PEBBLE PROJECT
ENVIRONMENTAL BASELINE DOCUMENT
2004 through 2008

CHAPTER 2.
CLIMATE AND METEOROLOGY
Bristol Bay Drainages

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TABLE OF CONTENTS

TABLE OF CONTENTS 2-i
LIST OF TABLES 2-ii
LIST OF FIGURES 2-iii
LIST OF APPENDICES 2-iv
ACRONYMS AND ABBREVIATIONS 2-v
2. CLIMATE AND METEOROLOGY 2-1
2.1 Mine Study Area 2-1
2.1.1 Introduction 2-1
2.1.2 Study Objectives 2-1
2.1.3 Study Area 2-1
2.1.4 Previous Studies 2-2
2.1.4.1 Iliamna Meteorological Data 2-2
2.1.4.2 Cominco Meteorological Data 2-3
2.1.5 Scope of Work 2-4
2.1.6 Methods 2-4
2.1.7 Results and Discussion 2-5
2.1.7.1 Pebble Data Collection and Capture 2-5
2.1.7.2 Wind Direction 2-6
2.1.7.3 Wind Speed 2-7
2.1.7.4 Temperature 2-8
2.1.7.5 Precipitation 2-9
2.1.7.6 Evaporation 2-11
2.1.8 Summary 2-11
2.2 Transportation Corridor 2-11
2.3 References 2-12
2.4 Glossary 2-12

LIST OF TABLES

Table 2-1, Pebble Project Meteorological Stations, General Information

Table 2-2, Cominco Meteorological Data-capture Rates by Month—Temperature and Wind, August 1991 through September 1993

Table 2-3, Cominco Meteorological Data-capture Rates by Month—Relative Humidity, Barometric Pressure, Precipitation, and Evaporation; August 1991 through September 1993

Table 2-4, Meteorological Parameters Measured at each Monitoring Station

Table 2-5, Meteorological Measurement Methods and Data-quality Objectives

Table 2-6, Meteorological Data-capture Rates by Month—Wind Speed and Direction at Pebble 1 and 4, 2005 through 2008

Table 2-7, Meteorological Data-capture Rates by Month—Wind Speed and Direction at Pebble 2 and 3, 2005 through 2008

Table 2-8, Meteorological Data-capture Rates by Month—Wind Speed and Direction at Pebble 5, 5A, and 6; 2008

Table 2-9, Meteorological Data-capture Rates by Month—Temperature at Pebble 1, 2, 3, and 4; 2005 through 2008

Table 2-10, Meteorological Data-capture Rates by Month—Temperature at Pebble 5, 5A, and 6; 2008

Table 2-11, Meteorological Data-capture Rates by Month—Precipitation at Pebble 1, 2, 3, and 4; 2005 through 2008

Table 2-12, Meteorological Data-capture Rates by Month—Precipitation at Pebble 5 and 6, 2008

Table 2-13, Meteorological Data-capture Rates by Month—Evaporation at Pebble 1, 2, and 4; 2005 through 2008

Table 2-14, Meteorological Data-capture Rates by Month—Evaporation at Pebble 5 and 6, 2008

Table 2-15, Summary of Monthly Mean Wind Speeds at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-16, Summary of Monthly Mean Wind Speeds at Pebble 5, 5A, and 6; 2008

Table 2-17, Summary of Maximum Hourly Mean Wind Speeds by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-18, Summary of Maximum Hourly Mean Wind Speeds by Month at Pebble 5, 5A, and 6; 2008

Table 2-19, Summary of Monthly Mean Temperatures at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-20, Summary of Monthly Mean Temperatures at Pebble 5, 5A, and 6; 2008

Table 2-21, Summary of Minimum Hourly Mean Temperatures by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-22, Summary of Minimum Hourly Mean Temperatures by Month at Pebble 5, 5A, and 6; 2008

Table 2-23, Summary of Maximum Hourly Mean Temperatures by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-24, Summary of Maximum Hourly Mean Temperatures by Month at Pebble 5, 5A, and 6; 2008

Table 2-25, Summary of Monthly Total Precipitation at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-26, Summary of Monthly Total Precipitation at Pebble 5 and 6, 2008

Table 2-27, Summary of Maximum Daily Precipitation by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

Table 2-28, Summary of Maximum Daily Precipitation by Month at Pebble 5 and 6, 2008

Table 2-29, Summary of Monthly Total Evaporation at Pebble 1, 2, and 4; 2005 through 2008

Table 2-30, Summary of Monthly Total Evaporation at Pebble 5 and 6, 2008

LIST OF FIGURES

Figure 2-1, Locations of Meteorological Monitoring Stations in the Mine Study Area

Figure 2-2, Iliamna Airport Wind Rose, 2000 through 2008

Figure 2-3, Location of Cominco Meteorological Monitoring Station

Figure 2-4, Wind Roses for Pebble 1, 2, 3, and 4

Figure 2-5, Wind Roses for Pebble 5, 5A, and 6

LIST OF APPENDICES

Appendix 2A, Cominco Meteorological Station Data Report, 1991-1993, for the Pebble Project Meteorological Monitoring Program

Appendix 2B, Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program, June 2008

Appendix 2C, Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program, August 2006

Appendix 2D, 2005-2006 Non-PSD Meteorological Stations Data Report for the Pebble Project Meteorological Monitoring Program

Appendix 2E, Pebble 1 (Mine PSD Station), First Annual Data Report, August 2005 – July 2006, for the Pebble Project Meteorological Monitoring Program

Appendix 2F, Pebble 1 Station, 2006 Annual Data Report for the Pebble Project Meteorological Monitoring Program

Appendix 2G, 2007 Annual Data Report, Pebble 1 Station, for the Pebble Project Meteorological Monitoring Program

Appendix 2H, 2008 Annual Data Report, Pebble 1 Station, for the Pebble Project Meteorological Monitoring Program

Appendix 2I, 2007 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program

Appendix 2J, 2008 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program

Appendix 2K, 2007 Annual Data Report, Pebble 4 Station, for the Pebble Project Meteorological Monitoring Program

Appendix 2L, 2008 Annual Data Report, Pebble 4 Station, for the Pebble Project Meteorological Monitoring Program

Appendix 2M, 2008 Annual Data Report, Pebble 5 Station, for the Pebble Project Meteorological Monitoring Program

Appendix 2N, 2008 Annual Data Report, Pebble 6 Station, for the Pebble Project Meteorological Monitoring Program

ACRONYMS AND ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
°C	degrees Celsius
°	degree(s)
EPA	U.S. Environmental Protection Agency
°F	degrees Fahrenheit
Hoefler	Hoefler Consulting Group
mph	miles per hour
mm	millimeter(s)
m/sec	meters per second
‘	minutes
NOAA	National Oceanic and Atmospheric Administration
PSD	Prevention of Significant Deterioration
“	seconds

2. CLIMATE AND METEOROLOGY

2.1 Mine Study Area

2.1.1 Introduction

The mine study area is in a transitional climatic zone with strong maritime influence. Summer temperatures are moderated by the open waters of Iliamna Lake, the Bering Sea, and Cook Inlet. Winter temperatures are more continental because of the presence of ice on Iliamna Lake and sea ice in Bristol Bay during the coldest months of the year. Winter weather systems typically travel into the region from the Bering Sea to the west, from along the Aleutian Island chain to the southwest, and from the Gulf of Alaska to the south. As a result, winter temperatures are less influenced by Cook Inlet. Depending on the season, these weather systems consist of cool to cold air that is saturated with moisture, resulting in frequent clouds, rain, and snow. Less frequent wintertime incursions of frigid, stable arctic air masses bring shorter periods of clear but very cold conditions to the region. In the summer, incursions of very warm air masses from interior Alaska can cause atmospheric instability, which results in the development of cumulus clouds and occasional thunderstorm activity.

The Pebble Project meteorological data-collection program is designed to provide meteorological data representative of the mine study area. Meteorological surface data were collected at six locations in the mine study area. Installation of monitoring stations began in October 2004. Meteorological monitoring began in January 2005.

2.1.2 Study Objectives

The objective of the meteorological data-collection program is to collect surface meteorological data in the mine study area. The meteorological data for the environmental study program are being collected in strict accordance with the same guidance that is provided for PSD permit requirements. Additional meteorological data are being collected to support engineering design in general accordance with PSD guidance; however, variations from PSD guidance do exist in the collection of these additional meteorological data.

2.1.3 Study Area

Meteorological data have been collected at six monitoring locations in the mine study area. These stations—identified as Pebble 1, Pebble 3, Pebble 4 (previously Pebble 2), Pebble 5, Pebble 5A, and Pebble 6—are located in the area surrounding the deposit area (Figure 2-1). A monitoring-station history is provided in Table 2-1, and a more detailed discussion of current and historical stations is provided below.

PSD-quality meteorological data are being collected at Pebble 1 (Figure 2-1) for environmental studies and engineering design. This station is located on a gently sloping, small plateau. This station is located consistent with requirements of the U.S. Environmental Protection Agency (EPA) and of the Alaska Department of Environmental Conservation (ADEC) as presented in *Meteorological Monitoring*

Guidance for Regulatory Modeling Applications (EPA, 2000). Collection of non-PSD-quality meteorological data began at Pebble 1 on January 1, 2005. EPA and ADEC personnel visited and inspected this site on May 24, 2005, and concurred that meteorological data collected at Pebble 1 would be representative of the meteorological study area. The collection of PSD-quality meteorological data began at Pebble 1 on August 1, 2005, and is ongoing.

Non-PSD-quality meteorological data for use in engineering design were collected at Pebble 2 from January 1, 2005, until November 19, 2005. This station was located within a possible tailings-storage-facility footprint on a small knoll south of Frying Pan Lake (location Pebble 4 on Figure 2-1). This station was located consistent with the EPA and ADEC requirements in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA, 2000). The meteorological data collected at Pebble 2 were not intended to be used for environmental studies, so not all of the same meteorological parameters were collected. In addition, the wind observations were made at 3 meters above grade instead of 10 meters above grade.

On November 19, 2005, the meteorological monitoring equipment at Pebble 2 was relocated to Pebble 3, approximately 0.5 miles north of and at a lower elevation than Pebble 2 (Figure 2-1). The equipment was relocated so that precipitation data could be collected in an area more sheltered from the wind. Meteorological monitoring at Pebble 3 was discontinued on December 31, 2008. As with Pebble 1 and 2, Pebble 3 was located consistent with the EPA and ADEC requirements in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA, 2000). The meteorological data collected at Pebble 3 are not intended to be used for environmental studies, so not all of the same meteorological parameters were collected, and wind observations were made at 3 meters above grade instead of 10 meters above grade.

Pebble 4 was located at the former Pebble 2 site (Figure 2-1). Collection of PSD-quality meteorological data began at Pebble 4 on June 9, 2006, The Pebble 4 monitoring period (for purposes of ADEC review) began on January 1, 2007. Data collection at Pebble 4 was discontinued on December 31, 2008.

Collection of PSD-quality meteorological data began at Pebble 5 and Pebble 6 (Figure 2-1) on July 1 and August 3, 2007, respectively. The monitoring period (for purposes of ADEC review) for both Pebble 5 and Pebble 6 began on January 1, 2008. These stations were located consistent with the EPA and ADEC requirements in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA, 2000). Data collection at both stations is ongoing.

Meteorological monitoring began at Pebble 5A (Figure 2-1) on July 1, 2007. As with the other sites, Pebble 5A was located consistent with the EPA and ADEC requirements in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA, 2000). The meteorological data collected at Pebble 5A are not intended to be used for environmental studies, so not all of the same meteorological parameters were being collected. Data collection at Pebble 5A is ongoing.

2.1.4 Previous Studies

2.1.4.1 Iliamna Meteorological Data

Meteorological data have been collected at the community of Iliamna from 1920 to the present, giving Iliamna one of the longest climatic records in the region (ACRC, n.d.). The data were and continue to be

collected at the Iliamna airport. The station is located at latitude 59°45' north, longitude 154°55' west. The station is at an elevation of 172 feet above sea level. The data record is not complete, especially during the early portion of the collection period.

Meteorological data collection at Iliamna is the responsibility of the Federal Aviation Administration and follows National Weather Service data-collection criteria. The Iliamna observation station is fully automated, being configured as an Automated Surface Observation System station. The currently reported meteorological parameters include sky cover, visibility, weather type, dry bulb temperature, wet bulb temperature, dew point temperature, relative humidity, wind speed, wind direction, wind characteristic, station pressure, pressure tendency, and precipitation (NCDC, n.d.). The collected data are transmitted to the National Climatic Data Center for analysis and archiving.

Climatic means for the period 1971 through 2000 at Iliamna are as follows (ACRC, n.d.):

- Mean annual temperature: 1.6 degrees Celsius (°C) [34.9 degrees Fahrenheit (°F)].
- Mean annual maximum temperature: 5.1 °C (41.2 °F).
- Mean annual minimum temperature: -1.9 °C (28.6 °F).
- Mean total annual precipitation: 637.5 millimeters (mm) (25.1 inches).

The wind at Iliamna is typically from the north or from the east. An eight-year wind rose is shown in Figure 2-2.

Climatic extremes for the period 1939 through 2004 at Iliamna are described below (ACRC, n.d.):

- Highest mean annual temperature: 4.1 °C (39.4 °F) in 1978.
- Lowest mean annual temperature: -2.1 °C (28.2 °F) in 1956.
- Highest daily maximum temperature: 32.8 °C (91.0 °F) on June 27, 1953.
- Lowest daily minimum temperature: -43.9 °C (-47.0 °F) on January 22, 1947.
- Highest total annual precipitation: 1,036.1 mm (40.8 inches) in 1985.
- Lowest total annual precipitation: 389.4 mm (15.3 inches) in 1968.
- Highest one-day maximum precipitation: 88.9 mm (3.5 inches) on August 7, 1985.
- Highest total annual snowfall: 3,241 mm (127.6 inches) in 1946.
- Highest total one-day snowfall: 508.0 mm (20.0 inches) on December 17, 1971.

2.1.4.2 Cominco Meteorological Data

Cominco (now Teck Alaska), a Canadian mining company, discovered the Pebble deposit in 1988. Subsequent to that discovery, Cominco collected meteorological data at one station in the area of the deposit (Figure 2-3) from August 27, 1991, to September 9, 1993. The monitored parameters were wind speed and direction, ambient temperature at 2 and 10 meters above grade, relative humidity, barometric pressure, precipitation, and evaporation. The data-capture statistics are provided in Tables 2-2 and 2-3. A data summary and the actual data are reported in *Cominco Meteorological Station Data Report 1991-1993*, a copy of which is provided in Appendix 2A.

The Cominco data are of limited use because the data-collection program did not include all of the same meteorological parameters being collected for the Pebble Project. The Cominco data are of limited use for design engineering because the rates of data recovery for precipitation and evaporation, two key parameters, were very low (Table 2-3).In addition, the quality assurance and quality control records for the Cominco monitoring program are incomplete.

2.1.5 Scope of Work

The research and field work for this study were initiated in 2004. CH_2M Hill initiated installation and monitoring of meteorological stations during the summer of 2004. Responsibility for the meteorological program was transferred to Hoefler Consulting Group (Hoefler) in October 2004. Data collection began in early 2005 and is ongoing. The work has been conducted by Steve Mackey, Eric Brudie, Dominic Shallies, Jared Cockman, and Isaac Bertchi.

The scope of work for the meteorological study in the mine study area was to measure and report the following meteorological parameters:

- Wind speed.
- Wind direction.
- Wind direction standard deviation (sigma-theta).
- Temperature.
- Precipitation.
- Evaporation.

Station location information is provided in Table 2-1 and on Figure 2-1. Not all parameters were measured at each monitoring station (Table 2-4).

2.1.6 Methods

This study was conducted according to the approach described in Chapter 2 of the study plan for the environmental baseline studies (a copy of which is provided in Appendix E of this environmental baseline document). The measurement methods and the data-quality objectives are summarized in Table 2-5. The rationale for selecting the meteorological data to be collected and all monitoring and data-reduction procedures are described in the 2008 revision of the *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, a copy of which is provided as Appendix 2B. The initial *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was submitted to ADEC in August 2006 (Appendix 2C). The measurement-quality objectives and acceptance criteria for the monitoring, as defined in the quality assurance project plan (QAPP), are prescribed in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA, 2000) and in the 2006 *EPA Requirements for Quality Assurance Project Plans* (EPA, 2006.)

2.1.7 Results and Discussion

2.1.7.1 Pebble Data Collection and Capture

The meteorological data collected at stations Pebble 1, 2, 3, and 4 prior to August 2005 were not collected in accordance with PSD guidance. The combined meteorological data collected for Pebble 1 for January through July 2005, for Pebble 3 for November 2005 through December 2006, and for Pebble 4 for June through December 2006, and the complete meteorological data set for Pebble 2 are reported in *2005-2006 Non-PSD Meteorological Stations Data Report for the Pebble Project Meteorological Monitoring Program* (Appendix 2D). The rate of data capture at Pebble 1 during this monitoring period was greater than 90 percent per quarter for all parameters except for temperature and precipitation during the first quarter. The rate of data capture at Pebble 4 during this monitoring period was greater than 90 percent per quarter for all parameters. The rate of data capture during the monitoring period at Pebble 2 was greater than 90 percent per quarter except for temperature during the second and third quarters of 2005 and precipitation during the first quarter of 2005. The rate of data capture at Pebble 3 was greater than 90 percent per quarter for all parameters except for wind direction during the second quarter of the monitoring year.

Starting in August 2005 meteorological data collected to meet PSD guidance was recorded in separate annual reports for each station. Pebble 1 was the only station at which data were collected to meet PSD standards in 2005. Meteorological data for Pebble 1 for the first PSD monitoring year are presented in *Pebble 1 (Mine PSD Station), First Annual Data Report, August 2005 - July 2006, for the Pebble Project Meteorological Monitoring Program* (Appendix 2E). The rate of data capture at Pebble 1 was greater than 90 percent per quarter for all parameters except for primary wind speed during the second quarter (December 2005 through February 2006).

Beginning in 2006, the monitoring period was switched to a calendar-year system. The meteorological data set for Pebble 1 for January 2006 through December 2008 is reported in *Pebble 1 Station, 2006 Annual Data Report, January 2006 - December 2006, for the Pebble Project Meteorological Monitoring Program* (Appendix 2F); *2007 Annual Data Report, Pebble 1 Station, for the Pebble Project Meteorological Monitoring Program* (Appendix 2G); and *2008 Annual Data Report, Pebble 1 Station, for the Pebble Project Meteorological Monitoring Program* (Appendix 2H). As reported in these documents, the rate of data capture at Pebble 1 was greater than 90 percent per quarter for all parameters except for the 10-meter temperature during the first three quarters of 2007.

PSD quality meteorological data collection was initiated in January 2007for Pebble 3. The meteorological data set for Pebble 3 for January 2007 through December 2007 is reported in *2007 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program* (Appendix 2I), and the data set for January 2008 through December 2008 is reported in *2008 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program* (Appendix 2J). The rate of data capture reported in these documents for Pebble 3 was greater than 90 percent per quarter for all parameters throughout 2007 and 2008.

PSD quality meteorological data collection was initiated in January 2007 for Pebble 4. The meteorological data set for Pebble 4 for January 2007 through December 2007 is reported in *2007 Annual Data Report, Pebble 4 Station, for the Pebble Project Meteorological Monitoring Program* (Appendix 2K), and the data set for January 2008 through December 2008 is reported in *2008 Annual Data Report,*

Pebble 4 Station, for the Pebble Project Meteorological Monitoring Program (Appendix 2L). The reported rate of data capture at Pebble 4 was greater than 90 percent per quarter for all parameters except for vertical temperature difference during the third and fourth quarters of 2007 and the first quarter of 2008, wind direction during the first through third quarters in 2008, and precipitation during the second and third quarters of 2008.

PSD quality meteorological data collection was initiated in January 2008 for Pebble 5. The meteorological data set for Pebble 5 for January 2008 through December 2008 is reported in *2008 Annual Data Report, Pebble 5 Station, for the Pebble Project Meteorological Monitoring Program* (Appendix 2M). The reported rate of data capture at Pebble 5 was greater than 90 percent per quarter for all parameters except for precipitation during the first quarter.

PSD quality meteorological data collection was initiated in January 2008 for Pebble 5A. The meteorological data set for Pebble 5A for January 2008 through December 2008 is reported in *2008 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program* (Appendix 2J). The rate of data capture noted in the report for Pebble 5A was greater than 90 percent per quarter for all parameters except for wind speed during the first, second, and fourth quarters.

PSD quality meteorological data collection was initiated in January 2008 for Pebble 6. The meteorological data set for Pebble 6 for January 2008 through December 2008 is reported in *2008 Annual Data Report, Pebble 6 Station, for the Pebble Project Meteorological Monitoring Program* (Appendix 2N). The rate of data capture reported for Pebble 6 was greater than 90 percent per quarter for all parameters, except for solar radiation during the fourth quarter.

Data-capture statistics for wind speed, wind direction, temperature, precipitation, and evaporation are summarized in Tables 2-6 through 2-14. The meteorological data are summarized below (additional information is provided in Appendices 2D through 2N).

2.1.7.2 Wind Direction

The wind direction at Pebble 1 was generally bimodal (Figure 2-4). The predominant wind directions from August 1, 2005, through December 31, 2008, were as follows:

- Northwesterly approximately 24 percent of the period.
- East-southeasterly approximately 18 percent of the period.
- Southeasterly approximately 14 percent of the period.

(Note that the stated direction indicates the direction from which the wind is blowing, e.g., a northwesterly wind is blowing from the northwest.)

A comparison of the wind directions at Pebble 1, Pebble 2, Pebble 3, and Pebble 4 is shown in Figure 2-4. A comparison of the wind directions at the newer meteorological stations—Pebble 5, Pebble 5A, and Pebble 6—is shown in Figure 2-5. The wind direction at the Pebble 2/4 location demonstrated an east-southeasterly and southeasterly flow similar to Pebble 1; however, Pebble 2/4 demonstrated a northerly and north-northeasterly flow instead of the northwesterly flow seen at Pebble 1. This difference is attributable to terrain influences at Pebble 2/4, which is located on a knoll at the southern end of a north-south oriented valley. Terrain influences (e.g., ridges and small hills that locally block and/or deflect the

wind; local valleys and low spots that allow wind to flow more freely) also are reflected in the wind directions observed at the Pebble 5, Pebble 5A, and Pebble 6 stations in 2008. All three of these newer stations record a strong southeasterly wind flow which is similar to the other meteorological stations. The Pebble 6 station is located at the lowest elevation of all the stations and, because of the elevated terrain to the north, has the most distinct flow of wind from the west compared to the other Pebble stations. Unlike the other stations, the Pebble 3 wind rose exhibits components from many directions, with a north-northeasterly flow being prominent. This station is located at a low elevation relative to the surrounding terrain and near the mouth of a north-south oriented valley which likely accounts for the variable wind direction.

The wind direction at the Iliamna airport during 2000 through 2008 also was bimodal (Figure 2-2). The predominant wind directions at the Iliamna airport were northerly and easterly.

2.1.7.3 Wind Speed

Summaries of monthly mean wind speed for seven Pebble stations and the Iliamna airport are provided in Tables 2-15 and 2-16. The highest monthly mean wind speeds for the stations were as follows:

- Pebble 1—12.9 meters per sec (m/sec) [28.9 miles per hour (mph)], November 2006.
- Pebble 2—8.6 m/sec (19.2 mph), February and November 2005.
- Pebble 3—7.9 m/sec (17.7 mph), November 2006.
- Pebble 4—12.7 m/sec (28.4 mph), November 2006.
- Pebble 5 —7.8 m/sec (17.4 mph), December 2008.
- Pebble 5A —9.0 m/sec (20.1 mph), May 2008.
- Pebble 6 —7.0 m/sec (15.7 mph), January 2008.
- Iliamna airport—6.6 m/sec (14.8 mph), November 2007.

The monthly mean wind speed was generally higher at Pebble 1 than at Pebble 2 or Pebble 3 when the stations being compared were operating simultaneously. These observations are consistent with the higher elevation and smaller terrain influence at Pebble 1. The monthly mean wind speed was consistently higher at all the Pebble stations than at the Iliamna airport, although the monthly mean wind speeds at Pebble 3 and at the Iliamna airport were more consistently similar. There is a significant correlation among wind speeds at stations with similar elevations and proximity.

The wind was calm (less than 0.5 m/sec) at Pebble 1 for 1.89 percent of the monitoring period and at Pebble 4 for 1.44 percent of the time, as compared to 8.17 percent of the monitoring period at Pebble 3 and 8.98 percent of the time from January 1, 2000, through December 31, 2007, at the Iliamna airport. In 2008, calm wind was recorded 3.17 percent of the time at Pebble 5 and 1.28 percent of the time at Pebble 6. Adequate data for a meaningful calm-period analysis were not collected at Pebble 2 or Pebble 5A.

The maximum hourly mean wind speeds for Pebble 1, Pebble 2, Pebble 3, Pebble 4, and the Iliamna airport are summarized in Table 2-17 and for Pebble 5, Pebble 5A, and Pebble 6 in Table 2-18. The highest hourly mean wind speeds were as follows:

- Pebble 1—40.0 m/sec (89.5 mph), January 2007.

- Pebble 2—26.7 m/sec (59.7 mph), March 2005.
- Pebble 3—22.7 m/sec (50.8 mph), April 2007.
- Pebble 4—37.6 m/sec (84.1 mph), March 2007.
- Pebble 5—29.5 m/sec (66.0) mph), January 2008.
- Pebble 5A—40.7 m/sec (91.0 mph), December 2008.
- Pebble 6—20.1 m/sec (45.0 mph), April 2008.
- Iliamna airport—21.5 m/sec (48.1 mph), November 2006.

The maximum hourly mean wind speeds during any given month generally were higher at the Pebble stations than at the Iliamna airport. The average monthly maximum hourly mean wind speed at Pebble 5A in 2008 was almost 30 m/sec (67.1 mph). The wind data collected at the meteorological stations are consistent with differences in elevation and terrain influence. The Pebble station with maximum hourly mean wind speeds most similar to those for the Iliamna airport during any given month was consistently Pebble 3 because the Pebble 3 station is more sheltered by terrain features, resulting in lower wind speeds.

The maximum hourly mean wind speeds of 40.0 m/sec (89.5 mph) at Pebble 1 in January 2007; 34.9 m/sec (78.1 mph) in November 2006, 37.6 m/sec (84.1 mph) in March 2007, and 33.3 m/sec (74.5 mph) in November 2008 at Pebble 4; and 39.4 m/sec (88.1 mph) and 40.7 m/sec (91.0 mph) in May and December 2008, respectively, at Pebble 5A were higher than the hurricane-force sustained wind-speed threshold of 33 m/sec (73.8 mph).

2.1.7.4 Temperature

Monthly mean temperatures for seven Pebble stations and the Iliamna airport are summarized in Tables 2-19 and 2-20. (The temperature data presented below and in the corresponding tables are for 2 meters above grade; temperature data for 10 meters above grade are presented in Appendices 2D through 2N.) The lowest and highest monthly mean temperatures, respectively, for all Pebble stations except Pebble 2 and for Iliamna were as follows:

- -17.5 °C (0.5 °F) in March 2007 and 14.0 °C (57.2 °F) in July 2005 at Pebble 1.
- -16.1 °C (3.0 °F) in March 2007 and 12.0 °C (53.6 °F) in July 2007 at Pebble 3.
- -16.4 °C (2.5 °F) in March 2007 and 11.7 °C (53.1 °F) in August 2007 at Pebble 4.
- -15.0 °C (5.0 °F) in January 2008 and 10.3 °C (50.5 °F) in August 2008 at Pebble 5.
- -15.3 °C (4.5 °F) in January 2008 and 8.8 °C (47.8 °F) in August 2008 at Pebble 5A.
- -14.2 °C (6.4 °F) in January 2008 and 10.7 °C (51.3 °F) in July and August 2008 at Pebble 6.
- -15.1 °C (4.8 °F) in January 2006 and 14.1 °C (57.4 °F) in July 2005 at the Iliamna airport.

Pebble 2 is not included here because 12 months of temperature data are not available for that station.

The monthly mean temperatures at Pebble 1, Pebble 3, and Pebble 4 were always lower than those at the Iliamna airport, consistent with the higher elevations of the Pebble stations.

Tables 2-21 through 2-24 show minimum and maximum hourly mean temperatures for the seven Pebble stations and the Iliamna airport. The minimum and maximum hourly mean temperatures, respectively, for all Pebble stations except Pebble 2 and for Iliamna were as follows:

- -35.3 °C (-31.5 °F) in January 2006 and 23.6 °C (74.5 °F) in August 2005 at Pebble 1.
- -33.4 °C (-28.1 °F) in January 2006 and 24.3 °C 75.7 °F) in May 2006 at Pebble 3.
- -31.1 °C (-24.0 °F) in January 2007 and 24.3 °C (75.7 °F) in July 2006 at Pebble 4.
- -32.2 °C (-26.0 °F) in January 2008 and 19.5 °C (67.1 °F) in July 2008 at Pebble 5.
- -33.5 °C (-28.3 °F) in January 2008 and 17.6 °C (63.7 °F) in July 2008 at Pebble 5A.
- -30.7 °C (-23.3 °F) in January 2008 and 21.3 °C (70.3 °F) in July 2008 at Pebble 6.
- -32.2 °C (-26.0 °F) in January 2006 and 27.2 °C (81.0 °F) in June 2007 at the Iliamna airport.

Again, Pebble 2 is not included here because 12 months of temperature data are not available for that station.

For any given month, the minimum hourly mean temperatures at the Pebble stations were generally lower than those at the Iliamna airport. These results confirm the stronger lake effect on the Iliamna station from its proximity to Iliamna Lake.

2.1.7.5 Precipitation

Summaries of total monthly precipitation for Pebble 1, Pebble 2, Pebble 3, Pebble 4, Pebble 5, Pebble 6, and the Iliamna airport are provided in Tables 2-25 and 2-26. The highest monthly precipitation totals for these stations were as follows:

- Pebble 1—256.5 mm (10.1 inches) [, September 2007.
- Pebble 2—109.4 mm (4.3 inches), September 2005.
- Pebble 3—196.3 mm (7.7 inches), August 2006.
- Pebble 4—310.2 mm (12.2 inches), September 2007.
- Pebble 5—170.7 mm (6.7 inches), September 2008.
- Pebble 6—165.4 mm (6.5 inches), September 2008.
- Iliamna airport—222.5 mm (8.8 inches), September 2005.

The lowest monthly precipitation totals were as follows:

- Pebble 1—9.1 mm (0.4 inches), January 2006.
- Pebble 2—6.6 mm (0.3 inches), June 2005.
- Pebble 3—1.8mm (0.1 inches), January 2008.
- Pebble 4—0.0 mm (0.0 inches), January 2008.
- Pebble 5—3.8 mm (0.1 inches), March 2008.

- Pebble 6—19.3mm (0.8 inches), March 2008.
- Iliamna airport—4.6 mm (0.2 inches), March 2008.

From year to year from January 2005 through December 2008 there was much variation in total monthly precipitation at each of the meteorological monitoring stations. For example, in the month of August at Pebble 1, 213.6 mm (8.4 inches) of precipitation were recorded in 2006 while 39.9 mm (1.6 inches) were recorded in 2007. In September 2005, Pebble 2 recorded 109.4 mm (4.3 inches) of precipitation, while in September 2007, Pebble 4 (at the same location) recorded over 200 mm 7.8 inches more than that earlier September 2005 total.

Large differences in observed precipitation also were noted among stations within a given year. During the 2007 calendar year there was a 29 percent difference in precipitation between the Pebble 1 and Pebble 3 stations. Pebble 1 recorded an annual precipitation of 879.4 mm (34.6 inches), while Pebble 3 recorded 624.4 mm (24.8 inches) of precipitation.

The wettest months were August, September, and October, during which a mean of 46 percent of precipitation for all stations was recorded. The combined mean total monthly precipitation for August, September, and October for all years for all Pebble stations recording precipitation was 130 mm (5.1 inches), compared to the overall combined mean total monthly precipitation of 27 mm (1.1 inches).

In 2008 Pebble 1 received 853 mm (33.6 inches) of precipitation and Iliamna received 527 mm (20.7 inches) of precipitation. The annual precipitation totals for Iliamna are comparable to the annual precipitation averages for Iliamna from 1977 through 2000 (637 mm (25.1 inches); ACRC, n.d.). The precipitation gage at Iliamna was inoperable from June 2006 through June 2007, preventing comparison of data during that period.

Because the rate of precipitation data-capture was not always 100 percent on a monthly basis, the precipitation data-capture statistics in Tables 2-11 and 2-12 should be considered in any use of the annual and monthly precipitation totals for Pebble 1, Pebble 2, Pebble 3, Pebble 4, Pebble 5, and Pebble 6.

Summaries of the maximum daily total precipitation for Pebble 1, Pebble 2, Pebble 3, Pebble 4, Pebble 5, Pebble 6, and the Iliamna airport are provided in Tables 2-27 and 2-28. The highest daily precipitation totals were as follows:

- Pebble 1—36.1 mm (1.4 inches) in September 2008.
- Pebble 2—38.6 mm (1.5 inches) in January 2005.
- Pebble 3—37.6 mm (1.5 inches) in September 2006 and October 2007.
- Pebble 4—42.8 mm (1.7 inches) in September 2007.
- Pebble 5—33.3 mm (1.3 inches) in October 2008.
- Pebble 6—26.7 mm 2.2 inches) in January 2008.
- Iliamna airport—57.4 mm (2.3 inches) in September 2005.

No correlation was found between precipitation and prevailing wind direction during the study period.

2.1.7.6 Evaporation

Summaries of total monthly evaporation for Pebble 1, Pebble 2, Pebble 4, Pebble 5, and Pebble 6 are provided in Tables 2-29 and 2-30. The highest monthly evaporation totals were as follows:

- Pebble 1—111.7 mm (4.4 inches) in June 2005.
- Pebble 2—112.2 mm (4.4 inches) in June 2005.
- Pebble 4—89.8 mm (3.5 inches) in June 2007.
- Pebble 5—81.9 mm (3.2 inches) June 2008.
- Pebble 6—84.0 mm (3.3 inches) June 2008.

The evaporation data are net results and, per net evaporation calculation procedure, are not adjusted using the pan coefficients. No evaporation data were collected at Pebble 3, Pebble 5A, or Iliamna.

2.1.8 Summary

The climate in the mine study area is transitional; it is more continental in the winter because of frozen waterbodies and more maritime in the summer because of the influence of the open water of Iliamna Lake, and to a lesser extent, the Bering Sea and Cook Inlet.

The wind direction was bimodal in the vicinity of the deposit (Pebble 1), generally from the northwest or from the east-southeast or southeast. The wind direction in the vicinity of Frying Pan Lake (Pebble 2) is terrain-influenced, with a northerly and north-northeasterly component rather than a northwesterly one. The wind-direction patterns in the mine study area did not match the wind-direction pattern observed at the Iliamna airport.

The wind was usually blowing in the mine study area, with calm conditions observed only 1.89 percent of the time at Pebble 1. The wind can be strong, with sustained winds speeds occasionally exceeding hurricane force. Wind speeds in the mine study area were generally higher than at the Iliamna airport.

The temperature pattern in the mine study area was similar to the pattern at the Iliamna airport, although temperatures in the mine study area were usually lower.

Generally, more precipitation is observed in the mine study area during the months of August, September, and October than during other months. Variation and missing data in the current precipitation record impede data comparisons among and within stations.

2.2 Transportation Corridor

The transportation corridor in the Bristol Bay drainages is climatologically similar to the mine study area. Because of this similarity, no additional baseline meteorological studies have been conducted in the transportation corridor in the Bristol Bay drainages.

2.3 References

Alaska Climate Research Center (ACRC). n.d. Climatological Data—Iliamna. http://climate.gi.alaska.edu/Climate/Location/BristolBay/Iliamna.html (accessed May 6, 2007).

Environmental Protection Agency, U.S. (EPA). 2006. EPA Requirements for Quality Assurance Project Plans. EPA QA/R-5.

———. 2000. Meteorological Monitoring Guidance for Regulatory Modeling Applications. EPA-454/R-99-005.

National Climatic Data Center (NCDC). n.d. Unedited Local Climatological Data: Iliamna Airport. http://www.ncdc.noaa.gov/oa/ncdc.html (accessed March 28, 2008).

2.4 Glossary

Continental Climate Zone: A climatic type associated with the interior of large land masses. Without the moderating influence of the water bodies, summer and winter temperatures are extreme. Precipitation is low because the region is distant from moisture-bearing winds.

Maritime Climate Zone: A climatic type associated with areas near large water bodies. Because of the moderating influence of the water bodies, summer and winter temperatures are less extreme. Precipitation is moderate to high because the region is near moisture-bearing winds.

Synoptic Scale: The size of weather patterns ranging from approximately 1,000 kilometers (620 miles) in length and/or width to approximately 2,500 kilometers (1,500 miles) in length and/or width.

Surface Meteorological Data: Meteorological data collected very close to the Earth's surface, typically no more than 10 to 15 meters 33 to 49 feet) above the surface.

Transitional Climatic Zone: Under the Köppen climate classification8, the transitional zone is identified as a Maritime Subarctic Climate. These climates are generally found poleward and are confined to narrow coastal strips (to include the adjacent islands) on the western margins of continents. Both continental and maritime climate systems affect the transitional zone. The climate must have moderate moisture in all seasons.

Wind Rose: A wind rose is a graphic tool used by meteorologists to give a succinct view of how wind speed and direction are typically distributed at a particular location. Presented in a circular format, the wind rose shows the frequency of winds blowing *from* particular directions. The length of each "spoke" around the circle is related to the frequency that the wind blows from a particular direction per unit time. Each concentric circle represents a different frequency, emanating from zero at the center to increasing frequencies at the outer circles.

TABLES

TABLE 2-1
Pebble Project Meteorological Stations, General Information

Station ID	Location	Function	Install Date	Comments
Pebble 1	Deposit area; 59°54'11" N Lat; 155°19'48" W Long; 1,560 feet above mean sea level	Support environmental studies and facility design	October 2004	Non-PSD-quality data collection begun on January 1, 2005. PSD-quality data collection begun on August 1, 2005. Data collection ongoing.
Pebble 2	Frying Pan Lake; 59°49'51" N Lat; 155°18'03" W Long; 1,200 feet above mean sea level	Support facility design	October 2004	Non-PSD-quality data collection begun on January 1, 2005, and ended on November 19, 2005.
Pebble 3	Frying Pan Lake; 59°50'20" N Lat; 155°18'05" W Long; 1,000 feet above mean sea level	Support facility design	November 2005	Non-PSD-quality data collection begun on November 19, 2005, and ended on December 31, 2008.
Pebble 4	Frying Pan Lake (site of former Pebble 2 station); 59°49'51" N Lat.; 155°18'03" W Long; 1,200 feet above mean sea level	Support environmental studies and facility design	June 2006	PSD-quality data collection begun on June 9, 2006, and ended on December 31, 2008.
Pebble 5	North Fork Koktuli River basin; 59°54' N Lat.; 155°26' W Long; 1,400 feet above mean sea level	Support environmental studies and facility design	June 2007	PSD-quality data collection begun on July 1, 2007. Data collection ongoing.
Pebble 5A	Koktuli Ridge; 59°54' N Lat.; 155°29' W Long; 2,300 feet above mean sea level	Support facility design	June 2007	Non-PSD-quality data collection begun on July 1, 2007. Data collection ongoing.
Pebble 6	Upper Talarik Creek basin; 59°54' N Lat.; 155°12' W Long; 800 feet above mean sea level	Support environmental studies and facility design	August 2007	PSD-quality data collection begun on August 3, 2007. Data collection ongoing.

TABLE 2-2
Cominco Meteorological Data-capture Rates by Month—Temperature and Wind, August 1991 through September 1993

		PERCENT RECOVERY			
Year	**Month**	**Temperature at 2 meters**	**Temperature at 10 meters**	**Wind Speed**	**Wind Direction**
1991	August	14.5	14.5	14.5	14.5
	September	93.8	93.8	93.8	93.8
	October	98.0	98.0	98.0	98.0
	November	99.7	99.7	99.7	99.7
	December	100	100	100	100
1992	January	93.3	93.3	93.3	93.3
	February	99.9	99.9	99.9	99.9
	March	96.6	96.6	96.6	96.6
	April	100	100	100	100
	May	99.7	99.7	99.7	99.7
	June	99.9	99.9	99.9	99.9
	July	99.7	99.7	99.7	99.7
	August	99.6	99.6	99.6	99.6
	September	99.6	99.6	99.6	99.6
	October	97.6	97.6	97.6	97.6
	November	100	100	100	100
	December	99.9	99.9	99.9	99.9
1993	January	69.5	69.5	69.5	69.5
	February	76.0	76.0	81.7	81.7
	March	71.8	71.8	74.7	74.7
	April	100	100	100	100
	May	98.7	98.7	98.7	98.7
	June	99.7	99.7	99.7	99.7
	July	99.7	99.7	99.7	99.7
	August	100	100	100	100
	September	25.3	25.3	25.3	25.3

TABLE 2-3
Cominco Meteorological Data-capture Rates by Month—Relative Humidity, Barometric Pressure, Precipitation, and Evaporation; August 1991 through September 1993

		PERCENT RECOVERY			
Year	**Month**	**Relative Humidity**	**Barometric Pressure**	**Precipitation**	**Evaporation**
1991	August	14.5	14.5	N/A	N/A
	September	93.8	93.8	N/A	N/A
	October	98.0	98.0	N/A	N/A
	November	99.7	99.7	N/A	N/A
	December	100	100	N/A	N/A
1992	January	93.3	93.3	N/A	N/A
	February	99.9	99.9	N/A	N/A
	March	96.6	96.6	N/A	N/A
	April	100	100	N/A	N/A
	May	99.7	99.7	N/A	N/A
	June	99.9	99.9	50	N/A
	July	99.7	99.7	35	N/A
	August	99.6	99.6	N/A	N/A
	September	99.6	99.6	N/A	N/A
	October	41.8	97.6	N/A	N/A
	November	N/A	100	N/A	N/A
	December	N/A	99.9	N/A	N/A
1993	January	N/A	69.5	N/A	N/A
	February	N/A	26.8	25.0	N/A
	March	N/A	71.8	35.5	N/A
	April	N/A	100	33.3	N/A
	May	N/A	98.7	90.3	N/A
	June	N/A	99.7	100	N/A
	July	N/A	99.7	100	N/A
	August	N/A	100	100	N/A
	September	N/A	25.3	23.3	N/A

N/A = not available

TABLE 2-4
Meteorological Parameters Measured at each Monitoring Station

	STATION						
Parameter	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Pebble 5**	**Pebble 5A**	**Pebble 6**
Wind Speed	X (at 10 m)	X (at 3 m)	X (at 3 m)	X (at 10 m)	X (at 10 m)	X (at 10 m)	X (at 10 m)
Wind Direction	X (at 10 m)	X (at 3 m)	X (at 3 m)	X (at 10 m)	X (at 10 m)	X (at 10 m)	X (at 10 m)
Wind Sigma Theta	X (at 10 m)	X (at 3 m)	X (at 3 m)	X (at 10 m)	X (at 10 m)	X (at 10 m)	X (at 10 m)
2 m Air Temperature	X	X	X	X	X	X	X
10 m Air Temperature	X			X	X	X	X
Solar Radiation [a]	X			X	X		X
Barometric Pressure [a]	X			X	X		X
Relative Humidity [a]	X			X	X		X
Precipitation	X	X	X	X	X		X
Evaporation	X (summer)	X (summer)		X (summer)	X (summer)		X (summer)

Notes:

a. These parameters are not discussed in this chapter, but are included in the data reports in the appendices.

m = meters above grade.

“X” indicates a monitored parameter.

TABLE 2-5
Meteorological Measurement Methods and Data-quality Objectives

Meteorological Parameter (Equipment Make and Model)	**Measurement Method**	**Manufacturer-specified Accuracy**	**EPA-required Accuracy** [a]	**EPA-required Resolution** [a]	**Detectability/ Minimum Data Completeness** [a]
Wind Speed (Climatronics F460)	Three-cup anemometer	±0.07 m/sec or ±1%	±0.2 m/sec or ±5%	0.1 m/sec	90% per monitoring quarter
Wind Direction (Climatronics F460)	Light-weight vane	±2 degrees	±5 degrees	1.0 degree	90% per monitoring quarter
Wind Speed (RM Young 05305-AQ)	Light-weight propeller	±0.2 m/sec	±0.2 m/sec or ±5%	0.1 m/sec	90% per monitoring quarter
Wind Direction (RM Young 05305-AQ)	Light-weight vane	±3 degrees	±5 degrees	1.0 degree	90% per monitoring quarter
Ambient Temperature and Vertical Temperature Difference [b] (Met One 062MP)	Solid-state thermistor	±0.05°C	±0.5°C (Ambient Temperature), ± 0.1°C (Temperature Difference)	0.1°C (Ambient Temperature), 0.02°C (Temperature Difference)	90% per monitoring quarter
Barometric Pressure [b] (Vaisala PTB101B)	Silicon capacitive sensor	±0.3 mb	±3 mb	0.5 mb	90% per monitoring quarter
Relative Humidity [b] (Vaisala HMP45C)	Thin-polymer capacitor	±2% (0-90% range) ± 3% (90-100% range)	±1.5°C [c]	0.1°C [c]	90% per monitoring quarter
Solar Radiation [b] (Licor LI200X)	Silicon photovoltaic detector	±5%	±5%	10 W/m^2	90% per monitoring quarter
Precipitation (ETI NOAH II)	Water pressure	±0.25 mm	±5 mm	0.3 mm	90% per monitoring quarter
Evaporation (Nova Lynx 255-100)	Float mechanism/ sensor	±0.25%	N/A	N/A	90% per monitoring quarter

Notes:

a. Referenced in Meteorological Monitoring Guidance for Regulatory Modeling Applications (EPA, 2000).

b. These parameters are not discussed in this chapter, but are included in the data reports in the appendices.

c. Values in guidance document are given in terms of dew-point temperature.

mb = millibar(s)

N/A = not applicable

W/m^2 = watts per square meter

TABLE 2-6
Meteorological Data-capture Rates by Month—Wind Speed and Direction at Pebble 1 and 4, 2005 through 2008

		PERCENT RECOVERY			
		Pebble 1		Pebble 4	
Year	Month	Speed	Direction	Speed	Direction
2005	January	88.2	88.2	N/A	N/A
	February	93.3	93.3	N/A	N/A
	March	98.9	98.9	N/A	N/A
	April	100	100	N/A	N/A
	May	99.6	99.6	N/A	N/A
	June	99.6	99.6	N/A	N/A
	July	100	100	N/A	N/A
	August	100	100	N/A	N/A
	September	100	100	N/A	N/A
	October	71.8	99.2	N/A	N/A
	November	99.3	99.3	N/A	N/A
	December	100	100	N/A	N/A
2006	January	82.3	99.1	N/A	N/A
	February	91.7	100	N/A	N/A
	March	99.7	100	N/A	N/A
	April	95.8	100	N/A	N/A
	May	100	100	N/A	N/A
	June	100	100	N/A	N/A
	July	99.6	99.6	100	100
	August	100	100	100	100
	September	100	100	100	100
	October	92.9	100	100	100
	November	82.1	100	100	100
	December	98.5	100	100	100
2007	January	99.3	99.3	99.2	99.2
	February	100	100	100	100
	March	100	100	100	100
	April	100	100	100	100
	May	100	100	100	100
	June	100	100	100	100
	July	100	100	100	100
	August	100	100	100	100
	September	96.5	99.0	99.6	99.6
	October	100	100	100	100
	November	100	100	97.2	100
	December	90.3	90.3	95.0	100

		PERCENT RECOVERY			
		Pebble 1		Pebble 4	
Year	Month	Speed	Direction	Speed	Direction
2008	January	100	100	100	100
	February	100	100	100	44.1
	March	100	100	100	N/A
	April	99.9	99.9	88.6	N/A
	May	99.9	99.9	99.2	N/A
	June	99.9	99.9	100	N/A
	July	100	100	100	N/A
	August	100	100	100	N/A
	September	99.7	99.7	99.9	18.3
	October	100	100	100	100
	November	100	100	100	100
	December	100	100	100	100

N/A = not applicable, parameter was not observed at this station during this month because of either station decommissioning or instrument failure.

TABLE 2-7
Meteorological Data-capture Rates by Month—Wind Speed and Direction at Pebble 2 and 3, 2005 through 2008

		PERCENT RECOVERY			
		Pebble 2		Pebble 3	
Year	Month	Speed	Direction	Speed	Direction
2005	January	96.8	96.8	N/A	N/A
	February	88.5	88.5	N/A	N/A
	March	98.9	98.9	N/A	N/A
	April	100	100	N/A	N/A
	May	99.5	99.5	N/A	N/A
	June	100	100	N/A	N/A
	July	100	100	N/A	N/A
	August	100	100	N/A	N/A
	September	100	100	N/A	N/A
	October	99.7	99.7	N/A	N/A
	November	99.6	99.6	100	100
	December	N/A	N/A	98.0	98.0
2006	January	N/A	N/A	100	100
	February	N/A	N/A	100	72.0
	March	N/A	N/A	100	79.0
	April	N/A	N/A	99.7	99.4
	May	N/A	N/A	99.3	99.3
	June	N/A	N/A	99.2	99.2
	July	N/A	N/A	99.9	99.9
	August	N/A	N/A	100	100
	September	N/A	N/A	100	100
	October	N/A	N/A	100	100
	November	N/A	N/A	100	100
	December	N/A	N/A	99.9	99.9
2007	January	N/A	N/A	100	100
	February	N/A	N/A	100	100
	March	N/A	N/A	100	100
	April	N/A	N/A	97.2	100
	May	N/A	N/A	99.6	99..6
	June	N/A	N/A	100	100
	July	N/A	N/A	100	100
	August	N/A	N/A	100	100
	September	N/A	N/A	76.1	76.1
	October	N/A	N/A	99.9	99.7
	November	N/A	N/A	100	100
	December	N/A	N/A	97.8	98.0

		PERCENT RECOVERY			
		Pebble 2		Pebble 3	
Year	Month	Speed	Direction	Speed	Direction
2008	January	N/A	N/A	81.3	81.3
	February	N/A	N/A	100	100
	March	N/A	N/A	100	100
	April	N/A	N/A	98.5	98.5
	May	N/A	N/A	100	100
	June	N/A	N/A	100	100
	July	N/A	N/A	100	99.9
	August	N/A	N/A	100	100
	September	N/A	N/A	100	100
	October	N/A	N/A	100	100
	November	N/A	N/A	100	100
	December	N/A	N/A	100	100

N/A = not applicable, parameter was not observed at this station during this month.

TABLE 2-8
Meteorological Data-capture Rates by Month—Wind Speed and Direction at Pebble 5, 5A, and 6; 2008

		PERCENT RECOVERY					
		Pebble 5		Pebble 5A		Pebble 6	
Year	Month	Speed	Direction	Speed	Direction	Speed	Direction
2008	January	100	100	66.1	100	100	100
	February	99.9	99.9	73.3	100	99.7	99.7
	March	100	100	92.3	100	99.9	99.9
	April	100	100	61.4	100	98.1	100
	May	100	100	81.2	100	99.5	100
	June	100	100	94.4	99.0	100	100
	July	100	100	100	100	100	100
	August	100	100	100	100	100	100
	September	99.9	99.9	100	100	99.9	99.9
	October	100	100	87.2	100	100	100
	November	100	100	62.5	100	100	100
	December	99.9	99.9	90.6	100	100	100

TABLE 2-9
Meteorological Data-capture Rates by Month—Temperature at Pebble 1, 2, 3, and 4; 2005 through 2008

		PERCENT RECOVERY					
		Pebble 1		Pebble 2	Pebble 3	Pebble 4	
Year	Month	Temp at 2 m	Temp at 10 m	Temp at 2 m	Temp at 2 m	Temp at 2 m	Temp at 10 m
2005	January	11.0	N/A	12.9	N/A	N/A	N/A
	February	100	N/A	100	N/A	N/A	N/A
	March	100	N/A	100	N/A	N/A	N/A
	April	100	N/A	100	N/A	N/A	N/A
	May	100	N/A	33.3	N/A	N/A	N/A
	June	96.5	65.4	0	N/A	N/A	N/A
	July	95.4	100	0	N/A	N/A	N/A
	August	86.0	99.3	0	N/A	N/A	N/A
	September	100	100	0	N/A	N/A	N/A
	October	99.7	99.7	75.3	N/A	N/A	N/A
	November	100	100	99.8	100	N/A	N/A
	December	100	100	N/A	100	N/A	N/A
2006	January	99.6	99.6	N/A	100	N/A	N/A
	February	100	100	N/A	100	N/A	N/A
	March	100	100	N/A	100	N/A	N/A
	April	100	100	N/A	99.6	N/A	N/A
	May	100	100	N/A	100	N/A	N/A
	June	100	100	N/A	99.0	N/A	N/A
	July	99.3	99.3	N/A	100	100	100
	August	100	100	N/A	100	100	100
	September	100	100	N/A	100	100	100
	October	100	100	N/A	100	100	100
	November	100	100	N/A	100	100	100
	December	100	100	N/A	100	100	100
2007	January	99.3	51.6	N/A	100	99.2	99.2
	February	100	0	N/A	100	100	100
	March	100	0	N/A	100	100	100
	April	100	0	N/A	90.0	100	100
	May	100	0	N/A	98.5	100	100
	June	100	0	N/A	100	100	100
	July	100	0	N/A	100	100	100
	August	100	5.6	N/A	100	100	100
	September	98.9	98.8	N/A	76.1	99.6	99.6
	October	100	100	N/A	99.9	100	100
	November	100	100	N/A	100	100	100
	December	90.3	90.3	N/A	100	100	100

		PERCENT RECOVERY					
		Pebble 1		Pebble 2	Pebble 3	Pebble 4	
Year	Month	Temp at 2 m	Temp at 10 m	Temp at 2 m	Temp at 2 m	Temp at 2 m	Temp at 10 m
2008	January	100	100	N/A	80.9	100	100
	February	100	100	N/A	100	100	100
	March	100	100	N/A	100	100	100
	April	100	100	N/A	100	100	100
	May	100	100	N/A	100	100	100
	June	100	100	N/A	100	100	100
	July	100	100	N/A	99.9	100	100
	August	100	100	N/A	100	100	100
	September	99.7	99.7	N/A	100	99.7	99.7
	October	100	100	N/A	100	100	100
	November	100	100	N/A	100	100	100
	December	100	100	N/A	100	100	100

m = meters above grade

N/A = not applicable, parameter was not observed at this station during this month.

TABLE 2-10
Meteorological Data-capture Rates by Month—Temperature at Pebble 5, 5A, and 6; 2008

		PERCENT RECOVERY					
		Pebble 5		Pebble 5A		Pebble 6	
Year	Month	Temp at 2 m	Temp at 10 m	Temp at 2 m	Temp at 10 m	Temp at 2 m	Temp at 10 m
2008	January	100	100	100	100	100	100
	February	99.9	99.9	100	100	99.7	99.7
	March	100	100	100	100	99.9	99.9
	April	100	100	100	100	100	100
	May	100	100	100	100	100	100
	June	100	100	99.0	99.0	100	100
	July	100	100	100	100	100	100
	August	100	100	100	100	100	100
	September	99.7	99.7	100	100	99.7	99.7
	October	100	100	100	100	100	100
	November	100	100	100	100	100	100
	December	99.9	99.9	100	100	100	100

m = meters above grade

TABLE 2-11
Meteorological Data-capture Rates by Month—Precipitation at Pebble 1, 2, 3, and 4; 2005 through 2008

		PERCENT RECOVERY			
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**
2005	January	99.2	99.6	N/A	N/A
	February	69.5	71.1	N/A	N/A
	March	7.3	6.5	N/A	N/A
	April	99.0	99.0	N/A	N/A
	May	98.8	98.7	N/A	N/A
	June	89.2	83.2	N/A	N/A
	July	99.7	100	N/A	N/A
	August	100	100	N/A	N/A
	September	100	100	N/A	N/A
	October	73.7	70.0	N/A	N/A
	November	90.6	93.4	96.0	N/A
	December	100	N/A	100	N/A
2006	January	99.6	N/A	99.9	N/A
	February	99.9	N/A	99.9	N/A
	March	99.7	N/A	99.9	N/A
	April	100	N/A	99.4	N/A
	May	100	N/A	99.9	N/A
	June	99.9	N/A	98.6	100
	July	98.0	N/A	99.7	100
	August	98.9	N/A	99.7	100
	September	100	N/A	99.7	100
	October	99.3	N/A	99.5	99.1
	November	97.8	N/A	98.8	99.9
	December	99.6	N/A	99.9	99.7
2007	January	99.7	N/A	99.5	99.5
	February	99.3	N/A	100	99.7
	March	99.7	N/A	100	100
	April	100	N/A	100	100
	May	99.6	N/A	99.3	99.6
	June	100	N/A	100	100
	July	100	N/A	100	100
	August	99.7	N/A	99.9	100
	September	98.3	N/A	75.7	98.5
	October	99.6	N/A	99.6	100
	November	100	N/A	100	100
	December	90.3	N/A	100	100

Year	Month	PERCENT RECOVERY			
		Pebble 1	Pebble 2	Pebble 3	Pebble 4
2008	January	100	N/A	81.0	100
	February	99.3	N/A	100	100
	March	100	N/A	99.6	99.7
	April	99.9	N/A	100	99.4
	May	99.9	N/A	100	38.7
	June	99.9	N/A	100	N/A
	July	100	N/A	100	N/A
	August	100	N/A	100	N/A
	September	99.2	N/A	99.7	20.4
	October	100	N/A	100	100
	November	100	N/A	100	100
	December	100	N/A	100	100

N/A = not applicable, parameter was not observed at this station during this month because of either station decommissioning or instrument failure.

TABLE 2-12
Meteorological Data-capture Rates by Month—Precipitation at Pebble 5 and 6, 2008

		PERCENT RECOVERY	
Year	**Month**	**Pebble 5**	**Pebble 6**
2008	January	0.0	100
	February	0.0	97.8
	March	82.1	99.9
	April	100	100
	May	100	100
	June	100	100
	July	100	100
	August	100	100
	September	99.7	99.7
	October	100	100
	November	100	100
	December	99.9	100

TABLE 2-13
Meteorological Data-capture Rates by Month—Evaporation at Pebble 1, 2, and 4; 2005 through 2008

		PERCENT RECOVERY		
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 4**
2005	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	87.9	100	N/A
	June	92.4	100	N/A
	July	99.6	100	N/A
	August	99.1	99.9	N/A
	September	99.6	99.3	N/A
	October	100	100	N/A
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A
2006	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	100	N/A	N/A
	May	100	N/A	N/A
	June	100	N/A	N/A
	July	100	N/A	99.9
	August	100	N/A	100
	September	100	N/A	100
	October	N/A	N/A	N/A
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A
2007	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	99.7	N/A	95.3
	June	100	N/A	100
	July	100	N/A	100
	August	99.7	N/A	100
	September	99.0	N/A	99.6
	October	100	N/A	16.0
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A

Year	Month	PERCENT RECOVERY		
		Pebble 1	Pebble 2	Pebble 4
2008	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	99.8	N/A	100
	June	99.9	N/A	100
	July	100	N/A	100
	August	100	N/A	100
	September	99.7	N/A	99.2
	October	100	N/A	100
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A

N/A = not applicable, parameter was not observed at this station during this month.

TABLE 2-14
Meteorological Data-capture Rates by Month—Evaporation at Pebble 5 and 6, 2008

		PERCENT RECOVERY	
Year	**Month**	**Pebble 5**	**Pebble 6**
2008	January	N/A	N/A
	February	N/A	N/A
	March	N/A	N/A
	April	N/A	N/A
	May	95.0	100
	June	100	100
	July	100	100
	August	100	100
	September	99.7	99.4
	October	100	100
	November	N/A	N/A
	December	N/A	N/A

N/A = not applicable, parameter was not observed at this station during this month.

TABLE 2-15
Summary of Monthly Mean Wind Speeds at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		MONTHLY MEAN WIND SPEED (meters/second)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	7.5	7.3	N/A	N/A	5.2
	February	9.6	8.6	N/A	N/A	5.4
	March	7.9	7.5	N/A	N/A	4.7
	April	6.0	6.7	N/A	N/A	4.1
	May	6.8	6.0	N/A	N/A	4.6
	June	6.4	5.4	N/A	N/A	4.2
	July	6.2	5.3	N/A	N/A	4.3
	August	5.8	5.5	N/A	N/A	4.2
	September	7.5	6.3	N/A	N/A	4.8
	October	6.4	6.4	N/A	N/A	4.4
	November	7.8	8.6	4.6	N/A	4.8
	December	7.9	N/A	5.1	N/A	5.5
2006	January	7.1	N/A	4.8	N/A	4.5
	February	12.1	N/A	6.4	N/A	6.5
	March	7.9	N/A	5.0	N/A	4.1
	April	8.1	N/A	5.0	N/A	4.6
	May	7.3	N/A	4.4	N/A	3.5
	June	7.7	N/A	4.3	6.1	3.0
	July	6.2	N/A	3.8	6.0	3.7
	August	5.8	N/A	3.6	5.9	3.9
	September	7.2	N/A	3.7	6.6	4.2
	October	9.5	N/A	5.2	9.1	6.0
	November	12.9	N/A	7.9	12.7	5.9
	December	7.4	N/A	6.3	9.1	5.3
2007	January	10.5	N/A	6.6	10.8	5.6
	February	8.0	N/A	4.9	8.0	3.5
	March	11.3	N/A	7.6	11.9	4.1
	April	8.9	N/A	5.5	8.5	4.1
	May	5.8	N/A	3.2	5.4	2.8
	June	6.3	N/A	3.8	6.4	2.7
	July	4.7	N/A	2.8	4.5	2.6
	August	7.5	N/A	4.2	7.3	3.6
	September	7.1	N/A	4.0	7.2	4.1
	October	7.1	N/A	4.5	7.6	4.6
	November	9.2	N/A	6.7	10.8	6.6
	December	9.1	N/A	7.3	11.4	6.4

		MONTHLY MEAN WIND SPEED (meters/second)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2008	January	8.1	N/A	6.4	10.2	4.1
	February	6.9	N/A	6.2	8.8	4.7
	March	8.5	N/A	5.4	8.6	3.9
	April	7.5	N/A	4.9	6.9	3.9
	May	8.3	N/A	4.5	7.6	4.0
	June	5.8	N/A	3.5	5.6	3.6
	July	6.5	N/A	3.9	6.6	3.8
	August	4.7	N/A	2.8	4.8	2.6
	September	6.2	N/A	3.8	6.3	3.3
	October	5.8	N/A	5.1	7.2	4.3
	November	6.7	N/A	5.9	8.3	4.2
	December	9.4	N/A	6.2	9.7	4.9

N/A = not applicable, parameter was not observed at this station during this month.

Multiply by 2.24 to convert meters per second to miles per hour. Example: 4 m/sec * 2.24 = 9.0 mph

TABLE 2-16
Summary of Monthly Mean Wind Speeds at Pebble 5, 5A, and 6; 2008

		MONTHLY MEAN WIND SPEED (meters/second)		
Year	**Month**	**Pebble 5**	**Pebble 5A**	**Pebble 6**
2008	January	7.6	2.6	7.0
	February	5.3	4.5	6.8
	March	6.8	6.9	6.2
	April	6.1	3.1	6.0
	May	7.0	9.0	5.6
	June	5.1	6.8	4.0
	July	5.6	8.5	4.5
	August	3.7	5.8	3.4
	September	4.9	8.8	3.9
	October	4.5	4.4	4.4
	November	5.0	2.0	5.3
	December	7.8	7.7	6.5

Multiply by 2.24 to convert meters per second to miles per hour. Example: 4 m/sec * 2.24 = 9.0 mph

TABLE 2-17
Summary of Maximum Hourly Mean Wind Speeds by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		MAXIMUM HOURLY MEAN WIND SPEED (meters/second)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	21.5	19.6	N/A	N/A	13.0
	February	32.3	25.4	N/A	N/A	17.0
	March	23.0	26.7	N/A	N/A	14.3
	April	30.8	24.0	N/A	N/A	19.2
	May	24.6	18.5	N/A	N/A	14.8
	June	21.2	17.3	N/A	N/A	11.2
	July	17.0	15.5	N/A	N/A	9.8
	August	18.3	16.7	N/A	N/A	13.0
	September	21.8	17.0	N/A	N/A	12.5
	October	23.0	18.0	N/A	N/A	13.0
	November	21.2	22.0	13.7	N/A	13.9
	December	30.2	N/A	15.0	N/A	17.0
2006	January	26.8	N/A	17.5	N/A	13.4
	February	30.9	N/A	17.2	N/A	19.1
	March	31.9	N/A	15.6	N/A	18.1
	April	23.2	N/A	17.0	N/A	14.3
	May	24.9	N/A	14.6	N/A	14.3
	June	26.1	N/A	14.8	18.5	11.9
	July	18.7	N/A	10.2	16.5	11.4
	August	19.2	N/A	9.2	16.6	9.5
	September	24.7	N/A	12.5	23.6	17.2
	October	28.2	N/A	13.6	26.3	17.2
	November	30.7	N/A	21.1	34.9	21.5
	December	26.8	N/A	17.0	24.5	17.6
2007	January	40.0	N/A	17.2	31.3	18.6
	February	30.2	N/A	16.2	26.7	17.6
	March	29.0	N/A	22.3	37.6	16.2
	April	30.3	N/A	22.7	30.0	18.1
	May	18.0	N/A	9.1	17.2	11.0
	June	18.7	N/A	11.6	19.4	11.0
	July	12.9	N/A	7.5	11.5	9.5
	August	21.6	N/A	11.6	18.4	12.4
	September	27.7	N/A	11.4	25.3	16.2
	October	28.8	N/A	15.7	27.0	17.2
	November	30.4	N/A	20.3	33.3	17.6
	December	28.7	N/A	17.2	28.7	19.1

Year	Month	MAXIMUM HOURLY MEAN WIND SPEED (meters/second)				
		Pebble 1	Pebble 2	Pebble 3	Pebble 4	Iliamna
2008	January	32.8	N/A	17.8	27.5	10.4
	February	26.8	N/A	14.7	23.8	9.0
	March	30.6	N/A	15.0	24.3	10.6
	April	25.7	N/A	17.2	28.0	7.4
	May	29.3	N/A	15.3	26.6	11.2
	June	27.4	N/A	12.4	20.6	8.0
	July	20.0	N/A	10.5	20.1	8.2
	August	19.4	N/A	9.6	15.4	7.2
	September	19.8	N/A	11.4	17.3	7.9
	October	24.9	N/A	16.2	23.9	11.0
	November	25.1	N/A	18.7	27.7	9.7
	December	32.9	N/A	17.1	26.8	10.8

N/A = not applicable, parameter was not observed at this station during this month.

Multiply by 2.24 to convert meters per second to miles per hour. Example: 4 m/sec * 2.24 = 9.0 mph

TABLE 2-18
Summary of Maximum Hourly Mean Wind Speeds by Month at Pebble 5, 5A, and 6; 2008

		MAXIMUM HOURLY MEAN WIND SPEED (meters/second)		
Year	**Month**	**Pebble 5**	**Pebble 5A**	**Pebble 6**
2008	January	29.5	27.9	18.6
	February	20.1	31.6	16.6
	March	23.0	31.8	16.3
	April	20.9	24.8	20.1
	May	22.7	39.4	17.7
	June	18.4	29.3	15.4
	July	18.4	25.4	12.0
	August	13.4	22.5	11.1
	September	15.9	29.2	12.7
	October	18.5	32.2	13.7
	November	17.5	23.9	16.2
	December	23.7	40.7	17.6

Multiply by 2.24 to convert meters per second to miles per hour. Example: 4 m/sec * 2.24 = 9.0 mph

TABLE 2-19
Summary of Monthly Mean Temperatures at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		MONTHLY MEAN TEMPERATURE (°C)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	-9.7	-8.4	N/A	N/A	-4.7
	February	-7.5	-6.3	N/A	N/A	-5.1
	March	-3.9	-2.2	N/A	N/A	-1.5
	April	-2.1	-1.0	N/A	N/A	1.2
	May	7.1	6.4	N/A	N/A	8.5
	June	11.6	N/A	N/A	N/A	12.6
	July	14.0	N/A	N/A	N/A	14.1
	August	11.5	N/A	N/A	N/A	13.8
	September	6.5	N/A	N/A	N/A	9.5
	October	-1.8	-2.0	N/A	N/A	1.6
	November	-13.0	N/A	N/A	N/A	-9.6
	December	-3.1	N/A	-2.2	N/A	-1.2
2006	January	-16.1	N/A	-15.3	N/A	-15.1
	February	-7.6	N/A	-6.7	N/A	-5.7
	March	-8.9	N/A	-7.9	N/A	-7.8
	April	-4.2	N/A	-2.5	N/A	-1.7
	May	4.8	N/A	6.0	N/A	6.9
	June	8.3	N/A	9.2	9.6	10.5
	July	10.6	N/A	11.4	11.0	12.7
	August	9.0	N/A	9.9	9.5	11.3
	September	7.1	N/A	7.9	7.7	9.5
	October	1.1	N/A	2.2	1.9	4.4
	November	-13.4	N/A	-12.0	-12.3	-8.8
	December	-10.0	N/A	-9.1	-8.9	-8.2
2007	January	-12.2	N/A	-11.2	-11.3	-10.8
	February	-7.6	N/A	-6.7	-6.9	-5.2
	March	-17.5	N/A	-16.1	-16.4	-14.1
	April	0.6	N/A	1.4	1.1	2.6
	May	4.0	N/A	4.8	4.6	6.0
	June	8.4	N/A	9.5	9.0	10.8
	July	11.1	N/A	12.0	11.6	13.3
	August	11.2	N/A	11.9	11.7	13.4
	September	6.7	N/A	7.5	7.4	9.8
	October	-2.0	N/A	-0.8	-1.0	1.3
	November	-3.1	N/A	-1.7	-2.0	0.2
	December	-9.3	N/A	-7.9	-8.0	-6.1

		MONTHLY MEAN TEMPERATURE (°C)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2008	January	-15.0	N/A	-13.5	-13.9	-13.3
	February	-12.8	N/A	-12.0	-11.9	-10.9
	March	-7.5	N/A	-6.1	-6.8	-4.9
	April	-5.7	N/A	-4.3	-5.0	-2.0
	May	2.8	N/A	4.0	3.5	5.9
	June	7.2	N/A	8.1	7.7	9.4
	July	9.1	N/A	10.4	9.8	11.9
	August	9.9	N/A	10.7	10.5	12.3
	September	5.8	N/A	7.0	6.5	8.7
	October	-5.3	N/A	-4.3	-4.3	-1.6
	November	-10.8	N/A	-9.7	-9.6	-7.6
	December	-8.1	N/A	-7.6	-7.4	-6.6

N/A = not applicable, parameter was not observed at this station during this month.

Use the following equation to convert °C to °F: (°C * 5/9) + 32 = °F. Example: (-10 °C * 5/9) + 32 = 14 °F.

TABLE 2-20
Summary of Monthly Mean Temperatures at Pebble 5, 5A, and 6; 2008

		MONTHLY MEAN TEMPERATURE (°C)		
Year	**Month**	**Pebble 5**	**Pebble 5A**	**Pebble 6**
2008	January	-15.0	-15.3	-14.2
	February	-13.2	-12.0	-12.5
	March	-8.0	-8.1	-6.2
	April	-5.7	-6.5	-4.5
	May	2.7	1.4	4.8
	June	7.7	5.7	8.7
	July	9.7	7.6	10.7
	August	10.3	8.8	10.7
	September	6.1	4.4	7.0
	October	-4.9	-5.9	-4.8
	November	-10.3	-10.8	-10.2
	December	-7.9	-8.9	-8.0

Use the following equation to convert °C to °F: (°C * 5/9) + 32 = °F. Example: (-10 °C * 5/9) + 32 = 14 °F.

TABLE 2-21
Summary of Minimum Hourly Mean Temperatures by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		MINIMUM HOURLY MEAN TEMPERATURE (°C)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	-19.6	-17.9	N/A	N/A	-20.0
	February	-28.3	-27.2	N/A	N/A	-25.0
	March	-19.9	-18.8	N/A	N/A	-18.9
	April	-19.5	-17.7	N/A	N/A	-17.8
	May	1.0	1.8	N/A	N/A	0.6
	June	4.6	N/A	N/A	N/A	2.8
	July	8.4	N/A	N/A	N/A	8.9
	August	2.4	N/A	N/A	N/A	5.0
	September	-1.1	N/A	N/A	N/A	1.1
	October	-14.5	-13.1	N/A	N/A	-11.7
	November	-26.2	-22.6	N/A	N/A	-22.8
	December	-25.7	N/A	-25.4	N/A	-22.8
2006	January	-35.3	N/A	-33.4	N/A	-32.2
	February	-31.6	N/A	-29.9	N/A	-30.6
	March	-23.8	N/A	-22.7	N/A	-22.2
	April	-16.4	N/A	-14.4	N/A	-16.1
	May	-7.2	N/A	-11.0	N/A	-6.1
	June	-0.1	N/A	0.8	3.5	1.1
	July	5.7	N/A	3.8	5.5	6.7
	August	4.1	N/A	1.0	4.3	2.8
	September	-2.3	N/A	-5.6	-0.9	-1.1
	October	0.0	N/A	-10.2	-9.8	-7.2
	November	-24.3	N/A	-22.6	-23.2	-20.6
	December	-21.9	N/A	-25.3	-21.0	-22.2
2007	January	-33.8	N/A	-31.0	-31.1	-30.6
	February	-23.3	N/A	-21.4	-21.9	-20.6
	March	-28.9	N/A	-27.2	-27.9	-23.9
	April	-5.1	N/A	-11.0	-4.5	-15.0
	May	-1.9	N/A	-4.5	-0.8	-2.8
	June	1.1	N/A	-0.2	1.7	2.8
	July	6.1	N/A	2.5	6.4	6.7
	August	6.5	N/A	3.9	7.0	5.6
	September	1.6	N/A	1.6	2.2	2.8
	October	-9.1	N/A	-12.5	-7.5	-10.0
	November	-18.5	N/A	-16.7	-16.5	-16.1
	December	-27.4	N/A	-25.4	-25.9	-22.8

		MINIMUM HOURLY MEAN TEMPERATURE (°C)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2008	January	-32.2	N/A	-30.7	-30.9	-29.9
	February	-30.7	N/A	-31.8	-28.0	-27.6
	March	-21.4	N/A	-19.4	-19.7	-16.5
	April	-18.2	N/A	-18.0	-17.5	-9.6
	May	-6.8	N/A	-4.9	-5.0	1.6
	June	0.3	N/A	1.5	0.9	5.8
	July	3.0	N/A	3.1	3.7	8.0
	August	4.4	N/A	1.7	4.8	9.8
	September	-0.9	N/A	-3.3	0.4	5.0
	October	-16.8	N/A	-17.7	-15.4	-10.7
	November	-27.8	N/A	-26.6	-26.3	-22.2
	December	-29.8	N/A	-27.8	-27.9	-27.0

N/A = not applicable, parameter was not observed at this station during this month.

Use the following equation to convert °C to °F: (°C * 5/9) + 32 = °F. Example: (-10 °C * 5/9) + 32 = 14 °F.

TABLE 2-22
Summary of Minimum Hourly Mean Temperatures by Month at Pebble 5, 5A, and 6; 2008

		MINIMUM HOURLY MEAN TEMPERATURE (°C)		
Year	**Month**	**Pebble 5**	**Pebble 5A**	**Pebble 6**
2008	January	-32.2	-33.5	-30.7
	February	-31.3	-28.1	-30.3
	March	-21.1	-22.2	-19.9
	April	-19.9	-19.1	-17.4
	May	-8.4	-6.9	-4.0
	June	0.8	-0.9	-1.3
	July	3.5	1.7	-0.4
	August	4.6	4.6	-0.3
	September	-0.6	-1.2	-2.7
	October	-16.6	-18.2	-21.6
	November	-27.9	-27.8	-26.4
	December	-29.4	-27.6	-27.3

Use the following equation to convert °C to °F: (°C * 5/9) + 32 = °F. Example: (-10 °C * 5/9) + 32 = 14 °F.

TABLE 2-23
Summary of Maximum Hourly Mean Temperatures by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		MAXIMUM HOURLY MEAN TEMPERATURE (°C)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	0.5	2.5	N/A	N/A	5.0
	February	4.4	6.6	N/A	N/A	5.0
	March	5.7	7.9	N/A	N/A	7.8
	April	13.0	14.3	N/A	N/A	19.4
	May	15.0	15.5	N/A	N/A	17.8
	June	21.5	N/A	N/A	N/A	23.9
	July	22.9	N/A	N/A	N/A	24.4
	August	23.6	N/A	N/A	N/A	24.4
	September	13.4	N/A	N/A	N/A	15.6
	October	7.8	6.5	N/A	N/A	10.6
	November	1.7	N/A	N/A	N/A	5.6
	December	3.7	N/A	5.9	N/A	6.7
2006	January	1.3	N/A	1.8	N/A	2.8
	February	1.4	N/A	2.7	N/A	5.0
	March	0.0	N/A	5.6	N/A	3.9
	April	1.8	N/A	8.2	N/A	8.9
	May	23.0	N/A	24.3	N/A	26.7
	June	19.3	N/A	20.8	22.7	21.1
	July	22.4	N/A	22.9	24.3	22.8
	August	16.8	N/A	17.5	16.8	21.1
	September	15.8	N/A	17.3	17.0	18.9
	October	10.6	N/A	11.8	11.2	13.9
	November	-0.8	N/A	0.6	-0.3	3.9
	December	1.3	N/A	2.7	2.2	5.0
2007	January	5.4	N/A	6.1	5.4	7.2
	February	6.4	N/A	6.6	5.5	7.2
	March	-0.1	N/A	6.9	1.7	2.2
	April	9.2	N/A	9.2	9.9	13.9
	May	12.2	N/A	13.6	11.7	13.9
	June	21.8	N/A	23.4	22.5	27.2
	July	21.4	N/A	23.2	22.6	25.6
	August	22.2	N/A	23.5	23.0	22.8
	September	16.1	N/A	15.1	14.4	17.2
	October	5.8	N/A	7.3	6.4	10.0
	November	4.1	N/A	6.2	5.5	7.8
	December	3.4	N/A	3.1	2.3	6.1

Year	Month	MAXIMUM HOURLY MEAN TEMPERATURE (°C)				
		Pebble 1	Pebble 2	Pebble 3	Pebble 4	Iliamna
2008	January	0.9	N/A	2.4	2.1	2.3
	February	1.4	N/A	3.1	5.8	2.7
	March	1.3	N/A	5.0	1.7	3.0
	April	6.0	N/A	10.5	6.6	4.3
	May	12.0	N/A	14.1	13.6	11.7
	June	16.7	N/A	18.5	17.9	12.4
	July	19.4	N/A	21.0	20.6	17.0
	August	17.3	N/A	18.9	18.0	15.5
	September	12.8	N/A	13.5	13.0	11.5
	October	4.7	N/A	6.3	5.3	6.2
	November	1.2	N/A	2.6	1.3	3.3
	December	2.3	N/A	3.7	2.6	4.2

N/A = not applicable, parameter was not observed at this station during this month.

Use the following equation to convert °C to °F: (°C * 5/9) + 32 = °F. Example: (-10 °C * 5/9) + 32 = 14 °F.

TABLE 2-24
Summary of Maximum Hourly Mean Temperatures by Month at Pebble 5, 5A, and 6; 2008

		MAXIMUM HOURLY MEAN TEMPERATURE (°C)		
Year	**Month**	**Pebble 5**	**Pebble 5A**	**Pebble 6**
2008	January	0.9	-0.9	2.7
	February	1.2	-0.6	3.6
	March	1.4	-0.1	3.0
	April	0.1	6.2	4.2
	May	12.4	10.2	15.1
	June	17.6	16.0	19.2
	July	19.5	17.6	21.3
	August	18.8	17.0	18.7
	September	13.1	10.3	14.7
	October	4.8	2.5	7.1
	November	1.5	-0.8	3.0
	December	2.3	1.1	3.9

Use the following equation to convert °C to °F: (°C * 5/9) + 32 = °F. Example: (-10 °C * 5/9) + 32 = 14 °F.

TABLE 2-25
Summary of Monthly Total Precipitation at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		TOTAL PRECIPITATION (liquid millimeters)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	22.8	39.2	N/A	N/A	48.3
	February	N/A	N/A	N/A	N/A	20.1
	March	N/A	N/A	N/A	N/A	22.6
	April	35.8	42.6	N/A	N/A	17.8
	May	25.4	34.6	N/A	N/A	7.6
	June	10.4	6.6	N/A	N/A	65.5
	July	51.4	80.0	N/A	N/A	93.2
	August	86.8	71.2	N/A	N/A	114.8
	September	146.8	109.4	N/A	N/A	222.5
	October	52.6	49.5	N/A	N/A	74.7
	November	24.1	20.8	3.8	N/A	22.6
	December	118.4	N/A	92.5	N/A	44.2
2006	January	9.1	N/A	75.9	N/A	81.0
	February	135.4	N/A	87.9	N/A	89.7
	March	69.8	N/A	82.8	N/A	83.1
	April	51.3	N/A	42.4	N/A	44.5
	May	21.8	N/A	14.5	N/A	15.7
	June	81.3	N/A	59.6	68.2	0[a]
	July	19.8	N/A	45.4	39.4	0[a]
	August	213.6	N/A	196.3	224.4	0[a]
	September	132.3	N/A	152.1	135.0	0[a]
	October	176.5	N/A	168.1	150.0	0[a]
	November	30.5	N/A	9.4	0.4	0[a]
	December	67.3	N/A	34.3	16.8	0[a]
2007	January	38.6	N/A	29.2	34.6	0[a]
	February	9.7	N/A	11.2	5.2	0[a]
	March	27.9	N/A	13.2	5.6	0[a]
	April	46.0	N/A	35.1	30.8	0[a]
	May	20.3	N/A	17.8	16.4	0[a]
	June	56.4	N/A	61.0	59.0	41.9[a, b]
	July	60.5	N/A	58.9	59.2	67.3
	August	39.9	N/A	61.2	59.6	63.2
	September	256.5	N/A	32.0	310.2	198.4
	October	111.5	N/A	121.4	98.4	71.4
	November	142.5	N/A	123.7	137.8	66.3
	December	69.6	N/A	59.7	46.0	47.8

Year	Month	TOTAL PRECIPITATION (liquid millimeters)				
		Pebble 1	Pebble 2	Pebble 3	Pebble 4	Iliamna
2008	January	96.5	N/A	1.8	0.0	40.9
	February	242.3	N/A	29.7	8.2	9.4
	March	42.4	N/A	14.7	8.4	4.6
	April	39.6	N/A	40.9	82.4	17.3
	May	55.9	N/A	34.5	8.6[b]	26.2
	June	23.4	N/A	13.7	N/A	18.3
	July	67.3	N/A	74.9	N/A	72.4
	August	59.9	N/A	27.9	N/A	36.6
	September	179.3	N/A	157.5	4.4[b]	178.3
	October	27.2	N/A	120.1	119.6	77.2
	November	0.0	N/A	36.8	13.6	24.9
	December	19.6	N/A	43.4	69.2	21.3

Notes:

a. The National Oceanic and Atmospheric Administration (NOAA) has stated that precipitation data from the Iliamna meteorological station from June 14, 2006, though June 7, 2007, must be considered missing because of concerns regarding the operation of the tipping bucket sensor.

b. Precipitation data for the first or last month of a period with invalidated or missing data may not be representative of the entire month because monitoring may not have begun on the first day of the month or ended on the last day of the month.

N/A = not applicable, parameter was not observed at this station during this month because of instrument failure.

Multiply by 0.039 to convert millimeters to inches. Example: 50 mm * 0.039 = 1.9 inches.

TABLE 2-26
Summary of Monthly Total Precipitation at Pebble 5, and 6; 2008

		TOTAL PRECIPITATION (liquid millimeters)	
Year	**Month**	**Pebble 5**	**Pebble 6**
2008	January	N/A	61.7
	February	N/A	42.9
	March	3.8	19.3
	April	26.4	35.6
	May	21.3	27.2
	June	18.0	19.6
	July	59.4	72.1
	August	22.4	57.4
	September	170.7	165.4
	October	97.3	102.9
	November	26.2	40.4
	December	27.4	43.9

N/A = not applicable, parameter was not observed at this station during this month.

Multiply by 0.039 to convert millimeters to inches. Example: 50 mm * 0.039 = 1.9 inches.

TABLE 2-27
Summary of Maximum Daily Precipitation by Month at Pebble 1, 2, 3, and 4, and Iliamna; 2005 through 2008

		MAXIMUM DAILY PRECIPITATION (liquid millimeters)				
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**	**Iliamna**
2005	January	22.8	38.6	N/A	N/A	23.4
	February	N/A	N/A	N/A	N/A	7.4
	March	N/A	N/A	N/A	N/A	11.4
	April	11.2	16.2	N/A	N/A	8.1
	May	11.2	9.0	N/A	N/A	2.8
	June	6.6	2.6	N/A	N/A	15.2
	July	17.0	22.2	N/A	N/A	17.8
	August	16.8	12.0	N/A	N/A	20.8
	September	30.6	19.0	N/A	N/A	57.4
	October	16.2	16.6	N/A	N/A	24.9
	November	7.6	8.1	11.4	N/A	6.9
	December	24.6	N/A	14.7	N/A	20.8
2006	January	2.3	N/A	10.2	N/A	10.2
	February	17.8	N/A	9.1	N/A	9.1
	March	21.1	N/A	20.1	N/A	20.1
	April	9.1	N/A	11.2	N/A	11.2
	May	5.8	N/A	4.6	N/A	4.6
	June	16.3	N/A	13.7	15.2	0[a]
	July	8.4	N/A	7.9	10.4	0[a]
	August	35.1	N/A	26.4	29.8	0[a]
	September	30.5	N/A	37.6	25.8	0[a]
	October	16.8	N/A	19.6	20.6	0[a]
	November	4.6	N/A	2.0	0.2	0[a]
	December	17.3	N/A	8.4	6.6	0[a]
2007	January	6.9	N/A	3.6	10.2	0[a]
	February	1.8	N/A	5.1	4.4	0[a]
	March	6.4	N/A	4.8	1.6	0[a]
	April	9.1	N/A	8.6	6.8	0[a]
	May	4.1	N/A	5.3	5.4	0[a]
	June	18.3	N/A	25.9	24.4	27.4[a, b]
	July	13.5	N/A	13.7	13.2	18.5
	August	6.9	N/A	12.4	10.0	12.7
	September	33.0	N/A	13.7	42.8	37.1
	October	22.9	N/A	37.6	39.0	21.6
	November	25.1	N/A	30.5	36.8	29.5
	December	10.7	N/A	9.9	11.0	10.7

Year	Month	MAXIMUM DAILY PRECIPITATION (liquid millimeters)				
		Pebble 1	Pebble 2	Pebble 3	Pebble 4	Iliamna
2008	January	15.2	N/A	1.3	0.0	24.4
	February	5.6	N/A	6.4	6.2	4.1
	March	5.8	N/A	2.3	5.2	1.8
	April	7.6	N/A	10.4	14.6	7.4
	May	5.6	N/A	9.9	3.6[b]	7.9
	June	3.8	N/A	3.0	N/A	10.4
	July	13.5	N/A	13.2	N/A	17.3
	August	28.4	N/A	5.1	N/A	12.2
	September	36.1	N/A	32.5	4.2[b]	28.2
	October	22.9	N/A	30.5	20.4	23.4
	November	0.0	N/A	8.1	3.0	8.1
	December	7.6	N/A	8.6	14.8	5.6

Notes:

a. NOAA has stated that precipitation data from the Iliamna meteorological station from June 14, 2006, though June 7, 2007, must be considered missing because of concerns regarding the operation of the tipping bucket sensor.

b. Precipitation data for the first or last month of a period with invalidated or missing data may not be representative of the entire month because monitoring may not have begun on the first day of the month or ended on the last day of the month.

N/A = not applicable, parameter was not observed at this station during this month because of either station decommissioning or instrument failure.

Multiply by 0.039 to convert millimeters to inches. Example: 50 mm * 0.039 = 1.9 inches.

TABLE 2-28
Summary of Maximum Daily Precipitation by Month at Pebble 5 and 6, 2008

		MAXIMUM DAILY PRECIPITATION (liquid millimeters)	
Year	**Month**	**Pebble 5**	**Pebble 6**
2008	January	N/A	26.7
	February	N/A	7.4
	March	1.5	2.3
	April	11.2	12.2
	May	3.8	5.8
	June	4.8	5.3
	July	10.4	15.5
	August	5.1	14.2
	September	26.7	20.3
	October	33.3	19.8
	November	7.6	10.4
	December	11.9	8.1

N/A = not applicable, parameter was not observed at this station during this month.

Multiply by 0.039 to convert millimeters to inches. Example: 50 mm * 0.039 = 1.9 inches.

TABLE 2-29
Summary of Monthly Total Evaporation at Pebble 1, 2, and 4; 2005 through 2008

		TOTAL EVAPORATION [a] (millimeters)		
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 4**
2005	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	43.5	4.5	N/A
	June	111.7	112.2	N/A
	July	75.9	73.3	N/A
	August	73.7	79.4	N/A
	September	15.4	16.4	N/A
	October	N/A	N/A	N/A
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A
2006	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	88.1	N/A	N/A
	June	69.8	N/A	38.4
	July	70.4	N/A	76.9
	August	17.8	N/A	20.6
	September	16.5	N/A	23.0
	October	N/A	N/A	10.6
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A
2007	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	56.4	N/A	63.8
	June	71.5	N/A	89.8
	July	48.3	N/A	65.8
	August	34.4	N/A	53.5
	September	57.7	N/A	9.7
	October	74.9	N/A	0.8
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A

Year	Month	TOTAL EVAPORATION [a] (millimeters)		
		Pebble 1	Pebble 2	Pebble 4
2008	January	N/A	N/A	N/A
	February	N/A	N/A	N/A
	March	N/A	N/A	N/A
	April	N/A	N/A	N/A
	May	32.1	N/A	41.5
	June	74.8	N/A	84.9
	July	69.7	N/A	55.8
	August	47.1	N/A	65.0
	September	2.4	N/A	7.1
	October	0.8	N/A	0.0
	November	N/A	N/A	N/A
	December	N/A	N/A	N/A

Notes:

a. Evaporation totals for shoulder months (first or last month of annual collection period) may not be representative of the entire month because monitoring may not have begun on the first day of the month or ended on the last day of the month. (See Appendices 2D through 2L for collection-period details.)

N/A = not applicable, parameter was not observed at this station during this month.

Multiply by 0.039 to convert millimeters to inches. Example: 50 mm * 0.039 = 1.9 inches.

TABLE 2-30
Summary of Monthly Total Evaporation at Pebble 5 and 6, 2008

		TOTAL EVAPORATION [a] (millimeters)	
Year	**Month**	**Pebble 5**	**Pebble 6**
2008	January	N/A	N/A
	February	N/A	N/A
	March	N/A	N/A
	April	N/A	N/A
	May	0.1	51.5
	June	81.9	84.0
	July	66.8	57.8
	August	54.8	50.8
	September	3.0	3.2
	October	0.0	0.1
	November	N/A	N/A
	December	N/A	N/A

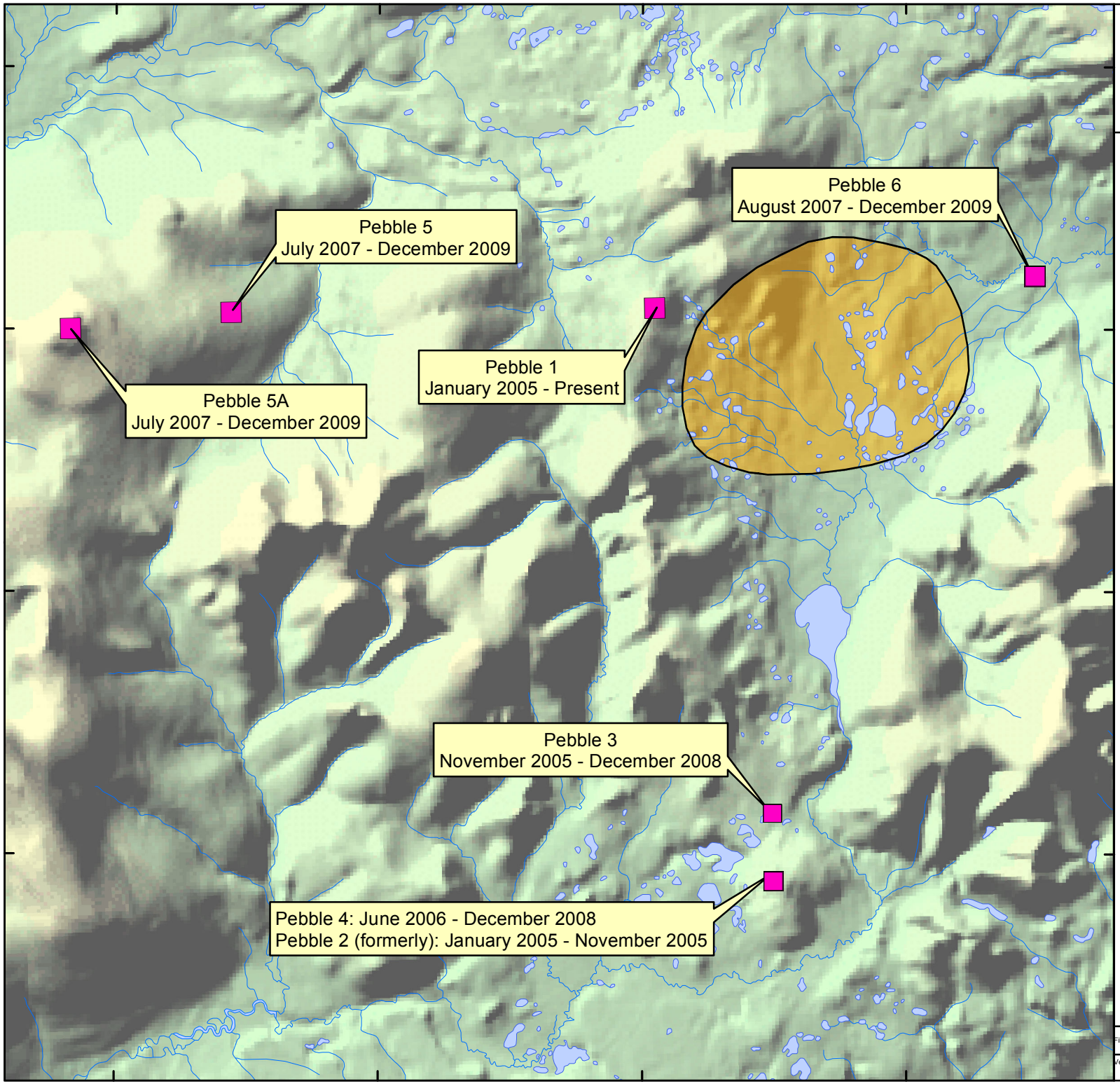
Notes:

a. Evaporation totals for shoulder months (first or last month of annual collection period) may not be representative of the entire month because monitoring may not have begun on the first day of the month or ended on the last day of the month. (See Appendices 2M and 2N for collection-period details.)

N/A = not applicable, parameter was not observed at this station during this month.

Multiply by 0.039 to convert millimeters to inches. Example: 50 mm * 0.039 = 1.9 inches.

FIGURES

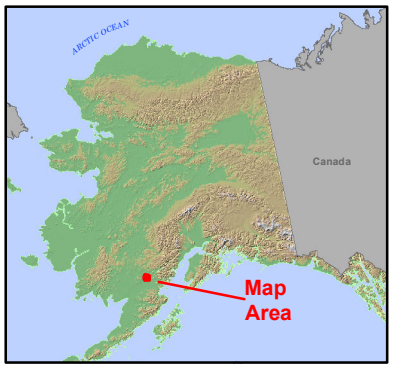


THE pebble PARTNERSHIP

Figure 2-1
Locations of Meteorological Monitoring Stations with Dates of Operation in the Mine Study Area

Legend

- Meteorological Stations
- General Deposit Location



Miles 0 1 2

Kilometers 0 1 2

N

Scale 1:75,000

Alaska State Plane Zone 5 (units feet)
1983 North American Datum

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Version: 4	Author: RDI-MRA, PLP-JG

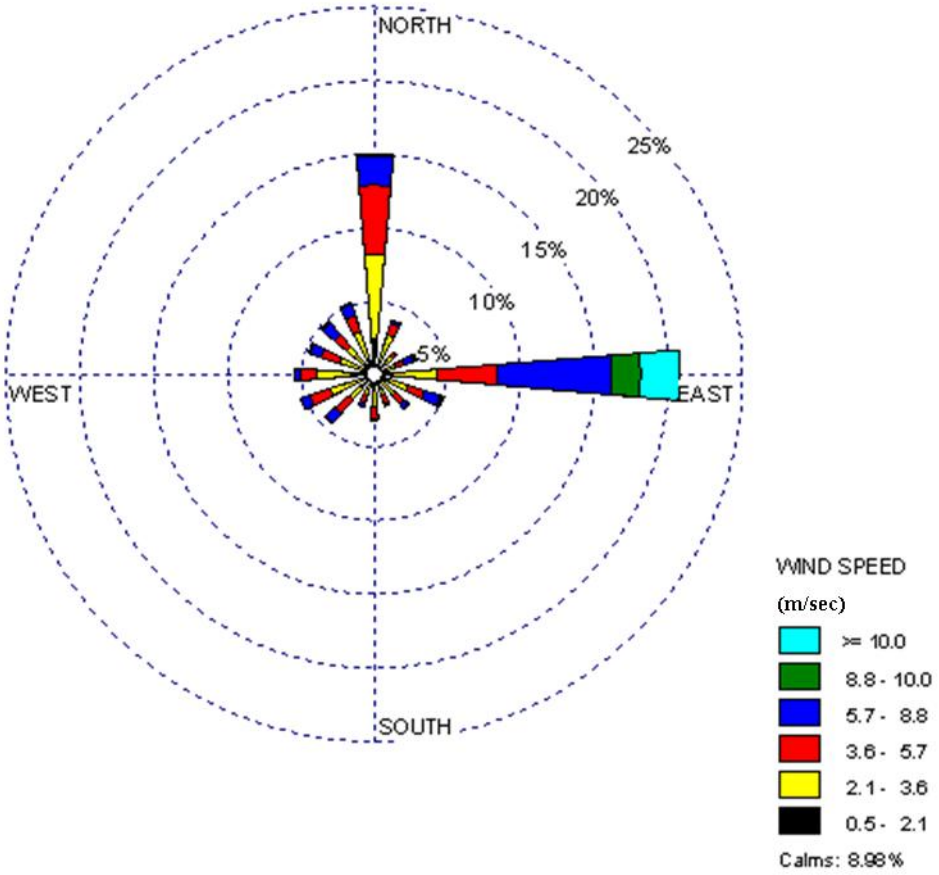
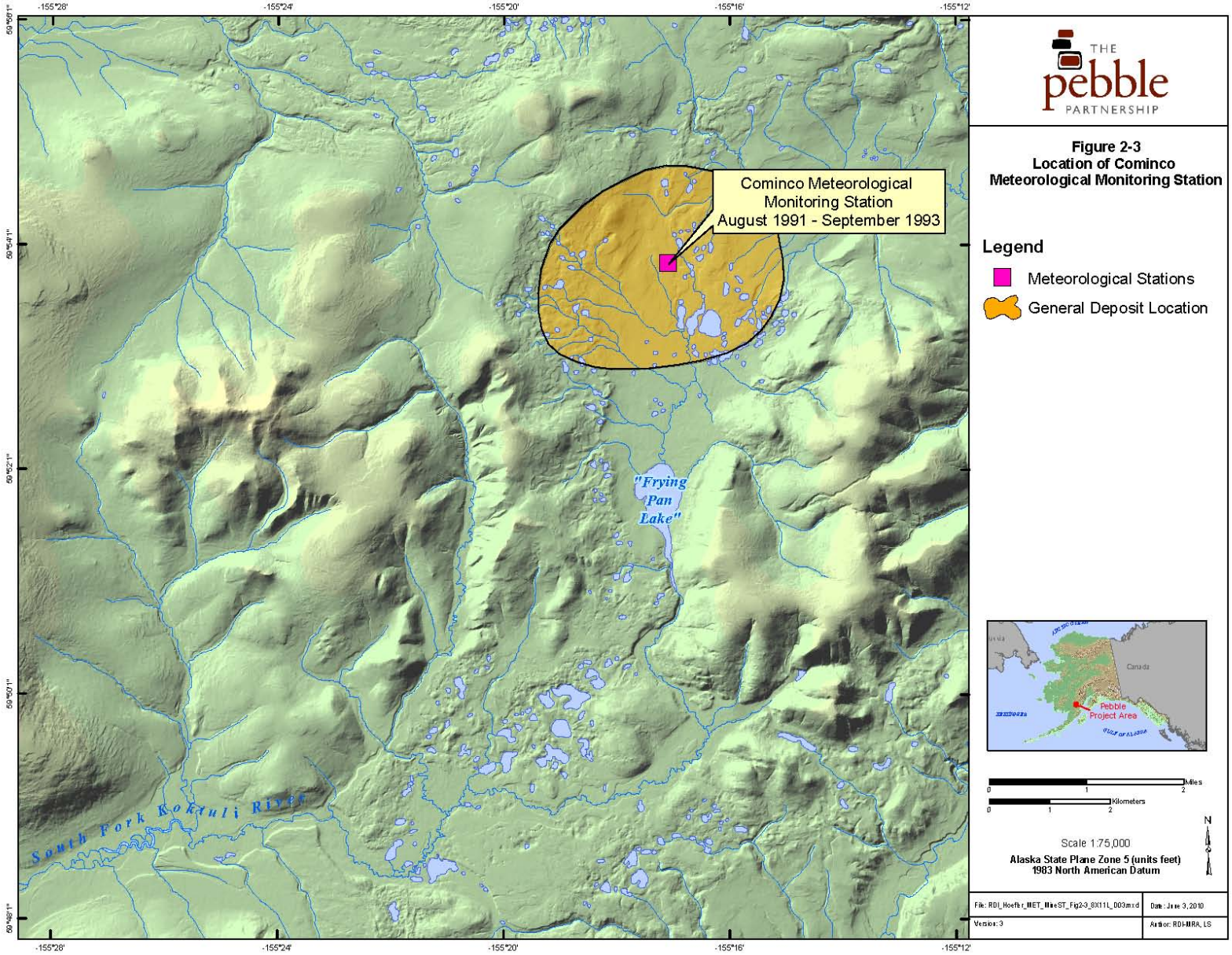
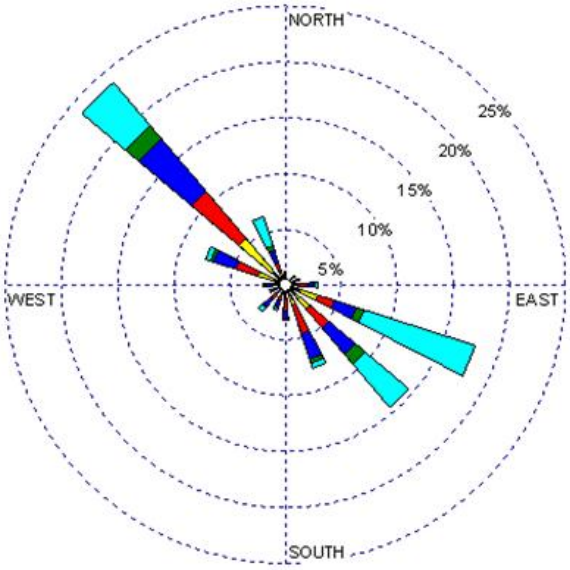
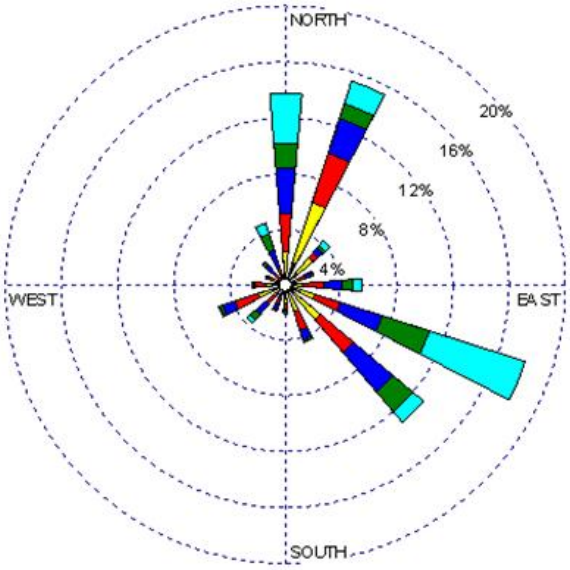


FIGURE 2-2. Iliamna Airport Wind Rose, 2000 through 2008 (based on data from ACRC, n.d.)

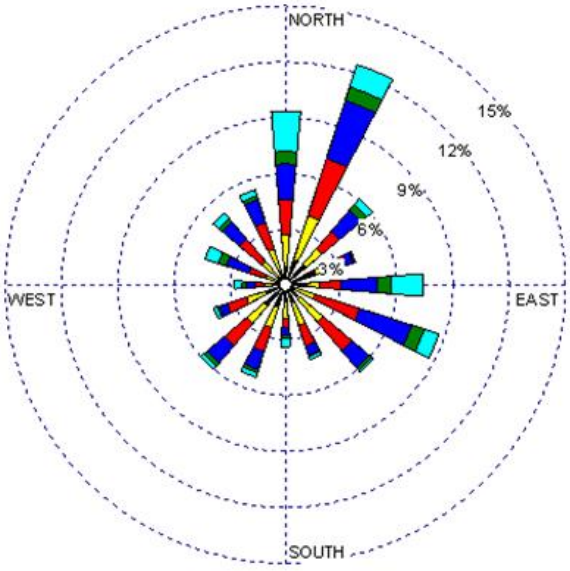

-155°28'
-155°24'
-155°20'
-155°16'
-155°12'
59°56'1"
59°54'1"
59°52'1"
59°50'1"
59°48'1"
Cominco Meteorological Monitoring Station
August 1991 - September 1993
"Frying Pan Lake"
South Fork Koktuli River
THE pebble PARTNERSHIP
Figure 2-3
Location of Cominco
Meteorological Monitoring Station
Legend
Meteorological Stations
General Deposit Location
Canada
Pebble Project Area
Miles
0 1 2
Kilometers
0 1 2
N
Scale 1:75,000
Alaska State Plane Zone 5 (units feet)
1983 North American Datum
File: RDI_Hoefler_MET_MineST_Fig2-3_8X11L_003mxd
Date: June 3, 2010
Version: 3
Author: RDI-MRA, LS



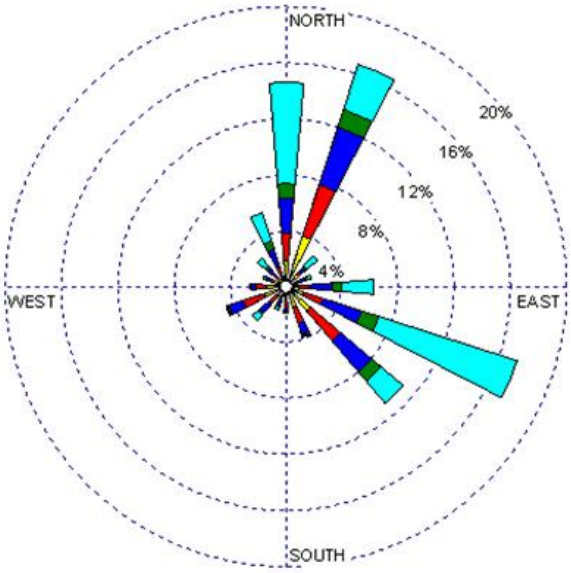
Pebble 1 PSD
August 2005 - December 2008



Pebble 2
January 2005 - November 2005

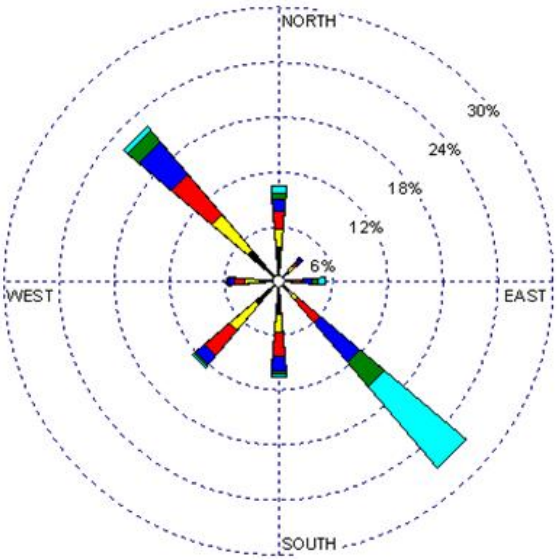


Pebble 3
November 2005 - December 2008

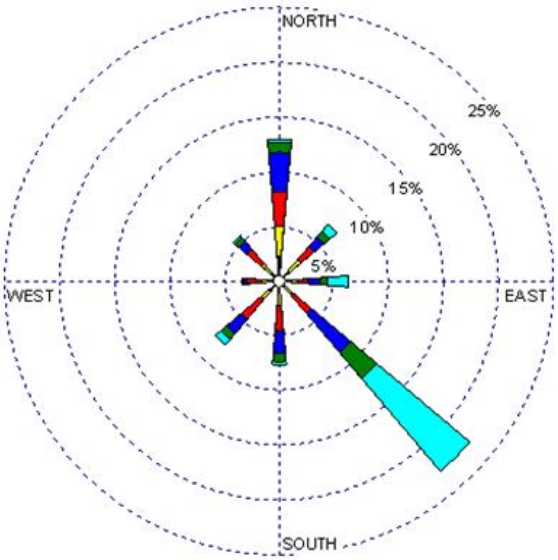


Pebble 4 PSD
July 2006 - December 2008

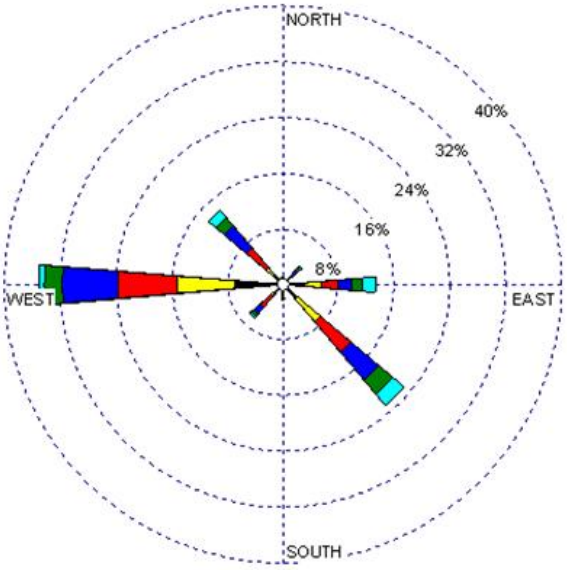
FIGURE 2-4. Wind Roses for Pebble 1, 2, 3, and 4



Pebble 5 PSD
January 2008 - December 2008



Pebble 5A
January 2008 - December 2008



Pebble 6 PSD
January 2008 - December 2008

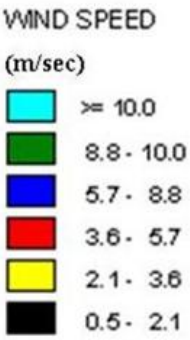


FIGURE 2-5. Wind Roses for Pebble 5, 5A, and 6

APPENDICES

APPENDIX 2A

Cominco Meteorological Station Data Report, 1991-1993, for the Pebble Project Meteorological Monitoring Program

Cominco Meteorological Station Data Report

1991 - 1993

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

Prepared for

Northern Dynasty Mines Inc.
Anchorage, AK

by

Hoefler Consulting Group
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503
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October 2006

This Cominco Meteorological Station report has been prepared and reviewed by the following:

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TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 MONITORING PARAMETERS AND PERFORMANCE SUMMARY 3
2.1 Monitoring Parameters 3
2.2 Performance Statistics 3

3.0 METEOROLOGICAL DATA SUMMARY 7
3.1 Temperature 7
3.2 Horizontal Wind 7
3.3 Barometric Pressure 15
3.4 Precipitation 15
3.5 Other Parameters 21

4.0 REFERENCES 22

List of Figures

1-1 Map of Pebble Project Meteorological Monitoring Stations 2
3-1 1991 Hourly Average Temperature 8
3-2 1992 Hourly Average Temperature 9
3-3 1993 Hourly Average Temperature 10
3-4 1992 Wind Rose 11
3-5 1991 Mean Hourly Wind Speed 12
3-6 1992 Mean Hourly Wind Speed 13
3-7 1993 Mean Hourly Wind Speed 14
3-8 1991 Barometric Pressure 16
3-9 1992 Barometric Pressure 17
3-10 1993 Barometric Pressure 18
3-11 1992 Monthly Precipitation 19
3-12 1993 Monthly Precipitation 20

List of Tables

2-1 Cominco Meteorological Station Performance Summary – Data Capture 1991 4
2-2 Cominco Meteorological Station Performance Summary – Data Capture 1992 5
2-3 Cominco Meteorological Station Performance Summary – Data Capture 1993 6

TABLE OF CONTENTS (Cont.)

List of Appendices

A Meteorological Data Summary Tables
B Wind Roses

1.0 INTRODUCTION

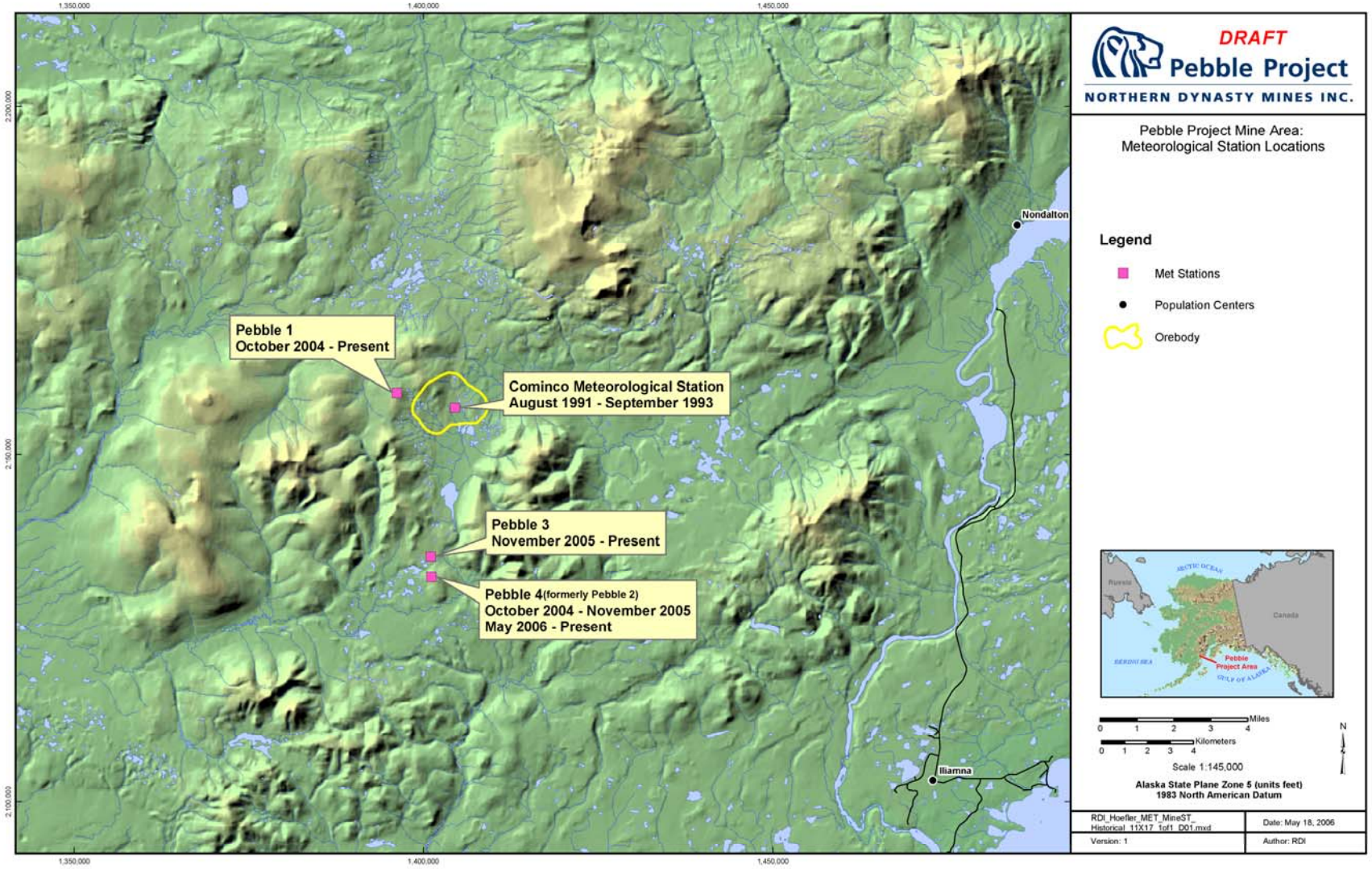
This document is a report of the Cominco meteorological station operation from August 1991 to September 1993. This station collected meteorological data at the Northern Dynasty Mines, Inc. Pebble Project site near Iliamna, Alaska. The Pebble Project is located within the South Central Alaska Intrastate Air Quality Control Region, in an area designated attainment or unclassifiable for all criteria pollutants. The Pebble Project is within a (prevention of Significant Deterioration (PSD) Class II area. The nearest PSD Class I area is the portion of Tuxedni National Wildlife Refuge that is designated as a National Wilderness Area. This PSD Class I area is approximately 140 kilometers east-northeast of the proposed mine site.

The Cominco meteorological station was located at an elevation of 1,175 feet (ft), at latitude 59° 53.86' N and longitude 155° 17.09' W. In October 2004, two new meteorological monitoring stations, "Pebble 1" and "Pebble 2", were installed at the Pebble Project mine area. Pebble 1 is located at an elevation of 1,550 ft at latitude 59° 54.18' N and longitude 155° 19.81' W. PSD-quality meteorological data are being collected at Pebble 1. Pebble 2 was located near the proposed tailing storage facility at latitude 59° 49.84' N and longitude 155° 18.04' W. Non-PSD meteorological quality data were collected at Pebble 2 through November 2005 to support engineering and design. Pebble 2 was reinstalled as a PSD-quality monitoring station in May 2006 and renamed "Pebble 4". A third monitoring station, "Pebble 3", was installed in November 2005 at 59° 50.33' N, 155° 18.08' W. Pebble 3 is a non-PSD quality meteorological monitoring station that is collecting data to support engineering and design. Figure 1-1 provides the locations of the active meteorological monitoring sites and the location of the Cominco meteorological station.

This report summarizes only data collected at the Cominco meteorological station. Regional climate data suitable for comparison to the area of the proposed Pebble Project mine site are available from the Iliamna airport, which is located at latitude 59° 45' N, longitude 154° 54' W and at an elevation of 160 ft. Precipitation data from the Iliamna station are available from the Western Regional Climate Center (www.wrcc.dri.edu).

A discussion of the Cominco monitoring parameters and data retrieval statistics is presented in Section 2.0. Section 3.0 summarizes the meteorological data. Appendix A presents validated meteorological data tables for each parameter measured during the Cominco station monitoring period. Appendix B provides monthly wind rose plots for September 1991 through August 1993 and an annual wind rose plot of the 1992 wind data.

Figure 1-1. Map of Pebble Project Meteorological Monitoring Stations



2.0 MONITORING PARAMETERS AND PERFORMANCE SUMMARY

2.1 Monitoring Parameters

The Cominco meteorological station was equipped with sensors to measure the following parameters:

- Air Temperature (degrees Celsius [ºC]) - 2 meters
- Air Temperature (degrees Celsius [ºC]) - 10 meters
- Wind Speed (meters per second [m/sec])
- Wind Direction (degrees [º])
- Relative Humidity (percent [%])
- Barometric Pressure (millibar [mbar])
- Precipitation (inches of liquid water [in.])
- Evaporation (inches of liquid water [in.])

A performance summary of these measurement parameters is provided in the following section.

2.2 Performance Statistics

The PSD goal for quarterly and annual valid meteorological data recovery is 90 percent, although at remote sites such as the Pebble Project the acceptable recovery rate for meteorological data is 80 percent (EPA, 1987). While the Cominco meteorological station was not a PSD-quality station, the 1992 annual recovery rate was greater than 90 percent for all meteorological parameters except relative humidity, precipitation, and evaporation. Temperature, wind speed, wind direction, and barometric pressure recovery rates were also greater than 90 percent during the fourth quarter 1991 and second quarter 1993. Relative humidity recovery rates surpassed 90 percent during the fourth quarter 1991 and the first, second, and third quarters 1992. Monthly precipitation recovery rates were greater than 90 percent from May through August 1992 but did not surpassed 50 percent at any other time. All evaporation measurements were determined to be invalid because the instrumentation was found to be inaccurate or not functioning throughout the monitoring period.

Annual data retrieval statistics for each meteorological parameter are summarized in Tables 2-1, 2-2, and 2-3.

Table 2-1. Cominco Meteorological Station Performance Summary - Data Capture 1991

Period	Percent Recovery							
	Temp 2 m	Temp 10 m	Wind Speed	Wind Direction	Relative Humidity	Barometric Pressure	Precip	Evap
January	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
February	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
March	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
April	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
June	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
July	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
August[1]	100%	100%	100%	100%	100%	100%	0%	0%
September	93.8%	93.8%	93.8%	93.8%	93.8%	93.8%	0%	0%
October	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	0%	0%
November	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	0%	0%
December	100%	100%	100%	100%	100%	100%	0%	0%
Monitoring Year[2]	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	0%	0%

[1] Monitoring began at 1300 (AST) on August 27, 1991.

[2] August 27 through December 31, 1991.

Table 2-2. Cominco Meteorological Station Performance Summary - Data Capture 1992

Period	Percent Recovery							
	Temp 2 m	Temp 10 m	Wind Speed	Wind Direction	Relative Humidity	Barometric Pressure	Precip	Evap
January	93.3%	93.3%	93.3%	93.3%	93.3%	93.3%	0%	0%
February	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	0%	0%
March	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	0%	0%
April	100%	100%	100%	100%	100%	100%	0%	0%
May	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	0%	0%
June	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	50%	0%
July	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	35%	0%
August	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	0%	0%
September	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	0%	0%
October	97.6%	97.6%	97.6%	97.6%	41.8%	97.6%	0%	0%
November	100%	100%	100%	100%	0%	100%	0%	0%
December	99.9%	99.9%	99.9%	99.9%	0%	99.9%	0%	0%
Monitoring Year	98.8%	98.8%	98.8%	98.8%	77.4%	98.8%	7.1%	0%

Table 2-3. Cominco Meteorological Station Performance Summary - Data Capture 1993

Period	Percent Recovery							
	Temp 2 m	Temp 10 m	Wind Speed	Wind Direction	Relative Humidity	Barometric Pressure	Precip	Evap
January	69.5%	69.5%	69.5%	69.5%	0%	69.5%	0%	0%
February	76.0%	76.0%	81.7%	81.7%	0%	26.8%	25.0%	0%
March	71.8%	71.8%	74.7%	74.7%	0%	71.8%	35.5%	0%
April	100%	100%	100%	100%	0%	100%	33.3%	0%
May	98.7%	98.7%	98.7%	98.7%	0%	98.7%	90.3%	0%
June	99.7%	99.7%	99.7%	99.7%	0%	99.7%	100%	0%
July	99.7%	99.7%	99.7%	99.7%	0%	99.7%	100%	0%
August	100%	100%	100%	100%	0%	100%	100%	0%
September[1]	100%	100%	100%	100%	0%	100%	100%	0%
October	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Monitoring Year[2]	89.9%	89.9%	90.9%	90.9%	0%	84.4%	62.2%	0%

[1] Monitoring ended at 1400 (AST) on September 9, 1993.

[2] January 1 through September 9, 1993.

3.0 METEOROLOGICAL DATA SUMMARY

3.1 Temperature

Figures 3-1 through 3-3 provide the annual time series of hourly average temperatures measured at 2 meters above ground level during 1991, 1992, and 1993, respectively.

From August 27, 1991 through September 7, 1993, hourly average temperatures at the Cominco meteorological station varied from a maximum of 26.2 °C to a minimum of -37.0 °C. The maximum hourly average temperature of 26.2°C was measured on July 10, 1993 between 5 and 6 p.m. The minimum hourly average temperature of -37.0°C was measured on February 1, 1993 between 8 and 10 a.m. The mean temperature at the Cominco meteorological station during this period was 0.5°C.

The 1992 hourly average temperatures varied from a maximum of 21.8°C measured on June 9 between 4 and 5 p.m. to a minimum of -29.4°C measured on February 4 between 8 and 9 a.m. The 1992 annual mean temperature at the Cominco meteorological station was -0.9 °C.

3.2 Horizontal Wind

Wind direction at the Cominco meteorological station was primarily from the north-north east in 1992. However, as demonstrated in Figure 3-4, the 1992 wind rose plot indicates that a predominant portion of winds exceeding 11.0 m/sec were from the east-southeast. The mean wind speed at the Cominco meteorological station during 1992 and for the 1991 to 1993 monitoring period were 5.5 m/sec and 5.8 m/sec, respectively. The maximum hourly average wind speed recorded during 1992 was 27.0 m/sec on October 15. The maximum hourly average wind speed during the 1991 to 1993 monitoring period was 28.3 m/sec on October 31, 1991.

Figures 3-5 through 3-7 show the annual time series of hourly average wind speeds. Appendix B contains an annual 1992 wind rose and monthly wind roses from September 1991 through August 1993.

Figure 3-1. Cominco Meteorological Station – 1991 Hourly Average Temperature

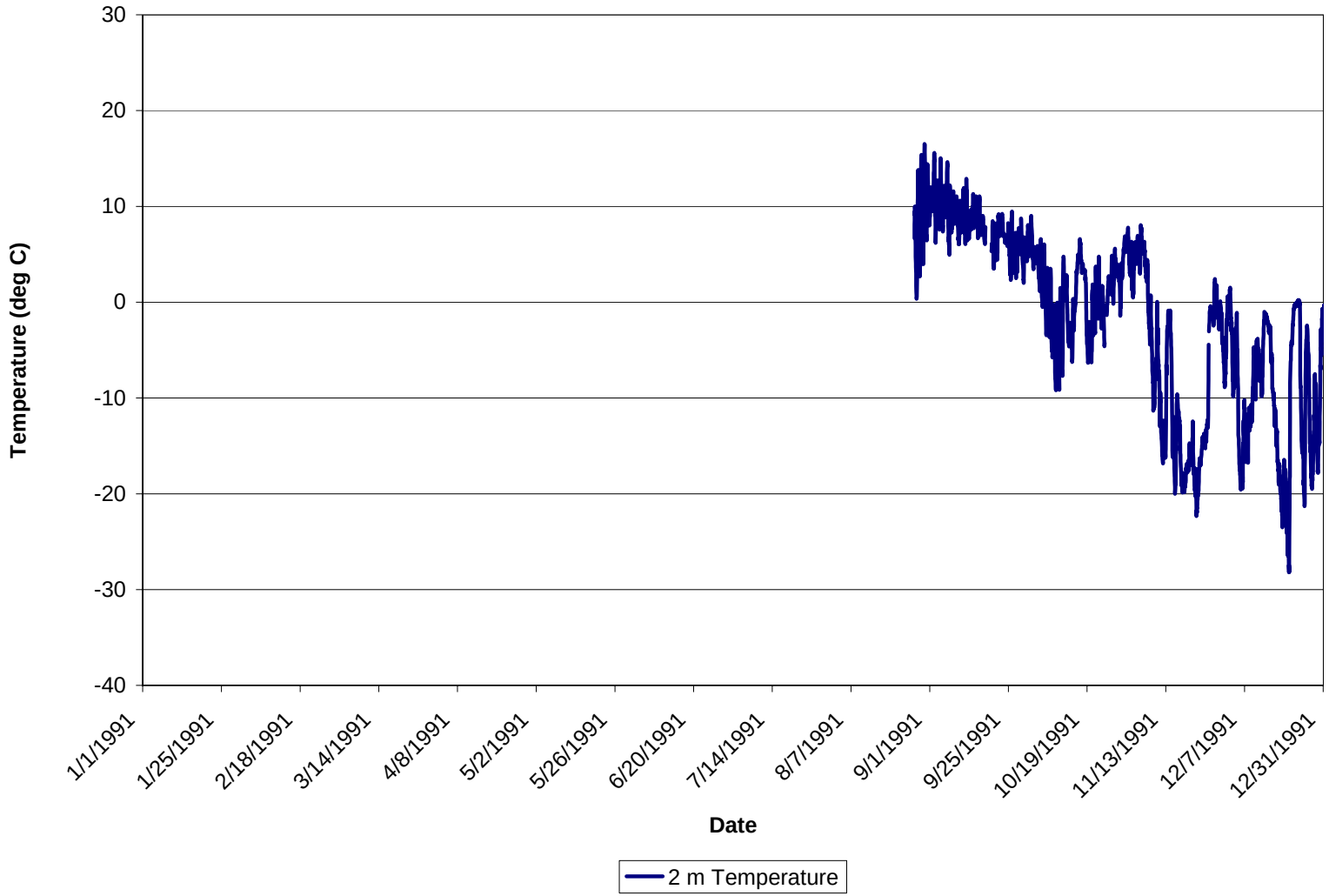


Figure 3-2. Cominco Meteorological Station – 1992 Hourly Average Temperature

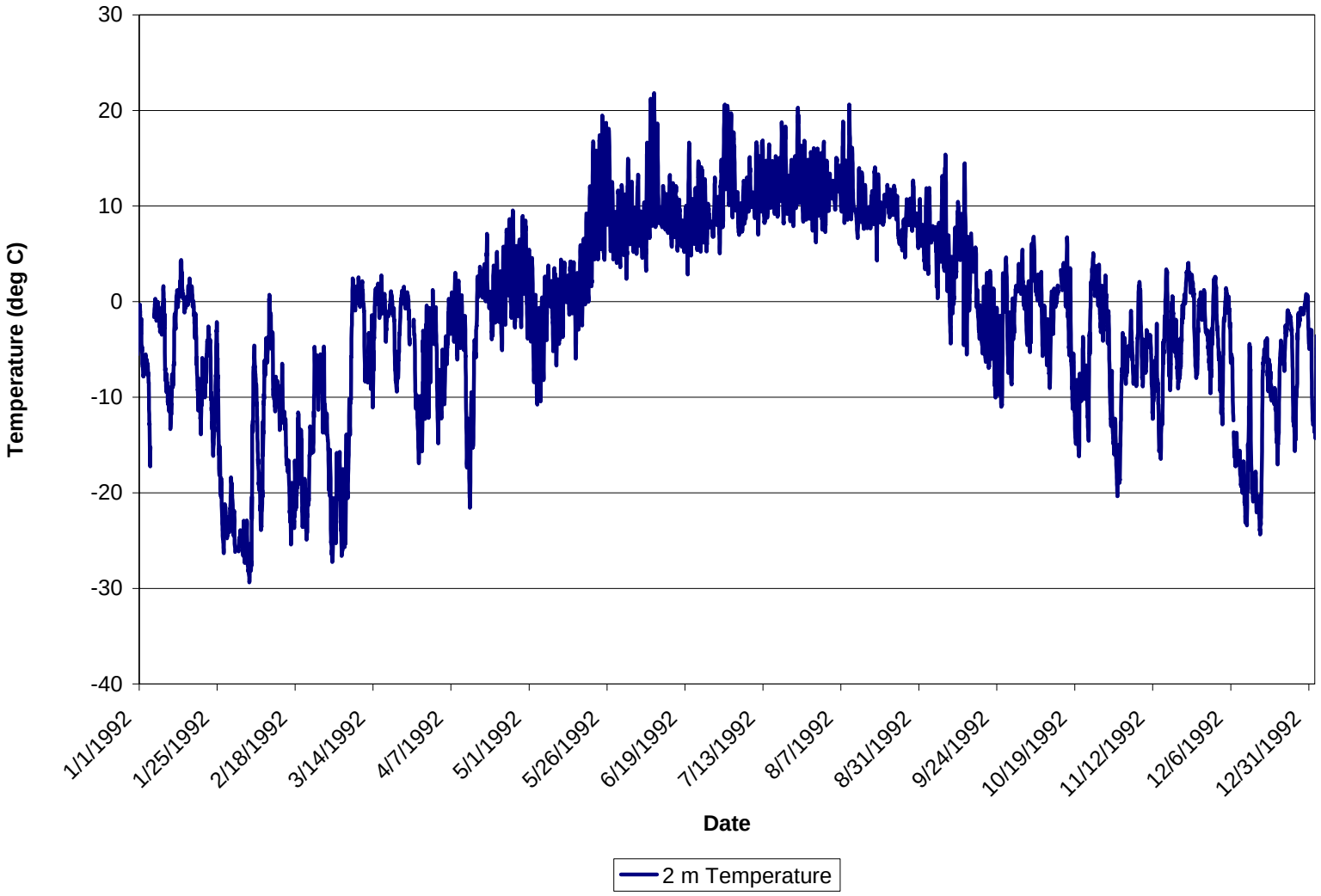


Figure 3-3. Cominco Meteorological Station – 1993 Hourly Average Temperature

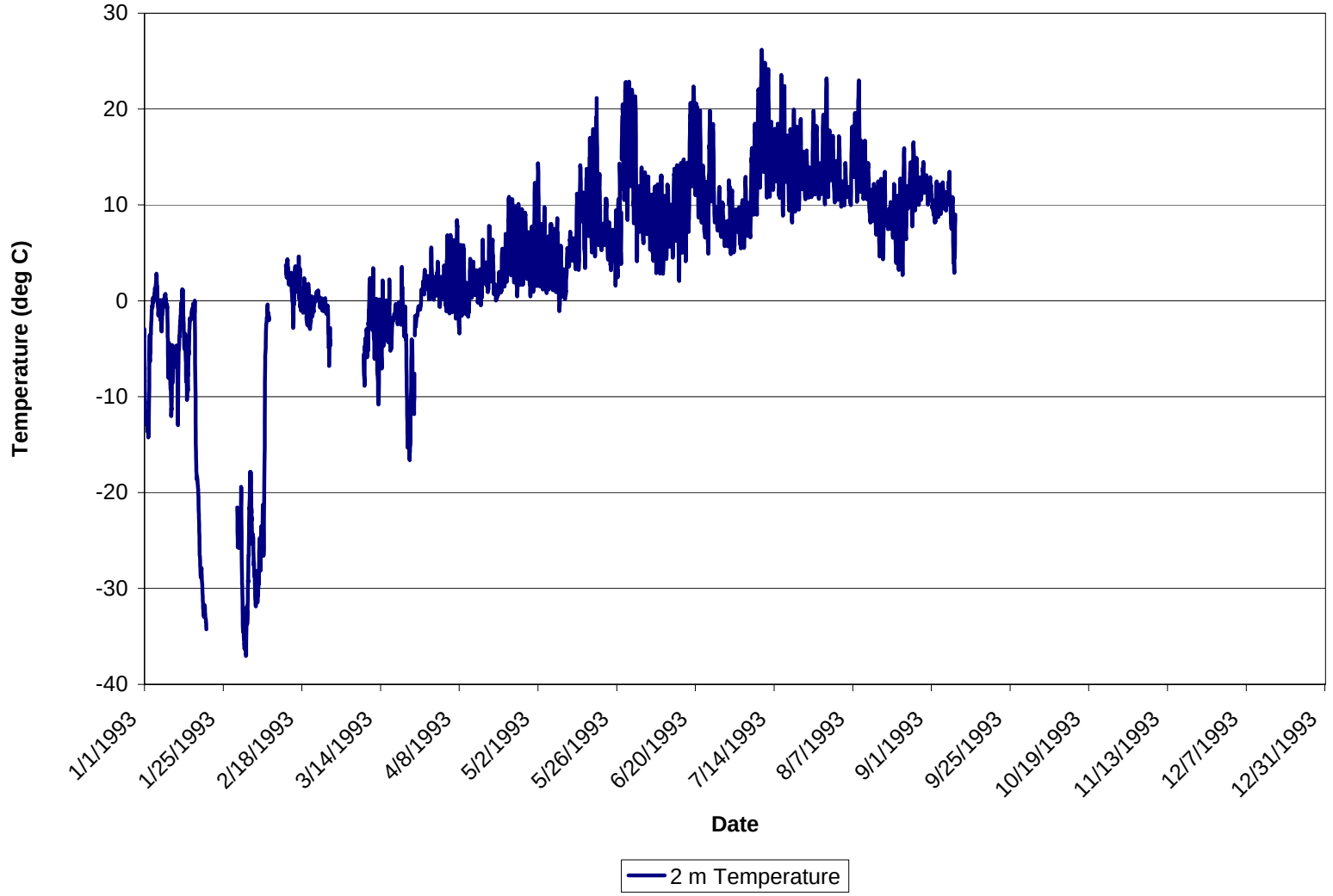


Figure 3-4. Cominco Meteorological Station – 1992 Wind Rose

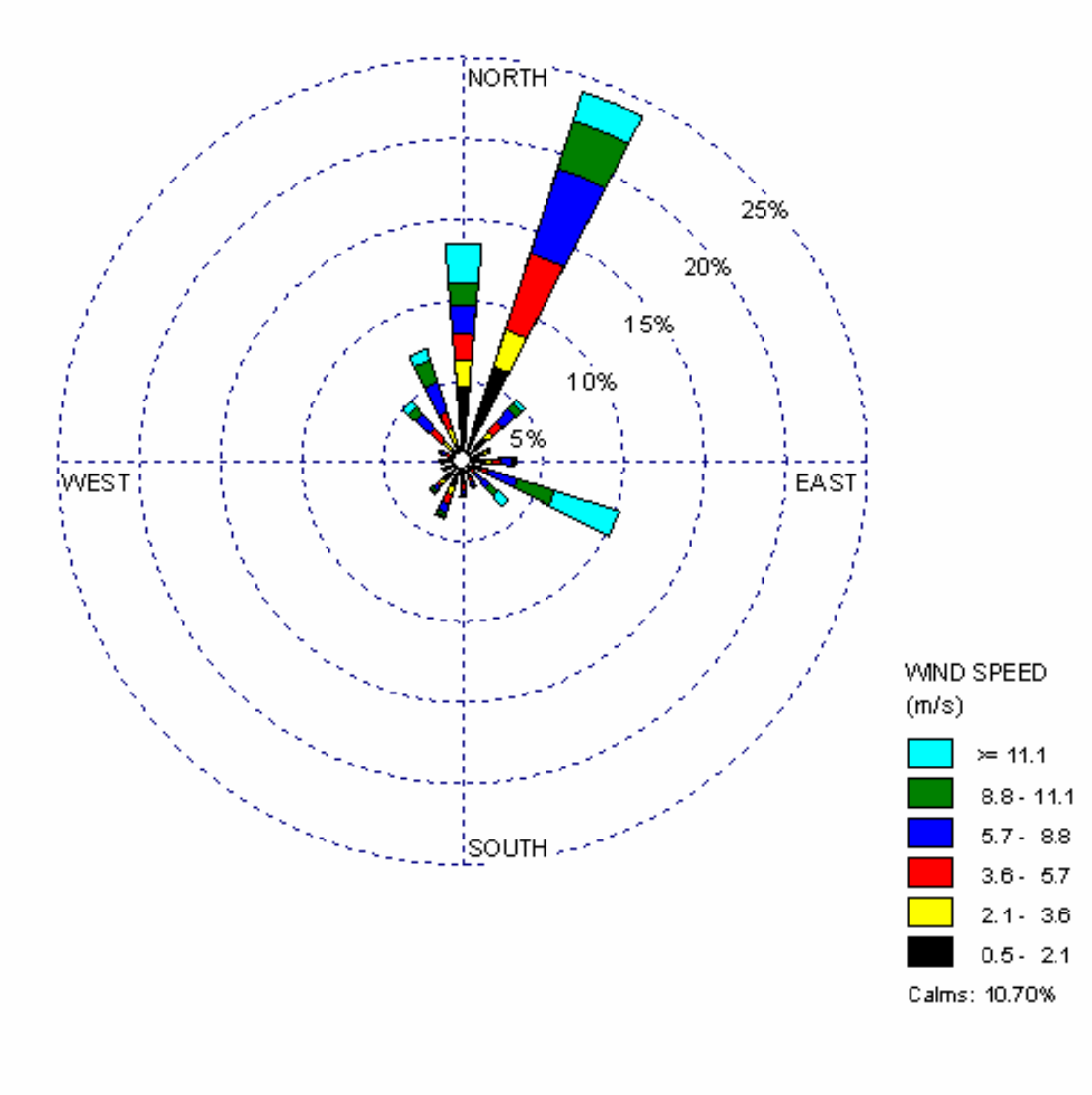


Figure 3-5. Cominco Meteorological Station – 1991 Mean Hourly Wind Speed

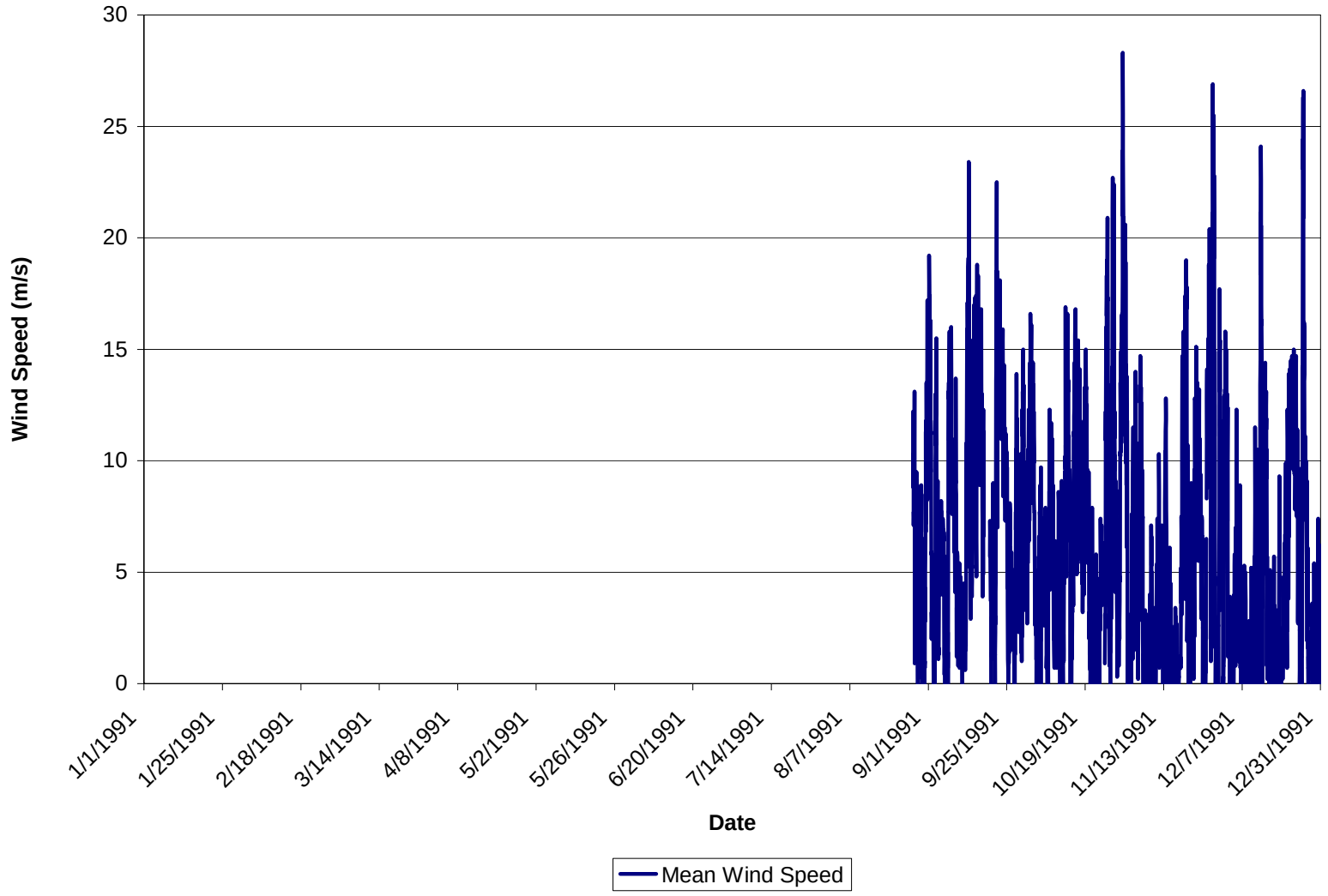


Figure 3-6. Cominco Meteorological Station – 1992 Mean Hourly Wind Speed

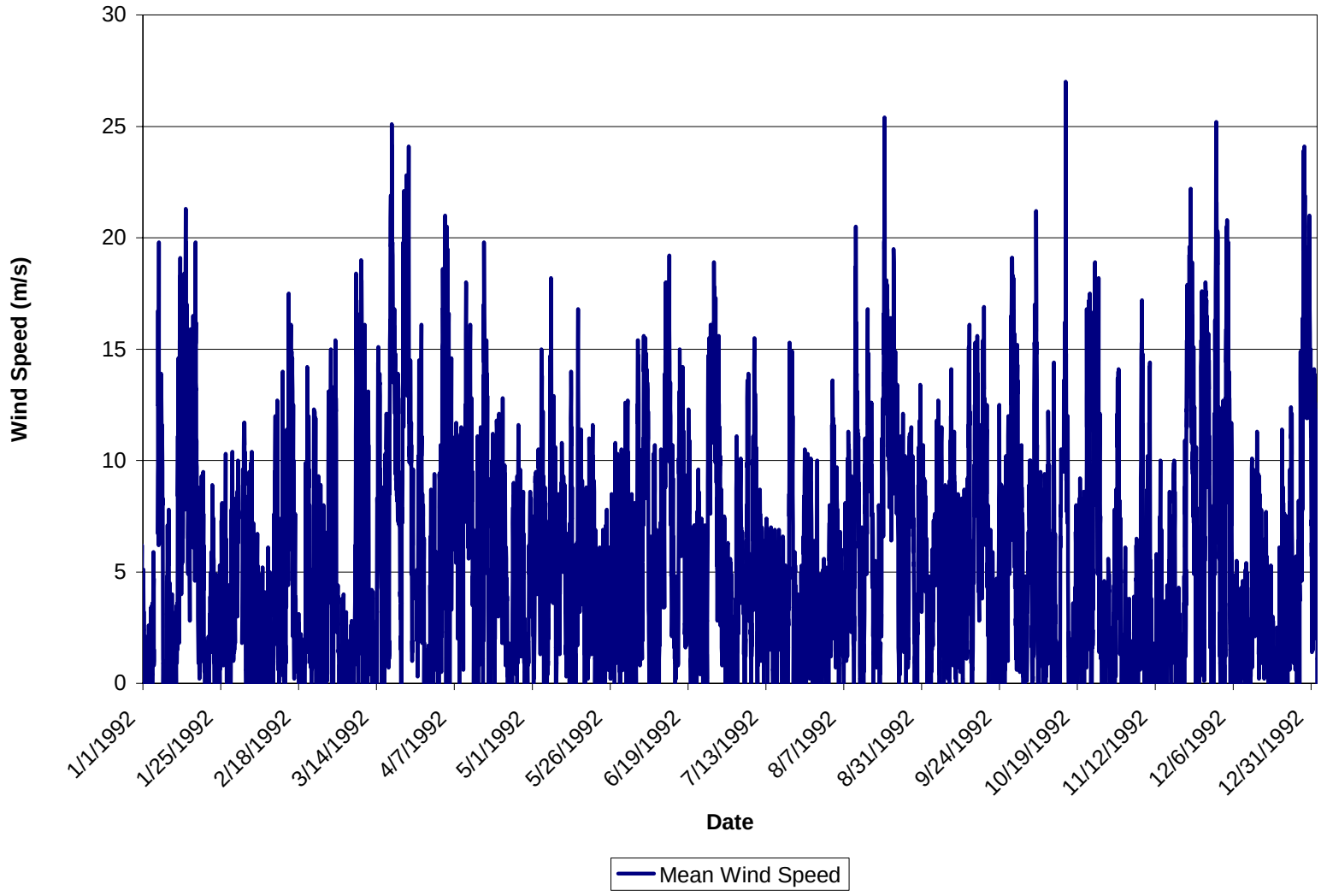
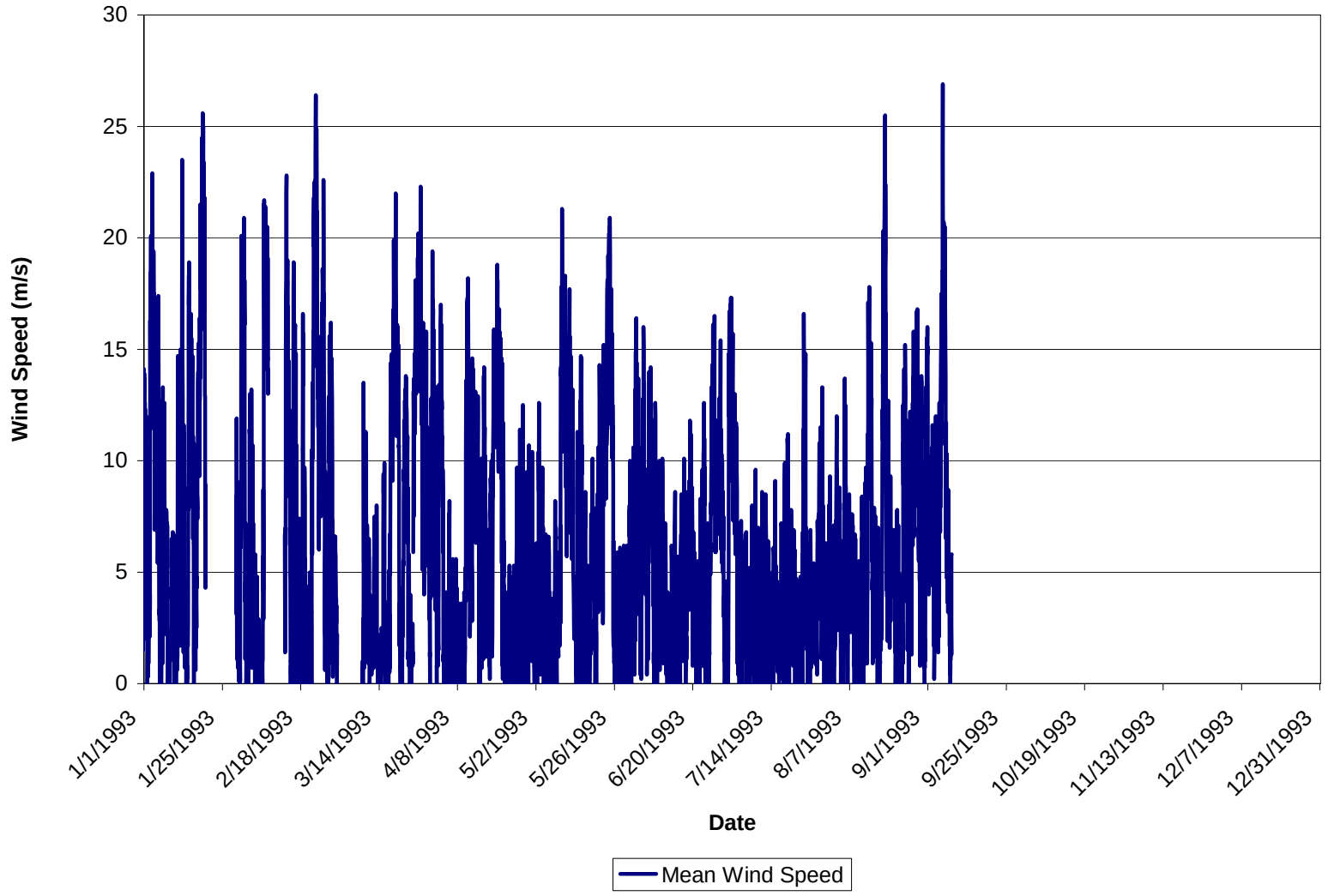


Figure 3-7. Cominco Meteorological Station – 1993 Mean Hourly Wind Speed



3.3 Barometric Pressure

Figures 3-8 through 3-10 show the annual time series of barometric pressure during 1991, 1992, and 1993, respectively. The barometric pressure between August 24, 1991 and September 7, 1993 ranged from 997 to 923 mbar. The mean barometric pressure for this period was 968 mbar. Maximum and minimum hourly average pressures were observed on October 21, 1991 and January 16, 1993, respectively.

During 1992, the barometric pressure ranged from 995 mbar on December 26 to 931 mbar on November 28. The 1992 annual mean barometric pressure was 967 mbar.

3.4 Precipitation

The Cominco meteorological station precipitation measurements, which include rain and snowfall, began on June 16, 1992 but were sporadic throughout the monitoring period. Tables showing the annual precipitation measurements during 1992 and 1993 are provided in Appendix A and include the data capture statistics for each month. During 1992, precipitation measurements were made on 26 days spanning the latter half of June and the first 11 days of July. Precipitation measurements were less intermittent throughout 1993, with valid monitoring for sever days in February, 11 days in March, and 137 days spanning from April to September.

Figures 3-11 and 3-12 show the Cominco meteorological station monthly precipitation measurements labeled with the percent of monthly data capture. Precipitation data collected at Iliamna Airport, available from the Western Regional Climate Center (www.wrcc.dri.edu), are included in Figures 3-11 and 3-12 to provide a context for annual precipitation trends in the Pebble Project area during 1992 and 1993.

The 1992 maximum daily precipitation value recorded at the Cominco meteorological station was 17.0 mm on June 27.

Precipitation data capture was 90 percent or better from May through August 1993. Monthly precipitation totals observed at the Cominco meteorological station exceeded Iliamna Airport observations by 62 percent to 278 percent during this period. The 1993 maximum daily precipitation recorded at the Cominco meteorological station was 17.0 mm on August 19, 1993.

Figure 3-8. Cominco Meteorological Station – 1991 Barometric Pressure

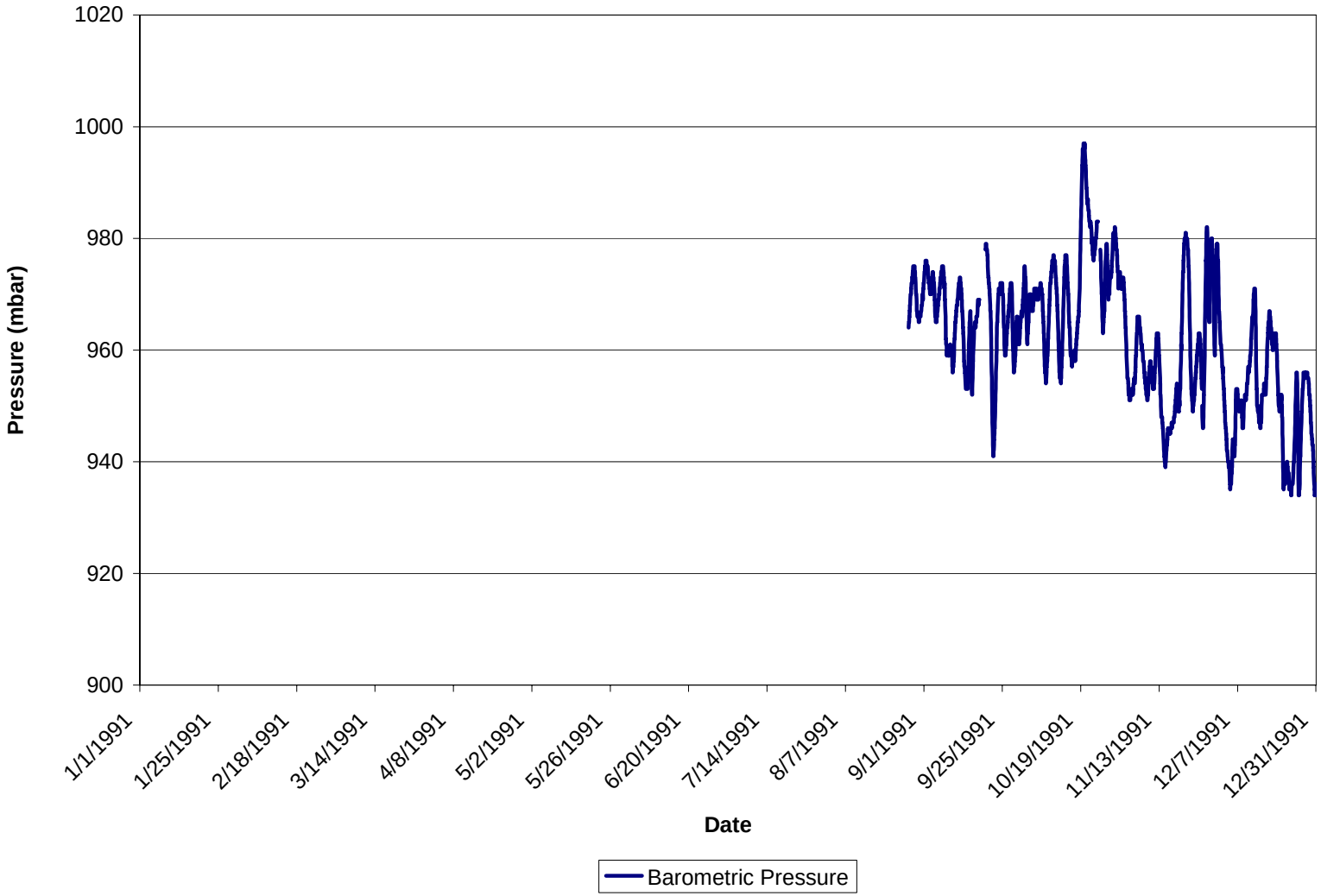


Figure 3-9. Cominco Meteorological Station – 1992 Barometric Pressure

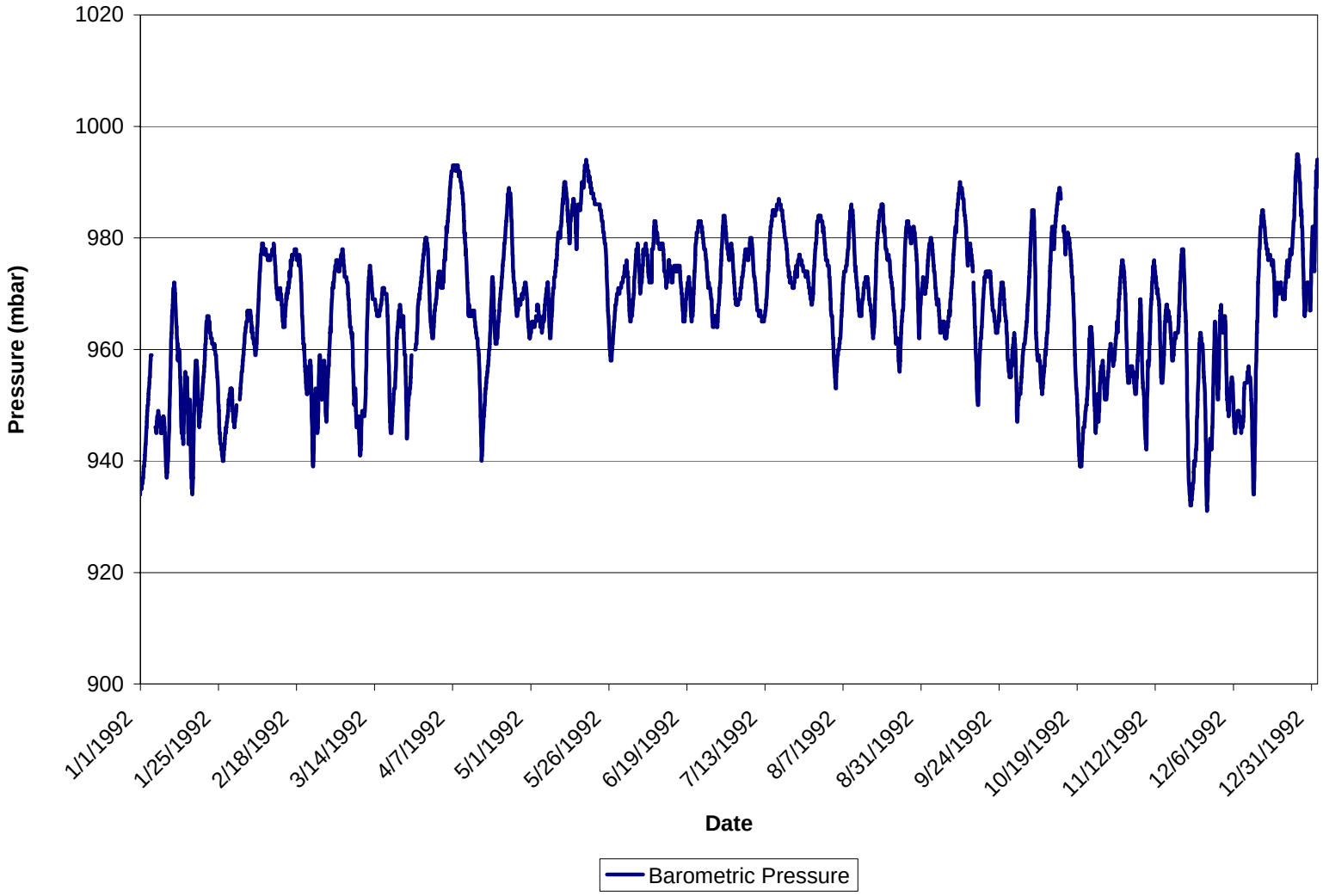


Figure 3-10. Cominco Meteorological Station – 1993 Barometric Pressure

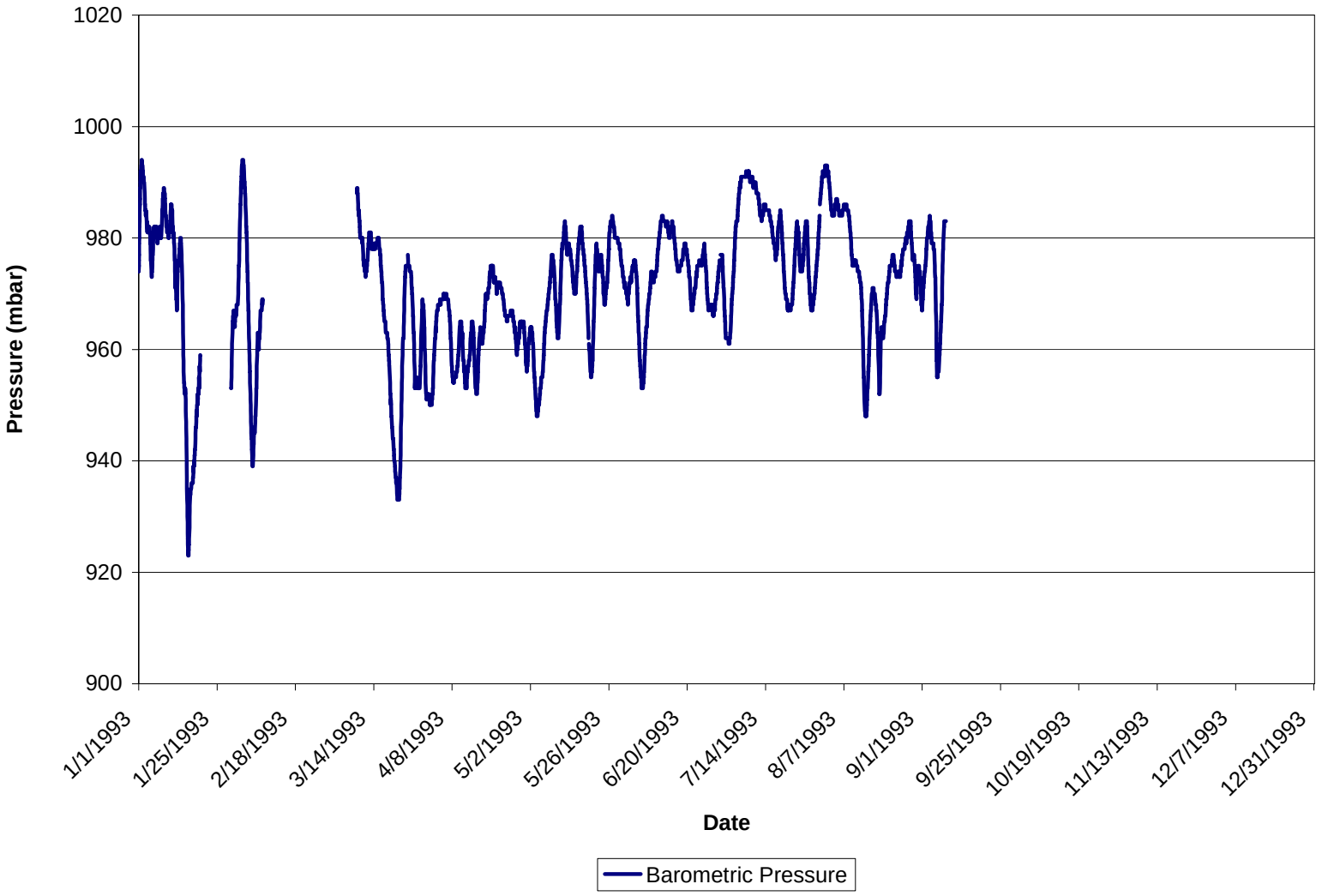
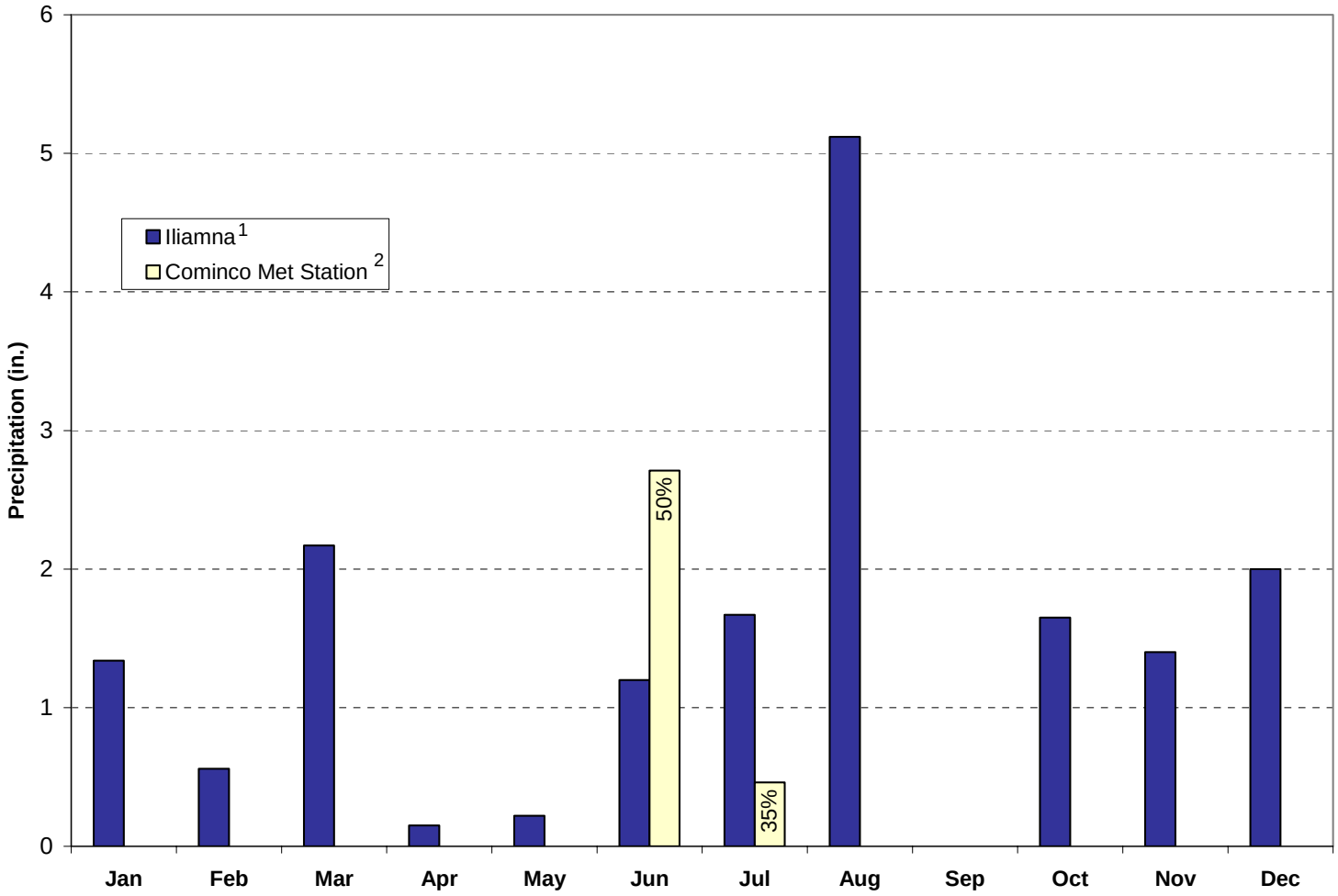


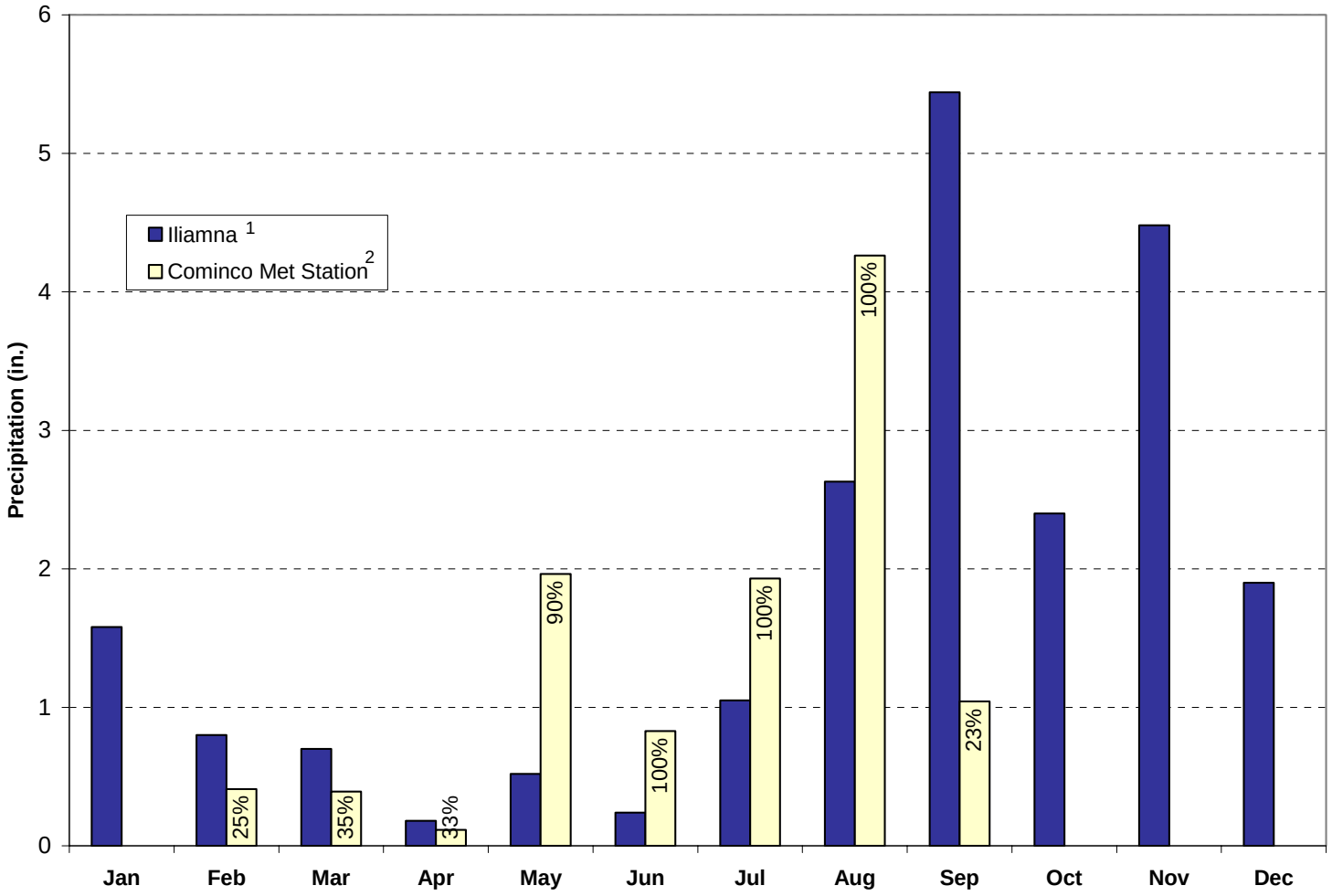
Figure 3-11. Cominco Meteorological Station – 1992 Monthly Precipitation and Iliamna Airport



[1] Data obtained from the National Weather Service (www.wrcc.dri.edu).

[2] Displayed values are percentages of monthly data capture.

Figure 3-12. Cominco Meteorological Station – 1993 Monthly Precipitation and Iliamna Airport



[1] Data obtained from the National Weather Service (www.wrcc.dri.edu).

[2] Displayed values are percentages of monthly data capture.

3.5 Other Parameters

Other meteorological parameters measured at the Cominco meteorological station include temperature at 10 meters above ground level and relative humidity. An evaporation pan was deployed at the Cominco meteorological station but the evaporation data has been reviewed and considered unreliable.

The maximum and minimum temperatures at 10 meters were 24.1°C and -37.0°C measured on July 10, 1993 between 6 and 7 p.m. and February 1, 1993 between 8 and 9 a.m., respectively. The mean 10-meter temperature at during this period was 0.5°C.

Relative humidity measurements were collected from August 27, 1991 to October 13, 1992. During this period, relative humidity varied from 100 percent to a minimum of 28.0 percent measured on June 8, 1992 between 4 and 5 p.m. The mean relative humidity at the Cominco meteorological station was 79.8 percent during this period.

4.0 REFERENCES

U.S. Environmental Protection Agency (EPA). 2005. *Meteorology Monitoring Guidance for Regulatory Modeling Applications*. Office of Air Quality Planning and Standards, Research Triangle Park, NC. EPA-454/R-99-005.

U.S. Environmental Protection Agency, 1987. *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD).* U.S. EPA OAQPS. Research Triangle Park, NC. EPA-450/4-87

Northern Dynasty Mines, Inc., 2005. *Pebble Project Hydrometeorology*. Ref. No. VA101-00176/07-4, Revision C, September 15, 2005.

APPENDIX A

Meteorological Data Summary Tables

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

August *1991*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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24																											
25																											
26																											
27													6.7	8.1	8.6	9.4	9.1	10.0	9.2	8.9	7.4	5.9	4.7	4.1	10.0	4.1	7.7
28	3.7	3.0	1.7	1.1	0.7	0.3	0.6	0.6	2.3	4.7	6.4	7.9	9.9	10.9	12.3	13.2	13.7	13.8	13.5	12.7	10.7	8.7	7.5	5.6	13.8	0.3	6.9
29	5.2	5.2	4.9	4.2	3.5	2.7	3.3	3.9	5.2	6.3	9.5	11.2	11.5	13.0	14.7	15.0	15.4	13.9	12.8	13.2	11.6	10.2	9.4	8.6	15.4	2.7	8.9
30	8.6	7.3	6.9	5.9	4.0	4.0	4.0	4.1	5.8	8.0	10.8	12.2	13.4	14.8	15.5	16.3	16.5	16.4	15.7	14.4	12.0	10.3	8.9	7.2	16.5	4.0	10.1
31	7.4	7.1	6.7	7.8	8.1	6.9	7.0	6.4	8.6	11.6	12.3	12.9	13.6	14.2	14.4	14.2	13.9	13.4	12.5	11.5	9.6	9.1	9.0	8.7	14.4	6.4	10.3
Max.	**8.6**	**7.3**	**6.9**	**7.8**	**8.1**	**6.9**	**7.0**	**6.4**	**8.6**	**11.6**	**12.3**	**12.9**	**13.6**	**14.8**	**15.5**	**16.3**	**16.5**	**16.4**	**15.7**	**14.4**	**12.0**	**10.3**	**9.4**	**8.7**	**16.5**		
Min.	**3.7**	**3.0**	**1.7**	**1.1**	**0.7**	**0.3**	**0.6**	**0.6**	**2.3**	**4.7**	**6.4**	**7.9**	**6.7**	**8.1**	**8.6**	**9.4**	**9.1**	**10.0**	**9.2**	**8.9**	**7.4**	**5.9**	**4.7**	**4.1**		**0.3**	
Avg.	**6.2**	**5.6**	**5.0**	**4.8**	**4.0**	**3.5**	**3.7**	**3.7**	**5.5**	**7.6**	**9.7**	**11.1**	**11.0**	**12.2**	**13.1**	**13.6**	**13.7**	**13.5**	**12.7**	**12.1**	**10.3**	**8.8**	**7.9**	**6.8**			**8.8**

Total Hours in Month 744 **Hours Data Available** 108 **Data Recovery** 14.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

September 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.4	8.3	8.2	8.2	8.0	8.1	8.5	8.8	9.0	9.1	10.0	10.4	10.7	11.4	11.6	11.8	12.0	11.7	10.9	10.7	10.3	10.1	10.0	9.9	12.0	8.0	9.8
2	9.7	9.8	10.0	10.1	10.1	9.7	9.5	9.8	9.6	10.7	11.6	12.8	13.5	13.7	14.8	14.9	15.4	15.6	14.8	12.8	11.7	10.8	10.4	9.0	15.6	9.0	11.7
3	9.0	7.0	6.2	7.4	7.5	7.9	8.1	8.9	8.8	9.9	10.7	11.3	11.9	12.6	12.5	12.5	12.7	12.5	11.8	10.8	9.8	9.0	8.8	8.7	12.7	6.2	9.8
4	8.8	8.8	8.2	8.3	8.8	8.6	7.7	7.6	7.7	8.5	9.4	10.6	11.9	12.4	12.8	14.2	15.0	13.3	13.2	12.2	10.9	9.9	8.8	9.0	15.0	7.6	10.3
5	9.1	9.2	8.8	8.6	8.4	8.1	8.1	8.0	7.4	8.3	8.5	9.0	9.3	9.8	10.6	11.7	12.1	11.8	10.9	10.7	10.1	9.5	9.5	9.4	12.1	7.4	9.5
6	9.3	9.3	9.5	9.5	9.3	9.0	8.8	8.9	9.2	9.7	10.3	11.1	12.2	12.8	13.5	14.2	14.6	14.6	14.2	14.3	11.5	9.5	9.0	8.0	14.6	8.0	10.9
7	7.5	6.4	6.7	6.6	6.2	6.1	5.8	4.9	5.6	7.1	8.8	12.1	12.2	11.8	11.3	10.5	9.8	9.5	9.3	8.1	7.7	7.4	7.3	7.2	12.2	4.9	8.2
8	7.3	7.4	7.7	8.5	8.1	7.7	8.0	8.7	9.2	9.7	9.6	10.4	10.9	11.5	11.6	11.3	10.8	10.4	10.0	9.3	8.5	8.2	8.3	8.3	11.6	7.3	9.2
9	8.2	8.2	8.3	8.3	8.4	8.8	8.8	8.5	8.4	8.7	9.3	9.6	9.9	10.3	11.1	10.8	10.7	10.5	10.2	9.8	8.6	8.1	8.1	8.1	11.1	8.1	9.1
10	7.8	7.0	6.5	6.8	6.6	6.2	6.0	6.1	6.0	6.3	6.9	7.6	8.8	9.2	9.5	10.4	10.6	9.6	9.2	9.2	8.4	7.3	7.5	8.2	10.6	6.0	7.8
11	7.9	7.9	7.9	7.7	7.6	7.5	7.4	7.4	7.3	7.5	7.7	8.2	9.5	9.0	11.7	11.7	11.3	11.5	11.0	11.9	7.9	7.2	8.0	7.5	11.9	7.2	8.8
12	7.2	8.0	7.6	7.6	7.3	6.3	6.1	6.1	6.6	7.2	7.9	9.0	11.1	12.1	12.9	12.6	11.8	11.0	11.6	10.8	8.3	6.4	7.0	7.3	12.9	6.1	8.7
13	8.4	8.2	8.3	8.2	8.5	8.4	8.2	7.9	7.0	6.8	6.7	6.6	7.3	7.5	8.2	8.5	8.6	8.3	8.5	8.3	8.8	9.1	9.5	9.6	9.6	6.6	8.1
14	9.4	8.4	7.6	7.9	7.8	8.1	8.1	8.6	8.7	8.8	9.2	9.9	9.6	9.9	9.8	10.4	11.3	11.3	10.5	9.3	8.3	7.8	7.7	8.5	11.3	7.6	9.0
15	8.9	9.0	8.9	9.1	9.3	9.1	8.9	8.9	8.8	9.0	9.5	10.3	10.8	10.6	11.1	10.9	9.9	9.4	9.0	8.9	9.2	9.4	9.7	10.5	11.1	8.8	9.5
16	9.7	9.3	8.2	7.1	6.7	7.3	9.0	9.4	9.4	9.4	9.5	9.2	9.3	9.2	10.3	10.7	11.1	10.7	10.0	9.1	8.3	7.7	7.5	7.4	11.1	6.7	9.0
17	7.2	7.1	7.0	7.1	7.1	7.3	7.4	7.8	7.8	8.1	7.7	7.8	8.1	8.7	8.9	8.7	8.6	9.0	8.9	8.4	7.9	7.7	7.9	7.9	9.0	7.0	7.9
18	7.4	6.9	6.7	6.7	6.4	6.3	6.3	6.2	6.1	6.3	6.8	7.8													7.8	6.1	6.6
19																											
20										5.3	5.6	6.1	5.8	5.8	6.1	6.1	7.9	8.5	7.3	6.3	6.2	5.7	4.8	3.8	8.5	3.8	6.1
21	3.5	3.6	3.5	3.6	3.6	4.7	4.5	4.2	4.7	5.1	6.0	6.0	6.6	7.7	8.1	8.2	8.2	7.7	7.9	6.9	5.8	5.4	5.3	4.8	8.2	3.5	5.7
22	4.8	4.8	4.7	4.4	4.9	5.2	6.1	6.8	7.7	7.8	8.3	9.1	8.8	8.7	9.2	8.0	7.4	7.6	7.6	8.1	7.0	6.9	7.3	7.4	9.2	4.4	7.0
23	7.4	7.4	7.3	7.5	7.3	7.3	7.2	7.2	7.4	7.4	7.8	8.1	8.1	8.1	8.8	9.2	9.2	8.9	8.8	8.4	8.4	8.1	7.2	6.9	9.2	6.9	7.9
24	7.0	7.0	7.0	7.1	7.1	7.0	7.2	7.0	7.0	6.9	7.0	6.4	6.2	6.5	6.3	6.3	6.6	6.6	6.9	7.0	6.9	6.5	6.3	6.5	7.2	6.2	6.8
25	6.4	6.4	6.2	6.1	6.0	6.1	6.1	5.8	6.1	6.7	7.0	7.4	8.2	8.0	7.8	7.9	8.1	7.9	6.5	6.0	5.7	5.1	4.8	4.9	8.2	4.8	6.5
26	4.7	4.0	3.0	3.4	3.6	2.8	3.0	2.9	2.3	3.2	5.0	6.5	7.6	8.7	8.7	9.3	9.5	7.7	6.6	6.1	5.3	4.7	5.1	4.9	9.5	2.3	5.4
27	4.3	4.0	3.5	3.7	3.6	3.5	3.3	3.1	3.1	3.5	3.7	4.2	4.5	4.7	5.3	6.6	6.7	7.3	5.9	5.0	3.7	2.9	2.5	2.6	7.3	2.5	4.2
28	3.2	3.6	3.7	3.7	4.4	4.2	3.8	3.1	3.2	4.2	5.0	6.2	6.2	7.3	7.2	7.2	6.7	7.3	7.6	7.8	7.1	6.1	6.1	6.2	7.8	3.1	5.5
29	6.5	6.2	5.4	5.9	6.0	6.1	6.1	6.0	5.7	4.9	5.9	7.8	8.5	8.8	8.0	7.0	6.0	5.6	5.4	5.3	5.3	4.8	4.5	4.1	8.8	4.1	6.1
30	3.9	3.9	3.9	3.7	3.3	2.9	2.3	2.4	2.0	3.4	4.9	5.8	6.8	6.7	5.4	5.1	5.7	5.9	6.2	6.4	6.4	6.3	6.2	6.1	6.8	2.0	4.8
Max.	**9.7**	**9.8**	**10.0**	**10.1**	**10.1**	**9.7**	**9.5**	**9.8**	**9.6**	**10.7**	**11.6**	**12.8**	**13.5**	**13.7**	**14.8**	**14.9**	**15.4**	**15.6**	**14.8**	**14.3**	**11.7**	**10.8**	**10.4**	**10.5**	**15.6**		
Min.	**3.2**	**3.6**	**3.0**	**3.4**	**3.3**	**2.8**	**2.3**	**2.4**	**2.0**	**3.2**	**3.7**	**4.2**	**4.5**	**4.7**	**5.3**	**5.1**	**5.7**	**5.6**	**5.4**	**5.0**	**3.7**	**2.9**	**2.5**	**2.6**		**2.0**	
Avg.	**7.2**	**7.0**	**6.8**	**6.9**	**6.9**	**6.8**	**6.8**	**6.8**	**6.8**	**7.2**	**7.8**	**8.5**	**9.1**	**9.4**	**9.8**	**9.9**	**9.9**	**9.7**	**9.3**	**8.9**	**8.0**	**7.4**	**7.3**	**7.2**			**7.9**

Total Hours in Month 720 **Hours Data Available** 675 **Data Recovery** 93.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

October 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.6	5.3	4.9	4.7	4.5	4.7	4.6	4.3	4.3	4.4	5.0	5.7	5.8	7.3	7.6	8.0	8.1	7.5	6.8	6.1	6.1	5.8	5.7	5.3	8.1	4.3	5.7
2	4.8	5.3	5.4	5.4	5.4	5.5	5.6	5.6	5.6	5.8	6.1	6.6	7.1	8.4	8.8	9.0	8.7	8.2	8.0	7.8	7.4	7.3	6.9	6.1	9.0	4.8	6.7
3	5.2	4.7	4.6	4.8	4.6	4.2	3.7	3.5	3.4	3.8	4.3	4.3	5.5	5.7	5.7	5.8	5.7	5.3	5.4	4.8	4.6	4.8	4.9	4.7	5.8	3.4	4.7
4	4.4	4.2	4.3	4.4	4.3	4.1	4.1	4.1	4.2	4.4	4.7	4.8	5.0	5.1	5.9	5.4	5.4	5.3	5.4	4.5	4.1	3.4	2.7	2.9	5.9	2.7	4.5
5	2.5	2.6	2.9	2.4	2.0	1.5	1.2	1.1	1.4	2.6	3.3	3.7	5.2	6.2	6.5	6.6	5.7	5.4	4.7	4.1	2.6	1.5	0.5	0.3	6.6	0.3	3.2
6	0.3	0.0	-0.5	-0.5	-0.5	-0.5	-0.5	0.2	0.3	1.4	2.1	2.7	3.7	4.6	5.3	5.6	6.0	5.2	4.1	2.4	2.9	3.0	2.5	1.7	6.0	-0.5	2.1
7	1.2	1.2	0.4	-1.0	-2.0	-2.2	-3.0	-3.3	-3.5	-2.3	-0.7	0.8	2.2	2.9	3.5	3.6	3.5	3.1	2.1	-0.4	-1.3	-1.5	-2.3	-2.6	3.6	-3.5	-0.1
8	-2.2	-2.7	-2.8	-3.1	-3.0	-3.0	-3.2	-3.5	-3.7	-1.8	-0.3	1.5	2.3	2.6	3.2	3.5	3.4	2.5	0.6	-1.4	-2.3	-3.2	-3.9	-4.5	3.5	-4.5	-1.0
9	-4.8	-5.0	-5.2	-5.1	-5.3	-5.8	-5.3	-5.0	-4.6	-4.0	-4.1	-3.5	-2.9	-2.3	-1.0	-0.6	-0.2	-0.7	-1.4	-3.1	-4.0	-4.8	-5.3	-5.9	-0.2	-5.9	-3.7
10	-6.5	-7.3	-8.0	-8.5	-8.5	-9.0	-9.1	-9.2	-8.8	-7.9	-6.0	-3.7	-2.1	-1.3	-0.6	-0.3	0.0	-0.5	-2.0	-4.1	-5.5	-6.1	-6.8	-7.0	0.0	-9.2	-5.4
11	-6.9	-6.2	-6.4	-7.6	-8.2	-8.5	-8.2	-8.3	-9.1	-7.8	-5.9	-4.3	-2.8	-1.1	0.1	1.0	1.5	1.1	-0.4	-2.7	-4.1	-5.0	-5.7	-6.3	1.5	-9.1	-4.6
12	-6.5	-6.7	-7.3	-7.6	-7.5	-7.1	-7.3	-7.7	-7.1	-5.4	-2.3	-1.9	2.4	3.9	4.5	4.8	4.5	4.1	3.7	3.2	2.8	2.1	0.9	0.2	4.8	-7.7	-1.6
13	0.9	1.3	1.2	1.6	2.0	1.5	1.2	1.4	0.6	0.5	0.8	1.4	1.8	2.2	2.8	2.1	1.0	0.3	-0.3	-0.9	-1.1	-1.3	-1.8	-2.3	2.8	-2.3	0.7
14	-3.5	-3.9	-4.0	-4.1	-3.7	-3.8	-4.1	-4.4	-4.6	-4.6	-4.4	-4.0	-3.7	-3.6	-3.3	-2.8	-2.5	-2.1	-2.3	-2.5	-3.3	-3.4	-3.4	-3.9	-2.1	-4.6	-3.6
15	-4.6	-4.5	-4.7	-4.5	-4.8	-4.4	-4.5	-5.6	-6.2	-5.9	-4.0	-2.4	-2.0	-0.8	-0.3	0.3	-0.3	-0.8	-2.9	-2.7	-3.0	-2.5	-1.5	-1.1	0.3	-6.2	-3.1
16	-0.8	-1.0	-0.9	-0.6	-0.6	-0.4	-0.4	-0.2	-0.1	0.1	0.4	1.0	1.5	2.1	2.7	3.0	3.3	3.0	3.0	3.2	3.5	3.7	3.9	4.1	4.1	-1.0	1.4
17	4.3	4.3	4.6	5.0	4.8	4.9	4.7	4.6	4.2	4.2	4.4	4.9	5.0	5.3	5.7	6.3	6.6	6.2	6.2	6.0	6.2	6.0	5.9	5.7	6.6	4.2	5.2
18	5.1	4.8	4.3	4.4	4.1	3.6	3.3	3.1	3.1	3.0	3.1	3.3	3.6	4.0	4.0	3.9	3.7	3.5	3.3	3.2	3.3	3.4	3.3	3.4	5.1	3.0	3.7
19	3.3	3.4	3.3	3.2	3.2	3.3	3.3	2.7	2.3	2.3	2.6	2.6	2.2	2.0	0.2	-0.6	-1.0	-1.7	-2.5	-3.4	-3.7	-4.2	-4.4	-4.3	3.4	-4.4	0.6
20	-4.5	-4.9	-5.3	-6.0	-6.3	-6.3	-6.2	-6.2	-6.3	-6.2	-5.2	-3.9	-3.1	-2.0	-2.6	-2.7	-2.5	-2.8	-3.0	-3.4	-3.7	-3.8	-4.2	-4.4	-2.0	-6.3	-4.4
21	-4.8	-4.5	-4.8	-5.6	-5.4	-5.8	-6.3	-5.4	-5.2	-5.1	-5.0	-2.0	0.7	1.3	0.2	1.9	1.8	0.6	-1.5	-3.0	-3.5	-3.3	-2.8	-2.5	1.9	-6.3	-2.9
22	-1.4	-1.4	-1.4	-1.2	-1.4	-1.5	-1.6	-2.2	-3.0	-3.1	-3.2	-1.5	0.5	2.6	3.7	3.2	2.5	1.9	1.1	0.0	-0.3	-0.3	-1.0	-1.2	3.7	-3.2	-0.4
23	-0.9	-0.7	-0.7	-1.0	-0.8	-0.3	-0.9	-0.6	-1.3	-1.7	-0.7	-0.4	1.8	3.1	4.8	2.9	1.8	1.1	0.4	0.3	0.1	0.1	0.1	0.1	4.8	-1.7	0.3
24	0.1	-0.2	-0.6	-0.4	-0.6	-1.1	-1.9	-2.0	-2.1	-2.8	-1.4	0.6	1.7	1.3	1.0	1.7	1.4	0.9	0.8	0.6	0.5	0.4	0.0	-0.3	1.7	-2.8	-0.1
25	-0.5	-0.8	-1.5	-2.7	-3.0	-3.6	-4.4	-4.6	-4.3	-4.3															-0.5	-4.6	-3.0
26		-1.4	-0.9	-0.2	-0.2	0.0	0.4	0.9	1.3	1.5	1.8	2.1	2.0	2.3	2.7	2.7	2.3	1.9	1.2	0.8	1.2	1.9	2.2	2.3	2.7	-1.4	1.3
27	2.1	2.2	2.3	2.6	2.5	2.0	2.1	2.2	1.8	1.5	1.8	2.2	4.0	4.1	4.9	4.2	4.0	3.0	1.0	0.7	0.9	1.0	1.0	0.9	4.9	0.7	2.3
28	-0.1	-0.2	1.0	1.5	1.9	2.2	2.4	2.4	2.8	3.2	3.5	4.1	5.3	5.6	5.2	4.5	4.5	4.4	4.5	4.3	4.2	3.3	3.0	2.7	5.6	-0.2	3.2
29	2.8	3.2	3.2	2.8	2.7	2.9	3.0	3.2	3.4	3.5	3.6	3.5	3.1	3.3	3.9	3.4	3.3	3.1	2.6	2.4	2.1	2.2	2.6	2.4	3.9	2.1	3.0
30	2.1	1.4	0.0	-0.5	-1.4	-1.3	-0.4	0.3	-0.5	0.0	1.7	2.3	3.2	4.1	3.9	3.2	3.6	2.5	2.5	3.1	2.8	3.2	3.5	3.8	4.1	-1.4	1.8
31	4.1	4.5	4.8	5.1	5.5	5.6	5.4	5.1	5.4	5.5	6.1	6.4	6.6	6.7	6.7	6.9	6.6	6.2	5.9	5.7	5.7	5.8	5.8	5.8	6.9	4.1	5.8
Max.	**5.6**	**5.3**	**5.4**	**5.4**	**5.5**	**5.6**	**5.6**	**5.6**	**5.6**	**5.8**	**6.1**	**6.6**	**7.1**	**8.4**	**8.8**	**9.0**	**8.7**	**8.2**	**8.0**	**7.8**	**7.4**	**7.3**	**6.9**	**6.1**	**9.0**		
Min.	**-6.9**	**-7.3**	**-8.0**	**-8.5**	**-8.5**	**-9.0**	**-9.1**	**-9.2**	**-9.1**	**-7.9**	**-6.0**	**-4.3**	**-3.7**	**-3.6**	**-3.3**	**-2.8**	**-2.5**	**-2.8**	**-3.0**	**-4.1**	**-5.5**	**-6.1**	**-6.8**	**-7.0**		**-9.2**	
Avg.	**0.0**	**-0.1**	**-0.3**	**-0.4**	**-0.5**	**-0.6**	**-0.7**	**-0.8**	**-0.8**	**-0.5**	**0.4**	**1.2**	**2.2**	**2.9**	**3.2**	**3.2**	**3.1**	**2.6**	**1.9**	**1.2**	**0.8**	**0.7**	**0.4**	**0.2**			**0.7**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

November 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.8	5.2	5.6	6.0	6.2	6.6	6.6	7.0	7.0	6.9	6.9	7.3	7.3	7.8	7.6	7.3	6.9	6.7	6.1	5.8	4.9	4.3	4.0	4.0	7.8	4.0	6.2
2	4.6	3.8	3.0	3.0	3.1	2.9	3.1	3.2	2.8	2.7	3.0	4.5	5.2	5.5	6.1	6.3	6.3	5.4	2.9	2.1	1.3	2.4	1.7	1.8	6.3	1.3	3.6
3	1.8	2.0	1.4	0.5	1.3	0.8	1.1	2.3	2.8	3.6	3.5	3.9	4.6	4.6	4.8	5.7	6.2	6.0	6.1	6.2	6.2	6.0	5.4	5.6	6.2	0.5	3.9
4	5.6	5.2	4.5	4.7	4.8	4.5	4.0	4.1	4.6	4.3	5.1	6.2	6.7	6.9	6.9	6.8	6.3	5.8	5.1	4.9	5.6	5.7	5.2	5.3	6.9	4.0	5.4
5	4.8	4.5	4.9	4.6	5.1	4.6	3.7	3.0	3.6	4.3	5.2	6.1	7.5	8.1	7.8	7.9	7.4	7.7	7.0	6.7	6.8	6.0	5.5	6.2	8.1	3.0	5.8
6	6.1	5.8	5.4	5.2	5.1	5.2	5.1	5.2	5.2	5.2	5.2	5.4	5.6	5.7	6.1	6.3	5.8	5.3	5.4	4.6	4.0	4.3	3.7	4.1	6.3	3.7	5.2
7	3.2	3.1	3.0	3.0	2.5	2.8	2.6	2.1	2.6	2.4	2.4	2.4	3.2	4.4	3.3	3.9	2.7	0.9	0.3	-0.1	-0.9	-1.0	-1.3	-1.6	4.4	-1.6	1.9
8	-2.2	-2.2	-2.3	-2.7	-2.7	-2.3	-2.9	-3.4	-4.2	-4.4	-3.9	-2.9	-1.7	0.1	0.7	0.7	-1.2	-2.3	-3.2	-2.8	-2.7	-3.5	-4.2	-4.8	0.7	-4.8	-2.5
9	-5.4	-6.2	-6.5	-7.2	-7.5	-7.7	-8.4	-8.3	-9.5	-10.7	-11.3	-11.0	-11.1	-11.1	-10.6	-9.8	-10.8	-11.0	-10.6	-10.0	-9.4	-8.8	-8.3	-8.0	-5.4	-11.3	-9.1
10	-7.6	-7.9	-8.1	-6.9	-7.0	-6.6	-5.9	-6.8	-6.3	-5.9	-5.5	-3.9	-2.2	-0.4	0.1	-1.5	-2.9	-4.4	-3.9	-2.7	-5.1	-5.9	-6.1	-6.8	0.1	-8.1	-5.0
11	-6.5	-6.9	-7.1	-8.0	-7.8	-7.2	-7.8	-9.7	-10.8	-12.3	-12.9	-12.6	-10.6	-10.4	-9.4	-9.8	-10.7	-12.0	-13.2	-13.6	-13.8	-13.8	-13.8	-14.2	-6.5	-14.2	-10.6
12	-14.5	-15.2	-15.5	-15.9	-16.1	-16.2	-16.3	-16.6	-16.8	-16.7	-16.4	-15.4	-13.9	-12.9	-12.4	-12.6	-13.0	-13.8	-14.9	-15.1	-15.5	-15.7	-15.4	-15.8	-12.4	-16.8	-15.1
13	-16.2	-16.1	-15.9	-16.3	-16.1	-15.7	-15.4	-15.2	-12.7	-9.1	-6.5	-7.6	-6.4	-5.8	-4.8	-3.6	-3.0	-2.7	-3.1	-2.5	-3.4	-3.0	-2.2	-1.3	-1.3	-16.3	-8.5
14	-0.9	-1.0	-1.4	-1.6	-1.7	-2.0	-2.3	-2.4	-2.3	-2.3	-2.4	-2.2	-1.8	-1.3	-0.9	-1.9	-2.8	-2.8	-3.2	-3.2	-3.7	-4.0	-4.5	-4.9	-0.9	-4.9	-2.4
15	-5.1	-6.7	-7.3	-9.4	-11.1	-11.3	-13.1	-15.4	-16.2	-15.4	-15.8	-14.7	-12.9	-12.0	-12.0	-12.8	-13.8	-14.4	-16.0	-16.1	-16.9	-17.3	-18.0	-18.1	-5.1	-18.1	-13.4
16	-18.3	-18.7	-19.3	-20.0	-19.5	-18.6	-18.8	-18.4	-19.0	-17.1	-16.2	-15.1	-15.4	-13.2	-11.6	-10.7	-10.3	-10.1	-9.9	-9.6	-9.7	-10.0	-10.3	-10.8	-9.6	-20.0	-14.6
17	-10.9	-11.3	-11.4	-11.5	-11.8	-11.4	-11.8	-12.0	-12.5	-12.4	-12.1	-12.5	-12.3	-12.4	-13.0	-12.9	-13.7	-15.3	-15.7	-15.9	-16.6	-17.2	-17.4	-17.4	-10.9	-17.4	-13.4
18	-18.3	-18.6	-18.6	-19.1	-18.8	-19.0	-19.2	-19.5	-19.8	-19.9	-19.9	-19.4	-18.8	-18.1	-17.8	-17.9	-18.2	-18.4	-18.5	-18.7	-18.9	-19.0	-19.6	-19.9	-17.8	-19.9	-18.9
19	-19.8	-19.6	-19.4	-19.3	-19.2	-19.3	-19.1	-19.0	-18.8	-18.8	-18.6	-18.2	-17.6	-17.3	-17.6	-17.3	-17.0	-16.9	-16.9	-17.0	-17.1	-17.2	-17.4	-17.6	-16.9	-19.8	-18.2
20	-17.8	-17.5	-17.4	-16.9	-16.5	-16.6	-17.0	-17.3	-17.5	-17.5	-17.5	-17.0	-16.5	-15.4	-14.7	-14.8	-15.3	-16.1	-15.8	-16.0	-16.7	-16.6	-16.4	-17.0	-14.7	-17.8	-16.6
21	-16.8	-16.2	-15.7	-15.5	-15.6	-15.1	-15.5	-15.7	-14.9	-14.8	-14.9	-14.2	-14.1	-13.9	-12.4	-13.4	-14.1	-15.7	-16.3	-16.8	-18.0	-17.4	-17.6	-17.4	-12.4	-18.0	-15.5
22	-17.3	-17.3	-18.1	-19.3	-19.3	-19.4	-19.7	-19.5	-19.8	-20.3	-19.5	-19.5	-18.4	-18.6	-17.4	-17.9	-19.8	-21.4	-22.3	-21.7	-21.9	-22.0	-21.5	-21.5	-17.3	-22.3	-19.7
23	-21.1	-20.8	-20.6	-20.3	-20.2	-20.2	-20.0	-19.9	-19.7	-19.7	-19.3	-18.7	-18.2	-17.7	-17.2	-16.8	-16.5	-16.4	-16.3	-16.7	-17.0	-17.0	-16.9	-16.6	-16.3	-21.1	-18.5
24	-16.9	-17.0	-16.8	-16.4	-16.3	-16.1	-15.9	-15.7	-15.4	-15.4	-15.3	-15.0	-14.8	-14.5	-14.3	-14.0	-14.2	-14.6	-14.3	-14.4	-14.4	-14.7	-14.7	-14.6	-14.0	-17.0	-15.2
25	-14.6	-13.7	-14.4	-14.5	-15.0	-14.9	-15.0	-15.1	-14.8	-15.2	-15.3	-15.3	-15.1	-14.0	-13.7	-13.3	-13.6	-13.9	-14.6	-14.4	-13.6	-13.2	-13.0	-12.9	-12.9	-15.3	-14.3
26	-12.7	-12.8	-12.6	-12.4	-12.3	-12.6	-13.1	-13.1	-11.8	-10.6	-8.2	-6.8	-4.4			-3.1	-2.4	-2.1	-2.0	-1.4	-1.2	-0.9	-1.1	-1.2	-0.9	-13.1	-7.2
27	-0.7	-0.4	-0.6	-0.6	-0.6	-0.7	-0.8	-0.6	-1.0	-1.4	-1.8	-1.6	-1.2	-0.8	-0.9	-1.1	-1.3	-1.1	-1.0	-0.8	-0.6	-0.7	-1.0	-1.4	-0.4	-1.8	-1.0
28	-2.4	-2.5	-1.6	-1.8	-1.2	-0.8	1.1	1.9	2.0	2.0	2.2	2.4	1.9	1.9	1.3	0.6	0.6	0.7	0.9	0.6	0.4	0.7	1.5	1.7	2.4	-2.5	0.6
29	1.8	1.3	0.5	-0.1	-0.3	-0.4	-0.5	-1.0	-1.3	-1.5	-1.7	-1.6	-1.4	-2.0	-2.1	-2.6	-2.2	-1.5	-2.9	-2.5	-1.7	-1.5	-1.2	-0.6	1.8	-2.9	-1.1
30	-0.6	0.1	0.1	-0.2	-0.3	-0.4	-0.4	-0.6	-0.8	-1.4	-1.7	-1.5	-1.1	-1.4	-2.2	-3.7	-4.3	-4.3	-3.8	-3.8	-3.7	-4.3	-4.9	-5.1	0.1	-5.1	-2.1
Max.	**6.1**	**5.8**	**5.6**	**6.0**	**6.2**	**6.6**	**6.6**	**7.0**	**7.0**	**6.9**	**6.9**	**7.3**	**7.5**	**8.1**	**7.8**	**7.9**	**7.4**	**7.7**	**7.0**	**6.7**	**6.8**	**6.0**	**5.5**	**6.2**	**8.1**		
Min.	**-21.1**	**-20.8**	**-20.6**	**-20.3**	**-20.2**	**-20.2**	**-20.0**	**-19.9**	**-19.8**	**-20.3**	**-19.9**	**-19.5**	**-18.8**	**-18.6**	**-17.8**	**-17.9**	**-19.8**	**-21.4**	**-22.3**	**-21.7**	**-21.9**	**-22.0**	**-21.5**	**-21.5**		**-22.3**	
Avg.	**-7.1**	**-7.3**	**-7.4**	**-7.6**	**-7.6**	**-7.6**	**-7.7**	**-7.9**	**-7.8**	**-7.7**	**-7.4**	**-7.0**	**-6.3**	**-5.8**	**-5.5**	**-5.5**	**-6.0**	**-6.4**	**-6.8**	**-6.8**	**-7.1**	**-7.2**	**-7.3**	**-7.4**			**-7.0**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

December 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-4.3	-5.1	-5.5	-6.1	-6.3	-6.1	-6.2	-6.8	-7.5	-8.4	-8.3	-8.9	-8.8	-8.6	-8.2	-7.4	-7.2	-7.5	-7.2	-6.5	-5.8	-5.8	-5.2	-3.4	-3.4	-8.9	-6.7
2	-1.8	-1.9	-1.9	-2.4	-2.3	-1.2	-1.1	0.3	0.5	0.6	0.2	-0.1	-0.2	0.0	0.1	0.0	-0.1	-0.1	-0.1	-0.5	-0.1	0.1	0.3	1.0	1.0	-2.4	-0.4
3	1.3	1.2	1.4	1.5	1.3	0.8	0.6	-0.2	-1.3	-1.7	-1.6	-2.3	-3.1	-2.6	-2.1	-2.3	-3.3	-3.2	-3.5	-5.1	-6.3	-7.0	-8.2	-8.2	1.5	-8.2	-2.2
4	-9.0	-9.6	-9.9	-9.6	-9.5	-9.5	-8.9	-8.7	-8.9	-8.9	-8.7	-8.4	-6.7	-6.1	-5.8	-5.3	-4.9	-5.0	-4.4	-3.5	-2.7	-3.6	-2.8	-3.9	-2.7	-9.9	-6.9
5	-4.4	-2.6	-2.1	-1.8	-1.2	-1.1	-2.5	-4.4	-5.2	-5.0	-6.3	-7.6	-8.0	-8.4	-9.1	-10.8	-12.6	-13.9	-14.1	-14.3	-14.8	-15.4	-16.0	-16.5	-1.1	-16.5	-8.3
6	-16.9	-17.1	-17.3	-17.5	-17.7	-18.0	-18.1	-18.4	-19.1	-19.5	-19.6	-18.6	-18.0	-17.5	-17.4	-17.8	-18.1	-18.6	-18.5	-17.9	-18.9	-18.8	-19.4	-19.5	-16.9	-19.6	-18.2
7	-18.3	-18.6	-18.8	-17.0	-14.7	-15.4	-13.6	-12.4	-13.3	-13.9	-12.6	-11.5	-10.2	-11.1	-11.1	-11.0	-11.1	-12.4	-13.1	-15.6	-16.3	-16.0	-15.7	-16.7	-10.2	-18.8	-14.2
8	-15.5	-14.9	-14.2	-12.8	-11.7	-13.4	-13.3	-13.8	-15.0	-14.2	-14.3	-14.7	-14.7	-14.4	-14.7	-16.3	-16.8	-15.0	-13.5	-12.8	-12.7	-11.8	-11.4	-11.0	-11.0	-16.8	-13.9
9	-12.8	-12.5	-13.0	-13.4	-13.4	-12.9	-12.8	-13.1	-12.6	-12.4	-12.6	-12.9	-11.7	-10.8	-10.7	-10.9	-11.0	-11.2	-11.9	-11.7	-11.8	-12.5	-12.1	-11.8	-10.7	-13.4	-12.2
10	-11.1	-10.4	-9.9	-9.2	-8.8	-8.7	-8.3	-7.6	-6.9	-6.2	-5.0	-4.7	-5.2	-5.4	-5.2	-5.3	-5.2	-6.4	-6.9	-7.4	-7.2	-8.0	-8.7	-9.5	-4.7	-11.1	-7.4
11	-10.2	-7.3	-7.9	-7.5	-6.3	-4.7	-4.2	-4.0	-4.0	-4.0	-4.2	-4.2	-4.0	-3.9	-3.8	-3.8	-3.9	-4.6	-4.7	-4.9	-4.9	-5.2	-5.8	-4.9	-3.8	-10.2	-5.1
12	-6.3	-7.8	-7.5	-7.8	-8.2	-8.2	-7.4	-6.9	-6.2	-6.1	-5.8	-5.9	-5.6	-5.6	-5.6	-6.2	-7.0	-8.0	-8.4	-8.4	-9.6	-9.9	-8.5	-9.1	-5.6	-9.9	-7.3
13	-9.6	-9.6	-9.0	-7.9	-7.8	-6.9	-6.2	-4.9	-4.3	-4.1	-3.9	-3.4	-2.8	-2.4	-1.9	-2.1	-2.0	-1.3	-1.0	-1.0	-1.1	-1.3	-1.5	-1.3	-1.0	-9.6	-4.0
14	-2.1	-1.5	-1.5	-1.2	-1.4	-1.2	-1.3	-1.3	-1.4	-1.6	-1.7	-1.9	-1.6	-1.5	-1.7	-1.8	-2.1	-2.0	-2.0	-2.1	-2.3	-2.4	-2.3	-2.2	-1.2	-2.4	-1.8
15	-2.5	-2.8	-3.1	-3.1	-3.1	-3.3	-3.1	-3.0	-2.6	-2.4	-2.9	-3.0	-2.7	-3.0	-2.6	-3.0	-3.6	-5.0	-6.2	-6.2	-6.3	-6.3	-5.9	-5.5	-2.4	-6.3	-3.8
16	-5.4	-6.1	-5.9	-6.9	-8.3	-9.0	-9.0	-9.0	-9.4	-9.5	-9.5	-9.6	-9.8	-10.2	-9.5	-9.4	-9.6	-10.6	-10.9	-10.8	-12.1	-12.9	-12.5	-12.0	-5.4	-12.9	-9.5
17	-11.3	-11.1	-11.7	-11.5	-11.3	-11.5	-11.7	-12.1	-14.9	-14.9	-15.0	-13.9	-13.8	-13.3	-13.6	-13.5	-14.6	-15.7	-16.2	-16.7	-16.7	-16.4	-16.7	-17.2	-11.1	-17.2	-14.0
18	-17.6	-17.5	-17.9	-18.7	-19.0	-17.7	-17.7	-16.9	-17.3	-17.0	-17.5	-17.5	-17.6	-18.5	-18.1	-18.4	-19.5	-19.9	-18.8	-19.9	-20.2	-20.2	-20.5	-20.5	-16.9	-20.5	-18.5
19	-21.8	-20.8	-21.5	-21.3	-22.0	-22.3	-22.2	-21.8	-23.5	-22.5	-22.6	-22.9	-21.5	-20.9	-20.4	-20.8	-21.5	-20.8	-19.5	-18.1	-16.5	-17.8	-16.8	-17.7	-16.5	-23.5	-20.7
20	-19.0	-18.4	-18.6	-18.2	-17.6	-17.5	-17.8	-18.2	-19.1	-19.4	-18.8	-20.7	-20.7	-20.4	-20.3	-21.2	-24.1	-23.4	-23.8	-23.0	-24.5	-26.1	-24.9	-26.5	-17.5	-26.5	-20.9
21	-26.1	-24.4	-25.5	-26.2	-25.1	-26.6	-26.6	-28.2	-27.4	-28.2	-27.0	-24.3	-21.5	-18.5	-18.2	-15.5	-12.0	-8.4	-7.2	-7.2	-6.2	-6.0	-5.4	-4.8	-4.8	-28.2	-18.6
22	-4.5	-4.5	-4.3	-4.1	-4.2	-4.5	-4.3	-4.3	-4.2	-3.8	-3.1	-2.8	-2.4	-2.4	-2.0	-1.8	-1.6	-1.2	-0.9	-0.8	-0.7	-0.7	-0.3	-0.3	-0.3	-4.5	-2.7
23	-0.3	-0.3	-0.3	-0.5	-0.4	-0.5	-0.3	-0.1	-0.1	-0.2	-0.1	-0.3	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.2	-0.1	-0.3	-0.1	0.2	0.2	-0.5	-0.2
24	0.1	-0.2	0.0	0.1	0.2	0.0	0.1	0.2	0.2	0.0	0.1	0.0	0.1	0.1	0.1	-0.2	-0.2	-0.2	-0.4	-3.0	-7.7	-8.9	-8.7	-9.0	0.2	-9.0	-1.5
25	-9.9	-11.0	-11.8	-11.9	-13.2	-14.4	-14.8	-15.0	-15.2	-15.6	-15.7	-15.8	-15.3	-14.5	-14.4	-15.5	-15.9	-16.3	-16.4	-17.7	-19.1	-18.6	-18.6	-19.6	-9.9	-19.6	-15.3
26	-20.1	-20.6	-20.8	-21.0	-21.3	-20.9	-17.3	-15.7	-13.4	-10.8	-8.7	-7.7	-6.3	-5.2	-4.7	-4.5	-4.1	-3.9	-3.9	-3.4	-2.9	-2.5	-2.4	-2.6	-2.4	-21.3	-10.2
27	-2.6	-2.8	-3.6	-4.5	-4.3	-4.5	-5.0	-5.2	-5.3	-5.3	-5.5	-6.5	-7.5	-8.0	-9.0	-10.5	-11.6	-12.4	-13.3	-14.7	-14.8	-15.6	-15.6	-15.2	-2.6	-15.6	-8.5
28	-15.3	-16.0	-16.8	-17.8	-18.3	-18.0	-18.6	-18.8	-19.2	-18.9	-18.6	-19.5	-18.6	-18.2	-18.6	-17.9	-18.0	-17.8	-17.8	-17.0	-15.7	-15.6	-14.0	-13.7	-13.7	-19.5	-17.5
29	-13.5	-13.4	-11.8	-12.4	-11.3	-9.2	-8.1	-7.8	-7.5	-7.5	-8.5	-9.2	-9.0	-8.8	-8.5	-8.6	-8.9	-10.4	-10.6	-12.3	-11.8	-13.3	-12.9	-12.9	-7.5	-13.5	-10.3
30	-14.5	-15.1	-16.2	-16.4	-17.0	-17.7	-17.6	-17.8	-17.5	-15.8	-15.1	-14.6	-15.0	-14.3	-13.4	-12.6	-12.4	-14.4	-14.7	-14.3	-12.6	-11.9	-10.9	-8.2	-8.2	-17.8	-14.6
31	-6.6	-7.0	-6.7	-4.9	-4.6	-2.8	-2.9	-4.5	-5.5	-4.9	-4.6	-3.3	-3.0	-1.8	-1.5	-0.7	-0.8	-0.8	-0.9	-1.4	-1.6	-1.7	-1.9	-1.5	-0.7	-7.0	-3.2
Max.	**1.3**	**1.2**	**1.4**	**1.5**	**1.3**	**0.8**	**0.6**	**0.3**	**0.5**	**0.6**	**0.2**	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**-0.1**	**-0.1**	**-0.1**	**-0.2**	**-0.1**	**0.1**	**0.3**	**1.0**	**1.5**		
Min.	**-26.1**	**-24.4**	**-25.5**	**-26.2**	**-25.1**	**-26.6**	**-26.6**	**-28.2**	**-27.4**	**-28.2**	**-27.0**	**-24.3**	**-21.5**	**-20.9**	**-20.4**	**-21.2**	**-24.1**	**-23.4**	**-23.8**	**-23.0**	**-24.5**	**-26.1**	**-24.9**	**-26.5**		**-28.2**	
Avg.	**-10.1**	**-10.0**	**-10.1**	**-10.1**	**-10.0**	**-9.9**	**-9.7**	**-9.7**	**-9.9**	**-9.8**	**-9.6**	**-9.6**	**-9.2**	**-8.9**	**-8.8**	**-8.9**	**-9.2**	**-9.4**	**-9.4**	**-9.6**	**-9.8**	**-10.1**	**-9.9**	**-9.8**			**-9.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

January *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.8	-1.7	-1.1	-0.8	-0.6	-0.3	-1.1	-1.4	-2.7	-4.1	-4.0	-4.0	-3.4	-3.4	-2.4	-1.8	-4.0	-4.8	-5.1	-5.3	-4.7	-5.0	-5.8	-6.5	-0.3	-6.5	-3.2
2	-6.8	-6.8	-6.8	-7.4	-7.5	-7.6	-7.8	-7.8	-7.7	-7.7	-7.6	-7.5	-7.5	-6.8	-6.3	-6.1	-6.1	-5.9	-6.0	-5.7	-5.7	-5.7	-5.6	-5.5	-5.5	-7.8	-6.7
3	-5.6	-5.8	-6.0	-6.4	-6.8	-6.3	-6.2	-6.1	-6.1	-6.2	-6.4	-7.6	-7.5	-6.8	-6.5	-6.7	-7.0	-7.2	-7.5	-7.7	-7.4	-8.5	-8.4	-9.1	-5.6	-9.1	-6.9
4	-10.2	-11.3	-11.8	-12.3	-12.9	-12.7	-13.9	-16.3	-16.2	-17.2	-15.8	-15.2	-15.2												-10.2	-17.2	-13.9
5															-1.6	-1.4	-1.1	-0.9	-0.7	-0.5	-0.3	-0.2	0.2	0.3	0.3	-1.6	-0.6
6	-0.4	-0.5	-0.6	-0.5	-0.6	-0.9	-1.3	-1.2	-1.4	-2.0	-1.7	-1.3	-1.7	-1.2	-0.7	-0.3	-0.6	0.0	0.0	-0.2	-0.3	-0.6	-0.9	-1.0	0.0	-2.0	-0.8
7	-0.8	-0.6	-0.6	-0.8	-1.1	-1.2	-1.6	-1.2	-1.2	-2.7	-2.5	-2.1	-3.2	-2.9	-2.3	-1.9	-1.7	-2.0	-1.9	-1.9	-1.7	-1.7	-1.9	-3.1	-0.6	-3.2	-1.8
8	-3.5	-2.8	-2.1	-1.8	-1.8	-1.6	-1.3	-0.5	-0.3	-0.3	0.3	1.2	1.6	1.3	0.9	0.3	-0.6	0.2	-2.5	-2.4	-2.0	-1.6	-1.3	-2.8	1.6	-3.5	-1.0
9	-5.3	-7.2	-6.9	-8.0	-7.5	-8.0	-8.3	-7.8	-8.1	-8.9	-9.4	-9.3	-8.3	-7.6	-7.9	-8.5	-8.5	-8.5	-8.5	-8.6	-9.7	-10.5	-10.4	-10.4	-5.3	-10.5	-8.4
10	-10.2	-10.8	-10.0	-9.8	-9.8	-10.0	-10.3	-10.7	-11.5	-11.0	-11.3	-10.8	-10.1	-10.2	-8.9	-11.1	-11.8	-13.3	-13.1	-13.1	-12.3	-10.9	-10.6	-11.8	-8.9	-13.3	-11.0
11	-11.4	-10.7	-10.2	-9.8	-8.4	-7.6	-8.2	-7.6	-8.7	-8.3	-9.0	-8.7	-7.5	-8.4	-8.8	-7.8	-7.3	-6.5	-6.7	-6.4	-6.5	-4.6	-3.0	-2.5	-2.5	-11.4	-7.7
12	-1.6	-1.3	-1.3	-1.5	-1.6	-1.9	-2.4	-2.6	-2.9	-1.7	-1.3	-0.7	-0.1	0.2	0.6	0.5	0.6	0.7	0.9	1.2	1.1	0.4	-0.3	-0.4	1.2	-2.9	-0.6
13	-0.3	-0.6	-0.2	-0.1	0.1	0.7	0.7	0.5	0.6	0.8	1.3	1.0	1.0	1.0	1.1	0.9	1.3	1.8	2.2	2.0	2.0	2.9	4.2	4.1	4.2	-0.6	1.2
14	4.0	4.1	4.3	4.2	3.5	3.3	2.5	3.1	2.9	1.6	1.2	1.2	0.7	0.4	0.5	0.8	0.8	0.5	0.3	0.3	0.4	0.3	0.4	0.4	4.3	0.3	1.7
15	0.4	-0.1	-1.1	-1.1	-0.9	-0.7	-0.7	-0.3	-0.4	-0.6	-0.7	-0.7	-0.3	-0.3	-0.5	-0.2	-0.3	0.1	0.5	0.3	-0.1	-0.4	-0.1	-0.2	0.5	-1.1	-0.4
16	0.1	0.1	-0.2	-0.3	0.1	0.6	1.3	1.6	1.7	1.2	0.6	0.6	0.8	1.3	1.7	1.1	1.4	2.4	2.3	1.8	1.5	0.8	0.1	0.2	2.4	-0.3	0.9
17	0.3	0.6	0.5	1.1	1.5	1.4	1.3	1.2	1.1	1.6	1.5	1.4	0.8	0.6	0.4	0.1	-0.5	-0.5	-0.3	-0.1	0.1	0.0	-0.1	-0.2	1.6	-0.5	0.6
18	-0.5	-1.0	-1.5	-1.3	-1.4	-2.3	-2.2	-2.4	-3.1	-3.9	-3.6	-2.0	-1.5	-1.3	-1.6	-2.3	-2.8	-3.4	-3.8	-4.2	-5.6	-6.6	-5.8	-6.4	-0.5	-6.6	-2.9
19	-7.5	-7.8	-8.0	-8.6	-8.8	-9.3	-9.2	-9.9	-10.7	-11.4	-10.7	-10.6	-10.3	-8.8	-8.4	-8.1	-8.6	-9.5	-10.8	-10.8	-10.4	-10.7	-11.0	-11.3	-7.5	-11.4	-9.6
20	-11.3	-11.6	-12.3	-12.0	-13.3	-13.9	-13.1	-12.5	-11.5	-10.2	-10.6	-10.8	-10.9	-9.8	-8.7	-8.0	-5.9	-7.0	-8.3	-9.3	-9.0	-8.8	-9.4	-9.1	-5.9	-13.9	-10.3
21	-9.4	-9.7	-9.5	-9.0	-9.0	-9.1	-9.3	-9.5	-9.5	-8.2	-9.1	-9.7	-10.0	-8.9	-8.1	-7.7	-7.7	-7.8	-8.2	-8.5	-8.4	-8.3	-7.3	-5.8	-5.8	-10.0	-8.7
22	-5.6	-5.8	-5.5	-4.6	-4.5	-4.1	-4.3	-4.1	-4.3	-5.3	-5.4	-4.3	-3.6	-3.0	-2.7	-2.6	-3.0	-3.5	-3.4	-4.2	-4.9	-4.7	-4.4	-4.3	-2.6	-5.8	-4.2
23	-4.4	-4.3	-4.0	-4.0	-4.1	-5.0	-5.9	-6.8	-8.3	-10.2	-10.0	-9.8	-9.5	-11.4	-11.1	-11.9	-12.9	-12.7	-13.1	-13.4	-12.6	-14.5	-14.9	-15.2	-4.0	-15.2	-9.6
24	-15.4	-16.0	-16.1	-15.5	-15.1	-14.9	-14.4	-14.0	-14.0	-13.8	-13.1	-13.6	-13.5	-12.1	-11.4	-10.6	-10.7	-10.3	-9.6	-8.9	-8.1	-7.7	-7.8	-6.7	-6.7	-16.1	-12.2
25	-4.7	-3.7	-3.0	-3.1	-3.2	-2.1	-2.3	-4.7	-4.5	-6.1	-5.9	-6.8	-8.0	-7.9	-7.8	-9.3	-11.0	-14.1	-14.3	-14.7	-15.9	-15.4	-17.5	-18.1	-2.1	-18.1	-8.5
26	-18.1	-18.2	-16.0	-15.2	-15.4	-15.5	-18.1	-19.6	-20.1	-19.7	-19.8	-20.4	-19.4	-18.5	-18.9	-18.9	-19.8	-20.3	-21.3	-21.9	-22.7	-23.2	-23.5	-23.9	-15.2	-23.9	-19.5
27	-24.0	-24.5	-24.8	-24.8	-25.1	-25.4	-25.8	-25.9	-26.3	-26.3	-25.7	-24.2	-23.3	-22.3	-21.6	-21.4	-21.3	-21.2	-21.5	-21.4	-21.4	-21.5	-21.7	-22.0	-21.2	-26.3	-23.5
28	-23.0	-23.5	-24.3	-23.9	-23.5	-23.5	-23.5	-23.7	-24.3	-24.8	-24.4	-24.5	-23.9	-23.3	-23.1	-22.9	-22.5	-22.9	-23.6	-23.8	-23.9	-23.9	-23.9	-23.7	-22.5	-24.8	-23.7
29	-23.8	-24.0	-24.1	-23.8	-23.2	-22.6	-22.4	-22.2	-21.7	-21.7	-21.4	-21.0	-20.4	-19.9	-19.7	-18.7	-18.4	-18.8	-19.1	-19.2	-19.0	-19.4	-19.4	-19.9	-18.4	-24.1	-21.0
30	-20.2	-20.5	-20.8	-21.3	-21.5	-21.9	-22.6	-23.2	-23.8	-24.1	-24.5	-24.2	-23.0	-22.3	-21.9	-22.2	-22.8	-23.9	-24.6	-25.4	-25.6	-25.8	-26.2		-20.2	-26.2	-23.1
31																											
Max.	**4.0**	**4.1**	**4.3**	**4.2**	**3.5**	**3.3**	**2.5**	**3.1**	**2.9**	**1.6**	**1.5**	**1.4**	**1.6**	**1.3**	**1.7**	**1.1**	**1.4**	**2.4**	**2.3**	**2.0**	**2.0**	**2.9**	**4.2**	**4.1**	**4.3**		
Min.	**-24.0**	**-24.5**	**-24.8**	**-24.8**	**-25.1**	**-25.4**	**-25.8**	**-25.9**	**-26.3**	**-26.3**	**-25.7**	**-24.5**	**-23.9**	**-23.3**	**-23.1**	**-22.9**	**-22.8**	**-23.9**	**-24.6**	**-25.4**	**-25.6**	**-25.8**	**-26.2**	**-23.9**		**-26.3**	
Avg.	**-7.6**	**-7.8**	**-7.7**	**-7.7**	**-7.7**	**-7.7**	**-7.9**	**-8.1**	**-8.4**	**-8.7**	**-8.6**	**-8.4**	**-8.2**	**-7.6**	**-7.1**	**-7.1**	**-7.3**	**-7.6**	**-7.9**	**-8.0**	**-8.0**	**-8.1**	**-8.2**	**-7.7**			**-7.8**

Total Hours in Month 744 **Hours Data Available** 694 **Data Recovery** 93.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

February 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-26.1	-25.6	-25.1	-24.9	-24.8	-24.7	-24.7	-24.7	-25.0	-25.1	-25.0	-24.8	-24.5	-24.3	-23.9	-24.2	-24.5	-24.8	-25.2	-25.3	-25.3	-25.3	-25.1	-25.1	-23.9	-26.1	-24.9
2	-25.1	-25.1	-25.1	-25.3	-25.6	-25.8	-25.9	-25.9	-26.0	-26.2	-26.6	-26.2	-24.4	-23.8	-22.9	-23.0	-24.0	-24.7	-25.4	-25.9	-27.0	-27.3	-26.9	-26.8	-22.9	-27.3	-25.4
3	-26.8	-27.0	-26.4	-25.7	-24.7	-25.1	-25.4	-25.4	-25.8	-25.9	-25.8	-25.2	-23.6	-23.1	-22.9	-23.3	-24.4	-25.3	-26.3	-26.9	-27.4	-27.6	-27.8	-27.9	-22.9	-27.9	-25.7
4	-28.2	-28.3	-28.3	-28.0	-28.3	-28.3	-28.7	-28.8	-29.4	-29.2	-28.9	-28.6	-27.4	-26.5	-25.7	-25.4	-25.7	-26.2	-27.2	-27.4	-27.7	-28.2	-27.3	-27.2	-25.4	-29.4	-27.7
5	-27.6	-27.1	-23.5	-20.4	-22.7	-17.5	-13.6	-12.9	-12.8	-12.8	-12.4	-13.6	-12.0	-11.0	-9.5	-7.4	-6.8	-6.9	-6.7	-6.3	-5.9	-5.1	-4.6	-4.6	-4.6	-27.6	-12.7
6	-5.9	-6.6	-6.8	-8.0	-7.9	-7.4	-7.7	-7.8	-8.1	-8.7	-9.1	-8.7	-8.6	-9.1	-9.3	-10.9	-10.6	-11.4	-12.0	-12.0	-13.0	-14.3	-14.8	-15.6	-5.9	-15.6	-9.8
7	-16.0	-16.5	-17.0	-16.5	-17.4	-17.8	-19.1	-18.9	-18.9	-19.7	-19.7	-19.8	-18.6	-18.6	-18.0	-19.2	-19.0	-19.8	-21.9	-21.6	-21.3	-22.9	-23.5	-23.9	-16.0	-23.9	-19.4
8	-23.8	-23.4	-23.5	-23.5	-23.6	-22.3	-22.0	-21.9	-21.1	-19.7	-20.5	-20.5	-17.1	-15.2	-12.5	-16.1	-14.5	-13.6	-13.8	-12.8	-10.4	-10.8	-9.7	-10.2	-9.7	-23.8	-17.6
9	-9.6	-7.1	-6.1	-6.2	-6.9	-7.6	-6.8	-7.7	-6.9	-6.7	-6.8	-6.3	-5.6	-4.3	-3.8	-4.6	-4.7	-5.0	-5.3	-5.7	-6.3	-6.4	-6.2	-6.3	-3.8	-9.6	-6.2
10	-6.3	-5.6	-5.1	-5.0	-4.7	-4.8	-4.3	-3.7	-4.3	-4.7	-3.9	-4.0	-1.8	0.3	0.0	0.7	0.6	-0.6	-1.3	-1.7	-1.8	-1.7	-1.5	-1.2	0.7	-6.3	-2.8
11	-1.3	-1.4	-2.0	-3.4	-3.5	-3.7	-3.7	-4.2	-4.4	-5.0	-5.0	-4.8	-4.7	-4.8	-3.2	-4.0	-5.2	-6.5	-8.2	-9.4	-9.9	-9.8	-9.1	-9.4	-1.3	-9.9	-5.3
12	-9.6	-9.6	-9.7	-10.2	-10.0	-10.4	-10.9	-10.9	-10.9	-11.5	-11.5	-10.9	-9.8	-9.1	-8.3	-8.4	-7.8	-8.3	-8.6	-8.6	-9.3	-9.8	-10.0	-9.8	-7.8	-11.5	-9.7
13	-9.4	-9.5	-9.7	-8.3	-9.3	-9.2	-9.4	-9.0	-8.7	-8.9	-9.0		-11.1	-9.6	-9.7	-9.3	-10.1	-10.7	-11.5	-11.6	-13.4	-13.1	-12.0	-12.8	-8.3	-13.4	-10.2
14	-12.0	-11.7	-11.5	-11.6	-11.4	-11.3	-12.3	-12.7	-12.4	-12.2	-12.0	-10.8	-10.8	-8.8	-6.5	-7.5	-7.7	-9.4	-10.1	-11.3	-12.3	-12.0	-12.0	-11.9	-6.5	-12.7	-10.9
15	-12.2	-12.0	-12.3	-12.0	-12.6	-11.8	-11.5	-11.5	-12.0	-12.3	-12.8	-13.4	-12.8	-12.6	-12.6	-12.3	-12.9	-13.7	-14.5	-15.0	-15.3	-16.2	-16.5	-17.0	-11.5	-17.0	-13.2
16	-16.9	-16.8	-17.0	-17.2	-16.9	-16.7	-16.5	-17.4	-17.8	-17.6	-17.5	-17.2	-16.8	-16.9	-16.6	-16.8	-17.3	-18.1	-18.9	-19.4	-19.9	-20.5	-21.2	-22.1	-16.5	-22.1	-17.9
17	-21.9	-22.1	-22.5	-23.1	-22.7	-23.0	-22.9	-23.2	-25.4	-24.6	-23.2	-21.5	-20.2	-20.1	-19.5	-18.9	-19.4	-20.0	-21.1	-22.3	-22.3	-21.6	-21.7	-21.6	-18.9	-25.4	-21.9
18	-20.8	-19.9	-20.2	-21.8	-23.5	-23.5	-23.1	-22.9	-23.7	-21.6	-22.6	-21.2	-20.3	-18.8	-16.6	-17.8	-18.4	-18.5	-20.2	-21.8	-20.6	-20.7	-21.0	-20.3	-16.6	-23.7	-20.8
19	-21.6	-20.6	-20.3	-20.3	-19.2	-19.5	-18.1	-18.5	-17.1	-16.9	-17.2	-14.9	-12.2	-15.0	-12.1	-11.6	-11.7	-11.8	-12.6	-13.8	-14.5	-14.9	-14.5	-14.6	-11.6	-21.6	-16.0
20	-15.0	-14.2	-13.4	-13.5	-13.4	-15.0	-16.7	-17.0	-18.3	-19.0	-18.9	-16.5	-13.4	-15.0	-14.4	-15.2	-16.0	-17.1	-19.1	-20.6	-21.9	-21.6	-22.5	-23.6	-13.4	-23.6	-17.1
21	-23.3	-22.1	-21.2	-21.5	-22.9	-22.4	-21.5	-22.0	-23.2	-23.5	-21.8	-20.4	-20.2	-19.7	-19.1	-18.5	-19.5	-20.0	-21.1	-22.1	-22.0	-22.4	-23.1	-23.4	-18.5	-23.5	-21.5
22	-23.6	-23.7	-24.0	-24.0	-24.3	-24.1	-24.9	-24.3	-24.2	-24.2	-24.1	-22.3	-22.5	-21.2	-20.0	-19.7	-20.0	-19.8	-20.7	-21.3	-20.6	-20.6	-20.9	-20.4	-19.7	-24.9	-22.3
23	-19.8	-18.4	-17.2	-16.0	-16.1	-16.2	-15.5	-14.9	-13.6	-13.0	-13.2	-13.4	-13.2	-14.1	-14.4	-14.8	-15.1	-14.9	-15.0	-15.0	-15.2	-15.4	-15.8	-15.8	-13.0	-19.8	-15.2
24	-15.4	-15.2	-15.4	-15.3	-15.4	-15.4	-15.7	-15.7	-15.2	-14.7	-13.5	-11.5	-12.1	-10.1	-9.6	-9.2	-5.8	-4.7	-5.3	-6.0	-6.5	-7.0	-6.2	-7.7	-4.7	-15.7	-11.2
25	-8.7	-7.1	-6.1	-6.2	-5.8	-6.1	-6.3	-6.4	-6.5	-7.1	-6.7	-5.6	-7.6	-9.4	-9.4	-8.8	-8.3	-7.7	-9.0	-10.6	-11.3	-11.3	-8.8	-9.0	-5.6	-11.3	-7.9
26	-8.9	-8.2	-6.8	-7.3	-7.6	-8.2	-7.5	-7.7	-7.4	-7.0	-7.5	-6.9	-6.1	-5.7	-5.5	-5.9	-5.7	-6.3	-7.4	-8.0	-8.4	-8.6	-8.6	-8.8	-5.5	-8.9	-7.3
27	-8.5	-9.0	-9.6	-9.8	-10.2	-10.8	-13.3	-13.7	-13.4	-10.3	-9.6	-9.5	-7.0	-5.3	-5.1	-4.7	-5.4	-7.0	-9.0	-10.1	-10.9	-11.6	-10.8	-11.0	-4.7	-13.7	-9.4
28	-11.1	-11.4	-12.9	-13.0	-12.8	-12.4	-12.9	-13.6	-13.8	-13.4	-13.1	-12.7	-12.2	-11.7	-12.3	-13.7	-13.9	-13.9	-14.0	-14.3	-14.5	-14.5	-14.8	-15.5	-11.1	-15.5	-13.3
29	-15.8	-16.6	-17.5	-17.6	-18.6	-19.7	-18.5	-18.2	-18.6	-20.3	-18.8	-17.7	-17.4	-15.5	-16.5	-17.6	-18.5	-20.1	-21.9	-23.8	-24.7	-25.3	-24.9	-25.0	-15.5	-25.3	-19.5
Max.	**-1.3**	**-1.4**	**-2.0**	**-3.4**	**-3.5**	**-3.7**	**-3.7**	**-3.7**	**-4.3**	**-4.7**	**-3.9**	**-4.0**	**-1.8**	**0.3**	**0.0**	**0.7**	**0.6**	**-0.6**	**-1.3**	**-1.7**	**-1.8**	**-1.7**	**-1.5**	**-1.2**	**0.7**		
Min.	**-28.2**	**-28.3**	**-28.3**	**-28.0**	**-28.3**	**-28.3**	**-28.7**	**-28.8**	**-29.4**	**-29.2**	**-28.9**	**-28.6**	**-27.4**	**-26.5**	**-25.7**	**-25.4**	**-25.7**	**-26.2**	**-27.2**	**-27.4**	**-27.7**	**-28.2**	**-27.8**	**-27.9**		**-29.4**	
Avg.	**-16.2**	**-15.9**	**-15.7**	**-15.7**	**-16.0**	**-15.9**	**-15.8**	**-15.9**	**-16.0**	**-15.9**	**-15.7**	**-15.3**	**-14.3**	**-13.8**	**-13.1**	**-13.4**	**-13.5**	**-14.0**	**-14.9**	**-15.5**	**-15.8**	**-16.1**	**-15.9**	**-16.2**			**-15.3**

Total Hours in Month 696 **Hours Data Available** 695 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

March 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-25.7	-26.5	-26.1	-26.2	-26.5	-26.9	-27.2	-26.9	-26.9	-26.6	-25.6	-24.3	-23.2	-22.5	-21.7	-20.7	-20.5	-22.6	-23.1	-24.5	-24.4	-24.4	-24.4	-23.8	-20.5	-27.2	-24.6
2	-23.6	-25.0	-24.4	-24.1	-24.2	-23.9	-23.1	-23.0	-23.9	-25.3	-23.8	-22.2	-21.4	-18.6	-17.6	-15.8	-17.2	-17.6	-16.8	-18.8	-19.4	-19.8	-20.1	-20.6	-15.8	-25.3	-21.2
3	-20.2	-20.6	-20.5	-19.8	-19.4	-19.4	-19.5	-19.7	-19.9	-19.9	-19.1	-17.9	-17.8	-15.7	-16.8	-17.4	-18.3	-19.8	-21.7	-22.4	-23.2	-22.9	-23.9	-23.8	-15.7	-23.9	-20.0
4	-23.9	-24.7	-25.2	-25.9	-26.6	-25.7	-24.8	-24.6	-25.0	-26.1	-25.6	-23.4	-22.3	-20.8	-18.4	-17.5	-17.7	-17.9	-20.3	-22.1	-23.0	-23.2	-23.4	-23.4	-17.5	-26.6	-23.0
5	-24.5	-24.2	-25.6	-25.7	-24.9	-24.6	-24.6	-24.6	-24.9	-25.3	-23.8	-21.1	-16.7	-15.8	-17.5	-13.9	-16.6	-17.5	-16.6	-17.4	-17.0	-17.4	-18.8	-19.7	-13.9	-25.7	-20.8
6	-20.3	-19.9	-20.5	-19.1	-18.2	-17.5	-17.2	-16.7	-16.5	-16.1	-15.4	-13.4	-11.9	-10.2	-11.0	-10.2	-12.2	-12.8	-13.4	-14.0	-12.3	-10.6	-10.7	-10.3	-10.2	-20.5	-14.6
7	-10.1	-10.2	-10.2	-8.0	-5.8	-5.8	-3.8	-2.8	-2.4	-1.4	-1.2	-1.1	0.1	1.2	1.7	2.4	2.4	2.3	2.0	1.6	1.1	0.4	0.6	0.9	2.4	-10.2	-1.9
8	0.9	0.9	0.7	1.1	1.5	0.8	0.8	0.1	-0.4	-0.9	-0.9	-0.4	1.6	0.7	0.6	0.6	0.6	-0.2	-0.2	-0.2	-0.1	0.4	0.1	0.0	1.6	-0.9	0.3
9	0.0	0.1	0.2	0.4	1.1	1.4	1.5	1.5	1.8	2.0	2.5	2.6	1.9	1.9	2.1	1.4	1.3	0.8	0.4	0.1	-0.4	-0.5	-0.3	0.6	2.6	-0.5	1.0
10	0.8	1.2	0.8	0.8	0.4	0.8	0.5	0.3	0.5	1.3	1.6	2.0	2.1	1.9	2.2	1.2	0.9	1.1	1.2	0.8	0.2	-0.1	-0.3	-0.3	2.2	-0.3	0.9
11	-0.3	-0.3	-0.7	-1.0	-1.0	-1.7	-2.9	-4.7	-5.8	-6.5	-7.2	-7.8	-8.4	-8.2	-7.1	-7.2	-7.1	-7.3	-8.1	-8.2	-8.1	-7.9	-7.8	-7.8	-0.3	-8.4	-5.5
12	-7.7	-7.6	-7.6	-7.8	-8.0	-8.0	-8.3	-8.5	-8.3	-7.8	-7.5	-5.9	-6.0	-5.0	-4.2	-3.3	-4.4	-5.0	-5.6	-6.1	-6.6	-6.9	-7.4	-7.3	-3.3	-8.5	-6.7
13	-7.6	-7.9	-7.8	-6.9	-7.6	-7.4	-8.3	-9.1	-8.6	-7.9	-7.8	-6.9	-4.7	-4.0	-1.4	-1.4	-1.8	-5.7	-5.9	-9.0	-10.8	-11.1	-10.0	-9.4	-1.4	-11.1	-7.0
14	-8.0	-5.1	-6.9	-7.2	-5.9	-4.1	-3.7	-3.8	-3.3	-2.7	-2.2	-1.4	-0.6	-0.2	0.3	0.9	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	-8.0	-1.8
15	1.3	0.9	0.3	-0.2	-0.1	-0.2	-0.2	-0.2	-0.3	-0.2	0.1	0.6	1.2	1.9	0.4	1.1	1.0	0.8	0.0	-0.6	-0.9	-1.2	-1.6	-1.7	1.9	-1.7	0.1
16	-1.5	-1.1	-1.1	-1.3	-1.4	-1.0	-1.0	-0.9	-1.3	-1.3	-1.0	0.3	2.0	2.8	1.6	1.6	2.1	-0.2	-0.5	-0.5	-0.9	-0.8	-0.5	-0.6	2.8	-1.5	-0.3
17	-0.8	-0.9	-0.5	-0.9	-0.9	-1.0	-1.0	-1.2	-1.2	-0.9	-0.4	-0.2	0.4	0.8	0.6	0.4	0.1	-0.3	-1.1	-1.5	-3.3	-3.8	-4.0	-4.1	0.8	-4.1	-1.1
18	-4.2	-3.0	-2.8	-3.0	-2.7	-2.2	-2.1	-2.0	-1.6	-1.6	-1.5	-1.3	-1.2	-1.4	-1.2	-1.3	-1.4	-1.5	-1.5	-1.4	-1.2	-1.2	-1.0	-0.9	-0.9	-4.2	-1.8
19	-1.0	-1.0	-1.1	-1.1	-0.6	-0.3	-0.6	-0.5	-0.3	0.1	0.3	0.5	0.8	1.0	1.1	0.6	0.8	0.8	0.4	0.5	0.3	0.3	0.0	0.1	1.1	-1.1	0.0
20	-0.2	-0.5	-0.7	-1.3	-1.4	-0.9	-1.5	-1.5	-1.1	-0.8	-0.7	-0.7	-1.2	-2.0	-1.9	-2.0	-4.0	-5.1	-5.9	-6.4	-6.8	-7.2	-7.3	-7.8	-0.2	-7.8	-2.9
21	-8.3	-8.3	-8.4	-8.5	-8.5	-8.7	-8.8	-9.1	-9.4	-9.4	-9.2	-8.7	-8.2	-7.5	-6.8	-6.3	-5.8	-5.3	-8.0	-8.0	-8.0	-7.1	-6.1	-6.1	-5.3	-9.4	-7.9
22	-5.1	-5.3	-5.3	-4.2	-3.3	-3.5	-3.3	-3.2	-2.8	-2.5	-2.1	-1.6	-1.3	-0.8	-0.6	-0.2	-0.1	0.3	0.2	0.3	0.3	0.6	0.8	0.7	0.8	-5.3	-1.8
23	1.1	0.8	0.2	0.6	0.4	0.4	0.6	0.8	0.4	0.1	0.3	0.5	0.7	1.1	1.6	1.4	0.9	0.2	-0.1	-0.3	-0.2	-0.1	-0.3	-0.5	1.6	-0.5	0.4
24	-0.6	-0.7	-0.7	-0.7	-0.7	-0.7	-0.1	-0.3	-0.6	-0.6	-0.2	0.1	0.2	0.5	0.8	1.0	1.0	0.5	0.7	0.7	0.7	0.5	0.2	0.2	1.0	-0.7	0.1
25	0.2	-0.2	-1.5	-1.8	-1.1	-0.9	-1.9	-3.7	-4.4	-4.5	-4.2	-3.9													0.2	-4.5	-2.3
26														-2.6	-2.1	-2.1	-1.9	-2.1	-2.7	-3.2	-3.5	-3.4	-3.9	-3.9	-1.9	-3.9	-2.9
27	-4.1	-5.3	-7.1	-8.7	-9.4	-9.6	-10.2	-10.7	-11.1	-11.2	-11.2	-10.7	-10.0	-9.8	-9.9	-9.9	-9.8	-10.4	-10.7	-11.2	-12.1	-12.4	-12.8	-13.3	-4.1	-13.3	-10.1
28	-13.6	-14.3	-14.8	-15.2	-15.7	-16.4	-16.9	-16.4	-16.0	-15.4	-14.8	-13.3	-11.6	-11.7	-10.5	-10.8	-9.9	-9.9	-10.5	-12.0	-14.0	-14.7	-13.6	-14.3	-9.9	-16.9	-13.6
29	-15.1	-15.4	-15.1	-15.6	-15.6	-15.3	-15.7	-15.5	-14.9	-13.1	-10.2	-8.4	-8.3	-4.1	-5.3	-3.0	-3.3	-4.9	-4.1	-5.7	-8.8	-9.0	-9.5	-9.8	-3.0	-15.7	-10.2
30	-9.6	-10.9	-10.7	-10.4	-11.2	-12.3	-12.1	-11.6	-10.7	-7.7	-6.7	-3.7	-3.9	-2.3	-3.0	-3.4	-1.1	-0.4	-4.5	-5.9	-7.9	-8.1	-9.6	-9.8	-0.4	-12.3	-7.4
31	-9.3	-10.7	-8.3	-8.2	-8.5	-10.0	-10.4	-11.6	-12.2	-10.5	-8.2	-6.8	-5.2	-5.1	-2.7	-0.6	-2.1	-1.9	-2.8	-4.4	-6.7	-8.5	-6.8	-3.8	-0.6	-12.2	-6.9
Max.	**1.3**	**1.2**	**0.8**	**1.1**	**1.5**	**1.4**	**1.5**	**1.5**	**1.8**	**2.0**	**2.5**	**2.6**	**2.1**	**2.8**	**2.2**	**2.4**	**2.4**	**2.3**	**2.0**	**1.6**	**1.3**	**1.3**	**1.4**	**1.4**	**2.8**		
Min.	**-25.7**	**-26.5**	**-26.1**	**-26.2**	**-26.6**	**-26.9**	**-27.2**	**-26.9**	**-26.9**	**-26.6**	**-25.6**	**-24.3**	**-23.2**	**-22.5**	**-21.7**	**-20.7**	**-20.5**	**-22.6**	**-23.1**	**-24.5**	**-24.4**	**-24.4**	**-24.4**	**-23.8**		**-27.2**	
Avg.	**-8.0**	**-8.2**	**-8.4**	**-8.3**	**-8.2**	**-8.2**	**-8.2**	**-8.3**	**-8.4**	**-8.1**	**-7.5**	**-6.6**	**-6.0**	**-5.1**	**-4.9**	**-4.5**	**-4.8**	**-5.3**	**-5.9**	**-6.6**	**-7.2**	**-7.3**	**-7.4**	**-7.3**			**-6.9**

Total Hours in Month 744 **Hours Data Available** 719 **Data Recovery** 96.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

April *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-3.3	-3.8	-2.8	-3.4	-2.8	-2.0	-2.4	-2.5	-2.5	-1.8	-1.1	-1.1	-1.1	-0.6	-1.2	1.2	-1.9	-1.9	-2.4	-2.8	-3.3	-3.7	-3.6	-4.5	1.2	-4.5	-2.3
2	-4.3	-3.6	-4.1	-4.1	-3.9	-4.1	-4.3	-4.4	-4.2	-3.7	-2.6	-2.0	-2.4	-0.6	-1.8	-2.5	-3.0	-3.5	-4.2	-4.5	-5.3	-6.7	-7.8	-8.9	-0.6	-8.9	-4.0
3	-9.6	-10.9	-11.6	-12.1	-12.7	-13.5	-13.4	-14.8	-13.4	-12.4	-11.3	-9.9	-8.6	-7.5	-7.4	-7.1	-7.2	-7.4	-7.5	-7.5	-8.0	-8.7	-9.0	-9.1	-7.1	-14.8	-10.0
4	-9.8	-10.7	-10.8	-10.9	-11.2	-11.5	-12.0	-12.2	-12.1	-11.3	-10.9	-10.2	-9.2	-7.4	-6.5	-5.3	-5.0	-5.5	-6.1	-7.1	-8.0	-8.5	-8.4	-8.4	-5.0	-12.2	-9.1
5	-8.9	-9.6	-9.8	-10.1	-10.4	-10.5	-10.6	-10.7	-10.1	-9.3	-8.3	-6.7	-6.2	-5.3	-5.0	-4.4	-4.1	-3.7	-3.6	-4.6	-5.2	-5.3	-5.7	-6.4	-3.6	-10.7	-7.3
6	-6.6	-6.0	-5.6	-4.8	-4.8	-4.4	-4.5	-4.2	-4.2	-3.5	-3.1	-1.2	-1.2	-0.7	-0.3	0.3	-0.4	-0.7	-1.2	-1.5	-1.9	-2.0	-2.1	-2.5	0.3	-6.6	-2.8
7	-2.6	-2.7	-2.7	-2.5	-2.8	-3.3	-3.3	-3.4	-3.2	-2.4	-1.4	0.1	0.1	0.8	1.0	0.2	0.2	0.2	-0.5	-0.9	-1.8	-2.0	-1.9	-2.1	1.0	-3.4	-1.5
8	-2.2	-2.7	-2.9	-3.1	-3.3	-3.7	-4.2	-4.1	-3.7	-3.0	-2.7	-1.4	1.4	2.2	2.7	3.0	2.7	2.3	1.5	-0.1	-1.5	-2.6	-3.1	-3.2	3.0	-4.2	-1.3
9	-3.4	-3.5	-3.8	-4.8	-5.6	-5.7	-6.1	-6.0	-5.0	-3.8	-2.9	-1.1	-0.4	0.5	1.4	1.9	2.2	1.9	1.3	0.2	-1.4	-2.3	-3.4	-3.7	2.2	-6.1	-2.2
10	-4.0	-4.2	-3.6	-3.9	-4.6	-4.5	-4.8	-4.0	-2.8	-2.2	-1.1	-0.4	0.1	0.4	0.6	0.7	0.1	-0.5	-1.2	-2.6	-3.8	-4.1	-4.1	-4.1	0.7	-4.8	-2.4
11	-3.9	-3.8	-4.1	-4.2	-3.8	-3.9	-4.4	-5.1	-4.6	-3.9	-3.6	-2.7	-2.3	-1.9	-1.6	-1.5	-1.5	-2.0	-2.9	-4.3	-5.7	-6.8	-7.9	-9.8	-1.5	-9.8	-4.0
12	-11.2	-12.0	-13.1	-14.0	-14.7	-15.8	-16.9	-17.4	-16.9	-16.1	-14.6	-14.2	-14.0	-13.4	-12.3	-12.2	-13.4	-13.3	-13.1	-13.4	-14.7	-15.8	-16.4	-17.0	-11.2	-17.4	-14.4
13	-18.4	-19.2	-19.7	-20.5	-20.7	-21.6	-20.9	-20.6	-18.9	-16.8	-15.4	-12.9	-12.4	-11.4	-10.8	-10.1	-9.5	-9.6	-9.9	-11.6	-14.2	-15.3	-14.8	-14.4	-9.5	-21.6	-15.4
14	-15.1	-15.3	-15.0	-15.3	-15.2	-15.1	-15.1	-14.2	-13.2	-11.7	-10.0	-7.6	-5.3	-5.1	-4.6	-4.1	-4.0	-4.1	-4.5	-4.6	-4.7	-5.1	-5.2	-5.5	-4.0	-15.3	-9.1
15	-5.4	-5.5	-5.8	-3.9	-3.0	-2.8	-2.6	-2.5	-2.5	-1.9	-0.8	0.4	1.2	2.4	2.6	2.6	1.6	1.3	1.0	0.8	0.4	0.7	0.8	0.6	2.6	-5.8	-0.8
16	0.9	1.3	1.3	2.0	2.2	2.2	3.0	3.2	3.3	3.7	3.4	2.8	3.1	3.0	3.0	3.0	2.8	2.3	2.1	1.8	1.7	1.7	1.5	0.9	3.7	0.9	2.3
17	0.9	0.7	0.6	0.6	0.4	0.6	0.6	0.5	0.6	0.9	1.1	1.7	2.3	3.2	3.2	3.2	3.4	3.8	3.9	3.4	2.8	2.2	2.4	2.2	3.9	0.4	1.9
18	2.2	1.7	1.1	0.0	0.6	0.3	1.0	1.4	1.8	3.3	5.1	4.8	6.4	7.1	4.0	2.3	1.9	1.2	0.8	0.4	0.3	0.3	0.3	0.3	7.1	0.0	2.0
19	0.1	0.2	0.0	0.0	0.0	-0.1	-0.7	-0.6	0.3	0.9	0.3	0.4	0.7	1.0	0.7	0.4	0.9	0.1	-0.2	-0.1	-0.6	-2.0	-1.7	-2.9	1.0	-2.9	-0.1
20	-3.4	-4.0	-3.8	-3.1	-3.4	-3.2	-3.2	-3.5	-3.6	-2.1	-0.7	1.6	2.7	3.0	3.6	3.8	3.5	3.1	3.0	2.0	1.0	0.1	-0.6	-0.8	3.8	-4.0	-0.3
21	-0.9	-0.7	-1.5	-2.2	-2.0	-1.8	-1.6	-1.2	-0.6	0.8	1.8	2.7	3.0	3.5	4.3	5.2	5.0	3.8	2.7	2.8	1.9	0.9	0.4	0.0	5.2	-2.2	1.1
22	-0.4	-0.8	-1.2	-1.6	-2.0	-2.0	-2.1	-1.9	-1.8	-1.5	-1.0	0.8	1.9	2.8	2.6	3.2	3.0	2.1	1.9	1.4	0.5	-0.9	-1.8	-2.5	3.2	-2.5	-0.1
23	-3.0	-3.3	-3.7	-4.2	-4.7	-4.9	-5.1	-4.3	-2.6	-0.8	0.6	1.6	2.8	4.0	5.0	5.3	5.8	5.7	4.8	3.7	1.5	-0.1	-0.1	-0.3	5.8	-5.1	0.2
24	-0.7	-1.6	-1.9	-2.0	-2.0	-2.0	-2.4	-1.7	-0.3	2.5	4.3	5.5	5.1	5.8	6.1	7.6	7.2	7.5	7.2	5.5	3.9	1.9	1.3	1.9	7.6	-2.4	2.4
25	1.7	1.6	1.2	1.0	0.7	1.5	1.3	1.5	3.4	4.9	5.9	8.1	8.4	8.6	8.6	8.4	7.6	7.2	5.9	4.6	3.2	1.8	1.2	0.2	8.6	0.2	4.1
26	-0.2	0.2	-0.3	-1.5	-1.7	-1.1	-1.3	-0.7	0.5	2.1	3.2	6.0	7.2	8.9	9.0	9.6	9.2	8.3	7.1	5.4	3.1	3.0	1.9	1.3	9.6	-1.7	3.3
27	0.3	-0.4	-1.0	-1.1	-2.1	-2.1	-2.7	-2.1	-2.0	-0.6	0.6	1.5	3.5	3.8	4.3	3.3	4.3	5.8	5.8	4.6	2.8	1.7	0.8	0.3	5.8	-2.7	1.2
28	0.1	0.0	-1.4	-1.4	-1.4	-1.5	-1.5	-1.0	-0.4	1.1	2.6	3.9	4.4	5.3	5.7	6.3	6.4	6.5	6.0	4.6	3.1	1.6	-0.4	-0.9	6.5	-1.5	2.0
29	-1.2	-0.9	-0.6	-1.7	-1.5	-2.7	-2.1	-1.4	0.5	1.3	2.5	3.6	4.9	6.7	7.6	7.8	9.0	7.3	7.6	7.6	4.2	2.6	1.7	2.0	9.0	-2.7	2.7
30	1.5	2.0	1.3	1.2	1.2	1.1	0.8	1.0	2.0	3.0	3.5	4.9	7.8	8.5	7.4	7.9	7.8	7.1	6.0	4.9	3.1	1.2	0.3	-0.2	8.5	-0.2	3.5
Max.	**2.2**	**2.0**	**1.3**	**2.0**	**2.2**	**2.2**	**3.0**	**3.2**	**3.4**	**4.9**	**5.9**	**8.1**	**8.4**	**8.9**	**9.0**	**9.6**	**9.2**	**8.3**	**7.6**	**7.6**	**4.2**	**3.0**	**2.4**	**2.2**	**9.6**		
Min.	**-18.4**	**-19.2**	**-19.7**	**-20.5**	**-20.7**	**-21.6**	**-20.9**	**-20.6**	**-18.9**	**-16.8**	**-15.4**	**-14.2**	**-14.0**	**-13.4**	**-12.3**	**-12.2**	**-13.4**	**-13.3**	**-13.1**	**-13.4**	**-14.7**	**-15.8**	**-16.4**	**-17.0**		**-21.6**	
Avg.	**-3.7**	**-3.9**	**-4.2**	**-4.4**	**-4.5**	**-4.6**	**-4.7**	**-4.6**	**-3.9**	**-2.8**	**-1.9**	**-0.7**	**0.1**	**0.9**	**1.1**	**1.3**	**1.2**	**0.8**	**0.4**	**-0.4**	**-1.6**	**-2.4**	**-2.8**	**-3.2**			**-2.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

May *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.4	-1.2	-1.9	-2.8	-3.6	-3.7	-3.9	-3.4	-1.8	-0.3	0.2	1.4	2.7	4.1	4.7	5.3	5.4	5.0	4.4	3.5	2.0	0.5	-0.6	-1.6	5.4	-3.9	0.6
2	-1.7	-1.7	-2.2	-2.9	-3.3	-4.2	-3.7	-2.9	-1.4	0.2	1.8	3.1	3.8	4.6	4.6	4.2	3.9	3.5	2.9	1.9	0.3	-1.1	-2.1	-2.9	4.6	-4.2	0.2
3	-4.0	-5.4	-6.9	-7.1	-7.4	-8.3	-8.4	-7.3	-6.1	-4.8			-1.6	-0.5	0.2	0.7	0.7	0.7	0.2	-0.9	-2.4	-4.1	-5.3	-6.4	0.7	-8.4	-3.8
4	-7.2	-8.0	-8.9	-9.7	-10.1	-10.8	-10.7	-9.8	-7.9	-6.2	-4.2	-3.3	-2.8	-2.3	-1.6	-1.1	-0.9	-0.8	-0.6	-1.7	-3.2	-4.7	-5.8	-6.4	-0.6	-10.8	-5.4
5	-7.0	-7.9	-8.8	-9.4	-10.0	-10.4	-10.4	-9.6	-8.1	-6.3	-5.0	-3.6	-2.5	-1.4	-0.5	-0.2	0.3	0.4	0.3	-0.7	-2.2	-4.1	-5.8	-7.0	0.4	-10.4	-5.0
6	-7.5	-7.6	-6.9	-6.6	-8.0	-8.2	-8.0	-6.7	-3.7	-2.9	-3.0	-1.0	0.7	1.9	1.8	2.6	2.5	2.4	1.5	0.7	-0.9	-2.3	-2.8	-2.8	2.6	-8.2	-2.7
7	-3.1	-3.2	-3.2	-4.0	-3.1	-2.3	-1.4	-1.3	-0.8	0.2	1.1	1.6	2.4	2.9	3.2	3.5	3.8	3.8	3.0	2.2	2.1	1.8	1.6	1.6	3.8	-4.0	0.5
8	0.6	-0.2	0.0	0.2	0.4	0.3	-0.1	-0.3	-0.3	-0.5	-0.5	-0.5	0.2	1.0	1.3	1.8	1.9	2.2	1.6	1.6	0.8	-0.2	-0.8	-1.6	2.2	-1.6	0.4
9	-1.6	-2.2	-2.6	-3.4	-4.4	-5.2	-4.1	-3.2	-1.6	-0.6	0.3	0.9	2.2	3.1	3.5	3.1	2.5	3.0	2.9	2.1	0.6	-1.1	-2.4	-3.0	3.5	-5.2	-0.5
10	-3.4	-4.2	-4.9	-6.0	-6.6	-6.7	-6.2	-5.0	-3.7	-2.4	-1.1	0.1	1.0	1.8	1.9	2.4	2.1	1.6	1.2	-0.3	-0.5	-1.8	-3.1	-4.1	2.4	-6.7	-2.0
11	-4.2	-4.4	-3.7	-3.4	-3.3	-3.8	-4.0	-3.3	-1.8	-0.3	0.7	1.4	2.3	3.1	3.3	4.4	3.8	3.4	3.0	2.6	1.1	0.5	-0.3	-1.4	4.4	-4.4	-0.2
12	-2.6	-3.2	-3.2	-2.8	-3.2	-3.7	-3.6	-2.8	-0.8	1.5	2.2	2.4	3.3	3.8	3.4	3.5	4.0	4.1	3.4	3.0	2.1	1.6	0.8	0.4	4.1	-3.7	0.6
13	0.3	0.2	0.1	0.4	0.7	0.9	0.9	0.3	-0.1	0.8	1.2	1.6	1.6	1.9	2.4	2.7	2.7	2.5	2.5	2.7	2.2	1.6	1.0	0.6	2.7	-0.1	1.3
14	0.3	0.1	0.0	-0.8	-1.1	-1.2	-1.4	-1.3	-0.8	-0.5	1.4	3.7	3.2	4.0	4.2	3.3	3.6	3.9	4.2	3.7	3.1	2.3	1.4	1.0	4.2	-1.4	1.5
15	1.0	1.1	-0.4	-0.8	-1.2	-0.8	-1.0	-0.4	0.5	1.3	1.6	2.1	2.7	3.6	4.1	4.1	2.3	1.9	1.1	0.2	0.3	0.8	0.7	0.5	4.1	-1.2	1.0
16	0.2	-0.1	-1.0	-2.8	-4.4	-5.8	-6.0	-5.2	-4.3	-3.4	-2.3	-0.7	0.2	1.3	0.8	1.9	3.0	3.0	2.2	1.1	0.4	-0.6	-1.6	-2.3	3.0	-6.0	-1.1
17	-2.6	-2.6	-2.8	-2.9	-2.8	-2.7	-2.2	-1.6	-1.0	0.0	0.2	0.8	2.6	3.2	4.1	4.6	5.2	5.8	5.9	4.8	3.8	1.4	0.0	-0.4	5.9	-2.9	0.9
18	-0.3	-0.9	-1.2	-1.9	-2.0	-2.5	-2.0	-0.6	0.6	0.4	1.5	2.7	4.0	4.4	4.6	5.5	6.3	6.5	6.6	5.4	3.9	2.5	1.4	1.2	6.6	-2.5	1.9
19	0.8	0.2	0.2	0.9	0.0	-0.3	0.4	1.1	3.0	4.6	5.5	6.0	7.0	8.4	9.2	9.2	9.1	8.8	7.6	7.9	6.5	4.8	3.4	2.5	9.2	-0.3	4.4
20	2.8	2.2	1.4	0.8	0.4	0.0	0.0	1.2	3.2	5.7	7.5	8.2	9.1	9.9	10.8	11.4	11.9	12.1	11.5	11.1	9.5	7.4	5.9	4.9	12.1	0.0	6.2
21	4.2	3.1	2.2	1.9	1.6	2.3	2.0	3.5	4.9	6.7	8.1	10.4	12.6	13.1	14.8	15.4	16.6	16.8	16.6	13.5	11.3	9.4	7.7	6.2	16.8	1.6	8.5
22	6.3	5.8	6.6	4.4	4.5	4.8	6.4	6.5	9.9	12.5	13.6	14.1	15.0	15.5	15.8	15.8	15.5	14.4	13.5	12.7	10.8	9.0	6.5	5.3	15.8	4.4	10.2
23	5.5	5.2	5.1	5.3	4.8	4.4	5.7	6.5	8.3	9.3	10.9	12.2	13.4	15.2	15.6	16.8	17.4	17.3	17.0	15.2	13.1	11.6	9.6	8.1	17.4	4.4	10.6
24	8.1	6.6	5.5	5.8	5.8	5.6	6.4	8.4	9.7	12.4	15.0	16.2	17.8	19.5	17.2	16.7	16.6	15.7	14.1	12.8	11.0	8.7	6.3	5.1	19.5	5.1	11.1
25	6.2	6.1	5.0	4.6	4.4	4.3	5.3	7.2	9.6	12.1	13.5	15.1	16.1	17.1	17.3	17.8	18.4	18.7	18.7	17.5	15.4	12.2	11.3	9.8	18.7	4.3	11.8
26	8.2	8.0	8.8	9.1	8.2	8.6	9.2	10.5	12.6	14.0	13.9	16.3	17.4	17.8	18.1	17.8	16.8	16.8	16.2	15.4	13.8	12.3	10.7	9.0	18.1	8.0	12.9
27	7.5	6.6	5.7	5.3	5.4	5.3	5.4	6.1	6.9	8.6	10.3	11.7	11.3	12.0	12.5	12.4	12.4	12.1	11.4	9.7	8.2	6.8	5.9	5.1	12.5	5.1	8.5
28	4.4	4.8	4.9	6.2	7.1	7.0	7.0	6.9	7.6	7.9	8.6	9.3	9.2	9.4	8.6	8.9	9.2	8.9	8.7	8.5	7.6	6.7	5.7	4.9	9.4	4.4	7.4
29	4.6	4.0	4.9	5.3	5.6	5.7	6.3	7.3	8.1	8.9	8.6	10.8	11.6	11.3	11.6	11.1	11.5	11.3	10.9	9.4	8.1	6.7	5.8	5.1	11.6	4.0	8.1
30	4.8	4.5	4.3	3.6	4.5	5.6	7.1	7.4	8.4	10.2	10.5	10.9	11.7	11.8	12.2	12.1	12.1	11.4	10.2	9.4	8.8	8.0	6.8	6.5	12.2	3.6	8.5
31	6.1	5.0	5.4	5.4	4.9	4.9	6.0	6.7	6.7	7.5	8.9	9.6	10.2	10.3	10.9	11.0	11.2	10.8	10.5	9.8	9.3	8.5	6.4	4.9	11.2	4.9	8.0
Max.	**8.2**	**8.0**	**8.8**	**9.1**	**8.2**	**8.6**	**9.2**	**10.5**	**12.6**	**14.0**	**15.0**	**16.3**	**17.8**	**19.5**	**18.1**	**17.8**	**18.4**	**18.7**	**18.7**	**17.5**	**15.4**	**12.3**	**11.3**	**9.8**	**19.5**		
Min.	**-7.5**	**-8.0**	**-8.9**	**-9.7**	**-10.1**	**-10.8**	**-10.7**	**-9.8**	**-8.1**	**-6.3**	**-5.0**	**-3.6**	**-2.8**	**-2.3**	**-1.6**	**-1.1**	**-0.9**	**-0.8**	**-0.6**	**-1.7**	**-3.2**	**-4.7**	**-5.8**	**-7.0**		**-10.8**	
Avg.	**0.8**	**0.3**	**0.0**	**-0.3**	**-0.5**	**-0.7**	**-0.3**	**0.5**	**1.8**	**3.1**	**4.4**	**5.4**	**6.1**	**6.8**	**7.1**	**7.4**	**7.5**	**7.4**	**6.9**	**6.0**	**4.7**	**3.4**	**2.2**	**1.4**			**3.4**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

June *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.1	2.8	2.4	3.6	3.6	5.3	4.9	6.5	8.9	9.7	12.1	12.2	13.6	14.9	13.7	12.2	14.8	14.2	13.2	9.8	10.7	10.5	8.8	8.4	14.9	2.4	9.2
2	8.5	7.9	8.2	7.3	6.9	6.0	6.0	6.4	6.7	6.8	7.0	7.4	7.8	9.5	10.2	10.9	12.3	12.6	12.4	11.1	10.4	9.7	8.8	7.7	12.6	6.0	8.7
3	6.4	6.3	6.3	6.4	5.8	5.6	5.2	6.0	6.7	8.6	9.4	9.7	9.8	9.4	9.3	9.7	9.1	8.8	8.0	7.7	7.0	6.7	6.1	6.0	9.8	5.2	7.5
4	5.5	5.7	6.3	6.2	5.8	5.0	5.0	6.1	7.7	9.3	9.9	11.4	11.7	11.9	12.2	12.5	12.9	13.3	13.3	12.9	9.9	7.6	7.1	6.6	13.3	5.0	9.0
5	6.9	6.5	6.2	6.6	6.2	6.1	5.8	6.2	6.4	6.3	7.5	9.0	9.3	9.2	9.4	9.1	8.6	7.9	7.4	6.7	6.0	5.5	5.3	4.9	9.4	4.9	7.0
6	4.6	4.6	4.9	5.0	4.7	5.0	5.2	5.4	6.0	6.6	7.3	8.1	8.4	9.0	10.2	10.4	10.0	10.3	9.6	8.9	8.4	7.6	7.1	6.8	10.4	4.6	7.3
7	6.1	5.0	5.6	3.6	3.6	3.2	4.4	6.3	10.1	12.4	14.5	15.4	15.5	16.6	15.3	15.4	15.8	16.1	15.6	15.0	14.6	12.8	11.6	11.0	16.6	3.2	11.1
8	10.1	10.5	9.6	8.7	8.3	7.7	6.6	10.6	12.4	14.6	16.5	15.3	17.0	18.8	19.8	20.6	21.2	20.8	20.8	19.9	19.1	15.0	13.1	13.2	21.2	6.6	14.6
9	12.0	11.9	9.9	9.2	9.2	7.9	9.4	11.3	12.3	13.0	14.8	16.6	18.2	19.4	20.3	20.7	21.8	21.6	20.9	20.4	18.7	17.1	15.1	13.5	21.8	7.9	15.2
10	12.0	11.3	10.2	8.9	7.8	8.4	8.8	8.8	13.1	13.0	13.6	13.2	14.3	15.3	16.5	17.8	18.2	18.5	18.6	17.1	15.3	14.1	13.3	12.3	18.6	7.8	13.4
11	11.4	10.8	9.8	9.4	9.4	8.8	8.2	8.2	8.6	9.1	9.6	9.9	9.7	9.8	9.7	9.7	9.5	9.3	9.2	9.1	8.9	8.7	8.5	8.3	11.4	8.2	9.3
12	8.3	8.2	8.0	8.1	7.9	7.8	8.0	8.3	8.6	8.8	10.1	10.9	12.1	12.1	11.3	11.5	10.5	10.7	10.1	10.0	9.4	8.7	8.9	8.7	12.1	7.8	9.5
13	8.5	8.3	8.1	8.2	7.7	7.5	7.9	8.1	8.6	9.0	9.2	10.3	11.3	11.3	10.7	10.1	9.4	9.3	9.4	9.0	8.9	8.6	8.3	7.9	11.3	7.5	9.0
14	7.4	7.2	7.7	7.6	7.5	7.5	7.7	7.3	7.5	8.7	10.4	11.3	11.9	12.4	13.1	13.3	12.9	12.3	12.0	12.1	11.2	10.4	9.4	7.8	13.3	7.2	9.9
15	7.1	6.6	6.4	5.9	5.8	5.7	5.7	6.3	6.8	7.8	8.1	8.5	9.1	9.7	10.1	12.4	11.4	9.6	10.1	11.8	11.6	11.0	10.2	9.1	12.4	5.7	8.6
16	8.4	8.0	7.6	7.1	6.7	6.8	7.0	7.8	8.4	10.1	10.2	11.1	12.1	12.1	12.0	11.9	11.5		10.9	9.9	8.8	7.8	6.7	5.7	12.1	5.7	9.1
17	5.3	5.8	6.0	6.0	6.1	6.2	6.4	6.7	7.6	8.5	9.7	10.4	10.6	10.7	10.4	9.4	9.8	9.4	9.0	8.3	8.1	7.5	6.9	7.6	10.7	5.3	8.0
18	7.2	6.9	6.4	6.2	6.0	6.6	6.6	5.8	6.3	6.9	7.6	8.5	8.2	8.4	8.5	8.2	8.0	6.7	6.4	6.1	6.1	5.7	5.7	5.9	8.5	5.7	6.9
19	5.7	5.6	5.7	5.2	5.4	5.5	5.6	5.8	6.3	7.0	8.0	8.6	9.2	9.8	9.5	9.2	9.5	10.0	9.7	9.4	8.3	7.5	6.8	5.8	10.0	5.2	7.5
20	5.9	5.8	5.1	4.7	3.2	2.8	3.6	5.1	8.8	11.3	12.3	13.0	13.9	15.0	15.4	16.3	16.6	15.9	14.9	14.1	13.2	12.1	11.4	10.6	16.6	2.8	10.5
21	9.7	8.9	8.6	7.4	6.7	5.9	4.8	7.0	7.1	7.1	7.3	8.1	8.4	8.6	9.1	10.0	10.2	10.8	10.4	10.6	9.6	8.8	8.1	7.7	10.8	4.8	8.4
22	7.1	6.5	6.3	6.2	6.5	6.4	6.3	6.0	6.6	7.2	7.3	8.5	9.6	10.5	11.5	11.9	11.7	11.4	11.1	10.4	9.6	8.8	7.8	6.6	11.9	6.0	8.4
23	6.4	6.2	6.1	5.6	5.6	5.4	5.5	6.3	7.7	9.8	11.4	13.1	13.8	14.7	12.9	13.5	14.4	12.1	12.9	12.0	11.9	11.5	10.2	9.2	14.7	5.4	9.9
24	7.6	7.4	6.1	6.1	5.8	5.2	5.6	7.7	9.2	11.9	13.1	14.1	13.9	12.1	9.3	11.5	13.8	12.6	11.1	11.6	11.7	11.3	9.9	9.1	14.1	5.2	9.9
25	8.3	8.1	7.7	6.8	6.2	6.2	6.3	7.7	8.2	9.9	11.0	12.2	12.3	12.7	12.8	12.1	11.5	10.4	10.3	9.2	8.3	7.2	6.8	6.5	12.8	6.2	9.1
26	5.9	5.4	5.3	5.6	6.1	6.0	6.5	7.1	7.5	8.1	8.1	8.2	9.6	10.3	9.8	10.1	9.3	9.3	9.8	9.3	9.1	9.2	9.0	8.8	10.3	5.3	8.1
27	8.1	7.8	7.8	7.8	7.9	7.9	7.9	8.1	8.1	8.1	8.2	8.3	8.1	8.1	8.2	8.3	8.2	8.2	8.4	8.3	8.0	7.6	7.2	6.8	8.4	6.8	8.0
28	6.8	6.8	6.9	6.9	7.1	6.9	6.8	7.6	8.4	8.6	9.4	9.9	9.9	11.3	12.3	12.5	13.0	12.1	11.3	11.0	10.5	9.7	9.0	8.9	13.0	6.8	9.3
29	8.8	8.5	8.6	8.9	8.5	8.1	8.0	8.2	8.4	8.5	8.8	8.6	9.1	9.7	10.1	10.2	10.2	11.0	10.9	10.4	9.9	8.5	8.2	7.5	11.0	7.5	9.1
30	7.1	6.9	6.5	6.4	5.7	5.0	6.2	6.5	9.3	10.0	12.1	12.0	12.1	12.6	12.6	12.8	13.0	14.9	13.6	13.4	13.0	12.0	10.2	8.5	14.9	5.0	10.1
Max.	**12.0**	**11.9**	**10.2**	**9.4**	**9.4**	**8.8**	**9.4**	**11.3**	**13.1**	**14.6**	**16.5**	**16.6**	**18.2**	**19.4**	**20.3**	**20.7**	**21.8**	**21.6**	**20.9**	**20.4**	**19.1**	**17.1**	**15.1**	**13.5**	**21.8**		
Min.	**4.1**	**2.8**	**2.4**	**3.6**	**3.2**	**2.8**	**3.6**	**5.1**	**6.0**	**6.3**	**7.0**	**7.4**	**7.8**	**8.1**	**8.2**	**8.2**	**8.0**	**6.7**	**6.4**	**6.1**	**6.0**	**5.5**	**5.3**	**4.9**		**2.4**	
Avg.	**7.6**	**7.3**	**7.0**	**6.7**	**6.5**	**6.3**	**6.4**	**7.2**	**8.3**	**9.2**	**10.2**	**10.8**	**11.3**	**11.9**	**11.9**	**12.1**	**12.3**	**12.1**	**11.7**	**11.2**	**10.5**	**9.6**	**8.9**	**8.2**			**9.4**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

July *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.3	8.6	8.1	7.8	8.3	8.2	8.4	10.8	13.0	13.7	15.1	16.6	18.0	18.8	19.9	20.3	20.4	20.5	20.6	20.3	19.6	17.7	16.5	15.4	20.6	7.8	14.8
2	14.8	12.7	11.8	12.0	12.6	12.0	12.2	13.2	15.1	16.3	18.1	18.5	18.9	20.3	20.5	20.5	20.2	19.4	18.6	17.8	15.9	14.7	12.8	11.9	20.5	11.8	15.9
3	11.1	10.3	10.2	10.1	10.3	10.3	10.4	10.6	10.9	11.2	11.6	12.6	14.1	15.3	16.2	16.8	18.0	19.3	19.7	19.5	17.9	16.6	14.2	12.9	19.7	10.1	13.8
4	11.2	10.1	9.7	9.3	8.8	8.8	9.6	12.1	14.3	16.5	17.2	16.9	17.3	17.7	17.5	16.8	16.0	16.0	16.3	15.2	14.6	13.8	12.3	11.5	17.7	8.8	13.7
5	10.8	10.8	10.2	9.9	9.7	9.8	9.5	9.6	9.9	10.0	10.5	11.2	10.8	10.8	11.1	11.0	11.0	11.3	11.5	10.9	10.1	8.7	8.2	8.0	11.5	8.0	10.2
6	7.8	7.6	7.3	7.3	7.1	7.0	7.0	7.1	7.2	7.3	7.6	8.2	8.6	9.0	9.7	10.3	10.2	9.4	9.2	9.1	8.6	8.1	7.8	7.8	10.3	7.0	8.2
7	7.5	7.4	7.3	7.4	7.4	7.3	7.4	7.5	8.0	8.7	9.9	10.1	11.1	11.6	11.2	12.1	12.2	12.7	12.5	11.6	11.0	9.9	8.8	8.1	12.7	7.3	9.5
8	8.3	8.6	8.9	9.2	9.5	10.0	10.3	9.6	8.7	9.7	10.7	11.5	12.2	12.5	11.8	12.2	12.8	13.0	12.9	12.2	11.8	11.3	11.0	10.7	13.0	8.3	10.8
9	10.1	9.5	9.5	9.6	9.5	9.4	9.6	10.2	11.1	12.8	12.9	13.4	14.6	15.1	14.8	13.6	14.0	13.0	12.3	11.9	11.3	10.8	10.6	10.7	15.1	9.4	11.7
10	10.4	10.1	9.9	9.9	9.9	10.0	10.2	10.4	10.7	11.3	11.4	11.4	11.5	11.2	11.3	11.1	10.9	11.4	11.0	10.8	10.2	10.0	9.9	9.9	11.5	9.9	10.6
11	9.6	9.3	9.1	9.0	8.7	8.8	9.0	9.6	10.4	11.1	12.4	13.4	13.8	15.5	16.0	16.3	16.7	15.4	16.4	16.4	15.2	14.4	13.2	12.6	16.7	8.7	12.6
12	11.6	10.8	9.3	8.4	7.4	7.0	7.1	7.7	9.2	10.2	11.3	11.8	12.9	14.2	15.2	14.7	14.0	13.8	14.1	14.2	14.1	14.1	13.3	12.3	15.2	7.0	11.6
13	11.6	10.9	11.0	10.3	9.4	9.4	10.0	11.8	13.3	14.8	16.7	12.9	14.8	16.2	16.9	16.6	15.8	15.1	14.0	12.7	11.8	10.9	10.3	9.5	16.9	9.4	12.8
14	9.0	8.8	8.3	8.3	8.4	8.2	8.5	8.6	8.8	8.4	8.6	9.3	10.1	10.6	11.0	11.5	13.8	14.3	14.8	14.2	12.9	12.4	11.1	10.0	14.8	8.2	10.4
15	9.2	8.8	9.3	9.8	9.8	9.3	9.5	10.2	11.0	13.0	13.6	14.2	15.1	15.7	16.1	16.5	15.6	14.2	11.9	12.9	14.1	13.8	12.5	11.5	16.5	8.8	12.4
16	10.5	10.8	10.1	10.0	9.8	10.0	9.9	9.9	10.2	10.9	12.2	13.2	13.0	13.6	14.6	14.7	14.6	14.1	14.7	14.3	12.6	11.9	11.4	11.1	14.7	9.8	12.0
17	10.9	10.8	10.7	10.6	10.5	10.1	9.6	9.2	9.2	9.3	9.9	10.0	11.5	13.1	13.8	14.6	15.2	15.2	15.0	14.9	13.8	12.5	11.7	10.8	15.2	9.2	11.8
18	10.5	10.3	10.1	10.1	9.8	9.3	8.9	9.1	9.1	9.2	9.5	10.1	10.9	11.7	12.5	13.1	13.7	14.1	15.0	14.7	13.8	13.0	11.9	11.2	15.0	8.9	11.3
19	11.0	10.7	10.6	10.6	10.6	10.6	10.7	11.1	11.7	12.1	14.0	15.3	17.3	18.8	17.6	16.9	16.0	14.6	12.6	12.6	13.3	14.0	12.6	11.1	18.8	10.6	13.2
20	9.7	9.0	8.2	8.4	8.2	8.8	9.4	9.6	9.7	10.2	10.5	11.3	12.6	14.6	16.9	17.1	18.2	18.3	17.7	16.3	15.3	14.3	13.3	11.9	18.3	8.2	12.5
21	11.6	11.4	11.1	10.7	10.1	9.4	9.2	9.2	9.6	10.5	11.2	11.4	12.2	12.4	12.3	12.8	13.2	12.5	11.6	11.1	11.1	10.7	10.4	10.5	13.2	9.2	11.1
22	10.0	10.1	10.1	9.8	8.6	8.4	8.4	8.9	9.7	10.9	11.6	12.9	14.4	13.2	14.5	14.8	14.6	14.5	14.3	13.4	12.7	10.8	10.0	9.5	14.8	8.4	11.5
23	9.4	8.9	8.6	8.5	8.2	7.9	8.4	9.2	10.9	12.1	13.0	14.0	14.4	14.7	15.0	14.1	13.5	15.2	13.2			11.8	11.5	10.7	15.2	7.9	11.5
24	9.8	10.7	11.3	11.4	11.2	10.2	10.7	11.1	12.4	15.5	16.9	18.2	19.4	18.9	19.2	20.3	18.7	19.5	19.3	19.3	17.9	15.6	13.7	13.1	20.3	9.8	15.2
25	12.3	11.1	10.3	10.4	10.7	11.1	11.3	11.4	12.8	13.9	14.5	14.8	16.2	16.0	16.3	16.2	15.2	14.9	14.4	14.1	13.3	12.2	11.5	11.0	16.3	10.3	13.2
26	10.9	10.6	10.4	9.7	9.2	8.7	8.3	10.0	12.6	13.1	14.1	14.7	16.1	16.3	15.2	16.9	16.4	15.5	15.1	14.2	13.5	12.3	11.3	10.6	16.9	8.3	12.7
27	9.6	10.1	10.0	9.4	9.6	8.6	8.6	9.3	10.4	11.3	12.4	13.3	13.9	14.1	13.7	14.4	14.9	14.4	13.8	12.4	11.9	11.3	10.9	10.3	14.9	8.6	11.6
28	9.8	9.5	9.3	9.1	8.9	8.7	8.8	9.2	9.5	10.1	10.6	11.7	13.2	13.8	14.5	15.2	15.7	15.3	13.6	13.2	12.2	10.8	9.5	8.9	15.7	8.7	11.3
29	8.8	8.6	8.6	7.9	7.4	7.5	7.8	8.3	10.6	11.8	14.3	15.8	15.4	16.0	16.1	15.3	14.4	12.5	10.0	11.0	10.8	9.9	9.2	8.6	16.1	7.4	11.1
30	7.8	7.8	7.1	6.7	6.8	7.1	6.2	7.6	9.3	11.1	11.8	12.8	14.8	14.8	15.5	15.8	16.0	16.0	16.0	15.7	14.6	13.0	11.9	10.6	16.0	6.2	11.5
31	10.2	9.9	9.8	9.5	9.3	9.4	9.0	9.1	9.4	9.6	9.6	10.2	10.9	12.6	14.1	14.7	15.2	15.5	15.5	14.2	13.1	11.5	10.4	10.1	15.5	9.0	11.4
Max.	**14.8**	**12.7**	**11.8**	**12.0**	**12.6**	**12.0**	**12.2**	**13.2**	**15.1**	**16.5**	**18.1**	**18.5**	**19.4**	**20.3**	**20.5**	**20.5**	**20.4**	**20.5**	**20.6**	**20.3**	**19.6**	**17.7**	**16.5**	**15.4**	**20.6**		
Min.	**7.5**	**7.4**	**7.1**	**6.7**	**6.8**	**7.0**	**6.2**	**7.1**	**7.2**	**7.3**	**7.6**	**8.2**	**8.6**	**9.0**	**9.7**	**10.3**	**10.2**	**9.4**	**9.2**	**9.1**	**8.6**	**8.1**	**7.8**	**7.8**		**6.2**	
Avg.	**10.1**	**9.8**	**9.6**	**9.4**	**9.2**	**9.1**	**9.2**	**9.7**	**10.6**	**11.5**	**12.4**	**13.0**	**13.9**	**14.5**	**14.9**	**15.1**	**15.1**	**14.9**	**14.4**	**14.0**	**13.3**	**12.3**	**11.4**	**10.7**			**12.0**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

August 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.8	9.2	8.6	8.7	8.6	7.6	7.5	8.6	9.8	12.3	14.4	15.7	15.2	14.6	13.9	15.5	16.3	16.7	13.6	11.9	13.1	12.5	11.0	10.0	16.7	7.5	11.9
2	9.0	8.0	7.7	7.3	7.6	8.1	8.0	8.3	9.0	11.0	12.0	13.2	14.2	14.1	14.8	14.7	13.7	13.7	13.1	11.8	11.0	10.2	10.0	9.7	14.8	7.3	10.8
3	9.5	9.7	9.8	9.8	9.7	9.5	9.6	9.8	10.3	11.1	11.7	12.3	12.8	13.4	13.4	12.1	11.9	12.1	11.9	11.8	11.9	11.6	11.6	11.2	13.4	9.5	11.2
4	11.3	11.6	11.0	11.0	11.5	11.5	11.6	11.2	10.8	11.3	11.6	11.8	12.0	12.6	12.6	12.4	12.5	12.6	12.5	12.4	12.1	11.7	11.5	11.0	12.6	10.8	11.7
5	10.6	10.4	10.3	10.1	9.7	9.6	9.6	9.6	10.0	10.6	11.4	12.6	13.0	14.3	15.1	14.2	14.9	14.7	14.7	14.9	14.1	13.4	12.8	12.4	15.1	9.6	12.2
6	12.1	11.8	11.5	11.8	11.7	11.6	11.7	12.0	12.2	12.4	13.1	13.7	14.1	13.3	13.1	13.4	13.7	14.2	14.1	13.0	12.1	11.4	10.9	10.8	14.2	10.8	12.5
7	10.5	10.3	9.8	10.2	10.1	10.1	9.4	10.6	11.1	11.3	12.0	13.0	14.1	16.2	16.3	17.7	18.3	18.9	18.5	18.3	16.7	14.2	12.7	12.5	18.9	9.4	13.4
8	10.8	10.2	9.3	9.4	8.2	9.3	9.3	9.6	9.5	9.9	11.0	13.0	14.0	14.8	14.3	14.3	14.6	13.7	13.0	12.2	11.6	10.9	10.4	9.7	14.8	8.2	11.4
9	9.2	9.0	8.8	8.6	9.3	9.3	9.5	9.4	9.8	10.4	11.3	13.0	15.7	16.6	18.0	19.2	20.6	20.2	19.1	17.5	17.1	14.5	13.3	12.5	20.6	8.6	13.4
10	12.1	11.9	11.7	11.4	9.8	8.6	8.9	9.2	11.1	13.3	15.1	15.7	15.9	16.1	15.4	14.9	14.5	13.6	12.8	11.9	11.4	10.9	10.4	10.1	16.1	8.6	12.4
11	9.8	9.9	9.7	9.8	9.8	9.5	9.5	9.6	9.7	9.8	9.6	9.6	9.5	9.5	9.4	9.6	9.4	9.4	9.2	9.0	8.9	8.7	8.5	8.3	9.9	8.3	9.4
12	7.9	7.5	7.3	7.2	6.9	6.8	6.6	7.2	7.6	8.1	8.5	9.3	9.9	10.4	11.5	13.3	13.8	14.0	12.6	12.2	10.9	10.3	9.3	9.3	14.0	6.6	9.5
13	9.5	9.0	8.5	8.7	8.8	8.9	8.5	8.3	8.3	9.1	9.8	10.0	12.8	13.5	13.2	12.8	12.9	12.1	11.2	11.2	10.5	9.4	8.8	8.6	13.5	8.3	10.2
14	8.4	8.3	8.1	7.8	7.6	7.7	7.6	7.7	8.7	9.0	9.6	10.6	11.4	11.9	12.2	11.9	11.8	9.9	9.1	9.1	8.9	8.6	8.3	8.4	12.2	7.6	9.3
15	8.4	8.2	8.4	8.3	7.9	7.8	7.7	7.7	7.9	8.3	8.5	9.0	9.4	9.4	9.4	9.8	9.8	9.9	9.3	9.1	9.0	8.7	8.2	8.3	9.9	7.7	8.7
16	8.4	8.6	8.8	8.9	9.0	8.1	7.7	7.9	8.3	9.1	10.2	10.4	10.7	10.9	11.1	10.9	11.0	10.9	11.6	11.6	11.0	9.7	9.4	8.9	11.6	7.7	9.7
17	9.3	9.1	9.5	8.9	8.6	8.6	8.4	8.1	8.9	9.7	11.3	12.3	13.6	13.4	13.9	13.6	14.1	13.0	11.7	11.6	11.5	11.1	10.5	9.3	14.1	8.1	10.8
18	8.4	8.1	8.4	7.5	6.4	5.1	4.3	4.3	6.9	8.8	8.9	9.3	10.2	11.7				13.3	13.0	12.4	11.1	10.4	9.4	8.8	13.3	4.3	8.9
19	8.5	8.4	8.3	8.5	8.5	8.3	8.5	8.7	9.0	9.5	10.0	10.0	10.2	10.4	10.3	10.1	10.0	10.1	10.0	9.6	9.4	9.3	9.1	8.6	10.4	8.3	9.3
20	8.3	8.1	8.1	8.1	8.1	8.0	8.2	8.2	8.3	8.3	8.5	8.4	8.8	9.0	9.9	10.6	11.2	10.8	10.6	10.5	10.5	10.4	10.4	10.2	11.2	8.0	9.2
21	10.2	10.1	10.2	10.1	10.0	10.1	10.2	10.2	10.5	10.7	11.1	11.5	11.6	12.2	11.9	11.2	11.7	11.5	11.1	10.8	10.3	9.8	9.7	9.5	12.2	9.5	10.7
22	9.2	9.4	9.6	9.7	9.4	8.9	8.8	9.1	9.4	9.7	10.3	10.3	10.9	11.7	11.1	11.4	11.3	10.6	10.0	9.6	9.6	9.6	9.7	9.8	11.7	8.8	10.0
23	9.5	9.3	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.3	9.5	9.4	10.0	11.1	12.1	11.4	11.5	11.7	11.9	11.4	10.6	10.8	10.5	12.1	9.1	10.1
24	10.1	9.8	9.4	9.4	9.3	9.3	9.0	8.6	8.6	8.6	8.9	9.0	9.8	11.1	11.0	10.3	9.4	8.7	8.6	8.6	8.2	7.7	6.9	7.1	11.1	6.9	9.1
25	7.0	6.6	6.7	6.5	6.5	6.3	6.2	6.0	6.1	6.3	6.7	6.7	6.3	6.3	6.3	6.0	6.5	6.7	6.2	6.3	6.4	6.3	5.8	6.0	7.0	5.8	6.4
26	7.5	6.8	5.8	5.5	5.3	5.6	5.7	5.6	5.6	6.2	6.8	7.1	7.3	8.1	8.5	8.5	8.1	8.5	8.6	8.2	8.0	7.5	7.0	7.0	8.6	5.3	7.0
27	6.4	4.6	5.3	6.4	6.6	6.8	7.1	7.6	8.1	8.2	8.9	9.6	10.3	10.7	10.5	10.3	10.6	10.6	10.1	9.8	9.2	8.7	8.5	8.3	10.7	4.6	8.5
28	8.2	8.3	8.3	8.2	8.0	8.1	8.1	8.0	8.1	8.2	8.5	9.0	9.3	9.5	9.5	10.1	10.8	10.5	10.1	9.5	9.1	8.8	8.6	8.6	10.8	8.0	8.9
29	8.5	8.4	8.3	8.0	7.7	7.7	7.4	7.7	8.6	9.2	10.2	11.4	12.5	12.4	12.7	12.4	12.1	12.1	12.0	11.1	10.2	9.6	9.0	8.7	12.7	7.4	9.9
30	8.3	8.0	8.1	8.2	7.9	7.9	8.0	8.2	8.1	8.2	8.4	8.6	8.9	9.2	9.2	9.3	9.1	8.8	9.0	8.8	8.6	8.6	8.4	7.5	9.3	7.5	8.5
31	6.8	6.2	5.8	5.8	5.8	5.6	5.8	6.0	5.9	6.3	6.7	7.4	8.0	8.4	8.8	9.3	9.9	10.8	10.5	9.5	8.3	7.6	6.9	6.5	10.8	5.6	7.4
Max.	**12.1**	**11.9**	**11.7**	**11.8**	**11.7**	**11.6**	**11.7**	**12.0**	**12.2**	**13.3**	**15.1**	**15.7**	**15.9**	**16.6**	**18.0**	**19.2**	**20.6**	**20.2**	**19.1**	**18.3**	**17.1**	**14.5**	**13.3**	**12.5**	**20.6**		
Min.	**6.4**	**4.6**	**5.3**	**5.5**	**5.3**	**5.1**	**4.3**	**4.3**	**5.6**	**6.2**	**6.7**	**6.7**	**6.3**	**6.3**	**6.3**	**6.0**	**6.5**	**6.7**	**6.2**	**6.3**	**6.4**	**6.3**	**5.8**	**6.0**		**4.3**	
Avg.	**9.2**	**8.9**	**8.7**	**8.7**	**8.5**	**8.4**	**8.3**	**8.5**	**8.9**	**9.5**	**10.1**	**10.7**	**11.4**	**11.8**	**11.9**	**12.1**	**12.2**	**12.1**	**11.6**	**11.2**	**10.7**	**10.1**	**9.6**	**9.3**			**10.1**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

September 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.3	6.4	6.3	6.2	6.2	6.0	5.8	5.8	6.1	6.2	6.3	6.8	7.4	7.1	8.1	6.9	7.7	7.1	6.1	6.5	6.1	5.8	5.4	5.2	8.1	5.2	6.4
2	4.6	4.2	4.4	4.2	4.1	4.1	4.1	3.4	3.5	5.1	6.6	7.6	8.6	10.0	10.2	10.3	11.6	11.8	11.9	10.1	8.3	5.5	4.8	4.1	11.9	3.4	6.8
3	4.0	3.4	3.4	3.2	3.4	3.6	3.7	2.9	3.5	5.4	8.3	10.8	11.3	11.1	11.7	11.9	11.3	11.2	10.3	9.4	8.0	7.2	7.0	6.8	11.9	2.9	7.2
4	6.8	6.5	6.6	6.6	6.2	6.2	6.4	6.4	6.6	6.9	6.9	6.9	7.1	6.9	7.0	7.2	7.9	7.8	7.2	7.1	7.1	6.5	7.4	7.4	7.9	6.2	6.9
5	7.4	7.2	7.2	7.1	6.9	6.9	7.0	7.1	7.1	7.2	6.9	7.4	7.6	7.3	7.8	6.1	5.9	5.2	5.6	6.5	4.7	2.5	1.5	1.8	7.8	1.5	6.2
6	1.7	2.1	2.2	2.0	1.0	0.3	1.0	1.2	2.2	2.8	4.1	4.6	4.9	6.5	7.7	8.3	7.4	7.4	7.0	7.0	6.8	6.5	6.6	6.8	8.3	0.3	4.5
7	6.8	6.3	5.9	5.8	5.2	4.8	4.3	4.2	4.9	5.7	7.3	8.9	9.1	10.3	10.8	11.7	12.8	13.2	12.9	11.7	9.0	7.2	6.8	6.3	13.2	4.2	8.0
8	5.2	4.6	4.2	3.6	4.1	3.6	3.7	3.3	3.2	5.8	7.8	10.5	11.9	13.3	14.0	13.1	15.4	12.4	13.4	12.4	9.9	8.0	7.4	6.1	15.4	3.2	8.2
9	5.2	4.0	3.2	2.9	3.0	2.1	1.4	1.1	1.9	2.5	2.7	3.8	5.2	6.4	6.9	6.9	6.6	5.5	4.6	3.4	2.7	1.7	0.3	-0.5	6.9	-0.5	3.5
10	-0.7	-1.5	-2.2	-2.6	-3.1	-3.5	-3.9	-4.4	-3.8	-2.2	-0.7	0.8	2.3	3.1	3.2	3.7	4.7	3.9	4.2	3.4	1.1	-0.3	-1.3	-0.1	4.7	-4.4	0.0
11	0.5	0.6	0.5	0.6	0.3	-0.3	-0.2	0.5	0.3	2.3	2.4	2.7	4.2	5.4	6.6	7.4	7.7	7.8	7.0	5.2	3.1	3.4	2.8	2.5	7.8	-0.3	3.1
12	3.2	3.1	4.4	5.1	4.7	4.5	4.4	4.6	5.0	7.0	8.7	9.4	9.2	9.5	10.5	10.1	9.8	9.9	9.5	8.8	7.7	6.7	5.9	5.2	10.5	3.1	7.0
13	4.7	4.9	4.5	5.2	4.6	5.3	4.8	4.3	4.5	4.8	6.5	7.1	7.7	8.1	9.2	8.7	9.1	9.1	8.4	7.8	7.3	7.1	7.0	6.5	9.2	4.3	6.6
14	6.2	5.9	6.0	6.1	5.2	4.5	5.0	4.8	4.7	8.0	6.8	-4.6	11.9	13.5	13.9	14.5	14.3	14.2	13.0	11.3	9.5	8.8	7.9	5.9	14.5	-4.6	8.2
15	2.3	0.7	-0.8	-2.0	-3.0	-3.7	-4.6	-5.5	-5.4	-4.1	-2.6	-0.1	2.5	4.0	5.1	6.5	6.8	6.4	4.9	2.9	1.6	1.7	0.8	0.2	6.8	-5.5	0.6
16	0.7	0.1	-1.0	-0.6	-0.4	0.2	0.8	0.9	1.4	2.3	3.3	4.6	4.8				7.1	7.1	6.6	5.7	5.1	4.8	4.7	4.6	7.1	-1.0	3.0
17	4.7	4.9	5.1	5.1	5.0	4.8	4.5	4.0	4.3	4.5	3.8	3.1	3.2	3.6	3.9	4.1	4.6	4.6	4.4	4.3	4.2	4.3	4.2	4.6	5.1	3.1	4.3
18	5.7	5.4	5.4	5.6	5.4	5.0	2.3	1.0	0.0	-0.4	-0.6	-0.2	0.0	0.3	1.0	0.6	1.2	-0.3	-0.9	-1.0	-1.4	-1.6	-1.8	-2.1	5.7	-2.1	1.2
19	-2.5	-2.8	-3.0	-2.9	-3.1	-3.1	-3.4	-3.9	-3.4	-2.9	-1.4	-0.8	-0.3	-1.1	-1.0	-1.2	-1.0	-1.3	-1.4	-2.0	-2.6	-3.0	-3.5	-4.2	-0.3	-4.2	-2.3
20	-4.2	-4.4	-4.6	-4.6	-4.4	-4.9	-5.3	-5.4	-5.0	-3.4	-2.5	-1.9	-0.8	0.3	1.2	1.6	1.6	1.0	0.3	-1.1	-2.7	-3.6	-4.3	-5.5	1.6	-5.5	-2.6
21	-5.2	-4.8	-4.9	-5.8	-6.0	-6.3	-5.6	-6.1	-5.3	-3.4	-0.7	0.2	0.9	2.4	2.9	3.0	2.1	2.7	0.8	-0.9	-2.7	-4.4	-5.0	-4.8	3.0	-6.3	-2.4
22	-5.0	-5.5	-5.8	-6.8	-6.9	-6.7	-6.7	-6.9	-6.7	-4.8	-2.1	-1.4	-1.0	1.1	1.8	3.2	1.9	2.7	2.5	0.7	-0.9	-2.3	-2.8	-3.8	3.2	-6.9	-2.6
23	-4.5	-4.9	-5.7	-6.0	-5.3	-5.5	-5.5	-5.8	-5.6	-4.9	-4.1	-2.7	-1.2	-1.1	0.2	1.3	1.4	1.3	0.3	-2.3	-4.7	-5.9	-6.7	-7.7	1.4	-7.7	-3.6
24	-8.8	-8.5	-8.6	-8.6	-9.3	-9.5	-9.4	-10.1	-9.9	-8.6	-6.8	-6.2	-3.9	-2.9	-1.7	-1.3	-1.0	-0.6	-1.8	-3.2	-4.4	-5.3	-5.7	-6.2	-0.6	-10.1	-5.9
25	-7.8	-8.7	-9.2	-9.7	-9.3	-9.0	-9.8	-9.7	-9.2	-8.4	-5.9	-4.7	-3.8	-2.4	-1.8	-1.5	-1.6	-2.1	-3.3	-5.2	-7.3	-8.1	-9.0	-9.3	-1.5	-9.8	-6.5
26	-9.4	-10.7	-11.0	-10.9	-10.1	-10.3	-10.9	-10.7	-10.8	-9.1	-7.5	-5.4	-3.2	-0.9	2.4	3.0	2.2	1.8	1.3	0.7	0.4	0.5	0.1	-0.8	3.0	-11.0	-4.6
27	-1.1	-0.6	-0.6	-0.5	0.0	0.3	0.8	0.7	0.7	2.0	3.1	4.3	4.4	3.7	4.6	4.0	3.8	3.2	2.7	2.6	2.1	0.6	-1.6	-2.8	4.6	-2.8	1.5
28	-3.5	-4.5	-4.8	-5.5	-5.9	-6.4	-7.2	-7.5	-7.3	-6.5	-5.8	-4.3	-3.3	-2.4	-1.6	-1.2	-1.1	-1.4	-2.2	-3.3	-4.0	-4.6	-5.5	-6.2	-1.1	-7.5	-4.4
29	-6.6	-7.0	-7.5	-7.8	-8.2	-8.6	-8.5	-8.6	-8.7	-7.9	-6.4	-4.8	-3.6	-2.5	-1.1	0.3	0.1	-0.1	-0.9	-3.7	-4.0	-3.7	-3.5	-3.0	0.3	-8.7	-4.8
30	-2.4	-2.9	-3.2	-3.3	-1.2	-1.0	-0.4	-0.4	-0.2	0.1	0.2	0.5	0.7	1.3	1.2	1.3	1.7	1.3	1.4	1.2	1.2	1.3	1.3	1.2	1.7	-3.3	0.0
Max.	**7.4**	**7.2**	**7.2**	**7.1**	**6.9**	**6.9**	**7.0**	**7.1**	**7.1**	**8.0**	**8.7**	**10.8**	**11.9**	**13.5**	**14.0**	**14.5**	**15.4**	**14.2**	**13.4**	**12.4**	**9.9**	**8.8**	**7.9**	**7.4**	**15.4**		
Min.	**-9.4**	**-10.7**	**-11.0**	**-10.9**	**-10.1**	**-10.3**	**-10.9**	**-10.7**	**-10.8**	**-9.1**	**-7.5**	**-6.2**	**-3.9**	**-2.9**	**-1.8**	**-1.5**	**-1.6**	**-2.1**	**-3.3**	**-5.2**	**-7.3**	**-8.1**	**-9.0**	**-9.3**		**-11.0**	
Avg.	**0.5**	**0.1**	**-0.1**	**-0.3**	**-0.4**	**-0.6**	**-0.7**	**-1.0**	**-0.7**	**0.4**	**1.5**	**2.1**	**3.4**	**4.2**	**5.0**	**5.2**	**5.4**	**5.1**	**4.5**	**3.5**	**2.4**	**1.6**	**1.0**	**0.6**			**1.8**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

October *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.2	1.0	1.1	1.4	1.4	1.2	1.2	1.3	1.1	1.7	2.3	2.7	3.3	3.8	4.0	3.4	3.2	3.6	3.7	3.4	3.5	3.5	3.3	3.0	4.0	1.0	2.5
2	2.1	2.6	3.2	3.0	1.4	0.8	1.1	1.1	1.0	1.3	1.5	2.5	3.3	4.2	3.9	4.4	5.4	5.0	4.0	2.7	2.1	2.1	1.7	1.0	5.4	0.8	2.6
3	0.0	-0.3	-0.4	-0.2	-0.3	-0.3	-0.4	-0.5	-0.7	-0.8	-0.5	0.1	0.5	0.8	1.0	1.5	1.4	0.9	0.3	-0.3	-0.8	-1.5	-2.0	-2.6	1.5	-2.6	-0.2
4	-3.0	-3.4	-3.8	-4.0	-4.2	-4.3	-4.5	-4.6	-4.5	-4.4	-3.9	-2.3	-0.2	1.1	1.8	2.2	2.0	1.2	-0.4	-2.7	-3.5	-4.2	-4.5	-4.8	2.2	-4.8	-2.5
5	-5.0	-5.3	-5.1	-4.4	-3.8	-3.8	-4.3	-2.0	-4.3	-2.2	0.1	3.2	5.2	5.5	6.1	6.1	5.5	5.3	5.1	4.9	5.1	4.8	5.2	5.6	6.1	-5.3	1.1
6	5.9	6.3	6.5	6.6	6.8	6.8	6.7	6.3	5.7	5.6	5.2	4.0	2.9	2.3	2.3	2.1	2.5	2.7	2.7	2.7	2.2	1.0	1.0	1.6	6.8	1.0	4.1
7	1.3	1.5	0.7	1.3	1.5	1.4	1.1	0.5	0.4	0.2	0.1	1.1	2.8	2.8	1.3	2.5	2.7	2.3	1.8	1.3	0.6	0.6	0.6	0.4	2.8	0.1	1.3
8	0.3	0.3	0.2	0.2	0.1	0.0	-0.2	-0.2	-0.4	-0.5	-0.2	0.3	1.1	3.0	3.1	1.8	0.7	-0.5	-1.5	-2.2	-3.1	-3.8	-4.6	-4.9	3.1	-4.9	-0.5
9	-5.7	-4.6	-3.8	-3.9	-4.0	-4.4	-4.9	-4.8	-4.7	-4.0	-4.3	-2.7	-0.5	-0.4	-0.7	-1.7	-0.8	-2.0	-2.8	-3.2	-3.5	-4.0	-4.0	-4.0	-0.4	-5.7	-3.3
10	-4.3	-4.4	-4.7	-4.8	-5.0	-5.3	-5.7	-6.1	-6.7	-5.9	-4.8	-3.9	-2.8	-2.1	-1.8	-2.3	-2.5	-3.2	-3.9	-4.4	-5.1	-6.2	-6.3	-6.6	-1.8	-6.7	-4.5
11	-7.5	-7.5	-7.7	-8.3	-8.1	-8.4	-9.1	-8.5	-8.4	-7.1	-6.3	-4.7	-4.1	-3.7	-2.5	-1.1	-0.5	0.1	0.4	0.9	1.1	1.0	1.0	0.9	1.1	-9.1	-4.1
12	0.6	-0.5	-2.1	-2.7	-3.4	-3.1	-3.2	-2.8	-3.4	-2.6	-1.6	0.4	0.9	1.4	0.2	0.2	0.4	0.6	0.2	-0.3	0.1	-0.4	-0.4	-0.3	1.4	-3.4	-0.9
13	-0.6	-0.2	-0.3	-0.2	0.2	0.0	-0.1	-0.2	0.0	0.2	0.1	0.4	0.8	1.2	0.8	0.8	1.4	1.7	1.4	1.1	0.9	0.9	1.1		1.7	-0.6	0.5
14																		3.3	2.7	2.5	2.3	2.2	2.1	1.8	3.3	1.8	2.4
15	1.7	1.5	1.4	1.2	1.2	1.2	1.5	1.5	1.6	1.8	2.1	3.1	3.9	3.6	4.1	4.0	3.6	3.3	2.8	2.4	2.4	2.3	2.3	2.1	4.1	1.2	2.4
16	2.0	1.9	1.7	1.2	-0.4	-0.5	-0.3	-0.3	-0.6	-0.6	2.4	4.0	4.2	4.5	5.7	6.8	6.0	5.2	2.2	0.4	-1.5	-1.2	-1.7	-1.6	6.8	-1.7	1.7
17	-1.7	-1.9	-2.5	-3.2	-4.0	-4.9	-4.7	-5.3	-5.7	-5.5	-3.9	-0.8	0.4	1.3	3.2	3.5	2.5	0.4	-2.0	-3.4	-4.2	-4.9	-6.2	-6.1	3.5	-6.2	-2.5
18	-6.6	-6.8	-7.9	-9.0	-9.1	-9.0	-9.4	-10.3	-10.8	-11.2	-8.9	-7.4	-6.7	-6.3	-5.4	-5.5	-6.1	-6.7	-8.5	-9.8	-10.5	-11.3	-11.5	-11.4	-5.4	-11.5	-8.6
19	-11.7	-11.9	-12.1	-13.3	-13.9	-14.0	-14.2	-14.4	-14.7	-14.9	-13.1	-11.8	-10.5	-9.2	-8.9	-8.2	-8.2	-9.2	-10.6	-11.7	-11.9	-12.4	-12.7	-13.1	-8.2	-14.9	-11.9
20	-13.4	-13.9	-14.2	-14.6	-14.8	-15.4	-15.5	-15.6	-16.2	-16.2	-15.1	-13.4	-11.0	-10.5	-8.7	-7.5	-8.1	-9.5	-10.0	-10.2	-10.4	-10.2	-9.8	-10.1	-7.5	-16.2	-12.3
21	-10.1	-9.9	-9.8	-10.4	-10.1	-9.6	-9.4	-9.1	-8.7	-9.0	-8.3	-7.5	-5.0	-4.7	-3.7	-4.3	-4.7	-5.3	-6.2	-7.0	-7.9	-8.7	-9.5	-9.5	-3.7	-10.4	-7.8
22	-9.5	-9.5	-9.9	-9.9	-10.0	-10.1	-10.1	-10.1	-10.1	-10.2	-10.1	-9.8	-8.8	-8.4	-7.2	-6.7	-7.2	-8.0	-9.2	-9.7	-10.0	-10.4	-10.7	-11.2	-6.7	-11.2	-9.5
23	-11.9	-12.1	-12.0	-12.5	-13.1	-13.4	-13.5	-14.0	-14.6	-14.4	-13.4	-10.2	-7.3	-5.8	-3.5	-3.6	-3.2	-3.9	-5.5	-4.8	-2.3	-1.1	-1.0	-0.6	-0.6	-14.6	-8.2
24	0.6	1.8	2.1	1.9	1.7	1.8	1.4	1.3	2.1	2.9	3.3	3.5	3.0	3.0	3.4	3.8	4.1	4.5	4.7	5.1	4.9	4.0	3.7	3.5	5.1	0.6	3.0
25	3.6	3.3	3.2	2.9	2.4	1.3	0.6	1.0	1.5	1.4	2.1	2.3	3.1	2.9	2.7	3.3	3.7	2.1	2.5	1.4	1.2	1.1	0.9	1.3	3.7	0.6	2.2
26	1.6	0.6	0.5	0.5	0.5	0.4	0.3	0.0	-0.3	-0.4	0.6	1.9	2.7	3.3	3.9	3.3	2.7	1.6	0.6	-0.1	-0.6	-1.3	-1.3	-1.8	3.9	-1.8	0.8
27	-1.9	-2.7	-2.3	-2.3	-2.7	-3.2	-2.8	-1.6	-1.7	-2.1	-2.0	-0.2	1.4	1.7	1.0	0.6	0.6	-0.8	-2.4	-3.5	-4.1	-3.8	-2.5	-2.8	1.7	-4.1	-1.7
28	-3.1	-1.6	-2.0	-1.2	-1.8	-1.6	-1.6	-1.5	-1.5	-0.7	0.0	0.8	1.7	2.2	2.8	2.5	1.9	1.4	0.8	0.6	0.5	0.7	-0.2	-0.7	2.8	-3.1	-0.1
29	-1.5	-2.0	-1.9	-2.0	-1.4	-1.8	-3.4	-4.1	-4.4	-4.1	-4.0	-3.6	-1.6	-1.0	-1.4	-1.5	-2.1	-2.9	-3.8	-5.2	-6.0	-6.5	-7.6	-8.9	-1.0	-8.9	-3.4
30	-9.8	-9.9	-10.1	-10.5	-11.0	-11.3	-11.6	-12.3	-12.7	-13.0	-12.3	-11.1	-9.7	-8.5	-7.3	-9.4	-10.1	-11.4	-12.2	-12.6	-13.3	-13.3	-13.8	-13.8	-7.3	-13.8	-11.3
31	-14.3	-14.5	-14.9	-14.9	-14.6	-14.8	-15.2	-15.8	-15.8	-16.0	-15.4	-14.3	-13.8	-12.9	-12.4	-12.2	-12.3	-13.0	-13.9	-14.6	-15.1	-15.6	-16.3	-16.6	-12.2	-16.6	-14.6
Max.	**5.9**	**6.3**	**6.5**	**6.6**	**6.8**	**6.8**	**6.7**	**6.3**	**5.7**	**5.6**	**5.2**	**4.0**	**5.2**	**5.5**	**6.1**	**6.8**	**6.0**	**5.3**	**5.1**	**5.1**	**5.1**	**4.8**	**5.2**	**5.6**	**6.8**		
Min.	**-14.3**	**-14.5**	**-14.9**	**-14.9**	**-14.8**	**-15.4**	**-15.5**	**-15.8**	**-16.2**	**-16.2**	**-15.4**	**-14.3**	**-13.8**	**-12.9**	**-12.4**	**-12.2**	**-12.3**	**-13.0**	**-13.9**	**-14.6**	**-15.1**	**-15.6**	**-16.3**	**-16.6**		**-16.6**	
Avg.	**-3.4**	**-3.4**	**-3.6**	**-3.7**	**-3.9**	**-4.1**	**-4.3**	**-4.4**	**-4.6**	**-4.4**	**-3.6**	**-2.4**	**-1.4**	**-0.8**	**-0.4**	**-0.4**	**-0.5**	**-1.0**	**-1.8**	**-2.5**	**-2.8**	**-3.1**	**-3.3**	**-3.7**			**-2.7**

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

November 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-17.1	-17.6	-18.0	-18.4	-18.7	-19.1	-19.4	-19.8	-20.0	-20.4	-19.9	-18.1	-15.9	-15.1	-15.2	-15.0	-15.3	-16.2	-17.4	-17.9	-18.1	-18.3	-18.4	-18.5	-15.0	-20.4	-17.8
2	-18.8	-19.0	-18.5	-18.7	-17.0	-15.0	-14.9	-15.1	-14.3	-13.3	-12.6	-12.4	-11.2	-9.8	-9.4	-8.6	-8.1	-7.8	-7.8	-7.0	-7.5	-7.1	-7.2	-3.7	-3.7	-19.0	-11.9
3	-3.3	-5.3	-6.1	-5.8	-6.0	-6.7	-6.5	-6.6	-6.4	-6.2	-5.8	-5.2	-5.2	-4.3	-3.8	-3.8	-4.3	-5.0	-5.9	-6.0	-6.5	-6.8	-7.8	-8.6	-3.3	-8.6	-5.7
4	-8.4	-7.1	-6.5	-7.3	-7.7	-7.5	-7.1	-7.2	-7.4	-7.4	-7.2	-6.2	-5.4	-5.6	-5.5	-4.9	-4.8	-4.7	-5.7	-5.5	-5.6	-5.2	-5.0	-5.0	-4.7	-8.4	-6.2
5	-4.8	-4.6	-4.6	-5.0	-4.9	-4.8	-4.7	-4.5	-4.2	-3.9	-3.4	-2.4	-1.8	-1.1	-1.0	-1.1	-2.0	-2.8	-3.3	-3.4	-4.3	-4.2	-4.5	-5.2	-1.0	-5.2	-3.6
6	-5.8	-6.2	-5.6	-6.0	-6.7	-7.4	-7.8	-8.3	-8.6	-8.4	-8.4	-8.3	-8.3	-7.7	-8.2	-8.0	-7.7	-7.9	-8.3	-8.3	-8.0	-7.7	-7.1	-6.9	-5.6	-8.6	-7.6
7	-7.1	-7.1	-6.9	-6.8	-6.9	-7.3	-8.5	-8.9	-8.5	-8.0	-7.1	-6.5	-5.8	-5.2	-4.8	-3.8	-3.7	-3.5	-3.3	-2.4	-1.0	-0.6	0.6	1.0	1.0	-8.9	-5.1
8	1.3	1.6	1.7	1.3	1.4	1.6	2.1	1.6	1.3	1.1	1.3	1.3	1.2	0.9	-0.4	-1.8	-2.5	-2.5	-2.6	-3.0	-3.4	-4.1	-5.7	-6.1	2.1	-6.1	-0.5
9	-6.9	-7.6	-8.0	-7.7	-6.4	-6.8	-7.9	-8.9	-8.4	-7.3	-6.2	-4.5	-4.0	-4.5	-4.3	-4.2	-4.3	-4.7	-4.7	-4.9	-4.8	-6.2	-6.9	-7.0	-4.0	-8.9	-6.1
10	-7.1	-7.2	-7.5	-7.3	-7.2	-7.3	-7.3	-6.7	-6.4	-6.2	-5.1	-3.5	-3.0	-3.3	-3.4	-3.1	-3.6	-3.9	-4.2	-4.5	-4.3	-4.2	-4.3	-4.6	-3.0	-7.5	-5.2
11	-4.2	-4.1	-4.0	-4.2	-4.1	-4.3	-4.1	-4.7	-4.8	-4.6	-4.5	-4.4	-3.9	-3.5	-3.6	-3.8	-3.7	-4.1	-4.5	-4.9	-5.4	-5.5	-5.9	-6.4	-3.5	-6.4	-4.5
12	-7.7	-8.7	-8.4	-9.1	-9.3	-9.7	-10.1	-11.7	-11.3	-12.3	-12.3	-10.7	-9.9	-9.4	-10.5	-10.1	-8.9	-7.0	-7.4	-7.2	-7.6	-7.4	-7.8	-7.1	-7.0	-12.3	-9.2
13	-6.4	-6.2	-6.2	-6.5	-6.3	-6.9	-6.6	-6.1	-6.0	-6.3	-8.3	-7.3	-5.8	-6.0	-2.3	-2.8	-5.4	-7.1	-8.8	-9.0	-9.4	-8.2	-8.6	-8.6	-2.3	-9.4	-6.7
14	-8.5	-9.1	-10.7	-10.7	-11.1	-11.9	-13.2	-14.0	-15.2	-15.7	-15.5	-15.4	-15.4	-14.7	-13.6	-12.7	-13.6	-15.2	-15.7	-16.0	-16.3	-16.5	-16.3	-15.3	-8.5	-16.5	-13.8
15	-13.9	-13.3	-12.6	-12.5	-12.2	-12.2	-11.9	-12.2	-12.9	-12.6	-12.0	-10.6	-8.0	-6.8	-5.1	-4.2	-4.2	-6.5	-6.0	-5.1	-5.4	-4.9	-4.1	-4.0	-4.0	-13.9	-8.9
16	-4.1	-3.5	-1.6	-1.5	-1.9	-2.7	-3.2	-1.4	0.2	0.4	0.4	1.2	2.1	3.1	3.4	3.2	3.1	3.0	2.9	2.7	3.2	2.6	1.1	0.6	3.4	-4.1	0.6
17	-3.2	-2.9	-2.3	-3.0	-2.0	-3.6	-4.9	-5.3	-5.3	-5.4	-6.5	-5.9	-6.9	-7.8	-6.4	-7.5	-8.0	-7.9	-8.6	-9.3	-9.1	-8.8	-8.2	-8.1	-2.0	-9.3	-6.1
18	-7.9	-6.5	-2.1	-0.9	-1.1	-0.2	-0.2	-0.3	-0.2	-0.7	-0.8	-0.1	0.6	0.4	0.4	0.4	-0.3	-1.3	-1.1	-2.4	-2.8	-3.7	-3.4	-2.7	0.6	-7.9	-1.6
19	-3.6	-4.1	-4.4	-4.4	-4.8	-5.2	-5.0	-5.3	-4.8	-4.6	-4.3	-4.3	-3.1	-2.3	-2.7	-1.9	-3.5	-4.7	-5.7	-5.8	-5.4	-5.9	-5.9	-6.9	-1.9	-6.9	-4.5
20	-7.0	-6.8	-7.5	-8.0	-7.6	-6.7	-7.9	-9.1	-8.5	-8.3	-8.4	-7.9	-7.0	-4.2	-4.0	-5.4	-7.3	-8.1	-7.8	-7.9	-7.8	-7.7	-7.5	-7.1	-4.0	-9.1	-7.3
21	-6.9	-6.7	-6.7	-6.8	-6.4	-5.4	-5.4	-5.2	-3.7	-4.1	-3.0	-1.9	-2.3	-1.2	-0.8	-0.4	-0.4	-0.4	-0.8	-1.7	-1.8	-1.4	-1.4	-1.0	-0.4	-6.9	-3.1
22	-0.2	-0.3	0.1	0.1	0.2	0.4	0.8	0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	0.3	1.0	1.2	1.4	1.6	2.0	2.2	2.6	3.0	3.1	3.1	-0.3	0.8
23	3.0	3.1	3.1	3.1	3.0	2.9	3.0	3.2	3.7	3.8	4.0	4.0	4.1	3.7	3.4	2.7	2.4	2.4	2.6	2.9	2.9	3.1	3.0	2.9	4.1	2.4	3.2
24	2.6	2.1	1.6	1.3	1.0	0.9	1.1	1.3	1.3	1.5	1.8	1.9	2.4	2.6	2.8	2.7	1.9	1.3	1.8	1.5	1.9	2.0	1.9	1.5	2.8	0.9	1.8
25	0.5	1.0	1.2	1.3	1.1	0.8	0.8	-0.3	-2.7	-3.2	-3.8	-3.8	-4.4	-4.8	-5.3	-5.6	-6.0	-6.7	-6.9	-7.0	-7.3	-7.4	-7.7	-8.0	1.3	-8.0	-3.5
26	-7.9	-7.6	-7.6	-7.4	-7.2	-7.5	-7.6	-7.4	-6.9	-6.0	-5.5	-4.3	-2.7	-3.2	-2.0	-1.6	-1.4	-0.4	-0.4	-0.5	0.0	0.2	-0.1	-0.1	0.2	-7.9	-4.0
27	-0.1	-0.2	-0.4	-0.3	-0.3	-0.1	0.3	1.0	1.0	-0.2	0.2	0.4	0.0	0.6	0.4	-0.2	-0.4	-1.0	-1.9	-1.6	-1.6	-1.9	-1.0	-0.7	1.0	-1.9	-0.3
28	-0.8	-0.7	-0.1	0.1	0.2	0.0	0.0	0.4	0.6	1.2	1.0	0.9	0.6	0.9	0.5	-0.7	-1.5	-1.9	-2.4	-2.5	-2.7	-3.0	-3.1	-3.3	1.2	-3.3	-0.7
29	-3.2	-3.1	-3.0	-2.9	-3.0	-3.1	-3.2	-3.5	-3.4	-3.4	-3.1	-3.5	-3.7	-4.1	-3.0	-3.2	-4.7	-4.9	-4.6	-5.5	-5.5	-5.1	-5.5	-6.4	-2.9	-6.4	-3.9
30	-5.9	-6.8	-7.1	-6.5	-6.5	-6.1	-5.8	-7.4	-7.8	-9.6	-9.5	-9.0	-8.2	-7.1	-7.4	-7.9	-6.7	-5.1	-4.1	-3.4	-2.8	-4.0	-4.5	-4.1	-2.8	-9.6	-6.4
Max.	**3.0**	**3.1**	**3.1**	**3.1**	**3.0**	**2.9**	**3.0**	**3.2**	**3.7**	**3.8**	**4.0**	**4.0**	**4.1**	**3.7**	**3.4**	**3.2**	**3.1**	**3.0**	**2.9**	**2.9**	**3.2**	**3.1**	**3.0**	**3.1**	**4.1**		
Min.	**-18.8**	**-19.0**	**-18.5**	**-18.7**	**-18.7**	**-19.1**	**-19.4**	**-19.8**	**-20.0**	**-20.4**	**-19.9**	**-18.1**	**-15.9**	**-15.1**	**-15.2**	**-15.0**	**-15.3**	**-16.2**	**-17.4**	**-17.9**	**-18.1**	**-18.3**	**-18.4**	**-18.5**		**-20.4**	
Avg.	**-5.4**	**-5.5**	**-5.3**	**-5.4**	**-5.3**	**-5.4**	**-5.5**	**-5.7**	**-5.7**	**-5.7**	**-5.5**	**-4.9**	**-4.4**	**-4.0**	**-3.7**	**-3.7**	**-4.1**	**-4.4**	**-4.7**	**-4.8**	**-4.8**	**-4.8**	**-5.0**	**-4.9**			**-4.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

December 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-3.5	-3.5	-2.5	-2.1	-2.0	-1.3	-0.4	0.6	1.1	1.2	2.0	2.3	1.1	1.0	1.5	1.8	2.0	2.1	2.5	2.4	2.3	2.3	2.6	2.5	2.6	-3.5	0.7
2	1.9	1.7	1.7	1.4	1.5	0.9	-0.3	-1.2	-1.4	-1.8	-2.1	-2.6	-2.9	-3.0	-2.9	-2.7	-3.2	-3.8	-3.9	-4.7	-4.7	-4.8	-5.0	-5.5	1.9	-5.5	-2.0
3	-6.1	-5.5	-5.3	-6.1	-6.0	-6.2	-6.4	-7.4	-8.1	-8.9	-9.4	-9.2	-8.2	-8.3	-8.7	-9.0	-9.5	-10.5	-10.5	-11.7	-10.4	-10.8	-11.6	-11.1	-5.3	-11.7	-8.5
4	-11.6	-11.7	-11.9	-12.9	-11.5	-9.5	-8.5	-7.7	-6.6	-5.7	-5.5	-3.4	-2.3	-2.1	-1.7	-1.7	-1.7	-2.0	-2.1	-1.9	-1.7	-1.2	-0.6	-0.5	-0.5	-12.9	-5.3
5	0.1	0.1	0.0	0.3	0.6	1.0	1.0	1.4	1.3	1.2	0.8	0.8	0.9	-0.4	-0.1	-0.7	-1.1	-1.1	-1.0	-0.4	0.2	0.3	0.1	-0.8	1.4	-1.1	0.2
6	-0.9	0.4	0.6	0.2	-0.7	-0.9	-0.7	-1.0	-0.8	-1.8	-2.5	-2.7	-2.3	-2.2	-3.5	-4.9	-5.4	-5.8	-6.4	-6.3	-5.9	-5.6	-5.5	-5.5	0.6	-6.4	-2.9
7	-5.6	-5.7	-5.8	-5.8	-5.9	-6.6	-7.2	-8.0	-9.6	-10.4	-11.1	-11.6	-11.9	-12.4		-13.7	-14.1	-14.6	-14.9	-15.4	-15.9	-16.2	-16.1	-16.3	-5.6	-16.3	-11.1
8	-16.3	-15.8	-16.6	-17.1	-17.2	-17.2	-17.3	-16.5	-16.9	-16.8	-16.3	-16.4	-15.3	-14.3	-13.7	-15.1	-15.2	-15.5	-16.1	-15.9	-16.1	-16.0	-15.9	-16.4	-13.7	-17.3	-16.1
9	-16.8	-16.3	-16.1	-16.2	-16.9	-16.4	-16.4	-16.9	-16.0	-17.1	-17.1	-16.2	-16.0	-15.6	-15.7	-17.4	-18.1	-18.1	-17.9	-18.5	-18.7	-19.2	-19.2	-19.0	-15.6	-19.2	-17.2
10	-19.3	-19.3	-19.3	-19.3	-18.5	-17.9	-18.0	-19.3	-20.0	-19.5	-18.2	-17.8	-17.4	-16.9	-16.7	-17.7	-18.0	-17.4	-16.7	-16.7	-17.6	-18.5	-18.8	-19.0	-16.7	-20.0	-18.3
11	-19.9	-21.0	-21.2	-21.0	-21.1	-21.0	-22.2	-23.1	-22.4	-23.1	-22.8	-21.5	-20.7	-19.8	-20.5	-21.9	-22.0	-22.3	-23.4	-22.7	-21.5	-19.7	-19.2	-19.9	-19.2	-23.4	-21.4
12	-19.8	-16.7	-14.9	-16.1	-16.5	-15.6	-15.2	-14.3	-12.8	-11.0	-10.9	-10.4	-7.9	-6.4	-4.4	-4.9	-5.7	-4.7	-5.5	-5.7	-7.4	-7.1	-8.5	-12.7	-4.4	-19.8	-10.6
13	-14.4	-15.2	-16.6	-16.9	-17.6	-17.7	-17.9	-19.6	-19.6	-19.8	-20.0	-19.8	-19.3	-19.1	-19.1	-19.6	-20.4	-20.9	-20.5	-19.8	-19.4	-19.0	-18.7	-18.5	-14.4	-20.9	-18.7
14	-18.5	-18.8	-18.6	-18.5	-18.4	-18.5	-18.3	-18.0	-18.0	-17.9	-17.9	-18.0	-17.8	-17.9	-18.7	-19.6	-20.6	-21.2	-22.0	-21.9	-22.0	-22.0	-21.1	-21.5	-17.8	-22.0	-19.4
15	-21.4	-21.3	-21.4	-20.9	-21.4	-21.5	-21.3	-21.2	-21.7	-21.9	-21.7	-21.0	-20.3	-20.4	-21.1	-21.7	-22.6	-23.0	-23.4	-24.0	-23.8	-24.0	-24.4	-24.0	-20.3	-24.4	-22.1
16	-23.2	-22.8	-23.3	-22.8	-22.6	-21.5	-21.1	-20.5	-19.8	-18.9	-17.5	-15.7	-14.4	-12.9	-11.8	-10.3	-8.3	-7.3	-7.3	-6.8	-6.3	-6.6	-6.3	-5.9	-5.9	-23.3	-14.7
17	-6.4	-6.2	-5.7	-5.3	-5.0	-5.0	-5.4	-5.3	-5.3	-4.9	-4.9	-4.9	-4.6	-4.4	-4.3	-4.0	-4.3	-4.6	-4.5	-4.7	-4.4	-4.2	-4.3	-4.1	-4.0	-6.4	-4.9
18	-3.9	-3.8	-4.0	-4.4	-5.5	-7.8	-7.2	-7.9	-9.0	-8.8	-9.4	-8.8	-7.3	-6.3	-6.1	-6.5	-6.0	-6.6	-6.4	-7.2	-6.5	-6.7	-6.8	-7.2	-3.8	-9.4	-6.7
19	-7.8	-7.7	-7.4	-8.1	-7.4	-8.3	-10.0	-9.3	-8.8	-9.4	-9.4	-10.0	-10.4	-9.5	-9.8	-10.3	-10.2	-9.7	-9.1	-9.2	-9.6	-9.9	-9.8	-9.3	-7.4	-10.4	-9.2
20	-10.1	-9.5	-10.0	-10.2	-10.4	-10.7	-10.5	-10.3	-10.4	-10.0	-9.5	-9.0	-9.5	-9.5	-9.3	-10.2	-11.2	-11.3	-11.1	-10.9	-11.2	-12.4	-13.4	-13.5	-9.0	-13.5	-10.6
21	-13.7	-13.8	-14.2	-14.8	-14.6	-14.3	-15.4	-16.1	-17.0	-16.5	-15.7	-15.5	-14.9	-14.9	-14.6	-13.9	-13.8	-13.8	-13.1	-11.8	-10.6	-9.7	-7.9	-7.3	-7.3	-17.0	-13.7
22	-6.6	-6.6	-6.4	-5.9	-5.7	-5.5	-5.1	-4.8	-4.6	-4.3	-4.1	-4.2	-4.7	-4.6	-5.0	-5.1	-5.3	-5.6	-5.6	-5.5	-5.6	-5.8	-6.0	-6.1	-4.1	-6.6	-5.3
23	-6.2	-6.2	-6.3	-6.4	-6.2	-6.4	-6.4	-6.7	-6.3	-6.4	-7.3	-7.1	-6.7	-6.2	-5.6	-5.3	-4.8	-4.8	-3.9	-2.8	-2.5	-2.9	-3.3	-3.2	-2.5	-7.3	-5.4
24	-3.6	-3.5	-3.2	-3.1	-3.2	-3.1	-2.8	-2.9	-2.5	-1.9	-1.3	-1.1	-0.9	-1.0	-0.9	-1.1	-1.2	-1.2	-1.4	-1.3	-1.2	-1.3	-1.4	-1.4	-0.9	-3.6	-1.9
25	-1.5	-1.7	-1.9	-1.7	-1.5	-1.5	-1.7	-1.5	-1.5	-1.7	-1.9	-1.9	-2.1	-2.2	-2.4	-2.5	-3.0	-3.1	-2.8	-3.5	-3.6	-4.7	-5.1	-6.4	-1.5	-6.4	-2.6
26	-6.7	-7.2	-8.3	-9.4	-9.9	-11.1	-12.1	-12.6	-11.8	-11.4	-13.0	-12.4	-12.5	-12.0	-12.8	-13.6	-14.2	-14.7	-15.6	-15.4	-13.4	-11.2	-12.4	-13.6	-6.7	-15.6	-12.0
27	-14.5	-12.2	-10.6	-10.2	-9.7	-9.3	-9.7	-9.9	-8.9	-9.2	-8.9	-8.6	-5.9	-3.7	-3.3	-4.0	-3.9	-2.2	-1.6	-1.4	-1.8	-1.2	-1.8	-2.6	-1.2	-14.5	-6.5
28	-2.6	-2.4	-2.3	-2.2	-2.1	-1.9	-1.8	-2.0	-1.6	-1.3	-1.1	-1.0	-0.7	-0.7	-0.7	-0.9	-1.0	-0.9	-0.6	-0.7	-0.8	-0.8	-0.9	-0.9	-0.6	-2.6	-1.3
29	-0.9	-1.0	-1.1	-1.1	-0.9	-1.0	-0.9	-1.1	-1.3	-1.4	-1.3	-1.3	-1.2	-1.0	-1.0	-1.0	-0.9	-0.8	-0.6	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-1.4	-0.9
30	0.0	0.1	0.3	0.2	0.2	0.4	0.6	0.8	0.7	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.5	0.3	0.4	-0.1	-1.5	-2.1	-2.7	0.8	-2.7	0.1
31	-3.1	-3.5	-4.3	-4.3	-4.4	-5.0	-4.2	-4.7	-4.6	-4.5	-4.3	-4.0	-3.7	-3.3	-3.2	-3.0	-3.0	-3.0	-3.3	-3.5	-3.7	-3.6	-3.0	-5.9	-3.0	-5.9	-3.9
Max.	**1.9**	**1.7**	**1.7**	**1.4**	**1.5**	**1.0**	**1.0**	**1.4**	**1.3**	**1.2**	**2.0**	**2.3**	**1.1**	**1.0**	**1.5**	**1.8**	**2.0**	**2.1**	**2.5**	**2.4**	**2.3**	**2.3**	**2.6**	**2.5**	**2.6**		
Min.	**-23.2**	**-22.8**	**-23.3**	**-22.8**	**-22.6**	**-21.5**	**-22.2**	**-23.1**	**-22.4**	**-23.1**	**-22.8**	**-21.5**	**-20.7**	**-20.4**	**-21.1**	**-21.9**	**-22.6**	**-23.0**	**-23.4**	**-24.0**	**-23.8**	**-24.0**	**-24.4**	**-24.0**		**-24.4**	
Avg.	**-9.1**	**-8.9**	**-8.9**	**-9.1**	**-9.0**	**-9.0**	**-9.1**	**-9.3**	**-9.2**	**-9.1**	**-9.1**	**-8.8**	**-8.4**	**-8.1**	**-7.9**	**-8.4**	**-8.6**	**-8.6**	**-8.7**	**-8.6**	**-8.5**	**-8.5**	**-8.6**	**-9.0**			**-8.8**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

January *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-7.0	-8.4	-9.7	-10.3	-10.6	-11.4	-11.8	-12.3	-12.3	-12.4	-12.6	-12.9	-12.4	-11.7	-11.5	-11.7	-11.7	-12.3	-12.4	-12.4	-12.8	-13.4	-13.6	-13.3	-7.0	-13.6	-11.7
2	-11.9	-13.6	-13.5	-14.3	-13.5	-13.8	-13.7	-13.6	-12.8	-10.6	-9.1	-5.8	-4.9	-4.3	-3.6	-5.8	-6.3	-5.1	-4.5	-5.4	-4.6	-3.6	-3.5	-3.4	-3.4	-14.3	-8.4
3	-2.9	-2.3	-1.9	-1.6	-1.4	-1.0	-0.8	-0.7	-0.6	-0.5	-0.6	-0.5	-0.1	0.2	0.3	0.1	-0.1	-0.2	-0.1	-0.1	0.2	0.3	0.4	0.5	0.5	-2.9	-0.6
4	0.7	0.8	0.8	1.0	1.3	1.3	1.2	1.1	1.1	1.3	1.3	1.7	1.9	2.1	2.2	2.7	2.8	2.8	2.6	2.3	1.3	1.5	1.2	0.8	2.8	0.7	1.6
5	0.2	0.0	-0.3	-0.7	-0.8	-1.2	-1.6	-1.3	-1.1	-1.0	-1.0	-1.1	-0.9	-1.0	-1.0	-1.0	-1.0	-0.8	-0.7	0.1	-0.5	-0.7	-2.0	-1.7	0.2	-2.0	-0.9
6	-1.4	-1.6	-2.5	-2.9	-2.4	-2.8	-3.2	-2.9	-2.5	-1.6	-0.5	0.1	-0.5	-1.4	-1.0	-0.3	-0.3	-0.2	-0.6	-0.5	-0.2	-0.1	-0.1	-0.2	0.1	-3.2	-1.2
7	0.1	0.1	-0.2	0.1	0.3	0.6	0.6	0.5	0.3	0.4	0.7	0.6	0.2	0.2	0.0	0.1	-0.2	-0.2	-0.4	-0.5	-0.4	-0.4	-0.8	-0.5	0.7	-0.8	0.0
8	-0.8	-1.4	-2.6	-3.8	-3.9	-5.6	-6.0	-7.3	-8.1	-7.3	-7.0	-6.8	-5.8	-4.4	-5.6	-5.6	-6.9	-6.9	-7.6	-7.0	-7.7	-7.9	-7.4	-8.5	-0.8	-8.5	-5.9
9	-9.2	-9.0	-8.8	-9.6	-9.7	-11.0	-12.0	-11.2	-11.4	-10.5	-8.1	-6.6	-4.6	-4.9	-5.8	-7.0	-7.5	-8.1	-8.5	-7.6	-6.3	-6.1	-7.0	-5.9	-4.6	-12.0	-8.2
10	-6.0	-5.6	-5.4	-5.2	-5.3	-5.3	-5.7	-6.1	-5.6	-5.9	-5.4	-5.1	-5.2	-4.7	-5.2	-5.4	-5.2	-5.3	-5.2	-5.5	-5.2	-4.7	-5.7	-5.3	-4.7	-6.1	-5.4
11	-5.4	-6.3	-6.6	-7.8	-8.8	-12.2	-11.5	-13.0	-12.7	-8.5	-8.1	-6.3	-4.8	-4.8	-5.1	-5.0	-4.5	-4.1	-3.7	-3.7	-3.5	-2.9	-2.5	-2.5	-2.5	-13.0	-6.4
12	-2.0	-2.0	-1.8	-1.5	-1.6	-0.8	-0.8	-0.5	-0.2	-0.8	-0.6	-0.5	-0.1	0.3	1.2	1.1	0.4	0.8	0.9	1.1	1.2	0.4	-0.6	-1.3	1.2	-2.0	-0.3
13	-1.8	-2.1	-2.5	-3.2	-3.9	-4.4	-4.6	-5.0	-4.7	-4.8	-4.4	-3.5	-3.9	-3.4	-4.2	-4.9	-5.9	-6.2	-6.4	-7.7	-8.1	-8.4	-8.5	-7.6	-1.8	-8.5	-5.0
14	-7.0	-9.6	-10.4	-10.0	-9.7	-9.5	-8.2	-8.5	-9.4	-8.3	-7.6	-7.8	-6.9	-6.3	-5.5	-5.3	-5.6	-5.3	-4.9	-3.7	-3.2	-2.8	-2.7	-2.2	-2.2	-10.4	-6.7
15	-1.8	-2.0	-2.0	-1.9	-2.0	-1.9	-1.8	-1.9	-1.9	-1.8	-1.7	-1.5	-1.3	-1.1	-1.1	-1.0	-0.8	-1.2	-1.5	-1.7	-1.8	-1.8	-1.4	-0.9	-0.8	-2.0	-1.6
16	-0.3	-0.3	-0.6	-0.8	-1.3	-1.6	-1.6	-1.4	-1.3	-1.3	-1.2	-0.8	0.0	-1.5	-3.8	-6.5	-8.3	-10.1	-12.6	-13.9	-14.9	-15.8	-16.3	-17.3	0.0	-17.3	-5.6
17	-17.8	-18.0	-18.4	-18.6	-18.6	-18.4	-18.4	-18.5	-18.7	-18.9	-19.1	-19.4	-19.5	-19.7	-20.1	-20.4	-21.0	-21.8	-22.3	-22.7	-23.3	-24.0	-24.5	-25.2	-17.8	-25.2	-20.3
18	-25.9	-26.5	-26.6	-27.1	-27.6	-27.9	-28.1	-28.3	-28.7	-28.8	-28.9	-28.6	-28.1	-28.0	-27.9	-28.3	-28.7	-29.0	-29.4	-29.7	-30.1	-30.4	-30.5	-30.8	-25.9	-30.8	-28.5
19	-31.2	-31.5	-32.0	-32.3	-32.6	-32.6	-32.8	-32.8	-32.8	-33.0	-32.7	-32.5	-32.2	-31.8	-31.7	-32.0	-32.4	-32.7	-32.9	-33.0	-33.1	-33.1	-33.3	-33.6	-31.2	-33.6	-32.5
20	-33.6	-34.0	-34.2	-34.3																					-33.6	-34.3	-34.0
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
29																-21.6	-22.5	-24.2	-24.8	-25.7	-25.5	-24.8	-24.8	-24.9	-21.6	-25.7	-24.3
30	-24.9	-24.9	-25.1	-25.7	-25.8	-25.3	-25.7	-24.8	-24.8	-24.5	-24.7	-22.4	-22.1	-23.9	-24.5	-24.4	-23.9	-23.2	-22.0	-20.6	-19.4	-19.5	-22.4	-24.2	-19.4	-25.8	-23.7
31	-26.2	-27.5	-28.9	-29.4	-29.8	-30.4	-31.4	-32.0	-32.9	-33.8	-34.3	-34.5	-34.5	-34.3	-34.4	-34.5	-34.8	-35.4	-35.6	-35.6	-36.2	-36.3	-35.6	-35.8	-26.2	-36.3	-33.1
Max.	**0.7**	**0.8**	**0.8**	**1.0**	**1.3**	**1.3**	**1.2**	**1.1**	**1.1**	**1.3**	**1.3**	**1.7**	**1.9**	**2.1**	**2.2**	**2.7**	**2.8**	**2.8**	**2.6**	**2.3**	**1.3**	**1.5**	**1.2**	**0.8**	**2.8**		
Min.	**-33.6**	**-34.0**	**-34.2**	**-34.3**	**-32.6**	**-32.6**	**-32.8**	**-32.8**	**-32.9**	**-33.8**	**-34.3**	**-34.5**	**-34.5**	**-34.3**	**-34.4**	**-34.5**	**-34.8**	**-35.4**	**-35.6**	**-35.6**	**-36.2**	**-36.3**	**-35.6**	**-35.8**		**-36.3**	
Avg.	**-9.8**	**-10.3**	**-10.6**	**-10.9**	**-9.9**	**-10.2**	**-10.4**	**-10.5**	**-10.5**	**-10.1**	**-9.8**	**-9.3**	**-8.8**	**-8.8**	**-9.0**	**-9.8**	**-10.2**	**-10.4**	**-10.6**	**-10.6**	**-10.6**	**-10.7**	**-11.0**	**-11.1**			**-11.4**

Total Hours in Month 744 **Hours Data Available** 517 **Data Recovery** 69.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

February 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-36.2	-36.0	-34.9	-34.8	-35.0	-35.6	-36.0	-36.4	-37.0	-37.0	-35.7	-34.1	-33.6	-32.8	-32.2	-31.9	-32.4	-33.7	-33.3	-32.5	-32.3	-31.2	-30.0	-29.1	-29.1	-37.0	-33.9
2	-29.4	-27.6	-27.0	-26.5	-26.5	-25.8	-24.0	-23.2	-21.7	-21.6	-21.7	-21.2	-20.6	-17.9	-18.9	-19.5	-20.1	-21.0	-19.5	-17.8	-18.8	-19.4	-20.4	-21.7	-17.8	-29.4	-22.2
3	-22.1	-21.6	-22.9	-22.6	-24.1	-24.5	-24.6	-25.3	-25.4	-25.1	-24.3	-24.7	-24.7	-24.6	-24.9	-25.9	-26.8	-27.3	-27.6	-27.3	-28.1	-28.3	-28.7	-28.3	-21.6	-28.7	-25.4
4	-28.2	-29.0	-29.5	-30.2	-30.8	-31.2	-31.3	-31.6	-31.9	-31.7	-31.3	-29.3	-28.8	-28.5	-28.2	-28.2	-28.7	-29.1	-29.6	-29.8	-30.2	-31.1	-31.5	-30.6	-28.2	-31.9	-30.0
5	-30.3	-30.8	-30.4	-30.0	-30.0	-29.5	-29.5	-29.5	-28.5	-27.0	-26.2	-25.8	-25.5	-25.0	-24.8	-24.7	-24.9	-26.9	-27.8	-27.7	-28.1	-27.1	-26.5	-25.5	-24.7	-30.8	-27.6
6	-24.1	-23.5	-23.5	-24.6	-25.1	-25.0	-26.0	-25.7	-25.3	-25.3	-25.6	-23.7	-21.3	-21.8	-23.0	-22.9	-23.6	-25.5	-26.6	-25.9	-25.2	-24.4	-22.7	-20.3	-20.3	-26.6	-24.2
7	-19.6	-16.8	-15.4	-12.6	-10.0	-8.5	-6.7	-5.8	-5.4	-4.9	-4.3	-3.7	-3.3	-2.7	-2.5	-2.4	-2.3	-2.1	-1.7	-1.7	-1.8	-2.0	-1.6	-0.7	-0.7	-19.6	-5.8
8	-0.4	-1.0	-1.4	-1.2	-1.2	-1.8	-1.8	-1.9	-1.8	-2.0	-2.0	-1.6													-0.4	-2.0	-1.5
9																											
10																											
11																											
12																											
13														3.1			3.7	3.1	2.8	2.9	2.8	3.2	2.4	2.4	3.7	2.4	3.0
14	2.8	4.1	4.2	4.3	4.2	4.3	3.7	3.3	3.5	2.6	2.3	2.1	1.7	1.8	2.0	2.2	2.0	1.9	1.7	1.8	1.7	1.7	1.8	1.8	4.3	1.7	2.6
15	1.7	1.8	1.9	2.1	2.3	2.3	2.6	2.9	2.0	1.6	1.6	1.1	0.8	0.8	0.3	0.2	0.0	0.0	-0.2	-0.3	-1.2	-2.3	-2.8	-2.8	2.9	-2.8	0.7
16	-2.5	-2.2	-0.2	-0.1	0.3	-0.4	0.5	1.5	1.8	2.4	2.8	2.9	3.4	3.6	3.1	3.1	2.9	3.0	2.9	2.7	2.5	2.6	2.3	2.6	3.6	-2.5	1.7
17	2.4	2.5	2.6	1.8	2.0	1.9	2.4	1.3	0.9	1.1	1.6	1.4	2.0	2.2	3.9	4.6	4.6	3.7	3.2	0.4	0.2	1.0	1.3	3.3	4.6	0.2	2.2
18	0.5	-0.7	-0.5	-0.6	-0.4	-0.3	-0.8	-1.0	-0.2	-0.1	0.5	0.2	0.6	0.6	1.3	1.1	0.9	0.1	-0.1	-0.1	-0.4	-0.9	-1.3	-1.1	1.3	-1.3	-0.1
19	-1.0	-0.8	-0.7	0.2	-0.6	1.2	2.0	2.3	2.1	2.2	1.5	0.2	0.9	1.2	1.1	1.3	1.6	0.5	0.6	0.0	-0.5	-0.6	-0.7	-0.9	2.3	-1.0	0.6
20	-1.0	-2.0	-1.7	-2.2	-1.9	-1.9	-2.5	-2.5	-2.6	-2.6	-1.0	0.8	1.5	1.7	0.6	1.8	1.0	0.3	-1.2	-1.9	-2.0	-2.5	-2.2	-1.9	1.8	-2.6	-1.1
21	-1.9	-1.6	-3.0	-2.8	-2.5	-2.2	-2.2	-1.8	-2.2	-2.2	-1.5	-0.9	-1.2	0.2	0.5	0.3	-0.2	-0.1	-0.9	-1.2	-1.6	-1.6	-1.3	-0.3	0.5	-3.0	-1.3
22	-0.8	-0.8	-0.8	-1.0	-1.0	-1.1	-1.2	-0.9	-0.6	-0.6	-0.3	0.1	0.3	0.4	0.4	0.2	0.1	0.0	0.0	-0.1	-0.1	0.1	0.1	0.4	0.4	-1.2	-0.3
23	0.6	0.6	0.7	0.8	0.9	0.7	0.7	0.9	0.6	0.9	0.6	0.9	0.9	0.9	1.0	1.1	0.7	0.5	0.3	0.1	0.4	0.5	0.3	0.2	1.1	0.1	0.7
24	-0.1	-0.1	-0.2	-0.2	-0.4	-0.7	-0.6	-0.5	-0.5	-0.5	-0.4	-0.1	0.1	0.2	0.3	0.2	-0.2	-0.3	-0.4	-0.7	-0.8	-0.9	-1.0	-0.9	0.3	-1.0	-0.4
25	-0.9	-0.8	-0.9	-0.9	-1.0	-1.0	-0.9	-1.0	-1.1	-0.9	-0.4	-0.3	-0.2	-0.1	0.2	0.1	-0.2	-0.6	-0.3	0.0	0.3	0.0	-0.8	-0.7	0.3	-1.1	-0.5
26	-0.4	-0.8	-1.2	-1.2	-1.4	-1.3	-1.4	-1.3	-1.4	-1.3	-1.3	-1.1	-1.0	-0.6	-0.5	-0.6	-1.8	-2.7	-3.1	-3.5	-3.5	-4.6	-5.0	-4.7	-0.4	-5.0	-1.9
27	-6.8	-5.6	-4.8	-4.8	-4.2	-4.3	-4.6	-4.1	-4.7	-2.8															-2.8	-6.8	-4.7
28																											
Max.	**2.8**	**4.1**	**4.2**	**4.3**	**4.2**	**4.3**	**3.7**	**3.3**	**3.5**	**2.6**	**2.8**	**2.9**	**3.4**	**3.6**	**3.9**	**4.6**	**4.6**	**3.7**	**3.2**	**2.9**	**2.8**	**3.2**	**2.4**	**3.3**	**4.6**		
Min.	**-36.2**	**-36.0**	**-34.9**	**-34.8**	**-35.0**	**-35.6**	**-36.0**	**-36.4**	**-37.0**	**-37.0**	**-35.7**	**-34.1**	**-33.6**	**-32.8**	**-32.2**	**-31.9**	**-32.4**	**-33.7**	**-33.3**	**-32.5**	**-32.3**	**-31.2**	**-31.5**	**-30.6**		**-37.0**	
Avg.	**-9.0**	**-8.8**	**-8.6**	**-8.5**	**-8.5**	**-8.4**	**-8.3**	**-8.2**	**-8.2**	**-7.9**	**-7.9**	**-7.5**	**-7.4**	**-6.5**	**-7.0**	**-7.0**	**-6.8**	**-7.4**	**-7.7**	**-7.7**	**-8.0**	**-8.0**	**-8.0**	**-7.6**			**-7.4**

Total Hours in Month 672 **Hours Data Available** 511 **Data Recovery** 76.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

March *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1															-5.1			-5.6	-6.5	-7.8	-7.8	-8.1	-8.1	-8.9	-5.1	-8.9	-7.3
2	-6.5	-5.7	-4.7	-5.2	-4.2	-3.9	-4.0	-3.9	-4.5	-4.8	-4.6	-5.0	-4.8	-4.0	-3.5	-2.9	-3.5	-4.0	-5.5	-5.9	-5.7	-5.7	-5.4	-4.8	-2.9	-6.5	-4.7
3	-3.9	-3.8	-5.2	-4.3	-2.3	-2.5	-1.5	-1.0	-0.7	-0.4	0.1	0.8	1.7	2.1	2.2	2.0	2.4	1.6	-0.6	-1.7	1.3	0.1	0.1	0.4	2.4	-5.2	-0.5
4	-0.6	-1.8	-0.7	-0.7	0.0	-0.3	-2.1	-3.0	-2.6	-2.1	-1.1	-0.9	0.3	2.0	3.4	2.2	1.2	0.3	-1.3	-3.3	-3.9	-3.6	-4.2	-4.2	3.4	-4.2	-1.1
5	-5.5	-6.1	-5.8	-5.5	-4.7	-4.2	-4.0	-5.2	-5.1	-2.7	-2.9	-2.8	-1.1	-0.6	-0.6	0.2	-0.1	-2.2	-3.7	-5.5	-5.8	-6.3	-7.3	-7.7	0.2	-7.7	-4.0
6	-7.6	-8.0	-8.5	-9.9	-9.9	-10.0	-10.5	-10.8	-10.4	-8.6	-6.7	-5.1	-4.9	0.2	-2.5	-1.1	-1.3	-1.6	-1.9	-3.8	-4.8	-5.1	-4.8	-4.8	0.2	-10.8	-5.9
7	-4.9	-5.2	-5.5	-5.4	-5.7	-6.2	-6.3	-7.1	-5.8	-4.1	-1.1	-0.9	0.2	2.1	0.7	1.4	1.1	-2.6	-4.2	-4.7	-4.2	-3.2	-3.2	-3.1	2.1	-7.1	-3.2
8	-2.9	-3.1	-3.3	-4.2	-3.8	-3.1	-2.1	-2.2	-2.3	-2.4	-1.4	-1.1	-0.5	0.0	-0.1	0.1	-0.4	-0.6	-0.9	-1.8	-1.9	-2.2	-2.1	-2.1	0.1	-4.2	-1.9
9	-2.8	-3.3	-3.4	-3.9	-4.0	-4.3	-4.3	-4.3	-4.0	-3.6	-3.0	-1.7	-0.8	-1.2	1.0	2.2	-0.3	-1.1	-2.2	-3.6	-4.5	-4.2	-4.6	-4.8	2.2	-4.8	-2.8
10	-5.2	-3.1	-3.0	-3.3	-4.4	-5.0	-4.6	-4.4	-4.3	-4.0	-3.2	-2.9	-2.6	-2.4	-2.1	-1.9	-1.8	-1.8	-2.2	-2.0	-1.8	-1.8	-1.8	-1.9	-1.8	-5.2	-3.0
11	-1.9	-1.8	-1.6	-1.5	-1.4	-1.5	-1.5	-1.5	-1.3	-1.3	-1.2	-0.9	-0.6	-0.4	-0.3	-0.5	-0.7	-1.1	-1.4	-1.5	-1.5	-1.3	-1.4	-1.5	-0.3	-1.9	-1.2
12	-1.4	-1.7	-1.8	-1.9	-2.1	-2.5	-2.2	-2.2	-1.8	-1.3	-1.0	-0.8	-0.6	-0.3	-0.1	-0.2	-0.3	-0.4	-0.5	-0.5	-0.7	-1.0	-0.8	-0.9	-0.1	-2.5	-1.1
13	-1.0	-1.1	-1.5	-1.6	-1.9	-1.9	-2.2	-2.5	-2.0	-2.3	-0.3	2.0	3.5	1.7	0.6	1.5	1.2	0.5	-0.2	-0.8	-1.6	-1.5	-1.7	-1.8	3.5	-2.5	-0.6
14	-2.0	-2.2	-2.4	-2.3	-3.2	-3.4	-3.7	-3.8	-3.2	-2.4	-1.5	-0.9	-0.6	-0.9	-2.5	-3.5	-3.8	-4.0	-4.0	-3.5	-4.0	-5.3	-6.8	-8.0	-0.6	-8.0	-3.2
15	-8.9	-9.6	-10.5	-11.8	-12.7	-13.7	-14.6	-15.2	-15.4	-15.2	-14.7	-14.4	-14.1	-13.3	-13.0	-13.1	-13.4	-13.8	-14.6	-15.8	-16.4	-15.9	-16.6	-15.8	-8.9	-16.6	-13.8
16	-15.8	-15.3	-15.2	-14.8	-12.8	-10.4	-11.2	-11.5	-10.1	-8.8	-6.3	-5.6	-4.6	-4.0	-6.4	-7.1	-6.0	-4.2	-6.1	-10.1	-11.3	-10.9	-10.7	-10.1	-4.0	-15.8	-9.5
17	-9.9	-10.5	-11.2	-11.0	-11.7	-11.4	-11.8	-10.7	-10.2	-7.6			-3.6	-1.6	-1.6	-1.9	-2.3	-2.3	-2.5	-2.6	-2.7	-2.3	-2.0	-1.7	-1.6	-11.8	-6.1
18	-1.7	-1.6	-1.5	-1.6	-1.5	-1.5	-1.5	-1.6	-1.4	-1.4	-1.2	-1.0	-0.9	-0.8	-0.8	-0.6	-0.8	-0.7	-0.8	-0.7	-0.5	-0.6	-0.7	-0.8	-0.5	-1.7	-1.1
19	-0.6	-0.6	-0.9	-0.9	-0.8	-0.7	-0.7	-0.6	-0.6	-0.3	0.0	0.4	1.1	1.0	0.9	1.1	1.0	1.1	1.1	1.2	1.0	1.1	1.2	1.3	1.3	-0.9	0.3
20	1.7	2.0	2.0	2.0	2.0	1.2	2.0	1.0	1.2	0.6	2.4	2.7	2.8	3.2	3.2	2.7	2.5	2.2	2.2	2.0	1.7	1.5	1.3	1.3	3.2	0.6	2.0
21	1.4	1.3	1.3	1.2	1.4	1.4	1.3	1.8	2.2	2.2	2.6	2.3	2.2	1.8	1.6	1.4	1.7	1.6	1.3	0.7	0.4	0.4	0.1	0.2	2.6	0.1	1.4
22	0.2	0.3	0.5	0.4	0.3	0.3	1.1	1.3	0.4	0.7	2.3	3.9	4.8	5.5	5.6	5.5	5.2	4.5	3.7	3.1	2.3	2.0	1.5	1.6	5.6	0.2	2.4
23	2.0	1.8	1.6	1.9	0.6	0.3	1.2	1.5	0.7	0.1	0.4	2.0	1.8	1.7	2.0	2.3	2.5	2.1	1.9	1.7	1.7	2.0	1.9	1.9	2.5	0.1	1.6
Max.	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**1.4**	**2.0**	**1.8**	**2.2**	**2.2**	**2.6**	**3.9**	**4.8**	**5.5**	**5.6**	**5.5**	**5.2**	**4.5**	**3.7**	**3.1**	**2.3**	**2.0**	**1.9**	**1.9**	**5.6**		
Min.	**-15.8**	**-15.3**	**-15.2**	**-14.8**	**-12.8**	**-13.7**	**-14.6**	**-15.2**	**-15.4**	**-15.2**	**-14.7**	**-14.4**	**-14.1**	**-13.3**	**-13.0**	**-13.1**	**-13.4**	**-13.8**	**-14.6**	**-15.8**	**-16.4**	**-15.9**	**-16.6**	**-15.8**		**-16.6**	
Avg.	**-3.5**	**-3.6**	**-3.7**	**-3.8**	**-3.8**	**-3.8**	**-3.8**	**-3.9**	**-3.7**	**-3.2**	**-2.0**	**-1.4**	**-1.0**	**-0.4**	**-0.8**	**-0.5**	**-0.7**	**-1.4**	**-2.1**	**-2.9**	**-3.1**	**-3.1**	**-3.3**	**-3.3**			**-2.8**

Total Hours in Month 744 **Hours Data Available** 534 **Data Recovery** 71.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

April *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.7	1.5	0.8	1.0	0.5	1.1	0.7	0.9	1.8	2.9	2.6	2.9	3.1	3.3	4.1	4.0	3.3	3.4	2.6	1.3	1.0	0.8	1.7	1.4	4.1	0.5	2.0
2	1.4	1.2	0.7	-0.6	-0.6	-0.7	-0.6	-0.4	-0.2	0.0	0.6	0.8	1.5	2.3	2.5	2.3	2.1	1.4	1.1	0.9	1.1	1.0	0.7	0.7	2.5	-0.7	0.8
3	0.5	0.2	0.3	0.5	0.5	0.5	0.8	1.0	1.2	1.8	1.9	2.6	3.6	3.7	3.6	3.5	3.1	3.2	2.3	1.4	0.7	0.6	0.4	0.1	3.7	0.1	1.6
4	-0.4	-0.3	-0.1	-0.5	-0.3	-0.6	-1.1	-0.8	0.4	1.3	4.3	3.8	4.4	6.8	6.8	4.7	4.6	3.7	2.4	0.5	-0.4	-0.3	-0.1	-0.4	6.8	-1.1	1.6
5	-0.6	-0.2	-0.6	-0.2	-1.2	-1.3	-0.9	-0.5	0.6	3.1	5.4	5.8	6.1	6.9	6.1	5.2	4.9	4.3	3.0	1.7	0.6	0.6	-0.1	0.1	6.9	-1.3	2.0
6	-1.2	-0.7	-0.5	-0.6	-0.9	-1.2	-0.8	-0.3	2.7	3.6	3.6	4.4	4.2	5.1	6.3	5.3	5.4	5.0	3.7	2.0	0.9	0.2	-0.9	-1.0	6.3	-1.2	1.9
7	-1.0	-0.6	-1.2	-1.2	-1.9	-1.5	-1.3	-1.0	1.0	2.6	4.8	6.2	7.9	8.4	8.0	7.7	7.8	6.4	4.4	2.5	0.8	-0.6	-1.2	-1.6	8.4	-1.9	2.3
8	-1.0	-1.2	-1.9	-2.7	-2.9	-3.2	-3.4	-2.0	-0.1	-0.2	1.9	3.5	4.3	5.2	5.8	5.8	5.5	5.3	5.3	2.9	1.0	-0.8	-1.3	-1.3	5.8	-3.4	1.0
9	-1.5	-1.6	-1.0	-1.3	-1.1	-1.2	-1.0	-0.4	0.9	3.4	5.3	5.8	5.5	5.3	3.4	4.5	5.4	3.6	2.2	1.3	0.1	-0.2	-0.2	-0.2	5.8	-1.6	1.5
10	-0.2	-0.3	-0.4	-0.9	-0.9	-1.0	-1.0	-1.0	-1.4	-0.4	0.4	0.8	1.9	1.7	0.8	0.4	0.4	0.3	0.0	-0.7	-0.7	-0.8	-0.9	-1.1	1.9	-1.4	-0.2
11	-1.7	-1.3	-1.1	-1.3	-1.1	-0.9	-0.8	-0.6	-0.1	0.5	1.5	2.2	3.1	3.5	4.0	4.4	4.3	4.0	3.4	2.4	1.4	1.2	1.2	1.5	4.4	-1.7	1.2
12	1.9	1.5	0.3	0.7	1.1	0.7	1.3	1.5	2.2	2.6	3.1	3.8	4.0	4.0	4.1	3.0	0.6	1.1	1.9	2.3	1.6	0.6	0.9	1.1	4.1	0.3	1.9
13	1.0	0.6	1.0	0.9	1.1	1.0	0.6	0.9	1.2	1.8	2.3	2.4	3.2	3.0	3.0	2.4	2.2	1.7	1.8	1.2	0.8	0.6	0.4	-0.2	3.2	-0.2	1.5
14	0.1	-0.1	0.2	0.1	0.2	-0.1	-0.2	0.4	0.9	1.0	1.5	1.9	2.5	2.8	3.0	3.0	3.3	3.2	2.8	2.5	1.5	-0.5	-0.1	0.7	3.3	-0.5	1.3
15	0.8	1.3	0.7	0.7	0.3	0.5	1.0	1.5	2.1	2.3	3.4	5.1	6.4	5.8	4.7	4.1	3.8	3.6	3.5	2.4	2.1	2.3	2.1	2.2	6.4	0.3	2.6
16	2.1	2.2	3.4	2.9	2.4	1.8	1.8	1.8	2.6	3.1	3.0	3.2	3.3	3.5	4.0	3.3	2.8	3.0	2.9	2.1	1.7	1.5	1.8	2.2	4.0	1.5	2.6
17	1.8	0.9	1.3	1.4	1.2	1.1	1.3	2.5	3.6	5.1	6.4	7.8	7.7	6.1	5.7	7.8	7.2	6.1	5.3	4.2	3.3	3.5	3.6	3.4	7.8	0.9	4.1
18	2.8	2.8	2.5	2.0	2.0	2.0	2.4	3.0	3.8	4.6	5.7	6.3	6.1	6.4	5.2	4.6	4.7	4.3	3.5	3.2	3.0	1.9	0.7	0.8	6.4	0.7	3.5
19	1.1	1.6	1.6	1.7	1.2	1.5	1.1	1.0	1.3	1.1	1.2	1.6	1.2	0.3	0.0	0.1	0.2	0.4	0.5	0.4	0.3	0.3	0.3	0.4	1.7	0.0	0.8
20	0.5	0.6	0.6	0.8	0.7	0.6	0.6	0.8	1.5	1.7	2.0	2.1	2.8	3.0	2.5	2.2	2.8	2.0	1.6	1.3	1.0	0.9	0.9	0.9	3.0	0.5	1.4
21	0.9	0.9	0.9	1.0	1.0	1.3	1.0	1.6	2.7	3.7	4.5	5.1	5.3	5.4	4.9	5.1	4.7	4.8	4.1	3.3	2.7	3.1	3.3	3.2	5.4	0.9	3.1
22	2.7	3.4	3.5	3.4	2.3	1.5	2.2	2.4	3.2	4.2	4.3	5.3	5.5	6.5	7.0	6.6	6.1	6.1	5.4	4.4	2.2	2.1	2.0	2.3	7.0	1.5	3.9
23	2.8	2.9	3.2	3.1	2.9	3.0	3.0	4.2	5.3	8.4	8.3	9.3	10.6	10.7	10.9	10.3	9.7	10.3	9.1	6.7	5.3	4.9	5.7	5.5	10.9	2.8	6.5
24	5.3	4.3	3.6	3.3	3.4	2.7	2.7	3.0	4.3	6.5	8.7	9.8	8.8	9.6	10.6	10.6	10.3	10.0	9.2	7.1	4.9	3.7	3.6	3.7	10.6	2.7	6.2
25	2.7	2.6	3.5	2.5	1.9	2.3	2.3	1.9	3.6	7.7	8.9	9.4	7.7	9.8	9.3	9.9	9.9	8.1	7.3	6.6	4.9	2.8	2.0	2.0	9.9	1.9	5.4
26	1.5	1.7	2.1	1.5	0.4	1.1	1.1	1.8	5.4	7.9	8.6	9.4	9.9	10.1	9.6	8.3	6.8	5.9	4.8	3.7	2.9	2.4	2.3	2.6	10.1	0.4	4.6
27	2.2	1.9	1.7	1.7	2.0	2.3	2.4	3.3	4.2	4.8	5.7	6.3	7.3	9.6	9.6	9.5	9.0	7.5	6.2	4.7	3.4	1.7	1.8	1.7	9.6	1.7	4.6
28	2.6	3.2	3.5	4.0	3.5	3.0	3.5	5.3	6.4	8.2	9.1	8.8	8.2	9.1	9.2	8.9	9.0	8.9	8.1	6.5	4.1	3.8	3.1	3.8	9.2	2.6	6.0
29	3.8	3.6	3.4	2.9	2.4	2.3	2.3	2.8	3.0	3.9	5.4	6.6	6.8	7.0	7.2	6.4	6.1	5.6	5.1	4.3	3.8	3.0	2.7	2.3	7.2	2.3	4.3
30	1.7	1.9	1.9	1.9	1.6	0.4	1.1	1.8	2.2	2.6	3.3	3.3	4.3	5.9	6.5	7.3	7.6	7.8	6.9	6.6	5.2	4.5	4.0	3.0	7.8	0.4	3.9
Max.	**5.3**	**4.3**	**3.6**	**4.0**	**3.5**	**3.0**	**3.5**	**5.3**	**6.4**	**8.4**	**9.1**	**9.8**	**10.6**	**10.7**	**10.9**	**10.6**	**10.3**	**10.3**	**9.2**	**7.1**	**5.3**	**4.9**	**5.7**	**5.5**	**10.9**		
Min.	**-1.7**	**-1.6**	**-1.9**	**-2.7**	**-2.9**	**-3.2**	**-3.4**	**-2.0**	**-1.4**	**-0.4**	**0.4**	**0.8**	**1.2**	**0.3**	**0.0**	**0.1**	**0.2**	**0.3**	**0.0**	**-0.7**	**-0.7**	**-0.8**	**-1.3**	**-1.6**		**-3.4**	
Avg.	**1.1**	**1.2**	**1.1**	**1.0**	**0.7**	**0.6**	**0.7**	**1.2**	**2.2**	**3.3**	**4.3**	**4.9**	**5.2**	**5.7**	**5.6**	**5.4**	**5.1**	**4.7**	**4.0**	**3.0**	**2.0**	**1.5**	**1.3**	**1.3**			**2.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

May *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.2	1.7	1.0	0.9	1.1	1.2	1.5	2.3	3.4	4.6	5.9	7.8	9.7	11.1	12.3	11.9	9.5	8.9	7.9	6.5	5.3	4.2	3.6	3.3	12.3	0.9	5.3
2	2.8	2.3	2.0	1.7	1.5	1.9	4.1	6.0	8.1	9.2	10.1	10.1	12.3	13.3	14.4	14.2	13.4	11.6	10.6	9.5	7.2	6.4	4.2	4.3	14.4	1.5	7.5
3	4.3	3.5	2.7	2.1	2.6	1.5	1.9	3.3	4.4	5.4	6.0	6.0	7.3	7.4	8.0	7.8	7.5	8.0	7.2	6.4	5.3	4.5	3.0	2.2	8.0	1.5	4.9
4	1.8	1.2	2.2	3.0	3.4	3.4	3.8	4.7	6.0	6.8	7.2	7.0	8.4	9.6	9.8	8.5	5.6	5.4	4.8	2.8	1.6	1.7	1.2	1.6	9.8	1.2	4.7
5	1.7	1.6	1.4	1.3	1.3	0.8	1.2	2.5	4.6	5.3	5.6	6.2	6.0	6.5	6.4	6.7	6.2	5.8	5.4	4.7	2.9	1.5	1.2	1.6	6.7	0.8	3.7
6	1.4	1.6	1.7	2.0	2.2	1.7	1.5	3.9	6.1	7.9	8.0	6.7	5.7	4.9	5.9	7.6	8.0	6.0	5.7	5.0	4.2	3.0	2.5	1.9	8.0	1.4	4.4
7	1.7	2.0	2.1	2.0	1.1	1.9	3.1	4.1	5.2	6.3	6.3	7.4	7.5	4.1	2.7	6.2	5.2	5.7	5.9	5.5	3.9	2.7	3.2	2.4	7.5	1.1	4.1
8	1.7	1.0	1.1	1.1	0.9	1.4	1.9	3.3	4.8	5.4	6.1	7.4	8.6	5.5	6.1	7.1	4.5	3.5	3.7	3.3	2.9	2.1	1.4	0.8	8.6	0.8	3.6
9	0.6	0.1	-0.1	-0.4	-0.9	-1.1	-0.6	-0.4	-0.1	1.2	2.7	3.9	4.8	4.7	5.8	5.6	5.6	4.6	4.0	3.3	2.3	0.8	0.5	0.4	5.8	-1.1	2.0
10	0.8	1.1	0.9	1.1	0.6	1.3	1.4	1.9	2.3	2.8	3.2	3.3	3.0	1.6	2.3	2.5	2.5	1.2	0.7	0.3	0.2	0.2	0.2	0.2	3.3	0.2	1.5
11	0.4	0.7	0.9	0.6	1.0	1.0	1.4	2.1	2.5	2.8	2.8	4.0	4.4	4.7	4.8	5.2	5.5	5.2	5.2	4.4	3.8	3.6	3.7	3.9	5.5	0.4	3.1
12	3.9	3.8	3.5	3.7	3.7	3.7	4.0	4.7	5.5	5.8	6.4	6.3	7.2	5.9	5.2	5.0	5.1	5.6	5.7	5.1	4.4	4.5	4.6	4.6	7.2	3.5	4.9
13	4.4	4.4	4.2	4.2	4.4	4.3	4.7	4.9	5.5	5.9	6.4	6.5	6.4	6.1	5.5	5.2	5.3	5.5	5.5	5.1	4.8	4.5	4.3	4.2	6.5	4.2	5.1
14	4.0	4.1	3.9	3.8	3.3	3.7	3.6	4.3	4.3	5.0	6.1	7.6	8.3	9.7	10.1	11.2	10.7	9.7	10.1	9.3	7.7	5.3	4.1	3.6	11.2	3.3	6.4
15	3.7	4.7	5.6	4.3	3.2	4.0	4.3	6.9	8.8	10.1	11.0	11.1	11.1	11.4	12.4	14.1	14.0	13.9	13.4	12.3	10.6	9.9	9.8	10.1	14.1	3.2	9.2
16	10.0	9.1	8.9	9.6	9.4	9.4	9.6	10.0	9.1	10.2	9.6	8.2	9.0	10.3	11.3	11.2	9.9	9.4	9.2	8.0	5.8	5.4	5.3	5.0	11.3	5.0	8.9
17	4.9	4.6	3.9	3.4	3.7	4.4	5.9	8.7	7.9	8.8	9.6	10.4	12.1	12.8	12.9	13.8	13.7	13.2	12.1	11.6	10.2	8.6	7.9	7.4	13.8	3.4	8.9
18	7.4	7.3	7.7	7.6	6.8	6.7	7.4	9.1	10.0	10.6	11.7	13.9	14.9	14.9	16.0	17.0	16.7	15.7	15.2	14.4	12.5	10.4	9.9	9.4	17.0	6.7	11.4
19	8.1	7.9	6.5	5.6	5.5	5.0	6.8	10.7	12.1	14.2	14.8	16.3	16.8	16.9	17.7	17.9	17.9	16.7	15.8	15.3	13.1	11.3	10.4	10.0	17.9	5.0	12.2
20	10.1	8.6	6.9	5.8	5.0	4.6	5.8	7.5	9.0	11.7	12.7	13.1	14.9	17.5	19.2			21.2	19.1	16.9	15.8	13.8	13.1	12.2	21.2	4.6	12.0
21	10.6	10.9	8.7	7.5	6.5	7.3	5.8	6.9	8.0	10.1	11.4	12.4	11.9	13.2	13.2	11.8	11.0	10.3	9.4	8.5	7.8	6.8	6.2	5.8	13.2	5.8	9.2
22	5.9	5.7	5.4	5.6	5.4	5.3	5.5	5.8	6.2	7.0	7.1	7.2	7.6	7.8	7.1	7.4	7.8	8.1	7.2	6.8	6.4	6.3	6.3	5.9	8.1	5.3	6.5
23	6.0	6.1	6.1	5.8	6.0	6.1	6.4	7.1	8.0	8.7	9.4	10.4	10.7	10.5	10.5	10.1	9.7	10.6	9.5	8.8	8.5	7.8	6.9	6.2	10.7	5.8	8.2
24	5.9	5.5	5.3	4.6	4.4	4.3	4.3	4.4	4.9	5.8	5.9	6.1	6.6	7.2	7.4	8.2	7.8	6.5	5.9	5.6	5.4	5.0	4.1	3.8	8.2	3.8	5.6
25	3.8	3.6	3.3	3.2	3.3	3.7	3.9	4.0	4.6	5.3	4.7	4.4	5.5	5.8	5.9	6.6	7.2	7.4	7.4	7.1	6.2	5.9	5.5	5.4	7.4	3.2	5.2
26	5.4	4.7	4.5	4.4	4.5	4.5	4.5	4.4	4.2	4.7	5.6	5.8	5.2	1.6	5.5	8.2	9.5	9.0	7.7	6.3	7.0	6.7	6.1	5.5	9.5	1.6	5.6
27	5.0	3.6	3.4	3.1	2.5	2.7	3.1	4.9	8.3	10.1	10.6							14.3	13.8	13.1	12.1	10.6	9.0	7.6	14.3	2.5	7.7
28	6.9	6.1	4.2	5.1	5.1	3.8	5.1	7.2	9.2		14.8	16.3	17.3	18.1	19.3		19.6	20.4	20.5	19.8	19.5	16.8	13.9	12.6	20.5	3.8	12.8
29	11.6	13.1	13.1	11.7	10.9	10.5	11.3	12.9	15.0	16.7	17.8	19.0	21.9	21.9	22.7	22.2	22.2	22.8	22.6	21.4	20.1	18.5	16.6	14.9	22.8	10.5	17.1
30	13.6	13.7	12.4	10.5	9.6	8.8	8.4	11.8	12.9	16.5	17.5	19.7	21.1	21.6	22.3	22.4	22.6	22.9	22.6	21.6	20.5	18.5	17.1	15.6	22.9	8.4	16.8
31	14.3	13.6	12.7	12.2	12.1	11.9	13.0	14.5	16.1	18.4	19.9	20.7	21.4	21.9	22.0	22.0	21.9	21.5	20.9	20.1	18.7	16.8	14.0	13.7	22.0	11.9	17.3
Max.	**14.3**	**13.7**	**13.1**	**12.2**	**12.1**	**11.9**	**13.0**	**14.5**	**16.1**	**18.4**	**19.9**	**20.7**	**21.9**	**21.9**	**22.7**	**22.4**	**22.6**	**22.9**	**22.6**	**21.6**	**20.5**	**18.5**	**17.1**	**15.6**	**22.9**		
Min.	**0.4**	**0.1**	**-0.1**	**-0.4**	**-0.9**	**-1.1**	**-0.6**	**-0.4**	**-0.1**	**1.2**	**2.7**	**3.3**	**3.0**	**1.6**	**2.3**	**2.5**	**2.5**	**1.2**	**0.7**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**		**-1.1**	
Avg.	**5.3**	**5.1**	**4.7**	**4.4**	**4.2**	**4.2**	**4.7**	**6.0**	**7.0**	**8.1**	**8.9**	**9.5**	**10.3**	**10.3**	**10.8**	**10.6**	**10.6**	**10.7**	**10.1**	**9.3**	**8.3**	**7.2**	**6.4**	**6.0**			**7.6**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

June *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.2	10.5	9.9	10.4	8.2	8.1	10.8	13.3	15.1	17.1	17.9	19.0	19.5	20.4	20.9	21.2	21.3	20.5	19.5	18.7	17.1	14.3	11.2	9.5	21.3	8.1	15.2
2	8.1	6.4	5.3	4.6	4.1	4.7	6.4	7.5	7.9	8.9	10.0	10.6	11.0	11.0	11.6	12.0	10.6	9.3	9.3	9.3	8.9	8.8	8.1	7.7	12.0	4.1	8.4
3	7.6	7.2	7.8	7.8	7.9	8.0	8.1	8.4	9.1	10.0	11.0	11.0	13.1	13.9	13.5	13.0	13.3	12.5	13.1	11.4	10.0	9.2	8.5	7.1	13.9	7.1	10.1
4	6.6	6.3	6.3	6.1	6.0	6.1	7.0	8.0	8.9	11.0	11.2	10.8	11.1	11.5	12.1	13.4	13.0	12.4	12.5	11.6	10.3	9.7	8.5	8.1	13.4	6.0	9.5
5	7.8	7.5	7.5	7.4	7.3	6.9	7.4	8.9	10.0	10.3	10.8	12.2	12.8	12.0	12.6	13.0	12.1	11.6	11.1	10.8	10.2	8.8	7.9	7.1	13.0	6.9	9.8
6	7.2	7.8	8.8	8.2	5.8	5.3	5.4	5.7	6.1	7.1	7.9	9.0	9.9	9.9	9.3	10.0	11.1	9.4	7.7	7.0	6.6	6.1	5.6	5.1	11.1	5.1	7.6
7	5.1	5.0	4.9	4.8	4.6	4.4	4.2	5.2	6.3	6.7	8.0	9.2	10.3	11.2	10.1	11.6	11.9	11.8	10.8	8.2	7.4	6.2	5.6	5.4	11.9	4.2	7.5
8	5.4	5.3	4.2	2.9	2.9	3.1	3.6	4.8	6.6	8.6	9.9	10.8	11.1	12.1	12.2	11.3	11.1	10.9	10.4	9.3	8.3	7.0	6.2	5.6	12.2	2.9	7.7
9	5.0	4.0	3.8	4.1	4.1	3.5	2.8	4.8	7.5	8.5	9.9	11.5	12.6	12.9	11.9	13.1	12.7	12.7	13.1	12.2	9.9	8.5	7.4	6.4	13.1	2.8	8.5
10	6.4	6.8	4.8	3.2	2.8	3.0	3.1	3.2	4.2	4.8	5.3	5.7	6.8	8.6	9.7	10.1	10.7	10.9	10.5	10.8	9.1	8.5	7.5	6.8	10.9	2.8	6.8
11	6.1	5.8	5.5	5.3	4.9	4.4	4.5	4.8	5.7	7.2	8.2	9.9	10.8	12.1	11.0	11.0	11.8	11.9	11.8	12.0	10.6	9.3	8.0	7.2	12.1	4.4	8.3
12	6.2	6.1	6.1	6.4	6.3	5.6	6.0	6.4	6.7	6.9	6.9	8.1	9.4	8.7	8.7	8.5	8.6	9.2	9.6	10.1	8.9	8.1	7.8	7.5	10.1	5.6	7.6
13	6.8	5.9	5.7	5.3	5.0	4.5	4.5	5.8	7.4	7.8	9.1	9.8	10.7	12.5	13.2	13.1	13.3	13.8	13.5	13.2	12.3	11.3	8.8	6.4	13.8	4.5	9.2
14	6.6	6.8	6.9	6.8	6.8	6.2	6.4	8.4	9.9	11.3	13.0	13.1	14.2	13.3	13.1	13.9	12.2	11.0	10.3	10.5	10.0	9.6	8.1	6.8	14.2	6.2	9.8
15	5.0	4.7	4.1	2.8	2.1	2.4	3.7	5.6	7.0	9.6	11.9	11.9	11.5	12.5	13.2	13.5	13.7	14.1	14.2	14.4	14.1	12.9	10.5	9.2	14.4	2.1	9.4
16	8.2	6.5	6.1	5.2	5.0	5.2	5.9	8.8	11.2	12.4	13.5	13.7	14.4	14.6	14.8	14.3	13.8	13.1	12.0	11.3	9.8	8.8	7.2	6.7	14.8	5.0	10.1
17	6.2	6.0	6.4	6.1	4.9	4.1	4.6	5.1	6.6	9.4	10.1	11.8	12.1	13.3	13.5	14.2	14.2	14.4	13.9	13.3	12.8	11.5	9.8	8.1	14.4	4.1	9.7
18	7.4	7.5	7.2	7.6	8.2	8.6	8.9	9.9	11.2	13.6	14.6	16.5	17.5	18.6	19.4	19.2	19.5	20.7	19.2	19.0	18.9	17.4	16.6	14.8	20.7	7.2	14.2
19	13.8	13.6	12.6	12.6	12.3	11.9	12.4	13.0	13.3	14.8	17.1	19.2	20.7	21.3	21.9	22.3	22.4	22.0	21.8	20.9	20.1	17.7	15.4	14.6	22.4	11.9	17.0
20	13.4	12.4	12.6	12.2	11.4	11.0	11.4	13.1	14.6	17.0	18.1	19.3	20.6	19.0	19.7	20.3	20.2	20.1	20.1	19.6	18.8	17.3	14.4	12.7	20.6	11.0	16.2
21	11.7	11.5	10.4	9.2	8.8	8.7	8.9	10.5	13.0	14.3	16.0	17.7	18.5	18.1	19.9	19.8	18.3	17.9	17.6	16.4	13.7	12.7	11.4	10.8	19.9	8.7	14.0
22	10.5	9.6	8.9	8.1	8.2	8.4	8.8	9.0	9.8	11.8	12.5	13.0	14.1	14.1	14.1	13.6	13.0	12.9	13.0	12.3	11.3	9.9	8.6	7.4	14.1	7.4	11.0
23	7.2	7.1	7.0	7.0	6.9	6.8	6.6	7.0	7.9	7.8	9.1	8.9	9.2	11.8	12.2	12.4	12.4	12.3	12.0	11.6	11.0	10.2	9.2	7.9	12.4	6.6	9.2
24	7.1	6.0	6.0	5.9	4.9	5.0	6.6	9.7	11.6	12.8	13.2	13.5	16.2	15.8	17.5	18.5	19.3	19.6	19.8	18.7	15.9	14.8	13.7	13.0	19.8	4.9	12.7
25	11.2	11.5	10.3	10.7	11.3	11.1	10.6	10.9	13.3	15.3	16.3	16.6	16.0	16.5	17.7	18.1	18.4	18.1	17.4	16.3	15.2	13.3	11.9	10.9	18.4	10.3	14.1
26	10.3	9.8	9.1	8.6	8.2	8.2	8.2	8.3	8.9	9.2	9.2	9.5	9.5	9.4	9.8	9.5	9.0	8.4	8.4	8.7	8.6	8.4	7.8	7.6	10.3	7.6	8.9
27	7.4	7.3	7.4	7.7	7.9	7.8	7.5	7.4	7.6	8.0	8.8	9.8	10.5	11.7	11.9	10.9	10.7	10.3	9.6	9.2	8.7	8.1	7.8	7.5	11.9	7.3	8.8
28	7.2	6.9	6.8	6.8	6.9	6.8	6.7	6.7	7.2	8.2	9.4	9.6	10.3	9.7	9.7	10.2	9.8	9.0	9.0	8.8	8.2	7.7	7.4	7.1	10.3	6.7	8.2
29	6.8	6.9	6.7	6.5	6.3	5.8	5.7	5.7	6.1	6.5	7.1	7.5	7.9	8.1	8.2	8.3	8.1	7.8	7.8	7.9	7.7	7.4	7.2	6.8	8.3	5.7	7.1
30	6.9	6.6	6.7	6.3	5.9	5.7	6.0	6.8	7.9	8.4			10.0	10.6	10.9	12.6	11.7	11.5	12.0	11.8	11.1	10.2	9.0	8.2	12.6	5.7	8.9
Max.	**13.8**	**13.6**	**12.6**	**12.6**	**12.3**	**11.9**	**12.4**	**13.3**	**15.1**	**17.1**	**18.1**	**19.3**	**20.7**	**21.3**	**21.9**	**22.3**	**22.4**	**22.0**	**21.8**	**20.9**	**20.1**	**17.7**	**16.6**	**14.8**	**22.4**		
Min.	**5.0**	**4.0**	**3.8**	**2.8**	**2.1**	**2.4**	**2.8**	**3.2**	**4.2**	**4.8**	**5.3**	**5.7**	**6.8**	**8.1**	**8.2**	**8.3**	**8.1**	**7.8**	**7.7**	**7.0**	**6.6**	**6.1**	**5.6**	**5.1**		**2.1**	
Avg.	**7.9**	**7.5**	**7.2**	**6.9**	**6.5**	**6.4**	**6.8**	**7.8**	**9.0**	**10.2**	**11.2**	**12.0**	**12.7**	**13.2**	**13.5**	**13.8**	**13.6**	**13.3**	**13.0**	**12.5**	**11.5**	**10.4**	**9.2**	**8.3**			**10.2**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

July *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.5	6.2	5.1	5.6	4.9	5.6	5.9	6.9	8.7	10.8	11.4	10.8	11.0	11.5	10.9	10.2	9.1	8.0	8.1	7.2	6.5	6.1	5.7	5.3	11.5	4.9	7.9
2	5.3	5.1	5.0	5.2	5.2	5.3	5.4	5.8	6.2	6.7	7.2	7.7	8.5	9.1	9.5	9.5	9.2	9.4	9.0	8.6	8.2	8.3	7.9	8.1	9.5	5.0	7.3
3	8.2	8.3	7.9	7.8	7.5	7.2	7.3	7.2	7.5	7.7	8.2	8.4	8.5	8.8	9.4	9.3	9.8	9.2	7.8	7.7	7.3	7.0	6.6	6.2	9.8	6.2	8.0
4	5.9	5.9	6.2	6.1	5.9	5.6	5.5	5.7	6.0	6.7	7.3	7.9	8.3	8.6	9.8	9.1	10.3	9.7	10.4	10.5	9.7	8.2	7.6	7.4	10.5	5.5	7.7
5	6.3	6.4	6.3	6.2	5.9	5.7	5.5	5.7	6.3	7.4	8.5	10.1	10.1	9.8	10.5	12.3	12.3	12.9	12.1	11.6	10.8	9.9	8.9	8.0	12.9	5.5	8.7
6	7.5	7.3	7.1	7.1	6.9	6.9	6.8	6.9	7.2	7.5	7.7	8.0	8.3	8.1	8.5	9.1	10.2	9.8	9.5	8.6	9.0	8.4	7.7	7.1	10.2	6.8	8.0
7	6.9	6.8	6.9	6.7	6.6	6.6	7.4	8.6	9.7	11.4	11.9	12.6	13.9	14.9	14.4	15.6	15.9	15.8	15.3	15.9	13.4	12.5	11.1	9.7	15.9	6.6	11.3
8	9.7	9.5	9.5	9.5	9.0	9.0	9.9	10.9	12.8	14.2	15.7	16.7	16.9	18.0	17.5	18.5	18.1	18.2	17.9	18.3	16.6	16.4	14.1	12.3	18.5	9.0	14.1
9	9.8	10.0	9.4	9.6	9.8	9.0	10.3	11.2	13.6	14.5	16.4	17.6	18.7	19.7	20.7	21.2	22.0	21.9	22.1	21.6	20.8	19.3	17.3	15.3	22.1	9.0	15.9
10	13.2	12.8	12.1	11.8	12.2	11.9	13.8	14.3	18.0	18.7	19.8	21.2	22.5	23.4	24.6	25.5	26.1	26.2	26.0	25.5	24.5	22.5	19.4	17.5	26.2	11.8	19.3
11	17.0	16.4	15.2	15.6	14.5	14.3	14.5	14.0	13.4	17.1	19.9	20.4	21.0	21.8	23.0	24.0	24.5	24.8	24.3	23.7	22.2	20.7	19.8	19.0	24.8	13.4	19.2
12	17.5	16.3	14.3	13.1	12.4	12.0	10.8	11.7	14.3	16.8	18.8	19.9	21.3	22.3	22.8	23.4	24.0	24.2	23.6	22.6	21.2	20.0	19.0	18.1	24.2	10.8	18.3
13	17.4	15.1	13.4	13.1	12.2	10.8	12.5	14.3	16.2	16.4	17.2	17.0	17.1	17.4	18.0	18.6	18.7	17.9	17.3	16.7	16.6	15.3	14.2	13.1	18.7	10.8	15.7
14	12.6	12.2	12.1	11.9	11.7	11.6	11.9	11.8	12.2	12.6	13.4	14.5	15.8	17.4	17.8	17.9	17.9	17.9	17.0	16.5	16.1	15.6	14.9	14.2	17.9	11.6	14.5
15	13.8	13.2	12.8	12.4	12.5	12.6	13.0	13.2	14.1	15.0	15.9	15.2	15.4	16.4	17.5	17.7	18.5	18.1	17.6	16.9	16.9	16.1	14.2	12.5	18.5	12.4	15.1
16	11.9	11.7	10.9	11.6	11.5	10.7	11.5	13.6	13.3	14.6	15.2	16.3	16.7	16.4	16.5	17.8	19.4	19.8	20.7	23.6	22.9	20.0	17.0	15.7	23.6	10.7	15.8
17	14.7	14.3	15.6	14.0	12.3	9.7	8.9	9.3	10.4	11.5	13.1	14.7	18.3	19.1	20.0	21.6	22.4	22.4	21.9	18.1	16.9	16.8	16.4	15.5	22.4	8.9	15.7
18	14.0	12.7	13.5	13.5	13.4	12.9	12.4	12.5	13.1	13.8	14.9	16.0	16.9	16.1	17.0	17.1	17.1	17.3	16.5	15.5	15.1	14.7	13.9	12.6	17.3	12.4	14.7
19	12.1	10.7	10.4	10.0	9.9	9.4	9.8	11.1	12.3	13.6	14.8	15.8	16.5	16.9	17.9	17.6	17.7	17.7	17.2	16.5	15.3	13.8	11.7	10.6	17.9	9.4	13.7
20	9.3	8.4	8.1	8.9	9.1	9.1	9.7	11.7	12.5	13.0	14.9	16.4	17.5	18.7	19.4	20.0	19.8	19.2	18.2	17.3	15.8	14.2	12.3	10.3	20.0	8.1	13.9
21	9.5	9.3	9.5	9.4	9.6	9.9	10.0	10.3	13.1	14.0	14.6	16.4	17.5	18.2	17.8	16.8	16.6	15.8	16.6	16.5	14.6	12.7	11.6	11.1	18.2	9.3	13.4
22	10.4	10.3	9.9	9.6	9.5	9.5	9.8	10.0	10.6	12.2	11.8	13.0	14.3	15.6	15.5	16.6	17.6	18.9	19.0	18.1	16.7	15.7	15.1	13.9	19.0	9.5	13.5
23	13.4	12.9	12.6	12.5	12.3	12.0	11.7	11.6	11.7	12.7	13.6	14.8	15.6	15.1	15.3	15.3	15.4	14.3	13.3	13.3	13.4	12.8	12.3	12.1	15.6	11.6	13.3
24	12.1	11.7	11.1	10.7	10.8	10.6	10.9	11.1	11.5	12.4	13.1	14.5	15.2	15.7	15.3	15.0	14.7	14.3	13.7	13.6	13.2	12.6	11.6	11.5	15.7	10.6	12.8
25	12.1	12.8	12.6	11.7	11.6	11.4	10.7	11.4	12.3	13.5	13.8	13.6	13.2	13.9	12.8	12.6	13.1	13.4	13.9	13.8	13.3	12.0	11.5	11.7	13.9	10.7	12.6
26	11.5	10.8	11.1	11.2	11.4	11.1	11.1	11.2	11.8	12.7	13.5	15.2	16.4	17.7	17.8	18.8	19.3	19.4	19.8	19.2	18.4	16.7	15.6	14.8	19.8	10.8	14.8
27	14.4	13.7	13.5	12.4	11.6	11.1	11.4	11.7	12.2	13.2	14.6	15.1	14.7	16.4	18.3	17.7	18.1	17.2	16.6	15.9	14.6	13.5	13.6	13.4	18.3	11.1	14.4
28	12.4	12.3	12.1	12.1	11.7	11.4	11.4	11.1	10.6	10.8	11.1	11.5	11.9	12.1	12.5	13.2	13.4	13.6	14.4	13.8	13.7	12.6	12.0	11.7	14.4	10.6	12.2
29	11.6	11.4	11.4	11.4	11.2	11.1	11.1	11.3	11.4	11.6	12.1	13.1	14.7	16.7	18.0	18.7	18.9	19.3	19.4	18.6	17.6	16.6	14.8	13.2	19.4	11.1	14.4
30	12.8	12.3	12.3	11.5	10.5	10.1	10.3	11.3	12.5	14.1	15.6	17.2	17.5	19.1	21.1	21.9	22.8	23.1	23.2	22.5	21.0	18.8	16.5	16.1	23.2	10.1	16.4
31	14.4	13.6	13.4	12.4	12.8	11.3	10.8	12.4	12.3			15.0	15.0	16.8	17.3	17.8	17.3	17.0	16.4	15.3	14.6	14.3	13.8	13.3	17.8	10.8	14.4
Max.	**17.5**	**16.4**	**15.6**	**15.6**	**14.5**	**14.3**	**14.5**	**14.3**	**18.0**	**18.7**	**19.9**	**21.2**	**22.5**	**23.4**	**24.6**	**25.5**	**26.1**	**26.2**	**26.0**	**25.5**	**24.5**	**22.5**	**19.8**	**19.0**	**26.2**		
Min.	**5.3**	**5.1**	**5.0**	**5.2**	**4.9**	**5.3**	**5.4**	**5.7**	**6.0**	**6.7**	**7.2**	**7.7**	**8.3**	**8.1**	**8.5**	**9.1**	**9.1**	**8.0**	**7.8**	**7.2**	**6.5**	**6.1**	**5.7**	**5.3**		**4.9**	
Avg.	**11.5**	**11.0**	**10.7**	**10.5**	**10.2**	**9.8**	**10.1**	**10.6**	**11.5**	**12.6**	**13.5**	**14.4**	**15.1**	**15.9**	**16.4**	**16.8**	**17.1**	**17.0**	**16.7**	**16.2**	**15.4**	**14.3**	**13.2**	**12.3**			**13.5**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

August 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.3	13.4	13.5	13.5	13.5	13.0	12.9	12.6	12.9	13.7	14.8	14.8	14.3	14.6	15.9	16.6	17.2	17.2	16.6	16.0	15.0	13.8	12.9	12.1	17.2	12.1	14.3
2	11.9	11.7	11.6	11.2	10.6	10.5	10.5	10.3	10.6	10.7	11.0	11.1	11.1	11.5	11.6	11.3	13.0	14.6	14.4	13.8	12.9	12.7	12.3	11.9	14.6	10.3	11.8
3	11.4	11.2	10.7	10.6	10.6	10.6	10.5	10.9	11.4	12.7	13.6	14.0	14.6	16.0	17.2	16.6	16.9	16.3	15.9	15.3	14.4	12.9	12.2	11.4	17.2	10.5	13.2
4	11.2	10.9	10.8	10.8	10.6	10.3	9.9	9.8	9.9	9.9	10.4	11.1	11.4	12.0	11.8	11.9	12.0	11.7	12.4	12.3	11.9	11.6	11.3	11.1	12.4	9.8	11.1
5	10.8	10.6	10.7	10.5	10.2	10.1	10.0	10.1	10.8	11.3	11.5	12.2	12.2	13.6	14.4	13.9	13.4	12.6	12.4	11.7	11.8	11.8	11.2	11.0	14.4	10.0	11.6
6	10.9	10.8	11.1	11.4	11.6	11.5	11.5	11.4	11.4	11.4	11.4	11.5	11.6	11.9	11.5	11.8	11.8	11.8	11.5	11.3	11.3	11.1	10.9	10.7	11.9	10.7	11.4
7	10.4	10.3	10.2	10.2	10.1	10.0	10.0	10.2	11.3	12.9	14.2	15.2	16.0	17.7	17.8	17.7	18.1	18.2	17.5	16.9	16.3	15.6	14.7	14.2	18.2	10.0	14.0
8	14.3	14.1	14.1	13.8	13.4	12.9	13.4	13.7	14.2	15.0	15.9	18.1	18.9	19.6	18.9	18.7	17.9	17.5	17.9	17.6	17.5	15.7	14.4	13.1	19.6	12.9	15.9
9	13.2	13.2	12.4	11.2	10.3	10.7	10.6	12.2	14.1	14.7	16.7	18.3	19.9	20.8	21.3	22.3	22.7	22.8	23.0	22.4	20.4	17.6	16.3	15.3	23.0	10.3	16.8
10	14.1	13.4	12.6	12.8	12.3	11.4	11.5	11.6	13.2	14.2	14.8	15.9	16.7	16.1	15.7	15.1	14.6	13.8	13.8	13.8	13.5	13.0	12.4	12.1	16.7	11.4	13.7
11	11.9	11.8	11.6	11.1	10.6	11.1	11.3	11.7	12.5	13.5	14.4	15.9	16.2	15.6	16.5	16.7	15.3	14.4	13.5	13.2	12.8	12.4	12.4	11.8	16.7	10.6	13.3
12	11.3	11.1	11.0	10.7	10.6	10.6	10.6	10.7	11.3	12.0	12.8	13.9	14.1	13.9	14.4	14.3	14.1	13.1	12.6	11.9	11.3	10.6	10.0	9.7	14.4	9.7	11.9
13	9.6	9.3	9.1	8.8	8.5	8.5	8.4	8.2	8.1	8.6	9.4	10.5	11.6	11.5	11.3	10.1	9.3	9.0	8.5	8.3	8.7	8.6	8.8	9.1	11.6	8.1	9.2
14	9.2	9.4	9.4	9.9	10.3	10.9	11.1	11.3	11.8	12.2	12.0	11.2	11.4	11.5	11.6	11.9	11.4	10.8	10.4	9.6	8.8	8.2	7.8	7.4	12.2	7.4	10.4
15	7.2	7.2	6.9	7.3	7.1	7.5	7.4	7.3	8.1	8.5	9.1	9.3	10.0	10.4	11.1	11.7	12.1	12.5	11.9	10.5	9.1	7.8	7.2	6.8	12.5	6.8	8.9
16	6.2	5.6	5.2	4.9	4.6	4.6	4.8	5.0	5.4	7.0	7.8	10.1	11.8	11.7	12.7	11.3	12.1	11.6	11.2	10.8	9.8	7.1	5.9	6.0	12.7	4.6	8.1
17	5.6	5.2	4.6	4.6	4.3	4.6	4.9	5.2	6.0	7.7	8.5	9.2	9.1	9.8	11.2	12.2	12.6	13.1	13.5	12.1	10.9	9.7	8.9	8.8	13.5	4.3	8.4
18	8.6	8.5	9.0	9.1	8.8	8.6	8.7	8.8	9.2	8.7	8.2	7.8	7.8	8.1	8.4	8.8	8.9	7.5	7.7	7.6	7.6	7.9	8.2	8.5	9.2	7.5	8.4
19	9.1	9.3	9.6	9.5	9.3	7.6	7.5	7.6	7.9	8.4	8.8	9.7	9.8	10.3	9.3	9.5	9.1	8.7	8.9	9.6	9.8	9.9	9.8	9.9	10.3	7.5	9.1
20	9.7	9.4	8.3	7.6	6.9	6.7	6.6	6.6	6.9	7.1	7.5	8.5	9.5	10.0	11.9	12.2	11.8	9.8	10.8	10.6	8.9	7.7	6.6	6.8	12.2	6.6	8.7
21	6.6	6.5	6.2	5.7	5.7	5.0	4.1	3.9	5.7	7.2	9.1	9.4	8.4	8.5	10.2	10.7	10.4	11.0	10.3	9.9	9.4	7.4	5.6	5.1	11.0	3.9	7.6
22	4.0	3.6	3.2	3.4	4.1	4.6	5.3	5.1	6.4	7.3	8.8	9.8	10.1	12.8	10.6	10.3	12.0	10.8	9.6	9.2	7.6	6.3	6.5	6.0	12.8	3.2	7.4
23	6.0	4.2	3.9	3.6	3.9	2.7	2.7	3.1	5.3	6.8	8.6	9.3	10.4	12.1	13.6	14.7	15.2	15.9	15.4	13.6	11.0	9.4	7.8	6.9	15.9	2.7	8.6
24	6.5	8.4	8.1	8.1	6.8	7.1	6.6	6.4	7.2	7.9	10.2	11.6	11.3	12.0	11.8	11.9	10.8	10.0	9.8	9.6	9.6	10.1	10.4	10.5	12.0	6.4	9.3
25	10.5	10.4	10.0	9.8	10.2	10.5	9.7	10.6	9.9	10.2	11.4	12.5	12.9	13.3	13.6	13.9	14.1	14.4	13.5	12.7	11.5	10.8	9.9	10.5	14.4	9.7	11.5
26	10.3	9.8	9.9	9.0	8.9	8.1	7.8	8.7	10.7	12.9	14.0	14.8	15.1	16.0	16.4	16.5	16.1	15.5	14.4	13.5	12.3	10.5	10.1	10.5	16.5	7.8	12.2
27	10.2	9.4	9.6	9.5	10.5	10.8	10.9	11.1	11.3	11.6	11.8	13.5	14.5	14.9	13.9	14.2	14.1	13.6	12.8	11.5	11.1	10.9	10.7	10.4	14.9	9.4	11.8
28	10.0	10.3	10.3	10.3	10.0	10.0	10.0	10.3	10.5	10.9	11.1	11.5	12.6	12.7	12.9	12.5	12.4	12.2	12.1	12.0	11.0	10.7	10.5	10.6	12.9	10.0	11.1
29	10.7	10.9	11.1	11.3	11.3	11.3	11.3	11.5	11.4	11.6	12.7	13.5	13.8	13.5	14.1	14.4	14.5	13.6	13.2	12.8	11.9	11.3	11.3	11.7	14.5	10.7	12.3
30	12.1	12.0	12.2	12.5	12.6	12.5	11.9	11.3	11.3	11.6	11.9	12.1	12.1	12.9	13.1	12.6	12.7	12.4	11.9	11.4	11.2	11.2	11.3	10.9	13.1	10.9	12.0
31	10.3	10.1	10.0	11.1	11.1	10.6	11.8	12.1	11.6	12.0	12.4	12.6	12.6	12.5	12.4	12.3	12.5	12.7	12.9	12.6	12.1	11.8	11.6	12.0	12.9	10.0	11.8
Max.	**14.3**	**14.1**	**14.1**	**13.8**	**13.5**	**13.0**	**13.4**	**13.7**	**14.2**	**15.0**	**16.7**	**18.3**	**19.9**	**20.8**	**21.3**	**22.3**	**22.7**	**22.8**	**23.0**	**22.4**	**20.4**	**17.6**	**16.3**	**15.3**	**23.0**		
Min.	**4.0**	**3.6**	**3.2**	**3.4**	**3.9**	**2.7**	**2.7**	**3.1**	**5.3**	**6.8**	**7.5**	**7.8**	**7.8**	**8.1**	**8.4**	**8.8**	**8.9**	**7.5**	**7.7**	**7.6**	**7.6**	**6.3**	**5.6**	**5.1**		**2.7**	
Avg.	**9.9**	**9.7**	**9.6**	**9.5**	**9.3**	**9.2**	**9.2**	**9.3**	**9.9**	**10.6**	**11.4**	**12.2**	**12.6**	**13.2**	**13.5**	**13.5**	**13.5**	**13.2**	**12.9**	**12.4**	**11.7**	**10.8**	**10.3**	**10.1**			**11.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 2 meters (deg. C)

September 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.1	12.0	11.8	11.4	11.2	11.1	10.6	10.4	10.6	10.5	10.3	9.6	9.9	9.7	9.6	10.0	9.8	9.6	9.3	9.4	9.0	9.1	9.1	9.1	12.1	9.0	10.2
2	9.0	8.9	8.7	8.3	8.2	8.1	8.2	8.2	8.3	8.3	8.3	8.6	9.3	10.4	11.2	11.6	11.8	12.1	12.4	11.6	11.3	11.1	10.7	9.9	12.4	8.1	9.8
3	9.6	9.3	9.0	8.9	8.8	8.9	8.8	8.7	9.1	9.7	9.9	10.4	10.9	11.6	11.7	12.1	11.9	10.9	10.1	9.8	9.6	9.7	9.4	9.0	12.1	8.7	9.9
4	9.1	9.1	9.3	9.4	9.4	9.4	9.6	9.9	10.0	9.9	10.4	11.0	11.7	12.1	12.3	12.0	12.4	12.2	12.0	11.7	11.4	10.9	10.9	10.4	12.4	9.1	10.7
5	10.3	10.3	10.5	10.3	10.4	10.0	9.6	9.8	9.9	9.8	10.2	10.5	10.6	10.1	9.9	9.6	9.4	9.9	11.3	11.2	11.3	10.9	11.0	10.8	11.3	9.4	10.3
6	10.7	10.5	10.1	10.0	10.2	10.2	10.2	10.0	10.2	10.3	10.4	11.5	12.4	11.7	12.1	12.2	12.4	13.5	12.9	11.7	11.2	11.0	10.4	10.5	13.5	10.0	11.1
7	10.5	10.1	10.1	9.3	8.8	8.2	7.9	7.5	7.5	7.7	9.7	10.0	10.1	9.8	10.1	10.3	10.4	10.8	10.4	9.9	8.7	6.2	5.2	4.0	10.8	4.0	8.9
8	4.0	4.3	4.7	3.5	3.3	2.9	4.1	4.6	4.9	4.5	5.9	7.7	8.4	9.0											9.0	2.9	5.1
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Max.	**12.1**	**12.0**	**11.8**	**11.4**	**11.2**	**11.1**	**10.6**	**10.4**	**10.6**	**10.5**	**10.4**	**11.5**	**12.4**	**12.1**	**12.3**	**12.2**	**12.4**	**13.5**	**12.9**	**11.7**	**11.4**	**11.1**	**11.0**	**10.8**	**13.5**		
Min.	**4.0**	**4.3**	**4.7**	**3.5**	**3.3**	**2.9**	**4.1**	**4.6**	**4.9**	**4.5**	**5.9**	**7.7**	**8.4**	**9.0**	**9.6**	**9.6**	**9.4**	**9.6**	**9.3**	**9.4**	**8.7**	**6.2**	**5.2**	**4.0**		**2.9**	
Avg.	**9.4**	**9.3**	**9.3**	**8.9**	**8.8**	**8.6**	**8.6**	**8.6**	**8.8**	**8.8**	**9.4**	**9.9**	**10.4**	**10.6**	**11.0**	**11.1**	**11.1**	**11.3**	**11.2**	**10.8**	**10.3**	**9.8**	**9.5**	**9.1**			**9.5**

Total Hours in Month 720 **Hours Data Available** 182 **Data Recovery** 25.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

August *1991*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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27													4.7	6.0	6.8	7.7	7.8	8.4	8.3	8.1	7.3	6.4	5.3	4.6	8.4	4.6	6.8
28	4.2	3.4	2.1	2.0	1.2	1.1	1.3	0.8	1.7	3.5	4.6	5.8	7.5	8.8	10.2	11.2	11.9	12.2	12.2	11.8	10.7	9.2	8.1	6.3	12.2	0.8	6.3
29	6.1	6.0	5.7	5.3	4.6	3.7	4.2	4.4	5.2	6.1	8.5	10.2	9.8	10.7	12.2	12.6	13.2	12.9	12.6	12.8	11.8	10.5	9.6	8.8	13.2	3.7	8.6
30	8.9	8.0	7.6	6.4	5.0	4.8	4.5	4.6	5.6	7.1	9.6	10.7	12.5	13.9	14.7	15.4	15.6	15.6	15.1	14.0	12.2	10.9	9.8	8.2	15.6	4.5	10.0
31	8.6	8.1	8.0	8.6	8.6	8.1	8.1	7.6	8.9	11.1	11.5	11.9	12.6	13.0	13.3	13.2	13.1	12.8	12.1	11.3	9.7	9.3	9.2	8.9	13.3	7.6	10.3
Max.	**8.9**	**8.1**	**8.0**	**8.6**	**8.6**	**8.1**	**8.1**	**7.6**	**8.9**	**11.1**	**11.5**	**11.9**	**12.6**	**13.9**	**14.7**	**15.4**	**15.6**	**15.6**	**15.1**	**14.0**	**12.2**	**10.9**	**9.8**	**8.9**	**15.6**		
Min.	**4.2**	**3.4**	**2.1**	**2.0**	**1.2**	**1.1**	**1.3**	**0.8**	**1.7**	**3.5**	**4.6**	**5.8**	**4.7**	**6.0**	**6.8**	**7.7**	**7.8**	**8.4**	**8.3**	**8.1**	**7.3**	**6.4**	**5.3**	**4.6**		**0.8**	
Avg.	**6.9**	**6.4**	**5.8**	**5.6**	**4.9**	**4.4**	**4.5**	**4.3**	**5.3**	**6.9**	**8.6**	**9.7**	**9.4**	**10.5**	**11.4**	**12.0**	**12.3**	**12.4**	**12.0**	**11.6**	**10.3**	**9.3**	**8.4**	**7.4**			**8.4**

Total Hours in Month 744 **Hours Data Available** 108 **Data Recovery** 14.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

September 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.6	8.5	8.4	8.3	8.2	8.3	8.6	8.9	9.1	9.1	9.9	10.3	10.5	11.0	11.2	11.3	11.6	11.4	10.9	10.7	10.4	10.3	10.2	10.1	11.6	8.2	9.8
2	9.9	10.0	10.3	10.3	10.3	10.0	9.8	9.9	9.6	10.5	11.2	12.1	12.8	13.1	14.1	14.2	14.4	14.7	14.1	12.7	12.2	11.8	11.2	9.8	14.7	9.6	11.6
3	9.9	8.8	8.2	8.5	9.0	8.8	9.2	9.6	9.3	10.2	10.8	11.1	11.7	12.2	12.1	12.0	12.0	11.8	11.3	10.7	9.7	9.1	8.8	8.8	12.2	8.2	10.1
4	9.0	9.0	8.5	8.5	9.0	8.8	8.0	7.9	7.8	8.4	9.2	10.1	10.8	11.1	11.5	12.3	13.1	12.2	12.6	12.1	11.1	10.2	9.3	9.6	13.1	7.8	10.0
5	9.6	9.8	9.3	8.9	8.6	8.4	8.2	8.1	7.4	8.3	8.6	8.9	9.1	9.6	10.0	10.7	11.2	11.4	10.8	10.7	10.2	9.8	9.8	9.9	11.4	7.4	9.5
6	9.6	9.7	9.8	9.8	9.6	9.3	9.0	9.1	9.3	9.7	10.1	10.5	11.1	11.6	12.2	12.9	13.5	13.8	13.7	13.7	11.9	10.2	9.5	8.9	13.8	8.9	10.8
7	8.5	7.5	8.1	7.7	7.6	7.4	6.8	5.8	6.9	7.3	8.4	11.5	11.5	11.3	10.9	10.2	9.7	9.5	9.2	8.2	7.8	7.6	7.4	7.4	11.5	5.8	8.5
8	7.4	7.6	8.0	8.9	8.4	8.0	8.4	9.1	9.4	9.7	9.7	10.2	10.6	10.9	11.1	11.0	10.5	10.3	9.9	9.4	8.6	8.3	8.4	8.5	11.1	7.4	9.3
9	8.4	8.4	8.5	8.4	8.6	9.0	8.9	8.7	8.5	8.7	9.2	9.5	9.8	10.0	10.6	10.5	10.5	10.3	10.2	9.8	8.7	8.3	8.2	8.2	10.6	8.2	9.2
10	8.0	7.2	6.9	7.0	6.9	6.3	6.1	6.3	6.2	6.3	6.8	7.2	8.0	8.7	9.1	9.6	9.7	9.2	9.0	9.1	8.7	7.9	7.8	8.5	9.7	6.1	7.8
11	8.1	8.1	8.1	7.7	7.6	7.5	7.4	7.3	7.3	7.3	7.5	7.9	9.0	8.8	11.1	10.6	10.7	11.2	10.9	11.1	8.7	8.0	8.4	7.9	11.2	7.3	8.7
12	8.1	8.5	7.9	7.9	7.9	7.0	6.4	6.1	6.5	7.0	7.7	8.6	10.0	11.0	11.2	11.9	11.4	10.9	11.5	10.7	8.7	7.7	7.7	7.9	11.9	6.1	8.8
13	8.9	8.5	8.6	8.6	8.8	8.7	8.3	8.0	7.1	6.8	6.9	6.8	7.3	7.6	8.1	8.4	8.5	8.4	8.5	8.4	8.9	9.3	9.7	9.9	9.9	6.8	8.3
14	9.7	8.7	7.8	8.2	8.0	8.3	8.4	8.8	8.8	8.8	9.2	10.0	9.6	9.9	9.8	10.4	11.3	11.3	10.6	9.4	8.5	8.1	8.0	8.8	11.3	7.8	9.2
15	9.1	9.2	9.1	9.3	9.5	9.3	9.1	9.0	8.9	9.1	9.6	10.0	10.5	10.2	10.5	10.5	9.7	9.4	8.9	8.9	9.3	9.5	9.9	10.6	10.6	8.9	9.5
16	9.9	9.5	8.4	7.3	6.7	7.4	9.2	9.6	9.6	9.5	9.6	9.2	9.4	9.2	9.9	10.4	10.8	10.5	9.9	9.2	8.5	7.9	7.7	7.6	10.8	6.7	9.0
17	7.4	7.2	7.2	7.2	7.2	7.4	7.6	8.0	7.9	8.1	7.9	7.8	7.8	8.4	8.6	8.6	8.6	9.1	8.9	8.5	8.1	7.8	8.0	8.1	9.1	7.2	8.0
18	7.6	7.0	6.8	6.8	6.6	6.5	6.4	6.4	6.2	6.4	6.6	7.4													7.6	6.2	6.7
19																											
20										5.3	5.5	5.9	5.7	5.6	5.9	5.9	7.5	8.1	7.4	6.5	6.4	6.0	5.3	4.7	8.1	4.7	6.1
21	4.3	4.5	4.3	4.1	4.3	4.9	4.6	4.3	4.8	5.3	6.0	6.1	6.4	7.5	7.8	7.8	7.8	7.6	7.8	7.2	6.3	5.9	5.8	5.4	7.8	4.1	5.9
22	5.4	5.3	5.6	5.0	5.4	5.6	6.5	7.2	8.0	8.0	8.4	9.1	8.9	8.9	9.2	8.1	7.6	7.6	7.6	8.3	7.1	7.0	7.5	7.5	9.2	5.0	7.3
23	7.5	7.7	7.5	7.6	7.5	7.4	7.4	7.4	7.5	7.5	7.8	8.1	8.1	8.2	8.8	9.0	9.1	8.9	8.9	8.6	8.6	8.3	7.4	7.1	9.1	7.1	8.0
24	7.2	7.2	7.2	7.4	7.4	7.3	7.4	7.2	7.2	7.1	7.0	6.6	6.2	6.6	6.4	6.4	6.6	6.7	6.9	7.1	7.0	6.7	6.4	6.5	7.4	6.2	6.9
25	6.5	6.6	6.3	6.2	6.1	6.3	6.2	6.0	6.3	6.7	6.9	7.3	7.8	7.7	7.6	7.6	7.8	7.6	6.5	6.1	5.9	5.4	5.5	5.7	7.8	5.4	6.6
26	5.2	4.7	4.1	4.3	4.2	3.3	3.8	3.7	3.2	3.5	4.6	5.8	6.5	6.9	7.3	8.4	8.8	7.7	6.9	6.5	5.9	5.3	5.4	4.9	8.8	3.2	5.4
27	4.3	4.0	3.6	3.7	3.6	3.5	3.2	3.0	3.1	3.4	3.5	3.9	4.2	4.4	4.9	6.1	6.4	6.8	6.1	5.4	4.3	3.6	3.4	3.4	6.8	3.0	4.2
28	3.7	4.0	4.1	4.3	4.8	4.3	4.1	3.7	3.7	4.5	5.1	6.1	6.1	7.1	7.2	7.2	6.7	7.3	7.6	7.9	7.3	6.4	6.4	6.5	7.9	3.7	5.7
29	6.8	6.4	5.6	6.1	6.2	6.3	6.5	6.3	6.0	5.1	5.8	7.5	7.9	7.9	7.5	6.7	5.9	5.5	5.5	5.4	5.3	4.8	4.5	4.1	7.9	4.1	6.1
30	4.0	3.9	3.9	3.8	3.5	3.3	2.8	2.8	2.3	3.6	5.0	5.7	6.5	6.5	5.4	5.0	5.7	5.9	6.2	6.6	6.5	6.4	6.3	6.2	6.6	2.3	4.9
Max.	**9.9**	**10.0**	**10.3**	**10.3**	**10.3**	**10.0**	**9.8**	**9.9**	**9.6**	**10.5**	**11.2**	**12.1**	**12.8**	**13.1**	**14.1**	**14.2**	**14.4**	**14.7**	**14.1**	**13.7**	**12.2**	**11.8**	**11.2**	**10.6**	**14.7**		
Min.	**3.7**	**3.9**	**3.6**	**3.7**	**3.5**	**3.3**	**2.8**	**2.8**	**2.3**	**3.4**	**3.5**	**3.9**	**4.2**	**4.4**	**4.9**	**5.0**	**5.7**	**5.5**	**5.5**	**5.4**	**4.3**	**3.6**	**3.4**	**3.4**		**2.3**	
Avg.	**7.6**	**7.4**	**7.2**	**7.2**	**7.2**	**7.1**	**7.1**	**7.1**	**7.1**	**7.3**	**7.7**	**8.3**	**8.7**	**9.0**	**9.3**	**9.4**	**9.5**	**9.5**	**9.2**	**8.9**	**8.2**	**7.8**	**7.6**	**7.6**			**8.0**

Total Hours in Month 720 **Hours Data Available** 675 **Data Recovery** 93.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

October 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.8	5.5	5.0	4.7	4.6	4.7	4.7	4.4	4.4	4.5	4.8	5.6	5.7	6.8	7.2	7.7	7.8	7.6	7.0	6.4	6.4	6.1	6.0	5.4	7.8	4.4	5.8
2	5.0	5.4	5.6	5.6	5.6	5.6	5.7	5.6	5.6	5.9	6.1	6.6	7.0	7.9	8.4	8.7	8.7	8.3	8.1	7.9	7.5	7.4	7.0	6.3	8.7	5.0	6.7
3	5.3	4.7	4.6	4.8	4.6	4.3	3.8	3.6	3.6	4.0	4.4	4.3	5.2	5.6	5.7	5.8	5.7	5.4	5.4	4.8	4.7	4.8	4.9	4.7	5.8	3.6	4.8
4	4.5	4.3	4.3	4.4	4.3	4.1	4.1	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.6	5.3	5.3	5.1	5.3	4.5	4.2	3.4	2.8	2.9	5.6	2.8	4.4
5	2.5	2.6	3.0	2.5	2.2	1.8	1.6	1.6	1.7	2.7	2.7	3.0	4.2	5.1	5.6	5.9	5.3	5.2	4.7	4.3	3.0	2.0	1.2	0.9	5.9	0.9	3.1
6	1.0	0.8	0.3	0.1	-0.1	-0.1	-0.1	0.6	0.6	1.0	1.1	1.5	2.0	2.8	3.5	4.0	4.5	4.4	4.1	3.3	3.3	3.3	2.8	1.8	4.5	-0.1	1.9
7	1.4	1.5	0.9	0.1	-0.9	-1.4	-2.1	-2.4	-2.6	-2.1	-1.4	-0.4	0.6	1.6	2.3	2.5	2.6	2.6	1.9	0.2	-0.5	-0.8	-1.5	-1.9	2.6	-2.6	0.0
8	-1.7	-2.0	-2.1	-2.2	-2.2	-2.3	-2.3	-2.9	-2.9	-2.2	-1.0	0.3	0.4	0.5	1.3	1.8	2.0	1.5	0.2	-1.1	-1.9	-2.9	-3.6	-4.2	2.0	-4.2	-1.2
9	-4.4	-4.7	-4.9	-4.8	-4.9	-5.2	-4.9	-4.7	-4.4	-4.2	-4.3	-4.0	-3.8	-3.3	-2.4	-1.8	-1.4	-1.5	-1.9	-2.7	-3.6	-4.3	-4.9	-5.5	-1.4	-5.5	-3.9
10	-6.1	-6.9	-7.5	-8.0	-8.1	-8.6	-8.6	-8.8	-8.4	-8.1	-7.0	-5.8	-4.8	-3.8	-2.8	-2.3	-1.8	-1.7	-2.4	-3.5	-4.7	-4.9	-5.8	-6.3	-1.7	-8.8	-5.7
11	-6.4	-5.8	-6.1	-7.1	-7.4	-7.4	-7.4	-7.9	-8.7	-7.8	-6.7	-5.8	-4.4	-2.8	-1.7	-0.6	0.2	0.3	-0.5	-1.9	-3.3	-4.5	-4.9	-5.6	0.3	-8.7	-4.8
12	-5.8	-5.9	-5.9	-6.2	-5.9	-5.7	-6.3	-6.5	-5.9	-5.1	-3.9	-2.1	1.7	3.0	3.9	4.3	4.3	4.0	3.8	3.5	3.2	2.6	2.1	1.3	4.3	-6.5	-1.1
13	1.6	1.8	2.1	2.4	2.7	2.0	1.6	1.7	0.9	0.6	0.8	1.3	1.5	1.7	2.2	1.6	0.7	0.1	-0.2	-0.8	-1.0	-1.3	-1.7	-2.3	2.7	-2.3	0.8
14	-3.5	-3.9	-4.0	-4.1	-3.7	-3.8	-4.0	-4.3	-4.6	-4.6	-4.4	-4.2	-4.0	-3.8	-3.4	-3.0	-2.6	-2.2	-2.1	-2.3	-2.9	-3.0	-3.2	-3.7	-2.1	-4.6	-3.6
15	-4.3	-4.3	-4.5	-4.3	-4.5	-4.2	-4.3	-5.1	-5.7	-5.5	-4.8	-4.1	-3.8	-2.9	-2.2	-1.5	-0.8	-0.9	-2.1	-2.2	-2.7	-2.3	-1.4	-1.0	-0.8	-5.7	-3.3
16	-0.8	-0.9	-0.8	-0.4	-0.5	-0.3	-0.3	-0.1	0.0	0.2	0.5	1.0	1.4	2.0	2.6	2.9	3.2	3.1	3.2	3.3	3.7	3.9	4.1	4.3	4.3	-0.9	1.5
17	4.6	4.6	4.9	5.2	5.0	5.2	4.9	4.7	4.4	4.3	4.5	4.9	5.0	5.3	5.6	6.3	6.7	6.3	6.3	6.2	6.4	6.2	6.1	5.9	6.7	4.3	5.4
18	5.4	5.2	4.7	4.8	4.4	3.9	3.5	3.3	3.3	3.2	3.2	3.3	3.5	3.8	3.9	3.9	3.7	3.5	3.4	3.3	3.4	3.5	3.5	3.5	5.4	3.2	3.8
19	3.4	3.5	3.4	3.3	3.3	3.4	3.4	2.7	2.3	2.3	2.5	2.5	2.1	1.9	0.0	-0.8	-1.2	-1.9	-2.5	-3.4	-3.7	-4.2	-4.3	-4.3	3.5	-4.3	0.6
20	-4.5	-4.9	-5.3	-5.9	-6.1	-6.1	-6.0	-5.9	-6.0	-5.9	-5.4	-4.6	-3.9	-3.3	-3.3	-3.1	-2.9	-3.0	-3.0	-3.2	-3.4	-3.5	-3.8	-4.0	-2.9	-6.1	-4.5
21	-4.3	-4.1	-4.6	-5.1	-4.7	-5.2	-5.7	-4.9	-4.7	-4.6	-4.5	-2.3	0.2	-0.1	-0.3	1.2	1.3	0.5	-1.2	-2.6	-3.1	-3.0	-2.7	-2.2	1.3	-5.7	-2.8
22	-1.2	-1.4	-1.5	-1.3	-1.4	-1.5	-1.4	-1.9	-2.7	-2.8	-3.1	-1.5	0.1	1.9	2.9	2.5	1.8	1.4	1.0	0.3	0.2	0.3	-0.2	-0.2	2.9	-3.1	-0.4
23	-0.3	-0.2	0.0	-0.4	-0.3	-0.2	-0.6	-0.4	-1.0	-1.4	-0.6	-0.5	1.2	1.9	3.8	2.7	1.7	1.1	0.6	0.4	0.3	0.3	0.3	0.3	3.8	-1.4	0.4
24	0.2	0.0	-0.5	-0.3	-0.4	-0.9	-1.6	-1.8	-2.2	-2.5	-1.6	-0.6	0.8	0.8	0.6	1.1	1.0	0.8	0.8	0.7	0.6	0.5	0.1	-0.2	1.1	-2.5	-0.2
25	-0.4	-0.8	-1.4	-2.1	-2.5	-3.1	-3.5	-3.5	-3.5	-3.9															-0.4	-3.9	-2.5
26		-1.0	-0.5	0.0	0.0	0.2	0.7	1.1	1.5	1.7	2.0	2.1	2.1	2.3	2.7	2.7	2.4	1.9	1.3	0.9	1.4	2.0	2.3	2.4	2.7	-1.0	1.4
27	2.3	2.4	2.5	2.8	2.6	2.2	2.3	2.4	1.9	1.6	1.8	2.0	3.3	3.4	4.0	3.8	3.8	3.0	1.5	0.9	1.0	1.1	1.1	1.2	4.0	0.9	2.3
28	0.3	0.0	1.1	1.6	2.1	2.3	2.5	2.5	2.9	3.3	3.6	4.1	5.3	5.6	5.2	4.5	4.5	4.5	4.5	4.4	4.3	3.3	3.1	2.7	5.6	0.0	3.3
29	2.8	3.3	3.4	3.0	2.9	3.1	3.3	3.5	3.7	3.7	3.7	3.5	3.1	3.2	3.6	3.3	3.2	3.1	2.7	2.5	2.3	2.5	2.8	2.7	3.7	2.3	3.1
30	2.5	1.9	0.6	0.2	-0.8	-0.8	0.4	0.8	-0.1	0.8	1.9	2.1	2.6	3.6	3.4	2.9	3.5	2.9	2.9	3.5	3.1	3.5	3.8	4.1	4.1	-0.8	2.0
31	4.4	4.8	5.0	5.3	5.7	5.8	5.6	5.3	5.6	5.8	6.3	6.5	6.6	6.7	6.8	6.9	6.6	6.3	6.0	5.8	5.9	6.0	6.0	5.9	6.9	4.4	5.9
Max.	**5.8**	**5.5**	**5.6**	**5.6**	**5.7**	**5.8**	**5.7**	**5.6**	**5.6**	**5.9**	**6.3**	**6.6**	**7.0**	**7.9**	**8.4**	**8.7**	**8.7**	**8.3**	**8.1**	**7.9**	**7.5**	**7.4**	**7.0**	**6.3**	**8.7**		
Min.	**-6.4**	**-6.9**	**-7.5**	**-8.0**	**-8.1**	**-8.6**	**-8.6**	**-8.8**	**-8.7**	**-8.1**	**-7.0**	**-5.8**	**-4.8**	**-3.8**	**-3.4**	**-3.1**	**-2.9**	**-3.0**	**-3.0**	**-3.5**	**-4.7**	**-4.9**	**-5.8**	**-6.3**		**-8.8**	
Avg.	**0.3**	**0.2**	**0.1**	**0.0**	**-0.2**	**-0.3**	**-0.3**	**-0.4**	**-0.5**	**-0.3**	**0.2**	**0.8**	**1.5**	**2.1**	**2.5**	**2.6**	**2.7**	**2.4**	**2.0**	**1.5**	**1.1**	**0.9**	**0.7**	**0.5**			**0.8**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

November 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.9	5.4	5.8	6.1	6.3	6.8	6.8	7.1	7.1	7.0	7.0	7.3	7.3	7.7	7.6	7.4	7.0	6.8	6.2	5.8	5.1	4.6	4.2	4.2	7.7	4.2	6.3
2	4.8	4.0	3.1	3.2	3.4	3.5	3.6	3.9	3.2	3.1	3.2	3.9	4.5	4.9	5.7	5.9	5.8	5.2	3.3	2.7	2.3	3.0	2.8	2.4	5.9	2.3	3.8
3	2.5	3.1	2.4	1.9	2.1	1.5	1.5	2.7	3.3	3.9	3.7	4.1	4.6	4.7	4.9	5.7	6.4	6.2	6.4	6.6	6.5	6.3	5.7	5.8	6.6	1.5	4.3
4	5.9	5.5	5.4	5.0	5.1	4.9	4.3	4.3	4.9	4.6	5.3	6.2	6.6	6.9	6.9	6.9	6.4	6.0	5.4	5.2	5.8	5.9	5.5	5.7	6.9	4.3	5.6
5	5.5	5.1	5.6	5.0	5.3	5.0	4.7	3.7	4.4	5.2	5.6	6.2	7.2	8.0	8.0	8.1	7.6	7.9	7.2	6.9	7.0	6.2	5.7	6.4	8.1	3.7	6.2
6	6.3	5.8	5.5	5.3	5.2	5.3	5.1	5.3	5.3	5.3	5.3	5.5	5.5	5.7	6.0	6.2	5.9	5.4	5.7	4.9	4.6	4.9	4.4	4.7	6.3	4.4	5.4
7	4.4	4.3	3.8	3.8	3.8	3.6	3.5	3.1	3.4	3.2	3.0	3.1	4.0	3.9	2.6	3.4	2.6	1.1	0.7	0.2	-0.3	-0.7	-1.3	-1.5	4.4	-1.5	2.4
8	-2.2	-2.2	-2.3	-2.5	-2.5	-2.3	-2.3	-2.9	-3.4	-4.0	-3.7	-2.9	-1.8	-0.2	0.5	0.3	-1.1	-1.8	-1.9	-1.7	-2.1	-2.8	-3.6	-4.0	0.5	-4.0	-2.2
9	-4.8	-5.4	-6.5	-7.2	-7.4	-7.9	-8.6	-8.5	-9.8	-11.0	-11.7	-11.4	-11.7	-11.8	-11.4	-10.7	-11.4	-11.4	-10.8	-10.2	-9.6	-8.9	-8.4	-7.9	-4.8	-11.8	-9.3
10	-7.3	-7.2	-7.7	-6.4	-6.1	-5.5	-4.8	-6.4	-5.8	-5.3	-5.4	-4.0	-2.3	-0.6	-0.2	-1.4	-2.5	-4.0	-2.5	-1.7	-3.7	-5.1	-5.3	-5.9	-0.2	-7.7	-4.5
11	-5.8	-6.0	-6.5	-7.3	-7.1	-6.7	-7.3	-9.3	-10.4	-12.1	-12.9	-12.8	-11.6	-11.9	-11.0	-10.9	-11.4	-12.1	-13.1	-13.4	-13.6	-13.6	-13.7	-14.1	-5.8	-14.1	-10.6
12	-14.3	-15.0	-15.3	-15.6	-15.7	-15.9	-16.1	-16.4	-16.6	-16.5	-16.2	-15.7	-15.1	-14.2	-13.6	-13.3	-13.2	-13.8	-14.6	-14.8	-15.1	-15.3	-15.0	-15.3	-13.2	-16.6	-15.1
13	-15.8	-15.6	-15.5	-15.1	-14.9	-14.4	-14.5	-14.1	-10.7	-7.2	-5.9	-7.1	-5.8	-5.3	-4.7	-3.5	-2.8	-2.6	-3.0	-2.4	-3.4	-3.1	-2.2	-1.1	-1.1	-15.8	-7.9
14	-0.7	-1.0	-1.3	-1.6	-1.6	-2.0	-2.3	-2.4	-2.3	-2.3	-2.3	-2.1	-1.8	-1.5	-1.5	-2.3	-2.7	-2.7	-2.8	-3.1	-3.6	-3.8	-4.4	-4.7	-0.7	-4.7	-2.4
15	-5.1	-6.7	-7.2	-9.4	-10.9	-11.2	-13.1	-15.3	-15.8	-15.1	-15.4	-14.8	-13.3	-12.8	-13.0	-12.8	-13.9	-13.7	-15.1	-15.5	-16.1	-16.3	-16.9	-17.0	-5.1	-17.0	-13.2
16	-17.3	-17.8	-18.2	-18.9	-18.3	-17.8	-17.8	-17.7	-18.6	-16.5	-15.6	-14.3	-13.7	-13.3	-11.8	-10.6	-10.2	-10.1	-9.8	-9.5	-9.7	-9.9	-10.3	-10.8	-9.5	-18.9	-14.1
17	-11.0	-11.4	-11.4	-11.5	-11.8	-11.4	-11.9	-12.1	-12.6	-12.4	-12.0	-12.5	-12.6	-12.5	-13.2	-13.2	-13.9	-15.4	-15.8	-16.0	-16.7	-17.3	-17.4	-17.5	-11.0	-17.5	-13.5
18	-18.5	-18.7	-18.8	-19.3	-18.9	-19.1	-19.4	-19.6	-19.9	-20.0	-20.0	-19.6	-19.2	-18.6	-18.3	-18.3	-18.5	-18.6	-18.7	-19.0	-19.1	-19.2	-19.7	-19.9	-18.3	-20.0	-19.1
19	-19.9	-19.7	-19.4	-19.3	-19.3	-19.4	-19.3	-19.0	-18.9	-18.9	-18.8	-18.4	-17.8	-17.5	-17.7	-17.4	-16.9	-16.7	-16.7	-16.8	-17.0	-17.1	-17.2	-17.4	-16.7	-19.9	-18.2
20	-17.6	-17.4	-17.2	-16.7	-16.3	-16.4	-16.7	-17.0	-17.3	-17.3	-17.4	-17.1	-17.1	-16.2	-15.7	-15.6	-15.7	-15.7	-15.5	-15.5	-16.3	-16.2	-16.0	-16.6	-15.5	-17.6	-16.5
21	-16.4	-15.9	-15.5	-15.3	-15.3	-14.8	-15.2	-15.2	-14.7	-14.4	-14.6	-14.2	-14.1	-14.0	-13.4	-13.7	-14.3	-15.2	-15.7	-16.1	-17.0	-17.1	-17.2	-16.9	-13.4	-17.2	-15.3
22	-16.9	-16.8	-17.6	-18.8	-19.0	-19.2	-19.4	-19.0	-19.4	-19.9	-19.1	-19.1	-18.4	-18.9	-17.8	-18.5	-20.2	-21.1	-22.0	-21.5	-21.8	-21.9	-21.5	-21.5	-16.8	-22.0	-19.6
23	-21.2	-20.9	-20.6	-20.4	-20.4	-20.5	-20.2	-20.0	-19.8	-19.8	-19.4	-19.0	-18.5	-18.0	-17.5	-17.1	-16.8	-16.6	-16.4	-16.7	-16.9	-17.0	-16.8	-16.5	-16.4	-21.2	-18.6
24	-16.8	-16.9	-16.8	-16.5	-16.5	-16.4	-16.0	-15.9	-15.6	-15.6	-15.5	-15.3	-15.2	-14.9	-14.7	-14.4	-14.4	-14.7	-14.4	-14.5	-14.6	-14.7	-14.7	-14.5	-14.4	-16.9	-15.4
25	-14.6	-13.8	-14.5	-14.5	-14.9	-14.9	-15.0	-15.1	-14.7	-15.1	-14.9	-15.2	-15.3	-14.3	-14.1	-13.6	-14.0	-14.0	-14.5	-14.4	-13.8	-13.3	-13.1	-13.0	-13.0	-15.3	-14.3
26	-12.9	-12.9	-12.7	-12.5	-12.4	-12.8	-13.2	-12.9	-11.3	-9.9	-7.8	-6.8	-4.4			-3.0	-2.3	-2.0	-1.9	-1.4	-1.1	-0.8	-1.1	-1.1	-0.8	-13.2	-7.1
27	-0.6	-0.3	-0.6	-0.6	-0.6	-0.7	-0.7	-0.5	-0.8	-1.2	-1.6	-1.5	-1.1	-0.7	-0.9	-1.1	-1.4	-1.1	-1.1	-0.8	-0.6	-0.5	-0.9	-0.8	-0.3	-1.6	-0.9
28	-1.7	-1.9	-1.3	-1.3	-0.8	-0.3	1.6	2.2	2.3	2.4	2.6	2.7	2.4	2.1	1.4	0.7	0.7	0.8	1.0	0.8	0.6	0.9	1.8	1.9	2.7	-1.9	0.9
29	1.9	1.5	0.6	-0.1	-0.4	-0.5	-0.6	-1.0	-1.4	-1.5	-1.7	-1.6	-1.5	-2.1	-2.2	-2.5	-1.9	-1.2	-2.2	-2.1	-1.5	-1.4	-1.2	-0.5	1.9	-2.5	-1.0
30	-0.6	0.2	0.3	-0.2	-0.3	-0.4	-0.3	-0.5	-0.9	-1.4	-1.7	-1.5	-1.2	-1.5	-2.3	-3.7	-4.3	-4.3	-3.6	-3.5	-3.5	-4.0	-4.5	-4.6	0.3	-4.6	-2.0
Max.	**6.3**	**5.8**	**5.8**	**6.1**	**6.3**	**6.8**	**6.8**	**7.1**	**7.1**	**7.0**	**7.0**	**7.3**	**7.3**	**8.0**	**8.0**	**8.1**	**7.6**	**7.9**	**7.2**	**6.9**	**7.0**	**6.3**	**5.7**	**6.4**	**8.1**		
Min.	**-21.2**	**-20.9**	**-20.6**	**-20.4**	**-20.4**	**-20.5**	**-20.2**	**-20.0**	**-19.9**	**-20.0**	**-20.0**	**-19.6**	**-19.2**	**-18.9**	**-18.3**	**-18.5**	**-20.2**	**-21.1**	**-22.0**	**-21.5**	**-21.8**	**-21.9**	**-21.5**	**-21.5**		**-22.0**	
Avg.	**-6.8**	**-6.9**	**-7.2**	**-7.4**	**-7.3**	**-7.3**	**-7.5**	**-7.6**	**-7.5**	**-7.4**	**-7.3**	**-6.9**	**-6.4**	**-6.1**	**-5.9**	**-5.8**	**-6.0**	**-6.3**	**-6.5**	**-6.6**	**-6.8**	**-6.9**	**-7.1**	**-7.1**			**-6.9**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

December 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-4.0	-4.6	-4.7	-5.2	-5.3	-5.3	-5.6	-6.3	-6.7	-7.5	-7.6	-8.7	-8.8	-8.7	-8.2	-7.1	-6.7	-6.9	-6.6	-5.5	-4.5	-4.8	-3.9	-2.1	-2.1	-8.8	-6.0
2	-1.4	-1.9	-1.8	-2.4	-2.3	-1.1	-1.0	0.5	0.7	0.8	0.4	0.0	-0.1	0.0	0.1	0.1	-0.1	-0.1	0.0	-0.5	0.0	0.1	0.4	1.2	1.2	-2.4	-0.3
3	1.5	1.4	1.6	1.7	1.5	1.0	0.9	0.3	-0.8	-1.6	-1.6	-2.3	-2.8	-2.5	-2.0	-2.3	-2.9	-2.7	-3.3	-5.0	-6.3	-7.0	-8.2	-8.3	1.7	-8.3	-2.1
4	-9.0	-9.5	-9.8	-9.5	-9.5	-9.6	-8.9	-8.7	-8.8	-8.7	-8.6	-8.4	-6.7	-6.1	-5.9	-5.5	-5.0	-4.7	-4.2	-3.3	-2.6	-2.8	-2.3	-3.2	-2.3	-9.8	-6.7
5	-3.3	-2.0	-1.3	-0.8	-0.4	-0.8	-2.1	-4.2	-4.9	-4.7	-6.3	-7.6	-8.1	-8.4	-9.2	-11.0	-12.8	-14.0	-14.2	-14.4	-14.9	-15.6	-16.2	-16.6	-0.4	-16.6	-8.1
6	-17.0	-17.2	-17.4	-17.6	-17.8	-18.0	-18.0	-18.2	-18.6	-18.8	-18.7	-18.2	-18.0	-17.7	-18.0	-18.0	-17.9	-18.2	-17.9	-17.4	-18.0	-18.3	-19.0	-19.0	-17.0	-19.0	-18.0
7	-17.6	-18.0	-18.4	-16.6	-14.1	-14.3	-12.5	-11.4	-12.1	-12.9	-11.7	-10.9	-10.3	-11.1	-11.0	-10.4	-10.5	-11.4	-12.0	-14.4	-14.8	-14.0	-14.1	-14.8	-10.3	-18.4	-13.3
8	-13.9	-13.0	-13.0	-12.1	-10.8	-11.7	-11.7	-12.6	-13.9	-13.4	-13.5	-13.9	-14.1	-14.1	-14.2	-16.3	-16.2	-14.6	-13.1	-12.2	-11.7	-11.2	-10.6	-10.6	-10.6	-16.3	-13.0
9	-12.1	-12.0	-12.1	-12.4	-12.6	-11.8	-12.0	-12.6	-12.3	-12.1	-12.1	-12.2	-11.1	-10.4	-10.5	-10.3	-10.9	-11.1	-12.0	-11.8	-11.9	-12.6	-12.2	-11.9	-10.3	-12.6	-11.8
10	-11.1	-10.3	-9.9	-9.3	-8.9	-8.8	-8.3	-7.4	-6.7	-6.0	-4.9	-4.7	-5.1	-5.4	-5.1	-5.1	-5.1	-6.2	-6.7	-7.3	-7.1	-7.7	-8.3	-9.3	-4.7	-11.1	-7.3
11	-9.5	-6.8	-7.2	-7.2	-6.2	-4.7	-4.2	-4.1	-4.0	-4.1	-4.2	-4.2	-4.0	-3.9	-3.9	-3.8	-3.9	-4.5	-4.5	-4.7	-4.6	-4.5	-5.1	-4.8	-3.8	-9.5	-4.9
12	-5.9	-7.0	-7.2	-7.3	-7.6	-7.7	-7.3	-7.0	-6.2	-6.1	-5.8	-5.8	-5.6	-5.7	-5.9	-6.6	-7.3	-8.1	-8.5	-8.4	-9.5	-9.8	-8.5	-9.2	-5.6	-9.8	-7.3
13	-9.6	-9.6	-9.0	-7.8	-7.7	-6.8	-6.0	-4.4	-4.1	-3.9	-3.8	-3.3	-2.7	-2.3	-1.8	-2.0	-1.9	-1.2	-0.9	-1.0	-1.0	-1.1	-1.2	-1.2	-0.9	-9.6	-3.9
14	-1.9	-1.2	-1.3	-1.0	-1.3	-1.0	-1.1	-1.2	-1.3	-1.5	-1.5	-1.8	-1.5	-1.5	-1.7	-1.7	-2.0	-1.9	-1.9	-2.1	-2.3	-2.3	-2.2	-2.1	-1.0	-2.3	-1.6
15	-2.5	-2.6	-2.9	-2.9	-2.9	-3.1	-2.9	-2.9	-2.6	-2.3	-2.9	-3.0	-2.8	-3.0	-2.9	-3.1	-3.6	-4.6	-5.5	-5.9	-5.9	-6.1	-5.8	-5.4	-2.3	-6.1	-3.7
16	-5.4	-5.8	-5.9	-6.8	-8.1	-8.9	-9.0	-9.0	-9.4	-9.5	-9.5	-9.6	-9.8	-10.1	-9.5	-9.6	-9.7	-10.3	-10.6	-10.7	-11.7	-12.2	-12.1	-11.6	-5.4	-12.2	-9.4
17	-11.1	-11.0	-11.6	-11.4	-11.4	-11.6	-11.8	-11.8	-14.1	-13.8	-14.3	-13.4	-13.8	-13.5	-13.3	-12.9	-13.8	-14.6	-14.8	-15.4	-15.4	-15.4	-15.3	-16.1	-11.0	-16.1	-13.4
18	-16.8	-16.7	-17.0	-17.0	-17.6	-17.0	-17.1	-16.4	-16.7	-16.4	-16.9	-16.9	-17.3	-18.2	-18.0	-18.2	-19.0	-19.4	-18.4	-19.2	-19.8	-20.0	-20.1	-19.8	-16.4	-20.1	-17.9
19	-20.4	-19.9	-20.4	-20.6	-21.3	-21.8	-21.6	-21.2	-22.0	-21.0	-21.2	-21.1	-20.3	-20.5	-20.3	-20.1	-20.1	-20.0	-18.5	-16.8	-15.6	-16.1	-15.4	-16.7	-15.4	-22.0	-19.7
20	-17.6	-17.0	-17.7	-17.5	-17.3	-17.0	-17.1	-17.3	-18.4	-18.3	-18.0	-19.9	-20.4	-20.2	-20.0	-21.0	-23.2	-22.4	-22.9	-22.4	-24.0	-25.3	-23.9	-25.6	-17.0	-25.6	-20.2
21	-25.0	-23.5	-25.1	-25.7	-24.4	-25.5	-25.6	-27.0	-26.4	-26.8	-25.9	-22.3	-18.0	-15.2	-17.6	-14.7	-11.6	-8.0	-6.9	-7.0	-6.0	-5.8	-5.2	-4.7	-4.7	-27.0	-17.7
22	-4.4	-4.5	-4.2	-4.0	-4.1	-4.3	-4.1	-4.0	-3.9	-3.4	-2.7	-2.4	-2.0	-2.2	-1.8	-1.5	-1.2	-0.7	-0.5	-0.4	-0.4	-0.3	0.1	-0.1	0.1	-4.5	-2.4
23	0.0	0.0	0.1	-0.2	-0.1	-0.3	-0.2	0.1	0.1	0.0	0.1	-0.2	0.0	-0.2	-0.2	-0.1	0.0	-0.1	-0.1	0.1	0.3	0.1	0.2	0.4	0.4	-0.3	0.0
24	0.3	0.1	0.3	0.4	0.5	0.2	0.3	0.4	0.5	0.2	0.3	0.2	0.2	0.2	0.2	-0.2	-0.1	-0.1	-0.3	-3.1	-7.8	-8.9	-8.7	-9.0	0.5	-9.0	-1.4
25	-9.9	-11.0	-11.9	-12.0	-13.3	-14.5	-14.9	-15.1	-15.3	-15.7	-15.8	-15.9	-15.4	-14.9	-14.6	-15.4	-15.9	-16.2	-16.4	-17.6	-18.8	-18.1	-18.2	-19.1	-9.9	-19.1	-15.3
26	-19.2	-19.6	-19.8	-20.0	-20.4	-20.2	-17.1	-15.6	-13.3	-10.6	-8.6	-7.6	-6.3	-5.1	-4.6	-4.4	-4.0	-3.8	-3.8	-3.2	-2.7	-2.3	-2.3	-2.5	-2.3	-20.4	-9.9
27	-2.5	-2.8	-3.5	-4.3	-4.2	-4.5	-4.9	-5.2	-5.3	-5.4	-5.5	-6.4	-7.4	-8.0	-8.9	-10.3	-11.3	-12.3	-13.1	-14.5	-14.9	-15.5	-15.5	-15.2	-2.5	-15.5	-8.4
28	-15.3	-15.9	-16.5	-17.4	-17.5	-16.8	-17.7	-17.8	-18.0	-17.9	-17.9	-18.0	-17.5	-17.6	-18.0	-17.3	-17.0	-17.0	-16.8	-16.3	-15.0	-14.8	-13.0	-12.4	-12.4	-18.0	-16.6
29	-11.9	-12.6	-11.0	-10.9	-9.8	-8.8	-7.8	-7.3	-6.9	-6.7	-7.7	-7.8	-8.0	-8.1	-8.1	-8.1	-8.4	-9.7	-10.0	-11.3	-10.8	-12.2	-11.7	-11.9	-6.7	-12.6	-9.5
30	-13.6	-14.2	-15.4	-15.7	-16.0	-17.0	-17.2	-17.0	-16.7	-15.6	-15.1	-14.5	-14.7	-14.4	-13.0	-12.6	-12.3	-13.7	-14.2	-13.3	-11.8	-11.2	-9.8	-6.8	-6.8	-17.2	-14.0
31	-6.2	-6.5	-6.5	-4.5	-4.2	-2.5	-2.5	-3.6	-4.3	-3.6	-3.0	-2.1	-1.9	-1.5	-1.4	-0.6	-0.7	-0.8	-0.8	-0.9	-1.2	-1.1	-1.1	-1.2	-0.6	-6.5	-2.6
Max.	**1.5**	**1.4**	**1.6**	**1.7**	**1.5**	**1.0**	**0.9**	**0.5**	**0.7**	**0.8**	**0.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**	**0.0**	**-0.1**	**0.0**	**0.1**	**0.3**	**0.1**	**0.4**	**1.2**	**1.7**		
Min.	**-25.0**	**-23.5**	**-25.1**	**-25.7**	**-24.4**	**-25.5**	**-25.6**	**-27.0**	**-26.4**	**-26.8**	**-25.9**	**-22.3**	**-20.4**	**-20.5**	**-20.3**	**-21.0**	**-23.2**	**-22.4**	**-22.9**	**-22.4**	**-24.0**	**-25.3**	**-23.9**	**-25.6**		**-27.0**	
Avg.	**-9.5**	**-9.5**	**-9.7**	**-9.6**	**-9.5**	**-9.5**	**-9.3**	**-9.3**	**-9.4**	**-9.3**	**-9.2**	**-9.1**	**-8.8**	**-8.7**	**-8.7**	**-8.7**	**-8.9**	**-9.0**	**-9.0**	**-9.2**	**-9.4**	**-9.6**	**-9.3**	**-9.3**			**-9.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

January 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.3	-1.0	-0.3	-0.1	-0.1	0.3	-0.3	-0.9	-2.0	-3.1	-3.5	-3.0	-2.9	-2.9	-2.0	-1.7	-3.6	-4.3	-4.8	-5.0	-4.6	-4.9	-5.8	-6.5	0.3	-6.5	-2.7
2	-6.8	-6.8	-6.8	-7.4	-7.5	-7.6	-7.7	-7.7	-7.6	-7.5	-7.2	-7.0	-7.3	-6.7	-6.4	-6.3	-6.1	-5.8	-5.9	-5.6	-5.5	-5.5	-5.5	-5.4	-5.4	-7.7	-6.7
3	-5.4	-5.5	-5.6	-5.8	-6.3	-6.0	-5.8	-5.7	-5.8	-5.7	-6.0	-6.4	-6.9	-6.7	-6.4	-6.7	-6.8	-7.0	-7.3	-7.3	-7.2	-7.6	-8.1	-8.7	-5.4	-8.7	-6.5
4	-10.1	-11.0	-11.4	-11.9	-12.5	-12.3	-13.5	-15.4	-15.4	-15.7	-14.9	-14.7	-14.6												-10.1	-15.7	-13.3
5															-1.2	-1.0	-0.7	-0.6	-0.3	-0.2	0.0	0.2	0.4	0.7	0.7	-1.2	-0.3
6	-0.1	-0.4	-0.4	-0.2	-0.3	-0.6	-0.9	-0.7	-0.8	-1.3	-1.1	-0.9	-1.2	-0.8	-0.4	-0.1	-0.2	0.2	0.2	0.0	-0.1	-0.4	-0.7	-0.8	0.2	-1.3	-0.5
7	-0.6	-0.4	-0.3	-0.6	-0.9	-0.9	-1.1	-0.9	-0.8	-2.1	-1.9	-1.9	-2.5	-2.5	-1.9	-1.7	-1.5	-1.8	-1.6	-1.7	-1.6	-1.6	-1.7	-2.0	-0.3	-2.5	-1.4
8	-2.7	-2.5	-1.8	-1.7	-1.7	-1.6	-1.1	-0.3	-0.1	-0.1	0.7	1.4	1.7	1.4	1.0	0.3	-0.2	0.7	-2.3	-2.0	-1.8	-0.6	-0.8	-2.4	1.7	-2.7	-0.7
9	-4.9	-6.9	-6.7	-7.9	-7.4	-7.9	-8.3	-7.8	-8.1	-8.4	-9.0	-9.1	-8.2	-7.6	-7.8	-8.3	-8.5	-8.5	-8.5	-8.5	-9.3	-10.1	-10.1	-10.1	-4.9	-10.1	-8.2
10	-10.0	-10.4	-9.6	-9.7	-9.8	-10.0	-10.3	-10.6	-11.0	-10.9	-10.9	-10.4	-9.9	-10.1	-9.9	-10.6	-11.1	-12.1	-12.4	-12.2	-11.6	-10.1	-9.8	-11.1	-9.6	-12.4	-10.6
11	-10.8	-10.5	-9.9	-9.4	-7.4	-6.6	-7.6	-6.7	-8.0	-7.8	-7.4	-7.6	-7.4	-7.5	-7.6	-6.5	-5.5	-5.1	-5.4	-5.6	-5.5	-4.1	-2.5	-2.0	-2.0	-10.8	-6.8
12	-1.1	-0.8	-0.8	-0.9	-0.9	-1.1	-1.7	-1.9	-2.4	-1.1	-0.9	-0.1	0.3	0.4	0.9	1.3	1.2	1.5	1.7	1.9	1.5	0.7	-0.1	-0.3	1.9	-2.4	-0.1
13	-0.2	-0.5	-0.1	0.2	0.3	1.0	0.9	0.7	0.8	1.0	1.5	1.2	1.2	1.2	1.2	1.1	1.5	2.0	2.4	2.2	2.3	3.3	4.7	4.6	4.7	-0.5	1.4
14	4.5	4.6	4.9	4.7	4.1	3.7	2.7	3.5	3.3	1.8	1.4	1.4	0.9	0.5	0.5	0.9	0.9	0.7	0.5	0.5	0.8	0.7	0.8	0.6	4.9	0.5	2.0
15	0.7	0.1	-1.2	-1.1	-0.9	-0.6	-0.6	-0.2	-0.2	-0.4	-0.6	-0.5	-0.2	-0.1	-0.3	-0.1	-0.1	0.3	0.9	0.6	0.3	0.0	0.1	0.0	0.9	-1.2	-0.2
16	0.3	0.2	-0.2	-0.3	0.2	0.7	1.5	1.8	1.9	1.3	0.7	0.7	0.9	1.5	2.0	1.3	1.5	2.7	2.5	2.0	1.7	0.9	0.1	0.2	2.7	-0.3	1.1
17	0.3	0.7	0.5	1.2	1.6	1.5	1.5	1.3	1.3	1.8	1.7	1.6	1.0	0.8	0.5	0.2	-0.5	-0.4	-0.2	0.0	0.3	0.2	0.1	0.0	1.8	-0.5	0.7
18	-0.2	-0.7	-0.9	-0.8	-0.9	-2.0	-1.6	-1.9	-2.4	-2.9	-3.1	-1.7	-1.3	-1.4	-1.7	-2.3	-2.4	-2.8	-3.0	-3.6	-4.6	-4.6	-4.0	-5.2	-0.2	-5.2	-2.3
19	-6.4	-7.0	-7.3	-8.2	-8.4	-8.8	-8.9	-9.7	-10.2	-11.1	-10.3	-10.3	-10.0	-9.0	-8.5	-8.4	-8.5	-9.0	-9.9	-10.0	-9.8	-10.2	-10.6	-10.8	-6.4	-11.1	-9.2
20	-10.8	-11.1	-11.9	-11.0	-11.6	-12.1	-11.3	-11.6	-10.8	-9.7	-10.2	-10.4	-10.4	-9.3	-8.2	-7.2	-6.2	-6.6	-7.5	-8.0	-8.2	-7.5	-8.1	-8.3	-6.2	-12.1	-9.5
21	-8.9	-8.7	-8.5	-8.1	-8.4	-8.0	-8.8	-9.1	-8.9	-7.7	-8.0	-9.1	-9.4	-8.4	-8.0	-7.6	-7.6	-7.6	-8.0	-8.5	-8.3	-8.1	-7.0	-5.7	-5.7	-9.4	-8.2
22	-5.5	-5.6	-5.4	-4.5	-4.3	-3.9	-4.1	-3.7	-4.0	-4.8	-4.8	-4.0	-3.2	-2.8	-2.5	-2.4	-2.8	-3.2	-3.0	-3.7	-4.2	-4.0	-3.7	-3.6	-2.4	-5.6	-3.9
23	-3.7	-3.8	-3.7	-3.7	-3.7	-4.6	-5.1	-5.9	-7.4	-9.0	-9.5	-9.3	-9.0	-10.6	-10.7	-11.3	-12.7	-12.4	-12.9	-12.7	-12.2	-14.1	-14.8	-15.2	-3.7	-15.2	-9.1
24	-15.5	-16.0	-15.9	-15.7	-15.3	-15.0	-14.5	-14.1	-14.1	-13.8	-13.1	-13.2	-13.2	-12.2	-11.5	-10.8	-10.8	-9.8	-9.2	-8.3	-7.1	-7.1	-7.5	-6.3	-6.3	-16.0	-12.1
25	-4.5	-3.4	-2.7	-2.7	-2.8	-1.7	-1.5	-3.4	-3.7	-5.7	-5.7	-6.4	-8.1	-8.3	-8.6	-9.6	-11.0	-14.3	-14.1	-14.3	-15.1	-14.9	-16.3	-17.1	-1.5	-17.1	-8.2
26	-17.1	-17.2	-14.7	-14.2	-14.7	-14.8	-17.8	-19.4	-19.9	-19.5	-19.5	-20.2	-19.2	-19.4	-19.8	-19.7	-20.2	-20.3	-20.9	-21.6	-22.4	-23.0	-23.2	-23.7	-14.2	-23.7	-19.3
27	-23.6	-24.2	-24.4	-24.5	-24.7	-24.9	-25.4	-25.6	-25.8	-25.8	-25.7	-24.3	-23.6	-22.5	-22.0	-21.6	-21.5	-21.7	-21.8	-21.5	-21.7	-21.8	-21.9	-21.9	-21.5	-25.8	-23.4
28	-22.3	-22.9	-23.5	-23.4	-23.1	-23.1	-23.1	-23.3	-23.7	-24.1	-24.1	-24.3	-24.0	-23.9	-23.7	-23.3	-22.9	-23.0	-23.3	-23.5	-23.5	-23.6	-23.6	-23.5	-22.3	-24.3	-23.4
29	-23.5	-23.6	-23.8	-23.6	-23.3	-22.8	-22.7	-22.4	-21.8	-21.9	-21.6	-21.1	-20.5	-20.0	-19.8	-18.8	-18.4	-18.8	-19.2	-19.3	-19.1	-19.5	-19.6	-20.2	-18.4	-23.8	-21.0
30	-20.4	-20.8	-21.1	-21.5	-21.7	-22.1	-22.8	-23.2	-23.7	-24.0	-24.4	-24.5	-23.8	-23.3	-23.1	-23.3	-23.5	-24.0	-24.5	-25.1	-25.4	-25.6	-26.0		-20.4	-26.0	-23.4
31																											
Max.	**4.5**	**4.6**	**4.9**	**4.7**	**4.1**	**3.7**	**2.7**	**3.5**	**3.3**	**1.8**	**1.7**	**1.6**	**1.7**	**1.5**	**2.0**	**1.3**	**1.5**	**2.7**	**2.5**	**2.2**	**2.3**	**3.3**	**4.7**	**4.6**	**4.9**		
Min.	**-23.6**	**-24.2**	**-24.4**	**-24.5**	**-24.7**	**-24.9**	**-25.4**	**-25.6**	**-25.8**	**-25.8**	**-25.7**	**-24.5**	**-24.0**	**-23.9**	**-23.7**	**-23.3**	**-23.5**	**-24.0**	**-24.5**	**-25.1**	**-25.4**	**-25.6**	**-26.0**	**-23.7**		**-26.0**	
Avg.	**-7.3**	**-7.5**	**-7.4**	**-7.3**	**-7.3**	**-7.3**	**-7.6**	**-7.8**	**-8.0**	**-8.2**	**-8.2**	**-8.1**	**-8.0**	**-7.5**	**-7.1**	**-7.0**	**-7.2**	**-7.3**	**-7.5**	**-7.6**	**-7.7**	**-7.7**	**-7.8**	**-7.3**			**-7.5**

Total Hours in Month 744 **Hours Data Available** 694 **Data Recovery** 93.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

February 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-26.2	-25.8	-25.4	-25.2	-25.0	-24.9	-25.0	-24.9	-25.1	-25.3	-25.2	-25.1	-25.2	-24.9	-24.8	-24.8	-25.1	-25.1	-25.4	-25.5	-25.5	-25.5	-25.3	-25.3	-24.8	-26.2	-25.2
2	-25.3	-25.3	-25.3	-25.4	-25.8	-25.9	-26.0	-26.0	-26.0	-26.1	-26.5	-26.3	-25.5	-24.7	-24.5	-24.1	-24.6	-24.6	-25.0	-25.5	-26.6	-26.9	-26.4	-26.5	-24.1	-26.9	-25.6
3	-26.4	-26.6	-25.9	-25.3	-24.4	-24.9	-25.0	-25.1	-25.5	-25.6	-25.4	-25.5	-24.6	-24.4	-24.4	-24.3	-24.5	-25.4	-26.1	-26.8	-27.3	-27.5	-27.6	-27.8	-24.3	-27.8	-25.7
4	-28.0	-28.1	-28.2	-27.9	-28.3	-28.2	-28.6	-28.7	-29.3	-29.0	-28.8	-28.8	-28.4	-28.0	-27.3	-26.9	-26.7	-26.5	-27.0	-27.1	-27.3	-27.4	-26.6	-26.6	-26.5	-29.3	-27.8
5	-27.0	-26.2	-20.2	-17.4	-18.8	-14.8	-12.8	-12.3	-12.1	-11.9	-11.3	-12.1	-10.9	-10.3	-9.3	-7.4	-6.6	-6.6	-6.4	-6.1	-5.7	-4.8	-4.3	-4.3	-4.3	-27.0	-11.6
6	-5.2	-5.8	-6.3	-7.2	-7.2	-6.5	-7.0	-7.3	-7.7	-8.4	-8.9	-8.6	-8.7	-9.1	-9.5	-11.3	-10.9	-11.5	-11.7	-11.9	-12.9	-14.3	-14.8	-15.7	-5.2	-15.7	-9.5
7	-16.1	-16.6	-17.1	-16.5	-17.5	-17.7	-18.9	-18.8	-19.0	-19.6	-19.5	-19.9	-19.2	-18.3	-19.2	-19.3	-18.6	-19.5	-21.2	-20.8	-20.4	-21.8	-22.4	-22.9	-16.1	-22.9	-19.2
8	-22.8	-22.5	-22.8	-22.2	-22.1	-21.3	-21.4	-20.6	-19.7	-18.4	-19.0	-19.6	-16.4	-15.2	-10.8	-14.5	-13.7	-11.9	-11.5	-10.2	-8.6	-9.5	-8.6	-9.2	-8.6	-22.8	-16.3
9	-8.2	-6.5	-5.8	-5.9	-6.5	-7.0	-6.4	-7.0	-6.7	-6.4	-6.4	-6.2	-5.5	-4.3	-3.8	-4.6	-4.6	-4.8	-5.0	-5.3	-5.6	-5.9	-5.8	-5.8	-3.8	-8.2	-5.8
10	-6.0	-5.2	-4.8	-4.7	-4.3	-4.4	-3.9	-3.3	-3.5	-3.8	-3.1	-3.3	-1.4	-0.4	0.3	0.5	0.2	-0.4	-1.0	-1.5	-1.6	-1.6	-1.4	-1.0	0.5	-6.0	-2.5
11	-1.0	-1.2	-1.7	-2.8	-3.4	-3.5	-3.5	-4.0	-4.2	-4.7	-4.7	-4.7	-4.9	-5.5	-4.9	-4.8	-5.6	-6.1	-7.3	-8.3	-9.2	-9.0	-8.6	-9.0	-1.0	-9.2	-5.1
12	-9.2	-9.2	-9.3	-10.2	-9.9	-10.3	-10.6	-10.6	-10.8	-11.0	-11.0	-10.8	-10.0	-9.3	-8.7	-8.7	-8.3	-8.3	-8.6	-8.6	-9.3	-9.6	-9.9	-9.7	-8.3	-11.0	-9.7
13	-9.4	-9.4	-9.4	-7.8	-8.5	-8.8	-9.1	-8.8	-8.5	-8.8	-9.0		-12.0	-11.0	-10.3	-10.3	-10.5	-10.8	-11.0	-10.9	-12.3	-12.1	-11.4	-12.0	-7.8	-12.3	-10.1
14	-11.6	-11.1	-11.0	-11.3	-11.2	-10.9	-12.0	-12.2	-12.3	-12.1	-11.9	-10.9	-10.0	-8.6	-7.1	-8.4	-8.5	-9.7	-10.1	-10.9	-11.8	-11.5	-11.5	-11.4	-7.1	-12.3	-10.8
15	-11.7	-11.6	-11.9	-11.8	-12.3	-11.5	-11.3	-11.3	-11.8	-12.0	-12.7	-13.5	-13.4	-13.5	-13.4	-13.2	-13.4	-13.8	-14.2	-14.5	-14.8	-15.8	-16.1	-16.6	-11.3	-16.6	-13.2
16	-16.4	-16.3	-16.6	-16.7	-16.4	-16.2	-16.1	-17.1	-17.3	-17.1	-17.3	-17.6	-17.5	-17.7	-17.6	-17.5	-17.8	-18.4	-18.8	-19.1	-19.8	-20.1	-20.7	-21.6	-16.1	-21.6	-17.8
17	-21.6	-21.8	-22.1	-22.8	-22.2	-22.4	-22.3	-22.7	-24.8	-23.7	-23.0	-22.5	-21.5	-21.9	-20.7	-19.7	-19.5	-20.1	-21.0	-21.5	-21.5	-20.9	-21.0	-20.9	-19.5	-24.8	-21.8
18	-19.9	-18.9	-18.9	-20.7	-21.9	-21.1	-21.9	-21.0	-22.0	-20.7	-21.2	-20.5	-19.0	-18.5	-16.5	-17.2	-18.5	-18.4	-19.7	-21.0	-19.7	-19.9	-19.8	-18.9	-16.5	-22.0	-19.8
19	-19.8	-19.6	-18.9	-18.6	-17.9	-17.2	-16.0	-16.3	-15.3	-15.4	-15.5	-13.7	-11.4	-14.3	-11.1	-10.9	-11.7	-11.0	-11.7	-12.7	-13.3	-13.1	-13.2	-12.9	-10.9	-19.8	-14.6
20	-13.3	-12.5	-12.1	-12.2	-12.6	-14.2	-15.1	-15.7	-17.3	-17.8	-17.4	-15.8	-14.9	-16.1	-14.3	-15.1	-16.0	-16.8	-18.6	-19.9	-21.1	-21.0	-21.8	-22.3	-12.1	-22.3	-16.4
21	-22.1	-21.1	-20.2	-20.9	-22.1	-21.9	-21.3	-21.9	-22.8	-23.1	-21.8	-21.4	-21.6	-21.4	-20.7	-19.8	-20.4	-20.5	-21.3	-22.0	-22.1	-22.4	-22.9	-23.3	-19.8	-23.3	-21.6
22	-23.5	-23.5	-23.6	-23.6	-24.0	-23.6	-24.2	-23.9	-23.4	-23.7	-23.8	-22.6	-23.6	-23.0	-21.0	-19.9	-20.2	-20.0	-20.6	-21.3	-20.6	-20.5	-20.5	-20.2	-19.9	-24.2	-22.3
23	-19.6	-18.1	-16.6	-15.9	-15.9	-15.7	-15.1	-14.1	-13.1	-12.5	-13.2	-13.5	-13.5	-14.7	-15.0	-15.3	-15.6	-15.2	-15.2	-15.1	-15.3	-15.5	-15.9	-16.0	-12.5	-19.6	-15.2
24	-15.5	-15.3	-15.5	-15.4	-15.2	-15.2	-15.3	-15.1	-14.7	-14.5	-13.6	-11.9	-12.4	-11.4	-10.4	-8.8	-5.6	-4.5	-4.9	-5.3	-6.1	-6.7	-5.8	-7.5	-4.5	-15.5	-11.1
25	-8.5	-6.7	-5.7	-5.8	-5.7	-5.8	-5.9	-6.1	-6.5	-7.1	-6.8	-5.7	-7.6	-9.5	-9.5	-8.8	-8.4	-7.8	-8.9	-10.0	-10.6	-10.1	-8.2	-8.5	-5.7	-10.6	-7.7
26	-7.8	-7.2	-6.3	-6.6	-6.7	-7.3	-6.6	-7.0	-6.7	-6.6	-7.6	-7.2	-6.7	-6.6	-6.5	-6.8	-6.8	-6.9	-7.6	-7.9	-8.2	-8.4	-8.5	-8.6	-6.3	-8.6	-7.2
27	-8.4	-8.9	-9.6	-9.8	-10.1	-10.4	-11.8	-12.4	-11.9	-9.5	-9.1	-9.2	-7.3	-5.9	-5.0	-4.8	-5.4	-7.0	-9.0	-10.1	-10.8	-11.5	-10.7	-10.9	-4.8	-12.4	-9.1
28	-11.1	-11.4	-12.8	-13.0	-12.8	-12.4	-12.9	-13.6	-13.8	-13.4	-13.1	-12.7	-12.2	-11.8	-12.4	-13.9	-14.0	-14.0	-14.1	-14.4	-14.5	-14.5	-14.8	-15.3	-11.1	-15.3	-13.3
29	-15.6	-16.2	-17.2	-17.1	-18.3	-18.9	-18.1	-17.8	-18.2	-19.5	-19.0	-18.1	-17.8	-18.5	-19.1	-19.6	-20.1	-21.2	-22.1	-23.5	-24.2	-24.8	-24.5	-24.6	-15.6	-24.8	-19.7
Max.	**-1.0**	**-1.2**	**-1.7**	**-2.8**	**-3.4**	**-3.5**	**-3.5**	**-3.3**	**-3.5**	**-3.8**	**-3.1**	**-3.3**	**-1.4**	**-0.4**	**0.3**	**0.5**	**0.2**	**-0.4**	**-1.0**	**-1.5**	**-1.6**	**-1.6**	**-1.4**	**-1.0**	**0.5**		
Min.	**-28.0**	**-28.1**	**-28.2**	**-27.9**	**-28.3**	**-28.2**	**-28.6**	**-28.7**	**-29.3**	**-29.0**	**-28.8**	**-28.8**	**-28.4**	**-28.0**	**-27.3**	**-26.9**	**-26.7**	**-26.5**	**-27.0**	**-27.1**	**-27.3**	**-27.5**	**-27.6**	**-27.8**		**-29.3**	
Avg.	**-15.8**	**-15.5**	**-15.2**	**-15.2**	**-15.4**	**-15.3**	**-15.3**	**-15.4**	**-15.5**	**-15.4**	**-15.4**	**-15.3**	**-14.6**	**-14.4**	**-13.7**	**-13.8**	**-13.8**	**-14.0**	**-14.7**	**-15.1**	**-15.4**	**-15.6**	**-15.5**	**-15.7**			**-15.0**

Total Hours in Month 696 **Hours Data Available** 695 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

March 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-25.3	-26.1	-25.7	-25.9	-26.2	-26.5	-26.9	-26.5	-26.6	-26.5	-26.2	-25.7	-25.1	-24.2	-24.0	-23.5	-22.8	-23.0	-23.6	-24.0	-23.7	-23.7	-23.7	-23.0	-22.8	-26.9	-24.9
2	-22.8	-24.0	-23.4	-23.5	-23.4	-22.6	-22.1	-22.2	-22.5	-24.0	-23.0	-21.3	-20.3	-18.6	-17.9	-17.2	-17.3	-17.8	-18.2	-18.8	-18.8	-19.2	-19.0	-19.7	-17.2	-24.0	-20.7
3	-19.6	-19.9	-19.9	-19.1	-18.5	-18.9	-19.2	-19.1	-19.4	-19.4	-19.5	-19.5	-19.2	-19.5	-19.2	-19.8	-20.7	-21.1	-21.6	-22.1	-22.6	-22.7	-23.3	-23.2	-18.5	-23.3	-20.3
4	-23.3	-24.0	-24.2	-24.1	-24.9	-24.5	-23.5	-23.3	-23.5	-25.1	-25.1	-23.2	-22.5	-21.0	-20.1	-18.5	-18.1	-18.9	-20.1	-21.3	-21.6	-21.7	-21.4	-21.4	-18.1	-25.1	-22.3
5	-22.5	-22.7	-23.6	-23.3	-23.6	-23.0	-22.8	-22.8	-23.0	-23.1	-21.6	-19.1	-17.0	-15.8	-17.3	-15.1	-15.9	-17.0	-16.1	-16.5	-15.9	-16.2	-16.6	-18.0	-15.1	-23.6	-19.5
6	-18.9	-18.0	-18.0	-16.9	-17.1	-16.4	-15.8	-15.5	-15.8	-15.5	-14.5	-12.2	-11.6	-10.9	-10.7	-10.3	-12.0	-12.5	-12.9	-13.4	-11.7	-9.8	-10.1	-9.9	-9.8	-18.9	-13.8
7	-9.7	-9.8	-9.7	-6.7	-5.2	-4.9	-3.6	-2.3	-2.1	-1.0	-0.9	-0.8	0.3	1.6	2.0	2.6	2.5	2.5	2.2	1.8	1.3	0.6	0.8	1.1	2.6	-9.8	-1.6
8	1.1	1.1	1.0	1.4	1.9	1.4	1.3	0.8	0.0	-0.7	-0.8	-0.5	-0.4	0.1	0.3	0.4	0.5	0.0	0.0	0.0	0.2	0.6	0.3	0.2	1.9	-0.8	0.4
9	0.1	0.3	0.3	0.7	1.3	1.6	1.7	1.7	2.0	2.4	2.9	2.9	2.2	2.0	2.1	1.3	1.2	0.7	0.4	0.1	-0.4	-0.6	-0.3	0.7	2.9	-0.6	1.1
10	1.1	1.3	1.0	0.9	0.5	0.9	0.6	0.5	0.6	1.5	2.0	2.4	2.4	2.2	2.4	1.2	0.9	1.2	1.2	0.7	0.3	-0.1	-0.3	-0.3	2.4	-0.3	1.0
11	-0.2	-0.3	-0.7	-1.0	-1.0	-1.7	-3.0	-4.7	-5.8	-6.6	-7.3	-7.9	-8.5	-8.4	-7.3	-7.4	-7.3	-7.6	-8.3	-8.4	-8.3	-8.0	-8.0	-7.9	-0.2	-8.5	-5.6
12	-7.8	-7.6	-7.6	-7.9	-8.1	-8.0	-8.4	-8.6	-8.5	-8.0	-8.0	-6.6	-7.2	-5.6	-4.7	-4.7	-4.7	-5.2	-5.7	-6.2	-6.6	-6.9	-7.2	-7.1	-4.7	-8.6	-7.0
13	-7.3	-7.7	-7.4	-6.7	-7.1	-7.1	-7.6	-8.2	-8.0	-7.7	-7.7	-7.3	-5.6	-4.1	-3.2	-2.6	-4.1	-4.9	-5.4	-8.4	-9.9	-10.1	-8.9	-7.8	-2.6	-10.1	-6.9
14	-6.9	-4.3	-5.5	-6.4	-5.0	-3.5	-3.3	-3.5	-2.9	-2.4	-1.9	-1.1	-0.3	0.1	0.6	1.2	1.5	1.5	1.6	1.5	1.5	1.5	1.6	1.7	1.7	-6.9	-1.4
15	1.4	1.0	0.3	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.2	0.1	0.4	0.9	1.1	0.4	1.1	1.1	0.5	-0.3	-0.9	-0.9	-1.1	-1.6	-1.7	1.4	-1.7	0.0
16	-1.5	-1.0	-1.0	-1.1	-1.3	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-0.1	1.4	1.3	1.1	0.9	1.5	0.2	-0.1	-0.2	-0.5	-0.4	-0.2	-0.4	1.5	-1.5	-0.3
17	-0.5	-0.7	-0.3	-0.6	-0.6	-0.8	-0.9	-1.0	-0.8	-0.7	-0.3	-0.1	0.2	0.6	0.4	0.4	0.2	0.0	-0.6	-1.4	-2.7	-3.3	-3.2	-3.7	0.6	-3.7	-0.8
18	-3.7	-2.4	-2.3	-2.5	-2.3	-1.9	-1.9	-1.8	-1.5	-1.6	-1.5	-1.3	-1.1	-1.3	-1.2	-1.3	-1.3	-1.5	-1.4	-1.3	-1.0	-1.0	-0.9	-0.8	-0.8	-3.7	-1.6
19	-0.9	-0.9	-0.9	-0.9	-0.4	-0.2	-0.4	-0.2	-0.1	0.3	0.4	0.6	0.8	1.1	1.2	0.9	0.9	0.9	0.6	0.7	0.5	0.5	0.3	0.4	1.2	-0.9	0.2
20	0.0	-0.3	-0.6	-1.2	-1.4	-0.8	-1.3	-1.2	-1.0	-0.7	-0.6	-0.6	-1.3	-2.0	-2.0	-2.1	-4.2	-5.2	-5.9	-6.4	-6.9	-7.2	-7.3	-7.8	0.0	-7.8	-2.8
21	-8.4	-8.4	-8.4	-8.6	-8.6	-8.8	-8.9	-9.2	-9.4	-9.5	-9.3	-8.8	-8.4	-7.6	-6.9	-6.4	-6.0	-6.7	-7.8	-7.5	-7.4	-6.8	-5.9	-5.8	-5.8	-9.5	-7.9
22	-4.9	-5.1	-5.1	-3.9	-3.0	-3.3	-3.2	-3.1	-2.6	-2.3	-1.9	-1.5	-1.2	-0.7	-0.4	-0.2	0.0	0.4	0.4	0.4	0.5	0.8	0.9	0.9	0.9	-5.1	-1.6
23	1.3	0.9	0.3	0.6	0.5	0.4	0.6	0.9	0.4	0.1	0.2	0.5	0.7	1.1	1.7	1.5	1.0	0.4	0.0	-0.2	-0.2	0.0	-0.1	-0.4	1.7	-0.4	0.5
24	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	0.2	0.1	-0.4	-0.3	0.2	0.4	0.6	0.8	1.2	1.3	1.2	0.7	0.9	0.9	0.9	0.7	0.5	0.4	1.3	-0.6	0.3
25	0.3	-0.1	-1.2	-1.8	-1.0	-0.9	-1.9	-3.7	-4.4	-4.5	-4.3	-4.1													0.3	-4.5	-2.3
26														-2.7	-2.3	-2.3	-2.0	-2.2	-2.7	-3.2	-3.4	-3.4	-3.8	-3.8	-2.0	-3.8	-2.9
27	-4.0	-5.3	-7.2	-8.8	-9.5	-9.7	-10.2	-10.7	-11.1	-11.5	-11.6	-11.4	-11.0	-10.7	-10.8	-10.7	-10.6	-10.8	-11.0	-11.4	-12.0	-12.3	-12.6	-13.1	-4.0	-13.1	-10.3
28	-13.5	-14.3	-14.7	-15.0	-15.6	-16.2	-16.7	-16.2	-16.1	-15.7	-15.4	-14.5	-13.8	-13.3	-12.6	-12.1	-11.3	-11.1	-11.4	-12.1	-12.9	-13.6	-13.2	-13.5	-11.1	-16.7	-14.0
29	-14.2	-14.4	-14.1	-14.5	-14.7	-14.6	-14.6	-14.9	-13.6	-11.9	-10.5	-8.2	-7.6	-5.0	-6.3	-5.3	-4.2	-5.0	-4.8	-6.0	-8.3	-8.5	-8.9	-9.1	-4.2	-14.9	-10.0
30	-9.0	-9.5	-9.6	-9.6	-10.0	-10.2	-10.8	-10.8	-10.2	-8.9	-6.3	-3.3	-3.5	-2.0	-3.1	-3.7	-1.4	-3.3	-4.6	-5.5	-5.6	-5.8	-7.2	-7.3	-1.4	-10.8	-6.7
31	-7.4	-8.9	-7.8	-7.8	-8.2	-9.6	-9.8	-10.8	-11.3	-9.8	-7.8	-7.3	-5.7	-5.7	-4.5	-1.2	-4.3	-4.2	-4.1	-4.2	-6.2	-6.4	-5.3	-3.2	-1.2	-11.3	-6.7
Max.	**1.4**	**1.3**	**1.0**	**1.4**	**1.9**	**1.6**	**1.7**	**1.7**	**2.0**	**2.4**	**2.9**	**2.9**	**2.4**	**2.2**	**2.4**	**2.6**	**2.5**	**2.5**	**2.2**	**1.8**	**1.5**	**1.5**	**1.6**	**1.7**	**2.9**		
Min.	**-25.3**	**-26.1**	**-25.7**	**-25.9**	**-26.2**	**-26.5**	**-26.9**	**-26.5**	**-26.6**	**-26.5**	**-26.2**	**-25.7**	**-25.1**	**-24.2**	**-24.0**	**-23.5**	**-22.8**	**-23.0**	**-23.6**	**-24.0**	**-23.7**	**-23.7**	**-23.7**	**-23.2**		**-26.9**	
Avg.	**-7.6**	**-7.7**	**-7.9**	**-7.8**	**-7.8**	**-7.7**	**-7.8**	**-7.9**	**-8.0**	**-7.8**	**-7.4**	**-6.6**	**-6.3**	**-5.6**	**-5.4**	**-5.1**	**-5.2**	**-5.6**	**-6.0**	**-6.4**	**-6.7**	**-6.8**	**-6.8**	**-6.8**			**-6.7**

Total Hours in Month 744 **Hours Data Available** 719 **Data Recovery** 96.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

April *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-3.1	-3.4	-2.3	-3.0	-2.3	-1.6	-2.1	-2.1	-2.2	-2.6	-1.7	-1.6	-2.0	-0.6	-1.4	-0.8	-3.5	-3.0	-2.9	-3.0	-3.3	-3.5	-3.6	-4.5	-0.6	-4.5	-2.5
2	-4.1	-3.5	-4.1	-4.0	-3.9	-4.2	-4.3	-4.4	-4.2	-3.8	-2.9	-3.5	-2.7	-2.3	-3.9	-4.1	-4.3	-4.3	-4.4	-4.3	-4.9	-5.9	-7.0	-8.1	-2.3	-8.1	-4.3
3	-8.7	-10.1	-10.7	-11.2	-12.0	-12.8	-12.7	-13.9	-13.1	-12.4	-11.3	-10.1	-8.8	-8.5	-8.1	-7.7	-7.5	-7.3	-7.1	-7.0	-7.1	-7.8	-8.0	-8.2	-7.0	-13.9	-9.7
4	-9.1	-10.1	-10.1	-10.2	-10.6	-10.8	-11.3	-11.7	-11.8	-11.4	-11.3	-10.7	-10.0	-8.7	-7.9	-6.4	-6.4	-5.8	-6.3	-6.8	-7.4	-8.0	-7.5	-7.4	-5.8	-11.8	-9.1
5	-8.3	-9.0	-9.3	-9.6	-9.9	-10.0	-10.0	-10.1	-10.0	-9.5	-9.2	-7.8	-7.1	-6.3	-5.8	-5.3	-5.1	-4.7	-4.4	-4.7	-4.9	-4.8	-5.1	-5.7	-4.4	-10.1	-7.4
6	-6.0	-5.7	-5.3	-4.6	-4.8	-4.3	-4.3	-4.1	-3.9	-3.6	-3.4	-2.4	-2.3	-1.9	-1.5	-1.1	-1.1	-1.3	-1.5	-1.5	-1.7	-1.6	-1.8	-2.2	-1.1	-6.0	-3.0
7	-2.4	-2.5	-2.5	-2.2	-2.6	-3.0	-3.1	-3.2	-3.2	-2.6	-2.1	-1.4	-1.2	-0.9	-0.6	-0.7	-0.6	-0.4	-0.8	-1.0	-1.3	-1.4	-1.4	-1.6	-0.4	-3.2	-1.8
8	-1.8	-2.1	-2.5	-2.8	-3.0	-3.2	-3.6	-3.6	-3.7	-3.5	-3.3	-2.3	-0.9	-0.1	0.3	0.7	0.9	0.9	0.6	0.1	-0.8	-1.6	-2.2	-2.8	0.9	-3.7	-1.7
9	-2.4	-2.5	-3.0	-4.2	-5.1	-5.1	-5.5	-5.6	-5.0	-4.1	-3.5	-2.7	-1.9	-1.0	-0.2	0.5	0.8	0.9	0.8	0.2	-0.7	-1.5	-2.4	-2.8	0.9	-5.6	-2.3
10	-3.2	-3.4	-3.0	-3.5	-4.0	-3.8	-4.2	-3.5	-3.0	-2.7	-2.4	-2.0	-1.7	-1.5	-1.3	-1.3	-1.4	-1.7	-2.1	-2.7	-3.3	-3.5	-3.6	-3.6	-1.3	-4.2	-2.8
11	-3.3	-3.3	-3.6	-3.7	-3.6	-3.7	-4.1	-4.7	-4.5	-4.2	-4.2	-4.0	-3.8	-3.5	-3.3	-3.1	-2.8	-2.8	-3.6	-4.5	-5.4	-6.3	-7.2	-9.1	-2.8	-9.1	-4.3
12	-10.5	-11.4	-12.6	-13.5	-14.2	-15.4	-16.5	-17.1	-17.2	-17.3	-16.8	-16.6	-15.9	-15.6	-14.8	-14.4	-15.0	-14.6	-14.0	-13.8	-14.3	-15.1	-15.7	-16.4	-10.5	-17.3	-14.9
13	-17.8	-18.4	-18.9	-19.6	-19.7	-20.4	-20.1	-20.1	-19.1	-18.1	-16.9	-16.8	-16.0	-14.9	-14.2	-13.5	-12.9	-12.7	-12.3	-12.5	-13.0	-13.7	-13.9	-14.0	-12.3	-20.4	-16.2
14	-14.7	-14.7	-14.6	-14.6	-14.5	-14.5	-14.5	-12.6	-12.0	-11.1	-9.8	-7.8	-6.0	-5.4	-4.8	-4.3	-4.2	-4.2	-4.6	-4.6	-4.5	-4.8	-5.0	-5.3	-4.2	-14.7	-8.9
15	-5.2	-5.3	-5.6	-3.6	-2.7	-2.4	-2.2	-2.2	-2.2	-1.5	-0.6	0.7	1.4	2.5	2.7	2.8	2.0	1.4	1.4	1.3	1.0	1.0	1.1	1.0	2.8	-5.6	-0.5
16	1.4	1.6	1.5	2.3	2.5	2.5	3.2	3.5	3.7	4.0	3.8	3.1	3.4	3.4	3.3	3.3	3.0	2.6	2.3	2.0	2.0	2.0	1.8	1.2	4.0	1.2	2.6
17	1.1	0.9	0.8	0.7	0.6	0.8	0.7	0.7	0.7	0.9	1.1	1.8	2.4	3.2	3.3	3.5	3.7	4.1	4.3	4.0	3.5	2.7	3.1	3.1	4.3	0.6	2.2
18	2.8	2.0	1.5	0.7	1.1	0.8	1.5	1.6	1.8	2.8	4.0	3.2	4.0	4.8	3.5	2.0	1.5	0.9	0.6	0.1	0.2	0.4	0.4	0.4	4.8	0.1	1.8
19	0.1	0.3	0.1	0.0	0.1	0.3	-0.2	-0.2	0.4	0.9	0.3	0.1	0.1	0.3	0.1	-0.1	0.5	-0.2	-0.4	0.0	-0.2	-1.1	-1.2	-1.6	0.9	-1.6	-0.1
20	-2.5	-2.4	-2.6	-2.6	-2.5	-2.4	-2.5	-3.2	-3.6	-2.5	-1.5	-0.3	0.7	1.1	1.6	2.0	2.1	2.0	2.0	1.8	1.6	1.0	0.3	0.0	2.1	-3.6	-0.5
21	-0.2	-0.1	-0.9	-1.6	-1.5	-1.4	-1.2	-0.9	-0.6	-0.2	0.1	0.6	0.8	1.1	1.7	2.3	2.7	2.5	2.2	2.2	1.8	1.2	0.7	0.2	2.7	-1.6	0.5
22	-0.2	-0.6	-0.9	-1.3	-1.7	-1.8	-2.1	-2.2	-2.5	-2.4	-2.1	-1.5	-0.7	-0.1	0.2	0.8	0.8	0.9	0.9	0.8	0.4	-0.6	-1.4	-2.1	0.9	-2.5	-0.8
23	-2.6	-2.9	-3.3	-3.7	-4.3	-4.5	-4.7	-4.5	-3.7	-2.9	-2.1	-1.1	-0.2	0.6	1.4	2.0	2.8	3.3	3.1	2.7	2.0	1.2	0.8	0.8	3.3	-4.7	-0.8
24	0.5	-0.5	-1.4	-1.4	-1.4	-1.4	-1.7	-0.7	-0.3	1.4	2.7	3.8	4.3	5.1	5.3	6.7	6.6	6.9	6.4	5.3	4.2	2.5	1.8	2.1	6.9	-1.7	2.4
25	2.2	2.1	1.9	1.6	1.4	1.9	1.8	1.9	3.0	4.0	4.6	4.8	5.1	5.6	6.2	6.3	5.9	5.8	5.1	4.4	3.8	2.8	2.3	1.4	6.3	1.4	3.6
26	1.3	1.6	1.2	-0.5	-0.6	-0.6	-0.6	-0.4	0.2	1.4	2.0	4.2	3.8	5.0	5.4	5.9	6.4	6.2	5.6	4.9	4.0	3.4	2.6	2.0	6.4	-0.6	2.7
27	1.2	0.2	-0.4	-0.9	-1.4	-1.3	-2.1	-2.2	-2.5	-1.8	-1.1	-0.2	1.2	2.7	3.2	2.3	3.4	4.8	4.5	4.1	3.2	2.6	1.7	1.1	4.8	-2.5	0.9
28	0.5	0.5	-0.5	-0.4	-0.7	-0.9	-1.1	-1.0	-1.1	-0.6	0.4	1.4	1.9	2.8	3.3	3.9	4.5	4.8	4.6	4.1	3.6	2.5	0.9	0.5	4.8	-1.1	1.4
29	0.3	0.0	-0.1	-1.0	-1.0	-1.5	-1.5	-1.3	-0.1	0.5	1.3	2.6	3.2	4.8	6.5	7.1	7.7	7.0	6.8	5.9	4.5	3.3	2.5	2.7	7.7	-1.5	2.5
30	2.0	2.3	1.6	1.5	1.5	1.4	1.3	1.3	1.9	2.6	3.0	4.1	5.1	5.1	4.9	5.7	5.6	5.0	4.6	4.0	3.5	2.4	1.5	0.8	5.7	0.8	3.0
Max.	**2.8**	**2.3**	**1.9**	**2.3**	**2.5**	**2.5**	**3.2**	**3.5**	**3.7**	**4.0**	**4.6**	**4.8**	**5.1**	**5.6**	**6.5**	**7.1**	**7.7**	**7.0**	**6.8**	**5.9**	**4.5**	**3.4**	**3.1**	**3.1**	**7.7**		
Min.	**-17.8**	**-18.4**	**-18.9**	**-19.6**	**-19.7**	**-20.4**	**-20.1**	**-20.1**	**-19.1**	**-18.1**	**-16.9**	**-16.8**	**-16.0**	**-15.6**	**-14.8**	**-14.4**	**-15.0**	**-14.6**	**-14.0**	**-13.8**	**-14.3**	**-15.1**	**-15.7**	**-16.4**		**-20.4**	
Avg.	**-3.1**	**-3.3**	**-3.7**	**-3.9**	**-4.0**	**-4.1**	**-4.3**	**-4.2**	**-3.9**	**-3.3**	**-2.8**	**-2.1**	**-1.5**	**-0.8**	**-0.5**	**-0.2**	**-0.1**	**-0.1**	**-0.3**	**-0.6**	**-1.1**	**-1.8**	**-2.2**	**-2.6**			**-2.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

May *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.4	-0.5	-1.1	-1.8	-2.8	-3.0	-3.5	-3.6	-3.1	-2.4	-2.2	-1.2	-0.2	0.9	1.8	2.5	2.8	2.9	3.0	2.7	2.2	1.3	0.3	-0.9	3.0	-3.6	-0.2
2	-1.4	-1.2	-1.6	-2.3	-2.7	-3.2	-3.4	-3.0	-2.7	-2.1	-1.1	0.2	1.0	1.7	2.0	1.9	2.0	1.8	1.6	1.2	0.5	-0.6	-1.4	-2.2	2.0	-3.4	-0.6
3	-3.3	-4.7	-5.8	-6.3	-6.7	-7.6	-8.1	-7.7	-6.9	-6.1			-3.9	-3.2	-2.5	-1.9	-1.3	-1.2	-1.3	-1.7	-2.5	-3.7	-4.7	-5.8	-1.2	-8.1	-4.4
4	-6.6	-7.4	-8.2	-9.2	-9.7	-10.4	-10.6	-10.4	-9.4	-8.4	-6.8	-6.1	-5.3	-4.6	-3.8	-3.1	-2.5	-2.2	-2.1	-2.5	-3.4	-4.3	-5.1	-5.8	-2.1	-10.6	-6.2
5	-6.4	-7.3	-8.1	-8.6	-9.4	-9.9	-10.3	-9.9	-8.8	-8.0	-7.1	-6.0	-5.1	-4.3	-3.5	-2.7	-2.0	-1.6	-1.4	-1.5	-2.2	-3.4	-4.8	-5.5	-1.4	-10.3	-5.7
6	-6.6	-6.9	-6.6	-6.3	-7.4	-7.3	-7.1	-6.6	-5.5	-4.5	-3.9	-2.0	-0.5	0.3	0.7	1.0	1.1	1.1	0.8	0.3	-0.7	-1.6	-2.1	-2.3	1.1	-7.4	-3.0
7	-2.7	-2.8	-2.8	-3.5	-2.8	-2.1	-1.4	-1.2	-0.8	0.2	1.0	1.6	2.3	2.8	3.2	3.5	3.8	3.9	2.9	2.3	2.3	2.0	1.9	1.9	3.9	-3.5	0.7
8	0.8	0.0	0.1	0.2	0.4	0.3	-0.1	-0.3	-0.4	-0.6	-0.6	-0.7	0.0	0.5	0.7	0.9	1.1	1.4	1.4	1.4	1.0	0.0	-0.7	-1.5	1.4	-1.5	0.2
9	-1.5	-1.8	-2.3	-2.9	-3.3	-4.5	-3.9	-3.5	-3.0	-2.5	-1.4	-0.6	0.3	0.9	1.2	1.3	1.3	1.7	1.8	1.5	0.6	-0.8	-1.9	-2.4	1.8	-4.5	-1.1
10	-2.8	-3.6	-4.3	-5.5	-5.9	-6.3	-6.0	-5.6	-5.2	-4.5	-3.6	-2.2	-1.5	-0.6	-0.8	-0.4	-0.3	-0.4	-0.2	-0.7	-0.7	-1.5	-2.7	-3.6	-0.2	-6.3	-2.9
11	-3.6	-4.0	-3.4	-3.1	-3.0	-3.4	-3.7	-3.6	-2.8	-1.8	-1.0	-0.3	0.2	1.0	1.6	2.4	2.2	2.2	2.1	1.9	1.1	0.7	0.1	-0.8	2.4	-4.0	-0.8
12	-1.8	-2.3	-2.6	-1.9	-2.5	-2.9	-2.7	-2.5	-1.1	1.0	1.3	1.3	2.0	2.4	2.4	2.8	3.2	3.5	3.1	2.7	2.1	1.7	1.1	0.7	3.5	-2.9	0.5
13	0.5	0.4	0.2	0.5	0.8	1.0	1.0	0.3	-0.2	0.7	1.1	1.3	1.4	1.5	2.0	2.4	2.6	2.6	2.6	2.7	2.3	1.8	1.1	0.6	2.7	-0.2	1.3
14	0.3	0.1	0.0	-0.8	-1.1	-1.3	-1.4	-1.5	-1.2	-1.0	0.9	1.9	1.5	2.4	2.7	2.6	2.9	3.2	3.5	3.4	3.2	2.7	2.1	2.1	3.5	-1.5	1.1
15	1.7	1.4	0.2	-0.4	-0.8	-0.2	-0.5	-0.5	0.1	0.6	0.8	1.2	1.7	2.6	3.1	3.2	1.8	1.5	1.0	0.2	0.3	0.9	0.8	0.7	3.2	-0.8	0.9
16	0.3	0.0	-0.9	-2.8	-4.1	-5.3	-5.7	-5.6	-5.1	-4.4	-3.8	-2.8	-2.4	-1.5	-1.1	-0.3	0.5	0.8	1.0	0.7	0.1	-0.4	-1.3	-2.0	1.0	-5.7	-1.9
17	-2.4	-2.4	-2.6	-2.7	-2.6	-2.3	-2.2	-2.2	-1.8	-1.4	-1.0	-0.9	-0.1	0.6	1.4	2.0	2.8	3.5	4.0	3.7	3.3	2.3	1.3	0.9	4.0	-2.7	0.1
18	0.4	-0.2	-0.7	-1.2	-1.4	-2.0	-2.1	-1.5	-0.9	-0.3	0.2	0.7	1.3	1.9	2.3	2.9	3.6	4.1	4.5	4.2	3.7	3.0	2.4	2.3	4.5	-2.1	1.1
19	1.6	1.0	1.0	1.3	0.5	0.1	0.6	1.0	2.1	3.1	4.1	4.8	5.5	6.4	6.9	7.2	7.4	7.6	7.2	7.4	6.6	5.3	4.2	3.3	7.6	0.1	4.0
20	4.0	3.3	2.3	1.3	0.8	0.3	0.1	0.8	1.9	3.6	5.1	5.9	6.7	7.7	8.6	9.4	9.9	10.1	10.0	10.1	9.2	8.2	7.1	5.8	10.1	0.1	5.5
21	5.0	4.0	3.1	2.7	2.1	3.1	2.0	3.0	4.2	5.1	6.3	7.9	9.7	10.8	12.0	13.3	14.2	14.5	14.5	12.9	11.2	10.3	8.5	7.0	14.5	2.0	7.8
22	7.4	6.8	7.6	5.9	6.0	6.0	7.0	8.0	9.7	11.8	12.7	13.2	13.9	14.4	14.6	14.7	14.5	13.6	12.9	12.3	10.8	9.4	7.8	6.6	14.7	5.9	10.3
23	6.5	6.3	5.8	5.8	5.6	5.0	5.9	6.5	7.7	8.4	10.2	11.3	12.6	14.1	14.8	15.5	16.0	16.6	16.3	14.7	13.1	12.4	10.6	8.9	16.6	5.0	10.4
24	8.4	7.3	6.7	6.8	6.8	6.7	6.6	7.8	9.3	11.4	13.6	14.8	15.6	16.4	15.8	15.5	15.5	14.7	13.4	12.3	10.8	8.9	6.9	6.1	16.4	6.1	10.8
25	6.8	6.8	5.8	5.9	5.5	5.2	5.7	6.9	8.7	10.9	11.6	12.4	14.3	15.3	16.2	16.9	17.6	18.1	18.1	17.0	15.3	13.1	12.3	11.3	18.1	5.2	11.6
26	10.2	10.2	10.2	10.3	10.3	9.6	10.0	10.8	12.2	13.6	13.5	15.3	16.3	16.8	17.2	17.2	16.2	16.3	15.7	14.9	13.8	12.7	11.2	9.4	17.2	9.4	13.1
27	7.7	6.9	5.9	5.6	5.6	5.4	5.5	6.0	6.7	8.3	9.9	11.0	10.7	11.3	11.9	11.8	11.9	11.4	10.7	9.4	8.0	6.7	6.0	5.6	11.9	5.4	8.3
28	5.1	5.3	5.7	6.7	7.5	7.2	7.2	7.0	7.4	7.6	8.2	8.8	8.7	8.8	8.3	8.5	8.7	8.6	8.4	8.1	7.3	6.5	5.7	5.2	8.8	5.1	7.4
29	5.0	4.6	5.5	5.7	5.9	6.2	6.5	7.1	7.8	8.6	8.3	10.0	10.6	10.4	10.7	10.6	10.8	10.5	10.0	9.0	8.0	6.7	6.1	5.8	10.8	4.6	7.9
30	5.3	4.6	4.3	4.1	5.0	6.1	7.4	7.5	8.2	9.6	9.9	10.2	10.8	11.0	11.3	11.2	11.2	10.8	9.9	9.4	8.9	8.0	6.9	6.7	11.3	4.1	8.3
31	6.3	5.5	5.6	5.7	5.1	5.1	6.1	6.6	6.7	7.2	8.2	8.7	9.2	9.3	9.9	10.1	10.3	10.1	9.9	9.5	9.1	8.6	7.1	5.5	10.3	5.1	7.7
Max.	**10.2**	**10.2**	**10.2**	**10.3**	**10.3**	**9.6**	**10.0**	**10.8**	**12.2**	**13.6**	**13.6**	**15.3**	**16.3**	**16.8**	**17.2**	**17.2**	**17.6**	**18.1**	**18.1**	**17.0**	**15.3**	**13.1**	**12.3**	**11.3**	**18.1**		
Min.	**-6.6**	**-7.4**	**-8.2**	**-9.2**	**-9.7**	**-10.4**	**-10.6**	**-10.4**	**-9.4**	**-8.4**	**-7.1**	**-6.1**	**-5.3**	**-4.6**	**-3.8**	**-3.1**	**-2.5**	**-2.2**	**-2.1**	**-2.5**	**-3.4**	**-4.3**	**-5.1**	**-5.8**		**-10.6**	
Avg.	**1.4**	**1.0**	**0.6**	**0.3**	**0.1**	**-0.1**	**0.0**	**0.3**	**1.1**	**2.1**	**3.2**	**4.0**	**4.4**	**5.1**	**5.5**	**5.9**	**6.1**	**6.2**	**6.0**	**5.5**	**4.7**	**3.8**	**2.8**	**2.0**			**3.0**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

June *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.2	4.4	3.9	4.6	5.0	6.0	5.4	6.6	7.6	8.5	10.2	11.0	12.3	13.2	12.6	11.8	13.4	12.6	12.1	9.9	10.7	10.6	9.4	8.9	13.4	3.9	9.0
2	9.0	8.5	8.5	7.8	7.8	6.2	6.1	6.3	6.5	6.5	6.6	6.9	7.2	8.7	9.4	10.2	11.5	11.8	11.8	10.9	10.3	9.8	9.0	7.9	11.8	6.1	8.5
3	6.6	6.5	6.6	6.6	6.1	5.8	5.3	5.9	6.4	8.0	8.5	8.9	9.0	8.7	8.6	9.0	8.6	8.3	7.7	7.5	6.9	6.7	6.3	6.1	9.0	5.3	7.3
4	5.7	5.8	6.4	6.4	6.0	5.4	5.4	6.0	7.4	8.8	9.3	10.7	11.0	11.4	11.7	11.9	12.2	12.6	12.8	12.6	9.8	7.5	7.2	6.8	12.8	5.4	8.8
5	7.1	6.7	6.3	6.7	6.3	6.2	5.9	6.2	6.4	6.3	6.9	8.0	8.2	8.2	8.5	8.4	8.0	7.5	7.1	6.4	5.9	5.5	5.4	5.1	8.5	5.1	6.8
6	4.7	4.7	5.0	5.1	4.8	5.1	5.2	5.4	5.9	6.4	7.0	7.6	7.8	8.3	9.3	9.4	9.3	9.6	9.2	8.7	8.5	7.7	7.3	7.1	9.6	4.7	7.0
7	6.4	5.6	6.0	4.9	4.7	4.2	5.4	6.4	9.4	11.4	12.3	12.9	13.9	15.1	14.2	14.4	14.9	15.3	14.9	14.5	14.3	13.0	12.3	11.7	15.3	4.2	10.7
8	10.7	10.8	10.3	9.8	9.2	8.8	7.6	10.3	12.1	13.8	14.6	12.9	14.6	16.3	17.4	18.4	19.2	19.2	19.3	19.0	18.6	14.9	13.3	13.9	19.3	7.6	14.0
9	12.8	12.6	10.6	9.9	9.7	8.5	9.6	10.5	11.1	11.2	12.6	14.1	15.4	16.6	17.6	18.5	19.4	19.6	19.5	19.4	18.4	17.2	15.6	14.1	19.6	8.5	14.4
10	12.6	12.2	11.0	9.9	9.0	9.4	9.8	8.9	12.4	12.5	13.0	12.4	13.7	14.5	15.4	16.4	16.8	17.3	17.7	16.5	15.1	14.2	13.5	12.5	17.7	8.9	13.2
11	11.5	11.0	10.0	9.6	9.6	8.9	8.3	8.3	8.5	8.9	9.2	9.5	9.4	9.4	9.5	9.4	9.4	9.3	9.1	9.0	8.9	8.7	8.6	8.4	11.5	8.3	9.3
12	8.4	8.3	8.1	8.2	8.1	7.9	8.1	8.3	8.6	8.7	9.5	10.2	10.9	10.8	10.5	10.6	10.1	10.1	9.8	9.8	9.5	8.9	9.0	8.8	10.9	7.9	9.2
13	8.6	8.4	8.2	8.3	7.9	7.7	8.1	8.1	8.5	8.8	9.0	9.8	10.4	10.4	9.8	9.5	9.0	9.0	9.1	8.8	8.8	8.6	8.4	7.9	10.4	7.7	8.8
14	7.5	7.3	7.8	7.7	7.5	7.6	7.7	7.2	7.3	8.3	9.7	10.4	10.6	11.0	11.6	11.7	11.7	11.4	11.2	11.4	10.8	10.1	9.4	8.0	11.7	7.2	9.4
15	7.2	6.8	6.6	6.1	5.9	5.8	5.7	6.2	6.7	7.5	7.7	8.0	8.7	9.3	9.7	11.6	10.7	9.3	9.8	11.4	11.4	11.0	10.4	9.4	11.6	5.7	8.5
16	8.7	8.3	7.8	7.4	7.0	7.0	7.1	7.7	8.2	9.4	9.4	10.0	10.7	10.8	10.6	10.7	10.6		10.2	9.4	8.5	7.7	6.9	5.9	10.8	5.9	8.7
17	5.6	5.8	6.0	6.0	6.1	6.3	6.5	6.7	7.5	8.3	9.3	9.7	9.9	10.1	9.9	9.2	9.3	8.8	8.4	7.9	7.9	7.4	6.8	7.8	10.1	5.6	7.8
18	7.5	7.1	6.6	6.4	6.3	6.9	6.8	5.8	6.2	6.8	7.4	8.2	7.9	7.9	8.1	7.9	7.9	6.5	6.2	5.9	6.0	5.6	5.8	6.1	8.2	5.6	6.8
19	6.0	5.9	5.8	5.5	5.7	5.6	5.8	5.8	6.2	6.7	7.4	7.9	8.3	8.7	8.6	8.6	8.9	9.3	9.1	8.9	8.2	7.6	7.0	6.2	9.3	5.5	7.2
20	6.3	6.2	5.6	5.5	4.7	4.2	4.5	5.2	8.0	9.2	10.7	11.5	12.1	13.2	13.9	15.4	15.5	15.2	14.2	13.6	13.0	12.2	11.8	11.2	15.5	4.2	10.1
21	10.5	9.8	9.7	8.3	7.5	6.4	5.0	6.9	6.9	6.9	7.1	7.8	8.1	8.3	8.6	9.4	9.7	10.2	9.9	10.2	9.4	8.7	8.2	7.9	10.5	5.0	8.4
22	7.3	6.7	6.4	6.3	6.7	6.5	6.4	6.1	6.6	7.1	7.2	8.1	8.9	9.5	10.3	10.6	10.6	10.5	10.4	9.8	9.3	8.7	7.8	6.8	10.6	6.1	8.1
23	6.6	6.4	6.4	5.8	5.9	6.0	5.7	6.4	7.6	9.0	9.7	10.9	11.9	13.0	12.1	12.4	13.6	11.3	12.1	11.6	11.7	11.5	10.4	9.8	13.6	5.7	9.5
24	8.5	8.3	7.6	7.3	7.2	7.0	7.0	8.1	9.2	11.3	12.4	13.0	12.8	11.9	9.1	11.1	13.5	12.5	11.0	11.7	11.8	11.5	10.1	9.5	13.5	7.0	10.1
25	8.7	8.4	8.1	7.3	6.7	6.5	6.4	7.4	7.9	9.4	10.2	10.9	10.9	11.5	11.8	11.0	10.6	9.8	9.8	9.1	8.3	7.3	6.9	6.6	11.8	6.4	8.8
26	5.9	5.5	5.4	5.7	6.2	6.2	6.6	7.1	7.5	8.0	7.9	7.8	9.0	9.6	9.4	9.6	9.1	9.1	9.6	9.2	9.1	9.2	9.1	8.9	9.6	5.4	7.9
27	8.1	7.9	8.0	8.0	8.1	8.0	8.1	8.2	8.3	8.3	8.3	8.2	8.1	8.0	8.1	8.4	8.4	8.2	8.3	8.3	8.0	7.6	7.3	7.0	8.4	7.0	8.1
28	7.0	7.0	7.1	7.1	7.3	7.0	6.9	7.8	8.6	8.8	9.5	9.9	9.6	10.8	11.7	11.9	12.1	11.4	10.9	10.5	10.1	9.6	9.0	9.1	12.1	6.9	9.2
29	9.0	8.7	8.7	8.9	8.5	8.2	8.1	8.3	8.5	8.5	8.6	8.5	8.7	9.3	9.7	9.8	9.9	10.4	10.6	10.2	9.8	8.4	8.5	8.3	10.6	8.1	9.0
30	7.5	7.3	7.0	6.9	6.4	5.9	6.5	6.4	8.0	9.0	10.0	10.5	10.9	11.4	11.4	11.6	11.7	12.6	12.3	12.4	12.2	11.7	10.6	9.3	12.6	5.9	9.6
Max.	**12.8**	**12.6**	**11.0**	**9.9**	**9.7**	**9.4**	**9.8**	**10.5**	**12.4**	**13.8**	**14.6**	**14.1**	**15.4**	**16.6**	**17.6**	**18.5**	**19.4**	**19.6**	**19.5**	**19.4**	**18.6**	**17.2**	**15.6**	**14.1**	**19.6**		
Min.	**4.7**	**4.4**	**3.9**	**4.6**	**4.7**	**4.2**	**4.5**	**5.2**	**5.9**	**6.3**	**6.6**	**6.9**	**7.2**	**7.9**	**8.1**	**7.9**	**7.9**	**6.5**	**6.2**	**5.9**	**5.9**	**5.5**	**5.4**	**5.1**		**3.9**	
Avg.	**7.9**	**7.6**	**7.4**	**7.1**	**6.9**	**6.7**	**6.7**	**7.2**	**8.0**	**8.7**	**9.4**	**9.9**	**10.4**	**10.9**	**11.0**	**11.3**	**11.5**	**11.3**	**11.1**	**10.8**	**10.4**	**9.6**	**9.0**	**8.6**			**9.1**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

July *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.8	8.9	8.6	8.2	8.8	8.7	8.6	10.1	11.6	11.9	13.1	14.6	16.7	17.9	18.8	19.0	19.3	19.6	19.8	19.8	19.4	17.9	16.9	16.2	19.8	8.2	14.3
2	15.5	13.8	13.2	13.3	13.7	12.9	13.0	13.6	14.8	15.9	17.4	17.7	18.0	19.1	19.2	19.3	19.1	18.7	18.0	17.4	15.7	14.5	12.8	12.0	19.3	12.0	15.8
3	11.3	10.5	10.3	10.2	10.3	10.2	10.1	10.1	10.1	10.6	11.3	12.1	13.5	14.6	15.6	16.1	17.1	18.5	18.6	18.7	17.4	16.4	14.4	13.3	18.7	10.1	13.4
4	11.8	11.2	10.6	10.2	10.0	10.1	10.5	12.0	13.9	15.9	16.4	16.3	16.3	16.3	16.3	16.0	15.5	15.4	15.7	14.9	14.4	13.7	12.3	11.5	16.4	10.0	13.6
5	10.8	10.8	10.3	9.9	9.7	9.8	9.5	9.5	9.8	9.8	10.3	10.8	10.4	10.4	10.7	10.6	10.8	11.1	11.3	10.8	10.1	8.8	8.3	8.1	11.3	8.1	10.1
6	7.9	7.7	7.3	7.4	7.2	7.1	7.0	7.1	7.1	7.2	7.4	7.9	8.3	8.8	9.4	9.9	9.8	9.1	9.1	8.9	8.6	8.1	7.8	7.8	9.9	7.0	8.1
7	7.7	7.4	7.4	7.5	7.4	7.3	7.4	7.5	7.8	8.5	9.6	9.8	10.6	11.1	10.9	11.3	11.4	11.8	11.6	11.2	10.7	9.9	8.9	8.3	11.8	7.3	9.3
8	8.4	8.8	9.1	9.4	9.6	10.1	10.5	9.8	8.6	9.6	10.5	11.2	11.8	12.1	11.5	11.8	12.3	12.6	12.4	11.9	11.6	11.3	11.1	10.8	12.6	8.4	10.7
9	10.3	9.7	9.9	9.8	9.6	9.4	9.7	10.1	10.9	12.3	12.4	12.7	13.6	13.9	13.8	13.1	13.5	12.7	12.0	11.6	11.1	10.7	10.6	10.7	13.9	9.4	11.4
10	10.4	10.2	9.9	10.0	10.0	10.1	10.3	10.4	10.6	11.1	11.1	11.1	11.2	10.9	11.1	10.9	10.8	11.1	10.8	10.6	10.2	9.9	9.9	9.9	11.2	9.9	10.5
11	9.6	9.3	9.1	9.4	9.3	9.2	9.1	9.6	10.0	10.5	11.3	12.2	12.5	13.8	14.4	14.8	15.3	14.9	15.7	15.7	14.9	14.4	13.4	12.7	15.7	9.1	12.1
12	11.7	10.9	9.3	8.4	7.4	6.9	7.0	7.6	8.8	9.4	10.1	10.4	11.4	12.7	13.4	13.6	13.3	13.5	13.8	14.0	14.1	14.0	13.3	12.4	14.1	6.9	11.1
13	11.8	11.0	11.1	10.4	9.4	9.7	10.3	11.9	12.5	13.5	14.6	12.6	14.3	15.4	16.2	15.8	15.2	14.7	13.6	12.4	11.6	10.6	10.1	9.3	16.2	9.3	12.4
14	8.9	8.7	8.2	8.3	8.3	8.2	8.4	8.4	8.5	8.2	8.3	9.0	9.8	10.3	10.8	11.2	13.0	13.6	14.0	13.7	12.6	12.2	11.2	10.1	14.0	8.2	10.2
15	9.3	9.0	9.6	10.0	10.0	9.5	9.7	10.2	10.7	11.8	12.4	13.1	13.9	14.5	15.0	15.4	15.0	13.8	11.8	12.6	13.9	13.9	12.9	11.8	15.4	9.0	12.1
16	11.0	11.2	10.5	10.7	10.7	10.5	10.3	10.1	10.2	10.7	12.0	12.7	12.7	13.1	13.9	13.9	13.4	13.3	13.8	13.9	12.4	11.8	11.3	11.1	13.9	10.1	11.9
17	10.9	10.8	10.6	10.6	10.5	10.1	9.5	9.1	9.0	9.1	9.4	9.7	11.0	12.3	12.9	13.8	14.3	14.4	14.3	14.3	13.4	12.4	11.8	11.0	14.4	9.0	11.5
18	10.5	10.2	10.1	10.1	9.7	9.2	8.8	8.9	8.9	9.0	9.2	9.8	10.5	11.2	11.9	12.6	13.0	13.7	14.3	14.1	13.4	13.0	12.2	11.5	14.3	8.8	11.1
19	11.1	11.0	10.9	10.8	10.9	10.7	10.7	10.8	11.1	11.3	12.1	13.1	14.5	15.8	15.9	15.8	15.3	14.4	12.6	12.4	13.1	14.0	13.0	11.8	15.9	10.7	12.6
20	10.4	9.9	8.9	8.8	8.6	9.2	9.4	9.5	9.6	10.0	10.3	11.0	12.2	14.0	16.0	16.5	17.4	17.6	17.1	15.9	15.1	14.3	13.4	12.1	17.6	8.6	12.4
21	11.7	11.5	11.1	10.8	10.2	9.6	9.3	9.3	9.6	10.2	10.8	11.0	11.7	11.8	11.8	12.2	12.4	12.1	11.4	10.9	11.0	10.7	10.5	10.6	12.4	9.3	10.9
22	10.1	10.2	10.3	10.1	8.8	8.6	8.6	9.0	9.7	10.7	11.5	12.5	13.7	12.8	13.9	14.3	14.2	14.3	14.0	13.0	12.4	10.6	10.0	9.4	14.3	8.6	11.4
23	9.4	8.9	8.6	8.6	8.4	8.3	8.6	8.9	10.4	11.5	12.3	13.4	13.8	14.1	14.2	13.6	13.1	14.5	13.2			12.2	12.1	11.6	14.5	8.3	11.4
24	11.2	11.5	11.8	12.1	11.6	11.0	11.3	11.4	12.3	14.1	15.2	16.0	17.0	17.5	18.4	19.3	18.1	18.6	18.6	18.8	17.7	16.0	14.2	13.5	19.3	11.0	14.9
25	12.8	12.1	11.5	11.1	11.2	11.4	11.5	11.6	12.6	13.4	13.9	13.9	14.8	14.9	15.3	15.2	14.5	14.3	14.0	13.5	13.0	12.1	11.5	11.1	15.3	11.1	13.0
26	10.9	10.7	10.5	9.9	9.4	9.0	8.8	10.0	11.5	12.2	13.1	13.8	14.9	15.0	14.4	15.4	15.1	14.5	14.3	13.8	13.2	12.3	11.5	11.0	15.4	8.8	12.3
27	10.1	10.4	10.2	9.8	9.7	9.1	9.2	9.5	10.3	11.0	12.0	12.5	13.2	13.3	13.0	13.4	13.8	13.6	13.2	12.1	11.8	11.3	10.9	10.4	13.8	9.1	11.4
28	9.9	9.6	9.4	9.2	9.0	8.9	8.9	9.2	9.4	9.9	10.3	11.1	12.3	13.3	14.0	14.5	14.9	14.5	13.4	12.8	12.0	10.8	9.8	9.3	14.9	8.9	11.1
29	9.2	8.8	8.8	8.4	7.9	8.0	8.2	8.2	10.2	11.4	13.3	14.2	14.0	14.4	15.1	14.7	14.0	12.4	9.9	10.9	10.7	10.0	9.4	8.9	15.1	7.9	10.9
30	8.3	8.2	7.9	7.7	7.5	7.7	7.3	8.4	9.2	10.5	11.3	12.3	13.9	14.1	14.6	14.9	15.2	15.4	15.5	15.4	14.4	13.1	12.1	10.9	15.5	7.3	11.5
31	10.4	10.0	9.9	9.6	9.4	9.5	9.2	9.1	9.4	9.4	9.4	10.0	10.6	11.9	13.1	14.0	14.4	14.7	14.7	13.7	12.9	11.6	10.5	10.2	14.7	9.1	11.1
Max.	**15.5**	**13.8**	**13.2**	**13.3**	**13.7**	**12.9**	**13.0**	**13.6**	**14.8**	**15.9**	**17.4**	**17.7**	**18.0**	**19.1**	**19.2**	**19.3**	**19.3**	**19.6**	**19.8**	**19.8**	**19.4**	**17.9**	**16.9**	**16.2**	**19.8**		
Min.	**7.7**	**7.4**	**7.3**	**7.4**	**7.2**	**6.9**	**7.0**	**7.1**	**7.1**	**7.2**	**7.4**	**7.9**	**8.3**	**8.8**	**9.4**	**9.9**	**9.8**	**9.1**	**9.1**	**8.9**	**8.6**	**8.1**	**7.8**	**7.8**		**6.9**	
Avg.	**10.4**	**10.1**	**9.8**	**9.7**	**9.5**	**9.3**	**9.4**	**9.7**	**10.3**	**11.0**	**11.7**	**12.2**	**13.0**	**13.6**	**14.1**	**14.3**	**14.3**	**14.3**	**13.9**	**13.6**	**13.1**	**12.3**	**11.6**	**10.9**			**11.8**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

August 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.9	9.5	8.9	9.0	8.9	8.3	8.4	9.0	9.8	11.4	12.3	13.6	14.1	14.1	13.4	14.8	15.5	15.9	13.1	12.0	13.1	12.9	11.5	10.5	15.9	8.3	11.7
2	9.6	8.8	8.5	8.1	8.4	8.8	9.0	8.9	9.1	10.7	11.6	12.5	13.4	13.5	14.1	14.2	13.6	13.6	13.1	11.9	11.1	10.3	10.1	9.8	14.2	8.1	10.9
3	9.7	10.0	10.0	10.0	9.9	9.7	9.7	9.9	10.4	11.3	11.9	12.3	12.6	12.9	13.0	12.1	11.9	12.3	12.0	11.8	12.1	11.8	11.8	11.4	13.0	9.7	11.3
4	11.5	11.8	11.1	11.3	11.8	11.8	11.9	11.3	10.8	11.2	11.4	11.5	11.8	12.3	12.4	12.3	12.3	12.4	12.5	12.4	12.1	11.8	11.5	11.0	12.5	10.8	11.8
5	10.7	10.5	10.3	10.2	9.7	9.6	9.6	9.6	9.8	10.3	11.1	12.3	12.4	13.7	14.4	13.7	14.2	14.1	14.5	14.5	14.0	13.5	13.0	12.7	14.5	9.6	12.0
6	12.3	12.1	11.7	12.0	11.8	11.8	11.9	12.1	12.1	12.2	12.7	13.2	13.4	13.0	12.9	13.1	13.4	13.8	13.9	12.9	12.1	11.5	10.9	10.8	13.9	10.8	12.4
7	10.5	10.5	10.4	10.8	10.8	10.7	10.2	10.5	10.6	10.6	11.0	11.9	13.1	14.1	14.8	15.7	16.2	16.8	16.9	17.0	16.3	14.7	13.7	13.3	17.0	10.2	12.9
8	11.8	10.9	9.9	10.0	8.9	9.8	9.6	9.6	9.4	9.6	10.4	11.6	12.2	12.8	12.9	13.1	13.2	12.7	12.2	11.6	11.3	10.9	10.5	9.8	13.2	8.9	11.0
9	9.4	9.3	9.0	8.9	9.5	9.5	9.6	9.5	9.7	10.2	10.8	12.0	13.4	14.1	15.5	16.9	18.2	18.2	18.0	17.2	16.9	14.9	14.1	13.3	18.2	8.9	12.8
10	12.6	12.6	12.2	11.9	10.3	9.4	9.5	9.8	11.1	12.8	14.2	14.7	14.9	15.0	14.4	14.0	13.8	13.1	12.5	11.8	11.3	10.9	10.3	10.1	15.0	9.4	12.2
11	9.8	9.8	9.6	9.8	9.7	9.5	9.5	9.6	9.7	9.7	9.6	9.6	9.5	9.4	9.3	9.5	9.3	9.3	9.2	9.0	8.9	8.8	8.6	8.4	9.8	8.4	9.4
12	7.9	7.5	7.3	7.2	7.1	6.9	6.8	7.2	7.6	7.8	8.1	8.6	9.2	9.6	10.7	12.0	12.9	13.8	12.4	12.1	10.9	10.4	9.5	9.5	13.8	6.8	9.3
13	9.7	9.3	8.7	9.1	9.1	9.2	8.8	8.6	8.4	8.9	9.5	9.7	12.0	12.6	12.3	12.0	12.1	11.6	11.0	11.0	10.5	9.7	9.1	8.8	12.6	8.4	10.1
14	8.6	8.4	8.2	8.0	7.9	8.0	7.9	7.8	8.6	9.0	9.5	10.1	10.5	10.9	11.3	11.2	11.1	9.7	9.2	9.0	8.9	8.6	8.3	8.4	11.3	7.8	9.1
15	8.4	8.3	8.4	8.4	8.0	7.9	7.8	7.8	8.1	8.4	8.5	8.9	9.2	9.2	9.2	9.5	9.6	9.5	9.1	9.0	9.0	8.7	8.3	8.4	9.6	7.8	8.7
16	8.6	8.7	8.9	9.1	9.2	8.3	8.0	8.0	8.4	8.9	10.0	10.2	10.4	10.5	10.6	10.5	10.6	10.6	11.3	11.3	10.9	10.0	9.8	9.2	11.3	8.0	9.7
17	9.6	9.4	9.6	9.1	8.8	8.7	8.6	8.3	8.7	9.2	10.1	10.9	11.8	11.8	12.3	12.4	12.7	12.2	11.6	11.5	11.5	11.2	10.6	9.3	12.7	8.3	10.4
18	8.4	8.1	8.6	7.7	6.8	5.5	5.0	4.7	6.2	8.1	8.5	9.0	9.8	11.1				12.7	12.6	12.4	11.7	10.8	9.6	9.0	12.7	4.7	8.9
19	8.8	8.7	8.6	8.7	8.7	8.5	8.7	8.8	9.0	9.3	9.8	9.9	10.0	10.1	10.1	9.8	9.8	9.9	9.9	9.6	9.4	9.3	9.2	8.7	10.1	8.5	9.3
20	8.4	8.3	8.3	8.3	8.2	8.1	8.2	8.3	8.4	8.4	8.4	8.5	8.7	9.1	10.1	10.7	11.1	10.8	10.6	10.5	10.5	10.6	10.6	10.4	11.1	8.1	9.3
21	10.4	10.2	10.3	10.2	10.1	10.2	10.3	10.3	10.5	10.6	10.9	11.1	11.2	11.6	11.5	10.9	11.3	11.3	10.9	10.7	10.3	9.9	9.8	9.6	11.6	9.6	10.6
22	9.3	9.5	9.6	9.7	9.5	9.0	8.9	9.2	9.4	9.7	10.1	10.1	10.6	11.2	10.8	10.9	10.9	10.4	10.0	9.8	9.9	9.8	10.0	10.0	11.2	8.9	9.9
23	9.7	9.4	9.3	9.2	9.3	9.2	9.2	9.2	9.3	9.2	9.4	9.6	9.6	10.1	11.1	12.0	11.5	11.6	11.7	11.8	11.4	10.9	11.0	10.7	12.0	9.2	10.2
24	10.4	10.0	9.6	9.7	9.6	9.7	9.1	8.6	8.6	8.7	8.9	8.9	9.6	10.7	10.7	10.1	9.2	8.6	8.6	8.6	8.2	7.8	7.0	7.1	10.7	7.0	9.1
25	7.1	6.7	6.8	6.6	6.5	6.4	6.3	6.1	6.1	6.3	6.6	6.6	6.2	6.2	6.1	5.9	6.5	6.8	6.2	6.4	6.5	6.3	5.8	6.0	7.1	5.8	6.4
26	7.7	6.8	5.8	5.5	5.4	5.6	5.8	5.8	5.6	6.0	6.6	6.9	7.0	7.7	8.1	8.2	7.9	8.2	8.4	8.1	7.9	7.5	7.1	7.1	8.4	5.4	6.9
27	6.9	5.4	5.9	6.8	7.3	7.4	7.4	7.8	8.1	8.1	8.8	9.3	9.8	10.3	10.3	10.1	10.3	10.3	10.0	9.7	9.2	8.8	8.6	8.4	10.3	5.4	8.5
28	8.3	8.3	8.4	8.3	8.1	8.2	8.2	8.1	8.1	8.2	8.5	8.9	9.1	9.3	9.4	9.8	10.3	10.1	9.8	9.4	9.1	8.9	8.7	8.6	10.3	8.1	8.8
29	8.5	8.4	8.4	8.1	8.0	8.0	7.8	8.0	8.5	9.0	9.8	10.8	11.8	11.7	12.1	11.9	11.7	11.7	11.6	11.0	10.2	9.7	9.1	8.7	12.1	7.8	9.8
30	8.3	8.0	8.1	8.2	8.0	8.0	8.1	8.4	8.2	8.2	8.3	8.5	8.8	9.0	9.0	9.1	8.9	8.8	9.1	8.8	8.6	8.7	8.4	7.6	9.1	7.6	8.5
31	6.9	6.3	6.0	5.9	6.0	5.8	5.8	6.0	5.9	6.2	6.4	7.0	7.6	8.0	8.4	8.8	9.5	10.4	10.3	9.4	8.4	7.7	7.0	6.6	10.4	5.8	7.4
Max.	**12.6**	**12.6**	**12.2**	**12.0**	**11.8**	**11.8**	**11.9**	**12.1**	**12.1**	**12.8**	**14.2**	**14.7**	**14.9**	**15.0**	**15.5**	**16.9**	**18.2**	**18.2**	**18.0**	**17.2**	**16.9**	**14.9**	**14.1**	**13.3**	**18.2**		
Min.	**6.9**	**5.4**	**5.8**	**5.5**	**5.4**	**5.5**	**5.0**	**4.7**	**5.6**	**6.0**	**6.4**	**6.6**	**6.2**	**6.2**	**6.1**	**5.9**	**6.5**	**6.8**	**6.2**	**6.4**	**6.5**	**6.3**	**5.8**	**6.0**		**4.7**	
Avg.	**9.4**	**9.1**	**8.9**	**8.9**	**8.8**	**8.6**	**8.6**	**8.6**	**8.8**	**9.3**	**9.8**	**10.3**	**10.8**	**11.2**	**11.4**	**11.5**	**11.6**	**11.7**	**11.4**	**11.0**	**10.7**	**10.2**	**9.8**	**9.5**			**10.0**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

September 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.3	6.4	6.3	6.3	6.3	6.1	5.8	5.8	6.0	6.1	6.2	6.6	7.1	6.8	7.4	6.6	7.2	7.0	6.0	6.5	6.1	5.9	5.5	5.3	7.4	5.3	6.3
2	4.8	4.5	4.6	4.6	4.4	4.4	4.5	4.1	4.2	5.1	6.2	6.7	7.3	7.9	8.8	9.0	9.9	10.2	10.1	9.5	8.7	6.7	6.0	5.1	10.2	4.1	6.6
3	5.2	4.6	5.2	4.5	4.3	4.7	5.4	4.0	4.4	5.7	7.8	10.0	10.3	10.0	10.7	10.9	10.5	10.5	9.9	9.2	8.1	7.4	7.2	6.9	10.9	4.0	7.4
4	6.9	6.5	6.7	6.7	6.3	6.2	6.5	6.5	6.6	6.9	6.8	6.8	6.9	6.8	6.9	7.1	7.7	7.6	7.1	7.1	7.2	6.9	7.5	7.5	7.7	6.2	6.9
5	7.5	7.3	7.2	7.1	7.0	7.0	7.0	7.1	7.1	7.1	6.7	7.1	7.2	6.9	7.3	5.8	5.0	4.5	4.8	5.5	4.9	3.3	2.1	2.1	7.5	2.1	6.0
6	2.2	2.7	2.7	2.4	1.5	0.8	1.7	1.6	2.3	2.7	3.7	4.3	4.5	6.0	7.0	7.5	7.0	7.3	7.1	7.1	6.9	6.7	6.8	7.0	7.5	0.8	4.6
7	7.1	6.7	6.4	6.3	5.5	5.2	4.9	4.8	5.1	5.7	6.7	7.3	8.0	8.9	9.6	10.4	11.3	11.8	11.9	11.1	9.6	8.2	7.6	6.8	11.9	4.8	7.8
8	5.9	5.5	4.8	4.2	4.8	4.4	4.4	4.1	3.7	5.5	7.3	9.1	10.9	12.5	12.3	12.3	13.5	12.2	12.5	11.6	10.4	8.9	8.1	6.6	13.5	3.7	8.1
9	5.7	4.5	3.4	3.5	3.5	2.6	1.8	1.4	1.9	2.2	2.4	2.9	4.1	4.8	5.3	5.6	5.6	4.8	4.0	3.3	2.8	2.0	0.9	0.1	5.7	0.1	3.3
10	-0.2	-1.0	-1.7	-2.2	-2.7	-3.0	-3.5	-4.1	-3.9	-3.2	-2.1	-0.7	0.6	1.5	1.9	2.4	3.1	3.3	3.5	3.1	1.8	0.5	-0.3	0.3	3.5	-4.1	-0.3
11	1.3	1.1	1.1	1.0	0.7	0.7	0.3	1.0	0.6	2.0	1.9	1.9	2.7	3.7	4.8	5.5	6.0	6.1	6.1	5.2	4.2	3.9	3.5	3.2	6.1	0.3	2.8
12	3.8	3.7	4.7	5.3	5.0	4.7	4.8	5.0	5.3	6.5	7.3	7.8	8.3	9.0	9.5	9.3	9.2	9.5	9.3	8.7	7.8	6.8	6.1	5.4	9.5	3.7	6.8
13	5.0	5.3	4.8	5.5	4.9	5.5	5.2	4.7	4.7	4.7	6.2	6.5	6.9	7.4	8.5	8.3	8.4	8.5	8.2	7.8	7.5	7.3	7.2	7.0	8.5	4.7	6.5
14	6.5	6.2	6.3	6.4	5.6	5.0	5.6	5.3	5.2	7.3	5.0	-4.3	10.1	11.2	11.8	12.6	12.8	13.0	12.5	11.3	9.6	9.0	8.0	5.9	13.0	-4.3	7.8
15	2.2	0.6	-0.8	-1.9	-2.9	-3.5	-4.4	-5.4	-5.6	-5.0	-3.7	-1.7	0.3	1.8	2.8	4.1	4.8	4.9	4.3	3.2	2.4	2.0	1.4	0.9	4.9	-5.6	0.0
16	1.6	1.4	1.0	0.7	0.4	1.0	1.6	1.5	2.0	2.3	3.1	4.2	4.3				6.7	6.7	6.3	5.6	5.2	4.9	4.8	4.8	6.7	0.4	3.3
17	4.8	5.0	5.1	5.1	5.0	4.9	4.7	4.4	4.6	4.7	4.0	3.2	3.2	3.6	3.9	4.1	4.5	4.6	4.4	4.3	4.3	4.3	4.3	4.7	5.1	3.2	4.4
18	5.7	5.4	5.4	5.5	5.5	5.0	2.3	1.0	0.0	-0.6	-0.9	-0.6	-0.5	-0.2	0.1	-0.1	0.2	-0.8	-1.1	-1.1	-1.5	-1.6	-1.8	-2.1	5.7	-2.1	1.0
19	-2.5	-2.8	-3.0	-2.9	-3.1	-3.2	-3.4	-3.8	-3.4	-3.0	-2.2	-1.6	-1.4	-1.8	-1.7	-1.6	-1.5	-1.6	-1.7	-2.1	-2.6	-3.0	-3.3	-3.9	-1.4	-3.9	-2.5
20	-4.1	-4.2	-4.3	-4.3	-4.2	-4.6	-5.0	-5.1	-5.0	-4.2	-3.6	-3.2	-2.2	-1.2	-0.3	0.2	0.3	0.2	-0.3	-1.1	-2.2	-3.0	-3.5	-4.8	0.3	-5.1	-2.9
21	-4.4	-4.2	-4.3	-5.3	-5.6	-5.7	-5.0	-5.7	-5.1	-3.8	-2.3	-1.7	-0.6	0.2	0.6	1.0	0.9	1.2	0.4	-0.4	-1.7	-3.4	-3.9	-4.0	1.2	-5.7	-2.6
22	-4.0	-4.5	-4.8	-5.8	-6.0	-5.7	-5.9	-6.1	-6.4	-5.3	-3.2	-2.2	-1.5	0.4	1.2	2.4	1.6	2.5	2.3	1.0	-0.5	-1.4	-2.1	-2.7	2.5	-6.4	-2.4
23	-3.4	-4.0	-5.1	-5.1	-4.2	-4.6	-5.0	-5.4	-5.3	-5.3	-4.7	-4.0	-2.9	-2.8	-1.7	-0.9	-0.4	-0.3	-0.4	-2.2	-4.0	-5.5	-6.1	-7.1	-0.3	-7.1	-3.8
24	-7.7	-7.6	-7.7	-8.2	-8.7	-9.1	-9.1	-9.7	-9.8	-9.1	-8.4	-7.8	-6.1	-5.1	-3.9	-3.0	-2.4	-1.9	-2.3	-3.1	-4.0	-4.8	-5.2	-5.7	-1.9	-9.8	-6.3
25	-7.3	-7.8	-8.4	-8.4	-8.1	-8.3	-9.0	-9.1	-8.9	-8.8	-7.3	-6.5	-5.6	-4.7	-3.8	-3.4	-3.3	-3.5	-4.1	-5.2	-6.8	-7.6	-8.7	-8.7	-3.3	-9.1	-6.8
26	-8.7	-9.6	-10.0	-10.1	-9.7	-9.8	-10.1	-9.9	-9.6	-9.0	-7.5	-5.6	-3.7	-1.4	1.5	2.2	1.8	1.6	1.1	0.6	0.4	0.5	0.2	-0.5	2.2	-10.1	-4.4
27	-0.7	-0.4	-0.3	-0.3	0.2	0.6	1.0	1.0	1.0	2.0	3.0	4.0	4.1	3.4	4.3	3.4	3.0	2.8	2.6	2.6	2.3	0.8	-1.5	-2.5	4.3	-2.5	1.5
28	-3.2	-4.2	-4.5	-5.2	-5.6	-6.2	-7.0	-7.2	-7.2	-6.9	-6.1	-5.3	-4.5	-3.6	-2.7	-2.2	-1.9	-2.0	-2.5	-3.2	-3.8	-4.4	-5.3	-6.0	-1.9	-7.2	-4.6
29	-6.4	-6.8	-7.3	-7.6	-8.0	-8.3	-8.3	-8.3	-8.5	-8.5	-7.6	-6.2	-5.2	-3.9	-3.0	-1.9	-1.5	-1.4	-1.6	-2.7	-3.3	-3.4	-3.3	-2.9	-1.4	-8.5	-5.3
30	-2.4	-2.9	-3.2	-3.3	-1.1	-1.0	-0.3	-0.3	-0.1	0.3	0.4	0.6	0.7	1.2	1.2	1.3	1.6	1.3	1.4	1.3	1.4	1.4	1.4	1.3	1.6	-3.3	0.1
Max.	**7.5**	**7.3**	**7.2**	**7.1**	**7.0**	**7.0**	**7.0**	**7.1**	**7.1**	**7.3**	**7.8**	**10.0**	**10.9**	**12.5**	**12.3**	**12.6**	**13.5**	**13.0**	**12.5**	**11.6**	**10.4**	**9.0**	**8.1**	**7.5**	**13.5**		
Min.	**-8.7**	**-9.6**	**-10.0**	**-10.1**	**-9.7**	**-9.8**	**-10.1**	**-9.9**	**-9.8**	**-9.1**	**-8.4**	**-7.8**	**-6.1**	**-5.1**	**-3.9**	**-3.4**	**-3.3**	**-3.5**	**-4.1**	**-5.2**	**-6.8**	**-7.6**	**-8.7**	**-8.7**		**-10.1**	
Avg.	**0.9**	**0.6**	**0.3**	**0.1**	**0.0**	**-0.1**	**-0.3**	**-0.6**	**-0.5**	**0.1**	**0.8**	**1.2**	**2.5**	**3.1**	**3.8**	**4.1**	**4.4**	**4.3**	**4.1**	**3.5**	**2.7**	**2.0**	**1.5**	**1.0**			**1.7**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

October *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.3	1.1	1.2	1.5	1.6	1.4	1.3	1.4	1.2	1.8	2.3	2.5	3.1	3.8	3.9	3.4	3.3	3.7	3.7	3.6	3.6	3.6	3.6	3.4	3.9	1.1	2.6
2	2.4	3.1	3.5	3.6	2.3	2.0	2.0	1.9	1.7	2.0	1.8	2.5	3.0	3.4	3.4	3.9	4.6	4.7	3.9	3.1	2.5	2.3	1.9	1.1	4.7	1.1	2.8
3	0.0	-0.3	-0.4	-0.2	-0.3	-0.3	-0.5	-0.5	-0.8	-0.9	-0.8	-0.4	-0.2	0.1	0.4	0.9	0.9	0.6	0.2	-0.3	-0.8	-1.4	-1.8	-2.5	0.9	-2.5	-0.4
4	-2.9	-3.3	-3.6	-3.9	-4.1	-4.3	-4.5	-4.5	-4.5	-4.5	-4.1	-3.1	-2.0	-0.8	-0.1	0.4	0.5	0.2	-0.9	-2.5	-3.2	-3.5	-3.7	-4.0	0.5	-4.5	-2.8
5	-4.1	-3.9	-4.2	-3.4	-2.9	-2.9	-2.8	-0.3	-2.5	-1.0	-0.4	2.7	4.6	5.1	5.6	5.7	5.4	5.3	5.1	5.0	5.2	4.9	5.3	5.7	5.7	-4.2	1.5
6	6.0	6.4	6.6	6.7	6.8	6.8	6.7	6.3	5.8	5.8	5.3	4.1	2.9	2.3	2.2	2.0	2.3	2.6	2.6	2.7	2.4	1.4	1.3	1.9	6.8	1.3	4.2
7	1.6	1.9	1.4	1.8	1.9	1.9	1.4	0.6	0.6	0.4	0.1	0.9	2.4	2.2	1.0	2.2	2.5	2.1	1.7	1.5	0.6	0.7	0.7	0.4	2.5	0.1	1.3
8	0.3	0.3	0.2	0.2	0.2	0.0	-0.3	-0.1	-0.3	-0.5	-0.2	0.1	0.8	1.8	1.8	1.1	0.4	-0.6	-1.4	-2.0	-2.7	-3.1	-3.9	-4.1	1.8	-4.1	-0.5
9	-4.9	-4.0	-3.1	-3.4	-3.5	-3.9	-3.9	-4.0	-3.4	-3.8	-4.2	-3.0	-2.0	-1.9	-2.1	-2.5	-1.9	-2.4	-2.7	-3.1	-3.3	-3.7	-3.8	-3.9	-1.9	-4.9	-3.3
10	-4.3	-4.3	-4.6	-4.6	-4.8	-5.1	-5.5	-5.9	-6.3	-5.8	-5.1	-4.5	-3.7	-3.3	-2.9	-2.9	-2.9	-3.4	-3.9	-4.1	-4.6	-5.5	-5.8	-6.1	-2.9	-6.3	-4.6
11	-7.1	-7.1	-7.0	-7.0	-7.4	-7.5	-8.1	-7.8	-7.7	-6.8	-6.1	-4.8	-4.2	-3.8	-2.6	-1.1	-0.5	0.1	0.5	1.0	1.3	1.2	1.4	1.3	1.4	-8.1	-3.7
12	0.9	-0.1	-1.5	-2.0	-2.7	-2.4	-2.6	-2.2	-2.7	-2.2	-1.4	0.6	0.9	1.5	0.3	0.3	0.4	0.5	0.1	-0.2	0.2	0.2	-0.1	-0.1	1.5	-2.7	-0.6
13	-0.5	-0.1	-0.2	-0.1	0.3	0.0	0.0	-0.1	0.1	0.2	0.2	0.4	0.9	1.2	0.8	0.7	1.5	1.8	1.5	1.2	1.0	1.0	1.2		1.8	-0.5	0.6
14																		3.5	2.9	2.7	2.5	2.4	2.4	2.0	3.5	2.0	2.6
15	1.9	1.8	1.6	1.4	1.4	1.5	1.8	1.8	1.8	2.0	2.3	3.0	3.7	3.6	4.0	4.0	3.7	3.5	3.1	2.8	2.8	2.7	2.6	2.5	4.0	1.4	2.6
16	2.4	2.3	2.2	1.7	0.3	0.3	0.3	0.1	-0.1	0.0	1.0	2.6	3.6	4.1	5.1	5.5	5.6	4.2	2.6	1.3	-0.4	-0.1	-0.4	-0.6	5.6	-0.6	1.8
17	-1.1	-1.0	-1.7	-2.4	-3.2	-4.0	-4.0	-4.3	-5.0	-4.7	-4.0	-2.0	-0.7	0.5	2.2	2.7	1.7	-0.1	-1.6	-2.9	-3.5	-4.5	-5.3	-5.1	2.7	-5.3	-2.3
18	-5.6	-6.3	-7.4	-8.1	-7.8	-8.5	-8.9	-9.9	-10.4	-11.1	-9.5	-8.6	-8.6	-8.5	-7.5	-7.2	-7.3	-7.6	-8.6	-9.5	-10.1	-10.7	-11.1	-11.0	-5.6	-11.1	-8.7
19	-11.0	-11.4	-11.3	-12.6	-13.1	-13.4	-13.7	-14.0	-14.1	-14.7	-13.6	-13.3	-12.2	-11.3	-10.7	-9.8	-9.5	-9.9	-10.5	-11.3	-11.5	-12.1	-12.3	-12.6	-9.5	-14.7	-12.1
20	-12.9	-13.5	-13.7	-14.3	-14.5	-15.0	-15.1	-15.3	-15.8	-15.9	-15.2	-13.7	-12.0	-11.1	-9.8	-9.0	-8.8	-9.7	-10.2	-10.3	-10.5	-10.3	-9.9	-10.2	-8.8	-15.9	-12.4
21	-10.3	-10.0	-9.9	-10.5	-10.2	-9.6	-9.4	-9.1	-8.7	-8.8	-8.3	-7.6	-5.4	-5.0	-4.2	-5.0	-5.0	-5.3	-6.0	-6.5	-7.6	-8.6	-9.4	-9.5	-4.2	-10.5	-7.9
22	-9.6	-9.6	-10.0	-10.0	-10.1	-10.2	-10.2	-10.1	-10.2	-10.3	-10.3	-10.0	-9.4	-9.0	-8.0	-7.5	-7.8	-8.3	-9.1	-9.5	-9.8	-10.2	-10.5	-11.1	-7.5	-11.1	-9.6
23	-11.7	-11.7	-11.6	-12.2	-12.8	-13.1	-13.1	-13.5	-13.7	-13.6	-13.3	-10.9	-8.5	-6.2	-3.9	-4.0	-3.4	-3.7	-5.0	-3.7	-1.8	-0.8	-0.7	-0.2	-0.2	-13.7	-8.0
24	0.9	2.0	2.3	2.1	1.8	1.9	1.6	1.6	2.5	3.1	3.6	3.7	3.3	3.4	3.7	4.0	4.3	4.8	5.0	5.3	5.2	4.3	3.9	3.7	5.3	0.9	3.3
25	3.8	3.4	3.4	3.0	2.4	1.3	0.6	1.0	1.6	1.6	2.2	2.4	3.1	3.0	2.8	3.4	3.9	2.3	2.8	1.6	1.5	1.3	1.1	1.5	3.9	0.6	2.3
26	1.7	0.6	0.6	0.5	0.5	0.4	0.4	0.1	-0.2	-0.3	0.4	1.4	2.2	2.8	3.3	3.1	2.6	2.0	0.8	0.6	0.1	-0.1	-0.3	-0.7	3.3	-0.7	0.9
27	-0.9	-1.6	-1.2	-1.3	-1.7	-2.1	-2.0	-0.9	-1.3	-2.0	-2.2	-1.3	-0.5	-0.3	-0.7	-0.6	0.1	-0.8	-1.7	-2.2	-3.2	-3.0	-2.2	-2.3	0.1	-3.2	-1.5
28	-2.2	-1.3	-1.4	-0.7	-1.2	-1.1	-1.1	-0.8	-0.6	0.1	0.5	0.8	1.6	2.0	2.4	2.0	1.9	1.5	1.0	0.9	0.7	0.8	-0.1	-0.6	2.4	-2.2	0.2
29	-1.5	-1.9	-1.7	-1.9	-1.1	-1.7	-3.3	-3.9	-4.3	-3.5	-3.8	-3.7	-1.9	-1.2	-1.6	-1.7	-2.2	-2.9	-3.6	-5.1	-5.7	-6.2	-7.3	-8.3	-1.1	-8.3	-3.3
30	-9.2	-9.2	-9.5	-9.9	-10.5	-10.6	-11.0	-11.3	-11.8	-12.5	-12.1	-12.1	-10.7	-10.5	-9.3	-10.3	-10.8	-11.6	-11.9	-12.3	-12.9	-13.0	-13.6	-13.5	-9.2	-13.6	-11.3
31	-14.0	-14.2	-14.4	-14.6	-14.3	-14.5	-14.9	-15.5	-15.6	-15.9	-15.5	-14.9	-14.6	-14.0	-13.4	-13.0	-12.8	-13.1	-13.7	-14.3	-14.9	-15.5	-16.1	-16.5	-12.8	-16.5	-14.6
Max.	**6.0**	**6.4**	**6.6**	**6.7**	**6.8**	**6.8**	**6.7**	**6.3**	**5.8**	**5.8**	**5.3**	**4.1**	**4.6**	**5.1**	**5.6**	**5.7**	**5.6**	**5.3**	**5.1**	**5.3**	**5.2**	**4.9**	**5.3**	**5.7**	**6.8**		
Min.	**-14.0**	**-14.2**	**-14.4**	**-14.6**	**-14.5**	**-15.0**	**-15.1**	**-15.5**	**-15.8**	**-15.9**	**-15.5**	**-14.9**	**-14.6**	**-14.0**	**-13.4**	**-13.0**	**-12.8**	**-13.1**	**-13.7**	**-14.3**	**-14.9**	**-15.5**	**-16.1**	**-16.5**		**-16.5**	
Avg.	**-3.0**	**-3.1**	**-3.2**	**-3.4**	**-3.6**	**-3.8**	**-4.0**	**-4.0**	**-4.2**	**-4.1**	**-3.7**	**-2.9**	**-2.0**	**-1.5**	**-1.1**	**-1.0**	**-0.9**	**-1.2**	**-1.7**	**-2.2**	**-2.5**	**-2.8**	**-3.0**	**-3.3**			**-2.6**

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

November 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-17.0	-17.4	-18.0	-18.3	-18.6	-18.9	-19.2	-19.6	-19.9	-20.2	-20.1	-19.2	-18.0	-17.2	-16.8	-16.3	-16.1	-16.4	-17.0	-17.4	-17.6	-17.9	-18.0	-17.9	-16.1	-20.2	-18.0
2	-18.2	-18.4	-17.5	-17.8	-16.5	-15.1	-15.0	-15.2	-14.3	-13.2	-12.8	-12.5	-11.3	-10.0	-9.6	-8.7	-8.2	-7.9	-7.6	-6.7	-7.4	-6.9	-6.7	-3.3	-3.3	-18.4	-11.7
3	-3.1	-5.3	-6.1	-5.8	-6.0	-6.7	-6.5	-6.6	-6.4	-6.2	-5.9	-5.4	-5.9	-4.8	-4.2	-4.4	-4.7	-5.3	-5.8	-5.9	-6.2	-6.7	-7.3	-8.2	-3.1	-8.2	-5.8
4	-7.8	-6.7	-6.3	-7.2	-7.8	-7.4	-7.0	-7.1	-7.3	-7.5	-7.3	-6.3	-5.8	-5.8	-5.9	-5.2	-5.0	-4.8	-5.7	-5.5	-5.6	-5.2	-5.0	-5.1	-4.8	-7.8	-6.3
5	-4.9	-4.6	-4.6	-5.1	-4.9	-4.8	-4.8	-4.6	-4.2	-3.9	-3.2	-2.4	-1.6	-1.2	-1.0	-1.1	-2.0	-2.8	-3.2	-3.4	-4.3	-4.2	-4.3	-5.1	-1.0	-5.1	-3.6
6	-5.8	-6.0	-5.5	-6.0	-6.7	-7.5	-7.9	-8.3	-8.7	-8.4	-8.4	-8.5	-8.7	-8.6	-8.8	-8.5	-8.1	-8.0	-8.3	-8.4	-8.1	-7.6	-7.1	-6.9	-5.5	-8.8	-7.7
7	-7.0	-6.9	-6.8	-6.7	-6.9	-7.4	-8.2	-8.6	-8.4	-7.9	-7.1	-6.6	-5.7	-5.1	-4.9	-3.8	-3.9	-3.5	-3.2	-2.2	-0.9	-0.4	0.8	1.1	1.1	-8.6	-5.0
8	1.5	1.9	1.9	1.4	1.6	1.9	2.3	1.8	1.6	1.4	1.5	1.5	1.3	1.1	-0.6	-1.9	-2.4	-2.4	-2.6	-2.9	-3.2	-3.8	-4.9	-5.7	2.3	-5.7	-0.3
9	-6.5	-7.2	-7.6	-7.4	-6.3	-6.8	-7.6	-8.1	-8.0	-6.9	-6.0	-4.6	-4.1	-4.5	-4.4	-4.3	-4.5	-4.7	-4.5	-4.6	-4.5	-5.5	-6.0	-6.3	-4.1	-8.1	-5.9
10	-6.2	-6.2	-6.5	-6.4	-6.0	-6.5	-6.7	-6.7	-6.4	-6.3	-5.1	-3.5	-2.8	-3.2	-3.4	-3.1	-3.6	-3.8	-4.1	-4.4	-4.3	-4.2	-4.2	-4.6	-2.8	-6.7	-4.9
11	-4.2	-4.1	-4.0	-4.2	-4.2	-4.2	-4.1	-4.5	-4.7	-4.5	-4.4	-4.3	-4.0	-3.6	-3.8	-3.8	-3.9	-4.1	-4.4	-4.6	-5.1	-5.4	-5.7	-6.4	-3.6	-6.4	-4.4
12	-7.4	-7.8	-7.7	-8.1	-8.5	-9.0	-9.3	-9.9	-10.2	-11.2	-11.3	-10.6	-9.9	-9.4	-10.1	-9.2	-8.2	-6.7	-6.9	-6.6	-7.0	-6.8	-7.1	-6.5	-6.5	-11.3	-8.6
13	-5.8	-5.7	-5.9	-6.2	-6.0	-6.6	-6.3	-6.0	-5.7	-6.1	-7.7	-6.8	-5.2	-5.5	-3.2	-4.2	-5.7	-6.8	-7.9	-8.7	-9.0	-7.7	-8.3	-8.2	-3.2	-9.0	-6.5
14	-8.1	-8.9	-10.5	-10.3	-10.8	-11.8	-13.1	-13.9	-15.1	-15.5	-15.4	-15.4	-15.5	-14.9	-14.2	-13.1	-13.7	-14.9	-15.1	-15.3	-15.7	-15.8	-15.9	-14.3	-8.1	-15.9	-13.6
15	-13.4	-13.1	-12.7	-12.7	-12.3	-12.4	-12.1	-12.3	-12.9	-12.8	-11.9	-9.8	-7.7	-6.7	-4.9	-4.1	-3.6	-4.9	-5.2	-4.4	-4.9	-4.3	-3.5	-3.4	-3.4	-13.4	-8.6
16	-2.8	-2.4	-1.2	-1.1	-1.4	-2.2	-1.8	-0.7	0.6	0.8	0.8	1.5	2.4	3.4	3.7	3.5	3.3	3.2	3.1	3.0	3.4	3.1	2.3	1.5	3.7	-2.8	1.1
17	-2.1	-2.6	-1.7	-2.5	-1.7	-3.1	-4.5	-4.9	-4.9	-5.2	-6.5	-5.9	-7.2	-8.1	-6.7	-7.7	-8.2	-8.0	-8.8	-9.5	-9.2	-8.9	-8.3	-8.2	-1.7	-9.5	-6.0
18	-7.5	-6.0	-1.6	-0.7	-0.8	0.1	0.1	0.0	0.1	-0.2	-0.4	0.3	0.9	0.5	0.5	0.4	-0.1	-0.9	-0.8	-1.4	-2.0	-2.8	-2.5	-2.4	0.9	-7.5	-1.1
19	-2.7	-3.3	-3.7	-3.8	-4.1	-4.1	-3.9	-3.7	-4.0	-3.6	-3.6	-3.0	-2.2	-1.7	-2.3	-1.1	-3.1	-4.2	-4.7	-4.5	-5.0	-5.2	-5.1	-5.8	-1.1	-5.8	-3.7
20	-5.2	-5.3	-5.9	-6.5	-6.7	-4.6	-6.5	-7.7	-7.6	-7.2	-7.6	-7.0	-6.7	-5.1	-4.7	-5.4	-6.7	-7.5	-7.3	-6.9	-7.1	-7.2	-7.1	-6.6	-4.6	-7.7	-6.5
21	-6.2	-5.7	-5.4	-5.5	-5.5	-4.7	-4.4	-4.0	-3.2	-2.7	-2.2	-1.4	-2.1	-1.1	-0.6	-0.3	-0.3	-0.2	-0.7	-1.6	-1.6	-1.2	-1.3	-0.9	-0.2	-6.2	-2.6
22	0.1	-0.1	0.2	0.2	0.3	0.5	0.9	0.5	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	1.1	1.5	1.5	1.6	1.8	2.2	2.4	2.9	3.3	3.5	3.5	-0.2	1.0
23	3.4	3.5	3.5	3.4	3.3	3.3	3.2	3.5	4.0	4.2	4.5	4.4	4.4	3.9	3.7	3.0	2.6	2.6	2.8	3.1	3.1	3.3	3.4	3.4	4.5	2.6	3.5
24	3.0	2.2	1.7	1.4	1.1	1.0	1.2	1.5	1.5	1.8	2.0	2.1	2.5	2.7	3.0	2.8	2.0	1.6	2.0	1.9	2.2	2.3	2.1	1.6	3.0	1.0	2.0
25	0.7	1.2	1.4	1.5	1.3	0.9	1.0	-0.3	-2.7	-3.2	-3.7	-3.8	-4.5	-4.9	-5.4	-5.7	-6.1	-6.8	-6.9	-7.1	-7.3	-7.5	-7.7	-7.8	1.5	-7.8	-3.5
26	-7.8	-7.7	-7.6	-7.4	-7.2	-7.4	-7.5	-7.4	-6.9	-6.0	-5.5	-4.3	-2.6	-3.2	-2.0	-1.6	-1.3	-0.2	-0.2	-0.4	0.1	0.3	-0.1	-0.1	0.3	-7.8	-3.9
27	-0.1	-0.1	-0.3	-0.2	-0.3	-0.1	0.5	1.4	1.3	0.0	0.4	0.8	0.6	0.8	0.8	0.3	0.1	-0.4	-1.2	-1.1	-1.5	-1.5	-0.8	-0.5	1.4	-1.5	0.0
28	-0.5	-0.4	0.1	0.3	0.4	0.1	0.1	0.5	0.7	1.4	1.1	1.0	0.7	1.1	0.6	-0.6	-1.4	-1.8	-2.4	-2.4	-2.6	-3.0	-3.1	-3.3	1.4	-3.3	-0.6
29	-3.2	-3.1	-3.1	-2.9	-3.0	-3.0	-3.2	-3.5	-3.4	-3.4	-3.0	-3.2	-3.2	-3.6	-2.7	-2.6	-3.9	-4.1	-4.2	-4.8	-4.8	-4.2	-4.9	-5.8	-2.6	-5.8	-3.6
30	-5.2	-5.5	-5.9	-5.7	-6.1	-6.1	-5.9	-7.0	-7.5	-8.8	-8.5	-7.7	-7.4	-6.7	-7.1	-7.2	-6.4	-5.0	-3.8	-3.1	-2.7	-4.0	-4.5	-4.1	-2.7	-8.8	-5.9
Max.	**3.4**	**3.5**	**3.5**	**3.4**	**3.3**	**3.3**	**3.2**	**3.5**	**4.0**	**4.2**	**4.5**	**4.4**	**4.4**	**3.9**	**3.7**	**3.5**	**3.3**	**3.2**	**3.1**	**3.1**	**3.4**	**3.3**	**3.4**	**3.5**	**4.5**		
Min.	**-18.2**	**-18.4**	**-18.0**	**-18.3**	**-18.6**	**-18.9**	**-19.2**	**-19.6**	**-19.9**	**-20.2**	**-20.1**	**-19.2**	**-18.0**	**-17.2**	**-16.8**	**-16.3**	**-16.1**	**-16.4**	**-17.0**	**-17.4**	**-17.6**	**-17.9**	**-18.0**	**-17.9**		**-20.2**	
Avg.	**-5.0**	**-5.1**	**-4.9**	**-5.0**	**-5.0**	**-5.1**	**-5.2**	**-5.4**	**-5.4**	**-5.4**	**-5.2**	**-4.7**	**-4.3**	**-4.1**	**-3.8**	**-3.7**	**-4.1**	**-4.2**	**-4.4**	**-4.5**	**-4.5**	**-4.5**	**-4.6**	**-4.5**			**-4.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

December 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-3.2	-3.3	-2.3	-1.8	-1.9	-1.1	-0.1	1.0	1.5	1.8	2.4	2.6	1.4	1.3	1.9	2.1	2.3	2.3	2.8	2.6	2.6	2.6	2.7	2.6	2.8	-3.3	0.9
2	1.9	1.8	1.9	1.8	1.8	1.1	-0.3	-1.2	-1.4	-1.8	-2.0	-2.5	-2.8	-2.9	-2.9	-2.5	-2.9	-3.3	-3.7	-4.2	-4.1	-4.2	-4.2	-4.8	1.9	-4.8	-1.7
3	-5.4	-4.9	-4.9	-5.7	-5.6	-5.7	-6.0	-7.0	-7.7	-8.4	-8.7	-8.8	-8.2	-8.4	-8.9	-9.1	-9.2	-9.9	-10.2	-11.1	-9.8	-9.9	-10.7	-9.8	-4.9	-11.1	-8.1
4	-10.9	-11.0	-11.2	-11.9	-11.0	-9.3	-8.3	-7.5	-6.4	-5.5	-5.3	-3.2	-2.2	-2.0	-1.7	-1.6	-1.6	-1.9	-2.1	-1.9	-1.6	-1.2	-0.5	-0.5	-0.5	-11.9	-5.0
5	0.2	0.2	0.1	0.4	0.8	1.2	1.3	1.7	1.4	1.3	0.9	1.0	1.0	-0.3	-0.1	-0.7	-1.2	-1.1	-0.8	0.1	0.5	0.9	0.5	-0.4	1.7	-1.2	0.4
6	-0.3	0.8	0.8	0.4	-0.6	-0.8	-0.6	-0.9	-0.7	-1.6	-2.3	-2.4	-2.3	-2.2	-3.6	-4.9	-5.4	-5.8	-6.5	-6.4	-5.8	-5.6	-5.5	-5.5	0.8	-6.5	-2.8
7	-5.6	-5.6	-5.8	-5.9	-5.9	-6.7	-7.2	-8.0	-9.6	-10.4	-11.2	-11.7	-12.2	-12.7		-13.8	-14.2	-14.6	-15.0	-15.4	-15.9	-16.2	-16.0	-16.2	-5.6	-16.2	-11.1
8	-16.2	-15.8	-16.3	-16.8	-16.7	-16.7	-16.8	-16.4	-16.4	-16.6	-16.1	-16.0	-15.2	-14.4	-14.1	-14.9	-14.8	-14.9	-15.1	-14.9	-15.3	-15.1	-15.1	-15.8	-14.1	-16.8	-15.7
9	-15.2	-15.3	-15.6	-15.8	-16.4	-15.7	-15.8	-15.7	-15.1	-15.8	-16.5	-16.1	-16.3	-15.8	-15.8	-17.2	-17.6	-17.9	-17.9	-18.5	-18.8	-19.2	-19.2	-19.0	-15.1	-19.2	-16.8
10	-19.3	-19.2	-19.1	-18.7	-17.8	-17.4	-17.5	-18.2	-19.3	-18.9	-17.8	-17.7	-17.3	-17.1	-16.9	-17.5	-17.6	-17.3	-16.7	-16.7	-17.5	-18.3	-18.7	-18.9	-16.7	-19.3	-18.0
11	-19.5	-20.3	-20.3	-20.3	-20.6	-20.4	-21.5	-22.3	-21.8	-22.3	-21.9	-20.9	-20.2	-19.2	-20.0	-20.8	-20.9	-21.6	-22.0	-21.7	-20.7	-18.5	-16.5	-16.9	-16.5	-22.3	-20.5
12	-17.4	-14.6	-12.0	-12.3	-12.2	-13.2	-13.1	-12.8	-11.4	-9.3	-9.4	-8.6	-7.1	-5.7	-4.3	-4.7	-5.3	-4.5	-5.3	-5.3	-6.8	-6.6	-8.2	-12.8	-4.3	-17.4	-9.3
13	-14.4	-15.3	-16.7	-17.1	-17.8	-17.8	-18.0	-19.8	-19.8	-20.0	-20.4	-20.3	-19.9	-19.5	-19.4	-19.7	-20.5	-20.9	-20.5	-19.9	-19.6	-19.1	-18.8	-18.7	-14.4	-20.9	-18.9
14	-18.6	-18.8	-18.7	-18.6	-18.4	-18.4	-18.3	-18.1	-18.1	-18.0	-18.0	-18.3	-18.4	-18.7	-19.1	-19.7	-20.3	-20.8	-21.5	-21.5	-21.5	-21.5	-20.8	-21.2	-18.0	-21.5	-19.4
15	-21.0	-20.8	-20.8	-20.1	-20.7	-20.4	-20.6	-20.5	-21.1	-21.0	-21.1	-21.1	-20.7	-21.0	-21.4	-21.7	-22.1	-22.4	-22.8	-23.4	-23.4	-23.6	-24.0	-23.7	-20.1	-24.0	-21.6
16	-23.1	-22.4	-23.1	-22.6	-22.4	-21.7	-21.3	-20.8	-20.0	-19.1	-17.4	-15.6	-14.4	-12.9	-11.7	-10.1	-8.2	-7.3	-7.3	-6.8	-6.3	-6.5	-6.3	-5.8	-5.8	-23.1	-14.7
17	-6.4	-6.2	-5.7	-5.3	-5.0	-5.0	-5.4	-5.3	-5.3	-4.9	-4.9	-5.0	-4.7	-4.4	-4.3	-3.9	-4.1	-4.3	-4.3	-4.4	-4.3	-3.9	-3.9	-3.6	-3.6	-6.4	-4.8
18	-3.7	-3.8	-3.9	-4.2	-5.3	-7.1	-6.5	-6.2	-7.8	-8.1	-8.2	-7.8	-6.6	-5.7	-5.7	-6.2	-5.7	-6.1	-6.2	-6.9	-6.4	-6.6	-6.7	-6.9	-3.7	-8.2	-6.2
19	-7.4	-7.2	-6.8	-7.1	-6.8	-7.2	-9.1	-8.8	-8.2	-9.0	-8.9	-9.9	-10.0	-9.3	-9.5	-9.9	-9.5	-9.1	-8.7	-8.9	-9.0	-9.2	-8.9	-8.5	-6.8	-10.0	-8.6
20	-8.9	-8.6	-8.7	-9.3	-9.4	-9.5	-9.2	-8.8	-9.2	-9.2	-8.6	-8.4	-9.0	-8.8	-8.7	-9.4	-10.5	-10.4	-9.7	-10.0	-10.1	-11.6	-12.7	-12.7	-8.4	-12.7	-9.6
21	-12.9	-13.3	-13.7	-14.4	-13.8	-13.5	-14.8	-15.5	-16.7	-15.7	-14.8	-14.9	-14.4	-14.7	-14.3	-13.4	-13.0	-13.1	-12.8	-11.0	-10.1	-9.4	-7.8	-7.2	-7.2	-16.7	-13.1
22	-6.5	-6.5	-6.3	-5.8	-5.6	-5.4	-5.0	-4.7	-4.5	-4.2	-3.9	-4.1	-4.6	-4.5	-5.0	-5.1	-5.3	-5.6	-5.5	-5.5	-5.5	-5.7	-5.9	-6.0	-3.9	-6.5	-5.3
23	-6.1	-6.2	-6.2	-6.2	-6.1	-6.1	-6.2	-6.2	-6.1	-6.1	-6.7	-7.1	-6.6	-6.2	-5.5	-5.1	-4.7	-4.5	-3.9	-2.7	-2.4	-2.9	-3.4	-3.2	-2.4	-7.1	-5.3
24	-3.7	-3.5	-3.1	-3.1	-3.2	-3.1	-2.9	-2.9	-2.5	-1.9	-1.3	-1.1	-0.9	-1.0	-1.0	-1.1	-1.2	-1.2	-1.5	-1.3	-1.2	-1.3	-1.4	-1.4	-0.9	-3.7	-1.9
25	-1.4	-1.6	-1.9	-1.7	-1.4	-1.4	-1.5	-1.4	-1.5	-1.7	-1.8	-2.0	-2.2	-2.3	-2.5	-2.6	-2.8	-3.0	-2.8	-3.4	-3.4	-4.3	-4.9	-6.1	-1.4	-6.1	-2.5
26	-6.4	-6.9	-8.2	-9.2	-9.7	-10.5	-11.3	-11.8	-11.0	-9.9	-11.4	-11.6	-11.8	-11.7	-11.9	-12.5	-12.9	-13.5	-13.5	-13.1	-10.8	-9.0	-10.5	-12.4	-6.4	-13.5	-10.9
27	-12.3	-10.1	-9.5	-9.3	-8.6	-8.6	-8.8	-9.2	-8.1	-8.3	-8.0	-8.0	-5.4	-3.3	-3.0	-3.6	-3.6	-2.0	-1.3	-1.0	-1.5	-0.9	-1.7	-2.5	-0.9	-12.3	-5.8
28	-2.6	-2.3	-2.1	-2.0	-2.0	-1.9	-1.7	-1.9	-1.5	-1.2	-1.1	-0.9	-0.6	-0.7	-0.6	-0.8	-0.9	-0.6	-0.3	-0.4	-0.5	-0.5	-0.6	-0.7	-0.3	-2.6	-1.2
29	-0.7	-0.8	-1.0	-1.0	-0.6	-0.8	-0.7	-0.9	-1.2	-1.2	-1.2	-1.2	-1.1	-1.0	-1.0	-0.9	-0.9	-0.7	-0.4	-0.2	-0.1	-0.1	-0.1	0.1	0.1	-1.2	-0.7
30	0.3	0.4	0.7	0.7	0.7	0.9	1.0	0.9	0.8	0.4	0.3	0.4	0.3	0.3	0.5	0.6	0.8	0.7	0.5	0.4	-0.1	-1.7	-2.2	-2.7	1.0	-2.7	0.2
31	-3.1	-3.3	-3.9	-3.6	-3.8	-4.7	-4.1	-4.5	-4.4	-4.2	-4.1	-3.9	-3.6	-3.3	-3.2	-3.1	-3.1	-3.0	-3.4	-3.5	-3.7	-3.7	-2.8	-5.6	-2.8	-5.6	-3.7
Max.	**1.9**	**1.8**	**1.9**	**1.8**	**1.8**	**1.2**	**1.3**	**1.7**	**1.5**	**1.8**	**2.4**	**2.6**	**1.4**	**1.3**	**1.9**	**2.1**	**2.3**	**2.3**	**2.8**	**2.6**	**2.6**	**2.6**	**2.7**	**2.6**	**2.8**		
Min.	**-23.1**	**-22.4**	**-23.1**	**-22.6**	**-22.4**	**-21.7**	**-21.5**	**-22.3**	**-21.8**	**-22.3**	**-21.9**	**-21.1**	**-20.7**	**-21.0**	**-21.4**	**-21.7**	**-22.1**	**-22.4**	**-22.8**	**-23.4**	**-23.4**	**-23.6**	**-24.0**	**-23.7**		**-24.0**	
Avg.	**-8.7**	**-8.5**	**-8.5**	**-8.6**	**-8.6**	**-8.6**	**-8.7**	**-8.8**	**-8.8**	**-8.7**	**-8.7**	**-8.6**	**-8.3**	**-8.0**	**-7.8**	**-8.2**	**-8.3**	**-8.3**	**-8.3**	**-8.3**	**-8.2**	**-8.2**	**-8.2**	**-8.6**			**-8.4**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

January *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-6.8	-8.2	-9.4	-10.1	-10.4	-11.2	-11.5	-11.9	-11.9	-12.0	-12.3	-12.6	-12.2	-11.7	-11.3	-11.4	-11.3	-11.8	-11.9	-12.1	-12.4	-12.4	-12.6	-12.4	-6.8	-12.6	-11.3
2	-11.1	-12.5	-12.2	-12.8	-12.3	-12.3	-12.5	-11.5	-10.9	-8.8	-6.8	-4.6	-4.1	-3.5	-2.8	-5.1	-5.7	-4.6	-4.1	-4.9	-4.0	-3.2	-2.9	-3.0	-2.8	-12.8	-7.3
3	-2.5	-2.0	-1.7	-1.4	-1.1	-0.8	-0.6	-0.5	-0.4	-0.3	-0.4	-0.4	0.0	0.3	0.4	0.3	0.2	0.1	0.1	0.2	0.4	0.5	0.6	0.7	0.7	-2.5	-0.3
4	0.8	1.0	1.0	1.3	1.6	1.6	1.4	1.3	1.3	1.5	1.5	1.9	2.2	2.3	2.4	3.0	3.2	3.2	3.0	2.6	1.6	1.7	1.4	0.9	3.2	0.8	1.8
5	0.3	0.1	-0.3	-0.7	-0.9	-1.2	-1.7	-1.3	-1.2	-1.0	-1.0	-1.0	-0.9	-0.9	-1.0	-1.0	-1.0	-0.7	-0.6	0.3	-0.3	-0.5	-1.8	-1.6	0.3	-1.8	-0.8
6	-1.3	-1.4	-1.7	-2.4	-1.9	-1.7	-2.5	-2.2	-1.5	-0.8	0.1	0.7	-0.2	-1.1	-0.9	-0.1	-0.1	0.1	-0.5	-0.2	0.1	0.2	0.1	0.1	0.7	-2.5	-0.8
7	0.2	0.3	0.1	0.3	0.5	0.7	0.7	0.6	0.4	0.5	0.9	0.7	0.2	0.1	0.1	0.1	-0.2	-0.2	-0.4	-0.5	-0.4	-0.4	-0.8	-0.6	0.9	-0.8	0.1
8	-0.8	-1.4	-2.3	-3.1	-3.3	-4.6	-4.2	-5.1	-5.5	-6.5	-6.5	-6.1	-5.2	-4.4	-5.1	-5.0	-6.1	-6.0	-6.1	-6.2	-6.5	-6.8	-5.9	-6.7	-0.8	-6.8	-5.0
9	-7.4	-7.9	-7.8	-8.0	-8.3	-9.8	-10.6	-10.0	-10.1	-8.8	-6.3	-5.6	-4.2	-4.3	-5.4	-6.4	-6.6	-6.5	-7.4	-6.8	-5.6	-5.6	-6.3	-5.5	-4.2	-10.6	-7.1
10	-5.6	-5.2	-5.2	-5.0	-5.1	-5.1	-5.5	-5.5	-5.2	-5.3	-5.2	-5.0	-5.2	-4.7	-5.2	-5.5	-5.3	-5.3	-5.2	-5.3	-4.8	-3.9	-4.0	-4.6	-3.9	-5.6	-5.1
11	-4.5	-4.9	-5.5	-6.8	-7.8	-10.5	-10.4	-12.0	-11.5	-8.1	-7.8	-6.2	-4.3	-4.4	-4.8	-4.8	-4.2	-3.8	-3.5	-3.6	-3.4	-2.8	-2.4	-2.4	-2.4	-12.0	-5.9
12	-1.9	-1.9	-1.6	-1.4	-1.5	-0.5	-0.5	-0.3	0.0	-0.7	-0.5	-0.4	0.0	0.4	1.4	1.3	0.5	0.9	1.1	1.3	1.4	0.5	-0.7	-1.4	1.4	-1.9	-0.2
13	-1.9	-2.0	-2.2	-2.9	-3.7	-4.1	-4.4	-4.7	-4.3	-4.6	-4.3	-3.4	-3.7	-3.8	-4.3	-4.8	-5.5	-6.0	-6.0	-7.0	-7.3	-7.7	-7.7	-6.7	-1.9	-7.7	-4.7
14	-6.2	-8.8	-9.5	-9.3	-9.0	-8.8	-7.7	-7.9	-8.5	-7.5	-6.8	-7.1	-6.5	-6.1	-5.4	-5.1	-5.6	-5.3	-4.9	-3.7	-3.1	-2.8	-2.6	-2.0	-2.0	-9.5	-6.3
15	-1.6	-1.8	-1.8	-1.7	-1.9	-1.7	-1.6	-1.7	-1.7	-1.6	-1.5	-1.4	-1.1	-0.9	-0.9	-0.8	-0.6	-1.1	-1.4	-1.7	-1.8	-1.8	-1.3	-0.8	-0.6	-1.9	-1.4
16	-0.1	-0.1	-0.5	-0.7	-1.3	-1.6	-1.6	-1.4	-1.2	-1.3	-1.2	-0.9	-0.9	-1.9	-4.0	-6.6	-8.4	-10.2	-12.8	-14.1	-15.1	-16.0	-16.2	-17.2	-0.1	-17.2	-5.6
17	-17.7	-18.1	-18.2	-18.5	-18.5	-18.5	-18.4	-18.5	-18.8	-19.0	-19.2	-19.6	-19.8	-20.1	-20.5	-20.8	-21.3	-22.0	-22.5	-22.9	-23.5	-24.2	-24.8	-25.5	-17.7	-25.5	-20.5
18	-26.1	-26.8	-26.8	-27.3	-27.8	-28.1	-28.3	-28.5	-28.8	-28.9	-29.0	-28.9	-28.5	-28.5	-28.4	-28.6	-28.8	-29.0	-29.4	-29.7	-30.1	-30.3	-30.5	-30.8	-26.1	-30.8	-28.7
19	-31.2	-31.5	-32.0	-32.2	-32.6	-32.6	-32.8	-32.8	-32.8	-33.0	-32.8	-32.7	-32.6	-32.4	-32.2	-32.3	-32.6	-32.7	-32.9	-33.1	-33.1	-33.2	-33.4	-33.7	-31.2	-33.7	-32.6
20	-33.8	-34.1	-34.4	-34.4																					-33.8	-34.4	-34.2
21																											
22																											
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24																											
25																											
26																											
27																											
28																											
29																-21.9	-22.5	-23.8	-24.5	-25.4	-25.0	-24.1	-24.1	-24.3	-21.9	-25.4	-24.0
30	-24.4	-24.4	-24.7	-25.0	-25.5	-25.1	-25.0	-24.2	-24.1	-23.3	-23.8	-22.0	-21.6	-23.7	-24.7	-24.8	-23.9	-22.6	-21.3	-19.5	-18.6	-19.2	-22.3	-24.1	-18.6	-25.5	-23.2
31	-26.0	-27.2	-28.6	-29.2	-29.6	-30.3	-31.2	-31.9	-32.9	-33.8	-34.5	-34.9	-35.0	-35.0	-35.1	-35.0	-35.0	-35.4	-35.5	-35.6	-36.2	-36.2	-35.5	-35.7	-26.0	-36.2	-33.1
Max.	**0.8**	**1.0**	**1.0**	**1.3**	**1.6**	**1.6**	**1.4**	**1.3**	**1.3**	**1.5**	**1.5**	**1.9**	**2.2**	**2.3**	**2.4**	**3.0**	**3.2**	**3.2**	**3.0**	**2.6**	**1.6**	**1.7**	**1.4**	**0.9**	**3.2**		
Min.	**-33.8**	**-34.1**	**-34.4**	**-34.4**	**-32.6**	**-32.6**	**-32.8**	**-32.8**	**-32.9**	**-33.8**	**-34.5**	**-34.9**	**-35.0**	**-35.0**	**-35.1**	**-35.0**	**-35.0**	**-35.4**	**-35.5**	**-35.6**	**-36.2**	**-36.2**	**-35.5**	**-35.7**		**-36.2**	
Avg.	**-9.5**	**-9.9**	**-10.2**	**-10.5**	**-9.5**	**-9.8**	**-9.9**	**-10.0**	**-10.0**	**-9.7**	**-9.4**	**-9.0**	**-8.7**	**-8.8**	**-8.9**	**-9.8**	**-10.0**	**-10.1**	**-10.3**	**-10.4**	**-10.4**	**-10.4**	**-10.6**	**-10.8**			**-11.1**

Total Hours in Month 744 **Hours Data Available** 517 **Data Recovery** 69.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

February 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-36.1	-35.9	-34.8	-34.6	-34.9	-35.5	-35.9	-36.3	-37.0	-36.9	-35.7	-34.7	-34.1	-33.9	-33.0	-32.6	-32.8	-33.6	-33.0	-32.4	-32.1	-31.0	-29.8	-28.7	-28.7	-37.0	-34.0
2	-28.4	-26.7	-26.3	-25.5	-25.5	-25.0	-23.6	-22.5	-21.2	-20.8	-20.5	-20.3	-19.2	-18.1	-18.8	-19.1	-19.6	-20.6	-18.8	-17.3	-18.4	-18.9	-20.1	-21.4	-17.3	-28.4	-21.5
3	-21.7	-21.2	-22.5	-22.2	-23.9	-24.4	-24.3	-25.0	-24.7	-24.8	-24.4	-25.2	-25.7	-25.6	-25.4	-26.5	-27.0	-27.2	-27.3	-27.1	-27.9	-27.9	-28.5	-28.1	-21.2	-28.5	-25.3
4	-27.9	-28.5	-29.3	-30.0	-30.5	-30.9	-31.0	-31.1	-31.4	-31.0	-31.1	-29.9	-30.1	-29.0	-28.4	-28.2	-28.3	-28.8	-29.2	-29.4	-29.5	-30.5	-30.6	-30.0	-27.9	-31.4	-29.8
5	-29.8	-30.4	-29.9	-29.7	-29.7	-28.9	-29.1	-28.6	-28.2	-27.1	-26.3	-25.9	-25.7	-25.3	-25.0	-24.9	-24.8	-26.4	-27.2	-27.0	-27.0	-26.5	-26.4	-25.4	-24.8	-30.4	-27.3
6	-24.0	-23.5	-23.5	-24.7	-25.1	-25.0	-25.9	-25.7	-25.3	-25.1	-25.4	-23.8	-21.7	-21.8	-22.4	-23.1	-23.2	-24.8	-25.4	-25.1	-24.3	-23.5	-22.2	-20.0	-20.0	-25.9	-23.9
7	-19.2	-16.7	-15.3	-12.3	-9.6	-8.3	-6.6	-5.6	-5.2	-4.7	-4.2	-3.5	-3.1	-2.4	-2.2	-2.1	-2.1	-1.8	-1.4	-1.4	-1.5	-1.7	-1.3	-0.4	-0.4	-19.2	-5.5
8	-0.2	-0.8	-1.3	-1.1	-1.1	-1.5	-1.5	-1.7	-1.5	-1.8	-1.9	-1.5													-0.2	-1.9	-1.3
9																											
10																											
11																											
12																											
13														3.5			4.3	3.7	3.3	3.4	3.3	3.5	2.7	2.7	4.3	2.7	3.4
14	3.2	4.6	4.7	4.8	4.6	4.7	4.1	3.7	3.9	2.8	2.5	2.3	2.0	2.0	2.2	2.5	2.3	2.1	1.9	2.0	1.8	1.9	2.0	2.0	4.8	1.8	2.9
15	1.9	2.0	2.1	2.4	2.5	2.6	3.0	3.4	2.4	2.0	1.6	1.0	0.5	0.5	0.2	0.2	0.1	0.0	-0.2	-0.2	-0.8	-1.9	-2.5	-2.2	3.4	-2.5	0.8
16	-2.0	-1.6	0.3	0.3	0.6	-0.1	0.9	1.7	2.1	2.7	3.3	3.2	3.8	3.9	3.4	3.5	3.2	3.3	3.2	3.0	2.7	2.8	2.6	2.8	3.9	-2.0	2.1
17	2.6	2.7	2.9	2.1	2.1	2.0	2.6	1.5	0.9	1.2	1.8	1.2	1.5	1.9	3.6	4.8	4.9	4.0	3.7	1.6	0.7	2.0	2.1	3.8	4.9	0.7	2.4
18	0.9	-0.5	-0.3	-0.2	0.0	0.2	-0.5	-0.8	0.1	0.1	0.5	0.0	0.3	0.3	0.9	0.9	0.6	0.3	0.2	0.2	-0.2	-0.7	-0.9	-0.7	0.9	-0.9	0.0
19	-0.6	-0.5	-0.1	0.6	-0.1	1.5	2.3	2.7	2.4	2.5	1.7	0.3	0.9	1.0	0.9	1.3	1.7	0.7	0.8	0.2	-0.3	-0.3	-0.4	-0.5	2.7	-0.6	0.8
20	-0.6	-1.8	-1.3	-1.5	-1.5	-1.5	-1.8	-1.9	-1.9	-1.6	-0.9	0.3	0.8	1.0	0.4	1.4	0.8	0.3	-0.8	-1.3	-1.5	-1.8	-1.6	-1.4	1.4	-1.9	-0.8
21	-0.9	-0.5	-2.4	-2.4	-2.1	-2.0	-1.9	-1.6	-2.0	-2.2	-1.6	-1.3	-1.4	-0.1	0.3	0.2	-0.2	-0.1	-0.8	-1.1	-1.6	-1.5	-1.2	-0.3	0.3	-2.4	-1.2
22	-0.8	-0.8	-0.7	-0.8	-0.9	-1.0	-1.1	-0.8	-0.6	-0.5	-0.3	0.0	0.2	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.5	0.5	-1.1	-0.2
23	0.7	0.7	0.9	1.0	1.1	0.8	0.8	1.0	0.7	1.0	0.7	0.9	0.9	0.9	1.0	1.1	0.7	0.5	0.3	0.1	0.4	0.6	0.4	0.3	1.1	0.1	0.7
24	0.1	0.1	0.0	-0.1	-0.3	-0.6	-0.4	-0.3	-0.4	-0.4	-0.4	-0.2	0.0	0.1	0.1	0.1	-0.2	-0.2	-0.4	-0.6	-0.8	-0.9	-0.9	-0.8	0.1	-0.9	-0.3
25	-0.9	-0.8	-0.8	-0.8	-1.0	-1.0	-0.9	-1.0	-1.1	-0.9	-0.4	-0.3	-0.2	-0.1	0.2	0.2	-0.1	-0.5	-0.2	0.2	0.4	0.2	-0.8	-0.6	0.4	-1.1	-0.5
26	-0.4	-0.8	-1.2	-1.2	-1.4	-1.4	-1.4	-1.2	-1.3	-1.3	-1.2	-1.2	-1.1	-0.7	-0.6	-0.7	-1.5	-2.2	-2.7	-3.1	-3.0	-3.5	-3.9	-3.8	-0.4	-3.9	-1.7
27	-5.0	-4.2	-4.0	-4.0	-3.5	-3.2	-3.5	-3.2	-3.7	-2.3															-2.3	-5.0	-3.7
28																											
Max.	**3.2**	**4.6**	**4.7**	**4.8**	**4.6**	**4.7**	**4.1**	**3.7**	**3.9**	**2.8**	**3.3**	**3.2**	**3.8**	**3.9**	**3.6**	**4.8**	**4.9**	**4.0**	**3.7**	**3.4**	**3.3**	**3.5**	**2.7**	**3.8**	**4.9**		
Min.	**-36.1**	**-35.9**	**-34.8**	**-34.6**	**-34.9**	**-35.5**	**-35.9**	**-36.3**	**-37.0**	**-36.9**	**-35.7**	**-34.7**	**-34.1**	**-33.9**	**-33.0**	**-32.6**	**-32.8**	**-33.6**	**-33.0**	**-32.4**	**-32.1**	**-31.0**	**-30.6**	**-30.0**		**-37.0**	
Avg.	**-8.6**	**-8.4**	**-8.3**	**-8.2**	**-8.2**	**-8.1**	**-8.0**	**-7.9**	**-7.9**	**-7.7**	**-7.7**	**-7.5**	**-7.6**	**-6.7**	**-7.1**	**-7.1**	**-6.7**	**-7.2**	**-7.3**	**-7.4**	**-7.6**	**-7.6**	**-7.7**	**-7.3**			**-7.1**

Total Hours in Month 672 **Hours Data Available** 511 **Data Recovery** 76.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

March *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1															-5.3			-5.3	-6.2	-7.1	-7.0	-7.1	-6.7	-7.0	-5.3	-7.1	-6.5
2	-5.9	-5.2	-4.5	-4.9	-3.8	-3.7	-3.8	-3.7	-4.3	-4.7	-4.6	-5.3	-5.3	-4.8	-4.3	-3.7	-3.7	-4.0	-5.2	-5.4	-5.3	-5.2	-5.1	-4.4	-3.7	-5.9	-4.6
3	-3.2	-3.4	-4.8	-3.5	-1.8	-1.7	-1.1	-0.7	-0.1	0.0	-0.2	-0.3	0.8	0.8	1.4	1.7	1.8	1.7	0.5	-0.3	1.9	1.0	1.2	1.0	1.9	-4.8	-0.3
4	0.3	-0.7	0.3	0.2	1.1	0.8	-1.5	-2.1	-2.3	-1.8	-1.5	-1.0	-0.2	1.3	2.5	1.3	1.0	0.3	-1.1	-2.5	-2.9	-2.6	-3.1	-3.0	2.5	-3.1	-0.7
5	-4.2	-4.9	-4.7	-4.3	-3.9	-3.4	-3.2	-4.2	-4.9	-3.1	-4.0	-3.8	-2.9	-2.3	-0.8	-0.9	-1.6	-2.7	-3.3	-4.5	-5.0	-5.9	-6.7	-6.8	-0.8	-6.8	-3.8
6	-6.9	-7.2	-7.7	-8.6	-9.0	-9.4	-9.7	-10.1	-9.9	-8.6	-7.2	-5.7	-5.5	-2.8	-2.7	-2.7	-2.2	-1.6	-1.4	-2.9	-3.6	-4.1	-4.0	-3.6	-1.4	-10.1	-5.7
7	-4.0	-4.5	-4.9	-4.6	-5.0	-5.2	-5.6	-6.3	-4.6	-3.6	-3.1	-1.7	-0.2	0.7	0.3	0.7	0.9	-2.1	-3.4	-3.7	-3.7	-2.8	-2.8	-2.6	0.9	-6.3	-3.0
8	-2.3	-2.5	-2.7	-3.5	-3.4	-2.8	-1.9	-1.9	-2.0	-2.0	-1.4	-1.4	-0.8	-0.4	-0.4	-0.3	-0.6	-0.6	-0.8	-1.6	-1.6	-1.8	-1.8	-1.8	-0.3	-3.5	-1.7
9	-2.3	-2.9	-3.0	-3.4	-3.6	-3.7	-4.2	-4.2	-3.9	-3.6	-3.2	-1.9	-0.9	-1.3	0.6	1.3	-0.5	-1.3	-2.0	-3.3	-4.1	-4.0	-4.5	-4.7	1.3	-4.7	-2.7
10	-4.7	-2.8	-2.9	-3.1	-4.1	-4.6	-4.1	-4.2	-4.1	-3.9	-3.3	-3.0	-2.7	-2.4	-2.0	-1.8	-1.7	-1.7	-2.1	-2.0	-1.7	-1.6	-1.6	-1.8	-1.6	-4.7	-2.8
11	-1.7	-1.7	-1.5	-1.5	-1.3	-1.4	-1.4	-1.1	-0.9	-1.0	-1.1	-0.8	-0.5	-0.3	-0.2	-0.4	-0.7	-1.1	-1.2	-1.2	-1.2	-1.0	-1.1	-1.1	-0.2	-1.7	-1.1
12	-1.1	-1.4	-1.3	-1.5	-1.7	-2.2	-1.9	-1.9	-1.6	-1.0	-0.7	-0.7	-0.5	-0.2	0.0	-0.1	-0.1	-0.2	-0.3	-0.3	-0.4	-0.7	-0.5	-0.6	0.0	-2.2	-0.9
13	-0.7	-0.8	-1.2	-1.4	-1.6	-1.6	-1.9	-2.0	-1.7	-2.5	-1.5	-0.4	0.4	0.8	0.1	0.6	0.1	-0.1	-0.2	-0.6	-1.2	-1.0	-1.3	-1.5	0.8	-2.5	-0.9
14	-1.6	-2.0	-2.2	-2.1	-3.0	-3.2	-3.5	-3.7	-3.4	-2.9	-2.7	-2.3	-1.8	-1.9	-2.7	-3.5	-3.8	-4.0	-4.0	-3.5	-3.9	-5.3	-6.8	-8.1	-1.6	-8.1	-3.4
15	-8.9	-9.7	-10.6	-12.0	-12.9	-13.9	-14.8	-15.5	-15.6	-15.5	-15.3	-15.2	-15.2	-14.6	-14.2	-14.1	-14.2	-14.2	-14.7	-15.4	-15.8	-15.4	-15.7	-14.8	-8.9	-15.8	-14.1
16	-15.2	-15.1	-14.8	-14.5	-12.7	-10.4	-11.1	-11.3	-9.7	-9.0	-7.3	-6.7	-5.5	-5.5	-7.0	-7.4	-6.3	-5.3	-7.4	-8.9	-10.0	-9.7	-9.9	-9.5	-5.3	-15.2	-9.6
17	-9.0	-9.6	-9.7	-9.3	-10.4	-10.4	-10.6	-9.2	-9.4	-8.2			-3.6	-1.7	-1.5	-1.8	-2.2	-2.2	-2.3	-2.4	-2.5	-2.1	-1.8	-1.5	-1.5	-10.6	-5.5
18	-1.6	-1.4	-1.3	-1.4	-1.4	-1.3	-1.3	-1.2	-1.0	-1.2	-1.1	-1.0	-0.7	-0.7	-0.7	-0.6	-0.7	-0.7	-0.7	-0.5	-0.4	-0.5	-0.5	-0.6	-0.4	-1.6	-0.9
19	-0.3	-0.3	-0.6	-0.6	-0.6	-0.5	-0.4	-0.3	-0.3	0.0	0.3	0.6	1.2	1.1	1.0	1.2	1.0	1.2	1.3	1.4	1.3	1.4	1.5	1.6	1.6	-0.6	0.5
20	2.0	2.3	2.2	2.3	2.2	1.4	2.3	1.2	1.2	0.7	2.6	2.8	3.0	3.3	3.4	2.8	2.6	2.4	2.4	2.4	2.1	1.9	1.6	1.6	3.4	0.7	2.2
21	1.6	1.6	1.7	1.5	1.7	1.7	1.6	2.1	2.4	2.3	2.7	2.3	2.2	1.7	1.4	1.3	1.6	1.6	1.4	0.9	0.6	0.6	0.3	0.4	2.7	0.3	1.5
22	0.4	0.5	0.7	0.7	0.6	0.6	1.5	1.7	0.6	0.7	2.0	3.2	4.0	4.8	5.0	5.0	4.8	4.4	3.7	3.3	2.5	2.3	1.8	1.8	5.0	0.4	2.4
23	2.3	2.0	1.9	2.1	0.7	0.3	1.4	1.7	0.7	0.1	0.3	2.1	1.9	1.8	2.1	2.4	2.5	2.2	2.0	1.9	2.0	2.3	2.2	2.2	2.5	0.1	1.7
Max.	**2.3**	**2.3**	**2.2**	**2.3**	**2.2**	**1.7**	**2.3**	**2.1**	**2.4**	**2.3**	**2.7**	**3.2**	**4.0**	**4.8**	**5.0**	**5.0**	**4.8**	**4.4**	**3.7**	**3.3**	**2.5**	**2.3**	**2.2**	**2.2**	**5.0**		
Min.	**-15.2**	**-15.1**	**-14.8**	**-14.5**	**-12.9**	**-13.9**	**-14.8**	**-15.5**	**-15.6**	**-15.5**	**-15.3**	**-15.2**	**-15.2**	**-14.6**	**-14.2**	**-14.1**	**-14.2**	**-14.2**	**-14.7**	**-15.4**	**-15.8**	**-15.4**	**-15.7**	**-14.8**		**-15.8**	
Avg.	**-3.1**	**-3.2**	**-3.3**	**-3.3**	**-3.3**	**-3.4**	**-3.4**	**-3.5**	**-3.4**	**-3.1**	**-2.4**	**-1.9**	**-1.5**	**-1.0**	**-1.0**	**-0.9**	**-1.0**	**-1.4**	**-2.0**	**-2.4**	**-2.6**	**-2.7**	**-2.8**	**-2.8**			**-2.6**

Total Hours in Month 744 **Hours Data Available** 534 **Data Recovery** 71.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

April *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.8	1.7	1.0	1.4	0.9	1.3	1.0	1.1	1.8	2.7	2.6	2.8	2.9	3.1	3.8	4.0	3.3	3.5	2.7	1.8	1.5	1.6	2.1	1.8	4.0	0.9	2.2
2	1.7	1.6	0.9	-0.5	-0.6	-0.6	-0.6	-0.4	-0.3	-0.2	0.4	0.6	1.2	2.0	2.2	2.1	1.9	1.3	1.1	1.0	1.3	1.1	0.9	0.9	2.2	-0.6	0.8
3	0.6	0.3	0.4	0.6	0.6	0.6	1.0	1.1	1.3	1.7	1.9	2.4	3.1	3.3	3.3	3.3	3.1	3.2	2.6	2.0	1.3	1.1	0.9	1.1	3.3	0.3	1.7
4	0.6	0.6	0.6	0.2	0.5	0.0	-0.4	-0.3	0.3	1.0	2.8	3.2	3.8	5.3	5.3	4.5	4.5	3.5	2.2	0.5	0.0	0.2	0.4	0.4	5.3	-0.4	1.7
5	0.2	0.3	-0.1	0.2	-0.4	-0.1	0.2	0.4	0.8	1.8	3.8	4.9	5.4	6.0	5.5	4.7	4.5	4.0	3.0	1.8	0.9	1.0	0.4	0.6	6.0	-0.4	2.1
6	-0.6	-0.2	-0.1	-0.2	-0.5	-0.5	-0.5	0.0	1.8	2.3	2.9	3.5	3.7	4.3	5.3	4.6	4.8	4.5	3.5	2.2	1.3	0.7	-0.3	-0.2	5.3	-0.6	1.8
7	-0.2	0.0	-0.4	-0.3	-1.2	-1.0	-0.9	0.1	1.0	2.3	3.8	4.2	5.0	5.3	5.2	5.4	5.7	5.0	4.1	3.1	1.9	0.5	0.2	-0.4	5.7	-1.2	2.0
8	-0.4	-0.7	-1.5	-2.3	-2.3	-2.6	-2.7	-2.1	-1.3	-0.9	-0.7	0.3	1.7	2.5	2.8	3.1	3.3	3.5	3.5	2.5	1.5	0.3	-0.6	-0.8	3.5	-2.7	0.2
9	-0.9	-0.9	-0.3	-0.5	-0.5	-0.6	-0.4	0.0	1.0	2.9	3.5	3.0	3.2	3.7	2.9	3.5	3.6	3.0	2.0	1.2	0.1	-0.1	-0.2	-0.2	3.7	-0.9	1.2
10	-0.2	-0.2	-0.4	-0.9	-1.0	-1.1	-1.0	-1.1	-1.6	-0.7	0.1	0.5	1.1	1.2	0.6	0.3	0.0	-0.1	-0.3	-0.8	-0.6	-0.7	-0.8	-0.9	1.2	-1.6	-0.4
11	-1.4	-1.1	-0.9	-1.3	-1.0	-0.7	-0.7	-0.5	-0.1	0.6	1.3	1.9	2.8	3.3	3.8	4.3	4.3	4.0	3.7	2.7	1.9	1.6	1.5	1.9	4.3	-1.4	1.3
12	2.3	1.8	0.7	1.1	1.3	1.0	1.5	1.6	2.3	2.5	2.9	3.4	3.5	3.6	3.7	2.9	0.7	1.1	2.2	2.6	1.8	0.8	1.0	1.2	3.7	0.7	2.0
13	1.2	0.9	1.1	1.1	1.3	1.2	0.8	1.0	1.2	1.7	2.2	2.2	2.8	2.8	2.8	2.3	2.1	1.6	1.9	1.4	1.0	0.8	0.6	0.0	2.8	0.0	1.5
14	0.2	0.0	0.3	0.2	0.3	0.1	0.0	0.4	0.7	0.8	1.2	1.5	2.0	2.3	2.4	2.5	2.9	3.0	2.8	2.7	1.6	0.3	0.7	1.1	3.0	0.0	1.3
15	1.4	1.6	1.3	1.4	0.8	0.9	1.5	1.5	1.5	1.9	2.8	3.9	5.0	5.2	4.3	3.7	3.2	3.4	3.2	2.4	2.3	2.6	2.5	2.5	5.2	0.8	2.5
16	2.5	2.7	3.9	3.2	3.0	2.3	2.0	1.9	2.6	3.2	2.9	3.1	3.2	3.3	3.7	3.0	2.6	2.9	2.9	2.2	1.9	1.7	2.1	2.6	3.9	1.7	2.7
17	2.2	1.9	2.0	1.9	1.9	1.6	1.8	2.6	3.7	4.2	5.0	6.5	7.0	5.8	5.2	6.9	6.8	5.9	5.3	4.3	3.8	3.8	3.9	3.7	7.0	1.6	4.1
18	3.1	3.1	2.9	2.5	2.5	2.5	2.8	3.1	3.7	4.3	5.2	5.9	5.8	5.9	4.8	4.2	4.4	4.2	3.5	3.3	3.2	2.2	0.8	1.0	5.9	0.8	3.5
19	1.5	2.1	2.1	2.0	1.4	1.8	1.2	1.0	1.2	1.0	1.0	1.4	1.0	0.3	0.1	0.1	0.0	0.3	0.4	0.3	0.3	0.3	0.4	0.4	2.1	0.0	0.9
20	0.5	0.6	0.7	0.9	0.9	0.6	0.6	0.9	1.5	1.6	1.8	1.9	2.3	2.5	2.2	1.9	2.5	1.9	1.6	1.3	1.1	1.0	0.9	1.0	2.5	0.5	1.4
21	1.0	1.0	1.0	1.2	1.2	1.5	1.1	1.6	2.6	3.5	4.2	4.7	4.9	4.9	4.6	4.8	4.6	4.6	4.2	3.5	3.0	3.4	3.7	3.5	4.9	1.0	3.1
22	3.0	3.8	3.9	3.8	2.7	2.1	2.5	2.4	3.2	4.0	4.0	4.5	5.0	5.8	6.3	6.2	5.8	5.7	5.0	4.5	2.6	2.4	2.6	3.5	6.3	2.1	4.0
23	3.6	3.5	3.8	4.0	3.6	3.6	3.5	4.4	5.0	7.6	7.8	8.4	8.6	8.6	8.6	8.7	8.5	8.7	8.3	6.9	6.2	5.9	6.3	6.3	8.7	3.5	6.3
24	5.7	4.8	4.2	3.7	3.6	3.0	3.0	2.8	3.0	4.1	5.4	6.6	6.9	7.6	8.5	8.9	8.6	8.6	7.8	6.9	6.2	5.3	4.6	4.6	8.9	2.8	5.6
25	3.9	4.0	4.4	3.2	2.6	2.9	2.7	1.9	3.3	5.5	6.0	6.4	6.7	8.0	8.2	8.8	8.8	7.4	6.9	6.6	5.3	3.5	2.8	3.0	8.8	1.9	5.1
26	2.4	2.9	2.8	2.5	1.4	2.0	2.3	2.8	5.2	7.1	7.5	8.2	8.8	8.9	8.5	7.6	6.2	5.4	4.6	3.7	3.0	2.5	2.5	2.8	8.9	1.4	4.6
27	2.3	2.2	2.0	1.9	2.3	2.7	2.6	3.5	4.2	4.7	5.4	6.0	7.0	8.9	8.9	9.0	8.4	6.6	5.7	4.6	3.6	2.8	2.9	2.8	9.0	1.9	4.6
28	3.3	3.8	4.3	4.6	3.9	3.5	3.9	5.3	6.3	7.8	8.4	8.0	7.5	8.2	8.4	8.4	8.4	8.6	8.1	6.5	4.3	4.6	4.0	4.3	8.6	3.3	6.0
29	4.2	4.0	3.8	3.4	2.7	2.5	2.3	2.9	2.9	3.5	4.9	6.1	6.5	6.6	6.8	6.2	5.9	5.3	4.8	4.2	3.8	3.2	2.9	2.5	6.8	2.3	4.2
30	2.3	2.3	2.4	2.2	1.9	0.6	1.3	1.9	2.2	2.5	3.2	3.0	3.9	5.2	5.8	6.5	6.9	7.1	6.6	6.4	5.5	4.7	4.4	3.8	7.1	0.6	3.9
Max.	**5.7**	**4.8**	**4.4**	**4.6**	**3.9**	**3.6**	**3.9**	**5.3**	**6.3**	**7.8**	**8.4**	**8.4**	**8.8**	**8.9**	**8.9**	**9.0**	**8.8**	**8.7**	**8.3**	**6.9**	**6.2**	**5.9**	**6.3**	**6.3**	**9.0**		
Min.	**-1.4**	**-1.1**	**-1.5**	**-2.3**	**-2.3**	**-2.6**	**-2.7**	**-2.1**	**-1.6**	**-0.9**	**-0.7**	**0.3**	**1.0**	**0.3**	**0.1**	**0.1**	**0.0**	**-0.1**	**-0.3**	**-0.8**	**-0.6**	**-0.7**	**-0.8**	**-0.9**		**-2.7**	
Avg.	**1.6**	**1.6**	**1.5**	**1.4**	**1.1**	**1.0**	**1.1**	**1.4**	**2.0**	**2.8**	**3.5**	**4.0**	**4.4**	**4.8**	**4.8**	**4.7**	**4.5**	**4.3**	**3.8**	**3.1**	**2.4**	**2.0**	**1.8**	**1.8**			**2.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

May *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.1	2.5	1.6	1.5	1.8	1.5	2.0	2.3	3.1	4.1	4.9	6.2	7.3	8.3	9.7	10.4	9.2	8.4	7.6	6.4	5.4	4.5	3.8	3.6	10.4	1.5	5.0
2	3.3	2.7	2.5	2.3	2.4	2.5	4.2	5.1	5.9	6.8	8.0	8.6	10.6	11.4	12.0	12.2	11.6	10.7	10.0	9.4	7.8	7.0	5.2	5.1	12.2	2.3	7.0
3	5.5	5.0	3.8	3.2	3.5	2.2	2.3	3.1	4.0	5.0	5.2	5.3	6.3	6.5	7.3	7.2	7.1	7.7	7.1	6.3	5.4	4.8	3.5	2.8	7.7	2.2	5.0
4	2.3	2.2	2.9	3.4	3.6	3.6	3.9	4.7	5.8	6.5	6.9	6.5	7.8	8.9	9.2	8.2	5.1	4.9	4.4	2.5	1.5	2.0	1.9	2.0	9.2	1.5	4.6
5	2.1	2.0	1.8	2.1	1.8	1.1	1.3	2.3	4.0	4.7	5.0	5.4	5.3	5.5	5.6	5.9	5.6	5.3	4.9	4.4	3.1	2.1	1.8	2.0	5.9	1.1	3.6
6	2.3	2.4	2.3	2.5	2.6	2.2	1.9	4.1	5.7	6.9	6.8	6.2	5.5	4.7	5.3	6.6	7.1	5.6	5.4	4.8	4.2	3.1	2.6	2.0	7.1	1.9	4.3
7	2.0	2.4	2.3	2.1	1.5	2.1	3.1	3.8	4.6	5.3	5.7	6.2	6.5	3.8	2.5	5.6	4.8	5.4	5.6	5.4	4.3	3.3	3.4	2.8	6.5	1.5	3.9
8	2.0	1.8	1.8	1.6	1.4	1.8	2.0	2.9	4.0	4.3	4.7	5.8	6.6	4.5	4.5	5.9	4.2	3.2	3.5	3.1	2.9	2.3	1.8	1.0	6.6	1.0	3.2
9	0.7	0.3	0.0	-0.4	-0.9	-1.0	-0.7	-0.6	-0.7	0.1	1.2	2.2	3.0	3.5	4.9	4.8	4.8	4.0	3.5	3.0	2.3	1.4	1.0	0.7	4.9	-1.0	1.5
10	1.0	1.2	1.0	1.2	0.8	1.4	1.4	1.8	2.1	2.4	2.7	2.8	2.6	1.5	2.1	2.4	2.3	1.2	0.7	0.4	0.4	0.3	0.3	0.3	2.8	0.3	1.4
11	0.5	0.8	1.0	0.7	1.1	1.1	1.6	2.4	2.7	2.8	2.8	3.7	4.0	4.3	4.6	5.0	5.3	5.1	5.1	4.4	4.0	3.8	3.8	4.1	5.3	0.5	3.1
12	4.1	4.0	3.7	3.8	3.9	3.8	4.1	4.8	5.4	5.7	6.1	6.1	6.8	5.8	5.2	5.0	5.1	5.6	5.8	5.3	4.5	4.7	4.8	4.8	6.8	3.7	4.9
13	4.7	4.6	4.5	4.4	4.6	4.5	4.9	5.0	5.5	5.8	6.2	6.3	6.1	5.9	5.5	5.2	5.2	5.4	5.5	5.1	4.9	4.7	4.4	4.3	6.3	4.3	5.1
14	4.2	4.3	4.1	4.0	3.3	3.7	3.5	4.0	4.0	4.7	5.7	6.8	7.5	8.6	9.1	10.1	9.9	9.3	9.5	9.1	7.9	5.8	4.8	4.3	10.1	3.3	6.2
15	4.8	5.6	6.0	4.8	3.8	4.3	4.4	6.1	8.1	9.4	10.0	10.1	10.3	10.7	11.6	13.2	13.2	13.1	13.0	12.1	10.9	10.4	10.3	10.7	13.2	3.8	9.0
16	10.5	9.8	9.9	10.2	10.0	10.1	10.2	10.2	9.0	10.1	9.4	7.9	8.6	9.4	10.4	10.4	9.5	9.2	9.0	7.9	5.8	5.4	5.4	5.2	10.5	5.2	8.9
17	5.3	4.9	4.3	3.8	4.6	5.1	5.5	7.3	7.0	7.5	8.3	9.1	10.0	11.0	11.5	12.2	12.6	12.5	11.9	11.5	10.5	9.3	8.7	8.1	12.6	3.8	8.4
18	7.6	7.6	7.8	7.7	7.1	7.1	7.6	8.8	9.3	9.6	10.1	11.5	12.5	13.3	14.8	15.8	15.8	14.8	14.5	14.1	12.9	11.1	10.4	10.0	15.8	7.1	10.9
19	8.8	8.8	7.6	6.9	6.8	5.7	6.9	9.8	10.5	11.5	12.3	13.4	14.3	14.9	15.4	15.6	15.8	14.9	14.8	14.9	13.3	11.7	10.8	10.3	15.8	5.7	11.5
20	10.4	8.9	7.3	6.1	5.3	4.8	5.4	6.6	7.7	9.4	10.6	11.6	13.4	15.5	16.7			19.0	18.5	16.8	15.7	14.0	13.6	12.8	19.0	4.8	11.4
21	11.8	11.8	10.2	9.0	8.0	8.3	6.8	6.8	7.6	9.3	10.4	11.1	10.6	11.6	11.9	11.0	10.5	9.9	8.9	8.1	7.5	6.7	6.2	5.8	11.9	5.8	9.2
22	5.9	5.7	5.4	5.6	5.5	5.3	5.6	5.9	6.2	6.8	6.9	7.0	7.4	7.5	6.9	7.1	7.4	7.5	7.0	6.8	6.4	6.2	6.3	5.9	7.5	5.3	6.4
23	6.1	6.2	6.1	5.8	6.0	6.2	6.5	7.0	7.9	8.5	9.1	10.0	10.3	10.3	10.3	10.0	9.4	9.8	9.1	8.7	8.4	7.8	6.9	6.3	10.3	5.8	8.0
24	5.9	5.6	5.3	4.7	4.5	4.4	4.3	4.4	4.8	5.4	5.5	5.8	6.1	6.5	6.7	7.3	7.1	6.2	5.7	5.5	5.4	4.9	4.1	3.8	7.3	3.8	5.4
25	4.0	3.8	3.5	3.3	3.5	3.8	4.0	4.1	4.6	5.3	4.7	4.5	5.7	5.7	5.8	6.3	6.8	6.9	6.9	6.7	6.2	6.0	5.7	5.5	6.9	3.3	5.1
26	5.4	4.8	4.6	4.4	4.5	4.5	4.6	4.3	4.1	4.6	5.3	5.6	5.1	1.7	5.0	7.7	8.8	8.4	7.7	6.2	6.9	6.7	6.4	5.9	8.8	1.7	5.6
27	5.3	4.1	4.2	3.9	3.3	3.7	3.9	5.2	7.4	8.6	9.7							13.3	13.0	12.5	11.8	10.8	9.6	8.5	13.3	3.3	7.7
28	7.9	7.0	5.4	6.5	6.0	5.4	6.9	7.8	9.3		12.5	13.8	14.6	15.8	16.6		18.1	18.8	19.2	18.9	18.8	16.9	14.8	13.5	19.2	5.4	12.5
29	12.2	13.8	13.8	12.4	12.0	11.8	12.8	13.3	14.6	15.8	17.1	18.2	19.5	19.7	20.3	20.6	21.1	21.5	21.5	20.7	19.9	18.7	17.5	16.3	21.5	11.8	16.9
30	15.3	14.5	13.4	12.0	11.2	10.5	10.2	12.0	12.5	15.6	16.8	18.8	20.1	20.5	21.1	21.3	21.5	21.9	21.7	21.0	20.3	18.7	17.6	16.1	21.9	10.2	16.9
31	15.1	14.8	13.9	13.2	13.4	13.2	14.3	14.8	15.9	17.8	18.9	19.5	20.1	20.5	20.6	20.7	20.8	20.6	20.3	19.6	18.6	17.1	15.0	14.7	20.8	13.2	17.2
Max.	**15.3**	**14.8**	**13.9**	**13.2**	**13.4**	**13.2**	**14.3**	**14.8**	**15.9**	**17.8**	**18.9**	**19.5**	**20.1**	**20.5**	**21.1**	**21.3**	**21.5**	**21.9**	**21.7**	**21.0**	**20.3**	**18.7**	**17.6**	**16.3**	**21.9**		
Min.	**0.5**	**0.3**	**0.0**	**-0.4**	**-0.9**	**-1.0**	**-0.7**	**-0.6**	**-0.7**	**0.1**	**1.2**	**2.2**	**2.6**	**1.5**	**2.1**	**2.4**	**2.3**	**1.2**	**0.7**	**0.4**	**0.4**	**0.3**	**0.3**	**0.3**		**-1.0**	
Avg.	**5.8**	**5.6**	**5.2**	**4.9**	**4.7**	**4.7**	**5.0**	**5.8**	**6.5**	**7.3**	**8.0**	**8.5**	**9.1**	**9.3**	**9.8**	**9.8**	**9.8**	**10.0**	**9.7**	**9.1**	**8.3**	**7.5**	**6.8**	**6.4**			**7.4**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

June *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.4	11.9	11.1	11.2	10.1	10.0	11.7	13.3	14.3	15.6	17.1	18.1	18.3	19.2	19.5	19.8	20.1	19.4	18.6	18.1	16.8	14.5	12.0	10.4	20.1	10.0	15.1
2	8.7	6.7	5.5	4.8	4.5	5.1	6.7	7.1	7.4	8.2	9.1	9.4	9.7	9.7	10.4	10.9	9.8	8.7	8.6	8.9	8.8	8.8	8.1	7.7	10.9	4.5	8.0
3	7.7	7.3	7.9	7.9	8.1	8.1	8.1	8.4	9.1	9.8	10.3	10.4	11.7	12.3	12.1	11.8	11.9	11.4	12.0	10.6	9.8	9.1	8.5	7.3	12.3	7.3	9.6
4	6.8	6.5	6.5	6.2	6.2	6.3	7.0	7.7	8.6	9.8	10.1	9.8	10.0	10.3	10.7	11.9	11.8	11.5	11.8	11.3	10.2	9.6	8.5	8.2	11.9	6.2	9.1
5	8.0	7.6	7.6	7.4	7.4	6.9	7.3	8.8	9.7	10.0	10.4	11.4	12.2	11.7	12.3	12.9	11.9	11.2	10.8	10.5	10.1	8.9	8.3	7.9	12.9	6.9	9.6
6	8.2	8.4	9.1	8.4	6.0	5.4	5.4	5.8	6.0	6.7	7.6	8.6	9.1	9.1	8.6	9.1	10.1	8.7	7.3	6.8	6.6	6.1	5.7	5.2	10.1	5.2	7.4
7	5.3	5.1	5.0	4.9	4.7	4.5	4.2	5.0	5.9	6.3	7.2	8.1	9.2	10.1	9.4	10.6	11.1	11.2	10.1	7.8	7.1	6.2	5.7	5.5	11.2	4.2	7.1
8	5.6	5.5	4.5	3.6	3.7	3.9	4.3	4.7	6.3	8.0	8.9	9.7	10.0	10.6	10.7	10.2	10.0	9.9	9.6	8.7	7.9	6.9	6.2	5.7	10.7	3.6	7.3
9	5.2	4.5	4.3	4.5	4.5	3.9	3.3	4.8	6.9	7.9	8.6	9.7	11.0	11.1	10.7	11.8	11.7	11.3	12.0	11.4	9.5	8.6	7.8	6.8	12.0	3.3	8.0
10	6.8	7.1	4.9	3.2	2.8	3.0	3.2	3.1	3.9	4.5	5.0	5.3	6.3	7.9	8.9	9.5	10.1	10.4	10.0	10.1	8.9	8.4	7.5	6.8	10.4	2.8	6.6
11	6.3	6.1	5.7	5.3	5.0	4.5	4.6	4.7	5.3	6.5	7.3	8.7	9.5	10.8	10.1	10.5	11.1	11.3	11.1	11.1	9.8	9.1	8.1	7.6	11.3	4.5	7.9
12	6.6	6.5	6.6	6.9	6.6	6.1	6.2	6.3	6.6	6.7	6.6	7.6	8.9	8.4	8.2	8.1	8.2	8.8	9.2	9.6	8.8	8.1	8.0	7.9	9.6	6.1	7.6
13	7.1	6.3	6.1	5.7	5.4	4.9	4.7	5.7	7.2	7.5	8.6	9.3	10.1	11.4	11.9	12.1	12.3	12.7	12.6	12.4	11.9	11.1	9.3	7.5	12.7	4.7	8.9
14	7.7	7.1	7.3	7.2	7.3	6.7	6.8	7.7	8.6	9.5	10.5	11.3	12.4	12.2	12.3	13.0	11.5	10.2	9.9	10.2	9.7	9.4	8.2	7.4	13.0	6.7	9.3
15	5.7	5.3	4.6	3.5	2.8	3.3	3.9	4.9	6.5	8.9	9.8	10.0	10.5	11.4	11.9	12.3	12.7	13.1	13.3	13.8	13.8	12.8	10.9	9.9	13.8	2.8	9.0
16	8.8	8.0	7.7	6.8	6.1	6.2	7.5	9.1	10.7	11.6	12.4	12.4	13.0	13.4	13.6	13.2	12.9	12.4	11.4	10.8	9.6	8.8	7.5	7.0	13.6	6.1	10.1
17	6.6	6.3	6.6	6.4	5.9	4.7	4.9	5.2	6.4	8.7	9.4	10.5	11.1	11.9	12.3	12.9	13.0	13.2	12.9	12.4	12.2	11.3	10.0	8.4	13.2	4.7	9.3
18	8.4	8.3	7.6	8.1	8.6	8.9	9.2	9.8	10.5	12.0	12.9	14.4	15.5	16.7	17.4	17.8	18.1	18.9	18.6	18.2	18.2	17.3	16.9	15.6	18.9	7.6	13.7
19	14.5	14.1	13.3	13.1	12.7	12.3	12.5	13.0	13.1	14.0	15.4	17.0	18.3	19.3	19.8	20.1	20.4	20.2	20.1	19.7	19.3	17.9	16.0	15.3	20.4	12.3	16.3
20	14.0	13.0	13.3	12.8	12.0	11.4	11.2	12.5	13.5	14.9	15.7	17.3	18.6	17.5	18.3	18.9	18.9	19.0	19.1	18.9	18.4	17.2	14.9	13.3	19.1	11.2	15.6
21	12.5	12.2	11.3	10.5	10.3	10.0	9.9	11.1	12.6	13.8	15.4	16.9	17.6	17.7	18.9	19.0	17.0	17.0	17.1	15.9	13.5	12.6	11.5	11.0	19.0	9.9	14.0
22	10.8	10.0	9.0	8.2	8.3	8.5	8.9	8.9	9.5	11.1	11.7	12.1	12.9	12.9	13.0	12.4	12.0	11.8	11.9	11.5	10.8	9.7	8.6	7.6	13.0	7.6	10.5
23	7.3	7.2	7.1	7.0	6.9	6.8	6.5	6.8	7.4	7.4	8.1	8.1	8.6	10.4	10.8	11.0	11.1	11.2	11.2	11.0	10.8	10.1	9.4	8.3	11.2	6.5	8.8
24	7.6	6.4	6.3	6.3	5.8	5.6	6.7	8.4	10.4	11.9	12.2	12.1	13.4	14.1	15.6	16.4	17.6	17.8	18.1	17.3	15.6	14.8	13.9	13.4	18.1	5.6	12.0
25	11.9	12.3	11.4	11.6	11.7	11.5	11.0	11.4	13.0	14.5	15.3	15.3	14.6	15.0	16.1	16.6	17.0	16.9	16.5	15.5	14.7	13.2	12.0	11.0	17.0	11.0	13.8
26	10.4	9.9	9.3	8.8	8.3	8.3	8.3	8.2	8.8	9.0	9.0	9.2	9.2	9.1	9.4	9.2	8.9	8.3	8.4	8.6	8.6	8.4	7.9	7.6	10.4	7.6	8.8
27	7.4	7.3	7.5	7.7	7.9	7.8	7.5	7.4	7.5	7.9	8.6	9.5	10.0	10.9	11.2	10.5	10.2	9.9	9.4	9.0	8.5	8.0	7.8	7.5	11.2	7.3	8.6
28	7.2	6.9	6.9	6.9	6.9	6.8	6.6	6.6	7.0	7.8	8.7	8.8	9.2	9.1	9.2	9.3	9.1	8.6	8.6	8.5	8.1	7.6	7.4	7.1	9.3	6.6	7.9
29	6.9	6.9	6.7	6.5	6.4	5.9	5.8	5.7	5.9	6.2	6.7	7.1	7.5	7.7	7.9	7.9	7.8	7.6	7.6	7.8	7.6	7.4	7.2	6.9	7.9	5.7	7.0
30	7.1	6.8	6.8	6.4	6.2	5.8	6.1	6.7	7.6	8.2			9.7	10.3	10.1	11.6	10.9	10.5	11.4	11.3	10.8	10.2	9.4	8.6	11.6	5.8	8.7
Max.	**14.5**	**14.1**	**13.3**	**13.1**	**12.7**	**12.3**	**12.5**	**13.3**	**14.3**	**15.6**	**17.1**	**18.1**	**18.6**	**19.3**	**19.8**	**20.1**	**20.4**	**20.2**	**20.1**	**19.7**	**19.3**	**17.9**	**16.9**	**15.6**	**20.4**		
Min.	**5.2**	**4.5**	**4.3**	**3.2**	**2.8**	**3.0**	**3.2**	**3.1**	**3.9**	**4.5**	**5.0**	**5.3**	**6.3**	**7.7**	**7.9**	**7.9**	**7.8**	**7.6**	**7.3**	**6.8**	**6.6**	**6.1**	**5.7**	**5.2**		**2.8**	
Avg.	**8.3**	**7.9**	**7.6**	**7.3**	**7.0**	**6.8**	**7.0**	**7.6**	**8.5**	**9.5**	**10.3**	**11.0**	**11.6**	**12.1**	**12.4**	**12.7**	**12.6**	**12.4**	**12.3**	**11.9**	**11.2**	**10.4**	**9.4**	**8.7**			**9.9**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

July *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.1	7.1	6.0	6.3	6.2	6.1	6.3	6.9	8.5	10.0	10.5	10.1	10.3	10.6	10.1	9.7	8.9	7.8	7.9	7.2	6.6	6.2	5.8	5.4	10.6	5.4	7.8
2	5.3	5.1	5.1	5.3	5.3	5.4	5.6	5.9	6.2	6.6	7.0	7.4	8.1	8.5	8.9	9.2	9.0	9.1	8.8	8.6	8.3	8.4	8.2	8.3	9.2	5.1	7.2
3	8.4	8.4	8.1	8.0	7.7	7.3	7.4	7.2	7.5	7.6	8.0	8.2	8.2	8.5	9.1	9.1	9.4	9.0	7.7	7.7	7.4	7.1	6.7	6.3	9.4	6.3	7.9
4	6.1	6.1	6.3	6.2	5.9	5.6	5.6	5.6	5.8	6.5	7.2	7.6	8.1	8.0	8.8	8.7	9.8	9.3	9.9	10.1	9.4	8.2	7.6	7.5	10.1	5.6	7.5
5	6.6	6.4	6.2	6.2	5.9	5.7	5.5	5.6	5.9	6.8	7.9	9.2	9.4	9.4	9.4	11.3	11.7	12.2	11.8	11.3	10.6	9.9	9.0	8.1	12.2	5.5	8.4
6	7.6	7.4	7.3	7.2	7.0	7.0	6.8	6.8	7.0	7.3	7.4	7.6	7.9	7.8	8.3	8.8	9.9	9.5	9.1	8.4	8.8	8.4	7.7	7.2	9.9	6.8	7.9
7	6.9	6.8	6.9	6.8	6.7	6.7	7.1	7.6	8.9	10.0	9.9	10.7	11.7	12.5	12.6	13.7	14.3	14.3	14.2	14.5	13.4	12.9	11.8	10.4	14.5	6.7	10.5
8	10.1	10.1	10.0	10.0	9.5	9.4	10.0	10.6	11.3	12.6	13.8	14.5	15.0	15.8	15.9	16.4	16.5	16.5	16.5	16.9	16.2	16.0	14.6	13.3	16.9	9.4	13.4
9	11.3	11.3	10.0	10.0	10.2	9.4	10.5	10.9	12.2	13.1	14.3	15.4	16.4	17.2	18.1	18.8	19.7	20.0	20.3	20.3	20.0	19.1	18.0	16.5	20.3	9.4	15.1
10	15.3	13.9	14.1	13.2	13.1	12.9	14.2	14.4	16.6	16.8	17.8	19.1	20.2	21.1	22.2	23.0	23.8	23.9	24.1	23.9	23.5	22.4	20.5	18.7	24.1	12.9	18.7
11	17.8	17.1	16.4	16.8	15.9	15.5	15.4	14.4	13.2	16.6	19.0	19.6	20.0	20.6	21.8	22.9	23.5	23.8	23.4	23.1	22.0	20.9	20.1	19.5	23.8	13.2	19.1
12	18.4	16.9	15.2	13.8	13.2	13.3	11.8	11.9	13.9	16.0	17.8	19.1	20.4	21.1	21.5	22.1	22.8	23.2	22.8	22.2	21.2	20.2	19.4	18.7	23.2	11.8	18.2
13	17.9	15.7	14.2	13.7	12.6	11.6	12.6	14.2	15.8	15.9	16.4	16.4	16.5	16.7	17.3	17.8	17.9	17.4	16.8	16.3	16.1	15.2	14.1	13.1	17.9	11.6	15.5
14	12.6	12.3	12.2	12.1	11.9	11.6	11.7	11.4	11.4	11.7	12.4	13.5	14.6	15.8	16.6	16.7	16.7	16.9	16.4	16.1	15.8	15.4	14.8	14.2	16.9	11.4	14.0
15	13.9	13.6	13.1	12.8	12.7	12.6	13.0	13.1	13.7	14.3	14.9	14.5	14.7	15.3	16.0	16.3	17.0	17.3	17.0	16.5	16.6	16.1	14.3	12.8	17.3	12.6	14.7
16	12.1	11.9	11.3	12.0	11.9	10.9	11.5	12.6	12.6	13.2	14.0	14.9	15.7	16.0	16.2	17.4	18.7	19.2	20.3	21.9	21.8	19.9	17.4	16.1	21.9	10.9	15.4
17	15.6	15.6	16.3	15.2	13.3	10.9	9.3	9.3	10.3	11.2	12.6	14.0	17.3	18.0	19.0	20.6	21.1	21.2	20.8	17.6	17.0	17.0	16.8	16.1	21.2	9.3	15.7
18	14.8	13.3	13.7	13.6	13.5	13.1	12.5	12.4	12.9	13.5	14.5	15.4	15.9	15.5	16.1	16.2	16.3	16.4	15.8	15.1	14.9	14.6	14.0	12.8	16.4	12.4	14.4
19	12.6	11.2	10.5	10.0	9.8	9.4	10.1	11.2	12.1	13.2	13.8	14.7	15.4	15.6	16.7	16.3	16.6	16.8	16.5	15.9	14.9	13.7	12.1	11.1	16.8	9.4	13.3
20	9.9	9.0	8.9	9.5	9.5	9.5	10.0	11.5	11.9	12.3	14.1	15.3	16.2	17.4	18.2	18.7	18.5	18.1	17.2	16.5	15.4	14.2	12.4	10.4	18.7	8.9	13.5
21	9.7	9.6	9.6	9.5	9.6	9.9	10.3	10.2	12.5	13.2	13.8	15.3	16.1	16.8	16.7	15.9	15.9	15.2	15.9	15.9	14.2	12.6	11.7	11.1	16.8	9.5	13.0
22	10.5	10.4	10.1	9.7	9.6	9.6	9.9	9.9	10.4	11.7	11.4	12.3	13.7	14.9	15.0	16.1	17.0	18.1	18.4	17.8	16.6	15.7	15.2	14.0	18.4	9.6	13.3
23	13.6	13.2	12.9	12.7	12.5	12.1	11.7	11.6	11.6	12.5	13.2	14.4	15.0	14.6	14.8	14.7	14.9	14.0	13.1	13.0	13.3	12.7	12.3	12.1	15.0	11.6	13.2
24	12.1	11.7	11.1	10.8	11.0	10.7	11.0	11.1	11.3	11.9	12.6	13.6	14.0	14.4	14.1	13.8	13.7	13.5	13.1	13.1	13.0	12.6	11.6	11.5	14.4	10.7	12.4
25	12.2	12.9	12.6	11.8	11.6	11.5	10.8	11.4	12.2	13.4	13.6	13.4	13.1	13.6	12.6	12.3	12.8	13.4	13.7	13.8	13.3	12.0	11.6	12.1	13.8	10.8	12.6
26	11.7	11.1	11.3	11.4	11.5	11.2	11.2	11.3	11.8	12.7	13.3	14.4	15.4	16.9	17.2	18.2	18.5	18.7	19.0	18.5	18.3	17.0	16.0	15.2	19.0	11.1	14.7
27	14.9	14.5	14.4	13.3	12.1	11.3	11.4	11.6	12.0	12.8	13.9	14.4	14.1	15.5	17.2	16.9	17.1	16.5	16.1	15.6	14.4	13.4	13.6	13.4	17.2	11.3	14.2
28	12.4	12.3	12.1	12.2	11.8	11.5	11.4	11.0	10.5	10.7	10.9	11.3	11.6	11.8	12.3	13.0	13.1	13.3	13.7	13.4	13.5	12.5	12.1	11.8	13.7	10.5	12.1
29	11.6	11.5	11.4	11.4	11.2	11.1	11.1	11.2	11.3	11.5	11.6	12.4	13.3	14.8	15.9	16.6	16.8	17.7	18.2	17.8	17.2	16.7	15.3	13.9	18.2	11.1	13.8
30	13.6	12.9	12.8	12.0	11.2	10.9	10.7	11.3	12.2	13.2	14.2	15.3	16.2	17.5	18.9	19.7	20.5	21.0	21.4	21.2	20.4	19.0	17.2	16.6	21.4	10.7	15.8
31	15.5	14.8	14.9	13.6	13.8	12.7	11.6	12.6	11.7			14.1	14.2	15.7	16.4	16.9	16.6	16.5	16.1	15.1	14.5	14.2	13.8	13.3	16.9	11.6	14.5
Max.	**18.4**	**17.1**	**16.4**	**16.8**	**15.9**	**15.5**	**15.4**	**14.4**	**16.6**	**16.8**	**19.0**	**19.6**	**20.4**	**21.1**	**22.2**	**23.0**	**23.8**	**23.9**	**24.1**	**23.9**	**23.5**	**22.4**	**20.5**	**19.5**	**24.1**		
Min.	**5.3**	**5.1**	**5.1**	**5.3**	**5.3**	**5.4**	**5.5**	**5.6**	**5.8**	**6.5**	**7.0**	**7.4**	**7.9**	**7.8**	**8.3**	**8.7**	**8.9**	**7.8**	**7.7**	**7.2**	**6.6**	**6.2**	**5.8**	**5.4**		**5.1**	
Avg.	**11.9**	**11.4**	**11.1**	**10.9**	**10.6**	**10.2**	**10.3**	**10.5**	**11.1**	**12.0**	**12.7**	**13.5**	**14.1**	**14.8**	**15.3**	**15.7**	**16.1**	**16.1**	**16.0**	**15.7**	**15.1**	**14.3**	**13.4**	**12.6**			**13.2**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

August 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.3	13.4	13.5	13.5	13.6	13.1	12.9	12.5	12.7	13.4	13.9	14.1	13.9	14.1	15.2	15.8	16.4	16.4	16.0	15.5	14.7	13.8	12.9	12.2	16.4	12.2	14.0
2	12.0	11.8	11.6	11.2	10.6	10.5	10.4	10.2	10.4	10.5	10.6	10.8	10.7	11.1	11.1	10.9	12.6	14.0	13.8	13.4	12.8	12.6	12.3	12.0	14.0	10.2	11.6
3	11.4	11.2	10.8	10.6	10.6	10.7	10.7	10.9	11.3	12.3	12.7	13.2	13.8	14.9	15.9	15.8	15.9	15.5	15.3	14.9	14.3	13.0	12.3	11.6	15.9	10.6	12.9
4	11.4	11.1	10.9	10.9	10.8	10.5	10.1	9.9	9.9	9.9	10.3	10.8	11.1	11.6	11.6	11.7	11.6	11.5	12.2	12.1	11.8	11.5	11.3	11.2	12.2	9.9	11.1
5	10.9	10.6	10.8	10.6	10.3	10.2	10.0	10.1	10.6	11.1	11.4	12.0	12.0	13.3	14.0	13.7	13.3	12.4	12.4	11.7	11.9	11.9	11.2	11.1	14.0	10.0	11.6
6	10.9	10.8	11.1	11.4	11.5	11.5	11.5	11.4	11.4	11.4	11.4	11.4	11.6	11.7	11.5	11.7	11.7	11.7	11.5	11.2	11.2	11.1	10.9	10.7	11.7	10.7	11.3
7	10.4	10.2	10.2	10.1	10.1	10.0	9.9	10.1	11.0	12.0	13.0	13.8	14.6	15.8	16.4	16.6	17.1	17.3	16.7	16.4	16.0	15.6	14.9	14.5	17.3	9.9	13.4
8	14.5	14.3	14.3	13.9	13.6	13.2	13.4	13.7	13.9	14.3	15.0	16.0	16.7	17.3	17.6	17.6	17.1	16.8	17.0	17.1	17.1	15.8	14.8	13.7	17.6	13.2	15.4
9	13.7	13.5	13.1	12.1	11.2	11.1	11.1	12.2	13.0	13.5	14.8	16.3	17.5	18.5	19.2	19.9	20.4	20.7	21.0	20.7	19.9	18.4	16.9	15.9	21.0	11.1	16.0
10	14.9	14.5	13.3	13.4	13.0	12.3	12.3	12.6	13.7	14.1	14.6	15.8	16.4	15.8	15.5	14.9	14.4	13.7	13.7	13.7	13.5	13.0	12.3	12.1	16.4	12.1	13.9
11	11.9	11.9	11.8	11.6	10.9	11.5	11.6	11.9	12.4	13.3	14.0	15.4	15.8	15.3	15.9	16.1	14.8	13.9	13.1	12.9	12.5	12.3	12.3	11.7	16.1	10.9	13.1
12	11.2	11.1	11.0	10.7	10.6	10.6	10.6	10.6	11.1	11.6	12.4	13.3	13.6	13.5	13.8	13.8	13.7	12.8	12.4	11.7	11.2	10.6	10.0	9.7	13.8	9.7	11.7
13	9.6	9.3	9.2	8.9	8.6	8.6	8.4	8.2	8.0	8.3	9.2	10.4	11.4	11.4	11.2	10.2	9.3	8.9	8.5	8.4	8.7	8.6	8.9	9.3	11.4	8.0	9.2
14	9.5	9.6	9.6	10.2	10.6	11.1	11.4	11.4	11.9	12.2	12.1	11.1	11.1	11.1	11.0	11.3	10.9	10.6	10.2	9.7	8.9	8.2	7.9	7.6	12.2	7.6	10.4
15	7.2	7.2	7.0	7.4	7.2	7.6	7.4	7.3	8.0	8.4	9.0	9.1	9.7	10.0	10.5	11.3	11.8	12.1	11.1	10.1	9.0	7.7	7.2	6.9	12.1	6.9	8.7
16	6.3	5.6	5.3	4.9	4.6	4.6	4.9	5.1	5.2	6.2	6.8	8.5	9.6	10.3	11.4	10.5	11.1	10.8	10.5	10.3	9.7	7.6	6.6	6.6	11.4	4.6	7.6
17	6.1	5.8	5.4	5.2	5.2	5.3	5.2	5.5	6.1	7.4	8.1	8.6	8.6	9.0	10.3	11.5	11.8	12.2	12.7	11.8	11.1	10.4	9.6	9.2	12.7	5.2	8.4
18	8.9	8.7	9.1	9.2	8.9	8.8	8.9	9.0	9.2	8.8	8.4	7.9	8.0	8.5	8.5	8.9	9.0	7.6	7.9	7.7	7.7	8.2	8.3	8.6	9.2	7.6	8.5
19	8.9	9.1	9.6	9.5	9.3	7.7	7.6	7.6	7.8	8.2	8.5	9.3	9.4	9.8	9.0	9.3	8.8	8.5	8.8	9.5	9.8	9.9	9.9	10.0	10.0	7.6	9.0
20	9.8	9.5	8.5	7.8	7.2	6.9	6.7	6.7	6.9	6.9	7.1	7.9	8.9	9.4	10.3	11.0	10.9	9.7	10.5	10.3	9.1	8.2	7.3	7.2	11.0	6.7	8.5
21	6.9	6.8	6.5	6.0	5.9	5.3	4.5	4.2	5.2	6.4	7.6	8.1	7.7	7.9	9.1	9.7	9.9	10.2	9.9	9.6	9.3	8.0	6.4	5.7	10.2	4.2	7.4
22	4.8	4.7	4.2	4.1	4.5	5.2	5.9	5.6	6.2	6.8	7.9	8.6	9.1	10.4	9.6	9.6	10.7	10.3	9.5	9.1	7.8	6.8	7.1	6.9	10.7	4.1	7.3
23	6.7	5.3	5.2	4.5	4.4	3.4	3.5	3.8	4.9	5.3	6.6	7.7	8.9	10.1	11.2	12.4	13.4	13.9	13.7	12.9	11.3	9.7	8.7	8.1	13.9	3.4	8.2
24	7.4	9.1	9.0	8.6	8.0	7.8	7.5	7.2	7.5	7.8	10.1	11.4	11.3	11.7	11.5	11.5	10.8	10.1	9.9	9.8	9.8	10.4	10.6	10.8	11.7	7.2	9.6
25	10.8	10.7	10.2	9.9	10.4	10.7	10.0	10.8	10.0	10.3	11.4	12.6	12.9	13.2	13.5	13.6	13.8	13.9	13.3	12.6	11.6	11.2	10.4	10.8	13.9	9.9	11.6
26	10.6	10.3	10.5	9.8	9.6	9.0	8.8	9.7	10.8	12.1	13.3	13.9	14.2	14.8	15.1	15.3	15.1	14.8	14.1	13.2	12.3	10.8	10.4	10.8	15.3	8.8	12.1
27	10.6	9.8	9.9	9.8	10.8	11.0	11.1	11.3	11.4	11.5	11.6	12.8	13.5	13.9	13.0	13.3	13.4	13.1	12.4	11.4	11.1	10.9	10.8	10.5	13.9	9.8	11.6
28	10.1	10.4	10.4	10.4	10.2	10.2	10.2	10.4	10.6	10.9	11.1	11.4	12.0	12.2	12.4	12.2	12.2	12.1	12.0	12.0	11.2	10.8	10.6	10.7	12.4	10.1	11.1
29	10.8	10.9	11.2	11.4	11.4	11.3	11.4	11.6	11.4	11.4	12.2	12.8	13.0	12.9	13.6	14.0	14.2	13.4	13.1	12.8	12.0	11.3	11.4	11.9	14.2	10.8	12.1
30	12.3	12.1	12.4	12.7	12.8	12.7	12.1	11.4	11.4	11.6	11.7	12.0	11.9	12.5	12.7	12.3	12.4	12.2	11.7	11.3	11.1	11.2	11.4	11.3	12.8	11.1	12.0
31	10.6	10.4	10.5	11.4	11.3	10.9	12.1	12.2	11.7	11.9	12.3	12.5	12.7	12.5	12.3	12.3	12.4	12.7	12.9	12.7	12.1	11.8	11.7	12.1	12.9	10.4	11.9
Max.	**14.9**	**14.5**	**14.3**	**13.9**	**13.6**	**13.2**	**13.4**	**13.7**	**13.9**	**14.3**	**15.0**	**16.3**	**17.5**	**18.5**	**19.2**	**19.9**	**20.4**	**20.7**	**21.0**	**20.7**	**19.9**	**18.4**	**16.9**	**15.9**	**21.0**		
Min.	**4.8**	**4.7**	**4.2**	**4.1**	**4.4**	**3.4**	**3.5**	**3.8**	**4.9**	**5.3**	**6.6**	**7.7**	**7.7**	**7.9**	**8.5**	**8.9**	**8.8**	**7.6**	**7.9**	**7.7**	**7.7**	**6.8**	**6.4**	**5.7**		**3.4**	
Avg.	**10.1**	**10.0**	**9.9**	**9.7**	**9.6**	**9.5**	**9.4**	**9.5**	**9.9**	**10.3**	**10.9**	**11.6**	**12.0**	**12.4**	**12.7**	**12.9**	**12.9**	**12.7**	**12.5**	**12.1**	**11.6**	**11.0**	**10.6**	**10.4**			**11.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Temperature at 10 meters (deg. C)

September 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.2	12.1	11.9	11.5	11.3	11.1	10.7	10.6	10.8	10.6	10.5	9.6	9.7	9.6	9.6	9.8	9.7	9.5	9.1	9.3	9.0	9.3	9.2	9.2	12.2	9.0	10.2
2	9.2	9.1	8.8	8.2	8.2	8.2	8.2	8.2	8.4	8.3	8.2	8.5	9.2	10.1	10.8	11.3	11.7	11.9	12.1	11.6	11.4	11.3	11.0	10.0	12.1	8.2	9.7
3	9.7	9.4	9.1	8.9	8.8	8.9	8.9	8.8	9.2	9.7	9.9	10.1	10.6	11.0	11.2	11.6	11.4	10.7	10.0	9.7	9.6	9.7	9.4	9.1	11.6	8.8	9.8
4	9.1	9.1	9.3	9.4	9.4	9.4	9.6	10.0	10.0	9.8	10.4	10.9	11.5	11.9	12.1	11.9	12.3	12.2	12.0	11.7	11.4	11.0	11.0	10.4	12.3	9.1	10.7
5	10.4	10.4	10.6	10.3	10.5	10.1	9.7	9.9	10.0	9.8	10.1	10.5	10.7	10.2	10.1	9.8	9.3	9.9	11.4	11.4	11.4	11.0	11.1	10.9	11.4	9.3	10.4
6	10.9	10.6	10.2	10.1	10.4	10.3	10.3	10.1	10.3	10.4	10.4	11.2	12.1	11.6	11.9	12.1	12.3	13.3	12.9	11.7	11.2	11.2	10.7	10.7	13.3	10.1	11.1
7	10.7	10.3	10.2	9.5	8.9	8.2	7.9	7.6	7.5	7.6	8.9	9.3	9.3	9.3	9.5	9.7	9.8	10.3	10.2	9.8	8.8	6.8	6.2	5.8	10.7	5.8	8.8
8	4.9	5.7	5.6	4.6	4.1	4.5	4.9	5.0	5.4	5.0	5.9	7.4	8.1	8.6											8.6	4.1	5.7
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Max.	**12.2**	**12.1**	**11.9**	**11.5**	**11.3**	**11.1**	**10.7**	**10.6**	**10.8**	**10.6**	**10.5**	**11.2**	**12.1**	**11.9**	**12.1**	**12.1**	**12.3**	**13.3**	**12.9**	**11.7**	**11.4**	**11.3**	**11.1**	**10.9**	**13.3**		
Min.	**4.9**	**5.7**	**5.6**	**4.6**	**4.1**	**4.5**	**4.9**	**5.0**	**5.4**	**5.0**	**5.9**	**7.4**	**8.1**	**8.6**	**9.5**	**9.7**	**9.3**	**9.5**	**9.1**	**9.3**	**8.8**	**6.8**	**6.2**	**5.8**		**4.1**	
Avg.	**9.6**	**9.6**	**9.5**	**9.1**	**8.9**	**8.9**	**8.8**	**8.8**	**8.9**	**8.9**	**9.3**	**9.7**	**10.1**	**10.3**	**10.7**	**10.9**	**10.9**	**11.1**	**11.1**	**10.7**	**10.4**	**10.0**	**9.8**	**9.5**			**9.6**

Total Hours in Month 720 **Hours Data Available** 182 **Data Recovery** 25.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

August *1991*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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27													12.2	9.1	9.2	8.8	10.3	7.1	7.7	7.2	9.5	8.9	7.2	13.1	13.1	7.1	9.2
28	10.8	8.0	0.9	1.2	1.8	3.9	7.3	7.6	8.2	8.6	5.1	6.9	7.9	9.5	8.0	8.9	6.3	5.9	9.1	6.5	8.2	8.9	7.6	5.3	10.8	0.9	6.8
29	0.0	1.3	0.0	1.1	2.5	1.1	1.2	1.7	0.8	1.4	1.1	2.0	4.7	4.4	5.5	4.2	6.6	7.2	6.5	3.0	4.7	1.3	1.1	1.9	7.2	0.0	2.7
30	3.4	4.6	8.9	3.3	2.1	2.7	0.2	1.9	1.4	0.0	1.2	1.2	2.1	2.2	1.8	4.7	6.5	5.2	5.4	5.0	0.9	1.7	1.8	1.8	8.9	0.0	2.9
31	2.2	1.0	0.0	0.8	1.0	0.7	4.3	2.8	5.0	6.4	8.5	6.8	11.3	7.2	9.7	11.8	8.6	13.5	8.9	8.2	8.6	12.7	13.4	17.2	17.2	0.0	7.1
Max.	**10.8**	**8.0**	**8.9**	**3.3**	**2.5**	**3.9**	**7.3**	**7.6**	**8.2**	**8.6**	**8.5**	**6.9**	**12.2**	**9.5**	**9.7**	**11.8**	**10.3**	**13.5**	**9.1**	**8.2**	**9.5**	**12.7**	**13.4**	**17.2**	**17.2**		
Min.	**0.0**	**1.0**	**0.0**	**0.8**	**1.0**	**0.7**	**0.2**	**1.7**	**0.8**	**0.0**	**1.1**	**1.2**	**2.1**	**2.2**	**1.8**	**4.2**	**6.3**	**5.2**	**5.4**	**3.0**	**0.9**	**1.3**	**1.1**	**1.8**		**0.0**	
Avg.	**4.1**	**3.7**	**2.4**	**1.6**	**1.8**	**2.1**	**3.3**	**3.5**	**3.8**	**4.1**	**4.0**	**4.2**	**7.6**	**6.5**	**6.8**	**7.7**	**7.7**	**7.8**	**7.5**	**6.0**	**6.4**	**6.7**	**6.2**	**7.9**			**5.4**

Total Hours in Month 744 **Hours Data Available** 108 **Data Recovery** 14.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

September 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	17.0	11.3	11.3	12.6	8.3	11.9	11.6	11.1	11.1	12.3	13.7	13.8	17.8	19.2	17.5	15.2	17.4	15.2	15.3	15.1	12.7	10.5	16.3	9.7	19.2	8.3	13.7
2	9.5	11.8	11.2	11.3	6.3	5.8	5.9	2.0	3.2	2.7	2.3	4.3	4.1	3.0	3.9	5.0	5.8	4.4	4.1	3.8	1.2	1.0	0.0	1.9	11.8	0.0	4.8
3	1.5	2.5	0.0	0.0	0.0	0.8	1.7	1.7	0.0	5.0	5.1	9.9	10.4	13.0	10.7	11.9	12.5	12.6	15.5	11.0	10.1	7.5	7.8	6.7	15.5	0.0	6.6
4	8.4	8.2	4.7	7.0	9.1	4.4	3.4	2.5	1.4	1.8	1.1	1.6	1.3	3.4	5.5	4.4	4.4	4.6	5.2	5.4	6.4	6.7	7.1	7.0	9.1	1.1	4.8
5	7.9	7.0	6.2	7.1	5.5	7.6	8.2	6.1	4.0	7.7	6.5	7.4	6.5	7.3	5.1	4.7	5.2	5.1	5.9	7.4	7.0	5.9	5.8	6.6	8.2	4.0	6.4
6	6.9	6.4	6.8	4.9	3.2	1.3	1.1	0.4	1.8	2.0	0.0	4.2	3.8	4.4	3.8	5.0	5.7	3.1	3.8	2.8	2.2	4.1	0.0	1.2	6.9	0.0	3.3
7	1.1	2.0	0.0	1.7	0.0	0.0	0.2	2.3	0.7	1.4	0.0	7.7	10.8	13.1	12.8	13.5	10.9	13.6	11.9	13.8	15.8	13.1	11.9	11.1	15.8	0.0	7.1
8	10.7	12.6	14.6	13.8	12.7	14.3	13.0	10.8	14.3	16.0	13.3	9.3	11.0	8.7	9.4	7.6	10.3	9.2	10.9	9.2	8.9	8.4	9.4	8.1	16.0	7.6	11.1
9	9.1	7.6	10.3	7.8	7.8	8.5	8.5	6.0	5.9	7.2	6.9	6.2	6.4	4.1	9.1	9.4	7.5	9.1	9.0	13.7	8.8	8.8	8.5	7.4	13.7	4.1	8.1
10	4.1	1.2	3.4	3.4	4.7	4.2	5.9	5.7	4.6	2.6	4.5	2.0	2.8	0.8	2.5	3.4	4.3	5.0	4.5	3.6	3.1	2.7	5.4	4.9	5.9	0.8	3.7
11	0.7	1.3	2.8	3.9	2.3	4.8	4.8	3.8	3.4	3.3	2.7	3.2	3.8	2.2	2.4	3.4	2.4	2.8	0.9	0.0	2.2	1.3	1.6	1.2	4.8	0.0	2.6
12	1.9	0.7	3.3	1.5	1.8	1.5	4.5	4.0	4.3	2.2	2.0	1.1	1.1	3.0	1.2	2.6	1.6	0.6	3.7	1.9	1.5	1.7	2.1	4.3	4.5	0.6	2.3
13	9.7	9.0	10.7	10.8	9.2	12.1	15.9	12.0	12.8	14.2	15.4	17.1	14.9	14.3	15.7	16.7	18.7	19.1	11.2	18.2	23.4	13.6	15.9	14.4	23.4	9.0	14.4
14	13.4	6.4	10.2	8.9	5.2	5.8	7.5	6.9	5.2	4.3	2.9	6.2	6.4	5.8	4.5	4.5	9.5	9.3	3.9	4.3	4.6	5.3	5.2	9.9	13.4	2.9	6.5
15	15.4	10.6	10.3	9.5	10.2	11.9	13.1	7.8	6.9	12.2	11.4	10.3	11.3	17.0	13.4	16.7	16.5	15.7	17.3	14.3	14.1	14.8	13.4	13.3	17.3	6.9	12.8
16	17.4	12.1	13.8	6.5	4.8	4.9	16.7	17.0	14.6	18.8	13.0	11.8	17.2	16.4	16.2	16.4	16.3	18.3	16.7	16.5	15.1	14.0	13.7	15.1	18.8	4.8	14.3
17	15.7	13.8	12.5	12.9	9.1	13.9	8.9	12.7	13.2	16.0	14.5	14.0	13.9	11.2	12.0	10.7	12.4	16.8	13.5	10.9	12.5	13.0	12.5	11.1	16.8	8.9	12.8
18	10.1	7.9	6.7	3.9	7.2	10.0	4.9	10.8	12.3	6.6	9.3	11.3													12.3	3.9	8.4
19																											
20										5.7	7.1	7.3	6.5	5.8	5.5	3.7	7.0	5.8	4.9	0.0	1.2	3.0	1.2	1.4	7.3	0.0	4.4
21	1.1	3.9	2.6	3.5	4.2	6.9	5.3	5.9	7.7	9.0	7.7	4.5	2.8	5.6	3.3	5.6	4.8	2.2	4.1	6.2	2.9	1.7	2.4	0.0	9.0	0.0	4.3
22	1.3	2.3	3.0	2.7	4.1	4.5	5.5	13.6	14.5	18.5	11.5	17.6	22.5	18.8	17.1	18.5	15.3	7.0	11.9	11.4	14.6	13.7	15.5	11.7	22.5	1.3	11.5
23	11.0	11.7	11.4	15.2	16.6	11.6	15.2	17.9	16.4	11.0	14.2	18.1	16.7	13.9	13.8	13.1	11.7	14.2	15.1	15.6	14.7	14.1	12.0	12.0	18.1	11.0	14.1
24	15.5	13.9	15.8	13.5	14.1	12.2	13.3	10.9	14.8	15.9	12.4	8.4	12.3	12.0	11.0	10.9	12.8	13.2	14.3	13.6	10.9	10.0	9.7	10.4	15.9	8.4	12.6
25	11.5	9.0	9.4	7.3	9.0	8.5	7.6	8.4	10.2	11.2	10.4	8.3	10.0	10.4	8.9	9.4	9.7	9.7	7.1	4.3	5.8	3.6	1.1	1.1	11.5	1.1	8.0
26	0.7	0.7	0.0	1.1	2.2	3.7	0.9	3.6	1.4	4.4	5.1	4.7	6.6	8.1	7.8	5.9	6.1	2.9	4.3	4.9	1.9	1.5	2.5	3.8	8.1	0.0	3.5
27	3.7	5.9	5.6	4.5	3.2	3.0	2.4	2.5	2.9	3.3	3.3	3.3	5.1	4.9	4.2	4.5	4.5	3.0	3.4	1.5	2.1	1.8	0.0	1.6	5.9	0.0	3.3
28	2.0	0.0	0.0	3.1	1.3	1.9	3.1	4.9	4.5	7.7	6.9	10.5	9.2	10.2	12.9	13.9	8.8	8.6	11.9	6.1	8.9	6.7	8.3	6.8	13.9	0.0	6.6
29	4.3	5.8	3.0	9.8	5.6	3.0	3.6	6.0	5.4	2.3	2.7	4.8	6.6	8.6	8.6	9.1	6.9	5.2	3.9	5.6	8.5	9.9	10.3	8.8	10.3	2.3	6.2
30	7.0	7.7	3.6	1.4	2.2	4.3	1.0	4.8	2.1	8.9	12.3	11.1	11.1	11.2	13.1	11.6	15.0	12.3	10.6	10.8	13.4	11.4	9.5	9.1	15.0	1.0	8.6
Max.	**17.4**	**13.9**	**15.8**	**15.2**	**16.6**	**14.3**	**16.7**	**17.9**	**16.4**	**18.8**	**15.4**	**18.1**	**22.5**	**19.2**	**17.5**	**18.5**	**18.7**	**19.1**	**17.3**	**18.2**	**23.4**	**14.8**	**16.3**	**15.1**	**23.4**		
Min.	**0.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.4**	**0.0**	**1.4**	**0.0**	**1.1**	**1.1**	**0.8**	**1.2**	**2.6**	**1.6**	**0.6**	**0.9**	**0.0**	**1.2**	**1.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.8**	**6.9**	**6.9**	**6.8**	**6.1**	**6.5**	**6.9**	**7.2**	**7.1**	**8.1**	**7.5**	**8.3**	**9.0**	**9.2**	**9.0**	**9.2**	**9.4**	**8.9**	**8.7**	**8.3**	**8.4**	**7.5**	**7.5**	**7.2**			**7.8**

Total Hours in Month 720 **Hours Data Available** 675 **Data Recovery** 93.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

October 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.1	7.2	3.9	3.3	4.9	3.6	5.5	5.0	4.4	3.6	6.9	5.1	6.2	7.3	6.1	7.9	9.9	7.9	9.1	5.6	7.7	6.8	5.0	4.0	9.9	3.3	6.0
2	2.7	6.9	7.9	5.4	7.4	10.5	6.5	9.7	9.0	10.2	12.3	9.5	6.4	7.4	9.9	9.2	7.3	10.6	9.4	10.6	14.4	13.8	12.2	16.6	16.6	2.7	9.4
3	15.3	15.4	13.6	14.5	14.3	16.1	11.5	11.8	13.4	13.2	9.5	8.6	8.1	11.0	8.5	11.9	11.1	10.1	14.4	9.4	11.0	13.4	11.2	9.9	16.1	8.1	12.0
4	12.2	10.2	8.3	7.7	7.7	7.0	5.1	4.1	2.7	3.1	2.6	4.2	4.5	4.8	2.2	3.4	5.0	2.0	1.1	1.1	0.0	2.8	2.5	1.1	12.2	0.0	4.4
5	2.1	1.1	0.0	0.0	1.4	0.7	0.7	0.0	2.1	2.9	3.4	5.1	4.3	5.7	3.9	6.6	5.3	4.9	3.2	3.7	6.5	7.7	7.5	8.9	8.9	0.0	3.7
6	4.6	4.3	3.6	1.9	5.2	0.0	9.7	4.3	5.1	4.3	4.5	4.3	4.8	5.1	3.8	5.6	6.7	7.4	3.9	5.6	5.5	5.4	3.6	2.8	9.7	0.0	4.7
7	2.7	2.6	3.8	4.2	4.2	3.3	4.0	3.7	4.2	5.7	5.9	7.3	6.6	7.4	5.4	7.9	6.7	7.1	5.8	4.9	7.0	5.4	2.4	0.7	7.9	0.7	5.0
8	1.2	1.4	1.0	1.6	2.1	0.0	1.9	0.0	0.0	1.7	0.0	3.8	6.0	7.2	6.5	6.6	7.7	6.2	8.6	8.6	9.5	12.3	7.8	4.2	12.3	0.0	4.4
9	4.6	8.9	11.7	6.5	4.9	5.8	9.7	9.6	9.5	10.1	11.7	8.7	9.8	6.8	8.6	9.9	11.0	8.8	7.1	5.8	7.3	8.2	8.9	6.6	11.7	4.6	8.4
10	5.8	5.5	5.1	2.0	3.4	2.5	1.9	1.4	1.4	0.7	2.7	2.3	3.4	4.7	6.3	6.4	4.5	5.5	3.5	2.4	3.3	3.4	4.7	1.9	6.4	0.7	3.5
11	3.8	3.3	1.3	0.7	3.6	1.3	2.0	1.3	1.5	2.1	3.2	5.1	5.5	6.2	6.0	5.6	8.6	8.2	2.7	5.3	3.1	3.8	2.3	4.5	8.6	0.7	3.8
12	1.5	0.8	0.0	0.0	0.0	0.7	0.4	0.0	0.4	1.3	1.4	0.5	1.2	8.3	9.1	7.6	8.0	7.3	6.1	6.2	6.3	3.6	3.3	0.0	9.1	0.0	3.1
13	0.9	0.0	0.9	1.1	1.5	2.2	1.5	1.0	4.7	6.6	6.3	4.5	6.5	5.9	5.8	7.5	9.5	9.2	10.2	9.6	16.9	9.9	10.7	9.3	16.9	0.0	5.9
14	10.2	9.4	4.8	7.1	12.2	12.7	14.9	12.7	14.2	12.2	16.6	15.1	13.3	14.9	14.1	13.1	13.6	10.3	9.0	10.8	11.1	10.4	8.7	7.7	16.6	4.8	11.6
15	7.6	9.2	9.6	8.2	8.0	6.4	7.1	9.0	0.0	4.9	6.0	5.5	4.3	3.7	4.2	3.2	0.0	2.2	4.8	2.6	1.1	2.6	3.4	3.2	9.6	0.0	4.9
16	4.3	6.7	4.3	6.0	6.4	5.4	3.5	8.8	9.7	10.9	11.3	11.1	12.0	12.4	10.4	12.5	14.4	11.5	14.1	15.6	16.3	14.4	16.8	13.5	16.8	3.5	10.5
17	6.4	7.9	8.7	9.4	9.3	9.7	13.1	6.8	4.9	8.3	5.0	9.1	7.7	5.6	5.4	11.1	12.1	11.4	15.4	12.7	11.5	13.0	13.1	8.5	15.4	4.9	9.4
18	11.3	11.0	9.4	9.5	9.4	11.2	11.5	14.1	7.8	8.5	11.8	9.2	8.6	9.6	6.5	6.2	5.6	7.2	6.6	6.7	6.8	6.8	8.3	4.5	14.1	4.5	8.7
19	4.8	5.4	7.5	3.3	3.2	6.5	6.9	7.9	8.7	6.8	6.2	7.9	9.9	4.0	7.5	11.3	5.6	7.9	8.0	11.4	13.3	10.5	11.4	9.8	13.3	3.2	7.7
20	12.2	9.1	12.8	15.0	14.8	13.2	13.3	13.0	8.5	10.4	12.5	11.4	6.3	8.9	8.3	9.1	9.6	5.4	9.2	7.9	6.7	7.6	9.0	5.7	15.0	5.4	10.0
21	6.2	9.5	4.8	3.6	2.2	2.0	3.2	2.9	1.3	1.0	0.9	0.6	1.9	1.8	0.0	1.0	2.0	1.3	3.7	1.8	1.2	1.3	1.7	1.9	9.5	0.0	2.4
22	2.9	5.4	7.9	2.5	4.3	0.0	2.4	0.6	0.6	0.0	3.1	1.9	1.9	0.0	4.4	3.1	2.6	0.8	1.0	0.8	0.8	1.2	2.9	2.9	7.9	0.0	2.3
23	0.0	1.4	2.3	2.4	1.0	1.4	5.8	4.7	5.3	1.0	1.5	1.1	2.4	0.0	0.8	1.5	3.0	2.5	0.0	2.5	0.6	0.0	0.3	1.9	5.8	0.0	1.8
24	2.5	1.6	0.0	4.4	4.7	1.4	0.0	2.0	1.4	0.0	4.0	3.7	3.9	3.7	2.4	2.8	4.8	7.4	5.8	5.4	3.8	5.6	5.0	7.1	7.4	0.0	3.5
25	4.6	6.1	3.5	4.4	4.6	3.7	3.8	5.0	6.3	6.1															6.3	3.5	4.8
26		0.9	2.7	3.1	2.5	5.6	7.4	12.2	10.9	14.4	13.0	16.0	14.6	14.0	18.3	16.5	17.9	19.0	18.6	16.1	20.9	18.8	17.2	17.3	20.9	0.9	13.0
27	9.8	12.7	11.0	13.4	11.1	9.1	13.0	8.4	5.1	4.7	0.8	2.5	2.9	2.1	3.8	4.9	2.7	0.0	2.2	1.4	5.5	2.1	4.1	2.9	13.4	0.0	5.7
28	3.9	6.6	5.5	8.2	12.5	13.3	14.2	14.1	15.4	18.2	20.2	22.7	21.4	18.9	21.1	21.3	16.8	16.7	21.9	18.0	22.4	20.2	15.5	12.5	22.7	3.9	15.9
29	11.0	12.2	11.2	9.6	10.2	5.0	4.1	7.8	7.3	9.1	6.3	8.4	7.6	8.7	6.8	5.2	4.1	4.4	3.6	2.6	0.3	1.3	1.1	1.3	12.2	0.3	6.2
30	2.8	1.5	1.9	2.3	2.0	4.4	2.4	2.7	3.7	0.8	4.8	3.6	3.8	2.0	2.6	3.7	4.8	4.6	9.4	10.4	10.2	13.5	12.0	13.6	13.6	0.8	5.1
31	10.4	14.9	14.7	10.8	15.3	11.8	14.5	16.5	16.3	12.7	16.6	15.8	18.1	23.9	21.0	28.3	25.6	23.8	21.6	19.9	20.9	14.9	19.7	18.4	28.3	10.4	17.8
Max.	**15.3**	**15.4**	**14.7**	**15.0**	**15.3**	**16.1**	**14.9**	**16.5**	**16.3**	**18.2**	**20.2**	**22.7**	**21.4**	**23.9**	**21.1**	**28.3**	**25.6**	**23.8**	**21.9**	**19.9**	**22.4**	**20.2**	**19.7**	**18.4**	**28.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**1.2**	**0.0**	**0.0**	**1.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.0**	**0.0**	**0.3**	**0.0**		**0.0**	
Avg.	**5.9**	**6.4**	**5.9**	**5.6**	**6.3**	**5.7**	**6.5**	**6.5**	**6.0**	**6.3**	**7.0**	**7.2**	**7.1**	**7.4**	**7.3**	**8.4**	**8.2**	**7.7**	**8.0**	**7.5**	**8.4**	**8.0**	**7.7**	**6.8**			**7.0**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

November 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	16.8	13.8	15.1	11.6	15.3	15.9	17.0	19.0	20.6	14.4	11.1	15.7	18.9	13.1	9.9	14.3	13.0	10.8	8.9	13.8	6.1	6.3	8.0	11.8	20.6	6.1	13.4
2	5.3	2.7	0.0	1.6	1.4	1.6	0.0	3.1	0.9	1.3	1.5	0.0	0.0	1.9	0.2	0.0	0.7	1.1	1.4	0.8	0.5	0.8	0.3	0.0	5.3	0.0	1.1
3	1.2	1.9	1.8	0.2	0.5	1.5	0.0	2.2	7.6	7.5	1.7	2.1	3.0	2.3	1.9	1.1	7.9	5.5	9.1	11.5	7.2	5.2	1.9	7.6	11.5	0.0	3.8
4	2.1	3.0	1.5	4.1	3.2	4.2	3.3	9.2	11.0	8.5	8.6	11.2	8.9	14.0	4.4	7.0	2.3	5.2	4.1	5.8	5.4	6.8	7.5	5.1	14.0	1.5	6.1
5	5.1	1.5	2.8	1.9	2.1	2.0	2.2	2.1	0.2	1.0	3.0	4.8	2.8	9.4	6.5	9.5	9.9	7.2	10.8	7.6	7.3	9.0	3.7	13.4	13.4	0.2	5.2
6	12.6	14.7	13.0	13.1	11.2	12.2	13.3	9.8	12.6	10.3	12.3	8.0	8.6	7.5	9.6	8.8	8.5	7.4	7.5	2.0	1.4	1.3	0.0	1.1	14.7	0.0	8.6
7	1.3	1.0	1.1	2.3	0.0	1.0	1.7	0.0	0.0	0.7	0.3	1.3	0.3	3.3	2.1	0.9	0.0	2.3	1.4	1.2	0.0	1.7	1.6	1.6	3.3	0.0	1.1
8	3.1	1.8	1.0	1.2	1.2	0.0	0.0	1.1	1.6	1.4	0.7	1.3	1.4	0.9	0.0	0.0	1.5	0.0	0.7	1.0	1.6	2.7	0.0	2.5	3.1	0.0	1.1
9	0.0	4.0	1.7	0.0	0.6	1.1	1.8	2.1	4.9	6.5	7.1	5.3	6.6	2.9	5.0	4.8	3.7	1.2	1.8	1.3	0.9	2.1	1.0	1.2	7.1	0.0	2.8
10	2.0	2.2	1.4	2.4	0.0	0.8	1.5	0.0	2.4	1.9	3.4	1.2	1.4	0.0	1.5	1.2	0.0	1.2	1.1	0.9	0.0	1.0	1.6	1.3	3.4	0.0	1.3
11	1.2	1.9	2.9	2.3	5.3	3.9	5.4	2.3	7.4	2.2	3.1	2.1	2.4	6.3	6.6	3.5	4.8	4.3	1.9	10.3	8.7	4.9	0.7	2.6	10.3	0.7	4.0
12	5.5	2.7	6.8	4.6	2.4	4.6	5.6	4.4	2.3	3.1	1.6	4.7	5.0	5.6	5.5	3.3	4.5	4.7	7.1	4.8	5.2	1.7	1.9	1.7	7.1	1.6	4.1
13	1.9	0.0	1.2	1.5	1.4	1.2	1.4	1.4	1.3	2.8	0.0	5.1	2.3	0.4	0.8	2.7	8.1	8.8	10.4	9.4	11.2	11.3	11.8	12.8	12.8	0.0	4.6
14	12.1	10.8	7.8	6.8	5.5	3.6	0.0	2.3	2.8	1.0	0.7	0.0	0.0	0.0	2.9	2.9	0.0	1.6	4.5	2.6	1.6	0.0	1.2	5.4	12.1	0.0	3.2
15	1.3	2.5	3.4	6.1	2.9	1.5	3.1	2.8	4.0	4.1	4.5	2.4	3.3	1.1	1.5	1.7	2.6	0.9	1.1	0.0	2.0	1.7	1.7	1.6	6.1	0.0	2.4
16	1.4	2.5	0.0	0.0	0.7	1.7	1.2	1.7	2.5	1.6	1.1	2.1	1.5	0.7	0.0	0.7	1.4	1.4	0.8	1.5	2.5	1.6	3.4	1.8	3.4	0.0	1.4
17	2.1	2.3	3.0	1.7	2.6	0.0	1.4	2.7	0.6	0.3	1.1	0.3	0.0	0.0	0.0	0.0	0.9	0.5	0.1	0.0	0.5	0.0	0.0	0.0	3.0	0.0	0.8
18	0.3	1.2	1.0	0.8	0.8	0.9	1.0	1.1	0.7	1.1	1.2	0.9	1.2	0.7	0.9	3.6	5.2	4.2	3.6	7.5	6.2	7.5	3.1	4.6	7.5	0.3	2.5
19	10.6	14.7	9.8	5.6	10.9	8.1	13.3	6.7	14.8	11.5	10.9	15.8	10.2	11.5	12.4	13.6	9.2	3.8	11.9	13.1	12.4	12.7	13.0	14.2	15.8	3.8	11.3
20	17.4	14.0	13.0	17.6	16.5	9.1	17.8	19.0	16.8	17.8	16.3	10.4	4.2	7.9	1.9	3.1	5.2	10.0	10.7	2.1	3.8	5.3	0.0	0.0	19.0	0.0	10.0
21	1.7	0.5	0.2	0.0	1.5	2.3	3.8	0.0	4.0	4.5	3.2	1.6	0.0	2.4	0.5	2.5	1.5	4.2	6.2	6.2	9.0	4.0	3.5	2.0	9.0	0.0	2.7
22	2.4	2.5	6.9	8.2	0.7	1.7	2.4	4.1	4.9	1.4	1.9	2.0	1.0	0.9	0.2	3.5	2.9	8.6	4.5	2.1	2.7	9.6	5.5	12.8	12.8	0.2	3.9
23	12.7	10.6	8.0	9.0	12.5	10.7	12.3	11.2	15.1	13.6	15.1	12.1	14.0	11.6	9.2	12.6	12.7	11.8	13.5	12.6	6.7	11.7	11.2	8.8	15.1	6.7	11.6
24	10.9	6.7	5.5	11.1	11.5	9.9	13.2	10.3	9.6	9.2	11.0	8.0	10.5	8.0	6.4	6.7	8.7	6.8	9.4	7.2	8.8	3.3	4.4	4.9	13.2	3.3	8.4
25	2.9	3.0	6.3	7.5	7.3	7.0	5.8	6.6	4.6	2.5	0.0	3.8	2.2	1.6	1.0	2.9	1.8	3.2	1.2	0.8	0.0	0.5	1.8	1.1	7.5	0.0	3.1
26	1.6	0.0	1.4	0.7	0.0	0.7	0.0	1.4	0.5	2.9	2.1	2.0	6.5			8.3	13.4	14.1	12.7	10.3	10.8	8.8	12.5	13.7	14.1	0.0	5.7
27	13.7	12.9	13.2	13.0	15.5	15.2	13.8	18.8	14.7	13.7	15.9	17.5	20.4	11.8	11.9	12.9	14.0	10.8	12.3	13.1	11.3	3.2	2.7	1.0	20.4	1.0	12.6
28	2.9	4.8	7.4	4.6	2.3	7.5	15.3	16.2	20.2	18.3	21.1	16.6	18.3	26.9	19.5	17.2	20.9	23.3	25.5	25.2	20.7	19.1	22.8	19.2	26.9	2.3	16.5
29	13.0	12.5	11.1	14.9	10.1	6.8	3.3	1.6	2.7	0.0	0.9	0.8	0.6	0.7	0.0	0.0	1.2	0.3	0.0	0.0	0.0	0.0	1.3	0.5	14.9	0.0	3.4
30	2.3	2.3	1.6	3.0	1.6	0.0	0.0	2.6	2.9	4.8	4.4	5.0	8.0	11.2	15.6	17.7	13.1	14.8	15.4	11.6	10.3	11.8	8.8	9.4	17.7	0.0	7.4
Max.	**17.4**	**14.7**	**15.1**	**17.6**	**16.5**	**15.9**	**17.8**	**19.0**	**20.6**	**18.3**	**21.1**	**17.5**	**20.4**	**26.9**	**19.5**	**17.7**	**20.9**	**23.3**	**25.5**	**25.2**	**20.7**	**19.1**	**22.8**	**19.2**	**26.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.6**	**5.2**	**5.0**	**5.2**	**4.9**	**4.6**	**5.4**	**5.5**	**6.5**	**5.7**	**5.5**	**5.5**	**5.4**	**5.7**	**4.8**	**5.6**	**6.0**	**6.0**	**6.7**	**6.2**	**5.5**	**5.2**	**4.6**	**5.5**			**5.5**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

December 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.2	8.9	7.5	3.3	6.1	8.1	10.7	4.2	4.3	3.7	5.3	4.7	10.7	5.8	6.8	4.3	0.0	0.3	0.0	0.3	0.0	0.8	1.1	3.5	10.7	0.0	4.5
2	12.9	10.7	10.5	7.1	7.3	7.1	9.0	13.2	11.5	10.6	15.8	11.5	12.7	9.6	11.6	10.5	15.0	12.1	8.1	8.3	11.1	8.3	11.2	13.0	15.8	7.1	10.8
3	7.5	7.3	10.1	12.4	6.3	1.2	2.3	1.7	2.4	3.9	3.3	2.3	1.7	2.6	2.7	1.4	2.5	0.0	0.9	2.2	3.8	3.9	1.2	2.9	12.4	0.0	3.6
4	2.3	1.4	0.0	0.6	0.0	0.4	0.0	0.9	0.8	0.9	1.1	0.9	1.6	1.9	0.0	1.3	0.6	1.5	0.9	1.8	1.7	1.3	1.5	0.0	2.3	0.0	1.0
5	0.0	1.9	2.0	4.0	3.1	2.4	5.3	5.8	1.8	2.1	4.2	3.9	0.8	3.4	7.0	5.9	1.9	2.3	2.9	6.4	4.1	12.3	3.1	5.9	12.3	0.0	3.9
6	5.3	5.3	4.9	2.1	1.8	3.6	2.1	4.3	5.4	3.0	4.7	1.0	1.1	2.6	6.5	6.1	6.8	5.8	6.3	4.8	2.5	3.8	8.9	8.6	8.9	1.0	4.5
7	3.6	3.6	3.9	0.7	2.7	1.6	0.0	1.6	1.5	2.1	1.5	1.0	1.7	3.0	1.7	0.9	2.5	1.5	1.2	1.2	0.0	1.6	1.4	2.4	3.9	0.0	1.8
8	1.5	0.6	1.2	1.4	2.0	1.7	4.3	5.3	0.9	3.2	0.0	4.3	1.8	2.1	3.1	5.0	4.5	3.7	0.7	1.2	1.0	1.6	1.4	0.7	5.3	0.0	2.2
9	0.8	1.3	1.6	0.4	0.0	0.7	1.9	1.2	2.6	0.9	2.3	0.0	1.2	0.6	0.0	1.4	0.0	2.8	1.2	1.9	2.1	1.4	1.2	1.2	2.8	0.0	1.2
10	0.0	0.7	2.1	1.1	0.0	2.0	1.3	0.8	2.0	0.0	5.2	5.0	4.9	4.7	3.9	0.7	4.9	3.2	1.4	1.9	2.1	0.6	0.0	0.0	5.2	0.0	2.0
11	1.0	0.0	0.8	0.7	1.2	3.3	2.9	1.9	3.1	2.2	2.5	3.1	5.7	3.8	5.2	7.7	11.5	7.3	4.2	1.5	1.6	4.9	2.8	1.3	11.5	0.0	3.3
12	1.0	4.5	1.0	0.0	0.0	2.9	3.2	5.7	8.9	10.5	8.8	5.5	5.8	0.7	0.0	1.8	1.8	0.0	1.2	0.0	0.0	0.0	3.1	1.7	10.5	0.0	2.8
13	0.3	2.3	2.8	4.4	7.3	13.4	14.4	12.3	21.1	18.4	24.1	22.6	20.5	20.5	17.0	16.1	16.3	14.6	11.5	7.3	6.6	0.0	8.3	3.4	24.1	0.0	11.9
14	5.7	6.7	6.8	4.9	5.2	8.6	8.4	7.0	5.1	9.8	10.4	8.1	10.3	8.9	10.4	10.9	11.9	9.5	14.4	12.3	10.7	12.6	9.0	12.6	14.4	4.9	9.2
15	12.0	13.1	11.4	11.9	9.2	10.5	6.4	0.8	5.7	3.2	0.7	0.2	0.2	1.6	1.6	0.8	3.4	3.3	0.3	0.4	1.0	0.6	0.0	0.0	13.1	0.0	4.1
16	1.7	0.7	1.1	3.0	2.8	4.1	5.1	2.2	2.6	3.3	2.8	3.3	3.8	0.6	0.0	2.9	1.1	0.7	2.1	3.6	2.7	1.0	0.3	1.1	5.1	0.0	2.2
17	0.0	3.0	3.2	0.5	1.7	1.3	3.2	0.0	1.2	0.0	2.4	1.6	5.7	1.5	2.2	1.5	3.5	0.7	0.0	0.2	0.0	0.7	2.1	1.8	5.7	0.0	1.6
18	1.2	0.0	0.4	2.8	1.3	1.9	3.3	1.1	1.0	1.6	2.1	2.8	0.8	2.0	1.0	2.3	2.7	2.7	1.9	1.2	0.0	1.0	0.0	1.4	3.3	0.0	1.5
19	1.4	5.1	5.7	5.6	9.3	5.8	6.7	0.7	1.9	0.0	1.1	1.0	1.0	1.6	2.3	1.9	1.4	1.3	0.0	1.0	0.3	1.5	1.2	1.8	9.3	0.0	2.5
20	1.4	2.5	1.7	1.3	1.2	0.2	1.6	1.8	1.8	1.6	1.1	4.8	1.8	4.1	2.8	1.6	3.0	1.9	0.8	3.4	6.3	2.5	0.8	6.7	6.7	0.2	2.4
21	2.1	6.4	5.9	9.9	2.5	2.3	3.5	3.5	2.4	3.6	2.0	2.8	0.7	2.3	3.6	3.9	2.4	12.3	11.0	8.1	7.4	10.1	9.2	11.3	12.3	0.7	5.4
22	3.8	11.1	13.9	6.6	10.3	7.5	10.4	12.8	12.8	14.1	12.8	10.2	11.5	13.0	11.4	11.3	12.3	14.5	12.0	10.6	11.7	11.6	11.9	13.3	14.5	3.8	11.3
23	12.8	12.6	14.5	14.7	11.7	10.6	12.4	10.0	12.0	13.5	10.9	12.0	9.6	9.7	15.0	14.0	13.8	13.0	11.9	12.5	9.4	9.4	10.6	12.7	15.0	9.4	12.1
24	12.2	13.6	7.8	9.9	11.1	12.3	8.9	12.8	14.7	12.8	9.0	8.1	9.4	8.9	7.5	8.1	9.8	11.4	10.5	7.8	9.5	11.3	2.8	2.7	14.7	2.7	9.7
25	6.6	9.7	5.7	6.0	7.9	9.3	9.5	5.2	4.9	5.4	6.3	2.4	0.0	0.8	2.4	6.3	5.2	2.9	1.8	0.0	4.4	3.1	0.3	1.2	9.7	0.0	4.5
26	1.9	1.6	1.3	0.0	1.2	2.1	5.7	7.9	14.2	14.2	24.4	23.1	26.3	25.4	20.9	26.6	16.1	15.5	13.6	13.9	16.2	16.0	13.6	12.0	26.6	0.0	13.1
27	9.2	10.8	10.4	10.7	11.1	10.3	10.6	9.0	8.0	9.7	10.0	8.4	7.3	8.4	9.1	5.1	8.2	4.2	9.1	1.9	4.9	5.5	2.6	6.1	11.1	1.9	7.9
28	1.6	2.0	0.7	0.0	1.2	0.0	0.0	1.4	1.4	0.4	2.0	1.3	0.7	1.5	1.8	2.3	1.8	1.2	1.2	0.8	1.3	1.5	2.3	1.6	2.3	0.0	1.2
29	1.7	0.2	1.0	0.8	0.8	2.7	2.0	1.2	2.8	3.6	2.2	0.8	0.0	0.0	2.2	0.7	1.9	0.0	2.0	1.3	1.8	0.0	1.4	5.4	5.4	0.0	1.5
30	0.8	1.4	3.7	1.5	4.7	1.0	2.8	1.5	2.6	1.2	1.3	1.3	0.7	0.8	0.4	0.9	2.2	0.0	1.5	0.6	0.0	0.0	2.1	0.0	4.7	0.0	1.4
31	1.1	0.9	1.4	4.5	7.1	7.4	6.6	0.9	0.9	2.3	1.2	0.6	1.7	4.9	4.7	6.2	5.0	4.3	3.7	1.9	1.2	0.0	1.1	1.3	7.4	0.0	3.0
Max.	**12.9**	**13.6**	**14.5**	**14.7**	**11.7**	**13.4**	**14.4**	**13.2**	**21.1**	**18.4**	**24.4**	**23.1**	**26.3**	**25.4**	**20.9**	**26.6**	**16.3**	**15.5**	**14.4**	**13.9**	**16.2**	**16.0**	**13.6**	**13.3**	**26.6**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**3.9**	**4.8**	**4.7**	**4.3**	**4.5**	**4.7**	**5.3**	**4.5**	**5.2**	**5.2**	**5.9**	**5.1**	**5.2**	**5.1**	**5.3**	**5.5**	**5.6**	**5.0**	**4.5**	**3.9**	**4.0**	**4.2**	**3.8**	**4.4**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

January 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	2.4	3.0	5.1	3.2	1.6	0.7	3.2	2.4	0.0	1.0	1.0	0.0	1.1	0.0	0.0	1.4	0.0	1.7	0.6	0.1	2.1	1.0	0.4	5.1	0.0	1.3
2	1.6	1.1	1.8	1.9	1.6	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	2.6	0.0	0.5
3	1.4	0.0	0.0	1.7	0.0	0.9	1.4	0.0	0.0	0.0	0.0	1.7	3.4	2.4	1.7	1.0	1.7	0.8	1.0	1.2	3.5	1.9	3.6	0.0	3.6	0.0	1.2
4	0.4	1.9	1.7	0.9	2.4	3.7	5.9	1.9	4.0	4.7	0.8	1.0	1.5												5.9	0.4	2.4
5															16.7	12.5	12.5	6.7	9.3	9.8	8.1	6.2	8.0	19.8	19.8	6.2	11.0
6	9.8	7.7	9.4	8.1	8.7	9.9	7.4	6.3	8.0	8.0	9.3	8.3	7.3	10.3	13.7	11.5	13.9	11.8	13.5	12.2	12.1	10.7	10.7	11.6	13.9	6.3	10.0
7	10.6	10.9	9.7	8.0	8.3	7.3	1.1	0.9	0.0	0.9	0.6	0.0	0.7	1.0	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	0.0	2.6
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	4.6	2.5	2.9	4.8	1.3	4.2	7.1	5.4	4.2	3.2	5.3	3.4	2.6	0.0	7.1	0.0	2.3
9	5.3	7.8	5.1	1.3	1.6	0.2	1.9	0.0	0.0	2.8	4.5	0.9	2.0	1.0	0.9	1.1	2.5	0.7	0.0	1.9	2.0	0.0	1.2	0.0	7.8	0.0	1.9
10	0.6	1.7	2.7	4.0	0.0	2.1	3.2	2.0	0.0	1.3	1.6	2.0	3.1	1.0	0.1	2.1	0.9	1.2	0.0	0.0	1.4	0.1	2.2	0.0	4.0	0.0	1.4
11	2.2	1.0	2.7	0.0	0.0	1.4	1.6	1.4	0.0	1.6	1.0	1.4	1.3	3.5	1.2	0.9	2.1	1.5	3.6	2.9	2.4	11.1	8.4	10.3	11.1	0.0	2.6
12	13.6	14.6	12.0	11.6	11.9	4.2	3.0	1.8	7.8	4.0	9.5	15.4	8.0	5.2	10.4	19.1	13.1	18.3	16.9	13.0	8.3	9.5	9.1	8.0	19.1	1.8	10.3
13	6.7	4.0	7.8	5.5	9.7	12.1	8.0	9.5	5.4	6.8	9.2	6.5	7.3	13.5	10.4	10.5	12.2	9.2	9.5	11.8	8.4	14.9	18.4	14.9	18.4	4.0	9.7
14	11.1	10.6	12.8	7.8	8.5	14.3	17.3	18.1	21.3	18.5	19.8	14.9	13.1	9.2	12.3	12.0	15.8	13.3	17.0	12.7	14.1	12.3	15.7	10.7	21.3	7.8	13.9
15	9.7	5.4	4.9	6.7	7.7	8.5	9.3	9.8	14.5	11.6	12.6	13.5	12.6	6.4	5.8	2.8	5.5	9.5	12.1	10.4	15.9	11.3	9.5	15.5	15.9	2.8	9.6
16	13.6	7.9	8.0	9.5	10.7	8.9	13.7	13.1	14.4	11.7	14.9	13.1	13.8	13.6	10.1	6.1	8.6	16.5	11.6	12.9	12.9	12.3	14.1	12.6	16.5	6.1	11.9
17	10.0	10.1	8.4	12.7	10.0	4.6	12.3	9.2	13.5	18.0	19.8	15.2	15.3	16.2	13.5	13.2	7.3	10.9	9.9	9.7	9.0	8.0	7.5	8.3	19.8	4.6	11.4
18	7.0	8.5	8.8	7.8	5.4	3.0	2.0	0.9	0.9	0.9	3.4	2.8	2.0	1.4	1.6	0.2	0.7	1.3	2.6	0.6	1.1	4.0	1.9	1.3	8.8	0.2	2.9
19	5.8	1.3	3.1	1.3	1.9	2.9	1.6	1.0	9.3	3.1	4.3	5.0	2.0	1.0	5.2	6.8	6.9	7.3	2.0	9.5	5.4	7.6	5.4	4.2	9.5	1.0	4.3
20	6.2	3.5	1.5	2.0	0.5	1.0	0.7	1.1	1.9	0.0	0.7	1.0	0.8	0.0	0.0	1.7	0.3	0.0	0.0	0.8	1.0	0.0	0.0	0.0	6.2	0.0	1.0
21	0.0	0.0	0.0	0.0	1.3	1.5	1.4	0.0	1.6	0.0	0.7	2.1	1.2	0.0	1.0	0.0	1.7	0.7	1.1	1.8	1.6	2.5	3.1	2.0	3.1	0.0	1.1
22	3.9	3.3	2.5	2.0	4.5	1.4	5.0	3.8	2.0	5.9	3.2	2.8	4.3	3.0	1.5	3.4	8.9	5.0	6.2	7.5	5.8	5.7	6.9	7.4	8.9	1.4	4.4
23	5.7	5.7	5.5	4.0	0.9	2.0	2.8	2.0	0.0	3.8	3.2	0.0	0.1	1.2	1.4	3.6	1.0	1.7	0.7	0.0	1.6	4.9	0.9	0.4	5.7	0.0	2.2
24	0.0	1.8	0.8	0.0	0.8	2.2	1.3	1.3	1.2	1.3	0.0	2.3	2.3	0.0	1.2	2.9	1.7	1.9	2.1	2.0	1.3	1.5	1.8	0.0	2.9	0.0	1.3
25	5.3	0.6	2.7	1.1	1.4	2.1	2.5	4.9	2.6	0.9	2.5	1.3	5.6	7.3	4.8	4.0	5.5	8.1	3.0	2.1	2.0	3.5	3.0	2.6	8.1	0.6	3.3
26	2.9	1.8	0.8	2.0	1.4	5.8	3.4	5.7	6.5	7.8	2.4	4.2	1.0	4.0	2.2	3.4	5.2	2.0	7.5	7.7	10.3	4.3	6.5	1.3	10.3	0.8	4.2
27	3.1	3.5	3.6	0.5	0.1	0.0	0.0	1.7	0.6	1.6	1.0	1.0	0.8	0.6	0.8	0.6	1.5	1.6	1.2	3.2	2.8	4.4	0.0	0.0	4.4	0.0	1.4
28	0.8	1.1	1.4	0.8	0.7	1.3	2.0	1.3	3.1	2.1	1.0	0.0	2.1	3.5	7.5	7.8	6.9	4.5	7.1	9.3	7.9	8.1	9.8	10.4	10.4	0.0	4.2
29	5.9	5.0	1.4	1.6	2.7	3.2	1.4	1.0	1.1	3.6	2.9	2.9	1.4	3.4	1.5	3.0	2.7	3.3	1.8	2.3	4.1	4.9	4.9	5.1	5.9	1.0	3.0
30	6.0	8.3	8.2	7.3	3.8	5.6	8.2	6.6	5.6	5.6	5.4	8.6	3.0	3.7	5.2	7.4	10.0	7.0	6.3	6.9	8.9	8.1	7.4		10.0	3.0	6.7
31																											
Max.	**13.6**	**14.6**	**12.8**	**12.7**	**11.9**	**14.3**	**17.3**	**18.1**	**21.3**	**18.5**	**19.8**	**15.4**	**15.3**	**16.2**	**16.7**	**19.1**	**15.8**	**18.3**	**17.0**	**13.0**	**15.9**	**14.9**	**18.4**	**19.8**	**21.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.1**	**4.5**	**4.5**	**4.0**	**3.8**	**3.9**	**4.1**	**3.7**	**4.4**	**4.5**	**4.8**	**4.5**	**4.1**	**4.2**	**4.6**	**4.9**	**5.4**	**5.2**	**5.2**	**5.5**	**5.4**	**5.6**	**5.6**	**5.2**			**4.7**

Total Hours in Month 744 **Hours Data Available** 694 **Data Recovery** 93.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

February 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.0	3.4	5.5	7.7	7.8	8.9	9.6	8.4	9.6	8.2	9.4	8.0	10.6	11.2	8.5	11.7	10.7	11.7	8.9	10.4	7.7	2.6	8.1	8.4	11.7	2.6	8.3
2	5.6	3.8	2.3	1.1	0.6	0.0	4.0	0.0	1.1	0.8	2.8	1.0	1.2	0.5	3.1	1.7	0.4	2.8	0.0	4.0	0.8	0.7	1.6	0.8	5.6	0.0	1.7
3	0.0	2.7	5.2	5.8	1.8	9.5	7.4	6.1	2.6	8.3	8.6	5.6	7.0	7.3	6.8	1.7	2.2	9.9	7.8	8.3	3.7	9.1	10.0	2.2	10.0	0.0	5.8
4	7.6	10.4	1.0	3.2	0.0	5.6	1.0	1.8	2.3	5.9	6.9	3.5	7.2	6.6	5.1	4.2	1.1	4.3	0.9	2.1	2.1	1.6	1.4	0.0	10.4	0.0	3.6
5	1.5	1.0	1.1	1.8	1.3	2.1	3.1	4.0	5.0	4.6	2.7	3.1	3.9	3.4	0.6	4.4	5.6	6.7	0.0	2.7	5.3	5.2	3.6	1.3	6.7	0.0	3.1
6	2.8	2.3	4.8	0.6	0.3	0.9	0.0	1.5	1.3	1.0	1.8	2.5	0.0	1.6	3.1	4.1	3.8	4.4	0.3	1.2	4.7	3.9	2.1	3.2	4.8	0.0	2.2
7	2.8	4.3	2.0	4.9	3.1	3.9	3.3	4.1	3.4	5.2	0.0	2.2	1.9	2.5	3.0	2.6	1.4	2.3	1.5	0.9	3.0	2.9	1.8	4.1	5.2	0.0	2.8
8	1.4	1.8	0.2	1.4	0.0	1.2	0.0	0.8	0.0	0.0	1.7	0.8	0.0	0.0	0.6	1.5	1.6	1.5	0.9	1.1	1.1	1.1	1.6	1.1	1.8	0.0	0.9
9	1.9	5.3	6.1	2.0	0.9	0.0	1.1	0.0	3.1	0.9	2.1	2.7	1.0	1.3	3.9	5.0	4.3	2.6	1.4	2.8	1.7	2.6	1.0	1.7	6.1	0.0	2.3
10	1.9	0.1	0.7	0.6	0.2	0.0	0.0	0.0	0.0	0.0	1.2	1.3	0.0	0.8	0.0	0.2	0.9	0.0	1.0	0.8	1.3	3.0	4.7	7.6	7.6	0.0	1.1
11	5.0	3.0	7.5	6.5	9.5	7.9	7.2	10.2	12.0	8.5	6.3	5.3	6.5	5.7	5.4	5.6	9.5	8.3	4.2	7.5	5.2	8.2	8.7	12.7	12.7	3.0	7.3
12	12.1	12.4	5.6	1.7	4.9	4.2	0.6	2.7	2.1	0.9	2.0	1.2	0.0	0.0	0.0	0.7	1.3	1.6	2.2	2.3	3.1	2.3	4.1	5.0	12.4	0.0	3.0
13	1.7	2.3	7.4	6.6	5.0	7.0	4.6	4.6	5.8	5.6	4.6		6.5	0.9	1.3	8.2	14.0	1.6	2.0	7.5	1.8	4.2	2.7	0.3	14.0	0.3	4.6
14	1.6	0.1	0.6	0.5	0.0	0.0	1.0	1.2	0.0	0.8	0.0	1.3	0.0	0.0	1.7	0.9	3.4	5.5	6.8	3.4	8.0	8.6	11.4	6.7	11.4	0.0	2.6
15	10.1	7.1	7.9	7.8	6.9	9.1	7.2	4.6	9.8	4.4	7.7	9.4	14.8	17.5	11.8	8.8	6.0	7.3	11.0	10.2	9.7	14.9	12.4	12.3	17.5	4.4	9.5
16	15.4	13.3	12.1	13.9	14.4	16.1	16.1	10.6	12.2	14.2	14.9	9.1	13.1	12.0	8.8	14.4	14.6	13.9	13.1	3.0	2.1	6.7	9.2	12.5	16.1	2.1	11.9
17	6.1	10.0	5.7	7.5	2.4	1.7	0.2	5.5	2.1	3.7	0.8	2.1	5.3	7.6	2.7	0.7	3.9	3.8	2.2	2.6	1.4	1.3	2.3	1.3	10.0	0.2	3.5
18	1.0	1.5	1.1	1.8	2.1	1.6	1.2	0.5	1.5	1.4	1.4	2.6	2.0	2.1	1.9	1.5	3.1	0.0	2.7	1.6	1.1	1.9	1.2	0.0	3.1	0.0	1.5
19	0.0	0.2	1.6	1.9	1.3	0.8	1.3	1.3	1.7	2.2	0.0	0.0	1.8	0.0	0.0	2.0	0.5	0.0	1.2	0.9	1.5	0.2	0.3	1.5	2.2	0.0	0.9
20	1.3	1.3	0.0	0.5	0.8	1.0	1.7	0.7	1.2	0.0	1.5	0.1	0.0	0.0	0.0	1.6	1.3	0.9	0.9	1.9	9.9	1.9	1.6	2.2	9.9	0.0	1.3
21	1.5	1.4	3.2	2.0	7.7	3.4	2.7	6.2	14.2	9.5	9.3	3.7	4.8	7.8	5.1	6.7	11.3	7.7	10.3	12.0	8.8	9.6	4.9	1.7	14.2	1.4	6.5
22	5.1	3.8	8.0	2.1	4.7	1.5	0.9	1.4	0.9	4.3	0.7	5.1	4.3	3.2	0.9	1.4	0.0	0.8	0.6	1.2	0.9	1.9	1.1	2.8	8.0	0.0	2.4
23	1.4	2.5	2.3	0.7	2.4	3.1	1.9	3.9	5.9	7.2	12.3	10.1	5.2	8.6	9.5	10.5	12.2	11.3	10.4	6.7	9.2	7.5	11.9	4.0	12.3	0.7	6.7
24	1.4	2.1	0.0	1.8	1.0	1.2	0.3	0.6	1.0	1.5	0.0	0.9	1.7	0.7	3.3	8.0	6.9	6.2	0.7	2.1	9.3	6.2	2.6	8.0	9.3	0.0	2.8
25	4.1	3.6	4.2	0.0	0.5	1.0	1.1	0.7	2.4	1.6	1.3	0.0	8.9	8.6	5.0	1.1	1.3	0.0	2.0	0.0	1.0	2.8	0.0	0.0	8.9	0.0	2.1
26	1.7	0.0	0.0	0.8	1.6	1.9	4.4	3.4	6.3	5.6	8.0	6.1	6.9	3.6	4.8	4.0	0.9	4.8	0.7	2.2	0.7	1.3	0.9	0.0	8.0	0.0	2.9
27	0.1	1.2	1.2	2.5	1.0	0.0	1.2	1.0	2.2	1.5	2.8	1.2	0.1	4.2	4.9	0.4	3.7	5.9	6.1	6.8	3.8	3.6	9.6	13.1	13.1	0.0	3.3
28	8.8	9.6	7.9	8.6	7.9	9.3	9.1	8.7	4.9	6.8	7.3	6.7	7.7	5.8	9.2	9.3	11.2	15.0	9.4	5.7	5.4	8.0	6.9	7.2	15.0	4.9	8.2
29	3.4	0.0	3.5	6.1	1.1	4.5	13.3	8.7	5.3	2.2	0.0	1.5	0.0	2.8	7.5	4.2	6.6	6.4	6.3	6.0	7.3	5.9	11.6	9.5	13.3	0.0	5.2
Max.	**15.4**	**13.3**	**12.1**	**13.9**	**14.4**	**16.1**	**16.1**	**10.6**	**14.2**	**14.2**	**14.9**	**10.1**	**14.8**	**17.5**	**11.8**	**14.4**	**14.6**	**15.0**	**13.1**	**12.0**	**9.9**	**14.9**	**12.4**	**13.1**	**17.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**0.2**	**0.0**	**0.0**		**0.0**	
Avg.	**3.8**	**3.8**	**3.7**	**3.5**	**3.1**	**3.7**	**3.6**	**3.6**	**4.1**	**4.0**	**4.1**	**3.5**	**4.2**	**4.4**	**4.1**	**4.4**	**5.0**	**5.1**	**4.0**	**4.1**	**4.2**	**4.5**	**4.8**	**4.5**			**4.1**

Total Hours in Month 696 **Hours Data Available** 695 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

March 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.2	11.8	11.6	15.4	14.4	13.3	12.5	12.2	12.8	11.3	5.4	4.3	3.7	2.3	3.6	3.8	2.7	2.9	3.3	2.6	3.7	4.4	3.6	3.8	15.4	2.3	7.3
2	3.9	2.7	1.4	1.5	1.2	1.4	0.0	0.8	0.6	0.0	0.0	1.7	0.1	0.9	0.6	1.2	1.5	0.0	0.0	1.1	0.7	0.3	1.0	1.3	3.9	0.0	1.0
3	1.2	1.5	0.9	0.8	3.8	0.8	0.8	1.3	1.2	3.7	0.5	1.5	3.2	1.9	0.0	3.3	4.0	0.4	0.0	3.1	2.0	1.8	0.6	1.8	4.0	0.0	1.7
4	0.0	1.3	0.0	1.2	0.3	1.8	0.3	1.5	1.6	2.3	2.5	3.1	3.2	0.9	0.9	0.0	0.0	0.7	0.9	0.6	0.0	1.3	0.0	0.6	3.2	0.0	1.0
5	0.6	1.3	0.0	0.7	1.9	1.4	0.8	0.7	0.9	0.9	0.9	0.0	0.7	1.6	0.7	0.0	1.1	1.5	0.9	1.6	0.3	0.0	0.7	1.0	1.9	0.0	0.8
6	2.6	0.0	0.9	0.3	2.1	2.8	1.9	1.5	0.9	0.8	2.5	0.9	0.3	1.4	1.7	1.8	2.0	0.7	1.6	1.6	0.5	0.6	0.0	0.8	2.8	0.0	1.3
7	1.4	2.2	1.1	1.5	1.9	1.3	3.0	3.9	6.2	3.2	5.8	6.2	9.7	11.1	13.5	18.4	16.3	14.8	17.2	12.0	15.2	16.6	13.4	13.6	18.4	1.1	8.7
8	9.3	7.2	9.8	10.5	8.2	0.8	4.2	0.0	5.6	2.4	1.7	1.3	1.4	1.4	2.0	6.6	8.3	11.6	10.7	11.9	13.3	14.2	12.1	16.4	16.4	0.0	7.1
9	11.1	13.3	15.5	14.7	19.0	15.3	12.9	16.0	18.1	15.7	15.1	6.5	6.4	3.6	0.0	0.0	2.2	1.0	7.8	9.9	7.5	8.4	7.9	12.4	19.0	0.0	10.0
10	13.2	12.4	11.6	12.9	12.9	11.4	14.0	16.1	11.7	10.4	11.5	9.8	9.7	8.9	3.6	3.7	2.8	1.4	0.0	0.0	0.0	1.6	0.0	0.0	16.1	0.0	7.5
11	0.0	0.0	0.0	0.0	0.0	0.0	8.3	11.1	11.0	12.4	13.1	10.0	10.7	5.7	3.1	3.4	3.2	2.3	2.7	1.4	0.4	2.3	2.5	2.6	13.1	0.0	4.4
12	2.7	1.9	2.7	1.7	1.7	2.4	1.7	2.3	1.8	1.3	1.6	4.2	3.1	0.0	0.0	1.0	0.7	0.8	0.0	0.1	0.0	4.1	0.0	0.9	4.2	0.0	1.5
13	1.4	1.4	1.0	0.9	0.8	2.2	2.5	1.4	1.3	0.3	1.8	2.2	1.1	0.0	0.0	0.2	0.0	0.0	0.9	0.0	1.0	0.8	1.5	0.0	2.5	0.0	0.9
14	2.8	0.0	0.0	3.8	8.2	8.3	7.8	7.5	7.7	8.3	11.1	14.4	14.0	14.0	15.1	13.1	13.3	13.6	10.9	11.4	10.3	10.6	13.9	13.4	15.1	0.0	9.7
15	13.5	12.9	7.1	8.0	9.6	6.0	8.4	6.8	5.4	4.3	4.2	3.2	0.0	1.2	3.3	1.6	1.0	1.2	2.5	3.6	7.0	4.4	2.8	1.9	13.5	0.0	5.0
16	5.9	7.9	8.8	6.9	6.6	6.8	7.9	5.9	5.9	6.1	6.5	5.0	0.0	1.6	1.8	2.6	2.6	2.9	10.3	9.3	6.9	7.5	9.0	8.8	10.3	0.0	6.0
17	9.6	9.8	12.1	10.5	11.8	10.4	7.7	10.5	10.4	10.0	11.1	7.4	7.3	7.4	7.2	5.1	5.1	5.1	2.8	0.7	1.8	1.2	1.9	1.1	12.1	0.7	7.0
18	9.9	8.5	11.1	13.3	15.2	16.0	16.3	13.7	17.0	20.9	21.9	19.6	20.0	16.2	20.9	21.4	20.3	15.8	25.1	19.0	24.1	19.9	19.2	19.8	25.1	8.5	17.7
19	19.6	19.2	15.4	15.1	16.1	13.5	15.4	16.4	15.7	15.2	13.5	15.5	13.5	16.8	15.2	14.8	16.0	12.1	13.4	13.9	14.8	9.4	11.8	10.5	19.6	9.4	14.7
20	10.6	10.8	9.1	9.2	8.7	11.3	9.8	8.4	11.3	9.8	8.2	11.4	8.2	8.5	7.3	13.2	13.7	13.9	10.3	13.6	13.2	7.2	9.0	8.0	13.9	7.2	10.2
21	7.6	9.5	7.1	9.0	8.7	7.4	7.1	6.9	3.9	4.1	3.7	4.5	2.9	3.5	1.5	2.1	0.0	2.3	3.6	0.0	0.0	3.6	7.9	7.5	9.5	0.0	4.8
22	7.2	7.2	9.0	11.5	12.8	12.1	13.8	12.3	15.4	19.8	11.5	16.2	17.0	22.1	18.5	20.6	17.6	16.3	16.6	16.9	18.5	14.2	15.3	13.2	22.1	7.2	14.8
23	15.7	15.3	16.5	16.8	16.8	20.2	17.2	21.8	22.8	19.3	16.9	13.2	14.4	15.8	12.9	20.0	15.2	17.5	16.4	18.2	18.2	18.4	20.5	14.3	22.8	12.9	17.3
24	19.3	24.1	23.8	11.7	14.1	10.2	10.6	9.9	10.7	11.6	13.0	12.8	13.2	13.2	14.5	12.9	12.2	9.8	10.8	11.7	9.9	10.7	4.9	5.0	24.1	4.9	12.5
25	4.8	4.8	1.0	1.9	1.4	5.7	9.4	9.6	6.2	9.6	8.0	3.8													9.6	1.0	5.5
26														3.7	3.6	1.9	3.9	5.1	3.5	4.5	0.3	2.9	3.0	5.5	5.5	0.3	3.4
27	5.8	7.3	10.2	8.3	5.2	9.7	14.5	14.2	10.4	10.9	9.1	9.9	9.7	8.4	10.2	8.8	6.8	6.4	7.8	7.6	8.2	7.7	13.7	14.2	14.5	5.2	9.4
28	16.1	10.2	11.1	9.6	7.1	5.8	1.8	8.5	7.5	6.7	2.7	8.0	7.5	7.5	8.0	5.7	6.0	5.2	6.3	5.6	6.5	0.0	1.8	1.3	16.1	0.0	6.5
29	0.7	1.1	1.3	0.0	0.5	0.0	0.9	1.0	0.0	0.7	0.0	0.0	0.2	0.0	1.2	0.0	1.5	0.9	0.6	0.0	1.3	0.9	0.0	0.0	1.5	0.0	0.5
30	0.0	0.0	0.6	0.0	1.7	1.2	0.0	0.0	0.6	1.1	0.0	0.0	0.2	0.0	1.3	0.6	1.2	0.9	4.4	2.7	5.3	6.6	5.2	3.5	6.6	0.0	1.5
31	8.7	1.3	2.5	2.3	2.4	2.8	0.0	1.4	1.5	1.2	1.0	1.4	1.1	1.1	0.7	2.4	2.6	4.2	0.0	0.9	4.2	4.9	4.8	4.7	8.7	0.0	2.4
Max.	**19.6**	**24.1**	**23.8**	**16.8**	**19.0**	**20.2**	**17.2**	**21.8**	**22.8**	**20.9**	**21.9**	**19.6**	**20.0**	**22.1**	**20.9**	**21.4**	**20.3**	**17.5**	**25.1**	**19.0**	**24.1**	**19.9**	**20.5**	**19.8**	**25.1**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.1**	**6.9**	**6.8**	**6.7**	**7.2**	**6.7**	**7.0**	**7.5**	**7.5**	**7.5**	**6.8**	**6.6**	**6.3**	**6.0**	**5.8**	**6.3**	**6.1**	**5.7**	**6.4**	**6.2**	**6.5**	**6.2**	**6.3**	**6.3**			**6.6**

Total Hours in Month 744 **Hours Data Available** 719 **Data Recovery** 96.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

April *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.8	9.4	9.2	0.9	3.9	2.0	4.0	5.8	3.9	0.6	4.5	1.5	1.9	0.8	2.1	5.3	4.3	4.6	5.9	4.9	3.8	4.0	2.7	4.8	9.4	0.6	3.9
2	2.1	1.2	3.0	0.9	0.0	1.1	0.9	1.9	0.0	1.3	2.1	0.9	0.0	5.6	7.8	9.0	9.4	9.1	7.9	7.3	8.3	9.5	9.1	8.5	9.5	0.0	4.5
3	6.9	10.7	9.3	7.4	3.7	0.5	6.6	7.3	3.0	3.1	2.1	7.8	3.3	15.1	15.3	16.8	16.8	18.6	15.6	13.7	13.2	6.9	10.1	13.3	18.6	0.5	9.5
4	7.5	13.0	16.1	13.5	15.8	18.4	14.8	13.7	16.1	18.9	20.9	21.0	20.1	12.3	4.7	5.1	7.2	2.3	0.0	16.3	8.7	4.1	15.5	20.5	21.0	0.0	12.8
5	4.2	18.6	15.8	15.0	19.5	15.3	9.8	11.0	10.0	4.3	12.8	11.9	15.7	16.6	14.4	13.1	13.2	2.1	9.0	8.6	8.4	0.0	5.5	7.5	19.5	0.0	10.9
6	6.9	5.7	6.6	7.4	8.7	8.8	8.4	9.2	11.1	14.6	3.3	6.8	10.8	10.6	10.5	9.7	9.9	7.2	7.4	8.6	8.8	9.2	6.8	7.0	14.6	3.3	8.5
7	6.0	7.1	7.9	6.4	7.9	8.9	7.4	9.5	9.2	9.5	9.0	7.9	10.0	9.6	11.0	11.1	8.9	9.9	7.4	7.4	5.4	11.7	9.9	9.1	11.7	5.4	8.7
8	10.1	10.2	7.4	6.3	9.7	8.3	11.1	9.7	10.8	2.0	8.8	7.2	5.4	7.5	5.9	7.0	6.8	6.2	7.8	7.2	8.7	6.0	4.0	0.0	11.1	0.0	7.3
9	8.4	10.6	9.2	1.0	2.8	7.0	7.6	4.8	11.2	6.9	9.0	11.5	10.6	9.5	10.2	8.8	10.6	9.8	10.9	8.1	8.0	7.5	8.8	7.2	11.5	1.0	8.3
10	6.4	9.4	8.6	0.6	8.7	8.0	7.2	8.0	11.3	8.1	8.3	9.7	10.5	9.9	11.1	10.9	10.7	8.4	9.3	12.5	10.8	12.3	15.6	18.0	18.0	0.6	9.8
11	17.9	15.3	11.7	10.8	11.7	10.9	10.4	10.9	14.9	12.5	11.6	9.5	10.2	8.6	6.1	8.5	7.2	6.2	6.2	5.6	7.7	9.4	9.7	7.6	17.9	5.6	10.0
12	12.5	10.9	9.3	9.9	9.1	13.5	14.7	16.1	14.0	8.8	6.8	8.2	8.6	7.1	9.6	9.9	12.8	10.8	9.5	9.5	9.1	9.5	8.2	9.5	16.1	6.8	10.3
13	3.5	4.8	3.6	4.6	5.7	4.7	6.9	4.2	3.8	0.0	3.2	3.6	4.9	3.9	3.7	2.8	3.5	2.8	3.4	3.8	4.1	1.0	0.0	0.0	6.9	0.0	3.4
14	0.3	0.0	0.0	0.1	0.0	0.0	2.2	6.0	6.9	6.5	3.4	3.8	0.9	11.1	7.6	7.0	6.4	4.6	7.2	0.0	6.5	5.5	5.4	6.2	11.1	0.0	4.1
15	5.5	0.8	1.0	7.4	7.5	5.6	5.9	5.9	8.1	7.4	8.2	7.6	11.5	9.3	9.2	6.3	7.2	3.6	10.2	10.6	6.2	4.0	6.3	10.0	11.5	0.8	6.9
16	10.1	3.7	3.8	11.0	5.5	4.7	1.1	0.0	6.5	13.8	4.1	1.9	17.0	14.4	19.8	16.1	15.4	13.3	10.3	5.2	7.7	8.1	9.4	7.0	19.8	0.0	8.7
17	7.5	10.4	14.2	13.4	11.8	12.2	9.4	13.1	15.4	13.5	10.8	13.9	11.7	9.6	12.9	9.9	9.9	7.0	9.2	4.9	5.1	3.4	1.6	0.0	15.4	0.0	9.6
18	0.9	1.3	1.9	1.0	0.8	0.0	2.1	1.6	1.7	0.0	0.0	1.0	0.0	1.1	2.5	4.5	4.2	3.9	0.0	1.8	3.6	6.7	7.0	7.4	7.4	0.0	2.3
19	7.3	9.4	6.7	10.0	6.6	6.2	4.8	0.7	4.8	11.2	10.7	6.3	8.0	7.6	6.4	3.7	4.0	3.1	2.6	1.5	3.5	1.8	0.0	2.0	11.2	0.0	5.4
20	2.0	2.2	4.2	4.9	9.9	8.1	6.9	7.0	8.7	6.9	8.8	9.8	8.3	11.8	11.4	9.8	9.1	9.0	9.6	10.0	11.1	10.6	7.9	7.9	11.8	2.0	8.2
21	9.2	8.6	3.0	5.6	7.8	6.8	10.8	12.1	7.9	8.8	6.9	7.2	6.4	4.7	5.9	5.5	5.5	5.8	7.2	6.9	7.9	8.9	8.5	8.1	12.1	3.0	7.3
22	5.7	6.6	3.6	4.8	7.6	3.2	1.8	9.0	8.7	11.8	12.8	9.4	8.8	8.4	6.7	8.6	9.1	8.4	7.4	7.7	6.2	9.3	8.5	8.8	12.8	1.8	7.6
23	9.8	9.8	7.7	8.8	9.4	6.4	1.7	2.6	0.8	5.1	5.5	6.1	5.6	4.9	4.3	4.0	3.8	4.7	3.7	3.9	3.9	0.3	0.7	0.0	9.8	0.0	4.7
24	0.0	0.7	1.0	1.0	1.5	0.0	1.1	1.8	0.0	0.0	0.9	0.0	0.8	0.6	1.5	0.2	0.0	0.0	1.0	0.8	0.8	0.0	0.0	0.0	1.8	0.0	0.6
25	0.0	0.8	1.2	0.9	0.3	0.0	0.0	1.5	0.9	0.0	1.3	3.0	3.1	4.9	7.2	7.9	6.2	6.1	8.4	6.4	7.3	9.0	3.2	1.6	9.0	0.0	3.4
26	6.0	7.2	6.7	6.9	1.2	2.5	0.6	0.8	1.4	1.7	0.4	0.8	2.3	2.3	2.7	3.2	3.8	2.9	3.7	4.0	4.2	0.0	8.0	9.3	9.3	0.0	3.4
27	8.6	3.9	1.0	0.9	8.4	8.7	7.4	9.4	11.6	10.3	10.0	7.1	4.2	1.2	2.2	2.8	1.6	5.6	6.3	8.2	7.5	9.6	7.7	4.6	11.6	0.9	6.2
28	2.0	5.3	2.3	1.2	3.7	3.3	4.0	4.9	2.2	7.2	4.9	6.5	7.2	7.4	7.6	6.3	7.1	6.0	4.8	7.5	8.6	6.1	5.7	4.7	8.6	1.2	5.3
29	6.7	1.4	1.8	0.9	1.8	1.9	0.0	0.5	1.0	2.9	0.9	2.3	2.1	0.0	1.5	0.0	1.2	0.8	1.0	0.8	1.5	2.1	1.2	1.6	6.7	0.0	1.5
30	0.6	0.9	2.1	1.5	0.0	1.4	1.0	1.0	0.8	1.6	1.9	0.9	1.9	2.2	2.7	5.1	6.2	4.9	5.8	3.9	5.7	6.3	6.9	7.3	7.3	0.0	3.0
Max.	**17.9**	**18.6**	**16.1**	**15.0**	**19.5**	**18.4**	**14.8**	**16.1**	**16.1**	**18.9**	**20.9**	**21.0**	**20.1**	**16.6**	**19.8**	**16.8**	**16.8**	**18.6**	**15.6**	**16.3**	**13.2**	**12.3**	**15.6**	**20.5**	**21.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.9**	**6.7**	**6.0**	**5.5**	**6.4**	**5.9**	**5.7**	**6.3**	**6.9**	**6.6**	**6.5**	**6.5**	**7.1**	**7.3**	**7.5**	**7.3**	**7.4**	**6.3**	**6.6**	**6.6**	**6.7**	**6.1**	**6.5**	**6.7**			**6.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

May *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.6	6.3	5.9	5.2	7.6	8.3	7.5	3.0	4.1	7.0	5.8	6.9	4.3	3.9	4.2	4.6	5.7	4.6	5.6	5.7	6.8	7.5	6.0	2.1	8.6	2.1	5.7
2	3.2	0.0	2.1	1.0	1.7	1.2	0.2	1.3	2.4	2.4	3.6	4.3	7.2	6.1	9.3	9.0	9.4	8.1	8.1	8.8	9.5	8.7	9.4	8.9	9.5	0.0	5.2
3	8.2	5.8	6.5	4.3	5.4	4.0	5.1	5.7	8.5	9.0			9.7	10.5	8.0	7.0	8.5	9.3	8.9	7.7	8.9	7.5	8.0	9.2	10.5	4.0	7.5
4	8.1	7.3	6.9	3.6	1.3	8.5	9.5	7.6	6.7	5.8	5.6	10.5	10.7	15.0	10.3	11.7	13.8	9.1	10.5	8.3	11.3	9.4	8.2	12.2	15.0	1.3	8.8
5	9.1	6.4	4.3	6.5	9.3	7.8	0.0	2.4	1.7	7.9	5.7	7.3	6.0	7.9	8.8	7.2	6.8	5.6	7.8	8.1	6.9	5.9	3.4	4.5	9.3	0.0	6.1
6	4.5	0.0	0.7	1.3	1.5	1.4	0.0	0.0	0.9	2.2	1.4	1.0	0.4	1.0	0.8	1.4	2.9	2.0	2.9	3.2	4.1	3.6	4.9	6.9	6.9	0.0	2.0
7	6.6	7.3	6.7	4.0	8.3	12.5	10.3	11.6	14.7	14.4	12.5	15.6	18.2	15.0	13.3	15.8	9.4	6.6	5.7	4.4	3.8	4.7	7.2	4.3	18.2	3.8	9.7
8	4.0	6.8	3.8	7.8	8.7	3.6	4.2	5.4	11.2	12.9	8.0	8.2	7.7	8.5	9.9	9.2	8.0	7.2	8.3	7.7	6.2	10.6	9.9	7.1	12.9	3.6	7.7
9	1.6	0.0	0.0	0.7	1.7	0.0	0.9	2.6	6.2	4.9	6.9	7.6	7.2	6.7	7.3	8.0	8.4	6.8	7.5	8.5	8.4	8.3	6.5	7.2	8.5	0.0	5.2
10	6.4	7.8	6.3	3.6	5.0	1.3	4.9	6.8	4.0	5.9	5.7	5.9	5.7	8.3	5.4	6.2	8.9	6.8	9.0	8.6	7.8	10.0	10.8	7.1	10.8	1.3	6.6
11	7.5	8.4	9.9	7.6	6.8	8.6	7.0	8.5	5.0	9.0	8.4	9.3	7.3	8.0	8.4	8.5	8.2	8.9	8.6	7.5	8.9	6.8	6.8	5.7	9.9	5.0	7.9
12	3.2	3.3	1.9	1.3	1.7	1.7	1.7	1.1	0.3	0.8	4.7	3.6	4.8	5.1	4.9	5.7	5.8	6.7	4.5	3.7	4.5	3.3	5.8	4.2	6.7	0.3	3.5
13	2.2	2.6	1.5	4.7	2.0	6.0	5.2	0.0	1.7	5.7	6.0	7.2	6.5	6.0	6.3	8.5	10.9	11.9	12.5	13.0	14.0	10.7	11.5	10.8	14.0	0.0	7.0
14	5.4	6.6	8.8	7.4	0.0	3.6	4.1	4.2	3.1	2.9	0.0	5.3	4.1	5.3	4.9	5.2	5.8	5.9	6.2	5.1	3.5	3.8	3.1	0.8	8.8	0.0	4.4
15	1.5	4.5	2.9	2.6	0.0	0.9	1.3	0.0	3.5	5.1	4.5	4.6	3.5	4.2	6.0	6.3	3.1	5.4	4.8	1.7	8.7	10.7	13.8	16.8	16.8	0.0	4.8
16	15.3	12.1	10.7	7.2	7.0	3.2	7.1	7.4	8.9	8.9	5.5	8.5	3.2	5.6	4.5	3.5	7.5	5.8	7.9	8.4	8.2	10.7	11.4	9.7	15.3	3.2	7.8
17	9.0	7.5	8.2	7.2	6.6	6.2	6.5	9.1	7.8	8.6	6.8	5.0	6.4	4.8	3.7	7.8	5.6	5.0	5.5	4.6	4.7	4.7	1.3	3.5	9.1	1.3	6.1
18	1.6	0.0	4.7	6.0	3.4	0.0	3.9	3.0	4.6	6.1	7.6	6.9	8.0	8.8	6.1	7.9	7.4	5.3	5.8	5.5	4.9	6.7	6.6	6.2	8.8	0.0	5.3
19	2.8	3.1	0.2	2.2	1.1	1.2	2.8	1.4	5.6	8.4	8.8	11.0	9.7	6.5	7.1	5.5	8.1	10.9	8.1	8.4	9.0	8.4	5.8	4.8	11.0	0.2	5.9
20	3.8	5.4	5.2	2.2	2.2	1.3	4.7	2.7	6.3	5.8	3.9	8.3	10.1	11.6	9.5	9.5	10.2	5.7	4.5	5.7	4.8	7.3	6.5	9.1	11.6	1.3	6.1
21	8.6	7.0	4.5	2.3	1.8	1.1	0.0	1.1	2.4	6.9	6.5	3.8	2.3	3.0	2.1	2.6	2.5	4.1	2.1	3.3	2.5	2.5	2.2	2.6	8.6	0.0	3.2
22	0.8	0.8	1.4	1.5	0.0	0.4	0.0	0.0	0.0	1.1	1.1	2.7	1.4	3.6	5.7	4.1	5.1	6.1	3.5	4.2	4.4	5.6	4.1	2.1	6.1	0.0	2.5
23	1.7	0.9	2.3	1.4	1.8	0.9	1.7	1.0	2.0	2.9	1.4	0.0	1.6	0.0	1.4	0.8	2.6	3.1	6.9	5.2	4.9	5.9	2.4	1.0	6.9	0.0	2.2
24	0.0	1.3	0.6	0.0	0.7	0.8	0.2	1.3	1.2	0.0	2.8	0.0	2.0	3.3	6.1	4.1	4.7	7.1	6.9	6.2	4.8	5.6	3.7	7.8	7.8	0.0	3.0
25	5.1	4.6	3.9	3.6	1.6	1.0	1.4	1.0	1.7	0.6	3.2	2.5	1.6	3.4	6.1	2.6	2.5	3.2	0.6	4.7	2.2	2.9	1.3	1.2	6.1	0.6	2.6
26	2.2	1.4	2.0	0.2	1.2	0.2	1.0	0.5	2.9	4.8	6.2	8.5	7.4	6.5	6.9	5.9	5.0	3.7	3.8	2.6	1.5	1.6	3.4	4.3	8.5	0.2	3.5
27	3.2	4.0	4.8	3.3	2.8	4.2	2.2	2.2	1.0	0.0	4.2	6.6	7.2	8.6	10.8	7.3	7.1	6.2	4.6	6.2	5.0	3.0	2.0	1.1	10.8	0.0	4.5
28	0.9	2.4	3.9	8.3	7.4	7.3	8.6	9.7	10.3	8.0	9.3	9.4	9.3	10.0	8.6	7.5	8.8	8.5	7.4	6.5	3.9	4.3	6.1	0.5	10.3	0.5	7.0
29	0.8	0.0	1.8	1.1	2.0	0.0	1.1	0.5	5.0	6.3	7.6	8.4	7.5	10.5	9.9	8.8	10.0	6.3	5.8	6.5	4.4	3.0	3.3	4.2	10.5	0.0	4.8
30	5.0	0.8	0.7	0.6	2.5	4.1	7.4	5.3	6.2	5.5	6.7	9.6	7.8	10.2	9.3	5.9	9.7	9.4	12.6	7.3	8.1	5.2	8.0	6.6	12.6	0.6	6.4
31	2.4	0.0	3.6	1.6	1.7	1.7	1.6	5.9	7.9	7.6	12.4	12.7	7.4	7.8	10.4	8.8	9.7	7.3	6.0	6.5	0.2	2.3	1.8	2.0	12.7	0.0	5.4
Max.	**15.3**	**12.1**	**10.7**	**8.3**	**9.3**	**12.5**	**10.3**	**11.6**	**14.7**	**14.4**	**12.5**	**15.6**	**18.2**	**15.0**	**13.3**	**15.8**	**13.8**	**11.9**	**12.6**	**13.0**	**14.0**	**10.7**	**13.8**	**16.8**	**18.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**0.0**	**0.8**	**0.8**	**2.5**	**2.0**	**0.6**	**1.7**	**0.2**	**1.6**	**1.3**	**0.5**		**0.0**	
Avg.	**4.6**	**4.0**	**4.1**	**3.6**	**3.4**	**3.3**	**3.6**	**3.6**	**4.8**	**5.7**	**5.8**	**6.7**	**6.3**	**7.0**	**7.0**	**6.7**	**7.2**	**6.5**	**6.5**	**6.3**	**6.0**	**6.2**	**6.0**	**5.6**			**5.4**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

June *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.5	2.1	0.0	0.7	3.4	1.1	2.6	1.0	3.0	5.2	5.4	5.4	5.4	5.3	6.3	5.7	6.8	5.7	8.5	1.7	1.3	1.6	2.0	0.0	8.5	0.0	3.4
2	1.0	2.2	1.0	1.1	1.5	1.8	5.3	3.5	3.5	2.9	3.9	3.5	3.3	5.0	4.6	4.3	8.1	4.8	7.3	6.0	4.2	2.9	2.2	5.4	8.1	1.0	3.7
3	1.4	1.3	0.0	1.6	0.9	1.1	3.3	4.5	3.2	5.1	6.7	9.6	10.0	12.5	11.7	15.0	15.4	15.4	12.6	12.4	8.4	14.7	12.5	7.8	15.4	0.0	7.8
4	6.9	7.2	9.2	10.5	3.5	1.7	1.1	0.8	2.6	3.2	3.0	4.4	5.8	4.2	6.0	4.5	8.7	9.9	7.0	6.7	7.3	2.8	1.9	1.1	10.5	0.8	5.0
5	5.4	3.4	1.9	8.4	5.5	8.7	7.2	8.0	8.7	11.0	7.1	9.6	15.6	14.0	15.1	15.3	11.3	13.2	13.7	15.0	11.5	11.4	15.1	12.8	15.6	1.9	10.4
6	15.5	12.9	13.6	8.3	9.4	12.4	14.8	12.4	11.0	13.0	14.1	14.0	13.1	8.9	9.1	13.5	13.2	9.6	10.5	10.8	11.0	12.2	9.7	8.9	15.5	8.3	11.7
7	3.3	3.0	2.4	1.2	1.0	0.0	0.4	0.0	1.6	0.0	3.4	1.7	1.6	1.3	5.4	6.0	5.7	6.6	5.4	4.4	4.7	4.2	3.6	2.3	6.6	0.0	2.9
8	0.0	1.1	0.0	1.4	0.0	2.4	1.6	1.3	0.5	1.4	3.1	6.6	4.5	5.9	10.3	6.2	2.2	9.6	8.3	7.3	6.2	7.9	8.7	10.7	10.7	0.0	4.5
9	7.5	6.3	3.0	3.3	2.4	0.0	3.3	3.3	4.2	5.8	4.1	4.1	6.9	3.2	5.3	3.1	1.2	0.5	1.5	4.7	5.6	6.4	6.2	2.3	7.5	0.0	3.9
10	3.5	1.1	1.0	1.4	0.2	0.4	0.0	0.0	1.1	1.5	4.0	1.7	4.5	4.1	5.5	5.8	7.2	6.9	7.2	5.2	5.2	6.0	10.5	7.5	10.5	0.0	3.8
11	6.3	5.9	3.4	4.6	7.4	6.8	6.0	8.1	9.0	6.4	9.3	5.7	6.5	5.0	6.2	3.8	3.4	6.2	4.3	5.0	4.4	7.0	3.4	6.7	9.3	3.4	5.9
12	9.4	9.0	9.9	13.9	11.5	8.8	14.7	14.9	15.5	10.5	18.0	14.0	16.4	16.8	12.3	14.9	16.0	14.5	11.3	12.4	12.9	15.8	18.0	14.6	18.0	8.8	13.6
13	15.5	13.1	17.4	13.1	12.5	17.1	10.0	15.4	14.1	13.3	14.6	14.0	19.2	15.9	14.4	12.7	9.9	11.7	12.1	13.5	12.3	12.0	8.1	7.1	19.2	7.1	13.3
14	8.7	8.8	7.2	4.8	5.6	5.1	2.7	2.1	3.3	6.3	6.8	8.3	10.7	6.4	5.5	9.2	7.0	5.0	6.6	5.3	4.6	3.1	4.4	4.7	10.7	2.1	5.9
15	3.2	1.6	2.7	3.0	1.1	2.0	0.9	0.9	0.0	3.5	4.8	3.2	2.3	1.5	0.2	3.0	2.5	2.8	2.8	2.7	2.3	2.4	3.2	0.8	4.8	0.0	2.2
16	2.2	1.5	1.1	0.9	2.1	0.8	0.9	1.1	3.2	5.1	7.5	10.1	9.4	10.6	11.7	13.1	10.0		15.0	10.9	8.4	9.7	8.4	10.5	15.0	0.8	6.7
17	8.9	9.3	6.2	7.2	6.1	6.3	7.3	5.7	7.6	9.5	6.7	6.7	6.1	10.7	9.7	10.7	12.7	14.2	11.6	9.3	7.9	9.2	9.1	11.3	14.2	5.7	8.7
18	9.9	11.3	6.1	9.4	7.2	7.0	6.7	2.2	2.2	2.5	2.7	2.5	1.6	5.1	8.6	8.8	5.2	6.5	1.7	3.0	1.7	1.9	1.9	5.9	11.3	1.6	5.1
19	7.9	8.3	6.2	6.2	6.2	6.8	7.4	8.2	6.0	7.9	7.7	7.6	12.3	12.0	9.8	7.6	9.6	7.8	9.7	10.9	9.6	8.2	7.0	4.9	12.3	4.9	8.2
20	6.8	6.4	1.2	1.0	0.0	1.1	0.7	1.0	0.0	2.4	1.1	1.1	5.5	2.9	1.1	3.1	1.6	6.4	6.7	7.0	6.7	5.3	4.7	3.6	7.0	0.0	3.2
21	0.6	0.0	0.0	1.4	0.3	2.0	1.9	7.1	6.5	4.3	5.4	5.6	5.2	5.3	4.8	5.1	2.8	6.1	4.5	7.1	6.9	2.2	5.6	6.8	7.1	0.0	4.1
22	5.7	2.7	0.0	5.4	6.3	7.7	6.1	4.5	7.3	6.2	8.7	8.4	7.2	9.6	8.0	7.0	7.2	8.0	8.6	7.5	5.7	4.0	4.8	3.4	9.6	0.0	6.2
23	1.7	3.3	1.8	0.4	2.1	1.4	1.6	1.0	1.0	4.4	3.8	4.2	1.8	3.5	7.4	5.0	2.3	3.7	3.8	3.8	2.6	0.9	2.3	1.5	7.4	0.4	2.7
24	0.0	1.6	1.6	2.3	0.4	0.7	1.6	0.0	1.1	0.9	4.6	4.4	4.9	4.8	1.7	2.4	5.5	7.1	6.0	3.1	3.3	4.8	0.9	0.0	7.1	0.0	2.7
25	1.3	2.8	0.2	2.1	3.7	2.7	0.2	1.3	0.0	2.8	4.8	6.6	9.0	9.9	12.1	14.7	12.1	12.6	12.7	13.8	14.7	9.7	15.5	14.4	15.5	0.0	7.5
26	13.9	13.9	8.9	11.7	10.6	12.4	9.5	7.6	12.5	16.1	13.7	12.9	12.5	12.9	14.3	14.2	16.0	15.1	13.8	14.9	14.5	15.8	13.2	13.0	16.1	7.6	13.1
27	13.4	11.6	13.4	11.3	15.5	10.8	14.6	12.9	15.4	16.2	16.2	18.9	12.0	17.8	16.9	15.6	17.2	16.2	16.4	16.6	12.9	9.9	13.0	17.3	18.9	9.9	14.7
28	13.4	14.4	13.2	13.2	10.9	9.0	11.5	12.3	11.0	5.3	8.3	3.9	2.8	6.2	5.1	7.2	9.3	5.3	6.3	13.7	13.5	11.1	15.6	12.7	15.6	2.8	9.8
29	12.5	7.2	8.7	9.2	7.1	11.5	9.2	10.0	9.8	10.2	10.1	2.6	6.6	6.6	7.9	7.5	6.5	8.0	8.7	5.7	5.4	1.6	1.3	1.6	12.5	1.3	7.3
30	0.8	0.9	1.8	1.5	2.6	2.4	1.4	1.9	1.9	3.0	5.2	4.7	6.4	5.8	5.7	7.5	6.4	7.4	6.4	5.7	6.2	5.1	5.1	5.2	7.5	0.8	4.2
Max.	**15.5**	**14.4**	**17.4**	**13.9**	**15.5**	**17.1**	**14.8**	**15.4**	**15.5**	**16.2**	**18.0**	**18.9**	**19.2**	**17.8**	**16.9**	**15.6**	**17.2**	**16.2**	**16.4**	**16.6**	**14.7**	**15.8**	**18.0**	**17.3**	**19.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.1**	**1.1**	**1.6**	**1.3**	**0.2**	**2.4**	**1.2**	**0.5**	**1.5**	**1.7**	**1.3**	**0.9**	**0.9**	**0.0**		**0.0**	
Avg.	**6.3**	**5.8**	**4.8**	**5.3**	**4.9**	**5.1**	**5.2**	**5.1**	**5.6**	**6.2**	**7.2**	**6.9**	**7.6**	**7.8**	**8.1**	**8.4**	**8.1**	**8.5**	**8.4**	**8.2**	**7.4**	**7.0**	**7.3**	**6.8**			**6.7**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

July *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	2.8	1.2	2.4	1.1	0.9	0.0	2.7	4.4	6.2	4.4	1.2	0.0	0.0	3.4	5.0	4.6	6.2	6.3	5.6	4.7	1.1	1.1	2.1	6.3	0.0	2.8
2	0.0	1.0	1.1	0.5	0.7	0.0	0.0	0.0	1.3	2.0	3.8	5.1	5.6	5.1	4.0	5.0	5.4	4.7	3.2	3.7	4.1	3.8	4.9	0.0	5.6	0.0	2.7
3	1.4	1.1	0.0	0.6	0.7	1.2	1.4	1.7	3.0	0.0	1.7	2.2	0.2	0.0	2.3	1.9	2.1	0.0	0.0	2.9	3.0	1.7	1.1	0.7	3.0	0.0	1.3
4	1.4	2.3	2.9	0.0	0.8	1.0	1.7	3.8	2.0	3.5	8.7	9.5	9.9	11.1	8.8	4.1	3.8	7.4	0.0	8.5	4.7	1.4	5.1	6.4	11.1	0.0	4.5
5	2.2	9.2	6.9	6.5	8.4	7.5	6.4	6.1	6.7	4.1	4.8	8.5	7.4	7.2	6.9	4.9	6.2	4.9	8.7	10.1	8.1	7.0	5.6	7.0	10.1	2.2	6.7
6	7.0	3.6	4.2	5.3	6.3	5.1	5.6	6.8	5.6	6.0	4.0	3.7	4.9	4.9	5.3	4.6	5.0	3.1	3.4	4.2	1.3	2.8	0.0	1.1	7.0	0.0	4.3
7	1.6	1.8	1.4	1.3	0.0	1.2	1.6	2.0	1.2	2.9	4.6	4.3	3.3	4.4	6.4	4.2	6.1	8.0	6.6	9.9	9.7	12.8	13.6	12.6	13.6	0.0	5.1
8	8.7	9.9	10.0	9.8	9.9	13.9	7.0	2.8	2.8	3.8	2.8	4.8	5.4	4.8	4.0	4.3	5.8	5.0	5.2	3.0	5.6	2.2	2.4	1.1	13.9	1.1	5.6
9	1.2	1.6	0.0	0.0	2.7	1.2	1.8	2.1	1.7	3.2	5.1	4.9	4.5	6.7	7.6	10.0	8.2	11.1	6.4	7.3	7.9	6.3	3.3	9.7	11.1	0.0	4.8
10	12.3	14.3	15.5	10.5	10.4	11.9	11.2	7.6	13.0	11.4	9.1	8.3	7.6	6.9	10.6	7.0	6.8	8.4	6.2	6.0	5.4	3.1	1.8	0.0	15.5	0.0	8.6
11	2.3	0.0	2.1	1.2	0.8	1.1	0.8	1.5	1.8	3.2	2.0	5.0	3.7	4.9	4.7	5.6	4.5	6.1	5.6	8.3	8.7	6.8	7.6	5.2	8.7	0.0	3.9
12	6.9	3.5	1.0	5.4	4.2	4.6	3.8	2.3	3.0	5.0	7.0	6.0	4.0	6.0	6.4	4.1	4.9	5.3	6.4	5.5	5.3	3.4	3.1	3.7	7.0	1.0	4.6
13	1.5	0.0	1.2	2.1	2.0	0.9	2.5	3.4	2.5	3.1	2.6	1.8	3.9	2.4	1.6	6.4	6.1	6.8	7.0	5.3	7.4	4.8	6.0	5.0	7.4	0.0	3.6
14	5.3	6.1	4.7	4.3	4.8	0.0	2.7	5.6	2.3	4.4	2.7	3.4	3.3	4.5	3.5	2.5	4.7	5.0	5.2	4.4	2.8	3.9	2.9	2.2	6.1	0.0	3.8
15	1.5	3.8	6.4	4.8	3.9	2.3	7.0	4.1	1.9	4.3	3.6	1.9	6.7	4.5	5.9	6.3	2.7	4.4	1.3	0.6	0.0	0.0	1.3	1.2	7.0	0.0	3.4
16	1.6	1.5	1.4	0.0	0.0	0.0	0.9	1.0	2.1	3.8	3.1	6.9	5.9	5.8	5.8	5.2	5.4	5.0	3.7	1.8	1.1	3.0	2.8	3.0	6.9	0.0	3.0
17	0.0	2.0	0.8	0.0	0.0	1.2	3.2	4.0	2.9	4.9	5.0	2.2	4.4	5.1	6.3	3.6	4.6	4.6	6.9	6.1	4.6	2.6	2.3	3.0	6.9	0.0	3.3
18	1.5	3.5	3.2	2.6	2.6	3.8	3.8	3.1	5.1	2.6	3.0	2.1	2.9	3.3	3.0	0.0	3.2	2.7	0.8	5.6	5.3	3.4	3.6	2.9	5.6	0.0	3.1
19	6.6	6.4	0.6	4.1	1.2	0.7	0.0	2.1	3.5	4.8	5.3	3.1	3.8	4.4	3.6	1.9	2.3	2.3	3.9	5.3	2.0	1.8	1.7	1.8	6.6	0.0	3.1
20	1.9	1.6	1.9	1.4	1.2	0.0	0.0	0.0	0.0	1.4	0.9	1.0	2.2	0.9	0.0	1.6	2.9	2.6	4.7	4.4	3.3	3.7	8.5	7.5	8.5	0.0	2.2
21	10.7	8.4	7.8	15.3	8.7	9.5	9.2	11.2	11.7	8.8	12.2	8.6	13.0	10.1	10.2	14.2	11.6	13.2	11.6	11.0	11.6	10.0	12.0	14.9	15.3	7.8	11.1
22	9.9	12.0	8.5	7.1	4.7	5.2	4.0	3.4	0.0	1.8	3.1	3.8	4.8	3.9	5.9	4.8	2.7	5.9	5.4	5.0	5.3	3.8	4.4	1.7	12.0	0.0	4.9
23	1.9	0.0	0.0	1.2	0.2	0.0	1.7	0.5	1.1	1.5	1.7	3.8	2.0	0.9	0.8	2.0	3.8	4.0	2.6			2.1	0.0	0.3	4.0	0.0	1.5
24	1.2	0.0	1.0	0.4	0.0	0.0	1.5	1.0	1.1	1.6	1.7	2.7	1.6	0.0	1.2	3.8	2.5	5.0	3.2	4.1	5.3	2.8	1.4	1.1	5.3	0.0	1.8
25	0.4	1.5	2.6	0.0	0.8	0.0	1.4	0.0	0.0	3.8	6.6	5.8	6.9	7.5	8.4	6.9	5.2	8.0	9.2	10.5	9.9	8.2	4.6	6.1	10.5	0.0	4.8
26	9.7	4.7	2.3	3.6	2.1	0.8	0.0	0.9	4.8	5.2	6.2	4.5	8.2	7.4	7.4	7.5	8.6	10.3	7.1	7.2	7.5	7.3	0.9	1.9	10.3	0.0	5.3
27	2.0	8.8	1.2	0.8	2.2	0.8	1.2	0.7	0.2	2.9	3.6	8.1	7.4	9.0	5.6	6.6	10.1	7.7	9.0	8.3	8.6	8.2	7.4	5.4	10.1	0.2	5.2
28	2.3	4.0	2.7	2.9	1.9	1.1	0.0	0.0	1.9	0.0	2.5	2.5	0.9	2.3	3.1	4.1	3.7	6.4	5.3	5.0	4.6	3.6	1.7	1.9	6.4	0.0	2.7
29	1.5	1.7	1.5	2.2	1.5	0.0	1.3	0.0	0.7	1.7	0.0	0.0	1.7	1.1	4.0	5.8	5.6	10.0	1.2	3.4	4.1	3.3	4.7	1.0	10.0	0.0	2.4
30	0.0	0.9	1.2	1.4	1.4	1.1	0.0	0.0	1.0	0.0	1.3	1.3	3.1	1.4	3.8	4.8	4.9	2.1	2.7	2.8	3.0	2.4	2.8	1.5	4.9	0.0	1.9
31	1.7	0.2	1.0	3.5	0.0	0.4	2.3	0.4	1.4	1.7	3.8	2.5	3.1	5.1	1.9	2.2	3.1	4.3	3.1	4.0	5.6	2.0	2.1	2.0	5.6	0.0	2.4
Max.	**12.3**	**14.3**	**15.5**	**15.3**	**10.4**	**13.9**	**11.2**	**11.2**	**13.0**	**11.4**	**12.2**	**9.5**	**13.0**	**11.1**	**10.6**	**14.2**	**11.6**	**13.2**	**11.6**	**11.0**	**11.6**	**12.8**	**13.6**	**14.9**	**15.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.1**	**0.0**	**0.0**	**0.6**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**3.4**	**3.8**	**3.1**	**3.3**	**2.7**	**2.5**	**2.7**	**2.6**	**2.9**	**3.5**	**4.1**	**4.2**	**4.6**	**4.6**	**4.9**	**4.9**	**5.1**	**5.8**	**4.9**	**5.7**	**5.4**	**4.2**	**3.9**	**3.7**			**4.0**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

August 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.0	1.3	1.0	0.4	1.1	2.2	0.8	0.4	0.0	2.3	1.9	0.9	2.3	4.6	2.6	4.1	3.5	5.2	3.2	3.0	0.4	0.9	1.8	1.6	5.2	0.0	2.0
2	0.9	2.1	1.6	1.9	1.5	1.1	0.0	0.0	1.2	3.4	2.3	6.2	7.2	5.5	6.1	8.0	6.9	7.9	6.0	3.7	3.8	1.3	2.7	1.2	8.0	0.0	3.4
3	1.9	2.6	2.9	2.0	3.3	2.2	4.4	4.4	6.5	11.6	8.9	7.6	13.6	11.5	10.5	10.7	11.6	11.6	11.9	8.4	9.6	6.1	11.6	10.3	13.6	1.9	7.7
4	9.7	8.5	2.0	5.9	6.2	6.6	8.0	2.7	2.3	2.8	1.5	1.2	0.7	2.1	5.2	2.7	2.7	4.9	5.5	4.3	9.7	8.4	8.0	7.4	9.7	0.7	5.0
5	5.3	7.8	7.8	5.3	3.1	3.9	1.4	3.1	1.9	1.1	0.0	0.0	1.1	0.0	0.0	0.8	3.9	2.2	1.7	4.7	5.8	2.0	6.8	3.4	7.8	0.0	3.0
6	4.9	4.7	3.8	4.4	5.4	4.2	3.8	6.0	2.5	2.5	2.8	4.0	3.9	2.5	2.8	4.5	4.0	2.1	2.6	1.2	2.2	3.1	2.7	0.9	6.0	0.9	3.4
7	0.0	0.0	2.5	3.3	2.9	5.0	3.5	4.2	4.3	4.7	3.4	4.6	8.1	6.4	5.7	7.4	4.6	6.9	4.6	4.6	4.4	1.0	4.1	3.8	8.1	0.0	4.2
8	4.7	3.9	5.4	1.2	4.5	10.1	5.1	4.3	7.7	4.7	7.3	11.3	8.7	10.7	8.1	10.5	10.5	6.8	10.0	8.9	5.4	5.4	6.9	6.0	11.3	1.2	7.0
9	5.9	3.7	2.8	4.2	8.3	6.1	5.2	6.4	2.3	5.3	9.3	6.3	3.2	4.0	4.6	2.9	3.1	2.3	2.8	2.8	3.9	2.6	4.3	2.7	9.3	2.3	4.4
10	3.5	1.8	1.6	1.5	0.0	0.0	0.0	3.0	1.9	6.3	4.3	7.7	8.9	10.1	15.6	14.1	18.7	12.3	14.1	20.5	17.5	12.5	16.2	15.7	20.5	0.0	8.7
11	13.7	13.9	12.0	10.3	7.7	13.1	10.2	11.3	11.4	11.0	11.0	9.6	11.2	10.6	11.1	8.8	9.0	6.8	6.1	8.7	6.7	5.3	5.3	2.6	13.9	2.6	9.5
12	2.5	0.8	0.2	0.0	1.3	1.5	2.1	2.8	4.4	4.2	5.5	3.4	5.5	5.5	5.9	5.3	6.3	7.0	1.3	3.6	3.1	3.2	2.8	0.4	7.0	0.0	3.3
13	3.2	2.0	0.9	1.8	1.3	0.0	1.1	1.7	0.5	1.7	1.8	2.6	3.3	5.6	5.6	9.8	8.5	11.0	7.6	8.0	6.1	8.6	7.2	9.3	11.0	0.0	4.6
14	8.0	5.0	6.4	6.2	4.9	8.0	6.7	9.0	10.7	10.7	12.7	14.5	16.8	13.1	11.6	13.4	11.9	13.3	14.8	8.7	8.7	12.3	10.6	12.2	16.8	4.9	10.4
15	10.9	9.2	11.7	8.8	8.6	8.7	9.0	10.8	11.7	10.3	11.2	10.9	11.4	12.6	10.9	10.0	12.6	10.0	7.5	9.8	7.8	5.0	4.3	5.6	12.6	4.3	9.6
16	5.3	5.2	7.6	6.3	2.1	3.4	0.0	1.4	1.3	2.4	2.1	1.0	2.3	2.0	3.8	3.1	2.6	1.8	4.1	5.5	4.1	3.1	0.9	1.5	7.6	0.0	3.0
17	3.0	1.2	1.9	2.6	1.1	1.0	0.7	2.4	2.3	3.5	4.4	4.1	5.2	4.2	3.7	3.2	3.8	5.3	5.4	4.7	2.9	2.8	5.0	8.0	8.0	0.7	3.4
18	7.6	4.6	3.9	7.4	0.0	1.7	1.8	0.0	0.0	1.1	0.4	0.6	1.2	1.8				2.1	3.1	2.1	4.1	7.4	7.3	11.0	11.0	0.0	3.3
19	10.3	7.4	10.9	6.6	8.0	7.0	10.9	12.8	10.8	6.6	13.9	13.4	16.6	14.8	17.5	19.8	19.9	19.5	25.4	20.8	18.5	15.7	15.5	13.5	25.4	6.6	14.0
20	15.7	17.6	16.3	12.1	13.3	13.8	13.8	15.8	18.1	13.1	16.1	16.8	14.0	12.2	17.9	14.0	16.8	12.1	10.6	11.7	10.2	14.2	12.6	10.9	18.1	10.2	14.2
21	10.8	11.7	11.5	9.6	9.5	9.2	7.9	8.2	9.9	8.5	10.2	8.6	9.7	11.1	10.1	10.6	12.0	16.4	13.1	12.3	6.4	8.3	8.6	13.6	16.4	6.4	10.3
22	10.1	14.6	14.1	11.0	12.1	11.5	10.1	13.5	8.5	13.2	12.7	12.5	12.7	13.4	16.4	19.5	18.9	11.6	13.3	14.6	11.7	14.6	13.7	12.7	19.5	8.5	13.2
23	11.9	10.6	14.9	14.0	10.3	12.4	11.5	12.1	12.6	11.9	10.4	12.3	11.0	8.1	7.6	12.3	11.7	10.6	13.4	9.2	9.2	8.3	11.0	7.2	14.9	7.2	11.0
24	6.4	3.6	1.9	1.6	1.3	0.4	0.0	1.1	3.7	2.0	2.6	3.1	3.2	4.2	3.0	0.4	5.7	3.5	3.7	3.9	1.6	11.1	9.6	5.7	11.1	0.0	3.5
25	5.0	5.4	7.1	4.4	5.9	8.3	7.9	7.0	7.6	10.4	7.8	8.4	12.1	8.7	6.8	5.8	9.0	8.0	9.1	7.4	1.4	2.1	2.4	6.5	12.1	1.4	6.9
26	7.2	8.1	9.6	8.2	10.2	8.0	6.7	4.5	3.6	4.5	4.4	2.6	0.0	2.8	1.8	1.2	1.2	2.9	4.0	1.6	1.6	1.0	2.2	1.0	10.2	0.0	4.1
27	1.1	1.7	0.7	0.9	1.1	2.0	1.1	3.9	6.9	6.6	7.3	9.6	8.5	10.1	11.1	8.8	11.2	7.8	9.4	8.1	9.7	11.1	10.2	8.7	11.2	0.7	6.6
28	10.0	10.7	10.1	11.5	10.0	8.6	8.1	7.8	7.0	7.0	7.8	9.8	8.2	10.2	9.4	9.0	8.8	7.0	5.9	7.4	6.9	5.3	5.4	4.2	11.5	4.2	8.2
29	1.8	1.9	1.9	0.0	0.9	1.2	1.2	0.9	1.4	0.7	4.0	0.5	1.3	3.8	2.0	4.0	3.8	3.8	3.0	1.9	0.9	0.0	0.5	2.3	4.0	0.0	1.8
30	0.0	0.0	2.2	2.7	2.2	4.2	5.4	7.2	8.9	7.0	10.6	10.2	8.2	10.0	7.0	8.3	9.8	8.6	11.8	7.9	6.8	8.2	13.4	12.1	13.4	0.0	7.2
31	11.9	9.4	10.9	10.5	7.4	7.6	6.0	6.0	6.1	3.2	5.3	6.3	7.4	7.4	6.1	5.0	7.0	7.9	9.0	7.2	10.7	7.1	6.9	5.8	11.9	3.2	7.4
Max.	**15.7**	**17.6**	**16.3**	**14.0**	**13.3**	**13.8**	**13.8**	**15.8**	**18.1**	**13.2**	**16.1**	**16.8**	**16.8**	**14.8**	**17.9**	**19.8**	**19.9**	**19.5**	**25.4**	**20.8**	**18.5**	**15.7**	**16.2**	**15.7**	**25.4**		
Min.	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**1.2**	**1.8**	**1.3**	**1.2**	**0.4**	**0.0**	**0.5**	**0.4**		**0.0**	
Avg.	**6.3**	**5.8**	**6.1**	**5.4**	**5.0**	**5.6**	**5.0**	**5.6**	**5.7**	**5.9**	**6.6**	**6.8**	**7.3**	**7.4**	**7.7**	**7.9**	**8.7**	**7.7**	**7.9**	**7.3**	**6.5**	**6.4**	**7.1**	**6.7**			**6.6**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

September 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.9	8.1	9.2	6.3	4.3	8.5	6.0	7.2	8.2	9.1	8.9	7.6	6.2	5.9	8.4	4.1	6.2	5.0	4.6	6.0	5.0	6.2	5.7	6.5	9.2	4.1	6.7
2	2.5	0.0	0.5	0.0	0.9	1.1	1.1	0.0	0.0	1.1	4.0	4.2	3.4	3.3	4.1	3.5	4.8	3.5	2.9	1.6	4.4	3.3	2.1	0.3	4.8	0.0	2.2
3	2.2	0.4	2.7	0.4	1.5	1.8	0.0	1.5	1.3	1.2	0.5	1.2	3.4	1.5	2.4	5.3	6.0	5.2	4.7	3.9	2.3	1.7	3.5	3.0	6.0	0.0	2.4
4	3.3	2.8	7.3	7.0	4.6	6.1	5.8	5.2	6.8	4.5	7.5	7.6	6.4	6.6	5.2	4.4	6.5	4.5	5.4	5.4	4.4	5.7	5.7	7.4	7.6	2.8	5.7
5	8.8	9.2	11.8	8.7	9.9	4.9	7.3	8.4	9.1	9.5	6.7	5.6	9.5	12.7	12.0	4.8	6.2	5.5	3.5	1.0	0.4	1.5	0.0	1.3	12.7	0.0	6.6
6	0.0	0.7	1.0	0.0	2.4	3.5	6.1	6.8	5.3	6.3	8.6	9.1	10.8	11.5	10.3	9.7	5.9	5.1	7.5	5.2	4.2	7.1	7.0	6.0	11.5	0.0	5.8
7	7.4	6.5	7.1	1.2	2.3	2.0	1.5	2.3	0.0	2.6	6.2	6.9	3.1	3.5	5.7	6.8	8.9	5.7	5.8	4.1	5.0	5.3	5.6	1.7	8.9	0.0	4.5
8	3.0	1.1	5.1	1.7	1.0	1.4	1.2	1.5	1.0	1.1	1.3	1.0	0.2	1.1	4.3	3.3	5.3	5.4	6.8	3.6	4.7	4.3	7.0	8.4	8.4	0.2	3.1
9	6.3	0.0	0.7	9.1	1.6	2.6	8.5	10.7	9.9	10.9	10.7	11.7	12.0	10.2	11.3	9.8	14.1	10.4	8.3	9.7	7.4	8.0	6.9	8.3	14.1	0.0	8.3
10	8.2	8.6	7.3	7.3	5.9	6.9	0.8	2.7	4.8	5.8	9.6	8.1	11.3	9.3	9.3	7.8	8.8	9.0	6.4	4.0	4.2	1.0	0.2	2.4	11.3	0.2	6.2
11	3.7	0.5	0.0	0.0	0.9	0.7	1.2	2.2	4.3	5.0	7.4	4.6	4.7	7.2	7.5	7.7	6.8	8.5	5.2	3.5	1.4	1.5	1.6	0.7	8.5	0.0	3.6
12	1.6	1.3	3.2	4.1	2.5	3.8	6.1	4.4	3.3	1.3	3.2	3.2	0.5	5.2	6.3	5.1	4.6	7.1	7.6	6.4	8.0	8.3	6.5	5.7	8.3	0.5	4.6
13	1.4	0.8	1.2	1.4	0.9	0.0	0.2	1.9	5.5	3.1	4.0	4.8	4.6	4.1	5.6	7.4	6.8	8.7	6.7	5.4	5.1	4.7	4.8	3.3	8.7	0.0	3.8
14	4.6	3.7	6.9	4.7	5.0	5.0	5.8	4.2	1.9	1.1	5.6	7.7	4.6	6.2	7.3	7.5	7.8	7.5	9.2	3.2	6.2	8.1	9.4	10.6	10.6	1.1	6.0
15	11.6	10.6	15.1	10.9	10.2	12.3	14.5	16.1	12.6	11.6	12.2	6.8	3.1	6.4	6.1	4.6	6.0	5.4	5.0	2.6	0.9	1.5	1.1	1.9	16.1	0.9	7.9
16	0.0	1.9	1.8	1.3	0.0	0.0	0.7	0.6	0.8	1.5	3.8	5.6	5.8				4.5	4.7	7.0	9.1	9.8	9.8	7.5	12.5	12.5	0.0	4.2
17	10.6	9.4	9.6	15.3	13.0	10.7	15.0	8.0	9.1	10.1	11.6	10.8	15.1	12.5	9.4	8.4	12.3	13.4	15.6	11.4	13.2	13.9	11.7	8.2	15.6	8.0	11.6
18	10.5	8.2	6.1	6.3	4.1	7.9	3.9	2.8	5.4	8.1	11.2	11.6	8.1	8.3	10.1	7.4	8.9	9.1	6.5	8.3	8.1	7.2	9.2	5.8	11.6	2.8	7.6
19	6.5	6.6	6.5	9.0	8.5	9.4	3.8	8.7	10.7	7.2	9.2	11.3	15.4	14.0	9.9	12.3	12.4	14.5	15.0	13.2	16.9	12.5	9.2	10.3	16.9	3.8	10.5
20	12.8	10.2	6.4	9.0	11.6	10.0	9.3	8.7	6.2	9.6	9.2	10.6	8.2	12.3	9.3	11.4	8.5	12.5	10.2	7.5	5.2	4.3	5.4	4.4	12.8	4.3	8.9
21	8.0	7.4	2.7	2.2	2.1	4.3	0.0	1.6	1.0	2.6	4.7	3.0	3.9	4.6	4.9	5.2	3.4	3.9	3.2	4.8	6.9	4.4	4.6	3.5	8.0	0.0	3.9
22	5.2	4.3	4.6	2.4	3.6	3.5	1.7	1.8	0.9	0.0	0.0	2.3	2.4	5.9	3.4	2.3	2.4	0.3	2.3	0.9	1.2	1.4	0.4	1.4	5.9	0.0	2.3
23	0.7	1.6	1.4	0.0	0.7	0.0	0.0	1.1	0.8	3.7	0.0	3.2	3.4	3.9	0.0	3.8	3.3	4.7	4.6	3.4	4.2	0.5	0.7	1.3	4.7	0.0	2.0
24	1.0	0.0	0.3	0.0	0.8	1.1	1.9	1.1	3.0	3.0	4.3	5.7	8.1	5.4	4.6	12.5	8.6	7.8	9.0	6.9	0.0	7.8	6.3	7.2	12.5	0.0	4.4
25	4.0	2.7	3.2	3.3	3.0	0.0	0.0	8.9	3.2	3.2	4.7	6.6	4.2	6.9	6.4	7.0	8.8	7.9	6.0	6.0	5.0	5.8	3.2	4.9	8.9	0.0	4.8
26	1.6	5.2	4.1	4.7	0.0	1.6	0.5	1.5	0.0	1.2	0.7	1.8	0.6	2.8	7.5	5.1	6.7	10.2	10.1	9.8	6.6	3.8	3.5	1.2	10.2	0.0	3.8
27	2.1	4.0	3.6	5.6	5.1	7.0	3.8	1.0	4.6	10.6	11.1	12.0	9.6	5.5	7.5	7.3	8.6	5.2	10.8	5.5	4.9	6.8	10.1	8.9	12.0	1.0	6.7
28	9.8	9.0	10.3	6.4	11.3	10.7	7.8	12.1	16.2	16.5	12.5	16.5	18.1	12.6	19.1	10.9	19.1	17.1	17.8	16.8	17.3	18.3	15.4	11.0	19.1	6.4	13.9
29	18.2	17.8	12.1	16.7	11.8	9.4	15.7	7.9	15.7	5.2	8.4	8.2	12.2	10.8	4.3	7.0	6.2	3.9	2.6	2.9	1.2	1.1	1.4	2.7	18.2	1.1	8.5
30	2.3	0.6	4.0	7.6	13.7	15.2	13.2	14.3	13.0	13.6	13.5	10.7	10.3	8.6	9.4	7.8	5.6	6.1	7.8	8.4	3.9	5.0	6.7	2.3	15.2	0.6	8.5
Max.	**18.2**	**17.8**	**15.1**	**16.7**	**13.7**	**15.2**	**15.7**	**16.1**	**16.2**	**16.5**	**13.5**	**16.5**	**18.1**	**14.0**	**19.1**	**12.5**	**19.1**	**17.1**	**17.8**	**16.8**	**17.3**	**18.3**	**15.4**	**12.5**	**19.1**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**0.2**	**1.1**	**0.0**	**2.3**	**2.4**	**0.3**	**2.3**	**0.9**	**0.0**	**0.5**	**0.0**	**0.3**		**0.0**	
Avg.	**5.5**	**4.8**	**5.2**	**5.1**	**4.8**	**5.0**	**4.8**	**5.2**	**5.5**	**5.7**	**6.7**	**7.0**	**7.0**	**7.2**	**7.3**	**6.9**	**7.5**	**7.3**	**7.3**	**6.0**	**5.6**	**5.7**	**5.4**	**5.1**			**6.0**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

October 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.4	2.9	0.5	3.0	2.4	4.2	3.5	2.6	6.7	7.1	7.9	6.0	7.0	6.1	10.7	7.9	8.8	7.5	6.0	6.5	7.0	7.6	6.9	1.0	10.7	0.5	5.6
2	0.3	0.9	0.0	0.3	3.3	0.0	0.4	0.0	0.0	0.0	1.3	0.2	1.0	3.8	0.0	4.8	3.3	2.4	3.3	4.8	4.3	0.6	1.8	3.3	4.8	0.0	1.7
3	3.6	1.2	1.9	1.2	3.4	2.9	0.1	1.4	2.2	2.4	4.5	3.2	4.4	4.5	4.7	5.4	5.9	5.0	6.8	5.1	5.9	6.0	5.6	6.4	6.8	0.1	3.9
4	8.9	7.1	6.9	10.0	9.2	6.8	4.8	8.7	6.8	8.4	10.0	6.5	6.5	7.2	4.5	6.6	6.7	8.1	6.7	1.6	2.6	1.0	0.3	0.0	10.0	0.0	6.1
5	0.8	0.0	0.3	0.1	1.9	2.6	1.3	2.0	1.2	1.3	2.5	4.2	12.5	13.4	15.2	15.3	15.0	17.0	10.8	10.9	16.0	12.5	16.4	15.6	17.0	0.0	7.9
6	16.2	13.2	16.5	15.8	21.2	16.9	14.8	15.3	13.6	10.4	10.7	4.8	3.9	4.7	3.4	1.9	1.1	0.0	0.0	1.5	2.9	2.7	1.0	2.5	21.2	0.0	8.1
7	0.0	3.9	1.1	1.1	0.8	0.9	1.9	1.5	1.7	3.4	3.6	2.2	9.5	6.8	3.9	5.3	4.6	5.6	2.9	6.4	4.8	4.2	4.6	8.7	9.5	0.0	3.7
8	4.4	6.2	3.8	4.8	3.4	4.6	0.7	0.7	1.8	1.4	0.0	1.5	1.4	4.4	4.5	4.2	5.0	7.6	6.9	9.4	9.0	6.8	6.7	6.5	9.4	0.0	4.4
9	3.4	4.6	4.7	1.3	0.0	0.9	0.7	0.3	1.4	2.2	0.8	2.7	4.7	7.6	5.0	3.9	5.9	5.3	9.5	9.8	7.7	10.7	12.2	10.4	12.2	0.0	4.8
10	8.6	7.2	8.1	7.9	9.7	9.8	6.2	3.0	0.9	2.2	3.0	3.0	2.1	2.6	5.2	5.0	5.0	4.5	5.0	6.6	5.4	3.9	6.7	3.4	9.8	0.9	5.2
11	0.0	3.3	0.7	2.3	0.8	0.6	1.0	1.9	0.3	0.9	0.0	6.9	4.2	1.6	7.6	11.4	14.4	11.6	9.7	7.9	6.8	6.3	5.5	6.4	14.4	0.0	4.7
12	4.7	6.7	4.7	2.7	3.5	0.9	0.6	0.8	1.9	0.0	1.2	0.0	0.0	1.6	0.4	0.0	0.0	0.0	1.4	0.6	0.0	0.0	0.0	0.0	6.7	0.0	1.3
13	0.2	0.0	0.0	0.0	1.0	0.0	0.0	0.9	1.8	1.6	0.6	0.9	0.2	1.7	1.1	0.0	6.4	6.6	6.1	7.6	8.0	7.5	10.5		10.5	0.0	2.7
14																		10.4	10.6	13.6	9.5	12.9	13.1	10.0	13.6	9.5	11.4
15	13.4	12.2	16.2	14.7	13.2	11.5	14.6	15.6	15.7	27.0	15.9	12.4	14.8	10.1	9.1	11.7	9.7	9.9	7.7	9.2	9.7	7.2	9.7	8.3	27.0	7.2	12.5
16	9.9	12.0	7.5	4.9	2.8	1.7	1.2	0.0	2.3	0.2	0.8	0.5	0.2	0.5	0.9	0.0	0.0	1.9	0.4	2.0	1.2	0.9	0.0	0.0	12.0	0.0	2.2
17	0.7	1.0	1.0	0.7	0.0	0.0	0.0	1.1	0.0	0.8	0.3	0.0	1.2	1.5	1.1	1.8	3.6	1.2	1.7	2.0	0.8	1.2	1.2	0.0	3.6	0.0	1.0
18	1.5	1.5	1.6	1.3	0.0	0.3	1.7	2.2	0.0	4.3	2.4	5.0	6.8	6.0	4.3	8.0	6.4	4.3	2.9	3.1	0.0	1.3	0.0	0.0	8.0	0.0	2.7
19	0.6	0.0	0.8	0.0	0.0	1.3	4.2	1.1	1.4	2.3	6.6	1.7	6.2	7.1	7.2	3.6	8.3	5.9	7.2	7.2	5.1	9.2	6.9	5.5	9.2	0.0	4.1
20	5.1	1.3	4.3	0.7	4.0	1.9	0.7	0.7	0.0	1.2	0.0	0.0	2.9	2.2	4.5	3.5	4.1	6.2	5.3	8.3	5.1	2.8	3.4	3.3	8.3	0.0	3.0
21	1.9	0.0	4.2	8.6	0.0	4.5	2.1	2.8	1.8	1.8	1.6	1.4	2.2	1.0	4.9	6.1	3.4	5.1	3.9	1.8	0.7	7.1	10.2	16.8	16.8	0.0	3.9
22	11.5	12.8	14.2	15.4	14.4	9.1	10.7	11.9	12.3	15.0	12.1	8.4	11.2	12.4	14.4	16.3	17.2	13.7	13.0	13.2	11.5	17.5	13.0	1.5	17.5	1.5	12.6
23	4.4	5.9	8.3	9.8	8.4	2.1	0.0	0.0	1.2	2.1	1.6	1.3	4.6	0.0	1.4	1.7	2.1	2.2	1.6	2.4	1.7	5.1	3.3	3.5	9.8	0.0	3.1
24	15.6	11.3	16.6	13.2	11.7	13.8	16.7	15.0	15.6	16.4	14.9	14.5	16.8	18.9	18.1	14.8	12.2	17.9	14.6	14.9	11.8	12.5	12.8	8.0	18.9	8.0	14.5
25	11.2	8.9	8.1	12.1	12.6	9.7	10.1	9.3	8.4	4.9	8.0	12.9	13.0	11.8	14.5	13.8	18.2	6.6	9.4	2.3	1.4	5.3	7.0	8.2	18.2	1.4	9.5
26	9.8	12.1	8.1	7.0	7.5	5.9	3.6	2.3	2.7	1.1	1.4	1.9	2.2	1.1	1.3	0.0	1.3	1.2	1.6	0.9	0.9	0.4	0.0	0.0	12.1	0.0	3.1
27	1.4	1.0	0.8	1.1	0.8	0.0	1.1	0.7	2.2	4.6	4.4	2.6	4.4	3.7	4.1	3.3	1.2	0.8	1.7	0.0	1.9	0.7	2.6	1.4	4.6	0.0	1.9
28	1.3	1.1	1.5	2.5	2.2	2.0	2.6	1.5	2.7	3.0	3.2	4.0	3.2	1.7	4.1	4.3	3.7	5.6	4.6	4.3	2.2	1.1	4.2	4.1	5.6	1.1	2.9
29	4.9	0.0	1.0	0.8	0.0	1.3	1.7	1.8	1.3	2.0	1.3	1.6	1.8	1.5	1.4	1.4	1.0	1.7	1.7	2.2	2.5	1.5	2.2	0.9	4.9	0.0	1.6
30	1.7	0.0	0.0	0.8	1.2	0.4	2.0	1.8	0.3	0.1	1.6	4.4	2.2	3.2	3.0	7.8	1.8	2.9	7.1	0.0	3.0	7.8	4.4	0.3	7.8	0.0	2.4
31	4.0	4.2	3.3	6.7	8.7	6.2	2.9	3.2	3.2	6.9	6.0	5.5	12.1	10.6	13.7	9.9	13.6	10.5	6.0	14.0	9.1	5.8	14.1	12.3	14.1	2.9	8.0
Max.	**16.2**	**13.2**	**16.6**	**15.8**	**21.2**	**16.9**	**16.7**	**15.6**	**15.7**	**27.0**	**15.9**	**14.5**	**16.8**	**18.9**	**18.1**	**16.3**	**18.2**	**17.9**	**14.6**	**14.9**	**16.0**	**17.5**	**16.4**	**16.8**	**27.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.2**	**4.7**	**4.9**	**5.0**	**4.9**	**4.1**	**3.7**	**3.7**	**3.7**	**4.5**	**4.3**	**4.0**	**5.4**	**5.3**	**5.8**	**6.0**	**6.3**	**6.1**	**5.7**	**5.8**	**5.1**	**5.5**	**6.0**	**4.9**			**5.0**

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

November 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.4	6.2	4.3	5.6	4.8	3.5	6.8	8.2	5.7	1.3	3.4	1.4	2.3	7.4	6.2	4.5	5.1	3.1	3.1	1.8	2.2	0.0	1.8	0.0	8.2	0.0	4.0
2	1.2	0.8	0.3	0.7	1.1	1.0	0.0	1.9	0.9	1.8	1.1	0.0	1.3	0.9	0.6	0.7	1.3	0.0	1.3	0.6	1.9	1.5	1.9	6.1	6.1	0.0	1.2
3	2.0	1.0	0.0	0.0	2.3	2.7	0.6	2.4	0.0	1.1	3.8	3.8	0.9	0.0	3.3	0.8	3.2	1.0	0.0	0.9	0.0	0.0	1.0	2.6	3.8	0.0	1.4
4	0.8	1.1	2.2	0.9	1.1	1.0	3.8	1.9	0.0	0.9	1.5	1.7	0.0	1.6	1.4	1.6	0.6	1.9	1.0	0.4	0.0	1.3	1.0	0.9	3.8	0.0	1.2
5	0.0	0.4	1.8	1.5	1.3	0.7	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.4	0.0	1.6	1.8	2.3	1.5	3.9	1.6	1.1	0.0	1.4	3.9	0.0	0.9
6	2.4	3.6	2.5	3.7	0.8	1.6	3.8	0.7	4.0	4.7	4.6	6.2	4.6	6.5	4.4	4.1	5.2	4.2	3.4	3.7	3.0	4.6	4.3	2.5	6.5	0.7	3.7
7	1.5	0.0	2.1	1.2	3.8	1.7	1.5	1.2	1.9	2.9	1.0	1.9	0.9	2.4	3.8	0.6	1.8	2.1	6.5	2.9	5.9	9.2	10.0	11.5	11.5	0.0	3.3
8	14.2	14.6	15.3	12.7	15.8	17.2	13.9	9.4	8.8	14.8	9.1	11.6	7.4	4.7	2.5	4.9	1.5	3.9	4.1	4.7	1.5	1.1	0.0	0.0	17.2	0.0	8.1
9	1.1	1.1	0.0	1.3	2.3	0.0	1.2	1.2	0.0	0.0	0.0	1.5	0.6	2.0	1.5	7.1	7.5	8.4	6.8	8.7	7.8	5.8	9.2	10.2	10.2	0.0	3.6
10	7.4	5.8	1.8	0.0	0.9	1.2	1.4	0.6	1.9	2.4	0.1	9.2	11.7	9.5	14.2	13.7	14.4	11.5	5.4	5.0	4.6	4.5	5.5	1.2	14.4	0.0	5.6
11	2.6	1.4	2.0	1.1	3.8	2.2	0.8	1.5	0.9	0.0	0.6	0.0	1.8	1.6	0.0	1.4	1.1	0.6	1.4	1.4	1.0	0.9	0.0	0.3	3.8	0.0	1.2
12	0.6	0.5	0.6	0.0	0.6	0.7	1.0	0.8	0.7	0.7	0.6	0.0	0.8	0.0	0.0	0.8	0.8	1.4	5.8	2.3	0.9	2.8	2.5	1.3	5.8	0.0	1.1
13	3.1	4.2	0.3	3.2	0.7	1.8	0.9	0.0	0.6	1.6	1.1	0.4	1.6	0.0	0.8	1.7	4.3	0.6	0.0	3.4	7.5	1.6	6.5	10.0	10.0	0.0	2.3
14	8.1	1.7	1.6	0.0	4.3	2.1	1.3	6.9	1.6	3.9	2.3	1.5	1.3	1.4	0.7	0.0	0.9	0.8	1.7	0.7	0.0	0.0	1.2	0.0	8.1	0.0	1.8
15	1.2	0.0	1.7	0.8	1.4	0.0	1.8	1.8	2.3	2.3	0.0	1.0	0.9	2.1	3.7	2.7	3.7	2.5	1.7	2.7	1.6	1.3	0.8	0.0	3.7	0.0	1.6
16	1.1	2.1	2.2	4.4	3.0	2.8	2.5	2.8	2.4	1.7	2.0	0.9	1.2	3.3	2.0	1.3	5.5	1.7	1.6	3.1	8.6	3.2	2.6	4.8	8.6	0.9	2.8
17	1.9	3.1	3.0	4.3	0.9	1.6	0.8	0.0	3.5	2.0	4.9	1.8	6.8	5.2	3.5	7.5	2.2	0.9	3.7	1.2	2.0	2.2	1.5	1.9	7.5	0.0	2.8
18	1.1	4.5	8.4	9.3	9.9	8.1	10.0	8.9	9.0	5.0	6.7	7.5	8.6	4.7	1.4	1.0	1.3	0.0	1.1	1.6	1.1	1.6	0.0	0.0	10.0	0.0	4.6
19	0.9	0.0	0.0	0.0	0.0	1.2	1.5	1.0	0.0	0.0	1.0	0.7	1.8	0.8	0.0	0.3	0.6	4.3	2.9	0.9	2.0	2.2	1.1	1.9	4.3	0.0	1.0
20	1.8	3.1	0.6	1.6	2.0	1.4	2.1	1.3	0.8	0.8	1.4	1.4	1.7	1.6	0.0	0.6	0.7	0.6	0.0	0.0	2.2	1.6	0.7	0.3	3.1	0.0	1.2
21	0.3	0.8	0.0	0.3	0.6	0.0	0.3	0.0	3.6	0.0	4.8	1.3	0.0	8.8	7.6	7.6	10.9	6.1	6.6	4.0	2.8	1.2	2.6	5.1	10.9	0.0	3.1
22	3.5	6.0	11.1	12.3	12.2	15.4	11.5	14.5	14.8	17.9	16.7	16.8	13.9	15.7	17.0	14.1	15.6	14.7	13.1	16.0	12.9	13.3	17.6	13.5	17.9	3.5	13.8
23	19.2	19.2	19.6	18.6	17.6	18.9	16.1	16.5	20.0	20.0	20.7	22.2	17.3	15.3	13.4	17.1	15.0	11.5	14.3	14.1	10.8	18.9	13.8	16.5	22.2	10.8	16.9
24	11.0	9.4	10.4	9.6	10.6	7.5	12.3	11.3	15.1	7.2	10.1	4.9	8.7	10.6	12.3	12.4	9.6	5.9	7.9	8.1	8.3	7.6	10.3	1.7	15.1	1.7	9.3
25	0.0	6.2	8.6	10.6	5.4	7.9	7.5	6.4	5.5	5.5	4.3	7.1	6.2	6.0	6.7	6.3	6.4	5.0	4.7	5.3	4.8	4.5	4.1	2.7	10.6	0.0	5.7
26	1.9	0.0	0.0	0.6	0.0	0.8	1.3	0.9	1.9	3.2	3.4	3.5	3.4	6.6	8.0	12.6	14.2	14.6	15.4	11.6	13.4	16.1	16.9	17.6	17.6	0.0	7.0
27	11.9	10.6	11.8	12.9	8.5	10.0	10.6	10.5	4.4	1.8	1.3	0.7	0.3	1.2	2.4	0.1	1.0	1.3	2.8	3.4	6.6	5.5	9.2	16.1	16.1	0.1	6.0
28	13.7	16.2	18.0	17.4	17.6	13.4	14.3	16.9	17.2	11.3	8.8	16.5	12.3	16.2	13.9	14.4	13.5	15.1	14.1	11.1	11.9	15.0	13.3	15.7	18.0	8.8	14.5
29	9.5	14.4	13.2	14.5	11.9	9.4	10.3	11.1	9.5	9.4	6.6	1.6	3.5	6.1	8.0	5.1	4.2	2.6	2.1	1.8	0.0	0.0	2.7	1.6	14.5	0.0	6.6
30	1.6	2.8	0.7	0.0	1.0	3.9	0.0	0.0	0.8	0.9	0.5	0.8	0.0	1.7	1.2	0.0	2.6	4.0	6.1	5.8	12.1	8.4	6.1	10.3	12.1	0.0	3.0
Max.	**19.2**	**19.2**	**19.6**	**18.6**	**17.6**	**18.9**	**16.1**	**16.9**	**20.0**	**20.0**	**20.7**	**22.2**	**17.3**	**16.2**	**17.0**	**17.1**	**15.6**	**15.1**	**15.4**	**16.0**	**13.4**	**18.9**	**17.6**	**17.6**	**22.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**4.4**	**4.7**	**4.8**	**5.0**	**4.9**	**4.7**	**4.7**	**4.7**	**4.6**	**4.2**	**4.1**	**4.3**	**4.1**	**4.8**	**4.7**	**4.9**	**5.2**	**4.4**	**4.7**	**4.4**	**4.6**	**4.6**	**4.9**	**5.3**			**4.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

December 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.9	16.3	14.9	15.2	12.7	16.7	17.5	19.5	22.0	22.6	25.2	21.7	20.3	21.6	17.5	19.5	19.5	19.9	18.9	18.8	20.3	20.1	19.1	14.7	25.2	4.9	18.3
2	9.4	7.7	6.3	11.3	7.5	12.4	12.4	10.0	9.9	5.6	7.3	8.0	5.1	2.4	1.2	3.2	0.9	0.0	1.6	0.9	0.0	0.6	0.8	0.8	12.4	0.0	5.2
3	1.8	0.0	1.3	2.3	0.6	0.6	1.8	2.8	2.3	6.4	6.1	8.6	8.8	9.3	12.7	10.1	6.4	2.4	1.9	0.9	2.0	2.3	1.4	1.5	12.7	0.0	3.9
4	0.0	0.8	0.0	2.1	3.2	3.6	1.2	1.6	8.2	12.8	8.1	14.0	15.9	14.4	18.5	16.3	20.5	15.9	13.5	20.8	15.1	10.4	14.2	15.8	20.8	0.0	10.3
5	15.5	16.0	18.4	13.2	19.8	14.8	17.0	11.1	12.7	14.0	11.1	10.9	8.6	10.7	12.8	10.2	3.1	1.8	1.8	1.5	0.0	2.4	1.4	4.1	19.8	0.0	9.7
6	3.5	7.6	8.1	7.1	11.7	10.2	8.5	5.3	5.8	3.5	3.2	4.3	4.1	4.9	4.3	3.0	2.3	4.8	1.0	0.7	1.0	0.0	1.0	0.0	11.7	0.0	4.4
7	0.9	1.0	0.8	0.0	1.4	1.2	2.4	3.1	4.6	3.2	1.8	2.8	3.8	3.5		4.2	1.9	2.8	2.7	1.4	5.5	1.3	1.9	2.5	5.5	0.0	2.4
8	3.9	1.8	3.2	2.8	3.0	2.4	0.0	0.0	0.9	0.6	1.4	1.7	0.0	1.5	2.3	1.3	1.9	0.9	0.6	2.1	0.9	0.5	0.0	2.3	3.9	0.0	1.5
9	3.6	0.0	1.0	1.8	1.3	4.3	3.3	1.1	2.3	3.1	3.5	3.7	3.0	2.8	1.1	3.7	2.5	4.6	4.5	3.4	2.1	4.2	2.8	0.9	4.6	0.0	2.7
10	1.5	0.2	0.8	3.5	1.2	2.9	2.0	2.0	0.0	0.0	0.0	0.4	4.8	5.1	1.3	0.0	3.6	3.5	2.3	2.0	5.4	3.1	3.9	2.3	5.4	0.0	2.2
11	5.0	4.3	2.6	3.0	1.0	4.3	1.1	0.9	1.3	0.1	0.0	0.3	0.8	2.9	0.9	1.1	1.1	1.2	0.0	2.8	1.5	0.7	0.6	0.9	5.0	0.0	1.6
12	0.8	0.6	0.6	1.0	0.0	1.3	0.3	2.2	2.2	0.8	0.8	2.6	3.5	9.6	10.1	0.7	4.2	3.5	1.7	5.6	6.7	7.6	4.6	9.6	10.1	0.0	3.4
13	7.2	2.5	5.7	3.9	4.7	3.1	8.5	2.7	4.4	2.5	4.2	2.1	3.0	2.9	5.6	7.8	8.9	7.6	3.7	4.9	5.8	6.9	6.0	8.3	8.9	2.1	5.1
14	7.8	5.2	7.5	6.9	11.3	8.2	8.3	7.8	8.2	6.3	5.1	4.6	4.3	9.4	6.5	7.5	6.7	1.3	2.6	0.2	2.9	9.3	7.2	8.5	11.3	0.2	6.4
15	4.7	2.6	4.3	2.3	1.4	4.0	3.0	2.7	3.0	4.7	3.1	2.0	3.4	7.8	1.9	5.1	5.5	3.2	2.2	2.0	0.9	3.2	3.8	4.1	7.8	0.9	3.4
16	2.0	1.7	2.4	1.0	2.8	0.9	1.7	1.6	1.5	0.8	0.2	2.3	1.0	5.2	2.7	1.0	4.6	5.7	2.6	6.5	2.5	6.5	5.4	4.9	6.5	0.2	2.8
17	2.6	7.7	3.6	5.7	5.2	2.2	1.8	1.5	2.3	2.9	3.8	2.3	2.7	2.5	1.3	1.7	0.0	0.2	0.9	0.7	0.0	1.8	2.6	3.1	7.7	0.0	2.5
18	2.5	2.7	4.8	3.2	1.6	1.8	0.7	2.6	0.0	1.3	1.6	1.2	5.3	2.7	1.9	0.0	0.3	1.1	0.9	0.5	0.8	0.8	0.0	1.9	5.3	0.0	1.7
19	2.0	2.3	3.0	0.3	1.6	2.8	1.3	1.3	0.0	1.3	0.9	1.6	0.1	1.4	0.9	1.2	1.1	1.3	0.6	0.6	0.0	0.7	0.9	1.3	3.0	0.0	1.2
20	1.3	1.3	1.3	0.0	0.7	1.2	0.7	1.6	0.0	0.0	2.5	1.7	0.6	0.0	1.4	2.4	1.1	1.0	1.0	2.0	0.9	0.0	1.6	0.0	2.5	0.0	1.0
21	0.7	0.7	0.6	2.6	6.1	2.7	1.7	5.0	2.2	0.9	1.4	1.8	1.7	2.2	2.4	0.0	2.3	2.8	1.9	0.0	1.7	1.6	3.4	11.4	11.4	0.0	2.4
22	8.2	11.0	7.6	7.6	6.0	4.8	7.2	8.8	7.7	7.0	8.1	3.2	4.1	5.7	5.9	4.9	3.8	6.2	7.6	4.4	2.4	1.9	2.4	0.0	11.0	0.0	5.7
23	0.5	0.9	1.2	0.0	0.0	0.0	2.3	0.4	0.7	1.9	1.1	1.5	1.0	1.8	4.5	1.1	1.8	1.0	0.0	7.5	3.5	5.4	3.7	3.1	7.5	0.0	1.9
24	4.5	3.8	1.6	2.1	3.2	1.1	1.9	1.1	0.6	8.1	6.8	7.2	9.6	7.3	6.5	7.3	7.4	7.9	8.2	12.4	11.0	11.2	8.3	9.9	12.4	0.6	6.2
25	10.3	12.1	9.9	7.0	6.1	2.9	3.3	1.2	2.2	1.5	1.1	1.9	2.8	1.9	1.2	0.9	2.8	2.2	1.9	5.2	3.2	2.4	1.4	0.9	12.1	0.9	3.6
26	1.8	1.8	3.1	1.6	0.6	3.0	3.0	1.9	3.5	5.7	5.7	1.1	2.8	1.7	1.2	0.0	2.2	2.2	0.0	1.2	0.6	1.1	1.3	1.0	5.7	0.0	2.0
27	1.9	3.8	1.4	6.4	1.9	8.2	3.2	0.7	1.7	2.2	5.1	0.0	4.4	3.7	5.9	5.1	7.5	4.9	13.7	14.9	10.1	6.8	5.7	5.8	14.9	0.0	5.2
28	7.0	11.5	13.8	12.8	4.6	8.1	7.7	13.7	11.8	7.8	14.1	11.7	16.4	14.5	15.0	19.8	19.5	23.9	19.7	22.5	21.7	19.6	22.7	24.1	24.1	4.6	15.2
29	23.3	18.5	20.1	21.9	21.1	20.5	17.6	19.0	15.7	16.7	16.9	18.2	15.8	14.8	14.6	14.2	11.9	13.7	14.9	14.5	14.5	12.5	11.9	15.3	23.3	11.9	16.6
30	15.0	15.7	17.0	18.2	16.3	15.7	19.6	15.5	14.7	17.5	16.5	18.2	17.9	17.1	21.0	17.5	16.8	15.7	13.5	12.0	11.9	14.7	15.0	12.5	21.0	11.9	16.1
31	11.1	13.5	9.6	7.1	7.3	5.7	6.3	1.4	6.5	8.9	6.7	5.1	5.3	3.8	3.9	3.0	1.5	2.2	2.8	6.7	6.0	9.0	10.7	14.1	14.1	1.4	6.6
Max.	**23.3**	**18.5**	**20.1**	**21.9**	**21.1**	**20.5**	**19.6**	**19.5**	**22.0**	**22.6**	**25.2**	**21.7**	**20.3**	**21.6**	**21.0**	**19.8**	**20.5**	**23.9**	**19.7**	**22.5**	**21.7**	**20.1**	**22.7**	**24.1**	**25.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.3**	**5.7**	**5.7**	**5.6**	**5.4**	**5.5**	**5.4**	**4.8**	**5.1**	**5.5**	**5.6**	**5.4**	**5.8**	**6.3**	**6.2**	**5.6**	**5.6**	**5.3**	**4.8**	**5.8**	**5.2**	**5.4**	**5.3**	**6.0**			**5.5**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

January 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.4	12.3	13.9	13.0	13.7	10.7	12.6	9.4	10.9	12.3	10.1	10.4	11.6	8.2	9.6	11.1	12.0	11.7	9.4	2.0	2.6	4.9	5.9	4.6	13.9	2.0	9.8
2	0.0	1.1	1.3	1.4	3.6	1.8	0.3	1.2	3.0	0.9	2.0	2.5	2.2	2.3	3.2	5.7	10.6	8.8	2.1	4.0	3.3	13.6	16.3	11.4	16.3	0.0	4.3
3	18.4	15.6	20.1	15.7	15.9	14.0	17.8	17.8	17.3	15.1	17.5	21.2	20.0	22.9	22.8	20.2	17.1	19.2	14.6	18.5	15.2	15.4	13.8	19.4	22.9	13.8	17.7
4	16.5	15.5	17.5	17.0	12.5	12.1	6.9	9.7	7.9	8.1	9.6	9.4	10.7	11.3	13.7	14.6	14.4	16.1	11.1	14.2	12.6	15.2	12.9	16.3	17.5	6.9	12.7
5	12.0	13.2	10.7	6.8	11.2	5.4	7.4	10.9	13.5	13.1	17.4	17.1	13.9	9.1	10.7	11.5	8.4	3.1	3.3	2.8	5.5	0.0	0.0	2.1	17.4	0.0	8.7
6	5.5	2.6	2.5	2.7	0.0	1.9	2.5	2.7	0.0	1.3	2.3	4.6	4.2	3.6	7.0	12.1	12.7	4.1	0.9	10.5	13.3	12.0	11.4	9.3	13.3	0.0	5.4
7	7.7	12.3	10.1	7.4	8.4	11.4	6.9	12.6	9.6	8.7	6.7	4.0	4.0	2.5	4.5	3.3	2.4	3.1	2.4	2.2	3.4	6.0	7.8	7.7	12.6	2.2	6.5
8	7.1	6.2	7.2	6.6	5.2	7.1	4.5	4.5	0.0	1.1	1.5	1.7	1.4	1.7	1.6	1.3	1.6	0.9	0.0	1.4	0.7	1.6	0.0	1.9	7.2	0.0	2.8
9	1.2	1.9	1.0	1.2	2.1	2.0	2.4	1.4	1.6	1.9	3.1	4.3	3.8	6.5	2.3	3.1	4.2	4.9	2.3	5.2	5.8	6.8	2.5	3.1	6.8	1.0	3.1
10	3.1	4.7	5.9	1.3	3.6	6.7	3.4	1.3	0.0	3.5	3.5	4.5	2.1	1.5	2.2	2.5	1.1	0.2	0.8	1.0	0.9	3.1	2.2	0.0	6.7	0.0	2.5
11	1.1	0.7	1.4	1.4	2.4	0.6	0.6	1.9	0.9	1.2	6.2	14.7	13.4	11.7	9.0	13.7	14.5	10.6	11.1	7.1	9.3	9.4	10.2	9.7	14.7	0.6	6.8
12	2.6	10.6	8.1	9.4	1.7	11.4	10.9	15.0	6.1	7.8	9.0	4.8	9.0	5.0	7.6	13.6	12.2	11.7	10.3	23.5	22.5	20.7	16.6	14.8	23.5	1.7	11.0
13	12.8	7.2	7.1	7.3	7.4	8.4	1.4	6.2	11.6	8.7	11.2	7.5	9.4	7.4	7.3	4.5	1.5	0.7	1.9	1.5	0.9	2.1	1.1	2.1	12.8	0.7	5.7
14	1.0	1.6	0.0	1.5	1.5	0.0	0.0	2.0	0.0	0.8	0.2	4.6	4.4	1.9	1.7	2.7	3.4	8.8	7.8	13.6	16.3	18.3	17.0	18.9	18.9	0.0	5.3
15	16.3	14.1	9.3	12.8	11.1	12.5	11.9	10.5	9.3	13.4	11.4	12.2	13.9	13.4	16.6	12.8	15.5	12.7	8.8	10.1	8.5	8.4	12.0	12.3	16.6	8.4	12.1
16	14.7	7.9	8.8	9.2	6.5	11.1	9.2	9.2	10.8	6.3	0.0	1.4	3.6	1.4	6.6	7.6	5.5	8.2	5.0	2.4	5.7	3.8	4.0	0.6	14.7	0.0	6.2
17	5.7	1.6	1.9	3.6	4.0	3.8	2.5	4.8	4.3	6.5	9.4	7.8	8.4	7.4	10.7	10.7	12.2	13.5	14.0	14.0	11.5	10.2	10.6	10.3	14.0	1.6	7.9
18	15.3	13.1	13.8	9.3	13.2	14.2	16.4	15.8	12.7	16.2	13.7	21.5	19.5	17.7	18.3	18.6	18.5	19.4	20.7	17.6	19.0	15.9	17.3	21.4	21.5	9.3	16.6
19	24.5	21.7	23.0	17.3	20.6	25.6	17.8	17.6	25.0	23.6	21.4	23.4	17.9	20.3	17.2	16.7	18.9	20.6	19.0	21.7	21.8	12.9	12.9	7.1	25.6	7.1	19.5
20	4.3	5.5	5.7	8.9																					8.9	4.3	6.1
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
29																8.4	3.1	11.9	4.0	2.9	1.1	4.7	4.4	1.7	11.9	1.1	4.7
30	1.8	0.7	1.5	4.8	0.8	3.0	3.5	1.9	1.0	2.1	0.1	0.6	0.8	1.5	2.1	1.6	0.7	0.0	1.3	0.1	0.7	8.2	8.8	6.1	8.8	0.0	2.2
31	9.1	6.2	7.9	13.7	20.1	12.5	14.0	12.0	14.6	13.9	11.4	11.1	13.5	11.8	16.4	13.2	9.3	15.7	13.6	13.6	14.5	13.6	16.7	17.4	20.1	6.2	13.2
Max.	**24.5**	**21.7**	**23.0**	**17.3**	**20.6**	**25.6**	**17.8**	**17.8**	**25.0**	**23.6**	**21.4**	**23.4**	**20.0**	**22.9**	**22.8**	**20.2**	**18.9**	**20.6**	**20.7**	**23.5**	**22.5**	**20.7**	**17.3**	**21.4**	**25.6**		
Min.	**0.0**	**0.7**	**0.0**	**1.2**	**0.0**	**0.0**	**0.0**	**1.2**	**0.0**	**0.8**	**0.0**	**0.6**	**0.8**	**1.4**	**1.6**	**1.3**	**0.7**	**0.0**	**0.0**	**0.1**	**0.7**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**8.8**	**8.0**	**8.1**	**7.8**	**7.9**	**8.4**	**7.3**	**8.0**	**7.6**	**7.9**	**8.0**	**9.0**	**8.9**	**8.1**	**9.1**	**9.5**	**9.1**	**9.4**	**7.5**	**8.6**	**8.9**	**9.4**	**9.3**	**9.0**			**8.5**

Total Hours in Month 744 **Hours Data Available** 517 **Data Recovery** 69.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

February 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	18.9	20.9	17.3	16.1	18.1	12.2	11.3	3.7	4.5	4.3	1.1	5.4	6.0	7.2	3.5	5.9	3.0	0.0	0.9	1.0	2.9	3.2	4.2	1.3	20.9	0.0	7.2
2	2.8	1.9	2.0	2.0	1.2	1.0	1.1	1.0	0.0	0.0	1.7	1.2	0.9	1.3	2.0	1.7	2.1	1.2	11.4	11.2	13.0	6.6	5.4	6.9	13.0	0.0	3.3
3	5.9	3.6	11.3	10.7	6.1	1.0	6.9	11.3	13.2	4.7	5.7	9.3	0.7	3.0	1.3	0.8	10.7	8.1	1.6	1.0	7.2	2.5	1.3	1.8	13.2	0.7	5.4
4	1.4	1.9	1.2	3.6	4.9	1.5	2.0	2.3	3.7	0.0	0.0	3.3	5.8	2.8	2.5	1.8	0.7	4.5	4.3	2.7	3.0	2.0	0.0	2.5	5.8	0.0	2.4
5	2.5	4.1	4.8	3.4	2.0	0.7	1.8	1.2	1.4	1.3	1.0	0.0	2.8	2.9	1.9	0.0	1.6	2.8	0.8	0.5	2.2	0.5	1.0	1.9	4.8	0.0	1.8
6	1.7	0.5	2.0	1.9	2.1	1.4	0.0	0.0	0.6	0.0	0.7	0.0	0.0	0.0	1.6	0.0	0.5	0.0	1.0	1.1	2.4	3.5	5.7	4.2	5.7	0.0	1.3
7	8.7	2.9	6.0	21.5	18.2	18.6	21.7	18.7	15.2	18.7	16.7	20.5	21.2	19.1	19.4	21.4	17.2	14.1	16.3	17.0	15.8	16.3	16.4	18.3	21.7	2.9	16.7
8	16.4	18.2	16.0	17.7	20.5	15.1	14.8	14.5	15.5	19.1	13.0	14.1													20.5	13.0	16.2
9																											
10																											
11																											
12																											
13														9.3			6.7	2.1	1.4	2.5	6.0	7.0	6.2	10.1	10.1	1.4	5.7
14	14.8	17.2	18.2	21.9	22.8	17.0	13.9	16.6	16.3	18.1	16.7	19.0	17.8	16.8	15.2	14.4	16.9	10.6	14.5	9.8	8.4	10.3	10.4	8.5	22.8	8.4	15.3
15	8.6	10.7	12.3	10.0	9.3	8.9	10.8	4.8	6.6	2.2	1.0	0.0	0.8	0.4	2.6	3.0	2.6	2.3	2.3	1.7	2.5	2.3	0.8	1.0	12.3	0.0	4.5
16	0.0	6.0	2.4	2.9	8.3	3.5	12.2	13.5	16.4	17.8	18.9	18.0	16.7	15.5	16.1	14.0	13.2	15.3	13.2	15.9	16.1	8.3	5.3	10.0	18.9	0.0	11.6
17	1.1	3.6	14.8	0.0	2.8	1.3	4.7	10.7	1.0	7.5	3.4	1.9	3.0	2.0	4.9	3.1	3.9	1.5	0.8	1.6	0.0	2.6	2.5	0.4	14.8	0.0	3.3
18	4.9	1.3	1.6	5.6	5.3	2.5	7.4	7.2	5.8	5.9	5.2	5.1	4.8	4.7	4.1	2.7	3.7	4.5	4.8	4.6	5.5	5.3	4.7	5.4	7.4	1.3	4.7
19	6.4	4.7	0.0	2.1	0.0	10.5	16.6	13.4	15.7	7.4	3.7	7.4	4.4	5.5	5.5	8.8	4.9	4.0	6.0	9.7	8.4	5.8	5.0	5.6	16.6	0.0	6.7
20	4.5	0.9	1.0	0.0	0.0	0.8	1.0	1.3	0.9	0.0	0.8	1.0	0.0	1.6	1.0	1.1	1.0	0.9	0.0	0.8	0.0	1.0	0.9	0.0	4.5	0.0	0.9
21	2.1	1.1	3.6	3.9	3.2	2.2	4.0	4.4	2.8	2.4	5.0	3.5	3.4	0.0	2.1	2.5	1.7	3.0	2.2	3.9	4.7	3.7	2.6	2.4	5.0	0.0	2.9
22	0.0	3.2	10.5	5.8	6.6	12.8	13.5	10.1	11.5	10.9	12.0	14.0	15.8	14.2	18.7	20.6	21.8	19.6	20.5	22.5	20.1	21.2	18.7	17.1	22.5	0.0	14.2
23	20.7	18.8	18.5	22.6	17.7	23.8	26.4	21.2	20.1	21.0	20.5	18.1	24.9	21.1	21.2	18.6	21.0	15.1	15.0	15.5	12.8	13.1	15.6	13.7	26.4	12.8	19.0
24	11.5	12.3	12.9	11.5	10.6	6.0	7.4	9.5	10.4	12.3	13.8	11.7	13.1	12.1	12.2	12.3	15.4	11.8	12.0	11.1	7.5	12.1	12.1	13.6	15.4	6.0	11.5
25	13.3	13.8	14.3	14.7	11.9	16.4	14.0	17.1	15.8	18.6	18.0	18.1	18.2	17.6	15.9	18.9	22.6	16.5	17.5	14.0	13.1	12.8	11.5	11.3	22.6	11.3	15.7
26	7.5	2.5	2.0	0.6	4.5	5.0	7.1	9.5	8.8	8.1	6.7	4.7	4.8	3.1	4.6	2.8	4.2	3.2	0.1	0.0	0.0	2.1	0.2	0.0	9.5	0.0	3.8
27	1.5	0.0	0.2	0.0	0.0	0.2	1.8	0.9	2.2	6.5	12.9	9.9	15.6	13.9	14.1	12.6	12.9	14.7	14.7	14.4	14.8	13.2	13.3	16.2	16.2	0.0	8.6
28	11.9	11.0	14.5	12.7	14.6	13.1	14.0	13.7	12.8	9.6	5.9	7.3	5.4	6.4	0.3	3.4	4.9	4.6	3.9	1.1	3.7	1.5	1.9	2.1	14.6	0.3	7.5
Max.	**20.7**	**20.9**	**18.5**	**22.6**	**22.8**	**23.8**	**26.4**	**21.2**	**20.1**	**21.0**	**20.5**	**20.5**	**24.9**	**21.1**	**21.2**	**21.4**	**22.6**	**19.6**	**20.5**	**22.5**	**20.1**	**21.2**	**18.7**	**18.3**	**26.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**0.0**	**0.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**0.0**	**0.0**		**0.0**	
Avg.	**7.3**	**7.0**	**8.1**	**8.3**	**8.3**	**7.6**	**9.3**	**9.0**	**8.7**	**8.5**	**8.0**	**8.4**	**8.5**	**7.8**	**7.8**	**7.7**	**8.4**	**7.0**	**7.2**	**7.1**	**7.4**	**6.8**	**6.3**	**6.7**			**7.8**

Total Hours in Month 672 **Hours Data Available** 549 **Data Recovery** 81.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

March *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.5	6.1	6.0	6.6	5.5	5.6	6.6	6.4	6.6	5.9	5.7	5.2	4.2	3.8	3.8	2.7	3.5	3.2	2.0	0.4	0.0	2.2			6.6	0.0	4.3
2																											
3																											
4																											
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7																											
8																											
9															3.0			1.0	0.0	0.7	0.6	0.0	0.0	2.9	3.0	0.0	1.0
10	1.3	0.9	4.1	13.5	5.5	5.3	9.4	0.7	7.6	8.3	5.2	6.0	6.1	8.0	8.8	8.3	6.7	10.6	11.3	10.1	10.7	10.2	7.8	6.5	13.5	0.7	7.2
11	7.1	6.3	5.5	7.0	4.4	7.1	4.4	5.2	5.2	4.2	5.2	4.5	1.7	3.4	0.9	1.2	1.0	4.4	6.5	5.4	2.7	3.8	0.1	0.0	7.1	0.0	4.0
12	2.1	2.2	4.0	1.5	1.8	2.0	0.9	3.1	2.8	1.7	2.4	1.9	0.9	0.4	0.6	0.8	1.6	1.0	1.6	3.0	1.3	0.9	1.9	2.7	4.0	0.4	1.8
13	0.9	1.0	1.4	1.0	3.6	0.7	1.7	3.9	5.7	4.2	7.5	6.0	5.3	1.8	1.1	4.4	5.6	6.5	2.6	5.1	5.2	2.0	2.9	2.0	7.5	0.7	3.4
14	4.0	2.1	2.2	8.0	6.6	2.0	2.1	1.5	1.3	1.5	1.3	1.9	0.0	0.8	1.8	1.1	0.0	1.6	2.2	2.1	0.7	1.1	2.1	0.7	8.0	0.0	2.0
15	1.8	0.3	0.0	0.6	1.2	0.7	0.0	1.8	1.3	0.2	1.4	0.0	0.9	0.4	1.6	1.8	2.0	2.5	2.3	1.4	0.7	1.5	1.1	2.1	2.5	0.0	1.1
16	2.3	1.4	1.4	2.1	1.3	6.6	9.4	8.6	8.5	4.8	4.7	5.9	5.3	9.9	6.6	1.1	3.7	1.3	0.0	3.3	0.0	1.7	3.6	1.3	9.9	0.0	3.9
17	1.8	1.1	0.8	0.0	0.8	1.6	1.1	0.9	1.2	1.3	2.0	1.0	1.0	1.7	0.0	0.4	0.7	0.0	0.7	1.5	0.0	1.6	2.3	1.2	2.3	0.0	1.0
18	1.5	3.6	5.1	0.5	3.1	2.3	0.7	6.7	5.0	4.9	10.1	10.0	11.9	9.5	14.4	13.4	10.9	12.7	12.1	12.7	13.3	14.8	12.1	11.1	14.8	0.5	8.4
19	12.5	11.5	12.8	9.1	12.5	13.6	11.1	16.6	15.1	16.8	15.9	17.5	19.9	16.3	14.1	13.4	16.1	17.3	13.4	14.5	16.4	14.5	12.7	12.6	19.9	9.1	14.4
20	17.0	22.0	18.4	16.4	15.5	14.4	11.6	13.9	11.1	16.1	14.3	11.3	16.1	16.1	14.0	16.0	14.0	15.0	11.7	12.2	13.3	11.2	15.2	14.9	22.0	11.1	14.7
21	10.6	10.7	9.9	6.1	2.1	1.7	2.9	3.6	3.0	1.0	0.7	0.0	0.8	1.1	2.4	2.0	4.3	3.6	3.0	1.6	2.2	0.0	0.4	0.5	10.7	0.0	3.1
22	0.0	0.0	1.2	1.2	3.3	3.6	2.1	3.0	4.6	5.5	5.3	5.3	5.6	8.1	9.6	9.1	9.9	11.8	7.5	8.5	9.5	9.8	12.7	10.9	12.7	0.0	6.2
23	8.6	13.2	12.4	12.0	13.8	11.5	13.7	12.2	11.8	11.3	12.4	12.0	11.9	9.6	9.6	9.9	10.2	11.1	6.3	8.8	8.0	2.1	1.1	1.4	13.8	1.1	9.8
24	1.1	1.5	0.8	1.7	5.8	3.9	1.7	1.8	1.7	2.8	0.0	0.0	1.1	1.2	4.0	1.4	0.7	0.0	0.0	0.0	0.7	0.0	0.0	1.0	5.8	0.0	1.4
25	2.4	1.9	1.5	2.6	1.5	2.2	0.8	2.7	0.9	1.4			5.9	11.6	13.1	11.7	7.5	11.1	13.7	12.1	13.4	12.0	14.8	12.9	14.8	0.8	7.2
26	13.0	11.2	12.0	14.5	15.9	18.1	18.0	17.4	15.4	13.0	14.2	16.0	17.2	16.6	14.3	16.0	14.8	16.0	13.2	15.2	17.2	15.7	19.1	16.4	19.1	11.2	15.4
27	17.1	18.0	20.2	16.1	16.1	19.8	16.1	20.1	19.6	14.3	18.3	18.1	15.9	13.1	15.8	15.4	18.4	17.2	21.5	17.5	22.3	18.5	14.6	15.2	22.3	13.1	17.5
28	14.5	12.8	16.1	15.4	11.6	15.3	11.0	8.8	5.1	13.9	13.7	14.0	14.0	16.2	12.9	11.6	15.1	5.8	7.0	6.4	4.0	5.0	4.1	7.8	16.2	4.0	10.9
29	8.4	8.2	6.6	9.0	7.2	8.5	8.6	7.3	6.6	5.4	11.1	10.3	14.4	15.8	12.0	11.6	10.6	5.3	6.1	6.9	9.6	11.5	10.9	11.2	15.8	5.3	9.3
30	9.1	5.3	9.7	8.5	5.7	10.0	9.7	6.7	6.5	5.0	4.2	3.0	2.9	5.1	3.2	1.2	1.4	0.0	4.1	3.8	10.0	4.2	4.1	5.4	10.0	0.0	5.4
31	8.6	7.4	12.8	12.0	9.5	6.5	10.3	10.4	9.4	7.9	12.3	19.4	15.8	17.2	15.9	15.9	16.8	15.6	13.5	15.9	15.7	14.2	15.1	12.1	19.4	6.5	12.9
Max.	**17.1**	**22.0**	**20.2**	**16.4**	**16.1**	**19.8**	**18.0**	**20.1**	**19.6**	**16.8**	**18.3**	**19.4**	**19.9**	**17.2**	**15.9**	**16.0**	**18.4**	**17.3**	**21.5**	**17.5**	**22.3**	**18.5**	**19.1**	**16.4**	**22.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.7**	**0.0**	**0.7**	**0.9**	**0.2**	**0.0**	**0.0**	**0.0**	**0.4**	**0.0**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.5**	**6.5**	**7.2**	**7.2**	**6.7**	**7.1**	**6.7**	**7.1**	**6.8**	**6.6**	**7.6**	**7.7**	**7.8**	**8.2**	**7.6**	**7.4**	**7.6**	**7.3**	**6.8**	**7.0**	**7.4**	**6.6**	**6.9**	**6.6**			**7.1**

Total Hours in Month 744 **Hours Data Available** 556 **Data Recovery** 74.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

April *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.7	6.6	3.9	4.7	5.2	4.2	7.4	6.1	3.3	5.2	9.9	9.7	10.3	9.7	13.3	9.9	6.6	3.4	2.9	0.0	0.8	0.9	3.6	1.8	13.3	0.0	5.8
2	1.6	1.6	4.1	2.7	0.8	3.0	1.9	1.5	3.7	4.0	7.6	13.4	12.2	12.6	9.8	9.1	10.7	10.4	8.9	10.8	12.7	11.8	12.1	12.2	13.4	0.8	7.5
3	16.1	16.6	17.0	12.7	15.5	16.1	13.2	13.6	12.3	12.7	11.0	11.1	10.9	9.0	9.3	7.9	9.6	6.9	5.9	7.9	1.0	1.3	1.3	0.7	17.0	0.7	10.0
4	0.0	1.4	1.1	1.0	1.2	2.0	0.9	0.6	1.5	0.2	0.9	2.2	0.9	1.8	1.5	2.3	1.8	3.6	4.1	2.2	3.1	1.2	0.9	0.4	4.1	0.0	1.5
5	0.0	1.2	0.0	2.2	3.5	0.1	0.9	1.2	0.8	0.8	0.8	2.3	2.5	1.6	7.6	5.4	5.8	8.2	5.2	2.6	0.8	3.6	2.3	3.5	8.2	0.0	2.6
6	0.0	2.6	0.0	1.1	0.0	0.0	0.9	0.0	1.1	3.1	1.9	3.1	3.7	2.2	3.7	3.3	4.7	5.6	2.3	1.2	1.3	1.8	0.8	0.9	5.6	0.0	1.9
7	0.9	0.8	1.0	1.0	0.0	0.0	1.2	0.3	0.4	1.3	1.9	1.6	2.2	2.0	4.3	3.2	3.7	5.1	5.6	5.2	2.2	3.5	1.6	4.3	5.6	0.0	2.2
8	2.6	1.3	1.4	0.0	2.1	3.5	1.9	0.0	1.3	1.5	1.7	2.7	1.8	2.8	3.0	3.0	3.6	2.0	1.5	0.2	1.3	1.8	0.0	0.8	3.6	0.0	1.7
9	1.3	0.7	0.0	1.2	0.0	1.7	0.0	1.5	0.2	0.3	2.3	3.6	2.9	3.0	0.0	1.4	1.0	2.3	1.6	2.3	1.9	2.5	2.0	0.7	3.6	0.0	1.4
10	0.9	0.0	1.1	0.0	2.0	1.6	4.1	4.0	4.0	2.3	0.0	1.0	1.7	0.9	2.0	5.2	4.7	5.0	4.9	3.7	10.1	13.6	11.4	10.9	13.6	0.0	4.0
11	6.7	13.3	11.2	9.3	16.4	17.1	12.9	17.1	17.3	14.4	13.0	16.2	18.2	16.0	15.7	14.2	13.4	11.5	12.8	7.3	7.4	4.7	6.2	7.6	18.2	4.7	12.5
12	6.7	3.3	2.1	3.9	4.8	5.6	3.5	11.9	12.8	11.4	9.9	8.3	11.3	9.1	7.4	5.5	4.9	2.8	9.9	14.6	9.9	14.4	12.8	12.1	14.6	2.1	8.3
13	12.7	9.7	10.2	14.1	13.0	11.9	8.3	9.3	9.4	9.4	12.0	7.9	8.1	9.5	9.9	12.8	8.9	8.9	13.1	9.3	9.3	8.7	6.5	6.3	14.1	6.3	10.0
14	8.3	10.8	10.5	12.5	10.3	9.5	10.0	10.8	8.1	9.3	9.6	10.6	12.0	12.9	11.1	9.5	8.0	8.3	8.1	6.6	3.8	1.9	0.0	0.8	12.9	0.0	8.5
15	3.2	1.3	5.5	6.2	3.6	4.1	0.0	2.0	7.4	4.5	6.1	4.6	7.9	8.8	10.1	7.5	3.5	7.6	4.9	4.8	0.7	7.0	3.0	3.0	10.1	0.0	4.9
16	4.9	1.7	3.0	1.4	1.5	1.1	1.5	1.8	7.4	13.8	12.9	11.1	14.2	13.4	10.8	10.7	11.5	8.3	9.4	7.9	10.2	9.3	7.9	7.6	14.2	1.1	7.6
17	2.8	1.4	3.6	3.1	3.3	1.2	3.2	3.1	3.0	4.9	5.4	5.7	4.8	5.8	1.2	6.1	4.4	3.6	1.5	1.5	6.9	5.6	5.7	5.4	6.9	1.2	3.9
18	0.8	2.5	4.0	3.9	2.3	1.4	0.2	2.3	2.0	5.3	8.5	7.5	9.2	8.8	7.3	7.1	8.8	9.1	10.0	8.8	3.0	4.4	2.7	1.3	10.0	0.2	5.1
19	1.2	2.3	2.6	6.9	6.9	10.3	8.4	10.8	12.0	12.8	15.6	12.9	14.0	15.9	11.5	15.1	15.3	15.2	13.6	13.3	13.1	11.1	14.6	12.1	15.9	1.2	11.1
20	13.5	10.6	15.3	12.8	14.8	14.3	11.5	13.1	15.8	15.8	15.7	16.3	18.0	18.8	14.4	18.1	16.2	13.3	12.3	11.8	10.3	10.3	9.5	10.0	18.8	9.5	13.9
21	15.0	16.4	12.6	16.8	12.5	15.8	13.6	13.8	10.8	11.8	14.5	12.8	14.7	15.5	15.0	14.8	13.3	14.0	9.9	9.2	11.8	11.6	14.6	7.6	16.8	7.6	13.3
22	5.4	14.4	11.0	10.6	0.8	5.6	1.6	0.2	6.5	5.3	8.6	11.7	7.9	4.8	6.4	3.3	4.4	3.1	1.1	2.7	3.9	0.0	1.1	0.0	14.4	0.0	5.0
23	1.9	0.0	0.7	0.9	1.0	0.0	1.2	0.0	0.8	1.2	1.2	0.8	2.0	2.7	3.2	3.6	2.8	4.1	2.3	3.2	4.0	1.1	1.2	0.0	4.1	0.0	1.7
24	0.7	0.0	0.6	1.2	0.9	1.3	3.6	3.9	5.3	2.4	3.7	3.8	4.3	3.7	0.0	2.6	3.6	4.0	4.7	3.9	4.8	1.8	0.0	0.6	5.3	0.0	2.6
25	1.9	0.0	1.6	0.7	0.3	1.1	1.4	0.8	0.7	1.5	0.9	3.6	3.2	3.7	4.3	3.5	5.3	3.0	3.8	3.2	1.8	3.1	1.7	1.8	5.3	0.0	2.2
26	1.8	0.7	1.2	1.9	0.4	0.0	1.0	0.8	1.2	1.8	3.1	1.5	4.3	5.5	6.8	5.8	9.7	7.1	7.6	4.9	0.0	1.3	1.2	5.1	9.7	0.0	3.1
27	2.9	1.9	0.0	1.0	3.5	1.8	1.1	3.2	5.4	4.3	6.0	5.1	8.1	10.2	11.4	8.2	8.5	9.4	5.9	2.3	0.9	0.0	0.0	1.9	11.4	0.0	4.3
28	1.8	2.8	10.4	0.0	0.4	2.3	2.1	6.7	3.1	9.1	5.7	9.4	9.6	12.5	9.5	6.9	8.0	8.9	9.2	4.6	1.4	0.0	0.0	1.8	12.5	0.0	5.3
29	2.1	3.0	0.0	2.0	3.8	2.5	5.1	8.3	7.5	8.2	8.2	6.7	8.4	6.5	3.4	5.8	9.5	9.0	8.1	5.7	6.1	7.9	3.3	2.9	9.5	0.0	5.6
30	0.9	0.0	1.3	2.1	3.1	0.0	3.6	4.9	9.6	7.9	10.7	8.9	6.6	6.6	8.8	5.8	5.2	4.2	2.5	2.1	1.4	1.6	3.4	4.9	10.7	0.0	4.4
Max.	**16.1**	**16.6**	**17.0**	**16.8**	**16.4**	**17.1**	**13.6**	**17.1**	**17.3**	**15.8**	**15.7**	**16.3**	**18.2**	**18.8**	**15.7**	**18.1**	**16.2**	**15.2**	**13.6**	**14.6**	**13.1**	**14.4**	**14.6**	**12.2**	**18.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.0**	**0.8**	**0.9**	**0.9**	**0.0**	**1.4**	**1.0**	**2.0**	**1.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**4.3**	**4.3**	**4.6**	**4.6**	**4.5**	**4.6**	**4.2**	**5.1**	**5.8**	**6.2**	**7.0**	**7.2**	**7.9**	**7.9**	**7.4**	**7.3**	**7.2**	**6.9**	**6.5**	**5.5**	**4.9**	**4.9**	**4.4**	**4.3**			**5.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

May *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.4	4.9	1.6	5.8	3.4	2.9	6.5	1.0	9.0	9.6	10.4	8.1	5.0	4.9	1.6	3.1	6.1	4.2	5.3	3.3	4.6	4.0	2.0	3.8	10.4	1.0	4.9
2	1.4	0.8	0.0	1.4	1.4	0.4	1.1	2.2	5.4	4.8	5.8	4.6	0.0	2.9	2.0	5.9	6.3	5.2	4.0	3.2	1.5	2.5	0.9	1.4	6.3	0.0	2.7
3	0.0	3.5	1.0	5.6	1.7	2.7	0.8	3.3	5.3	10.4	8.6	10.1	12.6	9.0	7.9	7.2	6.4	7.0	8.0	4.4	4.2	1.6	0.8	0.4	12.6	0.0	5.1
4	0.7	1.4	1.2	2.1	8.6	3.6	2.2	5.6	8.3	6.8	7.3	6.5	6.1	9.7	4.7	5.9	5.8	3.3	4.7	7.0	2.7	0.9	1.1	0.0	9.7	0.0	4.4
5	1.2	1.8	0.6	0.7	1.8	0.0	1.0	0.0	3.8	3.7	4.0	4.2	6.5	6.2	6.7	6.6	5.0	5.5	4.1	3.4	2.2	1.5	0.9	1.5	6.7	0.0	3.0
6	0.9	0.0	0.0	0.9	0.9	1.1	1.0	1.2	0.0	4.1	3.4	3.1	6.6	5.5	6.2	5.7	4.5	3.4	4.1	3.1	2.0	1.7	0.7	3.1	6.6	0.0	2.6
7	1.9	0.0	1.7	1.7	1.3	1.3	0.0	1.5	2.2	2.0	3.7	2.9	3.8	2.5	3.3	1.0	3.8	2.5	2.8	0.9	2.6	0.0	0.9	0.0	3.8	0.0	1.8
8	0.8	0.1	0.7	1.2	0.9	0.0	0.4	1.6	1.8	4.1	2.7	3.7	8.2	4.4	1.8	2.4	5.1	7.0	4.6	3.6	1.3	4.4	1.8	0.8	8.2	0.0	2.6
9	0.0	2.7	2.8	4.7	1.3	1.8	1.6	1.6	3.9	2.6	2.7	1.3	1.5	1.2	3.2	2.7	4.6	5.9	4.7	2.6	3.1	2.6	1.7	1.8	5.9	0.0	2.6
10	2.6	6.6	6.5	7.1	2.7	13.6	13.9	14.2	14.2	13.8	17.8	14.9	14.4	11.3	15.0	17.6	21.3	17.6	13.9	15.6	13.2	14.9	14.3	10.4	21.3	2.6	12.8
11	16.2	15.0	15.9	15.6	14.5	12.3	12.7	12.8	14.8	13.2	12.2	15.1	17.8	14.6	17.1	18.3	13.7	11.3	11.5	9.6	9.9	8.8	9.9	13.1	18.3	8.8	13.6
12	11.5	5.9	9.0	5.7	9.2	9.9	8.6	9.2	6.7	11.5	9.1	7.7	11.4	12.1	10.6	10.7	12.7	11.4	13.2	14.8	14.2	13.8	15.5	17.7	17.7	5.7	10.9
13	14.2	15.6	11.2	13.1	11.8	11.1	9.3	9.7	9.4	14.7	7.7	11.0	8.6	8.9	7.0	5.6	6.9	7.9	7.9	9.4	5.7	9.0	13.2	6.1	15.6	5.6	9.8
14	9.5	8.9	8.7	5.1	4.6	4.3	4.2	3.2	2.9	2.0	3.3	2.1	3.5	4.8	3.2	2.9	4.8	3.2	3.7	3.9	3.9	3.3	2.1	0.4	9.5	0.4	4.1
15	1.9	0.0	1.6	2.4	0.0	1.9	2.1	0.0	10.0	7.7	7.6	11.3	7.5	4.3	4.9	8.3	10.6	4.7	8.3	4.9	4.9	1.1	1.0	0.0	11.3	0.0	4.5
16	1.1	0.0	2.0	1.6	1.8	0.4	1.6	6.3	8.4	12.7	10.2	14.7	11.3	12.4	12.3	12.0	14.6	12.6	9.4	10.7	9.0	7.5	4.6	0.0	14.7	0.0	7.4
17	1.7	2.6	3.0	0.8	1.4	1.2	2.7	5.7	5.8	5.2	5.7	3.9	2.4	2.4	2.7	4.7	3.2	4.4	6.3	4.9	4.0	8.6	7.0	0.0	8.6	0.0	3.8
18	1.5	0.9	0.2	1.7	1.0	0.9	1.4	2.8	4.3	4.1	3.5	2.0	2.3	2.3	1.9	1.7	4.8	5.3	4.7	3.5	3.6	1.5	3.4	2.0	5.3	0.2	2.6
19	0.0	0.4	1.6	1.8	0.7	1.2	0.0	1.0	2.7	2.9	2.0	1.3	3.3	4.6	3.9	4.5	7.6	5.6	5.3	4.4	6.3	4.6	5.0	5.2	7.6	0.0	3.2
20	7.9	9.6	9.6	10.1	7.0	6.4	3.8	6.0	5.8	6.9	7.9	5.6	4.8	4.8	6.1			4.0	5.1	1.5	1.7	1.8	1.7	0.0	10.1	0.0	5.4
21	2.1	2.4	1.5	0.0	0.8	1.8	2.3	0.0	4.1	4.8	5.0	6.6	7.9	7.1	8.5	7.6	7.5	6.8	5.4	5.3	9.6	10.6	3.2	4.0	10.6	0.0	4.8
22	9.2	9.9	7.0	8.7	7.0	6.9	12.7	14.3	12.7	12.3	8.7	10.6	10.8	12.8	11.1	12.9	13.3	11.5	9.7	6.1	7.5	5.7	6.2	7.0	14.3	5.7	9.8
23	6.7	7.6	6.7	12.3	9.2	7.2	3.3	4.1	2.7	3.3	9.6	12.5	13.9	13.0	15.2	8.0	10.8	10.5	12.7	14.8	12.2	9.4	12.0	12.5	15.2	2.7	9.6
24	13.8	14.6	12.4	9.2	10.3	12.6	10.9	9.8	12.2	8.3	11.8	10.7	11.3	11.4	12.7	15.7	17.6	18.1	17.0	11.6	16.6	15.3	15.0	11.9	18.1	8.3	13.0
25	19.2	17.0	14.1	17.9	14.2	19.4	20.2	18.6	15.7	20.5	14.5	19.3	20.9	19.1	14.9	17.7	15.1	15.2	17.3	14.7	14.9	12.9	17.7	16.4	20.9	12.9	17.0
26	13.5	15.0	11.4	13.0	11.7	10.1	15.7	11.4	12.5	10.5	10.8	11.5	9.0	2.4	1.7	6.4	4.9	5.0	3.6	0.9	1.9	1.7	1.9	0.0	15.7	0.0	7.8
27	1.8	1.8	0.7	0.0	0.0	1.4	1.1	0.0	1.7	3.1	2.0							2.8	5.5	4.4	5.9	4.0	4.2	0.9	5.9	0.0	2.3
28	1.2	1.1	2.4	0.0	1.9	1.7	0.4	1.2	0.0		1.3	3.5	0.5	1.6	6.1		0.0	3.8	2.9	1.8	4.6	5.7	6.0	5.1	6.1	0.0	2.4
29	1.1	0.0	1.9	1.1	1.5	2.2	0.4	0.2	0.0	2.8	1.7	3.3	3.4	2.6	5.8	4.3	1.9	2.5	4.7	6.2	5.4	4.5	4.5	1.4	6.2	0.0	2.6
30	1.5	1.5	0.0	1.3	1.8	0.2	2.0	1.1	0.0	0.0	1.3	0.5	5.0	5.3	5.5	6.0	4.4	6.0	5.8	6.2	6.1	2.1	1.1	1.2	6.2	0.0	2.7
31	1.0	0.0	1.2	0.4	1.4	0.7	0.4	0.9	0.8	3.5	4.8	3.8	4.4	5.4	8.0	6.6	7.8	7.1	10.0	9.6	9.0	4.6	2.6	4.0	10.0	0.0	4.1
Max.	**19.2**	**17.0**	**15.9**	**17.9**	**14.5**	**19.4**	**20.2**	**18.6**	**15.7**	**20.5**	**17.8**	**19.3**	**20.9**	**19.1**	**17.1**	**18.3**	**21.3**	**18.1**	**17.3**	**15.6**	**16.6**	**15.3**	**17.7**	**17.7**	**21.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.3**	**0.5**	**0.0**	**1.2**	**1.6**	**1.0**	**0.0**	**2.5**	**2.8**	**0.9**	**1.3**	**0.0**	**0.7**	**0.0**		**0.0**	
Avg.	**4.9**	**4.9**	**4.5**	**4.9**	**4.4**	**4.6**	**4.7**	**4.9**	**6.0**	**7.1**	**6.7**	**7.2**	**7.5**	**7.0**	**7.1**	**7.6**	**8.0**	**7.1**	**7.3**	**6.3**	**6.3**	**5.5**	**5.3**	**4.3**			**6.0**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

June *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.0	1.9	0.9	0.0	0.0	0.0	0.8	1.4	3.0	1.3	3.0	5.0	2.8	5.1	4.5	2.9	4.6	7.1	10.2	10.6	8.6	1.8	4.2	6.2	10.6	0.0	3.6
2	1.9	1.4	6.3	6.7	0.4	2.8	6.8	1.9	2.9	13.2	10.3	9.0	14.9	9.5	9.3	13.8	16.4	10.7	11.9	14.4	13.2	11.9	9.0	7.5	16.4	0.4	8.6
3	4.2	7.4	10.0	10.4	9.1	8.9	3.1	9.6	13.7	13.2	9.5	10.6	6.5	6.5	8.6	6.5	7.9	6.1	8.7	8.9	7.7	6.4	0.4	2.5	13.7	0.4	7.8
4	2.9	3.1	3.0	4.9	1.4	0.2	1.5	4.1	3.5	6.3	6.1	6.6	8.2	8.3	9.6	8.2	10.4	10.1	9.5	10.7	12.8	10.1	16.0	15.1	16.0	0.2	7.2
5	13.5	9.9	8.2	13.5	11.6	5.5	5.8	8.1	7.0	6.6	5.3	7.8	6.3	4.0	5.1	7.2	8.7	9.6	8.9	4.2	6.5	5.6	1.3	0.4	13.5	0.4	7.1
6	1.5	3.2	4.2	1.6	3.5	3.2	2.7	2.3	1.9	1.1	3.3	3.4	5.4	10.4	13.1	11.2	11.9	14.0	10.4	12.2	13.9	11.7	11.7	11.7	14.0	1.1	7.1
7	9.8	10.0	10.2	14.2	12.3	9.6	8.2	7.3	11.9	7.1	9.2	9.7	9.4	6.3	9.0	6.8	8.6	9.5	8.2	5.4	10.1	8.1	6.2	3.5	14.2	3.5	8.8
8	5.9	4.4	0.9	1.4	0.0	2.8	0.7	2.2	0.0	2.9	3.8	5.7	9.5	7.7	12.6	12.0	10.5	8.5	7.4	6.0	8.2	9.8	7.1	6.1	12.6	0.0	5.7
9	1.6	2.1	2.6	1.2	0.0	1.6	0.9	0.9	2.6	1.1	2.0	3.7	1.9	4.0	5.2	6.7	9.0	5.8	5.8	10.0	7.9	3.0	3.3	2.4	10.0	0.0	3.6
10	0.6	2.5	5.8	7.0	2.8	1.9	3.5	6.4	3.0	4.1	2.2	4.8	2.7	1.1	2.5	5.4	7.2	7.5	9.8	10.1	9.6	6.0	7.6	5.6	10.1	0.6	5.0
11	5.3	5.2	0.9	3.4	1.8	1.2	3.7	1.4	4.1	4.8	5.9	5.5	4.0	6.1	6.8	6.1	6.1	7.2	5.0	7.1	4.7	1.9	2.0	0.4	7.2	0.4	4.2
12	1.8	1.0	1.1	1.1	1.0	2.4	0.0	1.0	1.6	0.8	3.5	4.1	2.5	2.1	3.0	1.4	1.8	1.6	0.7	1.9	3.6	1.2	2.0	0.0	4.1	0.0	1.7
13	0.8	0.0	0.0	0.7	0.3	0.0	0.0	0.9	0.7	2.6	2.5	0.7	2.4	2.8	4.1	6.2	5.4	4.6	4.0	3.9	5.0	2.9	3.3	1.2	6.2	0.0	2.3
14	0.9	0.9	0.0	0.4	0.9	1.1	1.7	2.5	2.5	3.7	4.5	2.7	4.2	4.8	1.9	7.0	7.3	8.6	4.4	4.9	3.3	5.0	3.2	1.9	8.6	0.0	3.3
15	1.4	0.0	1.8	1.6	1.5	1.4	0.9	1.3	0.0	1.9	3.3	0.0	0.8	3.0	5.7	4.4	1.6	2.8	4.3	1.0	3.6	2.0	1.4	0.2	5.7	0.0	1.9
16	1.9	0.0	0.0	0.0	1.0	0.7	0.8	0.0	1.3	1.8	4.6	4.8	1.7	6.0	6.7	3.9	8.5	5.4	6.9	5.7	5.1	8.0	6.0	6.7	8.5	0.0	3.6
17	6.4	4.6	5.8	2.6	1.6	1.2	1.4	1.0	2.8	3.7	7.0	9.7	10.1	7.6	7.2	5.4	3.8	3.7	4.7	4.5	4.3	4.9	3.3	3.2	10.1	1.0	4.6
18	1.8	0.0	0.7	3.1	0.7	2.1	1.1	3.3	2.4	8.1	4.8	8.3	8.6	8.2	5.9	7.6	6.9	8.3	7.5	6.4	8.4	3.7	5.6	3.3	8.6	0.0	4.9
19	6.9	7.1	7.5	9.1	6.1	6.4	4.4	7.8	9.9	11.8	8.6	8.6	6.2	7.2	11.2	10.5	9.7	6.7	8.5	5.9	6.3	6.7	7.7	7.7	11.8	4.4	7.9
20	8.8	8.6	6.9	1.4	1.9	0.8	3.1	4.3	5.1	6.0	6.8	4.7	2.5	4.9	5.9	5.6	5.9	3.6	4.5	4.7	5.1	3.5	2.2	1.8	8.8	0.8	4.5
21	1.2	0.9	1.7	1.6	0.9	0.9	0.0	0.0	1.4	1.4	1.5	2.4	2.8	3.8	3.5	2.5	5.2	3.5	5.3	5.5	4.2	2.3	5.1	0.8	5.5	0.0	2.4
22	0.0	2.8	4.2	3.2	2.1	2.3	2.3	3.0	2.6	0.0	5.1	5.1	4.9	6.6	6.9	7.1	8.3	5.6	3.9	7.5	5.5	4.4	3.5	7.7	8.3	0.0	4.4
23	6.8	7.8	7.1	9.6	5.7	4.2	0.8	3.5	6.4	7.3	8.0	7.6	7.7	10.2	10.7	7.3	5.3	12.6	9.1	11.0	8.0	9.7	5.8	3.8	12.6	0.8	7.3
24	3.5	0.7	0.0	0.8	0.4	0.6	2.2	0.2	0.2	2.6	1.0	3.3	3.9	0.9	2.5	0.0	4.4	1.3	3.1	7.2	6.4	4.2	1.0	2.3	7.2	0.0	2.2
25	0.5	1.6	1.1	0.0	1.0	1.2	0.5	0.0	1.4	1.4	1.3	5.2	5.0	6.4	5.6	5.9	6.3	4.9	6.6	7.1	8.1	7.6	9.0	9.8	9.8	0.0	4.1
26	13.3	8.3	9.7	7.7	12.2	11.3	14.3	11.2	12.6	10.0	13.7	13.4	16.1	10.3	13.6	12.7	12.3	13.1	12.1	14.4	14.6	12.3	16.5	11.6	16.5	7.7	12.4
27	8.3	8.5	8.6	8.4	9.0	5.9	7.6	5.9	7.2	8.4	8.6	6.3	10.9	8.8	11.8	8.0	7.7	8.9	9.7	8.0	6.7	9.6	7.0	7.9	11.8	5.9	8.2
28	10.6	8.7	9.4	10.4	9.3	10.3	11.0	8.9	8.2	10.3	12.8	11.6	8.8	11.4	9.2	11.2	12.7	9.3	11.1	15.4	9.7	9.4	10.4	11.2	15.4	8.2	10.5
29	6.0	11.4	8.0	10.3	10.0	8.1	5.4	8.2	10.0	7.8	6.5	5.6	5.0	8.6	6.8	6.0	6.0	7.5	4.4	4.0	3.0	3.9	2.4	1.0	11.4	1.0	6.5
30	1.7	2.4	0.0	0.2	1.1	0.8	0.0	0.0	0.9	0.0			1.1	2.6	3.1	4.6	2.1	1.7	3.1	3.7	3.5	3.3	2.5	1.0	4.6	0.0	1.8
Max.	**13.5**	**11.4**	**10.2**	**14.2**	**12.3**	**11.3**	**14.3**	**11.2**	**13.7**	**13.2**	**13.7**	**13.4**	**16.1**	**11.4**	**13.6**	**13.8**	**16.4**	**14.0**	**12.1**	**15.4**	**14.6**	**12.3**	**16.5**	**15.1**	**16.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**0.0**	**0.8**	**0.9**	**1.9**	**0.0**	**1.6**	**1.3**	**0.7**	**1.0**	**3.0**	**1.2**	**0.4**	**0.0**		**0.0**	
Avg.	**4.4**	**4.2**	**4.2**	**4.5**	**3.7**	**3.3**	**3.2**	**3.6**	**4.4**	**5.0**	**5.7**	**6.1**	**5.9**	**6.2**	**7.1**	**6.8**	**7.4**	**7.0**	**7.0**	**7.4**	**7.3**	**6.0**	**5.6**	**4.8**			**5.4**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

July *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.9	1.8	1.3	0.9	0.0	0.0	1.6	2.2	5.4	8.2	14.8	12.0	14.5	16.5	16.7	15.2	9.1	12.2	11.7	15.6	11.9	17.0	9.9	11.8	17.0	0.0	8.8
2	17.3	14.5	15.8	9.4	15.6	17.3	13.6	9.3	10.1	13.4	14.3	12.6	10.5	13.4	15.7	12.2	10.6	10.2	12.7	7.3	10.1	8.4	7.8	8.7	17.3	7.3	12.1
3	8.4	10.9	9.3	7.9	10.9	9.4	6.7	13.0	10.8	8.7	5.8	10.2	10.4	7.0	10.6	10.0	11.7	9.3	11.5	7.4	6.2	9.4	8.6	2.1	13.0	2.1	9.0
4	0.9	2.3	2.6	4.0	3.5	1.2	0.4	1.1	1.4	2.0	2.7	2.1	2.3	2.6	1.1	0.0	4.8	4.3	3.5	6.8	5.7	4.4	3.5	7.2	7.2	0.0	2.9
5	5.0	3.8	4.9	5.2	5.6	7.3	4.9	3.8	4.6	6.4	4.7	2.4	5.5	1.7	0.0	2.7	1.2	3.6	4.9	5.7	4.1	3.7	2.8	3.5	7.3	0.0	4.1
6	2.1	1.3	3.2	3.6	4.5	3.1	1.1	2.7	2.9	3.4	5.2	5.1	6.3	6.7	6.3	4.4	6.3	6.4	6.8	3.0	5.0	0.0	1.4	1.1	6.8	0.0	3.8
7	0.0	0.7	2.0	1.2	1.1	0.0	1.9	1.4	2.0	3.6	3.7	5.1	4.4	2.7	3.1	1.2	3.9	4.9	4.7	4.7	5.2	4.3	4.5	0.0	5.2	0.0	2.8
8	0.2	1.0	0.8	0.4	1.2	0.8	1.0	4.6	5.2	1.9	2.5	5.7	2.4	4.8	5.9	8.0	6.4	4.2	6.8	4.3	6.0	5.5	5.7	2.5	8.0	0.2	3.7
9	3.7	4.6	0.9	1.5	1.6	1.9	0.8	0.0	4.3	6.9	6.3	4.0	5.9	6.9	6.8	5.5	9.6	5.7	6.8	6.3	6.6	4.6	6.3	4.4	9.6	0.0	4.7
10	3.7	2.8	1.8	0.2	1.2	0.0	0.0	0.9	3.4	6.0	6.7	5.0	7.0	5.0	4.3	4.0	3.7	4.3	6.2	5.3	5.0	4.1	2.4	0.8	7.0	0.0	3.5
11	0.0	0.4	1.2	1.2	1.8	0.0	1.3	1.9	1.8	0.3	1.2	2.2	3.0	3.4	4.4	4.4	6.1	8.6	7.5	7.7	7.1	5.1	2.5	0.4	8.6	0.0	3.1
12	0.7	1.0	2.4	2.8	2.4	2.9	0.8	2.6	0.0	0.0	0.8	1.8	2.2	4.5	5.5	4.9	7.5	6.3	8.0	8.5	6.0	5.5	7.5	6.5	8.5	0.0	3.8
13	5.7	1.7	2.0	0.0	2.1	1.5	0.8	0.0	1.3	2.6	4.2	4.1	3.8	5.3	6.4	6.3	5.2	5.9	6.1	4.2	3.2	0.0	0.0	0.5	6.4	0.0	3.0
14	1.0	1.8	0.0	1.7	0.0	0.0	2.2	2.5	2.8	2.5	2.1	1.4	2.1	2.9	2.5	3.0	2.6	3.7	3.0	5.0	3.7	2.7	3.2	0.0	5.0	0.0	2.2
15	1.5	0.0	1.1	1.1	0.0	0.8	5.8	6.1	5.7	4.7	3.0	3.8	2.1	1.4	2.8	4.4	4.0	6.5	9.1	4.1	3.7	2.8	5.3	0.9	9.1	0.0	3.4
16	2.0	1.5	1.0	1.5	1.0	1.0	1.9	1.3	4.3	3.3	4.6	3.1	2.2	1.9	0.5	1.4	1.6	2.3	1.7	2.6	4.4	1.9	1.2	0.0	4.6	0.0	2.0
17	1.0	2.0	1.1	1.3	2.5	1.3	1.7	0.2	1.4	0.4	2.1	1.4	2.6	2.0	1.9	5.6	7.2	7.0	4.3	3.5	1.4	1.6	4.0	3.8	7.2	0.2	2.6
18	3.4	5.9	5.6	5.3	4.4	3.8	2.8	2.8	3.4	0.0	1.3	5.9	5.6	6.4	9.1	8.7	6.1	8.4	9.9	5.3	7.7	0.9	2.8	1.4	9.9	0.0	4.9
19	2.7	3.5	3.4	3.2	0.0	1.6	1.5	0.0	3.1	4.8	4.2	4.3	6.5	6.5	11.0	10.7	7.4	11.2	8.6	7.4	2.6	3.9	0.0	2.5	11.2	0.0	4.6
20	2.2	2.8	0.0	0.8	2.4	2.4	1.7	1.8	3.9	2.8	4.2	3.8	1.5	5.4	3.6	5.9	5.7	7.8	6.4	6.7	4.9	6.1	4.0	4.1	7.8	0.0	3.8
21	1.7	4.9	5.0	3.0	3.0	1.0	2.0	3.2	0.8	3.3	4.0	5.0	4.4	6.9	4.5	3.8	4.3	3.9	5.5	6.0	5.0	4.9	0.0	5.0	6.9	0.0	3.8
22	3.7	2.7	3.7	4.2	1.7	1.0	2.0	4.2	1.0	4.7	4.0	0.4	1.5	3.7	1.4	2.3	1.1	2.1	1.7	4.2	4.4	2.1	1.9	2.1	4.7	0.4	2.6
23	1.5	1.2	0.9	0.0	1.2	0.4	1.5	1.5	1.8	0.0	0.9	2.0	0.4	3.8	4.8	2.7	3.4	4.7	3.6	4.0	2.6	2.8	1.2	0.7	4.8	0.0	2.0
24	4.0	3.4	3.3	1.2	0.8	0.2	0.0	5.8	2.7	6.8	3.8	4.2	11.4	9.1	11.1	14.3	16.6	13.5	13.8	8.6	12.5	11.4	12.2	12.7	16.6	0.0	7.6
25	13.0	13.8	11.7	12.6	14.8	1.7	3.3	1.9	7.0	5.9	4.8	3.0	2.2	3.3	1.8	1.5	2.4	3.4	2.0	0.0	2.3	2.2	2.7	1.3	14.8	0.0	4.9
26	1.2	4.4	0.8	6.0	6.3	3.2	2.4	0.0	1.6	0.2	1.5	2.2	2.4	2.3	0.0	1.6	1.6	3.5	6.9	5.0	3.7	2.9	0.7	2.0	6.9	0.0	2.6
27	1.2	1.6	1.4	1.5	3.0	2.0	4.1	1.9	2.7	1.8	1.4	4.8	4.9	4.5	5.2	4.0	5.4	4.6	4.5	3.3	5.1	3.0	2.1	1.3	5.4	1.2	3.1
28	1.5	1.1	2.7	0.9	2.6	2.2	1.0	4.2	2.0	2.5	2.5	2.3	2.3	2.7	0.8	1.9	1.0	0.4	4.8	3.8	5.0	6.5	7.3	6.7	7.3	0.4	2.9
29	2.9	5.5	5.9	7.3	6.7	7.5	7.6	7.0	7.4	6.9	8.6	10.8	7.6	8.0	9.2	9.1	9.4	6.3	11.5	9.0	7.8	7.1	6.9	6.9	11.5	2.9	7.6
30	10.7	9.4	7.8	1.5	1.1	2.6	5.2	1.7	6.9	5.0	13.3	8.9	5.4	8.0	5.6	5.2	6.2	7.1	4.5	6.1	4.4	4.6	0.0	0.0	13.3	0.0	5.5
31	2.1	2.0	1.6	0.0	0.8	2.3	1.4	0.7	0.0			6.3	2.5	5.1	5.7	6.1	4.9	4.5	5.2	4.4	4.0	5.2	4.0	4.2	6.3	0.0	3.3
Max.	**17.3**	**14.5**	**15.8**	**12.6**	**15.6**	**17.3**	**13.6**	**13.0**	**10.8**	**13.4**	**14.8**	**12.6**	**14.5**	**16.5**	**16.7**	**15.2**	**16.6**	**13.5**	**13.8**	**15.6**	**12.5**	**17.0**	**12.2**	**12.7**	**17.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.4**	**0.4**	**1.4**	**0.0**	**0.0**	**1.0**	**0.4**	**1.7**	**0.0**	**1.4**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**3.4**	**3.7**	**3.4**	**2.9**	**3.3**	**2.6**	**2.7**	**2.9**	**3.6**	**4.0**	**4.6**	**4.7**	**4.7**	**5.3**	**5.4**	**5.5**	**5.7**	**6.0**	**6.6**	**5.7**	**5.4**	**4.7**	**3.9**	**3.4**			**4.3**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

August 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.3	0.0	1.9	5.7	1.1	2.3	4.0	2.0	5.0	5.1	6.2	6.4	8.0	6.0	7.0	7.2	8.2	7.3	9.3	7.0	0.0	5.8	6.0	5.2	9.3	0.0	5.0
2	5.6	6.2	4.1	5.2	2.9	1.9	0.2	1.3	3.0	4.6	4.9	4.2	2.2	2.0	4.1	3.3	1.6	3.7	5.0	5.5	4.4	6.9	7.1	2.8	7.1	0.2	3.9
3	0.0	0.0	1.4	0.8	2.0	3.3	1.5	3.1	1.7	5.6	5.8	5.1	4.3	6.6	5.8	7.3	6.9	7.8	9.5	9.8	12.0	10.0	7.6	9.6	12.0	0.0	5.3
4	7.1	8.2	6.2	5.7	4.6	3.4	2.4	3.2	4.0	5.3	6.7	5.8	8.1	7.0	4.4	8.0	7.4	8.8	7.8	7.8	8.1	6.8	3.6	3.6	8.8	2.4	6.0
5	4.5	2.4	0.9	0.0	0.9	1.1	0.7	0.0	0.0	0.9	0.0	1.3	0.8	4.4	6.4	4.0	3.3	2.2	4.8	4.6	2.7	2.7	1.6	0.0	6.4	0.0	2.1
6	0.0	0.0	1.3	6.0	6.2	4.1	8.8	5.9	8.0	13.7	7.4	11.4	12.5	12.1	11.8	11.5	5.6	8.9	7.9	7.2	6.4	5.2	3.7	5.3	13.7	0.0	7.1
7	5.2	3.5	2.9	1.5	2.0	0.9	0.7	0.0	1.9	2.4	3.5	4.2	4.5	5.4	7.9	3.9	7.4	7.1	8.5	5.1	6.8	5.2	4.1	3.7	8.5	0.0	4.1
8	3.2	5.1	4.6	4.3	3.5	2.3	5.7	5.0	7.5	4.5	4.8	6.5	4.8	4.8	6.8	7.6	3.2	6.0	4.6	6.7	7.1	5.0	6.5	4.9	7.6	2.3	5.2
9	4.6	3.1	2.6	3.7	0.8	2.0	0.0	2.3	3.1	5.3	5.5	6.4	6.7	4.6	4.2	6.5	3.0	5.0	4.8	3.2	2.3	2.0	0.0	1.5	6.7	0.0	3.5
10	1.1	0.5	1.2	1.6	1.1	0.0	1.1	1.1	1.5	0.9	1.3	1.7	2.4	1.3	1.7	1.1	5.5	5.0	2.7	3.0	2.5	2.1	1.4	2.2	5.5	0.0	1.8
11	1.5	1.6	1.7	1.4	0.8	0.0	0.5	1.3	0.0	1.4	2.3	1.2	3.4	5.1	6.5	5.7	8.4	6.9	6.9	7.1	6.2	3.9	3.6	5.1	8.4	0.0	3.4
12	3.7	2.0	3.4	3.2	2.9	0.0	1.8	0.8	3.1	3.3	3.7	4.0	3.8	4.7	4.4	5.4	9.0	8.6	7.7	6.5	8.7	9.7	8.6	7.8	9.7	0.0	4.9
13	4.7	5.2	3.0	1.7	1.6	0.9	1.1	1.2	0.9	3.7	5.0	9.1	11.2	9.4	11.8	17.1	14.2	11.2	12.9	13.3	14.3	17.0	17.4	17.8	17.8	0.9	8.6
14	11.3	14.2	11.2	13.0	9.6	12.4	11.6	13.4	10.5	11.9	11.3	8.3	15.3	14.3	11.9	12.8	11.9	9.1	8.9	5.5	7.9	4.2	4.7	4.5	15.3	4.2	10.4
15	3.6	0.9	3.1	1.3	1.3	2.8	1.2	2.9	4.5	2.9	2.5	6.7	7.9	6.8	7.1	6.3	5.0	3.8	4.2	4.6	4.4	5.7	7.5	5.9	7.9	0.9	4.3
16	3.7	2.2	3.1	3.0	2.5	2.8	1.2	1.6	1.8	5.5	1.9	2.9	0.8	0.0	5.7	3.6	5.0	4.2	7.0	3.7	3.5	1.3	1.4	1.0	7.0	0.0	2.9
17	0.4	0.9	0.0	0.0	0.4	0.0	0.0	1.0	0.9	4.4	4.8	3.9	4.7	3.6	1.5	4.7	6.1	2.8	4.8	2.0	2.4	3.8	4.0	8.7	8.7	0.0	2.7
18	10.1	11.3	12.3	10.9	13.9	13.2	19.2	20.3	14.7	16.7	16.6	14.9	17.2	18.4	16.9	20.0	20.9	23.2	24.7	15.8	23.6	25.5	18.7	19.4	25.5	10.1	17.4
19	22.4	15.7	12.7	16.6	9.0	9.0	5.6	4.7	4.2	5.7	6.3	3.9	4.3	4.7	2.4	1.9	2.3	2.9	6.5	9.8	12.7	10.8	11.4	10.1	22.4	1.9	8.1
20	7.8	5.2	4.4	5.5	4.8	4.4	3.0	1.6	3.8	3.1	5.8	5.1	5.0	9.3	2.8	5.6	5.8	4.4	5.3	6.4	5.8	4.1	3.9	6.0	9.3	1.6	5.0
21	4.8	6.6	5.9	6.4	6.5	6.9	5.9	5.0	5.2	6.6	5.7	5.3	6.9	4.0	3.9	4.9	6.2	6.4	5.9	6.4	5.3	5.5	6.1	1.4	6.9	1.4	5.6
22	3.5	2.4	4.1	0.0	1.3	1.6	0.0	1.2	4.4	2.6	3.4	4.9	7.7	4.3	7.8	5.0	4.0	6.0	6.5	5.2	2.4	0.0	4.7	7.1	7.8	0.0	3.8
23	3.1	4.5	2.7	2.5	1.7	1.1	2.0	0.2	3.6	4.0	2.7	4.9	3.5	2.6	2.1	2.2	2.8	3.8	2.8	2.7	0.0	0.4	0.9	0.0	4.9	0.0	2.4
24	1.0	1.3	2.3	1.3	0.0	1.3	2.1	2.7	1.9	0.9	2.1	4.8	12.5	8.9	10.8	10.4	10.4	9.5	14.1	9.6	8.0	10.4	13.0	13.3	14.1	0.0	6.4
25	12.2	12.8	15.2	13.3	8.8	5.5	6.8	5.9	3.7	4.9	10.2	8.8	11.8	9.0	11.0	5.7	8.4	9.3	6.2	8.5	1.5	3.9	1.5	5.4	15.2	1.5	7.9
26	3.2	2.3	1.8	0.0	0.4	1.2	0.7	0.0	1.2	2.8	5.7	7.3	8.2	10.1	8.6	12.2	10.0	7.2	6.7	7.0	4.9	6.5	9.2	6.5	12.2	0.0	5.2
27	5.7	4.2	1.3	6.1	7.9	6.3	9.6	11.0	9.1	7.1	6.2	12.6	8.0	9.4	10.4	10.0	15.8	9.0	13.8	8.7	6.6	8.6	10.9	10.6	15.8	1.3	8.7
28	7.9	9.8	11.5	9.8	9.7	9.0	8.3	8.2	9.6	12.7	10.4	10.3	13.0	12.1	13.3	12.6	16.7	12.2	12.7	12.2	16.8	11.1	10.2	15.4	16.8	7.9	11.5
29	13.0	13.7	12.3	10.3	10.6	10.3	6.2	5.5	7.0	6.1	8.4	8.1	5.7	5.5	4.6	5.0	0.8	2.0	6.3	2.7	10.9	11.5	11.5	7.9	13.7	0.8	7.7
30	10.6	13.6	12.7	11.0	13.8	12.4	11.6	8.1	9.9	9.0	4.8	2.6	5.6	4.4	7.2	6.7	5.7	7.1	8.7	8.0	3.1	1.9	0.7	2.3	13.8	0.7	7.6
31	1.1	1.6	0.0	1.2	0.7	2.0	1.0	1.2	1.5	6.5	8.2	7.5	13.0	13.3	9.6	13.0	11.7	10.9	15.5	14.6	9.9	11.6	14.2	16.0	16.0	0.0	7.7
Max.	**22.4**	**15.7**	**15.2**	**16.6**	**13.9**	**13.2**	**19.2**	**20.3**	**14.7**	**16.7**	**16.6**	**14.9**	**17.2**	**18.4**	**16.9**	**20.0**	**20.9**	**23.2**	**24.7**	**15.8**	**23.6**	**25.5**	**18.7**	**19.4**	**25.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.9**	**0.0**	**1.2**	**0.8**	**0.0**	**1.5**	**1.1**	**0.8**	**2.0**	**2.7**	**2.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.5**	**5.2**	**4.9**	**4.9**	**4.3**	**4.0**	**4.0**	**3.9**	**4.4**	**5.5**	**5.6**	**6.1**	**7.2**	**6.9**	**7.1**	**7.5**	**7.5**	**7.2**	**8.2**	**7.1**	**6.8**	**6.7**	**6.6**	**6.8**			**6.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Wind Speed (m/s)

September 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	14.8	15.1	14.1	12.8	10.9	7.0	6.0	5.6	9.7	4.0	5.0	7.9	8.4	7.9	8.3	9.8	9.0	6.6	6.2	7.4	8.2	4.4	6.1	5.8	15.1	4.0	8.4
2	6.9	10.2	6.3	8.8	8.3	6.8	6.6	10.2	8.2	8.5	8.9	10.6	9.5	8.2	11.6	7.4	6.2	5.8	5.3	8.3	5.1	6.0	6.6	2.7	11.6	2.7	7.6
3	1.7	3.0	0.2	1.3	1.8	2.6	3.8	3.9	7.1	5.9	9.6	10.1	6.8	9.9	12.0	11.4	8.7	4.2	4.5	6.0	9.3	1.5	7.3	5.6	12.0	0.2	5.8
4	8.5	9.0	10.3	9.9	8.7	9.1	6.0	5.1	1.4	3.2	8.2	4.2	5.1	7.5	2.1	4.3	8.7	12.6	8.7	7.9	8.0	9.1	6.8	12.1	12.6	1.4	7.4
5	7.9	11.2	8.8	11.6	13.0	15.0	12.5	17.5	10.7	16.2	15.3	17.4	12.6	14.0	16.4	18.5	18.5	20.1	26.9	23.9	18.8	16.1	18.7	14.7	26.9	7.9	15.7
6	18.1	18.4	20.7	14.2	16.2	16.3	17.3	18.7	20.5	16.0	19.9	18.7	17.2	15.4	15.2	13.8	8.8	10.4	6.5	11.7	9.2	6.6	6.5	5.1	20.7	5.1	14.2
7	10.3	4.7	6.0	7.9	5.5	3.8	6.1	3.6	6.2	4.5	3.2	8.7	4.2	5.2	6.1	5.4	4.5	3.9	4.6	5.2	2.3	1.7	1.7	1.6	10.3	1.6	4.9
8	0.4	1.9	0.0	0.8	1.1	1.1	1.8	2.1	1.9	2.7	1.3	5.8	5.8	5.8											5.8	0.0	2.3
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Max.	**18.1**	**18.4**	**20.7**	**14.2**	**16.2**	**16.3**	**17.3**	**18.7**	**20.5**	**16.2**	**19.9**	**18.7**	**17.2**	**15.4**	**16.4**	**18.5**	**18.5**	**20.1**	**26.9**	**23.9**	**18.8**	**16.1**	**18.7**	**14.7**	**26.9**		
Min.	**0.4**	**1.9**	**0.0**	**0.8**	**1.1**	**1.1**	**1.8**	**2.1**	**1.4**	**2.7**	**1.3**	**4.2**	**4.2**	**5.2**	**2.1**	**4.3**	**4.5**	**3.9**	**4.5**	**5.2**	**2.3**	**1.5**	**1.7**	**1.6**		**0.0**	
Avg.	**8.6**	**9.2**	**8.3**	**8.4**	**8.2**	**7.7**	**7.5**	**8.3**	**8.2**	**7.6**	**8.9**	**10.4**	**8.7**	**9.2**	**10.2**	**10.1**	**9.2**	**9.1**	**9.0**	**10.1**	**8.7**	**6.5**	**7.7**	**6.8**			**8.6**

Total Hours in Month 720 **Hours Data Available** 182 **Data Recovery** 25.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

August *1991*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
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27													0.0	353.0	329.0	353.0	345.0	346.0	333.0	343.0	339.0	351.0	328.0	336.0
28	333.0	336.0	244.0	168.0	249.0	341.0	338.0	337.0	329.0	346.0	340.0	324.0	325.0	335.0	0.0	321.0	338.0	339.0	339.0	336.0	331.0	341.0	315.0	297.0
29	320.0	180.0	122.0	172.0	189.0	83.0	212.0	347.0	24.0	23.0	51.0	20.0	346.0	329.0	352.0	0.0	3.0	339.0	331.0	286.0	328.0	67.0	190.0	88.0
30	1.0	343.0	340.0	329.0	302.0	171.0	202.0	79.0	116.0	270.0	2.0	19.0	200.0	190.0	172.0	190.0	195.0	212.0	208.0	207.0	209.0	253.0	1.0	208.0
31	240.0	6.0	68.0	73.0	50.0	316.0	107.0	87.0	127.0	116.0	140.0	137.0	128.0	134.0	127.0	136.0	131.0	128.0	110.0	137.0	121.0	116.0	113.0	118.0

Total Hours in Month 744 **Hours Data Available** 108 **Data Recovery** 14.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

September 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	116.0	127.0	114.0	116.0	106.0	114.0	116.0	107.0	112.0	108.0	117.0	124.0	119.0	122.0	120.0	123.0	122.0	126.0	126.0	123.0	121.0	110.0	116.0	121.0
2	123.0	104.0	118.0	104.0	97.0	101.0	105.0	30.0	97.0	106.0	76.0	114.0	93.0	128.0	90.0	156.0	153.0	152.0	217.0	216.0	339.0	353.0	132.0	247.0
3	230.0	1.0	159.0	215.0	82.0	308.0	336.0	18.0	87.0	115.0	117.0	107.0	116.0	123.0	114.0	119.0	129.0	109.0	120.0	121.0	123.0	132.0	139.0	115.0
4	113.0	113.0	93.0	103.0	100.0	100.0	98.0	71.0	15.0	49.0	44.0	24.0	337.0	334.0	350.0	344.0	0.0	0.0	291.0	289.0	285.0	305.0	274.0	288.0
5	291.0	291.0	283.0	276.0	271.0	265.0	259.0	181.0	218.0	241.0	263.0	281.0	269.0	278.0	296.0	289.0	277.0	274.0	279.0	283.0	291.0	286.0	288.0	291.0
6	282.0	289.0	293.0	280.0	268.0	59.0	25.0	261.0	50.0	189.0	316.0	271.0	301.0	301.0	291.0	260.0	279.0	282.0	323.0	298.0	233.0	197.0	279.0	252.0
7	2.0	207.0	223.0	64.0	316.0	225.0	185.0	14.0	227.0	66.0	100.0	133.0	117.0	113.0	112.0	114.0	107.0	112.0	117.0	108.0	108.0	113.0	107.0	111.0
8	103.0	105.0	102.0	110.0	116.0	110.0	110.0	116.0	135.0	126.0	125.0	121.0	132.0	116.0	139.0	130.0	129.0	134.0	128.0	118.0	125.0	112.0	108.0	99.0
9	105.0	118.0	109.0	110.0	117.0	114.0	112.0	112.0	117.0	119.0	106.0	104.0	118.0	105.0	119.0	123.0	126.0	111.0	120.0	112.0	95.0	110.0	119.0	129.0
10	152.0	55.0	14.0	4.0	350.0	326.0	343.0	328.0	318.0	319.0	341.0	320.0	328.0	0.0	212.0	285.0	277.0	287.0	272.0	249.0	256.0	231.0	235.0	242.0
11	303.0	166.0	200.0	188.0	222.0	215.0	192.0	194.0	210.0	217.0	213.0	193.0	199.0	184.0	177.0	320.0	315.0	342.0	173.0	295.0	222.0	260.0	220.0	283.0
12	244.0	253.0	225.0	31.0	106.0	224.0	198.0	188.0	197.0	232.0	46.0	0.0	351.0	338.0	280.0	318.0	101.0	234.0	167.0	32.0	241.0	355.0	20.0	95.0
13	114.0	125.0	120.0	117.0	119.0	112.0	118.0	119.0	107.0	102.0	118.0	99.0	109.0	114.0	110.0	117.0	109.0	109.0	125.0	120.0	109.0	108.0	122.0	116.0
14	113.0	99.0	62.0	72.0	106.0	92.0	87.0	75.0	99.0	106.0	63.0	77.0	92.0	100.0	102.0	98.0	119.0	118.0	74.0	72.0	102.0	97.0	99.0	126.0
15	121.0	124.0	114.0	117.0	120.0	123.0	131.0	102.0	122.0	126.0	128.0	124.0	127.0	120.0	108.0	131.0	110.0	119.0	107.0	117.0	124.0	121.0	110.0	106.0
16	116.0	110.0	120.0	76.0	94.0	111.0	119.0	111.0	129.0	118.0	123.0	129.0	112.0	115.0	122.0	128.0	122.0	120.0	124.0	118.0	126.0	114.0	128.0	109.0
17	114.0	105.0	118.0	116.0	109.0	112.0	119.0	132.0	133.0	118.0	124.0	113.0	117.0	115.0	113.0	114.0	118.0	119.0	119.0	101.0	117.0	107.0	123.0	123.0
18	123.0	102.0	114.0	105.0	116.0	125.0	117.0	119.0	133.0	124.0	118.0	122.0												
19																								
20										168.0	176.0	203.0	210.0	227.0	211.0	183.0	212.0	201.0	200.0	183.0	145.0	88.0	329.0	353.0
21	98.0	88.0	72.0	92.0	92.0	95.0	93.0	96.0	112.0	111.0	116.0	93.0	98.0	120.0	96.0	116.0	111.0	78.0	112.0	124.0	62.0	74.0	51.0	177.0
22	95.0	97.0	82.0	101.0	96.0	98.0	99.0	119.0	107.0	111.0	108.0	121.0	111.0	117.0	118.0	107.0	119.0	97.0	94.0	109.0	110.0	117.0	113.0	120.0
23	114.0	113.0	103.0	116.0	120.0	112.0	114.0	117.0	120.0	113.0	109.0	113.0	106.0	112.0	129.0	117.0	117.0	125.0	126.0	130.0	123.0	120.0	124.0	117.0
24	110.0	120.0	128.0	125.0	130.0	122.0	132.0	133.0	129.0	110.0	128.0	118.0	110.0	112.0	107.0	104.0	105.0	114.0	110.0	109.0	113.0	109.0	131.0	112.0
25	110.0	109.0	107.0	101.0	111.0	108.0	111.0	105.0	101.0	115.0	126.0	112.0	123.0	121.0	118.0	90.0	118.0	108.0	122.0	98.0	108.0	98.0	284.0	89.0
26	353.0	184.0	196.0	176.0	227.0	321.0	348.0	306.0	346.0	301.0	277.0	299.0	294.0	292.0	288.0	307.0	274.0	299.0	276.0	224.0	195.0	172.0	228.0	198.0
27	201.0	196.0	188.0	193.0	204.0	190.0	191.0	199.0	190.0	198.0	173.0	180.0	198.0	182.0	189.0	185.0	199.0	210.0	194.0	240.0	240.0	233.0	53.0	219.0
28	55.0	32.0	0.0	53.0	24.0	81.0	91.0	108.0	108.0	96.0	113.0	108.0	108.0	97.0	118.0	125.0	101.0	119.0	101.0	98.0	76.0	100.0	71.0	91.0
29	82.0	83.0	85.0	72.0	93.0	110.0	90.0	112.0	107.0	66.0	78.0	95.0	105.0	114.0	111.0	132.0	173.0	167.0	174.0	184.0	194.0	199.0	206.0	205.0
30	189.0	186.0	199.0	143.0	15.0	12.0	36.0	100.0	77.0	123.0	119.0	111.0	126.0	112.0	112.0	112.0	107.0	106.0	101.0	110.0	126.0	115.0	122.0	121.0

Total Hours in Month 720 **Hours Data Available** 675 **Data Recovery** 93.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

October 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	136.0	180.0	192.0	178.0	153.0	164.0	153.0	141.0	99.0	84.0	117.0	120.0	126.0	139.0	118.0	144.0	135.0	139.0	133.0	151.0	144.0	137.0	136.0	154.0
2	176.0	140.0	147.0	146.0	164.0	188.0	193.0	200.0	196.0	205.0	177.0	154.0	145.0	124.0	129.0	127.0	121.0	124.0	110.0	122.0	117.0	116.0	112.0	112.0
3	116.0	111.0	113.0	115.0	109.0	120.0	109.0	115.0	120.0	123.0	142.0	151.0	163.0	183.0	201.0	211.0	207.0	214.0	208.0	201.0	208.0	212.0	213.0	214.0
4	213.0	218.0	222.0	223.0	216.0	219.0	233.0	202.0	199.0	194.0	187.0	213.0	214.0	200.0	233.0	222.0	240.0	202.0	201.0	58.0	275.0	49.0	87.0	51.0
5	46.0	139.0	102.0	149.0	170.0	321.0	186.0	186.0	329.0	329.0	2.0	341.0	7.0	348.0	17.0	0.0	342.0	0.0	344.0	0.0	347.0	345.0	345.0	349.0
6	346.0	346.0	339.0	202.0	345.0	0.0	339.0	331.0	335.0	321.0	295.0	320.0	320.0	294.0	316.0	312.0	306.0	304.0	299.0	269.0	263.0	271.0	272.0	344.0
7	334.0	334.0	354.0	351.0	0.0	7.0	350.0	334.0	330.0	0.0	0.0	347.0	348.0	4.0	347.0	0.0	11.0	352.0	0.0	350.0	331.0	348.0	328.0	203.0
8	320.0	173.0	342.0	167.0	325.0	322.0	334.0	8.0	208.0	345.0	148.0	0.0	338.0	346.0	343.0	342.0	335.0	329.0	347.0	343.0	331.0	333.0	350.0	0.0
9	333.0	337.0	323.0	334.0	346.0	336.0	353.0	347.0	349.0	342.0	346.0	0.0	346.0	349.0	345.0	331.0	339.0	351.0	329.0	338.0	0.0	347.0	342.0	338.0
10	347.0	339.0	314.0	324.0	326.0	327.0	354.0	307.0	0.0	37.0	177.0	344.0	353.0	339.0	2.0	347.0	0.0	342.0	330.0	326.0	337.0	329.0	326.0	328.0
11	336.0	318.0	347.0	300.0	332.0	308.0	354.0	35.0	10.0	16.0	24.0	1.0	9.0	0.0	0.0	333.0	337.0	345.0	335.0	337.0	16.0	10.0	333.0	184.0
12	197.0	231.0	17.0	181.0	138.0	54.0	98.0	76.0	4.0	13.0	53.0	79.0	26.0	126.0	131.0	125.0	120.0	102.0	120.0	112.0	112.0	84.0	83.0	27.0
13	73.0	32.0	105.0	355.0	322.0	300.0	176.0	342.0	336.0	322.0	341.0	323.0	329.0	337.0	335.0	307.0	295.0	310.0	332.0	334.0	321.0	333.0	328.0	314.0
14	313.0	327.0	339.0	318.0	302.0	307.0	307.0	304.0	299.0	299.0	303.0	313.0	317.0	310.0	323.0	314.0	323.0	325.0	315.0	319.0	315.0	308.0	291.0	306.0
15	309.0	305.0	313.0	306.0	318.0	318.0	343.0	339.0	308.0	324.0	317.0	346.0	339.0	321.0	345.0	347.0	62.0	99.0	112.0	51.0	55.0	110.0	123.0	106.0
16	117.0	116.0	107.0	133.0	113.0	118.0	89.0	98.0	111.0	98.0	106.0	104.0	103.0	109.0	106.0	106.0	121.0	113.0	107.0	111.0	108.0	113.0	115.0	112.0
17	108.0	109.0	89.0	107.0	94.0	89.0	97.0	98.0	91.0	93.0	88.0	92.0	96.0	95.0	93.0	107.0	119.0	126.0	126.0	122.0	116.0	123.0	122.0	127.0
18	117.0	125.0	118.0	124.0	130.0	108.0	108.0	118.0	98.0	114.0	112.0	123.0	112.0	114.0	112.0	106.0	116.0	116.0	115.0	128.0	136.0	137.0	131.0	141.0
19	159.0	156.0	154.0	153.0	149.0	159.0	200.0	192.0	208.0	198.0	176.0	202.0	204.0	256.0	285.0	300.0	311.0	339.0	314.0	327.0	337.0	0.0	341.0	335.0
20	337.0	328.0	331.0	325.0	335.0	341.0	329.0	330.0	330.0	335.0	339.0	343.0	330.0	348.0	1.0	338.0	314.0	334.0	328.0	322.0	333.0	320.0	326.0	311.0
21	313.0	323.0	18.0	6.0	318.0	317.0	312.0	280.0	229.0	284.0	24.0	158.0	41.0	34.0	34.0	270.0	110.0	212.0	214.0	203.0	152.0	206.0	2.0	296.0
22	215.0	210.0	233.0	242.0	208.0	283.0	29.0	196.0	172.0	216.0	12.0	20.0	274.0	289.0	207.0	295.0	313.0	350.0	317.0	104.0	255.0	21.0	345.0	352.0
23	85.0	281.0	0.0	350.0	14.0	1.0	340.0	347.0	334.0	303.0	97.0	287.0	227.0	84.0	60.0	9.0	353.0	0.0	300.0	234.0	243.0	248.0	183.0	333.0
24	341.0	310.0	337.0	335.0	313.0	210.0	182.0	238.0	333.0	48.0	312.0	333.0	308.0	323.0	354.0	328.0	322.0	314.0	308.0	317.0	325.0	337.0	339.0	326.0
25	341.0	333.0	325.0	319.0	337.0	330.0	293.0	317.0	329.0	326.0														
26		97.0	125.0	131.0	93.0	117.0	97.0	114.0	106.0	112.0	113.0	97.0	110.0	111.0	110.0	114.0	110.0	112.0	104.0	105.0	112.0	113.0	110.0	117.0
27	109.0	115.0	114.0	127.0	106.0	113.0	119.0	110.0	106.0	100.0	43.0	115.0	89.0	132.0	152.0	137.0	157.0	210.0	235.0	229.0	156.0	228.0	159.0	130.0
28	133.0	105.0	104.0	110.0	115.0	116.0	114.0	116.0	111.0	108.0	117.0	113.0	124.0	116.0	115.0	114.0	128.0	129.0	127.0	126.0	134.0	133.0	128.0	118.0
29	129.0	131.0	131.0	127.0	128.0	158.0	141.0	130.0	130.0	125.0	159.0	151.0	144.0	158.0	165.0	155.0	149.0	146.0	153.0	144.0	262.0	4.0	27.0	77.0
30	65.0	200.0	94.0	38.0	90.0	86.0	94.0	85.0	96.0	97.0	142.0	238.0	148.0	233.0	193.0	165.0	137.0	124.0	116.0	114.0	114.0	111.0	111.0	98.0
31	108.0	116.0	113.0	99.0	117.0	116.0	121.0	110.0	110.0	106.0	113.0	114.0	115.0	115.0	120.0	114.0	119.0	113.0	122.0	116.0	114.0	120.0	108.0	120.0

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

November 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	114.0	112.0	122.0	116.0	125.0	113.0	107.0	117.0	116.0	118.0	99.0	107.0	111.0	112.0	119.0	110.0	126.0	129.0	126.0	122.0	129.0	132.0	117.0	116.0
2	135.0	85.0	97.0	58.0	38.0	248.0	280.0	335.0	334.0	178.0	5.0	194.0	27.0	56.0	159.0	97.0	355.0	191.0	51.0	343.0	314.0	11.0	1.0	82.0
3	332.0	324.0	3.0	256.0	322.0	105.0	200.0	80.0	56.0	66.0	72.0	68.0	61.0	88.0	34.0	65.0	63.0	75.0	51.0	57.0	56.0	41.0	99.0	37.0
4	59.0	42.0	83.0	88.0	70.0	116.0	95.0	97.0	110.0	106.0	113.0	110.0	92.0	105.0	92.0	42.0	91.0	86.0	74.0	112.0	87.0	129.0	75.0	72.0
5	70.0	170.0	106.0	46.0	186.0	248.0	74.0	37.0	3.0	114.0	55.0	118.0	100.0	56.0	54.0	47.0	45.0	49.0	42.0	93.0	119.0	114.0	115.0	115.0
6	112.0	114.0	112.0	106.0	102.0	114.0	119.0	113.0	116.0	113.0	106.0	106.0	112.0	94.0	115.0	117.0	121.0	110.0	131.0	15.0	322.0	73.0	17.0	315.0
7	343.0	12.0	229.0	349.0	147.0	177.0	338.0	234.0	149.0	252.0	233.0	6.0	259.0	0.0	0.0	148.0	13.0	343.0	268.0	90.0	255.0	110.0	31.0	342.0
8	7.0	13.0	32.0	223.0	97.0	96.0	29.0	116.0	99.0	205.0	122.0	121.0	79.0	194.0	254.0	94.0	79.0	113.0	311.0	96.0	12.0	117.0	84.0	227.0
9	29.0	353.0	127.0	287.0	18.0	167.0	209.0	56.0	330.0	324.0	346.0	1.0	331.0	344.0	352.0	3.0	347.0	355.0	37.0	23.0	108.0	145.0	83.0	85.0
10	100.0	103.0	121.0	94.0	72.0	99.0	114.0	89.0	103.0	97.0	88.0	157.0	109.0	77.0	149.0	113.0	73.0	122.0	205.0	86.0	140.0	55.0	131.0	38.0
11	204.0	91.0	279.0	134.0	318.0	228.0	336.0	345.0	320.0	4.0	339.0	142.0	313.0	333.0	318.0	340.0	332.0	331.0	315.0	328.0	332.0	337.0	68.0	337.0
12	0.0	322.0	315.0	308.0	322.0	343.0	348.0	321.0	1.0	338.0	0.0	26.0	4.0	332.0	349.0	217.0	10.0	331.0	334.0	345.0	346.0	26.0	189.0	58.0
13	173.0	10.0	61.0	14.0	351.0	10.0	30.0	94.0	59.0	321.0	240.0	81.0	40.0	54.0	185.0	104.0	110.0	108.0	101.0	89.0	101.0	103.0	108.0	106.0
14	117.0	113.0	110.0	105.0	106.0	100.0	114.0	91.0	87.0	351.0	352.0	227.0	143.0	143.0	339.0	320.0	336.0	335.0	328.0	287.0	351.0	346.0	124.0	300.0
15	314.0	1.0	352.0	4.0	43.0	5.0	343.0	351.0	18.0	324.0	323.0	118.0	322.0	230.0	248.0	246.0	277.0	74.0	302.0	324.0	8.0	317.0	98.0	194.0
16	112.0	97.0	111.0	102.0	181.0	103.0	126.0	97.0	90.0	87.0	84.0	94.0	114.0	103.0	88.0	108.0	107.0	132.0	76.0	104.0	15.0	39.0	11.0	350.0
17	30.0	23.0	4.0	39.0	5.0	63.0	7.0	5.0	60.0	118.0	106.0	40.0	1.0	14.0	0.0	351.0	1.0	0.0	352.0	39.0	348.0	3.0	353.0	112.0
18	339.0	341.0	343.0	348.0	344.0	346.0	345.0	336.0	316.0	348.0	331.0	335.0	326.0	330.0	337.0	0.0	346.0	345.0	333.0	337.0	0.0	342.0	313.0	326.0
19	333.0	349.0	335.0	321.0	338.0	349.0	345.0	345.0	344.0	339.0	337.0	340.0	329.0	349.0	345.0	332.0	328.0	27.0	337.0	314.0	335.0	349.0	330.0	329.0
20	318.0	332.0	350.0	332.0	334.0	326.0	327.0	322.0	328.0	326.0	334.0	345.0	0.0	350.0	338.0	341.0	324.0	347.0	342.0	22.0	22.0	336.0	295.0	103.0
21	151.0	181.0	6.0	228.0	315.0	0.0	301.0	298.0	297.0	331.0	354.0	37.0	74.0	324.0	344.0	218.0	327.0	335.0	333.0	327.0	331.0	115.0	3.0	88.0
22	339.0	342.0	328.0	337.0	232.0	325.0	347.0	318.0	314.0	324.0	330.0	101.0	111.0	166.0	103.0	0.0	351.0	338.0	314.0	222.0	45.0	348.0	336.0	334.0
23	330.0	323.0	300.0	351.0	339.0	339.0	346.0	343.0	332.0	329.0	334.0	332.0	335.0	336.0	329.0	340.0	337.0	332.0	347.0	337.0	340.0	328.0	338.0	333.0
24	349.0	342.0	11.0	335.0	344.0	335.0	339.0	346.0	346.0	346.0	340.0	336.0	342.0	342.0	348.0	327.0	349.0	342.0	345.0	333.0	341.0	351.0	321.0	327.0
25	339.0	9.0	335.0	344.0	334.0	346.0	334.0	328.0	329.0	316.0	352.0	0.0	353.0	354.0	312.0	324.0	13.0	48.0	261.0	191.0	59.0	121.0	27.0	342.0
26	32.0	14.0	42.0	328.0	235.0	242.0	41.0	99.0	343.0	12.0	49.0	48.0	87.0			117.0	105.0	118.0	119.0	106.0	116.0	137.0	149.0	205.0
27	218.0	208.0	227.0	206.0	207.0	216.0	231.0	227.0	223.0	229.0	226.0	219.0	232.0	226.0	233.0	224.0	220.0	229.0	222.0	254.0	230.0	199.0	124.0	61.0
28	61.0	107.0	67.0	6.0	4.0	94.0	112.0	109.0	121.0	113.0	114.0	123.0	127.0	114.0	108.0	116.0	107.0	118.0	120.0	110.0	106.0	112.0	120.0	131.0
29	136.0	178.0	214.0	197.0	201.0	203.0	208.0	202.0	197.0	199.0	181.0	177.0	60.0	71.0	280.0	280.0	100.0	154.0	41.0	77.0	20.0	38.0	99.0	17.0
30	113.0	77.0	77.0	94.0	88.0	326.0	355.0	21.0	349.0	342.0	344.0	333.0	312.0	309.0	300.0	306.0	302.0	297.0	297.0	299.0	298.0	298.0	301.0	301.0

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

December 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	300.0	318.0	315.0	0.0	330.0	324.0	331.0	111.0	336.0	9.0	347.0	4.0	352.0	325.0	343.0	8.0	109.0	273.0	225.0	311.0	11.0	153.0	3.0	40.0
2	99.0	100.0	98.0	95.0	101.0	101.0	103.0	114.0	116.0	108.0	120.0	106.0	107.0	99.0	99.0	106.0	111.0	109.0	101.0	107.0	119.0	108.0	108.0	126.0
3	109.0	104.0	112.0	123.0	113.0	104.0	86.0	343.0	188.0	193.0	184.0	175.0	194.0	198.0	159.0	355.0	354.0	18.0	105.0	355.0	345.0	5.0	9.0	0.0
4	9.0	7.0	174.0	190.0	100.0	87.0	89.0	247.0	82.0	111.0	98.0	7.0	24.0	59.0	238.0	18.0	3.0	15.0	22.0	59.0	38.0	45.0	19.0	71.0
5	25.0	28.0	348.0	21.0	35.0	126.0	342.0	343.0	132.0	10.0	354.0	7.0	80.0	222.0	354.0	1.0	341.0	1.0	84.0	324.0	338.0	329.0	347.0	327.0
6	335.0	311.0	321.0	2.0	1.0	312.0	343.0	325.0	341.0	329.0	350.0	321.0	164.0	33.0	310.0	321.0	332.0	339.0	353.0	318.0	346.0	61.0	334.0	0.0
7	317.0	353.0	167.0	51.0	25.0	104.0	219.0	176.0	171.0	133.0	297.0	188.0	343.0	296.0	154.0	292.0	313.0	141.0	117.0	109.0	92.0	87.0	106.0	108.0
8	259.0	202.0	231.0	176.0	56.0	68.0	326.0	337.0	209.0	3.0	43.0	341.0	160.0	114.0	20.0	1.0	343.0	6.0	241.0	151.0	204.0	312.0	175.0	159.0
9	2.0	63.0	226.0	164.0	142.0	50.0	16.0	82.0	195.0	144.0	103.0	298.0	212.0	247.0	95.0	26.0	352.0	43.0	39.0	354.0	63.0	9.0	59.0	5.0
10	24.0	92.0	8.0	49.0	16.0	55.0	342.0	46.0	54.0	192.0	224.0	215.0	204.0	218.0	230.0	217.0	208.0	235.0	309.0	232.0	180.0	174.0	198.0	23.0
11	213.0	110.0	34.0	15.0	214.0	213.0	206.0	194.0	222.0	187.0	196.0	221.0	211.0	224.0	235.0	228.0	232.0	227.0	217.0	219.0	212.0	278.0	146.0	193.0
12	347.0	193.0	314.0	250.0	113.0	183.0	191.0	218.0	233.0	232.0	239.0	278.0	264.0	262.0	354.0	342.0	355.0	353.0	169.0	240.0	223.0	211.0	181.0	169.0
13	143.0	69.0	71.0	102.0	103.0	114.0	107.0	119.0	121.0	116.0	115.0	118.0	125.0	114.0	114.0	111.0	113.0	138.0	160.0	175.0	182.0	28.0	131.0	159.0
14	118.0	110.0	127.0	156.0	167.0	122.0	128.0	168.0	169.0	143.0	143.0	137.0	129.0	163.0	162.0	175.0	181.0	179.0	192.0	198.0	177.0	173.0	166.0	218.0
15	208.0	212.0	207.0	200.0	191.0	193.0	178.0	154.0	154.0	130.0	22.0	89.0	222.0	27.0	316.0	210.0	196.0	225.0	322.0	165.0	107.0	46.0	217.0	136.0
16	231.0	16.0	175.0	196.0	201.0	194.0	193.0	193.0	202.0	214.0	212.0	199.0	187.0	195.0	11.0	272.0	233.0	208.0	345.0	297.0	151.0	147.0	203.0	290.0
17	48.0	351.0	325.0	290.0	116.0	142.0	160.0	46.0	220.0	225.0	312.0	112.0	334.0	46.0	107.0	152.0	308.0	332.0	348.0	1.0	352.0	43.0	355.0	352.0
18	38.0	286.0	61.0	11.0	1.0	21.0	18.0	27.0	91.0	351.0	12.0	39.0	23.0	6.0	321.0	352.0	214.0	176.0	60.0	77.0	82.0	59.0	259.0	347.0
19	351.0	349.0	343.0	322.0	330.0	328.0	317.0	350.0	110.0	342.0	98.0	129.0	99.0	102.0	97.0	92.0	116.0	124.0	308.0	262.0	81.0	129.0	120.0	99.0
20	150.0	98.0	121.0	137.0	82.0	19.0	164.0	96.0	163.0	100.0	92.0	343.0	7.0	347.0	317.0	34.0	101.0	81.0	290.0	320.0	2.0	241.0	82.0	351.0
21	277.0	325.0	310.0	337.0	114.0	90.0	102.0	107.0	72.0	50.0	343.0	19.0	53.0	9.0	5.0	100.0	58.0	98.0	92.0	97.0	100.0	107.0	102.0	108.0
22	173.0	134.0	131.0	130.0	136.0	123.0	112.0	124.0	120.0	123.0	109.0	117.0	113.0	111.0	114.0	113.0	111.0	113.0	114.0	110.0	112.0	117.0	116.0	117.0
23	115.0	109.0	122.0	119.0	108.0	110.0	110.0	105.0	111.0	114.0	108.0	105.0	114.0	110.0	112.0	111.0	121.0	115.0	114.0	114.0	110.0	111.0	114.0	120.0
24	105.0	115.0	112.0	109.0	110.0	114.0	118.0	115.0	116.0	108.0	116.0	114.0	107.0	119.0	109.0	99.0	110.0	108.0	105.0	198.0	185.0	181.0	158.0	227.0
25	200.0	219.0	215.0	232.0	187.0	192.0	201.0	194.0	197.0	194.0	186.0	199.0	219.0	152.0	307.0	266.0	279.0	122.0	99.0	171.0	8.0	350.0	157.0	204.0
26	253.0	97.0	157.0	290.0	40.0	129.0	68.0	72.0	106.0	110.0	103.0	111.0	118.0	110.0	123.0	118.0	124.0	122.0	110.0	120.0	117.0	129.0	155.0	173.0
27	178.0	200.0	204.0	197.0	180.0	192.0	187.0	196.0	201.0	189.0	204.0	203.0	202.0	210.0	227.0	206.0	218.0	190.0	207.0	217.0	212.0	198.0	201.0	213.0
28	63.0	184.0	219.0	304.0	246.0	240.0	193.0	226.0	237.0	310.0	18.0	30.0	0.0	20.0	20.0	23.0	24.0	26.0	12.0	192.0	91.0	0.0	57.0	95.0
29	34.0	325.0	36.0	314.0	62.0	48.0	338.0	348.0	345.0	339.0	341.0	102.0	133.0	283.0	303.0	39.0	120.0	349.0	180.0	99.0	336.0	101.0	135.0	22.0
30	11.0	112.0	345.0	40.0	7.0	318.0	0.0	95.0	95.0	105.0	5.0	107.0	62.0	255.0	15.0	20.0	15.0	34.0	208.0	286.0	8.0	255.0	71.0	63.0
31	158.0	82.0	50.0	80.0	106.0	112.0	97.0	312.0	353.0	323.0	319.0	298.0	57.0	81.0	91.0	79.0	87.0	86.0	93.0	47.0	54.0	332.0	53.0	355.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

January 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	52.0	4.0	350.0	347.0	345.0	346.0	222.0	350.0	319.0	262.0	184.0	78.0	81.0	235.0	51.0	53.0	227.0	179.0	226.0	200.0	200.0	204.0	244.0	50.0
2	67.0	66.0	215.0	59.0	52.0	38.0	32.0	32.0	33.0	32.0	32.0	74.0	29.0	83.0	351.0	46.0	12.0	247.0	72.0	181.0	139.0	292.0	58.0	62.0
3	22.0	205.0	351.0	191.0	306.0	223.0	280.0	35.0	205.0	218.0	291.0	217.0	199.0	194.0	209.0	201.0	222.0	225.0	292.0	265.0	314.0	306.0	322.0	346.0
4	174.0	61.0	27.0	339.0	348.0	9.0	333.0	326.0	335.0	335.0	197.0	37.0	110.0											
5															106.0	93.0	105.0	101.0	97.0	109.0	95.0	106.0	98.0	117.0
6	104.0	101.0	109.0	116.0	121.0	109.0	120.0	110.0	107.0	113.0	113.0	111.0	103.0	112.0	122.0	108.0	105.0	110.0	115.0	111.0	109.0	98.0	104.0	98.0
7	106.0	112.0	114.0	99.0	111.0	113.0	168.0	328.0	93.0	352.0	114.0	103.0	77.0	263.0	203.0	191.0	190.0	190.0	191.0	190.0	1.0	23.0	331.0	315.0
8	344.0	347.0	13.0	348.0	340.0	341.0	6.0	316.0	0.0	354.0	329.0	86.0	307.0	350.0	311.0	5.0	16.0	346.0	9.0	0.0	330.0	11.0	14.0	109.0
9	0.0	343.0	325.0	219.0	308.0	1.0	209.0	82.0	60.0	146.0	0.0	183.0	133.0	114.0	12.0	183.0	212.0	38.0	114.0	51.0	229.0	252.0	190.0	275.0
10	209.0	326.0	282.0	287.0	213.0	326.0	338.0	312.0	252.0	18.0	269.0	232.0	287.0	14.0	286.0	218.0	181.0	234.0	49.0	225.0	24.0	0.0	37.0	101.0
11	29.0	9.0	37.0	21.0	113.0	163.0	48.0	30.0	0.0	27.0	26.0	27.0	26.0	18.0	16.0	26.0	331.0	66.0	71.0	82.0	0.0	101.0	104.0	98.0
12	106.0	103.0	107.0	110.0	110.0	100.0	95.0	79.0	98.0	88.0	75.0	102.0	99.0	107.0	113.0	110.0	106.0	115.0	112.0	113.0	103.0	89.0	96.0	78.0
13	88.0	69.0	40.0	53.0	54.0	55.0	66.0	115.0	118.0	105.0	98.0	74.0	53.0	63.0	50.0	57.0	62.0	99.0	100.0	104.0	120.0	121.0	108.0	103.0
14	118.0	118.0	116.0	131.0	146.0	126.0	117.0	118.0	112.0	121.0	115.0	118.0	113.0	91.0	130.0	115.0	129.0	133.0	134.0	140.0	130.0	121.0	114.0	104.0
15	105.0	106.0	82.0	96.0	101.0	105.0	100.0	105.0	114.0	108.0	111.0	114.0	112.0	104.0	92.0	71.0	98.0	49.0	51.0	48.0	68.0	65.0	57.0	59.0
16	67.0	59.0	109.0	103.0	104.0	97.0	128.0	119.0	118.0	122.0	113.0	111.0	103.0	101.0	88.0	102.0	94.0	99.0	88.0	88.0	83.0	56.0	65.0	69.0
17	109.0	89.0	94.0	99.0	106.0	107.0	102.0	95.0	109.0	119.0	117.0	127.0	125.0	124.0	126.0	130.0	162.0	146.0	130.0	130.0	137.0	135.0	142.0	131.0
18	167.0	145.0	155.0	136.0	127.0	0.0	1.0	8.0	354.0	67.0	70.0	78.0	27.0	20.0	337.0	168.0	94.0	97.0	73.0	65.0	231.0	333.0	336.0	354.0
19	347.0	80.0	2.0	44.0	59.0	68.0	72.0	57.0	326.0	85.0	0.0	339.0	51.0	300.0	1.0	0.0	352.0	0.0	52.0	331.0	337.0	338.0	354.0	317.0
20	325.0	145.0	157.0	87.0	35.0	98.0	102.0	90.0	85.0	123.0	103.0	80.0	159.0	87.0	74.0	35.0	0.0	24.0	25.0	16.0	209.0	227.0	26.0	129.0
21	88.0	88.0	89.0	37.0	28.0	61.0	26.0	335.0	22.0	120.0	63.0	5.0	112.0	167.0	204.0	186.0	75.0	135.0	29.0	41.0	42.0	13.0	86.0	95.0
22	95.0	84.0	79.0	88.0	85.0	33.0	103.0	103.0	67.0	99.0	88.0	77.0	88.0	84.0	353.0	88.0	78.0	79.0	85.0	90.0	91.0	88.0	90.0	90.0
23	81.0	86.0	102.0	89.0	346.0	11.0	3.0	16.0	128.0	115.0	98.0	104.0	1.0	118.0	22.0	13.0	53.0	171.0	197.0	108.0	104.0	354.0	317.0	97.0
24	112.0	92.0	72.0	253.0	274.0	17.0	39.0	51.0	0.0	14.0	312.0	28.0	13.0	222.0	0.0	8.0	355.0	23.0	2.0	344.0	26.0	26.0	13.0	25.0
25	83.0	18.0	59.0	33.0	34.0	68.0	336.0	353.0	48.0	127.0	162.0	91.0	331.0	340.0	315.0	354.0	339.0	348.0	4.0	138.0	157.0	12.0	83.0	103.0
26	123.0	95.0	161.0	94.0	130.0	337.0	334.0	341.0	334.0	343.0	74.0	20.0	8.0	338.0	2.0	342.0	338.0	307.0	328.0	336.0	333.0	331.0	314.0	354.0
27	331.0	350.0	335.0	316.0	113.0	111.0	25.0	92.0	228.0	88.0	88.0	114.0	108.0	17.0	94.0	51.0	351.0	347.0	5.0	1.0	350.0	1.0	7.0	186.0
28	201.0	312.0	191.0	237.0	193.0	328.0	328.0	328.0	314.0	305.0	328.0	219.0	333.0	331.0	333.0	336.0	329.0	332.0	324.0	332.0	322.0	331.0	328.0	323.0
29	337.0	316.0	275.0	243.0	333.0	11.0	4.0	109.0	67.0	179.0	188.0	184.0	90.0	111.0	126.0	71.0	172.0	121.0	194.0	150.0	160.0	0.0	318.0	319.0
30	342.0	345.0	344.0	0.0	7.0	7.0	347.0	343.0	354.0	326.0	3.0	321.0	332.0	345.0	345.0	336.0	349.0	350.0	314.0	326.0	314.0	317.0	328.0	
31																								

Total Hours in Month 744 **Hours Data Available** 694 **Data Recovery** 93.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

February 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	281.0	338.0	328.0	328.0	319.0	336.0	334.0	348.0	333.0	354.0	336.0	351.0	339.0	339.0	0.0	343.0	343.0	344.0	345.0	335.0	336.0	337.0	346.0	341.0
2	332.0	319.0	331.0	246.0	24.0	344.0	333.0	136.0	231.0	286.0	17.0	5.0	11.0	20.0	340.0	333.0	133.0	350.0	354.0	309.0	48.0	104.0	169.0	300.0
3	15.0	324.0	315.0	331.0	267.0	332.0	341.0	329.0	297.0	323.0	321.0	305.0	297.0	318.0	321.0	50.0	83.0	337.0	321.0	346.0	0.0	336.0	352.0	9.0
4	349.0	333.0	76.0	114.0	204.0	28.0	55.0	351.0	316.0	0.0	328.0	55.0	341.0	339.0	340.0	342.0	207.0	324.0	205.0	346.0	100.0	77.0	120.0	119.0
5	103.0	328.0	48.0	3.0	306.0	36.0	50.0	88.0	91.0	91.0	68.0	32.0	72.0	44.0	42.0	92.0	84.0	100.0	72.0	63.0	80.0	54.0	58.0	353.0
6	0.0	339.0	4.0	317.0	182.0	75.0	156.0	46.0	1.0	92.0	19.0	351.0	71.0	271.0	7.0	353.0	28.0	0.0	178.0	9.0	354.0	347.0	318.0	330.0
7	322.0	4.0	335.0	0.0	312.0	324.0	320.0	344.0	350.0	353.0	333.0	19.0	345.0	347.0	352.0	199.0	249.0	23.0	202.0	154.0	111.0	111.0	52.0	1.0
8	201.0	152.0	89.0	82.0	176.0	159.0	136.0	133.0	83.0	36.0	35.0	190.0	74.0	13.0	249.0	51.0	280.0	31.0	344.0	64.0	14.0	12.0	50.0	37.0
9	203.0	191.0	181.0	207.0	166.0	353.0	65.0	155.0	197.0	223.0	183.0	175.0	54.0	251.0	209.0	235.0	205.0	220.0	180.0	185.0	188.0	256.0	134.0	126.0
10	190.0	164.0	195.0	195.0	193.0	46.0	251.0	34.0	205.0	28.0	225.0	51.0	180.0	275.0	261.0	165.0	189.0	187.0	204.0	164.0	218.0	201.0	204.0	273.0
11	277.0	222.0	247.0	247.0	266.0	267.0	258.0	280.0	296.0	315.0	317.0	302.0	294.0	290.0	314.0	324.0	313.0	318.0	326.0	286.0	313.0	324.0	328.0	331.0
12	337.0	333.0	0.0	287.0	331.0	337.0	253.0	284.0	335.0	220.0	209.0	351.0	256.0	120.0	3.0	65.0	290.0	117.0	269.0	332.0	349.0	347.0	349.0	355.0
13	0.0	42.0	324.0	329.0	338.0	333.0	350.0	1.0	337.0	337.0	345.0		340.0	281.0	222.0	349.0	333.0	146.0	324.0	319.0	271.0	345.0	209.0	41.0
14	200.0	174.0	202.0	64.0	131.0	161.0	43.0	38.0	326.0	28.0	13.0	224.0	350.0	144.0	306.0	270.0	318.0	347.0	323.0	313.0	311.0	330.0	336.0	329.0
15	330.0	340.0	348.0	335.0	333.0	340.0	307.0	283.0	330.0	321.0	348.0	326.0	335.0	343.0	325.0	331.0	331.0	344.0	341.0	328.0	326.0	333.0	329.0	328.0
16	334.0	315.0	324.0	327.0	324.0	316.0	329.0	333.0	334.0	333.0	333.0	342.0	337.0	342.0	329.0	344.0	337.0	337.0	340.0	122.0	346.0	324.0	319.0	334.0
17	7.0	350.0	287.0	353.0	286.0	343.0	74.0	355.0	338.0	323.0	208.0	303.0	343.0	335.0	217.0	0.0	171.0	320.0	331.0	346.0	136.0	127.0	101.0	126.0
18	202.0	194.0	120.0	122.0	108.0	86.0	132.0	91.0	108.0	109.0	104.0	111.0	89.0	115.0	106.0	36.0	353.0	38.0	105.0	105.0	123.0	99.0	64.0	76.0
19	346.0	27.0	75.0	209.0	151.0	173.0	101.0	99.0	148.0	83.0	3.0	71.0	97.0	127.0	187.0	27.0	333.0	62.0	197.0	85.0	198.0	176.0	152.0	54.0
20	159.0	0.0	175.0	270.0	273.0	18.0	229.0	15.0	3.0	27.0	239.0	207.0	313.0	8.0	222.0	87.0	33.0	50.0	140.0	331.0	328.0	353.0	116.0	88.0
21	118.0	111.0	177.0	336.0	320.0	312.0	88.0	321.0	350.0	339.0	345.0	326.0	324.0	346.0	350.0	332.0	352.0	349.0	354.0	348.0	342.0	348.0	0.0	238.0
22	347.0	0.0	336.0	333.0	335.0	71.0	152.0	136.0	101.0	6.0	273.0	0.0	352.0	348.0	69.0	18.0	194.0	245.0	162.0	136.0	176.0	98.0	123.0	115.0
23	103.0	81.0	352.0	210.0	156.0	109.0	98.0	347.0	322.0	298.0	344.0	341.0	344.0	348.0	339.0	348.0	342.0	340.0	343.0	333.0	336.0	339.0	349.0	340.0
24	15.0	29.0	189.0	29.0	126.0	113.0	187.0	77.0	90.0	70.0	201.0	30.0	30.0	15.0	45.0	102.0	102.0	122.0	54.0	346.0	342.0	349.0	19.0	349.0
25	324.0	339.0	316.0	343.0	123.0	168.0	70.0	101.0	28.0	27.0	19.0	93.0	224.0	221.0	213.0	183.0	190.0	196.0	187.0	86.0	79.0	63.0	29.0	296.0
26	355.0	228.0	90.0	176.0	328.0	344.0	348.0	323.0	336.0	331.0	343.0	334.0	332.0	312.0	307.0	307.0	328.0	318.0	1.0	287.0	298.0	147.0	9.0	224.0
27	305.0	207.0	195.0	208.0	350.0	61.0	81.0	63.0	41.0	339.0	7.0	36.0	7.0	90.0	84.0	87.0	193.0	161.0	186.0	195.0	199.0	196.0	260.0	241.0
28	244.0	222.0	197.0	215.0	209.0	218.0	212.0	219.0	207.0	160.0	166.0	155.0	152.0	171.0	212.0	194.0	194.0	201.0	183.0	196.0	200.0	200.0	212.0	212.0
29	192.0	301.0	205.0	193.0	105.0	211.0	227.0	208.0	196.0	199.0	308.0	72.0	105.0	321.0	309.0	321.0	315.0	314.0	321.0	310.0	329.0	322.0	329.0	326.0

Total Hours in Month 696 **Hours Data Available** 695 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

March 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	329.0	324.0	320.0	325.0	315.0	317.0	319.0	325.0	321.0	330.0	303.0	312.0	317.0	5.0	333.0	347.0	354.0	347.0	331.0	302.0	351.0	336.0	310.0	311.0
2	337.0	340.0	308.0	214.0	243.0	202.0	215.0	163.0	120.0	37.0	2.0	225.0	235.0	68.0	301.0	87.0	192.0	89.0	331.0	215.0	199.0	252.0	193.0	174.0
3	60.0	87.0	179.0	349.0	322.0	107.0	117.0	208.0	110.0	343.0	113.0	180.0	325.0	303.0	195.0	313.0	311.0	227.0	277.0	324.0	232.0	17.0	29.0	179.0
4	80.0	316.0	73.0	81.0	117.0	77.0	73.0	118.0	78.0	95.0	100.0	88.0	98.0	45.0	352.0	35.0	31.0	160.0	146.0	107.0	197.0	100.0	144.0	39.0
5	31.0	168.0	135.0	161.0	107.0	100.0	155.0	192.0	208.0	185.0	171.0	134.0	169.0	88.0	335.0	148.0	146.0	120.0	143.0	187.0	71.0	346.0	200.0	85.0
6	93.0	121.0	27.0	355.0	0.0	4.0	15.0	35.0	346.0	38.0	94.0	55.0	254.0	30.0	59.0	29.0	123.0	123.0	107.0	215.0	354.0	327.0	85.0	11.0
7	162.0	219.0	15.0	23.0	71.0	54.0	90.0	71.0	94.0	86.0	111.0	100.0	101.0	114.0	108.0	120.0	114.0	127.0	120.0	122.0	125.0	114.0	120.0	108.0
8	122.0	119.0	121.0	115.0	115.0	333.0	317.0	239.0	209.0	189.0	115.0	355.0	23.0	230.0	240.0	108.0	106.0	118.0	112.0	115.0	121.0	114.0	115.0	109.0
9	101.0	111.0	113.0	105.0	115.0	113.0	105.0	112.0	113.0	112.0	113.0	119.0	99.0	97.0	354.0	131.0	87.0	135.0	130.0	123.0	131.0	142.0	134.0	106.0
10	111.0	108.0	108.0	106.0	106.0	109.0	108.0	113.0	111.0	117.0	121.0	125.0	121.0	112.0	81.0	89.0	94.0	98.0	346.0	292.0	206.0	214.0	213.0	265.0
11	264.0	181.0	205.0	228.0	216.0	199.0	209.0	202.0	208.0	208.0	209.0	204.0	197.0	175.0	202.0	199.0	191.0	180.0	186.0	192.0	163.0	323.0	315.0	316.0
12	312.0	337.0	327.0	322.0	350.0	352.0	14.0	3.0	107.0	72.0	342.0	13.0	352.0	117.0	338.0	222.0	122.0	92.0	122.0	155.0	304.0	0.0	220.0	94.0
13	141.0	111.0	184.0	91.0	159.0	85.0	118.0	178.0	88.0	119.0	98.0	105.0	10.0	201.0	350.0	13.0	19.0	17.0	17.0	85.0	206.0	212.0	8.0	168.0
14	98.0	49.0	326.0	96.0	95.0	101.0	106.0	104.0	104.0	103.0	105.0	114.0	110.0	107.0	106.0	108.0	110.0	108.0	105.0	110.0	109.0	114.0	117.0	107.0
15	117.0	102.0	104.0	112.0	120.0	104.0	106.0	129.0	120.0	130.0	117.0	108.0	45.0	213.0	213.0	219.0	116.0	160.0	212.0	157.0	150.0	161.0	208.0	207.0
16	144.0	140.0	126.0	119.0	135.0	139.0	123.0	159.0	148.0	151.0	171.0	169.0	93.0	68.0	25.0	348.0	122.0	109.0	130.0	124.0	111.0	104.0	106.0	96.0
17	107.0	111.0	120.0	112.0	116.0	110.0	119.0	122.0	123.0	122.0	134.0	141.0	158.0	164.0	162.0	172.0	185.0	180.0	196.0	348.0	239.0	233.0	200.0	210.0
18	121.0	126.0	120.0	115.0	116.0	119.0	111.0	113.0	117.0	116.0	113.0	113.0	115.0	108.0	114.0	104.0	114.0	114.0	116.0	108.0	108.0	107.0	113.0	113.0
19	106.0	103.0	104.0	110.0	112.0	115.0	121.0	115.0	119.0	117.0	115.0	108.0	130.0	127.0	131.0	128.0	132.0	118.0	118.0	125.0	129.0	120.0	114.0	112.0
20	111.0	109.0	103.0	105.0	102.0	105.0	105.0	109.0	113.0	119.0	113.0	144.0	198.0	202.0	197.0	213.0	219.0	209.0	212.0	207.0	202.0	214.0	206.0	223.0
21	203.0	202.0	193.0	199.0	188.0	199.0	196.0	200.0	212.0	200.0	196.0	184.0	196.0	189.0	207.0	89.0	127.0	59.0	78.0	65.0	11.0	89.0	105.0	107.0
22	104.0	108.0	106.0	113.0	111.0	106.0	112.0	112.0	107.0	113.0	109.0	99.0	108.0	115.0	118.0	120.0	113.0	119.0	118.0	111.0	125.0	119.0	105.0	120.0
23	118.0	116.0	121.0	121.0	120.0	120.0	121.0	126.0	115.0	120.0	115.0	118.0	114.0	124.0	120.0	123.0	118.0	119.0	114.0	108.0	114.0	108.0	101.0	112.0
24	110.0	107.0	111.0	140.0	182.0	153.0	163.0	146.0	122.0	129.0	126.0	132.0	136.0	118.0	112.0	124.0	126.0	113.0	122.0	128.0	127.0	131.0	87.0	124.0
25	139.0	157.0	235.0	202.0	200.0	202.0	202.0	206.0	208.0	202.0	218.0	352.0												
26														241.0	231.0	210.0	220.0	237.0	234.0	226.0	262.0	259.0	282.0	298.0
27	292.0	302.0	333.0	0.0	335.0	322.0	326.0	320.0	309.0	308.0	300.0	302.0	307.0	307.0	308.0	297.0	314.0	310.0	306.0	312.0	303.0	323.0	329.0	336.0
28	330.0	315.0	329.0	331.0	336.0	330.0	6.0	0.0	340.0	0.0	33.0	350.0	0.0	335.0	331.0	314.0	331.0	336.0	334.0	341.0	323.0	187.0	212.0	156.0
29	155.0	168.0	198.0	118.0	152.0	162.0	83.0	112.0	75.0	168.0	143.0	80.0	123.0	208.0	35.0	110.0	113.0	241.0	264.0	210.0	196.0	242.0	224.0	231.0
30	215.0	352.0	22.0	3.0	9.0	4.0	9.0	14.0	343.0	32.0	15.0	61.0	61.0	85.0	102.0	244.0	334.0	264.0	339.0	0.0	332.0	330.0	310.0	350.0
31	335.0	307.0	158.0	122.0	297.0	266.0	143.0	99.0	67.0	180.0	133.0	159.0	61.0	192.0	156.0	319.0	326.0	331.0	134.0	318.0	354.0	349.0	347.0	43.0

Total Hours in Month 744 **Hours Data Available** 719 **Data Recovery** 96.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

April 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	32.0	50.0	49.0	155.0	306.0	241.0	22.0	26.0	92.0	271.0	87.0	14.0	11.0	41.0	8.0	353.0	347.0	342.0	344.0	337.0	346.0	316.0	332.0	341.0
2	314.0	174.0	277.0	204.0	98.0	12.0	269.0	238.0	258.0	83.0	337.0	175.0	173.0	321.0	340.0	341.0	331.0	330.0	328.0	319.0	331.0	335.0	332.0	335.0
3	331.0	333.0	332.0	324.0	343.0	267.0	341.0	343.0	62.0	70.0	23.0	15.0	8.0	336.0	339.0	337.0	324.0	333.0	334.0	332.0	326.0	328.0	312.0	314.0
4	314.0	321.0	316.0	328.0	323.0	329.0	329.0	322.0	327.0	327.0	331.0	336.0	342.0	331.0	348.0	340.0	338.0	73.0	69.0	336.0	346.0	121.0	330.0	331.0
5	3.0	332.0	332.0	327.0	333.0	331.0	336.0	338.0	338.0	0.0	322.0	329.0	325.0	332.0	322.0	328.0	341.0	344.0	342.0	343.0	342.0	328.0	343.0	327.0
6	334.0	305.0	313.0	332.0	320.0	331.0	332.0	327.0	342.0	342.0	335.0	331.0	0.0	354.0	343.0	349.0	324.0	314.0	319.0	322.0	335.0	333.0	323.0	321.0
7	320.0	318.0	331.0	315.0	314.0	319.0	314.0	319.0	316.0	321.0	325.0	326.0	327.0	331.0	327.0	328.0	337.0	344.0	336.0	344.0	0.0	334.0	335.0	335.0
8	330.0	332.0	337.0	348.0	337.0	344.0	340.0	330.0	336.0	36.0	10.0	345.0	342.0	346.0	339.0	335.0	345.0	340.0	336.0	329.0	336.0	334.0	244.0	40.0
9	339.0	330.0	326.0	349.0	324.0	314.0	328.0	0.0	317.0	328.0	332.0	336.0	331.0	331.0	328.0	335.0	344.0	333.0	335.0	339.0	341.0	326.0	342.0	332.0
10	314.0	338.0	328.0	63.0	326.0	343.0	316.0	330.0	341.0	336.0	346.0	331.0	342.0	344.0	345.0	336.0	340.0	338.0	326.0	321.0	330.0	341.0	336.0	334.0
11	332.0	326.0	331.0	332.0	332.0	339.0	332.0	326.0	331.0	338.0	333.0	331.0	328.0	336.0	331.0	324.0	323.0	344.0	336.0	334.0	330.0	326.0	326.0	336.0
12	328.0	330.0	331.0	331.0	330.0	320.0	310.0	322.0	324.0	340.0	335.0	318.0	312.0	326.0	325.0	334.0	325.0	335.0	342.0	342.0	337.0	337.0	338.0	329.0
13	23.0	342.0	352.0	351.0	0.0	326.0	322.0	312.0	111.0	160.0	348.0	349.0	351.0	345.0	0.0	350.0	343.0	333.0	339.0	333.0	336.0	304.0	149.0	151.0
14	53.0	23.0	213.0	290.0	76.0	0.0	79.0	99.0	97.0	97.0	81.0	119.0	297.0	118.0	126.0	130.0	125.0	139.0	117.0	335.0	105.0	107.0	116.0	100.0
15	89.0	331.0	54.0	101.0	102.0	92.0	98.0	99.0	101.0	103.0	110.0	105.0	112.0	98.0	106.0	97.0	60.0	106.0	51.0	56.0	77.0	71.0	87.0	44.0
16	47.0	121.0	46.0	43.0	66.0	112.0	114.0	60.0	88.0	69.0	138.0	83.0	119.0	112.0	121.0	118.0	114.0	127.0	125.0	128.0	135.0	109.0	118.0	113.0
17	116.0	111.0	112.0	120.0	123.0	114.0	114.0	119.0	111.0	121.0	120.0	126.0	119.0	114.0	127.0	119.0	119.0	130.0	127.0	135.0	129.0	44.0	0.0	311.0
18	267.0	203.0	190.0	192.0	240.0	189.0	63.0	38.0	57.0	277.0	0.0	7.0	5.0	209.0	199.0	195.0	205.0	208.0	129.0	5.0	94.0	139.0	122.0	124.0
19	114.0	110.0	99.0	117.0	109.0	114.0	100.0	101.0	138.0	116.0	109.0	113.0	174.0	163.0	171.0	154.0	104.0	194.0	87.0	50.0	125.0	87.0	344.0	3.0
20	323.0	341.0	324.0	341.0	335.0	341.0	341.0	341.0	349.0	347.0	332.0	324.0	318.0	329.0	336.0	331.0	324.0	335.0	341.0	331.0	329.0	320.0	324.0	317.0
21	329.0	338.0	320.0	319.0	334.0	314.0	329.0	336.0	342.0	345.0	339.0	340.0	344.0	346.0	333.0	332.0	323.0	319.0	338.0	331.0	334.0	344.0	336.0	336.0
22	326.0	349.0	326.0	328.0	327.0	347.0	276.0	341.0	350.0	350.0	344.0	349.0	339.0	346.0	336.0	327.0	342.0	347.0	0.0	347.0	336.0	333.0	340.0	339.0
23	324.0	336.0	327.0	333.0	338.0	334.0	22.0	327.0	148.0	336.0	345.0	354.0	0.0	347.0	345.0	341.0	325.0	323.0	328.0	332.0	322.0	272.0	163.0	131.0
24	205.0	131.0	114.0	30.0	181.0	154.0	188.0	151.0	305.0	24.0	15.0	228.0	253.0	225.0	206.0	113.0	111.0	56.0	214.0	186.0	210.0	193.0	228.0	64.0
25	50.0	239.0	226.0	219.0	233.0	316.0	210.0	16.0	173.0	270.0	293.0	327.0	307.0	334.0	339.0	341.0	345.0	339.0	340.0	350.0	341.0	331.0	332.0	261.0
26	330.0	330.0	347.0	338.0	267.0	162.0	268.0	162.0	188.0	169.0	116.0	285.0	309.0	307.0	0.0	314.0	316.0	293.0	295.0	306.0	304.0	112.0	336.0	327.0
27	329.0	304.0	39.0	40.0	336.0	326.0	322.0	320.0	336.0	339.0	342.0	348.0	35.0	108.0	153.0	228.0	224.0	344.0	347.0	340.0	338.0	331.0	324.0	330.0
28	241.0	309.0	334.0	332.0	332.0	294.0	333.0	338.0	1.0	341.0	338.0	352.0	344.0	332.0	338.0	331.0	338.0	341.0	349.0	333.0	339.0	0.0	342.0	334.0
29	316.0	92.0	275.0	215.0	187.0	153.0	19.0	110.0	132.0	10.0	102.0	122.0	302.0	299.0	194.0	248.0	203.0	217.0	277.0	270.0	243.0	241.0	259.0	217.0
30	268.0	49.0	244.0	223.0	121.0	298.0	229.0	211.0	125.0	198.0	192.0	259.0	282.0	300.0	251.0	278.0	302.0	281.0	302.0	315.0	337.0	313.0	311.0	325.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

May *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	329.0	316.0	332.0	325.0	322.0	335.0	335.0	317.0	320.0	336.0	330.0	350.0	322.0	311.0	333.0	341.0	334.0	330.0	328.0	331.0	334.0	335.0	327.0	257.0
2	310.0	335.0	339.0	0.0	147.0	117.0	112.0	130.0	339.0	350.0	351.0	339.0	347.0	331.0	342.0	330.0	335.0	337.0	333.0	333.0	334.0	332.0	338.0	338.0
3	331.0	0.0	334.0	325.0	349.0	354.0	354.0	311.0	324.0	328.0			327.0	333.0	343.0	327.0	334.0	0.0	340.0	337.0	341.0	339.0	340.0	336.0
4	338.0	330.0	323.0	335.0	66.0	340.0	340.0	338.0	343.0	352.0	0.0	342.0	344.0	344.0	341.0	333.0	332.0	347.0	345.0	340.0	337.0	327.0	333.0	337.0
5	337.0	335.0	324.0	335.0	322.0	321.0	31.0	128.0	325.0	314.0	341.0	328.0	342.0	344.0	340.0	337.0	329.0	353.0	318.0	324.0	328.0	322.0	351.0	315.0
6	308.0	131.0	187.0	235.0	281.0	335.0	163.0	112.0	332.0	13.0	165.0	217.0	233.0	209.0	259.0	197.0	263.0	185.0	201.0	126.0	132.0	119.0	108.0	133.0
7	107.0	106.0	104.0	84.0	104.0	108.0	103.0	109.0	109.0	109.0	107.0	108.0	108.0	108.0	104.0	115.0	112.0	88.0	86.0	85.0	98.0	96.0	115.0	107.0
8	92.0	106.0	97.0	127.0	141.0	190.0	205.0	199.0	193.0	204.0	206.0	212.0	211.0	207.0	220.0	200.0	197.0	208.0	237.0	233.0	236.0	239.0	246.0	237.0
9	343.0	208.0	325.0	264.0	29.0	112.0	274.0	344.0	333.0	353.0	310.0	323.0	335.0	337.0	332.0	325.0	314.0	311.0	309.0	309.0	303.0	300.0	308.0	328.0
10	335.0	337.0	331.0	303.0	311.0	147.0	331.0	331.0	312.0	340.0	321.0	324.0	293.0	319.0	281.0	307.0	311.0	298.0	321.0	332.0	298.0	298.0	294.0	290.0
11	297.0	310.0	304.0	305.0	316.0	311.0	311.0	328.0	324.0	316.0	326.0	332.0	339.0	310.0	305.0	323.0	323.0	327.0	305.0	318.0	310.0	314.0	309.0	320.0
12	340.0	310.0	129.0	274.0	116.0	204.0	198.0	242.0	201.0	224.0	235.0	204.0	200.0	192.0	196.0	205.0	216.0	227.0	218.0	217.0	190.0	210.0	203.0	194.0
13	227.0	259.0	179.0	158.0	156.0	166.0	160.0	188.0	229.0	179.0	185.0	162.0	170.0	163.0	191.0	200.0	208.0	208.0	218.0	229.0	235.0	239.0	249.0	247.0
14	199.0	240.0	238.0	236.0	157.0	198.0	195.0	197.0	195.0	182.0	222.0	263.0	246.0	266.0	256.0	266.0	253.0	240.0	250.0	254.0	271.0	281.0	290.0	231.0
15	247.0	259.0	199.0	258.0	275.0	239.0	69.0	195.0	203.0	205.0	209.0	209.0	189.0	190.0	198.0	192.0	205.0	157.0	173.0	219.0	167.0	189.0	228.0	233.0
16	240.0	241.0	291.0	310.0	320.0	317.0	331.0	316.0	323.0	308.0	317.0	325.0	263.0	283.0	261.0	288.0	310.0	278.0	258.0	255.0	265.0	274.0	271.0	273.0
17	274.0	281.0	280.0	286.0	289.0	319.0	296.0	305.0	319.0	327.0	329.0	319.0	343.0	342.0	0.0	321.0	322.0	303.0	298.0	282.0	251.0	283.0	258.0	221.0
18	314.0	72.0	261.0	294.0	307.0	251.0	295.0	330.0	315.0	331.0	330.0	343.0	315.0	310.0	308.0	343.0	344.0	350.0	343.0	331.0	335.0	326.0	326.0	328.0
19	296.0	336.0	13.0	28.0	0.0	101.0	25.0	36.0	333.0	334.0	327.0	325.0	340.0	343.0	348.0	338.0	329.0	329.0	328.0	324.0	314.0	305.0	298.0	38.0
20	339.0	338.0	0.0	311.0	4.0	99.0	351.0	2.0	340.0	337.0	347.0	344.0	344.0	339.0	353.0	346.0	345.0	346.0	350.0	0.0	351.0	342.0	338.0	321.0
21	331.0	344.0	337.0	0.0	267.0	252.0	353.0	9.0	178.0	346.0	353.0	351.0	36.0	6.0	9.0	338.0	11.0	1.0	194.0	188.0	208.0	203.0	229.0	197.0
22	243.0	162.0	218.0	214.0	216.0	230.0	229.0	249.0	139.0	191.0	209.0	139.0	141.0	143.0	182.0	178.0	175.0	160.0	162.0	180.0	212.0	192.0	211.0	246.0
23	247.0	215.0	206.0	205.0	222.0	275.0	208.0	200.0	199.0	198.0	239.0	221.0	247.0	232.0	244.0	252.0	182.0	211.0	198.0	188.0	198.0	194.0	181.0	61.0
24	50.0	1.0	271.0	218.0	351.0	20.0	353.0	21.0	83.0	129.0	77.0	241.0	324.0	328.0	165.0	164.0	156.0	164.0	177.0	173.0	206.0	209.0	198.0	182.0
25	162.0	187.0	205.0	201.0	253.0	266.0	353.0	113.0	142.0	103.0	349.0	7.0	334.0	74.0	22.0	95.0	69.0	41.0	324.0	194.0	212.0	176.0	232.0	161.0
26	162.0	72.0	190.0	209.0	185.0	201.0	171.0	0.0	14.0	53.0	35.0	60.0	54.0	46.0	70.0	111.0	164.0	145.0	172.0	170.0	226.0	217.0	219.0	203.0
27	196.0	206.0	205.0	191.0	175.0	193.0	174.0	187.0	177.0	210.0	135.0	141.0	138.0	131.0	130.0	140.0	124.0	150.0	162.0	170.0	163.0	198.0	225.0	226.0
28	19.0	106.0	106.0	143.0	134.0	125.0	135.0	131.0	134.0	140.0	144.0	129.0	130.0	130.0	118.0	137.0	127.0	138.0	153.0	169.0	175.0	175.0	195.0	159.0
29	68.0	167.0	31.0	18.0	99.0	347.0	50.0	63.0	94.0	120.0	122.0	105.0	138.0	134.0	141.0	161.0	147.0	173.0	139.0	190.0	210.0	240.0	226.0	232.0
30	184.0	198.0	0.0	323.0	74.0	109.0	135.0	133.0	140.0	134.0	124.0	137.0	125.0	131.0	138.0	127.0	133.0	147.0	131.0	109.0	128.0	161.0	147.0	143.0
31	116.0	267.0	74.0	106.0	70.0	309.0	40.0	111.0	126.0	107.0	128.0	134.0	108.0	111.0	137.0	139.0	145.0	142.0	114.0	129.0	204.0	230.0	223.0	180.0

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

June 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	253.0	230.0	3.0	284.0	352.0	261.0	345.0	267.0	337.0	337.0	349.0	322.0	353.0	341.0	344.0	334.0	339.0	267.0	299.0	6.0	83.0	241.0	257.0	214.0
2	18.0	324.0	219.0	255.0	205.0	79.0	190.0	181.0	190.0	189.0	194.0	179.0	191.0	192.0	195.0	201.0	205.0	212.0	203.0	210.0	194.0	159.0	233.0	190.0
3	220.0	166.0	350.0	207.0	331.0	215.0	200.0	183.0	176.0	111.0	135.0	112.0	126.0	123.0	113.0	116.0	120.0	117.0	112.0	115.0	110.0	120.0	120.0	118.0
4	140.0	121.0	120.0	147.0	98.0	296.0	16.0	52.0	82.0	93.0	82.0	105.0	105.0	72.0	76.0	87.0	69.0	63.0	68.0	131.0	182.0	244.0	148.0	40.0
5	134.0	113.0	96.0	137.0	110.0	120.0	120.0	129.0	144.0	110.0	121.0	127.0	128.0	121.0	126.0	111.0	112.0	115.0	111.0	111.0	117.0	123.0	117.0	124.0
6	113.0	115.0	114.0	114.0	104.0	108.0	109.0	110.0	111.0	107.0	96.0	108.0	106.0	119.0	118.0	105.0	116.0	122.0	127.0	122.0	123.0	132.0	125.0	132.0
7	20.0	11.0	3.0	333.0	220.0	220.0	168.0	98.0	235.0	58.0	331.0	301.0	131.0	318.0	198.0	179.0	204.0	196.0	181.0	205.0	221.0	190.0	198.0	295.0
8	71.0	49.0	78.0	264.0	285.0	217.0	214.0	59.0	36.0	176.0	291.0	296.0	291.0	323.0	326.0	321.0	281.0	288.0	283.0	296.0	271.0	234.0	256.0	284.0
9	298.0	310.0	93.0	79.0	145.0	0.0	329.0	9.0	15.0	353.0	350.0	312.0	309.0	292.0	329.0	260.0	329.0	279.0	36.0	326.0	294.0	289.0	294.0	69.0
10	73.0	354.0	34.0	208.0	276.0	0.0	25.0	223.0	190.0	76.0	212.0	189.0	224.0	91.0	140.0	178.0	178.0	166.0	155.0	161.0	174.0	145.0	141.0	113.0
11	130.0	162.0	195.0	149.0	154.0	150.0	128.0	123.0	107.0	118.0	133.0	130.0	132.0	130.0	133.0	129.0	127.0	132.0	129.0	112.0	125.0	112.0	125.0	115.0
12	145.0	117.0	131.0	115.0	110.0	108.0	108.0	116.0	107.0	107.0	108.0	117.0	106.0	123.0	113.0	112.0	116.0	126.0	112.0	119.0	115.0	113.0	117.0	112.0
13	105.0	110.0	124.0	120.0	121.0	124.0	114.0	111.0	117.0	128.0	111.0	119.0	119.0	128.0	121.0	119.0	131.0	111.0	115.0	120.0	108.0	126.0	126.0	134.0
14	123.0	129.0	128.0	146.0	156.0	154.0	90.0	71.0	122.0	111.0	116.0	120.0	143.0	159.0	164.0	149.0	136.0	140.0	118.0	129.0	139.0	209.0	190.0	208.0
15	198.0	214.0	203.0	212.0	193.0	28.0	248.0	132.0	205.0	178.0	193.0	190.0	209.0	120.0	163.0	206.0	261.0	298.0	183.0	184.0	208.0	220.0	195.0	202.0
16	215.0	190.0	214.0	260.0	221.0	249.0	50.0	33.0	145.0	116.0	128.0	127.0	119.0	142.0	137.0	114.0	131.0		115.0	122.0	108.0	103.0	113.0	114.0
17	110.0	109.0	107.0	112.0	107.0	107.0	122.0	121.0	120.0	116.0	123.0	95.0	104.0	128.0	113.0	107.0	117.0	135.0	137.0	108.0	131.0	138.0	125.0	118.0
18	117.0	128.0	97.0	115.0	113.0	115.0	116.0	42.0	71.0	82.0	48.0	103.0	71.0	114.0	107.0	117.0	210.0	238.0	155.0	86.0	64.0	61.0	154.0	131.0
19	120.0	113.0	110.0	128.0	113.0	93.0	107.0	108.0	109.0	109.0	116.0	119.0	126.0	114.0	125.0	126.0	112.0	127.0	126.0	107.0	109.0	109.0	108.0	101.0
20	132.0	120.0	30.0	339.0	354.0	154.0	329.0	188.0	323.0	346.0	238.0	62.0	307.0	251.0	65.0	63.0	240.0	213.0	204.0	209.0	191.0	180.0	202.0	178.0
21	196.0	81.0	211.0	242.0	233.0	35.0	140.0	201.0	184.0	182.0	207.0	203.0	227.0	197.0	195.0	187.0	164.0	134.0	146.0	163.0	148.0	123.0	108.0	134.0
22	175.0	206.0	204.0	151.0	128.0	126.0	130.0	115.0	116.0	125.0	135.0	120.0	118.0	152.0	148.0	156.0	140.0	127.0	127.0	151.0	133.0	163.0	172.0	299.0
23	161.0	216.0	355.0	43.0	3.0	198.0	225.0	190.0	172.0	343.0	0.0	1.0	41.0	330.0	220.0	197.0	180.0	280.0	222.0	196.0	183.0	216.0	236.0	262.0
24	175.0	243.0	215.0	192.0	239.0	217.0	236.0	250.0	121.0	255.0	256.0	279.0	236.0	32.0	88.0	217.0	210.0	191.0	173.0	205.0	210.0	199.0	190.0	219.0
25	229.0	213.0	308.0	213.0	199.0	206.0	238.0	60.0	65.0	76.0	111.0	138.0	136.0	113.0	129.0	109.0	116.0	111.0	119.0	103.0	114.0	124.0	120.0	120.0
26	115.0	115.0	105.0	97.0	103.0	105.0	125.0	110.0	103.0	113.0	112.0	118.0	105.0	108.0	113.0	112.0	116.0	113.0	105.0	118.0	116.0	119.0	122.0	116.0
27	123.0	118.0	111.0	109.0	112.0	118.0	115.0	110.0	110.0	111.0	127.0	110.0	113.0	125.0	105.0	116.0	108.0	115.0	120.0	109.0	114.0	115.0	123.0	116.0
28	122.0	113.0	120.0	110.0	126.0	115.0	106.0	122.0	115.0	140.0	133.0	178.0	198.0	134.0	209.0	187.0	158.0	93.0	142.0	162.0	168.0	155.0	144.0	136.0
29	135.0	146.0	116.0	129.0	144.0	111.0	112.0	117.0	127.0	123.0	131.0	155.0	162.0	151.0	137.0	131.0	138.0	132.0	133.0	159.0	160.0	218.0	270.0	241.0
30	280.0	259.0	5.0	223.0	255.0	265.0	330.0	37.0	4.0	291.0	300.0	280.0	283.0	283.0	282.0	308.0	277.0	269.0	291.0	288.0	296.0	297.0	293.0	277.0

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

July *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	260.0	72.0	120.0	101.0	79.0	316.0	31.0	348.0	349.0	336.0	350.0	42.0	149.0	171.0	87.0	149.0	146.0	184.0	175.0	186.0	171.0	219.0	190.0	156.0
2	106.0	295.0	232.0	223.0	337.0	288.0	351.0	172.0	81.0	198.0	149.0	134.0	169.0	211.0	183.0	203.0	188.0	186.0	208.0	220.0	182.0	185.0	180.0	49.0
3	196.0	214.0	222.0	325.0	335.0	340.0	302.0	303.0	342.0	133.0	168.0	137.0	50.0	149.0	209.0	185.0	240.0	48.0	328.0	191.0	205.0	216.0	223.0	252.0
4	229.0	234.0	1.0	200.0	216.0	335.0	121.0	72.0	48.0	26.0	117.0	116.0	122.0	126.0	128.0	147.0	96.0	122.0	98.0	126.0	303.0	117.0	126.0	87.0
5	127.0	116.0	115.0	141.0	132.0	131.0	118.0	127.0	133.0	146.0	131.0	136.0	136.0	132.0	146.0	138.0	136.0	127.0	128.0	137.0	123.0	125.0	115.0	115.0
6	133.0	153.0	174.0	109.0	109.0	122.0	116.0	121.0	121.0	114.0	116.0	135.0	118.0	128.0	149.0	148.0	162.0	148.0	179.0	143.0	221.0	183.0	33.0	248.0
7	57.0	326.0	283.0	126.0	65.0	72.0	72.0	105.0	75.0	174.0	136.0	122.0	119.0	140.0	134.0	145.0	144.0	168.0	157.0	126.0	148.0	150.0	136.0	134.0
8	121.0	118.0	114.0	124.0	125.0	115.0	104.0	91.0	86.0	86.0	86.0	81.0	106.0	96.0	100.0	92.0	112.0	102.0	104.0	89.0	105.0	99.0	114.0	74.0
9	339.0	25.0	327.0	287.0	223.0	38.0	151.0	247.0	206.0	73.0	125.0	132.0	149.0	131.0	134.0	132.0	128.0	131.0	133.0	122.0	118.0	134.0	124.0	107.0
10	111.0	107.0	119.0	102.0	120.0	106.0	120.0	119.0	133.0	113.0	126.0	106.0	132.0	133.0	146.0	161.0	155.0	177.0	182.0	151.0	180.0	186.0	287.0	216.0
11	201.0	241.0	99.0	0.0	334.0	229.0	145.0	345.0	349.0	346.0	321.0	296.0	328.0	310.0	1.0	314.0	346.0	315.0	311.0	277.0	282.0	280.0	272.0	236.0
12	235.0	267.0	117.0	193.0	192.0	190.0	202.0	225.0	322.0	300.0	306.0	277.0	306.0	287.0	307.0	333.0	293.0	294.0	282.0	270.0	259.0	257.0	248.0	232.0
13	230.0	234.0	67.0	221.0	204.0	53.0	315.0	341.0	337.0	321.0	65.0	57.0	205.0	148.0	213.0	195.0	211.0	196.0	227.0	211.0	206.0	189.0	193.0	188.0
14	173.0	193.0	193.0	189.0	195.0	268.0	212.0	187.0	196.0	218.0	201.0	204.0	217.0	181.0	163.0	161.0	183.0	160.0	155.0	149.0	169.0	169.0	211.0	106.0
15	70.0	122.0	126.0	130.0	110.0	91.0	137.0	122.0	161.0	153.0	131.0	129.0	139.0	145.0	171.0	216.0	245.0	3.0	232.0	251.0	71.0	63.0	223.0	245.0
16	213.0	196.0	237.0	289.0	223.0	92.0	193.0	205.0	228.0	210.0	281.0	290.0	316.0	311.0	317.0	341.0	320.0	303.0	309.0	38.0	46.0	214.0	205.0	210.0
17	181.0	212.0	29.0	106.0	33.0	33.0	86.0	93.0	186.0	168.0	193.0	209.0	200.0	178.0	154.0	199.0	166.0	174.0	200.0	198.0	197.0	184.0	186.0	183.0
18	162.0	235.0	214.0	196.0	215.0	207.0	222.0	201.0	202.0	196.0	220.0	194.0	188.0	207.0	239.0	216.0	180.0	281.0	219.0	306.0	316.0	321.0	318.0	306.0
19	298.0	295.0	350.0	305.0	253.0	40.0	312.0	330.0	318.0	326.0	347.0	354.0	321.0	304.0	328.0	314.0	2.0	234.0	188.0	205.0	209.0	207.0	254.0	278.0
20	244.0	215.0	243.0	209.0	344.0	270.0	216.0	237.0	148.0	175.0	240.0	65.0	62.0	339.0	170.0	210.0	192.0	107.0	222.0	201.0	167.0	131.0	131.0	144.0
21	117.0	102.0	109.0	124.0	108.0	112.0	110.0	120.0	113.0	101.0	112.0	105.0	111.0	107.0	122.0	121.0	120.0	114.0	112.0	119.0	123.0	122.0	115.0	133.0
22	133.0	123.0	116.0	98.0	103.0	89.0	89.0	85.0	69.0	107.0	68.0	99.0	75.0	100.0	75.0	111.0	116.0	109.0	114.0	131.0	208.0	185.0	183.0	180.0
23	199.0	167.0	0.0	47.0	8.0	266.0	7.0	40.0	58.0	20.0	110.0	84.0	83.0	95.0	233.0	76.0	207.0	199.0	206.0		198.0	354.0	220.0	
24	202.0	254.0	341.0	70.0	129.0	264.0	190.0	232.0	199.0	1.0	1.0	0.0	280.0	267.0	34.0	172.0	147.0	205.0	201.0	189.0	174.0	212.0	243.0	179.0
25	20.0	273.0	218.0	63.0	119.0	50.0	139.0	84.0	54.0	93.0	148.0	136.0	136.0	123.0	113.0	160.0	163.0	125.0	136.0	133.0	129.0	127.0	124.0	152.0
26	138.0	135.0	65.0	159.0	223.0	37.0	42.0	281.0	131.0	112.0	133.0	111.0	136.0	144.0	139.0	161.0	137.0	155.0	134.0	131.0	132.0	134.0	336.0	131.0
27	51.0	124.0	308.0	274.0	140.0	33.0	344.0	63.0	47.0	77.0	91.0	151.0	114.0	129.0	121.0	123.0	137.0	123.0	118.0	117.0	130.0	118.0	128.0	118.0
28	89.0	111.0	76.0	89.0	60.0	34.0	304.0	326.0	1.0	347.0	1.0	353.0	33.0	68.0	118.0	153.0	173.0	144.0	157.0	203.0	203.0	202.0	202.0	198.0
29	204.0	204.0	188.0	195.0	164.0	203.0	212.0	188.0	185.0	161.0	13.0	289.0	293.0	322.0	192.0	191.0	206.0	98.0	67.0	194.0	216.0	200.0	190.0	11.0
30	4.0	313.0	247.0	197.0	246.0	222.0	248.0	220.0	205.0	115.0	153.0	140.0	177.0	186.0	199.0	183.0	239.0	206.0	222.0	202.0	217.0	194.0	190.0	214.0
31	175.0	240.0	269.0	214.0	188.0	116.0	199.0	286.0	322.0	203.0	123.0	117.0	178.0	140.0	97.0	201.0	178.0	175.0	187.0	173.0	179.0	179.0	163.0	216.0

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

August 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	210.0	214.0	192.0	225.0	299.0	203.0	112.0	16.0	205.0	352.0	352.0	330.0	43.0	189.0	167.0	181.0	192.0	209.0	312.0	263.0	282.0	273.0	194.0	199.0
2	167.0	231.0	238.0	253.0	264.0	224.0	225.0	104.0	38.0	142.0	162.0	140.0	142.0	100.0	120.0	125.0	126.0	131.0	115.0	113.0	93.0	68.0	99.0	37.0
3	83.0	101.0	105.0	54.0	95.0	97.0	101.0	101.0	118.0	115.0	119.0	119.0	107.0	107.0	117.0	108.0	113.0	114.0	115.0	109.0	103.0	75.0	119.0	121.0
4	119.0	119.0	105.0	107.0	103.0	111.0	137.0	58.0	104.0	109.0	24.0	59.0	50.0	109.0	115.0	73.0	114.0	124.0	120.0	108.0	131.0	124.0	130.0	148.0
5	152.0	170.0	171.0	193.0	184.0	177.0	162.0	190.0	184.0	211.0	334.0	176.0	10.0	199.0	244.0	234.0	289.0	247.0	273.0	282.0	306.0	322.0	312.0	314.0
6	309.0	343.0	346.0	314.0	327.0	329.0	320.0	336.0	326.0	342.0	334.0	338.0	282.0	340.0	304.0	315.0	345.0	331.0	41.0	281.0	148.0	172.0	229.0	33.0
7	45.0	91.0	288.0	307.0	303.0	345.0	301.0	317.0	3.0	338.0	0.0	10.0	334.0	343.0	342.0	347.0	349.0	336.0	352.0	339.0	347.0	347.0	330.0	323.0
8	345.0	316.0	318.0	319.0	324.0	331.0	318.0	332.0	316.0	322.0	338.0	333.0	343.0	346.0	350.0	328.0	324.0	314.0	330.0	344.0	0.0	350.0	327.0	340.0
9	335.0	7.0	346.0	347.0	335.0	346.0	337.0	333.0	335.0	318.0	325.0	325.0	327.0	0.0	18.0	344.0	264.0	253.0	258.0	269.0	228.0	195.0	203.0	178.0
10	179.0	180.0	173.0	46.0	38.0	354.0	84.0	57.0	64.0	153.0	159.0	129.0	150.0	137.0	137.0	131.0	120.0	119.0	118.0	124.0	117.0	130.0	122.0	116.0
11	111.0	129.0	113.0	115.0	115.0	135.0	123.0	125.0	138.0	132.0	132.0	119.0	127.0	132.0	133.0	124.0	133.0	129.0	140.0	125.0	134.0	147.0	160.0	205.0
12	259.0	211.0	1.0	179.0	273.0	256.0	329.0	321.0	351.0	351.0	348.0	340.0	348.0	336.0	347.0	347.0	68.0	76.0	70.0	200.0	193.0	216.0	220.0	16.0
13	341.0	331.0	320.0	214.0	169.0	117.0	130.0	82.0	50.0	163.0	166.0	205.0	158.0	175.0	154.0	134.0	133.0	140.0	141.0	153.0	147.0	122.0	118.0	138.0
14	118.0	133.0	104.0	103.0	106.0	111.0	123.0	111.0	119.0	118.0	129.0	120.0	135.0	118.0	118.0	109.0	129.0	114.0	128.0	110.0	115.0	112.0	112.0	106.0
15	110.0	107.0	113.0	108.0	102.0	108.0	115.0	110.0	118.0	115.0	102.0	119.0	115.0	127.0	113.0	132.0	122.0	116.0	112.0	104.0	117.0	91.0	104.0	119.0
16	120.0	108.0	118.0	122.0	93.0	94.0	285.0	137.0	82.0	72.0	85.0	42.0	104.0	242.0	217.0	179.0	215.0	196.0	243.0	214.0	211.0	204.0	331.0	117.0
17	197.0	263.0	311.0	327.0	143.0	312.0	317.0	36.0	292.0	328.0	309.0	309.0	297.0	273.0	274.0	285.0	309.0	228.0	250.0	214.0	130.0	49.0	173.0	184.0
18	178.0	185.0	191.0	199.0	188.0	222.0	30.0	246.0	338.0	45.0	68.0	163.0	182.0	221.0				179.0	200.0	181.0	168.0	141.0	127.0	133.0
19	125.0	124.0	112.0	125.0	127.0	120.0	131.0	114.0	121.0	124.0	112.0	127.0	120.0	110.0	121.0	120.0	115.0	113.0	128.0	126.0	123.0	114.0	110.0	123.0
20	115.0	109.0	119.0	113.0	103.0	105.0	113.0	110.0	102.0	123.0	122.0	117.0	114.0	94.0	113.0	112.0	114.0	112.0	106.0	116.0	127.0	128.0	129.0	142.0
21	123.0	135.0	122.0	131.0	127.0	126.0	118.0	137.0	121.0	149.0	142.0	138.0	126.0	135.0	127.0	138.0	125.0	121.0	129.0	121.0	103.0	110.0	115.0	114.0
22	113.0	121.0	119.0	110.0	110.0	124.0	120.0	112.0	109.0	117.0	117.0	105.0	111.0	105.0	117.0	121.0	116.0	119.0	113.0	114.0	106.0	110.0	117.0	118.0
23	111.0	112.0	129.0	110.0	102.0	111.0	112.0	109.0	125.0	121.0	104.0	111.0	115.0	116.0	115.0	106.0	121.0	119.0	114.0	127.0	128.0	127.0	126.0	125.0
24	126.0	103.0	60.0	2.0	51.0	78.0	325.0	352.0	34.0	40.0	56.0	36.0	340.0	105.0	94.0	56.0	201.0	193.0	173.0	164.0	139.0	129.0	122.0	155.0
25	155.0	164.0	138.0	172.0	174.0	140.0	159.0	146.0	153.0	141.0	156.0	182.0	184.0	180.0	185.0	173.0	123.0	139.0	134.0	140.0	190.0	203.0	224.0	213.0
26	224.0	209.0	245.0	228.0	189.0	237.0	232.0	201.0	223.0	193.0	225.0	201.0	181.0	202.0	181.0	198.0	147.0	68.0	205.0	173.0	205.0	1.0	51.0	60.0
27	169.0	38.0	198.0	45.0	340.0	289.0	175.0	115.0	122.0	91.0	113.0	125.0	118.0	132.0	121.0	126.0	126.0	98.0	111.0	97.0	112.0	113.0	110.0	118.0
28	109.0	113.0	113.0	120.0	112.0	110.0	113.0	113.0	106.0	103.0	127.0	123.0	129.0	132.0	127.0	135.0	129.0	127.0	122.0	122.0	128.0	139.0	111.0	48.0
29	112.0	62.0	75.0	255.0	95.0	27.0	1.0	216.0	232.0	261.0	135.0	103.0	224.0	190.0	197.0	186.0	198.0	205.0	200.0	183.0	142.0	219.0	147.0	203.0
30	149.0	3.0	238.0	229.0	190.0	168.0	154.0	135.0	115.0	129.0	125.0	121.0	129.0	111.0	111.0	114.0	126.0	127.0	187.0	214.0	234.0	240.0	226.0	237.0
31	235.0	231.0	238.0	243.0	252.0	237.0	265.0	246.0	239.0	246.0	258.0	262.0	267.0	253.0	271.0	277.0	233.0	248.0	246.0	234.0	231.0	223.0	200.0	218.0

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

September 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	218.0	221.0	223.0	225.0	211.0	214.0	206.0	211.0	200.0	199.0	213.0	214.0	227.0	209.0	175.0	197.0	181.0	217.0	217.0	220.0	204.0	217.0	227.0	211.0
2	209.0	230.0	247.0	211.0	255.0	225.0	0.0	161.0	207.0	96.0	319.0	298.0	354.0	333.0	293.0	315.0	281.0	339.0	333.0	313.0	284.0	277.0	22.0	177.0
3	196.0	286.0	237.0	127.0	246.0	248.0	187.0	252.0	223.0	43.0	108.0	132.0	194.0	309.0	162.0	191.0	203.0	193.0	218.0	214.0	179.0	185.0	180.0	163.0
4	175.0	159.0	130.0	136.0	131.0	136.0	143.0	147.0	131.0	153.0	126.0	131.0	124.0	123.0	111.0	149.0	112.0	85.0	89.0	112.0	108.0	106.0	106.0	114.0
5	135.0	128.0	126.0	123.0	119.0	182.0	183.0	183.0	208.0	199.0	199.0	199.0	206.0	205.0	236.0	203.0	291.0	282.0	292.0	317.0	245.0	208.0	165.0	51.0
6	11.0	219.0	64.0	71.0	280.0	306.0	304.0	306.0	319.0	302.0	302.0	299.0	321.0	311.0	325.0	317.0	325.0	332.0	332.0	313.0	308.0	318.0	320.0	319.0
7	310.0	308.0	325.0	191.0	23.0	308.0	180.0	269.0	135.0	3.0	315.0	329.0	336.0	331.0	352.0	346.0	349.0	345.0	341.0	349.0	344.0	354.0	338.0	77.0
8	339.0	166.0	333.0	237.0	198.0	189.0	169.0	132.0	138.0	176.0	37.0	353.0	122.0	205.0	14.0	223.0	351.0	325.0	345.0	343.0	323.0	346.0	333.0	331.0
9	325.0	176.0	256.0	350.0	291.0	314.0	332.0	325.0	343.0	348.0	344.0	354.0	345.0	348.0	333.0	331.0	349.0	336.0	327.0	343.0	350.0	335.0	336.0	325.0
10	327.0	328.0	315.0	312.0	313.0	320.0	319.0	48.0	316.0	333.0	330.0	345.0	5.0	0.0	336.0	339.0	326.0	338.0	336.0	326.0	307.0	16.0	134.0	253.0
11	287.0	97.0	221.0	140.0	38.0	40.0	37.0	0.0	312.0	324.0	332.0	340.0	293.0	330.0	332.0	298.0	320.0	318.0	291.0	274.0	296.0	216.0	59.0	193.0
12	293.0	77.0	264.0	267.0	325.0	280.0	293.0	302.0	282.0	308.0	348.0	269.0	163.0	211.0	234.0	221.0	209.0	230.0	213.0	220.0	214.0	208.0	197.0	226.0
13	201.0	49.0	262.0	284.0	166.0	278.0	284.0	265.0	206.0	176.0	255.0	296.0	298.0	295.0	276.0	281.0	292.0	294.0	302.0	293.0	285.0	263.0	281.0	276.0
14	291.0	271.0	285.0	315.0	326.0	313.0	295.0	312.0	223.0	216.0	258.0	297.0	267.0	322.0	275.0	283.0	290.0	286.0	277.0	343.0	318.0	323.0	309.0	0.0
15	333.0	320.0	336.0	0.0	337.0	352.0	332.0	348.0	352.0	337.0	342.0	339.0	4.0	350.0	341.0	329.0	0.0	353.0	345.0	313.0	230.0	175.0	206.0	186.0
16	177.0	10.0	353.0	21.0	32.0	269.0	12.0	309.0	291.0	51.0	133.0	141.0	127.0				138.0	129.0	125.0	118.0	123.0	118.0	102.0	123.0
17	102.0	118.0	107.0	115.0	127.0	120.0	127.0	120.0	124.0	116.0	135.0	116.0	108.0	108.0	119.0	117.0	116.0	121.0	137.0	144.0	136.0	153.0	155.0	202.0
18	206.0	192.0	196.0	232.0	218.0	285.0	272.0	298.0	302.0	289.0	299.0	305.0	308.0	319.0	306.0	0.0	351.0	327.0	318.0	328.0	335.0	324.0	333.0	328.0
19	330.0	331.0	318.0	305.0	325.0	325.0	333.0	330.0	333.0	316.0	321.0	349.0	349.0	341.0	341.0	347.0	320.0	337.0	344.0	343.0	339.0	334.0	333.0	332.0
20	339.0	336.0	347.0	334.0	333.0	338.0	340.0	347.0	343.0	331.0	345.0	1.0	4.0	337.0	0.0	3.0	345.0	352.0	349.0	346.0	344.0	340.0	348.0	353.0
21	325.0	336.0	319.0	75.0	126.0	337.0	30.0	105.0	30.0	0.0	345.0	342.0	334.0	0.0	312.0	313.0	293.0	332.0	338.0	351.0	346.0	0.0	338.0	0.0
22	342.0	336.0	328.0	325.0	327.0	333.0	31.0	28.0	328.0	349.0	28.0	51.0	32.0	93.0	158.0	60.0	121.0	40.0	78.0	271.0	243.0	332.0	128.0	128.0
23	199.0	70.0	121.0	203.0	171.0	189.0	190.0	268.0	288.0	326.0	280.0	316.0	348.0	350.0	348.0	0.0	326.0	342.0	310.0	324.0	327.0	152.0	288.0	241.0
24	348.0	206.0	232.0	198.0	167.0	166.0	327.0	186.0	337.0	310.0	323.0	341.0	344.0	346.0	322.0	325.0	348.0	0.0	0.0	339.0	340.0	327.0	315.0	332.0
25	0.0	343.0	349.0	336.0	328.0	310.0	213.0	317.0	348.0	338.0	324.0	349.0	9.0	0.0	347.0	1.0	335.0	344.0	339.0	0.0	345.0	350.0	2.0	352.0
26	341.0	340.0	329.0	331.0	10.0	175.0	347.0	90.0	215.0	20.0	67.0	58.0	74.0	60.0	121.0	122.0	121.0	125.0	107.0	118.0	100.0	99.0	91.0	36.0
27	81.0	101.0	101.0	74.0	71.0	76.0	87.0	44.0	92.0	50.0	36.0	47.0	51.0	68.0	36.0	352.0	342.0	329.0	325.0	337.0	326.0	338.0	339.0	339.0
28	346.0	338.0	342.0	343.0	327.0	333.0	340.0	328.0	323.0	328.0	331.0	340.0	334.0	334.0	335.0	331.0	330.0	343.0	346.0	346.0	0.0	343.0	345.0	327.0
29	321.0	328.0	323.0	330.0	336.0	319.0	328.0	326.0	341.0	339.0	353.0	353.0	336.0	332.0	330.0	343.0	329.0	338.0	353.0	333.0	313.0	203.0	50.0	93.0
30	120.0	34.0	17.0	100.0	108.0	110.0	111.0	105.0	109.0	108.0	114.0	137.0	145.0	141.0	154.0	152.0	128.0	138.0	149.0	145.0	142.0	153.0	110.0	71.0

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

October 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	100.0	42.0	53.0	54.0	335.0	63.0	91.0	82.0	88.0	99.0	104.0	108.0	114.0	105.0	121.0	109.0	120.0	116.0	145.0	127.0	130.0	118.0	121.0	39.0
2	251.0	340.0	80.0	214.0	21.0	117.0	119.0	205.0	255.0	46.0	204.0	351.0	18.0	345.0	351.0	354.0	331.0	5.0	312.0	307.0	299.0	332.0	313.0	336.0
3	0.0	309.0	313.0	306.0	309.0	326.0	317.0	315.0	0.0	325.0	325.0	347.0	333.0	325.0	350.0	351.0	352.0	353.0	330.0	337.0	336.0	352.0	337.0	337.0
4	342.0	336.0	344.0	338.0	340.0	350.0	14.0	342.0	345.0	347.0	330.0	334.0	337.0	0.0	341.0	336.0	341.0	332.0	343.0	251.0	137.0	182.0	144.0	146.0
5	82.0	41.0	107.0	32.0	87.0	91.0	132.0	54.0	44.0	0.0	75.0	98.0	130.0	133.0	123.0	134.0	133.0	133.0	131.0	138.0	137.0	131.0	133.0	131.0
6	127.0	127.0	130.0	129.0	116.0	127.0	122.0	111.0	123.0	131.0	151.0	178.0	178.0	184.0	211.0	198.0	168.0	205.0	214.0	223.0	345.0	312.0	84.0	188.0
7	317.0	288.0	219.0	170.0	352.0	286.0	298.0	70.0	250.0	203.0	201.0	139.0	235.0	215.0	239.0	223.0	196.0	232.0	231.0	211.0	223.0	218.0	219.0	211.0
8	223.0	227.0	213.0	216.0	233.0	200.0	89.0	36.0	205.0	225.0	209.0	193.0	295.0	327.0	310.0	313.0	306.0	310.0	312.0	296.0	320.0	308.0	296.0	299.0
9	177.0	281.0	286.0	56.0	196.0	234.0	115.0	212.0	317.0	0.0	19.0	321.0	319.0	308.0	309.0	278.0	303.0	305.0	318.0	306.0	316.0	305.0	323.0	312.0
10	313.0	300.0	304.0	305.0	299.0	302.0	296.0	68.0	181.0	319.0	318.0	307.0	297.0	307.0	302.0	323.0	302.0	308.0	317.0	307.0	315.0	309.0	323.0	306.0
11	92.0	196.0	268.0	287.0	343.0	56.0	244.0	250.0	189.0	58.0	40.0	211.0	193.0	204.0	199.0	224.0	226.0	232.0	234.0	242.0	269.0	269.0	287.0	302.0
12	308.0	315.0	304.0	209.0	299.0	235.0	232.0	289.0	227.0	252.0	223.0	24.0	136.0	45.0	43.0	39.0	43.0	320.0	66.0	64.0	66.0	13.0	315.0	133.0
13	276.0	125.0	49.0	103.0	63.0	270.0	120.0	137.0	183.0	72.0	75.0	39.0	37.0	245.0	211.0	288.0	139.0	149.0	145.0	153.0	141.0	138.0	131.0	
14																		105.0	109.0	117.0	107.0	110.0	117.0	118.0
15	119.0	110.0	114.0	107.0	104.0	106.0	103.0	109.0	103.0	116.0	95.0	98.0	103.0	104.0	119.0	112.0	107.0	114.0	112.0	123.0	120.0	111.0	116.0	113.0
16	127.0	128.0	129.0	105.0	70.0	54.0	127.0	266.0	110.0	142.0	355.0	128.0	56.0	135.0	3.0	28.0	94.0	322.0	145.0	229.0	218.0	212.0	179.0	176.0
17	188.0	126.0	28.0	127.0	61.0	20.0	128.0	123.0	225.0	99.0	93.0	129.0	16.0	55.0	340.0	18.0	353.0	1.0	348.0	186.0	130.0	110.0	115.0	120.0
18	160.0	138.0	101.0	49.0	296.0	343.0	353.0	103.0	26.0	319.0	113.0	290.0	340.0	332.0	329.0	353.0	334.0	343.0	340.0	317.0	296.0	190.0	127.0	128.0
19	130.0	177.0	151.0	73.0	59.0	15.0	350.0	44.0	279.0	150.0	346.0	0.0	342.0	0.0	351.0	317.0	345.0	341.0	350.0	334.0	342.0	322.0	336.0	321.0
20	316.0	296.0	308.0	31.0	337.0	288.0	54.0	322.0	11.0	152.0	127.0	214.0	6.0	52.0	336.0	344.0	330.0	0.0	332.0	338.0	0.0	316.0	336.0	300.0
21	115.0	350.0	351.0	341.0	325.0	339.0	342.0	34.0	178.0	123.0	116.0	110.0	160.0	173.0	336.0	318.0	312.0	341.0	327.0	319.0	295.0	333.0	348.0	343.0
22	0.0	336.0	0.0	346.0	338.0	0.0	340.0	350.0	347.0	350.0	340.0	339.0	0.0	349.0	344.0	344.0	337.0	336.0	334.0	333.0	328.0	324.0	337.0	47.0
23	329.0	346.0	330.0	321.0	338.0	315.0	351.0	14.0	93.0	98.0	96.0	39.0	42.0	339.0	70.0	10.0	48.0	45.0	31.0	87.0	38.0	139.0	140.0	311.0
24	133.0	110.0	116.0	118.0	122.0	107.0	108.0	108.0	111.0	113.0	104.0	113.0	102.0	102.0	109.0	107.0	106.0	119.0	106.0	115.0	110.0	107.0	108.0	102.0
25	107.0	122.0	139.0	163.0	175.0	193.0	189.0	186.0	175.0	155.0	116.0	109.0	113.0	107.0	119.0	129.0	178.0	172.0	168.0	224.0	179.0	156.0	135.0	143.0
26	186.0	207.0	197.0	186.0	195.0	161.0	205.0	218.0	217.0	130.0	9.0	57.0	98.0	70.0	87.0	23.0	63.0	179.0	221.0	1.0	229.0	191.0	139.0	250.0
27	214.0	277.0	191.0	260.0	163.0	178.0	228.0	62.0	311.0	330.0	8.0	352.0	325.0	327.0	341.0	332.0	35.0	352.0	345.0	202.0	17.0	321.0	90.0	12.0
28	32.0	40.0	337.0	12.0	21.0	1.0	9.0	5.0	2.0	4.0	1.0	24.0	66.0	0.0	14.0	352.0	8.0	7.0	24.0	36.0	6.0	327.0	0.0	335.0
29	333.0	47.0	287.0	163.0	133.0	136.0	104.0	122.0	113.0	101.0	111.0	127.0	105.0	139.0	85.0	94.0	92.0	108.0	100.0	84.0	21.0	177.0	105.0	87.0
30	61.0	13.0	22.0	165.0	0.0	78.0	170.0	153.0	51.0	138.0	1.0	355.0	333.0	342.0	0.0	341.0	27.0	312.0	337.0	345.0	301.0	329.0	316.0	299.0
31	316.0	318.0	321.0	321.0	328.0	337.0	320.0	340.0	0.0	329.0	333.0	0.0	349.0	326.0	333.0	0.0	342.0	337.0	337.0	346.0	350.0	331.0	343.0	338.0

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

November 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	0.0	351.0	31.0	15.0	6.0	2.0	331.0	351.0	329.0	317.0	335.0	340.0	314.0	345.0	339.0	334.0	340.0	334.0	334.0	344.0	281.0	328.0	177.0	14.0
2	276.0	148.0	132.0	175.0	88.0	207.0	100.0	94.0	123.0	129.0	1.0	106.0	265.0	53.0	95.0	77.0	92.0	57.0	199.0	145.0	45.0	38.0	55.0	126.0
3	237.0	211.0	275.0	171.0	16.0	31.0	29.0	312.0	241.0	107.0	12.0	10.0	339.0	96.0	347.0	287.0	316.0	2.0	343.0	343.0	296.0	111.0	69.0	271.0
4	202.0	282.0	6.0	57.0	22.0	91.0	352.0	346.0	269.0	111.0	113.0	25.0	346.0	11.0	5.0	32.0	48.0	353.0	264.0	221.0	275.0	202.0	134.0	107.0
5	143.0	102.0	100.0	77.0	94.0	96.0	95.0	23.0	244.0	43.0	213.0	345.0	101.0	95.0	98.0	44.0	51.0	10.0	200.0	5.0	3.0	88.0	291.0	235.0
6	326.0	347.0	340.0	308.0	103.0	298.0	265.0	73.0	21.0	300.0	324.0	339.0	317.0	289.0	290.0	348.0	335.0	304.0	292.0	327.0	308.0	284.0	260.0	269.0
7	320.0	254.0	239.0	268.0	224.0	196.0	245.0	1.0	53.0	50.0	201.0	60.0	16.0	67.0	56.0	243.0	66.0	61.0	74.0	70.0	131.0	121.0	110.0	126.0
8	117.0	127.0	130.0	133.0	128.0	122.0	130.0	136.0	145.0	130.0	126.0	155.0	145.0	192.0	209.0	269.0	235.0	202.0	212.0	227.0	222.0	169.0	304.0	178.0
9	224.0	198.0	348.0	199.0	163.0	187.0	191.0	207.0	347.0	2.0	2.0	191.0	73.0	64.0	23.0	332.0	321.0	306.0	287.0	282.0	286.0	292.0	271.0	265.0
10	268.0	271.0	101.0	344.0	75.0	2.0	41.0	77.0	54.0	77.0	9.0	231.0	241.0	222.0	220.0	226.0	227.0	232.0	235.0	205.0	190.0	217.0	215.0	113.0
11	223.0	193.0	234.0	163.0	201.0	192.0	182.0	228.0	222.0	277.0	59.0	9.0	232.0	49.0	1.0	1.0	321.0	23.0	354.0	343.0	255.0	295.0	290.0	260.0
12	171.0	196.0	185.0	166.0	174.0	227.0	128.0	226.0	16.0	342.0	16.0	38.0	18.0	52.0	224.0	52.0	142.0	54.0	151.0	70.0	63.0	79.0	137.0	156.0
13	197.0	167.0	167.0	84.0	227.0	47.0	162.0	194.0	53.0	70.0	24.0	155.0	84.0	4.0	27.0	337.0	321.0	51.0	66.0	52.0	349.0	342.0	3.0	336.0
14	332.0	52.0	41.0	37.0	303.0	104.0	353.0	329.0	295.0	318.0	328.0	2.0	96.0	128.0	129.0	155.0	100.0	187.0	160.0	126.0	86.0	0.0	231.0	19.0
15	248.0	12.0	1.0	20.0	14.0	8.0	20.0	31.0	25.0	32.0	146.0	37.0	49.0	56.0	86.0	80.0	72.0	64.0	66.0	10.0	3.0	3.0	216.0	302.0
16	351.0	64.0	20.0	350.0	4.0	27.0	24.0	8.0	58.0	101.0	105.0	51.0	84.0	40.0	35.0	205.0	95.0	146.0	137.0	41.0	41.0	339.0	333.0	4.0
17	353.0	346.0	327.0	352.0	339.0	20.0	328.0	124.0	336.0	331.0	328.0	169.0	336.0	333.0	0.0	333.0	17.0	16.0	0.0	11.0	14.0	98.0	27.0	114.0
18	137.0	84.0	101.0	96.0	114.0	108.0	118.0	117.0	108.0	108.0	122.0	130.0	97.0	136.0	115.0	140.0	0.0	266.0	80.0	338.0	64.0	230.0	118.0	54.0
19	316.0	257.0	248.0	79.0	205.0	213.0	187.0	215.0	169.0	148.0	105.0	125.0	175.0	167.0	102.0	269.0	333.0	324.0	304.0	312.0	217.0	196.0	166.0	320.0
20	285.0	284.0	292.0	309.0	333.0	336.0	227.0	272.0	13.0	33.0	257.0	229.0	217.0	332.0	191.0	73.0	351.0	241.0	319.0	33.0	189.0	196.0	45.0	339.0
21	228.0	73.0	43.0	341.0	79.0	42.0	75.0	202.0	86.0	152.0	195.0	297.0	237.0	167.0	178.0	165.0	166.0	222.0	201.0	227.0	250.0	17.0	32.0	171.0
22	167.0	149.0	134.0	129.0	138.0	135.0	131.0	133.0	126.0	132.0	134.0	118.0	124.0	123.0	130.0	117.0	118.0	115.0	117.0	120.0	118.0	120.0	122.0	118.0
23	113.0	117.0	111.0	119.0	113.0	120.0	110.0	118.0	117.0	118.0	108.0	118.0	120.0	116.0	113.0	117.0	113.0	104.0	108.0	113.0	113.0	127.0	133.0	130.0
24	123.0	107.0	100.0	111.0	112.0	111.0	112.0	107.0	113.0	111.0	111.0	133.0	103.0	112.0	120.0	102.0	97.0	82.0	105.0	97.0	119.0	116.0	117.0	2.0
25	114.0	145.0	125.0	110.0	95.0	116.0	111.0	213.0	190.0	206.0	191.0	211.0	215.0	208.0	206.0	200.0	203.0	199.0	193.0	197.0	202.0	203.0	184.0	181.0
26	167.0	143.0	242.0	193.0	102.0	95.0	94.0	77.0	51.0	73.0	28.0	347.0	85.0	98.0	100.0	111.0	104.0	109.0	102.0	96.0	113.0	111.0	107.0	119.0
27	113.0	144.0	140.0	128.0	116.0	114.0	123.0	116.0	95.0	13.0	107.0	56.0	354.0	48.0	230.0	217.0	76.0	141.0	53.0	46.0	91.0	112.0	103.0	116.0
28	110.0	108.0	105.0	110.0	110.0	109.0	109.0	110.0	96.0	98.0	97.0	111.0	105.0	110.0	149.0	195.0	202.0	197.0	209.0	191.0	208.0	202.0	198.0	193.0
29	190.0	202.0	211.0	206.0	198.0	199.0	190.0	191.0	196.0	191.0	198.0	231.0	174.0	117.0	116.0	97.0	65.0	90.0	38.0	50.0	26.0	41.0	1.0	252.0
30	350.0	221.0	211.0	290.0	215.0	189.0	266.0	71.0	80.0	244.0	328.0	244.0	37.0	41.0	71.0	100.0	51.0	135.0	140.0	147.0	203.0	196.0	185.0	165.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

December 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	154.0	115.0	112.0	126.0	118.0	120.0	114.0	118.0	124.0	118.0	125.0	127.0	126.0	117.0	126.0	124.0	124.0	120.0	123.0	128.0	130.0	131.0	127.0	147.0
2	161.0	207.0	189.0	203.0	195.0	215.0	228.0	217.0	217.0	202.0	219.0	218.0	209.0	197.0	97.0	215.0	204.0	325.0	158.0	243.0	254.0	314.0	179.0	150.0
3	296.0	250.0	278.0	233.0	248.0	2.0	18.0	201.0	318.0	339.0	350.0	334.0	326.0	318.0	325.0	321.0	314.0	339.0	224.0	195.0	271.0	233.0	246.0	223.0
4	30.0	4.0	74.0	12.0	53.0	26.0	0.0	314.0	99.0	105.0	94.0	115.0	106.0	109.0	111.0	96.0	114.0	101.0	107.0	114.0	97.0	99.0	102.0	109.0
5	114.0	107.0	118.0	112.0	124.0	112.0	111.0	96.0	95.0	117.0	118.0	103.0	100.0	100.0	98.0	94.0	94.0	90.0	57.0	24.0	96.0	75.0	77.0	69.0
6	120.0	119.0	116.0	110.0	115.0	117.0	132.0	144.0	143.0	201.0	182.0	214.0	194.0	204.0	195.0	192.0	206.0	185.0	234.0	185.0	23.0	248.0	20.0	238.0
7	218.0	69.0	199.0	214.0	217.0	322.0	167.0	342.0	342.0	327.0	298.0	301.0	332.0	308.0		289.0	284.0	306.0	297.0	221.0	308.0	244.0	68.0	319.0
8	349.0	319.0	327.0	335.0	308.0	348.0	64.0	283.0	123.0	0.0	207.0	268.0	248.0	19.0	141.0	180.0	273.0	291.0	10.0	264.0	334.0	339.0	331.0	334.0
9	315.0	53.0	83.0	100.0	46.0	329.0	318.0	306.0	338.0	323.0	319.0	305.0	234.0	5.0	202.0	319.0	280.0	323.0	322.0	300.0	338.0	305.0	326.0	327.0
10	19.0	114.0	64.0	122.0	126.0	183.0	278.0	174.0	319.0	49.0	153.0	143.0	322.0	326.0	343.0	49.0	326.0	339.0	324.0	53.0	6.0	8.0	19.0	1.0
11	14.0	341.0	14.0	350.0	53.0	0.0	145.0	132.0	72.0	179.0	93.0	139.0	152.0	9.0	166.0	124.0	49.0	89.0	162.0	46.0	213.0	242.0	170.0	119.0
12	204.0	195.0	108.0	130.0	22.0	172.0	201.0	351.0	346.0	354.0	258.0	349.0	0.0	39.0	45.0	132.0	46.0	0.0	20.0	328.0	336.0	346.0	349.0	341.0
13	333.0	68.0	0.0	0.0	336.0	325.0	349.0	317.0	0.0	333.0	316.0	333.0	327.0	352.0	311.0	295.0	278.0	319.0	290.0	321.0	284.0	301.0	306.0	288.0
14	291.0	321.0	316.0	303.0	317.0	300.0	307.0	312.0	312.0	326.0	1.0	327.0	332.0	315.0	328.0	322.0	323.0	325.0	281.0	291.0	257.0	324.0	318.0	323.0
15	305.0	318.0	302.0	353.0	340.0	307.0	291.0	294.0	353.0	290.0	271.0	3.0	302.0	328.0	287.0	315.0	320.0	350.0	338.0	319.0	4.0	232.0	296.0	319.0
16	115.0	76.0	84.0	196.0	23.0	25.0	42.0	17.0	31.0	94.0	200.0	30.0	111.0	70.0	65.0	99.0	186.0	211.0	235.0	106.0	189.0	212.0	236.0	211.0
17	180.0	156.0	241.0	141.0	169.0	259.0	344.0	296.0	226.0	226.0	218.0	165.0	211.0	223.0	99.0	220.0	37.0	205.0	280.0	287.0	228.0	289.0	311.0	330.0
18	0.0	336.0	0.0	307.0	78.0	319.0	320.0	354.0	123.0	8.0	169.0	200.0	283.0	277.0	267.0	284.0	210.0	214.0	205.0	285.0	309.0	296.0	0.0	56.0
19	65.0	221.0	342.0	61.0	170.0	198.0	217.0	91.0	188.0	99.0	31.0	2.0	45.0	24.0	316.0	233.0	222.0	70.0	21.0	344.0	17.0	349.0	198.0	171.0
20	174.0	184.0	175.0	312.0	256.0	344.0	266.0	216.0	303.0	139.0	331.0	152.0	59.0	209.0	83.0	2.0	97.0	245.0	238.0	283.0	144.0	321.0	170.0	79.0
21	17.0	301.0	292.0	344.0	328.0	6.0	22.0	8.0	0.0	202.0	41.0	86.0	121.0	16.0	20.0	300.0	8.0	12.0	65.0	79.0	33.0	79.0	115.0	117.0
22	115.0	106.0	105.0	98.0	98.0	74.0	94.0	122.0	135.0	134.0	138.0	196.0	177.0	160.0	179.0	175.0	226.0	205.0	186.0	166.0	165.0	171.0	342.0	222.0
23	211.0	227.0	223.0	126.0	66.0	246.0	39.0	173.0	28.0	25.0	1.0	24.0	333.0	27.0	70.0	12.0	66.0	196.0	82.0	135.0	197.0	230.0	228.0	194.0
24	224.0	220.0	203.0	222.0	207.0	96.0	84.0	43.0	41.0	211.0	202.0	219.0	218.0	221.0	223.0	225.0	220.0	208.0	212.0	218.0	210.0	215.0	211.0	218.0
25	232.0	233.0	237.0	234.0	223.0	226.0	284.0	296.0	164.0	294.0	288.0	41.0	350.0	36.0	224.0	344.0	302.0	76.0	71.0	339.0	314.0	315.0	3.0	289.0
26	9.0	24.0	47.0	32.0	240.0	313.0	152.0	96.0	123.0	351.0	201.0	16.0	345.0	262.0	268.0	290.0	39.0	354.0	184.0	307.0	240.0	75.0	23.0	336.0
27	246.0	178.0	160.0	196.0	140.0	206.0	144.0	177.0	232.0	134.0	199.0	232.0	214.0	100.0	224.0	223.0	255.0	81.0	155.0	130.0	136.0	175.0	179.0	183.0
28	146.0	131.0	121.0	127.0	194.0	131.0	92.0	105.0	101.0	108.0	104.0	100.0	109.0	107.0	111.0	104.0	107.0	115.0	106.0	108.0	113.0	107.0	116.0	125.0
29	103.0	122.0	118.0	123.0	110.0	120.0	123.0	126.0	114.0	106.0	112.0	116.0	115.0	115.0	118.0	115.0	123.0	115.0	115.0	118.0	120.0	117.0	131.0	129.0
30	118.0	119.0	126.0	128.0	125.0	113.0	114.0	124.0	127.0	123.0	129.0	128.0	124.0	129.0	118.0	121.0	125.0	129.0	141.0	165.0	213.0	212.0	229.0	230.0
31	235.0	259.0	278.0	256.0	209.0	234.0	244.0	92.0	228.0	234.0	245.0	230.0	180.0	178.0	188.0	173.0	203.0	67.0	61.0	108.0	96.0	84.0	110.0	304.0

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

January 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	311.0	298.0	304.0	321.0	323.0	324.0	333.0	325.0	333.0	323.0	324.0	307.0	307.0	321.0	331.0	328.0	333.0	343.0	342.0	90.0	350.0	351.0	333.0	347.0
2	0.0	50.0	108.0	219.0	0.0	23.0	24.0	6.0	29.0	279.0	275.0	3.0	129.0	284.0	143.0	190.0	146.0	182.0	99.0	28.0	211.0	121.0	120.0	115.0
3	114.0	121.0	117.0	118.0	129.0	116.0	117.0	125.0	114.0	113.0	125.0	118.0	125.0	128.0	124.0	119.0	123.0	121.0	121.0	120.0	116.0	124.0	121.0	122.0
4	123.0	119.0	123.0	134.0	132.0	124.0	153.0	123.0	124.0	123.0	114.0	120.0	122.0	115.0	116.0	124.0	128.0	118.0	133.0	139.0	144.0	123.0	126.0	127.0
5	141.0	153.0	164.0	212.0	216.0	215.0	224.0	223.0	239.0	239.0	245.0	233.0	236.0	229.0	226.0	244.0	234.0	226.0	161.0	194.0	225.0	184.0	69.0	96.0
6	73.0	192.0	47.0	51.0	260.0	30.0	59.0	239.0	311.0	7.0	280.0	259.0	213.0	201.0	146.0	148.0	144.0	153.0	263.0	146.0	140.0	139.0	125.0	114.0
7	132.0	130.0	141.0	160.0	126.0	121.0	156.0	130.0	144.0	143.0	145.0	203.0	229.0	215.0	209.0	228.0	208.0	231.0	221.0	221.0	210.0	205.0	192.0	207.0
8	227.0	236.0	277.0	293.0	294.0	294.0	299.0	282.0	239.0	111.0	82.0	133.0	341.0	47.0	127.0	43.0	54.0	316.0	234.0	0.0	288.0	201.0	273.0	213.0
9	67.0	131.0	224.0	3.0	77.0	10.0	3.0	53.0	104.0	207.0	217.0	181.0	313.0	218.0	171.0	195.0	195.0	205.0	241.0	231.0	238.0	208.0	351.0	214.0
10	216.0	200.0	197.0	130.0	216.0	192.0	224.0	309.0	261.0	225.0	219.0	217.0	207.0	215.0	219.0	217.0	190.0	53.0	307.0	274.0	262.0	327.0	326.0	332.0
11	230.0	165.0	153.0	14.0	50.0	227.0	43.0	215.0	54.0	325.0	232.0	130.0	145.0	142.0	146.0	152.0	128.0	144.0	150.0	146.0	159.0	134.0	126.0	139.0
12	120.0	169.0	124.0	112.0	258.0	131.0	118.0	116.0	197.0	236.0	137.0	156.0	171.0	172.0	166.0	163.0	175.0	197.0	197.0	208.0	218.0	219.0	230.0	235.0
13	239.0	251.0	247.0	218.0	222.0	253.0	139.0	244.0	233.0	234.0	235.0	237.0	277.0	294.0	278.0	276.0	62.0	259.0	217.0	245.0	187.0	256.0	280.0	54.0
14	108.0	41.0	277.0	61.0	35.0	302.0	351.0	25.0	341.0	190.0	65.0	94.0	74.0	88.0	37.0	76.0	81.0	103.0	96.0	107.0	108.0	108.0	109.0	119.0
15	125.0	122.0	145.0	131.0	139.0	136.0	122.0	132.0	141.0	134.0	122.0	123.0	122.0	123.0	123.0	123.0	114.0	117.0	102.0	102.0	98.0	100.0	112.0	110.0
16	104.0	99.0	98.0	92.0	89.0	58.0	61.0	59.0	54.0	56.0	85.0	299.0	322.0	248.0	288.0	308.0	293.0	320.0	323.0	0.0	353.0	339.0	325.0	158.0
17	317.0	308.0	315.0	318.0	318.0	330.0	323.0	317.0	352.0	334.0	330.0	326.0	325.0	343.0	333.0	340.0	338.0	339.0	334.0	338.0	327.0	335.0	340.0	341.0
18	331.0	339.0	339.0	337.0	338.0	337.0	331.0	342.0	326.0	334.0	333.0	331.0	329.0	329.0	332.0	335.0	338.0	335.0	338.0	338.0	340.0	320.0	341.0	339.0
19	338.0	333.0	327.0	326.0	323.0	329.0	330.0	330.0	336.0	331.0	336.0	335.0	333.0	333.0	330.0	336.0	337.0	328.0	327.0	332.0	337.0	333.0	336.0	337.0
20	320.0	13.0	16.0	4.0																				
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																328.0	322.0	326.0	325.0	319.0	334.0	331.0	335.0	275.0
30	232.0	199.0	152.0	317.0	71.0	246.0	324.0	170.0	247.0	47.0	143.0	95.0	53.0	20.0	11.0	32.0	348.0	99.0	4.0	193.0	313.0	308.0	304.0	306.0
31	312.0	320.0	315.0	333.0	323.0	337.0	317.0	336.0	337.0	340.0	324.0	329.0	334.0	331.0	341.0	334.0	326.0	330.0	328.0	329.0	326.0	330.0	335.0	336.0

Total Hours in Month 744 **Hours Data Available** 517 **Data Recovery** 69.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

February 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	337.0	339.0	330.0	332.0	332.0	323.0	340.0	6.0	331.0	336.0	166.0	355.0	341.0	331.0	344.0	307.0	93.0	5.0	121.0	177.0	107.0	80.0	340.0	162.0
2	144.0	52.0	129.0	122.0	129.0	247.0	208.0	128.0	142.0	187.0	105.0	82.0	217.0	87.0	136.0	74.0	74.0	78.0	344.0	336.0	344.0	0.0	45.0	338.0
3	347.0	20.0	336.0	336.0	43.0	28.0	6.0	349.0	332.0	280.0	312.0	332.0	63.0	339.0	96.0	235.0	331.0	318.0	308.0	332.0	313.0	298.0	239.0	354.0
4	314.0	1.0	0.0	336.0	4.0	180.0	318.0	98.0	155.0	61.0	315.0	329.0	315.0	148.0	145.0	96.0	106.0	324.0	166.0	164.0	107.0	134.0	73.0	16.0
5	331.0	1.0	343.0	353.0	288.0	190.0	42.0	90.0	239.0	61.0	125.0	55.0	185.0	195.0	84.0	197.0	70.0	193.0	190.0	350.0	49.0	83.0	106.0	137.0
6	167.0	323.0	145.0	32.0	69.0	45.0	18.0	328.0	269.0	200.0	191.0	111.0	98.0	208.0	226.0	276.0	274.0	189.0	20.0	70.0	82.0	56.0	74.0	89.0
7	89.0	102.0	53.0	115.0	112.0	111.0	117.0	118.0	127.0	113.0	117.0	111.0	118.0	115.0	113.0	108.0	114.0	114.0	109.0	106.0	120.0	117.0	115.0	115.0
8	124.0	126.0	121.0	124.0	122.0	115.0	111.0	111.0	120.0	133.0	115.0	121.0												
9																								
10																								
11																								
12																								
13														118.0			118.0	24.0	69.0	355.0	80.0	81.0	104.0	75.0
14	107.0	119.0	118.0	116.0	112.0	114.0	125.0	123.0	119.0	117.0	120.0	117.0	117.0	121.0	112.0	111.0	110.0	119.0	127.0	126.0	121.0	124.0	121.0	119.0
15	129.0	122.0	129.0	120.0	129.0	128.0	135.0	141.0	127.0	69.0	60.0	85.0	311.0	154.0	203.0	194.0	193.0	169.0	200.0	91.0	47.0	32.0	97.0	101.0
16	100.0	95.0	65.0	185.0	97.0	1.0	102.0	112.0	119.0	122.0	117.0	128.0	118.0	116.0	121.0	131.0	125.0	121.0	118.0	123.0	128.0	142.0	118.0	114.0
17	308.0	0.0	131.0	197.0	37.0	123.0	194.0	237.0	270.0	265.0	259.0	256.0	183.0	206.0	95.0	111.0	85.0	244.0	61.0	198.0	92.0	207.0	162.0	189.0
18	194.0	248.0	355.0	182.0	188.0	189.0	197.0	184.0	168.0	168.0	204.0	186.0	186.0	197.0	211.0	210.0	202.0	184.0	198.0	211.0	230.0	207.0	242.0	237.0
19	222.0	236.0	231.0	302.0	305.0	121.0	129.0	126.0	126.0	141.0	198.0	224.0	211.0	201.0	237.0	184.0	156.0	176.0	168.0	166.0	165.0	162.0	180.0	158.0
20	171.0	210.0	69.0	157.0	47.0	214.0	88.0	29.0	175.0	172.0	269.0	126.0	99.0	188.0	172.0	175.0	199.0	150.0	75.0	137.0	115.0	77.0	211.0	250.0
21	107.0	279.0	203.0	200.0	198.0	199.0	210.0	205.0	200.0	207.0	190.0	212.0	205.0	218.0	164.0	195.0	155.0	222.0	250.0	208.0	203.0	218.0	61.0	223.0
22	184.0	136.0	118.0	100.0	103.0	98.0	114.0	115.0	118.0	105.0	106.0	112.0	105.0	126.0	119.0	120.0	110.0	113.0	113.0	105.0	107.0	113.0	115.0	119.0
23	116.0	111.0	109.0	111.0	108.0	111.0	118.0	116.0	110.0	109.0	115.0	117.0	107.0	110.0	127.0	121.0	111.0	111.0	122.0	112.0	114.0	130.0	115.0	108.0
24	121.0	122.0	126.0	113.0	102.0	99.0	111.0	114.0	110.0	111.0	122.0	112.0	110.0	120.0	113.0	109.0	116.0	112.0	101.0	118.0	105.0	113.0	112.0	105.0
25	109.0	113.0	115.0	110.0	109.0	109.0	104.0	119.0	106.0	119.0	108.0	113.0	114.0	115.0	118.0	113.0	115.0	113.0	109.0	105.0	118.0	112.0	111.0	111.0
26	111.0	81.0	91.0	108.0	177.0	174.0	166.0	163.0	173.0	173.0	192.0	197.0	170.0	195.0	170.0	189.0	204.0	181.0	195.0	195.0	195.0	221.0	197.0	196.0
27	208.0	220.0	220.0	121.0	120.0	120.0	134.0	48.0	340.0	94.0	109.0	115.0	109.0	116.0	111.0	113.0	112.0	114.0	109.0	113.0	118.0	122.0	125.0	111.0
28	125.0	123.0	120.0	116.0	125.0	116.0	112.0	107.0	122.0	115.0	187.0	203.0	200.0	184.0	203.0	193.0	177.0	186.0	177.0	89.0	202.0	218.0	190.0	174.0

Total Hours in Month 672 **Hours Data Available** 549 **Data Recovery** 81.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

March 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	196.0	193.0	213.0	215.0	207.0	219.0	223.0	208.0	215.0	204.0	235.0	206.0	208.0	216.0	229.0	202.0	197.0	205.0	197.0	162.0	217.0	188.0		
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9															92.0			43.0	89.0	335.0	18.0	47.0	132.0	43.0
10	94.0	122.0	63.0	39.0	45.0	83.0	66.0	181.0	339.0	334.0	329.0	315.0	335.0	333.0	332.0	325.0	341.0	334.0	337.0	329.0	353.0	345.0	339.0	0.0
11	6.0	338.0	354.0	2.0	19.0	23.0	38.0	29.0	0.0	7.0	346.0	308.0	66.0	0.0	68.0	354.0	135.0	0.0	3.0	3.0	19.0	41.0	0.0	5.0
12	184.0	171.0	337.0	314.0	28.0	323.0	120.0	347.0	203.0	67.0	149.0	106.0	96.0	149.0	40.0	214.0	212.0	113.0	170.0	112.0	145.0	241.0	351.0	146.0
13	120.0	154.0	132.0	281.0	0.0	267.0	98.0	5.0	345.0	334.0	340.0	5.0	338.0	24.0	13.0	326.0	314.0	292.0	288.0	0.0	344.0	329.0	341.0	267.0
14	330.0	318.0	354.0	320.0	327.0	171.0	127.0	63.0	25.0	137.0	88.0	90.0	161.0	179.0	76.0	225.0	338.0	191.0	169.0	179.0	243.0	273.0	197.0	259.0
15	201.0	213.0	239.0	272.0	262.0	258.0	97.0	191.0	110.0	348.0	257.0	94.0	127.0	140.0	230.0	65.0	220.0	195.0	195.0	216.0	217.0	351.0	348.0	317.0
16	288.0	50.0	75.0	6.0	101.0	111.0	117.0	119.0	108.0	114.0	125.0	112.0	139.0	138.0	147.0	134.0	160.0	169.0	276.0	237.0	219.0	298.0	259.0	0.0
17	0.0	13.0	318.0	19.0	244.0	214.0	176.0	250.0	199.0	193.0	176.0	193.0	191.0	203.0	194.0	269.0	237.0	65.0	18.0	196.0	93.0	191.0	204.0	16.0
18	347.0	81.0	59.0	66.0	217.0	264.0	273.0	126.0	136.0	124.0	121.0	124.0	127.0	135.0	127.0	116.0	103.0	115.0	103.0	121.0	120.0	116.0	119.0	127.0
19	112.0	119.0	113.0	108.0	121.0	123.0	120.0	118.0	122.0	123.0	114.0	108.0	117.0	113.0	109.0	117.0	124.0	111.0	115.0	109.0	119.0	105.0	104.0	104.0
20	114.0	125.0	119.0	105.0	110.0	106.0	97.0	101.0	98.0	109.0	107.0	102.0	105.0	107.0	118.0	105.0	115.0	111.0	119.0	120.0	113.0	110.0	115.0	119.0
21	125.0	126.0	123.0	92.0	12.0	95.0	82.0	89.0	83.0	2.0	328.0	270.0	119.0	192.0	172.0	325.0	335.0	325.0	337.0	4.0	7.0	152.0	198.0	178.0
22	142.0	177.0	265.0	180.0	316.0	316.0	320.0	303.0	305.0	296.0	288.0	281.0	280.0	229.0	245.0	241.0	241.0	242.0	259.0	283.0	303.0	307.0	301.0	288.0
23	304.0	295.0	297.0	301.0	296.0	300.0	301.0	295.0	309.0	309.0	315.0	309.0	310.0	325.0	316.0	318.0	319.0	315.0	329.0	316.0	304.0	154.0	216.0	241.0
24	19.0	101.0	72.0	139.0	216.0	217.0	22.0	80.0	108.0	226.0	80.0	300.0	58.0	262.0	194.0	55.0	259.0	37.0	189.0	30.0	229.0	333.0	41.0	42.0
25	84.0	352.0	34.0	54.0	29.0	24.0	17.0	25.0	1.0	130.0			99.0	122.0	112.0	124.0	113.0	123.0	112.0	112.0	109.0	111.0	111.0	110.0
26	113.0	110.0	117.0	109.0	116.0	118.0	118.0	112.0	109.0	109.0	108.0	110.0	114.0	109.0	104.0	117.0	106.0	109.0	114.0	112.0	106.0	104.0	114.0	117.0
27	113.0	106.0	110.0	105.0	102.0	112.0	108.0	106.0	102.0	114.0	108.0	102.0	107.0	97.0	107.0	113.0	105.0	103.0	111.0	113.0	117.0	118.0	106.0	113.0
28	109.0	117.0	119.0	114.0	115.0	110.0	99.0	85.0	99.0	106.0	109.0	104.0	116.0	115.0	125.0	132.0	125.0	113.0	100.0	108.0	90.0	114.0	104.0	114.0
29	101.0	101.0	109.0	102.0	95.0	97.0	105.0	105.0	109.0	114.0	137.0	118.0	112.0	131.0	127.0	138.0	123.0	87.0	103.0	100.0	104.0	114.0	113.0	112.0
30	112.0	107.0	126.0	127.0	128.0	115.0	115.0	104.0	96.0	83.0	95.0	76.0	60.0	95.0	85.0	64.0	55.0	319.0	94.0	69.0	83.0	106.0	101.0	111.0
31	85.0	96.0	98.0	98.0	90.0	87.0	96.0	106.0	92.0	99.0	100.0	109.0	110.0	105.0	108.0	114.0	117.0	97.0	118.0	111.0	108.0	120.0	105.0	112.0

Total Hours in Month 744 **Hours Data Available** 556 **Data Recovery** 74.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

April 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	109.0	84.0	106.0	86.0	76.0	75.0	88.0	97.0	45.0	80.0	122.0	126.0	143.0	127.0	121.0	122.0	113.0	27.0	290.0	215.0	274.0	44.0	71.0	126.0
2	185.0	24.0	196.0	187.0	338.0	348.0	7.0	47.0	87.0	90.0	114.0	103.0	113.0	123.0	116.0	115.0	105.0	110.0	112.0	108.0	111.0	119.0	122.0	115.0
3	114.0	112.0	118.0	112.0	113.0	123.0	119.0	112.0	110.0	111.0	112.0	116.0	123.0	135.0	136.0	125.0	138.0	134.0	144.0	135.0	36.0	88.0	17.0	75.0
4	19.0	16.0	73.0	20.0	74.0	32.0	67.0	350.0	154.0	352.0	91.0	73.0	76.0	320.0	204.0	201.0	196.0	203.0	201.0	217.0	195.0	220.0	148.0	115.0
5	136.0	118.0	182.0	78.0	51.0	345.0	45.0	8.0	12.0	104.0	84.0	107.0	110.0	88.0	142.0	128.0	145.0	144.0	162.0	164.0	59.0	78.0	91.0	39.0
6	210.0	40.0	1.0	105.0	335.0	335.0	189.0	55.0	9.0	141.0	120.0	131.0	136.0	71.0	129.0	127.0	143.0	145.0	233.0	231.0	252.0	198.0	110.0	238.0
7	213.0	157.0	200.0	121.0	100.0	92.0	346.0	227.0	200.0	332.0	65.0	319.0	324.0	329.0	300.0	318.0	321.0	321.0	337.0	328.0	331.0	338.0	296.0	318.0
8	164.0	304.0	130.0	86.0	213.0	326.0	343.0	337.0	192.0	174.0	304.0	301.0	310.0	304.0	296.0	330.0	310.0	303.0	316.0	340.0	193.0	242.0	79.0	249.0
9	240.0	310.0	265.0	182.0	86.0	177.0	128.0	190.0	206.0	66.0	321.0	311.0	343.0	23.0	10.0	289.0	237.0	194.0	196.0	199.0	203.0	200.0	210.0	196.0
10	72.0	84.0	189.0	210.0	204.0	193.0	201.0	197.0	183.0	228.0	219.0	168.0	275.0	207.0	183.0	134.0	190.0	183.0	145.0	103.0	118.0	112.0	116.0	109.0
11	104.0	113.0	108.0	115.0	113.0	116.0	115.0	109.0	109.0	111.0	106.0	117.0	101.0	112.0	103.0	107.0	104.0	100.0	89.0	96.0	95.0	70.0	77.0	90.0
12	80.0	65.0	49.0	57.0	92.0	89.0	112.0	53.0	51.0	50.0	56.0	43.0	41.0	53.0	62.0	74.0	77.0	92.0	118.0	112.0	115.0	117.0	125.0	121.0
13	122.0	100.0	111.0	108.0	115.0	117.0	119.0	119.0	118.0	107.0	132.0	141.0	134.0	129.0	129.0	125.0	118.0	112.0	128.0	124.0	130.0	122.0	90.0	107.0
14	97.0	116.0	118.0	126.0	116.0	115.0	112.0	130.0	125.0	138.0	120.0	134.0	117.0	125.0	119.0	110.0	125.0	125.0	117.0	132.0	88.0	340.0	62.0	34.0
15	50.0	214.0	347.0	341.0	354.0	2.0	32.0	315.0	348.0	352.0	8.0	4.0	56.0	55.0	58.0	28.0	347.0	0.0	351.0	341.0	21.0	352.0	341.0	98.0
16	342.0	9.0	68.0	58.0	332.0	178.0	75.0	70.0	111.0	118.0	125.0	132.0	130.0	125.0	126.0	130.0	123.0	125.0	138.0	140.0	138.0	130.0	135.0	136.0
17	3.0	333.0	8.0	335.0	339.0	43.0	354.0	8.0	57.0	342.0	343.0	54.0	58.0	139.0	47.0	49.0	57.0	144.0	314.0	90.0	74.0	82.0	82.0	67.0
18	29.0	78.0	107.0	73.0	86.0	46.0	65.0	50.0	79.0	118.0	115.0	109.0	119.0	115.0	139.0	129.0	130.0	124.0	131.0	121.0	115.0	92.0	93.0	261.0
19	79.0	260.0	94.0	132.0	126.0	125.0	114.0	111.0	117.0	110.0	112.0	118.0	126.0	108.0	112.0	114.0	117.0	115.0	119.0	112.0	112.0	117.0	122.0	121.0
20	128.0	117.0	112.0	111.0	106.0	109.0	106.0	107.0	118.0	122.0	123.0	112.0	126.0	124.0	123.0	122.0	116.0	127.0	117.0	123.0	121.0	108.0	112.0	115.0
21	103.0	116.0	117.0	121.0	111.0	120.0	132.0	118.0	109.0	127.0	119.0	115.0	122.0	132.0	128.0	120.0	122.0	134.0	116.0	111.0	125.0	120.0	129.0	116.0
22	149.0	120.0	118.0	124.0	86.0	110.0	40.0	279.0	125.0	157.0	148.0	127.0	107.0	122.0	114.0	183.0	147.0	160.0	257.0	146.0	195.0	108.0	111.0	8.0
23	12.0	276.0	10.0	27.0	223.0	203.0	180.0	168.0	176.0	174.0	245.0	245.0	288.0	305.0	270.0	262.0	251.0	285.0	268.0	287.0	287.0	353.0	221.0	68.0
24	230.0	295.0	349.0	299.0	21.0	280.0	329.0	354.0	336.0	334.0	300.0	278.0	274.0	259.0	284.0	261.0	245.0	270.0	288.0	304.0	309.0	307.0	194.0	296.0
25	175.0	164.0	183.0	331.0	230.0	346.0	27.0	162.0	254.0	285.0	305.0	196.0	219.0	228.0	199.0	254.0	202.0	195.0	205.0	199.0	179.0	193.0	217.0	204.0
26	249.0	354.0	22.0	251.0	55.0	305.0	229.0	231.0	96.0	100.0	104.0	109.0	157.0	153.0	140.0	154.0	152.0	140.0	145.0	146.0	306.0	80.0	125.0	124.0
27	115.0	77.0	27.0	333.0	103.0	69.0	45.0	92.0	107.0	109.0	86.0	80.0	119.0	109.0	130.0	140.0	142.0	159.0	133.0	146.0	291.0	330.0	85.0	68.0
28	40.0	49.0	62.0	51.0	47.0	44.0	61.0	48.0	69.0	66.0	139.0	138.0	129.0	134.0	138.0	139.0	134.0	133.0	132.0	234.0	273.0	279.0	171.0	77.0
29	79.0	92.0	256.0	43.0	107.0	73.0	104.0	128.0	121.0	85.0	108.0	88.0	141.0	145.0	96.0	129.0	133.0	139.0	137.0	127.0	117.0	143.0	101.0	77.0
30	20.0	181.0	62.0	84.0	109.0	147.0	98.0	120.0	120.0	108.0	119.0	111.0	133.0	128.0	119.0	128.0	150.0	152.0	177.0	306.0	94.0	265.0	2.0	334.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

May *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	329.0	321.0	279.0	341.0	337.0	40.0	350.0	189.0	327.0	322.0	328.0	331.0	342.0	347.0	325.0	34.0	169.0	140.0	184.0	205.0	200.0	177.0	157.0	223.0
2	193.0	55.0	8.0	51.0	171.0	317.0	307.0	329.0	347.0	352.0	8.0	18.0	59.0	350.0	101.0	274.0	210.0	195.0	199.0	215.0	249.0	212.0	223.0	240.0
3	318.0	203.0	90.0	180.0	215.0	217.0	217.0	207.0	115.0	127.0	120.0	107.0	133.0	109.0	110.0	138.0	121.0	95.0	55.0	70.0	117.0	91.0	37.0	213.0
4	259.0	0.0	78.0	46.0	58.0	63.0	76.0	49.0	42.0	44.0	8.0	11.0	36.0	28.0	39.0	155.0	182.0	209.0	203.0	199.0	206.0	0.0	267.0	92.0
5	249.0	233.0	297.0	258.0	235.0	182.0	252.0	90.0	0.0	12.0	112.0	132.0	129.0	124.0	139.0	127.0	140.0	143.0	161.0	204.0	232.0	197.0	260.0	242.0
6	163.0	251.0	352.0	110.0	268.0	178.0	177.0	29.0	112.0	342.0	341.0	246.0	205.0	184.0	203.0	218.0	182.0	277.0	190.0	207.0	206.0	199.0	354.0	67.0
7	87.0	85.0	82.0	0.0	41.0	48.0	126.0	59.0	91.0	166.0	179.0	243.0	198.0	16.0	320.0	92.0	91.0	265.0	167.0	176.0	235.0	257.0	166.0	219.0
8	1.0	307.0	251.0	213.0	255.0	68.0	12.0	273.0	319.0	317.0	5.0	267.0	317.0	0.0	310.0	234.0	226.0	198.0	193.0	184.0	235.0	326.0	252.0	146.0
9	319.0	294.0	320.0	315.0	20.0	273.0	199.0	298.0	309.0	269.0	263.0	4.0	339.0	273.0	177.0	204.0	200.0	186.0	209.0	178.0	207.0	163.0	179.0	181.0
10	135.0	119.0	123.0	99.0	23.0	113.0	112.0	113.0	127.0	131.0	122.0	106.0	116.0	117.0	108.0	106.0	105.0	114.0	110.0	118.0	104.0	109.0	105.0	106.0
11	105.0	106.0	109.0	110.0	109.0	115.0	100.0	104.0	99.0	123.0	104.0	110.0	114.0	116.0	118.0	113.0	119.0	111.0	111.0	111.0	102.0	123.0	119.0	111.0
12	110.0	90.0	92.0	96.0	126.0	105.0	111.0	115.0	124.0	104.0	111.0	117.0	105.0	115.0	115.0	101.0	110.0	121.0	118.0	122.0	109.0	122.0	113.0	118.0
13	121.0	127.0	126.0	118.0	117.0	119.0	119.0	126.0	114.0	117.0	127.0	123.0	122.0	116.0	125.0	143.0	133.0	112.0	122.0	109.0	115.0	108.0	113.0	122.0
14	115.0	117.0	137.0	182.0	146.0	173.0	163.0	190.0	175.0	188.0	136.0	164.0	147.0	150.0	143.0	123.0	142.0	144.0	158.0	168.0	183.0	187.0	197.0	205.0
15	288.0	114.0	87.0	258.0	271.0	188.0	236.0	338.0	107.0	117.0	132.0	113.0	135.0	138.0	153.0	127.0	142.0	148.0	146.0	161.0	138.0	344.0	78.0	180.0
16	54.0	238.0	91.0	89.0	58.0	178.0	78.0	164.0	125.0	131.0	148.0	150.0	133.0	129.0	127.0	129.0	127.0	139.0	143.0	273.0	244.0	225.0	200.0	331.0
17	311.0	206.0	204.0	260.0	355.0	257.0	328.0	291.0	289.0	302.0	303.0	349.0	329.0	266.0	272.0	298.0	279.0	249.0	266.0	267.0	262.0	283.0	288.0	122.0
18	94.0	331.0	129.0	200.0	215.0	242.0	268.0	325.0	330.0	349.0	306.0	312.0	225.0	320.0	0.0	198.0	202.0	181.0	206.0	155.0	187.0	223.0	176.0	132.0
19	128.0	37.0	234.0	20.0	189.0	245.0	316.0	0.0	277.0	311.0	306.0	0.0	332.0	221.0	341.0	278.0	302.0	270.0	287.0	291.0	278.0	266.0	284.0	323.0
20	335.0	339.0	340.0	333.0	331.0	310.0	327.0	328.0	334.0	319.0	337.0	333.0	333.0	349.0	336.0			351.0	55.0	336.0	213.0	235.0	230.0	309.0
21	233.0	147.0	251.0	15.0	111.0	220.0	37.0	3.0	181.0	183.0	187.0	180.0	166.0	148.0	166.0	133.0	145.0	128.0	125.0	131.0	130.0	118.0	120.0	124.0
22	118.0	106.0	114.0	98.0	94.0	99.0	111.0	115.0	118.0	123.0	112.0	98.0	109.0	118.0	132.0	128.0	117.0	111.0	109.0	113.0	124.0	125.0	126.0	118.0
23	108.0	121.0	113.0	134.0	117.0	114.0	106.0	114.0	92.0	101.0	130.0	117.0	123.0	128.0	130.0	119.0	131.0	124.0	128.0	111.0	122.0	119.0	116.0	114.0
24	117.0	115.0	113.0	111.0	119.0	108.0	114.0	113.0	110.0	131.0	121.0	112.0	104.0	119.0	120.0	121.0	129.0	115.0	110.0	97.0	108.0	112.0	115.0	111.0
25	111.0	118.0	106.0	119.0	111.0	112.0	109.0	122.0	117.0	110.0	109.0	120.0	106.0	111.0	108.0	115.0	113.0	129.0	125.0	128.0	127.0	110.0	128.0	127.0
26	125.0	111.0	110.0	113.0	103.0	115.0	122.0	126.0	113.0	109.0	121.0	116.0	218.0	31.0	225.0	183.0	167.0	175.0	233.0	146.0	184.0	183.0	144.0	138.0
27	0.0	61.0	170.0	92.0	227.0	11.0	210.0	189.0	12.0	89.0	16.0							122.0	165.0	162.0	188.0	206.0	190.0	195.0
28	264.0	238.0	215.0	128.0	241.0	242.0	316.0	193.0	230.0		287.0	321.0	4.0	16.0	4.0		353.0	329.0	13.0	314.0	296.0	296.0	293.0	300.0
29	50.0	311.0	104.0	157.0	158.0	186.0	98.0	134.0	185.0	4.0	179.0	323.0	279.0	318.0	245.0	250.0	287.0	224.0	237.0	208.0	190.0	210.0	192.0	279.0
30	266.0	52.0	225.0	273.0	226.0	27.0	191.0	218.0	195.0	211.0	61.0	115.0	211.0	205.0	200.0	204.0	224.0	210.0	169.0	196.0	199.0	183.0	188.0	190.0
31	276.0	260.0	251.0	261.0	255.0	320.0	73.0	46.0	19.0	86.0	122.0	108.0	152.0	151.0	165.0	136.0	121.0	143.0	141.0	163.0	144.0	186.0	229.0	181.0

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

June *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	247.0	246.0	265.0	338.0	211.0	88.0	299.0	338.0	0.0	10.0	73.0	204.0	137.0	130.0	152.0	161.0	147.0	170.0	159.0	157.0	164.0	310.0	245.0	205.0
2	240.0	157.0	189.0	212.0	164.0	231.0	135.0	128.0	132.0	106.0	124.0	137.0	145.0	147.0	143.0	147.0	145.0	142.0	147.0	141.0	143.0	141.0	140.0	133.0
3	106.0	114.0	135.0	131.0	132.0	120.0	111.0	116.0	101.0	114.0	113.0	146.0	146.0	158.0	148.0	158.0	158.0	155.0	177.0	130.0	135.0	151.0	130.0	249.0
4	260.0	231.0	253.0	208.0	225.0	249.0	322.0	109.0	121.0	124.0	162.0	148.0	146.0	146.0	153.0	143.0	143.0	129.0	109.0	124.0	128.0	133.0	132.0	132.0
5	118.0	123.0	119.0	125.0	114.0	70.0	104.0	88.0	106.0	110.0	118.0	94.0	108.0	68.0	76.0	104.0	139.0	131.0	132.0	125.0	137.0	137.0	273.0	250.0
6	113.0	106.0	106.0	165.0	205.0	256.0	168.0	354.0	15.0	72.0	55.0	111.0	137.0	123.0	126.0	118.0	130.0	126.0	103.0	102.0	106.0	107.0	103.0	117.0
7	116.0	109.0	109.0	109.0	120.0	114.0	115.0	118.0	121.0	109.0	111.0	116.0	84.0	104.0	106.0	103.0	122.0	115.0	167.0	163.0	140.0	142.0	114.0	123.0
8	128.0	75.0	336.0	340.0	92.0	97.0	120.0	23.0	159.0	106.0	144.0	118.0	120.0	121.0	128.0	132.0	141.0	150.0	128.0	134.0	123.0	133.0	137.0	145.0
9	351.0	175.0	253.0	257.0	244.0	238.0	228.0	123.0	213.0	176.0	224.0	294.0	189.0	272.0	174.0	170.0	230.0	209.0	225.0	220.0	239.0	259.0	230.0	225.0
10	339.0	182.0	185.0	192.0	176.0	205.0	203.0	195.0	179.0	232.0	228.0	213.0	200.0	273.0	204.0	207.0	219.0	222.0	209.0	221.0	232.0	224.0	199.0	189.0
11	186.0	175.0	220.0	200.0	221.0	243.0	196.0	267.0	205.0	182.0	181.0	179.0	229.0	202.0	214.0	226.0	240.0	228.0	210.0	220.0	273.0	275.0	328.0	55.0
12	226.0	232.0	219.0	243.0	88.0	330.0	154.0	207.0	192.0	200.0	205.0	191.0	151.0	90.0	182.0	285.0	238.0	207.0	309.0	126.0	78.0	84.0	120.0	97.0
13	198.0	322.0	304.0	331.0	342.0	222.0	87.0	43.0	51.0	200.0	213.0	241.0	210.0	170.0	172.0	182.0	193.0	177.0	176.0	188.0	189.0	217.0	183.0	282.0
14	174.0	114.0	160.0	283.0	350.0	216.0	353.0	0.0	346.0	327.0	354.0	0.0	334.0	53.0	21.0	195.0	209.0	219.0	214.0	220.0	243.0	222.0	204.0	205.0
15	216.0	116.0	224.0	220.0	277.0	208.0	335.0	219.0	192.0	125.0	289.0	74.0	189.0	211.0	208.0	190.0	294.0	250.0	215.0	59.0	191.0	223.0	224.0	213.0
16	2.0	178.0	68.0	243.0	235.0	337.0	226.0	35.0	187.0	194.0	141.0	134.0	121.0	190.0	166.0	184.0	140.0	179.0	186.0	167.0	158.0	148.0	163.0	155.0
17	159.0	133.0	118.0	126.0	73.0	48.0	65.0	48.0	59.0	131.0	107.0	144.0	144.0	139.0	137.0	111.0	119.0	202.0	172.0	212.0	222.0	203.0	209.0	220.0
18	237.0	30.0	2.0	80.0	264.0	307.0	178.0	326.0	347.0	345.0	327.0	323.0	347.0	336.0	328.0	0.0	3.0	0.0	353.0	343.0	344.0	321.0	330.0	318.0
19	334.0	343.0	343.0	326.0	323.0	317.0	314.0	327.0	337.0	333.0	331.0	1.0	0.0	353.0	2.0	350.0	346.0	346.0	338.0	334.0	327.0	327.0	309.0	311.0
20	302.0	314.0	321.0	323.0	22.0	106.0	312.0	322.0	335.0	344.0	344.0	21.0	198.0	177.0	136.0	188.0	176.0	188.0	175.0	196.0	188.0	215.0	231.0	211.0
21	197.0	204.0	195.0	207.0	206.0	195.0	161.0	225.0	64.0	51.0	177.0	185.0	179.0	152.0	236.0	262.0	1.0	81.0	113.0	161.0	187.0	176.0	194.0	130.0
22	188.0	223.0	216.0	222.0	170.0	252.0	218.0	222.0	232.0	287.0	128.0	175.0	138.0	140.0	166.0	145.0	159.0	173.0	150.0	142.0	163.0	140.0	145.0	130.0
23	127.0	127.0	116.0	126.0	133.0	136.0	328.0	167.0	113.0	136.0	143.0	143.0	139.0	134.0	139.0	131.0	152.0	145.0	143.0	124.0	130.0	148.0	175.0	137.0
24	118.0	42.0	76.0	97.0	296.0	294.0	354.0	92.0	91.0	57.0	50.0	47.0	1.0	225.0	289.0	46.0	302.0	242.0	325.0	217.0	226.0	236.0	28.0	272.0
25	52.0	140.0	295.0	246.0	191.0	149.0	197.0	47.0	151.0	122.0	177.0	187.0	168.0	198.0	170.0	198.0	154.0	158.0	156.0	157.0	143.0	131.0	136.0	129.0
26	124.0	112.0	110.0	100.0	108.0	110.0	119.0	111.0	117.0	118.0	128.0	129.0	133.0	127.0	117.0	116.0	130.0	112.0	121.0	123.0	117.0	113.0	111.0	102.0
27	101.0	108.0	107.0	118.0	132.0	132.0	133.0	131.0	127.0	135.0	127.0	129.0	123.0	143.0	118.0	114.0	123.0	120.0	105.0	115.0	125.0	118.0	125.0	117.0
28	119.0	115.0	117.0	127.0	128.0	118.0	126.0	129.0	121.0	119.0	123.0	122.0	128.0	135.0	127.0	135.0	135.0	129.0	123.0	132.0	119.0	137.0	127.0	121.0
29	121.0	129.0	126.0	129.0	113.0	133.0	132.0	111.0	124.0	132.0	131.0	110.0	134.0	141.0	140.0	140.0	143.0	131.0	151.0	155.0	138.0	189.0	342.0	38.0
30	307.0	207.0	217.0	221.0	257.0	231.0	99.0	49.0	25.0	239.0		28.0	79.0	283.0	180.0	333.0	158.0	164.0	192.0	212.0	182.0	207.0	262.0	

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

July *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	343.0	200.0	276.0	11.0	213.0	262.0	53.0	90.0	120.0	121.0	121.0	116.0	126.0	116.0	117.0	106.0	119.0	111.0	115.0	118.0	123.0	121.0	111.0	110.0
2	118.0	114.0	108.0	114.0	112.0	116.0	110.0	120.0	106.0	117.0	119.0	112.0	112.0	116.0	111.0	114.0	121.0	117.0	116.0	100.0	126.0	116.0	111.0	112.0
3	112.0	118.0	130.0	120.0	135.0	126.0	126.0	133.0	144.0	133.0	128.0	143.0	129.0	126.0	121.0	118.0	127.0	134.0	123.0	131.0	115.0	121.0	122.0	137.0
4	173.0	176.0	134.0	133.0	201.0	193.0	198.0	37.0	50.0	61.0	64.0	89.0	65.0	0.0	295.0	149.0	199.0	190.0	189.0	231.0	231.0	226.0	215.0	234.0
5	222.0	218.0	221.0	215.0	210.0	215.0	209.0	212.0	219.0	227.0	225.0	187.0	200.0	229.0	312.0	165.0	288.0	202.0	194.0	193.0	195.0	215.0	205.0	194.0
6	179.0	210.0	208.0	193.0	209.0	198.0	203.0	196.0	226.0	205.0	224.0	223.0	238.0	223.0	235.0	231.0	214.0	231.0	210.0	193.0	219.0	212.0	203.0	194.0
7	98.0	206.0	197.0	185.0	223.0	204.0	284.0	274.0	143.0	346.0	343.0	312.0	12.0	16.0	309.0	18.0	319.0	251.0	298.0	343.0	304.0	312.0	312.0	211.0
8	67.0	12.0	344.0	80.0	71.0	70.0	69.0	352.0	354.0	0.0	343.0	342.0	308.0	317.0	328.0	0.0	321.0	319.0	331.0	335.0	339.0	324.0	335.0	351.0
9	336.0	344.0	159.0	23.0	80.0	322.0	328.0	144.0	348.0	349.0	348.0	345.0	344.0	0.0	0.0	325.0	342.0	342.0	338.0	348.0	352.0	347.0	330.0	347.0
10	349.0	242.0	338.0	323.0	281.0	203.0	193.0	81.0	0.0	344.0	344.0	348.0	1.0	15.0	341.0	319.0	320.0	337.0	345.0	322.0	345.0	330.0	312.0	65.0
11	19.0	69.0	254.0	206.0	219.0	259.0	80.0	26.0	53.0	93.0	179.0	223.0	204.0	204.0	203.0	194.0	244.0	230.0	222.0	219.0	204.0	201.0	155.0	220.0
12	139.0	317.0	223.0	218.0	224.0	355.0	56.0	53.0	180.0	165.0	57.0	66.0	156.0	148.0	138.0	136.0	142.0	148.0	139.0	134.0	135.0	113.0	116.0	122.0
13	133.0	344.0	35.0	203.0	224.0	229.0	258.0	216.0	205.0	191.0	205.0	177.0	179.0	189.0	183.0	182.0	219.0	232.0	225.0	231.0	278.0	187.0	350.0	46.0
14	25.0	216.0	220.0	145.0	120.0	282.0	7.0	1.0	0.0	9.0	347.0	312.0	308.0	273.0	275.0	289.0	303.0	272.0	287.0	284.0	281.0	311.0	322.0	197.0
15	235.0	266.0	319.0	230.0	178.0	330.0	286.0	286.0	300.0	295.0	302.0	259.0	279.0	282.0	311.0	277.0	315.0	216.0	217.0	239.0	229.0	258.0	195.0	215.0
16	211.0	26.0	252.0	316.0	203.0	233.0	316.0	258.0	343.0	9.0	339.0	335.0	60.0	68.0	34.0	212.0	268.0	203.0	302.0	271.0	278.0	64.0	48.0	175.0
17	202.0	124.0	22.0	122.0	61.0	19.0	15.0	84.0	58.0	78.0	68.0	95.0	210.0	138.0	109.0	194.0	182.0	228.0	7.0	270.0	53.0	191.0	181.0	184.0
18	192.0	199.0	210.0	186.0	193.0	177.0	206.0	202.0	206.0	35.0	178.0	131.0	143.0	127.0	143.0	122.0	134.0	127.0	134.0	122.0	129.0	110.0	162.0	318.0
19	198.0	216.0	198.0	189.0	220.0	52.0	73.0	0.0	75.0	119.0	144.0	139.0	132.0	124.0	106.0	133.0	118.0	144.0	128.0	148.0	213.0	218.0	210.0	204.0
20	178.0	194.0	216.0	240.0	192.0	214.0	225.0	152.0	166.0	184.0	212.0	175.0	177.0	153.0	212.0	183.0	182.0	209.0	198.0	203.0	178.0	208.0	207.0	204.0
21	194.0	205.0	197.0	193.0	208.0	231.0	212.0	201.0	14.0	190.0	182.0	132.0	192.0	176.0	168.0	184.0	214.0	194.0	185.0	213.0	200.0	229.0	212.0	206.0
22	212.0	199.0	215.0	219.0	232.0	195.0	20.0	215.0	27.0	227.0	198.0	250.0	215.0	185.0	219.0	193.0	176.0	153.0	219.0	180.0	202.0	201.0	248.0	215.0
23	62.0	26.0	299.0	350.0	219.0	221.0	212.0	216.0	201.0	199.0	202.0	193.0	223.0	168.0	178.0	146.0	168.0	172.0	212.0	217.0	206.0	197.0	242.0	206.0
24	149.0	195.0	206.0	197.0	110.0	272.0	74.0	115.0	51.0	124.0	92.0	109.0	120.0	114.0	135.0	133.0	136.0	124.0	127.0	144.0	113.0	135.0	141.0	126.0
25	123.0	121.0	127.0	140.0	130.0	79.0	39.0	88.0	109.0	119.0	98.0	87.0	31.0	95.0	94.0	39.0	61.0	87.0	118.0	83.0	212.0	200.0	138.0	47.0
26	35.0	305.0	274.0	348.0	333.0	315.0	340.0	312.0	96.0	224.0	272.0	342.0	303.0	214.0	84.0	201.0	186.0	201.0	204.0	199.0	201.0	220.0	240.0	200.0
27	257.0	206.0	178.0	211.0	227.0	235.0	221.0	218.0	219.0	193.0	331.0	187.0	185.0	198.0	212.0	207.0	199.0	202.0	199.0	198.0	191.0	191.0	188.0	192.0
28	189.0	276.0	228.0	93.0	323.0	296.0	102.0	204.0	201.0	193.0	195.0	185.0	201.0	210.0	202.0	53.0	73.0	353.0	345.0	0.0	0.0	344.0	332.0	321.0
29	350.0	332.0	336.0	338.0	337.0	342.0	334.0	0.0	0.0	0.0	354.0	345.0	328.0	347.0	349.0	342.0	338.0	342.0	351.0	344.0	352.0	327.0	348.0	0.0
30	342.0	338.0	353.0	0.0	37.0	4.0	35.0	20.0	335.0	305.0	0.0	331.0	0.0	344.0	18.0	348.0	334.0	10.0	320.0	339.0	337.0	317.0	75.0	340.0
31	240.0	243.0	264.0	255.0	233.0	194.0	151.0	59.0	319.0			189.0	201.0	188.0	195.0	196.0	200.0	174.0	185.0	216.0	214.0	218.0	215.0	208.0

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

August 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	189.0	7.0	10.0	197.0	127.0	72.0	133.0	169.0	146.0	152.0	151.0	139.0	143.0	113.0	128.0	126.0	138.0	138.0	156.0	149.0	170.0	219.0	203.0	139.0
2	136.0	148.0	167.0	212.0	218.0	183.0	144.0	23.0	126.0	198.0	214.0	204.0	200.0	206.0	208.0	201.0	62.0	111.0	138.0	159.0	143.0	139.0	151.0	99.0
3	347.0	37.0	186.0	58.0	216.0	174.0	130.0	193.0	147.0	138.0	138.0	156.0	145.0	176.0	177.0	165.0	162.0	126.0	143.0	133.0	136.0	132.0	146.0	143.0
4	138.0	159.0	164.0	178.0	182.0	173.0	157.0	200.0	190.0	232.0	197.0	188.0	191.0	194.0	201.0	230.0	205.0	216.0	233.0	236.0	221.0	200.0	222.0	198.0
5	211.0	204.0	179.0	64.0	36.0	237.0	40.0	262.0	202.0	93.0	128.0	177.0	171.0	173.0	202.0	223.0	188.0	203.0	228.0	218.0	226.0	195.0	194.0	85.0
6	48.0	28.0	217.0	189.0	197.0	206.0	199.0	202.0	223.0	221.0	206.0	224.0	223.0	221.0	227.0	226.0	224.0	226.0	218.0	224.0	208.0	209.0	209.0	207.0
7	208.0	177.0	195.0	183.0	190.0	206.0	236.0	321.0	294.0	318.0	337.0	347.0	335.0	311.0	314.0	330.0	326.0	305.0	298.0	309.0	322.0	332.0	315.0	316.0
8	303.0	317.0	318.0	310.0	316.0	323.0	327.0	327.0	345.0	335.0	331.0	337.0	331.0	0.0	340.0	339.0	339.0	335.0	309.0	293.0	313.0	307.0	308.0	322.0
9	326.0	318.0	5.0	331.0	144.0	46.0	342.0	314.0	341.0	0.0	1.0	346.0	345.0	344.0	0.0	0.0	11.0	308.0	345.0	336.0	314.0	340.0	321.0	209.0
10	132.0	155.0	179.0	102.0	122.0	104.0	34.0	224.0	45.0	6.0	73.0	59.0	128.0	91.0	176.0	113.0	128.0	131.0	151.0	129.0	137.0	197.0	236.0	228.0
11	208.0	238.0	271.0	257.0	28.0	239.0	46.0	234.0	0.0	198.0	182.0	131.0	208.0	174.0	225.0	192.0	197.0	200.0	203.0	194.0	202.0	191.0	179.0	193.0
12	172.0	179.0	199.0	195.0	206.0	111.0	200.0	203.0	197.0	185.0	199.0	188.0	195.0	217.0	200.0	198.0	209.0	209.0	212.0	215.0	215.0	216.0	206.0	213.0
13	212.0	209.0	211.0	191.0	177.0	176.0	106.0	61.0	348.0	88.0	99.0	111.0	122.0	121.0	114.0	113.0	105.0	102.0	105.0	113.0	106.0	104.0	98.0	117.0
14	107.0	115.0	109.0	110.0	112.0	108.0	123.0	125.0	113.0	114.0	122.0	133.0	114.0	113.0	123.0	128.0	117.0	109.0	105.0	110.0	110.0	78.0	87.0	110.0
15	97.0	354.0	145.0	21.0	333.0	188.0	68.0	136.0	146.0	102.0	156.0	186.0	181.0	204.0	211.0	194.0	241.0	291.0	314.0	341.0	327.0	343.0	337.0	332.0
16	325.0	320.0	329.0	323.0	333.0	301.0	290.0	328.0	310.0	294.0	6.0	326.0	252.0	336.0	207.0	232.0	201.0	211.0	219.0	176.0	196.0	256.0	206.0	159.0
17	183.0	186.0	248.0	241.0	83.0	96.0	44.0	105.0	72.0	203.0	192.0	202.0	196.0	204.0	233.0	195.0	209.0	213.0	212.0	154.0	143.0	125.0	120.0	127.0
18	110.0	116.0	117.0	131.0	114.0	110.0	118.0	108.0	112.0	106.0	114.0	108.0	114.0	107.0	124.0	113.0	108.0	110.0	110.0	111.0	114.0	110.0	107.0	114.0
19	111.0	108.0	124.0	131.0	204.0	201.0	212.0	202.0	189.0	195.0	197.0	181.0	190.0	170.0	52.0	153.0	203.0	189.0	142.0	127.0	136.0	137.0	151.0	137.0
20	152.0	197.0	217.0	207.0	210.0	195.0	232.0	179.0	211.0	193.0	209.0	244.0	252.0	259.0	285.0	232.0	250.0	210.0	272.0	236.0	264.0	271.0	273.0	285.0
21	293.0	299.0	296.0	300.0	303.0	309.0	297.0	292.0	285.0	333.0	345.0	322.0	334.0	350.0	353.0	319.0	333.0	318.0	334.0	314.0	321.0	318.0	321.0	298.0
22	325.0	5.0	15.0	142.0	149.0	336.0	32.0	0.0	290.0	332.0	293.0	286.0	290.0	294.0	320.0	300.0	313.0	333.0	340.0	341.0	0.0	214.0	338.0	325.0
23	19.0	341.0	349.0	181.0	343.0	208.0	157.0	156.0	338.0	6.0	10.0	10.0	341.0	339.0	0.0	328.0	298.0	343.0	326.0	315.0	231.0	59.0	226.0	225.0
24	101.0	311.0	47.0	96.0	70.0	48.0	46.0	108.0	41.0	128.0	39.0	87.0	110.0	123.0	121.0	116.0	116.0	116.0	121.0	114.0	110.0	115.0	121.0	122.0
25	123.0	123.0	107.0	113.0	123.0	107.0	120.0	109.0	73.0	102.0	115.0	112.0	108.0	115.0	121.0	122.0	113.0	130.0	126.0	106.0	124.0	90.0	86.0	126.0
26	87.0	60.0	92.0	352.0	350.0	257.0	251.0	24.0	342.0	106.0	107.0	114.0	129.0	137.0	123.0	149.0	131.0	135.0	150.0	145.0	159.0	162.0	148.0	155.0
27	131.0	96.0	106.0	118.0	125.0	95.0	119.0	111.0	131.0	111.0	116.0	134.0	128.0	126.0	119.0	122.0	120.0	133.0	127.0	113.0	117.0	116.0	109.0	113.0
28	98.0	106.0	126.0	125.0	108.0	116.0	115.0	114.0	118.0	112.0	105.0	121.0	110.0	122.0	122.0	118.0	119.0	100.0	104.0	115.0	115.0	108.0	99.0	108.0
29	117.0	106.0	108.0	112.0	107.0	103.0	119.0	129.0	123.0	141.0	139.0	137.0	157.0	159.0	129.0	166.0	272.0	311.0	136.0	124.0	113.0	109.0	116.0	107.0
30	124.0	109.0	120.0	119.0	105.0	110.0	110.0	105.0	113.0	122.0	119.0	164.0	200.0	183.0	213.0	197.0	180.0	200.0	214.0	203.0	177.0	191.0	220.0	208.0
31	143.0	17.0	347.0	72.0	24.0	84.0	95.0	351.0	157.0	93.0	111.0	122.0	125.0	112.0	117.0	113.0	123.0	123.0	109.0	125.0	114.0	103.0	124.0	127.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Resultant Wind Direction (Degrees)

September 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	120.0	136.0	124.0	128.0	133.0	149.0	182.0	171.0	183.0	169.0	160.0	186.0	189.0	189.0	168.0	161.0	183.0	206.0	198.0	194.0	192.0	162.0	145.0	153.0
2	140.0	169.0	204.0	202.0	199.0	206.0	193.0	210.0	201.0	202.0	200.0	200.0	202.0	201.0	202.0	199.0	164.0	123.0	130.0	128.0	156.0	166.0	165.0	182.0
3	327.0	197.0	324.0	145.0	353.0	222.0	225.0	256.0	135.0	134.0	134.0	131.0	138.0	123.0	132.0	126.0	125.0	105.0	101.0	113.0	109.0	342.0	119.0	112.0
4	115.0	109.0	116.0	116.0	102.0	122.0	121.0	98.0	42.0	119.0	124.0	127.0	136.0	142.0	210.0	117.0	119.0	115.0	134.0	120.0	107.0	117.0	107.0	109.0
5	102.0	113.0	109.0	101.0	113.0	108.0	114.0	119.0	117.0	105.0	120.0	119.0	99.0	105.0	108.0	116.0	108.0	120.0	119.0	115.0	120.0	114.0	112.0	114.0
6	123.0	113.0	109.0	118.0	117.0	123.0	112.0	125.0	130.0	123.0	123.0	130.0	131.0	126.0	131.0	132.0	164.0	154.0	148.0	126.0	149.0	157.0	155.0	166.0
7	195.0	161.0	171.0	162.0	176.0	218.0	227.0	224.0	221.0	203.0	208.0	217.0	225.0	214.0	225.0	208.0	198.0	192.0	218.0	186.0	201.0	194.0	345.0	243.0
8	208.0	217.0	33.0	41.0	346.0	17.0	36.0	66.0	51.0	54.0	353.0	100.0	121.0	128.0										
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Total Hours in Month 720 **Hours Data Available** 182 **Data Recovery** 25.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

August *1991*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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27													56.0	52.0	50.0	47.0	48.0	46.0	47.0	50.0	52.0	55.0	59.0	62.0	62.0	46.0	52.0
28	64.0	68.0	74.0	76.0	79.0	82.0	81.0	83.0	78.0	69.0	62.0	57.0	53.0	50.0	46.0	42.0	41.0	40.0	40.0	43.0	48.0	51.0	54.0	61.0	83.0	40.0	60.1
29	60.0	62.0	62.0	65.0	71.0	76.0	71.0	69.0	69.0	72.0	62.0	53.0	55.0	51.0	46.0	46.0	43.0	45.0	48.0	47.0	52.0	56.0	57.0	60.0	76.0	43.0	58.3
30	58.0	64.0	65.0	70.0	77.0	76.0	76.0	75.0	70.0	64.0	56.0	53.0	49.0	46.0	45.0	42.0	41.0	40.0	47.0	49.0	54.0	56.0	61.0	68.0	77.0	40.0	58.4
31	70.0	71.0	71.0	66.0	64.0	65.0	62.0	67.0	63.0	55.0	54.0	54.0	52.0	51.0	47.0	48.0	48.0	53.0	59.0	68.0	81.0	81.0	81.0	81.0	81.0	47.0	63.0
Max.	**70.0**	**71.0**	**74.0**	**76.0**	**79.0**	**82.0**	**81.0**	**83.0**	**78.0**	**72.0**	**62.0**	**57.0**	**56.0**	**52.0**	**50.0**	**48.0**	**48.0**	**53.0**	**59.0**	**68.0**	**81.0**	**81.0**	**81.0**	**81.0**	**83.0**		
Min.	**58.0**	**62.0**	**62.0**	**65.0**	**64.0**	**65.0**	**62.0**	**67.0**	**63.0**	**55.0**	**54.0**	**53.0**	**49.0**	**46.0**	**45.0**	**42.0**	41.0	40.0	**40.0**	**43.0**	**48.0**	**51.0**	**54.0**	**60.0**		**40.0**	
Avg.	**63.0**	**66.3**	**68.0**	**69.3**	**72.8**	**74.8**	**72.5**	**73.5**	**70.0**	**65.0**	**58.5**	**54.3**	**53.0**	**50.0**	**46.8**	**45.0**	**44.2**	**44.8**	**48.2**	**51.4**	**57.4**	**59.8**	**62.4**	**66.4**			**59.1**

Total Hours in Month 744 **Hours Data Available** 108 **Data Recovery** 14.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

September 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	79.0	79.0	76.0	75.0	76.0	73.0	72.0	71.0	71.0	71.0	65.0	61.0	60.0	58.0	56.0	57.0	57.0	58.0	64.0	64.0	64.0	64.0	63.0	64.0	79.0	56.0	66.6
2	65.0	63.0	60.0	59.0	58.0	58.0	59.0	58.0	58.0	55.0	51.0	48.0	46.0	44.0	41.0	41.0	44.0	43.0	46.0	51.0	53.0	53.0	54.0	64.0	65.0	41.0	53.0
3	64.0	70.0	74.0	70.0	68.0	68.0	68.0	65.0	68.0	67.0	60.0	62.0	59.0	59.0	61.0	65.0	66.0	68.0	72.0	77.0	84.0	88.0	90.0	86.0	90.0	59.0	70.0
4	85.0	84.0	87.0	87.0	85.0	86.0	92.0	93.0	93.0	93.0	89.0	85.0	82.0	81.0	76.0	69.0	64.0	67.0	65.0	71.0	76.0	81.0	91.0	89.0	93.0	64.0	82.1
5	86.0	85.0	87.0	89.0	92.0	92.0	93.0	93.0	96.0	92.0	91.0	91.0	91.0	90.0	88.0	85.0	82.0	83.0	88.0	89.0	89.0	90.0	90.0	88.0	96.0	82.0	89.2
6	88.0	89.0	89.0	89.0	89.0	90.0	91.0	89.0	87.0	84.0	83.0	82.0	80.0	80.0	77.0	72.0	68.0	64.0	64.0	67.0	80.0	86.0	88.0	90.0	91.0	64.0	81.9
7	91.0	94.0	93.0	93.0	94.0	93.0	97.0	97.0	98.0	95.0	93.0	79.0	76.0	74.0	75.0	76.0	79.0	79.0	82.0	90.0	92.0	93.0	94.0	93.0	98.0	74.0	88.3
8	92.0	91.0	89.0	81.0	85.0	90.0	89.0	85.0	82.0	81.0	81.0	79.0	79.0	78.0	79.0	79.0	81.0	78.0	81.0	84.0	89.0	91.0	90.0	90.0	92.0	78.0	84.3
9	91.0	92.0	91.0	93.0	91.0	88.0	89.0	91.0	92.0	91.0	90.0	88.0	87.0	87.0	83.0	80.0	78.0	77.0	76.0	78.0	83.0	83.0	83.0	82.0	93.0	76.0	86.0
10	86.0	91.0	94.0	91.0	92.0	95.0	97.0	96.0	96.0	94.0	91.0	88.0	80.0	77.0	77.0	74.0	76.0	83.0	86.0	86.0	89.0	89.0	93.0	90.0	97.0	74.0	88.0
11	92.0	90.0	91.0	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	91.0	83.0	78.0	77.0	72.0	74.0	72.0	83.0	86.0	86.0	87.0	100.0	72.0	89.7
12	87.0	83.0	88.0	88.0	88.0	91.0	93.0	99.0	100.0	100.0	99.0	90.0	82.0	76.0	73.0	68.0	74.0	80.0	78.0	82.0	89.0	93.0	91.0	87.0	100.0	68.0	86.6
13	80.0	79.0	76.0	75.0	73.0	74.0	78.0	79.0	87.0	89.0	88.0	87.0	82.0	80.0	77.0	77.0	74.0	73.0	71.0	69.0	66.0	64.0	63.0	63.0	89.0	63.0	76.0
14	67.0	76.0	83.0	80.0	81.0	78.0	76.0	72.0	72.0	73.0	71.0	71.0	76.0	75.0	75.0	72.0	67.0	65.0	74.0	82.0	85.0	86.0	87.0	86.0	87.0	65.0	76.3
15	86.0	87.0	89.0	87.0	84.0	86.0	87.0	84.0	84.0	83.0	80.0	79.0	76.0	79.0	71.0	67.0	72.0	73.0	77.0	76.0	73.0	71.0	67.0	60.0	89.0	60.0	78.3
16	67.0	68.0	78.0	87.0	92.0	87.0	82.0	83.0	83.0	83.0	83.0	85.0	86.0	89.0	86.0	84.0	74.0	71.0	75.0	77.0	79.0	82.0	82.0	80.0	92.0	67.0	81.0
17	80.0	83.0	84.0	84.0	86.0	84.0	81.0	77.0	78.0	78.0	82.0	83.0	84.0	82.0	80.0	80.0	81.0	74.0	74.0	77.0	79.0	81.0	81.0	81.0	86.0	74.0	80.6
18	86.0	91.0	91.0	87.0	88.0	87.0	88.0	87.0	87.0	86.0	83.0	77.0													91.0	77.0	86.5
19																											
20										93.0	92.0	91.0	91.0	92.0	91.0	92.0	83.0	75.0	78.0	86.0	83.0	84.0	86.0	91.0	93.0	75.0	87.2
21	89.0	88.0	88.0	86.0	86.0	87.0	92.0	96.0	94.0	89.0	84.0	83.0	85.0	76.0	78.0	77.0	80.0	81.0	77.0	81.0	82.0	87.0	86.0	86.0	96.0	76.0	84.9
22	84.0	83.0	79.0	81.0	79.0	78.0	70.0	66.0	61.0	61.0	60.0	56.0	61.0	65.0	64.0	74.0	78.0	81.0	82.0	76.0	88.0	93.0	93.0	91.0	93.0	56.0	75.2
23	91.0	88.0	88.0	85.0	84.0	83.0	83.0	82.0	81.0	81.0	80.0	78.0	80.0	80.0	76.0	74.0	74.0	75.0	74.0	76.0	74.0	76.0	85.0	87.0	91.0	74.0	80.6
24	86.0	87.0	86.0	82.0	78.0	77.0	76.0	78.0	77.0	80.0	81.0	86.0	89.0	84.0	84.0	86.0	87.0	85.0	84.0	84.0	86.0	88.0	91.0	90.0	91.0	76.0	83.8
25	88.0	86.0	86.0	84.0	86.0	85.0	83.0	83.0	83.0	81.0	82.0	82.0	80.0	81.0	80.0	80.0	78.0	79.0	87.0	89.0	87.0	90.0	88.0	85.0	90.0	78.0	83.9
26	86.0	88.0	91.0	87.0	87.0	90.0	89.0	87.0	89.0	88.0	86.0	83.0	80.0	77.0	73.0	62.0	61.0	78.0	85.0	85.0	88.0	90.0	89.0	97.0	97.0	61.0	84.0
27	98.0	98.0	98.0	99.0	99.0	99.0	99.0	99.0	99.0	98.0	98.0	99.0	98.0	96.0	94.0	88.0	85.0	81.0	84.0	82.0	84.0	86.0	87.0	89.0	99.0	81.0	93.2
28	88.0	90.0	94.0	94.0	90.0	91.0	91.0	93.0	91.0	86.0	85.0	78.0	73.0	64.0	63.0	62.0	66.0	64.0	61.0	58.0	64.0	75.0	74.0	69.0	94.0	58.0	77.7
29	68.0	74.0	83.0	78.0	75.0	73.0	72.0	75.0	79.0	87.0	85.0	75.0	73.0	74.0	76.0	85.0	90.0	94.0	92.0	94.0	96.0	96.0	97.0	96.0	97.0	68.0	82.8
30	95.0	94.0	94.0	94.0	92.0	91.0	92.0	91.0	92.0	86.0	79.0	79.0	77.0	79.0	85.0	89.0	86.0	87.0	88.0	87.0	88.0	89.0	90.0	88.0	95.0	77.0	88.0
Max.	**98.0**	**98.0**	**98.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**96.0**	**94.0**	**92.0**	**90.0**	**94.0**	**92.0**	**94.0**	**96.0**	**96.0**	**97.0**	**97.0**	**100.0**		
Min.	**64.0**	**63.0**	**60.0**	**59.0**	**58.0**	**58.0**	**59.0**	**58.0**	**58.0**	**55.0**	**51.0**	**48.0**	**46.0**	**44.0**	**41.0**	**41.0**	44.0	43.0	**46.0**	**51.0**	**53.0**	**53.0**	**54.0**	**60.0**		**41.0**	
Avg.	**83.8**	**84.7**	**86.0**	**85.0**	**84.9**	**84.8**	**85.0**	**84.6**	**84.9**	**84.3**	**82.5**	**80.2**	**78.9**	**77.4**	**75.8**	**74.8**	**74.4**	**74.6**	**76.4**	**78.2**	**81.2**	**83.4**	**84.3**	**83.9**			**81.4**

Total Hours in Month 720 **Hours Data Available** 675 **Data Recovery** 93.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

October 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	90.0	91.0	95.0	95.0	95.0	96.0	94.0	94.0	92.0	92.0	92.0	88.0	88.0	84.0	81.0	78.0	77.0	78.0	79.0	84.0	85.0	86.0	87.0	90.0	96.0	77.0	88.0
2	90.0	90.0	89.0	91.0	92.0	92.0	95.0	96.0	96.0	94.0	92.0	89.0	86.0	81.0	78.0	77.0	77.0	79.0	78.0	77.0	78.0	76.0	80.0	88.0	96.0	76.0	85.9
3	90.0	93.0	95.0	95.0	95.0	93.0	93.0	93.0	92.0	90.0	89.0	93.0	94.0	95.0	94.0	94.0	92.0	93.0	92.0	94.0	97.0	98.0	97.0	97.0	98.0	89.0	93.7
4	96.0	96.0	96.0	97.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	94.0	89.0	90.0	90.0	89.0	90.0	92.0	93.0	93.0	96.0	94.0	100.0	89.0	95.5
5	97.0	97.0	98.0	99.0	97.0	96.0	98.0	99.0	98.0	98.0	96.0	96.0	90.0	84.0	80.0	78.0	80.0	81.0	85.0	84.0	84.0	87.0	88.0	87.0	99.0	78.0	90.7
6	87.0	88.0	90.0	91.0	90.0	90.0	89.0	86.0	86.0	83.0	86.0	85.0	81.0	73.0	68.0	64.0	64.0	69.0	71.0	77.0	74.0	74.0	81.0	89.0	91.0	64.0	80.7
7	90.0	83.0	84.0	86.0	91.0	91.0	92.0	93.0	94.0	92.0	91.0	88.0	80.0	70.0	62.0	60.0	59.0	59.0	64.0	75.0	76.0	77.0	81.0	82.0	94.0	59.0	80.0
8	80.0	82.0	83.0	82.0	81.0	79.0	78.0	80.0	79.0	73.0	70.0	64.0	63.0	63.0	58.0	58.0	57.0	60.0	69.0	73.0	77.0	79.0	82.0	83.0	83.0	57.0	73.0
9	81.0	80.0	80.0	79.0	79.0	81.0	80.0	79.0	77.0	74.0	73.0	72.0	69.0	66.0	60.0	59.0	59.0	61.0	63.0	68.0	72.0	76.0	78.0	79.0	81.0	59.0	72.7
10	82.0	85.0	86.0	88.0	88.0	88.0	87.0	87.0	85.0	82.0	79.0	76.0	75.0	68.0	62.0	60.0	58.0	60.0	64.0	71.0	76.0	76.0	80.0	82.0	88.0	58.0	76.9
11	81.0	77.0	78.0	82.0	83.0	84.0	83.0	84.0	87.0	82.0	80.0	78.0	72.0	61.0	53.0	50.0	47.0	46.0	50.0	56.0	65.0	71.0	74.0	75.0	87.0	46.0	70.8
12	77.0	77.0	78.0	78.0	77.0	75.0	76.0	78.0	76.0	70.0	65.0	67.0	45.0	37.0	38.0	39.0	43.0	48.0	50.0	53.0	54.0	58.0	62.0	63.0	78.0	37.0	61.8
13	60.0	57.0	56.0	56.0	57.0	58.0	58.0	57.0	59.0	56.0	53.0	45.0	43.0	43.0	41.0	43.0	46.0	47.0	47.0	49.0	50.0	57.0	66.0	74.0	74.0	41.0	53.3
14	84.0	87.0	92.0	92.0	91.0	91.0	89.0	89.0	89.0	86.0	87.0	86.0	84.0	83.0	80.0	78.0	74.0	70.0	69.0	69.0	70.0	70.0	76.0	84.0	92.0	69.0	82.1
15	84.0	85.0	85.0	83.0	82.0	77.0	75.0	80.0	83.0	79.0	75.0	72.0	73.0	68.0	62.0	57.0	51.0	52.0	59.0	62.0	64.0	65.0	67.0	70.0	85.0	51.0	71.3
16	72.0	74.0	71.0	69.0	68.0	64.0	68.0	69.0	71.0	70.0	71.0	70.0	69.0	66.0	64.0	64.0	64.0	64.0	63.0	63.0	61.0	60.0	59.0	58.0	74.0	58.0	66.3
17	59.0	60.0	61.0	60.0	60.0	57.0	57.0	58.0	60.0	60.0	59.0	58.0	59.0	60.0	60.0	59.0	58.0	58.0	57.0	56.0	54.0	55.0	58.0	62.0	62.0	54.0	58.5
18	70.0	74.0	78.0	76.0	80.0	84.0	87.0	89.0	90.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	93.0	94.0	94.0	94.0	94.0	94.0	94.0	70.0	88.3
19	96.0	95.0	95.0	96.0	95.0	97.0	98.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	94.0	95.0	96.0	96.0	95.0	91.0	92.0	90.0	90.0	85.0	100.0	85.0	95.5
20	82.0	84.0	83.0	81.0	81.0	80.0	80.0	79.0	80.0	80.0	77.0	73.0	71.0	70.0	73.0	74.0	79.0	82.0	80.0	79.0	80.0	81.0	81.0	77.0	84.0	70.0	78.6
21	78.0	77.0	80.0	82.0	80.0	81.0	84.0	81.0	79.0	80.0	80.0	69.0	59.0	63.0	67.0	61.0	63.0	67.0	78.0	84.0	88.0	88.0	87.0	84.0	88.0	59.0	76.7
22	87.0	93.0	97.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	99.0	95.0	88.0	82.0	85.0	86.0	90.0	92.0	95.0	95.0	90.0	92.0	92.0	100.0	82.0	94.0
23	93.0	93.0	92.0	92.0	95.0	97.0	97.0	96.0	96.0	97.0	92.0	92.0	84.0	81.0	71.0	79.0	86.0	89.0	91.0	91.0	92.0	91.0	91.0	90.0	97.0	71.0	90.3
24	89.0	91.0	94.0	93.0	94.0	95.0	95.0	95.0	98.0	99.0	94.0	89.0	85.0	86.0	90.0	88.0	89.0	92.0	95.0	96.0	95.0	93.0	91.0	91.0	99.0	85.0	92.4
25	90.0	91.0	90.0	90.0	90.0	92.0	92.0	92.0	91.0	92.0															92.0	90.0	91.0
26		69.0	65.0	64.0	64.0	60.0	52.0	46.0	44.0	43.0	41.0	41.0	42.0	43.0	47.0	49.0	54.0	57.0	67.0	75.0	71.0	68.0	67.0	67.0	75.0	41.0	56.3
27	72.0	74.0	74.0	72.0	75.0	81.0	79.0	78.0	82.0	86.0	85.0	86.0	81.0	80.0	75.0	74.0	75.0	80.0	86.0	93.0	95.0	95.0	95.0	93.0	95.0	72.0	81.9
28	97.0	97.0	88.0	82.0	77.0	75.0	74.0	71.0	68.0	65.0	68.0	70.0	66.0	66.0	69.0	74.0	78.0	81.0	81.0	82.0	85.0	94.0	96.0	96.0	97.0	65.0	79.2
29	96.0	95.0	94.0	94.0	93.0	92.0	91.0	88.0	87.0	86.0	87.0	89.0	91.0	92.0	92.0	95.0	96.0	96.0	99.0	97.0	96.0	95.0	91.0	92.0	99.0	86.0	92.7
30	92.0	97.0	99.0	100.0	100.0	100.0	99.0	93.0	96.0	93.0	88.0	86.0	84.0	77.0	80.0	84.0	80.0	82.0	80.0	69.0	72.0	70.0	65.0	63.0	100.0	63.0	85.4
31	64.0	63.0	64.0	61.0	55.0	52.0	53.0	54.0	51.0	50.0	50.0	51.0	53.0	54.0	54.0	56.0	58.0	63.0	64.0	65.0	66.0	65.0	62.0	62.0	66.0	50.0	57.9
Max.	**97.0**	**97.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**98.0**	**94.0**	**95.0**	**96.0**	**96.0**	**99.0**	**97.0**	**97.0**	**98.0**	**97.0**	**97.0**	**100.0**		
Min.	**59.0**	**57.0**	**56.0**	**56.0**	**55.0**	**52.0**	**52.0**	**46.0**	**44.0**	**43.0**	**41.0**	**41.0**	**42.0**	**37.0**	**38.0**	**39.0**	43.0	46.0	**47.0**	**49.0**	**50.0**	**55.0**	**58.0**	**58.0**		**37.0**	
Avg.	**83.5**	**83.7**	**84.2**	**84.0**	**84.0**	**83.8**	**83.6**	**83.4**	**83.4**	**82.1**	**80.4**	**78.8**	**75.7**	**72.9**	**70.5**	**70.5**	**70.9**	**72.7**	**75.0**	**77.1**	**78.4**	**79.1**	**80.5**	**81.4**			**79.2**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

November 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	64.0	67.0	66.0	67.0	66.0	63.0	64.0	63.0	63.0	63.0	64.0	62.0	62.0	60.0	61.0	62.0	64.0	64.0	67.0	69.0	78.0	83.0	85.0	84.0	85.0	60.0	67.1
2	80.0	84.0	91.0	92.0	92.0	93.0	92.0	90.0	89.0	89.0	89.0	84.0	82.0	80.0	79.0	75.0	76.0	82.0	90.0	93.0	97.0	92.0	92.0	92.0	97.0	75.0	87.3
3	87.0	79.0	82.0	84.0	82.0	86.0	83.0	73.0	69.0	65.0	67.0	68.0	69.0	75.0	77.0	71.0	67.0	63.0	61.0	58.0	57.0	57.0	59.0	60.0	87.0	57.0	70.8
4	63.0	68.0	71.0	70.0	74.0	78.0	85.0	86.0	80.0	80.0	76.0	71.0	67.0	63.0	62.0	61.0	62.0	62.0	65.0	67.0	61.0	62.0	66.0	64.0	86.0	61.0	69.3
5	65.0	68.0	67.0	71.0	72.0	75.0	78.0	82.0	75.0	67.0	65.0	63.0	60.0	57.0	55.0	55.0	59.0	56.0	60.0	63.0	63.0	71.0	75.0	72.0	82.0	55.0	66.4
6	74.0	75.0	75.0	75.0	75.0	75.0	77.0	77.0	79.0	81.0	81.0	80.0	80.0	79.0	75.0	73.0	73.0	75.0	74.0	79.0	81.0	79.0	80.0	76.0	81.0	73.0	77.0
7	78.0	77.0	79.0	81.0	82.0	82.0	85.0	85.0	83.0	84.0	86.0	86.0	84.0	81.0	79.0	78.0	78.0	81.0	83.0	84.0	84.0	86.0	87.0	88.0	88.0	77.0	82.5
8	95.0	100.0	100.0	100.0	99.0	99.0	97.0	95.0	94.0	93.0	93.0	92.0	90.0	87.0	83.0	82.0	85.0	87.0	87.0	85.0	83.0	86.0	86.0	86.0	100.0	82.0	91.0
9	85.0	86.0	85.0	85.0	85.0	85.0	83.0	81.0	80.0	78.0	77.0	76.0	74.0	72.0	72.0	71.0	75.0	82.0	88.0	88.0	88.0	91.0	93.0	93.0	93.0	71.0	82.2
10	94.0	94.0	94.0	94.0	93.0	93.0	92.0	93.0	92.0	91.0	91.0	90.0	87.0	83.0	79.0	82.0	83.0	83.0	82.0	80.0	84.0	85.0	83.0	84.0	94.0	79.0	87.8
11	79.0	78.0	79.0	79.0	79.0	77.0	78.0	81.0	83.0	86.0	86.0	83.0	79.0	79.0	76.0	75.0	77.0	80.0	83.0	83.0	83.0	83.0	84.0	84.0	86.0	75.0	80.6
12	84.0	86.0	86.0	85.0	85.0	85.0	86.0	86.0	86.0	84.0	81.0	77.0	75.0	74.0	72.0	71.0	71.0	76.0	80.0	80.0	80.0	80.0	77.0	78.0	86.0	71.0	80.2
13	79.0	78.0	77.0	77.0	81.0	86.0	88.0	87.0	91.0	91.0	82.0	80.0	74.0	73.0	70.0	60.0	53.0	54.0	76.0	80.0	93.0	96.0	95.0	91.0	96.0	53.0	79.7
14	88.0	91.0	94.0	97.0	98.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	98.0	98.0	99.0	99.0	99.0	98.0	98.0	97.0	97.0	99.0	88.0	97.5
15	96.0	95.0	95.0	93.0	93.0	92.0	90.0	89.0	89.0	89.0	88.0	87.0	85.0	83.0	80.0	78.0	78.0	80.0	81.0	81.0	79.0	79.0	80.0	81.0	96.0	78.0	85.9
16	82.0	82.0	83.0	84.0	85.0	85.0	87.0	89.0	88.0	89.0	89.0	89.0	88.0	89.0	89.0	88.0	86.0	85.0	87.0	85.0	85.0	85.0	84.0	86.0	89.0	82.0	86.2
17	88.0	91.0	93.0	93.0	93.0	93.0	92.0	92.0	91.0	92.0	92.0	91.0	90.0	90.0	89.0	90.0	89.0	89.0	89.0	88.0	88.0	88.0	87.0	87.0	93.0	87.0	90.2
18	87.0	87.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	85.0	85.0	85.0	85.0	85.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	85.0	85.0	87.0	85.0	85.8
19	85.0	84.0	84.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	82.0	83.0	83.0	82.0	81.0	81.0	79.0	79.0	78.0	78.0	78.0	77.0	76.0	76.0	85.0	76.0	81.1
20	77.0	77.0	77.0	78.0	78.0	75.0	70.0	69.0	68.0	68.0	68.0	68.0	69.0	66.0	68.0	71.0	74.0	78.0	80.0	81.0	83.0	83.0	83.0	84.0	84.0	66.0	74.7
21	85.0	84.0	83.0	82.0	82.0	80.0	83.0	84.0	81.0	78.0	77.0	76.0	76.0	75.0	71.0	73.0	75.0	78.0	80.0	82.0	83.0	84.0	85.0	83.0	85.0	71.0	80.0
22	83.0	83.0	84.0	85.0	84.0	83.0	83.0	80.0	81.0	81.0	77.0	76.0	71.0	72.0	67.0	69.0	76.0	77.0	78.0	76.0	77.0	78.0	77.0	77.0	85.0	67.0	78.1
23	77.0	77.0	76.0	76.0	77.0	78.0	79.0	81.0	79.0	79.0	79.0	82.0	82.0	82.0	83.0	83.0	83.0	82.0	82.0	81.0	81.0	81.0	80.0	79.0	83.0	76.0	80.0
24	79.0	79.0	79.0	79.0	79.0	80.0	80.0	80.0	80.0	81.0	81.0	82.0	83.0	83.0	82.0	83.0	84.0	84.0	83.0	83.0	83.0	83.0	83.0	82.0	84.0	79.0	81.5
25	82.0	82.0	82.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	78.0	79.0	79.0	81.0	83.0	85.0	86.0	85.0	85.0	88.0	89.0	89.0	78.0	82.3
26	91.0	92.0	91.0	91.0	91.0	90.0	90.0	90.0	91.0	92.0	94.0	95.0	95.0			92.0	91.0	90.0	92.0	91.0	92.0	93.0	98.0	97.0	98.0	90.0	92.2
27	99.0	97.0	98.0	99.0	100.0	99.0	99.0	96.0	93.0	90.0	90.0	90.0	89.0	88.0	90.0	94.0	99.0	100.0	100.0	100.0	97.0	94.0	93.0	92.0	100.0	88.0	95.3
28	93.0	92.0	87.0	89.0	83.0	77.0	60.0	60.0	66.0	64.0	68.0	73.0	77.0	84.0	87.0	92.0	92.0	92.0	90.0	93.0	96.0	96.0	93.0	93.0	96.0	60.0	83.2
29	93.0	96.0	100.0	100.0	100.0	100.0	100.0	99.0	99.0	99.0	99.0	99.0	98.0	99.0	99.0	99.0	98.0	94.0	98.0	100.0	99.0	99.0	98.0	98.0	100.0	93.0	98.5
30	100.0	99.0	97.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	97.0	95.0	91.0	89.0	100.0	89.0	98.2
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.0**	**99.0**	**100.0**	**100.0**	**100.0**	**99.0**	**99.0**	**98.0**	**98.0**	**100.0**		
Min.	**63.0**	**67.0**	**66.0**	**67.0**	**66.0**	**63.0**	**60.0**	**60.0**	**63.0**	**63.0**	**64.0**	**62.0**	**60.0**	**57.0**	**55.0**	**55.0**	53.0	54.0	**60.0**	**58.0**	**57.0**	**57.0**	**59.0**	**60.0**		**53.0**	
Avg.	**83.7**	**84.3**	**84.7**	**85.2**	**85.3**	**85.3**	**85.0**	**84.6**	**84.0**	**83.4**	**82.9**	**82.3**	**81.1**	**79.9**	**79.0**	**79.0**	**79.7**	**80.6**	**82.7**	**83.2**	**84.0**	**84.5**	**84.7**	**84.2**			**83.1**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

December 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	86.0	85.0	83.0	84.0	84.0	83.0	83.0	85.0	86.0	88.0	88.0	91.0	92.0	91.0	90.0	86.0	85.0	86.0	85.0	80.0	78.0	81.0	75.0	65.0	92.0	65.0	84.2
2	75.0	89.0	93.0	99.0	99.0	88.0	87.0	83.0	82.0	82.0	91.0	97.0	97.0	97.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	90.0	100.0	75.0	93.5
3	87.0	87.0	86.0	84.0	83.0	86.0	87.0	89.0	96.0	100.0	100.0	100.0	100.0	100.0	98.0	97.0	88.0	90.0	91.0	87.0	90.0	91.0	92.0	92.0	100.0	83.0	91.7
4	92.0	92.0	92.0	93.0	93.0	93.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	95.0	95.0	96.0	97.0	98.0	99.0	99.0	99.0	99.0	98.0	99.0	92.0	95.1
5	98.0	98.0	94.0	90.0	80.0	80.0	85.0	86.0	86.0	83.0	85.0	87.0	86.0	87.0	87.0	87.0	88.0	88.0	86.0	84.0	84.0	83.0	82.0	83.0	98.0	80.0	86.5
6	82.0	80.0	79.0	79.0	81.0	80.0	77.0	75.0	77.0	75.0	74.0	71.0	69.0	67.0	69.0	71.0	71.0	74.0	74.0	71.0	72.0	73.0	75.0	76.0	82.0	67.0	74.7
7	72.0	72.0	70.0	64.0	57.0	58.0	54.0	49.0	53.0	54.0	51.0	47.0	46.0	50.0	50.0	49.0	49.0	50.0	52.0	63.0	66.0	65.0	62.0	66.0	72.0	46.0	57.0
8	61.0	57.0	55.0	51.0	46.0	52.0	51.0	56.0	76.0	82.0	80.0	73.0	65.0	58.0	58.0	65.0	67.0	67.0	71.0	77.0	84.0	85.0	83.0	83.0	85.0	46.0	66.8
9	86.0	88.0	89.0	89.0	89.0	86.0	84.0	85.0	83.0	81.0	79.0	80.0	73.0	70.0	72.0	77.0	85.0	87.0	89.0	89.0	89.0	91.0	91.0	92.0	92.0	70.0	84.3
10	93.0	93.0	93.0	93.0	94.0	94.0	94.0	95.0	95.0	96.0	97.0	97.0	96.0	96.0	97.0	96.0	96.0	96.0	96.0	95.0	95.0	95.0	94.0	94.0	97.0	93.0	95.0
11	93.0	95.0	95.0	95.0	96.0	97.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	98.0	93.0	97.0
12	96.0	95.0	95.0	95.0	95.0	95.0	95.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	95.0	95.0	94.0	95.0	94.0	93.0	94.0	94.0	96.0	93.0	95.2
13	94.0	94.0	94.0	95.0	95.0	95.0	93.0	89.0	92.0	94.0	94.0	95.0	95.0	95.0	96.0	97.0	97.0	96.0	98.0	99.0	99.0	98.0	95.0	96.0	99.0	89.0	95.2
14	100.0	95.0	94.0	94.0	98.0	99.0	98.0	98.0	99.0	99.0	98.0	99.0	98.0	98.0	98.0	98.0	98.0	98.0	99.0	100.0	100.0	98.0	98.0	98.0	100.0	94.0	98.0
15	98.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	94.0	97.0	98.0	97.0	97.0	96.0	96.0	97.0	97.0	97.0	98.0	97.0	97.0	97.0	97.0	98.0	94.0	96.9
16	97.0	97.0	97.0	96.0	95.0	95.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	92.0	92.0	92.0	92.0	97.0	92.0	93.9
17	93.0	93.0	92.0	92.0	92.0	92.0	91.0	90.0	89.0	91.0	89.0	86.0	83.0	85.0	83.0	80.0	79.0	82.0	86.0	85.0	84.0	85.0	83.0	81.0	93.0	79.0	86.9
18	85.0	85.0	88.0	87.0	89.0	85.0	83.0	81.0	83.0	84.0	87.0	87.0	86.0	85.0	85.0	84.0	86.0	86.0	85.0	86.0	86.0	86.0	86.0	86.0	89.0	81.0	85.5
19	85.0	85.0	85.0	84.0	85.0	84.0	84.0	82.0	84.0	83.0	84.0	86.0	83.0	81.0	81.0	82.0	83.0	83.0	82.0	80.0	77.0	77.0	74.0	73.0	86.0	73.0	82.0
20	75.0	74.0	79.0	80.0	81.0	79.0	78.0	73.0	72.0	70.0	67.0	70.0	69.0	66.0	66.0	66.0	73.0	71.0	72.0	71.0	72.0	76.0	73.0	76.0	81.0	66.0	72.9
21	76.0	73.0	72.0	74.0	73.0	75.0	76.0	78.0	77.0	76.0	81.0	77.0	68.0	62.0	71.0	69.0	62.0	65.0	63.0	76.0	77.0	83.0	88.0	92.0	92.0	62.0	74.3
22	94.0	94.0	93.0	90.0	91.0	90.0	86.0	87.0	84.0	82.0	81.0	81.0	81.0	91.0	91.0	88.0	85.0	83.0	85.0	89.0	88.0	86.0	83.0	86.0	94.0	81.0	87.0
23	86.0	84.0	87.0	90.0	89.0	93.0	92.0	90.0	90.0	92.0	90.0	91.0	88.0	93.0	92.0	91.0	88.0	87.0	87.0	85.0	81.0	81.0	77.0	75.0	93.0	75.0	87.5
24	76.0	78.0	77.0	78.0	80.0	84.0	81.0	82.0	83.0	86.0	84.0	86.0	86.0	86.0	87.0	90.0	90.0	90.0	92.0	94.0	92.0	89.0	89.0	86.0	94.0	76.0	85.3
25	84.0	83.0	84.0	84.0	88.0	88.0	88.0	87.0	87.0	87.0	88.0	88.0	87.0	86.0	85.0	84.0	84.0	83.0	81.0	80.0	82.0	78.0	77.0	82.0	88.0	77.0	84.4
26	81.0	79.0	82.0	82.0	86.0	86.0	80.0	78.0	79.0	83.0	92.0	94.0	94.0	94.0	94.0	95.0	95.0	95.0	95.0	93.0	92.0	92.0	95.0	95.0	95.0	78.0	88.8
27	95.0	95.0	94.0	94.0	93.0	94.0	95.0	95.0	96.0	96.0	95.0	93.0	92.0	93.0	90.0	87.0	89.0	90.0	88.0	89.0	90.0	89.0	89.0	88.0	96.0	87.0	92.0
28	88.0	88.0	89.0	89.0	89.0	89.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	86.0	87.0	87.0	88.0	88.0	88.0	88.0	89.0	89.0	90.0	89.0	90.0	86.0	88.2
29	89.0	88.0	87.0	86.0	86.0	83.0	82.0	79.0	70.0	66.0	71.0	72.0	73.0	73.0	73.0	75.0	80.0	80.0	74.0	72.0	70.0	69.0	67.0	66.0	89.0	66.0	76.3
30	64.0	66.0	72.0	70.0	72.0	73.0	73.0	74.0	75.0	74.0	75.0	77.0	83.0	81.0	81.0	86.0	86.0	90.0	92.0	93.0	92.0	91.0	93.0	94.0	94.0	64.0	80.3
31	96.0	95.0	96.0	92.0	89.0	84.0	84.0	84.0	84.0	81.0	79.0	74.0	79.0	85.0	91.0	90.0	92.0	95.0	98.0	99.0	100.0	100.0	98.0	95.0	100.0	74.0	90.0
Max.	**100.0**	**98.0**	**97.0**	**99.0**	**99.0**	**99.0**	**98.0**	**98.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.0**	**98.0**	**100.0**		
Min.	**61.0**	**57.0**	**55.0**	**51.0**	**46.0**	**52.0**	**51.0**	**49.0**	**53.0**	**54.0**	**51.0**	**47.0**	**46.0**	**50.0**	**50.0**	**49.0**	49.0	50.0	**52.0**	**63.0**	**66.0**	**65.0**	**62.0**	**65.0**		**46.0**	
Avg.	**86.4**	**86.3**	**86.5**	**86.1**	**86.0**	**85.7**	**84.9**	**84.4**	**85.3**	**85.5**	**86.0**	**86.0**	**85.0**	**85.0**	**85.4**	**85.6**	**85.9**	**86.4**	**86.7**	**87.3**	**87.4**	**87.4**	**86.6**	**86.4**			**86.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

January 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	94.0	92.0	86.0	82.0	83.0	79.0	82.0	85.0	89.0	90.0	90.0	89.0	85.0	85.0	82.0	81.0	88.0	92.0	92.0	96.0	97.0	97.0	96.0	96.0	97.0	79.0	88.7
2	96.0	96.0	96.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	96.0	96.0	96.0	96.0	97.0	97.0	97.0	97.0	97.0	95.0	95.6
3	97.0	97.0	97.0	97.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	93.0	94.0	94.0	95.0	95.0	95.0	95.0	94.0	94.0	94.0	94.0	93.0	97.0	93.0	95.2
4	93.0	92.0	92.0	91.0	90.0	89.0	88.0	87.0	89.0	88.0	90.0	88.0	85.0												93.0	85.0	89.4
5															78.0	74.0	72.0	73.0	73.0	71.0	72.0	73.0	74.0	76.0	78.0	71.0	73.6
6	82.0	87.0	86.0	85.0	85.0	87.0	85.0	82.0	80.0	83.0	82.0	81.0	84.0	82.0	80.0	77.0	78.0	76.0	78.0	81.0	81.0	83.0	85.0	88.0	88.0	76.0	82.4
7	84.0	84.0	88.0	92.0	93.0	88.0	85.0	84.0	83.0	88.0	95.0	97.0	97.0	95.0	94.0	95.0	99.0	99.0	100.0	100.0	100.0	100.0	100.0	99.0	100.0	83.0	93.3
8	99.0	100.0	98.0	98.0	98.0	99.0	100.0	100.0	98.0	95.0	86.0	75.0	71.0	75.0	77.0	81.0	85.0	78.0	86.0	85.0	81.0	76.0	73.0	78.0	100.0	71.0	87.2
9	82.0	83.0	81.0	83.0	80.0	82.0	82.0	86.0	90.0	88.0	84.0	80.0	78.0	77.0	84.0	85.0	85.0	83.0	81.0	81.0	84.0	86.0	87.0	89.0	90.0	77.0	83.4
10	89.0	90.0	86.0	86.0	86.0	87.0	89.0	89.0	89.0	88.0	89.0	84.0	80.0	78.0	77.0	78.0	84.0	88.0	89.0	89.0	89.0	82.0	79.0	86.0	90.0	77.0	85.5
11	85.0	83.0	83.0	82.0	77.0	89.0	94.0	95.0	95.0	95.0	95.0	95.0	94.0	93.0	93.0	93.0	94.0	90.0	86.0	85.0	85.0	83.0	77.0	75.0	95.0	75.0	88.2
12	77.0	75.0	74.0	70.0	68.0	62.0	59.0	61.0	61.0	59.0	58.0	59.0	61.0	59.0	61.0	68.0	66.0	66.0	66.0	66.0	67.0	71.0	83.0	84.0	84.0	58.0	66.7
13	77.0	80.0	76.0	75.0	77.0	71.0	72.0	77.0	76.0	74.0	73.0	79.0	79.0	79.0	82.0	86.0	83.0	79.0	74.0	77.0	79.0	76.0	73.0	74.0	86.0	71.0	77.0
14	74.0	74.0	73.0	72.0	76.0	78.0	87.0	79.0	74.0	82.0	80.0	80.0	88.0	93.0	90.0	81.0	80.0	83.0	85.0	83.0	75.0	70.0	68.0	77.0	93.0	68.0	79.3
15	74.0	83.0	98.0	100.0	100.0	96.0	97.0	92.0	90.0	91.0	91.0	91.0	89.0	86.0	85.0	81.0	77.0	75.0	68.0	72.0	78.0	82.0	78.0	86.0	100.0	68.0	85.8
16	88.0	92.0	96.0	99.0	97.0	93.0	90.0	87.0	87.0	89.0	84.0	79.0	75.0	70.0	72.0	77.0	77.0	73.0	75.0	80.0	82.0	88.0	94.0	92.0	99.0	70.0	84.8
17	93.0	93.0	97.0	94.0	92.0	91.0	92.0	91.0	93.0	91.0	88.0	83.0	87.0	88.0	91.0	95.0	99.0	98.0	94.0	91.0	86.0	85.0	84.0	82.0	99.0	82.0	90.8
18	80.0	81.0	78.0	77.0	78.0	81.0	78.0	78.0	78.0	80.0	78.0	68.0	66.0	65.0	64.0	65.0	64.0	64.0	64.0	65.0	69.0	72.0	67.0	67.0	81.0	64.0	72.0
19	71.0	76.0	78.0	83.0	86.0	86.0	85.0	88.0	89.0	92.0	91.0	91.0	90.0	89.0	91.0	88.0	87.0	88.0	90.0	89.0	89.0	89.0	90.0	92.0	92.0	71.0	87.0
20	90.0	88.0	91.0	88.0	89.0	89.0	85.0	83.0	82.0	80.0	82.0	83.0	81.0	76.0	71.0	69.0	64.0	67.0	73.0	76.0	75.0	81.0	85.0	85.0	91.0	64.0	80.5
21	89.0	91.0	90.0	87.0	90.0	91.0	90.0	91.0	92.0	93.0	95.0	95.0	94.0	95.0	93.0	92.0	91.0	92.0	92.0	90.0	88.0	88.0	81.0	73.0	95.0	73.0	90.1
22	72.0	71.0	69.0	70.0	72.0	73.0	75.0	74.0	74.0	76.0	77.0	74.0	72.0	69.0	68.0	67.0	67.0	68.0	65.0	69.0	70.0	68.0	67.0	66.0	77.0	65.0	70.5
23	66.0	67.0	67.0	67.0	68.0	72.0	76.0	76.0	76.0	78.0	79.0	78.0	78.0	77.0	73.0	74.0	77.0	76.0	77.0	76.0	72.0	73.0	75.0	76.0	79.0	66.0	73.9
24	76.0	77.0	80.0	81.0	82.0	82.0	83.0	85.0	86.0	87.0	87.0	84.0	82.0	81.0	81.0	79.0	79.0	78.0	78.0	77.0	78.0	81.0	86.0	92.0	92.0	76.0	81.8
25	90.0	87.0	81.0	74.0	70.0	64.0	62.0	68.0	66.0	67.0	63.0	63.0	68.0	69.0	66.0	70.0	70.0	75.0	76.0	77.0	78.0	74.0	78.0	79.0	90.0	62.0	72.3
26	79.0	80.0	77.0	75.0	77.0	71.0	72.0	75.0	76.0	74.0	73.0	74.0	70.0	68.0	70.0	69.0	72.0	71.0	72.0	76.0	76.0	76.0	74.0	75.0	80.0	68.0	73.8
27	73.0	74.0	74.0	74.0	74.0	75.0	76.0	76.0	76.0	76.0	77.0	76.0	75.0	73.0	73.0	75.0	77.0	80.0	80.0	80.0	81.0	81.0	80.0	80.0	81.0	73.0	76.5
28	81.0	81.0	82.0	82.0	81.0	81.0	80.0	81.0	81.0	80.0	79.0	77.0	75.0	75.0	75.0	74.0	74.0	73.0	72.0	73.0	73.0	73.0	72.0	71.0	82.0	71.0	76.9
29	72.0	72.0	72.0	72.0	72.0	72.0	72.0	73.0	73.0	75.0	76.0	79.0	81.0	82.0	82.0	82.0	83.0	84.0	84.0	84.0	85.0	84.0	84.0	83.0	85.0	72.0	78.3
30	83.0	82.0	82.0	81.0	80.0	80.0	80.0	78.0	77.0	76.0	76.0	76.0	74.0	74.0	73.0	74.0	75.0	76.0	74.0	74.0	74.0	75.0	74.0		83.0	73.0	76.9
31																											
Max.	**99.0**	**100.0**	**98.0**	**100.0**	**100.0**	**99.0**	**100.0**	**100.0**	**98.0**	**96.0**	**96.0**	**97.0**	**97.0**	**95.0**	**95.0**	**95.0**	**99.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.0**	**100.0**		
Min.	**66.0**	**67.0**	**67.0**	**67.0**	**68.0**	**62.0**	**59.0**	**61.0**	**61.0**	**59.0**	**58.0**	**59.0**	**61.0**	**59.0**	**61.0**	**65.0**	64.0	64.0	**64.0**	**65.0**	**67.0**	**68.0**	**67.0**	**66.0**		**58.0**	
Avg.	**83.0**	**83.7**	**83.7**	**83.2**	**83.2**	**82.7**	**83.0**	**83.2**	**83.1**	**83.7**	**83.1**	**81.6**	**80.9**	**80.1**	**79.8**	**80.0**	**80.6**	**80.6**	**80.5**	**81.1**	**81.2**	**81.3**	**81.2**	**82.5**			**82.0**

Total Hours in Month 744 **Hours Data Available** 694 **Data Recovery** 93.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

February 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	73.0	73.0	73.0	73.0	73.0	73.0	74.0	74.0	75.0	76.0	75.0	74.0	74.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	74.0	73.0	72.0	72.0	76.0	72.0	73.4
2	72.0	73.0	72.0	72.0	71.0	71.0	70.0	70.0	70.0	69.0	69.0	67.0	63.0	60.0	59.0	59.0	62.0	62.0	64.0	67.0	70.0	72.0	73.0	74.0	74.0	59.0	68.0
3	75.0	76.0	75.0	74.0	75.0	76.0	77.0	78.0	77.0	74.0	72.0	71.0	68.0	66.0	66.0	65.0	67.0	72.0	74.0	74.0	73.0	73.0	72.0	72.0	78.0	65.0	72.6
4	72.0	73.0	73.0	75.0	76.0	75.0	75.0	76.0	74.0	74.0	72.0	69.0	67.0	68.0	69.0	68.0	67.0	66.0	68.0	69.0	70.0	71.0	69.0	68.0	76.0	66.0	71.0
5	70.0	71.0	79.0	82.0	84.0	85.0	86.0	83.0	75.0	71.0	67.0	72.0	80.0	90.0	91.0	88.0	85.0	87.0	87.0	85.0	81.0	70.0	65.0	66.0	91.0	65.0	79.2
6	77.0	74.0	74.0	82.0	83.0	82.0	86.0	88.0	92.0	91.0	91.0	90.0	90.0	89.0	88.0	90.0	89.0	89.0	90.0	90.0	89.0	88.0	86.0	85.0	92.0	74.0	86.4
7	85.0	85.0	85.0	86.0	84.0	83.0	82.0	81.0	80.0	79.0	78.0	75.0	69.0	66.0	66.0	67.0	66.0	67.0	74.0	74.0	74.0	77.0	78.0	79.0	86.0	66.0	76.7
8	80.0	79.0	80.0	80.0	82.0	82.0	81.0	81.0	84.0	82.0	82.0	80.0	71.0	67.0	58.0	68.0	67.0	67.0	68.0	66.0	71.0	64.0	67.0	68.0	84.0	58.0	74.0
9	70.0	72.0	76.0	76.0	79.0	77.0	76.0	77.0	78.0	77.0	77.0	77.0	74.0	74.0	78.0	83.0	83.0	85.0	86.0	85.0	84.0	84.0	85.0	88.0	88.0	70.0	79.2
10	88.0	82.0	77.0	77.0	75.0	76.0	74.0	72.0	76.0	81.0	80.0	82.0	79.0	82.0	85.0	86.0	90.0	93.0	95.0	100.0	100.0	100.0	100.0	98.0	100.0	72.0	85.3
11	91.0	87.0	85.0	82.0	89.0	91.0	89.0	92.0	92.0	92.0	90.0	87.0	87.0	87.0	82.0	79.0	81.0	81.0	82.0	85.0	88.0	88.0	88.0	89.0	92.0	79.0	86.8
12	91.0	91.0	90.0	93.0	92.0	93.0	93.0	93.0	93.0	93.0	92.0	92.0	91.0	92.0	92.0	90.0	89.0	90.0	93.0	91.0	92.0	92.0	93.0	93.0	93.0	89.0	91.8
13	93.0	93.0	92.0	90.0	91.0	92.0	93.0	94.0	94.0	94.0	94.0		86.0	82.0	80.0	79.0	84.0	82.0	83.0	83.0	87.0	88.0	84.0	87.0	94.0	79.0	88.0
14	84.0	82.0	80.0	82.0	83.0	87.0	91.0	91.0	91.0	91.0	91.0	90.0	89.0	88.0	83.0	84.0	85.0	89.0	90.0	89.0	90.0	89.0	89.0	88.0	91.0	80.0	87.3
15	88.0	87.0	86.0	86.0	85.0	86.0	86.0	84.0	84.0	83.0	84.0	86.0	83.0	83.0	80.0	79.0	79.0	81.0	84.0	83.0	83.0	81.0	82.0	81.0	88.0	79.0	83.5
16	77.0	76.0	76.0	73.0	71.0	74.0	75.0	76.0	74.0	74.0	74.0	73.0	72.0	72.0	71.0	71.0	72.0	73.0	74.0	74.0	74.0	75.0	75.0	77.0	77.0	71.0	73.9
17	76.0	76.0	75.0	75.0	73.0	73.0	73.0	73.0	77.0	74.0	71.0	66.0	62.0	64.0	60.0	56.0	57.0	60.0	64.0	67.0	66.0	63.0	62.0	62.0	77.0	56.0	67.7
18	58.0	55.0	55.0	60.0	67.0	66.0	65.0	64.0	66.0	62.0	63.0	59.0	58.0	57.0	53.0	58.0	62.0	60.0	62.0	66.0	63.0	60.0	60.0	58.0	67.0	53.0	60.7
19	61.0	59.0	60.0	61.0	60.0	62.0	63.0	63.0	59.0	62.0	62.0	56.0	48.0	53.0	48.0	47.0	48.0	48.0	54.0	61.0	63.0	65.0	62.0	57.0	65.0	47.0	57.6
20	55.0	52.0	49.0	52.0	51.0	55.0	59.0	59.0	62.0	65.0	63.0	56.0	47.0	53.0	48.0	52.0	54.0	57.0	63.0	66.0	65.0	61.0	64.0	67.0	67.0	47.0	57.3
21	68.0	66.0	64.0	62.0	65.0	62.0	57.0	59.0	68.0	68.0	60.0	58.0	61.0	62.0	62.0	59.0	66.0	70.0	69.0	70.0	69.0	68.0	67.0	68.0	70.0	57.0	64.5
22	68.0	67.0	67.0	67.0	67.0	66.0	68.0	66.0	66.0	64.0	65.0	60.0	65.0	63.0	57.0	53.0	56.0	54.0	58.0	65.0	64.0	67.0	69.0	69.0	69.0	53.0	63.8
23	65.0	67.0	67.0	70.0	66.0	65.0	66.0	67.0	66.0	62.0	63.0	65.0	78.0	83.0	86.0	87.0	87.0	87.0	85.0	84.0	81.0	79.0	77.0	77.0	87.0	62.0	74.2
24	78.0	85.0	87.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	86.0	88.0	88.0	87.0	89.0	85.0	84.0	88.0	88.0	86.0	83.0	85.0	86.0	89.0	78.0	86.5
25	85.0	83.0	84.0	87.0	87.0	88.0	91.0	95.0	96.0	95.0	95.0	95.0	91.0	89.0	88.0	87.0	87.0	86.0	85.0	91.0	95.0	94.0	80.0	77.0	96.0	77.0	88.8
26	74.0	73.0	70.0	72.0	74.0	77.0	75.0	76.0	75.0	74.0	77.0	75.0	73.0	73.0	74.0	77.0	77.0	78.0	81.0	82.0	83.0	84.0	85.0	87.0	87.0	70.0	76.9
27	86.0	92.0	94.0	93.0	93.0	94.0	92.0	91.0	91.0	89.0	82.0	86.0	82.0	81.0	87.0	91.0	90.0	92.0	92.0	93.0	91.0	90.0	87.0	85.0	94.0	81.0	89.3
28	85.0	83.0	88.0	91.0	90.0	91.0	90.0	90.0	90.0	89.0	88.0	87.0	87.0	86.0	87.0	87.0	89.0	89.0	90.0	89.0	89.0	89.0	89.0	88.0	91.0	83.0	88.4
29	88.0	88.0	88.0	87.0	86.0	83.0	82.0	85.0	86.0	84.0	81.0	76.0	74.0	73.0	75.0	75.0	74.0	75.0	76.0	78.0	73.0	72.0	76.0	75.0	88.0	72.0	79.6
Max.	**93.0**	**93.0**	**94.0**	**93.0**	**93.0**	**94.0**	**93.0**	**95.0**	**96.0**	**95.0**	**95.0**	**95.0**	**91.0**	**92.0**	**92.0**	**91.0**	**90.0**	**93.0**	**95.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**100.0**		
Min.	**55.0**	**52.0**	**49.0**	**52.0**	**51.0**	**55.0**	**57.0**	**59.0**	**59.0**	**62.0**	**60.0**	**56.0**	**47.0**	**53.0**	**48.0**	**47.0**	48.0	48.0	**54.0**	**61.0**	**63.0**	**60.0**	**60.0**	**57.0**		**47.0**	
Avg.	**77.0**	**76.6**	**76.6**	**77.5**	**77.9**	**78.4**	**78.5**	**78.8**	**79.3**	**78.5**	**77.4**	**75.4**	**74.4**	**74.6**	**73.6**	**74.0**	**74.9**	**75.8**	**77.7**	**78.9**	**78.9**	**77.9**	**77.3**	**77.3**			**77.0**

Total Hours in Month 696 **Hours Data Available** 695 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

March 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	76.0	76.0	75.0	76.0	76.0	77.0	76.0	75.0	74.0	74.0	72.0	68.0	66.0	62.0	63.0	61.0	59.0	58.0	60.0	62.0	60.0	59.0	58.0	55.0	77.0	55.0	67.4
2	53.0	60.0	58.0	58.0	58.0	55.0	53.0	54.0	56.0	61.0	57.0	50.0	50.0	53.0	59.0	67.0	74.0	79.0	80.0	84.0	86.0	86.0	87.0	87.0	87.0	50.0	65.2
3	88.0	87.0	87.0	86.0	85.0	85.0	85.0	85.0	84.0	81.0	74.0	66.0	63.0	62.0	60.0	61.0	65.0	65.0	65.0	68.0	70.0	69.0	69.0	69.0	88.0	60.0	74.1
4	70.0	72.0	72.0	74.0	76.0	73.0	72.0	67.0	67.0	69.0	66.0	59.0	59.0	57.0	53.0	52.0	47.0	51.0	55.0	59.0	61.0	61.0	61.0	60.0	76.0	47.0	63.0
5	63.0	62.0	66.0	66.0	65.0	63.0	62.0	62.0	62.0	62.0	57.0	50.0	42.0	39.0	47.0	41.0	46.0	46.0	41.0	43.0	42.0	42.0	45.0	49.0	66.0	39.0	52.6
6	52.0	52.0	55.0	56.0	59.0	64.0	65.0	63.0	61.0	58.0	57.0	56.0	59.0	62.0	66.0	61.0	62.0	64.0	67.0	72.0	66.0	69.0	73.0	81.0	81.0	52.0	62.5
7	82.0	81.0	79.0	89.0	85.0	81.0	73.0	73.0	72.0	71.0	75.0	75.0	76.0	77.0	77.0	73.0	77.0	78.0	80.0	81.0	85.0	91.0	89.0	85.0	91.0	71.0	79.4
8	84.0	85.0	86.0	85.0	83.0	83.0	80.0	81.0	85.0	89.0	87.0	90.0	92.0	90.0	91.0	90.0	88.0	91.0	89.0	86.0	84.0	84.0	88.0	89.0	92.0	80.0	86.7
9	90.0	91.0	91.0	87.0	82.0	79.0	77.0	78.0	75.0	73.0	69.0	70.0	78.0	80.0	79.0	90.0	91.0	95.0	96.0	95.0	97.0	98.0	97.0	92.0	98.0	69.0	85.4
10	89.0	92.0	95.0	95.0	98.0	97.0	98.0	98.0	97.0	89.0	87.0	83.0	84.0	86.0	86.0	93.0	96.0	95.0	95.0	97.0	99.0	100.0	100.0	100.0	100.0	83.0	93.7
11	100.0	100.0	100.0	100.0	100.0	100.0	99.0	97.0	95.0	94.0	93.0	92.0	91.0	90.0	85.0	84.0	83.0	84.0	89.0	90.0	91.0	92.0	96.0	97.0	100.0	83.0	93.4
12	97.0	97.0	96.0	95.0	95.0	95.0	95.0	94.0	93.0	93.0	91.0	86.0	89.0	84.0	79.0	81.0	82.0	86.0	90.0	93.0	95.0	94.0	93.0	94.0	97.0	79.0	91.1
13	94.0	94.0	94.0	92.0	92.0	92.0	92.0	92.0	89.0	88.0	85.0	78.0	71.0	66.0	63.0	61.0	66.0	77.0	79.0	91.0	96.0	95.0	95.0	96.0	96.0	61.0	84.9
14	92.0	76.0	79.0	79.0	76.0	70.0	71.0	74.0	77.0	75.0	77.0	83.0	80.0	80.0	78.0	76.0	76.0	77.0	78.0	82.0	82.0	82.0	83.0	83.0	92.0	70.0	78.6
15	87.0	91.0	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	96.0	97.0	99.0	100.0	99.0	97.0	100.0	100.0	100.0	87.0	98.2
16	100.0	98.0	95.0	94.0	96.0	94.0	95.0	95.0	95.0	93.0	94.0	89.0	82.0	81.0	83.0	82.0	76.0	81.0	80.0	80.0	82.0	83.0	78.0	81.0	100.0	76.0	87.8
17	84.0	87.0	84.0	88.0	87.0	86.0	88.0	89.0	85.0	82.0	80.0	81.0	79.0	79.0	82.0	81.0	83.0	81.0	80.0	80.0	83.0	86.0	87.0	86.0	89.0	79.0	83.7
18	83.0	77.0	76.0	75.0	74.0	72.0	74.0	77.0	82.0	90.0	93.0	94.0	93.0	96.0	96.0	97.0	97.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	72.0	88.8
19	98.0	98.0	97.0	95.0	90.0	88.0	90.0	88.0	89.0	87.0	87.0	85.0	83.0	79.0	77.0	78.0	73.0	75.0	82.0	77.0	78.0	78.0	79.0	77.0	98.0	73.0	84.5
20	83.0	84.0	88.0	94.0	95.0	89.0	95.0	93.0	92.0	91.0	94.0	94.0	96.0	96.0	94.0	95.0	95.0	95.0	93.0	93.0	95.0	94.0	94.0	94.0	96.0	83.0	92.8
21	95.0	95.0	95.0	94.0	94.0	94.0	94.0	94.0	94.0	93.0	92.0	90.0	85.0	81.0	78.0	75.0	71.0	72.0	79.0	78.0	79.0	81.0	83.0	83.0	95.0	71.0	86.2
22	84.0	82.0	81.0	86.0	85.0	89.0	92.0	91.0	88.0	88.0	88.0	90.0	91.0	90.0	91.0	91.0	91.0	89.0	90.0	91.0	90.0	88.0	86.0	86.0	92.0	81.0	88.3
23	84.0	89.0	94.0	92.0	94.0	95.0	94.0	92.0	94.0	96.0	97.0	96.0	95.0	91.0	86.0	84.0	86.0	93.0	92.0	94.0	95.0	95.0	97.0	99.0	99.0	84.0	92.7
24	99.0	99.0	99.0	98.0	99.0	97.0	91.0	87.0	90.0	90.0	85.0	84.0	83.0	83.0	78.0	79.0	78.0	87.0	87.0	86.0	86.0	88.0	89.0	90.0	99.0	78.0	88.8
25	93.0	95.0	99.0	100.0	100.0	100.0	100.0	93.0	93.0	93.0	94.0	91.0													100.0	91.0	95.9
26														85.0	87.0	87.0	87.0	90.0	90.0	90.0	92.0	91.0	95.0	95.0	95.0	85.0	89.9
27	95.0	93.0	93.0	93.0	93.0	93.0	91.0	92.0	92.0	91.0	90.0	89.0	87.0	87.0	85.0	84.0	83.0	84.0	85.0	86.0	88.0	88.0	87.0	87.0	95.0	83.0	89.0
28	88.0	87.0	86.0	85.0	84.0	85.0	85.0	85.0	84.0	81.0	79.0	75.0	76.0	75.0	74.0	74.0	72.0	73.0	72.0	75.0	77.0	78.0	75.0	77.0	88.0	72.0	79.3
29	79.0	80.0	79.0	81.0	81.0	79.0	81.0	81.0	77.0	71.0	61.0	54.0	56.0	46.0	57.0	57.0	52.0	57.0	59.0	68.0	78.0	79.0	81.0	81.0	81.0	46.0	69.8
30	82.0	85.0	84.0	82.0	79.0	75.0	74.0	74.0	63.0	56.0	48.0	38.0	39.0	37.0	41.0	44.0	37.0	46.0	50.0	51.0	51.0	49.0	54.0	52.0	85.0	37.0	58.0
31	51.0	60.0	52.0	52.0	53.0	61.0	62.0	66.0	68.0	60.0	51.0	48.0	44.0	47.0	46.0	40.0	47.0	49.0	48.0	45.0	51.0	54.0	52.0	51.0	68.0	40.0	52.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**98.0**	**98.0**	**97.0**	**98.0**	**99.0**	**100.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**51.0**	**52.0**	**52.0**	**52.0**	**53.0**	**55.0**	**53.0**	**54.0**	**56.0**	**56.0**	**48.0**	**38.0**	**39.0**	**37.0**	**41.0**	**40.0**	37.0	46.0	**41.0**	**43.0**	**42.0**	**42.0**	**45.0**	**49.0**		**37.0**	
Avg.	**83.8**	**84.2**	**84.4**	**84.9**	**84.5**	**83.7**	**83.5**	**83.0**	**82.4**	**81.3**	**79.3**	**76.8**	**75.5**	**74.6**	**74.6**	**74.6**	**74.5**	**77.1**	**78.3**	**79.8**	**81.2**	**81.6**	**82.3**	**82.5**			**80.4**

Total Hours in Month 744 **Hours Data Available** 719 **Data Recovery** 96.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

April 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	52.0	60.0	59.0	59.0	56.0	55.0	60.0	66.0	78.0	90.0	90.0	93.0	88.0	82.0	84.0	82.0	89.0	87.0	81.0	83.0	82.0	88.0	90.0	92.0	93.0	52.0	76.9
2	93.0	91.0	94.0	93.0	94.0	95.0	95.0	95.0	94.0	92.0	89.0	88.0	85.0	84.0	89.0	88.0	86.0	82.0	81.0	80.0	80.0	78.0	75.0	74.0	95.0	74.0	87.3
3	73.0	72.0	69.0	68.0	69.0	70.0	67.0	72.0	71.0	67.0	64.0	65.0	61.0	67.0	68.0	66.0	68.0	68.0	69.0	62.0	58.0	59.0	65.0	64.0	73.0	58.0	66.8
4	67.0	73.0	76.0	72.0	71.0	73.0	70.0	68.0	68.0	66.0	70.0	75.0	76.0	70.0	64.0	58.0	60.0	57.0	58.0	60.0	62.0	61.0	59.0	64.0	76.0	57.0	66.6
5	72.0	77.0	75.0	74.0	76.0	74.0	73.0	73.0	76.0	76.0	77.0	75.0	75.0	73.0	74.0	71.0	74.0	74.0	77.0	78.0	80.0	81.0	82.0	85.0	85.0	71.0	75.9
6	87.0	89.0	92.0	93.0	96.0	94.0	92.0	90.0	89.0	88.0	86.0	80.0	81.0	76.0	71.0	68.0	71.0	76.0	77.0	76.0	76.0	77.0	80.0	86.0	96.0	68.0	83.0
7	86.0	87.0	86.0	82.0	85.0	87.0	86.0	85.0	84.0	80.0	78.0	74.0	76.0	74.0	74.0	75.0	76.0	77.0	78.0	77.0	79.0	82.0	83.0	86.0	87.0	74.0	80.7
8	88.0	89.0	90.0	90.0	92.0	90.0	90.0	91.0	90.0	86.0	85.0	83.0	77.0	74.0	73.0	72.0	72.0	73.0	72.0	71.0	72.0	73.0	72.0	70.0	92.0	70.0	80.6
9	67.0	67.0	71.0	78.0	83.0	83.0	84.0	83.0	80.0	78.0	77.0	74.0	72.0	70.0	70.0	69.0	70.0	70.0	71.0	74.0	77.0	79.0	83.0	83.0	84.0	67.0	75.5
10	83.0	83.0	82.0	82.0	85.0	86.0	88.0	87.0	85.0	84.0	81.0	79.0	78.0	78.0	76.0	75.0	74.0	73.0	73.0	76.0	79.0	81.0	81.0	81.0	88.0	73.0	80.4
11	80.0	82.0	84.0	84.0	86.0	87.0	87.0	86.0	88.0	86.0	84.0	83.0	82.0	80.0	79.0	79.0	77.0	75.0	74.0	66.0	70.0	65.0	64.0	66.0	88.0	64.0	78.9
12	63.0	64.0	65.0	65.0	63.0	65.0	68.0	69.0	68.0	68.0	66.0	65.0	65.0	65.0	63.0	65.0	66.0	64.0	66.0	65.0	61.0	65.0	68.0	65.0	69.0	61.0	65.3
13	71.0	73.0	73.0	76.0	76.0	77.0	76.0	75.0	70.0	65.0	61.0	67.0	68.0	64.0	60.0	57.0	56.0	58.0	60.0	60.0	61.0	62.0	60.0	59.0	77.0	56.0	66.0
14	60.0	61.0	61.0	61.0	62.0	63.0	63.0	56.0	53.0	50.0	48.0	46.0	50.0	59.0	60.0	63.0	67.0	70.0	78.0	82.0	83.0	88.0	80.0	78.0	88.0	46.0	64.3
15	84.0	91.0	96.0	90.0	85.0	82.0	77.0	76.0	76.0	73.0	69.0	66.0	65.0	58.0	58.0	58.0	64.0	65.0	64.0	62.0	61.0	57.0	56.0	63.0	96.0	56.0	70.7
16	69.0	72.0	77.0	78.0	80.0	80.0	75.0	74.0	77.0	77.0	79.0	87.0	86.0	83.0	83.0	83.0	86.0	89.0	90.0	92.0	93.0	92.0	89.0	88.0	93.0	69.0	82.5
17	87.0	85.0	85.0	86.0	88.0	86.0	87.0	90.0	91.0	91.0	89.0	85.0	81.0	76.0	75.0	73.0	71.0	68.0	67.0	67.0	69.0	73.0	69.0	69.0	91.0	67.0	79.5
18	69.0	75.0	82.0	85.0	80.0	81.0	77.0	79.0	79.0	75.0	68.0	74.0	70.0	66.0	76.0	87.0	89.0	93.0	96.0	98.0	99.0	97.0	97.0	96.0	99.0	66.0	82.8
19	97.0	95.0	96.0	99.0	98.0	89.0	87.0	87.0	84.0	84.0	90.0	94.0	93.0	91.0	92.0	94.0	90.0	94.0	96.0	92.0	85.0	86.0	85.0	87.0	99.0	84.0	91.0
20	89.0	87.0	87.0	86.0	87.0	85.0	84.0	84.0	86.0	82.0	79.0	75.0	74.0	73.0	72.0	72.0	73.0	73.0	73.0	71.0	69.0	74.0	77.0	79.0	89.0	69.0	78.8
21	80.0	82.0	84.0	87.0	89.0	90.0	90.0	90.0	89.0	86.0	84.0	82.0	81.0	80.0	76.0	73.0	75.0	78.0	81.0	82.0	84.0	87.0	90.0	91.0	91.0	73.0	83.8
22	92.0	92.0	92.0	92.0	92.0	91.0	91.0	92.0	92.0	91.0	88.0	85.0	82.0	81.0	80.0	78.0	78.0	79.0	78.0	79.0	80.0	82.0	84.0	84.0	92.0	78.0	85.6
23	85.0	85.0	86.0	87.0	89.0	89.0	89.0	87.0	83.0	82.0	81.0	79.0	76.0	73.0	70.0	67.0	65.0	64.0	66.0	69.0	72.0	77.0	77.0	77.0	89.0	64.0	78.1
24	78.0	81.0	83.0	82.0	82.0	83.0	83.0	79.0	77.0	70.0	64.0	61.0	60.0	59.0	60.0	55.0	56.0	56.0	58.0	62.0	65.0	74.0	74.0	71.0	83.0	55.0	69.7
25	71.0	72.0	73.0	75.0	76.0	69.0	70.0	71.0	68.0	63.0	62.0	64.0	62.0	61.0	57.0	54.0	57.0	58.0	61.0	60.0	60.0	64.0	64.0	65.0	76.0	54.0	64.9
26	66.0	62.0	62.0	69.0	68.0	64.0	64.0	64.0	62.0	58.0	58.0	49.0	53.0	50.0	48.0	45.0	43.0	47.0	53.0	58.0	61.0	56.0	61.0	68.0	69.0	43.0	57.9
27	69.0	71.0	73.0	72.0	77.0	78.0	81.0	83.0	86.0	84.0	81.0	77.0	72.0	65.0	64.0	74.0	71.0	62.0	64.0	66.0	72.0	70.0	73.0	75.0	86.0	62.0	73.3
28	74.0	72.0	77.0	76.0	76.0	76.0	77.0	76.0	77.0	76.0	72.0	68.0	66.0	64.0	63.0	60.0	58.0	56.0	57.0	58.0	58.0	63.0	73.0	72.0	77.0	56.0	68.5
29	71.0	69.0	65.0	69.0	68.0	72.0	70.0	67.0	61.0	59.0	58.0	54.0	54.0	50.0	47.0	44.0	42.0	45.0	46.0	49.0	55.0	59.0	68.0	65.0	72.0	42.0	58.6
30	71.0	66.0	71.0	76.0	78.0	78.0	81.0	84.0	80.0	77.0	76.0	70.0	59.0	57.0	57.0	52.0	47.0	48.0	48.0	51.0	51.0	56.0	59.0	63.0	84.0	47.0	64.8
Max.	**97.0**	**95.0**	**96.0**	**99.0**	**98.0**	**95.0**	**95.0**	**95.0**	**94.0**	**92.0**	**90.0**	**94.0**	**93.0**	**91.0**	**92.0**	**94.0**	**90.0**	**94.0**	**96.0**	**98.0**	**99.0**	**97.0**	**97.0**	**96.0**	**99.0**		
Min.	**52.0**	**60.0**	**59.0**	**59.0**	**56.0**	**55.0**	**60.0**	**56.0**	**53.0**	**50.0**	**48.0**	**46.0**	**50.0**	**50.0**	**47.0**	**44.0**	42.0	45.0	**46.0**	**49.0**	**51.0**	**56.0**	**56.0**	**59.0**		**42.0**	
Avg.	**76.5**	**77.5**	**78.9**	**79.5**	**80.2**	**79.7**	**79.4**	**79.3**	**78.7**	**76.8**	**75.1**	**73.9**	**72.3**	**70.1**	**69.4**	**68.6**	**69.0**	**69.3**	**70.4**	**70.9**	**71.8**	**73.5**	**74.6**	**75.5**			**74.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

May *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	65.0	69.0	72.0	75.0	79.0	79.0	80.0	78.0	75.0	71.0	70.0	66.0	62.0	58.0	56.0	55.0	55.0	55.0	54.0	55.0	58.0	62.0	64.0	65.0	80.0	54.0	65.8
2	62.0	61.0	62.0	64.0	66.0	69.0	67.0	65.0	65.0	62.0	59.0	55.0	51.0	50.0	47.0	45.0	45.0	47.0	47.0	47.0	50.0	51.0	51.0	52.0	69.0	45.0	55.8
3	54.0	63.0	70.0	69.0	70.0	75.0	77.0	74.0	69.0	63.0			49.0	47.0	47.0	45.0	46.0	48.0	49.0	52.0	54.0	56.0	56.0	57.0	77.0	45.0	58.6
4	58.0	61.0	62.0	65.0	66.0	69.0	68.0	68.0	63.0	59.0	53.0	53.0	54.0	53.0	52.0	50.0	49.0	48.0	47.0	48.0	52.0	54.0	53.0	54.0	69.0	47.0	56.6
5	55.0	59.0	61.0	62.0	66.0	68.0	69.0	66.0	61.0	59.0	55.0	52.0	49.0	46.0	46.0	44.0	43.0	43.0	43.0	45.0	47.0	53.0	59.0	59.0	69.0	43.0	54.6
6	68.0	65.0	60.0	57.0	62.0	62.0	61.0	59.0	53.0	50.0	50.0	44.0	40.0	39.0	38.0	37.0	35.0	34.0	40.0	39.0	44.0	46.0	50.0	55.0	68.0	34.0	49.5
7	62.0	63.0	66.0	70.0	75.0	80.0	84.0	86.0	85.0	79.0	76.0	74.0	68.0	64.0	62.0	61.0	61.0	61.0	68.0	73.0	74.0	75.0	77.0	76.0	86.0	61.0	71.7
8	87.0	98.0	97.0	97.0	95.0	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.0	90.0	85.0	81.0	80.0	80.0	76.0	74.0	82.0	84.0	87.0	100.0	74.0	90.9
9	88.0	84.0	80.0	80.0	80.0	85.0	82.0	82.0	83.0	83.0	80.0	75.0	65.0	57.0	53.0	53.0	53.0	52.0	51.0	53.0	59.0	66.0	71.0	71.0	88.0	51.0	70.3
10	71.0	76.0	78.0	82.0	83.0	83.0	81.0	80.0	78.0	75.0	73.0	66.0	62.0	57.0	55.0	55.0	55.0	55.0	55.0	58.0	61.0	69.0	77.0	80.0	83.0	55.0	69.4
11	80.0	84.0	89.0	93.0	93.0	93.0	92.0	88.0	84.0	80.0	73.0	67.0	62.0	59.0	57.0	53.0	54.0	56.0	55.0	58.0	64.0	69.0	74.0	79.0	93.0	53.0	73.2
12	81.0	81.0	80.0	75.0	78.0	80.0	79.0	80.0	74.0	62.0	54.0	55.0	54.0	55.0	58.0	62.0	64.0	65.0	70.0	71.0	74.0	74.0	77.0	77.0	81.0	54.0	70.0
13	73.0	72.0	75.0	74.0	75.0	76.0	81.0	89.0	97.0	96.0	95.0	95.0	95.0	96.0	97.0	99.0	100.0	99.0	98.0	97.0	96.0	96.0	97.0	98.0	100.0	72.0	90.3
14	97.0	96.0	95.0	99.0	99.0	100.0	100.0	100.0	98.0	97.0	88.0	79.0	81.0	75.0	73.0	73.0	69.0	68.0	66.0	66.0	69.0	78.0	82.0	80.0	100.0	66.0	84.5
15	78.0	78.0	78.0	75.0	77.0	71.0	74.0	75.0	73.0	74.0	77.0	75.0	71.0	64.0	65.0	66.0	85.0	90.0	93.0	98.0	98.0	97.0	99.0	93.0	99.0	64.0	80.2
16	94.0	90.0	88.0	88.0	70.0	73.0	75.0	75.0	74.0	69.0	61.0	55.0	61.0	59.0	54.0	55.0	51.0	52.0	54.0	58.0	65.0	72.0	79.0	84.0	94.0	51.0	69.0
17	86.0	88.0	89.0	89.0	88.0	84.0	83.0	80.0	77.0	76.0	73.0	73.0	63.0	59.0	55.0	52.0	50.0	49.0	50.0	54.0	61.0	68.0	68.0	69.0	89.0	49.0	70.2
18	68.0	71.0	76.0	82.0	83.0	82.0	82.0	82.0	82.0	79.0	73.0	70.0	67.0	66.0	66.0	65.0	63.0	62.0	61.0	63.0	66.0	71.0	74.0	74.0	83.0	61.0	72.0
19	76.0	79.0	79.0	76.0	80.0	81.0	78.0	78.0	74.0	70.0	64.0	59.0	54.0	50.0	48.0	45.0	43.0	44.0	47.0	47.0	52.0	59.0	65.0	70.0	81.0	43.0	63.3
20	64.0	70.0	75.0	79.0	82.0	84.0	85.0	82.0	77.0	67.0	61.0	58.0	55.0	53.0	51.0	48.0	46.0	47.0	48.0	47.0	49.0	56.0	64.0	69.0	85.0	46.0	63.2
21	72.0	76.0	80.0	81.0	83.0	78.0	81.0	77.0	71.0	68.0	64.0	56.0	50.0	47.0	45.0	40.0	38.0	37.0	39.0	46.0	48.0	52.0	56.0	61.0	83.0	37.0	60.3
22	60.0	61.0	57.0	66.0	65.0	63.0	56.0	58.0	50.0	40.0	39.0	37.0	37.0	34.0	35.0	35.0	36.0	39.0	39.0	40.0	44.0	47.0	55.0	59.0	66.0	34.0	48.0
23	57.0	57.0	57.0	57.0	58.0	61.0	57.0	55.0	50.0	50.0	47.0	46.0	44.0	38.0	38.0	38.0	37.0	39.0	41.0	48.0	52.0	56.0	62.0	67.0	67.0	37.0	50.5
24	66.0	71.0	75.0	75.0	75.0	76.0	74.0	71.0	65.0	56.0	49.0	47.0	44.0	41.0	46.0	47.0	45.0	47.0	51.0	54.0	60.0	68.0	74.0	76.0	76.0	41.0	60.5
25	70.0	72.0	78.0	78.0	76.0	74.0	70.0	68.0	60.0	53.0	53.0	52.0	45.0	40.0	35.0	34.0	33.0	31.0	31.0	38.0	44.0	48.0	48.0	49.0	78.0	31.0	53.3
26	53.0	54.0	51.0	48.0	49.0	47.0	44.0	42.0	41.0	36.0	38.0	38.0	36.0	36.0	35.0	36.0	40.0	40.0	43.0	46.0	52.0	55.0	60.0	71.0	71.0	35.0	45.5
27	83.0	89.0	94.0	97.0	98.0	98.0	99.0	97.0	93.0	86.0	73.0	62.0	61.0	57.0	54.0	54.0	53.0	57.0	64.0	73.0	81.0	89.0	92.0	94.0	99.0	53.0	79.1
28	95.0	91.0	86.0	81.0	76.0	78.0	78.0	80.0	78.0	78.0	75.0	73.0	74.0	75.0	78.0	78.0	76.0	76.0	78.0	81.0	86.0	89.0	92.0	94.0	95.0	73.0	81.1
29	96.0	99.0	94.0	91.0	89.0	88.0	86.0	84.0	81.0	76.0	78.0	68.0	64.0	66.0	65.0	66.0	66.0	68.0	72.0	78.0	83.0	88.0	92.0	93.0	99.0	64.0	80.5
30	97.0	100.0	100.0	100.0	100.0	93.0	86.0	86.0	83.0	76.0	72.0	70.0	66.0	64.0	63.0	64.0	64.0	65.0	71.0	73.0	76.0	82.0	88.0	89.0	100.0	63.0	80.3
31	90.0	95.0	95.0	93.0	97.0	98.0	92.0	89.0	88.0	82.0	73.0	64.0	61.0	60.0	58.0	55.0	55.0	58.0	57.0	59.0	63.0	63.0	75.0	84.0	98.0	55.0	75.2
Max.	**97.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**96.0**	**97.0**	**99.0**	**100.0**	**99.0**	**98.0**	**98.0**	**98.0**	**97.0**	**99.0**	**98.0**	**100.0**		
Min.	**53.0**	**54.0**	**51.0**	**48.0**	**49.0**	**47.0**	**44.0**	**42.0**	**41.0**	**36.0**	**38.0**	**37.0**	**36.0**	**34.0**	**35.0**	**34.0**	33.0	31.0	**31.0**	**38.0**	**44.0**	**46.0**	**48.0**	**49.0**		**31.0**	
Avg.	**74.4**	**76.5**	**77.4**	**78.0**	**78.5**	**78.8**	**78.1**	**77.2**	**74.3**	**70.1**	**66.5**	**62.8**	**59.5**	**56.7**	**55.5**	**54.7**	**54.5**	**55.2**	**56.8**	**59.4**	**63.1**	**67.5**	**71.5**	**73.7**			**67.5**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

June *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	85.0	88.0	87.0	82.0	78.0	70.0	74.0	72.0	70.0	65.0	59.0	58.0	55.0	52.0	61.0	71.0	55.0	62.0	65.0	81.0	74.0	78.0	82.0	83.0	88.0	52.0	71.1
2	80.0	88.0	91.0	94.0	92.0	97.0	100.0	100.0	100.0	100.0	100.0	99.0	99.0	91.0	87.0	82.0	72.0	64.0	63.0	69.0	70.0	76.0	81.0	87.0	100.0	63.0	86.8
3	98.0	98.0	99.0	99.0	99.0	100.0	93.0	87.0	85.0	77.0	70.0	66.0	66.0	67.0	67.0	63.0	65.0	63.0	66.0	69.0	74.0	74.0	77.0	78.0	100.0	63.0	79.2
4	82.0	81.0	73.0	73.0	76.0	80.0	80.0	78.0	69.0	62.0	58.0	52.0	49.0	47.0	42.0	41.0	41.0	41.0	42.0	43.0	62.0	78.0	76.0	77.0	82.0	41.0	62.6
5	69.0	71.0	74.0	71.0	74.0	75.0	78.0	76.0	76.0	80.0	79.0	68.0	62.0	61.0	54.0	53.0	55.0	58.0	58.0	66.0	73.0	76.0	77.0	81.0	81.0	53.0	69.4
6	84.0	85.0	84.0	84.0	83.0	81.0	79.0	81.0	77.0	72.0	69.0	68.0	67.0	66.0	62.0	62.0	65.0	64.0	67.0	71.0	72.0	77.0	79.0	79.0	85.0	62.0	74.1
7	84.0	89.0	87.0	93.0	94.0	94.0	89.0	85.0	69.0	55.0	49.0	48.0	45.0	40.0	47.0	46.0	43.0	42.0	42.0	42.0	44.0	50.0	51.0	52.0	94.0	40.0	61.7
8	61.0	63.0	66.0	68.0	67.0	69.0	75.0	62.0	55.0	50.0	47.0	68.0	57.0	46.0	41.0	32.0	28.0	31.0	33.0	36.0	38.0	63.0	72.0	61.0	75.0	28.0	53.7
9	61.0	57.0	65.0	69.0	67.0	74.0	69.0	66.0	64.0	63.0	59.0	54.0	50.0	46.0	43.0	39.0	36.0	33.0	32.0	35.0	39.0	46.0	52.0	55.0	74.0	32.0	53.1
10	64.0	68.0	73.0	80.0	81.0	77.0	75.0	84.0	66.0	67.0	65.0	70.0	64.0	61.0	52.0	45.0	45.0	41.0	36.0	45.0	51.0	53.0	51.0	60.0	84.0	36.0	61.4
11	73.0	79.0	84.0	88.0	83.0	88.0	92.0	93.0	94.0	94.0	94.0	92.0	94.0	94.0	93.0	93.0	94.0	94.0	95.0	96.0	95.0	95.0	94.0	95.0	96.0	73.0	91.1
12	93.0	93.0	94.0	93.0	92.0	92.0	90.0	89.0	88.0	87.0	82.0	79.0	75.0	76.0	78.0	78.0	83.0	85.0	87.0	87.0	87.0	88.0	85.0	85.0	94.0	75.0	86.1
13	86.0	86.0	86.0	86.0	90.0	91.0	88.0	88.0	87.0	85.0	84.0	80.0	76.0	75.0	78.0	80.0	82.0	83.0	83.0	84.0	85.0	86.0	87.0	88.0	91.0	75.0	84.3
14	91.0	91.0	87.0	88.0	89.0	89.0	88.0	91.0	91.0	87.0	78.0	73.0	72.0	69.0	67.0	67.0	66.0	68.0	68.0	68.0	71.0	75.0	78.0	86.0	91.0	66.0	79.1
15	89.0	93.0	95.0	96.0	98.0	99.0	100.0	100.0	99.0	95.0	94.0	91.0	87.0	83.0	85.0	75.0	75.0	89.0	84.0	72.0	72.0	76.0	82.0	83.0	100.0	72.0	88.0
16	83.0	87.0	90.0	91.0	95.0	96.0	96.0	93.0	86.0	78.0	78.0	74.0	64.0	62.0	61.0	59.0	60.0		60.0	62.0	67.0	71.0	74.0	80.0	96.0	59.0	76.8
17	83.0	80.0	79.0	82.0	82.0	81.0	78.0	75.0	69.0	64.0	62.0	60.0	59.0	60.0	63.0	71.0	68.0	70.0	71.0	76.0	77.0	82.0	86.0	78.0	86.0	59.0	73.2
18	82.0	84.0	88.0	89.0	89.0	83.0	83.0	92.0	91.0	87.0	87.0	83.0	85.0	89.0	90.0	91.0	90.0	93.0	89.0	92.0	95.0	99.0	96.0	88.0	99.0	82.0	89.0
19	85.0	86.0	87.0	88.0	85.0	85.0	84.0	85.0	84.0	83.0	78.0	74.0	71.0	67.0	67.0	66.0	64.0	63.0	65.0	68.0	72.0	75.0	76.0	79.0	88.0	63.0	76.5
20	77.0	78.0	81.0	82.0	87.0	89.0	86.0	82.0	68.0	60.0	54.0	48.0	45.0	43.0	39.0	33.0	33.0	39.0	44.0	46.0	48.0	51.0	52.0	53.0	89.0	33.0	59.1
21	56.0	56.0	56.0	63.0	66.0	72.0	91.0	93.0	95.0	97.0	97.0	94.0	91.0	91.0	90.0	83.0	79.0	75.0	74.0	70.0	75.0	82.0	87.0	80.0	97.0	56.0	79.7
22	84.0	90.0	92.0	91.0	88.0	90.0	91.0	91.0	86.0	83.0	84.0	78.0	70.0	65.0	61.0	57.0	57.0	58.0	56.0	60.0	63.0	68.0	77.0	84.0	92.0	56.0	76.0
23	84.0	83.0	83.0	87.0	87.0	88.0	89.0	86.0	80.0	70.0	66.0	58.0	54.0	51.0	56.0	57.0	52.0	66.0	58.0	67.0	66.0	70.0	72.0	72.0	89.0	51.0	70.9
24	80.0	80.0	84.0	84.0	86.0	86.0	85.0	80.0	76.0	67.0	63.0	58.0	59.0	73.0	95.0	84.0	66.0	70.0	83.0	79.0	76.0	75.0	86.0	88.0	95.0	58.0	77.6
25	87.0	90.0	92.0	94.0	97.0	91.0	90.0	85.0	88.0	82.0	79.0	70.0	68.0	64.0	57.0	61.0	60.0	62.0	64.0	68.0	76.0	88.0	91.0	91.0	97.0	57.0	79.0
26	92.0	93.0	91.0	88.0	86.0	88.0	86.0	84.0	82.0	80.0	80.0	85.0	79.0	75.0	76.0	75.0	80.0	80.0	78.0	81.0	82.0	81.0	82.0	85.0	93.0	75.0	82.9
27	91.0	94.0	94.0	94.0	95.0	95.0	95.0	95.0	94.0	94.0	93.0	93.0	93.0	93.0	92.0	94.0	96.0	95.0	95.0	93.0	93.0	92.0	93.0	92.0	96.0	91.0	93.7
28	91.0	90.0	91.0	91.0	89.0	91.0	90.0	84.0	79.0	76.0	73.0	75.0	81.0	78.0	74.0	77.0	76.0	78.0	81.0	83.0	84.0	85.0	85.0	82.0	91.0	73.0	82.7
29	82.0	85.0	86.0	85.0	87.0	91.0	95.0	95.0	94.0	95.0	95.0	98.0	98.0	95.0	93.0	92.0	91.0	88.0	87.0	89.0	92.0	96.0	93.0	85.0	98.0	82.0	91.1
30	89.0	89.0	86.0	84.0	86.0	85.0	82.0	86.0	81.0	78.0	74.0	69.0	67.0	65.0	64.0	63.0	65.0	61.0	63.0	65.0	67.0	71.0	79.0	85.0	89.0	61.0	75.2
Max.	**98.0**	**98.0**	**99.0**	**99.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.0**	**99.0**	**95.0**	**95.0**	**94.0**	**96.0**	**95.0**	**95.0**	**96.0**	**95.0**	**99.0**	**96.0**	**95.0**	**100.0**		
Min.	**56.0**	**56.0**	**56.0**	**63.0**	**66.0**	**69.0**	**69.0**	**62.0**	**55.0**	**50.0**	**47.0**	**48.0**	**45.0**	**40.0**	**39.0**	**32.0**	28.0	31.0	**32.0**	**35.0**	**38.0**	**46.0**	**51.0**	**52.0**		**28.0**	
Avg.	**81.5**	**83.2**	**84.2**	**85.2**	**85.6**	**86.2**	**86.4**	**85.3**	**81.4**	**77.8**	**75.0**	**72.8**	**70.1**	**68.2**	**67.8**	**66.3**	**64.7**	**66.1**	**66.3**	**68.8**	**71.3**	**75.9**	**78.4**	**79.1**			**76.2**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

July *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	84.0	82.0	84.0	87.0	82.0	80.0	80.0	77.0	68.0	66.0	62.0	55.0	50.0	46.0	45.0	43.0	41.0	42.0	42.0	43.0	45.0	53.0	55.0	56.0	87.0	41.0	61.2
2	58.0	65.0	66.0	63.0	61.0	65.0	67.0	68.0	65.0	61.0	53.0	49.0	50.0	46.0	45.0	44.0	43.0	43.0	52.0	57.0	70.0	77.0	84.0	87.0	87.0	43.0	60.0
3	91.0	97.0	98.0	98.0	97.0	96.0	98.0	96.0	95.0	93.0	90.0	87.0	81.0	76.0	70.0	69.0	67.0	62.0	61.0	63.0	69.0	73.0	81.0	86.0	98.0	61.0	83.1
4	91.0	96.0	96.0	98.0	99.0	98.0	97.0	91.0	82.0	73.0	71.0	70.0	70.0	68.0	66.0	64.0	64.0	63.0	64.0	70.0	73.0	75.0	77.0	79.0	99.0	63.0	79.0
5	83.0	84.0	86.0	87.0	89.0	87.0	88.0	88.0	87.0	86.0	83.0	78.0	81.0	81.0	79.0	79.0	76.0	73.0	71.0	73.0	77.0	88.0	90.0	91.0	91.0	71.0	82.7
6	93.0	94.0	96.0	95.0	96.0	96.0	96.0	95.0	97.0	97.0	98.0	97.0	95.0	91.0	89.0	85.0	86.0	90.0	89.0	92.0	91.0	92.0	94.0	93.0	98.0	85.0	93.2
7	95.0	97.0	97.0	96.0	96.0	97.0	97.0	98.0	97.0	93.0	87.0	85.0	80.0	78.0	78.0	77.0	78.0	77.0	79.0	78.0	78.0	82.0	83.0	85.0	98.0	77.0	87.0
8	84.0	82.0	82.0	81.0	82.0	80.0	78.0	85.0	94.0	91.0	89.0	86.0	86.0	85.0	88.0	89.0	87.0	85.0	83.0	85.0	87.0	87.0	86.0	86.0	94.0	78.0	85.3
9	89.0	94.0	93.0	94.0	98.0	100.0	99.0	96.0	92.0	85.0	83.0	79.0	76.0	75.0	74.0	76.0	74.0	78.0	82.0	84.0	86.0	87.0	87.0	87.0	100.0	74.0	86.2
10	89.0	91.0	92.0	90.0	91.0	90.0	89.0	88.0	89.0	87.0	88.0	87.0	86.0	89.0	91.0	92.0	94.0	93.0	95.0	94.0	96.0	99.0	97.0	97.0	99.0	86.0	91.4
11	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	97.0	93.0	88.0	89.0	82.0	77.0	75.0	70.0	75.0	68.0	66.0	71.0	74.0	82.0	85.0	100.0	66.0	87.1
12	90.0	91.0	94.0	97.0	100.0	100.0	100.0	100.0	99.0	93.0	90.0	90.0	86.0	81.0	77.0	75.0	79.0	81.0	82.0	78.0	79.0	80.0	85.0	89.0	100.0	75.0	88.2
13	91.0	94.0	95.0	98.0	100.0	100.0	100.0	94.0	90.0	87.0	81.0	90.0	85.0	81.0	78.0	81.0	84.0	87.0	91.0	94.0	96.0	99.0	100.0	100.0	100.0	78.0	91.5
14	100.0	100.0	100.0	97.0	95.0	96.0	95.0	97.0	98.0	99.0	100.0	97.0	95.0	94.0	92.0	91.0	83.0	76.0	70.0	71.0	79.0	81.0	85.0	91.0	100.0	70.0	90.9
15	95.0	96.0	91.0	90.0	90.0	92.0	91.0	87.0	86.0	81.0	77.0	73.0	66.0	63.0	63.0	62.0	64.0	78.0	92.0	88.0	82.0	82.0	85.0	85.0	96.0	62.0	81.6
16	88.0	85.0	88.0	86.0	88.0	88.0	91.0	95.0	97.0	96.0	91.0	88.0	88.0	87.0	83.0	82.0	87.0	89.0	85.0	86.0	96.0	100.0	100.0	100.0	100.0	82.0	90.2
17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	88.0	84.0	79.0	75.0	74.0	69.0	70.0	77.0	85.0	91.0	95.0	100.0	69.0	90.9
18	98.0	99.0	100.0	99.0	100.0	100.0	100.0	99.0	100.0	100.0	99.0	95.0	92.0	89.0	85.0	82.0	81.0	76.0	75.0	77.0	82.0	84.0	88.0	92.0	100.0	75.0	91.3
19	94.0	93.0	94.0	94.0	93.0	94.0	94.0	93.0	92.0	90.0	85.0	80.0	72.0	63.0	61.0	64.0	67.0	76.0	92.0	95.0	90.0	86.0	91.0	91.0	95.0	61.0	85.2
20	93.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	95.0	90.0	82.0	72.0	60.0	51.0	45.0	50.0	57.0	64.0	68.0	69.0	73.0	100.0	45.0	81.9
21	74.0	75.0	77.0	80.0	85.0	91.0	93.0	93.0	91.0	88.0	82.0	80.0	78.0	77.0	76.0	74.0	73.0	74.0	79.0	83.0	81.0	83.0	84.0	83.0	93.0	73.0	81.4
22	88.0	86.0	85.0	85.0	94.0	95.0	94.0	93.0	89.0	86.0	82.0	77.0	69.0	73.0	68.0	63.0	65.0	64.0	64.0	71.0	78.0	90.0	93.0	96.0	96.0	63.0	81.2
23	92.0	94.0	96.0	95.0	96.0	97.0	91.0	93.0	84.0	79.0	76.0	65.0	61.0	60.0	62.0	67.0	75.0	67.0	79.0			86.0	85.0	84.0	97.0	60.0	81.1
24	86.0	83.0	82.0	81.0	83.0	86.0	82.0	83.0	79.0	73.0	65.0	60.0	53.0	49.0	47.0	46.0	52.0	51.0	50.0	49.0	54.0	59.0	70.0	71.0	86.0	46.0	66.4
25	74.0	78.0	81.0	84.0	83.0	82.0	82.0	84.0	81.0	78.0	76.0	76.0	71.0	71.0	68.0	68.0	72.0	72.0	71.0	72.0	76.0	82.0	85.0	88.0	88.0	68.0	77.3
26	86.0	85.0	86.0	90.0	93.0	97.0	97.0	90.0	84.0	78.0	70.0	67.0	61.0	60.0	67.0	62.0	66.0	68.0	68.0	72.0	74.0	78.0	81.0	84.0	97.0	60.0	77.7
27	87.0	83.0	82.0	83.0	83.0	87.0	87.0	87.0	83.0	80.0	77.0	74.0	71.0	70.0	73.0	69.0	65.0	66.0	67.0	74.0	75.0	78.0	82.0	88.0	88.0	65.0	78.0
28	92.0	94.0	96.0	97.0	98.0	99.0	100.0	98.0	98.0	96.0	94.0	91.0	85.0	75.0	75.0	69.0	66.0	62.0	72.0	82.0	85.0	90.0	93.0	94.0	100.0	62.0	87.5
29	94.0	97.0	97.0	97.0	99.0	98.0	96.0	96.0	88.0	81.0	73.0	69.0	71.0	68.0	67.0	72.0	79.0	86.0	99.0	93.0	93.0	94.0	96.0	98.0	99.0	67.0	87.5
30	100.0	100.0	100.0	98.0	98.0	96.0	98.0	93.0	91.0	88.0	86.0	82.0	74.0	70.0	72.0	72.0	70.0	66.0	65.0	65.0	72.0	72.0	75.0	83.0	100.0	65.0	82.8
31	87.0	90.0	93.0	96.0	96.0	94.0	97.0	98.0	96.0	96.0	95.0	93.0	89.0	84.0	74.0	65.0	64.0	63.0	61.0	70.0	72.0	79.0	82.0	83.0	98.0	61.0	84.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**95.0**	**94.0**	**92.0**	**92.0**	**94.0**	**93.0**	**99.0**	**95.0**	**96.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**58.0**	**65.0**	**66.0**	**63.0**	**61.0**	**65.0**	**67.0**	**68.0**	**65.0**	**61.0**	**53.0**	**49.0**	**50.0**	**46.0**	**45.0**	**43.0**	41.0	42.0	**42.0**	**43.0**	**45.0**	**53.0**	**55.0**	**56.0**		**41.0**	
Avg.	**89.2**	**90.4**	**91.2**	**91.5**	**92.4**	**92.9**	**92.8**	**92.1**	**90.0**	**87.0**	**83.7**	**80.7**	**77.3**	**74.3**	**72.5**	**70.8**	**70.9**	**71.0**	**73.1**	**75.1**	**78.3**	**82.0**	**85.0**	**87.1**			**83.0**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

August 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	86.0	89.0	91.0	89.0	91.0	93.0	93.0	90.0	89.0	83.0	80.0	74.0	72.0	75.0	82.0	72.0	65.0	63.0	77.0	91.0	81.0	85.0	85.0	85.0	93.0	63.0	82.5
2	83.0	85.0	88.0	89.0	88.0	87.0	89.0	91.0	93.0	89.0	78.0	71.0	66.0	66.0	62.0	62.0	65.0	66.0	69.0	81.0	87.0	94.0	95.0	95.0	95.0	62.0	80.8
3	96.0	94.0	92.0	92.0	93.0	94.0	94.0	94.0	91.0	86.0	83.0	81.0	81.0	81.0	81.0	87.0	90.0	88.0	90.0	91.0	90.0	92.0	91.0	94.0	96.0	81.0	89.4
4	93.0	91.0	95.0	95.0	91.0	91.0	90.0	94.0	99.0	98.0	98.0	99.0	98.0	96.0	96.0	96.0	96.0	94.0	93.0	93.0	93.0	94.0	96.0	98.0	99.0	90.0	94.9
5	98.0	99.0	99.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	91.0	92.0	87.0	81.0	86.0	88.0	86.0	82.0	83.0	87.0	91.0	92.0	93.0	100.0	81.0	92.9
6	93.0	93.0	97.0	97.0	98.0	98.0	97.0	96.0	96.0	97.0	95.0	92.0	91.0	93.0	95.0	96.0	96.0	95.0	96.0	99.0	97.0	95.0	97.0	98.0	99.0	91.0	95.7
7	100.0	100.0	98.0	86.0	84.0	86.0	89.0	88.0	88.0	88.0	87.0	84.0	79.0	74.0	70.0	68.0	66.0	63.0	62.0	60.0	65.0	74.0	80.0	80.0	100.0	60.0	80.0
8	86.0	89.0	90.0	89.0	93.0	90.0	90.0	91.0	93.0	93.0	89.0	81.0	76.0	71.0	70.0	69.0	68.0	71.0	74.0	76.0	80.0	83.0	84.0	87.0	93.0	68.0	82.6
9	88.0	89.0	90.0	93.0	92.0	93.0	93.0	92.0	90.0	87.0	84.0	78.0	70.0	66.0	60.0	57.0	53.0	51.0	53.0	59.0	61.0	76.0	80.0	85.0	93.0	51.0	76.7
10	86.0	79.0	75.0	73.0	87.0	92.0	92.0	91.0	86.0	81.0	73.0	72.0	72.0	71.0	72.0	73.0	74.0	76.0	78.0	81.0	83.0	85.0	89.0	90.0	92.0	71.0	80.5
11	92.0	91.0	94.0	92.0	92.0	94.0	93.0	91.0	87.0	87.0	88.0	88.0	89.0	91.0	93.0	94.0	95.0	96.0	96.0	96.0	97.0	98.0	97.0	98.0	98.0	87.0	92.9
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	97.0	98.0	98.0	96.0	94.0	92.0	87.0	82.0	72.0	79.0	81.0	96.0	97.0	95.0	94.0	100.0	72.0	94.0
13	95.0	97.0	98.0	95.0	95.0	95.0	97.0	98.0	100.0	99.0	97.0	97.0	83.0	76.0	76.0	73.0	69.0	69.0	71.0	72.0	76.0	81.0	81.0	83.0	100.0	69.0	86.4
14	83.0	83.0	84.0	85.0	84.0	84.0	83.0	84.0	81.0	79.0	75.0	73.0	72.0	69.0	66.0	66.0	65.0	73.0	80.0	79.0	80.0	83.0	87.0	85.0	87.0	65.0	78.5
15	85.0	85.0	84.0	85.0	88.0	89.0	92.0	92.0	90.0	89.0	90.0	88.0	87.0	88.0	89.0	88.0	86.0	87.0	86.0	86.0	87.0	88.0	90.0	88.0	92.0	84.0	87.8
16	87.0	85.0	84.0	82.0	81.0	86.0	88.0	87.0	88.0	87.0	80.0	80.0	78.0	78.0	82.0	84.0	85.0	85.0	84.0	81.0	80.0	82.0	83.0	88.0	88.0	78.0	83.5
17	88.0	91.0	90.0	94.0	95.0	93.0	90.0	92.0	91.0	86.0	79.0	75.0	68.0	64.0	59.0	60.0	59.0	67.0	76.0	76.0	74.0	74.0	81.0	92.0	95.0	59.0	79.8
18	93.0	93.0	83.0	86.0	88.0	95.0	94.0	94.0	89.0	81.0	83.0	83.0	78.0	67.0				62.0	65.0	69.0	76.0	79.0	81.0	81.0	95.0	62.0	81.9
19	82.0	82.0	82.0	80.0	80.0	83.0	81.0	82.0	82.0	81.0	78.0	77.0	77.0	78.0	78.0	80.0	81.0	80.0	79.0	79.0	80.0	83.0	84.0	89.0	89.0	77.0	80.8
20	93.0	95.0	95.0	95.0	96.0	96.0	96.0	96.0	95.0	95.0	95.0	94.0	95.0	93.0	86.0	83.0	79.0	80.0	81.0	83.0	83.0	83.0	83.0	84.0	96.0	79.0	89.8
21	84.0	86.0	86.0	87.0	89.0	88.0	87.0	86.0	85.0	86.0	84.0	83.0	83.0	81.0	81.0	85.0	83.0	82.0	84.0	84.0	86.0	87.0	85.0	86.0	89.0	81.0	84.9
22	87.0	87.0	87.0	87.0	90.0	96.0	97.0	96.0	95.0	94.0	91.0	87.0	84.0	80.0	82.0	82.0	82.0	85.0	90.0	93.0	93.0	93.0	91.0	89.0	97.0	80.0	89.1
23	90.0	93.0	94.0	95.0	93.0	94.0	93.0	93.0	93.0	94.0	94.0	93.0	93.0	90.0	86.0	80.0	83.0	82.0	81.0	81.0	83.0	87.0	86.0	88.0	95.0	80.0	89.1
24	91.0	93.0	96.0	96.0	94.0	93.0	97.0	100.0	99.0	97.0	94.0	93.0	90.0	86.0	88.0	91.0	95.0	99.0	94.0	95.0	95.0	96.0	96.0	99.0	100.0	86.0	94.5
25	99.0	97.0	97.0	97.0	97.0	97.0	98.0	97.0	96.0	95.0	95.0	95.0	96.0	94.0	95.0	96.0	96.0	94.0	95.0	95.0	96.0	99.0	100.0	100.0	100.0	94.0	96.5
26	97.0	99.0	100.0	99.0	97.0	95.0	93.0	89.0	93.0	94.0	89.0	86.0	89.0	83.0	84.0	85.0	91.0	91.0	91.0	92.0	93.0	97.0	100.0	97.0	100.0	83.0	92.7
27	96.0	98.0	94.0	90.0	85.0	83.0	83.0	81.0	82.0	85.0	84.0	86.0	86.0	84.0	84.0	86.0	85.0	85.0	86.0	86.0	88.0	89.0	88.0	89.0	98.0	81.0	86.8
28	89.0	90.0	90.0	94.0	94.0	93.0	92.0	93.0	93.0	94.0	93.0	93.0	92.0	91.0	88.0	86.0	83.0	84.0	85.0	86.0	86.0	87.0	89.0	89.0	94.0	83.0	89.8
29	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	86.0	85.0	82.0	76.0	70.0	73.0	72.0	72.0	74.0	73.0	75.0	82.0	88.0	91.0	96.0	96.0	96.0	70.0	83.1
30	97.0	100.0	100.0	99.0	98.0	95.0	94.0	91.0	94.0	97.0	98.0	97.0	97.0	96.0	95.0	96.0	97.0	96.0	96.0	99.0	98.0	97.0	100.0	100.0	100.0	91.0	97.0
31	99.0	97.0	96.0	95.0	93.0	95.0	97.0	96.0	92.0	91.0	90.0	86.0	84.0	82.0	82.0	80.0	76.0	67.0	70.0	79.0	84.0	87.0	89.0	94.0	99.0	67.0	87.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**99.0**	**98.0**	**96.0**	**96.0**	**96.0**	**97.0**	**99.0**	**96.0**	**99.0**	**98.0**	**99.0**	**100.0**	**100.0**	**100.0**		
Min.	**82.0**	**79.0**	**75.0**	**73.0**	**80.0**	**83.0**	**81.0**	**81.0**	**81.0**	**79.0**	**73.0**	**71.0**	**66.0**	**64.0**	**59.0**	**57.0**	53.0	51.0	**53.0**	**59.0**	**61.0**	**74.0**	**80.0**	**80.0**		**51.0**	
Avg.	**91.1**	**91.5**	**91.5**	**91.1**	**91.4**	**92.1**	**92.3**	**92.0**	**91.4**	**90.2**	**87.7**	**85.5**	**83.4**	**81.2**	**80.9**	**80.7**	**80.2**	**79.4**	**81.2**	**83.5**	**85.3**	**88.0**	**89.4**	**90.8**			**87.2**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

September 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	96.0	96.0	95.0	96.0	98.0	98.0	98.0	98.0	99.0	99.0	97.0	92.0	86.0	90.0	86.0	87.0	86.0	89.0	92.0	91.0	95.0	95.0	97.0	97.0	99.0	86.0	93.9
2	98.0	95.0	95.0	94.0	95.0	95.0	95.0	96.0	96.0	94.0	89.0	90.0	87.0	81.0	68.0	70.0	71.0	66.0	66.0	71.0	77.0	85.0	85.0	88.0	98.0	66.0	85.3
3	88.0	90.0	89.0	88.0	87.0	86.0	84.0	88.0	87.0	86.0	77.0	66.0	65.0	62.0	57.0	57.0	59.0	57.0	62.0	70.0	79.0	84.0	86.0	89.0	90.0	57.0	76.8
4	90.0	95.0	95.0	94.0	94.0	96.0	97.0	97.0	98.0	97.0	97.0	98.0	97.0	97.0	97.0	95.0	94.0	96.0	98.0	98.0	96.0	95.0	94.0	94.0	98.0	90.0	95.8
5	95.0	96.0	98.0	99.0	98.0	97.0	100.0	100.0	100.0	100.0	100.0	98.0	95.0	92.0	84.0	89.0	92.0	92.0	88.0	83.0	87.0	88.0	93.0	94.0	100.0	83.0	94.1
6	96.0	95.0	95.0	94.0	95.0	97.0	92.0	93.0	94.0	94.0	93.0	92.0	94.0	87.0	81.0	81.0	91.0	89.0	91.0	90.0	91.0	92.0	92.0	92.0	97.0	81.0	91.7
7	91.0	92.0	92.0	91.0	93.0	93.0	94.0	95.0	93.0	93.0	91.0	88.0	85.0	81.0	77.0	73.0	65.0	62.0	61.0	68.0	78.0	84.0	86.0	86.0	95.0	61.0	83.8
8	88.0	90.0	92.0	94.0	91.0	92.0	93.0	94.0	95.0	88.0	83.0	76.0	68.0	61.0	61.0	57.0	52.0	55.0	53.0	58.0	66.0	72.0	79.0	82.0	95.0	52.0	76.7
9	81.0	83.0	85.0	84.0	82.0	84.0	88.0	91.0	90.0	89.0	85.0	80.0	68.0	58.0	53.0	52.0	50.0	51.0	53.0	55.0	58.0	61.0	68.0	67.0	91.0	50.0	71.5
10	65.0	67.0	67.0	68.0	68.0	68.0	68.0	70.0	70.0	69.0	64.0	59.0	45.0	43.0	48.0	48.0	45.0	44.0	44.0	48.0	54.0	60.0	70.0	66.0	70.0	43.0	59.1
11	64.0	64.0	62.0	60.0	62.0	66.0	69.0	66.0	78.0	72.0	72.0	74.0	71.0	66.0	59.0	55.0	53.0	52.0	54.0	60.0	68.0	67.0	69.0	72.0	78.0	52.0	64.8
12	75.0	81.0	79.0	77.0	81.0	83.0	86.0	85.0	84.0	78.0	74.0	71.0	68.0	66.0	62.0	67.0	70.0	70.0	73.0	81.0	86.0	89.0	92.0	93.0	93.0	62.0	78.0
13	92.0	87.0	89.0	82.0	86.0	83.0	87.0	93.0	94.0	92.0	85.0	88.0	85.0	83.0	76.0	75.0	73.0	71.0	74.0	78.0	79.0	80.0	82.0	87.0	94.0	71.0	83.4
14	91.0	94.0	93.0	88.0	90.0	93.0	91.0	91.0	90.0	79.0	73.0	70.0	65.0	50.0	44.0	40.0	41.0	38.0	41.0	46.0	56.0	61.0	68.0	80.0	94.0	38.0	69.7
15	84.0	74.0	74.0	66.0	72.0	73.0	71.0	72.0	73.0	69.0	62.0	50.0	44.0	39.0	37.0	34.0	34.0	37.0	39.0	44.0	47.0	48.0	53.0	52.0	84.0	34.0	56.2
16	47.0	48.0	50.0	50.0	52.0	49.0	46.0	49.0	58.0	61.0	58.0	51.0	45.0				36.0	34.0	43.0	50.0	60.0	64.0	63.0	64.0	64.0	34.0	51.3
17	66.0	61.0	60.0	61.0	61.0	66.0	71.0	76.0	71.0	67.0	77.0	87.0	92.0	92.0	92.0	93.0	94.0	95.0	96.0	96.0	96.0	95.0	97.0	98.0	98.0	60.0	81.7
18	99.0	100.0	100.0	100.0	100.0	100.0	98.0	97.0	98.0	98.0	96.0	94.0	94.0	91.0	88.0	87.0	83.0	86.0	88.0	85.0	87.0	86.0	85.0	86.0	100.0	83.0	92.8
19	85.0	85.0	86.0	87.0	88.0	86.0	82.0	82.0	78.0	75.0	72.0	67.0	66.0	65.0	65.0	64.0	60.0	62.0	60.0	61.0	61.0	63.0	66.0	74.0	88.0	60.0	72.5
20	78.0	79.0	79.0	79.0	77.0	77.0	80.0	79.0	76.0	69.0	63.0	61.0	53.0	48.0	46.0	48.0	46.0	47.0	50.0	54.0	61.0	67.0	72.0	77.0	80.0	46.0	65.3
21	74.0	71.0	71.0	74.0	76.0	76.0	69.0	71.0	68.0	64.0	57.0	51.0	52.0	54.0	54.0	53.0	54.0	50.0	52.0	56.0	64.0	75.0	77.0	73.0	77.0	50.0	64.0
22	73.0	76.0	77.0	81.0	82.0	80.0	80.0	79.0	78.0	75.0	62.0	59.0	58.0	54.0	54.0	50.0	52.0	48.0	48.0	58.0	72.0	75.0	68.0	71.0	82.0	48.0	67.1
23	76.0	78.0	81.0	81.0	77.0	77.0	75.0	73.0	72.0	74.0	74.0	73.0	64.0	64.0	58.0	52.0	50.0	49.0	52.0	66.0	73.0	77.0	76.0	79.0	81.0	49.0	69.6
24	82.0	79.0	79.0	81.0	83.0	85.0	84.0	85.0	85.0	83.0	83.0	81.0	74.0	67.0	58.0	51.0	50.0	49.0	51.0	56.0	58.0	61.0	62.0	65.0	85.0	49.0	70.5
25	73.0	77.0	79.0	80.0	77.0	76.0	79.0	79.0	78.0	79.0	70.0	66.0	60.0	56.0	52.0	50.0	49.0	51.0	54.0	61.0	69.0	73.0	78.0	78.0	80.0	49.0	68.5
26	79.0	82.0	85.0	85.0	82.0	83.0	85.0	84.0	83.0	81.0	82.0	78.0	67.0	64.0	60.0	59.0	61.0	65.0	70.0	68.0	64.0	64.0	67.0	69.0	85.0	59.0	73.6
27	71.0	71.0	71.0	67.0	63.0	59.0	55.0	55.0	56.0	55.0	53.0	51.0	56.0	70.0	66.0	80.0	87.0	86.0	87.0	85.0	87.0	82.0	72.0	71.0	87.0	51.0	69.0
28	72.0	74.0	75.0	79.0	80.0	81.0	84.0	84.0	81.0	78.0	74.0	69.0	65.0	61.0	57.0	56.0	55.0	56.0	58.0	61.0	63.0	65.0	67.0	69.0	84.0	55.0	69.3
29	69.0	70.0	72.0	73.0	75.0	75.0	74.0	74.0	75.0	74.0	71.0	65.0	60.0	54.0	50.0	47.0	46.0	46.0	48.0	54.0	57.0	62.0	61.0	56.0	75.0	46.0	62.8
30	53.0	64.0	87.0	95.0	97.0	98.0	97.0	99.0	100.0	100.0	100.0	100.0	99.0	96.0	96.0	96.0	95.0	100.0	100.0	98.0	96.0	94.0	95.0	96.0	100.0	53.0	93.8
Max.	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.0**	**97.0**	**97.0**	**96.0**	**95.0**	**100.0**	**100.0**	**98.0**	**96.0**	**95.0**	**97.0**	**98.0**	**100.0**		
Min.	**47.0**	**48.0**	**50.0**	**50.0**	**52.0**	**49.0**	**46.0**	**49.0**	**56.0**	**55.0**	**53.0**	**50.0**	**44.0**	**39.0**	**37.0**	**34.0**	34.0	34.0	**39.0**	**44.0**	**47.0**	**48.0**	**53.0**	**52.0**		**34.0**	
Avg.	**79.7**	**80.5**	**81.7**	**81.6**	**82.1**	**82.4**	**82.4**	**83.2**	**83.3**	**81.1**	**77.8**	**74.8**	**70.9**	**68.7**	**65.0**	**64.3**	**63.1**	**63.1**	**64.9**	**68.3**	**72.8**	**75.5**	**77.3**	**78.8**			**75.2**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

October 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	97.0	96.0	95.0	92.0	91.0	93.0	95.0	97.0	100.0	99.0	97.0	98.0	98.0	93.0	94.0	93.0	94.0	94.0	95.0	94.0	95.0	96.0	94.0	92.0	100.0	91.0	95.1
2	95.0	92.0	89.0	89.0	95.0	97.0	97.0	96.0	96.0	95.0	96.0	96.0	96.0	92.0	94.0	93.0	89.0	88.0	93.0	93.0	95.0	96.0	96.0	98.0	98.0	88.0	94.0
3	100.0	100.0	100.0	100.0	100.0	100.0	99.0	99.0	97.0	96.0	95.0	94.0	93.0	93.0	92.0	89.0	87.0	87.0	89.0	90.0	91.0	93.0	94.0	94.0	100.0	87.0	94.7
4	94.0	93.0	93.0	94.0	95.0	96.0	97.0	97.0	96.0	95.0	92.0	86.0	80.0	75.0	71.0	69.0	68.0	70.0	75.0	82.0	84.0	86.0	87.0	88.0	97.0	68.0	86.0
5	88.0	89.0	88.0	87.0	86.0	88.0	90.0	84.0	91.0	86.0	81.0	75.0	65.0	63.0	64.0	64.0	68.0	72.0	77.0	81.0	82.0	88.0	91.0	91.0	91.0	63.0	80.8
6	87.0	84.0	85.0	88.0	89.0	89.0	92.0	92.0	88.0	83.0	86.0	93.0	95.0	97.0	96.0	97.0	96.0	97.0	100.0	100.0	100.0	100.0	100.0	99.0	100.0	83.0	93.0
7	98.0	96.0	96.0	96.0	95.0	94.0	96.0	100.0	100.0	100.0	100.0	98.0	88.0	85.0	93.0	88.0	90.0	92.0	95.0	98.0	100.0	99.0	99.0	100.0	100.0	85.0	95.7
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	88.0	84.0	91.0	94.0	99.0	100.0	100.0	99.0	96.0	95.0	89.0	100.0	84.0	97.2
9	87.0	84.0	82.0	81.0	82.0	82.0	85.0	83.0	86.0	86.0	91.0	84.0	80.0	82.0	84.0	87.0	86.0	93.0	94.0	94.0	88.0	91.0	90.0	90.0	94.0	80.0	86.3
10	89.0	87.0	88.0	86.0	86.0	85.0	84.0	86.0	88.0	88.0	85.0	84.0	79.0	81.0	80.0	79.0	79.0	86.0	89.0	89.0	85.0	87.0	88.0	87.0	89.0	79.0	85.2
11	86.0	84.0	84.0	85.0	85.0	88.0	90.0	87.0	85.0	84.0	84.0	90.0	95.0	96.0	98.0	99.0	99.0	100.0	100.0	100.0	99.0	100.0	100.0	99.0	100.0	84.0	92.4
12	97.0	97.0	90.0	88.0	86.0	83.0	83.0	79.0	83.0	81.0	83.0	77.0	78.0	76.0	86.0	90.0	90.0	89.0	92.0	95.0	93.0	97.0	96.0	97.0	97.0	76.0	87.8
13	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	92.0	93.0	94.0	94.0	93.0	89.0		100.0	89.0	97.9
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Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**86.0**	**84.0**	**82.0**	**81.0**	**82.0**	**82.0**	**83.0**	**79.0**	**83.0**	**81.0**	**81.0**	**75.0**	**65.0**	**63.0**	**64.0**	**64.0**	68.0	70.0	**75.0**	**81.0**	**82.0**	**86.0**	**87.0**	**87.0**		**63.0**	
Avg.	**93.5**	**92.5**	**91.5**	**91.2**	**91.5**	**91.9**	**92.9**	**92.3**	**93.1**	**91.8**	**91.5**	**90.4**	**88.0**	**86.2**	**87.4**	**87.6**	**87.6**	**89.2**	**91.7**	**93.1**	**92.7**	**94.0**	**93.8**	**93.7**			**91.2**

Total Hours in Month 744 **Hours Data Available** 311 **Data Recovery** 41.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

November 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

December 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

January *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

February 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 672 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

March *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

April *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

May *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

June *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

July *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Min.																											
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

August *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Relative Humidity (%)

September 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

August *1991*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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27													964	964	965	965	965	965	966	966	967	967	968	968	968	964	965.8
28	968	969	969	970	970	970	970	971	971	971	972	972	972	972	973	973	973	973	973	974	974	974	975	975	975	968	971.8
29	975	975	975	975	975	975	975	975	975	975	974	974	974	973	973	973	972	972	971	971	970	970	970	969	975	969	973.2
30	969	968	967	967	967	966	966	966	966	966	966	966	966	966	966	965	965	965	965	965	966	966	966	966	969	965	966.1
31	966	966	966	966	966	966	966	967	967	967	967	967	967	968	968	968	968	968	969	969	969	970	970	969	970	966	967.5
Max.	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**974**	**974**	**974**	**973**	**973**	**973**	**973**	**973**	**973**	**974**	**974**	**974**	**975**	**975**	**975**		
Min.	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**964**	**964**	**965**	**965**	**965**	**965**	**965**	**965**	**966**	**966**	**966**	**966**		**964**	
Avg.	**970**	**970**	**969**	**970**	**970**	**969**	**969**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**970**	**969**			**969.2**

Total Hours in Month 744 **Hours Data Available** 108 **Data Recovery** 14.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

September 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	970	971	971	971	972	972	972	972	973	973	974	974	974	974	975	975	975	975	976	976	976	976	976	976	976	970	973.7
2	976	976	976	976	975	975	975	975	975	975	975	975	975	974	974	973	973	973	972	972	972	972	972	972	976	972	974.1
3	971	971	971	970	970	970	970	970	970	970	971	970	971	971	971	971	971	971	972	972	973	973	973	974	974	970	971.1
4	973	973	974	973	973	973	973	972	972	972	972	971	971	970	969	969	968	968	967	966	966	966	966	965	974	965	970.1
5	965	965	965	965	966	965	966	966	966	966	967	967	967	967	968	968	968	969	969	969	969	969	970	970	970	965	967.2
6	970	970	971	971	971	971	972	972	972	972	973	973	973	973	974	974	974	974	974	974	974	975	975	975	975	970	972.8
7	975	975	975	975	975	975	975	974	974	974	973	973	973	973	972	971	972	971	971	969	969	968	967	966	975	966	972.3
8	965	964	962	962	961	961	961	961	960	959	960	960	960	960	960	960	960	960	959	960	960	960	959	960	965	959	960.6
9	959	959	959	959	959	960	960	960	960	960	960	961	960	960	960	960	960	960	959	959	959	959	959	959	961	959	959.6
10	959	958	957	957	956	956	956	957	957	957	957	958	958	958	959	959	960	961	962	962	963	963	963	964	964	956	959.0
11	965	965	965	966	966	966	966	967	967	967	968	968	968	968	968	968	969	969	969	969	970	970	971	971	971	965	967.8
12	971	971	971	972	972	972	972	972	972	973	973	973	973	973	972	972	972	972	971	971	971	971	970	970	973	970	971.8
13	969	969	968	967	967	967	966	966	965	964	964	963	963	962	962	960	960	959	958	958	957	957	957	956	969	956	962.7
14	956	956	955	955	954	954	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	955	956	953	953.6
15	955	956	957	958	959	960	961	962	963	964	964	965	965	965	966	966	967	967	966	965	963	962	961	959	967	955	962.3
16	957	956	955	953	952	952	952	953	954	955	956	957	958	958	959	960	960	961	962	962	963	964	964	964	964	952	957.8
17	964	965	965	965	965	965	965	964	964	965	965	965	965	966	966	966	966	966	966	966	966	967	967	968	968	964	965.5
18	968	969	969	969	969	969	969	968	969	969	969	969													969	968	968.8
19																											
20										978	978	979	979	979	979	979	978	978	978	978	978	978	977	977	979	977	978.2
21	977	976	976	975	974	974	973	973	973	972	972	972	972	971	971	970	970	970	969	969	968	967	967	967	977	967	971.6
22	966	965	964	962	961	960	958	956	955	953	950	949	948	947	946	944	943	942	941	941	941	941	942	942	966	941	950.7
23	943	944	944	945	945	946	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	962	963	964	964	943	952.1
24	965	965	966	967	967	968	968	969	969	970	970	971	971	971	971	971	971	970	970	970	970	971	971	971	971	965	969.3
25	972	972	972	972	972	972	972	972	972	972	972	972	972	972	972	971	970	970	970	970	969	968	968	967	972	967	971.0
26	966	965	964	964	963	962	961	960	960	960	959	959	959	959	959	959	960	960	960	960	961	961	962	963	966	959	961.1
27	963	963	964	964	964	964	965	965	965	966	966	966	967	967	967	967	968	968	968	969	969	970	970	971	971	963	966.5
28	971	971	971	971	972	972	972	972	972	972	972	972	972	971	970	969	967	966	965	964	963	962	960	960	972	960	968.7
29	959	958	958	957	956	956	956	957	957	957	957	958	958	958	959	959	960	960	961	961	962	963	964	965	965	956	959.0
30	965	966	966	966	966	966	966	966	965	965	964	964	964	964	963	962	962	961	961	961	961	961	962	962	966	961	963.7
Max.	**977**	**976**	**976**	**976**	**975**	**975**	**975**	**975**	**975**	**978**	**978**	**979**	**979**	**979**	**979**	**979**	**978**	**978**	**978**	**978**	**978**	**978**	**977**	**977**	**979**		
Min.	**943**	**944**	**944**	**945**	**945**	**946**	**946**	**947**	**948**	**949**	**950**	**949**	**948**	**947**	**946**	**944**	**943**	**942**	**941**	**941**	**941**	**941**	**942**	**942**		**941**	
Avg.	**966**	**966**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**966**	**966**	**966**	**966**	**966**	**966**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**			**965.4**

Total Hours in Month 720 **Hours Data Available** 675 **Data Recovery** 93.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

October 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	962	963	964	964	964	965	965	965	965	966	966	966	967	967	967	966	966	966	966	967	967	967	968	968	968	962	965.7
2	969	969	970	970	971	971	971	972	972	973	974	975	975	975	975	974	974	973	973	973	972	971	970	969	975	969	972.1
3	968	967	966	965	964	963	963	962	962	961	962	963	963	963	964	964	965	965	965	966	967	967	968	969	969	961	964.7
4	969	969	970	970	970	970	970	970	970	970	970	970	969	969	969	968	968	967	967	967	967	967	967	967	970	967	968.8
5	967	967	967	968	968	968	968	969	969	970	970	970	971	971	971	971	971	971	971	971	971	971	971	970	971	967	969.7
6	971	970	971	970	970	970	969	969	969	969	969	969	969	969	969	969	969	969	969	969	970	970	970	971	971	969	969.5
7	971	971	971	971	971	971	971	971	971	972	972	972	972	972	972	971	971	971	971	971	971	970	970	970	972	970	971.1
8	970	969	969	968	967	967	966	966	965	965	964	963	963	962	961	960	959	958	957	957	956	956	956	956	970	956	962.5
9	956	955	954	955	955	955	955	955	956	957	957	958	958	958	959	959	959	960	961	962	962	963	964	964	964	954	958.2
10	965	966	966	967	968	968	969	969	970	971	971	972	972	972	972	973	973	973	973	974	974	974	974	975	975	965	970.9
11	975	975	976	976	976	976	976	976	976	976	977	977	977	977	976	976	976	976	976	976	976	976	976	975	977	975	976.0
12	975	975	974	974	973	973	972	972	972	971	971	971	970	970	969	968	968	967	967	966	965	965	964	963	975	963	969.8
13	962	961	960	960	959	958	957	956	956	955	955	955	955	955	955	955	955	955	955	954	955	955	956	957	962	954	956.5
14	957	958	959	959	959	961	962	962	963	964	964	966	967	968	968	969	970	971	972	973	973	974	975	975	975	957	966.2
15	975	976	976	976	977	977	977	977	977	977	977	977	977	977	976	975	975	974	974	973	972	972	971	971	977	971	975.3
16	971	970	970	969	968	967	966	966	965	965	964	964	964	964	963	962	961	960	959	959	959	959	959	959	971	959	963.9
17	959	959	958	958	958	958	957	958	958	958	958	958	959	959	958	958	959	959	959	959	959	959	959	960	960	957	958.5
18	959	959	959	959	959	958	959	959	959	959	960	960	961	961	962	962	962	962	963	963	963	964	964	965	965	958	960.9
19	965	965	965	966	966	966	966	966	967	967	968	969	969	970	971	971	973	974	976	977	978	979	981	982	982	965	970.7
20	983	984	985	986	987	989	990	990	992	993	993	994	995	996	996	996	996	996	996	997	997	997	996	997	997	983	992.5
21	997	996	996	997	997	996	995	994	994	994	993	993	993	992	991	990	989	989	989	989	987	987	987	987	997	987	992.2
22	987	987	986	987	986	986	986	985	985	985	985	984	984	984	983	983	983	983	983	983	982	982	982	982	987	982	984.3
23	983	982	982	982	982	982	981	981	980	980	979	980	979	979	978	978	977	977	977	977	977	977	977	976	983	976	979.3
24	977	977	977	977	977	978	978	978	978	978	978	979	979	980	980	980	980	980	981	981	981	982	983	983	983	977	979.3
25	983	983	983	983	983	983	983	983	983	983															983	983	983.0
26		978	977	976	976	975	973	972	972	971	970	970	969	968	967	966	965	965	965	964	964	963	964	965	978	963	969.3
27	965	965	966	966	966	967	967	968	970	971	972	972	973	974	975	976	976	977	977	978	978	979	979	979	979	965	972.3
28	979	979	978	977	977	976	975	974	972	971	970	971	970	969	970	970	970	970	970	970	970	971	972	972	979	969	972.6
29	973	973	973	973	973	974	974	973	973	973	974	974	974	975	975	976	976	977	977	978	978	979	979	980	980	973	975.2
30	980	981	981	981	981	981	980	980	981	981	981	981	982	982	981	981	981	981	980	980	980	979	979	978	982	978	980.5
31	978	978	978	978	977	977	976	975	975	975	974	974	974	972	971	971	971	972	972	972	973	973	973	973	978	971	974.3
Max.	**997**	**996**	**996**	**997**	**997**	**996**	**995**	**994**	**994**	**994**	**993**	**994**	**995**	**996**	**996**	**996**	**996**	**996**	**996**	**997**	**997**	**997**	**996**	**997**	**997**		
Min.	**956**	**955**	**954**	**955**	**955**	**955**	**955**	**955**	**956**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**954**	**955**	**955**	**956**	**956**		**954**	
Avg.	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**971**	**972**	**972**	**971**	**972**	**972**	**972**	**971**	**971**	**971**	**971**	**971**	**972**	**971**	**972**	**972**	**972**			**971.6**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

November 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	974	974	974	974	973	973	971	971	971	972	972	972	971	971	971	972	971	971	972	972	973	973	973	973	974	971	972.3
2	973	973	973	973	973	972	972	972	971	971	970	970	969	969	968	967	967	966	966	965	964	964	963	962	973	962	968.9
3	962	961	961	960	959	958	957	957	956	955	955	955	955	955	955	954	954	954	953	952	953	952	952	952	962	952	955.7
4	952	951	951	951	951	951	951	951	951	952	952	952	952	952	953	952	952	952	952	952	953	953	953	952	953	951	951.8
5	952	953	952	952	953	953	953	954	954	954	954	954	955	954	954	954	954	954	954	955	956	956	957	957	957	952	954.1
6	958	959	959	960	961	961	962	962	963	963	964	965	966	966	966	966	966	966	966	966	966	966	966	966	966	958	963.7
7	966	966	966	965	965	964	964	964	964	964	964	963	963	963	962	962	961	961	961	961	960	961	960	960	966	960	962.9
8	960	960	960	960	959	959	958	958	958	958	958	958	958	957	957	956	956	956	955	955	955	955	954	955	960	954	957.3
9	954	954	954	953	953	953	952	952	952	952	952	952	952	951	951	951	951	951	952	952	952	953	953	954	954	951	952.3
10	955	955	956	956	956	956	956	957	957	957	958	958	958	958	958	958	957	957	957	957	957	957	956	956	958	955	956.8
11	956	956	955	955	954	954	954	953	953	954	954	953	953	953	953	953	953	954	954	954	955	956	956	956	956	953	954.2
12	957	957	958	959	959	960	960	960	961	962	962	962	963	963	963	963	963	963	963	963	963	963	963	963	963	957	961.4
13	962	962	961	961	960	959	959	959	958	957	957	956	956	955	954	954	952	952	951	950	949	949	948	948	962	948	955.4
14	948	948	948	948	948	948	947	947	947	946	946	946	945	945	944	944	943	943	942	942	941	941	941	940	948	940	944.9
15	940	940	940	940	939	939	940	940	940	940	941	941	942	942	942	943	943	943	943	944	944	945	945	945	945	939	941.7
16	945	946	945	946	946	946	946	945	945	945	946	946	946	946	946	946	946	945	946	946	946	946	946	946	946	945	945.8
17	946	946	946	946	947	946	947	947	947	947	947	947	947	947	947	947	947	947	947	947	948	948	948	948	948	946	947.0
18	948	948	949	949	949	950	950	950	951	951	951	952	952	952	953	953	953	953	954	953	953	953	953	952	954	948	951.3
19	951	951	951	950	950	950	949	949	949	949	950	950	950	951	950	951	952	953	953	953	953	955	956	957	957	949	951.4
20	957	958	960	961	960	963	963	964	965	966	967	969	970	971	972	973	974	974	974	976	976	977	977	978	978	957	968.5
21	979	979	979	980	980	979	979	980	980	980	981	981	981	981	981	980	980	980	980	980	980	980	980	980	981	979	980.0
22	980	979	979	978	978	978	978	977	976	975	975	974	973	972	971	969	968	967	966	964	963	962	961	959	980	959	971.8
23	958	957	956	956	955	954	953	953	952	952	952	951	951	951	950	950	950	949	949	950	950	950	950	951	958	949	952.1
24	951	951	951	951	952	952	952	953	953	953	954	954	955	955	955	956	956	956	957	957	957	958	958	959	959	951	954.4
25	959	959	960	960	960	960	961	961	961	961	962	962	963	963	963	963	963	963	963	963	963	963	962	962	963	959	961.7
26	962	962	961	961	960	960	958	957	956	955	955	954	953			950	948	947	947	946	946	946	946	947	962	946	953.5
27	948	949	951	952	952	953	955	955	957	959	961	963	965	967	968	970	971	973	974	976	977	979	980	981	981	948	964.0
28	982	982	982	982	982	981	980	978	977	976	976	975	974	973	971	970	968	966	965	965	965	965	965	965	982	965	973.5
29	968	969	971	972	974	974	977	978	978	979	980	980	980	980	979	980	979	979	979	978	978	977	976	975	980	968	976.7
30	975	974	973	971	970	968	966	964	964	962	961	960	959	960	960	961	964	966	967	969	971	972	973	975	975	959	966.9
Max.	**982**	**982**	**982**	**982**	**982**	**981**	**980**	**980**	**980**	**980**	**981**	**981**	**981**	**981**	**981**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**981**	**982**		
Min.	**940**	**940**	**940**	**940**	**939**	**939**	**940**	**940**	**940**	**940**	**941**	**941**	**942**	**942**	**942**	**943**	**943**	**943**	**942**	**942**	**941**	**941**	**941**	**940**		**939**	
Avg.	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**			**959.1**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

December 1991

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	976	977	977	978	979	978	978	979	979	979	978	977	976	976	975	973	972	971	970	969	967	967	966	966	979	966	974.3
2	965	965	965	964	963	963	962	961	961	961	961	961	961	960	960	960	959	959	958	958	957	957	957	956	965	956	960.6
3	957	956	955	955	955	954	954	953	953	952	952	951	951	950	950	949	949	948	947	947	947	946	946	946	957	946	951.0
4	945	945	945	944	944	943	943	942	942	942	942	941	941	941	941	940	940	940	940	940	939	939	939	939	945	939	941.5
5	939	938	938	937	937	936	936	936	935	936	936	936	936	936	936	936	937	937	938	938	939	939	940	941	941	935	937.2
6	942	943	943	944	944	944	944	943	943	943	942	942	942	942	941	942	941	942	943	943	944	945	946	948	948	941	943.2
7	949	951	951	952	953	953	953	953	953	953	953	953	953	953	952	952	952	951	951	951	951	951	950	950	953	949	951.8
8	950	950	950	950	949	949	950	950	950	949	950	950	950	950	950	951	951	951	951	950	950	949	949	948	951	948	949.9
9	948	948	947	946	946	946	946	946	946	947	947	948	949	950	951	951	951	951	951	951	951	952	952	952	952	946	948.9
10	952	952	952	952	952	951	952	952	952	952	953	953	954	954	954	954	954	955	955	956	956	957	957	957	957	951	953.7
11	957	957	957	956	957	957	957	957	957	958	958	958	959	959	959	959	959	960	961	962	962	962	963	963	963	956	958.9
12	964	965	965	966	966	966	966	966	965	966	967	967	968	969	969	970	970	970	971	971	971	971	971	971	971	964	968.0
13	971	971	969	968	967	965	964	962	960	958	956	954	953	953	952	950	950	950	950	950	950	950	949	950	971	949	957.2
14	949	949	949	949	948	948	947	947	947	947	947	947	947	947	947	946	946	946	946	947	947	947	947	948	949	946	947.3
15	949	950	950	951	952	952	952	952	952	952	952	952	952	952	952	952	952	952	953	953	954	953	953	953	954	949	952.0
16	953	953	952	952	952	952	952	952	952	953	953	954	955	955	956	957	957	958	959	960	961	961	962	962	962	952	955.5
17	963	963	964	964	965	965	965	965	965	966	967	967	967	967	967	966	966	966	966	965	965	965	964	964	967	963	965.3
18	964	964	963	963	963	962	962	961	961	961	961	961	960	960	960	960	960	961	961	961	961	961	961	962	964	960	961.4
19	962	963	963	963	962	962	962	962	962	963	963	963	963	962	962	961	961	960	960	959	958	958	957	956	963	956	961.1
20	956	955	954	954	953	952	952	951	950	950	950	950	950	949	949	949	949	950	950	950	951	951	952	952	956	949	951.2
21	952	952	952	951	952	952	952	951	949	950	948	948	947	945	944	943	941	939	938	937	936	935	935	936	952	935	945.2
22	936	937	936	937	937	937	937	936	936	936	936	937	937	937	937	937	937	938	938	938	939	939	940	940	940	936	937.3
23	940	940	939	939	939	939	938	938	938	938	938	938	938	937	936	935	935	935	935	935	935	935	935	935	940	935	937.1
24	935	935	935	935	935	934	935	934	935	935	936	936	936	936	936	936	936	936	936	937	937	938	938	939	939	934	935.9
25	940	940	940	941	942	942	943	943	944	945	946	947	948	949	950	951	952	953	954	954	955	956	956	956	956	940	947.8
26	956	955	955	954	953	951	949	947	945	942	940	937	935	934	934	934	935	934	935	935	935	936	938	939	956	934	942.0
27	939	941	941	942	943	943	944	945	946	946	947	948	949	949	950	951	951	952	952	953	953	953	954	954	954	939	947.8
28	955	956	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	956	955	956	956	956	956	956	956	955	955.8
29	956	956	956	956	956	956	956	955	955	955	955	955	955	955	955	954	954	954	953	953	952	952	952	952	956	952	954.5
30	952	951	951	950	950	949	949	948	947	947	947	946	945	945	945	945	944	944	944	943	943	943	943	943	952	943	946.4
31	942	942	941	940	939	939	938	937	936	936	936	935	935	934	934	934	934	934	934	934	934	934	935	935	942	934	936.3
Max.	**976**	**977**	**977**	**978**	**979**	**978**	**978**	**979**	**979**	**979**	**978**	**977**	**976**	**976**	**975**	**973**	**972**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**979**		
Min.	**935**	**935**	**935**	**935**	**935**	**934**	**935**	**934**	**935**	**935**	**936**	**935**	**935**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**935**	**935**		**934**	
Avg.	**952**	**952**	**952**	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**951**			**950.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

January 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	935	936	935	935	935	935	935	935	935	936	936	936	936	936	936	936	936	937	937	937	937	938	938	939	939	935	936.1
2	939	939	939	939	940	940	940	940	941	941	941	942	943	943	943	943	944	944	945	945	946	946	947	947	947	939	942.4
3	948	948	949	949	949	950	950	950	950	951	951	952	952	953	953	953	953	954	954	954	955	955	955	956	956	948	951.8
4	957	957	958	958	958	959	959	959	959	959	959	959	959												959	957	958.5
5															946	946	946	946	946	946	946	945	945	945	946	945	945.7
6	946	947	947	947	947	948	948	947	948	948	948	949	949	949	949	948	948	948	948	948	948	947	947	947	949	946	947.8
7	947	947	947	947	946	946	946	946	945	945	945	946	946	945	945	945	946	946	946	947	947	947	947	947	947	945	946.1
8	947	948	948	947	948	947	947	947	947	947	946	946	946	945	945	944	943	942	942	941	941	940	939	939	948	939	944.7
9	938	938	938	937	937	937	938	938	938	939	939	940	940	940	940	941	942	942	943	944	945	945	946	948	948	937	940.5
10	949	949	950	951	952	953	954	955	956	957	958	960	961	962	962	963	963	964	965	966	966	966	967	967	967	949	959.0
11	968	968	969	969	970	971	971	971	971	971	971	972	972	972	972	971	971	970	970	970	969	968	968	967	972	967	970.1
12	967	966	965	965	964	964	964	963	962	962	962	960	961	961	960	958	959	959	959	960	960	960	960	960	967	958	961.7
13	960	960	960	959	958	958	957	956	955	955	954	953	952	950	949	948	946	946	946	945	945	946	945	945	960	945	952.0
14	945	945	945	944	944	944	944	943	943	945	945	946	947	948	949	950	951	952	953	954	955	955	955	956	956	943	948.3
15	955	955	955	955	955	955	954	955	955	955	955	955	955	955	953	952	951	949	948	947	945	945	945	943	955	943	952.0
16	944	945	946	947	947	948	949	950	950	951	951	950	947	946	944	942	940	938	938	937	937	937	935	935	951	935	943.9
17	935	935	935	934	935	935	936	936	937	937	939	941	943	944	945	946	948	949	950	951	952	953	955	955	955	934	942.8
18	956	956	957	957	958	958	958	958	958	958	958	958	958	958	957	957	956	956	955	954	953	953	952	950	958	950	956.2
19	950	949	949	948	947	947	947	946	946	947	947	948	948	948	948	948	948	948	949	949	950	950	950	950	950	946	948.2
20	951	951	951	951	952	952	952	952	953	953	954	954	954	955	955	955	955	956	956	956	957	957	957	958	958	951	954.0
21	958	959	959	960	960	961	961	961	962	962	963	964	964	965	965	965	965	965	965	966	966	966	966	966	966	958	963.1
22	966	966	966	966	966	966	965	965	965	965	965	965	965	964	964	963	963	963	963	963	963	963	962	962	966	962	964.3
23	962	962	962	962	962	962	962	961	961	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	962	960	961.1
24	960	961	960	960	960	960	960	959	959	959	959	959	959	959	958	958	957	957	956	956	956	956	955	955	961	955	958.3
25	955	954	954	953	953	952	951	950	950	949	949	948	947	946	946	945	945	945	944	944	944	943	943	943	955	943	948.0
26	943	943	943	943	943	942	942	942	942	942	941	942	941	941	941	940	941	940	940	940	940	941	941	942	943	940	941.5
27	942	942	942	943	943	943	944	944	944	945	945	945	946	946	945	945	946	946	946	946	947	947	947	947	947	942	944.8
28	947	948	948	948	948	948	949	949	949	950	950	951	951	951	951	951	951	951	952	952	952	952	952	953	953	947	950.2
29	953	953	953	953	953	953	953	953	952	952	953	952	952	952	951	951	950	949	949	949	948	948	947	947	953	947	951.1
30	947	947	947	947	947	946	947	946	947	947	947	947	948	948	948	948	948	948	949	949	949	950	950		950	946	947.7
31																											
Max.	**968**	**968**	**969**	**969**	**970**	**971**	**971**	**971**	**971**	**971**	**971**	**972**	**972**	**972**	**972**	**971**	**971**	**970**	**970**	**970**	**969**	**968**	**968**	**967**	**972**		
Min.	**935**	**935**	**935**	**934**	**935**	**935**	**935**	**935**	**935**	**936**	**936**	**936**	**936**	**936**	**936**	**936**	**936**	**937**	**937**	**937**	**937**	**937**	**935**	**935**		**934**	
Avg.	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**952**	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**			**951.1**

Total Hours in Month 744 **Hours Data Available** 694 **Data Recovery** 93.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

February 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	952	952	952	953	953	953	954	954	954	955	955	956	956	956	956	956	956	957	957	957	957	958	958	958	958	952	955.2
2	959	959	959	959	960	960	960	961	961	961	962	962	963	963	963	963	963	963	964	964	964	964	964	965	965	959	961.9
3	965	965	965	965	965	965	965	966	966	967	966	966	966	966	966	966	966	966	966	966	966	967	966	966	967	965	965.8
4	966	966	966	966	967	967	967	966	966	966	965	966	965	965	965	964	964	963	964	963	963	963	963	962	967	962	964.9
5	962	962	962	962	962	962	962	961	961	961	961	961	961	961	960	960	960	959	959	959	959	959	959	960	962	959	960.6
6	960	960	960	961	961	961	962	963	963	964	964	965	966	966	966	967	967	968	968	969	969	970	971	971	971	960	965.1
7	972	972	973	973	974	974	974	975	975	976	976	977	977	977	977	977	978	978	978	978	978	979	979	979	979	972	976.1
8	979	979	979	979	979	979	978	978	978	978	978	978	978	978	978	978	978	978	977	978	978	978	978	977	979	977	978.2
9	978	978	977	977	977	977	977	977	977	977	977	977	977	977	977	976	976	976	976	976	976	976	976	976	978	976	976.7
10	976	976	976	976	976	976	976	976	976	976	976	976	977	977	977	977	977	977	977	977	977	977	977	977	977	976	976.5
11	977	978	977	977	977	977	977	977	977	977	978	978	978	979	978	978	977	977	977	977	977	976	976	975	979	975	977.2
12	975	974	974	974	973	972	972	972	971	971	971	971	970	970	970	970	970	969	969	969	969	969	969	969	975	969	971.0
13	969	969	969	969	969	969	969	969	969	969	969		971	971	971	970	969	970	970	970	969	969	969	969	971	969	969.4
14	968	968	968	967	967	966	966	965	965	965	965	965	964	964	964	964	964	964	964	964	964	964	964	965	968	964	965.2
15	966	966	966	967	967	967	968	968	968	969	969	970	969	969	970	970	970	970	971	970	971	970	971	971	971	966	968.9
16	971	971	972	971	972	971	971	972	972	972	973	974	973	974	974	973	973	974	974	976	976	975	976	975	976	971	973.1
17	976	976	976	976	977	977	976	976	976	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	976	976.7
18	978	978	978	978	978	978	978	978	978	978	978	978	978	978	977	977	977	976	976	976	976	976	976	976	978	976	977.3
19	976	976	976	976	976	976	976	976	975	976	976	976	976	977	976	976	976	976	975	975	975	974	974	973	977	973	975.6
20	973	972	972	971	970	970	968	968	967	966	966	965	965	964	963	963	962	962	961	961	961	960	961	960	973	960	965.5
21	960	960	959	959	958	958	957	957	956	956	956	955	955	954	954	953	953	953	953	952	952	952	952	952	960	952	955.3
22	952	953	952	953	953	953	953	954	954	955	955	956	957	957	957	957	957	957	957	958	958	958	958	958	958	952	955.5
23	958	957	957	956	955	954	953	951	950	948	947	946	945	944	942	941	940	939	939	939	939	940	940	941	958	939	946.7
24	942	944	945	945	946	947	948	948	950	950	951	952	952	953	953	952	952	951	950	949	949	948	947	947	953	942	948.8
25	946	946	946	946	945	946	946	947	947	948	949	951	952	953	955	956	957	958	958	959	959	959	959	959	959	945	952.0
26	958	958	958	957	957	956	955	954	953	953	952	952	951	952	951	952	952	952	953	953	954	954	955	956	958	951	954.1
27	957	957	957	958	958	958	958	958	958	957	957	956	955	953	952	951	950	949	948	948	948	947	947	947	958	947	953.5
28	947	948	949	950	951	952	953	953	954	955	955	955	956	956	957	957	957	957	959	959	960	960	961	961	961	947	955.1
29	962	962	963	963	964	964	963	964	965	965	966	967	967	968	968	969	969	969	970	971	971	971	971	971	971	962	966.8
Max.	**979**	**979**	**979**	**979**	**979**	**979**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**979**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**979**	**979**	**979**	**979**		
Min.	**942**	**944**	**945**	**945**	**945**	**946**	**946**	**947**	**947**	**948**	**947**	**946**	**945**	**944**	**942**	**941**	**940**	**939**	**939**	**939**	**939**	**940**	**940**	**941**		**939**	
Avg.	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**			**965.1**

Total Hours in Month 696 **Hours Data Available** 695 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

March 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	972	972	972	971	972	972	972	972	972	973	974	974	974	974	974	974	974	975	975	975	975	975	975	975	975	971	973.5
2	976	976	976	976	976	976	976	976	976	976	976	976	976	976	975	975	974	974	974	974	974	974	974	974	976	974	975.3
3	974	975	975	975	975	975	975	976	976	976	976	977	977	977	977	977	977	977	977	977	978	978	978	978	978	974	976.4
4	978	978	977	977	977	977	976	976	975	975	975	975	974	974	974	973	973	973	973	973	973	973	973	973	978	973	974.8
5	973	973	973	973	973	973	972	972	972	972	972	972	972	972	972	971	970	970	970	969	969	969	969	968	973	968	971.3
6	968	967	967	966	966	965	965	964	964	964	964	964	964	964	964	963	963	963	963	963	962	962	962	963	968	962	964.2
7	962	961	961	960	959	958	957	956	955	954	954	953	952	952	951	950	951	951	951	952	952	952	953	953	962	950	954.6
8	952	952	951	949	949	948	947	947	946	946	946	946	946	946	946	946	946	946	947	947	948	948	948	948	952	946	947.5
9	948	947	946	945	944	943	943	943	942	942	941	942	941	941	942	942	942	943	943	944	946	947	948	948	948	941	943.9
10	948	949	949	949	949	949	949	949	949	949	949	949	949	949	949	948	948	948	948	948	948	949	949	949	949	948	948.7
11	950	950	951	951	952	953	953	955	956	957	959	960	961	963	963	964	965	966	967	967	968	969	969	970	970	950	960.0
12	971	971	972	972	973	973	973	973	974	974	974	975	975	975	975	974	974	974	974	974	973	973	973	972	975	971	973.4
13	972	972	971	971	971	970	970	970	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	972	969	969.6
14	969	969	969	969	968	968	968	968	968	967	967	967	967	967	967	967	966	966	966	967	967	967	967	967	969	966	967.4
15	967	967	967	967	967	966	966	966	966	966	966	966	967	967	967	967	967	967	967	968	968	968	968	968	968	966	966.9
16	968	968	968	969	969	969	969	970	970	970	971	971	971	971	971	971	971	971	971	971	971	971	971	970	971	968	970.1
17	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	969	969	969	968	968	968	967	970	967	969.5
18	966	966	965	964	963	962	961	960	959	958	957	956	955	954	953	952	950	949	947	947	947	946	946	945	966	945	955.3
19	945	945	945	945	945	945	945	945	946	946	947	947	948	948	949	949	950	950	950	950	951	952	952	952	952	945	947.8
20	953	953	953	953	953	953	953	953	953	954	954	955	956	956	957	957	958	959	960	960	960	962	962	963	963	953	956.3
21	963	963	963	964	964	964	964	965	965	965	966	966	967	967	967	967	967	967	967	967	968	968	968	968	968	963	965.8
22	968	967	967	967	966	966	966	965	965	964	965	965	965	965	965	965	965	966	966	966	966	966	966	966	968	964	965.8
23	964	963	963	962	961	960	960	959	959	959	959	959	959	957	957	956	955	954	953	951	950	949	948	946	964	946	956.8
24	944	944	944	945	946	947	948	949	949	950	950	951	951	951	951	952	952	952	952	952	952	952	953	953	953	944	949.6
25	953	953	954	954	954	955	955	956	957	957	958	959													959	953	955.4
26														960	960	960	960	960	960	960	961	961	961	961	961	960	960.4
27	961	961	962	963	963	963	964	964	965	966	967	967	968	968	968	969	969	969	969	969	969	970	969	969	970	961	966.3
28	969	970	970	971	971	971	971	971	972	972	972	972	973	973	973	973	973	974	974	974	974	975	975	975	975	969	972.4
29	976	976	976	976	977	977	977	977	977	978	978	978	978	979	979	979	979	979	979	980	979	980	980	980	980	976	978.1
30	980	980	980	980	980	979	979	979	979	979	979	979	978	978	978	977	977	976	975	974	974	973	972	972	980	972	977.4
31	971	970	970	969	968	967	967	966	966	965	965	965	965	964	964	964	964	963	963	963	963	963	962	962	971	962	965.4
Max.	**980**	**980**	**980**	**980**	**980**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**978**	**979**	**979**	**979**	**979**	**979**	**979**	**980**	**979**	**980**	**980**	**980**	**980**		
Min.	**944**	**944**	**944**	**945**	**944**	**943**	**943**	**943**	**942**	**942**	**941**	**942**	**941**	**941**	**942**	**942**	**942**	**943**	**943**	**944**	**946**	**946**	**946**	**945**		**941**	
Avg.	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**			**964.1**

Total Hours in Month 744 **Hours Data Available** 719 **Data Recovery** 96.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

April *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	962	962	962	962	962	962	962	963	963	964	964	965	965	966	966	967	967	967	967	967	968	968	968	968	968	962	964.9
2	968	968	969	969	969	969	969	969	970	970	971	971	972	972	972	972	972	972	973	973	973	973	974	974	974	968	971.0
3	974	974	974	974	974	974	974	974	974	974	974	974	974	973	973	972	971	971	971	972	972	973	972	972	974	971	973.1
4	972	972	971	972	971	971	972	972	973	973	972	972	973	974	975	975	976	976	976	976	976	977	976	976	977	971	973.7
5	978	977	978	978	978	979	980	980	981	982	981	982	981	981	981	982	982	983	983	983	983	984	984	984	984	977	981.0
6	985	985	985	985	986	986	987	987	987	987	988	989	989	989	990	990	990	990	991	991	991	992	992	992	992	985	988.5
7	992	992	992	992	992	992	992	992	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	992	992.7
8	993	993	993	993	993	993	992	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	992	993.0
9	992	992	992	992	992	992	991	992	991	991	991	992	991	991	991	991	991	991	990	990	990	990	990	990	992	990	991.1
10	990	989	989	989	989	989	988	988	988	988	988	987	987	987	986	986	985	985	984	984	983	983	981	981	990	981	986.4
11	980	980	981	980	979	979	979	978	977	978	977	977	977	976	976	975	974	974	973	973	972	972	971	971	981	971	976.2
12	970	970	969	969	968	968	967	966	967	968	968	967	967	967	967	966	966	966	966	966	967	967	967	967	970	966	967.3
13	967	967	967	967	967	966	966	966	966	967	967	967	967	967	967	967	967	967	966	966	967	967	967	967	967	966	966.8
14	967	967	966	966	965	965	965	965	964	964	964	964	964	963	963	963	963	963	962	962	962	962	962	962	967	962	963.9
15	962	962	961	960	960	960	960	960	960	960	959	959	959	958	957	957	956	955	954	953	953	952	951	949	962	949	957.4
16	948	948	946	945	944	943	942	941	940	940	941	941	942	942	943	943	944	945	945	946	946	947	947	948	948	940	944.0
17	948	948	948	949	949	950	950	950	950	951	952	952	952	953	953	953	953	954	954	954	954	955	955	955	955	948	951.8
18	955	956	956	956	956	956	957	957	957	957	958	958	958	959	959	960	960	960	960	960	961	961	962	963	963	955	958.4
19	963	963	964	965	965	966	966	967	968	968	969	970	971	972	972	973	973	973	973	973	972	972	972	971	973	963	969.2
20	971	970	969	968	967	967	966	965	965	964	964	963	963	962	962	961	961	961	961	961	961	961	961	961	971	961	964.0
21	961	961	962	962	962	962	962	962	963	964	964	964	965	965	965	966	966	966	966	967	967	967	968	968	968	961	964.4
22	969	969	969	969	970	970	970	970	971	971	971	971	972	972	972	973	973	973	974	974	974	975	975	975	975	969	971.8
23	976	976	976	976	976	977	977	978	978	978	979	979	979	979	980	980	980	980	981	981	982	982	982	983	983	976	979.0
24	983	983	983	984	984	984	985	985	986	986	986	987	987	987	988	988	987	988	988	988	988	989	989	988	989	983	986.3
25	988	988	988	988	988	988	988	988	987	987	987	986	986	985	984	983	983	982	981	980	980	979	978	977	988	977	984.5
26	977	976	975	974	974	974	973	973	973	972	972	972	972	972	972	971	971	971	970	970	970	969	969	969	977	969	972.1
27	968	968	968	967	967	967	966	966	966	966	966	966	966	967	967	967	967	967	967	968	968	968	968	969	969	966	967.1
28	969	969	969	968	968	968	968	969	969	968	968	968	969	969	969	969	969	969	969	969	969	970	970	970	970	968	968.8
29	969	969	970	970	970	970	970	970	970	970	971	971	971	971	971	971	971	971	971	972	972	972	972	972	972	969	970.7
30	972	972	972	972	971	971	971	971	970	970	970	969	969	969	968	967	967	966	966	965	965	965	964	964	972	964	968.6
Max.	**993**	**993**	**993**	**993**	**993**	**993**	**992**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**		
Min.	**948**	**948**	**946**	**945**	**944**	**943**	**942**	**941**	**940**	**940**	**941**	**941**	**942**	**942**	**943**	**943**	**944**	**945**	**945**	**946**	**946**	**947**	**947**	**948**		**940**	
Avg.	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**973**	**972**	**972**	**972**	**972**	**972**	**972**	**973**	**972**	**972**			**972.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

May *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	964	964	963	963	963	963	962	962	963	963	962	963	963	963	963	963	963	963	963	964	964	964	964	965	965	962	963.2
2	965	965	965	965	965	965	965	965	965	965	965	964	964	964	964	964	964	964	964	964	964	964	964	965	965	964	964.5
3	965	965	965	965	965	965	965	966	966	966			967	967	968	968	967	967	967	967	967	968	968	967	968	965	966.4
4	967	967	967	967	966	966	966	966	966	966	966	965	965	965	965	964	964	964	964	964	964	964	964	964	967	964	965.3
5	964	964	964	964	963	964	964	964	964	964	965	965	965	966	965	966	965	965	965	966	966	966	967	967	967	963	964.9
6	967	968	968	968	968	969	969	969	969	970	970	970	970	971	971	971	971	971	971	971	971	972	971	971	972	967	969.9
7	972	971	971	970	969	969	968	968	966	966	965	964	964	963	963	962	962	962	962	962	962	963	963	964	972	962	965.5
8	965	965	965	965	966	966	967	967	967	967	969	969	970	970	970	971	971	971	971	971	971	971	972	973	973	965	968.8
9	973	973	973	973	973	973	973	974	974	974	975	975	976	976	975	976	976	976	976	977	977	978	978	979	979	973	975.1
10	979	980	980	980	980	981	981	981	981	981	981	981	981	981	981	981	980	980	980	980	980	980	981	982	982	979	980.5
11	982	982	982	982	983	983	983	984	984	984	985	985	986	986	986	987	986	987	987	987	988	988	989	989	989	982	985.2
12	989	989	990	990	989	989	989	990	990	990	990	990	989	989	989	989	988	988	988	988	987	987	987	987	990	987	988.8
13	987	986	985	985	984	984	983	984	983	983	982	982	982	981	981	980	980	979	979	979	979	980	980	982	987	979	982.1
14	983	983	983	983	984	984	984	984	984	984	985	985	985	985	985	986	986	986	986	986	986	987	987	987	987	983	984.9
15	987	987	987	987	986	986	986	985	985	985	985	985	984	984	983	983	982	981	981	980	979	978	978	978	987	978	983.4
16	979	980	981	982	983	985	985	985	985	986	986	986	986	986	985	985	985	985	985	985	985	985	985	985	986	979	984.4
17	985	986	985	986	986	986	986	986	987	987	988	989	989	989	990	990	990	990	990	989	989	989	989	989	990	985	987.9
18	989	989	989	989	989	990	990	991	991	991	992	992	993	993	993	993	993	993	993	993	993	994	994	994	994	989	991.7
19	994	993	993	993	993	993	993	993	992	992	992	992	992	992	992	992	991	991	991	991	990	991	991	991	994	990	992.0
20	991	991	990	990	990	990	989	990	989	989	989	989	988	989	988	988	988	988	988	988	988	988	988	988	991	988	988.9
21	988	988	988	988	987	987	987	987	987	987	987	987	987	987	986	986	986	986	986	986	986	986	986	986	988	986	986.8
22	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986.0
23	986	986	986	986	986	985	985	985	985	985	985	985	985	985	985	984	984	984	983	983	983	983	983	983	986	983	984.6
24	983	983	982	982	982	981	981	981	981	981	981	980	980	980	980	980	979	979	979	979	979	979	979	978	983	978	980.4
25	978	978	978	977	976	975	975	974	974	973	972	972	971	970	969	969	968	967	967	966	966	966	965	965	978	965	971.3
26	964	964	963	962	962	961	960	960	960	960	959	959	959	958	958	958	958	958	958	958	958	958	959	959	964	958	959.7
27	960	960	960	961	961	961	961	962	962	963	963	963	964	964	964	965	965	965	965	966	966	967	967	967	967	960	963.4
28	968	968	968	968	968	968	968	968	969	969	969	970	970	970	970	970	970	970	970	970	970	970	970	971	971	968	969.3
29	971	970	970	970	970	970	970	970	970	971	971	971	971	971	971	971	971	971	971	971	971	971	972	972	972	970	970.8
30	972	972	972	972	972	972	972	972	972	972	973	973	973	973	973	973	973	973	973	974	974	974	974	975	975	972	972.8
31	975	975	975	975	975	975	975	975	975	975	975	975	976	975	975	975	974	974	974	974	974	973	973	973	976	973	974.6
Max.	**994**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**992**	**992**	**992**	**992**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**994**	**994**	**994**	**994**		
Min.	**960**	**960**	**960**	**961**	**961**	**961**	**960**	**960**	**960**	**960**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**959**	**959**		**958**	
Avg.	**977**	**977**	**977**	**977**	**976**	**977**	**976**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**976**	**976**	**976**	**976**	**976**	**976**	**977**	**977**			**976.6**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

June *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	973	972	971	971	970	970	969	969	968	968	967	967	966	966	966	965	965	965	965	965	965	965	966	966	973	965	967.5
2	966	966	966	966	966	966	966	967	967	967	968	968	968	969	969	969	969	970	970	970	971	971	972	973	973	966	968.3
3	973	973	974	974	974	974	975	975	976	976	977	977	977	977	978	978	978	977	978	978	978	978	978	979	979	973	976.3
4	978	978	978	977	977	977	976	976	976	975	975	975	974	974	973	972	972	971	971	970	971	971	971	971	978	970	974.1
5	971	972	972	972	972	972	972	973	973	974	974	975	975	975	975	975	977	977	978	977	977	977	977	977	978	971	974.5
6	977	977	978	978	978	978	977	978	978	978	978	978	979	979	978	978	978	978	978	977	977	977	977	977	979	977	977.8
7	977	977	976	976	975	975	974	974	974	973	973	973	973	973	973	972	972	972	972	972	972	972	972	972	977	972	973.5
8	972	972	972	972	972	972	972	972	972	972	973	978	978	978	978	978	978	978	978	978	978	979	979	980	980	972	975.5
9	980	981	982	982	982	983	983	983	983	983	983	983	983	983	983	982	982	981	981	981	981	981	981	981	983	980	982.0
10	981	981	981	980	980	980	979	979	979	979	979	979	979	979	979	979	979	979	978	978	978	978	978	978	981	978	979.1
11	978	978	978	978	978	978	978	978	978	979	979	979	979	979	979	979	979	979	979	979	978	978	978	978	979	978	978.5
12	978	977	977	976	976	975	974	974	974	974	974	974	974	974	974	973	973	973	973	973	972	972	971	972	978	971	974.0
13	972	972	972	973	972	972	973	973	973	973	974	974	974	974	975	976	976	976	975	976	975	975	975	975	976	972	974.0
14	975	975	975	975	974	974	974	974	973	973	973	973	972	972	972	972	972	972	972	972	972	973	973	973	975	972	973.1
15	974	974	974	974	974	974	974	975	975	975	975	975	975	975	975	975	975	975	975	974	974	975	975	975	975	974	974.6
16	975	975	975	975	975	975	975	975	975	975	975	974	974	975	975	974	975		974	974	974	975	975	975	975	974	974.7
17	975	975	975	974	974	974	973	973	972	972	972	971	971	971	971	971	970	970	970	969	969	968	968	968	975	968	971.5
18	967	967	967	966	965	965	965	965	965	965	965	965	965	965	965	965	965	966	966	967	967	967	968	968	968	965	965.9
19	969	969	969	969	970	970	970	970	971	971	971	971	971	972	972	972	972	972	972	972	972	972	973	973	973	969	971.0
20	973	972	972	972	971	971	971	970	970	969	969	968	968	967	967	966	966	966	965	965	965	966	966	966	973	965	968.4
21	966	966	966	966	967	967	968	968	969	970	970	971	971	972	973	973	973	974	974	975	975	976	977	977	977	966	971.0
22	978	979	979	979	979	979	980	980	980	981	981	981	981	981	981	981	981	981	981	982	982	982	982	983	983	978	980.6
23	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	982	982	983	982	982	982	982	982	982	983	982	982.7
24	982	982	981	981	981	981	980	980	980	980	980	979	979	979	979	979	978	978	978	978	978	978	978	978	982	978	979.5
25	978	978	978	977	977	977	976	976	976	976	976	975	975	974	974	974	974	973	973	973	972	972	971	972	978	971	974.9
26	972	972	972	971	972	971	971	971	971	971	971	971	971	971	971	971	970	970	970	970	969	969	969	969	972	969	970.7
27	969	969	968	967	966	966	966	965	965	964	964	964	964	964	964	964	964	964	964	964	964	965	965	965	969	964	965.2
28	965	966	965	966	966	966	966	965	966	966	965	965	965	965	965	965	964	965	965	964	964	965	965	965	966	964	965.2
29	966	967	967	967	968	968	968	968	968	969	969	970	971	971	971	971	972	972	972	972	973	974	975	975	975	966	970.2
30	976	976	977	977	978	978	979	979	980	980	981	981	981	982	982	983	983	983	984	984	984	984	984	984	984	976	980.8
Max.	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**984**	**984**	**984**	**984**	**984**	**984**	**984**		
Min.	**965**	**966**	**965**	**966**	**965**	**965**	**965**	**965**	**965**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**965**	**965**	**965**		**964**	
Avg.	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**			**973.8**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

July *1992*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	984	984	984	984	983	983	983	983	982	982	981	981	981	981	980	980	980	979	979	979	979	979	979	978	984	978	981.2
2	978	978	978	978	977	977	977	977	977	977	977	976	976	977	977	977	977	977	977	977	977	977	978	978	978	976	977.2
3	978	978	978	979	979	979	978	978	978	978	978	978	977	977	977	976	976	975	975	974	974	974	974	973	979	973	976.7
4	973	972	972	972	971	971	971	970	970	970	969	969	969	969	969	969	968	969	968	968	968	968	969	968	973	968	969.7
5	969	968	969	968	968	968	968	968	968	969	969	969	969	969	969	969	969	969	969	969	969	969	970	970	970	968	968.8
6	970	970	971	971	971	971	971	971	971	972	972	972	973	973	973	973	973	973	973	974	974	974	974	975	975	970	972.3
7	975	975	975	975	976	976	976	976	977	977	977	977	977	978	978	978	978	978	978	978	978	978	978	978	978	975	977.0
8	978	978	977	977	977	976	976	976	976	976	976	976	976	977	977	977	977	977	978	978	978	978	979	979	979	976	977.1
9	979	980	980	980	980	980	980	980	980	980	980	980	980	979	979	979	979	978	978	978	977	977	976	976	980	976	979.0
10	975	975	975	974	974	973	973	973	973	973	973	973	973	972	972	972	972	971	971	971	970	970	970	970	975	970	972.4
11	969	969	968	968	968	968	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	967	967	969	966	967.2
12	967	967	967	967	967	967	967	966	966	966	966	966	966	966	966	966	966	965	965	965	965	965	965	965	967	965	966.0
13	965	965	965	965	965	965	965	965	965	965	965	966	966	966	966	966	966	966	967	967	967	967	967	968	968	965	965.8
14	968	968	969	969	969	969	970	970	971	971	972	972	973	973	974	974	974	974	975	975	976	976	977	978	978	968	972.4
15	978	979	979	979	980	980	980	981	981	981	982	982	982	982	982	982	983	983	983	983	983	984	984	984	984	978	981.5
16	984	984	985	984	984	984	985	985	984	984	984	984	984	984	984	984	984	984	984	984	984	984	985	985	985	984	984.2
17	985	985	985	985	985	985	985	985	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	987	987	985	985.7
18	987	987	986	986	986	986	986	986	986	986	986	986	986	986	986	986	985	985	985	985	985	985	985	985	987	985	985.8
19	985	985	984	984	984	984	983	983	983	983	983	983	982	982	982	982	981	981	981	981	980	980	980	980	985	980	982.3
20	980	980	980	980	979	979	979	979	979	978	978	978	978	977	977	977	976	976	975	975	975	975	975	975	980	975	977.5
21	974	974	974	973	974	973	973	973	973	973	972	973	972	973	973	972	972	972	972	972	972	972	972	972	974	972	972.7
22	972	972	972	972	972	971	971	971	971	971	971	971	971	972	971	971	971	972	972	972	972	972	973	973	973	971	971.6
23	973	973	974	974	974	974	974	974	975	975	975	975	975	975	975	975	975	975	973			975	976	976	976	973	974.5
24	976	976	976	976	976	976	976	977	977	977	976	977	976	977	976	976	976	976	976	976	976	976	976	976	977	976	976.2
25	976	976	976	976	975	975	975	975	975	975	975	975	975	975	974	974	974	974	974	974	974	974	974	974	976	974	974.8
26	974	974	974	974	974	974	974	974	973	974	974	974	974	974	974	974	973	973	973	973	973	973	973	974	974	973	973.7
27	973	973	973	973	972	972	972	972	971	971	971	971	971	971	971	970	970	970	970	970	970	969	969	969	973	969	971.0
28	969	969	969	969	968	968	968	968	968	968	969	969	969	969	969	970	970	970	971	972	972	973	974	974	974	968	969.8
29	975	975	975	976	976	976	977	977	978	978	978	979	979	979	979	979	979	980	981	981	981	982	983	983	983	975	978.6
30	983	983	983	983	983	983	983	984	984	984	984	983	984	984	984	983	983	983	983	983	983	983	983	984	984	983	983.3
31	984	984	984	983	983	983	983	983	983	983	983	983	983	983	983	982	982	982	982	982	981	982	981	981	984	981	982.6
Max.	**987**	**987**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**986**	**987**	**987**		
Min.	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**966**	**966**	**966**	**966**	**966**	**966**	**965**	**965**	**965**	**965**	**965**	**965**	**965**		**965**	
Avg.	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**975**	**975**	**976**	**976**	**976**	**976**	**976**			**975.8**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

August 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	981	981	981	980	980	980	979	979	979	978	978	978	977	977	977	977	976	976	976	976	976	976	976	976	981	976	977.9
2	976	976	976	976	975	975	975	975	975	975	975	975	975	975	975	975	974	973	973	973	973	972	972	971	976	971	974.4
3	971	970	969	969	968	967	967	967	966	966	966	966	966	966	966	966	965	964	964	963	963	962	962	961	971	961	965.8
4	961	960	960	959	958	958	957	957	957	956	956	955	955	955	954	954	954	953	953	953	953	954	955	956	961	953	956.0
5	956	957	957	957	958	958	958	959	959	959	959	960	960	960	960	960	960	960	960	960	961	961	961	961	961	956	959.2
6	962	962	962	962	962	962	963	963	964	964	965	965	966	966	967	967	968	968	968	969	970	970	971	971	971	962	965.7
7	972	972	972	972	973	973	973	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	975	975	975	972	973.6
8	975	975	975	975	975	975	976	976	977	977	977	977	978	978	978	978	978	979	980	980	981	981	981	982	982	975	977.7
9	982	983	983	983	983	984	984	984	984	985	984	985	985	985	985	986	985	985	985	985	985	985	985	985	986	982	984.4
10	985	984	984	983	983	983	982	981	981	980	980	979	979	978	977	977	976	975	975	975	974	975	974	974	985	974	978.9
11	974	974	973	973	973	972	972	972	972	971	971	971	971	971	970	970	969	969	969	968	968	968	967	967	974	967	970.6
12	967	967	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	967	968	968	968	968	968	966	966.5
13	969	969	969	969	969	969	969	970	970	970	971	971	971	971	971	972	972	972	972	972	972	972	972	972	972	969	970.7
14	972	973	972	972	972	972	973	972	972	972	972	973	973	972	973	972	972	972	972	972	972	971	971	971	973	971	972.1
15	970	970	969	969	969	969	969	969	968	968	968	968	968	968	968	968	967	967	967	967	966	966	966	966	970	966	967.9
16	965	965	964	964	964	963	963	963	962	962	962	963	963	963	963	963	964	964	964	965	965	966	967	968	968	962	964.0
17	969	969	970	971	972	973	973	974	975	976	976	977	978	978	979	979	979	980	980	980	981	981	981	982	982	969	976.4
18	982	982	983	983	983	983	983	984	984	984	984	984	985	985				985	985	985	985	985	985	986	986	982	984.0
19	986	986	986	986	986	985	985	985	985	986	985	985	984	984	984	983	982	982	981	981	981	982	982	981	986	981	983.9
20	981	980	980	980	980	979	978	978	978	978	978	978	978	978	978	977	977	977	977	977	977	976	977	977	981	976	978.1
21	977	977	977	977	977	977	977	976	976	976	976	976	976	976	975	975	974	974	974	973	973	973	973	973	977	973	975.3
22	973	972	972	972	972	972	972	971	971	971	971	971	970	970	969	969	968	968	968	967	967	967	967	967	973	967	969.9
23	967	966	966	965	965	964	964	963	963	963	962	962	961	962	962	961	961	961	961	961	962	962	962	962	967	961	962.8
24	962	962	961	961	961	960	959	959	958	958	958	957	957	957	957	956	956	957	957	958	958	959	960	961	962	956	958.7
25	961	962	963	963	964	964	964	965	965	965	966	966	966	967	967	967	967	967	967	968	969	969	970	971	971	961	966.0
26	972	973	974	975	975	976	977	977	978	979	979	980	980	980	981	981	981	982	982	982	982	982	982	983	983	972	978.9
27	983	983	983	983	983	983	983	983	983	983	982	982	982	982	982	982	982	981	981	981	981	980	980	981	983	980	982.0
28	980	980	980	980	979	979	979	979	979	980	980	980	981	981	981	981	981	981	981	981	981	982	982	982	982	979	980.4
29	982	982	982	982	981	981	981	981	981	981	980	980	980	980	980	979	979	978	978	978	977	977	977	976	982	976	979.7
30	976	976	975	974	973	972	972	971	969	969	967	967	966	965	964	963	962	962	962	962	963	964	964	965	976	962	967.6
31	966	967	967	968	968	968	969	969	970	970	970	970	970	971	971	971	971	971	971	972	972	972	972	973	973	966	970.0
Max.	**986**	**986**	**986**	**986**	**986**	**985**	**985**	**985**	**985**	**986**	**985**	**985**	**985**	**985**	**985**	**986**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**986**	**986**		
Min.	**956**	**957**	**957**	**957**	**958**	**958**	**957**	**957**	**957**	**956**	**956**	**955**	**955**	**955**	**954**	**954**	**954**	**953**	**953**	**953**	**953**	**954**	**955**	**956**		**953**	
Avg.	**973**	**973**	**973**	**973**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**971**	**972**	**972**	**972**	**972**	**972**	**972**	**972**			**972.2**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

September 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	972	972	972	972	971	971	971	970	970	970	970	970	971	971	971	971	970	971	971	971	971	971	971	971	972	970	970.9
2	972	972	972	972	973	973	973	974	974	975	975	976	976	976	977	977	977	977	978	978	978	979	979	979	979	972	975.5
3	979	979	979	979	979	979	980	980	980	980	980	980	980	980	979	979	979	979	979	979	978	978	978	977	980	977	979.1
4	977	977	976	976	976	975	975	975	974	974	974	974	974	974	973	973	972	972	972	971	971	971	971	970	977	970	973.6
5	970	970	969	969	969	969	968	968	968	968	968	968	968	968	968	968	969	969	969	968	968	968	967	967	970	967	968.4
6	966	966	965	965	965	964	964	963	963	963	963	963	963	963	963	963	964	964	964	964	964	965	965	965	966	963	964.0
7	965	965	965	965	965	965	965	965	965	965	964	965	965	965	964	964	963	963	963	963	962	963	963	963	965	962	964.2
8	962	962	962	962	962	962	962	962	963	963	963	964	964	964	964	964	964	964	965	965	965	965	966	966	966	962	963.5
9	966	967	967	966	966	967	967	966	967	967	968	969	969	969	969	969	970	970	971	971	971	971	972	972	972	966	968.6
10	972	973	973	973	974	974	975	975	976	976	977	977	978	978	978	978	979	979	980	980	980	981	981	981	981	972	977.0
11	981	982	982	982	981	982	981	982	982	983	983	984	984	985	985	985	985	986	986	986	986	986	987	987	987	981	983.9
12	987	988	988	988	988	988	989	989	989	989	990	990	990	990	989	989	989	989	988	988	988	988	988	989	990	987	988.7
13	989	989	989	988	988	988	988	988	987	987	987	987	987	987	987	987	986	985	985	985	985	984	984	984	989	984	986.7
14	984	984	984	983	983	983	982	982	982	981	981	980	980	980	979	978	977	977	977	976	976	975	975	976	984	975	979.8
15	976	976	976	977	977	976	977	976	977	977	977	979	978	978	979	979	979	978	978	978	978	978	978	977	979	976	977.5
16	977	977	977	977	976	976	976	976	975	975	975	974	974				972	971	970	970	969	969	968	968	977	968	973.4
17	967	966	966	964	964	963	962	961	961	960	959	959	958	958	957	956	955	954	953	952	952	951	951	951	967	951	958.3
18	950	950	950	950	950	951	952	953	954	955	956	957	957	958	959	959	960	960	960	961	961	961	962	962	962	950	956.2
19	962	962	963	963	963	964	964	964	965	965	966	966	967	967	968	968	969	969	969	970	970	971	971	971	971	962	966.5
20	971	972	973	972	973	973	973	973	973	973	973	973	974	973	973	973	973	973	973	974	974	974	974	974	974	971	973.1
21	974	974	974	974	974	973	974	974	974	974	974	974	974	974	974	974	974	974	973	973	974	974	974	973	974	973	973.8
22	973	973	972	972	971	971	971	970	970	970	969	969	969	968	968	968	967	967	967	967	967	967	967	967	973	967	969.2
23	967	967	966	966	966	966	965	965	965	965	965	965	965	964	964	964	963	963	963	963	963	963	964	963	967	963	964.6
24	963	963	963	963	964	964	964	964	964	964	965	965	965	966	966	965	966	966	967	967	968	968	969	969	969	963	965.3
25	969	970	970	970	970	970	971	971	971	972	972	972	972	972	972	972	972	972	972	972	972	972	971	971	972	969	971.3
26	971	971	970	969	969	969	969	968	968	968	967	967	967	966	966	966	966	966	965	965	965	965	965	964	971	964	967.2
27	963	963	963	962	961	961	960	959	959	958	958	958	958	958	957	957	956	956	956	956	956	956	955	955	963	955	958.4
28	955	955	955	956	956	955	956	956	955	956	957	957	957	958	958	958	957	959	959	959	960	960	960	960	960	955	957.3
29	959	960	961	960	961	962	961	962	960	963	962	962	961	961	961	961	961	960	960	959	958	957	957	956	963	956	960.2
30	955	954	953	952	949	948	948	948	947	947	948	949	950	950	950	951	951	951	951	951	951	952	952	952	955	947	950.4
Max.	**989**	**989**	**989**	**988**	**988**	**988**	**989**	**989**	**989**	**989**	**990**	**990**	**990**	**990**	**989**	**989**	**989**	**989**	**988**	**988**	**988**	**988**	**988**	**989**	**990**		
Min.	**950**	**950**	**950**	**950**	**949**	**948**	**948**	**948**	**947**	**947**	**948**	**949**	**950**	**950**	**950**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**		**947**	
Avg.	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**969**	**969**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**969**	**970**	**969**			**969.5**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

October 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	952	952	952	952	952	952	952	952	952	953	953	954	954	954	955	955	955	955	956	956	957	957	958	958	958	952	954.1
2	959	959	959	959	960	960	960	960	960	961	961	961	961	961	961	961	961	961	962	962	962	962	963	963	963	959	960.8
3	963	964	964	964	964	964	965	965	965	966	966	967	967	968	968	968	969	969	969	970	970	971	971	972	972	963	967.0
4	973	973	973	974	974	975	975	976	976	977	978	979	979	980	980	980	981	981	982	983	983	983	984	985	985	973	978.5
5	985	985	985	985	985	985	985	985	985	985	985	985	984	984	983	981	981	980	980	979	978	976	975	973	985	973	982.3
6	971	968	967	965	963	963	962	962	961	960	960	960	960	959	959	959	958	958	958	958	958	958	958	958	971	958	961.0
7	958	959	959	958	958	958	958	958	958	958	958	957	957	957	956	955	955	954	954	953	953	953	953	953	959	953	956.3
8	953	952	953	952	953	953	953	953	954	954	955	955	955	955	956	956	956	956	957	957	957	957	958	959	959	952	955.0
9	959	959	960	960	960	959	960	960	960	961	961	962	962	962	963	963	963	963	963	964	965	965	965	966	966	959	961.9
10	966	967	967	968	968	968	969	970	971	971	972	973	974	974	975	975	975	976	976	977	978	978	979	980	980	966	972.8
11	980	980	981	981	982	982	982	982	982	982	982	982	981	981	980	978	978	978	978	978	979	979	979	980	982	978	980.3
12	981	981	982	982	982	983	983	983	983	984	984	984	984	985	985	985	985	986	986	986	986	986	987	987	987	981	984.2
13	988	988	988	988	988	988	988	988	988	989	989	989	989	989	989	989	988	988	988	988	988	987	987		989	987	988.2
14																		982	982	982	982	981	982	982	982	981	981.9
15	981	981	980	980	979	979	979	979	978	977	979	979	979	979	979	979	979	979	979	979	979	980	980	980	981	977	979.3
16	980	980	981	980	980	980	980	980	980	980	980	980	980	980	979	979	979	978	978	978	978	978	977	977	981	977	979.3
17	977	976	976	976	975	975	974	974	973	973	973	973	973	972	972	971	970	970	970	969	969	968	967	966	977	966	972.2
18	966	965	964	963	962	961	960	959	959	958	957	956	956	955	955	954	954	953	953	953	952	952	952	951	966	951	957.1
19	951	950	950	949	948	948	947	946	946	945	944	943	943	942	941	941	941	940	940	940	940	939	940	940	951	939	943.9
20	940	940	939	939	939	939	939	939	939	940	940	941	941	942	942	943	943	944	945	945	945	945	946	946	946	939	941.7
21	946	946	946	946	946	946	946	947	947	947	947	948	948	949	949	949	949	949	950	950	950	950	950	950	950	946	948.0
22	950	951	951	952	952	953	953	953	953	954	955	956	956	957	957	958	958	959	960	961	961	962	961	963	963	950	956.1
23	964	964	964	964	964	964	964	964	963	964	964	964	963	963	963	962	961	961	961	960	960	960	959	958	964	958	962.4
24	957	957	956	956	955	954	953	952	951	950	950	950	949	949	948	947	946	946	945	945	946	946	946	947	957	945	950.0
25	947	948	948	949	949	950	951	952	952	952	952	951	950	949	948	947	947	947	948	949	949	949	950	951	952	947	949.4
26	951	952	953	954	954	955	955	956	956	956	956	956	957	956	956	956	956	957	957	957	957	957	958	958	958	951	955.7
27	958	957	957	956	956	956	955	955	955	954	953	953	953	952	952	951	951	951	951	951	951	951	951	951	958	951	953.4
28	951	951	951	951	951	952	952	952	953	953	954	954	955	955	955	955	955	956	956	957	957	958	959	959	959	951	954.3
29	959	960	960	960	960	960	960	960	960	961	961	961	961	961	960	960	960	960	960	959	959	959	959	959	961	959	960.0
30	959	959	958	958	958	958	957	958	958	958	958	958	958	958	958	959	959	959	959	960	960	960	961	961	961	957	958.7
31	962	962	962	962	962	963	963	963	964	964	965	965	964	965	963	965	965	965	966	966	967	967	967	967	967	962	964.3
Max.	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**989**	**989**	**989**	**989**	**989**	**989**	**989**	**988**	**988**	**988**	**988**	**988**	**987**	**987**	**987**	**989**		
Min.	**940**	**940**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**940**	**940**	**941**	**941**	**942**	**941**	**941**	**941**	**940**	**940**	**940**	**940**	**939**	**940**	**940**		**939**	
Avg.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**	**964**	**964**	**964**	**964**	**963**			**963.1**

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

November 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	969	969	969	970	970	970	970	971	971	972	972	973	973	973	973	973	974	974	974	975	975	975	975	976	976	969	972.3
2	976	976	976	976	976	976	975	975	975	975	975	975	975	974	974	974	974	973	973	972	972	971	971	970	976	970	974.1
3	970	970	969	968	967	967	965	964	963	962	961	961	960	959	958	957	956	956	955	955	955	954	954	954	970	954	960.8
4	954	954	954	954	954	954	954	954	955	955	955	956	956	956	956	957	957	957	957	957	957	957	957	957	957	954	955.6
5	957	957	957	957	957	956	956	956	956	956	956	956	956	956	955	955	955	954	954	954	954	953	953	953	957	953	955.4
6	953	952	952	952	952	952	952	952	952	952	953	953	954	954	955	955	956	957	957	958	958	958	959	959	959	952	954.5
7	960	960	961	961	962	963	963	963	963	964	965	965	966	967	967	968	969	969	969	968	968	967	966	965	969	960	965.0
8	964	963	963	962	960	958	958	957	956	955	955	954	954	953	953	953	953	953	952	952	952	951	950	949	964	949	955.4
9	948	947	947	946	945	945	944	944	944	943	943	943	943	942	942	943	944	946	948	949	951	952	953	954	954	942	946.1
10	955	956	957	958	958	957	957	957	958	958	958	958	960	961	961	961	962	963	964	965	965	966	967	967	967	955	960.4
11	968	968	969	969	969	969	970	970	971	972	972	973	973	973	973	974	974	974	975	974	975	975	975	975	975	968	972.1
12	976	976	975	975	975	974	974	974	974	974	973	973	973	973	972	972	972	972	971	971	971	971	970	971	976	970	973.0
13	970	970	970	970	970	970	970	969	969	969	969	969	969	968	968	967	966	965	965	964	963	962	961	960	970	960	967.2
14	959	958	957	956	955	955	955	954	954	954	954	954	954	954	954	954	955	955	955	956	956	957	957	958	959	954	955.4
15	958	959	959	960	961	961	962	963	963	964	965	965	966	966	966	967	967	967	967	968	968	968	968	968	968	958	964.4
16	968	968	967	967	967	967	967	966	966	966	967	967	967	966	966	966	965	966	965	966	965	965	965	965	968	965	966.3
17	965	964	964	963	963	963	962	962	962	961	961	961	960	959	958	958	958	958	958	958	958	958	958	959	965	958	960.5
18	959	959	959	960	960	960	961	961	961	962	962	962	962	963	962	962	962	962	962	962	963	963	963	963	963	959	961.5
19	963	963	963	963	963	963	963	963	963	963	963	963	964	964	964	965	965	966	966	967	968	968	969	970	970	963	964.7
20	970	971	972	972	972	973	974	974	974	975	976	976	977	977	977	977	978	978	978	978	978	978	978	978	978	970	975.5
21	978	978	978	977	977	977	976	975	974	973	973	972	972	971	969	968	967	967	967	967	966	965	965	963	978	963	971.5
22	963	962	960	959	958	956	954	953	951	950	948	947	945	944	942	941	940	939	938	937	936	936	936	935	963	935	947.1
23	935	934	934	934	933	933	933	932	932	932	932	932	932	932	933	933	933	933	933	933	934	934	935	935	935	932	933.2
24	935	936	936	936	936	936	936	937	938	939	939	940	940	940	939	939	940	940	940	940	940	940	940	941	941	935	938.5
25	942	942	942	942	943	943	944	946	947	948	948	949	950	951	951	952	953	953	954	955	956	957	957	958	958	942	949.3
26	959	960	960	961	961	962	962	962	962	963	963	963	963	963	963	962	962	962	962	961	961	960	960	960	963	959	961.5
27	960	961	961	961	960	960	959	958	958	957	956	956	955	955	955	954	954	954	953	953	952	951	950	949	961	949	955.9
28	948	946	944	943	941	938	936	935	933	932	932	931	931	931	933	933	933	934	936	937	938	938	938	939	948	931	936.7
29	939	939	940	940	941	942	942	942	943	943	944	944	944	944	943	943	943	943	943	943	942	942	943	943	944	939	942.3
30	943	944	945	946	946	947	948	949	950	952	953	954	955	956	958	959	959	960	961	961	962	963	965	965	965	943	954.2
Max.	**978**	**978**	**978**	**977**	**977**	**977**	**976**	**975**	**975**	**975**	**976**	**976**	**977**	**977**	**977**	**977**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**		
Min.	**935**	**934**	**934**	**934**	**933**	**933**	**933**	**932**	**932**	**932**	**932**	**931**	**931**	**931**	**933**	**933**	**933**	**933**	**933**	**933**	**934**	**934**	**935**	**935**		**931**	
Avg.	**959**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**959**	**959**	**959**	**959**	**959**			**958.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

December 1992

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	965	964	963	963	962	961	960	959	957	957	956	956	956	956	955	954	954	953	952	952	951	951	951	951	965	951	956.6
2	952	953	953	954	955	956	957	958	960	962	963	964	965	966	966	966	967	967	967	967	968	967	967	967	968	952	962.0
3	966	966	966	965	965	964	964	964	964	964	963	963	963	963	963	964	964	965	965	965	966	966	966	966	966	963	964.6
4	966	966	966	966	965	965	964	962	961	960	960	959	957	956	955	954	952	952	951	951	951	950	950	950	966	950	957.9
5	949	949	949	950	949	948	948	948	949	949	950	951	951	951	951	952	952	953	953	953	953	953	954	954	954	948	950.8
6	954	954	954	955	955	955	955	955	955	954	954	954	954	953	952	952	951	951	950	949	948	947	947	947	955	947	952.3
7	946	946	946	945	945	945	945	945	945	946	946	946	946	947		947	947	947	947	948	948	948	948	948	948	945	946.4
8	949	949	949	949	948	948	948	949	949	949	949	949	948	948	948	948	948	948	947	947	947	946	946	946	949	946	948.0
9	946	946	946	946	945	946	946	946	946	946	946	946	946	946	946	946	947	947	947	947	948	948	949	950	950	945	946.6
10	951	952	953	953	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	951	953.7
11	955	955	955	956	956	956	956	956	956	956	956	957	956	956	956	955	955	955	955	955	955	955	955	955	957	955	955.5
12	955	954	954	953	953	952	951	951	950	950	949	948	947	945	944	943	942	940	940	938	937	936	935	934	955	934	945.9
13	934	934	934	935	935	936	937	939	940	942	943	945	946	948	950	951	953	955	956	957	958	959	960	961	961	934	946.2
14	962	963	963	965	965	966	967	968	969	970	972	972	973	973	974	974	975	976	977	978	978	978	978	979	979	962	971.5
15	980	981	981	982	982	982	982	982	982	983	984	984	984	984	984	984	985	985	985	985	985	985	985	985	985	980	983.4
16	984	984	984	984	983	983	983	983	982	982	982	982	982	981	981	980	980	980	980	979	979	979	979	979	984	979	981.5
17	979	978	978	978	978	978	978	978	977	978	977	977	977	976	976	976	977	977	977	977	977	977	977	977	979	976	977.3
18	977	977	977	977	977	977	976	976	976	976	976	976	976	976	976	976	976	975	975	975	975	976	976	976	977	975	976.1
19	976	976	976	976	975	974	974	974	974	973	973	972	971	970	969	968	967	966	966	966	966	966	966	967	976	966	970.9
20	967	968	968	969	969	970	970	970	971	971	971	972	972	972	971	971	971	970	970	970	970	970	971	971	972	967	970.2
21	971	971	971	971	971	971	971	971	971	971	972	972	972	972	971	971	971	970	970	970	970	970	970	970	972	970	970.9
22	970	970	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	970	970	971	971	972	972	969	969.5
23	972	972	973	973	973	973	974	974	975	975	975	975	976	975	974	974	974	974	973	973	973	974	974	974	976	972	973.8
24	975	975	975	976	976	976	976	976	977	977	977	978	978	978	978	978	978	978	978	977	977	977	978	978	978	975	977.0
25	978	978	979	979	980	980	980	981	981	982	982	983	983	983	983	983	984	985	985	986	986	987	988	988	988	978	982.7
26	989	990	991	991	991	992	992	992	992	993	993	994	994	995	995	995	995	995	995	995	995	994	994	994	995	989	993.2
27	993	993	993	993	993	992	991	991	990	990	990	990	989	988	988	987	987	986	985	984	985	984	985	984	993	984	988.8
28	984	982	982	982	982	981	980	979	978	978	977	976	975	974	972	971	971	970	969	969	968	967	966	967	984	966	975.0
29	966	967	967	967	967	967	968	968	968	969	970	970	970	970	971	971	972	972	972	972	971	972	972	972	972	966	969.6
30	972	972	971	971	971	970	970	970	970	970	970	969	969	968	967	967	967	967	967	968	969	971	972	974	974	967	969.7
31	975	976	977	978	979	980	980	981	981	981	982	982	982	982	981	981	981	980	979	978	978	976	975	974	982	974	979.1
Max.	**993**	**993**	**993**	**993**	**993**	**992**	**992**	**992**	**992**	**993**	**993**	**994**	**994**	**995**	**995**	**995**	**995**	**995**	**995**	**995**	**995**	**994**	**994**	**994**	**995**		
Min.	**934**	**934**	**934**	**935**	**935**	**936**	**937**	**939**	**940**	**942**	**943**	**945**	**946**	**945**	**944**	**943**	**942**	**940**	**940**	**938**	**937**	**936**	**935**	**934**		**934**	
Avg.	**966**	**966**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**966**	**966**	**966**	**966**	**966**	**967**			**966.7**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

January 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	975	976	977	979	980	982	983	985	986	987	989	989	990	992	992	992	992	992	993	993	993	994	994	994	994	975	987.5
2	993	993	993	993	993	992	992	992	991	991	991	991	991	990	990	990	990	989	989	988	988	987	986	986	993	986	990.4
3	985	985	985	984	984	985	984	984	984	984	983	982	983	982	982	981	982	982	982	982	982	982	982	981	985	981	983.0
4	982	981	981	981	981	981	982	981	981	981	981	981	980	979	979	978	977	976	976	976	975	974	974	973	982	973	978.8
5	973	973	974	974	975	976	976	977	977	977	978	979	980	981	981	981	981	982	981	981	981	982	982	981	982	973	978.5
6	981	982	982	981	981	981	981	981	981	981	981	981	981	982	981	980	980	980	980	979	979	979	980	980	982	979	980.6
7	981	980	980	981	980	980	980	980	981	981	981	982	981	981	980	980	980	980	980	980	980	980	980	980	982	980	980.4
8	981	981	982	982	983	983	984	985	985	986	987	987	988	988	988	988	988	989	989	989	989	988	988	988	989	981	986.1
9	988	988	987	987	986	986	985	984	984	984	984	984	983	982	982	982	982	981	981	981	981	981	981	981	988	981	983.5
10	981	981	981	980	980	980	980	981	980	981	981	981	981	981	981	982	982	983	983	984	985	985	985	986	986	980	981.9
11	985	986	986	986	986	985	985	985	985	985	984	982	982	981	982	981	981	981	980	981	980	980	979	979	986	979	982.8
12	979	978	977	976	976	974	973	971	973	973	972	972	971	970	969	969	969	969	969	967	967	968	970	971	979	967	971.8
13	973	974	974	975	975	975	975	976	975	976	976	977	977	977	977	978	978	979	979	979	979	980	980	980	980	973	976.8
14	980	980	979	979	979	978	977	976	975	975	974	974	972	971	969	968	966	964	963	961	959	958	956	955	980	955	970.3
15	954	954	954	953	953	953	952	953	952	952	953	952	952	951	949	948	947	946	944	943	940	939	937	935	954	935	948.6
16	933	932	930	929	927	926	925	924	923	923	923	924	924	925	925	926	927	928	930	931	932	933	933	934	934	923	927.8
17	934	934	935	935	935	935	935	935	936	936	936	936	936	936	936	936	936	936	936	937	937	937	938	939	939	934	935.9
18	938	939	939	940	939	940	940	941	941	941	942	942	943	943	944	945	946	946	946	947	948	948	949	949	949	938	943.2
19	948	950	950	950	951	950	951	952	951	952	952	953	953	953	952	954	955	954	954	953	955	957	956	957	957	948	952.6
20	958	959	959	959																					959	958	958.8
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
29																953	953	954	955	956	957	958	960	961	961	953	956.3
30	962	963	963	964	965	965	966	966	966	967	967	967	967	966	966	965	965	965	965	964	965	965	966	966	967	962	965.3
31	967	967	967	966	966	967	967	967	967	968	968	968	968	968	968	968	968	968	969	969	970	971	972	972	972	966	968.2
Max.	**993**	**993**	**993**	**993**	**993**	**992**	**992**	**992**	**991**	**991**	**991**	**991**	**991**	**992**	**992**	**992**	**992**	**992**	**993**	**993**	**993**	**994**	**994**	**994**	**994**		
Min.	**933**	**932**	**930**	**929**	**927**	**926**	**925**	**924**	**923**	**923**	**923**	**924**	**924**	**925**	**925**	**926**	**927**	**928**	**930**	**931**	**932**	**933**	**933**	**934**		**923**	
Avg.	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**971**	**971**	**971**	**971**	**970**	**970**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**			**969.9**

Total Hours in Month 744 **Hours Data Available** 517 **Data Recovery** 69.5%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

February 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	973	975	975	976	977	978	979	980	981	983	983	984	985	986	986	987	988	989	990	990	991	991	992	993	993	973	983.8
2	993	993	993	994	994	994	994	994	994	994	994	994	993	993	993	992	992	991	991	990	990	989	989	988	994	988	992.3
3	988	988	987	986	985	984	984	983	982	982	981	981	980	979	977	976	975	974	974	972	972	970	969	968	988	968	979.0
4	967	967	965	964	963	962	961	960	959	958	957	956	956	954	953	952	951	950	949	948	947	946	945	944	967	944	955.6
5	944	943	942	942	941	940	939	939	939	939	939	940	940	941	942	943	943	944	945	945	945	946	945	945	946	939	942.1
6	945	946	946	947	948	948	948	949	950	950	952	953	953	954	955	957	958	959	960	961	961	962	963	963	963	945	953.7
7	963	963	963	960	961	961	960	961	962	962	963	962	963	963	963	964	965	966	967	967	967	967	967	967	967	960	963.6
8	967	967	967	967	967	968	968	969	968	968	969	969													969	967	967.8
9																											
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
18																											
19																											
20																											
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
Max.	**993**	**993**	**993**	**994**	**994**	**994**	**994**	**994**	**994**	**994**	**994**	**994**	**993**	**993**	**993**	**992**	**992**	**991**	**991**	**990**	**991**	**991**	**992**	**993**	**994**		
Min.	**944**	**943**	**942**	**942**	**941**	**940**	**939**	**939**	**939**	**939**	**939**	**940**	**940**	**941**	**942**	**943**	**943**	**944**	**945**	**945**	**945**	**946**	**945**	**944**		**939**	
Avg.	**968**	**968**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**968**	**968**	**968**	**968**	**967**	**967**	**967**			**967.2**

Total Hours in Month 672 **Hours Data Available** 180 **Data Recovery** 26.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

March 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9															989			988	989	989	989	988	988	988	989	988	988.5
10	987	987	986	985	985	985	984	984	985	984	984	983	983	982	982	981	981	980	980	980	980	980	980	980	987	980	982.8
11	980	980	980	980	980	980	980	980	979	980	980	979	979	978	978	977	976	976	976	976	975	975	975	975	980	975	978.1
12	975	975	974	974	974	974	974	974	974	973	974	974	974	974	974	974	974	974	975	975	975	976	976	976	976	973	974.4
13	976	977	977	978	978	978	979	979	979	980	980	981	981	981	981	981	981	981	981	981	981	981	981	981	981	976	979.8
14	981	980	980	979	979	979	979	978	978	978	978	978	978	978	978	978	978	978	978	978	978	978	979	979	981	978	978.5
15	979	979	979	979	979	979	979	979	979	978	979	979	979	979	979	979	979	979	979	979	979	979	979	979	979	978	979.0
16	979	980	980	980	979	979	979	979	979	980	979	980	980	979	979	978	978	978	978	978	978	977	977	977	980	977	978.8
17	977	976	976	975	975	974	974	974	973	973	973	972	972	972	971	971	970	969	969	969	968	968	967	967	977	967	971.9
18	967	967	966	966	966	965	965	965	965	965	965	965	965	965	964	963	963	963	963	963	963	963	963	963	967	963	964.5
19	963	963	963	962	962	962	962	962	962	961	961	961	960	959	959	958	958	957	957	957	956	956	955	954	963	954	959.6
20	953	952	952	952	951	950	951	950	949	948	948	948	947	947	946	946	946	945	945	944	944	944	944	944	953	944	947.8
21	943	943	942	942	942	941	941	940	940	940	940	939	939	939	938	938	938	937	937	937	937	936	936	936	943	936	939.2
22	936	935	935	934	934	934	933	933	933	933	933	933	933	933	933	933	933	933	933	933	934	934	935	935	936	933	933.7
23	936	937	938	938	939	940	941	943	944	946	947	948	950	951	952	953	954	955	957	958	959	960	961	961	961	936	948.7
24	962	962	962	962	962	963	964	965	966	967	969	970	971	971	972	973	973	974	974	974	975	975	975	975	975	962	969.0
25	975	975	975	975	975	975	975	975	975	975			977	976	975	975	975	975	975	975	975	975	975	975	977	975	975.1
26	975	975	974	974	974	974	974	974	974	974	974	974	974	973	973	972	971	971	971	970	970	970	969	968	975	968	972.6
27	968	967	966	966	965	964	964	963	963	962	961	959	959	958	957	956	953	954	953	954	954	954	954	954	968	953	959.5
28	955	955	955	955	955	955	955	955	954	954	954	954	953	954	954	953	953	953	953	953	953	953	953	953	955	953	953.9
29	953	953	953	953	953	954	954	955	955	956	957	958	959	960	961	962	963	963	964	965	965	966	967	967	967	953	959.0
30	968	969	968	968	968	968	968	968	968	967	967	966	966	965	964	964	963	962	960	960	959	958	957	956	969	956	964.5
31	955	954	953	952	952	952	951	951	951	951	951	951	952	952	951	951	951	951	951	951	952	952	952	952	955	951	951.8
Max.	**987**	**987**	**986**	**985**	**985**	**985**	**984**	**984**	**985**	**984**	**984**	**983**	**983**	**982**	**989**	**981**	**981**	**988**	**989**	**989**	**989**	**988**	**988**	**988**	**989**		
Min.	**936**	**935**	**935**	**934**	**934**	**934**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**934**	**934**	**935**	**935**		**933**	
Avg.	**966**	**966**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**964**	**964**	**965**	**965**	**966**	**964**	**964**	**965**	**965**	**965**	**965**	**965**	**965**	**965**			**965.0**

Total Hours in Month 744 **Hours Data Available** 534 **Data Recovery** 71.8%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

April 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	952	952	952	951	951	951	951	950	951	951	950	950	950	950	950	950	950	950	950	950	950	950	950	951	952	950	950.5
2	951	951	951	952	952	952	953	953	954	955	955	956	957	958	958	959	959	959	960	960	961	961	962	962	962	951	956.3
3	962	962	963	964	963	964	964	965	965	966	966	966	967	967	967	967	967	967	967	967	968	968	968	968	968	962	965.8
4	968	968	968	968	968	968	968	968	968	968	968	968	969	968	968	968	968	969	969	969	969	969	969	969	969	968	968.3
5	969	969	969	969	969	969	969	969	969	969	969	969	969	970	969	969	969	969	970	970	970	970	970	970	970	969	969.3
6	970	970	970	970	970	970	970	970	970	970	970	970	970	969	969	969	969	969	969	969	969	969	969	969	970	969	969.5
7	969	969	968	968	968	967	967	967	967	967	967	966	966	965	965	965	964	963	963	962	962	961	960	960	969	960	965.3
8	959	958	958	957	957	956	956	956	955	955	955	955	955	954	955	954	954	954	954	954	954	955	955	955	959	954	955.4
9	955	955	955	955	955	955	955	955	955	955	955	955	955	956	956	956	956	956	956	956	957	957	957	957	957	955	955.6
10	958	958	958	959	959	959	960	960	961	961	962	962	963	963	964	964	964	965	965	965	965	965	965	965	965	958	962.1
11	965	965	965	964	964	963	963	962	962	962	963	962	961	960	960	959	958	958	958	958	958	957	957	956	965	956	960.8
12	956	956	956	956	955	955	954	954	953	953	953	953	953	953	953	954	953	953	953	954	955	955	955	956	956	953	954.2
13	956	957	956	956	957	957	957	957	957	957	958	958	958	958	958	958	959	959	959	959	960	961	962	962	962	956	958.2
14	962	962	963	963	963	963	964	964	965	965	965	965	965	965	965	965	964	964	964	963	963	963	962	962	965	962	963.7
15	961	960	960	959	958	957	957	956	955	955	954	954	953	953	953	953	953	952	952	952	952	952	952	952	961	952	954.8
16	952	953	953	954	954	955	956	956	957	958	959	959	960	960	961	961	962	962	962	962	963	963	963	963	963	952	958.7
17	964	963	963	963	963	963	962	962	962	961	961	961	961	962	962	961	961	962	962	962	962	963	963	963	964	961	962.2
18	963	964	964	964	964	964	965	965	966	967	967	967	968	968	969	969	969	970	969	969	970	970	970	970	970	963	967.1
19	970	970	970	969	969	970	970	970	970	970	970	971	971	971	971	971	971	971	972	972	973	973	973	974	974	969	970.9
20	974	974	974	974	974	975	975	974	974	974	975	975	974	974	975	974	975	975	974	974	974	975	975	975	975	974	974.4
21	974	973	973	972	972	972	973	972	972	972	972	972	973	972	973	972	972	972	972	972	972	972	972	972	974	972	972.3
22	972	970	971	970	971	971	971	971	971	971	972	972	972	972	971	972	971	972	972	972	972	972	972	972	972	970	971.5
23	972	972	972	972	972	971	971	971	971	971	971	971	971	971	971	971	970	970	970	970	970	970	970	970	972	970	970.9
24	970	969	969	969	969	969	968	968	968	968	967	967	967	967	967	967	966	966	966	966	966	966	966	966	970	966	967.4
25	966	966	966	966	966	965	966	966	966	965	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	965	965.9
26	966	966	966	966	966	966	966	966	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	966	966.7
27	967	966	966	966	966	965	965	965	965	965	965	965	964	964	964	964	963	964	964	964	964	963	963	962	967	962	964.5
28	962	962	961	961	960	960	960	959	959	959	960	960	961	960	961	961	961	961	961	961	962	962	962	962	962	959	960.8
29	962	962	963	963	963	964	964	964	965	965	964	964	964	964	965	965	964	964	964	964	965	964	965	964	965	962	964.0
30	964	964	964	964	964	964	964	964	964	965	965	965	965	964	964	963	963	963	962	962	961	961	961	960	965	960	963.3
Max.	**974**	**974**	**974**	**974**	**974**	**975**	**975**	**974**	**974**	**974**	**975**	**975**	**974**	**974**	**975**	**974**	**975**	**975**	**974**	**974**	**974**	**975**	**975**	**975**	**975**		
Min.	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**950**	**951**	**951**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**951**		**950**	
Avg.	**964**	**964**	**964**	**963**	**963**	**963**	**963**	**963**	**963**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**			**963.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

May *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	960	960	959	959	958	958	957	958	957	957	956	957	957	957	957	957	957	958	958	959	960	960	961	961	961	956	958.3
2	961	961	962	962	962	962	962	962	963	963	963	963	963	964	964	963	963	964	964	963	964	964	964	964	964	961	962.9
3	963	963	963	963	962	962	962	961	961	961	960	960	959	959	958	957	956	956	955	955	955	955	954	954	963	954	958.9
4	953	953	952	952	951	951	951	950	949	949	949	949	948	948	948	948	948	948	948	948	949	949	949	949	953	948	949.5
5	950	950	950	950	950	950	950	951	951	951	952	952	952	953	953	953	953	953	953	954	954	954	955	955	955	950	952.0
6	955	955	955	955	955	955	955	955	956	956	956	956	957	958	958	958	959	959	960	961	961	962	963	963	963	955	957.6
7	963	964	964	964	964	965	965	965	965	966	966	966	966	967	967	967	967	967	967	967	968	968	968	969	969	963	966.0
8	969	969	969	969	970	970	970	970	971	971	971	971	971	972	972	972	973	973	973	973	974	974	975	975	975	969	971.5
9	976	976	976	977	977	977	977	977	977	977	977	977	976	976	976	976	976	975	975	975	975	975	974	974	977	974	976.0
10	973	973	972	972	971	970	969	969	969	969	968	968	968	967	966	965	965	964	964	964	963	963	963	963	973	963	967.4
11	962	962	962	962	962	962	962	963	963	964	964	965	965	966	966	967	968	968	969	970	970	971	972	972	972	962	965.7
12	973	974	975	976	976	976	977	978	978	978	979	979	979	979	979	979	979	979	979	980	980	980	981	981	981	973	978.1
13	982	982	982	982	982	983	983	982	982	982	982	982	981	981	980	980	979	978	978	978	978	978	977	978	983	977	980.5
14	977	977	977	978	978	978	978	979	979	979	979	979	979	979	978	978	978	978	978	978	978	978	978	977	979	977	978.1
15	977	977	976	976	976	976	976	976	975	975	975	975	975	975	974	973	973	973	973	972	973	972	971	971	977	971	974.4
16	971	971	971	970	970	970	970	970	970	970	970	970	971	970	971	971	971	971	972	973	973	973	974	974	974	970	971.1
17	974	974	975	975	976	976	977	977	978	978	978	979	979	979	979	980	980	980	980	980	981	981	981	982	982	974	978.3
18	982	982	982	982	982	982	982	982	982	982	982	981	981	981	980	980	979	979	979	978	978	978	978	978	982	978	980.5
19	978	977	977	977	977	977	976	976	975	975	975	975	975	974	974	973	973	973	972	972	972	971	971	971	978	971	974.4
20	970	970	970	969	969	968	968	967	966	966	965	964	964	963	962			961	961	960	960	960	959	959	970	959	964.6
21	958	958	957	957	956	956	956	956	955	955	955	955	955	956	956	956	956	957	957	958	958	958	960	961	961	955	956.8
22	961	962	963	964	965	965	966	967	968	969	970	971	971	972	973	974	975	975	976	977	977	977	978	978	978	961	970.6
23	979	979	979	978	978	978	978	977	977	977	976	976	975	975	975	975	974	974	974	974	974	974	974	974	979	974	976.0
24	974	975	976	976	976	976	976	977	977	977	977	977	977	977	977	976	976	975	975	975	974	974	974	973	977	973	975.7
25	973	973	973	972	972	970	970	970	970	969	969	968	968	968	968	969	969	968	969	969	969	970	970	970	973	968	969.8
26	971	971	971	971	971	971	971	972	972	972	972	973	974	974	974	974	975	976	976	977	978	978	979	980	980	971	973.9
27	980	981	981	981	981	982	982	982	982	982	983							983	983	983	983	984	984	984	984	980	982.3
28	984	984	983	983	983	983	983	982	982		982	982	982	982	981		981	980	980	980	980	980	980	980	984	980	981.7
29	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	979	979	979	979	979	979	979	980	979	979.7
30	979	979	979	979	979	978	978	978	978	978	978	978	977	977	977	976	976	976	975	975	975	975	975	975	979	975	977.1
31	975	975	975	974	974	974	973	973	973	973	973	973	973	972	972	972	972	971	971	971	971	972	972	972	975	971	972.8
Max.	**984**	**984**	**983**	**983**	**983**	**983**	**983**	**982**	**982**	**982**	**983**	**982**	**982**	**982**	**981**	**980**	**981**	**983**	**983**	**983**	**983**	**984**	**984**	**984**	**984**		
Min.	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**949**	**949**	**949**	**949**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**949**	**949**	**949**	**949**		**948**	
Avg.	**970**	**971**	**971**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**971**	**971**	**971**			**970.3**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

June *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	971	971	971	971	971	971	970	970	970	970	970	970	970	970	969	969	969	969	969	968	968	969	970	970	971	968	969.8
2	970	970	970	970	971	971	971	972	972	972	972	972	972	973	972	972	972	973	973	972	972	973	973	974	974	970	971.8
3	974	974	974	974	974	974	975	975	974	975	975	975	975	975	975	976	976	976	976	975	976	976	976	976	976	974	975.0
4	976	976	976	976	975	975	975	974	974	974	974	973	973	973	972	972	971	970	970	969	968	967	966	966	976	966	972.3
5	965	965	965	963	963	963	962	961	961	960	959	959	958	958	957	957	957	956	956	956	955	955	955	954	965	954	959.2
6	954	953	953	953	953	953	954	953	953	953	953	953	953	954	954	954	954	955	955	956	956	956	957	958	958	953	954.2
7	959	959	959	960	961	961	962	962	962	963	963	964	964	964	964	964	964	964	965	966	966	966	967	967	967	959	963.2
8	968	968	968	968	968	968	969	969	969	969	970	970	970	970	970	970	971	971	971	972	972	972	973	973	973	968	970.0
9	974	974	974	974	974	974	974	974	974	973	973	973	973	972	972	972	972	972	972	972	972	972	973	973	974	972	973.0
10	973	973	973	973	973	973	973	973	973	974	974	974	974	974	974	974	974	974	974	975	975	976	976	977	977	973	974.0
11	977	977	978	978	978	978	978	979	979	979	980	980	980	980	980	981	981	981	981	981	982	982	982	983	983	977	979.8
12	983	983	983	983	983	983	983	983	984	984	984	984	984	984	984	984	984	983	983	983	983	983	983	983	984	983	983.4
13	983	983	983	983	983	983	983	983	983	983	983	983	983	982	982	982	982	982	982	982	982	982	982	983	983	982	982.6
14	982	982	982	982	982	982	982	981	981	981	981	981	980	980	980	980	980	980	980	980	980	980	981	981	982	980	980.9
15	981	981	981	981	982	982	982	982	982	982	982	982	983	983	983	983	982	982	982	982	982	982	982	982	983	981	982.0
16	982	981	981	980	980	980	980	979	979	979	979	978	978	978	978	977	977	977	976	976	976	976	976	976	982	976	978.3
17	976	975	975	975	975	975	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	975	975	975	976	974	974.4
18	975	975	975	975	975	975	975	975	975	975	976	976	976	976	976	976	976	976	976	976	976	977	977	978	978	975	975.8
19	978	978	978	978	978	978	978	978	979	979	979	979	979	979	979	979	979	979	978	978	978	978	978	978	979	978	978.4
20	978	978	978	977	977	977	977	976	976	976	976	976	975	975	975	975	975	974	974	973	973	973	973	973	978	973	975.4
21	973	972	972	971	971	970	970	969	969	969	968	968	968	967	967	967	967	967	967	967	967	967	968	968	973	967	968.7
22	968	968	968	969	969	969	969	969	970	970	970	970	971	971	971	971	971	971	971	971	972	972	973	973	973	968	970.3
23	973	973	974	974	973	974	974	974	975	975	975	975	975	975	975	975	975	975	975	975	975	975	976	976	976	973	974.6
24	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	975	975	975	975	976	976	976	976	976	975	975.8
25	977	977	977	977	977	978	978	978	978	978	978	978	979	978	978	978	977	977	977	976	976	976	975	975	979	975	977.2
26	975	974	974	974	973	972	972	971	971	970	970	970	969	969	969	968	968	968	968	967	967	967	967	967	975	967	970.0
27	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	967	968	968	968	967	968	967	968	967	967.9
28	967	967	967	967	967	966	967	967	967	967	966	966	967	967	967	967	967	968	968	967	968	968	968	969	969	966	967.2
29	969	969	969	969	969	970	970	970	970	970	971	971	971	972	972	972	972	972	973	973	973	974	974	974	974	969	971.2
30	974	975	975	975	975	975	976	976	976	976			977	977	977	977	977	977	977	977	977	977	977	977	977	974	976.2
Max.	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**984**		
Min.	**954**	**953**	**953**	**953**	**953**	**953**	**954**	**953**	**953**	**953**	**953**	**953**	**953**	**954**	**954**	**954**	**954**	**955**	**955**	**956**	**955**	**955**	**955**	**954**		**953**	
Avg.	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**			**973.1**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

July *1993*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	977	977	977	976	976	975	975	974	973	973	972	972	971	971	971	970	970	969	968	967	967	966	966	965	977	965	971.6
2	965	964	963	963	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	965	962	962.3
3	962	961	961	961	961	961	961	961	961	962	962	962	962	963	963	963	963	964	964	965	966	966	967	968	968	961	962.9
4	968	969	969	969	970	970	970	971	971	971	972	972	973	973	974	974	974	975	975	976	976	977	978	978	978	968	972.7
5	979	980	980	980	981	981	982	982	982	982	983	983	983	983	983	983	983	983	983	983	984	984	985	985	985	979	982.4
6	986	986	986	987	987	987	988	988	988	988	989	989	989	989	989	990	989	990	990	990	990	990	990	991	991	986	988.6
7	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991.0
8	991	991	991	991	991	991	991	991	991	991	991	992	991	991	991	991	991	991	991	991	991	991	991	991	992	991	991.0
9	991	991	992	991	991	991	991	992	992	992	992	991	991	991	991	991	991	990	990	990	990	990	991	991	992	990	991.0
10	991	991	991	991	991	991	991	991	991	991	991	991	991	990	990	990	990	990	989	989	990	990	990	990	991	989	990.5
11	990	990	990	990	990	990	990	990	990	990	990	990	990	989	989	989	988	988	988	988	988	988	988	988	990	988	989.2
12	988	988	988	988	988	988	988	987	987	987	987	987	987	986	986	986	985	985	985	984	984	984	984	984	988	984	986.3
13	984	984	984	984	984	984	983	983	983	984	984	984	984	984	984	984	984	984	984	984	985	985	985	986	986	983	984.1
14	986	986	986	986	986	986	986	986	986	986	986	986	986	985	985	985	985	985	985	985	985	985	985	985	986	985	985.5
15	985	985	985	985	985	985	985	985	985	985	985	985	985	985	985	985	984	984	984	984	984	984	984	984	985	984	984.7
16	984	983	983	983	983	983	983	983	983	982	982	982	982	982	982	981	981	981	980	980	980	980	980	980	984	980	981.8
17	979	979	979	979	979	979	979	979	979	978	978	978	978	978	977	977	976	976	977	977	977	977	977	977	979	976	977.9
18	977	978	978	978	978	979	980	980	981	981	981	982	982	982	982	982	983	983	983	983	983	984	984	984	984	977	981.2
19	984	984	985	985	984	984	984	983	983	983	983	982	982	982	981	981	980	979	979	979	978	978	978	977	985	977	981.6
20	977	976	976	975	975	974	974	973	973	972	972	972	971	971	971	970	970	970	970	970	970	969	969	969	977	969	972.0
21	969	969	969	969	969	969	969	968	968	968	967	968	967	967	968	968	967	967	967	967	967	967	967	968	969	967	967.9
22	968	968	968	968	968	968	968	967	967	968	968	968	968	968	968	968	968	968	968	968	969	969	969	970	970	967	968.1
23	970	971	971	971	972	972	972	973	973	974	974	975	975	976	977	977	977	978	978	978	979	979	980	980	980	970	975.1
24	981	981	981	982	982	982	982	982	983	982	982	982	982	982	982	981	981	981	981	981	980	979	979	979	983	979	981.3
25	978	977	977	976	975	975	975	975	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	975	978	974	974.7
26	975	975	975	975	976	976	976	977	977	978	978	979	979	979	980	980	980	981	981	981	982	982	982	982	982	975	978.6
27	983	983	983	983	983	983	983	983	983	983	982	982	981	980	980	979	978	977	976	975	975	974	974	973	983	973	979.8
28	973	972	972	972	971	971	970	970	970	969	969	968	968	968	968	968	967	967	967	967	967	967	967	967	973	967	969.0
29	968	967	967	967	968	968	968	968	968	968	969	969	969	969	970	970	970	970	970	971	971	971	972	972	972	967	969.2
30	972	973	973	973	974	974	974	974	975	975	975	976	976	976	977	977	977	978	978	978	979	979	980	980	980	972	976.0
31	981	981	981	982	982	983	983	984	984			986	987	987	987	988	988	988	988	989	989	989	990	990	990	981	985.8
Max.	**991**	**991**	**992**	**991**	**991**	**991**	**991**	**992**	**992**	**992**	**992**	**992**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**992**		
Min.	**962**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**		**961**	
Avg.	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**			**979.1**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

August 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	990	991	991	991	991	991	992	992	992	992	992	992	992	992	992	992	992	992	991	991	992	992	992	992	992	990	991.6
2	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	993	992	992	992	992	992	991	991	992	993	991	992.6
3	992	991	991	991	991	990	990	990	990	989	989	989	989	988	988	987	987	987	986	986	986	985	985	985	992	985	988.4
4	985	985	985	985	984	984	984	984	984	984	984	984	984	984	984	984	984	984	984	984	984	985	985	985	985	984	984.3
5	986	986	986	986	986	986	986	986	986	987	987	987	987	987	987	987	987	987	987	987	986	986	986	986	987	986	986.5
6	986	986	986	986	985	985	985	985	985	984	984	984	984	984	984	984	984	984	984	984	984	984	984	984	986	984	984.5
7	984	984	984	984	984	984	984	984	984	984	985	985	985	985	985	985	985	985	985	986	986	986	986	986	986	984	984.8
8	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	985	985	985	985	985	985	985	986	985	985.7
9	985	985	985	985	985	985	984	984	984	984	984	984	984	983	983	983	982	982	982	981	981	981	981	980	985	980	983.2
10	980	980	979	978	978	977	977	977	977	976	976	976	976	975	975	975	975	975	975	975	975	975	975	975	980	975	976.3
11	976	976	975	975	975	976	976	976	976	976	976	976	976	976	976	976	975	975	975	975	975	975	975	975	976	975	975.5
12	975	975	974	974	974	974	974	974	974	974	974	974	974	974	974	973	973	973	973	973	972	972	972	972	975	972	973.5
13	972	972	972	971	971	971	970	970	969	969	968	967	967	966	965	964	964	963	962	960	960	958	957	956	972	956	966.0
14	955	955	954	953	951	951	950	950	949	949	949	949	948	948	949	948	948	948	948	948	948	948	949	950	955	948	949.8
15	950	951	951	952	953	953	953	954	954	955	956	956	957	957	958	959	959	960	961	962	962	963	963	964	964	950	956.8
16	965	965	966	966	966	967	967	968	968	968	969	969	970	970	970	970	970	970	971	971	971	971	971	971	971	965	968.8
17	971	971	971	970	970	970	970	970	970	970	970	970	970	969	969	969	968	968	968	968	968	967	967	967	971	967	969.2
18	967	966	966	965	965	964	963	963	963	962	962	961	960	959	958	958	957	955	955	953	952	952	952	952	967	952	959.6
19	952	953	954	955	957	958	960	961	962	962	963	963	964	964	964	964	963	963	962	962	962	962	962	962	964	952	960.6
20	962	962	962	963	963	963	963	964	964	965	965	965	965	965	966	966	966	966	966	967	967	968	968	968	968	962	965.0
21	969	969	969	969	970	970	970	971	971	971	972	972	972	972	972	972	972	972	973	973	973	973	974	974	974	969	971.5
22	974	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	976	976	976	977	977	977	977	974	975.3
23	977	977	977	977	977	977	977	977	976	976	976	976	975	975	975	975	974	974	974	974	974	974	974	974	977	974	975.5
24	974	974	973	973	973	973	973	973	973	973	973	974	974	974	974	974	974	974	974	974	974	974	973	973	974	973	973.5
25	973	973	973	973	973	973	973	973	973	974	974	974	974	975	975	975	975	975	976	975	976	976	977	977	977	973	974.4
26	977	977	977	977	978	978	978	978	978	978	978	978	978	978	978	978	978	978	979	979	979	979	979	979	979	977	978.1
27	980	979	979	979	980	979	979	980	980	980	981	981	981	981	981	980	981	981	981	982	982	982	982	982	982	979	980.5
28	982	983	983	983	983	983	983	983	983	983	983	983	983	983	982	982	981	981	980	980	979	979	979	979	983	979	981.8
29	978	978	977	977	976	976	976	976	977	976	977	977	977	977	977	977	977	976	976	976	975	975	974	974	978	974	976.3
30	973	973	972	972	971	970	970	970	969	970	970	971	972	972	973	973	974	974	974	974	975	975	975	975	975	969	972.4
31	975	975	975	975	975	975	974	974	974	974	974	974	973	973	973	972	971	970	970	970	969	968	968	968	975	968	972.5
Max.	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**993**		
Min.	**950**	**951**	**951**	**952**	**951**	**951**	**950**	**950**	**949**	**949**	**949**	**949**	**948**	**948**	**949**	**948**	**948**	**948**	**948**	**948**	**948**	**949**	**949**	**950**		**948**	
Avg.	**976**	**976**	**976**	**975**	**975**	**975**	**975**	**976**	**975**	**975**	**976**	**976**	**976**	**975**	**976**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**			**975.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Barometric Pressure (mbar)

September 1993

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	968	967	968	967	967	968	968	969	969	969	970	971	971	971	971	972	972	972	973	973	973	974	974	974	974	967	970.5
2	974	974	975	975	975	975	976	976	976	977	978	978	978	979	979	980	980	980	980	980	980	981	981	981	981	974	977.8
3	982	982	982	982	982	982	982	983	983	983	983	983	984	983	983	983	983	983	983	982	981	981	981	981	984	981	982.4
4	980	980	979	979	979	979	979	979	979	979	979	979	979	979	979	979	978	978	978	978	978	978	977	977	980	977	978.7
5	976	976	975	974	973	973	972	971	970	968	967	966	964	962	959	958	958	957	955	955	956	956	955	955	976	955	964.6
6	956	956	956	956	956	956	956	956	957	957	958	958	959	959	960	960	961	961	962	962	963	963	964	965	965	956	959.0
7	965	965	966	966	967	968	968	969	971	972	973	974	975	976	977	978	978	979	980	980	981	981	982	982	982	965	973.9
8	983	983	983	983	983	983	983	983	983	983	983	983	983	983											983	983	983.0
9																											
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
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24																											
25																											
26																											
27																											
28																											
29																											
30																											
Max.	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**984**	**983**	**983**	**983**	**983**	**983**	**983**	**982**	**981**	**981**	**982**	**982**	**984**		
Min.	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**957**	**957**	**958**	**958**	**959**	**959**	**959**	**958**	**958**	**957**	**955**	**955**	**956**	**956**	**955**	**955**		**955**	
Avg.	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**974**	**974**	**974**	**974**	**974**	**974**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**974**			**973.2**

Total Hours in Month 720 **Hours Data Available** 182 **Data Recovery** 25.3%

HCG, Inc.

Pebble Project, Cominco Meteorological Station (1991-1993) - Daily Precipitation (inches)

1992

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	0.00	-	-	-	-	-
2	-	-	-	-	-	-	0.00	-	-	-	-	-
3	-	-	-	-	-	-	0.00	-	-	-	-	-
4	-	-	-	-	-	-	0.00	-	-	-	-	-
5	-	-	-	-	-	-	0.13	-	-	-	-	-
6	-	-	-	-	-	-	0.19	-	-	-	-	-
7	-	-	-	-	-	-	0.08	-	-	-	-	-
8	-	-	-	-	-	-	0.06	-	-	-	-	-
9	-	-	-	-	-	-	0.00	-	-	-	-	-
10	-	-	-	-	-	-	0.00	-	-	-	-	-
11	-	-	-	-	-	-	0.00	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	0.00	-	-	-	-	-	-
17	-	-	-	-	-	0.30	-	-	-	-	-	-
18	-	-	-	-	-	0.43	-	-	-	-	-	-
19	-	-	-	-	-	0.00	-	-	-	-	-	-
20	-	-	-	-	-	0.01	-	-	-	-	-	-
21	-	-	-	-	-	0.09	-	-	-	-	-	-
22	-	-	-	-	-	0.02	-	-	-	-	-	-
23	-	-	-	-	-	0.10	-	-	-	-	-	-
24	-	-	-	-	-	0.18	-	-	-	-	-	-
25	-	-	-	-	-	0.00	-	-	-	-	-	-
26	-	-	-	-	-	0.67	-	-	-	-	-	-
27	-	-	-	-	-	0.57	-	-	-	-	-	-
28	-	-	-	-	-	0.20	-	-	-	-	-	-
29	-	-	-	-	-	0.14	-	-	-	-	-	-
30	-		-	-	-	0.00	-	-	-	-	-	-
31	-		-		-		-	-		-		-
Total	-	-	-	-	-	2.71	0.46	-	-	-	-	-
Days per Month	31	29	31	30	31	30	31	31	30	31	30	31
Days Captured	0	0	0	0	0	15	11	0	0	0	0	0
Percent Capture	-	-	-	-	-	50%	35%	-	-	-	-	-

Pebble Project, Cominco Meteorological Station (1991-1993) - Daily Precipitation (inches)

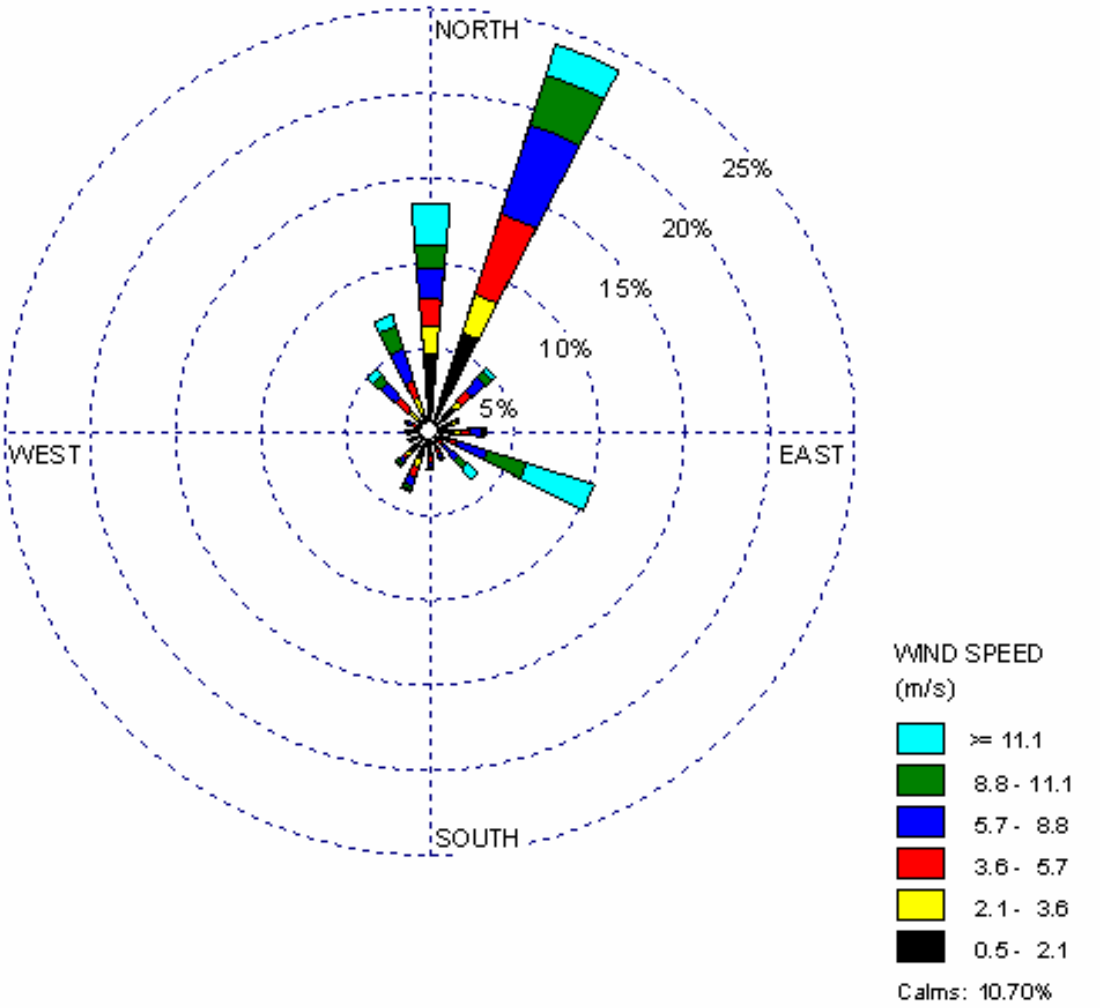
1993

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	0.06	0.02	0.28	0.00	0.42	-	-	-
2	-	-	-	-	0.00	0.01	0.19	0.02	0.07	-	-	-
3	-	-	-	-	0.00	0.00	0.36	0.00	0.21	-	-	-
4	-	-	-	-	0.01	0.01	0.08	0.00	0.28	-	-	-
5	-	-	-	-	0.02	0.11	0.03	0.55	0.05	-	-	-
6	-	-	-	-	0.06	0.06	0.04	0.18	0.01	-	-	-
7	-	-	-	-	0.27	0.00	0.00	0.01	0.00	-	-	-
8	-	-	-	-	-	0.00	0.00	0.03	-	-	-	-
9	-	-	0.00	-	0.14	0.00	0.02	0.01	-	-	-	-
10	-	-	0.09	-	0.15	0.00	0.02	0.06	-	-	-	-
11	-	-	0.02	-	0.22	0.06	0.00	0.01	-	-	-	-
12	-	-	0.00	-	0.39	0.19	0.00	0.09	-	-	-	-
13	-	-	0.00	-	0.06	0.00	0.00	0.25	-	-	-	-
14	-	-	0.03	-	0.03	0.00	0.01	0.21	-	-	-	-
15	-	-	0.03	-	0.00	0.00	0.01	0.16	-	-	-	-
16	-	-	0.00	-	0.00	0.03	0.00	0.02	-	-	-	-
17	-	0.00	0.07	-	0.05	0.00	0.01	0.31	-	-	-	-
18	-	0.04	0.13	-	0.00	0.00	0.01	0.67	-	-	-	-
19	-	0.00	0.02	-	0.00	0.06	0.00	0.18	-	-	-	-
20	-	0.00	-	-	0.05	0.01	0.00	0.00	-	-	-	-
21	-	0.23	-	0.00	0.11	0.00	0.04	0.04	-	-	-	-
22	-	0.14	-	0.00	0.03	0.02	0.00	0.06	-	-	-	-
23	-	0.00	-	0.00	0.07	0.00	0.06	0.05	-	-	-	-
24	-	-	-	0.01	0.16	0.02	0.02	0.07	-	-	-	-
25	-	-	-	0.00	0.00	0.07	0.08	0.00	-	-	-	-
26	-	-	-	0.04	0.08	0.00	0.02	0.03	-	-	-	-
27	-	-	-	0.02	-	0.02	0.36	0.05	-	-	-	-
28	-	-	-	0.00	-	0.04	0.19	0.38	-	-	-	-
29	-		-	0.05	0.00	0.02	0.04	0.43	-	-	-	-
30	-		-	0.00	0.00	0.08	0.03	0.25	-	-	-	-
31	-		-		0.00		0.02	0.16		-		-
Total	-	0.41	0.39	0.12	1.96	0.83	1.93	4.26	1.04	-	-	-
Days per Month	31	28	31	30	31	30	31	31	30	31	30	31
Days Captured	0	7	11	10	28	30	31	31	7	0	0	0
Percent Capture	-	25%	35%	33%	90%	100%	100%	100%	23%	-	-	-

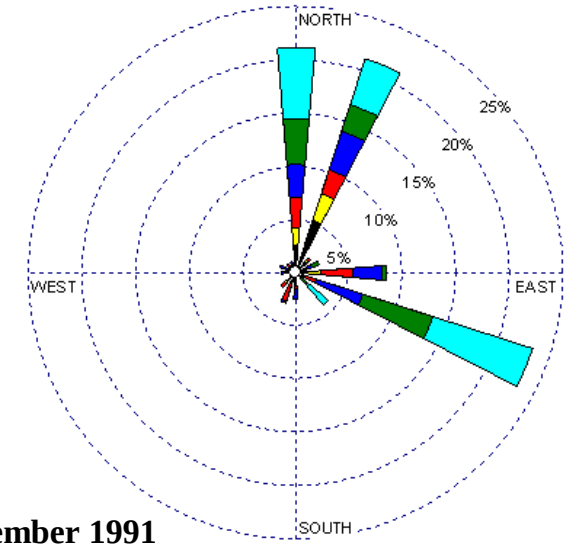
APPENDIX B

Wind Roses

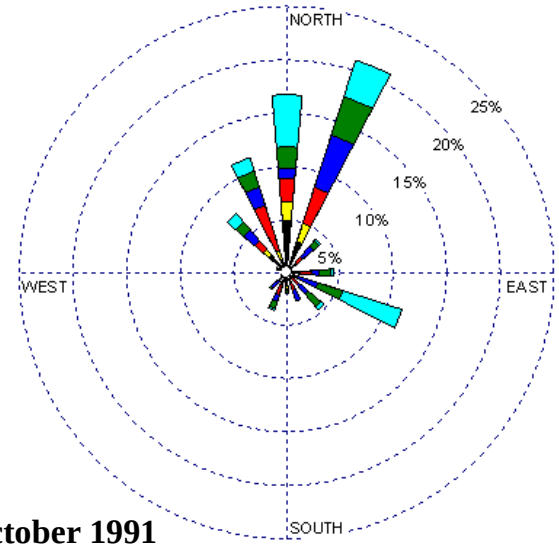
Wind Rose Plot Display: **Wind Speed**
Direction (blowing from)



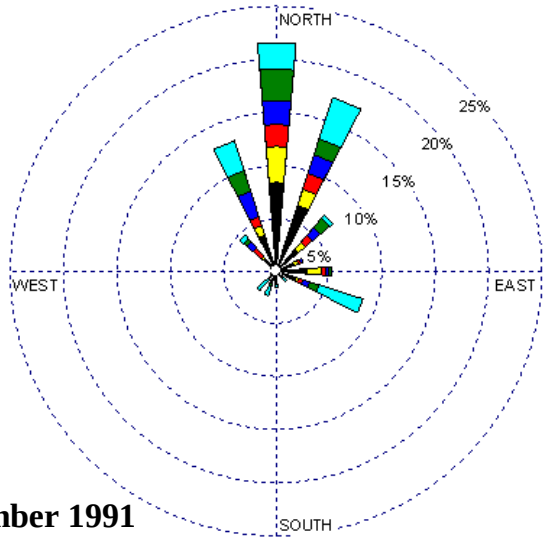
Site	Cominco Meteorological Station
Date	January 1 – December 31, 1992
Company	Northern Dynasty Mines, Inc.
Unit	m/s



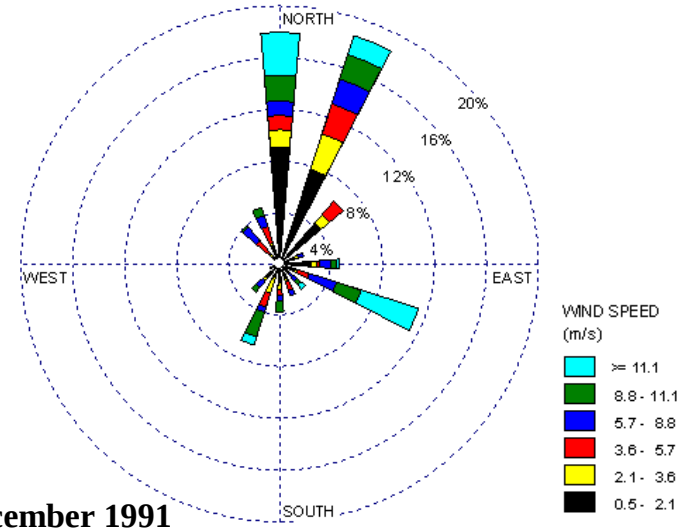
September 1991



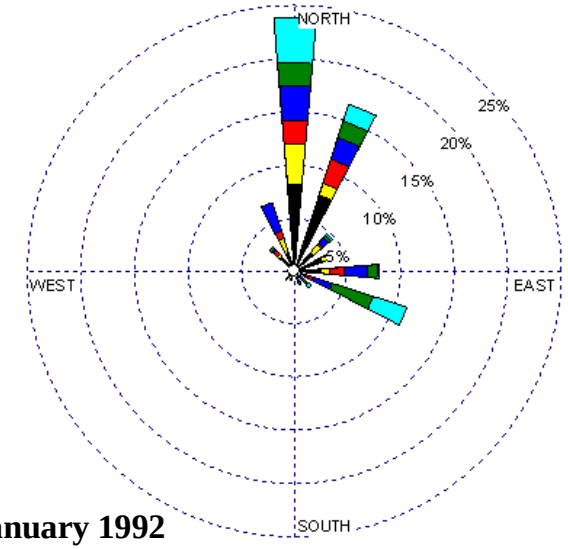
October 1991



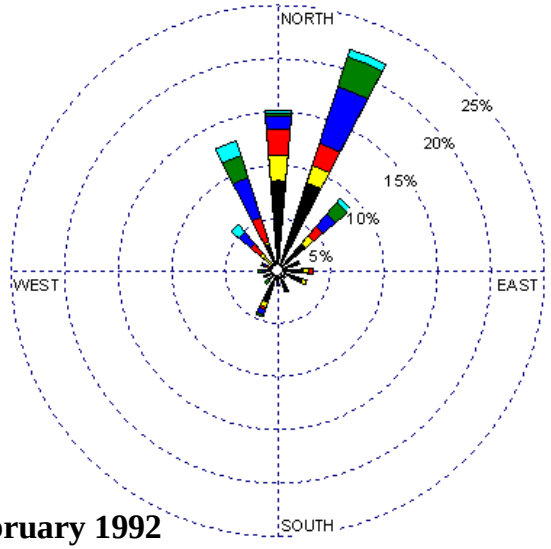
November 1991



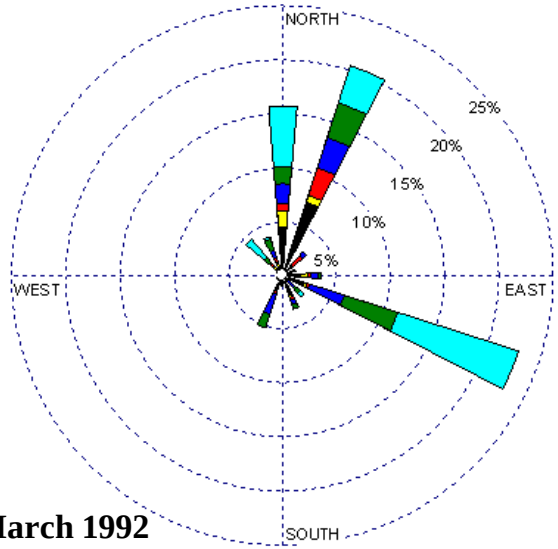
December 1991



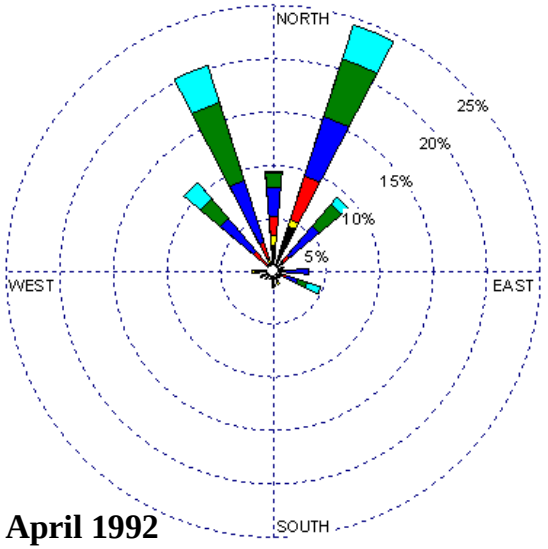
January 1992



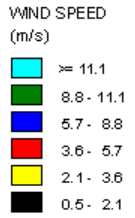
February 1992

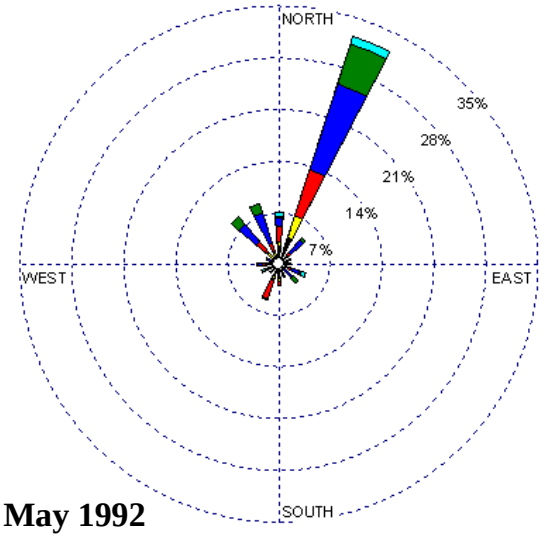


March 1992

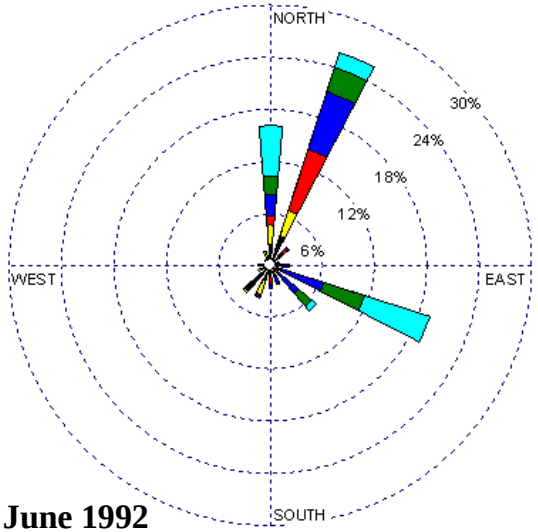


April 1992

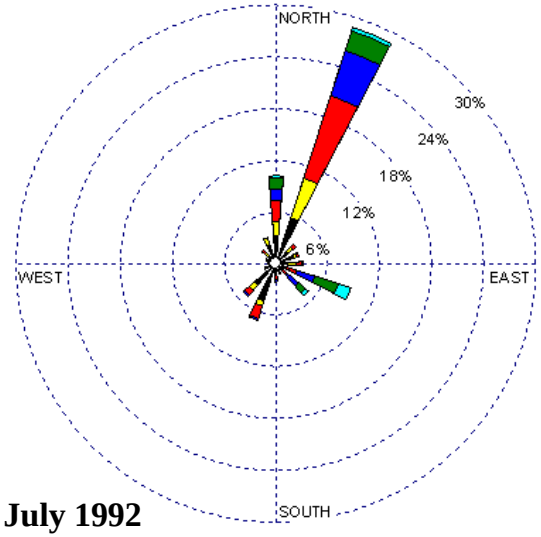




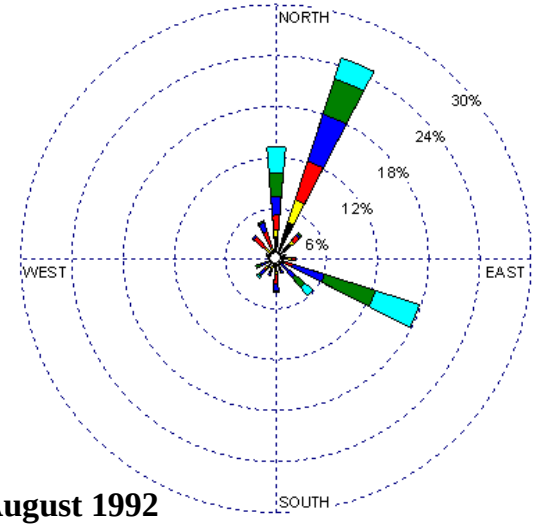
May 1992



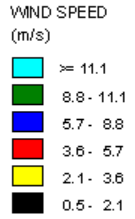
June 1992

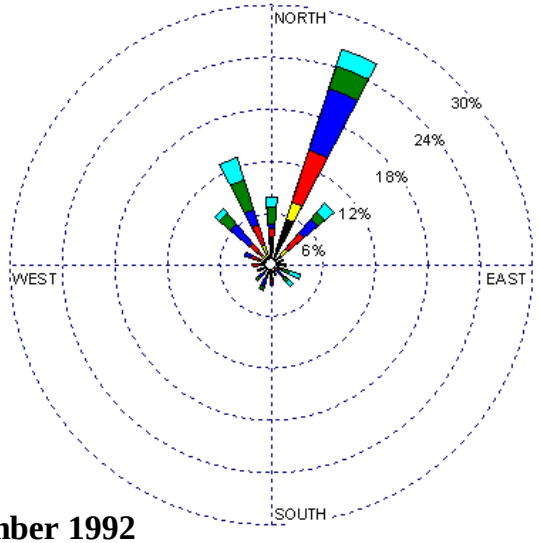


July 1992

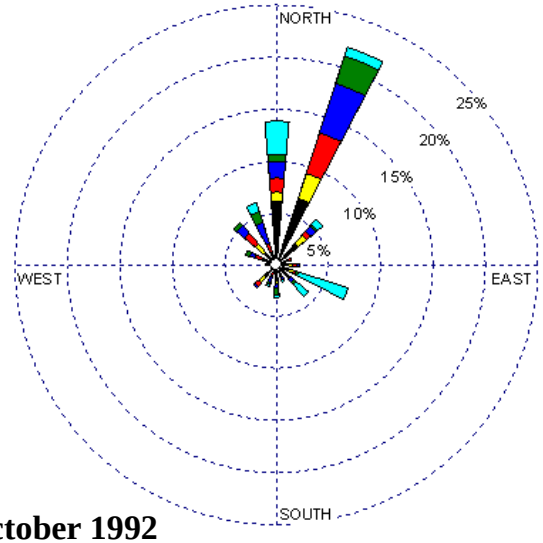


August 1992

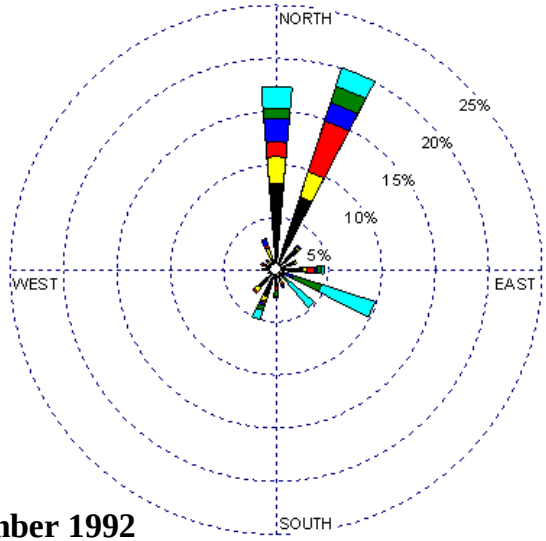




September 1992



October 1992



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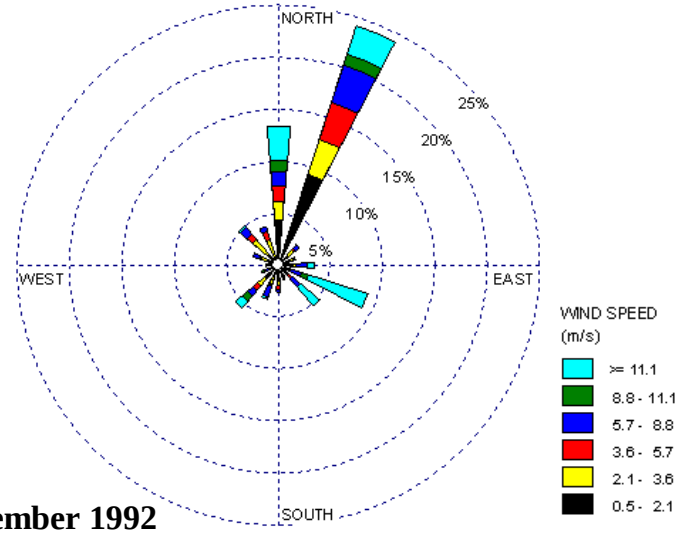

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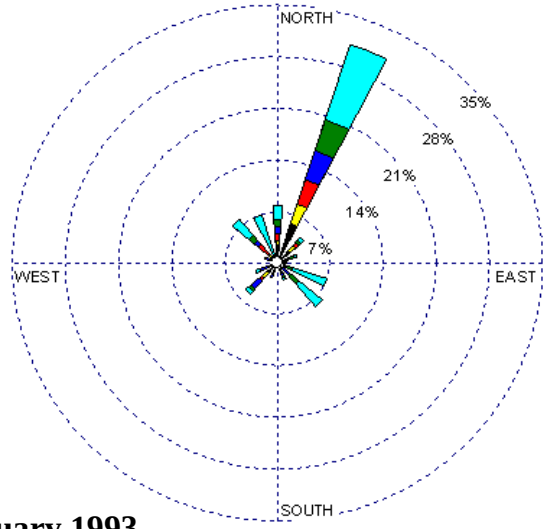

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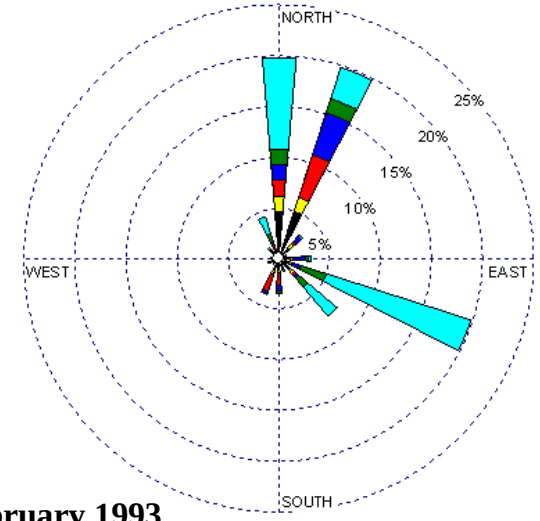

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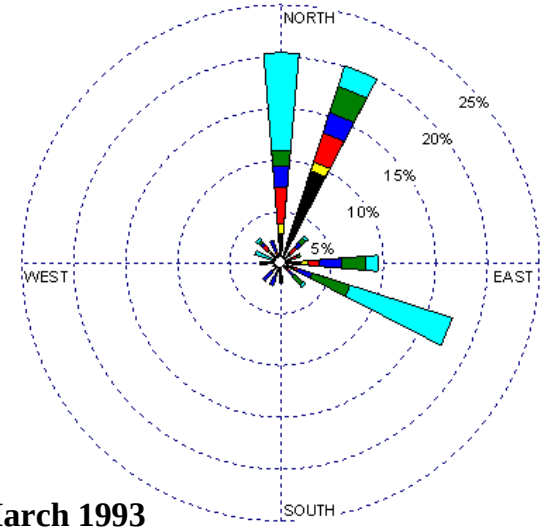

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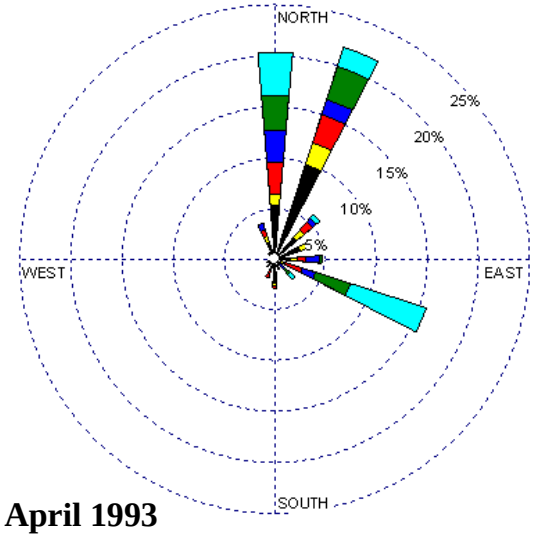

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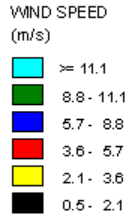

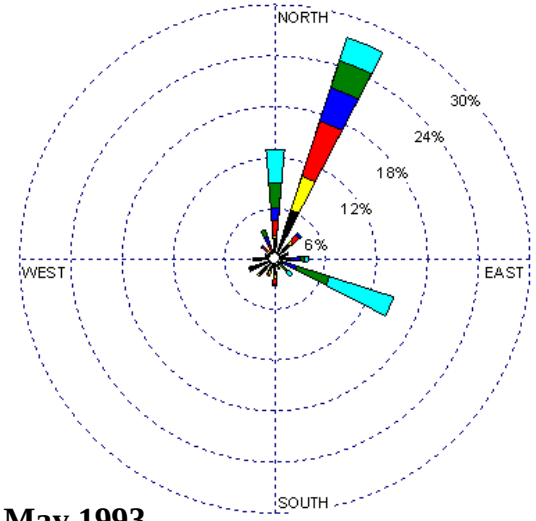

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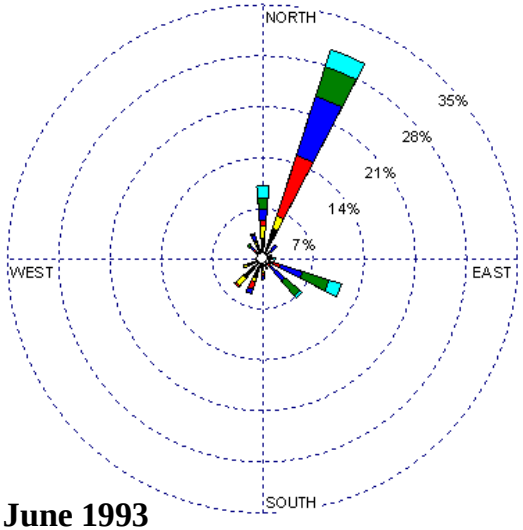

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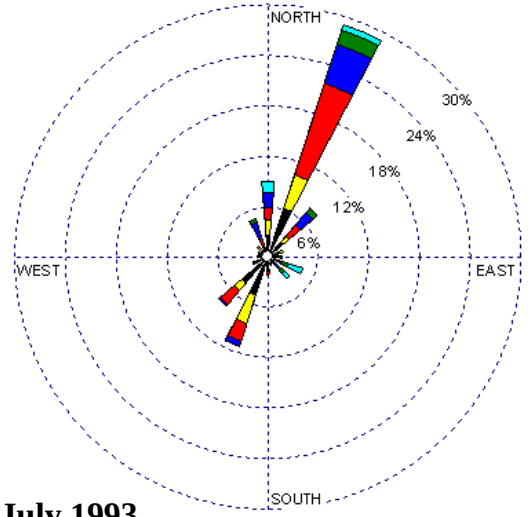

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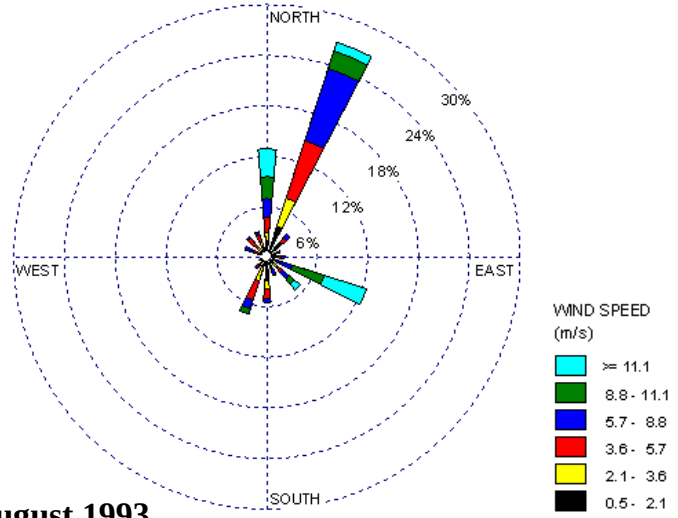


August 1993

APPENDIX 2B

Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program June 2008

Quality Assurance Project Plan

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

June 2008

Quality Assurance Project Plan

for the

Pebble Project Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Pebble Limited Partnership, Care of Pebble Mines Corp.

by

Hoefler Consulting Group
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503
(907) 563-2137

June 2008

A. Project Management Elements

A1. Approvals

Mike Smith
PLP Permitting Manager
Pebble Limited Partnership

6.5.08
Date

Al Trbovich
HCG Permitting Manager
Hoefler Consulting Group

6/2/2008
Date

K. Steven Mackey
HCG Project Manager
Hoefler Consulting Group

6/2/2008
Date

Eric Brudie
HCG Quality Assurance Officer
Hoefler Consulting Group

6/2/08
Date

Dominic Shallies
HCG Lead Network Operator
Hoefler Consulting Group

June 7, 2008
Date

Alan Schuler
ADEC Air Permits Program Project Supervisor
Alaska Department of Environmental Conservation

Date

A2. Contents

A. Project Management Elements ii

A1. Approvals ii
A3. Distribution List 1
A4. Project/Task Organization 2
A5. Problem Definition/Background and Project Objective 4
A6. Project/Task Description 4
A7. Quality Objectives and Criteria for Measurement of Data 9
A8. Training and Certifications 11
A9. Documents and Records 11

B. Measurement and Data Acquisition 13

B1. Sampling Process Design 13
B1.1 Monitoring Site Locations 13
B2. Sampling Methods Requirements 37
B2.1 Reference and Equivalent Methods 37
B2.2 Environmental Controls 40
B3. Sample Handling and Custody 40
B4. Analytical Methods Requirements 40
B5. Quality Control 40
B6. Instrument/Equipment Testing and Inspection/Maintenance 45
B6.1 Acceptance Testing 45
B6.2 Site Surveillance and Equipment Inspection and Maintenance 45
B6.3 Preventive Maintenance and Corrective Actions 45
B7. Instrument/Equipment Calibration and Frequency 46
B7.1 Calibration Frequency 46
B7.2 Calibration Equipment 46
B8. Inspection/Acceptance of Supplies and Consumables 48
B9. Non-direct Measurements 48
B9.1 Climate History 48
B9.2 Land Use 51
B10. Data Management 52
B10.1 Data Acquisition 53
B10.2 Data Validation 53
B10.3 Data Transmission 54
B10.4 Data Reduction 54
B10.5 Data Reporting 54
B10.6 Data Storage 55
B10.7 Data Use in Modeling 55

C. Assessments and Oversight 56

C1. Assessments and Response Actions 56
C1.1 Performance Audits 56
C1.2 Systems Audits 56
C1.3 Corrective Actions 59
C1.4 QAPP Revisions 59
C2. Reports to Management 59

D. Data Validation and Usability 61

D1. Data Review, Validation, and Verification Requirements 61
D1.1 Data Review 61
D1.2 Data Calculations 62
D2. Validation and Verification Methods 63
D3. Reconciliation with User Requirements 65

List of Tables

A1. Distribution List for Quality Assurance Project Plan 1
A2. Pebble Project Meteorological Monitoring Program Key Individuals and Responsibilities 2
A3. Meteorological Monitoring Measurement Parameters 5
A4. Pebble Project Meteorological Monitoring Program Work Schedule 7
A5. Summary of DQOs for the Pebble Project Meteorological Monitoring Program 10
B1. Summary of Pebble Project Meteorological Stations 15
B2. Summary of Meteorological Sensors and Performance Specifications 38
B3. Sampling and Averaging Times for Meteorological Parameters 39
B4. Meteorological Sensors QA/QC Critical Validation Criteria 42
B5. Meteorological Sensors QA/QC Operational Evaluations 43
B6. Meteorological Sensors QA/QC Systematic Issues 44
B7. List of Meteorological Equipment Spare Parts 46
B8. List and Specifications for Calibration Equipment 47
C1. List of Performance Audit Equipment and Procedures 58
C2. Summary of Reports to Management 60
D1. Data Review List for the Pebble Project 61
D2. EPA PSD Data Validation Criteria 64

List of Figures

A1. Pebble Project Meteorological Monitoring Program Organizational Chart 3
A2. Pebble Project Area Map 8
B1. Pebble Project Deposit Area Meteorological Station Locations 17
B2. Pebble 1 Meteorological Station Site Map 18
B3. Pebble 4 Meteorological Station Site Map 19
B4. Pebble 5 Meteorological Station Site Map 20
B5. Pebble 6 Meteorological Station Site Map 21
B6. Pebble 1 Meteorological Station 22
B7. Area Surrounding the Pebble 1 Meteorological Station 23
B8. Pebble 4 Meteorological Station 24
B9. Area Surrounding the Pebble 4 Meteorological Station 25
B10. Pebble 5 Meteorological Station 26
B11. Area Surrounding the Pebble 5 Meteorological Station 27
B12. Pebble 6 Meteorological Station 28
B13. Area Surrounding the Pebble 6 Meteorological Station 29
B14. Pebble Project Port Area Meteorological Station Map 30
B15. Pebble Port Meteorological Station 31
B16. Area Surrounding the Pebble Port Meteorological Station 32
B17. Williamsport Meteorological Station 33
B18. Area Surrounding the Williamsport Meteorological Station 34
B19. North Head Meteorological Station 35
B20. Area Surrounding the North Head Meteorological Station 36
B21. Iliamna Daily Extreme and Average High and Low Temperatures 49
B22. Iliamna Monthly Mean Precipitation 49
B23. Iliamna Wind Rose 50
B24. Alaska Air Quality Control Regions 51
B25. Alaska Class I Areas 52
B26. Data Processes Flow Chart 53

List of Appendices

Appendix A Program References
Appendix B Monitoring Program Supporting Documents
Appendix C Standard Operating Procedures (SOPs) and Audit/Calibration Forms
Appendix D Statement of Qualifications

A3. Distribution List

The following individuals have been provided a copy of this Quality Assurance Project Plan:

Table A1. Distribution List for Quality Assurance Project Plan

Key Individual/ Title	Organization	Email	Address	Phone
Mike Smith PLP Permitting Manager	Pebble Limited Partnership	michaelsmith@pebblepartnership.com	3201 C Street, Suite 604 Anchorage, Alaska 99503	(907) 339-2606
Al Trbovich, HCG Permitting Manager	Hoefler Consulting Group	atrbovich @hoeflernet.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 563-2140
Steven Mackey, HCG Project Manager	Hoefler Consulting Group	smackey @hoeflernet.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 563-2129
Eric Brudie, HCG Quality Assurance Auditor	Hoefler Consulting Group	eric @brudie.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 529-1642
Dominic Shallies HCG Associate Scientist	Hoefler Consulting Group	dshallies @hoeflernet.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 563-2100
Alan Schuler, ADEC Air Permits Program Project Supervisor	Alaska Department of Environmental Conservation	alan.schuler @alaska.gov	410 Willoughby Avenue, Suite 303 Juneau, Alaska 99801	(907) 465-5112

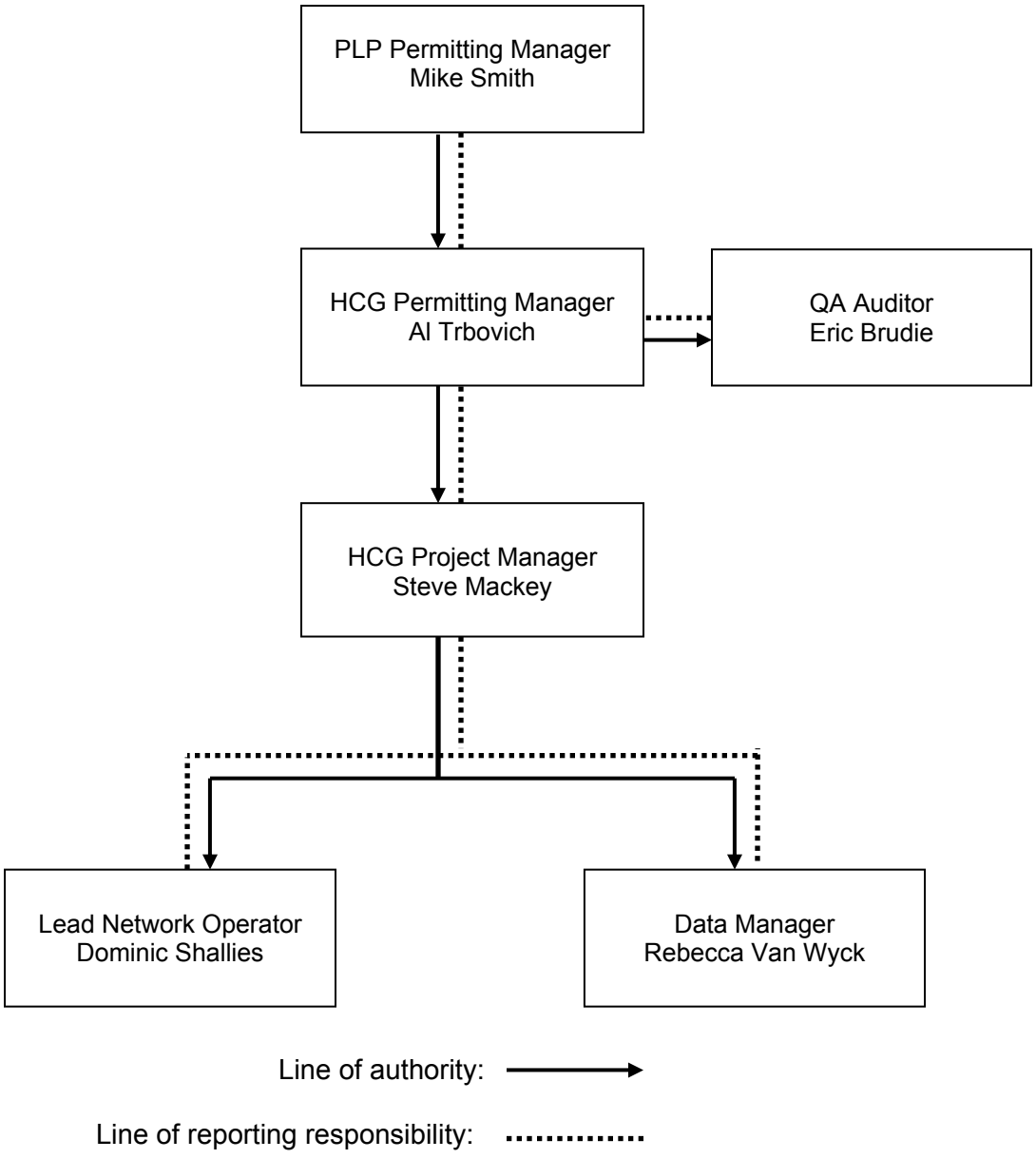
A4. Project/Task Organization

On behalf of The Pebble Limited Partnership (PLP), care of Pebble Mines Corp., its general partner, HCG Inc., dba Hoefler Consulting Group will assist in the installation, operation, and maintenance of meteorological monitoring stations for the Pebble Project located near Iliamna, Alaska. Figure A1 provides the organization plan for this project. The key personnel involved with this project and their respective responsibilities are summarized in Table A2. HCG will be responsible for all aspects of air monitoring, database management, and reporting.

Table A2. Pebble Project Meteorological Monitoring Program Key Individuals and Responsibilities

Key Individual	Responsibilities
PLP Permitting Manager	Mike Smith is the permitting manager for the Pebble Project and is responsible for complete program oversight.
HCG Permitting Manager	Al Trbovich is responsible for coordinating the meteorological monitoring program with PLP air permitting requirements.
HCG Project Manager	Steve Mackey is responsible for management of the technical staff conducting the PLP meteorological monitoring program and ensuring that the project is completed within established schedules and budgets.
Quality Assurance Auditor	Eric Brudie is responsible for auditing the validity and accuracy of reported information and coordinating follow-up activities to ensure a defensible data set.
Lead Network Operator	Dominic Shallies is responsible for installation and routine operation of the monitoring stations.
Data Manager	Rebecca Van Wyck is responsible for maintaining the project databases for all field data and for preparing data reports.

Figure A1. Pebble Project Meteorological Monitoring Program Organizational Chart



A5. Problem Definition/Background and Project Objective

The Pebble Project is a proposed mine for gold, copper, molybdenum, and silver located in southwestern Alaska, north of Lake Iliamna. PLP is conducting baseline environmental studies at the Pebble Project, including meteorological monitoring to support air permitting, environmental studies, and mine design objectives. At least two years of meteorological monitoring is anticipated with a primary objective of collecting meteorological data for supporting future air permit applications required for mining activities, construction and/or roadwork at the proposed mine and port sites.

The meteorological data will be collected in accordance with Prevention of Significant Deterioration (PSD) permit requirements and guidance. While construction of the mine and port infrastructure may not require a PSD permit, the PSD-quality meteorological measurements may also be used for air dispersion modeling required for minor permitting.

A6. Project/Task Description

This study will provide at least two years of representative surface meteorological observations for use in air quality dispersion modeling in support of the Pebble Project. The meteorological monitoring program will include seven PSD-quality stations. Four stations are located in the deposit area, approximately 17 miles northwest of Iliamna and three stations are located in the proposed port area, approximately 52 miles east of Iliamna. The stations are named as follows:

Deposit Area Stations

- Pebble 1 station
- Pebble 4 station
- Pebble 5 station
- Pebble 6 station

Proposed Port Area Stations

- Pebble Port station
- Williamsport station
- North Head station

The study will collect at least two years of meteorological data at the Pebble 1, Pebble 4 and Pebble Port stations. The study will also provide at least one year of meteorological monitoring at the Pebble 5, Pebble 6, Williamsport, and North Head stations.

Three other non-PSD meteorological monitoring stations, known as the Pebble 2, Pebble 3, and Pebble 5A stations have been or will be operated in the Pebble area to collect data for

mine design purposes. These non-PSD stations are not included as part of this QAPP because these stations are not intended to provide data for air dispersion modeling.

Table A3 lists the meteorological parameters to be measured and the frequency at which samples will be collected and recorded.

Table A3. Meteorological Monitoring Measurement Parameters

Parameter	Units	Sampling Frequency	Sample Averaging
Wind speed	meters/second (m/s)	1-second	1-hour
Wind direction	Degrees (°)	1-second	1-hour
Temperature 2-meters	degrees Celsius (°C)	1-second	1-hour
Temperature 10-meters	degrees Celsius (°C)	1-second	1-hour
Vertical temperature difference (ΔT)	degrees Celsius (°C)	1-second	1-hour
Relative Humidity	percent (%)	1-second	1-hour
Solar radiation	Watts per square meter (W/m^2)	1-second	1-hour
Barometric pressure	millibar (mb)	1-second[1]	N/A[1]
Precipitation[3]	Millimeters (mm)	N/A[2]	N/A[2]
Evaporation[3]	Millimeters (mm)	1 second	1 minute

1 Instantaneous pressure measurements are sampled once per hour.
2 Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.
3 Not measured at the Pebble Port, Williamsport, or North Head stations.

The meteorological monitoring sites for the Pebble Project were selected in a manner consistent with PSD criteria for surface meteorological data collection. Figure A2 shows a map of the PLP meteorological monitoring sites located in southwest Alaska. On May 24, 2005, the proposed monitoring sites were visited by Alan Schuler and Gerry Guay of Alaska Department of Environmental Conservation (ADEC), Natasha Greaves and Rob Wilson of the United States Environmental Protection Agency (EPA) Region 10, and Al Trbovich and Steve Mackey of HCG. On this date, all parties concurred that the Pebble 1, Pebble 4, and Pebble Port sites are the best available locations for carrying out meteorological monitoring representative of the areas proposed for development. Greater details of the monitoring site locations and the proximity of the study areas within defined Alaska land use boundaries are provided in Sections B1 and B9, respectively.

The Pebble Project Meteorological Monitoring Program is expected to run at least from August 1, 2005 to December 31, 2008. In 2007 the Pebble Project Meteorological Monitoring Program was changed to a calendar year monitoring year. Annual Data Reports for the Pebble 1 and Pebble Port stations were submitted for the 2005-2006 monitoring year (August 1, 2005 through July 31, 2006). Following the monitoring year change, annual data reports were submitted for the Pebble 1 and Pebble Port stations for the 2006 monitoring year (January 1, 2006 through December 31, 2006) and for the Pebble 1, Pebble 4, and Pebble Port stations for the 2007 monitoring year (January 1, 2007 through December 31, 2007). Annual data reports for all seven PSD stations will be submitted for the 2008 monitoring year (January 1, 2008 through December 31, 2008). Quarterly data summary reports will be submitted no later than 30 days upon the completion of the monitoring quarter and the annual data report will be submitted no later than 90 days upon completion of the monitoring year. Quality assurance audit reports will be included in the annual data report. For purposes of data reporting, the three calendar years of monitoring will be split into monitoring quarters A through D as follows:

2006 Monitoring Year
Pebble 1, Pebble Port

Monitoring Quarter A	Jan/Feb/Mar 2006
Monitoring Quarter B	Apr/May/Jun 2006
Monitoring Quarter C	Jul/Aug/Sep 2006
Monitoring Quarter D	Oct/Nov/Dec 2006

2007 Monitoring Year
Pebble 1, Pebble 4, Pebble Port

Monitoring Quarter A	Jan/Feb/Mar 2007
Monitoring Quarter B	Apr/May/Jun 2007
Monitoring Quarter C	Jul/Aug/Sep 2007
Monitoring Quarter D	Oct/Nov/Dec 2007

2008 Monitoring Year
Pebble 1, Pebble 4, Pebble 5
Pebble 6, Pebble Port, North Head, Williamsport

Monitoring Quarter A	Jan/Feb/Mar 2008
Monitoring Quarter B	Apr/May/Jun 2008
Monitoring Quarter C	Jul/Aug/Sep 2008
Monitoring Quarter D	Oct/Nov/Dec 2008

Personnel working on this project will be selected by the HCG project manager and will be fully qualified, trained, and capable of their assigned tasks. Work schedules will be determined by the HCG project manager and will include:

(a) daily data reviews
(b) site visits every four to eight weeks
(c) semiannual audits and audit reports
(d) quarterly data summaries
(e) annual data reports
(f) as needed maintenance and corrective actions.

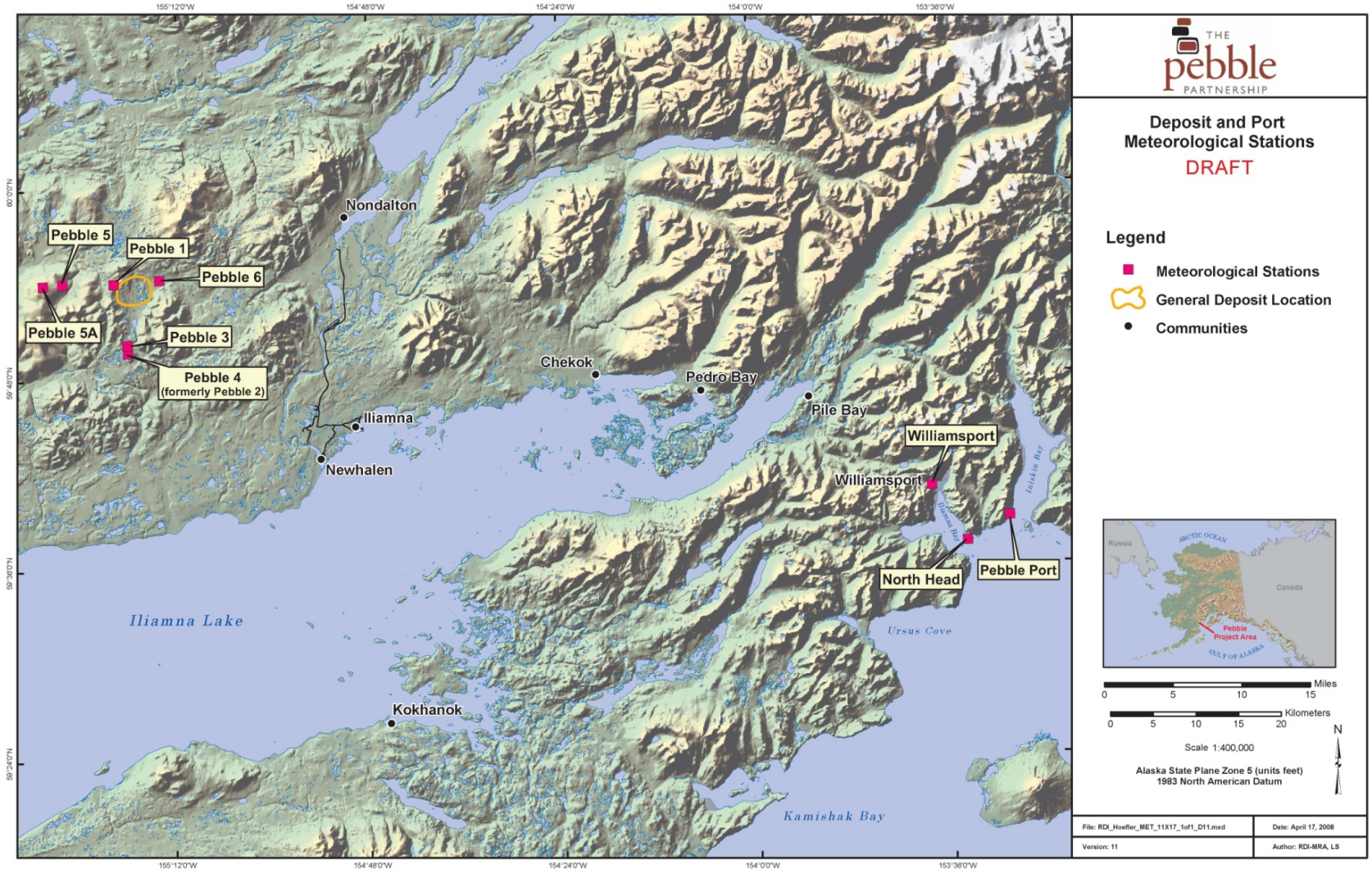
Table A4 provides a provisional work schedule for this monitoring project.

Table A4. Pebble Project Meteorological Monitoring Program Work Schedule

Scheduled Activity	Date
Station Site Selection Visit	May 24, 2005
Installation of Pebble 1 and Pebble Port Stations	June 2005
Training of Station Operators	June 2005
Pebble 1 and Port PSD Station Initial Systems/Performance Audit and Calibrations	June 11 and June 25, 2005
Start of Validated Data at Pebble 1 and Pebble Port stations[1]	August 1, 2005
Beginning of 2006 Monitoring Year	January 1, 2006
Semiannual Performance Audit and Calibrations	January 15-16, 2006
Pebble 4 Station Installation	June 3-10, 2006
Annual Systems/Performance Audit and Calibrations	July/August 2006
End of 2006 Monitoring Year	December 31, 2006
Beginning of 2007 Monitoring Year	January 1, 2007
Semiannual Performance Audit and Calibrations	January/February 2007
Pebble 5 Station Installation	June 2007
Williamsport Station Installation	July 2007
Annual Systems/Performance Audit and Calibrations	August/September 2007
Pebble 6 Station Installation	August 2007
North Head Station Installation	September 2007
End of 2007 monitoring Year	December 31, 2007
Beginning of 2008 Monitoring Year	January 1, 2008
Semiannual Performance Audit and Calibrations	February-April 2008
Annual Systems/Performance Audit and Calibrations	August/September 2008
End of 2008 Monitoring Year	December 31, 2008

[1] Monitoring year scheduled was changed to a calendar year system beginning in 2006.

Figure A2. Pebble Project Area Map



A7. Quality Objectives and Criteria for Measurement of Data

Measurement Quality Objectives (MQOs) and acceptance criteria for the project are defined by the MQOs as prescribed in *EPA Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Sections 3 and 5 (EPA-454/R-99-005), and by the guidelines defined in *EPA Requirements for Quality Assurance Project Plans* Chapter 3, Section A7 (EPA QA/R-5).

Data completeness is a measure of the amount of data actually collected compared with the amount of data that could have been collected, expressed as a percentage. Data completeness for the meteorological sensors is calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The Data Quality Objective (DQO) for data completeness during this monitoring project is 90 percent data capture per quarter for every parameter listed in Table A5.

DQOs for the detection capabilities of the meteorological sensors are defined in terms of measurement resolution. The resolution DQOs for this project have been set equal to those put forth in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* Section 5.1 (EPA-454/R-99-005), and are presented in Table A5.

Accuracy is a measure of the proximity of the measurements and the true value. Accuracy includes components of both random error and systematic error associated with instrumental bias. Accuracy will be assessed during performance audits. The accuracy DQOs for the meteorological sensors are presented in Table A5, and have been set equal to those recommended in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 5.1 (EPA-454/R-99-005).

Detectability, method/comparability, and representativeness are determined by the siting and exposure of the meteorological tower and sensors. The space-time domain and aspects for this specific application--as prescribed in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 3.1.1 Objective for Siting (EPA-454/R-99-005)--have been considered for each measurement parameter.

Meteorological data collected at this station will be examined and compared to nearby National Weather Service locations (e.g. Iliamna) to ensure that data are consistent with current and historical conditions in the area

Table A5. Summary of DQOs for the Pebble Project Meteorological Monitoring Program

Meteorological Parameter/ Manufacturer and Model	Measurement Method	Manufacturer Specified Accuracy	EPA Required Accuracy[1]	EPA Required Resolution[1]	Detectability/ Data Completeness[1]
Wind Speed (Climatronics F460)	Three-cup anemometer	± 0.07 m/s or ± 1%	± 0.2 m/s or ± 5%	0.1 m/s	90% per monitoring quarter
Wind Direction (Climatronics F460)	Light-weight vane	± 2 degrees	± 5 degrees	1.0 degree	90% per monitoring quarter
Wind Speed (RM Young 05305-AQ)	Light-weight propeller	± 0.2 m/s	± 0.2 m/s or ± 5%	0.1 m/s	90% per monitoring quarter
Wind Direction (RM Young 05305-AQ)	Light-weight vane	± 3 degrees	± 5 degrees	1.0 degree	90% per monitoring quarter
Ambient Temperature & Vertical Temperature Difference (Met One 062MP)	Solid state Thermistor	± 0.05°C	± 0.5°C (Ambient Temperature), ± 0.1°C (Temperature Difference)	0.1°C (Ambient Temperature), 0.02°C (Temperature Difference)	90% per monitoring quarter
Barometric Pressure (Vaisala PTB101B)	Silicon capacitive sensor	± 0.3 mb	± 3 mb	0.5 mb	90% per monitoring quarter
Relative Humidity (Vaisala HMP45C)	Thin-polymer capacitor	± 2% (0-90% range) ± 3% (90-100% range)	± 1.5°C	0.1°C	90% per monitoring quarter
Solar Radiation (Licor LI200X)	Silicon photovoltaic detector	± 5%	± 5%	10 W/m^2	90% per monitoring quarter
Precipitation (ETI NOAH II)	Water pressure	± 0.25 mm	± 5 mm	0.3 mm	90% per monitoring quarter
Evaportation (Nova Lynx 255-100)	Float mechanism/ sensor	± 0.25%	n/a[3]	n/a[3]	90% per monitoring quarter

[1] Referenced in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Values are given in terms of dew point temperature in guidance document (EPA-454/R-99-005).
[3] n/a = not applicable.

A8. Training and Certifications

The Pebble Project meteorological monitoring sites require no specific mandated training requirements as stated in *EPA Requirements for Quality Assurance Project Plans* Section A8 (EPA QA/R-5). However, a site-specific health and safety plan was developed in accordance with both HCG and PLP standards. Site-specific training for this project covers activities performed in the field and includes record keeping practices. All HCG and PLP field personnel will attend annual site safety and logistics meetings hosted by PLP. HCG field technicians for this project will receive training on the operation and maintenance of the meteorological sensors and related equipment. Training will be conducted by the HCG project manager or his designees. Site-specific training checklists and site visit memos will document the specific training received by each Field Technician (Appendix B). These documents will be filed and maintained in the project files.

All personnel working on any element of this project will have their qualifications reviewed and will be determined to have sufficient experience and knowledge in both meteorological monitoring and data processing. Experience and qualifications of key project participants are presented in Appendix D.

A9. Documents and Records

Documentation and records for this project will include equipment calibration and maintenance records, documentation of quality control/quality assurance activities, routine monitoring data, corrective action and resolution forms, any QAPP revision documentation, and records of HCG field activities (i.e. site visit memos). Appendix B includes example data sheets for the monitoring project. All hard-copy documentation will be stored at the HCG Anchorage office and retained for a period of at least five years from the completion of the project. Electronic data will be stored on various media with full project backups. In addition to any written reports, electronic data collected for this project and data transferred to electronic format will be provided to PLP via CD-ROM or e-mail. Both the original comma delimited raw text file and a spreadsheet format file will be provided.

The final annual reports will be submitted to ADEC and PLP in both hard copy and electronic (PDF) format within 90 days of the conclusion of the monitoring program. Validated data will be submitted to ADEC in the same formats. The annual report will include a brief discussion of any monitoring phenomena, observable trends, quarterly and annual averages for all the measured parameters, statistical summaries for each collected parameter, and wind rose graphics. The reports will also contain any additional documentation, including but not limited to equipment calibration and maintenance records, documentation of quality control/quality assurance activities, routine monitoring data, project data reports, corrective action records, and records of field activities. See Section C for an outline of the annual report.

In accordance with ADEC reporting guidelines, quarterly data summaries and annual data reports will be prepared by HCG and provided to PLP and ADEC. The annual data report will be prepared by HCG in accordance to the requirements set forth in *PSD Quality Ambient Air Quality & Meteorological Monitoring Annual Data Report Format* (ADEC, October 2006). In addition, quarterly data summaries will be prepared by HCG in accordance with the format described in *PSD Quality Ambient Air Quality & Meteorological Monitoring Quarterly Data Summary Format* (ADEC, April 2008) and provided to PLP and ADEC within 30 days after the completion of each calendar quarter.

B. Measurement and Data Acquisition

B1. Sampling Process Design

The identified objectives of the Pebble Project Meteorological Monitoring Program are:

- Collect meteorological data necessary to support air permit applications
- Collect data for other environmental purposes (baseline, NEPA)
- Collect data for engineering design of mine and port facilities

To accomplish the monitoring objectives, baseline meteorological monitoring is being performed in both the deposit area (four stations) and near the proposed port site (three stations). The monitoring study is comprised of seven PSD quality meteorological monitoring stations, each of which will collect hourly meteorological monitoring data over a period of at least two years. The seven PSD stations are designed and operated to meet the data quality objectives previously outlined in Section A7 of this QAPP.

B1.1 Monitoring Site Locations

The Pebble Project area is located near Iliamna in southwestern Alaska. The four deposit area stations are located approximately 17 miles northwest of Iliamna and the three port stations are located approximately 52 miles east of Iliamna on Iliamna Bay and Iniskin Bay. The specific station locations are shown in Figure A2.

The meteorological monitoring program consists of a total of seven PSD quality meteorological monitoring stations named as follows:

Deposit Area Stations

- Pebble 1 station
- Pebble 4 station
- Pebble 5 station
- Pebble 6 station

Proposed Port Area Stations

- Pebble Port station
- Williamsport station
- North Head station

Additional non-PSD meteorological monitoring stations are being used to collect data for mine design purposes. One of these non-PSD station was initially located at the Pebble 4 station site from October 2004 through November 2005, and was called the “Pebble 2” station. During November 2005, the Pebble 2 station was relocated 0.6 miles north and

renamed “Pebble 3”. Another non-PSD station, Pebble 5A, was installed on Koktuli Ridge during June 2007. Table B1 provides a summary of the location, purpose, and measurement parameters of PSD and non-PSD meteorological monitoring stations for the Pebble Meteorological Monitoring Program. Throughout the remainder of this QAPP, emphasis will be placed on the locations and operation of the PSD meteorological monitoring stations only, because the primary purpose of these stations is to provide measurements for air dispersion modeling and air permit applications.

Figure B1 shows a map of the meteorological stations adjacent to the Pebble Project deposit location, approximately 17 miles northwest of Iliamna, Alaska. Figures B2 through B5 provide higher resolved maps of the Pebble 1, Pebble 4, Pebble 5, and Pebble 6 station locations. The Pebble 1 station is located at a northern edge of a hilltop at 1,600 feet above sea level and overlooks a basin to the west where the Pebble Project ore body is located. The Pebble 4 station is located at 1,200 feet above sea level and overlooks the Pebble 3 station (at 1,000 feet above sea level) and the drainage of Frying Pan Lake. The Pebble 5 station is located at 1,400 feet above sea level in the North Fork Koktuli Basin. The Pebble 6 station is located at 800 feet above sea level 5 km east of the Pebble 1 station in the Upper Talarik Basin.

Figures B6 and B7 are photos of the Pebble 1 station and the surrounding area in the four cardinal directions, respectively. Figures B8 and B9 provide photos of the Pebble 4 station and the surrounding area in the four cardinal directions. Figures B10 and B11 provide photos of the Pebble 5 station and the surrounding area in the four cardinal directions. Figures B12 and B13 provide photos of the Pebble 6 station and the surrounding area in the four cardinal directions. Despite the relatively low elevation of the sites, all of the meteorological stations sit above tree line and are free of natural and man-made obstructions.

Figure B14 is a map of the proposed port area stations. Figure B15 and B16 are photos of the Pebble Port station and the surrounding area in the four cardinal directions, respectively. The Pebble Port station overlooks the western shores of Iniskin Bay at the site of the proposed Pebble Project shipping port. Figures B17 and B18 are photos of the Williamsport station and the surrounding area in the four cardinal directions respectively. The Williamsport station is located in the northern part of Iliamna Bay where Williams Creek meets the bay. Figures B19 and B20 are images of the North Head station and the surrounding area in the four cardinal directions. The North Head station overlooks the eastern shore of Southern Iliamna Bay.

Table B1. Summary of Pebble Project Meteorological Stations

Station Name	Purpose/ Function[1]	Station Coordinates and Elevation	Monitoring Period	Measured Meteorological Parameters
Pebble 1	PSD quality meteorological monitoring for proposed mine site	59° 54' N 155° 20' W 1,600 feet	Aug. 1, 2005 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure Precipitation Evaporation
Pebble 2	Non-PSD meteorological monitoring at the proposed mine tailings storage facility site	59° 50' N 155° 18' W 1,200 feet	Jan. 2005 – Nov. 2005	Wind speed Wind direction Wind sigma Temperature Precipitation Evaporation
Pebble 3	Non-PSD meteorological monitoring at the proposed mine tailings storage facility site	59° 50' N 155° 18' W 1,000 feet	Nov. 2005 – July 2008	Wind speed Wind direction Wind sigma Temperature Precipitation
Pebble 4	PSD quality meteorological monitoring at the proposed mine tailings storage facility site	59° 50' N 155° 18' W 1,200 feet	Jan. 1, 2007 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure Precipitation Evaporation
Pebble 5	PSD quality meteorological monitoring at the proposed mine tailings storage facility site	59° 54' N 155° 26' W 1,400 feet	Jan. 1, 2008 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure Precipitation Evaporation

[1]Each PSD station measures winds at approximately 10-meters height and is operated in accordance to *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Non-PSD stations measure wind at 3-meters height and are operated primarily for engineering design.

Table B1 (Continued). Summary of Pebble Project Meteorological Stations

Station Name	Purpose/ Function[1]	Station Coordinates and Elevation	Monitoring Period	Measured Meteorological Parameters
Pebble 5A	Non-PSD meteorological monitoring at the proposed mine tailings storage facility site	59° 54' N 155° 29' W 2,300 feet	Aug. 1, 2007 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature
Pebble 6	PSD quality meteorological monitoring for proposed mine site	59° 54' N 155° 12' W 800 feet	Jan. 1, 2008 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure Precipitation Evaporation
Pebble Port	PSD quality meteorological monitoring at a proposed port site	59° 39' N 153° 28' W 40 feet	Aug. 1, 2005 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure
Williamsport	PSD quality meteorological monitoring at a proposed port site	59° 41' N 153° 38' W 40 feet	Jan. 1, 2008 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure
North Head	PSD quality meteorological monitoring at a proposed port site	59° 37' N 153° 34' W 90 feet	Jan. 1, 2008 – Dec. 31, 2008	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure

[1]Each PSD station measures winds at approximately 10-meters height and is operated in accordance to *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Non-PSD stations measure wind at 3-meters height and are operated primarily for engineering design.

Figure B1. Pebble Project Deposit Area Meteorological Station Locations

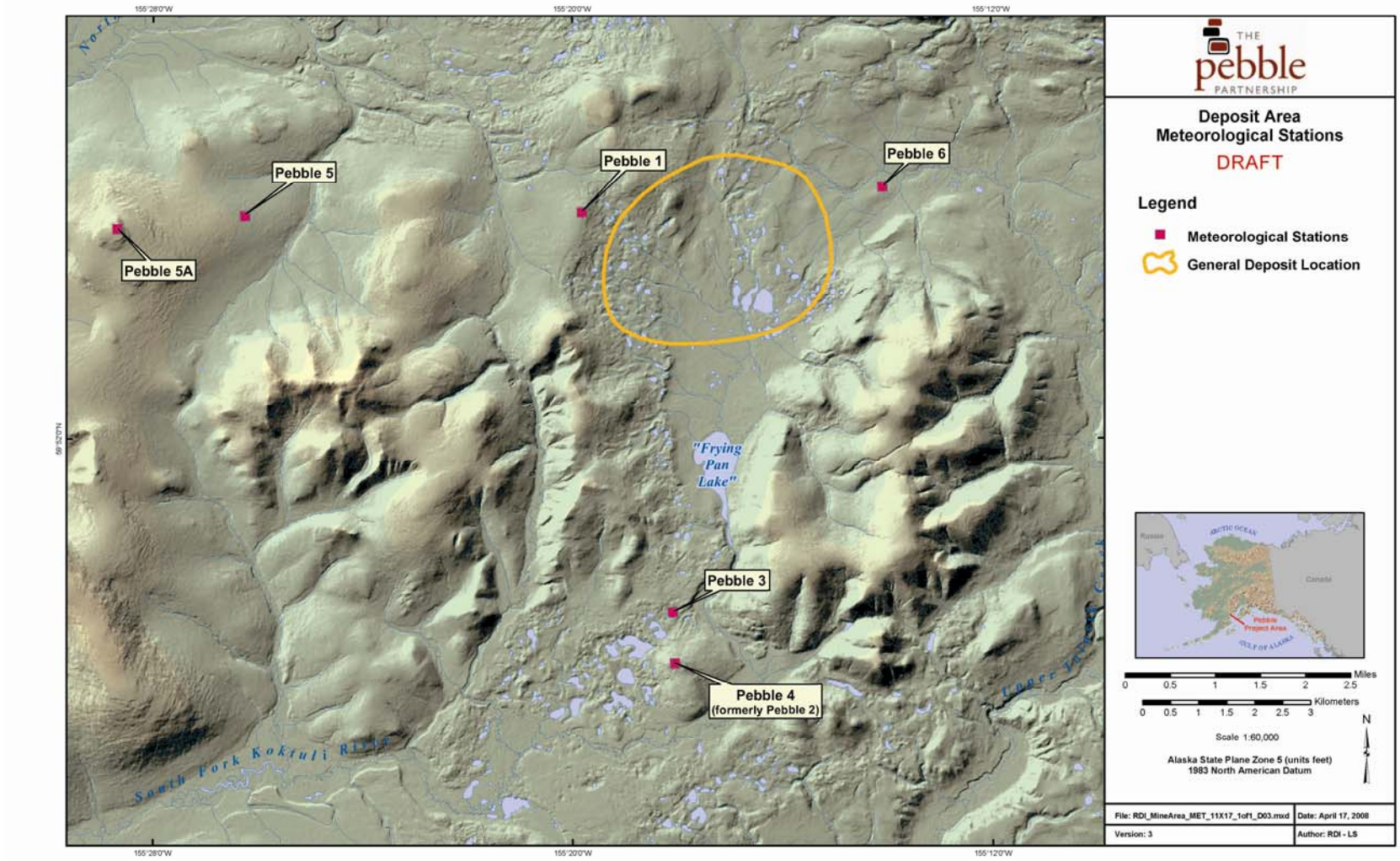


Figure B2. Pebble 1 Meteorological Station Site Map

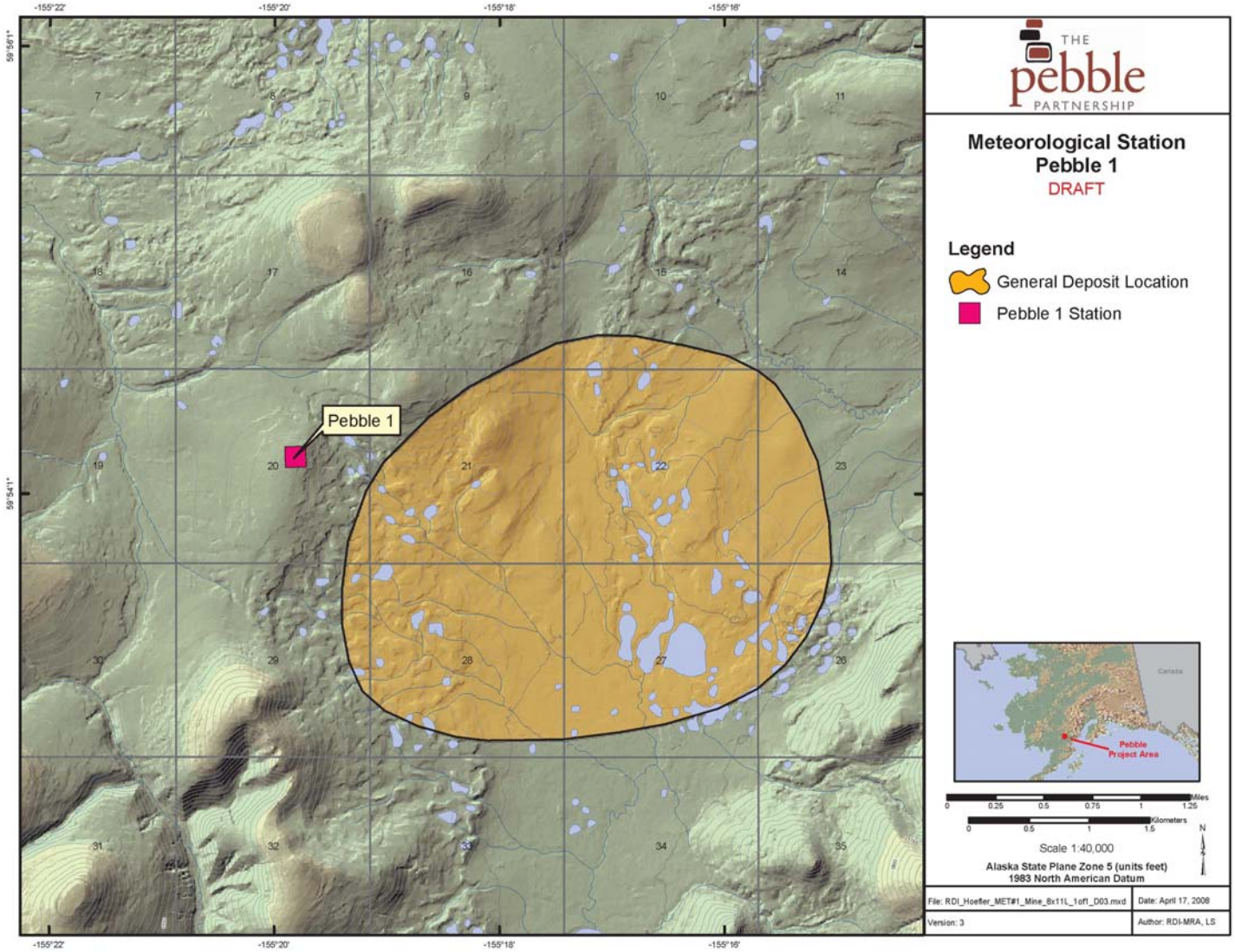


Figure B3. Pebble 4 Meteorological Station Site Map

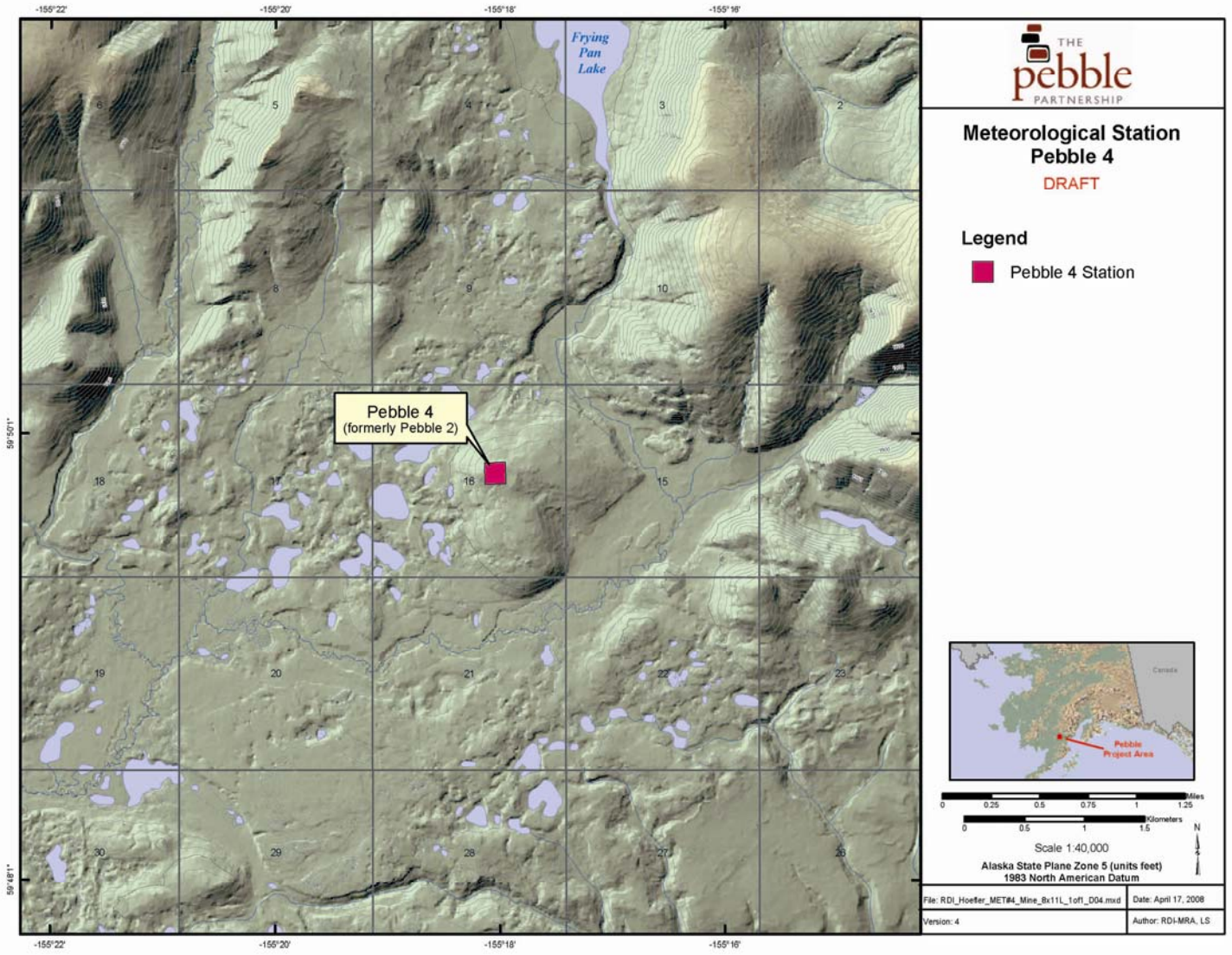


Figure B4. Pebble 5 Meteorological Station Site Map

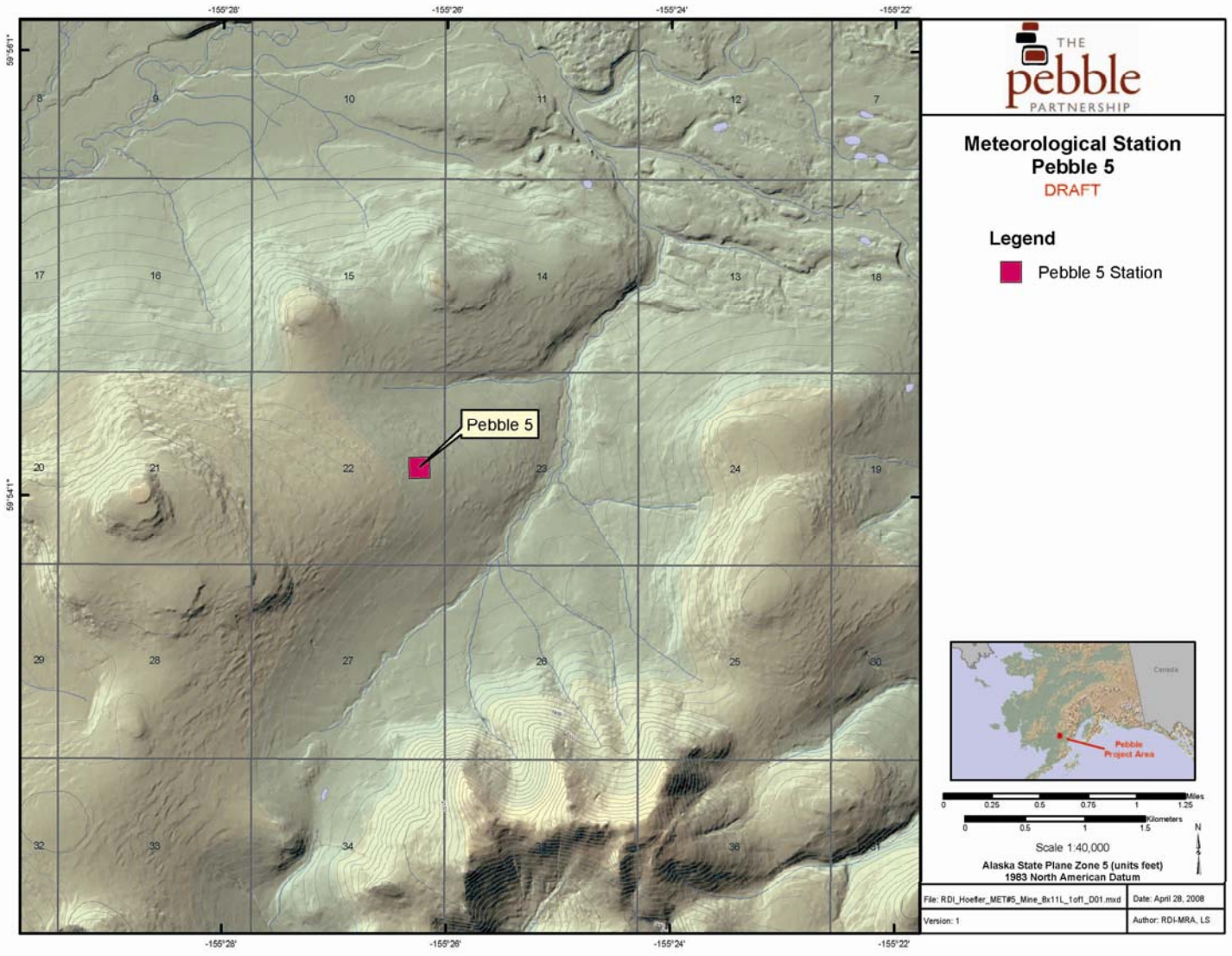


Figure B5. Pebble 6 Meteorological Station Site Map

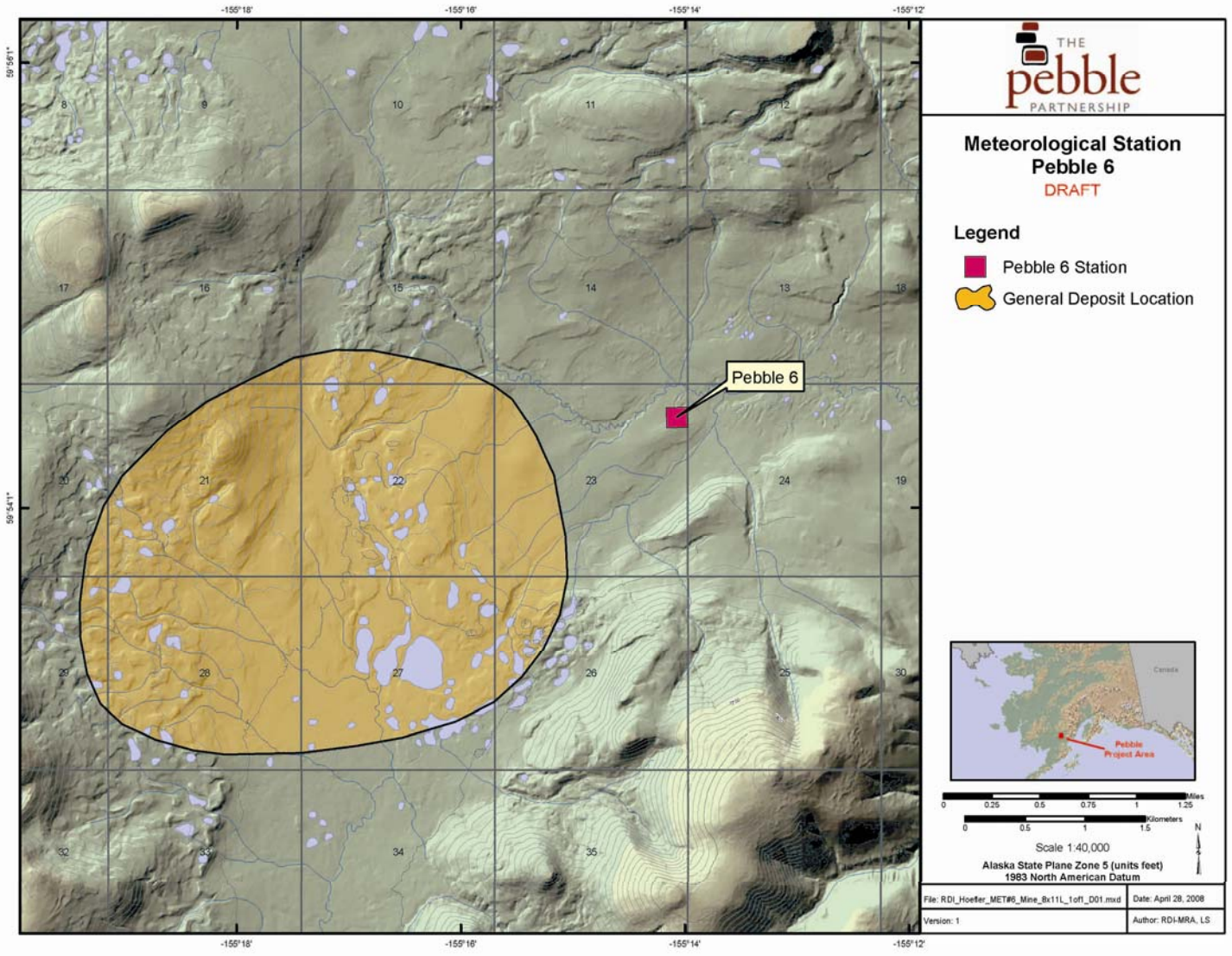


Figure B6. Pebble 1 Meteorological Station

North to Station

South to Station

West to Station

East to Station

Figure B7. Area Surrounding the Pebble 1 Meteorological Station

North from Station

South from Station

West from Station

East from Station

Figure B8. Pebble 4 Meteorological Station

North to Station

South to Station

West to Station

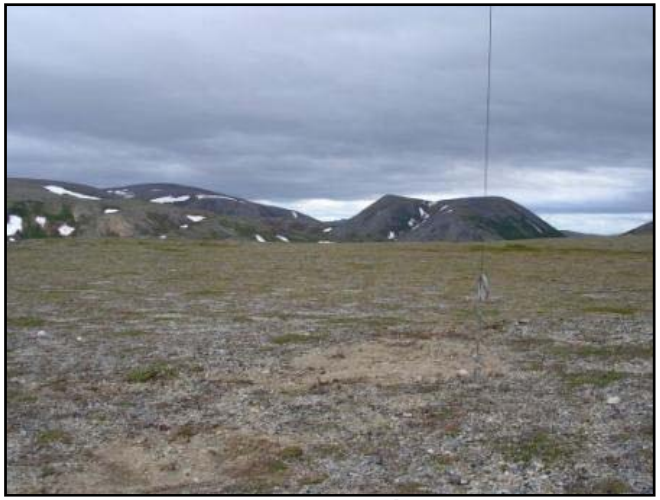
East to Station

Figure B9. Area Surrounding the Pebble 4 Meteorological Station

North from Station

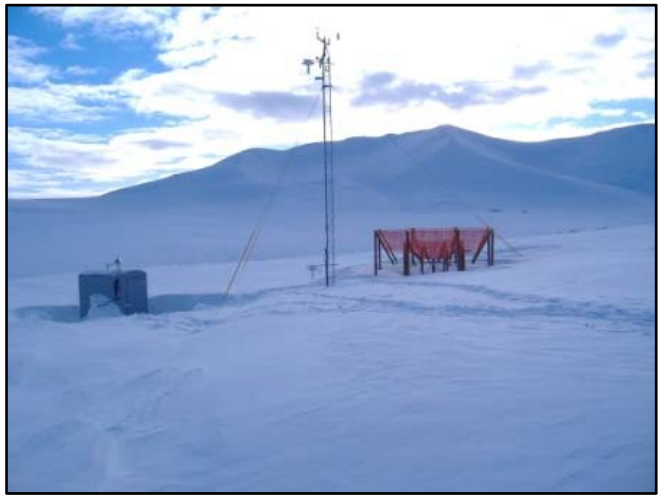
South from Station

West from Station



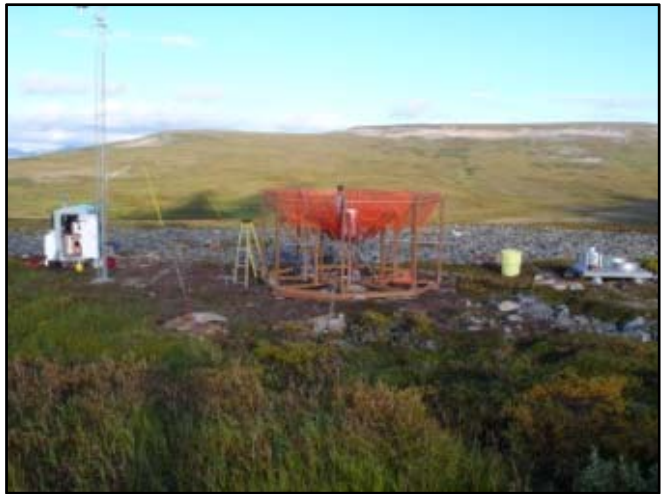
East from Station

Figure B10. Pebble 5 Meteorological Station

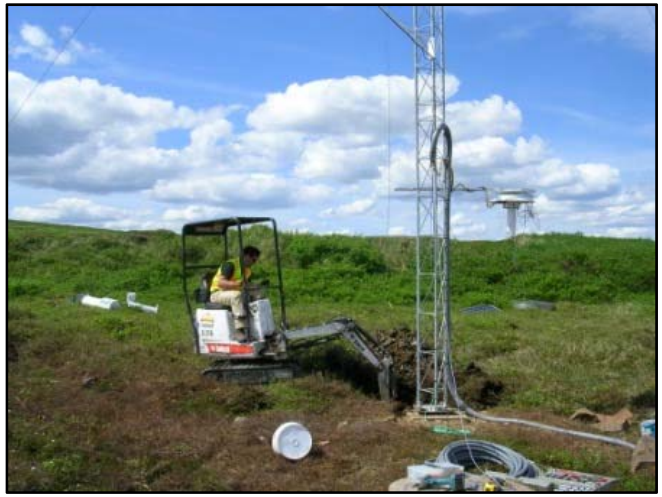


North to Station

South to Station



West to Station



East to Station

Figure B11. Area Surrounding the Pebble 5 Meteorological Station

North from Station

South from Station

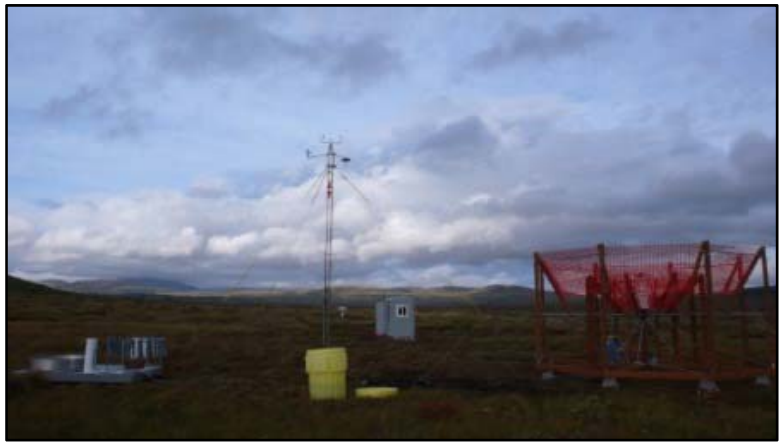
West from Station

East from Station

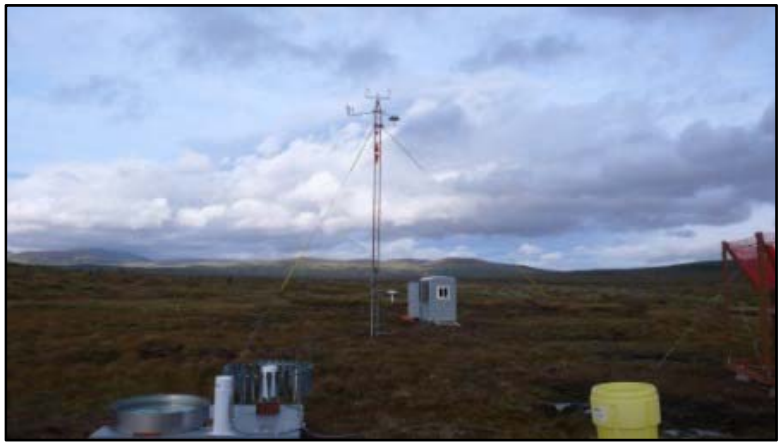
Figure B12. Pebble 6 Meteorological Station

North to Station

South to Station



West to Station

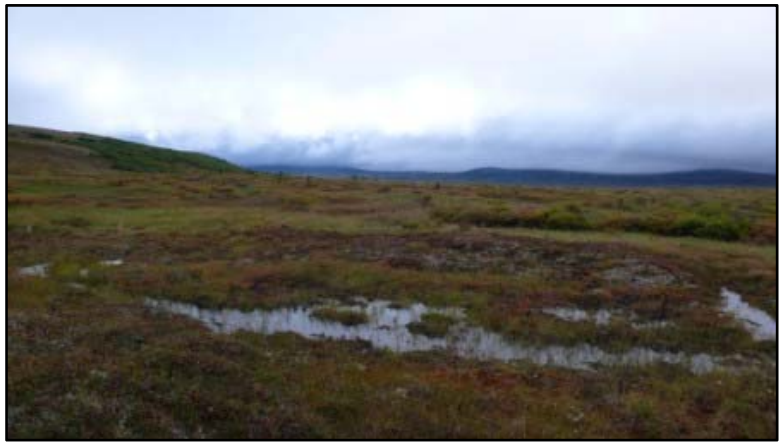


East to Station

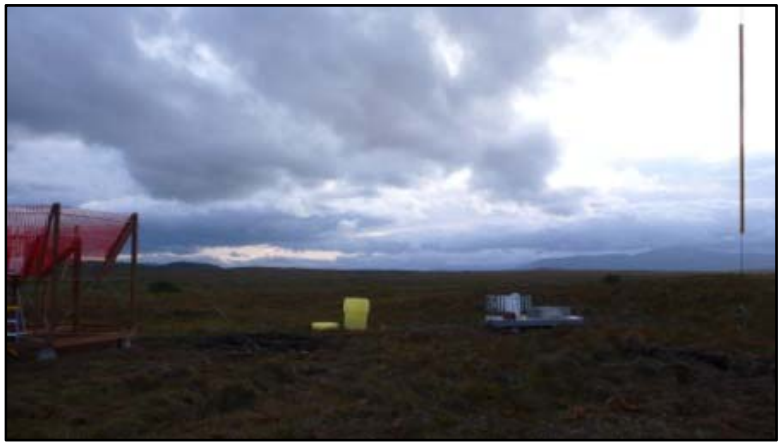
Figure B13. Area Surrounding the Pebble 6 Meteorological Station

North from Station

South from Station



West from Station



East from Station

Figure B14. Pebble Project Port Area Meteorological Station Map

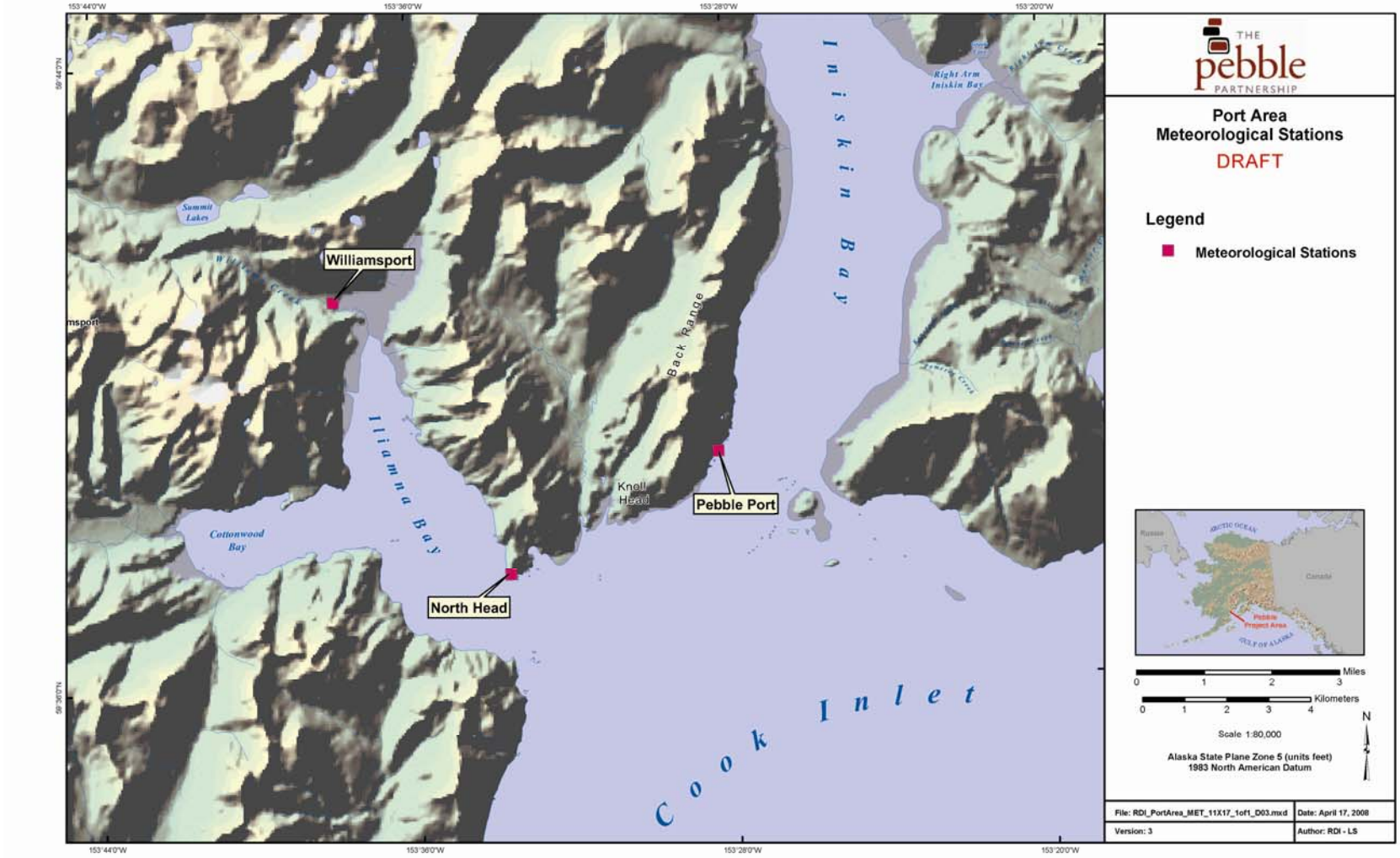


Figure B15. Pebble Port Meteorological Station

North to Station

South to Station

West to Station

East to Station

Figure B16. Area Surrounding the Pebble Port Meteorological Station

North from Station

South from Station

West from Station

East from Station

Figure B17. Williamsport Meteorological Station

North to Station

South to Station

West to Station

East to Station

Figure B18. Area Surrounding the Williamsport Meteorological Station

North from Station

South from Station

West from Station

East from Station

Figure B19. North Head Meteorological Station

North to Station

South to Station

West to Station

East to Station

Figure B20. Area Surrounding the North Head Meteorological Station

North from Station

South from Station

West from Station

East from Station

B2. Sampling Methods Requirements

Measurements will be performed using appropriate monitoring methods to ensure that the data are representative of actual conditions. The following sections address the methods to be used throughout the Pebble Project meteorological monitoring program, instrument installation, and the operational environment of the instruments.

B2.1 Reference and Equivalent Methods

Sensors for the measurement of wind speed, wind direction, ambient temperature, vertical temperature difference, barometric pressure, relative humidity, solar radiation, precipitation, and evaporation will be used to collect meteorological data. Table B2 lists the sensors that will be used, in addition to the manufacturers' specifications and the recommended performance specifications stated in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). These sensors will be continuously operated throughout this meteorological program.

Ambient temperature sensors will be mounted at 2 and 10 meters above ground level and used to measure vertical temperature difference, ΔT ("Delta T"). Two collocated wind speed and wind direction sensors will be mounted at 10 meters above ground level. The two wind measurement systems will include: (1) Climatronics F460 sensors as the primary wind sensors, and (2) RM Young 05305-AQ wind monitors as the secondary or back-up wind sensors. These dual wind sensors will provide redundancy in the case of data loss. Solar radiation, relative humidity, and barometric pressure measurements will be measured at 4, 2, and 1.5 meters above ground level, respectively. At the Pebble 1, Pebble 4, Pebble 5, and Pebble 6 stations, the evaporation gauge will be mounted on a leveled deck and surrounded with fencing to avoid animal disturbance. The Pebble 1, Pebble 4, Pebble 5, and Pebble 6 station precipitation gauges will be mounted inside Wyoming-type (see Figure B4) and Alter Shield-type wind screens to prevent blowing snow and excessive winds from causing spurious readings and to improve catch efficiency. Complete descriptions of sensor audit and calibration methods are located in Appendix C.

Table B3 lists the sampling and averaging times for all of the meteorological variables that will be collected throughout this project. Wind speed, wind direction, temperature, solar radiation, evaporation pan level, and relative humidity will be sampled every second, and will be used to determine the mean hourly values of the measured parameters. Discrete precipitation values will be recorded to the datalogger each time the precipitation sensor detects a signal, and subsequently processed to provide measurements of total precipitation per hour. In addition, instantaneous measurements of barometric pressure will be sampled once every hour.

Table B2. Summary of Meteorological Sensors and Performance Specifications

Meteorological Parameter	Measurement Method	Sensor Characteristics	Manufacturer Specification	Guidance Document
Wind Speed - Primary (Climatronics F460)	Three-cup anemometer	Max Operating Range	0 - 65 m/s	0 - 50 m/s
		Starting Speed	0.22 m/s	0.5 m/s
		Accuracy	± 0.07 m/s or 1%	± 0.2 m/s + 5%
		Temperature Range	-40 ºC to +60 ºC	Not Specified
		Distance Constant	Less than 4.0 m (13.1 ft)	5 m
		Measurement Resolution	0.01 m/s	0.1 m/s
Wind Direction - Primary (Climatronics F460)	Precision low-torque potentiometer	Azimuth	0 - 360º	Not Specified
		Starting Speed[1]	0.22 m/s	0.5 m/s
		Accuracy	± 2º	± 5º
		Damping Ratio[1]	>0.4	0.4 to 0.7
		Delay Distance	< 1 m (3.3 ft)	5 m
		Temperature Range	-40 ºC to +60 ºC	Not Specified
		Measurement Resolution	0.1º	1.0º
Wind Speed - Secondary (RM Young 05305-AQ)	Propeller type anemometer	Max Operating Range	0 - 40 m/s	0 - 50 m/s
		Starting Speed	0.4 m/s	0.5 m/s
		Accuracy	± 0.2 m/s or 1%	± 0.2 m/s + 5%
		Temperature Range	-50 ºC to +50 ºC	Not Specified
		Distance Constant	2.1 m	5 m
		Measurement Resolution	0.01 m/s	0.1 m/s
Wind Direction - Secondary (RM Young 05305-AQ)	Precision low-torque potentiometer	Azimuth	0 - 360º	Not Specified
		Starting Speed	0.5 m/s	0.5 m/s
		Accuracy	± 3º	± 5º
		Damping Ratio	>0.4	0.4 to 0.7
		Delay Distance	1.2 m	5 m
		Temperature Range	-50 ºC to +50 ºC	Not Specified
		Measurement Resolution	0.1º	1.0º
Ambient Temperature and Δ T Met One 062-MP	Solid state thermistor	Accuracy	± 0.05 ºC	± 0.1 ºC
		Time Constant	3.6 sec	1 min
		Temperature Range	-50 ºC to +50 ºC	-40 ºC to +60 ºC
Solar Radiation (Li-Cor LI200X)	Silicon photovoltaic detector	Accuracy	± 5 %	± 5 % of observed
		Time Constant	1 sec	5 sec
		Spectral Response[2]	400 nm to 1,100 nm	285 nm to 2,800 nm
		Temperature Range	-40 ºC to +65 ºC	-20 ºC to +40 ºC
Barometric Pressure (Vaisala PT101B)	Silicon capacitive absolute pressure sensor	Accuracy	± 0.5 mb	± 3 mb
		Temperature Range	-40 ºC to +60 ºC	Not specified
		Measurement Resolution	< 0.5 mb	0.5 mb
		Measurement Range	600 – 1,060 mb	Not specified

[1] At 10º initial angle of attack

[2] Guidance document allows photovoltaic pyranometers when data will be used to estimate stability.

Table B2 (Continued). Summary of Meteorological Sensors and Performance Specifications

Meteorological Parameter	Measurement Method	Sensor Characteristics	Manufacturer Specification	Guidance Document
Relative Humidity (Vaisala HMP45AC)	Capacitance change of a polymer thin film capacitor	Accuracy	± 2 % RH	± 1.5ºC [3]
		Time Constant	15 sec	30 min
		Temperature Range	-40 ºC to +60 ºC	-30 ºC to +30 ºC
		Measurement Resolution	0.1 % RH	0.1 ºC [3]
		Measurement Range	0-100% RH	-30 ºC to +30 ºC
Precipitation (ETI NOAH II)	Pressure of water column above a load cell mechanism	Accuracy	± .254 mm	± 0.5 mm
		Temperature Range	-30 ºC to +50 ºC	Not specified
		Measurement Resolution	± 0.254 mm	0.3 mm
		Measurement Range	0 to 12 in	Not specified
Evaporation (Nova Lynx 255-100)	Change in pressure head determined by float mechanism	Accuracy	± 0.25% over 10" range	Not specified
		Time Constant	1 sec	
		Temperature Range	0 ºC to 60 ºC	
		Measurement Resolution	1.0 mm	
		Measurement Range	3 to 10 in	

[3] Guidance document specifies values for dew point, not relative humidity.

Table B3. Sampling and Averaging Times for Meteorological Parameters

Meteorological Parameter	Sampling time	Averaging time
Wind Speed	1 sec	1 hr
Wind Direction	1 sec	1 hr
Wind Sigma	1 sec	1 hr
Temperature	1 sec	1 hr
∆ Temperature	1 sec	1 hr
Solar Radiation	1 sec	1 hr
Relative Humidity	1 sec	1 hr
Evaporation	1 sec	1 min
Precipitation[1]	n/a	n/a
Barometric Pressure[2]	1 hr	n/a

[1] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.
[2] Instantaneous pressure measurements are sampled once per hour.

B2.2 Environmental Controls

Weatherproof enclosures and/or structures will be installed at each monitoring site for protection of the datalogger, batteries, modem, and barometric pressure sensor. Each monitoring station will be properly grounded to prevent damage from possible lightning strikes. To assure accurate temperature data, each temperature sensor will be mounted within identical fan-aspirated solar radiation shields.

B3. Sample Handling and Custody

Not applicable. No physical samples will be taken as part of this project.

B4. Analytical Methods Requirements

The meteorological sensors to be used for this project meet the specifications and recommendations in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005) (see Table B2).

B5. Quality Control

Quality Assurance/Quality Control (QA/QC) procedures are required for this project to ensure that the collected meteorological data meet standards of reliability and accuracy. Quality control for this project will follow EPA PSD monitoring requirements presented in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005) and *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)* (EPA 450/4-87-007).

All monitoring equipment will be acquired from manufacturers whose equipment meets EPA meteorological monitoring guidelines. In no case will inferior equipment be used. The Critical Validation Criteria Table (Table B4) outlines criteria deemed critical to maintaining the integrity of a sample or group of samples. Data that do not meet each and every criterion on the Critical Validation Criteria Table will be invalidated unless compelling reason and justification exist for not doing so. The samples for which one or more of these criteria are not met are invalid unless proven otherwise. The cause for not operating in the acceptable range for each violated criteria will be investigated and future occurrences avoided reducing the likelihood that additional samples will be invalidated.

The QA/QC Operational Evaluations Table (Table B5) outlines criteria that are important for maintaining and evaluating the quality of the data collection system. Violation of a criterion or a number of criteria may be cause for invalidation of the data. The decision to invalidate data will consider other quality control information that may or may not indicate the data are acceptable. Therefore, a sample or group of samples for which one of these criteria is not met is suspect unless other quality control information demonstrates otherwise. The reason for not meeting the criteria will be investigated, mitigated, and/or justified.

The Systematic Issues Table (Table B6) outlines criteria important for the correct interpretation of the data but that do not usually impact the validity of a sample or group of samples. For example, data quality objectives are included in this table. Not meeting these data quality objectives does not invalidate any of the samples, but may impact the error rate associated with the attainment/non-attainment decision.

Table B4. Meteorological Sensors QA/QC Critical Validation Criteria

Meteorological Sensors Critical Validation Criteria			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Standard Reporting Units			
Wind speed	m/s	all data	EPA-454/R-99-005
Wind direction	0-360 degrees		
Temperature	Celsius		
Delta temperature	Celsius		
Barometric pressure	mb		
Solar radiation	W/m^2		
Equipment			
Wind speed sensor	Meets recommended specs in guidance	Purchase	EPA-454/R-99-005
Wind direction sensor			
Temperature sensor			
Delta temperature sensor			
Barometric pressure sensor			
Solar radiation sensor			
Completeness			
Annual - all parameters	90% hourly data capture/calendar qtr	1 year (all calendar qtrs)	EPA-450/4-87-007
Hourly avg.-all parameters	>45 min/hourly average	hourly average	
Calibration			
All sensors calibrated by manufacturer	According to manufacturer specs and within EPA accuracy criteria	Every six months	EPA-454/R-99-005
Performance Audit and Calibration Transfer Standards			
Audit and Calibration Standards	Audit Std independent from Cal Stds	Within std certification freq	EPA-454/R-99-005
Wind speed	Co-located transfer standard	Every 6 months	
WS bearing torque meter			
Wind direction			
WD bearing torque meter			
Temperature			
Delta temperature			
Barometric pressure			
Solar radiation			
Assessments			
Accuracy **Performance Evaluation**	All sensors	Every six months and within 30 days of site start-up	EPA-454/R-99-005

Table B5. Meteorological Sensors QA/QC Operational Evaluations

Meteorological Sensor Operational Evaluations			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Range Checks			
Data Screening Criteria	EPA Suggested Criteria		(EPA-454/R-99-005)
Wind direction	$0^o \leq WD \leq 360^o$	All data	Section 8.6, Table 8-4
	WD varies ≥ 1^o/3 consecutive hrs.		
	WD varies ≥ 10^o/18 consecutive hrs.		
Wind speed	0 m/s ≤ WS ≤ 25 m/s		
	WS varies ≥ (0.1m/s)/3 consecutive hrs.		
	WS varies ≥ (0.5m/s)/12 consecutive hrs.		
Temperature	local record low < T < local record high		
	T < 5^oC from previous hour		
	T varies > 0.5^oC for 12 consecutive hrs		
Temperature difference	daytime $\Delta T < 0.1^o$C/m		
	nighttime $\Delta T > -0.1^o$C/m		
	$\Delta T > -3.0^o$C, $\Delta T < 5.0^o$C		
Barometric pressure	pressure < 1060 mb (sea level)		
	pressure > 940 mb (sea level)		
	pressure varies > 6mb/3hours		
Solar radiation (SR)	nighttime SR = 0		
	daytime SR < max SR for date/latitude		
Calibrations			
All sensors calibrated by manufacturer	According to manufacturer specs	Every six months	EPA-454/R-99-005
WD alignment	WD alignment to true N verified by TSN		
Quality Control (QC) Checks			
Visual inspections			
Wind speed sensor	Moving freely, no visual damage	Each site visit	EPA-454/R-99-005
Wind direction sensor	Moving freely, no visual damage		
Temperature sensor	No visual damage or obstruction		
Delta temperature sensor	No visual damage or obstruction		
Barometric pressure sensor	No visual damage or obstruction		
Solar radiation sensor	No visual damage or obstruction		
Time and Date DAS	DAS time/date agree with NIST time		

Table B5 (Continued). Meteorological Sensors QA/QC Operational Evaluations

Meteorological Sensor Operational Evaluations			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Assessments			
Systems Audit			
Thorough review of entire monitoring system including field systems, data management, and data reporting.		1/year and < 30 days of site start-up	EPA-454/R-99-005
Performance Evaluation			
Wind speed	+/- 0.2 m/s +/- 5%	Every six months and <30 days of site start-up	EPA-454/R-99-005
WS bearing torque threshold	<= 0.5 m/s		
Wind direction	+/- 5 degrees		
WD linearity crossover	+/- 3° (included in +/- 5° above)		
WD bearing torque threshold	<= 0.5 m/s		
Temperature	+/- 0.5 Celsius		
Delta temperature	+/- 0.1 Celsius		
Barometric pressure	+/- 3 mb		
Solar radiation	+/- 5% of Observed		

Table B6. Meteorological Sensors QA/QC Systematic Issues

Meteorological Sensor Systematic Issues			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Standard Reporting Units			
Wind speed	m/s	all data	EPA-454/R-99-005
Wind direction	0-360 degrees		
Temperature	Celsius		
Delta temperature	Celsius		
Barometric pressure	mbar		
Solar radiation	W/m2		
Assessments			
Systems Audit			
Thorough review of entire monitoring system (field, lab, data, ect.)	In compliance with approved QAPP	Once per year and less than 30 days within site start-up	EPA-454/R-99-005

B6. Instrument/Equipment Testing and Inspection/Maintenance

B6.1 Acceptance Testing

Prior to installation, all equipment will be visually inspected to ensure no physical damage exists. After installation, and prior to the beginning of the monitoring period, sensors will be calibrated according to the procedures stated in their respective operating manuals. Acceptance testing procedures will be documented on the appropriate calibration forms (provided in Appendix C). To ensure that the sensors continue to properly operate during the monitoring period, calibration checks of the instruments will be conducted semiannually as outlined in Section C1.1 of this QAPP.

B6.2 Site Surveillance and Equipment Inspection and Maintenance

HCG station operators will visit the monitoring station to inspect the condition of the monitoring equipment every 4 to 8 weeks and as needed. During each visit the following tasks will be conducted:

- Check the tower and sensors for signs of storm damage and/or vandalism;
- Observe the sensors to determine if the units appear to be operational;
- Verify that the wind speed and wind direction sensors are moving freely (which is especially important during periods of freezing rain or snow); and
- Clear snow, ice, or accumulated water from surfaces of sensors.

A check list is used to document work performed during the surveillance visits and will be filed with the site visit memo (Appendix B). In the event that station repairs or modifications become necessary, the HCG project manager will dispatch HCG field personnel to accomplish the necessary work. Table B7 is a list of spare parts for this project that will be stored at the HCG Anchorage office and, in some cases, on site to minimize periods of invalid data collection. HCG staff will review data from the stations at least once every work day to check that meteorological sensors and data acquisition are functioning properly.

B6.3 Preventive Maintenance and Corrective Actions

The procedures and schedule for preventive maintenance outlined in the standard operating procedure (SOP) will be followed for this monitoring program (Appendix C). As needed, the spare parts and/or sensors will be dispatched to the monitoring station for repair or sensor replacement by qualified HCG personnel (see Section A4, Organization Chart).

Table B7. List of Meteorological Equipment Spare Parts

Meteorological Parameter	Manufacturer	Model	Spare Parts
Wind Speed	Climatronics/ RM Young	F460/ 05305AQ	Extra sensor, cups[1], propeller[1], and bearings
Wind Direction	Climatronics/ RM Young	F460/ 05305AQ	Extra sensor, vane[1], and bearings
Ambient Temperature	Met One	062-MP	Spare sensor
Delta Temperature	Met One	062-MP	Pair of matched spare sensors
Barometric Pressure	Vaisala	PT101B	Spare sensor
Relative Humidity	Vaisala	HMP45AC	Spare sensor
Solar Radiation	Li-Cor	LI200X	Spare sensor
Precipitation	ETI	NOAH II	Spare sensor and recommended parts
Evaporation	NovaLynx	255-100	Spare sensor and recommended parts

[1] Stored at HCG Anchorage office and at the monitoring site.

B7. Instrument/Equipment Calibration and Frequency

B7.1 Calibration Frequency

Sensors will be calibrated according to the manufacturers' recommendations by HCG personnel immediately prior to the project start date and on a semiannual basis thereafter. Associated calibration forms, methodology, and calibration SOP are presented in Appendix C.

B7.2 Calibration Equipment

All instruments used for calibrating meteorological sensors will be traceable to a National Institute of Standards and Technology (NIST) transfer standard. Calibration certifications will remain on file at the HCG main office. Specific calibration equipment used, NIST traceability standards, equipment certification frequency, equipment accuracy, and calibration range for each meteorological parameter measured are provided in Table B8. The specifications stated in *Quality Assurance Handbook for Air Pollution Measurement Systems* (EPA-600/R-94/038c, September 1994) and *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005), for the calibration parameters are referenced in Table B8 to show compliance with EPA standards.

Table B8. List and Specifications for Calibration Equipment

Meteorological Instrument	Calibration Standard	Calibration Standard Characteristics	Manufacturer Specification	Guidance Document
Wind Speed (Climatronics F460 and RM Young 05305-AQ)	RM Young 18801 Anemometer Drive	Range of calibration	0 to 10,000 rpm	0, 2, 5, 10 m/s
		Range of standard	0 to 10,000 rpm	Not Specified
		Accuracy of standard	1.0 rpm	Not Specified
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via RM Young certification	Not Specified
Wind Direction (Climatronics F460 and RM Young 05305-AQ)	Climatronics F460/ RM Young linearity Test Fixture	Range of calibration	0 to 360º	
		Range of standard	0 to 360º	
		Accuracy of standard	0.75º	
		Calibration Frequency[1]	n/a	n/a
		NIST traceability method		
Ambient Temperature and Delta T (Met One 062-MP)	Control Company Traceable 4000 series thermometer	Range of calibration	-20º to 400º C	-40º to 60º C
		Range of standard	-50º to 150º C	Not Specified
		Accuracy of standard	± 0.001º C	± 0.1 ºC
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via Control Co. certification	Not Specified
Solar Radiation (LiCor LI200X)	Co-located Eppley PSP	Range of calibration[3]	0 to 2000 w/m^2	Not Specified
		Spectral Response[4]	285 to 2800 nm	285 to 2800 nm
		Accuracy of standard	± 0.5 %	± 5 % of observed
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	To world radiometric reference via calibration with Eppley Cavity Pyrheliometer	To world radiometric reference
Barometric Pressure (Vaisala PT101B)	Co-located Pretel AltiPlus A2	Range of calibration	Ambient condition check (ACC)	ACC
		Range of standard	728 to 1050 mb	Not specified
		Accuracy of standard	± 1 mb	0.2 %
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via Chinook Engineering certification to Ruska Deadweight tester	Not specified
Relative Humidity (Vaisala HMP45AC)	Co-located Vaisala HMI41	Range of calibration	Ambient condition check (acc)	ACC
		Range of standard	0-100% RH	Not Specified
		Accuracy of standard	± 2 % RH	± 1.5ºC [5]
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via Vaisala Labs certification with Hyrgo M-3 dewpoint meter	Not specified
Precipitation (ETI NOAH II)	NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator	Range of calibration	24.66 mm/hr	< 25.0 mm/hr
		Range of standard	0 to 940 ml	n/a
		Accuracy of standard	n/a	Not specified
		Calibration Frequency[1]		n/a
		NIST traceability method		
Evaporation (Nova Lynx 255-100)	Graduated Cylinder	Range of calibration	3"-9" of H_20 in gauge	Not specified
		Range of standard	n/a	
		Accuracy of standard		
		Calibration Frequency[1]		
		NIST traceability method		n/a

Note: All monitoring instrument calibrations performed every six months.
[1] Refers to calibration frequency of calibration standard/instrument.
[2] Guidance document specifies standard calibration per manufactures' specifications.
[3] Calibration range for solar radiation will be specific to the time and day of audit.
[4] Guidance document allows use of photovoltaic pyranometers when data will be used to estimate stability.
[5] Guidance document specifies values for dew point, not relative humidity.

B8. Inspection/Acceptance of Supplies and Consumables

All spare parts inventories will be kept up to date by the data manager. Each new spare part will be accepted with the same procedures mentioned in Section B6. Serial numbers for each spare sensor will be recorded by either the data manager or technicians and filed with the data manager. Upon deployment of a replacement part/sensor by site technicians, the make, model, and serial number will be recorded on a Site Visit and System Check form (see Appendix B) or an equivalent site visit memorandum. Each replacement sensor will be calibrated and a performance audit will be completed by technicians to ensure that the sensor is properly functioning. The make, model, and serial number of the removed sensor, as well as replacement sensor information, will also be recorded on the performance audit form provided in Appendix C.

Consumable supplies are not expected to be necessary for this project.

B9. Non-direct Measurements

B9.1 Climate History

The Iliamna airport provides the only known comprehensive climate data available near the Pebble Project area. The Pebble Project mine area stations are located approximately 17 miles northwest of the Iliamna airport and the Pebble Port station lies approximately 52 miles to the southeast. Figure B21 shows the daily extreme and average high and low temperatures recorded at Iliamna from November 10, 1939 through June 30, 2007. The mean temperature at Iliamna ranges from 3°C (37°F) in January to 30°C (56°F) in July. The record low of -44°C (-47°F) was measured on January 22, 1947 and the record high of 33°C (91°F) was measured on June 27, 1953.

Figure B22 shows the monthly mean precipitation for Iliamna compiled from measurements collected from November 11, 1939 through June 30, 2007. Iliamna experiences the most precipitation in August and September with monthly mean precipitation values of 4.62 inches (117 mm) and 4.32 inches (110 mm), respectively. April is typically the driest month and has a monthly mean of 1.08 inches (27 mm) of precipitation.

Figure B23 shows a wind rose based on data collected by the National Weather Service from January 1, 2005 to December 31, 2007 at the Iliamna airport. Prevailing winds typically blow from the north and east. Because the Pebble Project meteorological stations are positioned at significant distances away from the airport and sit at varying elevations relative to the Iliamna airport and each other, the monitoring sites are expected to experience somewhat different meteorological conditions.

Figure B21. Iliamna Daily Extreme and Average High and Low Temperatures

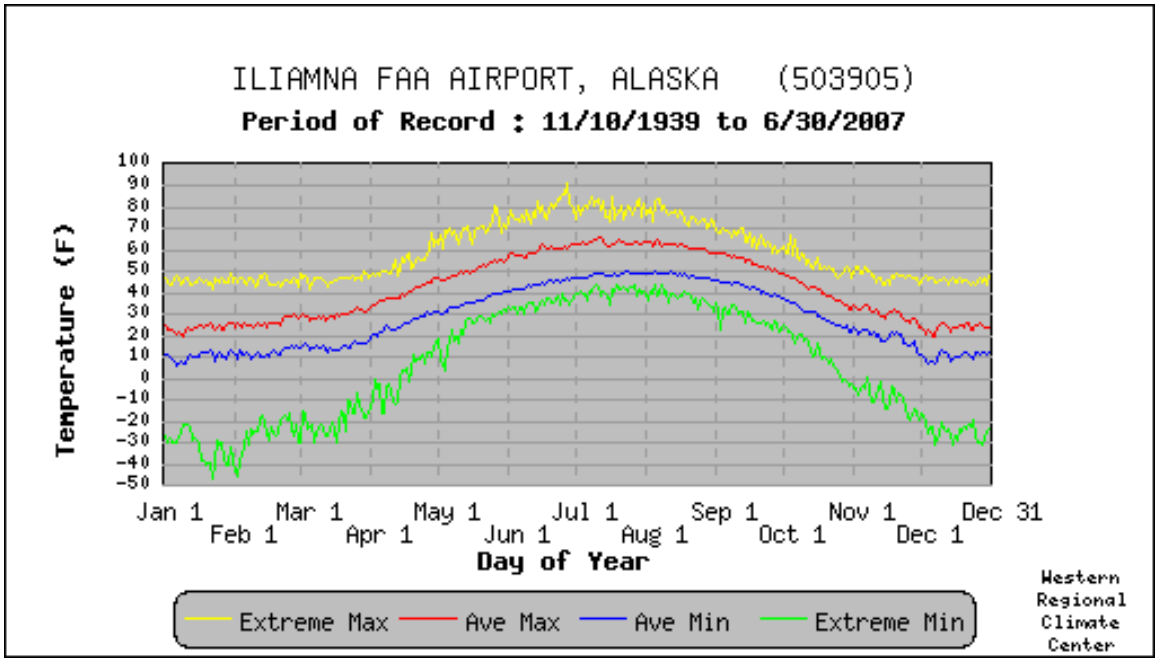


Figure B22. Iliamna Monthly Mean Precipitation

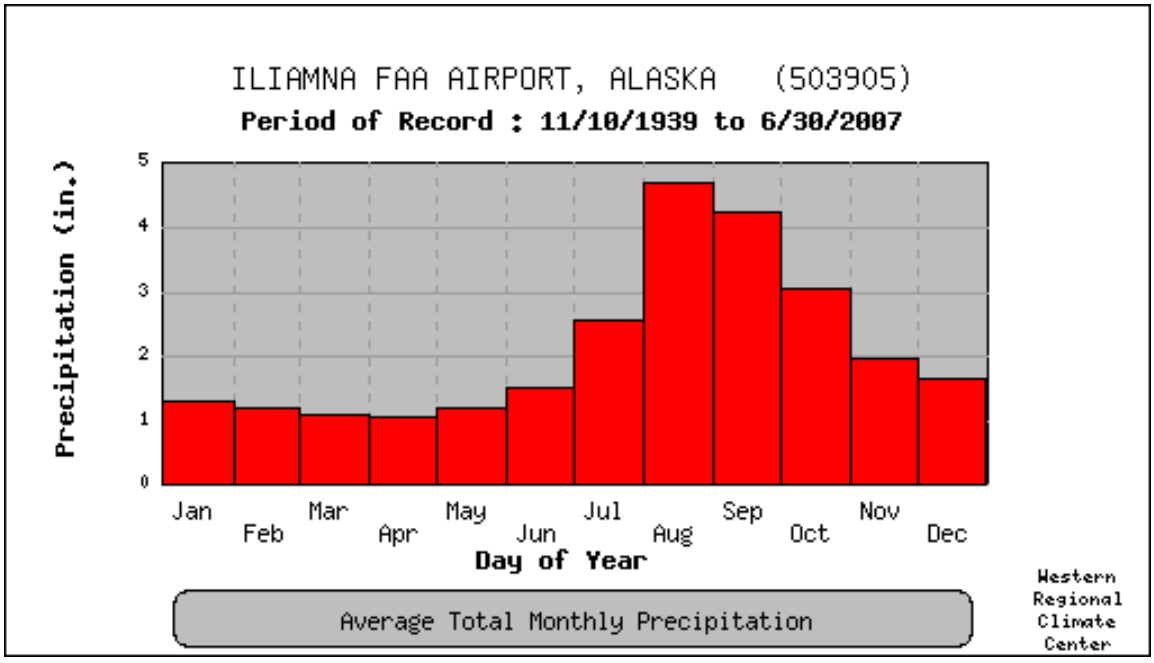
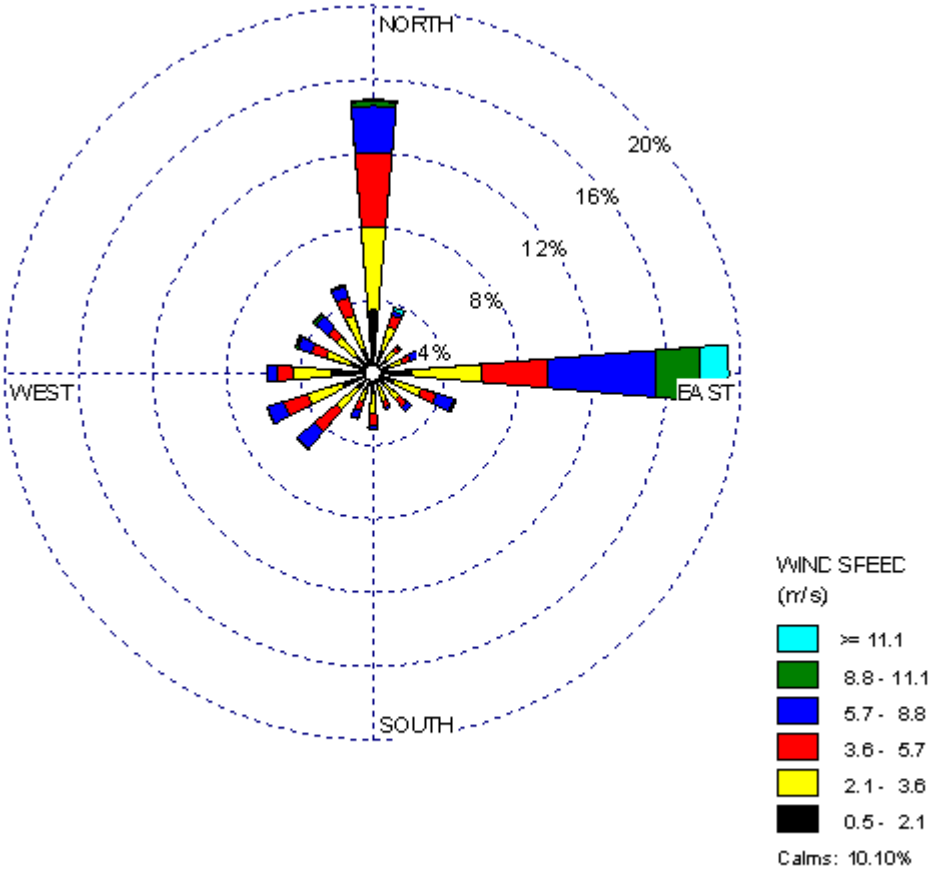


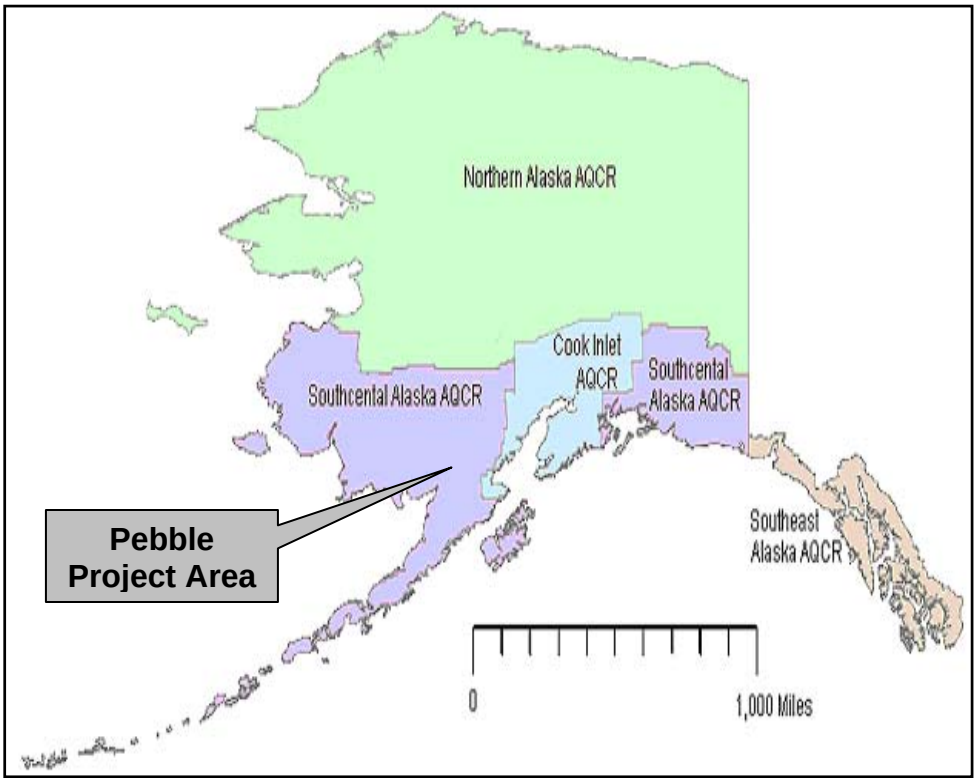
Figure B23. Iliamna Wind Rose



B9.2 Land Use

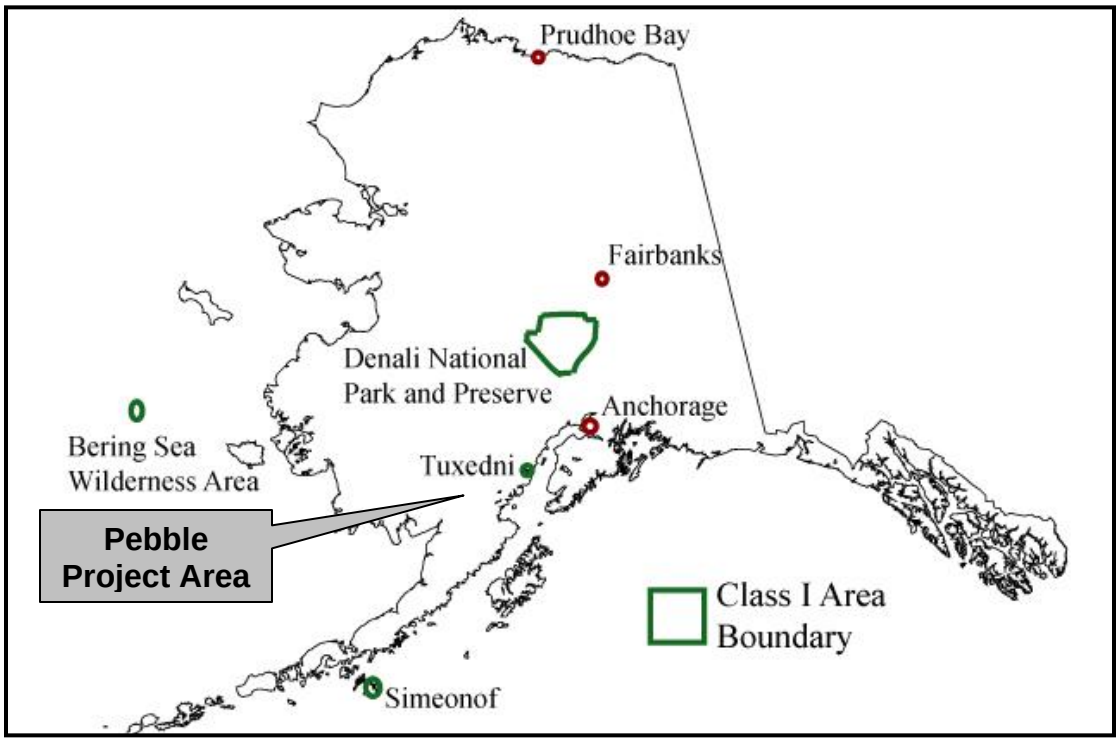
The Pebble Project study area is in a remote region of southwestern Alaska. The Pebble Port location lies within the boundaries of the Cook Inlet Air Quality Control Region (AQCR), as shown in Figure B24. The Pebble Project deposit area lies within the boundaries of the Southcentral AQCR, as shown in Figure B24.

Figure B24. Alaska Air Quality Control Regions



The map in Figure B25 displays the Class I areas in Alaska. The map reference to Denali National Park and Preserve is actually "Denali National Park including the Denali Wilderness but excluding the Denali National Preserve", as per 18 AAC 50.015. The Pebble Project area is within a Class II area and has been designated attainment or unclassifiable for all criteria pollutants. The Tuxedni Wilderness Area is the closest Class I area, and is approximately 50 miles away from the proposed Pebble Port site, and 90 miles away from the Pebble Project deposit area.

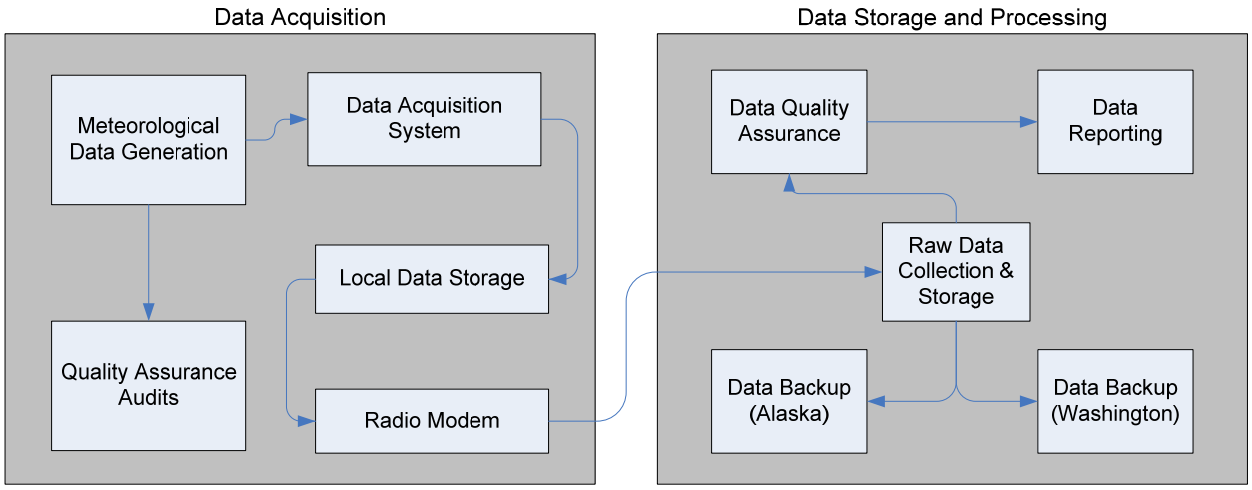
Figure B25. Alaska Class I Areas



B10. Data Management

The proper management of all data associated with this project is critical to assuring the quality and usability of the monitoring results. Therefore, procedures will be implemented to ensure adequate data acquisition, validation, transmission, reduction, reporting, and storage of electronic and hard copy data. Summaries of the procedures to be implemented in the field and in the laboratory for data management are provided in the following sections. Overall data processes illustrated in Figure B26.

Figure B26. Data Processes Flow Chart



B10.1 Data Acquisition

Data acquisition will include the daily collection of electronic data, the generation of hand-written or typed audit and calibration records, and the compilation of previously prepared records (e.g., NIST traceability records). Campbell Scientific CR1000 dataloggers will be used to collect and store the continuous meteorological data. Freewave wireless and SixNet telephone modems will be used to contact the stations remotely via a designated monitoring computer at the HCG Anchorage office. Station data will be downloaded on a daily basis. Field staff and the station auditor will generate written or typed records. These records will be kept according to the prescribed format. Additional records pertaining to this project that have been generated by other organizations will also be collected and stored at the HCG Anchorage main office as necessary.

B10.2 Data Validation

Meteorological data will be reviewed every work day by the HCG station operator or designated qualified personnel and screened using the recommended criteria in *Meteorological Monitoring Guidelines for Regulatory Modeling Applications* (EPA-454/R-99-005), Table 8-4. Site specific Microsoft Access databases and Excel spreadsheets will be used to store, review, and compare data to EPA critical criteria.

During each site visit, HCG Field Technicians will be responsible for verifying the condition of the monitoring site. All site visits will be documented by means of a site visit memo kept with the project files. Alternately, the site visit may be documented in a designated station log book. These field notes will include the following:

- Time, date, current meteorological conditions (e.g., temperature, barometric pressure, sky conditions), and personnel at the monitoring site;
- Activities completed during visit; and
- As-found and as-left observed conditions of monitoring site equipment.

Site audit and visit memo forms are found in Appendix C.

The data manager or their designee will review all records received from the field. Problems or irregularities in the records will be brought to the attention of HCG Field Technicians for further clarification. If the documentation is not sufficiently defensible, the affected data will be invalidated.

B10.3 Data Transmission

Meteorological data will be transmitted daily to the HCG Anchorage office. Collected data will be downloaded to HCG computers for daily data reviews and for data storage. Original forms, check lists, and other records will be stored upon receipt at the HCG main office until the end of the monitoring period. A description of the equipment implemented in the monitoring site telemetry is included in the above section B10.1.

B10.4 Data Reduction

All electronic calculations and statistical analyses will be performed using standard software packages (e.g., MINITAB, Excel, and WRPLOT view) that can be easily verified and audited. Preliminary data reduction to hourly data averages is performed by the datalogger.

B10.5 Data Reporting

Data generated for this project will be routinely summarized and presented to PLP as described in Section C2. Quarterly reports will be prepared and submitted to ADEC within 30 days of the completion of each monitoring quarter. Additionally, an annual data report will be prepared within 90 days upon completion of the monitoring year. The data will also be submitted to ADEC for review and approval in anticipation of using the meteorological data to meet the air dispersion modeling requirements for a minor source air construction permit application.

B10.6 Data Storage

All project documentation, records, data, and reports will be maintained at HCG for a period of at least five years from the completion of the project. Electronic data on the HCG servers are backed up at least once daily and will be archived at a minimum of two separate locations, as well as at the Washington site.

B10.7 Data Use in Modeling

The meteorological data collected during this project will be used for air dispersion modeling using EPA approved AERMOD and CALPUFF models.

C. Assessments and Oversight

C1. Assessments and Response Actions

Data Quality Assessments will be performed on all collected data. Data reviews will be conducted by HCG staff to determine whether the data are reasonable and representative through an independent audit program. Data that are determined to be unreasonable or unrepresentative will be identified, flagged, and discussed in the data reports. The independent audit program for the Pebble Project will consist of semi-annual performance audits and annual systems audits. The audits will be conducted by HCG staff and will be independent of the staff operating the monitoring network. In addition, audits will be conducted using equipment independent of that used for instrument calibrations. The auditor will use a pre-formatted audit form and follow established audit standard operating procedures provided in Appendix C.

C1.1 Performance Audits

Performance audits of the meteorological sensors will be conducted within thirty days of the project start, semi-annually thereafter, and within thirty days of project completion. Performance audits for meteorological sensors will be conducted by collocating independent meteorological sensors with those being used for the monitoring program. The audit sensors will be provided by the station auditor. Performance audits will serve the monitoring program with a measure of quality assurance for meteorological sensors and a means to produce a defensible data set. The performance audits will be conducted in accordance with the procedures outlined in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 8 (EPA-454/R-99-005). The QA auditor will conduct the performance audits. An outline for the audit equipment and procedures on all meteorological sensors used for this study is listed in Table C1.

C1.2 Systems Audits

In the *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 8 (EPA-454/R-99-005), and *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Section 7 (EPA-450/4-87-007), EPA recommends that a systems audit be conducted to assess compliance with established regulations governing the collection, analysis, validation, and reporting of meteorological monitoring for PSD. A systems audit is an independent review of program procedures and files to assess conformance to established plans, SOPs, and protocols (see Appendix C). Systems audits for this project will be conducted no later than 30 days after project startup and annually thereafter. The systems audit will evaluate the complete measurement system from data collection through data reporting. The evaluation will also include all off-site data handling and evaluate the management process.

The systems audit is also an on-site qualitative review of the operational procedures of the monitoring program. The audit will ensure that all procedures for the monitoring program (field operations, data reporting, and data management) are being followed and that the data being collected meet the DQOs for the program as described in Section A7. Items reviewed during the systems audit include:

- Quality assurance procedures and documentation;
- Station installation and operation procedures;
- Calibration procedures and documentation for monitoring equipment;
- Documentation of log books and data sheets;
- Completion and documentation of on-site quality assurance procedures; and
- Review of prepared data sets.

After completion of the audit, a debriefing will be conducted with the participants to discuss preliminary audit results. The results of this audit will then be formally compiled in an audit report with observations of strengths and deficiencies, and recommendations for improvements. The audit report will be submitted by the auditor to the PLP and HCG project managers within 30 days. The HCG project manager will ensure that any necessary corrective actions are implemented in a timely manner. Audit forms and further information on system audits are provided in Appendix C.

Table C1. List of Performance Audit Equipment and Procedures

Meteorological Variable	Make/Model	Audit Method	NIST Traceable Audit Tool Used	Frequency of Audit	Procedure
Wind Speed	Climatronics F460/ RM Young 05305-AQ	Synchronous motor comparison	RM Young 18801 Anemometer Drive	Semiannually	See SOP in Appendix C
Wind Direction	Climatronics F460/ RM Young 05305-AQ	Fixed linearity test	Climatronics F460/ RM Young 05305 linearity test fixture	Semiannually	See SOP in Appendix C
Ambient Temperature and Delta T	Met One 062-MP	Co-located temperature immersion bath comparison	Control Company Traceable 4000 series thermometer	Semiannually	See SOP in Appendix C
Solar Radiation	Li-Cor LI200SZ	Co-located sensor comparison	Eppley Labs PSP	Semiannually	See SOP in Appendix C
Barometric Pressure	Vaisala PT101B	Co-located sensor comparison	Pretel Altiplus A2	Semiannually	See SOP in Appendix C
Relative Humidity	Vaisala HMP45ASP	Co-located sensor comparison	Vaisala HMI41	Semiannually	See SOP in Appendix C
Precipitation	ETI NOAH II	Volumetric drip comparison	Nova Lynx 260-2595 Tipping Bucket Rain Gauge Calibrator	Semiannually	See SOP in Appendix C
Evaporation	Nova Lynx 255-100	Water height comparison	Precision Tape Measure	Semiannually	See SOP in Appendix C

C1.3 Corrective Actions

All deficiencies identified during audits, site visits or during data review will be recorded and reported to the project manger no later than seven working days of discovery. Corrective actions to rectify deficiencies will be addressed and documented in a Corrective Action Form (see Appendix B) and on the audit reports. Corrective actions will also be discussed in the annual data reports.

C1.4 QAPP Revisions

Based on the review of the systems audit, it may be necessary to revise this QAPP. The QAPP revisions will address any project deficiencies stated in the system audit. The project manager and permitting manager will make any necessary changes and the revised QAPP will be submitted to ADEC for approval.

The PLP QAPP was first submitted to ADEC August 31, 2006. On December 15, 2006 ADEC provided comments in their report of the findings. In May 2008, the QAPP was revised to reflect the addition of the Pebble 5, Pebble 6, Williamsport, and North Head meteorological stations and to address the comments received from ADEC regarding their review of the QAPP.

C2. Reports to Management

Reports to management are summarized in Table C2. An annual data report will be prepared by HCG and provided to PLP and ADEC within ninety days after the completion of the one year monitoring period. The annual data report will follow the ADEC PSD Quality Monitoring Data Report guidelines. An electronic copy of the validated data in Excel spreadsheet format will be provided with the data reports. This annual report will include the following:

- Data capture statistics for the meteorological sensors;
- Explanations for any missing or flagged data;
- Summaries of maintenance activities;
- Results of calibrations and audits;
- Raw data and calculations used for calibrations and audits; and
- Copies of site visit notes.

The annual data report will follow the ADEC PSD Quality Monitoring Data Report guidelines. An electronic copy of the validated data in Excel spreadsheet format will be provided with the data reports.

Table C2. Summary of Reports to Management

Reports	Frequency	Content	Responsible Individual	Distribution
Quarterly Data Summaries	Quarterly	Accuracy Assessment Summary	Rebecca Van Wyck Data Manager (or others)	See Section A3. Distribution List
Performance Audit Reports	Semiannually	Accuracy Assessment Summary	Eric Brudie QA Auditor	See Section A3. Distribution List
Technical System Audit Report	Annually	Results of the system audit, required corrective actions if needed	Eric Brudie QA Auditor	See Section A3. Distribution List
QA Annual Report	Annually	Summarize data following ADEC format for Annual Reports	Rebecca Van Wyck Data Manager (or others)	See Section A3. Distribution List
Corrective Action Reports	As Needed	Summarizes corrective actions taken to restore station to compliant status	K. Steven Mackey, Project Manager (or others)	See Section A3. Distribution List
Response to Corrective Action Reports	As Needed	Reports the results of the corrective action taken	K. Steven Mackey, Project Manager	See Section A3. Distribution List

D. Data Validation and Usability

D1. Data Review, Validation, and Verification Requirements

D1.1 Data Review

All data review will be done in accordance with EPA method-specific procedures. Method specific data validation tables (Appendix B) shall serve as the basis for this data review. These method specific data validation tables state specific criteria for accepting, rejecting, or qualifying the monitoring data. As meteorological data are periodically received over the monitoring year, the data manager will review the incoming data and make comparisons to the standards discussed in Section B10.2 of this document. During each quarter, the data will be reviewed again by a certified staff meteorologist to ensure that the data are complete, accurate, and representative and that erroneous data have been removed in preparation for the final data report.

Any anomalies or significant events will be flagged and noted on appropriate checklists or in the station logbook. Any suspect data will be brought to the attention of the Project Manager as soon as possible.

All other documentation pertaining to this monitoring project (e.g., trip reports, audit and calibration data sheets) will be reviewed upon receipt to ensure that all forms are completed prior to acceptance and for further use in this project. Table D1 summarizes the data review for this monitoring project.

Table D1. Data Review List for the Pebble Project

Type of Data Generated	Method for Acceptance	Data Review	Review Frequency	Person Responsible for Data Review	Project Specific Calculations
Raw Data	Data Review	Method Specific Data Validation Tables	Daily	Project and data manager	Delta T and Wind Sigma
QA Reviewed Data	Data Review	Method Specific Data Validation Tables	Daily	Project and data manager	n/a
Quarterly Data Summary	HCG permitting manger review	Method Specific Data Validation Tables	Quarterly	Project and data manager	Quarterly data capture statistics
Annual Data Report	HCG permitting manger review	Method Specific Data Validation Tables	Annual	Project and data manager	Quarterly and annual data capture statistics

D1.2 Data Calculations

Meteorological data collected for this project will be used for air dispersion modeling. Atmospheric stability, commonly determined using the solar radiation-delta temperature (SRDT) method, will be calculated using the EPA approved AIRMET Program.

Data completeness for meteorological monitoring methods will be calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) will be determined using the following equation:

$$DC_i = \frac{h_v}{h_i} \times 100$$

Where:

h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Vertical Temperature Difference and Wind Sigma will be computed by the datalogger. Wind Sigma will be calculated using the Yamartino method recommended in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005) provided below:

$$\sigma_A = \sigma_\theta = \arcsin(\epsilon)\,[1 + 0.1547\ \epsilon^3]$$

Where:

$$\epsilon = \left[1 - \left(\overline{\sin(\theta_i)^2} + \overline{\cos(\theta_i)^2}\right)\right]^{\frac{1}{2}}$$

D2. Validation and Verification Methods

Data validation refers to the review process in which data are screened for errors and anomalies. All data for this meteorological monitoring project will be validated only after being screened by the criteria in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* (EPA-454/R-99-005) found in Table D2. All data is examined using a MS Excel Spreadsheet that screens for the EPS PSD criteria outlined in Table D2 and all flagged data is examined by the Project Manager and Data Manager and reported in the Annual Data Report.

Semiannual audits and calibrations will be performed on the station to ensure that all sensors are operating within the tolerances suggested by the manufacturer and the EPA. Equipment audits and calibrations are conducted using NIST traceable equipment to ensure that collected data is traceable to standards of acceptable quality. Station calibration and audit forms can be found in Appendix C. During each site visit, the HCG operator will be responsible for recording any anomalies or significant events and bringing them to the attention of the Data Manager. Copies of the site visit memos will be provided to the Data Manager.

Calibration and Audit Criteria can be found in Section B.5. Station calibration and audit forms can be found in Appendix C.

For this project two types of wind sensors are being used to provide redundant data. The RM Young 05305-AQ wind sensor uses a combined propeller anemometer and vane assembly, and the Climatronics F-460 wind sensor uses a three cup-type anemometer with a separate vane-style wind direction sensor. The RM Young sensor can be somewhat less susceptible to rime ice build-up and is therefore used as a back-up wind measurement sensor. In cases when the Climatronics wind sensor data fails to meet the DQO goal of 90% quarterly data capture, the back-up RM Young wind data will be used, if deemed necessary and applicable. Both the primary and back-up wind sensors will have the same level of quality assurance checks as outlined in Sections B5 and B6.

The Data Manager will review data daily to check for irregularities. Any suspicious data will be investigated using EPA PSD criteria identified in Table D2. Any invalidated data will be discussed in Quarterly and Annual Data Reports. Data validation tables are provided in Appendix B.

Table D2. EPA PSD Data Validation Criteria

Parameter	Flagging Criteria[1]
Wind Speed (10 meters)	Value is < 0 m/s, > 25 m/s
	< 0.1 m/s variation for 3 consecutive hours
	<0.5 m/s variation for 12 consecutive hours
Wind Direction (10 meters)	Value is < 0°, > 360°
	<1° variation over 3 consecutive hours
	< 10° variation over 18 consecutive hours
Temperature (2 and 10 meters)	> 5°C variation from previous hour
	< 0.5°C variation for 12 consecutive hours
	Value is > record high, < record low
Temperature Difference, ΔT	Value is > 0.8°C during the daytime
	Value is < -0.8°C during the night
	Value is > 5°C, < -3°C
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature
	> 5°C variation from previous hour
	< 0.5°C variation for 12 consecutive hours
	Equals ambient temperature for 12 consecutive hours
Solar Radiation	> 0 W/m^2 at night
	Greater than the maximum possible value for date and latitude
Barometric Pressure	> 1060 mb (sea level)
	< 940 mb (sea level)
	> 6 mb variation for 3 consecutive hours
Precipitation	> 25 mm in one hour
	> 100 mm in 24 hours
	< 50 mm in one month

[1]Flagging criteria are based upon Table 8-4 Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2]Guidance document provides values in terms of dew point temperature.

D3. Reconciliation with User Requirements

The objective of this monitoring program is to collect surface meteorological data needed for engineering design and environmental purposes, including water balance studies, and for the preparation of the air quality construction permit applications for the mine and port sites. Although the mine and port facilities may not require a PSD permit, PSD-quality data will be collected to support the required computer-based dispersion modeling. HCG will conduct an annual or final review at the completion of the monitoring project and report the results obtained during the reporting period. These reports will be compared to the established DQOs to ensure that the scope of the project has been met.

The reconciliation of data for this project will be determined by the data validation and verification process as discussed in Section D2 of this document and based upon the five step Data Quality Assessment (DQA) plan recommended in *Guidance for Data Quality Assessments* (EPA QA/G-9):

- A review of the DQOs and sampling design will be conducted by the permitting manager to assure meteorological outputs from this program are still applicable. If DQOs have not been developed, the permit manager will specify DQOs before evaluating the data. The permitting manager will also review the sampling design and data collection documentation for consistency with the DQOs.
- A Preliminary Data Review will be conducted by the permitting manager. The manager will review QA reports, calculate basic statistics, and generate graphs of the data. This information will be used to determine data structure and identify patterns, relationships, or potential anomalies.
- A statistical test will be selected that is most appropriate for summarizing and analyzing the data, based on the review of the DQOs, the sampling design, and the preliminary data review. The permitting manager will identify the key underlying assumptions that must hold for the statistical procedures to be valid.
- Given the actual data and other information about the study, the permitting manager will evaluate whether identified assumptions will hold, or whether departures are acceptable.
- Conclusions from the statistical calculations will be evaluated to determine if the monitoring design and its created data meet the required permits for the statistical test. This determination will be documented, as well as the inferences drawn as a result of these calculations. If the design is to be used again, an evaluation will be made on the performance of the sampling design.

If the preliminary data review reveals that data sets are inconsistent with the DQOs, or the underlying assumptions of the statistical test are not supported by the data and fail to meet the criteria/objectives of this monitoring project, then the permit manager and project manager will reconsider the project design as described in this QAPP.

APPENDIX A
PROGRAM REFERENCES

Alaska Climate Summaries, Western Regional Climate Center, Desert Research Institute, 2004. http://www.wrcc.dri.edu/summary/climsmak.html

Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), (EPA-450/4-87-007)

AQCRs with Established Minor Source Baseline Dates for SO2 (map), WESTAR, 2004. http://www.westar.org/Committees/TDocs/AQCR%20maps/SO2_02Dec04.pdf

Class I Areas (map), Alaska Department of Environmental Conservation Areas Sources Group, 2004. http://www.state.ak.us/dec/air/anpms/as/rh/rhhome.htm

EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5).

Guidance for Data Quality Assessments (EPA QA/G-9)

Meteorological Monitoring Guidance for Regulatory Modeling Applications, EPA-454/R-99-005, EPA, February 2000.

PSD Quality Ambient Air Quality & Meteorological Monitoring Quarterly Data Summery Format, ADEC, April 2008

PSD Quality Ambient Air Quality & Meteorological Monitoring Annual Data Report Format, ADEC, October 2006

Wind Rose Wizard Hourly Observations, 1945-1999, University of Alaska Anchorage School of Engineering, 2001. http://holmes-iv.engr.uaa.alaska.edu/ncar/WindRoseWizard.htm

18 AAC 50, Air Quality Control, Alaska Department of Environmental Conservation, As Amended through July, 2002.

EPA Quality Assurance Handbook for Air Pollution Measurement Systems, (EPA-600/ K-941038C), September 1994.

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

APPENDIX B
MONITORING PROGRAM SUPPORTING DOCUMENTS

APPENDIX B1
PROJECT HEALTH AND SAFETY PLAN

Health & Safety Plan

Pebble Project Meteorological Monitoring

June 2008

prepared for

Pebble Limited Partnership

prepared by

Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, Alaska 99503
907-563-2137

Table of Contents

1.0 INTRODUCTION 1
2.0 SCOPE OF WORK 1
3.0 PROJECT EXECUTION PLAN 1
3.1 Phase 1: Mobilization 1
3.2 Phase 2: Installation 2
3.3 Phase 3: Operation 2
3.4 Phase 4: Demobilization 2
4.0 PROJECT SCHEDULE 2
5.0 HAZARD ASSESSMENT 2
5.1 HSE Risks Identified 2
5.1.1 Phase 1: Mobilization 3
5.1.2 Phase 2: Installation 5
5.1.3 Phase 3: Operation 7
5.1.4 Phase 4: Demobilization 9
6.0 ADDITIONAL SAFETY CONSIDERATIONS 12
7.0 EMERGENCY CONTACTS & MEDICAL PROCEDURES 13
7.1 Pebble Partnership Emergency Contact Information 13
7.2 Local Emergency Services 13
7.3 HCG Interface Document 14
7.4 Medical Emergency Procedures 14

1.0 INTRODUCTION

This Health and Safety Plan is a job-specific document presenting a comprehensive plan for compliance with the Hoefler Consulting Group HSE program. Hoefler Consulting Group (HCG) prepared this plan for the Pebble Project Meteorological Monitoring Program.

The plan incorporates a specific breakdown of the project activities, the planned communication and interface provisions that will be followed for the project. The intent is to summarize the scope of work and the associated health and safety issues with a focus on the needs of field personnel and successful execution of the project.

The established procedures found in the Alaska Safety Handbook (ASH) and the safety manual, *Mineral Exploration in Western Canada* are available as reference documents for implementing best practices for all project work activity and pre-job planning. A Phase Hazard Analysis (PHA) addresses the progressive steps of the project plan and field operations. Changes to a work plan or scope, after the plan is developed, poses significant potential for health and safety related incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT."

2.0 SCOPE OF WORK

Two three-meter meteorological stations will be installed and operated at the Pebble Project site. A radio repeating tower is already operating at the project location. Work will include instrument installation, establishing the power supply, and start-up and operation of the monitoring stations. All components are designed for rapid installation of the system in the field.

3.0 PROJECT EXECUTION PLAN

3.1 Phase 1: Mobilization

Mobilization consists of staging all necessary tools and equipment to the site. All equipment and personnel will travel from the base camp to the site via helicopter or snow machine. Prior to commencement of installation, HCG personnel will undergo a site-specific orientation, including familiarization with site facilities and operations personnel. HCG staff will also ensure that the pilot and site manager are aware of their location in the field in the event radio contact is interrupted. A back-up plan for pick-up will be established prior to beginning field work each day.

3.2 Phase 2: Installation

HCG personnel will begin to install equipment upon arrival. Electrical power such as 120 VAC for light hand tools and 12 VDC will be established first. All instrument components are 12 VDC, including heaters, fans, data logger and the cell phone/modem system.

3.3 Phase 3: Operation

Following successful installation of the equipment, initial performance audits and calibrations will be conducted to ensure equipment is operating within EPA and ADEC guidelines. These procedures require approximately one full day of work to complete. Subsequently, the meteorological station will operate unattended for an extended period of time**.** Quarterly audits, calibration, and maintenance will be conducted by HCG staff.

3.4 Phase 4: Demobilization

Demobilization operations consist of packing all tools, safety gear and HCG-owned equipment for transport back to Anchorage. The work area will be cleared of all work-related debris and litter and will be left in an orderly fashion.

4.0 PROJECT SCHEDULE

Installation activities are to be conducted in October 2004 and system upgrades are scheduled to be made in November 2004. Quarterly audits, calibrations and maintenance are scheduled to occur in 2005.

5.0 HAZARD ASSESSMENT

5.1 Health and Safety Risks Identified

The health and safety risks identified for the four defined phases of the project are as follows:

Phase		Personnel	Equipment
Phase 1	Mobilization	Low	Low
Phase 2	Installation	Medium	Medium
Phase 3	Operation	Low	Medium
Phase 4	Demobilization	Low	Low

5.1.1 Phase Hazard Analysis: Phase 1

Project: Pebble Project Meteorological Monitoring

Date: November 2004

Location: Iliamna, Alaska

Phase: Mobilization

Overall Risk Rank: Low

Phase Description: Initial project mobilization of employees, tools, and equipment to installation site.

Activities include:

- Travel to Pebble Project site near Iliamna, Alaska, site-specific orientation, familiarization with site facilities and operations personnel.
- Transporting, lifting, and rigging of tools and equipment.

POTENTIAL HAZARDS		RANK
1.	Lifting hazards	Medium
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Low
3.	Slips or falls from ladder.	Low
4.	Cuts and lacerations-striking against objects, pinch points and protruding objects, trip hazards.	Low
5.	Negative wildlife encounters	Low

Recommended Controls:

1. Ensure crew members understand all project hazards, are familiar with specific lifting equipment used, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Ensure footwear is in good repair, and always ensure solid footing. Situate ladders or stepstools on level ground, and use caution when working off the ground. Pay attention to surroundings.

4. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

5. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in firearm use.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Jeff Frensdorf, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Pebble Partnership Mines officials of the situation.

Additional Comments/Changes:

5.1.2 Phase Hazard Analysis: Phase 2

Project:	Pebble Project Meteorological Monitoring
Date:	November 2004
Location:	Iliamna, Alaska
Phase:	Installation
Overall Risk Rank:	Medium
Phase Description:	The meteorological station tripods will be installed at pre-determined field locations. Power will be connected to the instrumentation.

Activities include:

- Installing towers

- Installing/securing a data logger/controller enclosure at ground level
- Connecting 12 VDC electrical power

POTENTIAL HAZARDS		RISK
1.	Lifting Hazards	Medium
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Medium
3.	Slips or falls from ladder.	High
4.	Cuts and lacerations-striking against objects, pinch points and protruding objects	Medium
5.	Electrocution while connecting power supply	Low
6.	Negative wildlife contacts	Low

Recommended Controls:

1. Ensure crew members understand all project hazards, are familiar with the specific lifting equipment used in installation, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Ensure footwear is in good repair, and always ensure solid footing. Situate ladders or step stools on level ground and use caution when working off the ground. Pay attention to surroundings.

4. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task.

5. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

6. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in the use of firearms.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Jeff Frensdorf, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Pebble Partnership Mines officials of the situation.

Additional Comments/Changes:
Audits and calibrations are scheduled for the spring and fall. These tests, which will involve two HCG personnel, should take one working day to complete. Various personnel will be involved in these site visits.

5.1.3 Phase Hazard Analysis: Phase 3

Project: Pebble Project Meteorological Monitoring
Date: November 2004
Location: Iliamna, Alaska
Phase: Operation
Overall Risk Rank: Low/Medium
Phase Description: Following successful equipment setup, initial audits and calibrations will be conducted. These activities will take approximately one full work day to complete. Subsequently, the meteorological stations should operate unattended for an extended period of time.

Activities Include:

- Initial calibration and audits
- Periodic calibrations and audits

	POTENTIAL HAZARDS	RISK
1.	Lifting Hazards	Low
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Low
3.	Cuts and lacerations-striking against objects, pinch points and protruding objects	Low
4.	Electrocution	Low
5.	Negative wildlife contacts	Low

Recommended Controls:

1. Ensure crew members understand all project hazards, are familiar with the specific lifting equipment used in installation, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These

liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task.

4. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

5. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in firearm use.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Jeff Frensdorf, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Pebble Partnership Mines officials of the situation.

Additional Comments/Changes:

_____

_____

_____

5.1.4 Phase Hazard Analysis: Phase 4

Project: Pebble Project Meteorological Monitoring
Date: November 2004
Location: Iliamna, Alaska
Phase: Demobilization
Overall Risk Rank: Low
Phase Description: Demobilization consists of packing all tools, equipment and safety gear for transport back to Anchorage. The work area will be cleared of all debris and left in an orderly fashion.

Activities Include:

- Removal of all tools, and unused equipment and materials.
- Clean up and housekeeping at the job site and any other areas utilized as workspace or materials lay-down areas.
- Proper disposal of any waste materials generated during this installation.

	POTENTIAL HAZARDS	RISK
1.	Lifting Hazards	Low
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Medium
3.	Cuts and lacerations-striking against objects, pinch points and protruding objects	Low
4.	Electrocution while demobilizing system	Low
5.	Negative wildlife contacts	Low

1. Ensure crew members understand all project hazards, are familiar with the specific lifting equipment used in installation, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task.

4. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

5. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in firearm use.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY “TIME OUT” TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE

EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Brent Veltkamp, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Pebble Partnership officials of the situation.

Additional Comments/Changes:

6.0 ADDITIONAL SAFETY CONSIDERATIONS

- Field crews must always work in pairs and carry a radio.
- No alcohol or illegal drug consumption is allowed.
- Those who carry epi-pens for allergic reactions are to advise NDM and other members of the field crew so that assistance can be provided if necessary.
- Be aware of the rules regarding the possession of firearms and/or bear mace when traveling to the project area. A weapon must be unloaded before boarding the helicopter and unloaded and securely stored while in camp. The name of the individual bringing a firearm into camp must be given to Richard Moses (NDM Site Manager or his designee) prior to arrival. Permission to carry bear mace must be obtained from the pilot before boarding the helicopter.
- Field crews need to understand the risk of extreme weather and the possibility of staying overnight in the field.

7.0 EMERGENCY CONTACTS & MEDICAL PROCEDURES

7.1 Pebble Partnership Emergency Contact Information

c/o Iliamna Weathered Inn #1 Roadhouse Strip or Box 124 Iliamna, AK 99606 Tel: (907) 571-1872 or 1774 Home: (907) 571-1872 Fax: (907) 571-1789 Email: lenabrommelard@hdgold.com	3201 C Street, Suite 604 Anchorage, AK 99503 Tel: (907) 339-2600 Toll Free: 1-877-450-2600 Fax: (907) 339-2601

Pebble Project Office in Iliamna	**John Baechler:**
Line 1: (907) 571-1788 Line 2: (907) 571-1774 Quest Office: (907) 571-1873 Emergencies: 8:30pm – 6:00am call (907) 571-1872	Home: (907) 571-1878

Project Coordinator in Anchorage	**Anchorage Office**
Pebble Limited Partnership – Mike Smith Tel: (907) 339-2600 Toll Free: (877) 450-2600 Home: (907) 346-2467 Cell: (907) 223-1513 Email: michaelsmith@pebblepartnership.com	Pebble Limited Partnership – Ben Mohr Tel: (907) 339-2600 Toll Free: (877) 450-2600 Email: benmohr@pebblepartnership.com

7.2 Local Emergency Medical Services

Iliamna Clinic — Located on the Roadhouse Strip
Telephone: (907) 571-1383

Rene (Health Aid) — Home Telephone: (907) 571-1323

7.3 INTERFACE DOCUMENT

HCG has developed an Interface Document (Table 7-1) that outlines the interface HCG field and office personnel. Serious incidents must be reported immediately, while less serious ones shall be reported within the shift in which the incident occurred. This will include the completion of all necessary forms and documentation.

Interface Document
Table 7-1

Activity	Primary HCG Contact	Secondary HCG Contact
Environmental Non-compliance	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Environmental Incident Reporting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Unauthorized/unaccompanied individuals on site	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Compliance Audits: Scheduling, developing, conducting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Emergency Reporting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Agency Reporting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Field Installation Activities	Steve Mackey (563-2129)	Al Trbovich (563-2140)

7.4 MEDICAL EMERGENCY PROCEDURES

(1) Contact Pebble Partnership Base Camp in Iliamna by radio or telephone. Radio frequency being used is 151.625 MHz with a 123.000 MHz transmit and receive tone (private line).

(2) Contact Alaska State Troopers Dispatch: (907) 428-7200 (24 hrs/day).

In the event of a major emergency, the Alaska State Troopers will mobilize a response, including contacting the local State Trooper, medical, and rescue personnel.

Information to provide:

- Who you are
- Nature of emergency
- Your location
- Your company and contact number
- Number of victims
- Sex, age and vital signs of patients (if possible)
- Specific injuries

(3) Local emergency support in Iliamna and Newhalen:

- Iliamna State Trooper: (907) 571-1534
- Iliamna Clinic (Health Aid): (907) 571-1383
- Newhalen Clinic: (907) 571-1248
- Iliamna Air Taxi (has air Medivac capability): (907) 571-1245 / (907) 871-1445

APPENDIX B2
PROJECT FORMS

Site Visit & System Check

Date: _____

Project Title: _____ **Project No.** _____

Name of Inspector: _____

Associated Company: _____

Sate Reason for visit: _____
_____
_____

_____

Check List

Tower:

- Check tower for stability, ensure that guy wires are taunt and all clamping hardware is in good condition.
- Check that all sensors are securely mounted to tower. This includes antennas and enclosures.
- Check for excessive ice build-up on tower and sensor mounts
- Check for loose instrument cables

Comments: _____
_____
_____
_____
_____
_____
_____
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_____
_____
_____
_____
_____

Sensors:

Wind Direction:

- Check to see if wind vane is moving freely or fluttering in wind.
- Check for excessive ice or snow build-up on vane and sensor if so clear the sensor.
- After clearing ice or snow, check to see if vane can move freely in all directions.

Wind Speed:

- Check to see that cups are spinning freely.
- Check for excessive ice or build-up on vane and sensor, if so clear the sensor.
- After clearing ice or snow, check cups to insure they spin with ease.
- Clear ice or snow off of wind sensor cross arm.

All other sensors:

- Check sensor housing or brackets for visible damage.
- Check all sensor connection and cables to ensure good connections and secured to tower.
- Clear any ice or snow from sensor brackets and mounts.
- Check each sensor mount to ensure the sensor is level and secure.

Comments: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Inspector signature: _____

Corrective Action Plan

The corrective action plan is designed to address the many unexpected problems that may arise during the project duration. HCG personnel are instructed to immediately bring any major problems to the attention of the project supervisor. Since many individuals could become involved in the corrective action, the notification is best done by a standard corrective action form.

This Corrective Action Form exists in three parts to address and correct program that occur during routine operation or as a result of performance evaluation and technical systems audits. The three parts are listed below:

- Request for Assistance
- Proposed Corrective Action
- Results of Proposed Corrective Action

It is recommended that all personnel signing the form should feel free to attach other needed material. These forms are stored at the HCG office both in electric and paper format.

Hoefler Consulting Group

Corrective Action Form

Project Title: _____ Project No. _____

I. Request for Assistance:

To: _____ From: _____ Date: _____

Problem Summary: _____
_____
_____
_____
_____
_____
_____.

II. Proposed Corrective Action

To: _____ From: _____ Date: _____

Recommended Action: _____
_____
_____
_____
_____
_____
_____.

III. Results of Proposed Action

To: _____ From: _____ Date: _____

Action Results: _____
_____
_____
_____
_____
_____
_____.

Systems Audit Report
For Meteorological Monitoring Programs

Audit Date:
Auditor:
Auditor Affiliation

Interviewees:	Witnesses:

1.0 Monitoring Program Information

Monitoring Site Audited:

Monitoring Site Owner:
Owner Mailing Address:

2.0 Monitoring Program Staff

2.1 Program Staff Organization

- Draw diagram indicating the organizational structure of the monitoring program. Include names and titles.

2.2 Program Staff Training and Experience

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

- How is program staff trained?_____
- Who is responsible for training staff?

Does the operator have training manuals or other training related materials available for staff?

Yes
No

3.0 General Program Information

3.1 Monitoring Site Description

Monitoring Site Name:

Monitoring Site Location Description:

Indicated by Operator	Determined by Auditor

3.2 Monitoring Site Appearance and Safety

Does the site appear clean, organized and well maintained?	Yes No	Comments:
Does the site appear to be safe and reasonably hazard free?	Yes No	Comments:
Does the site have a shelter for operators?	Yes No	Comments:
Does the site have emergency equipment such as a first aid kit available?	Yes No	Comments:
Does the site have adequate measures to prevent human tampering?	Yes No	Comments:
Does the site have adequate measures to prevent damage from animals?	Yes No	Comments:

3.3 Monitoring Site Surroundings

- Indicate the population density type for the monitoring site.

	Type	Description
	Remote	No nearby development with no nearby population center.
	Rural	Limited development with nearby sparse population.
	Low Suburban	Light industrial development in low population center.
	High Suburban	Light industrial development in high population center.
	Urban	Heavy industrial development in high population center.

3.4 Monitoring Site Equipment Inventory

- List all parameters that are being monitored and their associated instrumentation at the site.

Parameter	Make	Model	Serial No.

- List all instrumentation used in support of the monitoring instrumentation.

Instrument	Make	Model	Serial No.

3.5 Meteorological Instrumentation Siting and Exposure (EPA-454/R-99-005)

Do all sensors appear to be clean, intact, in good condition and well maintained?	Yes No	Comments:
Are all sensors operational, online and reporting data?	Yes No	Comments

3.5.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base?	Yes No	Comments
Is the height of the tower 10 meters above the ground?	Yes No	Comments:
Is the tower stable and plumb?	Yes No	Comments:
Is the tower protected from lightning?	Yes No	Comments:

3.5.2 Wind Speed and Wind Direction

Is the horizontal distance between the instrument and any obstruction at least 10 times the height of the obstruction?	Yes No	Comments:
Is the instrument 1.5 times the height of the building above the roof or 10 meters above the ground?	Yes No	Comments:
Are the wind speed and wind direction sensors stable and plumb?	Yes No	Comments:
Is the distance of the sensor on the cross arm/mast at least twice the diameter of the tower?	Yes No	Comments:
Is the wind sigma theta collected according to EPA requirements?	Yes No	Comments:

3.5.3 Air Temperature, Air Temperature Difference, and Relative Humidity

Are the sensors mounted over open level ground at least 9 meters in diameter and at least 2 meters above ground?	Yes No	Comments:
Are the two temperature difference probes located at a height of 2 meters and 10 meters above the ground?	Yes No	Comments
Is the ground beneath the temperature sensor natural native material?	Yes No	Comments
Is the site free of any man-made features exist that could create bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	Yes No	Comments:
Is the site free of any natural made features that could create bias temperature data (e.g. open water, sloping ridge, etc.)?	Yes No	Comments:
Are the temperature sensors protected from the influence of solar radiation?	Yes No	Comments:
Are the sensors located at least four times the distance from the height of the obstruction?	Yes No	Comments:
Are the sensors located at least 30 meters from large paved areas?	Yes No	Comments:
Are the temperature sensors used for differential measurements located in identical aspirated shields?	Yes No	Comments:

3.5.4 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows on the instrument?	Yes No	Comments:
Is the sensor situated to the south of the tower in order to minimize obstruction from the tower?	Yes No	Comments:

3.5.5 EPA Recommended Instrument Resolutions

Parameter	Equipment Specifications	EPA Resolution Standard	Meets Standard?

3.5.6 Recommended Instrument Accuracy Standards

Parameter	Equipment Specifications	EPA Accuracy Standard	Meets Standard?

3.5.7 EPA Recommended Instrument Response Standards

Parameter	Equipment Specifications	EPA Response Standard	Meets Standard?
Wind Speed			
Threshold:			
Distance Constant:			
Wind Direction			
Threshold:			
Damping Ratio:			
Delay Distance:			
Air Temperature (2 meter)			
Time Constant:			
Air Temperature (10 meter)			
Time Constant:			
Relative Humidity			
Time Constant:			
Range:			
Solar Radiation			
Time Constant:			
Operating Range:			
Spectral Response:			

3.6 Support Instrumentation and Equipment

Is the DAS well protected from the elements with adequate room for maintenance?	Yes No	Comments:
Is the DAS rated for operation in the expected local temperature range?	Yes No	Comments:
Are all sensor signal leads neatly and securely connected to the correct DAS channels?	Yes No	Comments:
Are all components of the DAS operational?	Yes No	Comments:
Is the communications equipment operating correctly?	Yes No	Comments:
Does the DAS system have a stable power supply?	Yes No	Comments:

Is the DAS properly grounded?	Yes No	Comments:
Is the DAS system protected from lightning?	Yes No	Comments:

4.0 Data Processing

4.1 Data Collection

Is the monitoring station polled on a regular basis?	Yes No	Comments:
Is the PM sample run date recorded?	N/A	Comments:
Is the PM sample start time and elapsed time recorded?	N/A	Comments:
Is the PM average flow rate recorded?	N/A	Comments:
Is each PM filter recovered after each run period?	N/A	Comments

- Indicate how the polled data are handled for data processing after being downloaded.

Are procedures in place for backing up raw data?	Yes No	Comments:

- How long are backup raw data files retained?
- How long are archived records retained?

Are hard copies of data being kept in case of computer failure?	Yes No	Comments:

4.2 Data and Sample Handling

Are written procedures for data handling available for the project?	Yes No	Comments:
Are filters properly secured once removed to prevent contamination or tampering?	N/A	Comments:

Are copies of the Site Check Forms being sent to the operator on a regular basis?	N/A	Comments:.
Are Chain-of-Custody forms being used to transmit materials, samples, and/or documents to and from the field?	N/A	Comments:
Are filters folded in half with collection surfaces in contact for transport to the lab?	N/A	Comments:
Are samples maintained in a secure location while awaiting shipment to the laboratory?	N/A	Comments:

- Diagram the data flow from monitoring equipment to submission of final report.

4.3 Data Validation

Are data validation procedures established and in use?	Yes No	Comments:

- Describe data validation procedure.

Are the individuals responsible for data collection separate from those responsible with data validation?	Yes No	Comments:

- Identify those responsible with data validation:

Name:
Position:
Affiliation:

- Identify how periods of missing or invalidated data are handled.

4.4 Data Reporting

Are quarterly and annual data reports being submitted for the site?	Yes No	Comments:
Is qualified staff prior to submittal of data reports making reviews of the report?	Yes No	Comments:

- Identify those person(s) responsible for review of data reports.

Name:
Position:
Affiliation:

4.5 Corrective Actions

Are procedures established for initiating corrective actions within the data processing steps?	Yes No	Comments:

- Describe procedures for tracking and closing corrective actions.

Data Capture (Section 4.5 EPA-454/R-99-005)

- Identify the desired data capture rate for the monitoring data.

Meteorological Monitoring Data Type	Capture Rate

Are the desired data capture rates being met for each data type?	Yes No	Comments:

5.0 Quality Assurance and Quality Control

5.1 Quality Assurance Program Plan

Has a quality assurance program plan (QAPP) been written that describes quality assurance procedures?	Yes No	Comments:
Is a copy of the plan available to field and data processing personnel?	Yes No	Comments:
Has the quality assurance plan been approved by the ADEC?	Yes No	Comments:

- Identify those person(s) responsible for updating the plan and the procedure for updating the plan.

Name:
Position:
Affiliation:

5.1.1 Quality Assurance Assessment Requirements (Section 8.0 EPA-454/R-99-005)

Have adequate audit procedures been identified within the quality assurance plan?	Yes No	Comments:
Does the plan adequately document the correct criteria for accuracy and precision?	Yes No	Comments:

- Indicate the project's correct precision and accuracy limits.

Parameter	***Precision Limit***	***Accuracy Limit***	***Reference***
DAS Time			
Wind Direction			
Wind Speed			
Air Temperature			
Air Temperature Difference			
Relative Humidity			
Solar Radiation			
Barometric Pressure			

5.2.1 Standard Operating Procedures

- Indicate the Standard Operating Procedures that have been developed for the program:

Standard Operating Procedures	
	Installation, Setup, and Checkout
	Site Operations and Calibrations
	Operational Checks and Preventive Maintenance
	Data Collection Protocols
	Data Validation Steps
	Data Archiving

5.2.2 Preventive Maintenance

Does a preventive maintenance program exist for the monitoring program and is the program being followed?	Yes No	Comments:

- Identify those responsible parties for preventive maintenance at the site.

Name:
Position:
Affiliation:

- Identify the preventative maintenance procedures conducted for the site.

5.2.3 Station Documentation

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	Yes No	Comments:
Does the station have an activity log?	Yes No	Comments:
Does the station have a Site Visit Log and Checklist Form?	Yes No	Comments:
Does the station have an adequate Calibration Report Forms and copies of previous calibrations?	Yes No	Comments:
Does the station have an adequate Operations Manual?	Yes No	Comments:

- Identify the operation manuals present on site.

Description

Are report forms and site logs properly completed and current?	Yes No	Comments:

6.0 Comments and Suggestions

Site Training Check list

This form should be included with the site visit memos. All training is site specific and is to be given by qualified HCG personal only.

Date of Training: _____

Station Name:_____ Project No._____

Name of Trainer: _____ Position: _____

Name of Trainee: _____ Position: _____

Nature of Training: _____

Is the trainee HCG personnel? If not specify associated company. Yes □ No □

Specify company name: _____ Position: _____

Site surveillances/maintenances visits:

- □ Has the specific monitoring project overview and objectives been discussed?
- □ Has site location and all safety concerns been discussed in detail?
- □ Has the scope of the site surveillances visit been discussed?
- □ Have all specific concerns pertaining to meteorological station been discussed.
- □ Has all site surveillance visit forms and filling procedures been discussed in detail?
- □ Have all site surveillances/maintenances visit task been clearly explained and demonstrate, including all equipment and senor operation, and safety practices pertaining to these tasks?
- □ Have all "as left" procedures been explained and demonstrated?

Audit and Calibration Visits:

- ☐ Has the specific monitoring project overview and objectives been discussed?
- ☐ Has the scope of the audit or calibration visit been discussed in detail?
- ☐ Have all specific concerns pertaining to meteorological station including any environmental safety concerns been discussed?
- ☐ Have all the audit or calibration forms, site visit documentation and filling procedures been discussed in detail?
- ☐ Have the functions and operations of each instrument located at the site been explained and demonstrated in detail?
- ☐ Have all audit or calibration task, tests, and recording techniques been clearly explained and demonstrated?
- ☐ Have all safety practices penetrating to the above task been clearly explained and demonstrated?
- ☐ Have all filling procedure and deadlines been discussed in detail?
- ☐ Have all "as left" procedures been explained and demonstrated?

Comments:

_____
_____
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_____

Trainers Signature: _____

Trainees Signature: _____

Data Validation Checklist for Creating EPA Criteria Screening Data Bases:

The following criteria must be included in the spread sheet for each variable.

Parameter	Flagging Criteria[1]
Wind Speed (10 meters)	Value is < 0 m/s, > 25 m/s
	< 0.1 m/s variation for 3 consecutive hours
	<0.5 m/s variation for 12 consecutive hours
Wind Direction (10 meters)	Value is < 0°, > 360°
	<1° variation over 3 consecutive hours
	< 10° variation over 18 consecutive hours
Temperature (2 and 10 meters)	> 5°C variation from previous hour
	< 0.5°C variation for 12 consecutive hours
	Value is > record high, < record low
Temperature Difference, ΔT	Value is > 0.8°C during the daytime
	Value is < -0.8°C during the night
	Value is > 5°C, < -3°C
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature
	> 5°C variation from previous hour
	< 0.5°C variation for 12 consecutive hours
	Equals ambient temperature for 12 consecutive hours
Solar Radiation	> 0 W/m^2 at night
	Greater than the maximum possible value for date and latitude
Barometric Pressure	> 1060 mb (sea level)
	< 940 mb (sea level)
	> 6 mb variation for 3 consecutive hours
Precipitation	> 25 mm in one hour
	> 100 mm in 24 hours
	< 50 mm in one month

[1]Flagging criteria are based upon Table 8-4 Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).

[2]Guidance document provides values in terms of dew point temperature.

APPENDIX C
STANDARD OPERATING PROCEDURES (SOPs) AND AUDIT/CALIBRATION FORMS

APPENDIX C1
STANDARD OPERATING PROCEDURES

Calibration Procedure for Climatronics F460 Wind Speed and Wind Direction Sensors

1.0 Introduction

Calibration of Climatronics F460 type wind speed and wind direction sensors (hereafter referred to as F460 sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for an F460 sensor requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

The calibration is comprised of the determination of sensor responses to known input values, maintenance and adjustment of the sensors responses if warranted, and the documentation of all adjustments and responses.

Items required for the calibration of an F460 are as follows:

1. RM Young 18801 (or similar model) anemometer drive
2. Climatronics F460 linearity test fixture
3. PC or similar display module
4. Tripod mounted, survey grade compass and/ or pre-determined bearings to landmarks.
5. F460 manual

The calibration will begin by filling out the first part of the wind speed and wind direction calibration forms, noting the time, date, calibrator, and any witnesses.

1.1 System Inspection

Before determining the initial response of a F460 inspect the cable, cups, vane, and bearings for damage, open the outer cuff of the sensor and look for condensation inside. Note these observations on the Wind Speed Calibration Form.

2.0 Wind Speed Calibration Procedures

2.1 Pre-adjustment System checks

A system response check is performed by the use of an RM Young 18801 (or similar model) anemometer drive. The cups are removed from the sensor shaft and the anemometer drive is attached. The sensor is then challenged at the speeds specified on the Wind Speed Calibration Form. The speeds measured by the datalogger for each specific revolution per minute (rpm) are compared to the calculated values. The equation for calculating wind speed as a function of anemometer drive rpm is given on the Wind Speed Calibration Form.

2.2 Maintenance and Adjustments

At this point the technician should review the performance of the sensor and determine what adjustments are required, if any. All basic maintenance should be performed before any serious adjustment of the sensor, or determination of a new multiplier and/or offset in the datalogger programming. All maintenance and adjustments should follow the guidelines presented by the manufacturer in the F460 instrument manual.

2.3 Post-Adjustment Checks

If any maintenance or adjustments were performed, the steps listed in Section 2.1 of this procedure should be repeated and recorded on the Wind Speed Calibration Form. Results of the post adjustment checks should be closely evaluated. If the output values do not closely match the expected values, perform troubleshooting, maintenance, and adjustments as needed to correct the sensor response. If the sensor is deemed un-repairable by the technician, it should be replaced as soon as possible from the stock of back-up sensors for the monitoring project.

3.0 Wind Direction Calibration Procedures

3.1 Sensor Orientation

After the system is inspected, a check of the wind vane orientation is performed. The two methods for an orientation check of the wind vane are as follows:

<u>Compass</u>

1. Determine declination for the area using a Geomag type program with the most recent models of the earth's magnetic field.
2. Use a clamp fashioned from a band clamp and rubber tubing to fix the wind vane in various directions. In medium to high winds a vane with the "tail" removed may have to be used as to not damage the wind vane.
3. Using a tripod mounted and leveled, survey grade compass align the compass so that it sights directly at the tail of the wind vane.
4. Obtain readings in each of the four quadrants of the compass.
5. Record the readings from the datalogger and the compass on the Wind Direction calibration form.

<u>Landmark</u>

1. Obtain a GPS point directly under the wind direction sensor.
2. Using a mapping program (eg: TOPO!, allTOPO, or similar) with USGS datasets as its base files, obtain bearings to nearby defined landmarks.
3. Clamp and site the vane tail at the appropriate landmark and record the reading from the datalogger.

3.2 System Linearity Check

Using a Climatronics F460 linearity test fixture test the sensor at 30° intervals. Record the readings from the datalogger at each interval on the Wind Direction Calibration Form and compare to the expected values. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 5° (accuracy) and ≤ 3° mean absolute error (linearity). Mean absolute error is calculated by the the following equation: equation.

$$\sum \frac{|X|}{n}$$

Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

3.3 Maintenance and Adjustment

At this point the technician should review the performance of the sensor and determine what adjustments are required, if any. All basic maintenance should be performed before any serious adjustment of the sensor, or determination of a new multiplier and/ or offset in the datalogger programming. All maintenance and adjustments should follow the guidelines presented by the manufacturer in the F460 instrument manual. If the orientation was incorrect, the alignment of the cross arm will need to be adjusted following the linearity check.

3.4 Post Adjustment Checks

After all maintenance and adjustments have been made, the steps listed in Sections 3.2 and 3.1 of this document should be repeated, respectively. All results should be recorded On the Wind Direction Calibration Form. Results of the post adjustment checks should be evaluated. If the output values do not closely match the expected values, perform troubleshooting, maintenance, and adjustments as needed to correct the sensor response. If the sensor is deemed un-repairable by the technician, it should be replaced as soon as possible from the stock of back-up sensors for the monitoring project.

4.0 Conclusion

At the conclusion of the calibration, complete all calibration forms noting any adjustments made, maintenance performed, and corrective actions taken, if any. Note the specific time which the calibrations for the wind speed and direction sensors began and ended. Sign and date the calibration form under any comments made.

Calibration Procedure for RM Young 05305-AQ Wind Speed and Wind Direction Sensors

2.0 Introduction

Calibration of RM Young 05305-AQ type wind speed and wind direction sensors (hereafter referred to as RM Young sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for an RM Young sensor requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

The calibration is comprised of the determination of sensor responses to known input values, maintenance and adjustment of the sensors responses if warranted, and the documentation of all adjustments and responses.

Items required for the calibration of an RM Young are as follows:

1. RM Young 18801 (or similar model) anemometer drive
2. RM Young linearity test fixture
3. PC or similar display module
4. Tripod mounted, survey grade compass and/ or pre-determined bearings to landmarks.
5. F460 manual

The calibration will begin by filling out the first part of the wind speed and wind direction calibration forms, noting the time, date, calibrator, and any witnesses.

1.1 System Inspection

Before determining the initial response of a RM Young inspect the cable, prop, vane, and bearings for damage, open the outer cuff of the sensor and look for condensation inside. Note these observations on the Wind Speed Calibration Form.

2.0 Wind Speed Calibration Procedures

2.1 Pre-adjustment System checks

A system response check is performed by the use of an RM Young 18801 (or similar model) anemometer drive. The cups are removed from the sensor shaft and the anemometer drive is attached. The sensor is then challenged at the speeds specified on the Wind Speed Calibration Form. The speeds measured by the datalogger for each specific revolution per minute (rpm) are compared to the calculated values. The equation for calculating wind speed as a function of anemometer drive rpm is given on the Wind Speed Calibration Form.

2.2 Maintenance and Adjustments

At this point the technician should review the performance of the sensor and determine what adjustments are required, if any. All basic maintenance should be performed before any serious adjustment of the sensor, or determination of a new multiplier and/or offset in the datalogger programming. All maintenance and adjustments should follow the guidelines presented by the manufacturer in the RM Young instrument manual.

2.3 Post-Adjustment Checks

If any maintenance or adjustments were performed, the steps listed in Section 2.1 of this procedure should be repeated and recorded on the Wind Speed Calibration Form. Results of the post adjustment checks should be closely evaluated. If the output values do not closely match the expected values, perform troubleshooting, maintenance, and adjustments as needed to correct the sensor response. If the sensor is deemed un-repairable by the technician, it should be replaced as soon as possible from the stock of back-up sensors for the monitoring project.

3.0 Wind Direction Calibration Procedures

3.1 Sensor Orientation

After the system is inspected, a check of the wind vane orientation is performed. The two methods for an orientation check of the wind vane are as follows:

<u>Compass</u>

6. Determine declination for the area using a Geomag type program with the most recent models of the earth's magnetic field.
7. Use a clamp fashioned from a band clamp and rubber tubing to fix the wind vane in various directions.
8. Using a tripod mounted and leveled, survey grade compass align the compass so that it sights directly at the tail of the wind vane.
9. Obtain readings in each of the four quadrants of the compass.
10. Record the readings from the datalogger and the compass on the Wind Direction calibration form.

<u>Landmark</u>

4. Obtain a GPS point directly under the wind direction sensor.
5. Using a mapping program (eg: TOPO!, allTOPO, or similar) with USGS datasets as its base files, obtain bearings to nearby defined landmarks.
6. Clamp and site the vane tail at the appropriate landmark and record the reading from the datalogger.

3.2 System Linearity Check

Using a RM Young linearity test fixture test the sensor at 30° intervals. Record the readings from the datalogger at each interval on the Wind Direction Calibration Form and compare to the expected values. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 5° (accuracy) and ≤ 3° mean absolute error (linearity). Mean absolute error is calculated by the the following equation: equation.

$$\sum \frac{|X|}{n}$$

Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

3.3 Maintenance and Adjustment

At this point the technician should review the performance of the sensor and determine what adjustments are required, if any. All basic maintenance should be performed before any serious adjustment of the sensor, or determination of a new multiplier and/ or offset in the datalogger programming. All maintenance and adjustments should follow the guidelines presented by the manufacturer in the RM Young instrument manual. If the orientation was incorrect, the alignment of the cross arm will need to be adjusted following the linearity check.

3.4 Post Adjustment Checks

After all maintenance and adjustments have been made, the steps listed in Sections 3.2 and 3.1 of this document should be repeated, respectively. All results should be recorded On the Wind Direction Calibration Form. Results of the post adjustment checks should be evaluated. If the output values do not closely match the expected values, perform troubleshooting, maintenance, and adjustments as needed to correct the sensor response. If the sensor is deemed un-repairable by the technician, it should be replaced as soon as possible from the stock of back-up sensors for the monitoring project.

4.0 Conclusion

At the conclusion of the calibration, complete all calibration forms noting any adjustments made, maintenance performed, and corrective actions taken, if any. Note the specific time which the calibrations for the wind speed and direction sensors began and ended. Sign and date the calibration form under any comments made.

Audit Procedure for Wind Speed and Wind Direction Sensors

1.0 Wind Speed

The required instruments to complete a wind speed audit are a torque watch, and anemometer drive.

The audit procedure is as follows: A system response check is performed by the use of an RM Young 18801 (or similar model) anemometer drive. The cups are removed from the sensor shaft and the anemometer drive is attached. The sensor is then challenged at the speeds specified on the Wind Speed Audit Form. The speeds measured by the datalogger for each specific rpm are compared to the calculated values. The equation for calculating wind speed as a function of anemometer drive rpm is given on the Wind Speed Audit Form. The absolute difference from expected values is then calculated to see if the values agree within ±0.5 mph or 5% of observed.

The starting torque should be measured with a torque watch, and recorded on the Wind Speed Audit Form. If the sensor starting torque is above 0.0049 oz-in the bearings may need to be cleaned, oiled, or replaced.

2.0 Wind Direction

The process for auditing a wind direction sensor is described below:

Compass

1. Determine declination for the area using a Geomag type program with the most recent models of the earth's magnetic field.
2. Use a clamp fashioned from a band clamp and rubber tubing to fix the wind vane in various directions. In medium to high winds a vane with the "tail" removed may have to be used as to not damage the wind vane.
3. Using a tripod mounted and leveled, survey grade compass align the compass so that it sights directly at the tail of the wind vane.
4. Obtain readings in each of the four quadrants of the compass.
5. Record the readings from the datalogger and the compass on the Wind Direction calibration form.

Landmark

7. Obtain a GPS point directly under the wind direction sensor.
8. Using a mapping program (eg: TOPO!, allTOPO, or similar) with USGS datasets as its base files, obtain bearings to nearby defined landmarks.
9. Clamp and site the vane tail at the appropriate landmark and record the reading from the datalogger.

2.1 System Linearity Check

Using a linearity test fixture appropriate for the sensor, test the sensor at 30° intervals. Record the readings from the datalogger at each interval on the Wind Direction Audit Form and compare to the expected values. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 5° (accuracy) and ≤ 3° mean absolute error (linearity). Mean absolute error is calculated by the equation 1.0.

$$\sum \frac{|X|}{n}$$

Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

Calibration Procedure for MetOne 062 Temperature Sensors

1.0 Introduction

MetOne 062 temperature sensors (hereafter referred to as temperature sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for a temperature sensor requires an initial calibration check, and calibrations every six months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for temperature sensor calibration is as follows:

1. Calibrated, certified, NIST traceable thermometer.
2. Thermal mass unit and or ice, warm, and hot water bath.
3. PC or similar display module.
4. MetOne 062 manual

The calibration should start by completing the top of the Temperature Sensor Calibrations Form.

1.1 System Inspection

Before determining the initial response of the temperature measurement system, inspect the signal cable and sensor for signs of damage and wear. Note these observations in the Temperature Sensor Calibrations Form.

2.0 Pre-adjustment Calibration Procedures

2.1 System Response Check

The system response check is performed by comparing the sensor response with that of a calibrated NIST traceable thermometer for at least three different temperatures. The ideal temperatures to compare the sensors at are very cold, cold, warm , and hot. The very cold, cold, warm, and hot temperatures should be about -40˚C to -30˚C, 0˚C, 15 to 25˚C, and 30 to 40˚C, respectively. These temperatures can be obtained through the use of three small insulated thermoses and a Thermal Mass Device (TMD). The thermal mass device must be cooled by contact with dry ice (frozen CO_2). An ice bath should be used for the cold temperature range. For the warm and hot temperatures warm and hot water should be used. The thermometer and temperature sensor should be collocated as closely as possible by taping the sensors together. After allowing time for the temperature readings to stabilize, the technician will record the calibration and datalogger values on the Temperature Sensor Calibration Form. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 0.5° (accuracy) and no more than ± 0.1˚ for temperature difference between matched

sensors in a delta temperature measurement system. Mean absolute error is calculated by the equation 1.0. Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

$$\sum \frac{|X|}{n}$$

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks, the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Since a true calibration of the sensor cannot be performed unless the sensor is checked across its full range, a sensor not conforming to the calibrated NIST thermometer will most likely need to be replaced and sent back to the factory for a true calibration.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 should be repeated and the results recorded in the Temperature Sensor Calibration Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Audit Procedure for Temperature Sensors

The temperature sensors should be removed from the aspirators and checked at three temperature points. The system response check is performed by comparing the sensor response with that of a calibrated NIST traceable thermometer for at least three different temperatures.

The ideal temperatures to compare the sensors at are very cold, cold, warm , and hot. The very cold, cold, warm, and hot temperatures should be about -40˚C to -30˚C, 0˚C, 15 to 25˚C, and 30 to 40˚C, respectively. These temperatures can be obtained through the use of three small insulated thermoses and a Thermal Mass Device (TMD). An ice bath should be used for the cold temperature range. For the warm and hot temperatures warm and hot water should be used. The thermometer and temperature sensors should be collocated as closely as possible by taping the sensors together. Agitate each thermos to equilibrate the medium and remove any local temperature gradients, then record the audit sensor and datalogger values on the Temperature Sensor Audit Form.

The auditor should then compare all values recorded for the temperature sensors to the standards listed on the Temperature Sensor Audit Form. The standard for temperature sensors is ±0.5˚ of observed, and ±0.1˚ for temperature difference between matched sensors in a delta temperature measurement system.

Field Calibration Check for a Li-Cor LI200X Pyranometer

1.0 Introduction

LiCor LI200X pyranometers (hereafter referred to as pyranometers) are calibrated at the factory before receipt. Therefore, the calibration schedule for a pyranometer requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

True calibration of a pyranometer is only accomplished in full mid-summer sun, on a perfectly clear day. This calibration should also last 2 full diurnal cycles. Since these conditions are rarely possible to meet in Alaska calibration field checks rather than true calibrations of pyranometers are performed.

A field calibration check is comprised of the comparison of the pre-adjustment responses to the responses obtained from a collocated, calibrated NIST traceable pyranometer, adjusting or performing needed maintenance on the pyranometer, and documentation of all collected data and adjustments made.

Equipment required for calibration is as follows:

1. Calibrated NIST traceable pyranometer.
2. Datalogger capable of the same scan and averaging frequency as the datalogger being used on-site.
3. All associated instrument manuals.

The calibration should be started by completing the top of the Solar Radiation Sensor Calibration Form.

1.1 System Inspection

Before determining the initial response of the solar radiation system, inspect the signal cable and pyranometer. Check the cable for signs of wear. Check that the pyranometer is level and free of dust. Record these findings in the Solar Radiation Sensor Calibration Form.

2.0 Pre-adjustment Systems Check

This check requires that the solar radiation sensor is in it's normal operating mode. The first part of the check consists of totally covering the sensor to exclude all light. Observe and record the output from the datalogger (which should be approximately zero) in the Solar Radiation Sensor Calibration Form. Next check the ambient light condition output for the sensor and calibration sensor. Record these values in the Solar Radiation Sensor Calibration Form.

Pre-adjustment Collocated Transfer Standard (CTS) Check

Set-up and level the CTS as near as practical to the site pyranometer. Record the concurrent values for the site and CTS pyranometer. Ideally, the CTS should be collecting data for the entire time the technician is on-site. These data should be collected at the same scan rate, and averaged at the same interval as the site pyranometer. Ideally a full diurnal cycle of concurrent readings from the site pyranometer and CTS should be taken.

In practice, the calibration technicians time on-site is limited due to the remoteness and access of monitoring sites in Alaska. Therefore, at least four averaging periods of the site and CTS should be used. That is, if the site datalogger is set to record hourly averages of solar radiation data, four hours of data should be taken form the site datalogger and the CTS. Record the solar radiation data, averaging interval, and all other pertinent information in the Solar Radiation Sensor Calibration Form. If possible check the linearity of the instrument by fitting a curve and checking the slope, intercept, and R^2 value of the Y = X line.

3.0 Maintenance and Adjustments

At this point in the field calibration check the technician should review the results of the system inspection, system check, and CTS check to determine if the sensor is operating within its acceptable limits, and establish what maintenance and adjustments are required, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Any maintenance and adjustments performed should be noted in the Solar Radiation Sensor Calibration Form.

4.0 Post-adjustment Checks

If any maintenance or adjustments were performed, the steps listed in Sections 3.0 and 4.0 of this procedure should be repeated and all data noted in the Solar Radiation Sensor Calibration Form. The results of the post-adjustment checks should be evaluated and noted. If the results do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted. If the site pyranometer cannot be calibrated properly the unit may have to be replaced and sent back to the factory for repair.

5.0 Conclusion

Upon completion of the field calibration check, the Solar Radiation Sensor Calibration Form should be completed. Any adjustments, maintenance or repairs made should be noted. Sign and date the calibration form underneath any notes made in the comments section.

Solar Radiation Sensor Audit Procedure

Performance audits of a solar radiation system require a separate datalogger and a calibrated, NIST traceable pyranometer to serve as a collocated transfer standard (CTS). Procedure for the solar radiation system audit is as follows:

1. Set-up and level the CTS as near as practical to the site pyranometer.

2. Fill in the information of the top portion of the Solar Radiation Audit Form.

3. Record concurrent values for the site and CTS pyranometers for at least four of the site averaging intervals.

Ideally a full diurnal cycle of concurrent readings from the site pyranometer and CTS should be taken. However, In general practice the auditors time on-site is limited due to the remoteness and access of monitoring sites in Alaska. Therefore, at least four averaging periods of the site and CTS should be used. That is, if the site datalogger is set to record hourly averages of solar radiation data, four hours of data should be taken form the site datalogger and the CTS. Record the solar radiation data, averaging interval, scan rate, and all other pertinent information in the Solar Radiation Sensor Audit Form.

Calculated the percent difference according to the following equation and record the results in the Solar Radiation Sensor Audit Form.

$$\textit{Percent Difference} = \frac{\textit{(Observed value) - (Audit Value)}}{\textit{(Audit Value)}}$$

Check the linearity of the instrument, as compared to the CTS by fitting a curve and checking the slope, and intercept, of the Y = X line. To pass the audit the measures values should be within ±5% of observed (slope) and ±10 Wm^{-2} (intercept).

Calibration Procedure for Vaisala HMP- 45 Type Relative Humidity Sensors

1.0 Introduction

Vaisala HMP-45 type relative humidity sensors (hereafter referred to as relative humidity sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for a relative humidity sensor requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for relative humidity sensor calibration is as follows:

1. Calibrated, certified, NIST traceable relative humidity sensor.
2. PC or similar display module.
3. Vaisala HMP-45 type sensor manual

The calibration should be started by completing the top of the Relative Humidity Sensor Calibrations Form.

1.1 System Inspection

Before determining the initial response of the relative humidity measurement system, inspect the signal cable and sensor for signs of damage and wear. Open the sensor cover to look for signs of water condensation on the circuit board. Note these observations in the Relative Humidity Sensor Calibrations Form.

2.0 Pre-Adjustment Sensor and System Check

The system and sensor check of a relative humidity sensor is performed by comparing the sensor response with that of a calibrated NIST traceable relative humidity sensor such as a Vaisala HMI-41, to serve as a collocated transfer standard (CTS). Collocate the CTS as near to the site remative humidity sensor as possible. For aspirated temperature measurements, the sensor should be collocated inside, or just outside the bottom of the aspirator to receive the same amount of airflow and solar shielding as the site relative humidity senor. Five concurrent, instantaneous readings should be recorded, at least minute apart. Record these values on the Relative Humidity Sensor Calibrations Form.

Next calculate the absolute percent difference for each values and record the results in the Relative Humidity Sensor Calibrations Form. These instantaneous values should agree with the values from the CTS within ±5%.

Calculate the dew point temperature for each of the five points taken. Dew point temperature or T_d should be calculated according to the following equation:

Note: this equation is only valid for the following conditions:

0 °C < T < 60 °C
0.01 < RH < 1.0
0 °C < T_d < 50 °C

Where:

T = temperature in degrees Celsius
RH = is the relative humidity as a fraction (not percent)
T_d = the dew point temperature to be calculated

The formula is:

$$T_d = \frac{b\,\gamma(T, RH)}{a - \gamma(T, RH)}$$

where

$$\gamma(T, RH) = \frac{a\,T}{b + T} + \ln RH$$

and

a = 17.27
b = 237.7 °C

The recommended system accuracy for dew point temperature is ±1.5°C of observed

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Since a true field calibration of the sensor can rarely be performed any sensor not conforming to the calibrated NIST relative humidity sensor will most likely need to be replaced and sent back to the factory for a true calibration.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 of this document should be repeated and the results recorded in the Relative Humidity Sensor Calibrations Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Relative Humidity Sensor Audit Procedure

Equipment needed for a relative humidity sensor audit includes a calibrated, NIST traceable, Vaisala HMI-41 or similar type relative humidity and temperature probe. This probe will serve as a collocated transfer standard (CTS).

The process for relative humidity as dew point audit procedure is as follows:

Collocate a calibrated NIST traceable relative humidity sensor such as a Vaisala HMI-41. Collocate the CTS as near to the site relative humidity sensor as possible. For aspirated temperature measurements, the sensor should be collocated inside, or just outside the bottom of the aspirator to receive the same amount of airflow and solar shielding as the site relative humidity sensor.

After the CTS has been given ample time to equilibrate five concurrent, instantaneous readings should be recorded, at least minute apart. Record these values on the Relative Humidity Sensor Audit Form.

Calculate the dew point temperature for each of the five points taken. Dew point temperature or T_d should be calculated according to the following equation:

Note: this equation is only valid for the following conditions:

0 °C < T < 60 °C
0.01 < RH < 1.0
0 °C < T_d < 50 °C

Where:

T = temperature in degrees Celsius
RH = is the relative humidity as a fraction (not percent)
T_d = the dew point temperature to be calculated

The formula is:

$$T_d = \frac{b\,\gamma(T, RH)}{a - \gamma(T, RH)}$$

where

$$\gamma(T, RH) = \frac{a\,T}{b + T} + \ln RH$$

and

a = 17.27
b = 237.7 °C

The recommended system accuracy for dew point temperature is ±1.5°C of observed.

Calibration Procedure for an ETI NOAH II Precipitation Gauge

1.0 Introduction

All ETI NOAH II precipitation gauges (hereafter referred to as precipitation gauges) are calibrated at the factory before receipt. Therefore, the calibration schedule for a precipitation gauge requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for precipitation gauges calibration is as follows:

1. NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator or large graduated cylinder.
2. PC or similar display module with P7GACOMM
3. ETI NOAH II manual

The calibration should be started by completing the top of the Precipitation Gauge Calibrations Form.

1.1 System Inspection

Before determining the initial response of the precipitation measurement system, inspect the signal cable and sensor for signs of damage and wear. Note these observations in the Precipitation Gauge Calibrations Form.

2.0 Pre-Adjustment Checks

2.1 System Check

To ensure that the weight measurement assembly (WMA) is functioning, slowly pour an initial amount of water into the gauge and check for a response from the datalogger.

2.2 Gauge Check

A calibration is performed by inputting known amounts of water into the gauge using a NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator or large graduated cylinder and checking the system response. Water is usually inputted into the gauge 800mL at a time, across the full range (4-12” liquid in gauge).

Water should be delivered to the gauge slowly, and poured onto the side of the gauge to buffer the flow. This will ensure that the sensitive load cell in the WMA does not become damaged.

After each bottle of water is added to the gauge, the measurement system should be given ample time to read. This value should be noted in the Precipitation Gauge Calibrations Form. The values should agree within ±10% of the expected. If possible check the linearity of the instrument by fitting a curve and checking the slope and intercept of the Y = X line.

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Due to limited time and marginal weather in the field a true field calibration of the sensor can rarely be performed. Therefore, any sensor not conforming to within ±10% of the expected values will most likely need to be replaced and sent back to the factory for a true calibration.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 should be repeated and the results recorded in the Precipitation Gauge Calibrations Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Audit Procedure for an ETI NOAH II Precipitation Gauge

An audit of an ETI NOAH II precipitation gauge is performed by inputting known amount of water into the gauge using a NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator or large graduated cylinder. Water is usually inputted into the gauge 800mL at a time, across the full range (4-12" liquid in gauge).

Water should be delivered to the gauge slowly, and poured onto the side of the gauge to buffer the flow. This will ensure that the sensitive load cell in the weight measurement assembly (WMA) does not become damaged. Ample time should be given for the gauge to calculate and read the delivered amount of liquid.

After each bottle of water is added to the gauge, the system measurement should be noted in the Precipitation Gauge Audit Form. The values should agree within ±10% of the expected. If possible check the linearity of the instrument by fitting a curve and checking the slope, intercept, and R^2 of the Y = X line.

Audit procedure is as follows:

1. Fill out the top of the Precipitation Gauge Audit Form noting the prevailing meteorological conditions.

2. Deliver water to the gauge in measured increments across the full range of the gauge, noting the volume delivered, expected and system response, and percent error.

3. Compare the error of the gauge to the limit of ±10%.

For the gauge to pass the audit each point taken must agree to the expected value within ±10%. The slope, intercept, and R^2 value for the Y = X line should also agree within ±10% of expected.

Calibration Procedure for a Nova Lynx 255-100 Evaporation Gauge

1.0 Introduction

All Nova Lynx 255-100 evaporation gauge (hereafter referred to as evaporation gauge gauges) are calibrated at the factory before receipt. Therefore, the calibration schedule for an evaporation gauge requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for precipitation gauges calibration is as follows:

1. Large graduated cylinder or similar water delivery device
2. Ruler
3. PC or similar display module
4. Nova Lynx 255-100 manual

The calibration should be started by completing the top of the Evaporation Gauge Calibrations Form.

1.1 System Inspection

Before determining the initial response of the precipitation measurement system, inspect the signal cable and sensor for signs of damage and wear. Note these observations in the Evaporation Gauge Calibrations Form.

2.0 Pre-Adjustment Checks

2.1 System Check

To ensure that the float mechanism is functioning, slowly pour an initial amount of water into the gauge and check for a response from the datalogger.

2.2 Gauge Check

A calibration is performed by inputting known amounts of water into the gauge using a large graduated cylinder, measuring the height of the water in the evaporation pan, and checking the system response. Water is usually inputted into the gauge 800mL at a time, across the full range (3-9” liquid in gauge).

After each bottle of water is added to the gauge, the measurement system should be given ample time to read. This value should be noted in the Evaporation Gauge Calibrations Form. Check the linearity of the instrument by fitting a curve and checking

the slope and intercept of the Y = X line. These values should agree within ±10% of the expected.

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 should be repeated and the results recorded in the Evaporation Gauge Calibrations Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Audit Procedure for a Nova Lynx 255-100 Evaporation Gauge

An audit of an Nova Lynx 255-100 evaporation gauge is performed by inputting known amount of water into the gauge using a large graduated cylinder or similar type of water delivery device. Water is usually inputted into the gauge 800mL at a time, across the full range (3-9" liquid in gauge).

Water should be delivered to the gauge slowly and ample time should be given for the gauge to read and calculate the delivered amount of liquid.

After each bottle of water is added to the gauge, the system measurement should be noted in the Evaporation Gauge Audit Form. Check the linearity of the instrument by fitting a curve and checking the slope and intercept of the Y = X line. These values should agree within ±10% of the expected.

Audit procedure is as follows:

4. Fill out the top of the Evaporation Gauge Audit Form noting the prevailing meteorological conditions.

5. Deliver water to the gauge in measured increments across the full range of the gauge, noting the level of water in gauge and system response.

6. Compare the linearity of the gauge to the limit of ±10%.

For the gauge to pass the audit the slope and intercept of the Y = X line should agree within ±10% of expected.

Systems Audit Procedures for the Pebble Project Meteorological Monitoring Program.

1.0 Introduction

A systems audit is an on-site inspection and review of the quality assurance system used for the total measurement system (sample collection, sample analysis, data processing, ect.) for each monitored parameter. Whereas, performance audits are quantitative appraisal, system audits are normally a qualitative appraisal. The standard operating procedures (SOP) in the projects analysis plan should be used as the basis for conducting a system audit. The purpose of a system audit is to determine whether or not the monitoring program has followed the SOP and quality control procedures and listed in the projects analysis plan. It also determines if the data generated are scientifically valid, defensible, and of specified accuracy and precision.

2.0 Audit Items

The following are typical items checked in a systems audit for a PSD Meteorological Monitoring Program:

1. Is the quality assurance organization operational

2. Are there written standard operation procedures (SOP) available for site operation and sampling, and are they being followed?

3. Are there written calibration procedures and schedules, including traceability documentation, and are they being followed?

4. Are there preventative maintenance procedures and are they being followed?

5. Are site logbooks, site checks forms, and other documentation being used and properly completed?

3.0 Audit Goals

The goal of a systems audit is to ass the overall operation of the quality assurance system. System audits generally entail the following procedures:

1. Preparing audit questionnaires for the monitoring site evaluations (F/ST9001.1) and for evaluation of the office activities related to the monitoring (F/ST9001.2).

2. Identifying deficiencies from previous audits and preparing a checklist covering these areas.

3. Arranging entrance interviews and briefing the site operator on the purpose and the scope of the systems audit.

4. Performing the systems audit.

5. Conducting exit interviews and debriefing on the system audit results

6. Preparing and submitting audit reports

7. Following up on report recommendations.

A systems audit will be conducted within 30 days of the commencement of the filed program in order to insure that all of the QA project plans specified procedures have been implemented. An early assessment is designed to prevent the accumulation of a large amount of questionable to invalid data bay quickly uncovering any discrepancies between the project plan and the actual monitoring effort. Thereafter, a systems audit will be conducted yearly.

Hoefler CONSULTING GROUP

INDIVIDUAL SITE MEMO

Job Number: 1208-005-210
Station: Williamsport
Time Period:
Less Than 4/28/2008

Start Date & Time
3/24/2008 11:00

End Date & Time
3/24/2008 13:00

☐ **Equipment Change**
☐ **Missing or Altered Data**

Activity
Repair/Replace

Lead Technician
Dominic Shallies

Summary

Restored communications to station datalogger.

Work Performed

Dominic Shallies and Eric Brudie visited the Williamsport station to reset the communications. The datalogger RS232 port was found to be locked up. This problem is suspected to have happened because of concurrent communications with the CC640 digital camera interface (MD485) over the CS I/O port and the Freewave radio over the RS232 port. All stored data and images were downloaded from the CR1000 and a new operating system (rev.15) was loaded. One of the bugs listed to be fixed in rev.15 is comm lock-up during concurrent comm. Settings and datalogger program were returned to original. Comm was tested to HCG and is good.

Pending Items

1. 3/16" cable clamp for propane tank guy wire.

Attachments

EXAMPLE

APPENDIX C2
AUDIT/CALIBRATION FORMS

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**

A. DAS TIME AUDIT

Instrument Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments:

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?

B. 2M, 10M, and ΔT, TEMPERATURE SENSOR AUDIT

Thermistor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Audit Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED THERMISTOR TEST									
Thermal Input			Station Response						
Temp Range	Target Deg C	Input Deg C	2M DAS Deg C	10M DAS Deg C	ΔT DAS Deg C	ΔT Error Deg C	2M Error Deg C	10M Error Deg C	Pass/ Fail?
Hot	35 - 40								
Warm	15 - 25								
Ice Bath	0								
				Max Abs. Error					

Instrument Limits: Max Absolute Error > 0.5˚C (accuracy), Max Absolute Error > 0.1˚C ΔT.
Comments:

C. RELATIVE HUMIDITY SENSOR AUDIT

Site Sensor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Audit Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED RELATIVE HUMIDITY SENSOR TEST							
NIST Readings			Station Response				
Temp Deg C	RH (%)	T_{dp} Deg C	DAS Temp Deg C	DAS RH (%)	DAS T_{dp} Deg C	Error Deg C	Pass/ Fail?
				Max Abs. Error			

Instrument Limits: Max Absolute Error > 1.5˚C Dew Point Temperature
Comments:

C. MAIN HORIZONTAL WIND SPEED SENSOR AUDIT

Height: _____ **Meters**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Audit Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Audit Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		
Torque:	N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	2.94				
200	5.60				
400	10.93				
1000	26.92				
2000	53.57				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: MPS=RPM/37.522569+0.27; MPH=0.44704*MPS; gm-cm=72*oz-in; Torque=1.8*MPS^2.
Comments:

D. BACKUP HORIZONTAL WIND SPEED SENSOR AUDIT

Height: _____ **Meters**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Audit Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Audit Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		
Torque:	N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	0.51				
200	1.02				
400	2.05				
1000	5.12				
2000	10.24				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >2.4 gm-cm (0.033oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: Transfer Function for RM Young Model 05305 AQ w/ carbon fiber propeller: m/s = rpm x 0.00512
Comments:

E. HORIZONTAL WIND DIRECTION SENSOR AUDIT

Height: _____ **Meters**

Wind Dir Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Vane #:** _____ **Range:** _____ **Deg**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**
Audit Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions: Torque = 28.4*MPS^2 for aluminum vane.

Comments:

F. BACK-UP HORIZONTAL WIND DIRECTION SENSOR AUDIT

Height: **Meters**

Wind Dir Sensor: **Make:** **Model:** **S.N.#:** **Vane #:** **Range:** **Deg**
Audit Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >23.0 gm-cm (.32 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions:

Comments:

G. PRECIPITATION GAUGE AUDIT

Height: **Meters**

Precipitation Gauge: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Audit Equipment: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Diameter: **Inches** **Volume Rate** **Ml/mm**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**

PRECIPITATION GAUGE VOLUME TEST										
Start Time	Input Vol Ml	Input mm	Data Hour	DAS mm	-Adjust mm	+Adjust mm	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

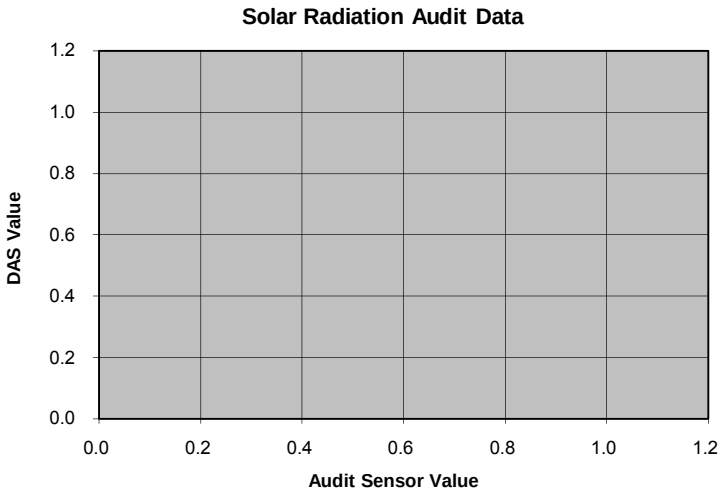
Instrument Limits: Max Absolute Error > 10 % of Input.
Comments:

H. SOLAR RADIATION SENSOR AUDIT

Height: _____ **Meters**

Site Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**
Audit Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**

SOLAR RADIATION SENSOR TEST					
DAS Output	Audit Output	C. Fit Data	Error	Error % Input	Pass/ Fail?
		Max Abs. Error			
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

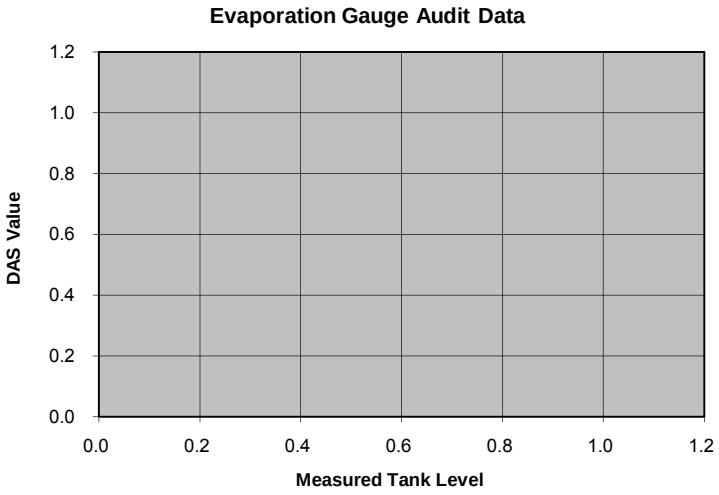
Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**
F) EVAPORATION GAUGE AUDIT **Height:** _____ **Meters**

Evaporation Gauge: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**
Evaporation Pan: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**

EVAPORATION PAN STAGE HEIGHT TEST					
Tank Level	DAS mm	C. Fit Data	Error mm	Error % Input	Pass/ Fail?
Max Abs. Error					
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**

A. DAS TIME CALIBRATION

Instrument Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments:

DAS TIME vs. NOAA CLOCK				
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?	Time Changed?

B. 2M, 10M, and ΔT, TEMPERATURE SENSOR CALIBRATION

Thermistor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Cal. Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED THERMISTOR TEST									
Thermal Input			Station Response						
Temp Range	Target Deg C	Input Deg C	2M DAS Deg C	10M DAS Deg C	ΔT DAS Deg C	ΔT Error Deg C	2M Error Deg C	10M Error Deg C	Pass/ Fail?
Hot	35 - 40								
Warm	15 - 25								
Ice Bath	0								
				Max Abs. Error					

Instrument Limits: Max Absolute Error > 0.5˚C (accuracy), Max Absolute Error > 0.1˚C ΔT.
Comments:

C. RELATIVE HUMIDITY SENSOR CALIBRATION

Site Sensor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Cal. Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED RELATIVE HUMIDITY SENSOR TEST							
NIST Readings			Station Response				
Temp Deg C	RH (%)	T_{dp} Deg C	DAS Temp Deg C	DAS RH (%)	DAS T_{dp} Deg C	Error Deg C	Pass/ Fail?
				Max Abs. Error			

Instrument Limits: Max Absolute Error > 1.5˚C Dew Point Temperature
Comments:

C. MAIN HORIZONTAL WIND SPEED SENSOR CALIBRATION

Height: _____ **Meters**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Cal. Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Cal. Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST	
Torque:	gm-cm
Bearing Status:	
Bearings Replaced:	
Torque: N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	2.94				
200	5.60				
400	10.93				
1000	26.92				
2000	53.57				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: MPS=RPM/37.522569+0.27; MPH=0.44704*MPS; gm-cm=72*oz-in; Torque=1.8*MPS^2.
Comments:

D. BACKUP HORIZONTAL WIND SPEED SENSOR CALIBRATION

Height: _____ **Meters**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Cal. Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Cal. Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST	
Torque:	gm-cm
Bearing Status:	
Bearings Replaced:	
Torque: N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	0.51				
200	1.02				
400	2.05				
1000	5.12				
2000	10.24				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >2.4 gm-cm (0.033oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: Transfer Function for RM Young Model 05305 AQ w/ carbon fiber propeller: m/s = rpm x 0.00512
Comments:

E. HORIZONTAL WIND DIRECTION SENSOR CALIBRATION

Height: _____ **Meters**

Wind Dir Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Vane #:** _____ **Range:** _____ **Deg**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**
Cal. Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions: Torque = 28.4*MPS^2 for aluminum vane.

Comments:

F. BACK-UP HORIZONTAL WIND DIRECTION SENSOR CALIBRATION

Height: **Meters**

Wind Dir Sensor: **Make:** **Model:** **S.N.#:** **Vane #:** **Range:** **Deg**
Cal. Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >23.0 gm-cm (.32 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions:

Comments:

G. PRECIPITATION GAUGE CALIBRATION

Height: **Meters**

Precipitation Gauge: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Cal. Equipment: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Diameter: **Inches** **Volume Rate** **Ml/mm**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**

PRECIPITATION GAUGE VOLUME TEST										
Start Time	Input Vol Ml	Input mm	Data Hour	DAS mm	-Adjust mm	+Adjust mm	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

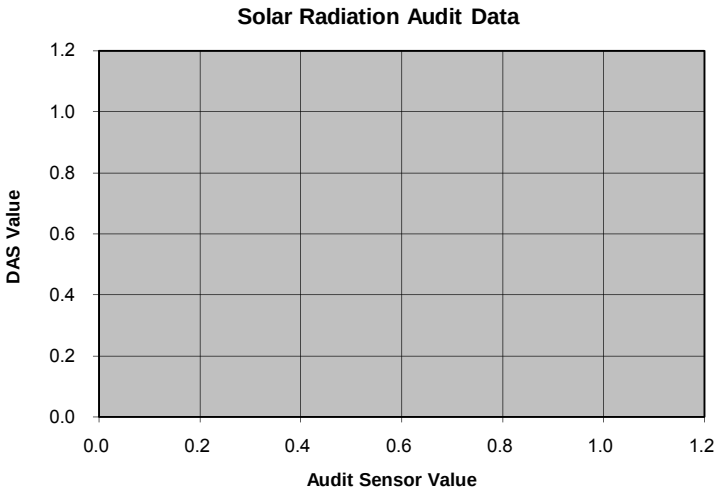
Instrument Limits: Max Absolute Error > 10 % of Input.
Comments:

H. SOLAR RADIATION SENSOR CALIBRATION

Height: _____ **Meters**

Site Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**
Cal. Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**

SOLAR RADIATION SENSOR TEST					
DAS Output	Audit Output	C. Fit Data	Error	Error % Input	Pass/ Fail?
		Max Abs. Error			
Intercept		**Slope**			



Regression: slope: intercept: R:
Time: Begin: End: **Date:**

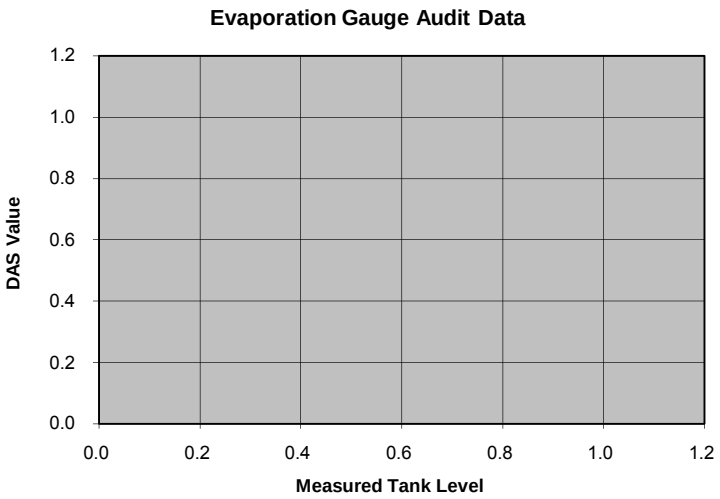
Instrument Limits: Max Absolute Error > 5 % . $0.95 \le m \le 1.05$, $-10 \le b \le 10$
Comments:

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Pebble Project **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**
F) EVAPORATION GAUGE CALIBRATION **Height:** _____ **Meters**

Evaporation Gauge: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**
Evaporation Pan: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**

EVAPORATION PAN STAGE HEIGHT TEST					
Tank Level	DAS mm	C. Fit Data	Error mm	Error % Input	Pass/ Fail?
Max Abs. Error					
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

APPENDIX D
STATEMENT OF QUALIFICATIONS

Air Quality Monitoring Services

Hoefler Consulting Group is an Anchorage-based consulting firm specializing in comprehensive environmental permitting and compliance services for Alaskan industries. Hoefler provides technical services supporting construction and operation of facilities in Alaska's unique physical, regulatory, and political environment. Hoefler is the leading air quality consulting firm in Alaska. The firm's staff of 40 professionals provides the following services from our Anchorage offices:

- PSD and non-PSD construction permitting
- Title V operating permitting
- Meteorological and ambient air quality monitoring programs
- Criteria pollutant, HAP, and greenhouse gas emission inventories
- Best available control technology demonstrations
- Air modeling compliance demonstrations
- Risk assessment
- Open burning approvals
- Certified opacity readings
- Source test supervision and support

Summaries of Experience for Key Personnel

ALAN M. TRBOVICH, CCM,

Vice President

Al Trbovich is a Certified Consulting Meteorologist and the Air Quality Team Leader of the Hoefler Consulting Group. He has 28 years of environmental permitting and regulatory compliance experience, and has been providing air quality services to his Alaskan clients throughout the state since 1998. Mr. Trbovich has extensive experience working with all facets of air permitting including construction ("PSD") and operating ("Title V") permitting, meteorological and ambient monitoring, compliance monitoring, source testing, and risk assessments. He is also a specialist in air quality modeling and has conducted ambient air quality and/or visibility modeling studies throughout Alaska. He has also lead numerous multi-disciplinary teams in preparing air permit applications, environmental impact statements, and other environmental studies. Mr. Trbovich holds B.S. and M.S. degrees in Meteorology from the University of Utah.

K. STEVEN MACKEY

Senior Project Manager

Steve Mackey is the Project Manger for the Air Quality Group at Hoefler Consulting group. He has over 22 years of air quality experience in air quality services project management as well as database development and management. His specialties include ambient air monitoring, meteorological monitoring, continuous emission monitoring systems (CEMS), source emissions measurement, and regulatory Compliance. Mr. Mackey holds B.S. degree in mechanical engineering from the University of Washington.

ERIC L. BRUDIE

Air Quality Consultant

Eric Brudie is an independent Air Quality Consultant that works with the Air Quality Group at Hoefler Consulting. He has over 24 years of air monitoring experience in air quality services. Mr. Brudie works with Hoefler Consulting as an independent contractor who specializes in conducting performance and systems audits of numerous PSD quality meteorological monitoring systems. His experiences include designee and operating numerous remote meteorological monitoring systems for the TAGS project, including the LNG terminal site 40-meter remote system. He functioned as a key team member in the preparation and agency approval of the Meteorological Monitoring & QA/QC Plan and the Application for Air Quality Control Permit to Operate with PSD Review for the proposed LNG liquefaction plant. Mr. Brudie holds a B.S. in Geological Engineering from the Colorado School of Mines.

W. DOMINIC SHALLIES

Associate Scientist

Dominic Shallies is an Associate Scientist at Hoefler Consulting. He assists in field project support and meteorological monitoring site operations for Air Quality Group. He has over 5 years experience in environmental monitoring and meteorological data collection. His specialties include PSD quality meteorological monitoring station installation and operation, data management, site assessment, and technical writing and editing. Mr. Shallies holds a BS in Environmental Science from the University of Alaska Southeast.

REBECCA K. VAN WYCK

Associate Scientist

Rebecca Van Wyck is the data Manager for the Air Quality Group at Hoefler Consulting. She has more than 5 years experience maintaining networks consisting of remote data collection stations. Her specialties include data management, statistical analysis, field data collection, and technical report writing and editing. Mrs. Van Wyck holds a B.S. in Environmental Science from Antioch College.

APPENDIX 2C

Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program August 2006

Quality Assurance Project Plan

for the

Pebble Project Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines Inc.

August 2006

Quality Assurance Project Plan

for the

Pebble Project
Meteorological
Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines Inc.
Anchorage, AK

by

Hoefler Consulting Group
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503
(907) 563-2137

August 2006

A. Project Management Elements

A1. Approvals

Mike C. T. Smith — 8.31.06

Mike Smith
NDM Permitting Manager
Northern Dynasty Mines Inc.

Date

Al Trbovich — 8/31/06

Al Trbovich
HCG Permitting Manager
Hoefler Consulting Group

Date

K. Steven Mackey — 8/31/2006

K. Steven Mackey
HCG Project Manager
Hoefler Consulting Group

Date

Eric Brudie — 8/31/2006

Eric Brudie
HCG Quality Assurance Officer
Hoefler Consulting Group

Date

Bill Walker
ADEC Air Permits Program/Project Supervisor
Alaska DEC

Date

Richard Heffern
ADEC Air Quality Assurance Manager
Alaska DEC

Date

A2. Contents

A. Project Management Elements ii

A1. Approvals ii
A3. Distribution List 1
A4. Project/Task Organization 1
A5. Problem Definition/Background and Project Objective 4
A6. Project/Task Description 4
A7. Quality Objectives and Criteria for Measurement of Data 8
A8. Training and Certifications 10
A9. Documents and Records 10

B. Measurement and Data Acquisition 12

B1. Sampling Process Design 12
B1.1 Monitoring Site Locations 12
B2. Sampling Methods Requirements 25
B2.1 Reference and Equivalent Methods 25
B2.2 Environmental Controls 28
B3. Sample Handling and Custody 28
B4. Analytical Methods Requirements 28
B5. Quality Control 28
B6. Instrument/Equipment Testing and Inspection/Maintenance 33
B6.1 Acceptance Testing 33
B6.2 Site Surveillance and Equipment Inspection and Maintenance 33
B6.3 Preventive Maintenance and Corrective Actions 33
B7. Instrument/Equipment Calibration and Frequency 34
B7.1 Calibration Frequency 34
B7.2 Calibration Equipment 34
B8. Inspection/Acceptance of Supplies and Consumables 36
B9. Non-direct Measurements 36
B9.1 Climate History 36
B9.2 Land Use 39
B10. Data Management 40
B10.1 Data Acquisition 41
B10.2 Data Validation 41
B10.3 Data Transmission 42
B10.4 Data Reduction 42
B10.5 Data Reporting 42
B10.6 Data Storage 42
B10.7 Data Use in Modeling 42

C. Assessments and Oversight 43

C1. Assessments and Response Actions 43
C1.1 Performance Audits 43
C1.2 Systems Audits 43
C1.3 Corrective Actions 45
C1.4 QAPP Revisions 46
C2. Reports to Management 46

D. Data Validation and Usability 47

D1. Data Review, Validation, and Verification Requirements 47
D1.1 Data Review 47
D1.2 Data Calculations 47
D2. Validation and Verification Methods 48
D3. Reconciliation with User Requirements 48

List of Tables

A1. Distribution List for Quality Assurance Project Plan 1
A2. Pebble Project Meteorological Monitoring Program Key Individuals and Responsibilities 2
A3. Pebble Project Meteorological Monitoring Program Work Schedule 6
A4. Summary of DQOs for the Pebble Project Meteorological Monitoring Program 9
B1. Summary of Pebble Project Meteorological Stations 14
B2. Summary of Meteorological Sensors and Performance Specifications 26
B3. Sampling and Averaging Times for Meteorological Parameters 27
B4. Meteorological Sensors QA/QC Critical Validation Criteria 30
B5. Meteorological Sensors QA/QC Operational Evaluations 31
B6. Meteorological Sensors QA/QC Systematic Issues 32
B7. List of Meteorological Equipment Spare Parts 34
B8. List and Specifications for Calibration Equipment 35
C1. List of Performance Audit Equipment and Procedures 45
D1. Data Review List for the Pebble Project 47

List of Figures

A1. Pebble Project Meteorological Monitoring Program Organizational Chart 3
A2. Pebble Project Area Map 7
B1. Pebble Project Mine Area Meteorological Station Locations 15
B2. Pebble 1 Meteorological Station Site Map 16
B3. Pebble 4 Meteorological Station Site Map 17

B4. Pebble 1 Meteorological Station 18
B5. Area Surrounding the Pebble 1 Meteorological Station 19
B6. Pebble 4 Meteorological Station 20
B7. Area Surrounding the Pebble 4 Meteorological Station 21
B8. Pebble Port Meteorological Station Map 22
B9. Pebble Port Meteorological Station 23
B10. Area Surrounding the Pebble Port Meteorological Station 24
B11. Iliamna Daily Extreme and Average High and Low Temperatures 37
B12. Iliamna Monthly Mean Precipitation 37
B13. Iliamna Wind Rose 38
B14. Alaska Air Quality Control Regions 39
B15. Alaska Class I Areas 40
B16. Data Processes Flow Chart 41

List of Appendices

Appendix A. Program References
Appendix B. Standard Operating Procedures and Forms
Appendix C. Statement of Qualifications

A3. Distribution List

The following individuals have been provided a copy of this Quality Assurance Project Plan:

Table A1. Distribution List for Quality Assurance Project Plan

Key Individual/ Title	Organization	Email	Address	Phone
Mike Smith NDM Permitting Manager	Northern Dynasty Mines Inc.	michaels@nothern dynasty.com	3201 C Street, Suite 604 Anchorage, Alaska 99503	(907) 339-2606
Al Trbovich, HCG Permitting Manager	Hoefler Consulting Group	atrbovich @hoeflernet.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 563-2140
Steven Mackey, HCG Project Manager	Hoefler Consulting Group	smackey @hoeflernet.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 563-2129
Eric Brudie, HCG Quality Assurance Auditor	Hoefler Consulting Group	eric @brudie.com	3401 Minnesota Dr., Suite 300 Anchorage, Alaska 99503	(907) 243-0462
Bill Walker, ADEC Air Permits Program/ Construction Permits Supervisor	Alaska Department of Environmental Conservation	Bill_Walker @dec.state.ak.us	410 Willoughby Avenue, Suite 303 Juneau, Alaska 99801	(907) 465-5124
Richard Heffern, ADEC Air Quality Assurance Manager	Alaska Department of Environmental Conservation	Richard_Heffern @dec.state.ak.us	410 Willoughby Avenue, Suite 303 Juneau, Alaska 99801	(907) 465-5111

A4. Project/Task Organization

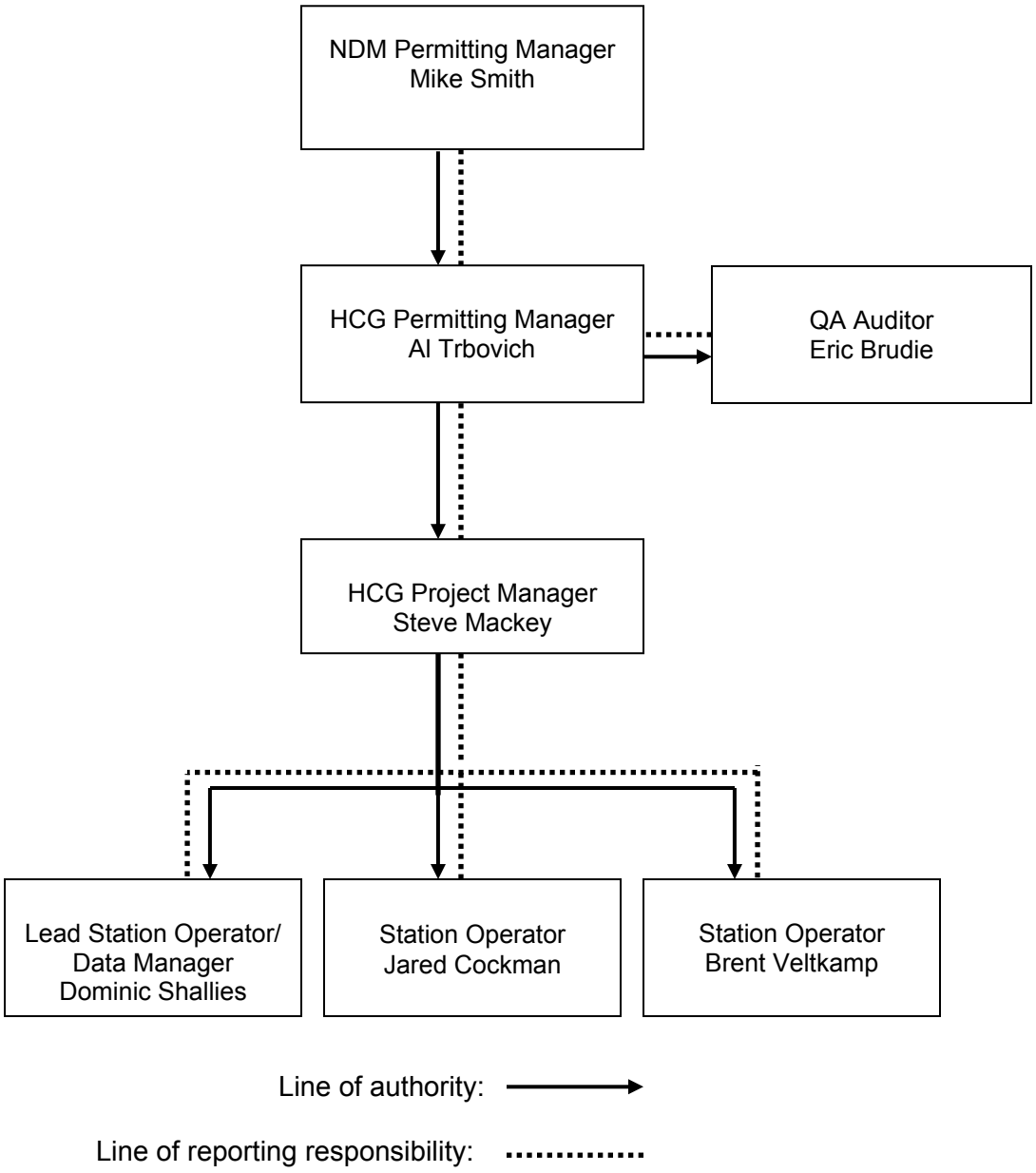
Hoefler Consulting Group (HCG) will support Northern Dynasty Mines Inc. (NDM) in the installation, operation, and maintenance of meteorological monitoring stations for the Pebble Project located near Iliamna, Alaska. Figure A1 provides the organization plan for this project. The key personnel involved with this project and their respective responsibilities are

summarized in Table A2. HCG will be responsible for all aspects of air monitoring, database management, and reporting.

Table A2. Pebble Project Meteorological Monitoring Program Key Individuals and Responsibilities

Key Individual	Responsibilities
NDM Permitting Manager	Mike Smith is the permitting manager for the Pebble Project and is responsible for complete program oversight.
HCG Permitting Manager	Al Trbovich is responsible for coordinating the meteorological monitoring program with NDM air permitting requirements.
HCG Project Manager	Steve Mackey is responsible for management of the technical staff conducting the NDM meteorological monitoring program and ensuring that the project is completed within established schedules and budgets.
Quality Assurance Auditors	Eric Brudie is responsible for auditing the validity and accuracy of reported information and coordinating follow-up activities to ensure a defensible data set.
Field/Site Operations	Dominic Shallies, Jared Cockman, and Brent Veltkamp are responsible for installation and routine operation of the monitoring stations.
Data Manager	Dominic Shallies is responsible for maintaining the project databases for all field data and for preparing data reports.

Figure A1. Pebble Project Meteorological Monitoring Program Organizational Chart



A5. Problem Definition/Background and Project Objective

The Pebble Project is a proposed mine for gold, copper, molybdenum, and silver located in southwestern Alaska, north of Lake Iliamna. NDM is conducting baseline environmental studies at the Pebble Project, including meteorological monitoring to support air permitting, environmental studies, and mine design objectives. At least two years of meteorological monitoring is anticipated with a primary objective of collecting meteorological data for supporting future air permit applications required for mining activities, construction and/or roadwork at the proposed mine and port sites.

The meteorological data will be collected in accordance with Prevention of Significant Deterioration (PSD) permit requirements and guidance. While construction of the mine and port infrastructure may not require a PSD permit, the PSD-quality meteorological measurements may also be used for air dispersion modeling required for minor permitting.

A6. Project/Task Description

This study will provide two years of representative surface meteorological observations for use in air quality dispersion modeling in support of the Pebble Project. The meteorological monitoring program will include three PSD-quality stations as follows:

- Mine PSD station (also referred to as the Pebble 1 station)
- Tailings Storage Facility PSD station (also referred to as the Pebble 4 station)
- Port PSD station (also referred to as the Pebble Port station)

The study will collect two years of meteorological data at the proposed Pebble mine area (Mine PSD station) and near the proposed port site (Port PSD station). The study will also provide one year of meteorological monitoring in the proposed tailings storage facility site (Tailings Storage Facility PSD station).

Two other non-PSD meteorological monitoring stations, known as the Pebble 2 and Pebble 3 stations, have also operated in the Pebble area to collect data for mine design purposes. These non-PSD stations are not included as part of this QAPP, as these stations are not intended to provide data for air dispersion modeling.

The meteorological monitoring stations for this project will use PSD quality equipment to monitor the following parameters on an hourly basis:

- Wind speed (meters/second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (sigma-theta [σ_θ])

- Temperature (degrees Celsius [°C])
- Vertical temperature difference (ΔT), 2-meter to 10-meter (degrees Celsius [°C])
- Relative humidity (percent [%])
- Solar radiation (watts per square meter [W/m^2])
- Barometric pressure (millibars [mbar])
- Precipitation (millimeters [mm]) (not included at Port PSD station)
- Evaporation (millimeters [mm]) (not included at Port PSD station)

The meteorological monitoring sites for the Pebble Project were selected in a manner consistent with PSD criteria for surface meteorological data collection. Figure A2 shows a map of the NDM meteorological monitoring sites located in southwest Alaska. On May 24, 2005, the proposed monitoring sites were visited by Alan Schuler and Gerry Guay of Alaska Department of Environmental Conservation (ADEC), Natasha Greaves and Rob Wilson of the United States Environmental Protection Agency (EPA) Region 10, and Al Trbovich and Steve Mackey of HCG. On this date, all parties concurred that the selected sites are the best available locations for carrying out meteorological monitoring representative of the areas proposed for development. Greater details of the monitoring site locations and the proximity of the study areas within defined Alaska land use boundaries are provided in Sections B1 and B9, respectively.

The Pebble Project Meteorological Monitoring Program is expected to run from August 1, 2005 to July 31, 2007 (two years). The first year of PSD monitoring will take place from August 1, 2005 to July 31, 2006. The second year of monitoring will take place from August 1, 2006 to July 31, 2007. The annual reports for this project are scheduled for submission to Northern Dynasty within ninety days following the completion of each year of monitoring. For purposes of data reporting, the two years of monitoring will be split into monitoring quarters as follows:

Year Number 1 (8/1/2005 – 7/31/2006)

Monitoring Quarter A	Aug/Sep/Oct 2005
Monitoring Quarter B	Nov/Dec/Jan 2005-2006
Monitoring Quarter C	Feb/Mar/Apr 2006
Monitoring Quarter D	May/Jun/Jul 2006

Year Number 2 (8/1/2006 – 7/31/2007)

Monitoring Quarter E	Aug/Sep/Oct 2006
Monitoring Quarter F	Nov/Dec/Jan 2006-2007
Monitoring Quarter G	Feb/Mar/Apr 2007
Monitoring Quarter H	May/Jun/Jul 2007

Personnel working on this project will be selected by the HCG project manager and will be fully qualified, trained, and capable of their assigned tasks. Work schedules will be

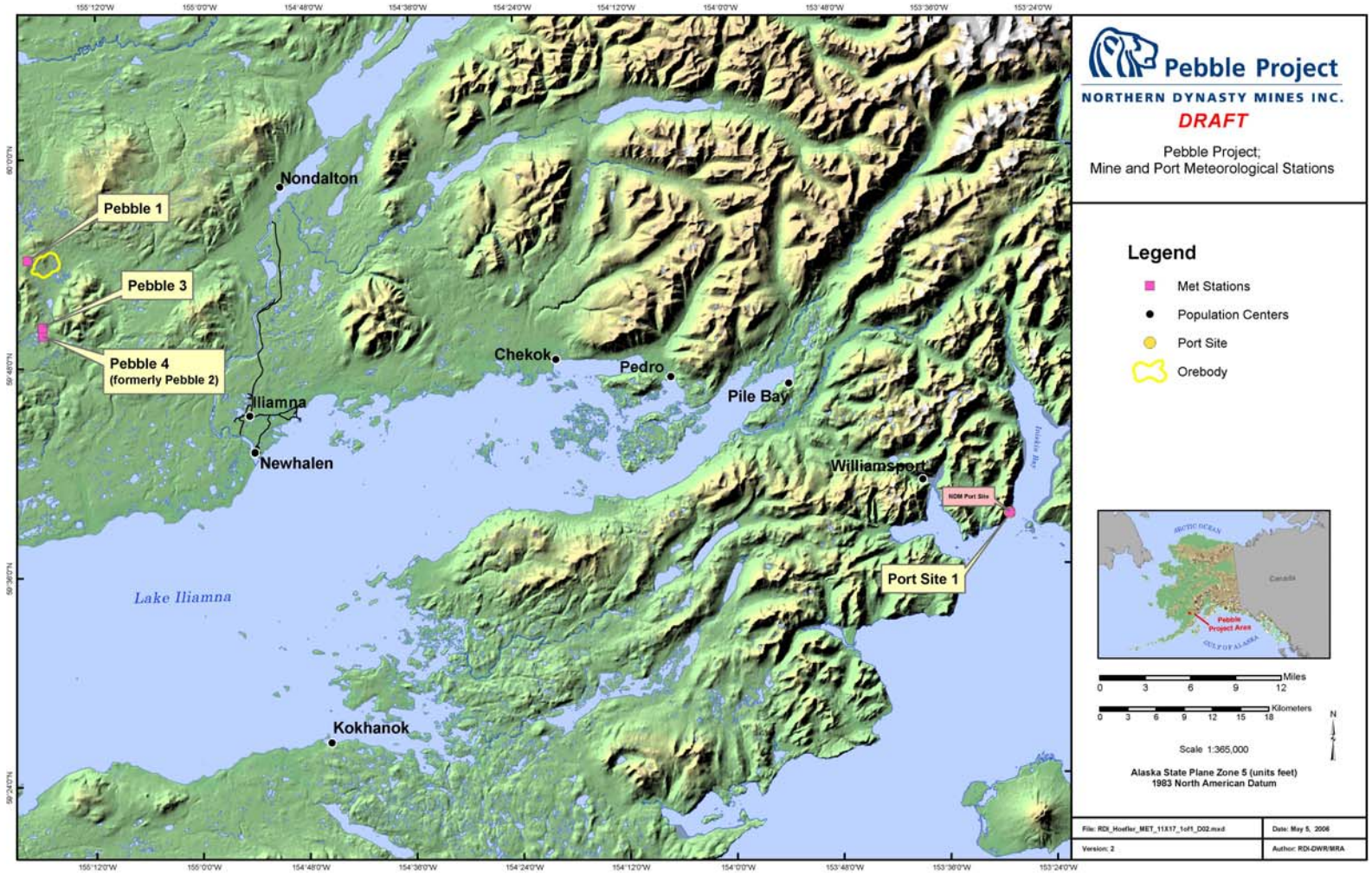
determined by the HCG project manager and will include: (a) daily data reviews, (b) site visits every four to eight weeks, (c) semiannual audits and audit reports, (d) quarterly data summaries, (e) annual data reports, and (f) as needed maintenance and corrective actions. Table A3 provides a provisional work schedule for this monitoring project.

Table A3. Pebble Project Meteorological Monitoring Program Work Schedule

Scheduled Activity	Date
Station Site Selection Visit	May 24, 2005
Installation of the Mine PSD Station (Pebble 1) and the Port PSD Station	June 2005
Training of Station Operators	June 2005
Mine PSD Station and Port PSD Station Initial Systems/Performance Audit and Calibrations	June 11 and June 25, 2005
Start of Two Year Monitoring Period[1]	August 1, 2005
Semiannual Performance Audit and Calibrations	January 15-16, 2006
Tailings Storage Facility PSD Station (Pebble 4) Installation	June 3-10, 2005
First Year of Monitoring Ends	July 31, 2006
Second Year of Monitoring Begins	August 1, 2006
Annual Systems/Performance Audit and Calibrations	July/August 2006
Semiannual Performance Audit and Calibrations	January 2007
Annual Systems/Performance Audit and Calibrations	June 2007
End of Two Year Monitoring Period	July 31, 2007

[1] The start of the PSD monitoring period was delayed until August 1, 2005 to resolve a temperature sensor problem in July 2005.

Figure A2. Pebble Project Area Map



A7. Quality Objectives and Criteria for Measurement of Data

Measurement Quality Objectives (MQOs) and acceptance criteria for the project are defined by the MQOs as prescribed in *EPA Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Sections 3 and 5 (EPA-454/R-99-005), and by the guidelines defined in *EPA Requirements for Quality Assurance Project Plans* Chapter 3, Section A7 (EPA QA/R-5).

Data completeness is a measure of the amount of data actually collected compared with the amount of data that could have been collected, expressed as a percentage. Data completeness for the meteorological sensors is calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The Data Quality Objective (DQO) for data completeness during this monitoring project is 90 percent data capture per quarter for every parameter listed in Table A4.

DQOs for the detection capabilities of the meteorological sensors are defined in terms of measurement resolution. The resolution DQOs for this project have been set equal to those put forth in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* Section 5.1 (EPA-454/R-99-005), and are presented in Table A4.

Accuracy is a measure of the proximity of the measurements and the true value. Accuracy includes components of both random error and systematic error associated with instrumental bias. Accuracy will be assessed during performance audits. The accuracy DQOs for the meteorological sensors are presented in Table A4, and have been set equal to those recommended in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 5.1 (EPA-454/R-99-005).

Detectability, method/comparability, and representativeness are determined by the siting and exposure of the meteorological tower and sensors. The space-time domain and aspects for this specific application--as prescribed in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 3.1.1 Objective for Siting (EPA-454/R-99-005)--have been considered for each measurement parameter.

Table A4. Summary of DQOs for the Pebble Project Meteorological Monitoring Program

Meteorological Parameter/ Manufacturer and Model	Measurement Method	Manufacturer Specified Accuracy	EPA Required Accuracy[1]	EPA Required Resolution[1]	Detectability/ Data Completeness[1]
Wind Speed (Climatronics F460)	Three-cup anemometer	± 0.07 m/s or ± 1%	± 0.2 m/s or ± 5%	0.1 m/s	90% per monitoring quarter
Wind Direction (Climatronics F460)	Light-weight vane	± 2 degrees	± 5 degrees	1.0 degree	90% per monitoring quarter
Wind Speed (RM Young 05305-AQ)	Light-weight propeller	± 0.2 m/s	± 0.2 m/s or ± 5%	0.1 m/s	90% per monitoring quarter
Wind Direction (RM Young 05305-AQ)	Light-weight vane	± 3 degrees	± 5 degrees	1.0 degree	90% per monitoring quarter
Ambient Temperature & Vertical Temperature Difference (Met One 062MP)	Solid state Thermistor	± 0.05°C	± 0.5°C (Ambient Temperature), ± 0.1°C (Temperature Difference)	0.1°C (Ambient Temperature), 0.02°C (Temperature Difference)	90% per monitoring quarter
Barometric Pressure (Vaisala PTB101B)	Silicon capacitive sensor	± 0.3 mbar	± 3 mbar	0.5 mbar	90% per monitoring quarter
Relative Humidity (Vaisala HMP45C)	Thin-polymer capacitor	± 2% (0-90% range) ± 3% (90-100% range)	± 1.5°C	0.1°C	90% per monitoring quarter
Solar Radiation (Licor LI200X)	Silicon photovoltaic detector	± 5%	± 5%	10 W/m^2	90% per monitoring quarter
Precipitation (ETI NOAH II)	Water pressure	± 0.25 mm	± 5 mm	0.3 mm	90% per monitoring quarter
Evaportation (Nova Lynx 255-100)	Float mechanism/ sensor	± 0.25%	n/a[3]	n/a[3]	90% per monitoring quarter

[1] Referenced in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Values are given in terms of dew point temperature in guidance document (EPA-454/R-99-005).
[3] n/a = not applicable.

A8. Training and Certifications

The Pebble Project meteorological monitoring sites require no specific mandated training requirements as stated in *EPA Requirements for Quality Assurance Project Plans* Section A8 (EPA QA/R-5). However, a site-specific health and safety plan was developed in accordance with both HCG and NDM standards. Site-specific training for this project covers activities performed in the field and includes record keeping practices. All HCG and NDM field personnel will attend annual site safety and logistics meetings hosted by NDM. HCG field technicians for this project will receive training on the operation and maintenance of the meteorological sensors and related equipment. Training will be conducted by the HCG project manager or his designees. Site-specific training checklists and site visit memos will document the specific training received by each Field Technician (Appendix B). These documents will be filed and maintained in the project files.

A9. Documents and Records

Documentation and records for this project will include equipment calibration and maintenance records, documentation of quality control/quality assurance activities, routine monitoring data, corrective action and resolution forms, any QAPP revision documentation, and records of HCG field activities (i.e. site visit memos). Appendix B includes example data sheets for the monitoring project. All hard-copy documentation will be stored at the HCG Anchorage office and retained for a period of at least five years from the completion of the project. Electronic data will be stored on various media with full project backups. In addition to any written reports, electronic data collected for this project and data transferred to electronic format will be provided to NDM via CD-ROM or e-mail. Both the original comma delimited raw text file and a spreadsheet format file will be provided.

The final annual reports will be submitted to ADEC and NDM in both hard copy and electronic (PDF) format within 90 days of the conclusion of the monitoring program. Validated data will be submitted to ADEC in the same formats. The annual report will include a brief discussion of any monitoring phenomena, observable trends, quarterly and annual averages for all the measured parameters, statistical summaries for each collected parameter, and wind rose graphics. The reports will also contain any additional documentation, including but not limited to equipment calibration and maintenance records, documentation of quality control/quality assurance activities, routine monitoring data, project data reports, corrective action records, and records of field activities. Examples of these documentation forms are provided in Appendix B. See Section C for an outline of the annual report.

In accordance with ADEC reporting guidelines, quarterly data summaries and annual data reports will be prepared by HCG and provided to NDM and ADEC. Two separate annual data reports will be prepared (one for each monitoring year, not calendar year).

The final annual data reports will conform to format requirements set forth in *PSD Quality Ambient Air Quality & Meteorological Monitoring Annual Data Report Format* (ADEC, March 2005). The annual data reports will be submitted to ADEC after the department has received the QAPP.

In addition to the annual data reports, quarterly data summaries will be prepared by HCG in accordance with the format described in *PSD Quality Ambient Air Quality & Meteorological Monitoring Quarterly Data Summary Format* (ADEC, March 2005) and provided to NDM and ADEC within 30 days after the completion of each calendar quarter. The quarterly data summaries will be submitted to ADEC in conclusion of each monitoring year.

B. Measurement and Data Acquisition

B1. Sampling Process Design

The identified objectives of the Pebble Project Meteorological Monitoring Program are:

- Collect meteorological data necessary to support air permit applications
- Collect data for other environmental purposes (baseline, NEPA)
- Collect data for engineering design of mine and port facilities

To accomplish the monitoring objectives, baseline meteorological monitoring is being performed in both the proposed mine region (two stations) and the proposed port site (one station). The monitoring study is comprised of three PSD quality meteorological monitoring stations, each of which will collect meteorological monitoring data over a period of two years. The three PSD stations are designed and operated to meet the data quality objectives previously outlined in Section A7 of this QAPP.

B1.1 Monitoring Site Locations

The Pebble Project area is located near Iliamna in southwestern Alaska. The mine area stations are located approximately 17 miles northwest of Iliamna and the Port station is located approximately 52 miles east of Iliamna on the eastern shore of Iniskin Bay. The specific station locations are shown in Figure A2.

The meteorological monitoring program consists of a total of three PSD quality meteorological monitoring stations, the Mine PSD Station (Pebble 1), the Tailings Storage Facility PSD Station (Pebble 4), and the Port PSD Station (Pebble Port). An additional non-PSD meteorological monitoring station is being used to collect data for mine design purposes. This non-PSD station was initially located at the Pebble 4 station site from October 2004 through November 2005, and was called the “Pebble 2” station. During November 2005, the Pebble 2 station was relocated 0.6 miles north and renamed “Pebble 3”. Table B1 provides a summary of the location, purpose, and measurement parameters of PSD and non-PSD meteorological monitoring stations for the Pebble Meteorological Monitoring Program. Throughout the remainder of this QAPP, emphasis will be placed on the locations and operation of the PSD meteorological monitoring stations only, as their primary purpose is to provide measurements for air dispersion modeling and air permit applications.

Figure B1 shows a map of the meteorological stations adjacent to the Pebble Project ore body, located approximately 15 to 20 miles west northwest of Iliamna, Alaska. Figures B2 and B3 provide higher resolved maps of the Pebble 1 and Pebble 4 station locations, which are situated atop gradual sloping hills that lie to the west and south, respectively, of the main

ore body. The Pebble 1 station is located at a northern edge of a hilltop at 1,600 feet above sea level and overlooks a basin to the west where the Pebble Project ore body is located. The Pebble 4 station is located at 1,200 feet above sea level and overlooks the Pebble 3 station (at 1,000 feet above sea level) and the drainage of Frying Pan Lake, which is located within the area of the proposed mine tailings storage facility.

Figures B4 and B5 are photos of the Pebble 1 station and the surrounding area in the four cardinal directions, respectively. Figures B6 and B7 provide respective photographs of the Pebble 4 station and the surrounding area in the four cardinal directions. Despite the relatively low elevation of the sites, both meteorological stations sit above tree line and are free of natural and man-made obstructions.

Figure B8 is a map of the Pebble Port station. Figure B9 and B10 are photos of the Pebble Port station and the surrounding area in the four cardinal directions, respectively. The Pebble Port station overlooks the western shores of Iniskin Bay at the site of the proposed Pebble Project shipping port.

Table B1. Summary of Pebble Project Meteorological Stations

Station Name	Purpose/ Function[1]	Station Coordinates and Elevation	Monitoring Period	Measured Meteorological Parameters
Pebble 1 (Mine PSD Station)	PSD quality meteorological monitoring for proposed mine site	59° 54' N 155° 20' W 1,600 feet	Aug. 1, 2005 - July 31, 2007	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure Precipitation Evaporation
Pebble 2	Non-PSD meteorological monitoring at the proposed mine tailings storage facility site	59° 50' N 155° 18' W 1,200 feet	Jan. 2005 – Nov. 2005	Wind speed Wind direction Wind sigma Temperature Precipitation Evaporation
Pebble 3	Non-PSD meteorological monitoring at the proposed mine tailings storage facility site	59° 50' N 155° 18' W 1,000 feet	Nov. 2005 – July 2007	Wind speed Wind direction Wind sigma Temperature Precipitation Evaporation
Pebble 4 (Tailings Storage Facility PSD Station)	PSD quality meteorological monitoring for proposed mine site	59° 50' N 155° 18' W 1,200 feet	Aug. 1, 2006 – July 31, 2007	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure Precipitation Evaporation
Pebble Port (Port PSD Station)	PSD quality meteorological monitoring at proposed port site	59° 39' N 153° 28' W 40 feet	Aug. 1, 2005 - July 31, 2007	Wind speed Wind direction Wind sigma Temperature Δ Temperature Solar radiation Barometric pressure

[1]Each PSD station measures winds at approximately 10-meters height and is operated in accordance to *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Non-PSD stations measure wind at 3-meters height and are operated primarily for engineering design.

Figure B1. Pebble Project Mine Area Meteorological Station Locations

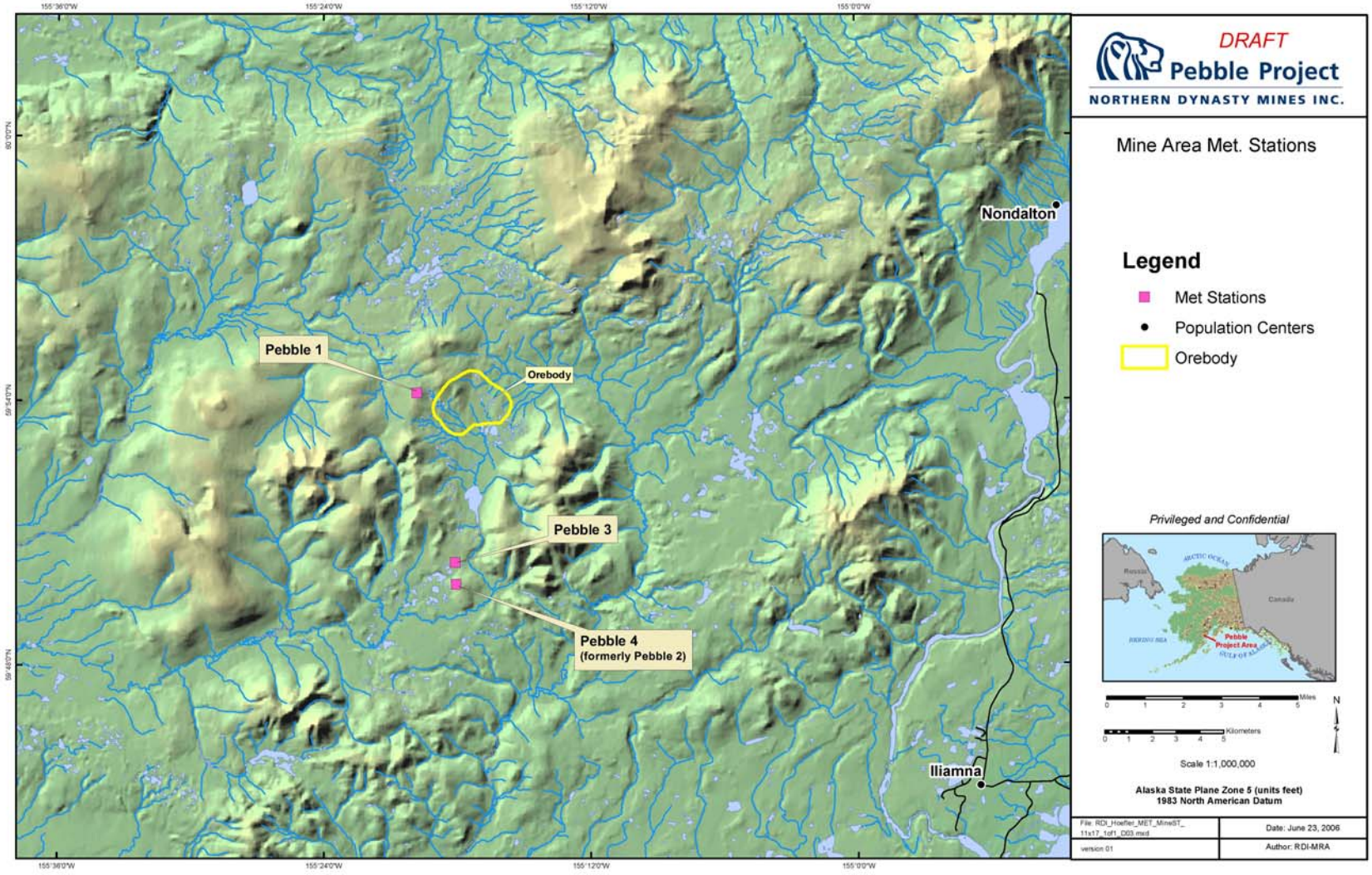


Figure B2. Pebble 1 Meteorological Station Site Map

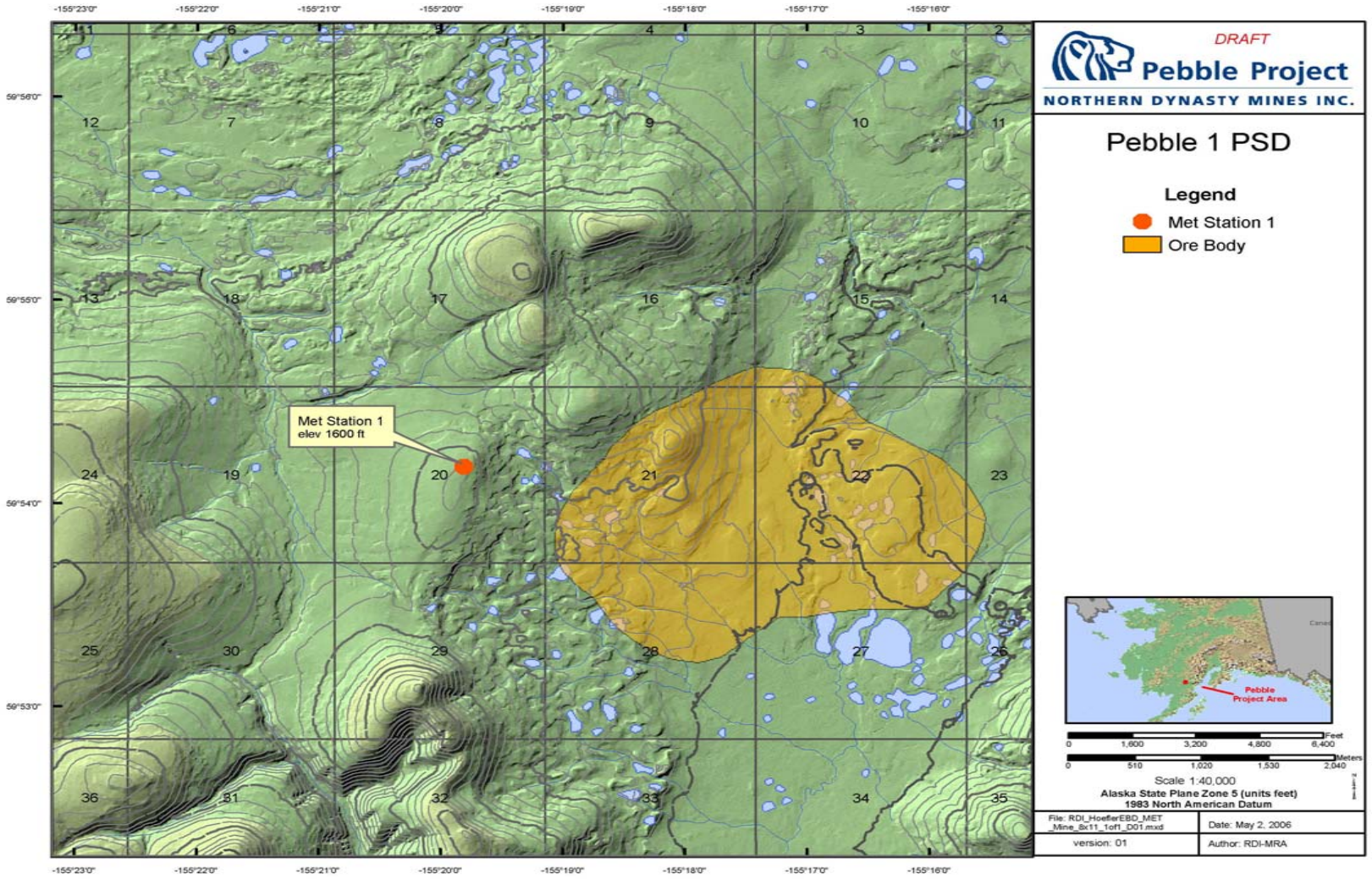


Figure B3. Pebble 4 Meteorological Station Site Map

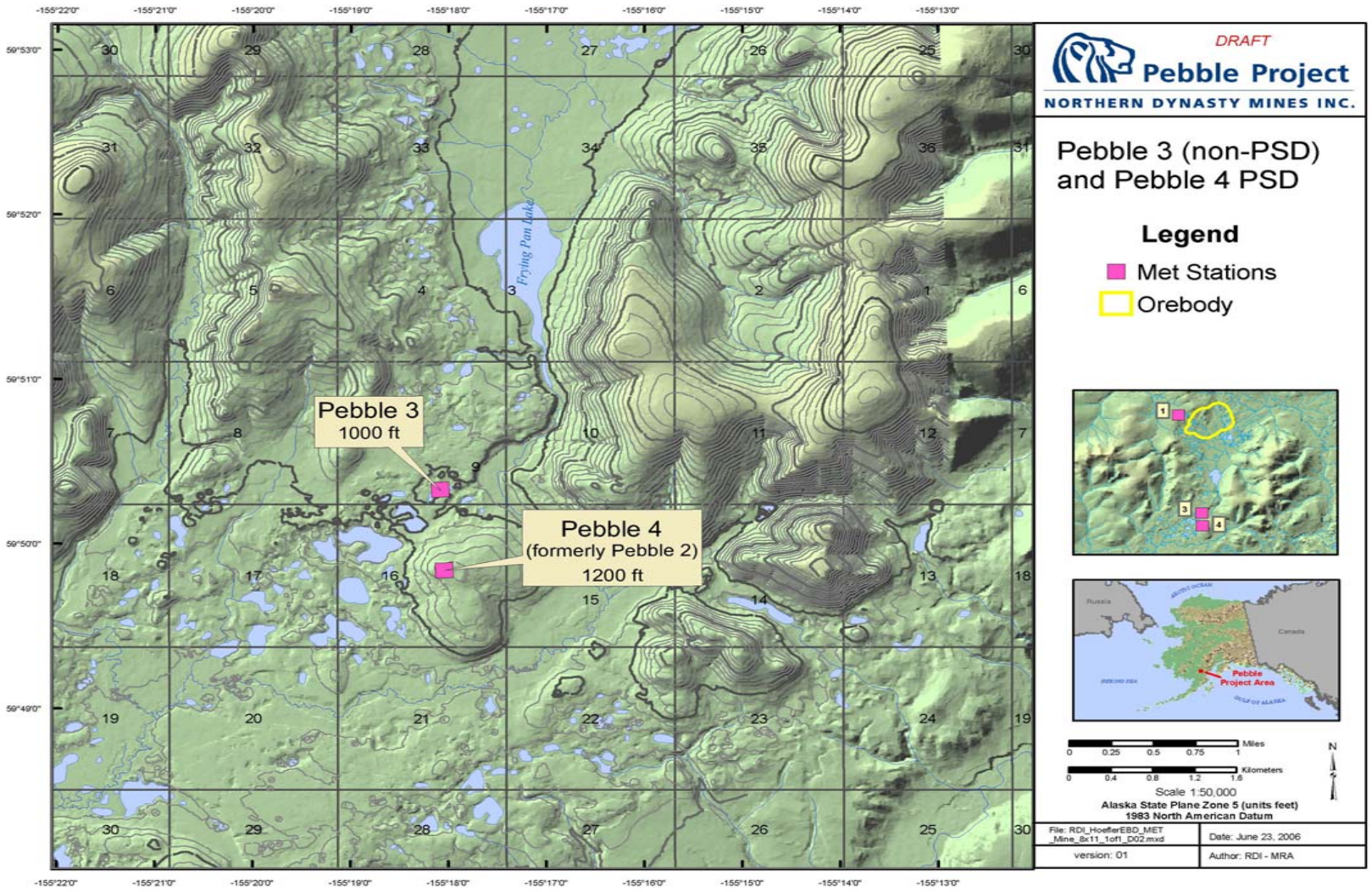
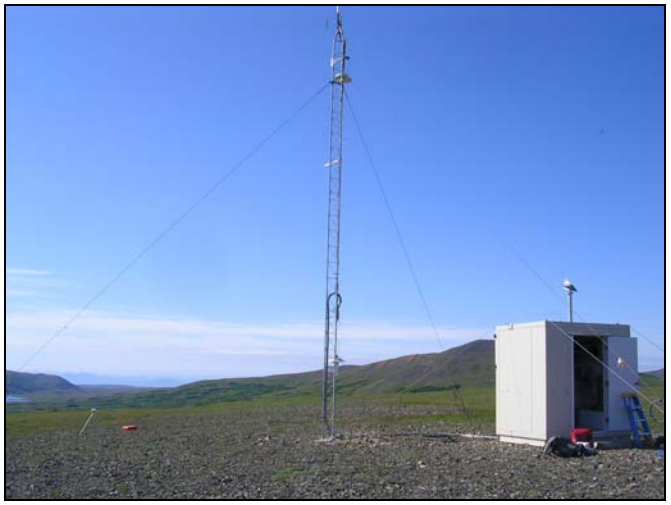


Figure B4. Pebble 1 Meteorological Station

Facing north



Facing south

Facing west

Facing east

Figure B5. Area Surrounding the Pebble 1 Meteorological Station

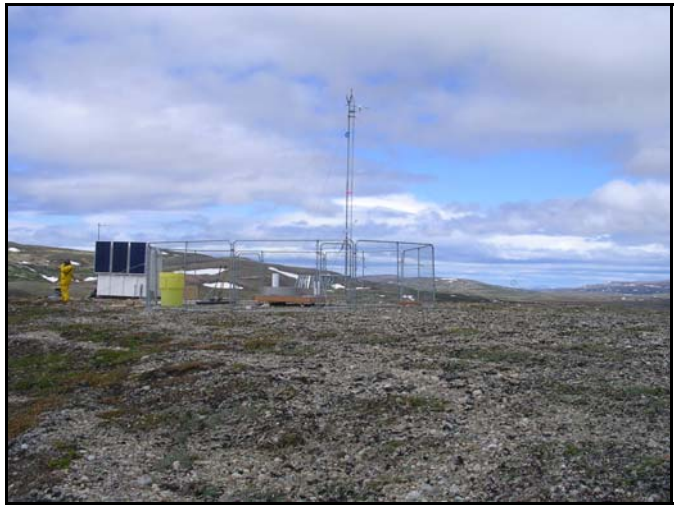
Facing north

Facing south

Facing west

Facing east

Figure B6. Pebble 4 Meteorological Station



Facing north

Facing south

Facing west

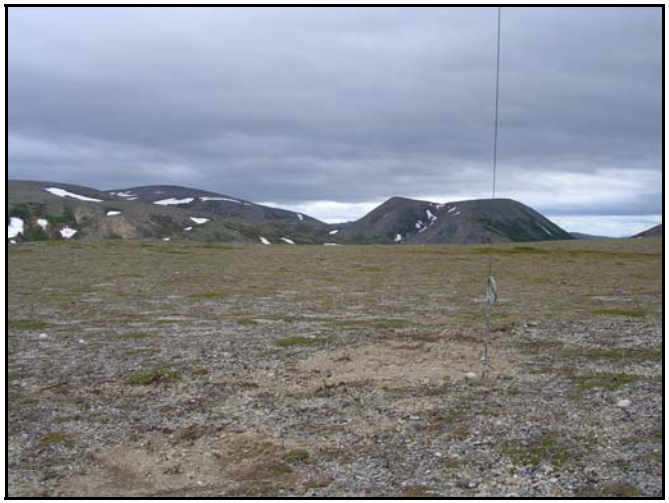
Facing east

Figure B7. Area Surrounding the Pebble 4 Meteorological Station

Facing north

Facing south

Facing west



Facing east

Figure B8. Pebble Project Port Meteorological Station Map

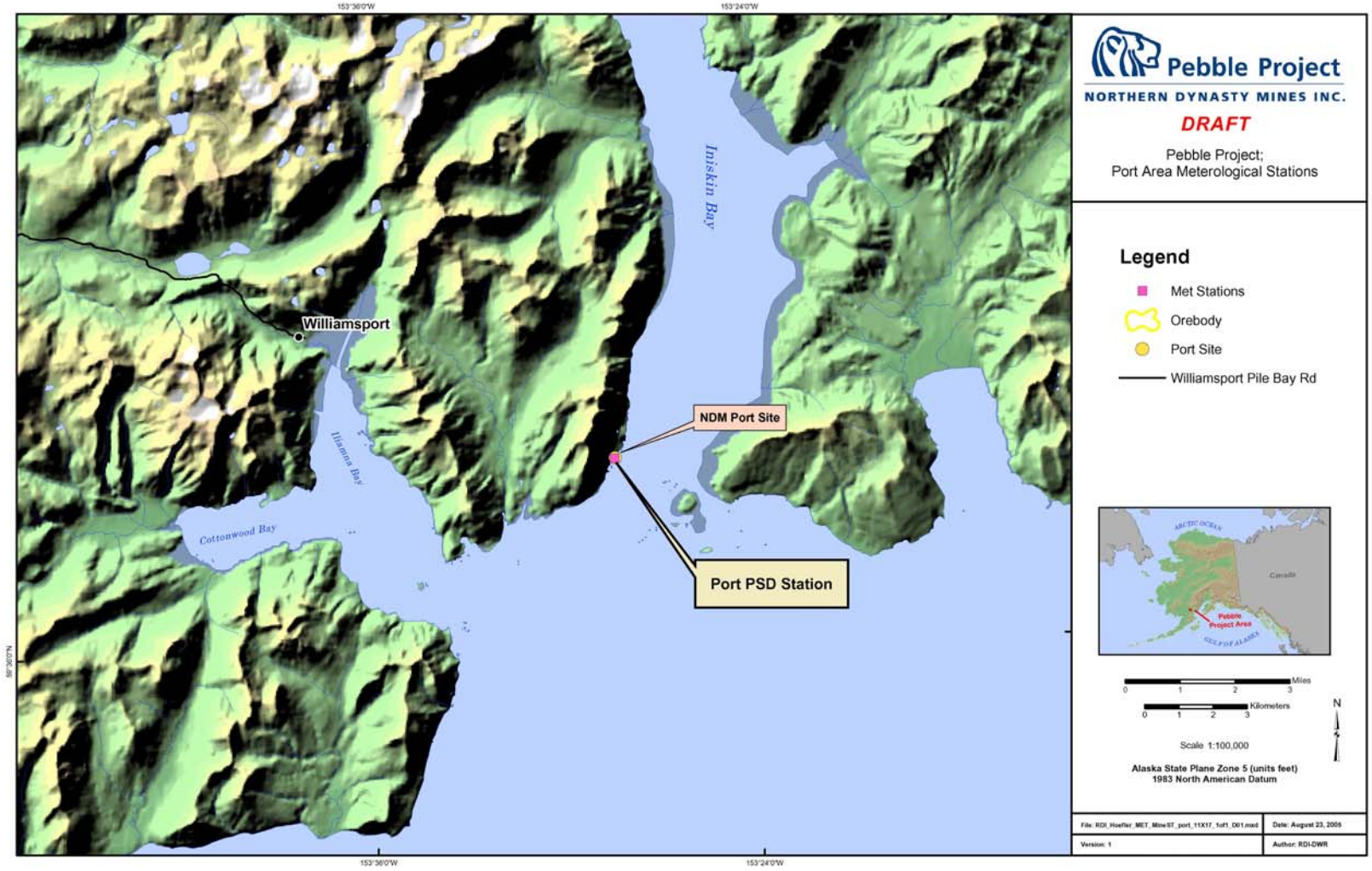
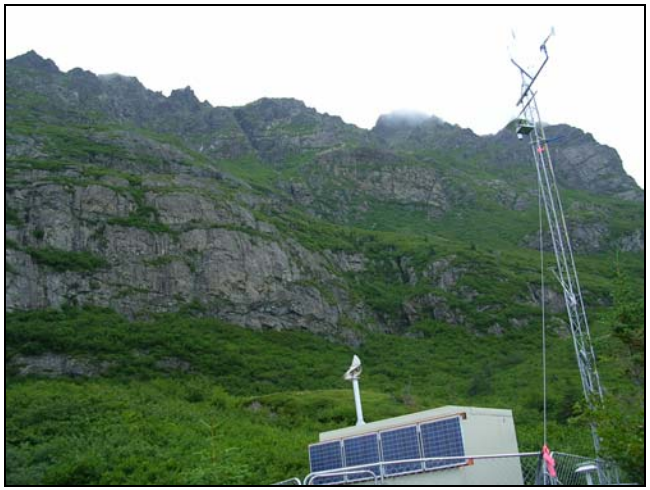


Figure B9. Pebble Port Meteorological Station



Facing north

Facing south

Facing west

Facing east

Figure B10. Area Surrounding the Pebble Port Meteorological Station

Facing north

Facing south

Facing west

Facing east

B2. Sampling Methods Requirements

Measurements will be performed using appropriate monitoring methods to ensure that the data are representative of actual conditions. The following sections address the methods to be used throughout the Pebble Project meteorological monitoring program, instrument installation, and the operational environment of the instruments.

B2.1 Reference and Equivalent Methods

Sensors for the measurement of wind speed, wind direction, ambient temperature, vertical temperature difference, barometric pressure, relative humidity, solar radiation, precipitation, and evaporation will be used to collect meteorological data. Table B2 lists the sensors that will be used, in addition to the manufacturers' specifications and the recommended performance specifications stated in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). These sensors will be continuously operated throughout this meteorological program.

Ambient temperature sensors will be mounted at 2 and 10 meters above ground level and used to measure vertical temperature difference, ΔT ("Delta T"). Two collocated wind speed and wind direction sensors will be mounted at 10 meters above ground level. The two wind measurement systems will include: (1) Climatronics F460 sensors as the primary wind sensors, and (2) a RM Young wind monitor as the secondary or back-up wind sensors. Solar radiation, relative humidity, and barometric pressure measurements will be measured at 4, 2, and 1.5 meters above ground level, respectively. At the Pebble 1 and Pebble 4 stations, the evaporation gauge will be mounted on a leveled deck and surrounded with fencing to avoid animal disturbance. The Pebble 1 and Pebble 4 station precipitation gauges will be mounted inside Wyoming-type (see Figure B4) and Alter Shield-type wind screens to prevent blowing snow and excessive winds from causing spurious readings and to improve catch efficiency. Complete descriptions of sensor audit and calibration methods are located in Appendix B.

Table B3 lists the sampling and averaging times for all of the meteorological variables that will be collected throughout this project. Wind speed, wind direction, temperature, solar radiation, evaporation pan level, and relative humidity will be sampled every second, and will be used to determine the mean hourly values of the measured parameters. Discrete precipitation values will be recorded to the datalogger each time the precipitation sensor detects a signal, and subsequently processed to provide measurements of total precipitation per hour. In addition, instantaneous measurements of barometric pressure will be sampled once every hour.

Table B2. Summary of Meteorological Sensors and Performance Specifications

Meteorological Parameter	Measurement Method	Sensor Characteristics	Manufacturer Specification	Guidance Document
Wind Speed - Primary (Climatronics F460)	Three-cup anemometer	Max Operating Range	0 - 65 m/s	0 - 50 m/s
		Starting Speed	0.22 m/s	0.5 m/s
		Accuracy	± 0.07 m/s or 1%	± 0.2 m/s + 5%
		Temperature Range	-40 ºC to +60 ºC	Not Specified
		Distance Constant	Less than 4.0 m (13.1 ft)	5 m
		Measurement Resolution	0.01 m/s	0.1 m/s
Wind Direction - Primary (Climatronics F460)	Precision low-torque potentiometer	Azimuth	0 - 360º	Not Specified
		Starting Speed[1]	0.22 m/s	0.5 m/s
		Accuracy	± 2º	± 5º
		Damping Ratio[1]	>0.4	0.4 to 0.7
		Delay Distance	< 1 m (3.3 ft)	5 m
		Temperature Range	-40 ºC to +60 ºC	Not Specified
		Measurement Resolution	0.1º	1.0º
Wind Speed - Secondary (RM Young 05305-AQ)	Propeller type anemometer	Max Operating Range	0 - 40 m/s	0 - 50 m/s
		Starting Speed	0.4 m/s	0.5 m/s
		Accuracy	± 0.2 m/s or 1%	± 0.2 m/s + 5%
		Temperature Range	-50 ºC to +50 ºC	Not Specified
		Distance Constant	2.1 m	5 m
		Measurement Resolution	0.01 m/s	0.1 m/s
Wind Direction - Secondary (RM Young 05305-AQ)	Precision low-torque potentiometer	Azimuth	0 - 360º	Not Specified
		Starting Speed	0.5 m/s	0.5 m/s
		Accuracy	± 3º	± 5º
		Damping Ratio	>0.4	0.4 to 0.7
		Delay Distance	1.2 m	5 m
		Temperature Range	-50 ºC to +50 ºC	Not Specified
		Measurement Resolution	0.1º	1.0º
Ambient Temperature and Delta T Met One 062-MP)	Solid state thermistor	Accuracy	± 0.05 ºC	± 0.1 ºC
		Time Constant	3.6 sec	1 min
		Temperature Range	-50 ºC to +50 ºC	-40 ºC to +60 ºC
Solar Radiation (Li-Cor LI200X)	Silicon photovoltaic detector	Accuracy	± 5 %	± 5 % of observed
		Time Constant	1 sec	5 sec
		Spectral Response[2]	400 nm to 1,100 nm	285 nm to 2,800 nm
		Temperature Range	-40 ºC to +65 ºC	-20 ºC to +40 ºC
Barometric Pressure (Vaisala PT101B)	Silicon capacitive absolute pressure sensor	Accuracy	± 0.5 mb	± 3 mb
		Temperature Range	-40 ºC to +60 ºC	Not specified
		Measurement Resolution	< 0.5 mb	0.5 mb
		Measurement Range	600 – 1,060 mb	Not specified

[1] At 10º initial angle of attack

[2] Guidance document allows photovoltaic pyranometers when data will be used to estimate stability.

Table B2 (Continued). Summary of Meteorological Sensors and Performance Specifications

Meteorological Parameter	Measurement Method	Sensor Characteristics	Manufacturer Specification	Guidance Document
Relative Humidity (Vaisala HMP45AC)	Capacitance change of a polymer thin film capacitor	Accuracy	± 2 % RH	± 1.5ºC [3]
		Time Constant	15 sec	30 min
		Temperature Range	-40 ºC to +60 ºC	-30 ºC to +30 ºC
		Measurement Resolution	0.1 % RH	0.1 ºC [3]
		Measurement Range	0-100% RH	-30 ºC to +30 ºC
Precipitation (ETI NOAH II)	Pressure of water column above a load cell mechanism	Accuracy	± .254 mm	± 0.5 mm
		Temperature Range	-30 ºC to +50 ºC	Not specified
		Measurement Resolution	± 0.254 mm	0.3 mm
		Measurement Range	0 to 12 in	Not specified
Evaporation (Nova Lynx 255-100)	Change in pressure head determined by float mechanism	Accuracy	± 0.25% over 10" range	Not specified
		Time Constant	1 sec	Not specified
		Temperature Range	0 ºC to 60 ºC	Not specified
		Measurement Resolution	1.0 mm	Not specified
		Measurement Range	3 to 10 in	Not specified

[3] Guidance document specifies values for dew point, not relative humidity.

Table B3. Sampling and Averaging Times for Meteorological Parameters

Meteorological Parameter	Sampling time	Averaging time
Wind Speed	1 sec	1 hr
Wind Direction	1 sec	1 hr
Wind Sigma	1 sec	1 hr
Temperature	1 sec	1 hr
Δ Temperature	1 sec	1 hr
Solar Radiation	1 sec	1 hr
Relative Humidity	1 sec	1 hr
Evaporation	1 sec	1 min
Precipitation[1]	n/a	n/a
Barometric Pressure[2]	1 hr	n/a

[1] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.
[2] Instantaneous pressure measurements are sampled once per hour.

B2.2 Environmental Controls

Weatherproof enclosures and/or structures will be installed at each monitoring site for protection of the datalogger, batteries, modem, and barometric pressure sensor. Each monitoring station will be properly grounded to prevent damage from possible lightning strikes. To assure accurate temperature data, each temperature sensor will be mounted within identical fan-aspirated solar radiation shields.

B3. Sample Handling and Custody

Not applicable. No physical samples will be taken as part of this project.

B4. Analytical Methods Requirements

The meteorological sensors to be used for this project meet the specifications and recommendations in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005) (see Table B2).

B5. Quality Control

Quality Assurance/Quality Control (QA/QC) procedures are required for this project to ensure that the collected meteorological data meet standards of reliability and accuracy. Quality control for this project will follow EPA PSD monitoring requirements presented in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005) and *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)* (EPA 450/4-87-007).

All monitoring equipment will be acquired from manufacturers whose equipment meets EPA meteorological monitoring guidelines. In no case will inferior equipment be used. The Critical Validation Criteria Table (Table B4) outlines criteria deemed critical to maintaining the integrity of a sample or group of samples. Data that do not meet each and every criterion on the Critical Validation Criteria Table will be invalidated unless compelling reason and justification exist for not doing so. The samples for which one or more of these criteria are not met are invalid unless proven otherwise. The cause for not operating in the acceptable range for each violated criteria will be investigated and future occurrences avoided to reduce the likelihood that additional samples will be invalidated.

The QA/QC Operational Evaluations Table (Table B5) outlines criteria that are important for maintaining and evaluating the quality of the data collection system. Violation of a criterion or a number of criteria may be cause for invalidation of the data. The decision to invalidate data will consider other quality control information that may or may not indicate the data are acceptable. Therefore, a sample or group of samples for which one of these criteria is not

met is suspect unless other quality control information demonstrates otherwise. The reason for not meeting the criteria will be investigated, mitigated, and/or justified.

The Systematic Issues Table (Table B6) outlines criteria important for the correct interpretation of the data but that do not usually impact the validity of a sample or group of samples. For example, data quality objectives are included in this table. Not meeting these data quality objectives does not invalidate any of the samples, but may impact the error rate associated with the attainment/non-attainment decision.

Table B4. Meteorological Sensors QA/QC Critical Validation Criteria

Meteorological Sensors Critical Validation Criteria			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Standard Reporting Units		all data	
Wind speed	m/s	"	EPA-454/R-99-005
Wind direction	0-360 degrees	"	"
Temperature	Celsius	"	"
Delta temperature	Celsius	"	"
Barometric pressure	mbar	"	"
Solar radiation	W/m^2	"	"
Equipment			
Wind speed sensor	Meets recommended specs in guidance	Purchase	EPA-454/R-99-005
Wind direction sensor	"	"	"
Temperature sensor	"	"	"
Delta temperature sensor	"	"	"
Barometric pressure sensor	"	"	"
Solar radiation sensor	"	"	"
Completeness			
Annual - all parameters	90% hourly data capture/calendar qtr	1 year (all calendar qtrs)	EPA-450/4-87-007
Hourly avg.-all parameters	>45 min/hourly average	hourly average	"
Calibration			
All sensors calibrated by manufacturer	According to manufacturer specs and within EPA accuracy criteria	Every six months	EPA-454/R-99-005
Performance Audit and Calibration Transfer Standards			
Audit and Calibration Standards	Audit Std independent from Cal Stds	Within std certification freq	EPA-454/R-99-005
Wind speed	Co-located transfer standard	Every 6 months	EPA-454/R-99-005
WS bearing torque meter	"	"	"
Wind direction	"	"	"
WD bearing torque meter	"	"	"
Temperature	"	"	"
Delta temperature	"	"	"
Barometric pressure	"	"	"
Solar radiation	"	"	"
Assessments			
Accuracy **Performance Evaluation**	All sensors	Every six months and within 30 days of site start-up	EPA-454/R-99-005

Table B5. Meteorological Sensors QA/QC Operational Evaluations

Meteorological Sensor Operational Evaluations			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Range Checks			
Data Screening Criteria	EPA Suggested Criteria		(EPA-454/R-99-005)
Wind direction	$0^o \leq WD \leq 360^o$	All data	Section 8.6, Table 8-4
	WD varies ≥ 1^o/3 consecutive hrs.	"	"
	WD varies ≥ 10^o/18 consecutive hrs.	"	"
Wind speed	0 m/s ≤ WS ≤ 25 m/s	"	"
	WS varies ≥ (0.1m/s)/3 consecutive hrs.	"	"
	WS varies ≥ (0.5m/s)/12 consecutive hrs.	"	"
Temperature	local record low < T < local record high	"	"
	T < 5^oC from previous hour	"	"
	T varies > 0.5^oC for 12 consecutive hrs	"	"
Temperature difference	daytime $\Delta T < 0.1^o$C/m	"	"
	nighttime $\Delta T > -0.1^o$C/m	"	"
	$\Delta T > -3.0^o$C, $\Delta T < 5.0^o$C	"	"
Barometric pressure	pressure < 1060 mbar (sea level)	"	"
	pressure > 940 mbar (sea level)	"	"
	pressure varies > 6mb/3hours	"	"
Solar radiation (SR)	nighttime SR = 0	"	"
	daytime SR < max SR for date/latitude	"	"
Calibrations			
All sensors calibrated by manufacturer	According to manufacturer specs	Every six months	EPA-454/R-99-005
WD alignment	WD alignment to true N verified by TSN	"	"
Quality Control (QC) Checks			
Visual inspections			
Wind speed sensor	Moving freely, no visual damage	Each site visit	EPA-454/R-99-005
Wind direction sensor	Moving freely, no visual damage	"	"
Temperature sensor	No visual damage or obstruction	"	"
Delta temperature sensor	No visual damage or obstruction	"	"
Barometric pressure sensor	No visual damage or obstruction	"	"
Solar radiation sensor	No visual damage or obstruction	"	"
Time and Date DAS	DAS time/date agree with NIST time	"	"

Table B5 (Continued). Meteorological Sensors QA/QC Operational Evaluations

Meteorological Sensor Operational Evaluations			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Assessments			
Systems Audit			
Thorough review of entire monitoring system including field systems, data management, and data reporting.		1/year and < 30 days of site start-up	EPA-454/R-99-005
Performance Evaluation			
Wind speed	+/- 0.2 m/s +/- 5%	Every six months and <30 days of site start-up	EPA-454/R-99-005
WS bearing torque threshold	<= 0.5 m/s	"	"
Wind direction	+/- 5 degrees	"	"
WD linearity crossover	+/- 3° (included in +/- 5° above)	"	"
WD bearing torque threshold	<= 0.5 m/s	"	"
Temperature	+/- 0.5 Celsius	"	"
Delta temperature	+/- 0.1 Celsius	"	"
Barometric pressure	+/- 3 mbar	"	"
Solar radiation	+/- 5% of Observed	"	"

Table B6. Meteorological Sensors QA/QC Systematic Issues

Meteorological Sensor Systematic Issues			
Criteria	***Acceptable Range***	***Frequency***	***40 CFR Reference EPA QA Guidance***
Standard Reporting Units			
Wind speed	m/s	all data	EPA-454/R-99-005
Wind direction	0-360 degrees	"	"
Temperature	Celsius	"	"
Delta temperature	Celsius	"	"
Barometric pressure	mbar	"	"
Solar radiation	W/m2	"	"
Assessments			
Systems Audit			
Thorough review of entire monitoring system (field, lab, data, ect.)	In compliance with approved QAPP	Once per year and less than 30 days within site start-up	EPA-454/R-99-005

B6. Instrument/Equipment Testing and Inspection/Maintenance

B6.1 Acceptance Testing

Prior to installation, all equipment will be visually inspected to ensure no physical damage exists. After installation and prior to the beginning of the monitoring period, sensors will be calibrated according to the procedures stated in their respective operating manuals. Acceptance testing procedures will be documented on the appropriate calibration forms (provided in Appendix B). To ensure that the sensors continue to properly operate during the monitoring period, calibration checks of the instruments will be conducted semiannually as outlined in Section C1.1 of this QAPP.

B6.2 Site Surveillance and Equipment Inspection and Maintenance

HCG station operators will visit the monitoring station to inspect the condition of the monitoring equipment every 4 to 8 weeks and as needed. During each visit the following tasks will be conducted:

- Check the tower and sensors for signs of storm damage and/or vandalism;
- Observe the sensors to determine if the units appear to be operational;
- Verify that the wind speed and wind direction sensors are moving freely (which is especially important during periods of freezing rain or snow); and
- Clear snow, ice, or accumulated water from surfaces of sensors.

A check list is used to document work performed during the surveillance visits and will be filed with the site visit memo (Appendix B). In the event that station repairs or modifications become necessary, the HCG project manager will dispatch HCG field personnel to accomplish the necessary work. Table B7 is a list of spare parts for this project that will be stored at the HCG Anchorage office and, in some cases, on site to minimize periods of invalid data collection. HCG staff will review data from the stations at least once every work day to check that meteorological sensors and data acquisition are functioning properly.

B6.3 Preventive Maintenance and Corrective Actions

The procedures and schedule for preventive maintenance outlined in the standard operating procedure (SOP) will be followed for this monitoring program (Appendix B). As needed, the spare parts and/or sensors will be dispatched to the monitoring station for repair or sensor replacement by qualified HCG personnel (see Section A4, Organization Chart).

Table B7. List of Meteorological Equipment Spare Parts

Meteorological Parameter	Manufacturer	Model	Spare Parts
Wind Speed	Climatronics/ RM Young	F460/ 05305AQ	Extra sensor, cups[1], propeller[1], and bearings
Wind Direction	Climatronics/ RM Young	F460/ 05305AQ	Extra sensor, vane[1], and bearings
Ambient Temperature	Met One	062-MP	Spare sensor
Delta Temperature	Met One	062-MP	Pair of matched spare sensors
Barometric Pressure	Vaisala	PT101B	Spare sensor
Relative Humidity	Vaisala	HMP45AC	Spare sensor
Solar Radiation	Li-Cor	LI200X	Spare sensor
Precipitation	ETI	NOAH II	Spare sensor and recommended parts
Evaporation	NovaLynx	255-100	Spare sensor and recommended parts

[1] Stored at HCG Anchorage office and at the monitoring site.

B7. Instrument/Equipment Calibration and Frequency

B7.1 Calibration Frequency

Sensors will be calibrated according to the manufacturers' recommendations by HCG personnel immediately prior to the project start date and on a semiannual basis thereafter. Associated calibration forms, methodology, and calibration SOP are presented in Appendix B.

B7.2 Calibration Equipment

All instruments used for calibrating meteorological sensors will be traceable to a National Institute of Standards and Technology (NIST) transfer standard. Calibration certifications will remain on file at the HCG main office. Specific calibration equipment used, NIST traceability standards, equipment certification frequency, equipment accuracy, and calibration range for each meteorological parameter measured are provided in Table B8. The specifications stated in *Quality Assurance Handbook for Air Pollution Measurement Systems* (EPA-600/R-94/038c, September 1994) and *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005), for the calibration parameters are referenced in Table B8 to show compliance with EPA standards.

Table B8. List and Specifications for Calibration Equipment

Meteorological Instrument	Calibration Standard	Calibration Standard Characteristics	Manufacturer Specification	Guidance Document
Wind Speed (Climatronics F460 and RM Young 05305-AQ)	**RM Young 18801 Anemometer Drive**	Range of calibration	0 to 10,000 rpm	0, 2, 5, 10 m/s
		Range of standard	0 to 10,000 rpm	Not Specified
		Accuracy of standard	1.0 rpm	Not Specified
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via RM Young certification	Not Specified
Wind Direction (Climatronics F460 and RM Young 05305-AQ)	**Climatronics F460/ RM Young linearity Test Fixture**	Range of calibration	0 to 360º	Not Specified
		Range of standard	0 to 360º	Not Specified
		Accuracy of standard	0.75º	Not Specified
		Calibration Frequency[1]	n/a	n/a
		NIST traceability method	n/a	n/a
Ambient Temperature and Delta T (Met One 062-MP)	**Control Company Traceable 4000 series thermometer**	Range of calibration	-20º to 400º C	-40º to 60º C
		Range of standard	-50º to 150º C	Not Specified
		Accuracy of standard	± 0.001º C	± 0.1 ºC
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via Control Co. certification	Not Specified
Solar Radiation (LiCor LI200X)	**Co-located Eppley PSP**	Range of calibration[3]	0 to 2000 w/m^2	Not Specified
		Spectral Response[4]	285 to 2800 nm	285 to 2800 nm
		Accuracy of standard	± 0.5 %	± 5 % of observed
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	To world radiometric reference via calibration with Eppley Cavity Pyrheliometer	To world radiometric reference
Barometric Pressure (Vaisala PT101B)	**Co-located Pretel AltiPlus A2**	Range of calibration	Ambient condition check (ACC)	ACC
		Range of standard	728 to 1050 mb	Not specified
		Accuracy of standard	± 1 mb	0.2 %
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via Chinook Engineering certification to Ruska Deadweight tester	Not specified
Relative Humidity (Vaisala HMP45AC)	**Co-located Vaisala HMI41**	Range of calibration	Ambient condition check (acc)	ACC
		Range of standard	0-100% RH	Not Specified
		Accuracy of standard	± 2 % RH	± 1.5ºC [5]
		Calibration Frequency[1]	annually	annually[2]
		NIST traceability method	via Vaisala Labs certification with Hyrgo M-3 dewpoint meter	Not specified
Precipitation (ETI NOAH II)	**NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator**	Range of calibration	24.66 mm/hr	< 25.0 mm/hr
		Range of standard	0 to 940 ml	n/a
		Accuracy of standard	n/a	Not specified
		Calibration Frequency[1]	n/a	n/a
		NIST traceability method	n/a	n/a
Evaporation (Nova Lynx 255-100)	**Graduated Cylinder**	Range of calibration	3"-9" of H_20 in gauge	Not specified
		Range of standard	n/a	Not specified
		Accuracy of standard	n/a	Not specified
		Calibration Frequency[1]	n/a	Not specified
		NIST traceability method	n/a	n/a

Note: All monitoring instrument calibrations performed every six months.

[1] Refers to calibration frequency of calibration standard/instrument.

[2] Guidance document specifies standard calibration per manufactures' specifications.

[3] Calibration range for solar radiation will be specific to the time and day of audit.

[4] Guidance document allows use of photovoltaic pyranometers when data will be used to estimate stability.

[5] Guidance document specifies values for dew point, not relative humidity.

B8. Inspection/Acceptance of Supplies and Consumables

All spare parts inventories will be kept up to date by the data manager. Each new spare part will be accepted with the same procedures mentioned in Section B6. Serial numbers for each spare sensor will be recorded by either the data manager or technicians and filed with the data manager. Upon deployment of a replacement part/sensor by site technicians, the make, model, and serial number will be recorded on a Site Visit and System Check form (see Appendix B) or an equivalent site visit memorandum. Each replacement sensor will be calibrated and a performance audit will be completed by technicians to ensure that the senor is properly functioning. The make, model, and serial number of the removed sensor, as well as replacement sensor information, will also be recorded on the performance audit form provided in Appendix B.

Consumable supplies are not expected to be necessary for this project.

B9. Non-direct Measurements

B9.1 Climate History

The Iliamna airport provides the only known comprehensive climate data available near the Pebble Project area. The Pebble Project mine area stations are located approximately 20 miles northwest of the Iliamna airport and the Pebble Port station lies approximately 50 miles to the southeast. Figure B11 shows the daily extreme and average high and low temperatures recorded at Iliamna from November 10, 1939 through 2005. The mean temperature at Iliamna ranges from 3°C (37°F) in January to 30°C (56°F) in July. The record low of -44°C (-47°F) was measured on January 22, 1947 and the record high of 33°C (91°F) was measured on June 27, 1953.

Figure B12 shows the monthly mean precipitation for Iliamna compiled from measurements collected from November 11, 1939 through 2005. Iliamna experiences the most precipitation in August and September with monthly mean precipitation values of 4.62 inches (117 mm) and 4.32 inches (110 mm), respectively. April is typically the driest month and has a monthly mean of 1.08 inches (27 mm) of precipitation.

Figure B13 shows a wind rose based on data collected by the National Weather Service from January 1, 2000 to December 31, 2004 at the Iliamna airport. Prevailing winds typically blow from the north and east. Because the Pebble Project meteorological stations are positioned at significant distances away from the airport and sit at varying elevations relative to the Iliamna airport and each other, the monitoring sites are expected to experience somewhat different meteorological conditions.

Figure B11. Iliamna Daily Extreme and Average High and Low Temperatures

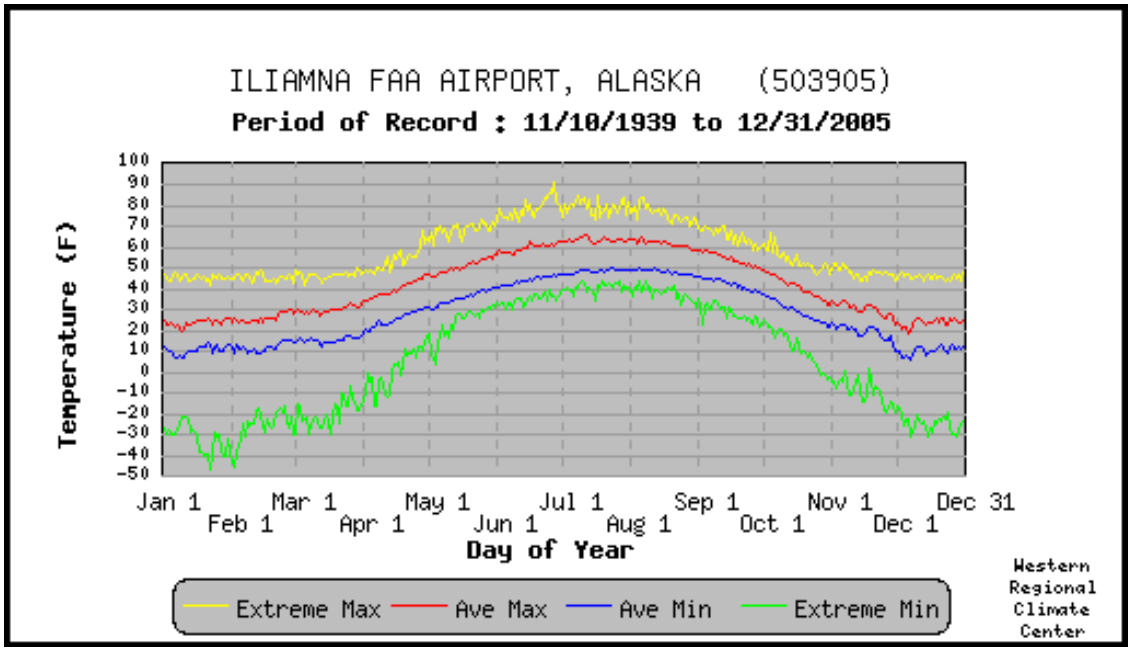


Figure B12. Iliamna Monthly Mean Precipitation

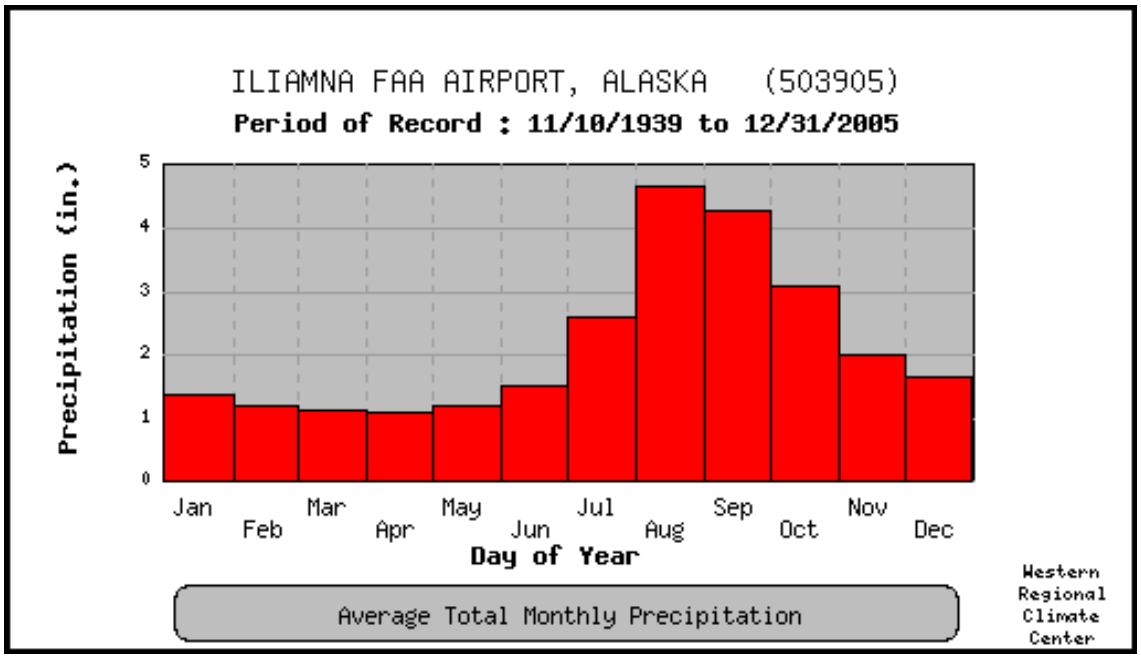
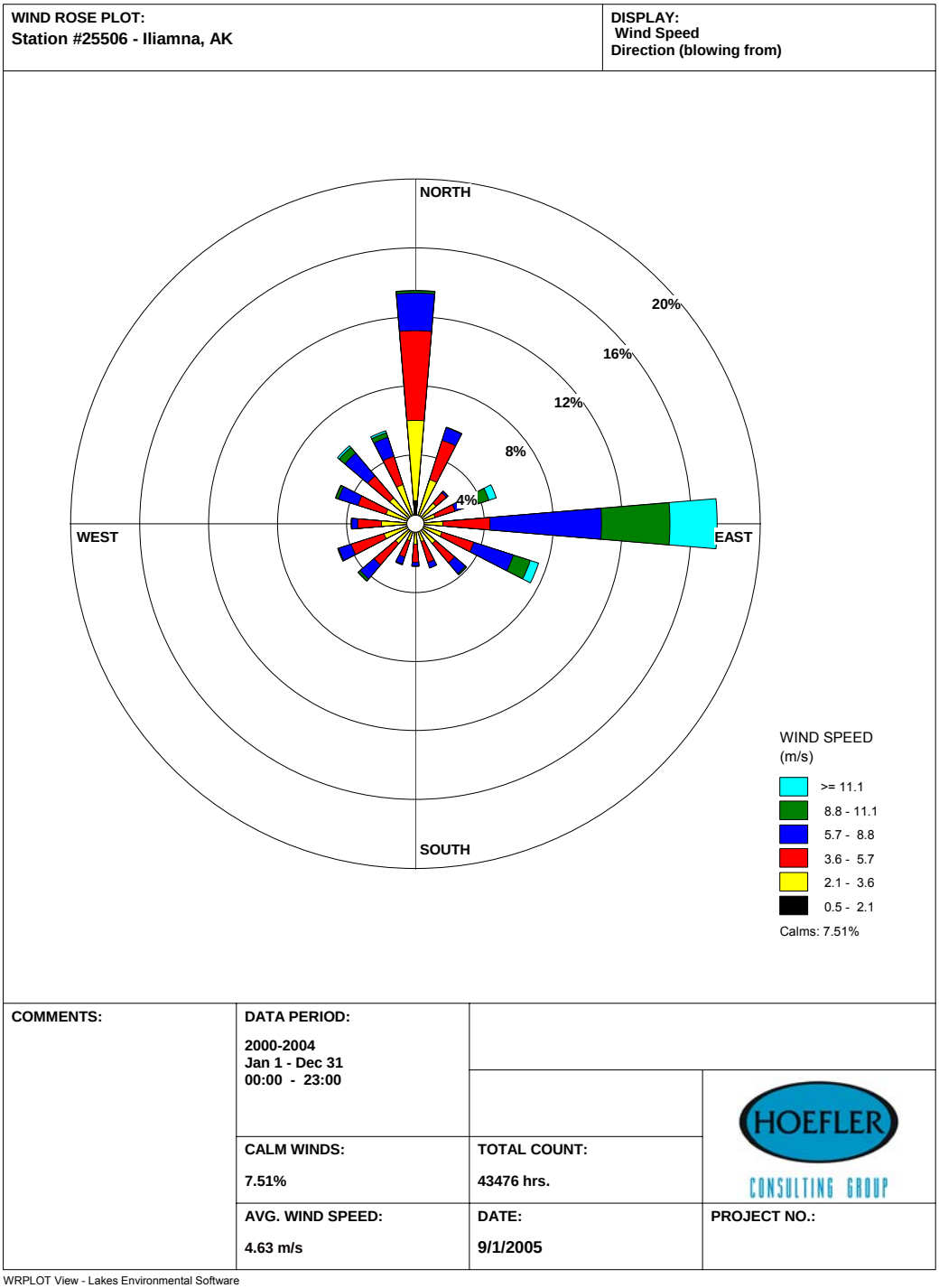


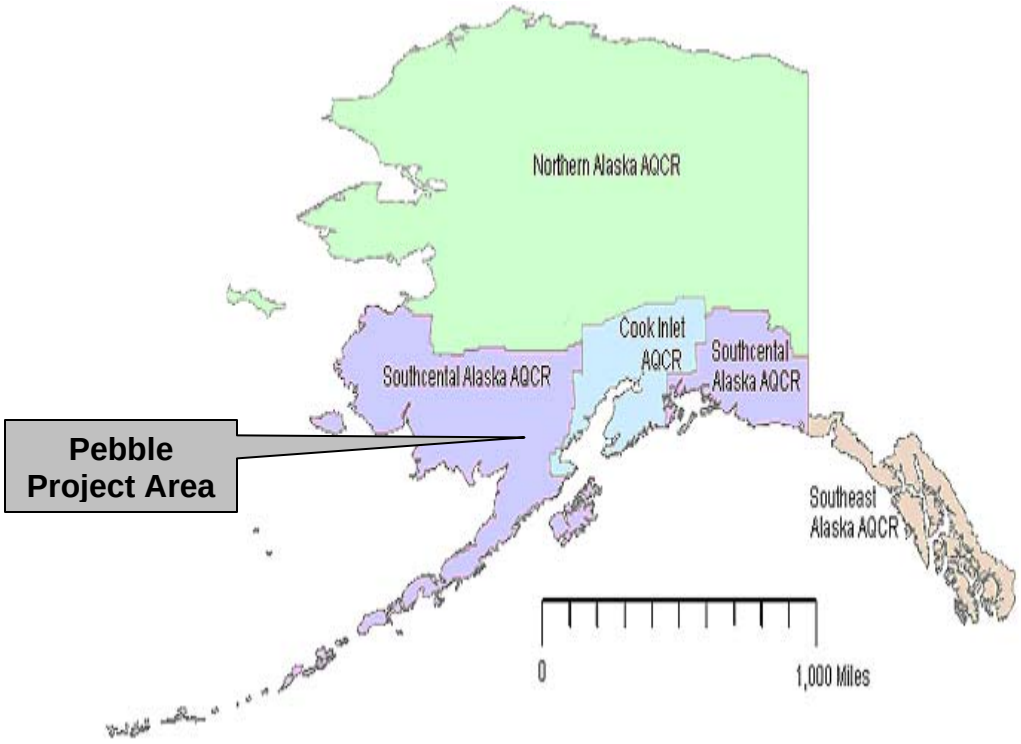
Figure B13. Iliamna Wind Rose



B9.2 Land Use

The Pebble Project study area is in a remote region of southwestern Alaska. The Pebble Port location lies within the boundaries of the Cook Inlet Air Quality Control Region (AQCR), as shown in Figure B14. The Pebble Project mine area lies within the boundaries of the Southcentral AQCR, as shown in Figure B14.

Figure B14. Alaska Air Quality Control Regions



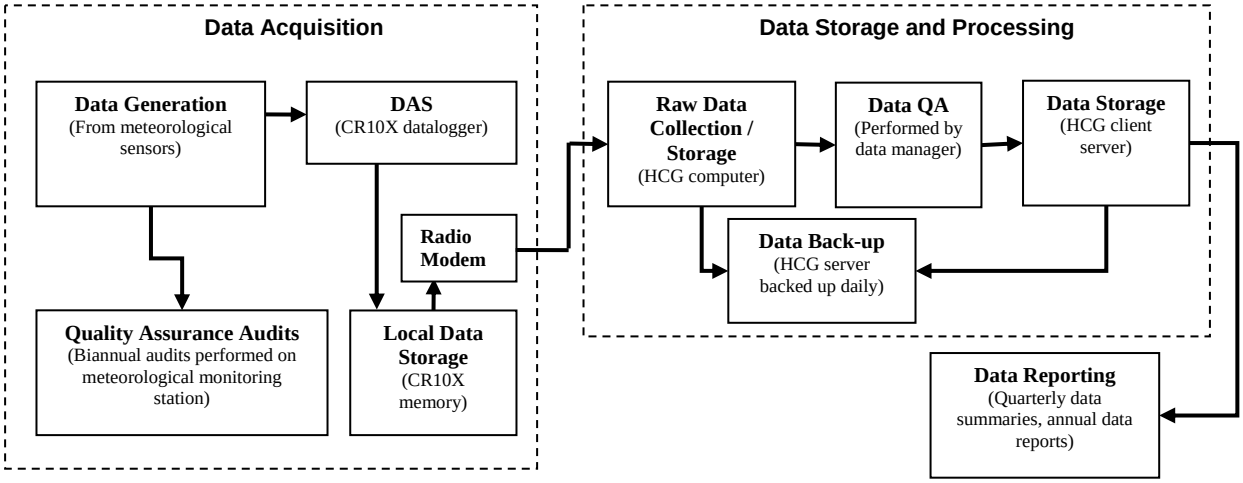
The map in Figure B15 shows the Class I areas in Alaska. The map reference to Denali National Park and Preserve is actually "Denali National Park including the Denali Wilderness but excluding the Denali National Preserve", as per 18 AAC 50.015. The Pebble Project area is within a Class II area and has been designated attainment or unclassifiable for all criteria pollutants. The Tuxedni Wilderness Area is the closest Class I area, which lies approximately fifty miles away from the proposed Pebble Port site, and ninety miles away from the Pebble Project mine area.

Figure B15. Alaska Class I Areas

B10. Data Management

The proper management of all data associated with this project is critical to assuring the quality and usability of the monitoring results. Therefore, procedures will be implemented to ensure adequate data acquisition, validation, transmission, reduction, reporting, and storage of electronic and hard copy data. Summaries of the procedures to be implemented in the field and in the laboratory for data management are provided in the following sections. Overall data processes are described in Figure B16, the Data Processes Flow Chart.

Figure B16. Data Processes Flow Chart



B10.1 Data Acquisition

Data acquisition will include the daily collection of electronic data, the generation of hand-written or typed audit and calibration records, and the compilation of previously prepared records (e.g., NIST traceability records). A Campbell Scientific CR10X datalogger will be used to collect and store the continuous meteorological data. Freewave wireless and SixNet telephone modems will be used to contact the stations remotely via a designated monitoring computer at HCG's Anchorage office. Station data will be downloaded on a daily basis. Field staff and the station auditor will generate written or typed records. These records will be kept according to the prescribed format. Additional records pertaining to this project that have been generated by other organizations will also be collected and stored at the HCG Anchorage main office as necessary.

B10.2 Data Validation

Meteorological data will be reviewed every work day by the HCG data manager or designated qualified personnel and screened using the recommended criteria in *Meteorological Monitoring Guidelines for Regulatory Modeling Applications* (EPA-454/R-99-005), Table 8-4. Site specific Microsoft Access databases and Excel spreadsheets will be used to store, review, and compare data to EPA critical criteria.

During each site visit, HCG Field Technicians will be responsible for verifying the condition of the monitoring site. All site visits will be documented by means of a site visit memo kept

with the project files. Alternately, the site visit may be documented in a designated station log book. These field notes will include the following:

- Time, date, current meteorological conditions, and personnel at the monitoring site;
- Activities completed during visit; and
- As-found and as-left observed conditions of monitoring site equipment.

The data manager or their designee will review all records received from the field. Problems or irregularities in the records will be brought to the attention of HCG Field Technicians for further clarification. If the documentation is not sufficiently defensible, the affected data will be invalidated.

B10.3 Data Transmission

Meteorological data will be collected daily by electronic transmission to the HCG Anchorage office. Original forms, check lists, and other records will be stored upon receipt at the HCG main office until the end of the monitoring period. A description of the equipment implemented in the monitoring site telemetry is included in the above section B10.1.

B10.4 Data Reduction

All electronic calculations and statistical analyses will be performed using standard software packages (e.g., MINITAB, Excel, and WRPLOT view) that can be easily verified and audited. Preliminary data reduction to hourly data averages is performed by the CR10X datalogger.

B10.5 Data Reporting

Data generated for this project will be routinely summarized and presented to NDM as described in Section C2. The data will also be submitted to ADEC for review and approval in anticipation of using the meteorological data to meet the air dispersion modeling requirements for a minor source air construction permit application.

B10.6 Data Storage

All project documentation, records, data, and reports will be maintained at HCG for a period of at least five years from the completion of the project. Electronic data on the HCG servers are backed up at least once daily and will be archived at a minimum of two separate locations.

B10.7 Data Use in Modeling

The meteorological data collected during this project will be used for air dispersion modeling using EPA approved AERMOD and CALPUFF models.

C. Assessments and Oversight

C1. Assessments and Response Actions

Data Quality Assessments will be performed on all collected data. Data reviews will be conducted by HCG staff to determine whether the data are reasonable and representative through an independent audit program. Data that are determined to be unreasonable or unrepresentative will be identified, flagged, and discussed in the data reports. The independent audit program for the Pebble Project will consist of semi-annual performance audits and annual systems audits. The audits will be conducted by HCG staff and will be independent of the staff operating the monitoring network. In addition, audits will be conducted using equipment independent of that used for instrument calibrations. The auditor will use a pre-formatted audit form and follow established audit standard operating procedures provided in Appendix B.

C1.1 Performance Audits

Performance audits of the meteorological sensors will be conducted within thirty days of the project start, semi-annually thereafter, and within thirty days of project completion. Performance audits for meteorological sensors will be conducted by collocating independent meteorological sensors with those being used for the monitoring program. The audit sensors will be provided by the station auditor. Performance audits will serve the monitoring program with a measure of quality assurance for meteorological sensors and a means to produce a defensible data set. The performance audits will be conducted in accordance with the procedures outlined in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 8 (EPA-454/R-99-005). The QA auditor will conduct the performance audits. An outline for the audit equipment and procedures on all meteorological sensors used for this study is listed in Table C1.

C1.2 Systems Audits

In the *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Section 8 (EPA-454/R-99-005), and *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Section 7 (EPA-450/4-87-007), EPA recommends that a systems audit be conducted to assess compliance with established regulations governing the collection, analysis, validation, and reporting of meteorological monitoring for PSD. A systems audit is an independent review of program procedures and files to assess conformance to established plans, SOPs, and protocols (see Appendix B). Systems audits for this project will be conducted no later than 30 days after project startup and annually thereafter. The systems audit will evaluate the complete measurement system from data collection through data reporting. The evaluation will also include all off-site data handling and evaluate the management process.

The systems audit is also an on-site qualitative review of the operational procedures of the monitoring program. The audit will ensure that all procedures for the monitoring program (field operations, data reporting, and data management) are being followed and that the data being collected meet the DQOs for the program as described in Section A7. Items reviewed during the systems audit include:

- Quality assurance procedures and documentation;
- Station installation and operation procedures;
- Calibration procedures and documentation for monitoring equipment;
- Documentation of log books and data sheets;
- Completion and documentation of on-site quality assurance procedures; and
- Review of prepared data sets.

After completion of the audit, a debriefing will be conducted with the participants to discuss preliminary audit results. The results of this audit will then be formally compiled in an audit report with observations of strengths and deficiencies, and recommendations for improvements. The audit report will be submitted by the auditor to the NDM and HCG project managers within 30 days. The HCG project manager will ensure that any necessary corrective actions are implemented in a timely manner. Audit forms and further information on system audits are provided in Appendix B.

Table C1. List of Performance Audit Equipment and Procedures

Meteorological Variable	Make/Model	Audit Method	NIST Traceable Audit Tool Used	Frequency of Audit	Procedure
Wind Speed	Climatronics F460/ RM Young 05305-AQ	Synchronous motor comparison	RM Young 18801 Anemometer Drive	Semiannually	See SOP in Appendix B
Wind Direction	Climatronics F460/ RM Young 05305-AQ	Fixed linearity test	Climatronics F460/ RM Young 05305 linearity test fixture	Semiannually	See SOP in Appendix B
Ambient Temperature and Delta T	Met One 062-MP	Co-located temperature immersion bath comparison	Control Company Traceable 4000 series thermometer	Semiannually	See SOP in Appendix B
Solar Radiation	Li-Cor LI200SZ	Co-located sensor comparison	Eppley Labs PSP	Semiannually	See SOP in Appendix B
Barometric Pressure	Vaisala PT101B	Co-located sensor comparison	Pretel Altiplus A2	Semiannually	See SOP in Appendix B
Relative Humidity	Vaisala HMP45ASP	Co-located sensor comparison	Vaisala HMI41	Semiannually	See SOP in Appendix B
Precipitation	ETI NOAH II	Volumetric drip comparison	Nova Lynx 260-2595 Tipping Bucket Rain Gauge Calibrator	Semiannually	See SOP in Appendix B
Evaporation	Nova Lynx 255-100	Water height comparison	Precision Tape Measure	Semiannually	See SOP in Appendix B

C1.3 Corrective Actions

All deficiencies identified during audits and site visits will be recorded and reported to the project manger no later than seven working days of discovery. Corrective actions to rectify deficiencies will be addressed and documented in a Corrective Action Form (see Appendix

B) and on the audit reports. Corrective actions will also be discussed in the annual data reports.

Based on the review of the systems audit, it may be necessary to revise this QAPP. The QAPP revisions will address any project deficiencies stated in the system audit. The project manager and permitting manager will make any necessary changes and the revised QAPP will be submitted to ADEC for approval.

C1.4 QAPP Revisions

After submittal and approval, any needed revisions of the NDM QAPP will be brought to the attention of the HCG project manager. Appropriate actions will be taken on any needed revisions and a revised version of the QAPP will be submitted to ADEC and NDM.

C2. Reports to Management

In accordance with ADEC reporting guidelines, quarterly data summaries and annual data reports will be prepared by HCG and provided to NDM and ADEC. Two separate annual data reports will be prepared, one for each monitoring year. All quarterly data summaries and annual data reports will be submitted to ADEC after ADEC has received the QAPP.

Quarterly data summaries will be prepared by HCG in accordance with the format described in *PSD Ambient Air Quality & Meteorological Monitoring Quarterly Data Summary Format* (ADEC, March 2005) and provided to NDM and ADEC within 30 days after the completion of each calendar quarter.

The final annual data report will conform to format requirements in *PSD Quality Ambient Air Quality & Meteorological Monitoring Annual Data Report Format* (ADEC, March 2005) and be provided to NDM and ADEC within 90 days after completion of the monitoring period. This report will summarize the monitoring data for the entire period, including monthly, quarterly, and annual averages for all measured parameters. This report will also include the following:

- Data capture statistics for the meteorological sensors;
- Explanations for any missing or flagged data;
- Summaries of maintenance activities;
- Results of calibrations and audits;
- Raw data and calculations used for calibrations and audits; and
- Copies of site visit notes.

D. Data Validation and Usability

D1. Data Review, Validation, and Verification Requirements

D1.1 Data Review

As meteorological data are periodically received over the monitoring year, the data manager will review the incoming data and make comparisons to the standards discussed in Section B10.2 of this document. During each quarter, the data will be reviewed again by a certified staff meteorologist to ensure that the data are complete, accurate, and representative and that erroneous data have been removed in preparation for the final data report. All other documentation pertaining to this monitoring project (e.g., trip reports, audit and calibration data sheets) will be reviewed upon receipt to ensure that all forms are completed prior to acceptance and for further use in this project. Table D1 summarizes the data review for this monitoring project.

Table D1. Data Review List for the Pebble Project

Type of Data Generated	Method for Acceptance	Data Review	Review Frequency	Person Responsible for Data Review	Project Specific Calculations
Raw Data	Calibrated DAS	n/a	Every Work Day	Project and data manager	Delta T and Wind Sigma
QA Reviewed Data	Data Review	MS Excel and Access Databases screening for EPA PSD criteria	Each Work Day	Project and data manager	n/a
Quarterly Data Summary	HCG permitting manger review	MS Excel and Access Databases screening for EPA PSD criteria	Quarterly	Project and data manager	Quarterly data capture statistics
Annual Data Report	HCG permitting manger review	MS Excel and Access Databases screening for EPA PSD criteria	Annual	Project and data manager	Quarterly and annual data capture statistics

D1.2 Data Calculations

Meteorological data collected for this project will be used for air dispersion modeling. Atmospheric stability, commonly determined using the solar radiation-delta temperature (SRDT) method, will be calculated using the EPA approved AIRMET Program.

D2. Validation and Verification Methods

Data validation refers to the review process in which data are screened for errors and anomalies. All data for this meteorological monitoring program will be validated only after being screened by the criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications,* Table 8-4 (EPA-454/R-99-005).

Semiannual audits and calibrations will be performed on the station to ensure that all sensors are operating within the tolerances suggested by the manufacturer and the EPA. During each site visit, the station operator will be responsible for recording any anomalies or significant events and bringing them to the attention of the data manager. Copies of the site visit memos will also be provided to the data manager.

For this project two types of wind sensors are being used to provide redundant data. The RM Young 05305-AQ wind sensor uses a combined propeller anemometer and vane assembly, and the Climatronics F-460 wind sensor uses a three cup-type anemometer with a separate vane-style wind direction sensor. The RM Young sensor can be somewhat less susceptible to rime ice build-up and is therefore used as a back-up wind measurement sensor. In cases when the Climatronics wind sensor data fails to meet the DQO goal of 90% quarterly data capture, the back-up RM Young wind data will be used, if deemed necessary and applicable. Both the primary and back-up wind sensors will have the same level of quality assurance checks as outlined in Sections B5 and B6.

The data manager will review data at least once each work day to check for irregularities in all measured parameters. Any suspicious data will be investigated.

D3. Reconciliation with User Requirements

The objective of this monitoring program is to collect surface meteorological data needed for engineering design and environmental purposes, including water balance studies, and for the preparation of the air quality construction permit applications for the mine, road, and port sites. Although the mine, road, and port facilities may not require a PSD permit, PSD-quality data will be collected to support the required computer-based dispersion modeling. HCG will conduct an annual or final review at the completion of the monitoring project and report the results obtained during the reporting period. These reports will be compared with the established DQOs to ensure that the scope of the project has been met.

The reconciliation of data for this project will be determined by the data validation and verification process as discussed in Section D2 of this document and based upon the five step Data Quality Assessment (DQA) plan recommended in *Guidance for Data Quality Assessments* (EPA QA/G-9):

1. A review of the DQOs and sampling design will be conducted by the permitting manager to assure meteorological outputs from this program are still applicable. If DQOs have not been developed, the permit manager will specify DQOs before evaluating the data. The permitting manager will also review the sampling design and data collection documentation for consistency with the DQOs.
2. A Preliminary Data Review will be conducted by the permitting manager. The manager will review QA reports, calculate basic statistics, and generate graphs of the data. This information will be used to determine data structure and identify patterns, relationships, or potential anomalies.
3. A statistical test will be selected that is most appropriate for summarizing and analyzing the data, based on the review of the DQOs, the sampling design, and the preliminary data review. The permitting manager will identify the key underlying assumptions that must hold for the statistical procedures to be valid.
4. Given the actual data and other information about the study, the permitting manager will evaluate whether identified assumptions will hold, or whether departures are acceptable.
5. Conclusions from the statistical calculations will be evaluated to determine if the monitoring design and its created data meet the required permits for the statistical test. This determination will be documented, as well as the inferences drawn as a result of these calculations. If the design is to be used again, an evaluation will be made on the performance of the sampling design.

If the preliminary data review reveals that data sets are inconsistent with the DQOs, or the underlying assumptions of the statistical test are not supported by the data and fail to meet the criteria/objectives of this monitoring project, then the permit manager and project manager will reconsider the project design as described in this QAPP.

APPENDIX A
PROGRAM REFERENCES

Alaska Climate Summaries, Western Regional Climate Center, Desert Research Institute, 2004. *http://www.wrcc.dri.edu/summary/climsmak.html*

Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), (EPA-450/4-87-007)

AQCRs with Established Minor Source Baseline Dates for SO2 (map), WESTAR, 2004. http://www.westar.org/Committees/TDocs/AQCR%20maps/SO2B_24Sept04.pdf

Class I Areas (map), Alaska Department of Environmental Conservation Areas Sources Group, 2004. http://www.state.ak.us/dec/air/anpms/as/rh/rhhome.htm

EPA Requirements for Quality Assurance Project plans (EPA QA/R-5).

Guidance for Data Quality Assessments (EPA QA/G-9)

Meteorological Monitoring Guidance for Regulatory Modeling Applications, EPA-454/R-99-005, EPA, February 2000.

"PSD Quality Ambient Air Quality & Meteorological Monitoring Quarterly Data Summery Format" (ADEC, March 2005)

"PSD Quality Ambient Air Quality & Meteorological Monitoring Annual Data Report Format" (ADEC, March 2005)

Wind Rose Wizard Hourly Observations, 1945-1999, University of Alaska Anchorage School of Engineering, 2001. http://holmes-iv.engr.uaa.alaska.edu/ncar/WindRoseWizard.htm

18 AAC 50, Air Quality Control, Alaska Department of Environmental Conservation, As Amended through July, 2002.

APPENDIX B
STANDARD OPERATION PROCEDURES AND FORMS

APPENDIX B1
STANDARD OPERATION PROCEDURES

Calibration Procedure for Climatronics F460 Wind Speed and Wind Direction Sensors

1.0 Introduction

Calibration of Climatronics F460 type wind speed and wind direction sensors (hereafter referred to as F460 sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for an F460 sensor requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

The calibration is comprised of the determination of sensor responses to known input values, maintenance and adjustment of the sensors responses if warranted, and the documentation of all adjustments and responses.

Items required for the calibration of an F460 are as follows:

1. RM Young 18801 (or similar model) anemometer drive
2. Climatronics F460 linearity test fixture
3. PC or similar display module
4. Tripod mounted, survey grade compass and/ or pre-determined bearings to landmarks.
5. F460 manual

The calibration will begin by filling out the first part of the wind speed and wind direction calibration forms, noting the time, date, calibrator, and any witnesses.

1.1 System Inspection

Before determining the initial response of a F460 inspect the cable, cups, vane, and bearings for damage, open the outer cuff of the sensor and look for condensation inside. Note these observations on the Wind Speed Calibration Form.

2.0 Wind Speed Calibration Procedures

2.1 Pre-adjustment System checks

A system response check is performed by the use of an RM Young 18801 (or similar model) anemometer drive. The cups are removed from the sensor shaft and the anemometer drive is attached. The sensor is then challenged at the speeds specified on the Wind Speed Calibration Form. The speeds measured by the datalogger for each specific revolution per minute (rpm) are compared to the calculated values. The equation for calculating wind speed as a function of anemometer drive rpm is given on the Wind Speed Calibration Form.

2.2 Maintenance and Adjustments

At this point the technician should review the performance of the sensor and determine what adjustments are required, if any. All basic maintenance should be performed before any serious adjustment of the sensor, or determination of a new multiplier and/or offset in the datalogger programming. All maintenance and adjustments should follow the guidelines presented by the manufacturer in the F460 instrument manual.

2.3 Post-Adjustment Checks

If any maintenance or adjustments were performed, the steps listed in Section 2.1 of this procedure should be repeated and recorded on the Wind Speed Calibration Form. Results of the post adjustment checks should be closely evaluated. If the output values do not closely match the expected values, perform troubleshooting, maintenance, and adjustments as needed to correct the sensor response. If the sensor is deemed un-repairable by the technician, it should be replaced as soon as possible from the stock of back-up sensors for the monitoring project.

3.0 Wind Direction Calibration Procedures

3.1 Sensor Orientation

After the system is inspected, a check of the wind vane orientation is performed. The two methods for an orientation check of the wind vane are as follows:

<u>Compass</u>

1. Determine declination for the area using a Geomag type program with the most recent models of the earth's magnetic field.
2. Use a clamp fashioned from a band clamp and rubber tubing to fix the wind vane in various directions. In medium to high winds a vane with the "tail" removed may have to be used as to not damage the wind vane.
3. Using a tripod mounted and leveled, survey grade compass align the compass so that it sights directly at the tail of the wind vane.
4. Obtain readings in each of the four quadrants of the compass.
5. Record the readings from the datalogger and the compass on the Wind Direction calibration form.

<u>Landmark</u>

1. Obtain a GPS point directly under the wind direction sensor.
2. Using a mapping program (eg: TOPO!, allTOPO, or similar) with USGS datasets as its base files, obtain bearings to nearby defined landmarks.
3. Clamp and site the vane tail at the appropriate landmark and record the reading from the datalogger.

3.2 System Linearity Check

Using a Climatronics F460 linearity test fixture test the sensor at 30° intervals. Record the readings from the datalogger at each interval on the Wind Direction Calibration Form and compare to the expected values. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 5° (accuracy) and ≤ 3° mean absolute error (linearity). Mean absolute error is calculated by the the following equation: equation.

$$\sum \frac{|X|}{n}$$

Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

3.3 Maintenance and Adjustment

At this point the technician should review the performance of the sensor and determine what adjustments are required, if any. All basic maintenance should be performed before any serious adjustment of the sensor, or determination of a new multiplier and/ or offset in the datalogger programming. All maintenance and adjustments should follow the guidelines presented by the manufacturer in the F460 instrument manual. If the orientation was incorrect, the alignment of the cross arm will need to be adjusted following the linearity check.

3.4 Post Adjustment Checks

After all maintenance and adjustments have been made, the steps listed in Sections 3.2 and 3.1 of this document should be repeated, respectively. All results should be recorded On the Wind Direction Calibration Form. Results of the post adjustment checks should be evaluated. If the output values do not closely match the expected values, perform troubleshooting, maintenance, and adjustments as needed to correct the sensor response. If the sensor is deemed un-repairable by the technician, it should be replaced as soon as possible from the stock of back-up sensors for the monitoring project.

4.0 Conclusion

At the conclusion of the calibration, complete all calibration forms noting any adjustments made, maintenance performed, and corrective actions taken, if any. Note the specific time which the calibrations for the wind speed and direction sensors began and ended. Sign and date the calibration form under any comments made.

Audit Procedure for Wind Speed and Wind Direction Sensors

1.0 Wind Speed

The required instruments to complete a wind speed audit are a torque watch, and anemometer drive.

The audit procedure is as follows: A system response check is performed by the use of an RM Young 18801 (or similar model) anemometer drive. The cups are removed from the sensor shaft and the anemometer drive is attached. The sensor is then challenged at the speeds specified on the Wind Speed Audit Form. The speeds measured by the datalogger for each specific rpm are compared to the calculated values. The equation for calculating wind speed as a function of anemometer drive rpm is given on the Wind Speed Audit Form. The absolute difference from expected values is then calculated to see if the values agree within ±0.5 mph or 5% of observed.

The starting torque should be measured with a torque watch, and recorded on the Wind Speed Audit Form. If the sensor starting torque is above 0.0049 oz-in the bearings may need to be cleaned, oiled, or replaced.

2.0 Wind Direction

The process for auditing a wind direction sensor is described below:

Compass

1. Determine declination for the area using a Geomag type program with the most recent models of the earth's magnetic field.
2. Use a clamp fashioned from a band clamp and rubber tubing to fix the wind vane in various directions. In medium to high winds a vane with the "tail" removed may have to be used as to not damage the wind vane.
3. Using a tripod mounted and leveled, survey grade compass align the compass so that it sights directly at the tail of the wind vane.
4. Obtain readings in each of the four quadrants of the compass.
5. Record the readings from the datalogger and the compass on the Wind Direction calibration form.

Landmark

4. Obtain a GPS point directly under the wind direction sensor.
5. Using a mapping program (eg: TOPO!, allTOPO, or similar) with USGS datasets as its base files, obtain bearings to nearby defined landmarks.
6. Clamp and site the vane tail at the appropriate landmark and record the reading from the datalogger.

2.1 System Linearity Check

Using a linearity test fixture appropriate for the sensor, test the sensor at 30° intervals. Record the readings from the datalogger at each interval on the Wind Direction Audit Form and compare to the expected values. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 5° (accuracy) and ≤ 3° mean absolute error (linearity). Mean absolute error is calculated by the equation 1.0.

$$\sum \frac{|X|}{n}$$

Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

Calibration Procedure for MetOne 062 Temperature Sensors

1.0 Introduction

MetOne 062 temperature sensors (hereafter referred to as temperature sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for a temperature sensor requires an initial calibration check, and calibrations every six months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for temperature sensor calibration is as follows:

1. Calibrated, certified, NIST traceable thermometer.
2. Thermal mass unit and or ice, warm, and hot water bath.
3. PC or similar display module.
4. MetOne 062 manual

The calibration should start by completing the top of the Temperature Sensor Calibrations Form.

1.1 System Inspection

Before determining the initial response of the temperature measurement system, inspect the signal cable and sensor for signs of damage and wear. Note these observations in the Temperature Sensor Calibrations Form.

2.0 Pre-adjustment Calibration Procedures

2.1 System Response Check

The system response check is performed by comparing the sensor response with that of a calibrated NIST traceable thermometer for at least three different temperatures. The ideal temperatures to compare the sensors at are cold, warm , and hot. The cold, warm, and hot temperatures should be about 0˚C, 15-25˚C, and 30-40˚C, respectively. These temperatures can be obtained through the use of three small insulated thermoses. An ice bath should be used for the cold temperature range. For the warm and hot temperatures warm and hot water should be used. The thermometer and temperature sensor should be collocated as closely as possible by taping the sensors together. After allowing time for the temperature readings to stabilize, the technician will record the calibration and datalogger values on the Temperature Sensor Calibration Form. If possible, check the linearity of the instrument by fitting a curve and checking the slope, and intercept of the Y = X line. Check to see if the accuracy of the instrument is no more than ± 0.5° (accuracy) and no more than ± 0.1˚ for temperature difference between matched sensors in a delta temperature measurement system. Mean absolute error is

calculated by the equation 1.0. Were *X* is the precision of the instrument at any given degree, and *n*, is the number of measurements taken.

$$\sum \frac{|X|}{n}$$

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks, the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Since a true calibration of the sensor cannot be performed unless the sensor is checked across its full range, a sensor not conforming to the calibrated NIST thermometer will most likely need to be replaced and sent back to the factory for a true calibration.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 should be repeated and the results recorded in the Temperature Sensor Calibration Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Audit Procedure for Temperature Sensors

The temperature sensors should be removed from the aspirators and checked at three temperature points. The system response check is performed by comparing the sensor response with that of a calibrated NIST traceable thermometer for at least three different temperatures.

The ideal temperatures to compare the sensors at are cold, warm, and hot. The cold, warm, and hot temperatures should be about 0˚C, 15-25˚C, and 30-40˚C, respectively. These temperatures can be obtained through the use of three small insulated thermoses. An ice bath should be used for the cold temperature range. For the warm and hot temperatures warm and hot water should be used. The thermometer and temperature sensors should be collocated as closely as possible by taping the sensors together. Agitate each thermos to equilibrate the medium and remove any local temperature gradients, then record the audit sensor and datalogger values on the Temperature Sensor Audit Form.

The auditor should then compare all values recorded for the temperature sensors to the standards listed on the Temperature Sensor Audit Form. The standard for temperature sensors is ±0.5˚ of observed, and ±0.1˚ for temperature difference between matched sensors in a delta temperature measurement system.

Field Calibration Check for a Li-Cor LI200X Pyranometer

1.0 Introduction

LiCor LI200X pyranometers (hereafter referred to as pyranometers) are calibrated at the factory before receipt. Therefore, the calibration schedule for a pyranometer requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

True calibration of a pyranometer is only accomplished in full mid-summer sun, on a perfectly clear day. This calibration should also last 2 full diurnal cycles. Since these conditions are rarely possible to meet in Alaska calibration field checks rather than true calibrations of pyranometers are performed.

A field calibration check is comprised of the comparison of the pre-adjustment responses to the responses obtained from a collocated, calibrated NIST traceable pyranometer, adjusting or performing needed maintenance on the pyranometer, and documentation of all collected data and adjustments made.

Equipment required for calibration is as follows:

1. Calibrated NIST traceable pyranometer.
2. Datalogger capable of the same scan and averaging frequency as the datalogger being used on-site.
3. All associated instrument manuals.

The calibration should be started by completing the top of the Solar Radiation Sensor Calibration Form.

1.1 System Inspection

Before determining the initial response of the solar radiation system, inspect the signal cable and pyranometer. Check the cable for signs of wear. Check that the pyranometer is level and free of dust. Record these findings in the Solar Radiation Sensor Calibration Form.

2.0 Pre-adjustment Systems Check

This check requires that the solar radiation sensor is in it's normal operating mode. The first part of the check consists of totally covering the sensor to exclude all light. Observe and record the output from the datalogger (which should be approximately zero) in the Solar Radiation Sensor Calibration Form. Next check the ambient light condition output for the sensor and calibration sensor. Record these values in the Solar Radiation Sensor Calibration Form.

Pre-adjustment Collocated Transfer Standard (CTS) Check

Set-up and level the CTS as near as practical to the site pyranometer. Record the concurrent values for the site and CTS pyranometer. Ideally, the CTS should be collecting data for the entire time the technician is on-site. These data should be collected at the same scan rate, and averaged at the same interval as the site pyranometer. Ideally a full diurnal cycle of concurrent readings from the site pyranometer and CTS should be taken.

In practice, the calibration technicians time on-site is limited due to the remoteness and access of monitoring sites in Alaska. Therefore, at least four averaging periods of the site and CTS should be used. That is, if the site datalogger is set to record hourly averages of solar radiation data, four hours of data should be taken form the site datalogger and the CTS. Record the solar radiation data, averaging interval, and all other pertinent information in the Solar Radiation Sensor Calibration Form. If possible check the linearity of the instrument by fitting a curve and checking the slope, intercept, and R^2 value of the Y = X line.

3.0 Maintenance and Adjustments

At this point in the field calibration check the technician should review the results of the system inspection, system check, and CTS check to determine if the sensor is operating within its acceptable limits, and establish what maintenance and adjustments are required, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Any maintenance and adjustments performed should be noted in the Solar Radiation Sensor Calibration Form.

4.0 Post-adjustment Checks

If any maintenance or adjustments were performed, the steps listed in Sections 3.0 and 4.0 of this procedure should be repeated and all data noted in the Solar Radiation Sensor Calibration Form. The results of the post-adjustment checks should be evaluated and noted. If the results do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted. If the site pyranometer cannot be calibrated properly the unit may have to be replaced and sent back to the factory for repair.

5.0 Conclusion

Upon completion of the field calibration check, the Solar Radiation Sensor Calibration Form should be completed. Any adjustments, maintenance or repairs made should be noted. Sign and date the calibration form underneath any notes made in the comments section.

Solar Radiation Sensor Audit Procedure

Performance audits of a solar radiation system require a separate datalogger and a calibrated, NIST traceable pyranometer to serve as a collocated transfer standard (CTS). Procedure for the solar radiation system audit is as follows:

1. Set-up and level the CTS as near as practical to the site pyranometer.

2. Fill in the information of the top portion of the Solar Radiation Audit Form.

3. Record concurrent values for the site and CTS pyranometers for at least four of the site averaging intervals (generally 4 hours).

Ideally a full diurnal cycle of concurrent readings from the site pyranometer and CTS should be taken. However, In general practice the auditors time on-site is limited due to the remoteness and access of monitoring sites in Alaska. Therefore, at least four averaging periods of the site and CTS should be used. That is, if the site datalogger is set to record hourly averages of solar radiation data, four hours of data should be taken form the site datalogger and the CTS. Record the solar radiation data, averaging interval, scan rate, and all other pertinent information in the Solar Radiation Sensor Audit Form.

Calculated the percent difference according to the following equation and record the results in the Solar Radiation Sensor Audit Form.

$$\textit{Percent Difference} = \frac{\textit{(Observed value) - (Audit Value)}}{\textit{(Audit Value)}}$$

If possible check the linearity of the instrument, as compared to the CTS by fitting a curve and checking the slope, and intercept, of the Y = X line. To pass the audit the measures values should be within ±5% of observed (slope) and ±10 Wm^{-2} (intercept).

Calibration Procedure for Vaisala HMP- 45 Type Relative Humidity Sensors

1.0 Introduction

Vaisala HMP-45 type relative humidity sensors (hereafter referred to as relative humidity sensors) are calibrated at the factory before receipt. Therefore, the calibration schedule for a relative humidity sensor requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for relative humidity sensor calibration is as follows:

1. Calibrated, certified, NIST traceable relative humidity sensor.
2. PC or similar display module.
3. Vaisala HMP-45 type sensor manual

The calibration should be started by completing the top of the Relative Humidity Sensor Calibrations Form.

1.1 System Inspection

Before determining the initial response of the relative humidity measurement system, inspect the signal cable and sensor for signs of damage and wear. Open the sensor cover to look for signs of water condensation on the circuit board. Note these observations in the Relative Humidity Sensor Calibrations Form.

2.0 Pre-Adjustment Sensor and System Check

The system and sensor check of a relative humidity sensor is performed by comparing the sensor response with that of a calibrated NIST traceable relative humidity sensor such as a Vaisala HMI-41, to serve as a collocated transfer standard (CTS). Collocate the CTS as near to the site remative humidity sensor as possible. For aspirated temperature measurements, the sensor should be collocated inside, or just outside the bottom of the aspirator to receive the same amount of airflow and solar shielding as the site relative humidity senor. Five concurrent, instantaneous readings should be recorded, at least minute apart. Record these values on the Relative Humidity Sensor Calibrations Form.

Next calculate the absolute percent difference for each values and record the results in the Relative Humidity Sensor Calibrations Form. These instantaneous values should agree with the values from the CTS within ±5%.

Calculate the dew point temperature for each of the five points taken. Dew point temperature or T_d should be calculated according to the following equation:

Note: this equation is only valid for the following conditions:

0 °C < T < 60 °C
0.01 < RH < 1.0
0 °C < T_d < 50 °C

Where:

T = temperature in degrees Celsius
RH = is the relative humidity as a fraction (not percent)
T_d = the dew point temperature to be calculated

The formula is:

$$T_d = \frac{b\,\gamma(T, RH)}{a - \gamma(T, RH)}$$

where

$$\gamma(T, RH) = \frac{a\,T}{b + T} + \ln RH$$

and

a = 17.27
b = 237.7 °C

The recommended system accuracy for dew point temperature is ±1.5°C of observed

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Since a true field calibration of the sensor can rarely be performed any sensor not conforming to the calibrated NIST relative humidity sensor will most likely need to be replaced and sent back to the factory for a true calibration.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 of this document should be repeated and the results recorded in the Relative Humidity Sensor Calibrations Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Relative Humidity Sensor Audit Procedure

Equipment needed for a relative humidity sensor audit includes a calibrated, NIST traceable, Vaisala HMI-41 or similar type relative humidity and temperature probe. This probe will serve as a collocated transfer standard (CTS).

The process for relative humidity as dew point audit procedure is as follows:

Collocate a calibrated NIST traceable relative humidity sensor such as a Vaisala HMI-41. Collocate the CTS as near to the site relative humidity sensor as possible. For aspirated temperature measurements, the sensor should be collocated inside, or just outside the bottom of the aspirator to receive the same amount of airflow and solar shielding as the site relative humidity sensor.

After the CTS has been given ample time to equilibrate five concurrent, instantaneous readings should be recorded, at least minute apart. Record these values on the Relative Humidity Sensor Audit Form.

Calculate the dew point temperature for each of the five points taken. Dew point temperature or T_d should be calculated according to the following equation:

Note: this equation is only valid for the following conditions:

0 °C < T < 60 °C
0.01 < RH < 1.0
0 °C < T_d < 50 °C

Where:

T = temperature in degrees Celsius
RH = is the relative humidity as a fraction (not percent)
T_d = the dew point temperature to be calculated

The formula is:

$$T_d = \frac{b\,\gamma(T, RH)}{a - \gamma(T, RH)}$$

where

$$\gamma(T, RH) = \frac{a\,T}{b + T} + \ln RH$$

and

a = 17.27
b = 237.7 °C

The recommended system accuracy for dew point temperature is ±1.5°C of observed.

Calibration Procedure for an ETI NOAH II Precipitation Gauge

1.0 Introduction

All ETI NOAH II precipitation gauges (hereafter referred to as precipitation gauges) are calibrated at the factory before receipt. Therefore, the calibration schedule for a precipitation gauge requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for precipitation gauges calibration is as follows:

1. NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator or large graduated cylinder.
2. PC or similar display module with P7GACOMM
3. ETI NOAH II manual

The calibration should be started by completing the top of the Precipitation Gauge Calibrations Form.

1.1 System Inspection

Before determining the initial response of the precipitation measurement system, inspect the signal cable and sensor for signs of damage and wear. Note these observations in the Precipitation Gauge Calibrations Form.

2.0 Pre-Adjustment Checks

2.1 System Check

To ensure that the weight measurement assembly (WMA) is functioning, slowly pour an initial amount of water into the gauge and check for a response from the datalogger.

2.2 Gauge Check

A calibration is performed by inputting known amounts of water into the gauge using a NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator or large graduated cylinder and checking the system response. Water is usually inputted into the gauge 800mL at a time, across the full range (4-12” liquid in gauge).

Water should be delivered to the gauge slowly, and poured onto the side of the gauge to buffer the flow. This will ensure that the sensitive load cell in the WMA does not become damaged.

After each bottle of water is added to the gauge, the measurement system should be given ample time to read. This value should be noted in the Precipitation Gauge Calibrations Form. The values should agree within ±10% of the expected. If possible check the linearity of the instrument by fitting a curve and checking the slope and intercept of the Y = X line.

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer. Due to limited time and marginal weather in the field a true field calibration of the sensor can rarely be performed. Therefore, any sensor not conforming to within ±10% of the expected values will most likely need to be replaced and sent back to the factory for a true calibration.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 should be repeated and the results recorded in the Precipitation Gauge Calibrations Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Audit Procedure for an ETI NOAH II Precipitation Gauge

An audit of an ETI NOAH II precipitation gauge is performed by inputting known amount of water into the gauge using a NovaLynx 260-2595 Tipping Bucket Rain Gauge Calibrator or large graduated cylinder. Water is usually inputted into the gauge 800mL at a time, across the full range (4-12" liquid in gauge).

Water should be delivered to the gauge slowly, and poured onto the side of the gauge to buffer the flow. This will ensure that the sensitive load cell in the weight measurement assembly (WMA) does not become damaged. Ample time should be given for the gauge to calculate and read the delivered amount of liquid.

After each bottle of water is added to the gauge, the system measurement should be noted in the Precipitation Gauge Audit Form. The values should agree within ±10% of the expected. If possible check the linearity of the instrument by fitting a curve and checking the slope, intercept, and R^2 of the Y = X line.

Audit procedure is as follows:

1. Fill out the top of the Precipitation Gauge Audit Form noting the prevailing meteorological conditions.

2. Deliver water to the gauge in measured increments across the full range of the gauge, noting the volume delivered, expected and system response, and percent error.

3. Compare the error of the gauge to the limit of ±10%.

For the gauge to pass the audit each point taken must agree to the expected value within ±10%. The slope, intercept, and R^2 value for the Y = X line should also agree within ±10% of expected.

Calibration Procedure for a Nova Lynx 255-100 Evaporation Gauge

1.0 Introduction

All Nova Lynx 255-100 evaporation gauge (hereafter referred to as evaporation gauge gauges) are calibrated at the factory before receipt. Therefore, the calibration schedule for an evaporation gauge requires an initial calibration check, and calibrations every 6 months. Calibrations are also required immediately after any repair, rewiring, adjustment, or replacement of the sensor or any sensor components.

Equipment required for precipitation gauges calibration is as follows:

1. Large graduated cylinder or similar water delivery device
2. Ruler
3. PC or similar display module
4. Nova Lynx 255-100 manual

The calibration should be started by completing the top of the Evaporation Gauge Calibrations Form.

1.1 System Inspection

Before determining the initial response of the precipitation measurement system, inspect the signal cable and sensor for signs of damage and wear. Note these observations in the Evaporation Gauge Calibrations Form.

2.0 Pre-Adjustment Checks

2.1 System Check

To ensure that the float mechanism is functioning, slowly pour an initial amount of water into the gauge and check for a response from the datalogger.

2.2 Gauge Check

A calibration is performed by inputting known amounts of water into the gauge using a large graduated cylinder, measuring the height of the water in the evaporation pan, and checking the system response. Water is usually inputted into the gauge 800mL at a time, across the full range (3-9” liquid in gauge).

After each bottle of water is added to the gauge, the measurement system should be given ample time to read. This value should be noted in the Evaporation Gauge Calibrations Form. Check the linearity of the instrument by fitting a curve and checking

the slope and intercept of the Y = X line. These values should agree within ±10% of the expected.

3.0 Maintenance and Adjustments

After performing all system inspections and calibration checks the results should be reviewed to determine what maintenance and adjustments are needed, if any. Maintenance procedures should follow the manufactures recommendations in the manual provided by the manufacturer.

4.0 Post-adjustment Checks

If maintenance or adjustments were made, the steps listed in Section 2.0 should be repeated and the results recorded in the Evaporation Gauge Calibrations Form. If the outputs do not agree within the specified limits troubleshooting, maintenance, and adjustments should be performed and noted.

5.0 Conclusion

When the instrument provides the proper response to the expected calibration values, complete the calibration form noting any adjustments, maintenance or repairs made. Sign and date the calibration form underneath any notes made in the comments section.

Audit Procedure for a Nova Lynx 255-100 Evaporation Gauge

An audit of an Nova Lynx 255-100 evaporation gauge is performed by inputting known amount of water into the gauge using a large graduated cylinder or similar type of water delivery device. Water is usually inputted into the gauge 800mL at a time, across the full range (3-9" liquid in gauge).

Water should be delivered to the gauge slowly and ample time should be given for the gauge to read and calculate the delivered amount of liquid.

After each bottle of water is added to the gauge, the system measurement should be noted in the Evaporation Gauge Audit Form. Check the linearity of the instrument by fitting a curve and checking the slope and intercept of the Y = X line. These values should agree within ±10% of the expected.

Audit procedure is as follows:

4. Fill out the top of the Evaporation Gauge Audit Form noting the prevailing meteorological conditions.

5. Deliver water to the gauge in measured increments across the full range of the gauge, noting the level of water in gauge and system response.

6. Compare the linearity of the gauge to the limit of ±10%.

For the gauge to pass the audit the slope and intercept of the Y = X line should agree within ±10% of expected.

Systems Audit Procedures for the Pebble Project Meteorological Monitoring Program.

1.0 Introduction

A systems audit is an on-site inspection and review of the quality assurance system used for the total measurement system (sample collection, sample analysis, data processing, ect.) for each monitored parameter. Whereas, performance audits are quantitative appraisal, system audits are normally a qualitative appraisal. The standard operating procedures (SOP) in the projects analysis plan should be used as the basis for conducting a system audit. The purpose of a system audit is to determine whether or not the monitoring program has followed the SOP and quality control procedures and listed in the projects analysis plan. It also determines if the data generated are scientifically valid, defensible, and of specified accuracy and precision.

2.0 Audit Items

The following are typical items checked in a systems audit for a PSD Meteorological Monitoring Program:

1. Is the quality assurance organization operational

2. Are there written standard operation procedures (SOP) available for site operation and sampling, and are they being followed?

3. Are there written calibration procedures and schedules, including traceability documentation, and are they being followed?

4. Are there preventative maintenance procedures and are they being followed?

5. Are site logbooks, site checks forms, and other documentation being used and properly completed?

3.0 Audit Goals

The goal of a systems audit is to ass the overall operation of the quality assurance system. System audits generally entail the following procedures:

1. Preparing audit questionnaires for the monitoring site evaluations (F/ST9001.1) and for evaluation of the office activities related to the monitoring (F/ST9001.2).

2. Identifying deficiencies from previous audits and preparing a checklist covering these areas.

3. Arranging entrance interviews and briefing the site operator on the purpose and the scope of the systems audit.

4. Performing the systems audit.

5. Conducting exit interviews and debriefing on the system audit results

6. Preparing and submitting audit reports

7. Following up on report recommendations.

A systems audit will be conducted within 30 days of the commencement of the filed program in order to insure that all of the QA project plans specified procedures have been implemented. An early assessment is designed to prevent the accumulation of a large amount of questionable to invalid data bay quickly uncovering any discrepancies between the project plan and the actual monitoring effort. Thereafter, a systems audit will be conducted yearly.

APPENDIX B2
AUDIT AND CALIBRATION FORMS

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**

A. DAS TIME AUDIT

Instrument Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments:

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?

B. 2M, 10M, and ΔT, TEMPERATURE SENSOR AUDIT

Thermistor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Audit Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED THERMISTOR TEST									
Thermal Input			Station Response						
Temp Range	Target Deg C	Input Deg C	2M DAS Deg C	10M DAS Deg C	ΔT DAS Deg C	ΔT Error Deg C	2M Error Deg C	10M Error Deg C	Pass/ Fail?
Hot	35 - 40								
Warm	15 - 25								
Ice Bath	0								
				Max Abs. Error					

Instrument Limits: Max Absolute Error > 0.5°C (accuracy), Max Absolute Error > 0.1°C ΔT.
Comments:

C. RELATIVE HUMIDITY SENSOR AUDIT

Site Sensor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Audit Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED RELATIVE HUMIDITY SENSOR TEST							
NIST Readings			Station Response				
Temp Deg C	RH (%)	T_{dp} Deg C	DAS Temp Deg C	DAS RH (%)	DAS T_{dp} Deg C	Error Deg C	Pass/ Fail?
				Max Abs. Error			

Instrument Limits: Max Absolute Error > 1.5°C Dew Point Temperature
Comments:

C. MAIN HORIZONTAL WIND SPEED SENSOR AUDIT

Height: _____ **Meters**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Audit Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Audit Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST	
Torque:	gm-cm
Bearing Status:	
Bearings Replaced:	
Torque: N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	2.94				
200	5.60				
400	10.93				
1000	26.92				
2000	53.57				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: MPS=RPM/37.522569+0.27; MPH=0.44704*MPS; gm-cm=72*oz-in; Torque=1.8*MPS^2.
Comments:

D. BACKUP HORIZONTAL WIND SPEED SENSOR AUDIT

Height: _____ **Meters**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Audit Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Audit Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST	
Torque:	gm-cm
Bearing Status:	
Bearings Replaced:	
Torque: N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	0.51				
200	1.02				
400	2.05				
1000	5.12				
2000	10.24				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >2.4 gm-cm (0.033oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: Transfer Function for RM Young Model 05305 AQ w/ carbon fiber propeller: m/s = rpm x 0.00512
Comments:

E. HORIZONTAL WIND DIRECTION SENSOR AUDIT

Height: _____ **Meters**

Wind Dir Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Vane #:** _____ **Range:** _____ **Deg**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**
Audit Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions: Torque = 28.4*MPS^2 for aluminum vane.

Comments:

F. BACK-UP HORIZONTAL WIND DIRECTION SENSOR AUDIT

Height: **Meters**

Wind Dir Sensor: **Make:** **Model:** **S.N.#:** **Vane #:** **Range:** **Deg**
Audit Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >23.0 gm-cm (.32 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions:

Comments:

G. PRECIPITATION GAUGE AUDIT

Height: **Meters**

Precipitation Gauge: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Audit Equipment: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Diameter: **Inches** **Volume Rate** **Ml/mm**

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**

PRECIPITATION GAUGE VOLUME TEST										
Start Time	Input Vol Ml	Input mm	Data Hour	DAS mm	-Adjust mm	+Adjust mm	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

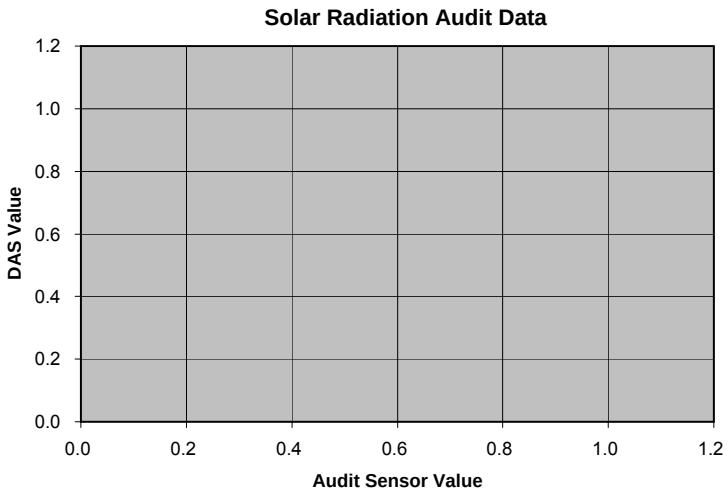
Instrument Limits: Max Absolute Error > 10 % of Input.
Comments:

H. SOLAR RADIATION SENSOR AUDIT

Height: _____ **Meters**

Site Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**
Audit Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**

SOLAR RADIATION SENSOR TEST					
DAS Output	Audit Output	C. Fit Data	Error	Error % Input	Pass/ Fail?
		Max Abs. Error			
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

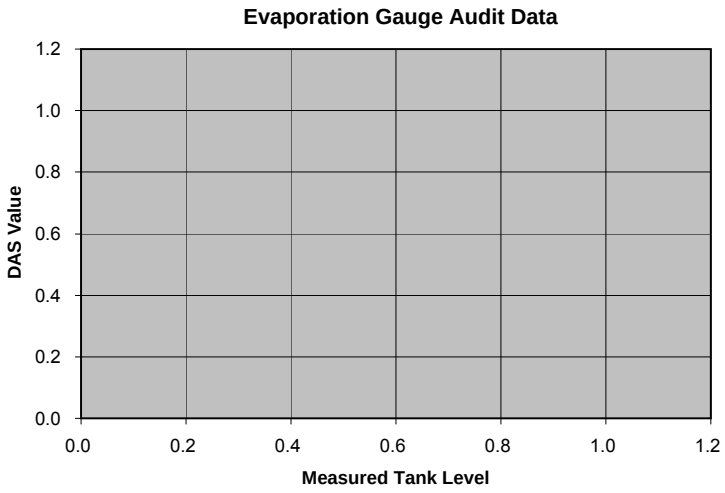
Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Auditor: **Witness(s):** **Audit Date:**
F) EVAPORATION GAUGE AUDIT **Height:** _____ **Meters**

Evaporation Gauge: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**
Evaporation Pan: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**

EVAPORATION PAN STAGE HEIGHT TEST					
Tank Level	DAS mm	C. Fit Data	Error mm	Error % Input	Pass/ Fail?
Max Abs. Error					
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**

A. DAS TIME CALIBRATION

Instrument Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments:

DAS TIME vs. NOAA CLOCK				
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?	Time Changed?

B. 2M, 10M, and ΔT, TEMPERATURE SENSOR CALIBRATION

Thermistor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Cal. Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **Deg C**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED THERMISTOR TEST									
Thermal Input			Station Response						
Temp Range	Target Deg C	Input Deg C	2M DAS Deg C	10M DAS Deg C	ΔT DAS Deg C	ΔT Error Deg C	2M Error Deg C	10M Error Deg C	Pass/ Fail?
Hot	35 - 40								
Warm	15 - 25								
Ice Bath	0								
				Max Abs. Error					

Instrument Limits: Max Absolute Error > 0.5˚C (accuracy), Max Absolute Error > 0.1˚C ΔT.
Comments:

C. RELATIVE HUMIDITY SENSOR CALIBRATION

Site Sensor **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Cal. Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **% RH**
Probe SN: _____

Time:
Begin: _____
End: _____

COLLOCATED RELATIVE HUMIDITY SENSOR TEST							
NIST Readings			Station Response				
Temp Deg C	RH (%)	T_{dp} Deg C	DAS Temp Deg C	DAS RH (%)	DAS T_{dp} Deg C	Error Deg C	Pass/ Fail?
				Max Abs. Error			

Instrument Limits: Max Absolute Error > 1.5˚C Dew Point Temperature
Comments:

C. MAIN HORIZONTAL WIND SPEED SENSOR CALIBRATION

Height: _____ **Meters**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Cal. Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Cal. Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST	
Torque:	gm-cm
Bearing Status:	
Bearings Replaced:	
Torque: N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	2.94				
200	5.60				
400	10.93				
1000	26.92				
2000	53.57				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: MPS=RPM/37.522569+0.27; MPH=0.44704*MPS; gm-cm=72*oz-in; Torque=1.8*MPS^2.
Comments:

D. BACKUP HORIZONTAL WIND SPEED SENSOR CALIBRATION

Height: _____ **Meters**

Wind Spd Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Cup #:** _____ **Range:** _____ **MPS**
Cal. Equipment: **Low Spd:** _____ **Model:** _____ **S.N.#:** _____ **Torque:** _____ **S.N.#:** _____
Cal. Equipment: **High Spd:** _____ **Model:** _____ **S.N.#:** _____

TORQUE TEST	
Torque:	gm-cm
Bearing Status:	
Bearings Replaced:	
Torque: N/A	gm-cm

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00				
100	0.51				
200	1.02				
400	2.05				
1000	5.12				
2000	10.24				
	Max Abs. Error				

Time: Begin: _____ End: _____

Instrument Limits: Threshold Torque >2.4 gm-cm (0.033oz-in). Max Absolute Error > 0.20 MPS @ WS<=5 MPS or > 5% of input @ WS>5 MPS.
Conversions: Transfer Function for RM Young Model 05305 AQ w/ carbon fiber propeller: m/s = rpm x 0.00512
Comments:

E. HORIZONTAL WIND DIRECTION SENSOR CALIBRATION

Height: _____ **Meters**

Wind Dir Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Vane #:** _____ **Range:** _____ **Deg**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**
Cal. Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions: Torque = 28.4*MPS^2 for aluminum vane.

Comments:

F. BACK-UP HORIZONTAL WIND DIRECTION SENSOR CALIBRATION

Height: **Meters**

Wind Dir Sensor: **Make:** **Model:** **S.N.#:** **Vane #:** **Range:** **Deg**
Cal. Equipment: **Align:** **Model:** **S.N.#:** **Torque:** **S.N.#:**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**
Compass: **Model:** **S.N.#:** **Magnetic Declin:** **E of N**

TORQUE TEST		
Torque:		gm-cm
Bearing Status:		
Bearings Replaced:		No
Torque:	N/A	gm-cm

IN SITU ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1020 End: 1043

VANE ACCURACY & LINEARITY TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0				330.0			
60.0				355.0			
90.0				30.0			
120.0				60.0			
150.0				90.0			
180.0				120.0			
210.0				150.0			
240.0				180.0			
270.0				**Max Abs. Error**			
300.0				**Mean Abs. Error**			

Time: Begin: End:

POST-AUDIT ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Instrument Limits: Threshold Torque >23.0 gm-cm (.32 oz-in). Max Absolute Error >5° or Mean Absolute Error > 3° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity).

Conversions:

Comments:

G. PRECIPITATION GAUGE CALIBRATION

Height: **Meters**

Precipitation Gauge: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Cal. Equipment: **Make:** **Model:** **S.N.#:** **Range:** **Inches per Hour**
Diameter: **Inches** **Volume Rate** **Ml/mm**

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**

PRECIPITATION GAUGE VOLUME TEST										
Start Time	Input Vol Ml	Input mm	Data Hour	DAS mm	-Adjust mm	+Adjust mm	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

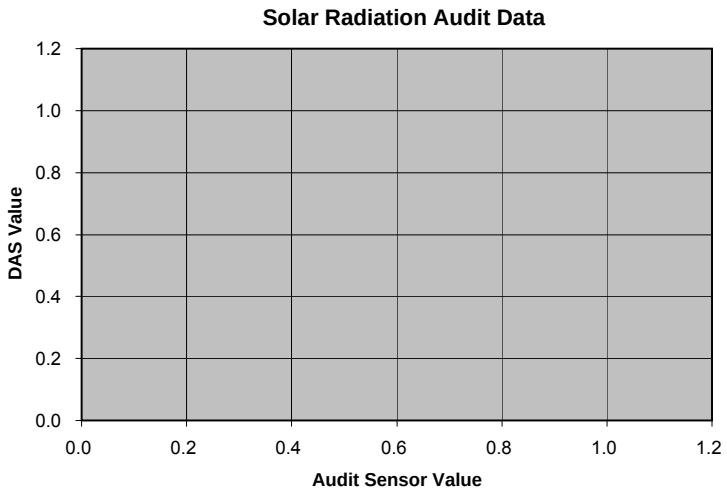
Instrument Limits: Max Absolute Error > 10 % of Input.
Comments:

H. SOLAR RADIATION SENSOR CALIBRATION

Height: _____ **Meters**

Site Sensor: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**
Cal. Equipment: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **W m^{-2}**

SOLAR RADIATION SENSOR TEST					
DAS Output	Audit Output	C. Fit Data	Error	Error % Input	Pass/ Fail?
		Max Abs. Error			
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

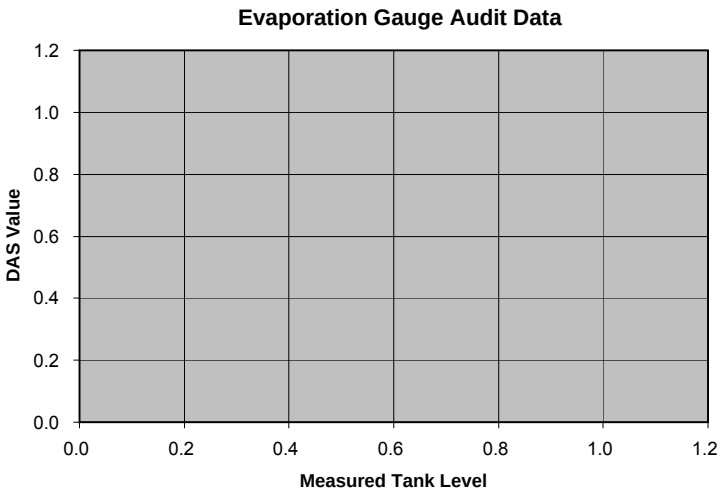
Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

METEOROLOGICAL STATION - INSTRUMENT CALIBRATION

Owner: Northern Dynasty **Operator:** **Alternate:** **Station Site:**
Calibrator: **Witness(s):** **Calibration Date:**
F) EVAPORATION GAUGE CALIBRATION **Height:** _____ **Meters**

Evaporation Gauge: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**
Evaporation Pan: **Make:** _____ **Model:** _____ **S.N.#:** _____ **Range:** _____ **mm**

EVAPORATION PAN STAGE HEIGHT TEST					
Tank Level	DAS mm	C. Fit Data	Error mm	Error % Input	Pass/ Fail?
Max Abs. Error					
Intercept		**Slope**			



Time: Begin: _____ End: _____ **Date:** _____

Instrument Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments:

APPENDIX B3
PROJECT HEALTH AND SAFETY PLAN

Health & Safety Plan

Pebble Project Meteorological Monitoring

November 2004

prepared for

Northern Dynasty Mines, Inc.

prepared by

Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, Alaska 99503
907-563-2137

Table of Contents

1.0 INTRODUCTION 1
2.0 SCOPE OF WORK 1
3.0 PROJECT EXECUTION PLAN 1
3.1 Phase 1: Mobilization 1
3.2 Phase 2: Installation 2
3.3 Phase 3: Operation 2
3.4 Phase 4: Demobilization 2
4.0 PROJECT SCHEDULE 2
5.0 HAZARD ASSESSMENT 2
5.1 HSE Risks Identified 2
5.1.1 Phase 1: Mobilization 3
5.1.2 Phase 2: Installation 5
5.1.3 Phase 3: Operation 7
5.1.4 Phase 4: Demobilization 9
6.0 ADDITIONAL SAFETY CONSIDERATIONS 12
7.0 EMERGENCY CONTACTS & MEDICAL PROCEDURES 13
7.1 Northern Dynasty Emergency Contact Information 13
7.2 Local Emergency Services 13
7.3 HCG Interface Document 14
7.4 Medical Emergency Procedures 14

1.0 INTRODUCTION

This Health and Safety Plan is a job-specific document presenting a comprehensive plan for compliance with the Hoefler Consulting Group HSE program. Hoefler Consulting Group (HCG) prepared this plan for the Pebble Project Meteorological Monitoring Program.

The plan incorporates a specific breakdown of the project activities, the planned communication and interface provisions that will be followed for the project. The intent is to summarize the scope of work and the associated health and safety issues with a focus on the needs of field personnel and successful execution of the project.

The established procedures found in the Alaska Safety Handbook (ASH) and the safety manual, *Mineral Exploration in Western Canada* are available as reference documents for implementing best practices for all project work activity and pre-job planning. A Phase Hazard Analysis (PHA) addresses the progressive steps of the project plan and field operations. Changes to a work plan or scope, after the plan is developed, poses significant potential for health and safety related incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT."

2.0 SCOPE OF WORK

Two three-meter meteorological stations will be installed and operated at the Pebble Project site. A radio repeating tower is already operating at the project location. Work will include instrument installation, establishing the power supply, and start-up and operation of the monitoring stations. All components are designed for rapid installation of the system in the field.

3.0 PROJECT EXECUTION PLAN

3.1 Phase 1: Mobilization

Mobilization consists of staging all necessary tools and equipment to the site. All equipment and personnel will travel from the base camp to the site via helicopter or snow machine. Prior to commencement of installation, HCG personnel will undergo a site-specific orientation, including familiarization with site facilities and operations personnel. HCG staff will also ensure that the pilot and site manager are aware of their location in the field in the event radio contact is interrupted. A back-up plan for pick-up will be established prior to beginning field work each day.

3.2 Phase 2: Installation

HCG personnel will begin to install equipment upon arrival. Electrical power such as 120 VAC for light hand tools and 12 VDC will be established first. All instrument components are 12 VDC, including heaters, fans, data logger and the cell phone/modem system.

3.3 Phase 3: Operation

Following successful installation of the equipment, initial performance audits and calibrations will be conducted to ensure equipment is operating within EPA and ADEC guidelines. These procedures require approximately one full day of work to complete. Subsequently, the meteorological station will operate unattended for an extended period of time**.** Quarterly audits, calibration, and maintenance will be conducted by HCG staff.

3.4 Phase 4: Demobilization

Demobilization operations consist of packing all tools, safety gear and HCG-owned equipment for transport back to Anchorage. The work area will be cleared of all work-related debris and litter and will be left in an orderly fashion.

4.0 PROJECT SCHEDULE

Installation activities are to be conducted in October 2004 and system upgrades are scheduled to be made in November 2004. Quarterly audits, calibrations and maintenance are scheduled to occur in 2005.

5.0 HAZARD ASSESSMENT

5.1 Health and Safety Risks Identified

The health and safety risks identified for the four defined phases of the project are as follows:

Phase		Personnel	Equipment
Phase 1	Mobilization	Low	Low
Phase 2	Installation	Medium	Medium
Phase 3	Operation	Low	Medium
Phase 4	Demobilization	Low	Low

5.1.1 Phase Hazard Analysis: Phase 1

Project: Pebble Project Meteorological Monitoring

Date: November 2004

Location: Iliamna, Alaska

Phase: Mobilization

Overall Risk Rank: Low

Phase Description: Initial project mobilization of employees, tools, and equipment to installation site.

Activities include:

- Travel to Pebble Project site near Iliamna, Alaska, site-specific orientation, familiarization with site facilities and operations personnel.
- Transporting, lifting, and rigging of tools and equipment.

POTENTIAL HAZARDS		RANK
1.	Lifting hazards	Medium
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Low
3.	Slips or falls from ladder.	Low
4.	Cuts and lacerations-striking against objects, pinch points and protruding objects, trip hazards.	Low
5.	Negative wildlife encounters	Low

Recommended Controls:

1. Ensure crew members understand all project hazards, are familiar with specific lifting equipment used, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Ensure footwear is in good repair, and always ensure solid footing. Situate ladders or stepstools on level ground, and use caution when working off the ground. Pay attention to surroundings.

4. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

5. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in firearm use.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Brent Veltkamp, Chris Lindsey, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Northern Dynasty Mines officials of the situation.

Additional Comments/Changes:

5.1.2 Phase Hazard Analysis: Phase 2

Project:	Pebble Project Meteorological Monitoring
Date:	November 2004
Location:	Iliamna, Alaska
Phase:	Installation
Overall Risk Rank:	Medium
Phase Description:	The meteorological station tripods will be installed at pre-determined field locations. Power will be connected to the instrumentation.

Activities include:

- Installing towers

- Installing/securing a data logger/controller enclosure at ground level
- Connecting 12 VDC electrical power

POTENTIAL HAZARDS		RISK
1.	Lifting Hazards	Medium
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Medium
3.	Slips or falls from ladder.	High
4.	Cuts and lacerations-striking against objects, pinch points and protruding objects	Medium
5.	Electrocution while connecting power supply	Low
6.	Negative wildlife contacts	Low

Recommended Controls:

1. Ensure crew members understand all project hazards, are familiar with the specific lifting equipment used in installation, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Ensure footwear is in good repair, and always ensure solid footing. Situate ladders or step stools on level ground and use caution when working off the ground. Pay attention to surroundings.

4. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task.

5. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

6. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in the use of firearms.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Brent Veltkamp, Chris Lindsey, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Northern Dynasty Mines officials of the situation.

Additional Comments/Changes:
Audits and calibrations are scheduled for the spring and fall. These tests, which will involve two HCG personnel, should take one working day to complete. Various personnel will be involved in these site visits.

5.1.3 Phase Hazard Analysis: Phase 3

Project: Pebble Project Meteorological Monitoring
Date: November 2004
Location: Iliamna, Alaska
Phase: Operation
Overall Risk Rank: Low/Medium
Phase Description: Following successful equipment setup, initial audits and calibrations will be conducted. These activities will take approximately one full work day to complete. Subsequently, the meteorological stations should operate unattended for an extended period of time.

Activities Include:

- Initial calibration and audits
- Periodic calibrations and audits

	POTENTIAL HAZARDS	RISK
1.	Lifting Hazards	Low
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Low
3.	Cuts and lacerations-striking against objects, pinch points and protruding objects	Low
4.	Electrocution	Low
5.	Negative wildlife contacts	Low

Recommended Controls:

1. Ensure crew members understand all project hazards, are familiar with the specific lifting equipment used in installation, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These

liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task.

4. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

5. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in firearm use.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY "TIME OUT" TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Brent Veltkamp, Chris Lindsey, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Northern Dynasty Mines officials of the situation.

Additional Comments/Changes:

_____

_____

_____

5.1.4 Phase Hazard Analysis: Phase 4

Project: Pebble Project Meteorological Monitoring
Date: November 2004
Location: Iliamna, Alaska
Phase: Demobilization
Overall Risk Rank: Low
Phase Description: Demobilization consists of packing all tools, equipment and safety gear for transport back to Anchorage. The work area will be cleared of all debris and left in an orderly fashion.

Activities Include:

- Removal of all tools, and unused equipment and materials.
- Clean up and housekeeping at the job site and any other areas utilized as workspace or materials lay-down areas.
- Proper disposal of any waste materials generated during this installation.

	POTENTIAL HAZARDS	RISK
1.	Lifting Hazards	Low
2.	Muscle strains / overexertion / dehydration / fatigue / hypothermia	Medium
3.	Cuts and lacerations-striking against objects, pinch points and protruding objects	Low
4.	Electrocution while demobilizing system	Low
5.	Negative wildlife contacts	Low

1. Ensure crew members understand all project hazards, are familiar with the specific lifting equipment used in installation, and utilize proper personal lifting techniques. Follow lifting safe work practices and avoid unsafe work acts. Ensure employees get help to move heavier objects, and utilize move-smart techniques, as well as proper body motion-mechanics when performing physical lifting.

2. Warm up and stretch before lifting or pulling. Drink plenty of water throughout the day. Avoid excessive amounts of coffee, teas, colas, sodas, juices, etc. These liquids will not re-hydrate an individual as well as water. Be prepared for inclement weather. Proper clothing (layered) for outside work activities is essential, and should include at a minimum: thermal underwear, arctic coverall gear, gloves, face mask, heavy socks, appropriately rated cold weather footwear (winter months). Get help with awkward loads. Ensure that employees are given sufficient time to conduct activities at the work site. Do not increase speed of activities. Ensure that employees are given multiple breaks throughout the workday.

3. Wear proper PPE to prevent personal injury. Anyone working at height will be trained in fall prevention/protection and will be wearing fall protection. Employees are to familiarize themselves with the immediate work area for any given task.

4. Ensure power tools and extension cords are good working order. Visually inspect the equipment before use.

5. Be alert to surroundings. Do not leave food sources out that can attract animals. Carry personal firearms and/or bear mace or be in the company of someone who has firearms and is trained in firearm use.

Note:
A change to a plan after the plan was developed is a major reason for health and safety incidents.

ANY CHANGE OF CONDITIONS THAT AFFECT THE PLAN WILL REQUIRE A SAFETY “TIME OUT” TO ASSESS HOW THAT CHANGE WILL IMPACT THE JOB AS PLANNED. WHEN ADDITIONAL HAZARDS ARE INTRODUCED INTO A PLANNED PHASE, CONTROLS WILL BE DISCUSSED WITH ALL PARTIES TO ENSURE SAFE

EXECUTION DURING THE SAFETY "TIME OUT".

Inspections/Audits:
The crew supervisor will review the upcoming work on a daily basis and review a Safety Analysis Form outlining safety procedures, safety equipment usage and the possible hazards associated with the work planned that day. The material will be presented to the crew as a "Tool Box Safety Meeting" prior to the start of work that day.

Possible Crew Members: Dominic Shallies, Jared Cockman, Brent Veltkamp, Chris Lindsey, Eric Brudie, Steve Mackey

Emergency Action Plan:
Provide first aid. Immediately notify Northern Dynasty Mines officials of the situation.

Additional Comments/Changes:

6.0 ADDITIONAL SAFETY CONSIDERATIONS

- Field crews must always work in pairs and carry a radio.
- No alcohol or illegal drug consumption is allowed.
- Those who carry epi-pens for allergic reactions are to advise NDM and other members of the field crew so that assistance can be provided if necessary.
- Be aware of the rules regarding the possession of firearms and/or bear mace when traveling to the project area. A weapon must be unloaded before boarding the helicopter and unloaded and securely stored while in camp. The name of the individual bringing a firearm into camp must be given to Richard Moses (NDM Site Manager or his designee) prior to arrival. Permission to carry bear mace must be obtained from the pilot before boarding the helicopter.
- Field crews need to understand the risk of extreme weather and the possibility of staying overnight in the field.

7.0 EMERGENCY CONTACTS & MEDICAL PROCEDURES

7.1 Northern Dynasty Emergency Contact Information

c/o Iliamna Weathered Inn #1 Roadhouse Strip or Box 124 Iliamna, AK 99606 Tel: (907) 571-1872 or 1774 Home: (907) 571-1872 Fax: (907) 571-1789 Email: richardm@hdgold.com	1020-800 West Pender St. Vancouver, B.C. Canada V6C 2V6 Tel: (604) 684-6365 Toll Free: 1-800-667-2114 Fax: (604) 662-8956

Pebble Project Office in Iliamna	**John Baechler:**
Line 1: (907) 571-1788 Line 2: (907) 571-1774 Quest Office: (907) 571-1873 Emergencies: 8:30pm – 6:00am call (907) 571-1872	Home: (907) 571-1878

Project Coordinator in Anchorage	**Anchorage Office Manager**
Northern Dynasty Mines Inc. – Ella Ede Tel: (907) 339-2600 Toll Free: (877) 450-2600 Home: (907) 274-0228 Cell: (907) 229-1780 Email: ellae@northerndynasty.com	Northern Dynasty Mines Inc.– Michelle Brunner Tel: (907) 339-2600 Toll Free: (877) 450-2600 Home: (907) 563-1309 Cell: (907) 632-0163 Email: michelleb@northerndynasty.com

7.2 Local Emergency Medical Services

Iliamna Clinic — Located on the Roadhouse Strip
Telephone: (907) 571-1383

Rene (Health Aid) — Home Telephone: (907) 571-1323

7.3 INTERFACE DOCUMENT

HCG has developed an Interface Document (Table 7-1) that outlines the interface HCG field and office personnel. Serious incidents must be reported immediately, while less serious ones shall be reported within the shift in which the incident occurred. This will include the completion of all necessary forms and documentation.

Interface Document
Table 7-1

Activity	Primary HCG Contact	Secondary HCG Contact
Environmental Non-compliance	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Environmental Incident Reporting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Unauthorized/unaccompanied individuals on site	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Compliance Audits: Scheduling, developing, conducting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Emergency Reporting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Agency Reporting	Steve Mackey (563-2129)	Al Trbovich (563-2140)
Field Installation Activities	Steve Mackey (563-2129)	Al Trbovich (563-2140)

7.4 MEDICAL EMERGENCY PROCEDURES

(1) Contact Northern Dynasty Mines Base Camp in Iliamna by radio or telephone. Radio frequency being used is 151.625 MHz with a 123.000 MHz transmit and receive tone (private line).

(2) Contact Alaska State Troopers Dispatch: (907) 428-7200 (24 hrs/day).

In the event of a major emergency, the Alaska State Troopers will mobilize a response, including contacting the local State Trooper, medical, and rescue personnel.

Information to provide:

- Who you are
- Nature of emergency
- Your location
- Your company and contact number
- Number of victims
- Sex, age and vital signs of patients (if possible)
- Specific injuries

(3) Local emergency support in Iliamna and Newhalen:

- Iliamna State Trooper: (907) 571-1534
- Iliamna Clinic (Health Aid): (907) 571-1383
- Newhalen Clinic: (907) 571-1248
- Iliamna Air Taxi (has air Medivac capability): (907) 571-1245 / (907) 871-1445

APPENDIX B4
PROJECT FORMS

Site Visit & System Check

Date: _____

Project Title: _____ **Project No.** _____

Name of Inspector: _____

Associated Company: _____

Sate Reason for visit: _____
_____
_____

_____

Check List

Tower:

- Check tower for stability, ensure that guy wires are taunt and all clamping hardware is in good condition.
- Check that all sensors are securely mounted to tower. This includes antennas and enclosures.
- Check for excessive ice build-up on tower and sensor mounts
- Check for loose instrument cables

Comments: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Sensors:

Wind Direction:

- Check to see if wind vane is moving freely or fluttering in wind.
- Check for excessive ice or snow build-up on vane and sensor if so clear the sensor.
- After clearing ice or snow, check to see if vane can move freely in all directions.

Wind Speed:

- Check to see that cups are spinning freely.
- Check for excessive ice or build-up on vane and sensor, if so clear the sensor.
- After clearing ice or snow, check cups to insure they spin with ease.
- Clear ice or snow off of wind sensor cross arm.

All other sensors:

- Check sensor housing or brackets for visible damage.
- Check all sensor connection and cables to ensure good connections and secured to tower.
- Clear any ice or snow from sensor brackets and mounts.
- Check each sensor mount to ensure the sensor is level and secure.

Comments: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Inspector signature: _____

Corrective Action Plan

The corrective action plan is designed to address the many unexpected problems that may arise during the project duration. HCG personnel are instructed to immediately bring any major problems to the attention of the project supervisor. Since many individuals could become involved in the corrective action, the notification is best done by a standard corrective action form.

This Corrective Action Form exists in three parts to address and correct program that occur during routine operation or as a result of performance evaluation and technical systems audits. The three parts are listed below:

- Request for Assistance
- Proposed Corrective Action
- Results of Proposed Corrective Action

It is recommended that all personnel signing the form should feel free to attach other needed material. These forms are stored at the HCG office both in electric and paper format.

Hoefler Consulting Group

Corrective Action Form

Project Title: _____ Project No. _____

I. Request for Assistance:

To: _____ From: _____ Date: _____

Problem Summary: _____
_____
_____
_____
_____
_____
_____.

II. Proposed Corrective Action

To: _____ From: _____ Date: _____

Recommended Action: _____
_____
_____
_____
_____
_____
_____.

III. Results of Proposed Action

To: _____ From: _____ Date: _____

Action Results: _____
_____
_____
_____
_____
_____
_____.

Systems Audit Report
For Meteorological Monitoring Programs

Audit Date:
Auditor:
Auditor Affiliation

Interviewees:	Witnesses:

1.0 Monitoring Program Information

Monitoring Site Audited:

Monitoring Site Owner:
Owner Mailing Address:

2.0 Monitoring Program Staff

2.1 Program Staff Organization

- Draw diagram indicating the organizational structure of the monitoring program. Include names and titles.

2.2 Program Staff Training and Experience

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

Name:
Program Position:
Training/Education/Experience:

- How is program staff trained?_____
- Who is responsible for training staff?

Does the operator have training manuals or other training related materials available for staff?

Yes
No

3.0 General Program Information

3.1 Monitoring Site Description

Monitoring Site Name:

Monitoring Site Location Description:

Indicated by Operator	Determined by Auditor

3.2 Monitoring Site Appearance and Safety

Does the site appear clean, organized and well maintained?	Yes No	Comments:
Does the site appear to be safe and reasonably hazard free?	Yes No	Comments:
Does the site have a shelter for operators?	Yes No	Comments:
Does the site have emergency equipment such as a first aid kit available?	Yes No	Comments:
Does the site have adequate measures to prevent human tampering?	Yes No	Comments:
Does the site have adequate measures to prevent damage from animals?	Yes No	Comments:

3.3 Monitoring Site Surroundings

- Indicate the population density type for the monitoring site.

	Type	Description
	Remote	No nearby development with no nearby population center.
	Rural	Limited development with nearby sparse population.
	Low Suburban	Light industrial development in low population center.
	High Suburban	Light industrial development in high population center.
	Urban	Heavy industrial development in high population center.

3.4 Monitoring Site Equipment Inventory

- List all parameters that are being monitored and their associated instrumentation at the site.

Parameter	Make	Model	Serial No.

- List all instrumentation used in support of the monitoring instrumentation.

Instrument	Make	Model	Serial No.

3.5 Meteorological Instrumentation Siting and Exposure (EPA-454/R-99-005)

Do all sensors appear to be clean, intact, in good condition and well maintained?	Yes No	Comments:
Are all sensors operational, online and reporting data?	Yes No	Comments

3.5.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base?	Yes No	Comments
Is the height of the tower 10 meters above the ground?	Yes No	Comments:
Is the tower stable and plumb?	Yes No	Comments:
Is the tower protected from lightning?	Yes No	Comments:

3.5.2 Wind Speed and Wind Direction

Is the horizontal distance between the instrument and any obstruction at least 10 times the height of the obstruction?	Yes No	Comments:
Is the instrument 1.5 times the height of the building above the roof or 10 meters above the ground?	Yes No	Comments:
Are the wind speed and wind direction sensors stable and plumb?	Yes No	Comments:
Is the distance of the sensor on the cross arm/mast at least twice the diameter of the tower?	Yes No	Comments:
Is the wind sigma theta collected according to EPA requirements?	Yes No	Comments:

3.5.3 Air Temperature, Air Temperature Difference, and Relative Humidity

Are the sensors mounted over open level ground at least 9 meters in diameter and at least 2 meters above ground?	Yes No	Comments:
Are the two temperature difference probes located at a height of 2 meters and 10 meters above the ground?	Yes No	Comments
Is the ground beneath the temperature sensor natural native material?	Yes No	Comments
Is the site free of any man-made features exist that could create bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	Yes No	Comments:
Is the site free of any natural made features that could create bias temperature data (e.g. open water, sloping ridge, etc.)?	Yes No	Comments:
Are the temperature sensors protected from the influence of solar radiation?	Yes No	Comments:
Are the sensors located at least four times the distance from the height of the obstruction?	Yes No	Comments:
Are the sensors located at least 30 meters from large paved areas?	Yes No	Comments:
Are the temperature sensors used for differential measurements located in identical aspirated shields?	Yes No	Comments:

3.5.4 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows on the instrument?	Yes No	Comments:
Is the sensor situated to the south of the tower in order to minimize obstruction from the tower?	Yes No	Comments:

3.5.5 EPA Recommended Instrument Resolutions

Parameter	Equipment Specifications	EPA Resolution Standard	Meets Standard?

3.5.6 Recommended Instrument Accuracy Standards

Parameter	Equipment Specifications	EPA Accuracy Standard	Meets Standard?

3.5.7 EPA Recommended Instrument Response Standards

Parameter	Equipment Specifications	EPA Response Standard	Meets Standard?
Wind Speed			
Threshold:			
Distance Constant:			
Wind Direction			
Threshold:			
Damping Ratio:			
Delay Distance:			
Air Temperature (2 meter)			
Time Constant:			
Air Temperature (10 meter)			
Time Constant:			
Relative Humidity			
Time Constant:			
Range:			
Solar Radiation			
Time Constant:			
Operating Range:			
Spectral Response:			

3.6 Support Instrumentation and Equipment

Is the DAS well protected from the elements with adequate room for maintenance?	Yes No	Comments:
Is the DAS rated for operation in the expected local temperature range?	Yes No	Comments:
Are all sensor signal leads neatly and securely connected to the correct DAS channels?	Yes No	Comments:
Are all components of the DAS operational?	Yes No	Comments:
Is the communications equipment operating correctly?	Yes No	Comments:
Does the DAS system have a stable power supply?	Yes No	Comments:

Is the DAS properly grounded?	Yes No	Comments:
Is the DAS system protected from lightning?	Yes No	Comments:

4.0 Data Processing

4.1 Data Collection

Is the monitoring station polled on a regular basis?	Yes No	Comments:
Is the PM sample run date recorded?	N/A	Comments:
Is the PM sample start time and elapsed time recorded?	N/A	Comments:
Is the PM average flow rate recorded?	N/A	Comments:
Is each PM filter recovered after each run period?	N/A	Comments

- Indicate how the polled data are handled for data processing after being downloaded.

Are procedures in place for backing up raw data?	Yes No	Comments:

- How long are backup raw data files retained?
- How long are archived records retained?

Are hard copies of data being kept in case of computer failure?	Yes No	Comments:

4.2 Data and Sample Handling

Are written procedures for data handling available for the project?	Yes No	Comments:
Are filters properly secured once removed to prevent contamination or tampering?	N/A	Comments:

Are copies of the Site Check Forms being sent to the operator on a regular basis?	N/A	Comments:.
Are Chain-of-Custody forms being used to transmit materials, samples, and/or documents to and from the field?	N/A	Comments:
Are filters folded in half with collection surfaces in contact for transport to the lab?	N/A	Comments:
Are samples maintained in a secure location while awaiting shipment to the laboratory?	N/A	Comments:

- Diagram the data flow from monitoring equipment to submission of final report.

4.3 Data Validation

Are data validation procedures established and in use?	Yes No	Comments:

- Describe data validation procedure.

Are the individuals responsible for data collection separate from those responsible with data validation?	Yes No	Comments:

- Identify those responsible with data validation:

Name:
Position:
Affiliation:

- Identify how periods of missing or invalidated data are handled.

4.4 Data Reporting

Are quarterly and annual data reports being submitted for the site?	Yes No	Comments:
Is qualified staff prior to submittal of data reports making reviews of the report?	Yes No	Comments:

- Identify those person(s) responsible for review of data reports.

Name:
Position:
Affiliation:

4.5 Corrective Actions

Are procedures established for initiating corrective actions within the data processing steps?	Yes No	Comments:

- Describe procedures for tracking and closing corrective actions.

Data Capture (Section 4.5 EPA-454/R-99-005)

- Identify the desired data capture rate for the monitoring data.

Meteorological Monitoring Data Type	Capture Rate

Are the desired data capture rates being met for each data type?	Yes No	Comments:

5.0 Quality Assurance and Quality Control

5.1 Quality Assurance Program Plan

Has a quality assurance program plan (QAPP) been written that describes quality assurance procedures?	Yes No	Comments:
Is a copy of the plan available to field and data processing personnel?	Yes No	Comments:
Has the quality assurance plan been approved by the ADEC?	Yes No	Comments:

- Identify those person(s) responsible for updating the plan and the procedure for updating the plan.

Name:
Position:
Affiliation:

5.1.1 Quality Assurance Assessment Requirements (Section 8.0 EPA-454/R-99-005)

Have adequate audit procedures been identified within the quality assurance plan?	Yes No	Comments:
Does the plan adequately document the correct criteria for accuracy and precision?	Yes No	Comments:

- Indicate the project's correct precision and accuracy limits.

Parameter	***Precision Limit***	***Accuracy Limit***	***Reference***
DAS Time			
Wind Direction			
Wind Speed			
Air Temperature			
Air Temperature Difference			
Relative Humidity			
Solar Radiation			
Barometric Pressure			

5.2.1 Standard Operating Procedures

- Indicate the Standard Operating Procedures that have been developed for the program:

Standard Operating Procedures	
	Installation, Setup, and Checkout
	Site Operations and Calibrations
	Operational Checks and Preventive Maintenance
	Data Collection Protocols
	Data Validation Steps
	Data Archiving

5.2.2 Preventive Maintenance

Does a preventive maintenance program exist for the monitoring program and is the program being followed?	Yes No	Comments:

- Identify those responsible parties for preventive maintenance at the site.

Name:
Position:
Affiliation:

- Identify the preventative maintenance procedures conducted for the site.

5.2.3 Station Documentation

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	Yes No	Comments:
Does the station have an activity log?	Yes No	Comments:
Does the station have a Site Visit Log and Checklist Form?	Yes No	Comments:
Does the station have an adequate Calibration Report Forms and copies of previous calibrations?	Yes No	Comments:
Does the station have an adequate Operations Manual?	Yes No	Comments:

- Identify the operation manuals present on site.

Description

Are report forms and site logs properly completed and current?	Yes No	Comments:

6.0 Comments and Suggestions

Site Training Check list

This form should be included with the site visit memos. All training is site specific and is to be given by qualified HCG personal only.

Date of Training: _____

Station Name:_____ Project No._____

Name of Trainer: _____ Position: _____

Name of Trainee: _____ Position: _____

Nature of Training: _____

Is the trainee HCG personnel? If not specify associated company. Yes □ No □

Specify company name: _____ Position: _____

Site surveillances/maintenances visits:

- □ Has the specific monitoring project overview and objectives been discussed?
- □ Has site location and all safety concerns been discussed in detail?
- □ Has the scope of the site surveillances visit been discussed?
- □ Have all specific concerns pertaining to meteorological station been discussed.
- □ Has all site surveillance visit forms and filling procedures been discussed in detail?
- □ Have all site surveillances/maintenances visit task been clearly explained and demonstrate, including all equipment and senor operation, and safety practices pertaining to these tasks?
- □ Have all "as left" procedures been explained and demonstrated?

Audit and Calibration Visits:

- ☐ Has the specific monitoring project overview and objectives been discussed?
- ☐ Has the scope of the audit or calibration visit been discussed in detail?
- ☐ Have all specific concerns pertaining to meteorological station including any environmental safety concerns been discussed?
- ☐ Have all the audit or calibration forms, site visit documentation and filling procedures been discussed in detail?
- ☐ Have the functions and operations of each instrument located at the site been explained and demonstrated in detail?
- ☐ Have all audit or calibration task, tests, and recording techniques been clearly explained and demonstrated?
- ☐ Have all safety practices penetrating to the above task been clearly explained and demonstrated?
- ☐ Have all filling procedure and deadlines been discussed in detail?
- ☐ Have all "as left" procedures been explained and demonstrated?

Comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Trainers Signature: _____

Trainees Signature: _____

APPENDIX C
STATEMENT OF QUALIFICATIONS

HOEFLER

CONSULTING GROUP

Air Quality Monitoring Services

Hoefler Consulting Group is an Anchorage-based consulting firm specializing in comprehensive environmental permitting and compliance services for Alaskan industries. Hoefler provides technical services supporting construction and operation of facilities in Alaska's unique physical, regulatory, and political environment. Hoefler is the leading air quality consulting firm in Alaska. The firm's staff of 40 professionals provides the following services from our Anchorage offices:

- PSD and non-PSD construction permitting
- Title V operating permitting
- Meteorological and ambient air quality monitoring programs
- Criteria pollutant, HAP, and greenhouse gas emission inventories
- Best available control technology demonstrations
- Air modeling compliance demonstrations
- Risk assessment
- Open burning approvals
- Certified opacity readings
- Source test supervision and support

Summaries of Experience for Key Personnel

ALAN M. TRBOVICH, CCM,

Vice President

Al Trbovich is a Certified Consulting Meteorologist and the Air Quality Team Leader of the Hoefler Consulting Group. He has 26 years of environmental permitting and regulatory compliance experience, and has been providing air quality services to his Alaskan clients throughout the state since 1998. Mr. Trbovich has extensive experience working with all facets of air permitting including construction ("PSD") and operating ("Title V") permitting, meteorological and ambient monitoring, compliance monitoring, source testing, and risk assessments. He is also a specialist in air quality modeling and has conducted ambient air quality and/or visibility modeling studies throughout Alaska. He has also lead numerous multi-disciplinary teams in preparing air permit applications, environmental impact statements, and other environmental studies. Mr. Trbovich holds B.S. and M.S. degrees in Meteorology from the University of Utah.

K. STEVEN MACKEY

Senior Project Manager

Steve Mackey is the Project Manger for the Air Quality Group at Hoefler Consulting group. He has over 20 years of air quality experience in air quality services project management as well as database development and management. His specialties include ambient air monitoring, meteorological monitoring, continuous emission monitoring systems (CEMS), source emissions measurement, and regulatory Compliance. Mr. Mackey holds B.S. degree in mechanical engineering from the University of Washington.

ERIC L. BRUDIE

Air Quality Consultant

Eric Brudie is an independent Air Quality Consultant that works with the Air Quality Group at Hoefler Consulting. He has over 22 years of air monitoring experience in air quality services. Mr. Brudie works with Hoefler Consulting as an independent contractor who specializes in conducting performance and systems audits of numerous PSD quality meteorological monitoring systems. His experiences include designee and operating numerous remote meteorological monitoring systems for the TAGS project, including the LNG terminal site 40-meter remote system. He functioned as a key team member in the preparation and agency approval of the Meteorological Monitoring & QA/QC Plan and the Application for Air Quality Control Permit to Operate with PSD Review for the proposed LNG liquefaction plant. Mr. Brudie holds a B.S. in Geological Engineering from the Colorado School of Mines.

JARED H. COCKMAN

Project Associate

Jared Cockman is a Project Associate with the Air Quality Group at Hoefler Consulting; He has over more than 4 years experience in air monitoring project support. Mr. Cockman holds an EPA Method 9 Visibility Certification for Alaska and his experiences include visible emissions monitoring, meteorological and ambient air quality monitoring, technical support for permit compliance, data management, management information systems, technical writing and editing, and document processing and production. Mr. Cockman holds a B.A. in English Literature from East Carolina University.

BRENT S. VELTKAMP

Associate Scientist

Brent Veltkamp is a Associate Scientist at Hoefler Consulting. He assists in field project support and meteorological monitoring site operations for Air Quality Group. He has over 12 years experience in environmental monitoring and remediation. His specialties include meteorological monitoring station installation and maintenance, maintenance of bioremediation systems, biological fieldwork and sampling techniques, wetland delineation, site assessment, and technical writing and editing. Mr. Veltkamp holds a BS in Biological Science from Colorado State University.

W. DOMINIC SHALLIES

Project Assistant/ Field Technician

Dominic Shallies is a Project Assistant at Hoefler Consulting. He assists in field project support and meteorological monitoring site operations for Air Quality Group. He has over 3 years experience in environmental monitoring and meteorological data collection. His specialties include PSD quality meteorological monitoring station installation and operation, data management, site assessment, and technical writing and editing. Mr. Shallies holds a BS in Environmental Science from the University of Alaska Southeast.

APPENDIX 2D

2005-2006 Non-PSD Meteorological Stations Data Report for the Pebble Project Meteorological Monitoring Program

2005 - 2006 Non-PSD Meteorological Stations Data Report

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler CONSULTING GROUP

May 2008

Pebble Project Non-PSD Meteorological Stations 2005 - 2006 Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

May 2008

prepared for

Pebble Limited Partnership,
care of Pebble Mines Corp.
Anchorage, Alaska

prepared by

Hoefler Consulting Group
administrator@hoeflernet.com
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503
907-563-2137

This data report has been prepared and reviewed by the following:

HCG Meteorologist:

Al Trbovich, CCM
Name

Signature

5/28/2008
Date

HCG Project Manager:

K. Steven Mackey
Name

Signature

5/23/2008
Date

HCG Lead Network Operator:

Dominic Shallies
Name

Signature

May 28, 2008
Date

HCG Staff Scientist:

Rebecca Van Wyck
Name

Signature

May 29, 2008
Date

CONTENTS

1.0 Introduction 1

2.0 Monitoring Parameters and Instrumentation 4

3.0 Station Performance Summaries 11

4.0 Meteorological Data Summary 20

4.1 Temperature 20
4.2 Horizontal Wind 30
4.3 Precipitation 34
4.4 Evaporation 37

5.0 References 39

List of Figures

1-1 Map of the Pebble Project Area. 3
2-1 Pebble 1 Meteorological Monitoring Station. 5
2-2 Pebble 2 Meteorological Monitoring Station. 6
2-3 Pebble 3 Meteorological Monitoring Station. 7
2-4 Pebble 4 Meteorological Monitoring Station. 8
4-1 Pebble 1 Hourly Average Temperature. 21
4-2 Pebble 2 Hourly Average Temperature 22
4-3 Pebble 3 Hourly Average Temperature 23
4-4 Pebble 4 Hourly Average Temperature 24
4-5 Pebble Meteorological Station Wind Roses. 31
4-6 Hourly and Cumulative Precipitation. 31

List of Tables

1-1 Summary of Pebble Project non-PSD Meteorological Stations. 2
2-1 Meteorological Measurement Methods Pebble 1, Pebble 2, Pebble 3 9
2-2 Meteorological Measurement Methods Pebble 4 10
3-1 Pebble 1 Valid Data Capture - Hours per Month. 12
3-2 Pebble 2 Valid Data Capture - Hours per Month. 13
3-3 Pebble 3 Valid Data Capture - Hours per Month. 14
3-4 Pebble 4 Valid Data Capture - Hours per Month. 15
3-5 Pebble 1 Percent Data Capture. 16
3-6 Pebble 2 Percent Data Capture. 17
3-7 Pebble 3 Percent Data Capture. 18
3-8 Pebble 4 Percent Data Capture. 19
4-1 Pebble 1 Temperature Summary 25
4-2 Pebble 2 Temperature Summary. 26
4-3 Pebble 3 Temperature Summary. 27
4-4 Pebble 4 2-meter Temperature Summary. 28
4-5 Pebble 4 10-meter Temperature Summary. 29
4-6 Monthly Mean Wind Speed (m/s) 32
4-7 Monthly Maximum Hourly Wind Speed (m/s). 33
4-8 Monthly Precipitation (mm) 36
4-9. Monthly Evaporation (mm) 38

List of Appendices

A Pebble 1 Validated Continuous Summaries
B Pebble 2 Validated Continuous Summaries
C Pebble 3 Validated Continuous Summaries
D Pebble 4 Validated Continuous Summaries
E 2005 - 2006 Non-PSD Meteorological Station Audit Data Sheets

1.0 Introduction

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., HCG Inc., dba Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. The Pebble Project is located within the South Central Alaska Intrastate Air Quality Control Region. The proposed mine site is in an area designated attainment or unclassifiable for all criteria pollutants and is within a PSD Class II area. The closest Class I area is Tuxedni National Wildlife Refuge located approximately 150 kilometers to the northeast.

In October 2004, HCG installed two meteorological stations at the Pebble Project to provide data for engineering design and environmental baseline studies. The two stations were originally called “Met Station 1” and “Met Station 2”, but have since been renamed “Pebble 1” and “Pebble 2”.

In June 2005, the Pebble 1 station was rebuilt as a PSD-quality meteorological station. In addition, HCG installed a second PSD-quality station, called the “Pebble Port” station located on Iniskin Bay, Alaska. Pebble 1 data for August 1, 2005 through July 31, 2006 was submitted to Alaska Department of Environmental Conservation in a PSD annual data report. In 2008 the monitoring year for the Pebble Project was changed to a calendar year system. Data collected at the Pebble 1 station in 2006 have been submitted in a separate PSD data report.

Similar to Pebble 1, the Pebble 2 monitoring period began January 1, 2005. However, the Pebble 2 structure was relocated on November 19, 2005 to a location approximately 0.6 miles to the north. Upon relocation, Pebble 2 was renamed Pebble 3 and began collecting valid meteorological data on November 19, 2005. Therefore, this report contains data collected at Pebble 2 and Pebble 3 from January 1, 2005 through November 19, 2005 and November 19, 2005 through December 31, 2006, respectively.

On June 9, 2006, HCG installed a third PSD quality meteorological station at the site of the former Pebble 2 station. In 2008 the monitoring year for the Pebble Project was changed to a calendar year system. Data collected at Pebble 4 beginning in 2007 was submitted in a separate PSD data report. This report includes PSD quality data collected at Pebble 4 during 2006.

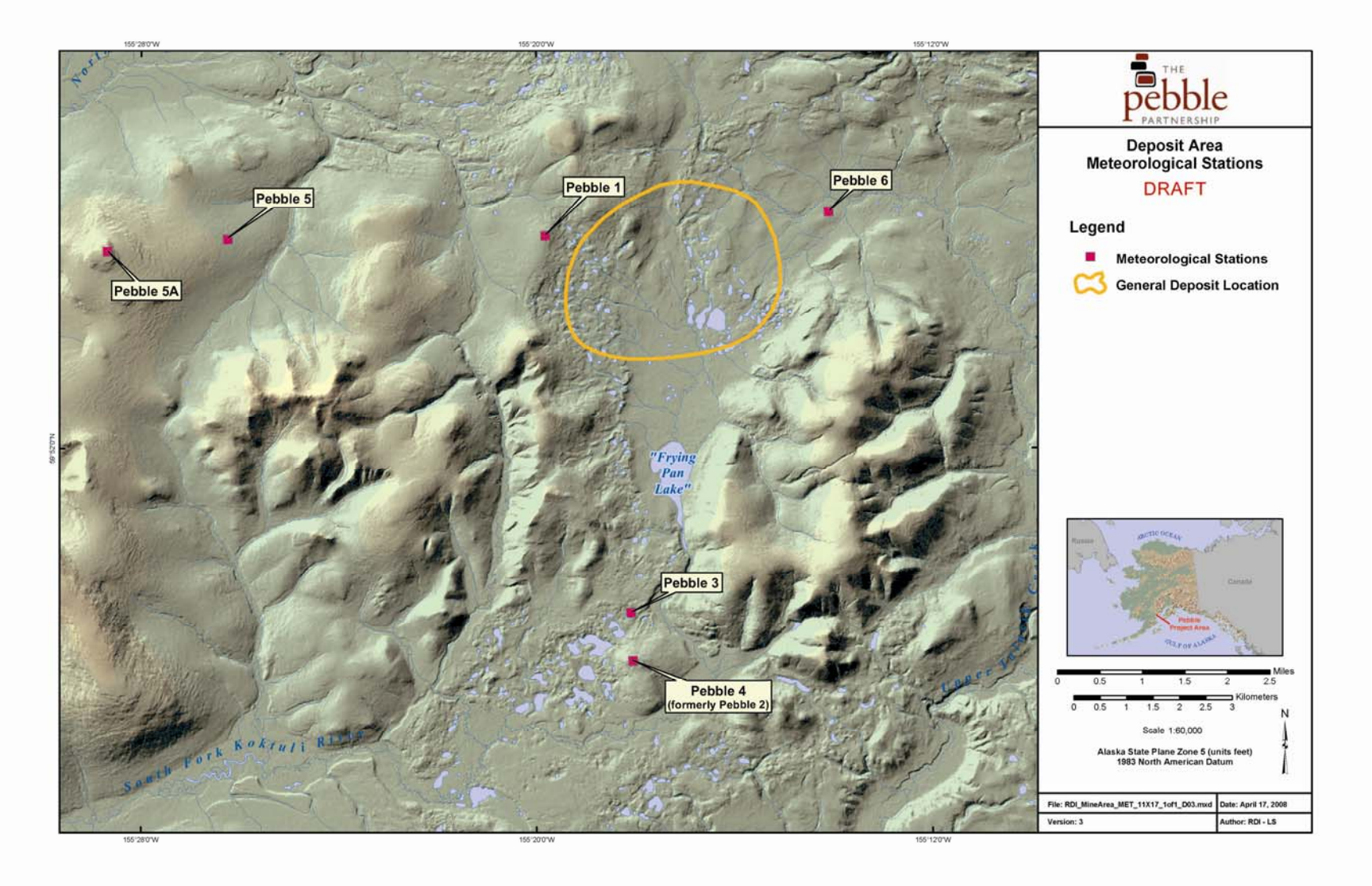
Table 1-1 gives a summary of the four meteorological stations deployed near the Pebble deposit area and includes the coordinates and elevation of each station and the period of data collection.

Table 1-1. Summary of Pebble Project non-PSD Meteorological Stations

Station Name	Coordinates	Elevation	Monitoring Period
Pebble 1	59° 54' N 155° 20' W	1,600 feet	Jan. 1, 2005 - July 31, 2005
Pebble 2	59° 50' N 155° 18' W	1,200 feet	Jan. 1, 2005 - Nov. 19, 2005
Pebble 3	59° 50' N 155° 18' W	1,000 feet	Nov. 19, 2005 - December 31, 2006
Pebble 4 (PSD)	59° 50' N 155° 18' W	1,200 feet	June 9, 2006 – December 31, 2006

Figure 1-1 shows a map of both the non-PSD and PSD-quality meteorological monitoring stations located near the Pebble Project ore body. As previously noted, Pebble 1 was modified for PSD-quality measurements on June 10, 2005. Pebble 4 is located on the former site of Pebble 2.

Figure 1-1. Map of the Pebble Project Area



2.0 Monitoring Parameters and Instrumentation

Figures 2-1 through 2-4 provide photographs of the Pebble 1, Pebble 2, Pebble 3, and Pebble 4 meteorological stations, respectively.

The non-PSD stations (Pebble 1, Pebble 2, and Pebble 3) consist of a 3-meter tower equipped with sensors to measure the following parameters:

- Air temperature, 2-meters above ground level (degrees Celsius [°C])
- Wind speed, 3-meters above ground level [m/s])
- Wind direction, 3-meters above ground level (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])

The Pebble 4 station is a PSD-quality station and consists of a 12 meter tower collecting data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Air temperature, ten meters above ground (degrees Celsius [°C])
- Vertical temperature difference (ΔT, "Delta T" (degrees Celsius [°C]))
- Wind speed (meters per second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])
- Relative humidity (percent [%])
- Solar radiation (Watts per square meter [W/m^2])
- Barometric Pressure (millibar [mb]).

In addition, precipitation measurements were collected at each station using a precipitation gauge coupled with a Wyoming wind screen carefully positioned to avoid interfering with the tower measurements. Additionally, evaporation measurements were collected at Pebble 1 from May 12 through July 31, 2005. Evaporation measurements were also collected at Pebble 2 from May 12 through October 8, 2005 and at Pebble 4 from June 9 through October 13, 2006.

Table 2-1 and Table 2-2 lists the meteorological sensors used at the non-PSD and PSD stations, respectively and includes the manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. A performance summary of the instruments and measurement parameters is provided in the subsequent section.

Figure 2-1. Pebble 1 Meteorological Monitoring Station

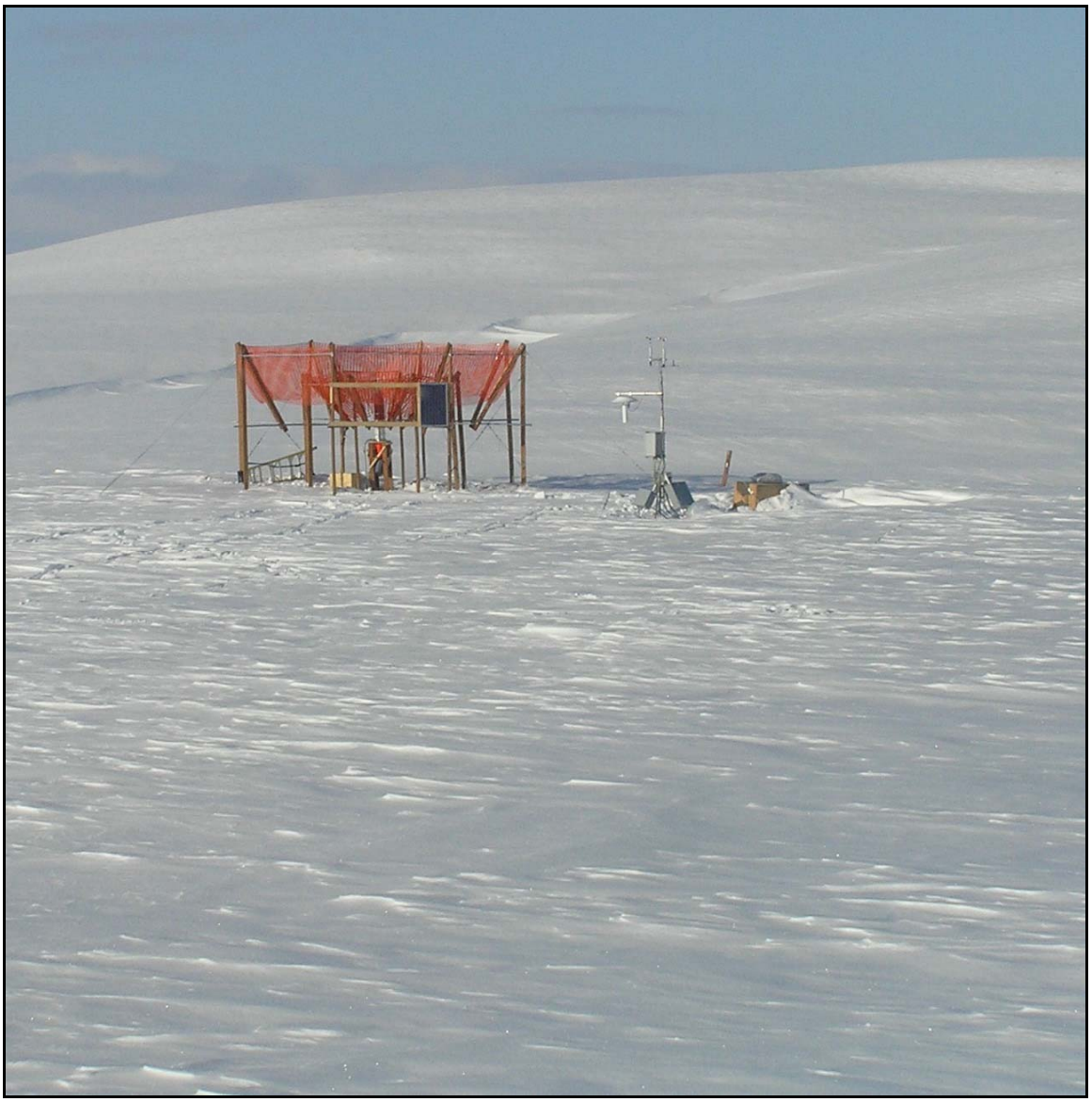


Figure 2-2. Pebble 2 Meteorological Monitoring Station

Figure 2-3. Pebble 3 Meteorological Monitoring Station

Figure 2-4. Pebble 4 Meteorological Monitoring Station

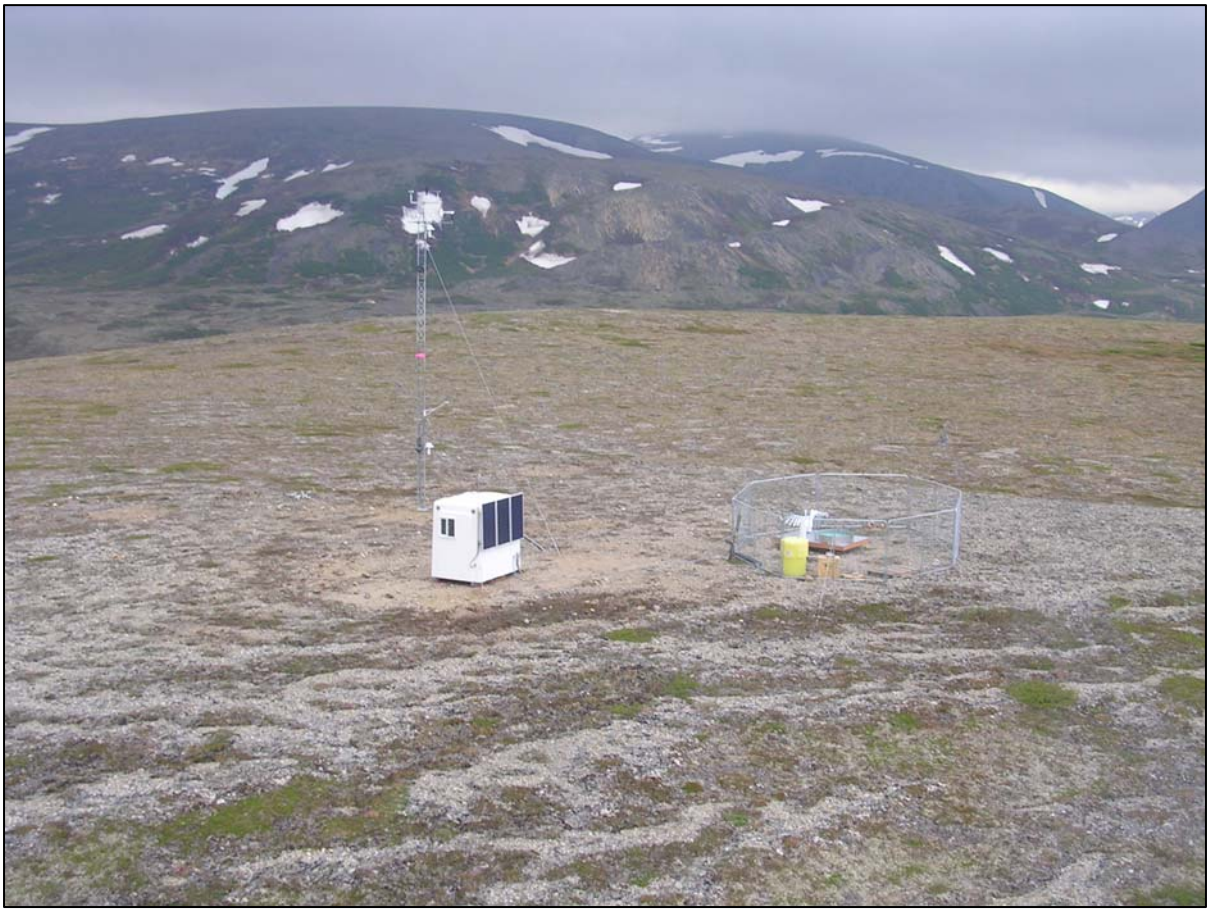


Table 2-1. Meteorological Measurement Methods
Pebble 1, Pebble 2, Pebble 3

Parameter & Measurement Height	Manufacturer/ Model	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Temperature (2 meters)	Met One, Inc. Model 062 MP	Solid state thermistor	50 to -50°C	± 0.05°C	1 second	1 hour
Wind Speed (3 meters)	Met One, Inc. Model 010C	Three-cup anemometer	0.2 to 60 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction (3 meters)	Met One, Inc. Model 020C	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Precipitation[1] (2 meters)	Met One, Inc. Model 370C	Tipping bucket rain gauge	N/A	± 1% @ 25 to 76 mm/hr	N/A[2]	N/A[2]
Precipitation[1,3] (2 meters)	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 305 mm	± 0.254 mm	N/A[2]	N/A[2]
Evaporation (0.5 meters)	Nova Lynx 255-100	Change in pressure head determined by float mechanism	0 to 305 mm	± 0.25% over 254 mm range	1 second	1 hour

[1] Met One precipitation gauges were used at the Pebble 1 and Pebble 2 stations. The Met One precipitation gauge at Pebble 2 was replaced with an ETI NOAH II gauge on October 8, 2005.

[2] Not applicable. Instantaneous precipitation measurements are collected by the datalogger and subsequently totaled on an hourly basis.

[3] The ETI NOAH II precipitation gauge was installed at Pebble 2 on October 8, 2005, and subsequently installed at the Pebble 3 site.

Table 2-2. Meteorological Measurement Methods
Pebble 4

Parameter	Manufacturer/ Model	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	Met One	Tipping bucket mechanism	0 to 76.2mm/hr	± 1%	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for 1 second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

3.0 Station Performance Summaries

Quarterly and annual data recovery goals are 90 percent or better for PSD-quality meteorological monitoring, although at remote sites the acceptable recovery rate for meteorological data is 80 percent (EPA, 1987). Percent data capture is determined by dividing the number of hours of collected valid data by the number of possible hours of valid data collection. While not all of the stations presented in this report are PSD quality stations, the data recovery goals at the onset of the project were 80 percent or better per monitoring quarter. Because of the modifications and location changes made to the stations during the station monitoring periods, the performance statistics are presented on a monthly basis.

Tables 3-1 through 3-4 summarize the hours of valid data capture on a monthly basis for the meteorological parameters, while Tables 3-5 through 3-8 summarize the percent data capture on a monthly basis measured at the Pebble 1, Pebble 2, Pebble 3, and Pebble 4 stations, respectively.

The monthly data capture rates for the majority of the Pebble 1 station meteorological parameters were greater than 87 percent, with the exception of the 2-meter temperature and precipitation parameters. Because of an electrical wiring problem, the Pebble 1 station temperature data capture rate was 11.0 percent during January 2005. Pebble 1 data capture rates for precipitation were 69.5 percent and 7.3 percent during the months of February and March 2005, respectively, due to technical problems with the precipitation gauge.

The Pebble 2 station valid data capture values exceeded 80 percent for all parameters except for the temperature and precipitation measurements. The Pebble 2 temperature measurements were invalid from January 1 through January 28 due to a sensor malfunction. In addition, the Pebble 2 temperature probe did not pass an October 8, 2005 audit (see Appendix E), thereby invalidating the temperature measurements collected between the prior audit conducted on May 11, 2005 and the October 8, 2005 audit. Monthly precipitation data capture rates exceeded 80 percent at the Pebble 2 station for all months except February, March, and October 2005.

The Pebble 3 station monthly data capture rates exceeded 90 percent for all parameters with the exception of wind direction and the standard deviation of the wind direction, sigma-theta, during February and March 2006. The February and March monthly percent data capture were 72 and 79 percent, respectively, for wind direction and sigma-theta mostly caused by ice build-up on the Met One wind vane.

The Pebble 4 station monthly data capture rates exceeded 99 percent for all measured parameters.

Table 3-1. Pebble 1 Valid Data Capture - Hours per Month

Period	Meteorological Parameter					
	2-m Temp	Wind Speed	Wind Direction	Sigm-Theta	Precip	Evap[1]
January 2005	82	656	656	656	738	N/A
February 2005	672	627	627	627	467	N/A
March 2005	744	736	736	736	54	N/A
April 2005	720	720	720	720	713	N/A
May 2005	744	741	741	741	735	456
June 2005	695	666	666	666	642	665
July 2005	710	744	744	744	742	741
Monitoring Period	**4,367**	**4,890**	**4,890**	**4,890**	**4,091**	**1,862**

[1] Not applicable. Evaporation pan gauge used from May 12 through July 31, 2005.

Table 3-2. Pebble 2 Valid Data Capture - Hours per Month

Period	Meteorological Parameter					
	2-m Temp	Wind Speed	Wind Direction	Sigm-Theta	Precip	Evap
January 2005	96	720	720	720	741	N/A[1]
February 2005	672	595	595	595	478	N/A
March 2005	744	736	736	736	48	N/A
April 2005	720	720	720	720	713	N/A
May 2005	248[2]	740	740	740	734	468
June 2005	0	720	720	720	599	720
July 2005	0	744	744	744	744	744
August 2005	0	744	744	744	744	743
September 2005	0	720	720	720	720	715
October 2005	560	742	742	742	521	183
November 2005[3]	441	440	440	440	413	N/A
Monitoring Period	**3,481**	**7,621**	**7,621**	**7,621**	**6,455**	**3,573**

[1] Not applicable. Pebble 2 evaporation measurements were collected from May 12 through October 8, 2005.
[2] Temperature data was invalid from May 11 through October 8, 2005 due to a failed audit in October, 2005.
[3] Pebble 2 was relocated and renamed Pebble 3 on November 19, 2005.

Table 3-3. Pebble 3 Valid Data Capture - Hours per Month

Period	Meteorological Parameter				
	2-m Temp	Wind Speed	Wind Direction	Sigm-Theta	Precip
November 2005[1]	273	273	273	273	262
December 2005	744	729	729	729	744
January 2006	744	744	744	744	743
February 2006	672	672	484	484	671
March 2006	744	744	588	588	743
April 2006	717	718	716	716	716
May 2006	744	739	739	739	743
June 2006	713	714	714	714	704
July 2006	744	743	743	743	742
August 2006	744	744	744	744	742
September 2006	720	720	720	720	718
October 2006	744	744	744	744	740
November 2006	720	720	720	720	711
December 2006	744	743	743	743	743
Monitoring Period	**9,767**	**9,747**	**9,401**	**9,401**	**9,722**

[1] Data collection began November 19, 2005.

Table 3-4. Pebble 4 Valid Data Capture - Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
June 2005	516	516	516	516	516	516	516	516	516	516	516	516	516	516
July 2005	744	744	744	744	744	744	744	744	744	744	744	744	744	744
August 2006	744	744	744	744	744	744	744	744	744	743	744	744	744	744
September 2006	720	720	720	720	720	720	720	720	720	720	720	720	720	720
October 2006	744	744	744	744	744	744	744	744	744	744	744	744	737	740
November 2006	720	720	720	720	720	720	720	720	720	720	720	720	719	NA[3]
December 2006	744	744	744	744	744	744	744	744	744	744	744	744	742	NA
Monitoring Period	**4,932**	**4,932**	**4,930**	**4,932**	**4,932**	**4,932**	**4,932**	**4,932**	**4,932**	**4,931**	**4,932**	**4,932**	**4,922**	**4,928**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge decommissioned for winter from November 1, 2006 to April 1, 2007.

Table 3-5. Pebble 1 Percent Data Capture

Period	Meteorological Parameter					
	2-m Temp	Wind Speed	Wind Direction	Sigm-Theta	Precip	Evap
January 2005	11.0%	88.2%	88.2%	88.2%	99.2%	N/A[1]
February 2005	100.0%	93.3%	93.3%	93.3%	69.5%	N/A
March 2005	100.0%	98.9%	98.9%	98.9%	7.3%	N/A
April 2005	100.0%	100.0%	100.0%	100.0%	99.0%	N/A
May 2005	100.0%	99.6%	99.6%	99.6%	98.8%	87.9%
June 2005	96.5%	92.5%	92.5%	92.5%	89.2%	92.4%
July 2005	95.4%	100.0%	100.0%	100.0%	99.7%	99.6%
Monitoring Period	**85.8%**	**96.1%**	**96.1%**	**96.1%**	**80.4%**	**96.9%**

[1] Not applicable. Evaporation pan gauge used from May 12 through July 31, 2005.

Table 3-6. Pebble 2 Percent Data Capture

Period	Meteorological Parameter					
	2-m Temp	Wind Speed	Wind Direction	Sigm-Theta	Precip	Evap
January 2005	12.9%	96.8%	96.8%	96.8%	99.6%	N/A[1]
February 2005	100%	88.5%	88.5%	88.5%	71.1%	N/A
March 2005	100%	98.9%	98.9%	98.9%	6.5%	N/A
April 2005	100%	100%	100%	100%	99.0%	N/A
May 2005	33.3%[2]	99.5%	99.5%	99.5%	98.7%	100%
June 2005	0%	100%	100%	100%	83.2%	100%
July 2005	0%	100%	100%	100%	100%	100%
August 2005	0%	100%	100%	100%	100%	99.9%
September 2005	0%	100%	100%	100%	100%	99.3%
October 2005	75.3%	99.7%	99.7%	99.7%	70.0%	100%
November 2005[3]	99.8%	99.6%	99.6%	99.6%	93.4%	N/A
Monitoring Period	**45.0%**	**98.5%**	**98.5%**	**98.5%**	**83.4%**	**99.8%**

[1] Not applicable. Evaporation measurements collected from May 12 through October 8, 2005.
[2] Temperature data was invalid from May 11 through October 8, 2005 because temperature sensor did not pass October audit.
[3] Pebble 2 measurements were discontinued on November 19, 2005.

Table 3-7. Pebble 3 Percent Data Capture

Period	Meteorological Parameter				
	2-m Temp	Wind Speed	Wind Direction	Sigm-Theta	Precip
November 2005[1]	100%	100%	100%	100%	96.0%
December 2005	100%	98.0%	98.0%	98.0%	100%
January 2006	100%	100%	100%	100%	99.9%
February 2006	100%	100%	72.0%	72.0%	99.9%
March 2006	100%	100%	79.0%	79.0%	99.9%
April 2006	99.6%	99.7%	99.4%	99.4%	99.4%
May 2006	100%	99.3%	99.3%	99.3%	99.9%
June 2006	99.0%	99.2%	99.2%	99.2%	98.6%
July 2006	100%	99.9%	99.9%	99.9%	99.7%
August 2006	100%	100%	100%	100%	99.7%
September 2006	100%	100%	100%	100%	99.7%
October 2006	100%	100%	100%	100%	99.5%
November 2006	100%	100%	100%	100%	98.8%
December 2006	100%	99.9%	99.9%	99.9%	99.9%
Monitoring Period	99.9%	99.7%	96.3%	96.3%	99.4%

[1] Data collection began November 19, 2005.

Table 3-8. Pebble 4 Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	ΔT	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
June 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
July 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.9%	100%	100%	100%	100%
September 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
October 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.1%	99.5%
November 2006	100%	100%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.9%	NA[3]
December 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	NA
Monitoring Year	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was decommissioned for winter from November 1, 2006 to April 1, 2007.

4.0 Meteorological Data Summary

4.1 Temperature

Figures 4-1 through 4-4 provide the time series of the 2-meter and 10-meter temperatures where applicable, at the Pebble 1, Pebble 2, Pebble 3, and Pebble 4 stations respectively, during the respective monitoring periods. Figures 4-1 through 4-4 also provide a comparison with temperatures recorded at the Iliamna Airport, located approximately 17 km to the east of the deposit area. Tables 4-1 through 4-5 provide temperature statistics for the Pebble 1, Pebble 2, Pebble 3, and Pebble 4 meteorological stations, respectively.

Hourly mean temperatures at the Pebble 1 station varied from -28.3 °C measured on February 3, 2005 to 22.9 °C measured on July 1, 2005. The maximum and minimum monthly mean temperatures at the Pebble 1 station were 14.0 °C and -9.7 °C for the months of July and January 2005, respectively. However, only 96 hours of valid temperature data were collected during January 2005 at the Pebble 1 station.

Hourly average temperature data collected at the Pebble 2 station from January 1 through November 19, 2005 varied from -27.2 °C measured on February 3, 2005 to 15.5 °C measured on May 9, 2005. The minimum monthly mean temperature at the Pebble 2 station was -10.2 °C during November 2005.

Hourly average temperatures at the Pebble 3 station varied from -33.4 °C measured on January 28, 2006 to 24.3 °C measured on May 26, 2006. The minimum and maximum monthly mean temperatures at the Pebble 3 station were -15.3 °C and 16.8 °C for the months of January 2006 and May 2006, respectively.

Hourly average temperatures at the Pebble 4 station varied from -23.2 °C measured on November 15, 2006 to 24.3 °C measured on July 12, 2006.

Temperatures recorded at the Iliamna Airport during 2005 varied from -22.2 °C measured on February 3, 2005, to 18.3 °C measured on August 12, 2005. Temperatures recorded during 2006 varied from -30.0 °C measured January 28, 2006 to 18.9 °C measured May 27, 2006.

Figure 4-1. Pebble 1 Hourly Average Temperature

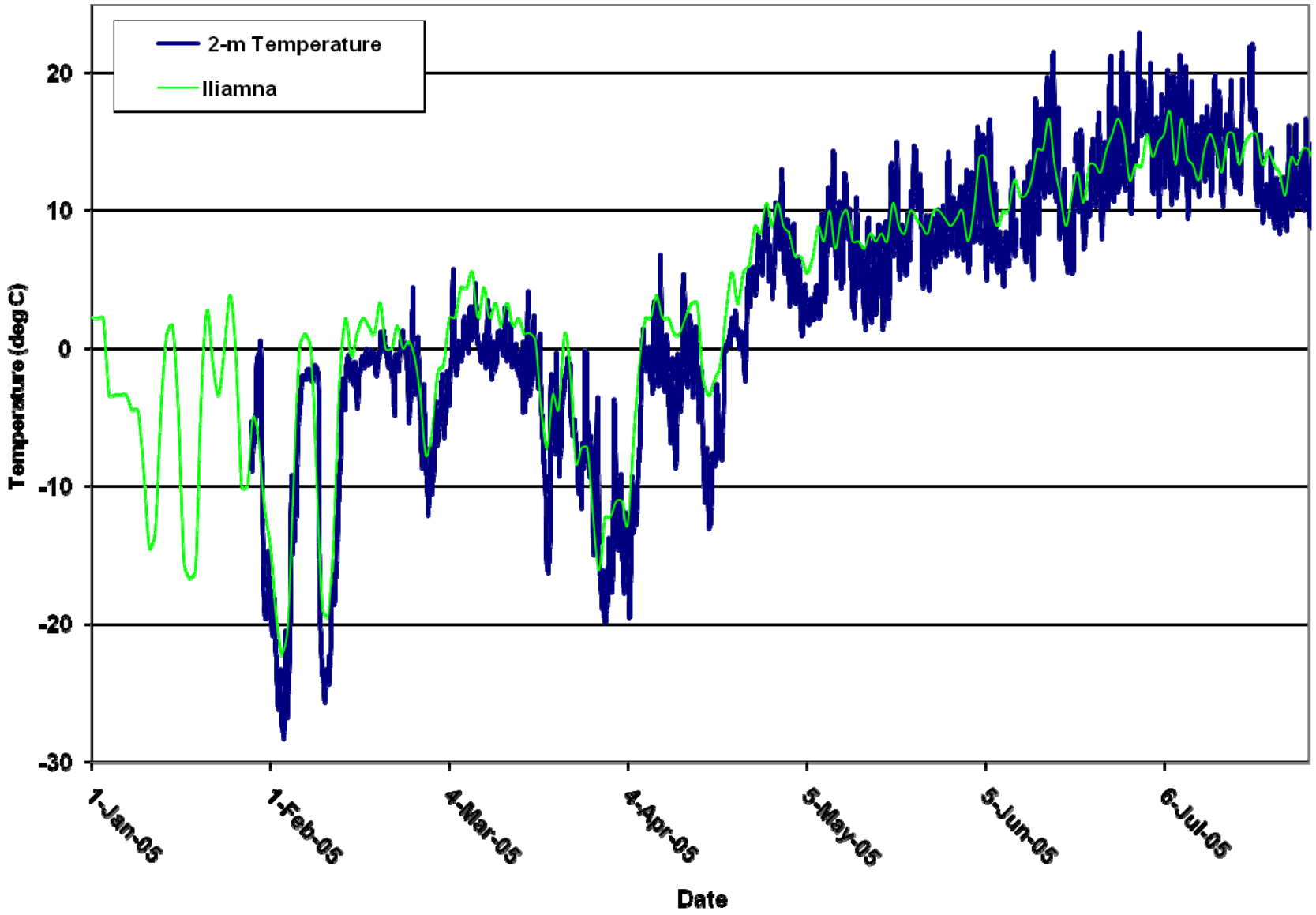
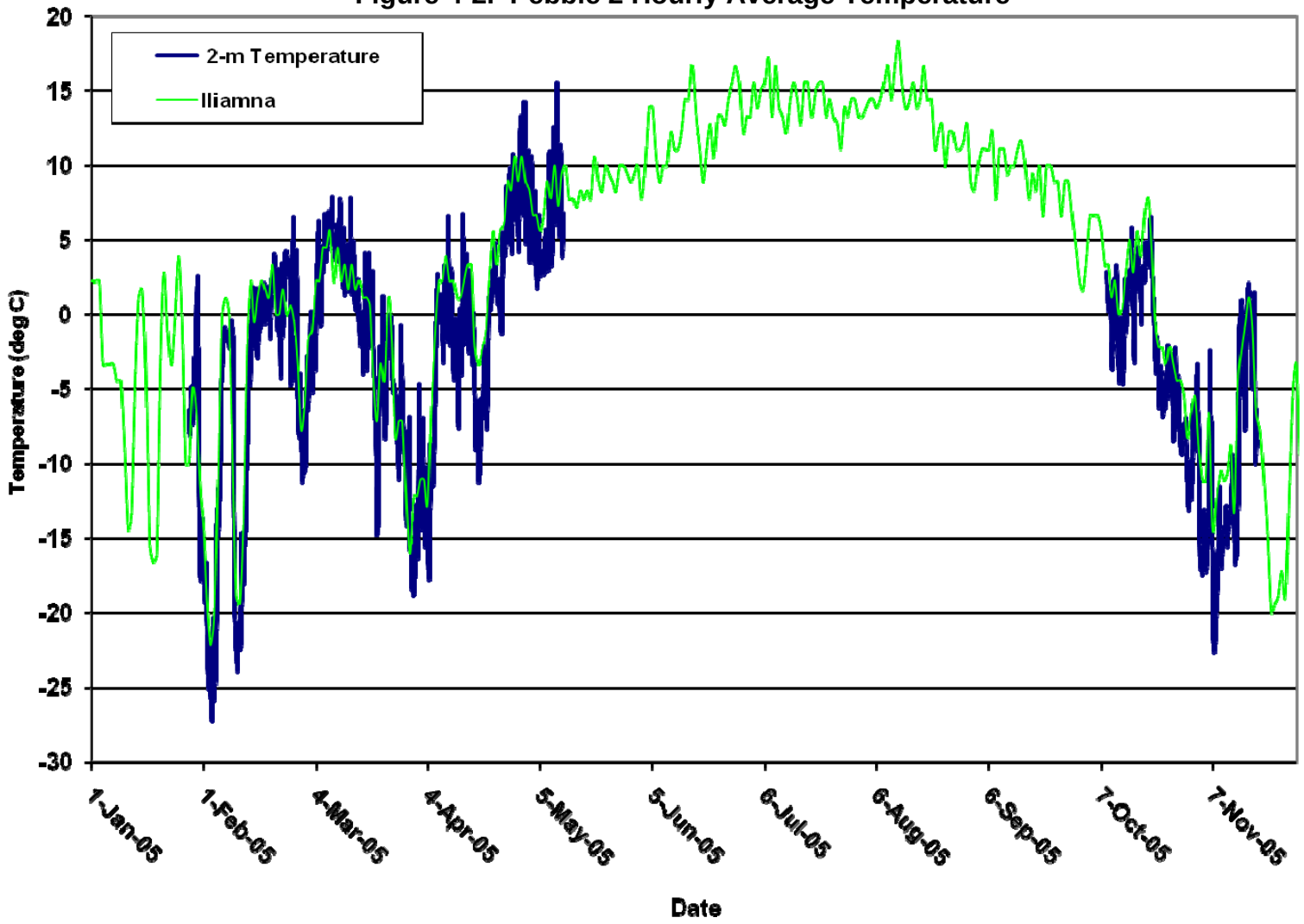


Figure 4-2. Pebble 2 Hourly Average Temperature[1]



[1] Temperature sensor failed audit on October 8, 2005. Data invalidated from May 11, 2005 through October 8, 2005.

Figure 4-3. Pebble 3 Hourly Average Temperature

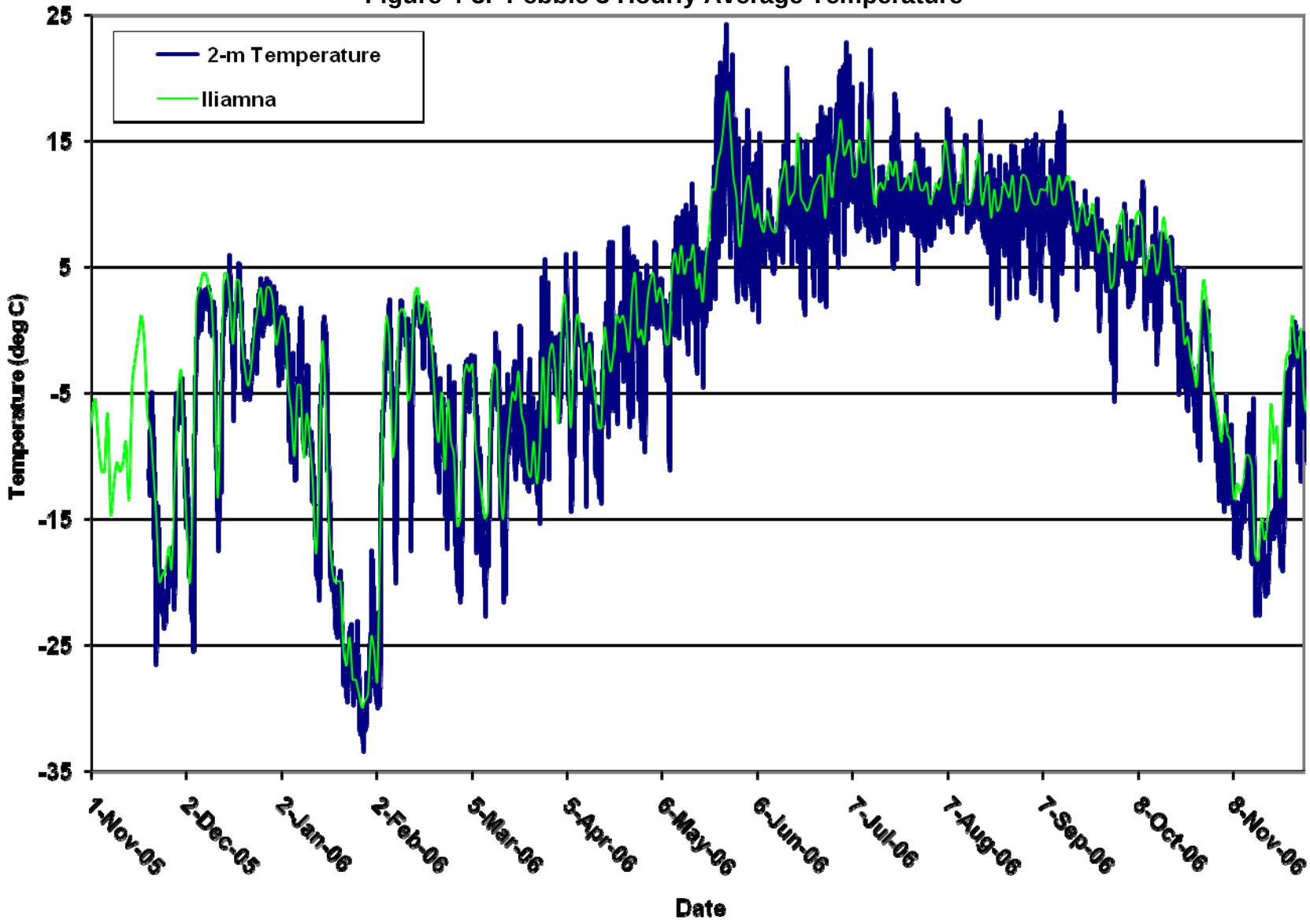


Figure 4-4. Pebble 4 Hourly Average Temperature

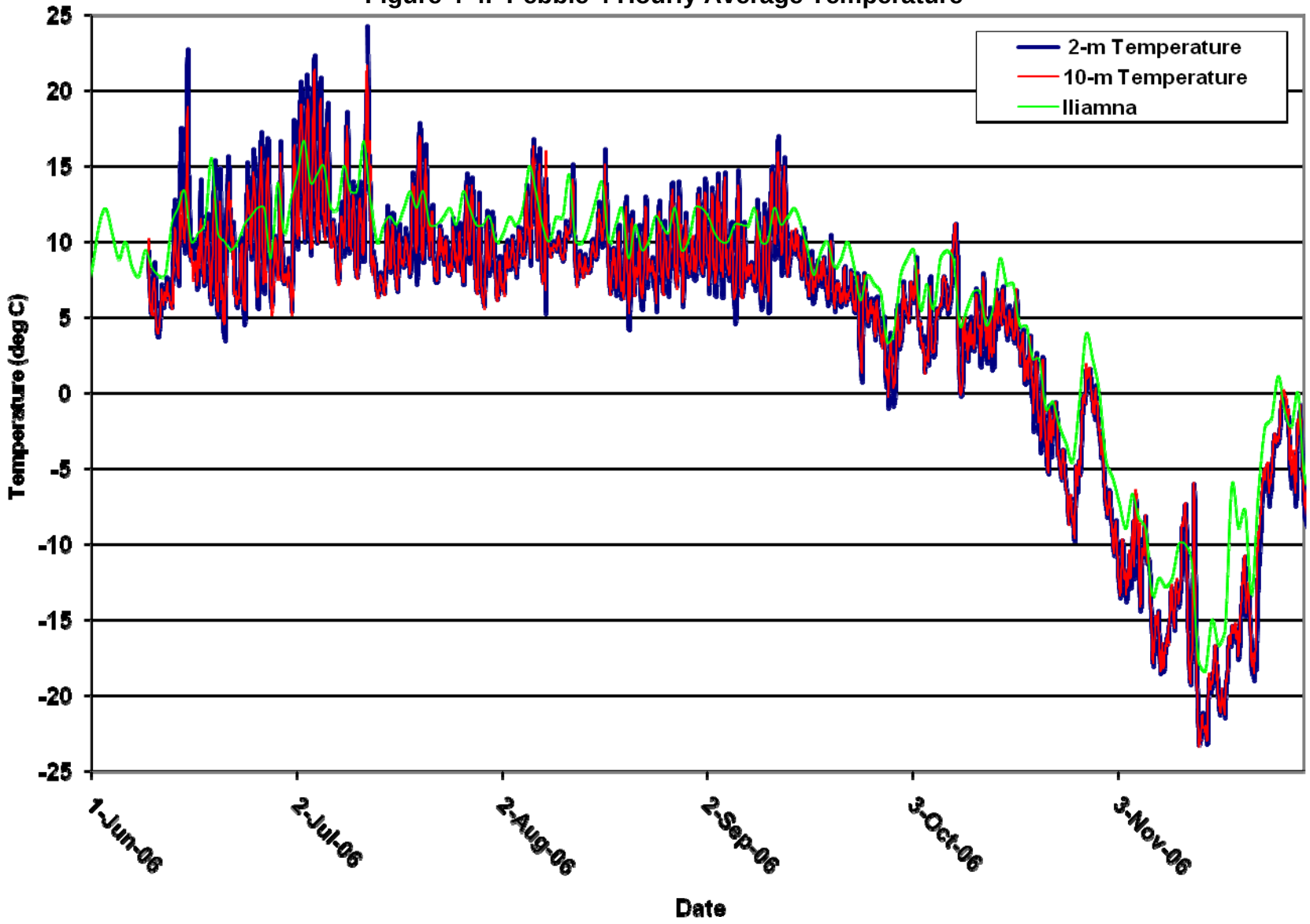


Table 4-1. Pebble 1 Temperature Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
January 2005[1]	-9.7	-3.4	-17.7	0.5	-19.6
February 2005	-7.5	0.6	-25.8	4.4	-28.3
March 2005	-3.9	1.8	-17.5	5.7	-19.9
April 2005	-2.1	9.5	-15.0	13.0	-19.5
May 2005	7.1	12.4	2.5	15.0	1.0
June 2005	11.6	16.8	6.7	21.5	4.6
July 2005	14.0	18.6	10.3	22.9	8.4
Monitoring Period	**3.1**	**18.6**	**-25.8**	**22.9**	**-28.3**

[1] Valid Data capture began on January 28, 2005.

Table 4-2. Pebble 2 Temperature Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
January 2005[1]	-8.4	-3.2	-16.3	2.5	-17.9
February 2005	-6.3	3.0	-25.2	6.6	-27.2
March 2005	-2.2	5.8	-17.1	7.9	-18.8
April 2005	-1.0	9.9	-13.4	14.3	-17.7
May 2005[2]	6.4	11.0	3.3	15.5	1.8
June 2005	-	-	-	-	-
July 2005	-	-	-	-	-
August 2005	-	-	-	-	-
September 2005	-	-	-	-	-
October 2005	-2.0	4.9	-11.7	6.5	-13.1
November 2005[3]	-10.2	0.0	-20.6	4.7	-22.6
Monitoring Period	**-3.3**	**11.0**	**-25.2**	**15.5**	**-27.2**

[1] Valid Data capture began on January 28, 2005.
[2] Temperature data invalidated due to failed audit May 11 through October 8, 2005.
[3] Data collection ended November 19, 2005.

Table 4-3. Pebble 3 Temperature Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
November 2005[1]	-14.5	-5.3	-21.9	-3.9	-26.5
December 2005	-2.2	3.5	-21.3	5.9	-25.4
January 2006	-15.3	0.1	-31.5	1.8	-33.4
February 2006	-6.7	1.7	-27.7	2.7	-29.9
March 2006	-7.9	-1.1	-19.1	5.6	-22.7
April 2006	-2.5	2.1	-10.9	8.2	-14.4
May 2006	5.9	16.8	-2.9	24.3	-11.0
June 2006	9.2	13.1	6.0	20.8	0.8
July 2006	11.4	15.8	7.9	22.9	3.8
August 2006	9.9	13.2	8.0	17.5	1.0
September 2006	7.9	11.0	1.2	17.3	-5.6
October 2006	2.2	9.0	-7.2	11.8	-10.2
November 2006	-12.0	-0.9	-21.6	0.6	-22.6
December 2006	-9.1	1.8	-21.8	2.7	-25.3
Monitoring Period	**-1.1**	**16.8**	**-31.5**	**24.3**	**-33.4**

[1] Valid Data capture began on November 19, 2005.

Table 4-4. Pebble 4 2-meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
June 2006[1]	14.0	5.4	9.6	22.7	3.5
July 2006	15.7	7.2	11.0	24.3	5.5
August 2006	12.7	7.5	9.5	16.8	4.3
September 2006	12.3	1.6	7.8	17.0	-0.9
October 2006	8.4	-7.2	1.9	11.2	-9.8
November 2006	-1.6	-22.2	-12.3	-0.3	-23.2
December 2006	1.2	-19.1	-8.9	2.2	-21.0
Monitoring Year	**15.7**	**-22.2**	**2.4**	**24.3**	**-23.2**

[1] Valid data capture began June 9, 2006.

Table 4-5. Pebble 4 10-meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
June 2006	12.4	5.4	8.9	18.9	3.9
July 2006	15.0	7.1	10.7	21.6	5.2
August 2006	12.7	7.3	9.4	16.3	5.2
September 2006	12.6	1.8	7.9	15.9	-0.3
October 2006	8.4	-7.2	2.0	11.1	-9.6
November 2006	-1.4	-22.3	-12.1	0.2	-23.3
December 2006	1.5	-18.8	-8.5	2.9	-20.6
Monitoring Year	**15.0**	**-22.3**	**2.4**	**21.6**	**-23.3**

[1] Valid data capture began June 9, 2006**.**

4.2 Horizontal Wind

Figure 4-5 provides wind roses for the Pebble 1, Pebble 2, Pebble 3, and Pebble 4 stations for their respective monitoring periods. Tables 4-6 and 4-7 provide the monthly mean wind speed and monthly maximum hourly wind speed for the Pebble 1, Pebble 2, Pebble 3, and Pebble 4 stations.

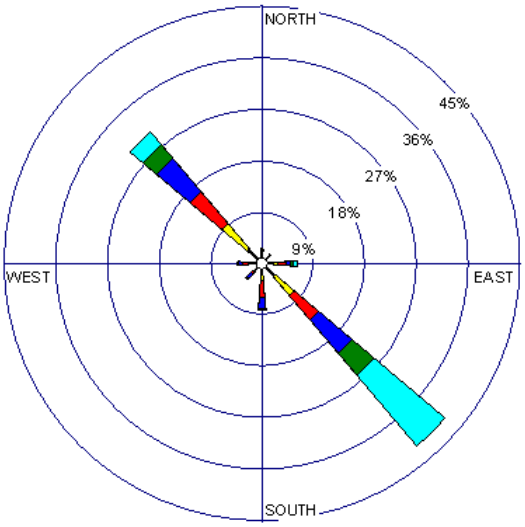
The Pebble 1 station wind rose shows major wind components from the northwest and southeast during the monitoring period. During this time span, the majority of winds exceeding 11 m/s came from the southeast. The mean wind speed at the Pebble 1 station from January 1, 2005 through July 31, 2005 was 7.2 m/s and the maximum hourly mean wind speed was 32.3 m/s, measured on February 14, 2005.

The dominant wind components at the Pebble 2 station were from the north, northeast, east-southeast, and southeast. Similar to the Pebble 1 station, the largest portion of winds exceeding 11 m/s came out of the east-southeast. The mean wind speed during the Pebble 2 monitoring period was 6.6 m/s and the maximum hourly mean wind speed was 26.7 m/s, recorded on March 20, 2005.

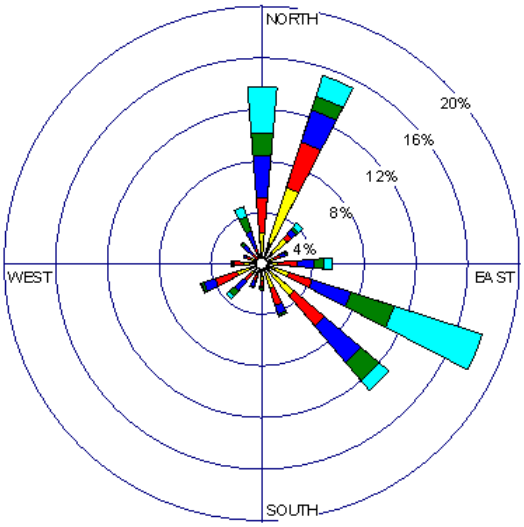
Northeast winds made up the largest component of the Pebble 3 wind rose from November 19, 2005 through July 31, 2006. Other significant wind components at the Pebble 3 station were from the north, east, and east-southeast. The average wind speed at the Pebble 3 station during the monitoring period was 4.8 m/s and the maximum hourly mean wind speed was 17.5 m/s, measured on January 22, 2006.

The dominant wind components at the Pebble 4 station were from the north and southeast with minor components from the east, northeast, and southwest. The mean wind speed at the Pebble 4 station was 8.0 m/s with maximum hourly wind speeds reaching 34.9 m/s, measured on November 19, 2006.

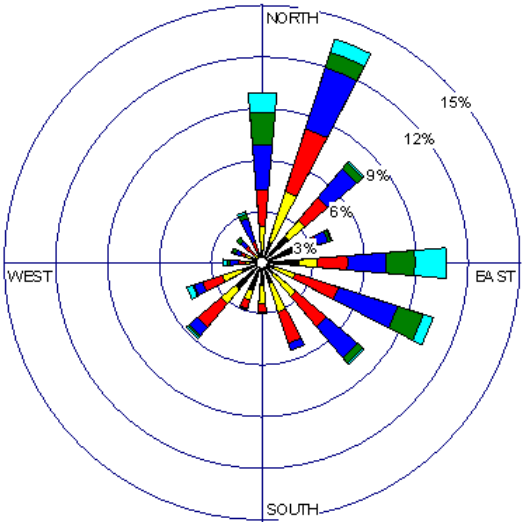
Figure 4-5. Pebble Meteorological Station Wind Roses



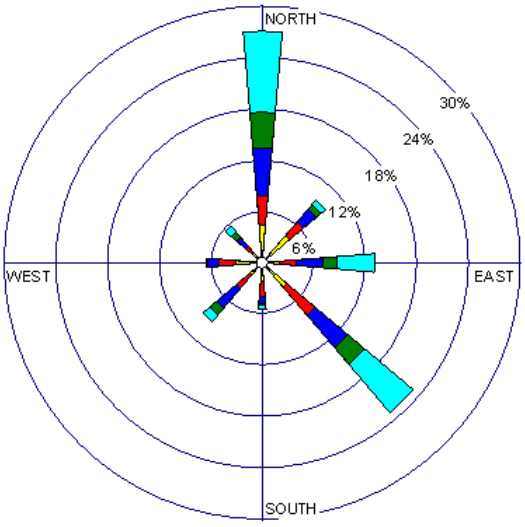
Pebble 1
(January 1, 2005 – July 31, 2005)



Pebble 2
(January 1, 2005 - November 19, 2005)



Pebble 3
(November 19, 2005 – July 31, 2006)



Pebble 4
(June 9, 2006 – December 31, 2006)

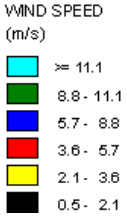


Table 4-6. Monthly Mean Wind Speed (m/s)

Period		Station Name			
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**
2005	January	7.5	7.3	-	-
	February	9.6	8.6	-	-
	March	7.9	7.5	-	-
	April	6.0	6.7	-	-
	May	6.8	6.0	-	-
	June	6.4	5.4	-	-
	July	6.2[1]	5.3	-	-
	August	-	5.5	-	-
	September	-	6.3	-	-
	October	-	6.4	-	-
	November	-	8.6[2]	4.6[3]	-
	December	-	-	5.1	-
2006	January	-	-	4.8	-
	February	-	-	6.4	-
	March	-	-	5.0	-
	April	-	-	5.0	-
	May	-	-	4.4	-
	June	-	-	4.3	6.1[4]
	July	-	-	3.8	6.0
	August	-	-	3.6	5.9
	September	-	-	3.7	6.6
	October	-	-	5.2	9.1
	November	-	-	7.9	12.7
	December	-	-	6.3	9.1
Monitoring Period		**7.2**	**6.7**	**5.0**	**8.0**

[1] The Pebble 1 monitoring period ended July 1, 2005.
[2] The Pebble 2 monitoring period ended November 19, 2005.
[3] Valid Data capture at the Pebble 3 station began on November 19, 2005.
[4] Valid data capture at the Pebble 4 station began on June 9, 2006.

Table 4-7. Monthly Maximum Hourly Wind Speed (m/s)

Period		Station Name			
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**
2005	January	21.5	19.6	-	-
	February	32.3	25.4	-	-
	March	23.0	26.7	-	-
	April	30.8	24.0	-	-
	May	24.6	18.5	-	-
	June	21.2	17.3	-	-
	July	17.0[1]	15.5	-	-
	August	-	16.7	-	-
	September	-	17.0	-	-
	October	-	18.0	-	-
	November	-	22.0[2]	13.7[3]	-
	December	-	-	15.0	-
2006	January	-	-	17.5	-
	February	-	-	17.2	-
	March	-	-	15.6	-
	April	-	-	17.0	-
	May	-	-	14.6	-
	June	-	-	14.8	18.5[4]
	July	-	-	10.2	16.5
	August	-	-	9.2	16.6
	September	-	-	12.5	23.6
	October	-	-	13.6	26.3
	November	-	-	21.1	34.9
	December	-	-	17.0	24.5
Monitoring Period		**32.3**	**26.7**	**21.1**	**34.9**

[1] The Pebble 1 monitoring period ended July 1, 2005.
[2] The Pebble 2 monitoring period ended November 19, 2005.
[3] Valid Data capture at the Pebble 3 station began on November 19, 2005.
[4] Valid data capture at the Pebble 4 station began on June 9, 2006.

4.3 Precipitation

Table 4-8 provides monthly precipitation rates, which include rain and snowfall, for the Pebble Stations.

Precipitation data at the Pebble 1 and Pebble 2 stations were invalid between February 21, 2005 and March 29, 2005 due to technical difficulties with the precipitation gauges. The highest monthly cumulative precipitation at the Pebble 1 station was 35.8 mm recorded during April 2005. During this same month, 42.6 mm of precipitation fell at Pebble 2. The highest total monthly precipitation measured at the Pebble 2 station was 109.4 mm during September 2005.

During the Pebble 3 monitoring period, monthly precipitation rates were greatest from August through October 2006. August 2006 had the greatest amount of precipitation with 196.3 mm of total rain and snow, followed by October 2006 with 168.1 mm. The month with the least amount of precipitation during the Pebble 3 station monitoring period was November 2006, which had 9.4 mm of total rainfall.

The Pebble 4 station experienced the greatest cumulative monthly precipitation during August 2006 recording 224.4 mm. November 2006 experienced the least precipitation during the monitoring period, recording only 0.4 mm during the month.

Figure 4.6 Hourly and Cumulative Precipitation

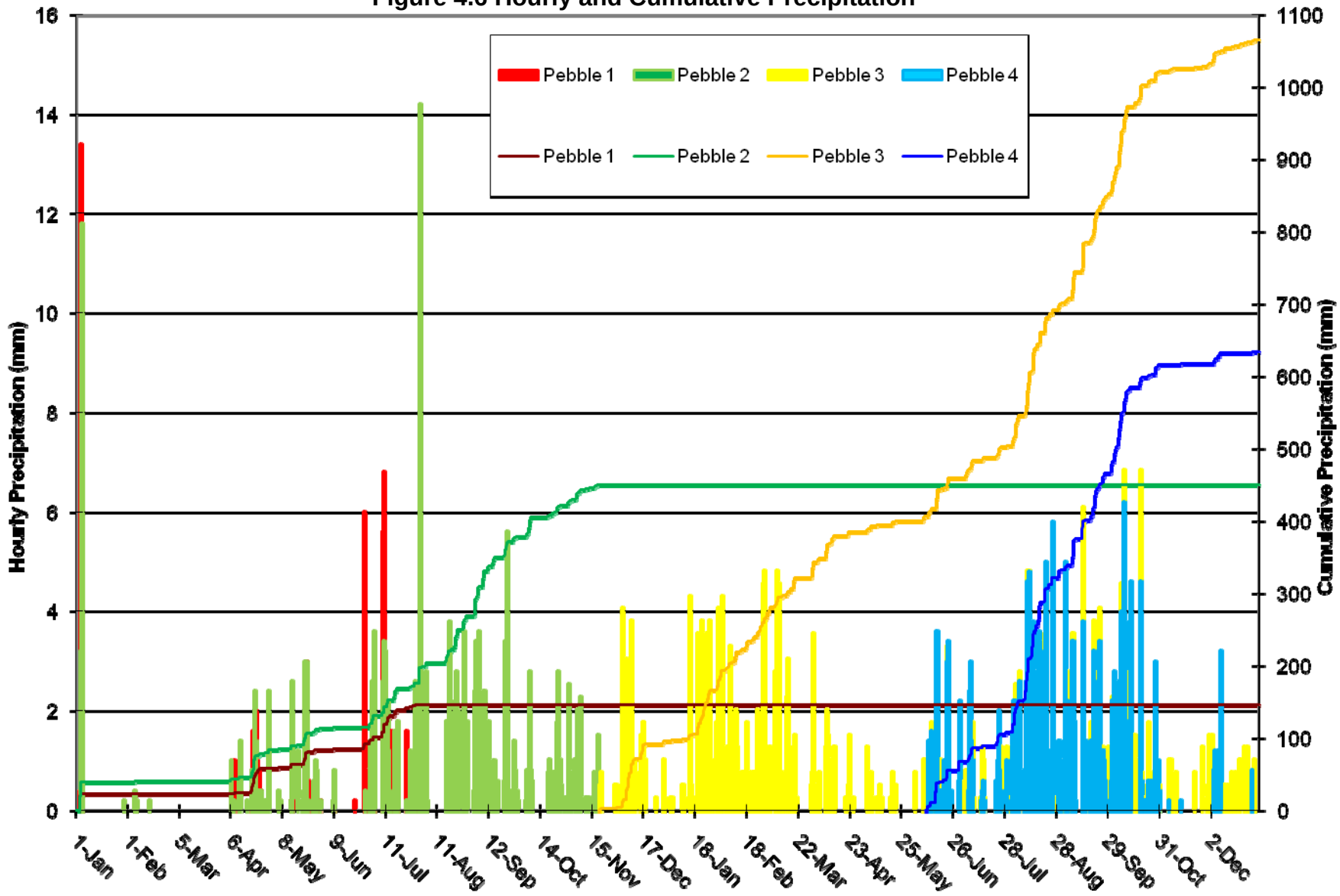


Table 4-8. Monthly Precipitation (mm)

Period		Station Name			
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 3**	**Pebble 4**
2005	January	22.8	39.2	-	-
	February	0.2[1]	2.0[2]	-	-
	March	0.0[1]	0.0[2]	-	-
	April	35.8	42.6	-	-
	May	25.4	34.6	-	-
	June	10.4	6.6	-	-
	July	51.4	80.0	-	-
	August	-	71.2	-	-
	September	-	109.4	-	-
	October	-	49.5	-	-
	November	-	20.8[4]	3.8[5]	-
	December	-	-	92.5	-
2006	January	-	-	75.9	-
	February	-	-	87.9	-
	March	-	-	82.8	-
	April	-	-	42.4	-
	May	-	-	14.5	-
	June	-	-	59.6	68.2
	July	-	-	45.4	39.4
	August	-	-	196.3	224.4
	September	-	-	152.1	135.0
	October	-	-	168.1	150.0
	November	-	-	9.4	0.4
	December	-	-	34.3	16.8
Monitoring Period		**146.0**	**455.9**	**1,065.2**	**634.2**

[1] The Pebble 1 precipitation data was invalid from February 21 - March 29, 2005.
[2] The Pebble 2 precipitation data was invalid from February 21 - March 29, 2005.
[3] The Pebble 1 monitoring period ended July 31, 2005.
[4] The Pebble 2 monitoring period ended November 19, 2005.
[5] The Pebble 3 monitoring period began November 19, 2005.
[6] The Pebble 4 monitoring period began June 9, 2006.

4.4 Evaporation

Table 4-9 provides the monthly evaporation measurements collected at the Pebble 1, Pebble 2, and Pebble 4 meteorological stations.

Evaporation data was collected at the Pebble 1 station from May 13 through July 31, 2005. The total evaporation during this period was 231.1 mm. June 2005 experienced the greatest evaporation of 111.7 mm.

Evaporation data was collected at the Pebble 2 meteorological station from May 13 through October 7, 2005. The greatest monthly evaporation values were observed during the months of June, July, and August. June had the highest monthly evaporation rate of 115.7 mm, followed by August with 79.4 mm. From May 13 to October 8, 2005 the cumulative evaporation at the Pebble 2 station was 326.6 mm.

Evaporation data was collected at the Pebble 4 station from June 9, 2006 through October 16, 2006. July 2006 recorded the greatest evaporation total of 76.9 mm, with a total of 169.5 mm of evaporation during the period of data collection.

Table 4-9. Monthly Evaporation (mm)

Period		Station Name		
Year	**Month**	**Pebble 1**	**Pebble 2**	**Pebble 4**
2005	January	-	-	-
	February	-	-	-
	March	-	-	-
	April	-	-	-
	May	43.5[1]	37.8[1]	-
	June	111.7	115.7	-
	July	75.9	73.3	-
	August	-	79.4	-
	September	-	16.4	-
	October	-	4.0[3]	-
	November	-	-	-
	December	-	-	-
2006	January	-	-	-
	February	-	-	-
	March	-	-	-
	April	-	-	-
	May	-	-	-
	June	-	-	38.4
	July	-	-	76.9
	August	-	-	20.6
	September	-	-	23.0
	October	-	-	10.6
	November	-	-	-
	December	-	-	-
Monitoring Period		**231.1**	**326.6**	**169.5**

[1] Evaporation data collected at Pebble 1 from May 13 through July 31, 2005.
[2] Evaporation data collected at Pebble 2 from May 13 through October 7, 2005.
[3] Evaporation data collected at Pebble 4 from June 9 through October 31, 2006.

5.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2006.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Alaska State Department of Environmental Conservation (ADEC), *PSD Quality Ambient Air Quality and Meteorological Monitoring Annual Data Report Format*, Division of Air Quality, Air Monitoring & Quality Assurance Program, 2005.

Appendix A

Pebble 1 Validated Continuous Data Summaries

Pebble 1 Meteorological Station – Temperature at 2 meters (deg. C)

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1																											
2																											
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27																											
28															-5.9	-5.3	-6.1	-6.9	-7.7	-8.8	-7.8	-7.1	-6.5	-6.9	-5.3	-8.8	-6.9
29	-6.3	-6.1	-6.6	-6.8	-6.4	-5.9	-5.4	-5.2	-4.8	-4.9	-4.1	-3.6	-2.3	-1.4	-0.6	-1.4	-1.7	-2.1	-1.3	-1.0	-0.7	-0.4	-0.5	-1.0	-0.4	-6.8	-3.4
30	-0.6	-0.5	-0.4	0.4	0.2	0.5	-0.8	-0.9	-2.9	-4.1	-7.4	-8.5	-10.6	-11.8	-12.8	-14.3	-15.9	-17.4	-17.6	-18.3	-18.8	-19.2	-19.2	-18.6	0.5	-19.2	-9.2
31	-19.5	-19.3	-19.5	-19.5	-19.6	-19.5	-19.5	-19.3	-18.8	-18.7	-18.8	-18.5	-18.1	-16.5	-15.7	-15.0	-14.7	-15.2	-15.9	-16.0	-16.8	-16.9	-17.3	-17.7	-14.7	-19.6	-17.8
Max.	**-0.6**	**-0.5**	**-0.4**	**0.4**	**0.2**	**0.5**	**-0.8**	**-0.9**	**-2.9**	**-4.1**	**-4.1**	**-3.6**	**-2.3**	**-1.4**	**-0.6**	**-1.4**	**-1.7**	**-2.1**	**-1.3**	**-1.0**	**-0.7**	**-0.4**	**-0.5**	**-1.0**	**0.5**		
Min.	**-19.5**	**-19.3**	**-19.5**	**-19.5**	**-19.6**	**-19.5**	**-19.5**	**-19.3**	**-18.8**	**-18.7**	**-18.8**	**-18.5**	**-18.1**	**-16.5**	**-15.7**	**-15.0**	**-15.9**	**-17.4**	**-17.6**	**-18.3**	**-18.8**	**-19.2**	**-19.2**	**-18.6**		**-19.6**	
Avg.	**-8.8**	**-8.6**	**-8.8**	**-8.7**	**-8.6**	**-8.3**	**-8.6**	**-8.5**	**-8.8**	**-9.2**	**-10.1**	**-10.2**	**-10.3**	**-9.9**	**-8.7**	**-9.0**	**-9.6**	**-10.4**	**-10.6**	**-11.0**	**-11.0**	**-10.9**	**-10.9**	**-11.0**			**-9.3**

Total Hours in Month 744 **Hours Data Available** 82 **Data Recovery** 11.0%

HCG, Inc.

Pebble 1 Meteorological Station – Temperature at 2 meters (deg. C)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-19.5	-19.1	-19.9	-19.9	-20.1	-20.8	-20.6	-20.2	-20.8	-20.8	-20.1	-19.8	-19.7	-19.3	-18.7	-18.2	-19.6	-20.8	-20.8	-21.2	-21.8	-22.1	-22.4	-22.8	-18.2	-22.8	-20.4
2	-23.8	-24.2	-24.7	-25.6	-25.9	-25.8	-26.0	-25.8	-26.0	-26.2	-25.2	-24.7	-24.3	-23.6	-23.3	-23.3	-23.5	-24.3	-24.9	-25.8	-26.5	-26.9	-27.3	-27.1	-23.3	-27.3	-25.2
3	-26.9	-27.3	-27.7	-27.8	-28.3	-28.2	-28.1	-27.7	-27.8	-27.4	-25.8	-23.3	-22.5	-22.2	-21.6	-20.5	-23.5	-25.3	-26.4	-26.4	-26.3	-26.7	-25.4	-25.1	-20.5	-28.3	-25.8
4	-24.9	-24.3	-24.4	-24.1	-22.8	-22.0	-20.8	-20.0	-20.0	-19.6	-16.8	-14.0	-11.8	-10.3	-9.2	-9.7	-11.2	-13.1	-14.4	-14.9	-13.7	-13.3	-13.3	-13.5	-9.2	-24.9	-16.7
5	-13.5	-13.9	-13.5	-13.0	-12.8	-12.0	-11.8	-11.8	-11.8	-11.6	-12.1	-10.3	-10.1	-9.2	-7.4	-6.3	-6.2	-5.7	-5.3	-4.8	-4.9	-5.1	-4.8	-4.6	-4.6	-13.9	-9.3
6	-4.5	-4.2	-4.1	-3.9	-3.7	-3.4	-3.0	-2.7	-2.3	-2.1	-2.0	-2.1	-2.0	-1.9	-1.9	-2.0	-1.9	-2.2	-2.0	-2.2	-2.2	-2.0	-2.0	-2.1	-1.9	-4.5	-2.6
7	-2.2	-2.0	-2.1	-2.2	-2.2	-1.8	-1.6	-1.6	-1.5	-1.7	-1.9	-1.8	-1.9	-1.7	-1.7	-1.6	-1.6	-1.5	-1.5	-1.5	-1.7	-1.6	-1.6	-1.8	-1.5	-2.2	-1.8
8	-1.7	-2.2	-2.1	-2.3	-2.3	-2.3	-2.2	-2.0	-2.1	-2.0	-1.7	-1.8	-1.7	-1.4	-1.4	-1.3	-1.2	-1.3	-1.3	-1.4	-1.4	-1.4	-1.5	-1.4	-1.2	-2.3	-1.7
9	-1.7	-1.7	-1.8	-1.8	-1.7	-2.0	-3.2	-8.3	-11.8	-14.0	-16.3	-17.7	-18.2	-19.2	-20.1	-20.8	-21.6	-22.1	-22.1	-22.7	-23.5	-23.6	-23.7	-23.6	-1.7	-23.7	-14.3
10	-23.8	-23.8	-23.9	-24.6	-24.6	-24.8	-25.4	-25.7	-25.5	-25.1	-25.3	-24.9	-24.4	-23.5	-23.3	-23.7	-23.4	-23.7	-24.1	-24.1	-24.1	-24.1	-24.1	-24.0	-23.3	-25.7	-24.3
11	-24.3	-23.3	-23.0	-22.3	-22.8	-22.9	-23.0	-22.9	-22.5	-21.7	-20.5	-19.6	-18.9	-17.9	-17.3	-17.8	-17.6	-17.5	-17.8	-18.3	-18.5	-18.5	-18.0	-17.4	-17.3	-24.3	-20.2
12	-17.3	-18.0	-18.3	-18.0	-17.0	-16.3	-16.6	-16.3	-16.5	-16.3	-14.3	-12.2	-12.8	-14.4	-13.2	-12.7	-11.9	-10.9	-11.0	-10.6	-10.3	-9.9	-9.3	-8.8	-8.8	-18.3	-13.9
13	-8.8	-8.8	-8.4	-7.6	-6.4	-5.3	-4.6	-4.3	-3.9	-3.6	-3.2	-2.5	-2.2	-2.2	-2.2	-2.3	-2.3	-3.0	-3.9	-4.2	-4.3	-3.8	-3.4	-2.7	-2.2	-8.8	-4.3
14	-1.9	-1.2	-1.4	-1.7	-1.6	-1.2	-0.9	-0.7	-0.6	-0.6	-0.5	-0.6	-0.7	-0.6	-0.6	-0.6	-0.8	-1.1	-1.6	-2.0	-2.2	-2.0	-1.7	-1.6	-0.5	-2.2	-1.2
15	-1.6	-1.3	-1.7	-2.0	-2.3	-2.6	-2.2	-1.8	-1.7	-1.6	-1.5	-1.6	-1.5	-1.0	-1.0	-1.4	-1.7	-2.7	-3.0	-3.3	-3.1	-3.7	-4.0	-4.3	-1.0	-4.3	-2.2
16	-4.0	-4.3	-3.4	-2.6	-2.3	-2.0	-1.8	-1.8	-1.7	-1.8	-1.8	-1.7	-1.6	-1.5	-1.4	-1.3	-1.3	-1.0	-0.8	-0.6	-0.6	-0.6	-0.7	-0.7	-0.6	-4.3	-1.7
17	-0.6	-0.6	-0.8	-1.0	-1.0	-1.1	-1.4	-1.2	-1.0	-1.0	-0.8	-0.4	0.0	-0.1	-0.1	-0.2	-0.3	-0.6	-0.8	-0.9	-1.1	-1.1	-1.1	-1.1	0.0	-1.4	-0.8
18	-0.8	-0.7	-0.7	-0.7	-1.0	-0.7	-0.6	-0.6	-0.3	-0.2	-0.1	-0.1	-0.5	-0.6	-0.9	-0.9	-0.7	-0.6	-0.4	-0.5	-0.4	-0.4	-0.4	-0.6	-0.1	-1.0	-0.6
19	-0.5	-0.5	-0.9	-1.2	-1.5	-1.8	-1.5	-1.5	-1.7	-1.9	-1.5	-1.0	-0.6	-0.5	-0.5	-0.7	-0.9	-0.8	-0.8	-0.4	-0.1	-0.3	-0.2	-0.2	-0.1	-1.9	-0.9
20	0.4	0.9	1.2	0.9	0.6	0.5	0.3	0.3	0.6	0.8	0.6	0.9	1.1	1.3	1.1	0.8	0.8	0.7	0.1	0.2	0.2	0.1	-0.1	-0.2	1.3	-0.2	0.6
21	-0.1	-0.2	-0.4	-0.5	-0.5	-0.5	-0.6	-1.1	-1.4	-1.3	-0.9	-0.7	-0.7	-0.4	-0.1	-0.2	-0.3	-0.6	-1.1	-1.4	-1.1	-1.4	-2.0	-1.4	-0.1	-2.0	-0.8
22	-1.3	-1.1	-1.5	-2.1	-2.0	-3.0	-4.1	-3.5	-3.2	-3.9	-4.1	-4.8	-3.6	-0.9	-0.4	-0.4	-0.7	-0.6	-0.8	-1.3	-1.3	-1.0	-0.4	-0.4	-0.4	-4.8	-1.9
23	-0.5	-0.5	-0.5	-0.7	-0.8	-1.6	-1.2	-0.5	-0.4	-0.5	-0.4	0.1	0.4	0.6	0.5	0.4	0.6	0.9	0.9	1.1	1.2	1.3	1.1	0.7	1.3	-1.6	0.1
24	0.3	0.0	0.2	0.4	0.1	-0.2	-0.1	0.0	0.2	0.2	-0.5	-0.4	-1.1	-1.5	-0.8	-0.1	0.1	-0.9	-1.6	-1.6	-3.2	-4.4	-4.7	-5.0	0.4	-5.0	-1.0
25	-5.3	-4.4	-3.1	-3.0	-3.9	-3.7	-3.0	-3.3	-2.7	-1.3	1.0	2.3	2.6	3.1	3.9	4.4	2.8	1.1	-0.4	-0.8	-1.0	-1.7	-1.1	-2.1	4.4	-5.3	-0.8
26	-2.8	-3.0	-3.3	-2.8	-2.4	-2.7	-3.3	-3.3	-3.1	-3.0	-2.1	-0.5	0.8	0.7	-0.2	-1.0	-1.1	-2.0	-3.3	-4.2	-4.8	-4.8	-4.7	-5.5	0.8	-5.5	-2.6
27	-6.3	-7.4	-7.4	-7.3	-7.9	-8.7	-8.3	-8.0	-7.3	-6.1	-5.1	-4.8	-4.5	-2.6	-2.8	-4.2	-5.0	-4.8	-5.8	-7.4	-7.6	-8.3	-9.1	-8.5	-2.6	-9.1	-6.5
28	-9.0	-9.7	-10.2	-10.5	-11.0	-11.1	-11.3	-12.1	-11.5	-11.3	-10.1	-9.8	-9.2	-8.6	-7.2	-7.9	-8.1	-8.3	-8.9	-9.5	-10.0	-10.6	-10.5	-9.8	-7.2	-12.1	-9.8
Max.	0.4	0.9	1.2	0.9	0.6	0.5	0.3	0.3	0.6	0.8	1.0	2.3	2.6	3.1	3.9	4.4	2.8	1.1	0.9	1.1	1.2	1.3	1.1	0.7	4.4		
Min.	-26.9	-27.3	-27.7	-27.8	-28.3	-28.2	-28.1	-27.7	-27.8	-27.4	-25.8	-24.9	-24.4	-23.6	-23.3	-23.7	-23.5	-25.3	-26.4	-26.4	-26.5	-26.9	-27.3	-27.1		-28.3	
Avg.	-8.1	-8.1	-8.1	-8.1	-8.1	-8.1	-8.1	-8.1	-8.2	-8.1	-7.6	-7.1	-6.8	-6.4	-6.1	-6.2	-6.5	-6.9	-7.3	-7.5	-7.7	-7.8	-7.7	-7.7			-7.5

Total Hours in Month 672 Hours Data Available 672 Data Recovery 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Temperature at 2 meters (deg. C)

March 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-9.4	-9.6	-9.6	-9.2	-9.3	-9.3	-8.9	-8.7	-8.6	-7.3	-6.2	-5.8	-5.1	-5.2	-4.7	-3.9	-3.9	-4.5	-5.7	-6.7	-7.0	-6.7	-6.1	-6.0	-3.9	-9.6	-7.0
2	-6.6	-6.6	-6.2	-5.5	-5.3	-5.2	-5.5	-5.4	-5.2	-4.8	-4.5	-3.7	-3.1	-3.5	-2.6	-2.0	-1.9	-2.5	-3.3	-3.5	-4.1	-4.6	-4.4	-4.8	-1.9	-6.6	-4.4
3	-5.4	-5.8	-6.4	-5.6	-5.2	-5.4	-5.0	-4.5	-4.5	-3.9	-3.8	-3.4	-2.6	-2.1	-1.9	-1.7	-1.9	-2.2	-3.1	-3.4	-3.8	-3.9	-4.1	-3.8	-1.7	-6.4	-3.9
4	-2.7	-1.9	-2.0	-2.0	-1.5	-1.1	-0.6	-1.1	-1.0	-0.5	0.7	2.2	3.6	4.3	5.7	3.6	3.9	2.9	1.9	0.7	0.6	-0.3	-0.7	-0.9	5.7	-2.7	0.6
5	-0.8	-1.4	-1.8	-1.9	-1.2	-1.4	-1.1	-1.3	-1.5	-1.2	-0.7	0.2	0.4	0.5	0.5	0.1	-0.3	-0.5	-0.3	-0.4	-0.2	-0.4	-0.6	-0.7	0.5	-1.9	-0.7
6	-0.9	-0.1	-0.2	-0.3	-0.5	-0.2	-0.1	-0.2	0.6	0.1	0.2	2.0	2.2	1.3	1.8	2.3	2.0	1.1	1.0	0.3	0.1	0.6	0.5	0.7	2.3	-0.9	0.6
7	1.2	0.6	0.3	0.2	0.2	0.5	-0.3	0.9	1.7	1.6	2.2	2.3	2.9	3.0	3.0	2.7	1.5	1.8	1.4	1.0	0.7	1.0	1.0	1.2	3.0	-0.3	1.4
8	1.5	1.3	1.2	1.0	0.9	0.9	1.0	1.0	1.7	3.1	2.7	4.7	3.5	3.4	2.7	2.6	2.9	2.4	1.4	0.8	0.5	0.4	0.5	0.5	4.7	0.4	1.8
9	0.3	0.2	0.1	0.0	-0.2	-0.2	-0.2	-0.4	-0.6	-0.7	-0.8	-0.9	-0.7	-0.3	0.1	0.2	0.1	0.2	-0.2	0.0	0.0	-0.4	-0.4	0.3	0.3	-0.9	-0.2
10	0.6	1.0	0.7	-0.6	-1.2	-1.4	-0.9	-0.7	-1.3	-0.7	0.8	1.6	1.3	3.0	3.4	3.5	3.1	2.7	2.3	1.7	1.2	0.7	0.0	-0.2	3.5	-1.4	0.9
11	-0.5	-0.8	-0.7	-0.5	-0.5	-0.9	-1.2	-2.1	-2.2	-2.2	-1.5	-0.8	-0.1	0.5	0.4	0.3	0.5	0.2	-0.4	-1.1	-1.4	-1.6	-1.2	-1.1	0.5	-2.2	-0.8
12	-0.6	-0.3	-0.1	-0.6	-1.0	-0.5	0.0	0.3	0.8	1.2	0.3	0.1	0.0	0.5	0.9	1.2	1.2	1.2	1.0	0.9	1.0	0.7	0.6	0.4	1.2	-1.0	0.4
13	1.2	0.6	-0.1	0.1	-0.4	-0.4	-0.1	0.1	0.0	0.1	0.5	1.1	1.6	1.9	1.6	3.0	2.7	1.8	0.9	-0.1	-0.5	-0.6	-0.6	-0.8	3.0	-0.8	0.6
14	-0.2	-0.4	-0.5	-0.2	-0.1	-0.2	0.1	-0.1	-0.2	0.4	1.5	1.8	1.8	1.4	1.5	1.7	1.7	0.3	-0.6	-1.3	-1.0	-0.6	-0.6	-0.1	1.8	-1.3	0.2
15	-0.3	-0.7	-1.0	-0.5	-0.7	-0.8	-0.7	-0.5	-0.4	-0.2	0.1	0.3	0.2	0.0	-0.2	-0.4	-1.2	-1.3	-1.5	-1.6	-1.5	-1.7	-1.7	-1.8	0.3	-1.8	-0.8
16	-1.8	-1.9	-1.9	-1.9	-2.0	-2.0	-2.1	-2.4	-2.6	-2.6	-2.5	-1.6	-1.2	-0.4	-0.1	-0.2	0.4	-0.6	-2.1	-4.6	-4.0	-4.0	-4.3	-4.1	0.4	-4.6	-2.1
17	-4.0	-4.5	-4.3	-3.4	-3.1	-3.6	-3.3	-3.7	-3.5	-3.2	-2.0	-1.0	1.8	3.6	3.5	4.2	3.0	0.6	-0.6	-1.9	-2.9	-2.9	-3.1	-3.1	4.2	-4.5	-1.6
18	-3.2	-3.4	-2.4	-2.8	-2.7	-2.5	-2.3	-2.1	-0.6	-0.3	0.2	0.4	1.2	1.9	2.4	2.1	2.3	1.6	0.1	-1.1	-1.3	-1.0	-1.2	-1.6	2.4	-3.4	-0.7
19	-1.7	-1.8	-1.5	-1.2	-1.0	-1.3	-1.9	-2.5	-2.9	-1.8	-1.3	-1.6	-1.5	-0.3	0.5	1.1	1.0	0.6	-0.7	-2.3	-3.0	-3.3	-4.1	-4.6	1.1	-4.6	-1.6
20	-5.1	-4.9	-5.0	-5.4	-5.4	-7.0	-6.1	-6.3	-6.3	-6.4	-6.1	-9.1	-9.4	-9.4	-9.2	-9.6	-10.4	-11.0	-12.3	-13.8	-15.3	-16.9	-16.0	-15.6	-4.9	-16.0	-9.7
21	-16.9	-15.9	-15.6	-16.3	-15.5	-15.2	-15.4	-15.5	-14.9	-14.0	-12.8	-10.0	-6.0	-3.3	-1.9	-2.2	-2.6	-3.4	-4.1	-4.7	-4.8	-4.8	-4.7	-5.1	-1.9	-16.3	-9.3
22	-5.5	-4.5	-4.6	-4.8	-5.2	-6.7	-7.6	-7.1	-6.3	-4.9	-4.0	-1.7	-0.3	-0.6	-3.3	-2.9	-3.3	-3.9	-5.6	-6.6	-6.8	-6.8	-6.9	-7.8	-0.3	-7.8	-4.9
23	-9.2	-8.6	-8.2	-8.1	-7.7	-7.8	-7.8	-7.6	-7.2	-6.4	-5.5	-4.4	-3.7	-3.7	-4.1	-3.8	-3.4	-3.3	-3.1	-3.1	-2.9	-2.6	-2.5	-2.3	-2.3	-9.2	-5.3
24	-2.2	-2.0	-2.1	-2.1	-1.9	-1.8	-1.6	-1.5	-1.4	-1.2	-1.1	-0.8	-0.7	-0.7	-0.7	-0.8	-1.0	-1.1	-1.1	-1.2	-1.2	-1.1	-1.2	-1.4	-0.7	-2.2	-1.3
25	-3.5	-4.9	-5.1	-5.1	-5.3	-5.4	-5.7	-6.2	-6.3	-6.3	-6.1	-5.9	-5.6	-5.2	-5.2	-5.3	-5.5	-5.6	-5.8	-6.3	-6.5	-6.6	-6.8	-6.9	-3.5	-6.9	-5.7
26	-7.2	-7.5	-7.9	-8.2	-8.5	-9.1	-9.7	-10.4	-10.4	-10.4	-10.5	-9.6	-9.2	-8.5	-7.8	-7.8	-8.4	-8.4	-9.1	-9.8	-11.1	-11.6	-10.6	-8.8	-7.2	-11.6	-9.2
27	-7.8	-7.4	-7.3	-6.9	-7.1	-7.5	-7.9	-8.6	-8.4	-6.9	-5.2	-1.7	-0.2	-1.7	-2.1	-0.5	-0.7	-0.4	-2.5	-4.9	-5.6	-5.3	-5.4	-5.6	-0.2	-8.6	-4.9
28	-5.6	-5.5	-6.4	-6.5	-7.3	-7.4	-7.6	-8.1	-9.3	-9.2	-9.3	-7.7	-6.9	-6.4	-7.3	-8.0	-8.4	-9.1	-10.3	-12.0	-12.7	-13.2	-14.1	-14.9	-5.5	-14.9	-8.9
29	-14.0	-13.3	-13.0	-13.2	-13.8	-13.8	-14.0	-13.7	-12.9	-11.1	-9.6	-10.7	-8.6	-8.4	-5.8	-3.6	-3.8	-5.9	-7.6	-11.6	-14.4	-15.0	-14.6	-15.4	-3.6	-15.4	-11.2
30	-15.5	-14.9	-15.6	-16.4	-16.2	-16.3	-16.7	-17.6	-18.1	-18.8	-18.7	-18.0	-16.6	-16.2	-16.1	-17.8	-17.6	-17.8	-18.5	-18.8	-19.4	-19.5	-19.7	-19.9	-14.9	-19.9	-17.5
31	-19.9	-19.9	-19.6	-19.4	-19.2	-19.0	-18.8	-18.6	-18.6	-18.4	-17.4	-16.8	-16.0	-15.4	-14.9	-14.3	-14.0	-13.8	-14.2	-14.9	-16.0	-16.8	-17.3	-17.5	-13.8	-19.9	-17.1
Max.	1.5	1.3	1.2	1.0	0.9	0.9	1.0	1.0	1.7	3.1	2.7	4.7	3.6	4.3	5.7	4.2	3.9	2.9	2.3	1.7	1.2	1.0	1.0	1.2	5.7	-	
Min.	-19.9	-19.9	-19.6	-19.4	-19.2	-19.0	-18.8	-18.6	-18.6	-18.4	-17.4	-16.8	-16.0	-15.4	-14.9	-14.3	-14.0	-13.8	-14.2	-14.9	-16.0	-16.8	-17.3	-17.5		-19.9	
Avg.	-4.7	-4.7	-4.6	-4.8	-4.8	-4.9	-5.0	-5.1	-4.9	-4.5	-4.0	-3.2	-2.5	-2.1	-1.9	-1.8	-2.0	-2.5	-3.3	-4.2	-4.6	-4.8	-4.9	-4.9			-3.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Temperature at 2 meters (deg. C)

April 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-17.7	-17.6	-17.5	-17.5	-17.6	-17.2	-16.5	-16.2	-15.2	-12.2	-9.9	-10.1	-9.5	-5.9	-3.7	-4.1	-5.3	-5.7	-6.9	-8.6	-12.2	-13.8	-13.9	-13.6	-3.7	-17.7	-12.0
2	-13.9	-14.0	-14.1	-14.1	-14.3	-14.6	-14.5	-14.0	-13.1	-12.8	-11.8	-11.3	-10.3	-10.5	-9.9	-9.4	-9.2	-10.0	-10.5	-11.7	-13.0	-13.6	-14.5	-15.3	-9.2	-15.3	-12.5
3	-15.1	-15.0	-15.6	-16.9	-17.1	-17.4	-17.7	-17.3	-16.6	-15.2	-14.6	-14.0	-13.1	-12.6	-12.1	-11.9	-12.1	-12.4	-13.3	-14.4	-15.6	-16.3	-17.1	-17.5	-11.9	-17.7	-15.0
4	-17.4	-17.4	-17.9	-18.4	-18.8	-19.5	-19.4	-19.0	-18.7	-17.3	-16.2	-15.2	-13.7	-12.3	-10.9	-9.7	-9.3	-9.4	-9.9	-11.1	-12.2	-12.9	-13.3	-12.8	-9.3	-19.5	-14.7
5	-12.8	-12.6	-12.6	-12.2	-12.2	-12.4	-12.5	-12.7	-12.7	-12.4	-12.1	-11.6	-11.1	-10.6	-10.0	-9.3	-9.1	-8.5	-8.2	-8.2	-8.1	-8.0	-7.5	-7.3	-7.3	-12.8	-10.6
6	-7.1	-6.5	-5.4	-4.6	-3.6	-3.4	-2.3	-1.4	-0.8	-0.2	0.1	0.5	1.1	1.4	1.4	1.2	0.4	0.1	0.0	-0.1	-0.2	-0.4	-0.9	-1.0	1.4	-7.1	-1.3
7	-1.2	-1.5	-1.6	-1.2	-1.2	-1.3	-1.3	-1.3	-1.2	-1.4	-1.2	-0.8	-0.8	-0.2	0.0	0.1	0.0	-0.3	-0.7	-1.2	-1.5	-2.3	-2.0	-1.8	0.1	-2.3	-1.1
8	-2.1	-2.4	-2.7	-3.2	-2.9	-3.0	-2.9	-2.5	-0.8	1.9	3.0	3.3	3.4	2.1	1.7	1.8	2.0	2.1	1.5	1.1	0.6	0.0	-0.2	-0.4	3.4	-3.2	0.1
9	-1.1	-1.7	-1.7	-1.7	-2.7	-2.5	-2.6	-1.1	-1.2	0.3	1.5	3.0	4.7	6.0	6.8	6.2	3.1	3.0	2.1	1.0	0.4	0.8	0.6	-0.1	6.8	-2.7	0.9
10	-0.4	-0.5	-1.2	-1.6	-2.6	-2.1	-2.8	-3.0	-2.9	-2.7	-2.1	-0.9	-0.1	1.0	0.9	0.7	0.7	0.3	-0.7	-1.5	-1.4	-2.0	-1.9	-3.1	1.0	-3.1	-1.2
11	-3.5	-4.0	-4.1	-4.6	-4.6	-5.0	-6.4	-6.8	-5.9	-5.3	-4.5	-3.7	-2.6	-2.0	-1.3	-0.7	-1.1	-1.4	-2.0	-2.9	-4.0	-4.7	-5.2	-5.5	-0.7	-6.8	-3.8
12	-6.8	-8.4	-7.1	-7.4	-8.0	-8.6	-8.6	-8.1	-7.6	-7.2	-6.2	-4.5	-3.4	-2.3	-1.3	-0.4	-0.8	-0.9	-1.4	-2.6	-4.1	-4.4	-4.3	-4.2	-0.4	-8.6	-4.9
13	-3.9	-3.7	-4.1	-4.6	-3.7	-3.3	-3.1	-1.9	-0.3	0.9	2.1	3.9	4.4	5.0	5.4	4.8	4.6	3.4	2.7	1.3	-0.5	-0.2	-1.1	-1.3	5.4	-4.6	0.3
14	-1.1	-1.6	-1.1	-1.4	-1.8	-2.4	-2.7	-1.1	0.3	0.7	1.2	2.1	2.1	2.2	2.3	2.3	2.4	2.3	1.7	1.3	0.1	-0.8	-0.8	-1.7	2.4	-2.7	0.2
15	-1.3	-1.6	-2.0	-2.5	-3.5	-3.3	-3.5	-2.3	-1.8	-3.3	-2.1	-0.3	0.9	1.5	1.5	1.5	1.6	0.9	0.5	0.4	-0.1	-1.0	-1.7	-1.7	1.6	-3.5	-1.0
16	-2.6	-3.2	-3.3	-3.4	-4.0	-4.3	-5.0	-5.2	-4.6	-3.8	-3.0	-2.4	-1.9	-1.4	-1.4	-1.5	-1.7	-2.0	-2.5	-3.8	-4.7	-5.9	-7.2	-7.3	-1.4	-7.3	-3.6
17	-7.2	-8.3	-8.6	-8.4	-9.7	-10.6	-11.1	-10.9	-11.1	-9.9	-8.8	-8.4	-8.1	-8.0	-7.8	-7.6	-7.3	-7.2	-7.8	-8.9	-10.3	-11.3	-12.2	-12.7	-7.2	-12.7	-9.3
18	-13.0	-12.7	-12.3	-12.9	-12.7	-12.8	-12.6	-12.6	-12.5	-11.9	-11.3	-10.3	-9.6	-8.8	-8.3	-7.9	-7.6	-7.7	-7.8	-8.0	-8.1	-7.9	-8.1	-8.3	-7.6	-13.0	-10.2
19	-8.5	-8.2	-8.2	-8.1	-7.6	-6.4	-2.8	-2.6	-3.0	-3.2	-3.0	-3.3	-3.4	-3.8	-3.6	-4.2	-5.0	-5.4	-5.6	-6.0	-6.2	-6.5	-6.6	-6.9	-2.6	-8.5	-5.3
20	-7.0	-6.8	-7.2	-8.0	-7.9	-7.9	-8.1	-7.5	-6.8	-5.3	-5.5	-5.8	-5.2	-3.9	-2.0	-1.0	-0.3	-0.1	0.0	-0.1	0.1	0.2	0.2	0.2	0.2	-8.1	-4.0
21	-0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.6	0.9	0.3	0.4	0.3	0.5	1.0	1.3	1.6	1.9	1.6	1.7	1.9	2.0	2.0	-0.1	0.7
22	2.2	2.2	2.2	2.1	1.9	1.6	1.0	1.1	1.1	1.6	1.9	2.3	2.4	2.5	2.7	2.5	2.1	2.1	1.9	1.5	1.3	1.2	1.5	1.1	2.7	1.0	1.8
23	1.2	1.4	1.0	0.7	0.5	0.1	0.1	0.1	0.4	0.5	0.7	0.6	0.8	0.8	1.0	1.2	1.2	1.1	0.9	0.8	0.9	0.7	0.4	0.0	1.4	0.0	0.7
24	-0.5	-0.7	-0.9	-1.3	-1.7	-2.1	-2.3	-1.8	-1.0	-0.6	-0.1	0.2	0.6	1.5	2.5	2.8	3.6	4.4	4.4	5.4	5.2	5.1	5.7	4.3	5.7	-2.3	1.4
25	3.6	3.6	3.5	3.1	3.6	4.0	4.2	4.3	4.5	5.2	5.4	5.6	5.5	5.6	5.8	5.9	6.1	4.8	4.7	4.6	4.4	4.3	4.1	4.3	5.9	3.1	4.6
26	4.1	4.0	4.4	3.9	4.2	4.4	5.1	5.6	5.5	5.7	6.1	6.7	8.0	8.3	8.1	7.8	7.5	7.0	6.6	6.8	7.3	7.5	6.8	7.2	8.3	3.9	6.2
27	7.7	7.1	7.0	7.3	6.5	5.6	5.4	5.7	7.1	7.5	7.8	7.2	7.2	7.7	8.1	7.8	9.0	8.7	8.4	8.6	8.8	9.7	10.3	9.9	10.3	5.4	7.8
28	9.6	9.2	8.7	8.1	7.9	7.1	7.5	5.7	5.8	4.9	5.3	6.3	7.2	7.6	6.5	7.1	6.5	6.1	5.7	6.7	5.8	5.6	5.4	4.8	9.6	4.8	6.7
29	3.7	4.3	4.2	5.1	4.5	4.4	5.5	6.2	6.5	6.6	6.4	9.7	10.4	10.6	10.4	10.4	10.0	9.7	8.7	7.5	7.8	7.8	9.0	9.7	10.6	3.7	7.5
30	8.6	9.2	10.5	8.2	8.4	8.9	7.3	7.3	7.3	8.3	9.0	9.9	10.8	11.8	13.0	12.6	12.1	12.1	10.1	9.2	8.6	8.8	8.1	7.2	13.0	7.2	9.5
Max.	9.6	9.2	10.5	8.2	8.4	8.9	7.5	7.3	7.3	8.3	9.0	9.9	10.8	11.8	13.0	12.6	12.1	12.1	10.1	9.2	8.8	9.7	10.3	9.9	13.0		
Min.	-17.7	-17.6	-17.9	-18.4	-18.8	-19.5	-19.4	-19.0	-18.7	-17.3	-16.2	-15.2	-13.7	-12.5	-12.1	-11.9	-12.1	-12.4	-13.3	-14.4	-15.6	-16.3	-17.1	-17.5		-19.5	
Avg.	-3.4	-3.5	-3.6	-3.8	-4.0	-4.1	-4.1	-3.8	-3.3	-2.7	-2.0	-1.4	-0.8	-0.2	0.2	0.3	0.1	-0.1	-0.5	-1.0	-1.6	-2.0	-2.2	-2.4			-2.1

Total Hours in Month 720 Hours Data Available 720 Data Recovery 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Temperature at 2 meters (deg. C)

May 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.2	6.1	5.6	5.8	5.7	5.9	5.8	6.3	6.9	7.0	7.7	8.6	9.4	9.4	9.4	8.9	8.5	7.4	6.8	6.3	5.6	4.9	4.6	3.6	9.4	3.6	6.8
2	3.1	4.0	3.7	3.5	3.9	4.0	4.2	4.8	5.6	6.0	5.5	7.7	8.3	8.6	8.9	9.1	8.0	7.3	6.6	5.4	4.7	4.2	3.8	3.4	9.1	3.1	5.6
3	3.3	3.4	3.7	4.4	4.6	4.3	4.1	4.4	5.0	6.1	6.1	6.2	6.2	6.7	6.5	6.3	5.7	5.2	4.8	3.8	3.3	2.7	2.0	1.8	6.7	1.8	4.8
4	1.5	1.4	1.2	1.0	1.0	1.0	1.3	1.7	2.1	2.6	3.3	4.4	4.6	4.6	4.7	4.6	4.6	4.4	4.1	3.4	2.8	2.3	2.1	2.1	4.7	1.0	2.8
5	2.1	2.1	2.1	2.0	2.0	1.9	1.8	1.8	1.9	2.0	2.0	2.4	2.7	3.1	3.2	3.6	3.5	3.3	2.9	2.8	2.8	3.0	3.0	3.0	3.6	1.8	2.5
6	2.8	2.7	2.4	2.2	2.2	2.3	2.2	2.3	2.7	3.3	3.7	4.0	4.0	4.1	4.4	4.6	4.6	4.5	4.1	3.6	2.8	2.5	2.5	2.4	4.6	2.2	3.2
7	2.3	2.4	2.4	2.2	2.4	2.4	2.6	2.9	3.8	4.8	6.0	7.2	8.7	9.4	9.8	9.8	9.6	9.6	9.1	7.2	6.2	5.5	4.7	5.0	9.8	2.2	5.7
8	4.2	3.7	3.5	4.2	4.2	4.2	4.0	4.6	5.8	6.5	7.0	8.2	9.3	10.0	10.4	11.0	11.7	11.5	11.0	10.3	9.3	9.6	9.5	9.2	11.7	3.5	7.6
9	9.0	8.7	8.0	7.9	7.8	7.6	8.4	7.9	8.8	10.0	12.1	12.8	13.6	14.3	14.3	14.1	13.8	13.3	12.4	11.1	9.3	8.5	7.9	7.4	14.3	7.4	10.4
10	5.8	5.3	5.2	5.2	5.5	5.7	6.1	6.4	6.5	9.0	9.6	9.9	10.2	10.7	10.6	10.6	10.4	9.6	8.7	7.9	6.8	5.7	4.8	4.5	10.7	4.5	7.5
11	4.9	4.8	5.2	5.9	5.9	4.9	5.6	6.4	7.5	10.3	11.7	12.2	12.6	12.7	12.6	12.5	12.7	12.3	11.9	11.0	10.6	10.4	9.9	10.1	12.7	4.8	9.4
12	10.0	9.6	8.3	8.5	8.6	9.1	8.0	8.4	8.9	9.7	10.1	7.8	7.6	7.6	6.0	5.9	5.5	5.3	5.1	5.0	4.5	3.7	3.0	2.9	10.1	2.9	7.0
13	2.9	3.4	3.0	3.0	2.7	2.3	2.4	3.0	4.0	4.8	6.0	8.1	9.8	10.9	10.8	10.5	9.6	8.0	7.4	7.3	7.1	5.0	4.5	5.0	10.9	2.3	5.9
14	5.0	4.9	4.6	5.4	5.1	5.0	4.8	5.7	6.5	7.3	7.0	6.9	7.4	6.8	7.2	7.0	6.7	6.3	5.7	5.4	4.2	3.3	2.7	2.3	7.4	2.3	5.5
15	1.9	2.3	2.0	2.2	1.5	1.4	2.6	3.5	4.2	5.4	6.8	7.7	8.5	9.1	9.5	9.1	8.3	7.2	6.3	5.2	4.2	3.2	2.5	2.2	9.5	1.4	4.9
16	2.1	2.4	2.2	2.2	1.9	2.1	2.8	3.3	4.3	5.4	5.5	6.3	6.6	6.9	7.5	7.7	7.9	7.3	6.9	6.2	5.1	3.6	2.9	2.5	7.9	1.9	4.7
17	2.7	2.6	3.2	3.6	3.8	4.0	4.3	4.9	5.6	6.6	7.5	8.3	9.0	8.8	8.8	8.6	7.9	8.8	8.6	8.0	7.0	6.8	5.7	4.9	9.0	2.6	6.3
18	4.5	4.4	3.1	2.8	1.6	1.4	1.9	2.1	2.8	4.0	4.3	4.9	5.8	6.6	7.9	8.9	8.3	9.2	9.2	8.4	7.7	5.9	5.3	4.1	9.2	1.4	5.2
19	3.8	3.2	3.2	3.2	3.1	2.2	3.4	3.9	5.6	7.3	9.1	10.7	11.7	12.6	13.2	13.5	13.0	13.4	13.3	12.9	11.8	11.5	10.6	10.5	13.5	2.2	8.6
20	10.4	10.1	7.5	6.8	7.6	9.1	9.9	8.9	9.4	10.6	11.2	12.3	13.1	14.5	15.0	14.5	12.7	11.5	10.6	9.3	7.5	6.9	6.6	6.4	15.0	6.4	10.1
21	5.8	5.6	5.5	5.1	5.2	5.6	6.5	7.0	7.0	7.4	8.1	8.5	9.0	8.8	7.6	6.3	8.3	7.7	7.4	6.9	6.7	6.6	6.6	5.8	9.0	5.1	7.0
22	5.8	5.7	5.8	5.5	5.4	5.5	5.5	5.9	6.2	6.9	7.2	7.6	8.1	8.7	9.8	9.7	7.3	7.9	8.0	7.3	7.2	6.6	6.5	10.0	10.0	5.4	7.1
23	11.4	11.1	11.0	10.7	10.4	9.9	10.6	10.8	11.1	11.6	12.0	12.9	14.0	14.4	14.6	14.7	13.8	13.3	14.3	14.0	14.4	12.8	12.4	12.0	14.7	9.9	12.4
24	11.4	11.4	11.2	10.6	10.4	10.2	10.2	10.4	10.4	10.7	11.6	12.0	12.0	12.4	12.6	10.9	11.5	11.6	10.2	8.9	10.4	8.7	8.6	6.9	12.6	6.9	10.6
25	5.1	4.7	4.7	4.5	4.6	5.3	6.5	7.3	7.4	7.3	7.8	8.1	8.3	8.8	8.9	9.6	9.2	9.0	9.0	8.3	7.3	6.2	5.5	5.4	9.6	4.5	7.0
26	4.7	4.8	4.7	4.3	4.3	4.7	5.4	6.6	7.6	8.8	9.7	9.2	8.6	8.3	7.9	8.2	8.8	9.5	9.1	9.1	8.1	7.7	7.4	7.2	9.7	4.3	7.3
27	7.1	7.1	6.7	6.5	6.2	6.0	6.0	6.4	6.7	6.7	7.3	7.5	7.7	8.5	9.1	9.3	9.7	10.1	9.3	9.1	8.4	7.6	7.3	7.2	10.1	6.0	7.6
28	7.0	7.0	6.5	6.3	6.5	6.8	7.7	8.4	9.1	8.7	8.9	8.4	8.7	10.0	10.4	10.4	9.9	9.2	8.9	8.4	8.1	7.6	7.3	7.2	10.4	6.3	8.2
29	7.3	7.2	6.9	6.8	7.6	7.9	8.7	9.6	11.5	13.0	13.5	13.5	14.3	13.9	13.9	13.6	12.9	12.0	11.7	10.6	9.6	8.9	8.4	8.1	14.3	6.8	10.5
30	7.4	7.5	7.3	7.4	7.5	7.9	8.3	9.7	10.9	11.0	10.3	9.8	9.8	9.7	10.4	10.0	10.4	10.5	10.2	9.3	8.4	7.6	7.4	7.2	11.0	7.2	9.0
31	7.3	7.1	7.0	7.0	6.8	7.3	7.4	8.3	8.2	8.2	9.2	10.5	10.8	11.6	11.8	10.8	10.5	10.3	10.5	9.4	8.5	7.7	7.1	7.1	11.8	6.8	8.8
Max.	11.4	11.4	11.2	10.7	10.4	10.2	10.6	10.8	11.5	13.0	13.5	13.5	14.3	14.5	15.0	14.7	13.8	13.4	14.3	14.0	14.4	12.8	12.4	12.0	15.0		
Min.	1.5	1.4	1.2	1.0	1.0	1.0	1.3	1.7	1.9	2.0	2.0	2.4	2.7	3.1	3.2	3.6	3.5	3.3	2.9	2.8	2.8	2.3	2.0	1.8		1.0	
Avg.	5.4	5.4	5.1	5.1	5.0	5.1	5.5	5.9	6.6	7.4	8.0	8.5	9.0	9.4	9.6	9.6	9.2	8.9	8.5	7.8	7.1	6.3	5.9	5.7			7.1

Total Hours in Month 744 Hours Data Available 744 Data Recovery 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Temperature at 2 meters (deg. C)

June 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.1	6.9	6.9	6.7	6.5	6.7	6.9	6.3	7.4	8.4	9.4	10.2	10.9	11.6	12.1	12.4	12.9	13.0	11.5	10.1	9.7	8.1	6.7	6.4	13.0	6.4	9.0
2	5.7	5.6	6.0	6.2	6.2	6.5	7.6	8.9	9.5	10.3	10.8	11.8	11.9	12.8	12.8	12.2	11.8	11.9	11.4	10.9	9.9	8.6	7.8	7.9	12.8	5.6	9.4
3	8.2	8.0	8.2	8.9	8.2	7.9	8.8	10.0	11.6	12.9	14.1	15.1	14.6	15.1	16.1	16.0	16.0	15.6	15.2	14.9	15.1	12.5	9.9	9.4	16.1	7.9	12.2
4	9.3	8.5	8.1	8.2	7.7	8.2	9.6	11.4	12.5	13.7	13.8	15.3	15.5	15.1	15.2	15.4	14.6	14.8	14.5	13.8	13.4	11.6	9.1	7.7	15.5	7.7	12.0
5	6.7	6.1	5.8	5.9	5.0	5.6	7.1	8.9	10.4	11.8	13.1	14.1	15.0	15.7	16.4	16.6	16.5	16.5	16.1	15.2	13.3	10.7	8.6	7.5	16.6	5.0	11.2
6	7.1	7.7	6.6	6.4	6.0	7.2	7.8	8.2	8.6	10.0	11.4	11.8	12.0	11.8	11.9	11.8	11.1	10.5	9.5	8.5	7.8	7.2	6.8	6.3	12.0	6.3	9.0
7	5.9	5.7	5.8	5.6	5.9	6.2	6.5	7.1	7.8	8.4	7.9	7.7	7.9	7.3	7.6	8.0	7.9	7.7	7.4	7.1	6.5	6.2	5.8	5.1	8.4	5.1	6.9
8	4.7	4.7	4.6	5.2	5.3	5.4	6.0	6.2	6.3	6.8	6.7	7.2	7.4	8.5	8.5	8.4	8.2	8.1	8.1	7.6	7.0	7.0	6.7	6.3	8.5	4.6	6.7
9	6.3	6.1	6.1	7.2	7.6	7.5	7.5	8.0	9.0	9.8	10.6	11.1	12.3	11.8	11.9	13.1	12.8	9.5	9.3	9.6	8.6	7.9	8.0	8.6	13.1	6.1	9.2
10	8.4	8.1	7.9	6.8	7.1	7.4	8.6	9.4																	9.4	6.8	7.8
Max.	9.3	8.5	8.2	8.9	8.2	8.2	9.6	11.4	12.5	13.7	14.1	15.3	15.5	15.7	16.4	16.6	16.5	16.5	16.1	15.2	15.1	12.5	9.9	9.4	16.6		
Min.	4.7	4.7	4.6	5.2	5.0	5.4	6.0	6.2	6.3	6.8	6.7	7.2	7.4	7.3	7.6	8.0	7.9	7.7	7.4	7.1	6.5	6.2	5.8	5.1		4.6	
Avg.	6.9	6.7	6.5	6.7	6.6	6.9	7.6	9.5	9.2	10.2	10.9	11.6	11.9	12.2	12.5	12.7	12.4	12.0	11.4	10.8	10.1	9.9	7.7	7.2			9.3

Total Hours in Month 224 **Hours Data Available** 224 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Wind Speed (m/s)

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.6	10.7	9.0	8.4	8.6	9.6	11.1	13.0	15.1	16.0	16.2	16.0	17.9	16.3	19.4	17.9	19.4	18.2	14.4	10.9	8.9	8.7	6.1	5.8	19.4	5.8	13.0
2	5.5	5.1	4.3	3.3	2.6	3.1	3.3	5.5	6.3	6.7	5.8	7.1	6.2	7.7	8.0	9.1	9.2	9.9	10.6	13.2	14.4	15.5	15.4	17.4	17.4	2.6	8.1
3	17.8	17.6	17.7	17.6	17.3	14.7	12.3	11.8	11.8	9.8	9.0	8.3	7.3	5.4	3.1										17.8	3.1	12.1
4																											
5																											
6																											
7								7.0	7.7	8.8	8.3	8.6	8.1	6.6	6.8	6.2	6.6	6.1	6.9	7.3	7.7	9.7	10.1	10.5	10.5	6.1	7.8
8	9.2	10.6	9.1	6.7	9.2	9.5	8.5	6.5	6.2	6.7	9.0	7.6	7.5	8.0	8.1	8.3	7.8	6.7	7.6	8.5	7.6	7.6	8.6	8.6	10.6	6.2	8.3
9	9.0	6.9	6.0	6.4	7.7	7.7	7.6	6.8	7.0	5.2	5.9	6.0	5.3	5.9	6.2	7.4	7.5	7.4	7.6	8.4	7.9	8.4	7.4	8.0	9.0	5.2	7.1
10	7.3	7.9	7.6	6.9	8.1	8.4	9.7	10.2	10.8	10.3	9.7	9.9	10.7	12.1	11.9	10.2	10.2	10.7	11.2	10.6	10.5	10.0	10.3	8.0	12.1	6.9	9.7
11	8.4	9.8	9.4	9.3	7.6	9.3	9.9	8.7	5.3	5.4	5.2	4.6	3.3	2.5	2.4	2.6	2.7	2.9	2.8	2.5	2.3	2.3	2.8	2.6	9.9	2.3	5.2
12	2.1	2.1	1.5	1.3	0.8	1.2	0.7	0.8	1.3	1.9	2.7	2.8	3.0	3.2	3.9	3.6	4.4	6.0	6.3	7.4	6.9	8.4	8.4	7.5	8.4	0.7	3.7
13	10.8	10.8	10.2	8.3	8.3	7.6	8.1	11.1	13.1	9.8	11.3	12.3	11.5	9.5	9.4	9.9	9.2	10.6	10.0	9.7	9.6	10.4	10.3	9.3	13.1	7.8	10.1
14	10.1	11.4	13.8	13.1	14.9	15.6	14.5	14.4	15.8	16.5	13.4	13.6	15.4	17.5	18.3	17.4	18.0	18.7	18.5	18.9	19.4	20.2	18.6	20.2	20.2	10.1	16.2
15	18.8	17.7	16.4	18.0	17.6	17.5	17.8	19.1	17.9	17.7	16.8	17.4	16.1	15.3	16.5	17.7	16.8	16.4	15.8	13.8	12.7	11.4	11.4	11.0	19.1	11.0	16.2
16	11.6	10.9	12.2	7.6	3.2	1.2	1.7	1.3	1.1	0.8	1.7	2.0	1.8	2.7	2.9	2.1	1.5	0.9	1.6	1.2	2.1	2.6	3.1	2.3	12.2	0.8	3.3
17	2.0	4.0	4.0	3.6	3.8	2.9	3.6	3.9	3.5	3.4	3.9	3.7	4.0	3.7	3.8	3.3	3.4	3.4	3.2	3.1	3.0	2.7	2.1	2.5	4.0	2.0	3.4
18	2.8	2.7	2.5	2.5	2.6	2.6	2.1	1.9	2.0	2.8	2.5	1.7	1.3	2.1	2.1	1.9	1.9	2.2	1.5	1.4	1.6	2.1	1.5	2.2	2.8	1.3	2.1
19	2.6	3.6	1.6	1.7	1.5	0.9	1.2	1.5	1.2	0.8	0.7	0.6	2.1	4.3	2.4	1.4	2.3	3.8	5.0	6.0	5.1	4.2	3.9	3.7	6.0	0.6	2.6
20	3.0	2.8	2.2	2.0	2.8	3.0	1.2	1.6	2.4	2.6	2.7	1.8	2.3	9.7	13.6	13.3	12.4	12.6	14.4	12.9	13.0	12.8	13.2	12.9	14.4	1.2	7.1
21	9.9	15.5	15.6	16.6	15.3	16.8	15.6	12.6	5.6	1.7	1.2	3.3	4.0	5.9	4.3	8.3	5.3	3.4	2.2	6.1	2.7	3.3	2.7	2.2	16.8	1.2	7.5
22	2.6	2.6	4.3	3.4	2.6	3.2	2.7	2.8	2.2	1.5	1.6	2.0	2.5	3.0	3.5	2.8	2.5	2.5	2.9	3.3	3.5	3.8	3.6	4.0	4.3	1.5	2.9
23	3.6	3.6	3.2	3.3	4.7	3.9	3.5	2.3	2.0	1.6	1.1	1.4	0.8	0.9	1.3	1.1	1.4	0.0	0.0	0.2	1.3	2.1	2.3	2.7	4.7	0.0	2.0
24	2.9	3.3	3.8	5.0	6.2	7.6	7.6	8.0	9.4	8.7	7.8	7.7	8.6	12.7	14.3	14.6	15.6	15.8	16.2	15.0	16.3	16.0	18.5	18.9	18.9	2.9	10.9
25	21.1	19.7	21.5	20.8	18.8	18.0	15.5	13.2	16.3	17.9	16.2	16.4	16.8	18.8	18.5	17.7	15.9	15.6	16.3	14.7	14.3	12.4	7.8	9.6	21.5	7.8	16.4
26	10.1	8.2	6.1	2.0	1.5	1.2	2.3	3.7	5.0	4.8	4.2	3.9	1.8	1.3	2.2	1.7	2.3	3.5	3.6	4.3	4.2	3.8	3.2	3.3	10.1	1.2	3.7
27	3.0	2.6	3.2	2.7	3.0	2.7	2.4	1.5	1.8	2.6	1.7	0.9	1.4	2.0	1.6	1.3	1.1	1.4	1.5	1.4	1.5	1.5	2.9	3.2	3.2	0.9	2.0
28	4.9	5.7	6.4	6.0	7.7	7.9	7.4	7.9	7.0	6.2	7.7	7.4	9.0	7.4	5.6	2.7	5.5	4.1	3.3	1.5	2.6	4.3	4.5	4.5	9.0	1.5	5.7
29	4.0	2.7	3.2	3.3	2.1	1.4	2.9	5.2	6.6	4.1	3.0	2.9	3.2	1.3	1.2	1.4	1.2	0.9	2.2	5.3	5.4	2.7	4.1	6.0	6.6	0.9	3.2
30	3.0	3.1	4.6	6.9	5.6	4.3	3.6	4.1	2.7	4.4	5.7	7.5	8.1	9.5	10.0	10.3	10.5	10.3	11.1	11.0	11.3	10.7	10.4	8.6	11.3	2.7	7.4
31	11.6	13.3	13.3	12.0	13.7	13.0	13.5	15.7	16.4	14.5	14.0	11.8	11.6	13.0	12.5	13.2	13.1	13.1	13.0	12.4	13.7	13.6	13.3	10.3	16.4	10.3	13.1
Max.	**21.1**	**19.7**	**21.5**	**20.8**	**18.8**	**18.0**	**17.8**	**19.1**	**17.9**	**18.0**	**16.8**	**17.4**	**17.9**	**18.8**	**19.4**	**17.9**	**19.4**	**18.7**	**18.5**	**18.3**	**19.4**	**20.2**	**18.6**	**20.2**	**21.5**		
Min.	**2.0**	**2.1**	**1.5**	**1.3**	**0.8**	**0.9**	**0.7**	**0.8**	**1.1**	**0.8**	**0.7**	**0.6**	**0.8**	**0.9**	**1.2**	**1.1**	**1.1**	**0.0**	**0.0**	**0.2**	**1.3**	**1.5**	**1.5**	**2.2**		**0.0**	
Avg.	**7.7**	**8.0**	**7.9**	**7.4**	**7.3**	**7.2**	**7.0**	**7.2**	**7.3**	**7.0**	**6.8**	**6.8**	**6.8**	**7.5**	**7.6**	**7.7**	**7.7**	**7.7**	**7.8**	**7.8**	**7.8**	**7.8**	**7.7**	**7.6**			**7.5**

Total Hours In Month 744 **Hours Data Available** 656 **Data Recovery** 88.2%

HCG, Inc.

Pebble 1 Meteorological Station – Wind Speed (m/s)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.4	10.5	11.3	10.7	9.6	7.7	8.9	9.6	8.8	7.6	10.0	11.3	8.7	9.9	12.3	13.7	12.7	14.3	14.3	14.8	11.8	11.6	14.6	17.0	17.0	7.6	11.3
2	14.6	14.5	14.6	13.6	13.0	13.3	12.9	14.2	10.6	9.1	10.6	10.3	10.2	11.8	11.3	11.8	11.3	10.8	11.0	11.7	6.8	7.1	5.4	6.1	14.6	5.4	11.1
3	6.7	7.0	4.2	4.2	4.2	3.5	3.2	2.5	1.2	0.7	0.6	0.8	1.0	1.6	1.3	0.8	1.5	1.9	1.7	1.1	0.5	0.8	2.1	2.1	7.0	0.5	2.3
4	2.5	2.2	0.5	1.3	1.9	2.0	2.2	1.8	0.4	0.8	0.8	1.3	1.3	0.7	0.4	1.3	1.8	1.8	2.7	2.4	2.4	2.3	3.8	4.9	4.9	0.4	1.8
5	5.4	3.2	4.0	4.2	5.2	5.8	7.3	8.0	8.0	7.3	6.0	7.5	6.9	10.5	13.5	15.2	16.5	17.0	17.3	18.5	20.8	21.2	21.8	22.0	22.0	3.2	11.4
6	21.4	21.8	21.4	21.5	20.2	17.6	19.0	18.6	17.9	18.6	19.3	20.1	18.2	17.1	17.0	17.9	18.6	18.2	18.6	17.7	16.2	17.5	18.9	17.4	21.8	16.2	18.8
7	16.8	15.7	15.1	15.8	16.2	16.2	16.4	14.2	13.2	11.0	12.6	13.5	9.9	10.4	9.1	6.7	6.9	8.2	8.8	9.3	7.8	7.8	6.1	4.9	16.8	4.9	11.4
8	4.1	3.3	3.4	2.2	1.8						3.1	5.2	5.7	4.9	6.7	8.0	9.2	9.4	7.8	5.8	5.7	6.3	6.7	6.7	9.4	1.8	5.6
9	7.1	6.6	6.1	5.6	5.6	4.3	1.5	4.4	6.5	7.2	7.4	7.7	10.6	10.9	11.3	12.6	12.7	13.4	13.7	13.8	14.0	13.6	14.0	13.8	14.0	1.5	9.3
10	12.5	11.9	11.5	10.8	11.0	10.8	10.0	8.9	7.1	7.3	7.2	7.6	8.8	9.0	7.2	6.4	6.3	6.8	5.8	6.1	6.3	6.0	4.9	5.1	12.5	4.9	8.1
11	5.2	4.6	5.2	5.2	5.7	6.3	7.7	7.0	7.6	8.4	7.9	6.6	7.0	6.1	5.8	6.3	5.6	5.3	5.8	5.1	5.4	5.3	4.8	5.4	8.4	4.6	6.0
12	5.2	6.1	6.8	6.6	7.6	6.0	5.8	5.4	4.8	4.7	3.1	1.2	3.6	4.4	4.3	4.0	6.8	8.7	7.0	8.2	10.5	11.5	13.4	15.1	15.1	1.2	6.7
13	14.5	15.5	13.2	14.0	15.1	17.9	19.9	23.4	24.3	24.7	26.9	28.5	30.4	29.0	27.3	17.8	13.2	9.9	10.7	10.9	8.0	10.1	10.6	16.0	30.4	8.0	18.0
14	19.1	23.1	28.8	24.8	31.5	30.1	32.3	32.0	29.1	27.5	24.9	20.0	15.3	13.7	11.6	11.2	10.8	10.0	8.5	8.7	7.7	9.4	8.9	7.5	32.3	7.5	18.6
15	8.1	8.7	6.8	7.1	6.5	4.9	6.1	7.7	8.4	6.6	7.2	7.8	6.5	4.8	2.9	3.3	3.6	2.7	2.7	2.8	4.9	5.7	4.7	6.3	8.7	2.7	5.7
16	7.4	7.4	9.4	12.2	13.2	16.6	13.1	17.3	20.2	20.2	20.0	21.1	20.6	21.2	20.5	18.1	17.8	18.3	17.5	16.2	17.8	17.0	16.4	15.3	21.2	7.4	16.4
17	15.6	15.4	14.8	13.7	13.1	12.8	12.3	12.6	11.8	10.5	11.1	11.1	12.1	14.4	15.1	13.7	12.3	14.9	16.2	17.7	17.5	14.7	15.0	16.2	17.7	10.5	13.9
18	15.4	14.6	15.9	13.4	16.5	20.8	19.0	22.1	18.4	20.9	19.5	20.1	21.2	19.7	19.2	17.6	17.5	17.9	15.8	14.5	14.7	14.4	13.5	10.9	22.1	10.9	17.2
19	11.7	12.2	11.8	9.9	9.4	8.3	7.3	8.0	8.0	9.9	10.5	9.6	11.0	12.4	13.2	13.5	10.0	11.1	14.5	16.2	16.6	13.9	11.3	12.6	16.6	7.3	11.4
20	14.6	15.1	17.0	17.7	20.5	21.4	21.2	19.7	19.6	20.3	20.0	19.8	16.7	17.8	18.6	17.0	16.2	16.5	17.7	16.4	15.1	15.8	13.9	12.1	21.4	12.1	17.6
21	13.2	12.1	8.8	5.4	4.8	4.0	4.0	3.1	2.3	2.7	2.4	3.2	3.9	3.8	4.0										13.2	2.3	5.2
22																											
23													10.8	11.3	13.7	13.8	14.2	14.6	14.5	14.1	11.9	11.2	15.1	17.3	17.3	10.8	13.5
24	15.2	10.6	10.2	5.4	5.1	1.7	1.7	1.9	2.3	3.1	4.0	4.1	4.3	5.2	5.8	4.7	5.1	5.5	5.1	5.6	5.5	4.6	3.8	3.5	15.2	1.7	5.2
25	2.3	0.9	1.7	1.9	2.3	2.3	2.0	1.7	1.7	2.1	1.7	2.2	1.1	2.3	1.0	1.3	1.5	2.8	3.1	3.5	2.2	1.1	2.0	1.6	3.5	0.9	1.9
26	2.1	2.0	1.6	1.2	1.1	1.7	1.5	1.5	1.5	2.1	2.0	1.6	1.6	2.4	3.1	3.4	3.7	4.3	4.7	5.5	5.2	4.4	4.4	4.6	5.6	1.1	2.8
27	5.1	4.5	5.0	4.5	4.5	4.5	3.8	3.4	3.6	3.1	3.8	3.5	3.1	2.4	2.6	3.1	4.4	3.8	3.7	4.2	3.8	2.9	3.8	3.6	5.1	2.4	3.8
28	3.6	2.7	3.4	4.0	4.4	5.0	5.4	5.0	5.2	4.6	4.0	5.2	3.4	3.3	3.1	3.9	4.2	3.8	3.1	1.9	1.7	0.9	1.0	1.3	5.4	0.9	3.5
Max.	**21.4**	**23.1**	**28.8**	**24.8**	**31.5**	**30.1**	**32.3**	**32.0**	**29.1**	**27.5**	**26.9**	**28.5**	**30.4**	**29.0**	**27.3**	**18.1**	**18.6**	**18.3**	**18.6**	**18.5**	**20.8**	**21.2**	**21.8**	**22.0**	**32.3**		
Min.	**2.1**	**0.9**	**0.6**	**1.2**	**1.1**	**1.7**	**1.5**	**1.5**	**0.4**	**0.7**	**0.6**	**0.8**	**1.0**	**0.7**	**0.4**	**0.8**	**1.5**	**1.8**	**1.7**	**1.1**	**0.5**	**0.8**	**1.0**	**1.3**		**0.4**	
Avg.	**10.0**	**9.7**	**9.7**	**9.1**	**9.6**	**9.8**	**9.8**	**10.2**	**9.7**	**9.6**	**9.5**	**9.6**	**9.5**	**9.7**	**9.7**	**9.5**	**9.4**	**9.7**	**9.7**	**9.7**	**9.3**	**9.1**	**9.3**	**9.6**			**9.6**

Total Hours in Month 672 **Hours Data Available** 622 **Data Recovery** 92.6%

HCG, Inc.

Pebble 1 Meteorological Station – Wind Speed (m/s)

March 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.1	1.5	2.0	2.0	1.7	1.6	2.5	4.8	5.7	5.0	5.8	7.3	9.5	9.1	7.3	6.3	7.2	7.0	5.9	4.8	5.4	6.8	7.0	6.7	9.5	1.5	5.2
2	5.0	4.5	3.9	4.2	4.2	4.4	4.1	4.0	3.8	3.8	3.3	3.2	3.6	3.9	3.7	3.7	3.3	3.1	2.5	1.9	1.5	1.2	1.6	2.0	5.0	1.2	3.4
3	1.5	1.9	2.8	5.0	5.9	5.1	6.2	6.7	7.7	10.5	12.5	12.4	10.1	11.2	12.0	10.3	10.6	11.9	12.3	12.6	8.5	7.3	4.4	3.9	12.6	1.5	8.1
4	3.1	2.2	2.4	3.0	4.5	4.6	4.5	3.1	3.4	3.0	3.7	2.2	2.2	1.4	1.0	1.5	1.6	1.6	1.6	2.9	2.9	1.4	1.1	1.4	4.6	1.0	2.5
5	1.7	3.2	2.3	4.7	9.3	10.9	14.5	17.3	18.0	18.5	17.6	18.5	19.5	18.5	18.5	16.8	16.5	17.0	15.1	13.4	13.8	11.8	10.2	12.9	19.5	1.7	13.3
6	13.3	13.9	15.1	15.9	17.4	17.0	16.7	17.8	14.9	9.1	7.8	12.0	14.5	14.3	11.3	8.9	4.3	9.4	14.6	5.7	6.5	6.3	7.7	6.6	17.8	4.3	11.7
7	4.2	5.3	5.9	2.8	2.6	4.3	7.4	13.2	15.8	11.7	14.9	16.6	16.2	18.3	16.8	18.6	17.2	15.1	13.1	7.8	4.1	6.2	7.6	4.4	18.8	2.8	10.5
8	13.7	14.4	14.4	13.0	12.8	11.1	10.6	9.1	6.0	2.8	4.1	3.3	6.9	6.8	13.4	15.7	13.1	17.8	23.0	22.3	19.5	16.9	19.0	18.4	23.0	2.8	12.9
9	19.5	19.3	20.6	20.3	18.8	18.0	16.5	17.6	15.5	12.1	9.2	9.6	10.7	13.6	13.2	12.7	12.2	13.1	14.7	15.0	11.7	6.7	5.6	6.7	20.6	5.6	13.8
10	8.1	11.4	8.5	7.8	8.2	6.8	9.0	6.9	5.7	5.0	5.4	4.9	3.9	3.8	4.1	6.8	5.7	2.4	2.7	2.9	3.0	3.9	4.6	6.9	11.4	2.4	5.6
11	6.6	5.5	4.9	6.8	14.1	16.7	16.2	13.1	8.6	9.2	14.6	13.4	14.7	15.9	16.6	18.0	17.7	15.3	9.9	9.8	8.3	7.2	10.9	11.7	18.0	4.9	11.9
12	13.0	13.6	14.2	14.5	13.2	12.6	13.7	14.2	14.8	17.0	14.9	10.6	10.6	12.5	10.8	8.7	8.4	8.3	7.7	8.2	9.5	8.6	7.7	6.6	17.0	6.6	11.4
13	9.1	6.2	5.3	5.6	5.2	4.5	5.4	5.6	4.1	2.5	1.3	1.7	1.5	1.7	2.4	1.9	2.6	4.2	3.4	2.6	2.9	2.3	3.0	2.0	9.1	1.3	3.6
14	2.5	2.3	2.6	2.3	2.7	2.9	2.7	2.6	3.1	3.2	2.6	4.9	5.6	7.2	7.7	7.0	5.9	8.6	9.9	10.4	10.3	10.2	9.8	13.2	13.2	2.3	5.6
15	13.1	11.5	10.3	11.5	12.4	13.6	12.9	11.7	12.4	14.4	16.8	16.8	18.5	19.1	18.8	17.7	16.3	14.1	10.5	10.6	11.8	11.8	10.7	8.3	19.1	8.3	13.6
16	8.8	7.0	5.9	7.8	5.6										3.9	4.0	2.3	4.5	4.9	3.9	3.7	2.5	1.9	1.9	8.8	1.9	4.6
17	2.0	1.7	1.0	1.7	2.3	3.0	3.8	4.6	6.3	6.0	4.0	1.7	1.4	1.5	1.7	1.6	2.0	2.2	3.4	2.5	1.9	2.5	4.1	4.5	6.3	1.0	2.8
18	3.1	3.2	4.1	2.6	3.4	3.0	2.9	3.1	8.6	9.2	6.9	5.1	6.1	5.8	6.4	5.1	3.8	4.9	4.7	3.5	5.9	6.6	5.4	5.0	9.2	2.6	4.9
19	2.6	1.2	1.9	2.0	2.4	2.7	3.0	3.6	5.6	4.5	4.4	4.5	5.3	6.5	8.5	7.9	7.9	7.9	8.1	10.3	11.9	12.9	10.7	10.1	12.9	1.2	6.1
20	10.8	10.5	10.2	9.2	9.9	12.1	12.7	13.4	13.8	12.5	13.3	13.8	16.5	20.4	15.7	15.7	15.5	14.1	14.6	15.5	14.1	11.5	9.0	5.5	20.4	5.5	12.9
21	4.6	4.3	5.3	7.3	8.1	7.8	10.3	10.9	9.1	7.5	6.2	4.0	7.2	11.2	12.0	11.1	12.6	11.8	13.4	12.3	10.5	9.6	10.3	8.5	13.4	4.0	9.0
22	6.8	7.8	9.8	6.4	3.9	2.7	2.5	1.6	1.6	1.6	1.8	1.0	1.1	1.0	2.5	2.8	7.0	8.1	8.7	7.9	6.4	7.1	7.0	4.7	9.8	1.0	4.6
23	3.7	4.3	4.0	4.6	5.9	7.0	6.0	5.8	5.5	7.3	8.3	9.3	12.4	12.9	15.0	14.7	13.7	13.3	13.0	13.3	13.4	13.8	13.9	14.0	15.0	3.7	9.8
24	14.0	14.2	14.4	15.5	15.5	16.0	15.9	15.9	15.6	15.2	14.8	14.8	14.9	15.1	15.4	15.1	14.9	14.1	13.8	11.8	11.5	10.9	10.4	5.1	16.0	5.1	13.9
25	4.2	5.4	5.0	4.9	5.2	6.3	7.0	7.2	7.1	6.6	6.6	6.5	6.3	5.7	6.2	6.4	6.5	6.0	7.0	7.6	7.2	6.5	6.0	6.2	7.6	4.2	6.2
26	6.8	7.0	7.7	7.9	8.1	8.4	9.2	9.9	10.4	9.9	8.4	7.7	7.7	7.4	7.2	7.3	6.7	5.0	4.0	3.4	3.3	3.6	2.9	1.7	10.4	1.7	6.7
27	1.9	2.2	1.8	2.0	2.2	2.1	3.0	3.2	3.5	3.4	2.4	0.7	1.1	2.4	1.4	1.2	1.2	1.0	1.2	2.4	2.0	2.2	3.9	6.8	6.8	0.7	2.3
28	6.3	3.8	8.1	8.2	9.5	8.6	8.6	8.3	6.7	7.4	7.8	4.0	3.4	2.5	6.0	6.9	7.0	5.9	4.9	4.4	3.3	4.8	6.3	5.6	9.5	2.5	6.2
29	3.1	2.3	1.7	3.4	3.0	1.7	2.4	4.3	3.3	1.3	2.1	4.3	2.4	2.7	1.1	0.5	0.5	0.7	0.5	1.3	1.2	2.0	1.6	1.0	4.3	0.5	2.0
30	1.1	1.6	1.2	1.1	1.7	1.9	1.8	2.9	3.5	2.8	3.5	2.4	2.0	3.2	3.3	4.6	5.3	7.4	9.8	10.5	13.0	14.6	16.2	17.0	17.0	1.1	5.5
31	17.4	17.9	18.3	18.7	20.0	18.9	17.9	14.9	15.8	14.7	12.7	12.0	11.6	12.2	12.0	10.8	10.4	9.5	10.0	8.8	7.6	6.6	6.5	5.7	20.0	5.7	13.0
Max.	19.5	19.3	20.6	20.3	20.0	18.9	17.9	17.8	18.0	18.5	17.6	18.5	19.5	20.4	18.8	18.6	17.7	17.8	23.0	22.3	19.5	16.9	19.0	18.4	23.0		
Min.	1.1	1.2	1.0	1.1	1.7	1.6	1.8	1.6	1.6	1.3	1.3	0.7	1.1	1.0	1.0	0.5	0.5	0.7	0.5	1.3	1.2	1.2	1.1	1.0		0.5	
Avg.	6.9	6.8	6.9	7.3	7.7	7.9	8.3	8.6	8.5	7.9	7.9	7.7	8.3	8.9	8.9	8.7	8.4	8.6	8.6	8.1	7.6	7.3	7.3	6.9			7.9

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station – Wind Speed (m/s)

April 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.2	5.1	5.2	4.8	3.9	3.5	3.6	2.5	1.7	0.9	1.0	2.2	1.5	1.1	1.0	1.1	1.2	1.5	1.0	0.9	0.9	0.7	1.0	1.5	5.2	0.7	2.2
2	1.7	2.0	1.9	2.0	2.8	2.7	2.1	2.1	2.5	3.1	2.5	2.7	3.0	4.9	5.7	5.7	5.3	5.0	4.0	3.9	3.7	4.2	4.5	5.0	5.7	1.7	3.5
3	5.3	5.3	6.7	6.1	5.8	5.9	5.2	5.4	4.1	4.1	5.1	4.9	5.2	5.4	6.4	6.9	7.4	7.1	7.7	5.8	6.7	5.4	5.3	5.3	7.7	4.1	5.8
4	5.3	5.2	4.8	4.6	4.4	4.7	5.2	5.2	5.0	4.7	5.2	6.0	6.6	6.7	6.5	5.3	5.7	5.7	5.6	6.5	6.8	7.7	7.5	8.2	8.2	4.4	5.8
5	8.1	9.4	11.1	12.5	12.3	11.9	13.3	13.7	13.9	13.7	13.8	12.5	12.1	11.6	10.9	10.0	10.2	8.9	7.3	7.8	7.5	6.2	3.9	3.3	13.9	3.3	10.2
6	2.6	2.4	1.6	1.0	1.3	2.9	2.9	2.7	6.8	11.4	15.9	14.9	13.5	13.1	13.2	16.1	16.6	17.1	16.5	15.6	12.0	9.4	5.5	4.6	17.1	1.0	9.2
7	2.7	2.4	5.9	12.8	12.2	10.5	12.0	13.3	13.9	13.5	12.8	12.9	12.2	10.4	9.4	9.2	8.1	8.4	7.7	6.9	7.2	5.8	2.4	3.0	13.9	2.4	9.0
8	2.9	1.7	1.7	1.5	1.7	1.3	1.3	0.7	1.1	2.0	2.1	3.7	4.5	7.0	7.8	5.7	5.0	3.5	2.2	3.0	2.5	1.9	3.8	4.2	7.8	0.7	3.0
9	3.1	2.9	2.7	2.3	1.0	1.3	1.0	2.1	2.4	2.3	2.1	1.8	1.4	1.3	1.5	2.6	3.9	3.7	2.8	4.0	2.6	2.4	3.4	4.9	4.9	1.0	2.5
10	6.1	5.1	4.0	4.1	4.6	3.8	4.2	4.8	4.6	4.9	5.3	6.4	7.6	6.2	7.1	7.9	6.8	8.5	7.6	8.1	8.0	7.9	10.5	10.7	10.7	3.8	6.6
11	9.3	9.3	10.3	12.0	10.7	10.4	10.4	11.4	10.6	12.1	14.6	14.8	12.9	13.9	11.7	10.7	15.6	11.7	11.6	10.9	8.7	7.7	6.9	8.2	15.6	6.9	11.1
12	9.0	12.0	13.4	13.3	10.9	10.5	10.6	10.4	8.9	9.4	10.7	7.5	7.9	7.3	5.9	4.8	5.2	4.3	3.7	3.4	3.4	3.2	2.1	1.2	13.4	1.2	7.5
13	1.2	0.9	0.9	0.5	1.4	1.8	1.8	1.7	1.0	2.1	1.7	1.5	1.9	2.3	2.3	2.5	2.6	3.7	2.2	3.3	4.4	4.3	3.1	3.7	4.4	0.5	2.2
14	4.7	4.6	4.9	5.6	5.7	5.5	3.5	2.4	2.0	3.4	3.4	5.2	7.1	8.3	8.6	7.1	6.4	5.4	4.8	4.5	3.5	2.8	3.6	3.2	8.6	2.0	4.9
15	3.3	2.4	2.2	2.7	4.7	5.5	4.4	3.9	4.1	5.2	6.5	8.2	8.6	6.8	8.4	8.7	10.4	9.1	8.4	7.9	9.1	7.3	6.2	7.3	10.4	2.2	6.3
16	5.8	7.1	7.5	5.1	5.3	5.1	7.0	8.5	7.7	8.6	10.1	11.4	11.3	12.6	11.7	10.6	8.2	7.7	8.7	5.9	3.5	4.1	4.4	4.0	12.6	3.5	7.6
17	5.1	5.5	6.0	7.9	6.4	5.5	5.1	6.5	5.9	7.6	8.8	10.5	8.8	9.6	8.2	7.0	6.9	8.4	7.9	6.5	5.6	6.3	6.6	6.8	10.5	5.1	7.0
18	5.9	6.6	6.8	7.2	7.4	7.4	8.0	8.1	7.8	8.2	8.5	8.7	8.5	8.3	8.1	8.1	7.8	7.5	7.5	7.2	7.2	6.8	6.4	5.9	8.7	5.9	7.5
19	5.6	4.3	3.4	3.9	3.2	1.7	1.4	2.0	1.6	2.0	4.6	5.3	5.6	4.5	3.5	4.3	3.2	3.1	2.8	1.2	0.7	0.5	1.2	1.6	5.6	0.5	3.0
20	2.1	2.5	1.4	1.7	0.6	0.8	1.1	0.9	0.8	0.9	1.6	1.8	1.5	1.0	2.1	3.0	3.2	3.4	3.6	2.6	3.2	4.5	4.5	4.2	4.5	0.6	2.2
21	3.0	2.8	2.4	2.5	2.9	3.4	7.1	11.4	14.4	17.0	19.8	23.8	26.2	28.1	30.1	30.8	30.5	29.7	29.2	27.6	25.5	26.1	24.8	24.1	30.8	2.4	18.6
22	23.4	21.9	22.6	20.3	18.4	14.3	9.4	10.8	9.8	8.8	8.2	8.2	8.8	8.4	8.6	8.7	7.9	7.0	6.8	6.7	3.2	5.2	5.3	3.1	23.4	3.1	10.7
23	2.2	3.0	2.4	1.8	1.2	1.9	0.4	0.6	2.5	3.5	6.4	6.4	5.6	6.7	6.0	5.9	7.0	4.6	3.9	2.0	1.6	1.3	4.2	2.8	7.0	0.4	3.5
24	2.6	2.0	2.5	2.8	2.8	3.1	3.5	2.9	2.5	2.8	0.8	0.7	1.4	1.2	0.5	1.2	0.4	0.7	1.3	2.0	2.3	2.5	1.6	1.9	3.5	0.4	1.9
25	3.9	3.3	4.9	3.7	3.2	2.8	2.1	1.6	1.1	1.6	1.4	1.9	4.0	4.5	4.7	5.6	6.9	5.9	6.3	4.0	4.6	3.3	3.5	4.0	6.9	1.1	3.7
26	4.3	4.7	4.7	6.0	5.9	2.7	2.1	1.6	1.8	3.0	4.1	4.9	6.3	5.5	5.8	5.8	6.0	6.8	7.7	8.1	10.8	11.5	9.5	8.9	11.5	1.6	5.8
27	9.5	6.4	6.0	7.9	7.8	6.7	7.6	7.3	9.2	9.6	9.0	8.4	8.0	7.4	7.3	6.4	5.8	4.8	2.6	2.8	1.5	1.1	1.5	1.8	9.6	1.1	6.1
28	2.7	3.3	4.1	4.3	4.8	4.7	4.6	4.9	5.4	5.6	6.3	7.2	6.1	6.4	8.3	9.3	10.1	12.7	11.0	9.1	6.7	6.0	4.6	6.0	12.7	2.7	6.5
29	6.2	5.2	2.9	2.9	3.6	2.8	1.7	1.8	1.6	1.3	1.6	3.2	8.6	11.2	12.4	10.2	9.6	7.7	6.9	6.3	3.1	3.1	1.5	1.3	12.4	1.3	4.9
30	1.7	1.2	1.5	2.2	2.4	2.3	3.2	3.4	3.9	3.6	2.3	2.0	1.9	2.0	2.1	3.0	3.8	4.3	5.5	4.6	4.3	4.8	3.5	3.5	5.5	1.2	3.0
Max.	**23.4**	**21.9**	**22.6**	**20.3**	**18.4**	**14.3**	**13.3**	**13.7**	**14.4**	**17.0**	**19.8**	**23.8**	**26.2**	**28.1**	**30.1**	**30.8**	**30.5**	**29.7**	**29.2**	**27.6**	**25.5**	**26.1**	**24.8**	**24.1**	**30.8**		
Min.	**1.2**	**0.9**	**0.9**	**0.5**	**0.6**	**0.8**	**0.4**	**0.6**	**0.8**	**0.9**	**0.8**	**0.7**	**1.4**	**1.0**	**0.5**	**1.1**	**0.4**	**0.7**	**1.0**	**0.9**	**0.7**	**0.5**	**1.0**	**1.2**		**0.4**	
Avg.	**5.2**	**5.0**	**5.2**	**5.5**	**5.3**	**4.9**	**4.9**	**5.2**	**5.3**	**5.9**	**6.5**	**7.0**	**7.3**	**7.5**	**7.5**	**7.5**	**7.6**	**7.3**	**6.8**	**6.3**	**5.7**	**5.5**	**5.1**	**5.1**			**6.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Wind Speed (m/s)

May 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	4.9	4.4	5.3	6.1	2.9	4.8	5.4	3.0	3.8	4.1	4.8	4.7	5.4	6.1	7.0	7.7	8.3	8.7	8.9	8.5	7.9	7.8	6.1	8.9	2.9	5.8
2	4.1	5.0	5.5	6.4	3.0	1.5	1.7	1.6	2.3	2.0	1.7	3.5	3.4	5.0	5.3	5.0	5.6	5.7	4.8	4.7	4.2	4.1	4.7	4.5	6.4	1.5	4.0
3	4.0	3.5	3.1	1.5	0.8	0.7	1.2	1.3	2.2	4.1	5.3	6.3	7.1	7.8	9.4	11.4	10.4	9.2	8.1	6.0	4.1	5.0	4.7	6.8	11.4	0.7	5.2
4	7.2	5.9	5.8	5.8	6.5	6.2	6.1	7.2	6.6	6.8	7.3	8.4	9.3	9.7	10.1	11.1	11.1	11.3	10.9	10.4	9.6	9.4	9.5	9.7	11.3	5.8	8.4
5	11.6	13.3	14.5	15.1	15.7	16.1	17.7	19.8	19.5	18.8	19.9	20.1	19.0	19.3	20.0	21.4	22.0	23.6	22.6	22.6	22.2	23.9	23.8	24.6	24.6	11.6	19.5
6	22.6	22.9	21.7	19.8	18.9	16.4	16.2	15.4	14.5	15.5	15.9	18.5	18.3	18.2	14.9	13.1	14.1	13.0	12.7	10.4	10.6	11.5	10.7	9.9	22.9	9.9	15.6
7	8.7	8.4	7.4	7.1	6.9	6.2	6.2	2.8	3.2	2.1	1.9	2.3	4.0	5.7	6.7	7.8	6.8	6.6	5.6	7.3	5.9	4.9	4.8	5.6	8.7	1.9	5.5
8	4.7	4.1	2.0	1.8	1.8	1.1	0.8	0.8	1.1	1.4	2.0	2.5	2.7	2.4	2.8	3.0	2.7	3.0	3.5	2.9	2.7	1.2	0.5	1.2	4.7	0.5	2.2
9	1.7	1.3	0.8	1.3	1.3	0.9	1.3	1.1	1.0	1.2	3.5	3.6	3.6	3.2	4.9	5.5	6.0	6.3	5.6	5.7	6.1	6.2	4.5	3.9	6.3	0.8	3.4
10	4.5	3.7	3.4	1.5	1.2	0.6	1.4	1.9	1.9	3.3				7.6	8.7	8.2	8.2	8.9	8.6	6.9	5.5	6.5	4.6	5.1	8.9	0.6	4.9
11	6.0	5.4	1.4	0.7	0.8	1.8	1.6	1.4	1.5	3.6	7.5	9.8	10.9	10.3	9.2	9.2	8.3	8.7	7.5	3.9	2.1	2.7	3.2	2.2	10.9	0.7	5.0
12	1.7	1.7	1.7	4.3	5.7	5.1	8.7	10.8	7.8	8.0	13.8	17.1	18.5	20.8	14.6	15.5	15.9	17.4	17.4	17.2	14.5	11.1	10.9	10.5	20.8	1.7	11.3
13	9.8	8.8	4.8	2.9	2.4	3.6	3.5	3.9	3.3	2.7	4.4	5.8	5.8	5.6	5.3	2.2	4.0	4.2	2.8	2.2	1.8	6.9	3.2	1.4	9.8	1.4	4.2
14	1.5	1.7	1.0	1.7	3.2	3.1	2.7	1.6	3.7	5.9	9.4	10.9	13.4	14.0	14.3	16.3	16.1	11.5	10.0	11.1	9.6	9.1	7.7	7.1	16.3	1.0	7.8
15	6.6	6.3	5.3	4.4	4.2	4.5	4.5	2.4	2.6	2.2	4.1	4.2	3.9	5.2	6.9	7.5	8.5	9.0	9.4	8.5	8.6	8.1	8.0	7.3	9.4	2.2	5.9
16	4.8	4.3	4.9	5.2	5.5	5.8	6.1	7.7	8.0	8.1	7.7	8.0	8.0	8.1	8.8	8.9	8.7	7.7	7.8	6.7	5.0	4.6	4.8	2.8	8.9	2.8	6.6
17	3.1	2.5	2.3	1.4	0.4	0.8	0.9	1.8	2.4	2.4	2.0	1.5	2.7	3.5	3.9	2.8	4.5	2.7	2.6	3.4	3.4	3.4	1.5	3.0	4.5	0.4	2.5
18	2.5	2.1	2.7	2.5	2.2	2.3	1.0	1.3	1.7	3.0	2.2	2.8	3.9	3.3	3.9	3.7	4.3	3.0	3.3	4.9	3.8	3.6	3.8	4.4	4.9	1.0	3.0
19	5.3	4.7	4.5	4.0	3.9	3.8	3.8	3.7	3.7	4.1	4.2	3.8	2.7	2.2	2.6	3.7	1.9	2.7	1.5	2.0	1.5	1.4	1.7	1.4	5.3	1.4	3.1
20	1.4	1.3	4.2	5.3	2.3	1.6	1.5	1.6	1.2	1.2	1.7	2.1	2.5	3.9	5.3	6.8	5.2	2.4	6.0	6.6	5.4	4.7	4.6	4.2	6.8	1.2	3.5
21	4.7	5.4	4.0	3.7	2.9	3.0	2.3	2.1	1.9	1.9	1.1	2.0	2.3	3.6	4.4	3.5	4.3	3.8	3.3	2.8	2.3	2.5	2.8	1.8	5.4	1.1	3.0
22	1.3	1.7	1.1	0.8	0.1	0.3	0.8	1.4	2.5	3.8	4.4	3.8	3.6	2.3	1.8	3.0	5.5	3.5	2.6	3.1	2.9	2.7	1.6	0.9	5.5	0.1	2.3
23	1.7	3.0	1.9	1.5	1.8	0.3	0.9	1.2	0.6	0.8	1.7	1.4	2.6	4.5	4.7	4.2	3.8	3.1	4.1	2.1	2.3	2.8	2.9	3.7	4.7	0.3	2.4
24	4.7	5.1	5.5	5.9	6.2	6.2	6.2	6.9	7.3	6.8	7.9	8.0	7.6	8.0	9.1	8.8	8.3	8.6	8.3	7.1	5.8	5.6	6.0	5.5	9.1	4.7	6.9
25	6.2	5.9	7.0	8.1	9.0	8.6	10.4	11.5	12.0	13.7	13.2	12.9	12.4	13.0	12.5	11.8	12.4	12.1	12.0	10.4	8.5	8.8	8.4	7.5	13.7	5.9	10.4
26	4.9	3.3	4.0	3.7	3.8	3.9	4.1	3.4	4.3	3.2	4.0	6.2	5.4	7.0	5.3	4.3	7.2	8.5	7.4	9.3	11.1	11.0	11.1	12.0	12.0	3.2	6.2
27	12.1	12.2	12.3	13.3	14.3	12.9	11.7	12.6	14.2	14.9	15.6	15.0	14.6	14.2	13.3	16.0	17.1	16.1	13.5	15.0	13.1	11.4	12.1	9.9	17.1	9.9	13.6
28	9.2	9.7	6.1	5.0	2.8	1.3	2.8	2.5	4.3	3.8	4.1	4.5	8.4	13.7	14.3	14.5	15.0	13.7	11.2	10.1	9.5	9.4	9.4	9.1	15.0	1.3	8.1
29	9.1	9.7	9.6	8.9	9.4	9.9	11.2	10.9	12.2	13.5	13.6	14.1	14.9	14.4	14.6	14.6	14.6	16.0	15.5	14.2	13.4	12.4	10.9	8.9	16.0	8.9	12.4
30	9.6	9.6	9.8	9.8	11.3	10.9	10.9	11.6	11.0	12.3	13.2	12.4	12.0	13.6	13.7	12.8	12.1	11.8	11.2	10.0	9.8	8.9	10.0	8.3	13.7	8.3	11.1
31	5.1	6.9	4.5	3.9	3.6	3.0	2.6	4.1	4.5	4.4	6.4	8.8	9.9	12.0	12.0	9.1	9.4	11.1	11.2	11.3	10.4	8.7	6.0	3.7	12.0	2.6	7.3
Max.	**22.6**	**22.9**	**21.7**	**19.8**	**16.9**	**16.4**	**17.7**	**19.8**	**19.5**	**18.8**	**19.9**	**20.1**	**19.0**	**20.8**	**20.0**	**21.4**	**22.0**	**23.6**	**22.6**	**22.6**	**22.2**	**23.9**	**23.8**	**24.6**	**24.6**		
Min.	**1.3**	**1.3**	**0.8**	**0.7**	**0.1**	**0.3**	**0.6**	**0.8**	**0.6**	**0.8**	**1.1**	**1.4**	**2.3**	**2.2**	**1.8**	**2.2**	**1.9**	**2.4**	**1.5**	**2.0**	**1.5**	**1.2**	**0.5**	**0.9**		**0.1**	
Avg.	**6.0**	**5.9**	**5.4**	**5.2**	**5.0**	**4.7**	**5.0**	**5.2**	**5.4**	**5.8**	**6.9**	**7.5**	**7.9**	**8.6**	**8.7**	**8.8**	**9.1**	**8.8**	**8.4**	**8.0**	**7.2**	**7.1**	**6.7**	**6.2**			**6.8**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station – Wind Speed (m/s)

June 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.1	2.8	3.8	5.6	4.9	4.3	5.0	4.6	4.5	5.2	4.8	6.1	6.2	6.7	6.5	6.5	6.6	7.6	8.0	7.0	5.7	5.1	4.7	3.0	8.0	2.1	5.3
2	3.7	3.6	4.0	3.8	3.1	2.7	3.9	4.5	4.8	5.3	5.3	6.1	7.5	8.4	8.6	8.3	8.6	8.7	7.5	6.7	5.8	3.2	2.9	3.5	8.7	2.7	5.4
3	3.1	2.5	1.7	1.2	2.0	3.4	4.1	4.5	4.1	4.9	5.2	6.0	6.7	8.8	7.7	7.8	9.4	6.7	6.9	6.8	7.3	6.3	6.8	6.2	9.4	1.2	5.4
4	6.3	4.2	3.8	4.5	4.3	4.6	4.2	5.5	8.1	9.3	9.8	9.2	8.5	10.0	8.0	9.0	9.6	9.0	8.1	8.1	7.4	7.6	6.5	5.5	10.0	3.8	7.1
5	5.6	6.1	6.4	5.9	5.2	5.1	6.5	5.9	6.8	6.0	5.1	3.8	3.0	2.6	4.1	5.4	5.4	5.3	5.7	6.4	6.3	6.7	8.2	6.3	8.2	2.6	5.6
6	6.6	8.8	7.3	7.0	8.9	9.1	10.0	9.1	9.2	9.5	10.8	10.5	11.8	12.9	13.8	13.9	14.4	13.8	13.1	12.8	13.4	14.1	13.7	11.6	14.4	5.6	11.0
7	12.6	12.9	13.2	12.6	11.9	10.8	11.4	13.3	14.0	14.0	12.7	14.0	15.4	14.0	12.0	11.8	13.2	14.2	15.9	14.8	13.4	13.9	13.4	12.9	15.9	10.8	13.3
8	13.3	13.6	13.5	13.7	13.3	10.4	10.6	14.0	13.4	11.6	12.4	12.5	10.6	10.8	10.2	10.2	8.0	5.9	5.3	4.4	3.1	5.7	8.6	4.8	14.0	3.1	10.0
9	3.9	2.0	1.2	3.7	5.0	3.5	4.5	3.8	2.8	3.2	3.1	4.4	6.3	5.1	5.1	4.2	6.2	6.3	4.4	3.5	3.2	1.5	1.5	1.5	6.3	1.2	3.7
10	1.4	2.1	2.5	1.6	1.6	1.8	2.0	2.5																	2.5	1.4	1.9
Max.	13.3	13.6	13.5	13.7	13.3	10.8	11.4	14.0	14.0	14.0	12.7	14.0	15.4	14.0	13.8	13.9	14.4	14.2	15.9	14.8	13.4	14.1	13.7	12.9	15.9		
Min.	1.4	2.0	1.2	1.2	1.6	1.8	2.0	2.5	2.8	3.2	3.1	3.6	3.0	2.6	4.1	4.2	5.4	5.3	4.4	3.5	3.1	1.5	1.5	1.5		1.2	
Avg.	5.8	5.9	5.7	6.0	6.0	5.6	6.2	6.7	7.5	7.7	7.7	8.1	8.4	8.8	8.4	8.5	9.0	8.6	8.3	7.8	7.3	7.1	7.4	6.1			7.2

Total Hours In Month 224 **Hours Data Available** 224 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Resultant Wind Direction (Degrees)

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	125.2	127.7	120.1	131.9	131.1	129.5	121.5	112.5	119.0	120.7	119.1	121.0	122.9	122.9	123.7	123.9	123.7	126.9	134.2	148.7	157.6	159.1	161.1	161.4
2	163.7	162.9	155.2	170.7	156.7	144.2	143.8	136.4	148.3	145.3	141.0	143.0	138.7	128.9	131.7	128.7	127.5	127.8	127.5	129.8	131.3	127.1	124.2	124.2
3	126.2	126.0	126.9	128.4	129.7	134.2	138.9	139.4	139.7	143.2	142.0	145.2	148.4	160.9	157.0									
4																								
5																								
6																								
7								73.6	75.7	90.2	340.1	311.9	312.1	307.2	311.5	305.2	313.5	305.3	299.7	297.2	309.3	310.7	317.5	318.3
8	328.4	326.2	336.0	340.7	329.0	327.6	324.1	329.1	332.2	318.5	323.4	318.4	315.1	326.9	322.9	320.4	312.2	313.7	322.8	313.6	318.0	315.3	312.1	313.6
9	328.2	330.7	314.1	309.4	294.1	302.4	303.9	306.4	303.2	301.2	302.8	307.2	303.9	305.8	307.0	307.1	309.6	312.0	303.6	304.3	307.1	308.1	313.7	311.6
10	309.9	317.8	307.8	301.6	322.2	318.4	321.7	328.8	319.8	319.3	323.4	323.9	313.5	309.8	318.8	324.6	320.9	320.9	312.9	311.2	311.2	316.2	315.3	317.5
11	317.0	312.6	323.1	310.7	308.5	311.4	321.0	319.3	303.8	315.6	313.4	312.2	308.1	302.0	298.0	289.1	290.8	299.5	302.7	305.5	298.6	307.8	309.6	304.3
12	296.1	297.7	289.3	266.2	94.7	112.6	109.9	89.7	113.2	121.0	124.9	123.6	141.0	141.1	131.3	131.2	130.7	145.7	140.5	122.5	130.0	129.3	127.6	131.1
13	129.8	141.3	149.7	151.7	154.6	146.8	129.0	114.1	106.9	97.5	102.7	141.3	131.8	86.9	66.2	64.0	63.5	63.7	65.2	66.8	65.4	60.9	59.3	59.1
14	59.3	58.0	56.8	54.1	50.6	46.1	48.5	46.0	113.2	119.8	120.0	121.7	121.3	118.5	116.5	116.7	118.0	116.1	115.7	116.3	114.1	114.0	114.4	115.6
15	116.7	116.9	116.4	112.7	113.5	113.9	104.7	83.0	79.9	79.5	75.5	75.1	75.4	73.1	81.0	115.8	115.1	116.2	117.6	116.5	115.3	115.5	113.7	115.2
16	115.0	110.6	109.7	105.7	84.7	124.1	102.2	143.2	120.2	251.5	305.3	293.8	284.9	304.4	306.2	306.5	279.2	303.3	128.2	268.9	295.2	309.0	301.4	299.3
17	312.8	314.0	315.2	310.7	311.6	321.8	316.9	321.2	311.7	314.1	309.8	312.4	316.4	315.0	319.4	309.0	304.3	302.4	306.8	310.3	313.4	309.8	310.3	306.8
18	302.7	293.2	283.4	288.8	296.5	295.1	284.9	289.7	298.9	285.7	284.2	269.6	300.9	289.4	305.8	304.1	286.5	304.5	37.6	203.4	268.3	205.8	167.4	168.5
19	179.6	193.9	213.4	188.9	161.8	323.6	289.5	278.3	234.3	175.7	221.0	204.9	132.8	155.7	140.5	161.6	173.7	168.1	180.5	169.3	157.0	157.4	166.9	160.3
20	167.2	155.2	167.0	130.3	114.2	107.8	59.3	61.7	102.9	103.5	92.3	132.0	107.6	117.1	113.6	119.4	118.7	116.6	116.1	120.0	119.5	121.7	119.3	124.2
21	109.5	113.2	112.5	116.1	118.0	120.0	115.3	110.8	116.6	61.9	101.4	74.7	78.0	73.4	42.3	22.4	355.7	321.0	328.2	35.8	302.8	281.7	306.1	331.1
22	316.3	311.5	301.1	309.2	326.5	324.1	315.0	310.4	320.1	304.0	300.1	303.2	304.5	312.7	316.9	306.5	310.3	308.5	307.5	313.7	315.9	311.4	308.7	314.0
23	316.9	314.8	306.0	310.3	322.2	321.1	320.1	308.2	304.3	292.4	285.1	301.7	302.8	307.3	309.1	290.0	301.3	325.9	134.0	103.8	119.9	128.1	130.9	121.1
24	127.5	110.4	113.3	110.5	126.5	128.2	130.6	123.8	119.9	117.8	121.1	124.1	124.9	124.8	125.2	125.7	121.2	118.8	116.5	117.0	116.3	115.3	114.6	118.3
25	121.3	123.0	121.0	113.0	114.5	112.9	111.7	109.7	111.7	118.0	117.6	117.0	116.9	117.9	115.1	114.8	114.6	117.5	122.8	123.2	121.2	119.2	117.4	127.1
26	132.8	139.2	118.6	29.8	329.2	37.4	332.9	300.1	323.2	309.1	305.5	314.6	297.7	290.4	296.2	297.4	305.4	302.2	309.3	317.5	315.3	319.5	320.6	311.2
27	306.7	313.7	317.0	310.4	308.1	305.8	308.1	288.7	299.5	309.2	297.3	264.0	286.6	305.5	297.4	287.5	290.8	212.2	296.7	206.2	178.6	160.2	151.2	146.6
28	143.4	149.3	164.7	149.2	152.5	157.2	161.4	151.8	155.2	154.9	151.5	148.1	148.7	138.3	129.7	118.6	111.2	114.3	116.6	122.8	124.5	112.1	109.7	118.6
29	114.8	122.5	136.6	144.7	163.7	194.1	118.9	106.8	110.3	110.6	111.0	111.9	80.7	96.9	6.3	355.2	135.5	91.4	18.7	46.8	45.0	99.2	50.5	63.8
30	117.6	118.5	117.1	118.4	108.0	106.1	38.7	32.7	327.6	297.7	311.5	327.1	311.4	315.2	313.5	303.0	311.4	316.1	314.6	314.0	307.8	310.5	307.5	331.9
31	311.5	307.8	308.4	302.7	309.4	318.1	317.2	315.8	319.1	317.9	316.8	311.3	316.3	330.4	329.7	320.7	307.9	317.2	322.3	329.9	331.0	336.5	337.5	338.5

Total Hours in Month 744 **Hours Data Available** 656 **Data Recovery** 88.2%

HCG, Inc.

Pebble 1 Meteorological Station – Resultant Wind Direction (Degrees)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	316.6	322.4	323.8	324.9	325.2	328.3	326.1	321.7	307.1	317.8	311.6	300.9	311.1	319.9	319.5	329.6	330.5	322.8	322.7	325.4	321.9	320.4	322.9	330.2
2	335.1	327.7	333.0	332.6	328.6	330.7	322.2	329.0	324.6	322.8	326.1	324.4	321.2	323.6	326.4	320.6	319.7	320.7	322.2	317.8	311.9	311.5	303.5	302.7
3	302.8	306.5	316.6	305.8	308.2	309.2	316.3	315.0	286.8	306.8	100.8	326.6	108.9	133.6	157.4	258.4	306.0	301.5	292.7	242.9	262.5	151.1	114.1	130.8
4	114.4	116.7	129.6	108.8	120.4	125.7	135.2	124.8	210.0	139.8	121.8	140.1	144.8	149.7	92.1	111.4	113.1	140.2	167.8	158.6	148.2	150.2	170.0	171.8
5	166.2	142.4	147.6	157.5	151.7	150.2	154.0	153.1	149.5	147.2	133.8	141.9	127.4	122.7	121.9	125.2	120.7	116.8	116.8	116.5	117.5	118.6	118.5	119.2
6	115.2	117.5	119.9	118.9	116.8	115.4	118.6	120.4	119.5	115.3	118.9	123.2	121.9	120.9	121.0	121.2	125.6	123.9	126.1	118.8	123.2	123.1	120.6	119.8
7	117.0	118.2	116.1	118.9	117.6	117.1	119.9	123.2	127.3	138.5	144.7	145.1	149.7	146.0	140.2	138.7	96.1	66.8	111.2	135.2	147.6	149.0	150.7	156.3
8	158.3	149.9	162.2	171.5	149.4						226.6	225.7	226.4	202.0	202.5	206.6	202.1	199.1	188.9	178.6	174.4	176.8	157.5	143.0
9	140.0	144.7	148.2	141.6	143.9	147.1	152.8	319.1	312.0	324.4	330.4	331.6	321.3	327.0	323.2	323.1	324.6	322.8	324.7	321.2	323.8	321.7	324.9	322.5
10	320.3	315.5	315.1	310.1	311.1	314.1	319.6	315.0	308.3	318.4	316.6	304.7	307.5	315.8	306.2	304.3	325.6	314.6	309.3	304.7	309.2	306.6	314.6	310.3
11	311.1	310.3	311.3	312.8	317.2	316.5	316.4	314.6	315.7	316.8	314.7	313.0	321.6	310.2	313.5	315.2	314.5	316.0	320.3	311.8	321.3	323.1	306.5	314.9
12	318.3	322.2	314.1	314.7	318.7	310.3	309.7	312.2	305.2	311.4	305.3	21.7	114.1	116.6	153.4	140.4	141.7	145.5	122.6	131.7	137.6	134.1	129.6	117.3
13	116.3	115.5	124.6	125.6	123.9	122.6	122.8	116.2	95.6	86.8	94.5	73.8	100.2	120.0	129.8	145.6	155.2	161.2	165.4	145.9	142.7	135.6	125.5	115.2
14	117.2	115.0	117.0	119.0	118.3	117.6	119.8	117.5	118.3	119.2	120.7	122.6	130.2	128.2	127.3	127.8	125.2	130.8	146.6	146.6	155.1	166.3	163.6	160.2
15	160.5	146.3	162.6	167.5	169.0	164.5	176.9	187.1	196.6	188.7	195.9	219.4	207.6	190.5	145.1	160.5	159.0	128.0	124.5	121.6	129.2	116.6	116.1	125.4
16	120.1	112.3	116.1	113.9	116.0	121.7	110.1	113.3	118.3	115.4	116.8	117.6	120.1	119.3	119.4	118.0	116.8	113.0	114.1	120.2	121.7	124.6	122.6	126.0
17	125.8	123.2	127.5	130.6	123.6	124.9	123.0	122.5	134.3	133.7	134.2	139.3	137.8	130.2	122.6	118.5	122.6	116.3	115.8	114.6	119.2	121.3	120.2	121.4
18	116.8	116.7	119.0	126.1	123.2	122.3	125.7	119.2	119.5	122.9	121.0	121.3	117.2	116.7	116.2	120.2	117.3	115.6	122.8	123.8	125.3	126.8	134.0	135.2
19	134.7	135.6	138.6	137.9	142.7	132.9	116.6	118.8	116.8	123.2	128.4	131.7	128.2	127.2	127.5	126.8	126.6	113.4	119.4	120.4	119.3	122.2	122.4	123.8
20	124.0	126.1	118.1	123.3	119.9	119.1	119.5	120.0	118.4	116.8	117.9	119.5	117.4	119.6	120.3	118.4	115.3	114.9	115.3	117.1	119.6	119.3	117.8	120.6
21	116.0	120.1	114.3	119.1	120.9	126.9	148.7	162.7	145.8	152.1	145.8	152.0	152.7	147.4	146.0									
22																								
23													120.1	121.3	120.1	119.1	119.0	120.3	122.6	124.5	122.2	125.6	120.5	118.3
24	119.0	118.4	115.9	104.3	127.3	168.5	347.3	344.9	319.5	300.8	311.5	306.8	327.9	317.7	322.2	309.4	319.1	323.4	304.2	302.8	306.5	308.3	305.0	319.6
25	324.8	290.8	157.1	137.7	118.5	143.0	133.7	122.3	134.0	128.2	99.6	87.8	331.2	63.5	350.8	128.7	116.6	124.1	119.3	115.5	124.7	333.2	305.6	303.0
26	297.1	313.6	291.4	258.1	286.2	299.6	288.7	302.7	305.2	297.0	295.9	292.9	294.5	303.5	307.2	312.6	306.5	306.7	308.2	312.6	305.7	299.4	297.9	304.6
27	312.7	311.3	311.5	316.1	314.2	305.8	312.8	314.4	306.4	316.2	312.7	313.6	316.3	311.5	305.8	293.5	311.6	309.3	309.1	299.6	309.8	314.4	315.9	315.9
28	315.4	320.3	312.1	315.3	314.6	314.8	310.8	315.8	302.7	302.0	307.1	306.1	323.8	318.5	313.3	303.9	308.8	299.9	298.2	293.2	301.4	291.1	118.6	124.8

Total Hours in Month 672 **Hours Data Available** 622 **Data Recovery** 92.6%

HCG, Inc.

Pebble 1 Meteorological Station – Resultant Wind Direction (Degrees)

March 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	133.8	118.1	130.8	114.6	109.2	101.2	134.8	145.8	157.0	140.1	142.6	126.3	126.3	131.3	141.2	148.0	147.1	136.1	140.4	132.8	134.4	144.7	141.3	143.0
2	131.9	134.5	141.7	133.2	129.3	119.3	123.4	115.5	114.0	128.0	121.6	140.3	134.5	117.5	116.6	109.2	106.6	98.0	105.5	109.0	104.2	139.5	116.6	120.8
3	112.7	101.3	112.7	119.6	120.5	125.0	113.6	124.6	118.2	120.8	120.3	119.1	117.4	119.2	116.7	119.2	119.7	120.9	124.9	126.9	110.8	115.8	96.8	97.0
4	79.8	68.8	78.2	84.5	88.4	99.2	76.9	91.2	112.7	113.7	121.6	86.8	76.2	195.3	331.1	303.3	355.5	20.2	126.9	182.4	171.0	277.2	190.0	254.2
5	214.6	182.9	123.1	116.1	107.9	104.8	112.3	117.0	117.5	116.1	115.7	116.5	116.6	112.8	115.4	117.7	119.0	116.4	116.2	118.6	126.7	124.3	125.0	124.9
6	120.5	119.4	114.5	115.5	119.6	117.0	117.1	120.1	112.5	92.1	77.3	91.2	73.2	65.6	86.6	96.3	93.7	84.5	74.9	67.0	68.2	70.2	56.3	61.7
7	109.9	93.8	86.5	108.6	112.8	118.5	122.0	118.8	117.8	115.9	117.4	116.3	116.6	115.1	112.4	118.3	125.0	124.7	116.6	99.8	74.2	63.8	66.8	92.6
8	59.5	55.0	54.4	53.0	53.8	60.9	64.6	65.1	77.2	61.7	61.7	63.8	63.3	86.4	120.3	114.3	115.5	113.1	110.2	112.3	115.9	118.4	120.3	122.4
9	120.0	122.9	121.6	121.8	120.6	120.1	120.0	113.6	112.4	113.2	113.7	120.4	123.3	112.4	114.1	117.8	124.5	124.6	133.5	123.9	114.6	93.9	38.2	24.6
10	35.5	48.4	25.4	2.8	7.9	352.7	4.0	348.9	342.7	339.5	340.4	351.4	347.4	354.7	350.7	31.4	28.5	55.9	162.8	194.9	179.0	179.1	148.4	157.6
11	160.8	157.5	127.5	127.3	124.6	124.8	157.3	190.2	181.0	148.7	129.8	133.8	132.4	129.3	129.9	125.8	123.5	122.8	141.3	164.1	162.9	158.0	134.6	131.4
12	131.0	123.1	127.7	131.1	134.6	131.0	127.8	117.4	113.9	115.0	119.0	132.8	133.1	128.3	134.8	146.3	160.7	156.1	163.2	158.0	154.1	163.9	168.1	159.9
13	138.0	120.0	112.3	114.8	120.1	113.5	127.0	137.9	121.6	107.3	90.1	69.7	68.6	106.5	128.9	108.6	150.8	170.2	136.4	152.7	143.3	135.0	158.9	130.6
14	140.0	108.2	116.2	132.6	132.3	131.0	126.2	123.8	120.8	130.9	134.6	116.4	121.6	147.8	144.4	152.5	154.2	145.5	150.9	141.5	132.5	133.8	133.7	127.5
15	118.9	121.6	120.9	126.0	136.0	136.2	136.7	135.5	128.1	128.0	129.4	129.3	128.1	123.4	121.0	122.2	121.1	127.3	135.9	126.7	119.4	119.6	119.5	130.4
16	140.7	154.4	157.0	153.5	149.4										351.8	11.7	302.4	321.1	336.1	301.8	309.4	301.8	307.6	288.3
17	305.6	269.3	233.9	122.6	117.3	118.6	145.2	155.9	146.6	137.5	180.5	137.9	0.4	166.4	99.7	77.1	138.4	147.2	160.7	163.0	197.9	143.4	165.4	141.4
18	129.2	133.1	125.2	131.1	127.9	138.7	117.1	146.9	128.8	138.1	143.6	133.7	139.5	138.6	152.7	156.6	160.3	138.6	137.1	156.1	144.4	150.6	159.8	170.3
19	205.1	266.7	295.5	298.8	289.5	296.3	307.5	296.0	309.1	314.3	305.0	298.4	303.0	305.6	304.3	303.3	302.1	296.0	306.1	316.6	311.9	316.4	317.9	317.7
20	315.8	321.1	314.4	305.9	313.0	324.3	323.8	319.5	323.2	325.6	329.0	329.6	324.9	329.3	330.4	332.6	341.6	338.1	339.3	335.8	335.3	331.5	329.1	329.8
21	310.0	301.3	307.1	300.8	313.8	329.5	329.4	325.8	326.5	318.1	301.0	331.2	36.7	59.7	64.4	61.0	52.0	42.0	47.7	46.8	34.9	37.5	29.5	22.5
22	5.4	26.4	55.5	39.9	36.6	313.3	322.4	303.1	291.0	161.9	159.5	161.6	312.5	116.7	126.1	119.2	121.0	121.2	202.4	231.7	199.4	179.3	164.7	172.7
23	158.5	135.1	131.7	142.1	154.0	155.1	154.5	152.3	130.2	128.7	126.5	113.5	117.8	121.0	120.5	122.7	127.1	129.3	125.9	127.0	128.9	129.7	128.8	129.8
24	130.2	127.6	128.2	127.3	125.7	125.2	123.9	125.3	126.3	127.1	127.0	126.5	125.2	123.5	122.9	125.6	127.3	130.7	128.7	133.9	136.2	138.9	137.2	160.5
25	315.1	316.4	317.8	319.0	318.8	313.1	313.7	310.5	312.4	311.8	308.9	309.1	305.1	306.3	303.3	307.5	306.6	311.1	313.1	310.7	308.9	308.6	307.5	305.2
26	305.2	307.6	304.7	306.8	312.2	311.7	302.3	308.4	307.9	309.0	307.4	304.3	303.4	299.2	305.0	292.6	310.7	309.2	302.9	306.7	307.0	313.9	320.4	303.6
27	297.2	313.8	355.0	331.5	300.4	319.8	5.3	311.1	303.6	308.9	304.3	325.6	122.8	130.1	133.9	114.6	127.4	118.2	108.6	107.3	120.1	126.4	125.4	133.9
28	106.0	22.7	312.1	298.9	275.4	265.5	266.2	258.0	234.7	218.5	229.1	215.4	190.9	177.3	261.7	274.6	275.5	282.3	283.3	294.6	268.8	276.1	285.3	275.0
29	242.7	220.1	178.1	198.5	204.4	121.3	176.6	207.5	253.5	338.2	120.0	238.6	211.7	191.1	293.3	215.2	98.1	303.1	319.9	155.1	175.0	226.9	183.7	135.8
30	186.2	199.9	179.2	143.0	163.2	171.1	155.6	166.2	158.6	127.0	151.4	128.7	144.2	167.2	313.1	313.2	304.0	306.4	316.0	329.7	329.2	324.3	324.1	326.0
31	326.3	326.8	329.1	329.3	326.6	325.0	325.1	334.1	324.9	323.2	328.8	326.1	325.1	322.9	326.7	329.1	332.5	331.1	325.2	319.3	313.7	306.9	306.6	313.6

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station – Resultant Wind Direction (Degrees)

April 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	305.8	300.6	304.2	306.6	312.4	316.2	324.8	316.8	319.1	181.9	4.1	325.6	329.9	304.2	153.5	326.6	333.6	335.0	337.6	318.6	303.2	315.6	176.9	272.9
2	303.1	307.6	316.5	315.6	310.9	317.3	305.2	301.0	300.3	311.5	318.0	310.5	306.1	304.6	310.7	300.7	286.8	285.2	290.6	310.3	314.9	311.0	305.1	311.9
3	307.0	313.4	314.7	312.4	308.2	316.2	314.1	308.2	308.8	296.1	305.4	305.8	302.5	304.6	304.1	307.7	313.0	299.2	302.5	301.8	305.0	299.3	304.6	303.9
4	300.1	305.0	317.8	312.2	319.2	321.1	315.2	318.8	320.3	322.6	319.3	317.1	310.9	307.3	303.4	309.2	302.8	303.0	302.9	302.1	301.0	303.3	306.5	303.8
5	298.5	301.7	312.6	319.1	325.0	324.8	325.3	326.1	322.0	320.2	318.1	317.8	313.0	312.5	312.0	306.4	302.0	307.3	310.1	308.6	305.3	307.6	315.3	324.0
6	321.8	316.3	291.1	301.5	303.4	53.6	112.5	125.9	116.9	114.0	122.5	122.7	121.9	127.6	129.5	128.4	125.0	126.6	120.0	119.3	128.9	124.5	95.7	115.1
7	91.3	75.3	107.5	109.4	116.6	110.5	112.2	114.5	112.8	114.6	119.6	125.3	130.5	133.9	133.9	140.3	144.7	143.3	137.3	133.6	142.5	151.2	116.2	145.1
8	164.5	182.8	224.6	299.1	300.5	311.2	287.5	15.5	67.5	37.0	87.1	92.9	77.2	128.2	128.1	127.1	110.4	70.1	117.1	126.6	112.1	95.3	75.7	65.2
9	69.5	84.9	89.6	67.4	285.7	293.0	251.0	295.9	317.5	292.0	311.1	319.4	337.0	299.2	292.6	280.7	282.7	292.1	299.1	289.1	305.3	275.4	295.7	281.8
10	292.4	306.2	304.9	306.9	303.5	300.6	306.0	315.7	326.8	311.1	308.5	315.8	306.3	330.8	326.9	320.4	321.0	316.1	320.6	325.1	320.0	324.8	325.3	325.2
11	317.1	310.0	322.8	327.9	317.9	308.9	325.4	325.1	335.1	327.5	326.1	326.9	323.6	318.4	326.1	331.5	330.6	327.6	325.1	325.9	328.1	332.6	339.8	330.5
12	309.1	309.1	325.0	328.6	332.0	324.0	326.1	322.8	331.9	324.6	324.5	338.0	339.3	341.0	343.1	344.4	325.7	310.1	314.1	320.9	309.2	305.8	290.4	283.0
13	205.5	236.0	37.5	128.0	125.9	120.3	119.6	141.6	150.4	146.8	137.4	142.8	114.1	101.3	109.1	117.9	141.4	185.3	205.0	175.9	142.4	140.5	137.1	134.0
14	131.5	139.5	127.1	124.5	144.1	147.1	126.9	113.8	125.3	120.9	118.3	126.7	128.3	130.4	127.5	134.5	138.2	143.1	150.8	157.8	151.9	178.3	188.5	213.8
15	211.9	287.6	307.7	296.4	303.0	296.4	315.0	302.8	289.7	306.2	314.2	311.3	315.7	343.2	327.3	327.4	322.4	306.5	300.5	298.5	300.4	312.3	314.3	311.3
16	313.3	310.3	307.8	305.4	302.9	304.5	316.6	321.0	319.5	328.2	323.2	324.6	324.0	324.7	326.5	326.7	338.1	330.9	322.9	324.7	337.2	336.6	309.6	311.8
17	327.4	324.6	316.5	307.4	315.5	323.4	319.6	322.9	316.1	319.5	322.3	327.1	332.4	329.1	329.0	331.2	328.9	321.6	326.7	317.6	304.3	302.7	305.9	308.3
18	309.8	308.6	303.5	302.2	303.0	304.3	305.2	302.3	303.7	306.5	309.4	310.5	310.9	313.1	313.6	311.6	309.9	310.5	308.7	305.6	303.7	302.8	301.3	302.2
19	309.2	320.8	322.6	317.9	314.8	289.0	185.7	158.2	127.8	131.3	191.2	206.4	203.8	179.5	161.6	175.7	151.4	152.5	157.4	218.8	5.0	259.0	131.1	125.6
20	139.0	174.7	110.4	325.1	286.2	283.0	261.5	248.0	223.4	103.4	304.5	273.1	282.3	284.6	107.4	128.2	129.4	129.6	125.5	135.8	135.2	157.4	159.3	152.4
21	155.8	161.4	145.0	156.4	151.6	150.7	124.4	120.4	118.4	121.1	118.2	115.5	115.3	117.0	119.2	119.2	117.1	115.4	115.4	114.8	117.5	114.7	114.4	118.7
22	126.7	129.9	128.6	129.6	127.3	134.1	170.0	157.9	156.7	158.4	158.6	150.5	153.7	162.4	156.8	139.7	132.2	135.7	137.8	135.3	134.6	159.2	163.3	161.1
23	158.1	116.2	122.4	77.0	272.6	314.5	295.6	117.1	121.8	122.8	123.1	136.2	138.0	133.7	140.0	145.5	162.4	159.0	162.9	151.8	206.5	342.2	296.5	316.7
24	306.1	311.2	314.8	311.5	311.3	305.5	312.6	306.7	304.6	303.1	23.1	313.1	303.7	316.9	2.9	248.2	296.2	312.4	295.8	310.8	307.6	299.0	256.9	143.1
25	172.7	177.0	188.4	197.8	194.4	189.3	202.6	162.2	141.7	110.4	113.7	141.3	142.2	150.8	152.9	163.2	167.9	151.2	164.4	165.5	164.9	169.5	158.7	167.6
26	156.7	159.2	141.9	137.1	140.0	138.1	132.0	113.6	130.4	124.9	133.3	136.7	127.3	131.6	128.5	132.3	133.3	150.5	151.4	128.3	128.9	125.4	129.5	135.8
27	129.9	144.5	135.6	134.2	138.1	141.5	135.8	125.4	135.3	149.7	144.1	150.1	163.2	158.4	163.8	163.3	162.6	168.5	140.8	159.4	136.1	158.2	296.4	305.1
28	296.4	304.3	294.4	298.6	298.5	305.7	295.3	299.9	298.6	308.0	308.6	320.5	320.9	317.9	323.4	327.3	319.4	319.5	322.2	328.5	329.2	322.3	314.4	328.3
29	310.5	302.4	310.5	107.8	112.7	112.4	129.5	119.0	130.1	232.8	292.5	107.2	121.8	125.3	125.6	113.4	123.2	125.7	140.2	131.3	105.0	111.9	121.9	80.9
30	328.5	283.4	81.9	293.2	294.6	291.5	300.3	294.5	298.5	296.0	288.7	269.1	243.6	235.2	200.4	200.0	204.9	175.3	146.4	145.4	153.4	145.5	138.0	159.2

Total Hours In Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station – Resultant Wind Direction (Degrees)

May 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	142.8	150.4	148.4	143.3	147.9	127.2	146.8	135.8	129.8	133.2	136.1	129.6	129.7	136.0	136.5	144.5	136.5	135.0	142.0	141.4	132.3	129.7	127.0	135.4
2	141.9	139.3	137.1	141.5	109.8	200.3	117.7	101.5	97.3	73.0	292.8	123.2	132.4	137.5	140.7	166.3	193.8	177.9	176.9	175.4	179.8	166.7	163.9	162.5
3	166.0	165.7	176.1	189.0	135.6	95.2	163.7	126.5	111.7	116.6	130.4	130.8	133.9	132.4	135.9	124.9	129.0	137.1	145.3	137.6	137.7	133.1	142.2	132.4
4	127.8	134.9	131.6	127.9	126.2	121.7	121.3	129.9	130.1	135.0	135.7	132.1	133.4	135.0	132.8	126.2	123.4	125.3	130.5	132.2	127.3	124.1	117.7	114.8
5	116.9	121.9	116.9	118.0	117.1	113.5	116.2	115.2	116.3	116.8	115.0	116.8	114.9	116.7	115.8	117.2	114.5	114.0	113.9	114.6	114.8	116.0	114.8	115.0
6	114.3	115.9	115.5	118.6	117.9	119.4	117.3	119.5	120.2	116.5	118.1	118.8	121.6	121.7	120.0	122.1	123.3	125.2	128.3	138.3	142.7	141.8	147.0	154.5
7	154.5	155.3	147.7	148.1	163.7	141.5	150.7	141.4	147.3	122.4	129.4	169.9	135.2	144.4	150.0	147.3	160.6	160.9	161.1	165.0	161.6	162.2	139.0	145.9
8	131.8	131.2	120.4	109.4	119.1	116.4	290.4	9.5	79.9	266.7	295.2	251.3	230.2	234.2	238.9	200.3	156.2	164.9	143.3	168.1	175.6	179.2	79.1	79.5
9	102.5	115.3	335.2	98.1	101.9	12.3	104.4	304.6	301.8	318.6	102.6	115.4	112.1	116.5	143.8	155.7	154.8	162.3	170.6	176.8	171.9	161.4	152.5	153.6
10	169.4	148.6	151.0	116.9	156.3	341.6	104.8	112.4	114.0	156.1				123.7	130.0	133.5	131.4	137.6	141.2	135.5	131.9	146.3	129.2	139.6
11	133.8	145.4	85.3	94.1	61.9	313.0	310.2	305.9	275.7	116.0	122.5	122.2	124.7	128.5	134.5	132.5	144.9	132.7	134.1	133.6	46.2	49.0	75.9	88.5
12	86.1	93.8	152.7	67.4	80.8	108.8	73.0	60.7	87.5	109.5	126.9	130.2	121.1	117.0	126.0	121.8	123.6	121.2	120.6	121.8	126.4	121.2	119.6	126.3
13	135.3	140.7	111.9	91.6	323.3	293.4	322.6	289.9	294.8	345.1	17.3	39.4	60.0	89.5	102.6	155.6	159.9	190.1	133.6	144.8	83.4	161.0	139.0	111.1
14	22.6	330.3	271.7	156.3	142.4	120.1	95.1	79.8	106.0	116.2	124.9	125.9	130.7	119.3	123.9	127.1	125.5	122.4	123.2	116.0	119.9	125.9	133.9	130.2
15	132.4	141.1	147.2	148.0	151.1	154.5	148.7	124.2	115.9	123.7	125.6	118.0	142.2	138.7	146.3	147.7	142.1	141.4	135.4	140.2	141.5	133.6	132.9	130.5
16	138.6	138.3	133.7	135.9	120.1	127.1	136.8	129.6	121.9	122.3	126.7	132.0	129.7	127.2	126.8	132.7	143.2	139.7	151.4	159.2	161.1	174.2	164.1	138.2
17	150.9	142.5	168.2	178.2	320.1	108.6	243.8	307.8	333.3	345.2	330.2	246.5	240.4	201.4	175.2	113.2	143.0	169.8	141.6	171.3	186.2	197.2	160.9	156.6
18	144.2	125.9	147.2	179.7	155.2	206.5	63.2	9.5	317.9	330.4	339.1	331.8	304.0	290.1	296.2	293.7	57.4	311.3	289.7	278.2	292.7	282.6	298.0	306.3
19	305.1	312.4	303.7	295.2	291.9	298.9	299.8	313.8	336.0	331.0	334.8	356.8	352.5	346.5	333.1	329.0	340.4	46.3	138.1	181.9	269.9	222.2	283.4	312.8
20	309.2	312.4	217.5	164.7	192.5	212.3	227.3	297.6	111.2	327.0	331.5	321.2	245.9	210.7	196.8	173.6	241.8	276.4	159.5	153.5	159.2	165.9	172.3	169.0
21	159.3	162.6	183.3	198.6	200.5	208.0	191.8	181.8	181.2	129.9	220.3	141.1	213.7	206.4	214.9	207.9	195.3	194.0	197.2	184.9	145.2	195.2	186.1	128.4
22	141.9	159.5	150.7	155.6	91.7	309.0	317.9	305.9	305.7	317.4	312.0	312.7	298.9	315.8	298.3	150.9	223.4	176.9	113.8	292.6	280.4	318.8	149.2	287.7
23	295.2	314.5	324.2	136.0	134.3	193.7	325.5	344.9	26.5	344.8	309.2	323.4	117.9	158.8	188.4	184.0	245.9	317.5	349.5	294.5	164.9	156.8	171.0	174.5
24	164.0	137.6	133.3	156.3	171.3	156.5	147.0	151.5	154.3	151.6	148.6	147.5	138.8	136.2	139.2	142.2	141.7	138.2	137.6	140.2	131.5	135.1	134.3	134.2
25	130.6	126.3	121.4	119.2	125.3	120.5	116.5	120.3	122.1	120.1	124.7	125.7	127.6	126.3	130.7	130.4	126.3	130.5	130.7	135.8	135.2	130.4	136.6	135.3
26	127.6	130.8	147.4	136.6	122.1	126.0	131.4	107.3	105.2	98.2	86.6	102.4	105.6	93.0	103.4	93.1	104.6	107.7	120.4	117.0	121.6	116.2	119.4	123.9
27	122.5	123.4	117.3	116.6	116.0	116.7	117.5	116.8	121.4	124.1	122.7	118.8	118.1	122.0	122.3	123.2	121.6	119.1	118.9	118.5	126.6	130.2	130.2	133.7
28	142.5	137.5	121.4	134.0	100.8	101.4	59.8	90.1	112.6	121.4	103.9	98.7	119.9	121.0	124.5	126.3	124.9	124.0	127.0	130.9	121.5	130.7	137.0	133.2
29	126.2	125.5	116.2	122.7	120.4	121.1	122.3	119.9	122.1	124.6	124.2	123.0	124.8	123.3	123.1	123.6	124.6	123.6	120.5	131.2	126.4	123.8	125.4	123.9
30	123.8	120.3	125.3	133.0	133.1	131.5	124.2	121.8	124.3	122.6	122.2	116.1	116.1	120.5	121.6	125.3	128.7	127.5	123.9	128.1	122.9	125.2	130.5	127.1
31	129.9	167.0	138.8	153.8	142.8	138.1	130.7	126.1	113.1	112.8	115.4	130.8	128.8	126.6	131.0	136.4	135.8	129.9	126.5	129.4	128.2	129.5	121.2	116.5

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station – Resultant Wind Direction (Degrees)

June 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	99.2	130.3	118.8	133.7	124.2	135.3	144.5	136.6	135.7	154.4	147.1	153.5	147.8	142.3	134.0	137.3	147.0	132.7	145.5	156.6	158.7	153.6	147.0	138.9
2	128.6	131.4	146.0	141.0	130.4	131.3	104.1	99.0	103.1	113.5	111.1	122.5	132.5	142.8	133.6	132.1	136.6	136.7	139.4	149.2	163.9	165.8	182.3	174.2
3	171.0	211.8	247.2	292.9	300.0	308.6	319.7	319.6	343.2	343.9	357.5	356.2	340.8	298.7	324.2	322.6	325.3	332.9	324.5	317.6	334.3	322.2	303.4	302.1
4	298.0	308.0	303.5	293.5	303.0	301.5	291.5	304.7	306.0	316.7	319.9	332.0	336.0	323.3	331.8	327.7	327.7	328.7	331.8	328.6	332.6	322.3	313.6	310.3
5	312.1	309.0	307.6	308.1	323.0	321.2	315.9	340.3	344.0	341.0	351.7	353.6	333.8	22.1	179.8	156.5	144.1	151.7	148.0	148.5	156.9	167.1	148.1	155.2
6	143.0	132.0	132.6	128.3	129.5	137.4	127.7	126.2	121.9	124.5	123.9	127.6	129.7	126.3	132.8	128.7	129.8	131.7	128.7	128.6	126.8	126.9	126.3	121.9
7	125.6	126.8	126.2	126.1	127.2	128.0	126.8	126.0	123.9	122.1	127.0	123.3	121.4	124.2	129.3	122.2	122.4	122.4	121.9	119.7	121.9	121.7	119.5	121.5
8	121.8	118.9	127.0	120.0	121.9	121.7	123.2	120.8	117.2	124.6	125.5	122.5	124.2	123.1	121.1	124.0	116.9	104.4	107.3	112.5	106.3	109.0	116.9	110.3
9	119.8	143.5	344.8	46.0	72.2	93.3	66.7	61.0	57.3	77.3	61.6	83.2	74.2	83.8	95.1	106.0	127.7	151.3	144.5	167.1	185.7	222.1	316.4	358.5
10	319.3	312.9	309.7	291.7	300.2	314.5	330.2	351.8																

Total Hours in Month 224 **Hours Data Available** 224 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station –Wind Sigma

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.6	4.6	4.5	6.2	6.0	5.2	4.9	4.3	4.0	3.9	4.4	4.2	4.1	4.1	4.6	4.1	4.0	4.1	4.4	4.4	4.3	4.5	5.2	5.1	6.2	3.9	4.6
2	5.1	5.8	6.3	5.4	7.9	4.7	6.2	5.0	5.0	3.6	5.0	5.1	5.1	4.7	5.4	4.7	4.4	4.5	4.3	4.1	4.2	4.0	3.8	3.8	6.2	3.6	5.0
3	3.8	4.0	4.3	4.6	4.3	4.4	4.6	4.6	4.4	4.4	4.4	4.3	4.2	6.8	12.9										12.9	3.8	5.2
4																											
5																											
6																											
7								1.9	11.1	40.1	41.5	3.1	3.9	3.9	3.6	4.5	3.4	3.7	5.0	2.2	3.8	3.9	3.8	2.7	41.5	1.9	8.4
8	8.9	6.4	12.7	13.7	10.2	8.2	6.6	12.1	12.9	7.3	4.5	4.4	4.7	7.0	6.3	5.6	3.3	5.8	5.8	4.9	3.9	2.8	3.1	3.2	13.7	2.8	6.8
9	8.4	10.9	3.9	6.7	3.9	3.7	3.5	4.6	4.3	6.2	3.7	3.8	5.2	5.1	3.8	3.3	2.6	2.9	3.3	4.7	4.2	3.1	5.3	3.9	10.9	2.6	4.6
10	3.6	4.6	4.9	4.7	6.4	3.8	3.7	7.8	3.5	4.0	6.4	8.4	5.6	5.0	4.6	5.9	6.2	5.3	4.9	4.4	5.4	4.0	3.4	3.5	8.4	3.4	5.0
11	5.6	4.7	5.0	4.0	4.1	3.9	4.5	5.8	5.3	3.4	5.8	4.0	6.1	6.1	10.1	6.7	8.1	5.9	6.4	5.0	7.6	7.6	7.2	5.0	10.1	3.4	5.7
12	6.0	7.2	7.9	52.9	65.8	9.8	21.5	19.3	12.0	9.1	6.3	7.6	8.5	7.7	5.4	5.5	7.2	5.0	5.3	4.1	3.4	4.3	4.2	5.5	65.8	3.4	12.2
13	5.0	4.2	4.3	6.0	5.7	5.8	12.1	6.0	4.2	4.6	12.9	4.1	8.5	11.7	6.8	4.6	3.7	4.3	4.8	4.5	5.3	4.3	4.1	4.9	12.9	3.7	5.9
14	4.5	4.4	5.3	3.8	3.8	1.4	3.2	3.1	8.4	3.3	3.7	3.8	3.5	3.6	4.0	3.8	3.6	3.3	3.5	3.4	3.5	3.4	3.9	3.7	8.4	1.4	3.8
15	3.7	3.7	3.6	3.7	3.8	3.7	7.6	2.8	4.7	2.5	2.4	2.2	2.3	3.4	7.4	3.5	3.3	3.6	3.1	3.6	3.3	3.2	3.3	3.1	7.6	2.2	3.7
16	2.2	3.6	3.2	3.6	36.6	32.4	17.2	15.3	23.3	24.2	8.8	5.1	12.7	4.6	6.3	7.2	15.9	23.0	10.1	30.4	11.2	6.5	4.0	6.5	36.6	2.2	13.1
17	7.2	5.5	4.2	3.9	3.4	5.5	6.3	4.4	6.6	3.8	2.5	4.1	2.9	3.2	3.4	7.1	5.0	5.8	4.8	4.7	4.5	6.7	6.6	6.7	7.2	2.5	5.0
18	7.1	7.2	5.8	8.5	9.8	8.3	10.0	5.5	7.1	9.2	7.5	11.9	23.1	15.9	6.9	5.9	12.3	10.2	40.3	36.7	14.6	20.0	22.0	10.5	40.3	5.5	13.2
19	8.6	7.5	10.6	9.8	19.5	29.5	15.6	17.7	14.9	26.2	16.3	19.3	13.9	9.1	15.6	36.2	18.6	10.7	6.2	5.4	8.9	9.6	5.6	6.4	36.2	5.4	14.3
20	9.2	7.3	14.2	10.2	6.1	5.1	34.5	31.1	11.1	9.8	15.5	22.3	35.3	4.3	4.1	3.8	3.6	3.5	3.4	3.3	3.3	3.7	3.7	4.4	35.3	3.3	10.5
21	4.3	3.7	3.5	3.3	4.0	3.7	3.5	3.4	16.0	28.2	33.0	8.6	9.8	9.6	29.1	10.9	12.0	11.3	23.9	10.9	22.5	8.3	11.1	10.0	33.0	3.3	11.9
22	11.4	20.1	9.0	13.6	13.6	7.5	11.6	6.4	13.4	11.9	6.3	5.4	4.9	5.4	4.3	4.4	4.2	4.3	3.1	3.3	2.9	3.0	3.1	3.0	20.1	2.9	7.3
23	3.8	3.5	3.4	3.8	4.1	3.6	3.3	5.5	5.3	6.9	6.7	8.2	6.7	8.5	13.4	9.1	12.5	2.6	1.3	4.1	5.0	6.2	5.7	5.0	13.4	1.3	5.8
24	8.1	5.2	4.5	3.5	4.1	3.7	3.4	3.4	3.3	3.3	3.4	3.2	3.3	3.4	3.7	3.6	3.5	3.7	3.7	3.7	3.6	3.5	3.6	3.6	8.1	3.2	3.8
25	3.4	3.4	3.5	3.2	3.4	3.4	3.0	3.3	3.6	3.9	4.0	3.6	3.6	3.9	3.6	3.5	3.7	3.6	3.7	3.8	3.9	4.2	5.9	6.0	6.0	3.0	3.8
26	3.8	5.9	6.5	46.7	17.7	53.6	39.6	7.9	5.7	4.1	5.2	5.1	11.9	13.7	6.1	10.8	4.9	3.1	5.1	3.0	4.0	5.0	4.2	4.7	53.6	3.0	11.6
27	3.7	4.5	3.8	4.6	4.2	7.0	5.8	10.6	9.2	3.2	9.5	18.6	26.8	10.6	29.4	33.5	8.8	21.4	18.1	18.3	8.6	19.1	7.2	8.3	33.5	3.2	12.3
28	4.4	3.7	4.0	3.3	3.6	3.4	4.0	3.2	3.1	4.9	3.3	3.4	3.8	4.8	5.8	13.5	10.6	30.7	24.8	21.2	12.9	7.0	7.2	4.5	30.7	3.1	8.0
29	5.9	9.7	8.7	6.3	21.0	42.5	47.6	45.2	4.5	5.4	7.9	5.9	6.9	19.2	30.5	31.3	15.4	27.2	30.9	4.9	5.5	15.4	13.3	4.6	47.6	4.5	17.3
30	17.3	15.9	8.2	5.5	14.2	14.5	24.8	11.9	19.6	10.1	6.8	7.5	3.7	5.4	4.1	3.7	4.7	4.3	7.6	5.1	4.1	5.5	7.1	10.0	24.8	3.7	9.2
31	4.8	4.2	4.1	5.3	3.6	6.8	3.7	2.9	3.3	3.3	3.2	4.9	4.4	8.0	8.6	8.3	8.5	6.7	5.6	9.9	8.3	11.9	12.9	12.9	12.9	2.9	6.3
Max.	17.3	20.1	14.2	52.9	65.8	53.6	47.6	45.2	23.3	40.1	41.5	22.3	35.3	19.2	30.5	36.2	18.6	30.7	40.3	36.7	22.5	20.0	22.0	12.9	65.8		
Min.	2.2	3.4	3.2	3.2	3.4	1.4	3.0	1.9	3.1	2.5	2.4	2.2	2.3	3.2	3.4	3.3	2.6	2.6	1.3	2.2	2.9	2.8	3.1	2.7		1.3	
Avg.	6.1	6.3	5.9	9.1	10.8	10.5	11.6	9.1	8.3	9.0	8.7	6.9	8.4	7.2	8.9	9.0	7.1	8.2	9.0	7.9	6.4	6.7	6.3	5.6			8.0

Total Hours in Month 744 **Hours Data Available** 656 **Data Recovery** 88.2%

HCG, Inc.

Pebble 1 Meteorological Station –Wind Sigma
February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.0	6.6	3.5	4.5	5.8	8.2	6.8	5.0	5.7	6.4	5.2	4.5	7.1	4.3	4.0	8.0	8.2	3.6	4.1	5.2	3.7	5.1	5.6	7.5	8.2	3.5	5.6
2	10.9	7.3	9.4	9.3	7.4	8.6	5.4	7.1	6.3	5.4	7.7	5.6	7.1	5.4	8.0	5.8	4.8	5.8	4.1	3.5	5.4	8.7	9.1	5.2	10.9	3.5	6.8
3	8.2	3.6	6.2	6.3	4.8	4.3	5.3	7.5	33.8	9.7	48.4	46.8	39.5	8.9	19.1	18.7	7.8	7.2	9.4	16.9	30.7	20.6	8.1	7.6	48.4	3.6	15.8
4	5.5	9.2	8.0	16.4	11.6	8.7	9.1	7.5	18.3	4.3	9.2	15.3	22.7	14.8	25.0	8.5	12.4	14.1	8.3	11.2	9.0	7.1	7.5	5.7	25.0	4.3	11.2
5	5.3	12.4	11.1	6.3	5.9	4.9	3.6	4.4	5.5	4.8	7.3	6.4	6.3	3.3	3.1	3.6	3.1	3.6	3.5	3.6	3.5	3.4	3.5	3.6	12.4	3.1	5.1
6	3.7	3.6	3.4	3.5	3.6	4.2	3.8	3.7	3.8	3.7	3.5	3.5	3.4	3.5	3.3	3.6	3.6	3.2	3.7	3.6	3.6	3.8	3.5	3.8	4.2	3.2	3.6
7	3.4	3.6	3.6	3.4	3.5	3.4	3.6	3.6	4.0	3.8	3.9	4.1	4.4	4.6	4.3	4.4	13.3	6.4	17.1	3.7	4.0	4.0	3.8	7.4	17.1	3.4	5.1
8	6.0	7.2	14.1	12.4	29.7						4.8	5.0	4.3	5.4	5.0	5.5	4.4	3.9	4.6	5.4	4.5	5.8	4.2	6.0	29.7	3.9	7.3
9	4.1	3.9	4.0	4.6	5.1	5.6	4.4	5.6	5.4	7.2	7.8	9.5	3.2	6.1	5.2	3.7	4.2	3.7	4.6	4.3	4.2	3.7	4.1	3.5	9.5	3.2	4.9
10	3.5	3.7	3.4	2.9	3.0	2.9	2.9	3.6	6.1	4.6	3.8	3.9	5.4	5.4	4.6	3.9	5.4	3.3	5.6	4.8	5.4	4.5	4.5	3.5	6.1	2.9	4.2
11	4.4	3.5	3.9	3.5	3.0	2.8	4.1	2.8	4.0	3.7	3.4	4.5	4.2	3.0	3.8	2.9	2.5	2.8	4.0	5.1	5.9	5.4	3.9	3.5	5.9	2.5	3.8
12	3.5	3.5	3.9	2.7	3.4	3.1	2.7	3.7	5.6	5.8	8.9	20.6	14.2	11.9	8.5	9.6	8.4	9.8	12.2	9.4	8.4	6.8	7.4	8.2	20.6	2.7	7.6
13	5.8	4.2	5.2	3.5	3.5	3.4	3.5	3.2	6.4	2.5	10.9	2.6	11.9	3.5	4.2	5.9	9.2	5.4	5.3	4.9	5.4	4.3	4.8	4.2	11.9	2.5	5.2
14	3.3	3.5	3.5	3.2	3.4	3.4	3.3	3.4	3.4	3.4	3.4	3.7	4.5	4.1	4.1	4.6	4.0	3.8	5.3	5.1	7.2	8.0	6.2	6.6	8.0	3.2	4.4
15	10.4	10.2	5.9	5.8	5.6	5.8	5.7	4.5	6.2	5.7	7.8	6.0	5.1	19.5	11.9	4.9	5.9	11.4	7.0	11.6	7.8	5.1	6.4	5.3	19.5	4.5	7.6
16	7.4	5.2	4.0	3.5	3.9	4.0	4.4	4.3	3.5	3.0	3.1	3.4	3.3	3.4	3.6	3.3	3.5	3.3	3.2	3.5	3.2	3.7	3.4	3.8	7.4	3.0	3.8
17	3.7	3.9	3.6	3.7	4.0	3.6	3.5	3.6	7.3	4.2	3.9	4.7	4.2	3.9	3.9	3.5	4.4	3.5	3.3	3.4	3.2	3.8	4.0	3.9	7.3	3.2	3.9
18	4.1	4.8	4.2	5.6	4.1	3.4	3.4	3.3	3.8	3.4	3.4	3.6	4.0	3.8	3.7	3.6	3.8	3.4	3.9	3.8	3.9	4.0	4.1	4.1	5.6	3.3	3.9
19	4.1	4.2	4.3	4.7	4.2	4.6	6.1	4.2	4.4	3.4	3.7	4.2	4.2	3.8	3.5	3.5	5.0	4.4	3.4	3.3	3.5	3.9	4.1	4.1	6.1	3.3	4.1
20	4.3	3.9	3.8	3.8	3.3	3.1	3.4	3.7	3.8	3.8	3.8	3.6	3.8	3.9	4.0	4.1	3.8	3.6	3.7	3.4	3.8	3.7	3.4	3.7	4.3	3.1	3.7
21	3.4	3.9	3.6	2.7	3.0	2.6	4.8	12.5	11.5	6.1	8.9	5.8	4.8	5.0	4.5										12.5	2.6	5.5
22																											
23													3.2	3.2	3.4	3.4	3.0	3.3	3.3	3.5	3.2	3.1	3.5	3.6	3.6	3.0	3.3
24	3.7	3.6	3.6	7.9	4.3	46.7	24.3	44.5	19.7	10.4	6.3	5.2	10.8	2.7	3.1	4.3	4.7	7.1	3.6	3.8	4.7	4.9	4.9	6.2	46.7	2.7	10.0
25	8.9	22.5	29.7	9.0	6.8	5.8	11.8	13.2	17.4	7.3	20.6	21.6	29.6	23.5	37.6	18.0	17.6	5.3	7.0	6.1	8.6	18.7	22.1	14.4	37.6	5.3	16.0
26	10.1	7.5	6.8	20.5	48.0	6.6	10.8	14.1	8.4	4.9	5.0	8.6	9.8	12.9	4.3	3.5	2.3	2.3	2.0	2.5	2.5	2.7	2.5	2.9	48.0	2.0	8.4
27	3.0	5.1	2.7	3.9	3.9	4.3	3.8	3.4	3.4	6.1	3.3	3.9	9.2	5.7	5.1	6.0	2.7	1.8	3.8	2.7	2.9	6.9	3.4	3.5	9.2	1.8	4.2
28	4.3	3.4	5.5	3.1	3.9	5.2	4.6	5.0	4.1	3.9	3.7	4.0	6.8	5.0	4.3	4.3	2.8	3.4	2.9	6.0	6.9	24.1	19.7	8.9	24.1	2.8	6.1
Max.	**10.9**	**22.5**	**29.7**	**20.5**	**48.0**	**46.7**	**24.3**	**44.5**	**33.8**	**10.4**	**48.4**	**46.8**	**39.5**	**23.5**	**37.6**	**18.7**	**17.6**	**14.1**	**17.1**	**16.9**	**30.7**	**24.1**	**22.1**	**14.4**	**48.4**		
Min.	**3.0**	**3.4**	**2.7**	**2.7**	**3.0**	**2.6**	**2.7**	**2.8**	**3.4**	**2.5**	**3.1**	**2.6**	**3.2**	**2.7**	**3.1**	**2.9**	**2.3**	**1.8**	**2.0**	**2.5**	**2.5**	**2.7**	**2.5**	**2.9**		**1.8**	
Avg.	**5.4**	**5.9**	**6.2**	**6.0**	**7.3**	**6.4**	**5.8**	**7.1**	**8.1**	**5.1**	**7.8**	**8.1**	**8.8**	**6.7**	**7.2**	**5.8**	**5.8**	**5.0**	**5.3**	**5.4**	**6.0**	**6.8**	**6.1**	**5.4**			**6.4**

Total Hours in Month 672 **Hours Data Available** 622 **Data Recovery** 92.6%

HCG, Inc.

Pebble 1 Meteorological Station –Wind Sigma

March 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	7.1	4.4	5.2	7.1	7.0	7.2	5.3	4.2	5.4	5.6	5.2	4.9	3.7	3.5	3.9	3.6	3.7	3.6	7.1	4.5	4.0	5.2	4.0	7.2	3.5	5.0
2	4.9	5.4	5.3	5.6	3.5	3.7	3.9	4.5	5.0	4.8	5.9	7.6	5.7	4.1	4.0	4.1	5.0	4.5	9.3	10.4	11.1	9.1	7.2	8.9	11.1	3.5	6.0
3	10.1	5.4	7.3	4.7	3.4	6.6	3.6	4.2	3.9	3.2	3.1	3.1	3.5	3.5	3.4	3.3	3.2	3.6	3.9	4.0	6.4	5.7	7.3	10.2	10.2	3.1	4.9
4	10.1	16.3	14.4	8.4	5.6	6.4	8.7	9.1	7.1	7.9	10.1	7.8	14.6	22.3	24.3	11.8	18.9	16.6	16.0	5.0	8.5	17.9	33.1	28.2	33.1	5.0	13.8
5	31.7	9.1	7.2	6.7	5.0	4.1	3.6	3.4	3.2	3.1	3.4	3.4	3.7	3.2	3.3	3.4	3.4	3.3	3.5	3.7	3.6	4.1	3.9	3.4	31.7	3.1	5.3
6	3.0	3.0	3.3	3.7	3.4	3.5	4.2	3.8	4.1	6.9	7.4	5.0	4.5	4.2	7.7	7.8	21.2	8.7	4.3	23.0	11.4	12.4	7.4	15.6	23.0	3.0	7.5
7	25.9	8.6	8.3	8.2	12.5	7.7	4.1	3.2	3.4	4.4	3.7	3.8	4.0	3.9	4.0	4.4	3.6	3.8	6.0	8.2	6.5	11.5	16.6	22.9	25.9	3.2	7.9
8	4.8	4.7	4.9	4.3	4.2	4.3	4.7	10.7	12.1	25.5	12.3	14.0	6.8	11.9	5.3	3.8	4.2	3.8	3.5	3.8	4.0	4.0	3.8	4.5	25.5	3.5	6.9
9	4.0	4.3	4.0	3.9	4.0	4.0	3.7	3.8	4.2	5.7	4.9	4.3	5.2	4.2	3.6	3.6	4.0	3.9	3.7	4.0	4.2	7.2	11.3	13.0	13.0	3.6	4.9
10	23.6	4.7	7.2	6.0	3.7	11.1	6.5	11.1	13.4	13.9	15.6	16.5	13.7	9.4	14.6	4.7	5.1	16.7	11.6	7.8	16.3	6.9	5.7	5.1	23.6	3.7	10.4
11	4.8	4.6	7.7	4.6	4.2	5.1	9.8	5.2	5.8	8.2	4.2	4.1	4.0	4.2	4.0	4.3	3.8	4.1	5.0	6.8	6.5	8.1	4.5	3.5	9.8	3.5	5.3
12	3.8	4.2	4.2	3.6	4.0	3.6	3.9	3.5	3.5	3.5	3.8	4.1	4.2	6.3	9.0	7.0	7.8	6.0	4.3	5.0	4.8	4.5	4.5	5.2	9.0	3.5	4.8
13	11.2	11.9	7.8	7.3	7.1	3.8	4.3	15.1	3.5	7.1	12.6	8.6	8.2	7.6	11.5	8.9	5.1	3.4	13.5	8.3	9.4	6.2	9.0	7.2	15.1	3.4	8.3
14	6.7	9.1	14.3	5.5	6.8	5.9	7.6	8.0	7.9	11.2	6.0	6.6	10.0	5.4	6.2	5.7	7.7	5.8	4.4	4.5	6.3	6.3	4.9	8.6	14.3	4.4	7.1
15	6.5	4.6	5.2	5.7	5.0	5.0	5.2	5.5	5.2	4.6	4.5	4.5	4.3	4.1	4.0	4.1	3.5	4.0	3.9	4.0	3.4	3.6	3.7	4.5	6.5	3.4	4.5
16	4.0	4.0	4.4	4.2	7.6										12.0	8.4	31.5	11.6	13.4	9.9	9.1	9.9	12.3	11.7	31.5	4.0	10.3
17	10.6	8.6	38.5	10.6	9.0	7.7	7.1	6.9	8.1	5.9	12.9	26.7	51.1	31.6	14.3	12.6	12.1	19.7	8.2	10.7	11.7	12.6	5.8	6.0	51.1	5.8	14.5
18	15.8	8.6	5.6	10.2	7.1	16.8	16.7	14.9	5.4	4.7	6.4	3.6	3.1	4.0	4.6	5.7	7.3	8.0	7.6	9.0	4.3	4.7	6.1	5.0	16.8	3.1	7.7
19	6.8	15.0	21.5	16.9	9.9	5.0	3.8	5.2	1.6	2.2	3.8	4.0	3.0	2.9	2.6	2.4	2.8	4.0	3.9	2.8	3.4	3.4	3.9	3.6	21.5	1.6	5.6
20	3.5	4.8	2.8	3.4	6.9	6.3	5.0	5.6	6.5	7.4	8.7	10.7	6.7	7.4	8.7	10.6	14.2	13.7	14.5	12.7	12.3	9.6	7.9	10.8	14.5	2.8	8.4
21	7.7	6.4	4.7	4.8	4.8	10.9	7.4	6.3	7.6	11.6	7.4	19.4	14.8	5.1	4.7	5.2	4.9	4.8	4.4	4.6	9.2	10.8	5.2	8.9	19.4	4.4	7.6
22	17.7	21.0	7.1	6.5	10.0	19.1	13.3	21.7	16.7	10.7	22.2	37.2	45.0	21.0	6.2	13.2	7.4	5.3	12.7	7.6	7.1	5.1	5.1	4.3	45.0	4.3	14.3
23	7.6	7.6	12.1	10.2	9.4	5.1	7.6	5.4	7.1	3.7	3.2	3.9	3.5	3.4	3.5	3.4	3.8	3.8	3.8	3.7	3.5	3.6	3.7	3.7	12.1	3.2	5.3
24	3.8	4.0	3.9	4.0	3.7	3.6	3.4	3.6	3.6	3.6	3.6	4.0	3.8	3.6	3.5	3.8	3.7	4.1	4.0	3.9	4.0	3.7	3.8	6.8	6.8	3.4	3.9
25	47.7	3.7	3.3	3.3	2.6	3.0	3.2	3.3	3.3	3.0	3.0	2.9	2.8	2.7	2.5	2.6	2.6	3.1	3.4	3.2	3.1	3.4	2.7	2.6	47.7	2.5	4.9
26	2.9	2.7	2.8	3.3	3.2	3.6	3.4	3.5	3.6	3.7	3.8	3.5	4.0	3.0	3.7	3.3	5.3	5.7	5.2	4.5	4.1	4.2	7.6	20.9	20.9	2.7	4.6
27	20.1	13.4	16.1	36.0	22.5	10.6	14.4	12.9	4.9	2.8	7.5	36.6	25.7	7.6	21.8	29.2	13.1	25.6	31.5	10.2	9.9	14.7	8.1	5.3	36.0	2.8	16.7
28	5.2	15.1	4.2	3.9	6.0	4.2	4.9	5.3	7.5	4.1	5.0	30.5	25.8	33.1	8.1	5.6	4.2	5.7	7.7	13.9	11.3	4.4	6.0	4.7	33.1	3.9	9.4
29	6.4	9.6	13.9	18.3	13.7	14.0	12.4	10.0	13.1	16.2	25.8	11.3	17.6	17.0	26.9	54.0	19.7	42.8	6.1	17.6	14.8	8.5	21.3	24.8	54.0	6.1	18.2
30	40.9	10.8	14.9	10.0	12.8	14.4	11.2	10.7	15.7	14.5	23.1	41.3	21.3	17.9	21.5	7.9	3.8	3.6	3.7	8.7	7.7	4.2	4.5	5.2	41.3	3.6	13.8
31	5.4	5.6	6.9	6.8	5.5	5.0	4.9	10.8	7.7	4.6	7.3	6.4	6.0	5.1	6.5	7.7	9.9	9.7	5.0	4.6	5.1	4.7	4.9	7.1	10.6	4.6	6.4
Max.	**47.7**	**21.0**	**38.5**	**36.0**	**22.5**	**19.1**	**16.7**	**21.7**	**16.7**	**25.5**	**25.8**	**41.3**	**51.1**	**33.1**	**26.9**	**54.0**	**31.5**	**42.8**	**31.5**	**23.0**	**16.3**	**17.9**	**33.1**	**28.2**	**54.0**		
Min.	**2.9**	**2.7**	**2.8**	**3.3**	**2.6**	**3.0**	**3.2**	**3.2**	**1.6**	**2.2**	**3.0**	**2.9**	**2.8**	**2.7**	**2.5**	**2.4**	**2.6**	**3.1**	**3.4**	**2.8**	**3.1**	**3.4**	**2.7**	**2.6**		**1.6**	
Avg.	**11.6**	**7.9**	**8.6**	**7.6**	**6.9**	**7.0**	**6.7**	**7.4**	**6.6**	**7.1**	**8.2**	**11.3**	**11.0**	**8.8**	**8.4**	**8.3**	**8.0**	**8.5**	**7.5**	**7.5**	**7.3**	**7.1**	**7.6**	**8.9**			**8.2**

Total Hours In Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station –Wind Sigma

April 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.9	4.5	3.5	3.4	4.7	5.0	4.0	6.0	6.5	34.2	29.3	8.4	10.8	17.0	39.5	37.0	19.4	17.3	14.6	11.1	8.5	19.8	15.3	12.3	39.5	3.4	14.3
2	7.8	5.5	3.3	3.3	2.7	4.9	3.8	5.9	4.2	1.9	4.5	5.5	4.4	3.4	3.8	4.3	3.9	3.8	5.1	2.9	4.9	2.9	4.1	4.8	7.8	1.9	4.2
3	3.6	4.9	3.8	4.5	3.3	4.1	5.3	3.5	3.6	5.1	3.2	3.2	4.5	4.8	4.1	4.7	3.1	3.2	2.8	2.9	2.8	3.6	3.0	4.6	6.3	2.8	3.8
4	2.9	3.4	4.6	3.5	3.4	4.3	3.1	3.3	2.4	3.3	3.3	3.7	4.2	4.9	4.9	6.5	4.3	3.4	3.4	3.2	3.6	3.6	4.0	4.8	6.5	2.4	3.8
5	3.9	3.7	3.8	3.6	6.1	5.1	5.6	5.6	4.0	3.7	3.7	4.2	3.5	3.6	4.2	5.2	3.6	5.3	6.2	5.4	4.5	4.9	6.0	5.7	6.2	3.5	4.6
6	7.3	7.9	12.0	62.9	32.7	19.4	12.7	13.4	6.3	3.9	3.6	3.4	3.8	4.4	4.5	4.3	3.7	3.6	3.6	3.5	3.8	6.4	7.1	6.9	62.9	3.4	10.0
7	11.3	6.3	6.8	3.3	3.4	3.1	3.6	3.5	3.9	4.0	3.8	3.8	4.1	4.5	4.7	4.7	5.4	3.9	3.7	3.1	3.8	6.3	20.0	12.4	20.0	3.1	5.6
8	7.8	9.2	20.9	10.7	8.7	16.5	36.7	23.9	45.1	23.5	11.5	7.8	12.8	4.0	4.2	4.2	12.6	12.9	13.0	14.7	9.4	16.3	5.9	4.9	45.1	4.0	14.1
9	7.4	11.2	13.8	17.2	25.3	13.3	20.0	5.2	10.2	9.1	5.7	11.7	23.0	15.5	6.7	4.8	4.0	6.1	17.2	3.5	9.3	12.9	7.3	5.0	25.3	3.5	11.1
10	3.2	6.0	6.1	3.7	4.0	4.1	3.6	7.0	9.2	3.5	4.1	4.5	5.1	10.5	7.6	4.5	4.8	4.0	10.0	5.9	7.9	7.6	8.8	6.5	10.5	3.2	5.9
11	8.9	6.9	7.7	7.9	10.5	9.2	8.3	5.9	11.8	8.0	5.9	5.6	5.8	3.9	6.3	10.4	9.0	8.3	5.4	5.9	7.4	11.5	13.8	11.6	13.8	3.9	8.2
12	4.8	6.6	6.6	8.4	10.1	6.5	9.6	9.0	11.4	5.9	5.5	14.1	13.8	14.1	14.6	15.1	7.9	4.2	5.4	8.6	6.9	4.8	4.6	12.4	15.1	4.2	8.8
13	14.6	36.0	25.4	21.6	15.0	7.0	6.5	8.9	17.6	9.3	15.5	10.0	9.7	7.1	11.2	7.0	10.6	4.7	8.5	8.4	9.5	10.1	9.8	8.9	36.0	4.7	12.1
14	8.0	5.7	8.4	5.5	4.3	3.6	30.1	7.6	7.8	5.7	7.0	5.8	4.9	4.6	4.6	4.2	6.0	5.1	5.2	6.2	11.7	7.2	4.7	8.3	30.1	3.6	7.1
15	4.3	11.6	5.0	6.9	2.7	3.3	5.5	3.3	5.4	3.8	3.6	3.8	7.3	14.2	7.7	8.3	4.1	3.6	2.8	3.2	4.5	3.1	4.6	3.9	14.2	2.7	5.3
16	5.4	5.1	5.6	10.3	5.9	5.6	4.0	3.9	4.4	7.9	5.4	5.9	6.1	5.5	6.7	6.7	12.9	10.6	4.3	7.9	14.5	14.2	9.3	8.6	14.5	3.9	7.4
17	8.4	6.3	7.4	4.2	10.1	7.2	7.4	7.2	4.4	3.7	4.9	8.2	11.0	9.5	9.6	10.9	9.9	4.5	7.8	5.3	3.5	3.2	4.1	4.1	11.0	3.2	6.8
18	2.9	3.8	4.5	4.0	4.1	3.6	4.6	3.8	3.7	3.2	3.0	3.2	3.5	3.5	3.4	3.8	3.4	3.3	3.9	4.8	3.6	3.6	3.0	2.5	4.8	2.5	3.6
19	2.7	4.5	4.3	3.4	4.8	15.0	16.8	15.7	16.9	14.8	10.1	6.7	7.8	13.8	15.6	9.4	10.1	9.0	18.2	41.0	27.7	47.9	13.9	8.2	47.9	2.7	14.1
20	14.4	5.1	31.5	7.1	8.4	10.8	17.1	37.5	38.3	35.8	50.3	5.6	8.0	13.6	10.5	9.6	5.2	9.6	6.3	6.5	6.2	7.0	5.6	4.7	50.3	4.7	14.8
21	5.9	6.0	4.0	4.6	4.0	5.9	3.7	3.3	3.1	3.7	3.5	3.6	3.6	3.7	3.6	3.4	3.6	3.8	3.9	4.2	4.2	3.9	3.9	4.0	6.0	3.1	4.1
22	4.6	4.7	4.4	4.6	4.3	7.2	8.1	4.9	4.9	7.0	4.9	5.2	5.1	5.7	5.8	4.4	4.3	4.1	3.7	4.8	11.2	5.3	6.1	28.1	28.1	3.7	6.4
23	22.2	19.6	8.4	5.4	13.0	6.1	4.9	6.0	5.3	5.7	4.0	4.0	3.3	3.0	3.6	3.7	4.5	5.6	5.4	15.1	12.7	46.3	7.7	8.3	46.3	3.0	9.4
24	10.9	6.1	5.1	6.4	3.9	5.5	4.2	6.0	11.0	8.2	34.8	10.8	21.2	19.8	10.3	15.1	3.3	30.7	15.9	17.5	6.1	8.8	20.7	12.8	34.8	3.3	12.3
25	8.9	7.2	6.0	7.3	12.2	8.4	9.8	8.9	19.9	8.4	18.1	14.6	6.4	7.0	5.6	5.1	4.6	5.4	4.4	5.8	2.9	6.0	7.7	10.2	19.9	2.9	8.4
26	7.2	5.2	14.4	7.0	5.1	8.7	13.6	12.2	8.8	8.3	5.4	6.5	8.0	6.8	8.1	5.0	4.4	6.7	5.2	6.4	5.2	6.1	6.9	7.9	14.4	4.4	7.5
27	10.7	11.1	9.9	8.5	6.0	5.5	5.4	5.3	5.9	6.0	5.6	4.8	4.4	2.9	3.5	3.9	7.4	10.6	17.1	7.4	25.1	26.3	6.2	8.7	26.3	2.9	8.8
28	7.2	4.8	2.9	3.8	3.5	3.1	4.1	4.1	3.3	3.6	3.0	6.1	6.5	6.3	6.3	9.9	5.6	4.3	6.6	11.0	11.1	9.8	9.1	11.3	11.3	2.9	6.1
29	4.9	4.7	13.0	23.9	8.7	8.6	12.1	23.9	33.0	20.3	16.8	23.5	6.1	4.9	4.8	5.5	4.8	4.9	5.2	14.1	18.2	7.9	16.1	9.8	33.0	4.7	12.3
30	18.7	16.9	16.0	33.6	3.7	5.9	5.1	4.6	5.2	3.6	6.2	11.4	9.6	7.0	14.5	10.6	6.9	10.5	6.1	12.7	7.7	13.4	18.9	11.2	33.6	3.6	10.8
Max.	22.2	36.0	31.5	62.9	32.7	19.4	36.7	37.5	45.1	35.8	50.3	23.5	23.0	19.8	39.5	37.0	19.4	30.7	18.2	41.0	27.7	47.9	20.7	28.1	62.9		
Min.	2.7	3.4	2.9	3.3	2.7	3.1	3.1	3.3	2.4	1.9	3.0	3.2	3.3	2.9	3.4	3.4	3.1	3.2	2.8	2.9	2.8	2.9	3.0	2.5		1.9	
Avg.	8.0	8.0	8.9	10.0	7.8	7.2	9.3	8.8	10.6	8.8	9.8	7.2	7.6	7.6	8.0	7.7	6.4	7.1	7.4	8.4	8.6	11.1	8.6	8.4			8.4

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station –Wind Sigma

May 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.2	14.3	10.5	16.9	13.1	13.5	8.0	9.1	12.4	9.6	7.8	6.9	8.0	6.8	6.8	5.0	4.8	4.4	5.3	5.5	8.9	7.9	8.6	8.8	16.9	4.4	8.7
2	9.0	11.2	6.3	4.9	38.9	12.9	8.8	8.2	10.6	20.2	42.0	27.1	14.5	14.5	9.8	12.2	7.7	6.9	5.7	5.1	5.3	5.1	4.0	4.8	42.0	4.0	12.3
3	3.7	3.1	3.2	5.0	15.3	27.4	15.7	10.7	10.9	10.9	8.0	8.2	7.8	7.2	6.5	5.0	5.6	5.5	5.2	5.6	6.7	5.1	4.9	4.4	27.4	3.1	8.0
4	4.6	5.3	4.9	4.4	4.0	4.1	4.8	4.9	5.3	7.5	6.6	7.5	5.7	5.5	6.1	5.5	5.6	5.3	5.4	5.3	5.5	5.4	5.0	5.0	7.5	4.0	5.4
5	4.6	4.7	4.6	4.7	4.7	4.6	4.8	4.6	4.7	4.8	4.7	4.9	5.0	5.1	5.1	5.1	4.9	4.9	4.9	4.7	4.9	4.7	4.8	4.7	5.1	4.6	4.8
6	4.9	4.8	4.8	5.1	5.3	5.0	5.1	5.5	5.1	5.2	5.4	5.2	5.0	5.2	5.5	5.4	5.1	5.2	5.1	5.2	4.5	4.5	4.7	4.5	5.5	4.5	5.1
7	4.8	5.1	5.0	4.2	5.1	8.6	4.5	14.3	6.8	13.7	29.6	37.7	18.8	10.5	8.5	8.0	8.3	9.2	8.1	4.6	4.5	7.5	9.2	9.2	37.7	4.2	10.2
8	6.8	8.6	9.2	11.2	11.1	16.5	36.0	15.9	47.4	35.8	13.0	11.9	10.9	14.2	10.9	18.8	38.3	21.0	8.7	6.5	3.8	6.7	18.4	12.9	47.4	3.8	16.5
9	7.3	24.0	30.1	31.9	17.0	39.7	32.7	16.1	21.0	57.1	20.3	20.7	17.5	29.3	14.1	11.1	12.4	8.9	6.4	4.7	4.7	4.0	5.0	3.5	57.1	3.5	18.3
10	7.9	8.7	6.8	11.0	44.9	27.8	10.5	12.3	19.5	57.3				10.8	8.6	9.0	10.2	7.0	6.6	6.1	7.9	5.3	10.8	6.7	57.3	5.3	14.2
11	5.1	4.8	33.4	59.4	35.3	9.2	7.2	16.1	19.8	14.9	9.7	7.6	7.6	8.7	8.9	8.3	9.0	7.8	6.8	28.8	20.4	5.7	8.6	8.3	59.4	4.8	14.6
12	11.8	14.6	17.8	12.6	14.1	14.1	8.7	5.8	11.0	9.2	7.1	5.9	6.6	5.6	6.1	5.8	5.6	5.0	5.2	5.2	5.2	5.2	5.0	5.3	17.8	5.0	8.3
13	5.7	5.5	23.6	13.4	23.2	14.4	15.6	8.5	16.4	28.7	14.7	13.4	11.6	14.1	12.9	33.6	10.0	16.5	11.6	9.4	30.7	7.6	11.4	15.2	33.6	5.5	15.3
14	39.2	36.1	21.4	8.1	7.1	8.3	9.3	20.0	9.7	8.0	6.4	7.2	6.5	6.1	7.1	5.9	6.4	7.5	7.8	6.4	5.7	5.8	6.4	6.3	39.2	5.7	10.8
15	6.0	7.7	8.9	13.1	9.9	6.7	6.8	20.0	19.0	41.2	17.8	22.3	22.9	17.6	12.6	11.8	9.1	7.5	7.2	6.4	5.6	5.4	4.9	5.1	41.2	4.9	12.3
16	5.9	6.7	5.9	7.3	6.0	6.5	7.4	7.2	8.6	10.4	8.3	10.8	10.1	10.3	8.8	9.1	11.1	10.4	7.5	7.1	6.4	6.0	4.7	14.1	14.1	4.7	8.2
17	6.5	8.4	10.3	8.4	35.1	22.2	25.8	15.8	13.8	21.3	37.5	55.5	22.9	46.0	23.4	42.0	15.2	21.2	20.2	8.5	4.3	9.9	45.5	6.9	55.5	4.3	21.9
18	12.2	10.8	9.9	20.0	24.9	31.7	23.9	20.8	22.8	16.0	21.0	19.0	16.4	24.2	14.1	19.6	21.5	30.8	17.5	10.3	7.7	4.1	4.4	4.6	31.7	4.1	17.0
19	3.6	3.1	3.9	3.9	3.6	4.4	5.4	8.1	14.8	13.7	16.3	20.6	36.8	51.5	27.2	24.3	29.8	27.3	30.6	23.6	18.9	19.1	12.1	4.8	51.5	3.1	17.0
20	7.4	7.9	26.5	8.1	13.7	22.8	11.0	8.6	52.4	42.1	22.4	37.6	27.4	16.3	13.2	12.8	21.8	40.8	6.6	6.0	5.9	7.2	5.4	7.2	52.4	5.4	17.9
21	6.4	6.3	5.9	7.8	14.3	9.5	20.0	23.0	22.1	14.7	58.8	31.5	19.3	10.7	6.0	11.2	10.2	9.3	9.1	11.9	26.2	21.4	19.7	8.9	58.8	5.9	16.0
22	24.6	18.7	31.2	19.5	1.5	1.7	9.6	10.9	7.2	7.7	8.9	9.7	10.1	24.3	44.5	27.6	9.3	34.7	18.4	21.0	19.6	5.2	18.4	23.6	44.5	1.5	17.0
23	9.9	5.4	9.3	31.3	9.1	16.7	13.8	21.2	37.0	31.7	23.1	40.5	40.1	14.4	11.8	15.6	21.8	8.4	12.7	15.1	15.7	7.2	7.0	10.5	40.5	5.4	17.9
24	8.2	8.9	6.5	6.7	6.2	6.1	5.5	6.2	7.3	7.1	7.4	6.7	6.8	7.4	7.6	8.0	6.8	7.4	6.9	7.2	7.1	7.4	6.3	6.1	8.9	5.5	7.0
25	5.6	6.4	4.8	4.6	4.8	4.7	5.0	5.7	6.1	5.8	6.3	6.7	6.8	6.6	7.2	7.3	7.2	6.7	6.6	6.7	6.3	5.0	5.4	5.6	7.3	4.6	6.0
26	16.4	16.0	10.1	8.6	8.8	7.1	10.3	10.6	10.9	23.0	23.3	10.5	10.2	9.1	9.9	11.2	7.3	7.0	6.4	6.3	5.7	5.3	5.5	5.2	23.3	5.2	10.2
27	5.5	5.4	5.3	5.3	5.2	4.9	5.2	5.5	5.5	5.6	5.7	6.1	6.2	6.2	6.6	5.9	6.4	6.5	5.7	5.5	5.8	6.2	5.5	5.9	6.6	4.9	5.7
28	6.2	5.7	7.0	5.8	9.1	26.6	12.1	14.7	8.7	8.1	12.1	7.9	6.8	6.5	6.5	6.9	6.7	6.4	6.6	6.6	5.8	5.6	5.6	5.6	26.6	5.6	8.3
29	5.6	5.5	5.4	5.6	5.7	5.3	5.2	5.5	6.3	7.1	7.1	6.4	6.6	7.0	6.6	6.2	6.1	6.1	6.4	5.9	5.8	5.7	5.8	6.3	7.1	5.2	6.1
30	5.8	5.4	5.4	6.0	5.5	5.7	5.8	6.8	6.9	6.3	6.2	7.3	6.2	6.3	6.5	6.3	6.4	6.6	7.0	6.9	5.7	5.4	5.4	5.9	7.3	5.4	6.2
31	9.2	6.8	9.1	7.8	8.9	8.4	7.2	7.8	8.3	9.9	7.7	7.6	7.7	7.3	8.4	9.1	8.4	6.9	7.4	6.7	5.9	6.2	6.2	11.7	11.7	5.9	7.9
Max.	39.2	36.1	33.4	59.4	44.9	39.7	36.0	23.0	52.4	57.3	58.8	55.5	40.1	51.5	44.5	42.0	38.3	40.8	30.6	28.8	30.7	21.4	45.5	23.6	59.4		
Min.	3.6	3.1	3.2	3.9	1.5	1.7	4.5	4.6	4.7	4.8	4.7	4.9	5.0	5.1	5.1	5.0	4.8	4.4	4.9	4.6	3.8	4.0	4.0	3.5		1.5	
Avg.	8.6	9.2	11.2	11.6	13.3	12.8	11.3	11.3	14.8	17.9	15.5	15.7	12.9	13.4	10.9	12.0	10.9	11.6	8.9	8.5	8.9	6.9	8.9	7.7			11.4

Total Hours In Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station –Wind Sigma

June 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	26.9	13.8	8.6	7.7	5.6	6.8	6.6	8.0	10.1	10.8	12.7	12.2	15.3	14.1	13.3	14.0	14.2	10.7	6.8	6.9	6.9	5.2	5.9	10.1	26.9	5.2	10.6
2	5.7	6.1	9.3	9.4	9.3	11.2	7.2	9.8	13.9	13.9	18.0	11.8	10.1	10.8	10.2	9.7	9.6	9.0	8.8	9.0	6.3	26.7	6.0	4.0	26.7	4.0	10.2
3	8.3	9.0	10.3	16.2	8.6	3.7	5.5	9.0	17.7	17.5	16.7	16.8	13.8	10.1	15.2	13.5	15.8	18.8	18.4	10.3	14.7	9.8	4.1	6.5	18.8	3.7	12.1
4	7.3	10.0	6.9	8.3	6.9	10.4	10.6	10.9	6.7	8.9	9.2	15.2	17.3	10.8	15.3	13.8	13.1	12.9	14.6	12.3	15.0	7.2	4.8	5.7	17.3	4.8	10.6
5	5.7	4.9	5.6	9.5	9.1	6.7	6.3	15.5	16.3	16.9	18.1	32.7	35.7	49.4	27.9	19.0	18.2	14.5	11.3	8.0	6.3	5.3	5.5	6.4	49.4	4.9	14.9
6	9.3	7.1	6.8	6.4	7.2	9.7	6.4	6.8	7.9	8.6	7.5	9.2	8.5	6.8	7.4	7.3	7.1	7.2	6.7	6.3	5.8	6.0	5.6	5.6	9.7	5.6	7.2
7	5.3	5.3	5.7	5.5	5.9	5.9	6.1	6.1	6.0	6.5	6.9	6.2	5.7	6.1	6.4	6.7	6.1	5.7	5.7	5.7	6.2	5.5	5.7	5.7	6.9	5.3	5.9
8	5.5	5.4	5.5	5.6	5.4	5.7	6.5	6.0	5.9	6.3	6.1	6.0	6.3	6.9	6.7	6.5	6.6	5.4	5.1	5.1	4.6	5.9	6.2	14.5	14.5	4.6	6.2
9	16.3	15.4	23.9	13.7	15.5	12.4	19.0	19.3	19.3	19.4	27.5	20.6	19.6	16.3	13.8	18.5	12.1	7.9	7.1	8.5	7.8	16.1	24.0	21.0	27.5	7.1	16.4
10	12.9	9.2	9.3	9.0	10.2	14.4	24.7	16.7																	24.7	9.0	13.6
Max.	**26.9**	**15.4**	**23.9**	**16.2**	**15.5**	**14.4**	**24.7**	**19.3**	**19.3**	**19.4**	**27.5**	**32.7**	**35.7**	**49.4**	**27.9**	**19.0**	**18.2**	**18.8**	**18.4**	**12.3**	**15.0**	**26.7**	**24.0**	**21.0**	**49.4**		
Min.	**5.3**	**4.9**	**5.5**	**5.5**	**5.4**	**3.7**	**5.5**	**6.0**	**5.9**	**6.3**	**6.1**	**6.0**	**5.7**	**6.1**	**6.4**	**6.5**	**6.1**	**5.4**	**5.1**	**5.1**	**4.6**	**5.2**	**4.1**	**4.0**		**3.7**	
Avg.	**10.3**	**8.6**	**9.2**	**9.1**	**8.4**	**8.7**	**9.9**	**11.0**	**11.5**	**12.1**	**13.6**	**14.5**	**14.7**	**14.5**	**12.9**	**12.1**	**11.4**	**10.2**	**9.4**	**8.0**	**8.2**	**9.8**	**7.5**	**9.0**			**10.6**

Total Hours in Month 224 **Hours Data Available** 224 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station –Total Precipitation (mm)

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.4	0.0	0.2	0.2	0.6	0.0	1.4	0.6	0.2	0.0	0.0	0.0	2.0	0.0	0.6	13.4	3.0	0.2	0.0	0.0	0.0	0.0	22.80
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 22.80

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 1 Meteorological Station –Total Precipitation (mm)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.20
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									

Total Precipitation (mm) = 0.20

Total Hours in Month 672 **Hours Data Available** 467 **Data Recovery** 69.5%

HCG, Inc.

Pebble 1 Meteorological Station –Total Precipitation (mm)

March 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
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19																									
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21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																			0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 0.00

Total Hours In Month 744 **Hours Data Available** 54 **Data Recovery** 7.3%

HCG, Inc.

Pebble 1 Meteorological Station –Total Precipitation (mm)

April 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.60
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.6	0.8	0.8	0.6	0.6	1.6	0.2	0.0	0.2	0.4	0.6	0.2	0.2	0.2	0.4	0.2	0.2	0.4	0.4	0.2	8.80
20	0.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.2	1.0	0.6	0.6	0.8	0.8	0.6	0.6	1.0	0.4	0.4	1.2	0.8	0.8	0.4	0.4	11.20
21	0.6	0.2	0.0	0.2	0.0	0.2	0.0	2.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.0	0.0	0.2	0.2	1.0	0.0	5.80
22	0.8	0.2	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.40
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.80
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.4	0.4	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.20
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 35.80

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 1 Meteorological Station –Total Precipitation (mm)

May 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Daily Total
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.20
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	2.0	1.8	0.0	4.60
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.20
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.0	1.4	0.2	0.0	4.60
22	0.2	0.6	0.4	0.0	0.2	0.6	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.8	1.2	1.0	3.0	0.2	0.0	0.0	0.0	11.20
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.20
27	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.60
29	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20

Total Precipitation (mm) = 26.40

Total Hours in Month 744 **Hours Data Available** 736 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station –Total Precipitation (mm)

June 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.60
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																	0.00

Total Precipitation (mm) = 0.80

Total Hours in Month 224 **Hours Data Available** 224 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Daily Evaporation (mm)

January 2005- July 2005

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	4.3	0.0	-	-	-	-	-
2	-	-	-	-	-	4.5	0.0	-	-	-	-	-
3	-	-	-	-	-	6.9	0.0	-	-	-	-	-
4	-	-	-	-	-	7.2	6.0	-	-	-	-	-
5	-	-	-	-	-	7.7	5.5	-	-	-	-	-
6	-	-	-	-	-	7.0	8.3	-	-	-	-	-
7	-	-	-	-	-	3.4	9.2	-	-	-	-	-
8	-	-	-	-	-	0.0	4.6	-	-	-	-	-
9	-	-	-	-	-	0.0	0.0	-	-	-	-	-
10	-	-	-	-	-	0.0	1.2	-	-	-	-	-
11	-	-	-	-	-	1.1	2.9	-	-	-	-	-
12	-	-	-	-	-	3.5	0.0	-	-	-	-	-
13	-	-	-	-	0.0	5.7	0.0	-	-	-	-	-
14	-	-	-	-	5.1	5.7	5.8	-	-	-	-	-
15	-	-	-	-	4.1	7.2	9.4	-	-	-	-	-
16	-	-	-	-	3.8	6.9	0.0	-	-	-	-	-
17	-	-	-	-	2.0	1.9	0.0	-	-	-	-	-
18	-	-	-	-	2.6	0.0	1.2	-	-	-	-	-
19	-	-	-	-	2.9	0.0	0.1	-	-	-	-	-
20	-	-	-	-	4.9	4.3	1.6	-	-	-	-	-
21	-	-	-	-	0.0	8.8	5.5	-	-	-	-	-
22	-	-	-	-	0.0	0.3	7.0	-	-	-	-	-
23	-	-	-	-	0.4	4.1	0.0	-	-	-	-	-
24	-	-	-	-	1.1	6.7	2.6	-	-	-	-	-
25	-	-	-	-	5.2	5.2	0.0	-	-	-	-	-
26	-	-	-	-	1.3	5.2	1.5	-	-	-	-	-
27	-	-	-	-	0.5	0.0	0.3	-	-	-	-	-
28	-	-	-	-	0.0	0.9	0.2	-	-	-	-	-
29	-		-	-	3.0	3.4	0.0	-	-	-	-	-
30	-		-	-	3.6	0.0	1.1	-	-	-	-	-
31	-		-		2.7		1.8	-		-		-
Total	0.0	0.0	0.0	0.0	43.5	111.7	75.9	0.0	0.0	0.0	0.0	0.0

Appendix B

Pebble 2 Validated Continuous Data Summaries

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

January *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
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16																											
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19																											
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22																											
23																											
24																											
25																											
26																											
27																											
28	-6.4	-7.4	-7.5	-7.8	-7.9	-7.4	-7.2	-7.7	-8.1	-7.9	-7.0	-6.0	-5.6	-5.7	-5.1	-4.9	-4.9	-5.5	-7.2	-7.3	-6.7	-6.3	-6.1	-6.0	-4.9	-8.1	-6.7
29	-5.8	-5.9	-6.3	-6.0	-4.8	-4.9	-4.8	-4.8	-5.1	-5.4	-5.6	-3.9	-2.9	-2.6	-2.6	-2.2	-2.7	-1.2	-1.7	-0.3	1.5	0.9	-0.9	-0.1	1.5	-6.3	-3.2
30	0.3	-0.2	1.3	2.5	2.2	2.1	1.4	-1.7	-2.1	-2.3	-4.2	-5.9	-7.6	-9.4	-10.6	-12.0	-13.6	-14.9	-15.6	-16.3	-17.0	-17.5	-17.4	-17.7	2.5	-17.7	-7.3
31	-17.5	-17.8	-17.9	-17.7	-17.8	-17.3	-17.3	-16.8	-16.3	-16.8	-16.5	-16.0	-15.2	-14.7	-14.4	-13.7	-14.2	-14.9	-15.6	-15.9	-16.0	-16.0	-16.6	-17.4	-13.7	-17.9	-16.3
Max.	**0.3**	**-0.2**	**1.3**	**2.5**	**2.2**	**2.1**	**1.4**	**-1.7**	**-2.1**	**-2.3**	**-4.2**	**-3.9**	**-2.9**	**-2.6**	**-2.6**	**-2.2**	**-2.7**	**-1.2**	**-1.7**	**-0.3**	**1.5**	**0.9**	**-0.9**	**-0.1**	**2.5**		
Min.	**-17.5**	**-17.8**	**-17.9**	**-17.7**	**-17.8**	**-17.3**	**-17.3**	**-16.8**	**-16.3**	**-16.8**	**-16.5**	**-16.0**	**-15.2**	**-14.7**	**-14.4**	**-13.7**	**-14.2**	**-14.9**	**-15.6**	**-16.3**	**-17.0**	**-17.5**	**-17.4**	**-17.7**		**-17.9**	
Avg.	**-7.3**	**-7.8**	**-7.6**	**-7.2**	**-7.1**	**-6.9**	**-7.0**	**-7.7**	**-7.9**	**-8.1**	**-8.3**	**-7.9**	**-7.8**	**-8.1**	**-8.2**	**-8.2**	**-8.9**	**-9.2**	**-10.0**	**-10.0**	**-9.6**	**-9.7**	**-10.2**	**-10.3**			**-8.4**

Total Hours in Month 744 **Hours Data Available** 96 **Data Recovery** 12.9%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-17.8	-18.3	-18.5	-18.8	-18.9	-19.2	-19.2	-18.1	-18.2	-18.8	-19.1	-17.4	-17.2	-17.7	-16.9	-16.6	-18.1	-19.0	-19.2	-19.7	-20.3	-20.5	-21.1	-21.5	-16.6	-21.5	-18.8
2	-22.4	-22.9	-23.0	-23.8	-24.3	-24.4	-24.4	-24.4	-24.7	-25.1	-25.0	-24.0	-23.3	-22.5	-22.0	-21.9	-21.9	-22.9	-23.6	-24.1	-24.7	-24.9	-25.4	-25.6	-21.9	-25.6	-23.8
3	-25.4	-25.3	-25.7	-26.0	-26.3	-26.6	-27.1	-27.2	-27.0	-27.0	-26.5	-25.1	-25.1	-23.2	-21.7	-20.3	-21.8	-24.3	-25.3	-25.5	-25.5	-25.9	-25.7	-25.4	-20.3	-27.2	-25.2
4	-25.3	-25.1	-25.0	-24.6	-24.0	-24.0	-23.5	-22.8	-22.0	-21.6	-20.5	-19.1	-17.8	-16.8	-15.0	-14.1	-13.9	-13.1	-14.7	-14.6	-15.0	-15.0	-14.6	-14.2	-13.1	-25.3	-19.0
5	-13.4	-13.3	-12.9	-12.1	-11.9	-11.7	-12.1	-12.3	-12.3	-12.1	-11.2	-10.3	-9.8	-8.8	-8.2	-7.2	-5.4	-5.0	-4.6	-4.1	-4.2	-4.4	-4.2	-4.0	-4.0	-13.4	-9.0
6	-3.9	-3.6	-3.3	-3.1	-2.8	-2.4	-2.2	-1.9	-1.5	-1.3	-1.1	-1.2	-1.2	-1.1	-1.1	-1.2	-1.0	-0.9	-1.1	-1.3	-1.3	-1.2	-1.2	-1.4	-0.9	-3.9	-1.8
7	-1.3	-1.3	-1.3	-1.6	-1.7	-1.3	-1.1	-1.2	-1.2	-1.4	-1.5	-1.6	-1.5	-1.4	-1.3	-1.2	-1.1	-1.2	-1.1	-1.3	-1.4	-1.8	-1.5	-1.8	-1.1	-1.8	-1.4
8	-2.0	-2.2	-2.2	-1.9	-1.8	-2.0	-1.9	-1.8	-1.9	-1.7	-1.3	-1.1	-0.9	-0.6	-0.5	-0.4	-0.8	-0.8	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-0.4	-2.2	-1.3
9	-1.1	-1.2	-1.3	-1.5	-1.5	-1.8	-3.2	-5.3	-9.5	-12.4	-14.7	-16.6	-17.3	-18.1	-19.0	-19.5	-20.3	-20.8	-20.9	-21.4	-22.2	-22.4	-22.4	-22.3	-1.1	-22.4	-13.2
10	-22.4	-22.6	-22.7	-22.9	-23.1	-23.3	-23.3	-23.3	-23.9	-23.7	-23.5	-22.8	-22.2	-21.8	-21.1	-21.0	-20.7	-21.8	-21.8	-22.0	-21.1	-22.2	-21.2	-21.9	-20.7	-23.9	-22.3
11	-22.2	-22.4	-22.0	-21.8	-21.8	-21.4	-20.7	-20.5	-19.8	-19.1	-18.2	-17.5	-16.6	-15.5	-14.7	-14.7	-15.5	-15.9	-16.4	-16.7	-17.3	-17.4	-18.0	-17.5	-14.7	-22.4	-18.5
12	-16.9	-16.5	-16.1	-16.4	-15.6	-14.7	-15.2	-15.4	-15.3	-15.3	-14.4	-14.2	-13.7	-14.5	-12.1	-10.7	-10.2	-10.1	-10.3	-10.0	-10.0	-9.7	-9.3	-8.8	-8.8	-16.9	-13.1
13	-8.6	-8.6	-7.9	-7.1	-6.0	-5.0	-4.4	-4.0	-3.7	-3.3	-2.7	-2.0	-1.9	-1.7	-1.9	-2.1	-2.2	-2.5	-3.4	-4.5	-4.7	-3.8	-3.3	-2.4	-1.7	-8.6	-4.1
14	-1.5	-0.7	-0.8	-1.0	-1.0	-0.6	-0.3	-0.3	0.4	0.0	0.1	0.5	0.2	1.5	1.8	1.8	1.8	1.8	-0.1	-1.2	-2.0	-2.2	-2.2	-1.8	1.8	-2.2	-0.2
15	-1.7	-1.7	-1.6	-1.7	-1.8	-2.0	-1.8	-1.6	-1.5	-1.3	-1.2	-1.0	0.6	1.8	1.5	1.4	0.9	-1.7	-2.4	-2.7	-2.8	-2.4	-2.4	-2.6	1.8	-2.8	-1.2
16	-2.9	-2.7	-2.0	-1.7	-1.7	-1.4	-1.1	-1.0	-1.1	-1.1	-1.1	-0.8	-0.2	0.3	0.0	0.2	-0.9	-0.6	0.7	1.6	1.7	1.5	1.4	1.6	1.7	-2.9	-0.5
17	1.6	1.6	1.3	1.0	1.3	1.1	-0.5	-0.4	0.3	0.5	1.8	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.7	1.2	1.0	0.9	0.9	0.4	2.1	-0.5	1.3
18	-0.6	0.3	-0.3	0.3	-0.2	-0.5	-0.1	1.0	1.1	1.5	1.5	1.9	1.6	1.3	1.2	1.3	1.3	1.6	1.6	1.7	1.7	1.6	1.7	1.2	1.9	-0.6	1.0
19	1.4	1.6	1.4	0.8	-1.0	-1.6	-1.4	-1.1	-1.2	-1.3	-0.8	0.7	2.1	2.4	2.4	2.1	1.6	1.5	1.4	1.7	2.1	1.9	1.8	1.9	2.4	-1.6	0.9
20	2.3	2.5	2.8	2.9	2.8	2.7	2.4	2.4	2.6	3.0	3.2	3.5	3.9	4.0	3.9	3.6	3.7	3.4	2.9	2.8	2.8	2.7	2.6	2.5	4.0	2.3	3.0
21	2.3	2.2	2.2	2.2	2.2	2.1	0.0	-0.8	-1.0	-0.8	0.6	2.6	2.8	2.8	3.0	3.0	3.0	2.9	0.6	-0.6	-0.6	-0.6	-1.4	-0.7	3.0	-1.4	1.2
22	-0.4	-0.5	-1.3	-1.5	-1.2	-2.6	-4.2	-3.2	-1.7	-1.8	-2.0	-1.8	-1.4	3.4	3.2	3.2	3.2	2.3	1.0	-1.5	-0.3	2.7	0.8	0.3	3.4	-4.2	-0.2
23	0.3	0.1	0.2	0.1	-0.2	-0.8	-0.4	0.9	1.2	0.9	2.3	3.5	3.9	4.1	3.8	3.9	3.8	4.0	4.0	4.2	4.3	4.2	3.6	3.3	4.3	-0.8	2.3
24	3.1	3.1	3.0	3.5	3.8	3.6	3.2	2.5	2.8	3.3	3.4	3.4	2.9	3.0	3.5	3.2	3.7	3.0	1.9	1.0	1.0	0.3	-1.2	-4.5	3.8	-4.5	2.4
25	-4.8	-4.5	-3.4	-3.2	-4.2	-4.0	-2.9	-4.4	-3.3	-2.1	2.9	1.0	2.9	4.9	4.9	6.6	5.7	4.3	3.0	3.1	2.5	2.7	2.1	1.8	6.6	-4.8	0.5
26	0.1	-0.1	-0.3	0.5	1.7	1.3	0.7	0.8	0.8	0.9	1.5	2.2	3.3	4.3	4.3	3.0	2.9	2.2	-0.8	-1.8	-1.9	-2.6	-5.5	-5.4	4.3	-5.5	0.5
27	-6.4	-6.2	-6.3	-6.3	-6.1	-7.9	-7.2	-7.9	-8.2	-7.1	-6.7	-7.2	-5.2	-4.2	-4.0	-4.0	-4.3	-5.1	-6.4	-6.5	-6.9	-8.2	-8.5	-8.9	-4.0	-8.9	-6.5
28	-8.6	-9.1	-9.2	-9.8	-10.4	-10.4	-11.1	-11.2	-10.9	-10.8	-10.3	-8.4	-8.2	-8.7	-7.8	-6.4	-7.4	-7.9	-9.1	-9.5	-9.5	-9.5	-9.4	-9.9	-6.4	-11.2	-9.3
Max.	**3.1**	**3.1**	**3.0**	**3.5**	**3.8**	**3.6**	**3.2**	**2.5**	**2.8**	**3.3**	**3.4**	**3.5**	**3.9**	**4.9**	**4.9**	**6.6**	**5.7**	**4.3**	**4.0**	**4.2**	**4.3**	**4.2**	**3.6**	**3.3**	**6.6**		
Min.	**-25.4**	**-25.3**	**-25.7**	**-26.0**	**-26.3**	**-26.6**	**-27.1**	**-27.2**	**-27.0**	**-27.0**	**-26.5**	**-25.1**	**-25.1**	**-23.2**	**-22.0**	**-21.9**	**-21.9**	**-24.3**	**-25.3**	**-25.5**	**-25.5**	**-25.9**	**-25.7**	**-25.6**		**-27.2**	
Avg.	**-7.1**	**-7.1**	**-7.0**	**-7.0**	**-7.0**	**-7.1**	**-7.3**	**-7.2**	**-7.2**	**-7.1**	**-6.6**	**-6.1**	**-5.6**	**-5.0**	**-4.7**	**-4.5**	**-4.7**	**-5.2**	**-5.8**	**-6.2**	**-6.3**	**-6.3**	**-6.6**	**-6.7**			**-6.3**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

March *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-9.8	-10.3	-10.4	-10.3	-10.0	-10.1	-9.4	-8.1	-8.1	-6.6	-6.2	-5.2	-4.6	-3.7	-3.1	-2.8	-3.2	-3.7	-5.2	-6.0	-6.3	-6.2	-6.3	-6.2	-2.8	-10.4	-6.7
2	-5.9	-5.6	-4.8	-4.4	-3.9	-4.0	-4.5	-4.7	-4.5	-3.8	-3.3	-2.7	-2.4	-1.4	0.2	0.2	-1.2	-1.7	-2.3	-2.7	-3.3	-3.8	-4.0	-4.1	0.2	-5.9	-3.3
3	-4.7	-5.2	-4.8	-4.0	-3.6	-3.4	-3.5	-3.2	-3.2	-3.0	-2.8	-2.3	-1.5	-1.1	-0.6	-0.3	-0.8	-0.7	-1.9	-3.3	-3.7	-3.3	-2.4	-1.9	-0.3	-5.2	-2.7
4	-0.5	1.1	2.8	2.9	3.4	3.1	3.4	2.7	2.4	2.9	3.2	3.3	5.4	5.8	5.8	6.2	5.3	5.2	4.7	3.0	3.4	2.4	1.5	1.7	6.2	-0.5	3.4
5	1.8	1.3	1.7	2.2	2.1	2.4	2.4	0.1	-0.7	-0.6	2.1	4.1	4.4	4.6	4.6	4.1	3.6	3.4	3.5	3.5	3.6	3.3	3.2	2.9	4.6	-0.7	2.6
6	2.9	3.7	3.8	3.4	3.6	3.8	3.6	3.5	4.0	4.7	5.9	6.7	6.6	5.6	6.3	6.1	4.9	3.8	4.6	4.9	3.9	3.7	4.8	5.0	6.7	2.9	4.6
7	5.0	4.7	4.8	4.4	4.5	4.6	4.4	4.4	4.7	5.0	5.3	5.6	6.3	6.7	6.9	6.5	5.1	5.1	4.9	4.9	5.0	5.4	5.2	5.8	6.9	4.4	5.2
8	5.4	5.4	5.2	5.7	5.3	5.1	4.9	5.0	5.4	5.9	6.6	7.9	7.9	7.3	6.8	6.3	6.7	6.0	5.2	4.7	4.6	5.0	4.9	5.1	7.9	4.6	5.8
9	5.2	5.1	5.1	4.9	5.0	4.8	4.8	4.3	4.0	3.9	3.8	3.8	4.1	4.7	5.3	5.4	5.3	5.1	4.6	4.6	5.2	5.2	5.4	5.2	5.4	3.8	4.8
10	5.3	5.5	6.1	4.9	4.1	3.5	4.0	4.4	4.8	6.2	6.8	7.0	6.7	7.2	7.4	7.8	7.3	7.0	6.8	5.9	5.4	4.9	4.4	4.2	7.8	3.5	5.7
11	3.7	3.6	3.6	4.1	4.4	4.1	3.2	2.3	2.1	1.9	3.3	4.0	4.9	5.8	5.4	4.8	5.0	4.7	3.9	1.9	1.5	1.3	1.6	2.0	5.8	1.3	3.5
12	2.7	3.3	3.1	2.1	2.0	2.6	3.1	3.7	4.0	4.2	3.5	3.3	3.1	3.6	4.1	4.4	4.7	4.4	4.0	3.4	3.2	3.0	2.6	2.7	4.7	2.0	3.4
13	2.7	2.7	2.0	1.8	1.6	1.8	1.9	2.2	2.3	3.2	4.0	4.6	5.2	5.2	5.5	6.6	7.8	5.9	4.0	2.7	2.0	1.8	1.4	1.8	7.8	1.4	3.4
14	2.1	2.0	2.2	2.1	2.1	2.0	2.5	2.2	3.0	3.8	4.9	4.7	4.5	3.9	3.9	3.8	3.3	2.7	1.7	0.9	0.9	0.6	1.0	1.1	4.9	0.6	2.6
15	0.7	0.7	0.4	0.3	0.5	0.5	0.6	1.0	1.5	2.0	2.2	2.3	2.3	1.9	1.8	1.6	0.9	0.6	-0.1	-0.2	-0.1	-0.3	-0.4	-0.4	2.3	-0.4	0.8
16	-0.5	-0.8	-0.7	-1.1	-1.1	-1.1	-1.5	-2.1	-2.0	-2.0	-1.8	-1.4	-1.3	-0.7	-0.1	0.2	0.2	-0.2	-1.3	-2.2	-3.5	-3.8	-4.0	-2.0	0.2	-4.0	-1.4
17	-2.3	-2.5	-2.9	-3.2	-3.1	-2.9	-2.5	-2.8	-3.0	-2.0	-0.9	0.0	-0.2	4.1	3.6	2.9	2.8	0.8	-0.1	-1.2	-2.2	-3.4	-3.7	-2.9	4.1	-3.7	-1.2
18	-2.6	-1.9	-0.9	-0.9	-1.0	-1.1	-1.9	-1.3	-1.0	0.0	1.3	2.6	3.4	4.1	3.2	3.4	3.3	3.4	1.8	-0.4	-0.8	-1.1	-1.0	-0.9	4.1	-2.6	0.4
19	-2.2	-1.7	-1.0	-1.3	-0.8	-1.4	-2.2	-1.9	-1.5	-1.2	0.4	0.3	0.4	1.3	2.3	2.9	2.8	2.5	1.1	0.2	-1.9	-2.5	-2.5	-3.0	2.9	-3.0	-0.5
20	-3.2	-3.1	-3.5	-4.1	-4.2	-5.3	-5.8	-6.5	-6.3	-7.0	-6.3	-7.1	-7.9	-7.5	-7.5	-8.2	-8.9	-10.0	-11.6	-12.8	-14.1	-14.9	-14.8	-14.3	-3.1	-14.9	-8.1
21	-14.5	-14.7	-14.3	-14.4	-14.3	-14.2	-14.1	-13.9	-13.7	-12.9	-11.9	-9.7	-6.6	-3.4	-2.2	-2.1	-2.4	-3.0	-3.7	-4.1	-3.7	-3.8	-3.8	-4.0	-2.1	-14.7	-8.6
22	-4.0	-3.7	-3.6	-3.7	-4.4	-5.5	-5.6	-5.9	-6.1	-4.4	-2.4	0.1	1.2	0.2	-3.1	-2.7	-2.3	-3.2	-5.5	-6.1	-6.1	-5.9	-6.1	-7.5	1.2	-7.5	-4.0
23	-8.3	-7.8	-7.6	-7.6	-7.1	-7.3	-7.2	-7.0	-6.2	-5.0	-4.3	-3.1	-2.5	-2.2	-2.9	-2.3	-2.0	-1.9	-1.9	-2.3	-2.3	-2.0	-1.9	-1.7	-1.7	-8.3	-4.3
24	-1.5	-1.3	-1.3	-1.4	-1.4	-1.0	-1.0	-0.9	-0.8	-0.6	-0.5	-0.3	-0.1	0.0	-0.1	-0.2	-0.5	-0.6	-0.6	-0.9	-0.8	-0.8	-1.0	-1.2	0.0	-1.5	-0.8
25	-1.3	-2.9	-4.2	-4.3	-4.4	-4.5	-4.8	-5.0	-5.1	-5.2	-5.2	-5.0	-4.7	-4.7	-4.7	-4.7	-4.8	-5.1	-5.1	-5.5	-5.6	-5.7	-5.8	-5.9	-1.3	-5.9	-4.8
26	-6.0	-6.4	-6.8	-7.1	-7.4	-7.8	-7.9	-8.3	-8.5	-8.6	-8.5	-7.1	-7.0	-5.5	-6.9	-7.3	-6.8	-6.9	-9.0	-10.0	-10.7	-11.0	-7.8	-7.2	-5.5	-11.0	-7.8
27	-7.1	-6.8	-6.8	-6.6	-6.4	-6.5	-6.9	-8.1	-7.9	-7.5	-6.6	-5.0	-3.6	-2.4	-0.8	-3.0	-3.5	-4.1	-5.3	-5.5	-4.9	-3.9	-4.0	-4.5	-0.8	-8.1	-5.3
28	-4.9	-4.6	-5.0	-5.5	-6.6	-7.1	-7.6	-7.9	-8.3	-8.8	-9.2	-9.0	-8.6	-9.0	-8.7	-7.8	-8.6	-8.8	-9.5	-10.9	-11.9	-13.0	-12.9	-13.5	-4.6	-13.5	-8.6
29	-13.0	-13.5	-14.1	-13.4	-13.5	-13.2	-12.8	-12.3	-12.3	-11.9	-11.3	-10.1	-10.5	-9.7	-7.8	-8.1	-8.4	-6.9	-8.1	-11.4	-15.1	-15.7	-15.3	-15.8	-6.9	-15.8	-11.8
30	-15.5	-15.1	-15.6	-15.7	-15.5	-15.5	-15.8	-17.2	-18.4	-18.4	-17.7	-18.4	-17.3	-17.4	-17.4	-17.1	-16.5	-16.8	-17.5	-17.8	-18.4	-18.4	-18.5	-18.8	-15.1	-18.8	-17.1
31	-18.7	-18.7	-18.6	-18.4	-18.1	-18.0	-17.7	-17.4	-17.5	-17.4	-16.3	-15.5	-14.8	-13.9	-13.8	-13.4	-12.9	-12.8	-13.1	-14.0	-14.4	-14.6	-15.2	-15.6	-12.8	-18.7	-15.9
Max.	**5.4**	**5.5**	**6.1**	**5.7**	**5.3**	**5.1**	**4.9**	**5.0**	**5.4**	**6.2**	**6.8**	**7.9**	**7.9**	**7.3**	**7.4**	**7.8**	**7.8**	**7.0**	**6.8**	**5.9**	**5.4**	**5.4**	**5.4**	**5.8**	**7.9**		
Min.	**-18.7**	**-18.7**	**-18.6**	**-18.4**	**-18.1**	**-18.0**	**-17.7**	**-17.4**	**-18.4**	**-18.4**	**-17.7**	**-18.4**	**-17.3**	**-17.4**	**-17.4**	**-17.1**	**-16.5**	**-16.8**	**-17.5**	**-17.8**	**-18.4**	**-18.4**	**-18.5**	**-18.8**		**-18.8**	
Avg.	**-2.9**	**-2.8**	**-2.8**	**-2.9**	**-2.9**	**-3.0**	**-3.0**	**-3.2**	**-3.1**	**-2.7**	**-2.0**	**-1.3**	**-0.9**	**-0.3**	**-0.2**	**-0.2**	**-0.4**	**-0.8**	**-1.6**	**-2.5**	**-2.9**	**-3.2**	**-3.1**	**-3.0**			**-2.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

April *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-15.6	-15.9	-16.0	-15.9	-16.4	-16.0	-16.0	-15.3	-14.0	-11.9	-9.1	-7.3	-6.8	-5.4	-4.9	-4.7	-7.1	-7.8	-7.7	-9.7	-12.4	-13.1	-13.2	-13.3	-4.7	-16.4	-11.5
2	-13.4	-13.4	-13.8	-13.9	-13.9	-14.3	-14.4	-14.1	-13.0	-11.7	-10.5	-9.7	-8.7	-8.5	-8.1	-7.3	-6.9	-8.3	-9.0	-10.6	-11.8	-12.3	-13.3	-13.5	-6.9	-14.4	-11.4
3	-13.0	-12.5	-13.3	-14.5	-15.0	-15.1	-15.5	-15.3	-14.9	-14.4	-13.7	-13.5	-12.9	-11.5	-11.0	-10.4	-10.3	-10.7	-11.1	-12.7	-14.3	-14.5	-15.0	-16.2	-10.3	-16.2	-13.4
4	-15.7	-15.6	-16.1	-16.7	-16.8	-17.3	-17.7	-16.8	-16.3	-15.3	-14.2	-13.4	-12.4	-11.5	-10.4	-9.3	-8.8	-8.7	-9.1	-9.6	-10.4	-11.0	-11.4	-11.1	-8.7	-17.7	-13.1
5	-10.8	-10.6	-10.8	-10.7	-10.5	-11.0	-11.1	-11.4	-11.3	-11.1	-10.7	-10.4	-10.0	-9.4	-8.9	-8.6	-7.8	-7.3	-6.9	-6.6	-6.2	-5.9	-5.3	-5.2	-5.2	-11.4	-9.1
6	-5.0	-3.7	-1.7	-0.5	-2.1	-2.1	0.0	0.3	1.2	1.7	1.8	1.9	2.4	2.2	2.7	2.2	1.2	1.3	1.3	0.8	0.4	0.4	0.2	0.1	2.7	-5.0	0.3
7	-0.1	-0.4	-0.1	-0.4	-0.4	-0.4	-0.5	-0.5	-0.4	-0.5	-0.3	0.1	0.6	1.1	1.4	1.1	0.8	0.8	1.0	0.2	-0.8	-1.4	-1.3	-1.3	1.4	-1.4	-0.1
8	-1.5	-1.7	-2.3	-2.8	-3.0	-3.2	-2.4	-2.5	-0.8	1.5	0.8	3.3	3.1	3.2	2.8	3.3	3.1	2.7	2.1	1.3	1.1	0.8	0.4	-0.5	3.3	-3.2	0.4
9	-1.5	-1.0	-0.6	0.0	-0.7	-1.7	-1.5	-0.5	-0.8	-0.6	1.9	1.7	2.6	3.9	6.6	6.4	6.3	5.3	4.2	3.1	1.9	1.5	1.4	1.1	6.6	-1.7	1.6
10	1.2	1.1	0.4	-0.3	-0.9	-1.3	-1.8	-2.1	-1.1	-0.4	0.1	1.0	2.1	2.7	3.1	2.7	2.1	1.4	0.7	0.0	-0.2	-0.9	-1.3	-1.5	3.1	-2.1	0.3
11	-2.2	-2.7	-3.3	-3.8	-4.0	-3.8	-4.1	-4.3	-4.3	-4.4	-2.9	-2.5	-1.9	-1.4	-0.8	-0.3	-0.3	-0.5	-0.8	-1.2	-1.7	-2.2	-2.8	-3.5	-0.3	-4.4	-2.5
12	-4.5	-4.8	-5.8	-6.2	-6.9	-6.9	-7.3	-7.6	-7.3	-6.5	-4.7	-3.5	-2.6	-1.7	-1.0	-0.3	0.2	0.4	-0.4	-1.5	-2.9	-3.3	-3.5	-3.3	0.4	-7.6	-3.8
13	-3.4	-3.5	-3.4	-3.8	-3.7	-4.1	-3.8	-3.3	-1.7	-0.7	2.0	3.4	4.4	5.5	6.7	5.4	5.1	4.7	3.4	1.6	-0.3	-1.0	-2.0	-1.8	6.7	-4.1	0.2
14	-1.3	-0.8	-0.2	-0.2	-0.9	-1.8	-1.7	-1.1	0.9	1.9	2.6	3.3	3.7	3.7	4.1	3.8	4.0	3.4	2.8	1.7	0.4	-0.7	-1.4	-1.4	4.1	-1.8	1.0
15	-1.3	-1.4	-1.8	-1.8	-2.4	-2.5	-1.9	-1.7	-2.1	-1.0	-0.3	0.8	2.1	2.8	2.9	2.8	2.7	2.3	2.0	2.0	1.9	0.6	-0.2	0.2	2.9	-2.5	0.2
16	-0.2	-0.8	-1.3	-1.9	-2.2	-3.0	-3.3	-2.5	-2.3	-2.0	-1.4	-1.0	-0.6	0.0	0.1	-0.1	-0.4	-0.8	-1.1	-1.8	-2.7	-3.5	-4.6	-5.0	0.1	-5.0	-1.8
17	-5.9	-5.9	-6.4	-7.0	-7.7	-8.3	-9.0	-8.8	-8.7	-8.1	-7.3	-6.7	-6.3	-6.2	-6.0	-6.1	-5.9	-5.8	-6.3	-7.1	-8.1	-9.4	-10.2	-10.7	-5.8	-10.7	-7.4
18	-11.2	-10.8	-10.2	-10.2	-10.6	-10.4	-9.7	-9.4	-9.3	-9.2	-8.8	-7.8	-6.7	-6.1	-5.8	-5.7	-5.7	-6.1	-6.3	-6.6	-6.7	-6.8	-6.8	-6.9	-5.7	-11.2	-8.1
19	-6.9	-6.7	-6.2	-6.1	-6.0	-5.6	-3.7	-2.1	-2.5	-2.4	-2.6	-3.6	-4.2	-4.1	-4.4	-4.4	-4.9	-5.4	-5.8	-6.0	-6.4	-6.6	-6.6	-6.6	-2.1	-6.9	-5.0
20	-6.6	-6.8	-7.0	-7.0	-7.2	-7.6	-7.5	-7.2	-6.7	-6.0	-5.3	-4.8	-4.2	-3.4	-2.3	-0.5	0.1	0.6	1.2	1.0	0.9	0.9	0.9	0.5	1.2	-7.6	-3.5
21	0.3	0.5	0.8	0.5	0.5	0.4	0.6	0.6	0.9	1.1	1.3	1.4	1.0	0.9	0.9	1.1	1.4	1.8	1.9	2.2	2.1	2.6	2.9	3.0	3.0	0.3	1.3
22	2.9	2.8	2.8	2.5	2.1	1.8	1.8	1.7	1.9	2.5	3.4	4.3	4.4	4.4	4.8	4.4	3.9	3.5	3.3	2.5	2.0	1.9	2.0	2.1	4.8	1.7	2.9
23	1.6	2.0	1.5	1.3	1.1	0.8	0.8	1.6	1.4	1.6	1.6	1.6	1.9	1.9	2.1	2.4	2.3	2.0	1.7	1.8	1.8	1.4	0.7	0.4	2.4	0.4	1.5
24	-0.2	-0.8	-0.9	-0.7	-1.1	-0.9	-1.2	-0.6	0.1	1.4	1.8	1.8	2.2	2.8	3.4	4.2	5.1	5.1	5.5	5.5	4.8	5.1	4.6	4.4	5.5	-1.2	2.1
25	4.8	5.0	5.0	5.3	5.0	5.0	4.9	5.0	4.0	5.1	6.0	7.6	8.2	8.4	8.6	8.1	7.5	7.5	6.5	5.7	5.3	5.5	5.1	5.3	8.6	4.0	6.0
26	5.2	5.4	6.1	5.2	4.8	5.4	4.9	4.8	6.7	8.1	8.7	9.4	9.5	9.8	9.5	9.3	9.4	8.5	7.8	7.2	6.6	5.7	6.3	5.9	9.8	4.8	7.1
27	5.6	5.6	5.0	4.7	4.3	4.1	4.4	5.6	6.8	7.8	8.9	8.9	9.6	10.8	10.3	10.4	10.4	10.4	10.3	10.1	9.8	8.6	9.4	8.8	10.8	4.1	7.9
28	9.1	8.8	8.3	7.8	8.0	7.0	7.2	6.3	7.6	7.4	7.9	8.8	9.5	9.8	10.1	9.4	9.0	8.4	8.1	7.3	8.4	7.6	6.1	5.4	10.1	5.4	8.0
29	5.4	5.4	4.3	4.9	4.7	5.1	5.9	6.9	6.9	7.0	7.9	11.6	12.2	12.8	13.3	12.6	12.1	12.4	10.0	8.3	8.1	8.6	9.3	7.9	13.3	4.3	8.5
30	7.7	7.6	8.1	8.0	6.8	7.5	7.3	7.0	8.6	10.5	11.4	11.9	12.5	13.5	14.0	14.2	14.1	14.3	11.8	10.1	9.6	8.5	7.2	6.3	14.3	6.3	9.9
Max.	**9.1**	**8.8**	**8.3**	**8.0**	**8.0**	**7.5**	**7.3**	**7.0**	**8.6**	**10.5**	**11.4**	**11.9**	**12.5**	**13.5**	**14.0**	**14.2**	**14.1**	**14.3**	**11.8**	**10.1**	**9.8**	**8.6**	**9.4**	**8.8**	**14.3**		
Min.	**-15.7**	**-15.9**	**-16.1**	**-16.7**	**-16.8**	**-17.3**	**-17.7**	**-16.8**	**-16.3**	**-15.3**	**-14.2**	**-13.5**	**-12.9**	**-11.5**	**-11.0**	**-10.4**	**-10.3**	**-10.7**	**-11.1**	**-12.7**	**-14.3**	**-14.5**	**-15.0**	**-16.2**		**-17.7**	
Avg.	**-2.5**	**-2.5**	**-2.6**	**-2.8**	**-3.2**	**-3.3**	**-3.2**	**-2.9**	**-2.3**	**-1.6**	**-0.8**	**0.0**	**0.5**	**1.0**	**1.5**	**1.5**	**1.4**	**1.2**	**0.7**	**0.0**	**-0.7**	**-1.1**	**-1.4**	**-1.7**			**-1.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

May *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.3	5.5	5.2	5.1	4.8	5.6	6.3	6.5	7.8	8.8	9.9	10.2	10.9	11.0	10.8	10.4	9.3	9.0	8.1	7.0	5.5	4.4	3.7	3.6	11.0	3.6	7.3
2	3.9	4.4	4.1	4.0	4.1	3.9	3.5	4.9	6.3	7.5	8.6	9.5	10.1	10.6	10.3	10.1	9.3	8.9	8.1	6.7	5.5	5.4	4.8	4.6	10.6	3.5	6.6
3	4.9	4.9	5.0	3.9	3.7	3.9	3.5	4.8	5.6	6.9	7.4	8.1	8.1	8.3	8.1	8.2	7.6	6.9	6.1	5.1	4.4	3.2	2.8	2.5	8.3	2.5	5.6
4	2.2	2.1	2.1	1.8	1.9	2.0	2.3	2.4	2.9	3.5	4.7	5.7	5.9	5.8	5.9	6.7	6.4	6.1	5.4	4.6	3.8	3.2	2.8	3.1	6.7	1.8	3.9
5	3.0	3.0	3.0	3.0	2.9	2.7	2.8	2.7	3.0	3.0	2.9	3.2	3.5	4.1	4.2	4.2	4.1	3.9	3.5	3.3	3.4	3.6	3.6	3.4	4.2	2.7	3.3
6	3.5	3.2	3.0	2.7	2.7	2.9	2.8	3.1	3.4	4.2	4.7	5.2	5.1	5.2	5.5	5.5	5.7	5.3	4.7	3.8	3.8	3.5	3.4	3.3	5.7	2.7	4.0
7	3.3	3.3	3.3	3.3	3.0	3.2	3.2	3.7	4.5	5.5	7.0	8.4	9.7	10.3	10.7	10.9	10.8	10.6	10.0	9.2	7.4	6.7	5.8	4.8	10.9	3.0	6.6
8	4.1	3.3	3.7	3.7	4.0	4.1	4.2	4.3	6.0	6.5	7.4	8.7	10.0	11.0	11.7	12.4	12.6	12.6	12.2	11.6	10.3	9.1	8.2	7.7	12.6	3.3	7.9
9	7.8	8.7	7.2	6.3	6.6	6.1	6.6	8.0	10.2	12.5	13.5	14.2	14.9	15.5	15.5	15.2	15.0	14.8	13.5	12.3	10.8	10.0	9.5	8.7	15.5	6.1	11.0
10	6.5	7.0	7.5	7.2	6.3	5.5	5.3	5.9	7.0	8.9	9.7	10.2	10.4	11.1	11.4	11.2	11.3	10.6	9.8	8.8	7.9	6.8	6.2	5.7	11.4	5.3	8.3
11	6.0	5.6	5.8	5.0	5.1	3.9	4.9	6.8																	6.8	3.9	5.4
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Max.	**7.8**	**8.7**	**7.5**	**7.2**	**6.6**	**6.1**	**6.6**	**8.0**	**10.2**	**12.5**	**13.5**	**14.2**	**14.9**	**15.5**	**15.5**	**15.2**	**15.0**	**14.8**	**13.5**	**12.3**	**10.8**	**10.0**	**9.5**	**8.7**	**15.5**		
Min.	**2.2**	**2.1**	**2.1**	**1.8**	**1.9**	**2.0**	**2.3**	**2.4**	**2.9**	**3.0**	**2.9**	**3.2**	**3.5**	**4.1**	**4.2**	**4.2**	**4.1**	**3.9**	**3.5**	**3.3**	**3.4**	**3.2**	**2.8**	**2.5**		**1.8**	
Avg.	**4.7**	**4.6**	**4.5**	**4.2**	**4.1**	**4.0**	**4.1**	**4.8**	**5.7**	**6.7**	**7.6**	**8.4**	**8.8**	**9.3**	**9.4**	**9.5**	**9.2**	**8.9**	**8.2**	**7.3**	**6.3**	**5.6**	**5.1**	**4.7**			**6.4**

Total Hours in Month 744 **Hours Data Available** 248 **Data Recovery** 33.3%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

June *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

July *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

August *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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8																	2.9	2.3	1.9	1.6	1.3	1.1	0.9	1.0	2.9	0.9	1.6
9	0.9	1.1	0.8	0.5	0.5	0.3	0.3	0.2	0.3	0.6	1.0	1.4	1.5	1.3	1.2	1.0	0.6	0.4	0.2	0.0	-0.7	-1.9	-2.4	-2.8	1.5	-2.8	0.3
10	-3.2	-3.4	-3.6	-3.6	-3.5	-3.5	-3.4	-3.3	-3.3	-3.1	-2.4	-1.5	-0.3	0.4	1.5	2.2	2.4	2.0	1.9	2.0	2.2	1.9	1.4	2.1	2.4	-3.6	-0.8
11	2.2	1.8	1.7	1.4	1.5	2.0	2.1	1.9	1.8	2.1	2.3	3.0	3.3	2.5	1.2	1.3	0.3	-1.2	-1.8	-2.3	-2.7	-2.9	-2.9	-3.1	3.3	-3.1	0.6
12	-3.3	-3.4	-3.8	-4.2	-4.0	-4.1	-4.2	-4.5	-4.4	-3.6	-2.8	-2.1	-1.4	-0.5	-0.5	-0.2	-0.5	-0.8	-2.9	-3.9	-4.1	-4.4	-4.6	-4.4	-0.2	-4.6	-3.0
13	-4.4	-4.5	-4.3	-4.3	-4.0	-3.7	-3.5	-3.2	-3.4	-3.1	-2.0	-0.8	0.6	2.0	2.3	2.0	0.3	-0.1	-0.5	-0.6	-0.7	-1.2	-0.9	-0.8	2.3	-4.5	-1.6
14	-0.8	-0.7	-0.7	-0.3	0.0	0.1	0.3	0.9	1.2	1.6	2.1	2.2	2.0	1.7	1.9	2.2	2.2	2.1	2.2	2.3	2.4	2.6	2.5	2.7	2.7	-0.8	1.4
15	2.9	2.8	3.0	2.9	2.6	2.6	2.5	1.9	1.8	2.2	3.4	4.1	5.1	5.7	5.8	5.3	4.9	3.8	2.3	1.5	0.9	0.6	0.5	1.0	5.8	0.5	2.9
16	-0.3	-1.7	-2.0	-1.8	-2.1	-2.8	-3.2	-3.2	-2.2	-0.7	0.7	3.2	3.3	3.9	3.2	2.7	2.2	2.4	2.3	2.5	2.7	2.8	2.7	2.6	3.9	-3.2	0.7
17	1.9	1.6	1.8	1.9	2.2	2.6	2.9	3.1	3.5	4.1	4.4	4.5	4.0	4.0	3.5	2.9	2.8	2.5	2.0	1.9	1.7	1.6	1.6	1.7	4.5	1.6	2.7
18	1.5	1.4	1.2	1.0	1.0	0.7	0.6	0.0	-0.6	0.0	1.2	2.1	3.0	2.8	3.2	3.0	3.1	3.0	3.0	2.6	2.7	2.9	2.7	2.2	3.2	-0.6	1.8
19	2.4	2.3	2.4	2.5	2.7	2.4	2.3	3.0	3.5	3.7	4.0	4.2	4.7	4.8	4.5	4.0	4.4	4.7	4.6	4.8	4.6	4.0	3.7	3.5	4.8	2.3	3.7
20	3.3	3.3	3.6	3.6	3.2	3.2	3.4	4.0	4.2	4.0	4.3	5.1	5.9	6.4	6.4	6.0	5.7	6.3	6.5	6.5	6.3	6.4	5.6	4.6	6.5	3.2	4.9
21	4.8	4.9	4.0	3.5	3.3	2.9	2.6	2.4	2.0	1.2	0.2	0.3	0.5	0.8	1.1	0.5	0.1	-0.1	-0.4	-0.5	-0.8	-0.6	-0.9	-1.4	4.9	-1.4	1.3
22	-1.9	-2.3	-3.0	-3.0	-3.6	-3.9	-3.5	-3.5	-3.6	-3.6	-3.5	-3.1	-2.3	-2.0	-1.5	-1.5	-2.1	-2.4	-2.8	-3.2	-3.9	-4.0	-3.3	-3.9	-1.5	-4.0	-3.0
23	-5.1	-5.2	-5.4	-5.6	-6.2	-5.4	-5.7	-6.0	-5.9	-5.1	-4.4	-4.4	-4.0	-3.7	-3.5	-3.8	-3.7	-4.1	-4.2	-3.9	-3.9	-4.0	-4.1	-4.0	-3.5	-6.2	-4.6
24	-4.0	-4.1	-4.4	-5.7	-6.3	-6.3	-6.4	-6.8	-6.5	-6.5	-5.8	-5.3	-4.8	-5.0	-4.9	-4.6	-5.1	-5.1	-5.6	-6.1	-5.9	-5.8	-5.9	-5.9	-4.0	-6.8	-5.5
25	-6.2	-6.1	-6.0	-5.6	-5.7	-5.5	-5.2	-5.4	-5.7	-5.1	-4.0	-3.4	-3.1	-3.1	-2.4	-2.1	-2.5	-2.7	-2.9	-2.9	-2.7	-2.5	-2.7	-2.8	-2.1	-6.2	-4.0
26	-3.1	-3.4	-3.5	-3.5	-3.7	-4.0	-4.4	-5.3	-5.4	-4.8	-3.4	-2.7	-2.6	-2.8	-2.8	-3.1	-3.3	-4.2	-4.9	-5.6	-6.5	-6.7	-7.0	-7.5	-2.6	-7.5	-4.3
27	-8.1	-8.1	-8.4	-8.4	-8.3	-7.5	-7.0	-7.2	-6.8	-6.3	-5.8	-5.5	-4.6	-3.6	-2.6	-2.2	-3.6	-4.2	-4.8	-5.0	-5.2	-5.0	-5.8	-6.0	-2.2	-8.4	-5.8
28	-5.9	-4.6	-4.6	-5.2	-4.7	-4.1	-4.6	-5.0	-5.0	-4.7	-4.7	-4.1	-4.1	-4.4	-5.1	-5.6	-6.2	-7.3	-7.7	-7.7	-8.2	-8.8	-8.4	-7.9	-4.1	-8.8	-5.8
29	-7.8	-7.7	-7.9	-8.0	-7.8	-8.0	-7.9	-8.7	-9.3	-9.3	-9.1	-8.8	-8.2	-8.1	-7.9	-8.0	-8.2	-8.4	-8.3	-8.3	-8.3	-8.0	-7.7	-7.4	-7.4	-9.3	-8.2
30	-7.6	-7.6	-7.8	-8.0	-8.1	-7.9	-7.8	-7.7	-7.9	-8.0	-7.9	-7.7	-7.0	-7.0	-7.0	-7.1	-7.5	-8.2	-8.9	-9.3	-10.0	-10.4	-10.8	-11.1	-7.0	-11.1	-8.3
31	-11.1	-11.2	-11.4	-11.5	-12.1	-12.3	-12.8	-12.9	-13.1	-13.1	-12.0	-11.5	-10.9	-10.4	-9.9	-9.9	-10.3	-10.9	-11.7	-12.1	-12.1	-12.3	-12.4	-12.1	-9.9	-13.1	-11.7
Max.	**4.8**	**4.9**	**4.0**	**3.6**	**3.3**	**3.2**	**3.4**	**4.0**	**4.2**	**4.1**	**4.4**	**5.1**	**5.9**	**6.4**	**6.4**	**6.0**	**5.7**	**6.3**	**6.5**	**6.5**	**6.3**	**6.4**	**5.6**	**4.6**	**6.5**		
Min.	**-11.1**	**-11.2**	**-11.4**	**-11.5**	**-12.1**	**-12.3**	**-12.8**	**-12.9**	**-13.1**	**-13.1**	**-12.0**	**-11.5**	**-10.9**	**-10.4**	**-9.9**	**-9.9**	**-10.3**	**-10.9**	**-11.7**	**-12.1**	**-12.1**	**-12.3**	**-12.4**	**-12.1**		**-13.1**	
Avg.	**-2.3**	**-2.4**	**-2.5**	**-2.7**	**-2.7**	**-2.7**	**-2.7**	**-2.8**	**-2.8**	**-2.5**	**-1.9**	**-1.3**	**-0.9**	**-0.6**	**-0.5**	**-0.7**	**-0.9**	**-1.2**	**-1.7**	**-1.9**	**-2.1**	**-2.3**	**-2.4**	**-2.5**			**-1.9**

Total Hours in Month 744 **Hours Data Available** 560 **Data Recovery** 75.3%

HCG, Inc.

Pebble 2 Meteorological Station - Temperature at 2 meters (deg. C)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-12.0	-12.0	-11.1	-10.6	-10.4	-10.6	-11.2	-11.2	-10.7	-10.0	-9.0	-7.7	-6.3	-6.0	-6.7	-6.6	-6.6	-6.3	-6.9	-7.8	-8.2	-8.6	-9.0	-9.0	-6.0	-12.0	-8.9
2	-9.0	-8.4	-8.1	-8.1	-8.1	-7.9	-6.8	-6.7	-6.9	-6.0	-4.9	-4.3	-4.1	-4.1	-3.5	-3.3	-5.7	-6.6	-6.2	-6.3	-6.7	-7.5	-7.9	-7.5	-3.3	-9.0	-6.4
3	-7.2	-7.0	-7.8	-9.4	-10.6	-11.6	-12.8	-14.1	-15.4	-16.9	-17.0	-16.6	-16.5	-16.5	-16.2	-16.0	-16.0	-16.1	-16.1	-16.1	-16.2	-16.5	-16.5	-16.7	-7.0	-17.0	-14.2
4	-16.7	-17.0	-16.8	-17.3	-17.4	-17.2	-17.2	-16.7	-16.8	-16.5	-16.0	-15.5	-15.3	-14.1	-13.3	-13.1	-13.3	-13.8	-14.6	-15.2	-15.6	-16.0	-16.0	-15.9	-13.1	-17.4	-15.7
5	-16.2	-16.4	-16.5	-16.7	-17.2	-17.2	-17.0	-17.0	-16.9	-16.5	-16.0	-15.3	-14.6	-14.1	-13.6	-13.3	-13.7	-14.3	-13.8	-14.0	-13.4	-13.0	-12.7	-11.9	-11.9	-17.2	-15.1
6	-11.1	-10.2	-10.0	-8.8	-6.7	-4.8	-3.4	-2.4	-4.4	-5.1	-6.5	-7.2	-6.9	-6.9	-6.9	-7.0	-7.1	-7.3	-7.8	-9.4	-10.9	-12.8	-14.5	-15.4	-2.4	-15.4	-8.1
7	-15.9	-17.0	-18.4	-19.7	-21.1	-21.4	-21.8	-22.0	-22.0	-22.4	-22.6	-22.3	-22.0	-21.9	-20.9	-20.8	-21.0	-20.4	-20.3	-20.4	-20.0	-20.0	-19.6	-19.5	-15.9	-22.6	-20.6
8	-19.4	-18.7	-18.8	-18.5	-18.2	-17.7	-17.2	-17.1	-16.0	-15.4	-14.8	-13.4	-13.2	-12.9	-12.4	-11.8	-11.5	-12.7	-13.1	-13.3	-13.4	-14.0	-14.3	-15.3	-11.5	-19.4	-15.1
9	-15.8	-16.4	-16.8	-16.8	-16.9	-16.9	-17.0	-16.8	-16.9	-16.9	-16.6	-16.3	-15.9	-15.6	-15.4	-15.3	-15.0	-14.8	-14.6	-14.7	-14.8	-14.8	-14.6	-14.6	-14.6	-17.0	-15.8
10	-14.4	-14.3	-14.3	-14.5	-14.5	-14.3	-14.2	-14.3	-14.4	-14.3	-14.1	-13.8	-13.7	-13.3	-12.9	-12.8	-13.3	-13.7	-13.8	-13.9	-14.3	-14.4	-14.5	-14.5	-12.8	-14.5	-14.0
11	-14.8	-15.1	-15.5	-14.7	-14.5	-14.4	-14.3	-14.4	-14.4	-14.4	-14.3	-14.1	-13.9	-13.6	-13.5	-13.4	-13.4	-13.4	-13.5	-13.5	-13.5	-13.4	-13.4	-13.2	-13.2	-15.5	-14.0
12	-12.8	-12.5	-12.2	-12.0	-11.6	-11.7	-11.6	-11.0	-10.1	-9.4	-10.8	-10.3	-9.4	-10.1	-9.6	-10.0	-9.9	-10.0	-10.9	-12.1	-12.6	-14.2	-15.0	-14.3	-9.4	-15.0	-11.4
13	-14.6	-14.9	-15.0	-15.5	-14.7	-16.2	-16.5	-16.8	-16.3	-16.0	-16.1	-16.2	-16.3	-15.6	-15.0	-15.9	-16.0	-15.5	-15.1	-14.0	-13.3	-13.3	-13.4	-12.7	-12.7	-16.8	-15.2
14	-10.8	-7.0	-5.3	-6.1	-6.7	-5.8	-5.4	-4.3	-2.8	-1.9	-1.3	-0.9	-0.3	-1.4	-1.6	-0.8	-0.5	-0.5	-0.3	-0.1	0.2	0.3	0.6	0.6	0.6	-10.8	-2.6
15	0.8	0.9	0.2	-0.3	-0.1	-0.5	-0.2	-0.9	-2.0	-2.5	-3.3	-3.3	-3.0	-3.4	-3.5	-3.2	-5.1	-5.3	-6.3	-6.2	-7.5	-7.7	-7.6	-7.4	0.9	-7.7	-3.2
16	-6.0	-5.0	-2.1	-1.3	-1.4	-1.1	-1.3	-1.2	-0.4	-0.1	-0.1	0.1	0.7	1.4	1.7	1.7	1.6	1.7	1.8	1.9	2.0	2.1	2.0	1.7	2.1	-6.0	0.0
17	1.3	1.4	1.5	1.5	1.4	1.2	1.1	0.8	0.5	0.1	-0.7	-1.2	-1.4	-1.9	-2.9	-3.5	-3.8	-4.0	-4.4	-4.7	-4.7	-4.9	-4.8	-4.8	1.5	-4.9	-1.5
18	-4.6	-3.8	-2.3	-1.3	-0.7	-2.3	-2.1	-0.6	-0.3	0.5		1.5	1.4	1.4	0.7	-1.2	-2.6	-7.5	-8.3	-9.0	-9.5	-10.0	-9.7	-8.8	1.5	-10.0	-3.4
19	-7.7	-7.2	-7.0	-6.8	-6.4	-7.2	-8.0	-8.3	-8.5	-8.9	-8.5	-8.9													-6.4	-8.9	-7.8
Max.	**1.3**	**1.4**	**1.5**	**1.5**	**1.4**	**1.2**	**1.1**	**0.8**	**0.5**	**0.5**	**-0.1**	**1.5**	**1.4**	**1.4**	**1.7**	**1.7**	**1.6**	**1.7**	**1.8**	**1.9**	**2.0**	**2.1**	**2.0**	**1.7**	**2.1**		
Min.	**-19.4**	**-18.7**	**-18.8**	**-19.7**	**-21.1**	**-21.4**	**-21.8**	**-22.0**	**-22.0**	**-22.4**	**-22.6**	**-22.3**	**-22.0**	**-21.9**	**-20.9**	**-20.8**	**-21.0**	**-20.4**	**-20.3**	**-20.4**	**-20.0**	**-20.0**	**-19.6**	**-19.5**		**-22.6**	
Avg.	**-10.9**	**-10.6**	**-10.3**	**-10.4**	**-10.3**	**-10.4**	**-10.4**	**-10.3**	**-10.2**	**-10.1**	**-10.7**	**-9.8**	**-9.5**	**-9.4**	**-9.2**	**-9.2**	**-9.6**	**-10.0**	**-10.2**	**-10.5**	**-10.7**	**-11.0**	**-11.2**	**-11.1**			**-10.2**

Total Hours in Month 720 **Hours Data Available** 443 **Data Recovery** 61.5%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.7	9.8	11.3	11.5	11.8	12.1	13.6	14.8	14.0	15.3	16.1	15.8	16.2	15.8	17.1	16.9	17.4	16.1	12.5	8.6	7.7	8.1	6.6	5.8	17.4	5.8	12.7
2	4.8	4.9	4.6	1.9														6.2	10.7	10.2	9.1	11.3	12.4	14.6	14.6	1.9	8.2
3	13.4	12.7	13.0	11.6	11.3	9.6	7.0	6.4	5.9	6.4	7.1	6.0	5.3	3.1	3.0	1.6	1.8	2.6	1.5	0.8	1.1	0.5	1.9	2.5	13.4	0.5	5.7
4				3.0	3.6	3.3	2.8	2.5									5.1	4.0	2.0	1.5	2.1	4.4	3.3	3.1	5.1	1.5	3.1
5	1.4	2.5	1.2	1.8	2.1	2.1	3.5	6.7	6.4	5.8	5.8	6.9	4.8	5.3	5.8	3.2	3.7	2.3	4.8	5.1	4.4	2.7	3.5	3.8	6.9	1.2	4.0
6	2.8	2.2	1.6	1.3	0.6	1.5	2.6	3.0	2.7	4.7	4.8	4.8	5.8	5.5	3.2	2.3	2.2	5.1	7.7	8.6	8.0	9.1	9.8	11.0	11.0	0.6	4.6
7	11.7	8.6	10.9	10.1	7.3	7.9	8.9	6.9	6.9	8.8	10.3	13.3	15.6	16.9	14.5	13.5	13.3	13.7	12.5	11.1	10.9	11.6	13.4	11.9	16.9	6.9	11.3
8	8.9	13.9	17.0	14.9	7.4	4.9	10.1	9.2	8.6	8.0	11.6	12.3	8.4	8.8	10.2	9.3	8.6	8.2	8.5	8.2	10.4	10.8	11.2	10.9	17.0	4.9	10.0
9	11.8	11.1	9.5	7.4	11.0	12.3	11.7	10.0	8.1	8.2	6.8	7.5	7.8	6.8	6.0	7.1	9.0	11.4	10.0	12.7	12.5	12.0	10.0	13.9	13.9	6.0	9.8
10	13.4	13.4	14.0	15.2	15.7	15.2	15.8	15.3	15.0	15.5	16.6	14.8	13.9	11.5	11.4	11.9	13.1	14.5	13.5	14.9	15.8	15.1	15.6	14.9	16.6	11.4	14.4
11	15.7	14.4	15.4	14.7	12.0	10.7	8.8	9.5	7.2	6.9	7.0	6.0	5.2	5.1	4.8	4.2	3.6	4.0	4.2	3.3	3.7	3.6	3.6	4.2	15.7	3.3	7.4
12	3.6	3.4	3.7	3.6	3.4	2.7	2.8	3.0	2.9	3.4	3.6	3.1	2.3	2.2	2.4	2.9	4.8	3.3	2.1	4.7	5.1	5.9	5.3	6.4	6.4	2.1	3.6
13	7.3	9.2	9.7	12.2	12.0	13.4	12.4	11.4	10.7	12.8	13.0	13.1	12.9	11.8	10.1	9.4	8.8	8.1	7.2	7.5	7.4	5.6	5.3	6.2	13.4	5.3	9.9
14	8.2	8.6	11.0	10.4	9.5	11.0	12.4	14.8	15.5	14.5	15.7	14.9	14.4	14.6	14.6	15.2	16.0	15.5	14.4	15.9	17.0	17.8	19.6	17.6	19.6	8.2	14.1
15	17.3	17.2	16.1	17.1	16.1	15.5	13.9	14.5	14.3	15.7	14.4	13.4	14.1	13.7	14.0	11.6	9.7	11.6	10.6	10.6	12.0	12.2	12.0	11.4	17.3	9.7	13.7
16	9.3	8.9	8.5	7.9	6.5	5.4	3.9	4.2	3.4	2.6	2.1	3.0	2.5	3.3	3.2	1.9	2.6	2.1	1.3	1.0	2.2	3.7	3.9	2.3	9.3	1.0	4.0
17	2.5	3.2	4.4	4.9	3.7	2.9	2.5	3.4	4.1	3.9	5.3	4.8	4.9	4.6	4.3	4.2	4.7	4.6	4.2	3.8	4.0	3.6	2.7	3.0	5.3	2.5	3.9
18	3.5	4.3	4.4	4.6	3.6	3.6	3.1	2.9	2.5	3.8	4.7	3.8	3.3	2.8	1.4	1.4	1.3	2.2	2.1	1.3	1.2	1.1	0.9	0.9	4.7	0.9	2.7
19	1.0	1.1	1.1	1.8	2.0	2.6	3.4	3.2	3.1	2.2	1.3	1.1	1.2	1.1	1.2	2.4	2.2	1.7	1.3	1.3	1.8	1.9	1.9	2.1	3.4	1.0	1.8
20	2.3	1.7	0.7	0.8	2.3	2.1	1.4	3.0	6.7	8.1	6.2	6.4	7.4	9.4	11.1	11.1	11.9	10.5	12.7	11.4	10.0	11.4	9.1	8.9	12.7	0.7	6.9
21	9.2	9.8	9.9	9.8	9.3	8.9	9.6	9.0	9.4	7.4	5.4	5.2	5.0	5.0	7.6	10.6	9.6	7.9	8.1	9.0	7.7	5.2	6.7	5.9	10.6	5.0	8.0
22	6.0	5.7	4.3	3.0	3.8	3.7	6.1	5.3	5.9	5.9	5.5	4.5	4.7	5.0	5.8	5.1	3.2	3.6	3.9	4.7	4.8	5.1	4.6	4.3	6.1	3.0	4.8
23	4.9	4.0	4.6	4.3	4.5	4.2	4.0	3.9	3.9	3.5	2.9	2.4	1.8	2.5	2.7	2.9	3.0	2.9	1.3	1.3	2.5	4.3	5.1	3.2	5.1	1.3	3.4
24	2.1	3.8	4.7	5.4	6.0	5.8	5.6	7.4	9.2	9.1	9.3	8.5	7.0	7.2	8.3	8.1	10.2	13.5	13.1	11.9	10.4	8.7	11.0	10.9	13.5	2.1	8.2
25	14.2	12.7	11.0	13.1	11.5	10.6	11.5	11.9	10.4	9.7	10.8	10.7	12.0	10.5	11.4	10.1	10.7	10.0	11.8	11.0	9.2	12.0	10.0	7.2	14.2	7.2	11.0
26	5.9	4.1	1.6	1.7	3.1	2.9	2.5	2.7	4.8	3.9	5.4	3.8	2.8	2.6	3.1	3.0	4.0	4.2	4.6	4.5	4.7	3.8	3.8	3.7	5.9	1.6	3.6
27	4.5	3.7	4.6	4.1	3.5	3.7	4.2	2.7	3.0	3.2	2.9	2.9	2.2	3.2	3.5	3.0	3.4	2.9	3.2	2.7	2.1	2.0	1.6	2.3	4.6	1.6	3.1
28	2.4	2.1	2.5	3.0	3.7	4.2	3.7	3.0	2.6	2.9	2.7	2.9	3.4	5.0	6.0	5.5	6.4	4.4	3.5	3.7	3.9	4.7	5.2	4.5	6.4	2.1	3.8
29	4.2	2.3	2.6	4.2	5.6	4.0	1.8	2.1	2.5	1.4	1.0	1.0	1.0	1.9	2.3	2.0	3.0	3.4	2.3	5.0	2.7	3.3	3.2	5.3	5.6	1.0	2.8
30	3.4	4.9	5.1	6.4	7.3	5.9	4.9	5.2	7.2	7.2	8.7	9.8	11.3	11.9	13.2	12.5	12.5	13.4	15.4	13.7	14.7	14.4	13.6	12.9	15.4	3.4	9.8
31	16.1	15.3	14.6	15.3	14.0	16.4	16.7	17.1	16.6	16.2	16.1	15.4	15.5	16.2	13.6	16.9	15.6	15.0	15.5	17.4	18.2	17.1	14.6	14.3	18.2	13.6	15.8
Max.	**17.3**	**17.2**	**17.0**	**17.1**	**16.1**	**16.4**	**16.7**	**17.1**	**16.6**	**16.2**	**16.6**	**15.8**	**16.2**	**16.9**	**17.1**	**16.9**	**17.4**	**16.1**	**15.5**	**17.4**	**18.2**	**17.8**	**19.6**	**17.6**	**19.6**		
Min.	**1.0**	**1.1**	**0.7**	**0.8**	**0.6**	**1.5**	**1.4**	**2.1**	**2.5**	**1.4**	**1.0**	**1.0**	**1.0**	**1.1**	**1.2**	**1.4**	**1.3**	**1.7**	**1.3**	**0.8**	**1.1**	**0.5**	**0.9**	**0.9**		**0.5**	
Avg.	**7.4**	**7.3**	**7.5**	**7.3**	**7.1**	**7.0**	**7.0**	**7.2**	**7.4**	**7.5**	**7.7**	**7.5**	**7.3**	**7.3**	**7.4**	**7.2**	**7.4**	**7.4**	**7.3**	**7.3**	**7.3**	**7.5**	**7.5**	**7.4**			**7.3**

Total Hours in Month 744 **Hours Data Available** 720 **Data Recovery** 96.8%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.6	10.6	10.5	9.1	8.9	11.4	16.7	19.0	18.5	16.8	15.1	14.7	11.9	9.3	12.0	12.3	12.1	11.3	13.8	18.3	19.4	22.4	21.0	20.5	22.4	8.9	14.5
2	20.9	20.5	20.8	18.8	14.4	13.0	14.2	14.1	10.5	10.7	9.9	7.2	10.8	8.8	8.6	10.3	7.7	6.7	4.6	7.5	8.7	9.0	7.5	7.6	20.9	4.6	11.4
3	8.2	7.7	6.9	6.5	6.0	5.3	4.5	3.3	2.0	2.0	2.0	2.2	2.3	1.7	1.1	1.1	1.9	2.5	2.7	2.6	3.0	2.2	1.7	1.1	8.2	1.1	3.4
4	1.6	1.2	1.3	1.7	1.4	1.2	1.5	0.9	2.2	2.6	3.5	3.1	2.7	2.9	2.7	2.6	2.1	1.7	1.2	1.6	1.3	0.9	1.2	2.1	3.5	0.9	1.9
5	1.6	1.5	2.2	2.2	2.0	1.7	2.9	1.9	3.5	3.8	4.2	2.9	4.0	4.2	4.9	6.8	13.5	15.7	16.4	16.0	17.1	18.5	19.1	17.8	19.1	1.5	7.7
6	18.3	17.2	17.0	17.5	17.4	17.0	16.6	16.1	16.5	16.5	17.4	15.5	15.4	15.1	13.8	13.1	12.2	11.9	13.4	14.4	13.6	13.8	14.9	12.9	18.3	11.9	15.3
7	13.1	11.1	12.4	13.5	13.3	13.5	13.7	11.3	8.7	9.0	11.5	10.9	9.7	7.8	6.3	4.9	4.2	5.5	4.8	5.6	4.7	2.7	3.0	2.4	13.7	2.4	8.5
8	1.6	1.6	1.4	1.6																					1.6	1.4	1.5
9																											
10																											
11										4.6	7.1	7.2	4.5	4.1	5.0	5.3	6.4	6.9	7.4	8.4	10.2	9.6	7.8	8.2	10.2	4.1	6.9
12	9.3	6.3	3.2	6.4	7.5	4.8	5.7	5.6	5.3	4.1	4.9	2.3	1.9	3.3	4.2	5.1	5.8	7.4	8.7	9.8	10.8	11.1	11.7	11.9	11.9	1.9	6.5
13	12.0	11.1	14.3	15.2	16.7	15.9	15.8	20.2	21.8	21.1	22.0	24.0	24.6	24.4	21.2	16.5	11.0	8.2	8.1	6.3	6.8	8.7	11.2	13.3	24.6	6.3	15.4
14	16.4	18.5	22.2	22.0	24.1	24.7	25.4	24.2	22.1	18.7	20.2	16.7	12.5	12.1	9.2	10.0	8.8	7.8	6.5	6.2	6.5	6.4	5.6	6.0	25.4	5.6	14.7
15	6.2	5.6	5.2	4.8	5.4	5.2	4.9	4.0	4.9	4.6	4.3	4.3	3.2	3.5	4.3	3.5	3.2	2.6	3.5	4.5	5.5	7.3	7.3	7.6	7.6	2.6	4.8
16	8.3	10.6	11.1	11.8	11.5	12.0	12.2	14.9	16.9	16.0	15.1	15.0	15.4	15.3	15.1	14.7	11.8	11.4	12.4	13.0	11.5	9.5	12.0	12.6	16.9	8.3	12.9
17	12.8	12.8	11.3	10.6	11.8	10.2	9.4	11.6	11.6	12.4	12.3	10.7	10.4	11.5	14.7	15.9	15.9	15.9	16.9	14.6	14.4	14.7	15.1	14.9	16.9	9.4	13.0
18	13.0	15.3	15.3	16.7	17.4	14.4	15.6	18.2	14.8	14.4	15.3	14.6	18.5	16.1	14.6	14.7	14.1	16.1	12.9	12.7	11.7	11.8	10.1	7.8	18.5	7.8	14.4
19	8.7	10.5	11.2	10.0	9.2	9.6	9.6	10.3	10.9	10.6	10.2	11.2	11.4	10.8	11.4	11.7	12.6	12.2	11.5	11.7	13.2	10.5	10.6	11.5	13.2	8.7	10.9
20	10.3	8.6	11.0	10.8	10.7	10.4	11.0	11.8	11.2	15.8	17.1	14.2	14.5	13.8	14.7	14.3	14.6	14.1	15.5	12.8	11.7	11.3	11.0	9.0	17.1	8.6	12.5
21	8.4	7.6	6.9	6.3	5.6	3.9	2.8	2.1	1.7	1.9	1.4	2.3	3.0	3.0	3.1	3.3	2.0	1.2	3.2	3.2	4.6	5.1	5.5	7.3	8.4	1.2	4.0
22	7.7	7.4	7.1	5.7	5.0	3.2	5.4	7.8	10.0	11.0	11.6	10.0	7.0	8.2	5.4	5.1	6.5	6.1	3.3	2.2	3.5	6.6	8.7	12.1	12.1	2.2	6.9
23	12.2	12.2	12.4	11.9	8.8	8.6	9.3	10.2	11.1	8.9	8.3	8.8	9.7	10.0	12.5	11.5	8.6	8.3	9.4	7.6	6.6	7.9	8.5	10.8	12.5	6.6	9.8
24	10.9	10.9	7.8	6.2	5.9	4.9	4.1	4.6	6.0	7.1	6.5	7.3	5.0	6.7	7.0	7.5	10.1	7.9	6.0	5.7	6.2	6.6	4.9	4.0	10.9	4.0	6.7
25	1.9	2.7	1.6	2.1	1.7	1.5	1.9	2.6	2.2	2.5	3.4	2.4	2.5	2.9	2.4	1.9	1.4	3.1	4.7	5.4	4.0	3.2	2.3	3.1	5.4	1.4	2.6
26	4.0	4.0	4.4	4.1	3.8	2.4	3.4	2.7	2.2	2.4	2.2	2.3	1.8	1.3	2.1	3.7	3.2	3.8	5.9	6.1	6.3	6.0	3.7	4.0	6.3	1.3	3.6
27	5.5	4.4	3.4	3.3	4.0	5.5	4.3	3.8	3.6	3.7	3.9	3.9	3.0	3.5	3.6	3.9	4.5	4.6	4.4	4.0	5.0	5.0	4.7	4.3	5.5	3.0	4.2
28	3.8	3.3	3.6	4.0	5.5	4.6	5.0	4.1	3.4	5.1	4.7	4.4	4.3	4.5	2.9	4.4	5.1	4.1	4.2	2.9	2.4	1.9	1.1	1.4	5.5	1.1	3.8
Max.	**20.9**	**20.5**	**22.2**	**22.0**	**24.1**	**24.7**	**25.4**	**24.2**	**22.1**	**21.1**	**22.0**	**24.0**	**24.6**	**24.4**	**21.2**	**16.5**	**15.9**	**16.1**	**16.9**	**18.3**	**19.4**	**22.4**	**21.0**	**20.5**	**25.4**		
Min.	**1.6**	**1.2**	**1.3**	**1.6**	**1.4**	**1.2**	**1.5**	**0.9**	**1.7**	**1.9**	**1.4**	**2.2**	**1.8**	**1.3**	**1.1**	**1.1**	**1.4**	**1.2**	**1.2**	**1.6**	**1.3**	**0.9**	**1.1**	**1.1**		**0.9**	
Avg.	**9.1**	**8.9**	**9.0**	**8.9**	**9.1**	**8.5**	**9.0**	**9.4**	**9.2**	**9.1**	**9.4**	**8.7**	**8.4**	**8.2**	**8.1**	**8.2**	**8.0**	**7.9**	**8.1**	**8.1**	**8.3**	**8.5**	**8.4**	**8.6**			**8.6**

Total Hours in Month 672 **Hours Data Available** 595 **Data Recovery** 88.5%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

March *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.0	1.2	2.1	2.1	1.4	1.9	1.6	2.8	1.9	2.1	4.4	5.9	6.7	6.0	6.0	5.3	6.3	5.3	4.0	4.0	3.4	3.0	3.4	3.2	6.7	1.0	3.6
2	3.4	4.2	3.3	3.9	3.8	4.2	4.6	4.1	3.3	4.0	4.4	4.6	4.6	4.0	3.8	4.0	4.0	3.6	3.0	2.1	1.3	1.1	1.1	1.7	4.6	1.1	3.4
3	1.2	1.9	4.5	5.6	7.5	7.3	7.5	7.3	7.5	9.3	9.4	9.4	10.7	10.8	10.1	9.9	9.6	11.8	10.1	8.3	7.5	7.3	6.9	7.3	11.8	1.2	7.8
4	8.1	8.6	9.0	9.2	10.0	10.2	10.3	9.2	8.1	7.1	7.1	6.3	5.1	3.7	3.2	3.0	2.6	1.7	1.0	1.1	0.8	2.1	2.1	1.2	10.3	0.8	5.4
5	2.3	2.0	3.2	8.3	8.5	11.2	11.5	12.0	12.0	11.2	12.3	13.1	15.3	15.1	14.6	14.9	15.4	14.9	13.4	13.3	12.2	11.0	11.0	10.3	15.4	2.0	11.2
6	10.4	11.7	14.6	11.5	13.5	16.5	15.9	8.1	11.2	11.8	13.3	13.7	13.7	12.6	8.4	8.7	6.8	5.2	12.4	10.8	8.3	6.5	8.1	9.2	16.5	5.2	11.0
7	8.6	6.6	6.1	5.2	5.9	7.9	9.4	8.9	9.4	10.4	10.6	11.6	13.5	15.3	17.1	15.9	12.0	10.9	11.4	11.0	9.1	9.0	9.4	8.5	17.1	5.2	10.2
8	10.0	14.8	13.2	13.0	12.5	10.7	7.6	7.1	5.4	5.3	5.6	7.8	8.5	7.5	10.6	9.8	11.4	13.4	16.8	15.9	16.1	13.9	14.7	15.9	16.8	5.3	11.1
9	16.5	16.9	17.0	16.8	17.1	14.8	11.8	13.0	11.1	9.8	9.3	7.9	10.4	10.5	9.3	9.6	11.4	9.5	9.2	10.6	8.3	6.1	8.0	11.4	17.1	6.1	11.5
10	12.6	13.6	12.6	10.9	11.3	11.4	11.7	10.3	11.2	12.5	13.2	10.5	8.5	8.0	7.1	6.7	6.3	3.7	1.4	2.4	1.9	2.7	4.2	4.7	13.6	1.4	8.3
11	4.9	3.7	5.3	8.3	11.6	11.4	10.7	10.5	6.5	7.4	10.2	11.9	12.5	13.6	14.2	15.7	14.4	12.8	7.2	6.5	7.0	6.9	8.7	9.5	15.7	3.7	9.6
12	10.7	12.0	10.8	10.2	9.4	10.9	12.6	14.1	13.4	14.4	13.9	10.3	9.3	9.3	8.6	9.0	7.2	5.0	4.9	5.7	5.8	5.5	5.1	4.4	14.4	4.4	9.3
13	4.9	4.8	4.0	5.1	3.8	3.1	2.7	3.3	3.6	2.6	1.9	1.7	2.0	2.1	1.7	1.8	1.4	2.7	3.0	2.4	2.0	1.7	1.9	2.3	5.1	1.4	2.8
14	2.3	1.7	2.5	2.0	2.5	2.7	2.3	2.0	3.9	3.8	2.6	4.4	5.7	6.1	8.2	8.4	9.4	9.0	8.1	10.8	11.5	6.0	7.7	11.3	11.5	1.7	5.6
15	10.1	8.1	8.3	8.9	8.4	9.9	11.7	13.2	13.6	14.6	13.3	12.7	13.0	14.3	15.5	12.6	11.9	9.1	8.4	10.2	11.5	11.0	10.2	9.9	15.5	8.1	11.3
16	7.7	6.2	5.4	4.5	3.6									3.1	6.0	7.1	7.1	8.9	8.3	8.2	5.9	4.3	3.9	3.8	8.9	3.1	5.9
17	5.1	4.9	3.8	3.4	2.6	3.5	3.8	2.5	4.1	4.2	1.8	2.2	2.5	1.1	2.3	3.0	4.1	4.2	1.7	2.6	1.1	1.1	1.2	3.3	5.1	1.1	2.9
18	3.9	4.7	6.2	4.9	5.1	4.6	3.5	6.1	4.6	3.0	2.5	3.0	2.8	4.7	5.8	4.3	3.7	1.8	2.2	2.9	1.9	2.0	2.2	3.1	6.2	1.8	3.7
19	1.4	2.4	1.8	2.6	2.7	2.2	1.3	2.0	2.0	3.5	3.5	5.9	5.8	5.8	5.9	5.8	5.5	8.2	8.3	6.7	9.2	5.7	11.7	12.9	12.9	1.3	5.1
20	13.8	12.8	12.0	12.6	15.9	16.5	15.9	13.5	6.3	6.8	6.3	8.9	12.7	10.9	12.4	15.8	18.3	22.0	26.7	24.1	20.0	18.9	13.4	9.7	26.7	6.3	14.4
21	7.9	5.7	4.8	6.4	9.2	10.9	12.3	14.4	12.8	13.3	10.0	7.7	9.9	12.7	12.1	12.1	14.3	14.8	15.7	15.1	14.9	13.6	13.0	13.6	15.7	4.8	11.6
22	13.6	12.8	9.9	7.7	4.7	2.8	3.3	2.2	1.1	1.0	0.7	0.8	0.7	1.2	5.4	5.7	6.3	8.2	8.6	5.4	4.2	5.5	5.5	4.1	13.6	0.7	5.1
23	4.0	4.6	5.8	5.2	5.1	4.9	5.7	4.0	6.0	7.1	7.9	9.8	10.6	10.7	13.1	12.1	12.1	12.0	12.2	11.3	11.1	11.4	11.8	11.6	13.1	4.0	8.7
24	12.0	11.6	12.0	12.4	12.9	13.0	13.8	13.9	13.4	12.9	13.3	12.5	12.4	12.0	13.5	14.5	13.6	12.5	11.0	8.9	9.8	8.8	5.2	2.4	14.5	2.4	11.6
25	2.1	5.3	7.0	6.6	6.2	6.2	6.2	7.3	8.3	7.3	7.1	6.4	5.5	5.2	5.0	5.6	5.4	5.1	5.3	6.5	7.7	7.5	6.7	6.4	8.3	2.1	6.2
26	6.4	7.5	8.0	8.6	9.1	9.4	7.4	7.6	5.8	7.5	7.5	4.4	3.3	4.3	4.8	6.5	3.9	3.9	4.0	2.9	2.5	3.1	4.9	2.5	9.4	2.5	5.7
27	2.0	1.7	3.5	3.2	2.8	3.0	3.7	2.7	3.5	3.8	3.8	2.7	1.8	1.5	1.1	2.9	2.5	2.7	3.0	3.2	3.8	4.2	4.8	6.8	6.8	1.1	3.1
28	5.2	4.5	6.9	6.1	7.3	9.4	10.0	7.8	6.7	4.8	4.0	4.2	3.4	5.3	4.5	4.6	5.0	3.5	3.7	3.0	2.5	3.6	2.1	0.9	10.0	0.9	5.0
29	1.1	0.9	1.1	1.4	1.2	1.3	1.7	3.7	3.0	3.7	3.1	3.2	4.3	4.3	2.1	2.5	1.7	1.0	0.9	0.9	0.7	0.8	1.0	1.1	4.3	0.7	1.9
30	1.6	1.4	1.1	0.8	0.8	0.9	1.1	1.2	1.1	1.3	2.6	3.6	3.2	3.3	4.0	3.7	4.2	6.2	9.1	11.1	14.5	16.6	17.6	19.1	19.1	0.8	5.4
31	21.3	21.9	19.6	19.1	21.1	21.2	15.2	13.4	16.4	16.8	12.8	12.4	11.9	10.4	11.3	11.3	10.6	10.1	9.6	8.1	8.1	7.9	9.6	8.7	21.9	7.9	13.7
Max.	**21.3**	**21.9**	**19.6**	**19.1**	**21.1**	**21.2**	**15.9**	**14.4**	**16.4**	**16.8**	**13.9**	**13.7**	**15.3**	**15.3**	**17.1**	**15.9**	**18.3**	**22.0**	**26.7**	**24.1**	**20.0**	**18.9**	**17.6**	**19.1**	**26.7**		
Min.	**1.0**	**0.9**	**1.1**	**0.8**	**0.8**	**0.9**	**1.1**	**1.2**	**1.1**	**1.0**	**0.7**	**0.8**	**0.7**	**1.1**	**1.1**	**1.8**	**1.4**	**1.0**	**0.9**	**0.9**	**0.7**	**0.8**	**1.0**	**0.9**		**0.7**	
Avg.	**7.0**	**7.1**	**7.3**	**7.3**	**7.7**	**8.1**	**7.9**	**7.6**	**7.2**	**7.4**	**7.3**	**7.3**	**7.7**	**7.6**	**8.0**	**8.2**	**8.0**	**7.9**	**7.9**	**7.6**	**7.2**	**6.7**	**7.0**	**7.1**			**7.5**

Total Hours in Month 744 **Hours Data Available** 736 **Data Recovery** 98.9%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

April *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.9	8.3	7.3	6.3	4.6	4.1	4.2	3.4	1.8	0.8	0.8	0.9	1.1	1.3	1.3	1.5	2.2	1.8	1.0	1.0	0.7	1.5	1.0	1.0	8.9	0.7	2.8
2	1.4	1.9	2.2	2.5	2.3	3.0	2.9	2.8	2.3	3.0	2.8	4.1	3.7	4.2	5.1	3.9	3.0	5.4	4.3	2.9	3.9	5.1	6.1	7.1	7.1	1.4	3.6
3	7.8	8.8	8.3	8.7	6.2	8.5	7.2	5.9	5.5	6.8	7.0	7.6	8.1	8.6	8.4	7.7	6.7	6.6	5.2	6.7	7.4	7.0	6.5	6.5	8.8	5.2	7.2
4	6.3	5.9	5.2	5.5	5.4	5.3	5.6	5.1	5.6	5.0	5.2	5.9	6.3	7.4	7.9	6.9	6.9	8.1	7.6	7.6	9.8	9.1	10.9	12.1	12.1	5.0	6.9
5	12.8	13.5	15.0	15.2	15.4	16.6	16.9	18.4	18.0	16.7	16.9	16.4	16.6	15.9	16.0	15.3	14.4	14.5	13.5	12.6	11.1	4.9	4.7	7.0	18.4	4.7	14.1
6	6.4	5.0	4.8	5.3	3.5	4.2	4.8	4.8	6.7	7.9	12.1	10.2	11.3	9.3	6.9	9.8	11.2	9.6	9.7	8.8	8.8	7.8	5.2	4.4	12.1	3.5	7.4
7	6.3	4.8	10.1	10.8	11.0	9.5	11.3	11.5	11.1	11.4	9.4	10.1	10.5	10.0	9.2	7.8	7.6	7.0	7.1	5.4	4.8	3.6	3.4	2.5	11.5	2.5	8.2
8	1.2	1.3	1.1	1.9	3.0	3.3	3.2	2.5	2.8	3.3	6.3	6.0	8.1	8.2	7.9	7.2	4.9	3.8	3.8	2.0	2.6	1.9	2.1	2.8	8.2	1.1	3.8
9	3.6	3.4	3.5	3.2	3.4	3.6	2.6	2.9	3.1	2.8	3.1	4.1	3.5	2.8	1.9	2.3	2.4	2.3	1.3	1.5	1.7	1.6	1.7	3.0	4.1	1.3	2.7
10	2.5	2.4	3.1	3.4	5.3	3.6	2.2	4.5	5.8	4.5	6.7	5.2	5.1	4.9	5.5	6.2	7.5	9.3	9.1	10.3	10.2	10.0	10.9	10.5	10.9	2.2	6.2
11	10.7	9.6	10.6	8.8	9.2	15.0	16.9	17.3	16.5	13.9	16.4	19.0	21.0	22.8	19.4	19.9	20.4	20.6	17.4	16.8	16.0	16.3	17.2	19.2	22.8	8.8	16.3
12	16.2	17.7	17.0	17.8	17.7	17.7	15.5	11.4	14.8	14.1	7.7	7.4	8.9	9.3	8.5	7.1	6.7	5.1	5.3	5.5	5.2	4.8	3.6	1.9	17.8	1.9	10.3
13	1.2	1.4	2.0	2.8	2.8	2.6	2.3	2.6	2.4	2.2	1.8	2.2	2.3	3.2	3.0	4.3	3.9	3.1	3.7	3.6	3.7	1.3	1.3	1.8	4.3	1.2	2.6
14	4.1	5.5	6.8	6.5	4.7	2.8	2.9	3.0	5.0	4.8	6.9	7.3	7.5	7.6	7.7	6.8	5.9	5.6	6.4	4.5	2.6	0.9	0.7	1.0	7.7	0.7	4.9
15	1.1	1.5	2.0	2.2	3.6	3.3	3.3	3.4	4.3	5.1	4.9	5.4	10.0	12.5	10.8	9.4	9.4	8.8	8.8	7.3	7.9	7.7	6.6	11.7	12.5	1.1	6.3
16	12.0	12.6	12.5	13.2	13.3	13.0	14.2	15.6	16.7	14.0	12.9	11.4	13.3	12.9	12.8	10.7	8.9	7.2	8.5	9.1	7.4	8.6	8.6	8.8	16.7	7.2	11.6
17	9.3	9.4	9.2	8.7	7.4	8.3	8.5	9.5	9.5	8.4	8.4	10.6	13.1	14.3	13.2	12.6	12.0	11.5	11.5	10.8	10.1	9.6	9.0	9.0	14.3	7.4	10.2
18	8.7	9.2	9.5	10.1	10.6	11.3	12.7	13.2	13.1	13.0	13.3	12.7	12.5	12.0	11.5	10.9	10.1	10.5	9.9	9.9	9.7	9.3	8.6	8.0	13.3	8.0	10.8
19	7.3	5.3	4.2	4.2	4.0	2.9	1.7	1.5	2.0	2.2	2.8	2.8	2.3	2.4	2.3	1.8	1.9	1.8	1.7	1.9	2.5	1.6	1.5	1.2	7.3	1.2	2.7
20	1.0	1.0	1.0	1.0	1.7	2.2	2.0	1.9	2.7	2.4	3.2	3.1	3.0	2.9	1.9	2.8	3.3	4.5	4.5	3.7	4.5	3.5	4.8	3.8	4.8	1.0	2.8
21	3.6	2.8	2.6	2.1	3.1	3.0	6.4	10.2	12.5	13.2	15.6	18.6	22.1	20.7	22.8	22.9	23.6	24.0	19.9	19.6	18.7	21.4	21.1	19.7	24.0	2.1	14.6
22	18.2	17.6	16.5	14.7	12.4	11.0	10.6	9.4	9.5	8.1	9.9	9.8	10.0	10.0	9.3	9.5	8.6	7.2	7.2	6.7	5.3	2.2	1.9	1.3	18.2	1.3	9.5
23	1.5	2.6	3.4	3.3	4.3	3.8	2.8	3.7	5.1	5.2	6.0	5.8	5.8	6.1	5.9	6.2	7.2	6.0	3.6	2.5	1.5	1.1	1.9	3.0	7.2	1.1	4.1
24	3.4	2.7	2.9	3.8	5.0	6.1	4.0	3.1	2.6	3.1	1.9	2.0	4.8	4.6	4.0	3.5	2.5	3.2	2.6	2.3	3.2	3.5	3.2	2.1	6.1	1.9	3.3
25	1.9	1.9	0.8	1.0	1.1	0.8	0.8	1.1	2.0	1.8	2.1	2.8	4.6	5.3	4.8	5.2	6.8	5.9	6.3	4.8	2.8	1.8	1.9	2.4	6.8	0.8	2.9
26	2.8	3.1	2.0	3.5	4.0	1.4	1.9	2.4	3.5	4.1	4.1	5.9	7.1	7.7	7.4	6.3	6.0	4.9	3.8	2.3	2.7	4.0	4.6	5.2	7.7	1.4	4.2
27	4.1	3.9	4.1	3.8	3.8	3.8	3.9	2.9	3.9	5.2	5.2	4.3	4.1	4.3	3.8	3.0	1.9	1.5	2.2	1.5	0.9	2.0	2.2	2.7	5.2	0.9	3.3
28	2.7	3.0	3.0	4.3	4.6	5.2	4.5	4.8	4.4	6.1	6.7	5.6	6.8	7.1	10.5	9.7	10.2	14.7	11.1	8.4	4.6	9.1	10.0	9.2	14.7	2.7	6.9
29	8.6	6.0	5.4	3.7	3.2	2.9	4.3	6.2	4.0	2.1	4.5	7.4	7.2	9.0	12.9	14.3	11.4	10.1	6.8	4.2	3.8	3.0	2.7	2.7	14.3	2.1	6.1
30	3.0	3.5	2.7	2.8	4.0	3.0	3.0	3.9	4.3	4.1	3.1	2.3	2.1	1.8	1.6	1.6	2.0	5.2	7.3	4.9	3.0	5.8	5.5	3.2	7.3	1.6	3.5
Max.	**18.2**	**17.7**	**17.0**	**17.8**	**17.7**	**17.7**	**16.9**	**18.4**	**18.0**	**16.7**	**16.9**	**19.0**	**22.1**	**22.8**	**22.8**	**22.9**	**23.6**	**24.0**	**19.9**	**19.6**	**18.7**	**21.4**	**21.1**	**19.7**	**24.0**		
Min.	**1.0**	**1.0**	**0.8**	**1.0**	**1.1**	**0.8**	**0.8**	**1.1**	**1.8**	**0.8**	**0.8**	**0.9**	**1.1**	**1.3**	**1.3**	**1.5**	**1.9**	**1.5**	**1.0**	**1.0**	**0.7**	**0.9**	**0.7**	**1.0**		**0.7**	
Avg.	**6.0**	**5.8**	**6.0**	**6.0**	**6.0**	**6.1**	**6.1**	**6.3**	**6.7**	**6.5**	**6.9**	**7.2**	**8.1**	**8.3**	**8.1**	**7.9**	**7.7**	**7.7**	**7.0**	**6.3**	**5.9**	**5.7**	**5.6**	**5.8**			**6.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

May *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.6	4.7	5.0	5.3	3.9	2.7	2.4	3.4	4.5	4.8	5.0	6.5	7.3	7.2	8.5	9.5	8.5	8.6	8.7	7.2	5.9	5.2	4.7	3.2	9.5	2.4	5.6
2	3.3	5.0	4.4	1.9	2.5	1.5	1.8	1.4	1.7	3.2	3.2	4.2	4.6	6.1	4.6	4.6	5.6	4.7	4.9	4.1	2.5	2.1	2.3	1.6	6.1	1.4	3.4
3	1.3	1.1	1.3	1.5	1.9	1.8	1.9	1.7	2.7	4.0	4.8	6.6	7.3	8.1	9.5	9.1	9.9	9.5	9.1	8.0	6.5	4.2	3.5	4.7	9.9	1.1	5.0
4	6.0	5.2	5.7	5.2	5.8	6.1	6.7	5.8	6.4	7.4	8.1	9.4	10.0	10.2	10.2	10.8	11.2	10.8	10.3	9.5	9.5	9.5	9.5	10.6	11.2	5.2	8.3
5	11.0	11.9	12.4	13.1	12.5	11.6	14.9	15.1	15.6	15.9	16.0	16.3	15.3	16.1	16.9	18.5	17.5	17.8	17.3	17.7	17.5	18.3	18.5	18.2	18.5	11.0	15.7
6	18.4	17.2	16.8	12.9	13.8	13.7	14.2	13.0	12.2	12.3	12.7	15.9	14.5	13.6	14.2	15.0	12.0	10.9	8.7	8.3	8.2	8.2	7.6	6.4	18.4	6.4	12.5
7	5.8	6.7	4.4	2.8	1.8	1.8	1.4	2.1	1.4	1.5	2.0	2.5	3.7	4.5	5.1	5.4	6.2	5.6	5.8	5.2	2.9	1.3	2.0	3.4	6.7	1.3	3.6
8	4.3	2.4	1.6	1.5	1.7	1.3	1.1	1.9	1.4	2.6	2.2	1.7	2.0	1.9	2.1	2.3	2.6	2.9	3.4	3.2	2.6	2.1	2.1	2.2	4.3	1.1	2.2
9	1.8	1.9	2.1	2.6	2.9	3.4	3.2	3.2	3.1	2.8	3.6	3.6	3.7	5.0	5.6	5.5	6.0	6.0	5.4	4.8	2.9	2.9	1.9	1.8	6.0	1.8	3.6
10	2.8	1.7	1.3	1.8	1.8	1.9	1.8	2.2	1.7	3.0	4.2	5.1	5.0	6.9	7.1	7.6	8.0	8.4	7.9	7.9	5.9	4.5	2.6	2.4	8.4	1.3	4.3
11	1.8	2.6	2.3	2.0	2.1	3.0	3.8	3.8					9.2	8.9	8.4	7.5	6.6	5.0	3.7	2.3	1.9	2.9	3.5	5.2	9.2	1.8	4.3
12	4.0	4.0	2.5	2.9	7.4	9.2	10.8	11.7	8.3	5.8	9.6	13.1	13.7	15.4	13.8	14.5	11.8	12.5	14.9	15.0	10.8	7.6	7.4	7.8	15.4	2.5	9.8
13	7.0	8.1	4.1	3.3	4.6	5.6	6.3	8.1	8.3	6.5	5.8	5.6	5.0	3.9	2.2	5.8	6.0	4.0	1.7	3.5	3.5	5.5	2.6	2.2	8.3	1.7	5.0
14	2.2	1.8	1.6	1.2	2.9	3.7	4.6	1.9	3.5	7.3	10.5	11.3	11.6	12.6	11.9	11.9	12.3	12.9	12.1	11.8	12.0	8.8	7.2	5.8	12.9	1.2	7.6
15	6.0	5.2	5.4	4.8	3.7	2.3	1.3	2.7	3.9	2.4	3.7	5.0	5.3	6.4	6.4	8.1	8.6	8.4	8.5	8.5	6.7	5.4	6.3	6.5	8.6	1.3	5.5
16	5.7	4.9	4.6	5.2	5.1	3.9	4.6	6.1	7.4	7.5	6.7	7.1	7.5	7.4	7.8	7.8	7.3	6.9	6.4	4.9	4.3	3.4	3.1	3.3	7.8	3.1	5.8
17	3.2	1.8	1.5	1.7	2.3	2.1	2.0	1.5	1.9	1.9	1.9	2.1	2.7	2.9	3.0	2.3	2.4	2.1	3.0	4.3	2.5	2.1	1.8	4.1	4.3	1.5	2.4
18	1.6	2.2	1.5	2.1	1.9	2.1	4.2	3.4	2.8	2.1	1.4	2.6	2.5	3.6	2.8	2.6	4.0	1.9	4.3	5.6	3.6	3.2	3.2	3.8	5.6	1.4	2.9
19	4.1	5.2	5.5	5.2	3.9	4.1	3.0	5.2	4.5	3.8	4.2	3.4	3.6	2.2	2.4	2.1	3.7	2.3	2.8	3.4	2.2	1.2	1.0	2.1	5.5	1.0	3.4
20	2.5	2.8	4.6	2.0	1.3	2.4	2.3	3.6	2.2	1.4	1.5	1.7	3.0	3.7	4.8	5.1	5.4	5.9	6.0	6.1	5.1	3.7	2.3	2.1	6.1	1.3	3.4
21	3.4	4.0	2.4	1.0	0.9	1.1	1.1	1.1	1.1	1.2	1.5	2.2	2.6	2.9	2.8	2.8	3.1	2.9	2.2	2.7	2.9	2.1	2.7	3.0	4.0	0.9	2.2
22	2.5	1.7	2.5	1.5	2.6	3.0	2.6	2.8	3.3	3.2	4.0	4.2	4.8	4.6	4.9	4.9	4.7	4.6	4.4	2.0	2.1	1.4	1.3	1.7	4.9	1.3	3.1
23	2.2	1.1	1.2	1.9	1.1	0.9	1.3	1.1	1.1	0.9	1.3	2.7	3.8	3.5	2.8	2.4	1.7	4.7	5.8	4.0	3.5	2.7	2.3	2.7	5.8	0.9	2.4
24	3.6	5.9	5.0	4.7	3.5	4.3	4.4	5.8	6.3	5.0	6.9	7.3	7.2	7.7	9.0	8.6	8.7	7.8	9.0	9.2	7.8	6.6	6.9	5.7	9.2	3.5	6.5
25	6.6	7.5	7.6	8.7	8.5	8.8	7.6	8.1	9.8	10.0	10.5	10.4	10.1	11.2	10.3	10.3	10.5	10.5	10.1	9.9	8.0	6.2	6.7	5.7	11.2	5.7	8.9
26	4.3	3.6	2.9	3.8	5.6	4.5	4.6	5.4	4.4	3.4	3.6	3.5	4.1	6.1	6.4	5.0	8.0	9.0	6.6	8.7	6.7	7.6	8.5	8.4	9.0	2.9	5.6
27	8.5	8.3	9.0	8.4	9.4	8.7	7.6	8.9	10.0	9.2	10.8	12.1	12.8	12.8	11.7	11.0	12.4	11.8	11.1	11.7	9.4	10.8	7.6	6.1	12.8	6.1	10.0
28	3.2	2.1	4.1	3.1	3.7	2.9	2.2	2.8	3.9	3.3	2.7	3.2	10.7	12.9	12.3	11.9	11.7	11.7	8.7	6.8	8.3	6.8	5.4	5.2	12.9	2.1	6.2
29	5.4	6.5	7.4	6.4	7.8	8.5	7.6	8.8	11.5	11.2	11.8	13.1	12.9	12.5	13.5	12.6	13.1	12.3	12.0	11.0	10.0	9.3	10.4	9.0	13.5	5.4	10.2
30	9.2	9.2	6.6	7.3	4.5	7.8	10.9	13.4	13.0	11.5	10.8	11.9	11.6	12.1	11.4	11.9	11.4	12.7	13.2	12.2	10.0	7.0	5.7	6.1	13.4	4.5	10.1
31	6.8	4.6	3.4	2.5	1.0	1.1	0.7	2.7	6.7	6.2	8.1	8.7	9.6	11.0	10.9	10.9	10.8	9.4	10.5	8.6	8.2	6.0	4.9	7.2	11.0	0.7	6.7
Max.	**18.4**	**17.2**	**16.8**	**13.1**	**13.8**	**13.7**	**14.9**	**15.1**	**15.6**	**15.9**	**16.0**	**16.3**	**15.3**	**16.1**	**16.9**	**18.5**	**17.5**	**17.8**	**17.3**	**17.7**	**17.5**	**18.3**	**18.5**	**18.2**	**18.5**		
Min.	**1.3**	**1.1**	**1.2**	**1.0**	**0.9**	**0.9**	**0.7**	**1.1**	**1.1**	**0.9**	**1.3**	**1.7**	**2.0**	**1.9**	**2.1**	**2.1**	**1.7**	**1.9**	**1.7**	**2.0**	**1.9**	**1.2**	**1.0**	**1.6**		**0.7**	
Avg.	**4.9**	**4.9**	**4.5**	**4.1**	**4.3**	**4.4**	**4.6**	**5.1**	**5.5**	**5.4**	**6.0**	**6.8**	**7.3**	**7.9**	**7.9**	**8.0**	**8.1**	**7.9**	**7.7**	**7.3**	**6.3**	**5.4**	**5.0**	**5.1**			**6.0**

Total Hours in Month 744 **Hours Data Available** 740 **Data Recovery** 99.5%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

June *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	5.7	5.7	5.3	4.8	3.8	1.8	3.8	3.5	3.9	4.5	5.6	5.9	6.3	6.1	5.8	6.3	7.0	8.1	6.7	5.5	4.3	3.8	3.7	8.1	1.8	5.2
2	3.6	3.5	4.3	3.2	2.4	1.4	2.5	5.1	5.7	5.9	6.1	6.4	7.5	7.8	8.5	8.7	8.3	7.5	7.6	6.5	5.4	2.9	1.5	0.8	8.7	0.8	5.1
3	0.6	0.9	1.1	1.4	1.3	2.6	3.2	3.6	5.4	7.3	7.6	6.1	7.6	7.2	7.2	9.3	9.0	9.0	7.7	7.4	8.1	8.5	9.0	9.4	9.4	0.6	5.9
4	8.3	6.2	7.2	7.0	9.5	7.3	6.5	8.1	7.5	8.6	9.7	9.9	9.7	9.8	9.4	9.9	10.3	10.1	9.8	9.5	8.9	9.4	8.4	4.4	10.3	4.4	8.6
5	5.0	5.5	6.2	7.4	9.5	9.4	8.6	8.0	9.6	10.0	8.5	4.5	3.2	4.5	5.0	5.5	5.9	5.5	5.7	7.1	6.9	5.3	5.4	3.4	10.0	3.2	6.5
6	2.3	5.6	1.6	5.3	8.5	8.5	8.8	8.8	9.0	10.6	10.0	9.7	10.3	12.3	12.1	12.7	13.2	11.9	11.3	11.1	9.6	8.1	7.6	8.9	13.2	1.6	9.1
7	8.1	9.6	10.4	9.4	9.5	10.3	11.2	9.7	10.6	11.4	10.7	11.2	12.6	11.2	9.9	10.9	11.3	10.5	10.3	11.5	10.3	10.4	10.3	8.3	12.6	8.1	10.4
8	7.4	9.4	8.7	10.1	9.3	10.2	9.9	7.4	7.4	8.1	7.9	9.1	9.0	9.0	7.9	7.4	6.6	5.2	4.6	4.0	4.6	6.2	7.2	5.1	10.2	4.0	7.6
9	3.0	1.3	2.3	2.4	1.2	1.9	2.7	4.1	3.0	3.0	2.3	4.1	5.9	4.9	4.3	3.9	6.0	6.0	2.7	2.7	2.0	1.4	0.9	1.6	6.0	0.9	3.1
10	2.1	2.5	3.0	2.5	2.7	3.0	1.6	1.5	1.9	3.0	2.8	4.1	4.7	4.6	3.6	4.2	4.9	4.8	2.2	2.0	1.7	1.4	1.7	2.4	4.9	1.4	2.9
11	2.7	2.2	2.1	3.0	2.7	2.0	2.7	4.9	6.8	6.7	6.2	6.8	9.1	9.0	8.5	8.0	7.3	7.0	6.9	6.8	6.1	3.2	2.0	1.5	9.1	1.5	5.2
12	1.2	1.8	2.9	2.4	2.6	2.6	5.3	4.8	2.9	2.2	3.5	5.6	7.8	4.6	5.4	4.9	5.8	6.1	5.7	6.3	5.4	2.7	1.4	1.2	7.8	1.2	4.0
13	1.0	1.6	1.8	2.1	2.3	3.2	4.1	5.1	5.7	4.7	4.3	4.3	3.7	2.9	3.0	5.4	7.0	4.9	5.1	6.5	4.6	2.5	3.2	2.8	7.0	1.0	3.8
14	2.2	2.3	1.1	1.7	1.7	1.7	2.3	1.7	1.4	2.5	2.8	2.6	2.8	3.1	3.5	3.7	3.7	3.7	3.9	3.0	3.0	2.1	2.1	2.3	3.9	1.1	2.5
15	2.1	5.4	2.7	1.9	1.3	1.5	3.1	3.6	3.0	4.1	3.8	3.3	2.8	3.0	4.4	4.4	3.1	3.2	3.0	4.3	4.6	4.4	4.4	4.5	5.4	1.3	3.4
16	3.3	3.2	2.6	2.1	2.4	2.8	4.1	3.6	2.3	2.7	2.0	3.3	3.4	3.2	3.4	4.9	6.2	3.9	5.5	8.6	8.7	6.7	3.2	3.2	8.7	2.0	3.9
17	3.1	4.3	4.1	4.2	1.9	2.4	3.6	3.4	2.8	4.5	5.1	6.6	6.5	10.4	11.9	13.5	15.6	12.9	13.4	14.3	14.0	17.3	17.3	15.1	17.3	1.9	8.7
18	14.4	12.8	9.5	12.2	11.3	10.2	8.7	7.0	6.7	8.4	9.6	8.9	10.6	9.5	8.7	9.3	8.9	6.8	7.1	7.7	6.6	3.8	1.8	2.0	14.4	1.8	8.4
19	3.7	3.9	4.2	1.5	2.5	2.9	3.9	3.3	4.2	6.4	7.5	8.4	8.7	9.8	8.5	9.8	8.9	6.5	5.4	5.0	5.6	5.6	4.3	5.1	9.8	1.5	5.7
20	4.9	4.4	6.3	6.3	6.7	6.5	6.8	6.5	7.4	6.3	6.7	6.1	6.3	7.0	6.7	6.7	6.3	6.7	6.4	5.3	4.9	3.5	5.1	5.4	7.4	3.5	6.1
21	4.4	3.6	3.0	2.5	2.4	2.4	2.1	4.1	4.7	5.6	7.6	9.3	10.1	9.6	9.8	11.1	11.6	11.1	8.8	7.3	5.8	7.5	6.7	8.2	11.6	2.1	6.6
22	8.9	9.1	9.1	6.3	8.2	8.8	9.4	10.0	9.4	9.1	9.2	8.8	9.1	9.2	9.2	8.4	7.5	7.7	7.2	6.2	5.7	3.9	4.3	3.4	10.0	3.4	7.8
23	3.6	3.4	4.0	4.0	2.8	2.2	2.4	3.1	3.4	4.8	4.6	4.0	3.1	3.2	3.5	3.1	3.4	3.2	3.5	3.5	2.9	2.6	2.4	2.1	4.8	2.1	3.3
24	1.3	1.7	2.1	2.4	1.2	1.6	1.8	1.5	1.6	1.8	3.0	3.6	4.4	5.5	5.8	6.6	6.8	7.5	7.6	7.0	5.8	3.3	2.1	2.3	7.6	1.2	3.7
25	2.6	3.4	5.2	5.3	2.5	2.0	3.4	4.6	4.9	4.3	4.7	4.9	5.2	5.5	5.9	6.2	5.7	5.9	6.0	5.1	3.6	2.2	0.9	0.8	6.2	0.8	4.2
26	0.6	0.6	0.5	1.5	2.7	3.2	3.0	2.6	1.7	1.7	2.0	2.6	4.1	4.7	4.6	5.3	4.5	6.0	5.5	5.0	3.0	1.9	2.5	1.4	6.0	0.5	3.0
27	3.3	3.6	2.9	1.2	2.5	5.4	6.2	6.2	4.1	3.3	4.8	4.0	4.6	4.7	3.8	4.4	4.3	5.1	4.9	4.2	3.2	2.0	1.7	2.0	6.2	1.2	3.9
28	2.3	2.7	3.2	3.6	3.5	2.7	1.8	1.9	1.7	1.8	1.6	1.7	2.3	2.3	2.7	3.5	5.1	2.2	2.9	3.5	2.8	3.2	2.4	1.8	5.1	1.6	2.6
29	2.4	2.5	2.2	1.4	1.7	1.5	1.9	3.3	2.9	2.4	1.1	1.6	2.1	3.4	4.8	4.5	4.9	6.1	7.7	7.3	4.6	2.2	3.7	5.8	7.7	1.1	3.4
30	6.1	6.1	5.6	6.4	8.0	7.8	6.4	6.5	5.7	5.7	6.5	5.8	6.8	7.6	7.9	7.2	6.8	6.2	5.9	6.1	5.5	4.4	4.6	4.4	8.0	4.4	6.3
Max.	**14.4**	**12.8**	**10.4**	**12.2**	**11.3**	**10.3**	**11.2**	**10.0**	**10.6**	**11.4**	**10.7**	**11.2**	**12.6**	**12.3**	**12.1**	**13.5**	**15.6**	**12.9**	**13.4**	**14.3**	**14.0**	**17.3**	**17.3**	**15.1**	**17.3**		
Min.	**0.6**	**0.6**	**0.5**	**1.2**	**1.2**	**1.4**	**1.6**	**1.5**	**1.4**	**1.7**	**1.1**	**1.6**	**2.1**	**2.3**	**2.7**	**3.1**	**3.1**	**2.2**	**2.2**	**2.0**	**1.7**	**1.4**	**0.9**	**0.8**		**0.5**	
Avg.	**4.0**	**4.3**	**4.2**	**4.2**	**4.3**	**4.4**	**4.6**	**4.9**	**4.9**	**5.4**	**5.6**	**5.8**	**6.3**	**6.5**	**6.5**	**7.0**	**7.2**	**6.7**	**6.4**	**6.4**	**5.6**	**4.8**	**4.4**	**4.1**			**5.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

July *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.7	5.5	5.1	4.2	2.9	1.7	1.6	2.9	4.4	5.6	4.1	3.5	3.8	4.6	5.8	4.9	5.8	6.0	5.0	4.6	7.2	6.2	3.4	3.3	7.2	1.6	4.5
2	4.1	3.7	4.4	5.4	4.5	3.5	2.7	2.6	2.1	1.4	1.4	2.3	4.3	4.4	3.2	2.0	2.3	1.5	1.5	1.8	1.1	2.6	2.8	2.6	5.4	1.1	2.8
3	2.1	3.2	3.6	3.1	3.5	4.2	3.9	3.0	2.5	2.0	1.4	1.5	3.3	5.1	6.2	6.1	6.0	5.0	6.1	4.8	3.7	2.7	2.7	2.2	6.2	1.4	3.7
4	2.2	1.8	1.3	0.6	0.9	0.8	0.8	1.4	2.7	4.1	3.7	4.0	5.0	5.7	7.4	6.9	7.2	7.2	6.8	6.1	4.6	4.7	2.2	3.3	7.4	0.6	3.8
5	3.1	2.8	1.7	1.4	1.4	3.0	2.7	1.4	1.5	2.2	3.8	5.0	4.9	4.3	5.7	7.4	4.7	3.4	5.7	5.5	3.6	3.4	4.9	3.9	7.4	1.4	3.6
6	1.8	1.7	2.5	1.5	1.9	3.0	4.0	4.2	4.4	5.3	5.0	4.9	4.3	5.2	6.4	6.8	7.7	7.5	7.5	5.8	4.6	4.4	6.2	7.8	7.8	1.5	4.8
7	10.4	9.0	7.5	8.5	5.4	5.4	8.4	7.7	7.0	6.7	5.7	5.9	6.6	7.4	7.5	7.0	6.7	7.0	6.4	6.8	6.0	4.8	4.8	3.9	10.4	3.9	6.8
8	1.9	2.0	1.9	2.0	1.8	1.2	1.5	1.6	1.5	2.7	2.8	3.1	4.0	3.0	2.6	4.0	7.1	7.3	6.1	4.4	7.2	3.1	1.9	2.3	7.3	1.2	3.2
9	7.2	2.5	2.7	3.0	4.1	4.4	4.3	2.9	2.8	2.3	3.9	5.7	6.8	7.9	6.1	7.3	9.5	10.5	9.1	5.1	3.6	3.8	5.8	7.8	10.5	2.3	5.4
10	9.3	6.9	8.0	8.0	7.6	8.0	7.8	6.9	7.2	7.1	6.2	5.9	6.1	5.5	5.1	4.5	4.0	4.8	5.9	6.6	5.4	6.4	6.8	7.5	9.3	4.0	6.6
11	7.5	6.8	5.7	4.8	5.2	5.3	5.0	5.5	5.1	4.1	4.3	3.3	3.0	3.2	3.6	3.9	4.1	4.6	3.9	4.2	4.1	3.2	0.8	0.9	7.5	0.8	4.3
12	2.2	3.7	7.8	7.6	7.9	8.6	10.1	9.4	7.8	8.9	9.6	9.7	9.6	12.0	11.3	10.7	10.7	9.2	8.9	8.8	7.8	7.4	5.9	4.5	12.0	2.2	8.3
13	5.0	3.5	4.8	4.4	3.8	3.0	2.6	2.3	2.1	2.1	3.1	3.3	4.2	4.4	3.3	3.7	3.3	3.8	3.8	2.2	2.5	1.6	1.3	1.3	5.0	1.3	3.1
14	1.2	1.2	2.6	3.4	3.6	3.3	2.1	1.1	1.1	1.7	1.8	2.2	2.7	2.4	4.0	4.3	4.9	5.6	6.2	5.8	4.5	3.3	2.2	2.0	6.2	1.1	3.0
15	1.9	1.5	1.3	1.6	2.1	1.5	1.9	1.9	3.1	3.0	4.5	7.0	8.4	9.3	9.8	12.1	12.4	12.6	11.8	11.5	11.2	12.1	13.2	12.5	13.2	1.3	7.0
16	10.4	9.3	8.9	10.3	9.5	9.3	9.2	8.8	8.6	8.4	7.3	7.3	6.5	5.6	5.4	5.1	6.0	4.8	3.0	1.8	2.2	1.5	0.7	0.8	10.4	0.7	6.3
17	2.0	2.1	1.4	1.3	0.9	1.1	1.2	2.1	3.9	5.3	4.2	5.2	5.0	4.8	5.4	5.8	7.2	7.8	7.9	6.5	5.6	5.2	3.9	4.9	7.9	0.9	4.2
18	7.9	10.4	10.3	7.7	8.9	10.3	8.7	8.4	9.1	9.6	8.5	8.0	7.8	8.6	9.7	9.1	8.9	9.1	8.4	7.8	6.8	8.0	7.8	8.2	10.4	6.8	8.7
19	9.9	9.6	9.6	10.2	9.4	9.4	10.0	11.1	13.2	14.6	15.5	15.0	11.8	10.5	10.5	10.8	10.3	12.1	12.2	10.3	9.4	9.9	10.8	9.9	15.5	9.4	11.1
20	9.6	8.6	5.8	6.0	7.1	8.0	7.5	7.3	4.9	4.0	3.4	3.4	2.8	4.5	5.0	4.2	4.0	4.1	3.7	4.2	3.5	2.7	3.1	3.6	9.6	2.7	5.0
21	3.4	3.3	3.7	3.9	4.8	2.5	1.4	1.5	2.6	1.8	2.4	3.3	3.6	4.4	4.2	4.7	5.1	6.0	8.4	8.5	7.2	6.2	7.3	6.4	8.5	1.4	4.4
22	6.6	6.6	7.8	9.8	9.2	8.1	8.9	7.8	7.6	9.2	10.0	9.8	10.1	10.4	10.3	10.0	9.4	9.3	9.1	8.6	6.7	4.7	2.8	2.9	10.4	2.8	8.1
23	3.3	3.4	4.4	4.3	5.2	6.2	6.2	5.5	5.5	7.1	7.1	7.7	8.7	7.4	7.0	7.2	7.8	8.4	7.3	7.4	7.5	7.5	7.8	7.6	8.7	3.3	6.6
24	9.5	7.7	7.9	7.5	7.4	9.4	9.3	9.3	7.9	8.5	10.2	11.8	12.3	12.2	8.7	6.9	7.9	8.8	9.2	9.5	11.5	10.3	8.1	7.7	12.3	6.9	9.2
25	7.2	8.3	10.9	8.5	7.6	7.1	5.6	6.2	5.3	5.4	6.3	7.2	7.1	5.4	5.9	5.4	7.2	9.5	9.0	11.1	10.9	7.9	8.6	9.5	11.1	5.3	7.6
26	8.5	7.8	7.7	8.3	9.2	7.9	10.2	9.4	9.9	9.8	9.6	9.4	9.0	8.3	8.5	8.7	6.9	4.3	3.4	2.0	1.8	1.3	1.6	1.4	10.2	1.3	6.9
27	1.4	1.7	2.2	5.2	5.3	5.6	5.5	4.1	3.5	4.6	4.6	5.8	6.7	3.9	3.4	4.9	4.1	3.7	4.2	3.2	1.7	1.4	1.2	1.6	6.7	1.2	3.7
28	1.5	1.5	1.7	1.6	1.7	2.5	2.8	2.0	0.9	1.7	3.4	3.5	2.5	2.3	2.8	2.8	3.4	3.0	4.1	4.2	2.1	3.5	2.6	3.1	4.2	0.9	2.5
29	4.2	5.8	7.9	6.2	2.3	3.5	3.8	2.3	2.3	1.8	2.2	2.7	2.1	1.8	1.8	2.2	2.5	2.5	2.6	2.3	2.0	1.7	1.2	1.5	7.9	1.2	2.9
30	1.6	1.1	0.8	1.1	2.5	2.7	2.3	2.2	2.7	3.9	4.1	2.6	3.4	4.3	6.5	7.1	7.2	6.7	3.9	2.3	1.9	4.9	2.8	2.4	7.2	0.8	3.4
31	2.8	2.6	3.0	3.0	3.1	4.2	4.9	5.3	4.6	5.6	5.8	5.2	5.3	6.6	6.0	5.4	4.1	4.7	2.7	6.0	5.5	1.8	1.6	2.1	6.6	1.6	4.2
Max.	**10.4**	**10.4**	**10.9**	**10.3**	**9.5**	**10.3**	**10.2**	**11.1**	**13.2**	**14.6**	**15.5**	**15.0**	**12.3**	**12.2**	**11.3**	**12.1**	**12.4**	**12.6**	**12.2**	**11.5**	**11.5**	**12.1**	**13.2**	**12.5**	**15.5**		
Min.	**1.2**	**1.1**	**0.8**	**0.6**	**0.9**	**0.8**	**0.8**	**1.1**	**0.9**	**1.4**	**1.4**	**1.5**	**2.1**	**1.8**	**1.8**	**2.0**	**2.3**	**1.5**	**1.5**	**1.8**	**1.1**	**1.3**	**0.7**	**0.8**		**0.6**	
Avg.	**5.0**	**4.7**	**5.0**	**5.0**	**4.9**	**5.0**	**5.1**	**4.8**	**4.8**	**5.2**	**5.4**	**5.6**	**5.9**	**6.0**	**6.1**	**6.2**	**6.4**	**6.5**	**6.2**	**5.8**	**5.3**	**4.8**	**4.4**	**4.5**			**5.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.3	2.9	1.5	1.9	2.0	2.6	1.6	0.9	1.2	1.5	3.2	3.5	3.8	3.7	3.1	2.7	4.5	5.7	5.1	5.0	4.6	2.9	3.9	3.5	5.7	0.9	3.1
2	4.4	6.8	7.1	4.4	5.5	5.6	5.9	5.8	5.8	7.1	6.8	7.7	7.0	6.9	6.0	7.3	5.1	4.7	2.4	3.6	5.2	5.6	5.2	4.1	7.7	2.4	5.7
3	5.6	6.4	6.3	6.8	6.5	6.3	5.5	4.5	4.6	4.0	4.2	2.2	2.5	3.7	4.0	4.3	4.2	3.2	3.0	2.6	2.4	1.8	2.2	2.5	6.8	1.8	4.1
4	2.5	1.8	1.8	1.2	1.3	0.6	0.6	1.8	1.4	1.5	2.5	2.0	2.8	3.1	3.2	2.2	2.6	2.7	2.1	1.2	2.3	3.0	2.6	1.9	3.2	0.6	2.0
5	1.8	2.2	1.8	1.7	1.8	2.6	2.0	3.3	3.3	2.6	2.3	2.9	2.9	3.3	1.8	2.7	4.2	4.5	4.6	5.0	4.4	5.6	6.1	4.7	6.1	1.7	3.3
6	4.1	3.2	3.3	3.0	2.9	3.1	3.1	4.6	4.7	3.0	2.3	2.3	3.6	4.1	4.9	4.9	4.4	4.8	4.1	4.3	2.8	1.8	1.1	1.1	4.9	1.1	3.4
7	0.6	1.3	1.5	3.8	3.3	3.8	4.6	3.3	3.3	3.4	3.7	4.6	4.5	3.8	3.5	3.5	4.1	4.0	4.1	4.2	3.4	2.1	2.1	2.3	4.6	0.6	3.3
8	2.0	2.5	2.8	2.8	3.2	3.4	3.2	3.2	3.1	3.1	2.2	1.6	2.0	2.3	2.4	3.1	2.9	2.9	3.7	3.5	2.4	2.1	2.3	2.8	3.7	1.6	2.7
9	2.5	1.3	0.4	0.9	0.7	2.4	1.6	2.3	3.5	3.8	4.1	4.1	4.7	4.9	5.5	5.9	5.7	5.7	5.8	4.2	4.4	3.7	2.0	2.3	5.9	0.4	3.4
10	1.5	2.6	1.2	1.5	1.5	1.1	1.1	1.4	1.8	1.5	1.7	2.5	2.9	4.0	4.2	4.1	3.1	2.9	3.2	4.2	2.6	1.9	2.4	3.1	4.2	1.1	2.4
11	3.0	4.0	4.0	3.9	3.8	4.1	4.7	4.5	4.6	4.7	5.2	5.2	4.1	2.5	2.3	3.4	3.4	3.4	3.1	2.0	2.0	1.1	0.9	1.2	5.2	0.9	3.4
12	1.3	2.1	2.1	2.0	1.4	1.2	1.1	0.7	2.0	3.0	3.4	4.0	3.9	4.9	5.5	5.7	6.5	6.5	6.5	6.5	3.5	2.3	2.2	2.1	6.5	0.7	3.3
13	1.6	1.0	2.0	2.4	0.9	1.4	1.4	1.2	1.3	1.2	2.2	3.1	3.8	5.0	4.6	6.1	5.4	3.8	3.9	4.9	3.2	1.5	1.1	1.0	6.1	0.9	2.7
14	2.1	0.9	2.2	3.0	1.5	1.5	2.5	2.6	1.7	2.0	2.3	2.5	3.1	3.4	3.3	4.5	5.3	3.7	3.6	4.4	3.3	2.6	0.7	0.8	5.3	0.7	2.7
15	2.9	2.8	2.5	2.3	2.4	2.4	4.0	4.9	5.1	5.6	5.9	6.4	8.3	8.9	9.2	7.7	7.0	8.4	9.6	6.2	4.0	3.2	2.0	5.5	9.6	2.0	5.3
16	6.3	6.9	6.2	6.6	6.0	5.2	6.5	7.4	7.3	7.7	8.1	9.4	10.1	10.1	10.7	11.0	11.3	11.0	10.6	9.6	7.6	7.9	8.3	10.0	11.3	5.2	8.4
17	8.9	9.6	8.3	6.7	6.0	5.4	4.8	4.0	5.4	6.1	5.5	5.0	4.5	6.7	8.3	7.4	5.8	4.0	5.2	5.2	5.1	5.3	5.1	5.5	9.6	4.0	6.0
18	3.6	3.0	3.2	4.3	3.7	2.5	2.2	2.5	1.2	3.5	3.5	1.6	1.8	4.3	6.1	5.0	2.1	2.0	2.1	2.3	1.0	1.2	1.0	1.7	6.1	1.0	2.7
19	1.7	1.1	1.1	1.5	0.9	2.1	3.0	3.7	4.8	5.8	5.3	6.3	7.6	7.6	8.7	7.8	9.2	8.5	7.2	5.8	5.4	8.8	5.8	4.1	9.2	0.9	5.2
20	4.6	4.9	5.2	6.2	6.8	9.2	9.6	9.2	10.6	10.0	8.9	7.9	6.2	5.6	5.5	4.8	5.6	4.4	5.4	6.8	9.1	9.2	8.6	9.1	10.6	4.4	7.2
21	9.0	8.5	7.8	8.9	10.1	9.0	6.6	8.1	10.4	7.5	10.7	8.8	8.9	8.5	9.3	7.3	7.9	7.2	6.7	6.3	7.8	6.8	7.4	6.5	10.7	6.3	8.2
22	3.8	2.1	1.2	1.2	2.1	2.2	2.2	1.6	2.8	3.6	6.9	8.3	11.6	10.9	10.0	12.9	15.1	16.7	16.5	16.6	15.5	15.6	15.6	12.2	16.7	1.2	8.6
23	13.5	12.4	13.5	11.4	11.9	8.2	9.9	14.2	13.0	9.9	9.7	10.5	10.1	10.5	10.2	10.1	10.4	9.2	9.7	9.1	9.2	10.2	10.9	11.3	14.2	8.2	10.8
24	9.9	9.5	9.2	7.7	5.6	3.3	3.4	3.3	2.8	2.0	6.2	8.7	7.9	8.1	10.2	11.0	8.8	8.3	8.8	8.8	6.7	6.6	6.3	6.2	11.0	2.0	7.1
25	5.0	4.6	3.1	2.9	2.8	2.2	3.2	3.4	4.6	4.2	3.9	4.2	5.4	4.9	4.4	4.1	4.7	4.9	5.6	5.9	5.6	6.9	7.5	7.9	7.9	2.2	4.7
26	7.2	8.5	8.4	10.7	9.1	5.8	6.7	6.2	6.2	9.4	11.5	13.6	13.9	11.8	11.9	12.8	14.0	15.6	15.3	12.8	11.1	11.0	10.1	11.2	15.6	5.8	10.6
27	12.1	11.6	12.3	13.9	14.7	13.6	12.8	13.8	7.2	8.1	8.5	8.6	5.9	4.8	5.0	6.0	5.7	5.5	4.8	3.3	2.2	1.5	2.5	3.0	14.7	1.5	7.8
28	3.6	3.7	3.5	4.8	4.9	4.9	5.6	5.2	6.1	6.2	6.4	5.9	7.6	6.7	12.7	12.7	12.2	11.8	10.8	8.9	8.9	9.7	9.8	8.6	12.7	3.5	7.6
29	8.2	8.0	8.5	8.4	7.1	6.4	6.0	6.1	4.9	7.1	5.2	6.4	6.3	5.6	5.3	3.9	4.2	5.1	3.0	5.1	5.4	5.6	4.9	4.2	8.5	3.0	5.9
30	3.0	2.4	1.5	2.8	3.6	4.6	6.1	6.3	8.4	8.2	10.2	9.9	8.9	9.5	9.7	10.4	10.3	9.8	9.1	10.0	8.5	10.0	10.0	10.6	10.6	1.5	7.7
31	7.9	11.0	9.2	9.0	10.1	10.4	10.3	9.1	11.1	11.8	11.4	12.7	12.6	13.0	11.5	13.8	12.9	12.9	13.9	12.2	10.3	12.6	12.8	12.8	13.9	7.9	11.5
Max.	**13.5**	**12.4**	**13.5**	**13.9**	**14.7**	**13.6**	**12.8**	**14.2**	**13.0**	**11.8**	**11.5**	**13.6**	**13.9**	**13.0**	**12.7**	**13.8**	**15.1**	**16.7**	**16.5**	**16.6**	**15.5**	**15.6**	**15.6**	**12.8**	**16.7**		
Min.	**0.6**	**0.9**	**0.4**	**0.9**	**0.7**	**0.6**	**0.6**	**0.7**	**1.2**	**1.2**	**1.7**	**1.6**	**1.8**	**2.3**	**1.8**	**2.2**	**2.1**	**2.0**	**2.1**	**1.2**	**1.0**	**1.1**	**0.7**	**0.8**		**0.4**	
Avg.	**4.7**	**4.8**	**4.6**	**4.8**	**4.6**	**4.4**	**4.6**	**4.8**	**5.0**	**5.1**	**5.6**	**5.9**	**6.1**	**6.2**	**6.5**	**6.7**	**6.7**	**6.6**	**6.4**	**6.1**	**5.5**	**5.5**	**5.3**	**5.3**			**5.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.3	8.1	2.6	2.6	3.0	5.0	5.6	5.8	7.1	9.1	11.8	11.3	11.2	11.0	11.0	9.9	8.5	8.3	8.1	7.1	6.0	4.5	5.3	4.4	11.8	2.6	7.4
2	3.0	2.9	1.9	2.1	2.2	1.7	1.6	2.2	3.7	4.5	5.2	7.8	8.9	9.5	11.0	11.5	11.0	11.3	11.1	9.6	10.4	10.9	11.9	10.6	11.9	1.6	6.9
3	10.8	11.6	10.8	8.7	9.1	8.2	8.4	9.2	9.9	11.1	11.6	10.8	9.7	11.6	13.4	12.6	11.7	11.2	9.4	7.9	7.1	7.2	6.8	5.7	13.4	5.7	9.8
4	5.5	4.9	3.6	2.7	3.0	2.1	2.1	1.9	2.8	3.0	3.4	4.1	4.0	3.5	3.7	4.1	4.4	5.3	4.8	5.1	5.0	5.4	6.1	5.9	6.1	1.9	4.0
5	5.5	6.5	6.8	5.1	6.8	7.9	6.4	5.4	5.8	6.7	8.0	9.4	10.0	10.8	11.0	11.3	10.7	10.4	9.8	9.2	8.8	7.2	7.2	6.9	11.3	5.1	8.1
6	5.6	1.7	2.7	4.8	3.8	3.4	2.4	2.4	5.2	6.7	6.3	7.2	7.5	8.2	6.8	7.0	6.3	6.5	4.5	5.2	6.4	8.0	8.0	7.0	8.2	1.7	5.6
7	6.9	6.8	5.1	3.4	3.7	3.3	4.3	3.5	1.7	2.6	2.5	2.8	5.2	4.4	4.4	6.5	6.7	6.1	5.9	3.9	3.5	4.6	4.0	5.4	6.9	1.7	4.5
8	2.7	2.0	2.7	1.7	1.5	2.6	3.2	2.9	1.9	2.8	1.6	3.5	3.9	3.9	5.8	5.8	6.6	7.2	6.0	8.4	9.8	13.1	15.5	15.9	15.9	1.5	5.4
9	16.0	15.4	13.2	13.1	11.7	10.8	10.8	11.5	10.4	8.9	9.3	7.4	7.9	7.5	7.0	6.4	5.9	5.2	6.1	6.0	4.9	4.0	4.0	6.4	16.0	4.0	8.7
10	7.1	6.9	8.1	8.4	8.7	9.8	9.6	8.9	8.6	9.8	6.9	6.8	5.5	5.1	4.2	3.8	1.7	1.6	1.3	2.4	0.2	1.1	2.4	2.7	9.8	0.2	5.5
11	4.1	3.0	4.0	4.3	4.9	5.7	5.8	7.0	7.0	10.9	11.2	12.6	11.2	12.4	12.7	11.6	10.6	9.6	9.6	9.5	10.9	12.1	10.2	2.9	12.7	2.9	8.5
12	3.1	4.5	6.1	5.3	3.8	3.3	4.8	5.2	7.6	9.4	8.4	9.1	10.3	11.5	10.5	10.8	11.4	12.1	13.4	14.4	13.9	11.6	8.5	4.6	14.4	3.1	8.5
13	7.5	5.7	2.1	1.6	1.3	4.0	4.7	2.9	4.2	3.8	3.7	4.3	4.9	4.1	3.8	3.7	2.8	3.0	1.7	1.9	1.7	1.5	1.2	1.0	7.5	1.0	3.2
14	0.6	1.6	1.6	1.5	1.7	1.9	1.7	1.5	2.2	3.9	3.9	4.6	4.9	7.1	8.0	8.8	10.0	9.2	8.9	11.4	13.1	14.5	13.7	14.3	14.5	0.6	6.3
15	14.6	16.0	15.2	15.9	16.0	15.2	14.1	13.2	13.3	13.5	13.8	14.3	13.5	12.9	14.1	13.9	11.6	8.0	3.0	2.4	3.1	3.5	3.9	5.4	16.0	2.4	11.3
16	6.2	3.9	4.9	3.9	3.2	2.5	2.8	1.6	1.7	2.1	3.6	4.9	5.0	5.0	6.1	5.4	4.6	5.4	4.2	4.1	3.7	3.8	3.8	3.1	6.2	1.6	4.0
17	1.6	0.8	1.0	1.0	2.0	3.1	3.1	2.6	2.5	3.2	3.7	2.8	2.1	3.5	2.6	1.8	1.6	0.9	1.1	1.5	1.1	1.2	1.3	1.3	3.7	0.8	2.0
18	1.5	2.8	2.4	1.8	2.1	3.6	4.7	3.0	1.8	4.0	5.5	6.4	7.8	8.0	7.2	7.0	6.9	6.5	5.4	4.4	4.7	4.3	3.8	4.2	8.0	1.5	4.6
19	2.7	2.1	2.5	3.2	2.0	2.1	1.8	2.9	2.6	3.6	5.7	6.4	7.1	7.6	8.1	7.9	7.0	7.7	6.7	7.2	6.3	6.2	6.7	6.9	8.1	1.8	5.1
20	7.4	8.3	7.7	4.4	4.6	4.1	3.8	3.9	3.3	3.8	7.3	7.7	6.7	5.9	6.6	6.5	5.5	4.3	4.3	1.5	1.9	2.1	2.1	2.3	8.3	1.5	4.8
21	1.9	1.3	2.0	2.5	1.2	1.2	3.0	4.0	3.6	4.0	3.8	3.6	4.2	5.9	5.2	5.2	5.9	6.2	6.2	6.6	5.0	6.3	5.4	5.0	6.6	1.2	4.1
22	5.6	5.6	6.5	6.4	6.5	7.1	7.0	8.8	11.5	13.1	14.6	14.4	14.6	15.4	12.6	12.7	7.5	7.2	11.0	9.4	8.9	10.7	7.1	6.6	15.4	5.6	9.6
23	7.1	7.9	4.7	4.5	5.1	4.6	4.1	3.7	4.4	5.1	6.0	6.9	7.3	9.9	10.4	9.3	9.4	8.9	5.8	4.8	7.6	10.4	10.1	9.8	10.4	3.7	7.0
24	6.6	7.6	9.9	11.4	11.7	9.4	9.2	7.5	8.0	8.2	10.1	8.8	9.3	9.4	9.9	8.4	9.2	8.6	8.3	8.0	8.9	8.8	8.0	7.6	11.7	6.6	8.9
25	8.5	8.4	9.2	8.5	9.0	7.8	7.1	6.9	8.5	7.3	7.4	8.1	8.8	8.0	8.4	7.6	7.7	6.9	6.0	5.6	4.5	5.2	3.4	2.5	9.2	2.5	7.1
26	1.3	2.4	1.8	2.1	2.2	2.5	2.5	5.2	6.7	7.8	9.5	10.6	11.1	14.2	14.5	13.5	12.3	10.3	12.1	14.8	15.1	15.4	16.7	15.0	16.7	1.3	9.1
27	17.0	16.6	15.2	14.4	13.9	13.3	12.0	13.0	10.0	3.9	3.6	2.9	9.0	9.2	9.0	8.3	6.6	9.5	7.3	5.0	5.8	3.0	3.1	3.3	17.0	2.9	8.9
28	4.1	5.0	4.9	3.9	4.8	4.4	4.1	2.5	2.0	1.6	1.5	2.2	1.4	1.1	2.5	3.0	2.7	2.6	1.3	1.7	1.9	1.8	1.8	1.1	5.0	1.1	2.7
29	1.6	2.5	3.4	4.4	4.1	3.9	2.6	3.7	3.8	3.0	5.7	6.7	7.5	6.2	5.0	5.0	5.3	3.4	2.7	1.1	1.4	2.0	1.7	2.9	7.5	1.1	3.7
30	2.5	2.0	2.3	2.1	2.0	1.4	0.7	0.9	0.5	0.5	1.3	1.6	1.7	2.4	1.7	3.0	2.7	6.7	6.6	7.5	8.9	10.5	11.2	12.7	12.7	0.5	3.9
Max.	**17.0**	**16.6**	**15.2**	**15.9**	**16.0**	**15.2**	**14.1**	**13.2**	**13.3**	**13.5**	**14.6**	**14.4**	**14.6**	**15.4**	**14.5**	**13.9**	**12.3**	**12.1**	**13.4**	**14.8**	**15.1**	**15.4**	**16.7**	**15.9**	**17.0**		
Min.	**0.6**	**0.8**	**1.0**	**1.0**	**1.2**	**1.2**	**0.7**	**0.9**	**0.5**	**0.5**	**1.3**	**1.6**	**1.4**	**1.1**	**1.7**	**1.8**	**1.6**	**0.9**	**1.1**	**1.1**	**0.2**	**1.1**	**1.2**	**1.0**		**0.2**	
Avg.	**6.0**	**5.8**	**5.5**	**5.2**	**5.2**	**5.2**	**5.1**	**5.1**	**5.4**	**5.9**	**6.6**	**7.0**	**7.4**	**7.8**	**7.9**	**7.7**	**7.2**	**7.0**	**6.4**	**6.3**	**6.4**	**6.7**	**6.5**	**6.1**			**6.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.2	13.5	13.5	13.2	14.7	13.9	12.1	13.7	12.8	10.7	9.5	10.9	12.4	12.0	10.1	9.4	10.5	10.2	9.0	7.4	7.7	7.5	7.6	7.3	14.7	7.3	10.9
2	7.1	7.4	6.7	7.7	5.2	3.1	4.6	4.4	4.2	4.7	6.5	7.0	6.5	5.1	5.7	6.2	5.4	5.4	4.4	2.8	3.2	3.2	2.7	3.1	7.7	2.7	5.1
3	3.1	2.7	2.5	2.7	3.3	2.6	2.4	3.7	4.1	3.8	3.0	3.7	2.8	3.0	4.3	2.5	1.3	2.4	4.3	3.3	2.4	3.8	4.6	4.4	4.6	1.3	3.2
4	3.1	2.6	2.2	2.7	2.5	2.4	6.3	6.3	7.8	7.1	7.4	5.8	6.5	5.1	6.1	5.9	4.5	5.6	3.5	4.2	5.8	7.4	8.8	7.3	8.8	2.2	5.3
5	4.4	4.7	4.4	4.3	7.0	6.7	7.0	6.9	6.4	6.7	6.0	6.8	5.8	5.0	4.6	3.3	2.6	3.7	2.9	3.0	3.2	1.9	1.3	1.5	7.0	1.3	4.6
6	0.9	0.6	1.0	1.3	1.4	1.0	1.2	1.3	1.2	1.3	2.5	3.4	2.6	2.3	3.4	3.0	3.2	3.2	1.8	2.7	2.2	2.4	2.4	2.1	3.4	0.6	2.0
7	4.2	5.2	4.3	5.6	7.1	7.9	9.1	8.2	7.8	9.0	8.3	6.0	6.6	6.2	5.5	3.8	2.7	1.3	2.2	1.1	1.2	1.9	1.7	1.5	9.1	1.1	4.9
8	1.8	2.0	3.2	2.3	1.4	1.3	1.4	1.7	1.8	1.8	2.1	2.0	2.1	2.6	3.1	3.3			2.0	1.6	1.7	1.7	2.0	1.9	3.3	1.3	2.0
9	2.0	2.3	2.2	3.2	3.5	3.2	3.2	3.3	4.8	5.5	4.3	6.2	7.0	7.6	7.5	8.4	8.8	8.5	7.3	7.3	7.2	8.7	8.9	10.6	10.6	2.0	5.9
10	10.1	8.0	5.7	5.3	3.5	2.9	2.6	1.3	2.2	4.6	4.8	3.4	3.2	3.0	2.1	1.9	2.0	2.0	3.2	4.4	4.4	4.6	4.6	5.0	10.1	1.3	3.9
11	4.3	2.9	1.9	2.8	2.7	3.3	3.3	4.7	3.5	2.1	2.8	1.3	2.0	4.5	5.2	5.1	6.5	8.9	9.8	9.2	7.9	9.0	8.5	8.5	9.8	1.3	5.0
12	8.0	8.3	8.7	7.7	6.2	7.2	7.3	8.7	8.1	7.5	8.5	10.1	8.1	7.6	7.5	6.5	5.6	4.8	3.3	3.3	3.1	2.6	2.8	1.6	10.1	1.6	6.4
13	2.6	2.3	3.1	3.6	3.9	4.2	3.0	4.6	5.3	4.7	4.9	4.2	2.0	4.2	5.6	3.8	3.0	2.7	2.1	2.5	2.8	3.8	4.2	4.6	5.6	2.0	3.7
14	5.2	5.1	5.7	4.8	4.5	3.8	3.0	3.6	4.8	1.8	2.4	3.2	2.3	3.2	3.9	5.9	5.4	6.8	6.7	7.1	8.4	9.3	9.3	10.0	10.0	1.8	5.3
15	10.2	10.0	10.2	10.0	8.2	5.9	4.3	2.8	3.9	3.6	2.7	4.1	2.8	2.9	3.9	4.7	4.8	4.4	5.1	7.7	7.6	8.3	8.3	8.3	10.2	2.7	6.0
16	6.2	4.4	3.7	7.0	7.5	5.3	3.7	1.8	1.8	2.6	2.2	1.0	1.5	3.1	4.1	3.1	3.2	4.7	3.5	3.9	5.0	5.3	6.0	6.5	7.5	1.0	4.0
17	6.5	8.0	9.2	9.8	11.8	12.7	13.2	12.4	12.0	12.6	12.8	11.5	13.5	15.8	16.0	15.5	15.3	14.4	13.9	13.0	14.0	14.3	15.6	14.4	16.0	6.5	12.8
18	12.8	10.8	10.4	10.0	11.2	9.5	10.2	9.1	8.2	8.1	6.2	5.5	6.3	8.3	7.4	5.3	4.6	5.5	5.6	6.4	6.4	5.2	5.4	6.2	12.8	4.6	7.7
19	6.9	8.1	7.8	8.2	7.7	5.0	5.0	6.7	8.6	8.3	9.8	10.4	10.2	13.1	13.6	12.8	14.6	16.3	16.4	18.0	17.4	16.0	14.9	15.2	18.0	5.0	11.3
20	15.4	15.9	14.7	14.3	13.4	11.5	12.8	12.6	12.1	10.9	11.7	9.5	11.0	9.4	4.4	2.9	3.6	9.8	12.5	10.3	12.2	11.5	9.0	8.7	15.9	2.9	10.8
21	8.8	10.1	8.9	10.2	6.9	3.7	2.8	3.5	4.1	4.8	4.8	3.1	3.4	1.8	2.2	3.5	3.0	3.3	4.0	5.4	6.6	7.2	7.1	7.2	10.2	1.8	5.3
22	8.7	7.8	5.6	8.3	6.6	4.2	7.0	7.3	8.3	9.3	10.9	10.4	12.5	9.7	12.2	12.4	11.1	5.2	5.5	5.5	4.4	4.0	6.1	5.2	12.5	4.0	7.8
23	3.3	3.4	5.1	5.2	6.0	7.7	9.4	8.8	8.7	9.4	11.6	11.1	8.7	9.8	11.7	13.4	11.4	13.6	11.9	11.8	11.9	12.2	9.3	8.3	13.6	3.3	9.3
24	7.3	6.3	4.9	4.1	4.9	4.2	4.3	3.8	7.2	5.6	6.3	7.8	7.7	9.6	9.3	9.9	10.4	9.3	8.6	7.5	8.7	9.7	11.0	11.1	11.1	3.8	7.5
25	11.3	11.5	8.8	7.3	7.8	8.5	9.7	7.9	5.8	6.0	7.3	8.7	8.3	9.2	8.8	9.5	10.4	7.2	10.1	11.2	9.6	8.0	8.4	9.4	11.5	5.8	8.8
26	11.5	14.7	13.1	14.0	13.9	13.2	11.5	9.9	10.8	10.8	12.5	11.5	8.5	7.9	7.4	7.6	9.1	8.9	8.4	7.0	5.6	3.9	3.3	3.4	14.7	3.3	9.5
27	3.6	3.4	3.3	3.3	3.1	1.8	2.0	2.4	3.3	2.9	3.2	3.4	3.0	2.9	2.6	2.3	2.4	2.5	2.8	2.2	2.2	2.0	2.6	2.3	3.6	1.8	2.7
28	2.3	1.6	1.6	2.4	2.9	2.7	3.6	3.7	4.0	5.7	6.2	6.2	6.3	7.2	7.1	6.9	6.3	6.5	6.2	5.7	5.3	3.8	3.3	2.0	7.2	1.6	4.6
29	1.8	2.6	3.5	3.7	4.8	4.8	4.1	5.1	5.3	5.1	4.8	4.4	3.8	3.7	4.2	4.4	4.8	5.1	4.4	4.8	4.5	3.5	3.1	2.0	5.3	1.8	4.1
30	3.6	4.3	5.3	5.5	5.3	5.0	5.4	5.1	5.8	6.1	6.5	6.0	5.6	6.2	6.3	6.4	5.5	4.6	5.5	6.1	7.4	8.9	9.2	12.0	12.0	3.6	6.1
31	12.8	12.3	11.4	11.7	10.4	9.7	9.2	8.5	9.0	6.6	8.2	15.4	16.0	13.8	13.7	13.8	8.7	11.3	12.8	14.2	13.0	8.3	5.5	3.7	16.0	3.7	10.8
Max.	**15.4**	**15.9**	**14.7**	**14.3**	**14.7**	**13.9**	**13.2**	**13.7**	**12.8**	**12.6**	**12.8**	**15.4**	**16.0**	**15.8**	**16.0**	**15.5**	**15.3**	**16.3**	**16.4**	**18.0**	**17.4**	**16.0**	**15.6**	**15.2**	**18.0**		
Min.	**0.9**	**0.6**	**1.0**	**1.3**	**1.4**	**1.0**	**1.2**	**1.3**	**1.2**	**1.3**	**2.1**	**1.0**	**1.5**	**1.8**	**2.1**	**1.9**	**1.3**	**1.3**	**1.8**	**1.1**	**1.2**	**1.7**	**1.3**	**1.5**		**0.6**	
Avg.	**6.5**	**6.5**	**6.2**	**6.5**	**6.4**	**5.8**	**6.0**	**5.9**	**6.2**	**6.1**	**6.5**	**6.6**	**6.4**	**6.6**	**6.8**	**6.5**	**6.4**	**6.6**	**6.4**	**6.5**	**6.5**	**6.4**	**6.4**	**6.3**			**6.4**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Speed (m/s)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.3	6.7	5.6	5.4	4.3	3.7	3.5	2.8	2.6	3.8	4.0	4.2	4.7	4.5	4.7	2.9	1.6	3.5	2.7	3.4	4.2	4.6	4.3	2.4	6.7	1.6	4.0
2	3.5	3.3	4.2	3.9	2.9	2.0	1.9	2.6	2.7	3.0	3.9	3.7	4.6	4.7	3.4	2.7	5.0	5.8	5.1	3.6	3.7	3.8	4.2	7.1	7.1	1.9	3.8
3	7.3	10.3	11.5	12.1	10.8	9.5	13.6	14.8	16.5	18.6	22.0	20.4	19.5	18.0	17.0	17.2	15.8	16.6	20.4	21.7	19.9	15.9	16.2	17.1	22.0	7.3	15.9
4	17.4	14.4	16.4	15.2	13.1	12.2	12.5	12.8	11.2	12.7	13.1	14.5	14.4	11.2	11.2	10.0	8.7	13.2	17.2	19.1	19.8	19.7	19.2	16.5	19.8	8.7	14.4
5	14.8	11.4	9.4	9.4	5.4	5.3	6.9	6.7	9.6	11.3	15.5	18.2	14.1	13.7	8.1	3.5	2.5	3.3	7.2	7.7	7.6	3.3	3.6	1.4	18.2	1.4	8.3
6	1.7	3.5	4.1	3.5	3.7	4.4	6.4	11.1	15.8	15.7	18.3	16.2	16.4	14.8	11.6	9.6	9.1	7.9	5.3	8.2	5.7	6.9	5.3	7.2	18.3	1.7	8.9
7	11.5	12.4	13.0	10.3	10.2	9.0	7.5	7.9	12.5	13.1	15.0	12.3	9.2	9.2	8.8	9.1	8.6	7.6	8.0	8.4	8.1	8.2	9.2	9.7	15.0	7.5	10.0
8	9.5	8.2	7.8	6.9	7.4	7.8	7.4	7.5	7.1	7.1	7.2	6.4	5.9	6.8	7.9	7.6	7.9	6.9	5.7	4.4	5.4	7.1	7.9	10.5	10.5	4.4	7.3
9	12.2	12.5	14.2	14.1	14.7	15.5	16.1	13.9	15.3	14.3	16.8	16.9	16.1	15.4	15.1	15.6	16.2	15.6	15.9	16.6	14.0	14.9	15.5	14.5	16.9	12.2	15.1
10	14.5	14.6	14.2	13.2	14.1	14.6	15.2	14.5	13.4	12.8	13.3	13.0	13.4	12.4	13.9	13.6	14.2	13.9	15.6	16.1	14.1	13.2	12.4	13.0	16.1	12.4	13.9
11	12.4	11.0	8.5	11.3	11.2	10.5	10.4	10.3	9.8	9.0	7.9	8.5	8.9	7.8	7.3	7.3	7.3	7.1	6.5	6.6	6.2	6.2	5.4	5.6	12.4	5.4	8.5
12	5.3	6.7	6.7	6.2	6.8	8.0	7.9	7.2	6.5	5.8	6.4	6.2	6.7	6.6	7.5	7.1	7.7	8.2	8.0	8.3	8.7	9.9	9.2	11.7	11.7	5.3	7.5
13	11.2	9.9	9.9	9.0	10.1	8.2	7.7	8.3	7.7	7.9	7.7	6.1	4.3	3.1	2.9	3.7	2.5	1.6	1.9	1.4	1.1	1.4	1.9	1.0	11.2	1.0	5.4
14	0.6	2.5	6.6	4.8	3.8	5.2	6.5	6.0	5.8	7.4	7.8	9.6	9.6	8.3	9.9	10.3	9.1	10.0	12.9	14.9	14.7	13.5	14.9	13.5	14.9	0.6	8.7
15	12.2	11.8	8.7	7.8	9.0	4.6	2.0	1.5	1.5	3.5	3.6	3.5	4.3	3.7	2.7	2.0	2.1	2.3	2.7	2.3	1.5	2.6	3.7	4.0	12.2	1.5	4.3
16	4.4	5.1	8.0	9.0	10.6	11.0	11.0	11.5	11.7	11.6	9.8	9.2	9.2	8.7	8.7	8.1	7.4	7.0	6.0	6.0	7.3	6.8	7.4	7.6	11.7	4.4	8.5
17	8.4	7.4	8.4	7.8	6.4	5.5	6.1	6.5	5.8	7.3	9.0	8.8	11.2	13.0	11.7	8.2	6.9	4.6	5.2	5.8	5.2	2.7	1.0	1.7	13.0	1.0	6.9
18	1.4	2.9	4.7	5.6	5.9	6.4	9.0	8.0	7.2	7.7	9.0			0.9	2.5	3.1	2.8	5.5	3.1	4.3	3.1	1.8	0.5	1.3	9.0	0.5	4.4
19	1.6	2.8	3.4	3.5	4.6	6.8	5.6	5.7	5.5	7.5	5.5	7.5													7.5	1.6	5.0
Max.	**17.4**	**14.6**	**16.4**	**15.2**	**14.7**	**15.5**	**16.1**	**14.8**	**16.5**	**18.6**	**22.0**	**20.4**	**19.5**	**18.0**	**17.0**	**17.2**	**16.2**	**16.6**	**20.4**	**21.7**	**19.9**	**19.7**	**19.2**	**17.1**	**22.0**		
Min.	**0.6**	**2.5**	**3.4**	**3.5**	**2.9**	**2.0**	**1.9**	**1.5**	**1.5**	**3.0**	**3.6**	**3.5**	**4.3**	**0.9**	**2.5**	**2.0**	**1.6**	**1.6**	**1.9**	**1.4**	**1.1**	**1.4**	**0.5**	**1.0**		**0.5**	
Avg.	**8.2**	**8.3**	**8.7**	**8.4**	**8.2**	**7.9**	**8.3**	**8.4**	**8.8**	**9.5**	**10.3**	**10.3**	**10.1**	**9.0**	**8.6**	**7.9**	**7.5**	**7.8**	**8.3**	**8.8**	**8.3**	**7.9**	**7.9**	**8.1**			**8.6**

Total Hours in Month 720 **Hours Data Available** 442 **Data Recovery** 61.4%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

January *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	-106.5	-106.1	-105.7	-105.2	-105.0	-104.5	-104.1	-104.0	-104.0	-104.1	-104.4	-104.7	-104.9	-105.3	-106.7	-107.2	-107.4	-107.3	-107.2	-107.5	-107.6	-107.6	-107.9	-107.9
2	-107.7	-107.5	-107.1	-107.0	-107.0	-106.3	-106.7	-107.3	-107.2	-107.7	-107.3	-106.8	-106.3	-105.9	-105.5	-104.7	-104.3	-103.8	-103.5	-103.5	-103.7	-102.7	-102.4	-101.8
3	-102.1	-102.7	-102.6	-102.5	-102.2	-102.1	-102.2	-102.2	-101.9	-102.2	-102.2	-101.9	-101.6	-102.1	-102.9	-103.0	-103.5	-103.4	-103.6	-103.7	-104.1	-104.4	-104.7	-105.1
4	-105.4	-106.1	-106.5	-106.6	-106.8	-107.6	-108.5	-108.8	-108.9	-109.5	-110.4	-111.1	-109.3	-110.0	-110.4	-111.9	-113.9	-115.3	-116.7	-116.6	-116.8	-116.3	-116.3	-115.8
5	-116.2	-115.4	-116.5	-116.9	-116.4	-116.5	-116.1	-114.6	-114.4	-113.1	-111.6	-109.9	-108.3	-106.5	-104.2	-103.3	-104.5	-105.4	-107.0	-107.7	-108.2	-109.1	-109.3	-109.2
6	-108.8	-108.6	-109.1	-110.8	-111.7	-111.8	-112.0	-111.9	-111.9	-110.7	-109.1	-107.0	-107.5	-108.7	-109.1	-109.8	-111.6	-113.0	-113.7	-113.7	-113.1	-112.7	-112.4	-111.2
7	-110.9	-110.7	-111.0	-111.4	-112.4	-112.7	-111.8	-112.0	-112.1	-111.9	-112.5	-112.1	-112.1	-111.9	-112.2	-112.9	-113.8	-113.9	-114.3	-114.5	-114.3	-114.3	-114.5	-114.9
8	-115.6	-115.6	-115.5	-115.3	-115.3	-115.3	-115.1	-115.1	-115.4	-114.8	-113.9	-113.2	-113.3	-113.1	-112.8	-112.7	-113.6	-114.6	-115.2	-115.4	-115.3	-115.3	-114.9	-115.0
9	-115.0	-115.3	-115.3	-115.5	-115.1	-114.8	-115.1	-114.9	-115.4	-116.1	-115.8	-115.3	-115.0	-114.9	-114.7	-115.0	-115.6	-115.7	-115.8	-115.7	-116.2	-116.4	-116.3	-116.4
10	-117.0	-117.5	-117.9	-117.9	-118.6	-118.9	-119.3	-119.8	-120.0	-120.4	-120.8	-120.7	-120.4	-120.5	-120.5	-121.5	-122.2	-122.8	-123.1	-123.0	-123.1	-123.3	-123.8	-124.0
11	-124.0	-123.6	-123.9	-124.1	-124.6	-124.4	-123.7	-123.6	-123.8	-123.8	-123.8	-123.5	-123.2	-122.9	-122.9	-122.9	-123.2	-122.9	-123.2	-123.6	-123.4	-122.8	-123.1	-123.1
12	-123.2	-122.8	-122.7	-123.0	-123.5	-123.7	-123.1	-123.2	-123.5	-123.6	-123.9	-123.0	-121.3	-120.1	-119.8	-120.1	-119.6	-120.1	-120.4	-119.5	-119.0	-118.9	-118.6	-118.2
13	-118.0	-117.7	-117.5	-117.1	-116.9	-116.7	-116.4	-116.2	-116.1	-115.9	-115.6	-115.2	-115.0	-114.8	-114.5	-114.7	-114.9	-114.8	-114.9	-114.9	-114.8	-114.9	-114.6	-114.2
14	-113.8	-113.7	-113.2	-112.6	-111.8	-111.5	-111.7	-112.6	-112.7	-112.7	-111.8	-111.1	-110.8	-110.9	-110.8	-111.4	-111.8	-111.5	-111.4	-111.8	-112.0	-112.0	-112.0	-112.1
15	-112.1	-111.9	-111.8	-111.6	-111.5	-111.7	-111.3	-111.3	-110.8	-110.6	-110.3	-109.8	-109.0	-108.0	-107.9	-108.6	-109.1	-109.6	-110.2	-110.4	-110.7	-110.7	-111.0	-111.3
16	-111.7	-111.7	-112.0	-112.6	-113.0	-113.0	-113.2	-113.1	-113.4	-113.7	-113.9	-114.0	-113.6	-114.3	-115.0	-113.9	-115.7	-116.6	-117.1	-117.2	-117.9	-119.1	-119.5	-119.7
17	-119.9	-119.9	-120.9	-122.1	-122.1	-122.1	-121.6	-122.1	-122.8	-123.5	-123.3	-122.1	-120.7	-120.0	-118.8	-119.1	-121.1	-123.5	-123.9	-124.0	-123.7	-123.8	-123.2	-123.4
18	-123.7	-123.5	-123.2	-123.2	-122.5	-122.5	-122.5	-121.9	-121.5	-121.9	-121.9	-119.5	-117.7	-116.5	-113.6	-113.4	-115.6	-119.3	-120.2	-121.3	-121.4	-121.5	-121.7	-121.9
19	-121.9	-121.7	-121.9	-122.0	-122.0	-122.1	-122.6	-122.7	-122.6	-121.7	-121.4	-118.4	-117.5	-117.2	-116.3	-116.3	-117.3	-118.0	-118.6	-118.6	-118.5	-117.8	-117.5	-117.4
20	-117.2	-117.0	-117.1	-116.7	-116.3	-115.3	-114.7	-114.7	-111.9	-111.3	-110.9	-111.1	-110.8	-110.5	-110.1	-109.7	-109.8	-109.7	-108.6	-108.4	-107.9	-108.1	-108.7	-108.8
21	-108.7	-108.3	-107.7	-107.8	-107.7	-107.5	-108.1	-108.4	-109.0	-109.4	-109.3	-108.6	-108.0	-108.1	-108.6	-108.9	-109.5	-109.8	-109.8	-109.5	-109.7	-110.2	-110.6	-111.2
22	-112.0	-112.1	-112.6	-113.4	-113.5	-113.8	-114.1	-113.7	-112.3	-111.7	-111.4	-111.1	-111.7	-112.0	-111.2	-111.2	-112.0	-112.8	-113.1	-113.6	-113.9	-113.7	-114.1	-114.2
23	-114.2	-114.0	-114.5	-114.6	-114.8	-115.0	-115.1	-115.4	-115.4	-115.2	-115.1	-113.3	-110.9	-111.0	-111.2	-111.6	-112.3	-111.5	-110.5	-110.5	-110.7	-109.6	-108.7	-108.4
24	-108.3	-108.0	-107.6	-107.4	-107.4	-107.4	-107.3	-107.0	-107.3	-107.2	-106.8	-106.5	-106.4	-105.9	-105.7	-106.5	-106.6	-106.7	-106.8	-107.1	-107.2	-107.5	-107.1	-107.4
25	-107.1	-107.9	-108.1	-107.9	-108.3	-108.6	-108.7	-108.3	-108.7	-108.7	-108.4	-108.2	-108.1	-109.1	-109.6	-109.9	-109.8	-109.9	-109.7	-109.8	-110.2	-110.2	-110.4	-110.8
26	-110.9	-111.5	-112.3	-112.4	-112.7	-112.4	-112.2	-112.5	-113.0	-113.1	-112.6	-112.1	-111.1	-110.8	-110.2	-109.7	-112.5	-114.5	-115.2	-115.5	-115.5	-116.0	-116.5	-116.8
27	-117.5	-117.9	-118.2	-118.2	-118.4	-118.4	-118.3	-117.8	-117.9	-118.2	-116.1	-114.5	-112.3	-113.5	-116.6	-116.4	-117.7	-118.6	-119.3	-119.6	-119.4	-118.7	-118.5	-118.2
28	-117.7	-118.1	-118.0	-118.2	-118.0	-117.8	-117.8	-118.2	-118.3	-118.2	-116.5	-114.9	-113.9	-113.4	-113.1	-115.8	-114.8	-116.1	-117.4	-117.6	-117.5	-117.3	-117.1	-117.1
29	-116.9	-117.3	-117.3	-117.1	-116.3	-116.3	-116.0	-115.9	-115.7	-116.0	-116.0	-114.7	-113.5	-113.0	-113.1	-113.2	-113.6	-113.7	-113.9	-113.6	-113.2	-113.0	-113.3	-113.3
30	-113.1	-113.1	-113.0	-112.7	-112.8	-112.9	-113.5	-114.2	-114.5	-114.5	-115.0	-115.0	-115.7	-116.4	-117.0	-118.0	-118.9	-121.0	-122.0	-122.6	-123.2	-123.4	-123.6	-123.8
31	-123.8	-124.0	-124.0	-123.9	-124.2	-123.7	-123.7	-123.3	-122.9	-123.1	-122.2	-121.4	-121.2	-120.2	-119.6	-119.3	-120.3	-121.3	-122.3	-122.9	-123.2	-122.8	-122.9	-123.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	-124.0	-124.2	-124.4	-124.8	-124.7	-125.1	-124.6	-124.4	-124.2	-124.3	-124.0	-122.8	-121.8	-121.5	-121.3	-121.2	-122.0	-123.5	-124.4	-124.7	-125.4	-125.9	-126.1	-126.2
2	-126.7	-126.9	-127.2	-127.3	-128.2	-128.1	-128.1	-128.1	-128.5	-128.5	-127.5	-126.6	-125.6	-124.5	-123.5	-123.8	-124.0	-125.7	-127.5	-128.0	-128.1	-128.9	-129.0	-129.2
3	-129.1	-128.8	-129.2	-129.5	-129.7	-129.6	-130.2	-130.3	-130.5	-130.3	-127.5	-125.2	-124.4	-122.2	-119.9	-119.5	-120.8	-125.1	-128.6	-129.3	-129.5	-129.7	-129.9	-130.0
4	-129.7	-129.5	-129.4	-129.2	-129.1	-128.6	-128.6	-128.1	-127.8	-127.0	-124.4	-122.2	-120.6	-119.2	-117.4	-116.6	-116.8	-118.5	-121.9	-122.6	-123.0	-123.1	-122.8	-122.8
5	-122.0	-121.6	-121.6	-120.9	-120.8	-120.6	-120.8	-120.9	-120.8	-120.6	-118.8	-117.2	-117.5	-117.1	-116.9	-116.7	-115.9	-115.6	-115.2	-115.0	-115.1	-115.2	-115.1	-115.0
6	-115.1	-114.8	-114.6	-114.2	-114.4	-114.2	-114.0	-113.8	-113.4	-113.3	-113.1	-113.1	-112.7	-112.4	-112.7	-112.9	-112.8	-113.1	-113.1	-113.2	-113.1	-113.1	-113.1	-113.4
7	-113.5	-113.3	-113.3	-113.3	-113.4	-113.1	-112.8	-113.0	-113.0	-113.2	-113.2	-113.0	-112.8	-112.8	-113.0	-112.8	-112.8	-113.0	-113.3	-113.3	-113.4	-113.6	-113.4	-113.8
8	-114.0	-114.0	-114.0	-113.8	-113.9	-114.0	-114.0	-113.9	-113.8	-113.9	-113.5	-113.2	-112.8	-112.5	-112.6	-112.6	-112.8	-113.0	-113.2	-113.3	-113.4	-113.6	-113.5	-113.5
9	-113.5	-113.6	-113.5	-113.9	-113.7	-113.9	-114.6	-115.7	-117.7	-119.4	-121.0	-122.2	-122.6	-123.0	-123.5	-124.2	-124.7	-125.2	-125.5	-125.5	-126.3	-126.5	-126.4	-126.3
10	-126.4	-126.5	-126.2	-126.6	-126.8	-127.0	-127.0	-127.3	-127.6	-127.4	-126.6	-125.8	-125.2	-124.6	-123.7	-123.7	-123.8	-124.6	-125.8	-126.2	-125.7	-126.2	-125.9	-126.1
11	-126.5	-127.1	-126.7	-126.8	-126.3	-126.2	-125.6	-125.3	-124.7	-123.9	-122.8	-122.0	-121.1	-119.4	-118.8	-118.9	-119.6	-120.4	-122.2	-122.7	-123.2	-123.3	-124.0	-123.8
12	-123.1	-122.9	-122.7	-122.9	-122.2	-121.7	-121.7	-121.9	-121.8	-121.8	-120.7	-119.3	-118.9	-118.9	-117.6	-117.8	-117.6	-118.2	-118.5	-118.3	-118.3	-118.1	-117.6	-117.4
13	-117.4	-117.4	-117.2	-116.8	-116.0	-115.3	-115.0	-114.7	-114.4	-114.1	-113.9	-113.2	-113.1	-112.9	-113.2	-113.4	-113.6	-113.7	-114.8	-115.5	-115.7	-115.0	-114.6	-114.0
14	-113.1	-112.7	-112.9	-112.6	-112.6	-112.6	-112.5	-112.4	-112.2	-112.0	-112.1	-112.2	-112.0	-110.5	-110.3	-109.9	-110.8	-111.7	-113.4	-113.9	-114.1	-114.0	-113.9	-113.6
15	-113.6	-113.6	-113.4	-113.5	-113.7	-113.8	-113.8	-113.7	-113.7	-113.5	-113.4	-112.8	-112.1	-110.8	-111.1	-110.1	-110.3	-112.7	-114.1	-114.6	-115.0	-114.4	-114.3	-114.2
16	-114.2	-114.1	-114.0	-113.6	-113.6	-113.5	-113.0	-112.9	-113.0	-112.9	-112.7	-112.5	-112.4	-112.3	-112.3	-112.3	-112.7	-112.8	-112.6	-112.5	-112.2	-112.5	-112.6	-112.5
17	-112.4	-112.4	-112.8	-112.8	-112.7	-112.8	-113.4	-112.8	-112.7	-112.5	-111.8	-111.0	-110.7	-110.5	-111.1	-110.9	-111.2	-111.9	-112.5	-113.1	-113.0	-113.0	-113.2	-112.9
18	-112.8	-112.8	-112.8	-112.7	-112.8	-112.8	-112.8	-112.5	-112.7	-112.3	-112.1	-111.8	-112.1	-112.4	-112.3	-112.3	-112.4	-112.5	-112.4	-112.5	-112.7	-112.5	-112.6	-113.0
19	-113.0	-112.7	-112.8	-113.5	-113.7	-113.8	-113.6	-113.6	-113.4	-112.7	-112.0	-111.5	-110.9	-110.3	-110.4	-111.2	-112.1	-112.7	-112.9	-113.0	-112.7	-112.7	-112.8	-112.7
20	-112.3	-112.1	-111.9	-112.1	-112.0	-112.2	-112.7	-112.8	-112.4	-112.0	-111.8	-111.5	-111.4	-111.0	-111.1	-111.4	-111.6	-111.9	-112.2	-112.3	-112.3	-112.3	-112.3	-112.5
21	-112.6	-112.6	-112.6	-112.8	-112.7	-112.8	-112.9	-113.4	-113.3	-113.3	-112.6	-112.2	-112.0	-111.4	-110.5	-111.1	-111.1	-111.8	-112.9	-113.3	-113.4	-113.4	-113.9	-113.6
22	-113.3	-113.3	-113.6	-113.9	-113.8	-114.6	-115.3	-115.2	-114.1	-113.9	-113.8	-113.1	-112.7	-111.4	-110.0	-110.5	-111.5	-112.5	-113.0	-113.7	-113.4	-113.0	-112.8	-112.9
23	-112.9	-112.7	-112.7	-112.8	-112.9	-113.3	-113.1	-112.5	-112.3	-112.4	-111.8	-111.2	-110.8	-110.5	-110.8	-110.9	-111.5	-111.5	-111.8	-111.8	-111.9	-111.8	-112.1	-112.2
24	-112.4	-112.4	-112.5	-112.3	-112.2	-112.4	-112.6	-113.0	-112.9	-112.4	-112.0	-111.7	-111.3	-110.9	-110.4	-111.2	-110.9	-111.9	-113.2	-114.2	-114.3	-114.7	-115.3	-116.1
25	-116.1	-116.2	-115.8	-115.7	-116.3	-116.2	-115.6	-116.2	-115.7	-113.6	-110.4	-110.3	-108.9	-106.7	-106.1	-102.5	-106.4	-108.6	-111.9	-113.2	-114.0	-114.0	-114.3	-114.5
26	-115.4	-115.9	-115.8	-115.4	-114.8	-114.6	-114.9	-114.8	-114.9	-114.4	-113.4	-112.0	-110.3	-109.8	-106.9	-108.9	-109.7	-110.9	-114.1	-116.2	-116.7	-117.0	-117.0	-117.3
27	-117.4	-117.6	-117.5	-117.5	-117.5	-118.2	-118.3	-118.2	-118.4	-115.9	-114.1	-114.0	-112.7	-111.8	-111.1	-111.5	-112.3	-113.3	-115.6	-117.5	-117.9	-118.6	-119.0	-119.1
28	-119.1	-119.4	-119.5	-119.6	-120.0	-120.0	-120.4	-120.6	-120.1	-118.0	-116.6	-115.8	-115.2	-114.8	-113.5	-113.4	-114.3	-114.6	-116.7	-119.0	-119.6	-119.9	-120.2	-120.3

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

March *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	-120.3	-120.5	-120.6	-120.6	-120.3	-120.3	-120.1	-119.3	-118.6	-115.0	-114.6	-114.5	-113.9	-113.0	-112.3	-112.0	-112.7	-113.3	-115.6	-117.1	-117.7	-117.6	-117.5	-117.8
2	-117.5	-117.2	-116.6	-115.9	-115.6	-115.6	-116.0	-116.2	-116.0	-115.4	-114.2	-113.0	-112.2	-111.2	-110.0	-110.1	-111.5	-112.8	-113.9	-114.7	-115.0	-115.5	-115.9	-116.1
3	-116.7	-116.9	-116.8	-115.8	-115.4	-115.2	-115.2	-115.0	-115.1	-114.5	-114.1	-113.7	-112.8	-112.4	-112.3	-112.2	-112.6	-112.0	-113.1	-115.0	-115.4	-115.7	-115.1	-114.7
4	-114.1	-113.4	-113.3	-113.3	-113.1	-113.2	-113.0	-113.4	-113.5	-112.5	-112.1	-111.8	-109.1	-106.6	-105.0	-105.8	-107.3	-107.0	-109.3	-112.2	-113.0	-113.5	-114.0	-113.9
5	-114.1	-114.0	-113.8	-113.4	-113.5	-113.3	-113.1	-113.5	-113.5	-113.3	-112.6	-111.8	-111.6	-111.5	-111.5	-111.9	-112.3	-112.6	-112.8	-112.8	-112.8	-113.1	-113.3	-113.5
6	-113.5	-113.2	-113.0	-113.0	-113.0	-112.6	-112.8	-112.8	-112.8	-112.1	-111.0	-110.1	-109.2	-110.2	-108.9	-109.4	-110.4	-111.9	-112.3	-112.4	-113.0	-113.0	-112.4	-112.2
7	-112.1	-112.1	-112.0	-112.3	-112.5	-112.3	-112.4	-112.3	-112.0	-111.5	-111.1	-110.4	-109.7	-109.0	-109.3	-109.7	-110.5	-110.8	-111.7	-112.1	-112.2	-112.1	-112.0	-112.0
8	-111.7	-111.8	-111.8	-111.8	-111.9	-112.1	-112.3	-112.2	-111.2	-109.6	-110.0	-108.6	-108.4	-108.9	-109.7	-110.2	-110.2	-111.1	-111.7	-112.2	-112.2	-112.2	-112.1	-112.2
9	-112.1	-112.4	-112.3	-112.5	-112.4	-112.2	-112.3	-112.6	-112.7	-112.5	-112.6	-112.2	-111.5	-110.8	-110.7	-110.6	-111.0	-111.2	-112.2	-112.8	-112.6	-112.7	-112.5	-112.5
10	-112.4	-112.1	-111.8	-112.3	-112.6	-113.0	-113.0	-112.9	-112.9	-110.6	-109.1	-108.8	-109.3	-109.3	-108.9	-108.7	-109.2	-110.1	-110.7	-111.4	-111.9	-111.9	-112.4	-112.7
11	-112.8	-112.9	-113.0	-112.6	-112.5	-112.6	-113.0	-113.4	-113.4	-113.2	-112.2	-111.8	-110.9	-109.7	-110.3	-111.3	-111.6	-111.5	-111.9	-113.3	-113.5	-113.7	-113.6	-113.6
12	-113.0	-112.6	-112.6	-113.1	-113.5	-113.0	-112.7	-112.0	-112.0	-111.4	-111.5	-111.7	-111.5	-111.3	-110.5	-110.1	-109.2	-110.3	-111.1	-111.9	-112.7	-113.0	-113.3	-113.4
13	-113.1	-113.1	-113.5	-113.6	-113.8	-113.8	-113.1	-112.9	-112.8	-111.8	-110.9	-109.3	-108.2	-107.9	-107.2	-105.0	-102.9	-104.9	-108.7	-111.4	-112.8	-113.3	-113.6	-113.3
14	-112.9	-112.6	-112.6	-112.6	-112.6	-112.5	-112.3	-112.4	-112.0	-109.2	-107.6	-107.3	-108.1	-108.8	-108.6	-108.9	-109.6	-110.8	-112.3	-113.2	-113.4	-113.6	-113.4	-113.3
15	-113.4	-113.6	-113.5	-113.4	-113.5	-113.6	-113.6	-113.4	-112.9	-112.1	-111.8	-111.5	-111.2	-111.6	-111.8	-111.8	-112.2	-112.5	-113.0	-113.4	-113.1	-113.2	-113.2	-113.2
16	-113.3	-113.4	-113.4	-113.4	-113.3	-113.4	-113.6	-114.0	-113.8	-112.1	-111.5	-111.4	-110.3	-108.3	-107.5	-108.5	-109.1	-109.9	-111.3	-113.4	-114.9	-115.4	-115.6	-114.8
17	-114.5	-114.8	-115.0	-115.1	-115.3	-115.4	-115.1	-115.1	-114.0	-111.4	-110.4	-108.6	-107.1	-88.8	-93.2	-103.3	-105.9	-110.4	-110.1	-112.7	-114.8	-115.7	-116.0	-115.7
18	-115.4	-114.9	-114.2	-114.3	-114.2	-114.4	-114.8	-114.3	-112.2	-109.1	-106.8	-105.9	-103.5	-104.5	-106.1	-106.5	-106.4	-102.9	-108.6	-112.7	-114.0	-114.4	-114.5	-114.4
19	-115.1	-115.2	-115.0	-114.9	-114.7	-114.7	-115.0	-114.6	-111.5	-109.8	-108.3	-109.3	-109.4	-108.4	-107.6	-108.8	-108.7	-109.0	-110.5	-112.7	-114.2	-115.1	-115.2	-115.5
20	-115.5	-115.5	-115.6	-115.7	-115.8	-116.4	-116.7	-117.0	-115.9	-114.8	-114.2	-114.7	-115.5	-115.2	-115.1	-116.2	-116.9	-117.3	-118.8	-120.3	-121.2	-121.9	-121.8	-121.7
21	-121.9	-121.9	-122.0	-122.0	-121.7	-121.6	-121.6	-121.3	-121.2	-120.3	-119.4	-117.4	-115.1	-112.8	-111.3	-112.2	-112.1	-113.6	-114.9	-115.5	-115.6	-115.6	-115.4	-115.6
22	-115.6	-115.6	-115.3	-115.5	-115.8	-116.3	-116.5	-116.5	-116.6	-113.8	-110.6	-107.3	-103.3	-107.3	-112.0	-112.8	-112.9	-114.1	-115.5	-116.6	-116.8	-116.9	-116.8	-117.7
23	-118.4	-118.2	-118.0	-117.9	-117.5	-117.7	-117.8	-117.6	-116.3	-113.9	-113.8	-112.9	-112.6	-112.8	-113.5	-113.2	-113.5	-113.7	-113.9	-114.2	-114.3	-114.1	-114.1	-113.9
24	-113.8	-113.7	-113.6	-113.5	-113.5	-113.5	-113.4	-113.2	-113.2	-112.5	-112.5	-112.1	-111.7	-111.6	-111.4	-111.3	-112.1	-112.5	-112.9	-113.3	-113.3	-113.3	-113.3	-113.5
25	-113.8	-114.4	-115.3	-115.5	-115.7	-115.7	-115.8	-115.9	-115.8	-115.5	-115.0	-114.3	-113.6	-113.2	-113.0	-113.4	-114.0	-114.3	-115.1	-115.7	-116.1	-116.4	-116.5	-116.5
26	-116.6	-116.8	-117.1	-117.3	-117.4	-117.6	-117.6	-117.8	-117.4	-116.8	-116.5	-113.5	-112.3	-111.1	-112.4	-114.0	-113.2	-112.0	-113.9	-116.9	-119.4	-120.0	-118.4	-117.5
27	-117.2	-117.2	-116.9	-116.9	-116.8	-116.9	-117.2	-117.4	-115.0	-112.8	-111.7	-110.2	-107.5	-103.6	-103.3	-109.0	-109.3	-111.1	-114.1	-115.6	-115.9	-115.6	-115.1	-115.7
28	-115.9	-115.9	-115.9	-116.1	-117.0	-117.3	-117.4	-117.6	-117.3	-116.7	-115.5	-114.6	-113.4	-114.2	-114.0	-113.6	-113.8	-114.0	-114.4	-117.2	-120.0	-121.6	-121.7	-122.5
29	-122.4	-122.6	-122.7	-122.2	-122.2	-122.0	-121.1	-120.7	-119.9	-117.8	-116.8	-115.6	-115.1	-113.9	-111.6	-113.3	-112.5	-109.7	-111.5	-116.0	-121.5	-123.4	-123.4	-123.6
30	-123.0	-122.7	-123.4	-123.5	-123.3	-123.2	-123.0	-123.6	-123.2	-121.0	-119.7	-119.7	-117.7	-117.7	-117.7	-118.1	-119.2	-120.9	-122.7	-123.3	-123.6	-124.1	-124.3	-124.6
31	-124.3	-124.5	-124.2	-124.3	-124.1	-124.3	-124.0	-123.6	-123.4	-122.8	-121.2	-120.1	-119.4	-118.7	-118.8	-119.1	-119.0	-118.7	-119.3	-120.7	-121.8	-122.1	-122.5	-122.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

April *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	-122.9	-123.1	-123.1	-123.2	-123.4	-123.1	-123.1	-122.4	-120.4	-116.9	-113.1	-110.7	-109.4	-105.7	-107.1	-108.9	-111.2	-111.0	-111.6	-114.7	-119.5	-121.3	-121.9	-122.2
2	-122.1	-121.9	-122.2	-122.0	-122.1	-122.1	-122.2	-121.5	-118.1	-115.7	-114.5	-114.4	-113.4	-113.0	-113.4	-114.0	-113.2	-114.5	-115.9	-117.8	-120.2	-120.8	-121.4	-121.6
3	-121.5	-121.2	-121.3	-122.0	-122.5	-122.7	-123.0	-121.2	-119.0	-117.8	-117.2	-117.4	-117.3	-116.7	-116.6	-116.9	-116.8	-116.4	-116.5	-118.5	-120.9	-122.0	-122.4	-123.2
4	-123.3	-123.1	-123.4	-123.4	-123.7	-123.9	-124.3	-122.2	-119.8	-118.7	-118.0	-117.0	-116.1	-115.6	-115.3	-115.3	-114.4	-114.4	-115.4	-117.5	-118.9	-119.9	-119.8	-119.5
5	-119.5	-119.3	-119.4	-119.1	-119.1	-119.3	-119.6	-119.5	-119.2	-118.9	-118.4	-117.7	-117.3	-116.8	-116.7	-116.2	-116.5	-116.5	-116.6	-116.9	-116.8	-116.7	-116.6	-116.3
6	-116.2	-115.8	-114.9	-113.9	-114.4	-114.6	-113.7	-112.8	-111.9	-110.5	-110.5	-109.6	-108.7	-108.7	-107.0	-108.5	-109.9	-108.9	-109.1	-110.8	-112.7	-113.0	-113.1	-113.1
7	-113.1	-113.1	-113.0	-112.9	-113.2	-113.0	-113.0	-112.7	-112.4	-111.9	-111.3	-110.7	-109.5	-107.9	-108.6	-109.6	-109.9	-109.4	-108.9	-110.5	-112.8	-113.8	-113.9	-113.7
8	-113.8	-114.1	-114.6	-115.1	-115.1	-115.2	-114.7	-114.5	-110.9	-104.1	-105.3	-104.6	-106.9	-106.4	-107.6	-107.2	-107.9	-108.9	-109.8	-111.3	-112.1	-112.8	-113.3	-113.9
9	-114.4	-114.2	-113.8	-113.8	-114.2	-114.6	-114.4	-112.2	-112.0	-109.9	-104.0	-105.1	-103.1	-99.3	-89.1	-98.5	-98.3	-100.2	-105.1	-109.3	-111.7	-112.3	-112.6	-112.9
10	-112.8	-112.8	-113.3	-113.8	-114.2	-114.5	-114.6	-113.2	-110.9	-109.4	-109.4	-108.2	-107.7	-106.5	-107.2	-108.9	-109.1	-109.9	-111.5	-112.5	-113.3	-114.0	-114.3	-114.4
11	-114.8	-115.1	-115.5	-115.8	-115.9	-115.6	-115.7	-115.4	-114.6	-113.3	-113.1	-113.0	-112.5	-112.4	-112.1	-112.3	-112.0	-112.0	-112.2	-113.1	-114.1	-114.7	-115.0	-115.5
12	-116.0	-116.2	-116.9	-117.1	-117.5	-117.6	-117.5	-116.8	-116.1	-115.2	-113.4	-112.2	-111.9	-111.0	-110.8	-111.2	-110.1	-109.4	-109.8	-111.6	-114.1	-115.4	-115.9	-116.0
13	-116.2	-116.3	-116.0	-116.2	-116.3	-116.2	-115.9	-112.3	-108.5	-104.0	-98.8	-99.1	-98.1	-98.5	-98.8	-105.5	-105.6	-104.4	-106.8	-109.6	-112.7	-114.3	-115.2	-115.1
14	-114.9	-114.1	-114.0	-113.9	-114.2	-114.8	-114.3	-111.1	-108.5	-107.0	-107.6	-107.4	-107.0	-107.2	-107.1	-108.3	-107.6	-107.4	-108.1	-109.5	-112.3	-114.0	-114.8	-114.9
15	-114.9	-115.0	-114.9	-115.0	-115.4	-115.2	-114.7	-111.8	-110.6	-108.9	-108.0	-107.8	-108.8	-108.8	-108.8	-109.4	-109.2	-109.1	-110.0	-111.1	-112.0	-112.7	-113.6	-113.4
16	-113.4	-113.9	-114.1	-114.4	-114.4	-115.0	-114.9	-114.2	-113.4	-112.5	-112.1	-111.7	-111.5	-111.1	-110.9	-111.4	-110.8	-110.5	-111.5	-112.8	-114.5	-115.4	-115.9	-116.5
17	-116.9	-117.0	-117.1	-117.6	-118.1	-118.4	-118.5	-117.1	-116.0	-114.7	-114.4	-114.3	-114.6	-114.5	-114.4	-114.7	-114.3	-113.6	-114.0	-115.1	-116.7	-118.5	-119.3	-119.8
18	-120.0	-119.8	-119.4	-119.2	-119.3	-119.2	-118.9	-118.3	-117.8	-117.3	-117.3	-116.1	-115.0	-114.5	-114.0	-114.1	-114.5	-114.8	-115.6	-116.3	-116.7	-117.0	-117.3	-117.2
19	-117.3	-117.1	-116.7	-116.9	-116.6	-116.6	-115.7	-113.8	-113.0	-111.6	-110.5	-109.8	-109.0	-108.8	-109.3	-109.8	-110.4	-111.9	-112.9	-114.2	-115.6	-116.4	-117.0	-116.7
20	-117.0	-117.1	-117.2	-117.1	-117.6	-117.7	-117.5	-116.7	-115.1	-113.0	-111.5	-110.8	-109.1	-108.3	-107.5	-108.1	-108.5	-110.0	-110.9	-111.6	-112.3	-112.5	-112.4	-112.8
21	-112.9	-112.7	-112.6	-112.7	-112.8	-112.8	-112.6	-112.1	-111.5	-111.2	-110.7	-110.7	-111.6	-111.7	-111.8	-111.4	-111.3	-111.3	-111.0	-110.8	-111.1	-111.0	-110.7	-110.6
22	-110.5	-110.6	-110.9	-111.1	-111.3	-111.4	-111.4	-111.4	-111.0	-109.9	-108.0	-105.5	-105.9	-106.2	-104.9	-106.1	-105.6	-106.5	-108.3	-110.4	-111.4	-112.2	-112.1	-112.1
23	-112.2	-112.2	-112.2	-112.3	-112.4	-112.6	-112.3	-111.7	-111.5	-110.8	-110.5	-109.9	-109.5	-109.2	-109.2	-109.4	-110.1	-110.6	-110.8	-111.0	-111.4	-112.2	-112.4	-112.8
24	-113.2	-113.5	-114.1	-114.0	-114.3	-114.1	-113.0	-109.9	-105.3	-100.9	-97.3	-91.7	-101.8	-100.8	-98.1	-101.6	-96.5	-93.0	-94.6	-99.6	-107.4	-110.3	-110.9	-111.1
25	-111.1	-111.1	-112.0	-111.7	-111.6	-111.7	-107.8	-101.9	-91.3	-78.3	-75.2	-85.7	-90.3	-93.3	-93.6	-100.4	-102.4	-101.0	-104.6	-106.8	-109.3	-110.1	-110.3	-110.1
26	-109.9	-109.9	-109.9	-110.2	-110.5	-110.3	-110.2	-103.3	-100.2	-91.5	-90.4	-94.2	-97.5	-97.7	-100.6	-102.7	-103.2	-104.6	-106.0	-107.4	-108.6	-109.8	-109.6	-109.7
27	-110.0	-110.2	-110.5	-110.6	-110.8	-111.0	-110.1	-104.0	-99.8	-99.1	-98.8	-98.7	-93.2	-85.9	-93.9	-95.2	-90.1	-91.5	-93.8	-101.3	-104.8	-107.0	-107.2	-107.1
28	-107.2	-107.3	-107.7	-108.2	-108.4	-108.7	-106.9	-104.8	-100.0	-99.8	-99.4	-98.0	-97.6	-95.7	-98.3	-102.4	-103.0	-103.4	-103.4	-104.4	-105.5	-107.9	-109.3	-110.1
29	-110.3	-110.4	-111.1	-111.2	-111.3	-110.9	-110.1	-108.7	-108.3	-107.2	-105.3	-99.0	-93.5	-90.6	-92.4	-97.7	-97.7	-94.1	-102.2	-106.8	-108.4	-108.9	-108.7	-108.9
30	-109.3	-109.4	-109.7	-109.8	-110.1	-109.9	-106.9	-103.3	-97.8	-89.6	-82.1	-75.5	-69.8	-52.4	-39.4	-66.8	-71.5	-86.1	-99.6	-105.1	-106.9	-107.8	-109.1	-110.1

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

May *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	-110.6	-110.8	-111.0	-110.9	-111.4	-111.5	-109.3	-108.4	-104.7	-102.0	-98.6	-99.3	-98.9	-98.2	-99.4	-102.3	-105.0	-104.5	-105.5	-107.6	-110.0	-111.3	-111.8	-112.3
2	-112.2	-111.7	-111.5	-112.2	-112.3	-112.5	-110.2	-105.2	-99.3	-98.9	-97.6	-99.5	-99.4	-99.3	-98.9	-101.8	-103.7	-102.9	-105.2	-107.9	-109.8	-111.0	-111.8	-112.2
3	-112.5	-112.8	-112.7	-112.4	-112.6	-112.7	-110.1	-104.5	-102.8	-102.6	-103.9	-104.9	-104.9	-104.6	-105.0	-105.8	-106.2	-107.0	-107.5	-108.8	-110.2	-111.6	-112.2	-112.3
4	-112.5	-112.6	-112.7	-112.6	-112.6	-112.5	-112.3	-112.1	-111.5	-110.8	-109.5	-107.9	-107.9	-108.4	-108.8	-107.8	-108.1	-108.4	-109.5	-110.3	-111.1	-111.7	-112.0	-111.8
5	-111.7	-111.7	-111.9	-111.6	-111.8	-111.8	-111.8	-111.7	-111.6	-111.4	-111.4	-110.9	-110.7	-110.2	-110.2	-110.6	-110.6	-110.8	-111.0	-111.2	-111.4	-111.3	-111.3	-111.6
6	-111.4	-111.5	-111.6	-111.7	-111.7	-111.4	-111.3	-111.2	-110.9	-110.0	-109.4	-109.1	-109.5	-109.3	-109.0	-109.1	-108.8	-109.1	-109.7	-110.5	-110.8	-111.0	-111.2	-111.2
7	-111.3	-111.4	-111.5	-111.5	-111.6	-111.7	-111.4	-110.7	-108.0	-104.5	-92.6	-88.5	-91.7	-90.2	-90.5	-96.3	-98.3	-95.2	-97.8	-101.0	-106.8	-110.0	-111.1	-111.7
8	-112.0	-112.5	-112.8	-113.0	-113.1	-112.9	-107.2	-102.1	-87.9	-94.4	-90.0	-82.2	-80.3	-72.2	-67.1	-79.7	-83.2	-76.8	-82.6	-92.6	-100.7	-107.3	-109.3	-110.2
9	-110.4	-110.2	-110.5	-110.9	-110.9	-110.5	-106.3	-100.3	-89.6	-71.2	-70.4	-72.6	-71.3	-72.7	-77.2	-85.8	-88.4	-86.8	-90.6	-96.8	-102.6	-107.0	-108.8	-110.0
10	-110.5	-111.0	-111.2	-111.2	-111.5	-111.3	-107.8	-102.7	-93.9	-92.6	-95.5	-98.1	-98.5	-98.2	-98.1	-100.7	-101.1	-101.0	-102.2	-105.4	-107.6	-109.4	-110.7	-111.4
11	-111.7	-111.6	-111.4	-111.9	-111.8	-111.8	-108.8	-104.1	-99.2	-96.9	-97.8	-98.8	-98.0	-97.9	-99.2	-100.9	-100.6	-96.0	-97.4	-102.6	-104.9	-106.7	-108.2	-108.1
12	-107.9	-108.7	-109.7	-110.3	-109.2	-108.4	-108.2	-108.0	-107.5	-106.1	42.9	207.5	205.9	202.7	201.6	201.3	201.1	201.3	199.9	199.3	199.4	199.7	199.7	199.8
13	199.5	199.4	199.4	199.4	199.6	199.8	199.8	199.8	199.8	200.1	200.4	200.3	200.0	199.7	199.7	199.3	199.2	199.2	199.2	199.2	198.9	201.5	201.9	201.9
14	202.0	202.0	202.0	202.0	202.0	202.1	202.0	202.1	202.0	201.8	201.7	200.9	201.2	200.5	200.0	199.7	199.3	198.3	198.0	197.7	197.3	197.2	197.2	197.2
15	197.2	197.2	197.2	197.2	197.2	197.2	197.2	197.2	197.1	197.1	197.0	196.6	196.3	195.7	195.2	194.8	193.9	193.5	193.1	192.8	192.8	192.7	192.7	192.6
16	192.6	192.6	192.6	192.6	192.6	192.5	192.5	192.3	192.3	192.1	191.9	191.5	191.5	191.0	190.7	190.3	190.1	189.7	189.5	189.4	189.3	189.3	189.3	189.2
17	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.2	188.9	188.7	188.7	188.6	189.4	189.4	189.4	189.3	189.1	188.8	188.6	188.6	188.5	188.5	188.3
18	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.2	188.1	188.1	188.1	187.9	187.7	187.6	187.4	187.4	187.4	187.1	186.9	186.8	186.7	186.6
19	186.5	186.5	186.4	186.4	186.2	186.3	186.3	186.2	186.2	186.1	186.0	185.7	185.3	185.2	185.0	184.7	184.4	184.2	183.9	183.8	183.5	183.4	183.4	183.3
20	183.1	182.6	182.5	182.5	182.5	182.5	182.3	182.3	182.2	182.3	182.2	182.1	181.5	181.2	180.3	180.0	179.6	179.2	178.8	178.6	178.7	178.7	178.7	178.7
21	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.7	178.6	178.5	178.5	178.7	178.9	181.4	182.1	182.6	182.6
22	183.0	183.8	184.0	184.1	184.5	184.7	185.1	185.2	185.3	185.4	185.5	185.5	185.5	185.5	185.6	185.8	188.1	188.9	189.1	189.7	189.9	189.9	190.0	189.9
23	189.9	189.9	189.9	189.9	189.9	189.9	190.0	190.0	189.9	189.9	190.0	189.9	189.9	189.9	189.8	189.9	189.9	189.8	189.8	189.6	189.2	189.2	189.2	189.1
24	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.2	189.0	188.9	188.7	188.3	188.3	188.1	188.1	187.6	187.5	187.5	187.5	187.4	187.4
25	187.4	187.3	187.3	187.2	187.2	187.2	187.1	186.7	186.5	185.8	185.5	185.3	184.9	184.7	184.5	183.7	183.1	182.8	182.5	182.1	182.2	182.1	182.1	182.2
26	182.1	182.1	182.1	182.1	182.2	182.2	182.1	181.9	181.9	181.9	181.6	181.6	181.6	182.3	181.9	182.0	181.4	181.3	181.2	180.8	181.0	181.1	181.0	181.0
27	181.0	180.8	180.9	181.0	181.0	181.7	182.4	182.9	183.3	183.2	183.0	182.8	182.3	181.9	182.1	181.8	181.2	181.2	181.2	180.8	180.6	180.9	181.0	180.8
28	180.8	180.8	180.6	180.6	180.7	180.7	180.7	180.7	180.8	180.9	181.7	182.2	182.0	181.6	181.3	180.9	180.8	180.7	180.9	180.9	180.8	181.0	181.2	181.7
29	182.1	183.0	183.9	184.3	184.5	184.8	184.8	184.6	184.5	184.4	184.2	183.9	183.3	182.9	182.6	182.4	181.6	181.6	181.3	181.2	181.2	181.0	180.6	180.8
30	180.5	180.5	180.6	180.5	180.5	180.4	180.0	179.8	179.6	179.6	179.2	178.7	178.5	178.4	177.4	177.2	176.6	176.1	175.6	175.5	175.5	175.9	175.9	175.8
31	175.6	175.6	175.6	175.7	175.7	175.8	175.9	176.0	176.2	176.2	176.1	175.9	175.3	174.9	174.5	173.9	173.2	173.2	172.4	172.5	172.5	172.7	172.7	172.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

June *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	172.3	172.3	172.2	172.2	172.2	172.2	172.1	172.1	172.1	172.2	172.0	171.5	171.2	171.0	170.8	170.5	170.0	169.1	168.8	168.8	168.8	168.7	168.7	168.7
2	168.7	168.6	168.5	168.5	168.5	168.5	168.5	168.4	168.1	167.8	167.5	167.3	166.7	166.1	165.9	165.2	164.9	164.6	164.4	163.9	163.8	163.8	163.8	163.8
3	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.8	163.7	163.6	163.3	163.0	162.6	161.8	161.4	160.8	160.5	159.7	159.2	158.8	158.7	158.5	158.4	158.2
4	157.7	157.8	157.6	157.5	157.4	157.1	157.0	156.9	156.9	156.8	156.4	155.9	155.4	154.8	154.4	153.7	153.2	152.8	152.1	151.7	151.4	151.3	150.9	150.5
5	150.5	150.3	150.2	150.2	150.0	149.9	149.6	149.4	149.4	149.2	148.8	148.6	148.0	147.2	146.4	145.5	144.8	144.1	143.4	142.7	142.3	142.1	141.8	141.8
6	141.8	141.4	141.4	141.4	141.2	141.2	141.1	141.1	140.7	140.5	140.1	139.8	139.3	138.5	137.7	137.1	136.2	135.9	135.8	135.4	135.5	135.4	135.4	135.2
7	135.2	135.0	134.8	134.8	134.8	134.6	134.6	134.5	134.4	134.5	134.5	134.3	133.8	133.9	133.8	133.7	133.5	133.2	133.2	132.6	132.7	132.6	132.7	132.9
8	133.3	133.6	133.6	133.8	133.9	133.7	133.7	133.7	133.8	134.0	134.0	134.1	134.1	134.0	134.0	134.2	134.3	134.6	134.6	135.1	135.3	135.4	135.3	135.2
9	135.2	135.2	135.2	135.2	135.2	135.3	135.3	135.3	135.3	135.3	135.3	135.2	135.2	134.8	134.8	134.5	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2
10	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.0	133.8	133.5	133.3	133.0	132.5	131.9	131.9	131.9	131.8	131.8	131.8	131.7	131.7
11	131.6	131.5	131.5	131.6	131.5	131.5	131.6	131.5	131.1	132.3	132.3	132.3	132.3	132.1	131.7	131.4	131.0	130.8	130.2	130.1	130.0	130.2	130.1	130.1
12	130.4	130.5	130.5	130.5	130.5	130.7	131.0	130.9	130.9	130.9	130.8	130.5	129.5	129.5	128.8	128.2	127.8	127.3	127.1	126.8	126.6	126.6	126.6	126.6
13	126.6	126.6	126.6	126.6	126.6	126.5	126.5	126.5	126.4	126.2	126.1	125.7	125.5	125.2	124.8	122.8	122.0	121.7	121.0	120.6	120.5	120.5	120.5	120.4
14	120.3	120.2	120.2	120.3	120.3	120.3	120.2	120.2	120.2	120.0	120.0	119.8	119.6	119.1	118.6	118.0	117.4	116.4	116.2	116.0	115.8	115.7	115.6	115.4
15	115.3	115.2	115.1	115.0	115.0	115.1	114.9	114.6	114.6	114.2	114.3	114.2	113.8	113.4	112.6	111.7	111.5	110.7	110.6	110.2	109.7	109.3	109.1	109.0
16	108.8	108.7	108.6	108.5	108.5	108.5	108.4	108.2	108.0	107.8	107.7	107.5	107.3	107.0	106.5	105.8	104.8	104.2	102.9	102.7	102.4	102.1	102.0	101.8
17	101.7	101.6	101.5	101.4	101.4	101.3	101.0	101.0	101.0	100.7	100.5	99.9	99.2	97.6	96.6	95.8	94.0	94.9	95.0	95.4	97.2	97.5	100.6	102.8
18	103.9	105.8	108.4	109.7	112.4	114.8	116.8	117.9	118.8	119.0	119.0	118.6	118.9	118.8	118.0	118.1	117.7	117.6	117.4	117.4	117.0	117.0	117.0	117.0
19	117.0	117.0	116.9	116.9	116.9	117.0	117.0	117.1	117.3	117.7	117.9	118.2	119.0	119.5	119.9	120.3	120.5	121.6	122.1	122.1	122.9	123.0	123.0	123.0
20	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	122.9	122.9	122.8	122.5	122.3	122.1	121.6	121.2	120.8	120.4	119.9	119.5	119.3	119.1	119.0	118.7
21	118.6	118.4	118.4	118.3	118.3	118.3	118.2	117.6	117.5	117.2	116.4	115.5	114.6	113.9	113.3	112.1	111.4	110.8	110.7	110.7	110.6	110.4	110.4	110.1
22	110.0	110.0	109.8	109.8	109.8	109.8	109.6	109.5	109.5	109.6	109.7	109.7	109.4	109.3	109.1	109.0	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2
23	109.2	109.2	109.2	109.2	109.2	109.3	109.2	109.2	109.2	109.2	109.1	109.0	108.8	108.4	108.1	107.7	106.9	106.3	106.1	105.8	105.7	105.7	105.6	105.6
24	105.5	105.5	105.5	105.4	105.4	105.4	105.3	105.3	105.3	105.0	104.7	104.3	104.0	103.2	102.6	101.7	100.9	100.2	100.0	99.6	99.5	99.4	99.5	99.4
25	99.4	99.4	99.2	99.2	99.2	99.2	99.1	98.9	98.8	98.5	98.4	98.1	97.6	97.3	96.5	96.1	95.6	95.1	94.7	94.6	94.5	94.5	94.5	94.5
26	94.5	94.4	94.4	94.3	94.3	94.3	94.2	94.1	94.1	93.9	93.7	93.4	92.8	91.8	91.4	91.3	90.3	90.0	89.4	89.3	89.4	89.3	89.1	89.1
27	88.8	88.7	88.7	88.7	88.7	88.6	88.6	88.5	88.4	88.3	87.9	87.6	86.8	86.4	86.1	85.3	85.0	85.0	84.8	84.5	84.4	84.4	84.4	84.4
28	84.4	84.4	84.4	84.4	84.4	84.5	84.4	84.4	84.5	84.4	84.4	84.4	84.3	83.9	83.5	82.3	82.0	82.0	82.0	82.0	81.8	81.7	81.5	81.5
29	81.4	81.4	81.3	81.3	81.3	81.3	81.3	81.2	81.2	81.2	81.2	81.2	81.0	81.0	80.7	80.1	78.7	78.6	78.3	78.0	78.0	78.0	77.8	77.8
30	77.7	77.7	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.5	77.0	76.9	76.8	114.7	119.1	119.0	119.0	119.0	119.0	119.0	119.6	120.6	121.1	121.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

July *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	121.6	122.6	123.0	123.0	123.0	123.0	123.0	123.5	123.7	123.8	123.8	161.4	161.4	161.4	161.4	161.2	161.0	160.6	160.5	160.2	160.0	159.9	159.8	159.7
2	159.6	159.6	159.5	159.5	159.5	159.4	159.4	159.4	159.4	159.3	159.1	159.0	158.7	158.5	160.1	160.5	160.5	162.0	162.9	163.2	163.2	163.1	163.2	163.2
3	163.2	163.2	163.1	163.1	163.1	162.9	162.8	162.8	163.4	163.3	166.6	166.6	166.3	165.8	165.4	164.7	164.3	163.9	163.3	163.2	163.0	162.9	162.7	162.6
4	162.5	162.5	162.4	162.4	162.5	162.4	162.4	162.3	162.1	161.8	161.6	161.4	161.0	160.5	159.7	159.2	158.3	157.8	157.2	156.8	156.6	156.4	156.3	156.3
5	156.3	156.2	156.2	156.2	156.2	156.2	156.2	156.1	156.1	156.0	156.0	155.8	155.7	155.2	155.0	154.5	153.8	153.7	153.6	153.2	153.1	152.8	152.6	152.4
6	152.3	152.2	152.2	152.1	152.0	152.0	152.0	152.0	152.0	152.0	151.9	151.7	151.7	151.2	150.6	149.7	149.0	148.7	148.0	147.5	147.0	146.8	146.6	146.4
7	145.9	145.4	145.1	144.9	144.7	144.7	144.7	144.4	144.3	144.2	143.9	143.5	142.9	142.3	141.4	140.6	140.0	139.1	138.7	137.7	137.4	137.0	136.7	136.6
8	136.5	136.5	136.5	136.4	136.4	136.4	136.3	136.3	136.3	136.2	136.2	135.9	135.7	135.6	135.3	134.9	134.5	133.8	133.2	132.8	131.9	131.8	131.8	132.0
9	134.5	135.0	135.1	135.1	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	134.9	134.1	133.7	133.2	132.4	131.9	131.6	133.4	136.3	137.1	138.3
10	138.3	138.2	138.2	138.0	137.9	137.8	137.9	137.8	137.8	137.8	137.7	137.7	137.7	137.8	137.7	137.7	137.3	137.1	136.9	136.9	136.8	136.7	136.6	136.5
11	136.5	136.4	136.3	136.2	136.1	136.1	136.0	135.6	135.6	135.6	135.7	135.5	135.5	135.3	135.0	134.6	134.2	133.8	133.7	133.7	133.5	133.4	133.4	133.4
12	133.4	133.4	134.2	136.2	138.3	139.5	140.4	140.9	143.0	144.1	145.3	146.1	145.7	145.2	145.1	145.1	144.8	144.8	144.8	144.7	144.7	144.7	144.7	144.7
13	144.7	144.7	144.7	144.7	145.0	145.0	145.1	145.1	145.1	145.1	145.1	145.1	145.0	144.8	144.6	144.2	144.1	143.9	143.4	143.4	143.3	143.2	143.2	143.1
14	143.0	143.0	143.0	142.8	142.8	142.8	142.8	142.8	142.7	142.5	142.5	142.4	142.0	141.9	141.5	141.0	140.4	139.9	139.2	138.6	138.0	137.6	137.5	137.4
15	137.2	137.2	137.1	137.1	136.9	136.9	136.9	136.7	136.5	136.5	136.2	135.6	134.7	133.9	133.1	132.4	131.1	130.5	129.9	129.7	129.6	128.7	128.5	128.5
16	128.7	128.6	128.5	129.7	133.2	135.8	136.6	137.9	140.4	143.1	145.4	147.3	148.7	149.9	150.1	150.2	150.2	150.2	150.3	150.3	150.3	150.3	150.3	150.4
17	150.5	150.5	150.5	150.5	150.5	150.5	150.5	150.6	150.8	151.1	151.1	151.1	151.1	151.1	151.1	150.9	149.9	150.0	150.0	150.0	151.0	151.0	152.0	152.6
18	153.3	153.3	153.2	153.0	153.0	153.0	153.0	152.9	152.9	152.9	152.7	152.5	152.3	152.2	152.0	151.4	151.2	150.8	150.5	150.3	150.1	150.0	149.9	149.8
19	149.7	149.6	149.4	149.4	149.4	149.3	149.2	149.2	149.2	149.1	149.1	148.9	148.9	148.7	148.7	148.6	148.4	148.3	148.3	148.1	148.1	148.1	148.1	148.1
20	148.1	148.0	147.9	147.9	147.9	147.9	147.9	147.9	147.9	147.8	147.7	147.6	147.5	147.3	147.2	147.0	146.8	146.5	146.2	145.8	145.7	145.4	145.3	145.3
21	145.2	145.1	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	144.8	144.8	144.5	144.2	143.8	143.4	142.5	141.9	141.1	140.6	140.5	140.6	140.5	140.3
22	140.2	140.2	140.1	140.2	140.2	140.0	139.7	139.7	139.5	139.1	138.5	138.4	137.6	136.9	136.3	135.8	135.1	134.5	134.0	133.7	133.7	133.7	133.7	133.7
23	133.7	133.6	133.7	133.6	133.6	133.5	133.4	133.4	133.4	133.4	133.4	133.5	133.7	133.9	134.0	134.0	134.0	134.0	134.0	134.0	134.0	134.0	134.0	134.0
24	133.8	133.9	133.9	133.9	134.0	134.3	134.3	134.1	134.1	134.0	133.3	133.0	132.1	132.2	132.1	132.1	132.2	132.2	132.2	132.3	132.5	132.4	132.3	132.3
25	132.3	132.5	133.4	132.7	132.7	132.7	132.7	132.6	132.6	132.7	132.7	132.7	132.7	132.5	132.8	133.2	133.2	133.1	132.5	132.2	132.2	132.2	132.2	132.1
26	132.1	132.2	132.2	132.2	132.1	132.1	131.7	131.8	131.8	131.6	131.6	131.2	131.0	130.4	130.4	129.9	129.8	129.9	129.8	129.8	129.8	129.8	129.8	129.8
27	129.8	129.8	130.0	130.3	130.3	130.3	130.3	130.3	130.4	130.4	130.6	130.6	130.6	130.6	130.5	130.4	130.4	130.2	130.2	130.2	130.2	130.2	130.2	130.2
28	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.3	130.2	130.2	130.2	130.0	129.8	130.8	131.0	131.1	131.1
29	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.1	131.0	131.0	131.0	131.1	131.1
30	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	130.9	130.8	130.7	130.6	130.4	130.0	129.6	129.5	129.5	129.5	129.6	129.6	129.5
31	129.5	129.5	129.5	129.5	129.5	129.5	129.5	129.5	129.5	129.5	129.4	129.4	129.3	129.3	129.0	128.8	128.6	128.3	137.1	138.0	138.1	138.1	138.1	138.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

August *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.0	138.0	138.0	138.0	138.0	138.0	137.8	137.6	137.4	137.3	137.2	137.2	137.2	137.2
2	137.1	136.8	136.9	136.9	136.9	136.9	136.9	136.9	136.8	136.7	136.5	136.4	136.2	135.8	135.6	135.3	135.3	135.2	135.3	135.2	135.2	135.3	135.2	135.2
3	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	134.6	134.5	134.3	134.2	134.2	134.1	134.0	133.9	133.9	133.8	133.8
4	133.7	133.7	133.6	133.6	133.6	133.6	133.6	133.7	133.6	133.7	133.7	133.7	133.7	133.7	133.7	133.7	134.6	134.6	137.0	137.0	137.0	137.0	137.0	136.9
5	136.9	136.9	136.9	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	158.7	158.9	158.9	158.7	158.5	158.3	158.1	158.0	157.8	157.7	157.4	157.3
6	157.3	157.2	157.2	157.1	157.2	157.1	157.1	157.0	157.0	157.0	156.9	156.8	156.6	156.2	155.8	155.2	154.9	154.4	153.9	153.6	153.4	153.2	153.2	153.1
7	153.0	153.0	153.0	152.9	152.8	152.7	152.6	152.6	152.6	152.6	152.5	152.4	152.2	152.1	152.0	151.8	151.6	151.2	150.9	150.7	150.4	149.9	149.8	149.8
8	149.8	149.6	149.6	149.5	149.4	149.4	149.3	149.3	149.3	149.3	149.2	149.3	149.2	149.1	148.8	148.5	148.0	147.5	147.0	146.6	146.2	146.0	145.7	145.5
9	145.3	145.3	145.2	145.2	145.2	145.1	145.1	145.0	144.9	144.8	144.7	144.5	144.2	143.8	143.3	142.4	141.8	141.1	140.4	139.9	139.6	139.3	139.1	139.0
10	139.0	138.9	138.9	138.8	138.7	138.7	138.7	138.6	138.5	138.5	138.5	138.5	138.4	138.1	137.6	137.0	136.2	135.9	135.4	134.9	134.6	134.5	134.0	133.9
11	133.8	133.5	133.4	133.4	133.4	133.1	133.2	133.2	133.1	133.0	132.8	132.4	132.3	132.1	131.9	131.7	131.2	130.7	130.2	129.8	129.5	129.4	129.2	129.1
12	129.1	129.0	128.8	128.7	128.6	128.6	128.6	128.6	128.6	128.5	128.4	128.1	127.9	127.4	126.8	125.9	125.1	124.3	123.4	122.9	122.6	122.4	122.3	122.2
13	122.0	122.0	121.9	121.8	121.8	121.9	121.8	121.8	121.9	121.8	121.8	121.6	121.4	120.9	120.5	119.8	119.1	118.5	118.2	117.7	117.4	117.3	117.2	117.2
14	117.1	117.0	117.0	117.0	117.0	117.0	117.0	117.0	116.9	117.0	116.9	116.9	116.7	116.4	116.1	115.5	114.9	114.5	114.1	113.5	113.3	113.1	113.1	113.1
15	112.9	112.9	112.9	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.7	112.3	112.1	111.4	111.2	110.8	110.5	110.0	109.6	109.4	109.3	109.3	109.0
16	109.0	109.0	109.0	109.0	109.0	109.0	108.9	108.9	108.9	108.9	108.7	108.3	108.3	107.9	107.6	107.2	106.9	106.7	106.4	106.3	106.3	106.1	106.0	105.7
17	105.6	105.6	105.6	105.6	105.6	105.7	107.1	107.9	108.2	108.4	108.5	109.0	110.7	111.8	112.2	113.0	113.0	113.6	113.6	113.6	114.0	114.0	114.0	114.0
18	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.3	115.0	115.5	116.2	117.1	117.2	117.2	117.1	117.2	117.3	117.4	117.5	121.4	121.7	122.1	122.1	122.1
19	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.0	122.0	122.0	122.0	121.6	121.3	121.1	120.7	120.4	120.2	119.9	119.2	118.1	118.0	118.0	118.0
20	118.0	118.0	117.6	117.6	117.6	117.3	117.1	117.3	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.3	117.2	117.2	118.0	118.7	119.9	120.7	121.0
21	121.2	121.2	121.4	121.6	121.6	121.6	121.6	121.6	121.6	121.5	121.0	121.0	120.6	120.4	120.0	119.8	119.4	118.9	118.5	118.3	117.9	117.2	116.9	116.6
22	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6	116.6	117.1	117.5	117.7	117.7	118.4	118.5	119.1	119.4	120.3	122.3	122.9	124.8	128.0	132.7	142.1
23	145.9	146.4	149.5	151.2	154.5	154.5	154.7	154.7	154.6	154.7	154.8	154.8	155.4	156.2	157.1	158.0	158.3	159.1	159.4	159.3	159.3	161.3	164.3	166.6
24	169.8	172.1	173.6	174.7	177.4	179.3	179.9	181.1	181.1	181.7	182.3	182.4	182.6	182.6	182.6	182.3	182.1	181.8	181.5	181.1	181.0	180.9	180.8	180.5
25	180.3	180.3	180.3	180.3	180.3	180.3	180.2	180.2	180.0	180.0	180.0	179.8	179.2	179.1	179.0	178.9	178.8	178.4	178.3	178.0	177.0	176.1	175.8	175.6
26	175.4	174.9	175.0	174.4	174.8	174.8	174.8	174.8	174.8	174.8	174.6	174.6	174.4	174.0	173.8	173.1	172.4	171.6	171.4	171.4	171.4	171.4	171.4	171.0
27	170.9	170.9	170.9	170.8	170.5	170.5	170.5	169.5	170.1	170.1	170.1	170.1	170.1	170.1	169.9	169.6	169.2	169.2	169.1	169.2	169.1	169.1	171.4	172.7
28	173.0	173.7	175.1	177.2	178.5	178.9	179.5	180.2	180.9	181.9	181.9	183.0	183.4	184.1	182.4	180.1	178.7	177.8	177.4	177.3	177.5	177.7	178.1	178.5
29	179.6	179.8	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	180.0	180.7	181.2	182.8	182.8	182.8	182.8	182.8	182.7	182.8	182.8
30	182.8	182.8	182.8	182.8	182.7	182.6	182.6	182.6	182.6	182.6	182.4	182.3	182.3	182.3	182.2	182.1	112.9	112.8	112.6	112.5	112.2	111.9	111.8	111.8
31	111.8	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.1	111.1	111.1	110.9	110.6	110.4	110.2	109.5	109.2	108.9	108.6	108.6	108.6	108.5	108.3	108.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	108.0	108.0	108.0	108.0	108.0	107.6	107.6	107.5	107.3	106.8	106.8	106.6	106.5	106.4	106.0	105.9	105.5	105.2	105.2	105.0	104.8	104.3	104.1	104.1
2	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.0	103.8	103.5	103.3	102.9	102.6	102.1	101.8	101.7	101.6	102.5	103.0
3	104.6	106.7	106.9	107.0	107.4	107.4	107.6	107.6	107.8	108.0	108.1	108.3	108.3	109.2	109.5	109.6	109.4	109.1	109.0	109.0	109.1	110.3	112.5	115.2
4	117.6	119.7	122.7	125.6	128.3	129.2	130.9	131.5	84.1	84.1	84.1	84.6	84.7	84.7	84.6	84.6	84.6	84.7	84.6	84.6	84.6	84.6	84.6	84.6
5	84.6	88.1	90.0	90.2	91.3	91.8	91.8	91.8	92.3	92.6	92.9	93.4	93.3	93.9	95.2	96.5	97.6	100.0	103.1	105.2	107.3	111.5	116.7	119.0
6	120.5	120.8	120.9	121.0	121.0	121.4	121.5	122.1	122.4	122.5	123.1	123.2	123.2	123.2	123.5	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6
7	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.6	123.5	123.4	123.3	123.2	123.0	122.9	122.8	122.7	122.6	122.5
8	122.5	122.3	122.3	122.2	122.2	122.3	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.1	122.0	121.8	121.5	121.4	121.9	122.3	123.4	124.2	126.9
9	129.6	134.8	140.0	142.7	146.6	149.5	151.7	153.3	155.6	160.8	164.2	167.3	168.5	169.9	169.9	169.9	170.4	170.4	170.4	171.2	171.3	171.3	171.3	171.3
10	171.3	171.3	171.3	171.3	171.5	171.5	171.5	171.5	171.5	171.5	171.5	171.4	171.4	171.4	171.3	171.3	171.2	171.2	171.2	171.0	171.1	171.0	171.0	170.9
11	170.9	170.8	170.8	170.8	170.8	170.8	170.9	170.9	171.1	171.7	171.5	171.8	171.4	171.4	171.3	170.8	170.7	170.8	171.2	171.4	171.7	171.7	171.9	173.1
12	174.6	176.0	176.0	176.0	175.9	175.9	175.9	175.9	175.9	176.2	176.9	178.7	179.2	179.0	179.0	179.0	179.1	178.5	176.7	174.7	173.6	173.3	173.3	173.2
13	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.2	173.1	173.0	172.9	172.8	172.8	172.8	172.8	172.7	172.7
14	172.7	172.7	172.7	172.7	172.7	172.6	172.5	99.4	99.4	99.4	99.4	99.4	99.4	99.2	99.0	98.5	98.0	97.7	97.3	97.4	97.3	97.4	97.4	98.6
15	99.6	101.3	103.8	105.8	109.1	110.6	112.9	115.3	117.3	119.4	122.0	121.6	122.3	122.4	123.4	123.4	123.8	127.0	127.0	127.3	127.4	127.4	127.5	128.4
16	128.4	128.8	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.8	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.6
17	129.6	129.6	129.6	129.7	129.5	129.5	129.3	129.3	129.4	129.3	129.3	129.3	112.6	112.5	112.5	112.5	112.6	112.6	112.6	112.5	112.5	112.5	112.5	112.5
18	112.5	112.5	112.5	112.5	112.5	112.5	112.6	112.6	112.6	112.6	112.5	112.5	112.1	112.1	111.9	111.4	111.3	111.1	111.0	110.8	110.7	110.6	110.6	110.6
19	110.6	110.5	110.4	110.3	110.3	110.3	110.3	110.2	110.2	110.2	109.7	109.7	109.3	108.9	108.6	108.6	108.6	108.6	108.6	108.6	108.5	108.4	108.4	108.3
20	108.2	108.1	108.0	108.0	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.4	107.2	107.2	107.1	106.9	107.0	106.9	106.9	106.8	106.8
21	106.8	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.8	106.8	106.8	106.8	106.8	106.9	107.6	107.6	107.9	108.1	108.1	108.3	108.3	108.3
22	108.5	108.6	108.9	108.9	108.9	108.9	108.9	109.5	109.9	110.2	110.5	111.1	111.3	115.7	120.2	123.7	129.6	131.3	132.3	132.3	132.2	132.0	132.0	132.0
23	132.0	132.0	132.0	132.0	132.0	132.0	132.0	132.0	132.1	132.1	121.2	108.3	108.2	108.3	107.9	107.6	108.1	112.5	117.9	118.7	119.6	119.7	119.7	119.7
24	119.7	119.7	119.7	119.7	119.9	119.9	119.9	119.9	119.9	120.1	120.7	120.7	120.8	120.9	121.4	121.4	122.3	122.5	122.5	122.5	122.5	122.5	122.5	122.5
25	122.5	122.6	122.6	122.7	122.7	122.7	122.7	123.7	123.8	124.1	124.3	124.5	124.6	124.6	124.6	124.6	124.6	124.6	124.5	124.5	124.5	124.5	124.6	124.6
26	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.6	125.3	125.4	125.1	125.3	125.3	124.6	124.3	124.2	124.3	124.5	124.5	124.1	124.1	124.0
27	124.2	124.0	123.9	123.7	123.5	123.4	123.2	123.2	122.9	122.7	122.5	121.9	120.7	121.0	120.8	121.5	121.5	121.9	123.5	124.4	124.4	124.6	125.1	125.2
28	125.4	125.4	125.4	125.5	125.4	125.6	125.6	125.6	125.9	126.4	127.2	127.3	127.2	127.3	127.3	127.3	127.3	127.3	127.3	127.3	127.3	127.3	127.3	127.3
29	127.3	127.3	127.3	127.3	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.5	127.5	127.5	127.5	127.5	127.5	127.6	127.6	127.6	127.6	127.6	127.6
30	127.6	127.6	127.6	127.6	127.6	127.6	127.6	127.7	127.7	127.7	127.7	127.7	127.7	127.7	127.7	127.7	127.6	127.7	127.2	127.3	126.6	126.1	125.9	125.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

October *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	125.3	125.2	125.3	125.5	125.8	126.1	126.4	126.8	127.0	127.4	127.6	127.7	127.7	127.8	128.0	127.5	127.2	127.1	127.1	127.0	127.0	127.0	127.0	127.0
2	127.0	127.0	127.1	127.1	127.1	127.0	127.1	127.1	127.1	127.1	127.1	127.1	127.2	127.3	127.1	126.8	126.9	126.5	126.6	126.6	126.6	126.6	126.6	126.6
3	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.7	127.4	127.5	127.5	127.3	126.9	126.7	126.5	126.3	126.2	126.2	126.2	125.5	125.5
4	125.6	125.6	125.6	125.5	125.5	125.4	125.2	124.9	124.4	124.5	124.4	124.3	124.3	124.3	124.3	123.9	123.7	123.7	123.7	123.8	123.6	122.9	122.9	123.1
5	123.1	122.9	122.9	123.0	122.9	123.0	123.3	123.6	123.9	124.2	124.3	124.1	124.3	124.3	124.3	124.3	124.4	124.4	124.4	124.5	124.9	125.4	125.9	126.6
6	126.8	126.9	126.9	126.9	126.9	126.9	126.9	127.0	127.0	127.1	127.6	128.3	128.4	128.4	128.5	128.5	128.5	128.6	128.7	128.8	128.8	128.8	128.8	128.8
7	128.8	129.0	129.0	129.1	129.3	129.7	130.3	130.5	131.2	131.8	132.1	132.3	133.3	135.0	137.2	138.6	140.7	142.1	142.7	143.5	144.6	145.5	145.9	146.6
8	147.2	147.3	147.5	147.5	147.5	147.5	147.5	147.6	147.7	148.1	148.8	149.4	149.6	149.6	149.8	189.9	47.2	47.2	47.4	47.7	47.7	47.8	47.8	47.8
9	47.9	47.9	47.9	47.9	47.9	47.9	47.9	48.0	47.9	43.1	43.1	43.1	43.1	43.1	43.1	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
10	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
11	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
12	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
13	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
14	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
15	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
16	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
17	43.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.9	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
18	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
19	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
20	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
21	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
22	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
23	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
24	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8
25	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
26	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8
27	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.9	42.8	42.8
28	42.8	42.9	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8
29	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
30	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.9
31	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.9	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Resultant Wind Direction (Degrees)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	42.9	42.9	42.9	42.9	42.8	42.8	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
2	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8
3	42.8	42.8	42.8	42.8	42.8	42.9	42.9	42.9	42.7	42.8	42.8	42.8	42.9	42.9	42.9	42.8	42.8	42.7	42.7	42.7	42.7	42.7	42.7	42.7
4	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
5	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
6	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.8	42.8	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
8	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
9	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
10	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
11	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
12	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
13	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.8	42.8	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
14	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.8	42.8	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
15	42.8	42.8	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.8	42.8	42.7	42.7	42.7	42.7	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
16	42.8	42.8	42.8	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.8	42.8	42.8	42.8	42.6	42.6	42.6	42.7	42.7	42.8	42.8
17	42.8	42.9	42.9	42.9	43.0	43.0	43.0	43.0	43.0	43.0	-49.6	-50.7	-50.3	-52.6	-56.1	-58.5	-59.9	-60.9	-61.6	-62.0	-62.1	-62.6	-62.4	-62.3
18	-62.0	-60.4	-57.3	-53.8	-51.1	-55.4	-55.4	-51.7	-50.0	-46.9	-43.6			-35.7	-35.3	-36.4	-40.5	-48.9	-54.2	-64.4	-66.0	-66.7	-67.2	-67.6
19	-67.5	-66.7	-66.0	-65.5	-65.1	-64.7	-64.3	-65.1	-65.9	-66.2	-66.3	-66.3												

Total Hours in Month 720 **Hours Data Available** 442 **Data Recovery** 61.4%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

January 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.2	4.7	4.4	4.4	4.4	4.3	4.3	4.0	4.3	4.7	4.6	4.7	4.8	4.9	5.2	5.1	4.9	4.8	4.6	4.5	4.2	3.7	4.3	3.5	5.2	3.5	4.5
2	3.8	4.2	3.7	3.8														3.3	4.8	4.4	4.4	4.7	4.7	4.6	4.8	3.3	4.2
3	4.6	4.5	4.8	4.9	4.7	4.7	5.1	5.5	6.1	4.7	4.3	4.5	4.7	10.6	8.8	15.5	8.8	7.4	4.6	10.1	11.5	4.4	5.5	6.9	15.5	4.3	6.6
4				6.7	5.6	6.9	4.7	5.0									4.3	10.0	13.6	46.4	38.1	4.3	10.5	8.7	46.4	4.3	12.7
5	51.0	23.2	24.2	22.1	18.0	15.3	7.1	7.7	5.2	5.5	7.8	5.7	6.7	5.7	4.9	14.4	11.4	19.2	23.0	16.5	18.3	19.4	18.9	8.5	51.0	4.9	15.0
6	18.5	16.8	23.3	26.2	28.8	7.8	7.1	5.6	19.6	11.7	15.5	12.8	18.0	17.8	13.8	30.4	28.6	3.1	5.3	3.6	3.2	3.3	2.6	2.9	30.4	2.6	13.6
7	1.7	2.7	2.2	2.9	4.6	3.8	2.0	4.4	3.9	4.6	6.1	5.6	4.7	5.1	4.7	3.6	3.7	3.5	3.9	3.7	4.6	5.2	4.3	4.7	6.1	1.7	4.0
8	4.4	5.0	4.6	4.6	7.4	8.7	4.5	5.8	6.3	9.8	5.6	4.6	4.9	5.5	5.2	5.6	5.6	5.5	4.6	4.1	5.0	3.8	4.1	3.6	9.8	3.6	5.4
9	3.9	3.7	4.3	4.0	3.9	4.0	4.1	4.9	6.5	6.2	18.4	5.0	4.5	5.1	7.9	6.7	5.7	3.9	4.9	4.0	4.1	3.9	5.6	4.3	18.4	3.7	5.4
10	4.2	4.2	4.1	4.4	4.0	3.9	3.8	3.6	4.2	3.7	4.3	3.9	4.0	4.4	4.5	4.9	4.6	3.8	4.3	4.3	3.9	4.3	4.5	4.5	4.9	3.6	4.2
11	4.1	4.5	4.2	4.4	6.2	5.5	8.0	3.2	8.6	5.2	7.0	7.1	6.8	5.6	6.5	5.2	4.9	6.2	5.8	6.5	7.0	7.2	5.9	5.7	8.6	3.2	5.9
12	6.0	5.3	5.7	5.4	5.1	5.3	6.0	6.8	7.7	7.3	7.9	8.6	14.5	7.7	7.8	9.9	5.4	11.1	17.1	5.1	5.4	5.1	5.9	5.0	17.1	5.0	7.4
13	4.8	4.3	4.3	3.9	4.0	3.9	3.8	3.8	4.0	4.1	3.9	4.3	4.1	4.1	4.0	4.1	4.1	4.2	4.1	4.1	4.0	4.3	4.5	4.5	4.8	3.8	4.1
14	4.4	4.7	4.1	4.3	4.7	4.3	4.5	4.5	4.4	4.6	4.4	4.5	4.3	4.5	4.7	4.6	4.2	4.7	4.3	4.5	4.4	4.5	4.4	4.3	4.7	4.1	4.5
15	4.3	4.4	4.7	4.6	4.6	4.7	4.9	4.8	4.8	4.7	4.7	4.7	4.4	4.1	4.2	4.5	4.5	4.4	4.2	4.2	3.9	3.7	3.8	3.9	4.9	3.7	4.4
16	4.1	5.3	5.4	5.6	5.6	5.8	8.8	5.5	8.9	8.9	7.1	7.2	10.2	11.1	8.0	8.4	16.5	32.4	40.2	42.7	12.3	6.3	7.1	7.4	42.7	4.1	11.7
17	7.3	10.7	7.5	9.5	8.4	4.9	7.1	4.0	5.0	4.6	4.5	5.8	5.7	5.6	5.8	4.7	5.3	4.9	4.9	4.9	5.7	4.8	7.8	6.1	10.7	4.0	6.1
18	4.7	6.3	7.0	6.1	6.4	7.8	7.4	7.2	6.6	8.0	7.5	7.3	9.7	6.9	34.1	23.9	27.4	10.1	10.4	20.2	10.7	16.7	14.5	11.7	34.1	4.7	11.6
19	28.0	17.2	20.2	5.4	6.6	7.5	7.2	7.0	6.2	7.0	9.5	14.9	18.1	28.5	32.6	13.1	9.6	19.7	25.2	31.8	14.7	10.1	9.7	7.4	32.6	5.4	14.9
20	8.6	30.1	27.1	30.3	15.5	23.1	16.6	15.3	5.0	4.9	5.7	5.2	4.7	4.1	4.6	4.2	4.1	4.1	4.2	4.0	4.4	4.9	4.3	4.8	30.3	4.0	10.0
21	4.6	4.5	4.4	4.1	4.3	4.3	4.0	4.6	4.0	7.5	7.9	6.2	12.6	10.6	7.2	4.7	4.7	4.2	5.2	3.9	6.5	4.7	3.7	4.4	12.6	3.7	5.5
22	6.4	4.2	17.1	32.8	5.7	6.3	2.8	6.1	4.6	3.3	4.5	4.4	5.5	4.4	5.0	5.1	5.7	7.0	5.5	4.3	5.5	5.2	6.2	3.9	32.8	2.8	6.7
23	5.2	5.6	5.1	5.6	6.9	6.2	6.7	5.8	4.9	5.7	5.9	6.1	10.8	5.7	6.4	5.8	6.4	19.7	10.3	10.8	11.5	4.1	4.0	4.7	19.7	4.0	7.1
24	6.8	6.5	4.6	4.6	4.2	4.0	4.2	4.6	4.3	4.4	4.5	4.1	4.8	5.4	4.7	5.0	4.5	4.3	4.7	4.3	4.9	6.2	4.7	4.7	6.8	4.0	4.8
25	4.6	4.6	4.8	4.7	5.0	4.7	5.2	4.6	4.7	5.1	4.7	4.5	4.5	4.2	4.7	5.1	4.8	4.3	4.5	5.2	5.4	5.6	5.1	8.1	8.1	4.2	4.9
26	8.6	12.6	49.7	22.3	7.7	9.4	11.9	14.8	4.5	5.4	5.0	6.5	11.8	7.9	7.5	6.6	6.5	7.3	7.5	8.4	7.7	9.5	6.7	7.4	49.7	4.5	10.6
27	6.1	6.9	6.2	6.4	7.5	6.5	6.7	6.8	6.8	7.3	5.6	5.5	5.4	5.7	5.0	4.4	5.5	5.6	5.4	5.0	4.5	10.0	14.0	10.5	14.0	4.4	6.6
28	8.6	9.2	10.9	7.4	5.8	5.1	7.0	9.9	13.0	12.9	8.9	8.8	11.9	8.4	6.4	6.6	7.2	9.9	8.0	11.3	10.1	5.8	6.0	6.2	13.0	5.1	8.5
29	6.5	16.5	18.0	13.4	7.0	23.0	53.8	48.0	14.7	33.3	26.5	19.6	68.8	24.8	11.6	27.9	14.7	29.9	31.7	14.3	22.0	16.9	9.9	10.8	68.8	6.5	23.5
30	8.2	7.6	8.1	5.3	5.4	7.0	9.3	10.9	4.6	3.8	6.3	5.4	5.0	5.5	5.8	5.9	6.2	6.7	5.5	5.4	5.2	5.4	4.6	5.2	10.9	3.8	6.2
31	4.2	4.4	4.6	5.7	4.7	5.9	4.8	4.5	5.0	5.1	4.9	5.3	6.9	6.0	5.5	6.5	5.3	5.6	4.2	4.3	5.5	5.6	4.4	6.0	6.9	4.2	5.2
Max.	**51.0**	**30.1**	**49.7**	**32.8**	**28.8**	**23.1**	**53.8**	**48.0**	**19.6**	**33.3**	**26.5**	**19.6**	**68.8**	**28.5**	**34.1**	**30.4**	**28.6**	**32.4**	**40.2**	**46.4**	**38.1**	**19.4**	**18.9**	**11.7**	**68.8**		
Min.	**1.7**	**2.7**	**2.2**	**2.9**	**3.9**	**3.8**	**2.0**	**3.2**	**3.9**	**3.3**	**3.9**	**3.9**	**4.0**	**4.1**	**4.0**	**3.6**	**3.7**	**3.1**	**3.9**	**3.6**	**3.2**	**3.3**	**2.6**	**2.9**		**1.7**	
Avg.	**8.1**	**8.1**	**10.0**	**8.9**	**7.1**	**7.2**	**7.8**	**7.6**	**6.5**	**7.0**	**7.4**	**6.6**	**9.7**	**7.9**	**8.2**	**8.7**	**7.8**	**8.7**	**9.2**	**9.9**	**8.3**	**6.6**	**6.5**	**6.0**			**7.9**

Total Hours in Month 744 **Hours Data Available** 720 **Data Recovery** 96.8%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.4	5.9	6.4	5.7	6.5	5.0	5.2	3.2	4.5	4.2	5.0	5.8	10.2	9.5	5.2	4.7	7.7	10.2	6.0	3.5	6.1	3.4	6.2	6.5	10.2	3.2	5.9
2	6.1	5.1	5.8	4.8	5.5	5.4	5.1	5.6	5.0	5.6	5.3	7.2	5.1	6.1	5.5	5.6	9.3	6.9	9.0	6.7	5.9	5.3	6.3	7.0	9.3	4.8	6.0
3	5.8	5.9	4.5	5.1	6.0	5.7	5.6	7.4	7.7	8.9	8.4	6.5	8.2	6.9	13.1	13.2	7.3	8.3	9.6	9.3	9.8	7.4	8.5	15.5	15.5	4.5	8.1
4	7.6	19.8	15.1	16.6	18.4	13.8	5.9	47.0	6.6	5.4	6.8	6.8	7.6	6.1	6.1	5.0	12.8	20.5	24.4	13.5	21.3	31.2	18.4	15.7	47.0	5.0	14.7
5	23.1	27.1	16.2	12.0	10.8	39.6	10.4	39.2	7.3	7.7	9.5	25.8	8.3	11.7	8.1	5.6	4.4	4.2	4.4	4.7	4.5	4.4	4.3	4.5	39.6	4.2	12.4
6	4.6	4.7	4.7	4.8	4.8	4.8	5.1	4.8	4.5	4.5	4.2	4.4	4.4	4.4	4.4	4.6	4.4	4.9	4.6	4.6	4.8	4.7	4.6	4.3	5.1	4.2	4.6
7	4.6	4.9	4.9	4.7	4.6	4.4	4.4	4.5	4.0	3.8	4.7	4.1	3.9	4.4	5.1	4.4	4.5	4.4	5.2	4.4	5.5	4.7	5.2	18.4	18.4	3.8	5.2
8	16.7	17.4	17.8	11.0																					17.8	11.0	15.7
9																											
10																											
11										1.9	5.8	5.4	10.1	6.6	3.0	6.7	5.8	4.9	5.3	3.8	3.0	4.0	2.3	2.8	10.1	1.9	4.8
12	2.7	4.8	13.6	4.0	3.7	4.7	3.6	6.8	6.6	6.4	7.2	11.2	42.4	15.3	22.3	14.7	7.3	4.6	4.6	4.3	4.0	4.4	4.8	4.5	42.4	2.7	8.7
13	4.3	4.3	4.3	4.1	4.2	4.3	4.3	4.2	4.4	4.4	4.5	4.3	4.6	4.6	6.5	4.1	4.2	6.8	4.8	4.8	5.4	5.3	4.6	4.5	6.8	4.1	4.7
14	4.4	4.6	5.0	4.8	4.9	4.5	4.7	4.7	4.9	4.8	4.7	4.9	7.0	4.4	4.4	4.8	4.5	4.9	4.3	3.9	3.3	4.1	7.6	4.0	7.6	3.3	4.8
15	9.9	4.9	5.2	9.5	5.9	5.4	6.2	7.1	12.0	11.8	11.1	8.9	11.3	11.2	5.5	4.9	4.7	5.6	7.5	5.0	5.2	4.5	5.4	4.7	12.0	4.5	7.2
16	4.6	4.5	5.0	4.5	5.4	4.9	4.9	4.4	4.6	4.2	4.4	4.5	4.6	4.5	4.2	4.5	4.7	4.4	4.5	4.7	5.0	4.6	4.1	4.1	5.4	4.1	4.6
17	4.2	4.2	4.1	4.3	4.2	3.9	5.2	4.3	4.1	4.0	3.8	4.5	4.1	4.5	4.2	3.9	3.5	4.0	4.0	4.0	4.1	4.3	4.6	4.4	5.2	3.5	4.2
18	4.5	5.0	4.1	4.6	4.4	4.4	4.7	4.9	4.3	4.4	4.2	5.1	4.6	4.8	4.8	4.4	4.9	4.1	4.6	4.4	4.3	4.1	4.0	4.3	5.1	4.0	4.5
19	4.1	4.1	4.1	3.8	4.2	4.3	4.7	4.4	4.7	4.5	4.8	4.6	4.4	4.6	4.5	4.6	3.9	4.2	4.6	3.8	4.0	4.1	4.2	4.5	4.8	3.8	4.3
20	5.3	5.3	4.3	4.5	4.7	4.1	4.4	4.2	4.8	4.9	4.7	4.8	4.8	5.1	4.9	4.9	4.8	4.8	4.5	4.5	4.5	4.4	4.1	4.4	5.3	4.1	4.7
21	3.9	4.2	4.1	3.8	4.2	4.5	7.7	11.2	12.4	8.2	10.4	6.2	5.7	6.0	5.5	4.3	9.6	21.5	9.9	6.9	6.0	5.8	4.8	4.8	21.5	3.8	7.1
22	5.2	4.5	4.5	4.7	6.4	13.3	10.0	4.1	4.8	5.3	4.8	5.8	7.8	4.5	7.6	5.3	5.8	4.1	16.9	5.6	8.8	4.6	4.5	4.5	16.9	4.1	6.4
23	4.4	4.5	4.1	4.3	4.7	4.6	4.5	4.7	4.4	4.3	3.9	3.9	4.2	4.1	4.2	4.2	3.9	4.1	3.7	4.9	5.0	4.6	4.2	4.1	5.0	3.7	4.3
24	4.0	4.4	5.0	4.2	5.2	9.4	8.9	6.2	4.5	5.3	9.1	4.0	6.1	5.4	4.2	3.5	5.6	4.2	5.3	3.8	4.3	4.5	6.8	8.1	9.4	3.5	5.5
25	8.2	5.8	20.5	17.6	9.8	11.5	15.9	9.1	9.7	11.0	15.2	8.1	16.3	17.4	10.7	12.0	11.0	9.5	4.2	4.3	5.2	17.3	7.4	6.3	20.5	4.2	11.0
26	6.9	7.6	10.5	8.3	7.9	10.2	6.3	7.7	10.1	8.5	9.2	6.1	17.7	17.2	13.5	5.8	13.0	6.1	3.2	2.7	3.6	4.1	5.8	5.9	17.7	2.7	8.2
27	3.9	10.5	9.4	14.9	5.7	5.9	8.7	8.9	5.9	5.6	5.5	4.8	8.3	5.7	6.7	5.8	5.3	4.8	5.2	11.4	3.7	5.4	6.3	6.9	14.9	3.7	6.9
28	7.8	6.5	9.0	7.0	5.0	5.4	6.3	7.4	8.3	6.8	8.0	7.5	5.8	5.9	8.0	5.9	5.6	4.5	6.2	6.9	6.4	6.7	13.5	7.4	13.5	4.5	7.0
Max.	**23.1**	**27.1**	**20.5**	**17.6**	**18.4**	**39.6**	**15.9**	**47.0**	**12.4**	**11.8**	**15.2**	**25.8**	**42.4**	**17.4**	**22.3**	**14.7**	**13.0**	**21.5**	**24.4**	**13.5**	**21.3**	**31.2**	**18.4**	**18.4**	**47.0**		
Min.	**2.7**	**4.1**	**4.1**	**3.8**	**3.7**	**3.9**	**3.6**	**3.2**	**4.0**	**1.9**	**3.8**	**3.9**	**3.9**	**4.1**	**3.0**	**3.5**	**3.5**	**4.0**	**3.2**	**2.7**	**3.0**	**3.4**	**2.3**	**2.8**		**1.9**	
Avg.	**6.5**	**7.2**	**7.7**	**6.9**	**6.1**	**7.7**	**6.4**	**9.0**	**6.3**	**5.9**	**6.6**	**6.6**	**8.7**	**7.2**	**6.9**	**5.9**	**6.3**	**6.7**	**6.7**	**5.4**	**5.7**	**6.3**	**6.1**	**6.5**			**6.7**

Total Hours in Month 672 **Hours Data Available** 595 **Data Recovery** 88.5%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

March 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	16.3	20.5	6.9	5.0	5.2	5.6	9.5	5.4	20.8	23.4	5.6	4.6	4.0	4.4	5.7	4.5	4.1	4.4	5.2	4.6	7.1	13.8	4.1	6.3	23.4	4.0	8.2
2	7.0	4.6	9.4	4.9	6.2	5.0	5.4	6.7	8.0	6.4	4.4	4.9	4.5	4.5	5.0	5.5	5.2	4.9	4.1	9.4	7.9	13.7	22.1	7.2	22.1	4.1	7.0
3	9.6	12.7	6.1	5.1	4.9	4.4	4.0	4.6	4.7	4.0	4.0	4.0	4.1	4.1	4.6	4.3	4.4	4.6	4.4	4.1	4.3	4.9	6.1	6.0	12.7	4.0	5.2
4	6.4	5.9	5.1	4.5	4.7	4.0	4.4	5.2	5.0	5.0	4.5	6.2	7.3	18.3	10.6	14.8	9.6	13.1	28.7	23.3	29.5	11.5	15.3	14.3	29.5	4.0	10.7
5	13.9	8.1	14.7	4.4	4.2	4.3	4.3	4.2	4.4	4.0	4.3	4.4	4.4	4.4	4.5	4.2	4.4	4.0	4.2	4.4	4.2	4.0	4.1	4.1	14.7	4.0	5.2
6	4.2	4.1	4.1	5.4	4.9	4.6	4.8	9.8	7.2	4.7	6.9	5.7	5.6	5.2	6.1	6.0	6.8	7.6	5.5	5.6	5.5	7.8	5.6	5.0	9.8	4.1	5.8
7	4.9	6.0	7.1	5.8	5.8	5.1	5.0	4.4	4.5	4.2	4.1	4.3	4.3	4.5	4.5	4.8	4.2	4.8	4.6	4.7	5.3	6.4	5.2	4.8	7.1	4.1	5.0
8	4.9	4.7	5.0	4.4	4.5	4.4	5.5	6.3	7.1	8.1	7.7	6.8	8.0	8.3	6.8	6.0	5.0	4.9	4.8	5.1	4.7	4.9	4.8	5.3	8.3	4.4	5.7
9	5.2	5.3	5.0	5.0	5.0	5.5	5.7	4.7	5.7	6.7	5.8	5.5	5.1	5.2	5.4	5.0	5.1	5.3	5.2	5.3	5.7	8.5	4.8	4.3	8.5	4.3	5.4
10	3.5	3.7	6.3	6.1	4.5	4.6	4.6	5.1	7.2	4.9	4.6	5.6	5.2	4.6	4.3	6.4	5.7	6.2	19.8	14.3	11.3	12.6	4.7	4.5	19.8	3.5	6.7
11	3.7	8.2	6.8	5.3	5.0	4.7	11.1	9.5	9.5	7.9	4.2	4.2	4.5	4.6	4.4	4.7	4.4	6.2	5.6	7.5	4.8	4.4	4.2	4.3	11.1	3.7	5.8
12	4.2	5.7	4.5	4.1	4.1	4.1	4.0	4.4	4.3	4.3	4.8	4.7	5.3	5.9	5.3	5.0	7.3	9.5	7.1	5.1	4.5	4.9	3.6	5.3	9.5	3.6	5.1
13	5.9	4.5	5.7	6.4	9.7	24.1	19.7	10.4	3.6	7.5	10.2	13.4	5.4	10.0	17.6	16.3	14.7	9.2	7.6	6.0	9.7	18.4	9.4	5.8	24.1	3.6	10.5
14	6.4	20.1	13.2	12.8	11.6	13.7	32.8	19.7	4.5	6.0	7.3	5.5	6.3	5.2	4.9	4.7	4.5	4.2	4.3	4.1	4.3	6.3	4.8	4.5	32.8	4.1	8.8
15	4.9	5.3	5.0	5.4	5.1	5.0	4.6	4.5	5.2	4.8	5.2	5.1	5.1	5.2	5.2	5.1	5.1	4.7	5.0	4.7	4.4	4.4	4.5	4.0	5.4	4.0	4.9
16	4.1	3.9	4.2	3.4	2.9									6.3	6.3	4.2	3.2	4.6	6.6	5.1	4.2	9.0	8.9	13.3	13.3	2.9	5.6
17	14.5	9.8	8.7	9.4	14.1	16.4	4.7	9.2	6.5	5.0	27.7	11.5	14.0	60.9	16.6	11.7	7.9	5.8	33.7	14.6	25.6	26.8	27.7	9.6	60.9	4.7	16.3
18	19.2	12.8	4.6	5.5	6.1	6.0	23.9	5.2	5.9	7.5	14.6	6.9	7.4	5.9	4.7	5.3	5.4	11.0	10.0	6.5	11.9	11.9	12.7	12.4	23.9	4.6	9.3
19	16.4	8.4	5.3	7.0	9.4	14.9	22.3	9.5	13.5	9.8	6.4	4.1	4.0	3.6	5.9	5.2	9.4	9.1	7.4	10.1	7.0	28.3	6.3	4.5	28.3	3.6	9.5
20	5.2	4.8	5.0	4.5	4.2	4.5	4.0	6.4	18.9	8.9	15.8	15.0	6.9	7.7	6.9	5.7	4.5	4.0	3.7	5.3	4.3	3.9	8.1	6.8	18.9	3.7	6.9
21	5.2	4.7	5.9	5.9	5.0	5.3	5.9	5.9	4.5	4.3	3.5	5.1	4.0	4.4	4.3	4.0	4.1	3.8	4.0	3.6	4.5	4.3	4.1	4.4	5.9	3.5	4.6
22	3.9	4.5	4.8	5.0	7.6	13.3	9.8	13.8	28.9	25.1	16.8	34.2	21.9	18.2	6.2	6.1	6.0	10.7	7.6	5.7	8.1	8.6	4.5	4.8	34.2	3.9	11.5
23	5.9	8.0	5.2	6.7	4.4	4.1	4.4	7.3	5.6	4.6	4.3	4.3	4.9	4.8	4.9	4.7	4.4	4.0	4.2	4.0	4.1	4.1	4.0	3.9	8.0	3.9	4.9
24	3.9	4.1	4.3	4.0	4.2	4.2	4.3	4.2	4.0	4.2	4.2	4.4	4.2	4.4	4.1	4.3	4.7	4.2	5.4	4.1	4.2	4.5	5.2	7.8	7.8	3.9	4.5
25	11.1	16.2	5.2	5.1	4.8	5.9	8.2	6.7	4.6	3.9	3.4	3.1	4.4	4.0	4.2	4.9	4.0	3.8	5.0	5.7	4.5	3.5	3.1	4.1	16.2	3.1	5.4
26	6.8	4.5	3.5	5.7	5.1	6.5	14.1	13.3	18.5	7.0	5.5	16.3	11.4	40.4	19.5	30.2	16.7	8.8	6.2	10.4	6.8	12.9	8.8	32.4	40.4	3.5	13.0
27	42.8	33.3	8.8	20.2	12.3	12.0	11.4	6.4	5.4	5.1	6.3	14.6	10.9	11.8	19.3	6.8	8.3	5.2	5.6	7.4	11.9	18.1	7.8	6.7	42.8	5.1	12.4
28	6.6	11.7	11.0	8.3	8.0	4.0	3.6	4.2	6.1	5.8	9.9	7.2	11.0	4.8	6.0	5.7	5.2	18.6	24.9	13.1	20.2	14.7	22.9	45.2	45.2	3.6	11.6
29	20.0	25.6	29.9	23.7	17.9	14.4	19.0	7.4	7.2	5.2	9.4	14.8	8.0	10.8	10.9	6.1	13.6	24.6	28.4	16.7	13.5	14.3	14.0	13.8	29.9	5.2	15.4
30	13.3	8.4	6.7	4.1	4.4	8.9	6.8	21.1	17.1	25.7	24.6	11.9	18.2	10.7	8.2	36.9	9.8	6.5	4.7	5.0	5.2	6.5	4.6	4.6	36.9	4.1	11.4
31	5.0	5.9	4.5	4.5	4.9	5.2	4.9	5.3	4.7	5.4	4.9	5.4	4.9	5.5	5.0	5.3	4.7	3.9	3.9	5.3	4.3	4.6	5.1	7.4	7.4	3.9	5.0
Max.	**42.8**	**33.3**	**29.9**	**23.7**	**17.9**	**24.1**	**32.8**	**21.1**	**28.9**	**25.7**	**27.7**	**34.2**	**21.9**	**60.9**	**19.5**	**36.9**	**16.7**	**24.6**	**33.7**	**23.3**	**29.5**	**28.3**	**27.7**	**45.2**	**60.9**		
Min.	**3.5**	**3.7**	**3.5**	**3.4**	**2.9**	**4.0**	**3.6**	**4.2**	**3.6**	**3.9**	**3.4**	**3.1**	**4.0**	**3.6**	**4.1**	**4.0**	**3.2**	**3.8**	**3.7**	**3.6**	**4.1**	**3.5**	**3.1**	**3.9**		**2.9**	
Avg.	**9.2**	**9.2**	**7.2**	**6.7**	**6.5**	**7.5**	**9.1**	**7.7**	**8.4**	**7.6**	**8.0**	**8.1**	**7.2**	**9.6**	**7.4**	**7.9**	**6.5**	**7.2**	**9.0**	**7.4**	**8.2**	**9.8**	**8.1**	**8.6**			**8.0**

Total Hours in Month 744 **Hours Data Available** 736 **Data Recovery** 98.9%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

April 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.3	4.1	4.3	4.8	5.9	7.2	4.4	6.0	11.1	34.3	16.4	17.4	40.3	17.7	19.2	16.7	12.1	9.5	13.3	11.0	43.2	6.6	10.9	6.5	43.2	4.1	13.8
2	10.3	6.6	5.9	7.5	7.2	7.9	6.8	10.2	8.2	6.2	12.3	5.7	9.4	25.3	10.3	38.3	32.6	7.0	6.3	16.9	9.2	5.3	6.0	3.9	38.3	3.9	11.1
3	4.2	5.1	5.0	4.9	11.2	4.1	4.9	5.8	5.0	5.8	6.4	5.2	5.3	4.6	4.1	4.5	5.0	4.4	8.8	4.5	6.3	5.0	5.0	4.7	11.2	4.1	5.4
4	5.1	5.8	6.2	5.5	5.5	6.4	5.3	6.2	5.8	5.5	6.3	6.5	5.6	5.8	5.1	5.9	5.1	4.5	4.7	4.9	4.9	5.4	5.1	4.4	6.5	4.4	5.5
5	4.0	4.0	4.8	5.2	5.8	5.2	5.5	4.6	4.2	4.9	4.5	4.4	4.3	4.4	4.7	4.2	4.5	4.5	4.5	4.0	3.9	22.4	18.3	8.0	22.4	3.9	6.0
6	7.3	7.3	15.3	5.3	17.0	20.2	7.1	6.3	6.3	5.5	5.2	4.7	5.1	5.5	5.8	5.7	5.1	5.1	5.2	6.4	4.2	5.0	5.0	5.7	20.2	4.2	7.1
7	6.0	12.3	4.9	4.8	4.2	4.8	4.7	4.4	4.7	4.7	5.3	4.7	5.2	6.2	6.3	5.9	5.2	5.3	5.2	4.2	4.7	5.7	8.1	8.2	12.3	4.2	5.7
8	17.4	22.0	7.7	10.2	6.7	7.5	6.8	7.8	30.5	39.2	5.4	7.3	4.9	5.0	5.0	5.3	4.9	6.0	10.6	16.4	11.2	32.9	8.9	9.5	39.2	4.9	12.1
9	8.7	15.6	10.1	9.3	7.8	10.1	8.7	7.1	9.4	7.0	6.1	4.7	5.1	5.0	4.8	6.8	10.2	8.4	24.0	15.6	18.1	17.4	28.1	6.7	28.1	4.7	10.6
10	19.9	14.3	8.3	5.1	4.0	10.0	26.9	11.6	5.0	4.2	5.8	6.8	7.6	9.0	6.8	5.5	4.8	3.4	4.6	4.0	4.4	4.5	6.8	6.1	26.9	3.4	7.9
11	5.0	7.4	7.2	6.7	7.6	6.0	3.6	5.0	6.1	7.3	5.7	3.9	3.7	3.5	4.3	3.3	3.8	3.5	3.1	3.0	3.0	2.9	3.4	4.0	7.6	2.9	4.7
12	5.5	5.2	5.5	5.3	4.2	4.5	4.3	5.1	5.2	5.9	7.2	8.4	6.1	6.6	6.3	5.3	4.6	7.2	9.1	5.8	4.2	5.1	7.7	11.7	11.7	4.2	6.1
13	13.6	8.6	8.7	7.0	6.1	8.7	7.2	9.3	7.9	7.8	7.3	10.6	19.7	21.6	19.0	10.6	8.0	8.4	4.6	5.9	6.3	23.1	15.3	14.4	23.1	4.6	10.8
14	6.4	5.4	4.6	4.7	6.0	20.2	18.8	10.7	4.9	5.4	6.2	6.8	8.0	6.5	7.9	6.7	10.7	7.3	8.1	5.3	7.3	12.8	43.1	23.1	43.1	4.6	10.3
15	8.4	12.5	7.6	7.4	8.7	8.4	8.4	6.2	4.0	4.5	10.3	8.4	4.6	3.3	3.6	4.4	4.4	4.4	4.0	5.8	7.1	4.1	7.3	3.3	12.5	3.3	6.3
16	3.3	3.1	3.0	2.8	2.9	5.2	3.9	4.4	4.5	3.9	4.1	4.7	4.7	4.9	4.3	4.6	4.8	6.3	4.4	3.2	4.4	3.7	4.7	4.5	6.3	2.8	4.2
17	5.4	4.5	4.6	5.5	4.2	3.8	3.9	3.9	4.2	6.2	5.1	6.8	6.8	5.6	4.9	5.3	5.6	5.8	5.9	6.4	4.6	4.7	4.7	4.2	6.8	3.8	5.1
18	4.9	4.7	4.8	4.5	4.1	4.1	4.6	5.2	5.6	4.2	4.6	5.5	6.0	6.1	5.6	5.3	5.2	4.4	4.2	4.4	4.0	4.3	4.0	4.4	6.1	4.0	4.8
19	4.9	10.7	11.4	7.6	6.2	5.0	9.6	17.7	10.4	10.1	9.5	9.3	7.3	5.5	5.9	13.3	11.4	10.4	10.2	6.5	5.5	8.5	8.4	9.6	17.7	4.9	8.9
20	11.9	26.7	31.6	15.3	10.3	6.1	7.7	6.3	7.6	6.2	5.5	4.8	6.4	9.3	40.6	12.4	9.3	5.7	5.3	6.0	6.7	9.1	6.1	4.9	40.6	4.8	10.9
21	5.1	7.9	8.8	7.7	6.1	5.6	5.7	4.0	4.3	4.8	4.5	4.9	5.1	5.1	5.0	5.2	5.2	5.0	5.4	5.5	5.5	5.1	5.1	5.0	8.8	4.0	5.5
22	4.8	5.0	4.8	4.6	4.6	5.6	5.4	5.9	4.8	6.4	3.8	4.6	5.4	4.3	5.4	6.0	6.6	5.3	5.0	5.9	7.6	9.2	11.8	50.6	50.6	3.8	7.6
23	10.1	16.9	5.3	15.4	7.8	4.6	10.4	10.2	5.4	5.3	5.8	5.6	5.8	4.9	5.0	5.4	4.5	4.0	7.9	8.2	45.9	71.4	10.9	8.8	71.4	4.0	11.9
24	6.7	7.2	8.1	8.8	4.5	4.2	5.7	7.1	11.9	20.3	22.4	14.2	7.6	6.3	7.3	8.1	9.9	5.8	10.9	10.0	7.2	10.2	9.0	4.8	22.4	4.2	9.1
25	9.8	7.9	48.8	15.4	14.5	19.4	16.2	15.3	7.9	6.8	15.1	23.1	13.3	7.7	8.4	7.1	4.9	5.5	4.8	5.1	8.5	9.5	13.7	8.0	48.8	4.8	12.4
26	8.2	6.8	12.8	7.2	7.9	21.0	6.2	9.2	18.6	7.8	6.4	6.6	6.1	6.6	7.0	5.0	5.8	5.0	6.2	10.9	12.1	7.6	8.6	5.8	21.0	5.0	8.5
27	8.9	7.8	7.7	7.3	6.5	7.3	9.5	8.5	8.3	5.7	7.0	8.3	9.4	12.0	8.3	11.4	22.0	15.9	11.2	14.9	29.5	9.3	6.7	7.5	29.5	5.7	10.5
28	5.3	6.3	6.6	8.2	9.3	7.8	6.7	7.7	10.9	6.2	5.2	5.7	6.0	6.2	6.1	4.6	5.6	4.9	6.4	8.1	26.3	6.9	5.9	4.9	26.3	4.6	7.4
29	4.5	5.7	7.0	10.6	9.0	12.8	10.2	6.6	7.0	16.3	8.9	7.6	9.1	7.8	6.5	6.3	6.5	6.6	7.7	6.6	5.8	18.0	5.1	14.3	18.0	4.5	8.6
30	6.1	5.0	5.6	7.9	5.5	7.6	7.4	8.9	6.2	7.8	9.1	15.8	17.4	26.1	11.9	11.6	18.3	13.7	7.0	8.1	7.4	6.1	5.6	6.4	26.1	5.0	9.7
Max.	**19.9**	**26.7**	**48.8**	**15.4**	**17.0**	**21.0**	**26.9**	**17.7**	**30.5**	**39.2**	**22.4**	**23.1**	**40.3**	**26.1**	**40.6**	**38.3**	**32.6**	**15.9**	**24.0**	**16.9**	**45.9**	**71.4**	**43.1**	**50.6**	**71.4**		
Min.	**3.3**	**3.1**	**3.0**	**2.8**	**2.9**	**3.8**	**3.6**	**3.9**	**4.0**	**3.9**	**3.8**	**3.9**	**3.7**	**3.3**	**3.6**	**3.3**	**3.8**	**3.4**	**3.1**	**3.0**	**3.0**	**2.9**	**3.4**	**3.3**		**2.8**	
Avg.	**7.6**	**8.7**	**9.2**	**7.4**	**7.0**	**8.4**	**7.9**	**7.6**	**7.9**	**8.9**	**7.6**	**7.8**	**8.4**	**8.3**	**8.2**	**8.0**	**8.2**	**6.4**	**7.3**	**7.5**	**10.6**	**11.4**	**9.6**	**8.8**			**8.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

May *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.1	6.7	7.0	6.1	6.0	8.6	7.1	7.5	7.5	8.2	11.8	8.0	9.2	7.5	7.4	7.7	7.3	5.6	6.0	5.2	5.8	6.2	5.4	8.5	12.1	5.2	7.4
2	8.5	6.8	6.3	20.0	8.4	19.1	7.7	10.3	29.4	11.4	26.6	17.7	17.3	13.9	16.5	17.9	10.1	10.1	8.0	5.1	21.7	5.2	6.5	10.3	29.4	5.1	13.1
3	11.5	11.2	10.4	5.9	6.3	5.3	4.2	7.9	20.7	10.3	11.5	12.3	10.5	12.0	8.7	9.7	8.4	7.5	6.5	5.8	5.0	6.0	6.7	5.9	20.7	4.2	8.8
4	6.2	6.1	5.8	6.1	5.9	5.2	5.5	5.5	5.3	6.2	6.9	7.0	7.0	7.0	7.0	7.7	6.7	6.6	6.3	5.7	6.0	6.1	5.7	5.8	7.7	5.2	6.2
5	6.0	5.5	5.6	5.7	5.8	6.0	5.6	5.8	5.8	5.9	5.9	6.1	6.3	6.3	6.2	6.0	6.2	6.1	6.3	6.2	6.0	5.8	6.1	6.1	6.3	5.5	6.0
6	6.1	6.2	6.2	7.1	6.5	6.5	6.2	6.6	6.7	6.8	6.3	6.2	6.4	6.2	6.2	5.7	6.2	6.8	6.0	5.8	6.1	5.7	6.1	6.4	7.1	5.7	6.3
7	6.0	5.7	7.7	8.1	17.7	18.9	15.9	8.6	43.7	34.4	35.1	26.2	24.9	15.6	13.6	13.2	10.7	11.4	9.9	7.9	50.8	33.5	10.2	9.4	50.8	5.7	18.3
8	6.5	11.1	16.5	14.4	17.5	13.6	46.0	8.7	40.4	17.1	41.8	35.5	34.9	55.9	54.3	43.8	36.3	23.8	15.4	8.0	5.0	25.5	6.5	6.5	55.9	5.0	24.4
9	6.5	8.2	9.6	6.7	7.8	6.2	6.2	5.3	11.1	17.2	19.2	24.1	24.5	19.7	15.6	14.7	11.9	10.3	7.9	4.9	4.4	5.6	12.1	13.9	24.5	4.4	11.4
10	11.3	14.1	12.7	6.6	9.8	11.4	21.7	11.2	30.2	26.4	16.2	15.4	18.7	14.6	14.0	10.2	9.4	9.0	8.6	6.0	5.4	5.8	14.0	21.9	30.2	5.4	13.5
11	27.5	12.3	10.4	8.5	6.1	5.6	5.9	7.2					10.6	10.6	13.1	14.2	10.9	14.1	12.2	10.7	16.3	10.1	13.9	5.2	27.5	5.2	11.3
12	5.5	8.3	28.3	11.7	10.6	6.7	5.9	5.6	7.1	10.7	10.0	7.1	7.3	6.4	6.5	6.2	7.2	6.6	6.1	6.1	6.0	6.1	7.1	6.4	28.3	5.5	8.1
13	6.3	5.8	6.7	13.1	5.5	6.0	5.6	5.0	6.0	7.2	9.7	13.4	17.5	22.7	27.1	9.2	9.5	11.3	29.3	9.1	30.7	7.1	15.5	9.5	30.7	5.0	12.0
14	16.6	19.3	13.1	15.6	7.7	5.1	11.0	26.2	8.2	10.7	8.0	9.7	7.1	7.6	7.6	8.9	7.7	7.4	7.3	6.5	5.8	6.0	6.2	6.6	26.2	5.1	9.8
15	6.9	7.4	5.9	9.2	8.5	10.2	32.7	15.5	11.0	33.7	26.4	18.0	17.9	13.5	15.9	11.2	9.6	8.7	8.9	6.9	6.6	6.6	5.9	5.9	33.7	5.9	12.6
16	6.5	6.6	7.3	6.2	5.9	8.9	7.4	7.1	7.2	8.4	10.3	12.7	12.3	12.2	9.9	12.2	8.6	10.1	9.2	10.2	7.1	7.6	7.7	5.9	12.7	5.9	8.6
17	6.1	13.7	14.6	5.8	7.3	5.1	5.8	10.7	15.8	34.3	52.8	43.2	31.1	15.1	21.7	27.8	46.6	34.0	24.9	10.1	9.2	27.9	15.3	6.6	52.8	5.1	20.2
18	42.4	22.5	33.5	11.9	27.3	10.8	6.7	11.6	15.4	33.9	42.8	26.0	30.2	21.8	29.7	40.7	16.9	45.1	15.2	8.9	10.9	13.6	13.1	5.5	45.1	5.5	22.3
19	8.1	5.1	4.6	5.6	20.7	17.6	33.7	7.9	11.3	19.5	21.1	24.5	23.0	43.8	37.7	43.4	48.7	38.8	31.2	6.5	10.9	38.0	16.5	6.2	48.7	4.6	21.8
20	6.5	15.6	8.7	49.8	24.4	6.5	16.8	6.2	17.5	29.9	41.0	47.1	24.4	22.0	19.2	15.9	13.5	8.3	7.6	6.0	6.3	6.8	5.5	6.0	49.8	5.5	17.1
21	7.3	6.4	10.7	17.8	19.8	21.2	14.2	23.7	28.1	20.9	21.2	20.9	12.7	17.6	13.8	12.5	13.5	9.3	11.0	10.9	13.5	10.8	9.3	5.7	28.1	5.7	14.7
22	4.5	6.3	4.0	5.7	19.0	6.8	5.4	6.0	6.5	7.6	7.2	7.0	7.1	6.3	8.0	8.7	12.5	12.5	9.0	21.2	20.6	32.0	26.7	11.6	32.0	4.0	10.9
23	9.3	15.9	36.8	5.6	25.0	26.5	8.8	25.3	21.0	33.1	42.4	23.9	11.6	13.2	16.5	29.2	33.8	10.0	7.0	8.1	33.0	6.2	4.5	5.6	42.4	4.5	18.8
24	7.7	6.6	5.6	9.5	8.7	6.2	5.6	6.9	6.6	8.5	6.5	7.0	7.4	7.4	7.4	6.7	6.8	7.3	6.9	6.7	5.7	5.9	5.6	7.0	9.5	5.6	6.9
25	6.7	6.4	6.3	5.5	5.5	6.0	6.4	7.2	7.2	8.0	8.6	8.5	8.4	8.3	9.2	9.1	10.3	8.7	8.2	6.6	6.7	6.0	5.9	5.6	10.3	5.5	7.3
26	5.7	8.6	8.0	7.1	6.6	6.8	6.4	10.7	15.4	17.3	22.2	30.3	12.9	11.4	8.0	10.0	8.4	8.0	7.2	6.4	7.6	6.5	6.2	6.3	30.3	5.7	10.2
27	6.4	6.6	6.4	6.1	6.2	5.9	5.9	6.0	6.4	6.6	7.3	7.2	7.1	7.6	8.0	6.8	6.7	6.7	6.3	6.5	6.8	6.7	7.2	6.8	8.0	5.9	6.7
28	20.6	18.5	8.4	10.5	7.1	10.3	15.4	15.3	9.7	10.2	9.5	14.0	6.8	6.7	7.4	7.0	7.6	7.6	6.1	7.0	6.1	6.3	6.2	6.1	20.6	6.1	9.6
29	6.3	6.3	7.1	7.0	6.2	6.3	6.3	6.1	5.9	6.3	6.8	7.2	7.7	7.5	7.3	7.4	7.4	7.1	7.1	7.0	7.0	7.2	5.8	6.4	7.7	5.8	6.8
30	6.0	6.1	8.4	5.9	9.3	7.2	5.5	5.9	6.1	6.7	7.7	7.3	6.4	6.6	6.9	7.2	7.7	7.6	6.9	6.4	6.4	6.9	7.3	6.8	9.3	5.5	6.9
31	6.5	6.1	7.8	21.1	16.2	23.3	28.1	12.0	6.8	6.4	6.4	9.0	8.7	9.3	9.6	9.7	8.6	7.6	7.2	7.6	6.5	8.0	9.4	6.8	28.1	6.1	10.4
Max.	**42.4**	**22.5**	**36.8**	**49.8**	**27.3**	**26.5**	**46.0**	**26.2**	**43.7**	**34.4**	**52.8**	**47.1**	**34.9**	**55.9**	**54.3**	**43.8**	**48.7**	**45.1**	**31.2**	**21.2**	**50.8**	**38.0**	**26.7**	**21.9**	**55.9**		
Min.	**4.5**	**5.1**	**4.0**	**5.5**	**5.5**	**5.1**	**4.2**	**5.0**	**5.3**	**5.9**	**5.9**	**6.1**	**6.3**	**6.2**	**6.2**	**5.7**	**6.2**	**5.6**	**6.0**	**4.9**	**4.4**	**5.2**	**4.5**	**5.2**		**4.0**	
Avg.	**9.7**	**9.4**	**10.7**	**10.5**	**11.1**	**10.0**	**11.8**	**9.9**	**14.0**	**15.5**	**18.3**	**16.8**	**14.1**	**14.1**	**14.2**	**14.2**	**13.4**	**12.1**	**10.2**	**7.6**	**11.1**	**10.9**	**9.0**	**7.5**			**11.9**

Total Hours in Month 744 **Hours Data Available** 740 **Data Recovery** 99.5%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

June *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.9	6.2	6.9	6.4	7.0	8.5	20.0	8.4	8.3	15.0	15.2	15.1	14.5	13.5	16.8	16.8	8.9	9.6	8.1	7.0	5.4	5.6	6.6	7.1	20.0	5.4	10.1
2	6.4	8.1	7.5	13.9	17.0	40.8	23.0	7.0	7.8	13.5	13.3	13.9	9.1	9.9	11.0	10.6	11.1	9.8	8.8	9.3	7.0	4.5	23.7	29.1	40.8	4.5	13.2
3	30.7	39.0	15.0	6.0	6.7	8.4	7.2	9.1	12.0	9.1	11.8	12.8	13.9	13.2	15.4	12.5	12.6	12.0	12.3	10.2	6.8	4.6	4.3	4.0	39.0	4.0	12.1
4	6.6	4.4	5.5	5.9	8.4	8.9	7.8	7.2	7.8	9.1	9.3	9.3	9.6	13.6	11.4	10.6	8.6	8.8	7.9	5.9	4.9	4.4	4.8	8.3	13.6	4.4	7.9
5	6.3	8.7	7.0	6.6	6.6	7.5	9.7	8.3	7.4	6.7	9.4	25.3	45.7	29.8	20.7	17.3	15.4	14.5	10.4	7.3	5.4	5.0	5.6	8.8	45.7	5.0	12.3
6	36.3	8.3	31.0	7.1	6.2	6.0	6.2	7.1	7.5	7.5	7.5	9.0	9.1	8.3	9.8	8.7	7.9	8.0	7.4	6.8	6.7	7.8	7.0	6.6	36.3	6.0	9.7
7	6.5	6.0	6.0	6.2	5.9	6.0	6.0	5.8	6.3	6.6	7.1	7.3	6.3	6.2	7.0	6.7	6.6	6.4	6.4	6.7	6.3	6.0	6.2	6.3	7.3	5.8	6.4
8	6.2	5.8	5.5	5.7	5.8	6.0	6.0	6.5	6.4	6.8	6.8	7.0	6.7	7.5	29.9	23.8	6.4	8.9	8.2	6.5	7.3	6.8	6.7	6.2	29.9	5.5	8.3
9	7.4	49.6	17.0	6.8	71.2	15.3	24.2	11.9	12.8	12.9	20.6	13.4	9.0	15.3	14.0	22.2	9.3	7.4	18.1	7.8	17.9	22.0	54.1	9.9	71.2	6.8	19.6
10	7.2	6.3	5.9	7.8	9.0	7.1	30.5	32.9	40.3	20.5	51.7	13.6	17.7	15.9	19.0	21.3	17.0	12.0	15.7	26.1	15.4	17.8	24.8	7.6	51.7	5.9	18.5
11	10.7	18.7	7.7	8.5	9.4	9.6	13.4	6.0	6.8	7.1	8.2	7.6	7.5	7.7	9.1	10.9	11.7	8.4	13.5	7.8	7.6	7.1	10.3	27.9	27.9	6.0	10.1
12	36.7	10.0	5.8	8.8	9.0	40.8	6.8	7.4	24.4	44.2	21.9	14.2	13.2	41.3	20.4	26.4	16.4	11.9	11.2	10.2	5.8	12.0	13.5	5.8	44.2	5.8	17.4
13	19.0	5.6	6.4	9.2	7.8	6.8	7.3	8.5	10.2	13.9	19.1	20.4	26.1	33.9	30.7	41.1	12.1	14.5	13.4	10.1	13.9	19.7	10.1	13.2	41.1	5.6	15.5
14	30.6	30.2	54.2	19.1	17.3	11.0	12.1	23.1	41.6	35.0	23.5	30.7	32.3	33.6	23.5	18.8	21.6	22.9	16.3	12.2	13.8	10.1	10.4	12.2	54.2	10.1	23.2
15	19.6	6.2	29.3	30.4	18.7	14.8	8.6	18.4	11.1	13.5	18.3	27.8	35.8	27.5	19.7	19.3	31.6	30.4	31.8	11.8	8.5	8.7	9.3	11.1	35.8	6.2	19.3
16	20.8	20.0	10.6	13.1	19.2	18.8	15.2	18.0	40.3	21.3	53.2	35.8	26.7	30.6	27.8	17.3	22.7	11.4	34.0	7.1	6.9	6.3	10.2	8.9	53.2	6.3	20.7
17	10.1	11.2	9.5	8.3	25.1	17.5	11.7	11.5	18.6	12.4	11.6	9.2	8.5	8.1	7.6	7.1	6.5	6.4	6.1	6.1	6.1	6.4	6.5	6.5	25.1	6.1	9.9
18	6.3	6.5	6.6	6.9	6.5	6.2	5.8	10.3	8.1	6.8	7.0	8.1	8.8	8.6	9.7	11.5	9.2	11.4	9.1	7.4	7.2	7.9	20.9	16.4	20.9	5.8	8.9
19	8.0	5.7	6.2	19.7	7.9	8.2	7.9	9.7	8.5	7.9	10.5	12.2	12.1	8.7	9.3	8.3	7.2	8.7	10.5	9.9	12.6	5.6	7.0	5.7	19.7	5.6	9.1
20	7.6	5.2	5.8	13.5	9.1	8.8	7.1	6.7	8.2	11.7	10.3	12.8	13.1	13.4	15.2	14.6	18.8	13.8	13.8	8.6	7.2	7.7	5.0	6.6	18.8	5.0	10.2
21	6.5	10.9	9.1	10.2	8.1	7.7	20.5	7.7	10.5	11.9	11.0	12.3	11.5	10.8	8.2	8.5	8.2	7.3	6.6	6.7	6.2	6.5	6.6	6.3	20.5	6.2	9.2
22	6.4	6.8	6.6	6.7	6.4	6.4	6.1	6.0	6.1	6.5	6.2	6.8	7.5	8.0	7.4	7.0	7.2	6.6	6.9	6.7	6.4	7.1	6.8	7.9	8.0	6.0	6.8
23	6.6	6.1	6.2	5.6	7.8	8.3	9.5	9.6	11.6	12.4	17.3	15.3	27.1	24.1	28.8	33.1	21.2	20.6	25.5	14.6	10.5	3.7	4.4	8.1	33.1	3.7	14.1
24	22.3	14.1	5.1	5.4	8.7	5.7	6.9	8.1	21.6	48.2	22.6	24.6	21.4	15.3	17.9	13.4	13.4	9.3	7.7	7.0	6.4	8.8	10.1	7.4	48.2	5.1	13.8
25	8.9	9.1	6.7	5.2	6.6	14.5	11.6	8.4	9.7	14.6	15.9	15.4	13.7	14.9	11.5	11.8	10.9	9.8	8.6	8.9	6.2	3.8	22.8	16.5	22.8	3.8	11.1
26	28.8	44.4	8.8	11.6	8.4	6.6	8.6	14.3	35.2	51.3	39.1	36.8	22.5	16.4	16.6	20.2	19.5	10.6	10.5	6.2	4.9	4.4	6.9	28.3	51.3	4.4	19.2
27	8.6	7.3	9.0	19.1	29.2	8.5	8.2	8.0	14.7	14.9	13.8	18.1	16.2	19.9	19.4	15.4	13.9	12.1	10.0	8.5	42.7	23.7	19.6	9.8	42.7	7.3	15.4
28	8.3	8.5	7.4	7.1	6.4	8.4	11.6	8.3	17.8	44.1	49.6	51.3	51.0	35.3	34.8	33.2	20.5	38.6	18.6	9.7	13.4	28.3	34.5	39.5	51.3	6.4	24.4
29	27.1	22.0	30.2	49.3	45.1	42.5	26.6	10.6	12.7	13.8	41.4	41.1	30.9	20.6	11.3	13.7	13.2	9.1	8.1	8.3	9.7	23.2	18.5	6.5	49.3	6.5	22.3
30	7.7	7.3	7.3	9.4	6.6	6.1	6.7	7.6	7.4	8.6	7.9	8.8	7.4	7.4	7.0	9.2	8.8	9.9	8.2	6.8	7.3	8.0	7.1	7.4	9.9	6.1	7.7
Max.	**36.7**	**49.6**	**54.2**	**49.3**	**71.2**	**42.5**	**30.5**	**32.9**	**41.6**	**51.3**	**53.2**	**51.3**	**51.0**	**41.3**	**34.8**	**41.1**	**31.6**	**38.6**	**34.0**	**26.1**	**42.7**	**28.3**	**54.1**	**39.5**	**71.2**		
Min.	**5.9**	**4.4**	**5.1**	**5.2**	**5.8**	**5.7**	**5.8**	**5.8**	**6.1**	**6.5**	**6.2**	**6.8**	**6.3**	**6.2**	**7.0**	**6.7**	**6.4**	**6.4**	**6.1**	**5.9**	**4.9**	**3.7**	**4.3**	**4.0**		**3.7**	
Avg.	**14.0**	**13.3**	**11.5**	**11.3**	**13.6**	**12.4**	**11.8**	**10.4**	**14.7**	**16.9**	**18.7**	**17.9**	**17.8**	**17.3**	**16.4**	**16.4**	**13.3**	**12.4**	**12.5**	**8.9**	**9.6**	**9.8**	**12.8**	**11.5**			**13.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

July *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.9	7.1	7.2	7.5	7.8	13.9	13.8	15.7	7.6	6.8	12.8	17.4	13.7	12.9	10.0	13.0	10.5	9.1	9.4	13.2	6.0	6.2	6.8	16.8	17.4	6.0	10.5
2	16.6	9.8	5.1	5.9	6.3	9.1	9.2	8.8	12.1	38.7	31.2	30.5	9.4	11.7	18.5	46.1	28.1	24.7	27.1	12.8	28.3	7.4	5.9	6.3	46.1	5.1	17.1
3	6.6	6.0	6.5	7.0	6.5	5.9	5.9	7.0	10.3	12.1	25.2	40.3	19.9	12.6	10.4	12.4	13.8	12.4	10.5	9.1	6.0	5.2	7.0	8.8	40.3	5.2	11.1
4	9.5	9.7	14.6	33.1	11.0	29.4	27.8	18.9	11.8	14.5	17.0	17.5	15.9	14.2	11.2	10.7	10.0	9.8	8.7	7.8	6.5	7.0	15.8	7.7	33.1	6.5	14.2
5	5.4	5.6	16.5	13.9	14.8	6.3	23.8	20.1	28.3	24.3	19.6	13.2	17.0	26.0	20.6	7.0	21.7	11.7	8.7	8.0	11.1	21.6	6.6	10.0	28.3	5.4	15.1
6	19.4	23.9	22.4	20.9	13.0	7.0	5.8	6.0	6.8	6.5	22.9	15.4	30.0	15.1	19.1	12.6	9.6	9.1	7.6	7.3	9.3	9.1	4.6	5.0	30.0	4.6	12.9
7	4.8	6.7	9.2	5.9	10.2	7.5	5.8	9.2	7.9	10.3	12.6	12.6	18.5	15.1	14.2	17.0	12.9	12.9	10.0	9.7	6.6	5.7	11.5	22.8	22.8	4.8	10.8
8	16.4	17.4	45.2	16.2	36.5	42.8	50.1	21.7	22.9	14.3	20.1	20.2	16.6	35.6	49.3	54.0	8.6	10.1	11.0	47.6	8.6	40.6	41.3	50.9	54.0	8.6	29.1
9	20.0	37.8	17.0	16.4	10.4	9.3	10.5	22.8	15.2	17.8	14.0	8.7	7.6	7.3	14.1	10.9	8.1	7.5	6.5	9.6	23.4	19.7	11.3	13.1	37.8	6.5	14.1
10	7.4	9.2	7.8	7.9	7.5	7.3	6.7	7.4	6.8	7.3	8.3	7.5	6.9	8.8	11.1	12.8	15.6	12.6	8.9	6.5	10.5	6.5	8.2	6.1	15.6	6.1	8.6
11	7.5	7.1	7.7	8.6	9.4	6.7	7.7	7.7	10.1	12.9	10.6	15.7	24.3	24.4	24.5	24.1	18.1	18.9	10.7	7.2	8.5	9.1	27.7	39.1	39.1	6.7	14.5
12	42.4	7.6	7.2	7.9	6.7	6.6	6.5	6.6	6.7	6.7	6.5	6.8	6.6	6.6	6.9	6.8	6.9	7.0	7.3	6.6	6.3	6.2	7.0	6.6	42.4	6.2	8.3
13	9.1	7.1	6.0	8.9	8.1	17.3	10.5	37.8	17.9	18.4	18.8	23.7	12.9	16.4	27.4	21.0	21.4	19.6	15.4	19.5	23.4	40.3	16.8	22.3	40.3	6.0	18.3
14	22.3	45.1	6.5	6.6	5.6	7.1	11.8	29.1	29.2	48.6	32.6	36.9	27.0	54.5	24.7	20.7	17.8	12.2	9.0	7.7	7.9	10.3	9.1	23.9	54.5	5.6	21.1
15	11.6	14.4	6.2	4.2	5.2	16.9	12.6	24.0	8.2	10.6	10.5	10.0	8.6	9.0	8.5	7.8	7.3	6.7	7.2	6.2	6.4	6.1	6.2	6.0	24.0	4.2	9.2
16	6.4	6.6	6.5	6.2	6.4	6.3	6.4	6.0	6.3	6.3	7.0	7.3	7.0	7.0	7.4	7.3	7.5	7.5	9.2	15.2	9.2	13.8	28.0	22.3	28.0	6.0	9.1
17	6.0	7.7	16.6	10.9	13.3	11.5	16.8	12.8	6.3	6.9	7.2	8.8	11.4	12.3	12.6	11.8	11.4	7.1	6.7	7.9	7.4	6.8	9.4	11.0	16.8	6.0	10.0
18	6.8	5.4	5.4	9.3	6.1	5.2	5.9	5.3	6.2	7.4	7.1	9.2	9.9	9.3	9.6	9.1	7.3	8.0	8.2	7.5	7.0	5.8	5.9	5.6	9.9	5.2	7.2
19	5.3	5.8	5.2	4.9	5.4	5.5	5.3	5.6	5.6	5.5	6.8	6.2	6.5	6.1	6.0	6.2	6.7	5.9	5.3	4.9	5.7	6.6	6.0	6.1	6.8	4.9	5.8
20	6.1	4.5	6.5	8.0	5.4	4.9	4.3	5.6	6.6	12.5	24.2	14.4	18.9	13.8	9.5	17.7	11.3	10.9	14.5	7.9	8.4	7.7	9.9	7.4	24.2	4.3	10.0
21	9.3	8.5	9.2	8.1	6.7	16.0	21.8	25.1	11.1	26.7	27.4	16.5	18.2	16.3	18.8	13.0	14.6	11.5	7.9	6.8	7.0	6.9	7.1	7.1	27.4	6.7	13.4
22	6.7	6.6	6.9	6.0	6.7	6.4	5.9	6.7	7.7	8.7	9.4	9.6	8.7	9.3	8.7	9.0	9.8	8.9	8.2	6.8	6.5	9.0	10.7	7.3	10.7	5.9	7.9
23	5.5	6.3	6.7	6.7	7.5	6.1	5.9	6.9	6.1	6.4	6.5	6.9	6.1	7.3	7.6	6.9	7.4	6.8	6.8	6.6	6.3	6.2	6.7	6.4	7.6	5.5	6.6
24	5.8	6.6	6.9	6.7	7.0	6.2	6.4	6.7	7.3	7.3	7.9	7.5	6.9	8.1	7.3	7.3	7.4	6.9	6.6	6.3	6.2	6.2	6.5	6.9	8.1	5.8	6.9
25	6.1	5.8	6.2	6.5	6.5	7.1	6.4	6.7	7.3	7.8	6.7	8.3	10.0	8.3	10.5	7.7	8.4	6.9	7.8	6.3	6.7	8.0	6.2	5.5	10.5	5.5	7.2
26	6.2	6.6	6.1	5.9	5.6	5.7	5.9	6.1	6.5	6.9	7.3	7.3	7.9	9.3	7.7	8.8	9.4	12.6	9.3	13.2	13.4	11.7	24.5	17.7	24.5	5.6	9.2
27	19.6	14.3	15.9	4.7	5.2	5.8	5.8	6.7	5.6	8.9	13.7	9.0	6.8	11.9	26.1	8.3	10.1	11.3	8.4	8.8	22.9	25.3	10.9	10.4	26.1	4.7	11.5
28	12.3	22.5	12.4	15.1	10.9	7.3	11.7	9.4	60.4	23.9	8.1	9.5	11.2	23.6	19.1	22.8	11.7	23.1	12.0	10.0	36.8	10.4	9.7	17.3	60.4	7.3	17.1
29	7.4	5.5	4.9	18.4	25.3	9.1	7.0	12.8	12.2	10.9	9.2	9.6	19.8	18.5	28.2	21.0	18.4	12.9	8.3	23.4	8.8	10.3	11.6	11.1	28.2	4.9	13.5
30	19.9	35.5	19.5	21.6	6.9	5.5	5.2	9.0	7.4	8.5	10.2	29.3	23.6	15.3	9.2	9.4	8.9	9.3	13.8	21.4	21.6	12.8	20.3	16.9	35.5	5.2	15.0
31	10.6	14.0	12.3	38.3	18.0	8.3	6.8	7.0	7.3	6.6	8.3	7.7	8.0	7.4	9.8	10.0	11.0	9.4	63.4	14.7	11.8	25.7	32.8	21.8	63.4	6.6	15.4
Max.	**42.4**	**45.1**	**45.2**	**38.3**	**36.5**	**42.8**	**50.1**	**37.8**	**60.4**	**48.6**	**32.6**	**40.3**	**30.0**	**54.5**	**49.3**	**54.0**	**28.1**	**24.7**	**63.4**	**47.6**	**36.8**	**40.6**	**41.3**	**50.9**	**63.4**		
Min.	**4.8**	**4.5**	**4.9**	**4.2**	**5.2**	**4.9**	**4.3**	**5.3**	**5.6**	**5.5**	**6.5**	**6.2**	**6.1**	**6.1**	**6.0**	**6.2**	**6.7**	**5.9**	**5.3**	**4.9**	**5.7**	**5.2**	**4.6**	**5.0**		**4.2**	
Avg.	**11.2**	**12.1**	**10.7**	**11.2**	**9.7**	**10.0**	**10.8**	**12.3**	**12.0**	**13.3**	**13.8**	**14.3**	**13.4**	**14.6**	**15.1**	**14.6**	**12.0**	**11.1**	**11.4**	**11.2**	**11.4**	**12.1**	**12.6**	**13.7**			**12.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.6	8.7	21.5	8.6	7.2	7.8	14.6	16.2	16.3	20.7	10.5	11.0	10.0	10.5	14.7	20.6	10.5	9.1	7.2	6.1	6.6	6.8	6.7	7.3	21.5	6.1	11.2
2	12.4	6.4	6.1	8.2	6.5	6.6	6.6	7.0	7.3	7.7	8.0	8.3	7.8	8.0	9.8	7.1	8.3	9.6	21.3	6.5	6.4	5.1	9.3	6.7	21.3	5.1	8.2
3	7.0	6.0	5.4	5.3	4.8	4.9	4.8	5.9	5.0	8.1	10.9	48.2	30.9	23.7	15.8	11.7	11.6	16.6	13.9	16.1	15.3	9.0	27.3	3.7	48.2	3.7	13.0
4	4.8	3.3	6.4	5.6	11.4	22.3	7.6	12.6	18.6	27.3	20.1	15.7	17.3	28.4	15.8	17.1	15.8	14.8	49.6	33.7	20.8	8.6	9.9	9.1	49.6	3.3	16.5
5	18.4	8.0	10.0	7.8	10.8	7.4	11.8	8.5	8.9	12.5	14.7	10.2	14.2	12.7	24.1	23.0	15.1	10.0	10.3	8.6	8.9	6.8	6.7	7.1	24.1	6.7	11.5
6	9.6	13.7	9.7	9.4	7.9	7.1	6.6	7.9	8.9	19.7	31.5	39.9	20.3	13.4	13.7	15.6	13.7	12.2	12.2	6.4	8.0	8.5	16.9	10.0	39.9	6.4	13.5
7	21.8	15.2	11.3	6.3	7.7	7.7	7.8	8.1	9.7	13.1	13.9	11.4	10.7	13.2	18.5	21.8	16.5	15.9	12.5	7.8	7.6	15.5	15.8	6.1	21.8	6.1	12.3
8	6.8	5.9	5.8	5.5	5.8	4.5	8.5	7.6	9.2	11.6	26.3	54.5	55.2	45.7	48.9	35.7	23.0	22.1	11.4	6.6	3.0	3.4	5.1	4.0	55.2	3.0	17.3
9	5.0	13.6	26.1	25.0	19.3	4.4	7.9	8.3	10.2	9.9	13.0	16.5	14.8	14.6	14.3	10.1	13.4	10.0	7.7	8.0	5.1	11.0	17.9	13.7	26.1	4.4	12.5
10	15.8	9.8	51.0	19.8	23.4	48.5	16.3	28.2	41.4	44.7	32.4	23.0	25.2	18.0	18.1	16.9	21.6	21.7	16.0	8.1	9.8	16.8	9.0	7.4	51.0	7.4	22.6
11	7.6	7.5	7.6	7.8	9.2	9.0	5.7	4.9	6.7	9.1	11.0	9.6	16.7	35.0	52.0	29.6	18.9	12.4	7.9	6.2	8.8	15.2	17.6	34.4	52.0	4.9	14.6
12	24.6	15.6	2.8	8.5	6.2	12.0	11.6	21.0	16.6	11.0	15.1	18.4	17.4	13.2	12.6	12.4	9.1	7.5	6.1	4.8	6.7	39.0	11.5	8.8	39.0	2.8	13.0
13	13.7	33.3	13.4	8.4	43.3	32.3	26.4	14.1	30.9	51.5	22.0	20.2	18.6	12.7	12.4	9.2	9.9	8.9	8.8	5.5	7.7	21.6	24.2	31.2	51.5	5.5	20.0
14	24.3	40.5	35.2	8.2	23.8	21.3	7.6	9.9	26.2	22.2	22.1	24.0	15.8	16.5	16.7	12.2	8.9	10.7	9.9	5.5	5.6	11.1	29.7	37.0	40.5	5.5	18.5
15	7.2	7.4	8.4	9.5	10.6	10.4	7.5	7.4	7.4	7.5	8.2	9.3	9.7	8.3	8.0	8.9	10.6	7.6	6.5	7.0	7.5	13.9	30.0	7.6	30.0	6.5	9.4
16	6.4	6.2	8.2	6.3	6.5	7.2	6.5	6.9	7.3	7.3	7.9	8.0	6.7	8.7	7.8	7.6	7.3	7.0	7.0	6.8	6.8	6.7	6.4	6.0	8.7	6.0	7.1
17	6.5	6.3	6.6	6.5	6.3	6.6	6.9	8.0	5.6	5.4	5.5	6.9	6.4	7.1	7.8	8.2	8.8	8.1	9.2	9.3	9.4	9.6	6.6	5.8	9.6	5.4	7.2
18	5.6	9.9	11.2	7.5	8.6	16.8	16.1	10.5	37.5	8.6	6.9	21.1	35.1	15.5	8.9	23.2	51.9	40.0	12.7	11.7	41.7	30.0	35.9	8.2	51.9	5.6	19.8
19	33.4	10.5	13.7	10.1	26.8	12.3	6.8	14.5	9.7	6.1	8.4	8.3	7.7	8.6	9.9	8.1	7.1	6.1	5.3	6.3	14.8	7.4	6.7	10.3	33.4	5.3	10.8
20	10.3	11.1	7.2	5.8	4.8	5.6	4.7	5.1	4.7	5.3	5.7	9.2	10.1	14.1	10.5	9.8	10.2	8.0	6.5	6.5	6.1	6.1	6.6	6.0	14.1	4.7	7.5
21	6.4	6.7	6.6	6.8	6.4	6.3	6.9	7.4	5.9	11.1	7.3	10.9	9.2	11.4	10.8	11.6	9.7	11.3	7.3	5.3	4.9	5.7	6.8	5.3	11.6	4.9	7.8
22	10.8	16.1	14.9	21.6	11.3	9.1	12.6	27.8	12.5	12.2	6.7	7.0	6.4	6.4	6.4	6.3	6.5	6.4	6.2	6.2	6.7	6.6	6.5	6.9	27.8	6.2	10.0
23	6.8	6.2	6.2	6.2	16.7	6.7	8.0	6.9	7.1	11.6	13.8	13.2	14.5	13.6	14.1	14.4	12.7	13.3	11.7	14.2	14.1	10.2	8.0	5.3	16.7	5.3	10.7
24	5.4	5.5	6.2	6.5	7.4	8.9	8.7	6.5	7.8	17.8	24.8	6.7	7.5	8.7	8.9	6.5	9.3	7.3	6.2	6.0	4.3	4.4	3.8	9.6	24.8	3.8	8.1
25	6.7	4.8	25.3	8.5	8.0	22.3	7.8	12.4	7.7	10.4	14.3	21.1	11.0	18.3	13.9	28.8	14.9	10.8	8.6	4.9	5.9	7.5	5.5	7.3	28.8	4.8	11.9
26	5.8	7.7	8.0	8.1	5.9	10.0	7.5	4.6	6.9	6.4	7.0	7.2	7.8	10.1	8.2	9.4	7.4	6.4	6.6	5.9	6.0	5.2	4.7	4.4	10.1	4.4	7.0
27	4.2	4.4	4.2	4.2	4.2	4.1	4.2	4.7	9.7	9.7	8.4	9.5	12.4	13.2	14.0	8.9	9.2	6.3	8.9	7.6	36.7	22.0	12.7	11.6	36.7	4.1	9.8
28	13.4	10.5	7.4	6.2	6.5	8.3	5.8	11.0	8.5	5.4	4.5	6.2	6.6	13.0	6.9	7.1	7.4	7.4	7.1	7.0	7.3	6.4	7.0	7.0	13.4	4.5	7.7
29	6.9	6.8	6.3	5.9	6.3	6.4	6.3	6.0	7.4	6.7	8.2	7.2	6.9	6.8	7.3	8.2	11.2	7.0	9.3	6.9	7.2	6.2	6.3	5.7	11.2	5.7	7.0
30	10.0	9.0	26.1	18.5	11.9	10.5	5.0	6.6	4.9	7.7	5.9	6.0	7.5	8.9	7.4	6.9	6.1	5.9	5.7	4.8	6.1	5.4	6.1	6.8	26.1	4.8	8.3
31	6.3	4.7	5.7	6.3	4.8	4.8	5.4	5.5	4.8	5.7	6.4	7.0	8.7	7.0	10.5	7.8	7.2	5.9	4.7	4.2	3.8	4.1	4.6	4.7	10.5	3.8	5.9
Max.	**33.4**	**40.5**	**51.0**	**25.0**	**43.3**	**48.5**	**26.4**	**28.2**	**41.4**	**51.5**	**32.4**	**54.5**	**55.2**	**45.7**	**52.0**	**35.7**	**51.9**	**40.0**	**49.6**	**33.7**	**41.7**	**39.0**	**35.9**	**37.0**	**55.2**		
Min.	**4.2**	**3.3**	**2.8**	**4.2**	**4.2**	**4.1**	**4.2**	**4.6**	**4.7**	**5.3**	**4.5**	**6.0**	**6.4**	**6.4**	**6.4**	**6.3**	**6.1**	**5.9**	**4.7**	**4.2**	**3.0**	**3.4**	**3.8**	**3.7**		**2.8**	
Avg.	**10.7**	**10.3**	**12.4**	**9.0**	**11.0**	**11.4**	**8.7**	**10.1**	**12.0**	**13.4**	**12.9**	**15.4**	**14.5**	**14.4**	**14.5**	**13.7**	**12.7**	**11.2**	**10.5**	**8.1**	**10.0**	**10.8**	**12.0**	**9.8**			**11.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.1	37.4	72.1	71.0	19.4	16.5	6.5	4.7	8.2	7.6	5.6	7.1	8.7	8.9	9.8	8.8	9.9	8.0	5.1	7.5	4.7	22.6	10.2	8.2	72.1	4.7	15.6
2	7.2	8.5	6.7	8.4	11.8	16.2	12.5	8.4	9.4	12.8	9.7	7.9	8.6	8.3	8.0	6.6	6.0	6.4	5.8	6.1	6.4	6.1	6.1	5.9	16.2	5.8	8.3
3	6.0	5.7	5.9	5.7	6.9	6.8	6.5	6.8	6.2	6.3	6.3	6.1	6.7	6.7	6.4	6.9	6.1	6.4	6.6	6.5	7.0	6.6	6.7	6.8	7.0	5.7	6.4
4	7.0	7.7	7.3	8.4	7.9	13.0	24.4	15.5	6.7	7.7	8.5	15.1	9.5	13.9	15.5	14.4	10.1	7.6	5.9	5.4	6.0	5.9	6.5	6.3	24.4	5.4	9.8
5	6.0	6.2	5.9	6.9	6.5	6.6	6.5	6.6	6.5	6.8	6.4	6.4	6.7	6.6	6.2	6.7	6.4	6.4	6.9	7.1	6.4	7.0	6.9	6.3	7.1	5.9	6.5
6	16.3	12.0	7.8	6.5	6.8	8.6	10.8	15.3	7.0	6.8	7.1	7.0	7.0	9.2	7.1	7.8	9.8	10.3	10.1	7.0	6.0	7.0	6.0	6.1	16.3	6.0	8.5
7	5.9	5.9	5.9	8.3	8.5	8.5	7.3	8.7	36.6	9.8	13.7	15.0	11.9	12.1	14.8	9.2	10.4	10.4	7.5	6.8	18.8	7.1	9.8	6.5	36.6	5.9	10.8
8	11.8	27.1	20.3	36.2	11.6	5.7	6.7	7.8	28.9	10.5	35.3	29.3	12.8	14.5	9.8	8.4	7.1	6.1	7.2	7.9	6.3	6.2	6.2	6.4	36.2	5.7	13.8
9	6.2	6.3	6.4	6.6	6.9	7.4	6.7	5.9	6.6	9.8	6.3	6.1	5.7	6.2	6.8	9.3	11.7	6.8	6.4	7.9	7.3	9.3	9.1	7.4	11.7	5.7	7.3
10	6.5	6.9	7.8	7.4	7.5	6.6	6.2	6.1	7.6	7.2	9.4	8.7	9.2	9.2	12.7	9.9	28.9	22.9	15.2	8.0	14.8	20.8	9.4	15.2	28.9	6.1	11.0
11	11.6	39.1	7.6	6.3	7.1	5.8	7.2	6.7	6.5	6.9	6.7	6.8	6.6	6.8	6.9	6.9	6.4	6.1	6.9	6.6	6.7	6.6	9.7	13.1	39.1	5.8	8.7
12	14.3	11.9	6.5	6.0	10.1	17.5	8.5	8.5	6.8	7.2	9.1	7.6	7.7	7.5	7.3	7.1	7.1	6.5	6.4	6.3	6.7	6.4	7.2	17.0	17.5	6.0	8.6
13	21.6	9.5	35.1	33.3	64.4	9.7	7.0	6.2	8.2	9.2	9.1	9.9	9.7	11.1	11.7	16.3	16.4	11.3	13.0	9.0	8.2	12.4	11.6	11.2	64.4	6.2	15.2
14	19.0	5.8	11.0	13.6	8.8	15.8	20.1	14.4	13.3	7.4	10.7	9.5	11.3	10.5	8.4	8.4	7.2	6.3	6.4	5.9	6.2	6.1	6.1	6.1	20.1	5.8	9.9
15	6.1	6.1	6.2	6.0	5.9	6.3	6.8	6.8	6.6	6.4	6.4	6.7	6.3	7.0	6.5	6.7	6.8	10.9	8.8	6.5	5.6	6.2	4.7	12.8	12.8	4.7	6.9
16	7.1	10.8	7.2	7.8	9.6	7.9	7.9	12.0	17.0	14.9	10.0	7.6	8.8	10.1	9.2	8.5	10.0	7.2	8.2	6.8	6.0	7.9	8.2	9.6	17.0	6.0	9.2
17	20.3	40.7	28.5	28.4	13.9	10.3	8.2	7.2	10.1	9.0	15.0	14.6	33.2	17.7	35.7	32.0	26.0	12.8	28.7	17.9	16.4	13.4	16.3	19.6	40.7	7.2	19.8
18	13.4	17.6	7.8	19.5	25.8	10.5	9.0	6.7	20.0	19.0	10.8	9.3	9.2	9.2	8.1	10.9	10.7	7.3	6.2	5.5	6.1	5.1	4.8	9.9	25.8	4.8	10.9
19	16.8	10.7	7.4	6.8	6.6	6.4	11.4	7.7	7.3	12.5	12.0	12.3	9.0	9.5	10.5	9.6	10.3	6.0	4.7	4.2	3.9	4.8	4.2	4.8	16.8	3.9	8.3
20	5.0	5.5	7.9	4.3	9.0	8.5	4.8	5.3	6.2	8.8	6.7	8.7	11.8	9.9	8.9	11.2	7.1	8.3	10.7	8.7	21.9	6.9	13.5	10.9	21.9	4.3	8.8
21	12.8	31.2	13.6	8.0	20.8	26.8	10.6	5.3	5.3	5.9	6.6	7.4	7.3	5.6	6.0	5.8	5.6	5.3	5.5	6.4	9.2	6.1	6.9	5.6	31.2	5.3	9.6
22	6.4	6.1	5.8	6.1	6.6	6.3	6.2	6.2	5.6	5.7	5.9	5.9	6.4	6.3	6.2	6.6	18.4	13.7	8.0	7.7	7.6	6.8	9.8	9.8	18.4	5.6	7.5
23	8.1	8.0	12.5	11.8	5.5	6.1	6.1	4.8	6.1	6.0	7.4	6.9	7.8	8.4	7.8	6.2	7.1	7.2	17.0	8.6	6.8	6.3	7.7	6.9	17.0	4.8	7.8
24	8.2	7.8	6.6	6.0	6.7	7.1	7.6	7.6	7.5	6.8	6.5	6.5	7.9	9.4	7.7	7.2	7.9	6.5	6.5	8.5	7.3	7.1	6.9	6.9	9.4	6.0	7.3
25	7.3	7.0	6.6	6.1	6.0	6.6	6.4	6.5	6.3	6.9	7.6	7.5	6.9	7.3	7.1	7.3	6.9	7.3	6.2	8.2	10.4	6.2	6.9	10.2	10.4	6.0	7.2
26	23.8	12.4	13.7	11.2	15.1	8.9	21.5	6.1	6.2	6.6	6.9	8.3	6.7	7.0	6.5	6.4	6.3	6.6	6.7	6.6	6.5	6.6	7.1	6.7	23.8	6.1	9.2
27	6.5	6.8	6.7	6.6	6.9	6.4	6.4	6.5	6.2	29.3	16.9	44.7	8.4	7.0	5.6	5.9	6.6	6.7	8.2	19.7	6.6	12.4	7.1	7.7	44.7	5.6	10.5
28	5.0	5.6	7.5	9.2	7.2	6.8	6.9	6.3	9.2	6.8	14.7	12.0	35.3	35.8	21.2	16.2	8.9	4.7	11.5	11.8	8.8	10.7	8.5	11.1	35.8	4.7	11.7
29	11.8	8.7	7.3	6.1	6.3	8.1	10.1	7.7	7.5	10.9	9.2	7.1	7.7	9.0	9.6	12.1	8.0	12.3	10.0	13.1	18.5	20.2	22.5	7.9	22.5	6.1	10.5
30	9.9	12.4	8.6	11.8	9.5	20.2	27.7	28.7	15.4	13.3	22.8	35.3	32.2	25.9	46.6	14.3	38.6	7.3	5.2	4.3	4.8	5.1	4.5	4.2	46.6	4.2	17.0
Max.	**23.8**	**40.7**	**72.1**	**71.0**	**64.4**	**26.8**	**27.7**	**28.7**	**36.6**	**29.3**	**35.3**	**44.7**	**35.3**	**35.8**	**46.6**	**32.0**	**38.6**	**22.9**	**28.7**	**19.7**	**21.9**	**22.6**	**22.5**	**19.6**	**72.1**		
Min.	**5.0**	**5.5**	**5.8**	**4.3**	**5.5**	**5.7**	**4.8**	**4.7**	**5.3**	**5.7**	**5.6**	**5.9**	**5.7**	**5.6**	**5.6**	**5.8**	**5.6**	**4.7**	**4.7**	**4.2**	**3.9**	**4.8**	**4.2**	**4.2**		**3.9**	
Avg.	**10.4**	**12.9**	**12.0**	**12.7**	**11.5**	**9.9**	**9.8**	**8.4**	**10.0**	**9.5**	**10.3**	**11.4**	**10.9**	**10.5**	**11.2**	**9.8**	**11.0**	**8.4**	**8.7**	**8.1**	**8.6**	**8.7**	**8.4**	**8.9**			**10.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.0	5.7	4.6	5.8	5.1	5.6	5.3	5.2	5.4	6.3	6.9	7.3	7.2	7.3	8.2	7.6	6.8	6.9	5.5	5.1	5.5	6.1	5.8	5.5	8.2	4.6	6.1
2	5.7	4.7	4.8	4.1	7.5	5.2	7.8	7.5	6.8	4.5	8.7	8.8	7.4	9.6	10.0	11.4	9.2	7.0	9.6	11.1	7.8	9.1	7.1	10.7	11.4	4.1	7.8
3	9.2	28.6	16.3	17.5	13.1	10.0	13.0	8.1	7.4	8.4	8.5	9.3	20.6	22.6	13.9	17.9	27.3	25.2	7.9	6.9	13.5	8.1	12.2	8.5	28.6	6.9	13.9
4	16.1	11.4	13.1	7.6	12.4	33.1	5.5	9.2	6.2	10.3	9.1	7.1	7.5	8.8	7.7	12.2	11.5	7.9	8.3	7.8	4.5	4.9	5.5	6.9	33.1	4.5	9.8
5	8.9	7.2	6.0	8.1	6.8	5.3	5.6	6.0	6.0	6.8	7.9	7.2	8.3	9.4	8.2	7.9	9.6	5.7	5.3	5.8	6.0	9.3	10.7	5.8	10.7	5.3	7.2
6	9.0	16.3	11.0	19.1	12.5	11.8	6.8	12.9	8.3	8.9	16.8	7.2	11.9	13.8	8.5	8.7	11.2	14.7	9.3	7.2	7.4	7.7	6.2	20.1	20.1	6.2	11.1
7	9.7	6.7	7.3	6.6	6.0	6.4	6.6	6.7	6.5	6.4	6.3	6.7	6.5	6.9	11.5	11.5	10.9	17.9	8.8	19.5	19.6	15.9	7.6	11.1	19.6	6.0	9.6
8	7.4	9.0	5.8	6.7	10.1	11.0	8.7	6.8	5.8	6.8	5.6	7.7	10.7	9.0	12.9	6.3			5.8	7.0	5.2	5.9	5.1	6.2	12.9	5.1	7.5
9	8.0	8.1	10.5	8.1	8.0	7.8	6.7	6.0	6.3	6.1	9.5	7.6	6.8	5.9	6.1	5.6	6.5	5.7	5.6	5.4	5.2	4.8	6.0	5.9	10.5	4.8	6.8
10	5.5	7.6	45.9	18.6	10.4	6.4	11.2	16.2	6.6	5.4	6.3	7.7	9.7	12.5	17.0	20.0	19.9	15.8	17.1	6.7	7.1	6.3	6.9	6.4	45.9	5.4	12.2
11	7.2	12.0	31.2	11.2	10.6	11.4	9.4	6.6	7.2	12.8	15.5	52.2	18.8	18.2	7.9	14.1	9.9	7.4	6.3	6.8	6.9	6.2	6.4	6.1	52.2	6.1	12.6
12	5.5	5.8	5.6	5.5	7.8	6.7	8.5	7.3	6.7	11.7	11.0	7.9	10.4	11.9	8.0	9.7	6.6	5.2	4.6	4.4	6.0	9.1	8.2	13.0	13.0	4.4	7.8
13	5.5	5.7	6.0	6.8	8.1	7.7	8.1	6.6	5.2	6.1	11.5	9.1	42.8	20.5	13.1	13.8	9.0	10.5	13.2	15.8	12.7	6.5	5.7	5.1	42.8	5.1	10.6
14	5.3	4.4	5.7	4.9	6.0	4.7	11.8	13.2	8.4	20.0	10.7	8.1	13.6	7.0	15.8	4.8	5.1	4.9	5.3	5.4	5.3	5.4	4.9	5.0	20.0	4.4	7.7
15	5.6	5.6	5.1	6.3	6.1	7.2	8.3	13.0	9.0	9.2	13.3	5.6	11.8	12.5	7.9	7.2	4.9	26.7	17.3	4.8	5.8	4.8	6.2	7.7	26.7	4.8	8.8
16	7.9	12.5	11.7	7.1	6.1	5.5	4.9	17.2	15.0	5.0	9.1	40.2	22.0	15.2	7.7	12.6	10.2	8.5	13.1	12.7	12.5	13.6	10.3	10.4	40.2	4.9	12.1
17	12.6	6.0	6.8	6.3	6.1	6.0	6.0	6.5	7.0	6.0	7.3	19.9	9.0	8.0	7.5	7.3	7.3	7.3	7.3	7.6	6.9	7.2	7.1	7.4	19.9	6.0	7.8
18	6.9	6.4	6.8	7.0	6.8	6.6	6.2	6.1	6.2	6.6	8.2	9.3	12.0	8.9	8.0	7.1	10.7	8.3	11.4	12.1	9.8	13.5	11.0	5.5	13.5	5.5	8.4
19	6.2	6.4	6.6	6.8	6.3	6.9	7.1	6.6	5.9	6.8	6.2	6.3	6.6	6.7	6.5	6.2	5.9	6.5	6.5	6.2	6.4	6.2	6.3	6.3	7.1	5.9	6.4
20	6.6	6.0	6.3	6.1	6.5	6.9	6.6	6.6	6.7	6.7	6.5	6.9	6.6	6.9	10.4	9.8	14.9	5.5	5.3	4.8	5.6	5.5	5.4	6.0	14.9	4.8	6.9
21	6.7	6.9	7.4	6.6	7.2	30.6	13.6	9.1	7.5	5.7	5.5	8.6	6.0	11.9	12.0	5.6	7.2	14.0	9.3	6.4	6.9	6.6	8.7	6.3	30.6	5.5	9.0
22	5.3	5.4	5.9	5.0	7.2	7.8	7.9	6.4	6.6	6.6	6.2	6.3	5.2	7.5	5.5	4.9	5.3	21.4	14.2	9.4	10.0	10.2	5.7	5.6	21.4	4.9	7.6
23	5.7	8.5	4.8	8.2	6.0	4.6	4.6	5.6	5.7	5.3	5.4	5.7	6.6	6.5	5.7	5.4	5.6	5.1	5.4	5.3	4.4	4.4	6.5	5.6	8.5	4.4	5.7
24	6.4	5.1	4.8	6.2	6.0	9.1	7.4	13.8	10.6	7.5	6.1	6.2	6.2	7.0	6.5	6.1	5.8	6.3	5.8	5.9	6.1	5.0	5.2	5.1	13.8	4.8	6.7
25	5.2	4.4	5.5	5.3	4.8	5.6	5.2	4.8	9.6	5.3	5.7	5.8	5.7	5.4	5.0	6.1	5.4	6.1	4.7	4.1	4.6	5.9	5.4	5.7	9.6	4.1	5.5
26	5.5	4.6	4.9	5.0	5.8	5.3	4.3	5.5	4.7	4.3	4.8	5.4	6.0	5.7	6.2	6.2	4.9	4.2	4.2	5.7	4.8	7.0	6.4	6.0	7.0	4.2	5.3
27	6.4	8.1	6.6	7.7	8.9	20.2	9.1	6.5	6.4	6.1	8.2	7.8	9.3	8.4	7.7	9.9	6.3	5.1	5.4	6.6	6.7	10.7	7.3	7.7	20.2	5.1	8.0
28	8.8	14.4	12.4	10.6	14.7	11.1	7.7	6.9	6.4	4.6	5.0	5.7	5.8	5.8	5.6	5.3	5.4	5.8	5.1	5.7	6.2	6.9	9.0	8.8	14.7	4.6	7.7
29	9.7	9.8	8.7	7.4	6.1	6.1	6.3	7.3	5.7	7.3	6.8	6.9	9.0	7.2	5.6	6.1	6.2	6.7	7.8	7.6	6.1	6.5	6.4	22.5	22.5	5.6	7.7
30	6.2	6.4	5.7	6.0	6.6	6.1	6.3	5.4	5.1	5.5	6.1	6.3	6.2	6.0	6.1	5.5	5.7	7.9	9.8	6.9	5.9	5.2	5.5	4.6	9.8	4.6	6.1
31	4.8	4.6	4.6	4.6	4.2	5.2	5.6	7.2	6.2	8.0	9.4	6.1	4.9	5.6	5.2	5.3	4.9	5.6	5.0	6.3	7.5	7.1	8.4	9.0	9.4	4.2	6.1
Max.	**16.1**	**28.6**	**45.9**	**19.1**	**14.7**	**33.1**	**13.6**	**17.2**	**15.0**	**20.0**	**16.8**	**52.2**	**42.8**	**22.6**	**17.0**	**20.0**	**27.3**	**26.7**	**17.3**	**19.5**	**19.6**	**15.9**	**12.2**	**22.5**	**52.2**		
Min.	**4.8**	**4.4**	**4.6**	**4.1**	**4.2**	**4.6**	**4.3**	**4.8**	**4.7**	**4.3**	**4.8**	**5.4**	**4.9**	**5.4**	**5.0**	**4.8**	**4.9**	**4.2**	**4.2**	**4.1**	**4.4**	**4.4**	**4.9**	**4.6**		**4.1**	
Avg.	**7.2**	**8.2**	**9.3**	**7.8**	**7.7**	**9.2**	**7.5**	**8.2**	**7.0**	**7.3**	**8.2**	**10.1**	**10.4**	**9.6**	**8.6**	**8.6**	**8.7**	**9.5**	**8.1**	**7.5**	**7.4**	**7.5**	**7.1**	**7.9**			**8.3**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble 2 Meteorological Station - Wind Sigma

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.4	6.2	7.9	7.0	7.2	8.2	7.2	9.4	5.7	6.7	6.5	6.5	6.2	5.8	6.8	6.4	11.9	8.1	13.3	6.4	6.3	6.0	6.5	11.5	13.3	5.4	7.5
2	10.6	7.6	6.6	10.5	8.0	29.3	11.4	16.0	9.2	10.3	5.6	6.1	4.8	5.9	6.3	8.7	6.0	5.1	5.1	5.0	8.1	12.1	9.1	4.9	29.3	4.8	8.8
3	5.8	6.4	5.5	5.3	5.3	7.5	5.4	6.2	8.3	5.7	6.5	7.4	8.8	7.7	7.1	6.3	6.4	6.1	5.6	4.9	4.7	7.6	7.4	6.5	8.8	4.7	6.4
4	6.8	7.5	6.3	5.9	7.4	6.2	5.6	6.5	6.4	7.1	6.4	5.7	6.0	6.1	7.8	7.8	8.5	7.7	5.5	4.8	4.6	4.6	4.2	6.1	8.5	4.2	6.3
5	5.8	7.6	5.5	7.9	11.8	12.8	10.5	10.3	8.9	9.3	7.2	6.2	7.9	8.0	9.7	14.8	44.7	39.1	12.1	4.7	6.1	23.6	15.8	31.5	44.7	4.7	13.4
6	26.5	10.5	11.4	17.4	14.6	15.8	5.7	5.6	4.5	4.6	5.6	5.7	5.7	6.3	6.0	7.7	7.0	8.3	16.6	7.4	6.4	5.5	10.6	11.1	26.5	4.5	9.4
7	5.3	5.9	5.3	5.9	4.1	5.5	7.2	7.8	5.6	4.2	5.8	7.1	7.1	6.3	7.1	5.9	6.0	5.9	7.6	6.2	6.4	7.0	6.5	5.9	7.8	4.1	6.1
8	8.1	8.3	10.5	12.4	11.3	6.9	6.7	6.8	6.9	7.3	6.9	7.4	9.6	9.1	5.1	5.6	5.3	7.4	6.9	11.2	9.6	7.5	6.6	5.2	12.4	5.1	7.9
9	5.4	5.8	5.5	5.6	5.5	5.1	5.0	6.1	5.5	5.2	5.7	5.0	4.6	5.9	4.2	5.1	5.0	5.9	6.0	5.2	5.0	4.8	4.9	4.6	6.1	4.2	5.3
10	5.2	5.6	5.5	5.1	4.6	4.9	6.1	5.1	4.3	4.8	4.1	4.4	4.4	4.8	4.9	4.6	4.4	4.5	4.3	4.5	4.4	4.4	5.6	4.3	6.1	4.1	4.8
11	4.4	4.9	6.2	5.2	5.4	4.3	4.7	4.5	3.8	3.8	4.4	4.5	4.4	5.4	5.2	5.5	4.6	5.1	5.2	5.8	5.4	6.0	5.3	5.0	6.2	3.8	5.0
12	5.6	5.9	6.0	5.9	5.2	5.7	5.8	6.3	8.6	19.1	6.1	6.4	6.5	5.9	6.2	6.4	6.2	5.2	5.8	5.5	5.4	5.3	5.6	4.8	19.1	4.8	6.5
13	6.1	5.0	4.6	4.8	5.0	4.9	7.6	5.7	5.0	6.2	5.7	6.9	6.9	6.7	7.5	7.4	7.5	9.3	9.4	11.4	10.7	8.3	7.6	12.5	12.5	4.6	7.2
14	17.9	13.2	5.8	10.4	9.9	11.1	6.3	8.2	6.0	6.3	6.6	5.7	6.4	7.1	4.6	4.9	5.2	4.1	4.3	4.7	5.1	4.8	4.9	5.4	17.9	4.1	7.0
15	6.1	5.8	5.7	5.9	6.8	28.5	54.1	50.0	34.7	9.3	6.2	5.7	4.3	7.6	7.9	33.6	7.7	8.1	7.6	15.7	16.4	5.1	8.3	7.3	54.1	4.3	14.5
16	7.8	13.0	5.4	5.7	6.4	6.0	5.2	5.3	5.0	4.8	4.7	4.8	5.2	4.9	4.7	4.8	5.1	4.7	4.8	4.9	4.7	5.1	4.6	4.9	13.0	4.6	5.5
17	4.2	4.9	4.9	4.8	4.9	5.7	4.5	4.6	4.9	10.8	5.1	6.4	6.6	5.3	5.2	5.6	6.3	10.1	10.3	6.5	8.4	7.8	23.7	8.5	23.7	4.2	7.1
18	12.2	15.3	7.0	7.3	7.0	5.5	3.8	7.6	7.5	8.3	6.0			4.4	27.5	19.3	56.9	11.8	12.8	11.3	11.7	20.5	37.4	31.0	56.9	3.8	15.1
19	11.6	9.0	7.6	12.4	7.6	6.8	7.3	7.9	7.4	8.2	7.4	8.2													12.4	6.8	8.4
Max.	**26.5**	**15.3**	**11.4**	**17.4**	**14.6**	**29.3**	**54.1**	**50.0**	**34.7**	**19.1**	**7.4**	**8.2**	**9.6**	**9.1**	**27.5**	**33.6**	**56.9**	**39.1**	**16.6**	**15.7**	**16.4**	**23.6**	**37.4**	**31.5**	**56.9**		
Min.	**4.2**	**4.9**	**4.6**	**4.8**	**4.1**	**4.3**	**3.8**	**4.5**	**3.8**	**3.8**	**4.1**	**4.4**	**4.3**	**4.4**	**4.2**	**4.6**	**4.4**	**4.1**	**4.3**	**4.5**	**4.4**	**4.4**	**4.2**	**4.3**		**3.8**	
Avg.	**8.5**	**7.8**	**6.5**	**7.6**	**7.3**	**9.5**	**9.0**	**9.5**	**7.8**	**7.5**	**5.9**	**6.1**	**6.2**	**6.3**	**7.4**	**8.9**	**11.4**	**8.7**	**8.0**	**7.0**	**7.2**	**8.1**	**9.7**	**9.5**			**8.0**

Total Hours in Month 720 **Hours Data Available** 442 **Data Recovery** 61.4%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

January *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.6	3.2	0.2	2.2	2.4	2.6	1.4	1.2	1.2	1.4	1.2	11.8	7.0	0.0	0.0	0.0	11.8	0.0	1.6
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**1.2**	**1.6**	**3.2**	**0.2**	**2.2**	**2.4**	**2.6**	**1.4**	**1.2**	**1.2**	**1.4**	**1.2**	**11.8**	**7.0**	**0.0**	**0.0**	**0.0**	**11.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.4**	**0.2**	**0.0**	**0.0**	**0.0**			**0.1**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

February 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2	0.2	0.2	0.2	0.4	0.0	0.1
6	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21																											
22																											
23																											
24																											
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26																											
27																											
28																											
Max.	**0.0**	**0.2**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.0**	**0.4**	**0.0**	**0.0**	**0.2**	**0.2**	**0.2**	**0.2**	**0.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**			**0.0**

Total Hours in Month 672 **Hours Data Available** 478 **Data Recovery** 71.1%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

March *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
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2																											
3																											
4																											
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30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**			**0.0**

Total Hours in Month 744 **Hours Data Available** 48 **Data Recovery** 6.5%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

April *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	1.0	0.0	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.1
7	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.6	1.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.1
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.6	0.8	0.4	0.6	0.6	0.8	0.4	0.6	0.6	0.2	0.0	0.2	0.0	0.0	0.2	0.2	0.8	0.0	0.3
20	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.4	0.4	0.4	0.6	0.6	1.0	1.2	0.2	1.2	1.8	1.6	2.2	2.4	0.6	2.4	0.0	0.7
21	0.2	0.2	0.0	0.0	0.2	0.0	0.4	1.2	0.6	0.6	0.2	1.4	0.0	0.0	0.0	0.2	0.0	0.4	0.2	0.0	0.2	0.0	0.0	0.0	1.4	0.0	0.3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.2	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
26	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.2
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**0.4**	**0.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.4**	**1.2**	**0.6**	**0.8**	**0.4**	**1.4**	**1.0**	**1.4**	**2.4**	**1.0**	**1.2**	**0.4**	**1.2**	**1.8**	**1.6**	**2.2**	**2.4**	**0.6**	**2.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**			**0.1**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

May *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.2	0.0	0.2	0.2	0.0	0.4	0.0	0.1
6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.2
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.6	0.6	0.2	2.6	0.0	0.2
14	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.2	3.0	1.0	0.6	0.0	3.0	0.0	0.2
22	0.4	0.8	0.2	0.0	0.2	0.4	0.6	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.6	3.0	1.2	0.0	1.4	0.0	0.0	0.0	0.0	3.0	0.0	0.4
23	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
24	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.1
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.0	0.0	0.1
29	0.6	0.8	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Max.	**0.6**	**0.8**	**0.6**	**0.2**	**0.2**	**0.4**	**0.6**	**0.4**	**0.0**	**0.4**	**1.6**	**3.2**	**0.2**	**1.2**	**0.0**	**0.6**	**3.0**	**1.2**	**1.0**	**1.4**	**3.0**	**2.6**	**0.6**	**0.4**	**3.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**			**0.0**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

June *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.8	0.0	0.0	0.0	0.0	0.8	0.0	0.1
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.1
12																											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14																											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17																											
18																											
19																											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.4	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.4	0.2	0.4	1.4	0.0	0.1
Max.	**0.2**	**0.2**	**0.0**	**0.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.2**	**0.8**	**0.4**	**1.4**	**0.2**	**0.4**	**1.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**			**0.0**

Total Hours in Month 720 **Hours Data Available** 599 **Data Recovery** 83.2%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

July *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	1.0	0.6	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.2	0.0	2.0	1.0	0.6	0.0	0.0	0.0	0.0	2.6	0.0	0.3
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.2
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.2	0.8	0.0	0.0
9	2.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.2	1.2	0.2	3.4	0.0	0.5
10	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.4	0.8	0.6	1.4	2.2	0.6	0.4	0.2	1.2	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.4
13	0.0	0.0	0.2	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.2	1.0	0.6	0.0	0.4	1.4	1.4	1.6	1.6	1.2	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.6	0.0	0.5
17	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.8	0.0	1.4	0.2	1.8	0.0	0.2
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.2	0.6	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.1
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.2	0.0	0.0	2.6	0.0	0.1
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	7.0	0.8	0.2	0.0	0.0	14.2	0.0	0.9
Max.	**2.6**	**1.0**	**0.6**	**1.4**	**2.2**	**0.6**	**0.4**	**0.4**	**1.4**	**1.4**	**3.6**	**1.6**	**1.2**	**1.2**	**2.6**	**0.4**	**0.2**	**2.0**	**14.2**	**7.0**	**3.4**	**3.2**	**1.4**	**0.2**	**14.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.2**	**0.1**	**0.1**	**0.0**	**0.1**	**0.0**	**0.0**	**0.1**	**0.5**	**0.3**	**0.3**	**0.1**	**0.1**	**0.0**			**0.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

August *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.6	1.2	0.0	2.8	0.2	0.0	0.0	0.0	0.0	2.8	0.0	0.2
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.2	1.8	1.0	0.2	0.4	0.0	0.4	1.8	0.6	0.2	0.6	0.0	0.6	0.0	0.0	0.6	0.0	0.0	0.0	1.8	0.0	0.4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.6	0.8	0.6	0.0	0.0	0.0	0.2	0.2	0.0	0.4	3.8	0.4	0.4	0.0	0.0	3.8	0.0	0.4
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.0	0.4	0.2	0.0	0.6	0.0	0.1
21	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4	0.0	0.0	0.2	0.0	0.2	0.6	1.0	1.2	0.2	1.0	1.6	2.2	2.8	2.8	0.0	0.5
23	1.6	0.2	1.4	0.4	0.6	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.2	0.2	0.2	0.0	0.0	0.0	0.4	0.6	0.2	1.6	0.0	0.3
24	0.4	0.4	0.2	0.4	2.0	1.8	0.4	1.0	0.0	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.3
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.6	1.2	3.6	0.0	0.2
28	0.2	0.8	1.4	2.2	1.0	0.2	0.2	0.8	0.6	0.6	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	2.2	0.0	0.4
29	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	0.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.2
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**1.6**	**0.8**	**1.4**	**2.2**	**2.0**	**1.8**	**1.8**	**1.0**	**0.6**	**0.8**	**0.8**	**0.6**	**1.8**	**0.6**	**1.2**	**0.6**	**1.8**	**1.0**	**2.8**	**3.8**	**1.0**	**1.6**	**3.6**	**2.8**	**3.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.1**	**0.1**	**0.2**	**0.1**			**0.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.2	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2	2.0	2.0	0.0	0.2
4	2.4	2.2	3.4	3.2	2.8	1.2	1.6	0.6	0.6	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.8
5	0.0	1.6	0.6	0.0	0.2	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.2	0.6	0.8	0.4	0.4	3.6	2.8	1.2	3.6	0.0	0.6
6	0.6	0.4	0.0	0.0	0.2	0.4	0.0	0.6	0.2	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.4	1.2	1.2	0.0	0.1
9	1.2	2.4	2.0	1.0	1.0	0.8	0.8	0.2	0.6	2.2	1.0	2.4	0.4	0.8	0.0	0.0	1.0	0.0	0.0	0.8	0.2	0.0	0.0	0.0	2.4	0.0	0.8
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	1.4	1.4	0.0	0.1
12	1.8	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.2
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0
15	0.2	0.2	0.8	0.6	1.0	1.0	0.8	0.6	0.6	0.8	0.6	0.2	0.2	0.0	0.4	0.0	0.2	1.0	0.2	0.6	0.0	0.0	0.0	0.4	1.0	0.0	0.4
16	0.2	0.8	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.6	1.2	1.6	3.4	0.6	0.4	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.4
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.0	5.6	0.8	0.6	0.2	0.0	0.0	5.6	0.0	0.4
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.4	0.2	0.4	0.6	0.2	1.4	0.0	0.1
28	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
30	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Max.	**2.4**	**2.4**	**3.4**	**3.2**	**2.8**	**1.2**	**1.6**	**0.6**	**0.6**	**2.2**	**1.0**	**2.4**	**0.4**	**1.6**	**1.2**	**1.6**	**3.4**	**2.0**	**5.6**	**0.8**	**0.6**	**3.6**	**2.8**	**2.0**	**5.6**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.2**	**0.3**	**0.3**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.3**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**			**0.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

October *2005*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.4	0.6	0.4	0.8	0.8	0.0	0.1
6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.6	0.0	0.1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.4	0.6	2.0	2.8	1.6	2.4	1.4	0.6	0.8	1.4	0.8	0.6	0.6	2.8	0.0	0.7
8	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.8	0.6	0.2	0.0	0.2			0.6	0.4	0.2	0.2	0.0		0.0	0.8	0.0	0.2
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0											0.0	0.0	0.0
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
18																		0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.0	0.0	0.1
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
24	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	1.0	0.0	0.0	0.0	0.0	1.8	0.0	0.2
25	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.0	0.1
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	0.0	0.0	0.0	0.0	1.0	0.0	0.5	2.5	0.0	0.2
Max.	**0.8**	**0.3**	**2.8**	**0.2**	**0.0**	**0.0**	**0.2**	**0.2**	**0.8**	**0.4**	**0.8**	**0.6**	**1.0**	**2.0**	**2.8**	**1.6**	**2.5**	**1.8**	**0.8**	**1.0**	**1.4**	**1.0**	**0.8**	**0.8**	**2.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.1**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.3**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**			**0.1**

Total Hours in Month 744 **Hours Data Available** 521 **Data Recovery** 70.0%

HCG, Inc.

Pebble 2 Meteorological Station - Total Rainfall (mm)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.8	0.0	0.1
2	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
6	1.8	2.0	1.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	2.0	0.0	0.3
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
8	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.1
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														0.0	0.0	0.0
19											0.0	0.0													0.0	0.0	0.0
Max.	**1.8**	**2.0**	**1.8**	**0.8**	**0.0**	**2.3**	**0.3**	**0.0**	**0.5**	**0.3**	**0.8**	**0.8**	**0.8**	**1.0**	**0.8**	**0.8**	**0.8**	**0.5**	**0.5**	**0.5**	**0.0**	**0.0**	**0.0**	**0.3**	**2.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**			**0.0**

Total Hours in Month 720 **Hours Data Available** 415 **Data Recovery** 57.6%

HCG, Inc.

Pebble 2 Meteorological Station - Daily Evaporation (mm)

January 2005- November 2005

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	3.7	0.0	0.7	4.1	0.0	-	-
2	-	-	-	-	-	4.9	0.0	1.8	1.1	0.5	-	-
3	-	-	-	-	-	5.6	0.0	1.3	0.0	1.0	-	-
4	-	-	-	-	-	7.6	6.3	0.0	0.0	2.5	-	-
5	-	-	-	-	-	8.8	4.0	1.2	0.0	0.0	-	-
6	-	-	-	-	-	6.6	6.0	4.2	0.0	0.0	-	-
7	-	-	-	-	-	2.3	9.7	3.3	1.1	0.0	-	-
8	-	-	-	-	-	0.0	3.7	4.2	0.0	-	-	-
9	-	-	-	-	-	0.8	0.0	6.5	0.0	-	-	-
10	-	-	-	-	-	2.5	1.6	5.1	0.4	-	-	-
11	-	-	-	-	-	0.0	3.1	4.8	0.0	-	-	-
12	-	-	-	-	-	3.5	0.0	6.9	0.0	-	-	-
13	-	-	-	-	-	6.2	0.6	5.1	0.5	-	-	-
14	-	-	-	-	4.5	5.0	5.7	4.1	0.8	-	-	-
15	-	-	-	-	4.6	6.5	8.8	4.0	0.0	-	-	-
16	-	-	-	-	3.4	7.2	0.0	3.3	0.0	-	-	-
17	-	-	-	-	0.0	0.0	0.0	0.0	0.0	-	-	-
18	-	-	-	-	1.7	0.0	2.8	0.0	1.9	-	-	-
19	-	-	-	-	3.1	0.0	1.7	3.9	2.2	-	-	-
20	-	-	-	-	4.1	4.3	2.8	0.0	1.5	-	-	-
21	-	-	-	-	0.0	8.6	5.0	4.2	0.0	-	-	-
22	-	-	-	-	0.0	0.8	6.6	0.0	0.0	-	-	-
23	-	-	-	-	0.6	3.7	0.0	0.0	0.0	-	-	-
24	-	-	-	-	1.6	6.1	1.5	0.0	0.0	-	-	-
25	-	-	-	-	5.2	5.0	0.0	4.9	0.0	-	-	-
26	-	-	-	-	0.7	5.4	2.3	4.6	0.6	-	-	-
27	-	-	-	-	0.0	4.1	0.0	0.0	0.0	-	-	-
28	-	-	-	-	0.0	2.9	0.0	0.0	0.0	-	-	-
29	-		-	-	0.0	3.7	0.0	0.0	0.0	-	-	-
30	-		-	-	5.0	0.0	1.1	1.7	2.1	-	-	-
31	-		-		3.3		0.0	3.6		-		-
Total	0.0	0.0	0.0	0.0	37.8	115.7	73.3	79.4	16.4	4.0	0.0	0.0

Appendix C

Pebble 3 Validated Continuous Data Summaries

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
19																-11.3	-11.1	-11.8	-11.6	-11.8	-13.1	-11.2	-11.8	-11.1	-11.1	-13.1	-11.6
20	-9.9	-9.5	-8.1	-7.7	-8.6	-8.6	-8.8	-8.9	-7.1	-5.9	-5.5	-4.9	-5.7	-5.5	-5.6	-5.7	-6.0	-6.4	-6.7	-6.8	-7.2	-8.4	-8.5	-8.7	-4.9	-9.9	-7.3
21	-9.1	-10.8	-9.3	-8.6	-8.9	-9.9	-10.4	-10.4	-10.2	-11.9	-16.5	-12.2	-11.3	-14.2	-12.7	-15.0	-18.1	-18.6	-18.2	-14.7	-13.7	-15.0	-21.4	-23.5	-8.6	-23.5	-13.5
22	-24.4	-26.5	-25.9	-25.0	-23.1	-21.0	-19.4	-17.9	-16.9	-16.5	-16.0	-15.6	-14.3	-14.0	-14.1	-14.2	-15.3	-16.0	-15.8	-16.2	-17.4	-18.6	-20.0	-19.3	-14.0	-26.5	-18.5
23	-20.8	-21.9	-22.1	-22.1	-22.3	-22.0	-22.0	-21.5	-20.8	-20.6	-20.5	-20.1	-19.7	-19.4	-19.3	-19.2	-19.2	-19.5	-19.9	-20.3	-20.0	-19.4	-19.9	-20.4	-19.2	-22.3	-20.5
24	-20.8	-21.4	-22.0	-21.3	-21.1	-21.5	-22.5	-21.2	-21.4	-21.8	-21.4	-21.6	-21.9	-22.1	-22.3	-22.8	-23.7	-23.6	-23.1	-22.2	-21.4	-21.4	-21.9	-22.3	-20.8	-23.7	-21.9
25	-22.3	-22.7	-23.1	-22.6	-22.6	-22.8	-22.4	-22.2	-21.6	-21.4	-21.4	-21.3	-21.5	-20.7	-20.9	-21.6	-21.5	-21.5	-21.2	-21.4	-20.2	-19.7	-19.6	-20.2	-19.6	-23.1	-21.5
26	-20.1	-20.2	-20.4	-19.9	-19.0	-18.5	-18.1	-18.7	-19.2	-18.8	-18.9	-19.1	-18.5	-18.6	-19.0	-19.1	-19.6	-19.6	-19.9	-19.7	-19.8	-19.5	-19.2	-19.4	-18.1	-20.4	-19.3
27	-19.6	-19.3	-19.3	-19.3	-19.1	-19.1	-20.1	-20.1	-20.2	-20.1	-20.0	-18.6	-17.8	-17.3	-18.1	-19.1	-20.9	-21.4	-21.2	-22.1	-21.0	-20.8	-21.1	-21.5	-17.3	-22.1	-19.9
28	-20.2	-19.8	-14.3	-9.8	-9.5	-9.0	-8.1	-7.1	-6.5	-6.5	-6.4	-5.9	-5.5	-5.1	-5.1	-5.4	-5.8	-6.2	-6.7	-6.7	-7.4	-7.9	-7.2	-6.9	-5.1	-20.2	-8.3
29	-6.8	-6.6	-6.8	-6.2	-6.2	-5.9	-5.9	-5.1	-5.6	-5.0	-6.0	-6.2	-5.7	-6.3	-6.6	-5.4	-5.0	-5.5	-5.1	-6.2	-7.3	-5.7	-6.9	-6.5	-5.0	-7.3	-6.0
30	-5.4	-4.6	-4.4	-4.5	-4.5	-4.5	-4.4	-4.2	-3.9	-4.0	-4.3	-4.6	-4.9	-5.3	-5.6	-5.7	-5.8	-6.2	-6.5	-6.2	-6.5	-6.7	-6.8	-7.1	-3.9	-7.1	-5.3
Max.	**-5.4**	**-4.6**	**-4.4**	**-4.5**	**-4.5**	**-4.5**	**-4.4**	**-4.2**	**-3.9**	**-4.0**	**-4.3**	**-4.6**	**-4.9**	**-5.1**	**-5.1**	**-5.4**	**-5.0**	**-5.5**	**-5.1**	**-6.2**	**-6.5**	**-5.7**	**-6.8**	**-6.5**	**-3.9**		
Min.	**-24.4**	**-26.5**	**-25.9**	**-25.0**	**-23.1**	**-22.8**	**-22.5**	**-22.2**	**-21.6**	**-21.8**	**-21.4**	**-21.6**	**-21.9**	**-22.1**	**-22.3**	**-22.8**	**-23.7**	**-23.6**	**-23.1**	**-22.2**	**-21.4**	**-21.4**	**-21.9**	**-23.5**		**-26.5**	
Avg.	**-16.3**	**-16.7**	**-16.0**	**-15.2**	**-15.0**	**-14.8**	**-14.7**	**-14.3**	**-13.9**	**-13.9**	**-14.3**	**-13.6**	**-13.3**	**-13.5**	**-13.6**	**-13.7**	**-14.3**	**-14.7**	**-14.7**	**-14.5**	**-14.6**	**-14.5**	**-15.4**	**-15.6**			**-14.5**

Total Hours in Month 720 **Hours Data Available** 273 **Data Recovery** 37.9%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-7.5	-7.6	-7.8	-8.0	-8.5	-9.4	-10.6	-10.7	-11.5	-12.7	-13.2	-11.3	-11.7	-11.3	-10.8	-10.3	-10.5	-11.6	-12.2	-13.3	-13.9	-15.6	-14.6	-13.8	-7.5	-15.6	-11.2
2	-13.1	-12.5	-12.2	-11.8	-11.0	-11.8	-12.9	-13.5	-13.6	-13.5	-14.1	-14.4	-14.4	-15.4	-16.2	-16.8	-17.5	-18.3	-18.6	-18.7	-19.1	-19.5	-18.9	-18.8	-11.0	-19.5	-15.3
3	-18.9	-19.1	-19.1	-19.2	-19.1	-19.1	-20.3	-21.4	-21.4	-21.3	-22.4	-22.1	-21.8	-21.5	-21.0	-21.5	-21.8	-22.3	-22.1	-22.6	-22.7	-23.0	-23.3	-23.6	-18.9	-23.6	-21.3
4	-23.8	-24.2	-24.7	-24.8	-25.4	-25.1	-25.4	-22.8	-21.1	-22.1	-22.5	-18.5	-10.0	-8.4	-8.0	-7.5	-6.6	-5.6	-4.8	-4.3	-4.0	-3.8	-3.3	-2.7	-2.7	-25.4	-14.6
5	-2.3	-2.1	-1.5	-1.0	-0.7	-0.6	-0.5	-0.4	-0.2	-0.1	-0.4	-0.3	-0.3	-0.3	-0.2	0.1	0.4	0.9	1.8	2.0	1.8	2.6	2.6	2.7	2.7	-2.3	0.2
6	3.1	3.2	3.3	3.2	2.6	2.4	2.8	2.9	2.4	2.1	1.7	1.1	0.3	0.3	0.4	0.2	0.1	0.1	0.3	0.6	0.8	0.9	1.3	2.0	3.3	0.1	1.6
7	2.2	2.3	2.3	2.4	2.6	2.8	2.3	2.0	2.2	2.6	3.1	2.5	2.7	2.8	2.7	2.4	2.8	2.7	2.2	2.8	3.0	3.2	3.0	2.7	3.2	2.0	2.6
8	2.5	2.3	1.8	1.9	2.1	1.8	1.8	1.9	2.0	2.0	2.0	1.9	2.5	3.2	2.7	2.5	2.7	2.9	3.0	2.8	2.9	3.1	3.0	3.2	3.2	1.8	2.4
9	3.4	3.3	3.4	3.2	3.2	3.1	2.8	2.6	2.1	2.1	1.6	1.6	1.7	2.1	1.7	0.4	-0.1	0.1	0.5	0.9	1.1	1.4	1.3	1.4	3.4	-0.1	1.9
10	1.1	0.7	0.5	-0.1	-0.4	0.0	0.3	-0.2	0.2	0.5	0.7	1.1	1.6	2.0	2.3	1.6	1.7	1.8	1.8	2.0	1.8	1.2	1.1	0.8	2.3	-0.4	1.0
11	0.6	0.4	0.1	-0.1	-1.7	-4.7	-5.8	-6.9	-7.3	-8.2	-8.9	-9.6	-9.8	-10.0	-10.1	-10.6	-10.8	-10.9	-11.0	-10.5	-10.6	-10.6	-11.7	-13.1	0.6	-13.1	-7.6
12	-14.0	-14.4	-14.2	-15.7	-15.7	-17.5	-16.8	-16.5	-15.7	-15.8	-15.1	-15.1	-13.3	-12.3	-12.5	-11.8	-12.9	-11.8	-10.1	-9.8	-10.4	-10.2	-10.3	-10.8	-9.8	-17.5	-13.4
13	-11.1	-11.7	-12.6	-12.5	-12.8	-12.0	-8.1	-8.8	-5.5	-4.7	-4.2	-3.8	-3.1	-2.5	-1.6	-0.9	-0.6	-0.3	-0.3	-0.2	0.0	0.2	0.2	0.4	0.4	-12.8	-4.9
14	0.7	0.8	1.2	1.6	2.0	2.2	2.2	1.6	1.3	1.0	1.5	2.5	2.4	3.4	3.2	3.2	3.0	3.1	3.3	3.2	3.4	3.6	3.4	3.1	3.6	0.7	2.4
15	2.7	2.7	2.4	2.7	3.2	3.9	4.0	3.1	2.0	2.4	2.9	2.7	2.6	2.7	2.7	2.9	3.2	4.0	5.1	5.9	5.1	4.9	4.7	4.8	5.9	2.0	3.5
16	4.9	4.7	4.2	4.1	4.1	4.1	3.8	3.9	3.0	2.2	1.6	0.9	0.0	-0.3	-0.5	-0.7	-0.9	-0.9	-1.0	-1.0	-1.2	-1.4	-1.8	-2.5	4.9	-2.5	1.2
17	-2.6	-3.6	-5.2	-5.6	-6.5	-7.1	-5.7	-4.6	-3.5	-4.5	-3.8	-3.8	-2.8	-2.2	-2.0	-0.4	2.1	2.1	1.8	1.9	2.0	2.1	2.0	1.1	2.1	-7.1	-2.0
18	1.5	2.3	2.8	2.1	1.5	2.7	2.7	2.7	2.3	2.6	3.0	3.0	2.7	3.0	3.0	3.2	3.2	3.5	3.9	4.6	4.3	3.6	5.3	4.8	5.3	1.5	3.1
19	4.9	5.2	5.2	3.9	4.1	3.7	3.2	3.5	3.3	3.2	3.0	3.3	3.1	2.8	2.7	2.7	2.1	1.6	1.5	1.5	0.9	1.2	0.9	0.2	5.2	0.2	2.8
20	-0.3	-1.0	-2.3	-2.4	-2.4	-2.4	-2.4	-3.2	-3.4	-4.5	-4.7	-3.4	-2.2	-1.2	-1.7	-2.1	-3.5	-5.4	-4.9	-4.6	-4.9	-4.1	-4.1	-4.1	-0.3	-5.4	-3.1
21	-3.3	-2.8	-2.7	-3.4	-4.1	-4.1	-4.2	-3.7	-4.3	-5.3	-5.4	-4.4	-3.3	-2.6	-2.7	-2.4	-2.9	-2.9	-3.3	-4.0	-4.1	-3.5	-3.5	-4.1	-2.4	-5.4	-3.6
22	-3.8	-3.8	-4.2	-4.0	-4.1	-4.0	-4.0	-4.3	-5.0	-4.9	-5.4	-5.0	-4.6	-4.4	-4.8	-4.6	-5.0	-5.0	-4.7	-4.5	-4.7	-4.4	-4.3	-4.0	-3.8	-5.4	-4.5
23	-3.7	-3.9	-3.8	-3.5	-3.7	-3.6	-3.3	-3.2	-3.1	-3.2	-3.1	-2.5	-2.4	-2.2	-1.2	-0.9	-1.0	-1.0	-1.1	-1.4	-1.0	-0.7	-1.0	-0.7	-0.7	-3.9	-2.3
24	0.0	-0.2	-0.5	-0.3	-0.4	0.0	0.1	0.6	0.8	0.8	0.7	0.9	1.3	1.6	0.9	-1.1	-2.6	-3.4	-2.6	-2.1	-1.0	-0.7	0.3	-0.8	1.6	-3.4	-0.3
25	-0.9	-0.6	-1.0	-1.5	-1.3	1.5	1.3	1.4	1.5	1.8	2.3	2.7	2.7	2.8	3.0	3.1	2.8	2.6	2.8	2.5	2.7	2.5	2.7	4.1	4.1	-1.5	1.7
26	3.7	3.1	3.0	2.9	2.6	2.4	2.1	2.2	2.1	2.4	0.8	2.0	3.0	3.2	3.3	2.8	3.0	2.6	2.6	2.9	1.5	-0.4	0.5	0.1	3.7	-0.4	2.3
27	0.9	1.7	2.9	3.3	3.7	3.4	2.1	2.6	2.6	2.8	3.3	2.6	1.7	0.6	1.2	1.0	0.7	1.2	1.6	1.5	1.5	1.4	2.9	3.5	3.7	0.6	2.1
28	4.1	3.1	3.7	3.6	3.8	3.7	3.6	3.2	2.6	2.4	1.4	2.8	3.5	2.8	3.8	3.6	3.1	3.0	2.0	3.2	3.9	3.8	3.7	3.3	4.1	1.4	3.3
29	3.4	2.8	1.3	0.6	0.9	1.5	1.8	1.9	1.5	1.6	1.5	1.5	1.4	1.6	2.0	2.2	1.7	1.9	2.2	2.0	2.3	2.9	2.8	2.3	3.4	0.6	1.9
30	2.0	2.8	3.2	3.3	3.2	3.4	2.7	3.3	2.7	1.7	1.3	1.2	1.2	0.9	1.3	0.7	0.7	1.7	2.8	2.8	2.3	1.6	2.5	3.0	3.4	0.7	2.2
31	2.2	1.9	1.6	2.3	1.4	0.6	-0.7	-0.3	-1.4	-1.9	-2.0	-1.0	0.7	1.1	1.0	0.8	-0.3	-2.0	-2.9	-2.7	-3.7	-4.3	-3.0	-2.0	2.3	-4.3	-0.6
Max.	**4.9**	**5.2**	**5.2**	**4.1**	**4.1**	**4.1**	**4.0**	**3.9**	**3.3**	**3.2**	**3.3**	**3.3**	**3.5**	**3.4**	**3.8**	**3.6**	**3.2**	**4.0**	**5.1**	**5.9**	**5.1**	**4.9**	**5.3**	**4.8**	**5.9**		
Min.	**-23.8**	**-24.2**	**-24.7**	**-24.8**	**-25.4**	**-25.1**	**-25.4**	**-22.8**	**-21.4**	**-22.1**	**-22.5**	**-22.1**	**-21.8**	**-21.5**	**-21.0**	**-21.5**	**-21.8**	**-22.3**	**-22.1**	**-22.6**	**-22.7**	**-23.0**	**-23.3**	**-23.6**		**-25.4**	
Avg.	**-2.0**	**-2.1**	**-2.2**	**-2.3**	**-2.5**	**-2.5**	**-2.6**	**-2.6**	**-2.7**	**-2.9**	**-3.0**	**-2.6**	**-2.1**	**-1.9**	**-1.8**	**-1.9**	**-2.1**	**-2.1**	**-1.9**	**-1.8**	**-1.9**	**-2.0**	**-1.8**	**-1.9**			**-2.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.6	-0.5	-1.2	-1.2	-0.4	0.3	0.2	0.7	1.0	0.8	0.5	0.6	1.0	1.8	1.4	1.2	0.8	-0.1	-1.9	-3.8	-2.7	-1.7	-1.9	-1.0	1.8	-3.8	-0.3
2	-1.4	-2.7	-3.2	-2.6	-2.0	-1.3	-0.2	0.4	-0.2	0.2	1.0	1.5	1.5	1.6	1.7	1.8	1.7	1.2	1.5	1.2	0.9	0.7	0.5	-0.3	1.8	-3.2	0.1
3	-0.1	-0.1	-0.1	-0.3	-0.3	-0.4	-0.5	-0.2	-0.3	0.3	0.2	0.2	0.5	0.9	0.6	0.4	0.0	-0.6	-1.4	-1.1	-0.5	-0.3	-1.0	-1.1	0.9	-1.4	-0.2
4	-2.5	-3.0	-2.9	-2.2	-2.7	-6.1	-8.1	-7.5	-8.8	-8.4	-7.2	-7.7	-7.1	-4.9	-5.3	-6.5	-8.1	-8.2	-7.5	-8.8	-8.5	-9.6	-10.4	-8.8	-2.2	-10.4	-6.7
5	-5.3	-3.8	-4.2	-4.6	-6.8	-4.8	-4.8	-5.1	-5.6	-4.9	-7.2	-7.3	-2.8	-1.8	-3.0	-3.4	-4.3	-5.2	-5.2	-4.9	-5.2	-6.5	-7.6	-8.7	-1.8	-8.7	-5.1
6	-9.5	-9.1	-8.9	-9.8	-11.6	-11.9	-9.4	-11.9	-11.5	-11.8	-11.8	-10.7	-10.9	-8.4	-6.6	-5.9	-5.7	-5.8	-6.3	-5.8	-5.3	-4.9	-4.9	-5.0	-4.9	-11.9	-8.5
7	-4.5	-3.8	-4.1	-4.9	-6.1	-6.4	-6.7	-6.7	-5.1	-5.1	-5.3	-4.0	-3.2	-3.3	-2.6	-1.8	-1.2	-1.0	-1.4	-3.6	-3.6	-0.6	-0.1	1.0	1.0	-6.7	-3.5
8	0.7	0.5	1.2	0.5	0.1	0.7	1.7	1.0	1.0	0.6	0.1	-2.1	-2.1	-2.5	-1.6	-2.1	-2.8	-4.0	-6.2	-6.7	-7.1	-7.7	-8.1	-8.2	1.7	-8.2	-2.2
9	-8.7	-9.1	-8.8	-9.5	-8.5	-8.8	-8.8	-9.3	-8.7	-8.5	-9.7	-9.8	-7.6	-5.9	-5.0	-5.3	-5.9	-6.4	-6.6	-5.5	-5.0	-4.9	-5.7	-5.5	-4.9	-9.8	-7.4
10	-4.9	-4.5	-4.1	-3.5	-3.3	-2.9	-2.8	-3.1	-2.9	-3.7	-4.6	-4.4	-4.9	-6.0	-6.6	-7.3	-8.2	-8.8	-8.8	-9.0	-8.9	-8.8	-8.6	-8.3	-2.8	-9.0	-5.8
11	-8.4	-8.3	-8.3	-8.3	-8.3	-8.9	-8.6	-9.0	-9.5	-9.7	-9.9	-9.7	-8.9	-8.6	-8.1	-8.5	-9.1	-9.5	-10.6	-13.5	-12.7	-13.0	-13.0	-12.9	-8.1	-13.5	-9.8
12	-12.2	-12.7	-12.1	-11.6	-10.7	-10.9	-11.4	-11.8	-11.7	-12.2	-12.8	-13.1	-13.5	-13.7	-13.7	-13.9	-14.3	-15.1	-16.1	-16.3	-16.2	-16.0	-16.4	-16.7	-10.7	-16.7	-13.5
13	-17.3	-18.2	-19.1	-18.7	-19.0	-19.1	-19.4	-19.6	-19.5	-19.7	-19.6	-19.3	-19.0	-18.5	-18.3	-18.8	-18.9	-19.3	-19.6	-19.4	-19.5	-19.9	-19.9	-20.9	-17.3	-20.9	-19.2
14	-21.4	-20.7	-20.3	-20.4	-20.3	-19.4	-19.7	-19.6	-18.0	-15.8	-12.8	-8.5	-6.2	-6.0	-6.2	-5.9	-5.5	-5.2	-5.1	-4.9	-4.6	-4.4	-4.2	-3.9	-3.9	-21.4	-11.6
15	-4.0	-4.1	-3.7	-3.3	-3.0	-2.8	-2.5	-2.0	-1.3	-0.7	-0.4	0.0	0.2	0.6	0.9	0.9	0.9	0.9	1.1	0.9	0.9	0.8	0.3	-1.1	1.1	-4.1	-0.8
16	-1.4	-1.9	-1.0	-0.8	-0.6	-0.4	-0.4	-1.3	-0.7	-0.9	-1.0	-0.6	-0.3	-1.2	-3.8	-4.1	-3.5	-4.5	-8.0	-11.1	-9.3	-8.5	-8.4	-8.4	-0.3	-11.1	-3.4
17	-8.6	-9.3	-9.4	-10.3	-10.2	-10.4	-11.5	-13.4	-14.4	-15.2	-14.3	-14.0	-13.5	-13.3	-13.9	-14.7	-17.0	-18.2	-19.0	-19.5	-18.2	-18.1	-17.7	-17.9	-8.6	-19.5	-14.2
18	-19.0	-19.1	-19.6	-20.2	-20.0	-20.0	-19.9	-19.3	-19.5	-20.2	-20.6	-20.2	-19.7	-19.2	-19.3	-18.9	-19.5	-19.7	-19.6	-19.9	-20.2	-20.3	-20.4	-20.9	-18.9	-20.9	-19.8
19	-21.0	-21.0	-20.9	-21.3	-21.6	-22.5	-23.3	-23.2	-23.2	-23.3	-23.6	-23.5	-22.9	-22.8	-22.4	-22.5	-23.1	-24.0	-24.0	-23.8	-23.9	-24.4	-24.4	-23.9	-20.9	-24.4	-22.9
20	-24.0	-23.7	-23.5	-23.2	-23.0	-24.1	-23.8	-23.1	-23.5	-22.7	-22.8	-22.9	-21.7	-20.9	-21.2	-20.6	-19.6	-20.4	-20.5	-20.2	-19.3	-20.9	-21.1	-20.1	-19.3	-24.1	-21.9
21	-19.9	-19.1	-19.9	-20.2	-20.4	-20.3	-20.1	-20.3	-20.8	-21.0	-21.8	-22.9	-23.7	-23.9	-23.8	-23.9	-24.3	-24.2	-24.1	-24.8	-25.3	-25.9	-26.5	-27.2	-19.1	-27.2	-22.7
22	-27.7	-28.1	-28.1	-28.1	-28.1	-28.0	-27.7	-27.5	-27.4	-27.4	-27.4	-27.5	-27.4	-27.4	-27.6	-27.7	-28.0	-27.9	-28.1	-28.2	-28.5	-28.5	-28.5	-28.7	-27.4	-28.7	-27.9
23	-28.9	-29.0	-29.0	-28.9	-28.6	-29.0	-29.5	-29.2	-28.5	-28.9	-28.7	-28.4	-27.4	-26.5	-25.8	-25.0	-25.3	-25.7	-26.1	-25.4	-25.7	-25.3	-24.8	-25.3	-24.8	-29.5	-27.3
24	-24.9	-24.5	-24.0	-24.1	-24.0	-24.1	-23.7	-23.7	-23.8	-24.5	-24.5	-24.0	-23.8	-23.5	-23.3	-23.6	-24.0	-24.8	-25.1	-26.1	-26.4	-26.4	-26.9	-27.2	-23.3	-27.2	-24.6
25	-27.3	-27.7	-28.0	-29.0	-29.1	-28.9	-29.5	-29.7	-29.6	-28.5	-27.8	-26.5	-25.8	-25.7	-25.2	-24.9	-25.7	-26.1	-26.4	-27.0	-27.3	-27.6	-28.2	-27.4	-24.9	-29.7	-27.5
26	-28.1	-28.0	-27.5	-28.2	-29.1	-28.7	-28.0	-28.1	-27.7	-27.8	-26.5	-25.2	-24.2	-23.1	-23.5	-23.6	-24.5	-25.6	-26.0	-26.3	-26.3	-26.6	-26.7	-27.7	-23.1	-29.1	-26.5
27	-27.6	-27.1	-28.0	-28.8	-29.6	-29.8	-30.8	-31.2	-31.4	-31.7	-31.7	-31.8	-32.0	-31.7	-31.2	-31.4	-31.3	-31.4	-31.3	-31.1	-31.3	-31.1	-30.5	-30.4	-27.1	-32.0	-30.6
28	-30.0	-30.4	-30.8	-30.9	-31.1	-31.4	-32.0	-32.4	-32.5	-33.1	-33.4	-32.9	-32.0	-31.3	-30.8	-30.4	-30.7	-31.4	-31.5	-31.3	-31.8	-31.6	-31.5	-31.6	-30.0	-33.4	-31.5
29	-31.8	-31.6	-31.5	-31.6	-31.3	-31.4	-31.4	-31.3	-31.6	-31.3	-31.0	-29.9	-28.7	-27.6	-27.8	-27.2	-27.3	-27.9	-27.7	-28.0	-28.2	-28.9	-28.7	-28.8	-27.2	-31.8	-29.7
30	-28.1	-27.9	-28.2	-28.3	-28.6	-28.6	-28.4	-28.9	-29.0	-29.4	-26.8	-27.4	-26.9	-25.4	-24.9	-25.8	-26.5	-27.3	-27.9	-28.3	-28.0	-26.1	-25.5	-24.4	-24.4	-29.4	-27.4
31	-23.5	-22.9	-24.0	-21.7	-21.6	-19.4	-18.5	-17.6	-21.4	-20.5	-19.7	-18.9	-18.3	-18.9	-18.3	-21.1	-23.2	-22.9	-20.4	-21.1	-22.4	-23.6	-24.3	-24.2	-17.6	-24.3	-21.2
Max.	**0.7**	**0.5**	**1.2**	**0.5**	**0.1**	**0.7**	**1.7**	**1.0**	**1.0**	**0.8**	**1.0**	**1.5**	**1.5**	**1.8**	**1.7**	**1.8**	**1.7**	**1.2**	**1.5**	**1.2**	**0.9**	**0.8**	**0.5**	**1.0**	**1.8**		
Min.	**-31.8**	**-31.6**	**-31.5**	**-31.6**	**-31.3**	**-31.4**	**-32.0**	**-32.4**	**-32.5**	**-33.1**	**-33.4**	**-32.9**	**-32.0**	**-31.7**	**-31.2**	**-31.4**	**-31.3**	**-31.4**	**-31.5**	**-31.3**	**-31.8**	**-31.6**	**-31.5**	**-31.6**		**-33.4**	
Avg.	**-15.2**	**-15.2**	**-15.3**	**-15.4**	**-15.5**	**-15.5**	**-15.5**	**-15.6**	**-15.7**	**-15.6**	**-15.5**	**-15.2**	**-14.6**	**-14.1**	**-14.0**	**-14.2**	**-14.6**	**-15.1**	**-15.5**	**-15.9**	**-15.8**	**-15.8**	**-16.0**	**-16.0**			**-15.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-24.6	-25.4	-26.1	-26.4	-26.8	-27.2	-27.3	-27.4	-28.3	-28.9	-28.7	-28.1	-27.7	-27.3	-27.1	-27.2	-27.5	-28.0	-28.6	-28.8	-29.3	-29.3	-29.6	-29.5	-24.6	-29.6	-27.7
2	-28.5	-28.7	-29.2	-29.0	-29.9	-29.6	-29.4	-28.5	-28.6	-29.3	-28.5	-26.8	-25.5	-24.2	-23.5	-22.4	-23.9	-27.3	-28.9	-29.2	-29.2	-29.1	-29.7	-26.2	-22.4	-29.9	-27.7
3	-20.0	-20.2	-18.4	-18.1	-16.4	-14.4	-12.6	-11.8	-11.2	-10.9	-10.4	-9.9	-9.5	-8.9	-8.3	-8.3	-8.4	-8.3	-7.8	-7.1	-6.6	-6.4	-6.4	-6.3	-6.3	-20.2	-11.1
4	-6.2	-6.1	-5.9	-6.0	-6.0	-5.9	-5.7	-5.4	-5.4	-5.0	-4.6	-4.3	-4.0	-3.0	-2.7	-3.0	-2.8	-3.0	-2.8	-2.4	-2.0	-1.6	-1.5	-1.4	-1.4	-6.2	-4.0
5	-1.3	-1.2	-0.9	-0.6	-0.7	-0.8	-0.8	-0.3	-0.3	-0.3	-0.2	-0.5	-0.8	0.1	0.2	0.6	0.9	1.3	1.6	1.1	0.9	1.9	2.4	1.9	2.4	-1.3	0.2
6	1.5	1.1	0.8	0.9	0.4	0.1	-0.2	0.1	-0.3	-0.6	-2.2	-2.4	-2.8	-3.2	-3.5	-3.5	-3.6	-4.1	-5.0	-6.1	-5.7	-5.5	-5.5	-5.7	1.5	-6.1	-2.3
7	-5.5	-5.4	-5.2	-5.1	-5.6	-5.9	-5.6	-5.8	-6.2	-6.5	-6.9	-7.6	-7.8	-8.2	-6.7	-7.1	-7.5	-11.9	-12.2	-13.3	-15.1	-17.6	-19.7	-20.0	-5.1	-20.0	-9.1
8	-15.5	-15.8	-15.4	-15.0	-14.8	-15.2	-15.0	-15.3	-16.1	-14.7	-9.7	-6.2	-4.7	-4.2	-4.0	-3.6	-3.6	-3.4	-3.2	-2.8	-2.6	-2.2	-2.2	-2.3	-2.2	-16.1	-8.6
9	-2.1	-2.1	-1.8	-1.4	-1.5	-1.3	-0.8	0.0	-1.2	-1.4	-1.3	-0.9	-0.5	0.2	1.2	1.8	2.1	1.9	1.8	1.8	2.3	2.3	1.6	0.7	2.3	-2.1	0.1
10	0.5	-0.1	-0.1	0.1	0.3	0.7	0.9	1.0	0.2	-0.3	-0.1	-0.1	-0.1	0.1	0.8	0.7	0.9	0.9	0.3	0.4	0.5	0.5	0.6	0.5	1.0	-0.3	0.4
11	-0.2	-0.1	-0.4	-0.3	-0.2	-0.6	-1.1	-1.0	-0.6	-0.5	-0.7	-0.3	0.0	0.1	0.3	0.3	0.3	0.2	0.4	0.2	0.3	0.7	0.9	0.8	0.9	-1.1	-0.1
12	0.2	0.1	0.2	-0.2	-1.3	-1.2	-1.3	-1.1	-2.5	-3.2	-3.6	-3.5	-4.3	-4.8	-4.9	-5.1	-5.4	-6.7	-7.9	-9.0	-10.0	-12.1	-15.2	-14.3	0.2	-15.2	-4.9
13	-15.9	-17.5	-15.1	-13.4	-13.6	-11.5	-11.3	-11.0	-11.5	-7.1	-7.2	-4.1	-1.8	-1.4	-1.2	0.0	0.0	0.2	0.4	0.6	0.4	0.8	1.0	1.4	1.4	-17.5	-5.8
14	1.4	1.5	1.6	1.5	1.4	1.1	1.0	1.0	1.0	1.1	1.1	1.4	1.6	1.6	1.5	1.6	1.5	1.4	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.0	1.4
15	1.7	2.0	2.1	2.2	2.5	2.7	2.4	2.2	2.3	2.0	2.1	2.1	2.0	1.7	1.9	1.9	1.8	1.2	1.2	0.6	0.4	0.4	0.3	0.4	2.7	0.3	1.7
16	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	1.0	0.8	1.4	1.4	1.9	1.5	0.9	-0.4	-0.8	-0.8	-1.2	-1.4	-1.7	-2.5	1.9	-2.5	0.2
17	-2.2	-3.0	-2.9	-1.7	-1.0	-0.4	0.3	0.5	0.7	1.1	1.2	1.5	1.6	1.7	1.7	1.5	1.3	1.0	1.0	1.0	0.7	0.2	0.0	-0.1	1.7	-3.0	0.3
18	0.0	0.0	0.0	0.0	-0.1	0.0	0.1	0.2	0.2	0.5	0.9	1.0	1.3	1.4	1.0	0.3	0.1	0.0	-0.3	-0.4	-0.2	0.2	0.9	0.8	1.4	-0.4	0.3
19	0.3	-0.1	-0.5	-1.1	-1.5	-2.1	-2.7	-3.1	-3.4	-3.7	-3.3	-2.3	-2.1	-2.2	-1.8	-1.6	-1.5	-1.3	-1.5	-1.9	-2.2	-2.5	-3.1	-4.7	0.3	-4.7	-2.1
20	-3.9	-3.7	-3.8	-3.7	-3.6	-3.8	-4.0	-3.8	-3.7	-3.5	-3.0	-2.6	-2.4	-2.3	-2.1	-1.9	-2.3	-3.2	-4.0	-5.4	-6.4	-6.4	-6.4	-6.7	-1.9	-6.7	-3.8
21	-7.2	-8.3	-8.6	-9.0	-8.9	-9.5	-9.9	-9.8	-10.6	-11.2	-9.5	-8.8	-7.0	-5.9	-6.7	-5.9	-5.9	-6.6	-8.8	-9.3	-9.2	-8.7	-8.4	-11.3	-5.9	-11.3	-8.5
22	-10.4	-11.5	-12.8	-11.9	-8.9	-9.4	-10.1	-10.7	-9.6	-9.8	-7.5	-5.7	-4.5	-3.8	-5.0	-6.2	-7.3	-7.8	-6.9	-6.6	-6.3	-6.9	-7.1	-7.4	-3.8	-12.8	-8.1
23	-7.6	-7.3	-6.9	-6.6	-6.4	-5.9	-5.5	-6.4	-7.3	-6.6	-7.5	-6.6	-6.2	-5.7	-5.7	-5.5	-6.3	-7.0	-7.3	-7.1	-7.9	-7.9	-8.1	-10.1	-5.5	-10.1	-6.9
24	-10.8	-11.5	-11.6	-13.2	-13.6	-14.6	-13.8	-14.0	-14.0	-14.8	-12.6	-11.1	-8.7	-7.1	-6.8	-7.2	-8.2	-11.2	-15.2	-17.3	-14.6	-12.6	-11.6	-10.3	-6.8	-17.3	-11.9
25	-9.6	-9.7	-9.8	-9.8	-9.7	-9.5	-8.7	-7.7	-6.6	-6.8	-5.5	-3.8	-2.9	-4.4	-4.8	-5.3	-6.0	-6.8	-8.0	-10.7	-10.6	-11.7	-10.6	-8.4	-2.9	-11.7	-7.8
26	-9.4	-9.9	-8.9	-9.2	-10.5	-13.7	-14.9	-11.8	-11.8	-12.5	-10.7	-8.4	-6.5	-6.1	-5.6	-5.1	-6.8	-7.0	-7.0	-7.3	-6.9	-6.8	-6.4	-5.7	-5.1	-14.9	-8.7
27	-5.8	-5.4	-4.2	-4.6	-6.8	-8.2	-10.6	-11.8	-13.3	-14.3	-15.1	-16.0	-16.8	-17.0	-17.1	-17.2	-17.5	-17.7	-18.1	-18.5	-18.6	-18.9	-19.1	-19.4	-4.2	-19.4	-13.8
28	-19.7	-19.9	-20.1	-19.8	-20.1	-20.2	-20.0	-20.6	-20.7	-19.9	-19.2	-19.0	-18.8	-17.9	-16.1	-15.8	-16.9	-17.3	-18.1	-18.9	-19.5	-20.2	-21.5	-20.8	-15.8	-21.5	-19.2
Max.	**1.7**	**2.0**	**2.1**	**2.2**	**2.5**	**2.7**	**2.4**	**2.2**	**2.3**	**2.0**	**2.1**	**2.1**	**2.0**	**1.7**	**1.9**	**1.9**	**2.1**	**1.9**	**1.8**	**1.8**	**2.3**	**2.3**	**2.4**	**1.9**	**2.7**		
Min.	**-28.5**	**-28.7**	**-29.2**	**-29.0**	**-29.9**	**-29.6**	**-29.4**	**-28.5**	**-28.6**	**-29.3**	**-28.7**	**-28.1**	**-27.7**	**-27.3**	**-27.1**	**-27.2**	**-27.5**	**-28.0**	**-28.9**	**-29.2**	**-29.3**	**-29.3**	**-29.7**	**-29.5**		**-29.9**	
Avg.	**-7.2**	**-7.4**	**-7.3**	**-7.2**	**-7.2**	**-7.4**	**-7.4**	**-7.2**	**-7.4**	**-7.4**	**-6.8**	**-6.2**	**-5.6**	**-5.3**	**-5.1**	**-5.1**	**-5.4**	**-6.1**	**-6.6**	**-7.0**	**-7.0**	**-7.1**	**-7.3**	**-7.3**			**-6.7**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-20.6	-20.8	-21.1	-20.6	-20.7	-21.1	-20.5	-20.4	-20.9	-21.0	-19.6	-17.5	-17.4	-16.0	-16.3	-14.9	-12.5	-10.9	-10.7	-10.5	-10.8	-10.8	-10.1	-9.6	-9.6	-21.1	-16.5
2	-9.1	-8.8	-8.8	-8.8	-8.6	-8.1	-7.7	-7.4	-6.9	-6.0	-5.2	-4.5	-3.9	-3.5	-3.3	-3.3	-3.3	-3.2	-3.1	-3.0	-2.8	-2.7	-2.6	-2.5	-2.5	-9.1	-5.3
3	-2.6	-2.9	-2.7	-2.6	-2.5	-2.9	-3.6	-3.7	-3.6	-3.3	-2.9	-2.6	-2.4	-2.4	-3.4	-3.7	-4.2	-4.9	-4.8	-5.3	-5.9	-6.4	-6.2	-6.2	-2.4	-6.4	-3.8
4	-6.1	-6.1	-5.9	-5.7	-5.2	-4.6	-4.7	-4.7	-4.3	-4.1	-3.6	-3.3	-2.7	-2.0	-2.1	-2.4	-2.7	-2.9	-2.9	-2.9	-2.8	-2.9	-2.9	-2.9	-2.0	-6.1	-3.8
5	-2.9	-2.9	-2.9	-3.0	-3.0	-3.0	-3.4	-3.8	-3.9	-4.1	-3.9	-3.2	-2.9	-2.3	-2.0	-2.3	-2.6	-2.8	-3.3	-3.8	-3.9	-3.9	-4.3	-4.7	-2.0	-4.7	-3.3
6	-5.6	-4.7	-6.5	-6.9	-6.0	-6.4	-9.8	-14.1	-17.6	-16.1	-10.8	-7.5	-6.9	-7.1	-7.4	-7.0	-7.4	-7.9	-9.4	-9.9	-9.6	-9.5	-9.6	-9.6	-4.7	-17.6	-8.9
7	-9.7	-9.5	-9.9	-9.4	-9.5	-9.6	-9.6	-9.5	-9.6	-9.8	-10.3	-11.0	-10.5	-10.0	-11.0	-11.8	-12.2	-13.2	-14.5	-14.7	-15.7	-16.5	-17.7	-18.6	-9.4	-18.6	-11.8
8	-18.2	-17.5	-17.0	-16.8	-16.6	-16.3	-16.4	-16.6	-17.0	-17.3	-17.1	-16.4	-15.9	-15.4	-15.1	-14.8	-14.9	-15.1	-15.6	-16.5	-17.3	-18.4	-18.8	-19.3	-14.8	-19.3	-16.7
9	-19.9	-19.8	-20.2	-20.5	-21.2	-21.8	-22.1	-22.7	-21.9	-21.2	-20.3	-18.9	-18.1	-17.7	-17.2	-16.7	-16.7	-16.5	-16.8	-17.1	-17.7	-17.7	-18.3	-18.4	-16.5	-22.7	-19.1
10	-18.7	-18.7	-18.6	-18.5	-18.5	-18.6	-17.1	-16.2	-15.7	-15.3	-14.8	-11.9	-11.8	-11.0	-10.6	-10.2	-10.6	-10.1	-10.5	-9.3	-8.8	-8.4	-8.3	-8.5	-8.3	-18.7	-13.4
11	-8.1	-7.8	-7.7	-7.2	-6.6	-6.5	-5.8	-5.4	-5.4	-5.5	-5.6	-5.3	-5.5	-4.7	-4.2	-4.0	-4.0	-4.1	-4.3	-4.3	-4.3	-4.2	-4.1	-4.7	-4.0	-8.1	-5.4
12	-4.0	-3.6	-3.3	-3.4	-4.4	-4.4	-4.1	-3.7	-3.4	-2.9	-2.5	-1.7	-1.5	-0.9	-0.2	-0.6	-0.3	-2.4	-4.3	-5.0	-5.0	-5.2	-5.6	-5.6	-0.2	-5.6	-3.2
13	-5.9	-5.4	-5.4	-5.2	-5.1	-4.9	-5.4	-6.2	-5.3	-4.5	-3.3	-1.7	-3.5	-5.2	-3.7	-3.9	-4.2	-5.0	-7.0	-8.6	-9.5	-10.2	-9.5	-10.5	-1.7	-10.5	-5.8
14	-11.5	-11.8	-12.0	-13.0	-13.2	-13.4	-14.6	-14.9	-14.4	-14.1	-13.8	-12.2	-11.1	-9.5	-10.2	-9.8	-9.4	-10.3	-12.1	-15.0	-15.8	-16.4	-17.1	-16.7	-9.4	-17.1	-13.0
15	-16.1	-16.9	-18.5	-18.7	-19.9	-20.6	-21.6	-21.4	-18.9	-16.0	-13.4	-11.1	-8.6	-6.7	-7.2	-6.0	-7.5	-9.6	-11.8	-16.9	-19.7	-20.9	-20.7	-18.4	-6.0	-21.6	-15.3
16	-11.9	-11.5	-12.0	-13.0	-12.0	-11.9	-12.9	-11.7	-8.8	-7.9	-5.8	-5.1	-4.3	-3.5	-4.0	-4.0	-4.6	-4.4	-6.5	-9.0	-9.8	-8.6	-8.7	-9.4	-3.5	-13.0	-8.4
17	-9.2	-8.7	-8.4	-8.2	-8.6	-8.8	-8.9	-8.6	-7.6	-6.5	-5.8	-5.4	-5.0	-4.7	-4.5	-4.9	-4.7	-4.7	-4.9	-5.0	-4.9	-4.8	-4.7	-4.7	-4.5	-9.2	-6.3
18	-4.9	-5.1	-5.0	-4.8	-4.9	-5.4	-6.3	-5.6	-5.4	-5.2	-4.3	-3.8	-3.7	-3.2	-3.1	-2.6	-2.5	-2.7	-3.1	-3.6	-4.4	-6.6	-10.6	-11.8	-2.5	-11.8	-4.9
19	-10.0	-8.9	-9.6	-9.8	-9.5	-7.7	-9.6	-10.5	-10.0	-6.8	-4.7	-3.7	-3.4	-3.3	-3.1	-3.2	-3.2	-3.2	-3.3	-3.4	-3.5	-3.3	-3.5	-3.4	-3.1	-10.5	-5.9
20	-3.4	-3.5	-3.5	-3.8	-4.0	-3.7	-3.6	-3.5	-3.5	-2.7	-1.7	-0.7	-0.1	0.4	0.2	-1.7	-3.1	-4.7	-6.3	-7.4	-8.3	-9.0	-9.2	-9.5	0.4	-9.5	-4.0
21	-9.6	-9.7	-9.7	-9.6	-9.9	-10.2	-10.4	-10.7	-10.6	-10.2	-9.9	-9.3	-8.5	-7.2	-6.3	-6.5	-6.1	-6.0	-6.8	-7.9	-8.3	-8.8	-9.1	-9.8	-6.0	-10.7	-8.8
22	-10.6	-10.7	-10.0	-11.2	-11.6	-12.0	-12.0	-11.8	-10.9	-10.3	-9.6	-9.4	-8.6	-7.9	-7.4	-7.3	-7.1	-6.8	-7.0	-7.7	-8.3	-9.2	-9.6	-10.2	-6.8	-12.0	-9.5
23	-10.8	-11.6	-11.4	-12.6	-12.0	-11.6	-11.4	-12.7	-12.1	-10.1	-8.3	-6.5	-4.3	-2.3	-3.8	-4.0	-3.8	-4.4	-6.9	-9.0	-10.8	-11.3	-8.9	-8.6	-2.3	-12.7	-8.7
24	-9.2	-9.6	-9.5	-10.2	-10.6	-10.9	-11.2	-11.7	-12.0	-10.9	-9.4	-7.8	-7.2	-5.9	-5.5	-5.3	-5.9	-5.9	-6.6	-7.4	-7.9	-8.8	-9.1	-9.4	-5.3	-12.0	-8.7
25	-9.9	-11.1	-10.7	-10.5	-11.0	-10.8	-10.5	-10.9	-11.2	-10.4	-11.0	-10.1	-8.6	-7.8	-7.1	-6.5	-7.1	-7.4	-7.4	-8.2	-8.8	-9.1	-10.0	-10.6	-6.5	-11.2	-9.4
26	-10.9	-11.8	-12.3	-12.8	-13.3	-13.3	-13.6	-13.7	-13.7	-12.5	-11.5	-10.8	-9.9	-8.8	-7.6	-6.8	-6.5	-5.7	-6.8	-10.2	-11.9	-12.4	-12.2	-13.6	-5.7	-13.7	-10.9
27	-13.4	-15.3	-13.4	-12.2	-11.9	-11.4	-11.6	-10.5	-8.0	-6.9	-3.6	-1.9	-1.2	0.1	-0.1	3.6	4.2	3.2	0.7	-3.7	-9.8	-11.6	-9.9	-8.2	4.2	-15.3	-6.4
28	-3.8	-1.4	-2.1	-3.3	-2.6	-3.7	-3.8	-5.0	-2.6	0.1	1.5	4.2	4.0	5.6	5.4	5.3	3.7	4.3	1.4	-2.6	-7.6	-9.5	-8.0	-6.7	5.6	-9.5	-1.1
29	-6.7	-6.0	-6.3	-7.1	-6.6	-6.3	-6.9	-7.4	-6.1	-4.8	-2.2	0.9	2.4	2.9	2.5	2.9	3.8	1.2	-1.8	-5.0	-8.7	-11.8	-9.9	-5.4	3.8	-11.8	-3.8
30	-4.6	-4.5	-3.7	-2.9	-2.3	-1.9	-1.4	-1.3	-1.2	-1.2	-0.9	-0.6	-0.3	-0.2	-0.4	-0.6	-0.8	-0.9	-1.1	-1.1	-0.9	-0.8	-0.8	-0.6	-0.2	-4.6	-1.5
31	-0.6	-0.5	-0.6	-0.6	-0.6	-0.7	-0.7	-0.8	-0.7	-1.8	-2.0	-1.5	-1.5	-1.6	-1.4	-1.6	-2.4	-3.1	-3.4	-3.6	-4.0	-4.5	-4.9	-4.7	-0.5	-4.9	-2.0
Max.	**-0.6**	**-0.5**	**-0.6**	**-0.6**	**-0.6**	**-0.7**	**-0.7**	**-0.8**	**-0.7**	**0.1**	**1.5**	**4.2**	**4.0**	**5.6**	**5.4**	**5.3**	**4.2**	**4.3**	**1.4**	**-1.1**	**-0.9**	**-0.8**	**-0.8**	**-0.6**	**5.6**		
Min.	**-20.6**	**-20.8**	**-21.1**	**-20.6**	**-21.2**	**-21.8**	**-22.1**	**-22.7**	**-21.9**	**-21.2**	**-20.3**	**-18.9**	**-18.1**	**-17.7**	**-17.2**	**-16.7**	**-16.7**	**-16.5**	**-16.8**	**-17.1**	**-19.7**	**-20.9**	**-20.7**	**-19.3**		**-22.7**	
Avg.	**-9.3**	**-9.3**	**-9.3**	**-9.5**	**-9.4**	**-9.4**	**-9.7**	**-9.9**	**-9.5**	**-8.7**	**-7.6**	**-6.5**	**-5.9**	**-5.2**	**-5.2**	**-5.0**	**-5.1**	**-5.5**	**-6.5**	**-7.7**	**-8.6**	**-9.2**	**-9.2**	**-9.1**			**-7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-3.9	-4.0	-4.1	-4.3	-4.5	-5.0	-4.8	-4.7	-4.4	-4.4	-2.0	-0.5	-1.4	-2.2	-2.3	-2.7	-3.1	-3.4	-3.6	-3.9	-4.6	-4.9	-5.3	-5.4	-0.5	-5.4	-3.7
2	-5.0	-5.2	-5.5	-5.4	-5.9	-6.6	-6.7	-7.2	-6.9	-7.2	-6.5	-5.9	-1.7	-0.3	-0.5	-3.3	-2.8	-2.2	-2.8	-5.2	-4.7	-4.0	-4.0	-3.6	-0.3	-7.2	-4.5
3	-2.8	-2.6	-2.2	-2.0	-1.9	-1.7	-1.5	-1.3	-0.7	-0.4	-0.2	-0.2	-0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.6	0.7	0.7	-2.8	-0.6
4	0.3	0.4	0.7	0.6	0.8	1.0	1.1	1.1	1.3	1.9	2.8	3.0	3.3	5.1	6.0	5.2	5.2	2.3	1.4	1.5	1.6	1.2	1.6	1.5	6.0	0.3	2.1
5	1.1	0.5	-0.2	-1.6	-2.3	-3.5	-4.5	-5.3	-5.8	-5.0	-4.6	-4.5	-4.2	-3.6	-3.3	-3.4	-4.0	-4.6	-5.1	-6.8	-7.6	-8.4	-8.9	-9.6	1.1	-9.6	-4.4
6	-10.3	-11.6	-12.8	-13.5	-13.8	-13.8	-14.2	-14.4	-13.4	-12.3	-10.7	-9.7	-8.3	-7.3	-6.1	-5.5	-5.1	-4.8	-5.5	-7.6	-8.3	-8.2	-9.5	-9.1	-4.8	-14.4	-9.8
7	-9.5	-10.0	-8.9	-8.3	-7.8	-4.2	-4.8	-6.9	-4.8	-2.2	1.7	5.8	6.1	4.9	3.4	2.7	2.5	2.1	1.4	0.7	0.4	0.5	0.7	0.6	6.1	-10.0	-1.4
8	0.7	0.7	0.6	0.5	0.1	-0.6	-0.6	-0.5	-0.1	0.1	0.6	0.3	0.3	0.5	0.5	0.3	0.1	-0.2	-0.6	-0.8	-0.9	-0.9	-0.9	-0.8	0.7	-0.9	-0.1
9	-0.6	-0.7	-0.9	-0.9	-1.0	-1.1	-1.1	-0.9	-0.8	-0.6	-0.4	-0.2	-0.2	0.1	0.4	0.4	0.4	0.1	0.0	-1.6	-3.4	-3.7	-2.7	-2.7	0.4	-3.7	-0.9
10	-2.9	-2.9	-2.6	-2.3	-2.2	-2.4	-2.9	-3.5	-3.6	-3.4	-3.0	-3.0	-2.6	-2.5	-2.5	-2.4	-2.5	-2.5	-3.7	-5.0	-7.2	-9.8	-10.9	-12.1	-2.2	-12.1	-4.1
11	-13.9	-11.7	-12.5	-11.0	-9.5	-8.5	-7.8	-7.0	-5.5	-4.2	-2.5	-1.5	-1.1	-1.3	-2.0	-2.0	-2.4	-2.4	-2.3	-2.1	-2.0	-2.2	-2.1	-2.3	-1.1	-13.9	-5.0
12	-2.3	-2.2	-2.4	-2.2	-2.0	-1.5	-1.3	-1.2	-1.2	-1.1	-0.7	-0.3	-0.4	-0.8	-1.0	-1.0	-1.1	-1.3	-1.5	-1.9	-2.5	-2.9	-3.3	-3.6	-0.3	-3.6	-1.7
13	-4.0	-5.7	-5.0	-5.7	-5.5	-4.1	-3.4	-3.8	-4.2	-4.3	-4.5	-5.1	-5.3	-5.1	-5.0	-4.8	-4.6	-4.7	-5.4	-6.6	-7.7	-8.5	-9.3	-9.6	-3.4	-9.6	-5.5
14	-9.6	-9.9	-10.4	-10.9	-11.1	-11.6	-11.5	-11.6	-11.3	-10.5	-10.0	-9.1	-8.2	-7.4	-6.4	-6.1	-6.4	-6.2	-6.6	-7.3	-8.0	-8.7	-9.2	-9.5	-6.1	-11.6	-9.1
15	-10.0	-10.4	-10.8	-11.2	-11.8	-12.6	-13.2	-13.1	-13.0	-12.3	-10.0	-10.6	-9.9	-9.9	-9.5	-9.2	-8.1	-8.4	-8.8	-9.6	-11.3	-11.7	-13.7	-13.4	-8.1	-13.7	-10.9
16	-12.4	-12.6	-11.2	-7.9	-7.4	-7.1	-6.8	-6.1	-5.3	-4.8	-4.0	-3.4	-2.8	-3.1	-2.8	-2.0	-1.8	-1.9	-2.1	-1.7	-1.5	-1.6	-1.4	-1.5	-1.4	-12.6	-4.7
17	-1.9	-1.6	-1.4	-1.3	-1.1	-1.2	-2.4	-1.4	-1.0	-0.5	-0.2	0.6	0.3	1.5	1.0	1.7	2.2	1.2	0.8	0.0	-2.8	-4.7	-6.2	-6.8	2.2	-6.8	-1.1
18	-6.0	-5.1	-5.5	-7.1	-7.7	-8.1	-8.4	-6.2	-2.8	0.8	2.3	6.3	7.0	6.7	5.7	5.1	5.1	4.6	2.5	-0.1	-0.9	-3.4	-2.8	-3.4	7.0	-8.4	-0.9
19	-4.9	-5.2	-5.0	-5.6	-5.9	-6.2	-6.3	-6.2	-2.8	0.8	2.3	6.3	7.0	6.7	5.7	5.1	5.1	4.6	2.5	-0.1	-0.9	-3.4	-2.8	-3.4	7.0	-6.3	-0.5
20	-4.9	-5.2	-5.0	-5.6	-5.9	-6.2	-6.3	-6.3	-6.2	-5.9	-4.6	-2.4	-2.1	-3.4	-3.3	-3.0	-3.3	-3.4	-4.1	-4.7	-5.7	-6.0	-6.1	-6.2	-2.1	-6.3	-4.8
21	-6.2	-6.4	-6.4	-6.4	-6.4	-6.8	-7.4	-7.0	-4.6	-2.4	-2.4	1.2	-0.6	-0.6	0.0	0.2	-0.1	-1.0	-1.3	-1.3	-1.4	-1.5	-1.5	-1.4	1.2	-7.4	-3.0
22	-1.3	-1.2	-1.1	-0.4	0.1	0.5	0.9	1.2	1.7	1.8	1.6	0.7	0.8	0.9	1.9	2.2	0.7	0.1	0.4	0.5	-0.9	-0.4	-0.6	-1.0	2.2	-1.3	0.4
23	-0.9	-0.6	-0.4	-0.8	-0.7	-1.4	-2.8	-4.0	-1.3	2.0	1.8	2.1	5.3	8.1	7.6	6.6	5.9	4.6	3.2	0.9	-1.6	-1.2	-0.8	-0.9	8.1	-4.0	1.3
24	-1.7	-2.0	-2.5	-1.9	-2.2	-3.2				3.6	3.6	4.0	5.3	5.7	7.4	8.2	7.0	5.9	2.8	0.7	-1.0	-1.5	-0.9	-1.1	8.2	-3.2	1.7
25	-6.2	-6.4	-6.7	-7.1	-7.4	-7.6	-7.5	-6.8	-5.4	-2.7	-0.9	-0.6	0.9	1.7	3.2	3.7	3.6	0.9	-0.3	-0.3	-0.7	-0.8	-0.8	-1.0	3.7	-7.6	-2.3
26	-0.6	-0.6	-0.6	-0.2	-0.2	-0.3	0.3	-6.8	-5.4	2.2	2.9	3.5	3.6	5.2	5.8	5.9	5.5	4.0	4.0	2.6	0.3	0.8	0.2	0.0	5.9	-6.8	1.3
27	0.0	0.5	0.2	0.3	-0.7	-0.8	-0.2	-0.2	1.3	2.9	3.6	4.4	4.7	5.4	4.4	4.1	3.8	3.5	2.8	2.1	1.4	0.5	0.0	-1.1	5.4	-1.1	1.8
28	-1.8	-2.5	-3.3	-4.2	-4.6	-5.5	-5.4	-4.2	-3.5	-2.0	0.8	1.3	1.9	3.4	4.5	4.0	3.4	2.6	3.5	-0.7	-2.2	-4.3	-5.9	-6.9	4.5	-6.9	-1.3
29	-7.7	-8.6	-8.1	-6.6	-6.2	-5.3	-4.6	-3.5	-1.6	0.1	0.7	1.3	2.0	3.0	3.8	3.8	3.1	2.7	2.0	1.2	0.1	-1.2	-1.4	-2.9	3.8	-8.6	-1.4
30	-3.2	-5.0	-5.6	-5.7	-7.3	-9.2	-9.6	-6.4	-4.8	-1.5	0.3	1.6	2.0	3.2	3.9	3.5	4.4	5.2	3.2	2.1	1.0	0.6	0.3	0.3	5.2	-9.6	-1.1
Max.	**1.1**	**0.7**	**0.7**	**0.6**	**0.8**	**1.0**	**1.1**	**1.2**	**1.7**	**3.6**	**3.6**	**6.3**	**7.0**	**8.1**	**7.6**	**8.2**	**7.0**	**5.9**	**4.0**	**2.6**	**1.6**	**1.2**	**1.6**	**1.5**	**8.2**		
Min.	**-13.9**	**-12.6**	**-12.8**	**-13.5**	**-13.8**	**-13.8**	**-14.2**	**-14.4**	**-13.4**	**-12.3**	**-10.7**	**-10.6**	**-9.9**	**-9.9**	**-9.5**	**-9.2**	**-8.1**	**-8.4**	**-8.8**	**-9.6**	**-11.3**	**-11.7**	**-13.7**	**-13.4**		**-14.4**	
Avg.	**-4.4**	**-4.6**	**-4.7**	**-4.6**	**-4.7**	**-4.8**	**-5.0**	**-5.0**	**-4.0**	**-2.4**	**-1.4**	**-0.5**	**0.1**	**0.5**	**0.7**	**0.6**	**0.4**	**-0.1**	**-0.8**	**-1.8**	**-2.7**	**-3.3**	**-3.6**	**-3.9**			**-2.5**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.1	-0.4	-0.6	-0.6	-0.5	0.1	0.6	1.1	1.8	2.6	3.3	3.7	3.8	3.8	4.1	4.2	4.3	4.1	3.9	3.5	2.2	1.8	1.3	1.1	4.3	-0.6	2.1
2	1.1	1.5	1.4	1.2	0.7	0.6	1.4	1.1	1.8	2.6	3.3	3.7	3.8	3.8	4.1	4.2	4.3	4.1	3.9	3.5	2.2	1.8	1.3	1.1	4.3	0.6	2.4
3	1.1	1.5	1.4	1.2	0.7	0.6	1.4	3.0	3.4	4.3	4.8	6.4	7.0	6.9	6.8	6.8	6.7	5.4	4.9	3.2	2.0	1.5	0.9	0.8	7.0	0.6	3.4
4	1.0	1.0	0.8	0.3	0.3	1.3	1.4	1.6	1.9	1.5	2.0	1.6	1.7	2.1	2.1	2.3	2.1	1.9	1.9	1.7	1.4	1.2	0.9	0.7	2.3	0.3	1.4
5	0.8	0.7	0.4	0.5	0.7	0.8	1.1	1.6	1.9	2.2	2.6	4.1	4.0	3.4	4.0	3.7	3.7	3.4	3.3	2.5	1.9	1.4	0.8	0.6	4.1	0.4	2.1
6	0.6	0.3	0.2	0.3	0.2	0.2	0.5	1.5	1.2	1.8	2.1	1.6	2.1	2.3	2.0	1.9	1.8	1.1	0.9	0.1	-0.7	-1.6	-1.9	-2.2	2.3	-2.2	0.7
7	-2.5	-2.9	-3.2	-3.6	-3.6	-3.8	-3.9	-3.6	-3.1	-2.8	-2.2	-1.8	-2.1	-1.9	-2.1	-2.1	-2.0	-2.0	-1.9	-2.2	-2.6	-2.9	-3.8	-8.0	-1.8	-8.0	-2.9
8	-9.9	-9.9	-9.6	-10.1	-11.0	-10.1	-8.5	-4.8	-1.4	0.4	1.5	2.0	2.0	1.5	1.7	1.9	2.3	2.9	2.6	2.3	2.3	2.3	2.3	2.5	2.9	-11.0	-1.9
9	2.1	1.8	1.7	1.9	1.9	2.0	2.3	2.6	3.4	4.3	4.4	5.2	5.6	5.3	5.4	5.4	6.3	6.2	4.6	3.7	2.5	1.2	-0.3	0.4	6.3	-0.3	3.3
10	2.3	2.6	2.8	2.1	1.6	1.2	1.2	2.5	4.5	6.5	8.6	8.2	9.0	8.9	6.5	4.6	6.5	6.1	6.0	3.9	3.2	2.6	2.5	2.1	9.0	1.2	4.4
11	1.5	0.9	0.3	0.3	0.2	-0.5	-0.5	1.3	2.8	4.4	6.9	7.2	7.3	7.9	7.9	8.1	8.9	8.4	5.6	4.1	4.7	3.8	3.2	3.1	8.9	-0.5	4.1
12	3.5	3.5	3.1	4.3	3.7	2.9	3.5	4.6	5.4	6.3	7.3	8.3	8.8	9.2	9.3	9.5	9.3	8.9	8.1	7.2	6.4	5.4	4.4	3.1	9.5	2.9	6.1
13	3.0	2.9	2.0	1.4	0.9	0.6	2.0	4.7	5.4	6.1	7.1	8.3	8.6	9.0	9.8	9.9	9.8	8.7	7.6	7.0	5.4	3.7	0.7	0.1	9.9	0.1	5.2
14	-0.1	-0.8	-1.4	-1.8	-0.5	0.9	1.7	5.5	5.7	6.8	8.0	8.5	9.1	9.3	9.1	8.4	7.8	7.3	6.5	5.3	4.4	2.9	1.9	2.0	9.3	-1.8	4.4
15	1.7	1.0	1.3	1.5	1.7	1.5	2.3	4.8	5.5	5.3	6.4	8.5	8.5	10.5	11.6	10.8	10.0	9.2	8.0	7.5	5.4	3.4	2.5	3.4	11.6	1.0	5.5
16	2.6	1.7	1.3	1.0	0.8	0.6	1.0	2.3	3.9	6.0	6.1	8.1	8.7	8.8	9.3	9.8	8.9	7.9	7.9	7.1	5.8	2.3	-1.8	-2.6	9.8	-2.6	4.5
17	-2.5	-3.4	-2.8	-2.3	-2.4	-1.0	-0.3	2.6	4.8	5.4	6.1	6.3	6.1	6.5	6.5	6.2	6.2	5.6	5.2	4.2	2.7	2.3	2.0	1.8	6.5	-3.4	2.7
18	1.6	1.5	1.3	1.3	1.3	1.3	1.2	2.1	3.2	3.7	3.9	3.9	4.1	3.9	4.2	5.8	6.2	6.0	5.2	4.3	3.2	1.6	1.1	1.0	6.2	1.0	3.0
19	0.5	-1.4	-2.8	-3.6	-4.5	-3.7	-1.0	0.0	1.7	2.8	2.7	2.6	4.2	4.8	4.9	4.2	1.3	0.7	0.6	0.6	0.5	0.5	0.7	0.7	4.9	-4.5	0.7
20	0.8	0.9	1.0	1.1	1.2	1.4	1.7	2.0	2.7	3.3	3.7	4.7	5.7	6.1	6.4	6.4	6.1	5.6	5.5	5.6	5.0	4.3	3.9	3.8	6.4	0.8	3.7
21	3.3	3.0	2.6	2.1	1.8	1.8	1.8	1.8	2.1	2.4	3.3	4.5	5.0	5.7	6.3	6.4	6.9	6.2	6.0	6.6	6.3	5.6	5.0	4.3	6.9	1.8	4.2
22	4.2	4.2	3.7	3.3	3.0	3.1	3.4	4.2	5.1	6.2	6.9	7.8	8.7	10.0	11.0	12.0	12.6	12.9	13.0	12.0	10.3	8.9	7.8	5.4	13.0	3.0	7.5
23	4.7	5.5	4.7	3.5	2.6	3.2	5.7	8.0	9.7	11.9	13.9	15.5	17.0	17.9	19.2	19.3	20.1	20.0	18.2	17.8	15.8	13.6	10.2	10.5	20.1	2.6	12.0
24	8.6	8.1	7.6	7.3	5.9	7.2	9.0	12.3	14.2	15.1	17.8	19.0	19.8	20.1	20.5	21.3	20.7	20.0	19.3	18.1	17.0	14.2	11.0	9.7	21.3	5.9	14.3
25	8.2	8.5	8.2	7.4	7.1	8.6	11.4	13.5	14.6	15.7	17.1	18.6	19.1	20.0	21.0	20.1	20.7	20.6	20.2	19.3	18.3	14.0	10.6	9.9	21.0	7.1	14.7
26	8.5	7.7	7.7	8.1	8.8	8.9	11.7	13.9	15.2	17.2	19.2	21.0	22.4	23.1	23.8	24.3	24.2	23.4	22.3	21.2	20.1	18.3	16.3	15.6	24.3	7.7	16.8
27	15.5	13.9	12.5	12.9	13.2	12.6	11.9	11.8	12.4	13.7	15.1	16.7	18.1	17.7	17.7	19.0	19.9	20.4	20.0	18.3	17.4	15.4	13.7	14.0	20.4	11.8	15.6
28	13.0	10.3	9.5	8.9	5.9	9.1	12.4	14.0	14.1	14.8	16.0	17.3	18.5	19.8	20.6	21.5	21.9	21.6	20.6	19.5	18.5	15.2	12.7	11.2	21.9	5.9	15.3
29	9.7	10.0	10.5	9.8	9.6	9.6	11.6	12.6	13.8	14.7	15.6	16.1	16.5	16.7	16.7	16.5	16.8	16.4	15.9	14.8	13.5	11.2	8.6	7.6	16.8	7.6	13.1
30	7.3	6.6	5.2	3.6	2.4	3.1	7.7	10.6	12.0	12.2	12.7	13.2	14.6	15.2	14.8	14.3	14.1	13.2	11.8	10.6	9.7	8.9	7.8	6.9	15.2	2.4	9.9
31	7.8	7.6	6.9	6.4	6.5	6.6	6.1	5.9	5.7	5.3	4.9	4.7	4.8	4.4	4.9	5.0	5.1	5.1	5.2	5.1	5.3	5.0	4.6	4.6	7.8	4.4	5.5
Max.	**15.5**	**13.9**	**12.5**	**12.9**	**13.2**	**12.6**	**12.4**	**14.0**	**15.2**	**17.2**	**19.2**	**21.0**	**22.4**	**23.1**	**23.8**	**24.3**	**24.2**	**23.4**	**22.3**	**21.2**	**20.1**	**18.3**	**16.3**	**15.6**	**24.3**		
Min.	**-9.9**	**-9.9**	**-9.6**	**-10.1**	**-11.0**	**-10.1**	**-8.5**	**-4.8**	**-3.1**	**-2.8**	**-2.2**	**-1.8**	**-2.1**	**-1.9**	**-2.1**	**-2.1**	**-2.0**	**-2.0**	**-1.9**	**-2.2**	**-2.6**	**-2.9**	**-3.8**	**-8.0**		**-11.0**	
Avg.	**3.2**	**2.9**	**2.5**	**2.3**	**1.9**	**2.3**	**3.3**	**4.7**	**5.7**	**6.5**	**7.5**	**8.2**	**8.8**	**9.1**	**9.4**	**9.4**	**9.5**	**9.1**	**8.5**	**7.7**	**6.8**	**5.5**	**4.2**	**3.7**			**5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.3	4.2	3.9	2.9	3.0	3.3	4.5	5.0	5.8	6.7	7.4	8.0	9.4	10.7	12.4	13.4	13.1	14.5	13.1	12.6	12.4	11.1	9.2	7.2	14.5	2.9	8.3
2	3.4	2.6	3.3	3.7	4.0	4.7	7.5	9.8	11.4	12.8	14.7	15.2	16.0	16.3	16.5	17.2	17.2	17.4	16.3	15.7	14.4	12.6	10.7	9.7	17.4	2.6	11.4
3	7.6	7.5	6.6	6.0	5.6	5.4	5.6	6.4	7.1	7.8	9.0	10.6	11.4	12.0				12.8	12.2	11.3	9.9	8.5	7.3	6.7	12.8	5.4	8.4
4	4.1	3.3	2.3	1.8	1.7	2.4	3.8	5.2				10.3	11.2	12.1	12.8	13.2	13.2	12.9	12.4	11.4	10.2	8.7	7.6	7.0	13.2	1.7	8.0
5	5.9	4.6	3.7	3.2	2.8	2.9	4.4	5.9	7.2	8.4	9.5	10.7	11.5	12.5	13.0	13.2	13.7	14.0	14.0	13.3	11.9	10.0	4.9	2.8	14.0	2.8	8.5
6	2.3	4.5	1.5	1.2	0.8	1.0	4.8	7.7	9.9	11.5	13.3	14.1	14.7	15.2	15.6	15.5	15.2	14.6	13.7	12.6	11.3	10.1	9.0	7.6	15.6	0.8	9.5
7	6.8	6.3	6.2	6.4	6.4	5.7	6.2	7.0	7.3	7.3	7.3	7.5	7.3	8.0	7.6	6.6	6.2	5.7	5.5	5.5	5.4	5.5	5.3	5.3	8.0	5.3	6.4
8	5.4	5.4	5.4	5.3	5.3	5.1	5.3	5.6	6.0	6.7	7.1	7.6	8.3	8.4	8.5	8.4	8.3	8.6	8.7	8.0	7.7	7.3	7.7	7.6	8.7	5.1	7.0
9	7.8	7.5	7.4	7.2	6.9	6.8	6.6	6.7		8.0	8.6	9.2	10.6	10.4	10.5	11.2	10.3	9.1	7.9	8.1	7.2	6.8	6.4	6.5	11.2	6.4	8.2
10	6.2	6.2	6.1	5.8	5.9	5.9	5.9	6.5	7.4	8.1	8.2	8.4	8.3	8.8	8.9	8.1	7.7	7.3	6.9	6.2	5.0	4.7	4.8	4.8	8.9	4.7	6.8
11	4.6	4.7	4.7	4.6	4.6	4.8	4.8	4.9	5.2	5.5	5.9	6.4	6.4	6.8	7.1	7.6	7.6	7.6	6.9	6.8	6.7	6.6	6.5	6.3	7.6	4.6	6.0
12	6.5	6.8	6.8	7.0	6.6	6.7	7.0	7.3	7.4	7.7	7.9	8.0	8.5	8.0	7.7	7.5	7.6	7.2	7.2	7.1	7.1	6.9	6.7	6.6	8.5	6.5	7.2
13	6.4	6.3	6.2	6.2	6.1	6.4	7.1	7.6	8.1	8.6	9.5	10.3	10.7	11.3	11.6	12.6	12.5	11.9	11.3	10.9	10.3	9.2	8.4	8.3	12.6	6.1	9.1
14	8.0	7.4	6.7	6.2	5.5	7.0	9.1	10.5	11.4	12.1	12.7	13.9	14.7	14.6	14.5	14.2	14.5	14.3	13.6	12.8	12.4	11.5	10.5	9.6	14.7	5.5	11.1
15	9.9	9.8	8.5	8.6	9.6	10.6	11.9	12.8	14.2	16.3	17.5	18.8	19.8	20.8	18.3	14.8	14.1	13.1	12.8	11.6	10.0	9.8	9.7	9.9	20.8	8.5	13.1
16	9.8	9.2	9.3	9.0	8.8	9.2	9.4	9.2	8.6	8.3	8.5	8.7	8.8	9.3	9.6	9.7	9.5	9.6	9.5	9.6	9.3	9.0	8.4	7.9	9.8	7.9	9.1
17	7.6	7.9	5.2	6.5	7.1	7.9	8.9	9.2	9.7	9.7	11.0	12.0	12.9	11.9	11.2	12.0	12.5	12.1	11.4	10.3	9.4	8.8	8.7	8.5	12.9	5.2	9.7
18	8.0	7.7	7.5	8.0	7.8	8.6	9.2	10.5	11.1	11.3	11.0	11.7	11.0	10.7	11.9	12.8	11.7	11.2	10.6	10.3	9.7	8.9	8.4	7.5	12.8	7.5	9.9
19	6.9	6.9	7.0	5.7	5.6	7.5	8.9	9.6	10.4	11.0	12.1	12.7	13.7	14.0	14.1	14.1	15.2	14.7	14.5	13.1	9.5	7.9	7.1	7.0	15.2	5.6	10.4
20	6.8	6.5	5.4	2.7	3.4	4.3	6.5	9.3	10.3	11.4	12.0	12.9	13.4	14.2	11.3	8.1	7.4	7.5	7.8	8.0	7.8	6.4	5.6	4.7	14.2	2.7	8.1
21	3.6	2.3	1.8	2.0	1.3	1.6	4.3	7.2	9.3	10.9	11.6	13.1	13.4	13.3	13.3	14.8	14.7	14.3	14.5	15.0	14.7	12.7	10.2	11.4	15.0	1.3	9.6
22	12.8	12.3	10.3	9.6	9.5	10.3	11.4	11.9	12.2	10.0	11.0	11.3	12.1	10.4	8.1	7.5	7.5	7.5	7.6	7.3	7.5	7.2	7.0	6.7	12.8	6.7	9.5
23	6.6	6.8	6.8	6.8	6.7	6.8	6.9	7.2	7.8	8.0	8.1	8.9	9.5	10.5	10.7	10.8	10.7	10.9	10.9	10.8	9.6	8.3	6.5	5.4	10.9	5.4	8.4
24	4.1	4.4	5.2	4.8	2.9	3.4	5.3	8.4	10.5	11.7	12.0	12.5	13.8	14.6	15.2	14.0	13.9	14.5	13.9	13.3	13.5	11.9	10.2	9.6	15.2	2.9	10.1
25	9.4	9.2	9.1	9.5	8.4	7.6	10.4	12.1	13.7	14.3	15.0	15.8	16.3	15.9	15.9	15.6	15.9	15.5	14.0	12.1	11.1	9.6	8.3	7.4	16.3	7.4	12.2
26	6.9	5.3	5.3	3.6	2.4	3.9	6.8	8.9	10.4	12.1	13.7	14.8	15.9	16.7	16.4	15.8	16.7	17.7	16.9	14.7	12.7	11.2	10.2	8.6	17.7	2.4	11.1
27	7.4	4.7	3.1	2.9	2.6	3.8	6.6	9.2	11.0	12.4	13.7	14.6	15.7	16.2	16.5	16.5	16.9	17.0	16.8	16.1	14.7	13.0	10.3	8.8	17.0	2.6	11.3
28	5.5	4.5	3.2	3.3	2.0	3.1	7.2	6.2	6.8	7.5	7.7	9.2	9.0	8.7	9.5	10.0	10.3	10.4	11.0	11.1	11.1	11.0	10.0	9.9	11.1	2.0	7.8
29	9.8	9.4	9.0	8.5	8.6	8.4	8.5	9.4	9.9	10.6	11.2	11.8	14.0	15.3	16.8	17.6	16.3	14.5	12.3	11.0	9.8	8.8	8.5	8.2	17.6	8.2	11.2
30	8.1	8.1	7.9	7.9	8.0	8.2	8.5	8.5	8.5	8.4	8.7	8.7	8.8	9.1	8.7	8.5	8.6	9.1	9.5	9.7	9.5	9.0	8.6	8.4	9.7	7.9	8.6
Max.	**12.8**	**12.3**	**10.3**	**9.6**	**9.6**	**10.6**	**11.9**	**12.8**	**14.2**	**16.3**	**17.5**	**18.8**	**19.8**	**20.8**	**18.3**	**17.6**	**17.2**	**17.7**	**16.9**	**16.1**	**14.7**	**13.0**	**10.7**	**11.4**	**20.8**		
Min.	**2.3**	**2.3**	**1.5**	**1.2**	**0.8**	**1.0**	**3.8**	**4.9**	**5.2**	**5.5**	**5.9**	**6.4**	**6.4**	**6.8**	**7.1**	**6.6**	**6.2**	**5.7**	**5.5**	**5.5**	**5.0**	**4.7**	**4.8**	**2.8**		**0.8**	
Avg.	**6.8**	**6.4**	**5.9**	**5.6**	**5.3**	**5.8**	**7.1**	**8.2**	**9.2**	**9.8**	**10.5**	**11.2**	**11.9**	**12.2**	**12.2**	**12.1**	**12.0**	**11.9**	**11.4**	**10.9**	**10.1**	**9.1**	**8.1**	**7.5**			**9.2**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.2	7.9	7.5	7.6	7.3	6.7	6.3	6.2	7.1	7.7	9.1	11.1	12.8	14.9	16.5	17.5	18.0	17.6	17.1	16.6	15.7	14.4	11.1	8.0	18.0	6.2	11.4
2	7.1	5.7	5.0	5.2	5.2	7.8	10.3	11.2	13.4	15.0	16.3	17.9	18.6	19.0	19.3	20.1	20.5	20.6	20.4	19.9	18.6	16.7	14.2	13.2	20.6	5.0	14.2
3	13.4	12.6	12.0	11.8	10.8	10.4	11.6	12.6	13.8	15.9	17.8	18.8	19.6	20.4	20.6	20.7	20.7	20.8	20.9	20.1	17.1	14.3	12.2	10.8	20.9	10.4	15.8
4	11.3	10.7	9.7	8.1	6.1	6.2	9.3	11.3	13.7	15.4	17.1	18.8	20.1	21.0	21.1	20.8	22.3	22.9	22.7	21.1	17.9	15.7	13.3	12.8	22.9	6.1	15.4
5	12.5	11.0	10.2	9.9	10.7	10.7	11.4	12.1	12.4	13.1	14.9	17.2	19.1	20.3	21.2	21.8	19.1	16.0	16.2	16.4	15.2	14.5	12.8	13.1	21.8	9.9	14.7
6	12.4	11.2	10.6	10.5	10.6	10.5	11.0	12.3	13.0	12.8	13.8	16.5	17.9	18.3	18.6	18.8	19.3	18.2	16.7	17.0	15.7	14.9	13.0	12.1	19.3	10.5	14.4
7	11.2	10.7	10.6	10.3	10.3	10.2	10.4	10.6	10.4	10.7	10.9	11.6	12.3	12.3	11.6	10.9	10.9	11.0	10.8	10.7	10.6	10.5	10.2	9.9	12.3	9.9	10.8
8	9.6	9.3	8.7	8.5	8.2	8.1	8.0	8.0	7.9	8.1	8.3	8.8	9.5	10.2	11.0	11.6	12.0	12.2	12.5	12.8	12.4	10.8	9.1	8.6	12.8	7.9	9.8
9	9.9	10.5	8.7	8.5	8.2	9.2	11.2	12.5	13.1	14.4	15.8	17.4	17.8	18.4	18.8	19.5	19.0	17.4	16.9	15.7	14.7	13.2	12.1	10.2	19.5	8.2	13.9
10	10.8	10.9	10.7	10.8	10.4	10.4	10.4	10.9	11.6	12.0	12.8	13.9	14.0	14.5	14.8	14.8	14.6	14.0	13.7	12.5	10.9	9.6	9.0	8.7	14.8	8.7	11.9
11	8.7	8.4	8.6	8.8	8.6	8.4	9.5	9.4	10.0	11.5	13.4	13.8	14.3	14.5	14.3	14.4	13.7	12.9	13.0	13.5	12.8	11.5	9.6	8.3	14.5	8.3	11.3
12	9.3	9.2	8.7	7.3	7.8	9.5	11.5	13.0	14.0	15.2	16.7	18.1	19.5	20.5	20.6	21.5	22.3	21.5	20.2	19.7	17.8	15.5	13.9	13.6	22.3	7.3	15.3
13	13.9	13.5	13.2	12.9	12.6	10.5	9.9	9.3	9.1	8.9	8.8	8.6	8.9	9.4	10.2	10.0	9.7	9.5	9.6	9.6	9.4	9.1	8.8	8.3	13.9	8.3	10.1
14	7.8	7.6	7.5	7.4	7.2	7.1	7.1	7.2	7.3	7.4	7.6	8.1	8.3	8.4	8.5	8.8	8.7	8.8	8.3	8.4	8.4	8.3	8.0	7.9	8.8	7.1	7.9
15	7.9	7.8	7.7	7.4	7.2	7.1	7.3	7.5	7.7	8.3	8.9	9.4	9.7	10.0	10.5	11.8	12.4	12.9	12.4	11.6	11.4	11.0	10.5	9.8	12.9	7.1	9.5
16	9.0	8.9	8.9	8.9	8.9	8.9	9.0	9.3	10.2	11.2	12.1	12.7	13.0	12.6	12.5	12.1	11.1	10.5	10.2	9.7	9.3	9.0	8.7	8.5	13.0	8.5	10.2
17	8.4	8.3	8.2	7.9	7.6	7.8	8.0	8.3	8.7	9.5	10.5	11.6	11.9	12.0	11.3	11.2	10.8	10.4	9.9	9.7	9.5	9.3	9.2	9.2	12.0	7.6	9.5
18	9.6	9.6	9.4	9.2	9.2	9.3	9.5	9.6	10.0	10.4	11.0	11.7	11.6	11.3	10.8	10.6	10.7	10.8	10.5	10.0	9.6	9.5	9.1	9.2	11.7	9.1	10.1
19	9.3	9.2	9.0	8.3	8.9	9.6	9.9	10.5	11.5	12.3	13.5	14.1	14.8	15.3	15.1	14.6	14.3	14.9	15.2	14.7	14.2	11.6	7.6	5.7	15.3	5.7	11.8
20	5.3	5.0	6.4	5.8	5.0	5.6	8.8	12.7	15.3	16.4	16.7	17.5	17.9	18.5	18.8	17.9	18.6	18.1	16.6	15.2	13.7	11.9	10.3	10.1	18.8	5.0	12.8
21	9.6	9.4	7.3	5.7	6.9	6.3	7.0	10.3	13.2	15.0	15.6	16.7	17.2	16.1	15.6	15.2	14.1	13.7	12.9	12.2	11.7	11.1	9.7	8.3	17.2	5.7	11.7
22	9.7	9.1	8.7	8.1	8.4	8.2	9.4	11.2	12.7	13.3	12.7	12.7	13.3	12.1	10.6	10.4	9.5	9.4	9.6	9.6	9.5	8.9	8.3	8.4	13.3	8.1	10.2
23	8.3	9.1	8.7	8.2	8.0	8.2	8.3	8.8	9.1	9.9	10.6	10.3	10.1	11.1	11.4	11.8	11.9	11.7	10.4	10.6	10.7	10.9	11.1	10.5	11.9	8.0	10.0
24	10.1	10.5	9.9	9.8	9.5	9.4	9.9	9.9	10.0	10.3	10.7	10.9	10.9	10.9	11.1	10.9	9.8	9.5	9.3	9.1	8.9	8.7	8.6	8.8	11.1	8.6	9.9
25	8.9	8.9	9.1	9.0	9.1	9.3	9.0	9.0	9.3	9.2	9.3	10.1	10.3	10.9	12.1	12.3	12.2	12.0	11.5	11.1	10.7	9.8	8.9	8.6	12.3	8.6	10.0
26	8.2	8.6	8.1	7.9	8.2	8.6	8.8	9.1	9.3	9.2	9.6	10.1	11.1	11.7	11.9	11.9	12.3	11.3	10.9	11.0	10.5	9.8	9.4	9.1	12.3	7.9	9.9
27	8.7	8.5	8.4	8.3	7.6	7.7	8.1	9.4	10.2	10.6	11.1	11.6	12.4	13.2	13.9	14.6	15.5	15.2	14.4	13.3	12.4	10.3	7.6	7.8	15.5	7.6	10.9
28	7.3	6.4	5.8	4.6	3.8	6.1	8.0	11.4	13.1	14.4	14.9	15.1	14.3	14.3	14.1	14.0	13.7	12.5	12.4	10.7	9.6	9.1	8.9	8.5	15.1	3.8	10.5
29	8.4	8.2	8.2	7.9	7.6	7.5	7.4	7.4	7.7	8.5	9.6	11.0	12.4	14.3	13.9	12.0	11.7	10.9	10.3	9.3	8.7	8.3	7.9	7.6	14.3	7.4	9.4
30	7.4	7.3	7.2	7.0	6.8	6.6	6.5	6.4	6.7	7.4	8.1	8.4	8.9	9.2	10.3	11.4	11.8	12.7	12.3	12.5	11.3	10.0	9.2	8.8	12.7	6.4	8.9
31	8.9	8.5	8.5	8.7	8.8	9.0	9.4	9.9	10.9	11.1	11.4	11.7	12.3	12.8	12.4	12.3	12.4	12.2	11.5	11.0	10.2	9.6	9.1	8.8	12.8	8.5	10.5
Max.	**13.9**	**13.5**	**13.2**	**12.9**	**12.6**	**10.7**	**11.6**	**13.0**	**15.3**	**16.4**	**17.8**	**18.8**	**20.1**	**21.0**	**21.2**	**21.8**	**22.3**	**22.9**	**22.7**	**21.1**	**18.6**	**16.7**	**14.2**	**13.6**	**22.9**		
Min.	**5.3**	**5.0**	**5.0**	**4.6**	**3.8**	**5.6**	**6.3**	**6.2**	**6.7**	**7.4**	**7.6**	**8.1**	**8.3**	**8.4**	**8.5**	**8.8**	**8.7**	**8.8**	**8.3**	**8.4**	**8.4**	**8.3**	**7.6**	**5.7**		**3.8**	
Avg.	**9.4**	**9.1**	**8.7**	**8.4**	**8.2**	**8.4**	**9.1**	**9.9**	**10.7**	**11.5**	**12.2**	**13.1**	**13.7**	**14.1**	**14.3**	**14.4**	**14.3**	**13.9**	**13.5**	**13.1**	**12.2**	**11.2**	**10.0**	**9.5**			**11.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.4	7.8	7.5	7.2	6.9	6.8	6.9	7.1	7.3	7.4	7.9	8.2	8.8	9.0	9.5	9.8	9.8	9.3	8.7	8.9	8.7	8.3	7.9	7.6	9.8	6.8	8.2
2	7.5	7.5	7.5	7.6	7.5	7.7	7.3	7.8	8.1	8.4	8.9	9.6	10.1	10.7	10.4	9.3	9.8	10.5	10.7	10.2	9.7	9.4	9.2	9.0	10.7	7.3	8.9
3	8.9	9.1	9.2	9.5	9.7	9.2	9.5	9.8	10.0	10.0	10.1	10.6	10.7	10.8	11.1	10.5	10.1	10.1	10.1	9.8	9.6	9.1	8.9	9.0	11.1	8.9	9.8
4	9.1	8.8	8.5	8.4	8.3	8.6	9.1	9.4	10.2	10.9	11.8	12.0	11.9	10.9	11.4	10.8	11.2	11.6	11.6	11.4	11.0	10.4	9.7	9.6	12.0	8.3	10.3
5	9.4	9.6	9.6	9.3	9.3	9.2	9.4	9.9	10.3	10.7	11.0	11.2	11.5	12.5	13.5	14.1	14.5	14.6	12.1	11.7	11.6	10.4	9.0	9.5	14.6	9.0	11.0
6	10.8	10.6	10.3	10.4	10.3	9.4	9.1	11.6	12.1	12.4	13.2	14.3	15.4	16.2	16.6	16.8	17.1	17.5	17.5	15.7	14.3	12.2	12.3	10.9	17.5	9.1	13.2
7	10.8	8.5	8.5	10.3	10.3	10.2	8.9	9.6	11.5	13.0	13.3	13.4	15.6	16.6	16.2	16.9	16.7	15.5	13.7	11.9	10.3	9.3	8.8	8.7	16.9	8.5	12.0
8	8.5	8.4	8.0	7.9	8.0	8.0	8.0	8.2	8.8	9.1	10.1	10.9	11.6	11.9	12.8	13.5	13.9	13.3	12.2	11.9	11.5	11.1	10.7	10.4	13.9	7.9	10.4
9	10.2	9.8	9.4	9.4	9.6	9.5	9.6	9.8	10.4	10.4	10.4	10.6	10.3	10.2	10.3	10.4	10.5	10.6	10.7	10.4	10.2	10.2	10.2	10.1	10.7	9.4	10.1
10	10.1	10.2	10.2	10.2	9.9	10.0	10.1	10.1	10.3	10.5	10.9	11.4	11.4	11.6	11.4	11.2	11.0	11.0	10.7	10.2	9.9	9.8	9.8	9.8	11.6	9.8	10.5
11	9.7	9.6	9.4	9.3	9.3	9.4	9.4	9.7	10.0	10.3	10.6	10.9	11.2	11.5	12.0	12.3	12.2	11.9	11.7	11.1	11.1	10.9	10.9	11.1	12.3	9.3	10.6
12	11.1	11.2	11.2	11.4	11.7	11.5	11.5	11.7	12.0	12.0	12.7	13.2	13.4	15.1	15.3	15.5	15.5	15.2	14.2	13.0	11.9	11.1	10.6	10.5	15.5	10.5	12.6
13	9.1	8.7	8.4	8.5	8.5	8.4	7.9	7.9	8.2	8.5	8.6	8.8	9.2	9.4	9.9	10.1	10.2	9.9	9.6	9.5	9.2	9.1	9.0	8.9	10.2	7.9	9.0
14	8.8	8.7	8.6	8.5	8.4	8.3	8.3	8.6	8.9	9.4	9.7	10.1	9.9	9.8	9.7	9.5	9.2	8.9	9.0	9.1	8.9	8.8	8.8	8.7	10.1	8.3	9.0
15	8.7	8.8	8.9	9.0	9.0	8.9	9.0	9.0	9.2	9.4	9.8	10.3	10.8	11.0	11.0	11.0	11.1	11.0	10.7	10.3	10.2	10.0	9.9	9.7	11.1	8.7	9.9
16	9.6	9.4	9.1	9.2	9.2	9.4	9.7	10.0	10.6	11.3	12.2	12.8	12.4	13.0	13.4	13.3	12.8	12.7	12.4	12.3	12.0	10.3	9.0	9.5	13.4	9.0	11.1
17	9.0	10.3	10.0	9.3	8.9	9.0	9.4	10.1	11.1	12.2	14.2	15.5	16.2	16.6	14.0	13.6	14.4	14.4	13.5	12.9	12.2	11.1	10.2	9.7	16.6	8.9	12.0
18	9.4	9.4	9.0	8.6	8.4	8.0	7.7	7.4	7.6	7.8	7.9	8.1	8.3	8.8	9.2	9.4	9.3	9.8	10.1	10.4	10.3	10.2	10.0	9.7	10.4	7.4	9.0
19	9.4	7.9	7.7	7.8	7.5	6.9	7.3	7.8	8.6	8.6	9.3	10.9	11.1	12.0	12.4	11.5	11.3	10.4	9.8	8.8	7.7	6.9	6.3	7.2	12.4	6.3	9.0
20	7.6	8.2	7.9	7.8	8.0	7.4	7.0	7.1	7.4	7.8	8.1	9.3	11.1	12.4	13.2	13.5	13.8	13.8	13.0	11.5	9.3	5.3	2.5	2.2	13.8	2.2	9.0
21	2.6	3.9	3.8	3.8	3.0	4.8	3.7	5.9	8.8	9.6	10.0	11.0	12.2	12.6	12.4	12.8	12.8	12.1	11.0	9.2	8.6	8.2	7.8	7.2	12.8	2.6	8.2
22	7.5	8.3	8.5	8.9	8.8	8.8	8.7	8.6	8.6	8.5	8.5	8.5	9.0	10.5	11.5	11.3	11.4	11.9	11.6	10.7	9.5	7.5	6.8	5.5	11.9	5.5	9.1
23	4.6	2.5	1.0	1.2	1.3	1.3	2.9	5.1	7.7	8.6	9.4	11.0	12.2	12.8	13.2	13.7	13.8	13.6	12.5	12.0	9.2	7.6	7.4	6.8	13.8	1.0	8.0
24	8.9	9.2	9.1	9.2	9.6	9.7	9.8	9.1	8.7	8.8	8.8	9.1	9.3	9.0	8.9	9.4	9.7	9.7	9.4	8.9	8.4	7.5	7.3	7.8	9.8	7.3	9.0
25	8.6	7.7	7.2	7.1	7.2	6.0	6.2	7.2	8.7	9.5	10.7	11.9	12.2	12.0	12.8	12.8	13.1	13.1	12.6	11.6	10.0	7.8	7.9	7.1	13.1	6.0	9.6
26	6.6	7.4	7.2	6.6	7.7	7.9	7.4	7.4	7.8	8.5	9.8	10.9	12.5	11.4	10.4	10.6	10.9	11.0	11.0	9.7	8.2	5.4	3.5	2.6	12.5	2.6	8.4
27	3.1	3.9	3.7	5.2	6.1	6.8	7.6	8.2	9.9	10.7	12.2	13.5	13.9	14.4	14.7	14.6	14.4	14.6	14.2	13.2	12.0	11.3	11.1	11.1	14.7	3.1	10.4
28	9.6	7.9	8.5	8.8	8.3	7.9	7.6	7.5	7.8	8.1	8.8	9.9	11.4	12.6	13.9	14.1	14.6	13.8	13.8	12.1	10.5	8.6	8.8	5.6	14.6	5.6	10.0
29	4.2	4.9	4.5	4.6	3.7	3.5	2.6	4.1	7.8	9.2	11.7	12.5	12.0	11.8	12.0	12.4	12.2	12.9	12.5	10.8	6.9	4.1	5.5	8.9	12.9	2.6	8.1
30	8.4	9.1	9.4	9.2	9.4	9.5	9.3	8.8	8.8	9.0	9.1	9.4	9.9	10.3	10.4	10.5	10.8	10.7	10.3	9.9	9.3	8.8	8.4	8.1	10.8	8.1	9.4
31	8.2	7.7	7.4	8.0	7.9	7.5	7.6	8.6	9.7	10.4	11.2	11.5	13.5	13.7	14.1	14.1	14.3	13.8	13.1	11.3	9.9	9.5	9.2	9.2	14.3	7.4	10.5
Max.	**11.1**	**11.2**	**11.2**	**11.4**	**11.7**	**11.5**	**11.5**	**11.7**	**12.1**	**13.0**	**14.2**	**15.5**	**16.2**	**16.6**	**16.6**	**16.9**	**17.1**	**17.5**	**17.5**	**15.7**	**14.3**	**12.2**	**12.3**	**11.1**	**17.5**		
Min.	**2.6**	**2.5**	**1.0**	**1.2**	**1.3**	**1.3**	**2.6**	**4.1**	**7.3**	**7.4**	**7.9**	**8.1**	**8.3**	**8.8**	**8.9**	**9.3**	**9.2**	**8.9**	**8.7**	**8.8**	**6.9**	**4.1**	**2.5**	**2.2**		**1.0**	
Avg.	**8.3**	**8.2**	**8.0**	**8.1**	**8.1**	**8.0**	**8.0**	**8.5**	**9.2**	**9.7**	**10.3**	**11.0**	**11.6**	**12.0**	**12.2**	**12.2**	**12.3**	**12.2**	**11.7**	**11.0**	**10.1**	**9.0**	**8.6**	**8.4**			**9.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.1	9.1	8.8	8.7	8.6	8.4	8.5	8.8	9.3	9.8	10.7	12.1	13.0	13.7	14.4	15.1	14.8	14.1	12.7	11.4	10.1	9.3	9.1	8.8	15.1	8.4	10.8
2	8.5	9.0	8.5	8.6	6.7	6.7	6.9	8.2	10.1	11.9	11.9	12.1	12.1	12.7	14.1	14.4	14.5	14.4	13.5	11.6	9.3	7.6	6.1	4.4	14.5	4.4	10.2
3	4.1	4.5	3.1	3.8	4.3	3.1	3.4	4.9	8.0	11.0	12.7	14.1	14.7	15.0	14.9	12.1	12.1	13.2	12.8	11.3	8.4	7.1	4.1	3.0	15.0	3.0	8.6
4	3.4	4.3	3.6	4.3	3.2	3.3	3.7	4.8	8.3	11.4	13.0	14.1	13.8	14.6	15.5	15.6	12.9	9.8	10.5	10.1	8.8	8.2	8.7	8.6	15.6	3.2	8.9
5	7.9	7.9	8.3	8.5	8.2	8.0	8.1	7.8	8.5	9.7	10.0	10.6	11.1	11.9	11.6	11.7	12.1	11.1	10.4	9.7	8.1	6.0	5.2	2.7	12.1	2.7	9.0
6	3.2	2.9	2.4	3.6	4.5	4.6	4.6	6.2	8.5	10.4	11.7	13.2	13.8	14.2	14.4	14.8	15.0	13.8	12.5	10.8	9.2	9.0	8.1	7.7	15.0	2.4	9.1
7	7.6	7.4	7.2	7.1	6.9	7.0	7.1	8.0	8.2	8.9	10.4	11.7	12.1	11.9	11.5	10.3	9.0	8.9	8.8	8.5	8.3	8.4	8.7	8.9	12.1	6.9	8.9
8	9.0	9.2	9.2	9.1	9.0	8.7	8.5	8.5	8.6	8.7	8.9	9.1	9.4	9.5	9.4	9.4	9.4	9.4	9.1	8.8	8.6	8.4	8.3	8.3	9.5	8.3	8.9
9	8.5	8.4	8.6	8.6	8.4	6.6	6.2	6.9	8.4	10.7	12.1	13.5	13.5	12.8	11.8	11.4	12.5	11.3	9.7	8.5	7.9	7.3	6.7	4.9	13.5	4.9	9.4
10	3.2	3.6	3.7	3.3	2.3	2.5	1.9	4.0	7.3	9.7	11.0	11.6	12.3	13.1	13.2	13.1	12.3	11.7	10.9	8.0	7.0	6.9	5.7	2.7	13.2	1.9	7.5
11	3.2	3.3	2.2	2.1	0.9	2.0	1.2	3.4	7.5	10.3	12.2	13.6	14.7	14.1	14.4	15.4	15.6	15.7	15.4	13.3	11.5	10.4	9.2	8.6	15.7	0.9	9.2
12	9.4	8.5	7.7	7.2	6.8	6.9	6.7	5.2	9.6	12.3	14.4	15.6	16.1	16.7	17.3	17.3	16.7	16.2	15.6	12.1	9.3	6.6	5.4	4.6	17.3	4.6	11.0
13	6.4	6.1	6.1	6.3	6.6	5.6	5.8	6.0	8.5	12.0	13.6	14.7	15.6	16.2	16.2	16.3	15.2	13.9	12.8	11.8	11.7	11.3	10.3	8.8	16.3	5.6	10.7
14	8.6	8.4	8.4	8.6	8.6	8.8	9.0	9.4	9.5	9.3	9.7	10.0	10.5	10.4	11.2	11.3	11.5	11.1	10.8	10.7	10.5	10.4	10.1	10.2	11.5	8.4	9.9
15	10.1	10.3	9.7	9.9	10.1	10.2	11.1	11.7	11.2	10.6	10.6	10.4	11.1	11.1	10.7	10.8	11.0	11.0	10.6	9.8	9.8	9.9	9.6	9.4	11.7	9.4	10.4
16	9.2	9.0	8.9	8.8	8.6	8.5	8.6	8.7	8.9	9.4	10.3	10.7	10.7	11.7	11.1	10.8	10.9	10.9	10.0	9.2	7.7	8.0	8.0	7.7	11.7	7.7	9.4
17	7.7	7.8	7.7	7.6	7.7	7.3	7.1	7.0	7.3	7.7	8.2	8.7	8.8	9.2	9.9	10.1	9.9	10.1	9.3	7.8	6.0	4.6	4.1	3.3	10.1	3.3	7.7
18	3.4	4.6	6.4	6.8	6.8	7.9	7.9	8.2	8.4	8.5	8.6	9.0	9.2	9.2	9.6	9.3	8.4	8.0	8.0	8.3	8.5	8.5	8.6	8.6	9.6	3.4	7.9
19	8.6	8.9	9.2	9.3	9.4	8.3	7.7	7.1	7.2	8.6	8.9	9.1	9.7	9.6	9.4	9.0	8.6	8.5	8.4	8.1	7.3	7.0	6.9	7.0	9.7	6.9	8.4
20	6.4	6.3	5.2	5.4	5.0	5.7	5.6	5.6	7.3	8.8	9.2	10.6	10.8	10.7	10.5	10.0	11.0	10.1	9.8	9.3	8.7	8.2	8.0	7.5	11.0	5.0	8.1
21	7.2	6.9	6.5	6.2	5.6	5.2	6.5	7.3	7.9	8.0	7.7	8.0	8.1	8.2	8.0	7.8	7.5	7.4	7.4	7.3	7.0	7.3	7.1	6.7	8.2	5.2	7.2
22	6.8	6.6	6.7	7.0	7.3	7.2	7.0	6.9	6.9	7.0	7.2	7.5	7.9	8.4	8.6	8.9	9.1	8.6	7.4	7.0	6.5	6.7	7.2	7.1	9.1	6.5	7.4
23	7.0	7.0	7.1	7.0	6.8	6.9	6.9	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.0	8.4	8.8	8.9	8.4	7.2	6.5	6.7	6.7	6.5	8.9	6.5	7.4
24	6.5	6.3	6.2	6.1	5.1	4.9	5.1	5.4	6.0	6.6	7.3	10.4	8.5	8.2	8.7	8.3	8.2	8.1	7.7	5.7	4.5	3.9	2.6	1.8	10.4	1.8	6.3
25	1.7	1.3	1.2	0.8	0.8	0.4	0.1	0.0	1.4	3.7	5.8	7.7	8.6	8.7	8.6	8.5	8.7	8.5	8.1	7.8	7.5	7.2	6.2	6.1	8.7	0.0	5.0
26	5.9	5.5	5.5	4.9	4.8	4.9	5.0	5.0	5.3	5.8	5.9	6.1	6.2	6.7	6.8	6.8	6.6	6.2	5.9	5.8	5.8	5.8	6.1	6.2	6.8	4.8	5.8
27	6.2	6.1	5.9	5.3	4.8	4.5	3.8	4.1	3.2	3.9	4.7	7.2	7.9	7.9	7.6	7.3	6.7	6.0	5.4	5.3	5.2	5.1	5.2	5.0	7.9	3.2	5.6
28	4.7	4.6	4.5	4.2	4.0	3.8	3.7	3.7	3.8	3.9	4.5	4.6	4.9	4.9	5.4	6.0	5.6	4.5	3.4	2.5	1.7	0.9	0.7	0.8	6.0	0.7	3.8
29	0.2	-0.7	-2.3	-2.1	-2.0	-2.0	-2.5	-1.4	-0.1	2.5	3.4	4.3	4.9	4.5	4.9	3.9	3.8	4.1	3.7	1.7	1.3	0.8	-0.3	-1.6	4.9	-2.5	1.2
30	-0.3	-1.4	-2.0	-4.6	-5.6	-3.8	-4.0	-3.7	-2.2	0.0	3.0	5.4	6.1	6.7	6.6	6.3	6.6	6.1	5.5	5.0	4.6	4.5	3.8	3.7	6.7	-5.6	1.9
Max.	**10.1**	**10.3**	**9.7**	**9.9**	**10.1**	**10.2**	**11.1**	**11.7**	**11.2**	**12.3**	**14.4**	**15.6**	**16.1**	**16.7**	**17.3**	**17.3**	**16.7**	**16.2**	**15.6**	**13.3**	**11.7**	**11.3**	**10.3**	**10.2**	**17.3**		
Min.	**-0.3**	**-1.4**	**-2.3**	**-4.6**	**-5.6**	**-3.8**	**-4.0**	**-3.7**	**-2.2**	**0.0**	**3.0**	**4.3**	**4.9**	**4.5**	**4.9**	**3.9**	**3.8**	**4.1**	**3.4**	**1.7**	**1.3**	**0.8**	**-0.3**	**-1.6**		**-5.6**	
Avg.	**6.1**	**6.1**	**5.8**	**5.7**	**5.5**	**5.4**	**5.4**	**5.8**	**7.0**	**8.3**	**9.2**	**10.1**	**10.5**	**10.7**	**10.8**	**10.7**	**10.5**	**10.0**	**9.5**	**8.5**	**7.6**	**7.1**	**6.5**	**5.9**			**7.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

October *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.8	4.2	4.2	4.1	4.2	4.4	4.5	4.7	5.3	5.7	6.3	6.9	7.3	8.3	7.7	7.0	6.2	6.1	6.1	6.1	6.1	6.4	6.2	6.0	8.3	3.8	5.7
2	6.0	6.0	5.8	5.7	5.5	5.5	5.4	5.2	5.3	5.5	5.7	5.8	6.2	6.9	7.3	7.4	7.9	7.8	7.5	7.5	7.6	7.5	7.2	7.0	7.9	5.2	6.5
3	6.8	6.9	7.4	7.6	7.3	6.8	7.0	7.2	7.4	8.3	8.8	10.0	9.7	9.1	8.0	8.2	8.3	7.9	6.0	4.8	4.8	4.8	5.0	5.2	10.0	4.8	7.2
4	5.1	5.0	4.7	4.0	3.8	4.0	4.1	3.9	3.7	3.7	3.7	3.7	3.6	4.5	3.9	3.8	3.1	2.4	2.0	2.0	2.1	2.3	2.4	2.6	5.1	2.0	3.5
5	2.8	2.8	2.8	2.8	2.9	3.3	3.3	3.0	2.3	3.4	4.7	6.6	8.4	8.6	8.2	7.7	6.7	5.3	4.8	4.5	4.0	3.5	3.4	3.4	8.6	2.3	4.6
6	3.1	2.6	2.7	3.1	3.2	3.2	3.1	3.2	3.6	4.1	4.7	5.2	5.6	5.8	6.0	6.1	6.1	5.9	5.7	5.5	5.5	5.6	5.6	5.7	6.1	2.6	4.6
7	5.9	6.0	6.1	6.2	6.3	6.3	6.3	6.3	6.3	6.6	6.9	7.3	7.8	8.1	8.2	8.2	8.2	8.0	7.8	7.8	7.8	7.7	7.6	7.7	8.2	5.9	7.1
8	7.5	7.1	6.5	6.2	6.3	6.1	6.0	6.0	6.1	6.2	6.4	6.5	6.8	7.0	6.6	7.0	7.0	7.3	7.6	7.8	8.4	9.5	10.4	9.9	10.4	6.0	7.2
9	9.6	10.0	10.3	10.7	10.6	11.0	11.1	11.0	11.3	11.6	11.8	11.0	10.8	10.6	10.3	10.0	9.8	9.6	8.3	4.7	4.0	2.9	2.3	1.9	11.8	1.9	9.0
10	0.9	0.9	0.5	0.2	0.2	0.2	0.2	0.3	0.4	0.6	1.3	1.5	3.3	4.7	5.3	5.2	5.2	5.1	5.3	4.4	3.8	3.9	4.0	4.1	5.3	0.2	2.6
11	4.2	4.2	4.0	3.3	3.4	3.2	2.7	3.1	3.1	3.4	3.8	3.8	4.5	4.7	4.4	4.9	5.5	4.3	2.4	2.8	3.5	3.4	3.5	3.2	5.5	2.4	3.7
12	3.0	3.2	3.3	3.0	3.1	3.4	3.6	3.7	3.7	4.6	5.1	5.9	6.8	7.4	7.3	7.0	7.0	6.3	5.7	5.4	5.3	5.2	4.9	5.1	7.4	3.0	5.0
13	5.0	4.8	2.8	0.7	0.9	0.8	0.2	0.3	0.4	2.2	5.3	7.3	8.4	9.2	9.4	9.7	8.7	6.8	2.7	1.0	0.9	-0.2	-1.5	-2.6	9.7	-2.6	3.5
14	-2.5	-0.9	0.8	0.1	0.4	0.1	0.7	0.9	-0.3	0.4	4.8	4.7	3.5	5.2	6.9	6.0	5.6	5.7	3.2	1.0	0.5	0.1	0.9	0.5	6.9	-2.5	2.0
15	0.2	1.7	1.8	1.2	0.7	1.9	3.1	4.5	3.8	3.7	5.3	5.8	6.8	7.5	7.7	7.3	6.7	5.9	5.2	4.6	4.5	5.4	5.8	6.5	7.7	0.2	4.5
16	6.6	5.8	5.7	5.7	5.6	5.6	5.6	5.1	5.2	5.3	6.1	6.9	7.3	7.5	7.4	7.1	6.8	5.7	4.7	4.6	5.0	4.9	4.7	5.2	7.5	4.6	5.8
17	5.3	5.2	4.7	4.5	4.3	4.1	4.2	4.5	4.3	4.7	5.2	5.7	6.1	6.6	6.7	6.2	5.8	5.2	4.7	4.7	4.8	5.1	5.3	5.1	6.7	4.1	5.1
18	5.3	4.7	4.5	4.5	4.3	4.2	4.3	4.6	4.7	4.6	5.0	5.5	6.6	7.2	7.4	7.2	6.7	6.2	5.4	4.8	4.3	4.1	3.9	3.6	7.4	3.6	5.2
19	3.5	3.6	3.5	3.3	2.9	2.1	2.6	3.2	3.2	3.6	3.9	4.1	4.1	4.4	4.6	4.3	4.1	3.3	1.7	2.2	1.0	0.7	1.6	2.2	4.6	0.7	3.1
20	2.6	2.4	2.5	2.3	2.1	2.0	1.2	0.9	0.9	1.0	2.2	3.1	2.7	4.4	4.1	3.7	5.0	2.6	-0.3	-1.0	-1.6	-2.0	-2.3	-2.8	5.0	-2.8	1.5
21	-4.2	-4.6	-5.1	-4.3	-3.4	-2.9	-0.9	-1.6	-2.0	-0.5	1.4	2.8	3.4	2.8	3.7	3.5	3.0	0.3	-2.1	-3.1	-3.9	-4.2	-3.8	-3.1	3.7	-5.1	-1.2
22	-3.4	-2.4	-2.0	-1.9	-2.5	-3.8	-4.4	-4.2	-4.4	-3.1	-0.7	1.0	3.5	4.4	4.7	4.8	2.6	0.2	-2.8	-3.2	-3.2	-2.9	-3.1	-3.9	4.8	-4.4	-1.3
23	-3.4	-3.7	-3.6	-3.5	-3.2	-3.5	-3.2	-3.1	-4.9	-4.5	-3.2	-1.5	-0.5	0.3	0.5	0.3	0.3	-1.4	-4.8	-5.5	-6.2	-6.3	-6.3	-5.6	0.5	-6.3	-3.2
24	-5.4	-3.9	-2.3	-1.3	-1.4	-1.8	-1.2	-0.7	-1.0	-0.7	-0.4	-0.1	-0.1	-0.3	-0.5	-0.7	-0.6	-0.9	-1.3	-1.7	-3.3	-3.5	-3.2	-3.2	-0.1	-5.4	-1.6
25	-3.4	-3.6	-3.8	-4.1	-4.2	-4.3	-4.4	-4.7	-4.9	-5.0	-5.1	-4.6	-4.0	-3.4	-3.2	-3.0	-3.1	-3.4	-4.0	-4.0	-4.4	-4.3	-4.4	-4.9	-3.0	-5.1	-4.1
26	-5.3	-5.6	-5.6	-5.9	-5.9	-5.8	-5.9	-6.4	-6.9	-7.3	-7.7	-7.9	-7.7	-7.2	-6.8	-6.2	-5.9	-6.6	-6.5	-6.8	-6.8	-7.0	-7.3	-7.9	-5.3	-7.9	-6.6
27	-8.0	-8.0	-7.8	-7.9	-8.1	-8.4	-9.2	-8.2	-7.8	-9.0	-7.6	-6.3	-4.9	-4.2	-2.8	-3.6	-4.3	-6.4	-8.5	-8.7	-10.2	-9.5	-6.8	-5.6	-2.8	-10.2	-7.2
28	-5.0	-4.6	-4.9	-4.8	-5.0	-5.0	-4.6	-4.3	-4.0	-3.8	-3.1	-1.8	-0.2	0.2	-0.1	0.1	0.5	0.5	0.5	0.4	0.3	-0.1	-0.1	0.0	0.5	-5.0	-2.0
29	0.1	0.3	1.0	2.1	1.7	1.7	1.2	1.2	1.3	1.2	1.2	1.6	1.8	2.0	2.1	2.2	1.8	1.5	1.4	1.3	1.0	0.7	0.5	0.3	2.2	0.1	1.3
30	0.3	0.1	0.0	-0.1	-0.4	-0.6	-0.6	-0.7	-0.9	-1.5	-0.6	0.2	1.0	1.5	0.9	0.4	0.1	-0.2	-0.4	-0.4	-0.6	-0.6	-1.0	-1.4	1.5	-1.5	-0.2
31	-2.3	-2.2	-2.1	-2.1	-2.1	-2.2	-2.6	-2.9	-3.3	-3.4	-3.0	-2.4	-2.1	-1.8	-2.0	-2.2	-2.8	-3.8	-4.7	-5.2	-5.8	-5.4	-5.6	-6.2	-1.8	-6.2	-3.3
Max.	**9.6**	**10.0**	**10.3**	**10.7**	**10.6**	**11.0**	**11.1**	**11.0**	**11.3**	**11.6**	**11.8**	**11.0**	**10.8**	**10.6**	**10.3**	**10.0**	**9.8**	**9.6**	**8.3**	**7.8**	**8.4**	**9.5**	**10.4**	**9.9**	**11.8**		
Min.	**-8.0**	**-8.0**	**-7.8**	**-7.9**	**-8.1**	**-8.4**	**-9.2**	**-8.2**	**-7.8**	**-9.0**	**-7.7**	**-7.9**	**-7.7**	**-7.2**	**-6.8**	**-6.2**	**-5.9**	**-6.6**	**-8.5**	**-8.7**	**-10.2**	**-9.5**	**-7.3**	**-7.9**		**-10.2**	
Avg.	**1.4**	**1.5**	**1.6**	**1.5**	**1.4**	**1.3**	**1.4**	**1.5**	**1.3**	**1.7**	**2.5**	**3.2**	**3.8**	**4.3**	**4.3**	**4.2**	**3.9**	**3.1**	**2.0**	**1.6**	**1.3**	**1.2**	**1.3**	**1.2**			**2.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-6.7	-6.9	-7.3	-7.2	-7.3	-7.3	-7.5	-7.6	-7.8	-7.6	-7.0	-6.5	-6.0	-5.4	-5.3	-5.3	-5.7	-6.2	-6.5	-6.8	-7.1	-7.5	-8.0	-8.2	-5.3	-8.2	-6.9
2	-8.5	-8.7	-8.5	-8.6	-9.2	-9.6	-9.9	-10.2	-10.3	-10.1	-9.2	-8.4	-8.0	-7.5	-7.2	-7.4	-8.0	-9.2	-9.6	-10.0	-10.3	-10.7	-11.0	-11.5	-7.2	-11.5	-9.2
3	-11.9	-12.2	-12.5	-12.9	-13.4	-13.3	-13.4	-13.4	-13.4	-12.9	-12.2	-10.9	-10.0	-9.0	-8.6	-8.6	-9.3	-10.9	-11.6	-11.8	-12.2	-12.3	-12.1	-12.5	-8.6	-13.4	-11.7
4	-12.7	-13.0	-12.6	-12.5	-13.3	-13.1	-13.3	-13.5	-13.3	-12.8	-12.2	-10.8	-10.4	-10.0	-9.6	-9.5	-9.7	-11.8	-12.3	-12.6	-12.6	-13.5	-14.3	-14.0	-9.5	-14.3	-12.2
5	-12.6	-11.3	-10.1	-9.0	-8.5	-8.4	-8.8	-9.0	-10.6	-12.4	-11.1	-9.8	-7.2	-5.5	-5.2	-5.9	-7.6	-9.1	-9.3	-10.3	-10.6	-10.7	-11.3	-12.1	-5.2	-12.6	-9.4
6	-12.2	-12.6	-12.1	-12.5	-12.4	-12.8	-13.6	-13.7	-13.3	-13.3	-13.1	-12.4	-10.6	-9.7	-9.5	-9.8	-10.1	-10.0	-9.9	-10.0	-10.2	-9.5	-9.2	-8.3	-8.3	-13.7	-11.3
7	-8.0	-7.5	-7.7	-8.4	-9.3	-9.5	-9.9	-10.7	-10.6	-10.6	-10.4	-10.4	-10.1	-9.9	-10.2	-10.4	-10.7	-11.1	-11.5	-12.1	-12.0	-13.3	-13.9	-14.2	-7.5	-14.2	-10.5
8	-14.9	-15.7	-16.5	-16.6	-17.0	-17.3	-17.6	-17.1	-16.7	-16.6	-16.2	-15.4	-14.9	-14.2	-13.9	-13.9	-14.4	-14.7	-14.7	-14.6	-14.6	-14.6	-14.1	-13.7	-13.7	-17.6	-15.4
9	-14.1	-14.7	-15.4	-15.6	-16.2	-16.7	-16.9	-17.7	-17.7	-18.0	-17.5	-16.7	-15.6	-15.5	-15.4	-15.4	-16.1	-17.4	-17.6	-17.9	-17.9	-17.8	-17.4	-17.0	-14.1	-18.0	-16.6
10	-16.6	-16.6	-16.1	-16.3	-15.9	-16.0	-15.8	-15.3	-15.3	-15.1	-15.6	-15.7	-15.6	-15.4	-15.1	-14.5	-14.6	-15.1	-14.9	-14.3	-13.9	-13.1	-13.1	-13.3	-13.1	-16.6	-15.1
11	-13.6	-13.0	-13.9	-13.7	-14.6	-14.5	-14.8	-14.9	-15.1	-14.9	-14.8	-14.1	-13.3	-12.5	-12.1	-12.3	-12.4	-12.1	-12.0	-12.2	-12.8	-12.9	-12.9	-12.8	-12.0	-15.1	-13.4
12	-12.9	-13.5	-13.6	-13.4	-13.2	-12.9	-12.4	-12.4	-12.3	-12.0	-12.0	-11.2	-10.0	-8.7	-8.0	-8.1	-8.2	-8.4	-8.1	-8.3	-7.9	-7.6	-7.4	-7.2	-7.2	-13.6	-10.4
13	-7.0	-6.8	-6.7	-6.7	-7.0	-7.7	-8.7	-10.0	-11.3	-12.7	-13.5	-14.3	-14.9	-15.4	-16.3	-16.9	-17.2	-18.0	-18.2	-18.3	-18.2	-18.5	-18.1	-17.3	-6.7	-18.5	-13.3
14	-17.1	-17.1	-16.9	-16.5	-15.8	-14.9	-12.7	-9.9	-7.7	-6.1	-5.5	-6.7	-9.3	-11.0	-12.5	-13.3	-14.0	-15.2	-16.3	-17.2	-17.9	-18.6	-19.5	-20.3	-5.5	-20.3	-13.8
15	-21.1	-21.6	-22.2	-22.4	-22.5	-22.5	-22.2	-22.4	-22.4	-22.2	-21.8	-21.6	-21.2	-20.7	-20.5	-20.5	-20.6	-21.0	-21.4	-21.5	-21.5	-21.4	-21.5	-21.6	-20.5	-22.5	-21.6
16	-21.7	-21.8	-21.6	-21.4	-21.4	-21.7	-22.1	-22.4	-22.5	-22.6	-22.2	-21.3	-20.1	-19.2	-18.6	-18.4	-19.1	-18.5	-18.6	-19.3	-19.0	-19.2	-19.1	-19.0	-18.4	-22.6	-20.4
17	-18.9	-18.9	-19.1	-19.1	-18.9	-18.7	-18.1	-18.0	-18.2	-18.2	-17.9	-17.5	-16.0	-15.4	-15.4	-16.0	-16.5	-17.3	-17.6	-18.0	-18.4	-19.0	-18.3	-18.8	-15.4	-19.1	-17.8
18	-19.4	-19.7	-19.9	-20.1	-20.4	-20.7	-21.0	-20.9	-21.0	-20.6	-20.5	-19.8	-19.4	-18.8	-18.7	-18.8	-19.6	-20.0	-19.7	-19.6	-19.9	-20.4	-20.4	-20.4	-18.7	-21.0	-20.0
19	-20.8	-20.6	-20.3	-19.8	-19.1	-19.0	-18.4	-18.4	-18.6	-18.3	-18.0	-17.5	-17.0	-16.3	-16.1	-16.1	-15.7	-15.5	-15.5	-15.5	-15.6	-15.6	-15.7	-16.0	-15.5	-20.8	-17.5
20	-15.8	-15.4	-15.3	-15.0	-14.8	-15.1	-15.2	-15.2	-15.1	-14.9	-15.3	-14.9	-14.5	-14.5	-14.5	-14.5	-15.0	-15.6	-15.8	-15.8	-16.0	-15.7	-15.9	-16.2	-14.5	-16.2	-15.2
21	-15.4	-15.8	-16.5	-16.2	-15.8	-15.7	-15.3	-15.5	-15.2	-14.8	-14.3	-13.8	-13.4	-13.2	-13.1	-12.9	-12.9	-12.4	-12.6	-11.5	-11.6	-11.8	-11.0	-10.5	-10.5	-16.5	-13.8
22	-10.7	-10.5	-11.1	-11.7	-12.1	-12.8	-14.0	-13.9	-13.5	-13.9	-12.7	-12.0	-12.7	-11.4	-11.6	-12.1	-12.5	-12.7	-13.2	-13.5	-14.8	-14.6	-15.3	-16.1	-10.5	-16.1	-12.9
23	-16.5	-16.6	-17.9	-18.1	-17.4	-18.1	-18.5	-18.6	-18.4	-18.7	-18.8	-17.4	-17.5	-16.7	-16.8	-16.9	-17.5	-18.7	-19.1	-18.9	-18.7	-17.8	-18.5	-17.6	-16.5	-19.1	-17.9
24	-16.9	-17.2	-16.7	-16.4	-17.0	-16.3	-16.5	-16.9	-16.7	-16.4	-14.5	-10.7	-10.4	-8.8	-7.7	-7.2	-6.3	-5.8	-5.6	-5.5	-5.3	-5.2	-4.8	-4.6	-4.6	-17.2	-11.2
25	-4.5	-4.5	-4.6	-4.7	-4.8	-4.9	-4.2	-4.1	-3.9	-4.1	-4.2	-4.2	-3.8	-3.4	-3.7	-4.5	-6.3	-7.1	-7.4	-7.3	-7.1	-6.4	-6.1	-5.8	-3.4	-7.4	-5.1
26	-5.8	-5.6	-5.5	-5.3	-5.1	-4.2	-3.7	-3.4	-3.1	-2.8	-2.7	-2.6	-2.5	-2.4	-2.2	-2.2	-2.3	-2.4	-2.6	-2.6	-2.7	-2.5	-2.5	-2.6	-2.2	-5.8	-3.3
27	-2.6	-2.6	-2.6	-2.7	-2.6	-2.4	-2.2	-2.0	-1.9	-1.6	-1.3	-0.9	-0.3	0.0	0.1	0.2	0.1	0.1	0.2	0.3	0.5	0.6	0.6	0.6	0.6	-2.7	-0.9
28	0.3	0.1	0.0	0.1	0.2	0.3	0.3	0.1	-0.2	-0.6	-0.9	-0.8	-0.7	-0.7	-0.7	-0.9	-1.7	-2.9	-4.0	-5.5	-7.7	-10.4	-10.2	-9.2	0.3	-10.4	-2.3
29	-8.7	-7.3	-6.4	-6.8	-6.0	-6.0	-7.3	-8.0	-7.8	-7.7	-6.3	-6.1	-4.8	-5.1	-5.1	-7.0	-9.4	-10.1	-11.6	-11.9	-7.4	-3.8	-3.1	-2.8	-2.8	-11.9	-6.9
30	-1.8	-1.5	-1.3	-2.2	-2.2	-1.9	-1.6	-1.3	-1.0	-0.7	-0.4	-0.2	-0.3	-1.0	-1.3	-1.8	-2.3	-4.0	-4.8	-4.7	-4.6	-5.0	-5.7	-6.2	-0.2	-6.2	-2.4
Max.	**0.3**	**0.1**	**0.0**	**0.1**	**0.2**	**0.3**	**0.3**	**0.1**	**-0.2**	**-0.6**	**-0.4**	**-0.2**	**-0.3**	**0.0**	**0.1**	**0.2**	**0.1**	**0.1**	**0.2**	**0.3**	**0.5**	**0.6**	**0.6**	**0.6**	**0.6**		
Min.	**-21.7**	**-21.8**	**-22.2**	**-22.4**	**-22.5**	**-22.5**	**-22.2**	**-22.4**	**-22.5**	**-22.6**	**-22.2**	**-21.6**	**-21.2**	**-20.7**	**-20.5**	**-20.5**	**-20.6**	**-21.0**	**-21.4**	**-21.5**	**-21.5**	**-21.4**	**-21.5**	**-21.6**		**-22.6**	
Avg.	**-12.3**	**-12.3**	**-12.4**	**-12.4**	**-12.4**	**-12.5**	**-12.5**	**-12.5**	**-12.5**	**-12.4**	**-12.1**	**-11.5**	**-11.0**	**-10.6**	**-10.5**	**-10.7**	**-11.2**	**-11.8**	**-12.1**	**-12.2**	**-12.3**	**-12.3**	**-12.3**	**-12.3**			**-12.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-6.4	-6.6	-6.8	-7.4	-7.9	-7.5	-7.8	-7.8	-7.8	-8.0	-7.8	-6.8	-6.5	-5.9	-5.2	-6.4	-6.7	-7.8	-8.5	-9.1	-9.5	-10.3	-10.5	-10.7	-5.2	-10.7	-7.7
2	-11.1	-10.3	-10.6	-11.2	-12.4	-13.9	-14.9	-12.2	-8.9	-7.9	-7.1	-4.7	-2.0	-2.6	-1.9	-3.2	-4.0	-1.9	-4.2	-3.9	-2.0	-0.7	-0.4	-2.0	-0.4	-14.9	-6.4
3	-2.4	-1.8	-2.2	-2.2	-1.6	-1.5	-2.3	-2.9	-2.1	-1.7	-1.1	-0.7	-0.4	-0.7	-1.8	-2.5	-3.1	-3.3	-3.1	-3.0	-3.0	-3.3	-3.3	-3.6	-0.4	-3.6	-2.2
4	-4.2	-4.2	-4.4	-4.6	-4.8	-4.5	-4.6	-4.6	-4.8	-4.6	-4.3	-4.1	-3.8	0.4	0.3	0.1	-0.5	0.0	0.0	0.1	0.3	0.6	0.7	0.8	0.8	-4.8	-2.3
5	1.0	1.2	1.0	1.0	0.6	0.4	1.0	2.2	2.4	2.2	1.9	2.4	2.0	2.2	2.6	2.3	1.9	1.8	0.5	2.2	2.4	2.2	2.4	2.5	2.6	0.4	1.8
6	2.0	1.9	1.9	1.8	1.8	1.7	1.2	0.5	0.7	1.3	1.3	1.7	1.8	2.0	2.2	2.3	2.2	2.3	2.1	1.9	2.1	1.9	1.6	1.9	2.3	0.5	1.8
7	2.2	2.1	1.8	2.3	2.7	1.9	1.4	0.5	1.6	2.7	1.9	1.4	1.6	1.1	1.3	1.6	1.6	2.1	2.1	1.7	1.6	1.2	1.4	1.5	2.7	0.5	1.7
8	1.8	1.9	1.6	1.1	0.5	0.9	1.1	0.4	0.1	0.2	0.3	0.3	0.5	0.9	1.3	1.2	0.5	-0.1	-0.9	-1.1	-1.1	-1.5	-1.6	-1.6	1.9	-1.6	0.3
9	-0.5	-0.6	-0.7	-0.1	-0.2	0.0	0.0	0.0	-0.1	0.2	0.4	0.7	0.2	0.1	0.3	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	-0.1	0.1	0.7	-0.7	0.0
10	0.3	0.3	0.3	0.4	0.3	0.1	0.1	-0.6	-1.2	-1.1	-0.7	-0.1	0.4	0.6	0.5	0.2	0.1	-0.3	-0.4	-0.2	-0.2	-0.2	0.2	0.2	0.6	-1.2	-0.1
11	-0.1	-0.1	-0.5	-2.1	-4.0	-4.7	-5.3	-6.4	-6.7	-7.7	-8.5	-7.4	-6.2	-5.8	-4.7	-5.0	-5.5	-6.0	-5.5	-6.2	-6.6	-7.0	-7.6	-8.1	-0.1	-8.5	-5.3
12	-9.5	-10.6	-11.1	-11.0	-10.4	-10.0	-9.7	-9.7	-10.0	-10.4	-10.2	-10.2	-9.9	-10.0	-9.9	-10.0	-10.1	-10.3	-10.3	-10.2	-10.3	-10.3	-10.5	-10.6	-9.5	-11.1	-10.2
13	-10.7	-10.9	-11.0	-11.2	-12.0	-12.5	-13.0	-13.2	-13.3	-13.7	-13.4	-12.9	-12.9	-13.2	-13.2	-13.5	-13.5	-13.9	-14.1	-13.8	-14.0	-14.3	-14.5	-14.5	-10.7	-14.5	-13.0
14	-14.7	-14.9	-15.3	-15.0	-14.7	-14.6	-14.9	-15.4	-14.6	-14.6	-15.3	-14.4	-13.7	-13.1	-12.5	-13.4	-14.6	-14.7	-13.8	-13.1	-13.2	-12.8	-13.1	-13.0	-12.5	-15.4	-14.1
15	-13.1	-13.2	-14.0	-14.1	-15.1	-17.2	-18.9	-19.3	-19.5	-20.1	-20.4	-20.8	-21.9	-18.9	-18.4	-18.6	-14.7	-10.7	-9.4	-8.6	-8.2	-8.0	-7.6	-7.5	-7.5	-21.9	-14.9
16	-7.2	-6.7	-6.0	-5.7	-5.4	-5.1	-5.0	-4.8	-4.6	-4.4	-4.2	-4.3	-4.4	-4.3	-4.2	-4.2	-4.4	-4.4	-4.3	-4.4	-5.8	-6.4	-6.5	-7.0	-4.2	-7.2	-5.1
17	-6.3	-7.0	-6.9	-6.9	-6.9	-7.0	-7.9	-8.0	-7.9	-7.9	-7.7	-8.4	-8.1	-8.3	-7.7	-8.1	-8.6	-8.9	-9.4	-9.5	-9.3	-9.6	-10.6	-11.7	-6.3	-11.7	-8.3
18	-11.4	-11.5	-11.6	-12.1	-13.3	-13.1	-12.6	-12.6	-12.7	-13.1	-13.4	-13.3	-14.0	-14.8	-14.9	-15.8	-16.2	-17.3	-18.5	-18.5	-17.9	-17.7	-17.5	-17.2	-11.4	-18.5	-14.6
19	-18.5	-17.4	-17.3	-17.3	-15.9	-12.9	-9.9	-9.1	-10.9	-10.4	-9.9	-8.4	-7.7	-8.3	-10.7	-10.8	-10.2	-10.7	-11.4	-12.8	-14.2	-15.7	-16.1	-17.1	-7.7	-18.5	-12.6
20	-17.9	-18.1	-18.2	-18.3	-17.8	-18.9	-18.6	-19.2	-19.5	-19.1	-18.9	-19.0	-17.7	-17.1	-17.0	-17.8	-19.1	-19.6	-19.7	-20.0	-19.9	-20.8	-20.6	-20.7	-17.0	-20.8	-18.9
21	-20.2	-19.3	-18.7	-18.0	-17.5	-18.6	-19.3	-19.2	-20.6	-22.7	-24.3	-25.0	-23.2	-24.2	-24.8	-24.1	-23.7	-24.1	-24.4	-25.3	-22.8	-20.3	-20.5	-22.1	-17.5	-25.3	-21.8
22	-22.5	-23.9	-23.1	-23.7	-22.5	-21.0	-18.8	-17.8	-16.1	-15.5	-15.2	-14.7	-14.6	-14.5	-14.8	-16.2	-13.9	-13.8	-13.9	-13.4	-13.2	-12.3	-13.5	-14.1	-12.3	-23.9	-16.8
23	-14.9	-14.8	-14.0	-16.0	-15.2	-15.8	-14.9	-15.0	-16.8	-15.8	-15.8	-16.7	-16.3	-13.7	-14.5	-14.3	-16.2	-16.1	-15.7	-15.3	-12.9	-13.8	-13.3	-13.9	-12.9	-16.8	-15.1
24	-14.4	-15.1	-14.9	-15.8	-15.3	-14.9	-15.7	-17.0	-17.5	-17.2	-16.4	-15.8	-15.4	-14.1	-13.7	-12.2	-9.9	-10.9	-13.5	-13.9	-14.0	-15.2	-15.8	-15.7	-9.9	-17.5	-14.8
25	-14.5	-14.2	-15.1	-15.6	-17.4	-17.8	-19.0	-18.4	-18.6	-18.5	-18.7	-18.7	-17.9	-16.5	-17.1	-17.6	-18.9	-19.1	-18.1	-18.3	-19.1	-15.4	-16.0	-17.2	-14.2	-19.1	-17.4
26	-18.2	-17.1	-16.7	-16.8	-17.1	-18.0	-18.4	-19.8	-22.4	-21.7	-22.3	-21.3	-19.3	-18.6	-18.4	-20.3	-20.7	-20.4	-20.4	-20.3	-19.5	-15.8	-7.9	-8.5	-7.9	-22.4	-18.3
27	-7.9	-7.0	-6.0	-5.3	-4.3	-4.2	-3.5	-3.2	-2.8	-2.6	-2.8	-4.5	-5.9	-5.7	-4.9	-4.3	-4.1	-3.5	-3.1	-2.4	-2.6	-1.9	-0.9	-0.3	-0.3	-7.9	-3.9
28	-0.4	-0.5	-0.5	-1.0	-0.6	-0.6	-0.8	-1.0	-1.3	-1.4	-1.2	-1.2	-0.7	-0.5	-1.3	-1.9	-2.9	-2.7	-1.4	-4.1	-7.7	-7.6	-8.3	-8.0	-0.4	-8.3	-2.4
29	-7.2	-4.8	-5.0	-4.0	-3.8	-4.4	-4.6	-4.9	-5.0	-7.3	-8.7	-8.9	-10.0	-10.3	-10.4	-11.2	-12.2	-12.9	-13.0	-13.1	-13.4	-13.7	-13.9	-13.7	-3.8	-13.9	-9.0
30	-13.6	-13.8	-13.9	-13.8	-13.9	-14.1	-14.2	-14.2	-14.2	-14.1	-14.5	-14.6	-14.2	-13.0	-14.1	-14.7	-14.9	-14.9	-15.2	-15.5	-16.0	-16.1	-16.2	-16.5	-13.0	-16.5	-14.6
31	-16.7	-16.8	-16.5	-16.8	-18.5	-18.4	-21.4	-20.9	-21.0	-20.2	-20.2	-19.6	-18.7	-16.9	-15.4	-15.7	-16.2	-14.7	-13.4	-12.9	-13.2	-13.9	-14.3	-16.2	-12.9	-21.4	-17.0
Max.	**2.2**	**2.1**	**1.9**	**2.3**	**2.7**	**1.9**	**1.4**	**2.2**	**2.4**	**2.7**	**1.9**	**2.4**	**2.0**	**2.2**	**2.6**	**2.3**	**2.2**	**2.3**	**2.1**	**2.2**	**2.4**	**2.2**	**2.4**	**2.5**	**2.7**		
Min.	**-22.5**	**-23.9**	**-23.1**	**-23.7**	**-22.5**	**-21.0**	**-21.4**	**-20.9**	**-22.4**	**-22.7**	**-24.3**	**-25.0**	**-23.2**	**-24.2**	**-24.8**	**-24.1**	**-23.7**	**-24.1**	**-24.4**	**-25.3**	**-22.8**	**-20.8**	**-20.6**	**-22.1**		**-25.3**	
Avg.	**-8.9**	**-8.8**	**-8.8**	**-9.0**	**-9.1**	**-9.2**	**-9.4**	**-9.5**	**-9.6**	**-9.5**	**-9.6**	**-9.4**	**-9.0**	**-8.5**	**-8.5**	**-8.8**	**-9.0**	**-8.9**	**-9.0**	**-9.1**	**-9.1**	**-9.0**	**-8.9**	**-9.2**			**-9.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
19																4.1	4.4	5.0	3.3	1.9	1.1	1.4	1.7	1.1	5.0	1.1	2.7
20	1.4	1.7	3.5	3.1	3.0	4.2	2.8	2.5	3.0	2.6	1.9	1.7	2.3	2.2	2.8	2.9	3.2	3.4	3.8	2.5	0.7	0.5	0.4	0.7	4.2	0.4	2.4
21	0.4	1.2	4.3	4.4	4.8	4.3	4.3	4.1	2.9	1.3	0.0	1.5	0.3	0.2	0.4	0.1	0.7	0.3	0.2	0.0	0.5	1.1	0.5	0.3	4.8	0.0	1.6
22	0.3	0.3	0.0	0.0	0.1	0.1	0.7	1.6	2.4	3.8	2.9	2.4	1.6	3.3	3.9	4.9	5.7	6.2	6.5	6.7	6.2	6.5	6.1	7.9	7.9	0.0	3.3
23	8.5	7.7	8.8	9.8	10.0	9.8	9.3	7.6	9.3	6.5	7.0	7.3	6.1	5.9	6.0	4.7	3.8	3.2	2.1	3.4	1.1	1.0	1.1	1.8	10.0	1.0	5.9
24	2.7	2.2	4.6	5.5	5.9	5.7	4.0	9.8	10.5	10.9	11.5	12.3	10.6	11.2	9.3	8.9	7.7	5.8	5.8	9.2	10.3	10.9	7.6	6.2	12.3	2.2	7.9
25	6.6	6.0	10.1	9.1	7.9	7.4	8.3	7.7	7.7	6.6	7.5	5.4	3.6	4.2	2.5	3.1	3.1	2.7	3.4	3.9	7.0	8.0	10.5	10.2	10.5	2.5	6.4
26	11.4	13.7	12.4	12.1	11.7	10.8	11.7	10.3	9.4	9.3	9.0	8.4	9.4	9.6	8.3	7.6	5.3	6.2	7.9	9.1	9.9	8.5	6.3	6.7	13.7	5.3	9.4
27	6.7	5.9	6.4	6.0	6.3	7.0	3.6	5.5	5.8	6.2	4.9	6.0	3.7	2.2	4.0	1.9	2.3	2.2	1.2	1.5	1.8	1.4	1.1	0.6	7.0	0.6	3.9
28	0.7	0.5	1.5	2.7	2.4	2.4	2.4	3.3	2.8	1.8	1.5	1.5	1.6	1.1	1.4	1.2	1.0	0.6	0.6	1.1	0.5	0.9	0.8	1.3	3.3	0.5	1.5
29	0.5	2.7	2.1	2.2	1.1	2.7	1.7	2.2	1.8	4.5	3.7	4.0	4.3	3.0	1.5	1.8	1.4	3.0	3.8	2.9	1.5	4.1	3.0	2.5	4.5	0.5	2.6
30	4.2	5.5	6.2	4.4	4.6	5.8	4.8	5.9	7.1	7.6	8.2	7.7	8.0	7.8	6.1	6.2	9.6	7.3	6.5	7.3	7.5	6.8	6.1	6.1	9.6	4.2	6.6
Max.	**11.4**	**13.7**	**12.4**	**12.1**	**11.7**	**10.8**	**11.7**	**10.3**	**10.5**	**10.9**	**11.5**	**12.3**	**10.6**	**11.2**	**9.3**	**8.9**	**9.6**	**7.3**	**7.9**	**9.2**	**10.3**	**10.9**	**10.5**	**10.2**	**13.7**		
Min.	**0.3**	**0.3**	**0.0**	**0.0**	**0.1**	**0.1**	**0.7**	**1.6**	**1.8**	**1.3**	**0.0**	**1.5**	**0.3**	**0.2**	**0.4**	**0.1**	**0.7**	**0.3**	**0.2**	**0.0**	**0.5**	**0.5**	**0.4**	**0.3**		**0.0**	
Avg.	**3.9**	**4.3**	**5.5**	**5.4**	**5.2**	**5.5**	**4.9**	**5.5**	**5.7**	**5.6**	**5.3**	**5.3**	**4.7**	**4.6**	**4.2**	**4.0**	**4.0**	**3.8**	**3.7**	**4.1**	**4.0**	**4.3**	**3.8**	**3.8**			**4.6**

Total Hours in Month 720 **Hours Data Available** 273 **Data Recovery** 37.9%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.9	6.7	6.3	6.3	5.7	4.6	6.1	7.2	4.5	3.8	5.6	8.2	6.5	6.2	8.7	9.8	9.2	6.4	4.0	3.0	1.8	3.0	4.4	2.5	9.8	1.8	5.7
2	1.2	1.0	1.9	1.6	2.5	2.7	2.0	1.1	0.3	0.6	2.4	2.4	1.9	2.8	3.0	4.0	6.0	6.9	8.4	7.3	5.3	5.4	8.9	8.9	8.9	0.3	3.7
3	8.9	9.7	8.2	8.2	8.2	7.1	6.1	4.0	7.3	7.8	5.3	8.4	6.6	6.2	8.1	7.4	7.6	6.1	7.8	7.2	6.0	6.5	4.5	3.7	9.7	3.7	7.0
4	3.5	4.2	4.8	3.1	2.3	2.5	2.5	3.4	4.7	5.0	2.2	1.2	3.1	4.2	4.1	3.9	5.8	7.3	6.9	7.5	8.2	9.1	8.2	8.2	9.1	1.2	4.8
5	8.4	9.2	11.1	10.0	6.9	9.2	10.1	10.8	10.2	10.1	10.0	10.5	10.6	10.3	9.5	9.6	9.7	9.8	9.3	11.2	9.4	9.9	9.5	9.1	11.2	6.9	9.8
6	9.0	9.8	11.5	10.1	9.0	9.4	9.7	7.2	7.1	6.5	4.9	3.5	2.7	3.0	4.5	3.9	3.6	3.7	3.6	3.8	6.5	8.2	9.2	10.6	11.5	2.7	6.7
7	12.4	12.1	12.9	14.8	14.0	14.2	14.5	15.0	13.1	13.1	12.6	12.5	12.0	10.7	9.8	10.0	9.8	8.5	5.6	7.2	5.6	7.4	8.3	6.5	15.0	5.6	11.0
8	5.3	4.6	5.1	5.3	4.0	3.9	3.8	3.5	4.1	4.8	4.5	5.5	6.5	6.8	6.8	6.1	5.5	6.6	7.2	8.0	8.6	8.6	7.9	8.9	8.9	3.5	5.9
9	8.9	9.2	9.1	8.8	7.8	5.4	5.0	7.1	6.0	5.7	4.7	3.8	3.1	2.4	1.2	0.2	0.1	0.1	0.2	0.7	1.7	2.4	2.0	2.7	9.2	0.1	4.1
10	3.6	2.2	1.4	0.6	1.8	1.4	1.5	0.3	1.0	0.8	1.9	2.0	2.5	2.3	2.1	1.1	3.0	4.2	5.3	4.7	5.0	2.6	3.7	3.6	5.3	0.3	2.4
11	2.7	2.0	1.2	0.3	2.7	6.6	6.7	6.9	5.8	4.1	4.9	5.3	5.5	4.8	4.5	3.8	4.3	4.3	3.0	2.8	5.9	4.9	4.1	4.4	6.9	0.3	4.2
12	5.4	4.2	1.6	0.0					0.4	1.7	2.1											0.1	0.0	0.0	5.4	0.0	1.5
13		0.0	0.0	0.4	0.2	1.6	1.2	0.5	4.0	5.2	3.5	4.4	3.4	7.5	10.0	11.5	12.0	13.2	12.3	12.0	13.0	13.6	13.4	13.9	13.9	0.0	6.8
14	13.0	11.5	10.3	12.6	11.0	9.7	8.5	8.5	10.0	9.3	8.5	9.1	6.5	9.2	10.3	11.0	11.6	11.6	8.4	7.7	8.7	11.7	12.2	11.2	13.0	6.5	10.1
15	9.9	9.4	8.1	9.2	7.9	8.9	6.3	5.1	5.8	8.9	8.7	6.5	4.9	5.1	6.5	5.9	6.1	7.0	8.4	13.3	13.8	14.3	11.6	10.3	14.3	4.9	8.4
16	7.3	6.7	9.7	7.0	6.7	6.8	5.4	5.7	5.3	5.7	3.8	2.5	3.0	2.0	1.8	2.3	1.2	0.8	1.2	1.1	1.5	2.1	1.0	0.2	9.7	0.2	3.8
17	0.7	1.5	2.3	1.4	0.6	0.5	1.5	2.0	1.9	1.6	1.8	2.6	3.2	2.6	2.3	2.0	5.9	7.4	7.3	6.9	6.4	4.7	3.0	4.3	7.4	0.5	3.1
18	5.0	5.6	5.2	4.6	4.9	4.1	3.2	3.2	3.6	5.5	6.9	7.7	5.3	4.2	5.6	5.4	5.5	5.0	6.9	6.4	3.5	3.4	6.0	5.6	7.7	3.2	5.1
19	6.3	6.4	6.0	3.3	7.0	8.1	6.7	7.8	6.1	6.8	6.7	6.7	3.9	5.2	4.6	4.9	3.8	4.7	3.1	4.3	4.0	3.3	1.9	1.2	8.1	1.2	5.1
20	1.1	0.7	0.6	1.8	1.9	2.8	2.6	1.9	0.5	0.4	1.2	1.3	2.6	0.9	0.5	0.9	0.9	0.0	1.8	1.6	1.7	1.8	2.6	1.5	2.8	0.0	1.4
21	2.3	2.0	1.6	1.5	0.2	0.3	0.4	1.4	1.2	0.9	0.5	1.7	0.1	1.2	0.6	0.9	0.7	1.8	0.9	0.8	1.3	2.6	2.7	1.3	2.7	0.1	1.2
22	3.2	3.4	3.2	3.1	2.9	2.6	2.3	3.7	5.0	3.5	1.7	1.8	3.8	4.3	4.4	2.7	3.3	3.2	1.7	2.2	2.3	2.4	2.2	1.3	5.0	1.3	2.9
23	2.4	1.9	1.2	2.8	3.2	1.1	0.5	1.5	2.5	1.7	0.7	0.0	2.3	2.3	1.1	1.4	1.4	1.3	0.7	0.4	1.6	2.3	3.1	4.4	4.4	0.0	1.7
24	6.7	7.2	5.9	5.5	5.8	6.8	5.7	4.8	5.0	4.1	4.7	3.8	4.8	4.7	3.9	3.7	2.3	2.6	4.3	4.5	3.6	3.6	3.4	3.2	7.2	2.3	4.6
25	2.9	2.5	2.6	3.8	1.8	3.8	4.7	6.1	6.6	7.5	6.3	5.6	5.9	6.0	5.7	6.0	5.9	6.1	7.8	7.3	7.4	6.4	5.8	9.2	9.2	1.8	5.6
26	10.9	9.5	8.0	10.8	7.2	6.4	6.2	7.6	3.7	2.7	2.8	3.4	5.2	5.7	5.1	3.3	4.7	4.9	5.0	4.8	4.2	3.9	4.4	4.8	10.9	2.7	5.6
27	5.2	6.3	7.7	8.3	8.4	7.8	5.6	5.2	4.6	5.5	4.4	3.3	3.6	3.5	4.5	4.5	4.8	5.0	4.0	3.7	2.0	4.0	7.3	6.7	8.4	2.0	5.2
28	5.5	5.3	7.5	8.1	8.4	9.2	9.1	7.8	5.7	5.1	4.7	5.7	5.5	5.6	6.6	6.1	5.4	5.0	4.3	6.4	7.0	6.7	4.8	5.1	9.2	4.3	6.3
29	4.4	2.8	1.1	1.7	4.3	4.9	6.3	9.1	8.3	8.3	7.8	6.8	6.4	6.2	5.1	5.7	6.7	6.6	6.2	4.0	6.0	6.4	5.2	3.8	9.1	1.1	5.6
30	6.2	7.0	7.9	9.0	8.6	7.8	5.3	6.3	4.6	4.4	2.2	1.3	3.3	2.9	1.4	0.9	3.5	6.2	8.8	7.7	6.9	5.3	5.3	4.9	9.0	0.9	5.3
31	3.2	3.6	5.0	4.3	2.9	1.4	1.4	2.8	3.1	2.7	2.4	3.5	2.9	2.1	1.5	1.8	2.4	1.8	1.7	1.4	1.0	1.4	3.1	2.2	5.0	1.0	2.5
Max.	**13.0**	**12.1**	**12.9**	**14.8**	**14.0**	**14.2**	**14.5**	**15.0**	**13.1**	**13.1**	**12.6**	**12.5**	**12.0**	**10.7**	**10.3**	**11.5**	**12.0**	**13.2**	**12.3**	**13.3**	**13.8**	**14.3**	**13.4**	**13.9**	**15.0**		
Min.	**0.7**	**0.0**	**0.0**	**0.0**	**0.2**	**0.3**	**0.4**	**0.3**	**0.3**	**0.4**	**0.5**	**0.0**	**0.1**	**0.9**	**0.5**	**0.2**	**0.1**	**0.0**	**0.2**	**0.4**	**1.0**	**0.1**	**0.0**	**0.0**		**0.0**	
Avg.	**5.7**	**5.4**	**5.4**	**5.4**	**5.3**	**5.4**	**5.0**	**5.2**	**4.9**	**5.0**	**4.5**	**4.7**	**4.6**	**4.7**	**4.8**	**4.7**	**5.1**	**5.3**	**5.2**	**5.3**	**5.3**	**5.4**	**5.5**	**5.3**			**5.1**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.1	1.8	2.3	4.1	4.0	4.5	3.7	4.1	5.0	4.5	3.1	3.5	3.4	5.4	4.8	3.8	3.9	3.6	3.3	4.3	3.8	3.8	3.6	3.8	5.4	1.8	3.7
2	3.6	2.2	2.2	4.0	4.7	4.2	4.5	5.8	4.1	2.5	3.5	4.8	3.7	5.2	4.6	5.0	4.0	2.4	5.5	6.2	6.7	7.4	6.0	3.9	7.4	2.2	4.4
3	6.3	5.1	6.8	7.0	7.3	5.3	4.8	4.2	4.4	5.0	4.0	5.0	3.6	3.7	2.6	2.4	2.0	0.0	0.3	0.5	1.0	1.4	1.1	1.3	7.3	0.0	3.5
4	0.2	0.0	0.4	0.3	0.0	0.0	0.1	0.4	0.1	0.4	0.8	0.1	0.5	0.1	0.0	0.0	0.0	0.6	1.4	0.5	1.5	0.3	0.5	2.1	2.1	0.0	0.4
5	3.5	2.1	1.3	0.9	1.2	1.3	1.4	1.0	0.3	0.5	0.1	0.0	0.0	1.0	2.2	3.7	4.6	3.1	2.9	3.2	4.1	2.4	2.1	2.5	4.6	0.0	1.9
6	1.7	1.6	1.9	1.5	0.3	0.2	0.0	0.3	0.2	0.1	0.4	0.6	0.0	1.0	1.1	2.0	0.9	1.1	1.1	1.5	1.4	1.3	0.6	1.0	2.0	0.0	0.9
7	1.7	1.9	0.8	1.1	0.7	1.2	1.3	1.0	2.6	1.4	0.8	0.5	0.4	0.5	0.6	3.4	2.2	2.2	3.9	3.0	4.5	4.8	4.6	6.7	6.7	0.4	2.2
8	5.8	5.5	5.4	5.9	6.0	5.6	6.1	3.6	2.9	2.1	3.1	3.5	3.9	4.1	3.2	4.4	2.1	1.4	1.3	1.2	1.4	1.6	2.0	1.9	6.1	1.2	3.5
9	2.0	1.7	1.1	1.8	1.8	1.8	1.4	0.9	1.9	1.1	0.6	0.3	1.8	1.8	1.5	2.8	1.6	2.0	0.7	1.5	1.8	1.7	1.9	2.1	2.8	0.3	1.6
10	1.9	2.0	1.2	1.3	1.7	1.3	0.1	0.3	0.4	1.1	1.4	1.7	1.7	2.5	2.6	2.4	2.1	1.8	1.9	2.9	2.8	2.4	1.7	1.3	2.9	0.1	1.7
11	2.1	1.2	0.5	0.0	0.5	0.8	1.6	1.1	0.7	0.2	0.1	1.2	1.5	1.6	0.5	1.1	1.6	0.6	0.5	0.2	0.9	0.7	1.0	0.5	2.1	0.0	0.9
12	0.6	0.5	0.9	2.1	3.6	4.0	4.0	3.1	3.2	4.4	3.9	4.7	5.0	4.7	4.5	4.9	5.6	3.9	3.8	4.6	5.3	5.6	5.8	4.4	5.8	0.5	3.9
13	5.3	6.0	3.5	4.4	5.1	5.8	5.0	5.6	6.1	4.3	4.7	5.1	5.6	5.8	6.3	4.9	5.9	6.9	5.4	5.1	5.3	4.7	4.2	2.1	6.9	2.1	5.1
14	3.0	5.7	4.2	3.7	4.3	2.4	3.1	3.3	1.7	2.3	0.6	2.3	1.0	2.9	3.7	3.9	5.5	6.5	6.8	6.4	7.1	6.9	5.7	4.2	7.1	0.6	4.1
15	2.7	2.6	2.9	4.6	4.8	4.5	3.9	4.9	6.3	6.8	7.5	7.4	7.5	7.3	7.5	7.5	7.1	7.4	8.1	7.2	7.3	6.3	5.9	5.9	8.1	2.6	6.0
16	6.3	5.5	6.3	6.3	7.1	7.5	6.2	5.0	5.6	4.2	4.2	5.1	2.0	1.4	1.2	0.3	1.0	1.2	0.6	0.2	1.1	1.4	3.0	5.7	7.5	0.2	3.7
17	4.9	5.7	6.4	6.1	6.2	4.5	4.3	5.5	3.1	5.6	5.2	6.3	5.8	4.7	4.7	4.3	6.7	7.4	7.2	6.1	5.5	5.2	4.5	5.9	7.4	3.1	5.5
18	5.9	5.7	5.5	6.0	6.4	7.4	7.6	8.7	9.0	6.8	8.1	6.9	7.0	7.5	9.6	10.0	9.4	6.9	6.7	7.1	8.2	7.7	5.4	7.8	10.0	5.4	7.4
19	9.7	10.2	10.7	8.8	8.5	6.2	4.5	8.7	8.6	7.7	8.0	10.2	9.0	8.6	8.1	8.0	5.6	4.6	6.0	6.0	7.5	8.7	8.9	9.0	10.7	4.5	8.0
20	8.3	8.0	8.0	8.3	7.7	8.5	8.5	8.6	8.6	7.5	8.2	8.1	7.8	8.4	8.4	8.1	7.9	7.6	7.9	8.2	7.9	9.1	8.5	8.4	9.1	7.5	8.2
21	8.5	8.7	9.2	9.9	9.8	10.2	11.3	11.8	12.2	12.0	12.7	13.1	13.7	13.3	12.7	12.3	12.8	12.9	11.4	8.7	8.5	8.7	10.8	10.9	13.7	8.5	11.1
22	10.6	11.2	9.1	10.3	12.0	11.1	10.2	12.5	12.1	12.1	12.9	17.5	15.7	12.0	8.6	7.8	7.5	7.8	8.8	6.7	8.7	10.7	9.3	8.2	17.5	6.7	10.6
23	7.0	10.8	11.9	11.0	11.4	10.8	6.5	5.8	3.3	4.5	7.0	9.9	7.0	7.5	6.9	5.3	8.2	7.1	6.4	7.8	7.3	9.0	6.8	6.3	11.9	3.3	7.7
24	8.4	8.2	6.5	6.6	8.8	8.2	10.4	10.9	10.6	8.4	8.7	10.1	10.0	9.5	7.9	8.3	8.5	7.2	7.1	5.1	5.4	5.7	5.6	5.7	10.9	5.1	8.0
25	6.6	5.2	5.9	3.7	4.5	5.6	4.6	2.6	3.1	6.8	3.1	3.0	6.0	7.8	6.4	6.6	5.8	4.2	5.6	4.4	5.6	6.6	5.4	6.0	7.8	2.6	5.2
26	4.3	3.7	4.5	3.7	4.4	2.4	2.0	2.0	2.1	3.4	3.5	1.9	2.2	2.1	4.6	4.1	3.4	3.4	2.6	3.7	3.5	3.0	5.9	4.2	5.9	1.9	3.4
27	6.7	8.5	8.0	9.9	9.6	10.2	10.5	12.1	11.5	12.7	10.7	12.3	8.8	6.6	5.1	7.8	6.0	8.8	11.3	12.7	10.0	6.0	6.6	6.2	12.7	5.1	9.1
28	8.7	10.7	13.4	12.7	13.3	6.9	9.6	7.5	11.7	10.6	6.9	9.1	8.1	7.5	8.7	7.3	5.9	4.2	4.5	4.1	3.8	4.4	4.5	4.3	13.4	3.8	7.8
29	3.5	3.9	4.4	3.8	4.3	3.7	4.7	3.4	4.3	4.1	4.4	4.1	4.7	4.0	4.6	4.2	5.0	3.8	3.9	2.9	2.5	3.6	3.9	3.3	5.0	2.5	4.0
30	4.3	4.3	4.1	5.4	4.9	5.6	6.0	5.5	5.7	6.6	4.2	1.5	1.6	2.2	3.9	5.1	4.8	2.5	1.9	0.9	1.6	2.4	2.5	2.4	6.6	0.9	3.8
31	2.8	1.9	2.0	2.0	1.8	2.4	2.0	2.4	1.4	1.5	4.6	3.5	2.9	2.7	2.2	1.8	0.8	1.7	4.9	5.8	5.2	6.7	5.9	5.1	6.7	0.8	3.1
Max.	**10.6**	**11.2**	**13.4**	**12.7**	**13.3**	**11.1**	**11.3**	**12.5**	**12.2**	**12.7**	**12.9**	**17.5**	**15.7**	**13.3**	**12.7**	**12.3**	**12.8**	**12.9**	**11.4**	**12.7**	**10.0**	**10.7**	**10.8**	**10.9**	**17.5**		
Min.	**0.2**	**0.0**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**0.2**	**0.9**	**0.3**	**0.5**	**0.5**		**0.0**	
Avg.	**4.8**	**4.9**	**4.9**	**5.1**	**5.4**	**5.0**	**4.8**	**4.9**	**4.9**	**4.9**	**4.7**	**5.3**	**4.9**	**4.9**	**4.8**	**4.9**	**4.8**	**4.4**	**4.6**	**4.5**	**4.7**	**4.9**	**4.6**	**4.6**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.4	6.2	6.9	5.6	7.6	8.5	8.4	9.2	8.3	9.1	10.6	10.8	10.3	11.1	10.6	9.9	8.7	7.8	6.4	6.9	8.1	6.2	5.1	6.6	11.1	5.1	8.1
2	8.6	7.8	8.2	7.6	6.0	6.1	6.4	4.6	4.4	3.7	3.1	4.7	3.7	2.6	2.7	1.5	0.6	0.5	1.5	1.5	1.9	1.5	0.6	3.4	8.6	0.5	3.9
3	3.8	3.8	4.6	3.9	4.3	5.5	5.9	5.4	6.7	6.2	6.5	6.2	6.7	6.1	6.8	5.6	5.4	5.8	5.8	5.8	6.2	6.9	7.5	9.3	9.3	3.8	5.9
4	8.3	9.5	10.8	10.4	10.1	11.4	11.1	10.9	12.8	13.7	14.1	12.9	13.3	13.7	13.6	14.3	13.9	14.2	15.9	14.6	14.8	14.2	13.3	13.1	15.9	8.3	12.7
5	15.9	15.8	17.0	15.6	15.0	14.0	13.8	12.6	8.7	10.3	10.2	9.8	9.4	10.0	9.8	8.6	8.6	9.0	9.3	8.2	8.0	11.4	14.1	12.1	17.0	8.0	11.5
6	9.5	7.9	6.6	6.4	5.2	4.0	4.0	3.7	2.4	3.8	6.2	8.1	10.3	11.5	9.3	8.2	6.8	6.1	4.8	3.1	3.1	3.6	4.1	4.3	11.5	2.4	6.0
7	3.9	3.6	3.4	3.1	3.5	4.1	5.9	6.0	5.7	5.4	6.7	6.3	5.2	4.2	3.4	5.4	5.5	1.7	2.5	2.4	1.3	0.6	0.2	0.2	6.7	0.2	3.7
8	1.4	0.6	1.6	1.4	1.7	2.1	2.1	1.9	0.8	0.8	2.9	4.4	7.7	9.7	10.8	10.6	13.2	13.7	13.3	14.6	13.5	13.6	14.3	14.5	14.6	0.6	7.1
9	14.6	14.7	13.9	13.8	14.4	12.5	11.7	11.8	9.0	7.2	8.0	9.7	8.1	8.2	6.7	6.2	8.1	7.5	6.6	7.8	9.5	11.6	11.9	11.3	14.7	6.2	10.2
10	11.8	10.7	10.0	10.0	9.4	12.4	12.0	11.5	8.5	4.9	5.0	6.6	6.2	6.7	7.1	7.5	6.7	6.0	6.6	7.0	6.6	6.7	7.1	7.9	12.4	4.9	8.1
11	6.4	6.9	7.7	5.8	2.6	1.0	1.3	3.6	4.4	5.8	7.3	7.9	7.3	6.6	6.2	5.4	4.7	4.5	3.5	0.5	1.3	2.1	1.6	1.4	7.9	0.5	4.4
12	1.0	0.6	0.7	1.7	2.2	1.0	1.2	2.9	7.4	9.0	9.8	10.1	8.7	8.4	7.3	7.2	5.9	5.6	3.7	1.9	1.8	0.6	0.4	1.7	10.1	0.4	4.2
13	0.1	0.5	1.2	1.2	1.9	0.2	1.6	0.5	0.4	1.8	1.2	3.1	4.3	6.8	6.3	7.6	8.6	10.9	12.4	11.0	9.7	10.4	9.6	9.9	12.4	0.1	5.1
14	10.4	11.0	10.6	11.5	12.6	11.1	10.9	9.6	10.4	10.7	8.2	9.0	9.2	10.3	9.9	9.0	9.2	8.6	9.0	8.4	8.8	9.8	10.0	10.7	12.6	8.2	10.0
15	9.6	8.0	9.8	7.9	7.6	8.5	9.4	9.4	9.1	9.3	10.1	9.4	9.4	11.7	9.7	9.0	9.3	10.2	9.7	8.9	9.5	8.0	5.3	5.1	11.7	5.1	8.9
16	3.3	3.2	3.2	2.2	1.1	1.4	1.0	2.1	1.8	1.0	1.0	1.7	2.0	2.5	1.7	3.1	2.7	3.1	2.5	2.7	2.7	3.2	4.3	3.5	4.3	1.0	2.4
17	2.8	1.2	3.2	4.8	6.2	7.2	7.3	7.2	10.6	10.2	9.0	8.2	8.8	8.6	10.1	8.7	8.3	7.2	6.9	7.3	8.0	7.1	7.0	6.5	10.6	1.2	7.2
18	5.2	5.3	5.4	4.1	3.6	4.1	5.2	5.9	6.6	8.0	10.7	11.2	10.7	10.8	10.4	10.4	10.0	9.0	8.2	7.5	6.7	7.1	8.8	8.2	11.2	3.6	7.6
19	8.9	6.3	5.5	5.6	4.7	5.3	5.6	4.9	4.1	2.1	2.3	1.6	2.8	3.4	2.3	3.2	3.6	4.3	3.6	3.0	2.5	2.3	3.4	2.8	8.9	1.6	3.9
20	2.2	1.7	2.2	1.3	1.6	1.0	1.2	2.3	1.8	3.9	3.7	2.2	5.1	5.1	7.1	8.2	7.8	5.9	6.3	5.9	6.4	7.8	7.3	7.6	8.2	1.0	4.4
21	6.5	4.5	6.2	6.8	7.2	6.3	5.0	5.2	3.3	0.9	1.1	2.0	1.1	3.4	3.5	2.7	2.4	0.4	2.6	1.9	1.8	1.9	2.4	1.0	7.2	0.4	3.3
22	1.9	0.9	1.1	1.2	4.2	3.2	2.8	1.0	2.7	1.1	3.8	4.9	4.4	2.6	3.3	2.8	3.1	1.4	4.1	3.6	4.1	3.8	3.4	4.7	4.9	0.9	2.9
23	4.4	5.1	5.4	5.2	4.3	2.7	3.5	3.6	4.4	2.7	3.0	6.7	8.0	6.9	5.8	5.9	6.9	8.5	7.9	7.3	6.3	5.3	6.6	8.5	8.5	2.7	5.6
24	8.0	7.0	7.7	5.4	4.0	1.8	5.3	5.9	5.7	4.7	3.7	3.3	0.9	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.7	1.5	8.0	0.0	2.8
25	1.4	1.6	1.8	2.6	3.0	3.4	2.6	2.2	3.9	3.8	2.9	2.4	4.9	10.6	9.4	8.9	7.2	5.8	4.2	2.7	2.4	1.2	1.4	3.6	10.6	1.2	3.9
26	3.9	3.1	3.1	1.2	0.1	0.1	0.5	1.7	0.4	0.7	0.9	1.8	2.0	3.5	2.7	2.0	3.0	2.1	0.7	2.8	3.5	5.0	5.5	5.8	5.8	0.1	2.3
27	6.3	5.0	2.5	5.7	11.0	13.4	15.5	15.0	15.0	16.0	16.5	14.7	13.7	13.5	13.3	14.5	14.0	14.4	13.0	13.1	14.1	15.7	16.9	16.0	16.9	2.5	12.9
28	17.2	16.9	14.1	15.0	16.8	14.6	13.6	11.1	13.9	13.8	10.6	7.5	8.0	7.1	6.5	4.2	5.2	6.9	5.3	6.0	9.2	8.5	6.4	9.8	17.2	4.2	10.3
Max.	**17.2**	**16.9**	**17.0**	**15.6**	**16.8**	**14.6**	**15.5**	**15.0**	**15.0**	**16.0**	**16.5**	**14.7**	**13.7**	**13.7**	**13.6**	**14.5**	**14.0**	**14.4**	**15.9**	**14.6**	**14.8**	**15.7**	**16.9**	**16.0**	**17.2**		
Min.	**0.1**	**0.5**	**0.7**	**1.2**	**0.1**	**0.1**	**0.5**	**0.5**	**0.4**	**0.7**	**0.9**	**1.6**	**0.9**	**0.4**	**0.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**0.2**	**0.2**	**0.2**		**0.0**	
Avg.	**6.5**	**6.1**	**6.2**	**6.0**	**6.1**	**6.0**	**6.2**	**6.1**	**6.2**	**6.1**	**6.4**	**6.7**	**6.9**	**7.4**	**7.0**	**6.8**	**6.8**	**6.5**	**6.3**	**5.9**	**6.2**	**6.3**	**6.4**	**6.8**			**6.4**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.2	10.2	10.5	9.6	9.0	5.0	5.1	4.5	3.1	2.2	2.0	2.9	2.9	2.7	2.4	2.0	3.1	4.0	4.5	5.0	3.8	3.5	6.2	6.5	10.5	2.0	5.0
2	6.7	7.7	6.7	5.3	5.9	6.6	7.4	7.7	8.4	8.2	7.9	7.6	7.5	7.9	6.1	7.6	7.8	7.4	6.1	5.3	5.7	4.9	4.3	4.1	8.4	4.1	6.7
3	3.1	2.5	2.7	2.9	3.0	2.6	2.0	1.5	1.6	2.6	4.3	5.4	4.4	3.3	4.0	4.2	3.7	1.5	1.2	1.4	1.2	0.0	0.6	0.4	5.4	0.0	2.5
4	0.3	0.5	0.1	0.7	2.0	3.4	2.8	1.9	3.1	2.6	3.9	3.3	4.0	5.4	7.3	7.7	8.4	7.7	6.5	6.9	7.7	7.6	6.5	5.9	8.4	0.1	4.4
5	6.2	6.1	5.5	5.0	4.9	4.5	4.1	3.3	4.2	3.9	3.6	3.9	3.7	4.1	3.6	4.6	4.0	2.6	3.6	2.1	1.5	1.4	1.4	2.1	6.2	1.4	3.7
6	1.6	2.5	2.1	3.0	2.3	2.4	2.9	0.4	0.2	0.0	0.0	3.0	2.5	3.1	3.2	2.1	2.1	1.1	1.3	0.9	0.6	2.2	2.3	1.1	3.2	0.0	1.8
7	1.1	1.8	1.4	2.0	1.6	1.7	1.5	2.7	4.3	5.3	4.9	6.2	4.9	5.4	7.9	6.4	5.6	4.9	9.6	8.2	8.1	9.5	9.3	8.4	9.6	1.1	5.1
8	10.5	9.1	7.7	7.2	6.4	3.8	3.7	5.4	7.5	9.0	13.6	14.9	11.6	11.5	14.1	12.9	13.4	12.5	13.1	10.6	9.5	11.1	12.4	14.8	14.9	3.7	10.3
9	13.3	11.5	6.3	6.0	3.0	3.3	2.1	3.7	6.0	6.9	4.4	4.1	5.4	7.5	8.9	8.5	9.6	10.9	13.2	13.3	12.9	13.7	11.2	11.6	13.7	2.1	8.2
10	11.2	11.3	10.8	10.5	10.0	10.4	8.7	7.3	8.2	7.1	5.0	3.0	3.9	4.6	4.8	3.7	3.4	3.0	0.9	2.4	3.5	4.9	3.3	3.4	11.3	0.9	6.1
11	3.1	3.2	3.5	4.5	6.4	6.1	7.3	8.8	7.9	8.6	13.0	13.4	14.5	12.8	12.0	12.4	11.3	10.9	12.7	11.3	9.8	11.2	12.9	11.0	14.5	3.1	9.5
12	10.0	8.6	7.7	7.3	5.7	6.2	6.1	6.5	7.0	6.7	3.3	0.5	1.2	0.9	1.5	2.1	1.0	1.4	0.5	2.8	1.9	1.1	0.4	0.3	10.0	0.3	3.8
13	0.5	0.3	0.0	0.8	0.5	1.0	0.4	0.0	0.4	0.9	0.3	1.2	3.7	3.8	3.6	3.7	3.8	4.0	3.9	4.6	3.4	4.1	6.4	6.7	6.7	0.0	2.4
14	9.0	6.0	5.9	7.2	7.0	6.4	6.7	6.4	5.5	5.3	4.3	3.1	3.3	2.7	4.3	4.0	3.0	3.6	2.2	0.9	0.6	0.6	0.0	0.1	9.0	0.0	4.1
15	0.4	0.6	0.3	0.7	0.0	0.0	0.5	0.6	1.0	0.1	0.0	1.4	0.8	0.6	1.0	0.6	1.3	1.5	0.1	0.1	0.0	0.0	0.1	0.9	1.5	0.0	0.5
16	2.8	2.7	1.5	1.5	1.7	1.7	1.0	3.1	5.4	4.6	3.9	4.9	5.1	3.8	3.4	3.2	3.6	3.3	1.8	1.6	2.7	3.8	3.9	2.6	5.4	1.0	3.1
17	2.1	2.5	3.0	2.9	3.0	3.7	3.6	3.8	4.3	4.3	4.1	4.1	4.1	3.0	4.2	4.9	5.5	5.8	6.2	5.3	6.1	5.9	6.0	5.7	6.2	2.1	4.3
18	5.7	5.8	5.6	5.3	5.0	4.8	2.6	3.0	4.7	5.3	5.0	5.8	6.0	5.3	6.1	5.6	6.1	6.5	5.4	4.2	3.3	1.3	0.1	0.9	6.5	0.1	4.6
19	1.5	1.4	0.7	0.2	0.6	0.9	0.9	2.5	1.0	1.8	4.2	5.2	6.1	5.7	8.2	7.8	7.7	6.0	6.2	5.6	4.7	4.6	5.8	6.0	8.2	0.2	4.0
20	6.7	5.4	4.8	4.1	3.7	4.8	3.9	3.4	2.9	2.1	2.0	1.5	1.7	1.4	2.7	6.5	7.1	8.1	7.8	9.3	11.1	11.9	13.5	12.8	13.5	1.4	5.8
21	14.5	14.2	13.9	13.4	12.9	14.2	13.3	12.0	10.4	11.6	8.4	7.8	7.3	6.1	7.2	7.2	6.0	6.5	7.5	6.3	6.6	5.9	6.2	4.4	14.5	4.4	9.3
22	5.1	7.8	7.0	7.7	8.3	9.0	8.9	9.8	13.2	13.3	11.7	10.3	10.1	9.8	9.0	9.2	9.0	9.5	8.0	6.6	5.8	5.3	5.9	4.9	13.3	4.9	8.5
23	4.4	1.0	1.3	1.3	2.8	3.9	1.5	1.1	0.4	0.7	1.6	1.5	1.4	0.7	1.6	1.7	1.8	1.4	2.9	2.1	2.9	3.3	4.4	3.5	4.4	0.4	2.0
24	5.1	5.0	4.7	3.0	5.1	7.6	7.7	4.7	4.7	5.4	6.5	6.1	7.2	6.3	6.7	7.1	8.2	8.1	8.3	9.4	9.0	7.0	7.8	6.9	9.4	3.0	6.6
25	7.2	7.4	7.5	7.2	7.5	8.0	7.7	7.9	6.2	6.8	7.1	8.8	7.1	7.0	8.1	7.6	7.6	7.6	7.2	6.7	6.9	8.5	7.9	7.1	8.8	6.2	7.4
26	6.6	5.9	6.5	5.7	6.0	8.0	7.8	7.0	6.3	7.1	5.5	6.7	5.9	5.2	3.9	3.6	2.9	1.8	1.5	2.2	2.3	1.2	1.0	0.4	8.0	0.4	4.6
27	1.3	0.2	2.1	2.4	1.3	1.8	2.5	2.1	2.2	2.6	1.6	1.8	2.0	2.5	2.7	0.4	0.1	0.6	0.6	1.0	0.1	0.4	0.9	1.7	2.7	0.1	1.5
28	3.5	4.0	3.0	1.8	2.7	1.1	1.5	1.2	1.4	2.3	3.0	2.0	2.2	1.6	2.0	1.7	1.4	0.1	1.4	0.2	0.0	0.1	2.0	3.8	4.0	0.0	1.8
29	2.8	4.2	3.7	2.6	2.7	3.2	3.1	1.9	2.7	3.0	3.0	1.3	1.1	1.2	1.5	1.3	0.4	1.4	1.5	0.7	0.3	0.4	1.8	3.4	4.2	0.3	2.1
30	4.1	5.0	5.8	6.2	8.3	7.3	10.3	8.4	7.5	7.9	8.4	11.8	12.7	13.6	13.6	14.1	11.8	12.5	13.0	15.6	13.1	13.0	14.3	13.2	15.6	4.1	10.5
31	11.0	10.9	10.6	9.5	9.0	9.4	8.8	7.7	7.1	4.1	3.1	2.5	3.0	3.0	2.7	3.4	3.7	4.2	2.7	1.3	0.3	0.2	0.5	1.6	11.0	0.2	5.0
Max.	**14.5**	**14.2**	**13.9**	**13.4**	**12.9**	**14.2**	**13.3**	**12.0**	**13.2**	**13.3**	**13.6**	**14.9**	**14.5**	**13.6**	**14.1**	**14.1**	**13.4**	**12.5**	**13.2**	**15.6**	**13.1**	**13.7**	**14.3**	**14.8**	**15.6**		
Min.	**0.3**	**0.2**	**0.0**	**0.2**	**0.0**	**0.0**	**0.4**	**0.0**	**0.2**	**0.0**	**0.0**	**0.5**	**0.8**	**0.6**	**1.0**	**0.4**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.1**		**0.0**	
Avg.	**5.5**	**5.3**	**4.9**	**4.7**	**4.8**	**4.9**	**4.7**	**4.5**	**4.8**	**4.9**	**4.8**	**5.0**	**5.1**	**4.9**	**5.4**	**5.4**	**5.3**	**5.2**	**5.2**	**5.0**	**4.7**	**4.8**	**5.1**	**5.0**			**5.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.0	5.0	6.0	5.1	5.5	3.8	4.6	5.6	5.0	3.4	0.7	1.6	2.6	3.7	4.0	3.6	3.4	2.1	1.0	1.6	0.7	0.6	1.7	1.5	6.0	0.6	3.2
2	2.9	3.6	3.2	2.2	2.1	1.5	1.6	0.8	0.5	0.9	1.8	2.1	1.2	0.5	1.7	3.3	1.9	0.9	1.3	2.1	4.8	4.0	4.7	5.1	5.1	0.5	2.3
3	7.2	8.2	8.0	8.5	8.7	9.2	10.0	9.7	9.9	11.7	11.5	9.6	10.9	10.7	8.2	7.1	6.9	6.7	6.7	7.3	6.9	7.4	7.7	7.0	11.7	6.7	8.6
4	5.7	6.0	6.9	7.4	7.4	6.3	5.9	6.1	5.1	4.3	3.7	3.9	3.1	2.2	2.5	1.0	1.1	3.5	4.0	4.0	3.7	3.7	6.3	6.4	7.4	1.0	4.6
5	6.5	8.5	8.5	11.0	11.1	11.4	11.9	9.4	9.0	8.2	8.9	12.2	12.3	9.5	10.5	8.5	10.3	10.1	5.1	6.5	10.9	10.1	12.1	11.9	12.3	5.1	9.8
6	12.0	9.1	5.7	4.3	7.1	5.8	6.0	8.2	10.3	9.1	6.6	5.8	4.5	3.9	3.4	3.6	3.4	3.0	2.7	2.6	3.6	0.9	0.2	0.6	12.0	0.2	5.1
7	0.1	0.0	0.1	0.1	0.6	2.1	2.7	0.6	0.3	0.9	0.7	0.9	1.4	2.9	4.4	3.9	3.9	4.8	6.8	6.4	6.0	7.5	9.5	7.9	9.5	0.0	3.1
8	7.1	7.6	6.8	7.7	9.5	9.1	9.2	10.9	10.4	8.8	7.5	6.8	6.4	6.1	5.7	5.4	5.3	5.3	5.9	4.9	5.2	5.7	5.4	5.4	10.9	4.9	7.0
9	4.5	3.8	3.9	4.3	4.4	4.9	4.7	5.8	5.1	5.4	5.6	5.4	5.6	5.2	4.3	4.2	3.4	3.2	2.1	2.2	2.3	1.3	1.8	1.9	5.8	1.3	4.0
10	2.0	2.1	2.0	3.3	3.2	4.9	6.1	6.4	4.7	6.0	7.7	7.1	6.2	5.8	6.1	6.2	5.6	4.9	4.8	3.5	3.1	2.0	1.4	0.7	7.7	0.7	4.4
11	0.4	0.8	0.7	0.0	1.0	1.4	2.0	0.6	1.6	2.0	3.1	3.7	5.0	6.1	7.7	8.3	9.3	9.2	8.5	7.5	8.5	7.7	7.6	8.1	9.3	0.0	4.6
12	7.7	7.3	7.5	7.1	6.7	7.2	7.0	6.7	7.5	8.0	6.3	5.1	7.0	9.9	8.9	7.8	6.7	6.3	5.1	4.1	3.3	1.7	1.4	2.2	9.9	1.4	6.2
13	1.7	0.9	0.5	2.0	2.5	3.3	6.6	8.3	9.5	9.6	11.8	13.8	14.2	14.7	13.0	12.3	9.7	10.3	10.9	12.3	12.8	12.2	10.3	9.0	14.7	0.5	8.8
14	9.7	10.0	10.5	10.3	11.7	12.4	12.2	12.9	14.2	11.8	11.7	12.1	12.0	12.5	11.0	11.5	13.9	14.1	14.7	15.1	16.9	17.0	15.0	14.7	17.0	9.7	12.8
15	14.5	15.8	14.8	13.8	12.7	13.5	9.7	8.1	6.9	5.7	4.1	6.9	9.2	12.9	13.5	12.3	5.8	6.1	6.3	4.6	5.6	4.9	3.3	2.8	15.8	2.8	8.9
16	1.9	2.4	2.7	6.2	7.2	7.7	7.9	8.9	10.5	8.1	7.9	11.4	13.0	12.5	11.7	12.5	11.2	10.6	12.1	11.5	9.6	8.2	8.0	7.8	13.0	1.9	8.8
17	9.2	9.5	10.9	11.9	10.9	7.3	6.0	5.5	4.9	4.2	4.7	4.0	5.0	5.1	5.1	5.1	4.2	4.6	3.0	0.9	1.7	2.4	1.5	3.4	11.9	0.9	5.5
18	4.3	4.5	4.2	2.1	1.5	0.7	1.4	1.2	0.4	0.9	0.6	0.0	0.6	0.5	1.8	1.9	1.6	1.6	1.7	2.1	0.1	1.3	2.4	5.2	5.2	0.0	1.8
19	6.8	6.7	6.4	5.5	5.2	4.2	4.0	1.2	0.4	0.9	0.6	0.0	0.6	0.5	1.8	1.9	1.6	1.6	1.7	2.1	0.1	1.3	2.4	5.2	6.8	0.0	2.6
20	6.8	6.7	6.4	5.5	5.2	4.2	4.0	3.9	4.3	3.4	1.8	1.2	2.6	4.1	3.9	3.8	2.8	2.4	1.7	2.0	1.4	0.5	1.3	2.5	6.8	0.5	3.4
21	2.2	0.4	1.2	1.5	1.0	0.3	1.5	1.1	0.7	1.5	1.6	2.0	3.7	5.3	6.7	6.8	6.6	5.9	6.7	8.5	9.6	8.7	8.8	8.8	9.6	0.3	4.2
22	9.5	10.2	9.7	10.1	9.9	9.3	10.5	9.6	7.9	9.0	8.7	9.2	8.1	6.7	5.5	5.9	5.2	2.4	2.0	1.5	1.1	0.0	1.5	1.9	10.5	0.0	6.5
23	1.3	1.3	2.4	1.1	2.2	1.2	0.3	0.1	0.5	0.9	2.1	1.9	1.0	0.7	1.2	1.3	1.1	0.1	0.0	0.0	1.5	0.9	1.1	0.4	2.4	0.0	1.0
24	0.7	0.6	1.4	1.6	1.7	1.6	2.2	2.0			2.1	2.6	2.4	2.0	1.2	1.2	1.1	0.0	2.5	2.8	2.5	3.7	4.9	4.7	4.9	0.0	2.1
25	5.3	3.9	3.9	3.9	3.6	3.1	1.6	1.5	0.8	0.1	1.2	2.3	2.1	1.3	0.6	0.4	0.1	4.3	4.5	5.6	5.8	5.6	6.4	7.0	7.0	0.1	3.1
26	7.7	8.1	7.6	7.4	6.2	6.1	6.9	1.5	0.8	4.8	4.9	4.5	4.7	3.0	3.3	2.9	2.4	2.0	0.7	0.4	2.3	4.4	5.0	5.2	8.1	0.4	4.3
27	6.2	6.3	5.5	4.9	4.7	4.7	5.1	4.0	4.2	3.8	4.0	4.4	4.1	3.6	6.0	6.9	7.1	7.2	7.7	7.2	6.4	6.5	7.1	6.5	7.7	3.6	5.6
28	6.7	7.7	7.7	7.8	6.6	4.2	5.3	5.4	5.1	4.0	2.1	2.4	2.3	1.4	1.3	1.3	1.6	1.0	1.3	2.7	1.8	0.5	0.1	0.1	7.8	0.1	3.3
29	0.0	0.2	0.6	1.5	2.1	2.1	1.4	4.1	4.9	5.3	6.5	5.5	5.2	4.0	4.6	4.6	4.8	4.5	4.2	3.8	4.0	3.7	4.1	2.4	6.5	0.0	3.5
30	3.6	3.0	2.4	0.8	0.5	0.2	0.3	1.7	1.7	1.2	0.9	1.6	1.9	1.5	1.6	1.8	1.2	1.5	3.3	3.9	4.2	4.1	3.8	5.2	5.2	0.2	2.2
Max.	**14.5**	**15.8**	**14.8**	**13.8**	**12.7**	**13.5**	**12.2**	**12.9**	**14.2**	**11.8**	**11.8**	**13.8**	**14.2**	**14.7**	**13.5**	**12.5**	**13.9**	**14.1**	**14.7**	**15.1**	**16.9**	**17.0**	**15.0**	**14.7**	**17.0**		
Min.	**0.0**	**0.0**	**0.1**	**0.0**	**0.5**	**0.2**	**0.3**	**0.1**	**0.3**	**0.1**	**0.6**	**0.0**	**0.6**	**0.5**	**0.6**	**0.4**	**0.1**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.1**		**0.0**	
Avg.	**5.3**	**5.3**	**5.3**	**5.3**	**5.4**	**5.1**	**5.3**	**5.1**	**5.1**	**4.9**	**4.7**	**5.0**	**5.3**	**5.3**	**5.4**	**5.2**	**4.8**	**4.7**	**4.6**	**4.7**	**4.9**	**4.6**	**4.9**	**5.0**			**5.0**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	5.7	6.0	7.9	7.9	8.5	9.1	8.7	9.9	9.2	10.9	11.4	11.9	11.6	9.7	9.4	9.5	9.8	7.4	6.2	5.7	4.2	4.8	4.5	11.9	4.2	8.2
2	4.7	5.5	5.1	5.9	4.8	4.4	3.9	8.7	9.9	9.2	10.9	11.4	11.9	11.6	9.7	9.4	9.5	9.8	7.4	6.2	5.7	4.2	4.8	4.5	11.9	3.9	7.5
3	4.7	5.5	5.1	5.9	4.8	4.4	3.9	4.7	4.2	3.8	3.9	3.2	4.6	5.0	4.5	4.2	4.2	2.7	1.9	2.9	0.9	1.3	0.4	1.0	5.9	0.4	3.6
4	0.4	0.9	1.1	1.6	1.3	4.8	6.5	5.4	5.6	6.3	6.2	6.0	6.1	6.3	5.6	5.6	5.1	7.5	9.4	9.1	9.6	9.9	9.8	10.2	10.2	0.4	5.8
5	10.0	10.7	10.7	11.6	10.8	9.0	7.0	8.3	5.8	6.6	6.3	8.0	8.9	7.6	7.4	7.4	8.6	7.8	6.3	5.8	2.4	2.2	2.2	1.4	11.6	1.4	7.2
6	0.5	0.6	0.7	2.2	1.3	0.4	0.0	0.2	2.2	2.3	2.9	4.7	4.8	4.3	4.5	4.2	5.0	4.8	5.7	6.2	6.5	5.3	5.1	5.9	6.5	0.0	3.4
7	5.5	5.9	6.0	6.8	6.6	6.7	6.0	5.3	5.0	5.2	4.5	5.5	5.7	5.2	5.7	4.6	4.8	4.2	2.7	4.0	2.8	2.0	1.0	0.0	6.8	0.0	4.7
8	0.0	0.3	0.7	0.3	0.0	0.3	0.0	0.7	3.3	3.5	3.7	4.6	5.2	4.7	5.3	4.6	4.8	6.9	6.6	6.1	6.1	6.7	5.7	5.7	6.9	0.0	3.6
9	5.4	4.5	4.6	5.8	5.7	6.0	6.4	6.4	5.4	4.6	2.7	2.5	4.1	5.3	5.5	4.4	2.8	2.0	1.7	0.3	1.4	0.1	0.2	2.9	6.4	0.1	3.8
10	2.7	3.0	2.6	1.0	0.7	0.1	0.0	1.4	2.6	2.5	1.9	3.0	2.7	3.7	5.8	4.6	2.7	1.6	3.0	1.8	2.2	2.2	2.5	3.3	5.8	0.0	2.4
11	3.4	1.8	1.7	1.7	1.1	0.2	1.6	0.5	1.4	1.7	1.2	1.8	1.8	2.0	2.4	2.6	2.3	2.1	2.3	1.5	3.7	3.6	2.7	3.4	3.7	0.2	2.0
12	4.7	4.6	5.0	7.9	7.1	5.4	5.4	6.0	5.7	6.2	6.1	5.9	6.3	6.1	6.1	6.2	5.7	5.2	4.6	5.1	6.8	7.5	5.9	4.3	7.9	4.3	5.8
13	4.0	5.7	5.7	5.7	4.1	2.9	2.6	2.0	2.4	2.7	1.9	2.0	2.3	2.5	2.2	2.8	2.1	2.1	1.1	1.8	1.6	1.0	0.6	0.4	5.7	0.4	2.6
14	0.2	0.0	0.1	0.0	0.8	0.3	0.0	0.9	3.4	3.8	3.8	4.0	4.0	4.8	6.1	6.0	5.7	5.3	6.4	5.2	2.3	4.4	2.6	2.8	6.4	0.0	3.0
15	2.1	1.5	1.4	1.4	1.1	0.7	0.4	0.1	1.4	2.1	1.9	1.2	1.4	1.0	1.2	1.9	2.7	2.7	1.9	1.4	1.2	0.2	1.2	3.9	3.9	0.1	1.5
16	3.9	3.1	3.5	2.1	1.9	0.9	1.6	2.0	1.5	1.5	2.4	1.4	2.3	2.5	2.3	1.8	3.1	3.1	2.6	1.9	1.8	0.5	0.4	0.5	3.9	0.4	2.0
17	0.7	0.5	1.4	1.1	0.9	0.7	1.3	3.7	2.7	2.1	3.0	4.1	4.9	4.9	5.2	4.6	5.4	4.6	4.6	4.4	3.4	3.3	2.5	2.3	5.4	0.5	3.0
18	2.0	2.0	1.9	1.6	0.9	0.6	0.1	0.3	0.7	1.5	2.0	3.0	3.7	5.7	6.5	5.4	5.1	6.2	5.5	4.6	2.9	3.0	3.1	2.3	6.5	0.1	2.9
19	1.1						0.9	0.8	0.7	3.2	3.2	4.0	5.8	6.4	6.8	8.2	8.0	8.0	7.4	7.7	7.0	7.9	9.1	7.7	9.1	0.7	5.5
20	8.9	8.6	5.8	4.7	4.0	3.7	4.2	5.1	6.0	5.2	5.0	5.1	5.8	5.3	5.3	4.7	3.5	2.4	1.1	0.8	0.4	4.0	6.1	6.3	8.9	0.4	4.7
21	6.2	7.2	8.3	8.3	8.2	8.5	9.5	9.4	9.1	10.3	10.3	11.5	11.0	13.1	14.6	10.8	9.9	12.2	8.7	10.4	12.5	12.8	7.0	4.1	14.6	4.1	9.7
22	10.6	12.4	11.2	11.8	11.5	11.4	11.3	11.2	11.9	11.9	13.6	10.2	10.8	10.3	9.5	8.7	8.2	7.7	7.4	6.5	8.3	8.2	7.9	5.9	13.6	5.9	9.9
23	6.3	7.7	6.8	5.6	5.4	5.2	5.5	5.2	6.1	4.9	4.4	4.7	3.7	3.2	2.3	2.8	2.9	4.3	4.9	5.2	4.7	4.2	3.4	4.1	7.7	2.3	4.7
24	3.8	4.2	2.7	1.2	0.9	1.1	1.3	1.3	2.8	2.1	1.4	1.3	2.1	2.0	1.9	2.8	3.6	3.5	4.0	3.3	2.7	1.8	2.2	2.8	4.2	0.9	2.4
25	2.8	3.6	3.7	3.2	1.3	0.9	1.2	1.9	2.2	2.1	1.7	1.5	1.4	1.5	1.9	4.0	2.7	3.2	2.9	2.4	1.9	0.3	1.4	2.4	4.0	0.3	2.2
26	1.7	1.1	2.7	2.9	2.8	1.2	3.7	4.2	5.0	3.7	5.2	5.9	6.9	5.6	5.6	6.6	6.5	6.6	6.4	5.7	6.2	6.8	5.9	8.1	8.1	1.1	4.9
27	8.2	5.7	4.6	6.1	7.5	7.8	7.1	7.8	8.3	9.3	8.5	8.2	9.2	10.1	11.5	10.4	9.2	9.1	7.0	6.2	4.4	3.2	3.7	6.0	11.5	3.2	7.5
28	5.5	3.7	2.1	0.9	0.1	2.5	2.4	3.6	3.0	2.1	1.9	1.3	1.4	2.2	2.5	2.9	2.8	3.4	4.2	4.0	3.1	3.0	1.5	2.0	5.5	0.1	2.6
29	0.7	1.1	2.9	2.7	3.1	2.5	2.0	2.6	3.7	4.7	4.8	5.9	6.0	6.6	6.8	6.4	6.0	6.2	5.9	5.6	4.1	3.1	2.7	2.0	6.8	0.7	4.1
30	2.4	2.1	0.8	0.5	0.5	0.6	1.2	1.7	2.2	3.5	3.7	4.0	4.9	5.2	5.3	5.6	5.8	5.5	5.8	5.2	4.9	4.6	4.4	3.8	5.8	0.5	3.5
31	3.0	3.2	2.9	3.0	2.6	2.9	2.4	4.1	3.6	2.6	3.5	2.9	4.2	4.2	4.4	3.7	3.6	3.0	2.9	2.3	2.2	2.3	1.1	0.8	4.4	0.8	3.0
Max.	**10.6**	**12.4**	**11.2**	**11.8**	**11.5**	**11.4**	**11.3**	**11.2**	**11.9**	**11.9**	**13.6**	**11.5**	**11.9**	**13.1**	**14.6**	**10.8**	**9.9**	**12.2**	**9.4**	**10.4**	**12.5**	**12.8**	**9.8**	**10.2**	**14.6**		
Min.	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.7**	**1.5**	**1.2**	**1.2**	**1.4**	**1.0**	**1.2**	**1.8**	**2.1**	**1.6**	**1.1**	**0.3**	**0.4**	**0.1**	**0.2**	**0.0**		**0.0**	
Avg.	**4.0**	**4.1**	**3.9**	**4.0**	**3.7**	**3.5**	**3.5**	**4.0**	**4.4**	**4.5**	**4.6**	**4.8**	**5.3**	**5.5**	**5.6**	**5.4**	**5.2**	**5.3**	**4.8**	**4.5**	**4.2**	**4.0**	**3.6**	**3.7**			**4.4**

Total Hours in Month 744 **Hours Data Available** 739 **Data Recovery** 99.3%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.2	0.6	0.2	1.4	1.0	1.5	2.6	2.6	2.1	2.4	2.8	2.6	1.9	2.4	1.6	2.6	2.2	2.5	4.4	4.2	4.0	2.7	1.7	0.8	4.4	0.2	2.2
2	0.0	0.7	1.2	1.4	1.2	0.9	0.7	1.6	2.1	2.3	4.2	4.2	3.7	3.7	3.9	4.3	4.9	5.1	5.4	5.6	3.9	5.2	5.5	5.6	5.6	0.0	3.2
3	2.9	5.2	6.9	7.7	9.0	9.2	9.2	9.6	10.6	10.4	9.5	8.2	9.7	10.0				7.2	7.2	7.0	6.6	6.9	7.4	8.7	10.6	2.9	8.0
4	7.4	7.5	7.7	7.1	8.8	9.7	8.4	8.7				9.9	10.6	10.0	9.4	8.2	8.0	7.7	7.6	8.3	8.3	7.4	8.7	8.6	10.6	7.1	8.5
5	8.1	7.3	6.5	5.7	6.0	5.6	6.0	6.1	5.6	4.4	3.4	2.9	2.8	3.3	2.9	3.2	2.9	2.7	2.3	3.8	2.9	2.0	0.3	0.4	8.1	0.3	4.0
6	0.3	0.9	0.6	1.0	0.7	0.4	0.6	1.2	1.9	2.3	3.0	3.6	4.5	5.2	5.8	6.0	6.5	7.0	7.0	6.7	6.6	5.5	5.6	5.5	7.0	0.3	3.7
7	4.8	4.0	3.8	5.5	4.9	3.5	3.5	5.8	7.0	6.6	7.9	8.3	7.6	7.6	7.4	6.8	6.1	5.8	5.6	6.8	6.3	5.5	5.0	4.4	8.3	3.5	5.8
8	4.0	5.6	6.7	7.1	7.2	6.4	7.0	8.0	8.3	8.7	9.2	9.9	10.3	10.2	10.6	9.2	9.8	11.0	11.0	9.5	11.6	12.1	14.1	14.8	14.8	4.0	9.3
9	13.3	11.6	12.7	11.3	9.3	9.4	10.2	9.1	10.4	12.2	11.8	11.2	12.4	12.1	13.0	11.8	10.4	7.7	7.7	8.7	8.5	7.2	8.1	9.1	13.3	7.2	10.4
10	6.7	6.3	6.4	6.7	7.8	6.8	6.7	8.2	9.1	10.0	9.5	9.2	9.8	9.9	10.4	10.7	10.0	9.5	9.1	8.1	7.6	8.6	9.0	9.0	10.7	6.3	8.5
11	9.9	11.0	10.9	10.8	11.8	10.5	10.6	7.9	7.9	9.8	9.7	9.7	9.7	9.7	9.3	9.2	9.4	8.3	7.2	8.5	6.6	7.6	7.7	7.5	11.8	6.6	9.2
12	6.0	6.3	5.4	6.2	5.3	4.7	5.2	4.7	4.0	4.5	5.6	6.0	6.5	5.7	5.1	4.5	4.2	4.4	5.0	4.2	4.6	4.0	2.4	1.6	6.5	1.6	4.8
13	2.3	1.3	1.0	1.3	0.0	0.9	1.9	1.0	1.9	3.2	3.3	3.5	3.2	3.2	3.3	3.9	3.4	3.4	3.2	1.8	1.4	0.9	0.0	0.1	3.9	0.0	2.1
14	0.8	0.2	0.1	0.5	1.0	1.4	2.1	2.6	2.3	2.7	2.5	3.0	2.6	2.0	2.3	1.8	2.0	2.1	2.2	2.2	1.1	0.6	0.7	1.4	3.0	0.1	1.7
15	3.8	4.2	3.5	4.0	3.7	3.1	3.2	4.1	4.7	4.3	3.2	3.1	3.4	3.2	3.5	2.5	2.0	3.3	1.5	3.2	2.9	1.4	1.5	1.4	4.7	1.4	3.1
16	1.5	1.2	0.9	0.3	1.1	1.7	1.0	2.5	3.1	3.0	2.8	3.6	3.7	4.7	4.9	5.0	5.5	5.0	4.8	4.5	4.5	3.3	2.6	1.6	5.5	0.3	3.0
17	1.8	0.6	0.3	0.9	0.8	0.3	1.6	2.7	2.3	3.1	2.7	3.1	3.7	5.1	4.5	4.7	5.7	6.5	5.7	5.0	4.6	3.2	2.6	1.9	6.5	0.3	3.1
18	2.0	1.4	1.4	3.0	2.8	2.5	2.9	2.6	3.9	5.1	4.9	6.8	7.8	6.9	7.6	8.1	8.5	7.3	7.0	5.5	4.7	3.8	3.6	0.9	8.5	0.9	4.6
19	0.5	1.1	1.2	0.9	1.0	2.1	4.1	3.9	3.0	1.8	1.9	1.6	2.2	3.3	2.5	2.6	3.5	2.7	3.1	4.4	4.8	3.9	1.9	1.1	4.8	0.5	2.5
20	1.2	0.8	0.9	0.1	0.7	0.6	1.1	1.0	1.1	1.6	1.6	1.8	2.5	2.8	6.3	5.8	5.3	4.7	4.8	4.3	2.9	2.4	3.0	1.7	6.3	0.1	2.5
21	1.3	0.1	0.5	1.1	0.9	1.1	2.3	2.8	2.7	2.7	2.6	3.0	2.6	2.8	2.4	2.0	3.8	2.7	4.0	3.6	2.6	2.9	0.6	2.9	4.0	0.1	2.3
22	3.8	4.9	3.5	3.8	3.6	3.9	4.7	4.3	3.4	4.0	4.4	4.0	4.7	5.4	6.4	6.1	5.9	5.2	5.2	5.3	4.9	4.8	4.2	3.2	6.4	3.2	4.6
23	3.0	2.2	2.4	2.5	1.8	2.3	2.8	2.1	2.6	3.2	3.7	4.0	3.9	3.9	3.4	3.1	2.7	2.5	3.2	4.1	4.1	2.0	1.6	1.8	4.1	1.6	2.9
24	0.7	0.5	1.9	1.0	0.1	1.0	1.5	2.2	2.6	2.9	2.3	1.6	1.5	1.9	2.9	2.7	2.3	2.2	2.9	2.1	2.0	1.8	0.1	0.8	2.9	0.1	1.7
25	1.3	0.6	1.2	3.1	3.1	1.7	2.2	1.9	1.9	2.5	2.6	2.8	3.9	4.7	5.0	4.7	4.6	4.9	4.7	3.6	2.8	2.1	2.0	2.4	5.0	0.6	2.9
26	1.9	1.2	0.9	0.6	0.5	1.1	1.6	3.9	3.3	3.9	4.0	3.8	4.0	4.0	3.6	1.8	1.7	3.6	4.6	5.0	4.6	3.3	1.9	1.7	5.0	0.5	2.8
27	1.6	0.7	0.7	0.2	0.3	0.6	1.0	1.1	1.5	1.4	1.7	2.2	3.4	3.8	4.3	4.0	4.0	4.0	4.3	4.9	5.4	3.9	1.3	1.3	5.4	0.2	2.4
28	0.4	0.5	0.4	0.4	0.4	0.0	2.1	4.6	2.9	3.6	4.1	4.9	5.1	4.0	4.1	4.2	3.8	3.3	3.4	3.6	3.8	2.7	2.3	2.7	5.1	0.0	2.8
29	2.6	2.8	3.2	2.2	7.6	7.7	6.8	5.9	5.6	6.4	4.5	2.6	0.9	0.7	1.0	1.1	1.5	2.0	2.2	3.6	3.3	3.3	3.4	16.7	16.7	0.7	4.1
30	5.1	4.9	5.4	10.0	12.5	10.8	9.4	9.4	8.8	8.8	7.3	7.9	7.7	6.6	11.7	12.0	12.6	12.5	13.2	13.3	13.0	14.2	15.6	9.5	15.6	4.9	10.1
Max.	**13.3**	**11.6**	**12.7**	**11.3**	**12.5**	**10.8**	**10.6**	**9.6**	**10.6**	**12.2**	**11.8**	**11.2**	**12.4**	**12.1**	**13.0**	**12.0**	**12.6**	**12.5**	**13.2**	**13.3**	**13.0**	**14.2**	**15.6**	**16.7**	**16.7**		
Min.	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.6**	**1.0**	**1.1**	**1.4**	**1.6**	**1.6**	**0.9**	**0.7**	**1.0**	**1.1**	**1.5**	**2.0**	**1.5**	**1.8**	**1.1**	**0.6**	**0.0**	**0.1**		**0.0**	
Avg.	**3.3**	**3.2**	**3.3**	**3.6**	**3.8**	**3.7**	**4.1**	**4.4**	**4.4**	**4.8**	**4.7**	**5.0**	**5.2**	**5.3**	**5.5**	**5.3**	**5.3**	**5.2**	**5.3**	**5.4**	**5.0**	**4.5**	**4.2**	**4.3**			**4.5**

Total Hours in Month 720 **Hours Data Available** 714 **Data Recovery** 99.2%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	14.0	12.9	11.4	13.3	12.9	12.8	10.7	8.9	7.2	8.5	9.1	7.4	8.6	8.6	8.8	9.3	9.4	9.2	8.7	7.4	8.3	8.5	9.5	13.1	14.0	7.2	9.9
2	8.4	8.4	10.6	13.1	14.3	13.2	12.6	12.0	11.5	11.5	10.8	10.1	9.6	9.0	9.0	8.7	9.2	9.5	10.1	10.6	11.3	12.7	13.2	2.0	14.3	2.0	10.5
3	13.0	13.3	12.7	12.5	12.0	11.5	10.9	10.1	10.5	9.9	9.9	9.7	9.3	8.6	8.0	7.3	5.3	4.2	4.2	4.0	2.9	1.7	1.5	2.7	13.3	1.5	8.1
4	2.2	2.8	2.8	2.3	2.4	2.3	1.8	1.9	1.8	1.7	1.9	2.5	1.6	1.5	1.2	1.0	1.0	1.0	1.0	1.7	2.2	2.0	1.9	2.9	2.9	1.0	1.9
5	2.4	3.2	3.1	3.0	1.3	1.4	1.4	2.0	2.1	1.6	1.7	1.9	2.3	2.8	3.2	4.1	3.6	2.0	1.0	2.9	2.0	1.1	0.7	1.3	4.1	0.7	2.2
6	2.0	1.6	0.6	0.4	1.1	1.0	0.6	1.4	2.1	2.5	1.8	1.9	3.2	3.9	4.0	3.8	3.3	3.0	1.9	2.4	2.9	1.9	3.2	2.9	4.0	0.4	2.2
7	3.7	3.3	3.4	3.1	2.5	2.7	2.2	3.2	3.5	4.5	4.3	4.4	4.8	4.8	4.5	4.3	4.1	4.0	3.6	3.2	3.5	3.6	3.8	3.1	4.8	2.2	3.7
8	3.8	4.5	4.1	4.2	4.5	3.1	2.9	3.5	4.0	4.5	4.2	4.5	4.5	4.0	3.1	2.6	2.7	3.1	3.2	2.7	2.3	1.5	0.4	0.7	4.5	0.4	3.3
9	1.2	0.9	0.8	1.8	1.8	3.1	4.0	3.7	2.1	2.2	2.1	2.7	3.2	3.9	4.1	4.9	5.4	4.8	5.0	5.0	4.4	4.3	4.0	4.5	5.4	0.8	3.3
10	8.4	8.3	7.3	7.0	6.6	7.0	6.0	6.7	7.1	7.0	10.2	9.0	9.0	9.0	9.0	8.8	8.0	8.6	7.5	7.2	4.6	3.9	2.8	1.9	10.2	1.9	7.1
11	4.0	2.1	2.1	1.2	1.1	0.9	2.9	1.2	1.2	2.5	4.3	3.7	4.3	3.8	4.1	3.3	4.0	3.1	2.4	2.4	2.7	2.1	2.1	1.2	4.3	0.9	2.6
12	1.0	0.1		0.1	1.3	0.9	2.8	2.6	3.2	2.8	2.9	2.3	3.0	3.5	2.8	2.2	2.3	4.4	5.5	5.4	4.3	3.4	2.0	1.8	5.5	0.1	2.6
13	2.7	3.0	3.3	2.8	3.2	5.4	6.3	6.8	5.4	5.0	4.0	5.2	5.7	5.1	5.1	5.6	5.6	5.6	5.5	5.9	5.4	4.8	4.4	6.6	6.8	2.7	4.9
14	5.7	5.5	5.2	4.2	5.7	4.6	3.8	4.7	5.2	5.3	5.0	4.6	5.0	4.7	4.8	5.0	4.8	4.5	4.6	4.1	4.9	4.6	4.9	4.5	5.7	3.8	4.8
15	3.8	2.9	3.4	3.7	3.5	2.8	2.5	3.1	3.0	2.9	3.3	4.0	4.2	4.4	3.7	3.4	3.6	3.8	3.9	3.3	2.6	2.5	2.5	3.2	4.4	2.5	3.3
16	2.4	1.6	1.9	2.2	2.6	3.8	4.5	5.7	6.8	7.1	7.3	7.5	7.5	7.6	8.0	8.3	7.6	6.6	7.5	6.5	6.7	6.1	4.5	4.3	8.3	1.6	5.6
17	3.6	5.6	6.5	5.6	6.1	5.6	5.7	6.3	5.6	6.4	8.4	9.2	8.4	8.1	8.2	8.1	7.3	7.0	6.2	6.5	6.2	6.1	9.8	8.5	9.8	3.6	6.9
18	5.6	7.6	9.0	6.1	5.9	7.1	6.1	5.4	6.4	8.2	8.2	9.5	8.6	7.9	7.7	7.1	7.5	7.8	6.8	6.1	5.2	5.8	5.1	7.5	9.5	5.1	7.0
19	6.9	5.9	4.2	2.4	4.1	4.0	3.7	3.7	3.4	3.3	4.2	5.0	5.0	4.8	3.9	3.4	3.1	3.3	4.3	3.6	2.7	0.9	0.4	0.3	6.9	0.3	3.6
20	0.8	1.9	3.7	3.9	3.0	2.9	3.0	3.6	4.5	4.6	3.5	4.3	4.1	4.7	4.9	2.7	2.7	3.1	3.9	4.3	3.3	3.6	2.1	2.2	4.9	0.8	3.4
21	1.4	1.2	0.4	0.5	0.6	0.5	0.3	1.1	1.2	3.5	3.8	4.1	4.7	4.8	4.1	4.7	4.1	3.8	3.9	4.0	2.0	1.6	1.1	0.5	4.8	0.3	2.4
22	1.3	0.3	0.4	0.4	0.5	0.4	1.3	1.7	1.8	2.0	2.0	1.7	3.8	4.3	3.9	4.0	4.0	3.4	3.0	3.5	3.6	3.5	3.4	3.4	4.3	0.3	2.4
23	4.3	5.8	3.8	2.2	2.9	4.7	4.9	5.0	4.7	4.4	3.7	3.7	1.8	2.2	1.8	2.6	2.2	2.0	1.7	1.5	2.3	3.4	3.6	3.0	5.8	1.5	3.2
24	1.2	3.7	3.1	1.6	1.5	1.5	3.6	3.4	2.9	2.7	3.3	3.2	3.8	2.8	3.0	2.8	4.0	3.1	3.1	2.6	3.3	3.4	1.3	3.1	4.0	1.2	2.8
25	3.2	3.2	4.0	5.5	4.3	3.0	1.4	4.1	4.7	4.8	3.8	4.1	4.0	4.1	3.5	3.7	3.6	3.3	2.9	2.1	2.3	1.9	1.0	0.1	5.5	0.1	3.3
26	0.0	0.0	0.1	0.0	0.8	1.1	0.5	1.2	1.9	3.2	4.4	3.9	3.7	3.6	4.5	5.6	6.1	5.8	5.3	4.3	4.5	4.0	3.8	3.8	6.1	0.0	3.0
27	3.6	3.0	2.1	2.8	2.0	1.3	1.0	1.7	3.2	3.8	2.8	1.5	1.7	1.7	2.4	2.1	2.8	2.4	4.2	3.1	3.1	1.6	0.1	0.5	4.2	0.1	2.3
28	0.8	0.7	0.8	0.9	0.3	0.6	0.8	1.0	2.2	2.8	3.5	4.6	4.3	3.7	4.5	5.0	6.7	7.5	7.2	7.3	6.9	6.9	7.8	8.4	8.4	0.3	4.0
29	7.6	9.1	8.8	9.8	7.0	7.8	8.1	7.7	6.6	6.1	6.1	6.3	6.6	5.7	6.3	7.4	7.6	7.9	7.5	7.2	6.7	7.2	6.6	4.9	9.8	4.9	7.2
30	4.7	4.8	4.0	3.3	3.1	3.2	3.5	3.3	2.0	2.8	3.2	1.8	2.0	3.4	4.5	5.9	5.9	6.4	6.0	6.4	5.6	5.8	5.3	4.7	6.4	1.8	4.2
31	5.5	5.5	5.3	5.5	5.5	4.0	4.2	4.3	4.1	4.0	4.3	3.4	3.1	4.9	4.8	3.9	3.0	1.9	2.2	1.7	1.1	1.5	2.0	2.8	5.5	1.1	3.7
Max.	**14.0**	**13.3**	**12.7**	**13.3**	**14.3**	**13.2**	**12.6**	**12.0**	**11.5**	**11.5**	**10.8**	**10.1**	**9.6**	**9.0**	**9.0**	**9.3**	**9.4**	**9.5**	**10.1**	**10.6**	**11.3**	**12.7**	**13.2**	**13.1**	**14.3**		
Min.	**0.0**	**0.0**	**0.1**	**0.0**	**0.3**	**0.4**	**0.3**	**1.0**	**1.2**	**1.6**	**1.7**	**1.5**	**1.6**	**1.5**	**1.2**	**1.0**	**1.0**	**1.0**	**1.0**	**1.5**	**1.1**	**0.9**	**0.1**	**0.1**		**0.0**	
Avg.	**4.2**	**4.3**	**4.3**	**4.0**	**4.0**	**4.0**	**4.0**	**4.2**	**4.3**	**4.6**	**4.8**	**4.8**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**	**4.7**	**4.6**	**4.5**	**4.2**	**3.9**	**3.7**	**3.6**			**4.4**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.0	4.6	4.1	3.3	2.4	3.6	2.7	2.8	2.6	2.5	3.0	3.5	3.7	3.5	4.1	4.1	3.9	3.7	3.5	3.3	3.1	2.9	3.8	3.6	4.6	2.4	3.4
2	3.5	3.6	3.6	3.6	3.7	3.4	2.2	1.9	2.9	3.8	3.7	3.1	3.0	3.1	4.1	2.8	4.2	5.2	5.9	6.1	5.7	6.2	4.1	3.6	6.2	1.9	3.9
3	4.2	5.8	7.7	6.9	7.3	6.3	7.3	8.2	6.5	5.2	4.1	5.3	6.4	6.1	6.0	6.5	8.0	6.9	5.2	4.3	4.2	5.0	5.3	5.4	8.2	4.1	6.0
4	5.4	3.7	3.5	3.5	1.7	1.1	0.6	2.9	3.0	2.0	2.0	1.3	2.4	2.3	1.6	1.1	0.3	0.3	0.2	0.4	1.0	0.7	0.0	0.5	5.4	0.0	1.7
5	0.4	0.8	1.6	1.1	0.3	0.2	0.1	0.7	0.9	2.2	2.9	2.4	3.8	3.8	5.0	4.0	4.0	3.1	3.4	1.4	1.7	0.8	0.5	0.4	5.0	0.1	1.9
6	2.5	2.3	0.8	0.8	1.3	2.5	3.3	3.7	5.1	4.6	4.5	4.0	3.7	4.3	4.2	4.3	4.6	4.4	4.1	2.8	2.0	2.1	2.4	2.3	5.1	0.8	3.2
7	1.2	0.2	0.3	2.1	2.4	1.8	2.5	2.9	3.4	3.9	4.2	6.1	5.8	6.4	6.5	6.9	6.8	7.3	7.3	6.2	5.8	5.6	5.1	5.2	7.3	0.2	4.4
8	4.4	4.2	4.1	3.5	1.8	1.6	3.1	3.0	2.7	4.1	3.8	4.2	2.4	3.5	2.8	1.9	2.6	4.3	4.9	3.9	2.2	2.0	1.4	1.8	4.9	1.4	3.1
9	1.3	0.4	0.6	0.8	0.8	0.7	1.3	1.4	1.7	2.3	2.2	2.0	2.8	3.0	3.3	2.9	3.3	4.2	4.5	4.4	4.0	3.3	3.6	3.7	4.5	0.4	2.4
10	3.4	3.3	4.1	3.9	3.4	3.9	4.4	4.2	4.8	4.0	3.8	4.2	5.2	5.5	6.3	6.6	7.1	7.7	7.5	6.3	7.6	6.9	7.7	6.8	7.7	3.3	5.4
11	6.1	5.2	4.3	3.6	4.8	4.4	4.4	4.9	5.9	5.8	5.7	5.4	4.3	4.2	3.6	3.3	3.8	3.6	3.2	2.6	2.7	2.5	2.4	2.2	6.1	2.2	4.1
12	1.6	1.9	1.5	1.8	3.6	4.4	4.1	4.7	5.2	6.7	6.3	5.8	5.5	5.1	4.7	5.5	6.0	5.3	4.3	3.8	4.2	3.5	1.6	2.1	6.7	1.5	4.1
13	3.4	2.0	1.4	1.7	1.1	1.7	3.7	3.1	3.9	4.4	5.5	4.5	4.5	4.1	4.0	5.2	4.9	5.2	4.7	4.4	4.7	4.7	4.1	4.5	5.5	1.1	3.8
14	3.8	4.0	3.5	3.2	2.2	1.7	1.9	3.4	2.8	4.3	5.4	7.6	9.1	7.8	5.9	5.6	6.7	7.5	7.1	6.9	6.9	6.5	6.8	6.4	9.1	1.7	5.3
15	5.9	5.9	4.5	4.4	4.4	3.9	4.5	5.1	5.1	4.5	4.0	4.4	4.3	4.1	3.2	3.3	3.0	2.2	1.7	1.3	1.3	0.8	0.9	1.0	5.9	0.8	3.5
16	0.8	0.6	0.2	1.3	1.5	1.5	2.4	2.3	1.9	1.6	2.1	2.0	2.1	2.1	2.1	1.8	2.7	2.1	1.2	1.1	1.2	0.8	0.0	0.0	2.7	0.0	1.5
17	0.1	0.5	0.4	0.8	0.2	0.4	0.4	0.2	0.9	0.6	1.1	2.1	3.9	4.4	3.6	2.5	4.7	5.8	7.1	5.6	4.9	7.3	7.5	7.3	7.5	0.1	3.0
18	7.4	8.5	9.0	7.9	7.6	7.7	7.4	8.1	9.2	8.6	7.2	7.6	7.7	7.4	7.2	6.8	6.7	6.1	4.9	4.7	3.8	3.3	3.4	3.0	9.2	3.0	6.7
19	0.9	1.0	1.9	1.6	1.4	0.9	2.0	1.2	2.1	1.5	3.2	4.9	6.2	7.2	6.7	7.2	7.7	7.3	5.8	3.8	1.9	2.2	1.2	1.5	7.7	0.9	3.4
20	0.7	4.9	5.2	4.9	5.4	4.4	3.5	3.2	4.3	4.5	4.9	4.7	5.6	5.3	5.2	4.6	5.1	5.3	5.0	4.6	3.5	1.2	1.2	1.8	5.6	0.7	4.1
21	1.8	3.7	3.6	2.7	1.8	1.4	0.8	1.4	2.1	1.6	1.2	1.4	2.3	2.5	2.8	2.9	3.1	2.8	2.6	2.2	2.5	3.9	5.2	5.9	5.9	0.8	2.6
22	6.4	5.5	5.4	5.8	6.8	6.2	6.8	6.9	7.1	6.8	6.7	6.2	5.9	5.0	4.9	5.7	5.8	4.9	5.0	3.4	3.4	3.9	2.7	2.1	7.1	2.1	5.4
23	0.8	0.3	0.2	0.2	0.2	0.0	0.0	0.2	1.4	1.8	1.3	1.2	3.0	2.8	3.1	2.9	2.9	2.5	2.2	3.3	2.0	1.7	1.2	0.9	3.3	0.0	1.5
24	5.2	6.3	5.9	6.7	5.1	4.4	4.3	4.8	4.0	5.4	5.9	7.1	5.8	5.2	5.0	4.7	5.4	5.4	4.2	3.2	3.6	4.3	3.4	4.1	7.1	3.2	5.0
25	5.1	5.6	4.5	5.0	3.2	2.6	3.2	1.2	3.4	2.3	1.7	2.9	4.8	4.1	3.3	3.1	3.0	2.7	2.0	1.4	1.0	0.8	1.9	2.6	5.6	0.8	3.0
26	3.7	3.0	0.8	0.3	0.3	1.4	1.3	1.1	0.4	1.5	3.5	4.6	4.1	2.7	2.3	1.8	2.9	2.1	2.9	2.4	0.6	0.2	0.0	0.0	4.6	0.0	1.8
27	0.3	1.0	0.7	1.3	0.8	0.8	1.1	0.4	1.1	1.0	1.0	2.0	3.0	2.9	3.2	4.2	4.5	3.5	3.1	2.2	1.6	2.1	2.6	3.5	4.5	0.3	2.0
28	1.1	0.6	3.2	4.1	4.9	5.1	4.2	4.7	3.9	3.8	4.0	3.4	4.0	5.2	5.4	5.5	5.2	3.8	3.0	1.6	0.8	0.4	0.1	0.1	5.5	0.1	3.3
29	0.2	0.1	0.2	0.4	0.1	0.9	0.6	0.3	1.2	1.9	2.3	3.0	3.8	2.9	2.6	2.7	2.3	2.8	3.5	2.1	0.3	0.0	0.8	3.1	3.8	0.0	1.6
30	3.6	5.4	5.9	6.3	6.7	7.1	8.1	8.0	7.6	6.9	7.1	6.1	5.3	5.6	6.0	5.0	6.1	7.2	5.4	5.3	4.3	3.4	2.3	2.9	8.1	2.3	5.7
31	2.8	2.4	2.8	0.7	0.3	1.1	1.9	1.2	2.8	4.9	6.6	5.9	6.4	6.3	7.4	7.4	7.3	7.1	6.5	6.8	4.4	4.8	4.7	4.6	7.4	0.3	4.5
Max.	**7.4**	**8.5**	**9.0**	**7.9**	**7.6**	**7.7**	**8.1**	**8.2**	**9.2**	**8.6**	**7.2**	**7.6**	**9.1**	**7.8**	**7.4**	**7.4**	**8.0**	**7.7**	**7.5**	**6.9**	**7.6**	**7.3**	**7.7**	**7.3**	**9.2**		
Min.	**0.1**	**0.1**	**0.2**	**0.2**	**0.1**	**0.0**	**0.0**	**0.2**	**0.4**	**0.6**	**1.0**	**1.2**	**2.1**	**2.1**	**1.6**	**1.1**	**0.3**	**0.3**	**0.2**	**0.4**	**0.3**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**3.0**	**3.1**	**3.1**	**3.0**	**2.8**	**2.8**	**3.0**	**3.2**	**3.5**	**3.7**	**3.9**	**4.2**	**4.5**	**4.5**	**4.4**	**4.3**	**4.7**	**4.6**	**4.3**	**3.6**	**3.1**	**3.0**	**2.8**	**3.0**			**3.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	4.7	4.1	4.1	4.1	4.2	4.4	4.5	4.0	4.7	5.4	5.0	4.5	4.1	3.5	5.3	6.1	5.9	5.6	5.6	4.9	4.5	4.6	4.5	6.1	3.5	4.7
2	4.7	5.0	4.9	4.3	2.8	3.4	2.5	3.2	3.8	6.3	7.0	7.2	6.7	6.2	5.5	5.0	5.2	4.9	1.8	3.0	2.5	0.9	0.1	0.2	7.2	0.1	4.0
3	1.0	1.1	0.4	1.2	1.1	0.6	1.2	1.6	1.9	2.3	1.7	1.4	1.7	2.0	2.2	1.8	1.1	0.2	0.6	1.1	0.6	0.2	0.0	0.0	2.3	0.0	1.1
4	0.1	0.0	0.4	1.2	1.3	1.2	1.2	2.3	2.8	2.8	2.7	2.3	2.1	1.2	1.3	2.3	4.4	1.9	1.2	1.6	2.7	0.8	1.7	1.6	4.4	0.0	1.7
5	2.0	1.5	1.4	1.4	1.4	1.6	1.3	0.5	1.3	2.8	3.6	4.4	4.7	5.3	5.3	5.2	5.8	4.8	4.0	2.7	1.0	0.4	0.7	0.6	5.8	0.4	2.7
6	0.6	0.9	1.1	2.3	3.5	3.6	3.7	4.1	4.7	5.1	5.5	5.4	5.0	4.4	4.2	3.5	4.2	3.7	3.4	4.0	3.0	5.0	5.8	3.9	5.8	0.6	3.8
7	4.4	2.7	2.1	1.8	1.7	1.9	3.2	4.0	3.5	4.1	6.5	8.7	9.7	11.2	11.7	11.5	10.5	8.8	10.1	9.7	9.1	8.4	9.1	9.9	11.7	1.7	6.8
8	8.3	10.4	10.5	9.5	9.5	10.2	10.9	10.1	7.8	6.8	6.1	5.4	5.6	5.6	5.8	5.0	4.9	5.8	5.5	3.6	4.9	4.7	5.1	4.6	10.9	3.6	6.9
9	5.0	4.0	4.5	4.9	3.6	1.6	2.7	2.1	2.9	3.2	3.3	3.9	4.2	4.0	4.0	3.1	4.3	4.1	3.4	3.0	1.8	1.1	0.2	0.0	5.0	0.0	3.1
10	0.3	0.7	0.4	0.5	0.5	0.4	0.1	1.0	0.8	0.7	2.4	2.3	2.0	2.7	3.1	3.4	3.4	2.6	2.1	0.6	0.1	0.5	0.2	0.0	3.4	0.0	1.3
11	0.5	0.8	0.4	0.8	0.2	1.2	0.1	0.3	1.0	3.3	2.7	1.7	2.9	2.5	1.6	1.6	2.0	2.5	2.8	2.4	1.7	0.7	0.9	0.8	3.3	0.1	1.5
12	1.0	1.1	1.8	2.3	0.6	0.7	0.5	0.4	1.4	2.2	2.8	2.0	1.7	1.6	2.6	3.8	3.7	2.1	2.0	2.6	1.3	0.9	0.9	0.7	3.8	0.4	1.7
13	1.6	1.3	1.3	1.4	1.3	1.6	1.5	1.7	2.1	2.0	3.7	3.9	5.6	6.3	6.2	6.6	6.7	7.5	7.9	8.0	10.7	10.0	9.0	9.9	10.7	1.3	4.9
14	12.0	10.3	10.7	11.1	10.0	8.8	8.6	9.3	10.2	9.7	8.3	8.7	7.7	9.3	9.1	9.6	12.4	10.7	10.9	11.0	10.0	8.1	7.4	7.9	12.4	7.4	9.6
15	9.2	8.9	6.8	8.0	7.8	9.4	8.7	7.1	8.6	10.0	9.7	9.8	8.6	7.8	8.4	10.4	9.9	9.4	8.4	6.8	6.5	7.2	5.8	5.5	10.4	5.5	8.3
16	4.9	4.3	4.1	4.1	3.5	3.8	3.3	2.7	2.5	3.0	4.7	5.2	4.7	6.1	5.4	4.4	4.4	4.0	2.8	1.2	0.2	1.9	1.4	1.6	6.1	0.2	3.5
17	1.5	1.8	1.3	2.5	3.1	2.3	2.2	2.0	3.4	4.2	4.0	4.5	4.4	3.7	3.8	3.5	3.5	3.4	2.3	1.8	1.5	0.7	0.0	0.0	4.5	0.0	2.6
18	0.0	0.0	0.4	1.6	2.0	3.3	4.8	5.4	5.9	6.9	6.5	7.8	9.5	9.2	9.7	10.6	8.9	10.9	12.5	11.7	11.0	12.2	11.3	10.2	12.5	0.0	7.2
19	9.3	12.2	11.8	6.7	4.1	2.5	3.8	2.6	1.4	2.2	4.3	4.9	2.1	1.5	0.7	1.4	1.0	1.3	0.6	1.8	0.3	1.0	0.5	0.6	12.2	0.3	3.3
20	0.7	0.5	0.1	0.7	0.4	0.2	0.1	0.3	0.5	2.6	3.1	3.2	4.1	4.3	4.2	1.2	3.1	2.6	3.5	4.2	4.5	3.2	4.1	3.7	4.5	0.1	2.3
21	3.1	1.8	0.4	0.4	0.5	1.2	1.5	4.0	5.0	6.4	6.1	5.4	5.6	5.2	4.8	3.8	5.9	6.2	7.4	8.3	7.2	9.8	7.5	5.5	9.8	0.4	4.7
22	3.5	1.1	2.4	2.6	3.9	3.3	4.2	4.1	5.4	5.1	3.5	3.7	4.1	4.3	3.7	3.8	3.5	2.9	3.1	4.1	3.1	2.7	5.6	5.9	5.9	1.1	3.7
23	5.5	4.2	3.7	3.5	3.9	2.4	2.5	1.5	2.1	4.0	4.5	4.8	5.3	4.6	4.5	4.4	3.9	2.9	2.2	1.5	1.9	2.5	2.3	2.1	5.5	1.5	3.4
24	1.4	1.4	0.5	1.0	0.3	0.0	0.1	0.0	0.1	0.6	0.6	1.8	1.4	1.7	2.4	2.8	4.1	3.8	2.8	2.6	3.5	3.6	3.2	1.6	4.1	0.0	1.7
25	2.2	0.7	0.9	3.2	3.6	2.6	2.3	1.9	2.3	3.2	3.4	2.7	1.9	2.2	2.6	3.6	3.9	4.4	4.4	5.1	3.3	2.9	1.8	1.8	5.1	0.7	2.8
26	0.9	0.7	1.3	1.9	2.3	3.3	3.1	3.0	2.9	2.3	2.2	2.6	4.0	5.0	4.4	3.4	2.4	2.3	2.4	1.8	0.9	0.5	1.4	2.3	5.0	0.5	2.4
27	2.3	2.5	4.0	4.4	3.1	0.8	0.4	0.4	0.3	0.3	0.4	1.1	0.9	1.6	2.0	2.6	1.7	1.6	2.7	2.8	0.9	1.5	2.1	1.6	4.4	0.3	1.8
28	1.5	1.9	2.6	2.3	2.2	2.2	2.1	3.0	3.7	3.6	4.5	4.8	5.2	5.8	6.2	6.9	6.9	5.5	5.7	4.7	3.8	3.2	2.8	2.9	6.9	1.5	3.9
29	2.4	0.1	0.0	0.0	0.0	0.8	0.8	2.6	3.3	6.2	6.9	5.7	6.2	6.1	6.4	5.3	4.6	4.4	3.4	2.8	3.3	3.5	2.3	3.0	6.9	0.0	3.3
30	3.0	2.3	0.6	0.0	0.4	1.8	0.1	0.0	0.4	0.1	0.7	1.3	2.9	4.0	4.6	4.3	5.3	5.6	5.0	5.3	5.6	6.9	8.6	9.0	9.0	0.0	3.2
Max.	**12.0**	**12.2**	**11.8**	**11.1**	**10.0**	**10.2**	**10.9**	**10.1**	**10.2**	**10.0**	**9.7**	**9.8**	**9.7**	**11.2**	**11.7**	**11.5**	**12.4**	**10.9**	**12.5**	**11.7**	**11.0**	**12.2**	**11.3**	**10.2**	**12.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.1**	**0.4**	**1.1**	**0.9**	**1.2**	**0.7**	**1.2**	**1.0**	**0.2**	**0.6**	**0.6**	**0.1**	**0.2**	**0.0**	**0.0**		**0.0**	
Avg.	**3.2**	**3.0**	**2.8**	**3.0**	**2.8**	**2.7**	**2.7**	**2.9**	**3.2**	**3.9**	**4.2**	**4.4**	**4.5**	**4.6**	**4.7**	**4.7**	**4.9**	**4.5**	**4.3**	**4.2**	**3.7**	**3.7**	**3.5**	**3.4**			**3.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.6	9.2	7.9	7.9	8.7	9.1	8.6	8.4	8.7	8.6	7.3	7.3	8.5	8.2	8.1	7.2	7.1	7.3	7.4	6.5	5.6	5.4	6.0	6.1	9.6	5.4	7.7
2	7.1	8.3	7.0	5.6	4.3	4.6	5.0	4.3	4.2	4.9	4.8	4.8	4.6	5.9	7.0	6.9	6.4	5.8	6.5	6.2	8.0	10.7	10.8	11.3	11.3	4.2	6.5
3	11.5	11.7	10.5	9.3	8.8	10.0	8.7	8.3	7.8	6.7	7.2	6.6	5.9	5.8	5.4	4.8	6.8	6.5	7.0	5.0	7.1	7.9	7.8	8.7	11.7	4.8	7.7
4	8.6	9.0	9.3	9.3	6.4	5.5	7.3	8.8	6.6	4.7	4.5	4.0	4.9	4.1	4.1	3.6	5.0	2.8	1.1	1.0	0.7	1.4	1.0	1.9	9.3	0.7	4.8
5	2.4	1.7	0.7	0.6	1.2	1.1	0.8	1.2	1.5	0.8	1.6	1.9	2.6	4.3	3.4	3.5	5.2	4.3	5.5	6.6	5.7	4.3	2.4	2.5	6.6	0.6	2.8
6	2.1	1.3	1.9	2.9	2.9	4.1	4.4	4.8	4.4	4.4	5.6	5.6	4.3	4.7	5.0	4.5	3.6	5.2	4.4	4.5	5.5	5.4	4.8	5.1	5.6	1.3	4.2
7	5.3	5.2	6.5	7.5	9.4	9.7	8.2	9.4	8.7	6.6	6.4	5.7	7.2	7.3	7.1	8.8	8.9	8.2	7.6	8.4	8.7	7.8	9.0	9.9	9.9	5.2	7.8
8	10.0	10.1	11.7	11.6	12.5	12.0	12.4	12.3	12.2	11.8	12.1	12.2	12.7	13.0	11.6	11.3	10.2	10.9	9.9	10.0	9.2	10.2	11.0	10.6	13.0	9.2	11.3
9	12.6	13.6	11.4	12.3	9.8	12.6	13.1	12.0	10.9	10.6	12.6	12.9	12.9	12.1	12.9	12.4	11.2	10.1	7.7	6.9	4.5	5.1	4.0	4.3	13.6	4.0	10.3
10	2.2	1.5	0.4	0.4	0.9	0.4	1.2	1.7	2.9	3.1	3.8	4.5	5.7	7.2	8.2	7.7	7.1	6.6	8.9	7.4	7.0	6.9	6.9	6.0	8.9	0.4	4.5
11	6.0	7.3	5.8	7.1	4.9	4.1	3.4	4.8	3.3	2.1	3.6	4.4	3.9	4.2	4.2	2.8	3.5	2.3	2.2	2.2	2.0	1.2	1.1	1.2	7.3	1.1	3.6
12	1.7	0.9	2.1	2.3	1.7	1.6	2.0	1.4	0.8	1.4	2.1	3.4	3.4	3.5	4.6	4.7	4.3	4.3	3.7	3.9	3.4	3.5	3.1	3.3	4.7	0.8	2.8
13	2.5	2.4	2.1	2.0	3.0	2.9	2.5	2.0	1.0	0.3	1.3	2.8	3.0	2.8	3.6	2.4	3.3	2.5	0.9	2.2	0.1	0.0	0.3	0.1	3.6	0.0	1.9
14	0.4	1.1	1.5	1.2	1.6	0.8	0.2	0.0	0.0	0.0	1.3	3.9	3.8	3.8	3.6	3.9	3.6	2.1	2.3	1.3	2.2	1.3	2.6	2.0	3.9	0.0	1.9
15	2.2	3.5	1.8	2.0	1.7	1.1	2.3	2.9	2.5	3.2	3.5	2.8	3.8	5.6	5.4	4.6	6.3	6.2	4.8	2.0	2.7	5.0	6.1	8.2	8.2	1.1	3.8
16	9.2	7.9	6.9	6.8	5.8	4.9	4.0	3.2	3.4	2.3	3.5	4.6	4.1	4.0	4.2	4.8	4.9	4.0	4.2	4.6	4.7	4.6	4.1	4.4	9.2	2.3	4.8
17	4.3	4.7	4.3	4.8	4.7	3.7	3.8	4.0	3.8	4.8	4.3	4.6	5.2	5.4	5.1	5.9	5.4	4.0	2.9	4.2	4.3	5.1	5.5	5.9	5.9	2.9	4.6
18	7.7	5.9	7.7	9.4	8.3	8.5	10.0	8.9	7.1	6.7	6.9	3.4	1.9	2.7	1.9	1.1	1.6	2.3	2.3	1.9	0.4	1.4	2.8	3.6	10.0	0.4	4.8
19	3.8	3.4	1.9	1.3	1.2	0.5	0.8	2.8	2.7	2.8	3.2	3.2	3.5	4.6	4.3	4.4	4.2	4.4	1.1	1.4	2.6	1.9	3.1	3.6	4.6	0.5	2.8
20	3.2	3.1	3.3	2.9	3.2	3.7	1.7	1.2	1.0	0.9	1.1	1.7	1.0	1.7	2.6	0.9	1.0	0.0	0.3	0.4	0.9	1.1	1.5	0.6	3.7	0.0	1.6
21	1.2	0.8	0.3	1.8	3.1	2.6	3.3	2.1	2.6	1.9	3.0	3.2	3.8	3.8	3.3	3.2	2.5	2.4	1.6	1.7	0.9	1.6	2.5	2.1	3.8	0.3	2.3
22	1.9	4.3	4.1	5.5	4.9	4.1	3.8	3.9	3.7	1.8	2.6	2.3	0.2	1.0	1.1	1.3	3.4	2.6	1.9	2.4	0.7	2.2	3.7	3.3	5.5	0.2	2.8
23	4.1	4.2	5.3	4.6	5.6	5.4	5.0	6.4	5.0	6.8	7.2	6.9	5.9	4.3	4.2	3.5	2.8	2.2	1.1	1.6	0.5	1.3	1.5	1.4	7.2	0.5	4.0
24	0.5	1.2	3.5	3.7	4.5	5.3	7.8	7.6	7.0	5.1	4.9	5.2	6.1	6.3	5.5	5.9	5.5	5.4	6.3	7.9	9.0	8.3	8.6	9.3	9.3	0.5	5.8
25	8.2	7.4	8.0	8.7	8.2	7.2	7.5	8.0	10.0	9.1	11.0	10.2	9.5	8.9	8.7	8.5	7.4	8.6	9.0	8.8	8.5	8.1	9.8	9.7	11.0	7.2	8.7
26	9.3	9.2	9.4	10.2	9.9	11.1	9.6	9.2	11.1	10.4	11.6	13.4	12.6	12.2	11.8	8.8	3.6	5.0	7.9	9.0	12.4	11.4	10.9	10.0	13.4	3.6	10.0
27	8.2	10.7	11.7	10.5	10.0	8.6	7.1	9.9	8.3	3.9	2.2	3.0	2.3	2.9	1.9	2.8	2.2	1.5	0.9	0.4	0.3	0.3	0.0	0.0	11.7	0.0	4.6
28	0.0	1.0	2.7	3.0	2.8	2.2	2.4	1.5	1.0	2.3	1.7	1.3	1.9	3.3	3.7	4.4	5.0	5.3	6.3	6.7	6.1	6.5	7.5	7.3	7.5	0.0	3.6
29	6.4	7.1	6.1	7.3	7.5	8.7	8.7	7.3	7.9	7.4	7.4	4.4	5.2	6.1	6.1	5.4	7.2	7.7	6.5	7.8	7.9	7.1	5.5	4.7	8.7	4.4	6.8
30	4.2	3.6	3.6	0.7	2.8	3.1	3.3	2.7	0.9	0.7	0.5	0.3	1.8	4.5	5.3	4.8	5.1	5.5	6.5	7.3	7.1	7.1	6.9	6.1	7.3	0.3	3.9
31	3.9	4.3	4.9	7.4	9.1	9.7	8.8	6.8	6.6	7.9	7.7	7.9	8.9	9.3	8.0	7.9	7.1	8.3	6.5	5.4	5.2	5.6	5.1	4.3	9.7	3.9	6.9
Max.	**12.6**	**13.6**	**11.7**	**12.3**	**12.5**	**12.6**	**13.1**	**12.3**	**12.2**	**11.8**	**12.6**	**13.4**	**12.9**	**13.0**	**12.9**	**12.4**	**11.2**	**10.9**	**9.9**	**10.0**	**12.4**	**11.4**	**11.0**	**11.3**	**13.6**		
Min.	**0.0**	**0.8**	**0.3**	**0.4**	**0.9**	**0.4**	**0.2**	**0.0**	**0.0**	**0.0**	**0.5**	**0.3**	**0.2**	**1.0**	**1.1**	**0.9**	**1.0**	**0.0**	**0.3**	**0.4**	**0.1**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.2**	**5.3**	**5.3**	**5.5**	**5.5**	**5.4**	**5.4**	**5.4**	**5.1**	**4.6**	**5.0**	**5.1**	**5.2**	**5.6**	**5.5**	**5.2**	**5.2**	**5.0**	**4.7**	**4.7**	**4.6**	**4.8**	**5.0**	**5.1**			**5.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.2	4.4	3.6	4.3	3.9	6.0	5.0	5.5	4.2	4.7	6.8	6.7	6.4	6.1	6.6	6.6	6.5	7.3	5.8	7.5	7.1	5.5	6.1	6.4	7.5	3.6	5.7
2	5.8	6.5	6.7	5.8	5.3	5.5	6.6	6.9	7.4	7.0	7.7	7.6	8.1	8.0	7.8	8.4	8.4	8.5	8.8	7.1	6.9	5.7	7.6	6.3	8.8	5.3	7.1
3	6.5	6.4	6.8	6.0	5.5	5.5	6.3	5.9	5.9	6.5	6.3	5.6	6.0	5.9	6.9	6.2	4.3	5.1	5.2	4.5	4.7	4.5	6.3	4.3	6.9	4.3	5.7
4	4.1	5.7	4.1	5.1	4.1	4.5	3.7	2.8	5.4	5.1	4.0	4.5	6.6	6.2	5.5	5.0	2.8	3.8	3.7	3.9	3.1	2.0	1.8	1.9	6.6	1.8	4.1
5	2.0	1.5	2.8	3.1	3.8	4.3	4.4	3.5	4.3	3.5	2.4	3.2	3.3	4.4	4.3	3.8	4.3	3.9	4.9	1.9	1.9	4.7	3.2	2.3	4.9	1.5	3.4
6	3.3	3.3	4.6	5.8	5.5	6.4	6.6	9.3	11.8	11.0	9.6	9.9	11.8	14.3	15.7	15.4	15.4	12.8	14.3	16.8	12.4	10.9	9.7	8.4	16.8	3.3	10.2
7	7.2	8.6	11.3	11.8	11.1	7.7	9.7	7.8	7.4	7.7	8.3	9.5	8.9	10.3	9.6	9.0	8.3	7.2	8.6	9.2	8.0	8.8	8.9	8.4	11.8	7.2	8.9
8	9.0	7.0	9.0	9.5	7.5	8.2	6.0	7.6	9.1	9.6	8.8	8.3	7.6	7.6	6.9	7.5	6.9	8.1	9.4	8.5	5.5	5.7	6.9	9.3	9.6	5.5	7.9
9	7.3	7.1	8.5	9.3	8.6	8.1	9.2	7.8	8.1	7.6	7.4	4.6	3.7	5.0	5.2	5.8	4.6	5.1	5.8	5.8	5.3	6.0	5.7	5.2	9.3	3.7	6.5
10	5.4	5.6	5.7	6.3	6.9	6.8	8.3	10.1	10.2	10.9	11.5	12.7	12.6	9.6	7.6	5.3	5.6	5.0	4.4	5.1	5.6	4.4	5.1	7.3	12.7	4.4	7.4
11	8.9	8.1	8.5	7.1	6.5	7.1	4.7	6.1	5.2	4.9	5.0	5.4	5.7	5.5	5.3	8.0	7.6	9.3	11.9	11.5	10.1	10.8	11.4	10.9	11.9	4.7	7.7
12	13.4	12.9	11.9	12.5	13.6	12.2	15.6	13.7	11.1	12.0	12.8	12.2	8.4	12.4	7.3	4.8	7.0	7.5	7.2	3.9	5.5	5.3	6.4	6.3	15.6	3.9	9.8
13	6.2	5.1	5.1	5.2	4.8	6.7	10.9	12.4	12.0	11.6	11.3	11.8	13.2	13.0	15.9	15.8	15.5	14.1	17.8	15.5	17.3	16.5	15.6	16.7	17.8	4.8	12.1
14	15.8	15.2	12.9	9.3	8.4	6.5	7.2	9.5	12.9	14.3	13.7	12.3	12.1	14.0	13.4	13.0	15.3	16.3	16.5	17.8	19.0	14.1	15.9	17.3	19.0	6.5	13.4
15	17.5	16.9	17.8	18.3	15.5	15.6	15.2	14.2	16.3	18.0	18.3	19.5	17.5	16.4	14.0	15.5	17.6	15.8	15.0	12.8	10.2	12.1	12.1	13.8	19.5	10.2	15.7
16	15.0	15.2	13.2	11.8	10.6	6.9	4.9	8.1	8.7	6.5	7.9	9.2	10.2	8.4	5.5	5.7	6.5	6.7	7.5	6.1	6.5	5.8	7.7	7.2	15.2	4.9	8.4
17	8.0	8.6	6.1	7.4	7.5	8.4	10.0	7.9	8.6	9.7	9.3	11.3	8.0	5.0	5.3	4.9	4.9	5.7	7.1	7.6	8.8	6.9	6.3	7.4	11.3	4.9	7.5
18	5.7	6.2	6.8	8.0	7.6	5.7	4.7	7.4	5.9	5.1	6.5	6.3	7.3	8.7	8.0	5.4	5.6	11.7	10.8	14.1	10.7	8.7	5.7	5.9	14.1	4.7	7.4
19	9.0	10.2	10.7	12.1	14.2	16.2	16.2	17.6	17.0	17.4	18.1	20.9	19.0	18.5	17.1	16.5	19.9	21.1	20.3	19.4	18.0	15.4	14.4	13.3	21.1	9.0	16.3
20	12.2	10.7	11.6	8.6	10.3	6.8	5.0	7.2	9.9	11.5	9.3	9.6	9.7	7.4	10.2	8.6	5.7	8.1	9.6	9.0	9.7	10.0	10.9	11.9	12.2	5.0	9.3
21	13.3	11.3	7.8	8.5	8.7	8.7	8.3	7.9	8.0	8.7	8.9	9.0	7.8	7.4	7.3	7.2	6.6	6.1	5.0	6.4	6.1	6.5	6.6	6.0	13.3	5.0	7.8
22	4.5	4.3	5.4	6.9	7.6	7.9	7.5	8.5	10.3	10.8	11.4	10.2	10.1	9.8	10.5	10.7	10.3	10.5	10.3	11.0	11.1	7.4	5.0	7.1	11.4	4.3	8.7
23	5.5	3.6	3.7	4.9	6.0	5.8	3.9	4.5	4.7	4.9	6.1	3.7	5.1	4.0	4.9	4.7	4.5	2.8	2.3	2.5	2.8	3.0	2.4	2.9	6.1	2.3	4.1
24	2.3	2.6	1.9	1.6	1.5	2.1	2.4	1.9	1.2	0.6	0.5	0.4	0.5	1.8	1.5	3.3	4.7	7.1	8.7	9.6	11.4	10.2	10.1	9.4	11.4	0.4	4.0
25	8.2	8.3	7.4	6.9	5.9	4.0	4.0	5.8	6.5	4.8	3.9	3.8	2.9	2.0	1.8	1.8	2.5	2.6	2.6	2.7	2.4	3.2	3.4	3.6	8.3	1.8	4.2
26	3.4	4.7	3.7	4.1	4.1	5.3	5.8	6.2	6.1	7.7	9.5	10.9	9.0	9.2	10.5	12.5	14.0	14.6	16.8	16.5	14.4	14.2	15.3	12.9	16.8	3.4	9.6
27	13.1	11.9	11.3	11.1	10.3	10.5	9.6	8.2	8.4	7.1	7.4	5.9	5.6	5.8	5.5	6.6	5.9	5.7	6.0	7.0	6.5	6.8	7.6	8.0	13.1	5.5	8.0
28	7.2	7.3	6.2	7.7	8.7	8.3	7.9	7.9	6.8	6.4	6.0	6.2	4.8	4.8	4.5	2.8	1.9	1.6	1.3	0.7	0.4	0.2	1.0	1.2	8.7	0.2	4.7
29	2.5	3.4	4.3	3.7	4.0	3.0	1.2	0.7	1.6	1.6	2.6	2.2	1.3	2.4	2.7	2.0	2.1	1.2	0.6	0.5	2.1	4.9	4.7	4.9	4.9	0.5	2.5
30	6.9	5.7	7.8	8.1	9.1	8.8	8.7	9.3	10.1	10.5	8.6	7.6	6.7	8.8	8.4	7.5	7.1	12.4	13.7	11.7	10.6	9.2	7.1	7.9	13.7	5.7	8.8
Max.	**17.5**	**16.9**	**17.8**	**18.3**	**15.5**	**16.2**	**16.2**	**17.6**	**17.0**	**18.0**	**18.3**	**20.9**	**19.0**	**18.5**	**17.1**	**16.5**	**19.9**	**21.1**	**20.3**	**19.4**	**19.0**	**16.5**	**15.9**	**17.3**	**21.1**		
Min.	**2.0**	**1.5**	**1.9**	**1.6**	**1.5**	**2.1**	**1.2**	**0.7**	**1.2**	**0.6**	**0.5**	**0.4**	**0.5**	**1.8**	**1.5**	**1.8**	**1.9**	**1.2**	**0.6**	**0.5**	**0.4**	**0.2**	**1.0**	**1.2**		**0.2**	
Avg.	**7.8**	**7.6**	**7.6**	**7.7**	**7.6**	**7.3**	**7.3**	**7.7**	**8.2**	**8.3**	**8.3**	**8.4**	**8.0**	**8.1**	**7.9**	**7.7**	**7.7**	**8.3**	**8.7**	**8.6**	**8.1**	**7.6**	**7.7**	**7.8**			**7.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.1	7.9	7.9	7.7	8.4	10.1	9.6	10.2	7.6	9.6	9.9	12.5	12.3	10.2	8.6	6.7	6.1	5.8	5.8	4.8	3.1	2.5	3.3	3.1	12.5	2.5	7.6
2	2.7	2.0	2.0	2.3	1.1	0.6	0.5	2.1	5.1	6.4	6.7	6.6	7.4	7.0	6.4	4.3	3.2	3.9	4.4	3.8	3.3	2.5	2.2	2.3	7.4	0.5	3.7
3	2.9	7.6	8.8	7.3	6.2	7.0	7.3	7.2	6.7	6.0	5.3	4.4	3.5	2.2	3.9	5.3	6.5	6.6	6.3	6.4	5.9	6.1	3.9	5.9	8.8	2.2	5.8
4	4.4	4.1	3.7	4.5	2.7	3.3	3.2	1.3	2.9	3.9	4.7	4.6	5.0	7.1	4.8	3.2	1.9	2.6	1.8	2.8	3.1	3.4	4.7	5.5	7.1	1.3	3.7
5	6.0	6.5	5.9	6.0	5.3	5.3	5.9	9.5	8.5	9.3	6.6	6.6	7.2	6.7	8.1	9.0	6.7	6.2	6.2	10.6	10.4	10.6	11.5	14.4	14.4	5.3	7.9
6	13.4	12.4	12.9	11.2	10.3	7.7	3.8	3.8	4.4	9.0	10.2	7.3	8.6	9.8	9.4	9.3	9.8	9.9	9.6	8.7	8.2	8.7	9.7	9.1	13.4	3.8	9.0
7	11.3	10.7	7.0	6.9	4.9	3.2	3.8	4.2	5.3	4.9	3.3	1.9	2.3	3.2	3.9	5.7	5.6	4.6	3.8	4.1	4.4	4.2	5.7	8.3	11.3	1.9	5.1
8	9.3	9.9	10.5	11.0	10.5	10.1	8.0	6.4	6.7	5.8	3.5	3.4	6.3	5.8	7.0	7.3	7.6	4.5	5.4	5.0	2.6	2.1	4.3	3.0	11.0	2.1	6.5
9	4.9	5.8	5.9	7.4	9.0	8.8	10.3	11.0	10.2	9.6	10.1	11.1	11.1	11.3	12.1	11.9	11.1	10.9	11.2	11.2	10.4	9.9	9.8	9.7	12.1	4.9	9.8
10	8.1	9.5	8.1	7.5	6.0	5.7	6.6	5.2	3.5	4.5	4.6	4.4	4.8	4.8	4.7	4.3	6.1	5.1	3.9	4.3	2.7	2.6	4.4	3.5	9.5	2.6	5.2
11	3.3	3.4	2.6	1.6	1.9	2.7	3.2	2.7	1.3	1.4	1.6	1.6	0.2	1.0	2.2	4.6	5.4	4.8	5.8	6.6	7.8	7.7	7.6	6.3	7.8	0.2	3.6
12	6.0	4.2	6.4	6.6	6.9	6.7	6.5	7.3	6.9	7.9	7.2	6.9	6.5	7.6	7.8	7.7	6.7	6.9	6.5	6.6	6.5	6.7	7.6	7.4	7.9	4.2	6.8
13	7.1	7.1	7.6	7.6	7.5	7.9	8.3	7.9	7.6	8.6	8.7	8.4	8.4	9.4	9.4	7.9	9.3	9.2	11.1	11.7	12.2	12.4	12.2	13.0	13.0	7.1	9.2
14	15.4	11.3	6.6	7.6	11.5	13.8	9.0	8.3	9.6	8.3	7.5	6.6	4.0	5.0	6.4	6.8	6.2	6.2	7.5	5.7	6.1	6.9	6.4	7.3	15.4	4.0	7.9
15	6.7	6.4	6.0	7.2	6.2	4.1	5.4	4.1	4.7	5.1	2.8	1.7	2.6	1.6	1.4	1.6	3.3	5.5	8.2	10.1	9.7	9.0	6.1	8.8	10.1	1.4	5.3
16	10.1	9.6	8.7	7.7	7.6	7.5	7.3	6.5	6.7	6.1	6.4	6.6	6.2	4.6	4.6	4.4	4.7	4.1	3.0	2.5	2.7	2.2	2.2	1.6	10.1	1.6	5.6
17	1.1	2.1	2.1	4.5	4.2	5.1	5.2	5.5	5.6	6.9	7.1	6.1	5.7	6.1	6.7	6.5	6.6	6.7	7.2	8.2	7.9	7.6	6.3	5.0	8.2	1.1	5.7
18	7.1	7.6	6.2	7.7	6.1	5.6	6.9	7.6	5.9	5.9	5.0	2.3	3.5	4.1	2.0	4.3	3.8	1.6	1.7	2.5	3.0	2.1	2.4	2.6	7.7	1.6	4.5
19	2.9	3.3	3.5	2.5	4.0	2.9	4.2	5.6	7.1	6.5	5.3	6.2	7.7	8.1	9.6	11.3	11.2	9.9	10.5	9.7	9.7	9.6	6.7	7.7	11.3	2.5	6.9
20	7.5	8.6	7.4	5.9	6.3	5.8	6.0	6.0	7.0	5.7	5.6	7.2	8.9	4.2	7.2	5.1	3.9	3.3	5.3	5.2	4.2	5.3	6.6	5.1	8.9	3.3	6.0
21	6.1	6.0	4.3	4.2	3.3	1.2	1.4	0.5	0.8	0.8	0.6	0.6	0.3	0.2	0.1	0.6	0.7	1.0	0.4	0.1	0.1	0.6	0.4	1.1	6.1	0.1	1.5
22	1.3	1.5	1.0	0.8	2.6	4.2	7.0	7.5	8.4	7.5	8.5	9.0	8.5	8.5	10.4	9.7	9.4	9.0	9.1	10.1	9.9	10.6	11.6	12.0	12.0	0.8	7.4
23	11.2	12.1	12.6	12.0	10.3	6.4	6.3	8.3	9.0	8.8	8.7	9.1	10.1	11.4	9.8	9.8	9.2	9.0	9.3	9.7	8.2	7.3	7.4	6.8	12.6	6.3	9.3
24	6.6	6.9	6.3	3.7	5.1	2.9	0.8	1.1	1.5	1.3	1.0	1.0	1.6	1.0	2.9	6.4	6.9	5.9	6.7	8.8	10.6	9.7	10.3	10.3	10.6	0.8	5.0
25	12.6	11.1	12.6	13.8	14.3	13.7	10.3	8.9	8.3	8.3	8.4	6.4	4.7	2.3	5.1	4.8	3.3	4.6	4.2	2.3	1.3	1.6	2.1	3.5	14.3	1.3	7.0
26	2.3	3.3	2.9	3.6	3.3	2.5	1.6	1.9	0.6	1.9	1.0	1.7	0.9	1.6	1.6	1.9	4.6	5.6	5.7	5.3	6.3	5.8	6.8	7.3	7.3	0.6	3.3
27	8.2	10.1	10.5	9.6	10.9	11.7	13.8	14.7	14.1	13.3	13.2	12.8	15.9	16.7	14.8	17.0	15.9	14.1	12.2	11.4	9.4	15.7	13.9	10.7	17.0	8.2	12.9
28	10.2	7.4	7.8	7.9	7.0	7.8	6.3	4.6	4.2	3.5	4.4	4.1	3.8	3.2	2.5	2.5	2.2	2.6	4.1	1.2	2.0	1.2	1.1	3.9	10.2	1.1	4.4
29	5.5	9.0	10.2	10.9	11.2	11.6	11.4	11.2	10.0	9.0	10.6	13.1	15.2	14.2	10.2	9.9	9.5	9.3	8.9	9.4	9.8	6.3	6.9	10.8	15.2	5.5	10.2
30	10.4	7.1	7.0	3.1	4.0	4.7	4.2	3.0	2.9	2.9	2.5	2.8	1.5	0.9	4.6	4.2	3.0	3.7	3.4	2.6	2.9	1.3	0.2	1.6	10.4	0.2	3.5
31	0.4	0.9	1.0	2.1	2.4	3.9	1.5	3.1	3.9	4.3	4.1	3.9	4.0	4.1	6.3	7.3	7.0	7.0	6.8	7.0	6.7	6.3	7.1	7.1	7.3	0.4	4.5
Max.	**15.4**	**12.4**	**12.9**	**13.8**	**14.3**	**13.8**	**13.8**	**14.7**	**14.1**	**13.3**	**13.2**	**13.1**	**15.9**	**16.7**	**14.8**	**17.0**	**15.9**	**14.1**	**12.2**	**11.7**	**12.2**	**15.7**	**13.9**	**14.4**	**17.0**		
Min.	**0.4**	**0.9**	**1.0**	**0.8**	**1.1**	**0.6**	**0.5**	**0.5**	**0.6**	**0.8**	**0.6**	**0.6**	**0.2**	**0.2**	**0.1**	**0.6**	**0.7**	**1.0**	**0.4**	**0.1**	**0.1**	**0.6**	**0.2**	**1.1**		**0.1**	
Avg.	**6.9**	**6.9**	**6.6**	**6.5**	**6.5**	**6.3**	**6.0**	**6.0**	**6.0**	**6.2**	**6.0**	**5.8**	**6.1**	**5.9**	**6.3**	**6.5**	**6.4**	**6.1**	**6.3**	**6.4**	**6.2**	**6.1**	**6.2**	**6.6**			**6.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
19																219.9	221.9	220.5	217.3	219.4	172.5	78.7	46.4	241.4
20	205.2	45.0	127.9	148.2	141.1	118.4	109.7	116.2	105.0	107.8	110.2	113.4	359.5	20.4	16.6	19.7	12.7	13.3	13.6	14.7	45.0	64.2	275.5	234.3
21	96.9	17.1	8.0	17.3	12.0	11.0	9.3	8.5	16.2	280.1	236.7	342.6	96.2	140.6	337.4	188.7	250.9	70.6	341.9	0.0	209.6	224.9	134.0	52.6
22	93.4	85.2	17.6	0.0	58.8	36.8	75.9	84.5	39.7	15.0	31.5	20.3	354.2	19.8	12.1	8.8	8.8	7.3	19.5	22.1	12.5	14.7	15.6	18.8
23	31.6	30.2	28.8	19.4	11.1	6.4	15.1	4.1	351.8	349.4	328.5	325.8	325.5	325.5	329.8	321.2	326.0	311.8	317.4	357.0	89.2	20.4	348.3	18.5
24	9.7	358.9	2.2	335.2	337.7	334.3	347.2	355.3	0.4	2.0	3.3	0.9	359.6	357.2	1.0	344.2	330.6	321.1	326.8	331.6	355.0	359.3	9.3	4.1
25	4.4	356.7	6.2	358.4	345.5	336.0	347.1	342.9	337.7	333.4	333.2	335.9	354.7	351.5	354.3	2.9	350.6	352.7	355.2	2.0	7.8	15.7	7.7	5.5
26	6.0	2.5	5.6	4.8	5.0	10.0	7.0	16.4	17.0	3.0	3.2	10.2	3.8	12.9	14.4	14.7	0.2	5.5	15.9	15.2	15.4	15.5	29.0	28.3
27	23.8	28.6	29.5	26.2	28.5	29.4	351.8	11.7	7.6	7.7	8.8	21.9	348.0	18.8	14.1	72.4	76.9	92.8	71.0	73.5	65.6	74.1	69.0	14.0
28	269.6	311.7	193.9	177.0	184.4	205.4	193.4	146.2	154.9	182.1	190.5	203.7	222.0	233.6	243.7	262.8	279.9	19.8	76.3	355.6	48.0	88.8	53.3	65.9
29	8.7	22.1	48.7	42.4	53.6	16.2	31.0	357.4	277.2	5.2	5.5	5.7	3.6	0.8	358.2	359.1	322.0	359.7	4.9	352.8	2.8	11.1	1.0	13.8
30	3.5	355.5	345.4	2.8	346.0	329.6	334.0	330.9	317.6	317.9	330.5	335.0	338.5	342.1	5.2	0.9	341.9	355.5	356.1	347.7	349.5	351.6	2.1	358.5

Total Hours in Month 720 **Hours Data Available** 273 **Data Recovery** 37.9%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	354.2	353.4	348.1	358.3	21.7	41.5	41.2	16.6	13.2	13.8	1.6	3.9	25.1	28.4	14.5	8.7	7.6	21.3	11.8	8.0	19.5	21.6	5.6	33.5
2	78.8	67.8	48.0	78.2	173.0	218.4	228.1	170.9	155.4	13.0	349.3	353.9	18.9	1.2	41.0	44.3	2.9	14.9	14.9	4.7	353.2	5.5	351.1	354.1
3	352.0	349.3	335.8	329.0	329.1	336.6	329.7	357.1	351.2	2.8	4.4	16.3	22.7	19.4	2.5	0.6	1.8	19.4	13.9	22.7	32.4	27.4	20.9	8.9
4	6.4	5.3	10.7	40.2	102.6	99.9	92.5	42.9	29.5	22.7	48.2	15.5	110.1	121.2	123.0	122.4	109.5	103.2	106.2	118.4	102.8	104.1	104.9	110.1
5	115.3	113.8	100.6	102.3	106.6	103.3	106.9	106.4	105.8	103.8	101.9	102.5	102.3	102.3	102.2	102.1	100.1	99.7	99.3	96.1	94.8	93.3	94.7	92.6
6	93.8	99.3	97.9	98.7	97.5	93.9	94.4	99.2	101.4	130.6	142.5	152.4	159.7	157.9	159.3	154.5	153.9	155.4	139.5	119.0	108.3	101.0	97.9	97.9
7	97.1	96.0	97.3	95.3	94.1	94.2	95.3	95.4	94.8	90.5	93.2	89.8	89.7	90.7	94.7	93.8	96.9	100.2	111.7	103.1	111.1	100.8	98.0	101.7
8	121.9	149.4	148.5	163.5	176.1	156.3	137.9	140.0	119.2	111.5	110.1	121.4	129.3	129.8	122.4	119.0	104.9	99.9	116.0	123.4	123.9	123.4	121.4	123.9
9	124.0	125.6	125.3	127.0	129.9	124.0	106.9	113.5	111.6	117.5	103.9	107.9	114.2	127.1	229.0	16.6	359.5	7.8	278.9	209.5	195.3	198.6	169.1	183.4
10	175.2	158.3	148.7	60.4	114.5	119.1	145.8	63.5	106.3	210.8	199.3	187.4	139.4	144.1	134.9	136.3	107.5	97.4	96.4	100.4	100.2	117.2	110.3	108.0
11	121.3	163.5	163.1	127.2	231.7	246.4	244.5	246.1	240.7	239.9	237.8	244.0	251.8	250.1	241.6	241.9	246.8	254.4	256.5	281.4	315.7	320.5	319.6	323.3
12	321.5	317.7	311.7	37.3					359.9	4.0	6.3											13.5	15.5	27.4
13		18.4	22.1	13.2	14.7	34.5	9.4	77.1	67.9	71.6	84.8	94.5	91.9	91.4	92.3	90.4	92.1	93.0	87.7	86.9	87.1	89.5	88.8	90.0
14	85.5	85.9	87.3	85.7	82.1	77.7	74.1	55.5	50.0	45.3	48.0	49.8	39.8	51.1	50.5	51.7	50.8	48.1	61.4	62.6	77.1	83.9	89.6	88.8
15	90.6	93.1	94.2	93.6	85.1	90.9	93.3	58.3	33.3	38.9	42.2	32.7	29.9	42.0	38.9	37.5	50.7	69.4	86.1	88.0	86.1	87.3	88.9	95.1
16	115.9	116.8	98.3	104.8	123.1	126.0	123.0	134.2	164.4	173.6	181.9	205.9	242.4	241.5	244.9	232.2	229.7	216.3	203.6	221.3	228.9	240.6	217.8	4.6
17	8.0	339.4	19.7	36.6	98.5	95.1	42.2	32.4	35.5	24.8	53.9	20.4	18.0	19.9	23.2	43.1	68.7	88.4	88.5	95.7	97.3	87.6	106.9	104.0
18	94.4	76.0	73.8	44.4	34.3	58.5	81.0	94.0	100.1	79.6	84.9	97.0	100.5	109.3	114.8	116.5	118.6	108.9	115.9	97.6	90.8	48.6	78.8	79.1
19	78.5	78.7	93.2	96.9	91.4	96.4	97.2	84.7	88.4	97.4	112.7	100.3	107.5	105.2	109.3	119.4	131.8	133.2	132.9	135.4	139.8	133.1	149.3	103.6
20	88.5	114.2	55.6	18.5	15.0	26.6	29.4	27.9	74.4	228.2	55.3	52.1	31.8	41.2	207.7	206.2	226.5	355.7	34.2	94.0	77.7	81.9	51.6	101.2
21	29.8	80.0	39.7	52.8	281.5	222.1	240.4	80.7	66.7	76.3	56.6	88.6	46.9	163.4	205.4	248.1	230.5	43.9	247.7	219.2	259.6	6.1	7.8	359.5
22	3.6	11.0	10.8	32.1	40.5	20.8	14.6	11.9	25.0	25.8	30.0	3.7	18.6	16.2	21.9	16.1	14.0	14.1	25.1	18.9	36.8	45.1	47.2	92.3
23	34.7	45.2	88.0	36.6	28.8	41.1	54.0	52.5	36.5	40.0	58.8	21.8	27.8	16.5	98.4	128.1	124.2	115.8	97.6	139.7	92.7	82.4	97.3	92.1
24	97.0	99.3	101.8	103.9	102.2	97.5	96.8	101.5	104.1	97.8	85.7	88.0	78.7	72.0	44.3	12.8	20.9	18.5	15.9	10.2	18.7	14.6	11.6	22.3
25	21.1	17.2	18.1	10.0	43.9	97.6	92.7	89.4	88.7	82.5	77.4	79.1	83.0	67.8	64.2	71.2	50.9	52.3	55.1	46.4	53.4	48.6	64.9	87.6
26	90.3	91.4	83.1	92.7	100.9	100.5	97.2	92.8	85.5	84.6	49.8	86.9	82.2	86.4	73.0	81.8	77.6	84.7	83.2	80.4	51.6	27.0	34.4	20.4
27	18.9	34.7	47.3	50.1	49.7	39.8	25.2	22.3	22.4	15.7	21.5	30.2	20.7	14.9	22.6	30.2	33.3	31.9	18.0	9.1	357.4	20.7	42.2	50.8
28	71.1	54.1	58.8	56.2	52.0	55.2	58.2	54.3	57.5	47.9	28.1	48.1	40.1	38.8	45.4	48.1	49.4	43.7	28.8	53.0	48.9	49.8	55.4	51.3
29	63.0	49.4	186.5	36.7	48.4	67.5	89.5	90.3	93.2	89.9	96.5	96.9	90.9	94.0	90.1	80.1	54.9	58.5	72.9	93.2	91.5	78.9	75.2	61.7
30	46.7	51.3	48.2	48.4	47.4	40.0	38.2	39.5	28.9	34.7	4.5	311.8	13.3	6.4	292.5	267.4	18.6	25.4	53.3	56.3	50.9	28.3	48.4	44.5
31	65.2	37.3	29.7	60.1	24.4	335.6	3.8	21.8	25.9	31.6	54.8	28.2	27.4	16.0	5.9	358.9	12.3	34.4	48.7	78.3	44.3	33.8	23.2	37.4

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	37.2	20.7	15.6	22.9	36.3	49.9	54.1	85.1	92.2	101.7	107.1	97.0	91.3	86.2	80.6	61.0	63.4	51.0	31.1	28.5	26.0	24.4	27.1	48.1
2	36.3	43.5	23.5	24.4	23.5	27.8	40.0	61.1	42.6	78.6	68.0	96.2	97.1	96.0	94.3	98.1	84.6	98.9	91.9	94.3	94.3	96.5	94.7	108.2
3	97.9	96.0	90.2	87.6	79.6	85.4	89.0	100.3	89.3	82.3	82.5	82.1	83.6	94.7	98.5	115.5	109.5	293.7	175.8	45.6	57.0	66.6	4.2	2.4
4	27.3	0.0	358.5	203.0	110.9	0.0	63.2	46.2	17.8	65.2	74.5	291.1	231.9	193.7	0.0	0.0	73.3	59.4	67.4	58.8	55.1	41.5	84.8	13.3
5	19.8	35.2	59.6	239.1	58.5	150.9	86.5	288.4	37.4	51.7	282.4	191.2	195.8	21.5	10.0	16.0	12.2	359.5	350.0	347.0	4.0	0.7	73.7	82.6
6	73.2	79.3	71.5	82.7	73.5	233.0	262.0	66.5	78.7	57.0	58.5	74.4	40.0	84.6	75.7	64.5	74.9	59.8	64.6	79.0	82.4	63.3	60.8	46.4
7	65.0	57.5	44.8	64.6	60.4	70.2	74.1	80.3	49.3	284.4	78.3	85.1	31.5	42.0	342.2	20.1	22.8	16.6	29.7	16.5	9.9	22.5	34.3	31.6
8	21.3	15.8	15.1	29.9	34.8	30.8	48.1	29.6	34.1	1.1	14.8	11.2	13.2	10.3	8.4	9.5	315.6	55.8	99.3	85.6	84.3	71.6	93.2	85.5
9	66.0	74.0	41.5	85.1	81.5	84.9	91.5	96.1	68.3	73.6	57.6	85.6	50.7	71.7	59.3	33.9	239.0	359.2	34.0	69.7	89.0	75.7	60.1	62.9
10	89.0	79.7	79.9	69.3	88.3	80.4	137.2	107.2	101.1	72.1	224.3	220.5	213.5	227.2	207.1	206.6	206.1	212.7	231.7	249.7	240.0	244.0	231.0	260.1
11	235.6	222.1	316.6	177.3	172.3	244.5	36.2	342.9	327.2	69.3	31.0	40.3	52.8	17.5	345.7	244.9	359.1	29.6	67.9	120.9	72.1	212.7	70.9	68.9
12	69.4	81.4	89.2	341.0	20.3	21.1	24.8	22.3	13.0	13.4	16.7	14.4	18.4	10.2	3.1	4.7	5.4	359.6	354.5	3.1	7.0	17.5	19.7	16.3
13	16.0	18.2	11.6	30.7	20.5	15.3	25.4	28.8	23.6	24.0	26.9	28.0	34.2	31.8	23.6	26.2	23.0	32.1	24.3	17.8	25.9	31.8	7.5	58.1
14	51.9	14.5	14.8	44.3	30.1	79.4	69.5	62.7	74.9	47.5	310.6	101.7	46.1	98.9	98.9	101.9	105.2	106.3	104.5	106.4	104.9	102.8	103.5	103.4
15	101.5	93.2	92.7	91.3	101.3	99.0	96.7	95.7	93.8	87.6	82.6	83.3	88.4	87.5	82.1	78.7	81.2	75.7	77.7	80.9	80.9	69.8	58.9	38.7
16	38.9	29.9	45.7	38.0	47.3	49.2	38.1	31.8	31.9	25.3	27.2	26.6	49.9	358.1	240.0	0.7	346.8	50.6	234.3	252.4	68.0	80.8	45.8	7.5
17	7.9	18.0	10.7	7.8	14.8	15.3	22.0	10.0	23.8	6.8	4.2	10.2	11.0	2.2	7.0	3.3	11.2	18.2	20.0	16.3	19.5	20.3	10.4	24.7
18	9.1	23.3	16.1	10.0	13.3	33.9	27.9	24.4	25.8	26.5	26.3	28.2	21.7	24.9	24.0	17.9	21.8	23.5	25.0	24.5	31.1	39.7	35.8	28.8
19	9.8	10.2	7.9	9.6	16.7	39.0	27.6	15.9	11.3	25.2	24.0	28.3	31.6	36.6	34.6	34.3	27.6	46.2	8.1	51.9	29.5	29.8	40.5	35.3
20	34.3	26.7	18.9	20.3	14.7	8.1	11.9	12.8	10.0	11.3	9.7	12.4	10.7	11.6	12.6	14.3	12.3	13.4	15.0	16.0	15.3	18.6	12.9	14.8
21	15.4	18.3	22.8	22.8	26.0	22.8	21.9	21.7	23.4	22.9	24.9	31.6	35.0	34.1	29.6	24.7	25.7	24.7	13.2	1.6	356.6	0.3	2.8	1.4
22	352.4	341.6	332.8	326.8	328.7	333.7	334.7	333.9	340.3	340.4	344.1	346.3	348.8	357.3	358.1	355.8	353.3	345.8	340.9	343.1	343.8	351.3	347.4	353.1
23	17.2	8.9	16.3	12.2	18.1	15.5	25.7	9.6	8.2	7.2	23.5	20.1	28.7	18.0	28.7	12.4	18.8	22.7	23.8	32.4	28.4	31.3	28.6	36.3
24	28.2	33.0	19.9	19.5	22.9	15.1	11.8	23.7	25.7	33.5	29.0	20.1	7.0	9.3	9.0	6.5	6.7	15.7	22.3	46.3	27.6	29.4	13.4	35.6
25	28.0	35.5	23.9	4.3	6.1	18.1	10.2	17.2	356.0	11.0	29.0	8.2	8.0	15.8	8.1	9.3	3.9	354.7	9.4	6.2	20.2	17.6	10.8	22.0
26	23.8	17.2	16.9	18.4	23.2	10.3	84.6	109.7	341.9	1.7	357.4	24.5	284.6	337.6	8.1	11.7	0.8	6.7	359.6	4.9	360.0	5.8	16.1	14.0
27	15.2	347.1	358.4	2.6	22.5	1.9	8.0	22.4	32.3	40.3	14.5	3.1	8.6	11.0	6.4	14.9	6.2	17.1	14.5	5.6	21.5	28.3	19.5	6.4
28	15.4	0.4	355.2	351.2	4.7	7.7	4.1	2.4	5.2	8.6	4.0	8.1	7.1	1.7	2.2	358.8	2.3	45.0	22.0	27.6	47.3	23.1	25.5	26.9
29	27.7	27.4	36.4	31.9	26.5	7.2	19.1	348.2	2.0	3.9	3.5	3.0	7.2	4.6	3.5	9.7	23.9	7.9	24.8	359.5	6.9	0.1	4.4	348.5
30	3.2	5.3	1.2	8.9	8.7	7.6	12.6	9.9	2.1	4.4	16.8	243.1	226.5	315.0	339.7	8.1	5.2	5.9	61.7	50.6	79.3	65.2	92.7	73.3
31	82.6	83.4	75.0	106.0	70.6	43.5	60.8	80.1	231.9	95.6	7.5	4.3	0.5	281.1	32.6	230.8	285.8	302.8	13.4	22.1	11.2	17.0	11.8	14.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	23.5	19.7	27.0	22.4	22.3	18.2	4.0	0.2	5.5	12.4	359.3	354.7	4.8	0.6	357.4	354.6	3.9	14.1	19.6	1.0	358.5	5.8	1.2	14.6
2	8.8	11.3	16.3	9.0	33.1	26.9	24.2	11.5	17.9	355.4	9.9	17.7	10.8	8.5	7.9	7.2	77.1	57.4	83.6	85.3	92.3	83.4	286.0	223.8
3	186.4	208.9	165.7	193.2	143.2	128.8	119.8	123.4	124.5	117.7	119.6	113.9	109.6	121.7	126.3	119.7	106.5	115.1	111.2	117.4	107.0	100.7	114.2	96.7
4	93.8	95.0	93.5	92.2	93.0	95.9	96.7	94.7	90.7	89.6	90.3	92.4	92.8	94.0	92.7	90.6	91.0	90.1	95.7	90.3	91.3	91.4	84.2	84.7
5	88.3	88.2	88.7	86.0	88.6	89.0	87.6	86.3	88.5	78.6	75.6	87.6	97.2	98.3	94.7	88.5	91.2	81.2	73.4	70.2	52.2	65.6	75.8	76.8
6	66.8	71.2	66.7	63.9	92.6	85.6	90.5	90.8	135.8	163.7	214.9	221.1	227.3	223.6	221.7	217.8	203.2	201.6	166.1	157.9	181.9	171.1	166.8	153.5
7	151.3	142.9	131.3	154.0	140.0	150.6	202.1	219.4	227.5	229.9	239.9	252.8	254.1	264.5	264.0	301.1	337.4	29.4	350.6	19.4	62.7	307.1	62.1	67.2
8	55.7	61.0	81.9	98.7	85.4	66.8	86.2	76.8	92.6	357.1	116.5	108.6	100.8	95.5	94.4	95.7	97.3	96.0	94.6	96.8	96.2	94.7	93.5	97.0
9	92.1	91.7	91.8	94.9	94.3	90.0	93.1	87.5	55.9	46.2	50.6	58.1	68.1	71.3	92.4	100.1	98.8	96.7	99.1	98.5	98.5	97.8	102.8	98.2
10	100.4	106.1	113.0	106.2	103.7	93.4	90.6	90.2	102.1	118.1	107.5	106.9	108.9	123.0	126.8	125.3	121.6	117.2	105.0	108.6	113.2	122.5	126.1	135.0
11	123.6	102.5	98.6	98.2	100.0	56.0	356.1	13.9	9.5	16.8	19.1	3.0	6.8	10.0	11.6	21.3	25.2	29.1	86.8	83.6	80.9	87.9	96.2	188.3
12	212.2	73.5	69.3	135.0	146.6	156.3	171.9	322.3	302.1	315.6	315.7	314.8	297.5	262.8	273.8	258.3	248.0	252.5	238.2	248.5	225.8	215.0	34.4	85.4
13	317.1	52.8	85.0	76.7	90.6	44.0	92.4	80.9	40.1	91.1	223.3	153.2	141.5	128.6	119.8	110.7	111.9	104.4	103.1	106.3	117.1	111.8	117.9	121.5
14	124.3	126.3	122.0	125.2	124.1	120.1	305.8	314.5	291.3	314.9	280.3	288.3	311.6	359.0	356.1	274.0	303.9	336.2	302.8	280.3	272.2	303.5	328.7	311.1
15	270.7	272.5	262.1	271.2	272.4	266.0	275.0	287.9	288.6	286.3	276.4	287.3	277.9	298.1	310.2	284.1	313.3	283.3	290.4	290.1	313.0	317.2	293.4	302.1
16	302.3	302.3	302.3	302.3	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.3	302.3	302.3	302.3	302.3	302.3	302.3	302.3	302.4	302.4	302.4	302.4	302.5
17	302.6	302.6	302.6	302.6	301.3	293.4	280.4	273.6	277.0	249.5	313.0	245.7	340.3	223.7	238.0	280.2	287.8	42.4	291.2	278.1	264.1	298.8	301.7	343.1
18	330.1	314.1	243.4	187.8	187.8	187.7	167.5	28.4	344.6	353.5	324.0	334.1	336.1	4.1	349.1	303.5	295.0	333.0	320.8	331.8	344.7	352.1	359.2	4.4
19	7.6																							
20												356.0	344.5	336.0	326.5	343.8	5.2	5.2	5.2	5.7	6.1	7.6	10.2	12.9
21																								
22																								
23																								
24																								
25																								
26																						88.8	32.6	13.1
27	19.4	4.6	3.3	3.1	308.1	224.7	228.3	228.3	242.4	245.6	245.9	244.5	247.4	257.6	263.7	275.8	270.6	271.8	279.6	274.6	267.2	263.3	261.5	246.4
28	246.5	234.5	260.4	239.5	251.9	248.8	249.9	260.6	272.1	249.6	226.2													

Total Hours in Month 672 **Hours Data Available** 484 **Data Recovery** 72.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1																							296.2	306.5
2	132.4	280.3	167.0	156.6	149.6	344.2	325.1	266.6	321.0	294.7	346.4	346.2	253.6	25.1	304.7	305.6	296.9	296.2	291.5					
3																								
4																								
5																								
6																								
7																								
8										233.4	230.8	295.2	257.5	256.0	217.2	238.3	208.3	246.6	237.1	250.8	267.2	261.5	260.9	256.5
9	257.6	245.2	257.0	258.2	262.2	261.7	259.4	259.4	258.9	266.6	270.9	270.8	266.4	22.5	19.6	22.6	34.3	19.3	16.2	18.5	18.9	19.8	33.0	44.0
10	43.0	38.6	34.1	26.7	33.9	34.3	55.0	67.9	61.5	53.5	55.1	15.0	58.6	44.7	61.0	37.5	37.0	36.2	52.6	115.3	129.5	127.5	138.8	149.7
11	145.8	149.2	143.1	129.7	130.1	128.3	121.9	120.6	123.0	123.5	118.6	119.4	118.4	119.7	118.1	118.9	117.0	117.7	119.6	118.1	120.2	122.3	121.4	124.0
12	118.9	122.9	121.4	129.1	142.4	125.2	124.8	118.2	120.8	123.5	167.9	179.6	183.6	263.9	115.6	142.4	144.7	181.5	328.9	171.5	245.7	279.2	262.8	226.2
13	263.1	312.2	0.0	82.7	192.6	238.5	140.7	0.0	29.6	230.3	253.0	36.3	30.7	33.1	31.1	34.2	34.3	45.3	31.8	30.8	31.0	28.6	34.4	41.6
14	45.5	28.1	24.9	27.4	29.0	28.3	29.6	25.7	26.9	26.5	37.9	39.7	40.2	59.1	34.3	34.1	28.9	43.5	44.9	94.6	71.5	69.7	36.7	332.2
15	254.7	280.8	81.1	29.4	0.0	244.6	304.6	94.2	81.2	64.3	0.0	243.8	227.3	240.9	246.8	251.2	236.3	233.0	306.9	104.7	101.5	184.7	94.4	190.6
16	180.9	171.8	158.8	154.9	210.7	258.0	222.6	85.1	71.4	86.2	112.7	105.7	118.0	130.0	128.9	135.7	139.6	150.8	151.6	147.5	153.4	150.0	138.5	142.1
17	139.5	139.6	143.3	132.8	122.5	125.2	129.5	128.9	132.5	134.6	135.4	141.6	152.2	146.6	142.1	137.0	149.1	152.9	139.3	131.6	128.5	127.9	142.3	149.2
18	148.4	142.8	137.6	130.8	128.4	117.3	112.9	87.4	71.8	76.6	84.8	75.0	67.9	34.2	33.1	39.5	51.4	50.5	48.5	40.3	30.5	45.3	279.1	95.2
19	111.6	97.6	79.0	58.7	218.3	193.9	97.4	72.8	85.3	150.5	144.6	139.5	144.0	147.7	149.4	148.5	156.6	153.8	153.1	149.8	145.1	144.3	150.5	146.9
20	165.0	168.9	167.2	176.1	157.0	157.2	150.0	146.7	145.9	138.8	128.6	115.6	226.3	241.1	263.0	354.2	20.2	20.5	31.9	34.6	31.5	38.9	19.7	14.0
21	8.1	11.4	13.4	15.8	24.3	16.1	16.2	18.1	20.4	28.2	38.3	56.5	54.7	25.6	19.7	33.8	22.9	16.5	18.6	24.4	46.7	48.5	51.7	50.7
22	19.1	23.2	15.4	41.4	35.6	31.7	28.8	16.9	25.3	16.7	16.9	33.7	22.0	15.6	9.0	19.5	18.7	10.8	14.4	40.8	50.7	51.0	49.8	44.2
23	33.4	123.5	92.7	103.9	36.1	51.6	83.7	237.7	133.5	311.7	46.3	241.9	254.5	243.1	250.5	239.2	244.1	320.3	55.3	34.3	38.0	11.4	0.8	357.1
24	13.9	21.6	20.3	27.5	41.0	8.9	15.3	34.4	69.2	54.5	50.4	55.8	40.6	11.2	15.0	10.9	18.2	6.6	6.2	8.6	10.1	31.3	43.5	55.2
25	45.6	50.7	53.5	53.6	52.4	51.2	55.2	57.0	53.8	53.0	49.2	51.7	48.3	42.2	34.8	26.4	41.3	35.0	16.5	6.3	0.1	8.7	44.8	51.9
26	30.3	44.1	55.2	56.0	56.8	46.5	45.6	40.9	37.5	47.5	47.4	45.1	52.5	53.1	48.6	43.5	58.3	2.9	359.6	32.9	38.0	86.0	116.4	90.1
27	90.0	88.0	102.7	99.9	98.1	88.9	93.6	102.3	91.2	102.6	87.1	84.2	71.6	61.9	50.5	97.5	45.9	150.0	169.4	152.0	166.9	51.1	83.0	60.4
28	75.1	112.3	117.1	110.2	110.7	22.8	83.5	170.3	122.3	111.1	120.6	126.4	137.0	134.4	132.0	84.3	31.9	24.0	165.8	38.1	0.0	72.6	46.0	32.6
29	32.5	31.5	19.0	12.1	14.3	354.4	26.4	34.3	36.5	26.3	22.4	147.7	197.6	255.4	244.0	228.0	211.5	216.8	242.0	242.3	96.2	61.4	145.0	147.8
30	142.0	148.3	136.3	133.0	124.8	126.5	122.5	125.8	132.5	129.0	127.2	120.7	120.8	120.6	119.8	121.4	128.1	126.7	124.6	120.9	124.0	123.3	121.5	123.4
31	128.3	130.8	133.1	134.0	134.9	136.2	135.2	127.9	139.4	232.3	232.2	217.6	225.9	238.4	249.0	256.8	258.5	260.8	264.4	261.8	231.2	132.9	19.5	37.5

Total Hours in Month 744 **Hours Data Available** 588 **Data Recovery** 79.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	36.4	33.9	11.1	44.4	42.5	23.8	0.0	356.8	28.8	1.5	6.0	247.9	259.1	262.3	257.4	264.8	257.4	305.7	105.8	68.7	226.8	205.3	184.0	170.3
2	173.5	174.2	169.9	214.9	288.7	200.4	186.3	246.9	228.5	66.4	36.6	47.4	234.0	277.6	35.6	27.3	23.8	65.5	212.7	141.3	117.4	118.5	118.0	103.7
3	105.2	103.5	111.2	113.3	120.4	121.0	121.3	120.1	120.7	121.3	121.6	123.9	122.2	125.0	129.4	138.4	141.8	144.2	143.8	140.3	136.0	132.0	130.9	137.9
4	148.2	153.2	145.9	145.1	146.4	145.1	147.7	156.3	142.6	143.5	151.9	155.6	158.3	144.7	244.4	294.7	5.2	53.0	46.8	43.5	46.0	34.6	34.3	20.3
5	26.5	11.3	11.2	359.1	23.4	16.7	9.3	15.3	25.5	23.6	10.1	352.0	358.4	356.5	6.6	9.3	7.2	10.3	27.6	45.2	29.8	30.6	15.7	16.4
6	22.6	31.7	18.3	43.2	32.9	42.4	31.8	47.3	48.6	55.0	63.5	55.8	48.0	41.4	36.3	43.6	35.0	43.8	36.3	30.9	31.2	105.2	104.9	51.6
7	66.4	0.0	89.0	73.6	175.9	204.1	173.7	201.7	154.6	208.3	287.9	203.9	186.8	185.3	167.0	171.9	162.5	143.6	135.0	141.3	140.3	129.3	123.1	127.3
8	134.7	136.9	135.0	132.7	133.0	129.0	126.5	123.5	125.6	137.6	139.2	144.7	146.1	145.8	145.4	151.3	154.9	167.7	159.6	163.2	160.1	161.3	172.4	186.2
9	197.0	180.6	172.2	181.5	177.1	184.0	176.4	184.2	193.6	203.2	209.7	218.4	226.7	227.5	231.7	225.9	208.3	203.7	229.8	169.6	182.7	174.1	212.4	205.8
10	184.2	159.3	172.8	242.8	236.7	257.3	266.9	263.9	253.2	259.7	258.4	273.9	299.6	294.2	281.8	281.5	283.5	297.9	301.8	327.8	305.2	17.1	267.1	239.9
11	63.2	248.6	62.1	40.8	93.9	102.4	52.5	82.9	283.6	232.1	101.7	121.9	106.1	107.4	114.0	117.7	118.0	117.4	111.5	105.8	100.0	104.4	105.5	108.0
12	110.7	113.2	119.4	120.2	120.8	125.6	126.8	124.5	122.9	122.9	128.5	147.5	169.0	171.9	185.9	212.1	218.7	222.6	228.9	234.5	221.4	242.1	228.9	231.2
13	244.3	171.2	57.7	48.0	38.5	18.1	0.1	3.4	354.2	356.4	2.5	357.1	357.4	358.6	0.0	4.8	357.5	347.3	349.4	352.1	352.2	353.5	356.3	1.5
14	4.4	10.6	6.8	7.7	9.1	12.5	5.4	5.4	6.9	18.7	14.1	9.5	11.4	0.7	1.7	10.4	3.3	6.1	4.0	7.4	6.1	5.5	6.3	12.8
15	18.7	12.0	10.6	3.7	8.7	7.7	21.8	21.8	49.0	45.9	357.8	32.7	357.9	8.8	13.5	15.2	8.9	24.3	4.5	18.8	43.0	45.4	36.3	50.5
16	75.1	166.7	169.9	132.0	131.7	128.3	123.6	122.1	122.8	132.8	130.0	121.2	120.0	118.2	118.2	118.3	116.9	114.8	111.2	110.3	102.8	83.7	79.1	66.5
17	58.2	65.7	66.0	67.9	70.9	82.9	64.4	99.0	112.0	134.4	132.6	132.7	129.4	122.9	130.2	114.3	118.8	130.2	134.5	195.7	167.2	40.2	41.3	30.5
18	33.3	31.4	31.5	33.2	40.5	71.4	96.7	85.1	77.5	147.6	26.3	250.9	245.2	237.2	222.5	226.1	220.6	231.6	243.7	231.0	245.5	246.8	240.4	264.9
19	271.5	268.9	264.0	262.9	263.5	262.8	264.4	85.1	77.5	147.6	26.3	250.9	245.2	237.2	222.5	226.1	220.6	231.6	243.7	231.0	245.5	246.8	240.4	264.9
20	271.5	268.9	264.0	262.9	263.5	262.8	264.4	272.7	269.8	274.3	267.5	247.3	258.0	270.8	267.4	258.7	250.8	242.0	248.6	258.9	288.5	293.8	281.6	266.0
21	271.7	199.5	189.0	46.2	33.1	117.3	45.3	91.3	81.0	105.9	40.5	158.9	160.7	154.2	142.2	142.9	127.0	131.7	126.8	122.1	122.1	122.4	121.6	119.7
22	116.3	116.2	113.9	111.4	110.1	108.6	112.3	112.9	114.4	118.4	119.1	121.5	123.5	128.1	133.1	128.9	173.9	171.4	166.3	157.8	188.1	0.0	136.0	138.6
23	132.0	131.8	114.1	113.5	87.2	69.6	35.5	291.1	53.6	77.1	27.7	29.3	300.5	252.6	241.3	250.1	232.4	208.0	0.0	189.6	155.9	161.6	265.8	280.5
24	188.1	249.7	155.6	143.4	143.8	157.8					125.8	123.7	140.5	131.6	173.3	262.8	272.4	263.3	16.6	17.4	9.6	0.6	336.7	344.2
25	226.7	224.5	217.2	205.3	207.5	219.6	226.7	199.5	242.5	319.9	154.6	137.2	196.2	163.5	273.0	318.7	315.1	113.1	105.2	101.2	100.0	104.2	101.7	90.9
26	91.8	90.9	88.8	85.0	85.5	84.2	86.8	199.5	242.5	65.4	82.1	104.3	102.8	116.2	112.9	117.8	135.3	151.2	171.5	357.6	28.6	26.7	25.0	38.0
27	47.8	53.5	24.0	30.6	31.0	24.7	25.5	26.1	28.0	25.9	35.2	3.2	357.7	15.5	349.2	341.7	345.0	345.3	344.9	344.0	347.4	339.5	345.8	8.3
28	5.4	16.9	16.4	27.9	32.5	17.0	34.8	32.4	30.9	25.1	36.0	169.1	160.8	158.6	191.3	128.6	140.1	145.4	60.8	20.0	23.6	59.1	49.0	34.9
29	0.0	41.0	75.3	64.0	21.4	0.8	24.5	16.5	14.6	18.9	360.0	3.7	13.5	9.1	342.2	332.7	326.2	320.9	317.7	325.1	327.2	311.6	321.9	9.4
30	23.5	18.2	10.7	277.2	86.4	104.1	346.2	222.7	168.4	193.1	17.6	237.7	232.6	226.6	200.7	244.0	235.6	202.9	117.6	115.6	106.9	107.8	106.1	104.4

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	100.7	104.4	104.7	92.5	92.1	85.8	86.5	86.1	89.6	95.0	94.8	95.5	95.0	93.6	89.9	93.6	93.3	94.8	87.7	85.5	83.7	89.1	77.4	75.0
2	88.6	87.4	73.4	52.5	44.3	53.5	86.8	86.1	89.6	95.0	94.8	95.5	95.0	93.6	89.9	93.6	93.3	94.8	87.7	85.5	83.7	89.1	77.4	75.0
3	88.6	87.4	73.4	52.5	44.3	53.5	86.8	70.6	46.2	57.8	42.4	28.1	47.3	58.7	58.6	61.4	60.9	32.6	48.4	133.7	186.3	158.7	237.7	327.6
4	199.2	110.2	106.6	39.8	54.2	106.3	104.3	110.6	124.5	123.8	128.0	129.7	130.6	135.5	138.4	124.2	115.3	105.1	103.8	103.0	100.6	100.4	100.2	99.9
5	99.5	99.4	100.9	100.9	100.5	98.7	113.7	106.3	110.2	105.7	112.2	106.6	102.4	102.6	112.6	102.4	102.4	99.1	98.4	97.0	116.4	111.6	120.0	136.8
6	178.8	287.3	32.8	22.7	34.6	43.2	32.7	142.1	146.5	159.5	204.0	234.7	222.8	218.9	216.4	214.4	209.6	209.3	222.3	224.7	223.5	233.4	226.4	225.9
7	223.4	219.7	218.9	222.5	222.5	218.2	221.8	217.1	217.6	218.3	224.2	214.9	213.0	213.0	214.5	218.9	217.0	224.9	211.2	214.6	220.1	216.5	221.7	0.0
8	0.0	61.9	41.5	41.7	0.0	102.2	0.0	26.1	67.8	96.9	108.0	106.9	108.7	107.6	96.5	88.0	89.5	99.6	93.5	84.5	67.5	77.1	82.5	79.7
9	67.3	59.9	50.9	52.6	56.0	55.8	68.4	84.8	91.8	97.3	120.3	120.3	123.6	115.3	101.9	92.7	116.8	92.7	38.8	58.5	234.2	224.3	80.9	0.5
10	5.5	15.2	0.4	24.0	31.0	359.9	90.5	34.4	19.3	27.4	269.5	255.7	262.8	297.4	352.7	288.9	327.0	349.0	21.7	21.8	355.1	4.4	15.7	126.2
11	128.0	114.7	207.7	207.7	218.7	241.7	200.3	49.9	35.3	233.9	181.2	214.7	219.2	212.0	213.7	216.2	207.9	212.5	168.0	199.4	352.8	9.5	12.7	17.4
12	10.5	9.2	22.7	48.4	40.2	19.2	30.9	35.9	35.6	347.6	347.0	351.1	349.2	348.4	331.2	338.7	334.7	327.8	316.4	320.7	323.0	326.0	344.2	12.9
13	22.4	17.3	25.6	25.9	30.3	23.7	23.8	24.8	106.7	158.5	193.3	215.3	211.2	231.6	232.6	216.6	211.8	214.0	167.9	150.8	187.5	195.7	65.8	50.8
14	5.3	0.0	38.5	0.0	103.5	263.4	0.0	123.3	141.1	134.3	151.6	159.7	158.5	159.2	148.5	139.3	149.7	146.1	146.0	145.9	173.8	155.5	187.4	149.4
15	151.7	186.1	150.8	151.6	178.2	45.0	150.8	213.0	223.0	267.0	306.7	355.3	12.0	167.8	199.4	216.2	214.2	214.2	212.2	193.7	209.8	18.5	226.6	259.4
16	261.3	248.9	253.9	258.0	230.6	319.9	22.4	347.7	232.2	47.0	23.4	21.4	228.5	233.9	230.5	232.6	221.0	210.8	219.8	218.7	201.5	221.8	68.0	353.8
17	95.1	63.7	111.0	92.4	125.4	97.8	20.4	26.4	36.1	129.5	125.7	132.7	160.3	165.6	157.8	130.8	112.4	117.5	123.3	124.5	126.4	126.7	142.5	143.3
18	153.5	166.2	170.2	196.4	206.0	218.1	238.8	215.9	213.4	205.0	211.5	214.8	221.0	241.0	241.4	234.4	225.8	253.3	242.8	246.3	242.9	246.1	245.9	238.7
19	192.7						204.6	208.2	217.4	152.3	129.6	127.8	132.1	132.1	127.7	122.0	106.4	111.9	118.2	107.3	111.9	107.7	108.3	113.4
20	125.5	128.6	121.7	116.0	120.5	118.7	116.5	124.8	124.9	125.5	125.2	123.5	132.9	119.5	117.9	119.0	112.6	111.3	136.2	282.6	330.4	335.5	342.0	341.5
21	342.4	341.1	343.3	336.8	339.6	342.6	351.3	353.4	358.0	354.2	356.8	355.9	358.4	4.1	358.8	4.0	352.5	345.9	355.3	352.0	3.7	5.0	1.2	5.2
22	358.3	352.1	354.0	355.2	354.4	351.6	1.8	15.9	11.0	6.2	4.0	0.3	4.4	8.3	8.3	10.3	359.3	358.9	1.2	357.9	348.9	354.0	1.7	16.7
23	20.2	16.2	21.8	17.4	16.2	17.0	24.0	28.1	25.2	20.6	15.7	5.4	22.4	52.5	66.6	190.7	325.9	333.4	336.8	334.5	328.7	344.9	12.6	15.5
24	17.8	17.3	52.3	94.0	91.9	65.9	59.3	28.8	20.3	26.4	193.7	237.2	240.3	330.9	319.1	265.3	233.9	240.4	264.0	274.3	283.5	354.5	12.8	9.0
25	11.2	13.9	15.8	20.1	319.7	262.6	84.0	17.8	37.7	27.9	14.1	346.2	103.3	121.3	151.0	162.1	202.7	199.9	220.9	207.6	224.1	255.6	32.7	12.8
26	18.0	44.6	11.8	24.8	16.3	175.9	22.0	35.4	36.2	23.8	18.4	10.4	358.7	358.1	353.9	341.2	343.9	340.4	343.4	340.4	339.2	332.4	344.1	350.8
27	357.3	356.7	7.0	1.0	8.4	28.2	14.0	1.6	4.6	352.3	351.2	348.2	351.3	349.6	357.1	358.9	3.6	5.0	355.9	342.6	11.0	25.9	9.4	15.3
28	20.7	20.8	23.9	69.9	102.0	140.3	136.8	147.7	150.6	164.4	181.9	214.4	205.4	272.8	315.0	308.1	320.0	77.4	149.1	159.3	155.6	139.4	146.1	170.1
29	220.2	224.0	170.4	167.8	165.0	181.8	200.8	187.9	129.2	139.4	138.0	142.7	149.2	150.6	148.3	147.3	139.3	137.7	138.8	144.9	161.3	166.8	188.5	205.0
30	196.4	204.4	221.7	15.2	37.4	221.0	226.0	231.0	187.1	176.5	173.3	168.2	175.9	174.4	161.5	149.7	150.0	145.2	151.3	144.1	145.6	147.5	146.5	146.4
31	162.9	147.5	153.5	151.1	175.6	250.2	213.4	205.9	185.2	237.1	243.7	227.1	239.3	235.0	232.5	231.7	235.0	237.6	242.4	241.5	235.4	198.4	247.4	198.3

Total Hours in Month 744 **Hours Data Available** 739 **Data Recovery** 99.3%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	211.5	72.3	1.8	9.2	10.6	7.2	31.6	30.5	13.1	0.4	352.4	5.7	29.6	55.7	56.0	166.5	165.4	327.2	247.6	253.4	258.1	260.9	262.3	97.2
2	0.0	63.5	48.9	74.0	75.9	102.8	198.9	220.7	223.3	204.8	2.9	348.9	336.4	315.0	296.1	301.1	306.0	297.1	302.7	330.8	330.9	335.5	333.2	344.8
3	18.7	28.3	18.4	21.8	40.0	44.6	19.3	12.2	3.2	0.7	10.8	357.5	351.4	345.6				327.1	347.9	341.4	346.9	339.3	336.0	345.9
4	5.5	13.3	18.8	18.3	14.8	13.6	14.8	15.7				7.4	5.6	358.7	356.4	356.0	355.1	356.3	359.0	357.4	351.8	351.3	347.0	345.6
5	11.5	12.8	24.7	37.9	26.9	30.2	34.7	32.2	35.7	30.8	22.1	12.7	4.7	335.9	28.3	156.7	88.3	313.6	328.8	155.3	141.4	139.6	14.7	80.7
6	63.2	150.2	60.6	62.7	51.5	58.8	88.2	221.5	168.6	161.5	183.5	191.3	163.3	151.6	152.3	143.4	140.0	138.0	129.5	124.3	119.2	119.3	124.8	133.6
7	133.4	125.1	128.9	126.7	129.4	143.7	138.7	126.4	121.7	124.8	127.2	123.1	124.5	126.3	126.0	122.9	124.8	114.7	107.0	104.7	109.3	113.1	109.5	106.0
8	107.1	114.0	104.8	103.2	104.9	108.1	104.8	102.8	102.2	102.0	100.1	99.5	103.3	99.3	100.2	99.4	96.0	95.4	92.8	97.9	95.7	88.7	89.9	92.3
9	90.5	91.1	92.2	92.7	94.9	99.6	96.7	96.1	95.6	94.0	97.0	97.8	98.2	100.4	93.7	101.8	113.2	137.6	130.4	119.9	127.4	125.8	119.4	121.9
10	125.4	118.5	113.2	117.4	119.4	116.1	113.1	106.0	119.3	120.8	121.6	121.3	118.2	114.6	115.7	110.4	114.7	112.1	108.8	110.9	101.9	101.7	100.6	99.3
11	97.1	98.0	97.3	98.6	98.1	98.9	100.3	104.5	104.2	102.8	115.3	118.1	117.5	117.5	117.8	112.9	104.9	109.3	106.3	103.0	109.2	103.4	103.3	103.1
12	111.4	107.7	107.8	109.3	119.0	118.2	119.9	123.2	130.6	128.3	130.3	134.5	133.5	136.5	137.6	137.7	139.4	144.5	149.6	136.2	131.3	134.5	137.3	161.2
13	148.8	155.4	135.0	175.0	188.3	160.7	136.6	129.9	128.4	114.2	110.6	140.5	135.3	141.0	130.4	146.1	150.0	167.0	161.7	172.8	197.6	197.1	10.7	146.0
14	295.3	337.1	104.1	299.6	69.9	63.6	29.8	22.1	18.8	19.1	24.7	49.0	98.3	78.9	25.7	188.5	185.8	184.4	148.4	153.9	160.2	169.4	289.5	23.9
15	22.1	26.0	23.1	23.7	23.5	22.9	31.4	38.1	26.0	18.4	31.3	31.7	11.7	15.4	154.7	127.5	110.6	120.5	163.6	158.4	151.8	207.3	168.8	171.5
16	162.3	170.6	223.8	264.0	189.3	188.9	206.7	165.3	147.9	139.6	153.0	162.0	153.1	141.8	142.3	146.0	141.4	124.9	121.3	127.4	124.4	102.9	123.3	164.9
17	262.5	244.6	243.6	71.3	54.7	115.1	172.1	148.9	147.9	144.2	122.2	154.6	151.4	163.3	146.6	144.3	147.0	148.2	143.0	142.3	137.3	136.9	135.7	160.9
18	177.7	309.6	349.4	25.0	17.1	3.1	16.4	79.2	104.7	104.7	98.2	105.1	98.7	104.8	111.4	111.2	105.3	107.2	103.3	108.6	110.8	108.4	117.9	116.5
19	327.2	292.2	209.9	287.1	44.6	121.8	101.3	100.6	113.5	135.3	192.5	145.7	107.8	62.1	170.0	226.0	181.0	201.0	169.1	158.4	147.8	146.8	189.8	179.0
20	219.1	217.3	207.5	30.6	48.9	58.4	90.0	44.0	65.4	146.4	193.4	70.7	178.7	215.6	154.0	139.2	129.5	124.3	120.1	123.2	130.1	135.5	126.7	219.0
21	196.5	94.2	104.1	157.1	74.9	69.3	48.9	25.5	21.1	33.1	7.8	349.5	359.9	339.5	356.5	234.4	317.5	294.3	214.2	246.8	305.2	267.8	350.5	322.3
22	319.4	320.9	11.7	18.7	12.2	24.7	33.3	31.4	58.3	135.8	132.4	149.3	147.0	129.1	119.6	120.1	118.3	120.7	117.1	117.4	115.9	118.5	120.0	117.3
23	119.7	119.2	126.5	127.2	175.7	147.2	143.3	165.3	137.3	132.5	134.9	130.4	142.6	140.5	133.3	140.8	148.4	143.2	159.4	165.6	165.5	166.2	152.7	153.3
24	136.3	123.1	142.6	184.2	31.4	81.5	69.4	28.8	36.4	35.1	45.3	51.6	42.7	138.6	213.5	209.3	210.1	237.6	296.2	285.1	274.0	245.4	92.9	72.1
25	70.9	66.8	12.1	23.6	12.2	47.3	49.2	41.8	87.0	142.2	180.1	202.5	197.8	173.8	177.2	175.5	174.9	169.6	147.3	141.7	156.8	164.9	163.3	175.9
26	191.0	196.5	201.9	21.3	47.8	215.9	180.2	223.1	235.0	226.9	227.3	231.2	228.8	229.5	216.7	231.5	220.9	190.7	158.6	141.5	139.7	137.6	205.1	207.0
27	219.7	336.7	28.2	54.2	34.7	75.6	75.3	201.0	48.7	38.2	212.2	229.8	231.3	232.5	243.2	248.6	234.3	234.0	238.6	251.4	253.1	255.6	298.7	341.6
28	51.9	57.6	74.1	92.7	53.1	83.3	243.3	253.3	231.9	225.4	217.6	207.0	224.7	245.4	236.0	245.8	239.4	229.6	220.1	238.2	230.2	210.3	161.6	159.1
29	161.4	178.2	206.4	245.5	107.5	108.3	136.4	142.1	142.0	128.1	131.6	135.4	124.0	291.3	250.6	308.6	19.2	20.2	24.2	14.9	1.7	3.9	16.2	358.2
30	5.0	11.2	351.4	338.6	349.2	339.9	332.8	333.4	329.8	333.2	324.0	324.6	340.6	353.0	346.4	342.5	343.7	345.4	347.9	345.3	358.3	356.7	356.8	1.6

Total Hours in Month 720 **Hours Data Available** 714 **Data Recovery** 99.2%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	357.3	351.8	345.4	340.8	348.0	350.2	352.2	359.2	347.2	335.6	339.1	343.8	345.8	356.1	356.2	2.4	2.9	0.8	0.1	1.5	1.7	359.8	2.2	23.0
2	5.4	357.6	8.7	3.2	359.8	0.0	2.0	3.3	4.5	8.9	16.8	18.3	25.6	29.7	27.0	22.8	23.7	26.4	23.3	21.7	23.6	22.4	21.4	161.0
3	22.4	22.4	21.0	18.5	17.6	20.4	22.3	24.0	24.8	25.5	25.8	27.2	28.9	27.3	24.3	26.6	29.1	21.6	22.5	28.0	36.0	82.8	145.9	18.4
4	170.5	200.0	245.8	238.0	247.3	245.2	193.3	154.5	192.0	233.8	247.9	241.6	233.1	235.6	223.0	184.7	185.0	125.6	129.7	40.1	30.6	28.2	25.6	13.1
5	21.1	22.8	21.3	21.7	227.8	235.0	208.3	177.9	149.9	152.1	172.5	179.4	163.8	162.1	155.4	148.4	118.9	197.9	115.3	154.6	127.8	206.2	138.6	218.3
6	150.2	241.0	15.8	256.4	260.8	258.3	304.7	158.5	147.5	144.9	174.9	209.4	153.5	152.5	154.1	185.0	189.4	182.5	41.1	149.1	151.4	157.3	133.1	138.1
7	144.7	143.8	144.6	148.5	148.8	159.3	166.6	166.3	169.7	157.4	168.6	174.2	149.4	146.2	170.8	168.0	147.1	158.3	178.6	166.3	163.5	168.1	198.9	219.1
8	210.0	217.9	219.5	224.0	236.8	233.4	232.5	226.6	237.9	239.5	241.1	246.9	241.6	236.7	241.1	254.2	258.0	261.2	273.4	290.4	261.0	282.8	45.0	52.2
9	84.0	124.6	13.6	29.7	18.9	27.7	30.5	38.7	50.6	27.3	64.2	116.8	134.5	141.8	137.0	132.9	150.5	145.7	148.7	147.0	126.6	113.6	108.0	116.4
10	98.9	99.2	93.4	101.4	110.9	112.8	120.6	107.2	118.3	120.7	99.5	110.6	112.3	106.7	104.1	104.4	112.7	106.8	110.5	109.3	120.5	110.0	107.3	100.7
11	108.9	110.9	91.8	99.2	116.6	85.9	102.3	148.8	113.9	98.1	114.0	116.0	135.4	155.5	162.5	151.8	160.1	168.9	194.4	197.2	173.3	171.5	167.4	156.7
12	174.2	271.3		59.6	71.6	31.3	16.5	32.5	30.9	39.6	40.5	340.2	3.8	357.7	13.0	20.1	319.4	309.9	317.2	341.3	7.0	21.1	14.4	13.1
13	17.5	21.5	14.4	20.9	284.5	246.9	242.1	244.0	243.0	246.1	230.7	233.8	231.2	236.8	227.5	220.1	214.7	224.2	230.6	228.9	228.1	234.6	228.0	237.8
14	237.4	235.8	236.2	233.2	231.5	240.5	231.6	238.8	238.6	233.4	232.9	229.3	218.7	212.9	212.4	213.4	217.4	205.8	206.4	200.8	215.7	228.5	226.6	230.6
15	236.7	244.8	241.3	240.2	248.8	251.3	243.7	232.8	222.7	220.3	222.2	222.1	220.7	225.4	227.8	214.7	194.1	204.2	197.1	174.2	197.7	168.3	181.3	180.2
16	181.3	170.2	134.5	133.5	133.8	125.2	127.3	130.1	125.3	121.8	123.5	125.0	125.7	121.4	121.8	116.3	114.4	116.6	122.7	128.2	122.6	116.7	113.0	112.9
17	107.8	99.2	97.7	102.0	101.3	105.1	105.5	102.3	105.6	111.9	111.7	114.8	119.4	118.8	115.0	115.0	116.0	120.3	115.6	112.3	106.3	108.6	104.2	101.9
18	103.6	97.1	103.8	117.1	102.7	101.0	100.9	111.0	104.9	103.3	109.0	114.1	125.2	125.5	120.1	113.7	113.6	107.9	118.2	111.1	108.5	105.2	107.3	101.1
19	97.0	102.1	103.0	93.6	79.6	71.5	53.1	60.3	47.2	74.0	67.9	79.4	113.1	116.3	135.6	160.9	127.8	130.8	115.7	117.4	118.4	177.1	14.1	33.7
20	44.1	30.0	15.9	15.9	20.5	28.4	32.2	36.2	45.7	58.9	72.0	78.2	93.1	82.6	108.0	128.0	121.1	149.4	156.3	159.1	151.6	157.5	168.9	171.4
21	169.8	293.9	29.9	50.0	9.2	46.6	36.0	65.5	91.4	119.4	117.1	116.6	131.9	127.4	117.4	164.5	158.5	160.8	146.7	153.5	190.1	194.0	198.9	133.0
22	177.9	350.3	278.2	50.0	288.6	271.9	36.6	43.2	20.9	127.6	150.6	136.0	124.8	156.4	163.0	152.5	145.9	143.1	140.3	125.7	110.8	109.5	108.7	109.5
23	106.4	98.3	97.4	91.4	101.5	101.5	101.7	99.6	91.7	89.6	96.9	104.8	97.2	56.9	95.3	105.8	117.0	118.2	164.9	226.9	124.2	94.9	91.0	97.0
24	117.8	93.3	99.3	91.4	122.5	65.9	86.7	90.2	83.7	81.3	84.3	85.6	95.4	105.7	107.0	159.5	147.7	145.9	131.1	120.0	136.8	127.7	97.1	81.4
25	98.7	98.3	97.6	102.4	100.4	93.4	122.7	98.2	96.2	97.8	101.6	106.5	112.7	126.3	122.9	123.2	146.7	158.1	158.5	174.6	174.4	159.3	162.3	188.9
26	0.0	194.7	38.5	0.0	165.9	193.0	195.4	180.7	187.5	234.9	248.8	240.9	235.8	229.4	225.5	232.5	230.4	233.3	234.9	220.1	229.6	228.6	237.1	249.0
27	248.2	253.8	259.4	253.6	258.2	249.9	258.3	263.4	244.8	243.7	242.8	125.3	192.4	203.7	220.2	159.7	160.7	187.0	243.6	245.4	246.0	231.1	13.9	80.7
28	39.2	49.2	60.1	45.7	45.8	73.4	84.1	221.0	177.5	151.2	180.0	213.7	219.1	211.6	208.7	217.7	225.9	226.3	225.3	228.6	227.7	229.2	230.7	229.1
29	226.6	234.4	240.5	241.5	238.9	237.7	246.4	246.4	250.4	256.9	257.7	250.6	251.6	254.7	238.0	231.1	230.5	228.8	232.4	232.2	231.2	233.2	231.4	238.6
30	252.1	247.0	241.0	246.6	249.9	243.5	250.3	248.5	231.2	246.7	250.7	40.8	313.3	325.2	325.3	324.2	318.6	316.1	327.3	321.8	316.0	312.4	320.4	320.6
31	325.4	336.8	334.3	339.6	335.8	325.8	328.3	336.2	343.5	325.3	332.2	323.9	338.5	272.2	281.6	296.8	295.2	305.6	331.1	336.5	79.6	207.9	223.3	239.6

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	245.1	230.8	228.2	239.2	227.5	229.8	222.3	200.0	196.5	192.6	167.0	166.6	169.5	158.1	147.9	153.7	142.8	139.3	134.1	133.2	144.4	135.8	129.1	138.1
2	137.4	135.0	132.3	130.6	127.6	149.0	186.2	189.6	177.7	164.0	169.4	169.7	143.9	128.8	112.6	117.2	108.6	108.9	108.8	109.6	105.7	103.5	109.3	111.7
3	112.2	101.8	96.4	93.8	92.4	93.9	93.1	92.3	88.0	57.4	55.3	44.0	52.3	50.5	51.7	52.2	45.1	40.3	37.7	33.8	34.6	30.9	38.1	40.5
4	35.0	25.4	21.2	27.2	352.2	246.7	333.7	24.7	37.2	31.6	25.4	11.1	324.4	124.1	201.2	5.0	63.8	210.5	162.5	174.0	169.7	225.5	0.0	204.4
5	205.3	152.2	250.0	39.9	26.8	33.3	243.0	106.6	153.9	312.3	295.1	291.8	268.4	279.7	280.3	307.7	311.3	286.9	17.3	317.4	260.7	312.2	50.8	278.8
6	313.2	336.9	87.7	68.5	60.2	1.0	17.5	353.0	355.3	6.7	359.1	17.2	13.2	352.7	341.4	326.4	315.9	316.0	322.0	326.6	334.7	342.6	328.8	2.5
7	342.6	44.4	39.0	9.6	10.0	14.2	217.7	215.9	221.5	221.4	228.9	236.6	234.7	245.8	256.1	243.4	245.4	245.6	247.1	242.4	240.8	241.4	246.2	243.4
8	240.9	245.3	253.8	252.0	274.9	236.1	250.8	264.8	250.2	249.2	244.8	242.4	265.6	243.9	247.2	13.5	251.7	254.4	254.1	245.2	231.9	228.8	206.5	239.4
9	222.8	77.6	236.7	230.7	218.9	194.4	206.6	222.9	219.6	178.0	235.4	204.8	196.0	174.6	197.7	196.4	167.2	161.6	156.8	154.3	151.8	155.3	144.7	159.1
10	164.2	164.1	153.7	176.7	176.1	161.3	169.2	161.0	158.2	151.3	146.7	134.8	120.8	107.9	108.6	105.9	102.1	103.0	105.2	109.1	101.5	103.8	103.3	106.2
11	118.4	131.2	142.3	136.1	136.4	132.6	136.2	163.0	170.2	156.1	153.8	163.2	193.1	196.4	191.8	214.6	216.3	203.9	215.9	217.8	223.6	216.6	213.4	251.4
12	246.7	248.4	259.0	279.1	306.8	314.5	314.7	317.5	322.9	349.8	355.4	353.4	341.0	331.7	316.3	295.4	291.4	310.9	333.9	351.0	333.2	320.1	139.4	210.7
13	238.3	215.9	153.6	195.2	236.9	223.6	222.3	206.7	215.9	224.8	229.1	225.9	227.6	224.1	211.2	223.5	216.4	217.7	218.8	211.8	218.4	222.1	217.5	217.9
14	216.1	210.9	220.3	218.8	206.3	136.1	128.3	108.5	100.8	103.7	105.7	100.4	99.4	103.1	111.3	108.8	114.1	105.9	105.7	100.1	102.1	103.5	102.5	99.7
15	102.0	101.4	105.4	112.5	112.8	121.1	109.7	103.2	102.3	106.5	113.2	110.7	109.9	119.2	122.4	128.3	136.1	139.0	126.1	153.3	125.9	120.2	112.9	113.8
16	183.4	224.7	45.3	32.8	22.0	33.4	41.4	35.6	29.4	29.5	38.6	31.5	190.7	196.6	215.3	138.5	170.4	210.0	159.7	149.2	146.8	262.3	126.8	4.7
17	185.9	213.6	258.0	307.2	82.2	78.0	76.6	142.1	238.4	161.2	163.0	213.8	242.2	262.2	217.2	261.2	220.3	229.5	235.2	232.6	238.6	232.3	234.4	225.0
18	218.7	221.9	220.8	217.6	219.9	220.6	216.1	221.7	222.9	215.5	206.3	204.3	200.2	197.9	204.1	220.5	231.0	232.3	232.2	235.8	226.5	212.6	231.0	234.3
19	246.1	286.6	293.6	343.4	284.0	223.3	268.6	352.2	44.0	187.1	156.0	207.4	229.1	228.9	230.2	212.0	211.4	209.6	208.7	212.4	186.1	171.3	119.7	118.0
20	265.4	101.4	96.6	100.1	93.5	39.4	38.2	33.9	32.9	10.4	4.8	6.3	10.2	9.2	329.6	325.1	322.8	343.8	342.6	341.8	331.4	9.6	40.7	20.2
21	46.4	22.4	21.0	24.5	22.2	305.9	147.8	48.3	26.3	115.0	193.4	147.9	138.9	168.5	160.1	145.0	136.6	137.3	168.8	164.0	146.1	138.8	128.4	124.8
22	125.8	163.7	167.6	200.8	198.1	194.6	197.8	201.8	204.4	203.5	209.4	219.2	227.5	240.2	287.5	291.5	289.6	302.6	307.3	322.2	346.2	2.5	13.7	12.3
23	339.3	238.7	29.6	52.0	35.4	0.0	104.3	211.7	201.0	220.1	230.1	156.8	139.8	141.2	150.1	133.6	131.0	151.5	155.4	159.6	149.9	166.0	180.1	149.1
24	108.2	102.6	96.2	88.5	77.6	77.4	75.1	84.7	73.6	50.4	33.7	42.4	25.1	12.3	24.6	11.2	359.1	2.0	5.2	353.9	337.7	325.5	305.1	292.1
25	319.2	333.3	328.8	335.8	326.8	356.6	308.9	353.0	29.5	237.1	229.2	269.2	251.0	261.9	265.9	267.4	313.9	314.4	4.8	21.7	35.0	53.9	24.0	19.8
26	15.7	24.0	26.6	112.5	130.1	169.7	170.5	256.2	310.5	24.5	18.2	18.6	30.9	96.5	187.5	160.8	177.5	185.8	239.9	242.4	264.6	28.6	81.9	26.5
27	66.8	44.5	94.6	93.3	72.9	88.8	67.9	174.6	218.7	233.2	84.2	358.6	340.1	357.3	260.1	236.0	334.8	316.6	324.6	343.1	313.2	287.3	275.1	286.2
28	307.6	287.6	246.9	246.1	246.2	250.0	252.2	248.0	249.7	244.3	241.6	237.4	234.0	245.5	248.6	246.5	261.2	253.7	319.4	279.7	280.6	5.1	87.9	96.0
29	348.0	1.0	25.2	33.5	119.7	348.2	259.2	215.7	211.1	211.1	60.6	143.3	146.4	146.3	155.1	151.3	157.6	133.2	123.7	135.1	126.3	0.0	113.8	110.7
30	109.9	96.9	92.2	97.9	95.2	94.4	89.7	91.9	86.9	83.8	75.9	59.1	53.6	48.0	51.7	55.7	52.5	42.0	31.1	39.0	48.2	36.1	29.8	33.0
31	25.5	27.9	18.3	314.2	26.2	6.3	22.1	19.1	19.9	37.5	35.4	21.7	1.2	8.9	3.4	2.9	354.0	347.5	337.5	339.5	348.2	1.6	12.4	1.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	10.4	35.6	29.6	34.9	30.8	32.4	34.7	36.6	17.3	15.9	13.8	9.6	11.6	351.7	359.4	348.1	350.9	6.1	357.4	356.9	14.4	25.4	27.1	26.9
2	22.5	9.7	30.7	19.5	21.9	30.6	33.7	31.5	24.8	334.3	338.7	344.9	10.5	7.7	13.1	10.3	11.1	18.3	20.9	32.0	123.5	233.8	196.6	31.5
3	49.1	82.2	70.5	86.6	64.1	55.0	79.5	97.3	66.3	31.2	51.0	40.8	203.7	155.8	160.0	301.7	239.0	238.1	41.8	123.0	101.6	185.0	0.0	41.0
4	58.3	34.9	68.2	71.4	59.4	49.6	52.9	30.5	20.2	22.1	37.7	29.1	101.6	64.0	39.4	166.5	131.1	246.9	49.2	129.5	141.0	77.5	24.8	194.0
5	152.2	155.5	133.5	135.8	141.2	143.8	148.1	157.2	146.9	119.1	109.1	112.4	114.3	115.0	114.3	112.1	127.2	118.6	124.6	141.7	93.4	161.5	226.2	56.6
6	60.8	62.1	67.8	33.7	20.2	18.8	16.0	26.2	25.1	2.3	6.9	1.9	327.4	318.7	309.1	302.1	270.8	277.4	275.4	246.1	248.6	243.1	242.6	223.3
7	223.2	222.4	218.9	163.0	142.1	136.2	111.4	112.2	143.7	133.7	125.4	118.9	121.7	121.6	121.6	121.2	122.4	118.2	124.8	119.1	115.4	112.4	114.4	100.6
8	111.8	118.6	117.5	108.2	101.4	98.4	98.0	99.0	103.3	105.5	106.2	113.8	111.7	113.0	105.6	111.9	110.5	98.6	102.7	107.9	103.7	103.2	100.2	99.9
9	98.5	95.9	87.0	93.1	70.7	24.4	31.0	31.7	28.0	28.8	50.4	75.4	125.3	152.9	147.5	123.9	130.1	153.7	158.7	149.5	146.5	77.6	318.1	80.6
10	31.0	38.7	337.8	6.2	49.7	67.5	77.1	82.2	86.7	198.4	117.3	140.4	136.8	162.3	161.5	173.2	181.1	171.2	161.8	152.4	136.7	69.5	93.3	0.0
11	63.7	65.6	55.9	59.0	87.4	76.7	89.7	85.4	77.3	37.4	44.9	51.3	14.3	35.9	187.9	30.3	352.1	320.2	292.6	301.0	3.7	66.9	60.8	59.3
12	24.4	4.8	6.5	358.7	29.2	115.3	37.8	71.3	70.0	53.1	39.5	51.8	281.3	23.3	330.3	271.4	243.3	238.0	298.9	324.9	19.1	47.6	71.7	63.4
13	55.0	48.9	57.7	116.5	83.2	78.2	79.3	60.7	72.3	34.9	112.1	109.1	127.6	114.9	117.9	119.3	125.6	122.7	118.3	102.0	99.8	108.1	107.3	105.5
14	99.1	103.5	101.7	99.1	100.6	112.1	106.3	113.4	119.6	112.7	112.3	100.2	104.6	99.3	109.7	112.5	99.0	98.1	97.3	98.6	101.2	113.7	113.3	102.0
15	98.0	101.4	108.8	101.9	105.4	99.2	96.4	96.5	96.6	96.6	95.8	95.3	100.6	98.2	100.6	98.2	97.4	98.3	103.9	121.5	123.9	105.0	109.1	105.1
16	108.7	111.0	137.0	140.1	139.8	126.0	120.5	110.4	127.1	134.2	124.6	143.4	147.3	142.2	148.8	149.9	138.5	138.3	135.3	161.0	135.0	160.7	133.0	157.1
17	137.1	119.0	111.1	120.0	130.4	149.0	123.9	137.8	125.3	122.1	126.2	130.1	132.4	137.7	144.3	135.9	133.2	125.2	133.9	135.3	135.0	144.2	0.0	87.8
18	66.5	74.1	102.9	76.8	110.0	105.4	103.3	104.3	103.0	104.1	106.0	104.3	94.8	94.1	96.0	90.3	93.3	93.3	93.5	93.3	91.4	93.2	93.0	96.5
19	93.3	96.7	98.4	91.1	88.3	94.3	64.1	39.7	29.2	85.6	86.8	89.1	108.2	79.7	172.6	152.7	214.0	229.9	358.3	34.4	10.0	31.1	237.0	227.6
20	20.9	89.5	278.0	63.6	81.8	38.8	230.6	232.1	271.9	270.3	283.4	283.3	248.7	246.0	242.6	226.7	214.0	208.8	219.2	229.8	231.3	240.3	240.3	237.0
21	235.3	254.0	166.2	165.2	3.5	55.0	61.8	98.8	95.4	94.9	90.5	92.6	83.9	71.8	73.0	57.6	45.1	49.6	48.7	44.0	39.2	43.7	36.1	29.6
22	28.3	212.4	247.1	276.6	317.4	296.6	262.5	255.4	251.7	248.5	239.8	227.3	222.4	250.1	247.9	236.6	230.8	204.5	237.9	247.0	246.3	241.7	239.2	232.2
23	235.0	232.2	230.0	233.8	237.6	232.6	225.7	210.8	230.4	230.3	227.4	230.0	228.9	227.6	216.9	217.7	216.0	198.3	173.2	149.7	146.4	137.6	131.8	128.4
24	146.7	161.0	213.9	182.0	252.3	10.3	79.4	194.9	168.8	116.5	258.8	212.3	250.9	29.9	34.1	325.5	344.7	336.9	332.1	345.6	18.0	25.7	18.9	17.8
25	13.6	254.3	250.6	17.3	24.0	28.2	52.7	70.2	25.8	28.3	24.8	30.2	24.7	121.0	120.3	106.1	110.2	100.9	102.7	94.5	93.9	112.9	92.2	116.2
26	75.8	54.9	33.6	29.9	28.1	28.2	25.3	19.5	23.4	37.4	33.3	29.8	28.5	25.2	35.3	31.0	23.9	12.8	22.4	28.2	28.7	221.9	132.2	139.7
27	145.1	164.1	218.6	245.2	256.0	248.5	215.0	268.5	3.9	60.1	233.5	219.1	198.0	162.0	134.1	110.0	100.3	29.8	18.2	56.6	14.5	78.1	97.9	100.2
28	22.9	29.9	30.4	23.0	17.6	17.2	18.7	31.7	31.5	24.7	17.8	13.0	2.6	7.7	8.4	1.5	349.0	335.8	318.0	328.3	336.8	337.4	340.8	345.2
29	354.7	51.0	0.0	254.2	0.0	267.9	355.4	7.5	11.4	350.5	340.2	332.6	327.9	314.8	323.4	323.5	325.3	317.2	329.9	336.1	338.4	334.2	0.6	5.6
30	352.2	7.5	88.0	121.1	66.3	62.7	45.2	97.3	83.7	18.1	51.3	70.1	128.7	123.3	124.9	128.9	133.4	136.6	132.7	118.7	115.0	109.1	102.0	101.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

October *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	101.2	100.0	102.4	102.6	101.3	101.4	99.6	100.2	100.6	100.5	107.9	114.4	99.2	103.1	103.3	109.2	102.6	100.9	101.0	103.3	101.9	105.0	104.4	102.3
2	101.4	99.9	101.8	104.4	112.3	111.5	107.3	125.7	121.4	122.0	115.9	112.3	116.0	107.7	102.4	101.6	102.9	106.1	105.7	108.1	101.4	99.2	99.4	98.9
3	97.7	99.2	100.1	104.9	110.5	105.3	109.7	126.1	123.3	126.0	139.1	138.9	133.2	125.0	129.0	152.6	195.7	188.5	215.5	181.0	174.5	173.6	192.7	207.1
4	218.2	219.7	226.1	230.3	209.3	197.5	196.8	217.6	222.1	206.8	201.6	169.2	151.6	134.8	191.3	208.0	220.1	230.7	71.8	46.5	141.0	118.1	132.4	120.3
5	125.9	157.8	199.1	224.4	159.5	236.7	139.7	192.3	239.5	150.7	207.5	195.1	247.5	234.0	247.8	244.0	223.4	232.1	226.7	225.2	228.0	226.1	197.9	181.8
6	145.6	134.6	142.2	124.5	117.7	116.3	119.9	119.7	124.8	136.3	149.4	160.7	146.9	130.3	125.7	129.7	120.4	123.1	130.8	117.3	113.8	109.6	113.3	108.1
7	108.1	108.6	105.0	101.6	102.1	101.3	104.4	102.3	103.3	113.6	111.3	117.1	121.2	119.3	109.1	103.0	102.6	105.6	110.3	113.2	116.7	116.5	116.1	120.1
8	121.3	110.3	100.6	99.3	97.5	98.4	97.7	97.8	96.6	94.3	97.3	96.2	94.7	97.4	98.9	99.2	101.0	100.2	100.3	101.7	100.3	94.1	95.5	100.9
9	98.0	97.8	98.9	98.9	103.7	99.6	99.4	101.8	103.2	104.0	116.8	116.2	109.5	110.0	116.2	117.1	113.6	107.4	161.4	220.6	230.7	236.9	228.6	226.7
10	238.1	251.3	129.9	139.3	144.1	146.9	102.6	132.3	143.1	139.7	123.1	122.7	126.8	128.9	134.2	134.5	142.5	157.0	170.3	178.3	181.5	166.2	172.4	184.7
11	186.3	204.9	186.6	206.7	182.2	205.9	206.7	201.9	191.4	171.7	201.9	220.3	193.7	193.9	225.1	218.0	210.4	195.2	149.7	146.5	153.7	176.5	154.3	100.1
12	34.8	31.6	358.7	12.5	25.2	65.7	133.4	126.1	73.4	142.0	164.9	106.9	103.8	106.7	104.0	99.3	105.4	105.3	105.8	98.1	98.5	98.9	98.2	92.4
13	85.7	82.9	38.8	39.4	24.7	19.7	28.9	36.6	84.6	75.0	39.8	18.2	23.3	43.1	25.6	359.1	359.0	29.5	8.6	20.3	183.0	332.3	31.7	48.4
14	90.6	47.3	8.8	38.0	12.3	74.8	135.4	0.0	20.2	93.2	209.7	250.8	225.6	234.3	295.6	277.4	281.1	312.5	348.2	4.3	7.0	44.3	7.4	30.8
15	27.1	18.8	50.4	56.1	106.7	79.7	172.7	133.7	179.9	175.0	142.1	144.4	137.6	141.3	145.4	149.4	155.0	147.9	151.2	165.5	156.3	138.8	125.8	120.1
16	129.5	142.6	132.3	134.2	135.5	136.8	127.7	127.5	113.2	116.9	135.1	148.5	154.6	145.4	130.8	120.4	115.3	111.3	109.6	113.8	115.9	112.7	115.6	131.2
17	119.7	130.9	121.5	125.3	109.3	110.4	118.5	118.5	114.3	108.8	120.4	116.3	126.3	122.2	126.4	122.7	119.8	118.3	104.7	112.9	110.8	104.9	108.2	105.7
18	99.7	113.2	100.5	96.3	96.7	91.6	93.8	93.7	94.4	95.6	101.7	107.5	51.1	24.8	2.2	26.7	263.4	251.2	260.9	287.9	182.0	234.6	246.4	246.0
19	243.5	242.5	245.0	166.9	228.7	262.7	210.3	156.5	157.0	154.5	151.7	143.6	143.4	125.7	124.2	131.1	111.8	218.2	29.0	225.8	199.2	143.8	146.4	161.2
20	206.1	180.2	197.9	181.3	201.9	215.2	219.6	228.7	209.7	170.3	146.4	134.5	8.2	52.7	72.1	116.7	71.3	0.0	18.1	47.9	77.7	90.5	88.3	78.0
21	58.0	105.4	38.5	22.5	16.0	10.4	11.6	347.6	359.2	14.7	354.2	331.7	319.2	333.0	318.6	302.3	347.8	2.1	26.5	20.7	65.0	42.9	22.2	11.7
22	15.5	40.1	54.4	34.8	38.7	27.2	18.1	21.3	24.1	93.6	53.1	34.6	105.5	227.9	228.4	18.1	22.8	31.1	25.6	16.1	355.4	12.5	22.4	26.3
23	37.8	19.5	29.6	24.5	4.6	4.0	356.0	10.5	24.4	9.7	5.2	3.7	3.5	356.8	319.4	319.8	335.0	350.4	4.1	40.8	91.6	73.5	72.2	79.3
24	91.1	62.8	15.8	69.4	78.5	83.6	88.4	74.9	53.8	44.5	33.0	26.2	28.0	27.9	24.6	14.7	4.2	0.3	0.6	351.0	342.9	343.3	352.8	351.5
25	350.6	338.3	346.1	355.4	355.2	344.2	334.4	328.4	333.6	330.7	328.8	332.8	324.1	321.1	317.8	317.9	319.4	318.0	319.6	317.5	320.2	323.2	329.1	329.7
26	333.9	333.1	332.6	345.1	350.7	346.0	341.0	338.8	345.3	352.2	357.9	359.2	2.8	2.6	3.9	0.3	18.8	9.4	357.8	0.1	353.0	357.1	7.8	16.5
27	8.8	1.3	355.3	0.7	0.7	0.0	12.0	349.4	3.8	45.1	58.6	47.4	22.1	13.7	341.9	331.5	313.4	296.5	301.9	40.7	72.8	65.9	0.0	0.0
28	0.0	27.8	30.6	33.0	35.1	43.1	38.0	41.0	37.9	34.0	26.3	21.1	162.1	143.8	142.9	146.3	138.3	139.7	141.9	132.0	136.6	134.2	125.9	131.9
29	149.9	154.5	156.9	195.3	214.8	215.4	217.1	221.5	216.6	219.5	221.2	213.6	202.8	209.5	203.9	211.4	218.6	225.5	225.5	229.7	234.8	228.7	238.5	238.0
30	240.3	240.6	239.4	322.8	241.6	232.8	241.5	242.6	259.3	249.1	309.3	265.1	350.8	313.1	321.7	332.1	331.0	331.3	340.4	357.6	359.5	2.8	3.4	4.6
31	12.1	14.8	353.7	2.2	4.0	2.8	358.7	3.8	10.6	17.7	29.7	14.4	7.1	8.1	3.7	3.7	0.9	2.4	27.4	16.7	28.2	25.2	28.3	28.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	27.8	28.7	33.0	36.8	26.0	35.1	31.5	32.8	28.0	29.9	31.8	31.7	28.6	21.5	25.5	15.1	20.0	16.4	17.8	16.8	27.5	7.0	23.3	28.8
2	30.2	33.2	35.3	33.7	36.1	38.3	34.9	37.2	38.6	35.6	34.3	30.5	28.4	31.7	29.8	26.2	32.1	27.4	31.7	24.8	33.9	27.1	32.9	36.0
3	35.5	30.7	31.7	22.7	19.5	22.0	26.5	22.2	23.2	22.8	23.1	16.5	26.1	26.9	30.7	27.0	15.0	16.5	10.8	3.5	31.9	25.9	36.3	19.2
4	21.3	20.3	11.4	21.1	11.0	7.6	355.0	356.7	18.1	18.8	5.8	26.0	37.9	34.1	33.0	36.3	22.4	23.8	23.8	22.1	31.1	60.9	91.0	81.5
5	85.3	68.9	37.6	20.9	16.6	11.4	12.4	24.3	26.9	42.8	50.8	34.9	21.3	16.0	14.3	12.6	22.5	15.7	14.3	94.6	78.7	19.6	56.0	79.0
6	45.7	30.6	18.8	16.2	11.8	10.3	28.4	11.3	17.5	43.7	34.3	36.2	20.3	5.4	2.9	6.9	7.6	12.8	6.2	358.9	6.8	5.3	3.7	4.5
7	356.9	357.0	351.8	346.7	345.0	338.0	329.3	334.1	339.5	336.5	333.0	333.3	332.9	327.8	328.5	331.5	329.0	335.6	341.3	346.2	341.7	354.9	350.8	7.7
8	14.9	7.5	1.3	359.7	16.6	15.3	34.5	19.3	14.9	14.0	15.9	11.4	5.0	3.9	355.2	354.2	357.6	355.7	359.5	8.4	17.0	9.9	7.9	3.1
9	0.4	7.3	20.0	25.2	10.4	31.2	14.5	33.4	31.7	30.9	36.6	33.6	23.5	33.2	32.6	23.0	20.0	38.0	37.2	33.0	30.1	34.3	29.7	16.6
10	19.2	23.3	26.5	26.1	30.5	30.3	28.6	30.9	26.5	28.4	25.6	26.6	31.3	30.7	31.9	31.0	35.8	29.7	31.8	40.2	42.7	26.9	24.3	34.2
11	31.0	28.1	21.7	24.6	22.8	30.3	22.2	26.1	23.2	34.8	8.2	13.1	20.0	28.5	13.3	11.3	21.4	29.2	10.9	17.6	29.4	21.3	22.0	22.9
12	26.3	17.1	19.2	14.4	16.3	20.4	1.3	4.1	14.3	19.8	23.4	20.8	21.7	1.7	355.0	347.7	344.9	337.8	334.3	15.1	330.5	302.9	307.2	308.0
13	310.3	306.2	311.8	313.8	317.8	335.2	348.5	347.2	347.3	345.2	2.8	4.9	356.6	4.0	351.0	346.8	353.9	356.3	352.6	354.0	350.3	358.7	1.9	346.8
14	345.3	345.5	342.1	338.4	339.5	335.6	325.8	317.7	309.2	303.9	313.7	336.1	344.2	341.4	344.6	347.3	341.5	341.9	345.2	349.0	348.5	3.1	0.3	358.3
15	2.3	4.7	0.1	5.1	5.6	10.9	7.7	12.2	13.3	6.7	4.3	1.3	6.4	5.7	5.5	6.8	360.0	3.9	5.9	8.7	8.8	5.6	358.9	7.1
16	12.0	18.4	13.4	5.9	7.3	0.5	9.0	15.0	31.6	21.4	23.4	30.1	19.6	23.6	36.3	30.2	25.9	24.6	33.1	31.2	30.8	24.2	26.8	24.9
17	24.1	31.1	36.1	38.5	31.9	34.2	34.5	39.1	38.7	34.6	34.9	35.9	23.6	32.5	27.4	32.4	36.7	35.8	22.6	25.9	20.9	23.1	11.3	28.9
18	23.6	39.3	38.5	41.1	36.6	29.4	32.6	35.7	35.3	38.9	39.7	34.4	36.5	34.3	28.6	29.4	16.7	13.8	20.7	4.6	17.9	17.2	316.8	349.6
19	12.6	8.2	21.0	12.9	36.4	9.2	11.1	4.7	8.1	0.4	4.4	356.3	2.9	6.1	11.0	8.1	3.8	2.0	2.0	9.2	2.4	1.3	355.5	8.3
20	15.2	12.6	5.9	359.5	22.4	20.5	25.2	19.9	7.4	10.1	43.0	40.6	24.8	31.0	50.4	15.3	21.0	31.2	31.8	36.2	38.4	42.2	16.7	13.1
21	7.7	10.0	16.7	13.5	10.7	5.5	4.9	9.6	6.8	1.2	1.7	359.5	1.1	353.4	354.9	354.0	348.0	344.7	6.5	0.5	355.0	351.4	356.0	1.0
22	3.7	23.6	350.6	344.8	1.5	12.4	15.4	9.0	22.9	22.8	13.2	19.4	30.1	9.8	14.6	18.6	21.6	11.4	21.0	22.9	32.4	33.9	49.1	39.4
23	39.1	28.3	342.9	357.4	10.4	19.7	16.0	26.6	21.8	15.1	12.1	32.2	20.1	17.2	17.3	18.2	22.4	80.3	99.8	83.5	77.5	90.6	77.8	82.0
24	93.8	81.6	70.9	81.3	73.3	61.5	68.4	81.3	66.7	46.1	77.4	117.9	352.9	103.3	100.6	103.1	95.5	97.7	99.6	99.9	97.1	93.8	95.1	90.8
25	89.5	85.3	88.7	89.1	96.0	104.9	106.2	100.6	99.1	98.9	98.2	105.7	126.3	135.0	147.6	130.1	163.8	169.9	153.3	153.6	150.2	128.9	132.7	127.5
26	121.8	120.6	113.6	119.2	121.6	124.7	123.8	118.4	115.5	103.6	103.6	104.7	111.2	108.3	107.8	105.7	101.3	99.6	99.7	99.5	102.7	102.3	101.2	113.0
27	116.2	107.2	111.4	110.7	108.2	115.0	118.3	114.2	113.7	115.9	123.6	128.0	130.2	129.1	119.9	122.2	114.5	112.2	111.8	104.2	106.9	104.6	104.2	103.2
28	112.2	110.8	107.1	102.1	102.3	100.1	101.0	100.4	100.1	101.6	105.7	103.1	102.1	99.6	101.7	107.9	116.7	343.0	289.4	68.8	359.9	48.6	66.1	66.0
29	10.5	29.3	16.1	15.0	3.3	348.5	14.7	355.1	18.8	336.3	5.3	33.7	40.6	8.6	30.0	67.5	78.6	66.1	50.6	72.3	129.9	123.0	130.2	149.7
30	123.5	124.8	124.9	111.9	107.8	108.8	114.0	116.9	109.3	104.1	106.7	116.9	143.0	157.5	178.0	189.0	235.8	316.3	333.3	334.2	336.9	335.0	324.6	323.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	325.6	324.5	322.3	325.8	332.2	336.5	336.6	339.2	16.6	45.7	36.4	25.0	12.6	21.9	12.1	37.1	39.5	24.2	23.2	27.2	24.5	37.3	23.1	38.2
2	49.3	65.7	65.9	71.2	64.8	64.3	51.5	80.5	31.2	19.6	25.8	30.1	41.2	37.2	51.3	26.2	19.7	25.2	15.8	13.6	346.4	319.1	7.6	17.9
3	21.8	31.6	34.5	40.4	37.8	34.5	37.3	33.7	29.0	30.4	32.3	31.3	25.8	7.2	17.1	24.0	27.2	26.3	22.0	27.7	29.7	31.2	22.5	32.2
4	41.2	17.7	13.5	16.1	5.0	24.2	24.9	300.9	24.2	21.4	16.4	15.3	32.1	88.0	107.1	133.9	152.4	120.3	141.8	116.8	115.4	108.2	114.6	109.5
5	88.0	91.9	95.6	91.5	86.0	91.9	79.1	80.8	80.6	90.2	75.1	72.9	67.8	62.1	88.8	96.6	85.7	62.2	35.7	55.8	53.7	47.4	53.0	56.5
6	57.0	55.8	57.0	61.1	58.4	50.9	84.5	94.9	85.1	95.0	100.7	101.6	101.5	99.8	101.8	101.1	97.4	93.9	96.1	86.6	93.6	98.8	100.1	102.1
7	93.5	98.5	101.8	93.8	101.0	103.1	71.8	54.2	63.1	72.9	65.3	20.9	59.3	30.6	48.7	51.2	52.1	70.3	87.6	78.7	90.8	91.9	97.3	98.5
8	97.6	94.4	94.8	98.9	96.8	95.5	99.8	109.0	107.5	124.3	113.1	109.8	102.2	93.8	94.6	87.5	78.1	55.2	24.4	15.6	102.1	57.1	35.7	33.1
9	87.4	102.2	97.6	90.7	84.6	81.5	85.9	88.2	90.0	89.4	89.9	93.6	90.7	90.5	92.1	89.9	89.4	91.6	91.5	92.3	96.8	98.2	97.7	97.2
10	103.1	102.6	103.8	106.1	116.5	118.3	122.5	120.8	117.5	119.4	122.2	125.6	123.0	126.1	118.8	113.0	105.2	108.2	110.6	105.3	105.5	90.9	82.3	88.2
11	89.8	92.6	70.1	37.9	34.4	17.0	23.8	36.0	47.3	84.4	48.4	85.8	55.5	67.3	40.5	20.6	14.3	18.6	27.5	22.3	25.7	34.2	33.9	39.5
12	25.5	7.6	18.5	19.2	29.8	36.9	34.8	37.4	32.8	38.0	29.6	33.4	35.2	31.5	30.3	31.7	19.3	17.4	24.0	11.9	13.4	10.5	357.4	1.4
13	0.5	351.1	348.4	347.9	347.3	354.5	355.0	359.1	360.0	349.4	351.1	352.3	353.1	355.2	1.8	2.6	356.2	353.3	354.9	350.1	1.2	355.4	24.2	13.7
14	351.2	15.8	20.3	351.3	339.3	352.1	348.0	6.2	5.5	353.2	344.3	327.2	339.5	324.2	328.8	327.8	332.4	333.8	333.1	325.9	329.0	331.6	323.6	328.4
15	325.5	319.3	317.4	341.4	349.6	8.2	17.5	36.4	29.5	18.3	49.8	70.1	81.6	85.4	77.0	37.1	87.6	108.3	107.8	107.1	109.1	114.5	110.5	102.5
16	105.2	106.7	110.6	116.1	117.9	124.2	121.5	120.9	122.9	129.9	136.2	144.9	144.8	142.8	145.1	143.1	131.3	124.1	114.4	119.6	42.3	7.4	25.2	88.0
17	62.4	6.6	14.1	19.5	22.6	14.7	15.6	19.3	27.3	31.1	34.1	21.9	21.4	27.7	23.9	22.4	29.4	24.7	22.8	24.5	21.5	9.4	22.4	24.9
18	349.0	331.4	320.5	315.8	354.5	1.1	347.9	354.1	10.2	8.7	347.9	0.1	28.1	10.9	49.9	359.6	4.7	56.9	82.3	65.5	84.7	78.7	89.6	95.5
19	79.1	67.3	65.9	88.0	23.7	20.6	10.2	12.8	12.6	28.0	34.6	23.3	22.6	25.6	24.7	36.8	31.6	34.2	31.4	36.8	39.0	29.1	25.9	28.7
20	24.7	29.3	31.3	14.6	18.6	33.0	35.6	31.3	32.3	20.6	6.9	21.5	19.3	29.2	36.4	30.7	3.6	350.4	19.7	13.5	2.8	19.1	22.6	12.2
21	14.4	18.4	10.7	8.6	351.1	264.7	249.1	353.8	53.7	242.7	354.4	59.9	90.4	54.2	192.6	330.6	358.2	58.3	80.8	210.4	24.1	32.0	85.7	52.6
22	61.7	76.2	88.7	94.9	31.8	20.8	26.2	29.3	36.7	33.0	30.9	35.5	34.6	27.1	33.7	28.7	25.7	26.7	34.3	32.4	25.7	7.4	350.9	352.0
23	2.8	352.9	5.9	55.5	49.0	42.1	24.0	11.4	26.2	20.9	21.6	20.6	14.5	356.9	11.2	14.6	35.3	32.7	34.3	36.6	17.8	30.9	38.7	22.0
24	20.7	12.8	14.6	12.2	11.8	24.7	116.5	98.9	96.6	86.9	121.2	113.3	32.3	201.8	2.9	23.3	20.7	19.8	19.9	21.4	20.8	31.1	33.6	26.0
25	354.6	358.7	8.0	14.6	1.4	23.2	25.5	32.0	37.3	28.0	10.3	26.4	24.7	14.6	17.0	16.1	16.4	11.3	11.7	295.1	344.0	343.3	7.9	25.5
26	342.8	344.1	6.3	5.4	13.8	21.8	12.3	27.0	82.1	56.7	78.8	64.0	63.9	67.8	73.8	82.6	24.9	24.1	27.5	37.2	24.6	34.9	90.2	100.5
27	99.7	100.4	92.2	81.7	79.9	84.5	81.0	83.5	84.7	77.6	71.8	51.7	50.7	50.2	46.2	48.8	48.3	42.9	40.9	47.6	82.9	97.3	107.6	111.3
28	109.1	109.8	105.2	107.4	114.5	104.6	104.4	123.5	125.5	125.5	123.7	120.6	126.7	138.5	131.3	132.5	132.0	118.7	106.2	71.3	23.3	73.1	92.6	20.4
29	21.6	30.1	23.7	8.8	353.0	346.2	344.5	348.5	3.6	25.5	35.8	22.8	356.1	359.0	10.6	11.6	358.7	356.7	331.6	343.5	358.8	354.4	350.7	345.4
30	353.2	2.7	8.3	5.4	351.8	343.6	336.7	307.2	330.8	346.7	27.9	20.4	5.9	220.7	245.7	247.3	239.8	248.7	246.2	250.7	246.3	212.6	240.7	231.5
31	207.9	31.2	58.3	29.9	22.6	14.1	66.5	25.9	20.2	18.9	22.6	22.4	22.9	12.3	1.6	4.7	9.7	13.1	18.7	21.6	29.8	27.0	26.3	17.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
19																11.6	7.9	7.5	8.1	20.9	32.8	46.2	27.0	32.1	46.2	7.5	21.6
20	43.4	50.4	13.8	11.5	13.3	14.4	13.2	13.2	11.2	15.3	16.9	22.9	13.6	11.2	8.7	7.0	5.4	5.4	5.0	45.6	51.5	42.1	48.2	41.3	51.5	5.0	21.9
21	62.1	29.5	4.4	6.8	5.0	5.8	4.8	4.9	8.5	39.8	0.0	37.9	45.4	33.6	45.7	40.3	61.4	51.6	40.4	0.0	5.9	62.0	72.3	57.7	72.3	0.0	30.2
22	28.5	19.5	4.9	0.0	9.7	8.1	23.8	21.6	20.5	6.0	15.7	35.0	38.0	6.9	6.4	4.7	4.0	4.8	6.0	5.8	5.9	5.4	6.2	6.4	38.0	0.0	12.2
23	6.0	7.2	7.4	7.5	6.3	6.6	7.0	6.1	7.1	8.2	8.0	7.7	8.5	7.0	6.3	7.3	6.5	5.8	8.4	8.3	39.7	45.9	35.1	15.8	45.9	5.8	11.7
24	8.9	15.5	7.9	6.7	6.4	7.7	10.3	6.7	5.6	5.8	5.0	5.5	6.1	7.6	7.2	8.0	7.1	6.7	8.0	6.9	6.7	6.6	7.9	9.1	15.5	5.0	7.5
25	8.6	8.9	5.6	5.9	6.3	7.5	7.0	7.7	7.0	8.0	6.5	9.0	8.8	7.5	8.7	6.6	9.2	9.0	7.6	5.4	8.5	13.1	6.8	6.5	13.1	5.4	7.7
26	5.8	6.1	5.8	5.0	6.0	6.9	5.7	7.7	8.5	7.0	6.0	7.3	6.2	7.6	7.1	9.2	10.8	11.7	8.7	7.9	7.9	7.9	10.5	9.7	11.7	5.0	7.6
27	8.6	7.4	7.7	9.2	6.8	7.5	13.9	7.1	7.0	6.6	7.0	6.7	28.2	34.5	8.6	23.8	21.8	20.1	23.2	21.5	25.7	27.3	35.0	60.5	60.5	6.6	17.7
28	76.4	79.5	45.7	30.2	12.7	14.1	11.7	14.6	16.4	18.8	18.0	23.6	18.2	21.9	12.0	17.6	25.4	21.3	36.2	29.7	60.8	46.8	37.9	29.3	79.5	11.7	29.9
29	12.7	10.5	12.6	12.5	25.6	11.2	50.9	14.6	49.5	13.4	9.3	7.5	8.8	13.0	41.2	15.4	47.8	17.2	11.0	15.1	67.1	9.1	15.7	14.6	67.1	7.5	21.1
30	4.8	7.0	7.0	8.4	7.8	5.7	6.5	5.6	7.8	6.0	5.6	5.2	4.8	5.7	7.5	9.2	5.0	5.3	5.8	5.3	5.6	5.3	7.0	5.9	9.2	4.8	6.2
Max.	**76.4**	**79.5**	**45.7**	**30.2**	**25.6**	**14.4**	**50.9**	**21.6**	**49.5**	**39.8**	**18.0**	**37.9**	**45.4**	**34.5**	**45.7**	**40.3**	**61.4**	**51.6**	**40.4**	**45.6**	**67.1**	**62.0**	**72.3**	**60.5**	**79.5**		
Min.	**4.8**	**6.1**	**4.4**	**0.0**	**5.0**	**5.7**	**4.8**	**4.9**	**5.6**	**5.8**	**0.0**	**5.2**	**4.8**	**5.7**	**6.3**	**4.7**	**4.0**	**4.8**	**5.0**	**0.0**	**5.6**	**5.3**	**6.2**	**5.9**		**0.0**	
Avg.	**24.1**	**22.0**	**11.2**	**9.4**	**9.6**	**8.7**	**14.1**	**10.0**	**13.6**	**12.3**	**8.9**	**15.3**	**17.0**	**14.2**	**14.5**	**13.4**	**17.7**	**13.9**	**14.0**	**14.4**	**26.5**	**26.5**	**25.8**	**24.1**			**16.0**

Total Hours in Month 720 **Hours Data Available** 273 **Data Recovery** 37.9%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.6	5.7	6.6	5.3	8.8	12.2	8.2	9.2	9.4	8.2	5.5	5.3	6.0	8.2	8.5	6.4	6.4	6.9	13.1	67.9	46.9	8.7	5.8	12.8	67.9	5.3	12.0
2	20.8	26.3	17.9	27.9	10.3	11.1	11.4	18.9	13.4	7.6	16.4	19.1	59.7	18.8	21.8	14.9	8.8	7.9	7.2	7.2	8.7	9.2	6.4	5.8	59.7	5.8	15.7
3	5.6	5.7	6.4	6.8	6.2	6.8	8.1	21.8	14.7	7.8	8.7	8.4	9.7	9.0	5.9	7.5	7.8	11.6	9.4	7.4	13.2	9.0	9.5	9.4	21.8	5.6	9.0
4	8.7	4.4	6.1	19.9	22.3	16.0	17.3	16.9	15.5	13.8	29.8	65.5	15.5	14.8	14.2	14.6	13.7	11.9	13.7	15.3	12.9	13.6	13.6	14.7	65.5	4.4	16.9
5	15.1	14.3	8.8	9.6	13.2	11.3	13.0	12.5	12.0	10.7	9.4	9.3	9.5	9.2	9.1	8.8	7.9	7.5	8.3	6.7	7.0	6.8	7.3	7.7	15.1	6.7	9.8
6	9.2	9.6	8.0	8.4	9.8	7.7	8.9	9.4	11.5	13.4	11.5	11.8	9.2	8.6	8.1	8.3	8.2	8.2	11.1	14.8	11.2	8.0	7.3	7.3	14.8	7.3	9.6
7	7.5	7.5	7.8	7.6	8.0	7.9	8.1	8.3	8.1	8.7	8.5	8.3	8.7	7.9	8.3	8.7	8.7	11.6	16.8	13.3	16.7	11.7	9.0	13.0	16.8	7.5	9.6
8	16.3	10.8	8.6	10.0	8.4	8.7	12.6	12.4	16.2	16.4	15.9	15.6	13.8	13.9	15.3	15.7	14.7	11.3	15.8	15.3	15.2	15.2	15.4	15.0	16.4	8.4	13.7
9	15.0	14.2	14.8	14.0	14.4	15.1	15.6	16.3	16.5	16.2	14.7	15.9	16.9	16.5	19.9	29.7	9.6	27.7	32.6	18.7	11.6	10.9	8.7	9.4	32.6	8.7	16.5
10	7.3	16.1	20.8	39.4	14.6	16.7	35.2	19.7	23.0	47.9	15.9	16.1	12.7	11.2	14.5	19.4	14.2	11.0	8.8	11.3	11.9	17.1	15.6	15.5	47.9	7.3	18.2
11	15.9	13.6	15.8	6.8	9.2	7.0	6.9	6.7	7.7	8.8	7.0	7.2	6.4	7.1	6.7	7.2	6.9	5.5	6.7	13.9	6.4	7.1	10.9	6.6	15.9	5.5	8.5
12	5.7	6.0	6.6	0.6					5.1	2.7	3.8											1.4	0.5	0.0	6.6	0.0	3.3
13		0.6	0.0	2.2	2.7	7.5	8.8	5.1	10.1	8.9	9.0	7.4	8.7	7.9	7.8	7.4	7.8	7.6	8.2	8.8	8.7	7.8	7.7	7.8	10.1	0.0	6.9
14	8.7	9.0	9.6	8.6	9.3	10.3	11.8	9.9	7.7	8.5	9.9	8.9	9.1	8.1	7.1	7.1	7.3	7.0	8.5	9.5	9.9	8.8	8.7	8.6	11.8	7.0	8.8
15	9.5	8.1	8.9	8.2	8.8	7.7	9.6	10.1	6.8	6.7	7.2	6.7	7.6	6.8	7.4	8.5	9.1	10.1	9.4	8.1	9.5	8.6	8.4	9.0	10.1	6.7	8.4
16	16.8	16.4	9.2	14.0	15.9	15.1	15.9	13.5	10.1	8.6	9.6	14.7	8.7	10.7	9.5	8.6	7.9	7.1	8.6	14.9	8.5	13.9	17.6	9.6	17.6	7.1	11.9
17	41.8	19.2	7.6	38.0	37.4	21.8	19.6	8.5	15.9	33.7	17.7	18.2	9.5	12.2	12.3	27.7	12.1	8.2	9.5	7.4	6.9	10.3	14.0	14.1	41.8	6.9	17.6
18	11.0	10.0	11.7	9.2	7.4	11.9	12.3	14.1	18.5	11.0	8.8	7.8	9.1	15.5	13.4	14.9	14.0	12.1	13.7	10.6	10.7	13.2	9.0	9.2	18.5	7.4	11.6
19	8.8	9.2	10.5	15.4	10.0	9.0	10.4	10.2	12.3	11.5	15.4	13.0	19.3	14.4	16.6	17.1	15.6	14.1	16.8	15.3	14.8	16.9	36.7	38.0	38.0	8.8	15.5
20	43.1	46.2	27.4	25.2	22.8	12.4	14.1	18.5	25.9	6.1	21.0	26.8	18.0	44.2	41.0	11.0	16.9	2.1	25.3	24.0	26.9	35.1	30.3	20.4	46.2	2.1	24.4
21	20.8	24.7	21.6	35.6	10.6	24.7	10.0	22.3	20.1	15.5	17.9	17.8	4.4	34.3	14.7	25.4	22.8	20.6	44.6	37.8	20.9	13.4	32.4	52.7	52.7	4.4	23.6
22	7.5	8.0	9.0	11.7	12.8	12.0	9.3	7.1	7.0	9.6	20.2	13.1	8.2	7.6	7.6	10.6	7.8	10.4	20.2	9.9	17.5	16.8	16.6	15.8	20.2	7.0	11.5
23	15.8	14.1	25.7	19.2	17.0	21.0	13.3	20.0	12.3	17.6	16.8	0.6	10.3	11.0	26.1	17.0	19.3	16.6	22.5	29.6	13.5	18.8	13.7	10.9	29.6	0.6	16.8
24	9.2	9.2	10.9	11.4	10.4	7.8	8.6	9.5	11.5	11.2	8.7	9.3	8.8	9.3	8.8	14.2	12.1	10.8	6.8	8.3	8.3	8.6	17.5	12.5	17.5	6.8	10.1
25	12.6	15.5	14.0	11.3	28.3	11.3	8.2	7.9	7.1	8.3	8.7	8.9	9.1	9.7	9.9	11.3	10.3	9.5	8.5	6.9	7.3	7.7	12.7	8.1	28.3	6.9	10.5
26	7.4	8.3	9.2	7.2	13.0	12.5	10.5	7.9	11.0	29.6	23.4	16.0	9.8	10.6	10.5	10.8	9.7	8.8	10.2	10.0	14.4	9.9	11.7	8.0	29.6	7.2	11.7
27	7.7	8.4	6.8	6.6	7.1	7.5	6.8	8.8	9.4	8.8	10.8	9.7	6.2	6.3	6.9	6.5	7.0	6.7	7.9	6.1	55.9	9.4	8.0	6.6	55.9	6.1	9.7
28	8.3	9.8	8.7	8.2	7.3	8.6	9.0	9.0	8.7	8.1	7.5	6.6	7.1	7.1	6.6	6.4	6.5	6.6	9.4	7.6	6.8	6.8	8.2	7.0	9.8	6.4	7.7
29	10.2	13.4	37.3	12.6	11.4	9.8	8.6	7.5	8.2	8.6	8.1	8.0	9.0	8.5	9.7	8.1	9.1	9.6	9.0	12.2	9.4	9.0	8.5	15.0	37.3	7.5	10.9
30	6.6	7.0	7.2	7.4	7.2	7.7	7.3	7.3	10.6	7.3	27.7	34.4	26.0	33.3	47.4	40.8	9.0	7.3	8.2	8.4	6.6	7.7	7.7	9.5	47.4	6.6	14.6
31	39.2	36.2	9.5	10.8	16.8	37.8	42.1	20.0	11.0	19.1	27.9	11.5	11.6	16.4	24.5	21.3	15.5	19.4	32.4	30.4	29.3	24.8	10.0	21.8	42.1	9.5	22.5
Max.	**43.1**	**46.2**	**37.3**	**39.4**	**37.4**	**37.8**	**42.1**	**22.3**	**25.9**	**47.9**	**29.8**	**65.5**	**59.7**	**44.2**	**47.4**	**40.8**	**22.8**	**27.7**	**44.6**	**67.9**	**55.9**	**35.1**	**36.7**	**52.7**	**67.9**		
Min.	**5.6**	**0.6**	**0.0**	**0.6**	**2.7**	**6.8**	**6.8**	**5.1**	**5.1**	**2.7**	**3.8**	**0.6**	**4.4**	**6.3**	**5.9**	**6.4**	**6.4**	**2.1**	**6.7**	**6.1**	**6.4**	**1.4**	**0.5**	**0.0**		**0.0**	
Avg.	**14.0**	**13.1**	**12.0**	**13.5**	**12.7**	**12.6**	**12.7**	**12.3**	**12.2**	**12.9**	**13.7**	**14.1**	**12.3**	**13.3**	**14.0**	**13.9**	**10.9**	**10.5**	**14.1**	**15.3**	**14.9**	**11.8**	**12.6**	**12.9**			**13.0**

Total Hours in Month 744 **Hours Data Available** 729 **Data Recovery** 98.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	18.1	34.2	9.8	7.5	8.4	8.6	12.0	9.2	8.4	11.8	16.8	11.8	14.2	8.8	9.2	9.9	14.9	15.5	23.8	7.8	9.6	7.7	9.6	12.3	34.2	7.5	12.5
2	12.0	29.2	13.6	9.2	7.8	7.6	11.4	10.0	10.1	19.5	12.8	9.9	10.0	8.8	8.3	8.3	9.7	15.0	8.3	7.9	8.5	8.5	8.1	15.4	29.2	7.6	11.2
3	9.4	9.3	8.3	8.6	8.5	10.1	12.1	11.0	10.4	9.5	10.6	10.0	10.6	11.0	10.3	13.9	16.7	3.5	22.7	6.2	32.2	26.9	32.1	19.3	32.2	3.5	13.5
4	13.4	0.0	22.4	26.7	1.3	0.0	6.6	36.0	16.9	29.1	41.1	13.1	48.1	3.6	0.0	0.0	0.0	26.8	27.5	20.3	26.4	26.9	36.9	41.6	48.1	0.0	19.4
5	17.7	32.2	23.2	36.3	29.8	44.3	48.8	42.4	29.4	34.4	12.4	1.6	0.1	7.5	11.7	8.0	6.6	9.5	12.7	10.2	6.3	16.5	16.6	18.4	48.8	0.1	19.8
6	36.6	19.6	18.9	20.6	14.2	21.6	0.5	22.2	15.9	10.3	23.3	32.7	2.4	24.5	28.8	19.1	21.7	21.0	21.5	22.1	24.7	24.6	26.1	39.9	39.9	0.5	21.4
7	22.8	21.8	32.1	15.9	26.4	25.0	32.0	36.2	34.2	44.4	23.8	49.7	32.7	35.6	22.0	9.8	15.3	27.2	10.0	10.7	6.9	8.0	9.9	8.1	49.7	6.9	23.4
8	8.5	8.4	8.4	8.1	6.4	9.1	8.3	12.6	15.5	13.9	9.9	7.8	7.9	8.0	8.9	6.0	22.9	35.6	31.4	55.1	44.2	23.7	21.4	26.2	55.1	6.0	17.0
9	23.2	27.3	39.1	24.2	21.2	25.1	19.4	43.0	34.7	20.0	37.1	16.7	15.0	16.2	10.5	21.1	43.2	15.6	17.8	22.1	17.9	16.2	21.6	26.1	43.2	10.5	23.9
10	15.8	15.6	20.2	17.9	14.7	23.1	5.1	14.5	37.6	31.5	14.6	21.3	17.4	10.1	7.9	10.1	12.8	14.9	9.5	8.4	9.4	9.0	9.5	13.8	37.6	5.1	15.2
11	12.6	24.3	6.2	1.5	8.5	15.2	20.2	23.7	27.9	9.4	8.3	14.0	19.5	10.2	21.7	12.8	40.7	13.8	42.1	36.8	20.0	38.7	43.2	17.9	43.2	1.5	20.4
12	18.1	17.8	55.3	37.2	8.0	7.8	8.0	8.4	13.0	12.4	8.7	8.2	8.3	7.8	6.1	7.2	5.7	7.8	10.2	8.8	8.0	7.9	7.8	10.5	55.3	5.7	12.5
13	9.5	7.0	13.4	10.1	7.2	6.5	6.6	6.9	7.3	9.8	9.3	9.3	9.3	7.7	7.8	10.6	9.5	9.3	8.3	9.0	8.7	13.4	8.2	31.8	31.8	6.5	9.8
14	20.3	7.3	10.3	19.8	14.6	23.9	24.8	21.3	24.2	28.4	30.7	44.3	49.1	12.2	11.6	10.8	11.1	11.9	11.4	12.7	11.3	10.6	11.8	12.8	49.1	7.3	18.6
15	16.2	13.2	12.2	9.9	9.1	8.2	9.8	9.2	7.9	8.9	8.6	8.1	7.7	8.1	8.3	8.1	8.6	7.6	7.9	7.6	7.9	8.8	9.1	6.5	16.2	6.5	9.1
16	5.6	6.7	5.8	6.4	5.0	5.5	6.4	7.3	7.7	9.1	7.9	7.2	23.8	54.9	42.0	18.3	37.2	31.6	24.3	10.8	40.9	18.1	24.7	5.7	54.9	5.0	17.2
17	6.9	7.1	6.6	6.2	7.1	12.6	14.7	6.5	38.3	7.7	11.0	6.6	6.8	13.1	6.8	11.1	6.6	6.8	7.5	7.0	8.9	9.0	7.5	8.7	38.3	6.2	9.6
18	6.3	7.8	9.0	9.3	7.6	7.4	8.1	8.6	7.4	9.1	7.9	10.0	9.5	8.8	6.5	6.3	6.8	7.5	9.4	8.7	9.2	7.7	10.4	9.6	10.4	6.3	8.3
19	7.3	6.9	7.9	9.6	10.1	10.2	11.5	10.7	10.3	10.0	9.2	7.5	8.1	7.6	8.9	9.0	10.6	10.2	9.5	8.0	7.5	6.8	7.8	6.4	11.5	6.4	8.8
20	7.3	6.8	6.7	6.3	6.3	5.5	6.1	5.6	5.3	6.5	5.3	5.8	5.7	5.9	5.7	6.1	5.9	6.5	6.4	6.0	6.1	5.9	6.0	6.1	7.3	5.3	6.1
21	6.8	6.6	5.9	6.0	6.2	6.1	6.0	6.3	6.0	6.1	6.6	5.8	5.6	6.4	7.6	8.9	8.5	8.6	9.7	8.0	8.7	7.0	6.6	6.3	9.7	5.6	6.9
22	7.4	7.2	8.1	8.0	7.4	7.5	8.2	7.2	7.4	7.8	7.6	6.3	7.3	7.4	9.1	7.2	8.2	7.8	7.6	13.2	10.0	7.3	8.3	10.9	13.2	6.3	8.1
23	17.2	8.5	9.4	8.4	9.0	8.3	11.1	13.2	23.9	13.6	10.5	7.6	10.0	9.0	9.3	12.3	7.6	9.4	8.9	9.4	9.6	8.0	10.0	9.3	23.9	7.6	10.6
24	8.3	9.2	11.4	9.6	9.8	8.9	7.7	7.9	8.9	8.6	9.3	7.6	7.1	6.6	6.9	5.4	7.3	8.1	8.9	12.9	11.7	10.1	9.2	11.2	12.9	5.4	8.9
25	7.9	8.7	7.4	12.6	6.6	8.6	11.7	29.2	58.4	6.1	24.6	22.9	9.8	7.0	6.0	5.9	10.7	7.3	7.2	7.0	13.9	7.0	7.4	9.3	58.4	5.9	12.6
26	10.1	14.2	11.8	10.6	7.8	23.7	50.8	47.2	45.2	7.5	19.8	41.7	47.2	27.5	5.8	8.4	5.7	13.1	33.5	9.0	6.4	11.0	9.0	10.5	50.8	5.7	19.9
27	8.9	10.9	9.6	9.3	8.9	5.6	7.1	10.4	10.5	10.4	7.8	6.3	7.7	13.3	13.1	11.3	17.4	10.9	8.8	7.0	8.3	12.2	11.2	11.2	17.4	5.6	9.9
28	13.7	7.2	7.7	7.6	10.2	16.2	7.1	8.6	6.4	6.2	8.6	7.1	8.0	7.5	6.8	6.4	8.5	16.9	10.4	10.5	9.7	6.6	6.5	7.6	16.9	6.2	8.8
29	6.6	6.9	6.6	7.5	8.9	9.7	7.9	13.7	6.9	6.3	5.7	6.5	6.4	8.0	6.7	8.2	8.1	7.4	15.8	30.6	26.3	13.4	8.9	14.8	30.6	5.7	10.3
30	6.6	6.2	8.8	4.9	6.5	8.8	5.5	5.5	7.4	5.1	37.3	19.9	40.6	35.3	38.6	8.2	6.3	55.7	29.5	28.6	27.6	26.0	18.9	27.3	55.7	4.9	19.4
31	18.8	39.9	34.7	46.9	32.9	22.3	37.0	40.2	45.5	51.0	7.5	9.0	20.8	29.9	52.1	25.6	37.0	35.5	6.8	6.9	6.9	6.8	5.8	9.8	52.1	5.8	26.2
Max.	**36.6**	**39.9**	**55.3**	**46.9**	**32.9**	**44.3**	**50.8**	**47.2**	**58.4**	**51.0**	**41.1**	**49.7**	**49.1**	**54.9**	**52.1**	**25.6**	**43.2**	**55.7**	**42.1**	**55.1**	**44.2**	**38.7**	**43.2**	**41.6**	**58.4**		
Min.	**5.6**	**0.0**	**5.8**	**1.5**	**1.3**	**0.0**	**0.5**	**5.5**	**5.3**	**5.1**	**5.3**	**1.6**	**0.1**	**3.6**	**0.0**	**0.0**	**0.0**	**3.5**	**6.4**	**6.0**	**6.1**	**5.9**	**5.8**	**5.7**		**0.0**	
Avg.	**12.9**	**13.8**	**14.5**	**13.6**	**10.9**	**13.0**	**13.9**	**17.2**	**19.0**	**15.0**	**14.7**	**14.1**	**15.4**	**13.8**	**13.1**	**10.1**	**13.9**	**15.4**	**15.1**	**13.9**	**14.6**	**13.2**	**13.9**	**15.0**			**14.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.1	7.2	7.3	9.3	11.5	10.7	7.4	6.2	9.6	7.4	8.2	6.6	6.3	6.6	6.8	6.7	7.7	8.7	9.6	6.8	6.3	7.6	6.8	8.3	11.5	6.2	7.8
2	7.0	6.6	7.6	7.2	8.2	8.5	9.0	13.5	13.2	21.3	9.2	7.3	7.5	10.7	7.4	11.8	16.7	15.5	19.0	23.4	18.3	21.9	38.1	35.6	38.1	6.6	14.4
3	18.2	14.1	14.8	19.6	11.1	14.3	15.1	15.8	14.5	15.3	15.7	15.7	14.2	15.0	13.8	14.5	13.4	15.0	14.9	15.7	13.1	9.8	14.8	8.6	19.6	8.6	14.4
4	8.1	8.1	7.5	8.1	8.3	7.6	7.6	8.5	7.6	8.9	8.1	7.9	8.1	8.2	7.9	8.0	7.8	8.6	7.8	8.3	8.3	8.1	8.8	10.6	10.6	7.5	8.2
5	8.9	8.8	8.6	9.0	8.7	8.9	9.1	10.1	10.2	8.9	9.0	9.3	8.9	8.1	7.6	9.4	8.8	8.3	10.7	10.8	10.5	9.9	9.3	9.4	10.8	7.6	9.2
6	9.6	10.6	11.2	10.8	10.2	9.3	8.5	13.6	19.5	14.7	7.1	6.9	7.3	7.2	7.4	7.7	9.3	9.2	6.4	9.9	9.5	11.8	7.8	8.5	19.5	6.4	9.7
7	7.6	17.9	16.4	18.5	10.3	8.2	9.3	7.0	6.3	6.5	6.9	6.1	5.5	8.2	7.8	7.9	8.8	56.4	24.3	31.6	56.9	49.5	28.2	32.4	56.9	5.5	18.3
8	22.0	31.9	31.3	34.8	26.3	26.8	26.4	48.9	47.5	74.4	22.8	14.1	8.5	6.7	6.9	7.4	7.2	7.7	7.5	7.5	7.6	7.5	7.3	7.8	74.4	6.7	20.7
9	8.0	7.8	7.3	7.8	8.0	8.4	8.3	8.0	8.8	8.7	8.2	8.7	8.4	8.9	8.3	9.9	7.4	8.4	8.7	9.8	7.9	8.8	11.1	9.2	11.1	7.3	8.5
10	9.6	12.5	15.0	12.2	11.4	7.8	8.0	7.6	10.0	14.6	11.8	10.5	11.2	14.2	13.3	13.8	14.3	14.7	10.3	12.2	14.3	13.7	14.0	11.9	15.0	7.6	12.0
11	13.7	9.4	7.8	7.2	13.5	35.3	44.2	7.7	5.8	7.6	8.4	4.8	5.3	4.9	5.6	5.8	6.3	4.7	14.9	16.4	16.5	10.2	15.6	13.7	44.2	4.7	11.9
12	17.1	16.3	22.2	17.3	10.6	10.2	21.8	28.7	8.4	6.6	6.2	6.0	6.9	8.0	5.9	6.5	7.3	5.9	8.9	21.9	39.0	52.6	11.6	24.9	52.6	5.9	15.4
13	24.4	15.6	28.1	28.0	21.7	11.6	16.7	23.3	42.7	34.7	28.1	18.9	21.3	11.8	11.9	10.6	11.5	7.8	6.6	9.0	12.8	11.3	12.5	12.5	42.7	6.6	18.1
14	12.6	12.5	12.9	12.2	12.6	14.3	59.2	87.1	89.6	92.0	61.9	44.4	80.2	74.7	78.9	61.3	60.6	50.0	54.4	26.8	10.4	69.7	79.8	70.9	92.0	10.4	51.2
15	30.2	9.4	7.6	9.4	10.1	8.8	47.7	65.7	58.8	44.1	47.3	54.0	41.0	83.3	70.6	73.3	75.6	59.0	83.6	70.0	73.9	55.6	3.3	2.6	83.6	2.6	45.2
16	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.2	0.2	0.0	0.2	0.0	0.1
17	0.1	0.1	0.1	0.1	1.2	2.8	0.6	4.1	10.6	42.2	84.7	75.2	91.0	66.0	76.4	56.8	29.0	35.0	49.9	37.3	54.2	62.6	63.4	54.5	91.0	0.1	37.4
18	7.0	4.7	13.1	0.2	0.2	0.2	6.1	19.6	36.3	54.8	82.5	72.3	83.7	75.9	76.9	84.4	88.7	85.1	75.0	73.3	2.1	1.6	5.6	4.4	88.7	0.2	39.7
19	4.1																								4.1	4.1	4.1
20												5.9	0.1	5.8	2.2	3.0	0.1	0.2	0.1	0.1	0.5	0.6	0.8	0.5	5.9	0.1	1.5
21																											
22																											
23																											
24																											
25																											
26																						6.0	6.0	2.4	6.0	2.4	4.8
27	6.9	1.5	0.0	0.2	20.8	52.4	63.2	58.8	8.7	8.9	49.3	7.7	6.4	7.4	7.2	47.2	8.4	42.4	7.0	9.4	9.7	54.9	53.9	15.8	63.2	0.0	22.8
28	44.3	73.6	9.2	40.6	67.5	40.9	51.1	5.2	11.9	64.5	46.1														73.6	5.2	41.3
Max.	**44.3**	**73.6**	**31.3**	**40.6**	**67.5**	**52.4**	**63.2**	**87.1**	**89.6**	**92.0**	**84.7**	**75.2**	**91.0**	**83.3**	**78.9**	**84.4**	**88.7**	**85.1**	**83.6**	**73.3**	**73.9**	**69.7**	**79.8**	**70.9**	**92.0**		
Min.	**0.1**	**0.1**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**0.2**	**0.2**	**0.0**		**0.0**	
Avg.	**12.7**	**13.4**	**11.4**	**12.6**	**13.6**	**14.4**	**21.0**	**22.0**	**21.0**	**26.8**	**26.1**	**19.1**	**21.1**	**21.6**	**21.1**	**22.3**	**19.4**	**22.1**	**21.0**	**20.0**	**18.6**	**22.6**	**19.0**	**16.4**			**19.1**

Total Hours in Month 672 **Hours Data Available** 484 **Data Recovery** 72.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1																							4.2	39.9	39.9	4.2	22.0
2	43.1	91.5	30.3	0.2	20.8	32.4	37.1	42.5	70.5	72.6	77.6	70.3	16.0	21.3	3.4	6.6	3.4	2.8	0.6						91.5	0.2	33.8
3																											
4																											
5																											
6																											
7																											
8										1.9	56.6	78.4	5.6	44.5	75.6	10.9	29.1	16.5	27.7	5.2	2.6	6.2	11.1	58.2	78.4	1.9	28.7
9	10.6	36.0	0.6	0.6	0.4	0.4	0.1	0.2	0.3	2.3	1.0	1.1	15.9	15.6	13.0	11.0	10.7	10.1	6.9	6.0	6.4	5.5	7.1	6.7	36.0	0.1	7.0
10	5.5	5.1	5.0	5.3	5.3	5.0	8.7	8.4	7.3	6.1	7.5	37.8	10.1	11.8	10.2	18.9	64.1	22.9	31.7	40.0	12.5	10.7	13.5	12.3	64.1	5.0	15.2
11	13.5	12.4	14.2	13.2	12.7	12.1	8.4	6.9	8.8	9.0	5.9	5.9	6.1	6.3	6.5	6.3	6.8	6.5	5.9	6.3	6.2	6.5	5.7	7.0	14.2	5.7	8.3
12	7.1	7.6	6.5	9.5	12.4	8.7	7.6	6.1	5.8	6.5	14.4	12.1	24.6	14.5	16.5	12.2	17.0	34.8	15.0	31.7	29.0	20.1	15.4	8.5	34.8	5.8	14.3
13	21.9	28.8	0.0	30.2	22.5	13.1	8.5	0.0	8.1	6.2	8.7	14.0	5.1	4.0	4.4	3.8	4.1	5.6	4.5	5.2	10.3	6.6	7.4	6.4	30.2	0.0	9.6
14	5.3	6.0	6.4	5.2	4.7	5.2	4.5	4.7	5.2	5.8	6.3	10.1	6.8	9.8	5.7	4.5	5.6	5.2	9.9	33.5	39.5	47.1	1.1	13.5	47.1	1.1	10.5
15	23.4	33.6	15.2	46.0	0.0	0.0	33.9	32.6	33.3	12.3	0.0	10.5	4.6	4.3	8.7	7.3	9.3	30.3	17.9	31.2	1.4	8.5	35.5	65.4	65.4	0.0	19.4
16	8.3	8.6	30.5	23.5	29.5	35.7	58.3	50.2	11.4	11.4	8.8	8.0	8.2	10.6	10.2	12.7	12.3	11.3	20.6	30.7	9.6	11.1	12.4	13.8	58.3	8.0	18.6
17	18.3	13.8	13.1	12.5	9.3	8.8	10.3	9.5	11.3	11.9	12.2	12.8	10.1	11.9	13.0	12.9	10.7	10.2	13.2	12.3	10.7	9.9	12.5	11.4	18.3	8.8	11.8
18	11.3	12.1	12.0	10.4	9.9	7.7	17.0	14.5	8.0	6.6	6.9	7.1	5.3	6.8	5.3	7.1	5.0	4.8	6.5	9.4	9.6	23.1	11.9	32.6	32.6	4.8	10.5
19	23.1	20.7	57.4	18.0	15.6	12.8	22.4	18.7	24.8	28.8	12.5	12.4	12.1	11.6	11.6	11.9	9.0	9.9	10.5	11.4	12.5	12.4	11.9	12.6	57.4	9.0	16.9
20	9.7	5.4	5.6	6.1	9.8	8.8	11.7	12.4	12.0	12.5	11.9	22.1	24.9	10.7	20.4	8.7	7.9	6.4	7.9	11.2	8.3	9.3	7.0	6.0	24.9	5.4	10.7
21	6.4	6.3	5.7	5.7	6.8	6.1	5.8	6.1	6.4	5.6	7.7	7.7	8.1	23.4	17.4	8.5	9.6	6.0	5.7	9.1	9.7	9.0	8.7	10.4	23.4	5.6	8.4
22	13.7	10.8	23.0	13.4	10.7	6.7	7.3	7.9	6.1	6.6	7.8	6.9	6.7	8.1	9.3	7.3	6.3	6.5	6.9	8.3	7.1	6.9	6.6	6.5	23.0	6.1	8.6
23	5.3	42.2	41.0	30.2	33.6	15.5	30.0	24.3	34.1	13.2	27.0	35.8	29.6	5.4	9.1	9.2	8.0	28.8	39.9	58.6	14.0	11.6	13.3	24.1	58.6	5.3	24.3
24	7.1	11.2	9.3	15.2	9.9	9.7	10.4	17.8	12.2	8.6	8.1	12.5	11.9	12.2	7.6	8.0	4.9	9.4	7.8	6.8	6.0	7.2	7.9	10.7	17.8	4.9	9.7
25	7.1	4.8	4.8	4.9	5.0	4.7	5.0	5.6	6.8	7.6	7.0	5.9	7.3	6.6	5.6	6.2	5.3	5.3	5.4	11.5	12.5	8.5	9.0	11.3	12.5	4.7	6.8
26	10.7	9.4	6.5	6.6	5.7	4.5	4.5	5.1	7.8	5.7	6.6	5.3	6.0	6.2	6.3	6.9	7.3	13.5	13.3	6.1	7.6	17.6	22.2	21.5	22.2	4.5	8.9
27	27.7	34.8	25.6	19.9	37.3	33.7	19.3	28.7	21.3	18.0	28.9	23.7	24.6	16.2	12.1	30.7	9.2	44.1	26.6	24.6	24.3	41.9	31.0	59.4	59.4	9.2	27.7
28	22.5	9.3	19.2	42.3	17.0	48.7	44.8	36.1	29.4	37.2	11.2	11.0	12.3	12.0	11.4	16.1	16.9	11.6	40.3	41.6	0.0	14.1	46.4	3.8	48.7	0.0	23.1
29	41.3	5.8	4.6	24.6	17.2	20.8	20.4	39.5	33.4	12.7	26.6	34.6	19.6	7.4	8.2	12.3	21.4	36.0	36.9	41.0	35.6	53.5	17.7	11.3	53.5	4.6	24.3
30	12.6	11.5	11.9	12.0	7.6	9.1	6.0	8.2	11.9	10.5	9.4	5.5	5.6	5.9	5.9	5.9	9.6	9.0	8.0	6.0	8.4	8.2	7.0	7.7	12.6	5.5	8.5
31	10.2	11.0	11.7	11.9	11.8	12.4	12.2	10.5	14.4	8.2	9.4	5.7	6.8	5.8	6.1	7.2	5.6	5.4	5.8	9.6	16.6	7.9	6.0	17.3	17.3	5.4	9.6
Max.	**43.1**	**91.5**	**57.4**	**46.0**	**37.3**	**48.7**	**58.3**	**50.2**	**70.5**	**72.6**	**77.6**	**78.4**	**29.6**	**44.5**	**75.6**	**30.7**	**64.1**	**44.1**	**40.3**	**58.6**	**39.5**	**53.5**	**46.4**	**65.4**	**91.5**		
Min.	**5.3**	**4.8**	**0.0**	**0.2**	**0.0**	**0.0**	**0.1**	**0.0**	**0.3**	**1.9**	**0.0**	**1.1**	**4.6**	**4.0**	**3.4**	**3.8**	**3.4**	**2.8**	**0.6**	**5.2**	**0.0**	**5.5**	**1.1**	**3.8**		**0.0**	
Avg.	**15.2**	**18.3**	**15.0**	**15.3**	**13.1**	**13.4**	**16.4**	**16.5**	**16.3**	**13.1**	**15.2**	**18.3**	**11.8**	**11.7**	**12.1**	**10.1**	**12.0**	**14.1**	**15.0**	**19.1**	**12.5**	**15.2**	**13.3**	**19.1**			**14.7**

Total Hours in Month 744 **Hours Data Available** 588 **Data Recovery** 79.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.4	9.6	6.3	14.3	8.2	16.8	10.3	7.4	8.5	22.2	36.0	20.6	17.5	6.9	4.5	6.3	5.7	17.5	34.2	62.8	14.7	13.2	18.6	14.9	62.8	4.5	16.1
2	8.9	8.9	5.7	14.2	11.2	29.6	11.9	20.5	18.2	14.0	10.1	10.4	23.9	9.3	11.7	5.3	18.6	37.7	48.9	15.3	8.3	9.3	8.6	8.5	48.9	5.3	15.4
3	7.1	6.7	6.6	6.5	6.1	5.9	5.7	5.8	6.3	5.9	5.9	7.4	6.3	7.7	11.2	13.7	13.2	12.6	12.9	12.7	12.7	11.9	11.6	11.8	13.7	5.7	8.9
4	10.9	9.9	11.8	12.0	11.9	12.4	11.4	8.0	11.4	12.5	10.5	8.6	8.8	12.7	16.8	31.6	36.9	8.7	5.2	7.0	7.2	5.7	7.2	7.1	36.9	5.2	11.9
5	9.5	5.6	7.1	6.4	5.6	6.8	7.0	6.7	6.0	13.2	9.0	6.8	7.2	8.4	7.2	7.2	7.0	6.6	17.7	11.0	6.5	6.8	6.0	6.3	17.7	5.6	7.8
6	9.3	21.6	14.6	23.8	10.7	11.8	8.6	7.4	6.0	8.8	8.5	7.7	9.8	7.2	9.7	8.9	6.3	5.9	6.7	6.2	6.0	26.8	23.3	35.3	35.3	5.9	12.1
7	9.2	0.0	4.3	4.9	9.0	14.7	6.1	17.9	10.3	29.5	12.2	22.0	17.7	13.5	7.3	7.9	8.3	12.8	11.4	12.1	12.6	9.4	6.5	9.4	29.5	0.0	11.2
8	12.6	13.1	13.1	11.7	11.2	9.8	9.0	6.2	7.7	13.1	12.9	12.6	12.7	12.6	12.6	10.5	9.4	6.1	7.0	7.4	7.1	6.4	7.0	6.8	13.1	6.1	9.9
9	8.3	6.9	5.3	7.2	6.5	6.1	5.5	5.6	7.3	6.3	5.8	6.4	5.9	6.1	6.5	7.4	8.0	7.3	9.6	10.5	15.9	27.4	21.0	29.3	29.3	5.3	9.7
10	9.5	10.8	12.8	13.5	7.9	5.5	5.9	5.7	9.6	6.5	5.2	6.9	7.3	5.9	6.6	4.8	4.7	6.6	5.7	8.1	22.1	43.9	55.6	39.1	55.6	4.7	12.9
11	55.8	57.1	31.9	4.9	21.6	17.3	15.8	19.6	25.7	30.3	25.9	9.3	6.3	7.3	6.1	5.8	5.6	5.7	6.4	6.8	6.8	7.5	6.8	6.4	57.1	4.9	16.4
12	6.9	6.5	5.9	5.9	5.6	7.0	7.7	7.0	5.5	5.0	9.9	11.7	6.9	6.3	6.0	6.0	6.8	5.7	6.1	6.1	7.8	10.7	20.7	9.4	20.7	5.0	7.6
13	13.3	23.7	9.4	20.0	6.0	9.5	7.3	7.9	8.7	9.3	9.8	10.1	10.8	9.7	11.6	11.4	11.1	8.8	8.9	10.5	10.9	13.8	15.9	15.6	23.7	6.0	11.4
14	12.4	8.2	8.4	9.3	7.6	7.0	12.2	12.0	9.6	7.7	9.3	10.3	8.7	14.7	13.5	10.8	12.1	10.0	11.2	9.6	12.4	12.2	9.8	6.7	14.7	6.7	10.2
15	5.9	6.9	6.3	7.4	6.5	7.7	10.5	8.9	11.4	11.4	30.3	10.0	13.7	7.7	6.9	7.2	28.3	10.4	8.8	13.1	7.6	11.0	28.3	32.9	32.9	5.9	12.5
16	46.1	14.8	38.6	11.1	10.9	9.5	6.9	6.0	6.1	11.4	10.7	5.4	6.0	6.3	6.1	6.4	6.7	6.8	7.1	7.2	8.0	9.0	8.2	8.2	46.1	5.4	11.0
17	5.2	5.7	5.2	5.2	5.5	6.4	5.3	12.1	7.9	12.1	10.9	10.9	10.7	7.9	10.8	7.4	6.8	8.4	10.4	39.0	16.2	23.1	18.6	4.6	39.0	4.6	10.7
18	6.9	5.7	3.9	56.3	38.4	42.3	18.8	32.9	14.4	30.0	19.5	0.6	17.3	3.4	7.0	7.6	9.6	8.1	12.0	9.6	16.3	5.9	8.8	7.4	56.3	0.6	15.9
19	6.4	5.9	5.5	6.3	5.8	5.6	5.5	32.9	14.4	30.0	19.5	0.6	17.3	3.4	7.0	7.6	9.6	8.1	12.0	9.6	16.3	5.9	8.8	7.4	32.9	0.6	10.5
20	6.4	5.9	5.5	6.3	5.8	5.6	5.5	5.9	5.3	8.0	12.2	12.0	8.1	6.7	6.3	7.4	10.0	11.1	19.3	26.4	23.9	10.4	27.8	18.5	27.8	5.3	10.8
21	21.9	13.7	22.8	22.3	25.6	7.0	19.3	25.0	21.6	23.4	19.5	14.9	8.7	10.0	11.5	11.8	9.3	10.4	8.7	5.1	5.6	5.2	5.2	5.9	25.6	5.1	13.9
22	6.0	6.1	5.9	6.1	7.0	7.6	6.9	6.8	7.2	6.1	6.6	5.1	6.4	9.1	10.8	9.5	10.9	9.8	9.6	13.0	16.0	0.0	9.4	11.6	16.0	0.0	8.1
23	9.7	9.7	6.2	9.9	13.0	35.5	6.0	16.5	19.9	16.2	6.0	6.3	23.2	4.8	17.6	5.8	10.1	2.2	0.0	0.5	17.9	24.1	16.0	13.9	35.5	0.0	12.1
24	4.7	19.0	10.8	11.8	12.2	11.1					11.6	12.7	14.1	12.2	14.3	16.6	8.1	0.1	7.1	10.0	10.8	10.6	9.7	9.8	19.0	0.1	10.9
25	7.6	11.8	9.0	9.1	8.9	11.1	19.5	24.1	13.6	8.2	27.0	23.1	22.7	20.3	22.1	13.3	6.6	15.5	5.7	6.6	6.4	6.5	6.5	7.1	27.0	5.7	13.0
26	6.4	6.7	6.8	7.1	7.0	6.4	6.7	24.1	13.6	6.3	7.5	7.6	5.5	10.3	9.3	10.2	9.3	6.2	32.5	40.9	15.8	8.8	6.8	7.6	40.9	5.5	11.2
27	6.9	5.5	10.0	8.0	5.6	5.7	6.1	7.6	10.0	5.3	4.9	12.0	13.6	10.0	7.6	5.7	5.9	5.9	5.9	5.4	7.3	6.1	7.5	9.9	13.6	4.9	7.4
28	14.2	9.9	8.7	6.2	6.8	10.2	6.0	6.1	6.1	8.9	27.6	9.2	11.1	19.7	16.3	26.5	18.8	30.3	28.1	4.6	10.0	15.6	7.4	9.7	30.3	4.6	13.3
29	0.0	12.4	34.2	28.9	24.0	13.0	36.6	6.3	7.6	8.5	10.0	11.0	8.7	9.0	10.0	8.6	7.6	7.7	6.2	6.5	5.8	5.7	5.5	17.3	36.6	0.0	12.1
30	6.8	4.0	31.9	58.7	25.6	20.8	26.9	22.5	38.2	17.7	10.7	11.3	13.5	18.5	14.9	10.9	21.6	38.5	11.8	11.5	8.4	8.4	9.0	9.0	58.7	4.0	18.8
Max.	**55.8**	**57.1**	**38.6**	**58.7**	**38.4**	**42.3**	**36.6**	**32.9**	**38.2**	**30.3**	**36.0**	**23.1**	**23.9**	**20.3**	**22.1**	**31.6**	**36.9**	**38.5**	**48.9**	**62.8**	**23.9**	**43.9**	**55.6**	**39.1**	**62.8**		
Min.	**0.0**	**0.0**	**3.9**	**4.9**	**5.5**	**5.5**	**5.3**	**5.6**	**5.3**	**5.0**	**4.9**	**0.6**	**5.5**	**3.4**	**4.5**	**4.8**	**4.7**	**0.1**	**0.0**	**0.5**	**5.6**	**0.0**	**5.2**	**4.6**		**0.0**	
Avg.	**11.4**	**11.1**	**11.8**	**13.8**	**11.3**	**12.2**	**10.7**	**12.9**	**11.7**	**13.4**	**13.5**	**10.1**	**11.7**	**9.6**	**10.3**	**10.0**	**11.1**	**11.1**	**12.6**	**13.2**	**11.4**	**12.0**	**13.4**	**12.9**			**11.8**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.3	7.8	8.5	7.5	6.6	7.3	7.7	7.1	7.6	7.3	7.4	7.8	7.5	8.0	8.9	8.0	7.8	8.5	7.8	9.5	8.7	8.9	6.1	7.2	9.5	6.1	7.8
2	8.3	7.5	8.4	6.8	10.1	9.2	12.6	7.1	7.6	7.3	7.4	7.8	7.5	8.0	8.9	8.0	7.8	8.5	7.8	9.5	8.7	8.9	6.1	7.2	12.6	6.1	8.2
3	8.3	7.5	8.4	6.8	10.1	9.2	12.6	7.7	7.3	5.7	7.6	7.5	7.7	8.0	7.1	6.6	7.3	7.3	17.1	12.0	36.8	25.8	4.9	38.6	38.6	4.9	11.6
4	8.4	14.9	25.8	15.1	33.6	9.4	7.1	9.9	11.7	11.7	11.7	11.5	11.4	10.1	9.7	11.8	11.9	6.7	6.6	6.5	7.5	7.3	7.2	7.6	33.6	6.5	11.5
5	7.9	7.5	7.2	7.1	7.5	8.1	12.0	9.4	11.0	8.4	11.9	9.5	7.2	7.6	10.9	7.5	7.0	7.0	7.9	7.3	13.4	11.6	13.0	11.0	13.4	7.0	9.1
6	8.8	5.0	10.9	9.8	19.8	11.3	1.2	4.2	6.0	7.8	12.2	8.4	6.9	7.9	8.2	9.7	7.8	9.0	6.9	6.2	6.2	7.5	8.0	7.5	19.8	1.2	8.2
7	7.9	7.8	7.9	7.0	7.0	7.3	7.2	7.8	9.2	7.7	8.4	8.4	8.0	7.9	7.5	8.7	7.6	9.3	11.3	7.7	16.8	18.9	16.3	0.0	18.9	0.0	8.9
8	0.0	12.4	16.5	10.7	0.0	27.0	0.0	11.7	16.8	9.5	12.8	12.7	11.3	9.8	10.5	10.1	9.3	7.2	8.6	7.8	12.0	7.3	7.6	7.3	27.0	0.0	9.9
9	7.1	6.0	5.1	6.1	5.5	5.6	6.4	6.6	6.8	8.1	9.9	12.9	12.8	11.4	8.7	8.5	10.8	16.8	20.5	9.0	19.5	17.1	21.3	33.7	33.7	5.1	11.5
10	48.8	16.1	11.5	23.9	20.6	11.6	5.8	9.6	7.3	6.6	29.6	9.5	12.9	10.4	19.3	10.7	32.5	37.8	17.9	26.4	12.3	19.1	27.0	12.8	48.8	5.8	18.3
11	11.3	39.5	13.8	13.8	12.7	5.1	15.1	8.4	19.3	10.1	21.4	14.6	12.6	12.3	11.6	11.6	13.9	32.3	23.4	29.8	11.7	10.1	17.6	10.0	39.5	5.1	15.9
12	10.9	11.4	9.3	11.4	9.7	9.5	10.9	10.8	12.3	8.2	8.5	9.1	8.1	8.3	8.0	7.1	7.4	7.2	7.1	6.7	6.2	6.3	9.3	11.1	12.3	6.2	9.0
13	13.4	8.0	6.8	7.4	10.2	10.8	34.1	24.7	32.9	6.8	14.3	13.5	11.3	11.2	17.2	11.8	11.3	10.4	14.3	8.6	15.8	39.9	23.3	33.5	39.9	6.8	16.3
14	27.4	0.0	11.8	0.0	37.2	24.1	0.0	9.2	10.6	13.3	9.8	10.0	13.1	10.1	10.4	11.0	9.5	10.1	8.3	11.4	36.2	13.3	16.4	9.3	37.2	0.0	13.0
15	11.5	39.7	19.4	17.7	39.6	13.6	7.6	8.6	13.2	15.0	31.2	36.8	32.7	73.4	36.2	19.7	15.6	12.0	10.6	7.9	35.6	18.0	14.4	8.9	73.4	7.6	22.4
16	7.7	8.3	8.1	16.4	17.4	36.0	17.0	27.4	51.6	35.7	18.0	60.7	24.8	21.9	28.3	45.8	11.5	11.0	12.0	9.8	20.8	27.0	49.4	59.4	60.7	7.7	26.1
17	45.1	40.9	20.3	43.0	41.9	33.1	6.4	6.5	16.1	27.9	18.5	17.7	12.2	13.6	9.6	13.3	12.5	13.2	14.1	12.6	12.5	12.6	9.7	8.6	45.1	6.4	19.2
18	9.1	10.7	7.2	9.1	15.4	12.4	2.5	4.0	18.0	14.5	13.5	10.1	10.0	7.6	7.3	10.9	11.5	8.7	7.8	8.0	12.2	11.9	8.8	20.5	20.5	2.5	10.5
19	37.7						9.1	24.3	20.7	16.3	15.6	14.1	12.7	13.4	13.4	13.3	9.8	11.5	12.7	9.9	11.9	8.8	9.2	11.3	37.7	8.8	14.5
20	12.3	12.0	12.5	12.7	13.7	13.8	13.0	13.6	13.2	13.7	13.9	13.9	14.2	13.6	13.8	13.4	12.2	11.2	33.0	16.5	12.0	8.1	7.6	8.3	33.0	7.6	13.4
21	7.2	8.0	7.2	7.7	8.0	8.0	9.0	9.2	9.7	8.8	10.2	9.5	10.0	9.1	10.1	10.9	11.3	8.6	11.6	11.6	11.4	9.3	13.2	14.2	14.2	7.2	9.7
22	12.6	11.0	12.0	12.6	11.6	12.3	11.5	7.8	9.6	12.2	12.8	13.9	12.3	10.5	11.1	9.9	12.9	10.9	9.8	9.2	7.5	8.4	10.3	9.2	13.9	7.5	10.9
23	7.3	10.7	7.3	7.3	5.2	5.5	5.9	6.3	6.4	10.3	13.6	14.1	17.1	27.4	49.3	39.6	43.0	14.6	8.1	7.5	7.3	11.7	6.4	11.5	49.3	5.2	14.3
24	6.4	5.3	30.8	59.8	60.7	36.7	28.5	46.8	7.4	20.0	41.7	46.3	37.4	47.2	55.0	30.5	12.8	12.1	9.3	10.4	11.1	51.8	31.1	8.3	60.7	5.3	29.5
25	5.7	5.3	6.4	6.9	50.2	50.2	44.3	29.6	16.3	26.4	42.6	50.5	72.8	52.1	40.1	14.0	16.9	13.4	12.7	11.5	10.3	50.4	32.1	12.5	72.8	5.3	28.0
26	18.0	26.3	10.0	9.1	18.4	57.9	20.7	6.8	8.8	17.0	12.0	12.7	12.6	15.2	15.0	13.8	11.9	8.8	7.8	8.2	7.3	6.7	9.0	8.2	57.9	6.7	14.2
27	10.4	13.1	11.8	11.9	11.5	12.8	9.6	9.1	10.6	9.0	10.4	10.8	11.7	10.7	10.9	11.2	11.2	10.4	11.4	9.7	17.3	13.3	11.2	10.5	17.3	9.0	11.3
28	7.4	6.6	48.2	41.9	18.9	10.1	12.7	11.3	14.1	22.8	37.1	46.9	61.3	65.5	50.7	27.1	27.8	37.1	13.2	8.7	7.9	9.5	23.9	17.9	65.5	6.6	26.2
29	28.5	35.4	3.7	6.3	12.3	8.9	12.3	16.7	14.7	13.5	14.9	14.2	12.9	10.5	11.8	11.8	13.0	12.5	11.8	9.8	9.0	8.6	7.6	11.2	35.4	3.7	13.0
30	11.6	14.7	49.8	39.9	35.3	49.2	45.7	23.3	25.9	16.7	14.3	16.4	13.1	15.2	13.7	11.1	10.1	11.4	7.9	8.6	7.8	7.3	7.3	15.5	49.8	7.3	19.6
31	16.8	14.6	13.5	16.2	17.5	24.8	39.5	13.0	13.2	19.4	12.0	13.8	11.0	10.1	9.8	12.4	11.9	10.7	11.9	10.4	12.9	14.4	21.0	39.0	39.5	9.8	16.3
Max.	**48.8**	**40.9**	**49.8**	**59.8**	**60.7**	**57.9**	**45.7**	**46.8**	**51.6**	**35.7**	**42.6**	**60.7**	**72.8**	**73.4**	**55.0**	**45.8**	**43.0**	**37.8**	**33.0**	**29.8**	**36.8**	**51.8**	**49.4**	**59.4**	**73.4**		
Min.	**0.0**	**0.0**	**3.7**	**0.0**	**0.0**	**5.1**	**0.0**	**4.0**	**6.0**	**5.7**	**7.4**	**7.5**	**6.9**	**7.6**	**7.1**	**6.6**	**7.0**	**6.7**	**6.6**	**6.2**	**6.2**	**6.3**	**4.9**	**0.0**		**0.0**	
Avg.	**13.9**	**13.8**	**14.0**	**15.1**	**18.9**	**18.0**	**13.8**	**12.9**	**14.1**	**13.5**	**16.3**	**17.6**	**16.7**	**17.7**	**17.2**	**14.2**	**13.2**	**12.8**	**12.0**	**10.6**	**13.8**	**15.5**	**14.7**	**15.2**			**14.8**

Total Hours in Month 744 **Hours Data Available** 739 **Data Recovery** 99.3%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.6	21.5	14.4	27.3	22.9	10.6	8.5	11.9	18.3	21.7	28.1	35.7	48.3	35.2	59.8	39.7	48.8	42.6	17.7	10.5	9.0	12.0	62.6	52.8	62.6	8.5	28.1
2	0.0	22.9	29.5	29.5	33.6	31.8	20.0	16.4	25.3	40.7	29.8	28.0	28.9	16.4	17.1	15.4	18.6	13.1	10.0	9.4	8.5	7.1	7.2	9.3	40.7	0.0	19.5
3	11.3	10.4	9.1	9.4	8.7	8.1	11.3	9.4	10.3	12.3	10.9	14.4	12.9	13.7				16.2	13.5	10.4	10.4	9.5	8.3	11.2	16.2	8.1	11.0
4	12.5	11.6	8.5	8.3	7.5	9.9	10.0	9.5				11.6	14.6	15.6	14.6	15.9	15.1	14.7	15.8	13.6	13.6	14.1	11.9	11.2	15.9	7.5	12.4
5	15.1	12.7	9.5	9.8	9.2	7.3	7.2	7.3	8.2	12.8	20.6	36.2	32.9	35.4	39.5	36.9	47.7	61.6	45.1	21.5	12.6	26.7	36.2	18.2	61.6	7.2	23.8
6	24.1	62.8	17.4	15.0	16.4	31.2	32.7	39.4	25.2	26.2	28.6	27.6	19.9	18.4	18.3	15.6	14.8	13.9	13.9	12.7	9.6	10.6	11.1	12.5	62.8	9.6	21.6
7	12.3	10.5	12.4	11.8	12.1	13.1	13.7	12.1	12.4	12.6	12.2	11.4	11.9	11.9	12.1	11.0	11.2	11.2	10.7	9.1	10.2	10.5	10.6	10.2	13.7	9.1	11.5
8	12.0	11.5	10.0	9.0	9.1	10.4	9.2	8.6	8.5	8.7	7.8	8.0	10.1	7.7	7.5	8.4	7.5	7.7	8.3	8.5	7.8	8.3	8.1	7.6	12.0	7.5	8.8
9	7.9	8.1	7.2	8.0	8.0	8.2	8.0	8.2	8.4	8.0	8.1	8.1	10.0	9.7	8.3	10.4	11.3	12.5	12.7	11.3	13.6	13.2	12.6	10.8	13.6	7.2	9.7
10	11.9	11.2	11.4	11.1	11.0	11.8	12.1	10.4	11.9	12.5	11.4	12.2	11.6	11.8	11.6	11.0	11.8	11.2	11.5	11.0	9.4	9.0	8.4	8.4	12.5	8.4	11.0
11	8.3	7.8	7.5	8.0	7.6	8.1	8.2	10.2	10.2	9.0	10.6	10.4	10.4	10.6	10.7	11.4	10.0	10.7	10.6	8.7	11.0	8.9	8.6	9.1	11.4	7.5	9.5
12	10.5	11.1	11.2	10.1	10.0	10.1	10.0	11.7	13.3	12.1	12.5	12.9	12.9	13.2	13.6	13.7	14.0	12.1	11.4	12.9	12.2	12.5	13.0	13.0	14.0	10.0	12.1
13	14.8	11.4	12.1	11.6	0.8	15.2	13.0	14.5	19.1	15.2	14.8	18.5	22.8	23.9	19.8	18.0	20.0	18.9	15.5	19.2	11.8	8.1	4.1	3.2	23.9	0.8	14.4
14	49.0	13.8	15.0	36.6	23.4	21.3	10.9	8.7	13.6	12.5	18.3	25.9	25.2	54.7	47.8	33.5	33.1	32.9	18.4	13.4	19.6	8.7	6.9	7.8	54.7	6.9	22.9
15	7.2	8.0	7.1	7.8	8.0	8.8	11.5	8.8	10.1	16.9	21.3	32.8	21.8	27.7	25.0	19.6	47.3	10.7	14.1	11.9	11.8	22.3	21.0	39.4	47.3	7.1	17.5
16	10.5	12.5	35.2	21.4	18.7	10.9	17.9	14.0	11.4	12.1	11.9	10.5	10.9	13.1	12.7	12.7	12.8	11.6	11.4	12.2	11.6	11.4	13.1	13.8	35.2	10.5	13.9
17	23.2	19.0	33.0	26.0	19.6	12.2	17.4	11.4	13.3	14.4	16.7	23.3	19.9	13.2	13.8	16.2	14.1	13.1	12.9	12.9	12.2	12.3	13.0	15.7	33.0	11.4	16.6
18	14.2	34.2	30.9	11.1	9.8	12.1	12.6	14.1	11.2	9.8	10.1	10.3	8.7	10.2	10.8	11.9	10.4	11.5	10.3	10.6	11.1	9.5	10.5	29.5	34.2	8.7	13.6
19	17.3	20.7	10.7	19.4	19.2	11.7	7.0	8.8	13.1	31.5	49.7	56.4	58.9	28.2	37.9	26.6	34.9	23.7	22.4	12.9	12.0	11.8	21.3	17.4	58.9	7.0	23.9
20	17.8	14.7	16.2	5.1	26.3	21.6	18.8	27.5	28.7	44.1	38.2	43.8	38.7	41.3	15.9	13.9	12.9	12.7	11.0	12.2	13.7	12.2	12.1	29.0	44.1	5.1	22.0
21	33.1	8.9	19.7	22.2	38.5	22.2	16.2	10.1	13.1	28.4	30.5	35.8	52.1	27.5	34.3	59.9	20.6	24.8	12.2	26.7	13.7	8.6	57.3	18.4	59.9	8.6	26.5
22	10.6	12.2	12.1	15.8	12.8	10.7	8.9	8.4	19.5	13.1	14.2	14.0	14.2	13.0	9.7	10.7	9.8	9.9	11.4	9.7	10.5	11.0	10.6	11.9	19.5	8.4	11.9
23	11.3	10.7	12.5	13.0	19.7	15.2	14.0	13.4	14.0	13.5	13.1	13.5	14.3	15.4	16.2	19.9	19.3	20.6	14.6	15.7	9.3	10.6	10.7	8.0	20.6	8.0	14.1
24	26.6	28.8	11.5	16.5	6.1	27.4	16.4	14.2	19.1	27.3	24.2	30.5	60.0	66.2	27.3	22.6	20.9	35.4	14.9	9.8	14.0	38.5	2.3	21.3	66.2	2.3	24.2
25	22.7	17.0	15.6	8.4	7.3	25.0	27.9	18.2	42.3	27.2	22.5	32.4	35.9	18.5	15.5	18.6	17.7	17.7	13.0	12.3	12.2	12.7	11.2	10.0	42.3	7.3	19.2
26	12.6	39.5	58.1	69.4	37.8	30.7	35.5	9.6	11.9	11.8	12.3	14.9	18.9	23.5	16.8	29.8	37.7	22.8	14.1	13.0	12.9	14.0	14.9	17.8	69.4	9.6	24.2
27	22.3	38.3	50.2	21.4	17.2	42.5	30.0	42.1	46.6	55.6	62.1	54.5	24.3	21.2	17.3	23.5	16.9	19.6	13.8	10.7	8.7	9.3	36.1	68.2	68.2	8.7	31.3
28	42.9	38.3	29.9	18.3	23.3	3.6	16.6	11.0	14.6	15.5	12.8	12.8	14.0	17.2	12.8	11.3	12.5	11.1	12.6	9.6	9.7	10.6	11.2	11.7	42.9	3.6	16.0
29	13.2	12.4	17.1	16.6	6.5	7.9	6.7	10.7	7.3	8.1	5.3	7.3	12.8	43.1	23.1	8.4	12.5	7.6	7.4	8.7	8.4	8.4	6.2	4.5	43.1	4.5	11.2
30	4.5	10.3	8.4	4.6	3.3	3.6	4.4	4.4	4.4	4.0	5.8	7.1	4.1	7.3	3.3	3.3	3.1	3.0	2.8	2.9	5.2	3.9	4.4	4.2	10.3	2.8	4.7
Max.	**49.0**	**62.8**	**58.1**	**69.4**	**38.5**	**42.5**	**35.5**	**42.1**	**46.6**	**55.6**	**62.1**	**56.4**	**60.0**	**66.2**	**59.8**	**59.9**	**48.8**	**61.6**	**45.1**	**26.7**	**19.6**	**38.5**	**62.6**	**68.2**	**69.4**		
Min.	**0.0**	**7.8**	**7.1**	**4.6**	**0.8**	**3.6**	**4.4**	**4.4**	**4.4**	**4.0**	**5.3**	**7.1**	**4.1**	**7.3**	**3.3**	**3.3**	**3.1**	**3.0**	**2.8**	**2.9**	**5.2**	**3.9**	**2.3**	**3.2**		**0.0**	
Avg.	**16.4**	**18.4**	**18.1**	**16.8**	**15.1**	**15.4**	**14.5**	**13.5**	**16.0**	**18.5**	**19.5**	**22.0**	**22.7**	**22.2**	**19.8**	**19.0**	**19.6**	**17.8**	**13.8**	**12.1**	**11.2**	**12.2**	**15.5**	**16.9**			**16.9**

Total Hours in Month 720 **Hours Data Available** 714 **Data Recovery** 99.2%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.9	4.1	4.7	4.7	4.9	4.3	4.6	4.8	6.3	4.4	3.2	4.4	3.7	4.7	4.5	5.4	4.5	4.6	5.5	4.2	3.8	3.9	3.9	5.6	6.3	3.2	4.5
2	6.2	5.1	6.8	6.8	5.6	4.9	5.3	5.6	5.8	5.9	6.4	4.6	4.7	4.7	4.2	4.9	4.7	4.8	4.5	4.1	4.1	4.6	5.2	10.4	10.4	4.1	5.4
3	4.2	4.6	5.5	6.0	6.1	5.6	5.3	5.2	4.4	4.2	4.4	4.0	4.3	4.0	4.4	4.9	10.7	11.4	7.6	6.2	5.0	9.6	17.7	7.6	17.7	4.0	6.4
4	10.1	9.5	9.3	7.3	5.5	5.9	13.3	11.4	10.4	10.2	6.5	5.5	8.5	8.4	9.6	11.9	26.7	31.6	15.3	10.3	6.1	7.7	6.3	9.3	31.6	5.5	10.7
5	6.2	5.5	4.8	6.4	21.6	15.8	21.7	25.0	19.1	26.3	32.3	42.4	28.4	25.0	18.9	15.4	17.1	28.3	17.8	20.5	15.0	54.9	32.9	42.6	54.9	4.8	22.7
6	37.6	23.1	30.1	4.9	34.0	24.9	31.4	29.3	16.1	15.8	37.2	27.8	22.0	15.8	16.2	18.8	19.3	25.7	28.6	18.1	11.5	15.6	11.3	13.9	37.6	4.9	22.0
7	11.7	11.9	11.7	10.6	11.0	8.4	10.3	10.4	8.8	9.9	10.1	10.9	12.0	12.6	12.6	10.8	11.6	10.0	9.5	9.0	8.6	9.6	11.5	9.4	12.6	8.4	10.5
8	9.2	11.4	9.8	9.7	9.8	11.1	12.5	10.2	8.9	10.5	10.9	9.7	10.2	10.1	11.6	27.5	19.8	15.5	14.3	19.0	16.2	20.9	38.7	26.8	38.7	8.9	14.8
9	24.9	36.5	47.0	26.8	21.2	8.5	7.8	11.8	20.0	21.7	42.8	32.2	21.9	19.0	16.6	17.2	14.7	14.5	13.8	13.4	13.6	11.9	12.5	11.4	47.0	7.8	20.1
10	7.3	8.0	9.1	8.6	10.4	11.3	11.9	11.8	11.5	11.9	8.9	12.3	11.7	12.2	11.1	12.2	13.9	12.0	12.4	12.0	13.5	11.5	13.0	20.3	20.3	7.3	11.6
11	12.0	17.4	22.4	34.4	27.1	23.8	12.1	26.3	31.2	20.4	14.6	16.3	17.0	17.4	14.4	20.7	15.9	21.0	23.6	25.9	12.7	7.6	5.6	14.6	34.4	5.6	18.9
12	22.2	8.7		7.6	22.8	43.7	8.9	13.6	13.3	19.3	28.5	34.5	36.8	25.3	38.7	47.6	45.1	17.3	10.5	12.8	10.4	8.8	10.4	18.5	47.6	7.6	22.0
13	12.6	12.1	10.0	8.5	19.5	9.5	9.5	9.1	9.6	11.2	15.2	10.1	8.9	10.6	9.2	9.7	10.4	9.1	8.9	8.9	9.1	9.4	10.3	8.6	19.5	8.5	10.4
14	10.0	9.0	9.0	9.5	7.7	9.9	10.5	10.1	9.3	8.2	9.7	11.1	11.7	10.7	10.2	10.1	10.5	10.4	10.6	11.1	9.3	9.2	8.8	8.8	11.7	7.7	9.8
15	9.5	9.8	9.6	8.8	8.8	9.1	10.0	9.5	10.8	17.6	13.3	12.3	12.5	10.3	12.0	18.8	15.4	15.8	16.3	11.3	12.1	9.6	9.2	9.4	18.8	8.8	11.7
16	9.1	15.1	14.0	13.1	14.1	12.0	11.7	12.2	11.4	11.1	13.0	13.5	14.8	14.5	13.7	12.2	12.5	11.2	11.8	12.6	10.9	11.9	12.6	13.5	15.1	9.1	12.6
17	13.0	9.7	8.9	9.5	8.9	10.7	10.8	9.6	11.5	12.7	12.6	12.1	13.2	13.4	11.2	11.4	11.9	10.6	12.2	12.0	10.8	12.7	9.5	8.6	13.4	8.6	11.1
18	10.2	7.9	8.9	11.1	10.2	8.7	10.7	12.4	10.7	10.4	11.3	12.5	12.5	12.6	11.7	12.0	11.8	12.0	11.6	11.4	12.1	10.9	11.5	9.5	12.6	7.9	11.0
19	9.3	10.0	11.4	17.6	11.0	12.7	12.8	12.2	13.9	14.7	13.6	14.5	14.3	14.4	22.2	20.3	17.5	20.5	14.4	13.5	13.2	51.4	47.1	23.1	51.4	9.3	17.7
20	18.8	11.4	6.7	5.8	7.1	8.9	8.6	7.7	8.7	12.2	15.7	15.3	17.4	16.4	15.9	19.4	21.6	14.9	11.8	9.4	10.3	9.0	8.9	11.9	21.6	5.8	12.2
21	19.3	32.9	31.8	46.3	44.5	38.7	24.4	29.1	32.0	16.8	16.1	24.0	18.8	17.4	13.9	14.7	11.7	12.9	12.2	9.8	18.0	12.1	36.2	15.8	46.3	9.8	22.9
22	27.5	36.9	28.3	31.0	35.6	15.8	15.7	21.3	20.4	25.0	22.0	31.5	15.1	12.5	10.5	11.9	12.5	13.4	13.3	15.3	11.9	12.7	11.2	13.3	36.9	10.5	19.4
23	12.0	8.3	8.4	11.9	9.8	9.3	9.4	10.3	10.0	9.1	9.8	9.9	16.8	22.2	24.5	11.2	10.9	25.3	22.9	38.0	13.1	10.5	10.9	11.1	38.0	8.3	14.0
24	17.2	12.1	11.5	16.5	21.4	34.7	10.5	11.1	10.5	11.4	11.6	13.4	9.0	10.8	13.0	18.0	13.7	14.1	15.7	12.4	14.7	14.0	32.4	12.8	34.7	9.0	15.1
25	10.3	9.6	8.6	8.3	9.8	12.1	14.6	10.6	8.8	8.5	9.0	12.2	12.2	14.4	18.1	17.2	14.7	16.4	16.5	17.3	11.9	7.9	6.4	1.9	18.1	1.9	11.6
26	0.0	6.6	4.8	0.0	14.8	19.2	35.2	18.9	18.6	14.5	10.5	11.7	14.2	10.5	11.6	8.5	9.2	9.4	8.3	9.4	8.6	8.6	8.9	9.3	35.2	0.0	11.3
27	9.6	8.9	10.7	10.3	9.8	16.4	9.5	12.6	10.8	9.1	22.4	44.2	49.6	38.8	46.1	49.6	27.0	26.5	12.3	9.2	8.5	16.1	10.9	19.9	49.6	8.5	20.4
28	16.5	26.4	26.7	39.2	23.3	26.5	23.4	35.3	23.6	16.3	15.3	12.2	11.8	13.0	12.5	10.8	9.2	8.2	9.6	8.0	8.9	8.7	8.4	8.2	39.2	8.0	16.7
29	8.2	8.2	8.7	7.8	9.4	8.2	8.3	9.0	10.4	10.7	9.5	9.5	10.2	12.7	11.1	8.9	9.6	9.0	9.1	8.4	8.8	8.7	8.8	9.7	12.7	7.8	9.3
30	9.1	9.0	9.2	10.8	10.8	8.9	8.9	9.5	10.2	9.0	16.9	15.4	33.3	13.3	12.4	11.7	12.8	11.4	10.8	11.8	10.9	10.2	9.6	9.8	33.3	8.9	11.9
31	9.5	9.1	8.8	8.5	8.0	9.0	9.0	9.6	13.6	11.1	10.9	14.2	20.6	11.6	11.1	13.0	13.1	20.3	14.7	12.1	16.4	7.7	9.5	9.8	20.6	7.7	11.7
Max.	**37.6**	**36.9**	**47.0**	**46.3**	**44.5**	**43.7**	**35.2**	**35.3**	**32.0**	**26.3**	**42.8**	**44.2**	**49.6**	**38.8**	**46.1**	**49.6**	**45.1**	**31.6**	**28.6**	**38.0**	**18.0**	**54.9**	**47.1**	**42.6**	**54.9**		
Min.	**0.0**	**4.1**	**4.7**	**0.0**	**4.9**	**4.3**	**4.6**	**4.8**	**4.4**	**4.2**	**3.2**	**4.0**	**3.7**	**4.0**	**4.2**	**4.9**	**4.5**	**4.6**	**4.5**	**4.1**	**3.8**	**3.9**	**3.9**	**1.9**		**0.0**	
Avg.	**12.5**	**12.9**	**13.2**	**13.2**	**15.0**	**14.5**	**12.8**	**13.7**	**13.2**	**12.9**	**15.0**	**16.3**	**16.1**	**14.2**	**14.6**	**15.7**	**14.8**	**15.1**	**13.1**	**12.8**	**11.0**	**13.1**	**14.2**	**13.1**			**13.9**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.1	8.7	9.1	10.1	14.8	10.1	9.8	11.4	11.9	15.3	10.7	11.5	10.9	13.5	14.3	12.1	14.0	13.3	13.0	12.9	12.5	12.9	12.6	15.0	15.3	8.7	12.1
2	13.5	12.8	12.6	12.1	11.5	15.0	10.9	12.3	12.2	10.2	12.8	16.2	17.6	16.7	13.2	14.3	12.4	12.6	11.5	11.0	11.2	9.8	11.7	11.4	17.6	9.8	12.7
3	10.8	9.4	8.3	8.9	8.5	8.8	8.3	8.8	9.4	11.2	10.0	9.5	8.7	9.2	9.0	7.6	7.1	7.8	7.9	10.0	9.0	8.7	8.1	6.9	11.2	6.9	8.8
4	7.9	8.7	7.7	9.6	22.2	19.8	11.0	15.5	13.5	14.6	17.1	41.2	39.6	14.6	27.0	13.1	8.8	7.9	11.5	4.9	17.2	6.9	0.0	3.6	41.2	0.0	14.3
5	6.7	15.1	47.3	34.2	21.6	12.4	23.2	18.8	15.3	19.0	17.4	14.8	10.9	17.6	12.4	15.4	14.8	16.5	13.7	13.9	14.1	23.0	44.7	23.6	47.3	6.7	19.4
6	9.6	9.8	37.3	36.4	24.6	15.4	9.2	10.7	11.5	13.5	15.1	17.7	17.7	17.3	18.6	16.1	14.2	15.5	13.0	9.1	12.5	18.6	13.4	10.1	37.3	9.1	16.1
7	20.0	26.1	23.1	13.2	10.5	49.6	8.5	6.9	8.8	10.3	8.1	8.8	8.7	9.4	11.0	9.9	10.0	9.2	8.6	8.7	8.6	9.5	8.8	8.6	49.6	6.9	12.7
8	9.3	9.1	9.0	9.1	21.4	19.9	10.3	12.2	12.7	8.6	11.0	10.1	49.7	27.3	22.3	42.5	44.1	10.0	9.4	8.9	12.7	9.8	8.5	17.3	49.7	8.5	16.9
9	18.7	41.1	28.7	34.0	18.1	14.5	16.5	9.9	17.7	20.7	12.5	17.8	10.6	10.1	11.2	11.7	10.0	7.6	9.2	9.5	11.1	13.2	12.0	9.2	41.1	7.6	15.6
10	10.0	10.6	10.6	9.5	9.3	8.8	9.2	9.3	10.0	11.2	12.7	13.2	10.1	11.6	11.2	10.7	9.5	9.9	10.9	11.4	9.4	10.8	9.9	11.4	13.2	8.8	10.5
11	11.4	13.0	12.7	13.7	13.4	13.2	12.9	10.3	10.5	11.8	11.8	10.1	11.3	11.2	13.3	15.5	10.5	10.2	10.8	15.6	9.7	11.6	11.9	10.3	15.6	9.7	11.9
12	10.9	13.6	18.7	20.6	11.0	10.5	10.2	10.6	9.9	9.7	10.9	11.3	12.6	15.9	16.9	12.5	11.9	14.5	10.6	9.5	11.5	10.2	27.6	17.3	27.6	9.5	13.3
13	10.0	13.7	20.4	14.0	13.1	23.0	8.8	10.3	9.9	8.5	8.0	8.6	8.4	9.0	10.9	9.0	10.1	9.4	8.7	9.7	8.4	8.4	8.9	8.2	23.0	8.0	10.7
14	9.5	9.3	9.4	11.7	16.6	16.7	10.6	10.6	13.1	10.3	10.7	9.2	8.1	9.9	12.0	11.9	11.0	9.9	10.3	8.3	8.9	9.7	8.6	8.0	16.7	8.0	10.6
15	8.8	8.5	11.0	10.9	11.4	11.4	11.1	9.6	8.9	10.5	12.3	12.3	12.8	11.3	12.5	13.2	14.0	15.3	20.5	19.6	11.7	12.5	9.4	22.0	22.0	8.5	12.5
16	18.6	5.2	9.8	11.7	7.0	7.7	7.8	8.6	11.3	19.6	17.2	21.9	20.6	22.7	20.8	22.3	10.2	12.0	17.2	25.1	12.1	42.7	0.0	0.7	42.7	0.0	14.7
17	8.9	42.9	20.1	18.0	6.2	18.2	24.7	15.9	10.2	32.2	58.6	26.8	23.9	15.3	28.2	23.9	19.4	9.1	8.9	8.7	11.4	9.0	9.1	9.8	58.6	6.2	19.1
18	9.4	8.9	9.5	10.2	10.5	9.5	10.5	9.9	9.3	10.6	11.1	11.1	10.9	11.0	10.8	9.9	8.5	8.7	9.8	8.3	10.0	11.6	10.8	15.0	15.0	8.3	10.2
19	11.3	38.6	29.5	21.2	20.8	20.1	30.8	32.9	38.6	25.8	13.2	13.5	11.2	10.7	9.5	11.2	10.6	10.3	10.6	9.8	13.7	9.8	25.8	18.7	38.6	9.5	18.7
20	42.3	9.7	9.1	9.9	9.6	12.3	8.1	10.6	11.3	11.1	9.1	10.7	12.0	14.5	18.0	19.0	16.8	12.3	12.5	9.6	19.8	25.8	20.2	15.7	42.3	8.1	14.6
21	25.6	7.4	7.6	48.5	48.5	41.1	58.2	22.3	10.3	28.1	25.5	43.1	26.1	23.0	14.7	16.3	14.8	13.1	11.5	13.8	14.0	12.7	12.1	11.8	58.2	7.4	22.9
22	12.7	17.2	12.5	10.7	11.1	11.3	11.6	10.5	10.3	10.4	10.3	9.9	8.4	11.4	14.0	12.2	10.6	12.9	12.7	10.4	10.0	8.9	16.2	21.3	21.3	8.4	12.0
23	38.5	28.0	11.1	9.3	10.9	0.0	0.0	5.2	16.4	17.1	20.7	56.1	24.5	25.0	22.4	24.8	28.0	25.5	13.4	9.2	10.2	17.0	20.3	39.5	56.1	0.0	19.7
24	11.1	9.2	8.5	9.5	11.5	11.3	11.1	9.4	10.0	8.0	7.4	7.9	8.7	9.2	9.5	10.9	10.8	10.0	12.4	10.1	10.3	8.1	8.5	8.6	12.4	7.4	9.7
25	10.0	8.6	10.2	9.1	17.0	26.1	15.3	19.1	10.0	21.2	34.9	36.5	15.6	15.2	27.4	22.2	27.5	14.1	18.8	14.3	21.7	18.7	15.0	6.9	36.5	6.9	18.2
26	7.9	39.7	46.7	25.7	43.5	25.2	16.3	29.5	21.4	15.3	12.6	11.0	18.8	32.4	50.9	32.9	12.8	15.8	15.7	8.6	14.7	10.6	3.2	1.7	50.9	1.7	21.4
27	19.3	21.2	23.0	29.0	23.4	33.2	27.6	15.5	17.3	21.5	57.4	39.7	22.2	29.5	28.1	17.5	13.8	17.4	12.6	11.6	14.9	12.8	9.7	8.8	57.4	8.8	22.0
28	62.4	15.4	10.1	8.6	8.5	8.3	8.7	8.5	8.7	8.0	8.6	11.3	11.8	12.0	12.5	11.6	12.6	14.7	37.5	27.6	13.8	31.6	18.1	12.9	62.4	8.0	16.0
29	25.9	2.2	7.2	27.9	6.1	20.9	34.9	3.7	23.6	15.6	45.7	18.5	13.7	18.3	19.0	17.7	20.4	17.6	12.0	11.9	9.9	0.0	43.0	18.6	45.7	0.0	18.1
30	19.8	9.3	10.2	8.8	9.0	9.0	9.7	8.3	9.1	9.8	10.2	11.1	9.4	8.5	7.5	7.5	7.7	7.9	8.5	7.4	6.9	8.9	9.4	7.0	19.8	6.9	9.2
31	7.5	8.7	6.8	16.4	22.3	51.9	32.5	20.9	10.2	11.6	8.9	11.3	11.0	12.0	11.1	10.5	11.1	10.5	10.9	10.8	11.6	10.0	9.6	9.3	51.9	6.8	14.1
Max.	**62.4**	**42.9**	**47.3**	**48.5**	**48.5**	**51.9**	**58.2**	**32.9**	**38.6**	**32.2**	**58.6**	**56.1**	**49.7**	**32.4**	**50.9**	**42.5**	**44.1**	**25.5**	**37.5**	**27.6**	**21.7**	**42.7**	**44.7**	**39.5**	**62.4**		
Min.	**6.7**	**2.2**	**6.8**	**8.6**	**6.1**	**0.0**	**0.0**	**3.7**	**8.7**	**8.0**	**7.4**	**7.9**	**8.1**	**8.5**	**7.5**	**7.5**	**7.1**	**7.6**	**7.9**	**4.9**	**6.9**	**0.0**	**0.0**	**0.7**		**0.0**	
Avg.	**16.0**	**15.5**	**16.1**	**16.8**	**15.9**	**17.9**	**15.4**	**12.8**	**13.0**	**14.6**	**17.2**	**17.8**	**15.7**	**15.3**	**16.8**	**15.7**	**14.1**	**12.3**	**12.7**	**11.6**	**12.0**	**13.3**	**13.8**	**12.6**			**14.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.8	9.3	8.7	7.3	7.9	7.3	7.0	7.0	10.5	10.0	10.5	13.1	16.1	18.3	19.3	16.1	12.4	9.8	9.7	9.5	10.9	9.8	10.4	10.8	19.3	7.0	10.9
2	11.3	7.9	8.4	10.1	11.6	8.3	9.6	12.8	17.4	9.8	11.1	11.9	10.2	12.0	12.9	11.9	12.3	11.6	24.6	50.8	44.9	42.3	14.1	20.0	50.8	7.9	16.6
3	19.4	20.8	22.5	28.4	25.7	25.7	22.2	18.2	19.8	13.4	30.9	55.7	40.5	58.7	52.5	37.3	28.4	26.8	15.0	15.5	37.8	21.4	0.0	0.4	58.7	0.0	26.5
4	10.0	0.0	14.6	19.1	11.0	31.2	51.0	29.5	8.9	13.2	14.1	24.8	18.8	29.6	30.6	25.9	44.2	31.2	27.3	11.0	11.9	8.4	23.3	19.0	51.0	0.0	21.2
5	13.5	15.4	10.0	11.9	10.5	12.5	11.7	15.4	12.3	14.2	12.3	12.9	14.3	14.6	12.8	12.9	15.9	11.1	11.7	13.5	50.9	15.7	11.7	22.4	50.9	10.0	15.0
6	25.6	19.0	29.0	13.8	8.1	8.5	7.4	9.7	9.8	11.4	13.5	15.1	16.5	17.5	19.4	24.4	17.1	10.1	8.6	8.5	9.4	8.4	9.3	12.6	29.0	7.4	13.9
7	9.3	10.4	13.7	12.3	12.0	12.4	12.1	12.9	14.7	14.0	12.6	11.3	11.8	11.7	11.5	11.8	11.0	12.6	11.9	11.2	12.6	12.6	12.4	9.6	14.7	9.3	12.0
8	11.9	11.6	11.5	11.9	10.4	9.4	8.5	8.3	10.2	11.1	12.4	12.6	12.5	12.7	11.3	12.2	11.7	8.6	9.9	12.4	10.3	9.6	8.8	9.6	12.7	8.3	10.8
9	9.8	11.0	10.1	9.0	10.8	22.0	17.6	16.1	15.6	10.4	16.0	17.0	15.1	16.5	13.9	12.3	12.8	12.1	13.6	12.8	14.5	32.9	17.3	0.2	32.9	0.2	14.1
10	16.5	30.0	22.2	14.4	20.9	11.6	11.3	16.8	24.7	25.5	21.3	24.7	28.3	27.7	23.7	19.8	14.1	14.4	10.7	22.1	1.9	15.8	6.9	0.0	30.0	0.0	17.7
11	14.9	24.8	30.9	27.3	15.4	17.9	6.1	32.2	23.3	8.0	15.9	46.3	29.3	25.7	27.0	41.5	45.6	19.2	17.8	14.3	19.9	35.8	25.5	36.2	46.3	6.1	25.0
12	26.7	32.6	33.8	17.7	45.4	47.4	52.1	18.9	36.7	23.2	12.9	51.2	48.8	69.3	41.3	18.9	15.3	17.1	27.0	6.1	33.8	43.1	12.1	12.3	69.3	6.1	31.0
13	19.2	19.1	15.0	16.6	22.1	15.3	30.8	28.5	36.2	33.3	13.3	16.0	14.7	13.2	12.4	12.4	13.2	11.1	11.1	10.8	9.4	12.2	12.1	12.4	36.2	9.4	17.1
14	9.3	10.7	9.4	8.8	9.6	12.7	11.7	11.6	11.7	11.8	12.7	10.2	11.5	9.6	11.7	11.7	8.7	9.2	9.2	9.4	10.3	13.5	13.0	10.7	13.5	8.7	10.8
15	8.0	9.6	12.6	9.7	11.1	10.3	8.7	10.3	9.0	9.1	9.1	9.2	10.5	10.4	9.2	8.8	9.6	9.4	10.0	11.6	11.5	10.6	12.5	11.8	12.6	8.0	10.1
16	11.7	12.5	14.3	14.2	13.9	12.1	11.4	11.7	14.9	13.7	11.4	13.7	12.6	13.4	14.1	14.3	14.4	13.8	13.6	17.2	9.8	14.8	14.2	14.4	17.2	9.8	13.4
17	12.2	12.7	17.8	10.6	12.1	13.4	16.7	13.7	10.8	11.3	12.1	13.0	13.7	13.7	15.2	15.5	14.5	13.8	12.7	12.5	13.3	8.0	0.0	1.3	17.8	0.0	12.1
18	0.0	3.8	41.7	30.9	12.4	13.2	10.5	10.7	10.2	10.5	10.9	11.4	7.9	9.1	9.2	9.4	9.1	8.3	8.0	8.0	8.9	8.3	8.3	8.1	41.7	0.0	11.2
19	8.9	7.6	7.9	9.8	10.4	13.1	9.9	12.5	33.4	16.5	12.3	8.5	14.0	14.2	6.4	15.2	9.8	10.4	4.5	14.1	12.0	19.1	10.2	7.6	33.4	4.5	12.0
20	5.6	17.1	3.0	17.8	4.2	16.3	5.9	12.1	12.5	15.7	17.6	16.8	11.1	9.3	11.2	9.6	16.1	14.7	14.8	8.2	8.2	9.1	8.3	9.4	17.8	3.0	11.4
21	8.5	12.3	7.2	15.1	19.7	25.8	34.6	10.8	9.2	8.4	9.4	9.5	9.7	10.8	10.5	10.0	7.5	9.0	7.5	7.6	8.4	7.6	7.9	8.4	34.6	7.2	11.5
22	11.5	37.2	19.7	15.3	10.5	13.3	11.7	10.0	9.0	8.9	9.3	9.3	10.2	9.4	11.0	10.3	11.1	11.9	11.4	10.3	8.7	10.3	8.8	8.1	37.2	8.1	12.0
23	8.0	7.9	7.8	8.6	9.1	8.2	9.5	12.7	12.0	8.1	8.5	9.2	9.0	8.9	9.8	9.6	10.0	10.7	9.2	10.0	9.8	10.9	11.6	11.6	12.7	7.8	9.6
24	10.7	19.2	14.6	21.9	9.6	2.3	10.3	0.7	3.9	17.9	36.5	24.3	47.1	22.2	36.8	17.0	11.2	8.6	10.6	14.1	15.1	9.9	8.2	28.4	47.1	0.7	16.7
25	46.7	53.7	52.6	15.3	8.1	16.7	17.2	19.6	12.6	9.1	12.4	16.1	25.1	17.2	15.2	11.3	12.1	9.1	9.9	8.9	12.0	11.9	15.8	16.6	53.7	8.1	18.5
26	14.3	22.2	13.8	13.5	9.5	7.1	7.3	7.0	7.6	8.7	8.7	8.6	8.2	8.2	7.5	7.6	8.7	8.0	11.6	11.1	13.4	11.2	11.3	12.3	22.2	7.0	10.3
27	11.7	9.4	9.8	8.8	10.1	14.2	17.4	13.2	9.2	14.4	12.1	20.4	28.1	20.6	18.3	12.1	10.8	16.0	11.1	12.5	30.0	17.9	9.2	14.8	30.0	8.8	14.7
28	9.6	8.5	7.2	7.3	6.9	6.7	8.4	7.8	8.0	9.7	9.6	8.9	9.6	8.9	9.6	10.8	10.5	10.9	9.9	8.7	8.5	10.3	11.2	11.2	11.2	6.7	9.1
29	8.7	12.2	0.0	0.0	0.0	30.6	34.3	16.4	11.2	10.1	10.4	12.5	13.0	12.7	13.3	11.3	13.0	10.5	9.1	7.6	7.5	7.7	9.9	9.3	34.3	0.0	11.3
30	12.4	10.3	38.0	4.8	6.6	15.9	6.9	0.8	7.7	4.6	14.5	42.6	18.1	14.6	13.4	12.1	13.5	12.7	13.2	11.3	11.1	11.6	9.0	8.5	42.6	0.8	13.1
Max.	**46.7**	**53.7**	**52.6**	**30.9**	**45.4**	**47.4**	**52.1**	**32.2**	**36.7**	**33.3**	**36.5**	**55.7**	**48.8**	**69.3**	**52.5**	**41.5**	**45.6**	**31.2**	**27.3**	**50.8**	**50.9**	**43.1**	**25.5**	**36.2**	**69.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.3**	**5.9**	**0.7**	**3.9**	**4.6**	**8.5**	**8.5**	**7.9**	**8.2**	**6.4**	**7.6**	**7.5**	**8.0**	**4.5**	**6.1**	**1.9**	**7.6**	**0.0**	**0.0**		**0.0**	
Avg.	**13.2**	**16.0**	**16.9**	**13.7**	**12.5**	**15.4**	**16.0**	**13.6**	**14.4**	**12.9**	**13.8**	**18.6**	**17.9**	**18.0**	**17.0**	**15.1**	**14.8**	**12.8**	**12.5**	**12.7**	**15.5**	**15.3**	**11.1**	**11.9**			**14.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.9	8.2	9.4	9.6	8.7	8.7	8.7	9.1	9.1	9.1	12.0	11.6	8.9	10.7	10.4	11.9	9.8	8.8	8.9	9.8	9.7	11.0	10.6	9.7	12.0	8.2	9.7
2	8.7	8.4	9.4	10.9	12.5	11.8	11.9	12.7	10.5	10.2	11.5	11.7	12.0	11.0	9.0	8.4	9.1	10.9	10.3	11.4	9.0	8.3	8.2	8.6	12.7	8.2	10.3
3	8.6	8.3	9.0	11.2	11.9	10.4	10.7	11.7	10.8	12.1	13.1	13.3	13.4	11.0	14.0	12.1	12.1	11.0	10.1	11.8	9.6	9.3	11.8	10.4	14.0	8.3	11.2
4	10.3	9.4	9.3	8.3	10.2	11.5	10.8	9.4	9.6	10.9	10.8	13.5	12.7	14.6	15.9	11.1	13.3	11.4	26.6	17.7	10.3	13.0	16.0	11.2	26.6	8.3	12.4
5	11.5	19.9	16.9	17.8	12.5	39.1	46.2	22.4	41.1	36.6	20.8	24.4	21.1	12.7	19.8	16.9	9.1	9.1	8.9	8.4	9.0	12.0	12.2	11.0	46.2	8.4	19.1
6	11.1	12.7	12.4	11.7	12.3	10.5	11.1	10.5	11.7	13.3	13.5	10.7	14.0	12.2	10.9	12.7	11.8	10.8	12.8	11.0	11.4	12.0	12.1	11.4	14.0	10.5	11.9
7	11.5	11.3	10.6	8.8	8.6	8.4	10.1	8.8	9.7	11.6	12.5	12.2	11.0	11.3	11.2	9.5	9.2	10.6	12.0	11.9	11.6	11.4	11.7	11.0	12.5	8.4	10.7
8	11.5	10.8	9.4	8.7	9.4	9.0	8.3	8.9	8.9	9.0	8.7	8.9	9.0	8.9	9.0	9.2	10.3	9.1	9.5	10.5	9.1	9.0	8.7	10.1	11.5	8.3	9.3
9	9.2	8.8	9.2	9.3	10.9	9.0	9.9	10.2	11.0	11.4	11.9	12.0	11.8	12.3	12.2	11.6	11.8	11.3	23.4	10.6	9.9	8.3	8.4	8.7	23.4	8.3	11.0
10	26.8	8.3	10.1	8.7	11.1	9.6	11.4	23.3	11.8	11.4	10.9	10.7	13.1	13.0	13.1	13.3	13.0	11.7	9.4	10.4	10.0	9.0	10.2	9.8	26.8	8.3	12.1
11	10.2	11.3	11.1	10.9	10.6	13.2	12.4	10.2	11.9	12.7	15.9	11.5	14.3	12.3	13.8	17.9	11.0	12.0	10.1	17.1	26.2	31.2	45.1	40.1	45.1	10.1	16.4
12	14.4	27.8	15.3	22.0	23.3	14.9	15.7	21.8	26.6	28.0	20.0	11.6	11.2	11.7	9.9	8.8	9.9	9.9	9.3	9.0	9.2	10.2	11.4	9.3	28.0	8.8	15.0
13	11.5	11.1	28.2	19.6	8.9	8.8	13.9	16.8	22.8	21.7	12.2	8.8	10.4	17.0	11.8	19.5	9.1	10.9	13.2	8.8	19.4	0.0	13.6	7.1	28.2	0.0	13.5
14	11.8	33.4	31.2	30.8	19.6	31.4	13.4	0.0	1.5	2.4	12.9	10.7	10.6	10.4	19.6	10.0	10.6	15.5	15.6	22.8	19.8	17.8	24.3	11.9	33.4	0.0	16.2
15	9.9	9.1	29.6	34.5	30.7	52.2	19.1	14.3	11.2	10.5	13.6	15.0	14.8	13.2	13.0	13.8	11.7	11.6	11.4	33.7	29.4	13.8	11.6	10.9	52.2	9.1	18.3
16	14.5	13.7	13.6	13.5	13.2	13.3	12.4	15.6	11.0	11.0	13.5	12.9	14.6	13.4	13.1	11.5	11.3	12.3	11.6	11.4	11.7	11.4	11.2	12.2	15.6	11.0	12.7
17	12.7	12.6	11.4	11.1	10.9	11.4	11.0	10.5	10.8	11.1	12.5	11.7	12.7	12.4	13.0	10.3	10.6	11.1	13.2	10.8	11.5	11.1	11.2	10.8	13.2	10.3	11.5
18	8.5	11.3	9.3	7.7	8.3	9.3	8.3	8.4	8.3	8.1	9.3	13.3	18.5	11.6	16.1	8.9	7.2	8.5	12.2	10.7	21.4	10.0	11.3	9.2	21.4	7.2	10.6
19	8.6	8.8	9.5	16.7	17.4	20.8	17.7	11.7	11.3	10.0	11.4	12.7	13.3	11.9	11.3	12.7	11.8	37.7	44.6	17.3	29.9	14.6	12.9	17.8	44.6	8.6	16.3
20	12.3	11.7	15.2	10.0	11.8	10.3	28.8	40.1	27.5	14.3	17.5	21.4	14.1	40.1	15.7	10.6	20.4	0.0	5.5	12.7	18.9	17.8	19.6	11.3	40.1	0.0	17.0
21	19.2	39.5	20.1	32.3	8.4	20.1	23.7	19.4	10.7	12.9	16.0	16.1	13.7	13.8	14.4	14.8	13.5	10.1	18.3	25.5	12.1	15.0	10.2	36.8	39.5	8.4	18.2
22	16.5	9.5	9.5	7.4	7.9	10.2	9.5	8.9	19.3	21.0	17.3	11.7	14.3	18.0	21.2	30.5	9.4	8.0	8.1	7.0	15.5	10.1	8.0	9.0	30.5	7.0	12.8
23	8.5	10.9	10.2	9.9	8.7	8.6	9.4	8.7	10.3	8.5	9.5	8.7	10.8	15.2	14.7	16.1	15.8	13.6	22.6	36.4	10.8	19.1	18.6	16.8	36.4	8.5	13.4
24	11.9	29.8	12.6	23.2	10.2	10.3	8.9	9.1	9.2	11.4	8.1	6.6	6.3	6.4	6.1	6.6	6.2	7.0	6.0	5.9	7.0	7.2	6.8	6.8	29.8	5.9	9.6
25	7.2	7.0	7.6	7.6	8.2	8.5	8.7	8.7	7.5	7.8	8.4	7.7	8.6	8.8	7.6	7.8	7.8	7.6	7.7	7.8	7.6	8.0	7.2	7.2	8.8	7.0	7.8
26	7.3	7.3	7.7	7.9	8.0	7.5	8.0	8.0	7.5	8.2	9.1	8.0	7.5	8.7	8.1	10.8	22.9	13.5	9.7	8.6	7.4	7.8	7.5	7.3	22.9	7.3	8.9
27	8.0	7.5	7.3	7.9	6.9	8.3	7.0	8.0	9.1	9.8	16.7	11.7	13.6	7.5	13.9	8.6	8.6	62.7	51.0	17.4	27.0	40.1	0.0	0.0	62.7	0.0	14.9
28	0.0	5.2	8.2	7.6	10.0	12.3	9.0	12.6	11.1	10.7	14.7	23.7	25.9	11.9	12.9	12.0	12.4	12.6	12.1	11.9	12.5	11.7	9.5	11.1	25.9	0.0	11.7
29	10.6	10.0	11.7	10.2	7.7	8.1	7.4	8.0	8.9	7.7	8.0	13.8	10.3	9.9	9.7	10.7	8.4	7.2	7.7	6.8	6.8	6.9	6.6	7.8	13.8	6.6	8.8
30	6.9	8.4	8.5	26.4	9.3	7.8	7.5	6.9	22.5	22.9	19.0	51.3	44.8	9.9	7.7	7.5	6.9	7.1	6.7	6.8	7.4	7.0	7.4	7.6	51.3	6.7	13.5
31	7.8	8.8	8.3	9.1	6.5	7.0	6.4	10.5	9.3	9.5	7.2	7.3	6.4	7.0	8.3	7.9	8.2	7.7	10.6	8.1	7.7	11.2	13.1	11.8	13.1	6.4	8.6
Max.	**26.8**	**39.5**	**31.2**	**34.5**	**30.7**	**52.2**	**46.2**	**40.1**	**41.1**	**36.6**	**20.8**	**51.3**	**44.8**	**40.1**	**21.2**	**30.5**	**22.9**	**62.7**	**51.0**	**36.4**	**29.9**	**40.1**	**45.1**	**40.1**	**62.7**		
Min.	**0.0**	**5.2**	**7.3**	**7.4**	**6.5**	**7.0**	**6.4**	**0.0**	**1.5**	**2.4**	**7.2**	**6.6**	**6.3**	**6.4**	**6.1**	**6.6**	**6.2**	**0.0**	**5.5**	**5.9**	**6.8**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**10.8**	**12.9**	**12.6**	**13.9**	**11.4**	**13.6**	**12.8**	**12.4**	**13.0**	**12.8**	**12.8**	**13.7**	**13.7**	**12.5**	**12.5**	**12.1**	**11.1**	**12.6**	**14.2**	**13.2**	**13.5**	**12.4**	**12.2**	**11.8**			**12.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.3	9.1	10.3	9.1	25.8	6.9	7.9	7.3	9.1	8.2	6.9	7.5	8.3	10.0	8.9	9.1	9.5	8.2	9.0	6.2	8.1	10.1	8.8	8.0	25.8	6.2	9.2
2	7.3	7.3	6.5	6.9	6.9	7.2	6.2	5.7	5.8	6.4	5.7	6.0	6.2	5.8	6.7	6.3	5.9	6.5	6.9	7.8	7.3	8.6	6.7	7.4	8.6	5.7	6.7
3	6.2	7.5	6.3	6.6	6.2	6.5	7.0	6.8	7.2	7.1	6.6	6.9	6.9	7.1	7.4	7.5	13.6	7.5	9.4	10.2	12.1	8.2	5.9	9.8	13.6	5.9	7.8
4	8.6	6.4	12.4	7.2	12.0	14.1	17.8	46.9	8.8	10.4	12.8	12.2	6.3	6.3	7.5	8.2	14.1	7.0	7.2	7.1	13.9	24.1	15.1	15.1	46.9	6.3	12.6
5	22.9	19.4	13.2	8.5	9.2	11.8	6.8	8.5	8.0	17.7	19.4	14.2	12.7	5.7	4.8	7.4	7.1	12.2	6.4	44.9	46.6	6.6	16.5	17.9	46.6	4.8	14.5
6	15.4	10.5	6.8	7.0	8.2	6.7	8.1	7.5	6.9	6.1	7.3	7.5	9.8	11.3	13.1	10.7	12.2	10.4	11.8	12.4	11.0	12.7	13.4	14.4	15.4	6.1	10.0
7	14.1	13.8	13.3	9.2	8.9	9.1	9.3	9.2	9.0	8.7	7.8	8.1	8.0	8.2	9.6	8.9	9.0	10.3	9.6	9.7	8.8	12.1	12.8	12.6	14.1	7.8	10.0
8	10.0	12.4	15.6	14.8	9.9	7.4	9.2	9.2	7.5	8.2	12.6	12.2	12.6	13.2	13.5	12.3	13.5	11.9	13.6	10.1	10.7	11.6	14.0	12.5	15.6	7.4	11.6
9	13.9	12.2	12.0	11.5	13.7	8.1	9.7	7.7	6.8	7.5	6.6	12.2	12.5	10.3	7.1	6.8	8.5	7.2	6.5	6.8	7.2	6.3	6.5	7.3	13.9	6.3	8.9
10	7.2	6.7	6.7	6.9	7.6	8.3	7.2	6.3	6.0	8.5	8.6	6.8	6.4	6.8	7.8	8.3	7.0	10.9	6.1	10.4	9.0	19.5	11.0	9.2	19.5	6.0	8.3
11	6.4	8.2	6.8	6.9	7.5	6.7	8.6	7.5	14.2	9.7	12.7	10.0	8.5	10.0	13.9	9.6	7.7	7.2	8.9	7.6	6.6	7.3	8.1	9.0	14.2	6.4	8.7
12	8.5	7.2	8.7	9.9	7.1	10.1	12.4	12.0	9.3	8.1	6.7	8.4	9.3	12.0	13.8	14.7	13.5	12.3	19.8	28.9	14.5	12.1	8.3	8.4	28.9	6.7	11.5
13	8.2	9.3	7.1	7.3	8.9	9.5	8.2	8.0	7.7	8.5	11.1	11.4	11.7	11.7	10.2	8.9	10.6	11.6	10.7	11.7	9.9	12.5	12.4	8.4	12.5	7.1	9.8
14	8.4	9.4	8.3	7.5	7.2	8.4	7.6	6.9	7.1	7.6	7.7	11.5	8.2	8.5	7.4	9.8	8.3	7.2	8.9	9.1	9.2	11.5	13.4	11.4	13.4	6.9	8.8
15	12.8	12.0	11.6	10.5	10.3	8.8	10.6	9.7	10.1	12.4	11.1	14.0	11.0	11.1	9.9	10.6	12.6	10.9	11.3	10.7	12.7	13.5	13.7	10.9	14.0	8.8	11.4
16	9.3	8.1	9.4	11.5	11.8	13.6	13.4	7.7	7.7	9.3	7.9	9.3	7.1	7.3	10.0	9.0	8.1	8.0	7.7	8.1	9.5	11.0	8.7	10.0	13.6	7.1	9.3
17	8.7	8.7	9.0	8.6	7.3	7.0	7.6	9.3	8.5	7.3	7.5	5.6	9.3	11.0	12.0	11.4	11.7	11.3	11.6	9.7	9.0	8.1	12.0	7.4	12.0	5.6	9.1
18	13.0	7.5	7.1	7.7	7.9	8.0	17.4	7.8	9.1	13.7	9.1	7.7	9.0	6.6	7.8	16.9	15.9	8.0	8.6	11.7	9.2	11.8	31.7	22.7	31.7	6.6	11.5
19	10.3	11.5	15.7	9.8	8.3	10.1	9.1	11.6	10.6	13.6	12.6	12.1	12.0	10.7	10.8	11.4	12.3	12.1	14.1	9.4	13.3	12.0	11.8	9.5	15.7	8.3	11.4
20	9.4	10.0	13.1	17.9	9.5	13.5	35.1	21.2	13.4	12.8	8.3	10.3	10.7	11.5	7.7	12.2	11.6	8.9	8.7	7.0	6.6	7.8	7.9	11.5	35.1	6.6	11.9
21	11.9	11.7	11.8	11.9	12.2	12.7	12.5	11.5	12.7	15.8	13.9	14.4	12.9	12.3	13.7	11.9	12.2	14.9	16.0	15.5	15.7	12.2	13.0	17.0	17.0	11.5	13.3
22	20.0	20.8	18.5	13.3	12.1	9.3	9.6	10.9	13.7	7.4	6.1	7.5	6.8	9.9	6.1	5.6	6.0	7.5	6.0	6.7	5.8	9.2	10.8	7.3	20.8	5.6	9.9
23	9.3	15.5	15.5	13.6	10.6	7.6	32.8	10.1	11.0	8.9	10.0	19.8	7.5	8.4	5.9	6.5	14.7	19.8	20.9	18.4	24.3	15.4	16.2	17.3	32.8	5.9	14.2
24	19.6	15.5	16.2	23.7	14.7	17.9	15.2	23.8	39.5	14.7	64.9	20.3	43.0	39.8	31.1	17.1	8.4	8.1	7.8	7.2	7.0	7.5	7.5	7.6	64.9	7.0	19.9
25	8.5	8.9	8.3	7.9	8.3	10.7	11.5	7.4	6.7	8.1	8.5	8.8	11.4	13.8	27.5	24.1	11.7	12.2	10.8	13.4	11.5	12.3	12.0	11.8	27.5	6.7	11.5
26	11.3	9.0	10.9	10.1	10.1	10.7	10.2	10.5	11.0	8.9	9.4	9.3	11.4	11.3	10.5	10.1	7.9	6.9	6.8	6.7	8.7	8.2	7.7	10.7	11.4	6.7	9.5
27	10.4	10.3	10.9	11.5	10.8	10.4	10.2	11.1	11.1	10.8	8.9	10.5	11.1	10.3	10.3	8.8	10.4	10.8	10.8	7.7	9.1	8.3	7.9	7.1	11.5	7.1	10.0
28	10.6	10.2	9.4	6.8	6.6	6.1	6.6	6.5	7.0	6.6	8.4	6.5	7.7	7.1	6.8	9.8	25.8	18.1	38.5	38.4	22.7	13.4	35.7	17.6	38.5	6.1	13.9
29	32.5	11.3	9.0	10.0	12.8	12.7	28.4	57.0	22.2	15.6	13.5	31.0	28.0	13.4	20.9	26.2	27.1	20.9	31.3	26.9	17.5	10.2	10.4	13.5	57.0	9.0	20.9
30	9.1	9.2	9.4	9.1	9.5	10.0	10.3	9.9	9.5	7.5	9.3	9.7	10.7	7.5	6.9	6.9	9.9	7.0	6.2	6.0	5.8	6.1	6.4	6.7	10.7	5.8	8.3
Max.	**32.5**	**20.8**	**18.5**	**23.7**	**25.8**	**17.9**	**35.1**	**57.0**	**39.5**	**17.7**	**64.9**	**31.0**	**43.0**	**39.8**	**31.1**	**26.2**	**27.1**	**20.9**	**38.5**	**44.9**	**46.6**	**24.1**	**35.7**	**22.7**	**64.9**		
Min.	**6.2**	**6.4**	**6.3**	**6.6**	**6.2**	**6.1**	**6.2**	**5.7**	**5.8**	**6.1**	**5.7**	**5.6**	**6.2**	**5.7**	**4.8**	**5.6**	**5.9**	**6.5**	**6.0**	**6.0**	**5.8**	**6.1**	**5.9**	**6.7**		**4.8**	
Avg.	**11.7**	**10.6**	**10.7**	**10.1**	**10.1**	**9.7**	**12.2**	**12.5**	**10.6**	**9.9**	**11.4**	**11.1**	**11.2**	**10.6**	**11.0**	**10.9**	**11.6**	**10.5**	**11.7**	**12.9**	**12.1**	**11.0**	**12.2**	**11.3**			**11.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.6	6.0	6.2	6.3	6.0	5.8	5.5	6.7	16.2	11.0	8.5	10.3	8.8	7.2	10.5	8.7	9.8	7.9	10.6	10.3	28.6	39.9	23.4	24.3	39.9	5.5	11.9
2	43.5	58.2	46.4	31.7	16.6	16.5	28.0	28.0	9.1	5.6	6.2	6.1	7.2	5.9	6.0	8.9	15.8	11.8	8.0	16.3	22.8	23.9	46.8	7.9	58.2	5.6	19.9
3	6.2	6.3	6.0	4.9	4.4	5.0	4.4	4.3	4.3	4.3	4.2	4.9	5.5	10.5	6.6	4.9	4.9	5.2	5.6	5.2	5.2	5.2	7.9	6.1	10.5	4.2	5.5
4	9.8	9.0	9.5	4.2	12.1	6.2	5.7	29.2	5.4	6.7	5.7	6.8	15.1	7.2	8.2	10.0	13.1	9.6	13.9	8.9	8.8	9.2	9.4	8.8	29.2	4.2	9.7
5	8.2	7.6	7.9	6.8	7.6	8.9	6.3	6.3	7.7	6.3	7.6	7.0	7.5	8.5	7.4	6.0	6.7	8.3	8.5	4.6	4.6	5.5	4.9	4.7	8.9	4.6	6.9
6	4.5	4.3	4.7	4.9	4.5	5.2	14.7	9.9	8.7	7.1	6.4	7.9	6.6	6.4	6.3	6.4	6.1	6.7	6.3	7.6	6.6	6.3	6.9	6.1	14.7	4.3	6.7
7	6.6	6.3	6.7	7.2	8.5	11.3	13.0	12.1	7.5	7.0	17.7	12.5	18.3	8.0	8.1	5.7	6.0	7.1	7.5	8.1	7.1	8.0	7.2	6.6	18.3	5.7	8.9
8	6.3	6.5	6.5	6.6	6.5	6.4	6.8	9.6	8.5	9.6	11.3	9.7	6.4	10.8	7.1	7.3	5.8	9.8	7.0	9.2	31.6	36.3	18.3	36.1	36.3	5.8	11.7
9	7.5	6.3	6.3	6.6	6.3	6.7	7.5	6.8	7.2	7.7	7.0	6.4	7.6	7.0	7.4	7.5	7.6	7.0	6.6	6.5	6.6	6.1	6.5	6.4	7.7	6.1	6.9
10	6.3	5.9	6.1	7.8	8.7	7.8	7.1	7.6	8.6	7.7	8.3	9.1	7.8	9.1	9.0	8.9	7.1	8.1	8.8	7.7	8.5	8.9	6.8	8.0	9.1	5.9	7.9
11	8.9	7.7	9.7	28.9	22.7	8.3	6.1	16.5	30.0	22.5	29.9	25.9	19.8	25.2	26.8	6.0	4.3	4.2	7.8	6.2	5.6	5.3	5.6	6.1	30.0	4.2	14.2
12	6.7	10.5	5.1	5.5	5.8	5.9	6.9	5.8	6.5	5.6	7.1	7.7	7.1	6.4	6.1	5.9	7.2	7.7	7.5	10.0	9.1	9.7	14.1	13.3	14.1	5.1	7.6
13	13.0	9.8	7.7	6.8	6.9	11.6	12.0	13.8	11.1	8.3	9.9	9.7	10.7	12.8	12.5	11.2	12.6	12.6	12.3	9.1	12.1	11.1	9.5	11.0	13.8	6.8	10.7
14	8.1	9.7	11.5	13.7	8.6	10.3	11.2	11.6	10.3	12.7	9.5	6.3	17.6	8.4	7.5	6.2	5.2	5.6	5.6	7.0	6.5	6.5	7.6	7.4	17.6	5.2	8.9
15	7.5	8.4	8.5	7.5	12.4	14.5	9.4	22.1	8.3	4.6	31.3	21.4	19.1	28.0	37.2	40.2	36.1	9.6	8.2	7.4	8.5	8.5	9.6	6.9	40.2	4.6	15.6
16	7.6	7.8	8.4	8.9	9.0	8.8	8.0	8.2	8.2	10.2	11.1	10.6	10.7	11.2	10.1	10.2	9.8	9.9	10.6	10.6	15.3	12.4	18.0	23.7	23.7	7.6	10.8
17	33.8	26.5	46.0	5.0	4.5	5.8	6.5	6.0	5.8	6.2	6.1	6.5	7.9	6.7	7.8	7.8	7.2	7.2	8.0	6.8	8.7	9.1	6.9	10.5	46.0	4.5	10.6
18	12.3	8.4	9.5	6.4	12.2	14.6	8.1	13.1	13.2	11.9	8.5	57.5	20.6	16.3	57.3	15.2	26.4	22.4	38.3	21.6	17.4	20.1	15.2	19.0	57.5	6.4	19.4
19	19.2	25.8	22.1	26.8	15.4	14.0	12.4	9.2	5.2	6.6	6.9	6.3	7.6	10.0	7.4	9.4	7.7	6.8	5.6	6.3	6.7	6.2	11.5	6.8	26.8	5.2	10.9
20	6.3	5.7	8.5	12.4	8.9	8.7	8.6	7.3	6.8	8.2	14.6	8.5	7.3	20.7	8.0	12.2	15.9	39.2	7.2	11.7	11.3	6.8	5.9	10.5	39.2	5.7	10.9
21	4.4	6.7	11.1	7.7	12.9	45.4	43.2	41.4	37.1	45.7	45.0	67.2	33.8	35.2	30.2	57.6	54.7	30.5	29.2	31.5	20.8	37.0	34.1	44.1	67.2	4.4	33.6
22	34.9	28.5	44.7	49.9	36.5	8.8	8.4	5.7	5.7	6.1	6.3	4.8	4.5	7.0	6.1	4.7	5.8	7.0	12.0	9.2	7.4	13.7	11.6	11.5	49.9	4.5	14.2
23	16.3	10.2	12.5	6.9	7.9	12.8	19.0	13.6	5.8	7.7	9.7	7.3	10.0	13.1	10.9	12.1	5.0	5.7	4.7	6.2	13.3	5.2	5.6	5.0	19.0	4.7	9.4
24	5.2	4.0	4.9	15.0	8.7	46.2	59.1	27.6	30.9	38.8	66.6	39.3	61.7	61.3	39.7	6.8	12.0	9.8	6.3	5.1	6.0	6.4	5.5	8.5	66.6	4.0	24.0
25	13.8	13.4	8.8	9.8	12.6	11.6	8.1	9.6	9.8	13.3	10.7	7.8	56.9	43.0	9.3	19.5	16.9	26.0	9.2	26.5	58.9	35.9	57.2	9.9	58.9	7.8	20.8
26	21.0	16.5	14.9	10.7	10.0	43.4	44.2	39.2	47.9	20.6	23.7	18.5	29.2	21.4	22.6	25.7	7.4	7.0	10.0	17.6	9.9	14.8	9.3	7.0	47.9	7.0	20.5
27	6.2	6.0	6.8	7.2	7.1	7.7	7.4	7.4	7.7	10.0	8.1	6.0	5.6	5.3	5.5	5.2	5.4	6.1	6.3	5.8	9.1	6.7	7.8	9.2	10.0	5.2	6.9
28	8.4	8.5	9.0	8.5	9.3	6.8	6.8	8.9	8.8	8.5	7.8	8.2	10.6	11.4	10.0	10.3	11.0	10.9	7.1	34.1	19.6	28.4	16.1	13.3	34.1	6.8	11.8
29	7.3	11.4	14.8	10.7	11.8	8.5	6.8	8.2	11.6	14.8	16.0	17.6	12.6	13.7	13.6	10.3	10.3	12.4	10.8	8.3	15.3	18.4	13.7	9.9	18.4	6.8	12.0
30	10.6	11.1	39.8	16.4	20.8	10.8	9.1	20.3	31.6	16.7	15.0	8.1	9.4	10.4	6.8	7.7	8.5	6.6	7.9	10.5	7.8	11.1	7.9	11.4	39.8	6.6	13.2
31	6.4	5.4	57.8	17.3	20.0	4.2	29.6	19.0	6.1	7.4	7.2	12.6	9.4	11.3	14.1	11.2	4.7	4.6	6.4	4.2	4.3	5.2	6.5	4.9	57.8	4.2	11.7
Max.	**43.5**	**58.2**	**57.8**	**49.9**	**36.5**	**46.2**	**59.1**	**41.4**	**47.9**	**45.7**	**66.6**	**67.2**	**61.7**	**61.3**	**57.3**	**57.6**	**54.7**	**39.2**	**38.3**	**34.1**	**58.9**	**39.9**	**57.2**	**44.1**	**67.2**		
Min.	**4.4**	**4.0**	**4.7**	**4.2**	**4.4**	**4.2**	**4.4**	**4.3**	**4.3**	**4.3**	**4.2**	**4.8**	**4.5**	**5.3**	**5.5**	**4.7**	**4.3**	**4.2**	**4.7**	**4.2**	**4.3**	**5.2**	**4.9**	**4.7**		**4.0**	
Avg.	**11.7**	**11.6**	**15.1**	**11.9**	**11.1**	**12.5**	**13.9**	**14.0**	**12.6**	**11.6**	**14.0**	**14.1**	**14.9**	**14.8**	**13.7**	**11.9**	**11.5**	**10.7**	**9.8**	**11.0**	**13.0**	**13.8**	**13.5**	**11.8**			**12.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
19																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.00
22	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51

Total Precipitation (mm) = 2.79

Total Hours in Month 720 **Hours Data Available** 262 **Data Recovery** 36.4%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
3	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
4	4.1	0.3	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.40
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
6	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	3.0	3.0	1.8	1.5	0.8	0.8	0.5	0.3	0.3	0.8	0.8	0.0	0.0	0.0	14.22
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	2.5	1.0	1.0	1.5	1.3	0.5	0.5	2.8	0.3	0.3	0.5	0.3	0.8	14.73
8	1.0	1.3	2.3	1.5	0.5	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	8.13
9	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.5	3.8	3.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	12.45
10	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.5	0.5	3.05
11	1.0	1.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.3	0.0	0.8	0.0	0.0	0.0	4.57
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	0.3	0.8	1.3	0.5	0.5	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.3	6.86
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.8	1.5	1.5	1.8	0.3	1.0	0.8	1.0	0.5	0.3	0.0	0.0	0.0	11.18
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.78
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.5	1.0	0.8	0.5	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	4.06
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 92.46

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.51
10	0.0	0.0	0.5	0.5	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
11	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	5.08
15	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.3	2.5	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	9.65
20	0.0	0.0	2.5	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.33
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	1.8	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	9.14
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.54
23	0.0	0.0	1.5	1.8	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.38
24	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	2.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	9.40
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.83
26	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	10.16
27	0.0	0.0	0.0	0.0	0.0	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.25
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	5.84

Total Precipitation (mm) = 75.95

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.11
2	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	3.3	8.89
3	1.3	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.59
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
6	0.0	0.0	0.0	0.0	0.0	1.3	0.8	0.0	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.05
7	0.0	0.0	0.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.30
9	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.5	0.5	0.0	0.0	0.5	0.3	0.3	0.8	0.5	2.0	0.3	0.3	0.5	1.3	0.0	9.14
12	1.0	0.3	0.3	0.3	0.0	0.0	1.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.06
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.76
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.8	0.5	2.03
16	0.8	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.5	1.27
18	0.0	0.8	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	1.3	1.8	1.8	1.3	0.0	0.0	0.0	8.38
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.76
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.5	2.29
23	0.5	0.5	0.8	0.3	0.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	1.0	0.3	0.3	0.3	0.0	0.0	2.0	0.5	0.0	0.8	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	5.59
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.56
27	1.3	1.5	0.8	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.08
28	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.33

Total Precipitation (mm) = 87.88

Total Hours in Month 672 **Hours Data Available** 671 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.83
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	1.52
3	0.5	0.3	0.5	0.3	0.5	0.5	0.5	0.5	0.8	0.3	0.5	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.60
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.8	0.3	0.3	1.0	1.3	0.5	4.57
5	0.5	1.0	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	4.06
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	3.05
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.83
10	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.57
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	2.54
13	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
16	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.05
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.8	0.8	0.8	0.3	0.0	0.0	0.0	3.56
18	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	1.0	0.5	1.3	0.8	1.3	0.8	1.3	1.3	1.3	9.40
20	1.5	0.3	0.3	0.3	0.8	1.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.59
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
31	0.0	0.3	0.0	0.3	0.0	0.3	0.8	0.3	1.3	3.6	3.0	2.5	2.0	2.0	1.0	1.0	0.5	0.3	0.3	0.3	0.5	0.0	0.0	0.0	20.07

Total Precipitation (mm) = 82.80

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.51
2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
3	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.5	0.3	0.5	0.0	0.0	0.0	0.0	0.0	3.05
4	0.8	0.3	0.3	0.5	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.5	0.8	1.0	1.3	0.5	0.5	1.8	0.8	2.0	0.3	11.18
9	0.0	0.3	1.0	0.8	1.3	0.3	1.3	0.3	0.3	0.3	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	8.38
10	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.3	1.27
12	0.3	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.8	0.0	0.5	0.8	0.5	0.0	0.0	0.0	0.5	0.0	0.3	0.3	0.0	0.3	0.3	0.0	7.37
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.54
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.51
22	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.0	1.5	0.5	0.5	0.0	0.0	0.0	0.0	4.32
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 42.42

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.8	1.3	0.5	0.3	0.0	0.3	0.0	0.0	0.0	0.5	0.3	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.57
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.3	0.8	0.8	0.5	0.5	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.51
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.51
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.25
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.8	0.5	0.5	0.5	0.0	0.0	3.05
20	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.51
21	0.0	0.0	0.0	0.0	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 14.48

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.00
4		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.0	0.8	0.0	0.0	0.0	0.0	0.0	2.79
8	0.0	0.0	0.0	0.3	0.8	1.0	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.05
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.8	0.5	3.05
11	0.3	0.3	0.3	0.8	0.5	0.0	0.0	0.5	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	4.83
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.8	0.5	0.0	0.0	3.56
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.6	0.5	0.8	1.0	1.8	2.5	0.3	0.0	13.72
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	3.0	2.3	1.8	1.5	0.5	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.18
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.25
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.3	0.0	0.5	0.0	1.8	1.3	2.8	0.8	0.5	11.94
23	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.20

Total Precipitation (mm) = 59.64

Total Hours in Month 720 **Hours Data Available** 704 **Data Recovery** 97.8%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.60
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0	1.00
4	0.8	0.4	0.6	0.6	0.8	0.4	0.6	0.6	0.2	0.0	0.2	0.0	0.0	0.2	0.2	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.2	0.6	7.40
5	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.87
6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	3.81
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.5	0.8	0.8	1.8	0.5	0.5	0.5	1.0	0.3	7.87
8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.25
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.27
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.0	0.0	0.0	0.0	0.3	0.0	0.0	1.78
15	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
23	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.8	0.5	0.5	0.3	3.81
24	0.0	0.5	0.8	0.3	0.0	0.0	0.0	0.5	0.5	0.8	1.0	1.8	0.0	0.0	0.0	0.0	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	7.62
25	0.0	0.0	0.3	0.0	0.0	0.0	1.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
30	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
31	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25

Total Precipitation (mm) = 45.40

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	1.3	2.03
2	1.0	0.8	1.0	1.5	0.8	1.8	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.62
3	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.3	2.5	1.5	1.5	1.3	2.0	1.5	1.8	1.5	0.8	0.5	1.0	1.3	0.8	0.5	0.0	20.07
4	0.0	0.5	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	1.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	5.08
5	0.5	0.8	0.3	0.3	0.0	0.3	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	6.86
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	1.0	2.79
10	1.0	1.8	2.5	1.0	2.0	0.5	0.5	0.3	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.0	3.3	4.8	23.37
11	2.0	1.0	1.0	1.5	0.5	1.5	0.8	0.5	0.8	0.5	0.5	0.5	0.5	1.3	1.5	1.8	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.8	22.10
12	4.8	2.3	1.8	0.0	0.3	0.0	0.0	0.0	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.67
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.52
14	0.0	0.3	0.0	0.3	0.0	0.8	0.5	1.0	1.0	1.3	1.5	1.8	0.8	0.0	1.8	1.8	2.0	3.6	3.0	2.3	1.5	0.8	0.3	0.3	26.42
15	0.3	0.0	1.0	0.3	0.0	1.5	0.5	0.5	0.3	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	5.84
16	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.5	2.3	0.5	0.0	0.0	0.0	6.10
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.0	2.8	1.5	1.3	0.5	0.0	0.0	0.0	0.3	0.0	1.3	3.3	15.24
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	43.7	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.12
20	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.8	0.8	1.3	2.0	6.35
22	3.6	4.6	1.5	0.3	0.0	0.0	0.5	0.3	0.5	0.8	0.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	13.72
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.8	0.3	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.59
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.08
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.25
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.5	0.8	0.8	0.5	1.0	0.8	1.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.13
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.76

Total Precipitation (mm) = 267.21

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.51
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	2.5	1.0	3.6	0.5	1.3	0.0	11.94
8	0.0	0.0	0.0	0.0	0.0	0.8	2.3	2.5	3.0	3.6	1.5	0.5	0.8	1.5	1.8	0.8	1.0	1.3	1.3	1.0	1.3	0.0	0.0	0.0	24.89
9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.78
14	1.3	3.8	1.5	1.8	3.8	6.1	4.6	4.6	2.5	2.8	2.0	1.0	0.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.59
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.78
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.51
19	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.5	0.3	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.8	0.0	0.5	0.3	0.3	0.0	0.0	0.3	5.59
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.8	1.8	0.0	3.8	3.8	0.0	0.0	0.0	0.0	0.0	10.41
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.3	1.8	0.8	1.8	2.8	1.0	1.0	1.5	1.5	0.3	0.3	0.3	0.8	16.00
22	0.5	1.8	1.3	0.0	0.3	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.3	0.0	1.3	1.0	1.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	8.64
23	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	1.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.84
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.5	0.3	0.0	0.3	0.3	0.0	0.5	1.0	1.0	1.3	0.8	0.3	0.0	0.0	0.0	0.8	0.5	1.0	0.5	0.3	0.3	0.0	9.40
27	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.8	0.0	0.0	0.0	1.52
28	0.5	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
29	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
30	0.0	0.0	0.3	0.5	0.5	0.8	1.3	17.3	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.97

Total Precipitation (mm) = 178.82

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

October *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	1.52
2	0.8	0.5	1.3	2.3	2.3	1.5	0.0	1.8	2.3	1.3	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.99
3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8	1.0	2.5	2.0	1.8	1.0	10.16
4	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.5	0.3	1.5	0.3	0.0	0.8	0.0	0.8	0.8	0.8	0.3	0.3	0.5	0.3	0.3	0.0	7.87
5	0.0	0.8	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	0.0	0.0	0.0	0.3	0.0	3.56
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.5	2.0	1.8	2.0	1.0	1.5	1.3	1.0	0.3	1.5	0.8	0.5	0.5	0.5	0.5	19.56
7	0.8	1.0	0.8	0.3	0.3	0.3	0.0	0.8	0.5	1.0	0.8	1.5	2.3	0.3	1.3	1.3	0.0	0.8	2.0	1.3	0.3	0.0	0.0	0.0	17.27
8	3.6	4.6	0.0	1.3	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.3	1.0	1.3	0.3	0.0	0.0	0.0	13.46
9	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	6.9	0.5	0.8	0.0	0.0	13.72
10	0.8	0.3	0.8	1.0	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.5	0.8	0.8	0.5	8.38
11	0.5	0.0	1.0	2.8	0.5	1.3	0.8	0.0	0.0	0.3	1.8	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.40
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	1.3	0.8	1.5	1.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.33
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.8	0.8	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	1.0	0.3	0.3	0.0	0.0	4.06
19	0.0	0.3	0.0	0.3	0.0	0.0	0.0	1.0	0.0	0.3	0.3	0.5	0.3	0.0	0.5	0.8	0.5	6.9	1.3	0.8	3.6	0.3	0.3	0.3	17.78
20	0.0	0.0	0.0	0.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
24	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.3	1.8	0.0	0.3	0.3	0.0	0.0	0.8	0.0	0.0	4.57
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.8	0.0	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.54
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	1.0	2.29
29	2.3	2.0	0.8	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.86
30	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.0	1.27
31	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76

Total Precipitation (mm) = 168.15

Total Hours in Month 744 **Hours Data Available** 740 **Data Recovery** 99.5%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	1.78
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.51
27	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03

Total Precipitation (mm) = 9.40

Total Hours in Month 720 **Hours Data Available** 711 **Data Recovery** 98.8%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.52
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.5	1.0	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.0	0.8	0.5	4.83
4	0.8	1.0	0.3	0.3	0.8	0.3	0.5	1.0	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.8	0.3	0.3	0.5	0.3	0.0	0.0	0.0	0.0	8.38
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
8	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.27
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.3	0.5	0.5	0.3	0.3	0.3	0.0	0.0	3.05
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.51
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.76
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.76
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.02
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.27
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.27
25	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.8	0.0	1.27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 34.29

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Appendix D

Pebble 4 Validated Continuous Data Summaries

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														142.5	999.0	999.0	9.4	8.1	7.1	7.4	7.0	6.8	5.9	5.8	142.5	999.0	254.4
10	5.4	5.4	5.5	5.2	5.3	6.1	6.0	6.5	7.3	8.0	8.2	8.2	8.2	8.6	8.6	8.1	7.5	7.2	6.7	6.2	4.7	4.1	4.3	4.0	8.6	4.0	6.5
11	3.8	3.9	3.9	3.8	3.8	4.0	4.2	4.3	4.6	4.8	5.1	5.5	5.6	6.0	6.3	6.7	7.2	7.2	6.5	6.5	6.4	6.1	5.8	5.7	7.2	3.8	5.3
12	6.1	6.3	6.3	6.5	6.2	6.3	6.8	7.0	7.2	7.6	7.6	7.6	7.6	7.1	6.9	6.9	7.4	7.1	7.1	7.0	6.5	6.7	6.6	6.0	7.6	6.0	6.8
13	5.9	5.8	5.8	5.7	5.8	6.9	7.5	8.4	8.8	8.9	9.9	10.7	11.4	12.2	12.0	12.8	12.7	12.4	11.7	11.6	11.7	10.7	10.4	9.2	12.8	5.7	9.5
14	8.4	8.1	8.0	7.7	7.2	9.3	10.6	11.8	13.1	14.5	14.7	16.1	17.1	17.2	17.5	16.5	17.5	16.6	15.3	14.6	14.9	14.5	12.4	10.3	17.5	7.2	13.1
15	9.8	9.9	9.6	9.3	10.3	11.8	13.3	13.6	14.9	17.0	19.1	20.6	21.7	22.7	19.8	14.9	14.9	13.7	14.3	12.8	11.1	11.5	9.8	9.1	22.7	9.1	14.0
16	9.1	8.8	9.2	9.2	9.4	10.1	10.2	9.8	9.7	9.7	10.0	9.7	9.7	9.9	9.2	8.9	8.8	8.8	8.8	9.2	8.7	8.7	8.3	7.6	10.2	7.6	9.2
17	6.9	7.1	7.0	7.8	8.8	10.2	10.3	9.6	10.2	9.9	11.6	12.8	14.1	12.9	11.4	11.4	11.7	11.2	10.4	9.4	8.5	8.1	7.9	7.8	14.1	6.9	9.9
18	7.5	7.3	7.2	7.4	7.6	7.9	8.5	9.8	10.4	10.6	10.3	11.0	10.2	10.0	11.1	11.8	10.9	10.3	9.8	9.5	8.9	8.1	7.7	6.6	11.8	6.6	9.2
19	6.4	6.4	6.3	6.0	6.3	6.8	8.1	8.9	9.7	10.7	11.9	13.1	13.7	14.1	14.3	14.1	15.4	14.4	13.9	12.6	8.8	7.2	6.4	6.3	15.4	6.0	10.1
20	6.0	5.8	5.5	5.1	5.1	6.3	8.0	9.8	11.4	12.0	12.5	14.0	13.4	14.8	10.9	7.4	6.5	6.7	6.9	7.2	6.9	5.8	5.2	4.1	14.8	4.1	8.2
21	4.0	3.7	4.1	3.9	3.5	3.8	4.6	6.8	9.1	10.9	11.7	13.0	13.8	13.5	13.3	15.7	14.5	14.1	13.9	15.0	14.5	12.7	11.5	11.1	15.7	3.5	10.1
22	12.2	11.6	10.4	10.7	9.7	9.7	10.7	11.2	10.8	9.0	10.1	10.4	11.3	9.6	7.3	6.7	6.7	6.7	6.8	6.6	6.7	6.5	6.3	5.9	12.2	5.9	8.9
23	5.7	5.9	6.1	6.1	6.0	6.1	6.2	6.4	7.0	7.3	7.3	8.1	8.8	9.7	10.0	10.0	10.0	10.3	10.2	10.1	8.8	7.7	6.3	5.7	10.3	5.7	7.7
24	5.4	5.1	5.2	5.2	4.6	4.9	5.5	8.4	10.5	11.4	12.4	13.1	13.3	14.9	15.2	14.1	13.2	14.1	13.7	13.0	12.9	11.6	11.4	11.1	15.2	4.6	10.4
25	10.4	9.7	9.6	9.4	8.9	9.1	10.6	12.8	14.2	14.2	14.7	16.0	16.1	15.7	15.6	14.9	15.4	14.8	13.3	11.5	10.5	9.4	8.5	7.6	16.1	7.6	12.2
26	7.1	6.6	6.4	6.1	5.7	5.6	6.8	8.1	9.9	11.7	13.2	14.7	15.9	16.7	16.6	15.5	16.5	17.3	16.2	13.8	11.6	10.3	9.5	8.4	17.3	5.6	11.3
27	7.7	6.7	7.0	6.8	6.7	7.6	8.7	10.4	11.9	14.0	15.4	15.5	16.3	16.8	16.6	16.9	16.7	16.6	16.8	16.1	14.5	12.7	10.7	9.6	16.9	6.7	12.4
28	9.0	7.8	6.8	6.3	5.7	6.8	7.7	5.7	6.1	6.8	6.9	8.2	8.1	8.0	8.9	9.4	9.7	9.8	10.3	10.4	10.4	10.2	9.4	9.2	10.4	5.7	8.2
29	9.1	8.8	8.3	8.0	7.9	7.7	7.8	8.7	9.2	10.1	10.7	11.4	13.7	14.6	16.0	16.7	15.4	13.4	11.4	10.2	9.0	8.1	7.8	7.5	16.7	7.5	10.5
30	7.4	7.4	7.3	7.3	7.5	7.7	7.9	7.8	7.8	7.7	7.7	7.8	8.1	8.3	8.1	7.8	7.9	8.3	8.7	8.9	8.8	8.2	7.8	7.6	8.9	7.3	7.9
Max.	**12.2**	**11.6**	**10.4**	**10.7**	**10.3**	**11.8**	**13.3**	**13.6**	**14.9**	**17.0**	**19.1**	**20.6**	**21.7**	**142.5**	**19.8**	**16.9**	**17.5**	**17.3**	**16.8**	**16.1**	**14.9**	**14.5**	**12.4**	**11.1**	**142.5**		
Min.	**3.8**	**3.7**	**3.9**	**3.8**	**3.5**	**3.8**	**4.2**	**4.3**	**4.6**	**4.8**	**5.1**	**5.5**	**5.6**	**6.0**	**999.0**	**999.0**	**6.5**	**6.7**	**6.5**	**6.2**	**4.7**	**4.1**	**4.3**	**4.0**		**999.0**	
Avg.	**7.3**	**7.1**	**6.9**	**6.8**	**6.8**	**7.4**	**8.1**	**8.8**	**9.7**	**10.3**	**11.0**	**11.8**	**12.3**	**18.4**	**306.5**	**306.9**	**11.6**	**11.3**	**10.9**	**10.4**	**9.6**	**8.9**	**8.2**	**7.6**			**-47.9**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.5	7.2	6.8	6.9	6.7	6.1	5.6	5.5	6.5	7.5	9.2	11.9	13.8	16.2	17.3	18.0	18.0	17.4	17.3	16.6	15.6	14.6	12.9	11.6	18.0	5.5	11.5
2	10.6	10.0	9.8	9.8	9.7	9.6	11.1	12.4	13.7	15.1	16.9	18.1	19.1	19.3	19.5	19.8	20.6	20.2	20.2	19.7	18.5	16.5	13.8	13.0	20.6	9.6	15.3
3	13.2	12.7	11.8	11.2	10.3	10.0	11.0	11.9	12.9	15.0	17.1	18.5	19.6	21.1	20.4	20.3	19.8	19.8	20.2	19.5	16.1	13.4	11.8	11.1	21.1	10.0	15.4
4	11.1	10.3	9.9	9.5	9.2	9.7	11.3	12.4	14.5	15.8	17.4	18.7	20.2	20.2	20.5	20.5	22.1	22.3	22.3	20.5	16.9	14.9	13.0	12.3	22.3	9.2	15.6
5	11.7	11.1	10.6	10.0	10.1	10.1	10.8	11.3	11.5	12.6	14.6	17.4	19.2	20.1	20.6	20.9	18.6	15.3	15.1	15.7	14.4	13.8	13.4	12.9	20.9	10.0	14.2
6	11.8	11.3	11.3	11.2	11.0	10.6	10.5	12.0	12.2	11.9	13.7	17.3	17.6	17.6	17.8	18.4	19.2	17.8	16.4	16.5	15.0	14.2	12.4	11.3	19.2	10.5	14.1
7	10.6	10.2	10.1	9.9	9.8	9.8	10.0	10.1	9.9	10.2	10.3	10.8	11.4	11.5	10.9	10.3	10.4	10.6	10.3	10.2	10.1	10.0	9.7	9.1	11.5	9.1	10.3
8	8.8	8.4	8.0	7.8	7.7	7.5	7.4	7.4	7.4	7.6	7.9	8.4	8.9	9.6	10.5	11.1	11.5	11.8	12.1	12.2	12.6	10.8	10.5	10.6	12.6	7.4	9.4
9	10.4	10.3	10.2	9.5	9.1	9.2	10.5	11.5	13.0	14.0	16.2	17.3	17.5	17.7	17.8	18.6	18.0	16.7	15.8	14.7	13.7	12.5	11.5	9.3	18.6	9.1	13.5
10	9.5	9.6	9.9	9.9	9.9	9.8	9.6	10.1	10.6	10.8	11.9	12.8	13.2	13.3	14.0	13.7	13.3	12.8	12.6	11.6	10.0	8.8	8.3	8.1	14.0	8.1	11.0
11	7.9	7.8	7.8	7.7	7.8	7.7	8.4	8.7	9.4	10.9	12.9	13.2	13.5	14.0	13.7	13.8	13.1	12.3	12.8	13.5	12.3	11.0	9.8	8.8	14.0	7.7	10.8
12	9.0	9.3	9.6	9.1	8.8	9.3	10.8	13.0	13.5	14.7	16.5	19.2	19.8	-11.9	28.9	-2.9	24.3	24.1	19.8	19.3	17.6	15.7	14.8	15.8	28.9	-11.9	13.7
13	15.5	14.3	13.6	13.5	12.7	10.1	9.6	9.0	8.6	8.4	8.3	8.1	8.3	8.7	9.4	9.2	8.9	8.7	8.7	8.7	8.5	8.3	8.0	7.6	15.5	7.6	9.8
14	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.6	6.5	6.7	6.8	7.1	7.4	7.5	7.9	8.0	7.9	8.0	7.6	7.7	7.7	7.6	7.4	7.3	8.0	6.5	7.2
15	7.3	7.2	7.1	6.9	6.7	6.7	6.8	6.9	7.2	7.6	8.1	8.7	8.9	9.3	9.8	11.4	11.7	12.4	12.0	10.8	10.6	10.3	9.8	9.2	12.4	6.7	8.9
16	8.4	8.2	8.2	8.1	8.0	8.2	8.2	8.5	9.3	10.4	11.2	11.9	11.9	11.6	11.8	11.5	10.3	9.7	9.4	8.9	8.6	8.3	8.1	7.9	11.9	7.9	9.4
17	7.7	7.6	7.3	7.1	6.8	7.0	7.3	7.6	8.0	8.7	9.8	10.8	11.2	11.1	10.4	10.3	9.9	9.6	9.1	9.0	8.8	8.8	8.5	8.6	11.2	6.8	8.8
18	8.8	8.8	8.6	8.5	8.4	8.5	8.8	8.8	9.3	9.7	10.2	10.7	10.9	10.5	10.0	9.8	9.9	10.1	9.7	9.3	9.0	9.0	8.6	8.4	10.9	8.4	9.3
19	8.3	8.3	8.0	7.8	8.1	8.6	9.4	10.0	10.8	11.5	12.7	13.4	14.2	14.6	14.3	13.9	13.3	13.7	14.2	13.8	13.2	11.8	11.6	10.8	14.6	7.8	11.5
20	10.0	8.8	7.3	7.5	7.5	7.8	9.6	11.7	14.4	15.4	16.1	16.7	16.9	17.7	17.9	16.9	17.5	17.1	15.8	14.4	13.0	11.2	10.0	9.4	17.9	7.3	12.9
21	9.0	8.8	8.7	8.7	9.8	9.9	10.3	10.8	12.6	14.1	14.7	15.9	16.4	15.2	14.7	14.5	13.3	12.9	12.1	11.4	11.0	10.6	9.8	10.6	16.4	8.7	11.9
22	9.9	9.1	9.0	9.0	9.5	9.7	9.7	10.7	11.8	12.3	11.8	11.8	12.5	11.2	9.8	9.5	8.7	8.6	8.7	8.8	8.7	8.2	7.5	7.4	12.5	7.4	9.7
23	7.5	7.8	7.8	7.5	7.4	7.4	7.6	8.1	8.3	9.1	9.8	9.6	9.3	10.1	10.6	10.9	11.0	10.8	9.5	10.4	10.1	10.0	10.1	9.7	11.0	7.4	9.2
24	9.5	9.6	9.1	9.0	8.8	8.6	9.1	9.1	9.2	9.4	9.8	10.1	10.2	10.2	10.3	10.0	9.2	8.8	8.6	8.4	8.2	7.9	8.0	7.9	10.3	7.9	9.1
25	8.0	8.0	8.1	8.0	8.2	8.3	8.2	8.2	8.5	8.5	8.6	9.4	9.5	10.1	11.3	11.6	11.4	11.1	10.7	10.3	10.0	9.1	8.9	8.7	11.6	8.0	9.3
26	8.6	8.8	9.0	9.1	8.7	8.2	8.2	8.2	8.6	8.7	8.9	9.3	10.3	10.8	11.0	11.2	11.2	10.4	10.1	10.1	9.6	8.9	8.7	8.3	11.2	8.2	9.4
27	7.9	7.8	7.8	7.7	7.2	7.3	7.6	8.7	9.3	9.8	10.3	10.9	11.4	12.5	13.0	13.7	14.4	14.5	14.0	12.8	11.8	10.0	10.2	10.1	14.5	7.2	10.4
28	10.0	9.2	8.7	8.7	8.7	9.5	9.7	11.2	12.2	13.4	14.0	14.3	13.6	13.5	13.4	13.3	13.0	11.7	11.6	9.9	8.8	8.4	8.1	7.7	14.3	7.7	10.9
29	7.6	7.5	7.3	7.1	6.9	6.7	6.7	6.8	7.0	7.6	8.7	10.1	11.6	13.2	12.9	11.2	10.9	10.1	9.5	8.5	7.9	7.5	7.1	6.9	13.2	6.7	8.6
30	6.8	6.6	6.5	6.3	6.2	6.0	5.9	5.8	6.0	6.5	7.2	7.6	8.1	8.5	9.5	10.6	11.1	12.0	11.7	12.0	10.8	9.3	9.0	8.4	12.0	5.8	8.3
31	8.7	8.0	7.8	8.1	8.1	8.4	8.7	9.2	10.0	10.4	10.6	11.0	11.6	12.0	11.8	11.6	11.6	11.5	10.9	10.4	9.6	9.0	8.6	8.2	12.0	7.8	9.8
Max.	**15.5**	**14.3**	**13.6**	**13.5**	**12.7**	**10.6**	**11.3**	**13.0**	**14.5**	**15.8**	**17.4**	**19.2**	**20.2**	**21.1**	**28.9**	**20.9**	**24.3**	**24.1**	**22.3**	**20.5**	**18.5**	**16.5**	**14.8**	**15.8**	**28.9**		
Min.	**6.8**	**6.6**	**6.5**	**6.3**	**6.2**	**6.0**	**5.6**	**5.5**	**6.0**	**6.5**	**6.8**	**7.1**	**7.4**	**-11.9**	**7.9**	**-2.9**	**7.9**	**8.0**	**7.6**	**7.7**	**7.7**	**7.5**	**7.1**	**6.9**		**-11.9**	
Avg.	**9.3**	**9.0**	**8.8**	**8.6**	**8.5**	**8.5**	**8.9**	**9.4**	**10.1**	**10.8**	**11.7**	**12.6**	**13.2**	**12.5**	**13.9**	**13.0**	**13.7**	**13.3**	**12.9**	**12.4**	**11.6**	**10.7**	**10.0**	**9.6**			**10.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.0	7.3	7.0	6.7	6.4	6.3	6.4	6.5	6.6	6.7	7.0	7.4	8.0	8.2	8.7	9.1	9.0	8.5	8.0	8.2	8.1	7.7	7.2	7.0	9.1	6.3	7.5
2	6.9	6.9	7.1	7.1	7.1	7.3	6.7	7.1	7.4	7.6	8.1	8.8	9.2	9.8	9.6	8.6	9.2	9.8	10.1	9.5	9.1	8.7	8.6	8.4	10.1	6.7	8.3
3	8.3	8.4	8.3	8.7	8.7	8.3	8.4	8.7	9.0	9.4	9.5	9.9	10.0	10.0	10.4	9.9	9.5	9.5	9.3	9.2	8.9	8.5	8.3	8.4	10.4	8.3	9.0
4	8.5	8.3	8.0	7.9	7.7	8.1	8.7	8.7	9.5	10.1	10.8	11.0	10.7	10.2	10.7	10.3	10.5	10.9	10.9	10.7	10.4	10.0	9.6	9.3	11.0	7.7	9.6
5	9.1	9.2	9.2	9.1	9.0	9.2	9.1	9.3	9.7	10.1	10.4	10.5	10.8	11.6	12.7	13.4	13.8	13.8	11.6	11.0	11.1	11.2	10.4	10.1	13.8	9.0	10.6
6	10.3	10.5	10.0	10.2	10.1	9.1	8.5	10.7	11.1	11.3	12.2	13.3	14.4	15.2	15.8	16.1	16.2	16.7	16.8	15.5	14.6	12.8	12.2	12.0	16.8	8.5	12.7
7	11.9	11.7	11.8	11.0	10.5	10.9	10.6	8.9	9.7	10.7	11.5	12.1	14.7	15.8	15.4	16.2	16.2	15.1	13.1	11.2	9.5	8.7	8.4	8.2	16.2	8.2	11.8
8	8.0	7.9	7.7	7.4	7.5	7.5	7.5	7.6	8.1	8.3	9.6	13.3	5.3	14.2	12.1	12.8	13.1	12.3	11.4	11.1	10.7	10.4	10.2	9.9	14.2	5.3	9.7
9	9.7	9.9	9.5	9.5	9.4	9.3	9.1	9.5	9.7	9.8	9.8	9.9	9.7	9.6	9.7	9.8	9.8	9.9	10.1	9.9	9.8	9.8	9.7	9.7	10.1	9.1	9.7
10	9.7	9.7	9.8	9.8	9.5	9.6	9.7	9.7	9.8	10.0	10.3	10.6	10.6	10.6	10.3	10.2	10.1	10.1	9.9	9.6	9.3	9.2	9.2	9.2	10.6	9.2	9.8
11	9.1	9.0	8.9	8.8	8.8	8.9	8.9	9.1	9.4	9.6	10.1	10.3	10.5	10.8	11.2	11.4	11.3	11.1	10.8	10.5	10.4	10.3	10.3	10.6	11.4	8.8	10.0
12	10.7	10.6	10.7	10.5	10.5	10.6	10.7	11.0	11.2	10.9	11.4	11.9	12.1	13.9	14.8	14.6	15.1	14.5	13.8	12.5	11.5	10.6	10.3	10.0	15.1	10.0	11.8
13	8.7	8.1	8.0	7.8	7.9	7.9	7.3	7.3	7.5	7.7	7.9	8.1	8.5	8.6	9.1	9.3	9.4	9.2	8.9	8.9	8.5	8.4	8.3	8.3	9.4	7.3	8.3
14	8.2	8.1	8.0	7.9	7.8	7.8	7.8	8.1	8.3	8.5	8.8	9.2	9.1	9.0	8.9	8.8	8.5	8.1	8.2	8.4	8.2	8.1	8.0	8.1	9.2	7.8	8.3
15	8.1	8.1	8.1	8.1	8.1	8.2	8.2	8.3	8.5	8.8	9.0	9.4	9.9	10.0	10.1	10.2	10.2	10.2	10.0	9.7	9.5	9.4	9.3	9.2	10.2	8.1	9.1
16	9.1	9.0	8.9	9.0	9.0	9.0	9.1	9.3	9.8	10.5	11.3	11.9	11.6	12.2	12.6	12.5	12.0	12.1	11.8	11.5	11.4	11.1	10.6	10.4	12.6	8.9	10.7
17	10.2	9.9	9.8	9.7	9.8	10.0	10.4	10.7	10.8	11.8	13.4	14.5	15.6	16.2	13.4	13.1	13.8	13.8	13.2	12.2	11.5	10.4	9.5	9.1	16.2	9.1	11.8
18	8.8	8.6	8.1	7.8	7.5	7.2	6.9	6.6	6.8	7.0	7.2	7.4	7.6	8.1	8.6	8.8	8.6	9.0	9.3	9.6	9.6	9.6	9.3	9.0	9.6	6.6	8.2
19	8.9	8.0	7.7	7.4	7.2	6.7	6.5	7.2	7.6	7.8	8.4	9.7	10.1	10.9	11.1	10.6	10.6	9.9	9.2	8.1	7.3	6.8	6.3	6.4	11.1	6.3	8.3
20	7.0	7.2	7.0	6.8	7.1	7.1	6.5	6.4	6.5	6.8	7.3	8.3	10.0	11.3	12.1	12.5	13.0	13.0	12.5	11.3	9.5	7.5	6.6	5.9	13.0	5.9	8.7
21	5.8	5.0	4.3	4.3	4.8	4.9	5.1	6.1	7.8	8.8	9.3	10.1	11.2	11.8	11.7	12.0	11.9	11.3	10.3	8.5	7.9	7.5	7.1	6.6	12.0	4.3	8.1
22	7.0	7.7	8.0	8.3	8.3	8.3	8.2	8.0	7.9	7.8	7.8	7.9	8.3	9.6	10.2	9.9	10.1	11.1	11.0	10.2	9.3	7.3	6.5	5.7	11.1	5.7	8.5
23	6.2	5.8	5.6	6.1	6.3	6.5	7.2	6.2	7.2	7.7	8.5	10.1	11.2	12.0	12.2	12.6	13.0	12.7	11.9	11.3	9.1	8.0	7.2	7.1	13.0	5.6	8.8
24	8.0	8.2	8.0	7.9	8.3	8.6	8.7	8.2	8.0	8.2	8.1	8.4	8.5	8.3	8.1	8.6	8.9	9.0	8.7	8.3	7.8	7.1	7.0	7.0	9.0	7.0	8.2
25	7.0	7.5	6.8	6.8	6.5	5.6	5.5	6.4	7.9	8.6	9.7	11.1	11.7	11.3	12.3	12.4	12.7	12.4	12.1	11.2	10.5	9.5	8.6	8.1	12.7	5.5	9.3
26	7.4	7.3	7.9	7.5	7.5	7.5	6.8	6.7	7.0	7.8	8.9	9.9	11.4	10.7	9.8	9.8	10.2	10.3	10.4	9.2	8.6	8.1	7.6	7.5	11.4	6.7	8.6
27	7.5	6.9	6.5	6.5	7.3	7.7	8.0	8.4	9.3	10.1	11.0	12.4	13.2	13.3	13.3	13.9	13.4	13.9	13.5	12.7	11.9	11.2	11.0	10.9	13.9	6.5	10.6
28	9.9	9.4	8.3	8.5	8.0	7.5	7.2	7.1	7.3	7.6	8.1	9.0	10.8	12.0	13.3	13.6	14.0	13.0	13.1	11.7	10.9	10.7	10.4	9.5	14.0	7.1	10.0
29	8.7	8.7	8.7	8.4	7.8	7.1	5.8	5.8	6.8	8.1	10.5	10.8	10.6	10.6	10.9	11.4	11.2	11.9	11.8	10.1	9.4	8.5	8.1	8.3	11.9	5.8	9.2
30	7.8	8.2	8.3	8.1	8.2	8.5	8.3	7.8	8.0	8.2	8.3	8.6	9.1	9.5	9.6	9.8	10.1	10.1	9.9	9.4	9.2	9.0	8.2	7.6	10.1	7.6	8.7
31	8.0	8.3	7.5	7.8	8.2	8.2	7.6	8.4	9.1	9.5	10.4	10.6	12.4	12.9	13.2	13.3	13.5	13.1	12.5	10.8	9.3	8.8	8.6	8.5	13.5	7.5	10.0
Max.	**11.9**	**11.7**	**11.8**	**11.0**	**10.5**	**10.9**	**10.7**	**11.0**	**11.2**	**11.8**	**13.4**	**14.5**	**15.6**	**16.2**	**15.8**	**16.2**	**16.2**	**16.7**	**16.8**	**15.5**	**14.6**	**12.8**	**12.2**	**12.0**	**16.8**		
Min.	**5.8**	**5.0**	**4.3**	**4.3**	**4.8**	**4.9**	**5.1**	**5.8**	**6.5**	**6.7**	**7.0**	**7.4**	**5.3**	**8.1**	**8.1**	**8.6**	**8.5**	**8.1**	**8.0**	**8.1**	**7.3**	**6.8**	**6.3**	**5.7**		**4.3**	
Avg.	**8.5**	**8.4**	**8.2**	**8.1**	**8.1**	**8.0**	**7.9**	**8.1**	**8.5**	**8.9**	**9.5**	**10.2**	**10.5**	**11.2**	**11.4**	**11.5**	**11.6**	**11.5**	**11.1**	**10.4**	**9.8**	**9.2**	**8.8**	**8.6**			**9.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.5	8.4	8.2	8.1	8.0	7.9	7.9	8.0	8.5	9.0	9.8	11.2	12.2	12.7	13.3	14.2	13.9	13.3	12.0	11.0	9.5	9.1	9.1	8.7	14.2	7.9	10.1
2	8.7	8.6	8.4	8.3	7.2	6.6	6.9	7.7	9.2	10.8	10.9	11.2	11.3	11.7	12.9	13.6	13.6	13.6	13.0	11.2	9.0	8.5	8.0	7.9	13.6	6.6	9.9
3	7.9	6.8	7.0	6.5	6.6	6.8	6.5	6.6	8.0	10.1	11.7	13.0	13.9	14.5	14.3	12.0	11.5	12.6	12.5	11.6	10.4	9.5	9.0	8.5	14.5	6.5	9.9
4	7.9	8.2	7.9	7.4	6.7	6.4	6.8	6.4	7.8	10.3	12.1	12.9	12.9	13.7	14.6	14.6	12.6	9.8	10.5	10.3	8.5	8.9	8.8	9.1	14.6	6.4	9.8
5	8.1	7.8	7.9	8.0	7.9	7.8	7.7	7.5	8.1	9.0	9.3	10.0	10.5	11.3	11.0	10.9	11.3	10.5	9.6	8.9	7.6	7.3	6.8	5.8	11.3	5.8	8.8
6	5.8	5.9	5.4	5.3	5.0	4.7	4.9	5.9	7.6	9.3	10.3	11.9	12.7	13.3	13.5	14.3	14.7	13.4	12.0	10.1	8.9	8.4	7.4	7.0	14.7	4.7	9.1
7	6.9	6.7	6.5	6.6	6.5	6.4	6.5	6.9	7.3	8.0	9.5	10.8	11.3	11.2	10.7	9.6	8.2	8.1	7.9	7.6	7.5	7.6	7.7	7.9	11.3	6.4	8.1
8	8.0	8.3	8.3	8.3	8.4	8.0	7.8	7.8	7.9	8.0	8.2	8.4	8.5	8.7	8.6	8.5	8.6	8.5	8.3	8.1	7.8	7.6	7.4	7.3	8.7	7.3	8.1
9	7.3	7.2	7.3	7.4	7.4	6.8	6.9	7.5	8.5	9.7	11.2	12.6	12.8	12.2	11.2	10.7	11.9	10.7	9.1	7.9	7.5	7.0	7.0	7.0	12.8	6.8	8.9
10	6.2	5.6	6.2	5.8	6.1	5.8	6.4	5.8	7.4	8.8	10.0	10.7	11.6	12.3	12.5	12.5	11.9	11.1	10.3	9.6	9.3	9.0	8.1	7.2	12.5	5.6	8.8
11	6.9	6.5	7.1	6.5	5.8	5.4	5.5	6.3	7.6	9.4	11.2	12.5	13.3	13.2	13.6	14.6	14.8	15.0	14.8	13.3	11.5	11.5	10.8	10.5	15.0	5.4	10.3
12	11.4	10.5	9.2	8.9	9.7	9.2	9.0	9.5	9.7	11.3	13.3	14.6	15.2	15.5	16.7	17.0	16.5	15.8	15.5	13.3	11.6	11.5	10.5	10.2	17.0	8.9	12.3
13	9.4	9.0	8.7	8.7	9.0	7.8	8.1	8.0	8.8	11.6	13.1	14.0	14.9	15.4	15.6	15.5	14.3	13.1	12.1	11.4	11.0	10.8	9.8	8.2	15.6	7.8	11.2
14	8.0	7.8	7.9	7.9	7.9	8.1	8.3	8.6	8.6	8.5	8.8	9.2	9.5	9.5	10.1	10.3	10.6	10.4	10.0	9.9	9.8	9.8	9.5	9.6	10.6	7.8	9.1
15	9.5	9.6	9.3	9.3	9.6	9.3	9.8	10.7	10.4	9.8	9.8	9.6	10.2	10.4	10.1	10.1	10.2	10.3	10.0	9.0	8.9	9.2	9.0	8.8	10.7	8.8	9.7
16	8.5	8.5	8.2	8.0	7.8	7.7	7.8	8.0	8.2	8.6	9.4	9.8	9.9	10.9	10.3	10.0	10.1	10.0	9.3	8.4	7.7	7.3	7.3	7.1	10.9	7.1	8.7
17	7.1	7.2	7.1	7.0	7.1	6.7	6.4	6.4	6.5	6.9	7.4	7.9	8.0	8.4	9.0	9.3	9.2	9.4	8.6	7.5	6.5	6.0	6.2	6.0	9.4	6.0	7.4
18	6.2	6.7	7.0	6.7	6.3	7.0	6.8	7.1	7.6	7.8	7.9	8.3	8.4	8.5	8.8	8.6	7.8	7.2	7.2	7.3	7.5	7.5	7.5	7.6	8.8	6.2	7.5
19	7.5	8.0	8.1	8.0	8.4	7.8	7.1	7.2	7.4	8.1	8.0	8.3	8.9	9.0	8.6	8.2	7.9	7.9	7.9	7.6	7.2	6.9	6.9	6.9	9.0	6.9	7.8
20	6.7	6.3	6.1	6.0	5.9	5.9	6.0	6.6	7.3	8.1	8.5	9.8	9.9	9.9	9.9	9.5	10.4	9.4	9.2	8.7	8.1	7.6	7.4	6.8	10.4	5.9	7.9
21	6.6	6.3	6.2	6.0	5.8	5.5	6.0	6.3	7.1	7.1	6.9	7.2	7.3	7.4	7.3	7.1	6.8	6.7	6.6	6.8	6.5	7.0	6.7	6.1	7.4	5.5	6.6
22	5.8	5.8	5.9	6.1	6.4	6.5	6.3	6.2	6.2	6.2	6.5	6.9	7.1	7.8	8.0	8.3	8.4	7.6	6.8	6.5	5.9	6.2	6.6	6.6	8.4	5.8	6.7
23	6.5	6.5	6.5	6.5	6.2	6.3	6.4	6.4	6.7	6.8	6.9	7.0	7.0	7.0	7.2	7.6	8.1	8.1	7.7	7.1	6.5	6.3	6.3	6.0	8.1	6.0	6.8
24	6.1	6.0	6.0	5.8	5.5	5.4	5.5	5.5	5.5	5.5	5.7	7.5	7.2	7.4	7.7	7.9	7.8	7.6	7.2	5.7	4.5	4.0	3.1	2.8	7.9	2.8	5.9
25	2.5	2.6	2.1	1.7	1.5	1.1	0.8	1.4	1.6	3.2	4.9	6.4	7.3	7.3	7.5	7.7	7.9	7.8	7.4	6.9	6.8	6.5	5.7	5.6	7.9	0.8	4.8
26	5.5	5.3	5.1	4.8	4.5	4.8	5.2	4.7	5.0	5.2	5.4	5.4	5.5	6.0	6.2	6.3	6.1	5.5	5.3	5.3	5.4	5.5	5.7	5.8	6.3	4.5	5.4
27	5.7	5.7	5.4	4.8	4.4	4.1	3.9	3.8	3.6	4.3	4.6	5.6	6.3	6.3	6.4	6.4	5.9	5.4	5.1	5.0	4.8	4.7	4.6	4.4	6.4	3.6	5.1
28	4.2	4.1	4.0	3.8	3.7	3.5	3.4	3.3	3.2	3.2	3.7	3.8	4.2	4.2	4.6	5.1	4.8	3.7	2.8	2.1	1.7	1.0	0.5	0.8	5.1	0.5	3.3
29	0.5	0.7	1.0	1.3	0.9	0.2	-0.5	-0.9	-0.6	1.4	2.0	2.7	3.3	3.4	4.0	3.2	3.2	3.5	3.1	2.0	1.5	1.1	0.4	-0.1	4.0	-0.9	1.6
30	-0.8	-0.2	-0.4	-0.3	0.0	-0.6	-0.6	0.1	0.5	1.0	2.7	3.7	4.7	5.5	5.6	5.5	5.9	5.4	4.8	4.5	4.1	4.0	3.2	3.0	5.9	-0.8	2.6
Max.	**11.4**	**10.5**	**9.3**	**9.3**	**9.7**	**9.3**	**9.8**	**10.7**	**10.4**	**11.6**	**13.3**	**14.6**	**15.2**	**15.5**	**16.7**	**17.0**	**16.5**	**15.8**	**15.5**	**13.3**	**11.6**	**11.5**	**10.8**	**10.5**	**17.0**		
Min.	**-0.8**	**-0.2**	**-0.4**	**-0.3**	**0.0**	**-0.6**	**-0.6**	**-0.9**	**-0.6**	**1.0**	**2.0**	**2.7**	**3.3**	**3.4**	**4.0**	**3.2**	**3.2**	**3.5**	**2.8**	**2.0**	**1.5**	**1.0**	**0.4**	**-0.1**		**-0.9**	
Avg.	**6.6**	**6.5**	**6.4**	**6.3**	**6.2**	**6.0**	**6.0**	**6.2**	**6.7**	**7.6**	**8.3**	**9.1**	**9.5**	**9.8**	**10.0**	**10.0**	**9.8**	**9.4**	**8.9**	**8.2**	**7.5**	**7.2**	**6.9**	**6.6**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.0	3.3	3.5	3.5	3.5	3.5	3.6	3.8	4.4	5.0	5.5	6.1	6.5	7.4	6.9	6.4	5.6	5.5	5.6	5.4	5.6	6.0	5.8	5.6	7.4	3.0	5.0
2	5.5	5.3	5.2	5.2	5.2	5.1	5.0	4.8	4.8	5.0	5.2	5.3	5.7	6.4	6.7	6.9	7.3	7.3	7.0	7.0	7.0	6.8	6.5	6.3	7.3	4.8	5.9
3	6.1	6.1	6.6	7.0	6.7	6.2	6.4	6.4	6.6	7.7	8.0	9.0	8.8	8.3	7.5	7.8	7.8	7.4	5.4	4.3	4.4	4.4	4.6	4.7	9.0	4.3	6.6
4	4.6	4.5	4.3	3.8	3.3	3.5	3.6	3.4	3.1	3.3	3.1	3.2	3.0	3.8	3.2	3.5	2.4	1.8	1.4	1.7	1.9	1.9	2.0	2.1	4.6	1.4	3.0
5	2.3	2.4	2.4	2.4	2.4	2.9	2.9	2.6	2.0	3.3	4.1	5.6	7.2	7.6	7.7	7.5	6.3	4.7	4.4	3.9	3.4	3.0	2.8	2.8	7.7	2.0	4.0
6	2.7	2.4	2.5	2.6	2.7	2.7	2.6	2.8	3.2	3.6	4.2	4.8	5.1	5.3	5.4	5.6	5.5	5.5	5.3	5.1	5.2	5.2	5.4	5.6	5.6	2.4	4.2
7	5.7	5.7	5.6	5.7	5.7	5.7	5.8	5.8	5.8	6.2	6.5	6.8	7.2	7.5	7.7	7.7	7.7	7.5	7.4	7.4	7.3	7.2	7.0	7.1	7.7	5.6	6.6
8	6.9	6.5	5.9	5.7	5.6	5.5	5.3	5.3	5.4	5.4	5.5	5.6	5.8	6.2	5.9	6.3	6.4	6.6	7.0	7.2	8.0	8.5	9.2	9.2	9.2	5.3	6.5
9	8.9	9.2	9.6	10.1	10.2	10.5	10.4	10.5	10.8	11.1	11.2	10.4	10.2	10.0	9.7	9.3	9.1	9.0	7.8	4.3	3.5	2.4	1.8	1.4	11.2	1.4	8.4
10	0.5	0.4	0.2	0.0	-0.1	-0.1	-0.2	-0.1	0.0	-0.1	0.2	0.7	2.4	3.8	4.3	4.3	4.4	4.5	4.6	3.8	3.4	3.5	3.7	3.8	4.6	-0.2	2.0
11	4.0	3.9	3.7	2.9	3.0	2.6	2.2	2.6	2.7	3.2	3.4	3.7	4.3	4.4	4.1	4.7	5.1	4.1	3.2	2.9	3.2	3.2	3.2	3.1	5.1	2.2	3.5
12	3.4	3.5	3.2	2.8	2.9	3.1	2.9	3.4	3.6	4.4	4.9	5.5	6.3	6.9	6.7	6.4	6.3	5.6	5.0	4.5	4.4	4.3	4.1	4.3	6.9	2.8	4.5
13	4.2	4.2	3.7	1.9	1.9	1.9	1.8	2.3	2.8	3.3	4.4	5.8	6.8	7.5	7.9	7.9	7.3	5.8	5.1	3.7	3.6	3.3	2.9	2.9	7.9	1.8	4.3
14	3.1	2.4	2.3	2.0	2.5	2.7	3.3	3.5	3.9	4.0	4.1	3.5	2.6	4.1	5.7	5.1	4.9	5.0	3.7	3.0	2.0	1.8	1.7	1.7	5.7	1.7	3.3
15	1.6	2.0	2.3	2.1	1.8	3.4	4.1	4.3	3.6	3.8	4.8	5.3	6.2	6.7	6.9	6.5	5.9	5.3	4.7	4.4	4.3	4.6	5.0	6.0	6.9	1.6	4.4
16	6.0	5.3	5.3	5.2	5.1	5.1	5.2	4.6	4.8	5.0	5.6	6.4	6.9	7.1	7.1	6.7	6.3	5.5	4.8	4.8	4.9	4.9	4.8	4.8	7.1	4.6	5.5
17	4.9	4.7	4.4	4.0	3.7	3.6	3.9	4.0	3.9	4.1	4.6	5.0	5.3	5.8	5.8	5.5	5.1	4.6	4.2	4.4	4.5	4.5	4.8	4.7	5.8	3.6	4.6
18	4.7	4.3	3.9	3.6	3.6	3.4	3.4	3.5	3.7	3.7	4.2	4.8	5.7	6.5	6.8	6.5	5.8	5.4	4.8	4.2	4.0	3.7	3.4	3.1	6.8	3.1	4.5
19	3.0	3.1	3.1	2.9	2.4	1.9	2.5	2.8	2.8	3.2	3.4	3.6	3.7	4.0	4.2	3.8	3.7	3.0	1.9	2.2	0.8	0.7	1.4	1.9	4.2	0.7	2.7
20	2.0	2.0	2.0	1.9	1.7	1.6	1.0	1.1	0.8	1.3	2.1	2.5	2.2	3.5	3.7	3.6	3.8	3.2	2.2	1.1	0.7	0.3	-0.2	0.0	3.8	-0.2	1.8
21	0.0	-0.5	-0.3	-0.9	-2.5	-1.9	0.3	-0.7	-1.2	-0.9	0.9	1.7	2.1	2.2	2.7	2.5	2.0	0.1	-0.7	-1.3	-1.9	-2.3	-2.6	-2.4	2.7	-2.6	-0.2
22	-2.4	-2.3	-2.0	-2.1	-2.4	-3.1	-3.8	-3.9	-3.7	-2.7	-1.9	-0.6	1.0	1.9	2.4	2.3	1.1	-0.4	-1.1	-1.5	-1.5	-1.7	-2.6	-3.3	2.4	-3.9	-1.4
23	-3.2	-3.5	-4.0	-3.5	-4.1	-4.7	-4.0	-3.9	-5.1	-5.2	-4.0	-2.6	-1.9	-1.4	-1.0	-0.8	-1.1	-2.0	-3.1	-3.7	-3.8	-4.2	-4.0	-3.7	-0.8	-5.2	-3.3
24	-2.9	-2.1	-2.0	-2.0	-2.0	-2.8	-2.2	-1.7	-1.3	-0.8	-0.7	-0.6	-0.6	-0.9	-1.1	-1.3	-1.3	-1.5	-1.9	-2.3	-3.9	-4.1	-3.8	-3.9	-0.6	-4.1	-2.0
25	-4.0	-4.2	-4.5	-4.8	-4.8	-4.9	-5.0	-5.2	-5.4	-5.6	-5.6	-5.3	-4.8	-4.2	-3.9	-3.8	-3.8	-4.1	-4.6	-4.6	-4.8	-4.7	-5.0	-5.5	-3.8	-5.6	-4.7
26	-5.9	-6.1	-6.2	-6.5	-6.5	-6.4	-6.4	-6.9	-7.4	-7.8	-8.3	-8.5	-8.4	-7.9	-7.4	-6.9	-6.8	-7.1	-7.0	-7.2	-7.2	-7.4	-8.0	-8.4	-5.9	-8.5	-7.2
27	-8.4	-8.4	-8.3	-8.6	-8.6	-8.9	-9.6	-9.0	-9.1	-9.8	-8.9	-7.9	-6.8	-5.8	-5.0	-4.8	-5.1	-5.8	-6.3	-6.5	-6.1	-5.6	-5.4	-5.2	-4.8	-9.8	-7.2
28	-4.7	-4.5	-5.1	-5.3	-5.4	-5.3	-5.0	-4.6	-4.2	-3.7	-3.0	-1.9	-1.2	-1.1	-1.3	-0.7	-0.4	-0.2	-0.2	-0.2	-0.4	-0.6	-0.6	-0.4	-0.2	-5.4	-2.5
29	-0.3	0.0	0.2	1.5	1.4	1.3	0.8	0.7	0.9	0.8	0.9	1.1	1.2	1.4	1.4	1.6	1.4	1.2	1.1	1.0	0.6	0.3	0.0	-0.1	1.6	-0.3	0.8
30	-0.1	-0.4	-0.5	-0.5	-0.9	-1.2	-1.1	-1.1	-1.3	-1.7	-1.4	-1.0	-0.1	0.5	0.0	-0.3	-0.5	-0.7	-0.9	-0.9	-0.9	-1.0	-1.5	-1.9	0.5	-1.9	-0.8
31	-2.6	-2.5	-2.5	-2.6	-2.6	-2.8	-3.2	-3.6	-3.9	-4.2	-3.9	-3.5	-3.1	-2.9	-3.0	-3.2	-3.6	-4.4	-5.3	-5.8	-5.7	-6.0	-6.3	-6.6	-2.5	-6.6	-3.9
Max.	**8.9**	**9.2**	**9.6**	**10.1**	**10.2**	**10.5**	**10.4**	**10.5**	**10.8**	**11.1**	**11.2**	**10.4**	**10.2**	**10.0**	**9.7**	**9.3**	**9.1**	**9.0**	**7.8**	**7.4**	**8.0**	**8.5**	**9.2**	**9.2**	**11.2**		
Min.	**-8.4**	**-8.4**	**-8.3**	**-8.6**	**-8.6**	**-8.9**	**-9.6**	**-9.0**	**-9.1**	**-9.8**	**-8.9**	**-8.5**	**-8.4**	**-7.9**	**-7.4**	**-6.9**	**-6.8**	**-7.1**	**-7.0**	**-7.2**	**-7.2**	**-7.4**	**-8.0**	**-8.4**		**-9.8**	
Avg.	**1.6**	**1.5**	**1.4**	**1.3**	**1.1**	**1.1**	**1.2**	**1.2**	**1.2**	**1.4**	**1.9**	**2.4**	**2.9**	**3.4**	**3.5**	**3.4**	**3.2**	**2.7**	**2.1**	**1.7**	**1.5**	**1.4**	**1.3**	**1.3**			**1.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-6.8	-7.1	-7.5	-7.5	-7.6	-7.6	-7.8	-7.9	-8.1	-8.1	-7.8	-7.6	-7.2	-6.9	-6.5	-6.4	-6.5	-6.8	-7.2	-7.5	-7.7	-8.1	-8.5	-8.8	-6.4	-8.8	-7.5
2	-9.1	-9.3	-9.1	-9.1	-9.5	-9.9	-10.3	-10.5	-10.7	-10.4	-9.8	-9.0	-9.1	-8.8	-8.4	-8.5	-8.8	-9.5	-10.0	-10.3	-10.8	-11.0	-11.4	-11.8	-8.4	-11.8	-9.8
3	-12.2	-12.5	-12.8	-12.9	-13.0	-13.3	-13.5	-13.3	-13.3	-13.0	-12.8	-11.9	-11.2	-10.2	-9.9	-9.8	-10.2	-11.1	-11.7	-12.2	-12.1	-12.5	-12.3	-12.3	-9.8	-13.5	-12.1
4	-12.4	-12.7	-12.7	-12.2	-13.7	-13.5	-13.5	-13.6	-13.2	-12.8	-13.0	-12.1	-11.7	-11.4	-11.1	-10.7	-10.7	-11.7	-12.1	-12.5	-12.8	-12.8	-12.8	-12.4	-10.7	-13.7	-12.4
5	-11.6	-10.8	-10.4	-9.9	-9.0	-8.5	-9.2	-9.4	-10.9	-12.2	-11.8	-10.6	-8.1	-7.0	-6.7	-7.3	-7.8	-8.1	-8.8	-9.1	-8.7	-9.3	-10.2	-9.9	-6.7	-12.2	-9.4
6	-10.9	-10.5	-9.6	-11.7	-12.4	-13.2	-13.7	-14.3	-14.0	-13.7	-14.0	-13.5	-11.7	-10.6	-10.1	-10.4	-10.7	-10.7	-10.6	-10.6	-10.9	-10.2	-10.2	-8.9	-8.9	-14.3	-11.5
7	-8.6	-8.2	-8.3	-8.9	-9.8	-10.1	-10.5	-11.2	-11.2	-11.2	-11.1	-11.3	-11.1	-10.9	-11.1	-11.3	-11.5	-11.8	-12.1	-12.8	-12.7	-13.9	-14.5	-14.9	-8.2	-14.9	-11.2
8	-15.5	-16.3	-17.1	-17.1	-17.7	-17.8	-18.0	-17.8	-17.2	-17.2	-17.1	-16.5	-16.0	-15.3	-14.9	-14.8	-15.1	-15.3	-15.4	-15.3	-15.2	-15.2	-14.8	-14.4	-14.4	-18.0	-16.1
9	-14.7	-15.4	-15.8	-16.2	-16.7	-17.3	-17.5	-18.2	-18.2	-18.5	-18.3	-17.9	-17.2	-17.0	-16.9	-16.6	-17.0	-17.8	-17.9	-18.3	-18.3	-18.1	-17.8	-17.4	-14.7	-18.5	-17.3
10	-17.1	-17.2	-16.7	-16.8	-16.6	-16.6	-16.5	-16.2	-16.1	-15.9	-16.1	-16.2	-16.3	-16.3	-16.0	-15.5	-15.0	-15.2	-15.1	-14.5	-14.1	-13.3	-13.2	-13.3	-13.2	-17.2	-15.7
11	-13.6	-12.9	-13.6	-13.6	-14.4	-14.6	-14.7	-15.1	-15.2	-15.1	-15.6	-15.1	-14.6	-14.0	-13.5	-13.4	-13.2	-12.5	-12.5	-12.7	-13.3	-13.3	-13.4	-13.3	-12.5	-15.6	-13.9
12	-13.3	-14.0	-14.1	-14.0	-13.8	-13.6	-13.1	-13.1	-13.1	-12.8	-12.6	-12.0	-11.0	-9.5	-8.8	-8.8	-8.7	-9.0	-8.7	-8.9	-8.6	-8.3	-8.0	-7.9	-7.9	-14.1	-11.1
13	-7.7	-7.4	-7.3	-7.4	-7.7	-8.3	-9.2	-10.5	-11.8	-13.2	-14.3	-15.0	-15.5	-16.0	-16.9	-17.3	-17.9	-18.6	-18.8	-19.0	-18.8	-19.2	-18.9	-17.9	-7.3	-19.2	-13.9
14	-17.6	-17.6	-17.5	-17.1	-16.5	-15.6	-13.3	-10.4	-8.1	-6.8	-6.0	-7.1	-9.8	-11.4	-12.9	-13.9	-14.2	-15.6	-16.8	-17.8	-18.5	-19.2	-20.1	-20.9	-6.0	-20.9	-14.4
15	-21.8	-22.3	-22.8	-23.1	-23.2	-23.2	-22.8	-23.0	-23.0	-22.8	-22.4	-22.4	-22.0	-21.5	-21.2	-21.2	-21.1	-21.7	-22.0	-22.1	-22.1	-22.0	-22.1	-22.2	-21.1	-23.2	-22.2
16	-22.3	-22.4	-22.2	-22.1	-22.1	-22.3	-22.6	-23.0	-23.1	-23.1	-23.1	-22.3	-21.1	-20.4	-19.8	-19.5	-19.5	-18.9	-19.5	-19.9	-19.9	-19.8	-19.8	-19.4	-18.9	-23.1	-21.2
17	-19.3	-19.3	-19.4	-19.4	-19.3	-19.1	-18.6	-18.5	-18.7	-18.6	-18.4	-18.1	-17.0	-16.8	-16.8	-16.9	-17.0	-17.3	-17.9	-18.0	-18.3	-19.3	-18.6	-19.0	-16.8	-19.4	-18.3
18	-19.3	-20.0	-20.2	-20.5	-20.7	-20.9	-20.9	-21.1	-21.2	-20.6	-21.2	-20.7	-20.6	-19.8	-19.6	-19.8	-20.3	-20.6	-20.4	-20.3	-20.7	-21.0	-20.9	-21.0	-19.3	-21.2	-20.5
19	-21.4	-21.2	-21.0	-20.5	-19.7	-19.6	-19.0	-19.1	-19.1	-18.9	-18.5	-18.0	-17.6	-17.0	-16.8	-16.6	-16.3	-16.1	-16.2	-16.1	-16.2	-16.3	-16.3	-16.7	-16.1	-21.4	-18.1
20	-16.5	-16.0	-16.0	-15.6	-15.4	-15.6	-15.8	-16.0	-15.8	-15.7	-16.0	-15.9	-15.7	-15.8	-15.4	-15.3	-15.6	-16.1	-16.3	-16.4	-16.5	-16.0	-16.3	-16.4	-15.3	-16.5	-15.9
21	-16.0	-16.8	-17.5	-17.3	-17.0	-16.7	-16.6	-16.7	-16.2	-15.7	-15.1	-14.7	-14.2	-14.0	-13.9	-13.7	-13.4	-12.8	-12.9	-11.9	-12.0	-12.2	-11.5	-11.0	-11.0	-17.5	-14.6
22	-11.1	-10.8	-11.5	-12.3	-12.7	-13.5	-14.6	-14.8	-14.2	-13.8	-13.6	-13.5	-13.7	-12.9	-12.7	-12.9	-13.2	-13.5	-13.7	-14.3	-15.2	-14.9	-15.5	-16.5	-10.8	-16.5	-13.6
23	-16.8	-16.8	-18.0	-18.6	-17.8	-18.0	-18.2	-18.4	-18.3	-18.6	-19.0	-18.5	-18.6	-17.8	-18.0	-17.7	-17.6	-18.2	-17.9	-16.8	-17.1	-15.4	-14.5	-12.3	-12.3	-19.0	-17.5
24	-13.1	-13.0	-12.0	-10.5	-10.9	-11.3	-11.1	-11.0	-9.9	-9.0	-8.8	-8.9	-9.1	-8.0	-7.8	-7.1	-7.0	-7.0	-6.6	-6.3	-6.1	-6.0	-5.7	-5.4	-5.4	-13.1	-8.8
25	-5.2	-5.3	-6.0	-6.3	-6.4	-5.8	-5.0	-4.9	-5.1	-5.2	-5.2	-5.1	-4.8	-4.8	-5.1	-5.4	-6.4	-7.3	-7.4	-7.4	-7.0	-6.7	-6.4	-6.1	-4.8	-7.4	-5.8
26	-6.3	-6.1	-6.0	-5.5	-5.4	-4.8	-4.4	-4.0	-3.6	-3.4	-3.2	-3.3	-3.1	-2.9	-2.7	-2.8	-2.9	-3.1	-3.4	-3.3	-3.3	-3.1	-3.1	-3.1	-2.7	-6.3	-3.9
27	-3.1	-3.1	-3.1	-3.2	-3.1	-2.9	-2.7	-2.5	-2.4	-2.2	-1.9	-1.6	-1.2	-0.8	-0.6	-0.6	-0.7	-0.7	-0.6	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-3.2	-1.6
28	-0.5	-0.6	-0.7	-0.8	-0.8	-0.7	-0.7	-0.9	-1.2	-1.6	-1.6	-1.6	-1.5	-1.7	-1.7	-1.6	-2.1	-2.7	-2.9	-3.4	-4.0	-4.8	-4.9	-4.8	-0.5	-4.9	-2.0
29	-5.6	-5.9	-5.9	-6.1	-6.2	-5.9	-5.2	-5.2	-4.6	-4.6	-5.1	-5.5	-4.7	-5.2	-5.4	-6.0	-7.4	-7.1	-6.6	-6.9	-5.1	-4.3	-4.0	-3.6	-3.6	-7.4	-5.5
30	-2.5	-2.0	-2.0	-2.7	-2.7	-2.4	-2.1	-1.8	-1.5	-1.3	-1.0	-0.8	-0.9	-1.5	-1.9	-2.4	-2.9	-4.7	-5.5	-5.5	-5.4	-5.7	-6.2	-6.8	-0.8	-6.8	-3.0
Max.	**-0.5**	**-0.6**	**-0.7**	**-0.8**	**-0.8**	**-0.7**	**-0.7**	**-0.9**	**-1.2**	**-1.3**	**-1.0**	**-0.8**	**-0.9**	**-0.8**	**-0.6**	**-0.6**	**-0.7**	**-0.7**	**-0.6**	**-0.5**	**-0.4**	**-0.3**	**-0.3**	**-0.3**	**-0.3**		
Min.	**-22.3**	**-22.4**	**-22.8**	**-23.1**	**-23.2**	**-23.2**	**-22.8**	**-23.0**	**-23.1**	**-23.1**	**-23.1**	**-22.4**	**-22.0**	**-21.5**	**-21.2**	**-21.2**	**-21.1**	**-21.7**	**-22.0**	**-22.1**	**-22.1**	**-22.0**	**-22.1**	**-22.2**		**-23.2**	
Avg.	**-12.4**	**-12.4**	**-12.6**	**-12.6**	**-12.7**	**-12.8**	**-12.7**	**-12.7**	**-12.6**	**-12.5**	**-12.5**	**-12.2**	**-11.9**	**-11.5**	**-11.4**	**-11.5**	**-11.7**	**-12.0**	**-12.2**	**-12.3**	**-12.4**	**-12.4**	**-12.4**	**-12.3**			**-12.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-7.1	-7.5	-7.6	-8.2	-8.4	-8.0	-8.2	-8.2	-8.8	-8.1	-7.8	-7.3	-7.2	-6.5	-6.2	-6.7	-6.8	-8.0	-8.4	-7.7	-7.3	-7.8	-8.7	-8.7	-6.2	-8.8	-7.7
2	-7.9	-5.9	-5.8	-6.8	-4.2	-4.7	-4.5	-7.4	-7.4	-5.7	-3.5	-2.7	-0.3	-0.1	0.0	-1.9	-1.0	-0.7	-2.7	-2.1	-0.8	-0.2	-0.1	-2.7	0.0	-7.9	-3.3
3	-2.6	-2.4	-2.8	-2.7	-2.0	-2.1	-2.7	-3.2	-2.4	-2.1	-1.5	-1.2	-0.9	-1.4	-2.3	-3.0	-3.3	-3.6	-3.5	-3.4	-3.4	-3.4	-3.6	-3.7	-0.9	-3.7	-2.6
4	-4.3	-4.5	-4.7	-5.0	-5.2	-5.0	-5.0	-4.5	-4.9	-4.7	-4.1	-4.6	-1.8	-0.3	-0.5	-0.9	-1.4	-0.5	-0.7	-0.4	-0.1	0.2	0.3	0.2	0.3	-5.2	-2.6
5	0.3	0.5	0.3	0.2	-0.1	-0.4	0.1	1.2	1.5	1.1	1.0	1.4	1.2	1.6	1.2	1.3	1.0	1.4	0.8	1.5	1.5	1.4	1.4	1.4	1.6	-0.4	0.9
6	1.1	1.0	1.1	1.1	1.2	1.1	0.6	-0.1	0.1	0.6	0.7	1.0	1.2	1.0	1.4	1.4	1.3	1.3	1.2	1.1	1.1	0.9	0.8	1.4	1.4	-0.1	1.0
7	1.1	1.2	1.1	1.6	1.8	1.4	0.9	1.1	2.2	2.1	1.4	1.3	0.9	0.6	1.3	1.3	1.7	1.8	1.3	1.0	0.9	0.5	0.7	0.6	2.2	0.5	1.2
8	0.7	0.8	0.7	0.5	-0.1	0.0	0.4	0.1	-0.2	-0.1	-0.1	0.1	0.0	0.4	0.7	0.5	-0.3	-0.7	-1.5	-1.6	-1.6	-1.8	-1.9	-1.7	0.8	-1.9	-0.3
9	-1.0	-1.4	-1.4	-1.0	-1.1	-0.8	-0.9	-0.8	-1.0	-0.7	-0.5	-0.3	-0.6	-0.7	-0.6	-0.8	-0.8	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.3	-1.4	-0.8
10	-0.5	-0.5	-0.3	-0.1	0.0	-0.2	-0.6	-1.1	-1.1	-1.0	-1.0	-0.9	-0.4	-0.2	-0.1	-0.4	-0.6	-1.0	-0.9	-0.9	-0.8	-0.7	-0.2	-0.1	0.0	-1.1	-0.6
11	-0.2	-0.4	-0.2	-0.4	-1.9	-2.3	-2.1	-2.4	-2.0	-1.9	-2.4	-2.6	-2.1	-3.3	-3.0	-4.2	-4.8	-4.7	-4.3	-5.5	-6.2	-6.6	-7.4	-7.9	-0.2	-7.9	-3.3
12	-9.3	-9.5	-10.3	-10.6	-10.3	-10.0	-10.1	-10.0	-10.4	-10.7	-10.7	-10.6	-10.6	-10.8	-10.7	-10.8	-10.8	-11.0	-11.0	-10.9	-11.0	-11.0	-11.1	-11.2	-9.3	-11.2	-10.5
13	-11.3	-11.5	-11.6	-11.8	-12.5	-13.2	-13.6	-13.8	-13.9	-14.2	-14.0	-13.5	-13.6	-13.8	-13.8	-14.1	-14.2	-14.5	-14.7	-14.4	-14.5	-14.8	-14.8	-15.1	-11.3	-15.1	-13.6
14	-15.1	-15.4	-15.9	-15.7	-15.3	-15.1	-15.5	-16.4	-15.7	-15.2	-16.0	-15.1	-14.8	-14.0	-13.3	-13.9	-14.8	-14.7	-14.3	-13.7	-13.8	-13.5	-13.8	-13.6	-13.3	-16.4	-14.8
15	-13.7	-13.9	-14.7	-14.7	-15.6	-17.6	-18.8	-19.0	-18.7	-19.5	-19.3	-18.6	-19.7	-17.5	-17.4	-15.8	-12.3	-11.0	-10.3	-9.5	-9.2	-8.8	-8.1	-8.2	-8.1	-19.7	-14.7
16	-7.9	-7.3	-6.6	-6.2	-6.0	-5.8	-5.6	-5.3	-5.1	-4.9	-4.7	-4.9	-5.0	-4.9	-4.9	-4.9	-4.9	-4.8	-4.7	-4.7	-5.6	-5.8	-6.1	-6.2	-4.7	-7.9	-5.5
17	-5.5	-5.9	-6.1	-6.7	-6.3	-7.4	-7.5	-8.1	-7.6	-8.1	-8.2	-8.3	-8.2	-8.3	-8.3	-8.6	-9.0	-9.3	-10.0	-10.1	-10.0	-10.3	-11.2	-11.9	-5.5	-11.9	-8.4
18	-12.0	-12.2	-12.3	-12.8	-13.9	-13.6	-13.2	-13.1	-13.0	-13.7	-14.1	-13.6	-14.3	-15.4	-15.3	-15.9	-15.9	-15.3	-14.9	-15.2	-15.3	-14.3	-14.3	-14.1	-12.0	-15.9	-14.1
19	-15.8	-15.3	-15.1	-13.4	-11.9	-9.4	-9.2	-9.1	-11.4	-9.9	-8.6	-8.5	-8.5	-9.2	-11.5	-11.5	-11.0	-11.1	-11.8	-12.9	-14.5	-16.0	-16.3	-17.1	-8.5	-17.1	-12.0
20	-17.1	-17.8	-18.5	-18.4	-18.1	-19.0	-19.1	-19.5	-20.0	-19.5	-19.4	-19.3	-18.6	-17.7	-17.7	-18.5	-19.6	-19.2	-19.1	-19.6	-20.1	-20.1	-19.6	-20.1	-17.1	-20.1	-19.0
21	-20.5	-19.2	-19.0	-18.6	-18.1	-18.2	-17.8	-17.9	-17.9	-18.9	-19.8	-19.9	-20.0	-19.9	-19.9	-20.4	-21.0	-20.5	-20.1	-19.0	-18.7	-18.3	-18.1	-18.2	-17.8	-21.0	-19.1
22	-19.3	-20.4	-20.0	-19.8	-19.9	-19.7	-18.3	-17.6	-16.9	-15.9	-15.4	-15.1	-14.5	-14.9	-15.3	-16.3	-13.8	-14.0	-14.1	-14.4	-14.0	-13.3	-14.8	-15.6	-13.3	-20.4	-16.4
23	-17.0	-16.6	-15.8	-16.4	-16.1	-15.9	-15.0	-15.9	-16.9	-16.5	-16.5	-16.6	-16.9	-14.4	-15.6	-15.6	-15.8	-15.6	-15.2	-15.0	-13.8	-13.1	-12.8	-13.4	-12.8	-17.0	-15.5
24	-12.8	-15.0	-14.7	-13.0	-13.3	-12.3	-13.3	-13.4	-13.3	-12.4	-12.7	-11.8	-11.7	-10.9	-11.3	-11.8	-10.4	-11.1	-13.3	-13.4	-14.5	-14.5	-15.5	-16.2	-10.4	-16.2	-13.0
25	-15.3	-14.7	-15.4	-15.8	-17.7	-18.1	-18.8	-18.6	-18.6	-18.6	-20.1	-19.8	-18.1	-17.5	-18.1	-18.1	-18.9	-18.6	-17.9	-16.7	-15.5	-15.4	-15.8	-17.2	-14.7	-20.1	-17.5
26	-17.7	-17.7	-17.3	-17.3	-17.5	-17.6	-17.3	-17.6	-16.8	-17.6	-16.7	-17.0	-16.0	-16.0	-15.9	-17.1	-17.3	-17.4	-17.2	-17.4	-17.1	-11.8	-10.2	-9.8	-9.8	-17.7	-16.3
27	-8.9	-7.9	-6.9	-6.4	-5.5	-5.1	-4.3	-3.8	-3.4	-3.1	-3.5	-5.1	-6.5	-6.2	-5.3	-4.8	-4.6	-4.1	-3.7	-3.0	-3.3	-2.6	-1.5	-0.8	-0.8	-8.9	-4.6
28	-0.8	-0.8	-1.1	-1.5	-1.2	-1.4	-1.6	-1.6	-1.9	-1.9	-1.8	-1.8	-1.5	-1.5	-1.9	-2.0	-2.1	-1.9	-1.9	-2.7	-4.3	-4.1	-4.2	-5.2	-0.8	-5.2	-2.1
29	-5.9	-5.2	-5.4	-4.5	-4.3	-4.9	-4.9	-5.3	-5.6	-7.4	-8.6	-9.3	-10.5	-10.9	-11.1	-11.9	-12.9	-13.5	-13.6	-13.8	-14.1	-14.3	-14.5	-14.4	-4.3	-14.5	-9.4
30	-14.2	-14.4	-14.5	-14.4	-14.5	-14.7	-14.8	-14.8	-14.8	-14.7	-15.1	-15.3	-15.0	-14.6	-15.1	-15.4	-15.5	-15.6	-15.8	-16.1	-16.6	-16.8	-16.9	-17.1	-14.2	-17.1	-15.3
31	-16.6	-16.7	-16.6	-16.7	-17.2	-17.9	-18.2	-18.7	-19.2	-19.1	-17.9	-17.6	-16.5	-15.8	-16.4	-14.2	-16.5	-14.8	-13.4	-13.1	-13.0	-13.1	-13.6	-14.7	-13.0	-19.2	-16.1
Max.	**1.1**	**1.2**	**1.1**	**1.6**	**1.8**	**1.4**	**0.9**	**1.2**	**2.2**	**2.1**	**1.4**	**1.4**	**1.2**	**1.6**	**1.4**	**1.4**	**1.7**	**1.8**	**1.3**	**1.5**	**1.5**	**1.4**	**1.4**	**1.4**	**2.2**		
Min.	**-20.5**	**-20.4**	**-20.0**	**-19.8**	**-19.9**	**-19.7**	**-19.1**	**-19.5**	**-20.0**	**-19.5**	**-20.1**	**-19.9**	**-20.0**	**-19.9**	**-19.9**	**-20.4**	**-21.0**	**-20.5**	**-20.1**	**-19.6**	**-20.1**	**-20.1**	**-19.6**	**-20.1**		**-21.0**	
Avg.	**-8.9**	**-8.9**	**-9.0**	**-8.9**	**-8.9**	**-9.0**	**-9.0**	**-9.2**	**-9.2**	**-9.1**	**-9.1**	**-8.9**	**-8.7**	**-8.5**	**-8.6**	**-8.9**	**-8.9**	**-8.8**	**-8.9**	**-8.9**	**-8.9**	**-8.7**	**-8.8**	**-9.1**			**-8.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														139.6	999.0	999.0	10.2	9.0	7.0	7.1	6.4	6.1	5.7	5.8	139.6	999.0	254.6
10	5.4	5.4	5.5	5.2	5.2	5.4	5.1	5.7	6.5	7.2	7.3	7.2	7.1	7.6	7.6	7.0	6.6	6.3	5.9	5.4	4.3	4.2	4.5	4.2	7.6	4.2	5.9
11	3.9	4.0	3.9	3.9	3.9	4.1	4.2	4.4	4.6	4.9	5.1	5.4	5.4	5.8	6.2	6.5	6.8	6.8	6.2	6.3	6.3	6.2	5.9	5.7	6.8	3.9	5.3
12	6.2	6.5	6.4	6.6	6.3	6.1	6.3	6.4	6.4	6.8	6.9	7.0	7.3	6.9	6.7	6.5	6.6	6.4	6.4	6.4	6.3	6.2	6.0	5.9	7.3	5.9	6.5
13	5.9	5.8	5.7	5.7	5.7	5.8	6.0	6.5	7.1	7.6	8.3	9.2	9.3	9.6	10.2	10.9	10.9	10.6	10.0	9.9	9.4	8.7	8.9	8.7	10.9	5.7	8.2
14	8.6	8.3	8.2	7.8	7.6	8.3	8.9	9.5	10.3	10.9	11.6	12.6	13.1	13.3	13.2	12.9	13.3	13.1	12.4	11.6	11.4	11.1	10.7	10.2	13.3	7.6	10.8
15	10.2	10.4	10.1	9.9	10.2	10.5	11.4	11.8	13.0	14.5	15.8	17.1	18.1	18.9	17.5	14.5	13.5	12.3	12.0	10.8	9.3	9.3	9.2	9.0	18.9	9.0	12.5
16	9.1	9.2	9.5	9.5	9.5	9.2	8.6	8.3	7.9	7.5	7.5	7.8	7.9	8.5	8.6	8.6	8.5	8.5	8.5	8.7	8.5	8.1	7.8	7.6	9.5	7.5	8.5
17	7.1	7.3	7.4	8.4	9.4	9.6	8.8	8.3	8.6	8.5	9.7	10.7	11.5	10.4	9.7	10.7	11.0	10.5	9.9	9.1	8.3	7.9	7.9	7.8	11.5	7.1	9.1
18	7.4	7.2	7.3	7.5	7.8	8.1	8.5	9.8	9.9	10.1	9.9	10.7	10.0	9.8	10.8	11.3	10.6	10.0	9.6	9.4	8.8	8.1	7.9	6.8	11.3	6.8	9.1
19	6.7	6.6	6.4	6.1	6.9	7.5	8.1	8.6	9.2	9.7	10.5	11.3	12.4	12.8	12.7	12.7	13.6	13.3	12.9	12.0	8.6	7.0	6.4	6.3	13.6	6.1	9.5
20	5.9	5.8	5.7	5.3	6.4	7.2	7.4	8.4	9.4	10.1	10.8	11.7	12.1	12.7	10.2	7.2	6.2	6.5	6.8	7.1	7.0	6.3	5.9	4.7	12.7	4.7	7.8
21	4.8	4.5	4.6	4.7	4.9	4.6	4.5	6.1	7.8	9.4	10.1	11.2	11.9	12.1	12.0	13.2	13.3	13.0	12.9	13.9	13.7	12.2	12.1	12.0	13.9	4.5	9.6
22	12.7	12.2	11.0	11.1	10.2	10.0	10.7	11.0	10.1	8.4	9.2	9.5	10.3	9.1	7.1	6.6	6.5	6.6	6.6	6.5	6.7	6.5	6.4	5.9	12.7	5.9	8.8
23	5.8	6.2	6.3	6.3	6.2	6.3	6.2	6.3	6.8	7.0	7.0	7.6	8.2	8.9	9.1	9.3	9.5	9.7	9.9	9.6	8.6	7.8	6.8	6.4	9.9	5.8	7.6
24	5.9	5.5	5.6	5.5	5.5	5.5	5.4	7.2	8.9	10.0	10.7	11.4	12.3	13.1	13.7	12.9	12.7	13.4	13.0	12.6	12.7	11.9	12.2	11.7	13.7	5.4	10.0
25	10.8	10.3	9.9	9.9	9.5	9.2	10.1	11.2	12.3	12.6	13.2	14.2	14.6	14.4	14.1	13.8	14.2	14.0	12.8	11.3	10.4	9.8	9.2	8.4	14.6	8.4	11.7
26	7.7	7.0	7.0	6.6	6.3	6.4	6.6	7.6	9.0	10.3	11.8	13.0	14.1	14.8	14.9	14.8	15.6	16.2	15.4	13.3	11.4	10.2	9.6	9.0	16.2	6.3	10.8
27	8.1	7.1	7.4	7.3	7.4	7.8	7.3	7.9	9.4	10.9	12.1	12.9	13.9	14.6	14.8	15.1	15.1	15.5	15.5	15.0	13.9	12.4	11.0	10.1	15.5	7.1	11.4
28	9.4	8.3	7.4	6.9	6.7	7.0	6.4	5.1	5.7	6.3	6.4	7.4	7.1	7.1	8.2	8.6	9.2	9.3	10.0	10.2	10.3	10.2	9.8	9.4	10.3	5.1	8.0
29	9.2	8.8	8.2	7.9	7.8	7.6	7.6	8.2	8.5	9.2	9.8	10.6	12.4	13.3	15.1	15.9	14.9	13.0	11.1	10.1	8.9	8.1	7.8	7.5	15.9	7.5	10.0
30	7.4	7.4	7.3	7.3	7.5	7.7	7.8	7.7	7.6	7.5	7.4	7.6	7.6	7.8	7.4	7.1	7.3	7.8	8.2	8.4	8.4	8.0	7.8	7.6	8.4	7.1	7.6
Max.	**12.7**	**12.2**	**11.0**	**11.1**	**10.2**	**10.5**	**11.4**	**11.8**	**13.0**	**14.5**	**15.8**	**17.1**	**18.1**	**139.6**	**17.5**	**15.9**	**15.6**	**16.2**	**15.5**	**15.0**	**13.9**	**12.4**	**12.2**	**12.0**	**139.6**		
Min.	**3.9**	**4.0**	**3.9**	**3.9**	**3.9**	**4.1**	**4.2**	**4.4**	**4.6**	**4.9**	**5.1**	**5.4**	**5.4**	**5.8**	**999.0**	**999.0**	**6.2**	**6.3**	**5.9**	**5.4**	**4.3**	**4.2**	**4.5**	**4.2**		**999.0**	
Avg.	**7.5**	**7.3**	**7.2**	**7.1**	**7.2**	**7.3**	**7.4**	**7.9**	**8.5**	**9.0**	**9.6**	**10.3**	**10.8**	**16.9**	**307.7**	**307.9**	**10.7**	**10.5**	**10.1**	**9.8**	**9.1**	**8.5**	**8.1**	**7.8**			**-48.5**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.4	7.1	6.7	6.8	6.5	5.8	5.2	5.2	6.0	6.5	7.5	9.4	11.2	13.4	15.0	16.0	16.3	16.0	15.8	15.3	14.9	14.4	13.7	12.4	16.3	5.2	10.6
2	11.2	10.7	10.5	10.5	10.4	10.1	10.4	10.3	11.8	13.2	14.8	16.1	16.8	17.4	17.8	18.3	18.9	19.0	19.1	18.8	18.0	16.4	14.0	13.4	19.1	10.1	14.5
3	13.5	13.0	12.2	11.5	10.5	10.2	10.7	11.4	12.3	14.1	15.8	16.9	17.9	18.6	18.7	18.9	18.9	19.1	19.3	18.7	15.7	13.5	12.4	11.5	19.3	10.2	14.8
4	11.6	10.8	10.2	9.8	9.7	9.5	9.6	10.7	12.5	13.8	15.4	16.8	18.1	18.7	19.3	19.7	21.2	21.3	21.4	19.6	16.5	14.9	13.5	12.9	21.4	9.5	14.9
5	12.5	11.5	11.3	10.4	10.2	10.0	10.5	10.7	10.8	11.6	13.3	15.3	17.2	18.1	19.0	19.4	18.0	15.5	15.5	15.3	14.5	14.1	13.9	13.2	19.4	10.0	13.8
6	12.1	11.8	11.8	11.7	11.8	10.4	10.2	10.9	11.2	11.1	12.4	15.0	15.9	16.1	16.7	17.4	17.8	17.3	16.1	15.9	14.9	14.3	12.4	11.3	17.8	10.2	13.6
7	10.5	10.2	10.0	9.8	9.8	9.7	9.8	9.9	9.7	10.1	10.1	10.5	11.1	11.3	10.7	10.1	10.3	10.4	10.1	10.1	10.1	10.0	9.6	9.1	11.3	9.1	10.1
8	8.8	8.4	7.9	7.8	7.6	7.4	7.3	7.2	7.2	7.3	7.5	7.9	8.3	8.8	9.8	10.3	10.6	11.0	11.4	11.7	11.6	11.0	11.3	11.1	11.7	7.2	9.1
9	10.7	10.7	10.5	10.0	9.6	9.7	10.4	11.1	12.0	13.0	14.5	15.6	16.0	16.4	16.8	17.6	17.2	16.2	15.3	14.4	13.6	12.6	11.7	9.7	17.6	9.6	13.1
10	9.7	9.8	10.1	10.0	10.0	9.8	9.5	10.1	10.4	10.5	11.3	12.1	12.3	12.4	13.0	12.8	12.7	12.3	12.1	11.4	9.7	8.6	8.1	8.2	13.0	8.1	10.7
11	8.1	7.8	7.8	7.7	7.7	7.6	8.3	8.2	8.8	10.2	11.9	12.2	12.6	12.9	12.6	12.7	12.0	11.2	11.5	12.1	11.6	11.0	10.4	9.2	12.9	7.6	10.3
12	9.2	9.4	9.7	9.1	9.5	9.9	10.5	11.9	12.7	13.5	15.0	16.6	18.0	21.2	13.8	-2.8	21.6	20.6	19.7	19.2	17.4	15.9	16.0	16.6	21.6	-2.8	13.9
13	16.2	15.2	14.9	14.6	13.2	9.9	9.4	8.8	8.5	8.2	8.1	7.9	8.0	8.5	9.0	8.9	8.6	8.5	8.5	8.6	8.4	8.2	7.9	7.5	16.2	7.5	9.8
14	7.1	6.9	6.8	6.7	6.6	6.5	6.4	6.4	6.4	6.5	6.6	6.8	7.1	7.3	7.6	7.7	7.7	7.8	7.4	7.6	7.6	7.6	7.4	7.3	7.8	6.4	7.1
15	7.3	7.2	7.0	6.8	6.7	6.6	6.6	6.7	6.9	7.2	7.6	8.3	8.4	8.8	9.3	10.5	11.1	11.6	11.2	10.5	10.4	10.3	9.9	9.2	11.6	6.6	8.6
16	8.3	8.2	8.2	8.2	8.1	8.3	8.2	8.5	9.2	10.1	10.6	11.1	11.1	10.8	11.0	10.8	9.9	9.5	9.3	8.9	8.5	8.3	8.0	7.9	11.1	7.9	9.2
17	7.7	7.6	7.3	7.0	6.8	7.1	7.2	7.5	7.8	8.4	9.3	10.1	10.4	10.5	9.9	9.9	9.7	9.4	8.9	8.8	8.7	8.7	8.5	8.5	10.5	6.8	8.6
18	8.8	8.8	8.6	8.4	8.4	8.5	8.7	8.7	9.1	9.4	9.9	10.3	10.3	10.0	9.5	9.5	9.7	9.8	9.6	9.1	8.9	8.9	8.7	8.4	10.3	8.4	9.2
19	8.3	8.4	8.1	7.9	8.2	8.7	9.4	9.9	10.6	11.1	12.2	12.9	13.4	13.8	13.5	13.0	12.7	13.2	13.6	13.4	13.1	12.6	12.2	11.3	13.8	7.9	11.3
20	10.6	9.7	9.2	9.6	9.6	9.8	10.3	11.6	14.0	15.1	15.6	16.0	16.3	17.0	17.0	16.3	16.9	16.5	15.3	14.1	12.8	11.1	10.0	9.3	17.0	9.2	13.1
21	8.9	8.8	8.8	9.2	10.9	10.2	10.8	11.0	12.4	13.5	14.0	14.9	15.4	14.5	14.2	13.7	12.8	12.3	11.7	11.1	10.8	10.5	10.0	11.3	15.4	8.8	11.7
22	10.3	9.2	9.1	9.0	10.0	10.1	10.2	10.7	11.6	12.0	11.4	11.4	12.0	10.7	9.4	9.2	8.4	8.3	8.5	8.6	8.6	8.3	7.7	7.6	12.0	7.6	9.7
23	7.7	8.0	7.9	7.5	7.4	7.4	7.5	8.0	8.2	8.9	9.6	9.3	9.1	9.9	10.4	10.7	10.9	10.6	9.3	10.3	10.1	10.0	10.2	9.7	10.9	7.4	9.1
24	9.5	9.7	9.1	9.1	8.9	8.7	9.2	9.1	9.1	9.4	9.7	9.9	10.0	10.0	10.1	9.8	9.0	8.6	8.4	8.3	8.1	7.9	7.9	7.9	10.1	7.9	9.1
25	8.0	8.1	8.2	8.1	8.3	8.5	8.3	8.0	8.2	8.2	8.4	9.1	9.3	9.6	10.7	11.0	10.8	10.6	10.2	10.0	9.8	9.1	9.0	8.8	11.0	8.0	9.1
26	8.7	9.1	9.2	9.3	8.9	8.5	8.3	8.1	8.4	8.5	8.5	8.9	9.9	10.4	10.5	10.6	10.6	10.0	9.8	9.8	9.4	8.8	8.6	8.2	10.6	8.1	9.2
27	7.9	7.8	7.7	7.6	7.3	7.3	7.5	8.4	8.9	9.3	9.8	10.5	11.0	11.9	12.3	13.1	13.7	13.7	13.2	12.5	11.6	10.1	10.5	10.5	13.7	7.3	10.2
28	10.3	9.4	9.1	9.3	9.2	9.8	10.2	11.1	11.8	12.9	13.4	13.7	13.2	13.0	13.0	13.0	12.7	11.6	11.3	9.8	8.7	8.3	8.1	7.6	13.7	7.6	10.9
29	7.6	7.5	7.3	7.1	6.8	6.7	6.7	6.8	6.9	7.4	8.6	9.8	11.2	12.6	12.5	11.1	10.7	10.0	9.3	8.3	7.8	7.4	7.0	6.9	12.6	6.7	8.5
30	6.7	6.5	6.4	6.2	6.1	6.0	5.8	5.7	5.8	6.2	6.8	7.3	7.8	8.0	8.9	9.9	10.4	11.4	11.3	11.6	10.7	9.5	9.4	8.8	11.6	5.7	8.1
31	8.9	8.2	8.1	8.3	8.4	8.5	8.7	9.0	9.6	10.0	10.1	10.5	11.1	11.1	11.0	11.0	11.1	11.1	10.7	10.3	9.6	9.0	8.6	8.2	11.1	8.1	9.6
Max.	**16.2**	**15.2**	**14.9**	**14.6**	**13.2**	**10.4**	**10.8**	**11.9**	**14.0**	**15.1**	**15.8**	**16.9**	**18.1**	**21.2**	**19.3**	**19.7**	**21.6**	**21.3**	**21.4**	**19.6**	**18.0**	**16.4**	**16.0**	**16.6**	**21.6**		
Min.	**6.7**	**6.5**	**6.4**	**6.2**	**6.1**	**5.8**	**5.2**	**5.2**	**5.8**	**6.2**	**6.6**	**6.8**	**7.1**	**7.3**	**7.6**	**-2.8**	**7.7**	**7.8**	**7.4**	**7.6**	**7.6**	**7.4**	**7.0**	**6.9**		**-2.8**	
Avg.	**9.5**	**9.2**	**9.0**	**8.9**	**8.8**	**8.6**	**8.8**	**9.1**	**9.6**	**10.2**	**10.9**	**11.7**	**12.3**	**12.7**	**12.7**	**12.3**	**13.0**	**12.7**	**12.4**	**12.1**	**11.4**	**10.7**	**10.2**	**9.8**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.8	7.2	6.9	6.6	6.3	6.1	6.3	6.3	6.4	6.5	6.7	7.1	7.6	7.9	8.3	8.7	8.7	8.3	7.7	8.0	7.9	7.6	7.1	6.9	8.7	6.1	7.3
2	6.8	6.9	7.0	7.0	7.1	7.2	6.5	6.9	7.1	7.2	7.6	8.2	8.7	9.2	8.9	8.3	8.9	9.5	9.8	9.3	9.0	8.6	8.5	8.4	9.8	6.5	8.0
3	8.3	8.3	8.3	8.7	8.8	8.3	8.4	8.8	9.0	9.4	9.4	9.6	9.8	9.8	10.2	9.8	9.5	9.6	9.3	9.2	8.9	8.5	8.3	8.5	10.2	8.3	9.0
4	8.7	8.5	8.1	8.1	7.8	8.3	8.7	8.8	9.2	9.9	10.5	10.8	10.5	10.0	10.3	10.1	10.4	10.7	10.7	10.5	10.2	9.9	9.6	9.3	10.8	7.8	9.6
5	9.2	9.2	9.2	9.0	9.1	9.1	9.0	9.1	9.5	9.8	10.0	10.1	10.2	11.1	12.2	12.7	13.1	13.3	11.5	10.9	11.1	11.5	10.6	10.4	13.3	9.0	10.4
6	10.8	11.0	10.2	10.4	10.1	9.1	8.9	10.8	10.8	10.9	11.8	12.8	13.8	14.6	15.1	15.5	15.7	16.1	16.3	15.6	15.0	13.8	13.6	12.8	16.3	8.9	12.7
7	12.7	12.3	12.2	11.8	11.4	11.7	11.5	8.9	9.5	10.3	10.8	10.9	13.5	14.6	14.4	14.9	15.1	14.0	12.3	10.8	9.3	8.6	8.3	8.1	15.1	8.1	11.6
8	7.9	7.8	7.5	7.3	7.4	7.4	7.3	7.4	7.8	8.0	10.1	13.5	6.8	16.0	11.6	12.3	12.4	11.7	10.9	10.7	10.5	10.3	10.1	9.8	16.0	6.8	9.7
9	9.7	9.9	9.6	9.6	9.4	9.2	9.0	9.3	9.5	9.5	9.5	9.6	9.4	9.4	9.4	9.6	9.6	9.7	9.8	9.7	9.7	9.7	9.7	9.7	9.9	9.0	9.5
10	9.6	9.7	9.8	9.7	9.4	9.5	9.6	9.6	9.7	9.9	10.1	10.4	10.3	10.3	10.2	10.0	9.9	10.0	9.9	9.5	9.2	9.1	9.1	9.1	10.4	9.1	9.7
11	9.0	8.9	8.8	8.8	8.8	8.8	8.9	9.0	9.2	9.4	9.8	10.1	10.3	10.5	10.8	11.0	10.9	10.7	10.6	10.3	10.3	10.3	10.3	10.6	11.0	8.8	9.8
12	10.6	10.6	10.7	10.5	10.6	10.7	10.8	11.0	11.1	10.9	11.5	11.9	12.1	13.1	13.9	13.8	14.1	13.9	13.6	12.5	11.5	10.7	10.5	10.1	14.1	10.1	11.7
13	8.7	8.1	8.0	7.8	7.8	7.8	7.2	7.1	7.3	7.6	7.7	7.9	8.2	8.4	8.8	9.0	9.2	9.0	8.8	8.8	8.5	8.4	8.3	8.2	9.2	7.1	8.2
14	8.2	8.1	8.0	7.9	7.8	7.7	7.7	7.9	8.1	8.3	8.6	9.0	8.9	8.9	8.8	8.7	8.4	8.0	8.1	8.2	8.1	8.0	8.0	8.0	9.0	7.7	8.2
15	8.0	8.0	8.0	8.1	8.1	8.1	8.2	8.2	8.4	8.6	8.8	9.1	9.5	9.6	9.7	9.8	9.9	10.0	9.8	9.5	9.5	9.5	9.3	9.1	10.0	8.0	8.9
16	9.1	9.0	8.9	9.0	9.0	9.0	9.1	9.2	9.6	10.2	11.0	11.5	11.2	11.7	12.1	12.1	11.7	11.8	11.7	11.4	11.3	11.2	10.8	10.6	12.1	8.9	10.5
17	10.4	10.2	10.2	10.0	10.1	10.3	10.8	10.9	10.8	11.6	13.1	14.1	14.8	15.1	13.2	13.0	13.6	13.6	12.9	12.1	11.4	10.3	9.4	9.0	15.1	9.0	11.7
18	8.7	8.6	8.1	7.8	7.5	7.1	6.8	6.6	6.8	6.9	7.1	7.3	7.5	8.0	8.4	8.6	8.4	8.8	9.1	9.4	9.5	9.5	9.3	8.9	9.5	6.6	8.1
19	8.9	8.3	7.9	7.6	7.4	6.9	6.9	7.6	7.7	7.7	8.0	9.0	9.6	10.3	10.6	10.3	10.2	9.5	8.9	8.0	7.7	7.5	6.7	6.7	10.6	6.7	8.3
20	7.1	7.3	7.1	6.9	7.2	7.1	6.5	6.3	6.4	6.7	7.0	8.0	9.3	10.5	11.3	11.6	12.0	12.3	12.0	11.2	10.1	8.3	8.0	7.7	12.3	6.3	8.7
21	7.3	6.4	6.2	5.6	5.2	5.5	6.0	6.5	7.6	8.5	8.9	9.8	10.6	11.1	11.1	11.4	11.5	11.1	10.3	8.8	8.0	7.5	7.1	6.5	11.5	5.2	8.3
22	6.9	7.6	8.0	8.3	8.2	8.2	8.1	7.9	7.8	7.6	7.7	7.7	7.9	9.0	9.3	9.2	9.6	10.0	10.3	10.2	9.5	8.3	7.1	6.5	10.3	6.5	8.4
23	6.8	6.5	6.3	6.6	6.9	7.1	7.5	6.6	7.0	7.4	8.2	9.7	10.4	11.1	11.4	11.9	12.3	12.2	11.7	11.2	9.4	8.3	7.5	7.6	12.3	6.3	8.8
24	8.4	8.5	8.1	8.1	8.5	8.8	8.8	8.3	8.0	8.1	8.1	8.3	8.4	8.1	8.0	8.4	8.6	8.7	8.5	8.2	8.0	7.7	7.9	7.6	8.8	7.6	8.3
25	7.7	8.0	7.5	7.3	6.9	5.9	6.4	6.7	7.7	8.2	9.4	10.4	10.5	10.6	11.3	11.6	12.0	11.9	11.9	11.3	10.6	9.8	9.3	8.8	12.0	5.9	9.2
26	7.9	7.6	8.1	7.7	7.9	7.5	6.7	6.6	6.9	7.6	8.5	9.3	10.6	10.4	9.6	9.5	9.7	9.8	10.0	9.2	8.7	8.3	7.8	7.8	10.6	6.6	8.5
27	7.9	7.5	7.6	7.8	8.1	8.3	8.5	8.6	9.1	9.8	10.8	12.0	12.6	12.7	12.6	13.1	13.0	13.4	13.3	12.7	12.2	11.5	11.2	11.1	13.4	7.5	10.6
28	10.1	9.9	8.3	8.4	7.9	7.5	7.1	6.9	7.0	7.2	7.7	8.7	10.0	10.8	11.9	12.5	12.9	12.6	12.6	11.8	11.1	11.1	10.7	9.9	12.9	6.9	9.8
29	9.0	9.1	9.0	8.7	8.2	7.8	6.1	6.0	6.7	7.9	10.1	10.0	9.8	9.8	10.3	10.7	10.6	11.4	11.3	10.3	9.6	8.7	8.7	9.1	11.4	6.0	9.1
30	8.5	8.5	8.4	8.1	8.3	8.6	8.4	7.8	7.9	8.2	8.2	8.5	8.9	9.3	9.5	9.8	10.1	10.4	10.0	9.8	9.6	9.5	8.6	8.0	10.4	7.8	8.9
31	8.7	9.1	8.5	8.5	8.7	8.6	7.9	8.7	9.2	9.3	10.0	10.3	11.7	12.3	12.7	12.8	13.1	12.9	12.4	10.8	9.3	8.8	8.6	8.5	13.1	7.9	10.1
Max.	**12.7**	**12.3**	**12.2**	**11.8**	**11.4**	**11.7**	**11.5**	**11.0**	**11.1**	**11.6**	**13.1**	**14.1**	**14.8**	**16.0**	**15.1**	**15.5**	**15.7**	**16.1**	**16.3**	**15.6**	**15.0**	**13.8**	**13.6**	**12.8**	**16.3**		
Min.	**6.8**	**6.4**	**6.2**	**5.6**	**5.2**	**5.5**	**6.0**	**6.0**	**6.4**	**6.5**	**6.7**	**7.1**	**6.8**	**7.9**	**8.0**	**8.3**	**8.4**	**8.0**	**7.7**	**8.0**	**7.7**	**7.5**	**6.7**	**6.5**		**5.2**	
Avg.	**8.7**	**8.6**	**8.4**	**8.3**	**8.2**	**8.2**	**8.0**	**8.1**	**8.3**	**8.7**	**9.2**	**9.8**	**10.1**	**10.8**	**10.8**	**11.0**	**11.1**	**11.1**	**10.8**	**10.3**	**9.8**	**9.4**	**9.0**	**8.8**			**9.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.5	8.5	8.2	8.1	8.0	7.9	7.9	8.0	8.3	8.7	9.3	10.4	11.3	11.9	12.6	13.2	13.1	12.8	11.8	10.9	9.7	9.4	9.4	9.1	13.2	7.9	9.9
2	9.1	9.1	9.0	8.8	7.8	7.1	7.4	8.0	9.1	10.4	10.5	10.7	10.8	11.1	12.2	13.0	12.9	13.2	12.9	11.1	9.5	8.7	8.1	8.3	13.2	7.1	9.9
3	8.8	8.1	7.8	7.3	8.0	7.9	7.3	7.6	8.2	9.8	11.3	12.6	13.3	13.8	13.6	11.8	11.3	12.4	12.6	11.8	10.8	10.0	9.6	8.9	13.8	7.3	10.2
4	8.1	8.4	8.0	8.2	8.3	8.1	8.2	7.6	8.3	10.0	11.7	12.5	12.4	13.3	14.2	14.2	12.3	10.0	10.7	10.5	8.9	9.4	9.2	9.5	14.2	7.6	10.1
5	8.6	8.2	8.2	8.3	8.2	8.2	8.1	7.8	8.0	8.7	9.0	9.4	9.8	10.4	10.3	10.2	10.5	10.1	9.5	9.0	8.0	7.9	7.2	6.2	10.5	6.2	8.7
6	6.5	6.5	6.5	6.4	6.3	6.5	6.6	6.8	7.6	9.0	9.8	11.2	12.0	12.3	12.8	13.5	13.7	13.0	11.9	10.2	9.0	8.4	7.3	6.9	13.7	6.3	9.2
7	6.8	6.6	6.4	6.5	6.4	6.4	6.4	6.9	7.1	7.7	9.2	10.6	11.0	10.9	10.3	9.4	8.2	8.1	7.9	7.6	7.5	7.6	7.8	8.0	11.0	6.4	8.0
8	8.1	8.3	8.3	8.4	8.4	8.0	7.7	7.8	7.9	7.9	8.1	8.3	8.4	8.5	8.5	8.4	8.4	8.4	8.3	8.1	7.8	7.6	7.4	7.3	8.5	7.3	8.1
9	7.3	7.4	7.5	7.6	7.8	7.2	7.5	7.8	8.6	9.4	10.7	12.0	12.0	11.3	10.5	10.4	11.3	10.1	8.7	7.8	7.5	7.1	7.2	7.3	12.0	7.1	8.8
10	6.6	6.1	6.9	6.5	6.6	6.4	7.0	6.6	7.8	8.6	9.5	10.1	10.9	11.4	11.7	11.5	11.1	10.7	10.4	10.0	9.5	9.2	8.4	7.5	11.7	6.1	8.8
11	7.2	7.6	7.7	7.0	6.0	6.1	6.7	7.2	8.0	9.1	10.8	12.1	12.8	12.9	13.3	14.2	14.4	14.5	14.3	13.4	12.1	11.8	11.2	11.3	14.5	6.0	10.5
12	12.1	11.2	9.9	10.1	10.3	10.0	9.8	11.1	10.5	11.1	12.9	14.1	14.8	15.1	15.9	15.9	15.6	15.3	15.3	14.4	12.8	12.3	11.7	11.6	15.9	9.8	12.6
13	10.6	10.2	9.9	10.2	10.5	9.1	9.3	9.3	9.6	11.5	12.4	13.2	13.9	14.5	14.9	14.9	14.0	13.0	12.1	11.4	11.0	10.9	9.9	8.3	14.9	8.3	11.4
14	8.0	7.9	7.8	8.0	7.9	8.1	8.3	8.6	8.6	8.5	8.8	9.2	9.6	9.5	10.1	10.3	10.7	10.4	10.1	10.0	9.8	9.9	9.5	9.7	10.7	7.8	9.1
15	9.6	9.7	9.4	9.4	9.7	9.4	10.0	10.8	10.5	9.9	9.8	9.6	10.3	10.5	10.1	10.1	10.2	10.3	9.9	9.0	8.9	9.2	9.1	8.9	10.8	8.9	9.8
16	8.6	8.5	8.2	8.0	7.8	7.7	7.9	8.1	8.2	8.5	9.3	9.5	9.6	10.1	9.7	9.6	9.8	9.5	9.1	8.4	7.8	7.5	7.5	7.3	10.1	7.3	8.6
17	7.2	7.3	7.2	7.2	7.2	6.8	6.5	6.4	6.4	6.7	7.0	7.5	7.6	8.0	8.4	8.7	8.7	8.9	8.5	7.9	7.2	6.6	6.7	6.6	8.9	6.4	7.4
18	6.6	7.1	7.3	7.4	7.0	7.3	7.0	7.3	7.6	7.8	7.8	8.1	8.3	8.4	8.6	8.4	7.7	7.3	7.3	7.5	7.7	7.7	7.7	7.8	8.6	6.6	7.6
19	7.6	8.2	8.3	8.3	8.7	8.1	7.5	7.7	7.8	8.3	8.2	8.3	8.7	8.9	8.5	8.0	7.7	7.7	7.8	7.7	7.2	7.0	7.0	7.0	8.9	7.0	7.9
20	6.8	6.5	6.4	6.4	6.2	6.2	6.2	6.7	7.3	7.9	8.2	9.1	9.4	9.6	9.7	9.4	10.1	9.4	9.1	8.6	8.1	7.6	7.3	6.7	10.1	6.2	7.9
21	6.5	6.2	6.1	5.9	5.8	5.6	5.9	6.3	7.1	7.1	6.8	7.1	7.2	7.2	7.2	7.0	6.8	6.8	6.7	7.0	6.7	7.2	6.9	6.2	7.2	5.6	6.6
22	6.0	5.9	5.9	6.2	6.4	6.6	6.3	6.2	6.1	6.1	6.2	6.6	6.9	7.5	7.8	8.1	8.3	7.5	6.8	6.4	5.9	6.2	6.5	6.5	8.3	5.9	6.6
23	6.4	6.4	6.4	6.4	6.2	6.3	6.4	6.4	6.6	6.6	6.7	6.8	6.8	6.8	6.9	7.4	8.0	8.0	7.8	7.4	6.8	6.3	6.2	5.9	8.0	5.9	6.7
24	6.1	6.0	6.0	5.7	5.5	5.4	5.5	5.5	5.3	5.4	5.5	7.1	6.8	7.2	7.4	7.7	7.7	7.6	7.3	6.1	4.9	4.4	3.8	3.2	7.7	3.2	6.0
25	2.7	3.0	2.2	2.0	1.7	1.6	1.3	2.0	2.0	3.1	4.6	6.1	7.0	6.9	7.2	7.5	7.8	7.7	7.4	7.1	6.9	6.7	5.8	5.7	7.8	1.3	4.8
26	5.5	5.4	5.1	4.9	4.6	5.2	5.5	4.8	5.1	5.1	5.3	5.3	5.3	5.8	6.0	6.1	5.9	5.4	5.2	5.2	5.3	5.4	5.7	5.7	6.1	4.6	5.4
27	5.7	5.6	5.3	4.7	4.3	4.1	3.9	3.8	3.7	4.1	4.5	5.3	6.0	5.9	6.0	6.1	5.7	5.3	5.0	5.0	4.8	4.7	4.6	4.4	6.1	3.7	4.9
28	4.1	4.0	3.9	3.8	3.7	3.5	3.4	3.3	3.1	3.0	3.5	3.5	3.8	3.8	4.2	4.6	4.3	3.7	2.9	2.5	2.0	1.5	1.2	1.5	4.6	1.2	3.3
29	1.3	1.2	1.4	1.5	1.0	0.5	-0.1	-0.3	-0.2	1.5	1.9	2.3	2.7	3.0	3.3	2.8	3.1	3.5	3.2	2.5	2.3	2.0	1.2	0.9	3.5	-0.3	1.8
30	0.4	0.8	0.3	0.5	0.8	0.6	0.6	0.7	1.1	1.4	2.5	3.4	4.1	4.9	5.1	5.2	5.7	5.3	4.8	4.6	4.2	4.0	3.2	3.1	5.7	0.3	2.8
Max.	**12.1**	**11.2**	**9.9**	**10.2**	**10.5**	**10.0**	**10.0**	**11.1**	**10.5**	**11.5**	**12.9**	**14.1**	**14.8**	**15.1**	**15.9**	**15.9**	**15.6**	**15.3**	**15.3**	**14.4**	**12.8**	**12.3**	**11.7**	**11.6**	**15.9**		
Min.	**0.4**	**0.8**	**0.3**	**0.5**	**0.8**	**0.5**	**-0.1**	**-0.3**	**-0.2**	**1.4**	**1.9**	**2.3**	**2.7**	**3.0**	**3.3**	**2.8**	**3.1**	**3.5**	**2.9**	**2.5**	**2.0**	**1.5**	**1.2**	**0.9**		**-0.3**	
Avg.	**6.9**	**6.9**	**6.7**	**6.7**	**6.6**	**6.4**	**6.4**	**6.5**	**6.8**	**7.4**	**8.0**	**8.7**	**9.1**	**9.4**	**9.6**	**9.6**	**9.5**	**9.2**	**8.8**	**8.3**	**7.7**	**7.5**	**7.1**	**6.9**			**7.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.0	3.4	3.5	3.5	3.5	3.6	3.7	3.9	4.5	5.0	5.5	6.0	6.4	7.1	6.8	6.3	5.5	5.5	5.6	5.6	5.9	6.2	5.9	5.6	7.1	3.0	5.1
2	5.5	5.3	5.1	5.2	5.3	5.2	5.0	4.8	4.7	4.9	5.1	5.1	5.5	6.3	6.7	6.9	7.3	7.3	7.0	7.1	7.1	6.8	6.5	6.4	7.3	4.7	5.9
3	6.1	6.1	6.7	7.0	6.7	6.2	6.4	6.4	6.6	7.5	7.9	8.5	8.6	8.2	7.6	7.8	8.1	7.6	5.4	4.4	4.3	4.4	4.6	4.7	8.6	4.3	6.6
4	4.7	4.6	4.5	4.0	3.5	3.6	3.7	3.5	3.1	3.3	3.1	3.1	2.7	3.2	3.0	3.2	2.3	1.7	1.4	1.6	1.9	1.8	1.9	2.0	4.7	1.4	3.0
5	2.2	2.3	2.4	2.4	2.4	2.8	2.8	2.6	2.1	3.3	3.9	5.3	6.6	6.7	6.9	7.0	6.2	4.6	4.3	3.8	3.3	2.9	2.7	2.8	7.0	2.1	3.8
6	2.7	2.6	2.8	2.7	2.8	2.8	2.7	2.9	3.1	3.5	4.1	4.7	5.0	5.1	5.2	5.4	5.4	5.5	5.3	5.1	5.3	5.3	5.5	5.7	5.7	2.6	4.2
7	5.8	5.7	5.6	5.7	5.7	5.7	5.9	5.7	5.8	6.3	6.5	6.8	7.2	7.5	7.6	7.7	7.7	7.5	7.4	7.4	7.4	7.3	7.1	7.2	7.7	5.6	6.7
8	7.0	6.7	6.0	5.8	5.7	5.6	5.4	5.5	5.6	5.5	5.7	5.7	5.9	6.3	6.0	6.3	6.4	6.7	7.1	7.2	8.0	8.6	9.4	9.3	9.4	5.4	6.5
9	9.0	9.3	9.6	10.2	10.2	10.5	10.5	10.5	10.8	11.1	11.1	10.3	10.1	9.8	9.6	9.2	9.1	9.0	7.7	4.4	3.5	2.4	1.8	1.4	11.1	1.4	8.4
10	0.6	0.5	0.2	0.0	-0.1	0.0	-0.2	-0.1	0.1	0.2	0.3	0.7	2.7	4.1	4.9	4.9	5.0	5.0	4.9	3.9	3.4	3.5	3.7	3.9	5.0	-0.2	2.2
11	4.0	4.0	3.7	2.9	2.9	2.6	2.1	2.7	2.7	3.1	3.2	3.3	4.0	4.2	3.7	4.2	4.7	4.3	4.1	3.2	3.5	3.3	3.3	3.4	4.7	2.1	3.5
12	3.8	3.8	3.3	2.9	3.0	3.2	2.9	3.4	3.6	4.3	4.8	5.2	5.9	6.5	6.4	6.1	6.2	5.6	5.1	4.6	4.4	4.4	4.2	4.4	6.5	2.9	4.5
13	4.4	4.4	4.4	3.1	2.6	2.7	2.4	3.1	3.6	3.8	4.5	5.6	6.5	7.1	7.5	7.7	7.3	6.6	5.7	4.8	4.2	4.2	4.1	4.4	7.7	2.4	4.8
14	4.1	3.3	3.1	3.4	3.5	4.1	4.4	4.2	4.3	4.2	3.8	3.0	2.2	3.5	4.8	4.6	4.7	5.0	4.2	3.5	2.6	2.7	2.3	2.6	5.0	2.2	3.7
15	2.5	2.8	3.0	2.9	2.6	4.3	4.9	5.2	4.3	4.2	4.8	5.2	6.0	6.5	6.7	6.4	5.9	5.4	4.9	4.6	4.7	4.8	5.2	6.0	6.7	2.5	4.8
16	6.0	5.3	5.2	5.2	5.1	5.1	5.1	4.6	4.8	5.0	5.5	6.2	6.8	6.8	6.8	6.5	6.2	5.6	5.1	5.0	5.0	5.0	4.9	4.9	6.8	4.6	5.5
17	4.9	4.8	4.5	4.2	3.8	3.8	3.9	4.0	4.0	4.0	4.4	4.7	5.0	5.4	5.5	5.2	5.0	4.6	4.3	4.4	4.5	4.6	4.8	4.8	5.5	3.8	4.5
18	4.8	4.3	3.9	3.6	3.6	3.5	3.5	3.7	3.8	3.8	4.1	4.7	5.6	6.4	6.8	6.4	5.7	5.4	4.9	4.2	4.0	3.7	3.3	3.1	6.8	3.1	4.4
19	3.0	3.0	3.0	2.8	2.2	1.9	2.6	2.8	2.8	3.1	3.2	3.4	3.4	3.8	4.0	3.7	3.7	3.0	2.0	2.3	0.8	0.9	1.6	2.0	4.0	0.8	2.7
20	2.1	2.1	2.1	2.0	1.9	1.7	1.1	1.2	0.9	1.5	1.9	2.3	2.0	3.2	3.4	3.6	3.7	3.3	2.4	1.6	1.4	1.1	1.0	1.1	3.7	0.9	2.0
21	0.9	0.7	0.5	0.1	-1.4	-0.9	0.6	-0.2	-0.4	-0.2	1.2	1.6	1.8	1.9	2.3	2.4	2.0	0.8	-0.1	-0.7	-1.1	-1.3	-1.9	-1.9	2.4	-1.9	0.3
22	-1.4	-1.9	-1.6	-1.9	-2.1	-2.6	-3.2	-3.1	-2.9	-2.2	-1.7	-0.7	0.8	1.7	2.2	2.1	1.2	0.2	-0.3	-0.7	-0.9	-1.3	-1.9	-2.7	2.2	-3.2	-1.0
23	-2.7	-3.1	-3.5	-3.2	-3.8	-4.3	-3.6	-3.6	-5.0	-5.3	-4.1	-2.8	-2.1	-1.8	-1.3	-1.1	-1.2	-1.7	-2.4	-3.1	-3.0	-3.3	-3.1	-2.8	-1.1	-5.3	-3.0
24	-2.3	-1.9	-1.9	-1.8	-2.0	-2.9	-2.2	-1.7	-1.2	-0.8	-0.8	-0.6	-0.6	-0.9	-1.2	-1.4	-1.3	-1.5	-1.9	-2.3	-3.9	-4.1	-3.8	-3.8	-0.6	-4.1	-2.0
25	-4.0	-4.2	-4.5	-4.7	-4.8	-4.9	-5.0	-5.3	-5.5	-5.6	-5.7	-5.3	-4.8	-4.3	-4.0	-3.8	-3.8	-4.0	-4.5	-4.5	-4.7	-4.7	-5.0	-5.5	-3.8	-5.7	-4.7
26	-5.9	-6.1	-6.2	-6.6	-6.5	-6.4	-6.5	-7.0	-7.4	-7.9	-8.5	-8.6	-8.5	-8.0	-7.5	-6.9	-6.8	-6.9	-6.8	-7.0	-7.0	-7.3	-7.9	-8.3	-5.9	-8.6	-7.2
27	-8.2	-8.3	-8.2	-8.4	-8.5	-8.8	-9.4	-8.8	-9.0	-9.6	-8.8	-8.0	-7.1	-6.1	-5.1	-4.9	-4.9	-5.5	-6.0	-6.2	-5.8	-5.3	-5.4	-5.2	-4.9	-9.6	-7.1
28	-4.7	-4.5	-5.1	-5.4	-5.4	-4.9	-4.7	-3.8	-3.6	-3.6	-2.9	-2.0	-1.3	-1.2	-1.4	-0.8	-0.4	-0.2	-0.2	-0.2	-0.4	-0.7	-0.7	-0.5	-0.2	-5.4	-2.4
29	-0.3	0.0	0.4	1.9	1.5	1.4	0.9	0.9	1.0	1.0	1.0	1.2	1.3	1.5	1.6	1.7	1.4	1.2	1.1	1.0	0.6	0.2	0.0	-0.2	1.9	-0.3	0.9
30	-0.2	-0.5	-0.6	-0.6	-1.0	-1.3	-1.2	-1.2	-1.3	-1.5	-0.9	-0.8	-0.1	0.3	-0.1	-0.4	-0.5	-0.7	-0.8	-0.8	-0.7	-0.9	-1.3	-1.8	0.3	-1.8	-0.8
31	-2.5	-2.4	-2.4	-2.5	-2.5	-2.7	-3.1	-3.4	-3.8	-4.1	-3.9	-3.5	-3.1	-2.9	-3.0	-3.2	-3.5	-4.3	-5.2	-5.6	-5.6	-5.9	-6.1	-6.5	-2.4	-6.5	-3.8
Max.	**9.0**	**9.3**	**9.6**	**10.2**	**10.2**	**10.5**	**10.5**	**10.5**	**10.8**	**11.1**	**11.1**	**10.3**	**10.1**	**9.8**	**9.6**	**9.2**	**9.1**	**9.0**	**7.7**	**7.4**	**8.0**	**8.6**	**9.4**	**9.3**	**11.1**		
Min.	**-8.2**	**-8.3**	**-8.2**	**-8.4**	**-8.5**	**-8.8**	**-9.4**	**-8.8**	**-9.0**	**-9.6**	**-8.8**	**-8.6**	**-8.5**	**-8.0**	**-7.5**	**-6.9**	**-6.8**	**-6.9**	**-6.8**	**-7.0**	**-7.0**	**-7.3**	**-7.9**	**-8.3**		**-9.6**	
Avg.	**1.8**	**1.7**	**1.6**	**1.5**	**1.3**	**1.3**	**1.3**	**1.4**	**1.4**	**1.5**	**1.9**	**2.3**	**2.7**	**3.2**	**3.3**	**3.3**	**3.2**	**2.8**	**2.3**	**1.9**	**1.7**	**1.6**	**1.5**	**1.5**			**2.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-6.7	-7.0	-7.3	-7.3	-7.5	-7.5	-7.7	-7.8	-8.0	-8.1	-7.9	-7.7	-7.3	-7.0	-6.6	-6.5	-6.6	-6.9	-7.3	-7.6	-7.7	-8.1	-8.5	-8.7	-6.5	-8.7	-7.5
2	-9.0	-9.2	-9.1	-9.1	-9.5	-9.9	-10.2	-10.5	-10.7	-10.4	-9.7	-9.0	-9.2	-8.8	-8.5	-8.5	-8.8	-9.4	-9.9	-10.3	-10.7	-10.9	-11.4	-11.7	-8.5	-11.7	-9.8
3	-12.2	-12.5	-12.7	-12.8	-12.9	-13.1	-13.4	-13.1	-13.2	-12.9	-12.7	-11.7	-11.2	-10.2	-9.9	-9.7	-10.0	-10.9	-11.5	-11.9	-11.9	-12.3	-12.0	-12.0	-9.7	-13.4	-11.9
4	-12.1	-12.4	-11.9	-12.0	-13.4	-12.6	-12.9	-12.7	-12.7	-12.6	-12.8	-12.1	-11.8	-11.5	-11.1	-10.6	-10.4	-11.1	-11.4	-11.9	-12.3	-12.2	-11.8	-11.3	-10.4	-13.4	-12.0
5	-10.4	-9.6	-9.7	-9.5	-8.9	-8.5	-9.3	-9.5	-10.9	-11.5	-10.5	-9.5	-7.5	-6.7	-6.4	-6.8	-7.2	-7.6	-8.0	-8.1	-7.7	-8.6	-9.4	-9.0	-6.4	-11.5	-8.8
6	-10.0	-9.3	-8.6	-11.4	-11.8	-12.5	-13.4	-14.2	-13.8	-13.6	-14.0	-13.5	-11.7	-10.7	-10.3	-10.6	-10.7	-10.6	-10.5	-10.6	-10.8	-10.1	-10.0	-8.8	-8.6	-14.2	-11.3
7	-8.5	-8.1	-8.2	-8.8	-9.7	-10.1	-10.5	-11.2	-11.2	-11.2	-11.2	-11.3	-11.2	-11.0	-11.2	-11.4	-11.6	-11.9	-12.2	-12.8	-12.7	-13.9	-14.5	-14.9	-8.1	-14.9	-11.2
8	-15.5	-16.2	-17.0	-17.1	-17.7	-17.7	-17.9	-17.6	-17.1	-17.1	-17.1	-16.5	-16.0	-15.3	-14.9	-14.7	-15.0	-15.2	-15.4	-15.3	-15.3	-15.3	-14.9	-14.5	-14.5	-17.9	-16.1
9	-14.8	-15.4	-15.7	-16.1	-16.7	-17.2	-17.5	-18.1	-18.1	-18.5	-18.3	-18.0	-17.2	-17.1	-16.9	-16.6	-16.9	-17.6	-17.8	-18.1	-18.2	-18.0	-17.8	-17.5	-14.8	-18.5	-17.3
10	-17.2	-17.2	-16.7	-16.9	-16.7	-16.7	-16.7	-16.3	-16.2	-16.0	-16.4	-16.5	-16.6	-16.5	-16.1	-15.5	-15.1	-15.0	-14.8	-14.3	-13.9	-13.1	-13.0	-13.3	-13.0	-17.2	-15.7
11	-13.5	-12.7	-13.4	-13.5	-14.3	-14.4	-14.4	-14.9	-15.0	-15.0	-15.5	-15.0	-14.5	-14.0	-13.4	-13.3	-13.0	-12.3	-12.4	-12.6	-13.1	-13.1	-13.2	-13.2	-12.3	-15.5	-13.7
12	-13.3	-13.9	-13.9	-13.8	-13.6	-13.5	-13.0	-13.0	-13.0	-12.7	-12.7	-12.0	-10.9	-9.4	-8.7	-8.7	-8.6	-8.9	-8.6	-8.9	-8.5	-8.3	-8.0	-7.8	-7.8	-13.9	-11.0
13	-7.6	-7.4	-7.3	-7.4	-7.7	-8.3	-9.1	-10.4	-11.7	-13.1	-14.3	-15.1	-15.7	-16.2	-17.1	-17.5	-17.9	-18.6	-18.8	-19.0	-18.8	-19.2	-18.9	-17.9	-7.3	-19.2	-13.9
14	-17.6	-17.6	-17.4	-17.0	-16.5	-15.6	-13.1	-10.3	-8.0	-6.7	-6.0	-7.2	-9.8	-11.4	-13.0	-14.0	-14.3	-15.6	-16.8	-17.8	-18.5	-19.3	-20.2	-21.0	-6.0	-21.0	-14.4
15	-21.8	-22.4	-22.9	-23.2	-23.3	-23.3	-22.9	-23.1	-23.1	-22.9	-22.7	-22.5	-22.0	-21.6	-21.3	-21.4	-21.3	-21.7	-22.1	-22.1	-22.1	-22.1	-22.1	-22.2	-21.3	-23.3	-22.3
16	-22.4	-22.4	-22.2	-22.0	-22.0	-22.2	-22.5	-22.9	-23.0	-23.0	-23.0	-22.3	-21.1	-20.4	-19.8	-19.4	-19.1	-18.6	-19.2	-19.5	-19.6	-19.6	-19.6	-19.2	-18.6	-23.0	-21.0
17	-19.1	-19.2	-19.3	-19.3	-19.1	-19.0	-18.4	-18.3	-18.6	-18.5	-18.4	-18.1	-17.0	-16.7	-16.7	-16.8	-16.8	-17.2	-17.7	-17.9	-18.3	-19.0	-18.3	-18.9	-16.7	-19.3	-18.2
18	-19.2	-19.9	-20.1	-20.3	-20.6	-20.7	-20.8	-21.0	-21.1	-20.5	-21.1	-20.7	-20.7	-19.9	-19.6	-19.7	-20.1	-20.6	-20.3	-20.2	-20.6	-20.9	-20.8	-20.9	-19.2	-21.1	-20.4
19	-21.3	-21.1	-20.9	-20.3	-19.6	-19.6	-19.0	-19.1	-19.1	-18.9	-18.7	-18.2	-17.8	-17.2	-17.0	-16.8	-16.4	-16.1	-16.2	-16.1	-16.2	-16.2	-16.2	-16.6	-16.1	-21.3	-18.1
20	-16.4	-15.9	-15.9	-15.5	-15.4	-15.5	-15.7	-15.9	-15.7	-15.6	-15.9	-15.9	-15.7	-15.8	-15.3	-15.2	-15.4	-16.0	-16.1	-16.2	-16.3	-15.7	-16.0	-16.1	-15.2	-16.4	-15.8
21	-15.8	-16.7	-17.4	-17.2	-16.8	-16.5	-16.4	-16.5	-15.9	-15.3	-14.8	-14.5	-14.0	-13.9	-13.7	-13.5	-13.1	-12.6	-12.6	-11.7	-11.8	-12.0	-11.1	-10.8	-10.8	-17.4	-14.4
22	-11.0	-10.8	-11.5	-12.2	-12.6	-13.4	-14.5	-14.5	-13.9	-13.6	-13.3	-13.3	-13.6	-12.8	-12.6	-12.8	-13.0	-13.2	-13.5	-14.1	-15.0	-14.8	-15.4	-16.4	-10.8	-16.4	-13.4
23	-16.7	-16.6	-17.6	-18.1	-17.2	-17.6	-17.9	-17.9	-17.9	-17.7	-18.6	-18.1	-18.5	-17.7	-17.8	-17.3	-17.2	-17.0	-15.6	-14.6	-14.6	-11.6	-10.9	-10.2	-10.2	-18.6	-16.4
24	-10.6	-10.4	-9.8	-9.2	-9.2	-9.7	-9.4	-9.5	-8.3	-8.1	-8.2	-8.1	-8.0	-7.3	-7.0	-6.4	-6.3	-6.3	-6.1	-5.8	-5.8	-5.7	-5.4	-5.1	-5.1	-10.6	-7.7
25	-5.0	-5.1	-5.7	-5.8	-5.8	-5.4	-4.8	-4.8	-4.9	-4.9	-4.9	-4.8	-4.6	-4.6	-4.8	-5.0	-5.8	-6.5	-6.6	-6.6	-6.3	-6.0	-6.0	-5.8	-4.6	-6.6	-5.4
26	-6.0	-5.8	-5.7	-5.3	-5.3	-4.7	-4.2	-3.9	-3.5	-3.3	-3.2	-3.3	-3.1	-2.9	-2.7	-2.8	-3.0	-3.1	-3.4	-3.3	-3.3	-3.0	-2.9	-2.9	-2.7	-6.0	-3.8
27	-3.1	-3.2	-3.1	-3.2	-3.1	-3.0	-2.7	-2.5	-2.4	-2.0	-1.8	-1.5	-0.8	-0.5	-0.2	-0.2	-0.3	-0.2	-0.1	0.0	0.1	0.2	0.2	0.1	0.2	-3.2	-1.4
28	0.0	0.0	-0.2	-0.3	-0.3	-0.2	-0.3	-0.5	-0.8	-1.2	-1.2	-1.2	-1.3	-1.4	-1.3	-1.1	-1.6	-2.2	-2.5	-2.9	-3.4	-4.4	-3.7	-3.5	0.0	-4.4	-1.5
29	-4.7	-4.8	-4.6	-4.6	-5.4	-5.2	-4.4	-4.4	-3.9	-3.9	-4.0	-4.5	-4.2	-4.5	-4.5	-5.4	-6.6	-5.9	-5.8	-5.9	-4.3	-3.7	-3.6	-3.4	-3.4	-6.6	-4.7
30	-2.2	-1.8	-1.8	-2.8	-2.7	-2.4	-2.2	-1.9	-1.5	-1.3	-1.0	-0.9	-1.0	-1.6	-1.9	-2.4	-3.0	-4.6	-5.2	-5.0	-4.8	-5.0	-5.4	-6.2	-0.9	-6.2	-2.8
Max.	**0.0**	**0.0**	**-0.2**	**-0.3**	**-0.3**	**-0.2**	**-0.3**	**-0.5**	**-0.8**	**-1.2**	**-1.0**	**-0.9**	**-0.8**	**-0.5**	**-0.2**	**-0.2**	**-0.3**	**-0.2**	**-0.1**	**0.0**	**0.1**	**0.2**	**0.2**	**0.1**	**0.2**		
Min.	**-22.4**	**-22.4**	**-22.9**	**-23.2**	**-23.3**	**-23.3**	**-22.9**	**-23.1**	**-23.1**	**-23.0**	**-23.0**	**-22.5**	**-22.0**	**-21.6**	**-21.3**	**-21.4**	**-21.3**	**-21.7**	**-22.1**	**-22.1**	**-22.1**	**-22.1**	**-22.1**	**-22.2**		**-23.3**	
Avg.	**-12.1**	**-12.1**	**-12.3**	**-12.4**	**-12.5**	**-12.5**	**-12.5**	**-12.5**	**-12.4**	**-12.3**	**-12.3**	**-12.1**	**-11.8**	**-11.5**	**-11.3**	**-11.4**	**-11.5**	**-11.8**	**-11.9**	**-12.0**	**-12.1**	**-12.1**	**-12.0**	**-12.0**			**-12.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-6.3	-6.7	-6.7	-7.4	-7.6	-7.3	-7.6	-7.6	-8.4	-7.5	-7.4	-6.9	-6.8	-6.0	-5.6	-6.2	-6.3	-7.5	-7.7	-6.8	-6.7	-7.1	-7.8	-7.7	-5.6	-8.4	-7.1
2	-6.9	-4.8	-4.4	-4.7	-3.7	-4.0	-4.2	-6.0	-6.4	-4.2	-2.0	-1.6	0.5	0.7	0.9	-1.1	0.0	0.2	-1.8	-1.4	-0.3	0.1	0.1	-2.6	0.9	-6.9	-2.4
3	-2.5	-2.3	-2.8	-2.6	-1.8	-2.0	-2.7	-3.2	-2.4	-2.1	-1.5	-1.2	-0.9	-1.4	-2.4	-3.1	-3.3	-3.7	-3.6	-3.5	-3.5	-3.5	-3.7	-3.7	-0.9	-3.7	-2.6
4	-4.3	-4.5	-4.7	-5.0	-5.1	-5.0	-5.0	-3.9	-4.9	-4.6	-3.8	-4.5	-1.4	-0.2	-0.5	-1.0	-1.3	-0.5	-0.7	-0.4	0.0	0.3	0.4	0.3	0.4	-5.1	-2.5
5	0.4	0.6	0.4	0.3	0.2	0.1	0.5	1.8	1.9	1.4	1.4	1.8	1.8	2.0	1.6	1.5	1.2	1.7	1.4	2.1	2.1	1.9	1.8	1.8	2.1	0.1	1.3
6	1.5	1.4	1.5	1.4	1.3	1.3	0.7	-0.1	0.2	0.6	0.8	1.1	1.3	1.1	1.5	1.5	1.5	1.5	1.3	1.2	1.3	1.0	0.9	1.5	1.5	-0.1	1.1
7	1.3	1.3	1.2	1.8	2.1	1.9	1.5	2.0	2.9	2.6	1.8	1.6	1.0	0.7	1.6	1.5	1.9	2.1	1.5	1.2	1.1	0.6	0.8	0.6	2.9	0.6	1.5
8	0.8	0.9	0.8	0.5	-0.1	0.0	0.4	0.1	-0.2	-0.2	-0.1	0.3	0.3	0.7	1.0	1.0	-0.1	-0.5	-1.5	-1.6	-1.5	-1.6	-1.6	-1.3	1.0	-1.6	-0.2
9	-0.8	-1.1	-1.0	-0.7	-0.9	-0.6	-0.8	-0.7	-0.9	-0.6	-0.4	-0.2	-0.6	-0.7	-0.6	-0.9	-0.8	-0.8	-0.9	-0.9	-0.8	-0.9	-0.9	-0.8	-0.2	-1.1	-0.8
10	-0.5	-0.6	-0.3	0.0	0.0	-0.1	-0.4	-0.8	-0.8	-0.7	-0.7	-0.7	-0.3	-0.2	-0.2	-0.5	-0.7	-1.0	-1.0	-0.9	-0.8	-0.6	0.1	0.3	0.3	-1.0	-0.5
11	0.4	0.3	0.7	0.6	-1.1	-1.4	-1.1	-1.3	-1.0	-0.8	-1.6	-1.3	-1.3	-1.7	-2.2	-2.7	-3.0	-3.1	-3.8	-5.0	-5.8	-6.3	-7.2	-7.7	0.7	-7.7	-2.4
12	-9.0	-8.9	-9.9	-10.4	-10.1	-10.0	-10.0	-9.9	-10.3	-10.7	-10.7	-10.6	-10.7	-10.9	-10.8	-10.9	-10.9	-11.1	-11.1	-11.0	-11.1	-11.0	-11.2	-11.3	-8.9	-11.3	-10.5
13	-11.3	-11.6	-11.7	-11.9	-12.4	-12.9	-13.5	-13.7	-13.7	-14.1	-14.0	-13.6	-13.7	-13.9	-13.9	-14.2	-14.3	-14.6	-14.9	-14.5	-14.7	-15.0	-15.0	-15.2	-11.3	-15.2	-13.7
14	-15.2	-15.5	-15.9	-15.7	-15.3	-15.1	-15.4	-16.2	-15.3	-15.0	-15.7	-14.6	-14.3	-13.7	-13.2	-13.6	-14.2	-14.0	-14.0	-13.7	-13.7	-13.4	-13.8	-13.6	-13.2	-16.2	-14.6
15	-13.7	-13.9	-14.7	-14.7	-15.5	-17.3	-18.5	-18.7	-18.5	-18.8	-18.4	-17.7	-18.5	-17.1	-16.6	-14.9	-11.8	-10.6	-10.0	-9.3	-9.0	-8.7	-8.0	-8.1	-8.0	-18.8	-14.3
16	-7.8	-7.2	-6.5	-6.2	-5.9	-5.8	-5.6	-5.4	-5.1	-5.0	-4.8	-5.0	-5.0	-5.0	-4.9	-4.9	-4.9	-4.9	-4.7	-4.6	-5.3	-5.6	-5.8	-5.7	-4.6	-7.8	-5.5
17	-5.1	-5.5	-5.9	-6.2	-5.8	-6.5	-6.8	-7.1	-7.0	-7.4	-7.6	-7.8	-7.8	-7.9	-8.0	-8.3	-8.7	-9.1	-9.8	-9.9	-9.9	-10.2	-11.1	-11.7	-5.1	-11.7	-8.0
18	-11.7	-12.1	-12.3	-12.7	-13.6	-13.2	-12.9	-12.7	-13.0	-13.6	-13.7	-13.6	-14.1	-15.0	-14.9	-14.6	-14.9	-14.0	-13.6	-13.6	-14.1	-12.9	-12.4	-12.2	-11.7	-15.0	-13.4
19	-14.6	-13.7	-12.7	-11.0	-9.8	-7.9	-8.3	-8.4	-10.0	-8.9	-7.4	-7.4	-7.9	-8.6	-11.2	-11.2	-10.6	-10.9	-11.7	-12.9	-14.5	-16.0	-16.3	-16.9	-7.4	-16.9	-11.2
20	-16.9	-17.5	-18.4	-18.1	-17.9	-19.0	-19.0	-19.5	-20.0	-19.4	-19.3	-19.3	-18.5	-17.6	-17.7	-18.5	-19.3	-19.0	-18.6	-19.0	-19.2	-19.3	-19.3	-19.5	-16.9	-20.0	-18.7
21	-19.4	-18.8	-18.6	-18.5	-18.0	-17.8	-17.7	-17.8	-17.6	-18.4	-19.6	-19.6	-19.7	-19.7	-19.9	-20.4	-20.6	-20.1	-19.3	-18.6	-18.5	-18.1	-17.8	-17.8	-17.6	-20.6	-18.8
22	-18.6	-19.4	-19.2	-19.2	-19.5	-19.1	-17.8	-17.3	-16.6	-15.0	-14.9	-14.6	-13.9	-14.5	-15.0	-16.0	-13.2	-13.5	-13.6	-14.0	-13.7	-12.8	-14.2	-15.1	-12.8	-19.5	-15.9
23	-16.6	-16.2	-15.4	-15.9	-15.5	-15.3	-14.4	-15.4	-16.0	-15.4	-15.6	-15.9	-16.3	-13.8	-15.1	-14.9	-15.0	-14.9	-14.4	-14.3	-12.9	-12.0	-11.7	-11.6	-11.6	-16.6	-14.8
24	-11.4	-13.6	-13.5	-12.6	-12.2	-11.3	-12.4	-12.2	-11.8	-11.4	-11.9	-10.9	-11.2	-10.6	-11.0	-10.0	-8.9	-9.7	-11.5	-12.2	-13.7	-14.0	-15.3	-16.0	-8.9	-16.0	-12.1
25	-15.1	-14.4	-15.2	-15.7	-17.7	-18.0	-18.7	-18.5	-18.4	-18.4	-19.8	-19.5	-17.9	-17.0	-17.5	-17.3	-17.7	-18.0	-17.0	-16.0	-14.9	-15.1	-15.6	-16.8	-14.4	-19.8	-17.1
26	-17.5	-17.5	-17.2	-17.2	-17.2	-16.8	-16.6	-16.8	-16.1	-16.2	-15.6	-15.7	-15.0	-15.2	-15.2	-15.9	-16.4	-16.6	-15.9	-14.8	-14.8	-10.4	-8.9	-9.1	-8.9	-17.5	-15.4
27	-8.3	-7.3	-6.4	-5.9	-5.1	-4.7	-3.9	-3.4	-3.0	-2.7	-3.2	-4.8	-6.4	-6.1	-5.2	-4.7	-4.5	-4.0	-3.5	-2.8	-3.3	-2.6	-1.3	-0.6	-0.6	-8.3	-4.3
28	-0.6	-0.7	-1.0	-1.5	-1.1	-1.3	-1.6	-1.6	-1.9	-1.9	-1.8	-1.8	-1.5	-1.4	-1.3	-1.2	-1.3	-1.2	-1.4	-1.9	-3.6	-2.9	-2.9	-4.5	-0.6	-4.5	-1.8
29	-4.7	-4.7	-5.1	-4.2	-4.1	-4.7	-4.6	-4.9	-5.4	-7.4	-8.6	-9.2	-10.6	-11.0	-11.1	-11.9	-12.8	-13.5	-13.6	-13.9	-14.1	-14.4	-14.6	-14.5	-4.1	-14.6	-9.3
30	-14.3	-14.5	-14.6	-14.5	-14.6	-14.8	-14.9	-14.9	-14.9	-14.8	-15.1	-15.3	-15.1	-14.7	-15.2	-15.5	-15.6	-15.6	-15.9	-16.2	-16.7	-16.8	-16.9	-17.1	-14.3	-17.1	-15.3
31	-16.5	-16.6	-16.6	-16.5	-16.7	-17.4	-17.5	-17.7	-17.8	-17.9	-17.1	-16.7	-15.6	-15.2	-15.5	-12.8	-16.0	-14.3	-13.0	-12.7	-12.2	-12.3	-13.0	-13.8	-12.2	-17.9	-15.5
Max.	**1.5**	**1.4**	**1.5**	**1.8**	**2.1**	**1.9**	**1.5**	**2.0**	**2.9**	**2.6**	**1.8**	**1.8**	**1.8**	**2.0**	**1.6**	**1.5**	**1.9**	**2.1**	**1.5**	**2.1**	**2.1**	**1.9**	**1.8**	**1.8**	**2.9**		
Min.	**-19.4**	**-19.4**	**-19.2**	**-19.2**	**-19.5**	**-19.1**	**-19.0**	**-19.5**	**-20.0**	**-19.4**	**-19.8**	**-19.6**	**-19.7**	**-19.7**	**-19.9**	**-20.4**	**-20.6**	**-20.1**	**-19.3**	**-19.0**	**-19.2**	**-19.3**	**-19.3**	**-19.5**		**-20.6**	
Avg.	**-8.6**	**-8.5**	**-8.6**	**-8.5**	**-8.5**	**-8.6**	**-8.7**	**-8.8**	**-8.8**	**-8.7**	**-8.7**	**-8.6**	**-8.4**	**-8.2**	**-8.3**	**-8.4**	**-8.5**	**-8.4**	**-8.5**	**-8.4**	**-8.5**	**-8.4**	**-8.5**	**-8.7**			**-8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														-2.94	99.00	17.20	0.84	0.86	-0.15	-0.33	-0.56	-0.68	-0.23	0.02	17.20	99.00	35.00
10	0.00	0.00	-0.02	-0.03	-0.12	-0.74	-0.88	-0.79	-0.80	-0.79	-0.92	-1.01	-1.03	-1.08	-1.06	-1.01	-0.90	-0.88	-0.87	-0.77	-0.41	0.10	0.19	0.13	0.19	-1.08	-0.57
11	0.06	0.06	0.07	0.08	0.08	0.10	0.09	0.06	0.05	0.01	-0.02	-0.14	-0.15	-0.13	-0.14	-0.25	-0.42	-0.36	-0.29	-0.25	-0.09	0.06	0.05	0.04	0.10	-0.42	-0.06
12	0.10	0.14	0.12	0.15	0.09	-0.17	-0.48	-0.64	-0.76	-0.78	-0.70	-0.62	-0.33	-0.22	-0.17	-0.44	-0.86	-0.76	-0.70	-0.59	-0.14	-0.42	-0.53	-0.06	0.15	-0.86	-0.37
13	-0.02	-0.02	-0.02	-0.02	-0.10	-1.11	-1.52	-1.92	-1.76	-1.31	-1.60	-1.49	-2.07	-2.52	-1.83	-1.88	-1.80	-1.79	-1.76	-1.79	-2.25	-2.03	-1.59	-0.46	-0.02	-2.52	-1.36
14	0.26	0.19	0.28	0.15	0.44	-0.92	-1.70	-2.22	-2.86	-3.60	-3.17	-3.47	-4.00	-3.95	-4.37	-3.57	-4.23	-3.51	-2.92	-2.98	-3.45	-3.47	-1.71	-0.13	0.44	-4.37	-2.29
15	0.44	0.43	0.58	0.57	-0.08	-1.30	-1.98	-1.75	-1.91	-2.50	-3.35	-3.48	-3.63	-3.83	-2.27	-0.41	-1.43	-1.45	-2.29	-2.01	-1.82	-2.22	-0.66	-0.11	0.58	-3.83	-1.52
16	-0.06	0.34	0.34	0.25	0.09	-0.88	-1.61	-1.43	-1.85	-2.21	-2.46	-1.90	-1.79	-1.47	-0.58	-0.31	-0.26	-0.30	-0.29	-0.55	-0.27	-0.61	-0.49	0.07	0.34	-2.46	-0.76
17	0.19	0.24	0.36	0.60	0.55	-0.60	-1.48	-1.35	-1.56	-1.38	-1.92	-2.08	-2.63	-2.51	-1.72	-0.68	-0.65	-0.70	-0.50	-0.29	-0.22	-0.14	0.02	-0.04	0.60	-2.63	-0.77
18	-0.06	-0.04	0.05	0.15	0.26	0.26	-0.05	-0.01	-0.42	-0.43	-0.31	-0.36	-0.14	-0.23	-0.35	-0.51	-0.33	-0.26	-0.17	-0.15	-0.14	-0.03	0.16	0.16	0.26	-0.51	-0.12
19	0.30	0.25	0.15	0.09	0.55	0.61	0.02	-0.25	-0.55	-0.94	-1.39	-1.82	-1.31	-1.25	-1.60	-1.40	-1.84	-1.07	-1.02	-0.54	-0.17	-0.12	-0.05	0.06	0.61	-1.84	-0.55
20	-0.06	-0.05	0.17	0.23	1.31	0.87	-0.64	-1.44	-1.95	-1.85	-1.75	-2.28	-1.35	-2.17	-0.74	-0.15	-0.34	-0.21	-0.16	-0.07	0.02	0.51	0.76	0.63	1.31	-2.28	-0.45
21	0.78	0.76	0.54	0.82	1.43	0.82	-0.06	-0.72	-1.24	-1.46	-1.62	-1.83	-1.90	-1.34	-1.28	-2.42	-1.19	-1.08	-0.93	-1.09	-0.85	-0.56	0.61	0.88	1.43	-2.42	-0.54
22	0.49	0.54	0.57	0.31	0.48	0.31	-0.07	-0.22	-0.71	-0.54	-0.89	-0.94	-1.06	-0.56	-0.21	-0.19	-0.18	-0.11	-0.13	-0.06	0.02	0.06	0.12	0.04	0.57	-1.06	-0.12
23	0.10	0.25	0.29	0.22	0.16	0.16	0.01	-0.07	-0.13	-0.22	-0.31	-0.51	-0.62	-0.79	-0.89	-0.72	-0.55	-0.58	-0.39	-0.45	-0.23	0.03	0.52	0.69	0.69	-0.89	-0.17
24	0.49	0.39	0.39	0.35	0.91	0.66	-0.09	-1.13	-1.58	-1.38	-1.71	-1.68	-1.06	-1.84	-1.51	-1.16	-0.55	-0.76	-0.63	-0.36	-0.25	0.21	0.84	0.60	0.91	-1.84	-0.45
25	0.38	0.55	0.28	0.47	0.58	0.09	-0.48	-1.60	-1.88	-1.59	-1.52	-1.86	-1.51	-1.39	-1.46	-1.11	-1.15	-0.81	-0.49	-0.21	-0.06	0.40	0.67	0.78	0.78	-1.88	-0.54
26	0.56	0.42	0.59	0.49	0.57	0.75	-0.20	-0.44	-0.91	-1.36	-1.38	-1.73	-1.88	-1.87	-1.70	-0.69	-0.86	-1.06	-0.82	-0.54	-0.24	-0.19	0.05	0.55	0.75	-1.88	-0.49
27	0.46	0.41	0.39	0.50	0.78	0.19	-1.39	-2.55	-2.44	-3.04	-3.26	-2.59	-2.39	-2.27	-1.88	-1.80	-1.56	-1.12	-1.28	-1.17	-0.61	-0.31	0.35	0.52	0.78	-3.26	-1.09
28	0.41	0.55	0.64	0.58	1.00	0.19	-1.24	-0.65	-0.35	-0.45	-0.45	-0.81	-0.93	-0.93	-0.73	-0.81	-0.53	-0.43	-0.31	-0.21	-0.13	-0.03	0.37	0.20	1.00	-1.24	-0.21
29	0.09	0.00	-0.09	-0.11	-0.06	-0.18	-0.25	-0.49	-0.68	-1.00	-0.88	-0.80	-1.30	-1.27	-0.89	-0.79	-0.49	-0.45	-0.25	-0.13	-0.03	0.03	-0.05	-0.04	0.09	-1.30	-0.42
30	-0.03	-0.04	-0.04	-0.03	-0.03	-0.04	-0.07	-0.04	-0.13	-0.20	-0.29	-0.21	-0.46	-0.47	-0.72	-0.72	-0.63	-0.53	-0.51	-0.49	-0.38	-0.15	0.02	-0.02	0.02	-0.72	-0.26
Max.	**0.78**	**0.76**	**0.64**	**0.82**	**1.43**	**0.87**	**0.09**	**0.06**	**0.05**	**0.01**	**-0.02**	**-0.14**	**-0.14**	**-0.13**	**-0.14**	**17.20**	**0.84**	**0.86**	**-0.13**	**-0.06**	**0.02**	**0.51**	**0.84**	**0.88**	**17.20**		
Min.	**-0.06**	**-0.05**	**-0.09**	**-0.11**	**-0.12**	**-1.30**	**-1.98**	**-2.55**	**-2.86**	**-3.60**	**-3.35**	**-3.48**	**-4.00**	**-3.95**	**99.00**	**-3.57**	**-4.23**	**-3.51**	**-2.92**	**-2.98**	**-3.45**	**-3.47**	**-1.71**	**-0.46**		**99.00**	
Avg.	**0.23**	**0.26**	**0.27**	**0.28**	**0.42**	**-0.04**	**-0.67**	**-0.94**	**-1.16**	**-1.29**	**-1.42**	**-1.51**	**-1.50**	**-1.59**	**19.32**	**-0.17**	**-0.90**	**-0.79**	**-0.77**	**-0.68**	**-0.56**	**-0.43**	**-0.03**	**0.21**			**29.46**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.04	-0.10	-0.11	-0.10	-0.18	-0.29	-0.35	-0.28	-0.55	-1.00	-1.64	-2.58	-2.64	-2.80	-2.30	-2.03	-1.66	-1.33	-1.43	-1.25	-0.72	-0.17	0.76	0.72	0.76	-2.80	-0.92
2	0.59	0.77	0.73	0.66	0.74	0.53	-0.73	-2.02	-1.86	-1.95	-2.14	-2.02	-2.22	-1.91	-1.63	-1.51	-1.71	-1.22	-1.14	-0.85	-0.44	-0.05	0.22	0.41	0.77	-2.22	-0.78
3	0.25	0.31	0.35	0.26	0.22	0.10	-0.27	-0.49	-0.65	-0.94	-1.32	-1.55	-1.71	-2.50	-1.68	-1.37	-0.91	-0.72	-0.89	-0.76	-0.43	0.09	0.56	0.40	0.56	-2.50	-0.57
4	0.49	0.56	0.33	0.38	0.52	-0.22	-1.66	-1.72	-2.03	-2.03	-2.02	-1.85	-2.07	-1.57	-1.20	-0.82	-0.90	-1.00	-0.90	-0.93	-0.39	-0.02	0.54	0.60	0.60	-2.07	-0.75
5	0.86	0.43	0.68	0.41	0.15	-0.14	-0.32	-0.53	-0.65	-1.00	-1.32	-2.07	-1.99	-1.94	-1.60	-1.43	-0.61	0.18	0.39	-0.47	0.09	0.27	0.60	0.24	0.86	-2.07	-0.41
6	0.27	0.45	0.55	0.55	0.88	-0.19	-0.30	-1.08	-1.04	-0.80	-1.32	-2.31	-1.63	-1.53	-1.13	-1.06	-1.35	-0.58	-0.32	-0.59	-0.16	0.08	0.05	-0.03	0.88	-2.31	-0.52
7	-0.05	-0.05	-0.06	-0.06	-0.06	-0.09	-0.17	-0.22	-0.20	-0.19	-0.18	-0.22	-0.29	-0.16	-0.24	-0.21	-0.13	-0.14	-0.14	-0.12	-0.07	-0.05	-0.07	-0.08	-0.05	-0.29	-0.13
8	-0.07	-0.07	-0.06	-0.07	-0.07	-0.10	-0.11	-0.14	-0.16	-0.26	-0.37	-0.48	-0.62	-0.75	-0.75	-0.81	-0.90	-0.82	-0.67	-0.56	-0.99	0.16	0.83	0.44	0.83	-0.99	-0.31
9	0.36	0.36	0.27	0.43	0.46	0.44	-0.06	-0.45	-1.02	-0.96	-1.67	-1.68	-1.54	-1.24	-0.93	-0.96	-0.78	-0.52	-0.53	-0.32	-0.09	0.14	0.23	0.38	0.46	-1.68	-0.40
10	0.19	0.18	0.12	0.08	0.08	-0.01	-0.09	-0.02	-0.19	-0.31	-0.55	-0.74	-0.87	-0.90	-1.00	-0.90	-0.66	-0.49	-0.42	-0.26	-0.31	-0.26	-0.12	0.09	0.19	-1.00	-0.31
11	0.16	-0.01	-0.06	-0.04	-0.11	-0.07	-0.04	-0.46	-0.56	-0.71	-1.00	-0.93	-0.91	-1.15	-1.14	-1.15	-1.11	-1.05	-1.22	-1.38	-0.63	0.04	0.53	0.46	0.53	-1.38	-0.52
12	0.24	0.15	0.08	0.05	0.65	0.51	-0.25	-1.07	-0.76	-1.16	-1.47	-2.61	-1.81	33.09	15.04	0.05	-2.62	-3.48	-0.12	-0.09	-0.22	0.27	1.18	0.85	33.09	15.04	0.27
13	0.69	0.88	1.28	1.18	0.42	-0.22	-0.21	-0.18	-0.12	-0.15	-0.21	-0.21	-0.27	-0.24	-0.38	-0.29	-0.24	-0.17	-0.17	-0.14	-0.10	-0.09	-0.08	-0.08	1.28	-0.38	0.04
14	-0.07	-0.08	-0.07	-0.07	-0.06	-0.08	-0.10	-0.13	-0.16	-0.17	-0.20	-0.34	-0.33	-0.28	-0.29	-0.26	-0.17	-0.22	-0.14	-0.13	-0.08	-0.07	-0.06	-0.05	-0.05	-0.34	-0.15
15	-0.06	-0.05	-0.07	-0.07	-0.07	-0.09	-0.12	-0.16	-0.24	-0.40	-0.47	-0.48	-0.48	-0.44	-0.53	-0.86	-0.60	-0.86	-0.80	-0.34	-0.21	-0.04	0.07	0.01	0.07	-0.86	-0.31
16	-0.07	-0.05	0.06	0.07	0.09	0.10	0.03	-0.02	-0.11	-0.31	-0.56	-0.78	-0.81	-0.81	-0.84	-0.68	-0.37	-0.22	-0.18	-0.08	-0.03	0.00	-0.01	-0.01	0.10	-0.84	-0.23
17	-0.01	0.00	-0.01	-0.03	-0.03	0.03	-0.02	-0.08	-0.15	-0.25	-0.57	-0.67	-0.77	-0.64	-0.49	-0.41	-0.25	-0.18	-0.18	-0.15	-0.09	-0.03	-0.03	-0.02	0.03	-0.77	-0.21
18	-0.01	-0.02	-0.01	-0.06	-0.04	-0.02	-0.04	-0.08	-0.13	-0.27	-0.29	-0.41	-0.60	-0.52	-0.46	-0.31	-0.22	-0.23	-0.11	-0.13	-0.05	0.00	0.02	0.00	0.02	-0.60	-0.17
19	0.02	0.06	0.09	0.09	0.12	0.15	-0.01	-0.13	-0.28	-0.47	-0.58	-0.50	-0.83	-0.79	-0.78	-0.83	-0.55	-0.57	-0.56	-0.39	-0.07	0.79	0.54	0.56	0.79	-0.83	-0.20
20	0.68	0.92	1.94	2.11	2.10	2.04	0.69	-0.07	-0.43	-0.37	-0.55	-0.67	-0.60	-0.70	-0.89	-0.60	-0.62	-0.55	-0.45	-0.27	-0.13	-0.09	0.02	-0.14	2.11	-0.89	0.14
21	-0.11	-0.07	0.10	0.48	1.06	0.30	0.54	0.21	-0.27	-0.61	-0.75	-0.97	-1.03	-0.73	-0.50	-0.75	-0.49	-0.52	-0.41	-0.31	-0.14	-0.03	0.22	0.66	1.06	-1.03	-0.17
22	0.39	0.11	0.03	0.05	0.50	0.47	0.45	0.07	-0.20	-0.33	-0.46	-0.40	-0.50	-0.47	-0.43	-0.35	-0.30	-0.25	-0.23	-0.18	-0.11	0.07	0.20	0.25	0.50	-0.50	-0.07
23	0.19	0.18	0.09	0.04	0.01	-0.03	-0.05	-0.10	-0.15	-0.21	-0.21	-0.22	-0.19	-0.18	-0.15	-0.18	-0.18	-0.17	-0.18	-0.08	-0.04	0.03	0.08	-0.04	0.19	-0.22	-0.07
24	0.01	0.08	0.03	0.08	0.08	0.12	0.12	0.07	-0.01	-0.01	-0.16	-0.16	-0.17	-0.21	-0.28	-0.25	-0.19	-0.16	-0.12	-0.11	-0.08	-0.03	-0.04	0.01	0.12	-0.28	-0.06
25	0.05	0.05	0.08	0.07	0.12	0.14	0.09	-0.13	-0.26	-0.25	-0.24	-0.30	-0.28	-0.42	-0.62	-0.63	-0.56	-0.49	-0.50	-0.35	-0.19	0.00	0.12	0.11	0.14	-0.63	-0.18
26	0.09	0.26	0.18	0.15	0.21	0.26	0.14	-0.11	-0.24	-0.23	-0.38	-0.46	-0.44	-0.45	-0.51	-0.52	-0.60	-0.42	-0.34	-0.32	-0.20	-0.10	-0.09	-0.08	0.26	-0.60	-0.17
27	-0.08	-0.08	-0.10	-0.04	0.10	0.01	-0.10	-0.24	-0.43	-0.54	-0.52	-0.37	-0.39	-0.64	-0.74	-0.61	-0.76	-0.77	-0.77	-0.37	-0.17	0.09	0.33	0.38	0.38	-0.77	-0.28
28	0.34	0.28	0.41	0.67	0.49	0.32	0.45	-0.12	-0.38	-0.51	-0.60	-0.57	-0.42	-0.49	-0.36	-0.30	-0.30	-0.14	-0.24	-0.08	-0.05	-0.07	-0.05	-0.07	0.67	-0.60	-0.07
29	-0.06	-0.07	0.00	-0.04	-0.04	-0.06	-0.06	-0.08	-0.13	-0.12	-0.16	-0.27	-0.43	-0.64	-0.33	-0.19	-0.20	-0.13	-0.21	-0.13	-0.10	-0.07	-0.06	-0.06	0.00	-0.64	-0.15
30	-0.08	-0.08	-0.06	-0.08	-0.09	-0.09	-0.14	-0.14	-0.18	-0.36	-0.37	-0.28	-0.28	-0.47	-0.56	-0.72	-0.73	-0.63	-0.36	-0.41	-0.15	0.25	0.34	0.41	0.41	-0.73	-0.22
31	0.25	0.25	0.28	0.27	0.28	0.12	-0.04	-0.15	-0.37	-0.42	-0.46	-0.48	-0.53	-0.82	-0.73	-0.61	-0.50	-0.36	-0.19	-0.09	-0.01	-0.02	-0.06	0.00	0.28	-0.82	-0.18
Max.	**0.86**	**0.92**	**1.94**	**2.11**	**2.10**	**2.04**	**0.69**	**0.21**	**-0.01**	**-0.01**	**-0.16**	**-0.16**	**-0.17**	**33.09**	**-0.15**	**0.05**	**-0.13**	**0.18**	**0.39**	**-0.08**	**0.09**	**0.79**	**1.18**	**0.85**	**33.09**		
Min.	**-0.11**	**-0.10**	**-0.11**	**-0.10**	**-0.18**	**-0.29**	**-1.66**	**-2.02**	**-2.03**	**-2.03**	**-2.14**	**-2.61**	**-2.64**	**-2.80**	**15.04**	**-2.03**	**-2.62**	**-3.48**	**-1.43**	**-1.38**	**-0.99**	**-0.26**	**-0.12**	**-0.14**		**-15.04**	
Avg.	**0.17**	**0.18**	**0.23**	**0.24**	**0.27**	**0.13**	**-0.09**	**-0.32**	**-0.45**	**-0.56**	**-0.73**	**-0.89**	**-0.89**	**0.22**	**-1.24**	**-0.69**	**-0.68**	**-0.59**	**-0.44**	**-0.37**	**-0.21**	**0.04**	**0.22**	**0.20**			**-0.26**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.12	-0.11	-0.10	-0.10	-0.10	-0.11	-0.11	-0.15	-0.21	-0.23	-0.33	-0.37	-0.39	-0.35	-0.42	-0.39	-0.35	-0.24	-0.25	-0.21	-0.14	-0.11	-0.11	-0.12	-0.10	-0.42	-0.21
2	-0.10	-0.09	-0.09	-0.08	-0.07	-0.08	-0.14	-0.24	-0.34	-0.40	-0.56	-0.56	-0.51	-0.54	-0.61	-0.37	-0.27	-0.37	-0.35	-0.17	-0.10	-0.07	-0.06	-0.06	-0.06	-0.61	-0.26
3	-0.06	-0.02	0.01	0.04	0.03	0.00	0.01	0.06	0.03	-0.01	-0.08	-0.27	-0.17	-0.15	-0.20	-0.07	0.01	0.08	0.01	0.00	0.02	0.01	0.01	0.07	0.08	-0.27	-0.03
4	0.16	0.16	0.16	0.16	0.13	0.22	0.05	0.02	-0.24	-0.27	-0.31	-0.22	-0.26	-0.24	-0.33	-0.21	-0.19	-0.20	-0.18	-0.17	-0.12	-0.03	-0.01	-0.02	0.22	-0.33	-0.08
5	0.06	-0.03	-0.04	-0.05	0.03	-0.03	-0.10	-0.17	-0.20	-0.29	-0.40	-0.42	-0.54	-0.49	-0.52	-0.68	-0.74	-0.51	-0.14	-0.09	-0.03	0.25	0.20	0.37	0.37	-0.74	-0.19
6	0.52	0.46	0.17	0.17	0.02	0.08	0.38	0.09	-0.25	-0.39	-0.38	-0.51	-0.60	-0.61	-0.70	-0.62	-0.58	-0.61	-0.47	0.08	0.42	0.97	1.35	0.86	1.35	-0.70	-0.01
7	0.80	0.60	0.48	0.85	0.89	0.76	0.96	0.02	-0.20	-0.48	-0.73	-1.12	-1.17	-1.16	-1.01	-1.30	-1.13	-1.03	-0.77	-0.42	-0.19	-0.14	-0.13	-0.12	0.96	-1.30	-0.24
8	-0.11	-0.12	-0.12	-0.12	-0.10	-0.11	-0.12	-0.20	-0.26	-0.29	0.54	0.29	1.45	1.78	-0.54	-0.56	-0.65	-0.61	-0.47	-0.33	-0.17	-0.10	-0.07	-0.08	1.78	-0.65	-0.04
9	-0.03	0.02	0.09	0.06	-0.02	-0.04	-0.09	-0.20	-0.24	-0.25	-0.27	-0.29	-0.25	-0.23	-0.27	-0.22	-0.24	-0.23	-0.25	-0.13	-0.10	-0.06	-0.06	-0.05	0.09	-0.29	-0.14
10	-0.05	-0.05	-0.06	-0.07	-0.05	-0.05	-0.06	-0.08	-0.13	-0.17	-0.22	-0.29	-0.31	-0.23	-0.16	-0.17	-0.12	-0.11	-0.05	-0.06	-0.07	-0.07	-0.08	-0.08	-0.05	-0.31	-0.12
11	-0.08	-0.06	-0.06	-0.06	-0.07	-0.06	-0.07	-0.13	-0.19	-0.23	-0.28	-0.24	-0.26	-0.32	-0.40	-0.44	-0.40	-0.35	-0.20	-0.18	-0.09	-0.08	-0.06	-0.04	-0.04	-0.44	-0.18
12	-0.04	-0.02	-0.02	0.01	0.10	0.12	0.11	0.02	-0.10	0.03	0.07	0.02	0.03	-0.79	-0.86	-0.84	-1.05	-0.67	-0.23	-0.01	0.07	0.12	0.23	0.16	0.23	-1.05	-0.15
13	0.03	0.06	0.09	0.05	-0.08	-0.11	-0.11	-0.14	-0.13	-0.13	-0.14	-0.18	-0.24	-0.20	-0.34	-0.27	-0.22	-0.15	-0.11	-0.11	-0.08	-0.07	-0.06	-0.07	0.09	-0.34	-0.11
14	-0.07	-0.07	-0.07	-0.08	-0.06	-0.07	-0.09	-0.12	-0.15	-0.17	-0.15	-0.16	-0.13	-0.14	-0.14	-0.13	-0.13	-0.11	-0.11	-0.11	-0.09	-0.06	-0.09	-0.06	-0.06	-0.17	-0.11
15	-0.05	-0.06	-0.06	-0.03	-0.04	-0.04	-0.06	-0.08	-0.13	-0.18	-0.26	-0.32	-0.38	-0.35	-0.37	-0.36	-0.33	-0.24	-0.14	-0.14	-0.04	0.01	0.03	0.00	0.03	-0.38	-0.15
16	-0.04	-0.09	-0.04	0.01	0.05	0.04	-0.05	-0.13	-0.22	-0.28	-0.33	-0.41	-0.38	-0.45	-0.55	-0.35	-0.29	-0.27	-0.16	-0.13	-0.10	0.13	0.14	0.16	0.16	-0.55	-0.16
17	0.16	0.35	0.35	0.27	0.33	0.30	0.38	0.16	0.02	-0.15	-0.24	-0.47	-0.81	-1.03	-0.22	-0.12	-0.19	-0.14	-0.29	-0.11	-0.03	-0.11	-0.10	-0.09	0.38	-1.03	-0.07
18	-0.08	-0.05	-0.02	-0.07	-0.05	-0.07	-0.05	-0.06	-0.06	-0.05	-0.06	-0.07	-0.10	-0.13	-0.15	-0.13	-0.12	-0.19	-0.17	-0.15	-0.09	-0.04	-0.04	-0.06	-0.02	-0.19	-0.09
19	0.00	0.27	0.22	0.23	0.19	0.19	0.35	0.43	0.09	-0.12	-0.45	-0.72	-0.56	-0.64	-0.53	-0.28	-0.37	-0.34	-0.32	-0.08	0.45	0.63	0.36	0.31	0.63	-0.72	-0.03
20	0.17	0.15	0.07	0.03	0.04	0.05	-0.02	-0.06	-0.12	-0.12	-0.28	-0.38	-0.66	-0.81	-0.89	-0.89	-0.93	-0.69	-0.46	-0.13	0.55	0.72	1.46	1.72	1.72	-0.93	-0.06
21	1.45	1.38	1.85	1.37	0.40	0.59	0.86	0.40	-0.21	-0.25	-0.32	-0.36	-0.63	-0.67	-0.57	-0.57	-0.44	-0.18	0.04	0.30	0.13	0.01	-0.04	-0.09	1.85	-0.67	0.18
22	-0.06	-0.06	-0.04	-0.06	-0.06	-0.07	-0.07	-0.08	-0.11	-0.13	-0.13	-0.14	-0.36	-0.61	-0.91	-0.63	-0.49	-1.12	-0.65	-0.05	0.24	1.00	0.61	0.82	1.00	-1.12	-0.13
23	0.62	0.74	0.65	0.47	0.61	0.55	0.26	0.32	-0.12	-0.31	-0.27	-0.43	-0.75	-0.89	-0.87	-0.76	-0.71	-0.52	-0.14	-0.20	0.30	0.30	0.32	0.53	0.74	-0.89	-0.01
24	0.39	0.23	0.16	0.18	0.20	0.17	0.15	0.07	-0.01	-0.06	-0.04	-0.06	-0.08	-0.13	-0.13	-0.23	-0.26	-0.27	-0.18	-0.06	0.21	0.61	0.90	0.57	0.90	-0.27	0.10
25	0.73	0.49	0.61	0.54	0.35	0.29	0.91	0.26	-0.24	-0.41	-0.38	-0.74	-1.12	-0.78	-0.95	-0.74	-0.74	-0.45	-0.20	0.05	0.13	0.29	0.71	0.70	0.91	-1.12	-0.03
26	0.50	0.28	0.21	0.21	0.43	0.02	-0.09	-0.12	-0.17	-0.20	-0.38	-0.56	-0.73	-0.27	-0.23	-0.36	-0.53	-0.51	-0.42	-0.04	0.16	0.20	0.17	0.30	0.50	-0.73	-0.09
27	0.41	0.63	1.10	1.30	0.86	0.61	0.54	0.19	-0.17	-0.29	-0.25	-0.39	-0.59	-0.52	-0.74	-0.81	-0.42	-0.50	-0.22	-0.07	0.28	0.28	0.25	0.22	1.30	-0.81	0.07
28	0.27	0.51	0.02	-0.07	-0.09	-0.09	-0.10	-0.15	-0.21	-0.33	-0.42	-0.38	-0.80	-1.24	-1.39	-1.07	-1.05	-0.41	-0.42	0.09	0.16	0.40	0.31	0.42	0.51	-1.39	-0.25
29	0.29	0.43	0.32	0.31	0.33	0.69	0.31	0.12	-0.13	-0.16	-0.40	-0.79	-0.84	-0.77	-0.67	-0.67	-0.61	-0.54	-0.42	0.21	0.24	0.21	0.60	0.79	0.79	-0.84	-0.05
30	0.65	0.28	0.13	0.05	0.08	0.07	0.06	-0.01	-0.03	-0.01	-0.09	-0.12	-0.17	-0.17	-0.09	-0.05	-0.05	0.30	0.12	0.37	0.44	0.52	0.40	0.43	0.65	-0.17	0.13
31	0.69	0.76	0.98	0.72	0.58	0.41	0.35	0.34	0.11	-0.21	-0.36	-0.35	-0.79	-0.56	-0.50	-0.46	-0.38	-0.18	-0.12	0.02	0.04	0.04	0.02	0.01	0.98	-0.79	0.05
Max.	**1.45**	**1.38**	**1.85**	**1.37**	**0.89**	**0.76**	**0.96**	**0.43**	**0.11**	**0.03**	**0.54**	**0.29**	**1.45**	**1.78**	**-0.09**	**-0.05**	**0.01**	**0.30**	**0.12**	**0.37**	**0.55**	**1.00**	**1.46**	**1.72**	**1.85**		
Min.	**-0.12**	**-0.12**	**-0.12**	**-0.12**	**-0.10**	**-0.11**	**-0.14**	**-0.24**	**-0.34**	**-0.48**	**-0.73**	**-1.12**	**-1.17**	**-1.24**	**-1.39**	**-1.30**	**-1.13**	**-1.12**	**-0.77**	**-0.42**	**-0.19**	**-0.14**	**-0.13**	**-0.12**		**-1.39**	
Avg.	**0.23**	**0.23**	**0.22**	**0.20**	**0.16**	**0.14**	**0.14**	**0.01**	**-0.14**	**-0.21**	**-0.25**	**-0.36**	**-0.42**	**-0.44**	**-0.52**	**-0.48**	**-0.45**	**-0.37**	**-0.25**	**-0.06**	**0.08**	**0.19**	**0.23**	**0.24**			**-0.08**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.07	0.04	0.04	0.05	0.04	0.04	0.01	-0.06	-0.18	-0.32	-0.55	-0.85	-0.86	-0.75	-0.75	-0.95	-0.80	-0.49	-0.19	-0.04	0.18	0.32	0.28	0.42	0.42	-0.95	-0.22
2	0.36	0.56	0.60	0.56	0.57	0.48	0.50	0.22	-0.10	-0.37	-0.45	-0.49	-0.48	-0.57	-0.72	-0.66	-0.72	-0.41	-0.09	-0.03	0.46	0.28	0.10	0.34	0.60	-0.72	0.00
3	0.92	1.24	0.79	0.72	1.40	1.02	0.87	1.02	0.17	-0.29	-0.40	-0.40	-0.59	-0.73	-0.71	-0.16	-0.22	-0.16	0.05	0.20	0.42	0.47	0.55	0.33	1.40	-0.73	0.27
4	0.17	0.24	0.16	0.83	1.60	1.65	1.37	1.21	0.58	-0.30	-0.45	-0.43	-0.44	-0.38	-0.39	-0.39	-0.38	0.21	0.27	0.21	0.37	0.55	0.36	0.39	1.65	-0.45	0.29
5	0.49	0.38	0.27	0.24	0.31	0.38	0.36	0.24	-0.11	-0.34	-0.35	-0.58	-0.71	-0.88	-0.67	-0.72	-0.84	-0.42	-0.09	0.08	0.43	0.58	0.39	0.33	0.58	-0.88	-0.05
6	0.70	0.65	1.10	1.11	1.35	1.82	1.68	0.83	0.02	-0.23	-0.47	-0.67	-0.79	-0.93	-0.70	-0.88	-0.99	-0.41	-0.05	0.09	0.07	-0.01	-0.09	-0.10	1.82	-0.99	0.13
7	-0.10	-0.10	-0.13	-0.10	-0.08	-0.08	-0.05	-0.02	-0.17	-0.29	-0.28	-0.23	-0.32	-0.30	-0.43	-0.22	-0.07	-0.04	0.02	0.01	-0.03	-0.01	0.02	0.09	0.09	-0.43	-0.12
8	0.05	0.04	0.05	0.06	0.04	-0.02	-0.05	-0.03	-0.01	-0.04	-0.08	-0.12	-0.13	-0.17	-0.14	-0.15	-0.13	-0.09	-0.05	-0.01	-0.01	-0.03	0.05	0.07	0.07	-0.17	-0.04
9	0.09	0.16	0.21	0.21	0.35	0.37	0.59	0.30	0.15	-0.33	-0.49	-0.56	-0.76	-0.83	-0.67	-0.31	-0.62	-0.62	-0.33	-0.05	-0.06	0.13	0.20	0.27	0.59	-0.83	-0.11
10	0.37	0.54	0.71	0.72	0.53	0.66	0.56	0.85	0.42	-0.20	-0.55	-0.59	-0.71	-0.92	-0.83	-0.96	-0.83	-0.46	0.04	0.38	0.19	0.29	0.34	0.33	0.85	-0.96	0.04
11	0.36	1.02	0.66	0.48	0.24	0.77	1.28	0.93	0.40	-0.23	-0.47	-0.45	-0.52	-0.33	-0.31	-0.41	-0.42	-0.46	-0.46	0.11	0.65	0.27	0.40	0.86	1.28	-0.52	0.18
12	0.66	0.69	0.73	1.13	0.67	0.75	0.81	1.54	0.75	-0.24	-0.43	-0.47	-0.44	-0.37	-0.82	-1.07	-0.93	-0.46	-0.18	1.04	1.18	0.78	1.23	1.42	1.54	-1.07	0.33
13	1.22	1.13	1.18	1.47	1.50	1.24	1.24	1.28	0.83	-0.08	-0.63	-0.83	-1.01	-0.97	-0.70	-0.61	-0.29	-0.10	0.01	0.06	0.03	0.06	0.09	0.10	1.50	-1.01	0.26
14	0.05	0.00	-0.05	0.10	0.06	0.01	0.01	0.03	-0.04	-0.01	0.00	0.01	0.06	0.05	0.00	0.07	0.13	0.07	0.04	0.05	0.05	0.05	0.01	0.05	0.13	-0.05	0.03
15	0.07	0.11	0.08	0.11	0.09	0.09	0.15	0.11	0.10	0.07	0.02	0.01	0.04	0.06	0.04	-0.02	0.01	0.00	-0.02	-0.03	-0.01	0.06	0.03	0.04	0.15	-0.03	0.05
16	0.05	0.05	0.02	0.00	-0.03	0.03	0.09	0.09	0.01	-0.09	-0.15	-0.30	-0.30	-0.80	-0.62	-0.44	-0.37	-0.48	-0.18	-0.06	0.03	0.24	0.16	0.18	0.24	-0.80	-0.12
17	0.09	0.10	0.12	0.19	0.14	0.08	0.07	-0.01	-0.11	-0.26	-0.39	-0.42	-0.40	-0.47	-0.58	-0.56	-0.45	-0.46	-0.12	0.40	0.66	0.60	0.48	0.53	0.66	-0.58	-0.03
18	0.46	0.39	0.29	0.68	0.71	0.29	0.16	0.13	-0.02	-0.05	-0.08	-0.12	-0.14	-0.09	-0.21	-0.17	-0.02	0.07	0.13	0.19	0.21	0.16	0.16	0.15	0.71	-0.21	0.14
19	0.13	0.22	0.21	0.30	0.27	0.32	0.36	0.45	0.40	0.20	0.14	0.07	-0.19	-0.08	-0.12	-0.16	-0.16	-0.15	-0.08	0.11	0.02	0.15	0.16	0.15	0.45	-0.19	0.11
20	0.11	0.22	0.28	0.43	0.35	0.34	0.20	0.12	0.05	-0.20	-0.32	-0.68	-0.53	-0.30	-0.23	-0.15	-0.38	-0.05	-0.03	-0.06	-0.07	-0.05	-0.08	-0.08	0.43	-0.68	-0.05
21	-0.08	-0.08	-0.08	-0.04	-0.02	0.09	-0.02	0.02	0.03	-0.04	-0.11	-0.12	-0.11	-0.15	-0.04	-0.03	-0.02	0.02	0.07	0.18	0.15	0.26	0.20	0.12	0.26	-0.15	0.01
22	0.12	0.10	0.06	0.08	0.08	0.08	0.01	-0.05	-0.12	-0.17	-0.23	-0.28	-0.22	-0.29	-0.23	-0.21	-0.13	-0.13	0.00	-0.05	-0.06	-0.04	-0.05	-0.06	0.12	-0.29	-0.07
23	-0.06	-0.05	-0.06	-0.06	-0.07	-0.05	-0.06	-0.05	-0.07	-0.13	-0.19	-0.17	-0.25	-0.26	-0.30	-0.17	-0.17	-0.15	0.08	0.27	0.23	0.05	-0.09	-0.02	0.27	-0.30	-0.07
24	0.04	-0.02	-0.03	-0.09	0.05	0.02	0.02	-0.02	-0.12	-0.17	-0.21	-0.40	-0.33	-0.23	-0.28	-0.27	-0.07	-0.06	0.14	0.45	0.45	0.39	0.75	0.39	0.75	-0.40	0.02
25	0.27	0.38	0.17	0.30	0.27	0.42	0.51	0.58	0.34	-0.09	-0.32	-0.34	-0.25	-0.35	-0.31	-0.24	-0.13	-0.05	0.05	0.18	0.13	0.18	0.01	0.09	0.58	-0.35	0.08
26	0.06	0.08	-0.03	0.11	0.09	0.38	0.29	0.14	0.10	-0.08	-0.11	-0.16	-0.19	-0.26	-0.17	-0.16	-0.14	-0.15	-0.10	-0.10	-0.07	-0.05	-0.04	-0.08	0.38	-0.26	-0.03
27	-0.07	-0.07	-0.10	-0.08	-0.08	-0.04	0.00	-0.09	0.11	-0.14	-0.18	-0.32	-0.39	-0.37	-0.35	-0.30	-0.17	-0.14	-0.09	-0.02	-0.09	-0.01	0.00	0.01	0.11	-0.39	-0.12
28	-0.09	-0.11	-0.09	-0.04	-0.02	0.01	-0.02	-0.04	-0.11	-0.18	-0.29	-0.31	-0.37	-0.38	-0.38	-0.47	-0.42	-0.09	0.09	0.32	0.33	0.44	0.65	0.71	0.71	-0.47	-0.04
29	0.84	0.43	0.39	0.27	0.15	0.29	0.41	0.62	0.44	0.13	-0.12	-0.37	-0.60	-0.47	-0.65	-0.46	-0.15	0.06	0.11	0.54	0.78	0.92	0.83	1.02	1.02	-0.65	0.22
30	1.17	1.03	0.68	0.75	0.79	1.23	1.25	0.54	0.59	0.45	-0.16	-0.29	-0.53	-0.66	-0.53	-0.34	-0.21	-0.11	0.01	0.11	0.04	0.05	-0.01	0.04	1.25	-0.66	0.24
Max.	**1.22**	**1.24**	**1.18**	**1.47**	**1.60**	**1.82**	**1.68**	**1.54**	**0.83**	**0.45**	**0.14**	**0.07**	**0.06**	**0.06**	**0.04**	**0.07**	**0.13**	**0.21**	**0.27**	**1.04**	**1.18**	**0.92**	**1.23**	**1.42**	**1.82**		
Min.	**-0.10**	**-0.11**	**-0.13**	**-0.10**	**-0.08**	**-0.08**	**-0.06**	**-0.09**	**-0.18**	**-0.37**	**-0.63**	**-0.85**	**-1.01**	**-0.97**	**-0.83**	**-1.07**	**-0.99**	**-0.62**	**-0.46**	**-0.10**	**-0.09**	**-0.05**	**-0.09**	**-0.10**		**-1.07**	
Avg.	**0.28**	**0.31**	**0.27**	**0.35**	**0.38**	**0.42**	**0.42**	**0.36**	**0.14**	**-0.13**	**-0.28**	**-0.36**	**-0.42**	**-0.44**	**-0.43**	**-0.39**	**-0.34**	**-0.19**	**-0.03**	**0.15**	**0.22**	**0.24**	**0.24**	**0.27**			**0.04**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.05	0.05	0.03	0.02	0.00	0.00	0.02	0.05	0.09	0.04	-0.02	-0.09	-0.12	-0.29	-0.13	-0.02	-0.01	0.02	0.03	0.18	0.30	0.19	0.06	0.02	0.30	-0.29	0.02
2	0.04	0.01	0.00	0.01	0.03	0.01	-0.01	-0.03	-0.08	-0.09	-0.14	-0.16	-0.16	-0.09	-0.04	0.01	-0.03	0.02	0.03	0.06	0.05	0.02	0.00	0.04	0.06	-0.16	-0.02
3	0.04	0.02	0.06	0.04	0.00	0.05	0.05	-0.01	-0.06	-0.18	-0.16	-0.47	-0.24	-0.05	0.07	0.05	0.28	0.23	-0.02	0.05	-0.04	-0.04	-0.02	0.00	0.28	-0.47	-0.01
4	0.02	0.09	0.25	0.28	0.20	0.13	0.05	0.11	0.04	-0.01	-0.07	-0.13	-0.29	-0.55	-0.16	-0.28	-0.11	-0.10	-0.05	-0.03	-0.08	-0.10	-0.09	-0.08	0.28	-0.55	-0.04
5	-0.06	-0.07	-0.04	-0.05	-0.01	-0.04	-0.09	-0.04	0.11	-0.01	-0.26	-0.32	-0.61	-0.88	-0.78	-0.44	-0.16	-0.09	-0.08	-0.10	-0.10	-0.11	-0.09	-0.01	0.11	-0.88	-0.18
6	0.01	0.19	0.28	0.09	0.11	0.11	0.07	0.08	-0.03	-0.10	-0.08	-0.07	-0.17	-0.23	-0.21	-0.17	-0.12	-0.04	-0.04	0.00	0.08	0.08	0.10	0.11	0.28	-0.23	0.00
7	0.10	0.06	0.01	0.00	0.03	0.02	0.04	-0.01	0.02	0.07	0.02	0.01	-0.02	-0.02	-0.03	-0.02	-0.02	0.04	0.04	0.02	0.05	0.06	0.06	0.12	0.12	-0.03	0.03
8	0.06	0.13	0.05	0.05	0.06	0.06	0.07	0.12	0.19	0.14	0.13	0.08	0.07	0.07	0.03	0.02	0.10	0.09	0.06	0.01	0.02	0.09	0.24	0.13	0.24	0.01	0.09
9	0.09	0.08	0.07	0.07	-0.01	0.05	0.09	0.05	0.03	0.02	-0.04	-0.07	-0.08	-0.11	-0.11	-0.10	-0.07	-0.03	-0.10	0.05	-0.06	-0.03	-0.01	0.01	0.09	-0.11	-0.01
10	0.11	0.04	-0.02	-0.03	-0.04	0.02	0.00	0.04	0.16	0.24	0.12	-0.02	0.24	0.23	0.60	0.60	0.54	0.46	0.33	0.12	0.00	0.00	-0.01	0.03	0.60	-0.04	0.16
11	0.05	0.10	0.05	-0.03	-0.01	-0.09	-0.02	0.05	0.01	-0.07	-0.14	-0.35	-0.33	-0.27	-0.33	-0.44	-0.42	0.20	0.83	0.29	0.25	0.09	0.08	0.30	0.83	-0.44	-0.01
12	0.38	0.30	0.11	0.08	0.10	0.07	0.01	0.08	0.03	-0.08	-0.10	-0.24	-0.40	-0.39	-0.35	-0.26	-0.14	0.05	0.05	0.11	0.06	0.04	0.11	0.17	0.38	-0.40	-0.01
13	0.15	0.25	0.67	1.23	0.80	0.81	0.62	0.83	0.82	0.42	0.06	-0.28	-0.35	-0.40	-0.35	-0.27	-0.05	0.79	0.66	1.16	0.65	0.90	1.14	1.54	1.54	-0.40	0.49
14	1.02	0.88	0.78	1.39	0.99	1.38	1.11	0.67	0.36	0.21	-0.23	-0.43	-0.34	-0.66	-0.85	-0.48	-0.19	-0.07	0.57	0.56	0.62	0.90	0.63	0.96	1.39	-0.85	0.41
15	0.93	0.73	0.68	0.81	0.85	0.98	0.80	0.88	0.74	0.42	-0.05	-0.10	-0.18	-0.20	-0.16	-0.09	0.01	0.16	0.24	0.19	0.37	0.24	0.25	0.04	0.98	-0.20	0.36
16	0.02	-0.02	-0.04	-0.05	-0.05	-0.04	-0.06	-0.04	-0.01	0.00	-0.11	-0.22	-0.08	-0.24	-0.24	-0.15	-0.07	0.15	0.21	0.18	0.09	0.15	0.15	0.10	0.21	-0.24	-0.02
17	0.06	0.08	0.17	0.22	0.11	0.14	0.04	0.06	0.07	-0.10	-0.17	-0.27	-0.31	-0.41	-0.35	-0.23	-0.13	0.02	0.08	0.08	0.04	0.05	0.04	0.05	0.22	-0.41	-0.03
18	0.07	0.01	-0.04	0.00	0.02	0.06	0.07	0.16	0.10	0.02	-0.05	-0.13	-0.16	-0.08	0.04	-0.07	-0.05	-0.02	0.01	-0.02	0.00	-0.04	-0.07	-0.07	0.16	-0.16	-0.01
19	-0.06	-0.07	-0.07	-0.10	-0.14	0.03	0.07	-0.03	-0.05	-0.12	-0.20	-0.21	-0.23	-0.26	-0.21	-0.18	-0.05	0.06	0.12	0.09	0.00	0.18	0.19	0.14	0.19	-0.26	-0.04
20	0.09	0.06	0.07	0.12	0.14	0.10	0.17	0.11	0.11	0.11	-0.19	-0.19	-0.16	-0.31	-0.30	-0.07	-0.04	0.14	0.18	0.51	0.70	0.77	1.13	1.09	1.13	-0.31	0.18
21	0.89	1.25	0.87	0.94	1.08	1.00	0.32	0.53	0.83	0.62	0.26	-0.11	-0.27	-0.27	-0.31	-0.09	0.04	0.63	0.54	0.58	0.80	0.99	0.73	0.50	1.25	-0.31	0.51
22	0.98	0.38	0.36	0.26	0.34	0.47	0.65	0.78	0.78	0.47	0.20	-0.18	-0.18	-0.22	-0.23	-0.14	0.09	0.57	0.84	0.78	0.62	0.40	0.69	0.58	0.98	-0.23	0.39
23	0.45	0.37	0.46	0.28	0.29	0.44	0.42	0.25	0.09	-0.02	-0.08	-0.17	-0.25	-0.35	-0.30	-0.30	-0.16	0.36	0.64	0.68	0.83	0.84	0.86	0.95	0.95	-0.35	0.27
24	0.56	0.27	0.10	0.16	0.00	-0.06	0.00	0.04	0.06	0.02	-0.01	-0.03	-0.04	-0.05	-0.06	-0.07	-0.06	-0.05	-0.04	-0.03	-0.02	-0.01	0.01	0.04	0.56	-0.07	0.03
25	0.05	0.00	0.00	0.02	0.01	-0.04	-0.04	0.00	-0.02	-0.02	-0.06	-0.05	-0.07	-0.11	-0.05	-0.03	-0.01	0.08	0.09	0.10	0.11	0.02	0.00	-0.01	0.11	-0.11	0.00
26	-0.03	-0.04	-0.03	-0.05	-0.06	-0.06	-0.07	-0.10	-0.06	-0.10	-0.18	-0.08	-0.08	-0.08	-0.04	-0.09	0.02	0.17	0.18	0.17	0.16	0.13	0.12	0.13	0.18	-0.18	0.00
27	0.17	0.13	0.16	0.15	0.14	0.14	0.23	0.20	0.12	0.19	0.04	-0.12	-0.26	-0.26	-0.13	-0.06	0.16	0.28	0.27	0.31	0.33	0.24	-0.04	-0.02	0.33	-0.26	0.10
28	-0.05	-0.05	-0.01	-0.09	-0.02	0.40	0.33	0.72	0.59	0.09	0.09	-0.13	-0.12	-0.10	-0.08	-0.04	-0.02	0.01	-0.02	0.03	-0.05	-0.06	-0.06	-0.06	0.72	-0.13	0.06
29	-0.06	-0.02	0.16	0.39	0.15	0.13	0.14	0.15	0.16	0.16	0.07	0.11	0.10	0.10	0.11	0.07	0.09	0.05	0.01	-0.01	-0.03	-0.04	-0.06	-0.06	0.39	-0.06	0.08
30	-0.07	-0.08	-0.08	-0.09	-0.11	-0.11	-0.08	-0.09	-0.08	0.22	0.49	0.19	-0.02	-0.17	-0.14	-0.10	0.01	0.07	0.08	0.16	0.18	0.12	0.16	0.16	0.49	-0.17	0.03
31	0.19	0.12	0.15	0.12	0.09	0.07	0.12	0.13	0.08	0.11	0.02	0.01	-0.02	-0.05	-0.05	0.01	0.08	0.07	0.06	0.18	0.16	0.15	0.14	0.15	0.19	-0.05	0.09
Max.	**1.02**	**1.25**	**0.87**	**1.39**	**1.08**	**1.38**	**1.11**	**0.88**	**0.83**	**0.62**	**0.49**	**0.19**	**0.24**	**0.23**	**0.60**	**0.60**	**0.54**	**0.79**	**0.84**	**1.16**	**0.83**	**0.99**	**1.14**	**1.54**	**1.54**		
Min.	**-0.07**	**-0.08**	**-0.08**	**-0.10**	**-0.14**	**-0.11**	**-0.09**	**-0.10**	**-0.08**	**-0.18**	**-0.26**	**-0.47**	**-0.61**	**-0.88**	**-0.85**	**-0.48**	**-0.42**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.11**	**-0.09**	**-0.08**		**-0.88**	
Avg.	**0.20**	**0.17**	**0.17**	**0.20**	**0.16**	**0.20**	**0.16**	**0.18**	**0.17**	**0.09**	**-0.03**	**-0.14**	**-0.17**	**-0.22**	**-0.17**	**-0.11**	**-0.02**	**0.14**	**0.19**	**0.21**	**0.20**	**0.20**	**0.21**	**0.23**			**0.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.15	0.18	0.13	0.10	0.10	0.11	0.10	0.09	0.09	0.05	-0.06	-0.08	-0.08	-0.09	-0.09	-0.12	-0.07	-0.07	-0.10	-0.07	-0.04	0.02	0.03	0.04	0.18	-0.12	0.01
2	0.06	0.08	0.03	0.01	0.05	0.04	0.05	0.06	0.04	0.04	0.03	-0.01	-0.06	-0.06	-0.06	-0.05	0.04	0.06	0.05	0.05	0.09	0.05	0.04	0.04	0.09	-0.06	0.03
3	0.03	0.04	0.06	0.12	0.11	0.17	0.10	0.13	0.11	0.09	0.09	0.15	0.00	0.02	0.01	0.04	0.16	0.26	0.16	0.25	0.20	0.22	0.31	0.24	0.31	0.00	0.13
4	0.25	0.35	0.81	0.25	0.32	0.93	0.62	0.90	0.53	0.25	0.17	0.05	-0.05	-0.05	-0.02	0.05	0.26	0.62	0.72	0.61	0.54	0.62	1.01	1.09	1.09	-0.05	0.45
5	1.19	1.12	0.71	0.36	0.07	0.00	-0.13	-0.13	-0.01	0.72	1.25	1.15	0.65	0.28	0.30	0.50	0.61	0.54	0.80	0.92	1.00	0.71	0.84	0.89	1.25	-0.13	0.60
6	0.86	1.20	1.00	0.38	0.59	0.70	0.26	0.17	0.15	0.10	0.06	0.00	0.07	-0.09	-0.16	-0.20	-0.09	0.07	0.05	0.02	0.09	0.15	0.23	0.15	1.20	-0.20	0.24
7	0.11	0.05	0.11	0.11	0.12	0.04	0.06	0.03	-0.01	-0.03	-0.10	-0.03	-0.08	-0.08	-0.06	-0.11	-0.11	-0.11	-0.07	-0.02	-0.03	-0.03	0.00	-0.03	0.12	-0.11	-0.01
8	0.01	0.03	0.06	0.06	0.07	0.10	0.07	0.16	0.14	0.07	0.01	0.00	-0.03	-0.01	0.00	0.03	0.10	0.11	0.05	0.00	-0.01	-0.02	-0.04	-0.07	0.16	-0.07	0.04
9	-0.07	-0.02	0.02	0.03	0.03	0.06	0.05	0.04	0.06	0.03	0.02	-0.02	-0.01	-0.04	-0.04	0.02	0.14	0.11	0.11	0.14	0.09	0.12	0.01	-0.02	0.14	-0.07	0.03
10	-0.06	-0.07	-0.04	-0.10	-0.14	-0.16	-0.14	-0.10	-0.11	-0.10	-0.24	-0.25	-0.26	-0.22	-0.11	-0.03	-0.02	0.19	0.23	0.19	0.13	0.21	0.19	0.04	0.23	-0.26	-0.04
11	0.08	0.16	0.19	0.13	0.07	0.21	0.25	0.24	0.23	0.06	0.08	0.09	0.05	0.03	0.07	0.08	0.21	0.24	0.16	0.14	0.19	0.19	0.18	0.16	0.25	0.03	0.14
12	0.09	0.10	0.12	0.12	0.13	0.11	0.15	0.09	0.09	0.06	-0.03	0.03	0.10	0.08	0.10	0.13	0.17	0.11	0.15	0.07	0.05	0.02	0.01	0.05	0.17	-0.03	0.09
13	0.03	0.03	0.02	0.00	0.00	0.02	0.12	0.10	0.12	0.08	0.00	-0.09	-0.14	-0.19	-0.19	-0.16	0.01	0.01	0.00	0.00	0.01	0.00	0.03	0.04	0.12	-0.19	-0.01
14	0.08	0.05	0.04	0.08	-0.03	0.02	0.13	0.09	0.13	0.14	0.04	-0.05	-0.03	-0.06	-0.12	-0.11	-0.02	0.03	0.01	0.00	0.00	-0.05	-0.10	-0.12	0.14	-0.12	0.01
15	-0.07	-0.08	-0.06	-0.10	-0.09	-0.10	-0.07	-0.06	-0.09	-0.11	-0.24	-0.07	-0.07	-0.10	-0.10	-0.23	-0.14	-0.08	-0.04	-0.02	-0.01	-0.03	0.01	-0.02	0.01	-0.24	-0.08
16	-0.03	-0.01	0.02	0.04	0.04	0.09	0.07	0.10	0.10	0.12	0.10	0.05	-0.01	0.01	0.07	0.14	0.31	0.31	0.23	0.35	0.27	0.20	0.20	0.21	0.35	-0.03	0.12
17	0.20	0.15	0.10	0.18	0.12	0.16	0.16	0.17	0.11	0.10	0.05	0.04	0.05	0.06	0.05	0.07	0.13	0.12	0.19	0.16	0.06	0.25	0.31	0.13	0.31	0.04	0.13
18	0.18	0.12	0.13	0.13	0.12	0.20	0.13	0.06	0.13	0.13	0.03	0.05	-0.02	-0.01	0.00	0.04	0.13	0.07	0.10	0.06	0.02	0.05	0.07	0.07	0.20	-0.02	0.08
19	0.08	0.11	0.06	0.14	0.07	0.01	0.00	-0.04	-0.02	-0.06	-0.18	-0.16	-0.22	-0.22	-0.21	-0.14	-0.12	-0.01	0.00	-0.01	0.01	0.08	0.10	0.06	0.14	-0.22	-0.03
20	0.11	0.13	0.11	0.13	0.06	0.12	0.08	0.13	0.11	0.06	0.06	-0.01	0.00	-0.02	0.08	0.09	0.21	0.13	0.17	0.18	0.21	0.23	0.27	0.30	0.30	-0.02	0.12
21	0.19	0.08	0.10	0.17	0.19	0.20	0.20	0.19	0.28	0.39	0.26	0.20	0.12	0.15	0.17	0.16	0.26	0.25	0.30	0.25	0.18	0.26	0.32	0.15	0.39	0.08	0.21
22	0.04	0.01	0.07	0.14	0.13	0.13	0.13	0.27	0.29	0.24	0.22	0.17	0.09	0.16	0.07	0.13	0.24	0.23	0.27	0.19	0.13	0.13	0.09	0.10	0.29	0.01	0.15
23	0.12	0.19	0.46	0.46	0.60	0.38	0.34	0.53	0.44	0.92	0.37	0.46	0.13	0.15	0.19	0.37	0.46	1.27	2.31	2.26	2.43	3.78	3.63	2.03	3.78	0.12	1.01
24	2.50	2.61	2.20	1.27	1.71	1.60	1.65	1.53	1.62	0.93	0.59	0.82	1.09	0.78	0.78	0.72	0.67	0.62	0.50	0.43	0.35	0.31	0.31	0.31	2.61	0.31	1.08
25	0.22	0.20	0.36	0.49	0.61	0.43	0.24	0.17	0.21	0.24	0.28	0.36	0.15	0.16	0.30	0.41	0.59	0.88	0.79	0.83	0.72	0.62	0.39	0.34	0.88	0.15	0.42
26	0.36	0.33	0.31	0.15	0.14	0.15	0.11	0.11	0.11	0.09	0.05	0.02	0.02	0.02	0.00	-0.03	-0.02	0.05	0.02	0.04	0.06	0.13	0.20	0.14	0.36	-0.03	0.11
27	0.00	-0.04	-0.04	-0.05	-0.05	-0.04	-0.04	-0.04	-0.03	0.13	0.18	0.19	0.32	0.37	0.38	0.40	0.44	0.47	0.48	0.49	0.51	0.46	0.44	0.44	0.51	-0.05	0.22
28	0.50	0.54	0.47	0.49	0.49	0.47	0.45	0.41	0.40	0.41	0.33	0.34	0.28	0.35	0.46	0.48	0.49	0.43	0.48	0.47	0.58	0.44	1.22	1.25	1.25	0.28	0.51
29	0.82	1.16	1.34	1.56	0.82	0.72	0.75	0.77	0.67	0.75	1.12	1.02	0.58	0.69	0.95	0.65	0.79	1.17	0.75	1.00	0.79	0.60	0.38	0.20	1.56	0.20	0.84
30	0.24	0.24	0.17	-0.02	-0.02	-0.05	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.05	-0.06	0.06	0.02	-0.06	0.07	0.27	0.47	0.65	0.73	0.73	0.59	0.73	-0.06	0.15
Max.	**2.50**	**2.61**	**2.20**	**1.56**	**1.71**	**1.60**	**1.65**	**1.53**	**1.62**	**0.93**	**1.25**	**1.15**	**1.09**	**0.78**	**0.95**	**0.72**	**0.79**	**1.27**	**2.31**	**2.26**	**2.43**	**3.78**	**3.63**	**2.03**	**3.78**		
Min.	**-0.07**	**-0.08**	**-0.06**	**-0.10**	**-0.14**	**-0.16**	**-0.14**	**-0.13**	**-0.11**	**-0.11**	**-0.24**	**-0.25**	**-0.26**	**-0.22**	**-0.21**	**-0.23**	**-0.14**	**-0.11**	**-0.10**	**-0.07**	**-0.04**	**-0.05**	**-0.10**	**-0.12**		**-0.26**	
Avg.	**0.28**	**0.30**	**0.30**	**0.23**	**0.21**	**0.23**	**0.19**	**0.20**	**0.19**	**0.19**	**0.15**	**0.15**	**0.09**	**0.07**	**0.10**	**0.11**	**0.19**	**0.27**	**0.30**	**0.31**	**0.31**	**0.35**	**0.38**	**0.29**			**0.22**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.77	0.77	0.91	0.75	0.87	0.76	0.61	0.65	0.41	0.54	0.39	0.39	0.33	0.47	0.56	0.44	0.49	0.53	0.67	0.87	0.58	0.71	0.92	1.02	1.02	0.33	0.64
2	0.92	1.06	1.41	2.16	0.55	0.66	0.36	1.38	0.99	1.47	1.52	1.16	0.78	0.85	0.82	0.80	0.96	0.96	0.94	0.66	0.56	0.29	0.24	0.14	2.16	0.14	0.90
3	0.14	0.04	0.01	0.09	0.13	0.05	-0.03	-0.03	0.08	0.01	0.02	0.01	-0.01	-0.01	-0.05	-0.07	-0.08	-0.09	-0.08	-0.08	-0.07	-0.07	-0.08	-0.08	0.14	-0.09	-0.01
4	-0.04	-0.01	0.00	-0.08	0.06	-0.01	0.00	0.59	0.02	0.17	0.24	0.10	0.37	0.09	-0.02	-0.02	0.05	-0.02	-0.03	-0.01	0.05	0.12	0.12	0.11	0.59	-0.08	0.08
5	0.09	0.12	0.07	0.08	0.21	0.50	0.41	0.55	0.44	0.31	0.36	0.45	0.60	0.42	0.42	0.28	0.25	0.37	0.60	0.61	0.57	0.47	0.40	0.42	0.61	0.07	0.37
6	0.41	0.38	0.33	0.26	0.16	0.16	0.09	-0.01	0.06	0.06	0.04	0.08	0.10	0.10	0.18	0.16	0.14	0.16	0.11	0.10	0.14	0.08	0.06	0.16	0.41	-0.01	0.15
7	0.14	0.12	0.13	0.27	0.29	0.42	0.66	0.83	0.67	0.46	0.36	0.29	0.13	0.08	0.28	0.18	0.24	0.29	0.28	0.19	0.11	0.07	0.07	0.05	0.83	0.05	0.27
8	0.08	0.08	0.02	0.01	-0.05	-0.01	0.03	-0.01	-0.02	-0.04	0.01	0.16	0.30	0.32	0.30	0.40	0.23	0.12	-0.04	0.01	0.03	0.19	0.30	0.37	0.40	-0.05	0.12
9	0.23	0.26	0.38	0.24	0.15	0.19	0.11	0.11	0.03	0.12	0.09	0.04	-0.03	-0.01	-0.02	-0.06	-0.02	-0.04	-0.06	-0.08	-0.06	-0.07	-0.06	-0.05	0.38	-0.08	0.06
10	-0.03	-0.04	0.01	0.07	0.05	0.11	0.20	0.27	0.33	0.35	0.27	0.22	0.10	-0.03	-0.03	-0.05	-0.06	-0.06	-0.05	-0.03	0.00	0.13	0.24	0.40	0.40	-0.06	0.10
11	0.60	0.71	0.84	1.01	0.87	0.81	0.93	1.03	0.99	1.08	0.85	1.34	0.78	1.61	0.84	1.56	1.82	1.61	0.52	0.51	0.36	0.34	0.19	0.23	1.82	0.19	0.89
12	0.35	0.53	0.38	0.26	0.15	0.07	0.05	0.04	0.06	0.06	-0.01	-0.02	-0.08	-0.07	-0.08	-0.08	-0.08	-0.06	-0.06	-0.07	-0.06	-0.06	-0.07	-0.06	0.53	-0.08	0.05
13	-0.05	-0.07	-0.09	-0.04	0.14	0.22	0.17	0.16	0.18	0.12	0.03	-0.09	-0.10	-0.12	-0.12	-0.11	-0.07	-0.07	-0.12	-0.15	-0.18	-0.18	-0.18	-0.10	0.22	-0.18	-0.04
14	-0.01	-0.10	-0.04	-0.01	0.03	-0.04	0.09	0.21	0.31	0.22	0.25	0.44	0.44	0.29	0.08	0.31	0.63	0.66	0.32	0.05	0.05	0.05	0.00	0.01	0.66	-0.10	0.18
15	0.02	0.00	-0.06	0.02	0.10	0.29	0.34	0.26	0.26	0.69	0.92	0.88	1.16	0.45	0.76	0.83	0.52	0.36	0.23	0.23	0.10	0.09	0.08	0.06	1.16	-0.06	0.36
16	0.08	0.06	0.05	0.04	0.03	-0.02	-0.04	-0.03	-0.02	-0.02	-0.03	-0.04	-0.05	-0.05	-0.07	-0.06	-0.04	-0.03	0.03	0.10	0.29	0.20	0.26	0.56	0.56	-0.07	0.05
17	0.43	0.41	0.22	0.49	0.51	0.96	0.75	0.93	0.66	0.69	0.59	0.55	0.48	0.37	0.28	0.30	0.25	0.17	0.21	0.22	0.06	0.05	0.15	0.25	0.96	0.05	0.41
18	0.28	0.10	-0.01	0.12	0.36	0.41	0.32	0.38	0.07	0.05	0.39	0.01	0.19	0.41	0.34	1.28	1.03	1.28	1.25	1.65	1.20	1.44	1.88	1.92	1.92	-0.01	0.68
19	1.25	1.69	2.41	2.45	2.01	1.51	0.95	0.63	1.42	1.06	1.23	1.08	0.61	0.56	0.31	0.38	0.44	0.22	0.16	0.07	-0.02	0.01	0.04	0.16	2.45	-0.02	0.86
20	0.27	0.24	0.07	0.22	0.14	0.07	0.12	0.05	-0.04	0.12	0.12	0.06	0.06	0.07	-0.02	-0.04	0.24	0.23	0.47	0.63	0.90	0.83	0.28	0.63	0.90	-0.04	0.24
21	1.10	0.43	0.35	0.08	0.04	0.35	0.16	0.11	0.30	0.51	0.23	0.26	0.28	0.20	0.06	0.00	0.34	0.35	0.80	0.45	0.22	0.17	0.27	0.39	1.10	0.00	0.31
22	0.66	1.00	0.85	0.60	0.41	0.63	0.49	0.30	0.27	0.94	0.55	0.47	0.54	0.37	0.28	0.29	0.60	0.47	0.47	0.40	0.36	0.54	0.56	0.48	1.00	0.27	0.52
23	0.42	0.44	0.44	0.48	0.54	0.51	0.59	0.53	0.95	1.07	0.94	0.70	0.57	0.58	0.46	0.73	0.73	0.76	0.79	0.67	0.88	1.06	1.19	1.75	1.75	0.42	0.74
24	1.37	1.34	1.25	0.35	1.11	1.01	0.84	1.26	1.47	0.97	0.80	0.85	0.48	0.31	0.31	1.90	1.43	1.40	1.81	1.14	0.80	0.49	0.28	0.21	1.90	0.21	0.97
25	0.18	0.27	0.17	0.07	-0.03	0.03	0.09	0.13	0.17	0.25	0.34	0.28	0.20	0.50	0.67	0.80	1.15	0.66	0.86	0.77	0.52	0.25	0.14	0.46	1.15	-0.03	0.37
26	0.17	0.15	0.06	0.10	0.37	0.82	0.70	0.84	0.69	1.38	1.14	1.31	0.92	0.82	0.71	1.23	0.93	0.85	1.33	2.58	2.30	1.40	1.33	0.76	2.58	0.06	0.95
27	0.61	0.62	0.55	0.49	0.42	0.39	0.38	0.39	0.39	0.37	0.30	0.23	0.09	0.11	0.13	0.08	0.10	0.11	0.16	0.25	0.08	-0.01	0.17	0.15	0.62	-0.01	0.27
28	0.21	0.15	0.06	0.00	0.04	0.04	0.05	0.03	-0.01	0.01	-0.01	0.02	-0.02	0.04	0.54	0.82	0.83	0.69	0.51	0.80	0.71	1.13	1.29	0.70	1.29	-0.02	0.36
29	1.24	0.53	0.34	0.30	0.23	0.21	0.38	0.37	0.17	0.00	-0.02	0.04	-0.14	-0.10	-0.04	0.00	0.07	0.06	0.04	-0.05	-0.10	-0.12	-0.11	-0.10	1.24	-0.14	0.13
30	-0.09	-0.08	-0.07	-0.08	-0.08	-0.10	-0.10	-0.10	-0.09	-0.07	0.01	-0.01	-0.07	-0.12	-0.13	-0.10	-0.09	-0.07	-0.06	-0.06	-0.06	-0.04	-0.02	-0.02	0.01	-0.13	-0.07
31	0.16	0.09	0.08	0.25	0.42	0.54	0.74	0.94	1.40	1.17	0.80	0.89	0.95	0.61	0.86	1.45	0.58	0.58	0.37	0.39	0.77	0.79	0.60	0.84	1.45	0.08	0.68
Max.	**1.37**	**1.69**	**2.41**	**2.45**	**2.01**	**1.51**	**0.95**	**1.38**	**1.47**	**1.47**	**1.52**	**1.34**	**1.16**	**1.61**	**0.86**	**1.90**	**1.82**	**1.61**	**1.81**	**2.58**	**2.30**	**1.44**	**1.88**	**1.92**	**2.58**		
Min.	**-0.09**	**-0.10**	**-0.09**	**-0.08**	**-0.08**	**-0.10**	**-0.10**	**-0.10**	**-0.09**	**-0.07**	**-0.03**	**-0.09**	**-0.14**	**-0.12**	**-0.13**	**-0.11**	**-0.09**	**-0.09**	**-0.12**	**-0.15**	**-0.18**	**-0.18**	**-0.18**	**-0.10**		**-0.18**	
Avg.	**0.39**	**0.36**	**0.36**	**0.36**	**0.33**	**0.37**	**0.34**	**0.41**	**0.41**	**0.45**	**0.41**	**0.39**	**0.32**	**0.29**	**0.28**	**0.44**	**0.44**	**0.40**	**0.40**	**0.41**	**0.36**	**0.33**	**0.34**	**0.38**			**0.37**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														-52.1	6999.0	63.2	70.6	79.5	89.6	85.4	86.0	88.1	90.7	87.0	90.7	6999.0	-573.7
10	88.1	88.7	89.0	91.8	90.3	84.7	86.9	85.9	78.7	71.1	69.7	68.4	67.1	63.9	63.1	64.3	67.0	68.6	71.6	76.1	88.4	88.0	83.5	87.2	91.8	63.1	78.4
11	92.6	91.6	91.4	91.7	91.3	88.7	88.8	89.6	88.7	89.4	88.3	88.2	89.3	87.1	85.0	84.0	79.6	79.3	87.3	88.7	89.4	91.6	93.9	95.0	95.0	79.3	88.8
12	90.7	88.4	89.2	87.5	91.2	91.6	88.8	89.2	89.3	88.2	90.6	93.9	92.3	95.7	97.9	97.5	94.2	95.7	96.5	96.6	99.1	98.1	96.9	99.4	99.4	87.5	93.3
13	99.9	100.0	100.0	100.0	100.0	98.0	92.9	89.5	87.4	85.8	80.3	78.2	73.5	68.7	68.8	64.4	63.7	66.5	67.7	68.5	69.5	71.5	72.4	77.6	100.0	63.7	81.0
14	79.8	80.6	81.7	83.1	87.0	80.3	76.2	73.8	70.1	65.1	63.1	54.9	47.8	50.4	50.6	58.7	53.3	55.8	62.4	68.4	69.0	70.6	79.5	90.0	90.0	47.8	68.8
15	91.2	91.2	92.2	96.0	93.6	86.3	78.6	77.3	70.8	58.9	52.3	45.7	41.2	36.1	51.9	79.1	83.5	82.0	80.1	87.0	91.1	89.6	95.9	99.1	99.1	36.1	77.1
16	97.5	96.5	97.9	98.0	95.7	91.2	91.7	93.4	91.7	89.6	88.8	91.0	91.8	93.2	97.4	98.6	99.2	97.8	94.8	92.6	93.3	91.8	92.4	95.8	99.2	88.8	94.2
17	98.9	99.6	99.1	94.6	88.8	82.6	84.0	92.7	92.4	93.2	86.4	79.9	73.7	77.4	81.2	81.8	78.9	79.7	84.1	89.7	95.0	98.1	98.7	98.9	99.6	73.7	88.7
18	99.7	99.7	99.8	98.7	95.5	94.9	95.2	88.0	83.6	80.3	85.9	78.1	80.2	83.1	73.1	67.7	71.5	74.7	75.7	78.2	81.2	85.4	87.0	94.8	99.8	67.7	85.5
19	96.6	96.3	97.7	98.4	93.0	87.8	81.0	74.7	70.0	66.4	62.3	56.8	49.6	50.4	54.0	57.6	51.6	56.5	55.5	60.7	86.8	97.2	97.4	96.1	98.4	49.6	74.8
20	96.8	97.6	98.7	99.5	96.1	86.0	79.6	71.7	65.1	59.1	59.0	52.6	56.4	52.8	72.2	94.2	96.2	91.2	85.3	78.0	75.9	80.8	81.9	86.2	99.5	52.6	79.7
21	86.1	88.5	88.0	85.7	88.6	83.9	82.7	73.7	61.2	50.5	47.2	48.7	45.3	47.3	50.9	43.0	47.3	49.9	53.2	45.9	47.2	52.9	56.7	57.1	88.6	43.0	61.7
22	51.1	51.0	55.6	55.9	64.8	69.4	68.7	69.3	70.4	82.6	76.6	73.8	72.1	80.8	97.2	97.9	96.4	95.3	94.5	95.2	95.4	95.5	93.6	95.2	97.9	51.0	79.1
23	94.5	90.0	86.9	87.7	88.9	89.1	91.9	93.0	88.1	83.9	84.2	80.3	73.1	67.9	63.6	63.3	63.7	63.8	65.3	69.8	76.1	80.0	86.2	90.5	94.5	63.3	80.1
24	91.8	93.2	92.9	91.6	94.1	91.5	88.0	76.0	65.6	64.0	60.8	56.9	53.8	47.4	49.4	53.4	62.6	54.4	59.4	64.4	63.4	61.6	63.0	65.7	94.1	47.4	69.4
25	72.3	77.6	79.2	82.9	84.2	82.7	76.5	64.8	59.0	58.8	50.4	43.1	40.8	43.8	47.8	49.4	47.2	48.7	54.9	63.8	71.2	75.0	75.9	78.2	84.2	40.8	63.7
26	79.4	82.6	85.8	89.1	92.3	94.4	91.9	89.2	80.7	65.7	53.6	50.2	45.7	43.7	46.3	50.2	41.1	34.5	41.7	62.6	73.5	80.7	84.4	88.2	94.4	34.5	68.6
27	91.1	95.6	94.9	90.7	77.8	71.9	70.6	68.0	64.0	55.0	49.2	49.1	48.7	47.7	48.7	47.2	46.4	46.2	42.6	46.3	51.6	60.3	66.5	71.0	95.6	42.6	62.5
28	73.4	79.9	87.0	89.1	93.6	87.0	82.2	95.7	99.0	95.2	97.0	84.5	81.4	83.0	79.0	78.0	78.7	79.8	79.7	79.7	80.2	82.2	85.4	87.2	99.0	73.4	84.9
29	87.4	89.4	96.5	98.1	98.9	99.1	98.0	93.6	91.5	86.9	87.7	87.5	76.7	70.9	64.2	58.7	61.4	67.6	75.3	80.3	87.8	96.5	99.6	99.9	99.9	58.7	85.6
30	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	97.3	95.7	93.0	95.7	94.3	93.8	92.2	91.4	90.4	90.7	93.3	93.9	94.4	100.0	90.4	96.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**97.3**	**95.7**	**95.7**	**97.9**	**98.6**	**99.2**	**97.8**	**96.5**	**96.6**	**99.1**	**98.1**	**99.6**	**99.9**	**100.0**		
Min.	**51.1**	**51.0**	**55.6**	**55.9**	**64.8**	**69.4**	**68.7**	**64.8**	**59.0**	**50.5**	**47.2**	**43.1**	**40.8**	**-52.1**	**6999.0**	**43.0**	**41.1**	**34.5**	**41.7**	**45.9**	**47.2**	**52.9**	**56.7**	**57.1**		**6999.0**	
Avg.	**88.5**	**89.4**	**90.6**	**91.0**	**90.7**	**87.7**	**85.4**	**83.3**	**79.4**	**75.7**	**73.0**	**69.5**	**66.5**	**60.6**	**-252.8**	**70.3**	**70.3**	**70.9**	**73.1**	**75.8**	**80.1**	**83.1**	**85.2**	**87.9**			**65.2**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	95.0	97.3	99.1	97.9	98.0	99.2	99.2	99.7	99.8	95.8	90.7	79.9	73.5	65.3	60.3	56.4	53.1	56.2	56.4	61.3	68.3	71.5	72.6	78.9	99.8	53.1	80.2
2	87.2	88.9	86.2	83.4	81.9	85.2	82.5	79.8	76.5	71.8	64.6	54.4	51.6	51.8	49.9	47.7	46.8	48.7	48.0	49.2	53.3	62.8	73.9	78.4	88.9	46.8	66.9
3	77.8	78.8	82.1	85.1	89.5	91.1	87.4	84.9	80.6	71.4	63.1	57.2	51.8	49.5	54.5	54.9	56.6	56.1	55.0	57.8	70.0	79.9	82.9	85.4	91.1	49.5	71.0
4	83.7	85.7	89.1	91.9	95.9	96.1	88.1	85.7	80.4	74.3	69.3	66.1	62.3	63.3	62.7	61.6	53.9	50.9	49.2	56.1	70.4	77.5	84.5	87.2	96.1	49.2	74.4
5	89.0	91.4	93.8	97.5	97.9	98.7	98.7	97.0	94.7	89.7	81.3	69.9	63.2	60.7	59.2	57.3	66.3	88.2	86.9	83.8	84.8	86.2	85.2	91.8	98.7	57.3	83.9
6	93.8	93.8	91.5	90.3	92.0	94.6	98.1	93.9	94.5	96.8	91.3	76.7	75.9	75.5	75.4	70.2	64.3	69.1	73.6	75.8	81.5	84.9	94.6	98.7	98.7	64.3	85.3
7	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	95.4	97.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.4	99.5
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	96.5	92.4	88.9	88.8	88.0	87.5	87.2	85.2	93.7	94.4	93.8	100.0	85.2	95.7
9	93.4	95.5	96.1	97.3	98.8	99.4	98.7	94.3	86.6	81.8	73.9	67.6	66.2	61.8	62.3	57.6	59.1	63.2	68.0	71.9	74.9	78.2	80.1	93.1	99.4	57.6	80.0
10	91.3	91.6	90.3	91.2	90.3	92.3	94.0	89.0	86.7	86.1	79.7	73.3	71.2	71.3	67.5	69.2	69.4	71.9	71.8	76.3	89.8	95.5	98.2	96.1	98.2	67.5	83.5
11	95.7	99.3	100.0	99.7	98.9	99.6	94.6	94.2	91.7	82.1	67.6	65.7	65.3	65.1	66.7	66.6	69.1	72.8	71.5	67.3	72.4	77.1	79.8	88.0	100.0	65.1	81.3
12	85.6	81.5	77.8	82.3	83.6	81.3	75.6	64.3	62.8	61.4	58.7	55.1	54.9	53.2	49.5	44.6	42.2	45.5	54.0	53.4	62.7	75.2	74.5	65.8	85.6	42.2	64.4
13	65.1	70.5	71.6	72.5	80.6	98.8	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	98.9	99.3	99.3	99.9	99.3	98.4	98.7	98.0	98.9	99.5	100.0	65.1	93.7
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	97.6	99.3	99.4	98.9	98.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	97.6	99.6
15	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.0	97.5	94.8	90.7	80.1	77.5	76.2	78.5	84.5	85.0	86.3	89.4	92.6	100.0	76.2	92.9
16	98.4	99.3	97.1	95.0	93.5	91.4	91.4	89.5	86.5	82.4	79.1	75.8	75.1	75.9	70.0	68.6	70.4	70.9	71.3	76.0	77.7	78.4	80.2	81.2	99.3	68.6	82.3
17	83.9	84.9	87.1	91.1	95.0	92.2	90.9	90.1	88.2	83.3	78.6	69.6	65.8	66.1	71.7	75.0	79.5	83.2	87.7	88.9	89.9	88.8	90.3	90.4	95.0	65.8	83.8
18	88.8	89.5	91.3	93.8	94.9	93.8	91.9	92.5	90.2	88.8	85.0	80.5	81.2	82.8	84.4	83.3	80.4	78.6	78.8	82.8	84.5	84.2	86.2	87.2	94.9	78.6	86.5
19	88.5	87.2	89.2	90.8	86.6	82.9	77.8	74.4	69.7	65.6	57.4	53.5	51.3	50.6	54.8	61.8	62.4	61.0	57.3	58.7	61.7	65.8	64.7	68.0	90.8	50.6	68.4
20	71.6	75.1	82.8	83.7	80.2	75.6	69.8	64.3	53.4	48.1	47.7	45.7	46.9	44.0	45.5	51.0	48.7	51.6	61.0	68.0	76.5	85.3	92.4	96.3	96.3	44.0	65.2
21	96.8	97.2	97.3	98.4	89.3	88.8	86.5	85.1	75.8	63.2	61.4	55.9	52.9	60.7	67.4	69.5	74.5	77.8	81.3	85.9	88.9	91.3	93.9	81.8	98.4	52.9	80.1
22	89.6	96.9	97.9	98.2	91.9	88.6	87.4	83.8	79.3	79.3	85.5	83.5	80.6	92.8	99.2	99.7	100.0	100.0	99.4	99.1	97.1	94.2	94.6	93.7	100.0	79.3	92.2
23	92.3	91.6	92.6	96.3	98.1	98.8	98.6	95.7	95.4	89.8	85.3	85.8	90.9	90.4	87.4	87.8	90.6	94.1	99.8	93.8	96.6	97.0	95.0	98.1	99.8	85.3	93.4
24	98.9	95.9	95.5	97.4	94.8	95.0	91.1	90.5	90.1	88.8	89.0	88.8	91.1	91.6	93.3	97.4	99.8	100.0	100.0	100.0	100.0	100.0	99.2	98.7	100.0	88.8	95.3
25	97.7	97.4	96.6	97.2	95.6	94.1	95.7	99.1	97.5	94.8	93.6	86.9	83.2	80.2	74.2	73.2	74.2	77.4	81.3	82.8	84.5	89.5	90.3	89.8	99.1	73.2	88.6
26	89.6	85.2	82.5	82.4	86.5	92.1	93.2	96.0	97.7	99.9	97.8	94.7	88.2	86.8	87.8	87.2	85.8	88.4	88.8	89.1	91.9	93.5	94.7	94.9	99.9	82.4	90.6
27	96.0	97.9	98.6	98.6	98.4	99.6	99.7	90.2	84.6	83.7	82.4	79.3	78.0	74.9	74.8	71.7	69.5	69.1	70.9	76.2	81.9	88.3	85.9	85.9	99.7	69.1	84.8
28	86.5	90.0	93.4	93.0	93.5	89.0	88.3	86.0	80.0	73.6	72.4	70.9	72.4	77.8	83.9	87.0	91.3	96.1	92.4	95.3	98.0	97.5	98.0	98.9	98.9	70.9	87.7
29	99.7	99.9	98.1	98.2	97.8	99.5	99.6	100.0	100.0	99.2	93.8	87.5	80.4	72.3	74.4	82.9	85.4	88.9	91.9	94.8	95.6	95.8	97.7	98.6	100.0	72.3	93.0
30	99.5	99.6	99.6	99.5	99.6	99.8	100.0	100.0	100.0	99.4	96.3	95.0	91.9	92.1	85.1	77.5	74.9	70.9	74.5	70.0	73.8	79.8	81.0	87.3	100.0	70.0	89.5
31	89.9	91.9	91.9	91.7	92.3	91.9	91.1	89.5	86.1	83.4	82.7	80.5	79.3	78.0	80.1	78.4	75.5	76.0	83.1	84.9	90.7	92.9	94.2	97.2	97.2	75.5	86.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.3**	**99.7**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**65.1**	**70.5**	**71.6**	**72.5**	**80.2**	**75.6**	**69.8**	**64.3**	**53.4**	**48.1**	**47.7**	**45.7**	**46.9**	**44.0**	**45.5**	**44.6**	42.2	45.5	**48.0**	**49.2**	**53.3**	**62.8**	**64.7**	**65.8**		**42.2**	
Avg.	**91.1**	**92.1**	**92.6**	**93.4**	**93.4**	**93.9**	**92.6**	**90.6**	**88.0**	**85.0**	**81.5**	**77.3**	**75.4**	**74.8**	**74.8**	**74.4**	**74.5**	**76.4**	**78.0**	**79.7**	**83.4**	**86.7**	**88.6**	**90.2**			**84.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	99.2	99.5	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	99.7	96.3	90.6	89.1	87.2	83.7	83.8	89.5	97.9	98.6	99.5	99.9	99.9	99.9	100.0	83.7	96.4
2	100.0	100.0	100.0	100.0	100.0	100.0	98.5	96.0	97.4	96.5	93.2	89.7	88.0	83.4	86.2	96.9	95.8	91.6	88.9	92.9	94.8	97.4	98.0	98.3	100.0	83.4	95.1
3	98.0	96.2	93.6	90.6	90.7	94.8	96.3	93.1	91.3	87.5	87.8	89.1	87.2	87.9	86.1	86.5	86.8	85.3	91.5	92.1	94.3	95.5	97.6	96.4	98.0	85.3	91.5
4	93.6	93.7	93.9	93.9	94.7	91.4	89.5	90.7	89.5	87.1	81.2	80.8	84.8	91.9	90.0	91.1	86.5	88.3	90.9	95.2	98.4	97.9	95.9	97.7	98.4	80.8	91.2
5	98.3	99.3	99.6	99.6	99.7	99.8	100.0	99.7	98.8	96.2	95.5	94.2	94.0	88.7	80.7	77.4	76.0	73.0	88.5	93.6	95.4	88.0	90.9	92.1	100.0	73.0	92.5
6	91.7	91.0	95.3	95.2	94.8	95.8	94.9	83.3	84.5	85.5	80.7	74.9	69.5	65.6	64.2	62.7	62.6	59.3	57.6	62.5	69.7	75.3	74.5	74.6	95.8	57.6	77.7
7	73.8	75.1	76.3	81.3	84.9	83.0	84.2	99.0	100.0	98.6	95.2	91.9	80.4	74.6	74.7	69.3	68.1	73.4	81.0	88.4	95.4	98.8	99.2	99.6	100.0	68.1	85.3
8	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.5	6999.0	84.0	87.1	85.5	85.3	89.2	92.4	94.8	97.2	98.8	98.2	98.8	100.0	6999.0	-200.1
9	99.0	98.2	97.3	97.1	98.0	98.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.1	99.5
10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.5	99.2	99.8	100.0	100.0	100.0	100.0	98.5	99.9
11	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.9	96.6	97.9	97.6	99.9	99.6	100.0	100.0	100.0	100.0	96.6	99.6
12	100.0	100.0	100.0	100.0	100.0	100.0	98.7	98.2	98.8	98.2	96.5	94.9	93.9	83.5	70.4	65.3	62.2	63.4	64.8	73.0	73.7	76.8	76.6	79.9	100.0	62.2	86.2
13	86.3	89.6	94.4	97.6	98.1	98.4	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.3	98.5
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
15	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	98.6	97.9	97.5	98.3	98.9	98.1	98.2	99.8	99.4	98.5	98.9	99.2	100.0	97.5	99.3
16	99.4	99.5	99.6	99.8	99.8	99.9	100.0	100.0	99.6	96.2	90.3	88.0	94.3	92.5	89.5	90.9	96.4	95.8	95.6	98.2	99.6	99.4	99.5	99.6	100.0	88.0	96.8
17	99.6	99.6	99.2	98.9	98.7	98.2	93.6	90.4	93.8	91.0	84.7	78.5	74.3	71.4	89.8	92.9	88.9	89.2	89.8	92.6	94.4	96.9	98.8	99.5	99.6	71.4	91.9
18	99.8	99.8	98.7	99.2	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	99.9
19	100.0	100.0	100.0	100.0	100.0	100.0	95.2	88.1	90.2	90.5	89.5	85.4	77.7	62.5	61.1	73.5	73.2	75.1	75.3	80.9	83.7	84.9	88.1	90.6	100.0	61.1	86.1
20	85.3	89.2	91.6	94.1	94.4	93.3	96.2	97.4	96.4	94.8	96.1	90.0	78.6	68.1	59.1	54.9	49.4	46.8	48.7	53.0	60.9	70.0	72.9	73.9	97.4	46.8	77.3
21	74.2	78.6	82.8	82.1	78.5	77.5	76.1	74.6	70.3	65.3	64.6	60.1	56.8	57.5	60.2	56.1	52.5	57.1	64.5	80.3	89.9	93.1	94.8	97.7	97.7	52.5	72.7
22	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	92.6	94.5	90.8	78.7	72.7	77.7	83.5	89.5	91.7	95.0	100.0	72.7	94.4
23	94.1	94.4	95.5	91.5	89.1	84.9	83.3	98.0	98.4	96.6	91.4	84.1	76.8	72.9	66.7	60.5	58.6	59.7	69.9	77.0	89.1	94.0	95.8	95.0	98.4	58.6	84.1
24	88.5	88.1	90.7	90.2	85.5	82.8	80.5	88.1	93.5	91.2	88.6	88.1	90.0	93.4	95.1	94.2	91.2	87.1	87.7	87.1	84.7	83.1	83.6	86.6	95.1	80.5	88.3
25	83.5	80.1	81.5	80.8	82.1	85.0	85.2	82.2	79.0	80.8	72.9	65.2	65.4	66.8	59.9	56.2	53.8	52.6	54.5	63.9	70.2	73.1	77.5	81.2	85.2	52.6	72.2
26	82.0	81.4	79.8	82.7	90.0	94.1	97.9	97.2	93.3	91.4	87.9	78.6	71.6	79.3	89.5	91.7	88.9	85.8	84.7	86.0	84.7	87.0	91.6	91.1	97.9	71.6	87.0
27	88.6	94.1	94.4	95.0	93.8	93.2	92.7	90.8	89.8	85.7	82.0	74.1	72.4	72.1	72.7	73.8	70.2	63.8	64.8	71.0	75.9	80.1	81.5	78.9	95.0	63.8	81.3
28	82.8	83.6	96.6	99.3	99.3	99.5	99.7	100.0	100.0	100.0	100.0	99.5	93.1	82.7	74.0	71.1	68.0	72.7	75.4	77.4	83.0	77.9	80.1	81.6	100.0	68.0	87.4
29	84.4	83.6	86.0	86.5	88.6	91.7	96.7	99.9	100.0	99.6	92.5	93.5	93.3	93.1	89.9	85.8	87.2	79.9	75.4	81.5	83.1	90.4	90.9	86.0	100.0	75.4	89.1
30	86.5	83.8	86.9	89.8	87.8	85.7	87.6	94.2	94.1	90.0	90.3	88.6	88.9	88.5	87.6	84.4	83.1	77.2	80.1	79.3	79.1	79.1	85.8	89.9	94.2	77.2	86.2
31	83.3	80.3	85.4	83.2	83.0	84.3	87.9	84.9	84.9	85.5	82.0	81.8	72.6	67.3	65.2	63.7	63.6	65.3	69.0	78.5	91.3	94.8	95.9	96.5	96.5	63.6	80.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**73.8**	**75.1**	**76.3**	**80.8**	**78.5**	**77.5**	**76.1**	**74.6**	**70.3**	**65.3**	**64.6**	**60.1**	**6999.0**	**57.5**	**59.1**	**54.9**	**49.4**	**46.8**	**48.7**	**53.0**	**60.9**	**70.0**	**72.9**	**73.9**		**6999.0**	
Avg.	**92.6**	**92.9**	**94.2**	**94.5**	**94.5**	**94.6**	**94.6**	**95.0**	**95.0**	**93.8**	**91.7**	**88.8**	**-142.1**	**84.3**	**83.1**	**82.6**	**81.2**	**80.5**	**82.4**	**86.3**	**89.4**	**91.0**	**92.2**	**92.9**			**80.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	95.3	95.4	96.6	97.5	97.8	98.1	98.3	98.2	96.8	94.6	92.1	84.7	76.9	71.9	67.9	64.6	64.0	66.2	74.4	80.4	88.0	89.8	90.3	92.4	98.3	64.0	86.3
2	91.6	91.9	90.9	89.7	92.1	95.6	93.8	89.4	83.5	77.4	73.1	66.4	67.4	68.3	58.7	54.5	52.9	54.1	59.6	71.2	89.3	89.7	94.6	92.9	95.6	52.9	78.7
3	88.0	90.4	90.3	89.9	91.2	88.1	88.1	87.6	86.8	79.8	73.0	64.3	64.6	66.4	67.7	68.8	77.2	70.9	71.4	77.0	77.6	79.3	81.8	86.3	91.2	64.3	79.4
4	86.9	84.2	86.7	87.9	87.2	88.0	86.3	88.0	87.2	81.4	70.8	66.2	72.8	65.2	54.7	60.7	71.5	78.2	72.7	76.8	86.8	79.1	80.6	79.5	88.0	54.7	78.3
5	87.3	93.6	94.8	92.0	91.2	91.9	92.4	95.6	98.3	94.4	90.3	85.9	83.6	75.8	74.3	74.5	69.7	74.6	81.2	85.9	89.9	87.9	90.6	94.8	98.3	69.7	87.1
6	96.8	96.3	95.5	91.2	91.8	92.8	92.5	90.7	87.4	82.7	77.2	66.5	59.2	57.0	57.2	52.4	48.9	56.0	65.1	85.0	91.7	96.2	95.5	95.2	96.8	48.9	80.0
7	96.5	98.0	98.3	98.8	99.0	99.1	99.3	95.9	96.1	95.3	87.8	74.4	69.9	68.8	72.3	80.9	96.0	97.6	98.4	99.3	99.5	99.6	99.6	98.8	99.6	68.8	92.5
8	98.9	98.7	98.5	98.1	98.1	99.1	99.6	99.8	99.7	99.7	99.7	99.8	99.7	99.7	99.6	99.6	99.7	99.6	99.3	99.5	99.6	99.7	99.6	99.5	99.8	98.1	99.4
9	99.3	99.0	98.4	98.4	98.0	98.4	98.0	89.6	81.8	78.5	70.9	65.8	66.7	67.6	75.4	78.8	68.4	82.8	89.6	96.4	96.7	96.5	94.7	92.0	99.3	65.8	86.7
10	93.1	95.1	92.2	93.1	92.8	92.5	88.4	89.1	85.3	81.6	77.1	73.3	68.3	65.1	63.8	62.7	64.8	70.7	74.5	76.3	74.3	76.1	82.8	86.2	95.1	62.7	80.0
11	87.5	87.5	85.3	87.3	92.2	92.2	91.3	87.7	85.8	81.8	72.8	60.9	58.0	59.1	56.3	50.1	46.8	49.2	55.4	63.1	64.2	62.6	68.4	69.5	92.2	46.8	71.5
12	63.2	66.8	72.8	74.1	71.0	72.6	74.2	72.1	74.4	71.1	63.9	59.3	56.6	52.8	48.0	45.6	55.8	58.8	54.4	59.7	64.9	65.5	70.1	71.5	74.4	45.6	64.1
13	74.6	77.6	78.6	77.8	77.4	82.3	81.3	81.6	81.4	73.1	68.4	64.0	61.9	57.9	53.1	53.6	57.8	59.9	64.0	68.5	70.9	64.3	70.9	84.8	84.8	53.1	70.2
14	88.9	90.4	90.4	89.6	92.0	94.5	95.0	94.5	95.3	97.5	97.3	96.8	95.1	95.4	91.9	87.8	85.3	85.6	86.2	85.4	85.7	84.2	86.0	84.0	97.5	84.0	90.6
15	82.6	80.9	82.5	81.6	79.5	80.9	79.8	77.0	80.3	84.9	86.4	89.7	85.5	82.9	83.9	82.8	83.4	82.5	85.9	94.3	94.7	91.2	91.3	91.0	94.7	77.0	84.8
16	91.5	89.9	91.3	92.5	94.9	95.1	90.8	88.3	87.7	87.3	80.9	80.3	79.3	76.8	79.7	81.7	78.2	79.4	82.6	87.8	90.6	93.2	92.2	91.9	95.1	76.8	86.8
17	94.0	91.1	88.8	86.4	86.1	88.4	91.1	93.5	94.6	93.3	90.2	84.1	82.7	81.0	77.7	75.4	75.6	75.2	79.4	84.7	87.4	87.3	85.5	85.3	94.6	75.2	85.8
18	85.8	83.7	81.7	79.3	82.2	80.6	81.6	80.5	78.5	77.9	79.0	75.3	79.0	82.1	78.4	77.9	83.4	86.1	84.4	81.8	79.8	78.3	78.1	78.5	86.1	75.3	80.6
19	80.4	75.1	72.6	72.1	71.2	77.0	84.1	84.5	83.2	80.0	81.1	80.9	81.1	80.9	85.4	87.4	90.6	93.1	94.2	90.0	90.1	92.1	90.5	90.2	94.2	71.2	83.7
20	90.3	93.3	94.1	94.2	93.9	94.3	93.3	90.2	89.8	89.4	89.0	86.0	84.2	81.9	86.3	90.8	88.7	94.6	94.9	97.2	98.1	98.7	99.0	99.0	99.0	81.9	92.1
21	99.1	99.2	99.2	99.2	99.2	99.2	99.5	98.2	93.1	94.8	98.0	98.0	95.3	93.4	90.0	93.3	92.8	90.6	90.8	88.8	90.3	83.8	86.2	92.0	99.5	83.8	94.3
22	93.7	94.7	96.0	96.6	96.3	94.1	96.8	98.7	99.7	99.8	99.8	99.4	98.9	96.5	95.3	93.6	93.2	96.5	96.7	96.3	98.2	99.1	99.4	99.5	99.8	93.2	97.0
23	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.1	89.5	89.1	88.6	90.6	92.9	96.5	98.6	98.7	100.0	88.6	97.4
24	98.8	98.8	99.1	99.1	99.0	99.1	99.2	99.2	99.8	99.7	98.8	93.2	87.1	85.1	85.5	83.7	79.9	82.9	83.7	86.5	93.8	95.6	97.9	99.3	99.8	79.9	93.5
25	98.8	98.9	98.9	99.9	100.0	100.0	100.0	98.6	97.9	96.9	93.5	87.6	83.0	85.9	81.3	79.9	79.7	78.2	81.2	82.5	81.0	82.5	91.5	91.8	100.0	78.2	90.4
26	91.6	92.9	95.5	96.9	98.0	93.5	88.8	93.1	92.3	93.7	92.7	95.3	95.5	91.9	91.6	92.9	94.1	98.5	99.8	99.8	99.7	99.7	99.7	99.7	99.8	88.8	95.3
27	99.7	99.7	99.7	99.9	100.0	100.0	100.0	99.7	96.0	80.3	76.1	74.4	77.4	78.3	77.5	77.2	84.4	91.4	94.6	94.4	95.1	94.5	94.0	93.8	100.0	74.4	90.8
28	97.2	98.8	99.3	99.4	99.7	99.8	99.9	100.0	100.0	100.0	97.2	95.6	94.8	93.1	87.9	81.4	77.9	82.2	83.8	83.6	80.6	74.8	75.7	73.2	100.0	73.2	90.7
29	75.1	73.0	71.3	71.4	73.5	82.9	92.1	94.4	93.6	80.4	79.1	77.7	74.7	72.4	71.4	77.5	74.8	66.5	71.7	77.3	76.9	78.4	80.6	81.4	94.4	66.5	77.8
30	83.7	80.5	80.8	80.3	78.3	79.4	79.2	75.8	74.2	75.1	69.7	62.8	62.9	57.7	56.5	60.1	62.6	67.6	71.0	66.9	71.2	71.5	81.2	84.8	84.8	56.5	72.2
Max.	**99.7**	**99.7**	**99.7**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.6**	**99.7**	**99.6**	**99.8**	**99.8**	**99.7**	**99.7**	**99.7**	**99.7**	**100.0**		
Min.	**63.2**	**66.8**	**71.3**	**71.4**	**71.0**	**72.6**	**74.2**	**72.1**	**74.2**	**71.1**	**63.9**	**59.3**	**56.6**	**52.8**	**48.0**	**45.6**	46.8	49.2	**54.4**	**59.7**	**64.2**	**62.6**	**68.4**	**69.5**		**45.6**	
Avg.	**90.3**	**90.5**	**90.7**	**90.5**	**90.8**	**91.6**	**91.8**	**91.0**	**90.0**	**87.4**	**84.2**	**80.3**	**78.7**	**77.0**	**75.6**	**75.5**	**76.3**	**78.6**	**81.0**	**84.2**	**86.7**	**86.3**	**88.2**	**89.3**			**85.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	85.2	86.3	90.5	92.5	94.1	93.9	93.5	91.4	87.8	85.0	82.3	80.1	79.1	75.9	79.0	84.2	89.5	90.2	90.7	89.1	87.5	87.3	89.8	92.9	94.1	75.9	87.4
2	92.7	93.2	95.4	95.6	95.9	96.3	96.5	96.5	99.1	99.5	99.1	99.2	97.9	93.5	91.1	90.4	88.4	88.2	90.0	90.4	89.7	92.3	95.6	92.5	99.5	88.2	94.1
3	92.7	93.7	90.5	90.3	88.7	85.6	85.3	90.1	93.5	91.9	84.0	74.0	70.3	73.8	80.7	81.2	69.1	68.6	86.0	95.1	97.4	98.7	98.6	98.9	98.9	68.6	86.6
4	98.7	97.7	93.6	89.0	93.6	95.4	96.5	95.1	95.7	94.8	96.0	98.1	97.6	96.4	95.1	95.3	97.0	98.5	98.8	99.2	99.6	99.9	100.0	100.0	100.0	89.0	96.7
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	97.5	88.7	79.7	78.8	75.2	75.8	84.1	96.0	98.5	99.4	99.7	100.0	100.0	98.9	100.0	75.2	94.6
6	97.5	95.3	94.9	94.9	93.7	91.7	94.4	93.1	96.5	99.9	100.0	99.7	99.6	99.8	99.7	99.8	99.5	98.7	98.7	99.0	98.4	98.5	98.1	97.4	100.0	91.7	97.5
7	96.9	97.4	98.1	98.5	98.3	98.4	98.2	98.3	97.9	96.3	97.3	97.6	98.2	98.1	98.3	98.5	98.7	98.4	98.3	98.6	97.9	97.0	96.7	94.9	98.7	94.9	97.8
8	96.1	96.3	97.4	97.4	96.6	94.7	94.0	92.5	89.8	90.3	88.8	88.7	85.5	83.3	87.4	84.3	86.4	88.5	89.8	91.4	87.6	84.6	82.5	83.7	97.4	82.5	89.9
9	86.1	86.3	87.5	89.8	92.4	89.0	86.3	88.2	89.7	87.3	83.3	82.2	80.0	80.8	82.7	86.0	86.0	84.6	88.0	97.4	98.6	97.7	98.1	96.9	98.6	80.0	88.5
10	98.6	98.4	99.3	99.8	100.0	100.0	100.0	100.0	99.8	99.8	100.0	100.0	99.9	97.4	94.3	94.5	93.8	89.7	90.7	96.3	99.0	99.6	99.7	98.9	100.0	89.7	97.9
11	98.6	98.0	99.2	99.4	100.0	100.0	100.0	100.0	99.7	99.1	98.4	96.0	94.1	91.5	91.0	89.6	84.4	85.0	88.6	95.9	95.1	93.8	94.7	92.4	100.0	84.4	95.2
12	89.3	88.1	91.8	93.4	92.4	92.6	96.8	97.5	96.8	95.8	93.7	91.0	89.0	86.7	86.4	88.1	85.2	88.5	89.5	90.3	93.2	93.8	93.9	91.2	97.5	85.2	91.5
13	89.9	88.8	86.7	94.4	94.8	93.0	91.1	86.9	83.4	81.0	78.7	74.7	70.9	66.6	62.8	60.9	65.7	71.1	73.3	78.4	79.9	80.0	79.3	78.4	94.8	60.9	79.6
14	77.9	82.3	84.0	85.2	82.1	82.5	81.1	79.7	76.4	78.0	83.6	93.8	100.0	97.1	86.2	89.2	88.4	87.2	90.9	93.9	97.2	98.9	99.2	99.7	100.0	76.4	88.1
15	99.9	99.8	98.0	93.8	89.5	75.4	69.0	66.1	72.5	78.6	75.7	75.8	71.2	65.9	62.7	66.0	68.1	68.7	73.9	77.1	77.3	74.2	79.2	80.7	99.9	62.7	77.5
16	87.0	96.7	98.9	99.2	99.4	99.6	99.6	99.8	99.8	98.9	98.5	95.5	79.0	77.5	80.0	81.7	80.7	81.1	83.0	85.0	87.1	86.7	84.5	84.7	99.8	77.5	90.2
17	83.2	84.9	85.9	87.0	91.0	91.3	90.5	89.8	90.1	89.5	86.3	83.8	82.3	79.2	79.0	82.2	83.0	83.8	85.6	84.2	82.3	82.9	82.5	84.1	91.3	79.0	85.2
18	83.2	92.6	95.2	93.6	91.6	91.6	90.2	89.2	89.0	90.9	88.7	84.9	80.0	79.4	77.2	81.1	90.5	95.2	95.9	95.8	94.9	96.5	98.8	99.6	99.6	77.2	90.2
19	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	99.0	98.6	95.8	97.8	97.1	95.6	98.0	98.4	98.5	99.8	100.0	100.0	100.0	95.6	99.1
20	99.9	100.0	99.6	99.4	99.9	99.3	99.3	100.0	99.6	96.7	94.3	91.5	93.5	86.1	83.9	78.8	75.4	74.1	79.2	85.1	85.3	86.2	87.6	84.9	100.0	74.1	90.8
21	81.8	81.5	77.2	78.2	90.3	94.2	82.8	86.3	89.2	89.6	85.6	86.9	85.0	83.0	75.7	75.5	78.4	88.5	91.4	92.5	94.7	95.4	96.7	96.6	96.7	75.5	86.5
22	95.3	93.9	89.3	89.0	88.9	90.1	93.1	92.7	91.4	87.4	88.1	84.7	73.1	70.6	68.4	68.3	80.5	81.8	81.8	84.3	85.6	85.1	88.8	90.7	95.3	68.3	85.1
23	90.9	91.6	91.9	88.0	88.8	92.9	89.0	87.7	94.0	98.4	97.5	91.4	88.3	85.7	81.5	79.3	80.4	83.5	85.4	89.1	90.4	90.5	90.8	92.0	98.4	79.3	89.1
24	91.7	89.9	88.0	85.4	89.0	98.1	99.3	98.7	97.1	96.0	97.9	99.1	98.0	98.1	99.1	100.0	100.0	100.0	99.7	98.4	97.1	97.1	95.6	94.6	100.0	85.4	96.2
25	93.9	94.5	93.1	93.5	93.6	94.1	94.0	94.5	93.6	91.1	90.8	90.2	89.6	89.3	90.9	90.6	90.4	88.5	86.8	87.2	85.8	88.2	92.1	90.8	94.5	85.8	91.1
26	91.1	90.9	93.0	94.4	90.6	89.4	89.2	89.6	89.5	88.5	88.1	87.8	85.3	81.6	76.9	71.6	72.6	72.3	71.5	74.3	76.7	77.7	81.0	82.7	94.4	71.5	83.6
27	82.1	80.4	78.2	78.2	77.5	79.3	82.4	79.3	79.3	82.2	79.4	76.6	76.3	75.4	72.4	71.5	73.8	78.4	81.0	85.0	85.5	83.4	85.2	88.7	88.7	71.5	79.6
28	85.6	87.3	88.4	89.2	92.3	94.9	94.0	96.7	98.4	100.0	100.0	99.9	95.7	90.8	91.6	93.3	92.5	92.1	93.7	94.4	97.8	100.0	100.0	100.0	100.0	85.6	94.5
29	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	97.7	97.9	98.2	98.6	98.1	97.5	98.4	99.3	99.3	99.8	100.0	100.0	100.0	100.0	100.0	97.5	99.4
30	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	97.5	97.1	98.9	98.6	100.0	100.0	99.3	98.1	96.7	95.9	94.9	100.0	94.9	99.0
31	96.5	96.3	94.7	96.0	95.0	93.2	94.0	94.3	94.9	94.5	93.9	92.5	91.1	88.9	89.1	89.6	91.1	92.3	93.7	94.9	95.0	94.7	94.8	95.2	96.5	88.9	93.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.7**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**77.9**	**80.4**	**77.2**	**78.2**	**77.5**	**75.4**	**69.0**	**66.1**	**72.5**	**78.0**	**75.7**	**74.0**	**70.3**	**65.9**	**62.7**	**60.9**	**65.7**	**68.6**	**71.5**	**74.3**	**76.7**	**74.2**	**79.2**	**78.4**		**60.9**	
Avg.	**92.3**	**93.0**	**92.9**	**93.1**	**93.5**	**93.4**	**92.9**	**92.7**	**93.0**	**92.8**	**91.8**	**90.4**	**88.0**	**86.0**	**84.8**	**85.2**	**86.1**	**87.4**	**89.4**	**91.6**	**92.0**	**92.2**	**92.9**	**92.8**			**90.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	95.8	97.6	99.1	99.6	98.4	98.4	97.7	97.9	98.0	98.2	98.0	97.8	97.2	96.4	94.5	94.6	94.9	96.0	98.0	99.2	98.3	95.5	95.0	96.2	99.6	94.5	97.2
2	96.0	96.9	97.5	96.9	96.5	95.7	95.0	94.9	94.6	93.1	89.3	86.1	89.4	88.2	88.9	89.0	89.9	91.7	93.1	93.1	94.8	95.5	95.3	95.5	97.5	86.1	93.2
3	95.4	95.3	95.1	94.5	93.6	93.2	92.8	92.0	91.0	88.0	86.5	83.4	82.3	79.6	79.3	77.6	80.4	85.6	86.9	88.6	87.7	87.0	84.1	82.6	95.4	77.6	87.6
4	81.3	82.8	82.2	79.9	84.5	84.5	83.8	84.1	83.7	82.5	83.8	80.7	80.2	80.6	80.5	80.4	80.1	84.2	83.6	85.4	87.0	86.7	85.9	88.0	88.0	79.9	83.2
5	90.7	95.0	95.1	97.6	98.1	97.8	97.4	97.8	96.1	95.9	94.9	91.7	76.7	73.5	69.5	68.8	68.4	67.0	68.7	69.0	68.6	72.0	76.1	73.7	98.1	67.0	83.3
6	76.8	74.7	67.4	75.4	77.6	80.5	82.1	83.0	79.1	74.0	74.7	73.8	69.0	70.5	71.2	76.8	80.6	84.2	85.0	84.5	86.6	84.9	84.8	86.3	86.6	67.4	78.5
7	87.4	79.0	74.3	76.8	79.1	84.1	83.0	86.0	86.2	84.8	86.0	85.3	83.0	81.6	80.2	80.2	80.5	81.6	80.1	79.7	81.9	79.1	83.7	83.4	87.4	74.3	82.0
8	81.8	81.6	84.0	82.7	84.2	83.7	84.0	85.5	83.4	83.4	85.4	84.7	81.4	80.5	78.8	77.4	81.4	82.6	81.9	82.7	84.4	84.9	84.7	83.2	85.5	77.4	82.8
9	82.8	85.3	84.2	84.2	85.8	87.4	86.1	88.2	87.6	87.2	85.8	84.1	80.1	80.8	82.2	81.5	81.1	83.2	83.2	84.2	85.4	85.0	84.8	84.7	88.2	80.1	84.4
10	85.7	87.1	87.7	88.0	87.2	85.2	87.7	89.2	89.1	89.0	88.2	87.9	86.9	85.7	85.4	84.6	83.6	84.0	83.5	82.7	82.0	79.8	79.7	81.6	89.2	79.7	85.5
11	83.4	80.7	83.6	83.7	86.0	87.1	86.3	86.8	85.8	83.9	85.7	84.4	83.5	82.0	81.2	81.9	81.7	78.2	77.3	74.6	75.2	73.8	71.9	70.1	87.1	70.1	81.2
12	69.8	73.3	71.7	70.6	69.9	67.9	69.0	74.0	78.7	82.3	83.0	82.7	81.5	77.4	76.2	77.2	76.5	78.0	76.3	81.0	84.7	88.2	92.4	92.7	92.7	67.9	78.1
13	93.8	91.2	91.3	92.4	92.8	92.6	85.8	83.9	69.5	66.9	68.2	65.5	63.3	66.1	67.3	67.3	62.1	60.6	61.8	60.0	59.6	60.8	57.5	51.5	93.8	51.5	72.2
14	47.8	51.7	66.8	77.0	86.4	89.4	91.3	94.4	95.7	95.4	93.3	91.3	76.8	74.4	74.6	77.1	80.9	78.9	77.9	77.2	80.2	79.3	75.4	73.9	95.7	47.8	79.5
15	74.5	75.3	74.6	75.0	75.1	76.0	73.6	72.7	72.3	71.0	70.4	71.9	70.8	71.2	69.5	69.6	72.8	71.8	70.4	70.5	69.4	68.1	68.4	71.0	76.0	68.1	71.9
16	72.9	72.6	71.3	71.5	72.9	74.2	74.9	76.5	76.8	77.3	77.8	75.8	73.3	72.0	71.4	71.8	73.2	74.1	76.2	77.4	75.5	73.5	75.0	74.0	77.8	71.3	74.2
17	74.1	75.1	74.6	74.3	72.7	73.4	71.0	70.0	71.1	71.0	72.3	73.1	68.2	67.7	67.5	68.3	68.2	70.7	72.8	72.0	73.1	75.7	71.5	72.1	75.7	67.5	71.7
18	73.0	75.2	75.3	76.2	77.6	78.1	77.6	77.8	78.6	75.3	77.6	76.4	77.0	75.4	74.6	76.0	78.5	79.5	78.3	77.6	78.7	79.1	78.4	79.0	79.5	73.0	77.1
19	81.1	80.9	80.4	79.9	77.6	78.1	76.7	77.3	77.7	77.6	76.2	75.7	73.9	71.5	70.7	70.0	69.7	69.0	68.4	67.4	68.0	68.2	69.3	71.3	81.1	67.4	74.0
20	70.9	69.8	70.1	68.8	68.3	69.2	69.6	70.9	70.0	69.5	70.3	69.5	69.7	69.9	66.2	66.4	66.3	67.3	66.5	66.6	66.1	62.2	63.3	63.7	70.9	62.2	68.0
21	61.1	64.4	66.8	66.2	64.7	63.3	62.3	62.9	61.8	60.8	59.1	59.1	58.3	58.9	60.1	60.2	61.2	62.3	67.4	76.8	81.3	85.6	90.6	94.9	94.9	58.3	67.1
22	95.5	95.5	94.3	93.5	92.3	91.0	86.4	84.9	79.2	78.1	79.0	78.9	78.8	78.0	76.9	77.4	78.5	78.9	79.8	80.9	83.4	83.2	83.4	85.3	95.5	76.9	83.9
23	86.0	85.0	86.4	88.1	86.0	85.0	85.4	84.8	84.5	85.4	86.1	83.7	84.3	81.8	82.6	81.9	80.8	82.5	82.8	81.7	80.4	80.6	81.5	71.8	88.1	71.8	83.3
24	76.5	75.0	67.8	57.3	59.1	56.9	54.3	54.7	48.5	44.9	47.0	54.1	54.5	51.5	51.4	51.7	54.6	51.6	46.6	49.3	50.2	49.2	52.2	55.1	76.5	44.9	54.7
25	61.5	64.3	67.3	68.6	69.9	74.0	73.1	71.4	69.2	68.4	66.9	67.6	68.8	68.3	68.1	66.5	69.2	73.4	77.0	81.8	80.5	79.4	79.0	81.8	81.8	61.5	71.5
26	79.2	79.5	76.6	74.2	76.7	77.2	78.0	76.3	75.0	76.2	79.1	80.3	79.9	82.6	83.2	83.4	86.0	90.5	93.8	97.0	97.6	95.2	96.1	98.3	98.3	74.2	83.8
27	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.6	95.3	92.3	90.0	89.4	91.8	93.1	93.0	91.9	91.6	91.4	90.6	91.0	100.0	89.4	95.8
28	90.0	88.1	87.1	85.9	84.0	82.0	81.4	80.5	81.3	83.5	82.5	82.1	82.1	80.6	77.1	75.1	77.9	84.2	82.8	81.9	84.5	90.6	85.4	82.1	90.6	75.1	83.0
29	82.6	84.1	80.9	80.8	83.1	85.4	81.7	82.4	78.6	79.7	80.1	82.9	81.9	84.1	84.6	87.6	91.2	92.5	86.8	89.4	82.3	74.2	79.0	84.2	92.5	74.2	83.3
30	80.0	73.2	81.3	98.1	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.7	98.6	97.9	95.9	93.8	92.4	100.0	73.2	96.2
Max.	**99.6**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.2**	**98.7**	**99.2**	**98.3**	**95.9**	**96.1**	**98.3**	**100.0**		
Min.	**47.8**	**51.7**	**66.8**	**57.3**	**59.1**	**56.9**	**54.3**	**54.7**	**48.5**	**44.9**	**47.0**	**54.1**	**54.5**	**51.5**	**51.4**	**51.7**	54.6	51.6	**46.6**	**49.3**	**50.2**	**49.2**	**52.2**	**51.5**		**44.9**	
Avg.	**80.9**	**81.0**	**81.2**	**81.9**	**82.7**	**83.0**	**82.3**	**82.7**	**81.4**	**80.8**	**80.9**	**80.3**	**78.3**	**77.4**	**76.8**	**77.0**	**78.1**	**79.2**	**79.3**	**80.1**	**80.6**	**80.2**	**80.3**	**80.4**			**80.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	90.0	86.1	81.9	81.9	82.6	85.9	84.9	83.7	83.9	80.4	78.9	83.6	82.8	76.4	73.3	73.8	74.0	79.4	80.3	75.1	69.8	69.1	70.4	69.6	90.0	69.1	79.1
2	63.4	51.2	48.5	54.8	46.0	55.3	64.3	68.0	66.4	59.7	56.7	58.1	56.8	57.5	57.9	63.1	59.9	56.5	62.5	59.0	54.0	49.6	55.8	96.9	96.9	46.0	59.2
3	100.0	99.0	98.9	91.2	86.7	92.2	98.2	97.9	98.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.7	99.8	99.5	98.9	99.3	98.8	100.0	86.7	98.3
4	98.0	98.9	99.7	99.3	99.5	99.5	99.4	99.7	99.2	99.6	99.8	99.1	99.7	97.4	99.5	100.0	100.0	100.0	100.0	100.0	100.0	99.2	95.7	95.1	100.0	95.1	99.1
5	93.2	91.8	93.7	94.5	94.5	92.7	88.2	79.7	79.5	84.4	82.7	78.0	78.5	77.3	82.3	85.9	86.2	78.3	79.8	75.7	76.7	81.2	84.0	85.2	94.5	75.7	84.3
6	87.2	88.4	89.0	89.3	88.4	88.0	93.7	100.0	99.4	95.1	95.7	94.1	92.9	95.5	95.5	95.8	94.9	94.3	95.8	96.2	94.2	96.3	98.5	91.9	100.0	87.2	93.8
7	92.0	92.8	94.7	88.6	84.3	85.0	85.0	80.0	73.4	76.5	86.3	84.8	91.9	95.6	89.7	90.1	87.5	82.4	87.5	91.4	92.9	97.2	95.5	96.8	97.2	73.4	88.4
8	95.1	95.0	96.3	95.5	99.5	99.2	96.5	99.4	100.0	100.0	99.7	92.0	85.7	80.4	78.0	76.9	85.2	88.4	98.7	99.1	99.8	99.1	96.0	93.1	100.0	76.9	93.7
9	92.6	95.0	89.3	86.5	89.7	86.3	89.7	94.8	96.7	92.3	90.6	91.8	98.1	98.0	96.3	99.5	99.6	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.3	95.3
10	100.0	100.0	99.4	94.6	91.7	91.1	92.7	95.9	97.4	97.3	98.7	99.1	98.4	99.9	99.2	100.0	100.0	100.0	100.0	100.0	100.0	98.6	88.4	83.2	100.0	83.2	96.9
11	80.3	79.0	76.2	75.0	81.1	81.7	78.0	76.9	72.9	69.5	70.8	70.1	68.9	74.2	72.0	73.7	75.4	74.8	75.6	81.2	84.9	87.0	90.5	92.3	92.3	68.9	77.6
12	96.5	96.0	96.1	95.8	95.6	95.5	95.0	92.1	91.3	92.1	92.1	90.6	91.4	91.8	91.0	91.6	91.6	92.7	92.9	91.4	92.2	91.6	91.0	91.4	96.5	90.6	92.9
13	91.0	90.9	92.0	91.0	90.8	91.6	92.1	91.4	90.5	90.3	90.4	90.2	89.9	90.3	89.4	89.2	89.1	89.8	90.9	89.7	88.2	88.6	88.0	89.5	92.1	88.0	90.2
14	90.2	88.9	89.4	88.9	87.6	84.1	80.1	82.5	85.4	86.4	85.9	85.9	86.7	86.0	85.8	83.0	81.5	78.3	81.8	83.2	82.8	79.4	82.0	79.0	90.2	78.3	84.4
15	78.4	80.7	86.7	86.3	84.9	85.3	86.2	87.2	85.2	86.1	85.9	83.8	86.8	83.0	82.7	79.6	76.9	78.6	83.0	84.1	83.7	83.2	83.0	87.0	87.2	76.9	83.7
16	87.0	93.9	94.0	95.1	95.9	98.1	98.9	99.0	99.1	99.2	99.2	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.3	99.3	98.6	98.6	98.4	98.5	99.3	87.0	97.8
17	98.8	98.4	98.5	98.0	98.3	97.4	97.6	97.3	97.4	96.7	96.3	96.0	96.1	96.0	95.3	95.2	95.6	95.7	95.8	95.5	94.9	94.3	94.4	94.2	98.8	94.2	96.4
18	92.5	93.0	92.6	91.3	89.7	90.2	90.5	90.0	90.5	92.3	92.9	92.9	91.8	92.8	92.9	91.8	92.1	91.5	87.9	85.7	85.5	80.4	82.2	82.2	93.0	80.4	89.8
19	87.7	87.8	88.5	83.9	74.2	73.1	75.6	74.1	82.4	74.4	64.1	62.8	59.2	60.4	69.4	71.0	71.1	70.9	73.9	73.5	75.2	76.0	73.1	74.7	88.5	59.2	74.0
20	75.1	77.0	80.2	80.8	80.5	82.7	82.7	82.9	84.1	83.1	82.3	83.0	82.4	80.1	80.3	81.5	83.3	82.4	81.4	81.4	81.8	82.1	80.5	80.5	84.1	75.1	81.3
21	81.6	78.9	77.5	77.8	76.9	77.4	77.2	79.7	80.0	83.1	85.8	86.0	90.3	89.9	88.2	87.3	86.9	87.4	87.9	88.8	88.7	89.3	89.4	89.1	90.3	76.9	84.4
22	88.2	87.3	87.9	87.9	87.7	88.1	89.7	89.7	90.4	84.9	68.2	58.0	52.7	55.7	62.2	68.1	62.3	57.2	54.2	55.3	54.9	56.6	64.1	63.5	90.4	52.7	71.4
23	65.7	66.6	61.5	52.5	48.4	46.0	42.2	46.2	50.9	47.9	48.8	50.8	51.5	44.7	49.4	49.0	46.3	47.8	45.9	45.7	41.3	38.5	39.5	42.8	66.6	38.5	48.7
24	39.1	48.8	44.5	35.0	35.8	31.9	36.8	36.5	35.7	32.9	33.5	30.5	29.9	28.1	29.7	35.5	33.0	34.8	41.1	42.6	46.8	46.9	64.0	82.1	82.1	28.1	39.8
25	89.1	85.6	86.8	83.6	85.1	84.8	83.4	83.1	83.4	81.6	83.6	82.2	79.6	81.3	84.6	84.2	85.9	86.5	85.4	83.2	85.8	86.7	90.5	91.1	91.1	79.6	84.9
26	90.5	90.1	90.3	90.0	89.7	89.7	89.8	89.6	90.1	89.5	89.3	84.5	76.4	73.2	69.1	73.4	72.1	69.4	67.5	64.9	62.3	40.1	36.2	37.4	90.5	36.2	75.6
27	42.8	44.4	43.2	51.8	64.8	68.2	62.0	52.2	48.8	54.6	59.7	64.0	75.5	77.9	77.4	81.1	83.9	81.7	82.2	80.8	94.7	98.8	95.8	89.1	98.8	42.8	69.8
28	88.8	90.6	95.6	99.9	95.5	95.1	95.0	95.9	100.0	100.0	100.0	100.0	100.0	98.9	96.7	93.3	91.9	89.7	88.8	88.5	96.9	94.8	92.2	90.4	100.0	88.5	94.9
29	88.8	87.5	87.1	86.2	87.0	88.0	83.0	82.4	80.2	80.8	81.5	83.6	87.7	88.3	87.5	87.2	88.0	88.6	88.5	89.0	88.0	86.0	86.1	85.1	89.0	80.2	86.1
30	84.0	82.8	84.3	83.4	81.5	85.6	87.9	86.8	84.4	82.4	85.3	87.7	88.8	92.1	92.5	91.9	91.8	91.6	91.5	91.2	90.8	90.6	90.5	90.3	92.5	81.5	87.9
31	90.8	90.5	90.6	90.4	90.2	89.5	89.4	88.8	88.4	88.9	89.8	89.9	91.4	90.8	91.0	92.2	89.2	83.6	75.1	71.9	66.9	63.2	59.0	58.0	92.2	58.0	83.7
Max.	**100.0**	**100.0**	**99.7**	**99.9**	**99.5**	**99.5**	**99.4**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**39.1**	**44.4**	**43.2**	**35.0**	**35.8**	**31.9**	**36.8**	**36.5**	**35.7**	**32.9**	**33.5**	**30.5**	**29.9**	**28.1**	**29.7**	**35.5**	33.0	34.8	**41.1**	**42.6**	**41.3**	**38.5**	**36.2**	**37.4**		**28.1**	
Avg.	**85.1**	**85.1**	**85.0**	**83.9**	**83.4**	**83.8**	**84.1**	**84.0**	**84.1**	**83.3**	**83.0**	**82.3**	**82.6**	**82.3**	**82.5**	**83.4**	**83.0**	**82.3**	**83.1**	**82.7**	**83.0**	**82.0**	**82.4**	**83.8**			**83.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														0	89	343	129	79	86	213	32	6	2	0	343	0	89
10	0	0	0	1	5	15	29	139	208	308	384	347	410	505	479	403	215	201	164	44	11	6	1	0	505	0	161
11	0	0	0	0	4	13	24	41	52	99	153	296	252	247	240	281	172	130	81	89	62	20	2	0	296	0	94
12	0	0	0	0	2	30	47	106	76	99	171	209	244	137	106	90	71	52	87	54	21	18	2	0	244	0	68
13	0	0	0	0	5	42	84	129	186	255	365	537	634	692	374	563	392	365	207	111	56	29	6	0	692	0	210
14	0	0	0	1	6	29	90	150	207	241	298	529	656	478	269	242	352	165	160	137	70	20	4	0	656	0	171
15	0	0	0	1	12	49	164	153	402	608	627	563	657	576	194	78	67	98	87	29	14	5	1	0	657	0	183
16	0	0	0	0	8	24	32	68	49	44	89	91	118	114	144	164	152	109	143	104	77	22	5	0	164	0	65
17	0	0	0	1	6	23	62	113	129	149	347	484	573	390	328	388	398	515	262	96	37	18	3	0	573	0	180
18	0	0	0	0	11	49	99	143	259	276	307	378	318	332	488	461	251	235	189	113	74	31	7	0	488	0	168
19	0	0	0	1	14	36	111	197	255	327	469	444	403	395	312	690	582	442	363	120	65	37	4	0	690	0	219
20	0	0	0	1	15	113	230	282	436	475	478	473	441	814	341	138	220	180	170	158	116	34	9	0	814	0	213
21	0	0	0	1	10	71	229	308	463	613	438	804	478	338	508	754	365	189	416	262	176	76	10	0	804	0	271
22	0	0	0	1	13	50	121	130	193	246	532	438	544	199	118	92	106	72	85	33	22	7	5	0	544	0	125
23	0	0	0	0	3	16	32	62	96	135	192	336	325	484	374	336	230	216	163	274	146	57	14	1	484	0	145
24	0	0	0	1	11	102	159	398	477	561	631	418	355	523	644	158	464	263	131	94	125	22	3	0	644	0	231
25	0	0	0	1	13	107	218	344	463	602	637	758	669	834	834	617	664	474	178	74	60	31	7	0	834	0	316
26	0	0	0	1	6	39	159	275	457	599	696	772	816	838	519	188	380	538	397	266	152	58	8	0	838	0	298
27	0	0	0	1	11	103	213	340	474	593	685	735	818	804	771	715	621	520	397	273	145	53	10	0	818	0	345
28	0	0	0	1	13	105	226	133	151	91	162	351	324	338	191	220	154	104	88	58	35	27	4	0	351	0	116
29	0	0	0	0	4	19	54	169	200	368	190	329	663	528	598	583	374	355	105	40	8	3	0	0	663	0	191
30	0	0	0	0	1	8	16	23	41	118	210	237	291	310	284	243	226	151	131	124	73	15	3	0	310	0	104
Max.	**0**	**0**	**0**	**1**	**15**	**113**	**230**	**398**	**477**	**613**	**696**	**804**	**818**	**838**	**834**	**754**	**664**	**538**	**416**	**274**	**176**	**76**	**14**	**1**	**838**		
Min.	**0**	**0**	**0**	**0**	**1**	**8**	**16**	**23**	**41**	**44**	**89**	**91**	**118**	**0**	**89**	**78**	**67**	**52**	**81**	**29**	**8**	**3**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**1**	**8**	**50**	**114**	**176**	**251**	**324**	**384**	**454**	**476**	**449**	**373**	**352**	**299**	**248**	**186**	**126**	**72**	**27**	**5**	**0**			**182**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	4	19	45	82	162	229	364	616	792	823	791	727	644	523	403	273	156	54	8	0	823	0	280
2	0	0	0	1	9	96	208	334	468	594	543	740	745	671	551	548	606	508	380	242	133	36	11	0	745	0	309
3	0	0	0	0	8	52	173	270	374	560	659	734	768	743	738	577	509	435	374	252	140	48	7	0	768	0	309
4	0	0	0	1	9	94	196	323	449	568	674	750	799	811	558	337	553	504	375	251	148	55	8	0	811	0	311
5	0	0	0	0	6	37	99	104	179	315	436	725	783	794	712	777	151	29	140	218	91	43	4	0	794	0	235
6	0	0	0	0	5	20	120	264	312	333	542	620	707	731	552	490	493	118	112	128	39	3	1	0	731	0	233
7	0	0	0	0	1	5	43	66	65	75	74	128	198	115	86	79	59	47	29	19	7	5	0	0	198	0	46
8	0	0	0	0	1	7	15	31	51	106	150	216	339	339	287	268	252	188	139	160	123	23	4	0	339	0	112
9	0	0	0	0	7	36	92	251	192	318	685	722	645	697	507	712	554	294	382	244	141	44	6	0	722	0	272
10	0	0	0	0	6	30	76	108	188	202	646	769	777	846	871	786	647	452	410	175	71	20	5	0	871	0	295
11	0	0	0	0	6	21	47	85	203	354	521	435	552	560	495	592	444	437	384	335	136	42	4	0	592	0	235
12	0	0	0	0	8	48	159	318	214	532	668	689	578	726	578	593	435	260	132	137	79	22	4	0	726	0	257
13	0	0	0	0	4	20	41	42	46	75	84	106	139	133	159	136	110	63	43	35	14	5	1	0	159	0	52
14	0	0	0	0	0	6	24	43	61	65	85	152	163	126	136	112	79	92	40	35	15	6	1	0	163	0	52
15	0	0	0	0	1	9	25	52	80	166	232	283	280	272	353	530	251	427	297	119	65	11	0	0	530	0	144
16	0	0	0	0	2	17	60	106	178	272	443	533	556	502	555	422	187	123	111	59	27	6	1	0	556	0	173
17	0	0	0	0	1	6	26	57	94	194	447	512	560	425	266	227	137	93	66	50	19	12	1	0	560	0	133
18	0	0	0	0	1	16	19	33	80	175	182	295	421	308	245	174	145	154	81	63	29	15	2	0	421	0	102
19	0	0	0	0	2	15	71	107	163	300	379	301	545	416	536	481	318	416	343	241	139	21	2	0	545	0	200
20	0	0	0	0	4	52	172	298	426	274	449	469	500	522	586	390	509	316	201	96	35	16	2	0	586	0	221
21	0	0	0	0	2	22	65	175	323	566	596	757	687	416	384	363	205	225	149	98	45	20	2	0	757	0	212
22	0	0	0	0	1	14	41	84	190	240	299	273	396	284	228	161	134	83	83	66	45	9	1	0	396	0	110
23	0	0	0	0	1	15	37	96	88	163	159	125	119	125	118	128	131	82	86	44	21	6	0	0	163	0	64
24	0	0	0	0	0	6	19	36	58	63	133	140	131	139	163	114	69	47	30	20	9	5	0	0	163	0	49
25	0	0	0	0	0	5	17	59	139	134	154	228	202	339	527	478	361	276	278	138	55	20	1	0	527	0	142
26	0	0	0	0	0	7	25	63	86	90	133	160	208	210	253	296	320	190	151	102	51	8	0	0	320	0	98
27	0	0	0	0	1	16	67	114	178	226	285	298	377	489	528	660	561	455	288	138	82	14	0	0	660	0	199
28	0	0	0	0	1	18	103	207	277	355	282	263	180	201	126	117	149	90	128	49	12	3	0	0	355	0	107
29	0	0	0	0	0	2	11	22	51	96	145	228	331	469	240	148	131	92	92	19	13	3	0	0	469	0	87
30	0	0	0	0	0	5	24	25	54	108	147	97	127	226	350	398	427	365	200	220	81	10	0	0	427	0	119
31	0	0	0	0	1	17	58	113	218	189	213	227	249	380	298	233	175	138	73	43	19	4	0	0	380	0	110
Max.	**0**	**0**	**0**	**1**	**9**	**96**	**208**	**334**	**468**	**594**	**685**	**769**	**799**	**846**	**871**	**786**	**647**	**523**	**410**	**335**	**156**	**55**	**11**	**0**	**871**		
Min.	**0**	**0**	**0**	**0**	**0**	**2**	**11**	**22**	**46**	**63**	**74**	**97**	**119**	**115**	**86**	**79**	**59**	**29**	**29**	**19**	**7**	**3**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**3**	**24**	**70**	**128**	**182**	**256**	**349**	**406**	**447**	**446**	**412**	**389**	**314**	**243**	**193**	**131**	**66**	**19**	**2**	**0**			**170**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	3	9	24	42	51	112	169	191	184	221	173	139	82	65	46	15	2	0	0	221	0	64
2	0	0	0	0	0	2	19	64	114	186	318	387	373	372	369	116	121	186	177	51	38	8	0	0	387	0	121
3	0	0	0	0	0	3	19	38	64	77	121	203	190	201	206	101	125	96	49	38	15	1	0	0	206	0	64
4	0	0	0	0	0	12	63	75	177	194	193	183	170	150	231	137	153	118	83	50	23	2	0	0	231	0	84
5	0	0	0	0	0	2	16	34	57	118	182	168	253	258	318	382	375	240	58	46	40	7	0	0	382	0	106
6	0	0	0	0	0	10	113	230	338	327	279	434	557	387	418	334	311	329	262	96	60	6	0	0	557	0	187
7	0	0	0	0	0	10	70	147	281	464	581	663	676	546	513	631	524	402	277	143	55	6	0	0	676	0	250
8	0	0	0	0	0	1	16	52	85	114	190	262	235	233	344	273	228	176	126	82	33	2	0	0	344	0	102
9	0	0	0	0	0	2	21	71	79	66	71	57	48	59	69	58	80	76	85	29	10	0	0	0	85	0	37
10	0	0	0	0	0	1	7	14	40	59	92	141	159	146	129	118	73	57	36	12	3	0	0	0	159	0	45
11	0	0	0	0	0	1	13	55	115	153	153	131	103	129	178	206	219	158	90	51	23	1	0	0	219	0	74
12	0	0	0	0	0	2	18	48	120	149	217	203	252	664	577	454	487	316	143	62	17	1	0	0	664	0	155
13	0	0	0	0	0	1	7	18	24	32	58	67	110	79	147	118	99	44	28	18	5	1	0	0	147	0	36
14	0	0	0	0	0	0	10	28	42	58	67	108	76	77	62	50	34	24	27	25	4	1	0	0	108	0	29
15	0	0	0	0	0	0	7	20	54	86	112	144	190	177	150	164	144	78	29	19	8	1	0	0	190	0	58
16	0	0	0	0	0	1	16	52	109	171	249	264	183	276	341	248	116	91	72	50	46	4	0	0	341	0	95
17	0	0	0	0	0	1	16	50	113	254	454	515	582	528	120	59	224	196	198	32	9	0	0	0	582	0	140
18	0	0	0	0	0	0	3	8	19	24	27	45	50	72	82	66	80	140	98	65	14	0	0	0	140	0	33
19	0	0	0	0	0	1	12	85	139	155	443	480	416	658	386	241	273	214	181	81	18	2	0	0	658	0	158
20	0	0	0	0	0	0	3	16	54	63	149	266	531	589	605	510	489	367	240	118	20	1	0	0	605	0	168
21	0	0	0	0	0	2	61	170	257	194	207	326	554	355	269	323	184	89	40	15	3	0	0	0	554	0	127
22	0	0	0	0	0	0	2	12	32	38	47	76	252	397	344	278	229	357	171	74	16	0	0	0	397	0	97
23	0	0	0	0	0	1	35	135	219	219	362	481	549	746	651	566	471	324	149	112	25	1	0	0	746	0	210
24	0	0	0	0	0	0	4	21	42	80	117	144	136	105	88	157	193	238	111	75	19	0	0	0	238	0	64
25	0	0	0	0	0	1	41	164	295	420	534	526	653	328	491	311	332	266	130	53	20	0	0	0	653	0	190
26	0	0	0	0	0	0	9	44	78	124	205	302	435	135	150	224	271	266	178	58	21	0	0	0	435	0	104
27	0	0	0	0	0	0	12	92	260	231	404	422	359	251	407	403	233	229	122	48	5	0	0	0	422	0	145
28	0	0	0	0	0	0	5	31	61	118	158	158	494	507	617	385	405	168	169	41	10	0	0	0	617	0	139
29	0	0	0	0	0	0	25	142	225	323	481	601	580	470	409	413	336	315	191	63	5	0	0	0	601	0	191
30	0	0	0	0	0	0	1	12	33	55	108	149	167	150	147	113	141	98	62	15	1	0	0	0	167	0	52
31	0	0	0	0	0	0	9	43	103	206	335	255	620	347	350	308	255	147	113	17	0	0	0	0	620	0	129
Max.	**0**	**0**	**0**	**0**	**0**	**12**	**113**	**230**	**338**	**464**	**581**	**663**	**676**	**746**	**651**	**631**	**524**	**402**	**277**	**143**	**60**	**8**	**0**	**0**	**746**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**19**	**24**	**27**	**45**	**48**	**59**	**62**	**50**	**34**	**24**	**27**	**12**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**2**	**21**	**64**	**118**	**155**	**227**	**269**	**327**	**309**	**303**	**255**	**237**	**190**	**121**	**54**	**19**	**2**	**0**	**0**			**111**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	10	35	121	188	440	591	635	527	495	514	406	265	116	53	3	0	0	0	635	0	183
2	0	0	0	0	0	0	18	82	241	387	365	313	294	332	471	359	418	241	123	37	8	0	0	0	471	0	154
3	0	0	0	0	0	0	14	121	248	373	480	548	573	508	335	119	177	220	78	41	3	0	0	0	573	0	160
4	0	0	0	0	0	0	9	65	178	403	463	404	303	459	395	226	156	50	70	12	2	0	0	0	463	0	133
5	0	0	0	0	0	0	4	36	83	192	204	345	449	507	302	351	451	158	98	53	3	0	0	0	507	0	135
6	0	0	0	0	0	0	6	111	237	360	467	543	581	585	425	447	368	138	79	20	0	0	0	0	585	0	182
7	0	0	0	0	0	0	2	24	72	126	181	181	239	181	240	102	44	30	21	5	0	0	0	0	240	0	60
8	0	0	0	0	0	0	0	5	13	35	76	79	121	137	123	104	72	66	24	7	0	0	0	0	137	0	36
9	0	0	0	0	0	0	3	46	160	395	466	555	441	561	290	167	387	244	98	9	0	0	0	0	561	0	159
10	0	0	0	0	0	0	3	77	205	321	471	451	529	600	408	389	303	176	78	12	0	0	0	0	600	0	168
11	0	0	0	0	0	0	3	77	209	330	437	525	485	208	343	453	298	253	129	30	0	0	0	0	525	0	157
12	0	0	0	0	0	0	2	78	203	324	430	512	398	428	584	452	331	182	109	16	0	0	0	0	584	0	169
13	0	0	0	0	0	0	3	76	195	330	430	508	537	523	381	343	180	99	33	5	0	0	0	0	537	0	152
14	0	0	0	0	0	0	0	2	8	26	39	28	39	48	168	96	74	41	14	2	0	0	0	0	168	0	24
15	0	0	0	0	0	0	0	10	27	46	66	85	110	39	37	46	27	24	19	1	0	0	0	0	110	0	22
16	0	0	0	0	0	0	0	11	32	78	141	198	152	547	251	167	154	200	71	7	0	0	0	0	547	0	84
17	0	0	0	0	0	0	0	4	56	96	165	158	143	196	270	215	158	186	45	7	0	0	0	0	270	0	71
18	0	0	0	0	0	0	1	16	47	37	47	77	66	50	130	85	37	27	12	1	0	0	0	0	130	0	26
19	0	0	0	0	0	0	0	8	19	46	48	79	121	73	79	87	80	65	26	1	0	0	0	0	121	0	31
20	0	0	0	0	0	0	0	9	67	165	197	390	239	147	134	112	235	31	23	4	0	0	0	0	390	0	73
21	0	0	0	0	0	0	0	5	18	32	33	48	63	83	53	27	22	26	7	0	0	0	0	0	83	0	17
22	0	0	0	0	0	0	0	14	26	74	70	109	89	132	98	137	73	42	6	1	0	0	0	0	137	0	36
23	0	0	0	0	0	0	0	4	12	50	69	67	151	109	126	116	122	79	19	2	0	0	0	0	151	0	39
24	0	0	0	0	0	0	0	4	40	66	175	532	146	185	196	154	131	123	46	3	0	0	0	0	532	0	75
25	0	0	0	0	0	0	0	31	155	255	332	389	192	183	132	130	90	60	25	1	0	0	0	0	389	0	82
26	0	0	0	0	0	0	0	4	29	45	53	58	94	153	78	59	35	16	6	0	0	0	0	0	153	0	26
27	0	0	0	0	0	0	0	8	57	118	150	354	292	228	166	103	56	26	9	0	0	0	0	0	354	0	65
28	0	0	0	0	0	0	0	3	15	51	124	124	202	207	255	314	229	82	23	1	0	0	0	0	314	0	68
29	0	0	0	0	0	0	0	16	124	237	341	419	469	279	370	197	97	47	20	0	0	0	0	0	469	0	109
30	0	0	0	0	0	0	0	11	65	118	244	305	366	351	258	151	118	55	11	0	0	0	0	0	366	0	85
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**121**	**248**	**403**	**480**	**591**	**635**	**600**	**584**	**514**	**451**	**265**	**129**	**53**	**8**	**0**	**0**	**0**	**635**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**8**	**26**	**33**	**28**	**39**	**39**	**37**	**27**	**22**	**16**	**6**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**33**	**99**	**177**	**240**	**299**	**284**	**285**	**253**	**207**	**178**	**108**	**48**	**11**	**1**	**0**	**0**	**0**			**93**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	1	17	48	87	103	114	211	83	51	42	23	10	0	0	0	0	0	211	0	33
2	0	0	0	0	0	0	0	1	8	22	47	60	80	104	116	79	59	27	4	0	0	0	0	0	116	0	25
3	0	0	0	0	0	0	0	2	29	135	167	323	197	91	91	107	97	76	3	0	0	0	0	0	323	0	55
4	0	0	0	0	0	0	0	1	21	33	34	62	134	351	56	105	28	20	4	0	0	0	0	0	351	0	35
5	0	0	0	0	0	0	0	3	42	134	150	388	540	441	369	171	99	23	4	0	0	0	0	0	540	0	98
6	0	0	0	0	0	0	0	1	11	29	34	52	60	92	74	66	38	23	2	0	0	0	0	0	92	0	20
7	0	0	0	0	0	0	0	1	13	26	36	39	43	72	52	38	28	11	1	0	0	0	0	0	72	0	15
8	0	0	0	0	0	0	0	0	6	14	14	23	29	31	31	41	19	7	0	0	0	0	0	0	41	0	9
9	0	0	0	0	0	0	0	0	4	13	29	39	47	60	29	22	9	4	0	0	0	0	0	0	60	0	11
10	0	0	0	0	0	0	0	1	13	23	53	199	332	323	252	68	17	8	1	0	0	0	0	0	332	0	54
11	0	0	0	0	0	0	0	1	14	44	72	211	129	126	210	229	164	43	5	0	0	0	0	0	229	0	52
12	0	0	0	0	0	0	0	1	22	36	70	132	214	231	177	114	110	26	3	0	0	0	0	0	231	0	47
13	0	0	0	0	0	0	0	1	51	156	251	319	355	351	308	238	146	44	2	0	0	0	0	0	355	0	93
14	0	0	0	0	0	0	0	1	24	116	225	167	135	246	287	121	86	50	2	0	0	0	0	0	287	0	61
15	0	0	0	0	0	0	0	0	17	69	133	129	177	206	164	110	64	21	1	0	0	0	0	0	206	0	45
16	0	0	0	0	0	0	0	0	4	31	73	242	306	185	146	87	81	25	1	0	0	0	0	0	306	0	49
17	0	0	0	0	0	0	0	0	14	64	74	108	145	209	173	93	81	26	0	0	0	0	0	0	209	0	41
18	0	0	0	0	0	0	0	0	11	38	106	108	87	82	64	58	45	17	0	0	0	0	0	0	108	0	26
19	0	0	0	0	0	0	0	0	6	23	65	87	69	121	82	57	12	0	0	0	0	0	0	0	121	0	22
20	0	0	0	0	0	0	0	0	10	42	112	84	77	317	173	138	105	22	1	0	0	0	0	0	317	0	45
21	0	0	0	0	0	0	0	0	22	123	191	309	344	257	272	129	109	15	0	0	0	0	0	0	344	0	74
22	0	0	0	0	0	0	0	0	14	127	218	276	308	303	263	191	100	15	0	0	0	0	0	0	308	0	76
23	0	0	0	0	0	0	0	0	19	81	155	269	301	304	228	155	75	15	0	0	0	0	0	0	304	0	67
24	0	0	0	0	0	0	0	0	3	24	49	111	94	74	66	40	23	7	0	0	0	0	0	0	111	0	20
25	0	0	0	0	0	0	0	0	8	44	90	139	142	177	145	94	48	9	0	0	0	0	0	0	177	0	37
26	0	0	0	0	0	0	0	0	4	41	124	174	187	230	180	193	84	10	0	0	0	0	0	0	230	0	51
27	0	0	0	0	0	0	0	0	11	99	184	258	283	275	212	145	70	6	0	0	0	0	0	0	283	0	64
28	0	0	0	0	0	0	0	0	6	29	69	118	137	112	84	54	27	14	0	0	0	0	0	0	137	0	27
29	0	0	0	0	0	0	0	0	3	19	53	91	134	143	164	125	26	5	0	0	0	0	0	0	164	0	32
30	0	0	0	0	0	0	0	0	3	30	82	160	241	247	146	84	40	6	0	0	0	0	0	0	247	0	43
31	0	0	0	0	0	0	0	0	5	74	163	225	257	253	216	149	55	5	0	0	0	0	0	0	257	0	58
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**	**156**	**251**	**388**	**540**	**441**	**369**	**238**	**164**	**76**	**10**	**0**	**0**	**0**	**0**	**0**	**540**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**13**	**14**	**23**	**29**	**31**	**29**	**22**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**58**	**104**	**161**	**184**	**201**	**158**	**108**	**64**	**20**	**1**	**0**	**0**	**0**	**0**	**0**			**45**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	8	61	124	173	154	231	198	151	67	5	0	0	0	0	0	0	231	0	49
2	0	0	0	0	0	0	0	0	4	68	157	212	238	246	224	160	62	5	0	0	0	0	0	0	246	0	57
3	0	0	0	0	0	0	0	0	3	64	154	227	267	259	204	134	44	4	0	0	0	0	0	0	267	0	57
4	0	0	0	0	0	0	0	0	3	53	142	204	235	232	194	120	40	3	0	0	0	0	0	0	235	0	51
5	0	0	0	0	0	0	0	0	2	47	143	215	249	233	195	127	38	3	0	0	0	0	0	0	249	0	52
6	0	0	0	0	0	0	0	0	2	47	134	196	227	225	185	118	34	2	0	0	0	0	0	0	227	0	49
7	0	0	0	0	0	0	0	0	1	14	59	99	207	201	152	118	38	2	0	0	0	0	0	0	207	0	37
8	0	0	0	0	0	0	0	0	1	37	133	187	219	215	178	109	27	1	0	0	0	0	0	0	219	0	46
9	0	0	0	0	0	0	0	0	1	16	102	162	205	205	166	107	28	1	0	0	0	0	0	0	205	0	41
10	0	0	0	0	0	0	0	0	0	7	28	79	118	157	111	72	11	1	0	0	0	0	0	0	157	0	24
11	0	0	0	0	0	0	0	0	1	28	112	176	207	204	168	99	23	1	0	0	0	0	0	0	207	0	42
12	0	0	0	0	0	0	0	0	0	28	43	145	153	152	131	68	16	0	0	0	0	0	0	0	153	0	31
13	0	0	0	0	0	0	0	0	0	25	108	172	203	199	164	92	20	1	0	0	0	0	0	0	203	0	41
14	0	0	0	0	0	0	0	0	0	7	61	91	181	133	158	90	20	1	0	0	0	0	0	0	181	0	31
15	0	0	0	0	0	0	0	0	0	16	91	155	183	179	144	97	19	0	0	0	0	0	0	0	183	0	37
16	0	0	0	0	0	0	0	0	0	6	88	155	182	185	149	78	14	0	0	0	0	0	0	0	185	0	36
17	0	0	0	0	0	0	0	0	0	6	80	152	182	180	146	75	12	0	0	0	0	0	0	0	182	0	35
18	0	0	0	0	0	0	0	0	0	13	84	151	182	181	146	73	12	0	0	0	0	0	0	0	182	0	35
19	0	0	0	0	0	0	0	0	0	11	78	148	180	178	142	69	11	0	0	0	0	0	0	0	180	0	34
20	0	0	0	0	0	0	0	0	0	10	92	176	197	189	126	64	11	0	0	0	0	0	0	0	197	0	36
21	0	0	0	0	0	0	0	0	0	11	62	131	149	129	89	59	13	0	0	0	0	0	0	0	149	0	27
22	0	0	0	0	0	0	0	0	0	8	64	132	161	160	125	56	8	0	0	0	0	0	0	0	161	0	30
23	0	0	0	0	0	0	0	0	0	7	61	128	158	150	122	54	7	0	0	0	0	0	0	0	158	0	29
24	0	0	0	0	0	0	0	0	0	10	52	93	55	99	39	31	7	0	0	0	0	0	0	0	99	0	16
25	0	0	0	0	0	0	0	0	0	4	35	90	158	146	112	53	4	0	0	0	0	0	0	0	158	0	25
26	0	0	0	0	0	0	0	0	0	0	11	26	44	39	22	11	3	0	0	0	0	0	0	0	44	0	6
27	0	0	0	0	0	0	0	0	0	1	9	32	51	54	48	24	5	0	0	0	0	0	0	0	54	0	9
28	0	0	0	0	0	0	0	0	0	1	21	56	74	66	53	26	5	0	0	0	0	0	0	0	74	0	13
29	0	0	0	0	0	0	0	0	0	3	41	99	129	132	87	26	3	0	0	0	0	0	0	0	132	0	22
30	0	0	0	0	0	0	0	0	0	0	8	19	22	49	60	40	13	0	0	0	0	0	0	0	60	0	9
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**68**	**157**	**227**	**267**	**259**	**224**	**160**	**67**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**267**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**19**	**22**	**39**	**22**	**11**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**20**	**79**	**136**	**166**	**167**	**135**	**80**	**21**	**1**	**0**	**0**	**0**	**0**	**0**	**0**			**34**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	2	33	96	134	133	93	38	5	0	0	0	0	0	0	0	134	0	22
2	0	0	0	0	0	0	0	0	0	1	20	58	38	35	50	22	4	0	0	0	0	0	0	0	58	0	10
3	0	0	0	0	0	0	0	0	0	0	3	15	37	43	25	12	1	0	0	0	0	0	0	0	43	0	6
4	0	0	0	0	0	0	0	0	0	2	13	32	44	46	38	16	3	0	0	0	0	0	0	0	46	0	8
5	0	0	0	0	0	0	0	0	0	1	9	32	44	77	50	17	1	0	0	0	0	0	0	0	77	0	10
6	0	0	0	0	0	0	0	0	0	0	4	14	25	42	30	20	2	0	0	0	0	0	0	0	42	0	6
7	0	0	0	0	0	0	0	0	0	0	8	24	42	42	39	27	3	0	0	0	0	0	0	0	42	0	8
8	0	0	0	0	0	0	0	0	0	0	7	26	43	46	28	11	5	0	0	0	0	0	0	0	46	0	7
9	0	0	0	0	0	0	0	0	0	0	9	43	64	47	39	14	1	0	0	0	0	0	0	0	64	0	9
10	0	0	0	0	0	0	0	0	0	0	9	33	47	35	26	12	1	0	0	0	0	0	0	0	47	0	7
11	0	0	0	0	0	0	0	0	0	0	9	47	98	105	76	28	2	0	0	0	0	0	0	0	105	0	15
12	0	0	0	0	0	0	0	0	0	0	15	44	53	40	32	14	1	0	0	0	0	0	0	0	53	0	8
13	0	0	0	0	0	0	0	0	0	0	21	40	31	38	34	15	2	0	0	0	0	0	0	0	40	0	8
14	0	0	0	0	0	0	0	0	0	0	7	52	104	89	58	27	3	0	0	0	0	0	0	0	104	0	14
15	0	0	0	0	0	0	0	0	0	0	8	37	63	110	64	30	4	0	0	0	0	0	0	0	110	0	13
16	0	0	0	0	0	0	0	0	0	0	5	23	39	46	74	61	7	0	0	0	0	0	0	0	74	0	11
17	0	0	0	0	0	0	0	0	0	0	7	29	69	58	50	39	8	0	0	0	0	0	0	0	69	0	11
18	0	0	0	0	0	0	0	0	0	0	6	51	105	78	88	53	3	0	0	0	0	0	0	0	105	0	16
19	0	0	0	0	0	0	0	0	0	0	7	40	57	62	43	22	4	0	0	0	0	0	0	0	62	0	10
20	0	0	0	0	0	0	0	0	0	0	8	32	48	56	85	71	5	0	0	0	0	0	0	0	85	0	13
21	0	0	0	0	0	0	0	0	0	0	14	65	94	61	46	17	3	0	0	0	0	0	0	0	94	0	13
22	0	0	0	0	0	0	0	0	0	0	4	14	64	103	54	22	5	0	0	0	0	0	0	0	103	0	11
23	0	0	0	0	0	0	0	0	0	0	13	61	103	109	78	28	3	0	0	0	0	0	0	0	109	0	16
24	0	0	0	0	0	0	0	0	0	0	7	30	44	53	64	30	4	0	0	0	0	0	0	0	64	0	10
25	0	0	0	0	0	0	0	0	0	0	13	59	100	107	76	29	3	0	0	0	0	0	0	0	107	0	16
26	0	0	0	0	0	0	0	0	0	0	12	52	83	90	65	21	3	0	0	0	0	0	0	0	90	0	14
27	0	0	0	0	0	0	0	0	0	0	1	9	21	25	20	10	1	0	0	0	0	0	0	0	25	0	4
28	0	0	0	0	0	0	0	0	0	0	7	26	62	59	32	48	5	0	0	0	0	0	0	0	62	0	10
29	0	0	0	0	0	0	0	0	0	0	5	24	43	58	46	28	4	0	0	0	0	0	0	0	58	0	9
30	0	0	0	0	0	0	0	0	0	0	7	35	62	74	40	19	4	0	0	0	0	0	0	0	74	0	10
31	0	0	0	0	0	0	0	0	0	0	7	35	45	42	50	18	4	0	0	0	0	0	0	0	50	0	8
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**33**	**96**	**134**	**133**	**93**	**71**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**134**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**21**	**25**	**20**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**38**	**61**	**65**	**51**	**26**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**11**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														513	957	959	959	959	960	959	960	961	961	961	961	513	919.0
10	962	963	963	962	962	963	963	963	964	965	965	966	967	967	967	968	968	968	969	969	969	969	969	969	969	962	965.8
11	969	968	968	967	967	967	967	967	967	967	968	967	968	968	967	967	967	967	967	966	966	966	966	966	969	966	967.1
12	965	965	965	965	966	965	966	966	966	966	966	967	967	967	968	968	968	968	968	968	968	968	969	969	969	965	966.8
13	969	969	969	969	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	967	967	967	967	967	969	967	967.8
14	967	967	967	966	966	966	966	966	966	966	966	965	965	965	965	965	965	965	964	964	964	964	964	963	967	963	965.3
15	963	963	962	962	962	962	962	961	961	961	960	960	959	959	958	959	959	959	959	959	959	958	958	958	963	958	960.1
16	958	958	957	957	957	956	956	956	956	956	956	956	956	957	957	957	958	958	958	958	959	959	960	960	960	956	957.2
17	960	960	960	960	960	961	961	962	962	962	962	963	963	963	964	964	964	964	965	965	965	965	966	966	966	960	962.8
18	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	967	967	967	967	967	967	967	968	968	966	966.4
19	968	968	968	968	968	968	968	969	969	969	969	968	968	968	968	968	968	968	968	968	969	970	971	971	971	968	968.7
20	971	971	972	972	972	972	972	972	972	972	972	973	972	972	974	974	975	975	975	975	975	975	975	975	975	971	973.2
21	976	976	975	975	975	975	975	975	975	974	974	974	974	973	973	973	973	972	972	972	972	972	972	972	976	972	973.7
22	972	971	971	971	971	971	972	972	973	973	973	974	974	974	975	975	975	975	976	976	976	977	977	978	978	971	973.8
23	978	978	978	978	978	978	979	979	979	979	980	980	980	980	980	980	980	979	979	979	980	980	980	981	981	978	979.3
24	981	981	980	980	980	980	980	980	980	980	979	979	979	979	978	978	978	977	977	977	977	977	977	977	981	977	978.8
25	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	978	978	978	979	979	977	977.2
26	979	979	979	979	979	979	979	979	979	979	978	978	978	978	977	977	977	977	976	977	977	977	977	977	979	976	977.8
27	977	977	977	977	977	977	977	977	977	976	976	976	976	976	976	976	975	976	976	975	976	976	977	977	977	975	976.3
28	977	977	978	978	978	978	978	978	978	978	978	978	977	977	977	977	977	977	977	977	977	977	977	977	978	977	977.4
29	977	977	977	977	977	977	978	977	977	977	977	977	977	976	976	975	975	975	975	975	976	976	976	976	978	975	976.4
30	976	976	976	977	977	978	978	978	979	979	979	979	980	980	980	981	981	981	981	981	981	981	982	982	982	976	979.3
Max.	**981**	**981**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**982**	**982**	**982**		
Min.	**958**	**958**	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**513**	**957**	**957**	**958**	**958**	**958**	**958**	**959**	**958**	**958**	**958**		**513**	
Avg.	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**950**	**970**	**970**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**			**969.9**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	982	982	982	982	982	983	983	983	983	983	983	983	982	982	981	981	981	981	981	981	981	980	980	980	983	980	981.8
2	980	980	980	980	980	980	980	980	980	980	979	979	979	978	978	978	977	977	977	977	977	977	976	976	980	976	978.5
3	976	976	976	976	976	976	977	976	976	976	977	976	976	976	976	976	976	976	976	976	976	976	977	977	977	976	976.2
4	977	977	977	977	977	978	978	978	978	978	978	978	978	978	977	977	977	977	977	977	977	977	977	977	978	977	977.4
5	977	977	977	977	977	977	977	977	977	976	976	976	975	975	974	974	974	974	973	973	972	972	973	972	977	972	975.0
6	972	972	972	971	971	971	971	970	970	970	970	970	969	969	969	969	969	969	968	968	969	969	969	969	972	968	969.9
7	970	970	970	970	970	970	970	970	970	971	971	971	971	971	971	971	971	971	971	971	971	971	972	972	972	970	970.8
8	972	972	971	971	972	972	972	972	973	973	973	973	973	973	974	974	974	974	974	974	974	974	974	974	974	971	972.8
9	974	974	974	973	973	973	973	972	972	972	971	971	971	971	970	970	969	969	968	968	967	967	968	967	974	967	970.7
10	967	967	966	965	965	964	964	964	964	964	963	963	963	963	963	962	962	962	962	962	962	962	962	962	967	962	963.5
11	962	962	962	961	961	961	962	962	962	962	962	963	963	963	963	963	963	964	964	964	964	965	965	965	965	961	962.8
12	965	965	965	965	965	965	965	965	965	964	964	964	964	964	963	963	962	962	962	963	963	963	963	964	965	962	963.9
13	964	964	964	964	964	965	965	965	965	966	966	967	967	966	966	966	966	966	966	966	966	966	966	966	967	964	965.5
14	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	967	967	967	967	966	966.6
15	967	968	968	968	968	969	969	969	970	970	970	971	971	971	971	971	971	971	972	972	972	973	973	974	974	967	970.4
16	974	974	974	974	974	974	974	974	974	974	974	975	975	974	975	974	975	975	975	975	975	975	975	975	975	974	974.5
17	975	975	975	974	973	974	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	972	971	973	975	971	973.2
18	973	972	971	972	971	971	971	971	970	970	970	969	970	969	970	969	969	969	969	969	969	969	969	969	973	969	970.1
19	969	969	969	969	969	969	969	969	969	968	968	968	968	968	968	968	967	967	966	966	966	966	966	966	969	966	967.7
20	965	965	964	964	964	963	963	963	963	963	963	963	963	963	964	964	964	964	964	965	966	967	968	968	968	963	964.3
21	968	968	968	968	968	969	969	969	970	970	970	970	970	971	971	971	971	971	971	971	971	971	971	971	971	968	970.0
22	972	971	971	971	970	970	970	970	970	970	970	970	970	970	969	969	969	969	968	968	968	969	968	968	972	968	969.6
23	968	968	968	967	967	966	966	966	965	965	964	963	963	962	961	960	959	959	958	958	958	957	957	957	968	957	962.5
24	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	955	955	957	955	955.8
25	955	955	954	954	954	954	955	955	955	956	956	956	956	956	957	957	957	958	959	959	960	961	962	962	962	954	956.8
26	963	964	964	965	965	966	967	968	968	969	970	971	971	972	973	973	974	974	975	975	976	976	977	978	978	963	970.5
27	979	979	979	980	980	980	980	980	981	981	981	981	981	981	980	980	980	980	979	979	979	979	979	978	981	978	979.8
28	978	978	977	977	977	977	977	977	977	977	977	977	977	977	977	976	976	976	975	976	975	975	975	975	978	975	976.4
29	975	974	974	974	974	973	973	973	973	973	973	973	973	973	973	972	972	972	971	971	970	970	970	970	975	970	972.4
30	969	969	968	968	967	966	966	965	964	964	963	963	962	962	961	961	961	961	961	961	961	962	962	963	969	961	963.7
31	963	963	963	963	964	964	964	964	964	964	965	965	964	964	964	965	964	964	964	964	965	965	965	965	965	963	964.2
Max.	**982**	**982**	**982**	**982**	**982**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**982**	**982**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**980**	**980**	**980**	**983**		
Min.	**955**	**955**	**954**	**954**	**954**	**954**	**955**	**955**	**955**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**955**	**955**	**955**	**955**	**955**	**955**	**955**		**954**	
Avg.	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**970**			**969.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	965	965	966	965	965	965	965	965	965	966	966	966	966	966	966	966	966	966	966	966	966	966	967	967	967	965	965.7
2	967	968	968	968	968	968	969	969	969	970	970	970	970	970	970	969	969	968	968	967	967	967	967	967	970	967	968.4
3	966	966	965	965	964	963	962	962	961	961	960	959	958	957	957	957	956	957	957	957	957	957	957	957	966	956	959.9
4	958	958	959	959	960	960	960	961	961	962	962	963	963	963	964	964	964	964	964	965	965	966	966	966	966	958	962.4
5	966	966	967	967	967	967	968	968	968	969	969	969	969	969	969	969	969	970	970	970	970	971	971	971	971	966	968.8
6	971	971	972	972	972	972	972	972	972	973	973	973	973	973	973	974	973	973	973	974	974	974	974	974	974	971	972.9
7	975	975	975	975	975	975	975	975	975	975	975	975	974	974	974	974	974	973	973	973	973	973	973	973	975	973	974.1
8	973	973	973	973	973	973	972	972	972	972	972	972	972	972	971	971	971	971	971	971	970	970	970	970	973	970	971.6
9	970	970	970	970	970	970	970	970	970	970	970	971	971	971	971	971	971	971	971	971	971	971	971	971	971	970	970.4
10	971	971	971	971	971	971	971	970	971	971	970	969	969	968	968	967	965	964	963	963	962	961	961	960	971	960	967.4
11	961	960	960	960	960	960	961	961	961	961	961	962	962	962	963	963	963	963	963	963	963	963	963	963	963	960	961.8
12	964	964	964	964	964	965	965	965	966	966	966	967	967	968	968	968	968	968	969	969	969	970	970	971	971	964	966.9
13	971	971	971	971	972	971	971	971	971	971	971	971	971	971	971	971	971	972	971	971	972	972	972	971	972	971	971.3
14	971	971	971	971	970	970	969	968	968	967	967	966	965	965	965	965	965	964	965	964	964	964	965	964	971	964	966.9
15	964	964	964	964	964	964	964	964	965	965	966	966	966	967	967	967	967	967	967	968	968	968	968	968	968	964	965.9
16	969	969	969	969	969	969	969	969	969	970	970	970	970	970	970	970	970	970	970	970	971	971	972	972	972	969	969.9
17	972	972	972	972	972	972	972	972	972	972	972	972	972	972	972	972	971	971	971	970	970	970	970	970	972	970	971.4
18	969	968	968	968	967	967	966	965	965	964	963	963	962	962	962	962	962	962	963	963	963	963	963	964	969	962	964.3
19	964	964	964	964	964	964	964	964	964	964	964	963	963	963	962	962	962	962	962	961	961	960	959	959	964	959	962.5
20	958	957	957	957	956	956	957	956	957	957	957	958	958	958	959	959	959	960	961	961	962	963	964	964	964	956	958.8
21	965	965	966	966	966	966	967	967	967	967	967	968	968	967	967	967	966	966	966	966	965	965	964	963	968	963	966.2
22	963	963	963	963	963	963	962	962	962	963	963	963	964	965	965	966	966	967	968	968	969	969	969	970	970	962	964.9
23	970	970	970	970	971	971	971	971	971	971	971	971	971	971	970	970	970	969	969	969	969	969	969	968	971	968	970.1
24	968	967	967	966	966	965	965	965	964	963	962	962	961	961	961	960	960	960	960	959	960	960	960	960	968	959	962.5
25	960	960	960	960	961	961	961	961	962	962	962	962	962	962	962	961	961	961	961	961	961	962	962	961	962	960	961.1
26	962	963	963	963	964	964	965	965	965	966	966	966	966	967	967	967	967	968	968	968	969	969	970	970	970	962	966.1
27	971	971	971	971	972	972	972	972	972	972	972	972	971	971	971	971	970	970	970	970	970	970	970	970	972	970	970.9
28	970	970	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	969	969	969	969	969	969	970	968	969.0
29	969	969	969	969	968	968	968	968	967	967	967	966	966	965	965	964	964	963	963	962	962	962	961	960	969	960	965.5
30	960	959	959	958	958	957	956	956	955	955	955	955	954	954	954	954	953	953	953	953	953	953	953	953	960	953	955.0
31	953	952	952	952	952	952	952	952	952	952	952	952	953	952	953	953	953	954	954	955	956	956	956	957	957	952	953.3
Max.	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**974**	**974**	**974**	**974**	**974**	**973**	**973**	**974**	**974**	**974**	**974**	**974**	**975**		
Min.	**953**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**953**	**952**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**		**952**	
Avg.	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**			**966.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	957	958	958	959	959	960	960	961	962	962	963	963	964	964	964	964	965	965	966	966	967	967	967	968	968	957	962.8
2	968	968	968	969	969	969	969	969	969	969	969	969	969	970	970	970	970	970	970	970	971	971	971	971	971	968	969.4
3	971	971	972	972	972	972	972	972	972	972	972	972	972	971	971	971	971	971	970	970	970	970	970	970	972	970	971.1
4	969	969	968	968	967	967	966	966	965	965	964	964	963	963	963	962	963	963	963	964	964	964	964	965	969	962	964.9
5	965	966	966	966	967	967	968	969	969	970	970	971	971	971	972	972	972	973	973	973	974	974	974	974	974	965	970.2
6	973	973	973	973	972	971	971	971	970	969	970	969	969	968	968	967	967	967	967	966	966	966	967	967	973	966	969.2
7	967	966	966	966	965	964	963	963	962	961	959	958	957	956	955	954	953	953	951	951	950	949	947	947	967	947	957.5
8	946	944	944	943	943	942	942	942	941	941	942	942	942	942	942	942	943	943	943	944	944	944	945	945	946	941	942.9
9	946	946	946	946	947	947	948	948	949	949	949	950	950	951	951	952	952	953	953	954	955	956	956	957	957	946	950.5
10	957	957	957	958	958	958	959	959	960	960	961	961	961	962	962	963	963	964	964	965	966	967	967	968	968	957	961.5
11	968	969	969	970	970	971	971	972	973	973	974	974	975	975	975	975	975	976	976	977	977	978	978	979	979	968	973.7
12	979	980	980	981	981	981	982	982	983	983	984	984	984	984	984	984	984	985	985	985	986	986	986	986	986	979	983.3
13	986	986	986	986	986	986	985	985	985	985	984	984	983	982	981	980	979	978	977	975	974	973	973	971	986	971	981.3
14	970	970	969	968	967	967	966	965	965	965	965	964	965	963	963	960	960	961	960	960	959	959	959	959	970	959	963.7
15	958	957	957	957	955	956	955	954	954	954	953	952	953	953	952	952	952	951	954	954	955	955	956	957	958	951	954.4
16	957	958	958	958	959	959	960	960	960	961	961	961	962	961	962	962	963	963	963	964	964	965	965	966	966	957	961.3
17	966	966	966	966	967	967	967	968	968	968	968	968	968	969	969	968	968	968	968	968	968	968	968	968	969	966	967.7
18	967	967	966	966	965	965	964	963	963	962	961	961	960	959	958	957	956	954	954	954	953	953	952	952	967	952	959.7
19	951	950	951	951	951	951	950	951	951	951	951	951	952	952	952	953	953	953	954	954	955	956	956	957	957	950	952.3
20	957	958	958	959	959	960	960	961	962	962	963	964	964	965	965	965	966	966	966	966	967	967	967	967	967	957	963.0
21	967	966	966	965	964	964	963	962	962	961	960	958	957	955	954	952	950	949	947	945	944	944	944	945	967	944	956.0
22	946	946	947	949	950	951	953	953	954	956	957	958	959	960	960	960	961	962	963	963	964	965	966	966	966	946	957.0
23	967	967	968	968	969	969	970	970	971	971	971	972	972	972	972	972	972	972	972	972	972	972	973	972	973	967	970.7
24	972	972	972	972	971	971	971	971	971	971	971	970	970	970	969	969	968	968	968	968	968	968	968	968	972	968	969.9
25	968	968	968	968	967	968	967	967	967	967	967	967	967	967	966	966	965	965	965	964	964	963	963	962	968	962	966.2
26	962	961	960	959	958	958	957	956	956	956	956	956	955	955	954	954	954	954	954	954	954	954	953	954	962	953	956.0
27	954	954	954	954	955	955	955	955	956	956	956	956	955	955	955	954	954	954	954	954	954	955	955	955	956	954	954.7
28	955	956	956	956	956	956	956	956	957	957	957	958	958	958	958	959	959	960	961	961	962	962	963	963	963	955	958.3
29	963	963	963	963	962	963	963	963	963	963	964	965	965	965	966	966	967	967	968	968	968	968	969	969	969	962	965.0
30	969	969	969	969	968	968	968	967	967	967	967	966	966	965	964	963	962	962	961	961	960	960	960	959	969	959	964.8
Max.	**986**	**986**	**986**	**986**	**986**	**986**	**985**	**985**	**985**	**985**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**985**	**985**	**985**	**986**	**986**	**986**	**986**	**986**		
Min.	**946**	**944**	**944**	**943**	**943**	**942**	**942**	**942**	**941**	**941**	**942**	**942**	**942**	**942**	**942**	**942**	**943**	**943**	**943**	**944**	**944**	**944**	**944**	**945**		**941**	
Avg.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**	**964**	**964**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**			**963.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	959	959	959	958	958	958	958	958	958	958	957	958	958	957	958	957	957	957	957	958	958	958	958	958	959	957	957.9
2	958	958	958	959	959	959	959	960	960	961	961	961	961	961	960	960	959	959	959	958	957	956	955	956	961	955	959.0
3	953	953	952	951	951	950	951	951	952	951	951	951	950	950	949	949	948	948	949	949	949	949	949	949	953	948	950.3
4	950	950	951	952	953	953	953	954	955	955	955	955	956	955	955	955	955	955	955	956	956	956	957	958	958	950	954.4
5	958	958	959	960	960	961	962	962	963	964	964	965	965	966	966	966	966	967	967	967	968	969	969	969	969	958	964.1
6	969	969	968	968	967	966	966	966	966	966	965	966	965	965	965	965	964	964	964	964	963	964	963	963	969	963	965.4
7	963	963	962	961	961	961	961	961	962	962	962	963	963	962	962	962	962	962	963	962	964	963	962	962	964	961	962.2
8	963	962	961	960	960	960	959	959	957	956	956	955	952	951	950	950	950	951	950	950	948	946	943	942	963	942	953.8
9	941	939	939	937	937	935	935	934	933	934	934	935	935	935	936	937	938	939	942	944	945	946	946	948	948	933	938.5
10	948	949	950	950	951	951	951	952	952	952	952	953	952	952	952	952	952	952	953	954	955	956	956	957	957	948	952.3
11	958	958	959	960	960	961	962	962	963	964	965	965	966	966	967	967	967	968	968	969	969	970	970	970	970	958	964.8
12	970	970	970	970	970	969	970	970	970	970	970	970	970	970	970	970	969	970	969	970	970	970	970	970	970	969	969.8
13	969	969	969	969	969	968	968	968	968	969	969	968	968	967	967	967	966	966	966	966	966	966	966	966	969	966	967.5
14	965	965	965	966	965	965	965	965	966	966	966	967	967	967	967	967	967	967	967	967	967	967	967	967	967	965	966.2
15	967	966	966	965	965	965	965	965	965	965	965	965	964	963	963	963	963	963	963	963	962	962	961	960	967	960	963.9
16	962	962	963	964	964	964	964	964	965	965	965	965	965	965	964	964	964	964	963	963	963	963	963	963	965	962	963.8
17	963	962	962	961	961	961	961	961	961	961	961	961	960	960	960	960	959	958	958	957	957	955	955	954	963	954	959.5
18	952	951	950	949	948	947	946	945	946	946	945	946	947	948	949	951	952	953	955	956	957	958	959	960	960	945	950.7
19	961	962	962	963	963	963	963	963	963	963	963	963	963	963	962	962	962	963	963	964	965	965	966	967	967	961	963.2
20	968	968	969	969	969	970	970	971	971	972	972	972	971	971	970	970	970	969	969	968	967	967	967	966	972	966	969.4
21	965	965	964	963	962	961	961	960	960	960	959	958	958	957	956	956	955	954	954	953	953	952	952	951	965	951	957.9
22	951	951	951	951	951	951	952	952	953	953	954	954	954	954	954	954	954	954	954	954	955	955	955	956	956	951	953.1
23	956	956	957	958	958	959	960	961	961	962	962	963	964	964	964	964	964	964	963	963	962	962	961	960	964	956	961.2
24	959	958	956	954	953	951	949	947	946	945	944	943	942	942	942	942	942	942	942	942	942	942	943	943	959	942	946.3
25	943	944	945	945	945	946	947	947	948	949	949	950	950	951	951	952	953	953	953	953	954	954	955	956	956	943	949.7
26	956	957	957	957	958	959	961	961	961	962	961	963	964	965	966	968	969	970	970	969	970	971	972	974	974	956	964.3
27	974	974	975	975	976	977	977	978	979	981	981	981	982	982	982	982	982	983	983	983	983	983	984	984	984	974	980.0
28	984	984	984	984	983	983	983	983	983	982	982	982	981	980	980	980	979	978	978	978	977	976	976	976	984	976	980.7
29	976	977	976	976	975	975	976	976	976	976	977	977	977	977	977	977	976	977	977	976	976	977	977	977	977	975	976.4
30	977	978	977	977	977	977	977	977	978	978	978	979	979	979	979	979	979	979	979	979	979	980	980	981	981	977	978.3
31	981	981	980	980	980	980	980	981	981	981	982	982	982	982	982	982	982	983	983	983	984	984	984	984	984	980	981.8
Max.	**984**	**984**	**984**	**984**	**983**	**983**	**983**	**983**	**983**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**983**	**983**	**983**	**984**	**984**	**984**	**984**	**984**		
Min.	**941**	**939**	**939**	**937**	**937**	**935**	**935**	**934**	**933**	**934**	**934**	**935**	**935**	**935**	**936**	**937**	**938**	**939**	**942**	**942**	**942**	**942**	**943**	**942**		**933**	
Avg.	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**963**	**963**	**963**	**963**			**962.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	984	984	984	983	983	983	983	983	982	982	982	982	982	981	981	980	979	979	979	979	979	978	978	978	984	978	981.1
2	978	977	977	976	976	976	975	975	975	975	975	975	974	974	973	973	972	972	972	972	972	972	972	972	978	972	974.1
3	971	971	971	971	970	970	970	970	971	971	971	971	971	970	970	969	969	969	969	969	968	969	969	969	971	968	969.9
4	968	968	968	968	968	967	967	966	966	966	966	965	966	965	965	965	965	965	965	964	965	965	965	965	968	964	965.9
5	965	965	965	965	965	965	965	965	966	966	966	966	966	966	966	966	965	965	965	965	965	964	964	964	966	964	965.2
6	963	963	963	962	961	961	959	958	957	958	958	958	956	954	953	954	955	955	953	954	956	957	957	958	963	953	957.6
7	959	959	957	957	958	958	958	959	958	959	958	957	958	957	958	957	958	957	957	957	957	957	956	956	959	956	957.5
8	956	957	956	956	956	956	957	957	957	957	957	957	958	958	957	957	956	957	956	956	956	956	954	956	958	954	956.5
9	956	954	954	953	954	953	954	953	954	954	953	954	953	954	953	953	952	952	952	952	952	952	951	951	956	951	952.9
10	951	951	950	950	950	949	948	947	947	946	945	945	948	948	948	949	950	951	950	951	952	952	953	953	953	945	949.3
11	954	954	954	954	955	955	955	956	956	957	957	958	959	959	960	959	958	958	958	959	959	959	960	961	961	954	957.2
12	960	962	962	962	962	963	960	963	965	964	965	967	967	966	968	968	968	967	968	967	966	965	964	963	968	960	964.7
13	962	961	960	959	958	956	955	954	955	955	957	956	956	958	956	957	959	958	958	959	958	957	959	959	962	954	957.5
14	959	961	962	962	961	961	959	956	954	953	952	953	952	952	952	950	949	947	949	944	947	947	945	945	962	944	952.9
15	945	942	944	942	944	943	943	943	942	941	940	940	942	940	942	943	943	942	943	943	943	943	943	943	945	940	942.3
16	942	941	945	945	947	947	947	947	947	948	948	949	948	950	951	950	949	950	951	951	952	953	954	954	954	941	948.6
17	954	955	956	956	956	957	957	958	959	959	959	959	960	960	960	961	961	961	962	961	961	962	962	961	962	954	959.1
18	962	962	962	962	963	962	963	963	963	963	963	963	963	962	962	962	962	959	960	958	960	959	959	958	963	958	961.4
19	956	955	956	953	950	949	946	946	947	946	945	944	945	945	945	944	944	944	946	947	949	954	952	955	956	944	948.5
20	955	955	957	957	959	960	961	960	959	960	961	962	962	964	964	966	967	967	968	968	968	968	969	968	969	955	962.6
21	970	972	973	972	973	973	974	974	974	973	974	974	975	974	974	975	975	975	974	974	974	974	974	974	975	970	973.7
22	974	974	974	973	973	973	972	972	971	971	972	971	973	972	971	970	971	971	970	970	972	973	973	974	974	970	972.0
23	974	974	974	974	973	974	975	975	975	975	975	976	976	976	976	976	976	976	976	976	976	977	977	977	977	973	975.3
24	977	977	976	976	976	976	975	975	976	976	975	975	975	974	973	973	973	972	971	971	971	971	971	971	977	971	974.0
25	971	971	972	972	973	973	974	974	974	975	976	977	977	978	978	977	977	977	977	977	977	977	977	977	978	971	975.4
26	977	976	976	975	975	974	974	973	973	972	971	971	970	970	968	966	966	964	965	961	962	960	961	962	977	960	969.3
27	963	964	963	963	964	965	966	966	967	968	969	969	969	969	969	969	969	969	969	968	968	968	968	968	969	963	967.1
28	968	968	968	967	967	967	967	967	967	967	967	967	966	966	965	965	965	965	965	965	965	964	964	964	968	964	966.1
29	964	964	963	963	963	963	963	963	963	962	962	963	962	962	961	961	960	960	960	959	959	959	959	958	964	958	961.5
30	958	958	957	957	956	956	956	956	956	957	958	958	960	962	963	964	965	964	967	968	970	972	973	974	974	956	961.8
Max.	**984**	**984**	**984**	**983**	**983**	**983**	**983**	**983**	**982**	**982**	**982**	**982**	**982**	**981**	**981**	**980**	**979**	**979**	**979**	**979**	**979**	**978**	**978**	**978**	**984**		
Min.	**942**	**941**	**944**	**942**	**944**	**943**	**943**	**943**	**942**	**941**	**940**	**940**	**942**	**940**	**942**	**943**	**943**	**942**	**943**	**943**	**943**	**943**	**943**	**943**		**940**	
Avg.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**962**	**962**	**962**	**963**	**963**	**963**	**963**			**962.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	975	976	977	977	977	977	978	978	979	978	978	977	976	977	977	979	979	979	978	978	978	977	977	976	979	975	977.3
2	976	976	975	975	974	974	973	972	971	970	969	968	967	966	965	965	964	963	962	962	960	960	959	958	976	958	967.6
3	956	955	953	954	953	952	952	951	952	952	952	952	952	952	952	952	952	952	952	953	953	952	952	952	956	951	952.6
4	953	953	953	953	953	954	954	954	954	954	954	954	954	954	955	955	955	955	955	955	955	955	955	955	955	953	954.2
5	955	954	954	953	953	952	951	950	950	950	949	948	947	946	945	945	944	943	940	939	938	937	935	934	955	934	946.5
6	933	931	931	930	930	930	931	931	931	931	932	933	932	933	934	934	933	934	935	935	935	935	935	935	935	930	932.6
7	935	935	936	936	936	935	935	934	934	934	934	934	933	933	932	932	931	931	931	931	931	931	931	931	936	931	933.3
8	931	931	931	931	931	930	931	932	932	934	935	935	934	934	933	932	932	933	931	933	934	934	933	933	935	930	932.4
9	933	933	932	932	932	931	930	930	931	931	930	930	929	929	929	928	928	928	928	929	929	929	929	929	933	928	930.0
10	929	930	930	931	932	932	933	933	934	934	935	935	935	935	935	935	935	935	936	936	936	936	935	935	936	929	933.8
11	935	935	935	936	935	935	935	935	935	936	936	936	936	936	935	935	935	935	935	935	936	936	936	937	937	935	935.6
12	937	937	937	937	937	937	937	937	938	938	938	939	939	939	940	940	940	941	941	942	942	943	943	943	943	937	939.3
13	944	944	944	944	944	944	944	945	945	945	946	946	946	946	946	946	947	946	946	946	947	946	946	946	947	944	945.4
14	947	950	952	951	951	952	953	953	954	956	956	957	957	957	957	957	957	957	958	958	958	959	959	959	959	947	955.2
15	959	960	960	960	960	960	959	959	959	959	958	957	956	956	954	953	952	951	950	949	949	949	949	948	960	948	955.3
16	947	947	947	947	947	947	947	947	947	947	947	948	948	948	948	948	947	947	946	946	945	945	944	943	948	943	946.6
17	942	942	941	940	939	938	937	937	936	936	935	935	935	934	933	933	932	932	931	931	931	930	930	930	942	930	935.0
18	929	930	930	929	930	930	929	931	931	931	932	932	932	932	933	933	933	933	933	933	934	934	934	934	934	929	931.8
19	934	934	934	934	933	933	932	931	930	929	928	927	925	923	920	919	919	919	918	919	919	919	919	918	934	918	925.7
20	918	918	919	920	920	921	922	922	923	925	926	926	928	929	930	931	931	932	933	934	935	935	935	935	935	918	927.0
21	935	935	936	936	936	937	937	937	938	939	939	940	941	941	942	943	944	944	945	946	947	948	949	950	950	935	941.2
22	951	951	951	952	952	951	950	950	950	950	949	948	947	946	945	944	944	943	943	942	941	941	940	941	952	940	946.8
23	941	940	941	942	943	944	944	944	944	944	945	945	946	947	947	947	948	948	948	949	950	950	951	951	951	940	945.8
24	952	952	953	953	952	952	952	951	951	950	950	949	949	948	947	946	945	945	944	943	943	943	943	943	953	943	948.1
25	943	943	942	941	943	943	943	944	945	945	946	947	946	946	946	946	946	947	947	947	947	948	949	950	950	941	945.4
26	950	951	952	952	953	953	954	954	955	956	956	957	957	958	958	958	958	958	958	957	957	956	956	956	958	950	955.5
27	955	955	954	953	952	949	947	946	946	945	944	942	938	936	934	931	931	929	929	932	931	931	933	935	955	929	940.7
28	936	937	937	938	939	939	940	941	942	943	944	945	945	946	945	946	946	945	945	945	944	943	941	940	946	936	942.1
29	938	934	934	932	932	930	929	928	929	929	928	928	928	930	931	933	931	934	934	935	937	937	938	939	939	928	932.3
30	940	941	942	943	944	945	945	946	947	948	949	950	950	950	950	950	951	950	950	951	951	951	951	951	951	940	947.7
31	950	950	949	949	948	947	947	946	945	945	945	944	943	942	941	940	939	938	938	937	936	934	934	933	950	933	942.4
Max.	**976**	**976**	**977**	**977**	**977**	**977**	**978**	**978**	**979**	**978**	**978**	**977**	**976**	**977**	**977**	**979**	**979**	**979**	**978**	**978**	**978**	**977**	**977**	**976**	**979**		
Min.	**918**	**918**	**919**	**920**	**920**	**921**	**922**	**922**	**923**	**925**	**926**	**926**	**925**	**923**	**920**	**919**	**919**	**919**	**918**	**919**	**919**	**919**	**919**	**918**		**918**	
Avg.	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**			**943.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														0.2	0.2	0.2	2.0	3.0	11.3	16.8	16.5	14.3	16.1	17.0	17.0	0.2	8.9
10	13.2	12.0	14.1	14.6	15.8	14.1	13.4	15.7	16.8	18.5	17.2	17.3	17.4	17.7	18.3	17.9	17.0	16.8	16.5	15.0	14.7	16.9	17.8	16.8	18.5	12.0	16.1
11	15.5	16.2	16.1	17.0	17.4	17.2	18.3	17.5	16.3	16.9	17.9	18.0	17.5	17.1	16.3	17.6	16.5	15.5	14.2	14.9	15.9	14.9	14.0	13.6	18.3	13.6	16.3
12	13.7	14.6	12.8	12.4	11.5	9.8	10.7	9.8	8.2	8.3	10.2	11.2	12.2	9.9	9.2	7.7	7.3	7.5	8.7	8.8	8.9	7.4	5.5	4.2	14.6	4.2	9.6
13	4.8	3.4	3.2	2.9	1.5	2.8	3.6	2.0	3.2	5.3	4.7	3.8	4.8	4.4	5.2	5.5	5.5	4.9	4.1	2.9	1.8	1.6	1.0	1.5	5.5	1.0	3.5
14	1.9	1.3	1.2	1.3	2.2	3.4	3.0	2.5	1.9	2.0	3.2	3.7	3.2	2.8	2.3	2.6	2.1	3.2	3.0	2.8	1.5	1.2	0.9	3.0	3.7	0.9	2.3
15	7.0	6.9	6.4	7.2	6.2	4.5	4.3	5.1	5.6	5.0	4.0	3.9	4.9	4.6	4.9	4.5	3.3	4.9	3.2	5.1	5.0	2.8	2.7	2.7	7.2	2.7	4.8
16	2.6	3.4	2.6	2.1	2.7	3.5	2.1	4.1	4.1	4.2	3.4	5.3	6.0	8.1	8.8	9.4	9.8	8.8	8.9	8.2	8.4	6.0	5.8	3.9	9.8	2.1	5.5
17	1.6	1.5	1.3	1.9	2.8	3.5	2.6	3.6	3.4	5.0	4.0	4.2	5.2	7.3	7.0	7.2	9.0	10.3	8.7	8.5	7.2	5.5	4.6	4.2	10.3	1.3	5.0
18	3.0	1.4	2.0	3.1	3.7	2.5	2.7	3.4	5.7	6.7	6.9	10.7	12.4	10.5	12.9	13.8	12.8	12.5	12.9	10.3	7.7	7.2	7.5	4.9	13.8	1.4	7.4
19	3.1	1.4	1.3	1.2	3.1	4.5	5.4	4.8	3.9	1.9	2.5	1.9	2.7	2.9	2.8	3.1	4.7	4.0	4.2	6.6	8.5	7.1	3.1	1.7	8.5	1.2	3.6
20	1.0	0.9	1.3	1.3	1.8	1.7	1.7	1.3	1.1	2.1	2.0	1.8	3.5	4.1	10.0	9.9	9.8	8.5	8.8	7.1	5.3	5.6	7.5	2.5	10.0	0.9	4.2
21	3.6	3.4	2.8	2.9	1.0	1.8	3.6	2.9	3.0	3.6	3.3	4.1	3.1	4.0	3.3	2.3	5.6	4.0	5.0	4.7	3.6	4.3	2.6	5.0	5.6	1.0	3.5
22	6.5	7.5	6.3	8.8	7.6	7.2	7.9	6.4	4.2	5.5	6.0	5.4	6.7	8.7	10.1	10.2	10.7	9.8	9.4	9.5	8.3	9.7	8.6	5.7	10.7	4.2	7.8
23	6.5	5.4	6.3	6.5	3.8	5.4	5.5	3.8	4.8	5.7	6.0	6.1	5.9	5.9	4.8	4.6	4.1	3.7	5.0	6.1	6.3	4.8	4.0	3.7	6.5	3.7	5.2
24	2.9	2.5	3.2	1.7	0.8	1.8	2.2	2.0	3.1	3.7	2.8	2.5	1.8	3.1	4.1	3.3	2.5	2.6	3.6	2.9	2.9	2.7	1.4	1.4	4.1	0.8	2.6
25	2.1	2.7	2.9	5.1	4.1	2.9	2.5	1.8	2.3	3.2	3.6	3.8	5.7	6.9	7.4	6.9	6.8	7.1	7.2	6.3	5.1	4.0	3.9	4.1	7.4	1.8	4.5
26	3.3	2.9	3.5	3.5	2.4	1.8	3.7	4.5	4.0	4.6	4.8	4.7	5.0	4.8	5.1	3.2	3.5	5.6	6.6	7.3	7.3	5.9	3.8	4.1	7.3	1.8	4.4
27	2.2	1.2	1.3	2.1	2.9	1.5	1.0	1.3	1.7	1.6	2.2	2.8	3.6	4.7	6.0	5.2	4.7	5.2	5.7	6.8	7.7	6.6	4.7	3.7	7.7	1.0	3.6
28	3.2	2.8	2.1	1.9	1.8	1.9	3.4	6.0	4.0	4.8	6.1	6.3	6.7	5.4	5.6	5.5	4.9	3.7	4.5	4.6	5.3	3.5	3.1	3.3	6.7	1.8	4.2
29	3.6	3.8	4.3	1.0	4.2	3.0	2.2	3.9	4.6	5.2	3.6	3.1	3.6	4.8	6.8	10.9	13.0	13.7	12.1	11.9	10.4	6.2	8.7	10.7	13.7	1.0	6.5
30	10.9	11.4	9.5	8.8	6.8	5.6	5.4	8.0	6.6	7.3	8.1	6.9	5.5	6.6	6.2	5.3	5.5	4.5	3.6	3.3	3.8	4.1	3.6	3.0	11.4	3.0	6.3
Max.	**15.5**	**16.2**	**16.1**	**17.0**	**17.4**	**17.2**	**18.3**	**17.5**	**16.8**	**18.5**	**17.9**	**18.0**	**17.5**	**17.7**	**18.3**	**17.9**	**17.0**	**16.8**	**16.5**	**16.8**	**16.5**	**16.9**	**17.8**	**17.0**	**18.5**		
Min.	**1.0**	**0.9**	**1.2**	**1.0**	**0.8**	**1.5**	**1.0**	**1.3**	**1.1**	**1.6**	**2.0**	**1.8**	**1.8**	**0.2**	**0.2**	**0.2**	**2.0**	**2.6**	**3.0**	**2.8**	**1.5**	**1.2**	**0.9**	**1.4**		**0.2**	
Avg.	**5.4**	**5.1**	**5.0**	**5.1**	**5.0**	**4.8**	**5.0**	**5.3**	**5.2**	**5.8**	**5.8**	**6.1**	**6.5**	**6.6**	**7.1**	**7.1**	**7.3**	**7.3**	**7.6**	**7.7**	**7.4**	**6.5**	**5.9**	**5.5**			**6.1**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.6	3.5	3.0	2.8	2.4	2.6	3.1	2.5	1.6	1.9	1.7	2.0	2.2	2.2	3.4	4.5	5.9	5.8	5.8	6.1	5.8	5.3	3.2	2.7	6.1	1.6	3.4
2	2.5	2.6	1.2	1.5	2.7	3.0	3.0	1.6	1.7	2.4	2.6	4.1	5.9	7.1	5.9	5.4	6.3	7.7	8.6	7.8	7.3	9.3	11.0	12.3	12.3	1.2	5.1
3	11.8	10.3	10.1	10.2	5.0	4.2	5.3	6.9	7.4	5.2	5.4	4.2	3.5	3.0	4.3	4.9	5.5	5.0	4.9	5.1	6.2	5.2	3.4	1.6	11.8	1.6	5.8
4	3.1	3.2	2.6	2.4	2.0	1.5	1.3	1.3	1.8	2.0	2.7	3.2	3.8	5.2	5.5	5.0	4.9	6.8	5.9	5.4	6.0	6.0	3.4	2.9	6.8	1.3	3.7
5	4.0	2.0	2.7	3.2	2.9	1.5	2.4	3.0	2.7	2.3	2.1	2.6	3.0	3.6	4.3	5.3	6.0	2.6	1.2	3.9	3.9	2.6	1.6	1.9	6.0	1.2	3.0
6	2.6	1.2	1.5	1.9	1.8	1.1	1.1	2.4	3.0	3.9	2.3	2.4	4.5	5.0	5.5	5.7	4.6	4.3	1.8	3.2	4.0	3.6	4.6	4.9	5.7	1.1	3.2
7	5.1	4.6	5.3	5.4	4.4	3.8	2.8	4.6	4.9	6.8	6.6	6.8	7.5	7.9	7.1	6.9	6.7	6.2	5.5	4.8	4.7	5.2	5.0	4.8	7.9	2.8	5.5
8	6.0	6.9	5.4	6.2	5.2	4.4	4.5	5.0	5.1	6.0	5.7	6.0	5.8	5.0	4.0	3.6	4.2	3.7	4.3	3.5	3.3	3.5	2.6	2.0	6.9	2.0	4.7
9	1.6	1.9	1.7	3.2	3.6	4.7	5.2	4.1	1.7	2.5	2.9	3.6	4.6	5.5	6.3	8.0	8.0	7.9	8.5	8.4	8.8	10.4	8.5	7.8	10.4	1.6	5.4
10	11.1	10.1	10.6	10.6	13.7	13.5	12.0	13.7	13.2	11.3	15.9	15.6	15.0	14.8	13.2	12.6	13.4	13.3	13.3	11.9	8.1	6.8	5.1	5.7	15.9	5.1	11.8
11	6.6	4.7	4.1	3.7	3.1	3.3	3.3	1.6	1.7	3.6	5.9	5.5	6.3	5.3	5.9	5.1	6.0	4.4	3.2	3.2	3.5	3.2	3.2	2.9	6.6	1.6	4.1
12	2.4	1.1	0.7	0.7	2.0	2.2	3.4	2.9	4.2	3.6	3.7	2.9	3.8	0.3	1.0	1.6	2.8	6.7	9.2	8.9	7.7	7.2	4.3	4.8	9.2	0.3	3.7
13	6.0	6.8	7.2	6.1	5.9	8.5	8.0	8.3	8.1	9.0	6.7	7.3	6.9	7.3	7.0	8.8	9.6	8.9	8.4	9.1	9.2	8.4	7.2	10.0	10.0	5.9	7.9
14	9.0	7.8	6.4	6.6	6.2	5.9	5.7	6.3	6.6	6.2	6.3	6.6	7.3	7.0	7.0	7.9	7.7	6.7	7.9	7.2	8.1	7.5	7.1	6.5	9.0	5.7	7.0
15	5.0	4.9	5.4	4.9	4.8	3.5	2.1	4.1	4.3	4.5	4.6	5.8	6.0	5.9	5.4	4.9	5.4	5.2	5.4	4.5	4.1	4.0	4.1	5.2	6.0	2.1	4.8
16	4.4	3.9	5.2	5.1	5.8	8.6	9.2	10.3	12.7	13.6	13.2	13.4	12.8	13.8	14.0	13.9	13.4	12.4	13.3	12.5	12.5	11.7	9.7	9.9	14.0	3.9	10.6
17	8.6	8.8	9.5	8.8	9.9	11.0	10.9	11.3	11.5	13.5	14.9	15.5	15.5	15.1	14.2	14.3	13.7	12.9	11.5	12.2	11.5	14.3	15.9	12.4	15.9	8.6	12.4
18	9.4	9.4	15.3	12.2	9.8	11.7	10.7	11.0	12.2	13.4	13.1	16.5	15.8	14.5	13.9	13.5	13.6	14.6	13.2	12.4	12.2	12.2	12.3	11.9	16.5	9.4	12.7
19	10.0	9.0	6.6	7.2	6.8	5.5	5.5	5.1	4.8	5.0	5.4	6.7	8.0	7.4	5.7	4.7	4.4	4.1	6.0	5.4	4.9	4.2	2.5	1.4	10.0	1.4	5.7
20	2.0	4.5	6.5	6.4	5.6	5.9	5.8	5.4	6.3	6.2	4.5	5.4	5.2	5.9	6.0	3.7	3.7	4.1	5.5	6.4	5.2	5.8	3.6	3.1	6.5	2.0	5.1
21	2.8	1.2	1.0	1.8	2.8	1.6	1.3	2.3	1.6	4.5	5.5	6.2	7.4	7.2	5.9	6.7	6.2	5.7	5.5	5.4	2.6	1.5	1.7	3.2	7.4	1.0	3.8
22	2.6	1.6	1.1	1.3	1.6	1.7	3.4	2.7	1.9	2.9	2.9	2.2	5.3	6.0	5.4	5.9	6.3	5.3	5.1	5.5	6.4	7.3	6.3	5.8	7.3	1.1	4.0
23	8.2	7.9	5.7	4.4	6.3	7.4	8.0	8.3	6.6	6.3	5.7	5.3	2.2	2.2	2.9	3.6	2.5	2.8	1.8	2.8	4.5	4.0	4.7	4.3	8.3	1.8	4.9
24	3.5	6.0	5.9	4.6	4.2	3.9	5.3	5.0	4.0	3.9	4.0	4.8	5.4	4.4	4.5	4.3	6.9	5.5	5.8	5.3	6.7	7.3	4.2	5.5	7.3	3.5	5.0
25	5.5	5.5	5.8	7.6	6.7	5.3	3.8	5.9	6.2	6.0	5.3	6.5	6.2	6.7	5.5	5.3	5.2	4.8	4.0	2.7	3.6	3.0	2.0	1.9	7.6	1.9	5.0
26	1.1	1.5	1.3	1.7	2.3	2.3	1.6	1.6	2.3	3.8	5.8	5.1	4.6	4.9	6.0	7.1	8.1	8.1	7.1	6.0	6.7	6.8	6.1	6.0	8.1	1.1	4.5
27	6.4	4.7	2.8	3.9	3.4	2.7	3.7	3.3	4.3	5.0	3.4	1.7	1.7	2.5	3.0	2.8	3.9	3.2	5.0	3.6	3.6	2.5	1.3	1.0	6.4	1.0	3.3
28	1.4	0.6	1.5	1.4	1.0	0.7	1.0	1.3	3.1	4.0	4.7	6.4	5.5	5.5	6.6	7.9	10.3	11.1	11.2	11.1	10.8	11.1	12.4	13.2	13.2	0.6	6.0
29	11.7	13.2	12.9	14.4	10.6	11.4	12.9	12.6	10.8	10.6	10.5	9.7	9.5	8.6	9.1	11.0	11.7	12.1	10.8	9.5	10.1	11.6	10.5	8.2	14.4	8.2	11.0
30	7.4	7.3	5.8	5.8	4.8	4.5	5.0	4.6	2.5	3.8	4.5	2.5	2.5	5.0	6.7	8.8	9.2	10.1	10.5	10.2	8.9	9.7	10.7	9.3	10.7	2.5	6.7
31	10.3	9.7	9.5	10.2	10.6	7.2	7.0	6.4	5.8	5.8	5.9	4.7	4.0	6.6	6.5	6.0	4.3	3.0	3.2	2.6	1.8	1.7	3.0	4.3	10.6	1.7	5.8
Max.	**11.8**	**13.2**	**15.3**	**14.4**	**13.7**	**13.5**	**12.9**	**13.7**	**13.2**	**13.6**	**15.9**	**16.5**	**15.8**	**15.1**	**14.2**	**14.3**	**13.7**	**14.6**	**13.3**	**12.5**	**12.5**	**14.3**	**15.9**	**13.2**	**16.5**		
Min.	**1.1**	**0.6**	**0.7**	**0.7**	**1.0**	**0.7**	**1.0**	**1.3**	**1.6**	**1.9**	**1.7**	**1.7**	**1.7**	**0.3**	**1.0**	**1.6**	**2.5**	**2.6**	**1.2**	**2.6**	**1.8**	**1.5**	**1.3**	**1.0**		**0.3**	
Avg.	**5.6**	**5.4**	**5.3**	**5.4**	**5.1**	**5.0**	**5.1**	**5.3**	**5.3**	**5.8**	**6.0**	**6.2**	**6.4**	**6.5**	**6.5**	**6.8**	**7.1**	**6.9**	**6.9**	**6.7**	**6.5**	**6.5**	**5.8**	**5.7**			**6.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.4	6.3	6.0	4.8	3.5	3.5	3.8	4.1	3.9	3.6	4.4	4.9	5.1	5.0	6.1	6.1	5.9	6.5	6.1	6.0	5.7	6.0	7.6	6.6	7.6	3.5	5.3
2	7.1	6.9	6.8	6.7	6.8	5.6	3.2	2.8	4.0	5.2	4.9	4.2	4.2	4.5	5.8	4.4	7.7	9.1	10.1	11.4	11.5	10.9	8.7	8.7	11.5	2.8	6.7
3	8.5	9.3	10.0	10.1	8.6	8.4	8.7	9.3	8.6	7.5	6.0	6.2	9.0	8.4	7.8	9.2	11.8	11.1	8.6	7.6	7.2	8.6	8.7	9.0	11.8	6.0	8.7
4	9.3	6.5	6.6	6.0	2.2	1.7	1.9	4.4	4.0	3.0	2.5	2.0	2.2	2.8	2.1	1.5	1.0	1.1	1.0	1.3	0.9	1.2	1.2	1.3	9.3	0.9	2.8
5	1.2	2.3	1.9	1.7	0.8	1.5	1.8	1.9	1.6	3.1	3.6	3.9	5.3	5.7	7.0	5.8	5.5	4.2	5.0	2.3	2.8	2.2	1.8	2.0	7.0	0.8	3.1
6	4.6	4.4	2.0	2.9	2.5	3.3	7.2	7.5	8.0	6.9	6.0	5.5	5.2	6.3	6.0	6.5	6.6	6.7	6.3	5.5	4.4	4.2	5.2	4.6	8.0	2.0	5.3
7	2.8	2.2	2.2	4.2	4.2	3.3	1.8	2.6	3.3	4.7	5.0	7.8	7.4	8.5	8.6	9.2	8.7	9.7	10.1	8.9	8.3	8.4	7.6	7.1	10.1	1.8	6.1
8	6.3	6.4	6.7	5.7	4.4	3.6	4.8	4.7	3.9	5.7	5.0	5.0	4.8	4.9	4.1	2.7	3.8	5.7	6.3	4.8	2.8	2.5	1.9	3.1	6.7	1.9	4.6
9	2.0	1.2	1.2	1.5	1.2	1.4	1.1	1.4	1.6	3.4	2.4	2.9	4.0	3.9	4.8	3.8	4.0	4.9	6.0	6.5	6.5	5.7	6.7	6.1	6.7	1.1	3.5
10	5.6	5.6	7.4	6.8	6.2	6.3	6.8	6.7	7.8	7.0	6.7	7.2	8.2	10.7	11.9	13.1	13.0	13.9	14.7	12.8	13.7	14.6	15.5	15.1	15.5	5.6	9.9
11	11.9	9.7	8.7	7.6	9.3	8.8	9.1	8.3	9.1	9.5	9.5	8.7	7.0	7.1	6.0	4.9	5.5	5.4	5.0	4.9	4.1	4.1	4.4	3.8	11.9	3.8	7.2
12	2.9	3.0	3.1	3.6	4.6	6.6	5.9	7.3	8.4	11.1	10.1	9.2	8.0	7.4	7.2	8.4	8.8	8.0	7.2	6.5	7.1	4.6	1.8	2.7	11.1	1.8	6.4
13	4.0	2.9	2.4	2.2	1.1	2.8	5.5	5.1	6.5	6.6	7.9	6.6	6.0	6.1	6.5	8.2	7.8	8.1	7.8	7.8	7.6	8.0	6.6	6.8	8.2	1.1	5.9
14	6.2	5.9	5.0	4.3	3.5	3.0	3.1	5.7	5.6	7.2	7.8	10.8	13.2	13.8	13.2	11.9	12.8	11.4	10.5	9.5	9.9	10.5	9.2	8.9	13.8	3.0	8.5
15	8.1	8.7	8.7	8.3	7.3	7.5	7.9	8.4	8.1	7.3	7.5	7.0	7.1	6.7	5.7	5.8	4.6	3.4	2.6	2.4	3.0	3.4	2.8	1.9	8.7	1.9	6.0
16	1.3	1.1	1.6	3.0	2.6	3.1	3.6	2.5	2.7	2.4	2.3	2.6	2.5	2.6	2.6	2.0	3.3	2.9	1.6	1.3	1.4	0.6	1.5	1.3	3.6	0.6	2.2
17	1.8	2.3	1.6	0.9	0.6	1.1	1.2	1.2	0.9	1.3	1.3	2.2	5.3	6.2	6.6	3.3	7.3	8.9	10.4	8.5	9.9	10.8	11.1	10.7	11.1	0.6	4.8
18	12.4	14.4	15.3	12.9	12.2	13.0	12.8	14.8	16.6	15.2	14.8	15.6	14.6	13.5	12.4	11.2	10.7	9.0	8.2	7.6	5.8	5.8	7.6	5.9	16.6	5.8	11.8
19	3.2	3.8	3.3	2.9	2.7	2.2	3.5	3.0	3.1	2.0	4.3	7.0	8.8	10.5	9.0	12.1	13.1	12.2	9.9	5.8	3.5	3.9	3.7	4.3	13.1	2.0	5.7
20	3.2	7.6	6.9	8.2	9.1	5.9	5.8	5.3	6.7	6.3	6.6	6.8	8.1	7.8	8.2	6.9	7.5	8.6	8.5	8.6	7.5	4.1	4.0	4.4	9.1	3.2	6.8
21	4.4	6.5	6.7	4.8	3.1	3.7	3.6	3.6	3.0	1.6	1.8	2.2	3.2	3.4	4.0	4.1	5.0	4.9	4.3	5.1	5.8	7.9	11.1	12.7	12.7	1.6	4.9
22	13.3	8.5	9.1	11.4	12.0	11.8	12.8	12.8	12.6	11.7	11.7	10.6	8.8	7.1	7.5	8.7	9.0	8.0	8.2	5.7	6.9	7.2	4.3	4.6	13.3	4.3	9.3
23	2.2	1.1	0.8	1.4	1.6	1.7	2.0	1.4	1.5	2.2	1.3	1.6	4.0	4.2	4.3	4.0	3.9	3.0	3.1	5.1	4.6	3.0	3.0	5.2	5.2	0.8	2.8
24	9.5	10.0	7.4	7.4	7.0	6.8	6.6	7.3	5.6	7.3	9.6	11.1	9.5	8.4	7.8	7.1	8.4	9.0	6.7	5.5	6.0	8.4	6.9	6.5	11.1	5.5	7.7
25	8.3	10.7	8.5	8.6	3.0	3.5	4.6	2.3	3.4	2.7	1.7	4.4	6.3	5.5	4.6	4.1	4.2	3.6	3.0	2.1	1.6	2.7	3.4	4.2	10.7	1.6	4.5
26	4.9	4.4	1.3	2.0	4.0	3.9	2.8	1.7	1.6	2.1	4.9	6.8	5.7	3.2	3.7	2.5	4.2	2.8	3.9	3.5	2.3	1.5	1.3	1.6	6.8	1.3	3.2
27	1.4	2.4	3.4	3.5	3.0	2.9	2.1	0.7	1.4	2.1	1.1	2.0	3.6	4.4	4.5	6.1	6.5	5.0	4.8	2.8	3.0	3.8	5.9	6.2	6.5	0.7	3.4
28	2.6	3.5	5.0	4.8	6.2	7.2	5.8	6.8	5.7	5.3	5.4	4.5	4.9	7.0	7.0	7.7	7.8	5.6	4.8	2.3	2.3	3.5	2.8	1.7	7.8	1.7	5.0
29	1.5	1.7	1.2	1.4	1.9	2.8	2.5	2.3	1.9	1.4	2.2	4.0	5.0	4.1	3.3	3.7	3.5	3.9	5.1	3.9	1.8	1.7	4.3	5.7	5.7	1.2	3.0
30	8.2	8.4	8.7	9.0	8.8	9.9	10.6	9.7	10.3	12.2	10.1	8.7	7.4	7.7	8.0	6.6	7.7	11.1	10.2	9.8	9.2	8.1	5.3	5.5	12.2	5.3	8.8
31	6.4	5.5	5.3	2.6	2.6	3.3	2.9	3.2	4.6	7.0	8.7	8.5	10.8	10.8	12.7	12.4	12.3	12.8	11.7	12.1	7.8	7.9	8.7	8.3	12.8	2.6	7.9
Max.	**13.3**	**14.4**	**15.3**	**12.9**	**12.2**	**13.0**	**12.8**	**14.8**	**16.6**	**15.2**	**14.8**	**15.6**	**14.6**	**13.8**	**13.2**	**13.1**	**13.1**	**13.9**	**14.7**	**12.8**	**13.7**	**14.6**	**15.5**	**15.1**	**16.6**		
Min.	**1.2**	**1.1**	**0.8**	**0.9**	**0.6**	**1.1**	**1.1**	**0.7**	**0.9**	**1.3**	**1.1**	**1.6**	**2.2**	**2.6**	**2.1**	**1.5**	**1.0**	**1.1**	**1.0**	**1.3**	**0.9**	**0.6**	**1.2**	**1.3**		**0.6**	
Avg.	**5.5**	**5.6**	**5.3**	**5.2**	**4.7**	**4.8**	**5.0**	**5.1**	**5.4**	**5.6**	**5.7**	**6.1**	**6.6**	**6.7**	**6.7**	**6.6**	**7.2**	**7.1**	**6.8**	**6.1**	**5.6**	**5.7**	**5.6**	**5.7**			**5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.0	7.2	6.4	5.9	6.0	6.5	6.2	6.0	6.4	6.3	7.6	6.6	6.1	5.6	4.9	7.6	9.7	9.7	9.8	9.8	8.7	9.2	9.4	8.7	9.8	4.9	7.4
2	9.3	9.5	9.9	9.2	6.3	7.4	5.7	6.4	6.6	8.4	11.1	11.8	11.0	10.2	8.0	7.4	7.6	7.7	3.9	3.4	4.4	1.4	1.1	1.6	11.8	1.1	7.1
3	2.1	3.3	1.6	2.7	2.8	1.9	3.2	3.6	3.4	2.6	1.6	1.4	2.0	3.3	4.0	2.8	1.5	1.1	1.0	1.7	2.5	2.4	2.4	1.0	4.0	1.0	2.3
4	0.6	0.6	0.9	2.9	4.3	3.8	3.6	4.4	3.8	3.0	2.8	2.6	2.6	1.6	1.6	2.9	7.0	2.5	2.2	3.8	4.9	2.2	2.7	3.1	7.0	0.6	2.9
5	4.1	2.9	3.4	3.2	3.1	3.7	3.6	3.4	3.4	4.6	5.6	6.7	7.5	8.6	8.7	8.3	9.6	8.2	7.5	5.4	4.3	3.7	2.0	1.3	9.6	1.3	5.1
6	1.6	1.9	3.4	5.0	6.4	7.7	7.5	6.9	7.6	7.2	8.7	7.0	7.2	6.7	6.0	5.4	5.6	5.4	5.3	6.8	6.8	8.5	8.5	6.3	8.7	1.6	6.2
7	6.0	3.9	2.7	2.6	2.9	4.1	5.9	6.6	6.0	8.3	12.2	17.5	17.1	21.0	22.7	22.9	20.1	17.5	20.4	19.2	18.3	17.9	17.7	19.4	22.9	2.6	13.0
8	16.4	20.2	19.5	19.4	18.4	17.1	16.5	16.0	15.8	15.1	14.2	12.0	11.5	11.4	11.7	10.5	9.5	9.2	9.4	9.0	8.3	7.6	8.4	7.2	20.2	7.2	13.1
9	7.0	6.2	5.9	6.4	5.5	3.0	3.0	2.5	3.2	3.8	3.5	3.6	5.7	6.1	5.4	5.4	6.9	5.9	5.4	5.4	4.0	2.4	1.6	1.9	7.0	1.6	4.6
10	2.0	2.6	3.7	2.4	1.7	2.2	2.0	2.1	1.2	1.3	3.2	3.2	3.1	3.8	4.5	4.9	4.9	3.4	3.0	2.1	1.3	1.6	1.1	0.6	4.9	0.6	2.6
11	1.3	2.0	1.5	0.9	0.7	2.4	3.1	3.5	3.4	3.6	3.2	1.7	3.1	3.3	1.8	1.7	2.6	3.7	4.6	4.0	2.7	1.3	1.5	2.3	4.6	0.7	2.5
12	3.3	3.1	3.3	4.1	2.7	3.3	3.3	3.4	3.4	3.0	2.5	2.4	2.3	1.8	3.7	5.2	5.3	3.5	3.4	4.2	3.2	2.6	2.9	3.2	5.3	1.8	3.3
13	4.2	4.5	4.5	4.3	4.0	3.9	3.6	3.4	3.1	2.7	5.2	6.2	9.2	10.2	10.6	10.4	11.6	12.7	15.2	15.6	18.4	21.4	21.3	22.7	22.7	2.7	9.5
14	23.5	23.6	23.0	20.7	19.4	20.8	20.4	19.0	19.0	20.3	18.1	15.6	16.8	16.2	19.8	19.0	20.4	18.9	16.8	17.3	17.1	17.8	17.4	17.7	23.6	15.6	19.1
15	17.0	16.3	16.7	16.5	16.0	14.3	11.5	11.9	13.7	15.4	14.9	14.9	16.2	14.6	18.2	18.8	15.4	17.5	15.5	11.7	11.8	13.8	11.9	12.1	18.8	11.5	14.9
16	9.6	9.5	8.6	7.4	6.9	7.9	6.6	6.5	5.8	6.6	8.9	9.7	8.3	10.5	9.4	7.6	7.8	6.9	5.7	3.5	3.0	4.8	4.4	4.5	10.5	3.0	7.1
17	4.0	5.0	4.3	5.9	6.7	5.5	5.1	4.7	6.1	7.1	7.0	7.5	7.3	6.0	5.7	5.4	5.6	5.0	4.1	3.8	3.7	2.8	2.5	2.8	7.5	2.5	5.1
18	2.6	2.4	4.4	5.8	6.4	6.6	8.3	10.2	11.0	14.0	12.7	14.9	14.0	13.5	15.1	14.0	13.4	12.7	15.5	15.0	14.3	13.5	14.3	14.4	15.5	2.4	11.2
19	10.9	16.7	15.9	8.9	7.0	4.2	5.5	4.5	2.6	3.5	5.7	6.2	3.0	2.1	1.3	2.1	1.5	1.2	1.1	3.0	1.5	2.1	1.0	1.8	16.7	1.0	4.7
20	1.8	2.0	1.8	1.8	2.2	2.3	1.5	1.4	3.0	3.4	4.4	5.3	6.0	6.2	5.9	2.8	5.1	4.6	6.5	7.3	7.9	5.6	6.0	4.8	7.9	1.4	4.2
21	4.0	3.3	1.9	1.4	1.0	2.3	3.7	6.3	7.4	8.0	8.8	7.5	7.8	7.4	7.8	5.0	7.7	8.7	10.0	14.3	12.9	17.1	12.8	9.8	17.1	1.0	7.4
22	5.6	1.9	3.5	4.0	6.1	5.7	5.5	7.0	8.6	8.2	5.5	5.1	6.2	6.2	5.6	5.7	5.5	4.6	5.4	5.8	3.5	4.7	9.0	9.1	9.1	1.9	5.7
23	8.1	6.5	5.5	5.5	6.1	3.8	4.4	3.5	4.3	6.0	6.5	7.6	8.6	7.2	6.9	6.6	5.9	5.1	4.1	2.9	3.1	4.2	4.0	3.1	8.6	2.9	5.4
24	2.4	2.8	1.7	2.1	1.2	1.2	1.3	1.3	1.2	1.0	1.3	1.9	2.9	2.8	3.7	4.0	6.1	6.5	5.6	5.1	5.8	6.6	6.0	4.1	6.6	1.0	3.3
25	4.2	5.3	4.3	5.5	5.6	4.7	3.8	3.7	4.1	3.5	3.8	2.2	1.9	3.2	4.3	5.9	7.4	7.3	8.3	7.3	5.5	5.6	4.5	4.7	8.3	1.9	4.9
26	4.2	3.4	2.4	3.1	3.6	5.4	5.0	3.9	3.7	3.3	3.1	3.0	5.9	6.8	5.5	2.9	2.1	2.5	2.7	2.1	1.4	1.2	3.5	4.0	6.8	1.2	3.5
27	3.8	3.8	6.0	7.1	5.5	3.3	2.6	1.0	1.4	1.1	1.0	1.7	1.9	2.3	2.9	3.9	2.8	1.7	2.5	3.8	2.0	3.9	3.5	3.7	7.1	1.0	3.0
28	2.3	2.5	3.1	3.8	3.0	3.0	3.0	4.2	5.9	5.4	6.8	7.6	8.0	9.1	9.6	10.7	11.0	9.7	10.4	8.9	8.2	7.2	5.3	5.7	11.0	2.3	6.4
29	4.8	1.8	1.3	0.9	1.2	2.3	2.6	4.7	5.5	9.8	11.3	9.8	10.1	9.9	10.6	9.3	7.8	8.3	7.1	6.9	7.8	7.7	5.5	6.3	11.3	0.9	6.4
30	5.0	4.6	2.2	2.1	2.1	2.4	1.5	0.9	1.2	1.2	1.8	2.0	4.0	6.0	8.3	7.6	10.2	10.4	9.0	11.7	13.9	14.5	14.8	15.5	15.5	0.9	6.4
Max.	**23.5**	**23.6**	**23.0**	**20.7**	**19.4**	**20.8**	**20.4**	**19.0**	**19.0**	**20.3**	**18.1**	**17.5**	**17.1**	**21.0**	**22.7**	**22.9**	**20.4**	**18.9**	**20.4**	**19.2**	**18.4**	**21.4**	**21.3**	**22.7**	**23.6**		
Min.	**0.6**	**0.6**	**0.9**	**0.9**	**0.7**	**1.2**	**1.3**	**0.9**	**1.2**	**1.0**	**1.0**	**1.4**	**1.9**	**1.6**	**1.3**	**1.7**	**1.5**	**1.1**	**1.0**	**1.7**	**1.3**	**1.2**	**1.0**	**0.6**		**0.6**	
Avg.	**6.0**	**6.0**	**5.8**	**5.7**	**5.5**	**5.4**	**5.3**	**5.4**	**5.7**	**6.2**	**6.8**	**6.8**	**7.2**	**7.4**	**7.8**	**7.6**	**7.9**	**7.4**	**7.4**	**7.4**	**7.0**	**7.2**	**6.9**	**6.8**			**6.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	14.6	13.2	13.2	13.8	13.9	12.9	12.3	12.1	13.1	14.0	14.9	13.9	14.0	14.8	14.7	15.2	15.0	13.9	13.2	11.8	11.0	13.3	14.1	13.3	15.2	11.0	13.6
2	13.5	12.6	11.9	12.4	11.3	10.7	11.6	9.2	8.2	8.9	9.1	9.0	8.6	10.1	10.5	10.7	12.1	12.7	12.8	13.6	15.2	16.9	17.2	17.3	17.3	8.2	11.9
3	17.0	17.7	19.3	19.5	19.2	19.9	18.4	15.9	14.3	12.8	13.3	11.6	11.3	10.7	11.1	8.8	13.4	12.9	12.5	9.4	12.6	13.0	14.4	15.2	19.9	8.8	14.3
4	13.9	15.5	14.6	14.1	10.8	10.4	13.2	15.3	10.7	8.4	8.6	7.1	7.8	5.9	6.9	5.6	7.4	3.9	2.3	2.1	2.3	3.4	3.4	4.2	15.5	2.1	8.2
5	4.4	3.3	1.4	1.4	1.9	3.4	1.7	2.4	2.6	2.3	2.5	2.1	3.5	5.4	5.1	5.7	8.4	7.1	8.9	10.0	10.0	6.8	3.8	3.3	10.0	1.4	4.5
6	3.6	3.0	3.7	5.5	6.9	7.8	8.4	9.4	9.3	8.3	9.9	8.7	7.4	8.3	8.6	7.7	7.5	9.5	8.4	9.8	11.6	11.3	12.1	11.6	12.1	3.0	8.3
7	12.3	11.8	11.7	12.4	14.0	15.0	15.2	15.1	14.7	14.3	15.1	13.3	13.2	14.5	14.9	16.1	16.7	17.0	17.4	19.6	17.4	15.6	18.0	19.6	19.6	11.7	15.2
8	19.3	19.5	20.8	21.5	20.9	21.8	20.2	18.9	19.2	19.0	20.0	20.0	20.2	22.5	22.3	22.2	20.7	17.5	18.6	20.3	19.1	14.1	16.4	22.1	22.5	14.1	19.9
9	22.7	23.2	20.7	22.3	21.9	23.8	23.1	25.4	23.9	22.9	24.8	25.8	26.3	25.7	25.1	23.9	23.8	21.6	14.9	11.0	6.5	7.2	6.6	7.0	26.3	6.5	20.0
10	4.7	3.6	1.1							4.7	6.8	7.9	10.4	13.2	15.2	14.9	14.3	12.7	15.3	13.7	12.6	12.0	12.2	11.5	15.3	1.1	10.4
11	11.1	12.3	10.5	12.1	9.4	6.8	6.5	8.8	6.8	4.1	5.9	6.9	5.8	7.0	6.7	4.7	5.2	5.0	4.6	3.8	2.8	2.7	3.2	4.1	12.3	2.7	6.5
12	3.7	3.0	2.3	2.5	2.1	2.5	3.2	2.4	1.5	3.3	3.6	5.7	5.2	5.7	7.2	6.8	7.4	7.5	6.5	6.1	5.4	5.7	6.0	5.8	7.5	1.5	4.6
13	4.7	4.8	3.8	3.1	4.4	4.3	4.1	3.9	3.2	2.3	2.1	2.5	3.3	3.0	4.5	3.3	4.4	4.3	3.4	4.2	2.8	3.2	3.4	2.9	4.8	2.1	3.6
14	2.9	3.6	3.2	3.3	3.2	3.1	2.0	1.1	1.4	1.4	2.7	4.7	4.7	5.2	5.4	5.3	6.0	3.6	3.0	2.7	3.8	4.2	4.8	4.4	6.0	1.1	3.6
15	4.4	4.5	2.7	2.6	2.8	4.2	5.9	7.0	6.2	6.8	6.5	6.3	7.9	11.1	11.0	10.2	12.3	11.9	10.6	8.3	7.9	9.3	11.8	17.1	17.1	2.6	7.9
16	17.9	15.4	14.0	12.9	11.2	8.7	7.2	6.4	6.5	5.2	6.4	7.2	6.2	6.8	7.7	9.1	10.0	10.7	11.5	13.1	12.1	12.5	10.5	9.4	17.9	5.2	9.9
17	8.9	9.8	10.0	9.7	8.9	8.1	9.0	8.8	8.5	7.9	8.1	7.8	8.6	9.8	9.4	10.1	10.0	7.6	7.2	10.2	10.6	10.7	12.7	13.0	13.0	7.2	9.4
18	13.0	13.4	12.1	12.0	12.5	11.3	11.5	11.5	9.1	8.9	11.0	7.0	2.2	4.0	3.1	2.2	2.9	3.5	3.9	4.1	1.8	2.7	5.9	6.4	13.4	1.8	7.3
19	5.8	4.5	2.3	1.5	1.7	4.3	3.8	4.6	4.1	4.5	5.0	5.2	6.2	7.7	8.0	7.8	8.4	7.9	2.6	3.3	4.4	4.4	5.3	6.2	8.4	1.5	5.0
20	6.0	6.5	6.6	5.8	6.3	6.9	5.1	3.8	2.5	2.2	2.1	2.4	1.7	2.6	3.7	2.4	1.4	1.6	2.1	2.3	2.9	3.1	3.3	2.7	6.9	1.4	3.6
21	2.3	2.5	2.4	4.0	7.2	6.9	6.6	4.4	5.1	4.7	5.5	5.4	6.2	6.1	5.1	4.4	3.8	4.3	3.2	3.3	3.3	4.1	4.7	4.1	7.2	2.3	4.6
22	5.0	6.3	6.8	6.8	7.2	6.4	5.6	5.8	5.1	3.6	3.2	2.0	0.9	1.7	1.5	1.3	4.8	5.0	4.6	4.5	3.2	4.6	7.2	6.0	7.2	0.9	4.5
23	7.3	7.7	8.7	7.9	7.7	8.5	7.3	9.2	8.3	8.2	11.2	10.5	8.4	6.8	6.6	5.2	4.3	4.1	3.0	2.9	2.4	1.9	2.1	2.0	11.2	1.9	6.3
24	2.9	3.6	3.4	7.6	7.9	8.5	11.3	10.7	9.6	7.4	5.5	4.7	6.5	9.5	9.2	9.3	8.0	8.3	9.1	11.7	13.8	12.7	13.4	14.9	14.9	2.9	8.7
25	13.8	12.3	12.5	13.9	13.5	11.8	12.0	14.6	15.1	14.8	18.2	17.1	15.5	13.7	12.7	12.4	11.3	12.6	15.1	14.1	15.0	15.4	15.2	15.5	18.2	11.3	14.1
26	14.9	15.5	15.8	16.8	17.0	17.8	15.3	15.1	17.6	17.8	19.6	22.2	20.7	20.1	19.9	14.2	7.1	9.5	13.9	16.2	21.7	19.4	18.3	18.4	22.2	7.1	16.9
27	15.1	18.1	18.6	16.9	17.6	14.6	13.0	14.8	10.6	5.9	3.5	4.8	4.0	3.8	4.4	4.6	3.4	2.1	1.5	1.2	1.5	2.5	1.7	1.8	18.6	1.2	7.7
28	1.7	1.4	2.6	3.0	2.5	1.7	2.0	1.7	2.0	2.3	2.4	2.8	3.9	5.1	6.7	7.8	8.8	9.8	11.5	11.5	11.8	12.3	14.5	13.0	14.5	1.4	5.9
29	9.3	9.3	9.0	13.1	12.2	13.6	13.8	11.0	12.5	12.2	12.2	8.9	9.4	10.4	11.4	9.0	9.9	12.5	10.9	10.6	10.6	10.9	8.3	7.0	13.8	7.0	10.7
30	5.9	6.1	5.6	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0	5.6	7.1	6.9	7.6	8.6	9.6	11.5	12.5	12.7	12.5	10.5	12.7	0.2	5.3
31	7.6	8.3	9.2	12.0	15.5	15.9	14.8	11.4	11.3	13.6	15.3	14.1	14.7	15.3	13.2	11.4	11.5	11.7	9.1	9.1	9.4	7.5	7.1	6.8	15.9	6.8	11.5
Max.	**22.7**	**23.2**	**20.8**	**22.3**	**21.9**	**23.8**	**23.1**	**25.4**	**23.9**	**22.9**	**24.8**	**25.8**	**26.3**	**25.7**	**25.1**	**23.9**	**23.8**	**21.6**	**18.6**	**20.3**	**21.7**	**19.4**	**18.3**	**22.1**	**26.3**		
Min.	**1.7**	**1.4**	**1.1**	**1.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.9**	**1.7**	**1.5**	**1.3**	**1.4**	**1.6**	**1.5**	**1.2**	**1.5**	**1.9**	**1.7**	**1.8**		**0.2**	
Avg.	**9.4**	**9.4**	**9.0**	**9.7**	**9.7**	**9.7**	**9.5**	**9.4**	**8.8**	**8.1**	**8.9**	**8.6**	**8.6**	**9.4**	**9.6**	**9.0**	**9.3**	**9.1**	**8.7**	**8.9**	**9.0**	**8.9**	**9.3**	**9.6**			**9.2**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	6.8	6.2	6.1	5.1	7.3	7.4	7.6	7.5	7.5	7.5	7.0	7.7	8.1	9.1	10.3	10.5	10.1	10.7	11.7	9.6	9.1	9.1	8.9	11.7	5.1	8.2
2	7.7	7.9	7.9	7.7	7.4	6.9	7.6	8.1	8.7	8.1	8.2	7.9	8.9	10.5	10.4	11.3	12.8	13.3	13.4	10.4	10.1	9.3	9.7	9.0	13.4	6.9	9.3
3	8.9	7.7	6.8	5.6	5.5	6.0	6.4	6.1	6.8	7.5	7.5	6.5	7.0	6.2	8.7	8.8	8.2	8.5	8.2	7.9	8.5	7.3	8.1	6.7	8.9	5.5	7.3
4	6.6	7.8	6.7	7.4	6.8	6.4	6.7	7.0	7.4	8.2	7.6	6.7	8.4	7.4	6.9	6.7	5.1	6.0	5.8	5.6	4.2	3.6	3.4	2.6	8.4	2.6	6.3
5	1.8	1.4	2.0	2.6	3.1	3.4	5.0	3.8	3.6	3.2	3.3	3.7	4.7	4.9	4.6	4.6	5.8	5.6	6.1	5.1	4.7	5.8	5.1	4.4	6.1	1.4	4.1
6	4.8	5.2	5.4	8.1	8.1	8.3	9.7	14.6	18.4	18.5	14.9	14.6	15.9	21.1	24.6	25.7	27.1	23.3	24.0	27.7	22.0	19.1	16.0	13.2	27.7	4.8	16.3
7	11.9	12.6	16.6	18.5	17.1	11.5	14.6	12.0	12.3	12.9	13.0	15.2	14.2	16.2	15.0	14.4	14.0	12.0	13.8	15.0	12.4	15.0	15.6	13.8	18.5	11.5	14.1
8	16.5	12.4	13.9	15.4	12.4	12.8	11.1	12.1	14.6	15.1	14.3	11.9	12.5	11.9	11.0	12.4	12.1	12.6	14.1	14.5	10.7	8.9	8.2	10.6	16.5	8.2	12.6
9	9.3	9.0	13.3	13.8	11.6	11.4	13.1	10.4	11.2	9.5	8.1	7.0	6.6	6.6	7.0	8.2	8.1	7.9	7.5	8.0	6.9	7.2	6.6	5.8	13.8	5.8	8.9
10	6.0	6.7	6.9	7.9	7.4	6.3	8.8	14.0	14.8	16.0	18.7	19.3	16.1	11.1	10.3	8.3	7.2	7.3	7.8	9.8	9.4	9.3	8.7	11.6	19.3	6.0	10.4
11	12.1	11.0	10.7	11.2	10.7	11.1	10.1	9.6	9.3	9.6	9.8	11.2	9.4	9.2	7.0	9.7	10.3	14.2	20.1	19.2	18.1	19.0	18.0	14.7	20.1	7.0	12.3
12	20.4	20.3	18.9	20.1	21.4	18.7	25.3	25.6	19.5	19.1	22.1	19.6	12.6	17.6	10.1	8.0	9.4	9.3	6.9	4.1	6.3	7.3	9.0	7.9	25.6	4.1	15.0
13	8.0	7.2	8.4	7.4	7.4	9.8	16.7	20.1	20.2	19.5	17.1	18.3	21.2	22.3	25.8	26.1	24.3	22.9	28.0	24.5	28.5	26.1	24.3	28.2	28.5	7.2	19.3
14	27.0	25.7	22.1	15.3	13.6	10.1	11.6	14.8	20.4	21.5	21.6	19.5	20.0	23.8	22.5	21.5	25.9	28.0	28.0	29.1	31.2	24.4	26.9	29.3	31.2	10.1	22.2
15	29.0	29.2	29.9	32.1	26.1	27.4	26.9	25.2	29.1	29.5	30.4	32.3	29.2	27.8	24.5	25.0	27.3	27.2	24.3	22.4	21.6	22.0	21.7	24.0	32.3	21.6	26.8
16	25.2	26.0	21.6	19.4	14.5	11.2	9.9	14.4	15.2	13.5	12.8	12.8	15.8	12.2	8.7	9.4	11.9	11.6	9.4	8.2	9.0	8.6	10.5	11.7	26.0	8.2	13.5
17	12.1	12.4	10.4	10.8	10.6	12.1	11.1	10.0	10.1	10.0	10.5	13.8	11.6	11.5	10.6	9.4	9.1	9.7	11.8	10.8	10.9	10.7	8.1	10.7	13.8	8.1	10.8
18	9.6	9.8	8.5	10.0	10.4	8.6	9.5	9.6	9.7	9.2	11.9	10.1	11.7	12.6	12.5	11.0	10.1	15.2	17.1	18.9	15.2	15.7	13.5	8.8	18.9	8.5	11.6
19	15.1	18.5	14.8	18.7	22.6	28.0	29.2	30.3	29.6	29.1	30.0	32.9	31.9	32.1	30.9	29.8	33.3	34.9	34.5	33.6	30.7	25.9	23.7	21.4	34.9	14.8	27.6
20	20.5	20.5	19.1	14.2	16.6	12.0	7.2	9.6	15.9	17.9	14.1	14.4	13.3	10.8	14.9	14.9	11.1	13.0	16.0	15.1	15.9	16.2	19.8	20.5	20.5	7.2	15.1
21	20.3	12.7	9.0	11.3	12.2	11.4	10.0	10.6	11.2	13.7	14.4	13.9	12.7	12.1	11.6	10.6	11.0	11.0	10.4	12.0	11.1	11.1	11.5	11.3	20.3	9.0	12.0
22	9.8	8.9	9.2	9.7	11.2	12.0	12.0	14.3	17.2	18.1	17.5	16.0	13.4	11.2	15.6	18.4	18.5	18.1	18.2	17.7	16.0	8.3	7.9	8.7	18.5	7.9	13.7
23	6.3	6.8	6.9	7.4	7.3	7.6	5.4	7.5	7.6	8.1	7.3	4.9	5.6	4.5	5.2	5.5	5.2	4.6	4.3	3.1	3.8	2.6	2.0	2.9	8.1	2.0	5.5
24	3.2	3.1	3.0	3.1	2.7	2.9	2.9	3.1	4.8	3.4	3.6	4.8	4.6	6.4	6.8	8.2	8.7	11.2	14.5	16.2	16.7	15.9	14.4	14.0	16.7	2.7	7.4
25	12.1	12.1	10.2	9.4	8.4	8.5	9.5	8.4	8.6	6.8	7.3	7.1	6.6	5.3	5.4	6.4	5.9	5.8	6.2	6.8	5.7	7.3	8.2	8.9	12.1	5.3	7.8
26	8.1	8.7	8.4	9.7	9.1	10.5	10.2	12.9	13.7	15.1	19.0	20.1	19.9	19.8	22.1	23.4	23.5	22.9	24.6	25.4	26.9	26.2	26.0	25.4	26.9	8.1	18.0
27	25.0	22.4	23.5	23.2	21.1	20.5	17.7	16.3	17.4	15.4	12.2	10.6	10.0	10.1	9.9	12.3	12.1	13.0	12.9	13.4	13.5	13.6	14.4	14.6	25.0	9.9	15.6
28	15.7	16.0	14.1	13.7	13.9	13.1	12.8	11.8	10.8	9.6	10.9	10.3	8.3	7.4	7.6	7.2	4.9	3.4	3.0	1.9	1.8	1.2	2.7	3.5	16.0	1.2	8.5
29	4.4	4.9	6.8	6.4	3.2	3.4	3.7	3.7	5.2	4.3	5.7	3.5	2.9	3.6	3.5	3.6	3.9	2.3	2.4	4.1	6.0	8.8	8.8	9.1	9.1	2.3	4.8
30	13.3	11.7	13.6	15.2	16.1	17.5	17.6	18.4	18.9	17.5	16.6	14.9	12.6	14.3	12.6	11.5	9.8	16.4	21.3	19.3	18.5	15.9	14.3	13.1	21.3	9.8	15.4
Max.	**29.0**	**29.2**	**29.9**	**32.1**	**26.1**	**28.0**	**29.2**	**30.3**	**29.6**	**29.5**	**30.4**	**32.9**	**31.9**	**32.1**	**30.9**	**29.8**	**33.3**	**34.9**	**34.5**	**33.6**	**31.2**	**26.2**	**26.9**	**29.3**	**34.9**		
Min.	**1.8**	**1.4**	**2.0**	**2.6**	**2.7**	**2.9**	**2.9**	**3.1**	**3.6**	**3.2**	**3.3**	**3.5**	**2.9**	**3.6**	**3.5**	**3.6**	**3.9**	**2.3**	**2.4**	**1.9**	**1.8**	**1.2**	**2.0**	**2.6**		**1.2**	
Avg.	**12.6**	**12.2**	**11.8**	**12.0**	**11.5**	**11.2**	**11.6**	**12.4**	**13.3**	**13.3**	**13.3**	**13.0**	**12.5**	**12.6**	**12.5**	**12.7**	**12.9**	**13.4**	**14.2**	**14.0**	**13.5**	**12.7**	**12.5**	**12.5**			**12.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.4	12.0	12.9	12.0	14.4	17.4	16.5	16.8	12.4	16.0	16.4	20.6	20.2	18.1	14.7	9.8	9.4	7.2	7.6	7.6	4.4	4.5	4.7	4.8	20.6	4.4	12.2
2	3.8	2.2	2.8	2.1	2.2	2.6	1.8	3.9	6.0	6.0	9.4	9.8	9.7	9.0	7.7	4.9	5.3	5.4	3.7	4.2	3.6	2.8	2.0	2.9	9.8	1.8	4.7
3	4.2	9.4	11.5	8.5	5.9	8.1	9.4	8.9	8.3	6.9	6.3	5.5	4.4	3.1	4.6	5.3	6.1	6.3	6.4	5.9	5.5	5.1	5.2	5.7	11.5	3.1	6.5
4	7.0	5.6	5.2	4.2	2.9	3.1	3.0	1.1	3.0	3.4	3.1	3.9	5.0	9.3	7.7	5.6	4.1	4.9	3.8	5.5	5.5	6.2	7.6	8.1	9.3	1.1	4.9
5	7.3	9.1	7.5	7.9	7.0	7.6	7.8	12.3	11.7	9.9	9.4	8.7	10.2	8.8	10.3	12.2	8.8	8.5	10.0	14.3	12.3	13.5	13.9	16.1	16.1	7.0	10.2
6	16.1	15.3	16.0	14.6	12.6	8.7	4.1	4.3	5.0	11.4	15.6	10.9	13.1	13.2	13.1	13.5	13.0	12.1	11.8	11.1	9.5	11.2	14.0	15.3	16.1	4.1	11.9
7	13.3	14.8	11.1	9.4	7.1	6.9	5.9	5.5	7.5	7.6	4.5	2.9	3.1	3.3	5.5	7.3	6.9	6.7	5.7	6.6	7.0	6.7	8.4	9.7	14.8	2.9	7.2
8	10.5	11.3	13.6	15.4	14.5	11.9	12.0	14.0	13.6	10.4	7.4	7.4	9.1	7.7	8.1	9.7	10.0	4.9	7.2	6.1	5.1	3.0	6.1	5.0	15.4	3.0	9.3
9	7.7	8.1	8.7	9.8	11.8	11.4	12.7	14.0	13.9	12.0	12.6	13.3	14.4	14.4	15.0	15.3	14.7	14.0	14.2	13.6	12.9	13.4	12.9	11.8	15.3	7.7	12.6
10	12.9	12.5	12.3	12.6	11.8	11.4	10.4	9.4	8.3	9.1	8.3	7.1	7.1	7.4	8.1	7.9	9.4	8.2	8.2	6.5	5.4	5.1	6.0	6.9	12.9	5.1	8.8
11	6.5	6.2	5.5	4.9	3.2	3.0	3.4	3.6	3.3	3.4	4.2	4.0	2.9	4.1	3.9	6.7	9.2	8.5	9.8	10.4	11.3	10.7	9.1	7.5	11.3	2.9	6.1
12	7.4	6.5	7.7	7.5	8.1	7.8	7.8	8.8	9.2	10.2	9.9	10.3	10.3	10.6	10.7	10.4	10.2	9.9	9.7	10.3	10.8	10.9	11.3	11.4	11.4	6.5	9.5
13	11.1	10.3	11.1	11.3	11.6	12.4	12.7	12.8	13.1	13.5	13.2	12.8	13.1	14.5	15.1	13.3	14.1	13.8	15.1	19.0	18.7	18.6	21.9	19.5	21.9	10.3	14.3
14	24.5	19.1	10.5	9.8	16.8	20.8	14.1	13.1	14.2	11.3	10.4	9.3	6.7	7.5	9.7	12.2	11.9	10.7	11.0	8.6	9.4	10.5	9.5	10.4	24.5	6.7	12.2
15	9.6	9.1	9.3	12.7	9.2	8.0	10.1	7.7	6.8	6.2	4.2	3.2	4.0	2.6	2.7	2.8	8.2	11.5	13.7	15.2	15.7	15.2	13.9	13.8	15.7	2.6	9.0
16	16.4	17.4	16.5	15.5	15.0	13.4	12.5	11.7	11.5	10.3	11.6	10.9	9.4	6.1	5.4	4.5	4.3	4.1	2.7	2.2	1.6	1.1	1.1	1.1	17.4	1.1	8.6
17	1.0	1.4	1.2	2.1	2.7	3.3	4.1	4.7	6.0	7.5	8.2	8.8	8.6	8.1	8.5	9.2	9.7	10.0	10.4	11.9	9.2	9.3	9.3	8.3	11.9	1.0	6.8
18	10.4	9.9	10.4	12.9	8.6	9.3	11.6	9.9	6.2	8.2	7.3	1.9	2.8	7.0	5.9	6.0	5.4	4.6	3.4	4.3	4.6	4.2	3.8	3.7	12.9	1.9	6.8
19	4.2	4.1	3.9	4.0	3.4	5.5	3.6	3.8	8.1	9.3	9.4	9.4	10.7	11.9	13.7	16.7	16.6	15.8	15.6	12.7	11.9	9.1	9.0	9.5	16.7	3.4	9.3
20	10.3	10.8	10.5	8.5	8.8	9.0	8.9	9.5	9.5	8.5	8.7	12.0	11.0	8.3	10.0	8.0	7.3	7.4	9.1	7.4	5.7	7.3	8.0	6.7	12.0	5.7	8.8
21	7.6	7.6	5.8	4.6	3.5	1.7	1.9	2.6	1.4	1.7	2.5	3.2	3.6	3.6	2.0	1.3	1.4	1.6	1.4	1.1	0.9	1.2	1.5	0.8	7.6	0.8	2.7
22	1.5	2.4	3.0	2.9	3.0	5.4	10.4	11.1	11.6	10.6	11.7	12.2	12.6	13.1	15.2	16.2	16.4	15.5	15.0	13.9	15.0	17.2	16.4	16.9	17.2	1.5	11.2
23	15.7	16.9	18.2	15.5	13.9	11.5	12.3	13.6	16.3	15.9	15.5	15.8	16.3	16.5	15.2	15.1	15.2	15.2	15.4	15.3	12.4	12.8	11.9	11.4	18.2	11.4	14.7
24	10.7	9.0	7.3	4.0	5.9	3.8	3.8	4.2	4.5	3.9	4.5	4.3	3.7	3.0	2.9	9.5	9.4	9.3	9.8	13.3	15.4	16.1	17.0	15.9	17.0	2.9	8.0
25	18.3	18.1	20.9	23.0	22.7	21.5	17.5	15.1	14.3	13.4	11.7	5.2	5.4	7.6	7.2	7.3	7.7	6.0	4.3	2.3	4.9	5.1	3.0	4.6	23.0	2.3	11.1
26	2.1	2.5	2.8	3.3	3.2	3.4	2.6	2.3	2.1	2.7	2.4	2.9	2.5	2.6	2.3	3.5	4.7	5.3	5.2	4.6	5.5	7.5	11.3	12.4	12.4	2.1	4.1
27	13.0	15.0	13.9	11.5	13.8	17.2	18.6	21.0	21.0	18.9	17.9	16.4	21.5	23.2	21.9	22.3	21.8	20.1	17.5	14.9	13.0	22.3	24.2	22.1	24.2	11.5	18.5
28	20.2	15.6	14.3	15.8	13.9	12.0	9.2	8.8	7.7	7.1	7.7	7.4	6.6	5.1	5.0	5.3	5.9	6.0	7.0	4.9	3.2	3.6	4.0	4.9	20.2	3.2	8.4
29	8.6	13.0	16.7	19.0	18.2	18.8	18.8	18.1	15.7	14.9	17.3	19.8	20.3	18.6	12.7	14.0	11.9	15.5	14.6	15.6	14.0	9.7	11.5	15.9	20.3	8.6	15.6
30	12.9	10.3	8.6	6.2	6.7	6.5	5.9	5.5	5.2	4.5	3.1	3.8	1.7	2.8	5.1	4.2	2.8	4.7	4.0	3.2	3.7	2.0	1.4	2.0	12.9	1.4	4.9
31	0.8	1.6	2.3	2.7	2.7	3.5	2.5	3.7	4.4	4.2	3.7	2.7	3.1	3.8	4.8	5.6	5.7	6.4	7.1	7.7	8.9	8.9	9.0	10.0	10.0	0.8	4.8
Max.	**24.5**	**19.1**	**20.9**	**23.0**	**22.7**	**21.5**	**18.8**	**21.0**	**21.0**	**18.9**	**17.9**	**20.6**	**21.5**	**23.2**	**21.9**	**22.3**	**21.8**	**20.1**	**17.5**	**19.0**	**18.7**	**22.3**	**24.2**	**22.1**	**24.5**		
Min.	**0.8**	**1.4**	**1.2**	**2.1**	**2.2**	**1.7**	**1.8**	**1.1**	**1.4**	**1.7**	**2.4**	**1.9**	**1.7**	**2.6**	**2.0**	**1.3**	**1.4**	**1.6**	**1.4**	**1.1**	**0.9**	**1.1**	**1.1**	**0.8**		**0.8**	
Avg.	**10.0**	**9.9**	**9.7**	**9.5**	**9.2**	**9.3**	**8.9**	**9.1**	**9.1**	**9.0**	**9.0**	**8.6**	**8.8**	**8.9**	**8.9**	**9.2**	**9.3**	**9.0**	**9.0**	**9.0**	**8.6**	**8.9**	**9.3**	**9.5**			**9.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
9														348.3	310.5	319.5	138.0	107.1	146.9	128.5	133.6	132.0	125.7	129.3
10	127.9	122.7	118.3	121.1	122.0	121.4	117.6	114.9	121.4	126.3	130.6	126.5	121.3	119.8	118.6	118.1	117.4	116.5	115.7	117.0	111.8	111.8	112.0	112.1
11	109.0	107.0	107.7	108.8	108.2	110.0	111.8	114.8	113.9	113.5	118.1	120.2	120.3	120.1	121.2	118.0	116.0	117.0	115.0	113.6	115.8	113.2	113.4	113.2
12	119.4	115.7	115.4	114.8	119.9	120.0	124.0	126.5	133.7	131.2	132.2	135.8	135.1	137.1	137.8	139.8	139.8	142.5	146.9	133.7	132.0	134.4	134.1	141.6
13	137.7	138.3	135.0	152.3	149.0	128.8	130.9	116.7	133.4	120.9	108.6	135.4	141.7	146.1	145.3	147.8	147.9	164.7	160.5	165.4	190.4	202.8	208.3	281.5
14	156.0	172.7	199.2	199.9	12.3	21.5	23.1	24.3	21.7	57.9	11.7	59.9	87.5	142.8	163.1	194.3	147.8	166.1	159.9	158.2	150.3	145.8	273.5	359.1
15	17.3	27.2	25.7	24.9	25.4	19.8	23.1	29.8	23.4	19.5	16.1	26.7	5.4	15.3	155.1	144.7	108.8	112.9	146.9	152.8	138.1	145.6	142.7	126.5
16	132.2	130.2	118.8	130.9	144.9	149.1	159.6	144.7	147.6	135.1	157.3	162.8	150.2	141.9	142.2	144.9	140.0	127.5	124.0	126.3	128.7	113.0	118.0	135.0
17	167.7	120.9	66.0	56.0	88.9	113.0	139.9	147.2	152.7	147.6	133.0	149.5	154.6	162.8	147.4	146.8	148.9	146.2	144.5	141.7	135.4	136.4	132.2	150.1
18	157.7	315.3	344.4	28.1	22.9	17.8	9.7	101.9	105.1	108.0	109.3	113.6	111.4	111.1	115.5	119.8	118.3	118.3	113.0	115.3	118.7	114.3	117.9	136.4
19	107.6	121.8	210.9	322.9	83.6	97.9	92.9	94.1	106.9	149.4	173.9	123.8	116.4	103.2	204.8	226.9	184.7	187.0	173.2	168.7	148.4	145.0	171.7	148.5
20	189.2	247.7	221.6	8.4	22.0	27.4	31.7	45.8	98.9	127.5	180.4	59.0	185.6	192.1	154.2	141.1	131.7	124.0	120.8	125.4	125.8	120.9	122.0	156.0
21	148.1	122.7	118.8	143.8	104.5	19.4	27.0	23.4	8.8	17.3	3.2	9.0	356.0	345.6	339.8	311.3	328.4	298.5	224.7	259.0	315.1	270.5	302.8	318.9
22	323.0	324.8	4.0	1.9	12.1	15.4	19.3	17.0	101.9	127.2	132.9	144.9	144.5	131.0	121.1	119.2	118.1	118.7	115.9	114.4	112.2	118.2	117.4	113.0
23	110.4	110.4	119.2	120.5	134.2	126.7	135.6	141.4	130.2	133.6	135.1	131.1	141.4	144.7	139.4	146.4	147.3	148.1	157.9	165.0	161.3	152.7	134.9	142.6
24	135.8	95.7	130.1	139.3	76.0	36.9	25.2	16.5	22.1	24.8	21.7	37.7	43.8	168.3	232.0	235.3	216.0	268.9	305.1	296.7	275.3	264.6	295.8	22.4
25	51.2	20.0	8.8	21.3	30.1	36.7	39.1	14.3	82.2	144.7	176.8	190.9	193.0	175.3	180.0	179.9	182.7	171.5	150.6	142.6	143.8	146.0	131.0	137.6
26	156.3	146.5	129.1	124.7	123.7	193.7	255.6	247.3	242.3	250.5	242.2	246.7	250.2	239.8	223.6	243.6	215.6	189.6	165.4	147.2	137.6	134.7	153.3	151.6
27	190.6	145.6	109.0	266.0	278.7	273.2	288.5	265.7	286.1	282.2	291.3	271.3	253.3	251.1	245.3	239.3	236.1	234.8	247.9	263.9	263.8	266.0	277.3	271.9
28	283.5	305.1	264.2	281.0	265.1	281.8	266.6	265.9	240.6	227.1	216.3	213.0	227.6	254.6	243.2	257.2	235.4	227.8	223.5	238.5	235.0	218.9	185.6	168.5
29	172.8	188.7	215.1	214.3	202.4	220.3	220.4	184.7	203.6	206.6	196.9	178.3	141.5	143.8	148.1	135.7	136.1	126.5	128.5	135.1	138.6	145.2	135.4	128.7
30	126.3	126.5	140.9	149.0	151.5	171.5	188.6	207.9	215.3	221.4	224.7	225.4	231.9	238.2	248.5	253.3	250.1	254.0	246.9	250.3	250.7	248.8	240.5	252.7

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	243.8	257.2	313.3	355.0	302.3	266.8	249.1	244.7	258.2	231.5	277.4	244.9	236.5	247.1	250.6	254.1	254.5	253.1	254.4	260.7	267.5	264.0	271.1	251.9
2	248.6	273.1	264.6	24.1	11.7	357.7	359.5	295.4	254.0	221.9	253.6	339.4	299.4	287.9	299.0	329.1	324.4	328.7	326.2	346.5	352.4	348.1	6.6	11.4
3	6.6	6.9	5.3	11.2	2.0	357.4	32.8	26.6	13.9	20.2	12.4	20.0	32.4	137.1	161.9	165.4	158.0	164.8	174.2	159.5	136.8	127.6	161.4	179.2
4	148.2	135.9	138.9	118.8	116.2	99.3	14.5	107.6	158.9	189.1	166.3	161.5	171.2	153.3	150.5	163.8	241.5	241.3	236.2	178.5	136.9	134.0	163.2	143.8
5	114.9	124.4	112.2	120.9	135.9	165.3	141.3	130.7	142.2	140.5	159.3	157.0	156.4	159.0	159.9	155.2	122.2	170.7	304.3	144.4	123.6	125.5	107.7	279.4
6	149.6	220.5	150.8	147.0	118.3	148.5	127.2	137.5	134.1	135.4	157.2	192.4	159.4	155.4	164.8	188.9	204.9	201.7	357.3	152.9	146.7	155.1	132.5	131.9
7	136.6	139.8	145.6	150.9	152.6	157.8	163.9	164.9	165.5	156.5	167.4	172.6	149.2	143.1	170.2	165.4	147.5	159.4	176.8	169.1	165.4	171.2	198.8	219.8
8	214.8	219.3	223.9	225.8	233.0	238.5	228.3	225.5	237.5	250.7	249.5	252.3	249.5	247.0	253.6	251.5	257.5	264.1	277.8	290.5	270.6	276.5	302.4	305.2
9	15.5	359.2	317.1	15.2	14.2	22.2	22.4	29.0	54.1	23.5	105.5	130.1	142.1	141.1	141.7	142.3	149.8	147.7	149.3	144.1	130.8	120.1	120.9	118.2
10	103.4	104.9	95.2	105.5	113.1	115.7	124.9	114.9	122.1	129.4	111.7	119.6	118.6	115.9	113.8	117.4	122.5	120.4	117.7	117.4	127.7	113.7	115.4	108.9
11	109.3	120.7	100.5	109.2	112.9	106.4	109.8	143.3	109.8	95.0	114.9	120.9	138.4	156.2	161.9	160.8	164.2	166.8	186.7	194.1	181.8	172.6	160.0	136.8
12	130.9	127.7	144.5	349.1	20.0	5.6	11.2	11.6	18.4	28.4	27.3	321.7	52.5	299.3	205.0	98.7	11.4	301.7	325.8	345.0	4.6	12.5	5.3	2.4
13	10.5	15.5	12.7	16.1	288.3	253.6	258.6	253.5	248.4	245.0	236.0	233.2	233.3	228.9	228.9	220.8	216.8	219.4	227.3	227.4	223.1	227.2	230.8	237.9
14	240.4	237.5	240.5	231.4	238.3	245.0	241.7	237.4	235.7	236.7	231.2	224.0	218.0	216.5	214.4	214.0	219.6	210.1	208.9	205.0	218.8	223.6	226.1	227.6
15	232.1	242.9	239.1	240.6	247.9	245.5	234.4	235.5	218.7	218.0	218.3	213.5	219.7	226.0	225.2	209.5	191.8	200.4	201.1	175.3	197.7	175.1	185.1	178.6
16	163.5	144.6	123.5	129.3	128.7	123.9	126.9	127.5	125.1	124.5	123.5	123.6	127.3	122.6	122.5	119.9	118.2	118.5	118.9	127.4	123.8	118.2	116.7	118.4
17	115.7	105.6	100.7	106.4	107.0	112.4	113.3	111.6	115.3	117.0	117.5	124.9	123.3	127.0	119.1	118.4	117.5	119.7	117.9	117.3	115.4	114.5	110.2	112.8
18	112.9	103.9	110.8	120.5	111.2	110.5	111.6	116.4	113.5	113.3	116.5	119.6	129.3	128.3	127.6	123.4	120.3	117.8	121.4	119.9	118.6	113.6	113.0	107.4
19	103.5	103.9	104.3	120.1	89.6	84.1	73.2	67.8	73.4	79.3	71.4	87.2	115.5	116.6	143.2	160.9	134.3	140.0	128.0	122.0	118.6	108.7	69.3	33.7
20	6.5	20.7	26.7	23.9	27.2	24.9	28.0	28.2	32.2	45.9	55.5	79.4	93.1	89.1	106.5	132.3	127.4	153.9	162.4	161.2	148.3	159.9	157.2	154.2
21	134.5	8.7	90.9	53.4	60.2	143.9	14.3	26.6	96.7	107.8	117.8	131.0	135.6	130.9	131.8	169.4	156.3	156.8	149.2	154.1	145.6	164.2	96.6	90.0
22	132.9	167.0	227.7	295.9	16.6	23.8	19.4	22.7	20.8	137.1	153.5	134.4	123.1	159.5	161.0	153.1	148.7	140.2	135.6	129.0	115.8	112.2	108.5	101.7
23	105.4	102.6	99.8	102.4	108.7	105.6	104.4	109.0	105.1	91.2	98.1	101.3	96.2	60.3	77.5	86.8	105.9	126.2	151.0	93.0	99.6	88.8	96.6	98.1
24	105.6	100.1	110.6	112.9	137.2	108.2	91.2	94.4	93.5	89.2	88.2	95.7	105.3	118.2	127.1	160.4	146.8	142.9	134.8	125.3	136.5	125.9	110.5	96.2
25	103.2	99.8	99.4	103.2	99.2	98.4	108.7	102.3	100.9	100.4	112.3	113.9	118.2	130.0	127.4	137.0	144.1	156.5	163.4	172.6	170.6	161.4	177.4	165.4
26	191.8	131.0	132.7	148.6	148.8	163.2	149.9	148.5	197.9	240.1	254.2	249.6	231.5	227.8	231.2	234.8	229.4	229.3	236.7	223.0	225.7	223.9	231.4	250.2
27	242.4	254.2	256.6	249.5	265.7	269.6	259.0	261.1	257.8	258.2	257.5	193.4	179.1	231.8	235.3	161.0	165.5	209.3	251.1	251.6	250.2	256.7	276.0	264.5
28	178.0	264.4	43.0	27.3	56.1	149.0	90.5	148.8	161.6	152.0	184.2	216.4	218.4	213.1	212.1	223.4	224.5	227.1	222.8	229.4	230.3	228.6	228.1	229.6
29	226.3	235.9	241.7	243.0	240.1	239.1	246.1	248.4	252.9	258.3	260.5	255.7	259.7	257.9	240.0	230.9	230.2	230.0	236.3	233.9	235.0	234.4	231.9	238.1
30	252.6	245.7	245.8	259.4	263.0	257.6	255.4	253.2	252.1	259.9	262.0	13.3	332.7	333.6	328.6	327.8	326.3	322.7	329.9	326.7	321.1	322.0	328.8	327.5
31	331.3	342.3	339.1	346.9	344.0	335.9	338.3	343.7	343.7	328.6	331.6	329.6	307.0	275.2	284.3	303.9	303.3	287.1	326.1	345.3	297.9	246.3	243.1	247.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	244.4	235.4	227.8	247.1	241.5	225.2	218.1	204.7	202.1	190.9	169.6	167.0	170.8	157.1	150.7	152.0	140.9	139.5	134.1	132.3	140.0	131.5	125.8	133.0
2	132.8	133.4	132.1	132.7	131.0	154.7	198.4	193.1	174.9	164.8	170.8	168.7	148.4	130.5	108.1	119.2	117.2	115.6	116.3	117.1	114.7	111.0	115.4	118.4
3	117.6	115.4	105.2	103.2	101.2	102.4	99.7	99.3	96.4	69.1	72.6	48.5	54.5	53.1	49.1	47.9	41.0	35.5	26.1	23.1	20.2	18.9	21.6	19.4
4	16.7	19.8	14.6	19.1	342.8	275.2	333.4	10.5	9.9	12.3	344.5	242.1	293.5	120.1	220.8	354.7	60.0	166.1	178.4	163.0	163.5	248.7	230.1	222.3
5	194.0	143.8	220.3	26.3	280.7	260.0	257.3	298.5	289.0	328.3	296.8	289.2	282.7	280.0	293.6	306.4	307.0	296.5	4.1	316.9	278.2	314.6	341.6	279.2
6	313.5	342.0	19.3	357.0	0.9	354.6	3.2	349.0	348.7	357.3	355.5	9.7	2.4	349.3	340.2	329.6	325.0	318.4	328.0	337.2	341.6	347.9	342.8	2.8
7	334.8	341.4	357.9	0.5	5.9	6.7	331.9	244.6	243.6	243.1	248.0	256.1	249.0	253.5	260.6	254.7	253.4	255.9	251.8	251.9	250.7	249.7	253.8	251.0
8	245.8	251.5	260.4	261.3	270.0	257.2	258.5	270.8	264.8	258.3	259.9	258.6	253.6	253.7	255.7	262.1	257.6	256.4	259.8	256.9	255.3	251.6	237.1	274.6
9	252.3	256.5	244.8	262.3	200.1	209.3	225.4	210.9	209.2	175.5	221.1	204.3	201.8	179.2	202.6	196.9	164.1	154.6	153.6	154.4	146.5	149.3	142.1	160.1
10	162.0	164.6	153.5	175.0	174.3	165.0	171.9	161.3	160.0	151.7	146.6	136.9	121.1	114.6	113.8	112.8	113.5	113.2	113.5	116.1	111.7	114.2	112.7	113.3
11	121.4	130.2	137.3	134.1	135.0	132.1	135.4	157.8	167.8	157.5	155.5	166.9	195.0	200.2	194.8	209.7	216.3	206.9	215.8	219.3	229.6	220.7	221.5	260.8
12	267.1	266.1	277.6	291.9	307.0	318.1	317.8	321.1	327.5	349.8	353.6	349.0	334.8	333.4	315.6	304.5	298.8	313.7	334.5	349.6	338.8	322.6	280.2	222.3
13	250.7	233.8	182.8	206.2	227.7	231.2	227.0	210.5	219.7	228.4	231.9	228.9	229.5	228.3	217.5	222.7	217.5	221.8	221.5	216.8	220.0	222.3	217.8	217.8
14	222.9	219.1	221.3	228.0	220.0	151.5	125.0	105.8	96.9	106.7	107.1	105.2	106.1	111.4	115.7	114.5	117.1	108.2	108.7	108.1	108.7	110.7	107.2	101.8
15	105.6	106.0	109.1	111.2	113.0	115.8	111.9	108.4	108.1	112.6	120.6	113.1	112.4	117.9	125.6	125.6	136.0	134.6	144.6	148.0	108.1	105.6	106.1	99.1
16	161.8	64.9	7.8	25.4	24.7	19.3	20.0	26.4	15.0	17.1	27.0	15.3	183.1	192.1	222.8	154.8	167.0	199.2	154.2	136.4	132.3	181.0	156.5	167.8
17	149.4	128.9	130.1	160.8	262.6	302.6	316.7	271.8	262.5	277.1	279.6	218.9	250.3	260.4	217.1	266.9	218.1	232.0	229.9	229.9	226.5	232.8	235.3	228.3
18	221.2	220.3	220.4	217.5	221.4	222.1	220.4	225.0	220.9	212.0	205.5	203.9	202.4	200.9	205.5	220.7	232.1	232.2	236.9	237.4	232.6	218.4	223.3	227.4
19	251.6	275.7	295.5	338.9	291.9	263.5	284.6	336.2	42.4	162.7	158.2	207.4	225.5	234.4	233.8	213.5	211.5	209.0	209.2	212.5	203.4	175.3	112.6	102.1
20	120.4	105.3	102.4	104.4	100.9	54.5	29.7	17.0	18.8	16.7	7.6	6.1	3.6	5.1	332.1	327.4	324.6	344.1	345.9	346.5	341.4	2.9	10.3	14.6
21	16.1	15.1	12.3	8.7	20.2	6.4	16.7	20.9	18.8	93.1	174.0	137.5	138.2	166.0	159.4	147.9	140.2	136.4	154.2	146.6	132.2	131.6	127.5	122.9
22	123.1	164.2	173.7	204.5	203.0	198.2	200.8	203.8	206.6	205.5	210.4	216.5	231.8	239.8	293.7	297.3	294.8	303.5	309.8	326.7	346.5	359.9	2.2	6.8
23	355.7	223.5	281.0	304.3	295.4	312.4	283.6	253.3	208.1	231.6	262.2	138.8	140.9	143.6	143.1	143.9	138.6	145.2	145.6	156.2	144.7	136.2	132.0	111.5
24	107.0	105.7	99.2	96.7	90.4	86.2	82.4	87.2	77.0	46.5	30.1	36.8	18.1	11.6	11.9	8.0	359.4	1.7	3.1	356.3	350.0	335.5	313.4	302.1
25	315.7	337.1	337.0	339.1	329.7	0.4	312.5	5.2	9.9	257.2	257.2	269.5	256.6	270.9	274.1	278.8	305.7	322.2	0.2	25.0	28.0	22.8	24.1	22.9
26	27.0	23.8	106.0	84.5	104.9	135.7	147.0	250.1	339.0	10.5	6.2	7.5	23.2	108.1	167.7	169.3	179.1	195.0	243.2	250.0	258.4	294.7	277.8	296.1
27	293.7	22.3	22.6	27.5	20.8	20.7	42.6	306.1	237.8	263.1	345.6	356.0	343.8	333.5	243.4	235.0	331.8	311.7	323.8	312.1	321.4	295.2	291.5	298.6
28	265.0	287.0	256.3	252.1	255.3	258.4	259.6	260.4	261.4	257.1	255.2	251.4	250.0	260.1	256.0	256.5	261.0	262.0	292.2	275.4	276.5	297.8	294.5	328.1
29	301.9	269.7	319.5	311.6	334.8	352.4	247.0	254.8	258.5	232.1	52.8	140.9	141.3	147.2	148.0	152.1	148.8	121.7	121.5	124.1	91.5	109.4	76.2	98.8
30	101.0	97.4	97.1	101.3	104.3	104.5	97.7	99.8	93.6	90.4	80.4	67.6	56.0	46.7	40.7	45.8	44.9	40.1	31.3	36.2	34.3	43.4	25.3	25.4
31	32.8	21.5	19.5	2.3	13.8	13.1	13.6	357.5	4.8	14.0	9.0	11.2	357.8	1.9	359.7	359.2	354.7	349.4	341.0	344.4	352.1	2.7	6.4	0.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	1.1	10.4	18.5	20.5	22.2	24.2	25.3	23.9	6.7	1.4	8.4	3.0	5.5	352.2	356.2	350.3	349.2	2.1	358.8	359.2	13.2	18.0	13.8	13.3
2	7.5	4.6	9.6	11.3	11.2	11.9	15.1	22.4	23.0	354.5	348.5	352.8	5.5	3.3	5.6	4.1	6.9	11.5	16.6	62.1	120.7	172.1	242.3	292.0
3	23.0	23.6	80.5	14.9	33.7	28.3	19.8	28.3	19.2	8.4	64.6	135.2	178.2	153.3	182.4	307.3	258.7	1.8	62.6	185.1	145.3	135.9	140.8	166.9
4	199.9	286.7	36.8	16.9	13.0	14.3	19.8	21.7	23.2	14.0	19.6	17.2	95.7	66.8	24.2	168.1	131.7	253.5	29.2	91.6	144.2	118.1	58.5	126.7
5	132.0	125.1	110.6	122.1	127.3	125.0	127.5	124.9	135.9	126.4	119.9	124.1	116.1	121.2	122.3	121.7	129.1	123.8	123.3	134.6	124.0	128.2	164.7	10.9
6	22.7	10.1	12.0	15.2	16.2	13.5	14.1	14.7	12.1	5.2	0.3	354.7	329.4	322.8	323.5	297.8	285.0	286.3	282.4	254.2	246.5	245.6	242.8	226.3
7	228.5	228.5	218.9	174.6	134.6	116.1	104.5	109.8	136.0	129.0	126.8	119.7	124.8	124.0	124.8	123.1	123.7	123.9	128.0	123.0	120.0	118.2	120.9	114.3
8	119.5	124.0	122.0	116.9	112.8	109.7	106.4	108.8	112.2	114.1	114.4	117.9	116.5	117.1	116.0	117.7	117.6	108.9	108.5	110.4	107.1	107.6	103.6	98.8
9	99.0	95.1	97.2	98.8	85.2	35.5	50.5	36.6	59.1	21.3	52.1	85.3	126.5	146.5	147.8	124.6	128.2	156.2	156.9	142.9	137.1	82.4	121.0	112.1
10	46.8	47.6	95.7	97.6	78.5	63.7	86.8	27.3	44.0	136.4	128.0	141.0	158.9	164.4	161.4	178.2	182.6	175.7	154.6	145.6	128.5	99.3	329.5	278.7
11	46.6	24.1	79.4	38.3	38.8	15.3	12.1	10.1	16.0	23.7	30.5	33.4	15.6	25.8	180.5	43.1	329.6	305.4	289.3	295.1	2.8	37.9	12.1	1.8
12	359.0	355.8	4.8	359.2	356.9	6.0	1.4	7.0	16.4	23.9	32.8	55.7	334.0	330.0	301.2	267.3	245.5	235.4	296.1	328.4	358.4	9.1	16.0	18.4
13	24.4	24.1	22.3	24.3	27.6	27.4	26.4	29.7	61.8	63.9	117.6	126.6	124.2	126.5	117.6	126.9	132.0	127.0	123.0	113.4	111.6	115.8	115.3	114.5
14	111.8	114.1	113.7	111.0	111.2	117.4	113.4	118.1	122.5	117.1	118.3	110.0	115.2	111.2	117.8	117.4	112.0	111.5	106.7	107.2	110.2	117.0	117.5	114.0
15	112.1	111.3	116.2	112.6	115.6	108.5	104.7	106.5	107.8	105.9	105.9	106.4	112.2	111.1	113.7	111.5	106.5	110.6	115.0	126.3	126.3	115.6	120.3	117.7
16	119.8	118.4	134.7	139.8	136.4	127.7	125.7	120.7	124.2	137.1	129.0	143.2	140.0	141.3	147.8	149.3	143.1	139.5	135.2	141.8	133.6	138.2	131.0	137.7
17	134.4	121.4	113.4	115.0	122.0	133.4	119.9	130.5	127.2	121.4	127.1	129.3	132.9	139.6	140.4	137.4	131.3	134.8	131.0	123.5	112.5	128.1	132.8	111.5
18	123.6	112.7	99.7	90.7	102.9	106.0	104.6	106.2	110.5	114.7	114.6	113.7	105.6	106.0	107.9	97.8	103.6	102.7	102.0	101.7	97.1	97.7	102.2	105.1
19	100.3	98.8	106.9	99.1	98.3	87.7	75.0	75.8	74.6	101.5	88.8	83.6	97.4	86.7	178.5	140.7	10.9	253.1	329.6	38.2	26.0	34.9	15.3	265.3
20	344.1	25.5	4.9	4.2	8.3	3.5	322.2	323.8	293.6	290.7	303.9	265.1	256.5	254.0	240.0	235.7	222.2	219.4	222.7	235.0	234.7	243.9	240.8	244.1
21	248.4	260.4	263.5	212.2	130.6	48.2	95.1	94.9	98.8	100.2	96.9	99.1	90.6	75.9	76.1	56.9	38.1	45.2	41.4	36.3	31.8	37.4	33.1	23.8
22	18.1	294.3	261.0	272.5	318.1	308.3	271.2	261.7	258.4	254.4	254.0	237.9	228.3	256.3	252.5	249.7	234.8	212.1	238.5	251.4	262.7	243.9	238.4	235.6
23	238.7	236.3	231.9	234.2	237.7	234.9	233.0	217.5	228.7	233.6	230.4	226.8	229.3	227.0	221.5	220.8	215.5	202.3	185.7	158.4	142.5	132.7	131.5	126.8
24	140.5	140.4	178.2	214.5	188.3	159.9	186.8	154.5	152.2	154.5	320.5	243.8	319.2	13.6	14.0	334.0	342.1	341.4	335.6	341.3	8.9	10.7	16.9	13.5
25	19.0	19.4	20.7	25.0	25.1	24.5	30.2	25.8	20.8	21.7	25.9	26.9	43.5	121.1	123.3	108.6	116.9	109.3	110.1	100.8	95.7	114.2	105.9	117.1
26	112.2	107.9	55.2	38.8	28.7	43.6	47.7	30.2	28.8	31.5	30.9	23.1	19.5	22.2	33.9	53.1	50.2	18.3	23.3	30.1	82.5	132.8	126.6	140.8
27	143.9	176.1	222.4	253.3	263.8	268.0	258.3	271.8	327.9	288.1	309.3	240.7	178.0	161.3	133.9	100.7	89.6	65.9	42.6	80.0	89.3	86.6	85.5	96.3
28	22.7	21.0	26.7	25.3	26.8	24.5	23.5	25.2	18.4	15.3	8.4	6.7	359.0	2.7	2.2	358.7	346.5	337.6	326.6	327.2	331.8	333.7	336.0	337.1
29	339.0	9.7	342.2	169.6	264.0	279.4	346.9	4.2	3.3	349.0	341.5	336.4	332.4	319.5	320.8	331.5	327.8	322.0	335.0	334.5	340.7	341.2	356.5	359.7
30	358.2	3.2	359.6	5.8	16.1	32.9	81.8	132.3	26.9	66.5	104.2	130.1	133.4	123.6	131.4	131.7	135.5	135.8	131.5	117.9	116.7	115.7	112.2	111.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	107.5	106.4	109.5	110.9	108.6	106.4	105.2	106.5	108.2	110.4	114.3	117.2	111.1	112.3	113.0	114.9	112.2	110.5	109.5	107.1	106.7	112.2	114.2	112.4
2	110.2	106.2	108.7	112.8	116.5	116.0	113.8	126.0	123.0	121.9	120.5	116.5	118.7	114.6	110.5	111.8	113.2	113.3	113.9	114.7	111.7	109.8	109.3	108.7
3	106.8	109.1	111.2	114.6	118.2	113.4	116.3	128.6	125.8	127.8	138.0	140.4	136.9	130.6	131.9	156.5	196.7	192.0	213.3	185.1	179.7	180.1	196.0	208.5
4	218.2	221.2	225.3	230.5	210.9	200.2	199.9	217.2	221.4	210.1	202.9	173.5	153.0	136.6	189.8	203.3	220.4	231.2	101.8	106.6	152.1	123.0	125.6	113.2
5	123.3	143.2	154.0	212.4	215.1	249.5	216.5	249.0	267.3	277.1	245.1	226.9	251.6	239.9	240.7	239.3	224.1	233.2	229.2	226.7	225.4	225.8	202.6	193.5
6	162.9	140.3	132.5	114.0	106.8	112.4	119.7	118.3	125.8	136.1	151.4	164.0	143.0	129.2	127.8	129.9	121.4	124.0	130.5	118.2	113.3	112.6	117.6	114.5
7	112.9	113.6	110.3	110.7	108.3	107.6	110.6	110.3	111.2	118.9	118.2	119.9	122.1	119.8	116.1	112.7	113.4	115.1	117.1	116.4	120.4	121.9	120.2	122.0
8	124.1	116.8	111.3	111.7	110.0	110.2	109.9	107.9	107.1	105.4	108.6	109.7	105.6	110.5	112.9	113.1	112.4	110.1	112.1	112.4	112.3	104.9	106.0	113.2
9	111.6	110.7	111.4	111.4	113.2	112.3	111.4	113.3	113.4	115.0	122.1	120.4	116.6	116.5	120.3	120.4	116.8	115.6	161.9	217.6	229.1	236.7	233.2	235.2
10	234.0	261.3	225.5	161.0	115.4	122.2	97.8	123.6	131.3	129.4	115.0	116.3	124.9	131.4	136.6	137.4	143.7	159.1	172.8	179.9	185.0	170.5	179.7	190.8
11	194.1	206.5	191.6	209.1	185.6	207.5	211.9	208.8	202.9	190.5	201.4	218.2	194.3	196.7	220.4	231.1	212.6	209.1	180.0	132.8	137.0	138.1	112.0	88.0
12	83.4	92.6	15.0	28.3	36.7	84.8	100.0	103.2	118.0	124.6	133.9	109.4	107.3	114.8	111.0	105.0	112.2	109.4	101.3	98.2	101.8	103.6	101.5	96.1
13	89.6	83.9	64.6	34.0	27.8	24.0	24.1	30.7	25.9	20.6	21.3	17.9	14.4	29.5	17.7	5.5	0.3	15.9	9.0	17.2	4.8	8.9	14.1	10.2
14	9.0	17.3	9.1	7.7	11.5	12.5	8.4	311.7	261.3	275.9	254.4	253.7	245.3	252.0	273.3	268.7	284.9	294.9	346.9	6.7	11.9	11.7	9.2	19.8
15	25.9	25.7	26.5	31.7	27.2	99.5	127.0	120.5	139.0	144.6	134.2	137.6	137.2	141.4	141.8	145.7	149.6	142.0	142.3	147.1	137.7	135.2	126.8	120.3
16	129.5	141.9	134.4	135.9	136.2	136.8	128.9	125.2	116.3	124.4	135.2	149.5	156.9	147.2	130.8	121.8	118.4	117.0	114.4	114.7	117.7	114.5	119.2	133.4
17	122.2	130.9	121.9	125.1	111.5	115.2	122.1	121.7	115.6	112.7	121.2	123.5	127.5	124.2	128.4	124.4	123.4	120.9	113.5	117.4	115.5	113.5	115.9	114.9
18	109.9	118.4	109.4	105.1	105.5	98.9	100.6	99.2	101.9	102.8	111.1	108.4	54.3	14.6	2.0	351.6	270.4	259.9	271.0	292.2	302.3	258.0	255.6	257.7
19	251.2	244.9	231.2	168.4	223.7	228.5	218.6	172.3	170.4	158.0	149.7	144.3	142.9	125.9	124.4	132.0	113.7	206.2	285.1	236.6	229.1	148.5	150.4	174.2
20	212.8	196.9	207.4	197.7	211.0	217.0	205.1	230.3	218.8	204.6	146.2	139.2	354.5	114.9	77.6	83.0	90.2	80.0	47.7	23.4	21.5	21.2	21.9	24.9
21	22.2	349.8	322.4	0.3	6.5	2.5	3.1	357.1	353.5	358.3	337.4	306.6	318.3	321.9	308.6	296.4	341.3	6.2	20.4	23.8	24.6	25.9	18.8	9.2
22	13.5	23.6	30.5	28.6	26.5	24.1	24.8	24.6	26.0	21.7	25.8	28.5	344.1	235.1	224.6	35.4	13.8	17.7	24.2	27.2	10.1	16.4	16.2	12.0
23	22.7	11.9	6.3	13.4	14.0	5.3	357.3	4.4	10.0	2.6	0.9	358.3	358.0	352.5	329.7	329.3	338.6	351.6	359.7	18.0	17.9	36.5	41.1	79.9
24	97.7	84.7	35.5	81.5	84.3	85.8	93.1	80.8	72.2	62.3	52.3	44.9	34.6	21.6	18.3	10.6	5.3	2.5	1.7	355.3	350.4	354.7	356.3	356.5
25	354.2	345.2	348.0	353.3	352.1	338.2	337.6	331.3	333.1	328.7	330.5	333.8	330.3	327.1	322.8	322.9	325.3	325.0	327.6	326.5	328.9	329.4	331.1	329.6
26	334.0	331.6	334.1	344.3	347.9	344.7	339.4	338.7	343.1	350.2	355.0	356.7	359.1	358.3	359.8	357.0	2.4	357.6	353.3	356.7	354.1	357.5	3.3	6.1
27	5.3	3.4	357.6	1.1	1.1	1.8	9.5	359.5	9.5	18.6	31.0	20.0	9.9	357.7	336.9	330.8	318.5	271.8	283.0	256.8	285.3	266.3	265.3	282.8
28	288.6	321.7	32.0	29.4	34.4	40.8	44.7	94.9	97.9	76.9	99.5	98.6	136.5	134.7	138.5	139.6	135.0	135.7	139.2	131.2	137.1	135.4	129.4	132.5
29	150.9	156.8	166.3	197.5	215.8	216.8	218.6	220.4	219.3	219.6	219.5	206.8	209.6	214.2	210.0	216.2	220.4	226.8	231.0	235.2	236.7	233.5	239.3	240.0
30	241.5	239.9	242.3	270.3	263.1	256.7	261.5	256.9	257.3	257.4	257.4	337.6	309.8	311.5	330.3	335.4	337.6	340.3	344.5	0.3	1.1	1.8	1.6	4.6
31	4.9	10.6	354.4	357.7	1.9	2.0	3.7	7.2	7.5	9.9	9.1	4.8	4.2	4.3	2.7	0.2	0.9	4.9	19.0	9.9	10.3	11.1	7.9	18.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	17.7	15.7	14.4	22.8	16.7	27.4	17.6	19.3	13.6	17.5	16.2	17.4	14.9	7.4	10.0	7.0	2.7	3.5	6.7	9.5	10.5	1.9	9.7	15.7
2	16.5	19.6	23.2	22.3	23.1	23.7	27.5	26.4	26.1	26.2	28.1	25.8	25.6	22.3	20.1	19.7	15.0	13.1	16.2	12.0	19.4	16.7	20.5	21.5
3	19.3	21.4	24.7	25.4	27.9	21.4	23.8	23.9	24.6	24.5	24.4	20.0	20.0	20.2	18.1	19.2	11.4	13.0	5.2	4.0	18.5	15.2	29.8	22.0
4	18.0	21.8	16.5	20.6	12.6	15.8	13.0	15.0	15.2	16.2	7.6	12.5	25.1	24.9	22.0	22.5	17.7	23.9	24.9	25.7	24.7	25.1	29.6	33.6
5	56.3	92.6	38.7	28.6	32.0	33.2	13.3	16.5	26.1	30.2	27.3	25.6	20.2	21.7	20.5	14.1	25.7	17.4	21.3	14.0	16.7	20.8	23.3	21.1
6	30.1	18.4	19.3	13.7	7.0	6.0	5.9	5.4	8.0	11.5	10.2	9.9	14.0	8.6	3.3	1.9	1.9	5.8	3.7	1.0	3.0	2.8	3.6	0.7
7	356.0	355.9	351.7	345.4	345.6	337.7	331.2	336.5	341.5	338.0	334.4	334.0	335.1	331.5	332.1	332.2	331.6	336.6	342.1	346.1	341.5	353.1	347.6	358.7
8	5.4	359.1	359.8	0.6	11.4	6.6	8.5	5.3	2.1	4.0	4.5	7.4	0.5	358.2	355.9	356.3	355.1	353.0	358.9	0.2	1.8	359.8	358.4	359.1
9	355.4	358.9	11.1	357.8	3.0	13.7	7.7	14.8	16.0	14.2	16.7	16.4	13.9	19.9	22.8	18.0	13.9	15.0	20.9	21.0	21.9	25.3	24.6	21.5
10	18.3	21.0	21.8	16.0	10.7	11.2	10.5	22.2	18.7	14.4	10.3	14.4	19.2	16.8	16.9	16.6	22.8	22.4	16.3	17.1	16.8	13.3	15.7	18.2
11	20.4	17.2	21.2	14.6	16.6	17.9	14.9	11.9	13.0	15.6	9.8	8.6	10.4	13.7	358.3	0.5	6.9	13.5	5.0	8.5	13.2	14.4	13.5	13.1
12	11.5	7.0	9.8	6.6	7.8	13.4	2.3	0.7	5.1	7.6	9.4	4.9	7.0	1.3	352.7	344.2	345.3	336.3	333.3	348.1	327.8	308.8	315.4	315.4
13	318.7	317.0	320.1	322.3	324.3	336.3	349.3	350.9	350.4	349.2	1.9	1.8	357.7	3.2	353.5	349.5	355.9	358.3	354.9	356.9	352.8	0.4	1.2	350.9
14	350.7	349.3	346.6	345.4	343.6	338.2	331.3	319.3	312.6	308.0	317.2	338.8	346.4	344.0	345.5	347.6	343.0	342.7	345.5	349.6	348.9	0.1	359.3	357.2
15	0.5	1.5	359.2	1.3	3.6	3.4	2.1	4.2	2.5	2.2	1.4	359.7	2.3	1.7	0.4	1.5	359.8	0.9	359.8	2.0	2.7	1.8	357.2	0.5
16	4.9	7.6	0.3	359.7	357.9	354.3	359.9	7.1	13.9	8.1	11.0	15.2	9.7	9.7	13.6	13.2	11.8	10.2	20.3	23.3	24.5	18.6	11.1	5.7
17	10.4	13.1	11.8	25.4	20.3	17.6	20.8	27.8	20.5	20.5	17.9	18.4	14.0	16.6	13.7	13.1	18.6	17.1	13.4	12.7	18.4	12.9	14.7	17.4
18	17.0	21.1	21.8	27.4	25.2	18.4	15.4	17.7	16.8	16.7	21.6	17.9	21.3	18.9	17.1	9.1	346.4	1.9	3.6	2.9	7.4	0.8	334.7	343.6
19	359.1	354.9	9.3	4.2	12.0	2.2	2.3	1.6	2.9	1.0	1.5	358.3	0.9	1.2	2.5	2.2	1.8	0.7	0.2	3.5	1.3	359.5	356.0	5.1
20	6.1	0.2	1.4	351.1	0.9	4.7	5.7	9.9	0.9	4.9	20.9	20.6	21.4	26.7	27.2	3.1	7.2	21.8	6.1	11.0	14.1	11.4	1.1	3.6
21	3.7	9.4	11.3	16.1	16.8	10.3	16.7	14.1	5.4	2.2	0.1	1.5	4.7	359.9	354.9	355.8	346.3	343.3	348.2	347.2	348.6	348.7	352.1	351.7
22	347.3	349.3	343.4	353.3	0.7	7.0	5.4	6.6	15.9	12.7	8.2	12.1	14.7	9.3	6.0	11.9	11.7	7.1	10.6	15.3	15.6	23.2	22.5	14.5
23	15.0	13.7	2.0	2.1	16.9	23.4	24.5	17.4	11.8	16.8	19.8	26.8	27.0	25.0	25.8	27.0	27.2	29.6	28.5	23.6	25.6	33.9	38.8	35.0
24	32.9	31.3	45.4	62.9	61.8	49.4	60.5	69.1	90.8	86.7	100.3	107.6	99.3	107.4	106.1	107.1	103.6	102.7	103.1	102.4	100.4	98.8	102.1	100.9
25	99.8	94.8	96.3	95.1	96.4	104.8	108.8	104.2	101.8	100.5	95.3	107.8	121.9	126.3	133.2	123.8	134.7	134.0	129.8	129.3	125.2	121.7	124.8	124.1
26	119.9	118.9	117.2	123.6	125.8	126.9	125.6	120.7	119.3	114.9	114.8	114.6	117.8	117.4	116.4	115.4	113.5	111.5	109.4	110.8	114.0	114.0	114.2	118.5
27	121.4	116.2	118.6	118.4	117.0	119.2	122.3	119.3	118.3	118.9	125.3	128.7	130.3	130.1	123.8	123.7	119.7	118.7	118.9	115.9	117.4	116.0	114.1	114.4
28	117.1	117.6	115.8	113.8	111.8	110.4	110.3	108.6	106.6	105.7	111.1	110.5	109.8	102.9	101.4	107.0	104.2	85.1	90.6	29.7	136.9	325.8	11.7	15.7
29	12.6	15.8	12.1	8.1	347.9	345.0	3.4	354.4	358.4	357.3	3.6	4.5	20.0	23.5	23.4	30.2	29.4	49.2	101.6	93.5	118.2	117.7	125.1	139.4
30	125.7	125.9	125.8	117.5	116.8	115.6	117.2	117.7	116.3	114.3	115.3	121.7	141.3	157.5	179.6	191.9	239.0	319.9	334.2	335.1	337.2	338.4	332.8	331.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	332.4	330.8	330.0	332.7	340.4	345.0	346.7	349.2	25.5	17.6	21.3	9.5	6.9	6.6	8.2	18.1	12.9	19.9	21.5	23.8	18.3	17.0	22.2	18.8
2	26.9	24.6	54.0	50.5	108.3	107.5	82.8	19.6	23.9	35.2	42.6	44.1	69.1	67.4	65.7	34.0	74.0	61.7	11.1	8.2	10.1	7.9	42.6	19.0
3	12.5	22.6	26.6	33.2	35.5	26.9	24.7	24.4	20.8	21.3	20.8	23.5	20.2	11.2	16.0	24.7	25.1	21.8	15.3	28.6	32.1	31.6	12.0	22.5
4	14.1	10.0	18.5	22.3	22.6	30.0	29.9	75.0	27.9	25.5	22.3	16.5	79.7	94.5	110.3	129.2	131.3	122.5	131.0	118.9	116.9	114.5	122.5	118.5
5	95.7	102.6	102.1	96.0	94.2	99.3	94.2	85.1	88.3	96.7	81.0	76.1	74.5	75.1	97.1	105.3	89.8	67.2	34.6	49.4	44.0	39.9	43.2	50.9
6	49.8	48.3	50.0	51.0	46.5	51.5	92.8	87.2	95.6	104.4	109.0	107.7	105.8	103.4	105.5	103.5	102.0	99.0	100.8	94.0	102.1	104.3	107.8	111.9
7	102.1	106.2	106.2	101.2	102.2	105.0	83.0	65.4	71.3	78.1	81.7	54.5	74.5	44.6	59.6	51.5	68.8	79.7	91.1	85.3	95.3	92.5	102.1	101.3
8	100.6	101.5	102.7	107.7	103.8	103.1	110.0	117.9	117.7	127.8	120.2	116.8	105.9	94.0	94.1	85.0	77.3	54.0	21.6	5.0	94.6	74.5	57.1	77.0
9	91.6	104.1	99.1	94.9	92.0	89.4	92.4	93.7	96.2	96.1	95.1	99.8	94.4	94.5	96.1	93.6	93.6	96.2	98.0	98.3	102.9	103.8	104.8	103.9
10	111.6	109.0	112.6	115.1	120.5	121.3	125.6	124.7	122.5	123.6	124.5	129.5	126.8	128.9	121.8	114.2	109.8	111.9	113.5	108.1	106.9	96.1	88.7	95.7
11	93.0	92.7	84.0	83.8	28.5	17.5	23.2	25.6	24.0	30.7	20.5	26.0	8.4	18.3	17.0	14.2	16.9	20.9	24.3	18.2	21.2	28.1	30.2	21.2
12	24.3	17.4	22.7	23.2	26.0	21.2	19.2	27.6	22.8	24.9	17.3	20.5	18.6	16.5	16.2	17.9	8.6	10.2	8.1	3.5	2.5	3.8	358.6	0.6
13	0.1	352.8	353.3	350.9	352.4	356.3	359.2	359.8	358.6	350.4	354.7	356.2	355.2	356.8	1.0	0.1	359.3	357.8	356.0	353.1	2.0	352.1	0.7	10.2
14	355.3	5.0	13.1	355.2	344.2	353.2	351.0	8.5	3.0	346.8	341.7	331.4	337.2	328.8	332.8	335.6	338.1	334.6	334.7	329.4	333.5	336.3	328.8	331.0
15	331.2	326.2	326.3	343.4	343.1	356.1	6.0	20.8	26.3	23.7	26.7	27.0	22.8	24.3	35.6	69.4	105.7	107.3	110.6	110.0	113.2	115.4	117.3	110.5
16	112.6	114.5	116.8	119.2	119.7	124.4	122.8	122.6	125.9	132.2	136.0	140.4	142.5	140.8	143.1	141.8	129.7	123.4	106.1	108.0	46.7	18.2	23.3	27.2
17	18.6	13.2	10.8	16.2	16.1	11.6	14.6	13.1	16.4	15.8	17.4	15.4	13.8	19.3	17.9	6.3	6.7	9.2	10.9	2.1	5.6	0.1	359.2	0.7
18	354.4	330.2	325.9	331.0	355.7	358.7	350.1	348.5	23.3	8.4	351.4	321.5	354.8	6.4	18.6	11.9	18.8	12.5	17.8	22.3	26.9	26.0	28.7	28.5
19	29.2	27.6	29.2	49.7	53.9	66.5	17.8	27.0	14.6	17.0	15.7	15.6	19.5	15.8	17.3	23.6	16.4	21.2	15.4	22.4	22.4	18.3	13.8	17.8
20	24.9	21.4	19.4	11.9	14.8	22.0	22.5	20.2	23.5	9.4	3.1	7.7	14.8	6.9	16.7	8.3	6.9	14.8	15.0	19.7	7.6	22.3	25.7	14.1
21	20.1	19.3	9.9	5.9	0.4	306.1	294.0	268.6	325.5	166.7	267.5	277.3	255.9	255.3	243.9	245.2	146.2	124.3	114.5	168.0	185.1	326.3	275.7	284.2
22	26.1	22.1	20.8	16.0	23.1	19.7	19.8	19.9	19.6	18.0	21.1	21.9	19.6	21.8	21.1	17.5	14.6	15.6	12.8	23.6	23.6	17.3	11.2	10.4
23	20.3	15.2	18.3	20.7	23.1	13.8	5.6	12.3	10.3	12.2	12.5	13.5	14.9	4.2	16.8	13.4	16.8	12.5	17.8	19.3	16.3	17.5	15.3	14.4
24	19.5	18.1	26.9	20.5	26.1	29.8	13.1	12.4	9.9	23.1	7.1	13.5	12.4	6.3	355.5	10.9	12.2	13.7	10.6	8.0	12.2	20.9	21.3	22.0
25	1.4	359.0	0.6	357.2	358.9	6.4	18.8	1.1	4.5	5.6	10.4	13.1	3.5	13.8	4.8	7.4	11.9	351.6	6.3	287.1	296.2	309.8	337.3	22.1
26	338.8	352.1	344.8	3.1	7.9	10.4	2.9	13.4	12.5	24.4	23.6	30.2	26.5	29.8	27.0	22.1	21.4	20.6	21.9	23.6	36.1	67.4	89.2	96.6
27	101.1	103.5	94.5	84.2	86.0	90.2	87.3	90.1	90.6	85.7	75.7	50.0	39.5	41.7	37.5	38.8	41.9	36.4	33.1	42.8	86.4	104.6	114.2	117.5
28	116.9	116.5	113.8	115.0	119.2	111.5	107.0	123.7	124.3	126.0	124.5	120.0	126.2	134.0	120.5	113.3	97.1	101.3	102.5	82.5	22.3	25.2	23.9	20.2
29	16.2	9.4	12.8	6.8	358.3	354.3	352.4	355.9	7.6	29.4	17.6	351.5	357.5	0.3	6.7	357.2	349.0	358.0	340.6	343.7	352.4	349.7	346.5	343.5
30	346.3	354.3	0.1	349.9	343.4	341.0	334.0	334.8	347.1	346.6	5.2	9.1	332.6	219.7	246.1	243.1	239.0	250.2	262.0	254.7	257.7	248.7	241.4	251.7
31	290.8	21.1	18.2	19.8	24.4	23.7	33.2	26.8	16.7	20.3	33.8	40.6	56.8	47.7	18.3	53.4	14.7	11.7	13.8	13.6	15.9	21.0	25.1	22.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														19.9	19.6	8.9	48.1	15.9	35.5	5.5	6.3	6.3	5.7	4.8	48.1	4.8	16.0
10	4.9	5.0	5.3	4.7	5.0	5.4	5.3	5.1	5.5	6.3	6.0	6.0	6.1	6.6	5.9	5.9	6.3	5.6	5.4	4.7	4.8	4.7	4.3	4.7	6.6	4.3	5.4
11	4.9	4.5	5.0	4.9	4.8	4.9	4.8	4.8	5.0	5.2	4.9	4.9	4.8	4.9	5.1	5.3	4.9	5.2	5.1	4.6	4.5	4.4	4.5	4.8	5.3	4.4	4.9
12	4.5	4.5	4.6	4.2	4.1	3.9	4.3	4.8	4.9	4.8	5.0	4.8	5.3	5.0	6.3	6.3	6.4	5.5	4.7	4.7	4.6	4.5	4.3	4.9	6.4	3.9	4.9
13	5.0	4.9	4.1	5.0	9.0	7.7	7.0	15.7	11.7	7.1	12.7	14.4	13.5	13.8	11.6	11.8	11.3	10.4	12.5	11.2	8.6	8.3	26.5	11.2	26.5	4.1	10.6
14	20.9	21.1	39.7	17.9	5.1	4.7	5.3	7.4	26.8	21.9	11.4	15.9	25.2	28.4	26.0	16.4	48.0	21.7	12.4	8.8	13.0	11.7	20.0	13.0	48.0	4.7	18.4
15	3.3	3.5	3.4	3.8	3.5	8.8	7.5	7.3	5.9	11.8	11.8	17.2	13.9	16.0	22.9	13.5	15.0	5.3	7.1	6.4	3.8	33.3	6.8	14.5	33.3	3.3	10.3
16	11.7	7.5	8.1	7.8	7.0	4.7	9.2	4.6	5.3	4.2	10.0	5.3	6.2	6.0	5.0	5.6	5.2	5.1	4.3	5.2	5.2	5.8	5.9	13.3	13.3	4.2	6.6
17	43.7	26.7	30.1	13.3	5.5	7.6	6.7	5.0	10.3	7.7	15.0	10.5	12.0	8.3	7.0	7.6	7.4	5.8	5.5	5.1	4.8	5.2	5.8	6.5	43.7	4.8	11.0
18	21.0	19.8	17.0	11.2	6.6	11.2	13.8	7.4	7.5	6.3	7.1	5.7	5.1	6.0	6.5	6.1	5.8	5.6	5.1	5.2	5.5	4.4	4.9	6.0	21.0	4.4	8.4
19	6.7	27.0	13.4	29.8	12.4	4.7	4.7	7.5	12.3	47.1	19.4	43.6	33.4	60.1	35.9	19.7	25.9	20.2	13.0	8.0	5.8	5.0	17.6	12.8	60.1	4.7	20.2
20	34.5	22.5	13.9	15.6	16.7	12.1	9.2	32.8	73.2	34.1	37.6	59.0	30.4	26.4	8.9	6.9	4.9	6.0	5.2	7.4	7.6	4.4	5.2	31.8	73.2	4.4	21.1
21	23.7	7.0	9.7	25.0	30.1	22.4	5.7	7.6	12.4	16.1	18.6	23.4	35.7	23.8	36.2	58.9	11.4	22.9	8.7	11.9	21.2	5.9	13.1	11.2	58.9	5.7	19.3
22	4.8	6.0	7.2	7.5	3.8	4.1	3.9	4.6	20.7	6.1	8.0	11.1	11.5	7.2	5.5	5.2	4.4	4.3	5.1	4.9	4.6	4.4	4.6	6.6	20.7	3.8	6.5
23	4.6	4.2	4.3	4.8	8.6	5.9	5.4	5.2	6.3	5.5	6.1	7.5	7.9	8.0	10.5	10.4	9.9	12.0	9.6	9.2	5.0	4.3	4.2	4.2	12.0	4.2	6.8
24	9.0	12.7	3.9	29.7	39.2	8.8	6.3	14.9	15.8	18.3	19.4	15.8	44.1	28.8	20.7	17.7	23.6	27.7	9.6	6.3	14.3	8.6	10.9	18.9	44.1	3.9	17.7
25	12.7	4.9	7.2	4.5	8.4	11.7	42.5	27.3	29.6	21.0	18.7	27.9	21.9	14.7	11.7	12.4	13.2	13.0	7.0	4.8	4.4	7.5	5.8	5.6	42.5	4.4	14.1
26	5.6	6.2	5.6	5.8	11.6	22.1	11.4	8.3	10.7	9.1	10.3	15.0	15.3	14.7	14.5	22.8	32.2	15.6	8.7	6.3	6.1	4.8	4.8	10.4	32.2	4.8	11.6
27	14.7	20.4	30.2	21.8	12.7	25.7	28.6	20.9	32.4	46.2	26.5	27.8	20.5	22.3	15.1	18.6	18.1	13.9	12.2	8.0	4.9	4.6	6.6	11.1	46.2	4.6	19.3
28	10.2	12.5	13.5	15.0	11.2	12.8	7.7	7.3	12.2	11.1	7.2	9.4	8.6	10.0	11.9	9.2	9.4	8.3	7.5	7.4	7.2	7.6	8.9	14.6	15.0	7.2	10.0
29	10.9	10.6	9.2	40.1	19.6	12.2	29.1	12.9	10.7	8.7	11.2	20.6	16.4	11.5	9.9	8.7	6.1	5.7	5.6	4.9	5.2	5.5	4.6	4.6	40.1	4.6	11.9
30	4.3	4.5	7.8	6.5	4.7	5.3	7.2	4.8	8.0	5.6	6.5	6.7	8.9	9.8	11.1	8.3	7.0	6.8	8.6	8.8	6.6	5.6	5.6	8.1	11.1	4.3	7.0
Max.	**43.7**	**27.0**	**39.7**	**40.1**	**39.2**	**25.7**	**42.5**	**32.8**	**73.2**	**47.1**	**37.6**	**59.0**	**44.1**	**60.1**	**36.2**	**58.9**	**48.1**	**27.7**	**35.5**	**11.9**	**21.2**	**33.3**	**26.5**	**31.8**	**73.2**		
Min.	**3.3**	**3.5**	**3.4**	**3.8**	**3.5**	**3.9**	**3.9**	**4.6**	**4.9**	**4.2**	**4.9**	**4.8**	**4.8**	**4.9**	**5.0**	**5.2**	**4.4**	**4.3**	**4.3**	**4.6**	**3.8**	**4.3**	**4.2**	**4.2**		**3.3**	
Avg.	**12.5**	**11.2**	**11.6**	**13.3**	**10.9**	**9.8**	**10.7**	**10.3**	**15.6**	**14.5**	**13.0**	**16.8**	**16.5**	**16.0**	**14.0**	**13.0**	**14.7**	**11.0**	**9.0**	**6.8**	**7.0**	**7.1**	**8.2**	**10.2**			**11.8**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.8	5.8	16.5	8.0	18.6	6.0	6.1	6.7	34.9	15.3	29.1	31.1	28.3	30.0	19.7	14.6	7.6	7.3	6.9	5.3	5.7	4.1	7.5	25.7	34.9	4.1	14.6
2	9.3	8.1	17.3	15.7	6.1	6.9	8.9	24.1	33.9	17.0	28.7	18.5	15.1	17.4	17.5	17.8	13.5	10.1	7.5	6.8	5.5	4.4	2.8	2.8	33.9	2.8	13.2
3	4.1	4.8	4.2	4.6	18.4	10.4	6.6	4.6	6.2	11.1	10.5	16.0	23.8	43.2	15.3	13.1	10.2	9.2	8.5	8.6	4.1	2.9	7.0	15.2	43.2	2.9	10.9
4	6.4	4.8	8.0	9.9	8.9	17.7	11.9	40.4	41.8	18.2	24.6	18.3	16.3	12.6	11.1	14.3	37.5	11.8	8.0	17.1	4.5	4.4	8.2	13.5	41.8	4.4	15.4
5	8.4	12.7	11.3	5.2	6.8	26.0	11.6	6.6	7.9	12.5	16.2	19.0	25.0	16.6	13.1	11.1	10.8	13.5	26.5	12.8	4.1	6.3	45.1	26.8	45.1	4.1	14.8
6	41.8	42.3	32.1	23.2	52.9	58.3	19.3	8.7	7.6	7.6	20.3	20.7	12.9	11.2	11.8	13.1	17.2	37.3	40.7	9.2	3.9	6.9	3.8	4.6	58.3	3.8	21.1
7	3.0	3.9	3.5	3.6	4.1	4.2	6.4	4.6	4.5	5.0	5.1	7.7	6.6	4.7	8.7	5.9	5.2	5.6	6.2	5.6	5.7	6.4	7.0	6.1	8.7	3.0	5.4
8	5.3	6.1	5.5	5.9	6.7	7.1	6.6	5.7	6.6	6.2	6.3	8.0	7.9	9.3	8.7	11.1	8.8	12.3	8.1	17.6	14.4	5.9	11.0	16.0	17.6	5.3	8.6
9	24.3	11.1	14.3	5.0	5.5	5.9	4.5	19.0	27.1	13.6	28.7	21.6	14.8	11.4	10.7	9.8	11.1	8.1	7.2	6.6	6.0	4.5	5.1	4.7	28.7	4.5	11.7
10	4.1	4.9	5.6	4.5	4.3	4.6	4.5	5.1	4.9	7.2	5.4	6.3	7.0	6.7	8.2	8.2	7.6	6.9	6.1	6.4	6.3	6.0	7.7	9.8	9.8	4.1	6.2
11	6.1	8.6	11.3	10.3	14.9	8.3	8.1	29.8	26.3	16.7	12.8	10.5	10.7	14.8	11.3	15.7	11.2	12.1	14.4	19.7	7.9	4.5	3.6	2.1	29.8	2.1	12.1
12	3.7	18.9	63.2	41.6	7.5	6.9	6.1	9.8	9.1	13.4	22.2	37.0	65.0	43.9	65.8	22.0	60.5	16.1	4.6	6.9	4.2	3.3	5.1	6.7	65.8	3.3	22.6
13	6.3	3.6	3.7	2.8	12.0	5.7	6.2	5.6	5.9	7.0	9.4	7.9	7.0	7.7	5.8	5.7	4.9	5.2	5.3	5.3	4.7	5.6	6.0	5.3	12.0	2.8	6.0
14	6.0	6.1	7.5	6.8	7.5	8.1	9.1	8.2	6.2	6.3	9.0	7.7	6.1	6.7	6.7	5.3	5.2	6.9	5.1	5.8	4.9	4.7	5.3	4.9	9.1	4.7	6.5
15	6.2	5.9	5.8	5.6	5.9	5.7	9.8	7.0	7.5	7.9	9.6	9.1	7.8	9.5	8.8	14.4	10.5	13.3	9.8	8.1	8.3	6.0	4.9	6.8	14.4	4.9	8.1
16	4.5	5.4	5.4	4.3	4.9	4.3	3.6	4.0	4.4	5.0	5.3	7.5	7.2	7.3	7.0	7.2	5.8	5.6	5.3	4.9	4.9	5.3	5.4	5.4	7.5	3.6	5.4
17	5.4	5.9	5.2	5.0	5.3	4.7	5.0	4.8	5.4	5.4	6.2	6.4	7.0	7.5	5.4	5.4	5.1	5.0	5.7	4.9	5.3	5.5	4.7	4.9	7.5	4.7	5.5
18	5.4	5.2	4.0	4.7	5.3	4.6	5.2	5.1	5.2	5.3	6.5	6.0	5.1	6.2	5.2	5.7	5.3	5.4	4.8	4.7	4.9	4.6	4.7	4.6	6.5	4.0	5.2
19	5.0	5.1	5.4	5.8	7.6	6.5	8.4	9.0	8.4	7.6	10.4	10.5	9.8	8.4	13.2	12.4	12.1	13.4	14.8	8.8	6.0	5.4	15.6	13.5	15.6	5.0	9.3
20	11.4	4.7	2.5	2.7	2.3	2.7	2.9	3.8	5.8	7.9	12.3	11.2	12.6	15.5	15.3	13.8	18.6	11.6	7.0	5.0	4.5	4.5	7.1	11.0	18.6	2.3	8.2
21	14.5	17.6	28.4	14.6	19.2	34.1	22.6	12.9	53.0	15.0	13.1	13.5	13.1	9.4	11.6	10.1	7.2	7.4	5.7	5.5	14.0	12.6	29.8	8.6	53.0	5.5	16.4
22	15.1	43.8	17.7	11.8	26.9	16.5	4.6	8.5	14.8	16.5	15.2	32.8	10.3	11.3	7.1	5.9	5.2	6.9	5.3	7.3	5.6	5.2	5.2	5.9	43.8	4.6	12.7
23	5.3	4.4	6.1	6.3	5.7	4.9	6.0	6.0	7.4	8.1	6.6	5.2	16.8	31.3	10.8	6.2	10.6	18.6	35.8	17.1	5.2	5.6	8.1	7.0	35.8	4.4	10.2
24	6.1	7.6	6.2	6.5	9.6	8.3	5.8	5.4	6.3	5.7	6.5	6.4	6.1	6.9	8.1	7.7	5.7	6.3	6.7	5.8	5.4	5.0	8.0	6.7	9.6	5.0	6.6
25	5.6	5.0	4.9	4.0	5.0	5.9	8.0	5.9	6.3	6.4	6.8	7.7	7.4	6.8	11.6	12.0	11.3	10.7	12.6	11.6	8.2	3.3	5.9	8.7	12.6	3.3	7.6
26	33.0	8.4	16.3	11.1	9.8	7.7	12.2	14.2	10.7	9.8	7.4	6.8	10.4	9.5	8.0	6.9	6.0	5.5	4.9	6.6	5.0	4.8	5.4	6.3	33.0	4.8	9.4
27	4.8	5.9	8.5	7.6	6.9	11.7	7.5	7.3	6.5	7.2	17.2	48.2	38.7	22.1	30.5	33.3	16.7	21.7	14.2	6.2	5.2	9.7	15.4	44.1	48.2	4.8	16.5
28	17.3	61.9	11.7	38.5	24.1	48.0	54.4	49.8	12.3	10.6	9.8	10.1	8.8	10.8	8.0	7.7	5.3	5.1	6.4	5.0	4.8	5.0	4.9	4.7	61.9	4.7	17.7
29	4.8	4.8	5.4	4.4	6.5	5.0	4.3	5.1	5.4	6.0	5.4	6.6	6.8	8.2	6.5	6.3	6.9	5.6	6.1	6.0	5.6	5.1	5.6	6.1	8.2	4.3	5.8
30	5.1	4.7	5.4	6.8	6.7	5.8	5.9	6.5	9.0	7.2	6.9	23.2	42.7	6.4	6.7	7.6	6.8	6.7	5.5	6.3	5.6	4.0	3.6	3.5	42.7	3.5	8.3
31	3.7	3.5	3.0	3.4	3.1	3.1	3.6	5.0	7.9	6.7	6.2	11.1	15.0	8.0	6.3	5.9	6.8	9.4	8.7	7.8	26.9	9.7	6.5	6.1	26.9	3.0	7.4
Max.	**41.8**	**61.9**	**63.2**	**41.6**	**52.9**	**58.3**	**54.4**	**49.8**	**53.0**	**18.2**	**29.1**	**48.2**	**65.0**	**43.9**	**65.8**	**33.3**	**60.5**	**37.3**	**40.7**	**19.7**	**26.9**	**12.6**	**45.1**	**44.1**	**65.8**		
Min.	**3.0**	**3.5**	**2.5**	**2.7**	**2.3**	**2.7**	**2.9**	**3.8**	**4.4**	**5.0**	**5.1**	**5.2**	**5.1**	**4.7**	**5.2**	**5.3**	**4.9**	**5.0**	**4.6**	**4.7**	**3.9**	**2.9**	**2.8**	**2.1**		**2.1**	
Avg.	**9.4**	**11.0**	**11.2**	**9.4**	**10.6**	**11.5**	**9.2**	**10.9**	**12.9**	**9.5**	**12.2**	**14.6**	**15.2**	**13.6**	**12.4**	**10.8**	**11.5**	**10.3**	**10.1**	**8.2**	**6.7**	**5.5**	**8.6**	**9.6**			**10.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.0	5.5	5.9	5.8	9.9	11.7	6.6	5.2	7.7	9.7	6.2	7.3	7.8	8.8	7.1	7.2	5.7	5.3	4.3	4.9	5.2	4.6	4.0	6.2	11.7	4.0	6.6
2	4.2	3.9	4.8	5.3	4.1	9.1	8.3	9.2	8.7	5.6	10.4	12.7	10.9	11.4	9.7	10.3	5.4	5.4	5.9	5.4	5.0	4.8	4.9	4.6	12.7	3.9	7.1
3	4.7	5.9	5.2	5.4	5.6	5.0	5.0	5.4	6.7	6.4	8.0	6.7	5.8	6.8	7.1	5.4	4.4	4.6	4.1	4.4	4.3	3.8	3.9	4.0	8.0	3.8	5.4
4	3.5	4.5	3.2	4.6	44.1	11.0	27.3	6.9	7.4	8.8	19.3	29.8	35.2	16.5	17.1	19.5	48.1	21.9	19.9	6.9	25.2	16.9	13.8	10.3	48.1	3.2	17.6
5	11.4	4.8	26.4	9.3	34.8	12.5	12.4	25.8	26.4	26.5	16.2	6.3	8.5	9.1	7.9	9.5	8.6	9.3	16.3	13.5	7.4	17.9	15.1	10.5	34.8	4.8	14.4
6	3.8	8.1	16.4	10.3	11.3	11.9	3.8	5.7	6.2	7.7	9.7	10.0	12.1	14.2	14.7	9.7	10.5	9.7	9.6	4.4	5.2	9.8	6.1	5.5	16.4	3.8	9.0
7	13.2	17.5	12.8	6.9	5.2	7.0	20.5	6.6	5.2	4.8	4.9	6.2	6.6	5.6	7.5	6.3	7.5	6.5	5.8	5.2	5.4	4.9	5.4	5.0	20.5	4.8	7.6
8	4.7	5.9	5.3	6.1	9.1	11.7	7.2	8.2	7.6	4.5	7.4	7.9	7.4	7.6	10.0	16.7	8.7	6.6	5.5	5.3	9.6	8.0	8.6	13.8	16.7	4.5	8.1
9	16.6	25.7	25.8	28.4	18.5	38.6	22.4	15.3	17.6	9.5	11.1	7.5	6.0	8.4	6.6	10.8	5.8	4.5	5.0	3.5	4.2	8.7	4.1	4.7	38.6	3.5	12.9
10	4.8	6.7	4.8	4.5	4.3	4.0	5.7	6.0	4.8	5.1	5.1	7.4	4.9	4.8	4.9	5.0	5.1	4.5	5.0	5.0	5.4	5.6	5.3	5.1	7.4	4.0	5.1
11	5.0	5.0	4.7	4.3	4.9	4.3	4.2	5.3	6.1	6.3	5.3	5.3	6.1	5.6	7.4	9.3	6.7	5.9	7.8	7.8	7.1	6.6	7.6	5.1	9.3	4.2	6.0
12	6.0	7.5	4.9	6.6	6.8	4.5	4.1	4.4	5.0	5.9	5.8	6.3	7.5	10.8	12.9	8.1	8.7	7.0	5.5	4.9	4.6	9.5	29.8	9.4	29.8	4.1	7.8
13	8.2	10.2	18.7	11.8	24.4	10.1	4.8	6.2	5.1	5.2	5.8	6.3	6.0	5.8	5.3	5.5	6.2	5.9	5.2	5.1	4.9	4.3	4.7	4.3	24.4	4.3	7.5
14	4.6	4.8	6.9	8.2	8.6	8.1	5.0	4.8	5.8	5.3	6.0	6.1	5.2	5.3	5.3	5.0	5.0	4.9	5.1	6.0	5.0	4.7	4.9	5.2	8.6	4.6	5.7
15	5.3	4.9	5.5	4.8	5.2	4.7	4.9	5.1	5.5	5.6	5.4	6.7	6.9	5.7	6.4	6.8	6.6	7.6	11.6	6.8	6.4	3.9	4.4	4.4	11.6	3.9	5.9
16	16.0	25.6	7.6	4.3	3.9	2.9	4.9	7.7	6.0	9.9	14.0	24.7	12.3	17.1	15.6	20.0	5.6	7.8	14.3	14.1	8.6	45.2	14.5	14.0	45.2	2.9	13.2
17	8.8	3.8	13.3	33.7	38.4	32.1	30.9	14.2	38.0	20.7	40.5	24.4	15.4	11.0	10.1	31.2	27.1	6.9	4.7	6.4	6.1	5.8	5.6	5.9	40.5	3.8	18.1
18	5.5	4.9	4.9	6.4	5.5	5.0	6.0	6.0	5.5	5.6	5.3	4.9	5.1	5.3	5.4	6.0	4.9	5.8	5.4	5.1	5.7	5.2	5.1	7.6	7.6	4.9	5.5
19	10.8	12.5	17.7	15.9	18.0	13.6	18.3	11.2	36.5	17.3	9.0	10.4	9.9	7.1	8.8	6.4	6.1	6.3	5.4	5.7	6.5	8.6	8.7	5.7	36.5	5.4	11.5
20	15.1	4.8	5.0	4.8	5.3	7.8	4.8	4.4	5.1	5.4	5.0	5.4	6.5	8.7	9.3	11.7	11.6	9.3	6.8	4.1	7.9	5.9	3.1	2.1	15.1	2.1	6.7
21	3.5	4.3	2.7	9.0	16.0	5.5	4.8	5.0	6.6	15.5	20.0	17.0	18.4	15.8	9.9	12.8	7.6	5.2	6.9	5.5	5.6	4.7	3.9	4.3	20.0	2.7	8.8
22	5.2	12.3	7.4	5.2	5.3	5.8	6.0	5.3	5.2	5.8	5.8	5.4	5.6	7.6	9.9	5.9	6.8	8.6	6.8	5.1	4.7	2.9	14.2	15.7	15.7	2.9	7.0
23	10.8	29.9	19.4	7.6	6.7	16.5	14.9	12.8	20.9	14.8	29.4	55.7	12.7	16.1	14.7	15.2	18.4	17.4	6.6	5.1	4.0	6.4	7.6	5.5	55.7	4.0	15.4
24	5.1	4.9	6.3	5.4	7.2	6.1	5.3	4.8	5.3	6.1	5.5	5.0	4.0	4.6	4.1	5.3	4.9	4.5	4.8	4.9	6.8	2.8	5.2	4.1	7.2	2.8	5.1
25	5.4	3.1	4.8	3.9	24.8	14.1	14.4	30.3	17.5	32.3	31.8	20.6	10.7	14.1	15.7	13.4	15.1	11.1	9.2	11.6	10.4	3.8	4.8	4.7	32.3	3.1	13.7
26	5.8	39.3	18.3	20.9	5.9	7.0	5.7	19.3	14.7	7.2	6.7	5.5	9.2	40.5	25.3	40.3	9.2	13.2	11.7	6.1	10.1	15.1	13.2	6.6	40.5	5.5	14.9
27	19.4	6.9	3.4	3.3	6.1	5.8	22.2	60.5	31.0	16.0	53.0	47.5	16.3	17.6	9.2	8.2	31.3	11.2	7.6	17.9	9.7	9.3	3.9	4.2	60.5	3.3	17.6
28	52.7	18.4	7.4	6.4	4.9	4.6	5.1	4.7	5.1	5.6	5.4	6.8	8.7	7.7	8.5	8.3	6.8	7.9	22.8	19.3	10.7	7.1	5.9	18.8	52.7	4.6	10.8
29	27.5	16.1	19.8	25.9	18.6	17.2	11.8	6.2	24.1	19.2	41.9	9.8	9.2	11.5	14.8	12.4	11.9	11.9	8.2	5.9	8.7	11.8	8.5	8.3	41.9	5.9	15.0
30	7.2	6.2	5.1	4.3	4.8	5.2	5.6	4.7	5.1	5.3	5.6	5.9	6.3	5.5	5.7	5.0	6.3	5.2	4.1	4.0	3.4	6.1	8.4	4.6	8.4	3.4	5.4
31	5.1	9.5	3.2	8.5	6.2	8.5	12.5	8.7	6.9	5.0	8.1	6.2	5.6	4.9	5.2	4.6	5.8	5.4	5.3	5.2	6.5	5.1	4.1	4.0	12.5	3.2	6.3
Max.	**52.7**	**39.3**	**26.4**	**33.7**	**44.1**	**38.6**	**30.9**	**60.5**	**38.0**	**32.3**	**53.0**	**55.7**	**35.2**	**40.5**	**25.3**	**40.3**	**48.1**	**21.9**	**22.8**	**19.3**	**25.2**	**45.2**	**29.8**	**18.8**	**60.5**		
Min.	**3.5**	**3.1**	**2.7**	**3.3**	**3.9**	**2.9**	**3.8**	**4.4**	**4.8**	**4.5**	**4.9**	**4.9**	**4.0**	**4.6**	**4.1**	**4.6**	**4.4**	**4.5**	**4.1**	**3.5**	**3.4**	**2.8**	**3.1**	**2.1**		**2.1**	
Avg.	**9.9**	**10.4**	**9.6**	**9.3**	**12.1**	**10.1**	**10.2**	**10.5**	**11.6**	**10.0**	**13.3**	**12.5**	**9.4**	**10.4**	**9.7**	**11.0**	**10.4**	**8.0**	**8.0**	**6.9**	**7.1**	**8.4**	**7.7**	**6.9**			**9.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.0	5.4	4.5	4.2	4.3	3.8	3.7	4.1	5.2	5.3	5.1	8.1	9.0	9.6	13.1	8.8	7.3	4.3	4.2	3.9	5.4	6.6	6.0	4.2	13.1	3.7	5.8
2	4.8	3.2	3.7	3.9	3.3	3.0	3.9	4.9	8.5	8.3	5.3	5.9	5.4	5.5	6.1	7.1	6.9	7.1	10.6	41.8	4.7	47.0	38.6	15.4	47.0	3.0	10.6
3	5.7	6.0	30.9	41.3	6.9	6.5	5.3	6.2	5.4	8.1	40.6	66.8	35.0	33.5	24.4	35.2	21.4	23.8	23.6	17.9	5.4	5.2	7.8	24.1	66.8	5.2	20.3
4	22.1	32.7	23.5	4.2	1.8	3.0	5.1	4.2	5.8	8.3	11.5	16.1	22.5	42.1	43.1	13.8	49.0	44.8	16.8	15.8	9.5	15.4	18.3	7.6	49.0	1.8	18.2
5	2.5	7.0	3.9	5.1	4.1	5.1	4.9	5.1	7.6	6.9	6.6	7.4	8.6	9.0	7.9	7.8	7.3	7.8	4.6	5.2	5.4	5.0	24.7	36.4	36.4	2.5	8.2
6	8.1	7.5	4.9	4.6	4.1	2.1	2.7	4.2	5.5	10.4	5.5	9.4	9.4	12.2	11.5	14.7	12.6	6.2	6.0	5.1	4.5	4.4	5.5	6.6	14.7	2.1	7.0
7	5.7	5.7	5.5	10.1	6.3	5.2	5.0	6.3	6.1	4.8	4.7	4.6	5.2	5.2	5.3	5.0	4.9	5.8	5.0	5.4	5.1	5.4	5.4	5.2	10.1	4.6	5.5
8	5.6	5.3	4.7	5.5	5.5	5.9	5.7	5.4	5.3	5.2	5.5	5.3	5.3	5.3	5.3	4.8	5.2	5.5	5.2	5.0	5.3	5.1	5.2	5.2	5.9	4.7	5.3
9	5.8	6.2	5.7	5.6	8.9	12.8	13.0	19.4	40.1	7.9	19.7	25.0	12.2	10.0	12.3	7.1	8.3	7.9	6.7	6.7	7.9	14.7	24.6	7.6	40.1	5.6	12.3
10	15.4	14.6	6.5	11.3	13.9	11.6	24.6	6.4	17.4	60.7	15.1	16.7	21.7	16.8	17.2	14.9	12.0	8.7	8.6	7.3	15.6	18.9	42.5	37.2	60.7	6.4	18.1
11	36.5	8.0	13.7	27.9	35.4	6.8	4.3	4.4	5.6	6.6	7.4	42.1	21.1	13.5	24.2	69.3	29.7	17.7	13.1	11.9	15.3	29.8	14.0	7.5	69.3	4.3	19.4
12	8.2	8.2	8.1	7.0	9.6	5.0	5.4	3.2	4.2	5.9	13.6	26.2	42.8	43.9	23.4	14.5	11.8	14.2	20.5	3.2	7.8	4.8	3.0	3.7	43.9	3.0	12.4
13	4.6	4.7	4.6	3.5	4.5	5.7	5.4	4.6	27.9	22.6	12.5	8.9	6.9	6.7	6.5	7.3	6.4	5.1	4.6	5.3	4.8	5.6	5.5	5.4	27.9	3.5	7.5
14	5.5	5.0	5.1	5.5	5.6	5.3	5.1	5.4	5.1	5.2	5.4	6.3	5.8	5.7	5.1	5.3	5.0	5.6	6.5	5.6	5.6	5.4	5.3	5.3	6.5	5.0	5.4
15	5.0	5.1	5.2	5.1	5.6	5.7	5.8	5.9	5.9	5.5	5.6	5.6	5.7	5.7	5.2	5.0	5.8	5.4	5.2	4.9	4.9	5.4	5.1	5.6	5.9	4.9	5.4
16	5.1	5.8	5.4	5.3	5.0	4.2	4.4	4.4	5.3	4.7	4.7	4.9	6.1	6.3	6.1	6.2	5.9	6.6	5.6	8.2	9.1	3.8	4.4	4.6	9.1	3.8	5.5
17	4.5	4.9	8.1	5.1	4.4	4.6	5.5	5.1	4.3	4.3	4.9	6.8	6.7	6.9	8.2	9.1	7.2	9.4	6.1	4.7	3.6	4.7	5.5	5.6	9.4	3.6	5.8
18	5.6	5.8	5.9	4.4	4.8	5.3	4.6	4.7	5.3	5.4	5.7	5.5	5.6	5.9	6.4	6.6	5.5	5.2	5.2	5.6	5.6	5.3	5.4	5.5	6.6	4.4	5.4
19	5.8	4.7	5.9	6.4	6.6	7.2	8.0	9.0	16.1	11.6	8.3	5.5	11.7	14.5	32.9	10.0	18.7	16.3	40.0	17.6	17.6	15.3	36.5	7.4	40.0	4.7	13.9
20	16.5	5.4	4.6	5.7	6.2	5.4	15.8	18.7	11.9	12.2	8.6	10.6	7.4	6.7	8.0	28.6	12.0	8.1	7.0	5.3	4.8	4.7	4.9	6.8	28.6	4.6	9.4
21	5.6	6.7	12.4	8.9	23.8	14.2	7.4	5.4	5.7	5.2	5.4	5.8	7.2	6.4	7.2	7.4	6.0	5.7	5.1	4.4	5.2	4.7	5.4	4.7	23.8	4.4	7.3
22	5.7	18.8	14.2	15.3	10.6	8.3	9.5	4.9	5.2	5.0	6.0	6.4	7.3	5.8	8.5	9.7	8.1	8.4	9.2	7.5	8.3	7.7	4.7	4.8	18.8	4.7	8.3
23	4.6	4.5	5.7	5.7	5.7	5.2	5.3	6.0	6.7	4.9	5.4	5.3	4.9	5.5	6.2	5.9	6.7	5.7	4.8	5.0	5.9	5.2	5.6	6.8	6.8	4.5	5.6
24	7.8	8.0	17.2	11.6	17.5	11.4	9.3	7.1	10.8	40.8	29.5	30.1	22.4	10.0	18.4	9.5	5.3	3.7	5.8	6.7	5.0	4.8	2.8	8.5	40.8	2.8	12.7
25	7.3	5.3	6.0	5.0	4.0	5.1	6.3	6.2	7.2	6.4	6.5	26.6	30.6	10.5	8.3	6.0	5.6	5.0	4.4	5.1	5.4	7.5	7.9	7.8	30.6	4.0	8.2
26	7.0	8.4	12.7	9.1	5.0	3.9	4.4	6.6	6.3	5.5	5.9	6.2	4.0	5.1	6.3	13.7	16.0	5.8	9.3	8.7	13.6	26.7	7.7	5.3	26.7	3.9	8.5
27	5.6	8.9	5.6	5.0	5.0	7.1	9.1	32.7	21.2	34.5	45.4	41.6	51.4	17.7	12.5	7.7	8.7	14.7	16.7	11.7	20.6	6.2	6.0	5.5	51.4	5.0	16.7
28	11.3	5.0	6.5	4.7	6.0	4.5	5.1	4.4	4.4	4.6	4.8	4.6	5.8	4.5	4.5	6.8	6.7	6.9	4.2	3.4	3.7	4.8	6.1	5.3	11.3	3.4	5.4
29	7.1	21.4	36.9	53.4	29.4	32.9	14.5	6.3	4.7	5.3	4.6	5.7	8.0	7.5	10.8	5.1	6.6	6.4	3.8	3.9	2.7	1.9	6.2	4.5	53.4	1.9	12.1
30	6.5	4.7	31.8	7.4	5.0	3.7	16.6	37.9	17.3	32.6	15.9	23.6	12.4	10.3	6.5	5.9	5.0	4.8	5.3	5.2	4.9	5.2	5.0	5.0	37.9	3.7	11.6
Max.	**36.5**	**32.7**	**36.9**	**53.4**	**35.4**	**32.9**	**24.6**	**37.9**	**40.1**	**60.7**	**45.4**	**66.8**	**51.4**	**43.9**	**43.1**	**69.3**	**49.0**	**44.8**	**40.0**	**41.8**	**20.6**	**47.0**	**42.5**	**37.2**	**69.3**		
Min.	**2.5**	**3.2**	**3.7**	**3.5**	**1.8**	**2.1**	**2.7**	**3.2**	**4.2**	**4.3**	**4.6**	**4.6**	**4.0**	**4.5**	**4.5**	**4.8**	**4.9**	**3.7**	**3.8**	**3.2**	**2.7**	**1.9**	**2.8**	**3.7**		**1.8**	
Avg.	**8.2**	**8.1**	**10.3**	**9.9**	**8.6**	**7.0**	**7.5**	**8.3**	**9.6**	**11.8**	**10.9**	**14.8**	**13.6**	**11.6**	**12.0**	**12.0**	**10.6**	**9.4**	**9.1**	**8.3**	**7.4**	**9.6**	**10.8**	**8.8**			**9.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.2	4.9	5.2	5.1	4.8	5.1	5.7	5.4	5.5	5.8	5.2	5.4	6.4	5.3	5.6	5.2	4.8	5.0	4.9	5.0	4.9	4.8	5.0	5.0	6.4	4.8	5.2
2	4.8	5.1	5.2	5.0	4.8	4.8	5.2	5.3	4.8	4.8	5.0	5.2	5.2	5.2	5.1	4.9	4.6	4.8	5.1	4.7	4.8	5.1	5.5	5.5	5.5	4.6	5.0
3	5.5	5.9	5.5	5.2	5.4	5.1	5.0	5.0	4.1	4.8	5.4	5.6	5.2	4.8	7.9	7.2	8.1	4.6	5.8	6.0	5.2	5.3	6.1	5.3	8.1	4.1	5.6
4	5.8	6.1	6.4	6.0	5.1	6.2	5.4	6.0	5.5	5.3	5.3	7.8	6.4	10.1	14.4	8.1	8.4	6.9	20.1	13.6	10.2	4.3	5.7	4.8	20.1	4.3	7.7
5	5.3	6.3	14.2	11.0	12.5	7.9	40.4	20.1	12.5	19.6	10.0	27.8	17.1	11.1	10.6	7.7	5.7	8.1	6.0	5.4	5.4	7.9	8.3	13.8	40.4	5.3	12.3
6	6.5	7.4	5.3	5.9	4.4	5.0	4.6	4.6	4.2	4.6	7.3	8.2	7.2	5.0	4.8	6.7	4.4	4.3	4.2	4.8	4.8	5.1	4.8	4.9	8.2	4.2	5.4
7	5.0	5.0	5.1	5.3	4.8	4.7	4.8	5.1	5.1	5.0	4.6	4.9	4.9	4.8	5.1	5.1	5.0	5.3	5.0	4.7	4.8	4.8	5.1	5.2	5.3	4.6	5.0
8	5.1	5.3	5.5	5.5	6.3	5.6	5.5	5.5	5.7	5.8	5.7	5.6	5.4	5.9	5.4	5.5	5.4	5.5	5.2	5.2	5.1	5.6	5.8	5.1	6.3	5.1	5.5
9	5.4	5.5	5.5	5.5	5.2	5.3	5.7	5.1	5.0	6.0	5.6	5.4	5.3	5.4	5.2	5.2	4.9	5.3	16.7	7.2	8.2	6.2	4.7	5.8	16.7	4.7	6.1
10	8.2	6.9	14.7	8.7	2.5	19.4	4.3	6.5	4.5	5.1	5.5	4.8	5.5	5.2	4.8	4.8	4.5	6.3	5.2	6.3	5.1	4.5	5.9	4.9	19.4	2.5	6.4
11	5.2	5.6	6.1	7.2	5.5	9.6	6.0	5.7	5.3	8.5	10.1	6.3	8.2	8.2	9.5	15.2	6.1	3.9	7.7	13.7	14.1	20.4	21.5	5.1	21.5	3.9	8.9
12	6.9	9.5	24.5	17.2	21.4	26.7	9.6	17.4	30.2	12.6	15.1	5.2	7.6	6.4	6.2	5.9	6.0	4.9	4.7	4.6	4.9	4.9	4.6	4.7	30.2	4.6	10.9
13	5.9	5.7	7.5	7.8	5.0	5.0	6.7	5.1	5.6	8.9	7.3	8.7	6.9	11.6	7.2	10.6	7.0	3.3	5.9	4.9	6.6	4.5	4.0	4.0	11.6	3.3	6.5
14	8.8	9.5	9.1	8.3	7.8	5.1	9.2	17.9	23.0	38.8	12.0	7.1	8.0	7.6	11.6	10.8	5.7	7.5	15.4	13.0	4.7	4.1	4.4	3.7	38.8	3.7	10.5
15	3.8	6.8	9.1	11.8	11.0	17.0	7.6	4.9	4.8	4.5	6.3	5.4	5.2	4.8	4.8	5.2	4.7	4.0	3.7	5.2	7.1	4.3	4.4	4.5	17.0	3.7	6.3
16	7.3	6.1	4.7	4.8	4.9	4.9	5.3	8.2	4.7	4.6	5.5	6.3	11.8	6.2	4.9	4.2	4.8	4.8	4.7	4.6	4.6	4.4	4.3	4.6	11.8	4.2	5.5
17	6.1	4.7	5.0	4.2	5.4	5.7	4.3	4.3	4.6	5.6	5.5	5.8	6.2	6.9	5.2	5.5	5.1	4.8	5.7	4.7	4.8	5.6	5.0	4.8	6.9	4.2	5.2
18	5.0	4.3	5.0	4.5	5.3	5.2	5.8	5.5	5.6	6.0	5.2	5.9	9.4	6.4	11.9	23.6	6.4	6.1	8.0	8.1	13.3	8.4	5.2	5.1	23.6	4.3	7.3
19	7.4	5.9	11.9	27.4	25.7	13.3	7.7	7.2	9.6	7.0	6.0	6.8	6.4	5.3	4.8	5.1	5.7	33.0	37.9	13.1	40.2	8.4	9.4	14.4	40.2	4.8	13.3
20	6.7	5.1	5.8	6.2	5.7	5.1	6.6	8.9	13.5	14.0	17.5	16.7	45.3	28.0	19.4	10.1	15.1	13.5	8.7	5.5	5.2	5.6	4.7	5.4	45.3	4.7	11.6
21	5.9	17.8	12.5	9.5	2.8	5.4	9.1	8.1	7.4	7.5	11.8	8.8	7.1	9.5	12.6	11.0	8.3	4.5	9.8	6.0	4.0	4.0	6.1	6.8	17.8	2.8	8.2
22	3.0	4.9	4.9	5.8	4.1	4.4	4.4	4.6	4.4	5.6	5.6	6.4	34.8	40.9	47.6	45.8	4.6	3.4	2.6	3.1	6.1	5.3	3.3	4.8	47.6	2.6	10.9
23	3.9	4.4	3.9	5.2	5.5	5.3	5.9	5.0	5.3	5.4	4.0	4.7	5.5	7.8	8.8	10.4	8.2	7.2	6.3	8.9	6.0	7.6	16.0	9.8	16.0	3.9	6.7
24	6.6	8.5	17.1	7.0	3.9	4.7	5.3	5.1	6.0	7.6	8.3	7.3	6.4	4.0	3.9	3.2	3.3	3.9	4.5	3.7	3.5	4.1	4.4	3.8	17.1	3.2	5.7
25	3.9	3.9	4.1	4.0	4.4	4.8	5.0	4.5	4.4	4.1	4.2	4.1	4.2	4.8	4.8	4.8	4.6	4.7	3.8	4.1	3.7	4.0	4.2	4.2	5.0	3.7	4.3
26	4.2	3.7	4.1	4.2	4.1	4.0	4.3	4.2	4.2	4.5	4.5	4.2	4.3	4.5	3.7	5.3	7.2	6.7	5.5	4.5	3.3	4.6	3.2	3.5	7.2	3.2	4.4
27	4.2	4.9	4.3	4.7	2.8	4.2	3.7	4.3	5.8	6.5	7.7	6.7	6.4	6.4	5.9	5.1	4.2	20.2	20.5	21.5	21.3	9.9	10.6	14.6	21.5	2.8	8.6
28	19.9	21.4	6.8	5.0	5.7	13.8	7.9	7.7	19.2	14.5	24.1	11.0	9.5	4.2	5.0	5.5	4.1	4.2	4.0	4.5	4.1	3.7	3.4	3.6	24.1	3.4	8.9
29	6.1	5.8	6.8	6.7	5.2	5.6	4.6	5.4	5.2	5.4	5.7	7.8	6.2	6.4	5.5	6.3	6.7	5.2	5.3	4.9	5.4	4.8	5.0	4.9	7.8	4.6	5.7
30	4.7	4.0	6.2	5.3	4.0	0.3	8.5	0.3	0.3	0.2	0.2	23.4	29.7	7.2	4.7	4.7	3.8	3.1	3.4	3.4	3.5	3.6	2.8	3.4	29.7	0.2	5.4
31	4.0	5.9	4.5	5.1	3.4	2.6	4.7	5.9	5.8	5.0	3.6	3.4	3.4	3.1	4.4	3.7	3.8	4.4	4.9	4.4	4.7	4.9	6.0	5.1	6.0	2.6	4.5
Max.	**19.9**	**21.4**	**24.5**	**27.4**	**25.7**	**26.7**	**40.4**	**20.1**	**30.2**	**38.8**	**24.1**	**27.8**	**45.3**	**40.9**	**47.6**	**45.8**	**15.1**	**33.0**	**37.9**	**21.5**	**40.2**	**20.4**	**21.5**	**14.6**	**47.6**		
Min.	**3.0**	**3.7**	**3.9**	**4.0**	**2.5**	**0.3**	**3.7**	**0.3**	**0.3**	**0.2**	**0.2**	**3.4**	**3.4**	**3.1**	**3.7**	**3.2**	**3.3**	**3.1**	**2.6**	**3.1**	**3.3**	**3.6**	**2.8**	**3.4**		**0.2**	
Avg.	**6.0**	**6.7**	**7.6**	**7.3**	**6.4**	**7.2**	**7.0**	**6.7**	**7.5**	**7.9**	**7.4**	**7.8**	**9.7**	**8.2**	**8.4**	**8.5**	**5.8**	**6.8**	**8.1**	**6.8**	**7.4**	**5.8**	**6.1**	**5.8**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.4	4.6	4.5	5.0	9.3	4.7	4.1	4.3	3.8	3.9	4.5	5.5	4.8	4.6	4.8	4.2	4.1	4.3	3.9	3.7	4.8	3.4	4.4	4.7	9.3	3.4	4.6
2	4.3	4.3	4.3	3.9	4.0	4.7	4.3	3.9	3.9	4.5	4.4	5.0	4.4	3.9	4.0	4.0	3.7	5.2	3.8	4.7	4.2	4.2	4.3	3.9	5.2	3.7	4.2
3	3.7	4.3	4.0	4.0	4.1	3.6	3.8	4.3	4.1	4.9	4.0	3.9	3.8	4.9	4.3	5.2	6.2	4.3	4.4	4.6	4.0	4.0	4.0	5.5	6.2	3.6	4.3
4	5.3	4.1	3.8	4.1	4.4	5.3	4.1	4.1	4.9	5.4	4.6	5.5	4.4	4.8	5.0	5.2	5.1	3.8	3.7	3.4	6.0	5.8	4.1	5.2	6.0	3.4	4.7
5	19.5	20.8	12.1	7.9	16.0	11.5	4.9	4.6	4.1	3.6	5.5	5.3	4.9	4.5	4.3	4.8	3.8	4.9	3.9	4.9	5.3	4.7	5.9	6.5	20.8	3.6	7.3
6	7.1	7.0	7.1	4.3	3.5	3.3	3.7	2.9	3.1	3.5	4.0	4.4	5.5	4.5	4.3	3.7	3.9	4.0	4.5	3.7	3.2	3.4	4.0	5.4	7.1	2.9	4.3
7	6.0	6.6	6.2	4.5	4.6	5.1	5.9	4.8	4.8	4.2	4.3	4.1	4.5	4.0	5.1	4.7	4.6	5.8	5.5	4.5	5.0	4.0	5.8	4.9	6.6	4.0	5.0
8	4.5	4.7	3.7	3.5	5.4	4.0	4.2	3.8	3.6	4.1	3.8	5.4	4.0	3.9	4.3	4.4	3.7	4.1	4.1	4.3	4.4	4.8	10.4	5.6	10.4	3.5	4.5
9	5.8	5.4	6.6	7.1	6.5	4.9	5.1	5.2	4.9	5.6	4.9	5.4	5.1	6.2	4.5	4.5	4.2	4.3	4.4	3.5	4.4	4.2	4.2	4.7	7.1	3.5	5.1
10	4.9	4.2	3.9	4.1	6.0	8.1	5.6	4.0	3.7	4.4	4.1	4.0	4.3	5.6	4.9	3.9	5.1	5.1	3.5	5.2	6.6	6.1	5.5	5.2	8.1	3.5	4.9
11	4.3	5.3	5.4	3.9	4.1	3.4	3.6	4.3	4.9	4.8	5.6	3.2	5.9	4.9	7.6	6.3	4.1	4.2	3.9	3.7	3.3	3.8	4.6	6.2	7.6	3.2	4.6
12	5.4	3.5	4.9	4.1	3.9	6.1	4.8	4.0	3.5	3.8	3.4	3.7	4.6	5.1	7.0	7.6	13.2	10.5	40.3	47.4	13.3	7.8	5.5	6.4	47.4	3.4	9.2
13	6.1	5.7	4.0	4.4	5.2	5.7	3.7	3.3	3.5	3.9	5.5	4.9	4.9	5.2	4.6	4.1	4.6	4.9	3.7	4.5	4.4	4.7	4.7	4.0	6.1	3.3	4.6
14	3.8	3.4	3.8	3.9	3.5	4.6	4.8	4.4	4.8	4.9	4.8	7.2	4.0	4.0	4.2	3.9	3.6	3.6	4.0	4.9	4.3	4.7	5.6	5.4	7.2	3.4	4.4
15	5.0	4.4	4.7	4.1	3.5	3.1	3.6	4.1	4.5	3.9	3.1	4.2	3.9	4.4	4.5	4.4	5.0	4.7	4.3	4.7	4.3	4.8	4.1	3.5	5.0	3.1	4.2
16	3.4	4.2	4.4	4.1	4.7	5.5	5.3	3.7	4.6	3.5	4.3	4.7	3.4	4.2	7.6	5.2	3.0	4.1	4.5	4.4	4.5	6.5	5.4	4.1	7.6	3.0	4.6
17	5.0	5.2	4.7	4.9	4.7	4.4	6.1	5.2	5.5	6.6	6.4	4.5	4.8	4.0	5.5	6.2	6.5	5.3	4.7	5.3	4.8	4.3	6.0	4.2	6.6	4.0	5.2
18	5.5	4.3	5.3	4.3	5.2	4.6	4.4	5.3	5.4	5.4	4.3	4.3	4.3	4.7	4.5	5.2	6.9	5.1	4.8	5.3	6.1	5.4	10.2	12.4	12.4	4.3	5.6
19	4.8	5.3	7.1	4.8	5.7	4.8	3.9	5.0	4.1	6.4	4.3	6.2	6.7	5.5	5.2	5.1	6.1	5.3	6.9	4.1	7.0	5.2	5.0	4.9	7.1	3.9	5.4
20	4.6	5.8	5.2	9.4	6.1	8.2	15.9	9.5	5.1	5.3	6.2	7.1	7.9	8.1	5.2	5.8	4.7	6.2	5.6	3.9	3.7	4.8	6.7	3.8	15.9	3.7	6.5
21	5.3	6.6	7.5	6.1	5.9	7.0	6.3	5.2	4.3	5.3	5.2	4.9	3.5	4.6	4.6	5.1	5.6	5.5	6.2	6.5	6.5	5.0	5.9	7.2	7.5	3.5	5.7
22	8.8	10.8	9.3	6.7	5.0	4.1	3.1	3.7	7.8	4.2	3.3	4.0	5.0	5.0	3.3	2.5	2.9	2.9	2.5	3.3	4.0	7.1	6.2	4.8	10.8	2.5	5.0
23	7.0	8.0	3.7	3.4	4.4	6.1	8.3	4.7	4.6	3.2	4.4	5.3	5.3	4.6	4.5	4.5	4.9	4.1	3.4	4.6	4.5	6.4	9.5	7.1	9.5	3.2	5.3
24	7.4	4.4	6.2	8.0	6.7	9.2	7.1	10.4	4.9	7.1	8.9	4.6	5.3	4.7	4.4	4.6	5.5	4.3	4.3	3.8	3.8	4.1	4.4	4.3	10.4	3.8	5.8
25	5.2	4.8	4.4	4.5	4.7	4.4	4.3	4.4	4.1	4.4	4.2	4.3	3.9	4.3	4.5	3.9	3.3	4.6	4.2	3.2	4.4	4.0	3.9	3.7	5.2	3.2	4.2
26	4.6	3.5	4.3	3.6	3.8	3.6	3.8	3.8	3.9	4.6	4.4	4.3	4.5	4.4	4.6	4.6	4.6	4.7	4.8	4.8	4.6	4.8	4.8	4.6	4.8	3.5	4.3
27	4.3	4.7	4.6	4.5	4.5	4.2	4.4	4.4	4.0	4.2	3.8	3.9	4.0	3.8	4.5	3.7	4.1	3.9	3.8	4.0	4.3	3.9	3.7	4.1	4.7	3.7	4.1
28	4.2	4.0	4.2	4.2	4.1	4.0	4.1	4.2	4.6	4.5	4.0	4.3	5.1	4.9	3.7	3.8	11.2	13.1	11.9	16.6	28.3	19.1	4.9	6.1	28.3	3.7	7.5
29	6.1	5.2	3.4	3.8	39.6	16.9	9.5	7.8	8.0	5.4	4.5	36.9	9.5	4.9	6.5	5.7	4.9	17.5	18.5	10.3	6.5	4.4	4.0	5.4	39.6	3.4	10.2
30	3.5	3.5	3.9	4.0	3.7	4.0	4.0	4.0	3.9	3.8	3.8	4.2	5.1	4.0	4.9	4.4	11.9	4.3	3.4	3.3	2.9	2.7	3.0	3.6	11.9	2.7	4.1
Max.	**19.5**	**20.8**	**12.1**	**9.4**	**39.6**	**16.9**	**15.9**	**10.4**	**8.0**	**7.1**	**8.9**	**36.9**	**9.5**	**8.1**	**7.6**	**7.6**	**13.2**	**17.5**	**40.3**	**47.4**	**28.3**	**19.1**	**10.4**	**12.4**	**47.4**		
Min.	**3.4**	**3.4**	**3.4**	**3.4**	**3.5**	**3.1**	**3.1**	**2.9**	**3.1**	**3.2**	**3.1**	**3.2**	**3.4**	**3.8**	**3.3**	**2.5**	**2.9**	**2.9**	**2.5**	**3.2**	**2.9**	**2.7**	**3.0**	**3.5**		**2.5**	
Avg.	**5.7**	**5.6**	**5.2**	**4.8**	**6.4**	**5.6**	**5.2**	**4.8**	**4.6**	**4.6**	**4.6**	**5.8**	**4.9**	**4.7**	**4.9**	**4.7**	**5.4**	**5.5**	**6.2**	**6.4**	**5.8**	**5.3**	**5.4**	**5.2**			**5.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.5	3.2	2.9	3.0	2.6	2.7	2.7	3.4	9.2	10.0	7.9	5.4	3.4	3.6	3.5	5.2	5.1	7.9	5.7	5.3	15.0	5.5	5.9	6.1	15.0	2.6	5.4
2	10.4	45.2	15.4	15.0	7.1	6.5	11.5	6.8	7.0	11.0	4.7	4.0	6.4	5.0	6.2	17.0	14.9	7.9	8.0	10.8	16.1	41.0	46.7	4.5	46.7	4.0	13.7
3	3.7	4.3	3.8	4.1	4.5	4.5	3.4	3.4	3.3	3.6	3.7	3.7	3.8	5.4	4.5	4.6	4.4	4.6	4.3	5.0	5.1	6.0	5.4	6.9	6.9	3.3	4.4
4	4.0	3.5	4.7	4.7	4.5	4.3	4.4	33.1	10.2	6.1	6.2	5.6	12.0	4.4	3.3	4.0	3.9	3.9	4.9	4.5	4.5	4.2	3.6	5.0	33.1	3.3	6.2
5	5.6	4.4	5.8	5.2	4.1	3.8	4.0	4.7	4.2	3.8	4.5	5.0	5.0	5.4	5.1	4.0	5.4	8.5	4.1	3.7	3.3	3.3	3.5	3.4	8.5	3.3	4.6
6	3.3	3.3	3.4	3.6	3.0	5.2	14.1	5.0	6.4	4.4	4.3	5.2	4.2	3.9	4.3	4.1	4.4	4.5	4.3	5.2	4.2	4.2	3.7	3.8	14.1	3.0	4.7
7	4.0	3.9	5.4	4.3	4.7	5.1	4.1	8.0	5.4	4.7	5.5	21.2	11.7	11.7	11.5	5.6	7.3	5.2	4.6	3.8	4.0	4.6	4.6	4.1	21.2	3.8	6.5
8	4.4	4.3	4.5	4.4	4.2	4.4	4.4	4.0	3.6	4.2	4.5	4.0	4.2	9.9	6.0	6.5	3.6	8.8	3.8	12.0	32.4	38.5	13.4	27.4	38.5	3.6	9.1
9	4.4	4.2	3.8	4.6	3.7	4.3	5.1	4.5	4.2	4.4	4.3	5.0	4.6	4.5	5.0	4.3	4.7	4.6	4.1	4.5	4.0	4.0	4.1	4.2	5.1	3.7	4.4
10	4.3	4.1	3.9	3.6	3.4	3.3	3.2	3.5	3.4	3.4	3.1	4.6	3.2	3.6	4.1	3.9	4.1	5.2	4.0	4.3	4.2	4.9	4.6	4.3	5.2	3.1	3.9
11	3.7	3.5	3.7	3.6	11.3	8.6	10.2	5.8	7.5	7.9	6.1	5.1	6.0	4.1	5.9	4.6	2.7	2.7	3.6	3.9	3.5	3.7	4.5	5.8	11.3	2.7	5.3
12	3.5	3.8	4.0	4.2	3.7	5.0	5.1	5.0	5.1	4.6	5.2	4.6	4.7	4.2	4.1	4.3	4.2	3.5	3.4	3.8	3.7	3.8	3.8	2.7	5.2	2.7	4.2
13	2.8	3.1	3.1	2.9	2.8	3.4	3.7	5.9	2.9	2.9	4.0	3.0	3.1	3.2	3.1	3.6	3.5	5.3	4.1	4.0	3.9	4.5	4.9	5.7	5.9	2.8	3.7
14	4.1	4.0	6.6	8.7	4.6	3.5	4.9	4.7	3.9	4.9	4.2	4.0	5.4	7.6	4.5	2.9	2.0	3.4	3.0	3.7	4.2	3.5	4.6	5.5	8.7	2.0	4.5
15	4.5	5.4	5.0	3.6	5.5	4.7	3.9	5.4	4.7	3.8	5.5	4.6	5.9	10.2	15.5	17.6	8.7	4.4	3.6	3.7	3.9	3.3	3.5	3.8	17.6	3.3	5.9
16	3.6	3.3	3.5	3.7	3.5	3.5	3.6	3.5	3.1	3.3	3.6	3.8	3.2	4.1	4.5	3.9	3.3	3.9	5.9	5.1	10.1	4.9	4.1	4.9	10.1	3.1	4.2
17	5.6	7.1	8.6	9.4	1.9	2.7	2.6	2.6	2.8	3.3	3.3	3.5	3.4	4.3	4.4	4.2	4.5	4.2	4.8	4.2	4.8	4.9	3.5	3.9	9.4	1.9	4.3
18	8.4	6.1	4.7	4.8	6.3	5.5	4.4	6.6	20.3	7.5	33.0	39.5	58.5	5.8	4.8	3.6	7.7	3.9	5.8	4.9	5.0	3.9	3.6	4.4	58.5	3.6	10.8
19	6.1	6.2	5.8	11.6	17.7	14.5	16.5	16.4	4.3	5.0	5.5	4.8	4.8	5.0	4.5	4.6	4.9	3.8	3.5	4.6	4.4	6.3	8.5	4.0	17.7	3.5	7.2
20	5.9	5.5	4.4	4.7	6.0	3.8	4.2	4.5	4.6	4.4	6.1	6.2	4.9	5.2	6.3	5.0	4.9	5.0	2.9	6.2	4.6	4.2	4.4	3.8	6.3	2.9	4.9
21	3.4	3.9	5.5	8.2	5.4	41.0	37.2	9.7	37.9	22.0	12.0	12.2	7.3	6.3	13.5	19.7	37.0	6.2	8.1	15.3	43.8	13.5	17.1	34.8	43.8	3.4	17.5
22	9.6	6.5	5.1	8.8	11.8	8.5	4.2	3.6	3.4	3.8	3.6	3.4	3.3	3.8	3.4	2.4	3.2	3.3	6.5	4.7	5.7	7.4	6.1	6.4	11.8	2.4	5.4
23	6.7	7.4	6.8	5.7	5.8	7.6	8.4	5.3	3.0	3.8	3.6	2.9	4.5	4.2	4.4	5.6	2.7	3.4	2.4	2.9	4.7	2.1	3.1	2.5	8.4	2.1	4.6
24	2.7	2.5	4.8	12.1	5.8	11.0	7.4	4.2	6.3	9.9	4.4	5.9	9.2	16.4	13.8	5.2	6.4	4.8	3.4	2.6	3.0	3.9	2.6	4.8	16.4	2.5	6.4
25	4.3	4.6	6.9	5.2	6.9	6.3	6.3	5.8	6.9	8.1	13.9	11.8	16.6	5.4	15.2	6.5	2.3	11.5	5.2	29.8	8.5	9.3	23.3	6.6	29.8	2.3	9.5
26	33.3	32.6	20.8	4.5	3.8	6.9	5.9	6.6	5.3	4.2	4.8	3.5	3.9	3.7	6.0	5.2	6.8	6.0	6.3	6.0	9.1	18.5	3.2	3.6	33.3	3.2	8.8
27	3.5	3.5	4.8	5.5	4.3	4.7	4.7	4.1	4.6	5.7	6.6	6.7	3.8	3.7	3.7	3.9	3.6	4.0	4.0	5.8	5.7	4.8	4.1	3.7	6.7	3.5	4.6
28	3.7	3.8	5.5	3.9	3.6	3.6	3.9	3.5	3.7	3.2	3.2	4.1	4.9	4.9	5.1	3.8	4.3	3.9	4.5	14.7	5.1	6.1	4.3	6.5	14.7	3.2	4.7
29	4.5	7.2	8.1	4.9	4.3	3.2	2.9	3.5	4.2	8.8	11.7	7.1	4.5	4.5	5.6	5.4	5.2	4.4	4.7	3.5	4.6	7.3	4.8	4.1	11.7	2.9	5.4
30	3.5	4.7	18.3	8.4	7.2	8.0	5.2	7.1	11.7	8.2	8.4	4.8	21.1	8.5	6.6	7.8	7.5	6.8	6.7	9.1	5.3	8.0	11.1	6.7	21.1	3.5	8.4
31	22.4	21.2	6.3	4.3	5.8	4.8	8.9	10.0	4.0	6.2	8.6	18.6	19.7	17.8	14.6	14.3	6.7	6.5	6.9	5.4	2.4	3.3	3.4	2.8	22.4	2.4	9.4
Max.	**33.3**	**45.2**	**20.8**	**15.0**	**17.7**	**41.0**	**37.2**	**33.1**	**37.9**	**22.0**	**33.0**	**39.5**	**58.5**	**17.8**	**15.5**	**19.7**	**37.0**	**11.5**	**8.1**	**29.8**	**43.8**	**41.0**	**46.7**	**34.8**	**58.5**		
Min.	**2.7**	**2.5**	**2.9**	**2.9**	**1.9**	**2.7**	**2.6**	**2.6**	**2.8**	**2.9**	**3.1**	**2.9**	**3.1**	**3.2**	**3.1**	**2.4**	**2.0**	**2.7**	**2.4**	**2.6**	**2.4**	**2.1**	**2.6**	**2.5**		**1.9**	
Avg.	**6.2**	**7.3**	**6.3**	**5.8**	**5.5**	**6.6**	**6.8**	**6.5**	**6.7**	**6.0**	**6.6**	**7.2**	**8.3**	**6.1**	**6.5**	**6.2**	**6.1**	**5.2**	**4.7**	**6.5**	**7.7**	**7.8**	**7.2**	**6.3**			**6.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														0.0	0.0	0.0	0.0	0.7	2.8	16.2	16.0	13.9	15.6	16.5	16.5	0.0	7.4
10	12.9	11.8	13.8	14.2	15.3	13.8	13.1	15.3	16.2	17.8	16.6	16.7	16.8	17.1	17.6	17.3	16.5	16.3	16.0	14.6	14.4	16.4	17.2	16.3	17.8	11.8	15.6
11	15.1	15.8	15.6	16.5	16.8	16.7	17.7	16.9	15.8	16.4	17.3	17.4	16.9	16.5	15.8	17.0	16.0	15.1	13.9	14.6	15.5	14.5	13.8	13.3	17.7	13.3	15.9
12	13.4	14.2	12.6	12.2	11.3	9.7	10.6	9.7	8.2	8.3	10.1	11.0	12.0	9.8	9.1	7.7	7.3	7.5	8.6	8.8	8.9	7.5	5.5	4.2	14.2	4.2	9.5
13	4.9	3.4	3.2	2.9	1.4	2.7	3.7	1.9	3.2	5.3	4.8	3.7	4.8	4.4	5.1	5.5	5.5	4.9	4.1	2.8	1.7	1.5	0.8	1.4	5.5	0.8	3.5
14	1.8	1.2	1.1	1.1	2.0	3.3	3.0	2.4	1.8	1.8	2.9	3.6	3.2	2.7	2.1	2.5	2.0	3.1	3.0	2.8	1.3	1.0	0.8	2.6	3.6	0.8	2.2
15	6.8	7.2	6.6	7.4	6.4	4.5	4.3	5.3	5.7	4.9	3.8	3.9	4.6	4.5	4.9	4.5	3.4	5.0	3.2	5.1	5.0	2.8	2.7	2.7	7.4	2.7	4.8
16	2.5	3.3	2.5	2.0	2.7	3.5	2.1	4.2	4.2	4.3	3.5	5.3	6.1	8.1	8.8	9.3	9.7	8.8	8.9	8.2	8.4	6.1	5.8	3.8	9.7	2.0	5.5
17	1.5	1.4	1.1	1.8	2.8	3.5	2.6	3.6	3.4	5.1	3.9	4.2	5.2	7.4	7.0	7.2	9.0	10.2	8.7	8.5	7.2	5.6	4.6	4.2	10.2	1.1	5.0
18	2.9	1.3	1.9	3.1	3.8	2.4	2.3	3.4	5.7	6.8	7.0	10.6	12.3	10.5	12.7	13.5	12.6	12.4	12.7	10.2	7.7	7.3	7.5	4.8	13.5	1.3	7.3
19	3.1	1.2	1.2	1.1	3.1	4.6	5.5	4.9	3.9	1.7	2.3	1.7	2.5	2.7	2.7	3.0	4.7	4.0	4.2	6.6	8.4	7.1	3.0	1.6	8.4	1.1	3.5
20	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.1	0.9	1.9	1.7	1.5	3.4	4.0	9.9	9.9	9.7	8.5	8.7	7.1	5.2	5.6	7.5	2.4	9.9	0.8	4.1
21	3.6	3.4	2.7	2.8	0.9	1.7	3.6	2.9	2.7	3.5	3.2	4.0	2.9	3.9	3.2	2.0	5.6	3.9	5.1	4.7	3.6	4.3	2.5	5.1	5.6	0.9	3.4
22	6.8	7.7	5.8	7.9	6.9	6.8	7.9	6.3	4.2	5.6	6.0	5.4	6.7	8.7	10.1	10.2	10.7	9.8	9.4	9.5	8.3	9.7	8.6	5.7	10.7	4.2	7.7
23	6.5	5.4	6.3	6.4	3.7	5.3	5.4	3.8	4.8	5.7	6.0	6.1	5.9	5.9	4.8	4.6	4.1	3.6	5.0	6.1	6.4	4.8	4.0	3.7	6.5	3.6	5.2
24	2.9	2.4	3.1	1.6	0.6	1.7	2.2	1.8	3.1	3.6	2.7	2.4	1.5	3.0	4.0	3.2	2.4	2.5	3.7	2.9	2.9	2.6	1.3	1.3	4.0	0.6	2.5
25	2.0	2.5	2.6	5.1	4.1	2.9	2.3	1.6	2.1	3.1	3.5	3.7	5.7	7.0	7.4	7.0	6.9	7.1	7.2	6.3	5.1	3.9	3.8	4.0	7.4	1.6	4.5
26	3.3	2.8	3.5	3.5	2.3	1.6	3.7	4.5	4.0	4.6	4.8	4.6	5.0	4.7	5.1	3.2	3.4	5.6	6.6	7.3	7.3	5.9	3.8	4.1	7.3	1.6	4.4
27	2.1	1.1	1.2	2.0	2.8	1.4	0.8	1.2	1.5	1.3	2.0	2.7	3.4	4.6	6.0	5.2	4.7	5.2	5.8	6.9	7.8	6.7	4.7	3.7	7.8	0.8	3.5
28	3.2	2.8	2.0	1.8	1.7	1.8	3.4	6.1	4.0	4.8	6.1	6.4	6.7	5.5	5.7	5.6	4.9	3.6	4.5	4.7	5.3	3.5	3.1	3.3	6.7	1.7	4.2
29	3.6	3.8	4.4	0.9	4.2	2.9	2.1	3.9	4.6	5.2	3.5	3.0	3.5	4.7	6.7	10.8	12.8	13.4	11.9	11.6	10.2	6.2	8.7	10.6	13.4	0.9	6.4
30	10.8	11.3	9.5	8.8	6.8	5.7	5.5	8.0	6.6	7.4	8.1	6.9	5.5	6.6	6.3	5.4	5.6	4.5	3.6	3.3	3.8	4.2	3.6	3.0	11.3	3.0	6.3
Max.	**15.1**	**15.8**	**15.6**	**16.5**	**16.8**	**16.7**	**17.7**	**16.9**	**16.2**	**17.8**	**17.3**	**17.4**	**16.9**	**17.1**	**17.6**	**17.3**	**16.5**	**16.3**	**16.0**	**16.2**	**16.0**	**16.4**	**17.2**	**16.5**	**17.8**		
Min.	**0.8**	**0.8**	**1.1**	**0.9**	**0.6**	**1.4**	**0.8**	**1.1**	**0.9**	**1.3**	**1.7**	**1.5**	**1.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**2.8**	**2.8**	**1.3**	**1.0**	**0.8**	**1.3**		**0.0**	
Avg.	**5.3**	**5.0**	**4.8**	**5.0**	**4.8**	**4.7**	**4.9**	**5.2**	**5.1**	**5.7**	**5.7**	**5.9**	**6.4**	**6.5**	**7.1**	**7.0**	**7.1**	**7.1**	**7.2**	**7.7**	**7.3**	**6.4**	**5.9**	**5.4**			**6.0**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.6	3.6	2.9	2.6	2.4	2.6	3.2	2.5	1.5	1.7	1.5	1.8	2.0	2.0	3.3	4.5	6.0	5.8	5.9	6.2	5.9	5.3	3.2	2.7	6.2	1.5	3.4
2	2.4	2.6	1.1	1.4	2.5	2.8	2.7	1.4	1.5	2.3	2.4	4.1	6.0	7.2	6.0	5.4	6.5	8.0	8.9	8.0	7.4	9.2	8.7	10.7	10.7	1.1	5.0
3	9.8	8.8	8.5	8.9	4.6	3.8	5.5	7.1	7.0	5.0	5.2	4.1	3.4	2.8	4.3	4.9	5.5	5.1	5.0	5.1	6.3	5.2	3.4	1.4	9.8	1.4	5.5
4	3.0	3.2	2.5	2.3	2.0	1.3	1.1	1.1	1.6	1.8	2.6	3.1	3.7	5.2	5.5	5.0	4.8	6.9	6.0	5.5	6.0	6.0	3.3	2.9	6.9	1.1	3.6
5	4.0	1.9	2.7	3.2	2.9	1.3	2.4	3.0	2.7	2.2	2.0	2.5	2.8	3.6	4.3	5.3	6.0	2.6	1.0	3.9	3.9	2.6	1.5	1.8	6.0	1.0	2.9
6	2.6	1.1	1.4	1.8	1.7	0.9	1.0	2.4	2.9	3.9	2.1	2.3	4.5	5.0	5.6	5.8	4.6	4.3	1.7	3.2	4.0	3.7	4.7	5.0	5.8	0.9	3.2
7	5.2	4.6	5.4	5.4	4.5	3.9	2.8	4.7	5.0	6.8	6.7	6.8	7.5	7.9	7.1	7.0	6.7	6.3	5.6	4.9	4.8	5.3	5.0	4.8	7.9	2.8	5.6
8	6.0	6.9	5.5	6.3	5.3	4.5	4.6	5.1	5.2	6.1	5.9	6.1	5.9	5.1	4.0	3.6	4.3	3.7	4.3	3.5	3.3	3.5	2.5	1.9	6.9	1.9	4.7
9	1.6	1.9	1.6	3.0	3.4	4.7	5.4	4.2	1.6	2.4	2.8	3.5	4.6	5.5	6.3	8.0	8.0	7.8	8.5	8.4	8.7	10.3	8.4	7.8	10.3	1.6	5.3
10	11.1	10.1	10.7	10.6	13.5	13.3	11.8	13.4	12.9	11.1	15.5	15.2	14.6	14.5	13.0	12.4	13.1	13.0	13.0	11.7	8.0	6.8	5.1	5.7	15.5	5.1	11.7
11	6.6	4.7	4.1	3.7	3.1	3.3	3.3	1.4	1.5	3.6	5.9	5.4	6.3	5.3	5.9	5.1	6.0	4.4	3.1	3.2	3.5	3.2	3.2	2.9	6.6	1.4	4.1
12	2.4	0.9	0.5	0.5	1.9	1.9	3.0	2.6	4.0	3.5	3.7	2.6	0.0	0.0	0.6	0.5	1.4	6.9	9.5	8.8	6.5	6.8	3.6	4.4	9.5	0.0	3.2
13	5.5	6.7	6.8	6.1	5.7	8.5	8.0	8.3	8.1	9.0	6.7	7.4	6.9	7.4	7.1	8.8	9.6	8.9	8.4	9.1	9.2	8.4	7.2	10.0	10.0	5.5	7.8
14	9.1	7.9	6.4	6.6	6.2	5.9	5.8	6.4	6.7	6.3	6.4	6.7	7.3	7.1	7.1	8.0	7.7	6.8	7.9	7.2	8.2	7.6	7.2	6.6	9.1	5.8	7.0
15	5.1	5.0	5.5	5.0	4.9	3.6	2.1	4.2	4.4	4.6	4.7	5.8	6.1	6.0	5.5	5.0	5.5	5.2	5.5	4.5	4.1	4.0	4.2	5.2	6.1	2.1	4.8
16	4.4	3.9	5.2	5.1	5.8	8.6	9.2	10.2	12.5	13.3	13.0	13.1	12.5	13.4	13.6	13.5	13.1	12.1	13.0	12.2	12.2	11.5	9.6	9.7	13.6	3.9	10.5
17	8.6	8.8	9.5	8.8	9.9	10.9	10.7	11.2	11.3	13.2	14.5	15.1	15.0	14.7	13.9	14.0	13.4	12.6	11.3	12.1	11.4	14.0	15.6	12.3	15.6	8.6	12.2
18	9.4	9.4	15.0	12.0	9.8	11.6	10.6	10.9	12.0	13.2	12.9	16.0	15.3	14.1	13.6	13.2	13.2	14.3	12.9	12.2	12.0	12.1	12.1	11.8	16.0	9.4	12.5
19	10.0	9.0	6.6	7.2	6.9	5.6	5.6	5.2	4.9	5.1	5.5	6.8	8.0	7.4	5.6	4.7	4.4	4.1	6.0	5.4	4.9	4.2	2.5	1.3	10.0	1.3	5.7
20	1.8	4.6	6.8	6.7	5.9	6.1	6.0	5.6	6.6	6.5	4.6	5.5	5.2	6.0	6.1	3.6	3.7	4.0	5.6	6.4	5.2	5.7	3.6	3.1	6.8	1.8	5.2
21	2.7	1.0	0.8	1.7	2.8	1.5	1.2	2.3	1.4	4.5	5.5	6.2	7.3	7.2	5.9	6.8	6.2	5.8	5.5	5.4	2.5	1.3	1.5	3.2	7.3	0.8	3.8
22	2.5	1.4	1.0	1.2	1.5	1.6	3.4	2.7	1.7	2.9	2.8	2.1	5.3	6.0	5.5	5.9	6.3	5.4	5.1	5.5	6.4	7.3	6.3	5.8	7.3	1.0	4.0
23	8.2	7.9	5.8	4.4	6.4	7.5	8.0	8.3	6.6	6.4	5.8	5.4	2.2	2.1	2.9	3.7	2.4	2.7	1.7	2.7	4.6	4.1	4.7	4.4	8.3	1.7	5.0
24	3.5	6.1	6.0	4.6	4.2	3.9	5.4	5.1	4.0	4.0	4.1	4.9	5.4	4.4	4.5	4.3	7.0	5.5	5.8	5.3	6.7	7.3	4.2	5.6	7.3	3.5	5.1
25	5.6	5.6	5.9	7.7	6.8	5.4	3.8	6.0	6.3	6.1	5.4	6.5	6.2	6.7	5.5	5.3	5.2	4.8	4.0	2.7	3.6	3.0	1.9	1.8	7.7	1.8	5.1
26	1.0	1.4	1.1	1.5	2.2	2.3	1.5	1.4	2.2	3.8	5.9	5.2	4.6	4.9	6.1	7.2	8.1	8.2	7.1	6.1	6.7	6.8	6.2	6.0	8.2	1.0	4.5
27	6.5	4.8	2.8	3.9	3.4	2.6	3.7	3.3	4.4	5.1	3.4	1.5	1.5	2.3	2.9	2.6	3.8	3.2	5.1	3.7	3.6	2.4	1.1	0.8	6.5	0.8	3.3
28	1.3	0.4	1.5	1.3	0.9	0.5	0.9	1.1	3.1	4.0	4.7	6.5	5.5	5.6	6.7	7.9	10.3	11.1	11.2	11.1	10.8	11.1	12.3	13.0	13.0	0.4	5.9
29	11.6	13.1	12.8	14.1	10.6	11.4	12.8	12.5	10.8	10.5	10.5	9.7	9.6	8.7	9.1	10.9	11.6	12.0	10.8	9.5	10.1	11.5	10.5	8.3	14.1	8.3	10.9
30	7.5	7.4	5.8	5.8	4.8	4.6	5.1	4.6	2.4	3.9	4.6	2.4	2.4	5.2	7.0	9.1	9.5	10.4	10.8	10.5	9.2	10.0	10.9	9.6	10.9	2.4	6.8
31	10.5	10.0	9.7	10.4	10.9	7.5	7.3	6.6	6.0	6.0	6.2	4.8	4.0	6.8	6.6	6.2	4.4	3.0	3.3	2.6	1.7	1.6	2.9	4.3	10.9	1.6	6.0
Max.	**11.6**	**13.1**	**15.0**	**14.1**	**13.5**	**13.3**	**12.8**	**13.4**	**12.9**	**13.3**	**15.5**	**16.0**	**15.3**	**14.7**	**13.9**	**14.0**	**13.4**	**14.3**	**13.0**	**12.2**	**12.2**	**14.0**	**15.6**	**13.0**	**16.0**		
Min.	**1.0**	**0.4**	**0.5**	**0.5**	**0.9**	**0.5**	**0.9**	**1.1**	**1.4**	**1.7**	**1.5**	**1.5**	**0.0**	**0.0**	**0.6**	**0.5**	**1.4**	**2.6**	**1.0**	**2.6**	**1.7**	**1.3**	**1.1**	**0.8**		**0.0**	
Avg.	**5.5**	**5.3**	**5.2**	**5.3**	**5.1**	**5.0**	**5.1**	**5.3**	**5.3**	**5.8**	**5.9**	**6.1**	**6.2**	**6.5**	**6.5**	**6.7**	**7.0**	**6.9**	**6.9**	**6.7**	**6.5**	**6.5**	**5.7**	**5.6**			**5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.5	6.4	6.1	4.9	3.5	3.5	3.8	4.1	3.9	3.7	4.5	5.0	5.1	5.1	6.1	6.1	5.9	6.5	6.2	6.1	5.7	6.0	7.6	6.6	7.6	3.5	5.3
2	7.1	6.9	6.8	6.7	6.9	5.6	3.2	2.7	4.1	5.3	5.0	4.3	4.2	4.5	5.9	4.5	7.7	9.1	10.0	11.3	11.4	10.9	8.7	8.7	11.4	2.7	6.7
3	8.5	9.3	10.0	10.1	8.7	8.5	8.8	9.4	8.7	7.6	6.1	6.5	9.3	8.7	8.1	9.5	12.1	11.4	8.9	7.8	7.3	8.7	9.0	9.1	12.1	6.1	8.8
4	9.3	6.6	6.4	6.0	2.0	1.6	1.7	4.3	3.6	2.8	2.4	1.9	2.1	2.8	2.0	1.4	0.8	0.9	0.8	1.2	0.7	1.0	1.1	1.2	9.3	0.7	2.7
5	1.1	2.3	1.8	1.7	0.7	1.4	1.7	1.8	1.5	3.1	3.6	4.0	5.4	5.8	7.2	6.0	5.7	4.3	4.6	2.1	2.8	2.2	1.7	1.9	7.2	0.7	3.1
6	4.7	4.3	1.7	2.7	2.3	3.0	6.3	7.7	8.2	6.6	5.8	5.2	5.0	6.3	6.0	6.8	6.9	6.9	6.6	5.7	4.4	4.0	5.2	4.2	8.2	1.7	5.3
7	2.6	2.1	2.0	3.8	3.6	3.0	1.6	2.5	3.3	4.8	5.1	7.9	7.5	8.6	8.7	9.3	8.8	9.7	10.1	8.9	8.3	8.4	7.7	7.2	10.1	1.6	6.1
8	6.4	6.5	6.7	5.8	4.5	3.7	4.8	4.8	3.9	5.8	5.0	5.1	4.8	4.9	4.1	2.6	3.8	5.7	6.4	4.8	2.7	2.5	1.8	3.0	6.7	1.8	4.6
9	1.9	1.1	1.1	1.5	1.1	1.3	0.9	1.3	1.5	3.4	2.4	2.9	4.0	4.0	4.8	3.9	4.0	5.0	6.0	6.5	6.5	5.7	6.7	6.1	6.7	0.9	3.5
10	5.7	5.6	7.4	6.9	6.2	6.3	6.9	6.7	7.9	7.0	6.7	7.3	8.2	10.7	11.8	12.9	12.8	13.7	14.4	12.7	13.6	14.4	15.2	14.8	15.2	5.6	9.8
11	11.8	9.6	8.6	7.6	9.2	8.7	9.0	8.3	9.1	9.4	9.3	8.7	7.0	7.2	6.1	4.9	5.6	5.5	5.0	5.0	4.1	4.1	4.4	3.8	11.8	3.8	7.2
12	2.9	3.0	3.1	3.6	4.7	6.8	6.1	7.6	8.7	11.3	10.2	9.4	8.1	7.6	7.4	8.6	8.9	8.2	7.5	6.7	7.4	4.8	1.7	2.6	11.3	1.7	6.5
13	4.0	2.9	2.4	2.1	0.9	2.8	5.6	5.1	6.6	6.7	8.0	6.7	6.1	6.2	6.5	8.3	7.8	8.1	7.8	7.8	7.6	8.0	6.6	6.9	8.3	0.9	5.9
14	6.3	6.0	5.1	4.4	3.6	3.0	3.1	5.8	5.6	7.3	7.9	10.8	13.1	13.7	13.0	11.8	12.7	11.3	10.5	9.5	9.9	10.5	9.2	8.9	13.7	3.0	8.4
15	8.2	8.8	8.7	8.4	7.3	7.6	7.9	8.4	8.1	7.4	7.5	7.1	7.1	6.8	5.8	5.8	4.7	3.3	2.6	2.4	3.0	3.4	2.8	1.8	8.8	1.8	6.0
16	1.2	0.9	1.5	3.0	2.6	3.1	3.7	2.5	2.6	2.2	2.2	2.5	2.4	2.5	2.6	1.9	3.3	2.9	1.5	1.2	1.3	0.4	1.4	1.2	3.7	0.4	2.1
17	1.7	2.3	1.5	0.7	0.4	1.0	1.1	1.1	0.8	1.1	1.0	2.1	5.3	6.3	6.7	3.2	7.2	8.9	10.4	8.5	9.8	10.8	11.0	10.6	11.0	0.4	4.7
18	12.3	14.1	15.0	12.7	12.1	12.8	12.6	14.4	16.1	14.8	14.4	15.2	14.3	13.2	12.2	11.0	10.7	9.0	8.3	7.7	5.9	5.9	7.6	6.0	16.1	5.9	11.6
19	3.2	3.8	3.3	2.8	2.7	2.1	3.5	2.9	3.1	1.9	4.3	7.0	8.9	10.5	9.0	12.0	12.9	12.0	9.8	5.8	3.5	3.9	3.6	4.3	12.9	1.9	5.7
20	3.0	7.6	6.9	8.3	9.1	6.1	6.0	5.3	6.8	6.2	6.0	6.1	7.5	7.4	8.4	7.1	7.7	8.8	8.8	8.9	7.7	3.7	3.6	4.4	9.1	3.0	6.7
21	4.4	6.4	6.3	4.3	2.9	3.2	3.5	3.6	3.0	1.5	1.7	2.0	3.1	3.4	4.0	4.1	5.0	4.9	4.3	5.1	5.8	7.9	11.0	12.5	12.5	1.5	4.8
22	12.9	8.4	9.0	11.2	11.8	11.6	12.5	12.5	12.4	11.6	11.5	10.5	8.8	7.1	7.7	8.9	9.1	8.2	8.4	5.9	7.2	6.6	4.0	4.4	12.9	4.0	9.3
23	2.2	1.0	0.7	1.3	1.5	1.6	1.9	1.3	1.4	2.1	1.1	1.4	4.0	4.1	4.2	3.9	3.8	3.0	3.0	5.1	4.6	2.9	2.9	5.2	5.2	0.7	2.7
24	9.5	10.0	7.4	7.5	7.1	6.8	6.8	7.4	5.7	7.5	9.9	11.4	9.6	7.8	7.2	6.7	7.9	8.1	6.0	5.2	6.0	8.6	7.1	6.6	11.4	5.2	7.7
25	8.5	11.0	8.7	8.8	2.9	3.3	4.7	2.2	3.0	2.7	1.5	4.4	6.3	5.5	4.6	4.1	4.3	3.6	2.8	2.0	1.5	2.8	3.4	4.3	11.0	1.5	4.5
26	5.0	4.2	1.1	1.9	4.0	3.8	2.8	1.6	1.5	1.9	4.4	6.1	5.8	3.2	3.6	2.4	4.2	2.8	3.9	3.5	2.2	1.4	1.2	1.5	6.1	1.1	3.1
27	1.3	2.3	3.5	3.6	3.0	2.8	2.1	0.6	1.2	2.0	0.8	1.7	3.6	4.2	4.6	6.2	6.7	5.2	5.0	2.8	3.0	3.9	6.0	6.3	6.7	0.6	3.4
28	2.5	3.6	5.1	4.8	6.3	7.2	5.8	6.8	5.8	5.4	5.4	4.5	4.9	7.0	7.1	7.8	7.9	5.7	4.8	2.3	2.2	3.6	2.8	1.6	7.9	1.6	5.0
29	1.4	1.6	1.0	1.3	1.8	2.7	2.4	2.2	1.8	1.2	2.1	4.0	5.0	4.1	3.2	3.6	3.4	3.9	5.1	3.9	1.7	1.5	4.4	5.8	5.8	1.0	2.9
30	8.2	8.5	8.8	9.1	8.8	9.9	10.6	9.7	10.3	12.2	10.3	8.9	7.6	8.0	8.3	6.9	8.0	11.4	10.6	10.2	9.6	8.4	5.3	5.7	12.2	5.3	9.0
31	6.7	5.5	5.3	2.4	2.4	3.0	2.8	3.0	4.1	6.7	8.0	8.1	10.4	9.7	11.7	11.6	12.1	13.0	12.0	12.3	7.9	7.1	7.5	7.6	13.0	2.4	7.5
Max.	**12.9**	**14.1**	**15.0**	**12.7**	**12.1**	**12.8**	**12.6**	**14.4**	**16.1**	**14.8**	**14.4**	**15.2**	**14.3**	**13.7**	**13.0**	**12.9**	**12.9**	**13.7**	**14.4**	**12.7**	**13.6**	**14.4**	**15.2**	**14.8**	**16.1**		
Min.	**1.1**	**0.9**	**0.7**	**0.7**	**0.4**	**1.0**	**0.9**	**0.6**	**0.8**	**1.1**	**0.8**	**1.4**	**2.1**	**2.5**	**2.0**	**1.4**	**0.8**	**0.9**	**0.8**	**1.2**	**0.7**	**0.4**	**1.1**	**1.2**		**0.4**	
Avg.	**5.5**	**5.6**	**5.3**	**5.2**	**4.7**	**4.8**	**5.0**	**5.1**	**5.3**	**5.6**	**5.6**	**6.1**	**6.6**	**6.7**	**6.7**	**6.6**	**7.2**	**7.1**	**6.8**	**6.1**	**5.7**	**5.6**	**5.6**	**5.6**			**5.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.4	6.7	6.4	6.1	6.1	6.7	6.5	6.2	5.9	5.7	7.1	6.2	5.6	5.5	4.6	7.5	9.8	8.5	9.3	9.3	8.4	9.1	9.0	8.3	9.8	4.6	7.2
2	8.1	7.9	8.8	8.5	5.8	6.9	5.6	6.5	6.6	8.4	11.2	11.8	9.5	9.4	7.3	6.7	7.0	7.4	3.6	3.4	4.4	1.3	1.0	1.5	11.8	1.0	6.6
3	2.1	3.4	1.5	2.6	2.8	1.9	3.2	3.7	3.4	2.4	1.4	1.2	1.8	3.2	4.0	2.6	1.4	1.0	0.8	1.6	2.4	2.3	2.3	0.8	4.0	0.8	2.2
4	0.4	0.4	0.7	2.8	4.2	3.7	3.6	4.5	3.8	2.8	2.7	2.6	2.5	1.3	1.3	2.8	6.9	2.3	2.1	3.7	4.9	2.1	2.7	3.1	6.9	0.4	2.8
5	4.1	2.9	3.4	3.1	3.0	3.6	3.5	3.3	3.3	4.6	5.6	6.7	7.5	8.6	8.7	8.3	9.5	8.2	7.5	5.4	4.3	3.7	1.9	1.3	9.5	1.3	5.1
6	1.5	1.8	3.2	4.7	6.3	7.4	7.3	6.7	7.1	6.8	7.9	6.7	7.4	6.9	6.2	5.5	5.7	5.5	5.4	6.9	6.9	8.5	8.6	6.3	8.6	1.5	6.1
7	6.1	3.9	2.6	2.6	2.9	4.1	6.0	6.7	6.0	8.2	12.0	16.9	16.6	20.1	21.7	21.8	19.3	17.0	19.6	18.5	17.7	17.4	17.1	18.8	21.8	2.6	12.6
8	15.9	19.4	18.8	18.7	17.8	16.7	16.2	15.7	15.5	14.8	14.0	11.9	11.5	11.4	11.7	10.5	9.5	9.3	9.4	9.0	8.4	7.6	8.4	7.3	19.4	7.3	12.9
9	7.0	6.3	6.0	6.5	5.6	3.1	3.0	2.5	3.1	3.6	3.5	3.6	5.7	6.1	5.5	5.4	6.9	5.9	5.4	5.4	3.9	2.3	1.5	1.9	7.0	1.5	4.6
10	1.9	2.5	3.7	2.3	1.6	2.1	1.9	2.1	1.0	1.1	3.2	3.1	3.0	3.7	4.5	4.9	4.9	3.4	3.0	2.0	1.2	1.5	0.9	0.4	4.9	0.4	2.5
11	1.2	1.9	1.4	0.8	0.5	2.4	2.8	3.2	3.3	3.7	3.2	1.5	3.0	3.3	1.7	1.4	2.5	3.7	4.6	4.1	2.5	1.2	1.3	2.0	4.6	0.5	2.4
12	3.1	3.0	3.0	3.9	2.6	2.9	3.0	3.0	3.3	3.1	2.5	2.2	2.1	1.7	3.7	5.3	5.3	3.5	3.4	4.3	3.0	2.4	2.9	3.2	5.3	1.7	3.2
13	4.4	4.6	4.6	4.4	4.1	4.0	3.6	3.5	3.1	2.6	5.2	6.2	9.2	10.1	10.5	10.3	11.4	12.5	14.8	15.2	17.8	20.5	20.4	21.8	21.8	2.6	9.4
14	22.5	22.5	22.0	19.9	18.7	19.9	19.7	18.4	18.3	19.6	17.5	15.3	16.3	15.8	19.1	18.4	19.7	18.3	16.4	16.9	16.7	17.3	16.9	17.2	22.5	15.3	18.5
15	16.5	15.9	16.2	16.1	15.6	14.1	11.4	11.9	13.6	15.1	14.7	14.7	15.9	14.3	17.7	18.2	15.2	17.0	15.2	11.6	11.6	13.6	11.7	12.0	18.2	11.4	14.6
16	9.6	9.5	8.6	7.3	6.8	7.8	6.6	6.6	5.8	6.6	8.9	9.7	8.3	10.4	9.3	7.6	7.8	6.9	5.7	3.5	2.9	4.8	4.4	4.5	10.4	2.9	7.1
17	4.0	5.0	4.3	5.9	6.7	5.5	5.1	4.7	6.1	7.1	7.0	7.5	7.3	6.0	5.7	5.4	5.6	5.1	4.1	3.8	3.7	2.7	2.4	2.7	7.5	2.4	5.1
18	2.6	2.3	4.4	5.9	6.4	6.6	8.4	10.2	11.0	13.8	12.6	14.6	13.8	13.3	14.8	13.8	13.2	12.6	15.3	14.8	14.1	13.4	14.2	14.3	15.3	2.3	11.1
19	10.9	16.4	15.6	9.0	7.1	4.3	5.6	4.5	2.5	3.5	5.8	6.3	3.0	2.0	1.2	2.1	1.4	1.1	0.9	3.0	1.3	2.0	0.9	1.7	16.4	0.9	4.7
20	1.7	2.0	1.6	1.6	1.9	1.9	1.4	1.3	3.0	3.4	4.4	5.3	6.0	6.2	6.0	2.8	5.1	4.6	6.5	7.4	8.0	5.6	6.1	4.9	8.0	1.3	4.1
21	4.0	3.4	1.8	1.3	0.9	2.3	3.8	6.4	7.5	8.1	8.9	7.5	7.9	7.5	8.0	5.2	8.0	9.0	10.4	14.6	13.2	17.3	13.1	10.1	17.3	0.9	7.5
22	5.5	1.8	3.5	4.0	6.3	5.9	5.6	7.1	8.7	8.2	5.6	5.2	6.3	6.3	5.7	5.7	5.5	4.7	5.4	5.9	3.6	4.7	9.1	9.1	9.1	1.8	5.8
23	8.2	6.6	5.6	5.6	6.2	3.9	4.5	3.6	4.3	6.1	6.6	7.6	8.7	7.3	7.0	6.7	6.0	5.1	4.1	2.9	3.0	4.3	4.0	3.1	8.7	2.9	5.5
24	2.3	2.8	1.6	2.0	1.0	1.0	1.2	1.1	1.0	0.7	1.1	1.7	2.8	2.7	3.6	4.1	6.3	6.8	5.8	5.1	5.4	6.1	6.0	4.0	6.8	0.7	3.2
25	4.2	5.4	4.4	5.6	5.8	4.9	3.9	3.8	4.2	3.5	3.9	2.0	1.7	3.1	4.3	5.9	7.4	7.4	8.3	7.4	5.5	5.6	4.5	4.7	8.3	1.7	4.9
26	4.1	3.4	2.4	3.2	3.8	5.6	5.2	4.0	3.8	3.4	3.2	3.1	6.0	6.9	5.7	2.9	2.1	2.5	2.7	2.1	1.3	1.0	3.5	4.0	6.9	1.0	3.6
27	3.8	3.9	6.0	7.1	5.5	3.3	2.6	0.9	1.3	0.9	0.8	1.5	1.7	2.1	2.8	3.9	2.8	1.6	2.5	3.8	2.0	3.9	3.6	3.7	7.1	0.8	3.0
28	2.1	2.5	3.1	3.9	3.0	3.0	3.0	4.3	6.0	5.4	6.1	6.8	7.5	8.0	8.5	10.2	11.2	10.0	10.6	9.2	8.5	7.4	5.5	5.9	11.2	2.1	6.3
29	4.8	1.7	1.1	0.7	1.0	2.2	2.5	4.6	4.7	10.0	11.6	10.1	10.4	10.1	10.8	9.6	8.1	8.6	7.3	7.2	8.0	8.0	5.2	5.9	11.6	0.7	6.4
30	4.6	4.0	2.0	1.9	2.0	2.4	1.4	0.7	1.0	1.1	1.6	1.8	4.0	6.0	8.3	7.6	10.1	10.3	9.0	11.6	13.7	14.2	14.4	15.1	15.1	0.7	6.2
Max.	**22.5**	**22.5**	**22.0**	**19.9**	**18.7**	**19.9**	**19.7**	**18.4**	**18.3**	**19.6**	**17.5**	**16.9**	**16.6**	**20.1**	**21.7**	**21.8**	**19.7**	**18.3**	**19.6**	**18.5**	**17.8**	**20.5**	**20.4**	**21.8**	**22.5**		
Min.	**0.4**	**0.4**	**0.7**	**0.7**	**0.5**	**1.0**	**1.2**	**0.7**	**1.0**	**0.7**	**0.8**	**1.2**	**1.7**	**1.3**	**1.2**	**1.4**	**1.4**	**1.0**	**0.8**	**1.6**	**1.2**	**1.0**	**0.9**	**0.4**		**0.4**	
Avg.	**5.8**	**5.8**	**5.6**	**5.6**	**5.4**	**5.3**	**5.3**	**5.4**	**5.6**	**6.1**	**6.7**	**6.7**	**7.1**	**7.3**	**7.6**	**7.4**	**7.9**	**7.3**	**7.3**	**7.3**	**6.9**	**7.1**	**6.8**	**6.6**			**6.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	14.4	13.0	13.1	13.6	13.7	12.7	12.2	12.0	13.0	13.7	14.6	13.7	13.8	14.5	14.4	14.9	14.8	13.7	13.0	11.7	11.0	13.1	13.8	13.1	14.9	11.0	13.4
2	13.4	12.6	11.8	12.3	11.2	10.6	11.5	9.2	8.2	8.9	9.1	9.0	8.6	10.1	10.5	10.7	12.0	12.5	12.7	13.3	14.9	16.5	16.8	16.8	16.8	8.2	11.8
3	16.6	17.2	18.7	18.8	18.5	19.2	17.7	15.5	14.0	12.6	13.0	11.4	11.2	10.6	11.0	8.7	13.2	12.7	12.3	9.4	12.5	12.9	14.1	14.9	19.2	8.7	14.0
4	13.6	15.1	14.3	13.8	10.7	10.4	13.0	14.9	10.6	8.4	8.6	7.2	7.8	6.0	6.9	5.7	7.5	4.0	2.3	2.1	2.2	3.4	3.3	4.3	15.1	2.1	8.2
5	4.4	3.3	1.3	1.3	1.8	3.3	1.6	2.3	2.5	2.2	2.5	2.0	3.4	5.5	5.1	5.8	8.4	7.1	8.9	10.0	9.9	6.8	3.8	3.2	10.0	1.3	4.4
6	3.6	3.0	3.7	5.6	6.9	7.8	8.4	9.4	9.3	8.3	9.9	8.7	7.4	8.3	8.6	7.7	7.5	9.4	8.4	9.8	11.6	11.2	12.0	11.5	12.0	3.0	8.2
7	12.2	11.7	11.6	12.3	13.8	14.8	14.9	14.8	14.5	14.0	14.8	13.1	13.0	14.1	14.6	15.8	16.3	16.6	16.9	18.9	16.9	15.1	17.4	18.8	18.9	11.6	14.9
8	18.5	18.7	20.1	20.7	20.1	20.9	19.5	18.4	18.6	18.4	19.3	19.3	19.5	21.6	21.4	21.3	20.0	17.1	18.0	19.6	18.5	14.0	16.0	21.2	21.6	14.0	19.2
9	21.7	22.3	20.0	21.5	21.0	22.7	22.1	24.2	22.9	22.0	23.6	24.5	25.0	24.4	23.8	22.7	22.7	20.8	14.5	10.9	6.5	7.3	6.6	7.0	25.0	6.5	19.2
10	4.7	3.5	1.0	1.4	1.1	1.2	2.7	3.6	4.5	5.5	6.8	7.9	10.3	13.0	14.8	14.5	14.0	12.6	15.1	13.5	12.4	12.0	12.1	11.3	15.1	1.0	8.3
11	11.0	12.1	10.5	12.0	9.3	6.8	6.5	8.8	6.8	4.1	5.9	6.9	5.9	7.0	6.7	4.8	5.2	5.0	4.6	3.8	2.8	2.6	3.1	4.2	12.1	2.6	6.5
12	3.7	3.0	2.3	2.4	2.0	2.4	3.2	2.4	1.4	3.2	3.5	5.7	5.3	5.7	7.2	6.9	7.4	7.5	6.5	6.2	5.4	5.7	6.1	5.9	7.5	1.4	4.6
13	4.7	4.9	3.9	3.2	4.6	4.5	4.3	4.0	3.3	1.9	2.0	2.3	3.1	3.0	4.3	3.1	4.0	4.2	3.0	4.1	2.4	2.8	3.2	2.5	4.9	1.9	3.5
14	2.8	3.6	2.9	2.9	2.9	3.0	1.9	1.0	1.3	1.2	2.6	4.7	4.7	5.2	5.4	5.3	6.1	3.6	2.8	2.5	3.3	3.8	4.0	4.5	6.1	1.0	3.4
15	4.6	4.6	2.6	2.6	2.7	4.1	5.8	6.9	6.2	6.8	6.5	6.3	7.8	10.9	10.8	10.0	12.1	11.7	10.4	8.2	7.8	9.2	11.6	16.5	16.5	2.6	7.8
16	17.2	14.9	13.6	12.6	11.0	8.6	7.2	6.4	6.5	5.2	6.4	7.1	6.2	6.8	7.7	9.1	9.9	10.6	11.4	12.9	11.9	12.4	10.4	9.2	17.2	5.2	9.8
17	8.9	9.7	9.9	9.6	8.8	8.1	9.0	8.7	8.5	8.0	8.1	7.8	8.5	9.7	9.4	10.0	10.0	7.5	7.2	10.1	10.5	10.6	12.4	12.8	12.8	7.2	9.3
18	12.8	13.2	12.0	11.8	12.4	11.2	11.4	11.4	9.0	8.9	10.9	7.0	2.1	3.6	2.8	2.0	2.9	3.4	3.8	4.2	1.7	2.7	5.9	6.5	13.2	1.7	7.2
19	5.9	4.5	2.3	1.4	1.5	4.3	3.8	4.7	4.1	4.5	5.0	5.2	6.3	7.7	8.0	7.8	8.4	7.9	2.4	3.3	4.6	4.4	5.3	6.1	8.4	1.4	5.0
20	5.9	6.5	6.6	5.8	6.3	6.9	5.1	3.8	2.4	2.1	2.0	2.3	1.5	2.5	3.7	2.4	1.3	1.5	2.1	2.3	2.9	3.1	3.4	2.8	6.9	1.3	3.5
21	2.2	2.4	2.4	3.4	5.4	5.8	6.0	4.1	4.7	4.2	5.6	5.5	6.4	6.3	5.2	4.5	3.7	3.9	3.1	3.3	3.4	4.3	4.6	3.7	6.4	2.2	4.3
22	4.7	6.4	7.1	6.9	7.4	6.5	5.7	5.9	5.2	3.6	3.2	2.0	0.7	1.4	1.2	0.9	4.4	5.0	4.8	4.6	3.1	4.4	7.1	5.5	7.4	0.7	4.5
23	7.4	6.4	6.8	7.2	7.1	7.3	6.9	8.5	7.3	6.8	9.7	9.7	7.7	6.4	6.8	5.4	4.5	4.1	2.8	2.6	2.4	1.9	2.1	2.0	9.7	1.9	5.8
24	2.9	3.6	3.3	7.6	8.0	8.6	11.2	10.7	9.7	7.7	5.9	5.1	7.1	10.3	9.6	8.2	6.1	6.6	8.2	11.6	14.0	12.5	12.9	13.8	14.0	2.9	8.5
25	13.1	12.5	12.7	13.7	13.0	12.0	12.3	14.7	15.2	14.8	18.1	17.1	15.6	13.8	12.8	12.6	11.5	12.8	15.2	14.2	15.1	15.5	15.2	15.6	18.1	11.5	14.1
26	15.0	15.5	15.8	16.8	16.9	17.7	15.4	15.2	17.5	17.6	18.9	21.0	18.7	18.6	17.6	13.3	6.3	8.8	13.7	15.5	21.0	18.4	14.3	13.7	21.0	6.3	16.0
27	12.7	16.7	17.5	15.0	15.1	12.2	10.7	13.2	8.9	5.6	3.6	4.7	3.5	3.4	4.5	4.8	3.4	2.0	1.3	1.0	1.4	2.4	1.5	1.7	17.5	1.0	6.9
28	1.5	1.3	2.6	3.0	2.6	1.7	2.0	1.6	1.9	2.2	2.3	2.8	3.9	5.1	6.6	7.7	8.7	9.7	11.3	11.3	11.6	11.8	13.6	13.8	13.8	1.3	5.9
29	10.7	11.2	9.4	12.8	12.0	13.3	13.4	10.9	12.2	12.0	12.0	8.9	9.3	10.3	11.3	8.9	9.9	12.3	10.8	10.5	10.6	10.8	8.3	7.0	13.4	7.0	10.8
30	5.9	5.4	4.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	6.0	7.3	7.1	7.9	9.0	9.9	9.9	10.4	9.9	10.3	8.9	10.4	0.0	4.8
31	6.1	7.2	9.0	10.7	12.9	12.8	12.5	9.5	9.5	11.3	12.1	10.5	10.8	11.4	10.7	10.1	9.9	9.1	8.9	7.7	8.1	6.6	6.4	6.8	12.9	6.1	9.6
Max.	**21.7**	**22.3**	**20.1**	**21.5**	**21.0**	**22.7**	**22.1**	**24.2**	**22.9**	**22.0**	**23.6**	**24.5**	**25.0**	**24.4**	**23.8**	**22.7**	**22.7**	**20.8**	**18.0**	**19.6**	**21.0**	**18.4**	**17.4**	**21.2**	**25.0**		
Min.	**1.5**	**1.3**	**1.0**	**1.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**1.4**	**1.2**	**0.9**	**1.3**	**1.5**	**1.3**	**1.0**	**1.4**	**1.9**	**1.5**	**1.7**		**0.0**	
Avg.	**9.1**	**9.2**	**8.8**	**9.1**	**9.1**	**9.1**	**9.0**	**8.9**	**8.4**	**7.9**	**8.6**	**8.4**	**8.3**	**9.1**	**9.4**	**8.8**	**9.0**	**8.8**	**8.6**	**8.7**	**8.7**	**8.6**	**9.0**	**9.2**			**8.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	6.6	5.9	6.0	4.8	7.2	7.2	7.7	7.2	7.5	7.6	7.2	8.4	8.0	8.0	8.2	8.6	8.2	8.4	9.6	8.9	7.8	7.9	8.9	9.6	4.8	7.6
2	7.9	8.3	8.5	8.2	7.9	7.4	8.2	8.7	9.5	8.9	8.9	8.2	9.2	10.7	10.5	11.3	12.2	12.1	12.9	9.3	10.2	9.3	9.9	9.4	12.9	7.4	9.5
3	9.0	8.1	7.3	6.0	5.8	6.5	7.0	7.0	7.7	8.2	8.0	6.6	7.2	6.3	8.7	8.8	7.5	7.8	7.1	6.9	8.6	7.0	8.3	6.8	9.0	5.8	7.4
4	6.4	8.0	6.5	7.6	6.3	6.4	6.1	6.7	7.0	7.9	6.6	6.2	8.7	7.7	7.0	6.8	5.1	6.1	6.0	5.8	4.3	3.7	3.5	2.7	8.7	2.7	6.2
5	1.7	1.2	2.0	2.6	2.9	3.3	4.5	3.7	4.0	3.6	3.6	4.3	4.9	5.0	4.6	4.2	5.9	5.5	6.3	4.8	4.6	6.0	5.2	4.5	6.3	1.2	4.1
6	5.0	5.0	5.3	7.4	6.9	6.8	7.4	10.6	14.0	15.7	12.3	12.0	14.4	17.3	19.1	20.9	22.1	17.9	18.6	23.3	17.6	15.1	13.3	11.6	23.3	5.0	13.3
7	11.2	11.9	16.2	18.3	17.0	11.6	14.7	12.1	12.4	13.0	13.2	15.2	14.3	16.2	15.0	14.5	14.1	12.2	13.9	15.0	12.5	14.8	15.4	12.7	18.3	11.2	14.1
8	13.0	10.9	12.6	13.4	11.0	10.3	9.2	9.2	11.9	11.9	11.2	9.6	10.8	11.0	10.8	11.8	12.0	12.5	13.0	12.4	9.0	7.9	7.3	9.6	13.4	7.3	10.9
9	9.0	8.1	11.3	12.4	10.9	10.4	10.9	9.7	10.9	8.8	7.9	6.8	6.2	6.7	7.2	8.1	7.5	7.6	7.7	8.2	7.1	7.5	6.8	6.0	12.4	6.0	8.5
10	6.0	6.9	7.1	7.7	6.6	5.7	8.2	14.0	14.6	14.6	15.7	17.7	15.8	10.6	10.1	8.3	7.4	7.4	7.8	9.6	9.1	8.6	8.4	11.4	17.7	5.7	10.0
11	12.1	10.7	10.8	10.6	10.4	11.2	9.8	8.7	8.6	9.2	8.8	9.0	8.1	8.5	6.5	8.1	8.6	12.9	15.7	15.3	16.4	17.4	16.1	12.9	17.4	6.5	11.1
12	17.6	15.1	15.4	15.6	16.4	16.5	21.8	22.2	14.8	15.0	17.5	14.7	10.0	14.8	9.7	8.1	9.2	9.3	6.7	3.9	6.4	7.4	9.2	8.1	22.2	3.9	12.7
13	8.2	7.4	8.6	7.6	7.6	10.0	16.6	19.8	19.9	19.2	14.9	15.3	19.5	18.2	24.6	25.4	23.0	20.5	26.8	23.0	27.3	22.6	20.6	27.3	27.3	7.4	18.1
14	26.2	25.0	21.6	15.3	13.7	10.3	11.7	14.7	19.9	20.9	21.1	19.1	19.8	23.2	22.0	21.1	25.2	27.2	27.3	28.3	30.3	20.9	23.7	26.8	30.3	10.3	21.5
15	25.1	23.8	26.3	26.0	19.8	20.5	21.4	19.3	23.3	23.3	24.5	28.0	22.8	22.4	20.5	20.4	23.6	22.5	20.7	18.0	17.5	18.0	19.9	20.2	28.0	17.5	22.0
16	18.8	20.0	18.2	16.6	13.1	11.0	8.8	11.3	13.9	10.7	11.1	12.0	12.9	10.3	7.7	8.4	10.7	10.1	9.3	8.2	9.2	8.4	9.4	9.4	20.0	7.7	11.6
17	10.6	11.3	9.4	11.0	10.6	11.8	10.9	10.1	10.0	9.9	10.2	13.5	10.9	11.3	9.8	8.7	9.0	9.6	10.9	9.8	10.8	9.9	7.8	10.5	13.5	7.8	10.4
18	9.4	9.9	8.6	10.2	10.6	8.6	9.2	9.5	9.5	9.0	12.0	10.0	11.8	12.5	12.1	10.0	10.1	12.4	13.3	15.1	12.5	13.2	13.5	8.3	15.1	8.3	10.9
19	13.5	17.5	13.1	15.0	19.3	21.8	22.6	24.3	22.6	24.1	23.9	29.6	26.6	26.3	24.3	24.4	26.4	28.8	29.3	25.1	25.0	22.1	21.7	16.2	29.6	13.1	22.6
20	16.2	17.2	15.6	13.7	14.3	10.6	6.9	8.5	13.4	14.5	13.6	13.9	12.8	10.7	14.8	12.4	9.5	12.9	13.4	12.9	14.6	13.9	16.3	15.4	17.2	6.9	13.2
21	15.7	10.6	8.0	10.7	11.6	10.1	9.5	9.8	8.7	11.9	12.7	11.5	9.5	10.5	10.9	9.7	11.1	11.2	10.5	12.1	11.1	11.2	11.4	11.1	15.7	8.0	10.9
22	9.9	8.8	9.3	9.6	9.8	9.9	9.1	11.4	15.6	15.9	13.6	14.0	12.4	9.3	11.5	16.0	15.8	13.5	15.0	16.7	15.0	8.2	8.0	8.2	16.7	8.0	11.9
23	5.9	5.9	6.0	6.2	7.1	7.7	5.3	7.3	6.8	8.2	7.4	5.1	5.8	4.7	5.3	5.6	5.3	4.7	4.5	3.1	4.0	2.7	2.0	3.0	8.2	2.0	5.4
24	3.3	3.3	3.1	3.1	2.7	2.9	2.9	3.1	4.8	3.4	3.5	4.8	4.5	6.5	6.8	8.2	8.7	11.1	14.2	15.8	16.3	15.5	14.1	13.8	16.3	2.7	7.3
25	11.9	11.9	10.2	9.3	8.4	8.5	9.4	8.4	8.6	6.8	7.3	7.1	6.6	5.3	5.3	6.4	5.9	5.7	6.1	6.7	5.7	7.3	8.1	8.8	11.9	5.3	7.7
26	8.0	8.7	8.4	9.6	9.0	10.4	10.1	12.7	13.4	14.7	18.2	19.2	19.0	18.9	21.1	22.2	22.3	21.8	23.4	24.1	25.4	24.7	24.6	24.0	25.4	8.0	17.2
27	23.6	21.2	22.2	21.9	20.1	19.5	17.0	15.7	16.8	14.9	12.1	10.6	10.0	10.0	9.9	12.1	12.0	12.8	12.7	13.2	13.2	13.3	14.2	14.3	23.6	9.9	15.1
28	15.3	15.6	13.8	13.4	13.6	12.9	12.6	11.7	10.7	9.5	10.8	10.2	8.3	7.5	7.6	7.2	4.9	3.3	2.9	1.8	1.7	1.0	2.5	3.2	15.6	1.0	8.4
29	4.0	4.7	6.1	5.4	2.6	3.1	3.2	3.5	4.7	4.1	4.7	3.0	2.7	3.7	3.6	3.7	4.0	2.3	2.3	4.1	6.0	8.7	8.8	9.0	9.0	2.3	4.5
30	13.0	11.6	13.3	14.8	15.7	16.9	17.2	17.9	18.4	17.0	16.1	14.5	11.7	13.3	12.3	11.3	10.0	16.9	21.2	18.4	17.5	15.2	14.0	13.0	21.2	10.0	15.0
Max.	**26.2**	**25.0**	**26.3**	**26.0**	**20.1**	**21.8**	**22.6**	**24.3**	**23.3**	**24.1**	**24.5**	**29.6**	**26.6**	**26.3**	**24.6**	**25.4**	**26.4**	**28.8**	**29.3**	**28.3**	**30.3**	**24.7**	**24.6**	**27.3**	**30.3**		
Min.	**1.7**	**1.2**	**2.0**	**2.6**	**2.6**	**2.9**	**2.9**	**3.1**	**4.0**	**3.4**	**3.5**	**3.0**	**2.7**	**3.7**	**3.6**	**3.7**	**4.0**	**2.3**	**2.3**	**1.8**	**1.7**	**1.0**	**2.0**	**2.7**		**1.0**	
Avg.	**11.5**	**11.2**	**11.0**	**11.2**	**10.5**	**10.3**	**10.7**	**11.3**	**12.1**	**12.1**	**12.0**	**12.0**	**11.5**	**11.6**	**11.6**	**11.7**	**11.9**	**12.2**	**12.9**	**12.7**	**12.6**	**11.6**	**11.7**	**11.6**			**11.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.3	12.1	13.0	12.1	14.4	17.2	16.4	16.5	12.1	14.4	15.8	16.2	14.7	13.8	11.7	9.7	8.4	7.0	7.5	7.8	4.3	4.3	4.8	4.8	17.2	4.3	11.4
2	3.8	2.0	2.8	2.1	2.1	2.5	1.7	3.9	6.0	6.0	9.6	10.1	9.8	9.1	7.9	4.5	5.4	5.4	3.4	3.8	3.2	2.6	1.9	3.1	10.1	1.7	4.7
3	4.1	10.2	12.4	9.2	6.3	8.6	9.9	9.3	8.5	7.2	6.9	6.2	5.0	3.3	5.0	6.1	6.9	7.0	6.6	6.3	6.0	5.5	5.0	6.0	12.4	3.3	7.0
4	6.8	5.0	5.2	4.4	3.0	3.3	3.2	1.0	3.2	3.7	3.3	4.0	5.3	9.7	8.1	6.0	4.4	5.3	4.1	6.1	6.2	6.8	8.1	8.6	9.7	1.0	5.2
5	7.8	9.4	7.6	7.9	7.1	7.7	7.9	12.3	11.7	9.9	9.5	8.8	10.3	9.0	10.3	12.1	8.8	8.6	10.3	14.5	12.6	13.8	14.1	16.2	16.2	7.1	10.3
6	16.2	15.5	16.2	14.8	12.9	8.9	4.3	5.1	6.1	12.2	15.3	10.8	12.9	13.1	12.9	13.4	12.8	12.0	11.7	11.1	9.5	11.2	13.9	15.0	16.2	4.3	12.0
7	13.2	14.6	11.0	9.4	7.2	7.0	6.0	5.6	7.6	7.7	4.5	2.8	3.1	3.3	5.5	7.6	7.0	6.8	5.8	6.7	7.1	6.8	8.4	9.7	14.6	2.8	7.3
8	10.5	11.3	13.5	15.2	14.5	12.1	12.1	14.2	13.7	10.9	7.9	7.8	9.3	7.9	8.2	9.7	10.1	5.1	7.6	6.3	5.3	2.9	6.2	4.9	15.2	2.9	9.5
9	7.9	8.3	8.8	9.9	11.8	11.4	12.6	13.8	13.7	11.9	12.5	13.2	14.2	14.3	14.8	15.2	14.7	13.9	14.1	13.5	12.8	13.2	12.5	11.9	15.2	7.9	12.5
10	13.0	12.7	12.9	12.9	11.9	11.5	10.5	9.5	8.5	9.3	8.5	7.2	7.3	7.9	8.9	8.7	10.2	8.9	8.9	7.2	6.0	5.6	6.7	7.6	13.0	5.6	9.3
11	7.1	6.6	5.9	5.1	3.3	3.0	3.5	3.8	3.4	3.5	4.3	4.2	2.6	4.2	3.8	6.4	9.3	8.8	10.0	10.4	11.5	11.0	9.4	7.6	11.5	2.6	6.2
12	7.6	6.5	7.9	7.7	8.6	8.2	7.9	9.1	9.4	10.4	9.7	10.5	10.3	10.3	10.4	10.3	8.4	8.3	7.7	8.3	8.5	8.6	10.4	9.7	10.5	6.5	8.9
13	9.5	10.3	11.1	11.5	11.7	11.9	11.3	11.4	11.8	13.5	12.4	12.3	12.8	13.7	12.4	11.4	12.5	12.4	13.5	18.4	14.9	17.8	19.4	17.0	19.4	9.5	13.1
14	23.3	16.8	9.4	9.3	16.6	20.1	14.0	10.7	11.5	11.3	10.6	9.5	6.8	7.7	9.9	12.4	12.1	10.9	11.2	8.8	9.7	10.7	9.7	10.6	23.3	6.8	11.8
15	9.8	9.3	9.6	12.9	9.4	7.4	7.9	7.7	7.0	6.4	4.3	3.3	4.1	2.5	2.7	2.7	8.1	11.4	13.4	14.9	15.4	14.8	13.7	13.6	15.4	2.5	8.8
16	16.0	16.8	16.1	15.0	14.6	13.1	12.3	11.6	11.3	10.2	11.4	10.8	9.6	6.7	6.3	5.4	5.6	6.3	4.2	3.3	2.9	1.8	2.2	2.0	16.8	1.8	9.0
17	1.6	2.3	2.1	4.7	6.0	6.1	8.1	8.7	9.9	10.1	9.9	9.6	8.7	8.7	8.8	7.5	7.8	8.6	9.1	10.3	7.5	8.3	8.4	7.5	10.3	1.6	7.5
18	10.2	10.3	10.8	13.2	8.1	9.2	11.9	10.1	5.8	7.7	7.5	1.8	2.4	5.7	6.3	5.5	5.4	4.4	3.4	4.5	4.8	4.4	4.0	3.9	13.2	1.8	6.7
19	4.3	4.3	4.1	4.1	3.3	5.5	3.2	3.5	7.7	9.1	8.8	8.8	10.6	11.1	13.1	16.6	15.5	15.8	14.7	12.8	12.1	8.8	8.7	9.4	16.6	3.2	9.0
20	10.4	10.4	10.4	7.7	8.3	9.1	9.1	9.6	9.7	7.2	7.6	9.9	10.1	7.1	9.5	7.2	6.1	6.9	8.8	7.5	5.2	7.4	8.2	6.2	10.4	5.2	8.3
21	7.8	7.7	5.3	4.2	3.0	1.6	1.8	2.6	1.2	1.6	2.4	3.2	3.6	3.5	1.9	1.3	1.5	1.8	1.6	1.1	0.8	1.0	1.1	0.5	7.8	0.5	2.6
22	1.2	1.7	1.8	1.6	2.0	5.6	10.8	11.2	11.6	10.5	11.8	12.3	12.7	13.1	15.1	15.9	14.9	14.9	13.1	13.9	15.0	14.5	14.9	14.6	15.9	1.2	10.6
23	15.0	15.4	16.7	15.2	13.8	11.2	11.2	12.1	13.3	13.7	13.7	14.4	15.4	12.7	14.4	13.6	14.9	13.4	15.1	15.1	11.8	12.8	11.3	10.8	16.7	10.8	13.6
24	10.8	9.1	7.4	3.9	6.0	3.7	3.5	3.7	4.1	3.7	3.7	4.0	3.4	2.7	2.5	8.4	8.9	8.3	8.2	9.9	13.4	15.9	16.9	15.2	16.9	2.5	7.4
25	14.8	15.8	17.5	21.1	20.0	18.1	16.8	12.9	12.1	11.6	10.1	4.8	5.1	7.1	6.1	6.5	6.8	5.1	3.7	2.2	4.9	5.2	2.9	4.5	21.1	2.2	9.8
26	1.8	2.2	2.4	2.9	2.8	3.2	2.3	2.2	2.0	2.8	2.5	3.1	2.6	2.7	2.3	3.6	4.7	5.3	5.2	4.7	5.6	7.4	11.2	12.2	12.2	1.8	4.1
27	12.8	14.7	13.7	11.5	13.7	16.8	18.0	20.3	20.3	18.4	17.5	16.4	21.2	22.8	21.7	22.0	21.6	20.0	17.6	15.0	12.8	21.3	23.1	21.1	23.1	11.5	18.1
28	19.5	15.2	13.8	15.6	13.8	11.9	9.1	8.8	7.8	7.3	7.9	7.6	6.8	5.3	5.1	5.4	6.0	6.1	7.1	5.0	3.3	3.8	4.1	4.8	19.5	3.3	8.4
29	8.3	10.7	14.4	15.5	16.3	18.1	18.5	17.0	12.7	14.8	16.7	18.9	18.2	16.0	10.9	13.1	12.0	13.9	14.6	15.7	13.9	9.6	11.7	16.0	18.9	8.3	14.5
30	13.0	9.8	7.2	6.1	6.9	6.7	6.1	5.7	5.0	4.5	2.8	3.2	1.3	2.8	5.2	4.3	2.8	4.8	4.1	3.2	3.8	1.9	1.3	1.9	13.0	1.3	4.8
31	0.6	1.6	2.3	2.8	2.9	4.0	2.9	4.0	5.1	4.8	4.4	3.1	3.5	3.9	4.5	5.6	5.4	5.7	6.4	7.1	8.9	9.1	9.2	10.2	10.2	0.6	4.9
Max.	**23.3**	**16.8**	**17.5**	**21.1**	**20.0**	**20.1**	**18.5**	**20.3**	**20.3**	**18.4**	**17.5**	**18.9**	**21.2**	**22.8**	**21.7**	**22.0**	**21.6**	**20.0**	**17.6**	**18.4**	**15.4**	**21.3**	**23.1**	**21.1**	**23.3**		
Min.	**0.6**	**1.6**	**1.8**	**1.6**	**2.0**	**1.6**	**1.7**	**1.0**	**1.2**	**1.6**	**2.4**	**1.8**	**1.3**	**2.5**	**1.9**	**1.3**	**1.5**	**1.8**	**1.6**	**1.1**	**0.8**	**1.0**	**1.1**	**0.5**		**0.5**	
Avg.	**9.7**	**9.6**	**9.5**	**9.3**	**9.1**	**9.2**	**8.9**	**9.0**	**8.8**	**8.9**	**8.8**	**8.4**	**8.5**	**8.4**	**8.6**	**9.0**	**9.0**	**8.8**	**8.8**	**8.9**	**8.4**	**8.7**	**9.1**	**9.3**			**8.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
9														1.1	303.6	234.3	236.2	159.0	211.4	125.2	130.4	128.8	122.5	126.1
10	124.6	119.4	115.0	117.8	118.6	118.2	114.1	111.4	117.9	123.0	127.3	123.2	117.7	116.3	115.1	114.5	113.9	113.1	112.3	113.6	108.4	108.4	108.7	108.7
11	105.7	103.7	104.4	105.5	105.0	106.7	108.3	111.2	110.5	110.0	114.5	116.6	116.7	116.6	117.8	114.7	112.6	113.6	111.6	110.1	112.3	109.9	110.1	109.9
12	116.0	112.5	112.1	111.4	116.4	116.6	120.7	123.2	130.5	127.8	128.8	132.5	131.8	133.8	134.4	136.4	136.4	139.0	143.4	130.2	128.5	130.8	130.6	138.1
13	134.2	134.8	131.3	148.6	145.2	125.1	127.1	113.1	129.7	117.2	105.3	132.0	138.2	142.4	141.9	144.3	144.4	161.4	157.2	162.2	187.4	199.7	206.0	278.8
14	151.8	168.2	195.8	195.9	10.5	19.2	20.9	21.9	18.7	55.0	8.6	56.7	84.4	139.4	159.1	191.2	144.6	162.8	156.4	154.8	146.6	142.1	270.4	356.1
15	14.2	24.7	23.3	22.3	22.9	17.0	20.7	27.6	20.7	16.6	12.9	23.7	1.6	12.0	151.6	141.0	105.4	109.3	143.2	149.3	134.4	141.5	139.0	122.5
16	128.4	126.5	115.1	127.4	141.4	145.5	156.1	141.1	143.9	131.3	153.6	159.5	146.6	138.2	138.7	141.4	136.5	123.7	120.2	122.6	125.1	109.3	114.5	131.5
17	164.5	116.2	61.1	52.8	85.9	109.7	136.1	143.7	149.4	144.2	129.6	146.2	151.3	159.8	144.1	143.4	145.6	142.8	141.2	138.4	131.9	132.9	128.6	146.8
18	154.5	312.5	341.1	25.2	20.2	15.4	6.8	98.8	101.8	104.7	106.0	110.1	108.2	107.8	112.1	116.2	114.9	114.9	109.8	111.9	115.3	111.0	114.6	132.9
19	104.3	118.4	208.6	319.3	80.5	95.1	90.2	91.3	103.8	145.1	170.7	119.9	113.3	100.5	201.2	223.4	181.7	184.1	170.1	165.8	145.1	141.8	168.8	145.1
20	187.4	245.9	220.5	3.8	19.1	24.5	29.4	42.2	97.8	124.2	177.4	53.8	183.8	189.3	151.3	137.8	128.3	120.4	117.4	122.1	122.5	117.3	118.5	153.1
21	144.9	119.1	115.4	140.9	100.0	17.2	24.7	20.7	5.6	14.1	359.5	5.1	352.7	341.3	336.1	307.6	324.2	294.3	222.2	256.3	311.3	267.2	299.0	314.5
22	318.6	320.3	1.0	359.1	9.6	12.8	16.6	14.3	98.8	123.8	129.5	141.6	141.2	127.7	117.6	115.8	114.6	115.1	112.5	111.1	108.9	114.7	113.8	109.8
23	107.3	107.4	115.6	116.9	131.1	123.4	132.3	138.2	126.9	130.2	131.8	127.7	138.0	141.5	136.1	143.1	144.1	144.9	154.9	162.2	158.5	149.5	131.7	139.0
24	132.3	92.1	126.2	134.9	67.1	34.6	23.0	13.5	19.2	21.8	18.6	35.0	41.2	165.6	229.2	232.3	213.7	265.7	300.9	292.6	272.2	261.7	292.6	20.4
25	49.2	18.4	5.8	18.9	28.0	35.3	36.6	11.2	79.5	141.6	174.0	188.2	190.2	172.6	177.2	177.0	179.8	168.7	147.5	139.4	140.5	142.6	127.5	134.2
26	153.1	143.1	125.4	120.7	119.2	189.1	252.8	244.8	239.6	247.7	239.5	243.8	247.2	236.9	220.8	241.2	212.7	186.3	162.2	143.9	134.3	131.4	149.9	148.3
27	188.6	142.8	105.2	264.7	274.8	269.6	284.7	263.0	281.8	279.0	287.6	267.9	250.4	248.2	242.5	236.4	233.2	231.9	245.1	260.9	260.7	262.9	273.5	268.1
28	279.7	301.6	260.7	278.0	262.1	278.0	263.4	262.8	238.0	224.6	213.9	210.5	225.2	251.8	240.6	254.4	232.7	225.4	220.9	236.0	232.5	216.2	181.8	164.9
29	169.6	185.9	212.8	213.5	199.8	217.9	217.7	181.8	201.0	204.1	194.2	175.4	138.1	140.5	144.8	132.4	132.9	123.1	125.2	132.0	135.5	142.0	132.2	125.4
30	122.9	123.1	137.8	145.8	148.2	169.1	185.8	205.4	212.8	218.9	222.2	222.8	229.2	235.6	246.0	250.6	247.4	251.3	244.2	247.2	248.1	246.0	237.7	250.0

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	241.1	254.4	309.6	350.9	297.7	263.4	246.2	241.8	255.6	228.5	273.8	241.5	234.0	243.9	247.2	251.0	251.6	250.2	251.5	257.7	264.2	261.1	267.7	249.0
2	245.9	269.7	260.4	22.8	10.3	353.0	355.4	288.8	250.3	219.3	250.9	335.2	295.1	283.8	294.7	324.8	319.9	324.4	321.8	341.4	346.9	343.3	4.7	9.0
3	4.6	4.6	3.0	9.1	358.4	353.5	30.6	24.3	11.5	17.6	9.3	17.1	29.8	133.9	158.7	162.4	154.8	161.8	171.2	156.3	133.6	124.4	158.1	177.5
4	145.0	132.8	135.8	115.4	112.4	95.9	11.1	105.1	156.0	186.3	163.5	158.5	168.3	150.0	147.3	160.7	238.7	238.7	233.6	175.5	133.7	130.8	160.3	140.8
5	111.7	121.2	108.6	117.3	132.7	164.2	138.1	127.4	139.0	137.1	156.4	154.0	153.2	155.7	156.9	152.0	119.2	167.9	303.5	141.0	120.2	122.0	104.4	275.8
6	145.6	218.6	146.7	142.4	114.1	138.0	124.5	134.1	130.7	131.9	153.8	189.7	156.4	152.4	162.0	186.3	202.0	199.1	355.7	149.6	143.4	152.1	129.2	128.7
7	133.4	136.4	142.3	147.6	149.5	154.8	161.2	162.2	163.1	153.7	165.1	170.3	146.3	140.1	167.5	163.0	144.3	156.6	174.6	166.4	162.7	168.8	196.3	217.6
8	212.6	217.1	221.5	223.4	230.6	236.2	225.7	223.0	235.0	248.2	247.0	249.9	247.1	244.3	250.9	248.7	254.6	260.8	273.9	286.6	267.3	273.1	298.6	301.7
9	13.7	356.3	314.0	12.9	12.1	19.9	19.9	26.3	51.3	20.8	102.6	127.0	138.9	137.9	138.5	139.0	146.7	144.6	146.2	141.0	127.8	116.6	117.5	115.0
10	100.6	102.1	92.6	102.6	109.8	112.4	121.5	111.6	118.7	126.2	108.5	116.0	115.1	112.4	110.5	114.0	119.1	117.0	114.4	114.1	124.4	110.5	112.1	105.9
11	106.3	117.3	97.6	106.1	109.4	103.3	106.8	140.1	106.5	92.2	111.8	117.6	135.2	153.2	159.1	158.0	161.5	163.9	184.0	191.3	179.0	170.0	157.0	133.4
12	127.3	122.5	132.6	350.0	18.6	3.3	8.7	8.8	15.8	26.0	24.5	313.7	51.4	156.1	160.1	7.8	351.1	297.7	321.7	341.2	2.7	10.3	2.7	359.3
13	8.3	13.2	10.3	13.8	284.8	251.1	255.9	250.9	246.0	242.4	233.6	230.8	230.9	226.7	226.5	218.5	214.7	217.2	225.0	225.0	220.6	224.7	228.4	235.5
14	238.0	235.1	238.1	228.9	235.9	242.4	239.1	234.9	233.1	234.2	228.6	221.5	215.8	214.2	212.1	211.8	217.3	207.8	206.6	202.5	216.5	221.2	223.5	225.0
15	229.6	240.5	236.5	238.2	245.5	243.3	232.2	232.9	216.1	215.4	215.7	210.9	217.1	223.5	222.6	206.9	189.2	197.9	198.6	172.9	195.3	172.8	182.6	176.3
16	161.2	141.6	120.2	126.0	125.4	120.2	123.3	124.0	121.5	120.8	119.9	120.0	123.8	119.0	118.9	116.4	114.6	114.9	115.4	123.9	120.2	114.6	113.4	114.9
17	112.3	102.8	98.0	103.6	104.1	109.1	109.9	108.5	111.9	113.4	113.9	121.3	119.7	123.4	115.5	114.7	114.0	116.0	114.4	113.7	112.0	111.2	107.2	109.6
18	109.6	101.3	107.7	116.8	108.2	107.4	108.5	112.9	110.3	110.1	113.1	115.9	126.0	125.1	124.1	119.8	116.7	114.3	118.0	116.4	115.1	110.4	109.9	104.6
19	100.9	101.2	101.5	116.6	87.2	81.8	70.9	65.5	71.1	77.0	69.2	84.8	112.2	113.3	140.0	158.4	131.1	136.7	124.6	118.7	115.2	105.6	66.7	31.1
20	5.1	18.5	24.6	22.0	25.0	22.8	26.0	25.8	29.6	43.7	53.2	77.0	90.5	86.4	104.0	129.4	123.9	150.9	159.8	158.7	145.3	157.3	154.5	151.5
21	131.0	4.5	87.1	49.8	57.4	140.4	11.5	24.6	95.1	104.9	114.6	127.8	132.4	127.7	128.6	167.3	153.7	154.2	146.2	151.3	143.2	162.7	94.6	87.5
22	130.0	164.2	225.9	293.0	13.9	22.2	17.7	20.9	18.5	133.7	150.5	131.6	119.8	157.0	158.4	150.2	145.8	137.1	132.4	125.6	112.4	108.8	105.3	98.9
23	102.5	99.9	97.1	99.4	105.5	102.5	101.4	105.9	102.1	88.7	95.5	98.5	93.6	58.1	75.5	84.6	103.0	123.3	146.6	90.4	96.9	86.5	93.8	95.4
24	102.5	97.2	107.2	109.3	134.0	105.2	88.6	91.7	90.9	86.8	85.7	93.0	102.1	114.5	123.3	157.6	143.6	139.7	131.4	121.5	133.2	122.1	107.1	93.4
25	100.1	96.9	96.5	100.3	96.4	95.6	105.4	99.3	98.0	97.7	108.9	110.5	114.5	126.5	123.9	133.7	141.0	153.7	160.7	170.3	168.3	158.6	174.9	162.7
26	189.3	126.9	128.7	144.9	145.7	160.4	145.4	144.2	195.3	237.7	251.9	247.3	228.9	225.3	228.7	232.1	226.7	226.6	234.0	220.5	223.0	221.2	228.9	247.8
27	239.8	251.8	254.0	247.1	262.6	266.4	256.3	258.2	255.3	255.6	254.8	188.9	176.4	228.8	232.3	158.2	162.6	206.3	248.4	249.1	247.8	253.6	273.8	268.0
28	172.9	317.5	40.4	25.5	52.1	146.7	83.4	146.2	158.8	149.0	181.8	213.8	215.9	210.5	209.6	220.8	221.9	224.4	220.1	226.6	227.5	225.8	225.3	226.9
29	223.6	233.2	239.1	240.4	237.5	236.5	243.6	245.8	250.3	255.5	257.7	253.0	256.9	255.0	237.3	228.2	227.6	227.3	233.6	231.1	232.2	231.6	229.1	235.4
30	250.1	243.1	243.2	256.5	260.0	255.0	252.5	250.5	249.1	257.1	258.9	10.9	328.9	329.5	324.3	323.6	322.1	318.5	325.6	322.6	316.8	317.7	324.5	323.2
31	327.1	338.0	334.9	342.2	339.6	331.8	334.1	339.1	339.0	324.5	327.3	325.2	302.4	271.3	279.9	299.7	299.0	282.8	321.8	341.1	294.5	243.5	240.3	245.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	241.7	232.6	225.1	244.4	238.7	222.7	215.6	202.0	199.4	188.2	167.5	164.9	168.6	154.5	147.9	149.3	137.9	136.5	131.0	129.1	136.9	128.2	122.0	129.7
2	129.7	130.3	129.0	129.6	127.9	151.8	195.7	190.5	172.7	162.3	168.5	166.2	145.4	127.2	105.0	115.7	113.4	112.0	112.6	113.4	111.1	107.8	111.9	114.6
3	113.9	111.9	102.2	100.3	98.5	99.5	96.9	96.5	93.7	66.9	70.3	46.5	52.4	51.0	46.9	45.9	39.4	33.8	24.1	21.0	18.0	16.7	19.3	17.1
4	14.5	17.5	12.3	16.9	339.6	271.1	329.3	7.8	7.9	9.9	341.3	238.9	289.2	116.7	218.0	351.8	55.8	163.1	175.2	159.9	158.2	246.4	227.1	219.2
5	191.4	140.2	217.0	24.9	282.0	257.1	254.3	295.1	286.2	323.8	292.3	284.8	278.4	275.9	289.1	302.0	302.6	292.1	1.7	313.7	274.4	310.5	338.7	275.6
6	309.2	338.4	17.1	353.1	357.0	350.7	0.7	343.9	343.7	353.0	351.4	6.8	358.5	345.1	335.9	325.2	320.8	314.2	323.7	333.0	337.9	344.8	339.1	359.4
7	331.1	337.9	354.9	358.0	3.9	4.0	325.5	241.5	240.7	240.3	245.2	253.2	246.2	250.7	257.5	251.9	250.6	253.0	249.0	249.1	248.0	246.9	251.2	248.2
8	242.9	248.8	257.5	258.3	266.5	254.3	255.6	267.3	261.6	255.6	257.1	255.3	250.7	250.8	252.6	258.4	254.5	253.5	256.8	254.1	252.3	248.7	234.1	271.2
9	249.2	253.5	242.4	259.6	196.1	207.3	222.9	209.4	206.7	172.5	218.4	201.5	199.0	176.7	199.7	194.4	161.5	151.5	150.6	151.6	143.5	146.6	139.0	157.4
10	159.3	162.2	150.7	172.7	172.0	162.6	169.7	158.7	157.4	148.7	143.6	133.8	117.5	111.2	110.6	109.5	110.2	109.9	110.1	112.5	108.5	110.7	109.4	109.9
11	117.5	126.7	134.2	130.9	132.0	128.9	132.3	155.3	165.7	154.7	152.6	164.5	192.2	197.4	191.8	207.1	213.7	204.4	213.3	216.7	227.0	218.1	219.0	257.9
12	264.1	262.8	274.0	287.6	302.6	313.6	313.3	316.6	323.0	344.4	348.2	343.8	330.0	329.0	311.2	300.0	294.4	309.3	330.1	344.3	334.4	318.2	277.6	219.3
13	247.9	231.1	179.5	203.2	225.3	228.6	224.2	208.0	217.1	225.7	229.2	226.2	226.8	225.6	215.1	220.2	215.0	219.3	219.0	214.4	217.4	219.8	215.3	215.3
14	220.2	216.5	218.8	225.3	217.2	148.2	121.1	102.8	94.3	103.9	104.1	102.3	103.3	108.2	112.1	111.0	113.3	105.3	105.8	105.0	105.7	107.6	104.3	99.1
15	102.9	103.2	106.1	107.9	109.6	112.1	108.5	105.4	105.1	109.3	116.7	109.8	109.0	114.2	121.8	121.8	132.6	131.1	141.5	144.7	105.0	102.6	103.1	96.5
16	159.0	64.6	4.8	23.6	22.8	17.2	17.9	24.6	12.8	14.6	24.7	13.2	180.2	189.6	220.0	151.6	164.5	196.5	151.0	132.0	128.4	174.4	151.5	163.0
17	145.3	124.7	125.6	156.0	265.1	300.7	315.9	269.1	260.5	274.5	275.7	216.0	247.1	257.2	214.3	262.9	216.0	229.3	227.2	227.2	224.0	230.3	232.8	225.6
18	218.7	217.7	217.8	215.1	218.9	219.7	217.9	222.6	218.5	209.8	203.1	201.5	199.8	198.2	203.2	218.3	229.6	229.8	234.5	234.9	230.2	216.0	220.9	225.0
19	249.0	271.7	291.8	335.0	288.1	259.7	281.2	332.5	40.5	159.8	155.6	205.0	223.0	232.0	231.3	211.1	209.1	206.7	206.7	210.2	200.8	172.7	109.6	99.5
20	117.9	102.5	99.7	101.6	98.1	52.6	27.7	14.9	16.8	14.6	5.0	3.5	0.2	1.8	327.7	322.9	320.1	339.2	340.9	341.7	336.7	359.8	8.6	12.6
21	14.2	13.1	10.0	6.0	17.7	4.3	14.4	18.7	16.6	90.2	171.2	134.3	134.9	163.4	156.6	144.9	137.0	133.3	151.5	143.7	129.1	128.4	124.2	119.2
22	119.5	161.6	171.1	202.0	200.5	195.5	198.2	201.3	204.2	203.1	208.2	214.2	229.3	237.5	289.3	292.7	290.3	299.2	305.4	322.4	341.5	356.6	358.5	4.5
23	352.7	222.3	280.4	301.6	292.6	309.5	279.9	250.2	206.5	229.0	258.8	136.3	137.7	140.4	139.8	140.8	135.1	141.9	142.5	153.3	141.8	133.0	129.0	108.6
24	104.3	103.0	96.6	94.3	88.2	84.1	80.3	85.1	74.9	44.6	28.3	35.2	15.9	9.4	9.8	5.4	355.5	358.8	0.2	352.5	345.5	331.1	309.0	297.7
25	311.2	332.9	332.6	334.7	325.4	357.3	308.3	3.5	7.1	254.6	254.3	266.1	253.9	267.6	270.3	274.7	301.1	317.8	357.2	22.9	26.0	20.9	22.0	21.0
26	25.1	21.6	103.5	82.2	101.7	132.6	143.9	248.1	335.0	8.0	3.8	5.2	20.9	105.1	165.0	166.5	176.5	192.5	240.7	247.6	255.4	291.3	274.7	292.7
27	290.7	20.8	20.6	26.0	19.2	18.7	40.3	324.6	234.7	260.0	341.3	352.1	339.5	329.0	240.7	232.5	327.4	307.3	319.5	307.9	317.3	290.8	287.1	294.3
28	262.4	283.4	253.7	249.5	252.8	255.8	257.0	257.6	258.5	254.3	252.6	248.9	247.3	257.2	253.2	253.8	258.2	258.7	288.8	272.0	273.3	293.7	290.2	324.3
29	298.2	266.3	315.4	307.6	330.6	350.3	243.7	251.9	255.0	229.1	50.8	137.7	138.0	144.1	144.9	148.9	145.7	118.8	118.3	121.0	88.3	105.8	73.5	96.3
30	98.3	94.8	94.7	98.6	101.6	101.6	95.1	97.1	91.3	88.1	78.3	65.5	54.0	44.6	38.8	43.8	43.0	38.5	29.6	34.7	33.0	41.6	23.2	23.6
31	31.0	19.5	17.6	359.2	11.9	10.8	11.2	354.0	1.7	11.8	6.5	8.7	353.3	359.0	355.9	355.2	349.9	344.3	336.4	339.6	347.3	359.9	4.5	357.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	357.7	8.4	16.5	18.4	20.2	22.4	23.3	21.9	4.0	358.2	5.8	359.4	2.5	347.9	352.8	346.4	344.7	359.9	354.7	355.2	11.0	16.0	11.9	11.4
2	5.4	3.0	7.7	9.5	9.2	10.0	13.0	20.4	20.9	350.6	343.8	347.7	3.3	0.3	3.2	1.5	4.6	9.0	14.4	60.1	117.2	168.6	240.0	288.1
3	21.7	21.8	77.4	13.4	32.3	26.8	18.3	26.7	17.1	5.1	60.6	137.8	175.5	150.6	179.8	303.4	256.4	359.3	58.8	181.9	141.5	132.1	136.8	162.9
4	199.3	290.9	34.7	16.0	11.5	12.9	18.2	19.8	21.2	11.5	17.1	13.9	92.8	63.9	21.4	165.7	128.9	250.9	27.5	88.6	141.0	114.8	56.1	123.5
5	128.6	121.7	107.2	118.4	123.8	121.5	124.2	121.7	132.6	123.0	116.5	120.7	112.9	117.7	118.9	118.3	125.8	120.3	119.9	131.7	120.7	124.9	162.5	9.0
6	21.7	9.1	10.7	13.4	14.0	11.4	11.9	12.4	9.7	1.9	357.0	350.7	325.0	318.6	319.2	293.5	280.8	282.0	278.4	251.7	244.0	243.0	240.1	223.7
7	225.9	225.9	216.3	171.7	131.2	112.8	101.8	106.8	133.0	125.9	123.6	115.9	121.2	120.3	121.2	119.4	119.9	120.3	124.6	119.2	116.2	114.4	117.1	110.8
8	115.9	120.4	118.1	113.3	109.4	106.5	103.5	105.7	108.7	110.5	110.8	114.0	112.7	113.3	112.3	113.8	113.9	105.7	105.6	107.3	104.3	104.6	100.9	96.3
9	96.5	92.8	94.7	96.3	83.1	33.8	48.7	34.2	57.2	18.9	49.9	82.7	123.6	143.4	145.0	121.0	124.7	153.3	154.2	139.9	134.0	79.6	118.1	108.9
10	43.8	45.0	93.0	94.5	75.8	61.1	84.3	25.4	40.7	135.9	124.6	137.9	156.2	161.7	158.6	175.5	180.0	173.1	151.6	142.4	124.5	96.3	329.4	281.9
11	45.0	22.9	77.0	35.2	35.4	13.8	11.0	8.1	13.4	21.2	28.1	29.0	12.7	24.0	177.7	40.7	325.2	300.9	285.3	291.1	0.1	36.9	11.4	359.9
12	355.7	352.1	2.3	355.5	353.4	4.0	358.7	5.5	14.6	21.7	30.4	53.6	329.5	326.3	297.1	263.9	242.7	232.6	292.2	324.6	355.9	7.2	14.3	16.9
13	22.6	22.3	20.6	22.9	26.4	25.7	25.0	27.9	59.8	60.6	114.3	123.2	120.6	123.0	114.1	123.6	128.9	123.8	119.3	110.1	108.4	112.3	111.8	110.9
14	108.4	110.5	110.1	107.6	107.8	113.4	109.8	114.3	118.6	113.3	114.5	106.7	111.7	107.9	114.0	113.8	108.7	108.2	103.8	104.3	107.1	113.3	113.7	110.5
15	108.8	108.2	112.6	109.5	112.2	105.7	102.1	103.8	104.9	103.2	103.1	103.6	109.1	108.0	110.3	108.3	103.8	107.6	111.6	122.7	122.9	112.3	116.7	114.2
16	116.3	115.1	131.5	136.8	133.3	124.4	122.3	117.2	120.8	134.1	125.7	140.1	137.0	138.3	144.8	146.3	140.0	136.3	132.0	138.5	130.2	135.2	127.8	134.7
17	131.2	117.7	110.2	111.7	118.5	130.3	116.5	127.4	123.8	117.8	123.7	125.9	129.7	136.5	137.2	134.1	127.9	131.4	127.7	120.0	109.2	124.5	129.2	108.1
18	120.0	109.6	97.2	88.5	100.2	103.2	101.9	103.5	107.4	111.2	111.2	110.3	102.7	103.2	104.9	95.4	100.9	100.1	99.3	99.1	94.7	95.4	99.7	102.4
19	97.8	96.4	104.1	96.6	95.9	85.5	72.9	73.7	72.0	99.0	86.6	81.5	94.9	84.2	175.6	137.4	8.5	250.8	326.4	36.1	23.4	32.9	14.9	262.7
20	342.1	24.1	3.0	2.6	6.8	1.7	318.3	319.5	289.3	286.6	299.5	261.8	253.9	251.3	237.5	232.8	219.8	216.9	220.2	232.5	232.2	241.5	238.3	241.6
21	246.0	257.8	260.2	209.3	126.6	46.1	92.5	92.5	96.2	97.5	94.4	96.4	88.3	73.8	73.9	54.8	36.5	43.4	39.8	35.0	30.2	36.0	31.5	21.8
22	16.1	290.3	257.8	268.7	313.6	303.9	267.5	258.8	255.7	252.0	251.5	235.4	225.8	253.9	250.0	247.2	232.3	209.6	236.1	248.9	259.9	241.4	235.9	233.0
23	236.3	234.0	229.4	231.8	235.3	232.5	230.6	215.3	226.2	231.3	228.0	224.3	226.6	224.5	219.2	218.4	213.1	199.7	183.2	155.2	139.1	129.6	128.1	123.4
24	137.2	137.0	175.4	212.1	185.4	156.9	184.3	151.4	149.2	152.2	316.7	240.8	315.2	11.1	11.8	329.7	337.1	337.1	331.3	336.7	6.3	8.8	14.7	11.1
25	16.8	17.3	18.7	23.1	23.4	22.9	28.9	24.3	18.8	19.5	23.6	24.1	41.1	117.9	120.3	105.7	113.5	106.5	107.1	98.3	93.2	111.2	102.8	113.9
26	108.9	104.8	53.0	37.1	27.0	41.9	46.0	28.6	26.9	30.0	29.2	21.3	17.4	20.2	32.2	51.3	48.5	16.5	21.4	28.5	79.7	129.3	123.2	137.4
27	140.6	173.7	220.0	251.0	261.0	265.1	255.8	271.8	326.0	287.3	306.0	237.8	175.8	158.6	130.7	98.2	87.4	63.9	40.3	77.7	86.4	84.4	83.3	93.8
28	20.9	19.0	25.2	23.8	25.6	23.0	21.9	23.5	16.5	13.4	6.5	4.3	355.2	359.7	359.2	354.5	341.5	332.8	322.0	322.6	327.3	329.1	331.5	332.5
29	334.3	7.7	339.7	162.4	262.1	276.2	342.8	0.7	0.6	343.7	336.9	332.0	327.9	315.0	316.6	327.2	323.4	317.6	330.8	330.4	336.6	337.2	353.9	355.8
30	355.1	1.3	357.1	3.0	14.9	31.6	77.6	123.6	24.9	63.9	101.2	127.0	130.0	120.2	128.2	128.4	132.4	132.8	128.3	114.4	113.0	111.9	108.8	108.2

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	104.5	103.5	106.3	107.7	105.6	103.5	102.4	103.7	105.2	107.2	110.6	113.4	107.9	108.9	109.6	111.3	108.9	107.3	106.4	104.3	103.9	108.9	110.5	108.9
2	107.0	103.4	105.6	109.3	112.7	112.3	110.2	122.2	119.1	118.1	116.6	112.8	114.9	111.1	107.4	108.5	109.8	109.8	110.3	111.1	108.4	106.6	106.1	105.5
3	103.9	106.0	107.8	110.8	114.4	109.9	112.5	125.2	122.1	124.2	135.1	137.4	134.0	127.3	128.6	153.8	194.2	188.9	210.8	182.6	177.6	178.1	193.1	206.2
4	215.9	218.9	222.9	228.1	208.5	197.6	197.2	215.0	219.1	207.7	200.5	171.3	150.1	133.1	187.2	200.8	218.1	229.0	99.5	103.2	149.2	119.0	122.1	109.7
5	119.3	139.7	149.9	209.6	212.0	247.1	216.3	246.2	264.1	274.0	242.6	224.7	248.5	237.5	238.1	236.7	221.6	230.8	226.7	224.2	222.9	223.5	200.0	190.8
6	159.9	136.8	129.3	110.8	104.0	109.0	115.8	114.4	122.2	132.8	148.7	161.5	139.9	125.8	124.3	126.5	117.5	120.2	127.1	114.3	109.7	109.0	113.7	110.8
7	109.2	110.0	107.0	107.3	105.2	104.5	107.2	106.9	107.7	114.8	114.0	115.8	118.0	115.8	112.2	109.0	109.6	111.1	113.0	112.4	116.2	117.8	116.2	117.9
8	120.1	112.9	107.7	107.9	106.4	106.7	106.4	104.7	103.9	102.3	105.3	106.1	102.6	106.9	109.1	109.3	108.6	106.6	108.2	108.5	108.4	101.8	102.8	109.5
9	107.9	107.1	107.9	107.8	109.4	108.6	107.9	109.4	109.6	111.2	118.2	116.4	112.6	112.5	116.2	116.2	112.7	111.6	158.8	215.2	226.7	234.4	230.8	232.9
10	231.5	259.1	223.4	155.9	110.1	116.4	94.6	119.1	126.4	125.1	111.4	112.4	121.1	127.8	133.4	134.3	140.7	156.7	171.0	177.8	182.4	168.7	177.4	187.7
11	191.1	204.0	189.0	206.6	183.3	205.2	209.6	206.4	200.4	187.7	198.8	215.8	191.4	194.0	218.1	228.6	210.4	206.6	176.6	129.4	133.7	135.0	109.3	85.7
12	80.9	90.3	12.8	26.1	34.7	81.6	97.3	100.0	115.1	121.3	130.9	106.1	104.2	111.1	107.7	102.2	108.6	106.1	98.7	95.7	99.1	100.8	98.8	93.7
13	87.3	81.7	62.0	31.5	26.4	22.7	22.6	29.3	24.8	19.8	19.5	15.6	11.8	27.4	15.6	2.4	356.6	13.6	6.8	15.5	1.8	7.1	12.3	8.8
14	6.4	15.4	7.1	5.8	9.5	10.7	6.3	309.4	258.6	274.9	251.8	251.2	242.6	249.6	269.9	265.2	281.3	290.7	343.2	4.5	10.1	9.6	7.3	18.0
15	24.3	24.2	25.2	30.4	25.7	96.3	123.5	116.4	135.9	141.4	130.7	134.2	134.0	138.2	138.6	142.6	146.6	138.9	139.2	144.0	134.3	131.9	122.8	116.0
16	125.8	138.8	131.1	132.6	133.0	133.6	125.3	121.2	112.3	120.2	131.8	146.3	154.0	144.1	127.3	117.6	114.2	112.9	110.6	110.7	113.7	110.6	115.1	129.8
17	118.3	127.3	117.9	121.1	108.1	111.3	118.0	117.6	111.8	109.1	117.3	119.4	123.8	120.4	124.6	120.5	119.4	117.2	110.0	113.5	111.7	109.9	112.2	111.1
18	106.7	114.3	106.2	102.3	102.7	96.3	98.0	96.7	99.2	100.1	107.7	105.1	52.2	12.3	358.7	348.4	267.3	257.4	267.7	288.2	298.4	255.3	253.2	255.1
19	248.6	242.5	228.8	164.8	221.6	225.9	215.9	169.5	167.6	155.0	146.6	141.1	139.7	122.2	120.4	128.4	110.1	203.9	282.5	234.1	227.0	144.9	147.1	171.3
20	210.4	193.9	204.9	194.7	208.6	214.6	202.5	227.8	215.9	201.8	142.6	136.0	350.5	111.2	75.3	80.8	87.5	78.1	45.6	21.9	20.4	20.2	20.9	23.8
21	21.4	348.1	319.2	357.7	4.4	359.3	359.7	353.1	349.4	354.3	332.8	302.5	314.0	317.6	304.4	292.3	337.1	3.2	19.0	22.3	23.1	24.5	17.1	6.5
22	11.3	21.8	29.1	27.1	25.0	22.7	23.3	23.1	24.6	19.9	24.0	26.6	341.0	232.6	223.3	33.6	11.8	15.6	22.8	25.8	7.2	14.6	14.1	9.6
23	21.0	10.1	4.0	11.2	12.0	2.4	352.6	0.7	7.5	359.5	357.0	353.6	353.6	348.5	325.5	325.0	334.1	347.0	356.6	16.7	16.6	34.2	38.9	76.4
24	94.7	82.3	33.4	79.4	82.2	83.7	90.8	78.8	70.1	60.3	50.5	43.2	32.8	19.6	16.2	8.3	3.3	0.2	357.8	349.9	345.3	349.4	351.0	352.1
25	349.6	340.7	343.2	348.0	347.5	334.0	333.3	326.9	328.6	324.2	326.0	329.4	325.9	322.7	318.3	318.4	320.4	320.1	323.1	322.0	324.4	325.0	326.7	325.2
26	329.6	327.2	329.7	339.7	342.9	340.1	335.1	334.4	338.7	344.8	349.1	350.7	354.1	353.0	355.7	352.4	358.8	353.0	347.9	351.1	348.1	351.8	0.6	3.4
27	2.4	358.9	352.2	356.9	357.4	358.7	6.9	355.3	7.0	16.1	28.7	17.3	7.1	353.1	333.3	328.0	315.7	267.3	288.7	255.1	283.5	263.1	262.6	278.9
28	285.1	318.2	30.3	27.6	32.3	36.8	41.0	90.9	93.5	73.5	95.3	95.5	133.1	131.3	135.2	136.5	131.8	132.5	136.1	127.7	133.8	132.3	125.9	129.2
29	148.3	154.3	164.0	194.8	213.4	214.4	216.3	218.0	217.0	217.3	217.1	204.3	207.2	211.8	207.6	213.9	218.0	224.3	228.6	232.9	234.3	231.2	237.0	237.8
30	239.4	238.5	241.6	280.2	255.6	255.2	256.9	248.8	264.8	265.7	300.7	345.5	309.4	307.3	325.8	331.0	333.4	336.0	339.8	355.5	357.0	359.1	358.9	2.0
31	2.4	8.4	349.6	353.6	358.6	359.7	0.7	4.9	4.7	7.2	6.2	2.2	1.8	1.9	0.0	356.6	357.6	2.6	16.9	7.7	8.0	8.9	5.2	16.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	15.7	13.4	12.2	20.7	14.5	25.9	15.8	17.5	12.0	15.8	14.4	15.4	12.8	5.2	7.5	4.5	359.6	0.5	4.5	6.9	8.3	359.1	7.4	13.5
2	14.3	17.6	21.5	20.4	21.5	21.8	25.9	24.9	24.6	24.4	26.2	23.8	23.8	20.6	18.2	17.7	12.7	10.9	14.1	9.7	17.5	14.9	18.6	19.6
3	17.3	19.8	23.7	24.5	27.2	20.5	22.8	22.3	22.7	22.4	22.3	17.9	17.9	18.0	15.9	17.2	9.2	11.0	2.1	0.8	16.6	13.2	28.1	19.9
4	16.1	20.0	14.3	18.8	10.7	13.6	10.7	12.5	13.2	14.1	5.0	10.2	23.2	23.0	20.0	20.7	15.7	22.3	23.3	24.2	23.5	24.1	28.7	32.1
5	51.2	86.2	36.1	26.9	29.6	30.8	11.5	15.0	25.0	29.5	26.4	23.8	18.2	19.9	18.5	12.2	24.3	15.4	19.5	12.1	14.9	19.2	22.2	20.0
6	29.2	17.1	18.0	11.8	4.6	3.3	3.5	2.9	5.2	8.6	7.4	7.2	11.6	6.1	0.6	358.7	358.5	3.0	0.7	356.9	359.8	360.0	0.3	356.9
7	351.3	351.2	346.5	340.6	340.8	333.2	326.7	332.1	337.1	333.6	330.0	329.5	330.6	327.1	327.6	327.8	327.1	332.2	337.5	341.3	337.0	347.6	342.6	354.4
8	2.8	355.0	355.3	357.3	9.1	3.9	6.1	3.0	359.2	1.2	1.7	4.7	356.7	353.5	350.4	351.4	349.4	347.4	354.0	356.6	358.4	355.8	354.1	354.6
9	350.1	354.2	8.4	353.7	358.8	11.2	5.1	12.3	13.5	11.8	14.1	14.1	11.4	17.8	20.7	15.8	11.7	12.8	18.8	19.1	19.8	23.4	22.6	19.5
10	16.1	19.1	19.4	13.9	8.3	8.7	7.8	20.4	16.7	12.0	7.6	11.8	17.1	14.6	14.8	14.6	20.9	20.6	14.3	15.1	14.9	11.2	13.7	16.2
11	18.5	15.2	19.3	12.5	14.5	16.1	12.9	9.7	10.9	13.5	7.0	5.9	8.1	11.4	354.2	357.3	4.5	11.1	2.6	6.0	10.7	11.9	11.1	10.9
12	9.0	4.2	7.2	4.1	5.1	11.1	357.9	355.9	2.6	4.8	6.5	2.5	4.5	357.6	347.6	339.4	340.9	331.7	329.2	343.3	323.3	304.5	311.0	310.9
13	314.3	312.5	315.6	317.8	319.9	332.0	344.0	345.2	344.9	343.9	358.1	358.5	352.3	0.2	348.0	344.1	350.0	353.4	348.7	351.1	347.1	356.0	357.1	345.3
14	345.0	343.9	341.7	340.8	339.2	334.2	327.0	315.1	308.5	303.9	312.8	333.7	341.5	339.2	340.8	342.5	338.3	337.9	340.3	343.8	343.2	356.0	354.4	351.8
15	356.1	358.3	354.3	358.2	1.1	1.0	359.4	1.5	359.4	359.3	358.2	355.3	359.4	358.7	356.8	358.5	355.4	357.2	355.6	358.8	359.6	358.6	352.0	356.3
16	2.5	4.9	356.4	355.8	353.3	348.7	355.8	4.6	11.5	5.7	8.4	12.7	6.9	7.2	11.3	10.9	9.4	8.0	18.4	21.3	22.5	16.4	8.7	3.3
17	8.0	10.7	9.5	23.3	18.0	15.3	18.6	25.8	18.2	18.1	15.3	15.8	11.6	14.4	11.5	10.9	16.3	14.9	11.1	10.4	16.2	10.5	12.2	15.3
18	14.7	19.0	19.7	25.6	23.3	16.3	13.2	15.5	14.6	14.5	19.4	15.6	19.1	16.6	14.8	6.5	341.3	358.3	1.0	0.0	4.7	357.5	330.1	339.7
19	354.7	349.6	6.4	1.4	9.3	359.7	359.7	358.6	0.4	357.1	358.4	352.5	356.5	357.9	360.0	358.7	359.2	356.9	355.8	1.1	357.9	355.6	350.9	2.6
20	3.3	356.8	358.4	346.2	357.4	1.3	2.6	7.2	357.5	2.2	18.8	18.5	19.2	24.7	25.3	0.1	4.6	19.8	3.6	8.5	11.7	9.1	358.4	1.3
21	1.3	7.1	8.9	14.0	14.6	7.8	14.4	11.9	3.2	358.6	355.9	358.6	2.5	356.4	350.7	351.9	341.6	338.8	343.2	342.3	343.8	343.8	347.0	346.5
22	342.5	344.7	339.1	348.6	357.3	4.7	3.0	4.5	13.7	10.2	5.7	9.5	12.2	6.9	3.6	9.1	9.0	4.5	7.9	12.9	13.1	21.0	20.5	12.3
23	12.7	11.6	358.9	359.6	15.0	21.9	22.8	15.6	9.5	14.8	17.8	25.1	25.1	23.2	24.0	25.3	25.7	28.5	27.3	21.9	24.2	31.2	35.5	31.7
24	30.1	28.9	42.5	59.6	58.1	45.0	56.6	65.3	87.8	83.4	97.2	104.1	96.2	103.9	102.9	103.8	100.5	99.8	100.1	99.5	97.4	95.9	99.2	97.9
25	97.0	92.2	93.6	92.4	93.6	101.6	105.4	101.0	98.8	97.6	92.6	104.2	117.7	122.2	129.6	119.6	131.2	130.5	126.3	125.6	121.6	117.5	120.9	120.0
26	115.9	114.8	113.2	119.4	121.8	123.0	121.6	116.3	115.0	110.8	110.7	110.5	113.4	113.1	112.2	111.3	109.5	107.7	105.8	107.1	109.9	109.8	110.1	114.1
27	117.1	111.9	114.2	113.9	112.6	114.8	117.8	114.8	113.8	114.4	120.8	124.2	125.9	125.7	119.2	119.1	115.1	114.2	114.3	111.4	112.9	111.4	109.5	109.9
28	112.5	113.1	111.3	109.3	107.3	106.1	105.9	104.3	102.4	101.7	106.7	106.1	105.5	99.1	97.7	102.9	100.7	82.1	87.6	27.3	127.6	322.4	8.1	11.8
29	8.2	12.6	9.2	4.9	345.3	340.2	359.5	349.4	354.7	352.9	0.9	1.3	16.2	19.3	20.0	25.8	26.7	44.2	97.1	90.2	114.1	113.4	120.9	135.8
30	121.4	121.5	121.5	113.1	112.3	111.2	112.8	113.2	111.9	109.8	110.9	117.3	137.8	155.0	176.9	187.3	234.6	315.3	329.3	330.0	332.2	333.9	328.3	326.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	327.8	326.1	325.2	327.8	335.8	339.9	341.4	343.8	23.4	15.4	19.1	6.6	4.0	3.9	5.9	15.9	10.4	17.7	19.3	21.8	15.6	15.0	20.3	17.1
2	25.6	22.3	50.1	46.7	104.0	103.5	79.1	17.8	21.8	32.5	40.6	42.3	66.5	64.9	63.1	31.7	71.4	59.1	8.8	5.5	6.9	3.6	39.6	16.9
3	10.6	20.4	24.7	31.5	33.7	24.9	22.7	22.4	18.8	19.2	18.8	21.4	17.9	8.6	13.8	20.6	21.3	19.1	12.0	26.1	30.0	26.0	9.1	19.8
4	11.8	7.8	11.3	12.5	14.1	19.3	20.9	65.7	22.7	18.3	15.6	12.3	75.2	91.6	106.5	125.2	127.5	118.1	127.1	114.4	112.6	110.2	117.9	114.2
5	92.9	99.4	99.0	93.1	91.5	96.4	91.5	82.6	85.6	93.9	78.4	73.6	72.0	72.7	94.3	102.0	87.2	64.9	32.8	47.3	42.1	38.3	41.3	48.8
6	47.7	46.2	47.9	48.8	44.5	49.4	89.9	84.7	92.3	101.1	105.2	104.0	102.4	100.3	102.2	100.3	98.9	96.1	97.9	91.3	99.0	101.1	104.1	107.7
7	99.0	102.8	102.7	98.2	99.1	101.6	80.5	63.1	68.9	75.6	78.9	51.7	72.1	41.6	56.5	49.4	66.5	77.3	88.5	82.8	92.6	89.8	98.9	98.2
8	97.6	98.4	99.4	104.1	100.5	99.9	106.1	113.4	113.2	123.5	115.7	112.4	102.4	91.0	91.3	82.2	74.8	51.9	19.2	2.5	91.5	71.5	54.5	74.9
9	88.8	100.8	96.0	92.1	89.4	86.8	89.7	90.9	93.3	93.3	92.3	96.8	91.7	91.8	93.2	90.8	90.8	93.3	95.0	95.4	99.7	100.5	101.6	100.7
10	107.4	105.1	108.4	110.6	115.9	116.8	121.2	120.4	118.0	119.2	120.2	125.4	122.6	124.7	117.4	109.7	105.7	107.9	109.3	104.4	103.4	93.3	86.0	92.7
11	90.0	89.7	81.2	81.0	25.6	15.0	21.1	23.6	22.0	28.8	18.3	23.9	5.6	16.0	14.5	11.3	14.3	18.5	22.0	15.7	18.9	25.9	28.3	18.9
12	22.3	15.3	20.8	21.2	24.1	19.0	16.9	25.7	20.6	22.8	15.0	18.2	16.2	14.0	13.8	15.6	6.2	7.7	5.6	0.3	359.7	0.9	353.4	357.1
13	356.2	347.2	347.5	345.4	346.8	350.4	354.4	354.8	353.6	344.9	349.8	350.3	349.3	350.8	357.6	356.0	354.7	353.1	351.3	347.2	358.6	346.4	356.1	7.6
14	349.0	1.3	10.7	350.8	339.2	347.1	345.5	5.7	359.6	341.6	336.8	326.8	332.8	324.2	328.3	331.0	333.6	330.2	330.1	324.8	328.9	331.8	324.3	326.4
15	326.7	321.7	321.8	338.6	338.1	351.6	3.6	18.7	24.3	21.7	24.9	25.1	21.2	22.2	32.8	66.2	102.4	103.7	106.7	106.1	109.0	111.0	112.7	106.6
16	108.3	110.1	112.3	114.6	115.1	120.0	118.3	118.2	121.7	128.6	132.7	137.2	139.4	137.7	140.3	139.2	126.9	119.1	103.4	105.5	47.1	19.9	25.8	29.9
17	20.7	14.5	10.4	16.8	18.1	14.3	15.7	13.7	15.9	14.9	16.0	13.8	12.0	17.6	16.0	4.1	4.4	6.8	8.6	358.3	3.1	356.3	354.8	356.5
18	349.3	325.5	321.4	326.4	352.0	354.1	344.6	343.5	21.0	5.1	346.7	316.7	352.8	4.1	16.1	9.2	16.9	10.7	16.2	20.4	25.0	24.1	26.8	26.7
19	27.1	26.0	27.3	46.7	50.0	63.4	14.4	23.8	11.9	14.6	13.3	13.2	17.2	13.4	14.8	21.2	13.8	18.7	12.7	20.0	20.0	15.8	11.2	15.6
20	22.7	19.1	17.1	9.4	12.3	19.8	20.2	17.9	21.4	6.9	359.7	5.0	12.3	4.3	14.2	5.5	4.1	12.4	12.6	17.4	4.7	20.3	23.7	11.8
21	17.6	17.2	7.2	2.7	356.2	299.8	289.9	265.1	322.2	161.7	264.1	273.6	253.1	252.7	241.9	243.1	142.8	121.1	111.9	164.5	181.4	324.7	273.7	283.2
22	26.6	22.0	20.5	14.8	21.7	17.7	17.7	17.6	17.4	15.7	19.0	19.8	17.4	19.7	18.9	15.2	11.9	13.1	10.4	21.4	21.4	15.1	7.8	7.8
23	18.0	12.4	16.1	18.5	20.9	10.9	2.1	9.8	7.3	9.3	9.7	10.5	12.0	1.5	14.2	11.1	14.2	9.6	15.2	16.7	13.7	15.0	12.6	11.4
24	17.0	15.3	24.6	17.5	23.5	27.0	10.6	10.3	7.5	20.7	5.2	11.0	9.7	2.9	351.2	7.9	9.2	10.9	7.4	4.9	9.1	18.4	18.9	19.6
25	357.9	354.6	356.8	351.6	353.9	3.5	16.3	357.4	1.5	2.7	7.6	9.8	0.2	11.3	2.2	4.7	9.4	348.0	4.3	283.1	291.8	305.5	333.7	20.0
26	333.9	349.2	340.7	0.4	6.4	8.6	0.3	12.0	11.2	23.1	22.0	28.3	24.6	27.7	25.0	20.5	19.7	18.6	20.0	21.7	33.8	64.2	86.2	93.4
27	97.9	100.3	91.6	81.5	83.3	87.3	84.6	87.3	87.9	83.1	73.2	47.9	37.8	39.9	35.8	37.0	40.0	34.7	31.3	40.8	83.7	101.4	110.4	113.3
28	112.7	112.3	109.6	110.8	114.8	107.4	102.9	119.5	120.3	122.2	120.6	116.0	122.2	130.6	116.4	109.3	93.6	97.5	98.7	79.1	18.9	22.4	21.1	17.3
29	12.9	6.5	9.8	4.0	353.4	348.6	346.8	350.4	5.1	26.8	14.3	346.3	352.5	356.2	3.6	352.1	343.8	353.9	336.1	338.8	346.9	345.0	341.4	338.5
30	341.4	349.6	356.7	345.6	338.6	336.3	329.5	330.4	343.0	341.9	2.2	6.5	330.4	217.1	243.5	240.5	236.5	247.8	259.2	252.1	255.3	246.6	240.1	250.2
31	290.7	19.6	16.6	18.2	23.4	22.1	32.1	25.1	14.9	18.6	32.2	38.0	53.3	44.1	15.0	50.4	12.5	9.3	11.5	11.3	13.7	19.2	23.5	20.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
9														3.8	56.6	0.2	9.4	46.6	33.1	5.5	6.3	6.3	5.7	4.8	56.6	0.2	16.2
10	5.0	5.0	5.3	4.8	5.0	5.4	5.4	5.0	5.5	6.4	6.1	6.2	6.1	6.6	5.8	5.9	6.2	5.5	5.4	4.7	4.7	4.6	4.2	4.6	6.6	4.2	5.4
11	4.7	4.5	4.9	4.8	4.7	4.8	4.6	4.7	4.9	5.0	4.8	4.9	4.7	4.9	5.0	5.2	4.8	5.2	5.1	4.6	4.5	4.4	4.4	4.7	5.2	4.4	4.8
12	4.5	4.4	4.6	4.2	4.1	3.9	4.4	4.7	5.0	4.8	5.0	4.8	5.3	5.1	6.3	6.4	6.4	5.5	4.8	4.6	4.6	4.5	4.3	4.9	6.4	3.9	4.9
13	5.0	4.9	4.1	5.0	9.1	7.6	7.0	15.7	11.7	7.1	12.5	14.3	13.5	13.8	11.7	11.9	11.5	10.7	12.7	11.4	8.8	8.6	25.8	11.3	25.8	4.1	10.6
14	21.0	22.0	38.6	18.3	5.7	4.7	5.5	7.6	26.8	22.1	12.2	16.1	25.3	28.5	27.7	16.7	48.0	21.8	12.8	9.1	13.2	11.3	21.0	13.4	48.0	4.7	18.7
15	3.5	3.8	3.6	4.0	3.8	9.5	7.6	7.4	6.0	12.2	12.7	17.8	15.4	17.1	23.0	13.6	14.9	5.2	7.2	6.6	3.8	34.1	6.8	14.5	34.1	3.5	10.6
16	11.8	7.5	8.1	7.7	7.1	4.8	9.2	4.7	5.4	4.3	10.2	5.5	6.3	6.0	5.0	5.7	5.4	5.2	4.4	5.3	5.3	5.7	5.9	13.4	13.4	4.3	6.7
17	44.3	26.8	29.0	13.2	5.5	7.7	7.0	5.2	10.5	7.8	15.0	10.7	12.2	8.5	7.2	7.7	7.6	5.9	5.7	5.2	4.9	5.4	6.0	6.7	44.3	4.9	11.1
18	21.4	19.5	17.2	11.2	6.9	11.9	13.9	7.1	7.1	6.1	6.8	5.5	4.9	5.6	6.3	6.0	5.6	5.5	4.8	5.0	5.4	4.2	4.8	6.2	21.4	4.2	8.3
19	6.6	27.0	12.8	29.0	12.5	4.6	4.6	7.3	12.1	47.3	19.8	43.5	33.5	60.0	35.7	19.8	26.1	20.3	13.2	8.1	5.9	5.0	17.9	12.8	60.0	4.6	20.2
20	37.9	22.5	13.6	15.3	16.4	11.8	9.0	32.3	72.2	34.4	38.0	60.3	30.4	26.8	9.0	6.9	5.0	6.1	5.1	7.4	7.6	4.4	5.1	32.4	72.2	4.4	21.2
21	23.8	7.2	9.5	25.1	30.2	21.7	6.0	7.7	13.5	17.0	19.3	24.4	35.5	24.2	36.9	59.0	11.8	23.6	8.8	11.6	21.2	5.5	13.2	11.3	59.0	5.5	19.5
22	4.8	5.9	7.4	9.7	5.4	4.0	4.0	4.5	20.3	6.1	8.1	11.3	11.7	7.3	5.5	5.2	4.2	4.2	4.9	4.5	4.4	4.2	4.4	6.4	20.3	4.0	6.6
23	4.4	4.1	4.2	4.7	8.9	6.0	5.5	5.3	6.3	5.6	6.1	7.6	8.0	8.0	10.5	10.6	10.0	12.2	9.9	9.4	5.2	4.4	4.1	4.1	12.2	4.1	6.9
24	9.0	12.5	3.9	30.7	38.5	8.7	6.0	15.6	16.5	18.9	20.3	16.1	43.1	29.1	20.8	17.3	24.0	27.6	9.5	6.3	14.2	8.1	11.1	18.9	43.1	3.9	17.8
25	12.6	4.9	8.3	4.7	8.5	11.9	43.1	27.7	30.2	21.4	19.2	28.3	22.0	14.9	11.7	12.3	13.2	13.1	7.2	4.8	4.4	7.6	5.9	5.6	43.1	4.4	14.3
26	5.6	6.3	5.7	5.8	11.4	23.1	11.1	8.3	10.6	8.9	10.3	14.9	15.0	14.8	14.5	22.9	32.1	15.8	8.9	6.4	6.1	4.8	4.8	10.4	32.1	4.8	11.6
27	14.8	21.1	29.3	22.5	12.3	25.8	28.4	19.6	32.0	46.5	26.8	27.4	20.7	21.9	14.8	18.8	18.0	13.8	12.2	7.6	4.6	4.3	6.3	10.8	46.5	4.3	19.2
28	9.8	12.7	13.2	14.6	11.1	12.5	7.4	6.9	12.1	11.4	7.3	9.7	8.7	9.8	11.9	9.0	9.5	8.2	7.5	7.5	7.2	7.8	8.8	14.6	14.6	6.9	10.0
29	11.1	10.7	9.3	39.1	19.8	12.4	28.2	13.0	11.2	9.2	11.5	21.0	16.6	11.6	10.0	8.8	6.1	5.9	5.8	5.0	5.1	5.5	4.6	4.8	39.1	4.6	11.9
30	4.6	4.7	7.9	6.5	4.8	5.4	7.2	5.0	8.1	5.6	6.3	6.7	8.8	9.8	10.9	8.2	7.0	6.7	8.7	8.6	6.6	5.6	5.7	8.0	10.9	4.6	7.0
Max.	**44.3**	**27.0**	**38.6**	**39.1**	**38.5**	**25.8**	**43.1**	**32.3**	**72.2**	**47.3**	**38.0**	**60.3**	**43.1**	**60.0**	**56.6**	**59.0**	**48.0**	**46.6**	**33.1**	**11.6**	**21.2**	**34.1**	**25.8**	**32.4**	**72.2**		
Min.	**3.5**	**3.8**	**3.6**	**4.0**	**3.8**	**3.9**	**4.0**	**4.5**	**4.9**	**4.3**	**4.8**	**4.8**	**4.7**	**3.8**	**5.0**	**0.2**	**4.2**	**4.2**	**4.4**	**4.5**	**3.8**	**4.2**	**4.1**	**4.1**		**0.2**	
Avg.	**12.7**	**11.3**	**11.4**	**13.4**	**11.0**	**9.9**	**10.7**	**10.3**	**15.6**	**14.7**	**13.3**	**17.0**	**16.5**	**15.4**	**15.8**	**12.6**	**13.0**	**12.5**	**9.0**	**6.8**	**7.0**	**7.1**	**8.2**	**10.2**			**11.9**

Total Hours in Month 720 **Hours Data Available** 515 **Data Recovery** 71.5%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.8	5.7	16.5	8.9	18.4	5.6	6.2	6.7	35.2	15.1	29.2	31.3	28.6	30.2	19.5	14.3	7.7	7.3	6.8	5.1	5.5	3.9	7.1	26.0	35.2	3.9	14.6
2	9.3	8.0	17.3	16.1	6.5	8.3	11.2	23.5	33.7	16.9	28.5	19.2	15.0	16.9	17.4	18.0	13.4	10.2	7.6	7.7	6.2	6.1	3.3	2.7	33.7	2.7	13.5
3	5.9	6.9	5.7	4.7	19.0	11.1	6.9	4.8	6.6	11.5	11.8	17.0	24.7	43.9	15.5	13.4	10.5	9.4	8.5	8.8	4.1	3.0	7.1	15.4	43.9	3.0	11.5
4	6.5	4.8	8.0	9.7	8.7	17.2	12.1	41.4	43.5	18.7	25.3	18.6	16.6	12.9	11.2	14.4	37.3	11.7	8.0	17.3	4.5	4.4	8.4	14.2	43.5	4.4	15.6
5	8.0	12.8	10.9	5.1	6.8	26.0	11.7	6.6	7.9	12.6	16.3	19.0	25.7	16.9	13.5	11.4	10.8	13.6	27.6	12.9	4.0	6.2	45.5	27.2	45.5	4.0	15.0
6	42.0	42.0	31.6	23.8	53.1	60.2	17.7	8.8	7.7	7.6	20.8	21.4	13.4	11.4	12.1	13.4	17.6	37.3	41.3	9.3	4.0	7.0	3.9	4.6	60.2	3.9	21.3
7	3.0	3.9	3.5	3.7	4.2	4.2	6.6	4.8	4.8	5.2	5.3	7.7	6.7	4.7	8.5	6.0	5.3	5.8	5.9	5.6	6.0	6.5	7.3	6.1	8.5	3.0	5.5
8	5.4	6.0	5.5	6.0	6.8	7.2	6.6	5.7	6.6	6.2	6.4	7.9	7.9	9.3	8.5	10.9	8.5	11.8	7.8	17.5	14.5	5.6	11.2	16.0	17.5	5.4	8.6
9	24.1	11.2	14.2	5.3	5.9	6.2	4.7	19.1	27.0	14.0	28.6	21.6	15.1	11.6	10.8	9.9	11.4	8.2	7.3	6.7	6.0	4.4	5.0	4.7	28.6	4.4	11.8
10	4.0	4.7	5.3	4.3	4.0	4.3	4.6	4.8	4.9	7.3	5.1	6.2	6.9	6.3	7.9	8.0	7.6	6.8	5.9	6.2	6.4	5.7	7.4	9.5	9.5	4.0	6.0
11	5.8	8.3	10.9	9.9	14.7	8.2	7.9	29.7	26.4	16.5	12.6	10.3	10.8	15.1	11.5	16.1	11.5	12.3	14.6	20.0	7.6	4.6	3.7	2.2	29.7	2.2	12.1
12	3.8	18.6	62.7	39.8	7.6	8.5	6.2	10.2	9.2	13.9	22.8	38.7	70.9	0.1	42.9	13.8	54.4	15.8	4.5	7.2	5.3	3.2	6.6	8.2	70.9	0.1	19.8
13	6.8	3.6	3.7	2.8	12.2	5.6	5.9	5.5	6.0	7.0	9.2	7.9	7.0	7.6	5.8	5.6	4.8	5.2	5.3	5.3	4.6	5.5	6.0	5.3	12.2	2.8	6.0
14	6.0	6.1	7.6	6.9	7.6	8.1	9.1	8.4	6.3	6.4	9.0	7.7	6.1	6.6	6.7	5.3	5.2	7.0	5.2	6.1	4.9	4.7	5.3	5.0	9.1	4.7	6.5
15	6.3	6.0	5.9	5.7	6.0	5.8	9.9	7.1	7.5	7.9	9.6	9.2	7.7	9.5	8.7	14.4	10.7	13.4	9.9	8.1	8.3	5.8	4.6	6.7	14.4	4.6	8.1
16	4.7	5.5	5.4	4.5	5.2	4.4	3.8	4.3	4.5	5.2	5.4	7.5	7.4	7.3	7.1	7.1	5.6	5.4	5.3	5.1	4.8	5.0	5.0	5.3	7.5	3.8	5.4
17	5.1	5.7	5.0	4.7	5.0	4.5	4.8	4.6	5.0	5.1	6.0	6.6	7.1	7.8	5.2	5.1	4.8	4.9	5.4	4.6	5.0	5.1	4.4	4.6	7.8	4.4	5.3
18	5.1	5.0	3.7	4.7	4.9	4.4	4.9	4.8	4.8	5.0	6.2	5.8	5.4	6.5	5.5	5.8	5.2	5.0	4.8	4.7	4.8	4.3	4.5	4.5	6.5	3.7	5.0
19	4.8	4.8	5.2	5.6	7.4	6.5	8.3	9.0	8.5	7.6	10.5	10.2	9.5	8.1	13.4	12.9	12.2	13.6	14.7	8.8	5.9	5.2	15.6	13.6	15.6	4.8	9.2
20	11.5	4.6	2.7	2.9	2.3	2.8	3.0	4.0	6.0	7.9	12.3	11.1	12.5	15.2	15.2	13.8	19.1	12.0	7.4	5.4	4.6	4.7	7.3	11.3	19.1	2.3	8.3
21	15.0	17.7	29.4	14.6	19.3	34.0	23.3	12.8	54.2	14.9	12.9	13.7	13.4	9.5	11.7	10.4	7.4	7.7	5.9	5.8	14.6	13.4	29.8	8.5	54.2	5.8	16.7
22	14.8	43.7	18.5	11.8	27.6	16.7	4.8	8.6	14.9	16.7	15.3	33.3	10.4	11.6	7.4	6.1	5.3	7.0	5.4	7.4	5.3	4.9	5.2	5.7	43.7	4.8	12.8
23	5.1	4.3	5.8	6.1	5.4	4.7	5.7	5.6	7.0	7.8	6.3	5.0	16.5	31.2	10.7	6.1	10.1	18.6	32.4	17.1	5.0	5.5	7.9	6.7	32.4	4.3	9.8
24	5.8	7.3	5.9	6.0	9.9	8.3	5.6	5.2	6.1	5.5	6.3	6.0	5.8	6.7	8.2	8.0	5.8	6.4	6.8	5.9	5.6	5.2	7.8	6.5	9.9	5.2	6.5
25	5.4	4.8	4.7	3.9	4.8	5.6	7.5	5.7	5.9	6.1	6.5	7.5	7.2	7.0	11.6	12.1	11.5	11.1	13.1	11.7	8.3	3.5	6.0	9.0	13.1	3.5	7.5
26	33.3	8.1	16.8	11.5	10.1	8.1	11.9	14.1	10.9	9.9	7.3	6.8	10.4	9.5	8.1	7.0	6.1	5.5	5.0	6.7	5.0	4.8	5.4	6.5	33.3	4.8	9.5
27	4.8	5.7	8.5	7.8	6.6	11.2	7.3	6.7	6.2	7.0	17.3	49.0	40.0	22.0	30.7	33.3	17.1	21.7	14.3	6.2	5.3	9.8	15.7	39.1	49.0	4.8	16.4
28	17.4	56.9	10.4	38.1	24.8	45.7	58.5	51.7	12.6	11.0	9.8	10.1	8.8	10.9	8.1	7.7	5.3	5.1	6.5	5.0	4.9	5.0	5.0	4.8	58.5	4.8	17.7
29	4.7	4.9	5.5	4.5	6.6	5.1	4.5	5.2	5.4	5.7	5.1	6.5	6.5	8.0	6.4	6.2	6.9	5.6	6.1	6.0	5.6	5.1	5.5	6.2	8.0	4.5	5.7
30	5.0	4.9	5.5	6.5	6.4	5.6	5.8	6.4	8.9	7.0	6.7	23.6	42.2	6.5	6.8	7.6	6.9	6.7	5.6	6.3	5.7	4.0	3.5	3.4	42.2	3.4	8.2
31	3.7	3.2	3.0	2.9	2.8	3.0	3.5	4.6	7.7	6.7	6.1	11.1	14.7	7.5	6.1	6.1	7.0	9.4	8.6	8.0	27.2	9.8	6.6	6.2	27.2	2.8	7.3
Max.	**42.0**	**56.9**	**62.7**	**39.8**	**53.1**	**60.2**	**58.5**	**51.7**	**54.2**	**18.7**	**29.2**	**49.0**	**70.9**	**43.9**	**42.9**	**33.3**	**54.4**	**37.3**	**41.3**	**20.0**	**27.2**	**13.4**	**45.5**	**39.1**	**70.9**		
Min.	**3.0**	**3.2**	**2.7**	**2.8**	**2.3**	**2.8**	**3.0**	**4.0**	**4.5**	**5.0**	**5.1**	**5.0**	**5.4**	**0.1**	**5.2**	**5.1**	**4.8**	**4.9**	**4.5**	**4.6**	**4.0**	**3.0**	**3.3**	**2.2**		**0.1**	
Avg.	**9.5**	**10.8**	**11.1**	**9.3**	**10.7**	**11.5**	**9.4**	**11.0**	**13.0**	**9.5**	**12.3**	**14.7**	**15.5**	**12.2**	**11.7**	**10.7**	**11.4**	**10.4**	**10.1**	**8.3**	**6.7**	**5.5**	**8.6**	**9.5**			**10.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.0	5.5	5.8	5.9	9.8	11.6	6.6	5.5	8.1	9.7	6.6	7.7	8.1	9.1	7.2	7.4	5.8	5.3	4.5	5.1	5.3	4.8	4.3	6.4	11.6	4.3	6.7
2	4.3	4.0	4.9	5.5	4.4	9.1	8.2	9.0	8.7	5.9	10.5	12.9	11.2	11.4	9.3	10.1	5.3	5.0	5.6	5.1	4.6	4.4	4.6	4.4	12.9	4.0	7.0
3	4.4	5.6	4.9	5.1	5.4	4.8	4.8	5.1	6.4	6.2	7.9	6.7	5.8	6.7	7.0	5.3	4.3	4.6	4.2	4.5	4.3	3.8	4.0	4.2	7.9	3.8	5.3
4	3.7	4.7	3.3	4.7	45.7	10.5	27.0	8.0	7.5	9.4	19.9	28.3	34.8	14.7	17.5	19.7	49.5	22.2	20.8	7.3	26.6	17.8	14.0	10.4	49.5	3.3	17.8
5	11.6	5.0	26.6	9.0	37.7	12.1	12.1	25.5	26.2	26.1	16.0	6.3	8.3	8.8	7.9	9.6	8.7	9.3	16.8	13.4	7.2	17.8	16.0	10.2	37.7	5.0	14.5
6	3.8	9.4	17.3	11.7	12.3	12.4	6.2	5.2	5.9	10.5	10.3	11.7	13.4	15.1	15.0	9.7	10.6	9.8	9.5	4.2	5.9	10.3	6.8	7.3	17.3	3.8	9.8
7	13.6	18.1	13.6	8.9	6.4	8.4	20.8	6.8	5.2	4.9	5.0	6.1	6.6	5.5	7.3	6.2	7.4	6.5	5.8	5.2	5.5	5.0	5.4	5.1	20.8	4.9	7.9
8	4.8	6.0	5.1	5.9	8.8	11.7	7.0	7.8	7.4	4.3	7.0	7.6	7.3	6.9	9.8	16.1	8.4	6.4	5.3	5.2	9.5	7.9	8.6	13.7	16.1	4.3	7.8
9	16.4	25.5	26.5	28.6	20.5	36.4	23.2	15.2	18.0	9.6	11.1	7.7	6.2	8.4	6.8	10.8	6.2	4.6	5.1	3.6	4.4	8.8	4.2	5.0	36.4	3.6	13.0
10	5.0	7.1	4.9	4.6	4.3	4.3	5.8	6.3	5.0	5.2	5.2	7.5	4.8	4.4	4.5	4.6	4.6	4.1	4.5	4.6	4.9	5.1	4.8	4.6	7.5	4.1	5.0
11	4.9	5.2	4.7	4.4	5.0	4.5	4.3	5.7	6.5	6.4	5.5	5.4	6.1	5.7	7.5	9.4	6.7	6.1	7.8	7.7	7.1	6.5	7.4	5.0	9.4	4.3	6.1
12	5.7	7.0	4.6	6.6	6.8	4.6	4.2	4.5	5.1	6.7	6.3	5.8	8.1	10.9	12.8	8.2	8.8	7.1	5.3	4.4	4.4	9.5	31.3	9.4	31.3	4.2	7.8
13	8.1	10.3	19.1	11.9	24.9	10.0	4.8	6.3	4.9	5.2	5.9	6.3	6.1	5.8	5.3	5.4	6.1	5.8	5.0	5.0	4.8	4.2	4.6	4.2	24.9	4.2	7.5
14	4.5	4.7	6.8	8.1	8.5	8.4	5.0	4.6	5.6	5.0	5.6	5.7	4.9	4.8	4.9	4.5	4.6	4.6	4.7	5.5	4.6	4.2	4.6	5.0	8.5	4.2	5.4
15	5.0	4.6	5.0	4.4	4.8	4.3	4.5	4.7	5.0	5.1	5.1	6.2	6.4	5.5	6.6	6.8	6.9	7.7	11.9	6.9	6.1	3.7	4.1	4.1	11.9	3.7	5.6
16	16.3	25.3	8.0	4.4	4.0	3.0	4.8	7.9	6.0	10.4	14.5	24.7	12.2	17.3	15.8	19.9	5.8	7.9	14.4	14.0	8.2	47.8	14.6	14.5	47.8	3.0	13.4
17	9.2	3.9	13.7	36.6	37.9	30.5	32.3	13.9	40.4	20.3	40.9	24.2	15.1	10.5	10.1	30.5	28.7	6.9	4.8	6.5	6.0	5.8	5.5	5.9	40.9	3.9	18.3
18	5.4	4.7	4.7	6.2	5.4	4.8	5.9	5.9	5.4	5.6	5.5	5.2	5.4	5.6	5.6	6.1	5.0	5.8	5.4	5.2	5.8	5.1	5.1	7.6	7.6	4.7	5.5
19	10.6	12.0	17.7	16.1	17.7	13.3	18.0	11.8	36.3	17.6	9.3	10.3	9.9	7.1	8.8	6.4	6.3	6.4	5.5	5.8	6.7	8.6	8.6	5.4	36.3	5.4	11.5
20	15.5	4.5	4.7	4.6	5.1	7.7	4.9	4.4	5.1	5.3	7.0	7.2	8.2	10.3	9.1	11.5	11.5	9.2	6.4	4.0	8.0	7.6	3.0	2.2	15.5	2.2	7.0
21	3.5	4.3	3.0	10.4	16.3	6.5	4.8	5.0	6.7	15.2	20.3	16.9	18.6	16.1	10.2	13.0	7.7	5.3	7.1	5.7	5.9	5.0	4.3	4.5	20.3	3.0	9.0
22	5.3	12.5	7.5	5.4	5.6	6.0	6.2	5.5	5.4	6.0	5.8	5.4	5.7	7.7	9.6	5.9	6.8	8.7	6.9	5.1	4.5	4.7	15.5	16.0	16.0	4.5	7.2
23	11.1	29.8	19.8	7.1	6.7	16.2	14.8	12.2	21.8	15.0	30.3	56.5	12.9	16.4	15.0	15.4	19.0	17.5	6.7	5.2	4.1	6.7	7.7	5.2	56.5	4.1	15.5
24	4.8	4.6	6.0	5.1	6.9	6.0	5.3	4.7	5.3	6.1	5.7	5.0	4.0	4.5	4.0	6.6	7.7	8.5	7.5	7.9	7.4	2.8	5.3	4.2	8.5	2.8	5.7
25	5.3	3.2	4.8	3.8	24.6	15.5	14.8	32.2	18.4	32.7	31.7	19.9	10.4	13.4	15.3	12.9	15.3	11.1	9.7	11.6	10.4	3.9	5.1	4.8	32.7	3.2	13.8
26	5.9	39.6	17.9	20.9	5.6	7.1	5.8	19.9	15.1	7.9	7.7	6.5	9.7	40.5	25.0	40.4	9.1	13.4	11.7	6.1	9.7	15.3	12.8	6.6	40.5	5.6	15.0
27	19.6	7.0	3.4	3.4	6.2	5.8	21.3	56.1	29.9	15.6	54.2	47.8	17.3	17.8	9.3	8.2	31.1	11.3	7.6	17.9	9.9	9.3	3.9	4.2	56.1	3.4	17.4
28	53.7	18.1	7.2	6.5	4.7	4.4	4.9	4.4	4.9	5.4	5.3	6.7	8.6	7.4	8.3	8.0	6.4	7.6	22.8	19.2	10.8	7.1	6.1	19.0	53.7	4.4	10.7
29	26.9	15.7	20.0	26.0	18.5	17.3	12.1	6.2	22.9	18.7	42.5	9.9	9.3	11.8	15.4	12.7	12.1	11.6	8.2	5.9	8.5	11.4	8.3	8.1	42.5	5.9	15.0
30	7.0	5.9	4.9	4.2	4.6	4.9	5.3	4.6	4.9	5.1	5.5	5.8	6.3	5.4	5.7	4.8	6.1	5.0	4.4	4.1	3.5	6.0	8.5	4.9	8.5	3.5	5.3
31	5.3	9.5	3.3	9.2	6.2	8.9	12.7	9.7	8.4	4.9	8.7	6.9	9.0	8.2	8.6	9.6	7.7	6.1	5.1	5.1	6.8	7.6	6.2	6.8	12.7	3.3	7.5
Max.	**53.7**	**39.6**	**26.6**	**36.6**	**45.7**	**36.4**	**32.3**	**56.1**	**40.4**	**32.7**	**54.2**	**56.5**	**34.8**	**40.5**	**25.0**	**40.4**	**49.5**	**22.2**	**22.8**	**19.2**	**26.6**	**47.8**	**31.3**	**19.0**	**56.5**		
Min.	**3.5**	**3.2**	**3.0**	**3.4**	**4.0**	**3.0**	**4.2**	**4.4**	**4.9**	**4.3**	**5.0**	**5.0**	**4.0**	**4.4**	**4.0**	**4.5**	**4.3**	**4.1**	**4.2**	**3.6**	**3.5**	**2.8**	**3.0**	**2.2**		**2.2**	
Avg.	**9.9**	**10.4**	**9.7**	**9.5**	**12.3**	**10.0**	**10.3**	**10.5**	**11.7**	**10.1**	**13.6**	**12.6**	**9.7**	**10.4**	**9.8**	**11.2**	**10.6**	**8.1**	**8.1**	**7.0**	**7.1**	**8.7**	**7.9**	**7.0**			**9.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	5.8	4.4	4.1	4.3	4.0	4.0	4.3	6.9	7.7	7.3	9.4	10.4	10.8	14.8	10.2	7.5	6.8	8.6	8.5	5.8	6.8	6.1	4.3	14.8	4.0	7.1
2	6.1	4.9	3.5	4.2	3.2	2.9	3.8	4.9	9.2	9.3	6.0	7.4	6.6	6.7	9.3	9.3	8.3	8.0	11.0	42.5	4.6	48.4	38.4	15.8	48.4	2.9	11.4
3	5.5	6.0	30.9	40.8	6.9	6.5	5.1	6.3	5.6	9.0	40.6	68.0	35.1	33.9	24.6	36.6	20.4	22.9	22.4	18.1	5.5	5.1	7.9	24.7	68.0	5.1	20.3
4	23.2	25.7	21.5	4.2	1.8	3.0	5.1	4.3	6.0	8.8	12.3	16.9	21.7	41.9	43.7	13.8	49.3	44.9	16.9	15.5	9.8	15.2	18.4	7.6	49.3	1.8	18.0
5	2.5	7.1	3.6	5.2	4.3	5.3	5.0	5.4	7.7	7.1	6.5	7.5	8.5	9.0	7.9	7.9	7.5	7.9	4.9	5.3	5.4	5.1	25.3	35.3	35.3	2.5	8.2
6	7.5	8.1	4.7	4.7	4.2	2.1	2.7	4.2	6.1	11.8	7.0	10.8	9.6	12.3	11.7	14.6	12.4	6.2	5.6	4.9	4.5	4.5	5.6	6.5	14.6	2.1	7.2
7	5.7	5.7	5.4	9.9	6.3	5.1	4.8	6.0	6.2	5.1	5.1	4.6	5.5	5.5	5.6	5.1	5.1	5.8	5.3	5.5	5.1	5.2	5.3	4.7	9.9	4.6	5.6
8	5.5	5.6	4.7	5.2	5.1	5.4	5.2	4.9	4.7	4.7	5.0	5.0	4.9	5.1	4.8	4.5	4.9	5.1	4.8	4.5	5.0	4.7	5.0	4.9	5.6	4.5	5.0
9	5.4	6.0	5.4	5.4	8.7	12.8	13.0	19.3	40.2	8.1	19.8	24.6	12.2	10.2	12.7	7.2	8.5	8.1	6.9	6.8	8.1	14.9	24.4	7.4	40.2	5.4	12.3
10	15.2	14.3	6.2	11.2	13.9	11.4	24.2	6.2	17.1	62.0	15.1	16.9	22.0	17.1	17.6	15.0	12.0	8.8	8.8	7.4	15.5	18.5	44.3	37.2	62.0	6.2	18.2
11	37.1	8.4	13.6	24.7	35.1	7.0	4.2	4.7	5.9	6.7	7.5	41.0	22.1	14.2	24.5	69.2	29.4	17.4	13.0	11.8	16.1	29.8	14.7	8.1	69.2	4.2	19.4
12	9.5	9.3	9.4	9.4	10.6	6.4	7.5	3.1	4.5	6.1	13.7	26.6	42.3	44.4	24.1	14.3	11.7	14.0	19.9	3.3	8.7	5.1	3.0	3.7	44.4	3.0	12.9
13	4.7	4.8	4.7	3.6	4.6	5.7	5.6	4.8	28.0	23.4	12.2	8.9	7.0	7.0	6.2	7.4	6.5	5.3	4.9	5.0	4.4	5.1	5.1	5.0	28.0	3.6	7.5
14	4.9	4.5	4.7	4.9	5.1	4.9	4.6	5.2	5.3	5.0	5.2	5.8	5.4	5.2	4.9	4.9	4.5	5.1	6.1	5.2	5.1	5.1	5.0	4.9	6.1	4.5	5.1
15	4.5	4.7	4.7	4.6	5.3	5.4	5.6	5.6	5.6	5.3	5.3	5.3	5.2	5.2	4.7	4.5	5.5	5.1	4.9	5.2	5.2	5.1	5.0	5.3	5.6	4.5	5.1
16	5.0	5.7	5.6	5.3	5.1	4.6	4.6	4.5	5.4	4.8	4.9	4.9	6.1	6.3	6.2	6.4	5.9	6.7	5.6	8.3	9.1	3.9	4.6	4.7	9.1	3.9	5.6
17	4.6	5.0	7.8	4.8	4.6	4.7	5.5	5.2	4.6	4.4	5.1	7.0	6.9	7.0	8.2	9.3	7.4	9.5	6.2	4.5	3.2	4.9	5.4	5.2	9.5	3.2	5.9
18	5.6	5.4	5.6	4.3	4.7	5.0	4.4	4.4	5.0	4.9	5.2	5.1	5.2	5.5	5.9	6.3	5.2	5.0	5.0	5.3	5.3	5.0	5.1	5.2	6.3	4.3	5.2
19	5.5	4.5	5.5	6.2	6.3	7.0	8.0	9.1	15.9	11.2	8.1	5.5	11.3	14.8	32.9	9.9	18.1	15.8	39.3	17.8	17.6	15.1	36.4	7.2	39.3	4.5	13.7
20	16.9	5.4	5.4	7.2	6.4	5.9	15.4	18.4	11.9	12.1	8.7	10.3	7.3	6.7	8.0	28.6	11.8	8.2	7.0	5.3	4.8	4.7	4.8	6.7	28.6	4.7	9.5
21	5.8	6.4	12.3	8.8	23.4	14.1	7.2	5.2	5.5	5.0	5.2	5.5	7.0	6.3	7.2	7.2	6.0	5.5	5.0	4.4	5.4	4.6	5.5	4.9	23.4	4.4	7.2
22	5.9	19.0	13.8	14.4	10.7	8.3	9.0	4.6	5.0	5.0	6.0	6.5	7.3	5.6	8.3	9.7	8.0	8.4	9.1	7.3	7.9	7.6	4.8	4.7	19.0	4.6	8.2
23	4.6	4.5	5.8	5.7	5.8	5.2	5.3	6.1	6.7	4.9	5.4	5.3	5.0	5.5	6.2	5.9	6.7	6.0	4.6	5.1	5.9	5.3	5.7	7.0	7.0	4.5	5.6
24	7.9	8.0	17.4	11.7	18.0	11.7	9.0	7.1	10.7	42.3	30.2	29.2	22.6	10.7	19.2	9.9	5.4	3.5	5.7	7.6	5.8	5.6	2.9	9.4	42.3	2.9	13.0
25	7.3	5.4	6.0	5.1	4.3	5.2	6.4	6.3	7.4	6.5	6.7	26.6	31.2	10.4	8.2	5.7	5.4	4.7	4.1	4.8	5.2	7.6	7.5	7.7	31.2	4.1	8.1
26	6.6	8.0	12.6	9.0	5.1	3.8	4.3	6.7	6.5	5.6	6.1	6.3	4.1	5.3	6.4	13.6	16.0	5.9	9.5	8.7	13.3	27.3	7.8	5.3	27.3	3.8	8.5
27	5.7	8.9	5.8	4.9	4.7	6.8	8.9	33.6	21.9	33.9	40.0	41.7	51.7	17.9	12.7	7.3	8.4	14.5	16.8	11.5	20.1	6.1	5.9	5.2	51.7	4.7	16.5
28	11.0	5.1	6.7	5.0	6.2	4.7	5.3	4.6	4.5	4.5	5.5	6.9	8.8	7.8	6.5	9.7	6.1	6.7	4.1	3.4	3.7	4.6	6.0	5.0	11.0	3.4	5.9
29	7.1	22.3	36.1	51.6	29.6	32.7	15.3	8.2	7.4	5.3	4.3	5.8	7.9	7.5	10.8	5.2	6.6	6.5	3.8	3.9	2.7	1.9	6.9	8.7	51.6	1.9	12.4
30	8.4	6.3	32.1	8.5	5.5	3.6	16.3	40.9	14.3	32.6	16.0	23.4	12.5	10.2	6.6	6.1	5.0	4.8	5.4	4.9	4.6	4.8	4.4	4.5	40.9	3.6	11.7
Max.	**37.1**	**25.7**	**36.1**	**51.6**	**35.1**	**32.7**	**24.2**	**40.9**	**40.2**	**62.0**	**40.6**	**68.0**	**51.7**	**44.4**	**43.7**	**69.2**	**49.3**	**44.9**	**39.3**	**42.5**	**20.1**	**48.4**	**44.3**	**37.2**	**69.2**		
Min.	**2.5**	**4.5**	**3.5**	**3.6**	**1.8**	**2.1**	**2.7**	**3.1**	**4.5**	**4.4**	**4.3**	**4.6**	**4.1**	**5.1**	**4.7**	**4.5**	**4.5**	**3.5**	**3.8**	**3.3**	**2.7**	**1.9**	**2.9**	**3.7**		**1.8**	
Avg.	**8.4**	**8.0**	**10.2**	**9.8**	**8.7**	**7.0**	**7.5**	**8.5**	**9.7**	**12.1**	**10.9**	**15.0**	**13.8**	**11.9**	**12.3**	**12.2**	**10.5**	**9.4**	**9.2**	**8.4**	**7.4**	**9.6**	**10.9**	**8.9**			**10.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.8	4.6	4.7	4.7	4.4	4.7	5.4	5.0	5.0	5.2	4.7	4.9	5.8	4.8	5.1	4.7	4.3	4.5	4.4	4.6	4.5	4.3	4.5	4.4	5.8	4.3	4.7
2	4.3	4.7	4.7	4.5	4.5	4.4	4.6	5.4	4.9	4.9	4.9	4.8	5.0	4.7	4.6	4.4	4.2	4.3	4.6	4.3	4.2	4.5	4.9	5.0	5.4	4.2	4.6
3	5.0	5.2	4.9	4.7	5.2	4.6	4.7	5.3	4.5	5.1	5.6	5.6	5.4	5.1	8.2	7.5	8.1	4.7	5.7	5.9	5.0	4.9	6.3	5.4	8.2	4.5	5.5
4	5.7	6.0	6.4	6.1	5.2	6.3	5.5	5.9	5.4	5.4	5.6	7.8	6.6	10.5	14.5	8.1	8.4	6.9	20.3	13.5	10.3	4.4	5.6	4.5	20.3	4.4	7.7
5	5.4	6.3	14.3	11.2	12.4	7.8	43.6	19.9	12.0	19.3	9.9	26.8	16.7	11.0	10.6	7.7	5.7	8.2	6.0	5.3	5.5	7.9	8.4	14.1	43.6	5.3	12.3
6	6.9	7.5	5.5	5.6	4.1	4.5	4.6	4.5	4.3	4.7	7.7	8.6	7.4	5.3	5.1	7.0	4.5	4.5	4.4	4.5	4.3	4.7	4.5	4.5	8.6	4.1	5.4
7	4.5	4.5	4.5	4.7	4.3	4.2	4.4	4.5	4.5	4.8	4.5	4.8	5.0	4.7	4.8	4.5	4.5	4.9	4.7	4.3	4.8	4.8	5.0	5.3	5.3	4.2	4.6
8	5.3	5.1	4.9	4.9	5.7	5.0	4.9	4.9	5.1	5.3	5.2	5.0	5.0	5.3	4.9	5.0	4.9	4.9	4.8	4.8	4.7	5.2	5.3	4.6	5.7	4.6	5.0
9	4.9	4.8	4.9	5.0	4.7	4.7	5.2	4.6	4.6	5.6	5.7	5.3	5.0	5.1	5.1	5.1	4.6	4.9	17.0	7.3	8.3	6.3	4.8	5.8	17.0	4.6	5.8
10	8.1	6.7	14.3	9.7	8.6	21.5	4.5	6.3	4.6	5.1	5.2	4.4	5.6	5.5	4.9	4.9	4.6	6.4	5.2	5.9	4.6	4.8	5.8	4.8	21.5	4.4	6.8
11	5.3	5.8	6.0	7.3	5.2	9.5	6.1	5.9	5.5	8.2	10.2	6.4	8.4	8.3	9.7	14.9	6.1	4.1	7.7	14.1	14.3	20.1	21.4	4.9	21.4	4.1	9.0
12	6.9	9.0	25.0	17.3	21.4	26.3	9.3	17.4	30.8	12.7	15.6	4.6	7.1	6.0	5.7	5.4	5.4	4.5	4.5	4.4	4.6	4.6	4.3	4.5	30.8	4.3	10.7
13	5.7	5.7	7.5	7.6	5.2	5.1	6.8	5.2	5.7	9.7	7.5	9.1	7.1	11.9	7.6	11.4	8.3	3.5	6.7	5.0	8.0	5.1	4.4	3.9	11.9	3.5	6.8
14	9.5	10.1	10.3	9.1	8.5	5.9	9.3	17.5	22.5	39.3	11.7	6.9	7.9	7.6	11.0	10.4	5.6	7.4	15.9	14.0	4.9	5.1	4.7	3.9	39.3	3.9	10.8
15	3.9	7.1	9.2	11.9	11.4	16.7	7.9	4.9	5.0	4.6	6.5	5.6	5.3	4.9	4.9	5.2	4.8	4.1	3.8	5.2	7.4	4.6	4.6	4.5	16.7	3.8	6.4
16	7.7	6.3	5.0	5.0	5.0	5.0	5.6	8.3	4.4	4.8	5.8	6.4	12.2	6.4	5.2	4.3	4.6	4.5	4.1	4.1	4.4	4.0	4.1	4.8	12.2	4.0	5.5
17	6.0	5.0	4.8	4.4	4.8	5.4	4.3	4.4	4.2	5.0	5.5	6.0	6.5	7.0	5.5	5.8	5.3	4.9	5.3	4.4	4.4	5.1	4.7	4.4	7.0	4.2	5.1
18	4.5	4.1	4.7	4.3	5.0	4.9	5.5	5.2	5.2	5.6	4.7	5.6	9.3	6.4	12.3	24.4	6.0	5.8	7.5	8.0	13.3	8.1	5.0	4.8	24.4	4.1	7.1
19	7.4	5.9	12.3	28.0	25.9	13.6	7.8	7.2	9.6	7.1	6.0	7.0	6.5	5.6	5.0	5.4	5.3	33.1	37.8	13.1	39.6	8.5	9.6	14.6	39.6	5.0	13.4
20	6.7	5.4	5.9	6.5	5.9	5.1	6.8	9.0	13.8	14.3	17.7	16.8	44.9	27.8	19.6	9.9	14.4	13.0	8.6	5.6	5.3	5.6	4.9	5.6	44.9	4.9	11.6
21	6.1	18.2	12.5	10.1	2.5	6.8	11.7	9.4	8.1	9.1	11.4	8.8	7.1	9.6	12.6	10.7	9.2	5.0	10.0	6.2	4.1	4.3	6.3	8.0	18.2	2.5	8.7
22	3.2	5.0	4.9	5.9	4.2	4.7	4.6	4.8	4.5	5.7	5.6	6.4	33.4	40.6	50.0	45.9	4.5	3.6	2.8	3.2	7.7	5.4	3.5	6.4	50.0	2.8	11.1
23	4.1	6.1	5.0	6.1	5.8	6.0	7.8	7.6	6.4	8.7	10.1	8.6	8.5	9.2	8.9	10.3	7.9	7.8	6.7	9.1	6.6	7.0	15.2	9.6	15.2	4.1	7.9
24	6.3	8.4	17.3	6.8	3.9	4.6	5.1	5.0	6.0	7.5	8.1	7.0	6.4	4.1	4.0	3.4	4.4	5.7	8.9	6.8	4.0	7.0	8.9	9.5	17.3	3.4	6.6
25	6.5	3.5	3.4	6.1	6.8	4.8	5.0	4.5	4.4	4.2	4.2	4.2	4.2	4.8	5.7	5.5	7.5	11.0	3.8	4.1	3.6	3.9	4.2	4.1	11.0	3.4	5.0
26	4.2	3.7	4.1	3.8	3.4	3.5	4.2	4.2	3.9	5.4	7.8	10.2	14.4	12.0	14.8	11.1	11.0	9.5	8.2	9.5	5.2	11.1	9.4	5.3	14.8	3.4	7.5
27	9.5	11.4	10.8	10.3	12.7	11.1	4.1	8.0	7.5	6.6	8.0	7.2	8.3	11.7	19.3	26.7	24.6	42.8	47.3	38.6	29.1	10.5	12.8	16.6	47.3	4.1	16.5
28	21.1	22.3	7.1	5.8	6.6	14.1	8.7	7.5	19.8	14.0	24.6	10.8	9.6	4.3	5.1	5.5	4.1	4.3	3.9	4.8	4.1	3.8	3.8	3.9	24.6	3.8	9.2
29	6.4	6.1	6.6	7.5	5.7	5.6	4.5	5.2	5.0	5.3	5.7	8.0	6.2	6.3	5.5	6.3	6.6	5.2	5.4	5.0	5.5	4.9	5.0	4.9	8.0	4.5	5.8
30	4.7	4.1	6.3	20.2	6.4	9.7	10.5	5.5	14.2	9.0	4.5	19.4	28.9	10.0	8.0	8.7	4.6	3.0	3.5	11.3	13.1	11.5	9.7	8.0	28.9	3.0	9.8
31	6.6	6.9	7.6	8.4	10.8	11.9	11.6	8.3	6.6	5.4	3.7	6.5	7.8	5.7	10.6	10.5	10.0	7.7	5.0	4.3	4.8	5.1	9.0	5.0	11.9	3.7	7.5
Max.	**21.1**	**22.3**	**25.0**	**28.0**	**25.9**	**26.3**	**43.6**	**19.9**	**30.8**	**39.3**	**24.6**	**26.8**	**44.9**	**40.6**	**50.0**	**45.9**	**24.6**	**42.8**	**47.3**	**38.6**	**39.6**	**20.1**	**21.4**	**16.6**	**50.0**		
Min.	**3.2**	**3.5**	**3.4**	**3.8**	**2.5**	**3.5**	**4.1**	**4.2**	**3.9**	**4.2**	**3.7**	**4.2**	**4.2**	**4.1**	**4.0**	**3.4**	**4.1**	**3.0**	**2.8**	**3.2**	**3.6**	**3.8**	**3.5**	**3.9**		**2.5**	
Avg.	**6.4**	**6.9**	**7.9**	**8.2**	**7.3**	**8.0**	**7.6**	**7.1**	**8.0**	**8.3**	**7.9**	**8.0**	**10.2**	**8.8**	**9.6**	**9.7**	**6.9**	**7.9**	**9.2**	**7.8**	**8.1**	**6.4**	**6.8**	**6.3**			**7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	4.6	4.5	5.2	10.5	4.9	4.3	4.4	3.8	4.0	4.6	5.6	4.8	6.5	5.8	6.6	8.3	9.7	4.3	3.7	6.7	8.4	4.6	4.7	10.5	3.7	5.6
2	4.4	4.4	4.4	4.1	4.0	4.7	4.4	4.0	4.1	4.5	4.6	5.2	4.5	4.0	4.1	4.1	4.0	6.0	4.1	5.6	4.3	4.3	4.6	4.1	6.0	4.0	4.4
3	3.9	4.5	4.3	4.2	4.2	3.9	4.1	4.5	4.3	5.0	4.2	4.0	3.9	5.1	4.3	5.3	7.7	4.4	8.2	8.4	4.2	4.1	4.5	6.1	8.4	3.9	4.9
4	5.7	4.4	4.1	4.3	4.9	7.2	5.1	4.6	5.6	5.6	8.9	6.0	4.4	4.9	5.1	5.2	5.6	4.1	3.8	3.6	6.4	5.9	4.1	5.1	8.9	3.6	5.2
5	18.0	20.5	11.5	7.8	15.8	11.5	5.1	4.7	4.3	3.6	5.7	5.5	5.1	4.6	4.9	5.0	3.9	5.0	4.0	5.7	5.7	4.9	6.0	6.5	20.5	3.6	7.3
6	7.2	7.2	7.2	4.4	5.5	7.1	5.8	5.1	3.5	3.8	4.7	4.8	5.7	8.6	14.3	14.8	15.6	8.9	11.6	14.8	11.5	10.9	10.1	11.0	15.6	3.5	8.5
7	9.6	9.4	7.2	4.1	4.0	4.9	5.9	4.8	4.5	4.1	4.3	4.2	4.6	4.1	5.2	4.6	4.6	5.7	5.2	3.9	4.6	6.3	6.8	7.0	9.6	3.9	5.4
8	7.9	9.5	11.6	13.2	7.0	6.1	5.6	5.4	11.3	8.9	8.6	6.8	9.4	8.2	7.5	8.7	6.5	6.2	9.8	10.3	8.1	8.3	12.9	9.0	13.2	5.4	8.6
9	8.8	10.0	8.6	10.6	8.2	5.1	8.9	5.5	6.6	6.1	5.0	5.5	5.1	6.3	4.6	4.5	4.6	4.3	4.4	3.6	4.6	4.3	4.4	4.8	10.6	3.6	6.0
10	5.1	4.3	4.8	4.3	6.3	9.6	7.2	4.1	3.8	4.6	5.2	4.3	4.5	5.7	5.1	4.1	5.3	5.3	3.6	5.3	7.1	6.3	5.8	5.5	9.6	3.6	5.3
11	4.3	5.4	5.6	4.1	4.2	3.5	3.9	4.7	5.1	4.9	6.5	3.3	6.2	5.0	9.1	11.6	6.9	4.8	8.8	5.3	3.6	4.1	4.8	7.3	11.6	3.3	5.6
12	6.8	5.0	5.6	7.8	5.7	6.8	11.0	16.7	6.9	5.8	4.2	7.8	7.0	11.3	8.8	9.3	13.7	10.4	40.2	47.4	13.8	7.8	5.4	6.4	47.4	4.2	11.3
13	5.9	5.6	3.9	4.5	5.1	5.5	3.1	3.5	3.0	3.8	9.4	12.8	12.0	12.8	7.8	3.9	10.2	12.3	6.4	9.9	7.1	11.6	11.9	4.4	12.8	3.0	7.4
14	4.3	2.8	3.3	3.5	3.2	4.4	4.9	4.3	4.7	4.8	4.6	7.0	3.4	3.6	3.7	3.4	3.2	3.2	3.4	3.6	5.5	12.3	14.4	12.4	14.4	2.8	5.2
15	15.4	16.0	14.8	19.0	9.0	11.0	13.8	10.2	13.3	14.4	18.3	20.1	14.0	14.9	15.3	14.9	18.1	16.4	14.8	12.9	12.9	13.3	11.5	15.1	20.1	9.0	14.5
16	8.2	6.0	13.1	13.8	11.6	8.2	8.0	5.2	4.7	4.7	4.8	5.0	3.6	4.4	8.0	6.0	3.9	5.9	4.6	4.5	4.5	6.9	6.3	6.3	13.8	3.6	6.6
17	7.1	7.1	6.6	4.9	4.7	4.5	6.2	5.3	5.5	6.7	6.4	4.6	5.4	4.1	5.6	6.3	6.6	5.7	4.8	5.3	4.9	4.5	7.3	4.3	7.3	4.1	5.6
18	6.0	4.3	5.4	4.4	5.4	4.7	4.6	5.4	5.4	5.8	4.4	4.5	4.3	4.8	4.7	7.2	6.9	9.9	9.1	12.5	9.0	10.2	10.2	13.4	13.4	4.3	6.8
19	11.4	10.0	11.3	12.1	6.7	13.8	14.4	16.7	13.9	17.6	16.8	17.1	19.4	19.4	17.0	15.7	20.4	18.8	21.7	13.1	20.8	16.8	10.3	7.8	21.7	6.7	15.1
20	9.5	11.9	14.2	12.2	12.3	10.0	17.0	10.5	12.8	10.3	6.4	7.3	8.0	8.3	5.3	9.0	7.4	6.4	10.0	4.5	3.9	6.1	14.8	8.6	17.0	3.9	9.4
21	11.2	8.4	7.7	6.0	6.3	9.0	6.5	5.7	7.7	9.7	10.5	12.7	5.7	8.2	8.5	9.0	5.3	5.1	6.9	5.9	6.7	5.6	6.4	8.2	12.7	5.1	7.6
22	9.4	11.9	9.5	8.6	7.8	6.1	4.0	7.2	8.1	4.5	4.4	4.1	5.1	7.4	4.8	2.7	3.1	3.1	2.7	3.4	4.1	7.3	6.3	5.3	11.9	2.7	5.9
23	7.0	8.3	7.1	7.7	5.1	6.4	8.6	5.1	5.0	3.3	4.5	5.4	5.3	4.7	4.5	4.5	5.0	4.2	3.5	5.1	4.4	6.1	10.0	7.2	10.0	3.3	5.7
24	7.1	4.5	6.3	8.8	7.4	10.7	7.8	10.9	5.4	8.4	8.7	4.3	5.2	4.3	4.0	4.1	5.1	4.1	4.0	3.6	3.6	3.9	4.1	4.0	10.9	3.6	5.9
25	4.9	4.6	4.1	4.2	4.4	4.0	3.9	4.1	3.9	4.2	4.0	4.0	4.0	4.5	4.7	4.1	3.4	4.9	4.5	3.5	4.6	4.1	4.0	3.8	4.9	3.4	4.2
26	4.5	3.4	4.2	3.8	4.0	3.9	4.1	3.8	3.8	4.2	4.1	3.9	4.3	4.2	4.3	4.2	4.1	4.2	4.3	4.2	4.2	4.4	4.5	4.5	4.5	3.4	4.1
27	4.4	4.5	4.5	4.4	4.5	4.3	4.4	4.4	4.0	4.2	3.8	3.8	4.0	3.8	4.5	3.7	4.1	3.9	3.8	3.9	4.3	3.9	3.6	4.0	4.5	3.6	4.1
28	4.2	4.0	4.1	4.0	3.9	3.8	3.9	4.0	4.2	4.1	3.8	4.0	4.8	4.4	3.2	3.5	10.9	13.5	11.4	16.7	36.0	24.3	6.5	7.7	36.0	3.2	8.0
29	10.8	6.0	3.9	7.3	46.4	20.9	17.5	12.0	11.4	7.5	6.6	37.5	10.7	7.7	8.1	9.4	7.3	19.1	20.2	9.9	6.2	4.3	4.0	5.6	46.4	3.9	12.5
30	3.6	3.5	3.9	3.9	3.6	3.8	4.0	3.9	3.8	3.6	3.7	4.2	5.3	4.1	7.8	16.2	28.5	4.3	3.3	3.2	2.8	2.6	3.0	3.6	28.5	2.6	5.4
Max.	**18.0**	**20.5**	**14.8**	**19.0**	**46.4**	**20.9**	**17.5**	**16.7**	**13.9**	**17.6**	**18.3**	**37.5**	**19.4**	**19.4**	**17.0**	**16.2**	**28.5**	**19.1**	**40.2**	**47.4**	**36.0**	**24.3**	**14.8**	**15.1**	**47.4**		
Min.	**3.6**	**2.8**	**3.3**	**3.5**	**3.2**	**3.5**	**3.1**	**3.5**	**3.0**	**3.3**	**3.7**	**3.3**	**3.4**	**3.6**	**3.2**	**2.7**	**3.1**	**3.1**	**2.7**	**3.2**	**2.8**	**2.6**	**3.0**	**3.6**		**2.6**	
Avg.	**7.4**	**7.1**	**6.9**	**6.9**	**7.7**	**7.0**	**6.9**	**6.4**	**6.2**	**6.1**	**6.4**	**7.5**	**6.3**	**6.6**	**6.7**	**7.0**	**8.0**	**7.3**	**8.2**	**8.1**	**7.5**	**7.5**	**7.1**	**6.8**			**7.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	4.6	4.6	7.8	2.5	2.4	2.3	4.9	9.9	12.1	8.9	6.3	5.2	5.5	5.1	5.2	5.4	8.2	5.8	5.6	16.9	5.7	6.0	6.2	16.9	2.3	6.3
2	10.8	31.6	15.9	14.6	6.7	6.2	11.4	7.0	7.4	10.8	4.7	3.9	6.3	4.9	6.1	17.5	14.9	8.0	8.1	12.0	17.4	41.5	45.0	4.5	45.0	3.9	13.2
3	3.7	4.3	3.9	4.1	4.4	4.5	3.4	3.5	3.4	3.8	3.9	3.7	3.7	6.1	4.5	7.7	7.1	5.5	5.2	6.3	5.8	9.8	6.0	7.4	9.8	3.4	5.1
4	4.2	4.0	8.9	10.0	9.8	12.6	11.7	35.3	12.6	10.5	9.3	7.5	13.9	4.3	2.7	4.1	4.1	3.9	5.1	4.3	4.4	3.8	3.6	4.9	35.3	2.7	8.1
5	5.4	4.1	5.4	4.9	3.9	3.6	3.8	4.7	4.1	3.5	4.5	4.9	4.9	5.3	4.9	3.6	5.2	8.4	4.2	3.6	3.0	3.2	3.3	3.3	8.4	3.0	4.4
6	3.2	3.2	3.3	3.5	2.9	5.2	13.9	4.9	6.1	4.0	3.7	4.6	3.8	3.6	3.8	3.7	4.1	4.3	4.0	5.0	3.9	3.7	3.3	3.3	13.9	2.9	4.4
7	3.7	3.5	4.8	4.0	4.2	4.6	4.1	8.1	5.4	4.7	5.5	21.5	11.8	13.1	12.5	5.5	7.2	5.2	4.4	3.8	3.7	4.3	4.2	3.8	21.5	3.5	6.4
8	4.1	3.9	4.2	3.8	3.7	4.0	3.9	3.9	3.5	4.2	4.5	3.9	3.7	9.4	5.6	6.2	3.6	8.7	3.9	13.5	32.2	38.4	13.8	27.2	38.4	3.5	8.9
9	4.3	3.8	3.5	4.4	3.5	4.2	4.8	4.3	4.0	4.2	4.1	4.7	4.4	4.3	4.7	4.0	4.5	4.2	3.8	4.3	3.7	3.6	3.6	3.8	4.8	3.5	4.1
10	3.8	3.5	3.5	3.4	3.4	3.3	3.4	3.6	3.4	3.5	3.2	4.7	3.3	3.7	4.0	3.7	3.7	4.9	3.7	3.7	3.8	4.6	4.4	4.1	4.9	3.2	3.8
11	3.5	3.3	3.6	3.5	11.1	8.3	10.0	6.1	7.5	8.0	6.1	5.3	7.2	4.1	6.0	4.7	2.9	2.8	3.6	4.0	3.6	3.8	4.6	6.0	11.1	2.8	5.4
12	3.7	4.1	4.2	4.3	3.9	5.2	5.3	5.2	5.1	4.7	5.8	4.7	4.8	4.4	4.2	4.4	5.5	4.0	3.7	8.2	10.1	8.3	9.7	12.4	12.4	3.7	5.7
13	9.6	4.5	3.2	2.4	2.5	6.8	12.0	14.2	9.9	2.5	5.8	6.5	4.3	6.8	13.3	10.6	11.5	9.4	10.6	5.1	9.2	6.8	11.7	10.8	14.2	2.4	7.9
14	6.8	8.3	7.0	10.1	4.3	5.1	6.8	6.6	9.6	4.8	4.0	3.9	6.2	7.4	4.4	3.0	2.0	3.4	3.0	3.7	4.2	3.4	4.6	5.4	10.1	2.0	5.3
15	4.4	5.9	5.0	3.4	5.1	8.1	5.3	5.5	4.7	3.8	5.6	4.6	6.0	10.7	15.7	17.4	8.2	3.9	3.2	3.3	3.5	3.1	3.3	3.3	17.4	3.1	6.0
16	3.2	3.1	3.4	3.7	3.5	3.7	3.7	3.6	3.2	3.5	3.6	3.9	3.3	4.2	4.6	4.0	3.6	3.9	5.6	4.5	9.6	5.1	4.0	4.8	9.6	3.1	4.1
17	6.2	8.3	9.6	10.0	1.5	3.1	2.2	2.3	2.7	3.2	3.3	3.6	3.5	4.5	4.5	5.5	5.9	5.0	6.3	9.7	7.7	8.4	4.1	8.9	10.0	1.5	5.4
18	10.2	5.8	4.6	4.7	7.5	7.7	3.9	7.2	21.1	8.9	33.9	40.0	60.1	6.1	5.0	3.6	8.3	4.0	5.6	5.1	5.1	3.9	3.5	4.5	60.1	3.5	11.3
19	7.0	6.3	6.3	11.7	17.9	14.6	16.3	17.1	4.3	5.1	5.7	5.3	5.0	5.0	4.6	4.7	5.0	3.8	3.7	4.7	4.4	6.9	9.1	4.4	17.9	3.7	7.5
20	6.0	5.8	4.6	5.2	6.1	3.8	4.2	4.6	4.6	4.5	8.6	8.2	5.0	6.9	6.3	6.8	6.5	5.4	3.0	6.5	5.4	4.3	4.5	4.7	8.6	3.0	5.5
21	3.5	4.0	6.5	9.7	12.0	39.7	37.5	9.3	37.5	22.6	11.5	11.7	7.2	6.2	13.9	20.0	36.5	6.2	8.2	15.8	39.0	13.7	17.1	36.0	39.7	3.5	17.7
22	10.9	7.0	5.6	9.8	12.4	9.0	4.4	3.7	3.5	4.1	3.6	3.4	3.4	3.9	3.5	2.5	3.4	3.5	8.9	4.9	5.7	9.7	11.0	10.0	12.4	2.5	6.1
23	7.0	9.8	9.4	5.8	5.9	8.9	11.2	7.7	3.0	3.9	3.6	3.0	6.5	10.5	4.5	5.7	2.8	3.5	2.5	3.0	4.8	2.2	3.2	2.5	11.2	2.2	5.5
24	2.9	2.8	5.0	12.7	6.0	11.3	7.7	4.1	7.8	10.1	6.0	5.8	10.1	17.0	14.9	6.2	8.2	5.0	3.7	2.3	3.2	4.1	2.7	5.3	17.0	2.3	6.9
25	14.1	12.7	16.2	10.8	13.0	12.6	7.3	11.6	10.4	11.8	15.5	13.4	17.5	5.6	16.4	8.2	2.3	13.3	6.7	29.6	8.2	9.4	22.4	6.9	29.6	2.3	12.3
26	33.5	33.0	21.6	7.9	3.9	8.0	7.8	6.6	5.4	4.4	4.9	3.6	4.1	3.9	5.9	5.3	6.8	6.0	6.4	6.0	8.8	18.5	3.1	3.4	33.5	3.1	9.1
27	3.3	3.4	4.6	5.4	4.2	4.5	4.6	3.9	4.4	5.6	6.5	6.5	3.7	3.5	3.7	3.8	3.4	4.1	4.1	5.7	5.6	4.5	3.9	3.7	6.5	3.3	4.4
28	3.7	3.8	5.3	3.8	3.5	3.5	3.7	3.5	3.8	3.4	3.3	4.1	5.0	5.0	5.0	3.6	4.0	3.6	4.2	14.6	5.0	6.3	4.4	6.2	14.6	3.3	4.7
29	4.6	8.6	9.6	11.9	9.7	5.0	4.5	7.4	7.9	8.9	13.2	9.8	12.8	12.3	8.1	7.2	5.4	9.6	5.4	3.2	6.5	9.5	4.4	3.9	13.2	3.2	7.9
30	3.0	8.7	19.2	8.9	7.0	8.1	5.1	6.9	12.4	8.4	9.5	5.0	20.8	8.5	6.7	7.9	7.5	6.7	6.4	8.8	5.1	7.8	10.9	6.6	20.8	3.0	8.6
31	16.5	20.0	6.3	4.4	6.1	5.0	9.0	10.0	3.9	6.4	8.8	18.3	19.8	17.6	14.8	14.4	7.2	7.2	7.1	5.8	2.6	3.4	3.5	2.9	20.0	2.6	9.2
Max.	**33.5**	**33.0**	**21.6**	**14.6**	**17.9**	**39.7**	**37.5**	**35.3**	**37.5**	**22.6**	**33.9**	**40.0**	**60.1**	**17.6**	**16.4**	**20.0**	**36.5**	**13.3**	**10.6**	**29.6**	**39.0**	**41.5**	**45.0**	**36.0**	**60.1**		
Min.	**2.9**	**2.8**	**3.2**	**2.4**	**1.5**	**2.4**	**2.2**	**2.3**	**2.7**	**2.5**	**3.2**	**3.0**	**3.3**	**3.5**	**2.7**	**2.5**	**2.0**	**2.8**	**2.5**	**2.3**	**2.6**	**2.2**	**2.7**	**2.5**		**1.5**	
Avg.	**6.8**	**7.6**	**7.1**	**6.8**	**6.2**	**7.5**	**7.6**	**7.3**	**7.5**	**6.4**	**7.1**	**7.6**	**8.9**	**6.9**	**7.1**	**6.8**	**6.7**	**5.7**	**5.2**	**7.0**	**8.1**	**8.4**	**7.7**	**7.1**			**7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Daily Precipitation (mm)

June 2005- July 2005

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	0.0	2.8	0.2	1.4	0.0	0.0
2	-	-	-	-	-	-	0.0	8.4	0.0	14.4	0.0	0.0
3	-	-	-	-	-	-	0.0	20.2	5.0	10.4	0.0	0.8
4	-	-	-	-	-	-	0.0	5.2	2.2	8.0	0.0	6.6
5	-	-	-	-	-	-	2.8	7.4	0.4	3.4	0.0	0.4
6	-	-	-	-	-	-	4.2	0.0	0.0	20.6	0.2	3.8
7	-	-	-	-	-	-	10.4	0.0	9.6	16.6	0.0	0.4
8	-	-	-	-	-	-	0.4	0.0	25.8	9.2	0.0	3.2
9	-	-	-	-	-	-	0.0	5.4	0.2	13.4	0.0	0.0
10	-	-	-	-	-	3.4	0.0	23.6	0.0	8.0	0.0	0.0
11	-	-	-	-	-	3.2	0.0	23.6	0.0	7.8	0.0	0.0
12	-	-	-	-	-	4.0	0.0	6.0	0.0	0.6	0.0	0.0
13	-	-	-	-	-	0.0	0.8	2.8	0.8	5.0	0.2	0.0
14	-	-	-	-	-	0.0	1.8	29.8	24.4	0.0	0.0	0.0
15	-	-	-	-	-	15.2	0.2	5.4	1.6	0.0	0.0	0.0
16	-	-	-	-	-	12.6	0.0	7.6	0.0	0.0	0.0	0.0
17	-	-	-	-	-	0.0	0.0	2.4	0.0	0.0	0.0	0.0
18	-	-	-	-	-	1.2	0.0	28.8	0.6	0.0	0.0	0.0
19	-	-	-	-	-	0.2	0.0	0.8	6.0	10.4	0.0	0.0
20	-	-	-	-	-	2.0	0.0	0.4	8.4	3.0	0.0	0.0
21	-	-	-	-	-	0.0	0.0	5.8	15.6	0.0	0.0	0.0
22	-	-	-	-	-	12.8	2.0	13.4	11.4	0.4	0.0	0.0
23	-	-	-	-	-	0.2	4.8	0.0	2.4	0.0	0.0	0.0
24	-	-	-	-	-	0.4	8.4	5.0	5.4	2.2	0.0	0.0
25	-	-	-	-	-	0.0	1.8	0.0	0.0	0.0	0.0	0.0
26	-	-	-	-	-	0.0	0.0	10.0	9.8	1.6	0.0	0.0
27	-	-	-	-	-	0.0	0.0	0.0	3.0	0.0	0.0	1.2
28	-	-	-	-	-	0.0	0.0	0.0	2.2	0.2	0.0	0.4
29	-		-	-	-	2.8	1.8	0.0	0.0	9.4	0.0	0.0
30	-		-	-	-	10.2	0.0	8.4	0.0	3.6	0.0	0.0
31	-		-		-		0.0	1.2		0.4		0.0
Total	0.0	0.0	0.0	0.0	0.0	68.2	39.4	224.4	135.0	150.0	0.4	16.8

Pebble 4 Meteorological Station - Daily Evaporation (mm)

June 2006- December 2006

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	0.0	0.1	0.4	1.7	-	-
2	-	-	-	-	-	-	4.2	0.0	2.8	0.0	-	-
3	-	-	-	-	-	-	8.4	0.0	1.9	0.0	-	-
4	-	-	-	-	-	-	3.9	0.0	0.0	0.0	-	-
5	-	-	-	-	-	-	6.2	0.0	0.0	0.0	-	-
6	-	-	-	-	-	-	0.0	0.0	1.0	0.0	-	-
7	-	-	-	-	-	-	0.0	2.8	2.7	0.0	-	-
8	-	-	-	-	-	-	0.0	4.4	0.0	0.0	-	-
9	-	-	-	-	-	-	0.0	1.4	0.0	8.4	-	-
10	-	-	-	-	-	1.3	6.1	0.0	0.5	0.0	-	-
11	-	-	-	-	-	0.0	6.3	0.0	1.7	0.0	-	-
12	-	-	-	-	-	0.0	2.9	0.0	2.2	0.0	-	-
13	-	-	-	-	-	0.0	5.2	0.0	3.0	0.0	-	-
14	-	-	-	-	-	2.0	0.0	0.0	1.8	0.0	-	-
15	-	-	-	-	-	2.9	0.0	0.0	0.0	0.0	-	-
16	-	-	-	-	-	0.0	1.1	0.0	0.0	0.5	-	-
17	-	-	-	-	-	0.0	4.8	0.0	0.9	0.0	-	-
18	-	-	-	-	-	2.2	3.8	0.0	1.3	0.0	-	-
19	-	-	-	-	-	0.6	3.4	0.0	1.3	0.0	-	-
20	-	-	-	-	-	2.8	3.3	0.4	0.0	0.0	-	-
21	-	-	-	-	-	0.0	5.1	2.5	0.0	0.0	-	-
22	-	-	-	-	-	4.0	3.7	0.0	0.0	0.0	-	-
23	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	-	-
24	-	-	-	-	-	1.3	0.0	1.5	0.0	0.0	-	-
25	-	-	-	-	-	1.6	0.0	0.0	0.0	0.0	-	-
26	-	-	-	-	-	6.5	0.0	2.0	0.1	0.0	-	-
27	-	-	-	-	-	5.4	1.7	0.0	0.0	0.0	-	-
28	-	-	-	-	-	6.2	2.3	1.7	0.0	0.0	-	-
29	-		-	-	-	1.6	2.3	1.7	0.0	0.0	-	-
30	-		-	-	-	0.0	0.0	2.1	1.4	0.0	-	-
31	-		-		-		2.4	0.0		0.0		-
Total	0.0	0.0	0.0	0.0	0.0	38.4	76.9	20.6	23.0	10.6	0.0	0.0

Appendix E

2005-2006 Non-PSD Meteorological Station Audit Data Sheets

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 1
Auditor: Eric Brudie **Witness(s):** Steve Mackey, Jared Cockman, Brent Veltkamp **Audit Date:** 12/3/04-2/15/05

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Time rechecked on 12/16/04.

DAS TIME vs. NOAA CLOCK				
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?	Date
13:03:00	13:03:23	00:23	**PASS**	12/04/04
13:44:30	13:44:54	00:24	**PASS**	12/16/04

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor **Make:** Met-One **Model:** 060A-2 **S.N.#:** D6457 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Fisher Scientific **Model:** 15-077-8 **S.N.#:** 21164797 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Fisher Scientific **Model:** 15-077-7 **S.N.#:** 22136783 **Range:** -40 to 150 **°C**

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	23.19	23.15	-0.04	Pass
Warm	15 - 25	11.78	11.76	-0.02	Pass
Ice Bath	0	0.00	0.03	0.03	Pass
		Max Abs. Error		**0.04**	**PASS**

Date: 12/04/04
Time: Begin: 1200 End: 1205

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	39.06	39.38	0.32	Pass
Warm	15 - 25	17.89	17.98	0.09	Pass
Ice Bath	0	-0.18	0.04	0.22	Pass
		Max Abs. Error		**0.32**	**PASS**

Date: 01/28/05
Time: Begin: 1315 End: 1330

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D6547.
Temperature tested with switch box on 12/16/04 from 1330-1340: (-30/-30.00, -10/-10.00, +30/29.95, +50/49.98).

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor: **Make:** Met-One **Model:** 010C-1 **S.N.#:** D6351 **Cup #:** N/A **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18801 **S.N.#:** CA01674 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136

Date: 12/04/04
Begin: 1230
End: 1245

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	<0.006	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.62	N/A	0.4	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.92	N/A	0.0	Pass
2000	53.57	53.58	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.4**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Wind speed tested with switch box on 12/16/04 from 1310-1320: (0/0.00, 11.18/11.18, 22.08/22.07, 43.90/43.88).

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 1
Auditor: Eric Brudie **Witness(s):** Steve Mackey, Jared Cockman, Brent Veltkamp **Audit Date:** 12/3/04-2/15/05

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D5541 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.9 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.060	**PASS**
New	0.0986	N/A	N/A

Date: 12/03/04
Time: Begin: 1200 End: 1230

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	301.0	22.6	81.6	Fail
Compass	133.0	220.0	87.0	Fail
	Max Abs. Error		**87.0**	**FAIL**
	Mean Abs. Error		**84.3**	**ALERT**

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.2	0.2	Pass
West	270.0	272.0	2.0	Pass
North	360.0	0.5	0.5	Pass
East	90.0	91.5	1.5	Pass
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error		**2.0**	**PASS**
	Mean Abs. Error		**1.1**	**PASS**

Time: Begin: 1255 End: 1300
Date: 12/16/04

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.0	-1.0	Pass	330.0	333.3	3.3	Pass
60.0	59.0	-1.0	Pass	355.0	359.4	4.4	Pass
90.0	90.2	0.2	Pass	30.0	29.0	-1.0	Pass
120.0	119.9	-0.1	Pass	60.0	59.1	-0.9	Pass
150.0	150.2	0.2	Pass	90.0	90.2	0.2	Pass
180.0	180.8	0.8	Pass	120.0	120.5	0.5	Pass
210.0	210.7	0.7	Pass	150.0	150.2	0.2	Pass
240.0	241.7	1.7	Pass	180.0	180.6	0.6	Pass
270.0	271.9	1.9	Pass	**Max Abs. Error**		**4.4**	**PASS**
300.0	302.4	2.4	Pass	**Mean Abs. Error**		**1.2**	**PASS**

Date: 12/04/04 **Time:** Begin: 1330 End: 1340

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass (12/04/04)	180.0	180.0	0.0	Pass
Compass (12/04/04)	126.5	127.1	0.6	Pass
Compass (12/04/04)	302.5	304.0	1.5	Pass
Compass (12/04/04)	27.0	26.8	-0.2	Pass
Compass (12/04/04)	210.0	210.3	0.3	Pass
Compass (12/16/04)	121.0	121.0	0.0	Pass
	Max Abs. Error		**1.5**	**PASS**
	Mean Abs. Error		**0.4**	**GOOD**

Date: 12/04/04
Time: Begin: 1445 End: 1505

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.
Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.
Comments: Instrument failed north alignment on 12/3/04. Realigned on 12/04/05 and checked in post audit. Single point check on 12/16/04.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 1
Auditor: Eric Brudie **Witness(s):** Steve Mackey, Jared Cockman, Brent Veltkamp **Audit Date:** 12/3/04-2/15/05

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1310	650	20.0	0.0	0.0	0.0	19.0	1005	19.0	-5.0%	Pass	12/04/2004
1005	650	20.0	0.0	0.0	0.0	18.6	1053	18.6	-7.0%	Pass	12/16/2004
1108	800	24.7	0.0	0.0	20.4	2.6	1200	23.0	-6.9%	Pass	12/16/2004
1402	650	20.0	0.0	0.2	0.0	18.0	1500	18.2	-9.0%	Pass	01/28/2005
1405	650	20.0	15.4	0.0	27.0	8.0	1600	19.6	-2.0%	Pass	02/15/2005
1603	650	20.0	0.0	0.0	16.0	2.6	1800	18.6	-7.0%	Pass	02/15/2005
							Max Abs. Error		**9.0%**	**PASS**	

Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 1
Auditor: Eric Brudie **Witness(s):** Jared Cockman, Terry Wassilli **Audit Date:** 10-May-05

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
8:35:00	8:35:31	00:31	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6457	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

Time: Begin: 920 End: 933

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	38.70	38.86	0.16	Pass
Warm	15 - 25	20.79	20.86	0.07	Pass
Ice Bath	0	-0.01	0.09	0.10	Pass
		Max Abs. Error		**0.16**	**PASS**

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D6547.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6351	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Time:
Begin: 1152
End: 1156

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0063	<0.006	**PASS**
New	0.0063	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.62	N/A	0.4	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.93	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.4**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 1
Auditor: Eric Brudie **Witness(s):** Jared Cockman, Terry Wassilli **Audit Date:** 10-May-05

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D5541 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.8 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.080	**PASS**
New	0.0986	N/A	N/A

Time: Begin: 1020 End: 1043

IN SITU ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	146.1	1.8	Pass
BM Pig, El 2807	241.9	240.9	-1.0	Pass
El 1984 Mtn	9.8	11.6	1.8	Pass
Compass	183.5	184.4	0.9	Pass
Compass	94.0	94.2	0.2	Pass
Compass	4.5	3.7	-0.8	Pass
Compass	285.0	286.5	1.5	Pass
	Max Abs. Error		**1.8**	**PASS**
	Mean Abs. Error		**1.1**	**GOOD**

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.0	0.0	Pass
West	270.0	270.5	0.5	Pass
North	360.0	0.5	0.5	Pass
East	90.0	90.5	0.5	Pass
North	360.0	0.5	0.5	Pass
West	270.0	270.0	0.0	Pass
South	180.0	180.0	0.0	Pass
East	90.0	89.9	-0.1	Pass
Max Abs. Error			**0.5**	**PASS**
Mean Abs. Error			**0.3**	**PASS**

Time: Begin: 1055 End: 1100

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.3	-0.7	Pass	330.0	330.5	0.5	Pass
60.0	59.5	-0.5	Pass	355.0	356.3	1.3	Pass
90.0	89.5	-0.5	Pass	30.0	29.3	-0.7	Pass
120.0	119.1	-0.9	Pass	60.0	59.5	-0.5	Pass
150.0	148.9	-1.1	Pass	90.0	89.5	-0.5	Pass
180.0	179.3	-0.7	Pass	120.0	119.5	-0.5	Pass
210.0	209.1	-0.9	Pass	150.0	149.1	-0.9	Pass
240.0	239.8	-0.2	Pass	180.0	179.3	-0.7	Pass
270.0	269.3	-0.7	Pass	**Max Abs. Error**		**1.3**	**PASS**
300.0	300.0	0.0	Pass	**Mean Abs. Error**		**0.7**	**PASS**

Time: Begin: 1115 End: 1123

POST-AUDIT AZIMUTH ALIGNMENT TEST				
	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	146.4	2.1	Pass
El 1984 Mtn	9.8	12.0	2.2	Pass
BM Pig, El 2807	241.9	243.1	1.2	Pass
	Max Abs. Error		**2.2**	**PASS**
	Mean Abs. Error		**1.8**	**GOOD**

Time: Begin: 1135 End: 1145

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Instrument not removed from crossarm for linearity tests. Very windy during post-audit alignment tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 1
Auditor: Eric Brudie **Witness(s):** Jared Cockman, Terry Wassilli **Audit Date:** 10-May-05

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
901	650	20.0	0.0	0.0	0.8	19.2	1000	20.0	0.0%	Pass	Snowfall adapter on.
1003	650	20.0	0.0	0.0	0.0	19.8	1100	19.8	-1.0%	Pass	Snowfall adapter on.
1116	650	20.0	0.0	0.0	0.0	20.2	1200	20.2	1.0%	Pass	Snowfall adapter on.
1505	650	20.0	0.0	0.0	0.0	20.0	1600	20.0	0.0%	Pass	Snowfall adapter off.
1605	650	20.0	0.0	0.0	0.0	19.6	1700	19.6	-2.0%	Pass	Snowfall adapter off.
							Max Abs. Error		**2.0%**	**PASS**	

Limits: Max Absolute Error > 10 % of Input.
Comments: None.

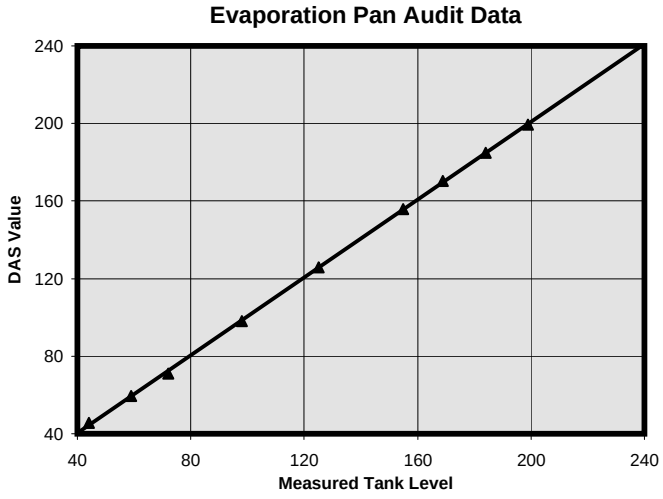
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
44.0	45.5	44.4	1.1	2.6%	Pass
59.0	59.6	59.4	0.2	0.4%	Pass
72.0	71.1	72.4	-1.3	-1.7%	Pass
98.0	98.2	98.4	-0.2	-0.2%	Pass
125.0	125.8	125.4	0.4	0.3%	Pass
155.0	155.7	155.4	0.3	0.2%	Pass
169.0	170.4	169.4	1.0	0.6%	Pass
184.0	184.8	184.4	0.4	0.2%	Pass
199.0	199.4	199.4	0.0	0.0%	Pass
	Max Abs. Error		**1.3**	**2.6%**	**PASS**
	Intercept	**0.4**	**Slope**	**1.0020**	**PASS**



Time: Begin: 1600 End: 1700

Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Steve Mackey, Jared Cockman, Brent Veltkamp **Audit Date:** 11/17/04-1/28/05

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Time rechecked on 12/17/04.

DAS TIME vs. NOAA CLOCK				
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?	Date
13:17:00	13:17:19	00:19	**PASS**	11/17/04
12:27:00	12:27:20	00:20	**PASS**	12/17/04

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor **Make:** Met-One **Model:** 060A-2 **S.N.#:** D6463 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Fisher Scientific **Model:** 15-077-8 **S.N.#:** 21164797 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Fisher Scientific **Model:** 15-077-7 **S.N.#:** 22136783 **Range:** -40 to 150 **°C**

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	23.44	23.49	0.05	Pass
Warm	15 - 25	8.74	8.75	0.01	Pass
Ice Bath	0	-0.01	0.11	0.12	Pass
		Max Abs. Error		**0.12**	**PASS**

Date: 11/17/04 **Time:** Begin: 1350 End: 1410

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	34.33	34.56	0.23	Pass
Warm	15 - 25	22.41	22.57	0.16	Pass
Ice Bath	0	-0.02	0.06	0.08	Pass
		Max Abs. Error		**0.23**	**PASS**

Date: 01/27/05 **Time:** Begin: 1645 End: 1710

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D7207.
Temperature tested with switch box on 12/17/04 from 1340-1345: (-30/-30.02, -10/-10.02, +30/29.97, +50/49.97).

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor: **Make:** Met-One **Model:** 010C-1 **S.N.#:** D6648 **Cup #:** N/A **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18801 **S.N.#:** CA01674 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136

Date: 11/17/04
Begin: 1605
End: 1610

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	<0.006	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.60	N/A	0.0	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.92	N/A	0.0	Pass
2000	53.57	53.58	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.1**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Wind speed tested with switch box on 12/17/04 from 1145-1150: (0/0.00, 11.18/11.18, 22.08/22.07, 43.90/43.87).

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Steve Mackey, Jared Cockman, Brent Veltkamp **Audit Date:** 11/17/04-1/28/05

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D6967 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.9 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.070	**PASS**
New	0.0986	N/A	N/A

Date: 11/17/04
Time: Begin: 1330 End: 1440

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	134.0	132.8	-1.2	Pass
Compass	131.0	129.4	-1.6	Pass
Compass	184.0	182.0	-2.0	Pass
GPS	183.0	182.0	-1.0	Pass
GPS	313.0	313.7	0.7	Pass
Compass	313.0	313.7	0.7	Pass
		Max Abs. Error	**2.0**	**PASS**
		Mean Abs. Error	**1.2**	**GOOD**

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	181.0	1.0	Pass
West	270.0	273.0	3.0	Pass
North	360.0	4.0	4.0	Pass
East	90.0	91.0	1.0	Pass
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error		**4.0**	**PASS**
	Mean Abs. Error		**2.3**	**PASS**

Time: Begin: 1100 End: 1105
Date: 12/17/04

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.4	-1.6	Pass	330.0	333.9	3.9	Pass
60.0	59.0	-1.0	Pass	355.0	358.8	3.8	Pass
90.0	89.3	-0.7	Pass	30.0	29.3	-0.7	Pass
120.0	119.3	-0.7	Pass	60.0	59.0	-1.0	Pass
150.0	149.6	-0.4	Pass	90.0	89.1	-0.9	Pass
180.0	180.0	0.0	Pass	120.0	119.1	-0.9	Pass
210.0	210.4	0.4	Pass	150.0	149.6	-0.4	Pass
240.0	241.6	1.6	Pass	180.0	180.0	0.0	Pass
270.0	272.8	2.8	Pass	**Max Abs. Error**		**3.9**	**PASS**
300.0	303.1	3.1	Pass	**Mean Abs. Error**		**1.3**	**PASS**

Date: 11/17/04 **Time:** Begin: 1500 End: 1512

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass (11/18/04)	165.0	163.3	-1.7	Pass
Compass (12/17/04)	245.0	246.0	1.0	Pass
		Max Abs. Error	**1.7**	**PASS**
		Mean Abs. Error	**1.3**	**GOOD**

Date: 11/18/04
Time: Begin: 1250 End: 1300

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.
Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.
Comments: Too windy for more post-audit north alignment tests on 11/18/04. Single point check on 12/17/04.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Steve Mackey, Jared Cockman, Brent Veltkamp **Audit Date:** 11/17/04-1/28/05

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1505	800	24.7	0.0	0.2	0.0	22.2	1600	22.4	-9.3%	Pass	11/17/2004
1505	800	24.7	0.0	-0.6	0.0	24.6	1700	24.0	-2.8%	Pass	12/17/2004
1710	650	20.0	0.0	0.2	0.0	20.4	1800	20.6	3.0%	Pass	01/28/2005
							Max Abs. Error		**9.3%**	**PASS**	

Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Jared Cockman, Terry Wassilli **Audit Date:** 5/11-12/2005

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
9:58:00	9:57:55	-00:05	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

Time: Begin: 1000 End: 1015

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	42.79	42.87	0.08	Pass
Warm	15 - 25	20.97	21.00	0.03	Pass
Ice Bath	0	-0.01	0.10	0.11	Pass
		Max Abs. Error		**0.11**	**PASS**

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D7207.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Time:
Begin: 1210
End: 1213

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0063	<0.006	**PASS**
New	0.0063	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.62	N/A	0.4	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.93	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.4**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Jared Cockman, Terry Wassilli **Audit Date:** 5/11-12/2005

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D6967 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.8 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.027	**PASS**
New	0.0986	N/A	N/A

Time: Begin: 1040 End: 1100

IN SITU ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp Mtn	46.1	45.3	-0.8	Pass
El 1824 Mtn	262.7	263.4	0.7	Pass
Groundhog Mtn	201.4	201.8	0.4	Pass
Kaskanak Mtn	128.5	129.7	1.2	Pass
El 0948 Mtn	325.6	326.2	0.6	Pass
	Max Abs. Error		**1.2**	**PASS**
	Mean Abs. Error		**0.7**	**GOOD**

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.1	-0.9	Pass
West	270.0	270.4	0.4	Pass
North	360.0	1.8	1.8	Pass
East	90.0	89.5	-0.5	Pass
North	360.0	2.0	2.0	Pass
West	270.0	270.6	0.6	Pass
South	180.0	178.6	-1.4	Pass
East	90.0	89.4	-0.6	Pass
Max Abs. Error			**2.0**	**PASS**
Mean Abs. Error			**1.0**	**PASS**

Time: Begin: 1145 End: 1150

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.9	-0.1	Pass	330.0	331.7	1.7	Pass
60.0	59.9	-0.1	Pass	355.0	356.7	1.7	Pass
90.0	89.6	-0.4	Pass	30.0	29.8	-0.2	Pass
120.0	119.4	-0.6	Pass	60.0	59.5	-0.5	Pass
150.0	149.6	-0.4	Pass	90.0	89.4	-0.6	Pass
180.0	180.1	0.1	Pass	120.0	119.3	-0.7	Pass
210.0	210.3	0.3	Pass	150.0	149.8	-0.2	Pass
240.0	240.7	0.7	Pass	180.0	179.8	-0.2	Pass
270.0	271.6	1.6	Pass	**Max Abs. Error**		**1.7**	**PASS**
300.0	301.2	1.2	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Time: Begin: 1125 End: 1130

POST-AUDIT AZIMUTH ALIGNMENT TEST				
	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp Mtn	46.1	44.7	-1.4	Pass
Kaskanak Mtn	128.5	129.0	0.5	Pass
El 1824 Mtn	262.7	262.4	-0.3	Pass
El 0948 Mtn	325.6	325.8	0.2	Pass
	Max Abs. Error		**1.4**	**PASS**
	Mean Abs. Error		**0.6**	**GOOD**

Time: Begin: 1150 End: 1157

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Instrument not removed from crossarm for linearity tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Steve Mackey **Alternate:** Jared Cockman **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Jared Cockman, Terry Wassilli **Audit Date:** 5/11-12/2005

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
915	650.0	20.0	0.0	-0.6	0.2	21.6	900	21.2	6.0%	Pass	Snowfall adapter on.
1015	650.0	20.0	0.0	-0.2	0.2	21.0	1000	21.0	5.0%	Pass	Snowfall adapter on.
1115	650.0	20.0	0.0	-0.2	0.4	21.0	1100	21.2	6.0%	Pass	Snowfall adapter on.
1215	650.0	20.0	0.0	-0.4	0.4	21.0	1500	21.0	5.0%	Pass	Snowfall adapter on.
1515	650.0	20.0	0.0	-34.0	0.0	55.0	1500	21.0	5.0%	Pass	Snowfall adapter off.
1610	650.0	20.0	0.0	0.0	0.0	20.8	1600	20.8	4.0%	Pass	Snowfall adapter off.
1705	650.0	20.0	0.0	0.0	0.0	21.0	1700	21.0	5.0%	Pass	Snowfall adapter off.
							Max Abs. Error	**6.0%**	**PASS**		

Limits: Max Absolute Error > 10 % of Input.
Comments: None.

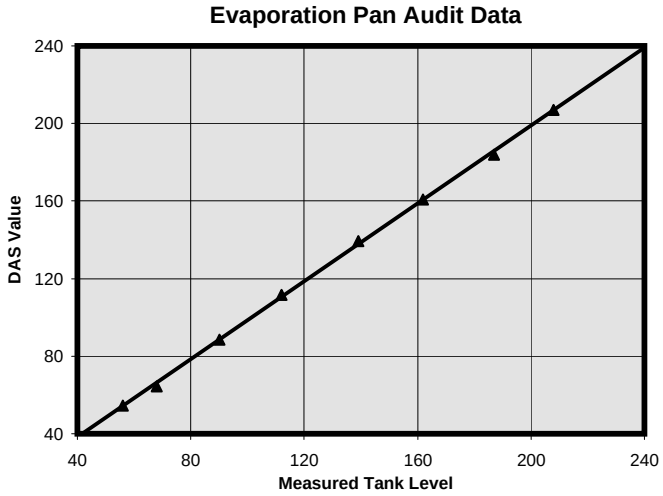
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
56.0	54.6	54.1	0.5	0.9%	Pass
68.0	64.5	66.1	-1.6	-2.4%	Pass
90.0	88.5	88.1	0.4	0.4%	Pass
112.0	111.7	110.1	1.6	1.4%	Pass
139.0	139.4	137.1	2.3	1.7%	Pass
162.0	160.8	160.1	0.7	0.4%	Pass
187.0	184.0	185.1	-1.1	-0.6%	Pass
208.0	207.0	206.1	0.9	0.4%	Pass
	Max Abs. Error		**2.3**	**2.4%**	**PASS**
	Intercept	**-1.9**	**Slope**	**1.0035**	**PASS**



Date: 05/12/05 **Time:** Begin: 1230 End: 1330

Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8-Oct-05

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
13:07:00	13:06:57	-00:03	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	50.92	51.79	0.87	Fail
Warm	15 - 25	N/A	N/A	N/A	N/A
Ice Bath	0	0.00	3.54	3.54	Fail
		Max Abs. Error		**3.54**	**FAIL**

Time: Begin: 1350 End: 1410

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	40.14	40.24	0.10	Pass
Warm	15 - 25	22.39	22.36	-0.03	Pass
Ice Bath	0	0.00	0.12	0.12	Pass
		Max Abs. Error		**0.12**	**PASS**

Time: Begin: 1600 End: 1655

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D7207.
Temperature initially failed. Sensor rewired with Scotchlocks and then passed re-audit.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Time:
Begin: 1700
End: 1705

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0063	<0.003	**PASS**
New	0.0063	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input RPM	Input MPS	DAS MPS	Error MPS	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.60	N/A	0.0	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.90	N/A	-0.1	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.1**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8-Oct-05

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D6967 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.7 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.050	**PASS**
New	0.0986	N/A	N/A

IN SITU ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	95.5	92.9	-2.6	Pass
Compass	12.0	13.6	1.6	Pass
Compass	279.0	281.4	2.4	Pass
Compass	185.5	184.4	-1.1	Pass
	Max Abs. Error		**2.6**	**PASS**
	Mean Abs. Error		**1.9**	**GOOD**

Time: Begin: 1710 End: 1730

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
Max Abs. Error				
Mean Abs. Error				

Time: Begin: N/A End: N/A

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.5	-1.5	Pass	330.0	334.8	4.8	Pass
60.0	59.0	-1.0	Pass	355.0	359.8	4.8	Pass
90.0	88.9	-1.1	Pass	30.0	28.8	-1.2	Pass
120.0	119.3	-0.7	Pass	60.0	58.7	-1.3	Pass
150.0	150.1	0.1	Pass	90.0	89.2	-0.8	Pass
180.0	181.0	1.0	Pass	120.0	119.7	-0.3	Pass
210.0	211.5	1.5	Pass	150.0	150.0	0.0	Pass
240.0	242.3	2.3	Pass	180.0	181.0	1.0	Pass
270.0	273.6	3.6	Pass	**Max Abs. Error**		**4.8**	**PASS**
300.0	304.0	4.0	Pass	**Mean Abs. Error**		**1.7**	**PASS**

Time: Begin: 1735 End: 1740

POST-AUDIT AZIMUTH ALIGNMENT TEST				
	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	186.0	186.4	0.4	Pass
Compass	81.0	79.8	-1.2	Pass
	Max Abs. Error		**1.2**	**PASS**
	Mean Abs. Error		**0.8**	**GOOD**

Time: Begin: 1745 End: 1800

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Instrument not removed from crossarm for linearity tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 2
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8-Oct-05

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
							Max Abs. Error				

Limits: Max Absolute Error > 10 % of Input.
Comments: No time to complete audit.

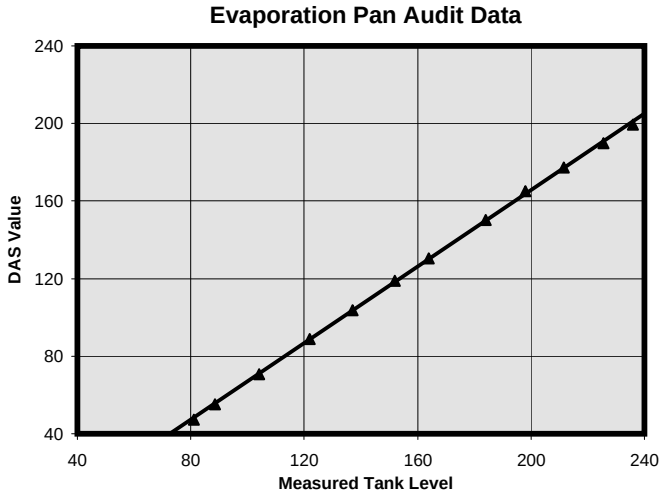
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
81.0	47.42	49.3	-1.9	-3.8%	Pass
88.5	55.33	56.8	-1.5	-2.6%	Pass
104.0	70.55	72.3	-1.8	-2.4%	Pass
122.0	88.90	90.3	-1.4	-1.6%	Pass
137.0	103.54	105.3	-1.8	-1.7%	Pass
152.0	118.89	120.3	-1.4	-1.2%	Pass
164.0	130.38	132.3	-1.9	-1.5%	Pass
184.0	150.11	152.3	-2.2	-1.4%	Pass
198.0	165.07	166.3	-1.2	-0.7%	Pass
211.5	177.29	179.8	-2.5	-1.4%	Pass
225.5	189.89	193.8	-3.9	-2.0%	Pass
236.0	199.56	204.3	-4.8	-2.3%	Pass
	Max Abs. Error		**4.8**	**3.8%**	**PASS**
	Intercept	**-31.7**	**Slope**	**0.9862**	**PASS**



Time: Begin: 1620 End: 1645

Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies, Dan Friedman **Audit Date:** Nov 18-19, 2005

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
13:03:00	13:02:48	-00:12	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	42.77	42.87	0.10	Pass
Warm	15 - 25	N/A	N/A	N/A	N/A
Ice Bath	0	-0.02	0.08	0.10	Pass
		Max Abs. Error		**0.10**	**PASS**

Date: 11/18/05 **Time:** Begin: 1000 End: 1015

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	37.93	38.01	0.08	Pass
Warm	15 - 25	20.91	20.93	0.02	Pass
Ice Bath	0	-0.02	0.07	0.09	Pass
		Max Abs. Error		**0.09**	**PASS**

Date: 11/19/05 **Time:** Begin: 1245 End: 1255

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D7207.
Temperature tested before moving station, 11/19/05 audit after station moved to Pebble 3 site.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Begin: 1400
End: 1415

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	0.004	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.91	-0.03	N/A	Pass
200	5.60	5.54	N/A	-1.1	Pass
400	10.93	10.90	N/A	-0.3	Pass
1000	26.92	26.93	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.03**	**1.1**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies, Dan Friedman **Audit Date:** Nov 18-19, 2005

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D6967 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.7 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	<0.06	**PASS**
New	0.0986	N/A	N/A

Time: Begin: 1325 End: 1340

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	259.0	259.2	0.2	Pass
Compass	184.0	184.1	0.1	Pass
Compass	98.0	96.4	-1.6	Pass
Compass	356.5	358.7	2.2	Pass
	Max Abs. Error		**2.2**	**PASS**
	Mean Abs. Error		**1.0**	**GOOD**

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: N/A End: N/A

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.0	-1.0	Pass	330.0	334.7	4.7	Pass
60.0	57.6	-2.4	Pass	355.0	359.8	4.8	Pass
90.0	88.6	-1.4	Pass	30.0	27.3	-2.7	Pass
120.0	118.6	-1.4	Pass	60.0	57.6	-2.4	Pass
150.0	149.4	-0.6	Pass	90.0	88.2	-1.8	Pass
180.0	179.9	-0.1	Pass	120.0	118.5	-1.5	Pass
210.0	211.5	1.5	Pass	150.0	149.6	-0.4	Pass
240.0	242.1	2.1	Pass	180.0	180.6	0.6	Pass
270.0	273.4	3.4	Pass	**Max Abs. Error**		**4.8**	**PASS**
300.0	304.4	4.4	Pass	**Mean Abs. Error**		**2.1**	**PASS**

Time: Begin: 1344 End: 1400

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: N/A End: N/A

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Initial audit after station moved, no post audit required.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies, Dan Friedman **Audit Date:** Nov 18-19, 2005

● ***WEIGHING PRECIPITATION GAUGE AUDIT*** **Height:** 2.0 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST									
Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1405		800	11.0	0.51	5.84	5.33	N/A	N/A	Initial volume not used.
1410		800	11.0	5.84	16.51	10.67	-2.6%	Pass	
1415		1600	21.9	16.51	37.34	20.83	-5.0%	Pass	
1420		1600	21.9	37.34	58.42	21.08	-3.9%	Pass	
					Max Abs. Error		**5.0%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 23-Apr-06

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Location: 59° 50.296'N, 155° 18.216' W.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
7:59:00	7:58:45	-00:15	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

Time: Begin: 820 End: 840

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	41.53	41.69	0.16	Pass
Warm	15 - 25	19.27	19.29	0.02	Pass
Ice Bath	0	-0.01	0.06	0.07	Pass
		Max Abs. Error		**0.16**	**PASS**

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D7207.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Begin: 1030
End: 1035

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	0.004	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.94	0.00	N/A	Pass
200	5.60	5.60	N/A	0.0	Pass
400	10.93	10.92	N/A	-0.1	Pass
1000	26.92	26.93	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.1**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 23-Apr-06

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D5541 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.050	**PASS**
New	0.0986	N/A	N/A

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	198.8	18.8	Fail
West	270.0	289.4	19.4	Fail
North	360.0	19.8	19.8	Fail
East	90.0	109.7	19.7	Fail
North	360.0	19.8	19.8	Fail
West	270.0	290.0	20.0	Fail
South	180.0	198.9	18.9	Fail
East	90.0	109.8	19.8	Fail
	Max Abs. Error		**20.0**	**FAIL**
	Mean Abs. Error		**19.5**	**FAIL**

Time: Begin: 915 End: 930

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.0	0.0	Pass
West	270.0	270.0	0.0	Pass
North	360.0	0.7	0.7	Pass
East	90.0	90.6	0.6	Pass
North	360.0	0.6	0.6	Pass
West	270.0	270.4	0.4	Pass
South	180.0	180.0	0.0	Pass
East	90.0	90.6	0.6	Pass
	Max Abs. Error		**0.7**	**PASS**
	Mean Abs. Error		**0.4**	**PASS**

Time: Begin: 1000 End: 1005

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	66.0	83.0	17.0	Fail
Compass	8.0	25.3	17.3	Fail
Compass	262.0	278.8	16.8	Fail
Compass	189.0	204.6	15.6	Fail
	Max Abs. Error		**17.3**	**FAIL**
	Mean Abs. Error		**16.7**	**ALERT**

Time: Begin: 845 End: 915

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.2	0.2	Pass	330.0	330.8	0.8	Pass
60.0	60.1	0.1	Pass	355.0	355.6	0.6	Pass
90.0	90.0	0.0	Pass	30.0	30.3	0.3	Pass
120.0	120.0	0.0	Pass	60.0	60.0	0.0	Pass
150.0	149.7	-0.3	Pass	90.0	90.2	0.2	Pass
180.0	179.7	-0.3	Pass	120.0	120.2	0.2	Pass
210.0	210.0	0.0	Pass	150.0	149.9	-0.1	Pass
240.0	240.2	0.2	Pass	180.0	180.0	0.0	Pass
270.0	269.8	-0.2	Pass	**Max Abs. Error**		**0.8**	**PASS**
300.0	300.5	0.5	Pass	**Mean Abs. Error**		**0.2**	**PASS**

Time: Begin: 950 End: 1000

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	263.5	263.5	0.0	Pass
Compass	10.0	10.5	0.5	Pass
Compass	101.5	101.4	-0.1	Pass
Compass	182.0	181.2	-0.8	Pass
	Max Abs. Error		**0.8**	**PASS**
	Mean Abs. Error		**0.4**	**GOOD**

Time: Begin: 1005 End: 1025

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Wind direction was out of alignment after emergency sensor replaced by NDM personnel. Error corrected and re-audited.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 23-Apr-06

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.0 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
915	2.00	1600	21.9	0.00	20.07	20.07	N/A	N/A	
920		1600	21.9	20.07	43.69	23.62	7.7%	Pass	
930		800	11.0	43.69	55.12	11.43	4.3%	Pass	
945		800	11.0	55.12	63.50	8.38	N/A	N/A	Improper pour.
1005		800	11.0	0.00	11.68	11.68	6.6%	Pass	
1015		800	11.0	11.68	23.11	11.43	4.3%	Pass	
1030	6.75	800	11.0	23.11	34.54	11.43	4.3%	Pass	
					Max Abs. Error		**7.7%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies, Isaac Bertschi, Tamara Hedlan **Audit Date:** June 4 & 9, 2006

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: 59° 50.301' N, 155° 18.265' W.
Clock reset after failure.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
11:22:30	11:13:52	**-08:38**	**FAIL**
11:24:30	11:24:30	**00:00**	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

Date: 06/09/06
Time: Begin: 915 End: 930

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 - 45	38.18	38.26	0.08	Pass
Warm	15 - 25	18.08	18.13	0.05	Pass
Ice Bath	0	-0.01	0.09	0.10	Pass
		Max Abs. Error		**0.10**	**PASS**

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: Motor Aspirated Radiation Shield: Met-One Mdl 076B-4; SN: D7207.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Begin: 1200
End: 1205

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	0.003	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.94	0.00	N/A	Pass
200	5.60	5.62	N/A	0.4	Pass
400	10.93	10.90	N/A	-0.3	Pass
1000	26.92	26.93	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.4**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies, Isaac Bertschi, Tamara Hedlan **Audit Date:** June 4 & 9, 2006

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D5541 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.050	**PASS**
New	0.0986	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	179.5	178.6	-0.9	Pass
Compass	86.5	86.5	0.0	Pass
Compass	9.0	9.5	0.5	Pass
Compass	254.0	252.8	-1.2	Pass
Pebble 4	346.3	347.8	1.5	Pass
Mtn EL_1952	47.9	46.1	-1.8	Pass
		Max Abs. Error	**1.8**	**PASS**
		Mean Abs. Error	**1.0**	**GOOD**

Time: Begin: 1045 End: 1115

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	178.6	-1.4	Pass
West	270.0	268.5	-1.5	Pass
North	360.0	0.5	0.5	Pass
East	90.0	89.7	-0.3	Pass
North	360.0	0.5	0.5	Pass
West	270.0	268.6	-1.4	Pass
South	180.0	178.2	-1.8	Pass
East	90.0	89.8	-0.2	Pass
	Max Abs. Error		**1.8**	**PASS**
	Mean Abs. Error		**0.9**	**PASS**

Time: Begin: 1135 End: 1140

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.1	0.1	Pass	330.0	327.6	-2.4	Pass
60.0	59.8	-0.2	Pass	355.0	352.1	-2.9	Pass
90.0	89.0	-1.0	Pass	30.0	29.7	-0.3	Pass
120.0	118.5	-1.5	Pass	60.0	59.6	-0.4	Pass
150.0	148.1	-1.9	Pass	90.0	88.8	-1.2	Pass
180.0	178.4	-1.6	Pass	120.0	118.6	-1.4	Pass
210.0	207.6	-2.4	Pass	150.0	148.6	-1.4	Pass
240.0	237.6	-2.4	Pass	180.0	179.1	-0.9	Pass
270.0	268.0	-2.0	Pass	**Max Abs. Error**		**2.9**	**PASS**
300.0	298.0	-2.0	Pass	**Mean Abs. Error**		**1.4**	**PASS**

Time: Begin: 1125 End: 1130

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
		Max Abs. Error		
		Mean Abs. Error		

Time: Begin: N/A End: N/A

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Instrument not removed from crossarm for linearity tests. This is the initial audit for this instrument after moving ~200 feet from water, no post-audit.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies, Isaac Bertschi, Tamara Hedlan **Audit Date:** June 4 & 9, 2006

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.0 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
844	4.50	1600	21.9	0.00	19.56	19.56	N/A	N/A	Initial pour not used.
849		1600	21.9	19.56	43.43	23.88	8.9%	Pass	
855	6.00	1600	21.9	43.43	67.06	23.62	7.7%	Pass	
859		1600	21.9	67.06	90.17	23.11	5.4%	Pass	
906	8.85	1600	21.9	0.00	23.37	23.37	6.6%	Pass	
912		1600	21.9	23.37	46.99	23.62	7.7%	Pass	
916	10.38	1600	21.9	46.99	70.10	23.11	5.4%	Pass	
921		1600	21.9	70.10	92.96	22.86	4.2%	Pass	
925	12.25	1600	21.9	92.96	116.08	23.12	5.4%	Pass	
					Max Abs. Error		**8.9%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 19-Jan-07

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
10:48:00	10:47:57	**-00:03**	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

Time: Begin: 1030 End: 1130

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 to 45	46.24	46.35	0.11	Pass
Warm	15 to 25	25.28	25.31	0.03	Pass
Ice Bath	0	-0.03	0.11	0.14	Pass
Very Cold	-35 to -45	-31.06	-30.86	0.20	Pass
		Max Abs. Error		**0.20**	**PASS**

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: None.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Begin: 1200
End: 1205

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	0.005	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.60	N/A	0.0	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.92	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.1**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 19-Jan-07

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D5541 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.5 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.055	**PASS**
New	0.0986	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	175.5	175.5	0.0	Pass
Compass	111.5	110.3	-1.2	Pass
Peak_1952	47.9	46.0	-1.9	Pass
Pk_1952_Shoulder	45.1	44.7	-0.4	Pass
Compass	8.0	8.2	0.2	Pass
Hill_1166	97.1	95.8	-1.3	Pass
Compass	290.5	288.9	-1.6	Pass
		Max Abs. Error	**1.9**	**PASS**
		Mean Abs. Error	**0.9**	**GOOD**

Time: Begin: 1055 End: 1105

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.5	0.5	Pass
West	270.0	271.6	1.6	Pass
North	360.0	0.5	0.5	Pass
East	90.0	90.7	0.7	Pass
North	360.0	0.5	0.5	Pass
West	270.0	271.6	1.6	Pass
South	180.0	180.6	0.6	Pass
East	90.0	90.7	0.7	Pass
	Max Abs. Error		**1.6**	**PASS**
	Mean Abs. Error		**0.8**	**PASS**

Time: Begin: 1122 End: 1127

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	330.0	330.8	0.8	Pass
60.0	59.4	-0.6	Pass	355.0	356.5	1.5	Pass
90.0	89.3	-0.7	Pass	30.0	29.6	-0.4	Pass
120.0	118.8	-1.2	Pass	60.0	59.6	-0.4	Pass
150.0	148.9	-1.1	Pass	90.0	89.4	-0.6	Pass
180.0	179.0	-1.0	Pass	120.0	119.2	-0.8	Pass
210.0	209.1	-0.9	Pass	150.0	148.7	-1.3	Pass
240.0	239.6	-0.4	Pass	180.0	179.0	-1.0	Pass
270.0	269.8	-0.2	Pass	**Max Abs. Error**		**1.5**	**PASS**
300.0	300.6	0.6	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1115 End: 1120

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak_1952	47.9	45.9	-2.0	Pass
		Max Abs. Error	**2.0**	**PASS**
		Mean Abs. Error	**2.0**	**GOOD**

Time: Begin: 1130 End: 1133

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Instrument not removed from crossarm for linearity tests, no post audit required.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 19-Jan-07

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.0 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 333 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1025		1600	21.9	1.02	24.13	23.11	5.4%	Pass	
1056		1600	21.9	24.13	41.91	17.78	N/A	N/A	Improper pour.
1113		1600	21.9	0.00	21.38	21.38	-2.5%	Pass	
1127		1600	21.9	21.38	42.42	21.04	-4.1%	Pass	
1150	9-7/8	1600	21.9	42.42	66.06	23.64	7.8%	Pass	
1205	10-3/4	1600	21.9	0.00	23.37	23.37	6.6%	Pass	
1215		1600	21.9	23.37	46.99	23.62	7.7%	Pass	
					Max Abs. Error		**7.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

Pebble 4
PSD Meteorological Monitoring Station

July 2006

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 4 PSD Meteorological Monitoring Station
July 2006
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 4 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 4 July 12, 2006 Performance Audit Summary 12

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 4 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

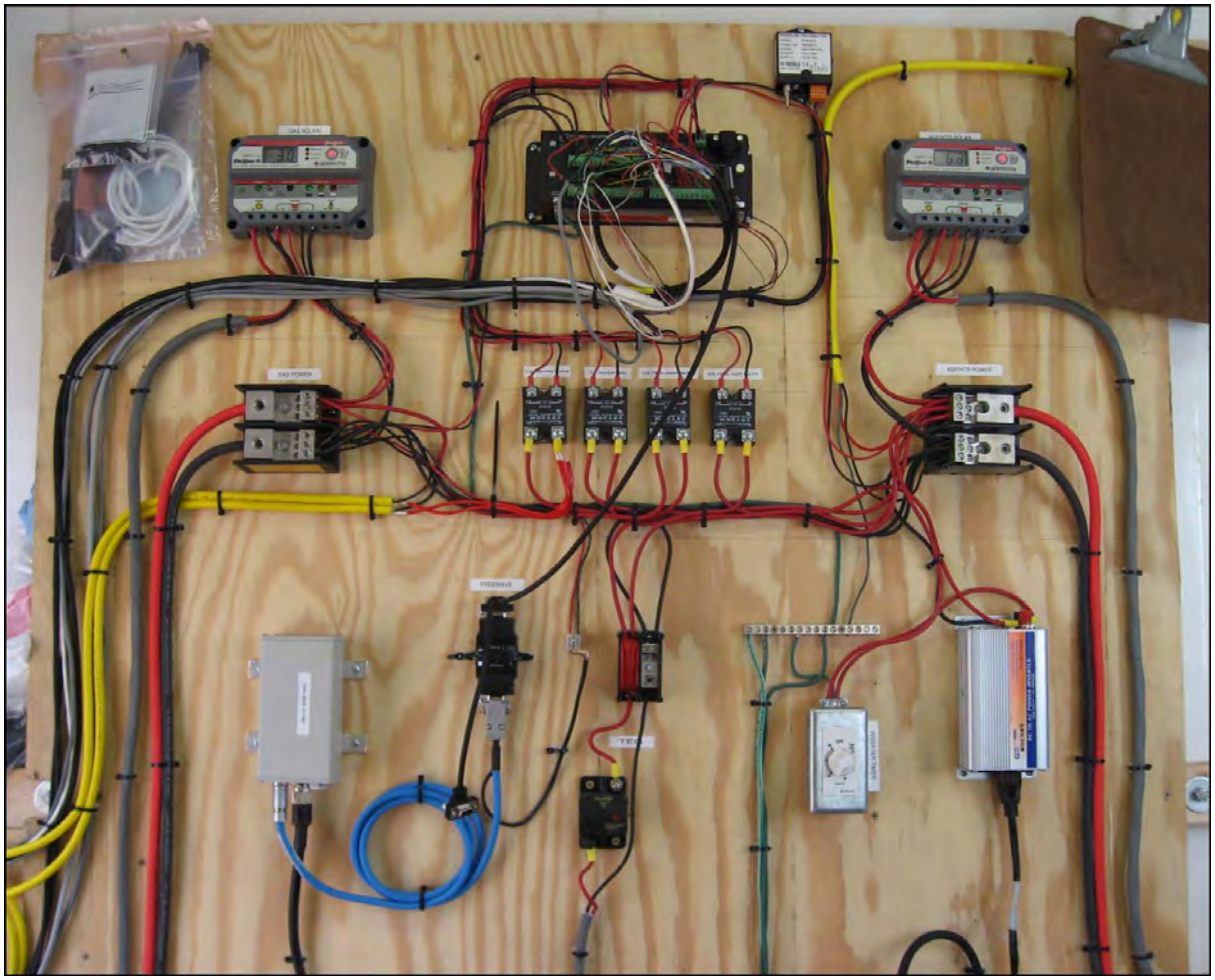
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 4 station was conducted in mid July 2006. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 4 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence and all instrumentation wires from the tower, precipitation gauge and evaporation gauge are protected in conduit These conduits all converge at a 5’ by 7’

insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 4 Station DAS Wiring Panel



The Campbell Scientific CR10X DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is

dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are constantly monitored by the DAS.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 4 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best

reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 4 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 4 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 4 station on July 12, 2006, with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 4 July 12, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.3	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.030	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.7	Pass
Wind Direction Linearity	≤ 3	Degree	2.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	4.0	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.010	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	4.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.4	Pass
Barometric Pressure	≤ ±3	Mbar	1.3	Pass
Solar Radiation	≤ ±5+Res	% input	-3.9	Pass
Tipping Precipitation	≤ ±10	% input	3.6	Pass
Evaporation	≤ ±10	% input	2.4	Pass

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 4 station is located on the crest of a knoll approximately 5 miles south of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

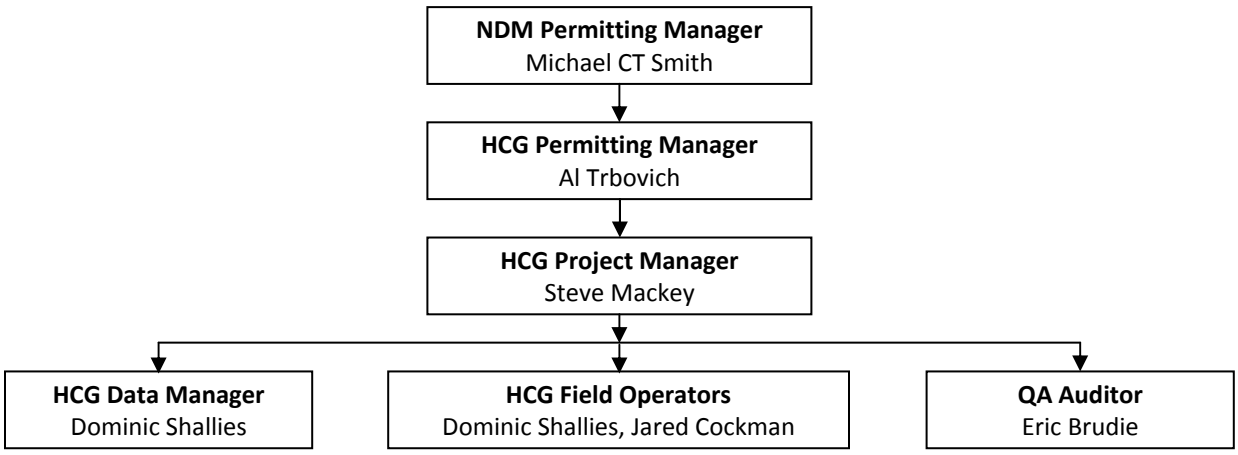
Indicated by Operator	Determined by Auditor
59° 50' N	59° 49.837 N
155° 18' W	155° 18.041'
Elevation: 1,200 feet	Elevation: 1,190 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR10X	X45838
DAS Wiring Panel	Campbell Scientific	CR10X	35367
Temperature (2-meter)	Met One	062MP	E2777, ID #2/2
Temperature (10-meter)	Met One	062MP	E2777, ID #1/2
Temperature Aspirators	Met One	076B-4	F5259 & F5260
Relative Humidity	Vaisala	HMP45AC	A4350044
Primary Wind Speed	Climatronics	F460-100075	5081
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2299
Primary Wind Direction	Climatronics	F460-100076	4745
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1452
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	71368
Backup Wind Spd Prop	RM Young	08254	63635
Barometric Pressure	Vaisala	PTB101B	B0440012
Solar Radiation	LI-COR	Li-200SX	PY52709
Precipitation-Tipping	Met-One	370	A6431
Precip. Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	687
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power? ■ Yes □ No Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained? ■ Yes □ No Comments: None.

Are all sensors operational, online and reporting data? ■ Yes □ No Comments: None.

Do all sensors meet EPA criteria for PSD quality sensors? ■ Yes □ No Comments: See table below.

Are spare parts stocked for items which are frequently worn out or broken? ■ Yes □ No Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)? ■ Yes □ No Comments: None.

Are the sensors located at least 30 meters from large paved areas? ■ Yes □ No Comments: None.

Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Alter type shield surrounds Met-One gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: The lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

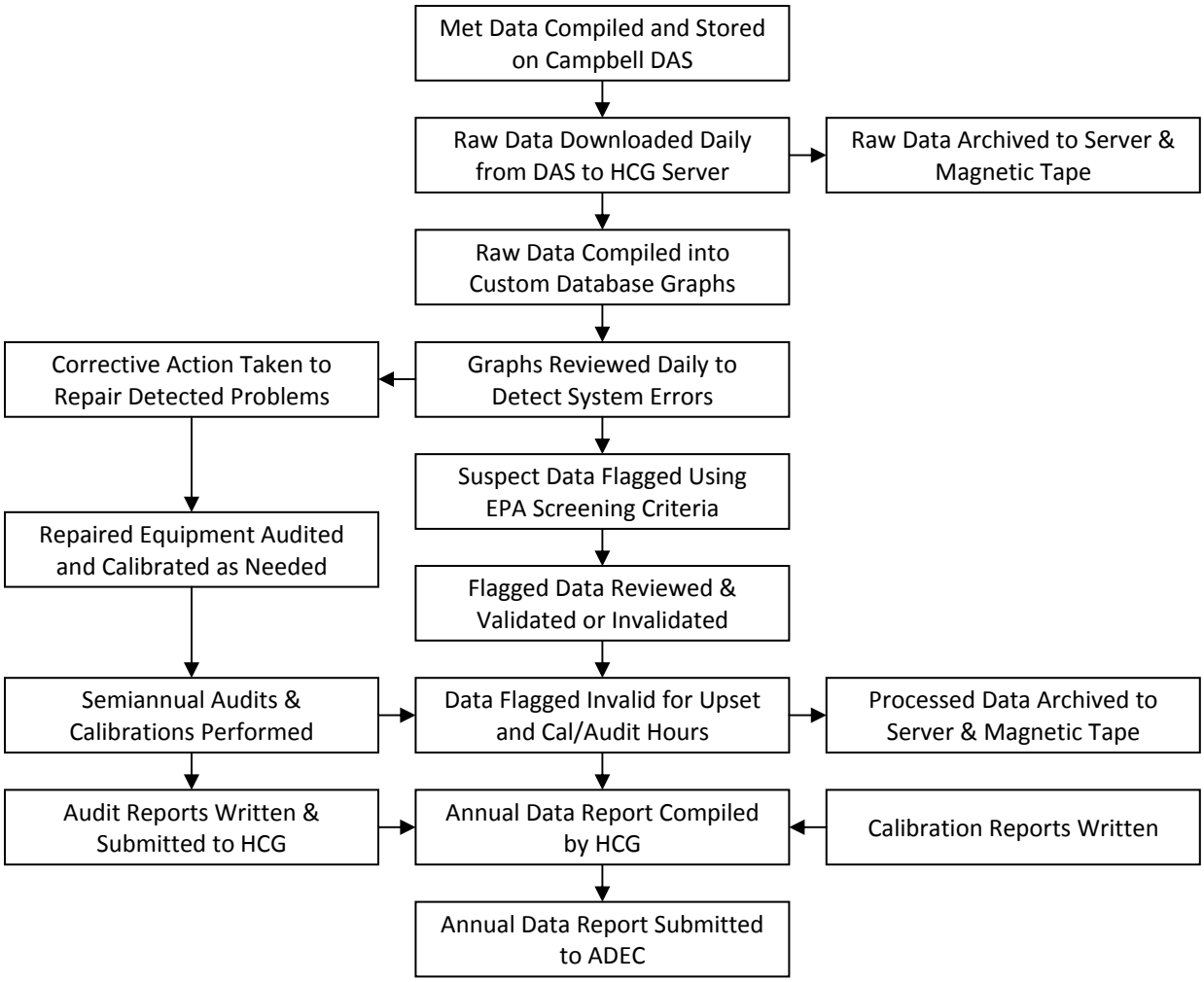
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Isaac Bertschi
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
11:35:00	11:34:58	**-00:02**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Begin: 1520
End: 1550

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	32.62	32.58	-0.04	Pass	32.58	-0.04	Pass	0.00	Pass
Warm	15 to 25	21.44	21.39	-0.05	Pass	21.39	-0.05	Pass	0.00	Pass
Ice Bath	0	0.05	0.05	0.00	Pass	0.05	0.00	Pass	0.00	Pass
Cold	-15 to -25	-17.02	-16.72	0.30	Pass	-16.72	0.30	Pass	0.00	Pass
Very Cold	-35 to -45	-35.00	-34.68	0.32	Pass	-34.68	0.32	Pass	0.00	Pass
		Max Abs. Error		0.32	**PASS**		0.32	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1640	43.0	23.1	10.0	44.0	23.2	10.3	0.3	Pass
					Max Abs. Error		0.3	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1557	28.51	28.39	961.5	962.8	1.3	Pass
			Max Abs. Error		1.3	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/24/06	
Audit Inst	Offset Amount
24.13	-0.13
26.24	-0.13
28.12	-0.12
30.11	-0.11
Intercept	**-0.22**
Slope	**0.0035**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5081 **Cup #:** 2299 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1450
End: 1455

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.6 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Prop #:** 63635 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1455
End: 1500

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.010	**PASS**
New	0.014	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4745 **Vane #:** 1452 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.030	**PASS**
New	0.104	N/A	**N/A**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	95.5	97.2	1.7	Pass
Compass	263.5	266.0	2.5	Pass
Compass	4.5	2.9	-1.6	Pass
Sharp Mtn West	46.1	47.9	1.8	Pass
		Max Abs. Error	**2.5**	**PASS**
		Mean Abs. Error	**1.9**	**GOOD**

Time: Begin: 1202 End: 1240

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.0	0.0	Pass
West	270.0	271.2	1.2	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.3	0.3	Pass
North	360.0	0.1	0.1	Pass
West	270.0	271.7	1.7	Pass
South	180.0	180.3	0.3	Pass
East	90.0	90.3	0.3	Pass
Max Abs. Error			**1.7**	**PASS**
Mean Abs. Error			**0.5**	**PASS**

Time: Begin: 1330 End: 1335

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.1	1.1	Pass	330.0	334.7	4.7	Pass
60.0	61.3	1.3	Pass	355.0	359.0	4.0	Pass
90.0	92.0	2.0	Pass	30.0	31.1	1.1	Pass
120.0	122.4	2.4	Pass	60.0	61.6	1.6	Pass
150.0	152.5	2.5	Pass	90.0	92.0	2.0	Pass
180.0	182.9	2.9	Pass	120.0	123.4	3.4	Pass
210.0	213.3	3.3	Pass	150.0	152.5	2.5	Pass
240.0	244.1	4.1	Pass	180.0	182.7	2.7	Pass
270.0	273.4	3.4	Pass	**Max Abs. Error**		**4.7**	**PASS**
300.0	304.4	4.4	Pass	**Mean Abs. Error**		**2.7**	**PASS**

Time: Begin: 1335 End: 1340

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp Mtn West	46.1	49.1	3.0	Pass
Compass	13.0	12.2	-0.8	Pass
Compass	95.0	95.0	0.0	Pass
Compass	171.5	171.4	-0.1	Pass
Compass	271.0	271.5	0.5	Pass
Peak 1590	104.4	108.4	4.0	Pass
		Max Abs. Error	**4.0**	**PASS**
		Mean Abs. Error	**1.4**	**GOOD**

Time: Begin: 1615 End: 1630

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.6 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	4.0	**PASS**
New	11.0	N/A	**N/A**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	95.5	96.4	0.9	Pass
Compass	263.5	262.1	-1.4	Pass
Compass	4.5	2.9	-1.6	Pass
Sharp Mtn West	46.1	49.2	3.1	Pass
		Max Abs. Error	**3.1**	**PASS**
Time: Begin: 1202 End: 1240		**Mean Abs. Error**	**1.8**	**GOOD**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.0	-1.0	Pass	150.0	150.1	0.1	Pass	270.0	268.1	-1.9	Pass
60.0	59.1	-0.9	Pass	180.0	179.5	-0.5	Pass	300.0	297.7	-2.3	Pass
90.0	90.0	0.0	Pass	210.0	209.4	-0.6	Pass	330.0	328.1	-1.9	Pass
120.0	119.5	-0.5	Pass	240.0	238.7	-1.3	Pass	355.0	353.4	-1.6	Pass
								Max Abs. Error		**2.3**	**PASS**
								Mean Abs. Error		**1.1**	**PASS**

Time: Begin: 1340 End: 1345

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp Mtn West	46.1	48.5	2.4	Pass
Compass	13.0	11.7	-1.3	Pass
Compass	95.0	95.8	0.8	Pass
Compass	171.5	171.1	-0.4	Pass
Compass	271.0	268.4	-2.6	Pass
Peak 1590	104.4	107.8	3.4	Pass
		Max Abs. Error	**3.4**	**PASS**
Time: Begin: 1615 End: 1630		**Mean Abs. Error**	**1.8**	**GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1125	800	24.7	0.0	23.2	2.0	1300	25.2	2.0%	Pass	
1305	800	24.7	0.0	0.0	25.2	1400	25.2	2.0%	Pass	
1403	800	24.7	0.0	0.0	25.6	1500	25.6	3.6%	Pass	
1504	800	24.7	0.0	0.0	25.6	1600	25.6	3.6%	Pass	
						Max Abs. Error		**3.6%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

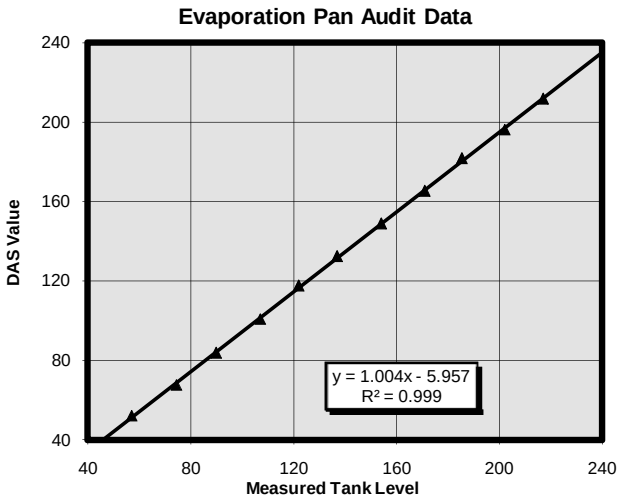
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
57.0	52.3	51.0	1.2	2.4%	Pass
74.5	67.7	68.5	-0.8	-1.2%	Pass
90.0	83.7	84.0	-0.3	-0.4%	Pass
107.0	101.0	101.0	-0.1	-0.1%	Pass
122.0	117.5	116.0	1.4	1.2%	Pass
137.0	132.4	131.0	1.3	1.0%	Pass
154.0	148.9	148.0	0.8	0.6%	Pass
171.0	165.3	165.0	0.3	0.2%	Pass
185.5	181.6	179.5	2.1	1.2%	Pass
202.0	196.3	196.0	0.3	0.2%	Pass
217.0	211.6	211.0	0.5	0.2%	Pass
Max Abs. Error			**2.1**	**2.4%**	**PASS**
Intercept	**-6.0**	**Slope**	**1.0045**		**PASS**



Time: Begin: 1706 End: 1738

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

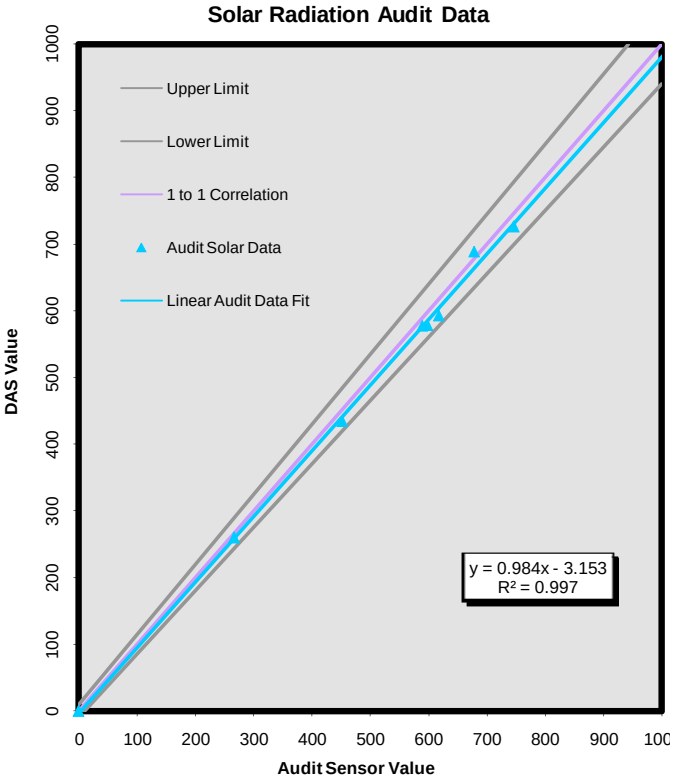
Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

● *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

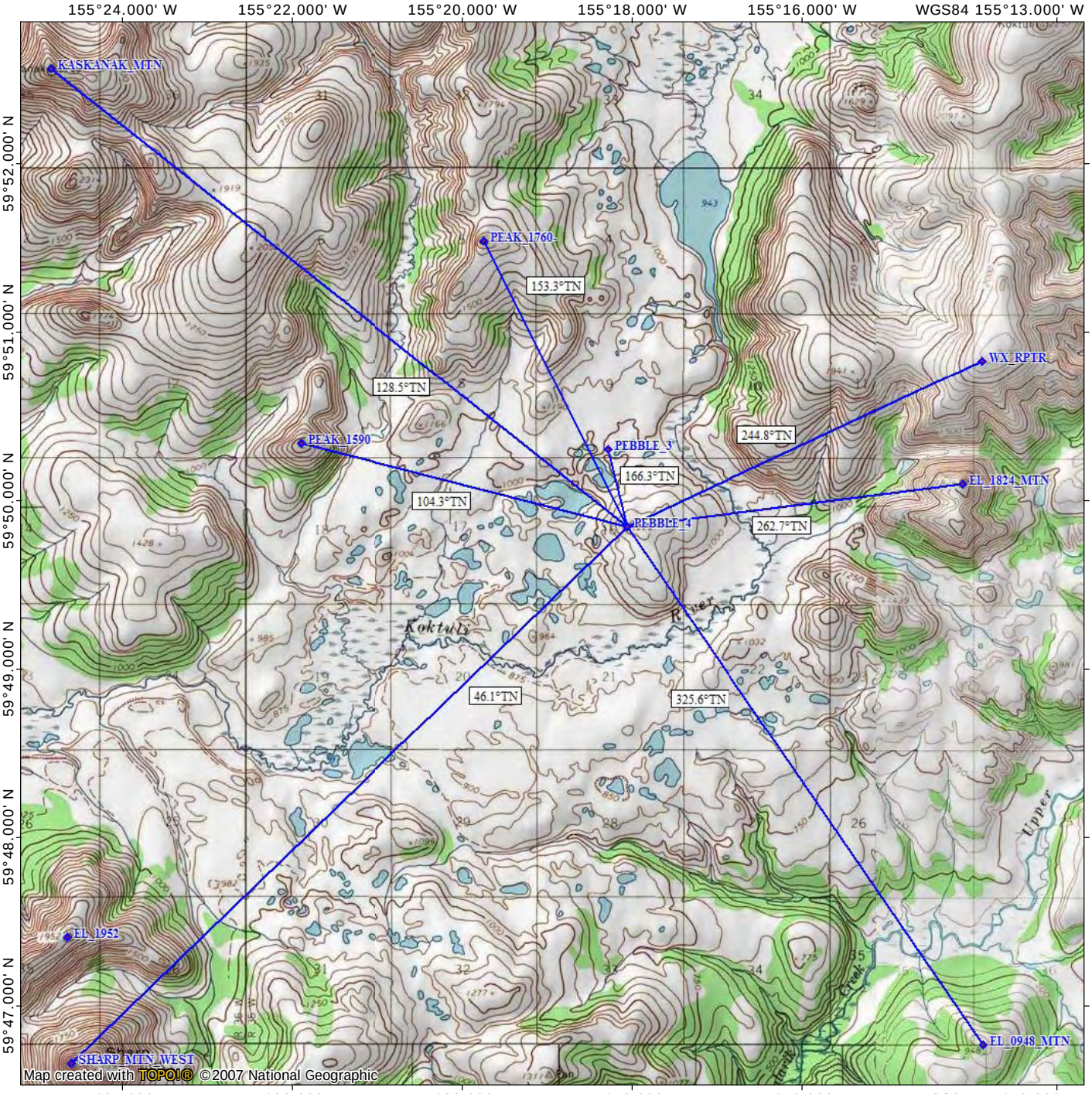
SOLAR RADIATION SENSOR TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1200	677.5	688.9	11.4	±43.9	1.7%	Pass
1300	588.8	577.7	-11.1	±39.4	-1.9%	Pass
1400	746.0	726.0	-20.0	±47.3	-2.7%	Pass
1500	597.9	578.1	-19.8	±39.9	-3.3%	Pass
1600	617.5	593.2	-24.3	±40.9	-3.9%	Pass
1700	451.9	434.9	-17.0	±32.6	-3.8%	Pass
1800	266.5	259.5	-7.0	±23.3	-2.6%	Pass
2400	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	**0.9989**	**Max Abs. Percent Error**			**3.9%**	**PASS**
R² Value	**0.9978**	**Intercept**	**-3.2**	**Slope**	**0.9841**	**PASS**



Begin Date: 07/12/06 **End Date:** 07/12/06

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17½°
08/30/06

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate 1750.01

Calibration complies with ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 4000-1338226

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Dominic Shallies, Anchorage, AK 99503 U.S.A. (RMA:933478)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	12/08/06	A5B28010-1
Thermistor Module	A17118	8/12/06	A5819038
Temperature Calibration Bath TC179	A45240		
Temperature Calibration Bath TC191	A42238		
Temperature Probe	157	9/01/06	A5815063
Thermistor Module	A27129	7/05/06	1000189003

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 6/07/06 **Cal Due: 6/07/07**

Test Conditions: 25.5°C 39.0 %RH 1013 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.000	0.072	N	0.000	-0.004	Y	-0.050	0.050	0.013	3.8:1
°C	25.000	25.020	Y	25.000	24.999	Y	24.950	25.050	0.013	3.8:1
°C	60.002	59.999	Y	60.001	59.999	Y	59.951	60.051	0.013	3.8:1
°C	100.002	100.001	Y	100.002	100.004	Y	99.952	100.052	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

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VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052406. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 05/24/06 Lab temperature 72.8 °F
Lab pressure 663.1 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.13	0.13	-0.13
26.11	26.24	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.11	0.11	-0.11

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R Sanders Date: 5-24-06

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 RPM - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 24 May 2006

Tested By EJC

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 17 November 2005

Tested By EC

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 8884 **TRACEABILITY CERTIFICATE NO.** 05090203

ISSUED TO: Hoefler Consulting Group

INSTRUMENT: 366-3, .003-.03 Inch Ounces Torque Watch, Waters Manufacturing, Inc, S/N 4864

DATE DONE: September 02, 2005 **DATE DUE:** September 01, 2006

CERTIFIED BY METROLOGIST: E.P. Young **TEMPERATURE:** 72 °F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

PROCEDURE/LIMITATIONS/ACCURACY STATEMENT: T.O. 33k6-4-2630-1. Accuracy: +/- 10 % of Full Scale.

COMPLIANCE

Alaska Calibration, Inc.'s calibration practices and procedures comply with the requirements of ANSI/SO/Z540-1 and ANS/ ISO/IEC17025: 2000 and relevant requirements of ISO 9002: 1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. This Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	33479
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	12/20/2005
		PO#:	Verbal
Contact:	Chris Lindsey	**Page:**	1
Dept:			
Gage:	.06-.60 oz Torque Watch	**Control:**	5042
Mfg:	Honeywell	**Model:**	.06-.60 oz Torque Watch
Location:		**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Cal-Tech Calibration, INC
Original Certificate (attached) # 1768

Reference HPI S/O # 13385

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
:

Last / Next Cal Dates: -->

Gage Status: PASS

Next Calibration Due: 12/20/2006

Certified By: Jorge Ashook Signature: Jorge A. Ashook

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 21C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994, ISO10012-1, and Houston Precision's Quality manual.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Gary Deterling Lab Manager.
*This Report shall not be reproduced except in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

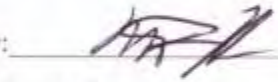
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 1768
Instrument Make: Honeywell
Model: .06-.60" oz Torque Watch
S/N: None
ID: 5042

Date: 12-20-05
Temp: 74 Deg f
Humidity: 40%
Rec. In Tol.
Due Date: 12-20-06

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: 

Accuracy: +\- 5% of full scale.

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	**1g-100g**	**822/265036-01**	**3-22-06**

Inch Oz. Range	As Found	After Adjust	Final Reading
.06	.05	none	.05
.18	.17	none	.17
.36	.35	none	.35
.48	.47	none	.47
.60	.59	none	.59

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.33×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}.

Shipped to:
Hoefler Consulting Group
Anchorage, AK

Date of Test: October 20, 2005

In Charge of Test: R. T. Eppley

S.O. Number: 60557
Date: January 11, 2006

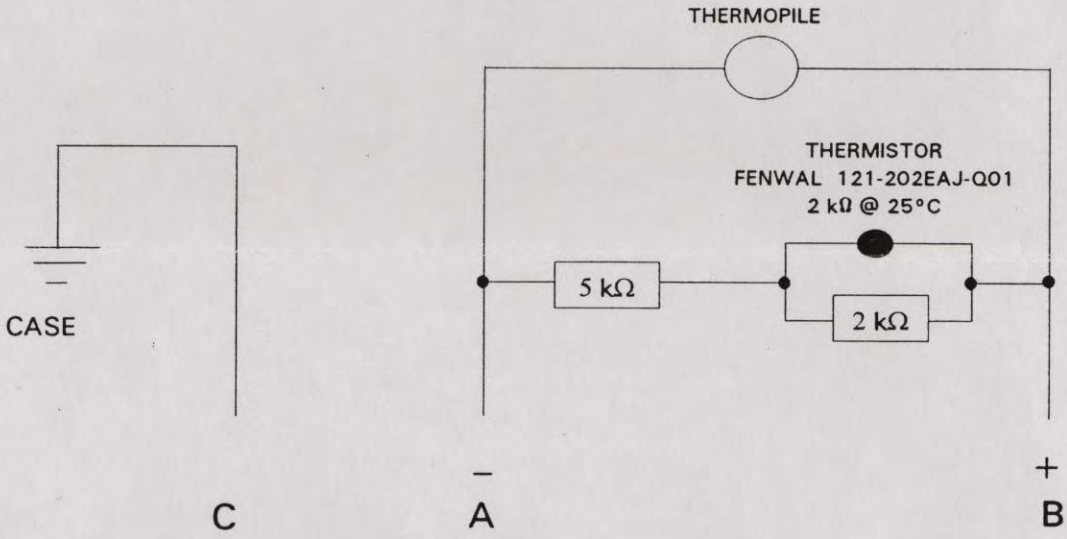
Reviewed by: George L. Eppley

Remarks:

PRECISION SPECTRAL PYRANOMETER
MODEL PSP

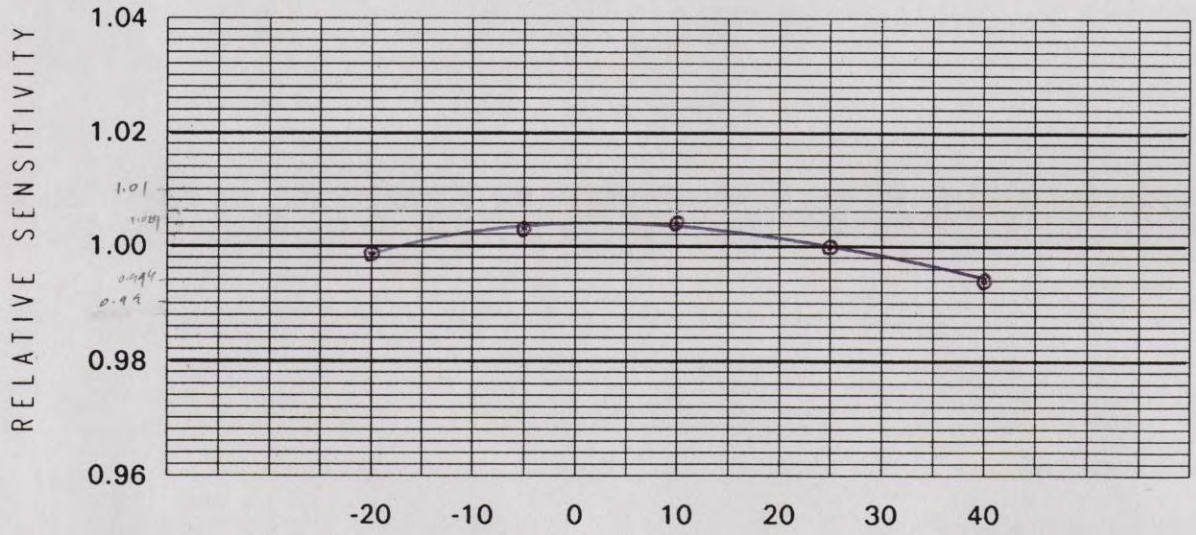
INSTRUMENT SERIAL NUMBER: 34377F3

INTERNAL WIRING



PIN CONNECTIONS ON PLUG

TEMPERATURE DEPENDENCE



EPLAB

TESTED BY: R. Eseman

DATE: Oct 18, 2005

APPENDIX 2E

Pebble 1 (Mine PSD Station), First Annual Data Report, August 2005 – July 2006, for the Pebble Project Meteorological Monitoring Program

Pebble 1
(Mine PSD Station)
First Annual Data Report
August 2005 - July 2006

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines Inc.

December 2006

Pebble 1
(Mine PSD Station)
First Annual Data Report
August 2005 - July 2006

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

December 2006

prepared for

Northern Dynasty Mines Inc.
Anchorage, Alaska

prepared by

Hoefler Consulting Group
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503
907-563-2137

This data report has been prepared and reviewed by the following:

HCG Meteorologist:

Al Trbovich, CCM
Name

12/21/06
Date

Signature

HCG Project Manager:

K. Steven Mackey
Name

12/21/2006
Date

Signature

HCG Associate Scientist:

Isaac Bertschi, Ph.D.
Name

12/20/2006
Date

Signature

HCG Data Manager:

Dominic Shallies
Name

12-20-2006
Date

Signature

CONTENTS

Executive Summary **1**

1.0 Introduction **5**

1.1 Project Summary 5
1.2 Measurements Method Table 6
1.3 Variations from the Quality Assurance Project Plan 6

2.0 Station Performance Summary **11**

2.1 Significant Project Events 11
2.2 Missing, Invalid, and Adjusted Data 13
2.3 Network Data Completeness 13
2.4 Precision Statistics 16
2.4.1 Monitoring Network Precision Statistics 16
2.4.2 Analytical Laboratory Precision Statistics 16
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 16
2.5 Accuracy Statistics 16
2.5.1 Instrument Calibration Statistics 16
2.5.2 Independent Quality Assurance Audits 16

3.0 Monitoring Data Network Summary **21**

3.1 Air Quality Data Summary 21
3.2 Meteorological Data Summary 21
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 21
3.2.2 Temperature Climatology 33
3.3.3 Other Meteorological Parameters 38

4.0 References **43**

List of Figures

1-1 Map of the Pebble Project Area 8
1-2 Map of the Pebble 1 Station 9
1-3 Pebble 1 Meteorological Monitoring Station 10
3-1 Annual Pebble 1 Station Wind Roses 23
3-2 Quarterly Pebble 1 Wind Roses (Climatronics) 24
3-3 Quarterly Pebble 1 Wind Roses (RM Young) 25
3-4 Annual Wind Rose Superimposed on Site Map 32
3-5 Hourly Average 2-m and 10-m Temperatures 36
3-6 Hourly Average Vertical Temperature Difference 37
3-7 Hourly Average Relative Humidity 39
3-8 Barometric Pressure 40
3-9 Hourly Average Solar Radiation 41
3-10 Daily and Cumulative Precipitation 42

List of Tables

E-1 Meteorological Data Capture – Valid Hours per Month 2
E-2 Meteorological Data Capture – Percent Data Capture 3
E-3 Pebble Project QAPP Variation Table 4
1-1 Meteorological Measurement Methods 7
2-1 Chronology of Events 11
2-2 Percentage of Final Data Set Flagged 14
2-3 Pebble 1 Station Percent Data Capture 15
2-4 Initial Performance Audit Summary 18
2-5 Semi-Annual Performance Audit Summary 19
2-6 Second Annual Performance Audit Summary 20
3-1 Average and Maximum Wind Speeds 21
3-2 First Year Wind Rose Analysis Table (Climatronics) 26
3-3 Quarter A Wind Rose Analysis Table (Climatronics) 27
3-4 Quarter B Wind Rose Analysis Table (Climatronics) 27
3-5 Quarter C Wind Rose Analysis Table (Climatronics) 28
3-6 Quarter D Wind Rose Analysis Table (Climatronics) 28
3-7 First Year Wind Rose Analysis Table (RM Young) 29
3-8 Quarter A Wind Rose Analysis Table (RM Young) 30
3-9 Quarter B Wind Rose Analysis Table (RM Young) 30
3-10 Quarter C Wind Rose Analysis Table (RM Young) 31
3-11 Quarter D Wind Rose Analysis Table (RM Young) 31
3-12 2-meter Temperature Summary 34
3-13 10-meter Temperature Summary 35

List of Appendices

A Data Processing Specifications and Statistical Formulae
- A.1 Data Recovery Percentage
- A.2 Data Bias Correction Using Calibration Information
- A.3 Estimation of Pasquill-Gifford Stability Categories

B Precision Data

C Accuracy Data

D Validated Continuous Hourly/Daily/Monthly Data Summaries

E Validated Manual Particulate (Field and Laboratory) Data

Executive Summary

On behalf of Northern Dynasty Mines Inc. (NDM), Hoefler Consulting Group, Inc. (HCG) is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

PSD-quality meteorological monitoring for the Pebble Project began on August 1, 2005 and will continue at least through July 31, 2007. This report provides details of the first full year of meteorological measurements collected from August 1, 2005 through July 31, 2006 at the proposed mill location.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 1 (Mine PSD) meteorological monitoring station. The Pebble 1 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of the primary wind speed sensor, which did not meet the minimum PSD monitoring requirement of 90% data capture or better during Monitoring Quarter B (November 1, 2005 through January 31, 2006) as a result of icing of the sensor. However, the collocated PSD-quality wind speed sensor (R.M. Young, model 05305-AQ) serving as a back-up instrument had greater than 90% data capture during this same period. Therefore, measurements from the back-up PSD-quality instrument will be used to fulfill PSD data capture requirements for Monitoring Quarter B.

Table E-3 provides items and procedures that differ from the Pebble Project Quality Assurance Project Plan (QAPP).

Table E-1. Meteorological Data Capture – Valid Hours per Month.

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
August 2005	640	739	640	744	744	744	744	744	744	644	744	744	744	737
September 2005	720	720	720	720	720	720	720	720	720	720	720	720	720	717
October 2005	742	742	742	534	738	744	744	744	744	744	744	744	548	180
November 2005	720	720	720	361	720	720	715	715	715	720	720	720	652	N/A[3]
December 2005	744	744	744	487	744	744	744	744	744	744	744	744	744	N/A
January 2006	741	741	741	612	737	737	723	737	737	744	744	744	741	N/A
February 2006	672	672	672	616	672	672	638	672	672	672	672	672	671	N/A
March 2006	744	744	744	742	744	744	744	744	744	744	744	744	742	N/A
April 2006	720	720	720	690	720	720	720	720	720	720	720	720	720	N/A
May 2006	744	744	744	744	744	744	744	744	744	744	744	744	744	471
June 2006	720	720	720	720	720	720	720	720	720	720	720	720	719	715
July 2006	730	730	730	732	732	732	726	726	726	735	735	735	720	728
Monitoring Year	**8637**	**8736**	**8637**	**7702**	**8735**	**8741**	**8682**	**8730**	**8730**	**8651**	**8751**	**8751**	**8465**	**3548**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge decommissioned for winter from October 8, 2005 to May 11, 2006.

Table E-2. Meteorological Data Capture – Percent Data Capture.

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
August 2005	86.0%	99.3%	86.0%	100%	100%	100%	100%	100%	100%	86.6%	100%	100%	100%	99.1%
September 2005	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%
October 2005	99.7%	99.7%	99.7%	71.8%	99.2%	100%	100%	100%	100%	100%	100%	100%	73.7%	100%
Quarter A	**95.2%**	**99.7%**	**95.2%**	**90.5%**	**99.7%**	**100%**	**100%**	**100%**	**100%**	**95.5%**	**100%**	**100%**	**91.1%**	**99.4%**
November 2005	100%	100%	100%	50.0%	100%	100%	99.3%	99.3%	99.3%	100%	100%	100%	90.7%	N/A[3]
December 2005	100%	100%	100%	65.6%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
January 2006	99.6%	99.6%	99.6%	82.3%	99.1%	99.1%	97.2%	99.1%	99.1%	100%	100%	100%	99.7%	N/A
Quarter B	**99.9%**	**99.9%**	**99.9%**	**66.1%[4]**	**99.7%**	**99.7%**	**98.8%[4]**	**99.5%**	**100%**	**100%**	**100%**	**100%**	**96.9%**	N/A
February 2006	100%	100%	100%	91.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
March 2006	100%	100%	100%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
April 2006	100%	100%	100%	95.8%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter C	**100%**	**100%**	**100%**	**95.9%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	N/A
May 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98.9%	100%
June 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	99.9%
July 2006	99.3%	99.3%	99.3%	99.6%	99.6%	99.6%	98.8%	98.8%	98.8%	100%	100%	100%	99.1%	98.0%
Quarter D	**99.8%**	**99.8%**	**99.8%**	**99.9%**	**99.9%**	**99.9%**	**99.6%**	**99.6%**	**99.6%**	**100%**	**100%**	**100%**	**99.1%**	**99.1%**
Monitoring Year	**98.7%**	**99.8%**	**98.7%**	**88.0%**	**99.8%**	**99.9%**	**99.2%**	**99.8%**	**99.8%**	**98.9%**	**100%**	**100%**	**99.2%**	**96.7%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was decommissioned for winter from October 8, 2005 to May 11, 2006.
[4] The Climatronics wind speed sensor was affected by icing during Quarter B. The R.M. Young wind speed sensor will be used to achieve the required data capture requirement of 90% or greater per monitoring quarter.

Table E-3. Pebble Project QAPP Variation Table

Item/Procedure	Variation	Reason for Variation
An accuracy performance evaluation will be conducted within 30 days of site startup.	The performance evaluation was conducted within 50 days of site startup.	The official start of the monitoring year was postponed from July 1 to August 1, 2005. The delay had no effect on the collected data as all sensors passed performance audits conducted during and after the monitoring year.

1.0 Introduction

1.1 Project Summary

On behalf of Northern Dynasty Mines Inc. (NDM), Hoefler Consulting Group (HCG) is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. This project currently consists of three PSD-quality meteorological monitoring stations located at the proposed mill site (Pebble 1), the tailings storage facility (Pebble 4), and shipping mine site (Pebble Port). An additional, non-PSD meteorological monitoring station (Pebble 3) is being used for engineering and mine design purposes. Of the three PSD meteorological monitoring stations, continuous measurements were made at the Pebble 1 and Pebble Port stations from August 1, 2005 through July 31, 2006, which concluded the first PSD monitoring year of the meteorological monitoring program. A separate annual data report has been prepared for the Pebble Port station. This report focuses on the first year of measurements collected at the Pebble 1 station.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 1 station.

The Pebble 1 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Air temperature, ten meters above ground (degrees Celsius [°C])
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]))
- Wind speed (meters per second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])
- Relative humidity (percent [%])
- Solar radiation (Watts per square meter [W/m^2])
- Barometric Pressure (millibar [mb]).
- Precipitation (millimeters [mm])
- Evaporation (millimeters [mm])

Measurements of these parameters will provide at least two years of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 1 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble Mine PSD station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble Mine PSD station.

1.3 Variations from the Quality Assurance Project Plan

During the first monitoring year, there was one variation from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

The initial performance audit for the Pebble 1 station was conducted on June 10, 2005 for most parameters. Follow-up audits were conducted on July 18, 2005 (for relative humidity) and July 21, 2005 (for temperature and vertical temperature difference). The June 10, 2005 audit date is somewhat greater than thirty days prior to the start of the monitoring period. At the time of the audit, it was envisioned that the monitoring period would start on July 1, 2005. However, temperature sensor wiring problems at the Pebble Port station caused that station's monitoring period to be delayed until August 1, 2005. It was later decided that the Pebble 1 and Pebble Port stations should operate on the same monitoring year schedule, so the official start for PSD monitoring was moved to August 1,2005 for the Pebble 1 station. This later start to the monitoring year has no effect on collected data, as all performance audits (before, during, and after the monitoring year) passed. For a discussion of audits performed on the Pebble 1 station, see Section 2.5.2 and Appendix C of this data report.

Table 1-1. Meteorological Measurement Methods.

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 12 in	± .254 mm	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for 1 second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area.

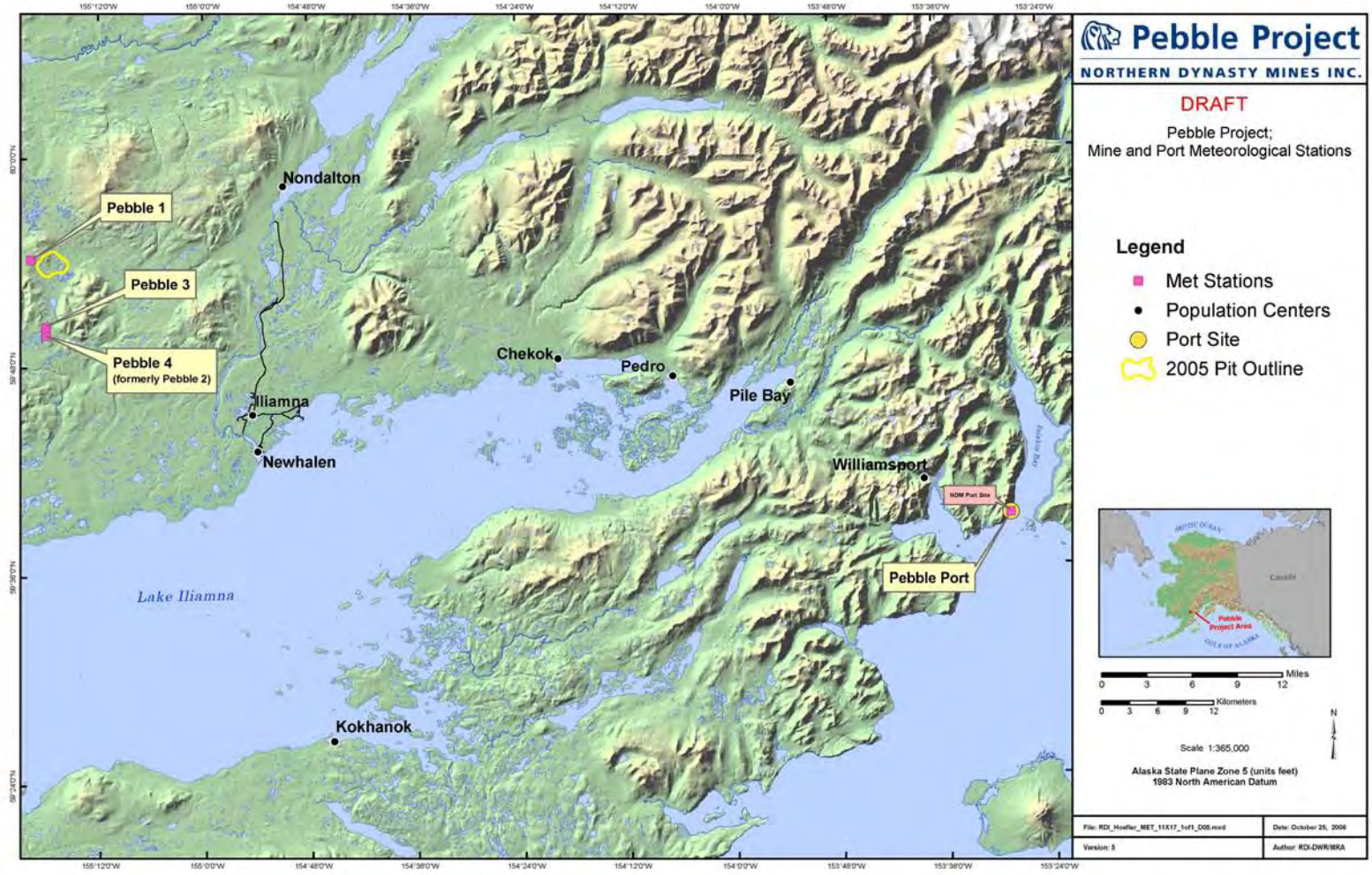


Figure 1-2. Map of the Pebble 1 Station.

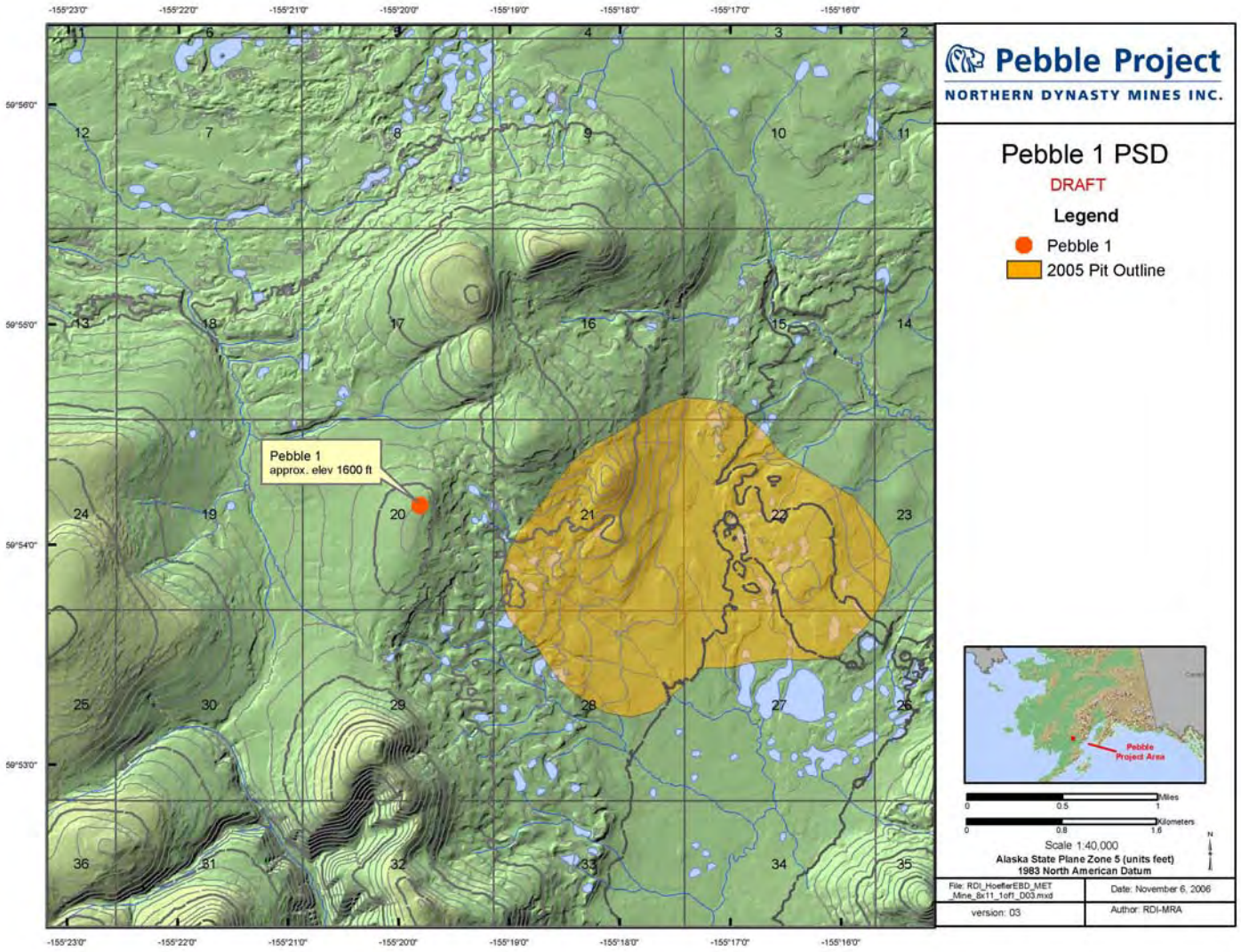


Figure 1-3. Pebble 1 Meteorological Monitoring Station.

2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 1 station relevant to the first year of meteorological monitoring.

Table 2-1. Chronology of Events.

Date	Event
June 6 – 11, 2005	Installation and upgrade of the Pebble 1 station to full PSD quality.
June 10, 2005	Initial performance audit for all parameters.
July 18, 2005	Performance audit and calibration of barometric pressure, relative humidity and temperature sensors. Maintenance performed on evaporation sensor.
July 20, 2005	Performance audit and calibration of precipitation gauge.
July 21, 2005	Rewiring of relative humidity and 2-meter temperature sensors. Re-audit of relative humidity and temperature sensors.
August 1, 2005	Beginning of the Pebble 1 station first monitoring year.
August 5, 2005	Maintenance of evaporation, 2-meter aspirator and 2-meter temperature sensor.
August 20, 2005	Maintenance of evaporation, 2-meter aspirator, 2-meter temperature sensor. Heaters added to Climatronics wind sensor bearings.
August 26, 2005	NDM personnel service relative humidity sensor.
August 30, 2005	NDM personnel replace relative humidity sensor.
October 8, 2005	Snowfall adapter fitted to precipitation gauge, evaporation gauge decommissioned for winter.
October 18, 2005	Calibration check of temperature sensors.

Table 2-1 (continued). Chronology of Events.

Date	Event
November 3-4, 2005	Maintenance work performed on precipitation gauge.
November 17-19, 2005	Period of icing affects Climatronics wind speed sensor.
November 20, 2005	Installation of NOAH II precipitation gauge.
December 10-13, 2005	Period of icing affects Climatronics wind speed sensor.
January 11-18, 2006	Significant period of icing affects Climatronics wind speed sensor.
January 15, 2006	Semi-annual performance audit.
February 11, 2006	Shelter anchored
February 18, 2006	Maintenance work performed on precipitation gauge windscreen.
April 22, 2006	Maintenance work performed on precipitation gauge windscreen.
May 4, 2006	Follow-up maintenance of precipitation gauge and evaporation pan.
May 11, 2006	Evaporation pan returned to service for data collection. Back-up precipitation gauge installed.
June 10, 2006	Structural maintenance performed on shelter and precipitation gauge wind screen.
July 10-12, 2006	Second annual performance audit of the Pebble 1 station.
July 31, 2006	End of first monitoring year at Pebble 1 station.

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 1 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations. Of particular note, the primary wind speed sensor was affected by substantial periods of icing during the months of November, December 2005 and January 2006 resulting in a valid data capture rate less than 90% for this sensor during Monitoring Quarter B. However, the back-up PSD-quality wind instrument met the 90% or greater valid data capture requirement for Quarter B, enabling PSD-quality data capture criteria to be met for all monitoring quarters of the Pebble Mine PSD meteorological monitoring year.

The Noah II precipitation gauge sustained damage due to a combination of high liquid level (in gauge) and sustained high winds, only few days prior to the July 10-12, 2006 performance audit. Although the gauge failed the audit, the data prior to the gauge damage are believed to be reliable. Data after the storm damage were removed. Data believed to be good are included in the data capture percentage calculations. A comparison graph showing the tracking between all precipitation gauges in the Pebble 1 area is provided in Appendix C. It should be noted that the Mine PSD Noah II gauge only stops tracking the other gauges immediately prior to the July 10-12, 2006 performance audit.

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the first monitoring year at the Pebble 1 station.

Table 2-2. Percentage of Final Data Set Flagged.

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.00%
	Value is > 25 m/s	0.67%
	< 0.1 m/s variation for 3 consecutive hours	0.00%
	<0.5 m/s variation for 12 consecutive hours	0.47%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.00%
	<1° variation over 3 consecutive hours	0.00%
	< 10° variation over 18 consecutive hours	1.79%
Wind Speed (RM Young)	Value is < 0 m/s	0.00%
	Value is > 25 m/s	0.57%
	< 0.1 m/s variation for 3 consecutive hours	0.00%
	<0.5 m/s variation for 12 consecutive hours	0.18%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.00%
	<1° variation over 3 consecutive hours	0.00%
	< 10° variation over 18 consecutive hours	2.01%
Temperature (2 meters)	> 5°C variation from previous hour	0.00%
	< 0.5°C variation for 12 consecutive hours	0.97%
	Value is > record high, < record low	0.00%
Temperature (10 meters)	> 5°C variation from previous hour	0.00%
	< 0.5°C variation for 12 consecutive hours	1.07%
	Value is > record high, < record low	0.00%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	1.79%
	Value is < -0.8°C during the night	0.00%
	Value is > 5°C, < -3°C	0.17%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.00%
	> 5°C variation from previous hour	0.00%
	< 0.5°C variation for 12 consecutive hours	0.00%
	Equals ambient temperature for 12 consecutive hours	0.00%
Solar Radiation	> 0 W/m^2 at night	0.00%
	Greater than the maximum possible value for date	0.00%
Barometric Pressure	> 1060 mb (sea level)	0.00%
	< 940 mb (sea level)	0.00%
	> 6 mb variation for 3 consecutive hours	0.03%
Precipitation	> 25 mm in one hour	0.00%
	> 100 mm in 24 hours	0.00%
	< 50 mm in one month	0.00%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 1 Station Percent Data Capture.

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
August 2005	86.0%	99.3%	86.0%	100%	100%	100%	100%	100%	100%	86.6%	100%	100%	100%	99.1%
September 2005	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%
October 2005	99.7%	99.7%	99.7%	71.8%	99.2%	100%	100%	100%	100%	100%	100%	100%	73.7%	100%
Quarter A	**95.2%**	**99.7%**	**95.2%**	**90.5%**	**99.7%**	**100%**	**100%**	**100%**	**100%**	**95.5%**	**100%**	**100%**	**91.1%**	**99.4%**
November 2005	100%	100%	100%	50.0%	100%	100%	99.3%	99.3%	99.3%	100%	100%	100%	90.7%	N/A[3]
December 2005	100%	100%	100%	65.6%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
January 2006	99.6%	99.6%	99.6%	82.3%	99.1%	99.1%	97.2%	99.1%	99.1%	100%	100%	100%	99.7%	N/A
Quarter B	**99.9%**	**99.9%**	**99.9%**	**66.1%[4]**	**99.7%**	**99.7%**	**98.8%[4]**	**99.5%**	**100%**	**100%**	**100%**	**100%**	**96.9%**	N/A
February 2006	100%	100%	100%	91.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
March 2006	100%	100%	100%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
April 2006	100%	100%	100%	95.8%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter C	**100%**	**100%**	**100%**	**95.9%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	N/A
May 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98.9%	100%
June 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	99.9%
July 2006	99.3%	99.3%	99.3%	99.6%	99.6%	99.6%	98.8%	98.8%	98.8%	100%	100%	100%	99.1%	98.0%
Quarter D	**99.8%**	**99.8%**	**99.8%**	**99.9%**	**99.9%**	**99.9%**	**99.6%**	**99.6%**	**99.6%**	**100%**	**100%**	**100%**	**99.1%**	**99.1%**
Monitoring Year	**98.7%**	**99.8%**	**98.7%**	**88.0%**	**99.8%**	**99.9%**	**99.2%**	**99.8%**	**99.8%**	**98.9%**	**100%**	**100%**	**99.2%**	**96.7%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was decommissioned for winter from October 8, 2005 to May 11, 2006.
[4] The Climatronics wind speed sensor was affected by icing during Quarter B. The R.M. Young wind speed sensor will be used to achieve the required data capture requirement of 90% or greater per monitoring quarter.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A preliminary systems and performance audit was conducted at the Pebble 1 station on June 10, 2005 and again from July 18 through July 21, 2005. The audits performed in July were necessary since the relative humidity sensor transfer standard was not available during the June 10, 2005 audit and additional electrical work was required for the temperature sensors. Specifically, the relative humidity probe was audited on July 18, 2005 and the temperature probes were re-audited on July 21, 2005. Additional audits were conducted on the barometric pressure sensor and precipitation gauge on July 18 and July 20, 2005, respectively. The results of the initial systems and performance audit are presented in Table 2-4. The complete systems and performance audit report is available in Appendix C.

A semiannual performance audit was conducted at the Pebble 1 station primarily on January 15, 2006. The evaporation pan and tipping bucket precipitation gauge were audited prior to winterization on October 8, 2005. The temperature sensors were also audited on October 18, 2005 because of preventative rewiring. On November 20, 2005 a new primary precipitation gauge was installed and the RM Young wind sensor had to be rewired through a pulse to millivolt converter to free up a pulse channel on the datalogger. Both the RM Young and the new ETI NOAH II precipitation gauge were

audited at that time. The results of the semiannual performance audit are presented in Table 2-5. The complete performance audit report is available in Appendix C.

An annual systems and performance audit was conducted at the Pebble 1 station from July 10-12, 2006. The results of the annual performance audits are presented in Table 2-6. The complete performance systems and performance audit report is available in Appendix C.

The performance audit involves reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with established PSD limits to assess the accuracy of the sensor.

During each of these audits, the power supply, DAS, communications system, and audited sensors all worked properly. The systems audit found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system. Appendix C contains the complete technical systems audit report.

Table 2-4. Initial Performance Audit Summary.

Parameter	EPA Limit	Units	Maximum Absolute Error	Pass/Fail
Datalogger Time (AST)	≤ ±5:00	Min:Sec	0:03	Pass
Temperature Accuracy (2-m)[1]	≤ ±0.5	°C	0.35	Pass
Temperature Accuracy (10-m)[1]	≤ ±0.5	°C	0.35	Pass
Temperature Difference (ΔT)[1]	≤ ±0.1	°C	0.00	Pass
Wind Speed[2] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[2] Torque	≤ ±0.005	oz-in	< 0.003	Pass
Wind Direction[2] Alignment	≤ ±5	°	3.3	Pass
Wind Direction[2] Linearity	≤ 3	°	0.5	Pass
Wind Direction[2] Torque	≤ 0.104	oz-in	0.060	Pass
Wind Speed[3] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[3] Torque	≤ ±0.014	oz-in	0.006	Pass
Wind Direction[3] Alignment	≤ ±5	°	3.0	Pass
Wind Direction[3] Linearity	≤ 3	°	1.6	Pass
Wind Direction[3] Torque	≤ 11.0	gm-cm	5.0	Pass
Relative Humidity[4] (Dew Point Temperature)	≤ ±1.5	°C	0.3	Pass
Barometric Pressure[4]	≤ ±3	mb	1.4	Pass
Solar Radiation	≤ ±5	% obs	NT[5]	N/A
Precipitation[6]	≤ ±10	% input	-8.5	Pass
Evaporation	≤ ±10	% input	-5.0	Pass

[1] Temperature sensors audited on July 21, 2005.

[2] Parameters audited for Climatronics wind sensor.

[3] Parameters audited for RM Young wind sensor.

[4] Relative humidity probe and barometric pressure sensor audited on July 18, 2005.

[5] NT = Not tested.

[6] Precipitation gauge audited on July 20, 2005.

The semi-annual and second annual audits were conducted from January 15, 2006 and July 10 – 12, 2006, respectively. A summary of the results of the performance audits are presented in Tables 2-5 and 2-6. The complete performance audit reports are available in Appendix C.

Table 2-5. Semi-Annual Performance Audit Summary.

Parameter	EPA Limit	Units	Maximum Absolute Error	Pass/Fail
Datalogger Time (AST)	≤ ±5:00	Min:Sec	00:03	Pass
Temperature Accuracy (2-m)	≤ ±0.5	°C	0.11	Pass
Temperature Accuracy (10-m)	≤ ±0.5	°C	0.11	Pass
Temperature Difference (ΔT)	≤ ±0.1	°C	0.00	Pass
Wind Speed[1] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[1] Torque	≤ ±0.005	oz-in	< 0.003	Pass
Wind Direction[1] Alignment	≤ ±5	°	2.3	Pass
Wind Direction[1] Linearity	≤ 3	°	1.3	Pass
Wind Direction[1] Torque	≤ 0.104	oz-in	0.070	Pass
Wind Speed[2] Accuracy	≤ ±0.2 + 5%	m/s	0.02	Pass
Wind Speed[2] Torque	≤ ±0.014	oz-in	0.010	Pass
Wind Direction[2] Alignment	≤ ±5	°	4.2	Pass
Wind Direction[2] Linearity	≤ 3	°	2.4	Pass
Wind Direction[2] Torque	≤ 0.152	oz-in	0.139	Pass
Relative Humidity (Dew Point Temperature)	≤ ±1.5	°C	1.0	Pass
Barometric Pressure	≤ ±3	mb	1.2	Pass
Solar Radiation	≤ ±5	% obs	NT[3]	N/A
Precipitation	≤ ±10	% input	9.5	Pass
Evaporation	≤ ±10	% input	NT	Pass

[1] Parameters audited for Climatronics wind sensor.

[2] Parameters audited for RM Young wind sensor.

[3] NT = Not tested.

Table 2-6. Second Annual Performance Audit Summary.

Parameter	EPA Limit	Units	Maximum Absolute Error	Pass/Fail
Datalogger Time (AST)	≤ ±5:00	Min:Sec	03:05	Pass
Temperature Accuracy (2-m)	≤ ±0.5	°C	0.48	Pass
Temperature Accuracy (10-m)	≤ ±0.5	°C	0.48	Pass
Temperature Difference (ΔT)	≤ ±0.1	°C	0.00	Pass
Wind Speed[1] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[1] Torque	≤ ±0.005	oz-in	< 0.003	Pass
Wind Direction[1] Alignment	≤ ±5	°	4.7	Pass
Wind Direction[1] Linearity	≤ 3	°	0.6	Pass
Wind Direction[1] Torque	≤ 0.104	oz-in	0.070	Pass
Wind Speed[2] Accuracy	≤ ±0.2 + 5%	m/s	1.2	Pass
Wind Speed[2] Torque	≤ ±0.014	oz-in	0.013	Pass
Wind Direction[2] Alignment	≤ ±5	°	2.1	Pass
Wind Direction[2] Linearity	≤ 3	°	2.1	Pass
Wind Direction[2] Torque	≤ 0.153	oz-in	0.042	Pass
Relative Humidity (Dew Point Temperature)	≤ ±1.5	°C	0.5	Pass
Barometric Pressure	≤ ±3	mb	0.5	Pass
Solar Radiation	≤ ±5	% obs	-5.8	Pass[3]
Precipitation	≤ ±10	% input	-6.9	Pass
Evaporation	≤ ±10	% input	2.3	Pass

[1] Parameters audited for Climatronics wind sensor.

[2] Parameters audited for RM Young wind sensor.

[3] See audit methodology in Appendix C for full pass/fail criteria explanation.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the first year of meteorological monitoring at the Pebble Mine PSD station. The mean hourly average wind speed during the monitoring year was 7.59 m/s and 7.60 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 31.91 m/s and 30.82 m/s were measured by the CLM and RMY sensors, respectively, at 8:00 PM on March 30, 2006.

Table 3-1. Average and Maximum Wind Speeds.

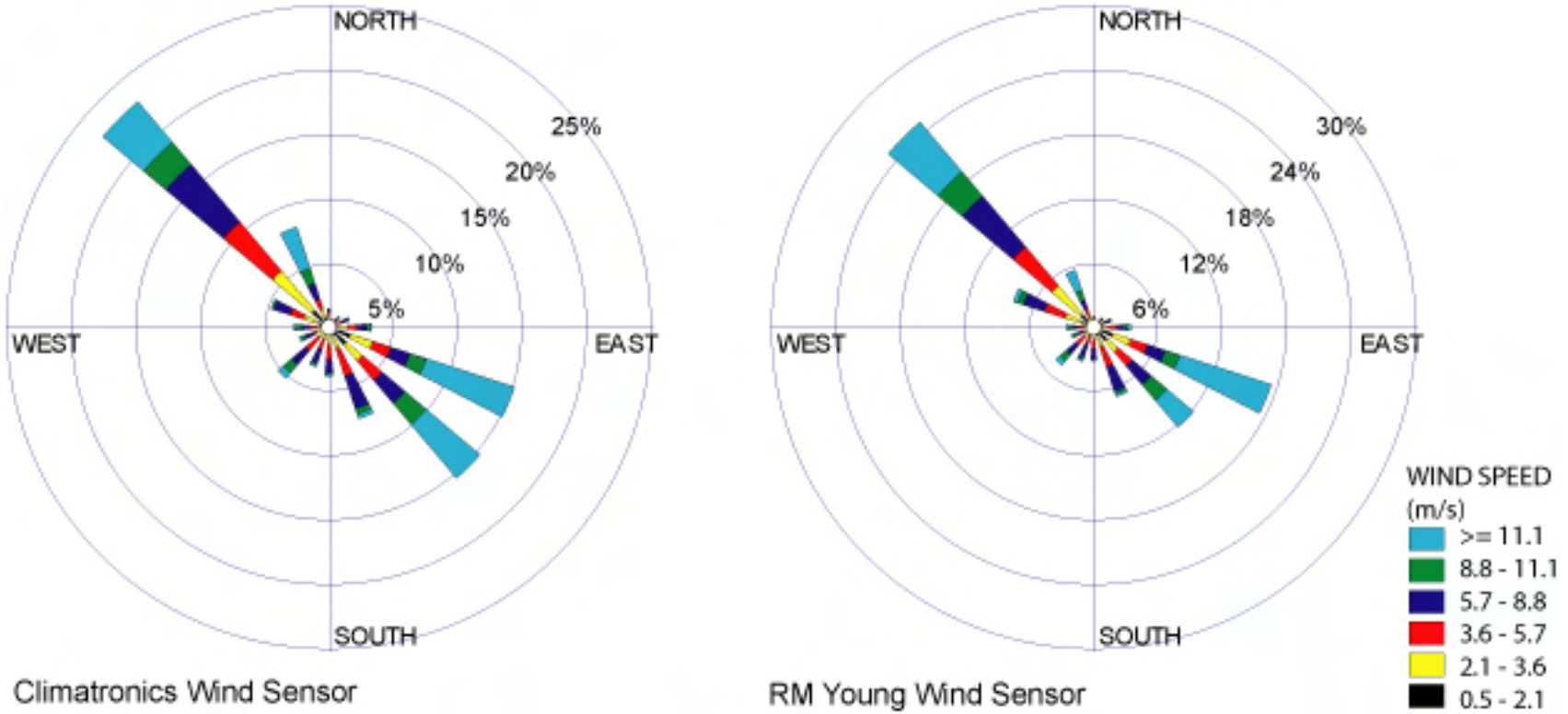
Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	6.37	6.54	22.85	23.02
Quarter B	7.70	7.58	27.86	30.17
Quarter C	9.33	9.41	31.91	30.82
Quarter D	7.01	6.97	26.14	24.81
Monitoring Year	7.59	7.60	31.91	30.82

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the first monitoring year. Winds were predominantly from the northwest and southeast with minor wind components from the southwest. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. All of the quarterly wind roses are characterized by major wind components from the northwest. Quarter A and Quarter D wind roses have similar wind components defined by winds predominantly blowing

from the northwest, southeast, and east-southeast. The Quarter B (November 1, 2005 through January 31, 2006) wind rose indicates a lack of southwesterly winds during this period. During Quarter C (February 1 through April 30, 2006), winds were mostly from the southeast, east-southeast and northwest. Tables 3-2 through 3-6 are the annual and quarterly wind tables for the Climatronics wind measurements. Tables 3-7 through 3-11 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Figure 3-4 shows the first monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the proposed location of the Pebble Mine and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 1 station.

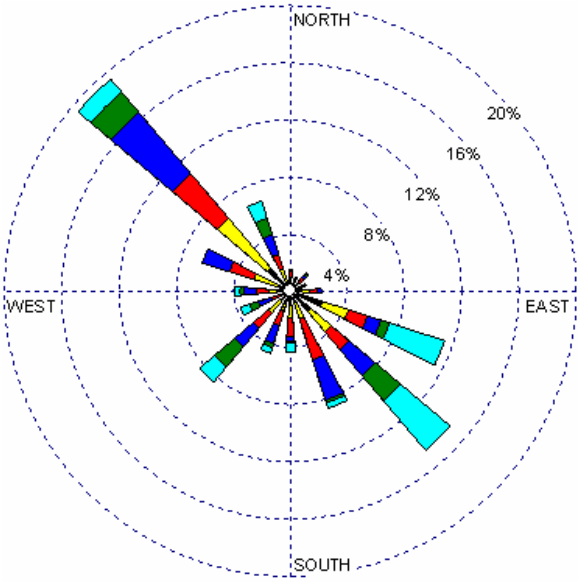
Figure 3-1. Annual[1] Pebble 1 Station Wind Roses.



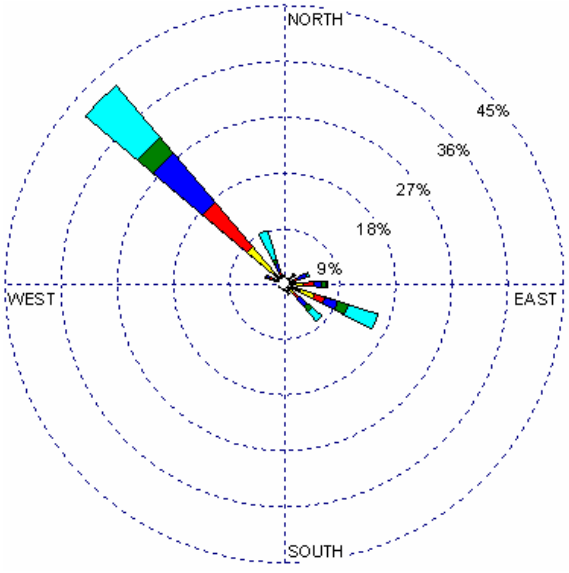
[1] August 1, 2005 to July 31, 2006.

Figure 3-2. Quarterly Pebble 1 Station Wind Roses (Climatronics).

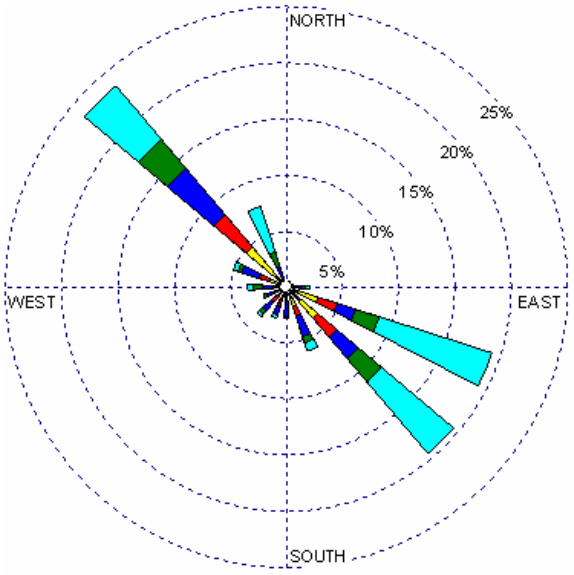
Quarter A (8/1/05 – 10/31/05)



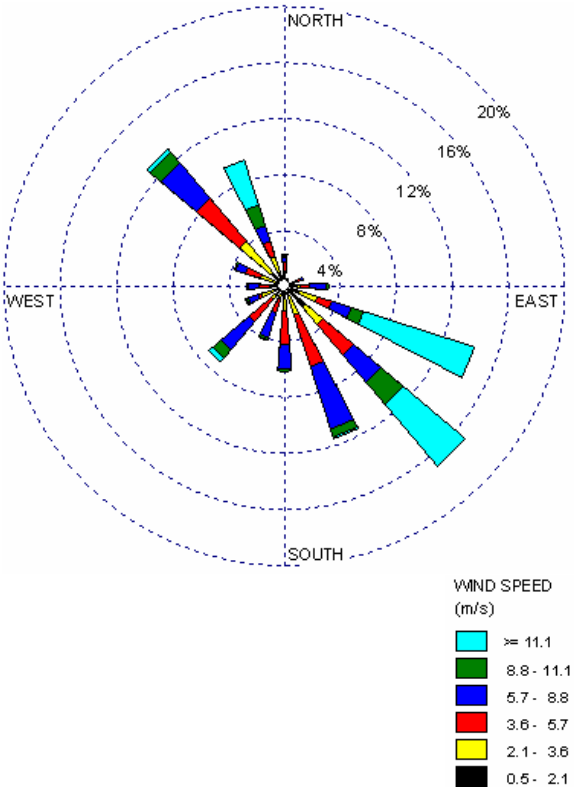
Quarter B (11/1/05 – 1/31/06)[1]



Quarter C (2/1/06 – 4/30/06)



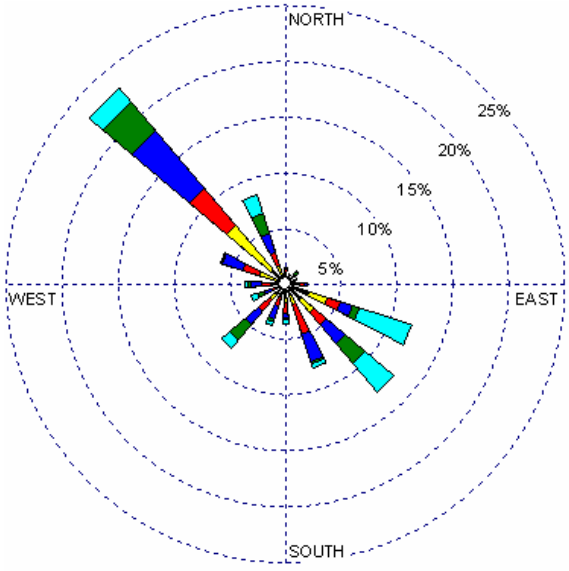
Quarter D (5/1/06 – 7/31/06)



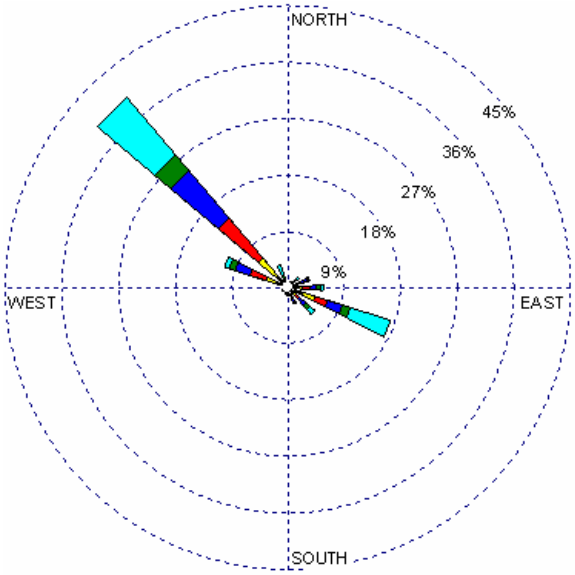
[1] Quarter B valid data capture was less than 90% for the Climatronics wind speed sensor.

Figure 3-3. Quarterly Pebble 1 Station Wind Roses (RM Young).

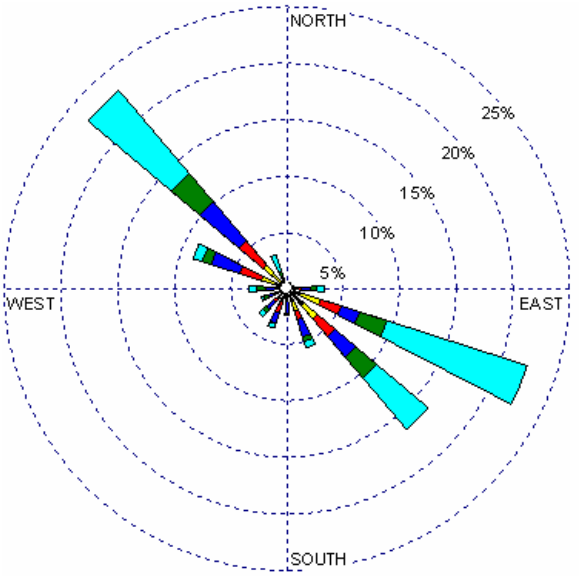
Quarter A (8/1/05 – 10/31/05)



Quarter B (11/1/05 – 1/31/06)



Quarter C (2/1/06 – 4/30/06)



Quarter D (5/1/06 – 7/31/06)

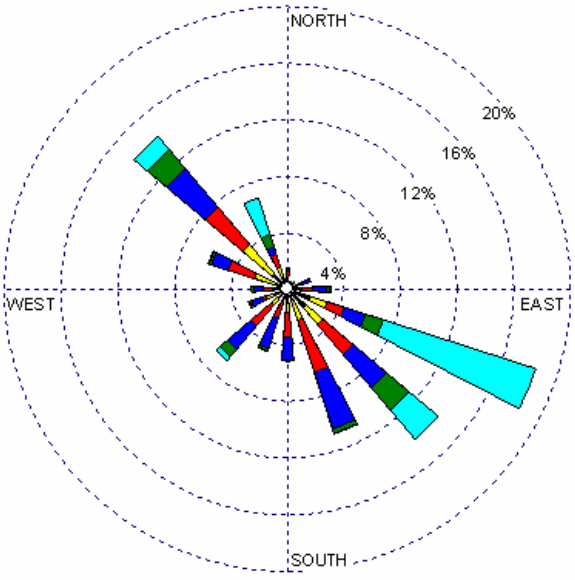


Table 3-2. First Year Wind Rose Analysis Table (Climatronics).

Station ID: Pebble Mine PSD
Climatronics wind speed and direction
Start Date: August 1, 2005

Run ID: First Monitoring Year
End Date: July 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.9%	0.7%	0.8%	0.5%	0.3%	0.7%	3.9%
NE	0.5%	0.4%	0.6%	0.5%	0.3%	0.2%	2.5%
E	1.6%	1.7%	1.6%	1.6%	0.8%	1.2%	8.5%
SE	3.4%	3.1%	4.0%	4.8%	3.3%	11.8%	30.5%
S	1.0%	1.8%	2.5%	2.5%	0.3%	0.4%	8.5%
SW	0.9%	1.2%	1.9%	2.5%	1.1%	0.8%	8.4%
W	1.2%	1.0%	0.8%	1.3%	0.5%	0.4%	5.1%
NW	3.0%	5.3%	6.3%	7.9%	3.3%	6.9%	32.7%
Sub-Total:	12.4%	15.2%	18.7%	21.5%	9.8%	22.3%	99.9%
Calms (<0.5 m/s):							0.1%
Total:							100.0%

Average Wind Speed: 7.59 m/s

Table 3-3. Quarter A Wind Rose Analysis Table (Climatronics).

Station ID: Pebble Mine PSD — Run ID: Quarter A
Climatronics wind speed and direction
Start Date: August 1, 2005 — End Date: October 31, 2005

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.9%	0.7%	0.8%	0.5%	0.3%	0.7%	3.9%
NE	0.5%	0.4%	0.6%	0.5%	0.3%	0.2%	2.5%
E	1.6%	1.7%	1.6%	1.6%	0.8%	1.2%	8.5%
SE	3.4%	3.1%	4.0%	4.8%	3.3%	11.8%	30.5%
S	1.0%	1.8%	2.5%	2.5%	0.3%	0.4%	8.5%
SW	0.9%	1.2%	1.9%	2.5%	1.1%	0.8%	8.4%
W	1.2%	1.0%	0.8%	1.3%	0.5%	0.4%	5.1%
NW	3.0%	5.3%	6.3%	7.9%	3.3%	6.9%	32.7%
Sub-Total:	12.4%	15.2%	18.7%	21.5%	9.8%	22.3%	99.9%
Calms (<0.5 m/s):							0.1%
Total:							100.0%

Average Wind Speed: 6.37 m/s

Table 3-4. Quarter B Wind Rose Analysis Table (Climatronics).[1]

Station ID: Pebble Mine PSD — Run ID: Quarter B
Climatronics wind speed and direction
Start Date: November 1, 2005 — End Date: January 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.1%	0.6%	0.4%	0.7%	0.0%	0.7%	3.5%
NE	1.0%	0.3%	1.0%	1.5%	0.7%	0.5%	5.1%
E	2.7%	3.2%	3.2%	2.8%	1.8%	2.1%	15.8%
SE	3.4%	2.1%	2.5%	3.1%	2.1%	5.5%	18.6%
S	0.6%	0.5%	0.8%	0.8%	0.1%	0.0%	2.7%
SW	0.5%	0.0%	0.1%	0.0%	0.0%	0.1%	0.7%
W	0.8%	0.1%	0.1%	0.0%	0.1%	0.1%	1.1%
NW	4.5%	6.3%	10.3%	12.3%	3.8%	15.2%	52.4%
Sub-Total:	14.6%	13.2%	18.4%	21.1%	8.6%	24.1%	99.9%
Calms (<0.5 m/s):							0.1%
Total:							100.0%

Average Wind Speed: 7.70 m/s

[1] Quarter B valid data capture was less than 90% for the Climatronics wind speed sensor.

Table 3-5. Quarter C Wind Rose Analysis Table (Climatronics).

Station ID: Pebble Mine PSD — Run ID: Quarter C
Climatronics wind speed and direction
Start Date: February 1, 2006 — End Date: April 30, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.4%	0.1%	0.1%	0.3%	0.2%	0.1%	1.3%
NE	0.2%	0.0%	0.2%	0.1%	0.1%	0.3%	1.1%
E	1.1%	0.9%	0.8%	1.4%	1.2%	2.2%	7.7%
SE	3.3%	3.3%	3.7%	4.6%	4.5%	17.5%	36.9%
S	0.8%	1.7%	1.1%	2.2%	0.3%	0.4%	6.5%
SW	1.0%	0.9%	1.6%	2.0%	0.6%	0.5%	6.5%
W	1.3%	0.7%	0.4%	1.6%	1.1%	0.7%	5.8%
NW	2.2%	4.1%	4.7%	7.7%	4.7%	10.5%	33.9%
Sub-Total:	10.3%	11.7%	12.7%	20.0%	12.7%	32.3%	99.8%
Calms (<0.5 m/s):							0.2%
Total:							100.0%

Average Wind Speed: 9.33 m/s

Table 3-6. Quarter D Wind Rose Analysis Table (Climatronics).

Station ID: Pebble Mine PSD — Run ID: Quarter D
Climatronics wind speed and direction
Start Date: May 1, 2006 — End Date: July 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.2%	1.0%	1.5%	0.6%	0.7%	1.7%	6.7%
NE	0.5%	0.5%	0.3%	0.0%	0.0%	0.0%	1.3%
E	0.9%	1.6%	1.4%	1.9%	0.3%	0.5%	6.5%
SE	3.0%	3.1%	5.4%	6.3%	3.3%	13.7%	34.9%
S	1.0%	2.6%	4.9%	4.4%	0.4%	0.0%	13.2%
SW	0.9%	1.5%	2.8%	4.0%	1.0%	0.5%	10.6%
W	1.2%	1.5%	1.0%	1.2%	0.3%	0.0%	5.4%
NW	2.4%	4.6%	5.4%	4.8%	2.1%	2.1%	21.4%
Sub-Total:	11.2%	16.4%	22.6%	23.2%	8.0%	18.5%	100.0%
Calms (<0.5 m/s):							0.0%
Total:							100.0%

Average Wind Speed: 7.01 m/s

Table 3-7. First Year Wind Rose Analysis Table (RM Young).

Station ID: Pebble Mine PSD
RM Young wind speed and direction
Start Date: August 1, 2005

Run ID: First Monitoring Year
End Date: July 31, 2006

Frequency Distribution
(Percent)

Direction	Speed (m/s) 0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.7%	0.6%	0.7%	0.3%	0.1%	0.2%	2.7%
NE	0.5%	0.4%	0.7%	0.5%	0.3%	0.2%	2.5%
E	1.7%	1.8%	1.6%	1.7%	0.9%	2.7%	10.6%
SE	3.3%	2.7%	3.9%	4.7%	2.9%	9.9%	27.5%
S	1.1%	1.4%	2.2%	2.2%	0.2%	0.3%	7.5%
SW	0.9%	1.2%	1.7%	2.2%	1.0%	0.7%	7.7%
W	1.3%	0.9%	0.9%	1.2%	0.5%	0.5%	5.3%
NW	2.8%	5.0%	6.8%	8.6%	4.2%	8.1%	35.6%
Sub-Total:	12.4%	14.0%	18.4%	21.5%	10.3%	22.7%	99.4%
Calms (<0.5 m/s):							0.6%
Total:							100.0%

Average Wind Speed: 7.60 m/s

Table 3-8. Quarter A Wind Rose Analysis Table (RM Young).

Station ID: Pebble Mine PSD — Run ID: Quarter A
RM Young wind speed and direction
Start Date: August 1, 2005 — End Date: October 31, 2005

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.8%	1.1%	1.1%	0.3%	0.3%	0.1%	3.7%
NE	0.4%	0.5%	1.0%	0.4%	0.4%	0.0%	2.8%
E	1.9%	1.4%	1.2%	0.8%	0.1%	0.6%	6.1%
SE	3.7%	3.2%	3.7%	4.4%	3.0%	7.8%	25.9%
S	1.4%	1.6%	2.4%	1.8%	0.3%	0.8%	8.4%
SW	1.1%	1.9%	2.4%	2.8%	2.2%	1.6%	12.0%
W	1.3%	1.0%	1.2%	1.8%	0.5%	0.6%	6.4%
NW	2.8%	7.4%	6.2%	9.8%	5.1%	3.4%	34.6%
Sub-Total:	13.5%	18.2%	19.2%	22.1%	11.9%	15.0%	99.8%
Calms (<0.5 m/s):							0.2%
Total:							100.0%

Average Wind Speed: 6.54 m/s

Table 3-9. Quarter B Wind Rose Analysis Table (RM Young).

Station ID: Pebble Mine PSD — Run ID: Quarter B
RM Young wind speed and direction
Start Date: November 1, 2005 — End Date: January 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.7%	0.4%	0.2%	0.5%	0.0%	0.1%	2.0%
NE	0.8%	0.5%	1.0%	1.4%	0.5%	0.5%	4.6%
E	2.6%	3.0%	2.6%	2.5%	1.7%	3.4%	15.8%
SE	2.7%	1.8%	2.4%	3.3%	1.5%	4.8%	16.5%
S	0.9%	0.6%	0.9%	0.7%	0.1%	0.0%	3.2%
SW	0.4%	0.2%	0.2%	0.4%	0.3%	0.2%	1.6%
W	1.1%	0.4%	0.3%	0.2%	0.1%	0.1%	2.2%
NW	4.2%	5.4%	11.1%	12.7%	4.7%	14.3%	52.4%
Sub-Total:	13.5%	12.3%	18.6%	21.7%	8.9%	23.4%	98.4%
Calms (<0.5 m/s):							1.6%
Total:							100.0%

Average Wind Speed: 7.58 m/s

Table 3-10. Quarter C Wind Rose Analysis Table (RM Young).

Station ID: Pebble Mine PSD — Run ID: Quarter C
RM Young wind speed and direction
Start Date: February 1, 2006 — End Date: April 30, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.3%	0.1%	0.2%	0.1%	0.0%	0.0%	0.7%
NE	0.1%	0.0%	0.2%	0.2%	0.1%	0.3%	1.0%
E	1.1%	1.1%	1.3%	1.7%	1.6%	5.4%	12.2%
SE	3.5%	3.2%	3.5%	4.2%	4.1%	14.8%	33.3%
S	1.1%	1.0%	1.4%	2.3%	0.2%	0.4%	6.5%
SW	1.0%	0.6%	1.7%	1.8%	0.8%	0.7%	6.4%
W	1.4%	0.7%	0.7%	1.5%	1.2%	1.1%	6.7%
NW	1.8%	3.0%	4.7%	7.0%	4.5%	11.7%	32.7%
Sub-Total:	10.4%	9.7%	13.7%	18.7%	12.6%	34.4%	99.5%
Calms (<0.5 m/s):							0.5%
Total:							100.0%

Average Wind Speed: 9.41 m/s

Table 3-11. Quarter D Wind Rose Analysis Table (RM Young).

Station ID: Pebble Mine PSD — Run ID: Quarter D
RM Young wind speed and direction
Start Date: May 1, 2006 — End Date: July 31, 2006

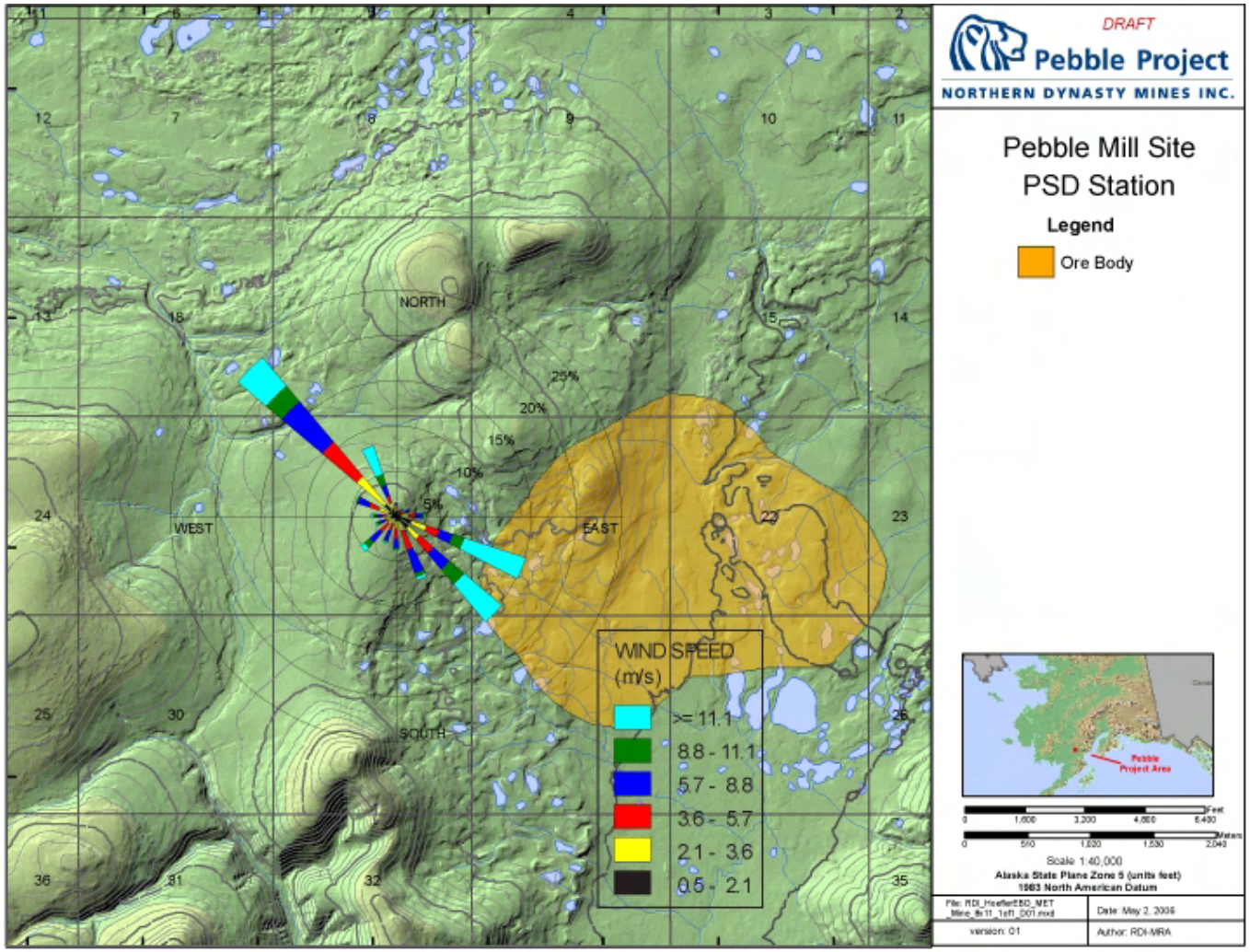
Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.2%	0.8%	1.1%	0.3%	0.2%	0.6%	4.2%
NE	0.6%	0.5%	0.4%	0.1%	0.0%	0.0%	1.6%
E	1.1%	1.7%	1.5%	2.0%	0.5%	1.7%	8.5%
SE	3.2%	2.7%	5.8%	6.9%	3.3%	12.4%	34.3%
S	1.0%	2.4%	3.9%	4.0%	0.3%	0.0%	11.6%
SW	1.0%	1.9%	2.6%	3.9%	0.9%	0.5%	10.8%
W	1.5%	1.4%	1.3%	1.4%	0.3%	0.0%	5.9%
NW	2.5%	4.2%	5.2%	4.9%	2.7%	3.5%	22.9%
Sub-Total:	12.1%	15.7%	21.8%	23.5%	8.1%	18.7%	99.9%
Calms (<0.5 m/s):							0.1%
Total:							100.0%

Average Wind Speed: 6.97 m/s

Figure 3-4. Annual[1] Wind Rose Superimposed on Site Map.



[1] First monitoring year: August 1, 2005 to July 31, 2006.

3.2.2 Temperature Climatology

Tables 3-12 and 3-13 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Daily average temperatures at the Pebble Mine PSD station ranged from 18.6°C on August 12, 2005 to -33.3°C on January 28, 2006. The average 2-meter temperature during the monitoring year was -1.2°C, which is slightly less than the mean temperature of 1.3°C observed at the Iliamna airport during the same time span.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. There was considerable monthly temperature variation throughout the late-autumn and winter months. The coldest temperatures were observed during January 2006. During the last two weeks of January 2006 temperatures hovered in between -20°C and -35°C, which corresponded with a period of cold arctic air influence across most of mainland Alaska.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 5.3°C measured at 3:00PM on April 2, 2006. The greatest negative vertical temperature difference was -5.9°C measured at 1:00PM on March 1, 2006.

Table 3-12. 2-meter Temperature Summary.

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
August 2005	18.6	6.9	11.5	23.6	2.4
September 2005	8.7	2.4	6.5	13.4	-1.1
October 2005	4.8	-13.2	-1.8	7.8	-14.5
1st Quarter	**18.6**	**-13.2**	**5.1**	**23.6**	**-14.5**
November 2005	-0.9	-24.6	-13.0	1.7	-26.2
December 2005	2.1	-23.4	-3.1	3.7	-25.7
January 2006	-1.0	-33.3	-16.1	1.3	-35.3
2nd Quarter	**2.1**	**-33.3**	**-10.7**	**3.7**	**-35.3**
February 2006	0.3	-30.0	-7.6	1.4	-31.6
March 2006	-2.4	-20.9	-8.9	0.0	-23.8
April 2006	0.5	-12.6	-4.2	1.8	-16.4
3rd Quarter	**0.5**	**-30.0**	**-6.9**	**1.8**	**-31.6**
May 2006	16.8	-4.6	4.8	23.0	-7.2
June 2006	11.9	4.7	8.3	19.3	-0.1
July 2006	16.5	6.9	10.6	22.4	5.7
4th Quarter	**16.8**	**-4.6**	**7.9**	**23.0**	**-7.2**
Monitoring Year	**18.6**	**-33.3**	**-1.2**	**23.6**	**-35.3**

Table 3-13. 10-meter Temperature Summary.

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
August 2005	18.6	6.9	11.4	23.1	3.0
September 2005	8.6	2.1	6.4	12.6	-1.3
October 2005	5.1	-12.9	-1.8	7.2	-14.2
1st Quarter	**18.6**	**-12.9**	**5.3**	**23.1**	**-14.2**
November 2005	-0.8	-24.2	-12.8	1.9	-26.0
December 2005	2.3	-23.1	-2.9	4.5	-24.9
January 2006	-0.6	-33.3	-15.7	1.5	-35.3
2nd Quarter	**2.3**	**-33.3**	**-10.4**	**4.5**	**-35.3**
February 2006	0.8	-29.8	-7.4	1.7	-31.4
March 2006	-1.8	-20.9	-8.6	0.2	-23.5
April 2006	0.4	-12.4	-4.1	1.9	-15.6
3rd Quarter	**0.8**	**-29.8**	**-6.7**	**1.9**	**-31.4**
May 2006	17.3	-4.9	4.9	22.2	-6.8
June 2006	11.8	4.6	8.1	18.7	0.7
July 2006	16.3	6.6	10.4	21.2	5.7
4th Quarter	**17.3**	**-4.9**	**7.8**	**22.2**	**-6.8**
Monitoring Year	**18.6**	**-33.3**	**-0.9**	**23.1**	**-35.3**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures.

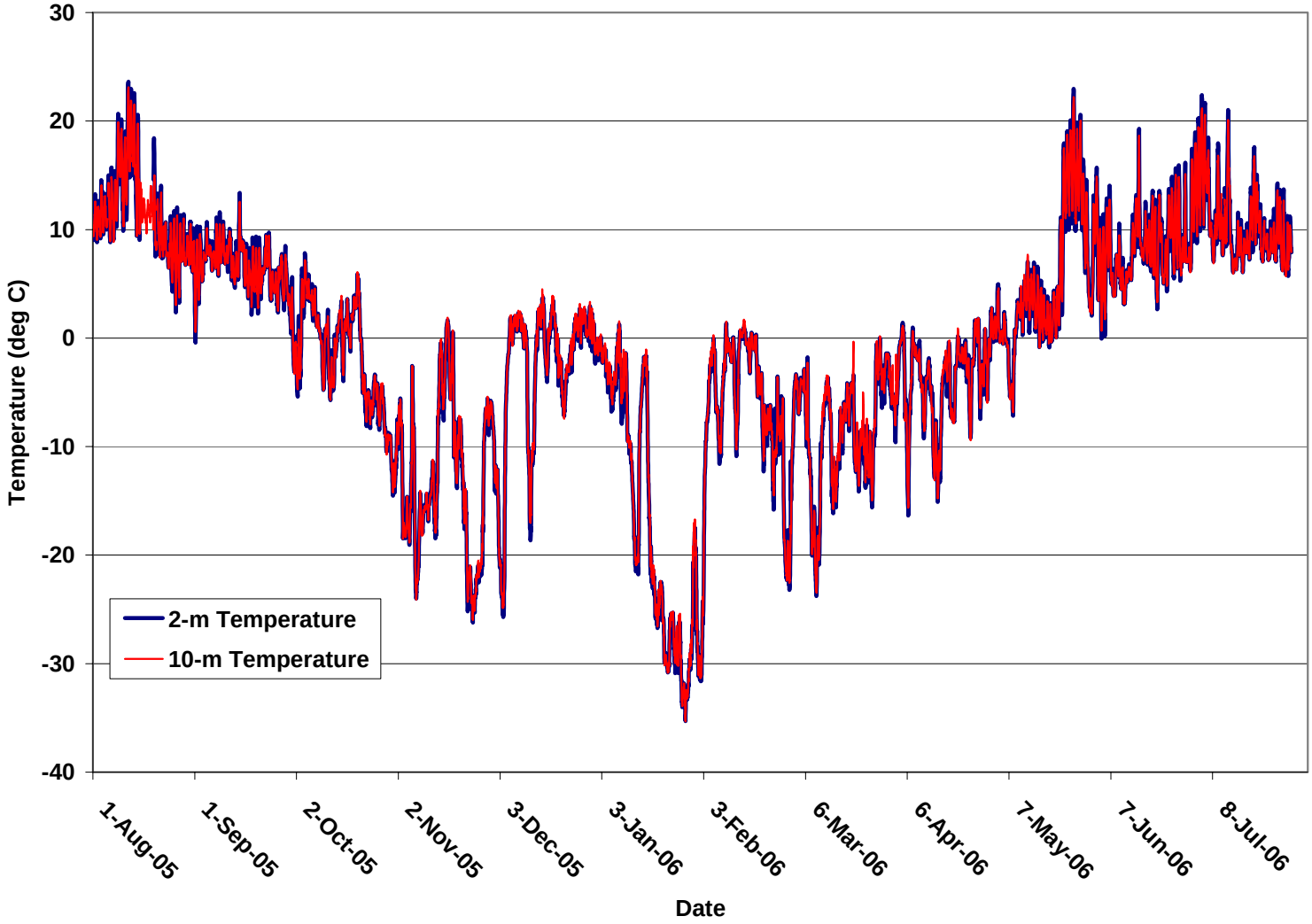
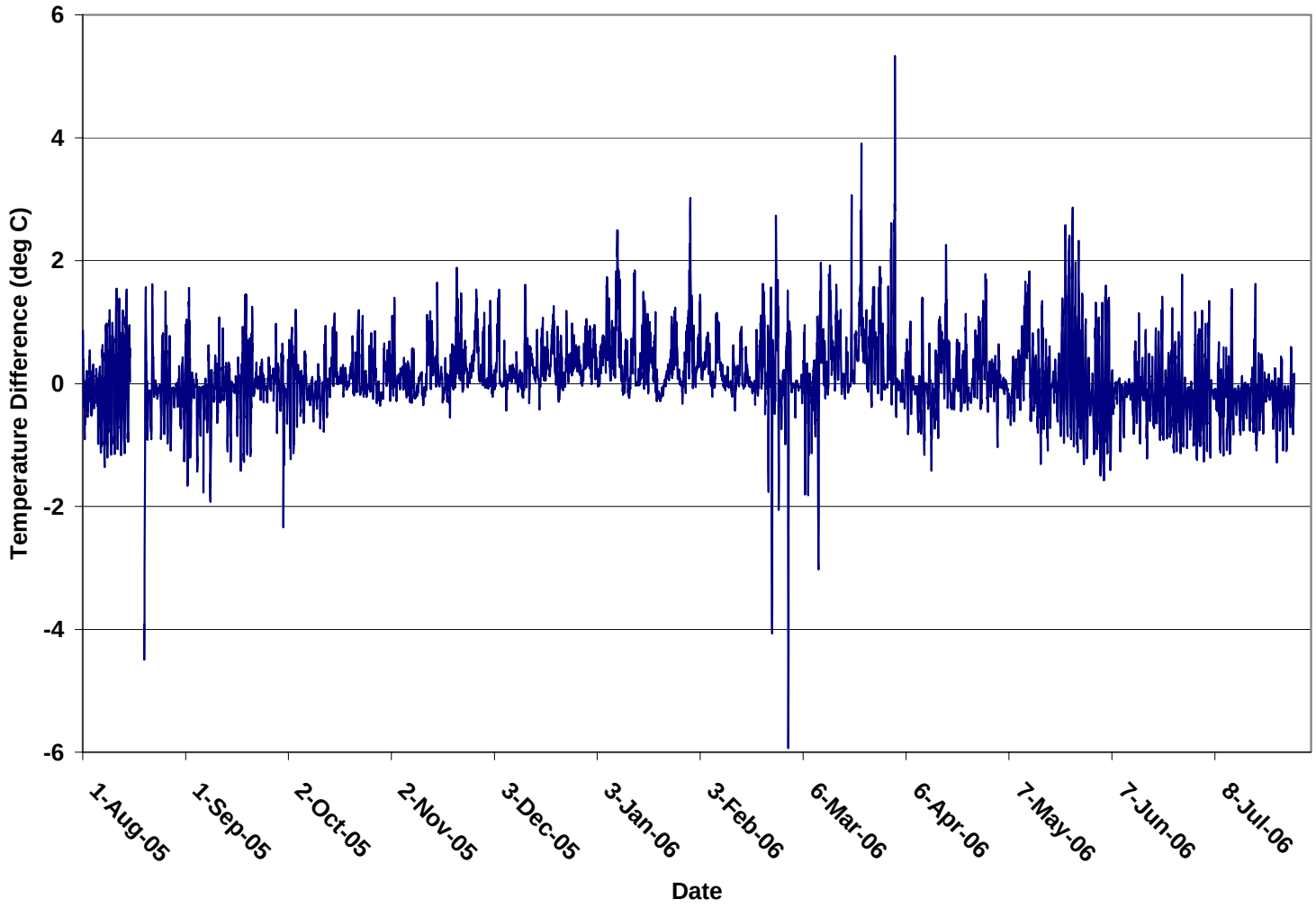


Figure 3-6. Hourly Average Vertical Temperature Difference.



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 1 station was 85.5%. The minimum relative humidity was 18.5% percent measured on May 26, 2006.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 908 mbar on February 6, 2006 to a maximum of 980 mbar observed on February 16, 2006. The mean barometric pressure during the monitoring year was 948 mbar.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 897 W/m^2 recorded on June 27, 2006 at 1:00 PM. The mean hourly average solar radiation for the monitoring year was 108 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the first PSD monitoring year. The maximum total daily precipitation was 30.6 mm measured on September 9, 2005 and, consequently, the maximum monthly precipitation was 146.8 mm during September 2005. The cumulative precipitation during the monitoring year was 817 mm.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble Mine PSD station was 88.1 mm during May 2006.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, solar radiation, and precipitation are also provided in Appendix D.

Figure 3-7. Hourly Average Relative Humidity.

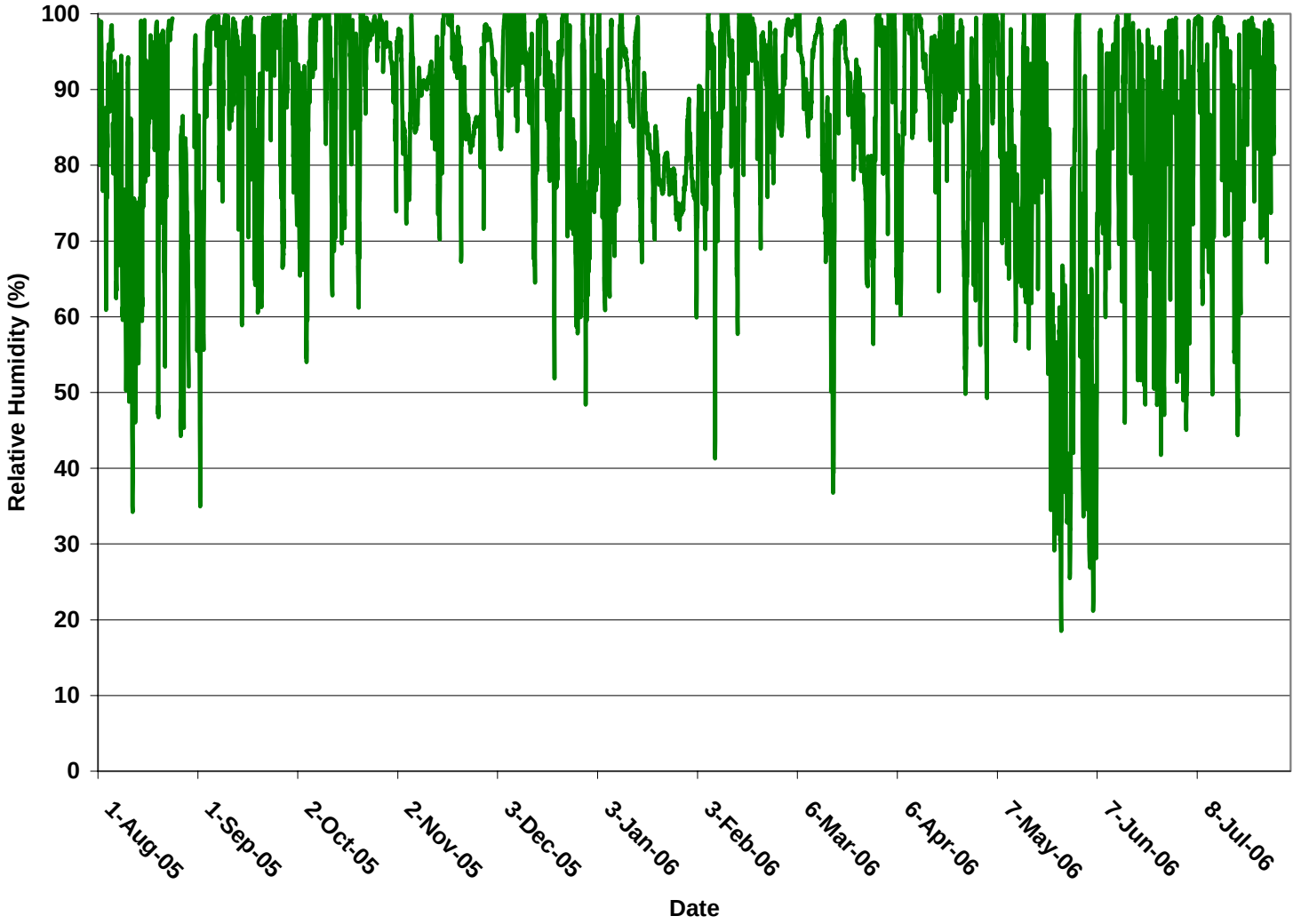


Figure 3-8. Barometric Pressure.

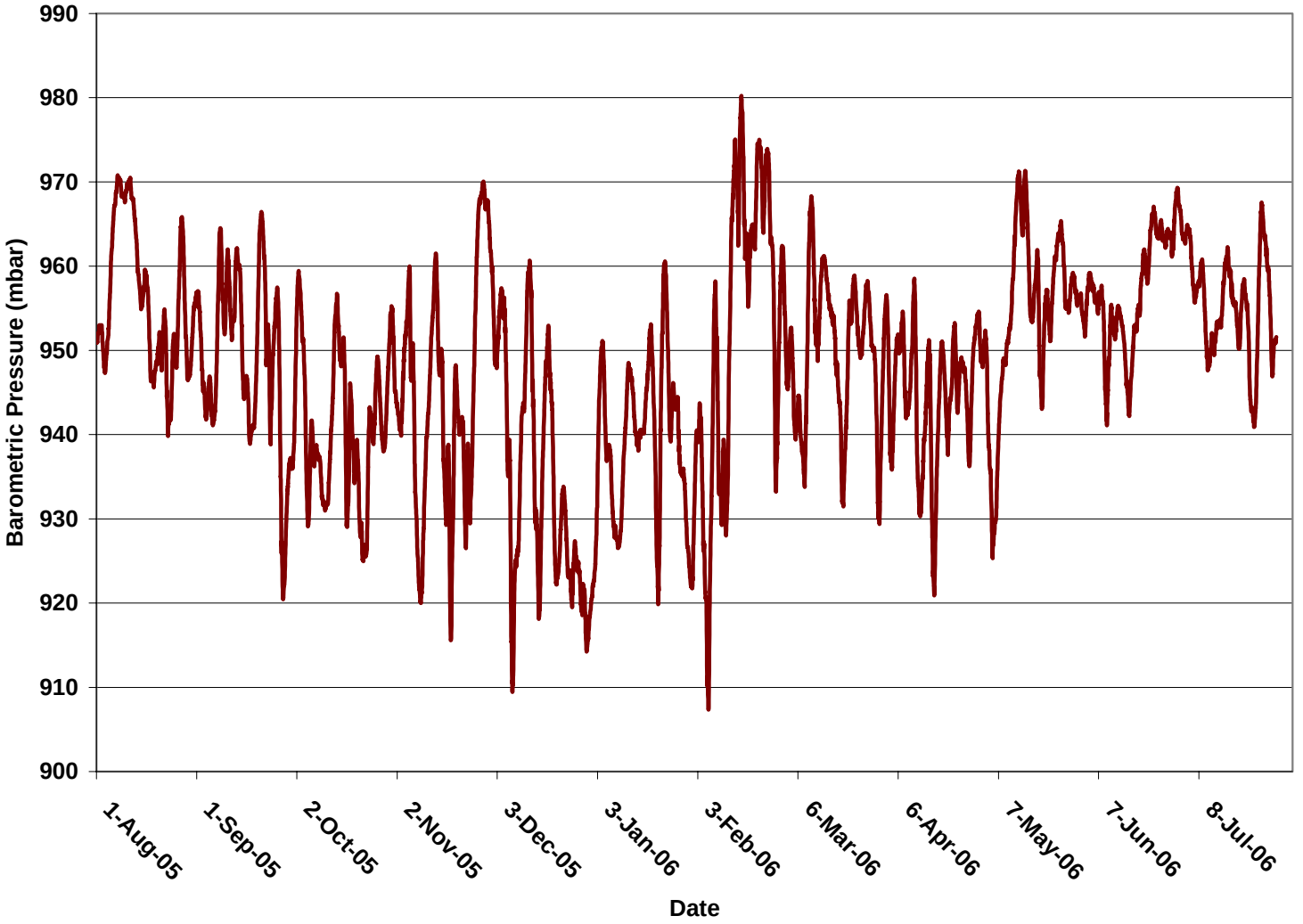


Figure 3-9. Hourly Average Solar Radiation.

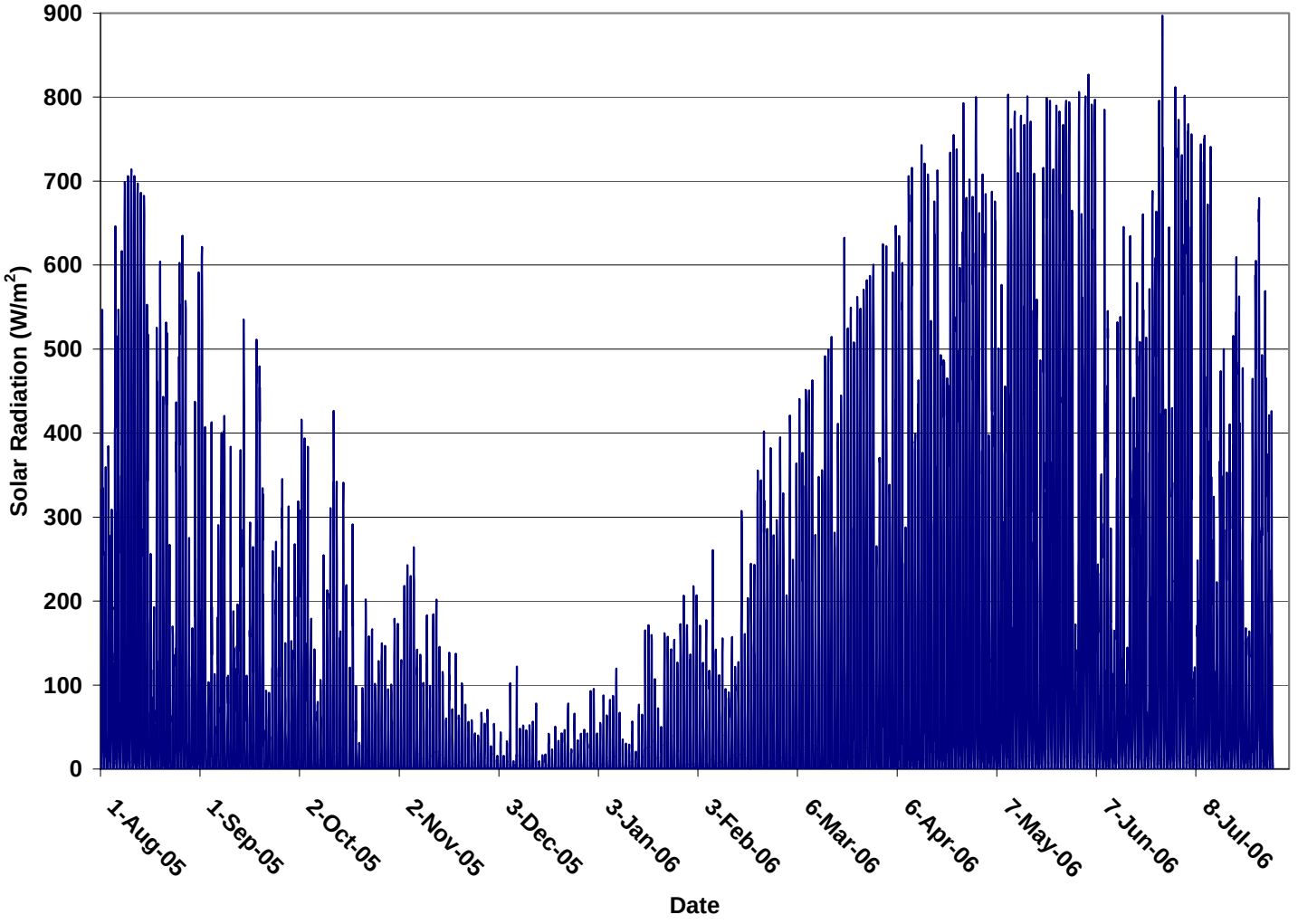
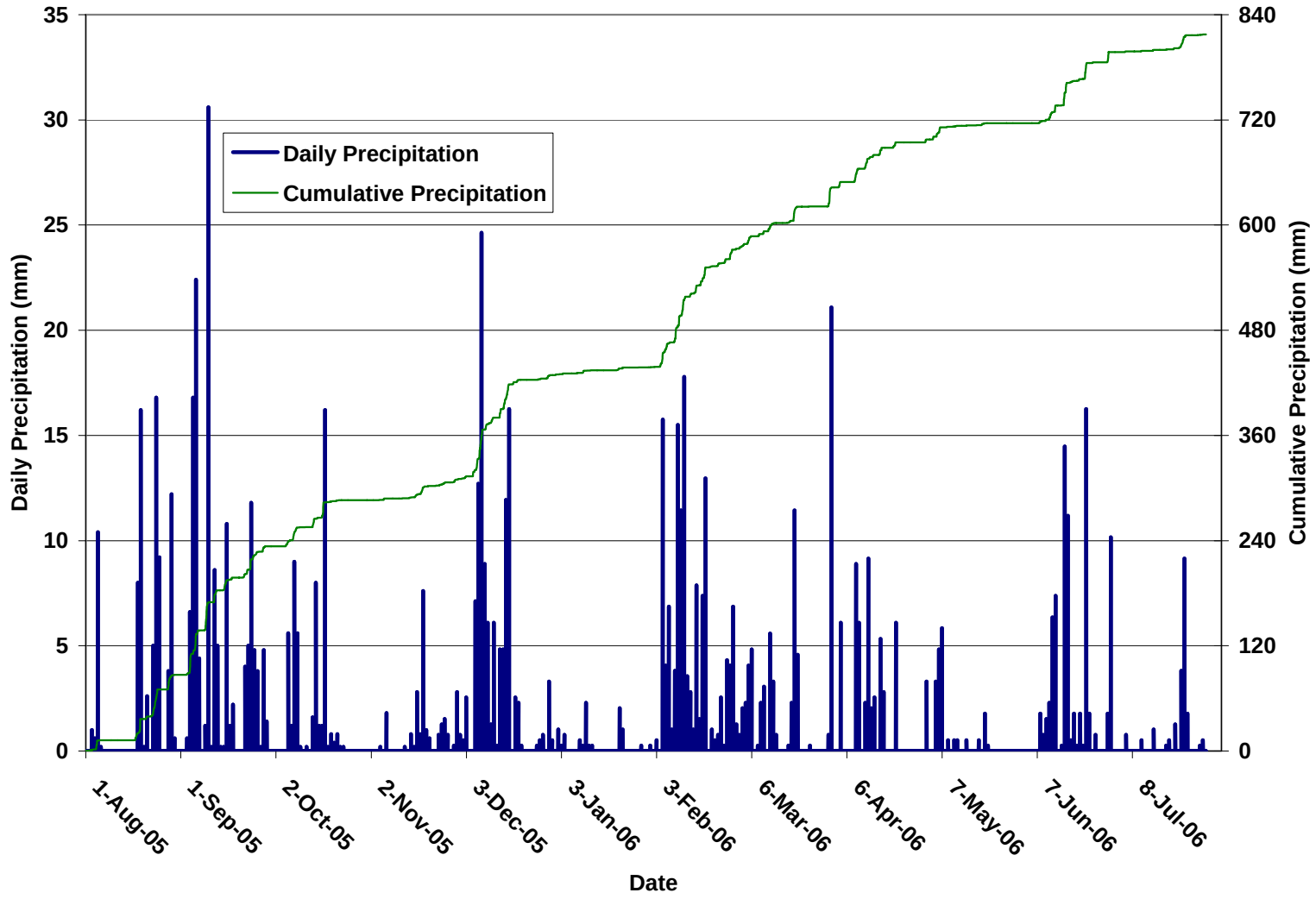


Figure 3-10. Daily and Cumulative Precipitation.



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2006.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

U.S. Department of Commerce, National Climatic Data Center, Asheville, North Carolina, *http://www.ncdc.noaa.gov*.

Western Regional Climate Center, Desert Research Institute, Reno Nevada, *http://www.wrcc.dri.edu/summary/climsmak.html.*

Appendix A

Data Processing and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected

h_i = number of possible valid hours of data collection during the monitoring period

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

Pebble 1
PSD Meteorological Monitoring Station

June 2005

Quality Assurance Systems Audit and Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
June 2005
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station On-Site Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Wind Speed 7
3.1.4 Wind Direction 8
3.1.5 Relative Humidity 9
3.1.6 Barometric Pressure 9
3.1.7 Precipitation 9
3.1.8 Evaporation 10
3.1.9 Solar Radiation 10

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 June 10, 2005 & July 2005 Performance Audit Summary 12

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, wind swept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan is located roughly 125 feet south of the tower. Between the tower and the precipitation gauge is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Precipitation (mm H_2O): Met One Model 370 Tipping Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program for the monitoring period from To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The program plan was the *Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*. This systems audit consisted of a review of this document, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question-answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

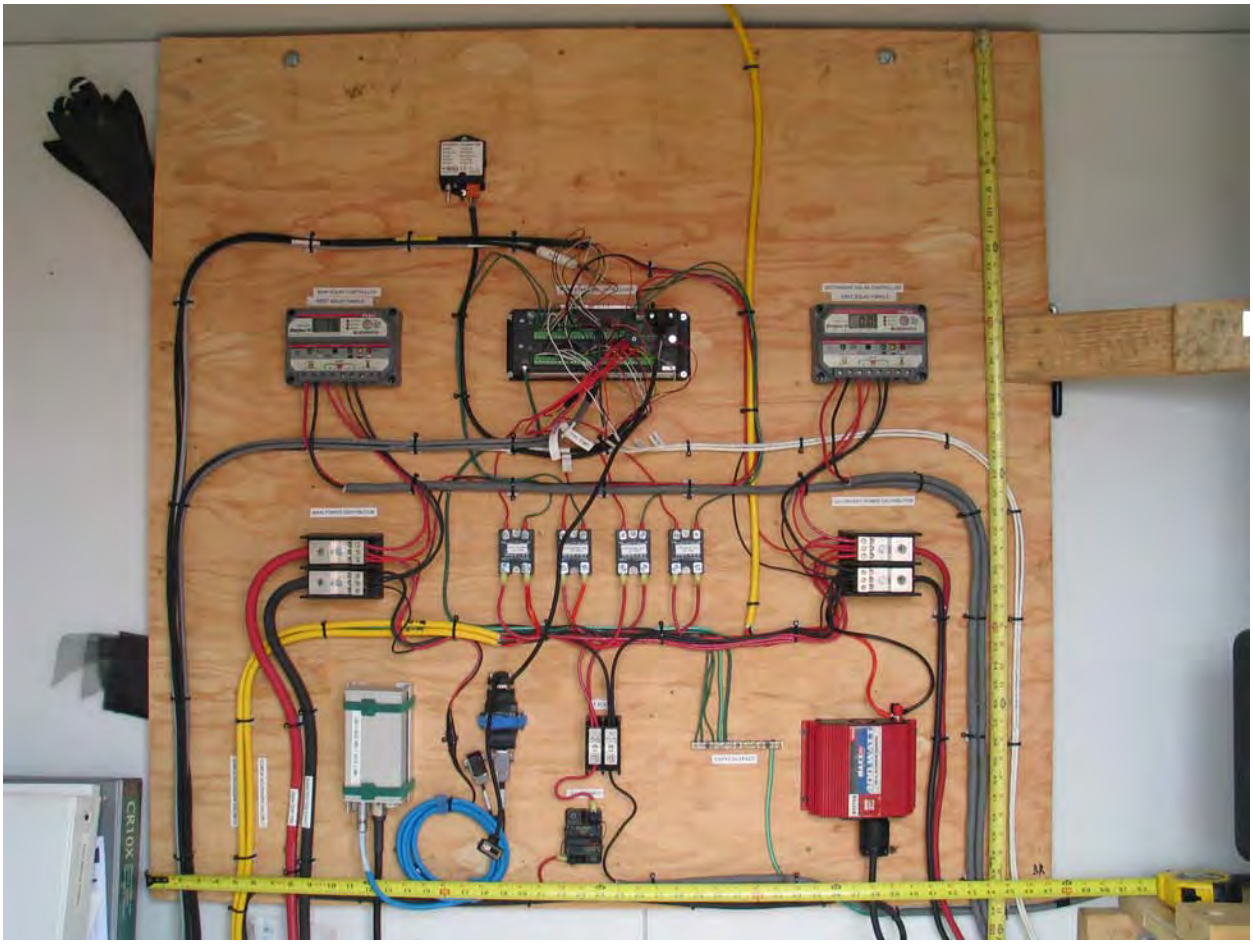
2.2 Meteorological Station On-Site Systems Audit

The on-site systems audit of the Pebble 1 station was conducted on June 10, 2005. Eric Brudie of HCG completed the systems audit with Dominic Shallies and Jared Cockman of HCG and Terry Wassilie of NDM assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan and gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which

allow leveling. The evaporation deck is surrounded by a 6' high fence to repel thirsty animals. All instrumentation wires from the tower, precipitation gauge and evaporation gauge are housed in conduit in order to repel hungry animals. These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. A Campbell Scientific SC932A interface converts the DAS signal to a RS-232 DCE modem signal. Three FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 35-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a 21-Watt Global Thermoelectric Model 5030 Thermo-Electric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a Morningstar ProStar-15 solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three panels are dedicated to the aspirator fans, Climatronics heaters, shelter lighting and 120VAC power; wired through a Morningstar ProStar-15 solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the aspirator/heater power system. Aspirator fans and heaters are controlled through relays connected to the DAS control ports. Logic programmed into the DAS reduces power consumption by limiting heater use to weather conditions conducive to icing and turns fans off at night when voltage is low, considered an upset condition. Also the TEG power is routed through relays which shunt power to the critical DAS/sensor system during upset conditions.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately

identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit checklists
- Keep a file on site containing copies of previous checklists.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input
Solar Radiation[1]	Collocated NIST sensor	≤ ±5% of input+resolutuion[2]

1. Solar radiation not audited.
2. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of water baths; hot water (35°C to 45°C), warm water (15°C to 25°C), and a water/ice bath (0°C). Each water bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments. The difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded

during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.4 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS

programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.5 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Precipitation

The tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge opening using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured

volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.8 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing enough water to bring the initial level to approximately 50 mm, the minimum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to the pan to raise the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper limit of approximately 240mm. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.1.9 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.2 Performance Audit Results

The initial performance audit was conducted at the Pebble 1 station on June 10, 2005, shortly after startup. Dominic Shallies and Jared Cockman of HCG and Terry Wassilie of NDM assisted. Some station instruments were also audited during July of 2005. The relative humidity sensor was audited on July 18, 2005 because the transfer standard was not available in early June. On July 21, 2005 the thermistors were rewired to bypass the Met-One aspirator junction box and were subsequently audited. The bypass wiring was prompted by temperature errors observed while using identical junction boxes at the NDM Port meteorological monitoring station; the Pebble 1 station modifications were preventative. All sensors, except the solar radiation sensor, were challenged with certified audit equipment and yielded errors below the PSD limits. The solar radiation audit was not completed because adequate audit equipment was not available at the time of the audit. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 June 10, 2005 & July 2005 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:03	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.35	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.35	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
2-m Temperature Accuracy[1]	≤ ±0.5	°C	0.30	Pass
10-m Temperature Accuracy[1]	≤ ±0.5	°C	0.30	Pass
Air Temperature Difference[1]	≤ ±0.1	°C	0.00	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.5	Pass
Wind Direction Linearity	≤ 3	Degree	0.5	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.006	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	5.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	-2.4	Pass
Wind Direction Linearity	≤ 3	Degree	1.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.0	Pass
Relative Humidity (dew point) [2]	≤ ±1.5	°C	0.4	Pass
Barometric Pressure[2]	≤ ±3	Mbar	1.4	Pass
Tipping Precipitation[3]	≤ ±10	% input	-8.5	Pass
Evaporation	≤ ±10	% input	-5.0	Pass
Solar Radiation	≤ ±5+Res	% input	No Test	N/A

1. Thermistors rewired on 07/21/05 to temporarily bypass aspirator junction box.
2. Relative humidity tested and barometric pressure retested on 07/18/05.
3. Tipping precipitation gauge tested on 06/10-11/05 and 07/20/05.

4.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Audit Date:** 10-Jun-05
Witnesses: D. Shallies, Jared Cockman, Terry Wassilie **Auditor:** Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 3
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 4
3.2.1 Data Acquisition System (DAS) and Communications System 4
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 5
3.3 Station Location and Siting 6
3.3.1 Tower 6
3.3.2 Temperature and Relative Humidity Sensors 6
3.3.3 Wind Speed and Wind Direction Sensors 7
3.3.4 Relative Humidity and Barometric Pressure 7
3.3.5 Precipitation 7
3.3.6 Evaporation 7
3.3.7 Solar Radiation 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 11
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 13
8.0 COMMENTS AND SUGGESTIONS 13

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is wind swept and treeless with very little organics. There are virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

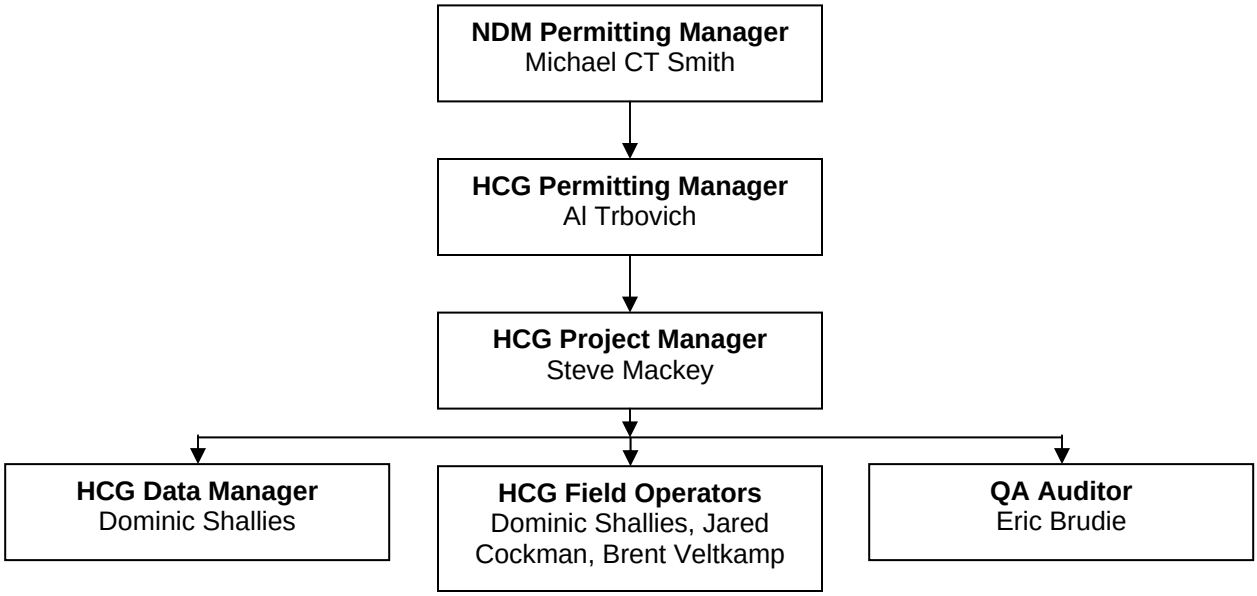
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.180' N
155° 20' W	155° 19.804' W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw diagram indicating the organizational structure of the monitoring program. Include names and titles:



3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR10X	X43107
DAS Wiring Panel	Campbell Scientific	CR10X	32768
Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Primary Wind Speed	Climatronics	F460-100075	5007
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Primary Wind Direction	Climatronics	F460-100076	4691
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	66725
Backup Wind Speed Prop	RM Young	08254	63047
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Relative Humidity	Vaisala	HMP45AC	A1040018
Barometric Pressure	Vaisala	PTB101B	A0710039
Precipitation-Tipping	Met-One	370	D5874
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None
Solar Radiation	LI-COR	Li-200SX	PY49464

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS to SC932A interface to FreeWave RF network to SixNet modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a 21-Watt propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can shunt the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not required.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings at HCG office.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resol. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

EPA Recommended Meteorological Instrument Standards (Continued)

Parameter	Instrument Specifications	EPA Standard	Pass?
Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Siting

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature and Relative Humidity Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)? ■ Yes □ No Comments: None.

Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.4 Relative Humidity and Barometric Pressure

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.
Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on wiring panel.

3.3.5 Precipitation

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds the gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.6 Evaporation

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.

Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

3.3.7 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	□ Yes ■ No	Comments: All operators have one to two years onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

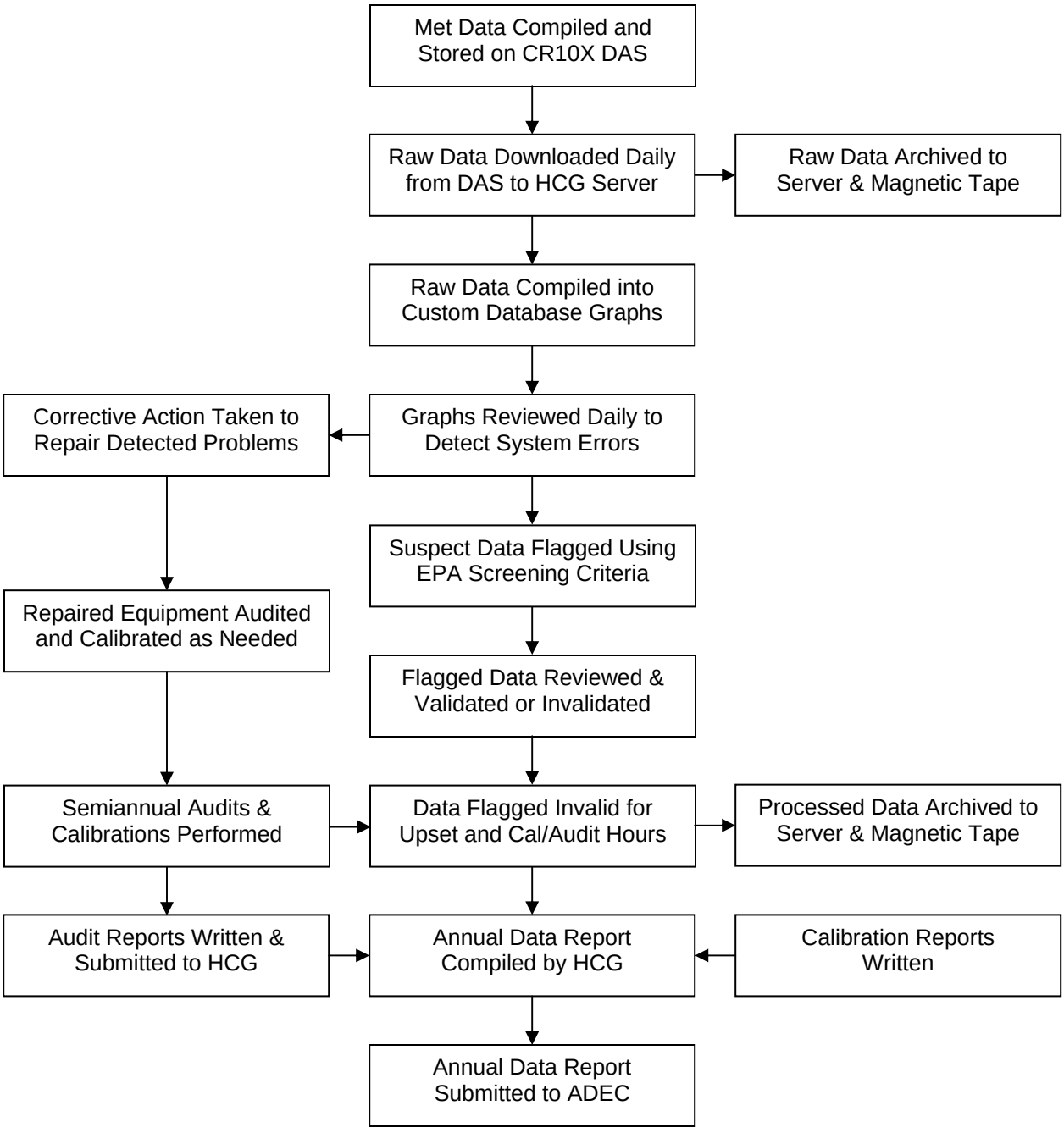
5.2 Station Monitoring Plan and Report Forms

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate Calibration Report Form and copies of previous calibrations and audits?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Isaac Bertschi
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: All tests in this audit on 06/10/05 unless otherwise noted.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
13:05:00	13:04:57	**-00:03**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220-601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220-604	**S.N.#:**	51091789	**Range:**	-40 to 150 **°C**

COLLOCATED THERMISTOR TEST

	Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
	Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Date: 06/10/05	Ice Bath	0	-0.18	0.17	0.35	Pass	0.17	0.35	Pass	0.00	Pass
Begin: 1400	Warm	15 to 25	23.77	23.98	0.21	Pass	23.98	0.21	Pass	0.00	Pass
End: 1420	Hot	35 to 45	38.49	38.77	0.28	Pass	38.77	0.28	Pass	0.00	Pass
			Max Abs. Error		0.35	**PASS**		0.35	**PASS**	0.00	**PASS**
Date: 07/21/05	Ice Bath	0	-0.11	0.12	0.23	Pass	0.12	0.23	Pass	0.00	Pass
Begin: 1300	Warm	15 to 25	16.53	16.73	0.20	Pass	16.73	0.20	Pass	0.00	Pass
End: 1315	Hot	35 to 45	41.53	41.83	0.30	Pass	41.83	0.30	Pass	0.00	Pass
			Max Abs. Error		0.30	**PASS**		0.30	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Met-One motor aspirated shields Model 076B-4: 2-m SN E3490, 10-m SN E3489. More tests run on 07/21/05 after bypassing Met-One aspirator junction box.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

COLLOCATED STANDARD TEST

Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
07/18/05	1440	69.2	12.1	6.6	70.9	12.1	7.0	0.4	Pass
07/18/05	1445	70.2	12.0	6.7	71.4	12.0	7.0	0.2	Pass
						Max Abs. Error		0.4	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
06/10/05	1430	28.21	28.09	951.1	952.0	0.9	Pass
07/18/05	1430	28.53	28.41	962.0	963.4	1.4	Pass
				Max Abs. Error		1.4	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/23/05	
Audit Inst	Offset Amount
24.13	-0.13
26.18	-0.13
28.12	-0.12
30.12	-0.12
Intercept	**-0.18**
Slope	**0.0020**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5007 **Cup #:** 2284 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 06/10/05
Begin: 1445
End: 1455

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 06/10/05
Begin: 1550
End: 1605

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.006	**PASS**
New	0.014	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
8000	40.96	40.96	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: Broke prop SN 62965 during initial install and replaced with prop SN 63047.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4691 **Vane #:** 1440 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.8 **E of N**

TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.060	**PASS**
New	0.104	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	89.0	91.6	2.6	Pass
Compass	164.0	166.2	2.2	Pass
Compass	262.0	264.4	2.4	Pass
Compass	8.0	8.3	0.3	Pass
Cone Mtn	144.3	145.6	1.3	Pass
BM Pig	241.9	238.6	-3.3	Pass
Peak El 1984	9.8	11.9	2.1	Pass
Compass	88.5	89.2	0.7	Pass
		Max Abs. Error	**3.3**	**PASS**
		Mean Abs. Error	**1.9**	**GOOD**

Date: 06/10/05
Time: Begin: 1345 End: 1450

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.4	-0.6	Pass
West	270.0	270.4	0.4	Pass
North	360.0	359.7	-0.3	Pass
East	90.0	89.2	-0.8	Pass
North	360.0	359.6	-0.4	Pass
West	270.0	269.8	-0.2	Pass
South	180.0	179.2	-0.8	Pass
East	90.0	89.0	-1.0	Pass
	Max Abs. Error		**1.0**	**PASS**
	Mean Abs. Error		**0.6**	**PASS**

Time: Begin: 1528 End: 1533
Date: 06/10/05

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.4	-0.6	Pass	330.0	331.5	1.5	Pass
60.0	59.8	-0.2	Pass	360.0	0.1	0.1	Pass
90.0	90.2	0.2	Pass	30.0	29.5	-0.5	Pass
120.0	120.4	0.4	Pass	60.0	60.0	0.0	Pass
150.0	150.3	0.3	Pass	90.0	90.2	0.2	Pass
180.0	180.5	0.5	Pass	120.0	120.7	0.7	Pass
210.0	210.6	0.6	Pass	150.0	150.3	0.3	Pass
240.0	240.9	0.9	Pass	180.0	180.6	0.6	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**1.5**	**PASS**
300.0	301.1	1.1	Pass	**Mean Abs. Error**		**0.5**	**PASS**

Date: 06/10/05 **Time:** Begin: 1515 End: 1520

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	1.0	2.8	1.8	Pass
Compass	107.0	107.8	0.8	Pass
Compass	166.0	166.4	0.4	Pass
Compass	285.0	288.3	3.3	Pass
Compass	323.0	325.9	2.9	Pass
		Max Abs. Error	**3.3**	**PASS**
		Mean Abs. Error	**1.8**	**GOOD**

Date: 06/11/05
Time: Begin: 815 End: 900

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Wind direction azimuth rechecked on 6/11/05.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.8 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	5.0	**PASS**
New	11.0	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	89.0	90.4	1.4	Pass
Compass	164.0	166.0	2.0	Pass
Compass	262.0	262.7	0.7	Pass
Compass	8.0	7.7	-0.3	Pass
Compass	101.0	100.6	-0.4	Pass
Date: 06/10/05		**Max Abs. Error**	**2.0**	**PASS**
Time: Begin: 1345 End: 1450		**Mean Abs. Error**	**1.0**	**GOOD**

BENCH STAND ACCURACY & LINEARITY TEST											
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.9	-1.1	Pass	150.0	147.6	-2.4	Pass	270.0	268.6	-1.4	Pass
60.0	58.9	-1.1	Pass	180.0	177.6	-2.4	Pass	300.0	298.2	-1.8	Pass
90.0	88.3	-1.7	Pass	210.0	208.2	-1.8	Pass	330.0	329.1	-0.9	Pass
120.0	118.0	-2.0	Pass	240.0	237.9	-2.1	Pass	355.0	354.0	-1.0	Pass
Date: 06/10/05								**Max Abs. Error**		**2.4**	**PASS**
Time: Begin: 1608 End: 1620								**Mean Abs. Error**		**1.6**	**PASS**

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	3.0	4.6	1.6	Pass
Compass	75.0	76.4	1.4	Pass
Compass	107.0	106.9	-0.1	Pass
Compass	167.0	165.8	-1.2	Pass
Compass	284.0	285.3	1.3	Pass
Compass	327.0	330.0	3.0	Pass
Date: 06/11/05		**Max Abs. Error**	**3.0**	**PASS**
Time: Begin: 815 End: 900		**Mean Abs. Error**	**1.4**	**GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Wind direction azimuth rechecked on 6/11/05.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1305	800	24.7	0.0	0.0	0.0	23.0	1400	23.0	-6.9%	Pass	Date: 06/10/2005
1405	800	24.7	0.0	0.0	0.0	22.6	1500	22.6	-8.5%	Pass	Date: 06/10/2005
925	800	24.7	0.0	0.0	0.0	23.6	1000	23.6	-4.5%	Pass	Date: 06/11/2005
1105	650	20.0	0.0	0.0	0.0	20.0	1200	20.0	0.0%	Pass	Date: 07/20/2005
1410	650	20.0	5.4	0.0	0.0	24.8	1500	19.4	-3.0%	Pass	Date: 07/20/2005
							Max Abs. Error		**8.5%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Tests run on 6/10/05, 6/11/05 and 7/20/05.

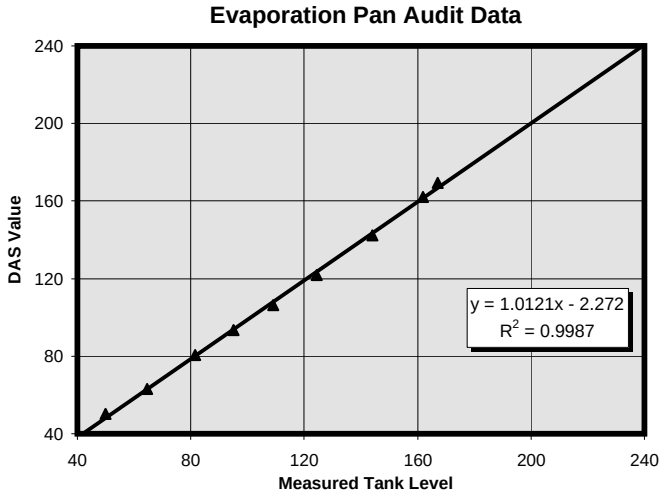
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

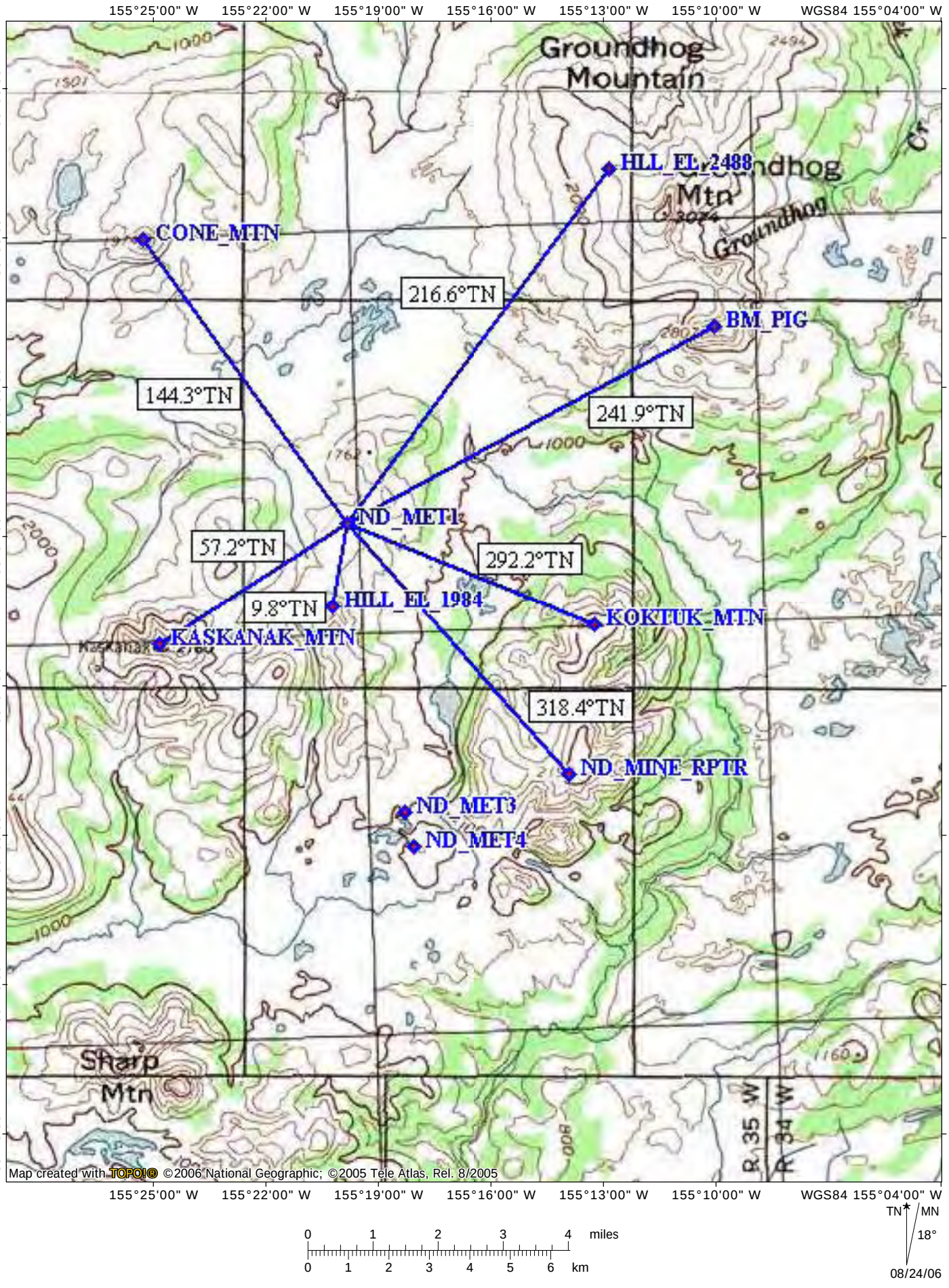
EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
50.0	50.1	47.7	-2.4	-5.0%	Pass
64.5	63.0	62.2	-0.8	-1.2%	Pass
81.5	80.5	79.2	-1.3	-1.6%	Pass
95.0	93.5	92.7	-0.8	-0.8%	Pass
109.0	106.4	106.7	0.3	0.3%	Pass
124.5	121.7	122.2	0.5	0.4%	Pass
144.0	142.4	141.7	-0.7	-0.5%	Pass
162.0	162.2	159.7	-2.5	-1.5%	Pass
167.0	169.3	164.7	-4.6	-2.8%	Pass
	Max Abs. Error		**4.6**	**5.0%**	**PASS**
	Intercept	**-2.3**	**Slope**	**1.0121**	**PASS**



Date: 06/10/05 **Time:** Begin: 1600 End: 1650

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.


TOPO! map printed on 08/24/06 from "Pebble_Sta1_(08-16-06).tpo"
155°25'00" W
155°22'00" W
155°19'00" W
155°16'00" W
155°13'00" W
155°10'00" W
WGS84 155°04'00" W
60°00'00" N
59°58'00" N
59°56'00" N
59°54'00" N
59°52'00" N
59°50'00" N
59°48'00" N
59°46'00" N
Groundhog Mountain
HILL_EL_2488
Groundhog Mtn
CONE_MTN
216.6°TN
BM_PIG
144.3°TN
241.9°TN
ND_MET1
57.2°TN
292.2°TN
9.8°TN
HILL_EL_1984
KOKTUK_MTN
KASKANAK_MTN
318.4°TN
ND_MINE_RPTR
ND_MET3
ND_MET4
Sharp Mtn
R. 35 W.
R. 34 W.
Map created with TOPO!© ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
0 1 2 3 4 miles
0 1 2 3 4 5 6 km
TN MN
18°
08/24/06

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate No. 1750.01

ACCREDITED

Calibration complies with ISO 17025

Cert. No.:4000-1103531

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 51091789

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	10/18/05	A4A12029
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	A42238		
Temperature Probe	149	7/20/05	A4715024
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	93139		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 4/27/05 **Cal Due: 4/27/07**

Test Conditions: 24.0°C 41.0 %RH 1016 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C		N.A.		0.001	0.003	Y	-0.049	0.051	0.013	3.8:1
°C		N.A.		25.001	25.002	Y	24.951	25.051	0.013	3.8:1
°C		N.A.		59.999	59.999	Y	59.949	60.049	0.013	3.8:1
°C		N.A.		100.001	100.007	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full.

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.

Traceable® is a registered trademark of Control Company © 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052305.01

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 5/23/2005 Lab temperature 73.6 °F
Lab pressure 661.65 mm Hg

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)
24.00	24.13	0.13	-0.13
26.05	26.18	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.12	0.12	-0.12

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)

Reviewed: R L S Date: 5-23-05

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 Rpm - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 3 May 2005

Tested By EJC

Meteorological Instruments

YOUNG

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 Rpm		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 29 October 2004

Tested By EJC

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City, Michigan 49686 USA
Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: Houston Precision

P.O.#:6632

Product Identification

Product Type: Torque Watch
Serial Number: 4864

Model Number: 366-3
Part Number: 060-SQF41199-01
Order Code: TQ3663

Product Specifications

Full Scale Range: 0.003-0.03 OZ IN
Calibrated At: 0.003-0.03 OZ IN

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW150

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 09/02/04

Certificate Number: 086-6000-01
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 5% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480. Calibration procedures are in compliance with ANSI/NCSL Z540-1-1994.

This is a quality record.

Approved and Certified By: Michael A Stanley
Factory Supervisor

Printed: 09/02/2004

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-3 SERIAL NUMBER: 4864 Units = oz in Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
.000	-.0002	.0000	.0000	.0002
.003	-.0000	.0036	.0031	.0060
.006	.0030	.0058	.0062	.0090
.009	.0060	.0086	.0092	.0120
.012	.0090	.0128	.0127	.0150
.015	.0120	.0162	.0161	.0180
.018	.0150	.0195	.0197	.0210
.021	.0180	.0225	.0219	.0240
.024	.0210	.0257	.0246	.0270
.027	.0240	.0296	.0288	.0300
.030	.0270	.0320	.0322	.0330

Max pos error (% FS) = 8.7 % at .027
Max neg error (% FS) = -1.2 % at .009

Torque Watch is a: PASS

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: Houston Precision

P.O.#:6743

Product Identification

Product Type: Torque Watch
Serial Number: 5042

Model Number: 366-0
Part Number: 060-SQF41201-01
Order Code: TQ3660

Product Specifications

Full Scale Range: 0.06-0.6 IN OZ
Calibrated At: 0.06-0.6 IN OZ

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW151

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 12/01/04

Certificate Number: 086-6000-01
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 5% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480. Calibration procedures are in compliance with ANSI/NCSL Z540-1-1994.

This is a quality record.

Approved and Certified By: Joe Belcher Jr., Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-0 SERIAL NUMBER: 5042 Units = oz in Accuracy = 5 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
.00	-.003	0.000	0.000	.003
.06	.030	.056	.060	.090
.12	.090	.121	.121	.150
.18	.150	.168	.180	.210
.24	.210	.223	.255	.270
.30	.270	.299	.319	.330
.36	.330	.359	.373	.390
.42	.390	.407	.424	.450
.48	.450	.481	.494	.510
.54	.510	.531	.537	.570
.60	.570	.592	.610	.630

Max pos error (% FS) = 3.1 % at .300
Max neg error (% FS) = -2.9 % at .240

Torque Watch is a: PASS

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

Pebble 1
PSD Meteorological Monitoring Station

January 2006

Quality Assurance Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
January 2006
Quality Assurance Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 PERFORMANCE AUDIT 2

2.1 Performance Audit Methodology 2

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Wind Speed 3
2.1.4 Wind Direction 4
2.1.5 Relative Humidity 5
2.1.6 Barometric Pressure 5
2.1.7 Precipitation 5
2.1.8 Evaporation 6
2.1.9 Solar Radiation 6

2.2 Performance Audit Results 7

2.3 Performance Audit Recommendations 7

3.0 REFERENCES 10

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 1 January 15, 2006 Performance Audit Summary 8
Table 2-3 Pebble 1 Fall 2005 Supplemental Audit Summaries 9

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, wind swept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan is located roughly 125 feet south of the tower. Between the tower and the precipitation gauge is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Precipitation (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer.

This report has been prepared for NDM to serve as a quantitative review of the Pebble 1 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input
Solar Radiation[1]	Collocated NIST sensor	≤ ±5% of input+resolutuion[2]

1. Solar radiation not audited.
2. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of water baths; hot water (35°C to 45°C), warm water (15°C to 25°C), and a water/ice bath (0°C). Each water bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments. The difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded

during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.4 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS

programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.5 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured

volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.8 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing enough water to bring the initial level to approximately 50 mm, the minimum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to the pan to raise the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper limit of approximately 240mm. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.1.9 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.2 Performance Audit Results

The performance audit was conducted at the Pebble 1 station primarily on January 15, 2006, with Dominic Shallies of HCG assisting. Some station instruments were also audited during October and November of 2005. On October 8, 2005 the evaporation pan and tipping precipitation gauge were audited prior to winterization. The temperature sensors were audited on October 18, 2005 after thermistors were permanently rewired to bypass the Met-One aspirator junction box. The bypass wiring was prompted by temperature errors observed while using identical junction boxes at the NDM Port meteorological monitoring station; the Pebble 1 modifications were preventative. On November 20, 2005 the Met-One tipping Precipitation gauge was replaced with an ETI weighing precipitation gauge. The RM Young wind sensor had to be rewired through a pulse to millivolt converter in order to free up a pulse channel for the new gauge. Thus, both the new gauge and RM Young wind sensor were audited on that day.

All sensors, except the solar radiation sensor, were challenged with certified audit equipment and yielded errors below the PSD limits, except as noted. The exception was the as–found RM Young azimuth alignment tested on November 20, 2005. This sensor was knocked out of alignment during the audit while chipping ice from the mounting arm. The operator reviewed the wind direction data from both the RM Young and Climatronics sensors for the period prior to this event and found the data corroborated this conclusion. The solar radiation audit was not completed because adequate audit equipment was not available at the time of the audit. Table 2-2 contains summary data from the January 2006 audit and Table 2-3 summarizes the supplemental Fall 2005 tests. Complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 1 January 15, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:03	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	-0.2	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-2.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.1	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.010	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.02	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	-0.4	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.8	Pass
Wind Direction Linearity	≤ 3	Degree	2.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.0	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Barometric Pressure	≤ ±3	Mbar	1.2	Pass
Weighing Precipitation	≤ ±10	% input	9.5	Pass
Solar Radiation	≤ ±5+Res	% input	No Test	N/A

Table 2-3 Pebble 1 Fall 2005 Supplemental Audit Summaries

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:14	Pass
2-m Temperature Accuracy[1]	≤ ±0.5	°C	0.13	Pass
10-m Temperature Accuracy[1]	≤ ±0.5	°C	0.13	Pass
Air Temperature Difference[1]	≤ ±0.1	°C	0.00	Pass
RM Young Wind System **Before** Rewiring[2]				
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	14.7	Fail[4]
Wind Direction Accuracy	≤ ±5	Degree	4.9	Pass
Wind Direction Linearity	≤ 3	Degree	2.7	Pass
RM Young Wind System **After** Rewiring[2]				
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	-0.06	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.4	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.4	Pass
Wind Direction Linearity	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-4.4	Pass
Weighing Precipitation[2]	≤ ±10	% input	-7.3	Pass
Tipping Precipitation[3]	≤ ±10	% input	3.0	Pass
Evaporation[3]	≤ ±10	% input	3.7	Pass

1. Thermistors rewired on 10/18/05 to permanently bypass aspirator junction box.
2. RM Young and weighing precipitation gauge tested on 11/20/05.
3. Tipping precipitation gauge and evaporation gauge tested on 10/08/05.
4. RM Young knocked out of alignment just prior to test.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:40:00	15:39:57	**-00:03**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220-601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220-604 **S.N.#:** 51091789 **Range:** -40 to 150 **°C**

Begin: 1420
End: 1440

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Ice Bath	0	-0.01	0.10	0.11	Pass	0.10	0.11	Pass	0.00	Pass
Warm	15 to 25	22.64	22.68	0.04	Pass	22.68	0.04	Pass	0.00	Pass
Hot	35 to 45	37.77	37.87	0.10	Pass	37.87	0.10	Pass	0.00	Pass
		Max Abs. Error		0.11	**PASS**		0.11	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Met-One motor aspirated shields Model 076B-4: 2-m SN E3490, 10-m SN E3489.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45ASP **S.N.#:** A1040018 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1645	81.0	-1.8	-4.6	87.8	-1.9	-3.6	1.0	Pass
1705	81.6	-1.9	-4.6	87.2	-2.1	-3.9	0.7	Pass
					Max Abs. Error		1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1535	27.79	27.67	936.9	938.1	1.2	Pass
			Max Abs. Error		1.2	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/23/05	
Audit Inst	Offset Amount
24.13	-0.13
26.18	-0.13
28.12	-0.12
30.12	-0.12
Intercept	**-0.18**
Slope	**0.0020**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5007 **Cup #:** 2284 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1445
End: 1450

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.67	N/A	-0.2	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.2**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1515
End: 1530

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.010	**PASS**
New	0.014	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.07	0.02	N/A	Pass
1000	5.12	5.11	N/A	-0.2	Pass
2000	10.24	10.20	N/A	-0.4	Pass
5000	25.60	25.70	N/A	0.4	Pass
10000	51.20	51.23	N/A	0.1	Pass
	Max Abs. Error		**0.02**	**0.4**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4691 **Vane #:** 1440 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	102.0	100.6	-1.4	Pass
Compass	167.5	166.1	-1.4	Pass
Compass	265.0	262.7	-2.3	Pass
Compass	341.0	339.0	-2.0	Pass
		Max Abs. Error	**2.3**	**PASS**
		Mean Abs. Error	**1.8**	**GOOD**

Time: Begin: 1200 End: 1300

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	330.0	333.0	3.0	Pass
60.0	60.7	0.7	Pass	355.0	357.3	2.3	Pass
90.0	91.2	1.2	Pass	30.0	30.5	0.5	Pass
120.0	121.5	1.5	Pass	60.0	60.8	0.8	Pass
150.0	150.9	0.9	Pass	90.0	91.3	1.3	Pass
180.0	181.2	1.2	Pass	120.0	121.2	1.2	Pass
210.0	210.7	0.7	Pass	150.0	150.8	0.8	Pass
240.0	241.7	1.7	Pass	180.0	181.3	1.3	Pass
270.0	272.0	2.0	Pass	**Max Abs. Error**		**3.0**	**PASS**
300.0	302.0	2.0	Pass	**Mean Abs. Error**		**1.3**	**PASS**

Time: Begin: 1504 End: 1510

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	113.5	110.5	-3.0	Pass
Compass	294.0	297.1	3.1	Pass
		Max Abs. Error	**3.1**	**PASS**
		Mean Abs. Error	**3.1**	**ALERT**

Time: Begin: 1630 End: 900

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Few data points for post-audit alignment test on a windy day, yielding an alert for a high average.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	10.0	**PASS**
New	11.0	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	102.0	101.5	-0.5	Pass
Compass	167.5	167.3	-0.2	Pass
Compass	265.0	262.7	-2.3	Pass
Compass	341.0	336.8	-4.2	Pass
		Max Abs. Error	**4.2**	**PASS**
Time: Begin: 1200 End: 1300		**Mean Abs. Error**	**1.8**	**GOOD**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	34.8	4.8	Pass	150.0	153.4	3.4	Pass	270.0	271.5	1.5	Pass
60.0	63.6	3.6	Pass	180.0	182.9	2.9	Pass	300.0	300.7	0.7	Pass
90.0	93.5	3.5	Pass	210.0	212.4	2.4	Pass	330.0	330.4	0.4	Pass
120.0	123.7	3.7	Pass	240.0	241.8	1.8	Pass	355.0	355.1	0.1	Pass
								Max Abs. Error		**4.8**	**PASS**
				Time: Begin: 1515		End: 1520		**Mean Abs. Error**		**2.4**	**PASS**

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	113.5	114.6	1.1	Pass
Compass	294.0	291.0	-3.0	Pass
		Max Abs. Error	**3.0**	**PASS**
Time: Begin: 1630 End: 1700		**Mean Abs. Error**	**2.1**	**GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1428		800	11.0	0.00	8.64	8.64	N/A	N/A	Initial pour not registered.
1453		800	11.0	8.64	19.81	11.17	1.9%	Pass	
1455		800	11.0	19.81	31.75	11.94	8.9%	Pass	
1501		800	11.0	0.00	11.96	11.96	9.1%	Pass	
1505		800	11.0	11.96	23.88	11.92	8.8%	Pass	
1510		800	11.0	23.88	35.81	11.93	8.9%	Pass	
1515		800	11.0	35.81	47.81	12.00	9.5%	Pass	
1520		800	11.0	47.81	59.79	11.98	9.3%	Pass	
1525		800	11.0	59.79	71.77	11.98	9.3%	Pass	
1530		800	11.0	71.77	83.76	11.99	9.4%	Pass	
					Max Abs. Error		**9.5%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Limited water available.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

• *GENERAL NOTES:*

1) On 10/08/05 the Nova Lynx evaporation pan and Met-One tipping precipitation gauge were audited and winterized.
2) On 10/18/05 the temperature sensors were audited after permanent bypass of the Met-One aspirator junction box.
3) On 11/20/05 the Met-One tipping precipitation gauge was replaced with an ETI weighing gauge. The RM Young wind sensor was rewired through a converter in order to free up a channel for the ETI device and was thus audited before and after rewiring.

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1205	800	24.7	0.0	0.0	0.0	24.6	1300	24.6	-0.4%	Pass	Date: 10/08/2005
1305	800	24.7	0.0	0.0	0.0	24.6	1400	24.6	-0.4%	Pass	Date: 10/08/2005
1710	650	20.0	1.6	0.0	0.0	22.2	1800	20.6	3.0%	Pass	Date: 11/03/2005
							Max Abs. Error	**3.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Tests run on 10/8/05 and 11/03/05.

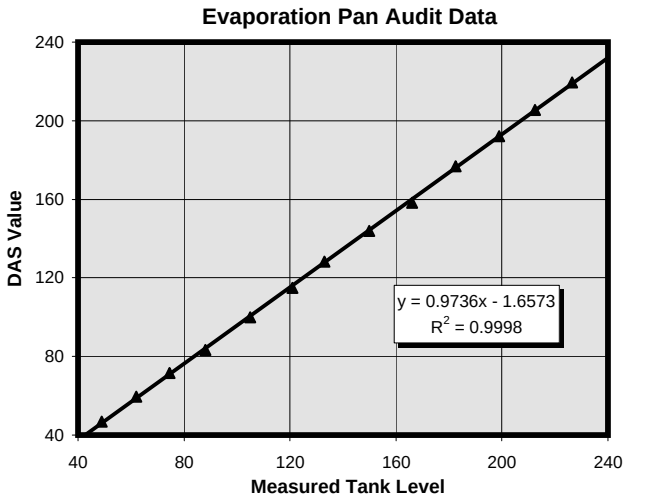
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
49.0	46.93	47.3	0.4	0.9%	Pass
62.0	59.44	60.3	0.9	1.5%	Pass
74.5	71.58	72.8	1.3	1.7%	Pass
88.0	83.20	86.3	3.1	3.6%	Pass
105.0	99.80	103.3	3.5	3.4%	Pass
121.0	115.06	119.3	4.3	3.6%	Pass
133.0	128.15	131.3	3.2	2.4%	Pass
150.0	144.06	148.3	4.3	2.9%	Pass
166.0	158.30	164.3	6.0	3.7%	Pass
182.5	176.94	180.8	3.9	2.2%	Pass
199.0	192.01	197.3	5.3	2.7%	Pass
212.5	205.41	210.8	5.4	2.6%	Pass
226.5	219.59	224.8	5.3	2.3%	Pass
241.0	233.31	239.3	6.0	2.5%	Pass
	Max Abs. Error		**6.0**	**3.7%**	**PASS**
	Intercept	**-1.7**	**Slope**	**0.9736**	**PASS**



Date: 10/08/05 **Time:** Begin: 1233 End: 1315

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Instrument audited before winterization.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Date: 10/08/05.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:22:24	16:22:10	**-00:14**	**PASS**

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST									
Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1628	4.75	500	6.9	100.58	106.93	6.35	-7.3%	Pass	Date: 11/20/05.
					Max Abs. Error		**7.3%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Instrument installed on 11/20/05. Time for only one audit point due to weather and helicopter schedule.

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220-601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220-604 **S.N.#:** 51091789 **Range:** -40 to 150 **°C**

Date: 10/18/05
Begin: 1603
End: 1625

COLLOCATED THERMISTOR TEST											
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Ice Bath	0	0.00	0.08	0.08	Pass	0.08	0.08	Pass	0.00	Pass
Warm	15 to 25	19.87	19.88	0.01	Pass	19.88	0.01	Pass	0.00	Pass
Hot	35 to 45	40.55	40.68	0.13	Pass	40.68	0.13	Pass	0.00	Pass
		Max Abs. Error		0.13	**PASS**		0.13	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Checked thermistors after permanent bypass of Met-One aspirator junction box.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG (Pre-Conversion)*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 11/20/05
Begin: 1115
End: 1120

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: Values **before** installing pulse to mv converter.

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG (Pre-Conversion)*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	104.5	118.6	14.1	Fail
Compass	169.0	182.5	13.5	Fail
Compass	270.0	284.1	14.1	Fail
Compass	9.5	24.2	14.7	Fail
	Max Abs. Error		**14.7**	**FAIL**
	Mean Abs. Error		**14.1**	**ALERT**

Prior to installing converter **Date:** 11/20/05 **Time:** Begin: 1040 End: 1105

BENCH STAND ACCURACY & LINEARITY TEST											
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	34.9	4.9	Pass	150.0	149.9	-0.1	Pass	270.0	274.9	4.9	Pass
60.0	63.1	3.1	Pass	180.0	180.4	0.4	Pass	300.0	303.8	3.8	Pass
90.0	92.8	2.8	Pass	210.0	212.1	2.1	Pass	330.0	334.2	4.2	Pass
120.0	121.8	1.8	Pass	240.0	242.1	2.1	Pass	355.0	357.0	2.0	Pass
								Max Abs. Error		**4.9**	**PASS**
								Mean Abs. Error		**2.7**	**PASS**

Prior to installing converter **Date:** 11/20/05 **Time:** Begin: 1120 End: 1125

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.
Comments: RM Young wind sensor placed on a pulse to mv converter in order to free a DAS channel for the ETI Noah gauge. The RM Young extension arm was frozen up and knocked out of alignment just prior to in-situ azimuth audit.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG (Post-Conversion)*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 11/20/05
Begin: 1305
End: 1310

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: Values **after** installing pulse to mv converter.

SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	1.99	-0.06	N/A	Pass
1000	5.12	5.19	N/A	1.4	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.66	N/A	0.2	Pass
10000	51.20	51.22	N/A	0.0	Pass
	Max Abs. Error		**0.06**	**1.4**	**PASS**

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG (Post-Conversion)*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	32.3	2.3	Pass	150.0	153.2	3.2	Pass	270.0	272.0	2.0	Pass
60.0	61.2	1.2	Pass	180.0	182.1	2.1	Pass	300.0	301.2	1.2	Pass
90.0	93.9	3.9	Pass	210.0	212.2	2.2	Pass	330.0	330.8	0.8	Pass
120.0	124.4	4.4	Pass	240.0	242.3	2.3	Pass	355.0	355.1	0.1	Pass
								Max Abs. Error		**4.4**	**PASS**
								Mean Abs. Error		**2.1**	**PASS**

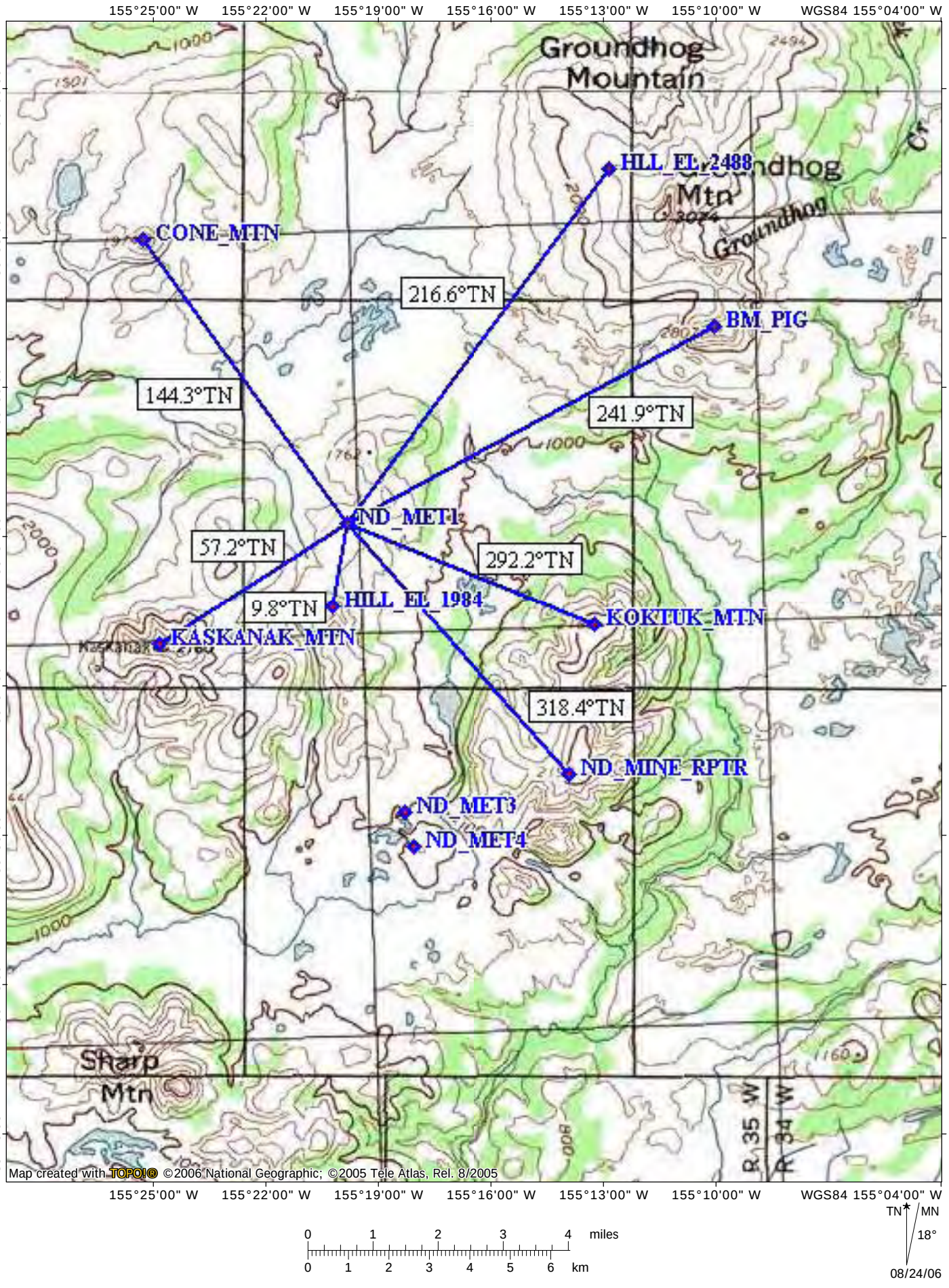
After installing converter **Date:** 11/20/05 **Time:** Begin: 1315 End: 1320

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	96.0	95.4	-0.6	Pass
Compass	167.5	165.4	-2.1	Pass
Compass	259.5	256.0	-3.5	Pass
Compass	6.0	1.6	-4.4	Pass
	Max Abs. Error		**4.4**	**PASS**
	Mean Abs. Error		**2.7**	**GOOD**

After installing converter **Date:** 11/20/05 **Time:** Begin: 1445 End: 1515

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.
Comments: RM Young wind sensor placed on a pulse to mv converter in order to make room for the ETI Noah gauge.


TOPO! map printed on 08/24/06 from "Pebble_Sta1_(08-16-06).tpo"
155°25'00" W
155°22'00" W
155°19'00" W
155°16'00" W
155°13'00" W
155°10'00" W
WGS84 155°04'00" W
60°00'00" N
59°58'00" N
59°56'00" N
59°54'00" N
59°52'00" N
59°50'00" N
59°48'00" N
59°46'00" N
Groundhog Mountain
HILL_EL_2488
Groundhog Mtn
CONE_MTN
216.6°TN
BM_PIG
144.3°TN
241.9°TN
ND_MET1
57.2°TN
292.2°TN
9.8°TN
HILL_EL_1984
KOKTUK_MTN
KASKANAK_MTN
318.4°TN
ND_MINE_RPTR
ND_MET3
ND_MET4
Sharp Mtn
R. 35 W.
R. 34 W.
Map created with TOPO!© ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
0 1 2 3 4 miles
0 1 2 3 4 5 6 km
TN MN
18°
08/24/06

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate No. 1750.01

ACCREDITED

Calibration complies with ISO 17025

Cert. No.:4000-1103531

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 51091789

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	10/18/05	A4A12029
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	A42238		
Temperature Probe	149	7/20/05	A4715024
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	93139		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 4/27/05 **Cal Due: 4/27/07**

Test Conditions: 24.0°C 41.0 %RH 1016 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C		N.A.		0.001	0.003	Y	-0.049	0.051	0.013	3.8:1
°C		N.A.		25.001	25.002	Y	24.951	25.051	0.013	3.8:1
°C		N.A.		59.999	59.999	Y	59.949	60.049	0.013	3.8:1
°C		N.A.		100.001	100.007	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full.

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.

Traceable® is a registered trademark of Control Company © 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052305.01

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 5/23/2005 Lab temperature 73.6 °F
Lab pressure 661.65 mm Hg

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)
24.00	24.13	0.13	-0.13
26.05	26.18	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.12	0.12	-0.12

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)

Reviewed: R L S Date: 5-23-05

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 Rpm - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 3 May 2005

Tested By EJC

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 17 November 2005

Tested By EC

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 8884 **TRACEABILITY CERTIFICATE NO.** 05090203

ISSUED TO: Hoefler Consulting Group

INSTRUMENT: 366-3, .003-.03 Inch Ounces Torque Watch, Waters Manufacturing, Inc, S/N 4864

DATE DONE: September 02, 2005 **DATE DUE:** September 01, 2006

CERTIFIED BY METROLOGIST: E.P. Young E.P. Young **TEMPERATURE:** 72 °F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

PROCEDURE/LIMITATIONS/ACCURACY STATEMENT: T.O. 33k6-4-2630-1. Accuracy: +/- 10 % of Full Scale.

COMPLIANCE

Alaska Calibration, Inc.'s calibration practices and procedures comply with the requirements of ANSI/SO/Z540-1 and ANS/ ISO/IEC17025: 2000 and relevant requirements of ISO 9002: 1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. This Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	33479
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	12/20/2005
		PO#:	Verbal
Contact:	Chris Lindsey	**Page:**	1
Dept:			
Gage:	.06-.60 oz Torque Watch	**Control:**	5042
Mfg:	Honeywell	**Model:**	.06-.60 oz Torque Watch
Location:		**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Cal-Tech Calibration, INC
Original Certificate (attached) # 1768

Reference HPI S/O # 13385

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers.
:

Last / Next Cal Dates: -->

Gage Status: PASS

Next Calibration Due: 12/20/2006

Certified By: Jorge Ashook Signature: Jorge A. Ashook

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 21C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994, ISO10012-1, and Houston Precision's Quality manual.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Gary Deterling Lab Manager.
*This Report shall not be reproduced except in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 1768
Instrument Make: Honeywell
Model: .06-.60" oz Torque Watch
S/N: None
ID: 5042

Date: 12-20-05
Temp: 74 Deg f
Humidity: 40%
Rec. In Tol.
Due Date: 12-20-06

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:

Accuracy: +\- 5% of full scale.

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1g-100g	822/265036-01	3-22-06

Inch Oz. Range	As Found	After Adjust	Final Reading
.06	.05	none	.05
.18	.17	none	.17
.36	.35	none	.35
.48	.47	none	.47
.60	.59	none	.59

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

Pebble 1
PSD Meteorological Monitoring Station

July 2006

Quality Assurance Systems Audit and Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
July 2006
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station On-Site Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Wind Speed 7
3.1.4 Wind Direction 8
3.1.5 Relative Humidity 9
3.1.6 Barometric Pressure 10
3.1.7 Precipitation 10
3.1.8 Evaporation 10
3.1.9 Solar Radiation 11

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 July 10-12, 2006 Performance Audit Summary 12

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble Station 1 is located just west of the mine ore body on top of a gentle, wind swept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan is collocated with a tipping precipitation gauge roughly 125 feet south of the tower. Between the tower and the weighing precipitation gauge is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Precipitation 1 (mm H_2O): ETI Model Noah II Weighing Gauge
- Precipitation 2 (mm H_2O): Met One Model 370 Tipping Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of this document, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question-answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

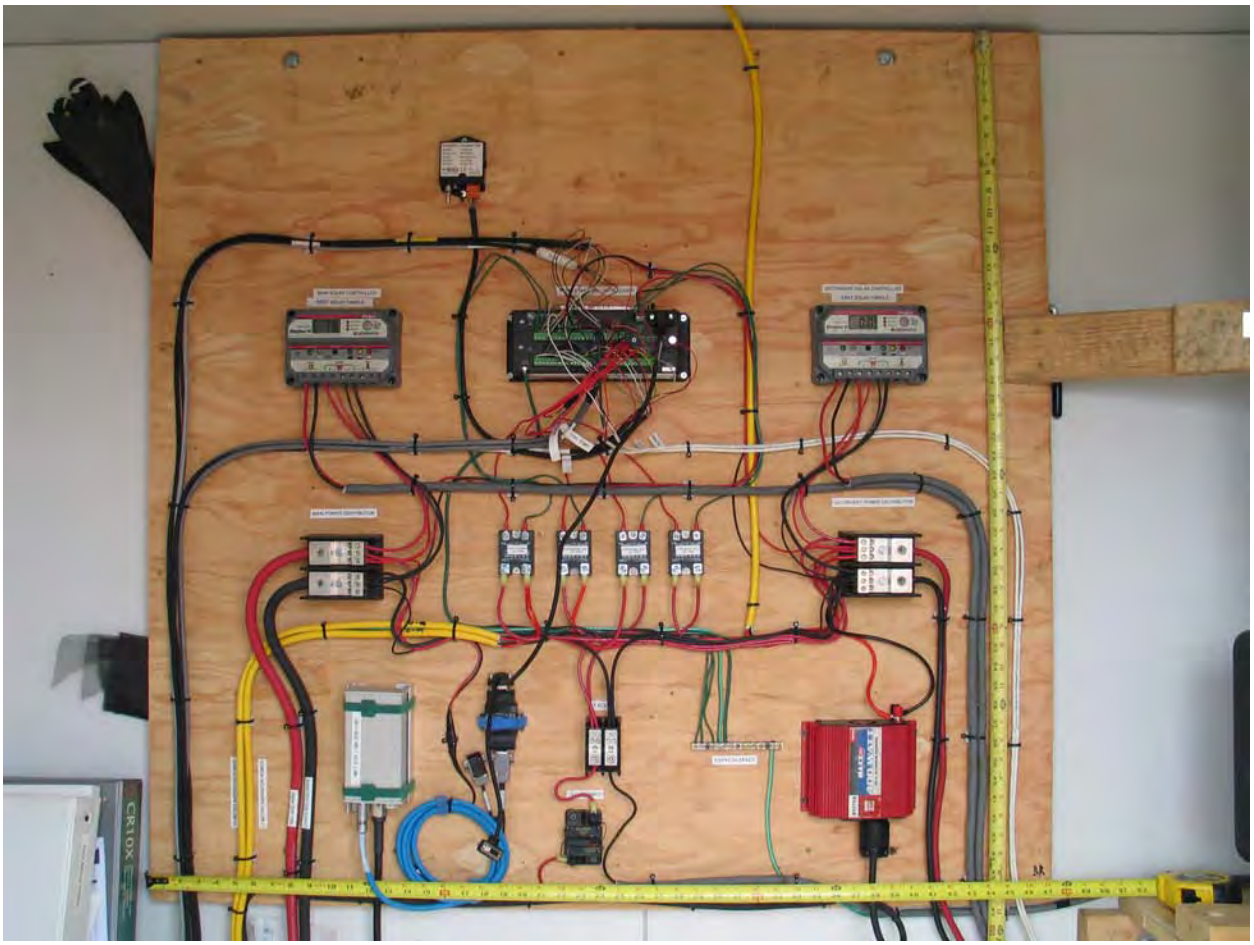
2.2 Meteorological Station On-Site Systems Audit

The on-site systems audit of the Pebble 1 station was conducted on July 10-12, 2006. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence to repel thirsty animals. All instrumentation wires

from the tower, precipitation gauge and evaporation gauge are housed in conduit in order to repel hungry animals. These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. A Campbell Scientific SC932A interface converts the DAS signal to a RS-232 DCE modem signal. Three FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 35-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a 21-Watt Global Thermoelectric Model 5030 Thermo-Electric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a Morningstar ProStar-15 solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three panels are dedicated to the aspirator fans, Climatronics heaters, shelter lighting and 120VAC power; wired through a Morningstar ProStar-15 solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the aspirator/heater power system. Aspirator fans and heaters are controlled through relays connected to the DAS control ports. Logic programmed into the DAS reduces power consumption by limiting heater use to weather conditions conducive to icing and turns fans off at night when voltage is low, considered an upset condition. Also the TEG power is routed through relays which shunt power to the critical DAS/sensor system during upset conditions.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately

identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit checklists
- Keep files on site containing copies of previous checklists.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor’s threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The

instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.4 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital

raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.5 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.8 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing enough water to bring the initial level to approximately 50 mm, the minimum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to the pan to raise the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper limit of approximately 240mm. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.1.9 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 1 station on July 10-12, 2005 with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits, except the ETI weighing precipitation gauge. The ETI gauge was found out of compliance, replaced and then re-audited. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 July 10-12, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time (pre-adjustment)	≤ ±5:00	Min:Sec	-3:05	Pass
Datalogger Time (post-adjustment)	≤ ±5:00	Min:Sec	0:06	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque (old bearings)	≤ 0.104	oz-in	0.070	Pass
Wind Direction Torque (new bearings)	≤ 0.104	oz-in	0.010	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.2	Pass
RM Young Wind System				
Wind Speed Torque (old bearings)	≤ 0.014	oz-in	0.013	Pass
Wind Speed Torque (new bearings)	≤ 0.014	oz-in	0.012	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.02	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.2	Pass
Wind Direction Torque (old bearings)	≤ 11	g-cm	11.0	Pass
Wind Direction Torque (new bearings)	≤ 11	g-cm	3.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.3	Pass
Wind Direction Linearity	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.8	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.5	Pass
Barometric Pressure	≤ ±3	Mbar	0.5	Pass
Weighing Precipitation (old gauge)	≤ ±10	% input	-17.8	Fail
Weighing Precipitation (new gauge)	≤ ±10	% input	8.8	Pass
Tipping Precipitation	≤ ±10	% input	-6.9	Pass
Evaporation	≤ ±10	% input	2.3	Pass
Solar Radiation	≤ ±5+Res	% input	-5.8	Pass

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Audit Date:** 10-Jul-06
Witnesses: Dominic Shallies **Auditor:** Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 3
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 4
3.2.1 Data Acquisition System (DAS) and Communications System 4
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 5
3.3 Station Location and Siting 6
3.3.1 Tower 6
3.3.2 Temperature and Relative Humidity Sensors 6
3.3.3 Wind Speed and Wind Direction Sensors 7
3.3.4 Relative Humidity and Barometric Pressure 7
3.3.5 Precipitation 7
3.3.6 Evaporation 8
3.3.7 Solar Radiation 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 11
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 13
8.0 COMMENTS AND SUGGESTIONS 13

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is wind swept and treeless with very little organics. There are virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

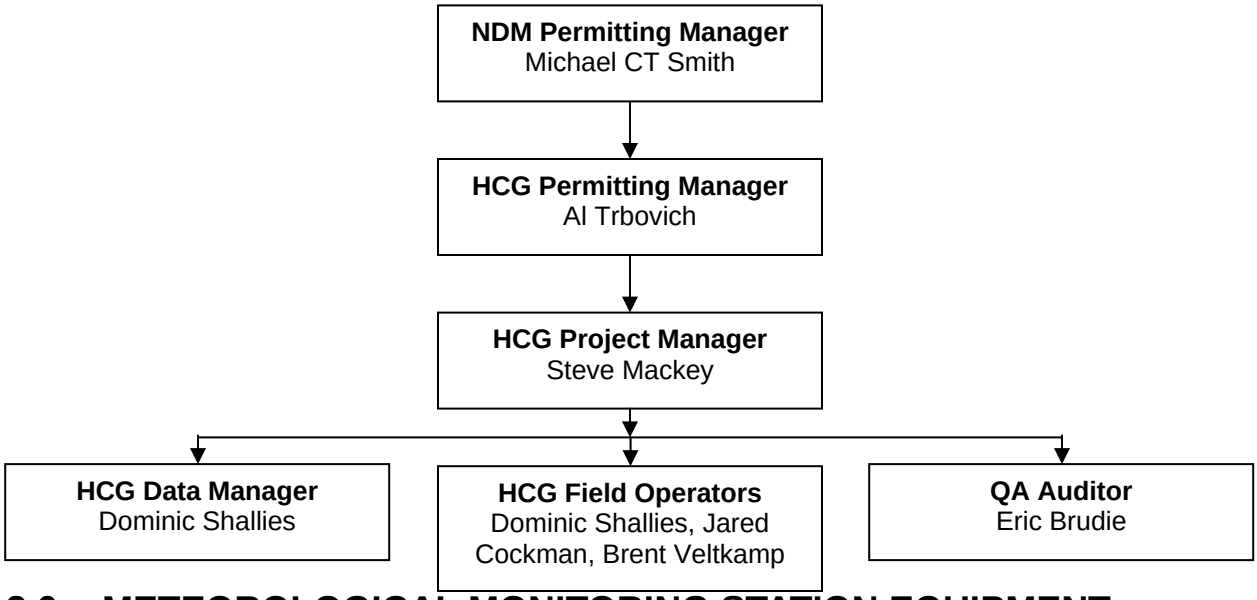
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.180' N
155° 20' W	155° 19.804' W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw diagram indicating the organizational structure of the monitoring program. Include names and titles:



3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR10X	X43107
DAS Wiring Panel	Campbell Scientific	CR10X	32768
Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Primary Wind Speed	Climatronics	F460-100075	5007
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Primary Wind Direction	Climatronics	F460-100076	4691
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	66725
Backup Wind Spd Prop (Old)[1]	RM Young	08254	63047
Backup Wind Spd Prop (New)[1]	RM Young	08254	63112
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Relative Humidity	Vaisala	HMP45AC	A1040018
Barometric Pressure	Vaisala	PTB101B	A0710039
Precipitation-Tipping	Met-One	370	D5874
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	334 – Original
Precipitation-Weighing	ETI	8205-00710 Noah II	343 – Replacement
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None
Solar Radiation	LI-COR	Li-200SX	PY49464

1. Prop SN 63047 broken during audit and replaced.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS to SC932A interface to FreeWave RF network to SixNet modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a 21-Watt propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can shunt the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not required.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings at HCG office.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resol. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

EPA Recommended Meteorological Instrument Standards (Continued)

Parameter	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10” range	Not Specified	N/A
Range:	2” to 10”	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Siting

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature and Relative Humidity Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.4 Relative Humidity and Barometric Pressure

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.
Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on wiring panel.

3.3.5 Precipitation

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.

Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.6 Evaporation

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

3.3.7 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	□ Yes ■ No	Comments: All operators have at least two years onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.

Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

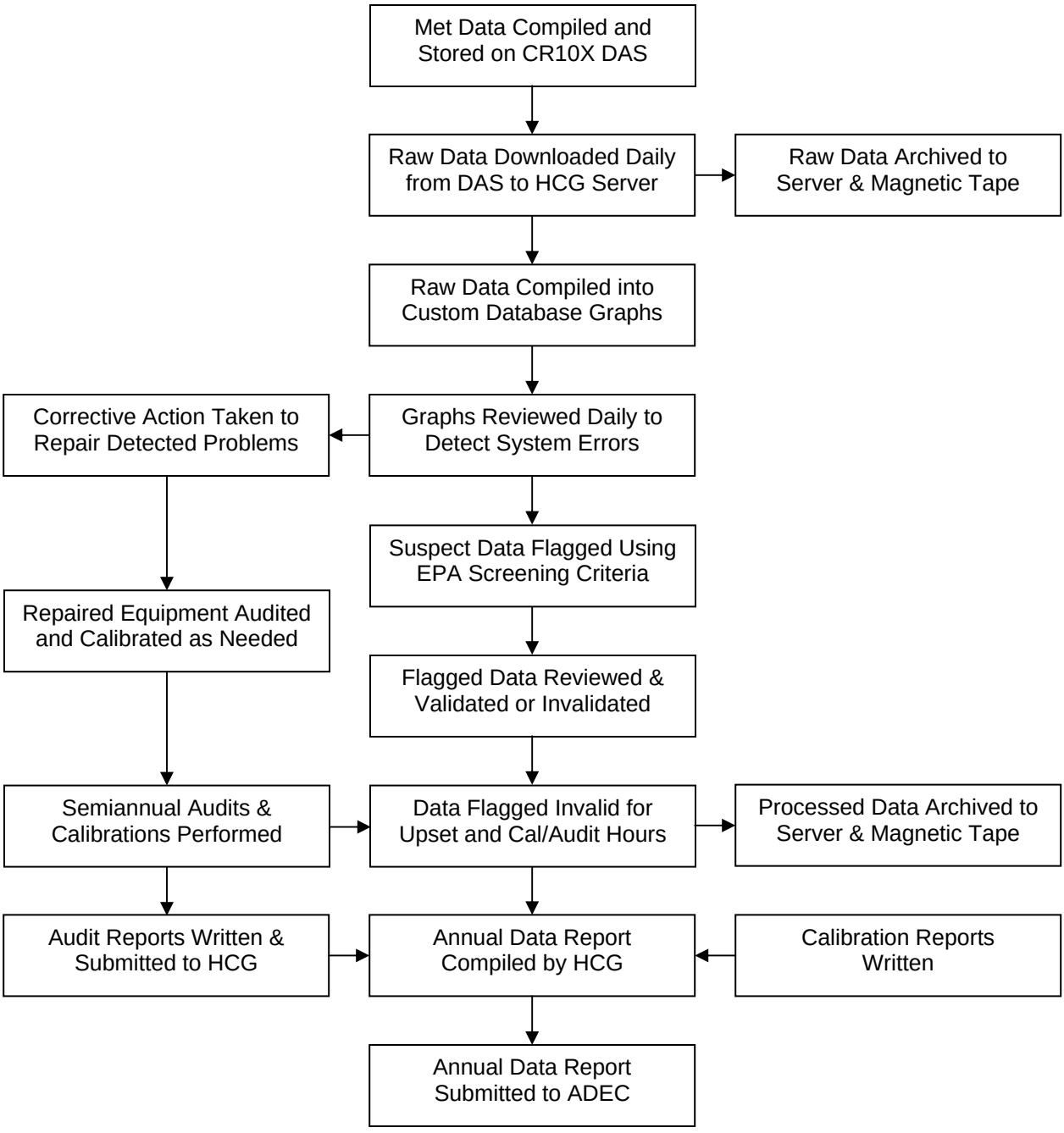
5.2 Station Monitoring Plan and Report Forms

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate Calibration Report Form and copies of previous calibrations and audits?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Isaac Bertschi
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Time check on 7/11/06 and reset and re-audited.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
9:23:30	9:20:25	**-03:05**	**PASS**
9:25:00	9:25:06	**00:06**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50	**°C**	
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50	**°C**	
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220-601	**S.N.#:**	51091749	**Range:**	-40 to 150	**°C**	
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220-604	**S.N.#:**	240301145	**Range:**	-40 to 150	**°C**	

Date: 07/11/06
Begin: 1100
End: 1130

Date: 07/10/06
Begin: 1540
End: 1700

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Very Cold	-35 to -45	-16.65	-16.18	0.47	Pass	-16.18	0.47	Pass	0.00	Pass
Cold	-15 to -25	-15.65	-15.17	0.48	Pass	-15.17	0.48	Pass	0.00	Pass
Ice Bath	0	-0.02	0.11	0.13	Pass	0.11	0.13	Pass	0.00	Pass
Warm	15 to 25	23.48	23.55	0.07	Pass	23.55	0.07	Pass	0.00	Pass
Hot	35 to 45	38.78	38.92	0.14	Pass	38.92	0.14	Pass	0.00	Pass
		Max Abs. Error		0.48	**PASS**		0.48	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Very cold test done on 7/11/06 with limited dry ice available, all other tests on 7/10/06.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:**	0.8 to 100	**% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100	**% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015							

COLLOCATED STANDARD TEST									
Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
07/10/06	1610	68.1	N/A	6.8	69.5	12.7	7.3	0.5	Pass
07/10/06	1615	69.6	N/A	7.1	71.5	12.6	7.6	0.5	Pass
						Max Abs. Error		0.5	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
07/10/06	1558	28.13	28.01	948.6	949.1	0.5	Pass
07/11/06	1540	28.17	28.05	949.9	949.9	0.0	Pass
				Max Abs. Error		0.5	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/24/06	
Audit Inst	Offset Amount
24.13	-0.13
26.24	-0.13
28.12	-0.12
30.11	-0.11
Intercept	**-0.22**
Slope	**0.0035**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5007 **Cup #:** 2284 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 07/10/06
Begin: 1635
End: 1645

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63112* **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 07/10/06
Begin: 1645
End: 1655

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.013	**PASS**
New	0.014	0.012	**PASS**

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.07	0.02	N/A	Pass
1000	5.12	5.18	N/A	1.2	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.58	N/A	-0.1	Pass
10000	51.20	51.30	N/A	0.2	Pass
	Max Abs. Error		**0.02**	**1.2**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: *Prop # 63047 broken during audit & replaced with prop # 63112.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

• *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4691 **Vane #:** 1440 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	0.010	**PASS**

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass (Before removal-07/10/06)	122.5	126.0	3.5	Pass
Cone Mtn (Before removal-7/10/06)	144.3	149.0	4.7	Pass
Cone Mtn (Before removal-7/11/06)	144.3	148.9	4.6	Pass
		Max Abs. Error	**4.7**	**PASS**
		Mean Abs. Error	**4.3**	**ALERT**

Date: 7/10/06 & 07/11/06
Time: Begin: 1425 End: 1550

CROSSARM-VANE ACCUR. & LIN. TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.8	0.8	Pass
West	270.0	272.1	2.1	Pass
North	360.0	0.1	0.1	Pass
East	90.0	91.3	1.3	Pass
North	360.0	0.1	0.1	Pass
West	270.0	271.8	1.8	Pass
South	180.0	180.8	0.8	Pass
East	90.0	91.8	1.8	Pass
	Max Abs. Error		**2.1**	**PASS**
	Mean Abs. Error		**1.1**	**PASS**

Time: Begin: 1556 End: 1600
Date: 07/10/06

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.2	0.2	Pass	330.0	332.1	2.1	Pass
60.0	60.0	0.0	Pass	355.0	356.3	1.3	Pass
90.0	90.6	0.6	Pass	30.0	29.7	-0.3	Pass
120.0	120.3	0.3	Pass	60.0	60.8	0.8	Pass
150.0	150.0	0.0	Pass	90.0	91.4	1.4	Pass
180.0	180.5	0.5	Pass	120.0	121.2	1.2	Pass
210.0	210.0	0.0	Pass	150.0	150.3	0.3	Pass
240.0	240.4	0.4	Pass	180.0	180.3	0.3	Pass
270.0	270.6	0.6	Pass	**Max Abs. Error**		**2.1**	**PASS**
300.0	300.4	0.4	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Date: 07/10/06 **Time:** Begin: 1550 End: 1553

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	145.3	1.0	Pass
Peak 1984	9.8	9.1	-0.7	Pass
Koktuk Mtn	292.2	293.6	1.4	Pass
Hill 2488	216.5	218.0	1.5	Pass
BM Pig	241.9	243.3	1.4	Pass
Compass	81.0	82.0	1.0	Pass
Met repeater	318.4	320.6	2.2	Pass
		Max Abs. Error	**2.2**	**PASS**
		Mean Abs. Error	**1.3**	**GOOD**

Date: 07/11/06
Time: Begin: 1450 End: 1530

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Extremely windy on 07/10/06, only able to capture two points on that day prior to removal from the tower. On 07/11/06 one single point checked and then crossarm re-aligned on muffler clamp and re-audited.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	11.0	**PASS**
New	11.0	3.0	**PASS**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	122.5	123.5	1.0	Pass
Compass	120.0	121.6	1.6	Pass
Cone Mtn	144.3	146.4	2.1	Pass
Cone Mtn - Post Audit	144.3	145.8	1.5	Pass

Date: 07/10/06 **Max Abs. Error** **2.1** **PASS**
Time: Begin: 1420 End: 1550 **Mean Abs. Error** **1.6** **GOOD**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.5	1.5	Pass	150.0	154.3	4.3	Pass	270.0	271.4	1.4	Pass
60.0	62.4	2.4	Pass	180.0	183.1	3.1	Pass	300.0	300.9	0.9	Pass
90.0	93.5	3.5	Pass	210.0	212.7	2.7	Pass	330.0	330.1	0.1	Pass
120.0	123.8	3.8	Pass	240.0	241.7	1.7	Pass	355.0	354.6	-0.4	Pass

Date: 07/10/06 **Max Abs. Error** **4.3** **PASS**
Time: Begin: 1700 End: 1710 **Mean Abs. Error** **2.1** **PASS**

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	144.8	0.5	Pass
Peak 1984	9.8	10.4	0.6	Pass
Koktuk Mtn	292.2	290.6	-1.6	Pass
Hill 2488	216.6	213.4	-3.2	Pass
BM Pig	241.9	238.1	-3.8	Pass
Compass	81.0	82.8	1.8	Pass
Met repeater	318.4	317.7	-0.7	Pass

Date: 07/11/06 **Max Abs. Error** **3.8** **PASS**
Time: Begin: 1440 End: 1530 **Mean Abs. Error** **1.7** **GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Few data points taken under extremely windy conditions on 07/10/06. Bearings replaced and instrument returned to tower and single post-audit point taken after return to tower. Full suite of post-audit values taken under less windy conditions on 07/11/06.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *WEIGHING PRECIPITATION GAUGE AUDIT (PRE-REPLACEMENT)*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1450	2.25	1600	21.9	0.00	19.30	19.30	-12.0%	Fail	
1455		1600	21.9	19.30	38.61	19.31	-11.9%	Fail	
1501		1600	21.9	0.00	19.30	19.30	-12.0%	Fail	
1505	5.75	1600	21.9	19.30	33.02	13.72	N/A	Fail	Bottle poured in too fast, very low reading.
1512		1600	21.9	33.02	51.56	18.54	-15.5%	Fail	
1530		1600	21.9	51.56	69.85	18.29	-16.6%	Fail	
1545	8.50	1600	21.9	69.85	88.14	18.29	-16.6%	Fail	
1610		1600	21.9	0.00	18.29	18.29	-16.6%	Fail	
1625		1600	21.9	18.29	36.32	18.03	-17.8%	Fail	
1633	11.00	1600	21.9	36.32	46.99	10.67	N/A	Fail	Instrument stopped working at 11".
					Max Abs. Error		**17.8%**	**FAIL**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Audit date 07/11/06. Instrument had quit working at 11", before being drained for audit. Instrument consistently read low with extreme low values disregarded as noted.

● *WEIGHING PRECIPITATION GAUGE AUDIT (POST-REPLACEMENT)*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1650	2.00	1600	21.9	48.77	72.64	23.87	8.8%	Pass	Date: 07/11/06.
1655		1600	21.9	72.64	96.51	23.87	8.8%	Pass	Date: 07/11/06.
0650		1600	21.9	0.00	22.35	22.35	1.9%	Pass	Date: 07/12/06.
0701	5.50	1600	21.9	0.25	23.37	23.12	5.4%	Pass	Date: 07/12/06.
0710		1600	21.9	23.37	46.23	22.86	4.2%	Pass	Date: 07/12/06.
0721	7.25	1600	21.9	46.23	69.34	23.11	5.4%	Pass	Date: 07/12/06.
0729		1600	21.9	69.34	92.20	22.86	4.2%	Pass	Date: 07/12/06.
0735	9.13	1600	21.9	92.20	115.06	22.86	4.2%	Pass	Date: 07/12/06.
0741		1600	21.9	115.06	135.64	20.58	-6.2%	Pass	Date: 07/12/06.
0749	10.75	1600	21.9	135.64	158.50	22.86	4.2%	Pass	Date: 07/12/06.
	`								
					Max Abs. Error		**8.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Gauge left with 3.75" of water, glycol & oil.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1546	800	24.7	0.8	10.6	0.0	13.8	1627	23.6	-4.5%	Pass	CR510 on 05/04/06.
1627	800	24.7	13.8	0.0	0.0	38.0	1700	24.2	-2.0%	Pass	CR510 on 05/04/06.
1240	400	12.3	0.0	5.2	0.0	7.4	1500	12.6	2.4%	Pass	CR510 on 07/10/06.
1020	800	24.7	0.0	20.6	0.0	2.4	1116	23.0	-6.9%	Pass	Station CR01X on 07/11/06.
1117	800	24.7	2.4	0.0	0.0	26.2	1158	23.8	-3.6%	Pass	Station CR01X on 07/11/06.
1202	650	20.0	0.0	0.2	0.0	19.8	1255	20.0	0.0%	Pass	Mostly full tip retrieved on
											07/12/06 at 0700.
							Max Abs. Error	**6.9%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Initial tests on 05/04/06 when tipping gauge installed.

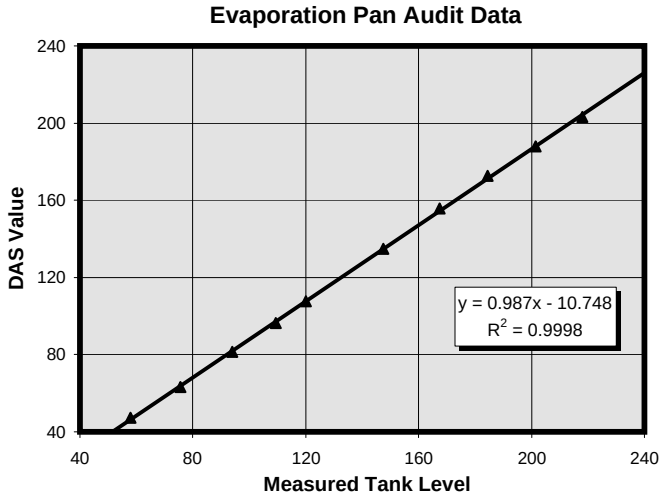
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
58.0	47.21	47.3	0.0	0.1%	Pass
75.5	63.30	64.8	1.5	2.2%	Pass
94.0	81.61	83.3	1.6	2.0%	Pass
109.5	96.53	98.8	2.2	2.3%	Pass
120.0	107.70	109.3	1.6	1.4%	Pass
147.5	134.74	136.8	2.0	1.5%	Pass
167.5	155.71	156.8	1.0	0.7%	Pass
184.5	172.74	173.8	1.0	0.6%	Pass
201.5	187.80	190.8	3.0	1.5%	Pass
218.0	203.30	207.3	4.0	1.9%	Pass
	Max Abs. Error		**4.0**	**2.3%**	**PASS**
	Intercept	**-10.7**	**Slope**	**0.9870**	**PASS**



Date: 07/12/06 **Time:** Begin: 900 End: 1045

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Adjusted chain on sensor wheel to match tank to DAS readings after audit. Single point reading: Tank=139mm, DAS=139.12mm.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

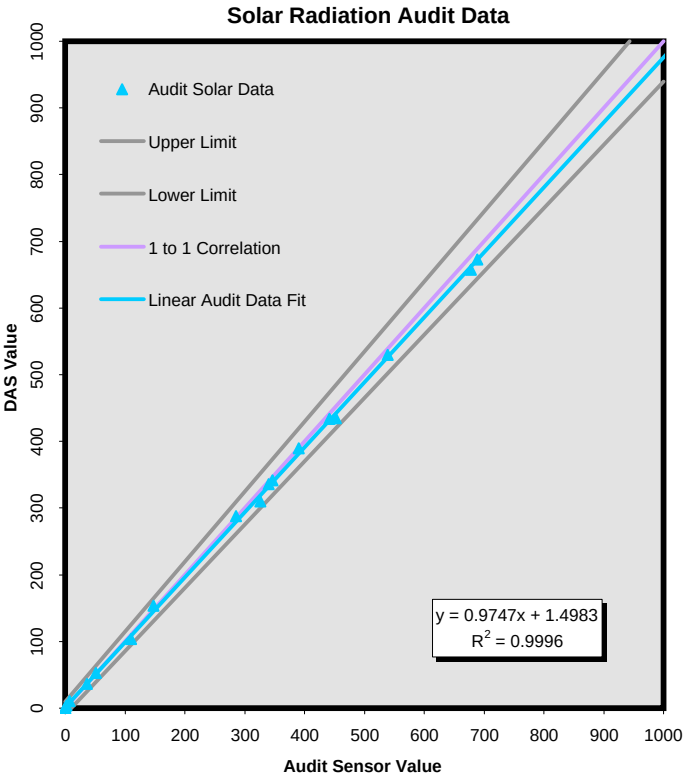
Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.0 **Meters**

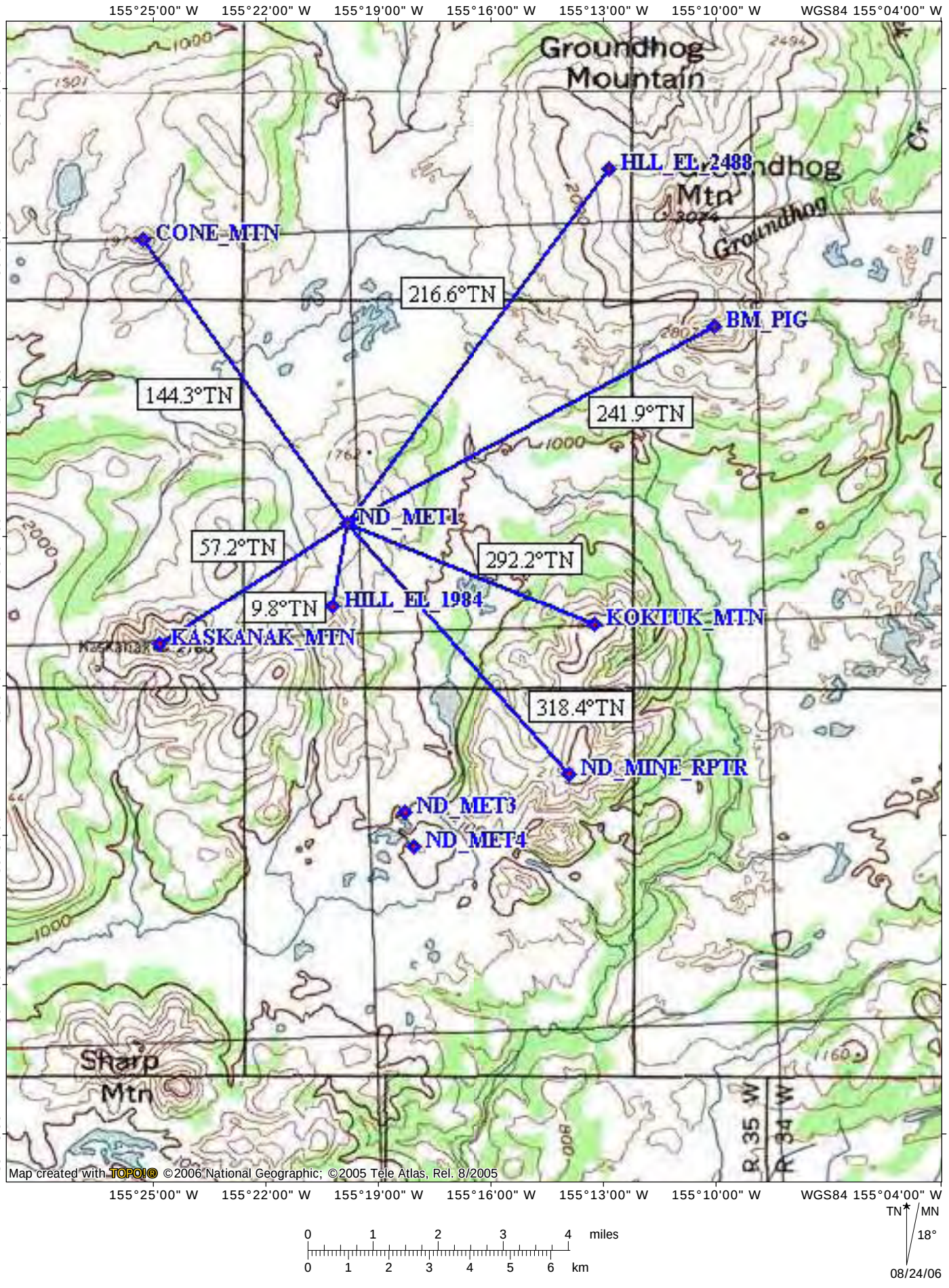
Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY49464 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION SENSOR TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1400	441.2	434.2	-7.0	±32.1	-1.6%	Pass
1500	678.1	657.5	-20.6	±43.9	-3.0%	Pass
1600	688.8	672.4	-16.4	±44.4	-2.4%	Pass
1700	452.3	434.5	-17.8	±32.6	-3.9%	Pass
1800	326.1	309.6	-16.5	±26.3	-5.1%	Pass
1900	389.9	390.0	0.1	±29.5	0.0%	Pass
2000	346.8	341.2	-5.6	±27.3	-1.6%	Pass
2100	109.7	103.3	-6.4	±15.5	-5.8%	Pass
2200	36.0	36.3	0.3	±11.8	n/a	Pass
2300	2.2	3.4	1.2	±10.1	n/a	Pass
2400	0.0	0.1	0.1	±10.0	n/a	Pass
100	0.0	0.0	0.0	±10.0	n/a	Pass
200	0.1	0.0	-0.1	±10.0	n/a	Pass
300	0.2	0.0	-0.2	±10.0	n/a	Pass
400	0.2	0.3	0.1	±10.0	n/a	Pass
500	8.0	10.4	2.4	±10.4	n/a	Pass
600	51.5	52.7	1.2	±12.6	2.2%	Pass
700	147.9	153.1	5.2	±17.4	3.5%	Pass
800	285.5	288.2	2.7	±24.3	0.9%	Pass
900	340.2	336.2	-4.0	±27.0	-1.2%	Pass
1000	539.1	529.3	-9.8	±37.0	-1.8%	Pass
Corr. Val	**0.9998**	**Max Abs. Percent Error**			**5.8%**	**PASS**
R² Value	**0.9996**	**Intercept**	**1.5**	**Slope**	**0.9747**	**PASS**



Begin Date: 07/10/06 **End Date:** 07/11/06

PSD Limits: Max Absolute Error <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Comments: None.


TOPO! map printed on 08/24/06 from "Pebble_Sta1_(08-16-06).tpo"
155°25'00" W
155°22'00" W
155°19'00" W
155°16'00" W
155°13'00" W
155°10'00" W
WGS84 155°04'00" W
60°00'00" N
59°58'00" N
59°56'00" N
59°54'00" N
59°52'00" N
59°50'00" N
59°48'00" N
59°46'00" N
Groundhog Mountain
HILL_EL_2488
Groundhog Mtn
CONE_MTN
216.6°TN
BM_PIG
144.3°TN
241.9°TN
ND_MET1
57.2°TN
292.2°TN
9.8°TN
HILL_EL_1984
KOKTUK_MTN
KASKANAK_MTN
318.4°TN
ND_MINE_RPTR
ND_MET3
ND_MET4
Sharp Mtn
R. 35 W.
R. 34 W.
Map created with TOPO!© ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
0 1 2 3 4 miles
0 1 2 3 4 5 6 km
TN MN
18°
08/24/06

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate 1750.01

Calibration complies with ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 4000-1338226

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Dominic Shallies, Anchorage, AK 99503 U.S.A. (RMA:933478)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	12/08/06	A5B28010-1
Thermistor Module	A17118	8/12/06	A5819038
Temperature Calibration Bath TC179	A45240		
Temperature Calibration Bath TC191	A42238		
Temperature Probe	157	9/01/06	A5815063
Thermistor Module	A27129	7/05/06	1000189003

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 6/07/06 **Cal Due: 6/07/07**

Test Conditions: 25.5°C 39.0 %RH 1013 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.000	0.072	N	0.000	-0.004	Y	-0.050	0.050	0.013	3.8:1
°C	25.000	25.020	Y	25.000	24.999	Y	24.950	25.050	0.013	3.8:1
°C	60.002	59.999	Y	60.001	59.999	Y	59.951	60.051	0.013	3.8:1
°C	100.002	100.001	Y	100.002	100.004	Y	99.952	100.052	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company

© 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052406. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 05/24/06 Lab temperature 72.8 °F
Lab pressure 663.1 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.13	0.13	-0.13
26.11	26.24	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.11	0.11	-0.11

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R Sanders Date: 5-24-06

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 RPM - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 24 May 2006

Tested By EJC

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 17 November 2005

Tested By EC

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 8884 **TRACEABILITY CERTIFICATE NO.** 05090203

ISSUED TO: Hoefler Consulting Group

INSTRUMENT: 366-3, .003-.03 Inch Ounces Torque Watch, Waters Manufacturing, Inc, S/N 4864

DATE DONE: September 02, 2005 **DATE DUE:** September 01, 2006

CERTIFIED BY METROLOGIST: E.P. Young E.P. Young **TEMPERATURE:** 72 °F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

PROCEDURE/LIMITATIONS/ACCURACY STATEMENT: T.O. 33k6-4-2630-1. Accuracy: +/- 10 % of Full Scale.

COMPLIANCE

Alaska Calibration, Inc.'s calibration practices and procedures comply with the requirements of ANSI/SO/Z540-1 and ANS/ ISO/IEC17025: 2000 and relevant requirements of ISO 9002: 1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. This Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	33479
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	12/20/2005
		PO#:	Verbal
Contact:	Chris Lindsey	**Page:**	1
Dept:			
Gage:	.06-.60 oz Torque Watch	**Control:**	5042
Mfg:	Honeywell	**Model:**	.06-.60 oz Torque Watch
Location:		**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Cal-Tech Calibration, INC
Original Certificate (attached) # 1768

Reference HPI S/O # 13385

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers.
:

Last / Next Cal Dates: -->

Gage Status: PASS

Next Calibration Due: 12/20/2006

Certified By: Jorge Ashook Signature: Jorge A. Ashook

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 21C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994, ISO10012-1, and Houston Precision's Quality manual.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Gary Deterling Lab Manager.
*This Report shall not be reproduced except in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 1768
Instrument Make: Honeywell
Model: .06-.60" oz Torque Watch
S/N: None
ID: 5042

Date: 12-20-05
Temp: 74 Deg f
Humidity: 40%
Rec. In Tol.
Due Date: 12-20-06

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:

Accuracy: +\- 5% of full scale.

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1g-100g	822/265036-01	3-22-06

Inch Oz. Range	As Found	After Adjust	Final Reading
.06	.05	none	.05
.18	.17	none	.17
.36	.35	none	.35
.48	.47	none	.47
.60	.59	none	.59

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.33×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}.

Shipped to:
Hoefler Consulting Group
Anchorage, AK

Date of Test: October 20, 2005

In Charge of Test: R. T. Eppley

S.O. Number: 60557
Date: January 11, 2006

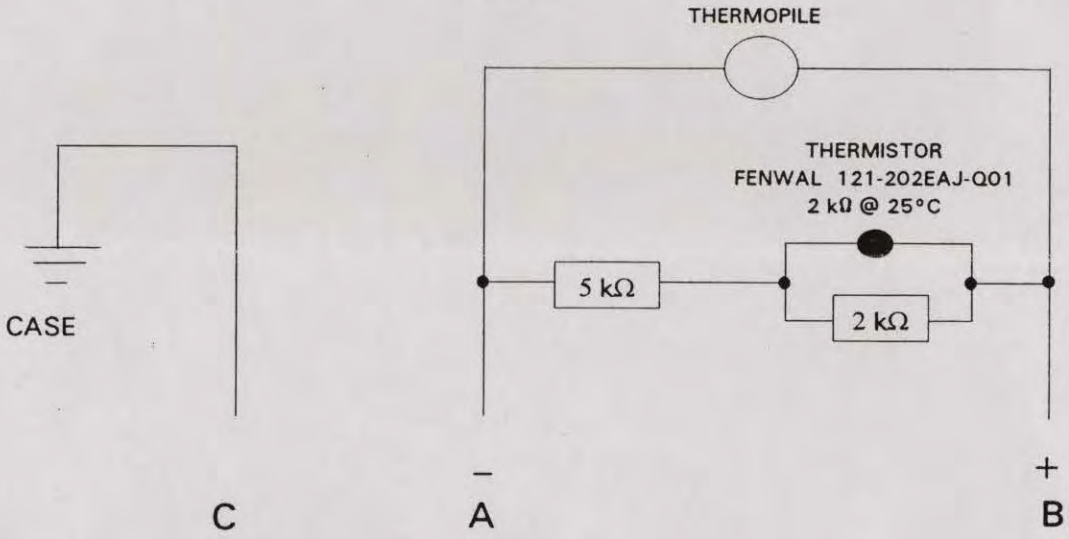
Reviewed by: George L. Kirk

Remarks:

PRECISION SPECTRAL PYRANOMETER
MODEL PSP

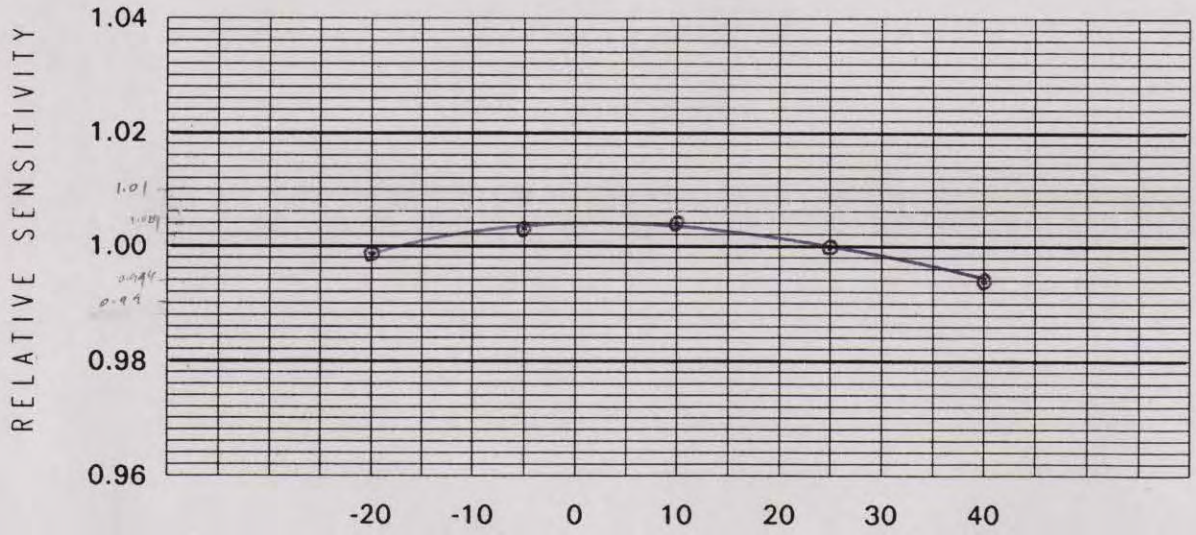
INSTRUMENT SERIAL NUMBER: 34377F3

INTERNAL WIRING



PIN CONNECTIONS ON PLUG

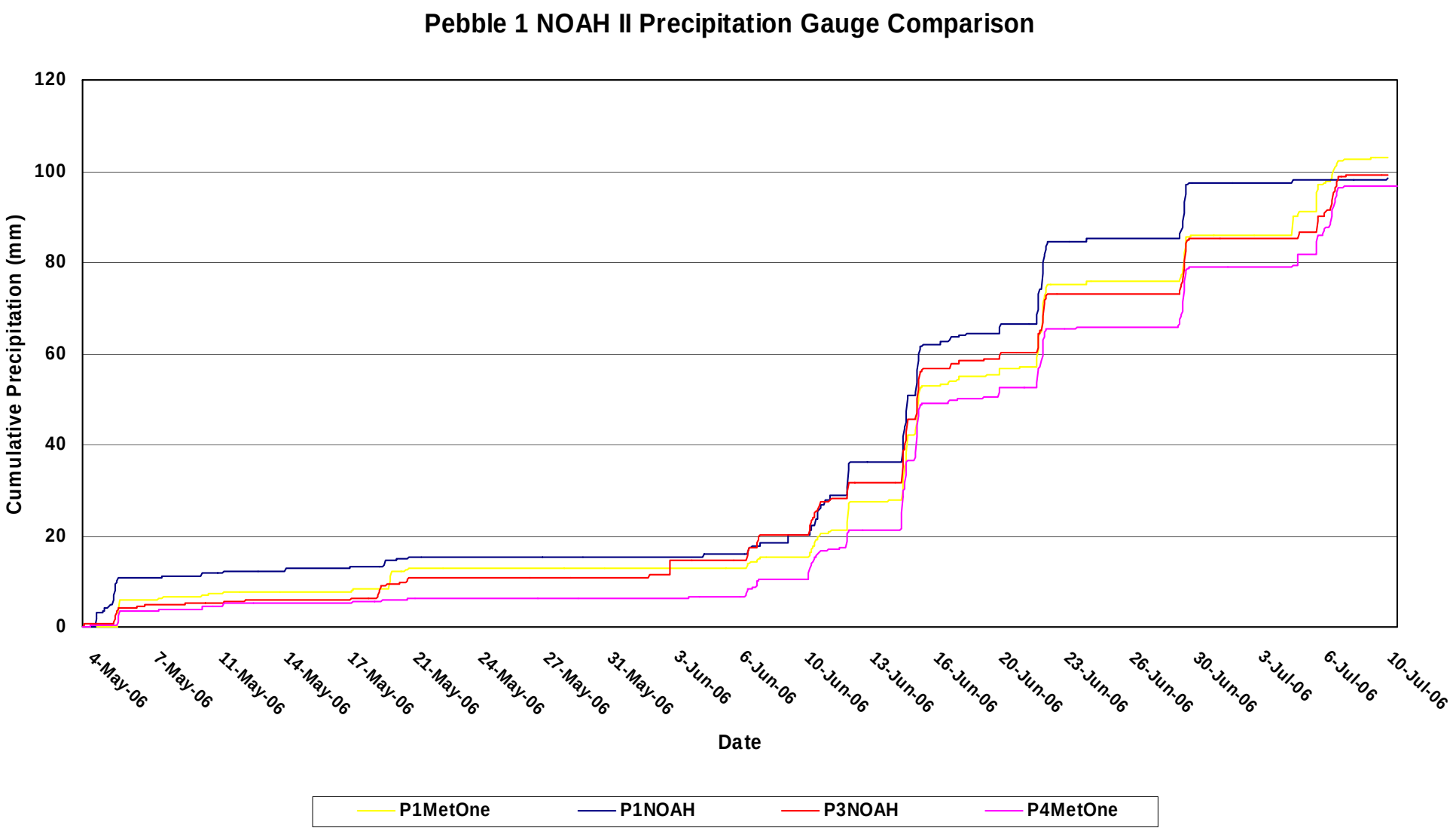
TEMPERATURE DEPENDENCE



EPLAB

TESTED BY: R. Eppeman

DATE: Oct 18, 2005


Pebble 1 NOAH II Precipitation Gauge Comparison
Cumulative Precipitation (mm)
120
100
80
60
40
20
0
4-May-06
7-May-06
11-May-06
14-May-06
17-May-06
21-May-06
24-May-06
27-May-06
31-May-06
3-Jun-06
6-Jun-06
10-Jun-06
13-Jun-06
16-Jun-06
20-Jun-06
23-Jun-06
26-Jun-06
30-Jun-06
3-Jul-06
6-Jul-06
10-Jul-06
Date
P1MetOne
P1NOAH
P3NOAH
P4MetOne

Appendix D

Validated Continuous Data Summaries

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.8	9.5	10.0	9.5	9.0	9.3	9.6	10.0	10.1	11.1	11.4	11.8	12.1	12.5	12.3	12.1	13.3	12.8	12.3	11.8	11.4	10.8	10.4	10.3	13.3	9.0	11.0
2	9.9	9.9	9.9	9.7	9.2	8.8	9.4	10.2	11.0	11.6	12.2	12.7	12.5	11.4	12.6	12.2	11.5	11.5	11.6	11.8	11.2	10.7	10.5	10.3	12.7	8.8	10.9
3	10.3	10.1	9.3	9.4	9.3	9.2	9.2	9.4	10.2	11.4	12.8	14.6	14.2	14.3	14.4	14.1	13.1	13.6	13.5	12.9	12.3	11.5	10.9	10.4	14.6	9.2	11.7
4	9.7	9.8	9.6	9.5	9.6	9.9	10.2	10.9	11.5	11.9	12.2	12.7	12.7	13.1	13.2	13.2	13.3	12.2	11.5	12.2	12.3	11.7	10.6	10.4	13.3	9.5	11.4
5	10.2	10.1	10.0	10.2	10.2	10.2	10.3	10.8	11.2	11.3				13.6	14.1	14.5	14.7	14.8	15.0	14.2	13.2	12.6	11.4	11.0	15.0	10.0	12.1
6	10.9	10.5	10.1	9.4	9.1	8.9	8.8	10.2	11.1	12.0	12.9	13.5	14.5	15.1	15.7	15.7	15.4	14.9	14.8	13.7	13.5	12.4	11.5	10.9	15.7	8.8	12.3
7	10.9	10.6	10.7	10.5	9.9	9.4	9.1	9.3	10.2	10.9	12.0	12.2	12.8	13.3	14.1	14.5	15.4	15.4	15.2	14.9	13.7	12.2	11.0	11.0	15.4	9.1	12.0
8	10.8	11.1	10.3	10.3	10.2	10.2	10.8	11.9	13.4	14.6	15.7	16.8	18.2	19.1	19.9	20.5	20.7	20.6	20.2	19.0	18.4	17.5	16.0	15.3	20.7	10.2	15.5
9	15.0	14.3	14.4	14.2	14.5	14.2	14.4	15.2	16.2	17.2	18.1	18.6	19.2	19.6	19.9	20.2	20.1	19.8	18.7	17.2	15.8	14.7	13.7	13.0	20.2	13.0	16.6
10	11.9	12.3	11.5	10.7	10.2	9.9	10.5	10.7	11.4	13.4	15.2	16.0	17.1	17.9	18.4	18.8	18.7	18.9	19.1	18.1	16.1	15.0	13.9	12.7	19.1	9.9	14.5
11	12.4	11.8	11.3	11.4	11.1	10.9	11.5	12.9	14.4	15.8	17.1	18.1	19.2	20.4	21.4	22.3	23.2	23.5	23.6	23.2	21.2	19.8	18.5	18.0	23.6	10.9	17.2
12	17.9	16.6	15.7	15.2	15.0	14.8	16.0	17.2	18.0	19.1	20.4	21.5	22.4	22.8	23.0	22.7	22.3	21.5	20.4	18.8	17.4	16.5	15.8	15.4	23.0	14.8	18.6
13	15.2	15.3	15.6	16.0	15.7	15.0	16.3	17.2	17.1	18.4	20.0	21.2	22.1	22.6	22.6	21.6	20.9	18.5	17.8	16.5	14.8	14.5	14.9	14.8	22.6	14.5	17.7
14	14.5	14.1	13.8	13.1	12.0	11.0	13.2	9.4	10.1	12.6	14.9	16.8	18.7	19.6	20.2	20.6	20.3	19.5	19.1	16.9	14.3	13.0	12.0	13.0	20.6	9.4	15.1
15	13.7	12.9	10.2	9.6	9.0	9.3	9.7																		13.7	9.0	10.6
16																											
17																											
18																											
19											14.6	16.1	17.5	18.4	18.3	17.9	17.0	16.2	14.7	13.0	11.1	9.0	8.6	7.9	18.4	7.9	14.3
20	7.5	8.1	7.8	8.3	8.4	8.2	8.9	9.1	9.8			12.1	12.7	13.1	13.3	13.3	13.3	12.9	12.4	11.0	10.1	9.8	9.8	9.7	13.3	7.5	10.4
21	9.1	8.8	8.8	8.8	8.6	8.3	7.9	7.6	8.1	9.1	10.6	11.4	11.1	12.1	12.5	13.3	13.8	14.1	13.9	12.2	10.5	8.4	7.7	7.5	14.1	7.5	10.2
22	7.3	7.5	7.9	8.1	8.3	8.1	7.7	7.4	7.6	8.5	8.6	9.7	10.4	9.5	9.3	8.8	8.3	8.3	8.3	8.3	8.8	9.4	9.8	10.3	10.4	7.3	8.6
23	10.6	10.6	10.7	10.7	10.7	9.5	8.5	7.7	7.8	7.9	7.9	8.0	8.0	8.1	8.0	8.1	8.1	8.0	7.9	7.7	7.4	7.1	6.8	6.6	10.7	6.6	8.4
24	6.5	6.5	6.8	7.0	7.3	7.6	7.7	7.9	8.2	8.9	8.8	8.5	8.9	10.3	10.6	11.2	10.9	10.7	10.3	9.9	7.8	6.3	5.5	5.0	11.2	5.0	8.3
25	4.9	4.7	4.8	4.3	5.1	5.4	5.8	6.0	7.1	8.1	9.1	9.6	10.1	10.7	11.1	10.8	11.7	11.5	11.3	10.1	8.1	6.6	5.8	5.6	11.7	4.3	7.8
26	5.3	5.0	4.4	3.4	2.5	2.5	2.4	3.9	4.9	6.4	7.8	9.2	10.6	11.4	11.9	12.1	10.4	8.7	7.6	7.4	7.6	7.5	6.5	5.6	12.1	2.4	6.9
27	5.0	5.1	4.5	4.4	4.2	3.8	3.2	4.6	6.2	7.5	8.7	9.9	10.9	11.2	11.3	10.5	9.9	9.0	8.2	8.0	7.8	7.5	7.3	7.1	11.3	3.2	7.3
28	7.2	7.4	7.4	7.4	7.5	7.3	7.4	7.9	8.0	8.6	9.2	10.3	10.7	11.3	11.4	10.1	9.0	8.2	8.1	7.6	7.3	7.2	7.1	7.0	11.4	7.0	8.4
29	7.2	7.2	7.1	6.8	6.7	6.8	7.1	7.2	7.3	7.6	7.7	8.1	8.4	8.6	8.9	9.4	9.6	9.5	9.5	9.2	8.7	8.4	8.2	7.9	9.6	6.7	8.0
30	7.6	7.2	7.1	7.2	7.2	6.9	6.8	7.1	7.5	8.8	9.0	9.5	9.5	10.7	10.6	10.7	10.6	10.7	10.5	10.4	9.8	8.7	8.1	7.9	10.7	6.8	8.7
31	7.1	6.7	6.5	6.9	7.4	7.0	6.3	6.1	6.8	7.5	8.2	8.3	9.1	10.1	9.9	9.5	9.1	8.5	9.4	8.0	6.9	5.7	5.1	4.0	10.1	4.0	7.5
Max.	**17.9**	**16.6**	**15.7**	**16.0**	**15.7**	**15.0**	**16.3**	**17.2**	**18.0**	**19.1**	**20.4**	**21.5**	**22.4**	**22.8**	**23.0**	**22.7**	**23.2**	**23.5**	**23.6**	**23.2**	**21.2**	**19.8**	**18.5**	**18.0**	**23.6**		
Min.	**4.9**	**4.7**	**4.4**	**3.4**	**2.5**	**2.5**	**2.4**	**3.9**	**4.9**	**6.4**	**7.7**	**8.0**	**8.0**	**8.1**	**8.0**	**8.1**	**8.1**	**8.0**	**7.6**	**7.4**	**6.9**	**5.7**	**5.1**	**4.0**		**2.4**	
Avg.	**9.9**	**9.8**	**9.5**	**9.3**	**9.2**	**9.0**	**9.2**	**9.5**	**10.2**	**11.2**	**12.2**	**13.0**	**13.6**	**14.1**	**14.4**	**14.4**	**14.2**	**13.8**	**13.5**	**12.7**	**11.7**	**10.9**	**10.3**	**9.9**			**11.5**

Total Hours in Month 744 **Hours Data Available** 640 **Data Recovery** 86.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	1.8	0.9	0.9	0.4	-0.3	-0.4	1.2	2.7	4.4	6.0	7.4	8.3	9.2	9.7	10.2	10.3	10.2	9.6	8.3	5.5	4.2	3.9	3.5	10.3	-0.4	5.0
2	3.5	3.7	3.8	3.6	3.5	3.1	3.3	4.2	5.2	6.4	7.7	8.6	9.5	10.2	10.3	10.0	9.5	9.3	9.1	8.6	8.2	8.0	7.2	6.8	10.3	3.1	6.8
3	6.5	6.2	6.0	5.7	5.3	5.2	5.4	5.3	5.5	5.8	6.0	5.8	6.0	6.7	7.1	7.2	7.6	8.0	7.9	7.5	7.5	7.7	7.7	7.6	8.0	5.2	6.5
4	7.6	7.6	7.6	7.3	7.1	7.2	7.3	7.1	7.7	8.3	8.7	8.8	9.7	10.2	10.3	10.4	10.7	10.3	9.6	9.0	8.6	8.1	8.0	7.8	10.7	7.1	8.5
5	7.9	8.1	8.1	8.0	7.9	7.9	7.7	7.7	7.8	8.0	8.1	8.8	8.7	9.0	8.6	8.5	8.5	8.6	8.5	8.3	8.0	7.7	7.6	7.6	9.0	7.6	8.1
6	7.8	7.6	7.3	7.2	6.5	6.2	6.3	6.9	8.9	7.8	8.0	8.2	8.1	8.2	8.3	8.5	8.3	8.1	8.2	7.8	7.5	7.6	7.5	7.2	8.9	6.2	7.7
7	7.0	6.8	6.7	6.6	6.6	6.5	6.7	6.5	7.0	8.1	8.6	9.9	9.9	9.7	10.8	11.1	10.4	10.4	10.1	9.7	8.3	7.7	6.9	6.5	11.1	6.5	8.3
8	6.6	5.9	5.9	5.9	6.0	5.7	5.8	6.5	7.8	9.6	10.5	10.7	10.8	11.3	11.6	11.2	10.7	9.7	8.2	8.0	8.3	7.6	7.1	7.1	11.6	5.7	8.3
9	7.0	7.0	7.2	7.5	7.8	7.9	8.0	8.2	8.4	8.7	9.0	9.5	10.2	10.3	10.7	10.7	10.3	10.1	9.9	9.0	8.2	7.4	7.2	7.3	10.7	7.0	8.6
10	7.6	7.3	7.0	7.0	6.9	6.9	6.9	7.0	7.1	6.9	6.8	8.1	8.3	8.2	8.2	8.2	8.9	9.0	8.6	7.6	6.9	6.9	6.8	6.7	9.0	6.7	7.5
11	6.5	6.1	6.4	6.9	7.2	7.7	7.8	7.9	8.8	9.4	9.3	9.1	9.3	9.8	10.1	10.1	9.6	9.2	9.0	9.0	9.0	9.2	9.3	8.6	10.1	6.1	8.6
12	8.2	7.4	6.0	5.4	5.7	5.5	5.3	5.6	6.1	6.1	6.2	6.8	7.0	7.3	7.7	7.8	7.7	7.5	7.3	7.0	6.6	5.8	5.4	5.4	8.2	5.3	6.5
13	5.1	4.9	4.8	4.7	4.6	5.0	5.3	5.4	5.6	5.8	6.0	6.4	7.2	8.5	9.0	8.7	8.8	8.5	7.9	7.1	6.7	6.6	6.1	6.5	9.0	4.6	6.5
14	5.9	5.6	5.4	6.0	5.8	5.4	5.5	5.8	6.2	7.1	8.8	10.3	10.8	12.7	13.3	13.4	12.9	11.9	10.6	9.4	9.2	9.4	9.2	8.7	13.4	5.4	8.7
15	8.2	8.1	8.2	8.4	8.6	8.9	8.9	8.9	8.9	9.1	8.8	8.4	8.1	8.4	8.3	8.6	8.9	9.0	8.5	8.2	8.0	8.2	8.5	8.7	9.1	8.0	8.5
16	6.4	5.7	5.6	5.5	5.5	5.1	4.9	4.7	5.0	5.7	6.5	7.2	7.4	8.6	8.5	8.6	8.7	8.1	7.7	6.7	5.5	5.4	5.3	5.1	8.7	4.7	6.4
17	4.8	4.6	4.5	4.2	4.0	3.8	3.7	3.7	4.0	4.4	5.5	6.9	8.3	8.0	7.0	6.5	6.1	6.2	6.1	5.8	5.4	5.6	5.6	5.4	8.3	3.7	5.4
18	4.8	4.6	4.3	4.4	3.8	3.4	2.7	2.1	2.7	5.1	6.8	7.7	8.4	9.0	9.3	8.4	8.9	8.8	7.5	5.8	4.3	3.7	3.4	3.5	9.3	2.1	5.6
19	3.4	3.4	3.4	3.4	2.9	3.4	3.4	4.0	5.2	6.1	7.1	8.2	8.9	9.1	9.2	9.4	8.7	8.3	7.8	6.4	5.7	4.6	3.4	4.2	9.4	2.9	5.8
20	4.0	4.1	4.1	3.3	2.3	2.2	2.3	2.4	3.0	5.5	7.2	7.8	8.5	9.3	8.4	9.0	9.0	8.6	8.5	6.6	6.1	6.2	5.9	5.1	9.3	2.2	5.8
21	4.5	3.9	3.6	3.9	4.9	5.0	4.9	5.1	5.4	5.6	5.8	5.2	5.8	6.1	6.4	6.6	6.5	6.3	6.2	6.1	6.2	6.0	5.9	6.1	6.6	3.6	5.5
22	6.1	6.3	6.3	6.3	6.3	6.2	6.6	6.7	7.2	7.9	8.2	8.1	8.4	8.3	8.2	8.3	8.7	9.4	9.5	8.1	7.3	6.6	6.6	6.9	9.5	6.1	7.4
23	6.7	6.6	6.5	6.7	6.8	6.8	6.8	6.8	6.8	6.8	7.3	7.8	8.4	9.2	9.7	9.3	8.4	8.1	7.8	6.7	6.3	5.1	4.2	3.8	9.7	3.8	7.0
24	3.9	3.8	3.8	3.8	3.4	3.5	3.6	3.5	4.1	4.6	5.1	5.6	6.1	5.9	5.8	6.0	6.2	5.9	5.4	5.1	4.9	4.9	4.6	4.6	6.2	3.4	4.8
25	4.8	4.8	4.6	4.4	4.4	4.4	4.2	4.3	4.6	4.8	5.1	5.3	5.5	5.9	6.2	6.3	6.2	6.0	5.5	5.1	4.9	4.7	4.3	3.8	6.3	3.8	5.0
26	3.1	3.1	3.0	3.0	3.2	2.8	2.7	2.4	2.6	3.3	4.1	5.6	6.2	6.5	6.3	6.0	5.3	5.4	6.0	6.2	6.3	6.2	5.4	5.9	6.5	2.4	4.6
27	5.8	6.0	6.2	6.4	6.8	6.8	7.3	7.0	6.5	7.2	7.5	7.8	7.5	7.2	6.6	7.0	5.9	4.8	4.2	4.0	3.9	3.8	3.7	3.6	7.8	3.6	6.0
28	3.5	3.4	3.5	3.1	2.5	3.0	3.5	3.8	3.9	4.5	5.3	6.7	7.3	8.5	7.9	7.4	6.9	7.0	6.9	6.6	6.4	6.3	6.1	6.1	8.5	2.5	5.4
29	5.8	5.6	5.2	4.9	4.7	3.8	3.7	3.7	3.7	4.1	4.4	4.0	3.6	3.4	3.8	4.1	4.3	4.1	3.8	3.0	2.4	2.2	2.3	2.7	5.8	2.2	3.9
30	2.6	2.3	2.1	1.7	1.3	0.7	0.6	0.4	1.6	3.3	4.9	3.3	3.9	5.2	5.1	5.6	5.5	3.7	2.5	2.2	1.1	0.2	-0.6	-1.1	5.6	-1.1	2.4
Max.	**8.2**	**8.1**	**8.2**	**8.4**	**8.6**	**8.9**	**8.9**	**8.9**	**8.9**	**9.6**	**10.5**	**10.7**	**10.8**	**12.7**	**13.3**	**13.4**	**12.9**	**11.9**	**10.6**	**9.7**	**9.2**	**9.4**	**9.3**	**8.7**	**13.4**		
Min.	**2.5**	**1.8**	**0.9**	**0.9**	**0.4**	**-0.3**	**-0.4**	**0.4**	**1.6**	**3.3**	**4.1**	**3.3**	**3.6**	**3.4**	**3.8**	**4.1**	**4.3**	**3.7**	**2.5**	**2.2**	**1.1**	**0.2**	**-0.6**	**-1.1**		**-1.1**	
Avg.	**5.6**	**5.4**	**5.3**	**5.2**	**5.1**	**5.0**	**5.0**	**5.2**	**5.7**	**6.3**	**7.0**	**7.5**	**7.9**	**8.3**	**8.4**	**8.4**	**8.3**	**8.0**	**7.6**	**7.0**	**6.4**	**6.1**	**5.8**	**5.7**			**6.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.5	-1.7	-2.0	-2.4	-2.7	-3.1	-3.0	-3.0	-3.1	-2.8	-2.5	-1.9	-1.0	-0.4	0.1	0.0	-0.1	-0.7	-1.7	-2.7	-2.2	-1.9	-1.9	-2.0	0.1	-3.1	-1.8
2	-2.1	-2.9	-4.2	-4.7	-4.9	-5.1	-5.2	-5.4	-4.2	-2.3	-0.4	0.4	0.0	0.3	1.6	2.0	0.9	-0.1	-1.2	-2.1	-2.9	-3.1	-4.1	-4.7	2.0	-5.4	-2.3
3	-4.4	-3.4	-2.9	-3.0	-3.6	-3.3	-1.9	-1.6	-1.3	-0.7	1.4	2.9	4.4	5.8	6.1	6.4	5.7	5.8	4.1	3.1	3.1	3.3	2.9	2.2	6.4	-4.4	1.3
4	2.5	1.8	2.5	2.2	2.2	2.2	2.8	3.1	4.2	5.1	4.9	5.8	7.8	7.7	7.5	7.2	6.9	7.0	6.1	5.3	4.8	5.0	5.1	5.0	7.8	1.8	4.8
5	4.9	4.8	4.4	3.6	3.6	3.9	3.7	3.6	3.7	4.0	4.5	4.6	4.8	5.3	5.8	5.9	5.7	5.0	4.4	3.9	3.8	3.4	3.6	3.7	5.9	3.4	4.4
6	3.8	3.9	3.8	3.7	3.6	3.6	3.4	3.4	3.6	3.7	3.9	4.0	4.2	4.4	4.8	4.9	5.0	4.5	3.7	2.8	2.2	2.1	2.1	2.1	5.0	2.1	3.6
7	1.6	2.2	2.4	2.4	3.3	3.7	3.7	3.8	3.8	4.0	4.3	4.7	4.7	4.7	4.6	3.6	2.9	2.4	2.4	2.3	2.1	1.9	1.7	1.5	4.7	1.5	3.1
8	1.3	1.2	1.2	1.1	1.2	1.3	1.1	1.1	1.0	1.3	1.7	2.0	2.2	2.2	1.9	1.8	1.6	1.4	1.0	0.9	0.9	0.9	0.7	0.6	2.2	0.6	1.3
9	0.8	0.7	0.6	0.5	0.3	0.3	0.0	0.0	0.0	-0.1	0.1	0.3	0.2	0.2	0.2	0.0	-0.2	-0.3	-0.4	-0.9	-1.6	-2.6	-3.2	-3.5	0.8	-3.5	-0.4
10	-3.8	-4.1	-4.2	-4.7	-4.8	-4.6	-4.5	-4.5	-4.3	-3.8	-3.4	-2.4	-1.3	-0.6	0.2	0.8	0.9	0.8	0.4	0.1	0.4	0.8	0.9	0.9	0.9	-4.8	-1.9
11	0.9	0.9	0.9	0.4	0.4	0.6	1.0	1.0	1.1	1.4	2.1	2.2	2.6	2.6	0.8	-0.1	-1.3	-2.3	-2.9	-3.2	-3.5	-3.7	-3.9	-3.9	2.6	-3.9	-0.2
12	-4.2	-4.4	-4.8	-5.4	-5.2	-5.2	-5.3	-5.7	-5.5	-4.9	-4.1	-3.4	-2.6	-2.0	-1.1	-1.1	-1.5	-2.2	-4.0	-4.6	-4.8	-4.8	-4.9	-4.8	-1.1	-5.7	-4.0
13	-4.8	-4.5	-4.6	-4.8	-4.6	-4.1	-4.0	-4.1	-4.5	-4.3	-3.4	-2.2	-1.1	-0.4	0.2	0.3	-0.6	-0.7	-1.1	-1.4	-1.6	-1.7	-1.5	-1.2	0.3	-4.8	-2.5
14	-1.2	-1.1	-1.0	-0.7	-0.5	-0.2	-0.3	-0.3	0.0	0.8	1.2	1.0	0.5	0.6	0.8	1.1	0.9	0.8	0.9	1.1	1.3	1.5	1.7	1.8	1.8	-1.2	0.4
15	2.0	2.1	2.2	2.1	1.8	1.4	1.2	1.2	1.0	1.7	2.2	2.3	3.0	3.1	2.8	3.4	3.2	2.3	0.6	0.0	-0.7	-0.5	-0.9	-1.6	3.4	-1.6	1.5
16	-2.4	-3.2	-2.9	-2.8	-3.3	-4.0	-3.7	-3.2	-2.7	-1.8	-0.5	0.5	1.1	1.2	1.4	1.2	0.9	1.2	1.4	1.5	1.5	1.7	1.7	1.6	1.7	-4.0	-0.6
17	0.7	0.7	0.8	0.8	1.2	1.6	2.0	2.2	2.6	3.3	3.6	3.2	3.2	2.6	2.3	1.9	1.6	1.2	1.0	0.7	0.5	0.2	0.3	0.5	3.6	0.2	1.6
18	0.5	0.5	0.3	0.3	0.1	-0.1	-0.2	-0.7	-1.3	-0.7	0.0	0.7	1.2	1.5			2.1	2.2	2.2	1.8	1.7	2.2	2.1	1.7	2.2	-1.3	0.8
19	1.6	1.6	1.6	1.7	1.9	2.1	2.2	2.5	2.7	3.0	3.4	3.4	3.9	3.9	3.1	3.0	3.3	3.6	3.7	3.7	3.6	3.3	3.0	2.8	3.9	1.6	2.9
20	2.7	2.8	3.1	3.1	3.0	2.9	2.9	3.8	4.1	4.1	4.6	5.4	5.9	5.3	5.6	5.6	5.3	5.5	4.9	5.1	5.3	5.4	4.2	3.6	5.9	2.7	4.3
21	3.8	4.2	3.3	2.8	2.7	2.7	1.1	0.8	0.8	0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0	-0.5	-1.1	-1.2	-1.5	-1.6	-2.1	-2.9	4.2	-2.9	0.5
22	-3.6	-3.7	-4.5	-4.5	-5.1	-5.1	-4.2	-4.2	-4.9	-5.0	-4.9	-4.6	-4.2	-3.7	-3.4	-3.3	-3.7	-4.5	-5.4	-5.5	-6.2	-6.5	-6.1	-6.8	-3.3	-6.8	-4.7
23	-6.3	-6.5	-7.0	-7.2	-7.7	-7.7	-8.1	-7.9	-6.8	-6.2	-6.1	-5.9	-5.5	-5.2	-5.2	-5.0	-4.9	-5.1	-5.1	-4.8	-4.8	-4.9	-4.9	-4.9	-4.8	-8.1	-6.0
24	-5.0	-5.1	-5.5	-6.7	-7.4	-7.1	-7.8	-8.1	-8.3	-7.9	-8.3	-7.3	-7.1	-6.4	-5.8	-5.6	-5.7	-5.6	-6.2	-6.4	-6.3	-6.2	-6.4	-6.5	-5.0	-8.3	-6.6
25	-7.3	-7.0	-6.7	-6.5	-6.8	-6.3	-6.0	-6.1	-6.3	-5.7	-5.1	-4.6	-4.3	-4.2	-4.0	-3.9	-3.6	-3.6	-3.5	-3.4	-3.4	-3.4	-3.8	-4.0	-3.4	-7.3	-5.0
26	-4.1	-4.4	-4.3	-4.3	-4.5	-4.9	-5.3	-6.1	-6.2	-5.9	-4.7	-4.4	-4.3	-4.2	-4.2	-4.3	-4.6	-5.1	-6.0	-6.8	-7.9	-7.7	-7.6	-7.8	-4.1	-7.9	-5.4
27	-7.8	-7.9	-8.1	-8.3	-8.5	-8.3	-7.6	-7.4	-7.5	-7.4	-7.4	-7.4	-6.7	-5.4	-4.9	-4.7	-5.2	-5.0	-4.8	-4.7	-4.6	-4.7	-5.9	-5.9	-4.6	-8.5	-6.5
28	-5.8	-5.2	-4.4	-4.5	-4.7	-5.3	-6.0	-6.0	-6.0	-5.7	-5.5	-5.8	-5.9	-6.1	-6.5	-6.9	-7.5	-7.9	-8.2	-8.5	-8.8	-8.8	-8.4	-8.2	-4.4	-8.8	-6.5
29	-8.3	-8.5	-9.0	-9.0	-8.9	-8.9	-9.5	-10.1	-10.4	-10.3	-10.5	-10.1	-10.0	-9.8	-9.5	-9.5	-9.4	-9.5	-9.6	-9.6	-9.5	-9.3	-8.7	-8.9	-8.3	-10.5	-9.4
30	-9.2	-9.2	-9.1	-9.1	-9.0	-9.0	-8.8	-8.8	-9.1	-9.2	-9.2	-9.1	-9.0	-9.1	-9.0	-9.2	-9.5	-10.0	-10.4	-11.3	-11.3	-11.8	-12.2	-12.2	-8.8	-12.2	-9.7
31	-12.1	-12.4	-12.7	-13.1	-13.5	-13.7	-14.4	-14.2	-14.4	-14.5	-13.8	-13.3	-12.5	-11.9	-11.5	-11.7	-11.9	-12.8	-13.5	-14.3	-13.5	-13.5	-13.7	-13.5	-11.5	-14.5	-13.2
Max.	**4.9**	**4.8**	**4.4**	**3.7**	**3.6**	**3.9**	**3.7**	**3.8**	**4.2**	**5.1**	**4.9**	**5.8**	**7.8**	**7.7**	**7.5**	**7.2**	**6.9**	**7.0**	**6.1**	**5.3**	**5.3**	**5.4**	**5.1**	**5.0**	**7.8**		
Min.	**-12.1**	**-12.4**	**-12.7**	**-13.1**	**-13.5**	**-13.7**	**-14.4**	**-14.2**	**-14.4**	**-14.5**	**-13.8**	**-13.3**	**-12.5**	**-11.9**	**-11.5**	**-11.7**	**-11.9**	**-12.8**	**-13.5**	**-14.3**	**-13.5**	**-13.5**	**-13.7**	**-13.5**		**-14.5**	
Avg.	**-2.2**	**-2.2**	**-2.3**	**-2.5**	**-2.6**	**-2.6**	**-2.6**	**-2.6**	**-2.5**	**-2.1**	**-1.7**	**-1.3**	**-0.8**	**-0.6**	**-0.5**	**-0.5**	**-0.7**	**-1.0**	**-1.6**	**-1.9**	**-2.1**	**-2.1**	**-2.3**	**-2.4**			**-1.8**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-13.2	-13.2	-12.4	-12.5	-11.7	-11.2	-12.0	-11.6	-11.1	-11.3	-10.5	-9.3	-8.9	-8.7	-8.7	-8.0	-7.5	-7.8	-8.4	-8.9	-9.4	-9.6	-10.2	-10.2	-7.5	-13.2	-10.3
2	-10.0	-9.3	-8.9	-8.8	-8.9	-7.3	-7.1	-8.2	-8.2	-7.1	-6.0	-6.3	-6.3	-6.0	-5.6	-6.2	-7.4	-8.2	-8.0	-7.7	-8.3	-9.2	-9.1	-8.8	-5.6	-10.0	-7.8
3	-8.0	-8.3	-8.8	-10.6	-11.6	-13.2	-14.0	-15.3	-17.0	-18.5	-18.5	-17.8	-17.7	-17.7	-17.3	-17.0	-17.1	-17.2	-17.3	-17.3	-17.4	-17.6	-17.8	-18.0	-8.0	-18.5	-15.4
4	-18.1	-18.2	-18.4	-18.4	-18.4	-18.3	-18.4	-18.2	-18.2	-17.8	-17.7	-17.1	-16.4	-15.2	-14.7	-14.6	-15.2	-15.4	-16.0	-16.6	-16.9	-17.6	-17.5	-17.5	-14.6	-18.4	-17.1
5	-17.6	-17.7	-17.7	-18.1	-18.2	-18.5	-18.6	-18.9	-19.1	-18.8	-18.3	-17.9	-16.9	-16.0	-15.6	-15.3	-15.6	-15.9	-16.0	-15.4	-14.5	-13.4	-12.7	-12.7	-12.7	-19.1	-16.6
6	-11.5	-11.5	-11.0	-10.8	-5.1	-2.6	-2.7	-3.3	-5.4	-6.1	-7.7	-8.3	-7.9	-8.1	-8.3	-8.4	-8.2	-8.6	-9.1	-10.7	-12.2	-14.3	-16.1	-16.8	-2.6	-16.8	-8.9
7	-17.8	-18.8	-20.0	-21.0	-21.9	-22.4	-22.7	-23.2	-23.4	-23.7	-24.0	-23.4	-23.4	-23.2	-22.5	-22.7	-22.6	-22.2	-22.4	-22.2	-22.1	-22.0	-21.8	-21.7	-17.8	-24.0	-22.1
8	-21.5	-21.2	-21.0	-20.7	-21.1	-20.3	-20.0	-19.2	-18.5	-17.4	-16.8	-16.0	-15.9	-15.6	-14.3	-14.6	-14.6	-14.9	-14.9	-15.3	-15.4	-16.0	-16.3	-17.0	-14.3	-21.5	-17.4
9	-17.8	-18.0	-18.1	-18.0	-18.0	-17.6	-17.7	-17.6	-17.9	-18.0	-17.5	-17.1	-16.8	-16.3	-16.3	-16.1	-15.9	-15.8	-15.6	-15.8	-16.0	-15.8	-15.7	-15.5	-15.5	-18.1	-16.9
10	-15.5	-15.3	-15.5	-15.8	-15.9	-15.7	-15.5	-15.6	-15.7	-15.7	-15.5	-15.3	-15.2	-14.6	-14.4	-14.4	-14.7	-15.2	-15.5	-15.5	-15.8	-16.0	-15.8	-15.8	-14.4	-16.0	-15.4
11	-16.3	-16.8	-16.9	-16.0	-15.6	-15.3	-15.2	-15.4	-15.4	-15.4	-15.3	-15.2	-15.0	-14.7	-14.6	-14.4	-14.4	-14.2	-14.4	-14.4	-14.5	-14.4	-14.2	-14.0	-14.0	-16.9	-15.1
12	-13.8	-13.5	-13.3	-13.0	-13.0	-13.1	-13.0	-12.6	-12.1	-12.1	-11.4	-11.8	-12.2	-11.4	-11.6	-11.6	-12.2	-12.7	-13.9	-14.8	-15.3	-15.8	-16.4	-16.9	-11.4	-16.9	-13.2
13	-16.7	-17.1	-16.8	-17.8	-17.7	-17.9	-18.5	-18.4	-18.2	-18.1	-18.0	-17.7	-18.2	-16.5	-16.1	-16.5	-15.0	-14.4	-14.2	-13.8	-13.4	-13.4	-13.3	-10.6	-10.6	-18.5	-16.2
14	-9.3	-8.4	-7.2	-7.7	-7.9	-7.4	-6.6	-6.9	-5.9	-5.3	-4.6	-4.2	-3.8	-2.9	-2.1	-1.6	-1.6	-1.6	-1.0	-0.8	-0.8	-0.5	-0.7	-1.2	-0.5	-9.3	-4.2
15	-0.4	-1.1	-1.8	-2.1	-2.0	-1.8	-1.6	-1.9	-3.7	-4.6	-4.9	-5.0	-5.3	-5.3	-4.7	-6.8	-6.3	-6.3	-7.6	-6.8	-6.4	-6.1	-5.4	-5.0	-0.4	-7.6	-4.3
16	-5.5	-5.1	-4.6	-3.8	-3.6	-3.2	-2.3	-1.8	-1.5	-1.0	-0.5	-0.4	-0.1	0.2	0.6	1.0	1.0	1.2	1.4	1.4	1.4	1.5	1.6	1.6	1.6	-5.5	-0.9
17	1.7	1.3	1.3	1.3	1.1	1.1	0.9	0.5	0.1	0.0	-1.0	-1.5	-1.9	-2.3	-3.3	-3.9	-4.6	-4.8	-5.2	-5.4	-5.5	-5.6	-5.6	-5.4	1.7	-5.6	-1.9
18	-5.4	-5.0	-4.1	-3.2	-4.1	-4.5	-2.5	-1.6	-2.0	-1.6	-0.3	0.1	0.1	0.6	0.6	0.1	-1.0	-2.4	-3.4	-5.4	-7.3	-9.5	-10.0	-11.0	0.6	-11.0	-3.5
19	-10.7	-9.5	-8.5	-8.3	-7.9	-7.7	-7.7	-8.2	-9.3	-9.7	-10.0	-9.9	-11.3	-12.3	-12.4	-12.5	-13.1	-13.4	-13.6	-13.2	-13.8	-13.1	-12.2	-11.5	-7.7	-13.8	-10.8
20	-11.0	-10.6	-9.6	-9.0	-9.7	-10.6	-10.6	-10.8	-9.8	-8.9	-8.0	-7.4	-7.4	-7.4	-7.4	-7.4	-7.6	-7.8	-7.8	-7.6	-7.7	-7.6	-7.5	-7.8	-7.4	-11.0	-8.6
21	-8.0	-9.3	-9.1	-9.6	-10.2	-11.1	-11.2	-10.8	-10.6	-11.3	-11.4	-11.9	-11.7	-12.6	-13.1	-13.6	-13.8	-14.0	-13.8	-13.3	-13.8	-15.5	-16.4	-17.0	-8.0	-17.0	-12.2
22	-16.8	-17.3	-17.6	-16.8	-17.2	-17.3	-17.5	-16.4	-16.7	-17.0	-16.0	-15.0	-14.5	-14.2	-16.2	-16.2	-16.1	-17.7	-18.5	-19.3	-20.1	-21.5	-22.0	-22.9	-14.2	-22.9	-17.5
23	-24.3	-24.6	-25.2	-24.2	-24.2	-24.3	-23.8	-23.1	-22.5	-22.4	-22.3	-22.0	-22.0	-21.5	-21.3	-21.1	-21.2	-21.6	-21.8	-22.4	-21.5	-21.1	-21.5	-21.9	-21.1	-25.2	-22.6
24	-22.4	-22.7	-23.2	-24.0	-24.9	-25.0	-24.8	-24.6	-24.5	-24.6	-24.6	-24.8	-25.0	-25.3	-25.6	-26.1	-26.2	-25.7	-24.9	-24.4	-24.0	-23.8	-24.2	-24.4	-22.4	-26.2	-24.6
25	-24.7	-25.0	-25.3	-25.2	-25.0	-25.3	-24.8	-24.5	-23.8	-23.8	-23.9	-23.9	-23.4	-23.1	-23.6	-23.5	-23.1	-22.6	-22.1	-22.7	-22.4	-22.0	-21.8	-22.2	-21.8	-25.3	-23.7
26	-22.3	-22.3	-22.2	-22.4	-22.2	-21.7	-21.2	-20.9	-21.5	-21.7	-22.3	-22.5	-22.0	-21.7	-21.4	-21.5	-21.6	-21.5	-21.8	-22.0	-21.6	-21.5	-21.4	-21.8	-20.9	-22.5	-21.8
27	-21.9	-21.5	-21.5	-21.3	-21.1	-21.7	-21.4	-21.6	-21.8	-21.5	-21.2	-20.9	-20.5	-21.0	-20.7	-18.5	-17.2	-17.9	-17.6	-16.9	-16.3	-14.9	-13.1	-11.5	-11.5	-21.9	-19.3
28	-10.4	-9.8	-9.5	-9.5	-9.4	-8.8	-8.3	-8.2	-7.9	-7.8	-7.5	-7.0	-6.8	-6.7	-6.7	-6.5	-6.8	-7.1	-7.5	-7.2	-7.3	-7.5	-6.9	-7.1	-6.5	-10.4	-7.8
29	-7.1	-6.9	-6.7	-5.7	-5.6	-6.4	-6.4	-6.8	-6.8	-7.0	-7.3	-7.6	-8.3	-8.9	-7.6	-6.5	-6.8	-6.7	-6.4	-8.3	-7.4	-7.1	-8.0	-8.2	-5.6	-8.9	-7.1
30	-6.6	-5.8	-5.8	-5.8	-5.9	-5.9	-5.9	-6.0	-6.0	-6.1	-6.3	-6.3	-6.7	-6.9	-7.1	-7.1	-7.1	-7.5	-7.8	-8.0	-8.1	-8.2	-8.4	-8.6	-5.8	-8.6	-6.8
Max.	**1.7**	**1.3**	**1.3**	**1.3**	**1.1**	**1.1**	**0.9**	**0.5**	**0.1**	**0.0**	**-0.3**	**0.1**	**0.1**	**0.6**	**0.6**	**1.0**	**1.0**	**1.2**	**1.4**	**1.4**	**1.4**	**1.5**	**1.6**	**1.6**	**1.7**		
Min.	**-24.7**	**-25.0**	**-25.3**	**-25.2**	**-25.0**	**-25.3**	**-24.8**	**-24.6**	**-24.5**	**-24.6**	**-24.6**	**-24.8**	**-25.0**	**-25.3**	**-25.6**	**-26.1**	**-26.2**	**-25.7**	**-24.9**	**-24.4**	**-24.0**	**-23.8**	**-24.2**	**-24.4**		**-26.2**	
Avg.	**-13.4**	**-13.4**	**-13.3**	**-13.3**	**-13.2**	**-13.2**	**-13.0**	**-13.0**	**-13.1**	**-13.1**	**-13.0**	**-12.8**	**-12.7**	**-12.5**	**-12.4**	**-12.4**	**-12.4**	**-12.7**	**-12.8**	**-13.0**	**-13.1**	**-13.3**	**-13.3**	**-13.4**			**-13.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-8.8	-9.1	-9.3	-9.5	-10.1	-10.9	-11.7	-12.4	-13.3	-14.1	-13.9	-13.0	-13.2	-13.2	-12.4	-11.7	-12.0	-13.2	-14.3	-14.2	-14.0	-14.1	-14.2	-14.1	-8.8	-14.3	-12.3
2	-13.6	-13.0	-12.9	-12.6	-12.1	-12.6	-13.7	-14.3	-14.6	-14.8	-15.6	-16.4	-16.9	-17.6	-18.3	-19.1	-19.4	-20.0	-20.4	-20.7	-21.1	-21.2	-20.5	-20.4	-12.1	-21.2	-16.7
3	-20.6	-20.7	-20.8	-21.0	-20.9	-20.8	-22.3	-23.5	-23.7	-23.6	-23.8	-23.8	-23.9	-23.7	-23.9	-24.1	-24.0	-24.8	-25.5	-25.4	-25.3	-25.5	-25.7	-25.4	-20.6	-25.7	-23.4
4	-25.3	-25.4	-25.5	-24.9	-23.5	-23.1	-21.9	-20.3	-16.7	-15.9	-15.1	-12.8	-12.1	-10.1	-9.4	-8.9	-8.3	-6.9	-6.1	-5.6	-5.2	-5.0	-4.6	-4.1	-4.1	-25.5	-14.0
5	-3.8	-3.4	-3.2	-2.8	-2.6	-2.4	-2.2	-2.0	-1.9	-1.8	-1.7	-1.6	-1.4	-1.4	-1.4	-1.3	-1.0	-0.6	-0.2	0.1	0.1	0.1	0.5	1.3	1.3	-3.8	-1.4
6	1.7	1.7	1.8	1.9	1.4	1.3	1.7	1.9	1.4	1.2	0.8	0.2	0.0	0.1	0.2	-0.3	-0.4	-0.6	-0.1	-0.1	-0.1	-0.1	0.2	0.7	1.9	-0.6	0.7
7	1.0	1.0	1.2	1.2	1.4	1.8	1.4	1.1	1.2	1.5	2.0	1.4	1.7	1.9	1.5	1.1	1.6	1.4	1.0	1.5	1.9	2.0	1.6	1.4	2.0	1.0	1.4
8	1.4	1.2	0.8	0.6	0.9	0.7	0.9	1.0	1.1	1.0	1.2	1.4	1.9	2.3	1.9	1.6	1.7	1.8	1.9	1.7	1.9	2.0	2.0	2.1	2.3	0.6	1.5
9	2.2	2.2	2.3	2.0	2.0	2.0	1.6	1.1	0.6	0.9	0.7	0.9	1.4	1.8	1.6	1.5	1.2	1.1	1.1	0.8	0.7	0.7	0.7	0.4	2.3	0.4	1.3
10	0.2	0.0	-0.1	-0.3	-0.7	-0.9	-1.0	-0.9	-0.5	-0.2	0.3	1.2	0.9	0.7	0.6	0.5	0.8	0.5	0.2	0.5	0.5	0.1	0.1	-0.1	1.2	-1.0	0.1
11	-0.2	-0.1	-0.6	-1.0	-1.3	-2.9	-4.4	-5.4	-6.3	-7.5	-8.6	-9.7	-10.5	-10.5	-10.2	-10.6	-11.0	-11.6	-11.8	-12.1	-12.5	-12.7	-13.5	-15.2	-0.1	-15.2	-7.9
12	-16.2	-17.6	-17.1	-17.3	-17.5	-18.7	-18.2	-17.4	-17.8	-17.7	-17.0	-14.7	-12.8	-11.9	-11.8	-10.5	-10.9	-11.7	-11.2	-10.8	-11.7	-11.3	-10.6	-10.4	-10.4	-18.7	-14.3
13	-10.5	-10.7	-9.9	-10.1	-10.6	-10.7	-10.1	-10.1	-10.0	-8.9	-7.8	-6.1	-5.8	-5.2	-4.1	-3.3	-2.7	-2.5	-2.3	-2.0	-1.6	-1.3	-1.1	-1.0	-1.0	-10.7	-6.2
14	-0.4	-0.3	-0.3	0.3	-0.2	-1.1	-0.1	-0.5	-0.5	0.0	0.7	1.3	1.4	2.5	1.8	0.9	1.7	1.4	1.6	1.4	1.3	1.4	2.4	2.1	2.5	-1.1	0.8
15	1.7	1.6	1.4	1.6	2.0	2.8	2.7	1.7	1.0	1.3	1.0	0.9	1.6	1.6	1.6	1.8	2.0	1.7	2.2	3.6	3.6	3.3	3.6	3.5	3.6	0.9	2.1
16	3.7	3.5	2.8	3.0	3.0	3.1	2.8	2.8	2.4	1.5	0.6	0.1	-0.2	-0.9	-1.0	-1.5	-1.5	-1.6	-1.8	-1.9	-2.0	-2.3	-2.4	-2.7	3.7	-2.7	0.4
17	-2.9	-3.2	-3.5	-3.7	-3.5	-3.6	-4.0	-4.0	-3.5	-3.3	-3.1	-2.9	-2.7	-1.9	0.5	0.7	-0.2	-0.5	-0.1	-0.1	-0.2	-0.5	0.5	0.3	0.7	-4.0	-1.9
18	0.2	0.0	0.3	0.2	0.8	1.0	0.8	1.3	1.3	0.8	0.9	1.6	1.7	1.8	2.1	2.3	2.3	2.5	2.7	2.7	2.5	3.1	2.9	2.7	3.1	0.0	1.6
19	2.8	2.6	3.5	3.0	2.7	2.4	1.9	1.9	1.9	1.9	2.0	2.2	2.3	2.0	1.7	1.5	1.4	0.9	1.1	1.1	0.7	0.9	0.9	0.2	3.5	0.2	1.8
20	-0.9	-1.3	-1.3	-1.1	-1.8	-1.9	-2.0	-2.1	-2.2	-1.8	-1.8	-1.8	-1.6	-0.7	-0.1	-1.4	-2.2	-3.3	-4.4	-4.0	-4.0	-4.0	-3.3	-3.7	-0.1	-4.4	-2.2
21	-3.2	-2.6	-2.2	-2.0	-1.9	-2.0	-1.9	-2.6	-3.2	-3.7	-3.4	-3.0	-2.3	-2.1	-2.3	-3.1	-3.5	-4.5	-4.1	-4.8	-4.6	-5.5	-5.3	-5.6	-1.9	-5.6	-3.3
22	-5.8	-6.2	-6.0	-6.3	-6.1	-5.8	-6.0	-6.2	-6.7	-7.0	-6.9	-7.2	-6.8	-6.6	-6.8	-6.5	-6.2	-6.2	-5.9	-5.7	-5.4	-5.2	-4.0	-3.9	-3.9	-7.2	-6.1
23	-4.1	-4.1	-3.9	-4.1	-3.9	-3.7	-2.9	-2.8	-3.0	-3.0	-2.8	-2.7	-2.7	-3.1	-3.0	-2.8	-2.8	-2.7	-2.7	-3.0	-2.9	-3.1	-3.3	-2.9	-2.7	-4.1	-3.2
24	-2.5	-2.3	-2.3	-2.1	-1.8	-2.0	-1.8	-1.6	-1.4	-1.4	-1.6	-1.1	-0.8	-0.8	-0.7	-0.6	-1.5	-2.6	-3.2	-2.2	-1.6	-1.6	-1.1	-0.9	-0.6	-3.2	-1.6
25	-0.9	-0.7	-0.4	-0.3	-0.1	-0.2	-1.1	-0.6	-0.2	-0.9	-1.1	0.2	0.7	0.3	0.6	0.6	1.2	1.4	0.9	0.7	0.5	1.2	1.9	1.1	1.9	-1.1	0.2
26	0.6	0.4	1.6	1.8	2.0	1.6	1.1	1.0	1.1	0.6	0.7	1.3	1.2	1.5	1.1	0.4	0.8	-0.3	-0.1	0.0	0.0	0.1	0.4	0.7	2.0	-0.3	0.8
27	1.4	1.6	1.5	1.7	2.2	1.9	2.7	2.6	1.7	0.7	1.9	1.6	0.8	1.1	-0.8	-0.9	-0.2	0.8	1.6	1.6	1.8	2.1	2.4	1.8	2.7	-0.9	1.4
28	1.4	0.7	1.3	1.5	1.7	1.8	1.6	1.7	1.0	0.7	1.4	2.5	2.1	2.2	1.9	2.2	2.6	2.6	2.4	1.9	2.0	1.8	1.6	1.8	2.6	0.7	1.8
29	1.9	1.9	1.2	0.5	0.3	0.4	0.2	0.6	0.3	0.2	0.2	0.2	0.1	0.3	0.5	0.5	0.5	0.4	0.5	0.4	0.1	0.1	-0.3	0.1	1.9	-0.3	0.5
30	0.8	1.0	1.7	1.8	1.4	1.6	2.4	2.9	1.1	-0.1	0.3	-0.6	-0.8	-0.1	0.8	0.2	0.0	1.3	1.6	1.4	1.7	2.2	2.2	2.3	2.9	-0.8	1.1
31	1.4	-1.2	0.6	1.7	0.8	0.1	-0.1	0.4	0.0	-0.3	-0.2	1.4	1.2	0.8	0.5	-0.3	-0.1	-1.0	-1.6	-1.8	-1.9	-1.7	-2.4	-2.0	1.7	-2.4	-0.2
Max.	**3.7**	**3.5**	**3.5**	**3.0**	**3.0**	**3.1**	**2.8**	**2.9**	**2.4**	**1.9**	**2.0**	**2.5**	**2.3**	**2.5**	**2.1**	**2.3**	**2.6**	**2.6**	**2.7**	**3.6**	**3.6**	**3.3**	**3.6**	**3.5**	**3.7**		
Min.	**-25.3**	**-25.4**	**-25.5**	**-24.9**	**-23.5**	**-23.1**	**-22.3**	**-23.5**	**-23.7**	**-23.6**	**-23.8**	**-23.8**	**-23.9**	**-23.7**	**-23.9**	**-24.1**	**-24.0**	**-24.8**	**-25.5**	**-25.4**	**-25.3**	**-25.5**	**-25.7**	**-25.4**		**-25.7**	
Avg.	**-3.1**	**-3.3**	**-3.1**	**-3.1**	**-3.1**	**-3.2**	**-3.3**	**-3.4**	**-3.5**	**-3.7**	**-3.5**	**-3.2**	**-3.1**	**-2.9**	**-2.8**	**-2.9**	**-2.9**	**-3.1**	**-3.1**	**-3.1**	**-3.1**	**-3.0**	**-2.8**	**-2.9**			**-3.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.9	-0.9	-1.3	-1.5	-1.1	-1.3	-1.3	-1.4	-1.3	-1.0	-1.0	-1.3	-0.8	-0.4	-0.9	-0.6	-0.7	-1.5	-2.0	-2.1	-1.7	-1.6	-1.7	-1.8	-0.4	-2.1	-1.3
2	-1.4	-1.6	-1.7	-1.1	-1.7	-2.0	-1.6	-1.3	-1.4	-0.9	-0.6	0.1	-0.2	-0.4	-0.4	0.1	-0.6	-0.6	-0.6	-0.8	-0.7	-0.7	-1.0	-1.9	0.1	-2.0	-1.0
3	-1.8	-2.2	-2.3	-2.3	-2.2	-2.2	-2.2	-2.2	-2.1	-2.1	-2.0	-1.9	-1.8	-1.6	-1.4	-1.0	-1.1	-1.1	-1.0	-1.2	-1.2	-1.1	-1.2	-1.1	-1.0	-2.3	-1.7
4	-1.4	-1.3	-1.2	-1.1	-1.4	-2.7	-3.6	-2.9	-2.8	-3.2	-3.4	-2.4	-3.1	-3.3	-3.5	-3.4	-3.6	-3.9	-4.6	-5.0	-4.8	-4.9	-4.6	-4.1	-1.1	-5.0	-3.2
5	-3.8	-3.0	-3.4	-2.8	-3.3	-3.3	-2.8	-2.7	-3.1	-3.0	-2.8	-2.8	-2.6	-4.1	-4.2	-5.2	-4.9	-5.5	-4.9	-5.2	-6.7	-6.8	-6.2	-6.6	-2.6	-6.8	-4.2
6	-6.4	-5.9	-6.0	-6.7	-6.3	-5.2	-5.1	-5.6	-5.8	-5.7	-5.8	-5.0	-5.4	-4.5	-4.5	-4.4	-3.7	-3.7	-4.6	-4.4	-3.8	-3.7	-4.1	-4.1	-3.7	-6.7	-5.0
7	-3.5	-3.3	-4.1	-4.8	-4.5	-4.4	-4.6	-4.5	-4.1	-4.0	-2.5	-1.9	-1.6	-1.9	-0.8	-0.9	-0.9	-1.4	-1.4	-2.5	-1.6	-0.4	0.0	0.4	0.4	-4.8	-2.5
8	0.2	-1.7	-0.7	-2.6	-1.7	-1.3	1.3	0.4	0.6	-0.1	-1.8	-2.6	-3.6	-3.6	-3.4	-2.6	-3.3	-4.7	-5.5	-5.8	-6.5	-6.5	-6.9	-7.7	1.3	-7.7	-2.9
9	-7.9	-7.6	-6.9	-5.7	-7.4	-6.5	-5.7	-6.0	-7.0	-5.2	-4.4	-3.1	-2.1	-2.0	-2.0	-2.5	-4.2	-5.4	-3.3	-2.7	-4.1	-4.1	-3.7	-3.2	-2.0	-7.9	-4.7
10	-4.2	-3.5	-2.2	-1.7	-1.6	-1.5	-1.4	-1.6	-1.6	-1.9	-2.8	-3.2	-4.0	-4.9	-5.3	-6.8	-7.3	-8.5	-9.1	-9.5	-9.5	-9.3	-9.1	-9.0	-1.4	-9.5	-5.0
11	-8.9	-9.1	-9.0	-9.3	-9.4	-9.5	-9.7	-10.2	-10.7	-10.2	-9.8	-9.8	-9.9	-10.2	-9.8	-9.8	-10.0	-9.7	-10.1	-11.2	-11.5	-11.4	-11.5	-11.6	-8.9	-11.6	-10.1
12	-11.4	-11.9	-12.2	-12.5	-12.6	-12.7	-13.1	-13.4	-13.5	-14.1	-14.5	-14.8	-15.2	-15.3	-15.4	-15.7	-16.0	-16.4	-17.3	-18.0	-18.6	-18.2	-18.4	-18.4	-11.4	-18.6	-15.0
13	-19.2	-20.2	-20.7	-21.0	-20.8	-20.8	-21.2	-21.5	-21.5	-21.5	-21.3	-21.2	-20.9	-20.6	-20.8	-21.0	-21.1	-21.2	-21.4	-21.1	-21.1	-21.3	-21.4	-21.5	-19.2	-21.5	-21.0
14	-21.7	-21.8	-20.7	-19.0	-19.1	-17.9	-16.7	-13.5	-12.0	-10.7	-9.8	-8.8	-8.6	-8.7	-8.3	-8.0	-7.5	-7.2	-6.8	-6.3	-6.4	-6.2	-5.9	-5.7	-5.7	-21.8	-11.6
15	-5.5	-5.5	-5.2	-4.9	-4.7	-4.4	-4.3	-4.1	-3.7	-3.7	-3.6	-3.3	-2.6	-2.5				-2.2	-2.0	-1.8	-1.7	-1.9	-2.7	-2.8	-1.7	-5.5	-3.5
16	-2.1	-2.2	-2.1	-1.9	-2.1	-2.2	-2.1	-1.8	-1.8	-1.6	-1.7	-1.6	-2.8	-4.3	-3.6	-3.3	-3.0	-3.6	-4.1	-4.9	-6.3	-7.6	-9.1	-10.2	-1.6	-10.2	-3.6
17	-11.3	-11.7	-12.2	-13.1	-13.3	-13.4	-14.2	-14.8	-15.4	-16.6	-16.5	-16.6	-16.9	-17.2	-17.4	-18.2	-19.8	-20.9	-21.4	-21.8	-21.4	-21.0	-19.2	-20.5	-11.3	-21.8	-16.9
18	-21.2	-21.4	-22.1	-22.3	-22.6	-22.0	-21.6	-21.2	-21.5	-22.1	-23.1	-22.8	-22.3	-21.6	-21.5	-21.3	-22.1	-22.1	-22.0	-22.3	-22.0	-22.7	-23.1	-23.7	-21.2	-23.7	-22.1
19	-23.7	-23.3	-23.4	-23.9	-24.3	-25.0	-25.7	-25.8	-25.9	-25.8	-25.9	-25.8	-25.7	-25.2	-24.8	-25.1	-25.8	-26.4	-26.4	-26.2	-26.2	-26.6	-26.7	-26.1	-23.3	-26.7	-25.4
20	-26.4	-26.2	-25.9	-25.4	-24.0	-25.5	-26.1	-25.9	-25.8	-25.3	-25.4	-25.3	-24.7	-24.1	-24.4	-23.6	-23.2	-23.2	-23.3	-23.0	-22.5	-23.3	-23.1	-22.9	-22.5	-26.4	-24.5
21	-22.8	-22.5	-23.1	-23.1	-22.8	-22.9	-23.1	-23.2	-23.4	-23.8	-24.3	-25.3	-25.8	-26.1	-25.8	-25.9	-25.9	-25.9	-25.9	-26.5	-27.1	-27.6	-28.2	-29.0	-22.5	-29.0	-25.0
22	-29.4	-29.9	-29.8	-29.7	-29.7	-29.6	-29.3	-29.1	-29.0	-29.0	-29.1	-29.2	-29.3	-29.5	-29.6	-29.7	-29.7	-29.7	-29.9	-30.2	-30.4	-30.4	-30.3	-30.5	-29.0	-30.5	-29.7
23	-30.7	-30.8	-30.8	-30.7	-30.6	-30.6	-30.7	-30.7	-30.0	-30.1	-30.0	-30.3	-29.1	-28.3	-27.6	-27.0	-26.8	-26.7	-26.6	-25.8	-26.7	-26.6	-26.2	-26.2	-25.8	-30.8	-28.7
24	-26.1	-25.8	-25.4	-25.8	-26.1	-26.2	-26.1	-26.0	-25.9	-25.8	-26.2	-26.0	-25.9	-25.6	-25.3	-25.5	-25.9	-26.2	-26.6	-27.2	-28.2	-28.7	-28.6	-28.7	-25.3	-28.7	-26.4
25	-29.3	-29.5	-29.3	-29.8	-29.6	-30.1	-30.3	-30.9	-30.5	-30.4	-29.4	-28.5	-28.5	-28.3	-27.3	-27.7	-27.7	-27.5	-28.8	-29.2	-29.8	-30.6	-30.2	-29.6	-27.3	-30.9	-29.3
26	-29.7	-29.2	-29.7	-30.3	-30.9	-29.9	-30.0	-29.8	-29.8	-29.5	-28.9	-27.5	-26.6	-26.2	-26.8	-26.2	-26.2	-26.4	-26.6	-28.0	-28.1	-28.0	-29.3	-30.1	-26.2	-30.9	-28.5
27	-29.7	-30.4	-31.1	-31.6	-31.5	-31.9	-32.9	-33.5	-33.5	-33.8	-33.9	-34.0	-34.0	-33.9	-33.4	-33.3	-33.2	-33.2	-33.0	-32.8	-33.0	-32.5	-32.2	-32.1	-29.7	-34.0	-32.7
28	-31.8	-32.1	-32.6	-32.7	-33.0	-33.2	-33.7	-34.1	-34.2	-34.8	-35.3	-34.8	-34.1	-33.4	-32.1	-32.1	-32.5	-33.2	-33.1	-33.1	-33.4	-33.1	-33.1	-33.3	-31.8	-35.3	-33.3
29	-33.3	-33.1	-33.1	-32.9	-32.7	-32.6	-32.5	-32.1	-31.9	-32.1	-32.1	-30.7	-30.7	-30.4	-30.3	-29.8	-29.6	-30.3	-29.6	-30.4	-30.2	-30.0	-30.6	-30.5	-29.6	-33.3	-31.3
30	-29.1	-29.2	-29.2	-28.7	-28.9	-29.3	-29.6	-29.4	-28.9	-28.7	-28.1	-26.8	-26.7	-26.7	-26.4	-26.7	-26.9	-23.5	-20.7	-20.8	-23.1	-23.1	-21.5	-20.1	-20.1	-29.6	-26.3
31	-20.0	-19.8	-19.0	-19.0	-18.2	-17.9	-17.8	-17.5	-17.6	-18.9	-19.8	-19.7	-19.3	-19.3	-20.2	-20.2	-21.4	-22.1	-23.0	-23.3	-25.1	-26.9	-27.4	-27.0	-17.5	-27.4	-20.8
Max.	**0.2**	**-0.9**	**-0.7**	**-1.1**	**-1.1**	**-1.3**	**1.3**	**0.4**	**0.6**	**-0.1**	**-0.6**	**0.1**	**-0.2**	**-0.4**	**-0.4**	**0.1**	**-0.6**	**-0.6**	**-0.6**	**-0.8**	**-0.7**	**-0.4**	**0.0**	**0.4**	**1.3**		
Min.	**-33.3**	**-33.1**	**-33.1**	**-32.9**	**-33.0**	**-33.2**	**-33.7**	**-34.1**	**-34.2**	**-34.8**	**-35.3**	**-34.8**	**-34.1**	**-33.9**	**-33.4**	**-33.3**	**-33.2**	**-33.2**	**-33.1**	**-33.1**	**-33.4**	**-33.1**	**-33.1**	**-33.3**		**-35.3**	
Avg.	**-16.0**	**-16.0**	**-16.0**	**-16.1**	**-16.1**	**-16.1**	**-16.0**	**-16.0**	**-16.0**	**-16.0**	**-16.0**	**-15.7**	**-15.6**	**-15.6**	**-15.9**	**-15.9**	**-16.2**	**-15.9**	**-16.0**	**-16.2**	**-16.5**	**-16.7**	**-16.7**	**-16.8**			**-16.0**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-27.3	-28.5	-28.9	-28.4	-29.3	-29.6	-29.9	-30.3	-30.7	-30.9	-31.2	-30.6	-29.9	-29.5	-29.2	-29.2	-29.5	-30.1	-30.4	-31.0	-31.5	-31.4	-31.5	-31.6	-27.3	-31.6	-30.0
2	-31.2	-31.2	-31.2	-31.6	-31.5	-31.6	-31.5	-31.2	-31.0	-30.4	-29.6	-29.4	-28.0	-27.5	-26.4	-24.5	-24.3	-25.0	-26.0	-26.3	-25.7	-25.1	-25.0	-23.0	-23.0	-31.6	-28.3
3	-19.5	-18.3	-17.1	-15.9	-15.8	-14.5	-13.4	-12.7	-12.4	-12.2	-11.8	-11.2	-10.6	-10.1	-9.6	-9.5	-9.5	-9.5	-9.0	-8.3	-8.0	-7.8	-7.7	-7.8	-7.7	-19.5	-11.8
4	-7.6	-7.6	-7.6	-7.5	-7.4	-7.2	-7.1	-6.9	-6.9	-6.5	-6.2	-5.9	-5.6	-4.6	-4.0	-4.1	-4.0	-3.9	-3.9	-3.7	-3.4	-2.9	-2.8	-2.5	-2.5	-7.6	-5.4
5	-2.4	-2.9	-2.9	-2.6	-2.5	-2.3	-1.9	-2.2	-1.8	-2.8	-3.1	-2.2	-1.6	-1.3	-1.5	-1.4	-1.0	-0.9	-1.3	-1.6	-1.5	-0.3	0.0	-0.4	0.0	-3.1	-1.8
6	-0.5	-0.8	-1.4	-1.0	-1.0	-1.3	-1.2	-1.2	-1.2	-1.2	-3.2	-3.6	-4.0	-4.4	-4.9	-5.1	-5.4	-5.8	-6.2	-6.9	-6.5	-6.5	-6.7	-6.8	-0.5	-6.9	-3.6
7	-6.8	-6.5	-6.5	-6.3	-6.6	-6.9	-6.6	-6.9	-7.5	-7.8	-8.4	-9.1	-9.3	-9.3	-9.2	-9.6	-10.2	-11.3	-11.6	-11.6	-11.3	-10.6	-10.6	-10.3	-6.3	-11.6	-8.8
8	-10.1	-10.0	-10.4	-11.0	-10.8	-10.5	-10.8	-10.2	-9.3	-7.9	-7.3	-7.6	-7.4	-6.8	-5.9	-5.8	-5.6	-5.2	-4.9	-4.6	-4.3	-4.0	-3.9	-4.0	-3.9	-11.0	-7.4
9	-3.5	-3.6	-3.4	-3.1	-2.8	-2.6	-2.3	-2.7	-2.7	-3.1	-2.6	-2.7	-2.0	-1.4	-0.7	-0.2	0.3	0.5	0.7	0.7	1.4	1.0	0.4	-0.6	1.4	-3.6	-1.5
10	-1.0	-1.3	-1.2	-1.1	-0.7	-0.2	0.0	0.0	-0.7	-1.1	-1.0	-1.0	-1.1	-1.1	-0.7	-0.6	-0.5	-0.5	-0.7	-0.6	-0.6	-0.7	-0.8	-0.8	0.0	-1.3	-0.7
11	-1.4	-1.5	-1.7	-1.6	-1.5	-1.5	-1.5	-1.9	-2.1	-2.1	-2.2	-1.8	-1.7	-1.4	-1.4	-1.3	-1.1	-0.8	-0.4	-0.5	-0.4	-0.1	0.0	0.1	0.1	-2.2	-1.2
12	0.1	0.0	-0.3	-0.5	-0.6	-0.9	-1.6	-2.3	-4.2	-5.1	-5.2	-5.4	-5.8	-6.3	-6.5	-6.5	-6.8	-6.8	-7.9	-9.0	-9.8	-10.4	-10.9	-10.4	0.1	-10.9	-5.1
13	-9.6	-9.8	-9.6	-8.6	-8.3	-8.0	-8.0	-7.9	-7.7	-6.8	-5.5	-3.4	-4.2	-2.8	-2.3	-1.5	-1.2	-1.0	-0.9	-0.5	-0.4	-0.2	0.1	0.1	0.1	-9.8	-4.5
14	0.3	0.6	0.7	0.4	0.0	-0.1	-0.1	-0.1	0.1	0.1	0.0	0.1	0.3	0.2	0.1	0.2	0.1	0.0	0.0	0.3	0.3	0.3	0.2	0.1	0.7	-0.1	0.2
15	0.0	0.4	0.2	0.5	1.0	1.0	0.7	0.6	0.6	0.8	0.7	0.8	0.8	0.6	0.5	0.6	0.5	0.1	-0.1	-0.6	-0.6	-0.4	-0.4	-0.3	1.0	-0.6	0.3
16	-0.3	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6	-0.9	-1.2	-0.8	-0.5	-0.5	-0.3	-0.5	-0.9	-1.1	-2.0	-2.4	-2.4	-2.7	-3.1	-0.3	-3.1	-1.0
17	-3.3	-3.2	-2.5	-2.4	-1.9	-1.6	-0.9	-0.8	-0.5	0.1	0.0	0.2	0.4	0.4	0.5	0.3	0.1	-0.2	-0.4	-0.4	-0.6	-0.7	-0.9	-1.0	0.5	-3.3	-0.8
18	-0.9	-0.9	-0.9	-0.8	-0.9	-0.9	-0.9	-0.9	-0.7	-0.5	-0.2	-0.1	0.2	0.2	-0.3	-0.8	-0.7	-1.0	-1.2	-1.2	-0.7	0.1	0.3	0.0	0.3	-1.2	-0.6
19	-0.7	-1.3	-1.8	-2.1	-2.5	-3.2	-3.9	-4.6	-5.0	-5.5	-5.2	-4.4	-3.2	-3.3	-3.1	-2.9	-2.6	-2.6	-2.9	-3.2	-4.0	-5.1	-5.1	-5.5	-0.7	-5.5	-3.5
20	-5.2	-5.0	-4.8	-4.9	-5.1	-5.4	-5.6	-5.0	-4.9	-4.3	-4.0	-3.5	-3.5	-3.5	-3.2	-3.3	-3.8	-5.0	-5.6	-6.7	-7.6	-8.2	-8.4	-8.6	-3.2	-8.6	-5.2
21	-9.5	-9.9	-10.5	-11.2	-11.7	-12.3	-12.2	-11.4	-11.7	-10.6	-9.0	-7.9	-6.2	-7.2	-7.2	-7.6	-7.3	-7.8	-9.0	-8.7	-8.9	-9.1	-9.8	-9.6	-6.2	-12.3	-9.4
22	-9.9	-9.8	-9.6	-9.8	-9.5	-9.6	-9.3	-10.0	-9.6	-8.8	-8.1	-7.6	-6.5	-6.2	-6.4	-6.9	-7.3	-8.2	-7.9	-7.6	-7.3	-7.8	-8.2	-8.5	-6.2	-10.0	-8.4
23	-8.5	-8.3	-8.0	-7.9	-7.5	-7.1	-6.2	-7.4	-8.5	-7.9	-8.0	-8.3	-6.9	-6.7	-7.3	-7.6	-8.2	-8.8	-8.5	-8.8	-9.4	-9.3	-9.8	-11.6	-6.2	-11.6	-8.2
24	-12.7	-14.0	-13.8	-14.1	-15.0	-15.0	-15.8	-15.8	-15.6	-13.7	-12.4	-10.8	-8.7	-6.8	-6.6	-6.5	-6.9	-9.5	-11.3	-11.6	-10.9	-11.1	-11.2	-10.7	-6.5	-15.8	-11.7
25	-10.7	-10.3	-10.7	-10.5	-9.8	-9.1	-9.0	-8.5	-8.0	-7.4	-6.3	-3.5	-3.7	-5.5	-6.6	-7.3	-8.0	-8.6	-9.9	-10.8	-10.3	-9.7	-8.9	-8.9	-3.5	-10.8	-8.4
26	-9.8	-9.7	-9.0	-9.1	-9.6	-10.6	-10.5	-10.2	-9.7	-9.6	-9.2	-8.4	-7.3	-6.7	-5.9	-5.4	-6.2	-8.2	-8.9	-9.0	-8.9	-8.5	-7.7	-6.4	-5.4	-10.6	-8.5
27	-6.3	-6.1	-5.6	-6.5	-8.4	-9.7	-11.8	-13.0	-14.5	-15.8	-16.5	-17.2	-18.2	-18.4	-18.4	-18.8	-19.0	-19.1	-19.4	-20.0	-20.3	-20.6	-20.9	-21.2	-5.6	-21.2	-15.2
28	-21.6	-21.7	-21.7	-21.6	-22.1	-21.9	-22.0	-22.2	-22.3	-22.0	-21.3	-20.5	-20.0	-18.8	-17.7	-18.0	-18.4	-19.2	-20.1	-21.3	-21.9	-21.9	-22.7	-22.6	-17.7	-22.7	-21.0
Max.	**0.3**	**0.6**	**0.7**	**0.5**	**1.0**	**1.0**	**0.7**	**0.6**	**0.6**	**0.8**	**0.7**	**0.8**	**0.8**	**0.6**	**0.5**	**0.6**	**0.5**	**0.5**	**0.7**	**0.7**	**1.4**	**1.0**	**0.4**	**0.1**	**1.4**		
Min.	**-31.2**	**-31.2**	**-31.2**	**-31.6**	**-31.5**	**-31.6**	**-31.5**	**-31.2**	**-31.0**	**-30.9**	**-31.2**	**-30.6**	**-29.9**	**-29.5**	**-29.2**	**-29.2**	**-29.5**	**-30.1**	**-30.4**	**-31.0**	**-31.5**	**-31.4**	**-31.5**	**-31.6**		**-31.6**	
Avg.	**-7.9**	**-7.9**	**-7.9**	**-7.8**	**-7.9**	**-8.0**	**-8.0**	**-8.1**	**-8.2**	**-8.0**	**-7.8**	**-7.4**	**-6.9**	**-6.7**	**-6.6**	**-6.5**	**-6.7**	**-7.1**	**-7.5**	**-7.7**	**-7.7**	**-7.6**	**-7.7**	**-7.7**			**-7.6**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-22.7	-23.2	-23.2	-23.0	-22.9	-22.8	-22.3	-21.9	-21.2	-19.7	-16.7	-12.0	-11.3	-13.5	-15.0	-15.0	-14.5	-13.6	-13.2	-12.0	-11.6	-11.6	-11.2	-10.8	-10.8	-23.2	-16.9
2	-10.3	-10.1	-10.1	-10.0	-9.7	-9.3	-9.1	-8.6	-8.0	-7.2	-6.4	-5.8	-5.4	-5.0	-4.9	-4.7	-4.5	-4.4	-4.3	-4.1	-4.0	-4.0	-3.7	-3.5	-3.5	-10.3	-6.5
3	-3.5	-3.4	-3.3	-3.4	-3.5	-3.6	-3.8	-4.4	-4.7	-4.5	-4.2	-3.9	-3.8	-4.0	-4.2	-5.0	-5.5	-5.6	-5.8	-6.4	-6.7	-7.0	-6.9	-6.7	-3.3	-7.0	-4.7
4	-6.7	-6.7	-6.6	-6.6	-6.3	-5.6	-5.4	-5.4	-5.0	-4.9	-4.4	-4.1	-3.9	-3.6	-3.7	-3.8	-4.0	-4.2	-4.0	-4.0	-4.0	-4.0	-4.0	-3.9	-3.6	-6.7	-4.8
5	-3.9	-3.9	-4.0	-4.0	-4.1	-4.1	-4.4	-4.7	-4.9	-4.9	-4.7	-3.9	-3.3	-3.0	-2.9	-2.8	-3.6	-4.6	-4.7	-5.0	-5.1	-5.1	-5.0	-5.1	-2.8	-5.1	-4.2
6	-5.2	-5.9	-7.1	-7.3	-7.7	-8.2	-9.3	-9.8	-10.0	-8.3	-7.1	-6.4	-3.1	-3.4	-2.0	-1.8	-3.8	-7.2	-9.2	-9.7	-9.7	-9.4	-9.7	-10.2	-1.8	-10.2	-7.1
7	-10.7	-10.6	-10.8	-10.8	-11.0	-11.0	-11.1	-11.0	-11.2	-11.6	-12.5	-12.2	-12.1	-12.8	-13.0	-12.7	-13.6	-15.3	-16.2	-16.8	-17.7	-18.5	-19.6	-20.1	-10.6	-20.1	-13.5
8	-20.0	-19.3	-18.7	-18.4	-18.2	-18.0	-17.9	-18.1	-18.4	-19.1	-19.0	-18.0	-17.9	-16.4	-15.5	-15.5	-15.9	-16.2	-16.8	-17.8	-18.8	-20.3	-20.8	-21.3	-15.5	-21.3	-18.2
9	-21.8	-22.0	-22.3	-22.5	-22.9	-23.2	-23.4	-23.8	-23.7	-23.2	-22.5	-21.3	-20.0	-19.5	-18.9	-17.8	-17.5	-17.5	-18.4	-19.1	-19.6	-19.7	-20.1	-20.3	-17.5	-23.8	-20.9
10	-20.9	-20.9	-20.9	-20.7	-20.3	-20.0	-18.9	-18.5	-17.9	-16.8	-15.5	-13.1	-12.6	-11.5	-10.5	-9.8	-9.7	-10.0	-10.3	-10.9	-11.1	-10.7	-9.8	-9.5	-9.5	-20.9	-14.6
11	-9.1	-8.9	-8.4	-8.2	-8.3	-8.3	-8.1	-8.2	-7.7	-7.4	-7.6	-7.3	-7.0	-6.4	-6.2	-6.1	-6.2	-6.3	-6.2	-6.2	-6.2	-6.2	-6.1	-6.1	-6.1	-9.1	-7.2
12	-5.8	-5.6	-5.3	-5.2	-5.4	-5.3	-4.8	-4.6	-4.4	-4.2	-4.0	-4.2	-4.4	-4.4	-4.0	-3.8	-3.6	-3.8	-3.8	-3.7	-3.8	-4.6	-5.3	-5.9	-3.6	-5.9	-4.6
13	-5.6	-5.2	-4.7	-4.7	-4.6	-4.8	-5.6	-5.8	-5.7	-6.5	-6.7	-6.7	-7.4	-7.5	-6.9	-7.1	-7.3	-7.8	-9.1	-9.9	-10.5	-11.0	-12.6	-13.7	-4.6	-13.7	-7.4
14	-14.6	-14.0	-14.4	-14.9	-15.2	-14.9	-15.4	-15.9	-15.5	-15.8	-16.2	-14.8	-13.9	-13.6	-13.3	-12.5	-12.3	-12.1	-11.6	-11.7	-12.4	-12.6	-12.5	-12.5	-11.6	-16.2	-13.9
15	-12.9	-13.5	-13.9	-14.4	-14.5	-15.1	-15.6	-15.3	-14.4	-14.2	-14.1	-13.4	-13.7	-13.1	-12.5	-11.9	-11.4	-11.7	-12.0	-11.6	-11.7	-11.6	-11.7	-11.7	-11.4	-15.6	-13.2
16	-11.1	-10.8	-11.4	-11.8	-11.8	-11.6	-11.6	-12.1	-11.0	-10.5	-10.1	-9.4	-8.2	-7.3	-6.6	-6.8	-6.8	-7.1	-7.8	-9.0	-9.4	-9.1	-8.8	-9.4	-6.6	-12.1	-9.6
17	-9.1	-8.8	-9.1	-9.2	-9.9	-10.6	-10.6	-10.3	-9.4	-8.3	-7.2	-7.1	-7.3	-7.7	-6.7	-6.5	-6.1	-5.9	-6.1	-6.1	-6.0	-6.1	-6.0	-6.1	-5.9	-10.6	-7.8
18	-6.2	-6.4	-6.2	-6.2	-6.3	-7.3	-7.2	-7.5	-7.7	-7.0	-6.5	-6.1	-5.9	-5.5	-5.1	-4.6	-4.1	-4.2	-4.6	-4.9	-5.7	-6.2	-6.5	-7.1	-4.1	-7.7	-6.1
19	-6.9	-6.7	-6.8	-6.5	-6.7	-8.0	-8.4	-8.6	-8.0	-7.4	-6.6	-5.7	-5.2	-5.0	-4.5	-4.6	-4.4	-4.4	-4.5	-4.5	-4.4	-4.1	-4.4	-4.4	-4.1	-8.6	-5.9
20	-4.4	-4.6	-4.5	-4.8	-5.1	-4.8	-4.6	-4.6	-4.8	-4.4	-4.1	-3.8	-3.7	-3.4	-4.1	-4.7	-6.1	-7.3	-8.3	-9.1	-9.9	-10.4	-10.9	-11.4	-3.4	-11.4	-6.0
21	-11.5	-11.5	-11.3	-11.5	-11.9	-12.0	-12.1	-12.3	-12.3	-11.9	-11.6	-11.1	-10.4	-9.5	-8.8	-8.7	-8.5	-8.6	-8.8	-9.5	-10.2	-10.9	-11.5	-11.9	-8.5	-12.3	-10.8
22	-12.1	-12.8	-13.1	-13.6	-13.6	-14.2	-14.0	-13.6	-13.1	-12.6	-11.9	-11.4	-10.7	-10.3	-9.9	-9.4	-9.2	-9.0	-9.3	-10.3	-10.6	-10.7	-11.2	-11.2	-9.0	-14.2	-11.6
23	-10.5	-9.4	-9.3	-10.0	-11.1	-10.9	-9.4	-9.4	-9.0	-10.4	-10.8	-9.9	-8.9	-8.8	-8.3	-8.1	-8.3	-9.1	-9.9	-10.7	-11.6	-11.2	-9.8	-10.0	-8.1	-11.6	-9.8
24	-11.6	-11.0	-11.7	-12.1	-12.2	-13.6	-13.8	-13.2	-13.6	-12.7	-11.2	-10.2	-9.4	-8.8	-8.4	-8.2	-8.0	-8.0	-8.7	-9.8	-10.9	-12.0	-11.9	-12.3	-8.0	-13.8	-11.0
25	-12.7	-13.3	-12.6	-12.5	-13.2	-12.7	-12.6	-12.8	-13.0	-12.8	-12.4	-11.5	-10.5	-9.6	-8.9	-8.6	-8.7	-8.9	-9.3	-10.2	-10.9	-11.3	-12.3	-12.9	-8.6	-13.3	-11.4
26	-13.7	-14.3	-14.6	-15.1	-15.1	-15.3	-15.5	-15.6	-15.2	-14.5	-13.8	-13.0	-12.0	-10.8	-10.0	-9.5	-9.1	-9.2	-9.5	-9.8	-10.0	-9.5	-9.4	-9.0	-9.0	-15.6	-12.2
27	-9.1	-8.8	-8.4	-8.7	-8.9	-8.8	-8.0	-7.4	-6.0	-3.0	-2.1	-2.0	-1.7	-1.4	-0.8	-0.8	-0.5	-0.7	-0.9	-1.9	-3.0	-3.4	-3.7	-3.6	-0.5	-9.1	-4.3
28	-3.9	-3.9	-4.2	-4.2	-3.3	-3.5	-3.4	-3.5	-2.9	-2.4	-2.3	-1.7	-1.1	-0.5	-0.2	0.0	0.0	-0.6	-1.2	-1.9	-2.2	-3.0	-3.5	-3.7	0.0	-4.2	-2.4
29	-4.0	-5.0	-5.3	-5.0	-5.8	-6.1	-6.4	-5.6	-6.0	-5.9	-4.5	-3.5	-3.1	-3.0	-2.9	-2.5	-2.9	-3.5	-3.8	-4.3	-4.8	-5.6	-6.0	-5.9	-2.5	-6.4	-4.6
30	-5.6	-4.7	-4.2	-3.9	-3.8	-3.1	-2.8	-2.7	-2.4	-2.3	-2.0	-1.6	-1.5	-1.4	-1.5	-1.6	-1.7	-1.8	-1.9	-1.9	-1.8	-1.8	-1.8	-1.5	-1.4	-5.6	-2.5
31	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.6	-1.7	-1.6	-2.7	-3.8	-4.2	-4.2	-4.4	-4.3	-4.3	-4.2	-4.2	-4.6	-4.8	-4.7	-5.1	-5.2	-5.0	-1.4	-5.2	-3.3
Max.	**-1.4**	**-1.4**	**-1.4**	**-1.4**	**-1.5**	**-1.5**	**-1.6**	**-1.7**	**-1.6**	**-2.3**	**-2.0**	**-1.6**	**-1.1**	**-0.5**	**-0.2**	**0.0**	**0.0**	**-0.6**	**-0.9**	**-1.9**	**-1.8**	**-1.8**	**-1.8**	**-1.5**	**0.0**		
Min.	**-22.7**	**-23.2**	**-23.2**	**-23.0**	**-22.9**	**-23.2**	**-23.4**	**-23.8**	**-23.7**	**-23.2**	**-22.5**	**-21.3**	**-20.0**	**-19.5**	**-18.9**	**-17.8**	**-17.5**	**-17.5**	**-18.4**	**-19.1**	**-19.6**	**-20.3**	**-20.8**	**-21.3**		**-23.8**	
Avg.	**-9.9**	**-9.9**	**-9.9**	**-10.0**	**-10.2**	**-10.3**	**-10.2**	**-10.2**	**-10.0**	**-9.6**	**-9.1**	**-8.4**	**-7.9**	**-7.6**	**-7.2**	**-7.1**	**-7.2**	**-7.5**	**-7.9**	**-8.3**	**-8.7**	**-8.9**	**-9.1**	**-9.2**			**-8.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-4.8	-5.4	-5.6	-6.0	-6.3	-6.2	-6.5	-6.5	-6.4	-6.5	-6.0	-5.3	-5.3	-5.1	-5.5	-5.5	-5.6	-6.1	-5.9	-5.9	-6.0	-6.1	-6.4	-6.0	-4.8	-6.5	-5.9
2	-6.3	-6.0	-6.1	-6.3	-7.0	-7.7	-7.8	-8.9	-9.5	-9.6	-9.1	-7.6	-7.2	-7.1	-6.8	-7.0	-6.7	-6.3	-5.9	-5.9	-6.1	-5.8	-5.6	-5.4	-5.4	-9.6	-7.0
3	-5.1	-5.0	-4.4	-4.0	-3.7	-3.4	-3.1	-3.0	-2.6	-1.7	-1.5	-1.4	-1.1	-0.9	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-5.1	-1.9
4	-0.4	-0.3	-0.2	-0.2	-0.2	0.0	0.1	0.3	0.6	1.0	1.2	1.1	1.0	1.1	1.4	1.2	1.1	0.6	0.6	0.5	0.4	0.6	0.3	0.2	1.4	-0.4	0.5
5	-0.3	-1.2	-2.1	-3.3	-3.9	-5.2	-6.2	-7.0	-7.4	-6.9	-7.1	-7.1	-6.1	-5.8	-5.6	-5.9	-6.2	-6.6	-7.4	-8.2	-9.0	-10.1	-10.7	-11.6	-0.3	-11.6	-6.3
6	-12.6	-13.5	-14.3	-14.9	-15.3	-15.7	-16.4	-15.8	-14.8	-14.0	-12.9	-11.6	-10.4	-9.4	-8.5	-7.7	-7.2	-6.9	-6.9	-6.9	-6.7	-7.0	-5.7	-5.2	-5.2	-16.4	-10.8
7	-5.1	-5.0	-5.0	-4.8	-4.8	-4.7	-4.3	-4.3	-3.6	-2.5	-1.3	-0.7	-0.3	0.6	1.0	0.6	0.3	0.4	0.1	-0.3	-0.5	-0.6	-0.6	-0.6	1.0	-5.1	-1.9
8	-0.6	-0.5	-0.6	-0.7	-1.2	-1.6	-1.6	-1.6	-1.4	-1.1	-1.0	-1.2	-0.9	-0.7	-0.7	-0.8	-1.1	-1.1	-1.5	-1.8	-1.8	-1.8	-1.8	-1.8	-0.5	-1.8	-1.2
9	-1.5	-1.6	-1.8	-1.9	-2.0	-2.0	-2.1	-1.8	-1.7	-1.6	-1.2	-0.9	-0.8	-0.7	-0.5	-0.5	-0.2	-0.4	-1.1	-2.2	-2.5	-3.1	-3.9	-3.8	-0.2	-3.9	-1.7
10	-3.9	-3.8	-3.6	-3.5	-3.5	-3.6	-4.0	-4.1	-4.5	-4.4	-4.2	-4.4	-3.7	-4.0	-4.3	-4.3	-4.6	-5.0	-6.1	-7.1	-8.1	-8.2	-8.2	-8.8	-3.5	-8.8	-5.0
11	-9.3	-9.1	-9.1	-8.3	-8.1	-8.3	-8.2	-8.1	-7.5	-7.0	-6.1	-4.8	-4.3	-4.1	-4.8	-4.0	-3.7	-3.7	-3.6	-3.5	-3.7	-3.8	-3.7	-3.7	-3.5	-9.3	-5.8
12	-3.8	-3.6	-3.5	-3.5	-3.5	-3.4	-3.0	-2.7	-2.3	-2.3	-2.1	-2.0	-1.8	-1.9	-2.5	-2.5	-2.7	-2.4	-2.6	-2.9	-3.3	-4.0	-4.5	-5.2	-1.8	-5.2	-3.0
13	-4.9	-5.3	-4.9	-4.8	-5.0	-4.8	-4.4	-4.9	-5.4	-5.7	-5.7	-5.9	-6.0	-5.6	-5.2	-5.0	-5.4	-5.6	-6.6	-7.9	-9.0	-9.9	-10.7	-10.9	-4.4	-10.9	-6.2
14	-10.9	-11.3	-11.8	-12.2	-12.4	-12.8	-12.8	-12.9	-12.5	-12.0	-11.7	-10.8	-10.0	-9.3	-8.1	-8.0	-7.6	-7.6	-7.8	-8.5	-9.6	-10.6	-11.2	-11.5	-7.6	-12.9	-10.6
15	-11.6	-12.6	-13.2	-13.3	-14.0	-14.7	-15.1	-14.3	-14.3	-14.1	-13.0	-13.1	-12.2	-11.5	-11.0	-9.8	-10.4	-10.7	-10.5	-10.8	-12.4	-13.0	-13.3	-13.0	-9.8	-15.1	-12.6
16	-12.9	-12.8	-12.9	-10.6	-9.2	-9.0	-8.7	-8.2	-7.5	-7.0	-6.4	-5.6	-5.0	-4.9	-4.6	-4.2	-4.2	-4.2	-4.0	-3.7	-3.6	-3.5	-3.6	-3.6	-3.5	-12.9	-6.7
17	-3.3	-3.1	-3.1	-3.2	-3.0	-3.0	-3.3	-3.4	-2.5	-2.8	-2.2	-2.4	-2.4	-2.0	-2.0	-1.8	-1.7	-1.9	-2.3	-2.6	-2.8	-3.2	-3.9	-4.5	-1.7	-4.5	-2.8
18	-5.3	-5.4	-5.1	-4.7	-5.1	-5.0	-3.8	-2.9	-2.5	-2.3	-2.1	-1.8	-1.2	-0.8	-0.6	-0.4	-0.4	-0.5	-0.8	-0.9	-0.8	-1.8	-2.1	-2.5	-0.4	-5.4	-2.5
19	-4.7	-6.2	-6.6	-6.2	-6.3	-6.6	-6.9	-7.0	-7.2	-7.3	-6.9	-6.4	-6.1	-6.2	-6.4	-6.5	-6.7	-6.5	-6.6	-7.2	-7.4	-7.5	-7.5	-7.5	-4.7	-7.5	-6.7
20	-7.6	-7.7	-7.8	-7.8	-7.7	-7.7	-7.6	-7.7	-7.3	-6.7	-5.8	-4.9	-4.0	-3.5	-2.7	-2.6	-2.6	-2.8	-2.7	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-7.8	-5.0
21	-2.5	-2.6	-2.6	-2.2	-1.7	-1.3	-0.9	-0.6	0.1	0.2	0.0	-0.4	-0.4	-0.6	-0.4	0.0	-0.4	-1.2	-1.4	-1.5	-1.5	-1.6	-1.9	-2.5	0.2	-2.6	-1.2
22	-2.6	-2.3	-1.9	-2.0	-2.1	-2.3	-1.9	-1.8	-1.9	-1.7	-1.6	-1.8	-1.2	-1.0	-0.9	-0.7	-0.7	-0.7	-0.7	-1.2	-1.5	-2.1	-2.7	-2.6	-0.7	-2.7	-1.7
23	-2.4	-2.3	-2.4	-2.3	-2.4	-2.6	-2.7	-2.6	-2.3	-1.5	-1.2	-0.9	-0.7	-0.6	-0.4	-0.4	-0.4	-0.2	-0.3	-1.1	-1.8	-2.6	-2.8	-3.5	-0.2	-3.5	-1.7
24	-3.5	-3.6	-4.1	-3.8	-3.5	-3.5	-3.5	-3.7	-3.7	-3.2	-2.6	-2.4	-2.3	-1.9	-1.6	-1.6	-1.9	-2.7	-3.6	-4.4	-5.3	-5.9	-6.7	-7.1	-1.6	-7.1	-3.6
25	-7.5	-7.7	-8.0	-8.3	-8.9	-9.2	-9.2	-9.0	-8.7	-8.1	-7.3	-6.0	-4.9	-4.3	-4.1	-3.1	-2.4	-2.1	-2.1	-2.0	-2.0	-2.1	-2.1	-2.2	-2.0	-9.2	-5.5
26	-2.1	-2.0	-2.2	-2.5	-2.4	-2.0	-2.0	-1.9	-1.7	-0.6	0.5	0.9	0.8	1.3	1.6	1.4	1.4	1.4	1.0	1.2	0.9	0.7	0.6	0.4	1.6	-2.5	-0.2
27	0.0	-0.1	0.3	-0.3	-0.3	0.1	-0.2	-0.4	-0.7	-0.4	0.0	0.5	1.1	1.5	1.5	1.8	1.7	1.3	0.8	0.1	-0.8	-1.3	-2.5	-3.0	1.8	-3.0	0.0
28	-3.2	-4.5	-5.7	-6.2	-6.9	-7.5	-6.7	-6.8	-6.1	-5.1	-4.2	-3.1	-2.5	-2.3	-2.2	-2.6	-2.5	-2.3	-2.3	-2.5	-2.6	-3.4	-4.3	-4.5	-2.2	-7.5	-4.2
29	-4.3	-4.3	-5.1	-4.8	-4.8	-4.8	-4.9	-5.2	-4.2	-3.3	-2.0	-1.1	-0.6	-0.1	0.5	0.8	0.8	0.5	0.0	-1.1	-2.0	-3.2	-3.5	-3.7	0.8	-5.2	-2.5
30	-3.5	-3.5	-3.8	-3.9	-3.5	-3.6	-2.9	-4.1	-5.6	-5.7	-5.7	-4.4	-3.6	-2.8	-2.1	-1.3	-0.6	-0.4	-0.1	-0.2	-0.7	-0.7	-0.9	-0.9	-0.1	-5.7	-2.7
Max.	**0.0**	**-0.1**	**0.3**	**-0.2**	**-0.2**	**0.1**	**0.1**	**0.3**	**0.6**	**1.0**	**1.2**	**1.1**	**1.1**	**1.5**	**1.6**	**1.8**	**1.7**	**1.4**	**1.0**	**1.2**	**0.9**	**0.7**	**0.6**	**0.4**	**1.8**		
Min.	**-12.9**	**-13.5**	**-14.3**	**-14.9**	**-15.3**	**-15.7**	**-16.4**	**-15.8**	**-14.8**	**-14.1**	**-13.0**	**-13.1**	**-12.2**	**-11.5**	**-11.0**	**-9.8**	**-10.4**	**-10.7**	**-10.5**	**-10.8**	**-12.4**	**-13.0**	**-13.3**	**-13.0**		**-16.4**	
Avg.	**-4.9**	**-5.1**	**-5.2**	**-5.2**	**-5.3**	**-5.4**	**-5.3**	**-5.4**	**-5.2**	**-4.8**	**-4.3**	**-3.8**	**-3.4**	**-3.1**	**-2.9**	**-2.7**	**-2.7**	**-2.8**	**-3.0**	**-3.4**	**-3.8**	**-4.2**	**-4.4**	**-4.6**			**-4.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.2	-1.4	-1.9	-2.1	-2.0	-1.4	-0.9	-0.4	0.3	1.1	1.9	2.3	2.6	2.2	2.5	2.8	2.8	2.6	2.1	1.7	1.0	0.6	0.1	-0.2	2.8	-2.1	0.6
2	-0.3	-0.1	0.3	0.1	-0.4	-0.1	0.2	0.5	0.9	1.6	1.6	1.5	1.9	2.1	2.1	2.2	1.9	1.8	1.9	1.3	1.2	0.8	0.8	0.1	2.2	-0.4	1.0
3	0.0	-0.2	-0.2	0.1	0.4	0.4	0.6	1.4	1.8	2.4	3.2	4.2	4.8	4.9	4.9	4.9	5.0	4.4	4.6	2.8	1.6	0.9	0.8	0.4	5.0	-0.2	2.2
4	0.4	0.2	0.3	0.0	-0.4	0.0	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.5	0.7	0.6	0.6	0.6	0.7	0.3	0.2	0.0	-0.1	-0.3	0.7	-0.4	0.3
5	-0.2	-0.2	-0.5	-0.5	-0.4	-0.1	0.3	0.5	1.0	1.2	1.5	2.4	2.0	1.6	2.1	1.7	1.6	1.6	1.5	1.0	0.8	0.2	0.1	-0.1	2.4	-0.5	0.8
6	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.8	-0.7	-0.7	-0.5	-0.5	-0.3	-0.1	-0.5	-0.8	-1.5	-2.3	-3.4	-3.5	-3.6	-0.1	-3.6	-0.9
7	-4.0	-4.1	-4.5	-4.6	-4.9	-5.2	-5.4	-5.3	-5.1	-5.0	-4.8	-4.3	-4.2	-4.5	-4.4	-4.5	-4.3	-4.2	-4.2	-4.0	-4.3	-4.4	-4.7	-5.5	-4.0	-5.5	-4.6
8	-5.9	-6.5	-6.9	-6.9	-7.2	-6.8	-6.0	-5.2	-4.1	-3.3	-2.0	-1.3	-1.0	-1.6	-1.3	-1.1	-0.7	0.4	0.8	0.5	0.2	0.3	0.4	0.2	0.8	-7.2	-2.7
9	0.1	0.1	0.7	0.8	0.8	0.8	0.9	1.3	1.9	2.5	2.5	2.7	2.8	3.2	3.5	3.3	3.5	3.1	3.1	2.5	1.9	2.7	2.7	2.7	3.5	0.1	2.1
10	2.5	2.4	2.2	2.0	2.0	2.2	2.1	1.8	1.9	2.9	2.9	2.8	3.5	4.1	4.6	3.0	1.7	2.4	2.3	2.5	2.8	2.3	2.0	2.4	4.6	1.7	2.6
11	2.6	1.3	0.3	0.5	0.5	1.3	2.3	2.8	3.1	3.2	3.6	3.6	4.2	3.9	5.0	5.3	4.3	4.3	3.3	3.3	2.6	2.8	2.8	3.1	5.3	0.3	2.9
12	2.6	2.8	3.1	2.6	2.2	2.1	2.0	2.1	3.0	4.0	4.8	5.4	5.9	6.5	6.7	7.1	7.0	6.5	6.1	4.7	4.1	2.9	2.3	2.6	7.1	2.0	4.1
13	2.1	1.4	0.6	0.7	0.5	0.5	1.4	2.0	2.8	3.8	4.1	4.2	4.9	5.6	6.0	5.7	6.3	6.0	5.9	5.4	4.9	4.4	3.6	2.9	6.3	0.5	3.6
14	3.0	2.6	2.5	2.3	2.0	3.2	3.3	3.7	3.9	4.4	5.2	6.0	6.5	6.9	7.0	6.2	5.7	5.1	4.5	3.5	2.2	1.8	1.1	0.7	7.0	0.7	3.9
15	0.9	0.6	0.6	0.7	0.7	0.9	0.8	1.7	2.1	2.2	2.7	3.6	4.2	4.8	5.3	6.2	6.6	6.4	5.9	5.8	4.3	3.8	3.2	2.3	6.6	0.6	3.2
16	1.7	1.4	0.9	0.4	-0.2	-0.8	-0.7	0.1	0.7	1.2	1.6	2.8	3.8	4.5	5.1	5.0	5.3	5.2	5.3	4.7	3.5	2.7	1.9	1.2	5.3	-0.8	2.4
17	0.8	0.5	0.2	-0.3	-0.2	-0.1	-0.3	1.3	2.3	3.0	3.5	3.9	4.1	4.5	4.5	4.0	4.0	3.6	3.1	2.2	1.3	1.1	0.9	0.9	4.5	-0.3	2.0
18	0.6	0.6	0.2	0.1	0.4	0.3	0.4	0.4	1.1	1.4	2.0	2.2	2.6	2.5	2.6	3.9	3.8	3.3	2.6	2.2	1.6	0.8	0.5	0.4	3.9	0.1	1.5
19	0.5	0.0	0.0	-0.7	-0.6	-0.9	-0.2	0.5	1.3	1.9	1.6	1.9	2.4	3.1	3.2	2.6	0.3	-0.2	-0.2	-0.1	-0.2	-0.4	-0.2	-0.2	3.2	-0.9	0.6
20	-0.2	-0.1	0.1	0.3	0.3	0.6	0.7	1.0	1.3	1.9	2.3	3.1	3.9	4.2	4.3	4.4	4.1	3.7	4.0	3.7	3.4	2.5	2.2	2.1	4.4	-0.2	2.2
21	1.7	1.5	1.0	0.4	0.2	0.3	0.2	0.1	0.2	0.4	1.3	2.2	2.8	3.1	4.0	4.1	4.6	3.7	4.5	4.8	4.5	4.2	3.6	3.2	4.8	0.1	2.4
22	2.5	2.0	1.7	1.1	0.8	1.1	1.5	2.5	3.4	4.4	5.1	5.7	6.7	8.3	9.6	10.4	10.7	11.1	11.1	10.1	8.1	7.0	5.5	4.6	11.1	0.8	5.6
23	4.4	3.2	2.1	2.3	2.4	4.0	4.6	6.0	7.5	9.7	12.0	13.9	16.0	17.4	17.4	17.7	18.0	17.1	16.5	15.9	14.1	12.6	11.7	10.9	18.0	2.1	10.7
24	10.2	10.2	10.6	9.9	9.8	10.9	11.8	11.6	12.1	13.5	15.2	15.9	16.9	17.7	18.7	18.9	19.1	18.8	18.1	15.8	15.2	14.5	14.4	13.5	19.1	9.8	14.3
25	12.9	12.0	11.1	10.9	10.0	10.5	10.7	11.4	12.8	14.0	15.3	16.7	17.7	18.5	19.5	19.9	20.1	19.4	18.1	17.4	17.9	16.4	15.5	15.0	20.1	10.0	15.1
26	13.7	12.7	11.5	11.3	10.5	11.1	11.2	12.7	14.4	16.5	18.5	20.6	21.7	22.5	22.8	23.0	22.7	21.8	21.0	19.5	17.8	15.8	15.5	13.8	23.0	10.5	16.8
27	11.8	12.1	11.5	9.9	10.2	9.9	10.5	10.3	11.2	13.3	14.1	15.5	17.0	16.7	17.6	19.1	19.4	19.9	18.8	17.0	16.6	14.9	12.8	12.4	19.9	9.9	14.3
28	11.7	11.0	11.3	11.4	12.1	11.3	11.6	12.8	13.2	14.0	15.3	16.7	18.3	19.0	19.7	20.3	20.4	20.6	20.6	18.6	16.7	14.9	13.8	12.9	20.6	11.0	15.3
29	12.2	11.8	11.5	10.9	10.3	9.9	11.0	12.2	13.0	13.9	14.9	15.7	16.2	16.5	16.3	16.0	15.8	15.1	14.1	12.8	11.2	9.8	9.0	8.2	16.5	8.2	12.8
30	7.6	7.1	6.7	6.2	6.0	6.6	7.2	9.4	10.6	11.5	12.4	12.6	13.9	14.6	14.3	13.6	12.8	11.8	10.2	8.9	8.2	7.3	6.7	6.6	14.6	6.0	9.7
31	6.5	6.4	6.1	5.4	5.0	4.6	4.2	4.2	4.1	3.8	3.7	3.6	3.2	2.8	3.3	3.5	3.7	3.8	3.9	3.9	3.8	3.6	3.4	3.1	6.5	2.8	4.2
Max.	**13.7**	**12.7**	**11.5**	**11.4**	**12.1**	**11.3**	**11.8**	**12.8**	**14.4**	**16.5**	**18.5**	**20.6**	**21.7**	**22.5**	**22.8**	**23.0**	**22.7**	**21.8**	**21.0**	**19.5**	**17.9**	**16.4**	**15.5**	**15.0**	**23.0**		
Min.	**-5.9**	**-6.5**	**-6.9**	**-6.9**	**-7.2**	**-6.8**	**-6.0**	**-5.3**	**-5.1**	**-5.0**	**-4.8**	**-4.3**	**-4.2**	**-4.5**	**-4.4**	**-4.5**	**-4.3**	**-4.2**	**-4.2**	**-4.0**	**-4.3**	**-4.4**	**-4.7**	**-5.5**		**-7.2**	
Avg.	**3.3**	**2.9**	**2.7**	**2.4**	**2.3**	**2.5**	**2.8**	**3.3**	**4.0**	**4.7**	**5.3**	**6.0**	**6.6**	**7.0**	**7.3**	**7.4**	**7.3**	**7.1**	**6.8**	**6.0**	**5.3**	**4.6**	**4.2**	**3.7**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.0	2.8	2.4	2.1	2.5	2.9	3.2	3.6	4.2	4.7	5.2	6.3	7.9	9.5	11.0	11.7	12.3	13.2	12.4	12.6	11.2	9.9	8.7	8.1	13.2	2.1	7.1
2	8.7	8.6	8.2	7.7	7.7	8.0	8.3	10.1	11.5	12.2	13.6	14.4	14.6	15.0	15.1	15.1	15.7	15.0	14.7	13.3	12.8	10.5	8.6	7.2	15.7	7.2	11.5
3	5.9	5.6	4.2	3.6	3.5	3.5	4.1	4.4	5.7	6.2	8.0	9.2	10.0	10.6	10.7	10.7	11.1	11.1	10.6	9.9	8.7	6.7	4.9	3.0	11.1	3.0	7.2
4	2.0	0.7	0.6	0.2	-0.1	0.8	2.1	3.1	4.3	5.6	7.1	8.3	9.4	10.3	11.1	11.4	11.4	11.3	10.8	10.0	8.9	6.8	4.0	2.5	11.4	-0.1	5.9
5	2.3	2.2	2.2	1.2	0.2	1.0	2.8	4.0	5.2	6.8	7.7	8.5	9.6	10.8	11.8	12.2	12.7	12.9	12.7	12.6	11.7	9.4	8.2	8.1	12.9	0.2	7.4
6	8.0	7.1	6.4	6.3	6.9	6.3	6.7	7.7	9.3	10.7	12.0	12.7	13.3	13.8	14.1	13.9	13.6	12.9	12.0	10.7	9.5	8.5	7.8	6.5	14.1	6.3	9.9
7	5.6	5.3	5.1	5.3	5.2	4.9	4.9	5.4	6.1	5.7	5.9	6.1	5.8	6.4	6.0	4.9	4.5	4.2	4.0	3.9	3.9	4.0	3.9	3.9	6.4	3.9	5.0
8	4.0	4.1	4.1	3.9	3.9	3.9	3.9	4.2	4.6	5.4	5.6	6.1	7.0	7.3	7.4	7.4	6.9	7.5	7.7	7.2	6.9	6.6	6.9	6.9	7.7	3.9	5.8
9	7.1	6.9	6.7	6.6	6.2	6.2	5.8	5.6	6.4	7.2	7.9	8.6	10.6	9.7	10.0	9.6	9.0	8.4	6.8	6.5	5.5	5.3	4.9	5.2	10.6	4.9	7.2
10	5.0	5.0	4.8	4.5	4.6	4.6	4.6	5.3	6.0	7.0	7.1	7.1	6.9	7.2	7.4	7.2	6.2	5.8	5.2	4.7	3.5	3.2	3.2	3.1	7.4	3.1	5.4
11	3.1	3.2	3.3	3.2	3.2	3.4	3.4	3.6	4.0	4.5	4.7	5.1	5.1	5.5	5.7	6.0	6.2	6.3	5.6	5.4	5.5	5.4	5.4	5.1	6.3	3.1	4.7
12	5.3	5.6	5.6	5.7	5.7	5.5	5.9	6.0	6.3	6.5	6.4	6.5	6.7	6.8	6.8	6.7	6.7	6.4	6.1	6.1	5.9	5.8	5.8	5.6	6.8	5.3	6.1
13	5.5	5.4	5.3	5.4	5.4	5.5	5.7	6.4	7.4	7.2	7.9	9.1	10.1	10.4	10.6	11.1	11.4	10.9	10.2	9.6	9.3	8.7	8.7	8.4	11.4	5.3	8.2
14	7.9	8.1	8.5	7.6	7.6	7.6	8.2	9.0	9.4	10.3	10.8	12.1	12.2	12.4	12.5	13.0	13.2	13.1	12.4	12.3	11.9	11.1	10.6	9.5	13.2	7.6	10.5
15	9.1	8.9	8.4	8.4	8.8	9.2	10.0	10.9	11.8	13.5	15.3	17.0	17.9	18.8	19.3	13.9	12.7	11.8	11.5	10.8	9.5	9.2	9.3	8.9	19.3	8.4	11.9
16	8.7	8.3	8.4	8.4	8.3	8.5	8.4	8.4	8.0	7.7	7.7	7.8	7.8	8.2	8.6	8.5	8.2	7.7	7.9	7.9	7.9	7.5	7.2	6.9	8.7	6.9	8.0
17	7.2	7.3	7.4	7.7	8.3	8.7	9.1	9.1	9.0	9.1	10.5	11.6	12.6	12.2	9.5	10.4	11.0	10.0	9.3	8.6	8.0	7.6	7.5	7.3	12.6	7.2	9.1
18	7.1	6.9	6.8	6.8	7.2	7.8	8.1	8.8	9.9	10.2	10.2	10.6	9.5	9.4	10.3	11.4	10.5	9.9	9.3	8.8	8.3	7.9	7.6	6.8	11.4	6.8	8.7
19	6.5	7.2	7.2	6.4	6.1	6.7	7.5	8.0	9.0	9.7	11.3	11.5	12.1	12.7	13.3	13.4	13.6	13.5	13.6	12.0	8.4	6.9	6.1	5.9	13.6	5.9	9.5
20	5.8	5.9	6.2	5.5	6.0	6.9	7.6	8.3	9.0	10.1	10.5	11.5	12.8	12.5	10.0	6.8	6.1	6.0	6.1	6.8	6.0	5.2	4.4	3.6	12.8	3.6	7.5
21	3.5	3.2	2.9	2.7	3.8	4.3	4.9	6.5	7.9	9.0	9.8	10.8	12.0	12.0	12.3	13.1	12.8	13.1	13.6	13.2	13.5	12.7	10.5	9.1	13.6	2.7	9.0
22	9.6	9.0	8.0	7.4	7.8	8.4	9.9	10.3	11.0	10.7	10.7	10.7	10.7	8.4	6.8	6.1	6.0	5.9	6.0	5.8	5.9	5.8	5.6	5.3	11.0	5.3	8.0
23	5.0	5.2	5.4	5.6	5.5	5.5	5.6	5.9	6.2	6.6	6.9	7.6	8.4	9.1	9.3	9.2	9.2	9.3	9.4	8.7	7.7	6.6	5.8	4.8	9.4	4.8	7.0
24	4.3	4.5	4.7	4.7	4.8	4.8	6.0	7.2	8.8	9.5	10.7	11.6	12.5	12.9	13.6	13.7	13.8	12.7	11.7	12.2	11.8	11.1	11.0	10.4	13.8	4.3	9.5
25	10.2	9.7	8.5	8.0	8.1	8.9	9.3	10.5	12.1	12.9	13.5	14.0	14.6	14.9	14.7	14.5	14.6	13.7	12.3	10.8	9.7	8.7	8.0	7.2	14.9	7.2	11.2
26	6.6	6.3	5.6	5.7	5.5	6.1	6.2	7.2	9.4	11.9	12.8	13.6	14.6	14.4	14.4	14.7	14.7	15.4	15.7	13.2	10.8	9.7	8.8	8.1	15.7	5.5	10.5
27	7.4	7.1	7.6	7.0	6.4	6.6	6.7	7.5	9.1	10.5	12.0	13.3	14.5	14.6	15.6	16.0	15.9	15.8	15.6	14.5	13.2	11.2	9.4	8.3	16.0	6.4	11.1
28	7.2	6.5	5.6	5.3	6.4	6.7	7.2	6.8	6.4	6.8	6.5	7.9	7.9	8.0	8.4	8.1	8.7	8.9	9.2	9.5	9.5	9.1	8.8	8.8	9.5	5.3	7.7
29	8.3	7.9	7.6	7.4	7.4	7.2	7.2	7.7	8.6	9.3	9.9	10.4	11.5	13.5	14.4	16.2	14.6	13.0	11.1	9.7	8.6	7.7	7.4	7.2	16.2	7.2	9.7
30	7.1	7.1	7.0	7.0	7.1	7.4	7.3	7.3	7.3	7.5	7.4	7.5	8.0	7.7	8.0	7.9	8.1	8.4	8.5	8.7	8.5	7.9	7.5	7.3	8.7	7.0	7.6
Max.	**10.2**	**9.7**	**8.5**	**8.4**	**8.8**	**9.2**	**10.0**	**10.9**	**12.1**	**13.5**	**15.3**	**17.0**	**17.9**	**18.8**	**19.3**	**16.2**	**15.9**	**15.8**	**15.7**	**14.5**	**13.5**	**12.7**	**11.0**	**10.4**	**19.3**		
Min.	**2.0**	**0.7**	**0.6**	**0.2**	**-0.1**	**0.8**	**2.1**	**3.1**	**4.0**	**4.5**	**4.7**	**5.1**	**5.1**	**5.5**	**5.7**	**4.9**	**4.5**	**4.2**	**4.0**	**3.9**	**3.5**	**3.2**	**3.2**	**2.5**		**-0.1**	
Avg.	**6.2**	**6.1**	**5.8**	**5.6**	**5.7**	**5.9**	**6.4**	**7.0**	**7.8**	**8.5**	**9.2**	**9.9**	**10.5**	**10.8**	**11.0**	**10.8**	**10.7**	**10.5**	**10.1**	**9.5**	**8.7**	**7.9**	**7.2**	**6.6**			**8.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	6.4	6.5	6.3	6.2	6.2	6.3	6.4	6.8	7.0	8.6	11.3	13.3	15.0	16.0	16.9	17.5	17.4	17.1	16.5	15.2	14.0	12.3	11.1	17.5	6.2	11.1
2	9.9	10.4	9.6	8.9	9.1	9.5	9.9	11.0	12.5	13.7	15.1	16.2	17.0	17.6	18.2	18.8	19.0	18.9	18.8	18.1	17.1	14.4	12.6	11.8	19.0	8.9	14.1
3	11.7	11.4	10.6	9.5	8.7	8.9	9.8	11.0	11.6	14.1	15.4	16.6	17.6	18.7	19.9	20.2	20.2	19.9	20.1	19.9	19.2	16.1	13.1	12.3	20.2	8.7	14.8
4	11.4	11.1	10.7	10.2	9.9	10.4	12.7	14.0	15.2	16.5	18.0	19.0	20.2	20.9	21.6	21.9	22.4	22.2	22.0	21.2	18.4	16.3	14.7	14.1	22.4	9.9	16.5
5	13.1	12.7	12.2	11.6	10.8	10.2	10.3	11.0	11.6	12.4	14.2	17.0	19.1	20.0	21.4	21.7	15.7	15.1	16.3	15.9	14.9	14.4	13.9	14.6	21.7	10.2	14.6
6	14.3	13.6	13.7	13.6	12.7	12.9	13.5	14.1	13.8	14.7	15.1	16.6	17.1	17.3	18.0	18.5	17.9	15.4	15.2	15.7	14.7	13.6	12.4	11.8	18.5	11.8	14.8
7	11.2	10.4	10.0	9.7	9.5	9.4	9.5	9.7	9.5	9.7	9.9	10.2	10.6	10.8	10.5	10.1	10.2	10.1	9.8	9.7	9.6	9.6	9.2	8.6	11.2	8.6	9.9
8	8.4	8.0	7.6	7.3	7.2	7.1	7.0	7.2	7.3	7.7	8.1	8.6	9.1	9.5	9.8	10.4	10.7	10.8	11.0	11.2	11.8	10.2	9.9	9.8	11.8	7.0	9.0
9	9.9	9.9	9.3	8.7	8.9	9.4	9.9	10.3	11.4	12.8	14.3	15.9	17.4	17.3	17.2	18.0	17.6	16.6	15.3	14.0	13.1	12.0	11.3	10.4	18.0	8.7	12.9
10	9.9	9.7	9.3	9.1									9.3	9.3	9.3	9.5	10.2	11.2	10.9	11.9	12.1	12.6	12.2	12.7	12.7	9.1	10.6
11			11.9	11.3	9.9	9.0	8.0	7.8	7.6		7.6	7.7	7.8	7.9	7.9	8.3	8.7	9.1	10.5				13.1	13.8	13.8	7.6	9.3
12	13.5	13.0	12.0	12.2	12.6	11.7	10.6	10.1	9.1	8.4	8.8	8.9	8.5	8.7	9.2	9.9	11.4	12.3	13.5	14.9	16.5	17.7	18.5	19.4	19.4	8.4	12.1
13	20.4	21.0	19.8	19.3	17.9	16.4	14.8	14.5	14.3	13.2	12.6	12.4	12.7	12.6	12.8	11.2	9.8	9.3	9.1	9.2	8.9	8.7	9.2	9.5	21.0	8.7	13.3
14	9.0	8.7	8.6	8.5	8.4	8.1	7.9	7.7	7.3	6.8	6.5	6.3	6.3	6.2	6.0	6.2	6.3	6.4	6.7	6.9	7.0	7.1	7.2	7.4	9.0	6.0	7.2
15	7.6	7.5	7.4	7.2	7.3	7.5	7.4	7.1	6.9	6.8	6.8	6.7	6.6	6.4	6.3	6.5	6.5	6.8	7.3	7.8	8.6	8.7	9.2	9.5	9.5	6.3	7.3
16	10.2	11.1	11.6	11.2	10.4	9.7	9.6	9.1	8.9	8.0	7.8	7.6	7.6	7.7	7.8	7.9	8.1	8.6	9.2	9.9	10.6	10.9	10.3	10.9	11.6	7.6	9.4
17	10.8	10.2	9.1	8.6	8.1	7.7	7.5	7.3	7.2	7.1	6.9	6.6	6.3	6.1	6.2	6.5	6.9	7.2	7.7	8.5	9.1	9.2	9.8	9.7	10.8	6.1	7.9
18	9.3	9.3	8.4	8.2	8.1	8.0	7.9	8.0	8.0	8.5	8.4	8.2	8.0	7.8	8.1	8.4	8.5	9.0	9.6	10.4	10.5	10.2	10.6	9.7	10.6	7.8	8.8
19	9.1	9.1	9.1	9.0	8.4	8.2	8.2	8.0	7.7	8.0	7.9	7.7	7.4	7.2	7.4	8.2	9.1	9.7	10.6	12.0	12.6	13.0	13.4	13.4	13.4	7.2	9.3
20	13.9	13.3	13.3	13.5	12.7	11.9	11.3	11.2	9.9	9.5	8.8	8.2	8.4	7.9	8.1	9.1	11.2	13.8	15.1	15.6	16.5	16.4	17.5	17.3	17.5	7.9	12.3
21	17.2	17.6	17.4	15.8	14.2	12.7	11.3	9.9	9.2	8.8	8.7	9.4	9.8	9.3	10.5	10.5	11.3	12.9	13.7	14.4	15.1	13.1	12.9	13.6	17.6	8.7	12.5
22	14.1	13.0	12.3	11.5	10.9	10.9	10.5	10.3	10.1	10.3	10.2	9.9	9.9	9.3	9.6	9.8	10.7	11.7	12.2	12.2	12.0	12.1	12.3	10.5	14.1	9.3	11.1
23	10.0	8.7	8.2	8.3	8.4	8.3	7.7	7.3	7.3	7.6	7.8	7.3	7.2	7.2	7.0	7.2	7.6	7.9	8.3	9.0	9.5	9.5	10.4	10.5	10.5	7.0	8.3
24	10.8	11.1	10.6	10.0	9.7	9.5	9.3	9.2	9.2	9.1	9.1	8.7	8.6	8.4	8.1	8.3	8.3	8.5	8.7	8.7	9.4	9.6	9.5	9.8	11.1	8.1	9.2
25	9.9	9.1	8.6	8.2	8.1	8.0	7.6	7.3	7.2	7.3	7.5	7.6	7.7	7.3	7.3	7.5	7.6	7.8	8.1	8.0	8.6	8.9	9.3	10.4	10.4	7.2	8.1
26	10.8	10.7	10.6	10.2	9.7	9.3	8.6	8.2	8.1	8.1	8.1	8.2	8.5	8.6	8.2	7.9	7.9	8.5	8.8	9.3	10.0	11.0	11.2	11.4	11.4	7.9	9.2
27	11.9	11.9	10.9	10.3	10.0	9.2	8.3	8.1	7.8	7.4	7.2	7.3	7.5	7.2	7.0	7.0	7.7	8.5	9.1	9.5	10.2	10.9	12.2	13.0	13.0	7.0	9.2
28	13.7	14.2	14.3	14.0	12.6	11.7	10.4	9.6	9.1	9.3	8.9	8.9	8.4	8.4	9.4	9.7	10.9	11.9	13.0	13.5	13.7	13.4	13.5	13.6	14.3	8.4	11.5
29	12.5	12.1	11.5	11.0	9.4	8.5	7.8	7.5	7.2	7.0	6.9	6.6	6.4	6.3	6.2	6.3	6.4	6.6	7.0	8.1	9.4	11.3	13.2	13.7	13.7	6.2	8.7
30	12.8	11.5	11.5	10.1	8.3	7.5	7.0	6.8	6.7	6.6	6.5	6.4	6.2	6.0	5.9	5.9	5.9	6.1	6.2	6.5	6.7	7.1	7.5	8.4	12.8	5.9	7.5
31	9.1	9.6	11.3	10.5	11.0	9.2	7.6	6.4	5.7	6.4	6.2	6.7	7.2	7.3	7.3	7.5	7.9	8.8	9.1	9.3	9.8	10.0	11.2	10.6	11.3	5.7	8.6
Max.	**20.4**	**21.0**	**19.8**	**19.3**	**17.9**	**16.4**	**14.8**	**14.5**	**15.2**	**16.5**	**18.0**	**19.0**	**20.2**	**20.9**	**21.6**	**21.9**	**22.4**	**22.2**	**22.0**	**21.2**	**19.2**	**17.7**	**18.5**	**19.4**	**22.4**		
Min.	**6.8**	**6.4**	**6.5**	**6.3**	**6.2**	**6.2**	**6.3**	**6.4**	**5.7**	**6.4**	**6.2**	**6.3**	**6.2**	**6.0**	**5.9**	**5.9**	**5.9**	**6.1**	**6.2**	**6.5**	**6.7**	**7.1**	**7.2**	**7.4**		**5.7**	
Avg.	**11.4**	**11.2**	**10.9**	**10.4**	**10.0**	**9.6**	**9.3**	**9.2**	**9.1**	**9.4**	**9.6**	**10.0**	**10.2**	**10.3**	**10.6**	**10.8**	**11.0**	**11.3**	**11.6**	**11.9**	**12.0**	**11.7**	**11.7**	**11.7**			**10.6**

Total Hours in Month 744 **Hours Data Available** 730 **Data Recovery** 98.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.4	10.4	10.4	9.9	9.4	9.5	9.7	9.9	9.8	10.7	11.1	11.4	11.3	11.6	11.5	11.6	12.6	12.4	12.0	11.6	11.3	10.8	10.4	10.2	12.6	9.4	10.8
2	10.0	9.9	10.0	9.8	9.3	9.0	9.4	9.9	10.5	11.1	11.6	12.1	12.0	11.2	12.1	11.9	11.2	11.2	11.4	11.8	11.3	10.8	10.5	10.3	12.1	9.0	10.8
3	10.4	10.5	9.4	9.9	9.7	9.4	9.4	9.5	10.0	11.0	12.3	14.0	13.7	13.9	14.1	13.7	12.7	13.1	13.1	12.6	12.2	11.5	11.1	10.6	14.1	9.4	11.6
4	9.8	10.1	9.8	9.7	9.9	10.2	10.3	10.7	11.3	11.6	12.0	12.3	12.5	12.9	12.9	13.0	13.1	12.1	11.4	12.1	12.2	11.6	10.6	10.5	13.1	9.7	11.4
5	10.3	10.4	10.2	10.4	10.3	10.2	10.3	10.6	10.9	11.0				13.6	13.1	13.6	14.1	14.2	14.3	13.7	13.0	12.4	11.5	11.1	14.3	10.2	11.9
6	10.9	10.5	10.3	9.7	9.1	9.0	8.9	9.6	10.2	11.1	11.7	12.6	13.7	14.3	14.8	14.7	14.7	14.4	14.4	13.6	13.3	12.9	11.9	11.5	14.8	8.9	12.0
7	11.3	11.0	11.2	10.7	9.9	9.5	8.9	8.9	9.5	9.9	11.0	11.2	11.7	12.0	12.9	13.7	14.4	14.5	14.6	14.5	13.7	12.8	12.0	11.9	14.6	8.9	11.7
8	11.6	11.4	11.1	11.0	11.2	10.8	11.2	11.4	12.3	13.4	14.6	15.8	17.4	18.4	19.1	19.7	19.9	19.9	19.7	19.0	18.9	17.7	16.6	16.0	19.9	10.8	15.3
9	15.8	15.4	15.3	15.4	15.4	15.0	14.8	14.9	15.6	16.4	17.1	17.5	18.2	18.5	18.8	19.1	19.3	19.2	18.4	17.4	16.6	15.5	14.3	14.0	19.3	14.0	16.6
10	12.6	13.0	12.3	11.4	10.7	10.4	10.6	10.3	10.8	12.6	14.3	15.1	16.1	16.8	17.3	17.7	17.9	18.3	18.5	17.8	16.8	15.8	14.6	13.9	18.5	10.3	14.4
11	13.7	13.1	12.7	12.6	12.6	12.3	12.5	12.8	13.8	15.0	16.1	17.0	18.2	19.5	20.7	21.6	22.5	22.9	23.1	23.0	21.7	20.3	19.1	19.4	23.1	12.3	17.3
12	18.9	17.1	16.3	15.8	15.6	15.4	16.8	17.1	17.7	18.5	19.5	20.4	21.3	21.7	21.9	21.7	21.4	20.8	20.1	18.9	18.1	17.3	16.8	16.3	21.9	15.4	18.6
13	16.2	16.5	16.6	16.6	16.3	15.8	16.8	17.1	16.8	17.9	19.3	20.3	21.1	21.5	21.5	20.5	20.0	18.0	17.5	16.4	15.1	15.4	16.0	15.7	21.5	15.1	17.7
14	15.5	15.5	14.9	14.4	13.6	12.2	14.2	9.4	9.9	12.5	14.4	16.0	17.8	18.9	19.3	19.8	19.3	18.6	18.5	16.8	15.1	13.6	12.9	13.9	19.8	9.4	15.3
15	14.6	13.7	10.7	10.0	9.6	9.8	9.7	10.2	10.4	10.5	11.0	12.4	13.9	14.3	14.0	13.3	13.7	13.4	12.6	11.7	11.3	10.9	10.7	10.8	14.6	9.6	11.8
16	10.8	11.0	11.0	11.1	11.1	11.1	11.2	11.7	12.0	12.5	12.9	12.7	12.5	12.3	12.7	12.4	12.3	12.0	11.8	11.7	11.4	11.1	10.9	11.0	12.9	10.8	11.7
17	10.9	11.0	10.6	10.7	10.8	9.9	9.7	9.7	10.2	10.8	11.1	11.5	11.6	11.3	11.8	12.0	12.6	12.7	12.2	12.4	12.2	11.9	11.8	12.0	12.7	9.7	11.3
18	11.9	12.0	12.0	11.8	11.2	11.1	11.3	11.3	11.0	10.6	11.4	12.2	13.3	14.0	13.4	13.4	13.4	14.0	14.0	12.8	12.3	12.4	12.2	12.4	14.0	10.6	12.3
19	12.1	11.9	11.3	11.4	11.3	11.0	10.9	10.7	10.0	10.1	10.7	12.0	13.0	14.0	14.4	14.8	15.0	15.0	14.4	13.2	11.7	10.0	9.7	9.5	15.0	9.5	12.0
20	8.6	8.8	8.5	8.6	8.7	8.1	8.3	8.4	8.9			12.1	11.8	12.4	12.7	12.7	12.8	12.6	12.2	10.7	9.8	9.7	9.7	9.5	12.8	8.1	10.3
21	9.0	8.7	8.7	8.7	8.5	8.2	7.8	7.4	7.8	8.7	9.9	10.7	10.5	11.3	11.9	12.4	13.0	13.3	13.4	12.2	10.9	9.7	9.4	8.8	13.4	7.4	10.0
22	8.5	8.1	8.5	8.7	8.8	8.6	8.1	7.5	7.6	8.5	8.4	9.5	10.3	9.3	9.1	8.7	8.2	8.2	8.3	8.3	8.9	9.3	9.8	10.2	10.3	7.5	8.7
23	10.5	10.6	10.6	10.7	10.7	9.4	8.4	7.5	7.7	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.6	7.3	7.0	6.7	6.6	10.7	6.6	8.3
24	6.4	6.5	6.7	6.9	7.3	7.6	7.7	7.8	8.1	8.8	8.5	8.1	8.5	9.4	9.8	10.6	10.6	10.5	10.2	9.8	8.3	6.8	6.2	5.8	10.6	5.8	8.2
25	5.7	5.4	5.3	5.1	5.5	5.9	6.1	6.4	6.8	7.6	8.6	9.0	9.3	9.9	10.3	10.3	11.0	11.0	11.0	10.1	8.9	8.0	7.3	6.8	11.0	5.1	8.0
26	6.3	5.7	5.2	4.1	3.4	3.3	3.0	3.7	4.5	6.1	7.5	8.7	9.6	10.4	11.0	11.3	10.0	8.5	7.5	7.3	7.6	7.6	6.7	5.9	11.3	3.0	6.9
27	5.6	5.5	5.2	5.1	4.9	4.4	3.7	4.8	5.9	7.0	7.8	8.9	9.8	10.3	10.6	10.0	9.5	8.8	8.1	7.8	7.7	7.4	7.2	7.0	10.6	3.7	7.2
28	7.1	7.3	7.4	7.4	7.4	7.2	7.3	7.8	7.9	8.5	9.0	10.1	10.4	11.0	11.0	9.9	8.7	8.0	7.9	7.5	7.2	7.1	7.0	6.9	11.0	6.9	8.2
29	7.1	7.2	7.1	6.8	6.7	6.8	7.1	7.1	7.2	7.4	7.5	7.8	8.2	8.2	8.5	9.0	9.3	9.3	9.5	9.2	8.8	8.5	8.2	7.8	9.5	6.7	7.9
30	7.7	7.4	7.3	7.2	7.2	6.8	6.7	6.9	7.2	8.1	8.3	8.9	9.0	9.9	10.0	10.3	10.3	10.5	10.4	10.0	9.7	9.0	8.4	8.2	10.5	6.7	8.6
31	7.3	7.1	6.8	7.0	7.3	6.9	6.2	6.1	6.7	7.0	7.6	7.8	8.3	8.9	8.7	8.5	8.3	8.3	9.0	7.9	7.0	6.2	5.8	4.6	9.0	4.6	7.3
Max.	**18.9**	**17.1**	**16.6**	**16.6**	**16.3**	**15.8**	**16.8**	**17.1**	**17.7**	**18.5**	**19.5**	**20.4**	**21.3**	**21.7**	**21.9**	**21.7**	**22.5**	**22.9**	**23.1**	**23.0**	**21.7**	**20.3**	**19.1**	**19.4**	**23.1**		
Min.	**5.6**	**5.4**	**5.2**	**4.1**	**3.4**	**3.3**	**3.0**	**3.7**	**4.5**	**6.1**	**7.5**	**7.8**	**7.8**	**7.9**	**7.9**	**7.9**	**7.9**	**7.8**	**7.5**	**7.3**	**7.0**	**6.2**	**5.8**	**4.6**		**3.0**	
Avg.	**10.6**	**10.4**	**10.1**	**9.9**	**9.8**	**9.5**	**9.6**	**9.6**	**10.0**	**10.8**	**11.5**	**12.2**	**12.7**	**13.2**	**13.5**	**13.5**	**13.5**	**13.3**	**13.1**	**12.6**	**11.9**	**11.3**	**10.8**	**10.6**			**11.4**

Total Hours in Month 744 **Hours Data Available** 739 **Data Recovery** 99.3%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.3	2.7	1.9	1.7	1.4	0.6	0.6	1.3	2.1	3.5	4.9	6.1	6.9	7.5	8.1	8.7	9.0	9.1	8.9	7.9	6.1	5.3	5.2	4.7	9.1	0.6	4.9
2	5.1	4.8	4.6	4.6	4.4	3.5	3.8	3.9	4.0	5.2	6.6	7.7	8.6	9.4	9.6	9.5	9.1	9.1	8.8	8.5	8.2	8.1	7.3	6.9	9.6	3.5	6.7
3	6.6	6.3	6.0	5.7	5.3	5.2	5.4	5.3	5.5	5.9	5.9	5.6	6.0	6.6	7.0	7.2	7.5	7.9	7.8	7.4	7.4	7.6	7.6	7.6	7.9	5.2	6.5
4	7.6	7.6	7.5	7.3	7.3	7.3	7.2	7.1	7.3	7.2	7.4	7.6	8.3	8.9	9.4	9.9	10.1	9.7	9.1	8.8	8.5	8.1	7.9	7.8	10.1	7.1	8.1
5	7.9	8.0	8.0	7.9	7.8	7.8	7.6	7.6	7.7	7.7	7.7	8.0	8.3	8.6	8.4	8.3	8.4	8.5	8.4	8.3	7.9	7.7	7.5	7.6	8.6	7.5	8.0
6	7.8	7.5	7.2	7.1	6.4	6.2	6.2	6.6	7.1	7.3	7.5	7.6	7.7	7.9	7.9	8.0	7.9	7.8	8.0	7.7	7.6	7.7	7.6	7.3	8.0	6.2	7.4
7	6.9	6.8	6.6	6.6	6.5	6.4	6.6	6.4	6.7	7.5	8.0	9.1	9.1	9.4	10.2	10.5	10.0	10.2	10.1	9.6	8.9	8.3	7.2	7.0	10.5	6.4	8.1
8	6.7	6.0	5.9	6.1	6.2	5.8	5.9	6.2	6.6	7.8	8.6	9.3	9.2	9.8	10.5	10.3	10.1	9.2	8.0	8.2	8.5	7.7	7.1	7.1	10.5	5.8	7.8
9	6.9	6.9	7.2	7.5	7.8	7.8	7.9	8.1	8.3	8.6	8.9	9.3	9.9	10.1	10.5	10.5	10.2	10.2	10.1	9.1	8.5	7.8	7.6	7.6	10.5	6.9	8.6
10	7.7	7.4	7.1	6.9	6.9	6.8	6.8	6.9	7.0	7.0	7.2	7.8	7.7	7.8	7.7	8.1	8.5	8.5	8.4	7.6	7.2	7.3	7.2	7.1	8.5	6.8	7.4
11	7.0	6.9	7.5	7.5	7.7	8.0	8.0	8.1	8.7	9.1	9.1	9.0	9.3	9.7	9.9	9.8	9.5	9.1	8.9	9.0	9.0	9.2	9.2	8.5	9.9	6.9	8.6
12	8.1	7.5	6.3	6.3	6.5	5.9	5.6	5.7	6.0	6.0	6.0	6.5	6.8	7.1	7.4	7.6	7.5	7.4	7.2	7.0	6.6	5.9	5.6	5.6	8.1	5.6	6.6
13	5.4	5.1	5.1	4.9	5.0	5.2	5.4	5.5	5.5	5.6	5.7	6.1	6.8	7.5	7.8	7.8	8.0	7.8	7.5	7.1	7.0	6.8	6.5	6.7	8.0	4.9	6.3
14	5.9	5.7	5.7	6.2	6.0	5.7	5.7	5.9	6.1	6.7	8.3	9.5	10.0	11.4	12.4	12.6	12.4	11.5	10.5	9.4	9.2	9.3	9.2	8.7	12.6	5.7	8.5
15	8.2	8.1	8.2	8.4	8.6	8.8	8.9	8.9	8.8	9.0	8.7	8.2	8.0	8.3	8.2	8.5	8.9	8.9	8.3	8.1	8.0	8.2	8.4	8.6	9.0	8.0	8.5
16	6.3	5.8	5.6	5.6	5.6	5.0	4.8	4.8	4.9	5.4	6.2	6.6	6.9	7.7	7.9	8.1	8.2	8.0	7.5	6.8	5.9	5.6	5.4	5.2	8.2	4.8	6.2
17	4.9	4.8	4.5	4.3	4.0	3.9	3.8	3.8	4.1	4.4	5.3	6.1	7.2	6.6	6.2	5.9	5.9	6.1	6.3	6.0	5.8	5.9	5.8	5.6	7.2	3.8	5.3
18	5.2	4.9	4.8	4.8	4.7	4.1	3.3	2.8	3.2	4.7	5.8	6.4	7.2	7.7	8.0	7.9	8.4	8.5	7.3	6.6	5.8	4.9	4.4	4.4	8.5	2.8	5.7
19	4.3	4.3	4.5	4.6	4.4	4.5	4.3	4.7	5.1	6.1	6.6	7.1	7.8	8.0	8.2	8.3	8.3	8.1	7.6	6.8	6.1	5.3	4.1	4.8	8.3	4.1	6.0
20	4.5	4.3	4.4	3.6	2.8	3.0	2.8	3.0	3.8	4.9	6.1	6.7	7.4	8.1	7.7	8.3	8.3	8.3	8.1	7.4	6.9	6.7	6.3	5.9	8.3	2.8	5.8
21	5.7	4.9	4.1	4.6	5.1	5.0	4.8	5.1	5.3	5.5	5.6	5.1	5.7	5.9	6.3	6.5	6.4	6.3	6.1	6.0	6.2	5.9	6.0	6.1	6.5	4.1	5.6
22	6.1	6.3	6.3	6.3	6.5	6.3	6.9	7.1	7.5	8.0	8.2	8.1	8.4	8.3	8.1	8.2	8.6	9.4	9.5	8.1	7.3	6.7	6.7	6.9	9.5	6.1	7.5
23	6.7	6.6	6.5	6.7	6.7	6.7	6.7	6.7	6.7	6.8	7.6	8.0	8.5	9.1	9.5	9.1	8.3	8.0	7.8	6.9	6.6	5.4	4.5	4.2	9.5	4.2	7.1
24	4.3	3.9	3.9	3.9	3.5	3.5	3.5	3.6	4.1	4.4	4.9	5.3	5.9	5.8	5.7	5.9	6.2	6.0	5.3	5.1	4.9	4.8	4.6	4.6	6.2	3.5	4.7
25	4.7	4.7	4.5	4.3	4.4	4.3	4.1	4.2	4.5	4.6	4.8	5.0	5.2	5.6	5.9	6.1	6.1	6.0	5.6	5.2	5.0	4.8	4.4	4.0	6.1	4.0	4.9
26	3.5	3.3	3.3	3.2	3.3	2.9	3.0	2.6	2.5	3.2	4.0	5.6	6.3	6.6	6.4	6.0	5.2	5.4	6.0	6.3	6.4	6.3	5.4	6.0	6.6	2.5	4.7
27	5.9	6.1	6.3	6.5	6.9	7.0	7.5	7.1	6.7	7.4	7.6	7.5	7.3	7.1	6.8	7.0	5.9	4.8	4.2	4.1	4.0	3.9	3.8	3.7	7.6	3.7	6.0
28	3.6	3.4	3.8	3.6	3.5	3.7	4.1	4.0	4.1	4.6	5.4	6.2	6.8	7.7	7.7	7.4	7.1	7.3	7.1	6.8	6.6	6.5	6.4	6.2	7.7	3.4	5.6
29	5.9	5.7	5.2	4.9	4.6	3.7	3.6	3.6	3.5	3.7	4.0	3.6	3.2	3.0	3.5	3.7	4.1	4.1	3.9	3.5	2.9	2.6	2.7	3.1	5.9	2.6	3.8
30	2.9	2.6	2.4	2.3	1.9	1.1	1.0	0.9	1.7	2.2	2.5	2.1	3.2	3.9	4.2	4.7	4.4	3.4	2.4	2.1	0.9	0.1	-0.8	-1.3	4.7	-1.3	2.1
Max.	**8.2**	**8.1**	**8.2**	**8.4**	**8.6**	**8.8**	**8.9**	**8.9**	**8.8**	**9.1**	**9.1**	**9.5**	**10.0**	**11.4**	**12.4**	**12.6**	**12.4**	**11.5**	**10.5**	**9.6**	**9.2**	**9.3**	**9.2**	**8.7**	**12.6**		
Min.	**2.9**	**2.6**	**1.9**	**1.7**	**1.4**	**0.6**	**0.6**	**0.9**	**1.7**	**2.2**	**2.5**	**2.1**	**3.2**	**3.0**	**3.5**	**3.7**	**4.1**	**3.4**	**2.4**	**2.1**	**0.9**	**0.1**	**-0.8**	**-1.3**		**-1.3**	
Avg.	**5.9**	**5.6**	**5.5**	**5.5**	**5.4**	**5.2**	**5.2**	**5.2**	**5.5**	**6.0**	**6.5**	**6.9**	**7.3**	**7.7**	**7.9**	**8.0**	**7.9**	**7.8**	**7.5**	**7.0**	**6.7**	**6.3**	**6.0**	**5.9**			**6.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.7	-2.0	-2.2	-2.5	-2.8	-3.2	-3.2	-3.2	-3.3	-3.0	-2.8	-2.2	-1.6	-1.0	-0.5	-0.5	-0.3	-0.7	-1.5	-2.3	-2.0	-1.8	-1.9	-2.0	-0.3	-3.3	-2.0
2	-2.2	-2.9	-3.9	-4.2	-4.2	-4.6	-4.6	-4.7	-4.0	-3.2	-1.5	-0.5	-0.7	-0.4	0.4	0.8	0.2	-0.6	-1.0	-1.6	-2.2	-2.4	-3.3	-3.8	0.8	-4.7	-2.3
3	-3.7	-2.8	-2.5	-2.7	-3.1	-2.6	-1.5	-1.4	-1.0	-0.7	0.4	1.7	3.3	4.7	5.3	5.4	5.3	5.4	4.6	3.4	3.3	3.7	3.3	2.8	5.4	-3.7	1.3
4	3.6	2.9	3.2	3.0	3.4	3.3	3.5	3.6	4.6	5.2	5.1	5.7	7.1	7.2	7.1	6.9	7.0	7.0	6.2	5.5	5.1	5.2	5.2	5.1	7.2	2.9	5.1
5	5.0	4.9	4.5	3.7	3.7	4.0	3.9	3.6	3.8	4.1	4.3	4.4	4.4	5.0	5.3	5.5	5.2	4.8	4.3	3.9	3.7	3.6	3.8	3.8	5.5	3.6	4.3
6	3.8	4.0	3.8	3.7	3.6	3.7	3.5	3.5	3.6	3.5	3.6	3.4	3.6	3.8	4.3	4.3	4.4	4.1	3.6	3.0	2.6	2.7	2.4	2.3	4.4	2.3	3.5
7	2.1	2.6	2.7	2.7	3.7	3.9	3.9	3.8	3.8	4.0	4.3	4.6	4.5	4.6	4.5	3.3	2.7	2.2	2.3	2.2	2.0	1.8	1.6	1.4	4.6	1.4	3.1
8	1.2	1.1	1.1	1.0	1.1	1.2	1.0	1.0	0.9	1.2	1.5	1.7	2.0	2.1	1.6	1.5	1.4	1.2	0.9	0.9	1.0	0.9	0.6	0.6	2.1	0.6	1.2
9	0.8	0.8	0.7	0.6	0.4	0.2	-0.1	-0.1	-0.2	-0.5	-0.4	-0.3	-0.4	-0.3	-0.2	-0.4	-0.5	-0.5	-0.6	-1.1	-1.8	-2.8	-3.4	-3.8	0.8	-3.8	-0.6
10	-4.0	-4.2	-4.3	-4.7	-4.8	-4.7	-4.7	-4.6	-4.5	-4.1	-3.7	-2.8	-1.7	-1.0	-0.1	0.5	0.6	0.7	0.2	0.0	0.5	0.9	1.2	1.1	1.2	-4.8	-2.0
11	1.0	1.0	0.9	0.4	0.4	0.7	1.1	1.0	1.1	1.3	1.6	1.7	2.0	1.9	0.3	-0.5	-1.7	-2.7	-3.1	-3.5	-3.8	-3.9	-4.1	-4.1	2.0	-4.1	-0.4
12	-4.4	-4.6	-4.9	-5.4	-5.3	-5.3	-5.4	-5.7	-5.5	-5.0	-4.5	-3.9	-3.2	-2.5	-1.9	-1.8	-1.8	-2.1	-3.4	-4.0	-4.2	-4.3	-4.5	-4.2	-1.8	-5.7	-4.1
13	-4.1	-3.8	-3.6	-3.9	-3.9	-3.6	-3.6	-4.0	-4.6	-4.5	-3.7	-2.7	-1.6	-0.9	-0.3	0.0	-0.6	-0.7	-1.1	-1.4	-1.7	-1.8	-1.6	-1.3	0.0	-4.6	-2.5
14	-1.3	-1.1	-1.0	-0.7	-0.5	-0.2	-0.4	-0.4	0.0	1.0	0.9	1.0	0.5	0.6	0.8	1.1	1.0	0.9	1.1	1.4	1.6	1.9	2.0	2.2	2.2	-1.3	0.5
15	2.3	2.5	2.6	2.5	2.1	1.9	2.0	2.1	1.9	2.2	2.5	2.6	2.9	3.4	3.4	3.9	3.9	3.0	1.5	1.0	0.5	0.3	-0.1	-0.9	3.9	-0.9	2.1
16	-2.0	-2.5	-2.7	-2.7	-3.2	-3.4	-3.2	-2.6	-1.8	-1.1	-0.3	0.5	1.1	1.3	1.6	1.3	1.0	1.2	1.5	1.6	1.5	1.8	1.8	1.7	1.8	-3.4	-0.3
17	0.7	0.7	0.8	0.7	1.2	1.7	2.0	2.2	2.7	3.3	3.6	3.4	3.4	2.7	2.4	2.1	1.7	1.5	1.1	0.8	0.5	0.3	0.3	0.5	3.6	0.3	1.7
18	0.6	0.7	0.5	0.4	0.2	0.1	-0.1	-0.6	-0.9	-0.5	0.0	0.5	1.0	1.3			1.9	2.1	2.2	1.8	1.7	2.2	2.1	1.7	2.2	-0.9	0.9
19	1.8	1.7	1.8	1.9	2.1	2.3	2.3	2.6	2.9	3.1	3.4	3.4	3.8	3.8	3.1	2.9	3.3	3.6	3.7	3.6	3.5	3.3	3.0	2.7	3.8	1.7	2.9
20	2.7	2.8	3.1	3.1	2.9	2.9	2.9	3.9	4.3	4.1	4.7	5.6	6.1	5.5	5.8	5.8	5.5	5.7	5.1	5.4	5.6	5.7	4.4	3.9	6.1	2.7	4.5
21	4.1	4.4	3.4	2.9	2.9	3.2	1.9	1.4	1.1	0.3	-0.3	-0.3	-0.3	-0.2	-0.1	-0.1	-0.2	-0.7	-1.3	-1.3	-1.6	-1.6	-2.1	-2.9	4.4	-2.9	0.5
22	-3.4	-3.4	-3.9	-4.2	-4.8	-4.8	-4.3	-4.3	-5.0	-5.1	-5.1	-4.7	-4.3	-3.8	-3.5	-3.4	-3.6	-4.1	-4.7	-4.7	-5.4	-5.6	-5.1	-5.6	-3.4	-5.6	-4.4
23	-5.2	-5.4	-6.0	-6.3	-6.5	-6.6	-7.7	-7.4	-6.7	-6.3	-6.2	-6.0	-5.6	-5.3	-5.3	-5.0	-5.0	-5.2	-5.2	-4.9	-4.9	-5.0	-5.0	-5.0	-4.9	-7.7	-5.7
24	-5.0	-5.1	-5.3	-6.0	-6.5	-6.3	-6.7	-7.2	-7.5	-7.3	-8.0	-7.1	-7.1	-6.6	-6.0	-5.8	-5.8	-5.7	-6.4	-6.5	-6.4	-6.3	-6.5	-6.5	-5.0	-8.0	-6.4
25	-7.1	-6.8	-6.5	-6.3	-6.6	-6.3	-6.0	-6.1	-6.2	-5.7	-5.3	-4.8	-4.5	-4.4	-4.2	-4.0	-3.7	-3.7	-3.5	-3.4	-3.4	-3.5	-3.9	-4.1	-3.4	-7.1	-5.0
26	-4.2	-4.4	-4.4	-4.4	-4.6	-4.8	-5.1	-5.7	-5.6	-5.6	-4.6	-4.4	-4.2	-4.2	-4.3	-4.4	-4.6	-5.0	-5.7	-6.3	-7.1	-6.9	-6.7	-7.1	-4.2	-7.1	-5.2
27	-7.3	-7.4	-7.7	-7.7	-8.1	-7.9	-7.5	-7.0	-7.2	-7.1	-7.5	-7.6	-6.8	-5.6	-4.9	-4.6	-4.7	-4.7	-4.4	-4.2	-4.2	-4.2	-5.2	-5.6	-4.2	-8.1	-6.2
28	-5.3	-4.3	-4.2	-4.4	-4.6	-5.1	-6.0	-6.0	-6.1	-5.7	-5.6	-6.0	-6.2	-6.4	-6.8	-7.2	-7.7	-8.2	-8.4	-8.8	-9.0	-9.0	-8.5	-8.3	-4.2	-9.0	-6.6
29	-8.4	-8.6	-9.0	-9.1	-9.0	-9.0	-9.7	-10.4	-10.7	-10.6	-10.7	-10.4	-10.4	-10.1	-9.9	-9.8	-9.7	-9.8	-9.9	-9.8	-9.7	-9.4	-8.9	-9.1	-8.4	-10.7	-9.7
30	-9.4	-9.4	-9.3	-9.3	-9.2	-9.2	-9.0	-9.0	-9.4	-9.4	-9.3	-9.4	-9.2	-9.1	-9.0	-9.0	-9.0	-9.5	-9.9	-10.6	-11.0	-11.5	-11.9	-11.9	-9.0	-11.9	-9.7
31	-11.9	-12.2	-12.4	-12.9	-13.3	-13.5	-14.1	-14.0	-14.1	-14.2	-13.8	-13.3	-12.6	-12.0	-11.5	-11.6	-11.6	-12.3	-12.9	-13.8	-13.2	-13.2	-13.2	-13.2	-11.5	-14.2	-12.9
Max.	**5.0**	**4.9**	**4.5**	**3.7**	**3.7**	**4.0**	**3.9**	**3.9**	**4.6**	**5.2**	**5.1**	**5.7**	**7.1**	**7.2**	**7.1**	**6.9**	**7.0**	**7.0**	**6.2**	**5.5**	**5.6**	**5.7**	**5.2**	**5.1**	**7.2**		
Min.	**-11.9**	**-12.2**	**-12.4**	**-12.9**	**-13.3**	**-13.5**	**-14.1**	**-14.0**	**-14.1**	**-14.2**	**-13.8**	**-13.3**	**-12.6**	**-12.0**	**-11.5**	**-11.6**	**-11.6**	**-12.3**	**-12.9**	**-13.8**	**-13.2**	**-13.2**	**-13.2**	**-13.2**		**-14.2**	
Avg.	**-2.0**	**-2.0**	**-2.1**	**-2.3**	**-2.4**	**-2.3**	**-2.4**	**-2.4**	**-2.4**	**-2.1**	**-1.8**	**-1.5**	**-1.1**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-1.1**	**-1.4**	**-1.7**	**-1.9**	**-1.9**	**-2.1**	**-2.2**			**-1.8**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-13.1	-13.1	-12.4	-12.4	-11.3	-10.6	-11.5	-11.1	-10.4	-10.8	-10.3	-9.4	-9.1	-9.0	-9.0	-8.3	-7.8	-8.0	-8.2	-8.8	-9.3	-9.5	-9.8	-9.8	-7.8	-13.1	-10.1
2	-9.7	-9.3	-8.9	-8.7	-8.6	-6.2	-6.4	-8.0	-7.4	-6.5	-6.1	-6.4	-6.4	-6.2	-5.6	-6.0	-6.7	-7.5	-7.1	-6.7	-7.1	-7.8	-8.1	-7.9	-5.6	-9.7	-7.3
3	-7.8	-8.2	-8.8	-10.5	-11.5	-13.1	-14.1	-15.3	-17.0	-18.5	-18.5	-18.0	-18.0	-17.8	-17.2	-17.0	-17.1	-17.2	-17.2	-17.3	-17.4	-17.5	-17.8	-18.0	-7.8	-18.5	-15.4
4	-18.0	-18.1	-18.3	-18.4	-18.3	-18.2	-18.3	-18.0	-18.0	-17.7	-17.6	-17.1	-16.5	-15.3	-14.8	-14.6	-15.0	-15.2	-15.8	-16.4	-16.7	-17.4	-17.3	-17.3	-14.6	-18.4	-17.0
5	-17.4	-17.6	-17.5	-18.0	-18.0	-18.3	-18.3	-18.7	-18.8	-18.7	-18.2	-17.9	-17.0	-16.1	-15.7	-15.3	-15.4	-15.7	-15.6	-15.0	-14.1	-13.3	-12.7	-12.6	-12.6	-18.8	-16.5
6	-11.5	-11.6	-11.0	-10.8	-4.8	-2.6	-2.8	-3.4	-5.5	-6.2	-7.8	-8.4	-8.1	-8.3	-8.2	-8.3	-8.2	-8.5	-9.1	-10.9	-12.3	-14.1	-15.8	-16.6	-2.6	-16.6	-8.9
7	-17.5	-18.6	-19.9	-20.9	-21.7	-22.1	-22.6	-23.1	-23.2	-23.7	-24.1	-23.6	-23.6	-23.5	-22.6	-22.5	-22.4	-22.2	-22.6	-22.4	-22.3	-22.2	-22.0	-21.9	-17.5	-24.1	-22.1
8	-21.7	-21.6	-21.1	-20.8	-20.5	-20.1	-19.8	-19.1	-17.9	-17.0	-16.6	-16.0	-15.8	-15.0	-14.2	-14.1	-14.3	-14.9	-14.9	-15.3	-15.6	-16.2	-16.5	-17.2	-14.1	-21.7	-17.3
9	-17.9	-18.1	-18.2	-18.1	-18.2	-17.9	-17.9	-17.8	-18.1	-18.2	-17.7	-17.3	-16.9	-16.4	-16.3	-16.2	-16.1	-16.0	-15.8	-16.0	-16.1	-15.9	-15.8	-15.6	-15.6	-18.2	-17.0
10	-15.6	-15.5	-15.6	-15.8	-15.8	-15.6	-15.5	-15.6	-15.6	-15.6	-15.5	-15.2	-15.1	-14.5	-14.2	-14.4	-14.6	-15.0	-15.3	-15.4	-15.6	-15.8	-15.7	-15.7	-14.2	-15.8	-15.4
11	-16.2	-16.6	-16.8	-16.1	-15.8	-15.5	-15.4	-15.5	-15.6	-15.6	-15.5	-15.4	-15.3	-15.0	-14.9	-14.7	-14.6	-14.4	-14.5	-14.5	-14.6	-14.5	-14.4	-14.2	-14.2	-16.8	-15.2
12	-14.0	-13.7	-13.5	-13.2	-13.1	-13.2	-13.1	-12.7	-12.1	-12.1	-11.2	-11.9	-12.1	-11.5	-11.6	-11.4	-11.6	-11.6	-13.2	-14.1	-14.4	-15.3	-15.8	-16.4	-11.2	-16.4	-13.0
13	-16.4	-16.5	-16.4	-17.1	-16.6	-17.4	-17.9	-18.0	-17.8	-17.7	-17.6	-17.4	-17.4	-15.8	-15.1	-15.4	-14.9	-14.4	-14.2	-13.8	-13.5	-13.5	-12.9	-10.0	-10.0	-18.0	-15.7
14	-8.9	-7.8	-6.6	-6.7	-7.1	-6.8	-6.1	-6.4	-5.2	-4.7	-4.2	-3.9	-3.7	-2.6	-1.8	-1.4	-1.4	-1.3	-0.7	-0.5	-0.5	-0.2	-0.5	-1.0	-0.2	-8.9	-3.7
15	-0.1	-0.7	-1.5	-1.8	-1.8	-1.5	-1.2	-1.5	-3.6	-4.3	-4.9	-5.0	-5.3	-4.9	-4.3	-6.6	-5.7	-5.7	-6.0	-5.4	-5.6	-5.5	-5.2	-5.0	-0.1	-6.6	-3.9
16	-5.4	-4.8	-4.5	-3.7	-3.6	-3.2	-2.3	-1.8	-1.5	-1.0	-0.6	-0.5	-0.1	0.2	0.7	1.1	1.1	1.3	1.5	1.6	1.7	1.7	1.9	1.9	1.9	-5.4	-0.8
17	1.9	1.5	1.4	1.4	1.3	1.2	1.0	0.5	0.1	-0.1	-1.3	-1.7	-2.0	-2.5	-3.5	-4.2	-4.7	-4.9	-5.3	-5.5	-5.6	-5.7	-5.7	-5.6	1.9	-5.7	-2.0
18	-5.5	-5.1	-4.1	-3.2	-3.8	-4.1	-2.4	-1.6	-2.0	-1.5	-0.3	0.1	0.3	0.6	0.7	0.1	-1.1	-2.6	-3.7	-5.6	-7.4	-9.6	-9.9	-10.9	0.7	-10.9	-3.4
19	-10.7	-9.4	-8.5	-8.3	-8.0	-7.8	-7.8	-8.3	-9.4	-9.8	-10.1	-10.2	-11.6	-12.5	-12.7	-13.0	-13.0	-13.2	-13.4	-13.2	-13.3	-13.0	-12.2	-11.5	-7.8	-13.4	-10.9
20	-11.0	-10.6	-9.6	-9.0	-9.6	-10.2	-10.1	-10.1	-9.5	-8.7	-7.8	-7.2	-7.4	-7.5	-7.4	-7.5	-7.7	-7.7	-7.7	-7.5	-7.6	-7.5	-7.3	-7.4	-7.2	-11.0	-8.5
21	-7.8	-8.7	-8.8	-9.7	-10.2	-10.8	-11.0	-10.7	-10.4	-10.5	-10.3	-10.9	-10.5	-11.2	-11.5	-11.8	-12.5	-13.5	-13.5	-13.1	-13.4	-14.9	-15.7	-15.6	-7.8	-15.7	-11.5
22	-16.3	-16.9	-17.1	-16.3	-16.9	-16.6	-16.9	-16.0	-16.3	-16.6	-15.7	-14.9	-14.3	-13.9	-15.4	-15.7	-15.8	-17.3	-18.5	-18.6	-19.1	-20.3	-20.8	-21.4	-13.9	-21.4	-17.0
23	-23.4	-24.0	-24.3	-23.9	-24.0	-24.1	-23.8	-23.1	-22.6	-22.5	-22.5	-22.1	-22.0	-21.6	-21.4	-21.2	-21.2	-21.4	-21.5	-21.8	-21.3	-21.0	-21.1	-21.4	-21.0	-24.3	-22.4
24	-21.8	-22.1	-22.6	-23.7	-24.2	-24.4	-24.3	-24.0	-24.1	-24.2	-24.2	-24.5	-24.8	-25.0	-25.4	-25.9	-26.0	-25.5	-24.7	-24.2	-23.7	-23.8	-24.2	-24.5	-21.8	-26.0	-24.2
25	-24.7	-24.8	-25.1	-25.0	-24.9	-25.1	-24.7	-24.5	-23.8	-23.7	-23.9	-23.9	-23.3	-23.1	-23.4	-23.2	-22.8	-22.3	-21.9	-22.4	-22.2	-21.8	-21.7	-22.0	-21.7	-25.1	-23.5
26	-22.0	-22.0	-22.0	-22.1	-21.8	-21.3	-20.9	-20.5	-21.1	-21.3	-21.9	-22.1	-21.7	-21.5	-21.2	-21.3	-21.2	-21.1	-21.3	-21.6	-21.2	-21.0	-21.0	-21.3	-20.5	-22.1	-21.4
27	-21.1	-20.7	-20.8	-20.5	-20.4	-20.8	-20.4	-20.9	-20.8	-20.5	-20.1	-20.1	-19.0	-19.6	-19.4	-17.1	-16.4	-17.4	-16.9	-16.1	-15.7	-14.4	-12.2	-10.4	-10.4	-21.1	-18.4
28	-9.6	-9.1	-9.0	-8.9	-8.9	-8.5	-8.2	-8.0	-7.8	-7.7	-7.4	-6.9	-6.6	-6.6	-6.5	-6.4	-6.8	-7.0	-7.4	-7.1	-7.2	-7.3	-6.6	-6.8	-6.4	-9.6	-7.6
29	-6.9	-6.6	-6.4	-5.5	-5.4	-6.3	-6.2	-6.7	-6.6	-6.9	-7.3	-7.6	-7.9	-8.1	-7.3	-6.5	-6.6	-6.5	-6.2	-7.4	-6.8	-6.9	-7.0	-7.1	-5.4	-8.1	-6.8
30	-6.5	-5.9	-5.8	-5.9	-6.0	-6.0	-6.0	-6.0	-6.0	-6.1	-6.3	-6.4	-6.6	-6.9	-7.0	-7.1	-7.2	-7.5	-7.7	-8.0	-8.1	-8.3	-8.4	-8.6	-5.8	-8.6	-6.8
Max.	**1.9**	**1.5**	**1.4**	**1.4**	**1.3**	**1.2**	**1.0**	**0.5**	**0.1**	**-0.1**	**-0.3**	**0.1**	**0.3**	**0.6**	**0.7**	**1.1**	**1.1**	**1.3**	**1.5**	**1.6**	**1.7**	**1.7**	**1.9**	**1.9**	**1.9**		
Min.	**-24.7**	**-24.8**	**-25.1**	**-25.0**	**-24.9**	**-25.1**	**-24.7**	**-24.5**	**-24.1**	**-24.2**	**-24.2**	**-24.5**	**-24.8**	**-25.0**	**-25.4**	**-25.9**	**-26.0**	**-25.5**	**-24.7**	**-24.2**	**-23.7**	**-23.8**	**-24.2**	**-24.5**		**-26.0**	
Avg.	**-13.2**	**-13.2**	**-13.1**	**-13.1**	**-13.0**	**-12.9**	**-12.8**	**-12.9**	**-12.9**	**-12.9**	**-12.8**	**-12.7**	**-12.6**	**-12.4**	**-12.2**	**-12.2**	**-12.2**	**-12.5**	**-12.6**	**-12.8**	**-12.9**	**-13.1**	**-13.1**	**-13.1**			**-12.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-8.9	-9.2	-9.3	-9.6	-10.1	-10.9	-11.5	-12.1	-12.9	-13.2	-13.4	-12.8	-12.8	-12.7	-12.3	-11.8	-11.9	-12.2	-13.0	-12.8	-13.1	-13.4	-13.8	-13.9	-8.9	-13.9	-12.0
2	-13.3	-12.8	-12.9	-12.5	-12.1	-12.8	-13.8	-14.4	-14.7	-14.9	-15.9	-16.5	-17.1	-17.7	-18.3	-18.9	-19.5	-20.0	-20.4	-20.7	-21.0	-21.0	-20.5	-20.5	-12.1	-21.0	-16.8
3	-20.7	-20.8	-20.9	-21.0	-20.9	-20.8	-22.4	-23.3	-23.4	-23.4	-23.5	-23.5	-23.7	-23.6	-23.7	-23.7	-23.8	-24.4	-24.9	-24.4	-24.4	-24.7	-24.8	-24.6	-20.7	-24.9	-23.1
4	-24.6	-24.6	-24.2	-23.5	-22.9	-22.5	-21.1	-19.2	-15.8	-15.1	-13.6	-11.9	-11.7	-10.0	-9.3	-8.9	-8.2	-6.9	-6.1	-5.6	-5.3	-5.0	-4.6	-4.2	-4.2	-24.6	-13.5
5	-3.8	-3.5	-3.2	-2.9	-2.6	-2.5	-2.2	-2.1	-2.0	-1.8	-1.8	-1.6	-1.4	-1.4	-1.4	-1.3	-1.1	-0.6	-0.2	0.0	0.0	0.3	1.2	1.7	1.7	-3.8	-1.4
6	2.0	2.0	2.0	2.1	1.6	1.4	1.9	2.1	1.5	1.3	0.8	0.2	-0.1	-0.3	-0.1	-0.4	-0.5	-0.7	-0.2	-0.1	-0.1	-0.1	0.1	0.8	2.1	-0.7	0.7
7	1.1	1.1	1.3	1.3	1.5	1.9	1.5	1.1	1.3	1.6	2.2	1.4	1.8	2.0	1.6	1.2	1.9	1.5	1.1	1.6	2.1	2.2	1.8	1.5	2.2	1.1	1.6
8	1.5	1.3	0.9	0.6	1.0	0.7	1.0	1.1	1.2	1.1	1.4	1.7	2.1	2.5	2.1	1.8	2.0	2.1	2.0	1.9	2.1	2.2	2.1	2.2	2.5	0.6	1.6
9	2.3	2.3	2.5	2.2	2.2	2.1	1.7	1.1	0.6	0.9	0.7	0.9	1.6	2.1	1.9	2.0	1.6	1.4	1.4	1.0	0.9	0.9	0.8	0.4	2.5	0.4	1.5
10	0.2	-0.1	-0.2	-0.4	-0.7	-0.9	-0.9	-0.8	-0.5	-0.2	0.3	1.3	1.0	0.9	0.8	0.7	0.8	0.7	0.4	0.6	0.5	0.1	0.1	-0.1	1.3	-0.9	0.1
11	-0.2	-0.2	-0.7	-1.1	-1.4	-2.7	-4.4	-5.5	-6.4	-7.6	-8.8	-9.9	-10.7	-10.7	-10.3	-10.9	-11.2	-11.7	-11.8	-12.1	-12.6	-12.8	-13.6	-15.0	-0.2	-15.0	-8.0
12	-16.0	-16.9	-16.4	-16.3	-16.2	-17.0	-16.6	-16.2	-16.2	-16.3	-16.0	-14.1	-12.3	-11.6	-11.5	-10.4	-10.9	-11.4	-10.7	-10.6	-11.3	-10.7	-9.9	-9.7	-9.7	-17.0	-13.6
13	-10.0	-10.2	-9.7	-9.7	-10.3	-10.1	-9.7	-9.7	-9.7	-8.6	-7.8	-6.3	-6.1	-5.3	-4.2	-3.3	-2.5	-2.0	-1.7	-1.4	-1.1	-0.8	-0.7	-0.6	-0.6	-10.3	-5.9
14	0.0	0.1	0.1	0.7	0.1	-0.8	0.4	-0.1	-0.1	0.3	1.0	1.6	1.7	2.8	2.1	1.2	2.0	1.5	1.8	1.5	1.5	1.6	2.6	2.3	2.8	-0.8	1.1
15	1.9	1.7	1.5	1.8	2.2	3.1	3.0	1.7	1.1	1.4	1.1	1.0	1.9	1.8	1.8	2.0	2.2	1.9	2.6	4.5	4.2	3.8	3.9	3.7	4.5	1.0	2.3
16	4.0	3.7	3.0	3.1	3.1	3.2	2.9	2.8	2.4	1.5	0.6	0.1	-0.6	-1.0	-1.1	-1.4	-1.5	-1.7	-1.9	-2.0	-2.0	-2.3	-2.4	-2.5	4.0	-2.5	0.4
17	-2.6	-2.8	-2.9	-3.0	-2.8	-3.0	-3.1	-3.4	-3.1	-3.1	-2.6	-2.5	-1.8	-0.8	0.9	0.9	0.0	-0.4	0.1	0.1	0.0	0.0	0.9	0.4	0.9	-3.4	-1.4
18	0.3	0.2	0.7	0.5	1.4	1.6	1.2	1.6	1.5	0.8	1.1	1.7	1.9	2.0	2.3	2.5	2.5	2.8	3.0	3.1	2.8	3.9	3.4	3.2	3.9	0.2	1.9
19	3.3	3.2	3.9	3.4	3.0	2.8	2.1	2.2	2.2	2.1	2.2	2.4	2.5	2.2	1.8	1.6	1.5	1.0	1.4	1.4	1.0	1.2	1.2	0.5	3.9	0.5	2.1
20	-0.5	-0.8	-0.7	-0.4	-1.2	-1.1	-1.2	-1.4	-1.6	-1.1	-1.0	-1.0	-0.7	0.1	0.4	-0.3	-1.7	-2.7	-3.7	-3.0	-2.7	-2.9	-2.4	-2.7	0.4	-3.7	-1.4
21	-2.5	-1.8	-1.8	-1.7	-1.6	-1.6	-1.6	-2.5	-2.9	-3.3	-3.1	-2.8	-2.3	-2.1	-2.2	-2.9	-3.5	-4.4	-3.8	-4.6	-4.4	-5.2	-5.0	-5.0	-1.6	-5.2	-3.0
22	-4.8	-5.9	-5.8	-6.3	-6.1	-5.9	-6.2	-6.3	-7.0	-7.2	-6.7	-7.5	-7.0	-6.9	-6.9	-6.5	-6.3	-6.0	-6.0	-5.2	-5.2	-4.5	-3.4	-3.5	-3.4	-7.5	-6.0
23	-3.3	-3.3	-3.3	-3.8	-3.7	-3.6	-2.5	-2.5	-2.9	-3.0	-2.8	-2.8	-2.8	-3.1	-3.1	-2.9	-2.8	-2.7	-2.7	-3.0	-2.8	-3.0	-3.1	-2.8	-2.5	-3.8	-3.0
24	-2.5	-2.3	-2.3	-2.1	-1.9	-2.1	-1.8	-1.6	-1.4	-1.3	-1.4	-0.8	-0.4	-0.4	-0.4	-0.1	-0.3	-1.8	-2.5	-1.8	-1.3	-1.3	-0.8	-0.7	-0.1	-2.5	-1.4
25	-0.6	-0.3	0.1	0.1	0.3	0.0	-1.1	-0.5	0.1	-0.7	-0.6	0.5	0.9	0.5	0.8	0.9	1.5	1.7	1.1	0.8	0.9	1.6	2.3	1.6	2.3	-1.1	0.5
26	1.0	0.7	1.9	2.1	2.2	1.8	1.3	1.2	1.2	1.0	1.6	1.7	1.4	1.7	1.5	1.1	1.0	0.1	0.5	0.7	0.6	0.9	0.8	1.2	2.2	0.1	1.2
27	1.7	1.9	1.8	2.0	2.5	2.4	3.2	2.9	2.0	1.3	2.5	2.2	1.4	1.5	-0.5	-0.3	0.2	1.2	2.1	2.0	2.3	2.6	2.6	2.3	3.2	-0.5	1.8
28	1.7	1.3	1.9	2.0	2.2	2.2	2.0	2.0	1.4	1.3	2.0	2.8	2.3	2.6	2.1	2.4	2.9	2.9	2.5	2.2	2.3	2.0	1.9	2.1	2.9	1.3	2.1
29	2.1	2.1	1.3	0.5	0.3	0.4	0.2	0.7	0.3	0.2	0.1	0.2	0.1	0.3	0.7	0.7	0.6	0.4	0.5	0.5	0.3	0.4	0.3	0.8	2.1	0.1	0.6
30	1.4	1.5	2.1	2.1	1.8	2.2	2.9	3.4	1.3	0.8	1.0	0.4	-0.1	0.5	1.6	1.2	1.0	1.8	1.9	1.6	2.1	2.6	2.6	2.7	3.4	-0.1	1.7
31	2.0	-0.5	1.4	2.0	1.4	0.9	0.6	1.0	0.7	0.3	0.5	1.7	1.5	1.3	1.2	0.6	0.2	0.0	-0.9	-1.1	-1.1	-0.9	-1.5	-1.2	2.0	-1.5	0.4
Max.	**4.0**	**3.7**	**3.9**	**3.4**	**3.1**	**3.2**	**3.2**	**3.4**	**2.4**	**2.1**	**2.5**	**2.8**	**2.5**	**2.8**	**2.3**	**2.5**	**2.9**	**2.9**	**3.0**	**4.5**	**4.2**	**3.9**	**3.9**	**3.7**	**4.5**		
Min.	**-24.6**	**-24.6**	**-24.2**	**-23.5**	**-22.9**	**-22.5**	**-22.4**	**-23.3**	**-23.4**	**-23.4**	**-23.5**	**-23.5**	**-23.7**	**-23.6**	**-23.7**	**-23.7**	**-23.8**	**-24.4**	**-24.9**	**-24.4**	**-24.4**	**-24.7**	**-24.8**	**-24.6**		**-24.9**	
Avg.	**-2.8**	**-3.0**	**-2.8**	**-2.8**	**-2.8**	**-3.0**	**-3.1**	**-3.1**	**-3.3**	**-3.4**	**-3.2**	**-3.0**	**-2.9**	**-2.7**	**-2.6**	**-2.7**	**-2.7**	**-2.9**	**-2.8**	**-2.7**	**-2.7**	**-2.7**	**-2.5**	**-2.6**			**-2.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.5	-0.7	-1.2	-1.4	-1.0	-1.3	-1.3	-1.4	-1.3	-0.8	-0.7	-0.9	-0.3	0.1	-0.4	-0.1	-0.3	-0.9	-1.6	-1.3	-1.1	-0.7	-0.8	-0.9	0.1	-1.6	-0.9
2	-0.5	-0.7	-1.0	-0.4	-0.7	-1.1	-1.0	-1.2	-1.0	-0.3	-0.4	0.1	0.0	-0.4	-0.1	0.3	-0.2	-0.3	-0.3	-0.7	-0.6	-0.6	-0.9	-1.7	0.3	-1.7	-0.6
3	-1.7	-2.2	-2.1	-2.2	-2.2	-2.3	-2.3	-2.2	-2.0	-2.0	-2.0	-1.9	-1.9	-1.5	-1.4	-0.9	-1.1	-0.9	-0.7	-0.7	-0.6	-0.7	-0.7	-0.5	-0.5	-2.3	-1.5
4	-0.8	-0.9	-1.0	-0.9	-1.2	-2.2	-3.1	-2.3	-2.3	-2.8	-2.8	-2.0	-2.7	-2.7	-2.7	-2.9	-2.8	-3.7	-3.9	-4.3	-4.1	-4.1	-4.0	-3.4	-0.8	-4.3	-2.6
5	-3.3	-2.6	-2.8	-2.2	-2.8	-2.6	-2.3	-2.3	-2.7	-2.4	-2.4	-2.5	-2.4	-3.9	-3.6	-4.3	-3.9	-4.0	-3.3	-3.7	-5.5	-5.1	-4.7	-5.2	-2.2	-5.5	-3.4
6	-5.4	-5.2	-5.7	-6.1	-5.3	-4.5	-4.5	-5.0	-5.1	-5.1	-5.1	-4.4	-4.0	-4.0	-3.9	-3.8	-3.1	-3.5	-4.3	-4.0	-3.5	-3.7	-4.0	-3.9	-3.1	-6.1	-4.5
7	-3.4	-3.3	-3.7	-4.3	-4.0	-4.0	-4.0	-3.7	-3.2	-3.0	-1.7	-1.3	-1.1	-1.2	-0.4	-0.5	-0.6	-1.2	-1.0	-1.6	-0.7	0.0	0.1	0.8	0.8	-4.3	-2.0
8	0.5	-1.2	-0.4	-2.3	-1.5	-0.9	1.5	0.5	1.0	0.2	-1.5	-1.7	-2.6	-2.3	-2.5	-1.6	-1.4	-3.7	-3.8	-4.0	-5.0	-4.9	-5.6	-6.0	1.5	-6.0	-2.0
9	-5.4	-5.5	-4.5	-4.2	-5.5	-4.8	-3.8	-4.3	-5.5	-3.5	-2.5	-1.9	-1.7	-1.1	-1.1	-2.0	-3.6	-4.9	-3.0	-2.4	-2.4	-2.9	-3.0	-2.9	-1.1	-5.5	-3.4
10	-3.4	-2.7	-1.9	-1.6	-1.6	-1.4	-1.3	-1.5	-1.5	-1.8	-2.7	-2.9	-3.8	-4.9	-5.2	-7.0	-7.4	-8.7	-9.3	-9.6	-9.6	-9.4	-9.2	-9.0	-1.3	-9.6	-4.9
11	-9.0	-9.2	-9.2	-9.5	-9.5	-9.7	-9.7	-9.9	-10.1	-9.9	-9.7	-9.5	-9.5	-9.5	-9.6	-9.6	-9.8	-9.5	-9.7	-10.8	-11.3	-11.1	-11.1	-10.9	-9.0	-11.3	-9.9
12	-10.7	-11.3	-11.7	-12.4	-12.7	-12.8	-13.2	-13.5	-13.7	-14.3	-14.7	-15.0	-15.5	-15.5	-15.7	-15.9	-16.2	-16.5	-17.3	-17.9	-18.6	-18.3	-18.4	-18.4	-10.7	-18.6	-15.0
13	-18.9	-19.8	-20.3	-20.4	-20.2	-20.2	-20.5	-20.7	-20.8	-20.9	-20.9	-20.9	-20.7	-20.4	-20.6	-20.7	-20.4	-20.7	-20.7	-20.3	-20.3	-20.5	-20.4	-20.4	-18.9	-20.9	-20.4
14	-19.9	-20.7	-19.2	-18.3	-18.6	-16.8	-14.9	-12.4	-11.3	-10.3	-9.7	-8.6	-8.5	-8.7	-8.2	-8.0	-7.5	-7.2	-6.8	-6.4	-6.4	-6.2	-5.9	-5.6	-5.6	-20.7	-11.1
15	-5.5	-5.5	-5.2	-4.9	-4.7	-4.4	-4.4	-4.1	-3.7	-3.7	-3.6	-3.1	-2.3	-2.5				-2.2	-2.0	-1.8	-1.7	-1.8	-2.6	-2.3	-1.7	-5.5	-3.4
16	-2.0	-2.1	-1.9	-1.8	-2.1	-2.1	-1.8	-1.4	-1.5	-1.3	-1.3	-1.1	-1.8	-3.6	-3.2	-3.0	-2.6	-2.8	-3.3	-4.0	-5.2	-6.1	-8.5	-9.7	-1.1	-9.7	-3.1
17	-11.2	-11.4	-12.3	-12.8	-12.9	-12.6	-12.8	-13.6	-14.4	-16.0	-16.1	-16.5	-16.4	-16.3	-17.0	-17.7	-19.4	-20.4	-20.8	-21.1	-20.8	-20.9	-19.2	-20.2	-11.2	-21.1	-16.4
18	-20.2	-20.5	-21.3	-21.1	-22.1	-22.0	-21.7	-21.4	-21.6	-22.1	-22.7	-22.5	-22.1	-21.4	-21.2	-20.9	-21.6	-21.1	-21.4	-21.7	-21.3	-22.0	-22.3	-22.9	-20.2	-22.9	-21.6
19	-23.0	-22.8	-23.1	-23.5	-23.9	-24.6	-25.3	-25.5	-25.6	-25.5	-25.5	-25.4	-25.3	-24.9	-24.5	-24.6	-25.2	-25.9	-26.0	-25.9	-26.1	-26.5	-26.6	-26.1	-22.8	-26.6	-25.0
20	-26.1	-25.7	-25.3	-24.7	-23.2	-24.7	-25.5	-25.6	-25.4	-24.5	-24.9	-24.1	-24.5	-24.2	-24.3	-23.7	-23.4	-23.1	-23.4	-23.1	-22.4	-23.6	-22.9	-23.0	-22.4	-26.1	-24.2
21	-22.8	-22.7	-23.3	-23.3	-23.0	-23.2	-23.3	-23.4	-23.7	-24.0	-24.5	-25.4	-25.9	-26.3	-25.9	-26.1	-26.0	-26.1	-26.1	-26.7	-27.4	-27.9	-28.5	-29.3	-22.7	-29.3	-25.2
22	-29.7	-30.2	-30.0	-29.9	-29.9	-29.8	-29.5	-29.3	-29.2	-29.2	-29.2	-29.3	-29.3	-29.7	-29.8	-29.8	-29.9	-29.9	-30.1	-30.3	-30.5	-30.5	-30.4	-30.5	-29.2	-30.5	-29.8
23	-30.7	-30.8	-30.9	-30.7	-30.6	-30.7	-30.7	-30.7	-30.0	-30.1	-29.9	-30.3	-29.1	-28.3	-27.7	-27.0	-26.7	-26.6	-26.4	-25.7	-26.6	-26.4	-26.0	-26.0	-25.7	-30.9	-28.7
24	-26.0	-25.6	-25.3	-25.6	-25.9	-26.0	-25.8	-25.7	-25.6	-25.5	-26.0	-25.8	-25.8	-25.5	-25.2	-25.3	-25.8	-26.0	-26.4	-27.0	-27.8	-28.4	-28.4	-28.6	-25.2	-28.6	-26.2
25	-29.0	-29.0	-28.8	-29.3	-29.2	-29.9	-29.5	-30.0	-29.5	-29.3	-28.4	-27.7	-28.4	-28.1	-27.2	-27.5	-27.1	-26.5	-28.3	-28.5	-29.2	-30.1	-29.6	-29.4	-26.5	-30.1	-28.7
26	-29.4	-28.9	-29.3	-29.9	-30.2	-28.7	-28.9	-28.7	-28.9	-28.3	-27.6	-26.3	-25.5	-25.9	-26.4	-25.8	-25.7	-25.4	-25.8	-27.0	-27.3	-27.4	-29.0	-29.5	-25.4	-30.2	-27.7
27	-29.2	-30.1	-30.7	-31.4	-31.5	-31.9	-32.8	-33.4	-33.4	-33.7	-33.8	-33.9	-33.9	-33.7	-33.1	-33.1	-32.9	-33.1	-33.0	-32.8	-33.0	-32.4	-32.2	-32.1	-29.2	-33.9	-32.5
28	-31.8	-32.2	-32.6	-32.7	-33.0	-33.2	-33.8	-34.1	-34.2	-34.8	-35.3	-34.9	-34.3	-33.5	-32.4	-32.4	-32.7	-33.2	-33.2	-33.2	-33.3	-33.1	-33.0	-33.1	-31.8	-35.3	-33.3
29	-33.1	-33.0	-33.1	-32.8	-32.6	-32.4	-32.1	-31.7	-31.4	-31.7	-31.6	-30.4	-30.6	-30.4	-30.5	-29.6	-29.3	-29.4	-29.0	-29.6	-29.8	-29.4	-30.2	-30.0	-29.0	-33.1	-31.0
30	-28.2	-28.4	-28.2	-27.8	-28.2	-28.5	-29.0	-28.6	-27.8	-28.0	-27.0	-26.0	-26.2	-26.5	-26.3	-26.5	-25.4	-21.6	-20.4	-19.2	-20.8	-21.1	-18.7	-17.1	-17.1	-29.0	-25.2
31	-17.3	-17.4	-17.2	-17.5	-17.3	-16.8	-17.0	-16.7	-16.9	-17.4	-18.5	-18.8	-18.6	-18.7	-20.1	-19.7	-20.9	-21.9	-23.1	-23.3	-24.7	-26.5	-26.9	-26.0	-16.7	-26.9	-20.0
Max.	**0.5**	**-0.7**	**-0.4**	**-0.4**	**-0.7**	**-0.9**	**1.5**	**0.5**	**1.0**	**0.2**	**-0.4**	**0.1**	**0.0**	**0.1**	**-0.1**	**0.3**	**-0.2**	**-0.3**	**-0.3**	**-0.7**	**-0.6**	**0.0**	**0.1**	**0.8**	**1.5**		
Min.	**-33.1**	**-33.0**	**-33.1**	**-32.8**	**-33.0**	**-33.2**	**-33.8**	**-34.1**	**-34.2**	**-34.8**	**-35.3**	**-34.9**	**-34.3**	**-33.7**	**-33.1**	**-33.1**	**-32.9**	**-33.2**	**-33.2**	**-33.2**	**-33.3**	**-33.1**	**-33.0**	**-33.1**		**-35.3**	
Avg.	**-15.4**	**-15.6**	**-15.6**	**-15.7**	**-15.7**	**-15.7**	**-15.6**	**-15.6**	**-15.6**	**-15.5**	**-15.6**	**-15.3**	**-15.3**	**-15.3**	**-15.7**	**-15.7**	**-15.8**	**-15.5**	**-15.6**	**-15.8**	**-16.0**	**-16.2**	**-16.2**	**-16.2**			**-15.6**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-26.7	-28.0	-28.2	-28.1	-29.1	-29.4	-29.8	-30.2	-30.5	-30.7	-31.1	-30.5	-29.9	-29.6	-29.3	-29.2	-29.4	-29.9	-30.1	-30.8	-31.2	-31.2	-31.2	-31.4	-26.7	-31.4	-29.8
2	-31.0	-31.0	-31.0	-31.3	-31.2	-31.2	-30.9	-30.5	-30.3	-29.7	-28.8	-28.6	-27.7	-26.9	-25.6	-24.2	-23.9	-24.6	-25.3	-25.6	-24.3	-24.3	-23.6	-21.5	-21.5	-31.3	-27.6
3	-18.2	-17.4	-16.5	-15.6	-15.4	-14.1	-13.2	-12.5	-12.2	-12.1	-11.8	-11.1	-10.5	-10.0	-9.5	-9.4	-9.4	-9.4	-8.8	-8.1	-7.7	-7.5	-7.4	-7.5	-7.4	-18.2	-11.5
4	-7.3	-7.3	-7.2	-7.2	-7.2	-7.0	-6.8	-6.6	-6.5	-6.1	-5.7	-5.4	-5.1	-4.1	-3.5	-3.7	-3.7	-3.7	-3.5	-3.0	-2.6	-2.1	-2.0	-1.8	-1.8	-7.3	-5.0
5	-1.7	-2.4	-2.4	-2.0	-1.8	-1.5	-1.2	-1.4	-1.0	-2.2	-2.6	-1.8	-1.4	-1.1	-1.3	-1.1	-0.6	-0.4	-0.6	-0.9	-1.0	0.1	0.3	-0.2	0.3	-2.6	-1.3
6	-0.4	-0.7	-1.4	-0.8	-1.0	-1.3	-1.3	-1.2	-1.2	-1.3	-3.2	-3.6	-4.1	-4.4	-5.1	-5.2	-5.4	-5.7	-6.2	-6.7	-6.4	-6.5	-6.7	-6.8	-0.4	-6.8	-3.6
7	-6.8	-6.4	-6.4	-6.3	-6.7	-7.0	-6.7	-7.0	-7.6	-7.9	-8.4	-9.0	-9.2	-9.2	-9.0	-9.1	-9.4	-10.3	-10.5	-10.5	-10.4	-9.9	-9.9	-9.1	-6.3	-10.5	-8.4
8	-9.5	-9.5	-10.1	-10.6	-10.1	-9.8	-9.9	-9.2	-8.3	-6.9	-6.4	-7.2	-6.7	-6.1	-4.9	-4.8	-4.9	-4.7	-4.5	-4.2	-4.0	-3.6	-3.6	-3.7	-3.6	-10.6	-6.8
9	-3.3	-3.4	-3.1	-2.7	-2.5	-2.2	-2.0	-2.5	-2.5	-3.0	-2.4	-2.6	-2.0	-1.4	-0.6	0.0	0.6	0.9	1.0	0.9	1.5	1.0	0.4	-0.7	1.5	-3.4	-1.3
10	-1.0	-1.3	-1.3	-1.1	-0.7	0.0	0.0	0.0	-0.7	-1.1	-1.0	-1.1	-1.1	-1.2	-0.8	-0.6	-0.4	-0.4	-0.6	-0.5	-0.5	-0.6	-0.6	-0.8	0.0	-1.3	-0.7
11	-1.4	-1.5	-1.7	-1.6	-1.4	-1.4	-1.2	-1.9	-2.1	-2.2	-2.3	-1.8	-1.7	-1.5	-1.5	-1.4	-1.1	-0.8	-0.4	-0.6	-0.5	-0.1	0.0	0.0	0.0	-2.3	-1.3
12	0.0	0.0	-0.4	-0.4	-0.5	-1.0	-1.7	-2.4	-4.3	-5.3	-5.4	-5.6	-6.0	-6.5	-6.7	-6.7	-7.0	-7.0	-7.8	-8.7	-9.3	-10.0	-10.3	-9.9	0.0	-10.3	-5.1
13	-9.2	-9.4	-9.2	-8.3	-8.0	-7.8	-7.8	-7.6	-7.4	-6.6	-5.2	-3.8	-4.2	-3.1	-2.4	-1.6	-1.4	-1.1	-1.0	-0.6	-0.4	-0.2	0.1	0.1	0.1	-9.4	-4.4
14	0.4	0.6	0.8	0.6	0.3	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.5	0.6	0.8	0.1	0.3
15	0.7	1.2	1.0	1.3	1.7	1.7	1.5	1.4	1.4	1.6	1.6	1.4	1.3	1.1	0.7	0.6	0.5	0.1	-0.1	-0.6	-0.6	-0.4	-0.4	-0.4	1.7	-0.6	0.8
16	-0.4	-0.5	-0.5	-0.4	-0.5	-0.6	-0.5	-0.5	-0.7	-0.7	-0.9	-1.0	-0.8	-0.5	-0.4	0.0	-0.2	-0.3	-0.5	-1.5	-2.1	-2.3	-2.7	-3.0	0.0	-3.0	-0.9
17	-3.2	-3.0	-2.2	-2.1	-1.7	-1.3	-0.6	-0.6	-0.4	0.2	0.1	0.2	0.4	0.4	0.5	0.3	0.1	-0.2	-0.3	-0.3	-0.6	-0.8	-1.0	-1.1	0.5	-3.2	-0.7
18	-1.0	-1.0	-0.9	-0.8	-0.9	-1.0	-0.9	-0.9	-0.7	-0.5	-0.2	-0.1	0.2	0.2	-0.2	-0.9	-0.9	-1.1	-1.3	-1.3	-0.7	0.1	0.3	-0.1	0.3	-1.3	-0.6
19	-0.8	-1.4	-2.0	-2.2	-2.6	-3.2	-4.0	-4.6	-5.0	-5.4	-5.2	-4.5	-3.6	-3.5	-3.3	-3.0	-2.7	-2.7	-3.0	-3.2	-3.7	-4.2	-4.5	-4.9	-0.8	-5.4	-3.5
20	-5.1	-4.9	-4.7	-4.8	-4.9	-5.2	-5.2	-5.0	-4.9	-4.5	-4.1	-3.6	-3.5	-3.5	-3.2	-3.3	-3.8	-4.6	-5.1	-6.1	-6.9	-7.6	-7.9	-8.2	-3.2	-8.2	-5.0
21	-8.8	-9.3	-9.8	-10.2	-10.9	-11.3	-11.1	-10.8	-10.9	-10.3	-8.9	-7.9	-6.1	-6.7	-7.2	-7.3	-7.0	-7.4	-7.7	-7.1	-8.0	-8.8	-8.4	-7.9	-6.1	-11.3	-8.7
22	-8.6	-8.7	-9.0	-8.4	-8.0	-8.4	-8.4	-8.8	-8.6	-8.2	-7.9	-7.6	-7.0	-6.5	-6.8	-6.7	-7.3	-8.1	-7.9	-7.6	-7.4	-7.9	-8.3	-8.5	-6.5	-9.0	-7.9
23	-8.5	-8.4	-8.1	-7.8	-7.4	-7.1	-6.2	-7.0	-7.6	-7.4	-8.2	-8.4	-8.3	-8.5	-8.0	-7.8	-8.3	-8.8	-8.6	-8.8	-9.4	-9.3	-9.8	-11.1	-6.2	-11.1	-8.3
24	-11.9	-13.2	-13.0	-13.0	-13.7	-13.7	-14.3	-14.2	-14.5	-13.3	-12.3	-11.3	-10.7	-10.5	-10.7	-10.4	-10.4	-10.6	-10.8	-10.9	-10.3	-10.8	-10.9	-10.3	-10.3	-14.5	-11.9
25	-10.5	-10.1	-10.7	-10.6	-9.8	-9.2	-9.1	-8.6	-8.1	-7.9	-6.5	-3.6	-3.9	-5.8	-6.5	-6.9	-7.3	-7.4	-7.9	-8.0	-8.3	-8.0	-8.0	-8.2	-3.6	-10.7	-8.0
26	-9.0	-8.9	-8.5	-8.6	-8.5	-9.5	-9.1	-8.6	-8.0	-8.9	-8.0	-7.8	-7.4	-7.1	-7.2	-7.4	-7.8	-9.1	-9.3	-9.1	-8.9	-8.5	-7.7	-6.4	-6.4	-9.5	-8.3
27	-6.3	-6.1	-5.5	-6.6	-8.6	-9.9	-12.1	-13.3	-14.8	-16.1	-16.9	-17.9	-18.6	-18.6	-18.7	-18.8	-19.0	-19.2	-19.6	-20.0	-20.1	-20.4	-20.7	-21.0	-5.5	-21.0	-15.4
28	-21.4	-21.5	-21.5	-21.4	-21.9	-21.8	-21.9	-22.1	-22.4	-22.0	-21.6	-21.1	-20.7	-19.4	-18.7	-18.8	-19.1	-19.3	-20.1	-21.0	-21.4	-21.7	-22.1	-22.2	-18.7	-22.4	-21.0
Max.	**0.7**	**1.2**	**1.0**	**1.3**	**1.7**	**1.7**	**1.5**	**1.4**	**1.4**	**1.6**	**1.6**	**1.4**	**1.3**	**1.1**	**0.7**	**0.6**	**0.6**	**0.9**	**1.0**	**0.9**	**1.5**	**1.0**	**0.5**	**0.6**	**1.7**		
Min.	**-31.0**	**-31.0**	**-31.0**	**-31.3**	**-31.2**	**-31.2**	**-30.9**	**-30.5**	**-30.5**	**-30.7**	**-31.1**	**-30.5**	**-29.9**	**-29.6**	**-29.3**	**-29.2**	**-29.4**	**-29.9**	**-30.1**	**-30.8**	**-31.2**	**-31.2**	**-31.2**	**-31.4**		**-31.4**	
Avg.	**-7.5**	**-7.6**	**-7.6**	**-7.5**	**-7.6**	**-7.6**	**-7.6**	**-7.7**	**-7.8**	**-7.8**	**-7.6**	**-7.3**	**-7.1**	**-6.9**	**-6.8**	**-6.7**	**-6.8**	**-7.0**	**-7.2**	**-7.3**	**-7.3**	**-7.3**	**-7.4**	**-7.3**			**-7.4**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-22.2	-22.6	-22.4	-22.4	-22.4	-22.3	-21.6	-20.6	-19.6	-19.1	-17.9	-17.3	-17.3	-18.0	-17.3	-16.1	-14.6	-13.2	-12.5	-11.0	-10.6	-10.7	-10.5	-10.3	-10.3	-22.6	-17.2
2	-9.8	-9.5	-9.5	-9.2	-9.0	-8.9	-8.8	-8.6	-8.0	-7.2	-6.4	-5.9	-5.4	-5.1	-5.0	-4.8	-4.6	-4.5	-4.4	-4.2	-4.0	-4.0	-3.6	-3.5	-3.5	-9.8	-6.4
3	-3.5	-3.4	-3.4	-3.4	-3.5	-3.6	-3.9	-4.5	-4.7	-4.5	-4.2	-4.0	-3.9	-4.3	-4.8	-5.4	-5.7	-5.8	-5.8	-6.4	-6.7	-7.0	-6.8	-6.7	-3.4	-7.0	-4.8
4	-6.7	-6.7	-6.6	-6.6	-6.3	-5.6	-5.4	-5.4	-5.0	-5.0	-4.4	-4.2	-4.0	-3.7	-3.8	-3.9	-4.1	-4.3	-4.1	-4.0	-4.1	-4.0	-4.0	-4.0	-3.7	-6.7	-4.8
5	-3.9	-3.9	-4.0	-4.1	-4.1	-4.2	-4.5	-4.8	-4.9	-4.8	-4.6	-3.8	-3.1	-2.9	-2.8	-2.9	-3.9	-4.7	-4.8	-5.1	-5.1	-4.9	-4.9	-4.9	-2.8	-5.1	-4.2
6	-5.1	-5.8	-6.7	-7.0	-7.4	-8.0	-8.5	-9.3	-9.2	-7.6	-6.1	-5.9	-5.0	-5.0	-3.0	-2.3	-3.7	-7.4	-9.3	-9.5	-9.4	-9.3	-9.7	-10.1	-2.3	-10.1	-7.1
7	-10.4	-10.5	-10.5	-10.5	-10.8	-10.9	-10.9	-11.0	-11.5	-12.3	-13.2	-13.6	-13.9	-13.8	-13.8	-13.9	-14.5	-15.8	-16.2	-16.6	-17.5	-18.4	-19.5	-19.9	-10.4	-19.9	-13.7
8	-19.9	-19.1	-18.6	-18.4	-18.2	-18.0	-18.0	-18.2	-18.6	-19.2	-19.1	-18.3	-18.1	-17.5	-16.3	-15.9	-16.1	-16.5	-17.0	-18.0	-19.2	-20.4	-20.7	-21.3	-15.9	-21.3	-18.4
9	-21.7	-21.8	-22.1	-22.2	-22.6	-22.8	-23.2	-23.4	-23.5	-23.1	-22.6	-21.7	-20.7	-20.0	-19.3	-18.6	-18.3	-18.2	-18.4	-18.9	-19.4	-19.3	-19.9	-19.9	-18.2	-23.5	-20.9
10	-20.5	-20.4	-20.2	-20.1	-19.7	-19.2	-17.8	-17.7	-17.4	-17.4	-16.1	-15.1	-14.9	-14.4	-13.5	-12.3	-11.7	-10.7	-10.4	-10.6	-10.5	-9.8	-8.9	-8.4	-8.4	-20.5	-14.9
11	-8.4	-7.9	-6.9	-6.8	-7.1	-7.0	-6.7	-6.2	-6.0	-6.3	-7.2	-6.5	-6.6	-5.9	-5.5	-5.2	-5.4	-5.5	-5.5	-5.4	-5.4	-5.4	-5.5	-5.7	-5.2	-8.4	-6.3
12	-5.1	-4.9	-4.4	-4.6	-5.2	-5.3	-4.9	-4.6	-4.5	-4.3	-3.4	-3.5	-3.9	-4.2	-4.0	-4.0	-3.8	-3.7	-3.6	-3.5	-3.7	-4.6	-5.1	-5.8	-3.4	-5.8	-4.4
13	-5.2	-4.8	-4.4	-4.6	-4.5	-4.9	-5.6	-5.6	-5.6	-6.5	-6.9	-6.9	-7.4	-7.5	-7.0	-6.6	-6.6	-6.6	-7.3	-8.1	-9.0	-9.7	-11.0	-12.3	-4.4	-12.3	-6.9
14	-13.4	-12.1	-13.2	-13.6	-13.7	-13.5	-14.0	-14.4	-14.2	-15.2	-15.8	-13.9	-12.9	-13.2	-13.1	-12.2	-11.9	-11.4	-10.9	-11.0	-11.8	-11.9	-11.8	-12.0	-10.9	-15.8	-13.0
15	-12.5	-13.0	-13.6	-13.8	-14.0	-14.6	-15.1	-14.9	-14.2	-13.9	-13.9	-13.4	-13.6	-13.0	-12.6	-12.0	-11.2	-11.2	-11.3	-10.6	-10.6	-10.6	-10.2	-10.0	-10.0	-15.1	-12.7
16	-9.8	-9.7	-10.4	-10.8	-10.6	-10.4	-10.5	-11.3	-10.5	-10.2	-9.8	-9.3	-8.1	-7.2	-6.4	-6.3	-6.4	-6.6	-7.1	-8.0	-8.4	-8.3	-8.1	-8.5	-6.3	-11.3	-8.9
17	-8.3	-8.2	-8.5	-8.6	-8.9	-9.5	-9.7	-9.1	-8.7	-8.0	-7.1	-7.0	-7.4	-7.8	-6.9	-6.7	-6.2	-6.0	-6.2	-6.2	-6.1	-6.1	-6.1	-6.1	-6.0	-9.7	-7.5
18	-6.0	-6.4	-6.1	-6.1	-6.1	-7.2	-7.2	-7.5	-7.7	-7.0	-6.6	-6.3	-6.0	-5.6	-5.4	-4.7	-4.2	-4.2	-4.6	-4.9	-5.5	-6.0	-6.1	-6.4	-4.2	-7.7	-6.0
19	-6.4	-6.2	-6.5	-6.3	-6.5	-7.7	-8.1	-8.1	-7.8	-7.2	-6.5	-5.7	-5.4	-5.1	-4.5	-4.7	-4.5	-4.5	-4.5	-4.6	-4.4	-4.1	-4.5	-4.4	-4.1	-8.1	-5.8
20	-4.5	-4.7	-4.6	-4.8	-5.1	-4.8	-4.7	-4.6	-4.5	-3.9	-3.2	-2.6	-1.5	-0.3	-3.0	-4.3	-5.9	-7.1	-8.3	-9.0	-9.8	-10.2	-10.8	-11.2	-0.3	-11.2	-5.6
21	-11.3	-11.4	-11.3	-11.4	-11.7	-12.0	-12.1	-12.3	-12.3	-11.9	-11.5	-10.9	-10.1	-8.8	-8.0	-8.0	-7.8	-8.0	-8.3	-8.9	-9.5	-10.1	-10.7	-11.0	-7.8	-12.3	-10.4
22	-11.5	-12.3	-12.7	-13.0	-13.2	-13.6	-13.6	-13.2	-12.8	-12.1	-11.5	-11.0	-10.3	-9.9	-9.5	-9.0	-8.6	-8.4	-8.6	-9.4	-9.4	-9.4	-9.9	-9.9	-8.4	-13.6	-11.0
23	-9.1	-8.5	-8.3	-8.6	-9.5	-9.3	-7.9	-7.8	-7.8	-7.6	-9.5	-8.5	-5.0	-5.8	-6.1	-6.2	-7.4	-8.4	-8.9	-9.9	-10.8	-10.2	-9.3	-9.5	-5.0	-10.8	-8.3
24	-10.5	-10.2	-11.0	-11.3	-11.9	-13.2	-13.3	-12.6	-12.7	-11.8	-10.6	-9.6	-8.8	-8.2	-7.8	-7.7	-7.4	-7.7	-8.3	-9.2	-10.1	-10.9	-10.8	-11.3	-7.4	-13.3	-10.3
25	-11.7	-12.1	-12.0	-12.0	-12.8	-12.7	-12.6	-12.8	-12.8	-12.8	-12.4	-11.5	-10.6	-9.7	-9.0	-8.6	-8.6	-8.6	-8.9	-9.7	-10.2	-10.5	-11.7	-12.2	-8.6	-12.8	-11.1
26	-12.9	-13.3	-13.7	-14.1	-14.1	-14.3	-14.6	-15.0	-14.8	-14.3	-13.9	-13.2	-12.3	-11.2	-10.3	-9.8	-9.2	-8.8	-8.5	-8.5	-8.7	-8.5	-8.4	-8.0	-8.0	-15.0	-11.7
27	-7.5	-7.7	-7.6	-7.8	-8.1	-8.1	-7.4	-6.3	-4.5	-2.5	-2.0	-1.9	-1.7	-1.3	-0.8	-0.7	-0.4	-0.3	-0.3	-1.1	-2.3	-2.8	-3.1	-3.0	-0.3	-8.1	-3.7
28	-3.3	-3.3	-3.5	-3.8	-2.7	-3.0	-2.9	-2.7	-2.2	-2.1	-2.3	-1.8	-1.2	-0.6	-0.3	0.0	0.2	0.1	0.0	-0.3	-1.4	-1.9	-2.1	-2.3	0.2	-3.8	-1.8
29	-2.7	-3.3	-3.4	-3.2	-3.9	-4.5	-4.7	-3.9	-4.6	-4.7	-4.0	-3.5	-3.4	-3.2	-3.0	-2.8	-3.1	-3.2	-3.0	-3.5	-4.4	-5.0	-5.1	-5.0	-2.7	-5.1	-3.8
30	-4.9	-4.2	-3.9	-3.7	-3.6	-2.9	-2.7	-2.7	-2.5	-2.4	-2.1	-1.7	-1.5	-1.4	-1.6	-1.7	-1.8	-1.9	-2.0	-1.9	-1.8	-1.8	-1.8	-1.6	-1.4	-4.9	-2.4
31	-1.5	-1.4	-1.4	-1.5	-1.5	-1.6	-1.7	-1.7	-1.7	-2.6	-3.4	-3.7	-3.4	-3.7	-3.4	-2.7	-3.7	-3.8	-4.2	-4.4	-4.5	-5.0	-4.9	-4.8	-1.4	-5.0	-3.0
Max.	**-1.5**	**-1.4**	**-1.4**	**-1.5**	**-1.5**	**-1.6**	**-1.7**	**-1.7**	**-1.7**	**-2.1**	**-2.0**	**-1.7**	**-1.2**	**-0.3**	**-0.3**	**0.0**	**0.2**	**0.1**	**0.0**	**-0.3**	**-1.4**	**-1.8**	**-1.8**	**-1.6**	**0.2**		
Min.	**-22.2**	**-22.6**	**-22.4**	**-22.4**	**-22.6**	**-22.8**	**-23.2**	**-23.4**	**-23.5**	**-23.1**	**-22.6**	**-21.7**	**-20.7**	**-20.0**	**-19.3**	**-18.6**	**-18.3**	**-18.2**	**-18.4**	**-18.9**	**-19.4**	**-20.4**	**-20.7**	**-21.3**		**-23.5**	
Avg.	**-9.4**	**-9.3**	**-9.4**	**-9.5**	**-9.6**	**-9.8**	**-9.8**	**-9.7**	**-9.5**	**-9.3**	**-9.0**	**-8.5**	**-8.0**	**-7.7**	**-7.3**	**-7.1**	**-7.1**	**-7.3**	**-7.5**	**-7.8**	**-8.2**	**-8.4**	**-8.6**	**-8.7**			**-8.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-4.8	-5.3	-5.4	-5.7	-6.1	-6.0	-6.1	-6.0	-5.7	-5.4	-4.4	-3.1	-4.1	-2.5	-5.8	-5.9	-5.9	-5.9	-5.5	-5.3	-5.8	-5.8	-6.0	-6.0	-2.5	-6.1	-5.4
2	-6.3	-6.0	-6.1	-6.3	-6.8	-7.5	-7.3	-7.9	-8.1	-7.4	-6.4	-5.1	-4.3	-4.2	-1.5	-3.2	-3.8	-4.0	-5.3	-5.5	-6.0	-6.1	-6.0	-5.8	-1.5	-8.1	-5.7
3	-5.7	-5.4	-4.6	-4.1	-3.7	-3.5	-3.1	-2.9	-2.6	-1.7	-1.5	-1.5	-1.1	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.4	-0.3	-0.2	-0.3	-0.2	-5.7	-2.0
4	-0.5	-0.4	-0.2	-0.2	-0.3	-0.1	0.1	0.3	0.5	0.7	0.9	0.9	0.9	0.9	1.1	1.1	0.9	0.6	0.7	0.7	0.7	0.7	0.4	0.3	1.1	-0.5	0.4
5	-0.4	-1.4	-2.4	-3.4	-4.1	-5.5	-6.4	-7.2	-7.6	-7.2	-7.3	-7.3	-6.5	-6.2	-6.0	-6.1	-6.3	-6.5	-7.2	-7.8	-8.6	-9.7	-10.2	-11.1	-0.4	-11.1	-6.4
6	-12.2	-13.1	-13.9	-14.5	-14.8	-15.2	-15.6	-15.3	-14.6	-14.1	-13.2	-12.1	-11.1	-10.2	-9.3	-8.5	-7.9	-7.3	-6.7	-6.4	-6.4	-6.6	-5.2	-4.9	-4.9	-15.6	-10.8
7	-4.7	-4.7	-4.7	-4.1	-3.9	-4.0	-3.7	-3.3	-3.4	-2.6	-1.6	-1.1	-0.8	0.2	0.7	0.4	0.3	0.3	0.1	-0.2	-0.4	-0.5	-0.5	-0.6	0.7	-4.7	-1.8
8	-0.5	-0.5	-0.5	-0.6	-1.2	-1.6	-1.7	-1.7	-1.4	-1.2	-1.1	-1.2	-1.0	-0.8	-0.8	-0.8	-1.2	-1.3	-1.6	-1.9	-1.9	-1.9	-1.8	-1.8	-0.5	-1.9	-1.3
9	-1.6	-1.6	-1.9	-1.9	-2.0	-2.1	-2.2	-1.9	-1.8	-1.7	-1.6	-1.4	-1.4	-1.3	-1.1	-1.1	-1.0	-1.2	-1.7	-2.2	-2.6	-3.2	-3.7	-3.9	-1.0	-3.9	-1.9
10	-4.0	-3.9	-3.6	-3.5	-3.5	-3.5	-4.1	-4.6	-5.0	-4.9	-5.0	-4.8	-4.5	-4.6	-4.3	-4.5	-4.7	-4.9	-5.4	-5.9	-6.7	-7.7	-7.5	-7.5	-3.5	-7.7	-4.9
11	-7.9	-8.2	-8.6	-8.0	-7.9	-8.3	-8.5	-8.5	-8.2	-7.8	-7.0	-6.0	-5.1	-5.0	-4.8	-4.1	-3.8	-3.8	-3.7	-3.6	-3.7	-3.8	-3.8	-3.8	-3.6	-8.6	-6.0
12	-3.8	-3.7	-3.6	-3.5	-3.5	-3.4	-3.0	-2.8	-2.5	-2.5	-2.3	-2.2	-2.1	-2.3	-2.8	-2.9	-3.0	-2.8	-2.9	-3.1	-3.3	-3.9	-4.1	-4.5	-2.1	-4.5	-3.1
13	-4.6	-4.8	-4.7	-4.8	-5.0	-4.8	-4.4	-5.1	-5.8	-6.1	-6.4	-6.7	-6.9	-6.6	-6.5	-6.5	-6.4	-6.5	-7.4	-8.3	-9.2	-10.1	-10.9	-10.9	-4.4	-10.9	-6.6
14	-11.0	-11.4	-11.9	-12.4	-12.5	-12.9	-12.9	-13.1	-12.8	-12.4	-12.1	-11.3	-10.5	-9.7	-8.8	-8.5	-7.8	-7.8	-8.1	-8.7	-9.5	-10.3	-10.7	-11.1	-7.8	-13.1	-10.8
15	-11.3	-12.3	-12.7	-12.8	-13.6	-14.4	-14.8	-14.5	-14.6	-14.1	-13.6	-13.1	-12.5	-11.8	-11.1	-10.7	-10.7	-10.6	-10.4	-10.9	-11.5	-12.0	-12.2	-12.1	-10.4	-14.8	-12.4
16	-12.1	-11.9	-11.9	-9.6	-8.9	-8.7	-8.1	-7.5	-6.6	-6.3	-6.1	-5.2	-4.6	-4.7	-4.4	-3.6	-3.4	-3.4	-3.2	-2.9	-3.1	-3.1	-3.3	-3.2	-2.9	-12.1	-6.1
17	-2.8	-2.5	-2.5	-2.6	-2.4	-2.6	-2.6	-2.8	-2.3	-2.6	-2.1	-2.6	-2.6	-2.0	-1.9	-1.5	-1.2	-1.1	-1.5	-1.4	-1.5	-2.2	-3.0	-2.6	-1.1	-3.0	-2.2
18	-3.1	-3.1	-3.3	-3.8	-4.0	-3.6	-2.8	-2.2	-2.2	-2.1	-2.1	-2.0	-1.6	-1.2	-0.6	-0.3	-0.3	-0.3	-0.4	-0.2	-0.2	-1.2	-1.4	-1.8	-0.2	-4.0	-1.8
19	-4.3	-5.7	-6.2	-6.1	-6.3	-6.7	-7.0	-7.1	-7.3	-7.5	-7.2	-6.8	-6.5	-6.5	-6.6	-6.8	-6.9	-6.8	-7.1	-7.4	-7.6	-7.6	-7.7	-7.7	-4.3	-7.7	-6.8
20	-7.8	-7.8	-7.9	-7.9	-7.8	-7.7	-7.6	-7.6	-7.5	-6.9	-6.2	-5.3	-4.4	-3.8	-2.8	-2.7	-2.7	-2.9	-2.7	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-7.9	-5.1
21	-2.6	-2.6	-2.4	-1.7	-1.2	-0.7	-0.2	0.1	0.6	0.9	0.5	-0.2	-0.2	-0.6	-0.4	0.0	-0.5	-1.3	-1.5	-1.6	-1.5	-1.6	-1.9	-1.9	0.9	-2.6	-0.9
22	-2.1	-2.1	-1.9	-2.0	-2.1	-2.2	-1.7	-1.6	-1.8	-2.0	-1.8	-2.0	-1.6	-1.4	-1.1	-0.9	-1.1	-1.1	-0.9	-1.1	-1.4	-1.9	-2.3	-2.1	-0.9	-2.3	-1.7
23	-2.1	-2.1	-2.1	-2.1	-2.1	-2.2	-2.2	-2.3	-2.0	-1.5	-1.3	-1.1	-0.9	-0.9	-0.6	-0.6	-0.7	-0.5	-0.4	-0.6	-1.1	-1.6	-2.0	-2.4	-0.4	-2.4	-1.5
24	-2.8	-3.1	-3.5	-3.2	-3.0	-3.0	-3.2	-3.6	-3.7	-3.4	-2.9	-2.8	-2.7	-2.3	-1.9	-1.8	-2.1	-3.0	-3.8	-4.5	-5.4	-6.0	-6.9	-7.3	-1.8	-7.3	-3.6
25	-7.7	-7.9	-8.2	-8.5	-9.0	-9.4	-9.4	-9.2	-8.9	-8.4	-7.6	-6.3	-5.2	-4.7	-4.3	-3.4	-2.6	-2.2	-2.1	-2.0	-2.0	-2.1	-2.1	-2.1	-2.0	-9.4	-5.6
26	-2.0	-2.0	-2.2	-2.5	-2.3	-1.7	-1.8	-1.5	-1.4	-0.6	0.3	0.8	0.7	1.1	1.4	1.3	1.4	1.5	1.3	1.6	1.8	1.5	1.3	0.7	1.8	-2.5	0.0
27	0.5	0.2	0.7	0.4	0.5	0.6	0.0	0.0	-0.4	-0.4	-0.3	0.3	1.0	1.4	1.7	1.9	1.8	1.5	1.1	0.7	0.3	-0.5	-1.5	-2.0	1.9	-2.0	0.4
28	-2.4	-3.6	-4.6	-5.3	-6.0	-6.5	-5.8	-6.1	-6.0	-5.3	-4.6	-3.4	-2.9	-2.7	-2.4	-3.0	-2.8	-2.7	-2.6	-2.6	-2.4	-3.0	-3.9	-4.2	-2.4	-6.5	-3.9
29	-3.6	-3.2	-4.0	-3.8	-3.7	-3.4	-3.7	-4.5	-3.6	-2.9	-1.7	-0.7	-0.2	0.1	0.6	0.8	1.0	0.8	0.4	-0.2	-0.6	-1.4	-2.2	-2.1	1.0	-4.5	-1.7
30	-2.3	-2.0	-2.1	-2.4	-2.5	-2.6	-2.7	-4.1	-5.6	-6.0	-5.9	-4.7	-3.9	-3.1	-2.5	-1.8	-1.0	-0.6	-0.1	-0.1	-0.5	-0.5	-0.7	-0.8	-0.1	-6.0	-2.4
Max.	**0.5**	**0.2**	**0.7**	**0.4**	**0.5**	**0.6**	**0.1**	**0.3**	**0.6**	**0.9**	**0.9**	**0.9**	**1.0**	**1.4**	**1.7**	**1.9**	**1.8**	**1.5**	**1.3**	**1.6**	**1.8**	**1.5**	**1.3**	**0.7**	**1.9**		
Min.	**-12.2**	**-13.1**	**-13.9**	**-14.5**	**-14.8**	**-15.2**	**-15.6**	**-15.3**	**-14.6**	**-14.1**	**-13.6**	**-13.1**	**-12.5**	**-11.8**	**-11.1**	**-10.7**	**-10.7**	**-10.6**	**-10.4**	**-10.9**	**-11.5**	**-12.0**	**-12.2**	**-12.1**		**-15.6**	
Avg.	**-4.5**	**-4.7**	**-4.9**	**-4.9**	**-5.0**	**-5.1**	**-5.1**	**-5.1**	**-5.1**	**-4.8**	**-4.4**	**-3.9**	**-3.6**	**-3.2**	**-2.9**	**-2.8**	**-2.8**	**-2.8**	**-3.0**	**-3.1**	**-3.4**	**-3.8**	**-4.1**	**-4.2**			**-4.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.1	-1.2	-1.7	-1.7	-1.7	-1.1	-0.6	-0.2	0.4	1.1	1.8	2.1	2.3	2.2	2.5	2.8	2.8	2.8	2.3	2.1	1.3	1.0	0.3	0.1	2.8	-1.7	0.8
2	0.0	0.2	0.6	0.3	-0.1	0.2	0.5	0.5	0.8	1.5	1.4	1.3	1.7	1.8	1.9	2.0	1.8	1.8	2.0	1.6	1.7	1.3	1.1	0.2	2.0	-0.1	1.1
3	0.0	-0.1	0.0	0.2	0.5	0.6	0.8	1.4	1.5	2.0	2.4	3.3	3.7	4.1	4.3	4.3	4.4	4.5	4.6	3.0	2.2	1.2	0.9	0.6	4.6	-0.1	2.1
4	0.6	0.6	0.3	-0.1	-0.4	0.0	0.2	0.4	0.6	0.3	0.2	0.3	0.3	0.5	0.7	0.5	0.5	0.6	0.7	0.3	0.2	-0.1	-0.2	-0.3	0.7	-0.4	0.3
5	-0.2	-0.2	-0.6	-0.6	-0.4	0.0	0.4	0.6	1.1	1.3	1.5	2.3	1.9	1.5	1.9	1.6	1.4	1.5	1.5	1.0	0.9	0.2	0.1	-0.2	2.3	-0.6	0.8
6	-0.3	-0.2	-0.2	-0.2	-0.4	-0.3	-0.4	-0.4	-0.5	-0.5	-0.9	-0.8	-0.9	-0.6	-0.8	-0.8	-0.7	-0.9	-1.1	-1.7	-2.5	-3.6	-3.7	-3.9	-0.2	-3.9	-1.1
7	-4.2	-4.4	-4.7	-4.9	-5.2	-5.4	-5.6	-5.6	-5.4	-5.3	-5.2	-4.9	-4.8	-4.9	-4.9	-4.8	-4.6	-4.6	-4.4	-4.2	-4.4	-4.6	-4.8	-5.6	-4.2	-5.6	-4.9
8	-5.9	-6.4	-6.7	-6.6	-6.8	-6.4	-5.8	-5.4	-4.6	-3.8	-2.6	-1.9	-1.6	-2.1	-1.9	-1.6	-1.2	0.2	0.8	0.5	0.3	0.4	0.7	0.5	0.8	-6.8	-2.8
9	0.4	0.5	0.8	1.0	1.0	1.1	1.1	1.4	1.8	2.4	2.5	2.5	2.6	3.0	3.2	3.0	3.4	3.0	2.9	2.5	2.5	3.1	3.1	3.0	3.4	0.4	2.2
10	2.8	2.8	2.5	2.3	2.3	2.5	2.4	2.1	1.9	2.4	2.9	3.2	3.8	4.4	4.8	3.0	2.2	2.7	2.9	3.1	3.3	3.2	2.9	3.2	4.8	1.9	2.9
11	3.1	1.4	0.5	0.8	0.5	1.3	2.2	2.6	2.9	3.0	3.3	3.9	4.4	5.2	5.8	5.5	5.5	5.3	4.3	4.6	3.9	4.5	4.2	3.8	5.8	0.5	3.4
12	3.4	4.2	3.8	3.4	3.1	3.0	2.7	2.6	3.5	4.4	5.2	6.0	6.5	7.0	7.3	7.7	7.7	7.5	7.2	6.3	5.2	3.8	3.5	3.6	7.7	2.6	4.9
13	3.4	3.0	2.4	1.9	1.8	1.6	1.8	2.1	2.6	3.6	3.5	3.7	4.6	5.3	5.4	5.3	5.7	5.8	5.9	5.5	5.1	4.6	3.8	3.2	5.9	1.6	3.8
14	3.4	3.2	3.2	3.1	2.6	3.6	3.5	3.6	3.8	4.0	4.8	5.6	6.1	6.5	6.6	5.8	5.5	5.0	4.6	3.8	2.5	2.2	1.3	0.9	6.6	0.9	4.0
15	1.1	0.9	1.1	1.1	0.9	1.1	1.0	1.4	1.7	2.1	2.6	3.3	3.5	4.3	4.8	5.6	5.8	5.6	5.5	5.6	4.9	4.6	3.8	2.8	5.8	0.9	3.1
16	2.1	1.6	1.1	0.7	-0.2	-0.7	-0.9	0.0	0.2	0.6	1.2	2.0	2.5	3.3	4.0	4.5	4.5	4.4	4.6	4.4	4.1	3.9	2.9	2.6	4.6	-0.9	2.2
17	1.6	0.9	0.8	0.6	0.4	0.3	-0.2	1.0	1.8	2.4	3.0	3.1	3.4	3.8	4.0	3.7	3.5	3.3	3.0	2.2	1.5	1.3	1.0	1.1	4.0	-0.2	2.0
18	1.0	1.0	0.8	0.8	0.7	0.4	0.5	0.3	0.9	1.0	1.5	1.6	1.7	1.8	1.9	2.8	3.4	3.2	2.8	2.3	1.8	1.2	0.9	0.7	3.4	0.3	1.5
19	0.7	0.3	0.3	-0.5	-0.5	-0.2	0.0	0.3	0.8	1.2	0.9	1.3	2.1	2.9	3.1	2.5	0.3	-0.2	-0.2	-0.2	-0.2	-0.4	-0.3	-0.3	3.1	-0.5	0.6
20	-0.2	-0.1	0.1	0.3	0.3	0.6	0.9	1.2	1.5	2.0	2.4	3.1	3.7	3.8	4.1	4.2	4.1	3.6	3.9	3.8	3.8	2.8	2.5	2.3	4.2	-0.2	2.3
21	1.9	1.6	1.0	0.4	0.1	0.2	0.2	0.0	0.1	0.4	1.1	1.7	2.2	2.7	3.4	3.9	4.5	3.7	4.5	4.8	4.8	4.5	3.9	3.6	4.8	0.0	2.3
22	3.0	2.5	2.1	1.5	1.2	1.3	1.5	2.3	3.0	3.8	4.4	5.1	6.0	7.4	8.7	9.7	10.3	10.8	10.9	10.3	8.9	7.9	6.5	5.8	10.9	1.2	5.6
23	5.3	4.3	3.5	3.4	3.6	4.6	5.2	5.9	7.0	9.2	11.4	13.3	15.2	16.4	16.9	17.3	17.5	17.2	16.7	16.3	14.8	14.0	13.3	13.0	17.5	3.4	11.0
24	12.8	11.8	11.7	11.4	11.0	11.7	12.3	11.5	11.8	13.1	14.7	15.4	16.3	17.0	17.9	18.0	18.8	18.7	18.1	17.2	16.9	16.2	15.7	15.5	18.8	11.0	14.8
25	15.1	13.9	13.5	12.8	12.4	12.4	11.8	11.3	12.5	13.6	14.8	16.0	17.0	17.8	18.8	19.1	19.2	18.7	18.0	17.5	18.4	17.7	17.4	16.7	19.2	11.3	15.7
26	15.8	15.1	14.1	13.7	13.4	12.0	11.7	12.6	14.0	16.0	17.9	19.8	20.7	21.5	22.0	22.2	22.1	21.7	21.2	20.2	18.8	17.1	16.2	15.2	22.2	11.7	17.3
27	13.7	13.1	12.1	11.0	11.1	10.7	10.8	10.5	11.0	12.7	13.6	14.9	16.0	15.9	16.6	17.9	18.7	19.3	18.6	17.4	17.4	16.5	15.1	14.1	19.3	10.5	14.5
28	13.3	12.4	12.3	12.2	13.0	12.0	11.7	12.4	12.5	13.3	14.7	16.0	17.4	18.1	18.8	19.4	19.6	19.9	20.1	18.2	16.9	15.6	14.9	14.2	20.1	11.7	15.4
29	13.6	13.2	12.9	12.1	11.4	10.5	10.8	11.6	12.2	12.9	13.8	14.5	14.9	15.2	15.1	14.9	14.8	14.4	13.7	12.7	11.4	10.3	9.7	9.1	15.2	9.1	12.7
30	8.6	8.0	7.8	6.8	6.4	6.9	7.2	9.0	10.0	10.6	11.1	11.4	12.8	13.5	13.2	12.6	12.2	11.3	10.0	8.9	8.2	7.4	6.9	7.0	13.5	6.4	9.5
31	6.7	6.5	6.2	5.4	5.0	4.5	4.0	3.9	3.8	3.5	3.2	3.1	2.7	2.4	2.8	3.2	3.5	3.5	3.7	3.7	3.7	3.4	3.3	3.0	6.7	2.4	3.9
Max.	**15.8**	**15.1**	**14.1**	**13.7**	**13.4**	**12.4**	**12.3**	**12.6**	**14.0**	**16.0**	**17.9**	**19.8**	**20.7**	**21.5**	**22.0**	**22.2**	**22.1**	**21.7**	**21.2**	**20.2**	**18.8**	**17.7**	**17.4**	**16.7**	**22.2**		
Min.	**-5.9**	**-6.4**	**-6.7**	**-6.6**	**-6.8**	**-6.4**	**-5.8**	**-5.6**	**-5.4**	**-5.3**	**-5.2**	**-4.9**	**-4.8**	**-4.9**	**-4.9**	**-4.8**	**-4.6**	**-4.6**	**-4.4**	**-4.2**	**-4.4**	**-4.6**	**-4.8**	**-5.6**		**-6.8**	
Avg.	**3.9**	**3.6**	**3.3**	**3.0**	**2.8**	**2.9**	**3.0**	**3.3**	**3.7**	**4.3**	**4.9**	**5.6**	**6.1**	**6.5**	**6.9**	**7.0**	**7.0**	**6.9**	**6.7**	**6.3**	**5.8**	**5.2**	**4.7**	**4.4**			**4.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.9	2.8	2.4	2.2	2.6	2.8	3.0	3.3	3.7	4.1	4.6	5.5	6.8	8.4	9.8	10.7	11.4	12.4	12.0	12.0	11.2	10.3	9.6	8.8	12.4	2.2	6.8
2	9.6	9.4	9.2	9.0	8.7	9.0	9.0	9.7	10.8	11.4	12.6	13.3	13.7	14.1	14.4	14.5	14.9	14.6	14.3	13.3	12.9	11.1	9.6	8.1	14.9	8.1	11.5
3	7.0	6.2	5.0	4.4	3.8	3.4	3.8	4.1	4.8	5.2	6.8	7.8	8.6	9.1	9.2	9.3	9.9	10.1	9.8	9.4	8.6	7.1	5.5	3.8	10.1	3.4	6.8
4	2.9	2.0	1.5	1.2	0.7	1.0	1.8	2.5	3.4	4.5	5.8	6.9	7.9	8.7	9.6	10.0	10.2	10.3	10.1	9.6	8.8	7.3	5.2	3.9	10.3	0.7	5.7
5	3.4	3.3	3.2	2.5	1.8	1.7	2.6	3.6	4.5	5.9	6.8	7.6	8.6	9.7	10.7	11.1	11.6	12.0	12.0	12.0	11.6	10.5	9.5	9.1	12.0	1.7	7.3
6	9.0	8.5	7.8	7.5	7.4	6.5	6.5	7.3	8.6	9.9	11.0	11.5	11.9	12.4	12.8	12.8	12.6	12.2	11.5	10.5	9.5	8.6	7.8	6.6	12.8	6.5	9.6
7	5.8	5.5	5.3	5.3	5.2	4.9	4.8	5.2	5.6	5.4	5.6	5.6	5.5	6.0	5.7	4.8	4.4	4.1	3.8	3.8	3.8	4.0	3.9	3.9	6.0	3.8	4.9
8	4.0	4.1	4.1	3.9	3.9	3.9	3.9	4.1	4.5	5.1	5.4	5.9	6.7	7.0	7.2	7.3	6.8	7.6	7.7	7.2	6.9	6.6	6.9	6.9	7.7	3.9	5.7
9	7.1	7.0	6.8	6.6	6.3	6.3	5.8	5.7	6.4	6.9	7.6	8.2	9.5	9.1	9.3	9.3	8.8	8.2	6.6	6.4	5.4	5.2	4.9	5.2	9.5	4.9	7.0
10	5.0	5.0	4.7	4.4	4.5	4.6	4.6	5.1	5.7	6.2	6.3	6.3	6.3	6.4	6.5	6.3	5.7	5.4	4.9	4.5	3.4	3.2	3.3	3.1	6.5	3.1	5.1
11	3.1	3.2	3.3	3.2	3.2	3.3	3.4	3.5	3.9	4.4	4.5	4.9	4.9	5.4	5.6	5.8	6.0	6.1	5.6	5.4	5.4	5.4	5.3	5.1	6.1	3.1	4.6
12	5.3	5.7	5.6	5.8	5.7	5.6	6.0	6.0	6.2	6.4	6.3	6.4	6.5	6.5	6.5	6.4	6.5	6.2	5.9	5.9	5.9	5.7	5.7	5.6	6.5	5.3	6.0
13	5.5	5.4	5.3	5.4	5.4	5.4	5.5	6.2	6.9	6.9	7.5	8.6	9.3	9.6	9.8	10.3	10.6	10.3	9.7	9.3	9.3	9.1	9.2	8.6	10.6	5.3	7.9
14	8.5	8.3	8.8	7.8	7.9	8.1	8.2	8.8	9.0	9.9	10.3	11.4	11.6	11.8	12.1	12.6	12.8	12.9	12.3	12.1	11.8	11.3	11.0	9.6	12.9	7.8	10.4
15	9.4	9.5	9.3	9.5	9.5	9.4	10.0	10.7	11.4	12.8	14.4	16.0	17.2	18.2	18.7	14.0	12.8	11.6	11.4	10.7	9.4	9.1	9.3	8.8	18.7	8.8	11.8
16	8.7	8.5	8.7	8.8	8.7	8.5	8.3	8.1	7.8	7.5	7.5	7.5	7.6	8.0	8.3	8.2	8.0	7.6	7.7	7.9	7.8	7.5	7.4	7.1	8.8	7.1	8.0
17	7.6	7.9	8.2	8.6	8.9	9.3	9.2	8.9	8.5	8.5	9.6	10.9	11.7	10.9	8.9	9.8	10.3	9.6	9.0	8.4	7.8	7.4	7.4	7.2	11.7	7.2	8.9
18	7.1	6.9	6.9	7.0	7.7	7.9	7.9	8.6	9.4	9.7	9.6	10.0	9.2	8.9	9.8	10.9	10.1	9.5	9.1	8.7	8.2	7.9	7.6	6.9	10.9	6.9	8.6
19	6.7	7.3	7.3	6.7	6.6	6.8	7.3	7.8	8.6	9.3	10.7	11.0	11.6	12.1	12.6	12.7	13.1	12.8	13.0	11.7	8.2	6.7	5.9	5.8	13.1	5.8	9.3
20	5.9	6.3	6.7	6.2	6.9	7.1	7.4	8.0	8.6	9.5	10.1	11.0	12.1	12.0	9.5	6.5	5.7	5.7	5.8	6.4	6.1	5.6	5.0	4.2	12.1	4.2	7.4
21	4.3	4.0	3.5	3.3	4.2	4.7	5.1	6.1	7.3	8.2	8.9	9.9	11.2	11.6	11.7	12.2	12.1	12.6	13.2	12.8	13.2	12.9	11.7	10.3	13.2	3.3	9.0
22	10.3	9.7	8.9	8.9	9.0	9.1	9.8	10.1	10.6	10.3	10.2	9.8	9.8	8.2	6.6	5.9	5.8	5.7	5.9	5.7	5.8	5.7	5.6	5.2	10.6	5.2	8.0
23	5.0	5.3	5.6	5.8	5.6	5.6	5.6	5.8	6.0	6.3	6.4	7.0	7.7	8.2	8.6	8.6	8.8	8.9	9.1	8.5	7.7	6.8	6.1	5.2	9.1	5.0	6.8
24	4.8	4.9	4.9	5.0	5.2	5.0	5.8	6.8	8.1	8.8	9.8	10.8	11.7	12.3	13.0	13.2	12.9	12.5	11.8	12.1	11.9	11.6	11.5	10.9	13.2	4.8	9.4
25	10.7	10.0	9.4	9.3	9.3	9.4	9.3	10.2	11.6	12.3	12.8	13.3	13.8	13.8	13.7	13.4	13.5	13.0	12.1	10.7	9.7	9.0	8.6	7.8	13.8	7.8	11.1
26	7.2	6.9	6.3	6.3	5.9	6.6	6.1	6.9	8.9	11.1	11.9	12.6	13.5	13.6	13.9	14.1	14.2	14.9	15.1	12.9	10.8	9.7	9.2	8.4	15.1	5.9	10.3
27	7.8	7.8	8.4	7.5	7.1	7.0	6.4	6.9	8.4	9.7	11.4	12.6	13.7	13.8	14.5	14.8	14.8	14.8	14.8	14.0	12.9	11.3	9.8	8.7	14.8	6.4	10.8
28	8.0	7.1	7.4	6.6	6.6	6.8	6.9	6.2	5.8	6.0	6.0	6.9	6.9	7.0	7.8	7.6	8.2	8.5	8.9	9.3	9.3	9.1	8.9	8.8	9.3	5.8	7.5
29	8.3	7.8	7.5	7.3	7.3	7.0	7.0	7.4	8.1	8.7	9.3	9.9	10.9	12.7	13.6	15.1	14.0	12.5	10.7	9.5	8.5	7.6	7.3	7.1	15.1	7.0	9.4
30	7.0	7.0	6.9	7.0	7.0	7.3	7.2	7.2	7.1	7.1	7.0	7.0	7.3	7.0	7.3	7.4	7.5	7.8	8.1	8.4	8.4	7.9	7.5	7.2	8.4	6.9	7.4
Max.	**10.7**	**10.0**	**9.4**	**9.5**	**9.5**	**9.4**	**10.0**	**10.7**	**11.6**	**12.8**	**14.4**	**16.0**	**17.2**	**18.2**	**18.7**	**15.1**	**14.9**	**14.9**	**15.1**	**14.0**	**13.2**	**12.9**	**11.7**	**10.9**	**18.7**		
Min.	**2.9**	**2.0**	**1.5**	**1.2**	**0.7**	**1.0**	**1.8**	**2.5**	**3.4**	**4.1**	**4.5**	**4.9**	**4.9**	**5.4**	**5.6**	**4.8**	**4.4**	**4.1**	**3.8**	**3.8**	**3.4**	**3.2**	**3.3**	**3.1**		**0.7**	
Avg.	**6.6**	**6.4**	**6.3**	**6.1**	**6.1**	**6.1**	**6.3**	**6.7**	**7.3**	**7.9**	**8.6**	**9.2**	**9.8**	**10.1**	**10.2**	**10.2**	**10.1**	**10.0**	**9.7**	**9.3**	**8.7**	**8.0**	**7.5**	**6.9**			**8.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.6	6.3	6.3	6.2	6.1	6.1	6.1	6.2	6.5	6.7	8.0	10.8	12.7	14.0	15.1	15.9	16.5	16.5	16.3	15.8	14.9	14.2	12.8	11.8	16.5	6.1	10.8
2	10.6	11.0	10.8	10.0	9.9	10.2	9.8	10.5	11.8	12.8	14.1	15.1	15.8	16.5	17.0	17.6	17.9	17.9	18.0	17.6	17.1	14.9	13.4	12.4	18.0	9.8	13.9
3	12.2	11.9	11.2	10.2	9.6	9.4	9.6	10.5	11.1	13.2	14.5	15.6	16.7	17.8	18.9	19.4	19.4	19.1	19.3	19.4	19.0	16.5	14.0	13.0	19.4	9.4	14.6
4	12.2	12.1	11.8	11.1	10.4	11.1	12.9	13.7	14.7	15.9	17.2	18.2	19.2	19.9	20.6	20.9	21.1	21.2	21.2	20.7	18.2	16.5	15.1	14.5	21.2	10.4	16.3
5	13.6	13.2	12.6	12.2	11.8	10.8	10.4	10.8	11.3	12.0	13.7	16.4	18.5	19.3	20.3	20.6	15.8	15.5	16.3	15.8	15.0	14.7	14.2	15.3	20.6	10.4	14.6
6	15.1	14.6	14.5	14.5	13.5	14.2	13.5	13.8	13.4	14.0	14.4	16.0	16.6	16.5	16.8	17.3	17.2	15.3	15.1	15.6	14.7	13.4	12.5	11.9	17.3	11.9	14.8
7	11.1	10.3	9.9	9.6	9.4	9.3	9.4	9.6	9.4	9.6	9.7	10.0	10.3	10.6	10.3	9.8	9.9	10.0	9.6	9.6	9.5	9.5	9.1	8.5	11.1	8.5	9.8
8	8.3	7.9	7.4	7.2	7.2	7.0	6.9	6.9	7.0	7.3	7.8	8.3	8.7	9.1	9.5	10.1	10.4	10.3	10.6	10.8	11.4	10.4	10.2	10.0	11.4	6.9	8.8
9	10.0	10.0	9.7	9.2	9.5	9.5	9.7	10.0	10.9	12.4	13.7	15.0	16.3	16.2	16.3	16.8	16.7	15.8	14.8	13.7	13.2	12.2	11.5	10.6	16.8	9.2	12.7
10	10.0	9.8	9.4	9.2									9.3	9.2	9.1	9.4	10.0	10.7	10.4	11.1	11.2	11.4	11.9	13.3	13.3	9.1	10.3
11			11.4	10.9	9.7	8.8	8.0	7.9	7.7		7.6	7.7	7.8	7.9	7.9	8.2	8.5	8.9	11.1				12.4	12.8	12.8	7.6	9.2
12	12.4	12.1	11.3	11.5	11.9	11.4	10.7	10.3	9.3	8.7	8.9	9.2	8.9	9.1	9.4	9.7	10.9	11.6	12.6	13.9	15.4	16.5	17.3	18.3	18.3	8.7	11.7
13	19.5	20.1	19.5	18.7	17.5	16.4	15.4	15.7	15.6	14.3	14.1	13.9	14.0	14.1	13.2	11.5	9.5	8.9	8.7	8.7	8.3	8.2	8.3	8.7	20.1	8.2	13.4
14	8.6	8.4	8.3	8.3	8.1	8.0	7.8	7.6	7.2	6.7	6.4	6.2	6.2	6.1	5.9	6.0	6.0	6.1	6.3	6.4	6.5	6.6	6.7	7.0	8.6	5.9	7.0
15	7.3	7.2	7.2	7.1	7.2	7.4	7.2	7.0	6.8	6.7	6.8	6.7	6.5	6.4	6.3	6.3	6.3	6.4	6.9	7.3	7.9	8.1	8.4	8.7	8.7	6.3	7.1
16	9.5	10.3	10.8	10.6	10.1	9.6	9.5	9.0	8.8	7.9	7.7	7.6	7.7	7.8	7.9	7.9	8.0	8.5	9.1	9.5	10.1	10.2	9.8	10.1	10.8	7.6	9.1
17	10.0	9.5	8.8	8.4	8.0	7.7	7.5	7.3	7.2	7.1	6.9	6.6	6.2	6.0	6.2	6.5	6.8	7.1	7.5	8.0	8.7	8.8	9.2	9.1	10.0	6.0	7.7
18	9.0	9.0	8.2	8.1	8.0	7.9	7.9	8.0	8.0	8.5	8.4	8.1	8.0	7.8	8.0	8.3	8.4	8.8	9.1	9.7	9.9	9.8	9.8	9.2	9.9	7.8	8.6
19	8.8	8.9	9.0	8.8	8.3	8.2	8.1	8.0	7.8	8.1	7.9	7.7	7.5	7.3	7.6	8.4	8.9	9.4	10.1	11.3	12.1	12.4	12.8	12.9	12.9	7.3	9.2
20	13.1	12.6	12.7	13.0	12.5	12.2	12.1	11.5	10.1	10.1	9.8	9.0	9.3	9.0	9.7	9.7	11.0	13.2	14.3	14.8	15.5	15.7	16.4	16.4	16.4	9.0	12.2
21	16.3	16.8	16.8	15.5	13.9	12.6	11.2	9.8	9.1	8.6	8.7	9.7	10.2	9.8	11.0	10.9	11.0	12.4	13.1	13.7	14.4	12.8	12.6	13.3	16.8	8.6	12.3
22	13.5	12.5	11.9	11.2	10.7	10.8	10.9	10.6	10.6	10.8	10.6	10.2	10.2	9.7	10.0	10.1	10.7	11.5	11.7	11.8	11.5	11.6	11.5	9.8	13.5	9.7	11.0
23	9.5	8.4	8.0	8.1	8.3	8.2	7.8	7.5	7.5	7.7	7.9	7.4	7.3	7.3	7.0	7.1	7.5	7.8	8.0	8.7	9.2	9.3	10.3	10.3	10.3	7.0	8.2
24	10.6	10.8	10.5	9.8	9.6	9.5	9.3	9.3	9.2	9.1	9.1	8.7	8.6	8.4	8.2	8.4	8.4	8.5	8.5	8.6	9.2	9.3	9.3	9.5	10.8	8.2	9.2
25	9.6	8.9	8.4	8.1	8.0	7.9	7.5	7.2	7.1	7.2	7.5	7.6	7.7	7.3	7.4	7.6	7.5	7.6	7.8	7.7	8.2	8.5	8.8	9.7	9.7	7.1	7.9
26	10.1	10.1	10.0	9.7	9.3	9.1	8.6	8.2	8.1	8.1	8.2	8.5	8.6	8.8	8.4	8.1	7.8	8.3	8.3	8.7	9.2	9.9	10.2	10.4	10.4	7.8	8.9
27	10.6	10.7	9.8	9.4	9.4	9.0	8.3	8.0	7.6	7.3	7.1	7.2	7.6	7.2	7.1	7.1	7.5	8.1	8.7	9.2	9.7	10.4	11.5	12.2	12.2	7.1	8.8
28	13.0	13.5	13.7	13.5	12.4	11.7	10.8	10.0	9.3	9.5	9.1	9.2	8.7	8.7	9.6	9.8	10.6	11.4	12.4	12.9	13.0	12.7	12.4	12.6	13.7	8.7	11.3
29	12.0	11.8	11.1	10.6	9.2	8.3	7.7	7.4	7.1	6.9	6.9	6.6	6.4	6.2	6.2	6.2	6.3	6.4	6.8	7.8	9.1	10.6	12.1	12.7	12.7	6.2	8.4
30	11.9	10.7	10.5	9.3	8.0	7.3	6.9	6.7	6.6	6.5	6.4	6.3	6.2	5.9	5.8	5.7	5.8	5.9	5.9	6.1	6.3	6.6	7.0	7.8	11.9	5.7	7.2
31	8.5	9.1	10.6	10.2	10.7	9.3	7.9	6.8	6.3	6.7	6.6	6.8	7.4	7.3	7.3	7.3	7.7	8.4	8.7	8.9	9.2	9.5	10.4	9.9	10.7	6.3	8.4
Max.	**19.5**	**20.1**	**19.5**	**18.7**	**17.5**	**16.4**	**15.4**	**15.7**	**15.6**	**15.9**	**17.2**	**18.2**	**19.2**	**19.9**	**20.6**	**20.9**	**21.1**	**21.2**	**21.2**	**20.7**	**19.0**	**16.5**	**17.3**	**18.3**	**21.2**		
Min.	**6.6**	**6.3**	**6.3**	**6.2**	**6.1**	**6.1**	**6.1**	**6.2**	**6.3**	**6.5**	**6.4**	**6.2**	**6.2**	**5.9**	**5.8**	**5.7**	**5.8**	**5.9**	**5.9**	**6.1**	**6.3**	**6.6**	**6.7**	**7.0**		**5.7**	
Avg.	**11.1**	**10.9**	**10.7**	**10.3**	**9.9**	**9.6**	**9.3**	**9.2**	**9.1**	**9.3**	**9.5**	**9.9**	**10.2**	**10.2**	**10.4**	**10.6**	**10.6**	**10.9**	**11.2**	**11.5**	**11.6**	**11.4**	**11.3**	**11.4**			**10.4**

Total Hours in Month 744 **Hours Data Available** 730 **Data Recovery** 98.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.55	0.86	0.39	0.37	0.39	0.26	0.09	-0.14	-0.24	-0.38	-0.32	-0.43	-0.76	-0.91	-0.75	-0.51	-0.67	-0.42	-0.32	-0.22	-0.08	0.02	-0.01	-0.08	0.86	-0.91	-0.14
2	0.06	0.06	0.02	0.07	0.09	0.21	0.09	-0.28	-0.45	-0.53	-0.54	-0.54	-0.46	-0.21	-0.46	-0.31	-0.29	-0.30	-0.26	0.01	0.05	0.06	0.09	0.02	0.21	-0.54	-0.16
3	0.07	0.44	0.14	0.54	0.44	0.16	0.18	0.08	-0.16	-0.33	-0.44	-0.52	-0.42	-0.36	-0.29	-0.36	-0.39	-0.52	-0.34	-0.29	-0.12	-0.03	0.21	0.20	0.54	-0.52	-0.09
4	0.09	0.29	0.19	0.18	0.32	0.29	0.11	-0.22	-0.26	-0.27	-0.26	-0.41	-0.27	-0.24	-0.33	-0.23	-0.21	-0.09	-0.09	-0.12	-0.05	-0.11	0.07	0.14	0.32	-0.41	-0.06
5	0.11	0.24	0.21	0.17	0.12	0.08	-0.06	-0.24	-0.22	-0.37				0.09	-0.98	-0.87	-0.61	-0.58	-0.69	-0.50	-0.20	-0.25	0.14	0.16	0.24	-0.98	-0.20
6	-0.05	0.02	0.16	0.28	0.05	0.12	0.08	-0.53	-0.87	-0.97	-1.13	-0.81	-0.78	-0.86	-0.86	-1.02	-0.65	-0.49	-0.40	-0.04	-0.20	0.55	0.43	0.63	0.63	-1.13	-0.31
7	0.42	0.38	0.50	0.17	-0.01	0.08	-0.16	-0.45	-0.69	-0.95	-1.00	-0.95	-1.17	-1.36	-1.19	-0.77	-0.98	-0.85	-0.66	-0.45	-0.02	0.64	0.96	0.90	0.96	-1.36	-0.32
8	0.78	0.35	0.73	0.75	0.98	0.58	0.45	-0.53	-1.10	-1.20	-1.14	-0.95	-0.82	-0.65	-0.76	-0.74	-0.80	-0.66	-0.46	0.01	0.54	0.25	0.53	0.71	0.98	-1.20	-0.13
9	0.84	1.04	0.93	1.20	0.88	0.79	0.46	-0.29	-0.60	-0.80	-1.02	-1.04	-1.06	-1.09	-1.16	-1.05	-0.83	-0.60	-0.28	0.17	0.78	0.77	0.66	0.99	1.20	-1.16	-0.01
10	0.76	0.76	0.77	0.69	0.46	0.48	0.12	-0.41	-0.61	-0.79	-0.98	-0.85	-0.97	-1.07	-1.15	-1.10	-0.88	-0.59	-0.54	-0.31	0.66	0.73	0.67	1.17	1.17	-1.15	-0.12
11	1.25	1.31	1.37	1.19	1.55	1.41	0.93	-0.06	-0.55	-0.81	-0.96	-1.07	-1.04	-0.90	-0.78	-0.71	-0.73	-0.66	-0.52	-0.17	0.50	0.48	0.65	1.39	1.55	-1.07	0.13
12	1.05	0.55	0.63	0.58	0.57	0.55	0.83	-0.03	-0.36	-0.67	-0.92	-1.01	-1.17	-1.14	-1.10	-1.00	-0.92	-0.63	-0.30	0.15	0.63	0.78	1.01	0.96	1.05	-1.17	-0.04
13	1.00	1.19	0.99	0.65	0.61	0.82	0.51	-0.11	-0.31	-0.52	-0.69	-0.89	-1.03	-1.05	-1.13	-1.09	-0.92	-0.57	-0.33	-0.13	0.30	0.90	1.09	0.91	1.19	-1.13	0.01
14	1.05	1.36	1.13	1.25	1.53	1.24	1.02	-0.02	-0.24	-0.07	-0.44	-0.78	-0.90	-0.80	-0.88	-0.82	-0.95	-0.87	-0.58	-0.09	0.76	0.67	0.83	0.88	1.53	-0.95	0.18
15	0.95	0.76	0.50	0.42	0.58	0.52	0.03																		0.95	0.03	0.54
16																											
17																											
18																											
19											-3.92	-4.18	-4.50	-4.44	-3.87	-3.07	-2.04	-1.16	-0.31	0.20	0.63	0.98	1.10	1.57	1.57	-4.50	-1.64
20	1.10	0.75	0.64	0.39	0.33	-0.09	-0.54	-0.68	-0.91			0.05	-0.92	-0.71	-0.60	-0.58	-0.47	-0.23	-0.20	-0.26	-0.25	-0.17	-0.12	-0.12	1.10	-0.92	-0.16
21	-0.13	-0.13	-0.11	-0.11	-0.11	-0.11	-0.16	-0.19	-0.22	-0.48	-0.65	-0.70	-0.61	-0.79	-0.68	-0.91	-0.84	-0.73	-0.45	0.00	0.48	1.35	1.62	1.31	1.62	-0.91	-0.14
22	1.21	0.63	0.62	0.55	0.41	0.41	0.42	0.10	0.00	-0.03	-0.17	-0.22	-0.12	-0.14	-0.18	-0.06	-0.07	-0.09	-0.03	0.04	0.06	-0.03	-0.05	-0.04	1.21	-0.22	0.13
23	-0.04	-0.03	0.00	-0.01	-0.03	-0.08	-0.09	-0.14	-0.19	-0.13	-0.14	-0.25	-0.24	-0.23	-0.18	-0.14	-0.16	-0.13	-0.07	-0.09	-0.07	-0.06	-0.08	-0.07	0.00	-0.25	-0.11
24	-0.07	-0.06	-0.06	-0.05	-0.04	-0.02	-0.05	-0.07	-0.13	-0.16	-0.32	-0.34	-0.46	-0.91	-0.80	-0.66	-0.32	-0.20	-0.11	-0.11	0.48	0.54	0.68	0.78	0.78	-0.91	-0.10
25	0.78	0.68	0.58	0.82	0.42	0.53	0.39	0.42	-0.30	-0.49	-0.55	-0.65	-0.79	-0.82	-0.81	-0.51	-0.72	-0.51	-0.35	0.07	0.84	1.40	1.50	1.23	1.50	-0.82	0.13
26	0.96	0.76	0.87	0.72	0.94	0.85	0.67	-0.16	-0.33	-0.25	-0.33	-0.59	-0.97	-0.98	-0.89	-0.78	-0.40	-0.24	-0.19	-0.09	0.03	0.10	0.22	0.32	0.96	-0.98	0.01
27	0.54	0.39	0.78	0.63	0.67	0.56	0.49	0.22	-0.24	-0.56	-0.84	-1.03	-1.09	-0.84	-0.74	-0.55	-0.41	-0.22	-0.13	-0.16	-0.10	-0.07	-0.09	-0.10	0.78	-1.09	-0.12
28	-0.09	-0.08	-0.09	-0.08	-0.07	-0.08	-0.06	-0.07	-0.09	-0.11	-0.18	-0.27	-0.32	-0.38	-0.39	-0.28	-0.25	-0.20	-0.14	-0.13	-0.11	-0.09	-0.09	-0.09	-0.06	-0.39	-0.16
29	-0.09	-0.07	-0.05	-0.01	-0.03	0.01	-0.01	-0.11	-0.10	-0.20	-0.21	-0.26	-0.24	-0.32	-0.38	-0.37	-0.28	-0.13	-0.06	0.02	0.04	0.08	0.00	-0.04	0.08	-0.38	-0.12
30	0.08	0.29	0.20	0.06	0.01	-0.12	-0.11	-0.18	-0.31	-0.66	-0.69	-0.62	-0.44	-0.73	-0.52	-0.44	-0.31	-0.21	-0.06	-0.38	-0.11	0.27	0.32	0.28	0.32	-0.73	-0.18
31	0.25	0.43	0.33	0.14	-0.04	-0.11	-0.06	0.04	-0.13	-0.51	-0.58	-0.51	-0.82	-1.27	-1.18	-0.97	-0.85	-0.19	-0.47	-0.08	0.16	0.41	0.65	0.59	0.65	-1.27	-0.20
Max.	**1.25**	**1.36**	**1.37**	**1.25**	**1.55**	**1.41**	**1.02**	**0.42**	**0.00**	**-0.03**	**-0.14**	**0.05**	**-0.12**	**0.09**	**-0.18**	**-0.06**	**-0.07**	**-0.09**	**-0.03**	**0.20**	**0.84**	**1.40**	**1.62**	**1.57**	**1.62**		
Min.	**-0.13**	**-0.13**	**-0.11**	**-0.11**	**-0.11**	**-0.12**	**-0.54**	**-0.68**	**-1.10**	**-1.20**	**-3.92**	**-4.18**	**-4.50**	**-4.44**	**-3.87**	**-3.07**	**-2.04**	**-1.16**	**-0.69**	**-0.50**	**-0.25**	**-0.25**	**-0.12**	**-0.12**		**-4.50**	
Avg.	**0.50**	**0.49**	**0.46**	**0.43**	**0.41**	**0.35**	**0.21**	**-0.16**	**-0.37**	**-0.49**	**-0.74**	**-0.76**	**-0.86**	**-0.86**	**-0.85**	**-0.74**	**-0.63**	**-0.45**	**-0.31**	**-0.11**	**0.21**	**0.38**	**0.48**	**0.54**			**-0.12**

Total Hours in Month 744 **Hours Data Available** 640 **Data Recovery** 86.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.83	0.86	0.96	0.80	0.97	0.84	1.05	0.07	-0.59	-0.92	-1.08	-1.27	-1.41	-1.66	-1.64	-1.53	-1.29	-1.10	-0.72	-0.42	0.59	1.03	1.34	1.25	1.34	-1.66	-0.13
2	1.56	1.18	0.81	1.02	0.86	0.37	0.41	-0.34	-1.16	-1.21	-1.12	-0.95	-0.92	-0.82	-0.69	-0.56	-0.35	-0.28	-0.24	-0.11	0.03	0.03	0.18	0.14	1.56	-1.21	-0.09
3	0.10	0.07	0.00	-0.03	-0.03	-0.02	-0.01	0.02	0.06	0.01	-0.04	-0.24	-0.09	-0.12	-0.08	-0.04	-0.06	-0.06	-0.02	-0.05	-0.06	-0.05	-0.05	-0.04	0.10	-0.24	-0.03
4	-0.03	-0.05	-0.05	0.06	0.16	0.02	-0.04	0.07	-0.44	-1.08	-1.28	-1.19	-1.43	-1.31	-0.96	-0.59	-0.57	-0.55	-0.43	-0.20	-0.09	-0.08	-0.07	-0.06	0.16	-1.43	-0.42
5	-0.06	-0.06	-0.05	-0.06	-0.07	-0.06	-0.09	-0.09	-0.11	-0.29	-0.42	-0.85	-0.44	-0.42	-0.17	-0.14	-0.13	-0.10	-0.08	-0.07	-0.07	-0.07	-0.07	-0.05	-0.05	-0.85	-0.17
6	-0.05	-0.11	-0.10	-0.07	-0.09	-0.04	-0.05	-0.32	-1.78	-0.51	-0.47	-0.58	-0.42	-0.30	-0.42	-0.58	-0.42	-0.27	-0.22	-0.08	0.06	0.03	0.08	0.07	0.08	-1.78	-0.28
7	-0.06	-0.02	-0.07	-0.06	-0.06	-0.07	-0.03	-0.04	-0.28	-0.62	-0.59	-0.80	-0.73	-0.35	-0.63	-0.62	-0.45	-0.20	-0.02	-0.07	0.62	0.59	0.37	0.49	0.62	-0.80	-0.15
8	0.19	0.11	0.02	0.21	0.19	0.09	0.10	-0.32	-1.23	-1.82	-1.93	-1.47	-1.69	-1.55	-1.13	-0.91	-0.61	-0.55	-0.16	0.14	0.23	0.07	-0.04	-0.02	0.23	-1.93	-0.50
9	-0.03	-0.05	-0.04	-0.05	-0.05	-0.06	-0.05	-0.06	-0.06	-0.08	-0.08	-0.20	-0.30	-0.21	-0.28	-0.27	-0.13	0.11	0.18	0.17	0.26	0.46	0.37	0.26	0.46	-0.30	-0.01
10	0.10	0.11	0.08	-0.03	-0.08	-0.06	-0.05	-0.08	-0.10	0.10	0.32	-0.37	-0.64	-0.44	-0.53	-0.04	-0.43	-0.48	-0.23	0.08	0.24	0.34	0.41	0.40	0.41	-0.64	-0.06
11	0.50	0.81	1.08	0.63	0.49	0.29	0.21	0.27	-0.12	-0.31	-0.18	-0.09	-0.08	-0.15	-0.23	-0.28	-0.15	-0.09	-0.08	-0.06	-0.05	-0.06	-0.06	-0.08	1.08	-0.31	0.09
12	-0.05	0.10	0.34	0.90	0.80	0.35	0.27	0.04	-0.13	-0.10	-0.19	-0.27	-0.22	-0.18	-0.26	-0.22	-0.19	-0.15	-0.10	0.00	0.04	0.06	0.14	0.23	0.90	-0.27	0.05
13	0.28	0.27	0.28	0.24	0.34	0.21	0.04	0.08	-0.05	-0.16	-0.35	-0.33	-0.38	-0.96	-1.11	-0.89	-0.84	-0.63	-0.39	-0.08	0.22	0.18	0.35	0.19	0.35	-1.11	-0.15
14	0.03	0.12	0.32	0.23	0.17	0.25	0.13	0.03	-0.11	-0.40	-0.58	-0.87	-0.81	-1.27	-0.95	-0.83	-0.54	-0.41	-0.09	0.04	0.00	-0.01	-0.03	-0.04	0.32	-1.27	-0.23
15	-0.03	0.00	-0.01	-0.02	-0.04	-0.04	-0.04	-0.04	-0.04	-0.06	-0.07	-0.14	-0.13	-0.11	-0.08	-0.06	-0.06	-0.09	-0.16	-0.08	-0.02	-0.02	-0.05	-0.06	0.00	-0.16	-0.06
16	-0.11	0.12	0.02	0.05	0.07	-0.04	-0.02	0.11	-0.16	-0.27	-0.27	-0.58	-0.53	-0.86	-0.59	-0.54	-0.57	-0.13	-0.16	0.10	0.43	0.24	0.07	0.09	0.43	-0.86	-0.15
17	0.08	0.15	0.02	0.03	0.04	0.09	0.11	0.10	0.08	-0.03	-0.20	-0.78	-1.15	-1.42	-0.73	-0.61	-0.28	-0.02	0.15	0.19	0.32	0.24	0.22	0.24	0.32	-1.42	-0.13
18	0.32	0.26	0.50	0.41	0.93	0.72	0.64	0.71	0.51	-0.42	-1.01	-1.26	-1.14	-1.27	-1.28	-0.53	-0.55	-0.39	-0.17	0.83	1.44	1.27	1.00	0.96	1.44	-1.28	0.10
19	0.87	0.89	1.02	1.22	1.45	1.04	0.83	0.75	-0.08	0.06	-0.51	-1.12	-1.12	-1.16	-1.04	-1.04	-0.42	-0.25	-0.20	0.33	0.43	0.71	0.67	0.53	1.45	-1.16	0.16
20	0.53	0.26	0.25	0.32	0.51	0.73	0.53	0.58	0.74	-0.63	-1.19	-1.11	-1.07	-1.13	-0.68	-0.66	-0.65	-0.29	-0.40	0.79	0.81	0.48	0.43	0.79	0.81	-1.19	0.00
21	1.25	0.98	0.53	0.65	0.17	-0.03	-0.06	-0.05	-0.09	-0.16	-0.20	-0.19	-0.09	-0.20	-0.17	-0.11	-0.15	-0.05	-0.11	-0.03	-0.03	-0.04	0.09	0.06	1.25	-0.20	0.08
22	0.01	-0.03	-0.05	0.02	0.19	0.08	0.34	0.34	0.25	0.15	0.05	0.00	-0.07	-0.06	-0.08	-0.08	-0.09	-0.06	-0.06	-0.07	-0.02	0.10	0.12	0.08	0.34	-0.09	0.04
23	0.04	0.00	-0.01	-0.01	-0.04	-0.07	-0.06	-0.06	-0.09	0.02	0.27	0.15	0.09	-0.09	-0.27	-0.15	-0.10	-0.09	-0.04	0.23	0.33	0.32	0.39	0.38	0.39	-0.27	0.05
24	0.34	0.12	0.11	0.18	0.11	0.02	-0.05	0.15	-0.05	-0.19	-0.25	-0.30	-0.19	-0.02	-0.10	-0.11	-0.08	0.08	-0.05	-0.04	-0.07	-0.06	-0.04	-0.05	0.34	-0.30	-0.02
25	-0.08	-0.07	-0.08	-0.07	-0.06	-0.05	-0.05	-0.07	-0.11	-0.16	-0.29	-0.26	-0.27	-0.30	-0.31	-0.17	-0.09	0.01	0.09	0.04	0.07	0.11	0.15	0.18	0.18	-0.31	-0.08
26	0.43	0.17	0.28	0.16	0.10	0.13	0.29	0.22	-0.05	-0.09	-0.07	0.02	0.13	0.05	0.04	0.05	-0.12	-0.04	0.06	0.13	0.10	0.09	0.09	0.10	0.43	-0.12	0.10
27	0.11	0.10	0.09	0.10	0.14	0.14	0.17	0.15	0.21	0.25	0.12	-0.29	-0.17	-0.14	0.15	0.06	-0.01	-0.01	0.02	0.05	0.03	0.03	0.11	0.10	0.25	-0.29	0.06
28	0.05	0.07	0.30	0.44	0.98	0.70	0.61	0.24	0.18	0.13	0.05	-0.43	-0.49	-0.81	-0.22	0.04	0.20	0.33	0.21	0.26	0.18	0.19	0.29	0.16	0.98	-0.81	0.15
29	0.06	0.07	-0.03	0.00	-0.12	-0.06	-0.06	-0.12	-0.17	-0.37	-0.41	-0.42	-0.45	-0.36	-0.31	-0.35	-0.25	-0.09	0.03	0.44	0.49	0.43	0.38	0.39	0.49	-0.45	-0.05
30	0.34	0.28	0.33	0.65	0.61	0.34	0.40	0.46	0.07	-1.12	-2.34	-1.19	-0.70	-1.33	-0.86	-0.94	-1.06	-0.28	-0.04	-0.08	-0.20	-0.18	-0.21	-0.21	0.65	-2.34	-0.30
Max.	**1.56**	**1.18**	**1.08**	**1.22**	**1.45**	**1.04**	**1.05**	**0.75**	**0.74**	**0.25**	**0.32**	**0.15**	**0.13**	**0.05**	**0.15**	**0.06**	**0.20**	**0.33**	**0.21**	**0.83**	**1.44**	**1.27**	**1.34**	**1.25**	**1.56**		
Min.	**-0.11**	**-0.11**	**-0.10**	**-0.07**	**-0.12**	**-0.07**	**-0.09**	**-0.34**	**-1.78**	**-1.82**	**-2.34**	**-1.47**	**-1.69**	**-1.66**	**-1.64**	**-1.53**	**-1.29**	**-1.10**	**-0.72**	**-0.42**	**-0.20**	**-0.18**	**-0.21**	**-0.21**		**-2.34**	
Avg.	**0.25**	**0.22**	**0.23**	**0.26**	**0.29**	**0.19**	**0.18**	**0.09**	**-0.16**	**-0.34**	**-0.48**	**-0.58**	**-0.56**	**-0.63**	**-0.52**	**-0.42**	**-0.35**	**-0.20**	**-0.11**	**0.08**	**0.21**	**0.21**	**0.22**	**0.22**			**-0.07**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.21	-0.22	-0.15	-0.08	-0.11	-0.12	-0.13	-0.17	-0.19	-0.21	-0.26	-0.36	-0.61	-0.66	-0.60	-0.41	-0.21	-0.01	0.21	0.39	0.22	0.10	-0.01	-0.04	0.39	-0.66	-0.16
2	-0.05	0.02	0.34	0.57	0.71	0.50	0.58	0.67	0.13	-0.94	-1.05	-0.91	-0.73	-0.67	-1.17	-1.23	-0.71	-0.55	0.12	0.50	0.73	0.74	0.82	0.91	0.91	-1.23	-0.03
3	0.70	0.59	0.37	0.31	0.52	0.62	0.42	0.28	0.30	-0.01	-1.08	-1.13	-1.05	-1.01	-0.80	-0.99	-0.42	-0.41	0.48	0.22	0.22	0.45	0.39	0.60	0.70	-1.13	-0.02
4	1.12	1.02	0.74	0.72	1.21	1.05	0.77	0.50	0.42	0.07	0.21	-0.05	-0.71	-0.45	-0.32	-0.25	0.05	0.00	0.10	0.23	0.31	0.19	0.13	0.12	1.21	-0.71	0.30
5	0.11	0.12	0.03	0.09	0.10	0.14	0.19	0.08	0.04	0.12	-0.20	-0.28	-0.35	-0.38	-0.53	-0.42	-0.48	-0.24	-0.09	-0.04	-0.03	0.21	0.16	0.10	0.21	-0.53	-0.07
6	0.01	0.03	0.03	0.04	0.03	0.07	0.13	0.12	-0.06	-0.17	-0.29	-0.52	-0.60	-0.64	-0.46	-0.60	-0.56	-0.33	-0.10	0.25	0.36	0.53	0.29	0.25	0.53	-0.64	-0.09
7	0.48	0.34	0.27	0.29	0.33	0.17	0.14	0.08	0.02	-0.04	-0.08	-0.11	-0.17	-0.14	-0.09	-0.27	-0.22	-0.15	-0.13	-0.11	-0.13	-0.12	-0.10	-0.13	0.48	-0.27	0.01
8	-0.09	-0.07	-0.10	-0.03	-0.06	-0.04	-0.10	-0.10	-0.12	-0.09	-0.13	-0.35	-0.26	-0.09	-0.29	-0.26	-0.25	-0.22	-0.10	-0.02	0.06	0.02	-0.09	-0.03	0.06	-0.35	-0.12
9	-0.07	0.07	0.11	0.08	0.07	-0.05	-0.11	-0.12	-0.16	-0.41	-0.52	-0.62	-0.62	-0.52	-0.42	-0.38	-0.28	-0.21	-0.20	-0.19	-0.17	-0.20	-0.23	-0.24	0.11	-0.62	-0.23
10	-0.18	-0.09	-0.03	0.04	-0.01	-0.10	-0.13	-0.12	-0.21	-0.25	-0.33	-0.37	-0.35	-0.41	-0.31	-0.30	-0.22	-0.12	-0.24	-0.10	0.16	0.15	0.32	0.21	0.32	-0.41	-0.12
11	0.17	0.11	0.09	-0.02	0.03	0.09	0.11	0.06	0.07	-0.11	-0.45	-0.49	-0.58	-0.73	-0.52	-0.45	-0.40	-0.34	-0.26	-0.27	-0.25	-0.24	-0.23	-0.21	0.17	-0.73	-0.20
12	-0.20	-0.18	-0.10	-0.03	-0.09	-0.09	-0.09	0.03	-0.04	-0.05	-0.32	-0.48	-0.59	-0.55	-0.79	-0.65	-0.30	0.09	0.56	0.64	0.57	0.50	0.39	0.57	0.64	-0.79	-0.05
13	0.68	0.77	0.91	0.94	0.63	0.50	0.43	0.07	-0.10	-0.16	-0.38	-0.52	-0.55	-0.48	-0.51	-0.34	0.01	0.03	0.08	0.03	-0.09	-0.09	-0.06	-0.07	0.94	-0.55	0.07
14	-0.08	-0.06	-0.03	-0.01	-0.02	-0.03	-0.08	-0.05	0.01	0.25	-0.23	0.01	-0.01	-0.03	-0.03	-0.01	0.03	0.13	0.18	0.23	0.26	0.34	0.31	0.42	0.42	-0.23	0.06
15	0.33	0.34	0.35	0.37	0.37	0.48	0.80	0.92	0.84	0.48	0.26	0.23	-0.04	0.31	0.56	0.44	0.74	0.66	0.91	0.95	1.14	0.83	0.79	0.73	1.14	-0.04	0.58
16	0.47	0.67	0.21	0.11	0.16	0.57	0.48	0.56	0.84	0.77	0.20	-0.01	0.05	0.15	0.19	0.09	0.07	-0.01	0.12	0.07	0.06	0.10	0.09	0.08	0.84	-0.01	0.25
17	0.00	0.00	0.00	-0.01	0.04	0.07	0.07	0.06	0.05	0.03	0.02	0.13	0.14	0.15	0.10	0.20	0.18	0.26	0.15	0.10	0.05	0.01	0.00	0.02	0.26	-0.01	0.08
18	0.05	0.17	0.19	0.17	0.15	0.15	0.14	0.10	0.31	0.21	0.00	-0.16	-0.22	-0.16			-0.12	-0.03	0.01	0.05	0.07	0.01	-0.03	-0.03	0.31	-0.22	0.05
19	0.26	0.11	0.16	0.21	0.17	0.17	0.09	0.15	0.11	0.07	0.00	-0.01	-0.09	-0.10	-0.06	-0.06	-0.04	0.01	0.04	-0.01	-0.04	-0.01	-0.03	-0.05	0.26	-0.10	0.04
20	-0.05	-0.03	-0.03	-0.03	-0.03	-0.01	-0.01	0.12	0.14	0.08	0.10	0.17	0.18	0.19	0.22	0.17	0.14	0.28	0.23	0.32	0.29	0.25	0.22	0.33	0.33	-0.05	0.13
21	0.35	0.20	0.08	0.08	0.23	0.47	0.77	0.57	0.25	-0.08	-0.15	-0.15	-0.17	-0.15	-0.12	-0.12	-0.20	-0.17	-0.15	-0.09	-0.08	-0.08	-0.05	0.08	0.77	-0.20	0.06
22	0.28	0.33	0.51	0.37	0.30	0.27	-0.05	-0.09	-0.06	-0.13	-0.13	-0.13	-0.10	-0.14	-0.11	-0.05	0.12	0.36	0.69	0.85	0.82	0.87	1.03	1.15	1.15	-0.14	0.29
23	1.10	1.12	0.97	0.95	1.20	1.01	0.40	0.48	0.02	-0.11	-0.13	-0.13	-0.19	-0.18	-0.10	-0.06	-0.17	-0.16	-0.12	-0.09	-0.12	-0.11	-0.11	-0.10	1.20	-0.19	0.22
24	-0.08	-0.06	0.13	0.69	0.86	0.82	1.10	0.89	0.79	0.66	0.34	0.18	0.06	-0.19	-0.22	-0.18	-0.13	-0.17	-0.15	-0.09	-0.12	-0.12	-0.10	-0.02	1.10	-0.22	0.20
25	0.20	0.19	0.16	0.16	0.21	0.01	-0.04	0.02	0.14	-0.03	-0.16	-0.22	-0.21	-0.20	-0.20	-0.16	-0.06	-0.05	-0.03	-0.05	-0.05	-0.08	-0.09	-0.09	0.21	-0.22	-0.03
26	-0.07	-0.03	-0.07	-0.07	-0.08	0.01	0.16	0.43	0.62	0.35	0.06	0.04	0.06	0.01	-0.14	-0.12	-0.03	0.04	0.26	0.51	0.82	0.82	0.81	0.72	0.82	-0.14	0.21
27	0.51	0.53	0.42	0.58	0.37	0.37	0.17	0.39	0.32	0.26	-0.11	-0.25	-0.12	-0.15	-0.08	0.09	0.45	0.32	0.40	0.47	0.37	0.46	0.70	0.36	0.70	-0.25	0.28
28	0.48	0.86	0.26	0.10	0.13	0.25	0.04	0.01	-0.02	-0.01	-0.08	-0.27	-0.27	-0.32	-0.29	-0.26	-0.23	-0.27	-0.20	-0.22	-0.21	-0.20	-0.09	-0.09	0.86	-0.32	-0.04
29	-0.16	-0.12	0.04	-0.11	-0.10	-0.11	-0.27	-0.27	-0.23	-0.25	-0.24	-0.30	-0.35	-0.36	-0.35	-0.32	-0.26	-0.26	-0.28	-0.27	-0.25	-0.16	-0.14	-0.25	0.04	-0.36	-0.22
30	-0.25	-0.23	-0.21	-0.19	-0.21	-0.20	-0.19	-0.22	-0.22	-0.22	-0.14	-0.22	-0.25	0.02	-0.01	0.20	0.48	0.57	0.55	0.66	0.37	0.37	0.32	0.25	0.66	-0.25	0.04
31	0.20	0.20	0.22	0.23	0.21	0.19	0.35	0.29	0.22	0.30	0.05	-0.02	-0.04	-0.03	-0.03	0.08	0.31	0.46	0.54	0.51	0.27	0.34	0.47	0.33	0.54	-0.04	0.24
Max.	**1.12**	**1.12**	**0.97**	**0.95**	**1.21**	**1.05**	**1.10**	**0.92**	**0.84**	**0.77**	**0.34**	**0.23**	**0.18**	**0.31**	**0.56**	**0.44**	**0.74**	**0.66**	**0.91**	**0.95**	**1.14**	**0.87**	**1.03**	**1.15**	**1.21**		
Min.	**-0.25**	**-0.23**	**-0.21**	**-0.19**	**-0.21**	**-0.20**	**-0.27**	**-0.27**	**-0.23**	**-0.94**	**-1.08**	**-1.13**	**-1.05**	**-1.01**	**-1.17**	**-1.23**	**-0.71**	**-0.55**	**-0.28**	**-0.27**	**-0.25**	**-0.24**	**-0.23**	**-0.25**		**-1.23**	
Avg.	**0.19**	**0.22**	**0.19**	**0.21**	**0.24**	**0.23**	**0.20**	**0.18**	**0.14**	**0.01**	**-0.17**	**-0.24**	**-0.28**	**-0.26**	**-0.25**	**-0.22**	**-0.09**	**-0.02**	**0.12**	**0.17**	**0.18**	**0.19**	**0.19**	**0.19**			**0.06**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.11	0.15	0.04	0.15	0.39	0.59	0.49	0.53	0.69	0.49	0.17	-0.01	-0.21	-0.26	-0.29	-0.26	-0.27	-0.19	0.13	0.02	0.14	0.09	0.36	0.46	0.69	-0.29	0.15
2	0.27	-0.02	-0.03	0.11	0.34	1.11	0.74	0.14	0.85	0.63	-0.09	-0.08	-0.18	-0.20	-0.07	0.23	0.69	0.71	0.90	0.97	1.28	1.40	0.99	0.83	1.40	-0.20	0.48
3	0.19	0.07	-0.04	0.12	0.14	0.04	-0.07	0.01	0.05	-0.05	0.00	-0.20	-0.28	-0.19	0.04	0.00	0.01	0.02	0.06	0.06	0.06	0.08	0.02	0.01	0.19	-0.28	0.01
4	0.04	0.11	0.14	0.09	0.10	0.11	0.13	0.12	0.16	0.06	0.02	-0.05	-0.10	-0.09	-0.06	0.02	0.17	0.25	0.19	0.19	0.16	0.24	0.19	0.17	0.25	-0.10	0.10
5	0.17	0.15	0.14	0.14	0.19	0.19	0.22	0.28	0.22	0.09	0.04	-0.06	-0.10	-0.09	-0.07	0.00	0.18	0.28	0.42	0.36	0.32	0.12	-0.02	0.09	0.42	-0.10	0.13
6	0.01	-0.03	-0.07	0.02	0.33	-0.02	-0.02	-0.07	-0.13	-0.07	-0.07	-0.09	-0.23	-0.20	0.03	0.08	-0.01	0.12	-0.03	-0.20	-0.10	0.18	0.37	0.28	0.37	-0.23	0.00
7	0.33	0.21	0.09	0.07	0.28	0.25	0.12	0.17	0.22	-0.07	-0.08	-0.24	-0.19	-0.31	-0.15	0.10	0.19	-0.03	-0.22	-0.21	-0.28	-0.19	-0.16	-0.16	0.33	-0.31	-0.01
8	-0.23	-0.32	-0.07	-0.07	0.57	0.18	0.18	0.12	0.57	0.41	0.18	-0.07	0.10	0.56	0.03	0.50	0.36	0.01	0.03	0.03	-0.14	-0.20	-0.20	-0.25	0.57	-0.32	0.09
9	-0.15	-0.17	-0.14	-0.18	-0.20	-0.24	-0.19	-0.21	-0.22	-0.22	-0.19	-0.16	-0.13	-0.11	-0.08	-0.03	-0.19	-0.21	-0.19	-0.17	-0.14	-0.14	-0.15	-0.13	-0.03	-0.24	-0.16
10	-0.15	-0.14	-0.10	0.01	0.10	0.07	0.02	0.08	0.10	0.07	0.07	0.07	0.10	0.11	0.13	0.06	0.10	0.17	0.16	0.13	0.15	0.15	0.07	0.09	0.17	-0.15	0.07
11	0.15	0.19	0.13	-0.13	-0.18	-0.16	-0.17	-0.17	-0.19	-0.20	-0.24	-0.27	-0.30	-0.35	-0.34	-0.31	-0.24	-0.21	-0.11	-0.12	-0.06	-0.13	-0.19	-0.19	0.19	-0.35	-0.16
12	-0.19	-0.20	-0.22	-0.20	-0.17	-0.06	-0.06	-0.08	-0.03	-0.02	0.16	-0.11	0.12	-0.04	0.08	0.26	0.70	1.12	0.70	0.72	0.89	0.53	0.64	0.44	1.12	-0.22	0.21
13	0.30	0.53	0.42	0.71	1.01	0.51	0.52	0.42	0.46	0.41	0.40	0.33	0.79	0.74	1.00	1.18	0.05	0.00	-0.06	-0.09	-0.07	-0.09	0.46	0.56	1.18	-0.09	0.44
14	0.43	0.59	0.60	1.02	0.78	0.57	0.56	0.57	0.69	0.60	0.47	0.25	0.13	0.35	0.27	0.23	0.18	0.22	0.33	0.31	0.28	0.29	0.20	0.24	1.02	0.13	0.42
15	0.33	0.42	0.38	0.36	0.22	0.28	0.45	0.40	0.06	0.30	-0.05	-0.02	0.00	0.37	0.45	0.25	0.58	0.58	1.64	1.33	0.81	0.64	0.26	0.04	1.64	-0.05	0.42
16	0.01	0.29	0.16	0.07	0.05	-0.01	-0.02	-0.04	-0.04	-0.04	-0.05	-0.05	-0.03	0.00	0.10	0.09	0.07	0.12	0.15	0.18	0.23	0.24	0.26	0.27	0.29	-0.05	0.08
17	0.21	0.13	0.13	0.16	0.12	0.11	0.07	0.01	-0.03	-0.13	-0.31	-0.21	-0.16	-0.17	-0.20	-0.27	-0.11	-0.08	-0.08	-0.12	-0.16	-0.11	-0.13	-0.14	0.21	-0.31	-0.06
18	-0.12	-0.10	-0.03	-0.02	0.31	0.42	0.08	0.02	0.02	0.08	-0.01	0.02	0.17	0.09	0.14	0.00	-0.15	-0.16	-0.30	-0.19	-0.13	-0.12	0.15	0.11	0.42	-0.30	0.01
19	0.00	0.09	-0.04	-0.02	-0.08	-0.07	-0.04	-0.04	-0.06	-0.08	-0.07	-0.33	-0.27	-0.21	-0.31	-0.56	0.08	0.20	0.22	0.01	0.48	0.12	0.03	-0.01	0.48	-0.56	-0.04
20	0.00	-0.03	0.01	0.02	0.15	0.34	0.50	0.64	0.32	0.13	0.15	0.26	-0.01	-0.08	-0.05	-0.10	-0.02	0.08	0.10	0.14	0.07	0.12	0.27	0.38	0.64	-0.10	0.14
21	0.19	0.61	0.32	-0.07	0.00	0.22	0.24	0.08	0.19	0.79	1.09	0.99	1.17	1.43	1.57	1.89	1.37	0.52	0.33	0.17	0.34	0.61	0.67	1.38	1.89	-0.07	0.67
22	0.55	0.43	0.53	0.41	0.33	0.62	0.57	0.40	0.32	0.35	0.32	0.08	0.20	0.26	0.82	0.53	0.34	0.39	0.05	0.67	1.03	1.13	1.16	1.47	1.47	0.05	0.54
23	0.91	0.62	0.88	0.34	0.28	0.25	0.09	-0.02	-0.11	-0.12	-0.14	-0.09	0.07	-0.08	-0.09	-0.10	0.00	0.18	0.33	0.56	0.27	0.15	0.39	0.48	0.91	-0.14	0.21
24	0.60	0.65	0.60	0.37	0.70	0.58	0.57	0.60	0.43	0.40	0.34	0.28	0.25	0.24	0.25	0.21	0.22	0.17	0.18	0.19	0.20	0.00	-0.05	-0.06	0.70	-0.06	0.33
25	0.04	0.18	0.12	0.12	0.13	0.16	0.07	0.07	0.03	0.08	0.03	0.09	0.01	0.03	0.23	0.30	0.24	0.33	0.29	0.32	0.24	0.17	0.09	0.21	0.33	0.01	0.15
26	0.29	0.32	0.27	0.39	0.42	0.35	0.35	0.46	0.42	0.42	0.44	0.47	0.29	0.25	0.20	0.26	0.41	0.36	0.54	0.46	0.40	0.46	0.43	0.52	0.54	0.20	0.38
27	0.86	0.80	0.70	0.73	0.72	0.85	0.95	0.74	1.04	0.97	1.16	0.79	1.53	1.40	1.28	1.38	0.75	0.53	0.64	0.85	0.59	0.50	0.89	1.05	1.53	0.50	0.90
28	0.77	0.64	0.52	0.60	0.47	0.28	0.15	0.16	0.07	0.05	0.11	0.15	0.13	0.09	0.15	0.11	0.02	0.04	0.04	0.17	0.11	0.19	0.31	0.27	0.77	0.02	0.23
29	0.20	0.21	0.26	0.21	0.17	0.11	0.20	0.14	0.12	0.06	-0.03	0.01	0.38	0.85	0.36	0.04	0.18	0.17	0.20	0.92	0.59	0.20	1.00	1.15	1.15	-0.03	0.32
30	0.07	-0.04	-0.04	-0.05	-0.07	-0.05	-0.06	0.03	-0.03	0.00	0.01	-0.05	0.06	-0.03	0.06	-0.02	-0.07	0.01	0.09	0.04	-0.06	-0.06	-0.05	-0.07	0.09	-0.07	-0.02
Max.	**0.91**	**0.80**	**0.88**	**1.02**	**1.01**	**1.11**	**0.95**	**0.74**	**1.04**	**0.97**	**1.16**	**0.99**	**1.53**	**1.43**	**1.57**	**1.89**	**1.37**	**1.12**	**1.64**	**1.33**	**1.28**	**1.40**	**1.16**	**1.47**	**1.89**		
Min.	**-0.23**	**-0.32**	**-0.22**	**-0.20**	**-0.20**	**-0.24**	**-0.19**	**-0.21**	**-0.22**	**-0.22**	**-0.31**	**-0.33**	**-0.30**	**-0.35**	**-0.34**	**-0.56**	**-0.27**	**-0.21**	**-0.30**	**-0.21**	**-0.28**	**-0.20**	**-0.20**	**-0.25**		**-0.56**	
Avg.	**0.21**	**0.21**	**0.19**	**0.18**	**0.25**	**0.25**	**0.22**	**0.18**	**0.21**	**0.18**	**0.13**	**0.06**	**0.11**	**0.15**	**0.18**	**0.20**	**0.19**	**0.19**	**0.22**	**0.26**	**0.25**	**0.22**	**0.27**	**0.32**			**0.20**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.07	-0.07	-0.03	-0.08	-0.08	-0.04	0.18	0.30	0.47	0.95	0.49	0.16	0.31	0.57	0.09	-0.05	0.13	0.99	1.35	1.34	0.93	0.70	0.44	0.19	1.35	-0.08	0.38
2	0.28	0.23	-0.01	0.09	0.01	-0.17	-0.16	-0.10	-0.11	-0.15	-0.22	-0.14	-0.15	-0.05	0.05	0.14	-0.06	0.00	-0.01	0.04	0.12	0.22	0.01	-0.08	0.28	-0.22	-0.01
3	-0.10	-0.08	-0.09	0.01	0.01	-0.06	-0.05	0.23	0.23	0.23	0.29	0.29	0.21	0.18	0.27	0.34	0.28	0.41	0.59	0.97	0.85	0.76	0.87	0.83	0.97	-0.10	0.31
4	0.75	0.83	1.23	1.39	0.57	0.54	0.86	1.10	0.86	0.85	1.53	0.93	0.39	0.11	0.11	0.01	0.06	0.01	0.00	-0.01	-0.02	-0.02	-0.02	-0.02	1.53	-0.02	0.50
5	-0.02	-0.03	-0.03	-0.04	-0.01	0.00	-0.04	-0.05	-0.04	-0.03	-0.05	-0.05	0.00	-0.01	0.00	0.03	-0.04	0.00	0.01	-0.03	-0.04	0.23	0.70	0.34	0.70	-0.05	0.03
6	0.33	0.30	0.24	0.21	0.15	0.14	0.20	0.21	0.12	0.10	0.03	0.00	-0.10	-0.44	-0.28	-0.15	-0.09	-0.13	-0.06	-0.06	-0.08	-0.02	-0.07	0.09	0.33	-0.44	0.03
7	0.08	0.10	0.15	0.11	0.11	0.07	0.08	0.03	0.05	0.08	0.15	0.05	0.05	0.11	0.10	0.16	0.29	0.18	0.08	0.15	0.19	0.19	0.14	0.12	0.29	0.03	0.12
8	0.11	0.07	0.04	0.03	0.06	0.02	0.07	0.10	0.06	0.09	0.17	0.31	0.24	0.20	0.24	0.19	0.25	0.26	0.18	0.13	0.15	0.14	0.09	0.13	0.31	0.02	0.14
9	0.13	0.14	0.19	0.17	0.14	0.11	0.06	0.01	0.01	0.01	0.00	0.03	0.26	0.31	0.32	0.52	0.38	0.32	0.25	0.17	0.15	0.14	0.10	-0.02	0.52	-0.02	0.16
10	-0.07	-0.14	-0.10	-0.08	0.03	0.00	0.02	0.04	-0.01	-0.03	0.07	0.10	0.10	0.17	0.14	0.15	0.01	0.19	0.22	0.10	0.00	-0.02	-0.02	-0.07	0.22	-0.14	0.03
11	-0.06	-0.05	-0.09	-0.06	-0.04	0.18	-0.03	-0.04	-0.14	-0.14	-0.19	-0.22	-0.16	-0.15	-0.18	-0.23	-0.17	-0.11	-0.02	-0.05	-0.08	-0.11	-0.11	0.15	0.18	-0.23	-0.09
12	0.20	0.64	0.71	0.94	1.39	1.61	1.58	1.19	1.60	1.34	0.99	0.56	0.50	0.30	0.29	0.08	-0.06	0.31	0.47	0.26	0.40	0.64	0.67	0.74	1.61	-0.06	0.72
13	0.54	0.53	0.26	0.37	0.35	0.61	0.44	0.40	0.33	0.30	0.07	-0.24	-0.32	-0.10	-0.09	0.05	0.23	0.49	0.61	0.55	0.58	0.53	0.43	0.39	0.61	-0.32	0.30
14	0.37	0.37	0.39	0.43	0.30	0.36	0.49	0.37	0.41	0.36	0.32	0.29	0.38	0.28	0.27	0.27	0.27	0.17	0.19	0.16	0.16	0.25	0.23	0.16	0.49	0.16	0.30
15	0.12	0.09	0.07	0.13	0.22	0.27	0.26	0.09	0.02	0.16	0.10	0.12	0.25	0.21	0.19	0.22	0.26	0.22	0.40	0.88	0.57	0.47	0.32	0.22	0.88	0.02	0.24
16	0.22	0.17	0.12	0.13	0.08	0.09	0.06	0.05	0.04	0.02	0.00	-0.01	-0.42	-0.12	-0.01	0.06	-0.01	-0.03	-0.05	-0.05	-0.02	0.00	0.03	0.17	0.22	-0.42	0.02
17	0.28	0.45	0.69	0.63	0.75	0.62	0.90	0.61	0.34	0.25	0.46	0.38	0.95	1.07	0.40	0.12	0.21	0.20	0.12	0.21	0.24	0.45	0.34	0.05	1.07	0.05	0.45
18	0.11	0.25	0.40	0.31	0.60	0.53	0.38	0.32	0.16	0.05	0.22	0.19	0.15	0.21	0.24	0.23	0.27	0.32	0.27	0.34	0.31	0.85	0.50	0.48	0.85	0.05	0.32
19	0.44	0.56	0.39	0.43	0.35	0.35	0.28	0.27	0.26	0.22	0.24	0.25	0.23	0.18	0.12	0.15	0.12	0.13	0.26	0.28	0.28	0.31	0.30	0.28	0.56	0.12	0.28
20	0.38	0.50	0.61	0.66	0.66	0.79	0.80	0.67	0.60	0.70	0.88	0.80	0.96	0.80	0.52	1.12	0.48	0.53	0.72	1.03	1.26	1.07	0.91	1.02	1.26	0.38	0.77
21	0.73	0.77	0.42	0.32	0.33	0.41	0.22	0.16	0.32	0.39	0.26	0.21	0.05	-0.02	0.10	0.21	0.02	0.06	0.24	0.15	0.16	0.26	0.31	0.59	0.77	-0.02	0.28
22	0.93	0.30	0.19	-0.09	-0.07	-0.05	-0.18	-0.17	-0.30	-0.20	0.18	-0.25	-0.26	-0.26	-0.14	-0.01	-0.04	0.17	-0.10	0.48	0.19	0.70	0.65	0.44	0.93	-0.30	0.09
23	0.78	0.72	0.62	0.35	0.16	0.16	0.43	0.36	0.11	0.02	0.02	-0.03	-0.08	-0.02	-0.11	-0.06	-0.06	-0.02	-0.05	0.06	0.03	0.09	0.18	0.18	0.78	-0.11	0.16
24	0.04	-0.02	-0.05	-0.05	-0.05	-0.04	-0.04	-0.05	0.00	0.13	0.21	0.34	0.37	0.41	0.31	0.52	1.18	0.84	0.69	0.44	0.27	0.34	0.30	0.20	1.18	-0.05	0.26
25	0.29	0.37	0.45	0.46	0.44	0.15	0.02	0.11	0.22	0.21	0.47	0.30	0.21	0.17	0.20	0.34	0.29	0.23	0.19	0.19	0.40	0.41	0.39	0.50	0.50	0.02	0.29
26	0.46	0.33	0.31	0.28	0.27	0.17	0.17	0.21	0.13	0.36	0.98	0.47	0.27	0.22	0.37	0.76	0.20	0.36	0.59	0.71	0.64	0.79	0.48	0.57	0.98	0.13	0.42
27	0.36	0.31	0.25	0.33	0.34	0.43	0.43	0.30	0.29	0.60	0.57	0.53	0.62	0.46	0.29	0.59	0.45	0.41	0.49	0.45	0.53	0.51	0.20	0.47	0.62	0.20	0.42
28	0.35	0.58	0.54	0.58	0.49	0.37	0.32	0.31	0.38	0.59	0.61	0.35	0.19	0.39	0.17	0.24	0.26	0.29	0.14	0.32	0.24	0.25	0.31	0.30	0.61	0.14	0.36
29	0.26	0.19	0.06	0.00	0.01	0.03	0.01	0.10	-0.02	-0.03	-0.04	-0.01	-0.01	0.01	0.15	0.22	0.09	0.04	0.06	0.11	0.20	0.32	0.57	0.66	0.66	-0.04	0.12
30	0.60	0.47	0.41	0.31	0.35	0.53	0.46	0.40	0.23	0.91	0.74	0.93	0.68	0.56	0.78	1.05	0.97	0.49	0.34	0.28	0.42	0.45	0.43	0.43	1.05	0.23	0.55
31	0.55	0.72	0.85	0.30	0.56	0.78	0.65	0.63	0.72	0.59	0.68	0.31	0.34	0.48	0.66	0.85	0.25	0.94	0.74	0.72	0.88	0.76	0.87	0.88	0.94	0.25	0.65
Max.	**0.93**	**0.83**	**1.23**	**1.39**	**1.39**	**1.61**	**1.58**	**1.19**	**1.60**	**1.34**	**1.53**	**0.93**	**0.96**	**1.07**	**0.78**	**1.12**	**1.18**	**0.99**	**1.35**	**1.34**	**1.26**	**1.07**	**0.91**	**1.02**	**1.61**		
Min.	**-0.10**	**-0.14**	**-0.10**	**-0.09**	**-0.08**	**-0.17**	**-0.18**	**-0.17**	**-0.30**	**-0.20**	**-0.22**	**-0.25**	**-0.42**	**-0.44**	**-0.28**	**-0.23**	**-0.17**	**-0.13**	**-0.10**	**-0.06**	**-0.08**	**-0.11**	**-0.11**	**-0.08**		**-0.44**	
Avg.	**0.30**	**0.31**	**0.30**	**0.28**	**0.27**	**0.29**	**0.29**	**0.26**	**0.24**	**0.29**	**0.33**	**0.22**	**0.20**	**0.20**	**0.18**	**0.26**	**0.21**	**0.27**	**0.29**	**0.33**	**0.32**	**0.37**	**0.34**	**0.33**			**0.28**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.46	0.19	0.10	0.13	0.15	-0.01	-0.01	0.01	0.03	0.29	0.33	0.45	0.48	0.46	0.56	0.45	0.42	0.57	0.43	0.73	0.61	0.87	0.90	0.87	0.90	-0.01	0.39
2	0.92	0.95	0.76	0.75	0.95	0.83	0.58	0.07	0.48	0.65	0.19	0.09	0.20	0.09	0.30	0.23	0.43	0.28	0.23	0.08	0.11	0.08	0.08	0.25	0.95	0.07	0.40
3	0.14	0.09	0.16	0.11	-0.03	-0.05	-0.03	0.04	0.07	0.06	0.01	-0.03	-0.04	0.09	0.06	0.18	0.00	0.21	0.31	0.50	0.54	0.41	0.48	0.61	0.61	-0.05	0.16
4	0.59	0.41	0.19	0.17	0.23	0.44	0.49	0.65	0.41	0.47	0.58	0.43	0.44	0.57	0.74	0.56	0.78	0.30	0.72	0.73	0.72	0.77	0.67	0.75	0.78	0.17	0.53
5	0.57	0.43	0.61	0.55	0.51	0.67	0.54	0.44	0.42	0.55	0.39	0.38	0.18	0.18	0.61	0.89	0.94	1.54	1.60	1.49	1.19	1.74	1.53	1.44	1.74	0.18	0.81
6	1.02	0.72	0.38	0.53	0.91	0.75	0.55	0.54	0.70	0.58	0.72	0.52	1.39	0.48	0.60	0.61	0.57	0.27	0.39	0.38	0.22	0.05	0.07	0.18	1.39	0.05	0.55
7	0.19	0.05	0.40	0.48	0.52	0.41	0.66	0.83	0.89	1.02	0.82	0.53	0.48	0.72	0.41	0.43	0.34	0.24	0.43	0.92	0.85	0.40	0.13	0.35	1.02	0.05	0.52
8	0.30	0.49	0.34	0.34	0.21	0.31	0.28	0.09	0.32	0.32	0.35	0.82	1.06	1.33	0.85	1.07	1.83	1.02	1.70	1.72	1.49	1.54	1.21	1.62	1.83	0.09	0.86
9	2.50	2.06	2.49	1.54	1.84	1.73	1.86	1.70	1.52	1.68	1.84	1.23	0.41	0.93	0.90	0.56	0.59	0.50	0.26	0.28	1.69	1.20	0.73	0.36	2.50	0.26	1.27
10	0.83	0.71	0.32	0.08	0.07	0.06	0.04	0.08	0.11	0.08	0.08	0.29	0.19	0.00	0.16	-0.13	-0.02	-0.19	-0.12	-0.13	-0.09	-0.10	-0.10	-0.03	0.83	-0.19	0.09
11	-0.09	-0.10	-0.12	-0.15	-0.09	-0.15	-0.07	0.27	0.54	0.31	0.05	0.33	0.36	0.72	0.27	0.12	0.26	0.24	0.38	0.41	0.21	0.33	0.41	0.66	0.72	-0.15	0.21
12	0.69	0.57	0.49	0.08	-0.11	-0.15	-0.09	-0.13	-0.15	-0.19	-0.17	-0.21	-0.23	-0.24	-0.23	-0.23	-0.21	-0.15	-0.04	0.10	-0.03	-0.09	-0.03	-0.02	0.69	-0.24	-0.03
13	0.28	0.36	0.40	0.53	0.63	0.64	0.69	0.73	0.70	0.60	0.40	0.27	0.22	0.18	0.16	0.29	0.65	0.46	0.71	0.72	0.77	0.85	0.98	1.14	1.14	0.16	0.56
14	1.80	1.14	1.42	0.72	0.57	1.16	1.84	1.11	0.76	0.42	0.14	0.25	0.11	-0.04	0.03	0.02	0.03	0.01	0.01	-0.02	-0.02	0.02	-0.01	0.01	1.84	-0.04	0.48
15	0.02	-0.02	-0.01	0.01	-0.01	-0.02	-0.02	-0.03	-0.03	-0.03	0.06	0.16	0.25	-0.01				0.01	-0.02	-0.01	0.01	0.12	0.16	0.50	0.50	-0.03	0.05
16	0.09	0.06	0.19	0.15	0.08	0.11	0.23	0.36	0.26	0.27	0.41	0.58	0.96	0.75	0.46	0.26	0.47	0.76	0.86	0.85	1.09	1.49	0.63	0.50	1.49	0.06	0.49
17	0.12	0.27	-0.09	0.22	0.40	0.87	1.35	1.24	0.99	0.65	0.37	0.16	0.49	0.95	0.43	0.46	0.43	0.53	0.60	0.69	0.60	0.18	-0.02	0.31	1.35	-0.09	0.51
18	1.06	0.83	0.73	1.14	0.50	0.09	-0.03	-0.16	-0.12	0.01	0.41	0.28	0.21	0.22	0.36	0.41	0.49	1.01	0.65	0.65	0.61	0.64	0.81	0.83	1.14	-0.16	0.48
19	0.71	0.48	0.35	0.44	0.40	0.46	0.36	0.33	0.33	0.35	0.39	0.42	0.39	0.29	0.26	0.49	0.59	0.51	0.48	0.29	0.05	0.13	0.14	0.02	0.71	0.02	0.36
20	0.28	0.41	0.69	0.66	0.77	0.78	0.52	0.31	0.33	0.77	0.52	1.17	0.18	-0.11	0.09	-0.09	-0.15	0.08	-0.16	-0.10	0.09	-0.29	0.23	-0.05	1.17	-0.29	0.29
21	0.08	-0.18	-0.17	-0.16	-0.20	-0.25	-0.19	-0.22	-0.23	-0.23	-0.20	-0.13	-0.15	-0.23	-0.17	-0.17	-0.15	-0.18	-0.23	-0.27	-0.28	-0.27	-0.29	-0.29	0.08	-0.29	-0.20
22	-0.28	-0.26	-0.23	-0.22	-0.24	-0.23	-0.22	-0.20	-0.21	-0.20	-0.07	-0.08	-0.06	-0.14	-0.18	-0.09	-0.14	-0.20	-0.16	-0.11	-0.12	-0.16	-0.11	-0.06	-0.06	-0.28	-0.16
23	-0.06	-0.03	-0.04	-0.01	0.02	-0.04	-0.02	0.07	0.06	0.01	0.05	-0.01	-0.02	-0.05	-0.04	0.00	0.14	0.08	0.13	0.06	0.12	0.21	0.19	0.14	0.21	-0.06	0.04
24	0.18	0.16	0.09	0.11	0.18	0.23	0.31	0.28	0.30	0.32	0.20	0.20	0.10	0.07	0.05	0.11	0.15	0.18	0.27	0.24	0.39	0.29	0.17	0.18	0.39	0.05	0.20
25	0.29	0.45	0.51	0.54	0.42	0.27	0.83	0.92	1.03	1.09	0.97	0.84	0.09	0.27	0.15	0.14	0.67	0.96	0.47	0.78	0.60	0.45	0.58	0.23	1.09	0.09	0.56
26	0.23	0.25	0.39	0.44	0.65	1.17	1.18	1.08	0.94	1.17	1.24	1.15	1.06	0.30	0.37	0.41	0.41	0.98	0.83	1.00	0.85	0.62	0.32	0.60	1.24	0.23	0.74
27	0.47	0.30	0.36	0.22	0.08	0.08	0.09	0.11	0.09	0.11	0.13	0.07	0.16	0.19	0.23	0.20	0.21	0.02	0.00	-0.01	0.03	0.09	0.03	-0.01	0.47	-0.01	0.14
28	-0.01	-0.03	0.00	-0.01	0.03	-0.02	-0.03	0.02	-0.02	-0.04	-0.04	-0.07	-0.13	-0.15	-0.31	-0.33	-0.16	0.04	-0.05	-0.06	0.09	0.00	0.14	0.20	0.20	-0.33	-0.04
29	0.18	0.06	0.04	0.07	0.07	0.16	0.34	0.37	0.51	0.40	0.43	0.30	0.10	-0.06	-0.16	0.16	0.29	0.85	0.56	0.81	0.46	0.60	0.35	0.49	0.85	-0.16	0.31
30	0.87	0.77	0.96	0.86	0.72	0.77	0.55	0.87	1.07	0.67	1.19	0.86	0.57	0.15	0.08	0.20	1.50	1.84	0.34	1.60	2.27	2.01	2.77	3.02	3.02	0.08	1.11
31	2.77	2.40	1.85	1.54	0.97	1.09	0.82	0.73	0.70	1.44	1.28	0.92	0.69	0.58	0.17	0.45	0.50	0.19	-0.08	-0.01	0.40	0.42	0.46	0.94	2.77	-0.08	0.88
Max.	**2.77**	**2.40**	**2.49**	**1.54**	**1.84**	**1.73**	**1.86**	**1.70**	**1.52**	**1.68**	**1.84**	**1.23**	**1.39**	**1.33**	**0.90**	**1.07**	**1.83**	**1.84**	**1.70**	**1.72**	**2.27**	**2.01**	**2.77**	**3.02**	**3.02**		
Min.	**-0.28**	**-0.26**	**-0.23**	**-0.22**	**-0.24**	**-0.25**	**-0.22**	**-0.22**	**-0.23**	**-0.23**	**-0.20**	**-0.21**	**-0.23**	**-0.24**	**-0.31**	**-0.33**	**-0.21**	**-0.20**	**-0.23**	**-0.27**	**-0.28**	**-0.29**	**-0.29**	**-0.29**		**-0.33**	
Avg.	**0.55**	**0.45**	**0.44**	**0.38**	**0.36**	**0.39**	**0.43**	**0.40**	**0.41**	**0.44**	**0.42**	**0.39**	**0.33**	**0.27**	**0.24**	**0.25**	**0.40**	**0.42**	**0.37**	**0.46**	**0.50**	**0.47**	**0.44**	**0.51**			**0.40**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.55	0.50	0.70	0.31	0.22	0.15	0.10	0.12	0.16	0.14	0.08	0.06	-0.01	-0.06	-0.04	0.00	0.08	0.16	0.24	0.19	0.26	0.23	0.28	0.22	0.70	-0.06	0.19
2	0.26	0.27	0.28	0.35	0.38	0.41	0.67	0.69	0.74	0.72	0.78	0.74	0.27	0.66	0.80	0.35	0.41	0.41	0.71	0.74	1.33	0.81	1.38	1.45	1.45	0.26	0.65
3	1.27	0.90	0.63	0.36	0.41	0.38	0.22	0.19	0.13	0.08	0.08	0.10	0.09	0.07	0.06	0.06	0.08	0.12	0.20	0.25	0.27	0.35	0.32	0.29	1.27	0.06	0.29
4	0.35	0.35	0.35	0.35	0.29	0.23	0.26	0.30	0.33	0.46	0.49	0.48	0.49	0.52	0.48	0.39	0.30	0.26	0.43	0.69	0.73	0.76	0.75	0.74	0.76	0.23	0.45
5	0.65	0.45	0.47	0.56	0.71	0.83	0.72	0.77	0.82	0.60	0.52	0.43	0.15	0.19	0.21	0.26	0.36	0.54	0.63	0.65	0.51	0.41	0.28	0.18	0.83	0.15	0.50
6	0.14	0.08	0.02	0.19	0.02	-0.03	-0.03	-0.02	-0.01	-0.04	-0.06	-0.01	-0.03	-0.03	-0.22	-0.12	-0.03	0.02	0.05	0.20	0.13	0.09	0.03	-0.01	0.20	-0.22	0.01
7	0.01	0.02	0.07	-0.01	-0.06	-0.06	-0.05	-0.07	-0.07	-0.06	-0.04	0.11	0.12	0.08	0.22	0.45	0.87	1.00	1.12	1.13	0.88	0.64	0.67	1.15	1.15	-0.07	0.34
8	0.52	0.49	0.34	0.38	0.65	0.70	0.86	0.98	0.99	1.01	0.90	0.40	0.71	0.69	0.95	0.99	0.73	0.51	0.45	0.41	0.34	0.33	0.33	0.24	1.01	0.24	0.62
9	0.22	0.21	0.28	0.34	0.31	0.35	0.31	0.20	0.22	0.11	0.19	0.09	0.07	0.07	0.05	0.13	0.27	0.30	0.22	0.16	0.14	0.05	0.04	-0.04	0.35	-0.04	0.18
10	-0.02	-0.05	-0.07	-0.03	0.05	0.12	0.07	0.03	-0.01	-0.05	-0.05	-0.06	-0.06	-0.11	-0.11	0.01	0.07	0.08	0.11	0.13	0.10	0.11	0.14	0.05	0.14	-0.11	0.02
11	0.00	0.01	-0.04	-0.04	0.08	0.11	0.27	0.00	-0.03	-0.01	-0.05	-0.05	-0.05	-0.07	-0.05	-0.05	-0.04	0.01	0.01	-0.02	-0.06	-0.05	-0.03	-0.03	0.27	-0.07	-0.01
12	-0.01	-0.02	-0.03	0.01	0.04	-0.07	-0.09	-0.07	-0.07	-0.15	-0.17	-0.18	-0.18	-0.19	-0.22	-0.19	-0.17	-0.17	0.15	0.34	0.50	0.46	0.62	0.52	0.62	-0.22	0.03
13	0.44	0.42	0.38	0.31	0.29	0.20	0.18	0.29	0.27	0.15	0.27	-0.44	-0.03	-0.32	-0.17	-0.12	-0.13	-0.10	-0.07	-0.04	-0.03	0.01	0.00	0.03	0.44	-0.44	0.08
14	0.09	0.07	0.15	0.19	0.29	0.29	0.22	0.24	0.23	0.17	0.14	0.13	0.07	0.01	-0.01	-0.05	0.01	0.10	0.15	0.13	0.15	0.19	0.23	0.54	0.54	-0.05	0.16
15	0.78	0.81	0.78	0.85	0.69	0.69	0.77	0.81	0.87	0.84	0.93	0.67	0.54	0.58	0.20	0.04	-0.01	-0.03	0.00	-0.01	-0.04	-0.04	-0.05	-0.05	0.93	-0.05	0.44
16	-0.09	-0.08	-0.03	-0.02	-0.05	-0.04	-0.04	-0.04	-0.04	-0.03	-0.05	0.18	0.07	0.01	0.11	0.22	0.36	0.60	0.58	0.47	0.30	0.10	0.03	0.13	0.60	-0.09	0.11
17	0.10	0.22	0.31	0.28	0.24	0.22	0.21	0.17	0.11	0.09	0.09	0.06	0.02	0.03	-0.01	-0.04	-0.04	-0.01	0.11	0.09	0.02	-0.05	-0.06	-0.06	0.31	-0.06	0.09
18	-0.06	-0.06	-0.05	-0.05	-0.05	-0.03	0.00	0.01	0.04	-0.03	0.00	-0.03	-0.03	0.00	0.01	-0.10	-0.16	-0.08	-0.08	-0.06	-0.04	-0.02	-0.03	-0.06	0.04	-0.16	-0.04
19	-0.11	-0.12	-0.12	-0.12	-0.11	-0.09	-0.10	-0.03	0.01	0.05	-0.02	-0.03	-0.35	-0.23	-0.14	-0.15	-0.13	-0.03	-0.08	0.02	0.26	0.88	0.63	0.61	0.88	-0.35	0.02
20	0.18	0.06	0.13	0.11	0.21	0.26	0.36	0.03	-0.05	-0.20	-0.06	-0.07	-0.03	-0.03	-0.02	-0.03	-0.07	0.40	0.46	0.55	0.63	0.58	0.49	0.45	0.63	-0.20	0.18
21	0.70	0.62	0.72	0.99	0.78	0.99	1.11	0.59	0.75	0.24	0.15	-0.09	0.05	0.52	0.02	0.30	0.26	0.46	1.28	1.62	0.86	0.27	1.44	1.62	1.62	-0.09	0.68
22	1.30	1.16	0.65	1.33	1.49	1.23	0.92	1.12	0.96	0.66	0.24	-0.01	-0.50	-0.27	-0.35	0.18	0.07	0.15	-0.03	-0.05	-0.08	-0.08	-0.06	-0.05	1.49	-0.50	0.42
23	-0.05	-0.06	-0.04	0.02	0.08	0.06	-0.04	0.41	0.94	0.52	-0.17	-0.09	-1.37	-1.77	-0.68	-0.23	-0.06	0.01	-0.06	-0.02	0.04	-0.03	0.07	0.50	0.94	-1.77	-0.08
24	0.84	0.85	0.87	1.03	1.38	1.38	1.56	1.57	1.07	0.41	0.12	-0.51	-2.02	-3.68	-4.07	-3.91	-3.58	-1.12	0.52	0.71	0.55	0.34	0.22	0.44	1.57	-4.07	-0.21
25	0.23	0.19	0.02	-0.05	0.05	-0.09	-0.08	-0.10	-0.06	-0.49	-0.20	-0.04	-0.20	-0.29	0.07	0.39	0.64	1.19	1.93	2.73	2.02	1.73	0.89	0.66	2.73	-0.49	0.46
26	0.82	0.86	0.57	0.54	1.07	1.13	1.34	1.68	1.69	0.75	1.25	0.62	-0.08	-0.38	-1.34	-2.06	-1.61	-0.89	-0.33	-0.05	0.00	0.06	0.03	-0.02	1.69	-2.06	0.24
27	-0.03	0.00	0.04	-0.12	-0.22	-0.23	-0.35	-0.31	-0.33	-0.34	-0.40	-0.75	-0.40	-0.21	-0.24	0.02	0.01	-0.07	-0.20	0.06	0.15	0.17	0.19	0.20	0.20	-0.75	-0.14
28	0.17	0.21	0.21	0.17	0.22	0.14	0.10	0.03	-0.03	-0.07	-0.26	-0.57	-0.65	-0.61	-0.99	-0.77	-0.64	-0.03	0.05	0.25	0.51	0.21	0.62	0.49	0.62	-0.99	-0.05
Max.	**1.30**	**1.16**	**0.87**	**1.33**	**1.49**	**1.38**	**1.56**	**1.68**	**1.69**	**1.01**	**1.25**	**0.74**	**0.71**	**0.69**	**0.95**	**0.99**	**0.87**	**1.19**	**1.93**	**2.73**	**2.02**	**1.73**	**1.44**	**1.62**	**2.73**		
Min.	**-0.11**	**-0.12**	**-0.12**	**-0.12**	**-0.22**	**-0.23**	**-0.35**	**-0.31**	**-0.33**	**-0.49**	**-0.40**	**-0.75**	**-2.02**	**-3.68**	**-4.07**	**-3.91**	**-3.58**	**-1.12**	**-0.33**	**-0.06**	**-0.08**	**-0.08**	**-0.06**	**-0.06**		**-4.07**	
Avg.	**0.33**	**0.30**	**0.27**	**0.29**	**0.34**	**0.33**	**0.34**	**0.34**	**0.34**	**0.20**	**0.17**	**0.04**	**-0.12**	**-0.17**	**-0.19**	**-0.14**	**-0.08**	**0.14**	**0.30**	**0.40**	**0.37**	**0.30**	**0.34**	**0.36**			**0.20**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.50	0.66	0.82	0.63	0.55	0.55	0.77	1.23	1.51	0.56	-1.23	-5.35	-5.93	-4.43	-2.33	-1.14	-0.12	0.37	0.72	1.01	0.98	0.88	0.77	0.50	1.51	-5.93	-0.31
2	0.50	0.58	0.65	0.85	0.71	0.44	0.38	0.02	-0.01	-0.02	-0.02	-0.06	-0.07	-0.13	-0.15	-0.08	-0.04	-0.05	-0.03	0.00	-0.04	-0.01	0.01	-0.03	0.85	-0.15	0.14
3	-0.02	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.07	-0.01	-0.02	-0.07	-0.11	-0.13	-0.30	-0.56	-0.36	-0.24	-0.12	-0.05	-0.01	0.03	0.05	0.05	-0.03	0.05	-0.56	-0.09
4	-0.03	-0.02	0.01	0.02	0.05	0.01	-0.03	-0.03	-0.01	-0.02	-0.01	-0.07	-0.04	-0.11	-0.12	-0.11	-0.08	-0.07	-0.06	-0.06	-0.05	-0.06	-0.05	-0.05	0.05	-0.12	-0.04
5	-0.05	-0.05	-0.06	-0.05	-0.05	-0.07	-0.05	-0.06	-0.06	0.04	0.11	0.13	0.15	0.06	0.09	-0.03	-0.32	-0.09	-0.14	-0.16	0.01	0.14	0.03	0.13	0.15	-0.32	-0.02
6	0.04	0.09	0.38	0.33	0.27	0.21	0.73	0.48	0.83	0.72	0.96	0.45	-1.81	-1.57	-0.98	-0.50	0.08	-0.15	-0.12	0.22	0.22	0.11	-0.02	0.09	0.96	-1.81	0.04
7	0.30	0.13	0.22	0.33	0.22	0.17	0.12	0.02	-0.25	-0.65	-0.66	-1.36	-1.82	-1.03	-0.79	-1.16	-0.92	-0.55	0.05	0.16	0.15	0.16	0.08	0.13	0.33	-1.82	-0.29
8	0.13	0.16	0.07	-0.02	0.04	-0.07	-0.08	-0.07	-0.21	-0.16	-0.06	-0.33	-0.26	-1.14	-0.73	-0.35	-0.15	-0.27	-0.16	-0.26	-0.44	-0.07	0.10	-0.01	0.16	-1.14	-0.18
9	0.13	0.21	0.20	0.26	0.25	0.36	0.25	0.38	0.22	0.14	-0.12	-0.36	-0.65	-0.44	-0.43	-0.82	-0.87	-0.69	-0.03	0.24	0.20	0.37	0.18	0.38	0.38	-0.87	-0.03
10	0.40	0.47	0.65	0.64	0.68	0.82	1.09	0.77	0.50	-0.59	-0.59	-1.96	-2.33	-2.92	-3.02	-2.53	-2.03	-0.69	-0.12	0.30	0.56	0.84	0.96	1.12	1.12	-3.02	-0.29
11	0.74	0.96	1.50	1.39	1.25	1.36	1.43	1.97	1.69	1.08	0.33	0.71	0.38	0.46	0.68	0.86	0.83	0.82	0.69	0.86	0.80	0.77	0.54	0.33	1.97	0.33	0.93
12	0.71	0.70	0.89	0.61	0.11	0.00	-0.02	0.01	-0.02	-0.04	0.58	0.70	0.51	0.14	0.02	-0.25	-0.19	0.10	0.25	0.17	0.11	0.05	0.11	0.13	0.89	-0.25	0.22
13	0.33	0.36	0.29	0.12	0.12	-0.08	0.05	0.13	0.15	-0.04	-0.18	-0.15	-0.08	-0.05	-0.02	0.47	0.75	1.14	1.78	1.71	1.52	1.38	1.53	1.39	1.78	-0.18	0.53
14	1.27	1.92	1.27	1.26	1.50	1.46	1.33	1.50	1.29	0.59	0.40	0.83	0.93	0.47	0.14	0.25	0.47	0.70	0.68	0.70	0.66	0.69	0.66	0.53	1.92	0.14	0.90
15	0.38	0.56	0.37	0.60	0.44	0.47	0.54	0.44	0.21	0.23	0.11	0.08	0.12	0.06	-0.12	-0.05	0.21	0.54	0.74	0.98	1.12	1.05	1.47	1.61	1.61	-0.12	0.51
16	1.36	1.12	0.98	0.98	1.17	1.17	1.12	0.79	0.54	0.30	0.30	0.07	0.08	0.06	0.19	0.47	0.41	0.44	0.71	1.01	0.93	0.77	0.70	0.91	1.36	0.06	0.69
17	0.83	0.62	0.56	0.61	1.01	1.04	0.99	1.20	0.72	0.35	0.13	0.01	-0.10	-0.18	-0.17	-0.14	-0.12	-0.09	-0.06	-0.05	-0.05	-0.05	-0.04	0.02	1.20	-0.18	0.29
18	0.16	0.05	0.14	0.13	0.16	0.13	0.00	-0.01	0.08	-0.04	-0.09	-0.16	-0.17	-0.12	-0.25	-0.18	-0.04	-0.01	0.03	0.08	0.12	0.26	0.47	0.75	0.75	-0.25	0.06
19	0.54	0.46	0.36	0.26	0.15	0.24	0.34	0.52	0.22	0.21	0.06	-0.03	-0.12	-0.15	-0.07	-0.10	-0.10	-0.10	-0.07	-0.07	-0.03	-0.01	-0.05	-0.05	0.54	-0.15	0.10
20	-0.05	-0.05	-0.05	-0.04	-0.01	-0.04	-0.03	0.03	0.24	0.48	0.89	1.22	2.20	3.07	1.12	0.32	0.19	0.21	0.04	0.07	0.08	0.15	0.08	0.21	3.07	-0.05	0.43
21	0.21	0.10	0.06	0.09	0.16	0.02	0.01	0.05	0.07	0.00	0.03	0.19	0.28	0.64	0.81	0.73	0.75	0.58	0.47	0.58	0.69	0.85	0.78	0.83	0.85	0.00	0.37
22	0.58	0.50	0.45	0.54	0.41	0.53	0.38	0.38	0.38	0.40	0.36	0.37	0.41	0.39	0.38	0.40	0.56	0.60	0.73	0.92	1.15	1.32	1.26	1.32	1.32	0.36	0.61
23	1.40	0.94	1.01	1.40	1.57	1.62	1.49	1.62	1.21	2.82	1.34	1.41	3.91	2.99	2.24	1.89	0.94	0.78	0.97	0.79	0.88	0.97	0.59	0.51	3.91	0.51	1.47
24	1.07	0.77	0.67	0.79	0.35	0.41	0.51	0.62	0.88	0.83	0.60	0.54	0.58	0.56	0.60	0.56	0.59	0.33	0.35	0.54	0.83	1.03	1.08	1.05	1.08	0.33	0.67
25	1.03	1.20	0.57	0.46	0.39	0.01	-0.08	0.08	0.12	0.02	0.02	-0.08	-0.13	-0.07	-0.07	0.00	0.12	0.27	0.39	0.50	0.68	0.77	0.57	0.61	1.20	-0.13	0.31
26	0.80	0.94	0.96	1.03	0.95	1.02	0.91	0.65	0.41	0.20	-0.02	-0.18	-0.28	-0.33	-0.38	-0.30	-0.08	0.40	1.02	1.26	1.26	1.01	0.93	0.98	1.26	-0.38	0.55
27	1.57	1.19	0.82	0.81	0.78	0.70	0.59	1.13	1.57	0.51	0.12	0.05	0.00	0.04	-0.02	0.07	0.17	0.41	0.56	0.84	0.65	0.65	0.57	0.59	1.57	-0.02	0.60
28	0.55	0.67	0.74	0.41	0.62	0.45	0.46	0.76	0.66	0.35	-0.05	-0.10	-0.15	-0.16	-0.09	-0.01	0.16	0.66	1.14	1.57	0.83	1.06	1.42	1.43	1.57	-0.16	0.56
29	1.32	1.68	1.90	1.75	1.82	1.63	1.68	1.73	1.36	1.17	0.55	0.02	-0.27	-0.12	-0.13	-0.27	-0.18	0.29	0.84	0.74	0.38	0.57	0.98	0.93	1.90	-0.27	0.85
30	0.72	0.52	0.31	0.21	0.14	0.12	0.08	0.05	-0.05	-0.08	-0.08	-0.10	-0.08	-0.02	-0.10	-0.09	-0.06	-0.05	-0.03	-0.01	-0.04	-0.04	-0.04	-0.04	0.72	-0.10	0.05
31	-0.04	-0.04	-0.03	-0.04	-0.05	-0.05	-0.05	-0.05	-0.07	0.09	0.37	0.49	0.80	0.63	0.95	1.58	0.52	0.45	0.33	0.37	0.13	0.12	0.31	0.17	1.58	-0.07	0.29
Max.	**1.57**	**1.92**	**1.90**	**1.75**	**1.82**	**1.63**	**1.68**	**1.97**	**1.69**	**2.82**	**1.34**	**1.41**	**3.91**	**3.07**	**2.24**	**1.89**	**0.94**	**1.14**	**1.78**	**1.71**	**1.52**	**1.38**	**1.53**	**1.61**	**3.91**		
Min.	**-0.05**	**-0.05**	**-0.06**	**-0.05**	**-0.05**	**-0.08**	**-0.08**	**-0.07**	**-0.25**	**-0.65**	**-1.23**	**-5.35**	**-5.93**	**-4.43**	**-3.02**	**-2.53**	**-2.03**	**-0.69**	**-0.16**	**-0.26**	**-0.44**	**-0.07**	**-0.05**	**-0.05**		**-5.93**	
Avg.	**0.56**	**0.56**	**0.54**	**0.53**	**0.51**	**0.47**	**0.48**	**0.52**	**0.46**	**0.30**	**0.13**	**-0.10**	**-0.13**	**-0.12**	**-0.11**	**-0.03**	**0.04**	**0.20**	**0.38**	**0.48**	**0.46**	**0.51**	**0.52**	**0.53**			**0.32**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.06	0.08	0.21	0.34	0.16	0.16	0.39	0.45	0.69	1.09	1.60	2.20	1.13	2.61	-0.30	-0.34	-0.28	0.20	0.44	0.60	0.22	0.30	0.45	0.01	2.61	-0.34	0.52
2	-0.02	0.01	0.02	-0.01	0.21	0.17	0.46	1.03	1.47	2.22	2.66	2.47	2.93	2.81	5.33	3.80	2.82	2.36	0.64	0.45	0.04	-0.29	-0.35	-0.39	5.33	-0.39	1.28
3	-0.55	-0.38	-0.15	-0.10	-0.04	0.00	-0.05	0.08	-0.03	-0.05	-0.01	-0.05	-0.01	-0.05	-0.07	-0.07	-0.10	-0.11	-0.07	-0.06	-0.02	0.04	0.03	-0.02	0.08	-0.55	-0.08
4	-0.04	-0.03	0.01	-0.02	-0.05	-0.07	-0.01	-0.03	-0.13	-0.30	-0.26	-0.20	-0.17	-0.23	-0.28	-0.10	-0.20	-0.08	0.06	0.20	0.22	0.13	0.09	0.06	0.22	-0.30	-0.06
5	-0.16	-0.29	-0.30	-0.11	-0.16	-0.25	-0.25	-0.24	-0.22	-0.29	-0.26	-0.23	-0.41	-0.38	-0.35	-0.25	-0.12	0.04	0.24	0.41	0.33	0.44	0.47	0.51	0.51	-0.41	-0.08
6	0.40	0.38	0.35	0.40	0.44	0.52	0.72	0.55	0.21	-0.09	-0.25	-0.52	-0.75	-0.83	-0.80	-0.78	-0.69	-0.37	0.14	0.52	0.30	0.44	0.51	0.31	0.72	-0.83	0.05
7	0.41	0.32	0.27	0.63	0.90	0.63	0.63	1.01	0.20	-0.01	-0.29	-0.42	-0.50	-0.43	-0.32	-0.23	-0.06	-0.08	0.02	0.12	0.12	0.11	0.11	0.06	1.01	-0.50	0.13
8	0.07	0.03	0.07	0.10	0.02	-0.06	-0.06	-0.07	-0.06	-0.07	-0.11	-0.10	-0.08	-0.04	-0.06	-0.05	-0.12	-0.18	-0.16	-0.11	-0.08	-0.07	-0.06	-0.05	0.10	-0.18	-0.05
9	-0.05	-0.05	-0.06	-0.05	-0.07	-0.05	-0.09	-0.11	-0.12	-0.17	-0.34	-0.53	-0.58	-0.61	-0.62	-0.62	-0.79	-0.77	-0.58	-0.03	-0.08	-0.05	0.13	-0.04	0.13	-0.79	-0.26
10	-0.06	-0.07	0.04	0.01	0.04	0.07	-0.11	-0.46	-0.43	-0.50	-0.73	-0.43	-0.82	-0.52	0.06	-0.20	-0.11	0.15	0.74	1.24	1.40	0.54	0.75	1.35	1.40	-0.82	0.08
11	1.39	0.96	0.47	0.27	0.14	-0.01	-0.30	-0.38	-0.64	-0.82	-0.94	-1.16	-0.81	-0.93	0.01	-0.10	-0.09	-0.10	-0.10	-0.08	-0.06	-0.04	-0.04	-0.04	1.39	-1.16	-0.14
12	-0.04	-0.03	-0.04	-0.04	-0.04	-0.02	0.00	-0.06	-0.15	-0.14	-0.14	-0.21	-0.23	-0.33	-0.27	-0.41	-0.29	-0.35	-0.25	-0.14	-0.04	0.09	0.33	0.65	0.65	-0.41	-0.09
13	0.30	0.46	0.17	0.06	0.01	0.06	-0.04	-0.19	-0.38	-0.42	-0.68	-0.84	-0.86	-0.99	-1.31	-1.42	-1.07	-0.92	-0.89	-0.44	-0.20	-0.17	-0.23	0.00	0.46	-1.42	-0.41
14	-0.06	-0.12	-0.12	-0.14	-0.10	-0.09	-0.12	-0.20	-0.31	-0.46	-0.32	-0.55	-0.52	-0.41	-0.74	-0.52	-0.24	-0.16	-0.31	-0.18	0.14	0.35	0.54	0.40	0.54	-0.74	-0.18
15	0.31	0.31	0.48	0.48	0.41	0.34	0.32	-0.21	-0.32	-0.03	-0.60	0.00	-0.34	-0.28	-0.10	-0.89	-0.30	0.09	0.11	-0.08	0.92	1.01	1.04	0.97	1.04	-0.89	0.15
16	0.82	0.90	1.03	1.09	0.27	0.32	0.61	0.63	0.96	0.62	0.25	0.39	0.47	0.17	0.25	0.63	0.85	0.79	0.84	0.73	0.49	0.44	0.33	0.39	1.09	0.17	0.59
17	0.48	0.61	0.66	0.63	0.57	0.41	0.70	0.55	0.29	0.16	0.03	-0.15	-0.25	-0.04	0.08	0.28	0.55	0.72	0.81	1.14	1.30	1.01	0.88	1.93	1.93	-0.25	0.56
18	2.14	2.26	1.82	0.95	1.05	1.37	0.96	0.70	0.30	0.19	0.03	-0.21	-0.40	-0.36	-0.02	0.07	0.11	0.20	0.49	0.70	0.55	0.58	0.66	0.68	2.26	-0.40	0.62
19	0.47	0.58	0.38	0.08	0.01	-0.04	-0.10	-0.11	-0.13	-0.17	-0.29	-0.37	-0.40	-0.24	-0.16	-0.23	-0.21	-0.32	-0.42	-0.26	-0.21	-0.17	-0.19	-0.20	0.58	-0.42	-0.11
20	-0.17	-0.15	-0.12	-0.11	-0.10	0.02	0.03	0.08	-0.12	-0.21	-0.37	-0.42	-0.40	-0.29	-0.09	-0.03	-0.07	-0.11	-0.10	-0.08	-0.06	-0.06	-0.05	-0.05	0.08	-0.42	-0.13
21	-0.05	-0.01	0.15	0.44	0.48	0.64	0.72	0.70	0.52	0.71	0.49	0.12	0.13	-0.08	-0.06	0.03	-0.11	-0.10	-0.13	-0.07	-0.05	0.00	0.09	0.66	0.72	-0.13	0.22
22	0.54	0.21	0.05	0.05	0.08	0.12	0.15	0.23	0.11	-0.21	-0.17	-0.11	-0.45	-0.39	-0.15	-0.16	-0.42	-0.33	-0.13	0.10	0.18	0.23	0.36	0.47	0.54	-0.45	0.01
23	0.35	0.20	0.23	0.25	0.27	0.47	0.53	0.23	0.27	-0.02	-0.17	-0.21	-0.23	-0.32	-0.22	-0.24	-0.28	-0.31	-0.08	0.47	0.76	0.91	0.86	1.14	1.14	-0.32	0.20
24	0.79	0.54	0.61	0.64	0.48	0.51	0.30	0.11	-0.02	-0.25	-0.29	-0.33	-0.37	-0.43	-0.37	-0.22	-0.26	-0.27	-0.19	-0.10	-0.06	-0.13	-0.23	-0.18	0.79	-0.43	0.01
25	-0.16	-0.18	-0.18	-0.18	-0.19	-0.17	-0.20	-0.18	-0.20	-0.26	-0.31	-0.28	-0.28	-0.32	-0.27	-0.22	-0.16	-0.12	-0.09	-0.06	0.01	0.00	0.05	0.05	0.05	-0.32	-0.16
26	0.08	0.04	-0.04	0.08	0.13	0.33	0.24	0.40	0.32	0.06	-0.18	-0.13	-0.11	-0.17	-0.23	-0.11	0.02	0.17	0.28	0.37	0.87	0.74	0.64	0.33	0.87	-0.23	0.17
27	0.46	0.29	0.34	0.77	0.78	0.52	0.23	0.37	0.29	-0.05	-0.23	-0.24	-0.13	-0.11	0.18	0.07	0.11	0.19	0.32	0.58	1.09	0.79	1.02	0.98	1.09	-0.24	0.36
28	0.77	0.89	1.01	0.97	0.97	1.01	0.94	0.69	0.18	-0.11	-0.42	-0.34	-0.41	-0.40	-0.25	-0.33	-0.31	-0.32	-0.32	-0.03	0.24	0.35	0.33	0.30	1.01	-0.42	0.23
29	0.73	1.07	1.05	1.01	1.16	1.35	1.24	0.74	0.59	0.45	0.34	0.35	0.42	0.28	0.08	0.06	0.12	0.29	0.40	0.86	1.37	1.78	1.27	1.66	1.78	0.06	0.78
30	1.29	1.51	1.70	1.54	0.96	0.96	0.28	0.04	0.00	-0.24	-0.23	-0.30	-0.32	-0.30	-0.37	-0.46	-0.41	-0.19	-0.03	0.08	0.18	0.15	0.16	0.19	1.70	-0.46	0.26
Max.	**2.14**	**2.26**	**1.82**	**1.54**	**1.16**	**1.37**	**1.24**	**1.03**	**1.47**	**2.22**	**2.66**	**2.47**	**2.93**	**2.81**	**5.33**	**3.80**	**2.82**	**2.36**	**0.84**	**1.24**	**1.40**	**1.78**	**1.27**	**1.93**	**5.33**		
Min.	**-0.55**	**-0.38**	**-0.30**	**-0.18**	**-0.19**	**-0.25**	**-0.30**	**-0.46**	**-0.64**	**-0.82**	**-0.94**	**-1.16**	**-0.86**	**-0.99**	**-1.31**	**-1.42**	**-1.07**	**-0.92**	**-0.89**	**-0.44**	**-0.21**	**-0.29**	**-0.35**	**-0.39**		**-1.42**	
Avg.	**0.35**	**0.34**	**0.34**	**0.33**	**0.29**	**0.31**	**0.27**	**0.21**	**0.11**	**0.02**	**-0.07**	**-0.09**	**-0.16**	**-0.12**	**-0.05**	**-0.10**	**-0.07**	**0.00**	**0.06**	**0.23**	**0.33**	**0.32**	**0.33**	**0.40**			**0.15**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.12	0.17	0.24	0.34	0.36	0.33	0.27	0.14	0.06	-0.01	-0.07	-0.15	-0.22	0.02	0.07	0.03	0.01	0.18	0.19	0.35	0.34	0.39	0.25	0.28	0.39	-0.22	0.15
2	0.32	0.30	0.25	0.19	0.25	0.32	0.27	0.05	-0.10	-0.11	-0.20	-0.20	-0.21	-0.29	-0.20	-0.20	-0.10	0.05	0.08	0.33	0.45	0.45	0.34	0.08	0.45	-0.29	0.09
3	0.02	0.12	0.19	0.10	0.18	0.21	0.12	-0.07	-0.24	-0.44	-0.76	-0.84	-1.04	-0.81	-0.60	-0.57	-0.53	0.08	-0.03	0.12	0.64	0.27	0.20	0.16	0.64	-1.04	-0.15
4	0.15	0.38	0.05	-0.06	-0.06	0.02	-0.01	0.09	0.14	0.02	0.02	-0.01	-0.04	-0.05	-0.03	-0.03	-0.07	-0.04	0.03	0.00	0.01	-0.07	-0.04	-0.05	0.38	-0.07	0.01
5	-0.02	-0.05	-0.09	-0.05	-0.03	0.04	0.08	0.07	0.10	0.07	0.06	-0.15	-0.11	-0.12	-0.17	-0.16	-0.17	-0.09	-0.08	0.02	0.07	0.00	-0.01	-0.09	0.10	-0.17	-0.04
6	-0.07	0.00	0.04	-0.01	-0.04	0.01	-0.01	-0.02	-0.09	-0.07	-0.13	-0.10	-0.11	-0.08	-0.27	-0.47	-0.56	-0.48	-0.32	-0.23	-0.21	-0.20	-0.16	-0.23	0.04	-0.56	-0.16
7	-0.22	-0.23	-0.23	-0.24	-0.24	-0.22	-0.24	-0.25	-0.30	-0.28	-0.38	-0.53	-0.68	-0.45	-0.48	-0.31	-0.32	-0.32	-0.17	-0.17	-0.10	-0.15	-0.15	-0.07	-0.07	-0.68	-0.28
8	0.02	0.11	0.19	0.30	0.35	0.44	0.15	-0.16	-0.54	-0.50	-0.60	-0.55	-0.62	-0.54	-0.59	-0.50	-0.49	-0.22	-0.04	0.02	0.06	0.16	0.26	0.28	0.44	-0.62	-0.12
9	0.28	0.40	0.17	0.18	0.23	0.24	0.19	0.12	-0.08	-0.10	-0.06	-0.23	-0.23	-0.21	-0.23	-0.24	-0.15	-0.03	-0.15	0.00	0.55	0.41	0.43	0.34	0.55	-0.24	0.08
10	0.31	0.42	0.33	0.24	0.36	0.33	0.24	0.35	-0.09	-0.43	0.04	0.38	0.25	0.29	0.22	0.08	0.47	0.33	0.56	0.59	0.52	0.94	0.89	0.78	0.94	-0.43	0.35
11	0.47	0.09	0.25	0.37	0.03	0.01	-0.11	-0.16	-0.23	-0.28	-0.26	0.34	0.23	1.26	0.84	0.21	1.15	0.94	0.98	1.30	1.32	1.66	1.48	0.75	1.66	-0.28	0.53
12	0.85	1.48	0.75	0.85	0.97	0.95	0.66	0.48	0.44	0.45	0.41	0.60	0.54	0.52	0.62	0.63	0.64	0.98	1.09	1.61	1.13	0.87	1.13	1.00	1.61	0.41	0.82
13	1.31	1.62	1.83	1.24	1.35	1.10	0.34	0.12	-0.22	-0.11	-0.60	-0.46	-0.28	-0.27	-0.52	-0.49	-0.61	-0.20	-0.03	0.16	0.20	0.24	0.21	0.33	1.83	-0.61	0.26
14	0.48	0.58	0.63	0.82	0.56	0.47	0.15	-0.05	-0.11	-0.33	-0.43	-0.45	-0.38	-0.41	-0.37	-0.38	-0.26	-0.08	0.07	0.25	0.29	0.42	0.26	0.20	0.82	-0.45	0.08
15	0.20	0.36	0.46	0.37	0.17	0.19	0.19	-0.21	-0.33	-0.13	-0.17	-0.24	-0.72	-0.55	-0.55	-0.64	-0.80	-0.76	-0.38	-0.20	0.61	0.88	0.61	0.44	0.88	-0.80	-0.05
16	0.34	0.18	0.17	0.23	0.01	0.10	-0.20	-0.09	-0.47	-0.57	-0.39	-0.85	-1.31	-1.20	-1.09	-0.53	-0.80	-0.81	-0.62	-0.25	0.64	1.27	0.95	1.35	1.35	-1.31	-0.16
17	0.79	0.45	0.58	0.91	0.60	0.46	0.10	-0.28	-0.50	-0.59	-0.54	-0.75	-0.71	-0.69	-0.50	-0.33	-0.53	-0.32	-0.14	0.00	0.19	0.16	0.17	0.22	0.91	-0.75	-0.05
18	0.33	0.38	0.64	0.72	0.26	0.04	0.03	-0.06	-0.16	-0.46	-0.48	-0.64	-0.89	-0.70	-0.72	-1.09	-0.46	-0.07	0.21	0.12	0.21	0.34	0.43	0.23	0.72	-1.09	-0.08
19	0.16	0.30	0.28	0.19	0.15	0.61	0.26	-0.20	-0.50	-0.68	-0.73	-0.56	-0.33	-0.21	-0.07	-0.08	-0.02	-0.04	-0.05	-0.03	-0.02	-0.05	-0.06	-0.05	0.61	-0.73	-0.07
20	-0.02	-0.01	0.01	0.01	0.00	0.05	0.13	0.20	0.16	0.13	0.07	-0.01	-0.15	-0.32	-0.25	-0.16	-0.02	-0.05	-0.14	0.13	0.39	0.33	0.25	0.20	0.39	-0.32	0.04
21	0.18	0.12	0.04	-0.04	-0.05	-0.02	-0.02	-0.08	-0.07	-0.08	-0.19	-0.44	-0.53	-0.42	-0.62	-0.25	-0.09	0.02	-0.04	0.07	0.24	0.29	0.37	0.41	0.41	-0.62	-0.05
22	0.50	0.46	0.42	0.37	0.35	0.22	0.02	-0.16	-0.37	-0.53	-0.69	-0.59	-0.74	-0.85	-0.82	-0.66	-0.40	-0.35	-0.14	0.25	0.81	0.86	1.03	1.20	1.20	-0.85	0.01
23	0.93	1.08	1.39	1.02	1.20	0.60	0.57	-0.18	-0.44	-0.47	-0.55	-0.65	-0.80	-0.97	-0.57	-0.49	-0.44	0.09	0.24	0.37	0.72	1.41	1.61	2.12	2.12	-0.97	0.33
24	2.58	1.51	1.13	1.43	1.27	0.85	0.50	-0.12	-0.29	-0.34	-0.49	-0.48	-0.61	-0.70	-0.81	-0.86	-0.31	-0.05	0.09	1.37	1.75	1.76	1.31	2.01	2.58	-0.86	0.52
25	2.15	1.93	2.37	1.92	2.41	1.89	1.02	-0.08	-0.32	-0.37	-0.54	-0.65	-0.72	-0.67	-0.66	-0.80	-0.91	-0.78	-0.11	0.10	0.57	1.25	1.91	1.70	2.41	-0.91	0.53
26	2.10	2.37	2.61	2.47	2.87	0.94	0.57	-0.05	-0.41	-0.53	-0.63	-0.80	-1.02	-0.98	-0.85	-0.77	-0.54	-0.16	0.12	0.70	1.06	1.25	0.71	1.45	2.87	-1.02	0.52
27	1.98	1.08	0.64	1.11	0.87	0.83	0.38	0.23	-0.18	-0.56	-0.55	-0.60	-0.99	-0.80	-0.96	-1.12	-0.68	-0.58	-0.21	0.49	0.79	1.65	2.33	1.74	2.33	-1.12	0.29
28	1.62	1.43	0.97	0.76	0.88	0.71	0.16	-0.44	-0.72	-0.69	-0.65	-0.72	-0.89	-0.90	-0.89	-0.85	-0.74	-0.66	-0.51	-0.35	0.23	0.69	1.08	1.30	1.62	-0.90	0.03
29	1.47	1.43	1.36	1.25	1.08	0.56	-0.12	-0.57	-0.82	-1.00	-1.13	-1.23	-1.29	-1.32	-1.24	-1.12	-0.95	-0.71	-0.38	-0.09	0.24	0.50	0.66	0.93	1.47	-1.32	-0.10
30	0.97	0.97	1.05	0.65	0.43	0.38	-0.06	-0.42	-0.64	-0.91	-1.22	-1.22	-1.11	-1.13	-1.03	-0.93	-0.57	-0.46	-0.16	-0.03	-0.02	0.04	0.22	0.42	1.05	-1.22	-0.20
31	0.19	0.07	0.11	0.00	0.00	-0.11	-0.19	-0.35	-0.30	-0.33	-0.42	-0.52	-0.42	-0.40	-0.45	-0.34	-0.27	-0.27	-0.24	-0.19	-0.15	-0.12	-0.10	-0.09	0.19	-0.52	-0.20
Max.	**2.58**	**2.37**	**2.61**	**2.47**	**2.87**	**1.89**	**1.02**	**0.48**	**0.44**	**0.45**	**0.41**	**0.60**	**0.54**	**1.26**	**0.84**	**0.63**	**1.15**	**0.98**	**1.09**	**1.61**	**1.75**	**1.76**	**2.33**	**2.12**	**2.87**		
Min.	**-0.22**	**-0.23**	**-0.23**	**-0.24**	**-0.24**	**-0.22**	**-0.24**	**-0.57**	**-0.82**	**-1.00**	**-1.22**	**-1.23**	**-1.31**	**-1.32**	**-1.24**	**-1.12**	**-0.95**	**-0.81**	**-0.62**	**-0.35**	**-0.21**	**-0.20**	**-0.16**	**-0.23**		**-1.32**	
Avg.	**0.66**	**0.63**	**0.61**	**0.57**	**0.54**	**0.41**	**0.18**	**-0.07**	**-0.24**	**-0.33**	**-0.39**	**-0.43**	**-0.52**	**-0.45**	**-0.44**	**-0.43**	**-0.31**	**-0.16**	**-0.01**	**0.22**	**0.44**	**0.58**	**0.60**	**0.62**			**0.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.08	-0.04	0.03	0.17	0.14	-0.09	-0.21	-0.30	-0.44	-0.53	-0.65	-0.79	-1.04	-1.11	-1.15	-1.06	-0.88	-0.77	-0.37	-0.51	-0.03	0.35	0.91	0.74	0.91	-1.15	-0.32
2	0.84	0.82	0.99	1.32	0.99	0.95	0.65	-0.40	-0.68	-0.81	-1.06	-1.07	-0.93	-0.96	-0.66	-0.63	-0.82	-0.39	-0.42	-0.06	0.06	0.60	1.01	0.90	1.32	-1.07	0.01
3	1.08	0.66	0.70	0.78	0.28	-0.05	-0.25	-0.35	-0.97	-1.05	-1.23	-1.41	-1.47	-1.50	-1.48	-1.34	-1.22	-1.02	-0.76	-0.45	-0.05	0.38	0.61	0.78	1.08	-1.50	-0.39
4	0.92	1.31	0.90	0.99	0.76	0.26	-0.24	-0.55	-0.85	-1.09	-1.28	-1.43	-1.47	-1.58	-1.53	-1.42	-1.21	-1.01	-0.70	-0.39	-0.07	0.45	1.27	1.42	1.42	-1.58	-0.27
5	1.05	1.03	0.92	1.30	1.59	0.72	-0.15	-0.41	-0.67	-0.93	-0.96	-0.89	-1.00	-1.14	-1.14	-1.11	-1.12	-0.90	-0.72	-0.52	-0.14	1.08	1.35	1.03	1.59	-1.14	-0.07
6	1.01	1.40	1.39	1.23	0.47	0.29	-0.20	-0.44	-0.73	-0.78	-0.96	-1.12	-1.41	-1.38	-1.30	-1.14	-0.97	-0.71	-0.45	-0.16	0.00	0.02	-0.01	0.07	1.40	-1.41	-0.25
7	0.16	0.17	0.22	0.08	0.03	-0.06	-0.14	-0.20	-0.50	-0.31	-0.29	-0.46	-0.34	-0.40	-0.28	-0.17	-0.13	-0.15	-0.14	-0.10	-0.08	-0.06	-0.04	-0.02	0.22	-0.50	-0.13
8	-0.01	0.00	0.02	0.01	0.00	0.01	-0.04	-0.05	-0.12	-0.26	-0.23	-0.26	-0.33	-0.30	-0.19	-0.09	-0.03	0.03	0.03	0.03	0.00	0.00	0.03	0.05	0.05	-0.33	-0.07
9	0.05	0.04	0.03	0.01	0.02	0.05	0.09	0.03	-0.02	-0.25	-0.32	-0.43	-1.11	-0.61	-0.70	-0.26	-0.23	-0.28	-0.20	-0.18	-0.09	-0.10	-0.09	-0.02	0.09	-1.11	-0.19
10	-0.06	-0.04	-0.07	-0.09	-0.07	-0.06	-0.09	-0.21	-0.33	-0.72	-0.77	-0.82	-0.62	-0.80	-0.88	-0.87	-0.47	-0.40	-0.26	-0.11	-0.03	-0.03	0.02	0.03	0.03	-0.88	-0.32
11	0.00	0.01	0.01	0.00	0.00	-0.04	0.00	-0.04	-0.08	-0.16	-0.16	-0.22	-0.16	-0.16	-0.12	-0.19	-0.18	-0.12	-0.08	-0.05	-0.01	0.00	-0.04	-0.03	0.01	-0.22	-0.08
12	-0.02	0.04	0.04	0.08	0.05	0.04	0.03	-0.02	-0.07	-0.13	-0.17	-0.14	-0.16	-0.25	-0.26	-0.25	-0.17	-0.18	-0.14	-0.13	-0.06	-0.06	-0.04	-0.03	0.08	-0.26	-0.08
13	-0.04	-0.05	-0.01	0.02	0.00	-0.08	-0.17	-0.28	-0.52	-0.26	-0.47	-0.55	-0.82	-0.81	-0.82	-0.76	-0.78	-0.60	-0.44	-0.28	-0.04	0.41	0.53	0.19	0.53	-0.82	-0.27
14	0.69	0.21	0.31	0.15	0.35	0.50	-0.02	-0.23	-0.41	-0.38	-0.53	-0.64	-0.65	-0.54	-0.38	-0.38	-0.37	-0.24	-0.12	-0.21	-0.13	0.18	0.37	0.16	0.69	-0.65	-0.10
15	0.35	0.62	0.95	1.15	0.65	0.20	-0.05	-0.22	-0.35	-0.72	-0.92	-0.98	-0.79	-0.65	-0.64	0.04	0.11	-0.18	-0.18	-0.10	-0.12	-0.07	-0.01	-0.09	1.15	-0.98	-0.08
16	0.05	0.18	0.33	0.37	0.42	0.10	-0.09	-0.21	-0.15	-0.21	-0.24	-0.25	-0.27	-0.21	-0.26	-0.28	-0.21	-0.15	-0.13	-0.02	-0.07	-0.01	0.25	0.27	0.42	-0.28	-0.03
17	0.36	0.53	0.80	0.88	0.62	0.53	0.13	-0.26	-0.46	-0.61	-0.89	-0.68	-0.85	-1.22	-0.57	-0.70	-0.63	-0.46	-0.27	-0.21	-0.18	-0.14	-0.10	-0.09	0.88	-1.22	-0.19
18	-0.09	-0.05	0.14	0.25	0.49	0.11	-0.16	-0.28	-0.48	-0.53	-0.55	-0.62	-0.33	-0.46	-0.53	-0.50	-0.35	-0.34	-0.22	-0.13	-0.06	0.01	0.04	0.07	0.49	-0.62	-0.19
19	0.13	0.11	0.13	0.35	0.44	0.07	-0.17	-0.25	-0.41	-0.41	-0.68	-0.50	-0.48	-0.63	-0.71	-0.73	-0.47	-0.65	-0.60	-0.23	-0.19	-0.25	-0.21	-0.08	0.44	-0.73	-0.27
20	0.13	0.34	0.48	0.69	0.90	0.24	-0.19	-0.28	-0.35	-0.53	-0.44	-0.58	-0.65	-0.52	-0.47	-0.32	-0.44	-0.34	-0.25	-0.36	0.07	0.37	0.59	0.60	0.90	-0.65	-0.06
21	0.83	0.85	0.66	0.63	0.45	0.34	0.24	-0.33	-0.59	-0.78	-0.90	-0.92	-0.77	-0.40	-0.64	-0.84	-0.68	-0.44	-0.37	-0.38	-0.27	0.19	1.20	1.17	1.20	-0.92	-0.07
22	0.71	0.72	0.86	1.41	1.14	0.64	-0.03	-0.16	-0.42	-0.40	-0.53	-0.92	-0.91	-0.27	-0.24	-0.18	-0.20	-0.18	-0.19	-0.10	-0.07	-0.06	-0.04	-0.03	1.41	-0.92	0.02
23	-0.01	0.11	0.22	0.20	0.13	0.09	-0.01	-0.07	-0.13	-0.26	-0.43	-0.65	-0.69	-0.90	-0.75	-0.65	-0.41	-0.41	-0.35	-0.12	-0.04	0.20	0.29	0.36	0.36	-0.90	-0.18
24	0.50	0.42	0.25	0.31	0.45	0.23	-0.18	-0.44	-0.67	-0.73	-0.87	-0.81	-0.79	-0.61	-0.65	-0.55	-0.81	-0.26	0.12	-0.04	0.15	0.54	0.54	0.54	0.54	-0.87	-0.14
25	0.46	0.31	0.84	1.23	1.16	0.49	-0.06	-0.33	-0.41	-0.58	-0.70	-0.68	-0.76	-1.05	-0.99	-1.09	-1.12	-0.66	-0.22	-0.10	0.04	0.30	0.63	0.59	1.23	-1.12	-0.11
26	0.62	0.64	0.68	0.59	0.40	0.45	-0.12	-0.25	-0.51	-0.74	-0.87	-1.03	-1.10	-0.87	-0.52	-0.62	-0.50	-0.51	-0.61	-0.33	-0.04	0.08	0.32	0.33	0.68	-1.10	-0.19
27	0.37	0.64	0.84	0.53	0.66	0.42	-0.27	-0.61	-0.77	-0.79	-0.60	-0.75	-0.82	-0.79	-1.10	-1.11	-1.14	-0.98	-0.80	-0.52	-0.24	0.14	0.35	0.40	0.84	-1.14	-0.29
28	0.78	0.58	1.77	1.30	0.26	0.09	-0.30	-0.64	-0.68	-0.71	-0.53	-1.03	-0.98	-1.01	-0.69	-0.53	-0.47	-0.38	-0.30	-0.22	-0.17	0.00	0.10	-0.03	1.77	-1.03	-0.16
29	-0.01	-0.04	-0.12	-0.10	-0.10	-0.14	-0.19	-0.29	-0.50	-0.54	-0.57	-0.54	-0.55	-0.75	-0.78	-1.05	-0.61	-0.51	-0.36	-0.21	-0.07	-0.06	-0.09	-0.08	-0.01	-1.05	-0.34
30	-0.07	-0.08	-0.08	-0.06	-0.07	-0.08	-0.10	-0.12	-0.19	-0.38	-0.36	-0.50	-0.75	-0.66	-0.69	-0.53	-0.58	-0.58	-0.43	-0.34	-0.15	0.04	-0.04	-0.12	0.04	-0.75	-0.29
Max.	**1.08**	**1.40**	**1.77**	**1.41**	**1.59**	**0.95**	**0.65**	**0.03**	**-0.02**	**-0.13**	**-0.16**	**-0.14**	**-0.16**	**-0.16**	**-0.12**	**0.04**	**0.11**	**0.03**	**0.12**	**0.03**	**0.15**	**1.08**	**1.35**	**1.42**	**1.77**		
Min.	**-0.09**	**-0.08**	**-0.12**	**-0.10**	**-0.10**	**-0.14**	**-0.30**	**-0.64**	**-0.97**	**-1.09**	**-1.28**	**-1.43**	**-1.47**	**-1.58**	**-1.53**	**-1.42**	**-1.22**	**-1.02**	**-0.80**	**-0.52**	**-0.27**	**-0.25**	**-0.21**	**-0.12**		**-1.58**	
Avg.	**0.36**	**0.38**	**0.47**	**0.53**	**0.42**	**0.21**	**-0.08**	**-0.27**	**-0.45**	**-0.55**	**-0.64**	**-0.72**	**-0.77**	**-0.75**	**-0.70**	**-0.64**	**-0.57**	**-0.46**	**-0.33**	**-0.22**	**-0.07**	**0.15**	**0.32**	**0.30**			**-0.17**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.16	-0.10	-0.13	-0.11	-0.10	-0.15	-0.17	-0.19	-0.30	-0.28	-0.55	-0.55	-0.56	-1.01	-0.96	-0.97	-1.01	-0.93	-0.81	-0.61	-0.28	0.18	0.48	0.64	0.64	-1.01	-0.36
2	0.62	0.65	1.17	1.08	0.75	0.70	-0.13	-0.53	-0.74	-0.89	-0.97	-1.12	-1.21	-1.18	-1.24	-1.18	-1.06	-0.95	-0.76	-0.44	-0.04	0.43	0.79	0.65	1.17	-1.24	-0.23
3	0.48	0.47	0.62	0.76	0.89	0.42	-0.18	-0.47	-0.51	-0.89	-0.92	-0.95	-0.85	-0.91	-1.02	-0.80	-0.71	-0.78	-0.73	-0.47	-0.20	0.42	0.88	0.72	0.89	-1.02	-0.20
4	0.76	0.94	1.19	0.93	0.53	0.71	0.16	-0.28	-0.45	-0.59	-0.76	-0.77	-0.98	-1.02	-0.96	-1.03	-1.27	-1.03	-0.84	-0.54	-0.19	0.21	0.34	0.38	1.19	-1.27	-0.19
5	0.49	0.46	0.42	0.67	0.98	0.61	0.07	-0.20	-0.25	-0.38	-0.49	-0.66	-0.61	-0.71	-1.07	-1.10	0.07	0.40	0.01	-0.10	0.19	0.27	0.30	0.65	0.98	-1.10	0.00
6	0.80	0.99	0.75	0.87	0.75	1.34	0.03	-0.31	-0.47	-0.66	-0.63	-0.65	-0.55	-0.85	-1.21	-1.16	-0.67	-0.07	-0.10	-0.08	0.01	-0.11	0.06	0.04	1.34	-1.21	-0.08
7	-0.09	-0.13	-0.13	-0.13	-0.11	-0.10	-0.13	-0.14	-0.16	-0.16	-0.20	-0.20	-0.25	-0.14	-0.21	-0.24	-0.25	-0.15	-0.15	-0.13	-0.10	-0.09	-0.11	-0.11	-0.09	-0.25	-0.15
8	-0.10	-0.12	-0.12	-0.11	-0.09	-0.12	-0.16	-0.20	-0.33	-0.41	-0.30	-0.30	-0.41	-0.43	-0.34	-0.30	-0.33	-0.45	-0.41	-0.38	-0.32	0.25	0.34	0.21	0.34	-0.45	-0.21
9	0.09	0.14	0.41	0.51	0.67	0.13	-0.18	-0.36	-0.53	-0.40	-0.62	-0.87	-1.03	-1.07	-0.91	-1.13	-0.98	-0.81	-0.50	-0.21	0.04	0.24	0.20	0.15	0.67	-1.13	-0.29
10	0.12	0.13	0.10	0.13									0.03	-0.09	-0.12	-0.15	-0.26	-0.55	-0.47	-0.81	-0.91	-1.18	-0.33	0.59	0.59	-1.18	-0.24
11			-0.54	-0.41	-0.15	-0.15	0.00	0.06	0.05		-0.02	-0.06	-0.04	0.00	-0.01	-0.06	-0.17	-0.22	0.58				-0.74	-1.07	0.58	-1.07	-0.16
12	-1.08	-0.87	-0.71	-0.66	-0.65	-0.23	0.04	0.23	0.25	0.29	0.17	0.29	0.33	0.45	0.21	-0.24	-0.53	-0.67	-0.88	-1.02	-1.07	-1.15	-1.11	-1.07	0.45	-1.15	-0.40
13	-0.97	-0.92	-0.31	-0.59	-0.38	0.03	0.55	1.25	1.23	1.15	1.46	1.54	1.31	1.44	0.42	0.29	-0.28	-0.33	-0.45	-0.53	-0.57	-0.54	-0.83	-0.78	1.54	-0.97	0.13
14	-0.43	-0.31	-0.31	-0.27	-0.23	-0.12	-0.10	-0.10	-0.08	-0.08	-0.09	-0.08	-0.08	-0.09	-0.11	-0.20	-0.25	-0.29	-0.36	-0.44	-0.51	-0.52	-0.50	-0.38	-0.08	-0.52	-0.25
15	-0.31	-0.27	-0.22	-0.18	-0.16	-0.13	-0.11	-0.10	-0.09	-0.08	-0.04	-0.04	-0.06	-0.07	-0.08	-0.19	-0.29	-0.35	-0.39	-0.56	-0.68	-0.60	-0.77	-0.76	-0.04	-0.77	-0.27
16	-0.74	-0.83	-0.75	-0.62	-0.36	-0.15	-0.12	-0.11	-0.06	-0.14	-0.10	-0.06	0.10	0.13	0.04	-0.03	-0.13	-0.15	-0.18	-0.42	-0.56	-0.62	-0.52	-0.76	0.13	-0.83	-0.30
17	-0.77	-0.66	-0.33	-0.19	-0.09	-0.04	-0.02	0.01	0.01	0.01	0.01	-0.02	-0.03	-0.04	0.01	-0.01	-0.08	-0.16	-0.24	-0.49	-0.39	-0.36	-0.57	-0.53	0.01	-0.77	-0.21
18	-0.31	-0.29	-0.14	-0.12	-0.10	-0.07	-0.06	-0.03	-0.03	-0.01	-0.03	-0.05	-0.06	-0.06	-0.05	-0.07	-0.10	-0.22	-0.50	-0.70	-0.54	-0.38	-0.77	-0.48	-0.01	-0.77	-0.21
19	-0.29	-0.19	-0.15	-0.13	-0.11	-0.06	-0.02	0.02	0.04	0.06	0.07	0.06	0.08	0.07	0.26	0.13	-0.15	-0.37	-0.48	-0.63	-0.49	-0.62	-0.64	-0.46	0.26	-0.64	-0.17
20	-0.79	-0.68	-0.62	-0.50	-0.15	0.25	0.73	0.27	0.21	0.65	1.06	0.88	0.93	1.10	1.62	0.58	-0.23	-0.57	-0.78	-0.75	-1.00	-0.72	-1.09	-0.93	1.62	-1.09	-0.02
21	-0.87	-0.85	-0.60	-0.31	-0.27	-0.03	-0.03	-0.05	-0.14	-0.14	0.06	0.35	0.49	0.50	0.45	0.42	-0.31	-0.53	-0.60	-0.77	-0.71	-0.28	-0.23	-0.32	0.50	-0.87	-0.20
22	-0.58	-0.45	-0.46	-0.32	-0.17	-0.03	0.32	0.32	0.46	0.48	0.44	0.30	0.35	0.33	0.39	0.32	0.00	-0.21	-0.47	-0.46	-0.54	-0.52	-0.82	-0.80	0.48	-0.82	-0.09
23	-0.56	-0.37	-0.26	-0.17	-0.12	-0.04	0.06	0.14	0.17	0.18	0.12	0.06	0.05	0.06	-0.03	-0.06	-0.13	-0.11	-0.30	-0.28	-0.29	-0.22	-0.13	-0.19	0.18	-0.56	-0.10
24	-0.22	-0.22	-0.12	-0.15	-0.09	-0.05	-0.02	0.07	0.07	0.01	-0.02	-0.02	-0.01	0.04	0.09	0.15	0.05	0.01	-0.14	-0.17	-0.26	-0.27	-0.20	-0.23	0.15	-0.27	-0.07
25	-0.25	-0.23	-0.20	-0.15	-0.12	-0.10	-0.09	-0.05	-0.04	-0.06	-0.04	0.01	0.02	-0.01	0.05	0.05	-0.11	-0.17	-0.30	-0.31	-0.41	-0.42	-0.52	-0.74	0.05	-0.74	-0.17
26	-0.67	-0.57	-0.58	-0.51	-0.32	-0.20	-0.06	0.03	0.02	0.02	0.16	0.25	0.13	0.24	0.20	0.16	-0.07	-0.17	-0.45	-0.67	-0.88	-1.05	-1.01	-1.02	0.25	-1.05	-0.29
27	-1.29	-1.26	-1.10	-0.91	-0.62	-0.24	-0.05	-0.15	-0.18	-0.16	-0.13	-0.04	0.08	0.03	0.09	0.05	-0.26	-0.34	-0.43	-0.31	-0.48	-0.54	-0.77	-0.77	0.09	-1.29	-0.41
28	-0.76	-0.70	-0.62	-0.46	-0.21	-0.01	0.41	0.44	0.24	0.18	0.19	0.29	0.29	0.39	0.22	0.11	-0.30	-0.50	-0.60	-0.61	-0.65	-0.69	-1.09	-0.99	0.44	-1.09	-0.23
29	-0.48	-0.29	-0.36	-0.40	-0.26	-0.21	-0.14	-0.10	-0.10	-0.09	-0.09	-0.04	-0.04	-0.08	-0.09	-0.11	-0.14	-0.19	-0.24	-0.23	-0.32	-0.71	-1.10	-1.00	-0.04	-1.10	-0.28
30	-0.91	-0.80	-1.06	-0.76	-0.29	-0.24	-0.16	-0.10	-0.05	-0.05	-0.04	-0.04	-0.06	-0.10	-0.11	-0.17	-0.15	-0.20	-0.27	-0.35	-0.39	-0.45	-0.56	-0.64	-0.04	-1.06	-0.33
31	-0.62	-0.47	-0.71	-0.29	-0.31	0.08	0.30	0.40	0.60	0.34	0.35	0.12	0.15	-0.01	-0.04	-0.12	-0.20	-0.37	-0.40	-0.39	-0.53	-0.51	-0.83	-0.66	0.60	-0.83	-0.17
Max.	**0.80**	**0.99**	**1.19**	**1.08**	**0.98**	**1.34**	**0.73**	**1.25**	**1.23**	**1.15**	**1.46**	**1.54**	**1.31**	**1.44**	**1.62**	**0.58**	**0.07**	**0.40**	**0.58**	**-0.08**	**0.19**	**0.43**	**0.88**	**0.72**	**1.62**		
Min.	**-1.29**	**-1.26**	**-1.10**	**-0.91**	**-0.65**	**-0.24**	**-0.18**	**-0.53**	**-0.74**	**-0.89**	**-0.97**	**-1.12**	**-1.21**	**-1.18**	**-1.24**	**-1.18**	**-1.27**	**-1.03**	**-0.88**	**-1.02**	**-1.07**	**-1.18**	**-1.11**	**-1.07**		**-1.29**	
Avg.	**-0.33**	**-0.26**	**-0.19**	**-0.11**	**-0.03**	**0.06**	**0.02**	**-0.01**	**-0.04**	**-0.07**	**-0.06**	**-0.08**	**-0.08**	**-0.10**	**-0.15**	**-0.23**	**-0.33**	**-0.37**	**-0.41**	**-0.46**	**-0.43**	**-0.35**	**-0.38**	**-0.34**			**-0.20**

Total Hours in Month 744 **Hours Data Available** 730 **Data Recovery** 98.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	89.6	92.0	92.5	95.8	99.0	99.2	98.3	96.3	98.3	95.2	93.6	92.0	92.5	88.6	88.2	87.7	80.0	80.4	80.1	87.8	91.7	94.9	97.0	99.0	99.2	80.0	92.1
2	97.2	95.6	93.4	93.3	93.3	93.5	90.6	86.7	84.6	81.4	78.9	76.6	78.2	87.3	81.9	82.5	85.3	84.4	84.8	81.3	77.7	77.4	77.5	77.8	97.2	76.6	85.1
3	76.7	79.9	86.0	84.3	85.6	86.8	87.2	87.6	84.5	78.8	72.8	60.9	61.7	63.9	64.9	74.5	83.1	75.6	77.8	79.3	81.9	84.2	82.4	86.7	87.6	60.9	78.6
4	93.3	92.6	94.2	94.9	95.0	95.2	95.0	96.0	94.4	92.5	91.1	89.7	89.2	90.7	91.6	91.4	87.9	88.9	87.1	88.6	93.0	94.4	96.2	97.4	97.4	87.1	92.5
5	97.8	98.0	98.2	98.4	98.4	98.5	98.5	98.1	95.2	96.7				85.5	82.0	79.7	78.9	79.3	79.2	82.8	86.6	87.2	89.9	90.1	98.5	78.9	90.4
6	91.1	89.1	89.4	93.8	93.6	93.5	92.0	88.6	86.6	83.4	79.9	76.4	71.5	65.7	62.4	64.6	63.6	63.4	63.5	73.6	78.8	82.6	84.8	87.5	93.8	62.4	80.0
7	86.6	88.8	90.1	90.8	91.5	89.9	92.0	91.0	86.6	84.4	80.7	80.2	77.6	74.6	71.7	70.1	66.8	68.5	70.8	74.0	80.5	85.2	88.1	89.3	92.0	66.8	82.1
8	89.3	88.3	91.9	93.4	93.5	94.5	92.5	91.9	88.4	79.1	71.2	68.2	62.5	60.0	61.3	59.6	59.6	60.1	60.6	61.8	60.0	60.8	61.2	69.0	94.5	59.6	74.1
9	68.9	68.5	69.7	70.8	68.8	70.6	76.8	74.8	69.3	65.5	62.3	62.9	60.7	59.9	60.2	59.1	53.1	50.2	54.2	59.2	68.3	73.6	74.1	75.9	76.8	50.2	65.7
10	81.8	83.9	84.6	88.9	90.9	93.6	93.2	94.3	93.5	85.8	74.1	66.8	60.8	56.1	51.3	48.8	49.7	51.5	55.8	58.5	62.2	61.2	67.2	74.6	94.3	48.8	72.1
11	76.0	81.3	84.1	84.9	84.6	86.2	85.4	84.2	78.5	74.2	67.3	60.5	55.3	48.6	45.2	41.4	35.0	34.2	36.4	39.2	51.4	54.5	60.8	61.4	86.2	34.2	62.9
12	59.0	68.9	75.6	75.2	73.5	75.6	68.0	67.0	67.0	64.6	54.8	52.5	48.4	46.0	46.7	49.2	51.1	54.3	58.1	64.1	68.5	71.2	72.2	71.4	75.6	46.0	62.6
13	69.5	69.0	70.1	69.7	71.0	75.1	72.4	71.5	73.6	69.3	60.7	56.9	54.3	53.9	56.3	58.8	60.5	65.5	61.0	66.5	70.7	73.1	74.7	75.7	75.7	53.9	66.7
14	74.6	71.0	67.8	67.3	75.0	81.6	68.3	97.1	99.1	93.3	82.3	75.3	69.4	64.3	62.0	59.4	62.5	61.4	61.6	73.0	82.3	84.5	89.7	85.3	99.1	59.4	75.3
15	74.5	77.1	92.2	96.3	96.1	97.9	98.4	98.8	99.1	99.2	98.7	89.4	81.0	77.9	78.0	80.2	77.8	81.7	86.0	89.2	91.8	92.5	93.9	93.3	99.2	74.5	89.2
16	91.0	92.0	91.7	91.6	92.5	91.1	91.3	90.0	86.9	82.5	78.7	81.2	82.8	84.9	82.2	84.0	85.5	86.4	87.7	85.6	87.1	89.0	89.6	89.4	92.5	78.7	87.3
17	89.3	86.7	91.3	91.0	89.5	95.2	96.5	97.2	95.4	93.2	92.7	90.0	91.1	95.4	93.3	92.0	87.8	87.0	89.7	86.3	90.4	91.2	90.6	88.3	97.2	86.3	91.3
18	88.8	88.8	88.0	89.4	92.2	93.6	91.5	92.5	95.2	96.3	90.8	86.5	82.3	82.0	88.6	92.6	93.7	90.4	89.4	92.6	95.6	97.1	97.9	98.2	98.2	82.0	91.4
19	98.3	98.5	98.6	98.8	98.7	98.7	99.0	98.7	94.2	89.6	87.2	76.7	62.7	52.6	47.2	48.3	46.8	46.7	52.4	61.9	67.1	72.9	74.9	78.4	99.0	46.7	77.0
20	80.5	80.5	84.6	85.4	85.6	93.2	95.7	97.2	94.7			81.4	78.5	74.2	73.0	72.4	75.2	78.9	84.9	94.2	94.4	95.7	97.0	97.6	97.6	72.4	86.1
21	97.3	97.1	97.8	97.7	97.6	97.3	97.3	95.0	89.7	83.8	74.5	65.9	71.4	65.8	63.7	62.3	57.6	55.2	53.4	65.3	73.8	77.3	77.8	77.7	97.8	53.4	78.8
22	77.0	77.5	77.3	77.4	75.8	77.8	81.4	85.7	87.4	90.3	95.8	87.1	82.0	88.3	90.9	93.7	97.1	98.0	97.5	97.4	97.7	98.4	98.8	99.0	99.0	75.8	88.7
23	99.0	99.1	99.0	98.9	98.9	98.8	98.8	98.8	96.7	96.5	97.0	98.0	98.5	98.4	98.4	98.1	97.9	98.1	98.4	98.7	98.8	98.9	99.1	99.2	99.2	96.5	98.4
24	99.3	99.3	99.4	99.4	99.4																				99.4	99.3	99.4
25																											
26														47.7	45.2	44.2	58.4	73.1	83.9	84.2	79.5	77.5	82.1	84.0	84.2	44.2	69.1
27	85.2	83.3	83.8	82.4	83.3	84.2	86.5	82.4	75.9	66.3	61.4	55.9	49.9	47.4	45.3	49.9	52.0	63.2	73.8	74.7	74.7	77.6	79.3	81.6	86.5	45.3	70.8
28	82.5	83.5	83.6	83.6	82.5	82.4	82.3	81.5	81.1	80.0	78.8	76.8	75.6	73.7	72.4	73.5	73.8	71.6	69.0	70.9	70.5	68.8	66.8	64.3	83.6	64.3	76.2
29	61.0	57.2	54.6	52.9	50.8																				61.0	50.8	55.3
30																					82.4	88.5	92.8	93.2	93.2	82.4	89.2
31	95.4	95.7	95.9	96.9	97.2	97.2	96.9	96.4	91.3	88.2	81.6	75.2	73.6	64.5	64.0	64.3	66.9	67.9	55.5	60.7	67.5	71.3	70.7	66.9	97.2	55.5	79.2
Max.	**99.3**	**99.3**	**99.4**	**99.4**	**99.4**	**99.2**	**99.0**	**98.8**	**99.1**	**99.2**	**98.7**	**98.0**	**98.5**	**98.4**	**98.4**	**98.1**	**97.9**	**98.1**	**98.4**	**98.7**	**98.8**	**98.9**	**99.1**	**99.2**	**99.4**		
Min.	**59.0**	**57.2**	**54.6**	**52.9**	**50.8**	**70.6**	**68.0**	**67.0**	**67.0**	**64.6**	**54.8**	**52.5**	**48.4**	**46.0**	**45.2**	**41.4**	35.0	34.2	**36.4**	**39.2**	**51.4**	**54.5**	**60.8**	**61.4**		**34.2**	
Avg.	**84.7**	**85.1**	**86.6**	**87.3**	**87.6**	**90.0**	**89.5**	**90.0**	**88.0**	**84.4**	**79.5**	**75.3**	**72.5**	**70.3**	**69.2**	**69.7**	**69.9**	**71.0**	**72.3**	**76.0**	**79.5**	**81.5**	**83.1**	**84.0**			**80.3**

Total Hours in Month 744 **Hours Data Available** 644 **Data Recovery** 86.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	74.0	76.9	80.8	79.9	82.2	85.2	86.6	79.3	73.1	66.3	61.3	54.9	47.8	46.2	40.4	36.0	35.0	35.9	38.5	46.1	58.1	62.2	62.8	64.7	86.6	35.0	61.4
2	65.1	65.4	66.8	67.6	68.6	71.9	70.8	72.5	72.5	76.5	74.0	71.0	67.7	61.2	56.9	57.7	57.5	55.6	57.9	65.6	69.2	72.8	79.3	84.8	84.8	55.6	67.9
3	87.1	86.9	89.8	92.3	90.9	93.4	92.5	88.5	86.7	87.0	87.4	92.0	94.5	95.3	92.4	90.4	86.4	86.6	91.1	96.0	97.6	98.1	98.3	98.5	98.5	86.4	91.7
4	98.6	98.7	98.8	98.8	98.9	98.9	99.0	99.0	99.1	99.1	99.1	99.1	98.6	94.9	91.9	91.2	90.7	92.5	94.0	96.8	98.3	98.4	98.7	98.9	99.1	90.7	97.2
5	99.1	99.2	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.5	98.5	98.1	98.0	98.5	99.0	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.7	99.7	98.0	99.2
6	99.7	99.7	99.7	99.7	99.5	99.5	99.6	99.7	99.6	99.6	99.6	99.3	99.2	98.9	98.6	96.7	95.8	97.7	97.8	97.4	98.2	98.6	98.0	97.9	99.7	95.8	98.8
7	98.8	98.9	99.2	99.4	99.5	99.6	99.5	99.4	99.7	99.5	96.7	90.0	86.3	88.5	82.0	78.0	82.6	81.5	81.4	84.2	87.4	90.2	93.4	96.0	99.7	78.0	92.2
8	95.1	97.2	98.3	97.6	96.2	96.7	96.4	94.5	90.3	85.1	78.6	77.9	81.3	78.0	75.2	77.4	80.8	83.6	90.8	91.2	87.9	90.3	97.5	96.6	98.3	75.2	88.9
9	97.1	98.3	99.0	99.3	99.4	99.5	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.6	98.4	97.4	97.1	96.9	97.8	97.5	99.8	96.9	98.9
10	98.2	96.8	97.2	98.7	99.3	99.5	99.6	99.7	99.7	99.5	97.9	94.6	95.3	94.2	92.8	90.8	87.3	84.8	86.7	93.0	94.1	92.3	92.7	92.8	99.7	84.8	94.9
11	92.6	94.0	93.1	92.5	93.2	93.4	94.3	91.6	89.2	86.2	86.2	85.9	87.1	87.0	87.6	88.5	91.1	95.4	98.0	98.2	98.7	99.2	99.4	99.1	99.4	85.9	92.6
12	99.2	98.2	92.9	88.0	89.2	94.9	96.6	98.0	96.1	96.2	98.1	98.8	98.9	98.8	98.2	98.0	97.7	97.5	97.9	96.4	94.7	95.0	94.6	92.5	99.2	88.0	96.1
13	89.8	91.0	93.1	95.9	97.1	96.4	95.6	94.5	95.8	96.4	95.9	93.0	86.1	78.8	71.5	75.4	75.4	78.9	83.9	88.1	90.0	89.7	88.5	86.3	97.1	71.5	88.6
14	93.1	94.1	95.2	95.5	94.5	95.2	94.2	92.6	91.3	89.7	80.2	74.3	74.1	65.1	59.2	58.9	60.8	65.8	71.1	82.6	87.1	88.1	91.4	96.9	96.9	58.9	83.0
15	97.4	97.5	98.1	98.6	98.8	99.0	99.1	98.8	98.3	98.8	98.6	98.5	98.4	98.2	97.8	97.7	97.6	98.9	98.6	98.9	99.1	99.3	99.4	99.5	99.5	97.4	98.5
16	96.8	92.0	95.1	95.7	95.2	96.8	98.0	97.2	97.7	98.0	91.3	86.7	86.4	76.5	72.7	70.5	73.5	79.4	86.1	91.9	91.9	97.0	96.4	97.0	98.0	70.5	90.0
17	97.2	97.6	97.4	97.8	98.7	99.0	99.1	99.4	99.6	99.4	97.3	91.7	78.1	80.1	88.2	87.4	88.5	88.5	86.1	84.8	89.1	87.7	88.4	88.8	99.6	78.1	92.1
18	90.2	91.3	90.9	89.1	87.8	90.6	93.0	96.4	97.1	89.0	83.2	76.0	69.5	66.7	64.9	70.6	67.1	64.2	72.6	77.6	82.8	84.5	84.7	83.6	97.1	64.2	81.8
19	83.1	83.2	82.6	81.1	83.5	81.8	81.3	81.2	78.8	77.4	73.4	67.4	63.6	60.5	60.9	60.8	62.1	64.4	68.8	75.3	79.6	83.6	89.0	87.1	89.0	60.5	75.4
20	88.2	88.1	86.9	88.8	92.1	91.9	92.0	92.0	92.1	85.1	78.5	75.4	70.8	61.9	70.8	62.3	61.3	62.7	64.2	71.1	74.9	77.1	80.2	83.0	92.1	61.3	78.8
21	83.9	86.9	89.5	97.2	98.7	98.8	98.9	99.1	99.2	99.3	99.4	99.2	99.4	99.4	99.2	98.6	98.4	97.6	97.4	97.2	97.9	98.3	97.6	97.8	99.4	83.9	97.0
22	98.7	99.1	99.2	98.8	96.4	97.1	94.7	93.0	92.6	93.8	94.6	97.2	96.7	97.7	98.7	99.1	99.3	99.5	99.2	98.0	97.6	95.3	95.4	95.5	99.5	92.6	97.0
23	96.0	97.5	98.1	98.3	98.8	99.2	99.4	99.4	99.5	99.3	98.2	94.8	89.7	84.9	83.3	87.1	96.6	98.8	98.8	97.1	97.8	97.2	96.9	97.9	99.5	83.3	96.0
24	98.3	99.1	99.1	98.4	98.4	99.6	99.8	99.6	99.7	99.8	99.4	98.3	96.4	95.6	95.3	95.2	93.2	91.8	95.2	96.8	98.5	98.6	98.5	99.0	99.8	91.8	97.7
25	99.4	99.4	99.6	99.7	99.8	99.9	99.9	100.0	99.9	99.9	99.8	99.7	99.5	98.8	97.1	96.1	95.5	96.4	96.9	98.0	98.1	98.1	98.7	99.2	100.0	95.5	98.7
26	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.5	88.8	84.0	79.9	80.7	88.5	88.3	82.0	77.8	76.5	75.6	82.4	75.6	100.0	75.6	90.6
27	77.5	75.4	72.7	72.5	69.7	69.9	66.5	68.2	72.0	68.1	66.9	66.8	68.4	68.1	74.1	69.1	80.6	88.5	92.8	95.1	96.5	97.1	97.5	98.1	98.1	66.5	78.0
28	98.3	99.1	98.7	95.8	95.5	96.7	95.0	94.6	95.8	98.2	98.7	97.5	91.9	87.6	88.1	88.8	90.6	89.6	90.6	91.4	93.4	94.6	95.9	96.1	99.1	87.6	94.3
29	97.3	98.2	98.4	98.6	98.9	98.9	99.5	99.7	99.8	99.8	99.3	98.7	98.5	97.5	96.7	96.5	93.9	95.1	95.9	97.4	98.1	98.0	98.7	96.3	99.8	93.9	97.9
30	97.2	98.6	99.2	99.0	98.2	98.7	98.9	99.5	99.1	93.4	85.4	88.2	89.5	81.1	81.6	76.4	79.5	91.0	95.6	98.8	98.9	99.7	100.0	100.0	100.0	76.4	93.6
Max.	**99.7**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.8**	**99.8**	**99.8**	**99.7**	**99.7**	**99.6**	**99.5**	**99.5**	**99.6**	**99.7**	**100.0**	**100.0**	**100.0**		
Min.	**65.1**	**65.4**	**66.8**	**67.6**	**68.6**	**69.9**	**66.5**	**68.2**	**72.0**	**66.3**	**61.3**	**54.9**	**47.8**	**46.2**	**40.4**	**36.0**	35.0	35.9	**38.5**	**46.1**	**58.1**	**62.2**	**62.8**	**64.7**		**35.0**	
Avg.	**92.9**	**93.3**	**93.6**	**93.8**	**93.9**	**94.7**	**94.6**	**94.2**	**93.8**	**92.7**	**90.6**	**88.7**	**86.7**	**84.1**	**83.1**	**82.5**	**83.5**	**85.0**	**86.9**	**89.3**	**91.0**	**91.8**	**93.1**	**93.2**			**90.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	100.0	99.7	98.4	98.1	97.7	98.0	98.4	97.8	97.6	96.1	94.1	89.7	85.1	78.7	75.6	74.2	72.1	72.1	75.4	82.0	86.5	85.2	84.3	86.5	100.0	72.1	88.5
2	87.3	89.4	93.2	93.3	92.9	93.0	92.1	91.5	86.4	82.6	73.0	68.9	72.7	72.4	67.3	65.4	72.9	87.1	88.0	89.9	92.2	86.6	87.2	90.3	93.3	65.4	84.0
3	90.4	87.5	86.4	89.6	89.2	84.7	76.4	75.9	77.1	84.9	77.1	72.6	68.7	66.2	67.0	67.1	72.1	70.5	78.0	82.2	82.5	80.6	90.7	93.1	93.1	66.2	79.6
4	84.1	85.5	84.5	86.1	83.8	82.9	79.2	76.6	69.8	66.7	69.8	67.2	55.0	54.7	55.5	56.9	55.4	54.0	59.3	63.8	64.8	62.0	59.5	59.8	86.1	54.0	68.2
5	62.2	64.3	72.1	85.6	85.2	84.5	86.0	89.4	89.6	88.8	89.3	92.6	93.7	92.9	89.2	88.3	88.7	93.4	94.4	97.0	98.1	98.0	98.7	99.0	99.0	62.2	88.4
6	99.1	99.2	99.1	98.9	99.0	99.1	99.2	99.1	99.0	99.0	98.1	96.9	95.1	93.1	91.6	92.0	92.7	93.4	96.1	97.3	99.1	99.6	99.8	100.0	100.0	91.6	97.3
7	100.0	100.0	100.0	99.9	97.1	95.6	92.7	93.6	96.8	97.4	97.9	96.9	96.3	97.1	97.4	97.7	98.3	98.9	99.7	100.0	100.0	100.0	100.0	100.0	100.0	92.7	98.1
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.4	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	99.9
9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10	99.9	99.8	99.6	99.6	99.5	99.5	99.5	99.4	99.7	96.8	93.7	92.3	86.0	85.5	83.7	82.8	83.8	86.4	88.3	88.3	89.6	88.7	89.5	90.4	99.9	82.8	92.6
11	93.2	96.5	97.7	98.1	100.0	100.0	100.0	100.0	100.0	99.8	97.0	94.3	91.6	92.0	99.7	100.0	98.1	95.9	94.4	96.8	95.3	95.0	97.9	98.3	100.0	91.6	97.2
12	96.4	94.1	91.3	94.2	92.4	91.7	91.2	86.6	82.3	80.0	78.3	74.4	70.9	68.2	65.7	63.5	62.8	67.0	77.0	78.3	78.0	78.4	78.5	77.8	96.4	62.8	80.0
13	77.3	75.1	73.8	74.1	72.7	68.6	68.9	79.6	89.2	91.3	86.8	84.3	78.9	74.5	71.1	70.4	75.7	83.1	87.2	87.5	96.7	99.8	100.0	100.0	100.0	68.6	81.9
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.6	100.0	98.6	99.9
15	98.3	97.7	97.0	96.0	95.9	96.4	95.9	92.6	91.3	79.9	75.0	76.0	73.5	73.8	75.7	69.6	70.1	78.6	85.6	86.4	89.9	88.1	88.1	92.2	98.3	69.6	86.0
16	94.3	98.4	100.0	100.0	100.0	100.0	97.7	92.2	86.1	80.6	76.0	71.7	74.2	73.3	79.0	90.3	93.9	97.2	98.5	98.6	99.6	100.0	100.0	100.0	100.0	71.7	91.7
17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.7	98.1	97.4	97.7	96.8	97.9	98.2	98.7	99.5	100.0	99.9	100.0	96.8	99.3
18	99.3	96.9	95.4	94.4	94.8	93.2	92.1	91.8	90.6	86.3	82.9	81.8	80.4	80.4	80.7	80.1	94.2	97.4	97.7	97.6	98.6	98.1	98.6	99.2	99.3	80.1	91.8
19	93.4	94.3	92.0	90.4	89.5	90.6	92.3	89.9	87.9	88.3	84.9	84.9	85.8	86.0	93.2	96.0	94.6	90.8	91.5	92.9	93.1	93.3	96.1	97.4	97.4	84.9	91.2
20	97.4	96.9	96.9	96.1	95.4	95.0	94.4	88.8	86.0	86.1	81.1	72.4	68.4	72.4	69.4	67.3	67.0	64.3	66.8	63.0	61.4	61.2	68.8	72.5	97.4	61.2	78.7
21	71.3	67.7	75.7	80.5	79.2	75.4	83.0	85.7	85.9	91.8	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8	97.1	100.0	67.7	91.3
22	97.4	96.9	97.6	97.6	98.2	99.8	99.9	99.7	98.9	99.2	99.4	99.6	98.7	96.1	93.5	93.1	91.6	90.5	94.6	93.5	94.7	93.6	88.3	90.0	99.9	88.3	95.9
23	86.8	89.2	93.8	92.6	93.9	95.0	97.9	99.1	99.5	99.2	99.1	97.2	96.9	95.8	98.1	98.4	98.9	98.6	98.7	98.9	98.8	98.7	98.8	98.7	99.5	86.8	96.8
24	98.7	98.6	98.2	97.3	97.1	97.3	96.8	96.5	96.8	97.2	97.8	97.5	97.7	98.4	98.6	98.5	98.4	98.3	97.8	97.8	97.9	97.9	97.8	97.7	98.7	96.5	97.8
25	97.2	97.5	97.6	97.7	97.5	97.9	98.1	98.0	97.8	98.4	98.8	99.0	99.1	99.2	99.3	99.3	99.5	99.5	99.6	99.6	99.7	99.6	99.4	99.3	99.7	97.2	98.7
26	99.2	99.0	99.1	99.1	98.9	98.7	98.5	97.9	98.1	98.3	98.8	98.6	98.3	95.1	93.8	94.7	94.8	94.9	95.7	95.5	96.8	97.5	97.4	97.0	99.2	93.8	97.3
27	97.9	97.6	97.5	97.5	97.0	97.3	97.3	97.2	97.0	97.1	99.3	99.4	99.9	99.4	98.7	96.6	98.2	98.4	98.7	98.5	98.8	98.3	97.6	98.2	99.9	96.6	98.1
28	97.6	99.1	98.7	98.4	98.1	97.1	97.4	97.3	97.5	97.5	92.3	94.3	95.4	95.7	94.6	95.5	97.2	96.8	98.1	97.3	97.0	96.9	97.4	96.6	99.1	92.3	96.8
29	97.1	96.3	95.6	96.9	96.5	96.7	95.9	95.8	96.3	96.4	98.9	97.7	96.3	95.9	95.9	95.8	95.8	95.7	95.7	95.7	95.7	96.0	96.3	96.1	98.9	95.6	96.3
30	95.9	95.9	96.0	96.0	96.0	96.1	96.2	96.1	95.9	96.0	95.9	96.0	96.1	95.8	96.2	95.8	95.5	95.0	95.0	94.1	94.4	93.9	93.7	93.8	96.2	93.7	95.5
31	93.8	93.5	93.3	92.9	92.8	92.4	92.1	92.3	92.0	92.2	92.7	93.0	93.5	93.4	91.5	88.6	88.3	89.4	90.9	92.7	93.3	92.8	93.0	92.7	93.8	88.3	92.2
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**62.2**	**64.3**	**72.1**	**74.1**	**72.7**	**68.6**	**68.9**	**75.9**	**69.8**	**66.7**	**69.8**	**67.2**	**55.0**	**54.7**	**55.5**	**56.9**	55.4	54.0	**59.3**	**63.0**	**61.4**	**61.2**	**59.5**	**59.8**		**54.0**	
Avg.	**93.7**	**93.8**	**94.2**	**94.9**	**94.5**	**94.1**	**93.8**	**93.6**	**93.1**	**92.5**	**91.2**	**90.0**	**88.6**	**87.9**	**87.7**	**87.6**	**88.6**	**89.8**	**91.6**	**92.4**	**93.3**	**92.9**	**93.4**	**93.9**			**92.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	91.9	91.9	90.9	90.5	87.1	83.2	86.1	85.6	85.4	83.8	81.0	73.9	78.6	84.3	92.0	95.3	96.4	96.2	96.4	96.3	95.8	96.5	95.9	95.0	96.5	73.9	89.6
2	97.0	96.2	96.4	95.6	96.6	98.0	96.9	95.5	97.0	98.0	97.6	97.8	97.7	97.2	96.3	96.6	96.9	97.4	97.9	97.2	96.2	96.7	97.0	97.2	98.0	95.5	97.0
3	97.0	96.9	96.2	93.7	94.2	92.4	92.4	90.5	88.4	87.1	86.0	85.7	83.4	83.3	82.1	81.5	83.0	85.4	85.7	85.3	84.6	84.8	84.8	84.8	97.0	81.5	87.9
4	84.3	84.7	84.8	84.7	83.8	83.0	83.8	82.7	82.4	80.5	80.5	79.4	80.0	74.7	72.9	72.3	75.7	74.3	76.5	79.1	79.5	81.1	80.7	80.6	84.8	72.3	80.1
5	80.4	80.3	78.9	80.0	79.7	79.5	79.8	80.4	80.9	79.5	77.6	77.9	76.3	75.4	76.1	76.1	78.2	80.2	82.7	85.6	86.9	86.9	84.9	92.0	92.0	75.4	80.7
6	93.1	94.7	94.5	94.8	99.5	99.8	99.7	99.2	97.9	97.8	96.0	95.2	94.7	94.3	93.9	93.6	92.6	94.2	94.2	92.5	90.5	89.7	88.8	90.0	99.8	88.8	94.6
7	88.7	88.7	87.4	86.2	85.6	85.6	85.2	84.3	85.1	84.4	85.6	85.6	85.0	84.9	84.9	84.6	84.9	85.4	85.2	85.5	85.2	85.3	85.3	85.5	88.7	84.3	85.6
8	85.8	85.4	86.2	85.6	85.4	86.6	88.0	88.1	89.8	90.3	90.6	91.5	91.7	92.2	92.9	92.6	92.1	91.6	91.6	91.3	91.2	90.6	90.5	89.9	92.9	85.4	89.6
9	89.3	89.2	89.2	89.3	89.3	89.5	89.5	89.5	89.2	89.2	89.5	89.9	90.2	90.6	90.7	90.8	90.9	91.0	91.0	90.8	90.7	90.9	91.0	91.2	91.2	89.2	90.1
10	91.1	91.2	91.1	90.7	90.8	91.0	91.1	91.0	90.9	91.0	91.0	91.1	91.0	91.0	90.6	90.2	90.4	90.9	90.8	90.7	90.3	90.2	90.7	90.4	91.2	90.2	90.8
11	90.2	90.0	90.3	91.2	91.1	91.3	91.1	91.1	91.2	91.2	91.4	91.7	91.5	91.1	90.8	91.1	91.6	91.7	91.7	91.9	92.0	92.2	92.4	92.6	92.6	90.0	91.4
12	92.8	93.2	93.2	93.2	93.1	93.0	92.9	93.4	93.7	93.1	93.4	90.6	89.3	86.7	85.6	83.5	84.5	87.3	88.0	88.1	88.3	87.7	87.7	89.1	93.7	83.5	90.1
13	87.8	88.4	87.3	87.2	88.3	87.9	87.9	87.3	87.0	86.8	84.6	83.6	84.5	82.1	83.3	91.1	91.8	91.9	92.1	92.4	92.7	92.6	92.8	94.9	94.9	82.1	88.6
14	95.7	96.4	97.0	96.6	96.6	97.0	96.4	87.7	83.8	85.2	79.6	73.5	77.2	77.5	77.2	74.7	75.3	76.1	72.9	72.1	71.4	70.6	71.0	72.8	97.0	70.6	82.3
15	70.2	74.8	77.2	82.3	93.6	94.3	91.5	90.2	94.9	95.4	95.5	95.3	94.6	92.1	84.9	89.7	85.2	78.9	83.4	91.6	95.6	98.9	99.1	99.3	99.3	70.2	89.5
16	98.1	99.1	98.7	97.3	99.4	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	99.7
17	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.1	98.8	99.1	98.8	98.9	98.6	98.8	98.6	98.8	98.8	100.0	98.6	99.5
18	98.8	99.3	99.7	99.9	98.6	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.9	98.3	99.8	99.6	99.9	99.0	97.6	96.1	94.0	94.5	94.3	100.0	94.0	98.6
19	94.8	97.5	96.4	97.2	97.2	97.1	97.1	96.4	95.6	95.6	95.4	95.2	93.6	93.2	93.2	92.8	92.7	92.5	93.0	92.8	92.3	93.8	94.6	94.8	97.5	92.3	94.8
20	95.0	95.4	96.3	96.0	94.8	94.4	94.0	93.6	95.2	96.2	96.5	91.5	96.2	97.1	97.9	98.3	97.7	96.9	96.9	97.0	96.8	97.1	96.9	96.7	98.3	91.5	96.0
21	96.4	95.6	96.2	95.8	95.3	94.8	94.7	95.1	95.0	94.5	95.7	94.4	82.2	73.1	68.1	67.2	68.2	79.7	83.6	83.4	82.7	85.1	85.8	85.8	96.4	67.2	87.0
22	86.5	86.0	88.1	88.0	90.8	91.0	91.0	91.1	89.2	91.0	91.6	90.4	86.6	84.5	91.1	93.0	91.4	89.6	89.3	88.1	87.4	86.8	86.4	85.4	93.0	84.5	88.9
23	84.6	83.6	83.4	84.0	83.6	83.7	84.1	84.9	85.2	85.4	85.7	85.9	85.8	86.4	86.4	86.7	86.4	86.1	85.7	85.3	86.1	86.4	86.1	85.7	86.7	83.4	85.3
24	85.3	84.9	84.5	83.7	82.9	82.8	83.0	83.3	83.2	83.2	83.2	83.1	82.8	82.6	82.2	81.7	81.8	82.2	83.0	83.4	83.8	83.9	83.5	83.4	85.3	81.7	83.2
25	83.1	82.8	82.6	82.7	82.8	82.6	82.9	83.3	83.9	83.9	83.8	83.8	84.4	84.5	84.1	84.2	84.6	85.0	85.4	84.9	85.2	85.7	85.7	85.4	85.7	82.6	84.1
26	85.2	85.3	85.3	85.2	85.4	85.9	86.2	86.4	85.8	85.8	85.1	85.2	85.6	85.8	86.0	85.9	86.0	86.0	85.6	85.5	85.9	86.0	86.0	85.6	86.4	85.1	85.7
27	85.6	85.9	85.9	86.2	86.3	85.7	86.1	85.7	85.7	85.9	86.1	86.4	86.5	85.6	84.5	79.7	80.7	85.3	86.2	85.6	86.7	85.6	88.6	95.5	95.5	79.7	85.9
28	94.9	94.8	94.4	94.1	95.1	94.2	93.3	92.6	92.7	92.6	91.3	86.5	83.7	80.8	79.0	71.6	85.8	93.6	94.6	97.5	96.2	97.3	97.5	96.9	97.5	71.6	91.3
29	98.5	97.8	98.2	98.6	98.0	98.0	98.0	98.1	97.7	97.8	98.6	98.5	97.6	97.3	97.9	98.0	97.5	97.6	97.6	96.5	97.2	97.3	96.6	96.7	98.6	96.5	97.7
30	97.7	98.1	98.1	98.1	98.0	98.1	98.0	98.0	98.0	97.9	97.8	97.9	97.6	97.5	97.3	97.3	97.3	97.0	96.8	96.7	96.7	96.5	96.4	96.3	98.1	96.3	97.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**70.2**	**74.8**	**77.2**	**80.0**	**79.7**	**79.5**	**79.8**	**80.4**	**80.9**	**79.5**	**77.6**	**73.5**	**76.3**	**73.1**	**68.1**	**67.2**	68.2	74.3	**72.9**	**72.1**	**71.4**	**70.6**	**71.0**	**72.8**		**67.2**	
Avg.	**90.7**	**90.9**	**90.9**	**90.9**	**91.4**	**91.3**	**91.4**	**90.8**	**90.8**	**90.8**	**90.4**	**89.4**	**88.9**	**88.1**	**88.0**	**88.0**	**88.6**	**89.4**	**89.9**	**90.1**	**90.1**	**90.3**	**90.3**	**90.9**			**90.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	96.1	96.0	95.8	95.7	95.3	94.7	94.1	93.6	92.9	92.3	92.7	93.2	92.9	93.2	93.8	94.1	93.8	92.9	92.0	92.3	92.3	92.2	92.2	92.4	96.1	92.0	93.6
2	92.8	93.2	93.1	93.5	93.8	93.3	92.6	92.1	91.9	91.7	91.1	90.4	90.0	89.4	88.8	88.1	88.0	87.5	87.2	86.9	86.5	86.5	87.1	87.1	93.8	86.5	90.1
3	86.9	86.9	86.8	86.6	86.7	86.7	85.3	84.3	84.2	84.2	84.0	84.0	83.8	84.0	83.8	83.7	83.7	83.0	82.3	82.5	82.5	82.3	82.1	82.4	86.9	82.1	84.3
4	82.5	82.3	82.3	83.0	84.2	84.5	85.5	87.3	90.3	90.6	91.6	93.5	93.9	95.4	95.7	96.0	96.6	97.3	97.8	98.1	98.4	98.5	98.8	99.0	99.0	82.3	91.8
5	99.2	99.4	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	95.9	100.0	95.9	99.7
6	92.6	91.0	90.5	91.0	94.5	94.8	91.9	89.8	94.1	95.2	98.1	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.7	95.3	100.0	89.8	96.5
7	97.1	98.8	96.8	95.8	93.3	90.5	94.2	96.6	96.3	95.1	91.9	96.7	96.0	94.5	95.7	99.3	97.2	97.9	99.4	99.6	99.0	98.6	99.1	99.1	99.6	90.5	96.6
8	99.2	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8	95.1	89.3	86.5	88.1	90.4	88.7	87.7	88.5	89.8	88.3	89.1	91.3	89.1	100.0	86.5	94.2
9	86.6	86.2	84.5	86.7	91.6	95.9	98.2	99.5	100.0	100.0	100.0	99.4	94.7	91.2	91.1	91.4	94.9	95.6	94.6	96.3	97.7	98.3	98.8	99.7	100.0	84.5	94.7
10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	93.5	95.6	96.2	97.4	98.3	96.8	96.2	96.3	96.5	98.1	100.0	100.0	100.0	100.0	93.5	98.5
11	100.0	100.0	100.0	100.0	100.0	98.9	97.7	97.5	97.0	95.2	95.0	93.4	94.0	93.5	95.1	93.6	94.0	93.2	93.7	93.9	93.7	93.8	92.6	91.2	100.0	91.2	95.7
12	91.0	90.2	90.4	90.5	89.4	89.2	89.6	90.0	89.5	89.8	90.5	92.4	93.6	93.7	93.9	94.6	90.0	86.5	87.3	85.6	85.8	91.2	91.0	93.2	94.6	85.6	90.4
13	90.9	93.8	94.8	92.6	95.5	94.6	90.7	89.8	89.2	91.9	89.0	87.2	91.6	97.4	95.8	93.3	89.2	85.2	83.8	81.9	80.1	77.6	75.0	73.4	97.4	73.4	88.5
14	72.4	71.3	71.6	68.4	67.6	71.2	67.7	71.4	72.8	72.2	70.2	66.8	67.7	64.5	69.5	76.4	72.6	75.8	75.4	78.4	79.7	80.8	78.9	81.5	81.5	64.5	72.7
15	86.7	89.0	91.3	89.6	86.5	79.6	79.3	87.5	94.9	97.5	97.7	99.1	94.7	95.1	95.7	96.9	98.5	99.2	98.3	94.8	93.2	92.8	92.0	95.4	99.2	79.3	92.7
16	94.6	96.0	97.8	98.1	99.0	98.7	99.4	99.0	99.8	100.0	100.0	100.0	99.8	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	94.6	99.2
17	99.8	100.0	100.0	99.9	99.9	99.8	99.6	99.8	100.0	99.8	100.0	99.9	100.0	99.7	90.8	90.5	96.3	97.7	99.5	98.8	98.6	97.7	95.8	99.1	100.0	90.5	98.5
18	98.6	97.6	92.9	94.4	89.3	86.4	88.3	85.9	89.1	94.5	94.3	95.0	94.4	92.9	88.9	87.3	87.1	85.3	85.0	84.9	86.1	81.1	79.1	81.0	98.6	79.1	89.1
19	81.3	82.5	77.9	81.6	84.5	87.3	93.7	92.5	91.0	89.7	86.7	82.2	80.5	83.0	86.1	87.0	86.7	89.9	85.4	83.0	84.3	82.3	81.5	85.5	93.7	77.9	85.3
20	90.7	91.9	90.9	88.5	91.2	86.4	80.5	79.1	76.4	72.3	72.3	69.3	67.6	59.5	51.8	62.3	82.2	82.5	88.1	87.9	88.4	89.7	85.1	84.6	91.9	51.8	80.0
21	84.7	78.9	79.0	78.6	77.0	77.9	77.1	80.0	82.1	83.7	82.7	82.1	78.1	82.3	86.4	90.1	88.8	93.5	92.5	94.7	92.6	96.3	95.2	95.4	96.3	77.0	85.4
22	92.1	91.6	92.1	89.3	87.3	87.5	88.3	91.1	92.4	94.1	94.6	95.3	94.0	95.3	96.5	95.7	95.3	95.1	94.6	95.4	94.5	95.5	99.1	97.0	99.1	87.3	93.5
23	99.3	99.5	98.9	99.7	99.6	99.7	99.9	99.6	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.9	99.8	99.7	99.9	100.0	98.9	99.8
24	99.8	99.8	100.0	100.0	100.0	100.0	100.0	99.8	98.9	96.0	91.3	80.5	76.8	75.1	73.5	70.6	74.4	80.9	84.6	85.2	81.6	81.8	81.2	81.6	100.0	70.6	88.1
25	81.5	82.0	80.0	79.9	79.4	80.1	94.7	98.5	92.4	89.5	89.6	84.7	82.0	83.9	80.0	77.9	74.5	73.0	75.4	77.7	77.8	75.3	71.6	75.9	98.5	71.6	81.6
26	80.3	83.2	80.6	79.7	78.3	81.1	84.4	85.2	86.1	83.8	76.2	70.9	75.5	75.9	77.2	78.0	76.9	82.2	83.2	79.8	79.0	78.6	76.4	75.3	86.1	70.9	79.5
27	71.5	68.4	68.4	67.1	66.1	65.0	61.1	60.1	61.9	64.7	58.7	60.1	63.2	60.8	71.2	71.7	64.9	59.6	57.8	58.0	59.8	60.0	62.9	69.3	71.7	57.8	63.8
28	72.6	76.1	77.1	77.5	74.8	74.1	75.4	76.4	79.5	76.9	69.5	64.6	67.4	64.0	65.4	64.4	60.8	59.9	60.8	63.3	60.2	60.1	62.2	62.0	79.5	59.9	68.5
29	62.4	67.6	81.8	91.6	96.0	94.3	95.0	94.3	98.6	100.0	100.0	99.9	99.0	96.3	92.6	90.1	94.5	96.6	95.2	95.1	95.1	93.5	91.4	86.8	100.0	62.4	92.0
30	82.2	78.4	70.7	67.9	67.5	62.1	54.6	48.4	66.2	69.9	65.4	72.1	71.7	66.7	59.5	64.8	66.0	67.1	68.1	68.7	66.2	64.2	63.7	62.8	82.2	48.4	66.5
31	64.7	73.6	69.5	65.9	71.0	73.8	76.6	75.0	76.4	77.9	76.6	67.6	68.2	68.8	69.9	75.1	74.5	77.8	80.6	81.4	81.0	80.1	81.7	82.5	82.5	64.7	74.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**62.4**	**67.6**	**68.4**	**65.9**	**66.1**	**62.1**	**54.6**	**48.4**	**61.9**	**64.7**	**58.7**	**60.1**	**63.2**	**59.5**	**51.8**	**62.3**	60.8	59.6	**57.8**	**58.0**	**59.8**	**60.0**	**62.2**	**62.0**		**48.4**	
Avg.	**88.1**	**88.5**	**88.2**	**88.2**	**88.4**	**88.0**	**88.2**	**88.5**	**89.8**	**89.9**	**88.7**	**87.4**	**87.0**	**86.4**	**86.3**	**87.1**	**87.3**	**87.7**	**88.0**	**88.1**	**87.8**	**87.7**	**87.2**	**87.5**			**87.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	78.6	86.3	95.3	98.3	97.2	98.5	99.8	100.0	99.5	91.6	86.4	86.3	82.6	78.3	79.7	77.3	76.3	80.5	81.7	81.1	78.4	74.6	73.8	77.8	100.0	73.8	85.8
2	79.1	80.0	82.6	78.3	84.8	87.7	86.2	89.9	91.9	83.2	79.4	76.7	78.2	83.7	84.7	77.4	81.4	80.5	80.2	84.7	88.2	90.1	88.1	89.1	91.9	76.7	83.6
3	92.4	97.3	93.9	95.2	99.8	100.0	99.9	98.9	98.3	98.0	99.2	100.0	100.0	95.3	93.9	90.1	94.2	91.0	87.0	88.1	87.4	86.8	84.9	82.1	100.0	82.1	93.9
4	82.1	80.8	81.2	79.7	81.6	84.7	90.2	87.0	81.0	79.0	80.6	73.1	77.8	89.8	91.2	89.3	88.9	88.8	89.3	88.4	81.2	76.2	74.1	71.4	91.2	71.4	82.8
5	67.7	63.4	65.3	62.1	62.5	63.2	62.1	60.9	63.6	63.6	69.9	81.5	82.3	81.1	72.9	78.3	72.5	71.5	63.8	63.0	68.2	66.9	63.0	64.0	82.3	60.9	68.0
6	63.4	63.2	68.3	77.3	80.6	87.1	93.6	95.2	95.3	94.4	95.0	90.9	89.2	81.1	78.8	73.5	63.5	62.7	65.6	70.4	69.8	74.9	85.3	90.8	95.3	62.7	79.6
7	90.4	89.8	92.6	98.1	99.2	98.5	98.4	99.2	98.3	95.7	88.9	82.1	80.3	81.2	78.1	77.9	79.7	83.4	81.1	85.4	81.8	76.7	73.5	69.8	99.2	69.8	86.7
8	70.2	75.8	74.7	79.1	73.7	72.4	68.0	78.8	79.3	79.9	79.6	81.5	84.1	81.3	77.6	73.9	75.3	77.7	80.7	80.7	80.8	81.2	80.7	80.7	84.1	68.0	77.8
9	82.1	81.0	82.6	80.2	82.4	81.6	83.7	79.4	85.7	84.3	80.1	75.7	74.8	75.4	76.5	80.4	84.0	93.8	98.1	97.8	96.7	98.5	98.4	95.5	98.5	74.8	85.4
10	92.9	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.1	98.2	96.8	96.7	95.8	95.6	95.4	95.6	95.6	95.8	95.8	100.0	92.9	97.9
11	95.7	95.6	95.6	95.3	95.4	95.2	95.2	94.6	94.3	95.2	95.2	94.9	94.9	95.0	94.8	95.1	94.8	95.4	94.3	94.0	93.8	94.3	93.9	93.9	95.7	93.8	94.9
12	94.1	93.4	93.2	93.2	93.4	92.7	92.4	92.5	92.3	91.3	91.4	91.1	90.9	90.9	90.7	90.5	90.3	89.7	88.3	88.4	88.3	88.8	88.5	88.2	94.1	88.2	91.0
13	86.6	86.2	86.3	86.3	87.0	86.5	85.7	85.7	86.0	85.9	86.1	85.8	86.1	86.1	85.9	85.8	85.8	86.3	85.9	86.3	85.9	85.7	86.0	85.5	87.0	85.5	86.1
14	85.1	86.0	87.7	88.1	88.3	89.2	90.5	92.7	93.5	93.9	93.4	93.9	95.8	95.7	96.4	96.3	97.0	97.0	97.3	97.4	97.3	97.7	97.7	97.9	97.9	85.1	93.6
15	97.9	98.0	98.1	98.4	98.5	98.6	98.7	98.7	99.0	98.9	98.9	99.6	98.2	94.0	94.3	89.5	87.2	87.1	85.6	83.0	82.0	81.2	82.6	80.6	99.6	80.6	92.9
16	76.0	75.5	75.7	74.6	75.5	74.9	72.6	70.0	70.0	70.6	72.1	71.8	75.5	74.0	72.3	69.5	67.2	69.4	70.9	72.9	76.3	79.1	81.9	85.0	85.0	67.2	73.9
17	87.1	88.8	87.8	89.5	89.7	87.4	88.2	89.9	88.9	91.6	92.2	92.0	91.5	90.9	90.7	90.1	89.1	87.0	86.1	86.3	86.6	87.0	86.4	85.1	92.2	85.1	88.7
18	85.2	84.6	84.5	84.6	84.2	85.1	85.2	85.5	85.6	85.0	85.0	84.7	84.3	83.6	82.9	82.2	83.2	84.2	83.2	84.0	84.0	83.2	84.0	84.0	85.6	82.2	84.3
19	84.1	83.8	83.2	82.9	82.7	82.0	82.0	81.8	81.5	81.6	81.7	81.8	81.7	81.9	81.7	81.6	81.7	81.2	80.9	81.2	80.9	80.5	80.6	80.5	84.1	80.5	81.8
20	79.3	79.0	78.1	77.2	72.5	72.9	75.8	74.7	75.8	74.9	73.2	73.6	72.1	71.2	72.3	70.9	70.2	72.4	78.2	81.6	84.6	83.1	85.2	84.4	85.2	70.2	76.4
21	84.6	84.6	84.3	84.2	84.5	84.2	84.2	83.9	83.8	83.3	83.0	82.1	81.5	81.2	81.5	81.3	81.5	81.4	81.3	80.8	80.1	79.6	78.9	78.2	84.6	78.2	82.3
22	77.8	77.4	77.5	77.5	77.5	77.6	77.9	78.1	78.1	78.1	78.0	78.0	77.9	77.6	77.6	77.4	77.4	77.3	77.2	76.9	76.7	76.7	76.7	76.6	78.1	76.6	77.5
23	76.3	76.2	76.2	76.3	76.4	76.4	76.3	76.4	77.0	76.8	77.0	76.8	78.1	78.8	79.4	80.0	80.2	80.3	80.5	81.1	80.3	80.5	80.8	80.9	81.1	76.2	78.3
24	80.9	81.3	81.6	81.2	80.9	80.9	81.0	81.1	81.1	81.2	80.9	81.1	81.2	81.5	81.7	81.5	81.1	80.8	80.4	79.8	78.8	78.4	78.5	78.4	81.7	78.4	80.6
25	77.7	77.7	77.8	77.3	77.3	76.8	76.8	76.1	76.6	76.7	77.8	78.5	78.4	78.8	79.4	79.1	78.9	79.1	77.9	77.9	77.2	76.4	77.2	77.4	79.4	76.1	77.7
26	77.4	77.8	77.2	76.5	76.3	77.3	76.9	77.2	77.1	77.6	78.2	79.2	79.6	79.4	79.3	79.2	78.5	79.2	79.4	78.7	78.9	78.7	78.0	77.4	79.6	76.3	78.1
27	77.8	76.7	76.1	75.7	75.7	74.9	74.1	73.5	73.6	73.2	73.1	72.8	73.0	73.1	73.6	73.6	73.7	73.7	73.9	74.0	73.8	74.4	74.6	74.8	77.8	72.8	74.3
28	75.0	74.7	74.3	74.1	73.9	73.6	73.0	72.8	72.6	71.9	71.5	72.2	72.7	73.4	74.8	74.6	74.1	73.6	73.9	73.6	73.5	73.8	73.7	73.5	75.0	71.5	73.5
29	73.6	73.8	73.7	74.0	74.1	74.3	74.4	74.8	75.0	74.7	74.7	75.2	74.0	74.2	74.1	75.1	75.3	76.3	77.1	76.7	76.9	77.2	76.6	77.0	77.2	73.6	75.1
30	78.5	77.8	78.1	78.3	78.4	77.7	77.4	77.9	78.3	78.5	79.8	80.7	80.8	80.7	81.1	80.7	80.5	84.0	86.0	85.3	83.8	83.9	85.3	86.6	86.6	77.4	80.8
31	86.4	86.7	87.4	87.4	88.2	88.3	88.5	88.8	88.4	86.9	83.2	81.9	81.6	81.1	82.0	84.3	83.2	83.3	83.3	82.3	81.3	81.2	80.9	81.2	88.8	80.9	84.5
Max.	**97.9**	**98.3**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.1**	**98.2**	**96.8**	**97.0**	**97.0**	**98.1**	**97.8**	**97.3**	**98.5**	**98.4**	**97.9**	**100.0**		
Min.	**63.4**	**63.2**	**65.3**	**62.1**	**62.5**	**63.2**	**62.1**	**60.9**	**63.6**	**63.6**	**69.9**	**71.8**	**72.1**	**71.2**	**72.3**	**69.5**	63.5	62.7	**63.8**	**63.0**	**68.2**	**66.9**	**63.0**	**64.0**		**60.9**	
Avg.	**81.8**	**82.3**	**82.9**	**83.3**	**83.6**	**83.9**	**84.2**	**84.4**	**84.6**	**83.8**	**83.4**	**83.1**	**83.2**	**82.9**	**82.5**	**81.7**	**81.4**	**82.1**	**82.1**	**82.5**	**82.2**	**82.0**	**82.1**	**82.1**			**82.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	79.6	79.4	79.5	79.8	78.6	78.4	78.3	77.4	77.0	76.7	76.5	77.0	77.5	77.7	77.9	77.8	77.2	76.7	76.7	76.1	75.9	75.9	76.0	75.7	79.8	75.7	77.5
2	76.2	75.9	75.9	75.5	75.7	75.5	75.6	75.9	76.0	75.8	73.4	72.9	71.2	70.8	68.4	61.9	59.9	63.4	68.2	72.6	73.6	72.2	71.9	73.0	76.2	59.9	72.1
3	76.6	78.9	82.3	82.6	84.3	86.4	87.4	87.8	88.8	90.5	90.1	86.1	82.5	81.2	80.8	82.7	83.9	87.3	90.4	89.4	88.3	87.0	87.8	88.5	90.5	76.6	85.5
4	87.2	86.7	86.3	86.6	88.3	90.0	88.7	86.6	86.3	82.9	80.3	79.5	79.6	76.8	74.9	78.5	81.7	81.4	83.7	81.6	81.1	79.1	78.1	77.5	90.0	74.9	82.6
5	78.7	80.4	82.2	78.3	75.3	73.1	71.0	70.2	68.9	73.4	75.9	81.1	86.9	83.0	83.4	81.6	78.0	75.1	74.1	75.7	79.1	78.5	82.1	88.3	88.3	68.9	78.1
6	91.1	92.7	97.6	93.0	97.2	99.5	100.0	100.0	100.0	100.0	98.5	98.6	98.5	98.3	97.8	97.3	95.3	94.6	93.7	92.8	96.0	96.6	97.1	97.3	100.0	91.1	96.8
7	97.1	97.1	95.6	96.4	97.0	97.0	97.4	96.6	96.3	96.2	95.3	94.8	95.5	96.1	93.7	90.2	86.1	89.5	91.1	89.1	86.8	78.8	77.5	92.6	97.4	77.5	92.7
8	93.3	95.7	92.4	88.4	89.1	85.9	82.1	75.3	70.0	49.0	41.3	43.6	59.8	67.2	73.6	73.2	79.4	81.8	82.8	80.5	81.3	80.6	80.4	83.9	95.7	41.3	76.3
9	82.7	83.2	77.3	74.8	73.3	71.1	70.0	74.1	75.8	82.6	81.7	86.9	85.2	84.0	80.2	79.5	78.9	79.6	79.6	84.1	84.0	84.6	82.3	91.0	91.0	70.0	80.3
10	89.6	97.0	97.7	95.7	91.0	85.0	86.7	89.3	97.6	99.7	100.0	100.0	100.0	97.5	95.1	93.4	89.2	87.6	90.7	88.2	87.5	88.6	87.9	91.0	100.0	85.0	92.8
11	94.9	92.9	99.3	99.6	97.9	95.5	93.5	97.7	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.9	98.8
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.8	98.5	98.3	98.1	97.7	97.5	97.4	97.1	97.0	96.2	95.6	95.2	94.6	94.4	94.7	100.0	94.4	97.9
13	95.4	95.0	95.4	96.1	96.2	96.1	95.9	96.0	94.8	90.6	86.5	79.8	81.6	84.0	87.9	93.9	96.1	96.5	95.2	93.4	93.6	94.8	93.2	92.3	96.5	79.8	92.5
14	89.1	87.1	87.6	88.5	90.3	89.8	88.1	85.7	84.8	84.4	85.1	84.0	83.8	85.5	87.6	86.6	85.3	83.5	80.1	75.9	76.4	75.1	74.6	75.3	90.3	74.6	83.9
15	77.5	72.6	68.3	65.4	66.5	65.9	69.0	63.1	60.4	57.7	60.1	61.4	66.8	76.4	81.2	80.7	83.8	91.7	93.3	97.8	99.5	100.0	100.0	100.0	100.0	57.7	77.5
16	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	97.1	92.8	90.7	90.0	90.6	96.1	99.0	99.8	99.9	99.8	100.0	90.0	98.1
17	100.0	96.1	88.0	86.5	84.3	80.8	78.7	81.7	87.7	85.7	89.7	90.5	90.5	90.1	89.0	88.6	90.4	94.6	96.2	97.4	98.7	99.9	100.0	100.0	100.0	78.7	91.0
18	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.5	98.6	97.9	94.9	92.1	95.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.1	99.1
19	100.0	100.0	100.0	100.0	100.0	99.8	99.4	98.5	98.1	97.4	97.9	96.3	97.3	97.0	97.1	97.4	98.4	96.5	95.4	94.0	93.8	94.5	96.3	96.4	100.0	93.8	97.6
20	99.4	99.0	99.0	98.7	98.7	97.9	98.6	98.7	98.6	98.7	98.0	97.1	95.9	97.4	98.3	98.2	98.0	96.6	96.6	95.3	93.8	94.8	95.1	94.1	99.4	93.8	97.4
21	90.1	92.6	91.0	91.4	91.3	91.3	91.8	92.1	93.1	93.6	91.1	89.4	80.8	83.4	84.3	85.2	85.6	85.5	88.5	88.4	88.7	88.7	87.2	84.7	93.6	80.8	88.7
22	88.1	89.3	84.5	83.2	82.5	83.6	82.4	81.6	80.3	77.3	74.9	75.6	71.6	69.0	69.7	71.7	78.4	91.0	96.8	97.2	97.0	96.0	96.0	95.9	97.2	69.0	83.9
23	96.2	96.2	96.4	96.4	96.7	97.0	97.6	95.9	95.7	96.5	95.6	95.4	96.7	94.2	94.0	93.0	93.7	94.9	95.9	95.6	95.2	96.0	94.4	93.0	97.6	93.0	95.5
24	91.9	92.1	92.9	91.6	91.2	91.3	90.6	90.8	91.6	92.6	93.1	92.2	87.3	85.4	82.2	78.6	75.8	76.6	83.5	85.1	82.4	81.7	83.0	83.4	93.1	75.8	87.0
25	82.3	84.2	89.5	94.8	95.5	96.0	95.6	96.5	96.4	97.0	97.9	98.9	98.0	94.6	89.1	86.8	84.5	84.4	82.2	84.8	81.7	84.3	86.0	83.9	98.9	81.7	90.2
26	86.7	88.8	87.6	87.8	87.7	87.8	89.4	88.6	81.7	79.9	79.4	80.6	77.6	79.0	79.9	80.9	82.1	91.2	95.2	95.6	95.9	96.2	96.8	97.7	97.7	77.6	87.3
27	97.2	97.5	97.9	96.5	95.3	94.7	92.9	92.4	91.1	90.3	90.0	89.2	88.6	88.6	88.5	88.1	87.9	87.8	87.5	87.0	86.9	86.6	86.3	86.0	97.9	86.0	90.6
28	85.7	85.6	85.6	85.6	85.2	85.4	85.3	85.1	84.9	85.4	86.1	86.8	87.3	88.5	89.2	88.5	88.1	87.1	86.5	85.5	85.4	85.0	84.5	84.7	89.2	84.5	86.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**76.2**	**72.6**	**68.3**	**65.4**	**66.5**	**65.9**	**69.0**	**63.1**	**60.4**	**49.0**	**41.3**	**43.6**	**59.8**	**67.2**	**68.4**	**61.9**	59.9	63.4	**68.2**	**72.6**	**73.6**	**72.2**	**71.9**	**73.0**		**41.3**	
Avg.	**90.2**	**90.6**	**90.3**	**89.8**	**89.6**	**89.1**	**88.8**	**88.5**	**88.4**	**87.6**	**87.0**	**86.9**	**86.9**	**87.0**	**86.9**	**86.6**	**86.6**	**87.9**	**89.0**	**89.1**	**89.2**	**88.9**	**88.9**	**90.0**			**88.5**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	84.6	83.9	84.3	84.4	84.3	84.6	85.1	85.4	86.2	87.8	91.4	94.5	94.2	92.1	91.5	91.7	91.6	92.4	92.5	93.0	91.3	90.6	91.7	92.6	94.5	83.9	89.2
2	92.3	92.0	91.4	91.4	92.1	93.1	94.3	96.0	96.6	97.2	97.6	97.8	98.1	98.2	98.3	98.4	98.5	98.6	98.6	98.8	98.9	98.9	99.2	99.2	99.2	91.4	96.5
3	99.2	99.3	99.3	99.2	99.2	99.2	99.0	98.5	98.5	98.8	98.9	99.0	98.9	98.5	98.6	97.2	97.6	97.9	97.7	97.5	97.2	97.1	97.2	97.3	99.3	97.1	98.4
4	97.3	97.3	97.3	97.3	97.7	98.2	98.1	98.2	98.6	98.6	99.0	98.9	99.1	98.9	98.8	98.8	98.8	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.1	97.3	98.5
5	99.1	99.1	99.0	99.0	99.0	98.9	98.7	98.5	98.5	98.5	98.7	99.3	99.7	99.9	100.0	100.0	99.7	98.9	98.8	98.5	98.4	98.4	98.4	98.4	100.0	98.4	99.0
6	98.3	97.7	97.0	96.9	96.6	96.2	95.5	95.1	95.2	96.7	97.7	98.4	99.9	99.8	100.0	100.0	99.4	97.2	95.7	95.4	95.5	95.7	95.4	94.9	100.0	94.9	97.1
7	94.7	94.7	94.6	94.6	94.4	94.4	94.4	94.4	94.2	93.9	93.4	94.0	94.1	93.3	93.3	93.6	92.7	91.1	90.4	90.0	89.2	88.5	87.6	87.4	94.7	87.4	92.6
8	87.4	88.1	88.6	88.7	88.9	89.1	89.1	88.9	88.6	88.0	88.5	89.4	89.6	91.0	91.4	91.2	90.9	90.4	89.7	88.9	87.9	86.7	86.5	85.9	91.4	85.9	88.9
9	85.6	85.5	85.1	85.0	84.6	84.4	84.0	83.8	84.0	84.6	85.4	86.6	87.6	87.9	88.6	89.5	89.5	89.2	88.5	87.8	87.3	87.6	86.8	87.0	89.5	83.8	86.5
10	86.2	86.5	86.3	86.6	87.0	87.2	88.5	88.2	89.1	90.1	91.4	93.1	93.5	94.3	95.1	95.3	95.3	95.0	94.5	94.2	94.2	94.6	94.8	95.0	95.3	86.2	91.5
11	95.1	95.6	96.2	96.2	96.0	96.2	96.2	96.1	96.5	96.6	96.6	96.7	96.9	97.1	96.9	97.1	97.0	97.1	97.1	97.3	97.2	97.3	97.4	97.4	97.4	95.1	96.7
12	97.5	97.5	97.6	97.8	97.8	98.2	98.4	98.6	98.6	98.7	98.3	98.0	97.9	97.7	98.4	99.0	99.3	99.3	99.4	99.2	98.9	98.4	98.0	97.7	99.4	97.5	98.3
13	98.1	98.2	98.5	98.5	98.5	98.2	97.8	97.9	98.2	97.3	97.4	95.4	92.8	90.1	85.7	83.2	81.2	81.8	79.2	84.6	85.2	85.5	84.2	82.4	98.5	79.2	91.2
14	82.8	82.4	81.2	80.0	80.2	81.2	81.5	78.5	73.2	73.3	74.5	74.1	73.0	73.6	73.7	70.9	71.2	70.2	67.2	69.3	77.8	78.7	81.7	80.9	82.8	67.2	76.3
15	74.1	79.4	83.5	87.2	87.0	88.1	89.0	85.9	78.1	77.4	77.2	75.1	74.7	72.4	69.5	69.0	70.9	71.9	74.0	76.6	84.1	85.9	85.7	86.7	89.0	69.0	79.3
16	85.7	76.4	78.7	80.7	75.0	68.2	70.0	74.9	63.2	54.4	50.1	51.5	51.9	52.5	55.8	56.8	57.7	57.0	57.4	58.9	59.9	52.9	42.3	40.3	85.7	40.3	61.3
17	38.3	36.8	39.0	40.8	39.3	41.9	44.5	52.5	57.1	63.2	69.0	71.3	77.8	94.0	93.4	95.3	96.1	96.7	97.9	97.7	97.5	97.5	97.4	96.7	97.9	36.8	72.2
18	93.3	94.8	90.2	89.1	90.5	95.9	97.2	97.5	98.4	97.7	97.7	98.0	98.0	97.7	97.1	91.7	84.6	84.2	91.1	92.2	95.9	97.2	96.4	96.2	98.4	84.2	94.3
19	98.3	98.1	97.5	97.9	96.9	96.1	97.0	97.1	98.5	97.3	97.2	97.4	97.8	98.1	98.8	98.6	98.7	98.7	98.6	98.9	98.7	98.9	98.7	98.7	98.9	96.1	98.0
20	98.7	98.6	98.6	98.4	98.3	98.5	98.6	98.6	98.7	98.9	99.0	99.1	99.1	99.0	98.5	98.5	96.9	96.1	95.2	95.6	94.9	94.7	94.4	94.0	99.1	94.0	97.5
21	94.1	94.1	94.2	93.9	93.7	93.6	93.6	93.4	93.5	93.7	93.8	93.7	93.4	92.5	91.7	91.0	90.4	89.2	87.3	86.6	88.9	89.1	89.3	90.6	94.2	86.6	91.9
22	90.2	90.6	90.1	91.0	90.9	91.7	91.9	92.2	91.9	92.0	91.5	91.1	90.1	89.5	89.4	89.2	88.0	87.7	86.8	87.6	88.8	88.1	87.5	87.9	92.2	86.8	89.8
23	88.7	89.1	87.1	84.9	85.8	87.0	87.5	82.5	78.1	80.9	83.5	81.6	79.4	81.1	81.0	83.4	84.1	84.1	87.1	88.5	89.6	91.1	87.1	86.6	91.1	78.1	85.0
24	89.2	90.3	90.9	93.3	91.2	92.0	94.0	93.0	92.7	93.2	92.4	88.3	86.2	84.2	83.9	83.7	83.6	83.0	86.0	88.6	90.2	92.7	92.7	92.8	94.0	83.0	89.5
25	92.1	90.9	91.1	88.6	89.4	90.1	90.8	91.5	91.7	90.4	88.5	86.2	83.8	81.7	80.8	80.0	79.4	79.2	79.3	80.5	82.9	84.1	84.6	84.6	92.1	79.2	85.9
26	85.1	86.4	87.6	88.4	88.6	88.6	89.1	89.4	89.1	88.1	87.3	85.8	84.8	82.4	80.3	79.9	79.0	77.8	77.5	77.5	79.4	79.2	77.4	77.5	89.4	77.4	83.6
27	76.9	76.1	75.4	75.6	77.0	77.9	76.3	71.5	69.6	65.0	64.6	65.4	66.2	65.8	65.2	64.2	64.8	64.8	64.0	67.5	75.8	79.5	81.2	80.7	81.2	64.0	71.3
28	80.3	77.7	76.2	75.7	73.4	73.9	74.4	70.9	70.0	74.4	75.6	73.7	72.4	72.9	75.2	76.3	75.8	77.8	78.4	80.2	81.3	74.5	70.3	68.2	81.3	68.2	75.0
29	67.7	71.3	73.2	71.1	74.6	74.3	74.2	66.6	67.6	68.7	63.1	57.4	56.4	62.3	68.9	68.2	67.9	67.8	70.3	72.3	75.3	79.3	80.0	86.3	86.3	56.4	70.2
30	86.2	82.5	82.1	80.6	82.2	85.4	86.5	91.4	97.7	99.5	99.4	98.9	98.1	96.9	97.3	98.5	99.1	99.2	99.4	99.6	99.8	100.0	100.0	100.0	100.0	80.6	94.2
31	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.3	98.2	97.8	97.2	95.8	96.7	96.2	96.2	97.0	97.9	97.9	98.5	99.3	100.0	95.8	98.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.4**	**99.3**	**99.9**	**99.9**	**100.0**	**100.0**	**99.7**	**99.3**	**99.4**	**99.6**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**38.3**	**36.8**	**39.0**	**40.8**	**39.3**	**41.9**	**44.5**	**52.5**	**57.1**	**54.4**	**50.1**	**51.5**	**51.9**	**52.5**	**55.8**	**56.8**	57.7	57.0	**57.4**	**58.9**	**59.9**	**52.9**	**42.3**	**40.3**		**36.8**	
Avg.	**88.3**	**88.1**	**88.1**	**88.2**	**88.1**	**88.5**	**88.9**	**88.6**	**88.1**	**88.2**	**88.3**	**88.0**	**87.9**	**88.2**	**88.2**	**87.9**	**87.6**	**87.4**	**87.6**	**88.4**	**89.6**	**89.7**	**89.1**	**89.1**			**88.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	98.8	97.6	97.3	97.2	97.4	97.2	97.9	98.3	97.6	93.6	87.4	80.3	78.9	78.9	85.0	83.3	78.9	87.9	89.3	86.7	93.3	94.7	97.3	97.5	98.8	78.9	91.3
2	97.2	98.2	97.9	98.2	96.8	96.8	96.4	96.4	96.6	95.7	96.1	96.7	96.8	96.9	96.9	96.7	96.1	92.0	90.5	83.7	82.3	83.0	77.3	76.0	98.2	76.0	93.0
3	70.9	80.8	88.8	92.9	97.2	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	70.9	97.1
4	100.0	100.0	100.0	100.0	100.0	99.1	96.1	92.8	91.9	88.5	88.3	89.3	91.0	92.1	90.6	91.5	93.2	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.3	95.9
5	100.0	100.0	99.4	97.5	98.1	98.1	97.5	96.8	94.7	89.8	88.3	85.9	82.4	79.2	71.9	66.3	65.3	65.5	66.4	64.2	61.8	66.8	67.9	72.5	100.0	61.8	82.3
6	76.0	76.9	79.3	81.6	83.0	83.6	84.0	82.8	80.7	79.8	76.9	74.2	71.5	69.4	68.4	69.0	66.7	67.1	64.4	64.0	63.0	64.4	63.6	60.2	84.0	60.2	72.9
7	62.2	63.1	62.7	64.8	70.2	73.8	74.3	69.3	68.7	79.9	80.2	80.2	80.6	82.4	82.9	85.5	87.1	85.5	86.0	86.0	85.6	84.5	84.3	89.4	89.4	62.2	77.9
8	90.0	89.8	87.1	84.1	93.0	100.0	100.0	100.0	100.0	99.9	98.6	100.0	100.0	99.4	97.9	98.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.1	97.4
9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	98.5	97.5	97.9	97.4	97.8	100.0	99.9	99.3	100.0	100.0	97.4	99.5
10	99.9	100.0	100.0	100.0	100.0	99.8	99.2	98.3	97.7	97.2	96.4	96.4	94.1	89.7	83.6	91.2	91.6	90.1	90.1	90.1	91.1	92.6	84.2	88.1	100.0	83.6	94.2
11	93.5	94.1	96.4	96.2	96.2	96.3	96.4	95.1	92.9	89.9	88.2	87.4	87.4	87.1	90.3	96.8	98.3	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.1	95.1
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.8	99.5	99.7	99.6	98.7	98.4	98.2	100.0	98.2	99.7
13	98.9	98.5	98.9	98.7	98.6	99.2	99.4	98.0	97.8	97.8	97.7	97.8	97.6	97.6	97.8	97.5	96.7	96.4	95.6	95.1	94.6	94.4	93.8	94.4	99.4	93.8	97.2
14	94.0	93.6	93.5	93.2	93.2	92.8	93.2	92.8	93.1	92.9	93.1	94.4	93.5	94.3	94.7	94.5	94.5	94.4	93.7	92.9	92.2	91.1	90.9	91.0	94.7	90.9	93.2
15	91.3	91.0	91.4	91.1	90.1	90.2	90.9	90.5	89.8	90.5	90.2	90.3	91.5	90.6	91.0	91.0	90.4	91.1	90.4	89.8	88.8	90.0	91.1	89.6	91.5	88.8	90.5
16	84.7	84.9	87.5	86.4	83.3	88.6	91.0	93.4	94.5	94.8	95.4	95.9	95.9	96.7	96.9	96.3	96.0	96.9	96.9	93.1	92.4	93.7	95.4	96.4	96.9	83.3	92.8
17	94.9	93.7	94.3	94.9	95.6	95.9	94.7	94.2	96.3	94.9	96.1	95.8	97.1	94.9	95.4	91.0	86.0	81.3	84.1	81.6	76.4	90.6	91.1	86.9	97.1	76.4	91.6
18	90.9	93.5	95.9	94.6	96.5	96.1	89.7	85.3	87.8	85.1	82.3	83.3	86.8	86.0	80.8	78.5	81.4	79.9	77.0	67.4	63.4	80.1	79.9	80.0	96.5	63.4	84.3
19	89.2	94.9	97.0	97.6	97.1	97.1	99.6	98.9	97.7	97.3	97.4	97.6	97.6	97.5	97.7	96.8	96.9	96.4	95.6	95.8	95.4	95.6	94.5	94.7	99.6	89.2	96.5
20	94.1	92.9	92.3	92.6	93.4	92.5	89.8	89.6	90.3	92.8	95.8	95.8	93.7	91.8	85.6	87.6	93.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.6	94.3
21	100.0	100.0	100.0	96.2	89.8	86.4	84.7	85.4	77.9	83.4	87.1	93.5	95.2	99.3	99.0	92.3	96.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.9	94.4
22	100.0	100.0	100.0	100.0	100.0	100.0	97.0	93.3	92.9	93.8	93.2	97.4	94.1	92.6	89.8	85.8	94.9	93.6	91.6	92.3	95.3	95.8	98.6	100.0	100.0	85.8	95.5
23	100.0	100.0	100.0	98.7	95.3	93.5	93.7	95.6	95.5	93.0	90.9	90.4	90.6	90.6	89.0	90.4	89.4	87.3	87.6	90.6	92.3	91.0	88.8	89.3	100.0	87.3	92.6
24	88.7	89.7	92.8	93.3	90.8	91.0	92.0	94.3	95.0	95.8	95.6	95.8	95.9	94.8	93.0	91.9	90.2	94.2	96.1	95.4	97.3	97.6	97.4	97.1	97.6	88.7	94.0
25	96.9	96.7	96.6	96.2	95.7	95.5	96.3	96.2	96.1	95.6	93.7	91.0	89.6	96.0	99.2	93.1	89.7	97.0	98.7	98.3	96.4	96.8	95.7	95.3	99.2	89.6	95.5
26	94.0	94.4	98.1	98.3	97.0	88.6	86.6	82.7	81.0	77.2	73.1	69.1	71.4	69.1	66.6	65.9	65.3	65.3	66.1	57.8	57.3	55.0	53.0	53.4	98.3	53.0	74.4
27	53.0	52.1	49.8	54.0	53.0	51.8	52.2	55.4	55.9	55.9	63.1	65.0	64.1	64.5	68.2	66.0	65.4	66.9	67.3	69.0	72.6	72.8	78.0	79.1	79.1	49.8	62.3
28	78.5	82.8	86.2	86.8	87.7	88.5	84.9	85.5	84.1	82.2	79.8	82.3	82.4	82.1	79.7	87.9	85.9	87.5	87.6	87.3	84.8	88.9	94.9	96.8	96.8	78.5	85.6
29	95.6	92.9	92.7	93.1	93.8	90.2	86.8	88.8	84.0	81.7	78.1	73.6	71.0	69.0	64.3	64.2	64.2	66.2	71.2	74.2	74.1	77.7	78.6	76.9	95.6	64.2	79.3
30	74.1	71.6	70.1	69.7	65.9	64.8	62.1	72.2	85.3	93.0	99.5	97.6	94.3	91.7	89.5	87.9	85.6	84.3	83.3	82.9	84.0	82.2	82.3	84.9	99.5	62.1	81.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**53.0**	**52.1**	**49.8**	**54.0**	**53.0**	**51.8**	**52.2**	**55.4**	**55.9**	**55.9**	**63.1**	**65.0**	**64.1**	**64.5**	**64.3**	**64.2**	64.2	65.3	**64.4**	**57.8**	**57.3**	**55.0**	**53.0**	**53.4**		**49.8**	
Avg.	**90.2**	**90.8**	**91.5**	**91.6**	**91.6**	**91.6**	**90.9**	**90.7**	**90.5**	**90.4**	**90.1**	**89.9**	**89.5**	**89.1**	**88.2**	**87.8**	**87.9**	**88.7**	**88.9**	**87.9**	**87.8**	**89.3**	**89.2**	**89.6**			**89.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	90.4	90.5	88.8	84.7	83.9	82.1	78.4	78.6	76.0	72.5	68.7	65.9	62.3	62.0	58.5	56.4	56.3	56.3	60.9	62.5	70.2	72.9	78.0	78.8	90.5	56.3	72.3
2	78.6	77.9	76.3	77.0	78.3	78.7	77.3	75.9	75.6	72.7	77.8	81.8	80.0	79.5	78.7	78.3	80.8	80.7	79.9	82.2	81.3	82.3	83.9	92.5	92.5	72.7	79.5
3	98.6	99.8	96.8	94.1	89.3	86.1	82.9	76.6	75.4	72.6	70.0	60.9	56.2	55.3	55.0	54.7	53.0	53.2	49.3	65.9	77.5	84.3	88.4	93.8	99.8	49.3	74.6
4	93.6	96.9	97.5	99.3	100.0	100.0	100.0	100.0	98.1	98.8	100.0	100.0	100.0	100.0	96.9	97.2	96.7	96.2	94.5	96.1	97.4	99.9	99.1	100.0	100.0	93.6	98.3
5	99.7	99.4	100.0	100.0	98.4	94.1	91.9	90.5	87.2	88.3	88.0	85.5	87.9	90.5	87.2	89.4	89.0	87.1	86.3	90.2	90.5	95.7	94.4	97.0	100.0	85.5	92.0
6	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.8	99.2	98.9	98.3	100.0	99.7	97.8	99.5	97.0	98.6	97.5	96.9	97.8	97.8	100.0	96.9	99.1
7	97.6	97.7	98.1	98.8	99.0	98.6	97.5	95.4	93.0	92.1	91.9	92.8	95.1	94.9	95.3	94.1	91.9	88.8	83.9	83.2	83.0	83.0	81.0	84.3	99.0	81.0	92.1
8	86.0	87.2	89.6	90.6	92.0	90.3	85.3	83.2	78.9	75.3	71.5	69.7	81.7	96.2	100.0	100.0	99.7	91.3	83.9	85.5	86.4	81.9	79.4	79.9	100.0	69.7	86.1
9	80.5	79.4	76.6	76.6	76.1	76.1	76.1	75.2	73.6	72.1	71.5	73.4	77.6	76.3	72.8	73.5	70.6	74.2	74.2	78.7	81.6	70.6	67.8	67.0	81.6	67.0	74.7
10	69.1	70.0	71.1	71.7	75.1	74.9	75.1	77.6	78.6	74.5	73.7	75.7	68.2	65.0	68.6	84.1	91.6	86.6	87.0	86.2	82.0	83.4	83.8	80.6	91.6	65.0	77.3
11	81.3	89.6	96.3	97.9	98.0	95.7	89.1	87.9	87.1	87.5	85.5	83.2	80.6	80.5	76.6	76.3	77.2	75.3	80.6	79.3	82.0	79.5	78.6	76.9	98.0	75.3	84.3
12	78.9	78.6	76.9	78.9	80.4	81.0	81.6	82.6	77.6	73.0	70.3	68.4	66.6	65.1	64.3	60.7	56.8	59.2	58.8	65.5	67.5	70.9	72.5	71.2	82.6	56.8	71.1
13	72.9	75.7	78.8	77.5	78.0	76.9	73.1	73.6	70.4	66.7	72.7	72.6	67.7	64.6	67.7	71.2	68.3	69.7	66.2	68.1	68.9	66.8	69.9	71.4	78.8	64.6	71.2
14	69.4	73.5	74.0	73.9	74.3	68.6	69.6	68.7	70.4	70.1	65.7	64.0	66.2	66.8	64.4	70.6	72.1	74.7	76.1	81.8	87.2	86.6	91.0	95.6	95.6	64.0	74.0
15	95.2	95.4	96.4	97.6	97.3	98.2	99.9	98.6	94.7	90.3	86.3	80.7	76.9	70.6	66.9	62.6	63.5	65.4	64.9	61.9	67.8	68.1	71.8	75.1	99.9	61.9	81.1
16	75.9	76.5	78.2	81.7	87.8	93.3	95.5	92.9	91.0	87.5	85.2	80.7	73.9	67.0	60.9	58.3	59.1	61.1	55.8	59.2	63.2	66.0	68.1	70.9	95.5	55.8	74.6
17	73.2	83.6	86.5	90.4	89.4	90.6	93.4	88.5	79.5	75.7	66.3	61.9	62.9	62.6	61.8	65.0	69.0	71.8	75.3	82.5	86.3	86.2	86.5	84.4	93.4	61.8	78.1
18	85.8	86.1	86.3	87.9	91.5	95.6	97.7	99.1	99.7	99.8	99.9	99.5	100.0	97.3	90.2	77.1	75.1	76.0	78.4	79.1	84.6	89.0	90.0	88.0	100.0	75.1	89.7
19	88.9	90.6	89.6	92.1	92.6	92.5	90.6	89.8	86.8	85.1	89.5	83.5	80.6	73.5	63.6	68.7	96.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	63.6	89.7
20	100.0	100.0	99.5	98.4	99.4	98.9	98.3	99.0	97.4	92.6	89.8	84.8	80.0	78.1	76.7	76.4	78.2	83.5	82.9	83.6	88.5	98.2	100.0	100.0	100.0	76.4	91.0
21	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	93.2	88.9	86.6	81.8	80.2	79.4	83.4	81.0	78.4	79.2	79.6	81.7	83.3	100.0	78.4	90.6
22	86.2	88.0	89.4	92.0	93.5	93.2	91.3	86.0	82.2	78.4	75.8	73.4	69.7	64.0	59.5	55.5	54.2	52.4	52.6	55.9	62.5	65.2	70.5	74.2	93.5	52.4	73.6
23	74.6	79.3	84.8	84.6	84.2	77.0	76.5	72.7	68.9	61.6	54.5	48.8	40.6	34.5	36.2	36.6	34.8	39.9	43.5	45.0	51.8	54.9	56.0	58.2	84.8	34.5	58.3
24	59.7	61.1	60.3	61.9	63.0	59.3	55.8	59.0	58.5	51.1	44.0	43.1	40.4	37.1	34.3	33.9	29.2	30.0	32.6	42.6	42.1	42.1	42.0	44.3	63.0	29.2	47.0
25	45.8	49.4	52.9	53.0	56.7	55.2	55.9	56.3	50.5	47.3	44.3	41.2	36.5	33.9	31.4	34.0	35.0	38.3	40.7	41.1	37.0	39.8	41.2	40.2	56.7	31.4	44.1
26	42.7	45.5	50.5	52.9	58.3	57.7	61.3	58.6	54.2	46.8	41.8	33.2	30.4	30.8	29.8	28.8	26.0	20.2	18.5	22.6	27.1	32.3	33.0	41.8	61.3	18.5	39.4
27	52.7	54.8	58.3	66.1	64.3	66.8	65.3	66.6	64.5	59.2	57.1	53.2	48.6	49.9	47.6	42.6	39.3	36.9	39.5	45.0	44.6	52.2	58.8	59.4	66.8	36.9	53.9
28	62.4	64.2	61.5	60.5	57.6	55.9	53.6	41.3	41.2	41.3	39.5	37.4	35.6	33.6	32.8	33.3	33.1	32.9	33.0	37.9	42.0	41.3	38.1	34.7	64.2	32.8	43.5
29	33.0	34.2	37.6	40.0	39.4	40.7	39.4	39.0	36.7	31.9	28.9	25.5	26.1	26.3	29.2	32.0	31.9	33.1	36.7	42.6	49.6	55.5	59.7	61.9	61.9	25.5	38.0
30	66.1	72.1	75.7	77.9	79.6	76.9	73.0	61.5	54.7	55.2	54.2	50.9	42.4	42.0	47.3	52.9	57.2	62.5	69.4	75.9	79.1	83.7	84.8	83.0	84.8	42.0	65.7
31	81.9	83.4	85.3	87.9	90.2	93.3	96.4	97.4	98.4	99.1	99.3	99.3	99.4	99.7	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	81.9	96.3
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**33.0**	**34.2**	**37.6**	**40.0**	**39.4**	**40.7**	**39.4**	**39.0**	**36.7**	**31.9**	**28.9**	**25.5**	**26.1**	**26.3**	**29.2**	**28.8**	26.0	20.2	**18.5**	**22.6**	**27.1**	**32.3**	**33.0**	**34.7**		**18.5**	
Avg.	**78.1**	**80.0**	**81.1**	**82.1**	**82.8**	**82.2**	**81.3**	**79.7**	**77.4**	**74.8**	**73.0**	**70.4**	**68.4**	**67.2**	**65.7**	**65.9**	**66.5**	**67.1**	**67.2**	**70.2**	**72.8**	**74.5**	**75.7**	**77.0**			**74.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	94.6	88.9	81.0	73.7	67.3	63.0	60.5	54.8	55.4	64.8	69.7	75.3	76.3	71.6	100.0	54.8	83.1
2	61.5	57.4	60.5	64.3	64.1	59.9	62.5	54.8	50.7	48.6	43.6	39.9	40.1	37.6	35.3	35.0	33.6	37.7	41.5	48.5	48.8	57.4	67.0	74.1	74.1	33.6	51.0
3	81.7	84.1	88.7	91.2	91.8	91.5	85.3	83.6	77.3	73.8	64.0	56.3	52.1	50.3	50.6	47.9	41.8	36.1	34.6	35.0	35.6	40.3	45.0	50.5	91.8	34.6	62.0
4	53.2	60.0	59.8	61.0	62.7	60.1	52.7	46.8	41.8	38.0	33.7	31.0	29.8	29.0	27.8	27.5	27.1	26.8	27.6	28.8	33.9	42.6	52.7	58.6	62.7	26.8	42.2
5	58.9	58.6	57.0	61.1	66.3	65.5	58.7	54.0	49.5	43.2	39.3	36.7	34.3	30.2	28.3	27.3	24.1	21.1	22.6	24.6	28.0	35.4	38.8	37.0	66.3	21.1	41.7
6	36.5	39.9	41.9	44.4	39.6	42.7	47.1	49.4	51.0	47.2	40.0	33.0	31.0	30.4	28.8	28.1	29.5	34.5	41.6	46.0	50.5	57.0	63.5	69.9	69.9	28.1	42.6
7	73.8	71.0	68.2	70.5	75.3	80.4	82.0	78.0	72.1	73.5	75.5	76.1	78.6	75.3	78.9	92.2	95.9	97.6	97.2	97.0	97.0	97.0	97.7	97.9	97.9	68.2	83.3
8	97.0	94.6	93.1	94.6	95.6	96.1	95.9	94.5	92.6	88.5	87.5	84.2	78.5	74.0	72.9	73.6	80.1	72.8	71.0	74.9	77.1	78.2	74.0	73.0	97.0	71.0	83.9
9	71.8	73.8	74.6	76.0	77.8	77.9	83.5	84.5	77.2	72.7	67.6	65.3	59.9	63.1	63.8	65.9	71.1	75.3	86.4	87.7	92.1	92.9	94.8	90.3	94.8	59.9	76.9
10	89.7	89.1	91.4	94.8	93.8	92.2	92.9	89.5	83.4	77.0	75.2	73.2	72.2	69.1	67.9	66.4	71.2	72.4	77.1	83.0	94.8	92.3	89.2	89.9	94.8	66.4	82.8
11	94.0	93.2	92.3	93.0	92.3	89.9	91.3	93.4	92.8	92.2	91.0	89.2	88.9	86.5	84.5	84.1	82.4	82.2	88.7	92.2	93.8	95.2	94.6	96.0	96.0	82.2	90.6
12	94.0	91.1	91.6	90.0	91.3	93.6	91.2	91.7	90.4	90.6	93.3	95.1	94.4	94.0	94.7	93.7	93.4	95.7	98.5	98.9	98.8	99.0	99.1	99.1	99.1	90.0	94.3
13	99.1	99.1	99.1	99.1	99.2	99.3	99.7	97.3	90.2	88.6	87.1	82.0	77.6	75.5	74.1	70.9	69.6	73.0	75.9	77.7	77.8	81.2	80.5	81.2	99.7	69.6	85.6
14	84.5	84.5	83.2	85.9	88.0	87.7	86.3	85.1	84.6	81.5	80.0	71.5	70.9	69.6	66.5	62.0	62.9	64.8	72.6	75.1	80.1	83.6	83.5	91.0	91.0	62.0	78.6
15	91.9	90.9	95.3	97.3	98.0	97.9	95.4	90.1	87.6	78.0	71.2	61.5	54.8	46.0	47.2	83.6	92.2	96.6	90.9	96.3	98.7	99.1	99.8	100.0	100.0	46.0	85.8
16	100.0	100.0	100.0	100.0	99.0	96.6	98.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	98.1	96.9	97.0	97.3	100.0	96.6	99.3
17	97.5	96.5	95.3	93.6	89.9	86.9	87.2	92.6	96.5	97.7	90.3	81.8	78.9	81.9	94.6	90.1	83.4	85.5	87.8	92.8	96.2	98.2	97.8	98.2	98.2	78.9	91.3
18	98.6	98.8	98.8	98.8	96.2	92.5	94.9	94.6	88.3	84.4	85.9	79.5	84.6	86.8	79.2	70.4	70.9	75.1	77.5	79.7	82.8	83.3	83.5	86.7	98.8	70.4	86.3
19	88.6	84.0	83.7	88.5	89.7	86.2	81.8	78.8	74.4	70.0	62.3	61.7	54.9	52.8	51.6	55.4	52.8	61.7	60.3	65.2	86.1	96.0	97.8	97.0	97.8	51.6	74.2
20	96.6	94.4	88.6	90.6	85.3	81.7	80.5	76.1	72.5	70.6	68.8	60.9	51.6	58.4	78.5	96.0	94.9	92.4	88.6	79.2	78.2	81.2	83.1	86.3	96.6	51.6	80.6
21	86.2	88.4	91.0	91.3	83.5	78.6	79.3	70.9	66.1	56.5	57.2	56.9	51.1	50.9	54.5	53.8	58.7	55.3	48.9	53.0	48.4	54.4	61.0	64.3	91.3	48.4	65.0
22	62.6	63.0	65.8	68.3	71.4	74.7	72.4	74.3	73.1	78.0	80.3	75.7	77.7	89.9	96.4	97.9	97.5	96.8	95.9	96.5	96.4	96.9	95.6	95.8	97.9	62.6	83.0
23	95.8	92.8	89.7	89.3	89.9	90.0	91.7	90.5	88.6	84.1	81.3	80.2	73.4	70.7	67.5	66.3	66.3	68.0	68.6	73.9	82.3	84.8	87.6	92.1	95.8	66.3	81.9
24	95.7	95.2	93.5	91.1	88.6	90.5	83.9	79.4	74.6	72.7	68.0	63.6	57.3	53.4	50.5	50.6	56.2	63.9	70.8	65.4	67.0	69.0	64.3	67.7	95.7	50.5	72.2
25	67.8	72.6	87.5	93.7	87.4	83.4	85.6	79.1	67.3	60.9	57.1	49.8	48.3	48.7	51.4	53.1	51.1	53.6	59.3	66.8	73.4	75.3	76.2	78.3	93.7	48.3	67.8
26	81.1	84.3	88.2	91.4	93.7	93.7	95.6	90.1	79.4	57.8	52.5	51.4	48.4	51.0	53.1	56.2	55.1	44.7	41.7	61.6	77.0	82.9	86.0	87.7	95.6	41.7	71.0
27	89.7	85.1	78.1	75.2	76.6	79.3	82.1	78.7	68.3	63.9	58.5	58.1	55.6	55.7	54.1	51.2	50.5	50.1	47.0	52.8	56.0	65.3	70.4	75.9	89.7	47.0	65.8
28	80.3	85.7	87.8	91.2	87.3	85.6	85.5	89.3	94.3	94.3	97.7	86.5	83.3	82.4	80.1	83.3	82.4	84.3	84.1	82.3	83.1	86.2	87.5	87.8	97.7	80.1	86.3
29	90.5	93.8	97.0	97.8	98.3	98.9	99.1	99.1	95.5	89.6	90.2	91.0	86.9	76.7	71.6	62.2	64.8	69.8	76.5	82.0	89.4	95.5	97.6	98.2	99.1	62.2	88.0
30	98.6	98.8	98.9	98.9	99.0	99.1	99.2	99.1	99.1	99.0	98.6	96.9	94.7	94.4	91.6	92.6	91.2	88.7	87.6	86.9	87.2	90.3	93.2	93.4	99.2	86.9	94.9
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**98.8**	**99.1**	**99.8**	**100.0**	**100.0**		
Min.	**36.5**	**39.9**	**41.9**	**44.4**	**39.6**	**42.7**	**47.1**	**46.8**	**41.8**	**38.0**	**33.7**	**31.0**	**29.8**	**29.0**	**27.8**	**27.3**	24.1	21.1	**22.6**	**24.6**	**28.0**	**35.4**	**38.8**	**37.0**		**21.1**	
Avg.	**83.9**	**84.0**	**84.7**	**86.1**	**85.7**	**85.1**	**84.7**	**82.8**	**79.3**	**75.7**	**73.1**	**69.3**	**66.4**	**65.3**	**65.4**	**66.7**	**67.0**	**67.7**	**69.2**	**72.3**	**75.9**	**79.4**	**81.2**	**82.9**			**76.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	94.5	95.6	96.8	97.8	98.3	99.0	99.2	99.3	99.4	99.5	96.9	86.7	79.3	70.3	61.0	56.9	51.4	51.5	58.1	60.4	65.6	67.1	72.4	71.6	99.5	51.4	80.4
2	77.3	75.8	79.3	86.3	88.4	87.0	87.6	85.5	80.7	72.8	66.5	61.3	58.9	57.1	54.3	53.8	54.3	53.4	52.7	54.5	58.1	71.5	77.7	82.4	88.4	52.7	69.9
3	83.8	83.4	86.3	91.2	94.2	95.1	93.9	88.8	86.8	75.6	70.0	65.1	61.0	57.0	52.3	49.0	55.8	58.5	57.1	57.2	56.6	69.2	80.3	81.2	95.1	49.0	72.9
4	83.6	83.2	84.9	87.5	90.8	91.1	82.4	78.4	71.8	69.5	63.9	60.4	49.6	47.1	45.0	47.0	48.1	50.0	49.7	52.3	65.5	72.4	76.0	76.6	91.1	45.0	67.8
5	81.0	83.8	86.7	88.3	92.2	96.8	98.5	99.0	99.1	97.7	87.6	75.3	66.2	63.9	56.5	56.4	72.3	84.5	77.4	84.6	90.2	86.7	88.5	80.4	99.1	56.4	83.1
6	81.1	83.2	81.2	80.9	84.3	85.7	86.1	91.1	93.0	90.7	87.7	81.4	80.7	80.2	77.2	73.9	72.2	76.6	77.6	78.8	86.1	92.5	94.4	96.3	96.3	72.2	83.9
7	96.7	97.5	97.9	98.2	98.4	98.7	99.0	99.2	99.2	99.3	99.4	99.4	99.4	99.0	98.7	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.5	99.5	99.5	96.7	98.9
8	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.6	99.6	98.1	94.3	92.4	92.6	90.2	88.0	86.9	94.4	95.8	96.6	99.7	86.9	96.8
9	97.4	97.7	97.9	98.3	98.9	99.2	99.4	99.4	97.5	86.6	82.0	74.6	66.1	63.7	64.9	61.7	62.1	65.5	71.1	75.5	76.6	77.5	79.1	84.3	99.4	61.7	82.4
10	86.1	88.6	91.2	92.9									91.8	93.1	93.3	91.1	86.6	81.1	81.2	76.2	75.2	73.5	72.3	70.9	93.3	70.9	84.1
11	69.3	70.2	71.9	74.7	82.8	88.8	93.9	93.9	95.0		95.8	96.0	94.5	93.4	92.4	89.6	87.6	85.5	78.4	72.5	69.4	67.1	66.1	65.9	96.0	65.9	82.4
12	67.3	70.7	74.6	72.6	71.0	75.4	79.7	78.3	81.2	86.7	83.4	81.0	81.4	81.9	79.0	78.2	69.9	67.4	66.7	65.9	65.1	63.1	60.8	56.8	86.7	56.8	73.3
13	52.8	49.7	52.7	56.1	59.5	68.5	75.2	75.4	72.2	75.9	75.4	74.7	72.0	70.5	74.1	90.2	98.1	98.4	98.9	99.0	98.6	98.4	96.4	95.6	99.0	49.7	78.3
14	98.1	98.9	99.1	99.2	99.3	99.3	99.3	99.1	99.1	99.0	99.1	99.1	99.2	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.6	98.5	97.8	99.6	97.8	99.1
15	98.1	97.8	97.7	98.2	98.7	98.7	98.8	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.3	99.4	99.4	99.5	99.5	98.8	96.8	96.5	94.8	91.0	99.5	91.0	98.2
16	84.5	79.2	78.0	80.1	85.4	88.6	88.7	91.1	91.0	96.3	98.2	98.4	96.4	92.9	90.3	88.6	86.8	86.6	85.0	82.6	79.5	77.7	79.7	73.2	98.4	73.2	86.6
17	70.8	70.7	72.3	73.2	77.4	79.6	80.3	80.3	81.0	83.1	85.4	87.8	93.3	96.8	94.3	92.6	91.4	89.6	86.4	82.9	74.5	73.9	70.9	74.4	96.8	70.7	81.8
18	78.7	81.3	89.2	90.5	91.0	91.9	91.3	89.5	90.3	87.1	88.7	90.8	93.2	95.1	93.2	91.2	90.3	88.4	86.5	81.1	79.2	78.5	76.7	81.5	95.1	76.7	87.3
19	83.5	82.3	81.9	79.5	83.7	85.3	85.2	85.4	87.1	85.6	86.2	87.5	89.1	90.6	89.1	83.6	79.0	78.2	73.6	59.9	55.3	55.6	54.0	55.6	90.6	54.0	78.2
20	57.0	60.6	59.6	58.3	62.3	66.9	67.8	66.0	71.6	72.6	74.1	80.4	76.6	76.5	76.4	73.9	62.6	52.0	49.5	48.9	46.3	46.4	44.4	47.0	80.4	44.4	62.4
21	49.1	47.0	47.2	58.8	67.8	74.9	82.8	90.2	95.2	97.1	97.3	93.3	89.4	90.3	83.4	82.6	83.8	74.7	65.6	62.9	60.4	78.9	79.9	72.4	97.3	47.0	76.0
22	70.4	76.4	79.8	83.9	85.8	83.5	83.4	83.7	82.0	78.8	78.5	80.0	80.0	83.9	82.7	84.0	80.7	74.3	73.2	72.8	77.3	77.3	80.3	92.5	92.5	70.4	80.2
23	96.5	98.5	99.0	99.0	95.5	92.8	91.8	90.2	87.8	86.0	85.6	90.9	92.7	93.8	96.5	96.2	94.9	92.6	91.6	87.1	83.2	87.5	82.7	86.6	99.0	82.7	91.6
24	88.9	88.8	91.5	95.8	97.5	98.5	99.0	99.1	99.1	99.1	99.0	98.7	98.3	96.6	96.6	94.8	94.1	93.0	93.9	96.0	92.9	93.7	93.1	93.2	99.1	88.8	95.5
25	93.8	98.1	99.0	99.2	99.3	99.4	99.4	99.5	99.5	99.4	98.5	96.3	95.2	97.3	97.9	97.5	98.7	98.6	95.9	93.9	90.5	85.1	81.7	78.5	99.5	78.5	95.5
26	75.2	78.0	78.2	82.0	84.8	87.3	90.8	92.0	91.2	88.4	87.0	84.7	83.7	82.4	84.7	89.1	93.7	94.4	97.9	95.0	90.0	84.4	84.0	84.5	97.9	75.2	86.8
27	83.5	82.2	86.0	87.2	87.3	91.8	94.9	96.0	96.0	96.7	97.8	97.8	92.9	93.7	94.4	94.4	94.1	89.7	85.4	83.7	82.6	79.9	76.4	73.3	97.8	73.3	89.1
28	71.9	70.7	70.4	72.1	76.1	78.4	84.5	87.8	90.7	89.5	90.4	90.3	93.7	94.3	89.4	89.5	87.2	80.5	75.2	70.7	72.3	74.6	77.1	81.6	94.3	70.4	81.6
29	89.2	94.2	96.7	94.3	96.9	97.8	98.6	98.7	98.7	98.8	98.9	98.7	97.8	98.6	98.7	98.7	98.8	98.7	98.2	94.7	89.2	81.4	71.3	67.2	98.9	67.2	93.9
30	74.7	81.8	82.5	86.4	93.1	96.3	97.7	97.0	96.7	96.6	96.3	96.5	96.9	97.6	98.1	98.8	99.1	99.2	99.2	99.0	98.0	98.1	97.4	91.9	99.2	74.7	94.5
31	86.8	82.5	74.5	80.4	73.7	80.4	87.1	91.2	96.3	97.8	98.2	98.6	97.1	96.9	97.4	97.6	96.3	93.8	91.2	89.9	87.3	88.1	83.0	85.2	98.6	73.7	89.6
Max.	**99.5**	**99.5**	**99.5**	**99.5**	**99.5**	**99.5**	**99.6**	**99.6**	**99.6**	**99.7**	**99.7**	**99.7**	**99.6**	**99.6**	**99.3**	**99.4**	**99.4**	**99.5**	**99.5**	**99.6**	**99.6**	**99.6**	**99.5**	**99.5**	**99.7**		
Min.	**49.1**	**47.0**	**47.2**	**56.1**	**59.5**	**66.9**	**67.8**	**66.0**	**71.6**	**69.5**	**63.9**	**60.4**	**49.6**	**47.1**	**45.0**	**47.0**	48.1	50.0	**49.5**	**48.9**	**46.3**	**46.4**	**44.4**	**47.0**		**44.4**	
Avg.	**81.3**	**82.2**	**83.3**	**85.2**	**87.1**	**89.2**	**90.5**	**90.8**	**90.9**	**89.8**	**88.9**	**87.5**	**86.0**	**85.6**	**84.1**	**83.6**	**83.2**	**82.2**	**80.8**	**79.5**	**79.0**	**80.3**	**80.2**	**80.2**			**84.6**

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	8	37	90	165	333	195	245	433	547	354	255	335	187	135	79	27	7	0	0	547	0	143
2	0	0	0	0	0	14	91	179	235	255	259	240	226	205	360	249	184	170	161	56	16	3	0	0	360	0	121
3	0	0	0	0	0	4	23	48	128	255	384	351	270	233	273	179	277	278	160	151	65	9	0	0	384	0	129
4	0	0	0	0	0	8	64	185	200	153	151	309	198	214	265	128	138	61	82	120	54	8	0	0	309	0	97
5	0	0	0	0	0	11	59	126	111	193	189	405	406	524	647	471	254	212	306	195	54	7	0	0	647	0	174
6	0	0	0	0	0	14	94	211	319	489	515	317	380	399	547	526	322	255	233	69	78	20	0	0	547	0	199
7	0	0	0	0	0	8	54	120	177	305	350	257	359	553	617	539	506	445	251	167	68	7	0	0	617	0	199
8	0	0	0	0	0	7	71	208	333	448	565	651	699	698	693	638	541	438	310	188	74	8	0	0	699	0	274
9	0	0	0	0	0	9	85	201	325	449	555	638	689	706	683	623	546	438	312	186	70	6	0	0	706	0	272
10	0	0	0	0	0	8	81	201	324	450	561	645	697	714	696	636	554	442	317	182	59	3	0	0	714	0	274
11	0	0	0	0	0	7	80	198	324	448	556	639	691	706	685	625	543	431	304	180	64	5	0	0	706	0	270
12	0	0	0	0	0	6	75	193	319	443	551	633	682	697	676	615	532	421	295	169	55	4	0	0	697	0	265
13	0	0	0	0	0	5	70	186	311	434	541	623	670	686	665	602	519	253	286	180	37	3	0	0	686	0	253
14	0	0	0	0	0	7	67	145	237	420	537	616	666	682	660	597	511	400	275	148	37	2	0	0	682	0	250
15	0	0	0	0	0	3	22	49	68	148	223	516	553	546	445	343	518	279	104	69	23	2	0	0	553	0	163
16	0	0	0	0	0	3	37	67	68	132	171	180	94	148	256	191	179	104	89	118	31	3	0	0	256	0	78
17	0	0	0	0	0	2	5	19	40	49	69	86	47	138	174	179	193	58	55	52	23	0	0	0	193	0	50
18	0	0	0	0	0	1	11	70	57	121	146	330	526	381	461	131	106	128	35	6	2	0	0	0	526	0	105
19	0	0	0	0	0	2	18	36	109	265	417	551	594	604	564	493	391	299	162	80	21	0	0	0	604	0	192
20	0	0	0	0	0	0	4	23	91	214	305	395	443	288	247	237	166	72	23	15	4	0	0	0	443	0	105
21	0	0	0	0	0	0	8	51	157	388	532	472	434	519	441	520	474	394	262	116	20	0	0	0	532	0	199
22	0	0	0	0	0	1	15	41	53	55	122	267	206	89	87	56	31	23	13	8	1	0	0	0	267	0	44
23	0	0	0	0	0	0	6	44	63	56	87	170	159	146	103	98	136	92	29	19	2	0	0	0	170	0	50
24	0	0	0	0	0	0	4	17	43	58	143	123	168	437	354	390	189	145	128	119	18	0	0	0	437	0	97
25	0	0	0	0	0	0	20	83	250	365	491	386	554	518	603	241	360	282	234	115	17	0	0	0	603	0	188
26	0	0	0	0	0	0	27	135	96	113	228	405	635	626	524	415	183	96	86	18	3	0	0	0	635	0	150
27	0	0	0	0	0	1	25	140	263	383	488	558	548	406	314	204	135	95	53	20	2	0	0	0	558	0	151
28	0	0	0	0	0	0	3	15	24	34	100	143	189	275	272	126	96	60	21	18	3	0	0	0	275	0	57
29	0	0	0	0	0	0	5	18	46	106	111	122	107	141	168	157	128	86	59	24	4	0	0	0	168	0	53
30	0	0	0	0	0	0	8	68	187	437	328	284	182	318	218	215	163	116	80	26	3	0	0	0	437	0	110
31	0	0	0	0	0	0	6	57	93	183	250	221	430	591	362	381	251	88	189	53	4	0	0	0	591	0	132
Max.	**0**	**0**	**0**	**0**	**0**	**14**	**94**	**211**	**333**	**489**	**565**	**651**	**699**	**714**	**696**	**638**	**554**	**445**	**317**	**195**	**78**	**20**	**0**	**0**	**714**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**15**	**24**	**34**	**69**	**86**	**47**	**89**	**87**	**56**	**31**	**23**	**13**	**6**	**1**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**4**	**38**	**104**	**168**	**264**	**326**	**380**	**417**	**443**	**433**	**357**	**305**	**221**	**163**	**95**	**30**	**3**	**0**	**0**			**156**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	17	121	246	371	479	560	609	622	597	531	441	327	201	76	3	0	0	0	622	0	217
2	0	0	0	0	0	0	21	109	198	338	338	339	407	360	331	196	117	84	65	21	1	0	0	0	407	0	122
3	0	0	0	0	0	0	1	10	12	25	33	58	59	99	94	103	79	55	23	7	0	0	0	0	103	0	27
4	0	0	0	0	0	0	1	15	62	116	126	238	409	413	222	136	193	98	42	10	0	0	0	0	413	0	87
5	0	0	0	0	0	0	4	10	21	39	69	85	97	113	50	43	51	20	13	5	0	0	0	0	113	0	26
6	0	0	0	0	0	0	2	40	74	135	180	175	125	164	207	291	243	67	73	16	0	0	0	0	291	0	75
7	0	0	0	0	0	0	4	30	90	140	244	309	326	255	317	400	267	136	78	45	1	0	0	0	400	0	110
8	0	0	0	0	0	0	7	78	188	313	402	316	369	421	369	232	148	61	20	6	0	0	0	0	421	0	122
9	0	0	0	0	0	0	0	1	7	18	28	55	71	103	110	97	78	111	88	13	0	0	0	0	111	0	33
10	0	0	0	0	0	0	2	21	27	36	112	384	255	179	175	157	136	119	35	9	0	0	0	0	384	0	69
11	0	0	0	0	0	0	4	21	188	152	92	53	66	92	144	105	62	32	10	2	0	0	0	0	188	0	43
12	0	0	0	0	0	0	1	30	119	70	99	147	118	114	196	170	149	133	59	15	0	0	0	0	196	0	59
13	0	0	0	0	0	0	2	17	45	66	108	144	260	380	289	140	207	79	45	8	0	0	0	0	380	0	75
14	0	0	0	0	0	0	1	20	90	133	285	240	396	535	491	427	297	148	77	5	0	0	0	0	535	0	131
15	0	0	0	0	0	0	0	3	16	16	31	111	95	87	57	75	50	24	17	2	0	0	0	0	111	0	24
16	0	0	0	0	0	0	0	14	54	74	165	157	271	294	185	165	106	47	41	6	0	0	0	0	294	0	66
17	0	0	0	0	0	0	1	10	33	88	193	265	264	115	237	136	66	44	36	5	0	0	0	0	265	0	62
18	0	0	0	0	0	0	1	28	75	266	389	509	460	511	402	270	295	165	74	12	0	0	0	0	511	0	144
19	0	0	0	0	0	0	1	31	70	160	255	459	480	414	454	329	140	121	75	5	0	0	0	0	480	0	125
20	0	0	0	0	0	0	1	28	130	267	335	273	327	297	163	208	183	78	66	6	0	0	0	0	335	0	98
21	0	0	0	0	0	0	0	4	14	34	47	34	44	93	90	71	58	50	15	1	0	0	0	0	93	0	23
22	0	0	0	0	0	0	0	6	33	47	39	40	91	49	32	33	39	25	20	11	0	0	0	0	91	0	19
23	0	0	0	0	0	0	0	1	23	55	119	122	219	233	260	70	36	8	2	0	0	0	0	0	260	0	48
24	0	0	0	0	0	0	0	20	41	72	162	201	185	190	271	224	221	92	24	1	0	0	0	0	271	0	71
25	0	0	0	0	0	0	0	5	32	60	112	121	110	240	180	157	99	71	18	1	0	0	0	0	240	0	50
26	0	0	0	0	0	0	0	12	48	100	195	310	287	345	162	62	54	28	10	0	0	0	0	0	345	0	67
27	0	0	0	0	0	0	0	1	15	32	67	110	150	89	77	45	36	18	6	0	0	0	0	0	150	0	27
28	0	0	0	0	0	0	0	3	19	47	126	202	313	261	75	60	53	42	8	0	0	0	0	0	313	0	50
29	0	0	0	0	0	0	0	5	30	152	109	99	117	142	109	135	98	66	13	0	0	0	0	0	152	0	45
30	0	0	0	0	0	0	0	13	116	220	268	131	193	243	182	205	114	58	19	0	0	0	0	0	268	0	73
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**121**	**246**	**371**	**479**	**560**	**609**	**622**	**597**	**531**	**441**	**327**	**201**	**76**	**3**	**0**	**0**	**0**	**622**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**16**	**28**	**34**	**44**	**49**	**32**	**33**	**36**	**8**	**2**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**24**	**70**	**121**	**173**	**208**	**239**	**248**	**218**	**176**	**137**	**80**	**42**	**10**	**0**	**0**	**0**	**0**			**73**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	2	21	55	93	165	319	292	238	159	113	43	11	0	0	0	0	0	319	0	63
2	0	0	0	0	0	0	0	8	90	204	309	291	205	238	416	339	144	112	19	0	0	0	0	0	416	0	99
3	0	0	0	0	0	0	0	5	45	178	299	373	331	394	278	198	152	77	12	0	0	0	0	0	394	0	98
4	0	0	0	0	0	0	0	1	53	150	81	189	384	150	127	107	68	55	4	0	0	0	0	0	384	0	57
5	0	0	0	0	0	0	0	1	12	42	104	145	152	179	164	98	58	29	5	0	0	0	0	0	179	0	41
6	0	0	0	0	0	0	0	2	15	49	63	104	132	98	143	97	89	31	9	0	0	0	0	0	143	0	35
7	0	0	0	0	0	0	0	1	7	24	68	58	75	77	77	80	34	14	3	0	0	0	0	0	80	0	22
8	0	0	0	0	0	0	0	1	11	26	38	59	106	92	66	59	29	16	2	0	0	0	0	0	106	0	21
9	0	0	0	0	0	0	0	1	21	157	255	246	217	157	136	86	47	15	2	0	0	0	0	0	255	0	56
10	0	0	0	0	0	0	0	1	18	49	107	200	213	165	133	115	70	31	2	0	0	0	0	0	213	0	46
11	0	0	0	0	0	0	0	0	19	107	209	191	235	311	139	124	82	34	2	0	0	0	0	0	311	0	60
12	0	0	0	0	0	0	0	1	48	99	254	302	341	268	427	313	154	64	3	0	0	0	0	0	427	0	95
13	0	0	0	0	0	0	0	0	15	68	219	319	342	287	245	198	59	25	1	0	0	0	0	0	342	0	74
14	0	0	0	0	0	0	0	0	17	77	123	156	148	149	164	136	78	24	1	0	0	0	0	0	164	0	45
15	0	0	0	0	0	0	0	0	22	87	147	219	313	341	309	242	155	47	2	0	0	0	0	0	341	0	79
16	0	0	0	0	0	0	0	1	25	122	207	210	219	183	172	80	36	5	0	0	0	0	0	0	219	0	52
17	0	0	0	0	0	0	0	0	2	7	13	28	74	92	121	50	32	13	0	0	0	0	0	0	121	0	18
18	0	0	0	0	0	0	0	0	15	100	203	292	245	171	198	97	24	3	0	0	0	0	0	0	292	0	56
19	0	0	0	0	0	0	0	0	2	13	58	44	91	99	45	26	11	2	0	0	0	0	0	0	99	0	16
20	0	0	0	0	0	0	0	0	4	16	25	31	31	29	28	21	8	2	0	0	0	0	0	0	31	0	8
21	0	0	0	0	0	0	0	0	3	14	46	70	97	79	72	43	26	12	0	0	0	0	0	0	97	0	19
22	0	0	0	0	0	0	0	0	7	46	94	129	172	202	197	133	67	22	0	0	0	0	0	0	202	0	45
23	0	0	0	0	0	0	0	0	9	62	91	130	145	158	121	85	37	11	0	0	0	0	0	0	158	0	35
24	0	0	0	0	0	0	0	0	10	53	98	118	165	167	113	66	40	6	0	0	0	0	0	0	167	0	35
25	0	0	0	0	0	0	0	0	8	50	59	102	93	95	96	72	31	5	0	0	0	0	0	0	102	0	25
26	0	0	0	0	0	0	0	0	9	63	72	78	129	125	110	83	39	7	0	0	0	0	0	0	129	0	30
27	0	0	0	0	0	0	0	0	4	25	57	97	129	140	150	69	40	6	0	0	0	0	0	0	150	0	30
28	0	0	0	0	0	0	0	0	3	25	66	115	145	147	109	66	29	4	0	0	0	0	0	0	147	0	30
29	0	0	0	0	0	0	0	0	2	19	47	74	95	94	80	49	23	3	0	0	0	0	0	0	95	0	20
30	0	0	0	0	0	0	0	0	1	24	49	78	101	90	65	51	56	4	0	0	0	0	0	0	101	0	22
31	0	0	0	0	0	0	0	0	2	78	131	161	179	166	109	78	40	4	0	0	0	0	0	0	179	0	40
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**90**	**204**	**309**	**373**	**384**	**394**	**427**	**339**	**155**	**112**	**19**	**0**	**0**	**0**	**0**	**0**	**427**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**13**	**28**	**31**	**29**	**28**	**21**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**67**	**119**	**154**	**181**	**169**	**156**	**110**	**60**	**23**	**3**	**0**	**0**	**0**	**0**	**0**			**44**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	2	32	79	122	132	173	116	98	31	3	0	0	0	0	0	0	173	0	33
2	0	0	0	0	0	0	0	0	2	21	47	88	103	120	130	65	33	3	0	0	0	0	0	0	130	0	25
3	0	0	0	0	0	0	0	0	1	29	72	122	174	214	218	162	54	4	0	0	0	0	0	0	218	0	44
4	0	0	0	0	0	0	0	0	2	41	135	203	240	243	210	147	49	3	0	0	0	0	0	0	243	0	53
5	0	0	0	0	0	0	0	0	2	37	128	193	230	223	169	125	37	2	0	0	0	0	0	0	230	0	48
6	0	0	0	0	0	0	0	0	0	10	106	264	232	223	183	102	37	1	0	0	0	0	0	0	264	0	48
7	0	0	0	0	0	0	0	0	1	19	69	110	142	113	121	62	18	1	0	0	0	0	0	0	142	0	27
8	0	0	0	0	0	0	0	0	0	18	57	100	129	136	86	60	16	1	0	0	0	0	0	0	136	0	25
9	0	0	0	0	0	0	0	0	0	12	50	88	103	95	62	44	13	1	0	0	0	0	0	0	103	0	20
10	0	0	0	0	0	0	0	0	0	29	68	125	117	164	183	119	26	1	0	0	0	0	0	0	183	0	35
11	0	0	0	0	0	0	0	0	0	7	36	69	74	99	59	47	16	1	0	0	0	0	0	0	99	0	17
12	0	0	0	0	0	0	0	0	0	9	46	128	146	184	150	117	28	1	0	0	0	0	0	0	184	0	34
13	0	0	0	0	0	0	0	0	0	20	96	165	199	202	166	73	21	1	0	0	0	0	0	0	202	0	39
14	0	0	0	0	0	0	0	0	0	12	41	75	146	108	90	45	17	0	0	0	0	0	0	0	146	0	22
15	0	0	0	0	0	0	0	0	0	7	28	68	116	111	85	50	13	0	0	0	0	0	0	0	116	0	20
16	0	0	0	0	0	0	0	0	0	3	21	47	57	61	52	28	9	0	0	0	0	0	0	0	61	0	12
17	0	0	0	0	0	0	0	0	0	4	28	82	139	82	112	54	7	1	0	0	0	0	0	0	139	0	21
18	0	0	0	0	0	0	0	0	0	3	30	43	71	59	38	27	6	0	0	0	0	0	0	0	71	0	12
19	0	0	0	0	0	0	0	0	0	4	23	56	82	100	137	68	8	0	0	0	0	0	0	0	137	0	20
20	0	0	0	0	0	0	0	0	0	4	28	41	64	60	61	35	8	0	0	0	0	0	0	0	64	0	12
21	0	0	0	0	0	0	0	0	0	2	40	78	102	76	98	59	6	0	0	0	0	0	0	0	102	0	19
22	0	0	0	0	0	0	0	0	0	3	25	57	76	77	66	33	6	0	0	0	0	0	0	0	77	0	14
23	0	0	0	0	0	0	0	0	0	2	14	36	31	56	43	21	4	0	0	0	0	0	0	0	56	0	9
24	0	0	0	0	0	0	0	0	0	2	26	44	54	58	45	24	3	0	0	0	0	0	0	0	58	0	11
25	0	0	0	0	0	0	0	0	0	1	8	15	41	43	31	16	3	0	0	0	0	0	0	0	43	0	7
26	0	0	0	0	0	0	0	0	0	1	14	28	37	40	34	21	3	0	0	0	0	0	0	0	40	0	7
27	0	0	0	0	0	0	0	0	0	1	18	41	60	67	58	32	2	0	0	0	0	0	0	0	67	0	12
28	0	0	0	0	0	0	0	0	0	1	9	28	46	54	49	23	4	0	0	0	0	0	0	0	54	0	9
29	0	0	0	0	0	0	0	0	0	1	13	71	59	57	45	16	2	0	0	0	0	0	0	0	71	0	11
30	0	0	0	0	0	0	0	0	0	1	6	18	27	22	19	9	1	0	0	0	0	0	0	0	27	0	4
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**41**	**135**	**264**	**240**	**243**	**218**	**162**	**54**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**264**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**	**15**	**27**	**22**	**19**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**45**	**87**	**108**	**111**	**97**	**59**	**16**	**1**	**0**	**0**	**0**	**0**	**0**	**0**			**22**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	1	18	46	54	42	15	10	1	0	0	0	0	0	0	0	54	0	8
2	0	0	0	0	0	0	0	0	0	0	3	11	16	13	8	6	1	0	0	0	0	0	0	0	16	0	2
3	0	0	0	0	0	0	0	0	0	0	10	28	40	44	37	21	1	0	0	0	0	0	0	0	44	0	8
4	0	0	0	0	0	0	0	0	0	0	4	11	16	15	12	7	1	0	0	0	0	0	0	0	16	0	3
5	0	0	0	0	0	0	0	0	0	0	10	16	33	29	23	9	1	0	0	0	0	0	0	0	33	0	5
6	0	0	0	0	0	0	0	0	0	0	6	33	49	102	36	16	3	0	0	0	0	0	0	0	102	0	10
7	0	0	0	0	0	0	0	0	0	0	1	5	8	10	8	4	1	0	0	0	0	0	0	0	10	0	2
8	0	0	0	0	0	0	0	0	0	1	16	19	56	122	26	16	1	0	0	0	0	0	0	0	122	0	11
9	0	0	0	0	0	0	0	0	0	0	4	26	35	48	38	18	1	0	0	0	0	0	0	0	48	0	7
10	0	0	0	0	0	0	0	0	0	0	4	22	41	52	51	21	2	0	0	0	0	0	0	0	52	0	8
11	0	0	0	0	0	0	0	0	0	0	10	23	46	46	27	13	2	0	0	0	0	0	0	0	46	0	7
12	0	0	0	0	0	0	0	0	0	0	10	31	44	52	42	30	4	0	0	0	0	0	0	0	52	0	9
13	0	0	0	0	0	0	0	0	0	0	3	20	38	56	51	21	1	0	0	0	0	0	0	0	56	0	8
14	0	0	0	0	0	0	0	0	0	0	7	19	27	78	62	18	2	0	0	0	0	0	0	0	78	0	9
15	0	0	0	0	0	0	0	0	0	0	1	6	9	8	9	8	1	0	0	0	0	0	0	0	9	0	2
16	0	0	0	0	0	0	0	0	0	0	1	6	15	16	10	5	1	0	0	0	0	0	0	0	16	0	2
17	0	0	0	0	0	0	0	0	0	0	2	6	17	8	10	5	0	0	0	0	0	0	0	0	17	0	2
18	0	0	0	0	0	0	0	0	0	0	5	31	30	42	32	18	2	0	0	0	0	0	0	0	42	0	7
19	0	0	0	0	0	0	0	0	0	0	2	10	18	24	21	11	1	0	0	0	0	0	0	0	24	0	4
20	0	0	0	0	0	0	0	0	0	0	5	26	48	51	41	20	2	0	0	0	0	0	0	0	51	0	8
21	0	0	0	0	0	0	0	0	0	0	3	18	32	33	34	14	3	0	0	0	0	0	0	0	34	0	6
22	0	0	0	0	0	0	0	0	0	0	5	17	43	43	33	13	2	0	0	0	0	0	0	0	43	0	6
23	0	0	0	0	0	0	0	0	0	0	6	47	34	29	27	12	2	0	0	0	0	0	0	0	47	0	7
24	0	0	0	0	0	0	0	0	0	0	5	26	70	78	34	23	3	0	0	0	0	0	0	0	78	0	10
25	0	0	0	0	0	0	0	0	0	0	6	19	20	24	22	9	2	0	0	0	0	0	0	0	24	0	4
26	0	0	0	0	0	0	0	0	0	0	8	32	52	66	48	24	3	0	0	0	0	0	0	0	66	0	10
27	0	0	0	0	0	0	0	0	0	0	3	15	32	34	24	12	1	0	0	0	0	0	0	0	34	0	5
28	0	0	0	0	0	0	0	0	0	0	5	28	37	42	33	14	2	0	0	0	0	0	0	0	42	0	7
29	0	0	0	0	0	0	0	0	0	0	2	12	31	47	28	8	2	0	0	0	0	0	0	0	47	0	5
30	0	0	0	0	0	0	0	0	0	0	2	20	43	25	30	19	3	0	0	0	0	0	0	0	43	0	6
31	0	0	0	0	0	0	0	0	0	0	5	35	93	70	78	19	4	0	0	0	0	0	0	0	93	0	13
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**47**	**93**	**122**	**78**	**30**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**122**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**8**	**8**	**8**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**21**	**36**	**44**	**31**	**14**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	7	39	90	96	56	32	4	0	0	0	0	0	0	0	96	0	13
2	0	0	0	0	0	0	0	0	0	0	5	24	37	42	41	20	3	0	0	0	0	0	0	0	42	0	7
3	0	0	0	0	0	0	0	0	0	0	3	19	38	55	53	33	5	0	0	0	0	0	0	0	55	0	9
4	0	0	0	0	0	0	0	0	0	0	8	37	57	88	76	50	7	0	0	0	0	0	0	0	88	0	13
5	0	0	0	0	0	0	0	0	0	0	5	44	47	64	58	63	14	0	0	0	0	0	0	0	64	0	12
6	0	0	0	0	0	0	0	0	0	0	10	21	40	61	81	82	19	0	0	0	0	0	0	0	82	0	13
7	0	0	0	0	0	0	0	0	0	0	8	32	59	87	49	42	4	0	0	0	0	0	0	0	87	0	12
8	0	0	0	0	0	0	0	0	0	0	15	54	100	120	119	54	11	0	0	0	0	0	0	0	120	0	20
9	0	0	0	0	0	0	0	0	0	0	6	27	47	47	67	26	5	0	0	0	0	0	0	0	67	0	9
10	0	0	0	0	0	0	0	0	0	0	6	21	36	24	20	11	2	0	0	0	0	0	0	0	36	0	5
11	0	0	0	0	0	0	0	0	0	0	3	14	26	30	21	13	4	0	0	0	0	0	0	0	30	0	5
12	0	0	0	0	0	0	0	0	0	0	4	16	22	29	22	17	8	0	0	0	0	0	0	0	29	0	5
13	0	0	0	0	0	0	0	0	0	0	9	34	51	57	53	38	10	0	0	0	0	0	0	0	57	0	10
14	0	0	0	0	0	0	0	0	0	0	1	5	8	16	15	21	6	0	0	0	0	0	0	0	21	0	3
15	0	0	0	0	0	0	0	0	0	0	11	52	63	77	46	34	11	0	0	0	0	0	0	0	77	0	12
16	0	0	0	0	0	0	0	0	0	0	5	22	47	64	65	27	14	1	0	0	0	0	0	0	65	0	10
17	0	0	0	0	0	0	0	0	0	1	22	50	129	165	150	55	25	1	0	0	0	0	0	0	165	0	25
18	0	0	0	0	0	0	0	0	0	1	22	87	147	172	160	103	27	1	0	0	0	0	0	0	172	0	30
19	0	0	0	0	0	0	0	0	0	1	26	93	133	160	154	87	33	1	0	0	0	0	0	0	160	0	29
20	0	0	0	0	0	0	0	0	0	1	20	63	94	107	77	48	15	1	0	0	0	0	0	0	107	0	18
21	0	0	0	0	0	0	0	0	0	1	13	36	57	73	69	39	14	1	0	0	0	0	0	0	73	0	13
22	0	0	0	0	0	0	0	0	0	0	11	28	45	50	41	46	19	0	0	0	0	0	0	0	50	0	10
23	0	0	0	0	0	0	0	0	0	1	28	92	142	162	154	115	41	2	0	0	0	0	0	0	162	0	31
24	0	0	0	0	0	0	0	0	0	1	30	86	136	158	154	122	52	2	0	0	0	0	0	0	158	0	31
25	0	0	0	0	0	0	0	0	0	1	30	76	115	139	143	118	57	2	0	0	0	0	0	0	143	0	28
26	0	0	0	0	0	0	0	0	0	1	39	89	125	150	154	133	60	2	0	0	0	0	0	0	154	0	31
27	0	0	0	0	0	0	0	0	0	1	16	28	38	103	127	83	35	2	0	0	0	0	0	0	127	0	18
28	0	0	0	0	0	0	0	0	0	1	22	70	139	173	155	132	58	4	0	0	0	0	0	0	173	0	31
29	0	0	0	0	0	0	0	0	0	5	55	124	183	207	199	156	57	5	0	0	0	0	0	0	207	0	41
30	0	0	0	0	0	0	0	0	0	5	48	105	159	172	166	134	60	6	0	0	0	0	0	0	172	0	36
31	0	0	0	0	0	0	0	0	0	5	63	130	116	122	137	122	54	7	0	0	0	0	0	0	137	0	31
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**63**	**130**	**183**	**207**	**199**	**156**	**60**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**207**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**8**	**16**	**15**	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**52**	**81**	**99**	**93**	**66**	**24**	**1**	**0**	**0**	**0**	**0**	**0**	**0**			**18**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	5	52	130	195	218	208	169	90	6	0	0	0	0	0	0	218	0	45
2	0	0	0	0	0	0	0	0	0	8	61	138	187	207	203	171	94	7	0	0	0	0	0	0	207	0	45
3	0	0	0	0	0	0	0	0	0	4	39	73	131	157	171	106	48	8	0	0	0	0	0	0	171	0	31
4	0	0	0	0	0	0	0	0	0	4	29	56	77	127	100	50	34	15	0	0	0	0	0	0	127	0	20
5	0	0	0	0	0	0	0	0	0	6	31	51	146	177	94	57	24	6	0	0	0	0	0	0	177	0	25
6	0	0	0	0	0	0	0	0	0	7	39	92	117	95	116	109	44	11	0	0	0	0	0	0	117	0	26
7	0	0	0	0	0	0	0	0	0	8	55	154	259	183	261	197	109	16	0	0	0	0	0	0	261	0	52
8	0	0	0	0	0	0	0	0	0	16	61	102	137	142	108	70	33	7	0	0	0	0	0	0	142	0	28
9	0	0	0	0	0	0	0	0	0	5	32	53	58	112	91	93	58	8	0	0	0	0	0	0	112	0	21
10	0	0	0	0	0	0	0	0	0	8	32	60	71	138	156	105	65	40	1	0	0	0	0	0	156	0	28
11	0	0	0	0	0	0	0	0	0	6	34	62	76	95	84	67	39	11	0	0	0	0	0	0	95	0	20
12	0	0	0	0	0	0	0	0	0	7	29	68	85	62	91	67	33	11	0	0	0	0	0	0	91	0	19
13	0	0	0	0	0	0	0	0	1	13	50	81	114	128	157	108	48	16	0	0	0	0	0	0	157	0	30
14	0	0	0	0	0	0	0	0	1	13	52	86	121	122	94	100	56	13	0	0	0	0	0	0	122	0	27
15	0	0	0	0	0	0	0	0	0	11	37	72	88	127	91	73	41	17	0	0	0	0	0	0	127	0	23
16	0	0	0	0	0	0	0	0	1	17	66	165	213	307	292	233	152	43	2	0	0	0	0	0	307	0	62
17	0	0	0	0	0	0	0	0	1	23	72	106	161	141	128	70	51	13	1	0	0	0	0	0	161	0	32
18	0	0	0	0	0	0	0	0	1	29	65	112	204	174	124	83	52	16	1	0	0	0	0	0	204	0	36
19	0	0	1	1	2	1	1	1	3	31	135	245	188	169	156	143	84	44	4	0	0	0	0	0	245	0	50
20	0	0	1	1	1	1	1	1	3	18	125	211	243	140	132	118	112	47	4	0	0	0	0	0	243	0	48
21	0	0	0	0	0	0	0	0	4	39	99	244	326	334	355	273	162	56	4	0	0	0	0	0	355	0	79
22	0	0	0	0	0	0	0	0	7	70	151	208	337	344	315	223	164	56	5	0	0	0	0	0	344	0	78
23	0	0	0	0	0	0	0	0	9	66	118	227	402	282	320	216	187	80	5	0	0	0	0	0	402	0	80
24	0	0	0	0	0	0	0	0	6	45	116	198	260	286	277	261	197	94	9	0	0	0	0	0	286	0	73
25	0	0	0	0	0	0	0	0	3	24	61	134	209	382	358	275	180	77	10	0	0	0	0	0	382	0	71
26	0	0	0	0	0	0	0	0	7	58	101	210	261	279	227	217	117	55	7	0	0	0	0	0	279	0	64
27	0	0	0	0	0	0	0	0	7	50	131	204	297	271	247	203	241	135	21	0	0	0	0	0	297	0	75
28	0	0	0	0	0	0	0	0	18	118	240	331	381	395	373	308	214	104	14	0	0	0	0	0	395	0	104
Max.	**0**	**0**	**1**	**1**	**2**	**1**	**1**	**1**	**18**	**118**	**240**	**331**	**402**	**395**	**373**	**308**	**241**	**135**	**21**	**0**	**0**	**0**	**0**	**0**	**402**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**29**	**51**	**58**	**62**	**84**	**50**	**24**	**6**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**25**	**76**	**138**	**191**	**200**	**190**	**149**	**97**	**36**	**3**	**0**	**0**	**0**	**0**	**0**			**46**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	15	93	209	293	328	298	251	217	139	79	12	0	0	0	0	0	328	0	81
2	0	0	0	0	0	0	0	0	8	41	82	127	153	207	197	125	91	37	8	0	0	0	0	0	207	0	45
3	0	0	0	0	0	0	0	0	9	78	169	247	317	386	421	397	257	100	27	0	0	0	0	0	421	0	100
4	0	0	0	0	0	0	0	0	13	41	86	130	219	250	181	176	128	56	15	0	0	0	0	0	250	0	54
5	0	0	0	0	0	0	0	0	8	32	159	195	286	317	364	334	261	80	27	0	0	0	0	0	364	0	86
6	0	0	0	0	0	0	0	1	38	119	254	333	420	441	420	357	254	96	23	1	0	0	0	0	441	0	115
7	0	0	0	0	0	0	0	1	19	74	164	335	377	224	231	338	285	107	26	1	0	0	0	0	377	0	91
8	0	0	0	0	0	0	0	1	23	54	157	334	404	452	433	424	282	136	27	1	0	0	0	0	452	0	114
9	0	0	0	0	0	0	0	2	54	179	286	372	432	451	432	370	282	168	45	1	0	0	0	0	451	0	128
10	0	0	0	0	0	0	0	2	56	175	271	350	433	463	439	265	173	102	29	1	0	0	0	0	463	0	115
11	0	0	0	0	0	0	0	1	28	74	118	158	210	279	213	163	123	73	24	1	0	0	0	0	279	0	61
12	0	0	0	0	0	0	0	1	32	103	139	211	281	328	348	289	225	96	38	2	0	0	0	0	348	0	87
13	0	0	0	0	0	0	0	2	23	61	129	202	225	339	356	327	196	104	35	3	0	0	0	0	356	0	83
14	0	0	0	0	0	0	0	6	79	206	321	414	473	491	466	404	311	194	69	4	0	0	0	0	491	0	143
15	0	0	0	0	0	0	0	5	83	210	326	420	480	499	476	412	319	198	72	4	0	0	0	0	499	0	146
16	0	0	0	0	0	0	0	7	84	187	292	431	491	515	440	300	272	228	60	6	0	0	0	0	515	0	138
17	0	0	0	0	0	0	0	9	81	135	210	246	282	270	262	224	166	86	23	2	0	0	0	0	282	0	83
18	0	0	0	0	0	0	0	5	32	120	227	304	387	411	344	319	179	142	55	5	0	0	0	0	411	0	105
19	0	0	0	0	0	0	0	17	83	141	197	250	445	390	231	201	141	98	37	5	0	0	0	0	445	0	93
20	0	0	0	0	0	0	0	8	35	134	231	333	462	633	395	316	159	127	108	13	0	0	0	0	633	0	123
21	0	0	0	0	0	0	0	7	39	133	197	321	433	515	525	432	350	230	115	12	0	0	0	0	525	0	138
22	0	0	0	0	0	0	0	27	150	276	345	473	533	550	526	460	364	241	110	13	0	0	0	0	550	0	170
23	0	0	0	0	0	0	0	35	115	287	259	439	498	508	487	452	379	247	116	15	0	0	0	0	508	0	160
24	0	0	0	0	0	0	0	30	141	273	391	477	546	562	539	473	376	254	122	18	0	0	0	0	562	0	175
25	0	0	0	0	0	0	0	15	100	228	345	488	547	548	544	470	374	253	121	20	0	0	0	0	548	0	169
26	0	0	0	0	0	0	1	37	157	286	405	495	553	571	544	476	380	255	127	21	0	0	0	0	571	0	179
27	0	0	0	0	0	0	1	42	170	300	416	506	563	582	556	488	391	269	138	25	0	0	0	0	582	0	185
28	0	0	0	0	0	0	1	46	172	323	421	518	587	587	562	490	394	271	141	27	0	0	0	0	587	0	189
29	0	0	0	0	0	0	2	59	184	310	430	524	581	601	574	506	406	278	134	25	0	0	0	0	601	0	192
30	0	0	0	0	0	0	1	16	57	89	145	236	247	265	210	159	118	89	36	11	0	0	0	0	265	0	70
31	0	0	0	0	0	0	1	17	69	139	233	319	371	365	370	331	272	164	78	19	0	0	0	0	371	0	115
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**59**	**184**	**323**	**430**	**524**	**587**	**633**	**574**	**506**	**406**	**278**	**141**	**27**	**0**	**0**	**0**	**0**	**633**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**32**	**82**	**127**	**153**	**207**	**181**	**125**	**91**	**37**	**8**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**70**	**158**	**246**	**338**	**405**	**429**	**398**	**345**	**260**	**157**	**65**	**8**	**0**	**0**	**0**	**0**			**120**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	2	40	106	190	364	548	625	624	593	526	426	284	158	50	1	0	0	0	625	0	189
2	0	0	0	0	0	0	4	44	144	267	359	410	420	491	623	438	371	235	103	37	1	0	0	0	623	0	164
3	0	0	0	0	0	0	2	33	108	190	221	242	288	335	339	324	284	185	61	16	1	0	0	0	339	0	110
4	0	0	0	0	0	0	4	76	227	240	259	310	326	592	518	326	197	173	113	47	1	0	0	0	592	0	142
5	0	0	0	0	0	0	3	35	234	371	440	427	643	647	628	551	454	327	191	60	2	0	0	0	647	0	209
6	0	0	0	0	0	0	10	101	236	367	488	580	609	635	613	554	444	314	162	32	2	0	0	0	635	0	214
7	0	0	0	0	0	0	4	75	228	275	388	555	547	594	603	486	246	245	105	30	1	0	0	0	603	0	183
8	0	0	0	0	0	0	3	28	76	106	164	174	241	274	288	281	276	200	164	43	2	0	0	0	288	0	97
9	0	0	0	0	0	0	10	56	151	230	430	581	656	706	652	684	361	285	213	76	4	0	0	0	706	0	212
10	0	0	0	0	0	0	10	50	180	384	574	576	714	716	528	470	402	343	215	80	5	0	0	0	716	0	219
11	0	0	0	0	0	0	12	84	158	210	300	379	390	388	399	371	237	174	105	38	4	0	0	0	399	0	135
12	0	0	0	0	0	0	10	56	126	216	302	404	434	402	403	463	356	292	145	48	7	0	0	0	463	0	153
13	0	0	0	0	0	0	17	56	182	247	345	425	541	743	687	587	439	329	216	85	9	0	0	0	743	0	205
14	0	0	0	0	0	1	43	153	385	543	585	616	721	698	670	603	505	377	231	97	11	0	0	0	721	0	260
15	0	0	0	0	0	1	35	158	296	434	549	638	692	708	679	606	510	386	238	105	10	0	0	0	708	0	252
16	0	0	0	0	0	1	20	85	173	262	350	362	534	526	328	317	253	169	93	39	5	0	0	0	534	0	147
17	0	0	0	0	0	1	33	108	196	290	302	409	510	676	568	636	554	341	262	122	20	0	0	0	676	0	209
18	0	0	0	0	0	2	40	172	360	301	516	598	706	713	688	621	520	393	257	115	12	0	0	0	713	0	250
19	0	0	0	0	0	2	23	84	143	253	365	469	485	481	493	423	335	247	141	55	10	0	0	0	493	0	167
20	0	0	0	0	0	2	50	147	227	272	369	487	419	421	485	409	330	216	118	53	9	0	0	0	487	0	167
21	0	0	0	0	0	1	19	86	166	195	298	455	465	426	459	436	280	228	278	47	11	0	0	0	465	0	160
22	0	0	0	0	0	3	45	129	244	457	361	448	734	640	558	542	377	307	168	66	18	0	0	0	734	0	212
23	0	0	0	0	0	4	33	107	172	352	543	693	679	755	729	624	546	338	279	124	26	1	0	0	755	0	250
24	0	0	0	0	0	2	31	120	311	538	521	523	613	738	633	413	498	355	231	130	38	1	0	0	738	0	237
25	0	0	0	0	0	3	33	95	191	312	422	527	597	590	495	446	311	197	117	55	15	0	0	0	597	0	184
26	0	0	0	0	0	5	50	155	324	495	640	556	641	711	793	612	439	313	206	116	31	1	0	0	793	0	254
27	0	0	0	0	0	5	51	143	244	433	581	654	680	611	678	609	495	406	277	129	26	1	0	0	680	0	251
28	0	0	0	0	0	7	83	209	346	488	605	637	702	615	498	438	347	293	240	86	27	1	0	0	702	0	234
29	0	0	0	0	0	10	50	153	355	491	464	641	681	647	577	615	569	437	304	164	42	2	0	0	681	0	258
30	0	0	0	0	0	12	98	221	342	495	609	741	800	776	725	656	561	441	335	195	61	2	0	0	800	0	295
Max.	**0**	**0**	**0**	**0**	**0**	**12**	**98**	**221**	**385**	**543**	**640**	**741**	**800**	**776**	**793**	**684**	**569**	**441**	**335**	**195**	**61**	**2**	**0**	**0**	**800**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**76**	**106**	**164**	**174**	**241**	**274**	**288**	**281**	**197**	**169**	**61**	**16**	**1**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**102**	**221**	**330**	**424**	**502**	**570**	**596**	**564**	**502**	**397**	**294**	**191**	**78**	**14**	**0**	**0**	**0**			**201**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

May 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	14	58	147	271	385	495	573	662	452	407	365	300	210	136	63	22	1	0	0	662	0	190
2	0	0	0	0	0	9	58	138	238	379	351	356	657	708	693	682	562	439	398	107	36	3	0	0	708	0	242
3	0	0	0	0	0	12	49	189	265	331	443	638	597	685	651	483	420	193	178	85	38	3	0	0	685	0	219
4	0	0	0	0	0	7	85	141	182	203	356	398	372	322	335	264	241	187	150	54	24	1	0	0	398	0	138
5	0	0	0	0	0	16	53	132	128	179	225	687	427	426	502	384	420	344	203	94	33	2	0	0	687	0	177
6	0	0	0	0	0	3	16	39	97	213	496	676	588	652	636	451	280	234	211	100	26	4	0	0	676	0	197
7	0	0	0	0	0	6	35	128	245	278	361	429	501	494	385	278	236	201	153	82	28	3	0	0	501	0	160
8	0	0	0	0	1	30	134	272	406	467	555	555	577	408	378	361	339	289	210	88	30	5	0	0	577	0	213
9	0	0	0	0	0	13	52	165	278	294	225	374	383	456	436	362	350	226	143	84	36	6	0	0	456	0	162
10	0	0	0	0	1	13	47	117	304	549	643	728	780	803	648	312	446	360	243	146	94	7	0	0	803	0	260
11	0	0	0	0	156	253	530	649	726	733	762	744	682	629	219	99	168	59	10	0	0	0	0	0	762	0	267
12	0	0	0	0	2	40	150	276	412	540	649	731	774	783	755	687	599	480	346	212	90	12	0	0	783	0	314
13	0	0	0	0	3	51	170	300	391	501	643	641	710	638	628	675	489	300	195	147	65	9	0	0	710	0	273
14	0	0	0	0	3	51	170	235	285	496	631	711	774	778	747	695	593	481	350	211	73	13	0	0	778	0	304
15	0	0	0	0	2	24	150	276	255	383	551	519	422	701	767	635	605	336	208	103	30	4	0	0	767	0	249
16	0	0	0	0	3	28	106	157	308	494	570	760	792	801	708	699	602	481	352	216	93	15	0	0	801	0	299
17	0	0	0	0	5	41	110	324	442	516	629	731	761	771	534	306	546	456	308	161	44	10	0	0	771	0	279
18	0	0	0	0	2	7	47	107	250	270	250	280	454	453	471	709	428	449	180	170	94	19	1	0	709	0	193
19	0	0	0	0	6	54	150	293	420	528	559	411	333	259	219	164	40	39	49	18	11	4	0	0	559	0	148
20	0	0	0	0	5	25	55	113	205	239	248	354	409	487	348	283	158	128	138	64	46	7	0	0	487	0	138
21	0	0	0	0	3	21	48	104	158	248	447	716	681	472	637	334	365	166	329	192	102	23	1	0	716	0	210
22	0	0	0	0	8	61	173	299	433	560	700	656	783	799	760	678	553	511	372	194	86	23	1	0	799	0	319
23	0	0	0	0	7	64	172	296	428	553	658	735	784	796	613	596	489	271	365	235	120	28	2	0	796	0	301
24	0	0	0	0	8	73	181	307	412	531	638	707	705	699	714	610	492	405	275	193	133	29	2	0	714	0	296
25	0	0	0	0	10	71	173	299	430	553	658	735	782	790	764	694	609	494	363	234	121	29	2	0	790	0	325
26	0	0	0	0	8	66	168	293	427	550	649	719	779	783	759	692	600	484	358	229	118	31	2	0	783	0	321
27	0	0	0	0	7	44	108	139	277	443	436	549	685	606	652	767	526	491	267	94	88	26	2	0	767	0	259
28	0	0	0	1	15	50	152	300	411	529	665	742	787	796	769	702	622	500	380	246	129	41	5	0	796	0	327
29	0	0	0	0	12	80	187	310	441	563	665	740	785	794	765	700	611	500	374	247	133	36	3	0	794	0	331
30	0	0	0	0	12	70	168	304	405	566	665	644	603	591	561	513	287	206	71	38	42	17	1	0	665	0	240
31	0	0	0	0	2	20	37	94	75	124	165	173	126	117	142	100	77	73	51	31	19	7	0	0	173	0	60
Max.	**0**	**0**	**0**	**1**	**156**	**253**	**530**	**649**	**726**	**733**	**762**	**760**	**792**	**803**	**769**	**767**	**622**	**511**	**398**	**247**	**133**	**41**	**5**	**0**	**803**		
Min.	**0**	**0**	**0**	**0**	**0**	**3**	**16**	**39**	**75**	**124**	**165**	**173**	**126**	**117**	**142**	**99**	**40**	**39**	**10**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**9**	**43**	**122**	**224**	**323**	**426**	**516**	**594**	**618**	**611**	**568**	**493**	**421**	**322**	**238**	**133**	**65**	**14**	**1**	**0**			**239**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

June 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	10	56	69	115	195	242	250	448	683	751	806	626	529	429	222	204	94	45	4	0	806	0	241
2	0	0	0	1	14	80	186	311	437	552	661	628	483	562	318	326	482	217	274	137	128	40	5	0	661	0	243
3	0	0	0	1	14	96	170	219	459	503	676	740	785	801	765	707	628	516	389	268	152	47	6	0	801	0	331
4	0	0	0	1	19	96	204	331	462	584	690	774	813	827	797	728	633	522	395	267	154	50	5	0	827	0	348
5	0	0	0	1	20	93	175	239	353	435	550	599	659	791	763	631	642	526	398	268	150	52	5	0	791	0	306
6	0	0	0	1	14	76	199	317	454	532	656	752	786	797	778	712	628	517	392	263	80	22	1	0	797	0	332
7	0	0	0	0	7	35	57	112	236	138	150	244	162	233	162	122	85	86	80	37	20	7	1	0	244	0	82
8	0	0	0	0	4	28	73	98	156	293	296	334	351	284	177	130	110	62	44	22	21	11	1	0	351	0	104
9	0	0	0	0	3	18	39	72	111	292	251	409	785	372	435	153	110	117	61	93	13	8	2	0	785	0	139
10	0	0	0	0	3	15	24	125	220	430	456	436	389	546	513	525	219	192	91	32	13	4	1	0	546	0	176
11	0	0	0	0	5	20	29	61	92	158	181	287	176	176	149	166	138	86	44	38	30	14	1	0	287	0	77
12	0	0	0	0	1	11	19	39	65	96	114	70	110	165	141	103	77	58	41	41	9	7	2	0	165	0	49
13	0	0	0	0	8	29	82	138	347	154	257	299	532	515	467	520	422	257	173	114	57	29	8	0	532	0	184
14	0	0	0	1	6	25	80	141	206	267	310	538	414	347	307	255	196	126	79	131	69	18	3	0	538	0	147
15	0	0	0	1	15	41	114	155	252	519	643	646	629	376	373	67	62	78	101	30	12	4	1	0	646	0	172
16	0	0	0	1	10	23	36	63	36	61	95	101	119	118	144	145	106	70	68	82	45	27	7	0	145	0	57
17	0	0	0	1	8	30	59	193	209	320	614	384	504	635	242	467	331	153	82	45	23	14	3	0	635	0	180
18	0	0	0	1	19	54	112	187	322	302	351	357	264	347	412	442	300	262	189	114	74	38	9	0	442	0	173
19	0	0	0	1	14	68	126	196	308	318	382	314	367	515	482	579	278	333	402	79	67	30	2	0	579	0	202
20	0	0	0	1	13	86	206	268	403	491	255	475	509	413	272	169	172	153	141	278	121	36	11	0	509	0	186
21	0	0	0	1	11	79	203	309	462	459	574	661	536	214	519	547	470	331	309	222	184	91	11	0	661	0	258
22	0	0	0	1	15	55	132	124	190	223	408	422	514	126	70	47	52	47	68	15	13	7	3	0	514	0	106
23	0	0	0	0	4	16	32	58	85	148	223	377	378	572	393	316	197	205	161	197	172	53	13	1	572	0	150
24	0	0	0	1	10	52	185	309	461	519	672	688	594	559	465	367	468	116	78	118	101	25	2	0	688	0	241
25	0	0	0	1	22	99	202	324	449	609	587	491	568	609	640	664	642	335	101	73	44	29	6	0	664	0	271
26	0	0	0	1	6	51	147	249	453	566	662	731	796	489	246	301	225	405	423	286	166	76	9	1	796	0	262
27	0	0	0	1	18	94	197	319	445	568	657	712	897	336	740	738	627	532	410	232	158	64	12	0	897	0	323
28	0	0	0	2	19	96	208	324	253	232	190	428	424	422	227	155	143	109	78	53	39	20	4	0	428	0	143
29	0	0	0	1	6	33	61	112	206	222	232	258	294	425	433	645	350	307	147	55	13	5	1	0	645	0	159
30	0	0	0	0	3	11	16	27	67	198	177	284	430	324	341	235	223	224	174	116	57	17	4	0	430	0	122
Max.	**0**	**0**	**0**	**2**	**22**	**99**	**208**	**331**	**462**	**609**	**690**	**774**	**897**	**827**	**806**	**738**	**642**	**532**	**423**	**286**	**184**	**91**	**13**	**1**	**897**		
Min.	**0**	**0**	**0**	**0**	**1**	**11**	**16**	**27**	**36**	**61**	**95**	**70**	**110**	**118**	**70**	**47**	**52**	**47**	**41**	**15**	**9**	**4**	**1**	**0**		**0**	
Avg.	**0**	**0**	**0**	**1**	**11**	**52**	**115**	**184**	**280**	**348**	**407**	**463**	**498**	**455**	**419**	**386**	**318**	**246**	**187**	**130**	**76**	**30**	**5**	**0**			**192**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	5	25	59	87	182	297	447	768	756	812	794	736	650	535	418	290	171	68	10	0	812	0	296
2	0	0	0	1	15	89	192	313	441	560	647	739	728	734	773	712	559	509	392	245	131	37	11	0	773	0	326
3	0	0	0	1	9	52	167	256	299	522	609	706	693	695	731	593	566	454	407	273	155	59	8	0	731	0	302
4	0	0	0	1	14	85	182	304	428	544	625	565	802	728	613	645	677	524	392	269	166	64	8	0	802	0	318
5	0	0	0	0	7	42	86	128	203	258	516	637	759	757	768	628	17	55	177	168	130	46	3	0	768	0	224
6	0	0	0	0	10	31	137	291	429	541	646	438	321	571	756	712	306	31	107	91	20	3	3	0	756	0	227
7	0	0	0	0	1	6	23	37	43	51	82	79	116	85	85	103	121	41	22	21	13	13	0	0	121	0	39
8	0	0	0	0	2	12	25	48	112	171	158	179	249	207	167	200	167	154	131	169	148	22	4	0	249	0	97
9	0	0	0	1	6	23	66	239	348	314	618	703	740	744	580	723	633	517	389	266	163	56	6	0	744	0	297
10	0	0	0	1									5	44	47	70	163	305	333	480	461	750	465	688	750	0	238
11	754	575	452	276	61	31	5	0	0		0	0	0	10	18	45	84	128	311	388	468	407	434	658	754	0	222
12	672	435	310	390	341	103	36	3	0	0	0	0	0	10	53	153	288	336	529	634	707	741	700	718	741	0	298
13	623	522	201	348	200	79	29	5	0	0	0	0	0	5	22	75	103	158	216	273	226	196	324	255	623	0	161
14	136	90	116	88	69	16	8	3	0	0	0	0	0	1	12	63	79	101	140	179	223	200	173	132	223	0	76
15	100	98	70	49	39	29	10	2	0	0	0	0	0	2	21	64	87	129	199	272	367	300	396	337	396	0	107
16	381	474	409	314	155	82	15	1	0	0	0	0	0	2	15	54	100	112	132	283	343	349	284	500	500	0	167
17	462	403	169	104	38	17	3	0	0	0	0	0	0	1	7	26	63	97	165	285	225	246	353	261	462	0	122
18	166	149	72	46	24	11	7	1	0	0	0	0	0	1	21	27	49	121	362	404	278	254	411	232	411	0	110
19	145	101	93	77	50	32	20	2	0	0	0	0	0	2	15	53	101	196	244	353	286	327	352	252	353	0	113
20	516	339	381	386	258	145	28	2	0	0	0	0	0	4	49	153	271	378	459	445	544	425	610	483	610	0	245
21	470	485	315	149	98	31	17	2	0	0	0	0	0	2	22	65	276	435	509	556	563	142	210	367	563	0	196
22	412	248	228	133	87	54	23	3	0	0	0	0	0	1	13	41	84	173	248	250	280	296	477	319	477	0	140
23	309	141	76	52	50	54	11	1	0	0	0	0	0	1	12	53	82	84	151	148	168	151	152	135	309	0	76
24	155	130	66	59	36	21	7	0	0	0	0	0	0	0	4	21	37	54	77	112	158	137	134	164	164	0	57
25	139	74	56	34	19	16	9	1	0	0	0	0	0	0	6	23	32	80	157	215	267	282	328	465	465	0	92
26	407	357	337	239	107	52	20	1	0	0	0	0	0	0	7	22	54	111	189	320	472	588	518	477	588	0	178
27	604	605	403	337	244	94	24	1	0	0	0	0	0	1	34	88	111	154	184	212	301	394	666	651	666	0	213
28	680	579	466	290	163	78	16	0	0	0	0	0	0	1	24	76	190	284	270	279	288	278	493	362	680	0	201
29	103	103	199	144	108	44	10	0	0	0	0	0	0	0	4	20	29	55	94	127	181	448	569	483	569	0	113
30	429	325	466	238	49	23	4	0	0	0	0	0	0	0	6	26	26	57	70	107	138	188	258	375	466	0	116
31	308	283	421	198	237	40	11	0	0	0	0	0	0	0	6	40	70	161	154	147	226	271	426	290	426	0	137
Max.	**754**	**605**	**466**	**390**	**341**	**145**	**192**	**313**	**441**	**560**	**647**	**768**	**802**	**812**	**794**	**736**	**677**	**535**	**529**	**634**	**707**	**750**	**700**	**718**	**812**		
Min.	**0**	**0**	**0**	**0**	**1**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**20**	**17**	**31**	**22**	**21**	**13**	**3**	**0**	**0**		**0**	
Avg.	**257**	**210**	**171**	**128**	**83**	**47**	**42**	**58**	**83**	**112**	**145**	**160**	**167**	**175**	**183**	**204**	**196**	**211**	**246**	**266**	**267**	**250**	**283**	**278**			**177**

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	951	951	951	951	951	951	951	951	952	952	952	952	952	952	952	952	952	952	952	953	953	953	953	953	953	951	951.9
2	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	952	952	952	951	951	951	951	951	953	951	952.5
3	950	950	950	949	949	949	948	948	948	948	948	948	948	948	947	947	947	947	948	948	948	949	949	949	950	947	948.3
4	949	949	950	950	950	950	950	951	951	951	951	951	951	952	952	952	952	953	953	953	953	954	955	955	955	949	951.5
5	955	956	956	957	957	957	958	958	959	960	960	960	961	961	962	962	962	962	962	962	963	963	964	964	964	955	960.1
6	965	965	965	965	965	966	966	966	966	967	967	967	967	967	967	967	967	967	967	967	968	968	968	969	969	965	966.6
7	969	969	969	969	969	969	969	970	970	970	970	971	971	971	971	970	970	970	970	970	970	970	970	970	971	969	969.9
8	971	970	970	970	970	970	970	970	970	970	970	970	970	969	969	969	968	968	968	968	968	968	968	968	971	968	969.4
9	968	968	968	968	968	968	968	969	969	969	969	969	969	969	968	968	968	968	968	968	968	969	969	969	969	968	968.3
10	969	969	969	969	969	969	969	969	969	970	970	970	970	969	969	969	969	969	969	969	969	970	970	970	970	969	969.3
11	970	970	970	970	970	970	970	970	970	970	971	970	970	970	970	969	969	969	968	968	968	968	968	968	971	968	969.5
12	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	967	966	966	966	966	965	966	965	965	968	965	967.0
13	965	965	964	964	964	964	963	963	963	963	963	962	962	961	961	961	960	960	959	960	959	959	959	959	965	959	961.8
14	959	959	958	958	958	958	958	957	957	957	957	957	957	956	956	956	955	955	955	955	955	955	955	955	959	955	956.7
15	955	955	955	955	955	956	956	956	956	957	957	957	957	957	957	957	958	957	957	958	958	958	959	960	960	955	956.8
16	959	959	959	959	959	959	958	959	959	958	959	958	959	958	958	958	958	957	957	957	957	957	957	956	959	956	958.2
17	956	955	955	954	954	953	953	952	951	951	951	950	950	949	948	948	947	947	946	946	946	946	946	946	956	946	950.1
18	947	947	947	947	947	947	947	946	947	947	947	947	946	946	946	946	946	946	946	946	947	947	947	948	948	946	946.6
19	947	948	948	948	948	948	948	948	948	948	948	949	949	949	949	948	949	948	949	949	949	950	950	950	950	947	948.4
20	950	950	950	950	950	951	951	951	951	952	952	952	952	952	952	952	951	951	950	950	950	949	949	948	952	948	950.7
21	949	948	948	948	948	948	949	950	950	950	951	952	952	952	952	953	953	953	953	954	954	955	955	955	955	948	951.2
22	955	955	954	954	954	953	953	953	953	953	952	951	950	950	949	947	946	946	944	945	944	943	943	942	955	942	949.5
23	942	941	940	940	941	941	941	941	942	941	941	942	942	942	942	943	942	942	943	942	942	942	942	942	943	940	941.6
24	942	942	943	943	944	944	945	946	947	948	948	949	949	950	950	951	951	951	951	951	952	952	952	952	952	942	948.0
25	952	952	952	951	951	951	950	950	950	950	950	949	949	949	948	948	948	948	948	948	949	949	950	950	952	948	949.7
26	950	951	952	952	953	953	954	955	956	956	957	957	958	958	959	959	959	960	960	961	962	963	963	964	964	950	957.2
27	965	965	965	965	965	965	966	965	966	966	966	966	965	965	965	965	965	964	964	963	963	962	961	961	966	961	964.4
28	960	960	959	958	958	957	956	956	955	955	954	953	953	952	952	951	952	951	951	950	950	950	949	949	960	949	953.7
29	948	947	947	947	947	946	946	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	948	946	947.0
30	948	948	948	948	948	949	949	949	949	950	950	951	951	951	952	952	952	952	953	953	953	954	954	954	954	948	950.7
31	954	955	955	955	955	955	956	955	956	956	955	956	955	955	956	956	956	956	956	957	957	957	957	957	957	954	955.7
Max.	**971**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**971**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**971**		
Min.	**942**	**941**	**940**	**940**	**941**	**941**	**941**	**941**	**942**	**941**	**941**	**942**	**942**	**942**	**942**	**943**	**942**	**942**	**943**	**942**	**942**	**942**	**942**	**942**		**940**	
Avg.	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**			**956.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	957	957	957	957	957	957	957	957	957	957	957	957	957	957	956	956	956	955	955	955	955	955	955	954	957	954	956.2
2	954	953	953	952	952	952	952	952	951	951	950	950	949	949	948	948	948	948	948	946	946	946	945	945	954	945	949.4
3	946	946	946	946	946	946	945	945	945	945	945	944	944	943	943	943	943	942	942	942	942	942	942	942	946	942	943.9
4	942	942	942	942	943	943	943	943	944	944	945	945	945	946	946	946	946	946	946	946	947	947	947	947	947	942	944.7
5	947	947	946	947	946	946	946	946	945	945	944	943	943	943	942	942	942	942	942	941	941	941	941	941	947	941	943.8
6	941	941	941	941	942	942	942	942	942	942	942	942	942	943	943	943	943	943	943	944	944	945	945	946	946	941	942.6
7	947	947	947	948	949	949	950	951	952	953	953	954	955	955	956	957	957	958	959	960	961	961	962	963	963	947	954.3
8	964	964	964	964	964	964	965	965	965	964	964	964	963	963	962	962	961	961	960	959	958	958	957	957	965	957	962.1
9	956	956	956	956	956	956	955	954	953	953	953	953	952	952	952	952	952	952	953	953	954	954	955	955	956	952	953.8
10	956	956	957	957	957	957	958	959	960	961	961	962	962	962	962	962	961	961	961	960	961	960	959	959	962	956	959.6
11	958	958	958	957	957	957	956	956	955	955	955	954	954	954	953	953	952	952	952	952	951	952	952	953	958	951	954.5
12	953	953	953	953	953	954	954	954	954	954	954	953	953	953	954	954	954	954	955	955	957	958	959	960	960	953	954.4
13	960	961	961	961	961	962	962	962	962	962	962	962	962	961	961	961	961	961	960	960	960	960	960	960	962	960	961.0
14	960	960	960	960	960	960	960	960	960	960	959	959	959	958	957	957	956	955	955	954	953	953	953	952	960	952	957.5
15	951	950	949	948	948	947	947	947	946	945	945	945	945	945	944	944	945	946	946	946	946	946	946	946	951	944	946.3
16	946	946	946	946	947	947	947	947	947	947	947	947	947	947	947	946	946	946	946	945	945	945	944	944	947	944	946.0
17	943	943	942	941	941	940	940	939	939	939	939	939	939	939	939	939	940	940	940	940	940	940	940	940	943	939	940.1
18	940	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	942	942	942	943	943	940	941.1
19	943	943	944	944	944	945	945	946	946	947	947	948	949	949	950	950	951	951	952	953	954	954	955	956	956	943	948.7
20	957	958	958	959	960	961	961	962	963	963	964	964	964	965	965	965	965	965	966	966	966	966	966	966	966	957	963.1
21	966	966	966	966	966	966	966	965	965	965	965	964	964	963	963	963	962	962	962	961	961	961	961	961	966	961	963.8
22	960	960	959	958	958	957	957	955	954	952	950	948	949	949	948	949	949	949	950	950	951	952	952	953	960	948	952.9
23	953	953	953	952	952	952	952	951	950	949	948	947	946	945	943	942	940	939	939	939	939	940	941	942	953	939	946.2
24	942	943	943	943	944	944	945	946	947	947	948	949	949	950	949	950	950	950	950	951	951	952	952	953	953	942	947.8
25	953	953	953	953	953	953	954	954	955	955	956	956	956	956	956	956	956	957	957	957	957	957	957	957	957	953	955.4
26	957	957	957	956	956	955	955	954	953	953	952	951	950	948	947	947	945	943	942	940	939	936	935	935	957	935	948.5
27	933	932	931	929	928	926	927	927	926	926	925	924	923	922	922	921	920	921	921	921	921	921	922	922	933	920	924.6
28	922	922	922	922	923	923	924	924	925	926	926	927	928	928	929	929	929	930	930	931	931	932	932	933	933	922	927.0
29	933	933	933	934	934	934	934	935	935	935	935	936	936	936	936	936	937	937	937	937	937	937	937	937	937	933	935.5
30	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	936	937	937	937	938	938	938	938	936	936.6
Max.	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**965**	**965**	**965**	**965**	**964**	**964**	**965**	**965**	**965**	**965**	**965**	**966**	**966**	**966**	**966**	**966**	**966**	**966**		
Min.	**922**	**922**	**922**	**922**	**923**	**923**	**924**	**924**	**925**	**926**	**925**	**924**	**923**	**922**	**922**	**921**	**920**	**921**	**921**	**921**	**921**	**921**	**922**	**922**		**920**	
Avg.	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**949**	**949**			**948.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	939	939	939	939	940	940	941	942	943	944	945	946	946	947	948	949	950	951	952	953	953	954	955	955	955	939	946.2
2	956	956	957	957	958	958	958	958	959	959	959	959	959	959	959	959	959	959	959	958	958	958	958	957	959	956	958.0
3	957	957	957	956	956	956	955	955	955	954	954	954	953	952	952	952	951	951	951	951	951	951	951	951	957	951	953.5
4	951	951	950	949	949	948	948	948	947	947	946	945	944	943	943	942	941	940	939	938	937	936	935	934	951	934	943.8
5	934	934	933	932	931	930	930	930	929	929	929	929	929	929	930	930	930	931	931	932	933	934	934	935	935	929	931.2
6	936	936	937	938	938	939	939	940	940	941	941	942	942	942	942	941	941	941	941	940	940	940	939	939	942	936	939.7
7	939	938	938	937	936	936	936	936	937	936	937	937	937	937	937	938	938	938	938	938	938	939	939	939	939	936	937.5
8	939	939	938	938	938	938	938	938	938	938	938	938	938	938	937	937	937	937	937	937	937	937	937	937	939	937	937.6
9	937	937	937	937	937	936	936	936	936	935	935	935	934	934	934	933	933	933	933	932	932	932	932	932	937	932	934.6
10	932	932	932	932	932	932	932	932	932	932	932	932	932	932	931	931	931	931	931	931	931	931	931	932	932	931	931.6
11	932	932	932	932	932	932	932	932	932	932	932	932	932	932	932	932	932	933	933	934	934	934	935	935	935	932	932.5
12	936	936	937	937	937	937	937	938	938	939	939	940	940	941	940	941	941	942	942	942	942	943	943	944	944	936	939.6
13	944	944	944	945	945	946	947	947	948	949	950	950	951	952	952	953	953	953	954	954	954	954	954	954	954	944	949.9
14	955	955	955	955	955	956	956	956	956	957	957	956	956	956	955	954	954	953	953	953	953	953	952	952	957	952	954.8
15	952	951	951	950	950	949	949	949	949	949	949	949	949	949	948	948	948	948	949	949	949	949	950	949	952	948	949.3
16	950	950	950	951	951	951	951	951	951	952	951	951	951	951	950	949	949	948	948	947	946	944	943	942	952	942	949.1
17	941	939	938	936	935	933	932	931	930	929	930	930	929	930	929	930	930	931	932	932	932	932	932	933	941	929	932.3
18	934	934	936	937	938	940	941	942	944	945	945	946	946	945	945	945	945	945	944	944	944	943	943	942	946	934	942.3
19	942	941	940	940	940	940	939	939	939	939	938	939	938	937	936	936	935	934	934	934	935	935	935	935	942	934	937.5
20	935	935	936	936	936	936	936	937	936	935	938	938	939	939	939	939	938	938	938	937	937	937	936	936	939	935	937.0
21	935	935	934	933	933	931	931	930	930	930	929	929	928	928	928	928	928	928	929	929	930	929	930	929	935	928	930.2
22	929	929	928	927	926	926	925	925	925	925	925	925	925	925	925	926	926	926	926	926	926	927	927	927	929	925	926.1
23	927	927	926	926	926	926	926	926	926	926	926	926	926	926	926	927	928	929	930	931	932	933	934	935	935	926	927.9
24	936	937	938	939	940	940	941	941	942	943	943	943	943	943	943	943	943	943	942	943	943	942	942	941	943	936	941.4
25	941	941	941	941	940	940	940	940	940	940	940	939	940	939	939	939	939	940	940	940	940	941	941	941	941	939	940.0
26	941	942	942	943	943	944	945	945	946	946	946	947	947	947	948	948	948	949	949	949	949	949	949	949	949	941	946.4
27	949	949	949	949	948	948	948	948	947	947	947	946	946	946	945	945	944	944	944	943	943	943	942	942	949	942	945.9
28	942	941	941	941	940	940	940	939	939	939	939	939	939	939	938	938	938	938	938	938	938	938	938	938	942	938	939.2
29	938	938	939	938	939	939	939	939	940	940	941	941	941	942	942	942	943	943	944	944	945	945	945	946	946	938	941.3
30	946	946	947	947	947	948	948	948	949	950	950	950	951	951	951	951	952	952	953	953	954	954	954	954	954	946	950.3
31	955	954	954	955	955	955	955	955	954	955	955	955	955	955	954	954	953	953	953	951	952	951	950	950	955	950	953.6
Max.	**957**	**957**	**957**	**957**	**958**	**958**	**958**	**958**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**957**	**959**		
Min.	**927**	**927**	**926**	**926**	**926**	**926**	**925**	**925**	**925**	**925**	**925**	**925**	**925**	**925**	**925**	**926**	**926**	**926**	**926**	**926**	**926**	**927**	**927**	**927**		**925**	
Avg.	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**942**	**942**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**942**	**942**	**942**	**942**			**941.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	949	948	948	947	946	946	945	945	945	945	945	945	945	945	945	944	944	944	944	944	944	943	943	943	949	943	945.1
2	944	944	943	943	943	943	942	942	942	942	942	942	942	942	941	941	941	941	941	941	941	941	941	941	944	941	941.9
3	941	941	941	940	940	940	941	941	942	942	941	942	943	943	944	944	945	945	946	947	947	947	947	947	947	940	943.2
4	949	949	949	950	950	950	950	950	951	951	951	952	951	952	951	952	952	952	953	953	953	953	953	953	953	949	951.3
5	953	954	955	955	955	955	955	956	956	957	958	958	958	958	959	959	959	960	960	960	960	959	958	957	960	953	957.2
6	955	953	952	950	948	947	947	947	947	946	947	948	949	948	949	949	949	949	951	951	951	950	950	949	955	946	949.3
7	948	947	946	946	945	944	943	941	939	939	937	936	935	934	933	933	932	932	932	931	931	931	930	930	948	930	937.3
8	930	929	929	928	928	927	926	926	926	925	925	925	924	924	923	923	922	922	922	922	922	922	922	921	930	921	924.7
9	921	921	920	920	920	920	920	920	920	921	921	921	921	921	921	921	922	922	923	923	924	925	925	926	926	920	921.7
10	927	928	928	929	929	929	930	930	931	932	933	933	934	934	935	935	935	936	936	936	937	938	939	939	939	927	933.0
11	939	940	940	940	940	940	940	940	941	941	942	942	942	942	943	943	943	943	943	944	944	944	945	946	946	939	941.9
12	946	946	947	947	947	948	948	949	949	950	950	951	952	952	952	952	952	952	953	953	953	954	954	954	954	946	950.4
13	954	955	955	955	955	955	956	956	957	957	958	959	959	959	959	960	960	960	961	961	961	961	962	962	962	954	958.2
14	961	961	961	961	960	959	958	958	957	957	957	956	955	954	952	951	951	950	949	949	949	948	948	948	961	948	954.5
15	948	947	947	947	947	947	947	947	948	948	949	949	949	949	949	950	950	950	950	950	950	949	949	948	950	947	948.5
16	947	945	944	943	941	939	938	937	937	937	936	936	936	935	935	934	934	934	933	933	932	932	931	931	947	931	936.7
17	931	930	930	930	929	929	930	931	931	932	933	934	935	936	937	938	939	938	938	938	939	938	938	936	939	929	934.2
18	936	935	933	932	929	927	925	923	921	919	918	917	916	916	916	916	916	916	917	919	920	922	923	925	936	916	922.3
19	925	926	927	928	929	929	930	930	931	933	935	935	937	938	940	941	942	943	945	945	947	947	947	948	948	925	936.6
20	948	948	948	948	948	947	947	947	946	946	946	945	945	945	944	944	943	943	943	943	943	942	942	942	948	942	945.1
21	941	941	941	941	940	940	940	940	940	941	940	941	940	941	940	940	941	941	941	941	941	941	942	942	942	940	940.7
22	942	941	942	942	941	942	942	942	941	941	941	940	939	938	937	937	936	935	934	933	932	932	931	930	942	930	938.0
23	929	928	927	927	927	927	927	927	928	930	931	932	933	934	935	935	936	937	938	938	939	939	939	938	939	927	932.4
24	938	937	936	935	934	933	933	933	932	931	931	930	929	930	931	931	931	932	933	933	933	933	934	934	938	929	932.9
25	935	935	936	936	937	937	938	939	940	941	942	943	944	945	945	946	946	947	948	948	948	949	950	951	951	935	942.7
26	951	952	953	954	954	955	956	956	957	958	959	959	960	960	961	961	961	962	963	963	964	964	965	965	965	951	958.9
27	966	966	966	966	967	967	967	967	968	968	968	968	968	968	968	968	967	968	968	968	968	968	968	968	968	966	967.4
28	968	969	969	969	969	969	969	969	969	970	970	970	970	970	970	970	970	970	970	970	970	969	969	969	970	968	969.4
29	969	968	968	968	968	967	967	967	967	968	968	968	968	968	968	967	968	967	967	967	968	968	967	968	969	967	967.6
30	968	967	967	967	967	966	966	966	965	965	965	965	965	964	963	963	963	963	962	962	962	962	962	962	968	962	964.5
Max.	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**970**		
Min.	**921**	**921**	**920**	**920**	**920**	**920**	**920**	**920**	**920**	**919**	**918**	**917**	**916**	**916**	**916**	**916**	**916**	**916**	**917**	**919**	**920**	**922**	**922**	**921**		**916**	
Avg.	**945**	**945**	**945**	**945**	**944**	**944**	**944**	**944**	**944**	**944**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**946**	**946**	**946**	**946**	**946**			**944.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	962	961	961	961	960	960	960	959	960	960	960	959	959	958	958	957	956	956	955	955	954	954	953	952	962	952	957.9
2	952	951	950	950	949	949	949	948	948	948	949	949	949	948	948	948	948	949	948	948	948	949	949	950	952	948	948.9
3	950	950	950	951	951	952	952	951	952	953	953	953	954	954	954	955	954	955	955	955	955	956	956	956	956	950	953.3
4	957	957	957	957	957	957	957	957	957	957	957	957	957	956	956	956	956	955	954	954	954	955	955	956	957	954	956.1
5	956	956	956	955	954	954	955	954	954	953	952	953	951	951	949	949	949	947	946	946	945	943	942	941	956	941	950.4
6	939	937	937	937	936	936	936	935	936	936	938	938	938	939	939	939	939	939	939	939	937	937	935	934	939	934	937.3
7	931	929	927	924	920	919	916	915	915	915	915	913	912	911	911	909	910	910	910	910	912	911	912	913	931	909	915.4
8	915	916	918	920	920	921	922	922	923	923	924	924	925	924	925	925	925	925	925	925	924	925	925	926	926	915	922.8
9	926	926	926	926	926	926	926	926	926	927	927	926	927	927	928	928	929	930	930	931	932	933	934	935	935	926	928.2
10	935	936	937	937	938	938	939	939	940	940	941	942	942	942	943	943	943	943	943	943	943	943	943	944	944	935	940.7
11	944	943	943	943	943	943	943	943	944	944	945	945	946	947	947	947	948	949	949	950	950	951	952	953	953	943	946.4
12	954	954	955	956	957	957	957	958	958	959	959	959	959	959	959	959	959	960	960	960	960	960	960	961	961	954	958.2
13	961	961	960	960	959	959	959	958	958	957	956	957	956	955	953	952	951	950	948	947	945	946	946	945	961	945	954.2
14	943	944	944	943	942	942	939	939	938	937	936	935	933	932	931	930	930	930	931	931	930	930	929	930	944	929	935.4
15	930	931	931	930	930	929	929	928	927	926	925	924	924	923	922	921	921	920	919	918	920	919	918	919	931	918	924.4
16	920	919	919	919	921	922	922	923	925	926	927	927	928	929	929	930	931	931	932	933	934	935	936	936	936	919	927.2
17	937	937	938	938	939	939	940	940	941	942	942	943	943	944	944	945	945	946	946	947	947	947	948	948	948	937	942.8
18	949	949	948	948	948	949	949	949	949	950	950	950	951	952	952	952	952	953	953	953	952	952	951	951	953	948	950.5
19	951	949	949	948	948	947	947	946	945	947	946	946	945	945	945	945	945	945	944	944	944	944	943	943	951	943	945.8
20	942	941	940	940	938	937	936	935	935	934	933	932	930	930	929	928	927	927	926	925	925	924	924	924	942	924	931.8
21	923	923	923	922	923	922	922	922	922	923	923	923	923	923	923	923	923	923	923	923	924	924	924	924	924	922	923.0
22	924	925	925	925	925	926	926	926	926	927	928	928	929	929	929	929	929	930	930	931	931	932	932	932	932	924	928.1
23	933	933	933	933	933	933	933	933	933	934	934	934	934	933	933	933	933	933	932	932	932	932	932	931	934	931	932.9
24	931	931	931	930	929	929	928	928	927	928	927	927	926	926	925	924	924	924	923	923	923	923	923	923	931	923	926.5
25	924	924	924	924	924	924	924	923	923	924	924	924	924	923	923	923	922	921	922	921	921	920	921	921	924	920	922.7
26	920	920	919	920	921	922	921	922	923	924	924	924	925	925	925	925	925	926	926	927	927	927	927	927	927	919	923.8
27	927	927	926	927	926	926	925	925	925	926	925	925	925	925	924	924	924	924	924	924	924	924	924	925	927	924	925.1
28	925	925	925	924	924	923	924	924	924	924	923	923	923	922	922	922	921	921	921	920	920	920	919	919	925	919	922.4
29	919	919	919	919	919	919	919	919	920	921	921	922	922	922	922	922	922	921	921	921	922	922	922	921	922	919	920.6
30	921	920	919	919	919	918	918	916	916	916	915	915	914	914	914	914	914	915	915	915	915	915	915	916	921	914	916.2
31	916	916	916	916	916	917	917	917	917	918	918	918	918	918	918	919	919	919	919	919	919	919	920	920	920	916	917.9
Max.	**962**	**961**	**961**	**961**	**960**	**960**	**960**	**959**	**960**	**960**	**960**	**959**	**959**	**959**	**959**	**959**	**959**	**960**	**960**	**960**	**960**	**960**	**960**	**961**	**962**		
Min.	**915**	**916**	**916**	**916**	**916**	**917**	**916**	**915**	**915**	**915**	**915**	**913**	**912**	**911**	**911**	**909**	**910**	**910**	**910**	**910**	**912**	**911**	**912**	**913**		**909**	
Avg.	**936**	**936**	**936**	**936**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**935**	**934**	**935**	**935**	**935**			**935.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	920	920	920	920	921	921	921	921	921	922	922	922	922	922	922	922	922	922	923	923	923	923	923	923	923	920	921.7
2	923	924	924	924	924	924	925	925	925	926	926	927	927	928	928	928	929	930	931	931	931	933	934	935	935	923	927.5
3	936	937	937	938	939	940	941	941	942	943	943	944	944	945	945	946	946	946	947	947	948	948	949	949	949	936	943.4
4	949	950	950	950	950	950	950	950	951	951	951	951	951	951	951	951	951	950	950	950	949	949	948	948	951	948	950.1
5	947	946	945	945	944	943	942	942	941	941	940	940	939	939	938	938	938	937	937	937	937	937	937	937	947	937	940.3
6	937	937	937	937	937	937	937	937	938	938	939	939	939	939	939	939	939	939	938	938	938	938	938	938	939	937	938.0
7	937	937	937	936	936	935	934	933	933	933	933	932	932	932	931	931	931	930	930	930	930	930	929	929	937	929	932.6
8	929	929	929	929	928	928	928	928	929	929	929	929	929	929	929	928	928	928	928	928	928	928	928	928	929	928	928.3
9	928	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	928	928	928	928	927	927.1
10	928	928	929	929	929	929	929	929	930	930	931	931	931	932	932	933	933	934	934	935	935	936	936	936	936	928	931.7
11	937	937	938	938	938	938	938	939	939	939	940	940	940	940	941	941	941	941	942	942	943	943	944	944	944	937	940.2
12	944	945	945	945	946	946	947	947	947	948	948	948	949	949	948	948	948	948	948	948	948	948	947	948	949	944	947.3
13	948	948	948	948	948	947	947	947	947	947	947	947	947	946	947	946	946	946	945	945	945	945	945	945	948	945	946.5
14	945	944	944	944	943	943	943	942	942	942	942	942	941	941	940	940	940	940	940	940	940	940	940	940	945	940	941.7
15	940	940	939	939	939	939	939	939	939	939	939	939	939	939	938	939	939	939	939	940	940	940	940	940	940	938	939.2
16	940	940	940	941	940	940	940	940	940	940	940	941	940	941	940	940	940	940	940	940	940	940	940	940	941	940	940.3
17	940	941	940	940	940	940	940	940	941	941	941	941	941	942	942	942	942	943	943	943	944	944	944	945	945	940	941.7
18	945	945	945	946	945	945	946	946	946	947	947	947	947	948	948	948	948	948	949	949	949	950	951	951	951	945	947.3
19	951	951	952	952	952	952	952	952	952	953	953	953	953	953	952	952	952	951	950	950	950	949	949	949	953	949	951.6
20	948	948	947	947	946	946	945	944	944	943	943	943	942	942	941	940	940	939	938	937	937	936	935	934	948	934	941.9
21	932	931	930	929	928	927	926	925	925	924	925	924	924	923	922	922	921	920	920	920	922	921	923	924	932	920	924.6
22	925	926	927	927	928	930	931	933	935	937	938	941	940	943	943	944	947	947	948	948	949	950	952	952	952	925	939.2
23	952	952	953	954	955	955	957	957	958	959	958	959	960	960	960	960	960	960	960	960	961	960	960	960	961	952	958.0
24	959	959	959	959	958	957	957	957	956	956	955	954	954	953	953	952	951	950	950	949	949	947	947	947	959	947	953.8
25	946	945	944	943	942	942	941	941	940	940	940	939	939	939	939	939	939	940	940	941	941	942	942	942	946	939	941.2
26	943	944	944	945	945	945	945	946	946	946	946	946	946	945	945	945	944	944	944	943	943	943	943	943	946	943	944.6
27	943	943	943	943	944	944	944	944	944	944	944	944	943	944	943	943	944	944	944	944	944	943	943	940	944	940	943.5
28	940	940	940	940	938	939	937	937	938	937	937	937	936	936	936	935	935	936	936	935	935	935	935	936	940	935	936.9
29	936	935	935	935	935	935	935	935	935	936	936	936	936	936	935	935	935	935	935	935	934	934	934	934	936	934	935.2
30	933	933	933	932	932	931	931	930	930	930	929	929	929	928	928	927	927	927	927	927	927	927	927	926	933	926	929.2
31	926	926	926	926	926	925	925	924	924	924	924	924	924	923	923	923	923	923	922	922	922	922	922	922	926	922	923.8
Max.	**959**	**959**	**959**	**959**	**958**	**957**	**957**	**957**	**958**	**959**	**958**	**959**	**960**	**960**	**960**	**960**	**960**	**960**	**960**	**960**	**961**	**960**	**960**	**960**	**961**		
Min.	**920**	**920**	**920**	**920**	**921**	**921**	**921**	**921**	**921**	**922**	**922**	**922**	**922**	**922**	**922**	**922**	**921**	**920**	**920**	**920**	**922**	**921**	**922**	**922**		**920**	
Avg.	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**			**939.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	922	922	922	922	922	922	922	922	923	923	923	924	925	925	927	927	927	928	929	930	930	931	931	932	932	922	925.4
2	933	934	935	935	936	936	937	937	938	939	939	940	940	940	940	940	941	940	940	940	940	940	940	940	941	933	938.3
3	939	940	939	939	939	939	939	939	940	942	942	943	944	944	944	944	943	943	942	942	942	942	942	941	944	939	941.4
4	941	940	940	939	937	937	937	936	935	934	933	933	931	931	930	928	927	927	926	927	927	926	927	927	941	926	932.4
5	926	926	925	924	923	922	921	921	921	921	921	921	921	920	921	920	919	918	917	915	913	911	910	911	926	910	919.4
6	911	911	910	909	909	908	907	907	908	909	910	911	912	914	916	919	920	922	923	924	925	926	927	928	928	907	915.1
7	929	930	930	931	931	932	933	934	935	936	937	938	939	941	941	943	944	945	946	947	949	950	951	953	953	929	939.3
8	954	955	955	956	956	957	957	956	957	958	958	958	956	955	954	953	952	953	952	951	952	951	951	952	958	951	954.5
9	950	948	947	944	944	943	940	940	938	937	935	934	933	933	933	933	934	934	935	934	934	935	934	935	950	933	937.7
10	935	935	934	934	933	930	930	930	929	930	930	930	931	932	933	934	936	936	937	938	938	939	939	939	939	929	933.8
11	939	939	939	938	938	937	936	935	934	933	932	931	930	929	929	928	928	928	929	929	929	929	930	930	939	928	932.6
12	931	932	932	932	933	934	934	935	937	939	941	942	944	945	947	948	949	950	950	951	952	953	953	954	954	931	942.3
13	955	957	958	959	960	960	962	963	964	965	965	966	966	965	966	966	967	967	967	969	968	968	969	969	969	955	964.2
14	970	970	970	971	971	971	972	972	973	973	974	975	975	974	973	972	972	972	972	972	972	972	972	971	975	970	972.1
15	971	971	970	970	970	969	968	968	967	966	967	965	962	964	965	965	966	967	969	970	971	973	974	975	975	962	968.3
16	976	976	977	978	978	978	978	979	979	980	980	980	980	980	979	978	978	978	978	978	977	977	976	975	980	975	978.1
17	974	973	973	972	970	969	969	966	965	965	965	965	964	964	962	961	961	962	962	961	962	962	963	963	974	961	965.5
18	964	964	964	964	964	962	961	960	959	958	958	957	955	956	955	955	956	956	956	956	957	958	958	959	964	955	958.9
19	960	961	962	961	961	962	962	962	963	964	964	964	964	964	964	964	964	964	965	965	965	965	965	965	965	960	963.3
20	965	965	964	964	964	963	963	963	963	964	964	963	963	963	962	962	963	963	964	964	965	965	966	967	967	962	963.9
21	968	968	969	969	971	972	972	973	974	974	974	975	974	974	974	974	974	974	974	974	974	975	975	975	975	968	972.9
22	975	975	974	974	974	973	973	973	973	974	974	974	974	973	973	972	972	972	971	971	970	969	969	968	975	968	972.5
23	967	966	965	965	965	964	964	965	965	966	966	966	967	967	967	968	969	969	970	970	971	971	972	972	972	964	967.3
24	973	973	973	973	973	973	973	973	973	973	974	974	974	974	973	973	973	973	973	973	973	973	972	972	974	972	973.2
25	972	971	970	970	968	968	967	966	965	964	963	963	963	963	963	963	963	963	963	963	963	963	963	962	972	962	965.0
26	962	962	962	962	961	961	961	960	959	958	958	957	956	955	953	952	950	948	946	944	943	941	939	937	962	937	953.5
27	936	935	933	934	933	934	935	936	937	937	938	937	939	939	939	939	941	942	943	944	944	945	947	948	948	933	938.8
28	949	950	951	951	952	952	954	955	955	955	956	957	957	958	958	959	958	959	960	960	961	962	962	962	962	949	956.3
Max.	**976**	**976**	**977**	**978**	**978**	**978**	**978**	**979**	**979**	**980**	**980**	**980**	**980**	**980**	**979**	**978**	**978**	**978**	**978**	**978**	**977**	**977**	**976**	**975**	**980**		
Min.	**911**	**911**	**910**	**909**	**909**	**908**	**907**	**907**	**908**	**909**	**910**	**911**	**912**	**914**	**916**	**919**	**919**	**918**	**917**	**915**	**913**	**911**	**910**	**911**		**907**	
Avg.	**952**	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**952**	**951**	**951**	**952**	**952**	**952**	**952**	**952**	**952**	**953**	**953**			**951.6**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	962	962	962	962	961	962	962	962	962	962	961	961	961	960	959	958	958	957	956	956	955	955	954	955	962	954	959.4
2	954	953	952	951	950	950	949	949	948	948	947	947	946	946	946	946	946	945	945	946	946	946	946	946	954	945	947.9
3	947	947	947	948	948	949	950	950	950	950	951	951	951	952	952	952	952	953	953	952	953	953	953	952	953	947	950.7
4	952	952	951	951	950	949	949	949	949	948	947	947	946	946	945	944	943	942	942	942	941	941	941	941	952	941	946.1
5	940	940	940	940	940	939	940	940	940	940	940	940	940	941	940	941	941	941	942	942	942	943	943	944	944	939	940.8
6	944	944	945	945	945	945	945	944	944	944	944	944	943	942	942	941	941	940	940	940	940	940	939	939	945	939	942.4
7	939	939	939	938	938	938	938	938	938	938	938	938	937	937	937	937	936	936	935	935	936	936	935	935	939	935	937.1
8	934	934	935	936	937	937	938	939	940	940	942	941	943	944	945	945	946	946	948	948	949	950	951	953	953	934	942.5
9	954	955	956	957	958	959	961	961	962	962	963	963	963	964	965	966	967	966	966	967	967	967	967	967	967	954	962.6
10	968	968	968	968	968	968	968	967	967	967	967	967	967	965	965	964	964	963	962	962	961	960	959	959	968	959	965.0
11	958	956	956	956	955	955	953	952	952	952	953	953	952	952	951	952	951	951	951	951	951	951	952	950	958	950	952.7
12	950	951	949	951	951	951	951	951	951	952	952	953	953	954	954	954	954	955	955	956	956	956	957	958	958	949	953.0
13	958	958	959	959	959	959	959	959	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	961	961	958	960.1
14	961	961	961	961	961	961	961	960	960	960	960	960	960	960	960	959	959	959	959	959	958	958	958	958	961	958	959.8
15	958	958	958	957	957	957	957	957	956	956	956	956	957	956	956	956	955	955	955	955	955	955	955	955	958	955	956.2
16	955	955	955	955	955	955	954	954	954	954	955	955	954	954	953	953	954	953	953	953	954	954	954	954	955	953	954.2
17	954	954	954	953	953	953	952	952	952	952	951	951	951	950	949	948	948	948	948	948	947	947	948	949	954	947	950.6
18	948	948	948	948	948	947	947	947	946	946	946	945	945	945	944	944	944	944	944	944	944	944	943	943	948	943	945.5
19	943	943	942	942	942	941	940	939	938	937	936	935	934	933	932	932	932	932	932	932	932	932	932	931	943	931	936.0
20	932	933	933	934	934	935	935	936	936	937	937	938	938	938	938	939	940	940	940	941	941	941	942	942	942	932	937.4
21	943	943	944	944	944	945	946	947	948	949	950	950	951	952	952	953	954	954	954	955	956	956	956	955	956	943	950.0
22	955	956	956	955	954	955	954	954	954	953	954	954	954	954	953	954	955	955	955	956	957	957	957	958	958	953	954.9
23	958	958	958	958	958	958	959	959	959	959	959	959	959	958	958	958	958	957	957	957	957	956	956	956	959	956	957.8
24	955	955	955	955	954	954	953	953	953	953	952	953	953	952	952	951	951	951	951	951	951	950	950	950	955	950	952.4
25	950	950	950	950	950	949	949	949	949	949	950	950	950	950	950	950	950	949	950	950	950	951	951	951	951	949	949.9
26	952	952	952	952	952	952	953	953	953	953	954	954	955	955	955	955	955	955	956	956	957	957	957	957	957	952	954.2
27	957	958	958	957	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	958	957	957.5
28	956	956	955	955	954	954	954	953	953	953	953	953	953	952	952	951	951	950	951	951	951	951	951	951	956	950	952.6
29	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	948	948	947	951	947	949.6
30	946	946	945	944	943	943	942	942	941	941	939	939	937	937	936	934	932	932	931	930	930	931	931	930	946	930	937.6
31	930	930	930	930	929	930	930	931	932	935	935	936	936	937	937	938	939	939	940	941	941	942	943	943	943	929	935.6
Max.	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**967**	**967**	**967**	**967**	**967**	**967**	**965**	**965**	**966**	**967**	**966**	**966**	**967**	**967**	**967**	**967**	**967**	**968**		
Min.	**930**	**930**	**930**	**930**	**929**	**930**	**930**	**931**	**932**	**935**	**935**	**935**	**934**	**933**	**932**	**932**	**932**	**932**	**931**	**930**	**930**	**931**	**931**	**930**		**929**	
Avg.	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**			**950.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	944	944	945	946	946	947	948	948	949	949	950	950	951	951	952	952	952	953	954	954	954	954	955	955	955	944	950.2
2	955	955	956	956	956	956	956	956	956	957	956	956	956	956	955	954	954	953	953	953	952	952	951	950	957	950	954.6
3	949	949	948	947	946	945	945	943	941	940	939	938	938	938	938	937	937	937	937	937	937	937	937	936	949	936	940.5
4	936	936	937	937	938	938	938	938	939	939	940	940	941	942	942	943	943	944	945	945	946	946	946	947	947	936	941.2
5	948	948	948	948	948	950	950	950	950	950	950	951	951	951	951	951	951	950	950	951	952	952	952	951	952	948	950.2
6	950	951	951	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	951	951	952	952	952	953	953	950	950.5
7	953	953	953	953	953	954	954	954	954	955	954	954	954	954	953	952	951	951	951	950	949	948	948	946	955	946	952.1
8	946	945	944	945	944	944	943	942	943	942	942	943	943	942	942	943	942	942	942	942	943	942	943	943	946	942	943.0
9	943	943	943	943	943	943	943	943	944	944	944	944	945	945	945	945	945	946	946	946	947	947	948	948	948	943	944.8
10	949	949	950	950	950	950	950	950	951	951	952	953	954	955	955	956	956	956	957	957	957	958	958	959	959	949	953.4
11	958	958	957	957	956	956	954	953	952	952	951	949	948	946	944	942	941	940	939	938	937	937	936	936	958	936	947.3
12	935	935	935	934	934	934	933	933	933	932	932	931	931	931	931	931	931	931	930	930	930	931	931	931	935	930	932.1
13	931	931	931	931	932	932	933	933	934	934	935	935	935	935	935	936	937	937	937	938	939	939	940	939	940	931	934.9
14	939	939	940	940	940	940	940	941	942	941	942	941	943	942	944	943	944	945	946	946	946	947	948	948	948	939	942.8
15	949	949	948	949	949	950	950	950	950	950	951	950	951	950	951	950	949	949	950	949	948	947	946	945	951	945	949.1
16	943	942	940	939	938	936	935	933	931	931	930	929	928	928	926	926	924	924	923	924	924	923	923	922	943	922	930.0
17	922	922	921	921	922	922	923	924	925	925	927	927	928	929	930	930	931	932	933	934	935	935	936	936	936	921	927.8
18	937	937	938	939	939	939	940	940	941	942	942	943	943	943	944	944	944	945	945	946	946	947	947	948	948	937	942.5
19	948	949	949	949	950	950	950	950	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	949	951	948	950.1
20	949	949	949	948	948	948	947	947	947	947	946	945	945	945	944	944	944	943	943	942	942	942	942	941	949	941	945.4
21	941	940	940	940	939	939	938	938	938	938	939	939	940	940	941	941	942	942	943	943	943	944	944	944	944	938	940.6
22	944	944	944	944	944	944	944	945	945	945	945	945	946	946	946	947	947	947	948	949	950	950	951	951	951	944	946.3
23	952	952	952	952	952	952	953	953	953	953	953	953	953	953	952	952	951	950	950	949	949	948	948	947	953	947	951.3
24	946	945	945	944	944	943	943	943	943	943	943	943	944	944	944	945	945	945	946	946	947	947	947	948	948	943	944.6
25	948	948	948	948	949	948	949	949	949	949	949	949	949	949	949	949	948	948	948	948	948	949	948	949	949	948	948.5
26	948	948	948	948	947	948	948	948	948	948	948	948	948	948	948	947	947	947	947	946	946	946	946	945	948	945	947.3
27	945	945	945	944	944	943	943	943	942	942	942	941	941	940	939	939	938	938	937	937	937	937	936	936	945	936	940.5
28	936	936	937	937	938	938	938	939	939	940	941	942	942	943	944	944	945	945	946	946	947	947	948	948	948	936	941.9
29	949	949	949	949	950	950	950	950	951	951	951	951	951	951	952	952	951	952	952	952	952	953	953	953	953	949	950.9
30	953	953	953	953	953	953	953	953	954	954	954	954	954	954	954	954	954	954	954	954	954	955	955	954	955	953	953.8
Max.	**958**	**958**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**957**	**956**	**956**	**956**	**956**	**955**	**956**	**956**	**956**	**957**	**957**	**957**	**958**	**958**	**959**	**959**		
Min.	**922**	**922**	**921**	**921**	**922**	**922**	**923**	**924**	**925**	**925**	**927**	**927**	**928**	**928**	**926**	**926**	**924**	**924**	**923**	**924**	**924**	**923**	**923**	**922**		**921**	
Avg.	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**			**945.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

May 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	954	954	954	953	953	952	951	951	950	950	950	949	949	950	950	950	949	949	949	949	949	949	948	949	954	948	950.4
2	948	948	948	949	949	948	949	950	950	950	951	950	950	951	951	951	951	951	951	951	952	952	952	952	952	948	950.2
3	952	952	951	951	951	951	951	950	950	949	948	947	946	945	944	943	942	942	941	940	940	940	939	939	952	939	946.0
4	939	939	938	938	938	937	936	936	936	936	936	936	935	936	936	935	934	933	932	932	931	931	929	929	939	929	934.8
5	928	927	926	926	925	926	927	928	927	927	927	928	928	928	929	928	929	928	928	929	929	930	930	930	930	925	927.8
6	930	930	930	930	930	930	930	931	931	932	932	933	934	935	935	936	936	936	937	937	938	939	939	940	940	930	933.7
7	940	940	940	941	941	941	942	942	942	943	943	943	944	944	945	945	945	945	945	945	946	946	946	946	946	940	943.4
8	946	947	947	947	947	947	947	948	948	948	949	949	949	949	949	949	949	948	948	949	949	949	949	949	949	946	948.1
9	949	949	948	948	949	948	949	949	949	950	950	950	950	950	951	951	951	951	951	951	951	951	951	951	951	948	949.9
10	951	952	951	952	952	952	952	952	953	953	953	953	952	952	953	953	953	953	953	953	954	954	954	955	955	951	952.7
11	955	955	955	956	957	957	958	958	958	958	958	959	958	959	959	959	960	961	961	962	962	962	962	963	963	955	958.9
12	964	962	963	964	964	965	966	966	966	967	967	967	967	968	968	968	968	969	969	969	969	970	970	971	971	962	966.9
13	971	970	971	970	971	971	971	971	971	971	971	971	971	970	970	970	970	969	969	968	968	968	968	967	971	967	969.9
14	967	966	965	965	965	965	964	964	964	964	964	964	964	964	964	965	964	965	966	966	966	967	968	969	969	964	965.2
15	970	970	971	971	971	971	971	971	971	971	971	970	970	970	969	969	968	968	967	967	967	966	966	965	971	965	969.3
16	965	964	964	963	963	963	962	962	961	960	960	959	958	958	957	956	956	955	955	955	954	954	954	954	965	954	958.8
17	954	954	954	954	954	954	954	954	953	953	953	953	954	954	954	954	954	954	955	955	955	956	956	956	956	953	954.1
18	957	957	957	957	957	957	958	958	958	958	958	958	959	959	959	959	960	960	960	961	961	961	962	962	962	957	958.9
19	962	962	962	961	961	961	960	959	959	958	956	955	954	953	950	951	950	949	948	947	948	947	947	948	962	947	954.5
20	947	947	946	946	945	945	944	944	943	943	943	943	943	943	944	944	945	946	947	948	949	950	950	951	951	943	945.7
21	951	952	952	953	953	953	954	955	955	955	956	954	955	956	956	956	956	956	956	957	957	957	957	957	957	951	955.0
22	957	957	957	956	956	956	955	955	955	955	955	954	954	954	954	953	953	953	952	952	952	952	952	951	957	951	954.1
23	951	951	951	951	952	952	953	953	954	955	955	956	956	956	956	956	956	956	957	957	957	958	958	958	959	951	954.9
24	959	959	959	959	960	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	961	961	962	962	962	959	960.6
25	962	962	962	963	963	963	963	963	964	964	964	964	964	964	964	963	963	963	963	963	963	964	964	964	964	962	963.3
26	964	965	965	965	965	965	965	965	965	965	965	965	965	964	964	963	963	963	963	963	963	963	963	963	965	963	964.1
27	962	962	961	961	960	960	960	960	960	960	959	958	957	957	956	956	955	955	955	955	955	955	955	955	962	955	957.9
28	955	955	955	955	955	955	956	956	956	956	956	956	956	955	955	955	955	954	955	955	955	955	955	956	956	954	955.2
29	956	956	956	956	956	957	957	958	958	958	958	958	958	958	959	959	958	958	958	958	958	958	959	959	959	956	957.7
30	959	959	959	959	959	959	959	959	959	959	959	958	958	958	958	958	957	957	957	957	957	957	957	957	959	957	958.1
31	957	956	956	956	956	956	956	956	956	955	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	955	955.9
Max.	**971**	**970**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**970**	**970**	**971**	**971**		
Min.	**928**	**927**	**926**	**926**	**925**	**926**	**927**	**928**	**927**	**927**	**927**	**928**	**928**	**928**	**929**	**928**	**929**	**928**	**928**	**929**	**929**	**930**	**929**	**929**		**925**	
Avg.	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**			**954.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

June 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	956	956	956	956	956	956	956	956	957	957	957	957	957	956	956	956	955	955	955	955	954	955	954	954	957	954	955.8
2	954	954	954	954	954	954	954	953	953	953	953	953	953	953	952	952	952	952	952	952	952	953	953	954	954	952	953.0
3	954	954	954	955	955	956	956	955	956	956	957	957	957	958	957	957	957	957	957	957	958	958	958	959	959	954	956.4
4	959	959	959	959	959	959	959	959	959	959	958	959	959	959	959	958	958	958	957	958	958	958	958	957	959	957	958.5
5	957	957	958	958	957	958	958	957	958	958	957	957	957	957	957	956	956	956	956	956	956	956	956	956	958	956	956.8
6	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	954	954	955	955	955	956	957	957	954	955.5
7	957	956	956	956	955	956	956	956	956	957	956	956	957	956	956	957	957	956	957	957	957	958	957	957	958	955	956.5
8	957	956	956	956	956	956	955	956	955	956	955	955	954	954	953	952	952	950	949	949	949	947	947	945	957	945	952.9
9	946	946	945	945	944	944	944	944	943	942	943	942	943	941	943	943	944	945	945	945	945	946	947	947	947	941	944.2
10	949	949	948	948	948	949	949	949	950	951	951	952	953	953	953	954	954	954	955	955	955	955	955	955	955	948	951.9
11	954	954	953	953	952	953	953	953	953	953	954	953	954	953	953	954	953	953	953	952	953	952	953	952	954	952	953.0
12	952	951	951	952	952	952	952	952	953	952	953	953	953	953	954	954	954	954	955	955	955	955	955	955	955	951	953.3
13	955	955	955	955	955	955	955	955	955	955	955	955	955	954	954	954	954	954	954	954	954	954	954	954	955	954	954.5
14	954	953	953	953	953	953	953	953	953	953	953	952	952	952	952	952	952	951	951	951	951	951	951	951	954	951	952.2
15	950	950	950	949	949	949	949	948	948	948	947	947	946	946	946	946	946	946	946	946	945	945	945	945	950	945	947.2
16	945	945	944	944	943	943	943	942	942	942	942	942	943	943	944	944	944	944	945	945	945	946	946	947	947	942	943.9
17	947	947	947	947	947	947	948	948	949	949	949	949	949	950	950	950	950	951	951	952	952	952	952	953	953	947	949.4
18	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	952	952	953	952	953	953	954	954	955	955	952	952.9
19	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	954	954	954	955	955	956	957	957	958	958	954	955.3
20	958	958	958	958	958	958	959	959	959	959	959	959	959	959	960	960	961	961	961	962	961	961	961	962	962	958	959.6
21	962	962	962	962	961	961	961	961	961	961	961	960	960	960	960	959	959	959	959	959	959	959	959	958	962	958	960.2
22	958	958	958	958	958	958	958	959	959	960	960	960	960	961	961	961	962	962	962	963	963	963	964	964	964	958	960.5
23	964	964	964	964	965	965	965	965	966	966	966	966	966	966	966	966	966	966	966	966	966	966	967	967	967	964	965.6
24	967	967	967	966	966	966	966	966	966	966	966	966	966	965	965	965	964	964	964	964	964	964	964	964	967	964	965.4
25	964	964	964	964	963	963	964	964	964	964	964	964	964	964	964	964	963	964	964	964	964	965	965	965	965	963	963.8
26	965	965	965	965	965	965	965	965	965	965	965	965	965	964	964	964	964	964	963	963	963	964	963	964	965	963	964.4
27	964	964	964	964	963	963	963	963	963	963	963	963	963	962	962	962	962	963	963	962	963	963	963	964	964	962	963.0
28	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	964	963	963.9
29	964	963	964	964	964	964	964	964	964	964	964	964	963	963	962	961	962	961	961	962	962	962	962	962	964	961	962.9
30	962	962	962	963	963	964	964	965	965	965	965	966	966	967	967	967	967	968	968	968	968	968	968	969	969	962	965.7
Max.	**967**	**967**	**967**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**967**	**967**	**967**	**967**	**968**	**968**	**968**	**968**	**968**	**968**	**969**	**969**		
Min.	**945**	**945**	**944**	**944**	**943**	**943**	**943**	**942**	**942**	**942**	**942**	**942**	**943**	**941**	**943**	**943**	**944**	**944**	**945**	**945**	**945**	**945**	**945**	**945**		**941**	
Avg.	**957**	**957**	**956**	**956**	**956**	**956**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**956**	**956**	**957**	**957**	**957**	**957**	**957**			**956.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

July 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	968	967	967	967	967	967	967	969	967	968.3
2	967	967	967	967	967	967	966	967	967	966	966	966	966	965	965	965	964	964	964	964	964	964	964	964	967	964	965.4
3	963	963	963	964	963	963	964	964	963	964	964	963	963	963	963	963	963	963	963	963	963	963	964	964	964	963	963.3
4	964	964	964	964	964	964	965	965	965	965	965	965	965	965	965	964	964	964	964	964	964	964	964	964	965	964	964.3
5	964	964	964	964	964	964	963	964	963	963	963	963	962	962	961	961	961	961	960	960	960	960	960	959	964	959	962.1
6	959	959	958	958	958	958	958	957	957	957	957	957	956	956	956	956	956	956	956	956	956	956	956	956	959	956	956.9
7	956	956	956	957	957	957	957	957	957	957	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	956	957.4
8	958	958	958	958	958	958	959	959	959	959	960	960	960	960	960	960	960	960	960	961	960	961	961	961	961	958	959.5
9	961	960	960	960	960	960	959	959	959	958	958	958	958	957	957	956	956	955	955	955	955	954	954	954	961	954	957.5
10	953	952	952	952									951	951	951	950	950	950	949	950	949	950	949	949	953	949	950.6
11	949	948	948	948	948	948	948	948	949		948	948	948	948	948	948	949	949	949	949	949	950	950	950	950	948	948.6
12	950	950	950	951	951	951	952	952	952	952	952	952	952	952	952	952	952	952	951	951	951	951	951	951	952	950	951.3
13	950	950	949	950	950	950	951	951	951	951	951	951	951	951	952	952	952	952	953	953	953	953	953	953	953	949	951.5
14	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	953	954	954	954	954	954	953	953.1
15	953	953	953	953	953	953	953	953	954	954	954	954	955	955	955	955	956	956	956	957	957	958	958	958	958	953	954.8
16	958	958	958	958	959	959	959	960	960	960	960	960	960	960	960	960	961	961	961	961	961	961	961	961	961	958	959.9
17	961	961	961	962	962	962	962	962	962	962	961	961	960	960	960	959	959	959	959	959	959	959	960	960	962	959	960.6
18	959	959	959	959	959	959	959	958	957	958	957	956	958	958	957	957	957	956	956	956	956	956	956	956	959	956	957.5
19	955	956	956	956	955	955	955	956	955	956	955	955	956	956	956	955	956	956	955	955	955	955	955	954	956	954	955.3
20	954	954	954	953	953	953	953	953	953	952	952	952	951	951	950	950	950	950	950	950	950	950	950	951	954	950	951.6
21	951	951	951	951	952	952	953	954	954	955	955	955	955	955	956	956	956	957	957	957	957	958	958	958	958	951	954.7
22	958	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	957	956	956	958	956	957.4
23	956	956	955	955	955	955	956	955	955	955	955	954	954	953	953	953	953	952	952	951	950	949	949	948	956	948	953.3
24	947	946	946	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	943	943	943	943	943	943	947	943	943.8
25	943	942	942	942	942	942	942	942	942	941	941	941	941	941	941	941	942	942	942	942	943	943	943	943	943	941	941.9
26	944	944	945	945	946	947	947	948	949	949	950	951	951	952	953	953	954	955	955	956	957	958	958	959	959	944	951.1
27	960	960	961	961	962	962	963	964	964	965	966	966	966	966	966	966	967	967	968	967	967	967	967	967	968	960	964.8
28	967	966	966	966	966	965	965	965	965	964	964	964	964	964	964	963	963	963	963	963	964	963	963	963	967	963	964.3
29	963	963	962	962	961	961	962	962	962	961	961	960	960	960	960	960	960	959	960	960	960	959	960	959	963	959	960.7
30	959	958	958	958	957	957	956	957	956	956	955	955	954	954	953	952	952	951	950	949	949	949	948	948	959	948	953.7
31	947	947	947	947	947	947	948	949	949	949	950	950	950	950	951	951	951	951	951	951	951	951	951	951	951	947	949.5
Max.	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**967**	**967**	**967**	**967**	**967**	**969**		
Min.	**943**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**942**	**942**	**942**	**942**	**943**	**943**	**943**	**943**		**941**	
Avg.	**956**	**956**	**956**	**956**	**956**	**956**	**957**	**957**	**957**	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**			**956.4**

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.4	2.6	1.5	2.1	2.5	2.6	1.4	1.5	1.6	2.2	2.0	2.8	3.9	4.6	4.0	3.3	4.5	5.7	5.8	5.5	5.3	5.2	4.8	5.1	5.8	1.4	3.5
2	9.1	9.7	8.2	8.3	9.0	8.0	7.9	5.7	5.7	5.1	5.9	4.5	6.4	5.7	5.0	6.3	4.3	3.7	1.7	4.0	2.9	3.6	3.5	2.7	9.7	1.7	5.7
3	3.6	5.6	2.5	4.4	3.2	2.4	3.0	3.1	2.3	2.3	3.1	3.6	2.6	1.8	1.9	4.0	5.0	4.5	3.2	4.2	3.2	3.2	2.6	1.9	5.6	1.8	3.2
4	2.0	2.4	2.6	2.2	2.0	3.2	1.4	1.4	1.4	1.7	1.4	2.6	1.3	1.4	2.3	2.3	2.9	4.2	2.1	2.0	2.0	2.3	1.3	1.0	4.2	1.0	2.1
5	1.2	2.4	1.2	1.6	2.0	1.7	1.9	2.3	1.4	2.6	2.6	2.7	4.1	3.3	4.6	4.9	4.5	4.8	5.8	6.7	6.1	5.9	4.1	2.5	6.7	1.2	3.4
6	1.4	2.9	2.4	1.9	1.3	1.4	2.0	1.4	2.0	1.7	2.1	1.3	1.4	2.8	3.5	5.3	3.7	3.9	3.6	4.4	3.2	3.1	2.0	2.3	5.3	1.3	2.5
7	1.5	1.6	2.2	1.7	2.9	3.5	2.6	5.1	5.2	4.3	2.6	2.8	4.5	4.6	3.3	2.1	4.1	3.8	3.6	3.4	4.0	4.3	3.9	3.8	5.2	1.5	3.4
8	2.9	2.9	2.7	3.1	3.5	3.1	3.3	3.2	3.1	3.5	1.9	1.1	1.8	1.9	2.8	3.0	4.1	4.0	3.7	3.0	2.1	0.8	2.3	2.6	4.1	0.8	2.8
9	4.7	4.7	3.8	3.2	3.0	3.0	3.0	3.5	4.5	5.2	5.4	5.5	5.6	5.6	6.4	7.6	8.7	7.5	6.8	7.1	7.8	4.8	6.2	5.5	8.7	3.0	5.4
10	2.2	2.8	2.6	1.6	1.4	2.1	1.8	3.0	2.6	2.1	2.7	2.8	4.0	4.7	5.7	5.9	4.4	2.8	3.0	3.5	3.6	3.1	3.2	3.4	5.9	1.4	3.1
11	3.7	3.6	3.4	3.4	4.0	3.9	4.0	4.0	4.7	5.0	5.1	5.4	5.1	3.4	2.0	2.0	2.8	2.6	2.4	2.6	2.4	2.5	3.3	4.2	5.4	2.0	3.6
12	2.6	1.5	1.7	1.6	1.6	1.9	2.2	1.8	2.3	3.6	5.2	4.9	6.2	6.5	6.9	5.9	6.1	6.0	5.1	5.6	5.7	5.4	5.3	5.4	6.9	1.5	4.2
13	4.5	5.1	2.3	2.7	2.5	1.8	2.5	2.2	1.7	2.2	3.0	4.2	4.6	4.5	5.6	6.4	6.4	6.1	7.0	7.0	6.0	3.9	3.9	4.0	7.0	1.7	4.2
14	4.5	4.0	3.2	3.2	2.8	1.9	1.2	2.4	2.1	1.8	2.5	2.9	3.3	2.8	3.5	3.2	4.6	4.8	4.1	2.6	2.3	2.7	3.2	2.8	4.8	1.2	3.0
15	4.1	4.8	4.4	5.4	4.8	5.1	5.3	6.6	5.8	6.3	7.4	7.8	8.1	8.2	9.8	9.0	9.1	8.8	11.2	10.4	8.3	9.5	7.6	4.8	11.2	4.1	7.2
16	5.3	6.1	5.9	6.9	8.6	9.0	8.7	8.7	9.6	11.0	11.9	13.0	13.5	13.3	13.7	13.9	14.1	13.9	12.8	12.9	13.1	11.5	12.0	12.6	14.1	5.3	10.9
17	13.7	14.0	12.6	12.5	9.6	5.4	4.4	3.7	4.3	4.9	4.1	3.0	4.0	5.4	6.0	5.3	4.4	4.1	5.0	3.7	3.0	3.2	2.1	2.0	14.0	2.0	5.9
18	1.9	3.6	2.7	2.1	2.6	1.3	1.9	1.8	2.8	3.9	2.7	3.1	6.1	6.9	6.5	4.1	4.5	2.3	2.8	2.5	2.2	1.9	1.4	1.0	6.9	1.0	3.0
19	1.1	2.0	1.1	1.4	1.3	2.4	4.0	4.5	4.5	4.2	5.5	8.3	8.9	8.1	9.8	9.5	10.5	10.2	8.8	7.0	6.9	6.6	6.3	6.5	10.5	1.1	5.8
20	5.5	5.7	5.1	4.9	5.3	5.9	5.6	6.7	5.6	5.8	5.4	6.2	6.0	6.4	6.0	6.1	5.4	5.1	3.6	7.6	10.4	9.9	11.2	10.3	11.2	3.6	6.5
21	10.8	11.1	11.4	10.4	9.5	7.5	7.5	8.5	8.1	9.4	11.3	10.5	9.7	9.3	8.5	7.9	8.2	7.7	7.5	6.3	5.1	5.9	4.9	3.7	11.4	3.7	8.4
22	2.8	1.4	2.5	2.9	2.7	2.8	3.1	4.4	4.9	6.2	9.1	12.2	15.6	15.3	15.6	16.9	17.8	18.0	19.0	17.9	16.3	16.7	18.1	16.5	19.0	1.4	10.8
23	17.7	17.6	17.5	18.2	14.3	9.4	13.0	14.9	14.2	12.7	14.7	16.2	15.6	14.7	14.7	13.9	14.8	14.3	13.1	13.1	14.2	13.7	13.2	13.3	18.2	9.4	14.5
24	14.1	11.3	9.1	6.5	3.6	2.3	2.5	1.6	1.7	3.8	10.3	11.2	11.0	10.3	10.0	9.4	8.7	8.6	8.7	8.0	6.6	4.9	5.1	4.7	14.1	1.6	7.2
25	3.8	2.8	3.2	2.5	2.3	2.9	2.0	2.3	2.4	2.7	2.6	4.4	3.9	4.4	3.8	3.6	4.9	5.2	6.3	6.3	5.4	5.9	6.1	6.9	6.9	2.0	4.0
26	7.2	8.2	8.6	7.3	5.4	6.1	5.7	6.3	6.3	10.3	13.5	14.8	14.9	13.3	13.0	13.7	15.7	15.5	16.7	13.8	11.6	10.1	8.3	8.2	16.7	5.4	10.6
27	5.9	5.5	5.7	7.7	7.5	4.7	4.9	5.2	9.8	8.5	8.2	7.6	7.5	7.3	6.2	7.3	6.1	5.4	5.0	3.3	1.9	2.5	3.2	3.8	9.8	1.9	5.9
28	4.2	4.7	3.7	4.8	5.6	6.0	6.5	6.8	7.0	7.3	6.8	9.4	7.8	11.1	12.9	13.1	13.5	13.2	9.9	11.5	10.1	11.4	11.0	9.1	13.5	3.7	8.6
29	9.3	8.9	9.3	10.0	7.8	7.6	7.2	6.9	7.1	8.3	8.2	7.8	6.7	6.3	6.2	4.7	5.8	6.8	4.7	6.0	7.6	6.4	6.3	5.5	10.0	4.7	7.1
30	3.9	3.1	3.4	4.1	4.0	4.4	4.2	6.1	7.1	9.1	10.0	8.7	8.6	10.4	10.3	10.8	10.1	8.8	9.2	7.0	8.5	9.3	8.8	9.4	10.8	3.1	7.5
31	8.7	7.8	6.3	8.4	8.1	9.2	7.4	9.8	11.1	10.5	12.3	12.5	13.5	14.4	12.9	14.2	12.8	9.9	11.2	8.7	5.8	6.4	10.5	11.8	14.4	5.8	10.2
Max.	**17.7**	**17.6**	**17.5**	**18.2**	**14.3**	**9.4**	**13.0**	**14.9**	**14.2**	**12.7**	**14.7**	**16.2**	**15.6**	**15.3**	**15.6**	**16.9**	**17.8**	**18.0**	**19.0**	**17.9**	**16.3**	**16.7**	**18.1**	**16.5**	**19.0**		
Min.	**1.1**	**1.4**	**1.1**	**1.4**	**1.3**	**1.3**	**1.2**	**1.4**	**1.4**	**1.7**	**1.4**	**1.1**	**1.3**	**1.4**	**1.9**	**2.0**	**2.8**	**2.3**	**1.7**	**2.0**	**1.9**	**0.8**	**1.3**	**1.0**		**0.8**	
Avg.	**5.4**	**5.5**	**4.9**	**5.1**	**4.7**	**4.3**	**4.3**	**4.7**	**4.9**	**5.4**	**6.1**	**6.6**	**7.0**	**7.0**	**7.2**	**7.3**	**7.5**	**7.2**	**6.9**	**6.7**	**6.2**	**6.0**	**6.0**	**5.7**			**5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.2	9.9	8.8	8.8	8.5	6.6	6.9	7.5	9.0	10.0	9.9	11.3	10.6	9.1	8.9	9.0	9.0	9.4	8.8	6.4	4.4	4.3	4.5	3.5	11.3	3.5	8.1
2	3.6	3.0	2.9	2.9	1.5	1.1	2.0	2.6	3.2	5.0	7.0	9.9	11.7	12.7	14.5	15.3	12.1	12.1	10.8	11.8	14.1	14.5	14.6	16.1	16.1	1.1	8.5
3	15.6	14.8	11.4	10.7	12.3	10.8	11.4	12.9	12.8	14.0	14.2	13.3	14.1	15.6	17.4	16.4	14.8	14.7	13.0	10.5	8.9	8.0	6.9	5.0	17.4	5.0	12.5
4	2.6	2.1	1.5	0.8	1.0	1.1	1.5	0.8	0.7	1.6	2.1	3.7	3.9	4.6	4.8	4.2	4.8	5.7	5.7	5.6	6.0	5.8	6.1	6.8	6.8	0.7	3.5
5	6.5	6.9	6.7	7.1	6.8	7.9	8.9	6.9	7.8	8.6	11.8	13.7	13.2	13.6	13.9	13.9	11.1	8.6	9.8	10.1	10.4	7.6	7.1	5.9	13.9	5.9	9.4
6	6.7	3.1	2.5	4.2	5.2	3.4	2.2	2.4	3.6	7.3	6.9	6.4	6.7	7.8	7.2	7.5	8.3	7.4	6.1	6.5	7.1	8.6	8.3	7.6	8.6	2.2	6.0
7	5.9	4.7	4.8	3.0	4.0	1.9	2.4	2.0	2.4	2.8	3.7	4.7	5.6	4.7	6.7	8.0	8.6	8.0	6.9	5.6	5.6	3.9	4.0	3.6	8.6	1.9	4.7
8	1.5	2.7	2.7	3.5	4.3	3.6	2.5	2.7	1.8	1.8	3.0	3.4	3.8	5.6	7.9	8.4	8.2	9.4	9.8	12.5	16.3	16.3	14.7	15.0	16.3	1.5	6.7
9	16.0	15.7	11.9	10.6	10.5	8.3	10.3	9.8	10.8	10.2	11.2	8.7	8.5	8.7	7.7	6.9	7.2	6.5	5.9	7.2	7.6	6.9	6.7	7.9	16.0	5.9	9.2
10	7.3	7.7	9.4	9.5	10.1	13.4	13.4	8.5	3.1	3.6	5.3	6.1	4.1	5.2	5.1	3.9	2.2	2.2	2.4	3.2	1.6	1.2	2.7	3.2	13.4	1.2	5.6
11	4.7	3.9	7.5	8.5	9.3	8.9	9.4	10.5	12.9	15.4	15.3	15.4	14.7	14.4	14.7	14.2	15.3	15.0	12.5	11.8	12.6	14.8	12.8	5.8	15.4	3.9	11.7
12	5.2	6.3	5.7	7.6	7.0	5.6	6.8	7.3	8.3	9.5	9.4	9.5	10.6	11.2	11.9	13.1	13.7	14.1	14.3	14.8	15.1	15.1	11.8	9.3	15.1	5.2	10.1
13	8.5	8.1	9.7	10.6	9.3	4.6	2.5	6.7	4.2	2.6	2.9	4.2	5.0	5.5	4.0	3.4	3.1	3.4	2.9	2.4	3.4	2.5	1.8	1.9	10.6	1.8	4.7
14	1.5	2.4	2.8	3.4	3.2	3.1	2.3	2.4	3.7	3.8	4.6	5.0	6.3	8.1	9.6	10.7	11.2	10.4	11.3	13.4	16.7	16.5	16.3	16.0	16.7	1.5	7.7
15	18.9	19.8	19.3	20.3	21.3	20.4	19.5	18.8	18.2	17.7	19.8	20.0	18.9	18.1	18.9	18.9	17.2	11.6	4.7	3.8	4.4	5.0	5.0	5.1	21.3	3.8	15.2
16	9.0	8.6	5.9	6.8	4.7	1.2	2.1	2.7	1.6	1.8	3.8	4.6	5.8	5.7	6.0	5.6	4.7	3.7	4.3	4.8	4.6	5.3	4.8	4.3	9.0	1.2	4.7
17	3.6	3.4	1.9	1.6	1.5	1.3	0.9	1.2	1.0	1.7	1.6	1.9	1.6	1.8	3.1	3.9	2.1	2.1	1.7	1.9	2.5	3.8	4.1	4.3	4.3	0.9	2.3
18	4.7	4.6	7.1	5.8	6.0	5.5	5.0	3.9	4.1	6.0	6.7	8.3	8.8	8.9	8.3	7.7	8.2	8.0	6.4	6.0	6.8	5.6	4.7	4.3	8.9	3.9	6.3
19	4.0	3.6	4.2	4.0	3.4	3.2	3.2	3.0	2.7	4.5	5.4	7.5	8.0	8.9	9.1	9.0	8.5	8.2	7.8	6.9	6.2	7.0	5.9	7.9	9.1	2.7	5.9
20	8.3	7.8	8.6	6.2	5.0	3.6	3.1	3.8	4.6	4.8	4.5	4.5	6.0	6.8	6.0	7.2	6.2	5.2	4.0	2.9	2.7	3.4	3.4	4.9	8.6	2.7	5.2
21	4.0	2.8	2.7	4.1	3.0	1.8	1.9	3.6	4.3	4.9	5.2	4.0	4.6	5.6	6.1	5.5	5.7	7.4	6.4	6.9	8.2	8.2	7.5	7.5	8.2	1.8	5.1
22	7.3	7.3	6.6	6.5	7.8	6.4	7.2	7.7	11.2	14.8	17.1	19.5	19.5	17.1	16.0	12.6	11.7	10.9	13.4	12.4	9.8	10.6	8.4	9.5	19.5	6.4	11.3
23	7.5	7.5	5.6	5.7	4.9	4.7	4.4	3.9	4.5	5.8	6.7	7.3	9.0	11.8	12.8	11.6	10.4	9.3	8.5	7.7	9.9	11.0	11.7	13.0	13.0	3.9	8.1
24	11.4	9.5	9.4	11.5	12.9	11.2	11.5	10.0	9.0	10.3	10.8	9.6	9.1	9.4	10.7	9.5	10.2	8.6	9.4	9.0	10.2	10.0	9.5	9.5	12.9	8.6	10.1
25	9.9	10.3	10.0	10.9	11.0	10.9	10.8	9.1	8.4	8.6	8.8	8.3	8.0	8.0	7.8	7.3	6.9	7.2	6.3	6.1	5.9	7.4	7.2	6.3	11.0	5.9	8.4
26	4.8	2.6	2.7	3.0	3.7	3.3	3.1	3.3	5.3	6.3	9.2	12.3	15.1	17.2	18.8	17.0	18.0	17.5	20.8	20.0	19.8	21.9	22.9	19.8	22.9	2.6	12.0
27	19.5	20.3	19.6	21.4	21.7	18.9	14.9	6.3	5.4	5.4	2.6	5.2	9.7	11.6	9.1	8.5	8.0	7.3	6.2	6.2	3.5	2.3	1.6	1.5	21.7	1.5	9.9
28	2.3	2.8	2.3	2.5	4.3	4.4	3.8	2.6	1.7	1.7	2.2	2.8	2.7	2.5	3.1	2.8	2.9	1.6	1.1	1.7	1.1	2.2	2.3	1.1	4.4	1.1	2.4
29	1.9	2.6	3.4	3.5	5.0	5.5	3.7	4.7	5.3	5.9	5.5	6.5	7.9	7.8	6.1	6.8	6.3	5.1	3.5	2.9	2.9	1.4	1.6	2.8	7.9	1.4	4.5
30	2.0	1.2	1.4	2.5	1.6	1.5	1.4	1.3	1.3	1.3	1.3	2.1	2.0	2.4	2.3	2.4	5.1	7.1	5.9	7.1	8.7	10.5	10.6	10.8	10.8	1.2	3.9
Max.	**19.5**	**20.3**	**19.6**	**21.4**	**21.7**	**20.4**	**19.5**	**18.8**	**18.2**	**17.7**	**19.8**	**20.0**	**19.5**	**18.1**	**18.9**	**18.9**	**18.0**	**17.5**	**20.8**	**20.0**	**19.8**	**21.9**	**22.9**	**19.8**	**22.9**		
Min.	**1.5**	**1.2**	**1.4**	**0.8**	**1.0**	**1.1**	**0.9**	**0.8**	**0.7**	**1.3**	**1.3**	**1.9**	**1.6**	**1.8**	**2.3**	**2.4**	**2.1**	**1.6**	**1.1**	**1.7**	**1.1**	**1.2**	**1.6**	**1.1**		**0.7**	
Avg.	**7.2**	**6.9**	**6.6**	**6.9**	**7.0**	**6.1**	**6.0**	**5.6**	**5.8**	**6.6**	**7.3**	**8.0**	**8.5**	**9.0**	**9.3**	**9.0**	**8.7**	**8.3**	**7.7**	**7.6**	**7.9**	**8.1**	**7.6**	**7.3**			**7.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.2	12.6	12.3	13.6	14.5	14.6	14.0	13.3	11.8	12.4	11.8	12.4	12.8	13.4	12.2	11.5	12.6	11.7	9.9	8.5	8.5	8.3	9.0	7.8	14.6	7.8	11.7
2	7.8	7.1	7.1	6.8	5.8	3.9	4.5	2.9	2.9	2.5	5.1	7.1	6.2	6.4	7.9	6.7	6.5	4.8	4.0	3.6	4.2	4.7	3.3	3.3	7.9	2.5	5.2
3	2.0	2.3	2.7	2.1	1.5	1.3	1.4	1.2	2.0	2.3	3.2	2.9	2.5	2.6	2.1	2.3	1.4	1.9	2.3	1.0	1.0	2.1	2.5	1.8	3.2	1.0	2.0
4	2.9	2.2	2.8	2.7	3.8	4.6	5.7	3.7	5.1	6.1	7.0	5.7	7.0	6.5	6.1	6.7	5.6	6.8	4.6	4.1	7.2	8.8	9.8	10.2	10.2	2.2	5.7
5	8.7	5.5	4.5	4.9	3.7	3.6	3.8	2.8	4.4	3.4	3.7	4.3	4.5	3.9	3.8	3.3	2.6	2.9	2.6	3.0	1.8	0.9	1.6	1.7	8.7	0.9	3.6
6	1.6	2.5	1.9	1.3	1.1	1.2	1.7	1.5	2.1	3.1	2.8	2.5	2.0	3.4	3.0	4.1	4.0	4.4	4.0	2.7	2.7	2.8	2.2	3.7	4.4	1.1	2.6
7	5.6	5.1	3.5	5.5	9.3	9.9	11.3	9.8	9.6	11.0	11.4	10.5	9.9	9.0	8.9	6.5	4.5	3.2	1.9	1.7	1.9	1.5	1.6	1.5	11.4	1.5	6.4
8	1.4	1.7	1.8	1.3	1.7	1.7	2.1	2.0	2.1	1.3	0.8	0.8	2.0	2.3	2.5	2.1	2.2	1.3	1.4	0.7	1.0	1.3	1.8	1.9	2.5	0.7	1.6
9	1.6	1.8	2.0	1.3	1.4	2.2	2.6					6.1	7.8	7.8	7.3	7.9					6.2	7.2	7.6	7.3	7.9	1.3	4.9
10		6.9	6.6	4.9																		6.8	7.6	6.2	7.6	4.9	6.5
11	4.5	4.2	4.0	3.8	3.8	3.9	3.8	4.1	4.9	5.1	4.6	4.8	5.0	4.5	5.6										5.6	3.8	4.4
12															9.6	8.0	6.7	5.2	3.1	2.7	2.0	1.7	1.8	1.9	9.6	1.7	4.3
13	1.9	3.0	3.1	3.0	2.7	2.7	2.5	2.3	2.9	3.3	3.5	2.7	3.0	2.9	3.0	3.0	3.6	3.3	4.3	3.0	3.8	5.4	6.0	6.4	6.4	1.9	3.4
14	6.4	6.3	5.7	4.3	3.3	3.7	2.3	1.9	4.0	5.8	4.2	3.0	3.4	4.2	2.9	2.3	2.8	5.2	7.0	8.4	8.4	9.1	7.4	8.4	9.1	1.9	5.0
15	5.9	4.9	3.1	3.4	4.2	3.6	3.3	4.2	4.7	5.3	1.8	1.6	2.0	2.7	4.2	4.4	4.7	5.3	4.6	4.1	6.9	7.7	7.2	7.5	7.7	1.6	4.5
16	6.1	5.7	5.2	5.6	4.0	3.9	3.3	3.2	3.5	3.3	1.8	1.3	2.7	3.5	5.4	3.8	4.5	2.9	5.7	2.8	3.2	5.9	8.5	8.7	8.7	1.3	4.4
17	9.8	11.9	12.3	11.1	13.3	14.9	15.8	16.5	16.1	15.4	12.4	11.3	14.7	16.7	15.4	16.2	14.7	14.0	12.3	12.2	14.6	14.6	15.0	15.0	16.7	9.8	14.0
18	13.4	14.4	15.3	14.9	13.4	12.9	12.1	10.5	10.9	11.2	11.2	6.3	2.9	6.1	8.8	8.0	5.5	5.9	6.4	7.8	6.6	6.9	6.4	6.0	15.3	2.9	9.3
19	7.6	8.8	9.0	10.4	9.8	9.0	8.4	9.7	10.9	11.8	14.1	12.7	14.3	17.4	18.6	18.4	20.5								20.5	7.6	12.4
20												18.1	13.6	4.5	5.0	4.7	4.0	7.7	8.4	8.7	9.1	9.0	6.5	7.4	18.1	4.0	8.2
21		6.9	6.0	1.2	3.0	4.1	3.8	4.2	5.9	5.5	4.5	4.2	4.1	3.2	2.3	1.7				7.7	7.7	8.1	7.2	5.7	8.1	1.2	4.9
22	7.2	6.2	4.6	4.8	5.9	7.1										9.9	8.2	8.0	6.0	7.5	6.5	5.9	6.4	5.7	9.9	4.6	6.7
23	5.2	5.3	4.7	4.5	6.1	7.0	6.8	7.5	6.5					13.5	13.9	13.5	13.3	14.9	13.2	11.6	9.7	8.2	6.6		14.9	4.5	9.1
24		2.6	2.3	2.0	2.5	2.1	3.2																		3.2	2.0	2.5
25																											
26																											
27					0.7	0.5	0.6	0.5	0.6	0.6	0.7	0.8	0.5	0.7	0.6	0.6	0.5	0.5	0.5	0.6	1.0	0.8	0.5	0.4	1.0	0.4	0.6
28	1.0	1.2	0.9	0.8	0.8	1.2	1.3	1.3	1.2	1.0					4.2	4.8	4.4	4.0	3.5	2.8	2.1	1.9	0.9	1.3	4.8	0.8	2.0
29	1.5	1.1	1.1	2.1	2.0	2.3	2.1	2.2	2.2	2.2	1.9	1.8										1.3	1.2		2.3	1.1	1.8
30							1.8			2.1	2.2	2.0	1.9												2.2	1.8	2.0
31																							6.2	4.7	6.2	4.7	5.4
Max.	**13.4**	**14.4**	**15.3**	**14.9**	**14.5**	**14.9**	**15.8**	**16.5**	**16.1**	**15.4**	**14.1**	**18.1**	**14.7**	**17.4**	**18.6**	**18.4**	**20.5**	**14.9**	**13.2**	**12.2**	**14.6**	**14.6**	**15.0**	**15.0**	**20.5**		
Min.	**1.0**	**1.1**	**0.9**	**0.8**	**0.7**	**0.5**	**0.6**	**0.5**	**0.6**	**0.6**	**0.7**	**0.8**	**0.5**	**0.7**	**0.6**	**0.6**	**0.5**	**0.5**	**0.5**	**0.6**	**1.0**	**0.8**	**0.5**	**0.4**		**0.4**	
Avg.	**5.4**	**5.4**	**5.1**	**4.9**	**4.9**	**5.1**	**4.9**	**5.0**	**5.4**	**5.5**	**5.4**	**5.6**	**5.8**	**6.4**	**6.7**	**6.5**	**6.3**	**5.7**	**5.3**	**5.0**	**5.3**	**5.4**	**5.4**	**5.4**			**5.5**

Total Hours in Month 744 **Hours Data Available** 534 **Data Recovery** 71.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.8	5.6	5.5	4.3	3.8	3.8	3.9	3.1	3.4	4.5	3.9	3.9	4.0	3.7	2.7	2.5	2.9	3.0	3.2	4.3	4.7	5.2	4.9	5.0	5.8	2.5	4.1
2	3.8	3.9	3.2	3.2	2.6	3.2	2.9	3.4	3.3	3.5	3.1	3.2	3.4	2.7	2.4	3.5	3.7	3.8	3.6	3.5				4.4	4.4	2.4	3.3
3														20.5	18.6	17.0	18.5	20.3	18.2	17.3	16.8	17.9	21.4	21.5	21.5	16.8	18.9
4	18.8	16.3	16.6	16.1	14.0	14.8	14.9	16.0	14.8	16.0	15.7	15.0	13.6	15.1	17.3	16.5	14.5	16.8	16.1	14.6	14.3	12.9	15.8	16.6	18.8	12.9	15.5
5	14.9	16.6	15.9	14.8	16.8	15.7	16.6	16.4	16.2	15.8	14.7	14.0	13.9	14.2	13.8	13.7	12.2	11.6	10.1	10.2	7.3	3.8	2.2	2.9	16.8	2.2	12.7
6	4.2	4.9	5.8	4.2	12.9	14.8	11.0	12.6	11.6	13.0	18.0	17.4	18.4	17.4	15.3	16.2	16.0	16.6	14.0	10.5	8.4	7.8	9.1	9.6	18.4	4.2	12.1
7	10.3	12.9	12.7	6.7	6.9	8.2	8.8	7.8	9.5	7.9	7.8	8.6	6.3	4.7	5.2	5.9	5.7	5.3	6.0	5.5	5.8	5.9	6.0	5.5	12.9	4.7	7.3
8	5.1	5.0	4.5	4.6	4.2	3.8	4.2	4.1	4.1	3.8	3.7	3.8	3.7	4.1	3.9	3.8	4.9	5.8	6.4	7.2	7.8	7.6	8.5	8.4	8.5	3.7	5.1
9	9.2	10.5	11.9	12.6	12.8	12.0	13.2	14.9	15.6	15.1	15.0	15.5	15.7	15.9	16.6	18.2	18.9	19.2	18.6	18.1	18.7	17.3	17.5	17.7	19.2	9.2	15.4
10	14.6	13.8	13.7	12.4	13.5	14.2	14.9	14.5	13.2	12.4	12.3	12.9	13.6	13.5	14.2	13.1	13.2	14.0	14.2	13.5	12.9	11.6	10.2	10.8	14.9	10.2	13.2
11	9.3	8.9	8.7	10.0	9.9	9.4	9.5	9.2	8.8	8.4	8.4	8.1	7.8	7.0	6.9	6.6	7.4	6.9	5.9	6.3	5.8	6.0	6.0	5.8	10.0	5.8	7.8
12	5.4	5.5										6.2	5.1	5.5	5.6	6.3	6.4	7.0	7.8	8.5	8.7	8.9	7.6	8.6	8.9	5.1	6.9
13	8.4	6.8	8.2	7.4	9.3	8.0	6.7	7.3	7.3	5.8	5.8	5.3	3.3	2.1	1.3	1.2	2.0	1.9	1.2	1.5	1.6	1.6			9.3	1.2	4.7
14			6.0	6.7	7.0	7.8	10.1	7.4	6.1	4.3	3.8	3.1	2.6	5.8	10.0	10.3	7.0	7.9	13.0	13.8	13.2	12.2	10.1	8.5	13.8	2.6	8.0
15	9.3	7.3	6.8	5.4	3.4	1.5	0.9	2.7	3.5	3.3	3.8	3.6	3.3	3.5	2.9	3.6	2.1	2.4	2.6	1.2	1.8	2.3	3.2	2.1	9.3	0.9	3.4
16	2.6	3.3	4.8	4.4	6.6	5.2	6.9	8.5	7.8	8.3				8.9	10.8	10.0	9.2	8.5	8.8	7.6	7.2	6.7	7.2	7.3	10.8	2.6	7.2
17	8.2	8.2	9.3	8.6	7.5	9.4	9.3	8.6	6.9																9.4	6.9	8.4
18																											
19																											
20																											
21																											
22																											
23																											
24																											
25																											
26																											
27																											
28																											
29																											
30																											
Max.	**18.8**	**16.6**	**16.6**	**16.1**	**16.8**	**15.7**	**16.6**	**16.4**	**16.2**	**16.0**	**18.0**	**17.4**	**18.4**	**20.5**	**18.6**	**18.2**	**18.9**	**20.3**	**18.6**	**18.1**	**18.7**	**17.9**	**21.4**	**21.5**	**21.5**		
Min.	**2.6**	**3.3**	**3.2**	**3.2**	**2.6**	**1.5**	**0.9**	**2.7**	**3.3**	**3.3**	**3.1**	**3.1**	**2.6**	**2.1**	**1.3**	**1.2**	**2.0**	**1.9**	**1.2**	**1.2**	**1.6**	**1.6**	**2.2**	**2.1**		**0.9**	
Avg.	**8.7**	**8.6**	**8.9**	**8.1**	**8.7**	**8.8**	**8.9**	**9.1**	**8.8**	**8.7**	**8.9**	**8.6**	**8.2**	**9.0**	**9.2**	**9.3**	**9.0**	**9.4**	**9.4**	**9.0**	**9.0**	**8.5**	**9.3**	**9.0**			**8.9**

Total Hours in Month 720 **Hours Data Available** 361 **Data Recovery** 50.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1																											
2																											
3																											
4																											
5																											
6																											
7															21.4	20.6	21.4	20.8	17.4	18.4	16.8	16.7	15.9	14.4	21.4	14.4	18.4
8	12.8	9.9	9.4	7.3	7.6	5.5	5.3	6.3	7.8	11.0	12.2	13.2	15.2	16.1	16.4	15.0	16.7	17.8	18.9	19.3					19.3	5.3	12.2
9				19.8	18.5	16.0	15.7	16.5	15.4	15.5	14.8	13.3	12.5	9.8	7.6	5.5	5.8	7.5	6.4	7.4	7.4	6.8	5.1	2.8	19.8	2.8	10.9
10	4.4												5.4	5.4	3.9	4.1	4.1	7.0	6.7	8.9	9.8	8.0	8.0	7.7	9.8	3.9	6.4
11	5.6	5.3	3.4	1.9																					5.6	1.9	4.0
12																											
13											8.8	8.2	7.8	10.3	12.2	14.1	17.2	20.9	22.9	23.3	27.9	27.2	24.1	22.6	27.9	7.8	17.7
14	27.0	22.3	20.2	19.7	15.5	6.9	12.7	13.0	11.0	13.0	9.5	10.8	11.6	15.9	16.1	14.6	15.9	16.0	10.5	9.7	9.9	11.7	22.3	21.2	27.0	6.9	14.9
15	21.2	19.8	18.4	19.6	17.8	16.6	10.1	6.2	5.9	7.6	7.0	3.3	5.1	5.9	4.8	4.3	5.9	7.8	11.1	19.4	20.0	20.2	21.6	23.9	23.9	3.3	12.6
16	22.1	20.8	22.0	21.3	20.0	17.2	17.1	15.9	12.0	10.3	7.8	5.5	5.7	4.5	0.7										22.1	0.7	13.5
17																			10.0	8.8	6.4	7.2	10.6	12.3	12.3	6.4	9.2
18	8.3	5.6	4.1	2.6	4.9	4.2	4.4	8.7	9.5	4.1	7.9	14.5	14.6	13.8	10.9	8.3	10.8	7.6	7.6	6.2	3.5	3.7	4.2	3.0	14.6	2.6	7.2
19	3.3	3.9	7.1	12.7	13.7	17.8	14.9	18.2	18.7	16.8	14.2	15.8	14.9	16.4	14.5	14.4	14.6	9.0	9.6	12.3	8.6	10.2	10.8	8.3	18.7	3.3	12.5
20	6.5	5.1	2.8	2.6	1.2	1.5	2.1	1.9	0.9	2.2	3.4	3.7	4.3	3.7	1.8	1.8	5.1	3.2	2.3	1.4	2.9	2.4	1.5	3.0	6.5	0.9	2.8
21	2.3	1.6	1.1	0.8	1.6	2.2	1.0	0.9	1.4	1.7	1.2	1.5	1.1	1.3	1.2	1.0	2.1	2.5	2.6	3.1	4.1	5.1	5.0	5.8	5.8	0.8	2.2
22	5.0	4.7	5.3	6.2	5.0	4.6	3.9	3.9	4.7	3.7	2.3	3.6	4.3	4.0	3.2	2.0	2.1	2.1	2.0	1.9	2.1	0.8	0.9	0.8	6.2	0.8	3.3
23	0.5	1.1	1.8	2.1	2.0	1.5	0.6	1.0	1.8	1.8	1.5	1.6	1.5	2.2	2.4	2.7	2.5	2.9	3.3	2.3	2.1	3.2	5.0	6.6	6.6	0.5	2.2
24	8.1	9.3	7.4	7.6	9.9	5.4	6.9	7.0	8.0	7.4	4.7	5.4	4.2	4.0	3.4	2.0	1.2	1.1	2.9	2.9	2.1	1.8	1.2	1.4	9.9	1.1	4.8
25	1.2	1.1	1.7	2.1	2.6	3.2	4.6	8.7	10.6	9.7	9.7	9.3	9.1	5.5	4.5	5.2	8.2	10.3	4.9	4.5	4.9	8.6	9.4	8.0	10.6	1.1	6.1
26	9.0	7.7	14.0	17.3	14.2	16.4	15.8	15.9	9.5	2.4	3.9	2.2	2.8	2.5	3.4	2.9	2.7	3.7	4.4	3.2	3.6	2.9	2.7	6.7	17.3	2.2	7.1
27	5.6	7.1	5.9	7.1	8.9	8.1	11.0	7.9	5.0	3.6	3.9	3.3	2.4	2.8	3.8	4.2	3.1	2.5	2.9	2.0	2.7	5.4	5.9	4.6	11.0	2.0	5.0
28	2.8	3.3	5.5	8.4	9.3	10.7	10.0	10.1	7.7	4.1	5.9	6.8	3.9	6.6	2.7	3.8	6.1	7.4	4.2	7.8	6.7	5.4	5.9	5.6	10.7	2.7	6.3
29	5.5	4.2	4.9	5.7	5.9	5.6	8.8	15.3	15.8	14.9	15.7	15.4	14.6	13.4	12.0	6.5	8.7	8.1	9.6	8.6	7.5	3.5	4.1	4.9	15.8	3.5	9.1
30	5.7	9.0	10.8	11.5	7.7	7.7	8.0	7.1	5.1	4.4	3.1	3.4	3.4	2.6	2.7	3.5	4.0	6.8	10.3	5.3	8.0	7.4	4.4	5.8	11.5	2.6	6.2
31	2.8	3.0	5.7	3.9	3.0	1.7	1.3	2.3	1.9	1.0	1.2	1.5	1.9	1.4	2.2	2.7	1.8	2.6	1.5	1.3	1.5	1.8	1.7	1.2	5.7	1.0	2.1
Max.	**27.0**	**22.3**	**22.0**	**21.3**	**20.0**	**17.8**	**17.1**	**18.2**	**18.7**	**16.8**	**15.7**	**15.8**	**15.2**	**16.4**	**21.4**	**20.6**	**21.4**	**20.9**	**22.9**	**23.3**	**27.9**	**27.2**	**24.1**	**23.9**	**27.9**		
Min.	**0.5**	**1.1**	**1.1**	**0.8**	**1.2**	**1.5**	**0.6**	**0.9**	**0.9**	**1.0**	**1.2**	**1.5**	**1.1**	**1.3**	**0.7**	**1.0**	**1.2**	**1.1**	**1.5**	**1.3**	**1.5**	**0.8**	**0.9**	**0.8**		**0.5**	
Avg.	**8.0**	**7.6**	**8.0**	**9.0**	**8.9**	**8.0**	**8.1**	**8.8**	**8.0**	**7.1**	**6.9**	**7.1**	**7.0**	**7.1**	**6.9**	**6.6**	**7.6**	**8.0**	**7.8**	**8.1**	**7.5**	**7.6**	**8.1**	**8.1**			**7.7**

Total Hours in Month 744 **Hours Data Available** 487 **Data Recovery** 65.5%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.9	2.0	1.9	2.8	3.0	2.7	2.1	3.2	4.6	6.1	5.7	6.7	5.3	3.8	3.1	2.6	1.6	2.1	2.2	2.4	1.8	2.0	3.0	3.7	6.7	1.6	3.2
2	3.8	2.8	2.0	4.1	5.4	2.3	2.0	3.0	4.5	3.5	2.7	2.7	2.1	3.9	4.1	4.0	4.8	4.1	3.3	3.9	9.2	13.9	10.7	7.2	13.9	2.0	4.6
3	9.4	7.2	9.2	10.0	10.1	4.5	3.9	4.0	5.9	2.8	2.7	3.8	2.9	3.1	3.6	5.1	5.6	5.7	5.4	3.9	3.3	3.1	3.2	4.4	10.1	2.7	5.1
4	3.5	1.6	1.0	0.8	1.3	1.0	0.7	1.8	1.2	0.9	1.3	2.0	2.4	4.2	3.2	1.7	1.7	1.9	2.1	1.7	1.8	2.1	2.3	2.2	4.2	0.7	1.9
5	0.8	1.4	1.7	1.5	1.8	1.5	1.1	1.4	2.3	2.8	2.1	1.1	1.2	4.0	4.7	5.0	4.2	5.3	6.3	5.5	4.9	4.4	4.0	3.1	6.3	0.8	3.0
6	1.7	1.1	2.4	3.2	3.4	5.5	4.7	2.6	2.2	1.7	1.2	1.0	2.1	1.4	2.8	2.5	1.7	1.3	0.7	1.1	1.6	2.7	1.3	0.8	5.5	0.7	2.1
7	1.0	1.1	1.5	1.4	0.8	1.4	1.7	1.8	1.6	2.4	1.3	1.2	1.2	2.0	4.2	3.8	4.1	3.1	2.5	4.2	6.3	5.9	4.8	10.5	10.5	0.8	2.9
8	8.7	4.3	6.4	3.5	2.9	4.0	7.1	4.2	3.8	1.9	2.6	3.1	3.5	4.7	4.5	4.4	4.1	4.2	4.8	4.5	4.4	4.9	3.6	4.0	8.7	1.9	4.3
9	3.0	3.5	3.2	2.6	3.4	3.6	3.2	3.1	2.0	2.2	2.8	1.2	1.1	1.1	1.1	0.8	2.5	2.6	1.6	1.1	1.1	1.5	1.5	1.8	3.6	0.8	2.1
10	1.3	1.1	0.9	1.2	0.8	1.2	1.0	1.0	0.8	1.2	0.9	0.8	1.0	1.3	1.1	1.3	1.7	1.7	1.3	1.2	0.8	0.8	0.5	0.5	1.7	0.5	1.1
11	0.4	0.4	0.5	0.8	0.9	1.2	0.9	0.7	0.6	1.0	0.7	0.8	0.6	0.5	0.7	0.5	1.2								1.2	0.4	0.7
12																											
13																											
14																											
15																											
16																											
17						5.5	5.9	5.5	6.1	6.0	5.7	6.4	6.9	5.4	5.7	5.7	6.9	7.2	6.8	6.6	5.1	5.4	5.2	4.3	7.2	4.3	5.9
18	5.3	8.0	6.9	7.2	7.9	11.4	11.2	9.9	10.0	7.2	6.3	7.2	9.7	10.4	10.3	11.0	8.1	7.0	6.6	9.3	10.2	8.1	7.2	7.0	11.4	5.3	8.5
19	7.4	10.5	9.4	7.9	7.3	6.5	8.8	9.4	8.3	7.0	7.4	7.0	6.2	6.9	7.1	6.2	5.7	5.7	7.4	10.0	10.4	9.5	8.1	7.2	10.5	5.7	7.8
20	7.8	7.3	7.3	7.8	6.7	6.2	6.6	6.9	6.2	5.8	6.6	5.8	5.7	6.2	5.9	6.6	6.9	5.0	5.5	5.4	6.1	6.1	5.5	5.9	7.8	5.0	6.3
21	5.4	6.8	7.9	8.6	9.0	10.1	10.8	11.5	11.3	11.5	11.7	12.1	13.3	14.7	15.5	15.8	16.9	18.6	19.6	19.4	17.6	16.1	15.5	16.9	19.6	5.4	13.2
22	18.9	19.9	18.8	21.0	23.8	23.7	23.0	21.4	20.5	20.3	18.3	16.0	16.5	15.7	15.0	16.5	15.8	15.6	17.5	18.8	20.1	17.6	16.4	21.3	23.8	15.0	18.9
23	21.0	20.3	21.1	19.9	19.6	18.9	17.6	13.3	14.8	12.6	19.9	16.5	14.1	13.4	14.9	15.4	11.6	15.1	15.2	15.5	14.0	12.8	14.1	14.0	21.1	11.6	16.1
24	14.0	14.1	13.7	12.2	12.0	13.2	13.2	12.0	13.6	15.4	15.4	15.8	15.8	14.9	12.4	13.8	14.0	13.1	12.1	13.3	10.1	12.5	11.3	7.6	15.8	7.6	13.1
25	7.2	7.6	6.0	6.7	6.9	7.0	5.5	5.4	6.3	6.3	5.9	6.8	7.2	5.9	5.7	6.3	6.2	7.2	7.2	8.0	6.8	6.5	9.6	11.2	11.2	5.4	6.9
26	9.6	10.9	10.1	9.6	6.6	7.5	7.2	7.6	6.0	4.7	4.6	5.2	5.0	5.1	4.7	3.8	3.4	4.5	5.2	5.1	6.4	7.7	6.6	7.9	10.9	3.4	6.5
27	9.3	9.7	9.1	10.9	11.1	12.5	12.7	13.7	13.7	14.6	17.1	18.4	18.9	20.0	20.1	21.5	19.9	20.1	20.6	19.7	18.4	20.2	20.7	22.1	22.1	9.1	16.5
28	26.8	23.5	23.4	20.3	22.3	21.9	17.5	18.4	17.6	11.8	11.5	11.3	9.2	10.8	10.9	9.4	8.8	6.1	4.7	5.4	4.4	5.6	6.1	4.9	26.8	4.4	13.0
29	5.2	6.9	7.0	7.5	7.5	7.3	7.1	6.2	6.5	5.2	6.9	7.0	5.3	5.5	4.8	7.3	7.3	7.9	8.0	6.7	6.6	6.7	6.4	6.0	8.0	4.8	6.6
30	7.1	6.7	7.1	6.7	4.8	6.4	6.4	4.1	5.3	5.0	5.0	4.2	4.4	5.4	4.9	4.7	4.8	3.5	2.5	2.3	2.8	2.9	1.4	0.9	7.1	0.9	4.6
31	1.1	2.2	2.7	3.3	2.9	3.4	3.8	3.3	3.0	3.5	4.6	4.4	4.7	5.3	6.0	4.7	5.3	5.6	7.2	8.7	8.4	7.9	6.5	4.7	8.7	1.1	4.7
Max.	**26.8**	**23.5**	**23.4**	**21.0**	**23.8**	**23.7**	**23.0**	**21.4**	**20.5**	**20.3**	**19.9**	**18.4**	**18.9**	**20.0**	**20.1**	**21.5**	**19.9**	**20.1**	**20.6**	**19.7**	**20.1**	**20.2**	**20.7**	**22.1**	**26.8**		
Min.	**0.4**	**0.4**	**0.5**	**0.8**	**0.8**	**1.0**	**0.7**	**0.7**	**0.6**	**0.9**	**0.7**	**0.8**	**0.6**	**0.5**	**0.7**	**0.5**	**1.2**	**1.3**	**0.7**	**1.1**	**0.8**	**0.8**	**0.5**	**0.5**		**0.4**	
Avg.	**7.3**	**7.2**	**7.2**	**7.3**	**7.3**	**7.3**	**7.1**	**6.7**	**6.9**	**6.3**	**6.6**	**6.5**	**6.4**	**6.7**	**6.8**	**6.9**	**6.7**	**7.0**	**7.0**	**7.3**	**7.3**	**7.5**	**7.0**	**7.2**			**7.0**

Total Hours in Month 744 **Hours Data Available** 612 **Data Recovery** 82.3%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.9	5.5	6.3	7.4	8.3	7.3	9.9	10.0	10.4	11.1	13.4	12.9	13.9	13.1	10.8	12.1	14.8	14.2	13.8	12.8	11.8	12.5	13.4	12.8	14.8	3.9	10.9
2	12.6	10.9	9.6	8.8	8.3	7.2	7.5	7.6	6.7	5.7	5.8	5.0	3.4	4.2	3.3	2.1	1.5	1.8	2.5	3.2	2.7	4.7	6.2	7.8	12.6	1.5	5.8
3	10.7	10.8	11.0	13.4	14.7	15.5	17.5	18.1	16.8	14.5	14.0	13.0	12.8	11.4	12.8	13.4	10.8	11.8	13.2	14.3	15.0	15.9	16.8	17.0	18.1	10.7	14.0
4	18.5	16.5	17.9	18.2	19.5	21.6	20.5	19.9	23.3	24.9	23.7	24.4	26.3	26.6	25.3	27.1	29.7	29.1	30.8	25.8	25.6	25.4	23.3	17.9	30.8	16.5	23.4
5	17.8	17.8	17.5	19.7	21.4	20.2	20.5	16.7	16.6	15.3	13.6	15.7	18.1	19.1	17.1	16.0	15.9	14.7	10.4	8.3	9.7	15.0	17.5	15.7	21.4	8.3	16.3
6	13.4	11.1	8.1	8.8	8.5	6.2	6.5	3.8	4.1	6.9	11.8	13.4	16.9	16.7	15.6	11.9	12.2	11.3	7.7	6.8	6.9	6.2	6.3	6.7	16.9	3.8	9.5
7	6.2	5.1	6.0	8.0	7.5	7.0	8.5	9.3	8.3	8.6	11.0	12.2	11.2	8.7	8.5	9.4	7.7	4.3	3.9	3.6	2.4	2.4	3.0	3.7	12.2	2.4	6.9
8	1.7	1.9	2.8	3.6	3.3	3.6	4.6	5.3	5.0	5.1	5.0	4.3	13.0	16.6	22.2	24.2	26.3	25.7	27.8	27.9	27.3	28.3	29.5	27.0	29.5	1.7	14.2
9	26.1	29.3	28.7	30.5	27.1	20.7	18.4	16.6	12.2	10.6	9.3	9.3	10.8	10.6	9.4	10.1	11.9	15.5	16.1	17.1	21.0	24.4	27.7	28.7	30.5	9.3	18.4
10	30.0	29.6	25.6	27.3	24.1	26.2	24.8	22.9	19.7	14.8	14.5	16.1	15.6	16.3	15.8	17.2	17.7	18.1	17.2	16.9	16.7	16.6	17.2	16.9	30.0	14.5	19.9
11	14.9	15.2	14.0	10.6	6.1	1.7	1.8	3.0	3.3	5.7	7.5	7.8	6.0	4.7	4.2	3.1	2.8	2.1	2.0	2.2	1.2	1.7	2.5	2.6	15.2	1.2	5.3
12																											
13												6.7	5.6	9.8	13.0	14.5	17.9	17.6	17.7	18.8	19.6	20.8	20.5	19.3	20.8	5.6	15.5
14	20.7	21.4	23.6	22.1	23.1	21.2	20.4	20.1	20.8	21.1	20.5	18.0	17.7	17.9	19.4	21.9	22.2	19.0	19.1	20.7	20.7	20.8	20.3	22.3	23.6	17.7	20.6
15	22.8	21.5	20.4	20.6	19.7	20.7	21.7	21.9	23.4	22.9	25.4	24.9	26.3	30.9	29.1	26.9	25.2	23.1	22.2	18.1	17.4	15.1	12.7	9.6	30.9	9.6	21.8
16	5.8	5.8	4.8	3.6	0.4																				5.8	0.4	4.1
17			5.1	5.4	5.2	11.4	14.5	16.0	20.7	20.3	19.3	18.8	20.3	20.2	22.0	22.6	22.7	19.6	19.2	20.2	20.1	18.9	16.9	15.5	22.7	5.1	17.0
18	12.3	12.7	13.0	11.2	10.8	11.5	14.6	16.2	18.3	20.4	21.1	19.8	23.1	24.6	21.5	19.0	17.6	14.4	11.8	13.0	12.2	12.6	15.2	14.8	24.6	10.8	15.9
19	10.9	7.9	7.1	6.7	7.9	7.4	6.8	9.8	7.6	4.7	6.0	6.8	3.9	7.0	8.3	7.2	7.6	8.0	6.1	6.7	6.2	7.6	8.4	6.7	10.9	3.9	7.2
20	7.4	5.2	5.9	5.1	4.5	3.2	3.6	3.3	3.1	3.4	3.4	2.7	4.7	5.1	6.2	8.1	6.3	6.9	7.5	8.6	11.1	11.4	12.1	11.8	12.1	2.7	6.3
21	11.8	11.0	13.6	13.3	10.9	8.3	7.0	6.9	5.8	3.0	2.1	2.0	5.4	11.5	7.2	9.8	6.8	5.0	9.1	10.3	6.7	5.6	7.6	8.6	13.6	2.0	7.9
22	4.6	3.8	4.6	6.9	10.9	11.5	10.8	11.0	12.3	8.6	6.6	6.9	7.0	7.7	6.9	8.0	9.5	8.6	7.1	6.3	7.5	6.3	5.0	4.9	12.3	3.8	7.6
23	5.9	7.3	6.8	6.9	5.6	3.8	8.6	8.1	7.1	6.2	4.8	7.5	5.5	5.6	8.6	9.5	9.3	8.6	8.6	8.3	6.9	7.5	10.0	10.6	10.6	3.8	7.4
24	8.6	6.3	6.2	6.5	6.1	7.1	7.1	7.1	3.5	3.1	4.1	3.3	2.3	1.7	1.3	1.0	1.4	2.2	2.1	1.8	1.9	2.6	3.2	4.0	8.6	1.0	3.9
25	4.2	3.3	4.5	5.8	7.4	5.8	5.1	4.8	3.1	2.9	1.1	10.6	13.1	11.2	12.6	14.2	11.7	10.5	7.3	6.6	8.4	10.4	9.5	10.2	14.2	1.1	7.7
26	10.6	9.8	9.0	8.6	7.2	5.4	5.8	6.6	5.8	3.5	6.4	8.0	6.7	6.7	3.0	1.6	2.8	4.8	6.8	7.2	6.0	5.2	5.6	8.0	10.6	1.6	6.3
27	7.9	6.1	6.2	10.3	13.3	18.1	18.2	16.9	17.1	18.6	18.5	19.1	20.2	17.4	18.1	19.9	21.2	19.1	18.5	20.2	20.5	22.2	20.2	20.0	22.2	6.1	17.0
28	19.9	19.0	19.1	18.2	18.8	20.4	17.8	15.2	12.8	16.0	18.3	18.4	17.1	16.5	16.2	19.1	18.5	18.7	16.7	15.9	14.3	9.4	9.1	9.8	20.4	9.1	16.5
Max.	**30.0**	**29.6**	**28.7**	**30.5**	**27.1**	**26.2**	**24.8**	**22.9**	**23.4**	**24.9**	**25.4**	**24.9**	**26.3**	**30.9**	**29.1**	**27.1**	**29.7**	**29.1**	**30.8**	**27.9**	**27.3**	**28.3**	**29.5**	**28.7**	**30.9**		
Min.	**1.7**	**1.9**	**2.8**	**3.6**	**0.4**	**1.7**	**1.8**	**3.0**	**3.1**	**2.9**	**1.1**	**2.0**	**2.3**	**1.7**	**1.3**	**1.0**	**1.4**	**1.8**	**2.0**	**1.8**	**1.2**	**1.7**	**2.5**	**2.6**		**0.4**	
Avg.	**12.4**	**11.8**	**11.4**	**11.8**	**11.6**	**11.7**	**12.1**	**11.9**	**11.5**	**11.1**	**11.5**	**11.8**	**12.6**	**13.2**	**13.0**	**13.5**	**13.5**	**12.9**	**12.5**	**12.4**	**12.3**	**12.7**	**13.1**	**12.8**			**12.3**

Total Hours in Month 672 **Hours Data Available** 616 **Data Recovery** 91.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.4	9.5	9.4	9.6	10.8	11.1	7.1	5.7	4.3	3.5	1.2	0.7	1.6	2.8	3.7	3.9	5.1	5.3	5.0	8.2	9.5	10.8	12.0	13.1	13.1	0.7	6.9
2	13.2	12.9	12.8	12.6	12.7	12.3	13.3	13.0	12.5	11.2	12.5	12.6	12.5	13.7	12.0	9.6	9.6	8.7	9.6	9.8	9.6	8.8	9.8	9.0	13.7	8.7	11.4
3	8.2	8.2	8.8	8.5	8.1	7.9	5.9	5.5	6.3	7.0	7.9	7.5	8.5	8.2	8.4	7.3	5.5	3.6	2.8	2.0	2.2	1.5	1.2	1.4	8.8	1.2	5.9
4	1.7	2.1	2.4	2.7	4.1	6.5	6.5	6.2	6.0	4.8	6.0	5.9	6.8	7.8	7.6	7.9	8.7	8.3	9.0	9.2	9.9	8.5	7.8	7.6	9.9	1.7	6.4
5	7.1	6.6	5.2	4.0	3.8	4.3	3.9	3.4	3.5	3.0	2.4	2.4	2.2	2.5	2.4	2.6	3.4	3.7	2.4	2.6	1.4	2.1	2.1	2.5	7.1	1.4	3.3
6	2.7	2.8	1.9	2.3	2.8	2.2	1.6	1.3	0.9	1.1	2.1	1.3	1.2	1.0	0.6	0.3	0.9	1.1	1.0	1.0	0.7	0.9	1.3	1.9	2.8	0.3	1.4
7	2.1	2.0	2.4	2.4	2.5	2.8	2.7	3.3	4.5	4.6	4.3	5.6	5.6	6.1	5.9	6.5	6.0	7.9	9.3	8.8	8.1	7.2	9.2	10.0	10.0	2.0	5.4
8	11.8	16.4	18.1	17.8	16.0	14.3	15.8	15.3	15.4	13.6	11.2	12.4	12.5	11.3	11.1	10.8	11.0	14.7	15.0	14.9	15.3	15.2	15.8	15.3	18.1	10.8	14.2
9	15.6	14.9	16.0	17.2	17.1	16.2	15.0	15.2	15.4	17.1	15.2	16.3	18.2	18.4	17.5	14.9	13.2	14.2	15.2	15.7	15.9	16.2	15.2	14.7	18.4	13.2	15.9
10	11.4	12.0	10.8	9.6	8.3	7.8	8.3	10.0	9.7	6.3	5.7	5.8	6.4	5.6	4.7	3.4	2.3	2.1	4.8	5.0	5.4	6.4	10.4	12.0	12.0	2.1	7.3
11	11.2	14.1	17.7	16.9	17.4	17.5	18.9	22.9	23.5	24.9	22.2	20.7	20.6	20.1	22.7	21.0	19.3	20.4	18.0	21.3	20.1	18.7	14.5	16.9	24.9	11.2	19.2
12	18.1	17.5	17.7	16.8	13.1	14.1	13.5	12.6	10.8	11.0	10.5	7.5	7.8	4.8	5.3	3.7	4.2	4.0	3.4	3.6	2.0	2.0	1.7	1.3	18.1	1.3	8.6
13	0.9	1.1	1.2	1.1	1.4	1.5	1.7	1.4	2.0	2.3	1.8	1.7	2.2	2.4	2.6	3.2	3.4	5.6	5.5	6.6	5.4	5.7	7.2	7.6	7.6	0.9	3.1
14	7.4	7.0	7.3	7.4	5.6	5.3	5.4	5.1	4.4	4.0	4.1	2.7	2.0	2.3	3.5	2.3	3.6	3.4	2.9	2.1	2.1	1.9	1.4	1.1	7.4	1.1	3.9
15	1.6	2.1	2.3	1.9	2.8	1.7	1.3	1.3	1.3	1.9	2.1	1.3	0.9	1.2	2.0	1.8	2.2	3.1	3.7	4.1	3.8	4.6	6.0	7.3	7.3	0.9	2.6
16	8.7	8.6	5.7	5.0	5.4	5.5	5.4	4.4	3.0	3.3	4.7	4.9	6.6	8.1	10.0	10.9	10.7	11.0	9.9	10.5	10.3	9.8	9.7	9.0	11.0	3.0	7.5
17	9.9	10.1	10.4	9.6	10.4	9.4	9.6	9.8	10.3	9.6	10.8	9.3	8.1	7.3	10.8	11.4	11.1	10.4	12.3	13.1	13.9	14.6	15.5	12.9	15.5	7.3	10.9
18	13.2	13.2	10.4	7.6	9.3	8.5	6.5	2.4	4.0	5.9	5.9	5.2	1.9	1.3	0.9	1.1	3.1	4.4	1.1	2.5	2.4	1.4	1.4	2.9	13.2	0.9	4.8
19	2.5	1.7	1.0	1.7	2.1	1.9	2.2	2.3	3.1	4.9	5.8	12.2	13.0	11.5	13.6	13.7	12.0	10.1	9.0	8.2	7.7	7.6	9.3	10.3	13.7	1.0	7.0
20	12.7	9.8	8.8	7.0	5.5	6.2	6.8	6.2	4.6	3.4	2.9	2.6	2.1	1.6	0.4			1.7	11.8	13.1	16.4	19.5	18.5	16.7	19.5	0.4	8.1
21	17.0	15.7	16.9	16.6	16.8	17.5	17.3	16.1	15.4	15.3	12.4	10.4	10.1	7.6	8.3	8.9	8.2	9.3	10.1	8.7	8.9	6.9	5.9	8.2	17.5	5.9	12.0
22	11.9	8.1	8.4	9.5	13.3	16.1	14.9	17.5	14.5	18.5	16.1	17.0	16.1	16.0	16.3	14.4	11.2	10.8	9.3	6.5	5.9	5.8	6.1	4.9	18.5	4.9	12.0
23	3.4	3.1	3.4	4.2	5.5	4.2	2.9	2.0	2.0	2.9	4.2	3.6	1.7	2.5	2.5	2.9	5.6	8.0	6.7	3.7	4.7	8.7	9.4	11.2	11.2	1.7	4.5
24	10.5	11.1	10.0	8.9	8.9	5.8	8.3	12.1	9.5	7.4	11.0	11.8	10.1	9.6	9.3	10.7	9.7	12.5	12.2	10.0	9.2	6.3	6.8	6.3	12.5	5.8	9.5
25	7.2	6.8	6.7	7.7	8.0	8.2	8.8	9.2	9.8	9.3	9.9	7.4	7.4	8.6	8.2	8.8	9.4	10.1	9.3	8.5	9.9	9.7	6.4	7.3	10.1	6.4	8.4
26	6.6	5.9	5.9	6.2	6.9	7.5	7.9	7.5	7.7	7.4	7.1	6.6	6.1	5.7	4.9	4.7	4.3	4.4	5.3	5.1	4.3	3.2	2.8	2.2	7.9	2.2	5.7
27	3.3	3.5	3.4	3.3	3.6	3.7	3.4	3.2	1.6	1.4	1.8	2.0	2.3	1.4	1.3	1.6	1.7	2.1	2.6	3.3	2.5	2.3	1.9	2.2	3.7	1.3	2.5
28	2.8	4.4	4.2	3.5	6.5	6.1	5.2	4.6	4.7	4.7	3.9	3.4	2.8	2.7	3.1	1.4	1.6	1.3	1.4	1.8	2.7	3.8	4.3	3.9	6.5	1.3	3.5
29	4.1	4.1	3.9	4.5	4.7	4.0	4.8	5.2	4.3	3.4	2.8	2.1	1.3	1.5	1.4	0.9	1.5	2.3	3.1	3.4	2.1	2.9	5.9	8.7	8.7	0.9	3.5
30	12.2	12.1	12.2	12.4	15.1	17.1	18.3	16.4	17.6	17.0	19.6	23.0	24.4	26.3	26.2	28.8	30.6	31.2	31.2	31.9	30.4	29.2	28.4	28.6	31.9	12.1	22.5
31	28.5	27.2	27.0	26.2	25.1	25.5	24.2	22.1	20.9	10.0	5.6	4.5	4.2	4.5	3.0	2.7	3.9	3.7	4.1	2.9	1.5	1.7	2.4	4.9	28.5	1.5	11.9
Max.	**28.5**	**27.2**	**27.0**	**26.2**	**25.1**	**25.5**	**24.2**	**22.9**	**23.5**	**24.9**	**22.2**	**23.0**	**24.4**	**26.3**	**26.2**	**28.8**	**30.6**	**31.2**	**31.2**	**31.9**	**30.4**	**29.2**	**28.4**	**28.6**	**31.9**		
Min.	**0.9**	**1.1**	**1.0**	**1.1**	**1.4**	**1.5**	**1.3**	**1.3**	**0.9**	**1.1**	**1.2**	**0.7**	**0.9**	**1.0**	**0.4**	**0.3**	**0.9**	**1.1**	**1.0**	**1.0**	**0.7**	**0.9**	**1.2**	**1.1**		**0.3**	
Avg.	**9.0**	**8.9**	**8.8**	**8.5**	**8.8**	**8.8**	**8.6**	**8.5**	**8.2**	**7.8**	**7.5**	**7.4**	**7.3**	**7.2**	**7.4**	**7.4**	**7.4**	**7.7**	**8.0**	**8.0**	**7.9**	**7.9**	**8.1**	**8.4**			**8.1**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	6.6	8.3	6.3	4.2	5.9	6.7	7.9	5.1	3.6	3.9	2.8	3.5	2.2											8.3	2.2	5.3
2																	1.4	2.2	4.6	4.5	6.3	5.6	9.0	10.0	10.0	1.4	5.4
3	9.0	9.4	10.5	11.1	10.0	11.0	7.2	7.2	13.7	19.8	20.0	20.0	18.7	17.5	17.5	16.2	16.3	16.7	14.6	12.5	11.5	12.8	13.4	14.6	20.0	7.2	13.8
4	14.5	17.0	16.5	13.8	12.9	10.4	9.1	9.3	7.0	4.1	9.5	7.9	8.4	7.0	4.4	1.5	2.0	5.0	4.8	4.6	4.9	5.9	6.6	8.3	17.0	1.5	8.1
5	7.2	7.5	9.8	11.9	11.3	11.2	10.2	10.5	10.9	14.8	14.4	11.9	11.6	13.9	14.0	14.2	15.3	17.0	18.8	17.3	12.8	12.5	12.2	13.2	18.8	7.2	12.7
6	17.5	13.5	11.1	11.4	10.4	9.4	9.6	8.9	7.3	7.5	7.9	5.5	4.6	3.5	3.7	3.0	2.6	2.4	2.2	2.7	2.2	1.2	2.3	2.2	17.5	1.2	6.4
7	2.5	2.0	2.3	3.8	6.0	4.4	6.0	6.1	3.1	5.1	5.0	5.9	5.9	7.7	8.7	10.2	10.9	11.5	10.3	13.0	14.1	16.6	18.1	16.7	18.1	2.0	8.2
8	19.3	21.7	20.9	19.2	17.9	17.1	15.3	15.5	14.9	16.2	17.7	14.7	10.8	11.1	11.0	9.5	9.0	8.9	9.2	7.5	7.6	7.6	8.7	7.4	21.7	7.4	13.3
9	7.8	6.8	6.7	7.6	7.4	7.6	6.9	7.2	6.8	6.3	6.9	7.4	7.5	7.6	7.0	6.6	4.8	4.7	5.0	4.3	2.9	5.5	6.5	5.8	7.8	2.9	6.4
10	2.2	2.8	3.2	4.1	5.3	7.3	9.4	10.3	10.9	10.3	10.5	10.9	8.4	8.9	8.3	9.4	9.5	8.3	6.5	6.1	3.5	1.3	2.6	5.5	10.9	1.3	6.9
11	5.3	2.0	1.7	1.5	2.6	3.7	6.1	6.7	7.1	6.8	6.9	5.9	6.9	7.2	10.3	13.1	14.4	13.6	11.8	10.5	11.0	10.9	10.0	9.3	14.4	1.5	7.7
12	8.8	8.3	7.0	6.9	6.6	5.4	5.2	6.1	7.6	8.8	9.3	9.9	11.0	11.6	9.8	8.2	8.2	6.8	6.0	5.5	5.5	4.9	4.3	2.4	11.6	2.4	7.2
13	2.5	1.9	0.4			2.4	6.1	7.0	8.2	9.1	9.4	10.4	12.2	16.3	18.7	18.9	16.9	15.3	16.5	15.1	14.8	13.4	11.0	10.9	18.9	0.4	10.8
14	12.8	14.8	13.8	13.2	16.4	15.9	14.7	17.1	16.2	18.2	19.3	19.6	18.6	18.0	15.8	20.2	18.4	18.0	15.5	13.3	15.8	13.0	11.2	10.7	20.2	10.7	15.8
15	11.2	9.6	12.1	14.4	13.4	12.2	14.3	11.8	14.7	15.8	16.1	18.1	15.5	16.7	14.0	13.0	15.9	16.1	8.8	6.3	6.9	4.2	2.1	2.6	18.1	2.1	11.9
16	6.7	7.4	9.0	11.4	11.5	13.1	17.9	17.5	21.0	22.5	23.0	21.8	23.2	22.9	21.1	20.9	22.7	23.2	22.5	16.1	11.3	9.1	10.4	12.0	23.2	6.7	16.6
17	11.1	11.7	14.2	15.0	14.4	12.3	9.1	8.3	8.5	7.2	9.9	7.8	11.8	9.6	8.5	6.6	7.3	7.7	5.6	4.4	3.2	1.3	2.1	4.4	15.0	1.3	8.4
18	5.2	4.9	2.8	3.9	2.6	2.6	1.8	1.4	2.0	1.0	1.0	1.0	1.5	1.3	1.4	1.1	1.5	1.5	1.7	2.1	2.1	1.2	1.9	2.0	5.2	1.0	2.1
19	1.9	2.2	1.7	2.2	1.5	2.1	2.5	2.4	3.8	3.5	1.6	1.1	1.7	5.2	4.1	3.8	3.0	2.8	4.8	5.3	4.5	3.8	3.8	3.8	5.3	1.1	3.0
20	3.3	3.6	2.3	1.7	1.8	2.2	1.6	1.9	2.4	3.0	3.3	5.0	7.9	9.8	14.4	14.9	13.7	14.5	15.3	15.4	16.8	16.0	14.8	15.9	16.8	1.6	8.4
21	16.9	17.0	17.5	15.1	13.3	14.1	15.1	16.3	12.3	14.9	17.5	14.2	13.7	13.4	11.7	13.3	11.3	6.2	5.3	4.2	3.5	6.8	7.0	7.3	17.5	3.5	12.0
22	4.6	2.6	1.7	0.4	0.7			0.6	0.6	0.8	0.8	0.7	1.1	0.8	0.8	0.7	2.1	1.6	1.3	1.0	1.5	1.5	2.6	2.7	4.6	0.4	1.4
23	3.6	3.8	4.0	3.9	3.0	3.8	3.7	3.6	4.0	4.3	4.8	4.8	4.8	3.9	2.2	1.6	1.5	2.0	3.6	3.6	5.5	8.1	8.2	7.3	8.2	1.5	4.1
24	6.9	6.4	6.6	8.1	8.3	10.6	10.7	10.6	11.2	11.6	12.0	11.6	11.2	11.6	11.5	9.2	11.0	10.5	10.1	11.6	11.0	11.6	10.5	8.7	12.0	6.4	10.1
25	6.2	4.2	3.5	2.8	2.8	2.6	2.7	2.3	2.0	2.0	2.3	3.3	4.3	4.4	3.4	3.4	4.4	8.5	9.3	9.6	10.0	10.4	11.0	10.0	11.0	2.0	5.2
26	9.1	9.1	7.5	7.3	7.9	9.6	7.0	7.9	5.3	5.7	6.0	5.1	3.9	2.8	3.0	2.5	2.9	3.2	3.1	4.1	6.1	5.3	5.6	5.9	9.6	2.5	5.7
27	8.1	4.5	5.9	4.6	5.0	5.1	2.0	2.2	2.3	2.6	3.9	4.8	5.7	6.6	7.3	8.2	8.0	9.2	8.8	6.8	6.2	6.3	8.2	10.3	10.3	2.0	5.9
28	10.3	9.7	8.7	7.3	7.3	7.0	6.4	5.2	4.7	4.1	1.5	2.6	3.1	2.6	2.4	3.0	2.5	2.1	1.7	0.6	1.3	0.9	1.0	1.0	10.3	0.6	4.0
29	1.6	2.5	3.2	3.7	5.0	5.7	4.4	4.0	4.9	6.7	9.6	10.5	10.6	9.6	8.0	7.4	8.9	8.6	7.6	6.5	6.3	6.5	6.0	5.6	10.6	1.6	6.4
30	4.3	4.3	4.1	3.9	3.2	2.1	1.4	1.9	2.5	2.5	1.9	2.4	2.6	2.9	3.1	4.1	6.0	7.2	9.6	11.3	10.6	10.3	10.1	10.5	11.3	1.4	5.1
Max.	**19.3**	**21.7**	**20.9**	**19.2**	**17.9**	**17.1**	**17.9**	**17.5**	**21.0**	**22.5**	**23.0**	**21.8**	**23.2**	**22.9**	**21.1**	**20.9**	**22.7**	**23.2**	**22.5**	**17.3**	**16.8**	**16.6**	**18.1**	**16.7**	**23.2**		
Min.	**1.6**	**1.9**	**0.4**	**0.4**	**0.7**	**2.1**	**1.4**	**0.6**	**0.6**	**0.8**	**0.8**	**0.7**	**1.1**	**0.8**	**0.8**	**0.7**	**1.4**	**1.5**	**1.3**	**0.6**	**1.3**	**0.9**	**1.0**	**1.0**		**0.4**	
Avg.	**7.8**	**7.5**	**7.5**	**7.7**	**7.6**	**7.7**	**7.6**	**7.5**	**7.6**	**8.2**	**8.8**	**8.5**	**8.6**	**8.8**	**8.8**	**8.7**	**8.7**	**8.8**	**8.4**	**7.8**	**7.6**	**7.4**	**7.6**	**7.8**			**8.1**

Total Hours in Month 720 **Hours Data Available** 690 **Data Recovery** 95.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.8	13.8	14.0	15.2	16.6	18.5	20.1	21.8	20.6	19.5	20.8	22.8	24.3	20.7	16.1	13.5	12.2	13.6	7.8	8.8	9.3	8.3	8.1	7.0	24.3	7.0	15.3
2	7.2	9.5	8.6	6.2	3.8	7.6	7.2	3.3	2.2	1.4	3.9	7.1	11.6	11.5	12.3	11.9	10.8	9.8	9.8	10.9	13.1	11.4	10.5	10.4	13.1	1.4	8.4
3	11.6	12.0	12.6	11.4	9.7	6.1	5.3	3.9	2.6	2.5	3.0	4.2	5.4	5.7	5.9	5.2	4.1	4.4	4.1	3.8	2.9	2.8	2.1	2.0	12.6	2.0	5.6
4	2.3	1.4	0.9	1.0	1.5	7.2	12.7	14.8	15.2	16.2	14.3	13.1	12.9	14.2	13.0	13.7	14.4	16.3	18.4	18.6	19.7	19.7	21.2	21.1	21.2	0.9	12.7
5	20.9	23.1	24.0	24.9	23.3	21.2	18.1	17.0	17.4	16.8	16.9	17.1	16.7	16.6	15.9	15.5	14.0	13.6	12.8	11.9	8.5	5.1	4.2	3.3	24.9	3.3	15.8
6	3.9	3.1	1.3	1.5	0.8	0.6	0.6	0.4	1.5	2.1	4.2	6.3	7.1	6.8	7.6	8.0	7.0	8.0	8.5	8.5	9.4	9.0	7.5	7.8	9.4	0.4	5.1
7	7.1	6.9	7.9	8.4	9.5	8.1	7.4	6.8	6.7	7.2	6.1	6.9	7.6	6.9	6.6	5.6	5.3	5.6	4.1	3.8	3.9	2.9	1.7	0.8	9.5	0.8	6.0
8	1.0	1.2	1.6	2.0	2.0	2.2	2.2	2.8	4.3	4.8	6.1	7.3	9.1	6.8	5.6	4.2	4.8	8.6	12.0	8.5	6.8	6.9	6.7	4.6	12.0	1.0	5.1
9	4.4	3.1	4.9	7.4	6.8	6.8	8.8	8.7	7.6	8.0	7.3	4.3	5.0	6.9	5.6	3.6	1.8	2.0	2.5	1.7	2.2	2.9	5.8	6.8	8.8	1.7	5.2
10	6.1	3.5	2.0	1.5	1.8	1.8	1.1	1.3	2.0	1.7	1.5	2.6	2.2	2.8	4.3	5.3	6.7	6.4	6.4	5.2	3.8	4.1	4.0	2.7	6.7	1.1	3.4
11	2.7	1.9	1.5	2.6	1.8	1.2	1.8	1.1	1.4	2.5	2.7	2.7	3.8	5.9	4.0	3.3	3.5	6.5	5.9	6.8	6.6	7.0	7.8	8.2	8.2	1.1	3.9
12	8.3	7.8	8.2	8.3	8.0	9.0	8.8	8.9	10.4	8.9	8.1	9.2	9.4	8.9	8.8	10.0	10.2	9.2	8.2	8.6	9.0	6.5	7.7	6.3	10.4	6.3	8.6
13	6.1	7.9	7.2	6.0	6.1	4.8	3.1	2.9	1.7	1.0	2.5	2.4	1.2	1.3	2.3	4.1	3.8	3.5	2.1	3.2	3.2	1.5	2.1	1.9	7.9	1.0	3.4
14	2.8	2.7	3.3	3.4	2.5	3.2	3.0	3.8	5.6	5.4	5.3	5.7	6.0	6.5	8.0	7.4	8.9	9.9	10.1	11.2	10.5	13.7	12.5	8.6	13.7	2.5	6.7
15	6.2	5.0	5.0	3.8	1.9	1.9	1.8	1.7	2.4	3.1	3.4	1.5	2.0	1.3	1.8	2.5	2.7	4.0	3.7	3.1	4.6	3.9	6.4	8.7	8.7	1.3	3.4
16	6.6	1.2	1.1	2.6	3.2	4.1	3.6	3.6	4.5	3.4	2.4	1.9	2.9	2.7	2.4	2.1	2.8	4.4	4.4	4.0	3.0	4.1	3.0	3.6	6.6	1.1	3.2
17	2.5	2.7	2.7	2.1	2.7	3.0	2.4	2.2	2.5	3.9	5.6	7.2	7.8	7.9	7.5	8.3	9.3	8.0	7.7	7.4	7.0	6.8	5.3	5.4	9.3	2.1	5.3
18	5.0	4.3	4.2	4.5	4.2	2.9	2.2	1.3	1.5	2.4	3.7	5.2	5.2	6.3	7.7	7.0	7.0	9.5	8.1	8.6	8.8	8.6	6.3	2.2	9.5	1.3	5.3
19	2.6	3.4	2.6	1.1	1.4	1.3	0.9	1.8	3.4	5.7	7.0	9.1	11.6	11.0	17.4	19.9	14.1	14.7	16.4	17.8	16.9	13.5	13.9	11.8	19.9	0.9	9.1
20	11.4	11.4	11.7	11.8	12.4	16.3	16.2	16.5	16.4	15.6	13.8	14.0	10.8	11.5	11.4	9.5	7.1	4.1	3.1	2.2	4.8	8.5	8.3	9.1	16.5	2.2	10.7
21	10.5	9.8	10.5	10.6	11.1	11.9	13.2	13.1	14.0	15.9	16.7	20.4	21.0	16.5	17.5	15.2	17.2	17.4	17.1	16.6	14.0	11.5	14.4	12.9	21.0	9.8	14.5
22	14.1	13.0	11.9	11.9	12.4	14.2	13.9	16.3	15.6	14.7	15.9	17.2	16.9	13.6	12.5	11.8	12.3	11.8	11.4	10.9	12.3	10.7	11.0	9.2	17.2	9.2	13.1
23	10.4	7.0	6.4	4.6	4.0	3.4	4.0	4.2	4.0	4.5	5.0	5.0	3.8	3.1	2.6	2.3	4.2	6.2	8.7	7.6	6.0	5.9	5.5	5.7	10.4	2.3	5.2
24	6.1	4.7	3.3	4.1	3.9	2.4	1.6	2.8	4.0	2.2	2.0	2.0	2.5	2.6	3.2	3.7	4.0	5.1	4.2	6.1	6.9	5.0	4.0	4.9	6.9	1.6	3.8
25	5.1	5.2	4.9	5.9	5.9	4.8	5.0	3.8	3.2	3.0	2.4	2.5	2.7	2.5	2.4	3.8	4.8	5.1	6.0	3.8	2.9	4.0	4.7	4.9	6.0	2.4	4.1
26	5.0	6.0	5.7	6.0	7.2	4.0	4.8	5.2	6.8	7.0	8.4	9.7	8.9	7.4	8.8	9.2	10.4	11.2	10.7	9.7	7.7	7.3	6.7	8.9	11.2	4.0	7.6
27	8.1	6.4	8.0	12.4	14.0	13.5	12.3	12.8	11.1	9.7	10.6	12.9	14.5	15.8	15.3	15.2	14.7	12.9	10.6	9.3	8.4	6.8	8.0	7.1	15.8	6.4	11.3
28	6.7	5.1	3.6	2.0	2.9	3.4	3.7	6.3	5.2	3.4	1.9	1.9	3.2	4.2	3.8	3.6	4.2	3.6	3.5	6.0	6.6	5.1	5.9	6.0	6.7	1.9	4.2
29	5.7	5.6	6.6	6.6	7.7	7.1	7.3	6.1	6.9	7.7	7.6	8.2	8.5	8.5	8.3	7.9	7.6	7.9	8.0	7.8	7.0	7.5	7.6	6.4	8.5	5.6	7.3
30	6.3	6.3	5.8	3.6	2.6	2.9	2.0	3.1	5.5	4.6	6.2	6.6	7.2	8.1	7.7	7.7	6.8	7.2	7.2	6.3	5.7	5.4	4.7	7.4	8.1	2.0	5.7
31	7.4	7.6	7.5	4.5	7.0	8.1	7.0	7.5	6.6	8.1	8.9	7.8	6.1	5.9	6.1	5.0	4.3	5.0	3.9	3.1	3.5	3.4	1.9	2.0	8.9	1.9	5.8
Max.	**20.9**	**23.1**	**24.0**	**24.9**	**23.3**	**21.2**	**20.1**	**21.8**	**20.6**	**19.5**	**20.8**	**22.8**	**24.3**	**20.7**	**17.5**	**19.9**	**17.2**	**17.4**	**18.4**	**18.6**	**19.7**	**19.7**	**21.2**	**21.1**	**24.9**		
Min.	**1.0**	**1.2**	**0.9**	**1.0**	**0.8**	**0.6**	**0.6**	**0.4**	**1.4**	**1.0**	**1.5**	**1.5**	**1.2**	**1.3**	**1.8**	**2.1**	**1.8**	**2.0**	**2.1**	**1.7**	**2.2**	**1.5**	**1.7**	**0.8**		**0.4**	
Avg.	**7.0**	**6.5**	**6.4**	**6.4**	**6.4**	**6.6**	**6.5**	**6.6**	**6.9**	**6.9**	**7.2**	**7.9**	**8.3**	**8.1**	**8.1**	**7.9**	**7.8**	**8.2**	**8.0**	**7.8**	**7.6**	**7.1**	**7.1**	**6.7**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.7	1.5	1.3	2.6	2.5	2.3	2.8	2.7	3.3	3.7	3.9	3.8	4.3	3.7	3.8	4.1	3.5	3.9	6.2	5.7	6.1	7.1	5.7	1.7	7.1	1.3	3.7
2	2.8	3.2	3.5	3.1	3.5	3.8	4.3	3.4	3.4	4.2	5.8	5.6	5.4	5.7	6.3	7.1	7.4	7.9	9.6	7.7	7.1	6.9	6.6	6.6	9.6	2.8	5.4
3	7.4	8.6	8.5	10.8	10.4	10.2	10.8	12.8	15.1	14.2	13.7	12.8	11.8	11.6	11.8	11.3	11.2	12.3	12.3	12.2	12.3	11.0	10.5	9.0	15.1	7.4	11.3
4	8.9	8.2	8.2	8.2	7.5	8.6	10.0	12.1	11.2	12.0	12.8	13.3	12.0	11.8	12.0	11.2	11.2	11.7	11.8	11.1	10.2	8.3	8.8	10.4	13.3	7.5	10.5
5	11.0	10.1	8.6	6.2	6.8	6.4	6.5	7.3	7.0	6.5	4.5	3.2	3.5	3.6	3.7	4.5	4.4	4.1	3.3	3.5	2.9	3.4	3.8	3.8	11.0	2.9	5.4
6	3.6	3.5	2.9	2.4	2.1	2.7	2.8	3.2	4.2	4.2	4.2	5.4	7.7	9.0	9.1	9.9	10.0	10.5	11.0	10.2	10.1	9.9	9.7	8.2	11.0	2.1	6.5
7	6.9	7.7	11.8	12.7	13.2	12.6	10.5	12.3	15.6	15.1	16.1	16.1	15.1	15.8	15.2	14.8	13.6	14.4	14.3	13.4	11.2	9.7	10.2	12.0	16.1	6.9	12.9
8	13.9	15.2	16.5	16.6	15.8	16.7	16.0	16.9	16.9	17.9	18.2	18.8	18.9	19.6	19.2	18.4	18.8	19.8	20.5	21.4	22.0	23.8	26.1	25.9	26.1	13.9	18.9
9	24.1	21.9	23.0	22.6	19.9	19.4	20.9	19.7	20.7	21.7	20.8	22.9	23.8	24.7	24.9	22.4	21.7	22.8	15.9	20.8	17.5	20.1	20.3	20.3	24.9	15.9	21.4
10	15.8	16.5	17.0	17.4	18.4	18.5	17.0	19.3	20.2	19.5	17.8	18.4	19.8	21.2	21.3	21.0	19.1	20.9	20.0	18.0	17.5	19.1	18.7	18.6	21.3	15.8	18.8
11	19.0	20.7	20.6	20.1	21.1	21.5	20.4	19.2	19.4	19.3	19.7	20.8	19.5	18.4	18.8	18.6	18.1	16.7	17.2	16.2	15.3	15.1	12.5	15.0	21.5	12.5	18.5
12	15.4	14.4	14.4	13.2	12.0	12.2	12.1	11.6	11.5	11.2	10.8	8.4	11.2	11.6	12.1	11.3	11.2	8.4	6.4	6.9	6.4	5.6	6.1	5.8	15.4	5.6	10.4
13	5.6	4.9	5.1	5.2	5.1	5.1	3.8	4.7	6.8	7.9	4.8	4.6	4.9	5.2	5.5	4.7	4.8	4.8	4.6	3.4	1.6	2.0	1.2	2.0	7.9	1.2	4.5
14	1.8	1.1	1.7	1.1	2.0	2.7	2.0	1.6	2.5	2.1	3.3	3.2	3.4	3.1	2.0	2.0	2.6	1.9	2.9	1.3	1.2	2.2	3.0	3.0	3.4	1.1	2.2
15	3.4	4.2	4.5	4.7	4.6	5.1	5.1	4.5	5.1	5.6	5.0	5.9	4.0	4.9	5.3	5.2	2.6	3.7	4.4	5.2	4.9	3.8	3.5	3.3	5.9	2.6	4.5
16	3.5	4.1	4.4	3.9	4.9	4.3	4.3	4.2	3.9	4.5	5.4	6.9	8.2	8.9	8.9	10.0	10.4	10.8	10.2	9.6	8.8	8.5	6.4	5.6	10.8	3.5	6.7
17	5.2	4.8	4.4	3.3	2.2	2.7	2.9	5.0	5.2	5.4	5.1	5.6	5.8	7.7	6.9	7.0	7.9	7.9	7.7	6.7	6.4	6.6	6.3	6.3	7.9	2.2	5.6
18	4.5	2.3	1.5	1.5	2.1	2.1	1.7	2.2	3.1	4.6	6.1	7.9	10.0	9.4	11.0	14.3	16.7	15.2	15.3	14.0	13.3	11.1	4.8	2.1	16.7	1.5	7.4
19	2.5	4.4	4.6	4.2	3.9	2.7	2.0	1.8	1.6	1.9	4.3	3.1	2.6	3.8	3.9	3.8	3.2	5.0	4.1	5.8	8.7	5.6	3.4	4.2	8.7	1.6	3.8
20	3.9	3.9	4.3	3.4	3.2	2.1	2.1	1.6	1.7	1.6	2.0	2.1	3.7	4.2	9.0	11.8	8.9	9.2	8.4	8.6	8.0	8.0	6.7	5.3	11.8	1.6	5.2
21	4.4	4.9	4.1	2.1	2.1	1.2	1.2	1.7	2.8	4.6	5.0	4.3	3.2	2.0	3.0	4.4	6.1	4.4	2.6	4.9	3.4	3.8	6.4	6.4	6.4	1.2	3.7
22	8.2	10.1	6.4	6.0	5.7	6.4	6.3	5.5	6.0	3.6	3.0	6.0	7.0	8.1	8.9	9.0	7.8	8.0	8.5	7.7	7.5	6.9	6.0	5.8	10.1	3.0	6.8
23	5.2	5.4	7.2	7.1	6.1	6.3	7.0	6.2	6.1	6.6	7.2	6.4	7.1	6.4	6.0	6.2	5.6	4.5	5.4	6.1	6.7	6.6	6.5	4.6	7.2	4.5	6.2
24	3.5	3.9	3.5	3.9	3.3	1.8	1.3	2.3	3.4	3.8	3.8	3.1	3.1	2.3	2.9	2.6	5.2	4.1	2.4	1.8	2.6	2.2	1.9	2.6	5.2	1.3	3.0
25	1.8	2.2	3.3	4.0	3.9	2.4	1.8	2.2	2.0	3.0	3.7	3.4	3.7	6.0	6.1	6.5	7.1	7.3	6.2	5.4	4.7	4.4	5.0	5.5	7.3	1.8	4.2
26	5.0	5.0	4.0	4.0	2.6	2.4	2.0	1.4	2.4	2.9	2.7	3.6	3.7	3.2	3.0	4.2	3.3	2.4	5.4	7.0	6.5	6.8	6.1	5.3	7.0	1.4	4.0
27	4.6	1.9	3.0	1.3	2.8	2.4	3.2	3.7	3.5	2.6	1.6	1.9	1.8	2.7	4.4	4.7	5.8	6.0	5.8	6.6	8.0	6.7	5.1	4.6	8.0	1.3	3.9
28	4.6	3.2	5.4	3.7	1.0	1.2	2.3	4.3	6.3	5.4	5.3	6.9	5.8	6.1	4.7	4.6	4.5	3.5	2.7	4.9	4.8	2.4	3.6	3.7	6.9	1.0	4.2
29	3.8	4.8	5.8	3.4	4.7	3.7	3.5	4.2	4.2	4.4	4.0	3.6	3.6	5.1	7.2	11.0	12.3	12.8	11.9	12.0	11.6	10.1	8.0	10.9	12.8	3.4	6.9
30	10.8	8.6	8.6	9.4	9.0	7.5	8.9	8.6	6.2	5.9	5.7	6.5	6.0	5.8	5.0	3.2	3.7	3.6	1.9	1.7	1.8	2.2	2.0	2.3	10.8	1.7	5.6
Max.	**24.1**	**21.9**	**23.0**	**22.6**	**21.1**	**21.5**	**20.9**	**19.7**	**20.7**	**21.7**	**20.8**	**22.9**	**23.8**	**24.7**	**24.9**	**22.4**	**21.7**	**22.8**	**20.5**	**21.4**	**22.0**	**23.8**	**26.1**	**25.9**	**26.1**		
Min.	**1.7**	**1.1**	**1.3**	**1.1**	**1.0**	**1.2**	**1.2**	**1.4**	**1.6**	**1.6**	**1.6**	**1.9**	**1.8**	**2.0**	**2.0**	**2.0**	**2.6**	**1.9**	**1.9**	**1.3**	**1.2**	**2.0**	**1.2**	**1.7**		**1.0**	
Avg.	**7.1**	**7.0**	**7.3**	**6.9**	**6.7**	**6.6**	**6.5**	**6.9**	**7.4**	**7.5**	**7.5**	**7.8**	**8.0**	**8.4**	**8.7**	**9.0**	**8.9**	**8.9**	**8.6**	**8.7**	**8.3**	**8.0**	**7.5**	**7.4**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	1.3	2.1	3.2	2.0	1.6	1.2	1.5	1.5	1.1	1.3	1.6	1.8	3.0	2.8	3.0	3.9	4.2	5.2	5.5	5.6	5.6	5.4	3.5	5.6	1.1	2.9
2	1.8	2.5	3.6	3.1	2.8	3.6	3.8	3.8	4.7	5.3	5.3	5.3	5.5	6.4	6.2	6.0	8.0	9.4	9.4	8.6	7.9	7.6	8.8	8.9	9.4	1.8	5.8
3	10.5	9.9	8.2	6.3	5.8	5.6	5.1	4.2	6.1	6.3	4.8	4.5	3.5	3.3	3.3	2.8	3.5	5.3	5.3	4.7	4.6	3.6	1.6	1.9	10.5	1.6	5.0
4	2.0	1.3	1.2	1.7	2.0	1.7	1.1	1.1	1.7	1.8	2.0	2.6	3.1	3.5	3.1	4.3	5.4	6.1	6.1	5.5	6.2	4.6	4.1	2.1	6.2	1.1	3.1
5	2.5	1.5	1.6	2.2	2.4	2.5	2.7	2.1	2.0	2.5	2.3	2.3	1.7	2.4	3.4	5.5	4.6	3.9	1.9	1.7	2.1	2.0	1.6	1.8	5.5	1.5	2.5
6	1.0	2.3	2.2	1.8	1.8	1.0	1.7	1.4	2.6	2.9	2.7	2.0	2.8	5.5	6.5	6.6	5.0	5.2	2.1	2.3	3.1	2.5	3.9	3.8	6.6	1.0	3.0
7	3.8	3.8	4.2	4.9	5.8	4.1	4.1	5.4	6.6	7.6	7.6	6.7	6.9	7.6	7.5	8.0	8.5	7.0	4.5	4.5	6.2	6.1	4.8	6.7	8.5	3.8	6.0
8	7.2	6.5	3.7	6.4	4.1	4.2	5.2	5.0	5.5	4.5	2.3	1.9	2.4	2.4	1.6	1.4	2.2	3.0	3.1	3.3	2.4	3.7	4.0	2.1	7.2	1.4	3.7
9	1.5	2.3	3.1	3.4	3.9	3.7	3.8	3.3	2.6	1.7	2.6	3.8	5.4	5.5	7.2	8.0	8.1	8.5	9.5	9.8	9.5	8.6	11.3	12.5	12.5	1.5	5.8
10	13.8	15.0	15.8	13.3									13.2	13.8	13.3	12.2	14.1	15.3	17.5	17.5	16.0	15.1			17.5	12.2	14.7
11		16.2	15.9	14.6	13.6	12.8	8.8	8.2	8.8		6.3	5.6	7.4	7.1	5.5	4.5	5.4	4.7	5.2	3.4	4.1	5.2	5.4	6.2	16.2	3.4	8.0
12	5.5	6.2	5.4	4.1	4.3	4.2	2.5	2.6	1.5	2.9	2.2	1.2	1.4	1.9	2.1	3.0	3.3	4.0	3.2	3.6	3.8	4.4	4.6	4.2	6.2	1.2	3.4
13	3.4	4.6	7.9	9.3	6.6	6.1	5.7	3.6	4.6	4.8	4.8	4.6	4.4	4.0	3.2	1.9	4.3	6.3	5.9	5.1	6.1	6.3	7.3	6.6	9.3	1.9	5.3
14	6.7	6.5	8.0	9.1	9.9	9.6	8.8	8.6	12.2	11.9	9.2	9.6	8.8	7.8	8.2	8.5	6.9	6.5	6.1	6.9	7.1	6.5	6.2	5.7	12.2	5.7	8.1
15	6.6	7.5	6.5	6.8	6.5	7.3	7.8	6.5	6.6	6.0	5.1	4.8	5.4	4.5	3.9	3.4	5.5	4.7	3.9	5.0	5.1	5.3	5.8	5.0	7.8	3.4	5.7
16	4.5	5.3	5.9	5.3	4.9	5.5	3.7	3.2	4.6	5.9	5.7	6.0	6.5	7.8	9.9	11.1	11.0	12.2	13.9	13.3	13.5	13.5	14.3	15.1	15.1	3.2	8.4
17	15.6	14.6	12.4	11.1	8.5	8.6	6.9	7.4	7.5	8.8	8.8	10.6	11.1	12.0	13.1	12.8	13.8	13.8	15.3	16.7	16.8	15.5	16.0	15.0	16.8	6.9	12.2
18	15.3	15.4	14.5	13.9	14.5	11.4	12.5	13.0	18.3	18.7	17.8	18.0	14.1	12.3	12.9	12.7	14.8	14.7	16.4	17.1	16.4	15.7	17.1	14.3	18.7	11.4	15.1
19	15.3	14.7	14.4	14.6	13.9	14.3	13.0	12.1	11.0	13.0	10.8	10.5	8.0	6.8	3.9	3.5	3.8	3.0	3.8	5.4	6.9	6.4	5.4	5.4	15.3	3.0	9.2
20	5.2	4.9	5.0	5.3	4.5	3.5	2.6	1.7	1.5	2.6	3.9	3.6	2.9	3.8	4.8	4.7	5.0	5.4	5.7	5.0	7.0	7.6	7.1	6.2	7.6	1.5	4.6
21	4.9	5.8	5.1	5.0	5.7	5.6	5.1	6.0	6.3	4.2	2.9	2.5	2.7	0.8	0.9	0.9	2.1	2.0	2.6	2.9	2.8	2.8	2.6	6.3	6.3	0.8	3.7
22	7.6	7.2	7.0	7.2	6.7	4.6	3.0	3.3	3.2	2.8	1.9	1.1	1.2	2.5	2.1	2.0	1.9	3.2	4.1	5.0	4.0	3.7	5.8	6.0	7.6	1.1	4.0
23	6.3	5.9	4.9	5.1	6.6	8.2	7.4	6.4	6.9	9.2	9.7	7.7	7.7	9.4	9.6	9.9	6.7	6.1	3.6	2.7	2.1	1.5	5.0	3.6	9.9	1.5	6.3
24	3.3	3.4	3.8	3.5	2.2	2.4	1.8	2.0	3.1	1.5	3.6	3.5	6.1	6.0	5.5	5.3	5.0	4.7	3.0	1.8	2.6	3.7	5.2	6.0	6.1	1.5	3.7
25	5.7	6.1	5.5	5.6	5.4	8.8	9.3	8.4	7.2	9.0	10.5	10.3	9.0	4.4	3.7	2.7	3.9	5.5	6.3	7.0	7.3	7.1	6.3	6.3	10.5	2.7	6.7
26	6.3	5.7	5.1	4.6	3.2	2.8	3.1	3.1	3.3	2.4	2.6	2.4	2.7	3.1	1.9	1.3	1.6	1.5	4.5	5.0	5.0	5.4	5.8	6.2	6.3	1.3	3.7
27	7.4	8.2	9.0	8.7	7.1	6.0	5.8	6.0	6.7	6.9	6.4	5.3	4.3	3.6	1.8	1.5	1.3	1.3	2.1	1.4	2.6	2.7	2.5	2.4	9.0	1.3	4.6
28	2.7	3.0	3.0	2.5	2.2	2.1	1.8	1.4	0.9	1.6	1.5	1.7	1.4	1.3	0.9	1.7	2.4	4.4	4.4	4.8	5.4	6.8	8.7	9.4	9.4	0.9	3.2
29	7.4	7.2	8.9	10.8	9.7	11.7	8.3	9.4	11.6	10.5	10.8	12.7	14.8	14.0	13.4	12.2	9.8	8.4	9.4	7.0	6.7	8.8	9.7	8.4	14.8	6.7	10.1
30	10.0	11.5	11.6	12.2	10.6	11.0	9.2	7.8	6.7	6.7	6.7	6.2	7.4	5.5	3.5	1.7	1.5	1.6	2.4	3.7	4.9	4.7	6.0	7.4	12.2	1.5	6.7
31	9.7	10.8	12.9	10.4	13.1	12.4	12.0	7.7	6.8	7.3	5.8	6.5	5.8	4.6	5.2	4.0	4.0	5.1	6.2	5.7	5.3	5.5	6.3	7.5	13.1	4.0	7.5
Max.	**15.6**	**16.2**	**15.9**	**14.6**	**14.5**	**14.3**	**13.0**	**13.0**	**18.3**	**18.7**	**17.8**	**18.0**	**14.8**	**14.0**	**13.4**	**12.8**	**14.8**	**15.3**	**17.5**	**17.5**	**16.8**	**15.7**	**17.1**	**15.1**	**18.7**		
Min.	**1.0**	**1.3**	**1.2**	**1.7**	**1.8**	**1.0**	**1.1**	**1.1**	**0.9**	**1.1**	**1.3**	**1.1**	**1.2**	**0.8**	**0.9**	**0.9**	**1.3**	**1.3**	**1.9**	**1.4**	**2.1**	**1.5**	**1.6**	**1.8**		**0.8**	
Avg.	**6.5**	**7.0**	**7.0**	**7.0**	**6.3**	**6.2**	**5.6**	**5.2**	**5.8**	**5.9**	**5.6**	**5.5**	**5.8**	**5.7**	**5.5**	**5.4**	**5.7**	**6.0**	**6.2**	**6.2**	**6.4**	**6.4**	**6.6**	**6.5**			**6.1**

Total Hours in Month 744 **Hours Data Available** 732 **Data Recovery** 98.4%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	209.9	258.9	298.6	309.7	306.3	328.0	357.4	96.4	97.2	104.3	109.1	148.0	167.1	168.9	180.2	191.9	168.7	163.9	150.4	155.7	150.0	145.6	132.0	142.3
2	126.9	124.3	130.1	124.8	129.3	123.6	113.4	107.6	109.2	108.0	107.2	103.0	134.9	128.8	134.3	133.5	143.4	148.5	84.8	43.7	42.4	42.2	70.3	69.7
3	55.5	16.5	313.9	4.3	307.9	289.2	291.7	297.1	304.0	319.9	350.3	357.9	22.0	236.4	147.5	172.4	175.1	200.9	182.0	207.0	190.6	209.4	208.0	153.1
4	141.7	150.8	150.4	150.7	168.4	201.0	188.4	145.2	120.8	136.2	216.9	223.0	218.2	112.0	125.3	151.1	209.3	314.6	169.8	146.8	196.5	324.1	169.0	121.5
5	150.4	229.2	146.8	176.9	247.5	144.2	156.6	232.4	244.1	118.1	143.2	169.8	215.7	213.8	208.8	190.4	217.6	217.3	205.7	218.7	222.1	226.1	241.6	218.6
6	138.9	233.1	246.2	347.1	104.1	225.8	316.8	239.0	298.7	12.5	320.9	34.0	256.9	271.6	222.1	245.5	233.6	222.8	235.2	275.1	285.0	280.8	290.4	260.5
7	240.5	234.4	181.9	180.5	162.4	190.3	92.7	276.2	274.7	279.0	251.8	297.7	273.7	279.9	267.7	240.4	282.6	277.4	293.0	286.8	293.3	301.6	301.7	303.0
8	294.1	303.9	306.3	304.8	309.5	305.8	311.3	314.8	325.1	339.9	336.2	295.1	61.3	129.1	139.4	131.1	144.1	167.8	174.5	171.1	194.7	139.1	155.2	163.1
9	171.0	175.1	177.2	178.3	168.2	158.7	160.2	151.3	144.4	123.5	136.8	148.1	151.1	152.5	156.6	151.3	154.7	158.7	161.8	162.9	165.0	161.1	159.9	147.9
10	143.8	214.2	320.9	317.6	109.3	131.1	118.2	102.3	112.4	112.2	140.6	149.5	150.5	156.2	153.3	162.4	167.7	169.6	197.5	230.9	240.4	272.6	313.9	309.6
11	321.6	328.7	329.3	320.3	316.7	308.4	305.7	304.3	311.8	328.1	335.0	347.3	355.7	358.0	354.5	349.1	353.6	349.0	335.1	329.8	297.2	296.2	301.4	306.0
12	311.0	102.7	142.7	139.3	106.4	116.5	170.0	142.0	136.4	141.1	144.9	141.1	126.3	133.3	153.7	158.8	169.3	160.3	156.3	169.9	169.3	158.6	163.1	165.2
13	167.7	166.8	120.0	104.5	123.1	137.8	112.0	125.4	120.1	107.1	115.9	130.9	123.4	133.9	154.1	166.9	164.5	187.6	159.7	166.2	169.4	178.7	148.1	154.7
14	152.7	153.5	141.9	152.9	153.6	165.9	172.4	117.9	127.1	129.2	121.7	125.6	128.7	142.6	137.9	150.9	180.1	184.3	208.7	147.4	142.3	134.8	157.9	140.8
15	154.8	158.9	143.2	160.9	147.7	156.8	153.4	158.5	162.0	161.3	147.7	138.7	144.3	147.8	144.0	143.1	156.2	139.7	137.4	133.7	138.4	130.6	137.6	158.1
16	136.9	141.6	151.3	145.9	131.0	132.1	127.2	119.6	128.8	126.8	124.9	127.5	126.8	123.5	120.6	124.0	123.6	120.6	122.8	121.0	122.4	118.3	118.3	116.5
17	119.0	117.4	115.9	121.4	111.3	96.9	94.4	82.7	54.9	54.3	56.3	54.9	61.7	54.8	77.6	79.0	69.1	82.2	75.8	78.9	94.2	76.7	113.3	102.4
18	113.4	114.6	117.3	126.3	144.2	92.1	130.7	173.6	276.7	324.9	304.0	306.5	313.3	314.3	314.7	315.5	321.7	310.6	293.7	352.4	307.4	247.4	140.7	319.5
19	148.0	284.3	114.4	110.5	209.8	275.5	311.0	317.1	303.7	308.4	300.4	316.7	323.9	325.9	327.6	331.4	328.3	331.5	331.0	327.3	319.0	318.3	317.9	318.0
20	314.6	317.9	319.4	304.5	312.3	320.2	328.6	318.4	321.0	327.7	324.5	325.5	326.9	315.8	292.4	281.4	270.0	271.1	237.7	218.2	238.7	235.3	234.6	232.2
21	232.2	225.3	234.0	248.9	265.1	285.4	289.2	300.8	307.5	317.6	317.7	307.7	305.8	304.5	319.3	325.2	318.6	329.3	312.6	327.3	323.2	322.5	323.8	314.2
22	316.5	53.6	115.4	117.1	113.7	142.6	130.4	123.2	119.8	149.7	136.4	128.4	123.0	124.6	125.5	123.2	122.6	123.1	124.2	123.2	119.3	119.7	118.8	126.4
23	127.6	124.4	132.6	130.2	152.5	203.6	221.0	210.9	199.3	187.0	183.8	185.4	182.1	186.3	184.0	188.4	187.5	182.4	168.6	177.8	172.8	163.2	159.5	159.4
24	154.7	140.4	130.8	135.2	116.0	108.6	95.4	119.7	129.6	259.4	306.4	312.2	312.0	309.3	313.9	312.9	309.7	313.4	309.5	315.7	302.6	303.1	301.5	306.2
25	305.8	309.0	306.2	311.0	291.6	302.4	307.1	315.6	323.1	334.9	1.5	348.3	342.2	347.8	2.1	345.4	329.1	343.3	339.0	330.9	328.4	318.6	318.2	316.6
26	312.8	310.9	310.1	321.1	332.2	313.5	314.1	330.2	343.1	341.7	330.9	336.3	336.1	340.1	333.0	328.9	329.0	327.7	319.3	320.0	318.1	326.5	315.4	322.4
27	317.7	314.8	297.0	332.3	332.7	318.6	305.7	321.7	332.3	325.3	323.2	327.7	325.0	313.4	301.4	289.4	287.4	288.2	285.9	308.3	178.4	165.8	170.5	160.8
28	163.5	187.8	151.5	138.9	145.6	153.3	157.1	159.9	159.4	160.3	159.1	174.8	151.6	176.2	203.2	219.2	216.1	223.4	214.0	221.5	216.1	218.8	224.0	222.3
29	217.7	227.4	237.6	241.4	248.7	249.4	251.8	259.5	263.8	266.9	265.6	262.7	260.0	265.9	265.8	272.3	283.3	275.6	261.4	257.5	267.6	267.8	268.8	273.3
30	288.1	309.9	313.8	307.6	319.4	320.9	311.5	307.9	316.7	326.1	323.5	330.5	333.7	329.5	331.7	328.8	333.8	335.2	325.8	313.9	305.8	305.7	303.6	314.1
31	312.6	315.4	323.2	307.1	310.7	309.6	315.9	321.6	329.6	325.9	331.5	335.0	333.3	331.7	320.8	327.8	321.6	327.0	334.2	335.0	331.3	324.1	325.2	333.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	332.2	322.0	317.4	316.7	318.0	322.7	323.1	322.4	319.1	323.7	331.6	332.3	331.4	323.3	327.2	330.4	333.5	329.7	334.7	332.6	319.7	312.7	313.0	324.3
2	316.4	300.7	293.9	308.2	304.1	120.4	122.7	115.1	121.3	126.7	143.3	135.4	131.6	134.5	140.6	144.1	138.7	132.2	128.0	125.2	128.5	131.4	131.2	131.9
3	130.8	130.2	131.5	135.5	137.9	135.3	133.6	133.8	130.3	125.9	121.1	121.5	117.0	112.4	113.8	115.8	118.2	120.2	118.3	114.0	118.6	122.4	120.9	126.1
4	123.2	113.8	143.9	195.3	128.0	105.3	135.3	123.7	66.3	96.1	106.9	106.0	103.8	103.3	107.0	116.9	145.6	157.5	162.1	157.9	148.7	150.5	148.6	143.5
5	135.8	141.9	145.6	142.8	144.8	147.6	139.3	136.3	130.7	127.2	121.8	121.9	126.1	129.8	133.3	137.0	136.0	136.4	135.1	127.8	126.9	140.1	131.6	144.6
6	147.3	196.7	229.8	224.2	222.8	227.0	218.4	169.9	195.0	223.1	230.0	219.1	207.8	210.3	208.3	202.0	201.3	198.2	198.0	214.1	226.5	234.0	243.3	237.8
7	236.7	236.1	237.7	258.4	266.9	222.4	221.8	339.8	318.3	303.8	299.0	300.1	306.9	293.3	292.6	293.5	300.4	304.4	310.5	307.5	294.5	273.6	238.1	233.7
8	267.5	324.8	324.1	307.7	307.8	306.4	301.9	315.5	353.1	23.5	356.3	57.6	101.6	106.5	122.5	126.3	131.4	145.8	147.4	118.8	123.4	126.4	126.0	128.2
9	128.6	128.4	133.5	130.5	134.2	129.0	119.5	115.8	119.7	140.0	140.2	150.6	148.8	151.3	149.9	162.7	202.0	224.0	229.5	235.6	233.1	231.0	226.6	221.9
10	217.4	222.1	230.8	226.3	222.0	230.6	224.9	232.3	169.7	227.4	226.0	227.5	221.2	192.2	207.7	214.4	175.7	124.2	128.3	95.2	97.6	151.9	118.0	106.0
11	118.9	139.8	125.9	138.9	139.1	132.9	133.7	133.9	132.3	127.8	126.9	123.3	126.5	127.0	128.9	133.1	127.5	127.3	134.0	135.5	130.2	126.9	143.7	198.6
12	197.7	240.8	256.3	257.5	245.9	213.9	215.7	203.1	208.3	201.3	196.9	203.1	218.6	229.0	235.7	238.3	240.4	240.7	242.9	251.2	250.1	251.6	254.6	255.7
13	249.6	251.8	259.2	265.8	263.4	240.9	229.2	249.9	246.6	227.1	217.9	222.9	222.6	229.4	216.5	217.4	220.7	205.0	183.2	158.1	185.4	190.5	216.6	170.6
14	121.6	134.5	131.1	153.5	145.0	126.4	122.1	106.7	119.4	109.0	110.5	123.5	121.3	128.1	130.9	139.1	140.2	138.3	130.5	129.5	126.9	120.0	121.4	124.1
15	121.3	118.9	120.7	121.1	121.9	123.1	122.6	127.1	126.2	129.3	126.6	124.9	122.1	118.8	117.1	119.3	122.9	139.9	183.9	147.6	161.5	149.8	157.0	155.5
16	260.0	260.3	242.9	264.0	258.0	29.1	284.0	265.4	107.7	130.1	267.3	262.1	267.4	253.6	257.5	263.8	226.9	237.8	212.3	215.8	235.2	228.9	225.1	217.4
17	223.2	197.4	160.1	128.7	275.6	2.4	24.4	308.0	304.0	309.2	299.6	319.7	103.1	221.6	302.4	315.8	261.1	293.7	257.5	280.8	300.3	298.5	286.5	300.1
18	297.2	308.2	299.5	295.3	294.2	296.9	307.2	314.7	317.4	305.6	311.9	310.7	306.7	309.9	302.9	299.7	293.7	298.3	299.0	298.9	290.7	298.7	299.4	299.3
19	299.9	302.2	298.2	308.3	313.9	302.3	304.6	299.4	316.2	313.3	344.1	333.2	338.2	337.8	350.4	334.8	334.6	341.4	335.5	330.3	320.5	311.6	307.6	302.1
20	301.8	300.6	304.7	313.5	307.6	310.1	302.0	302.6	299.3	301.7	308.2	324.0	312.4	322.7	331.0	308.1	294.2	308.9	318.1	293.5	270.5	271.6	261.8	238.4
21	227.1	211.2	197.1	223.0	210.2	163.9	124.7	119.3	150.4	155.6	146.8	113.6	130.9	138.8	151.9	157.4	147.4	149.9	148.9	147.2	151.2	145.3	131.1	148.8
22	155.8	151.7	144.0	147.0	161.1	144.5	137.6	134.9	132.4	122.7	123.7	123.0	124.6	126.6	127.9	145.1	157.5	179.0	216.0	209.5	206.6	215.6	204.6	198.3
23	203.8	207.6	184.3	182.9	168.6	165.8	162.4	163.4	149.8	128.0	120.9	121.1	128.9	127.1	130.1	126.7	128.2	138.4	184.9	237.9	251.6	246.5	246.4	250.4
24	240.9	233.6	231.2	230.7	230.9	228.3	232.4	235.3	217.8	222.8	231.5	239.1	237.8	238.5	230.5	222.6	227.2	226.4	218.7	223.6	225.9	228.5	230.1	227.1
25	226.6	229.8	226.9	226.9	230.6	231.1	223.9	225.9	221.3	222.1	225.8	222.5	220.4	216.7	211.4	208.2	206.1	210.2	205.1	208.5	214.6	223.8	219.0	223.8
26	208.6	132.2	132.3	108.4	106.7	108.5	104.2	113.1	112.8	116.7	109.9	113.6	116.3	119.1	115.2	113.9	112.3	114.7	111.8	109.7	109.4	111.3	110.6	113.8
27	113.5	112.0	114.0	117.1	117.2	119.1	114.0	79.0	54.6	82.9	93.9	52.3	48.8	49.6	39.7	34.8	31.6	61.6	70.0	72.6	81.9	67.3	358.5	310.5
28	319.1	325.9	321.3	302.1	308.6	303.1	306.0	308.8	261.5	268.6	292.2	324.6	311.2	325.9	333.3	321.3	326.4	339.9	277.4	269.4	137.7	221.6	238.0	158.3
29	170.8	213.3	210.3	225.9	227.3	213.0	198.4	213.1	209.0	210.3	220.3	261.8	272.2	281.9	291.5	290.8	298.6	296.2	299.8	282.7	272.3	169.2	293.4	262.5
30	257.4	146.1	172.6	218.1	213.2	142.8	183.3	183.8	140.2	118.6	325.3	329.1	332.0	318.0	320.0	324.2	318.3	320.6	329.3	333.0	338.8	325.3	322.3	322.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	322.0	321.8	321.7	320.1	321.0	321.9	321.2	325.9	326.4	326.1	325.7	326.1	322.4	326.1	324.6	329.1	323.5	327.8	322.5	306.8	311.2	315.0	309.0	312.1
2	309.2	308.3	302.7	298.8	298.3	318.6	308.1	314.8	316.5	321.8	314.0	317.9	314.2	313.7	320.6	323.9	334.8	326.8	294.4	302.4	326.5	341.0	324.8	317.5
3	349.3	86.9	121.7	109.8	330.8	179.5	108.0	320.6	307.3	308.3	310.0	327.8	318.5	343.4	324.7	144.2	171.1	150.3	157.2	220.7	320.3	207.3	108.4	50.9
4	43.8	25.2	93.6	61.9	47.9	61.0	64.4	90.3	71.0	99.1	85.3	88.6	104.4	108.8	118.1	96.5	66.4	80.9	86.3	81.9	49.5	52.7	56.4	59.5
5	54.6	54.0	63.3	50.5	41.1	23.4	31.6	17.9	36.9	30.2	8.1	353.4	348.3	2.9	357.8	357.9	14.5	32.1	352.3	356.5	320.7	239.9	140.8	143.9
6	149.2	201.0	231.5	334.0	110.7	130.9	209.4	174.5	196.5	208.9	211.6	227.4	195.6	215.9	216.1	220.1	204.3	204.0	181.2	141.8	137.9	137.6	126.9	122.3
7	110.2	117.6	117.2	126.1	123.1	122.6	124.2	127.6	120.4	121.6	123.4	126.6	124.8	123.9	138.5	179.0	193.4	171.9	133.2	145.6	172.4	149.6	114.1	114.9
8	120.5	111.0	114.6	88.1	97.3	95.8	91.7	93.1	98.7	112.3	95.1	114.8	349.6	328.6	336.1	331.0	325.6	307.6	301.3	291.8	149.6	127.5	117.7	102.5
9	103.5	104.1	101.1	4.5	344.3	325.0	322.8	323.3	314.0	321.2	312.6	313.8	320.9	322.4	314.2	322.3	317.4	319.0	322.6	329.1	333.4	326.4	322.3	323.8
10	327.9	316.3	324.4	321.2	311.6	303.7							52.4	61.2	84.1	102.3	101.5	110.4	145.2	125.9	115.5	123.7	128.2	119.3
11	120.2	129.9	122.7	150.1	148.8	126.8	129.2	133.8	158.0	170.5	178.5	214.4	211.1	209.0	247.1	289.4	306.3	304.9	300.1	294.0	302.7	304.5	305.7	309.6
12	309.4	308.6	310.0	313.8	316.5	316.6	313.2	312.6	315.7	315.2	316.2	317.2	317.3	317.3	306.6	306.2	313.9	316.0	336.8	310.4	302.8	314.9	332.6	300.2
13	315.0	303.5	316.0	316.9	305.2	322.0	308.5	324.2	315.5	313.7	313.8	321.6	317.7	326.5	299.9	287.9	232.3	186.2	181.3	132.6	155.1	145.4	146.2	150.4
14	149.5	162.8	163.8	152.8	138.2	157.4	136.7	119.5	174.6	194.8	144.2	124.1	86.0	83.0	101.4	105.7	111.8	116.2	117.8	114.6	118.9	122.2	110.0	112.3
15	111.8	112.2	107.8	159.2	117.6	92.1	52.1	44.4	66.1	54.6	60.7	338.5	317.0	344.5	349.0	325.8	335.2	324.6	323.0	310.7	318.8	313.6	304.2	309.1
16	314.7	310.3	310.2	318.6	307.2	298.9	300.5	297.2	312.4	311.7	317.5	148.9	193.2	179.1	202.3	187.2	207.6	175.4	204.0	146.2	147.9	161.8	166.6	162.1
17	166.1	147.3	142.7	138.8	121.1	117.1	121.1	121.9	128.7	131.9	155.0	194.6	196.1	205.0	210.8	215.9	215.9	218.5	213.9	213.5	218.2	217.9	219.1	232.7
18	241.6	249.3	260.8	264.0	260.5	261.2	261.2	255.4	253.2	262.4	266.8	253.2	241.8	240.8	250.9	237.7	212.2	206.1	206.9	220.3	195.2	187.4	175.3	157.6
19	143.0	130.9	140.1	136.5	140.2	152.1	154.0	138.8	130.6	129.9	126.5	129.9	124.7	121.3	117.8	115.8	113.6	117.7	116.6	117.9	117.1	116.8	114.7	111.6
20	111.3	112.1	113.3	114.7	115.8	113.4	111.8	112.9	115.7	118.4	119.5	114.7	110.7	65.7	52.3	56.0	18.5	32.5	23.5	24.6	32.5	32.2	0.3	357.2
21	9.6	38.9	38.5	93.7	20.9	12.1	323.7	326.3	317.4	314.5	303.5	298.9	301.1	301.3	297.9	289.5	308.3	295.0	294.7	296.9	298.8	295.6	305.2	318.5
22	310.6	309.9	313.9	312.3	312.6	318.4	311.4	310.0	308.9	312.0	312.2	307.3	309.8	308.5	306.6	303.5	306.3	313.2	305.5	300.4	302.9	299.0	298.9	310.6
23	309.7	314.8	311.2	304.4	304.6	311.8	318.2	315.2	308.9	306.0	318.9	319.3	326.7	324.5	327.0	327.3	328.1	326.6	326.8	326.5	325.8	326.0	326.1	324.0
24	312.7	301.2	306.2	312.1	303.5	305.5	304.0	306.4	321.1	310.1	312.7	307.0	322.7	312.7	310.3	317.3	321.5	327.6	317.3	311.7	319.4	322.6	322.8	327.4
25	326.2	321.9	325.1	323.0	316.2	318.1	322.7	324.9	312.8	308.8	309.1	318.4	322.1	337.1	333.2	333.2	330.4	328.5	327.7	327.9	331.8	333.3	334.7	328.4
26	332.3	330.6	332.9	336.4	335.4	333.1	332.3	329.9	324.9	321.0	323.7	330.4	337.9	342.6	340.5	334.8	332.9	334.6	327.4	325.0	327.9	309.0	298.4	301.4
27	302.3	307.9	305.8	310.0	307.4	219.5	307.3	211.8	294.7	263.8	277.9	273.3	227.6	120.6	120.7	107.3	126.0	83.8	127.3	116.2	120.3	104.4	139.4	206.3
28	310.6	265.9	277.5	338.1	309.8	314.5	312.5	314.3	317.3	317.3	356.8	336.1	347.7	343.7	345.3	345.0	343.5	337.0	347.7	350.8	328.5	331.2	298.6	271.9
29	304.9	278.1	276.6	316.0	342.4	343.7	312.2	316.7	312.6	311.2	311.8	312.4	312.8	310.4	327.2	326.9	329.0	322.1	321.5	316.6	316.1	295.5	294.7	312.2
30	311.6	310.0	309.8	314.2	312.5	307.6	308.9	305.9	307.8	314.5	312.2	318.4	312.0	316.4	311.3	310.6	299.0	309.7	309.6	317.8	313.7	309.4	312.4	316.4
31	316.2	314.3	316.2	308.2	311.5	312.2	309.8	322.6	320.0	300.2	309.9	315.1	319.8	313.4	317.5	329.0	299.2	312.8	314.6	320.1	315.8	318.9	303.8	297.2

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	306.3	304.9	309.1	315.0	302.1	313.0	313.0	317.2	316.0	313.1	310.1	311.1	317.4	309.4	310.2	303.7	311.1	315.9	321.8	314.0	310.9	315.9	320.4	319.2
2	321.0	321.5	320.8	319.0	309.3	303.3	312.9	317.4	307.0	308.5	302.9	317.5	315.1	308.7	313.3	315.5	328.8	307.1	308.7	310.7	311.9	311.3	308.7	309.8
3	305.0	317.5	325.0	327.9	316.7	320.6	321.0	323.9	323.9	319.7	323.2	331.0	329.1	325.3	324.1	325.3	317.4	321.6	318.3	316.1	316.9	330.2	330.1	326.8
4	326.7	322.8	323.5	326.3	325.0	323.0	316.1	315.5	315.6	322.0	320.6	319.8	321.8	315.8	321.1	320.5	312.5	320.0	330.2	326.6	329.9	323.5	327.3	326.6
5	322.6	321.8	313.8	319.3	322.8	317.2	322.5	321.8	321.1	318.7	318.5	314.8	316.7	316.8	311.9	314.6	315.1	311.7	312.8	308.9	302.7	288.5	165.8	152.0
6	149.5	121.8	116.6	141.4	237.9	261.4	274.4	296.0	305.8	307.9	311.1	305.9	309.2	311.1	315.9	312.7	309.7	313.8	324.7	336.7	337.9	326.8	316.0	310.6
7	313.4	321.1	327.7	317.7	320.2	315.8	316.9	315.5	314.5	311.9	320.0	316.7	335.3	311.6	314.2	303.7	303.2	310.4	310.4	313.3	311.3	310.3	310.8	314.4
8	315.2	315.5	318.4	316.7	310.3	306.9	308.6	308.2	307.6	302.8	300.1	304.6	305.5	311.4	309.6	309.5	311.0	313.1	313.7	313.2	312.8	310.1	308.4	321.6
9	329.6	330.3	337.3	336.4	336.4	329.7	336.0	337.5	339.6	339.3	327.6	330.4	326.4	329.5	324.4	323.7	329.5	325.6	326.0	322.8	323.6	322.8	325.5	324.3
10	317.3	320.4	318.8	317.4	316.8	317.7	317.4	318.5	316.5	313.9	315.6	318.0	319.4	323.4	326.5	321.6	322.6	321.9	322.0	321.3	322.8	321.8	322.3	324.6
11	322.1	329.7	322.3	317.5	319.5	324.6	328.8	326.2	324.9	320.8	317.4	318.6	322.3	321.6	322.9	327.1	335.2	327.2	317.8	315.3	311.8	309.6	301.3	301.3
12	305.2	303.7	302.5	307.2	309.1	303.6	312.4	307.4	306.0	307.8	316.1	315.1	311.8	313.7	313.9	316.3	307.2	311.2	317.2	321.7	326.6	331.4	320.6	323.6
13	324.8	323.0	324.3	315.2	317.7	321.2	323.5	329.2	338.7	328.0	340.3	337.8	308.7	311.1	26.8	55.7	111.3	120.5	120.2	127.0	125.7	119.0	129.0	121.4
14	117.5	122.1	126.1	134.1	129.1	129.5	124.9	117.7	105.1	104.8	116.2	112.6	117.8	53.8	58.6	62.0	87.4	80.0	48.9	48.0	49.5	43.1	30.9	6.0
15	30.7	12.5	356.1	358.4	350.6	344.4	286.3	312.0	316.0	313.5	307.5	316.3	316.8	306.4	310.6	313.8	316.5	321.4	315.6	199.8	141.1	109.9	100.3	105.9
16	98.9	103.7	109.8	112.1	91.1	98.4	102.8	109.4	111.7	116.0	121.4	126.7	128.7	125.0	127.8	129.4	126.0	123.6	128.5	125.4	123.6	125.1	124.7	125.3
17	129.0	138.0	139.5	145.0	157.3	157.7	154.6	169.9	160.5	188.6	221.6	208.5	201.5	208.0	218.1	221.1	212.3	200.7	189.0	189.4	185.7	196.1	152.5	151.1
18	150.7	111.3	101.3	95.2	83.4	22.9	39.7	47.8	33.9	35.6	96.2	92.8	36.3	73.4	71.1	331.2	320.0	311.4	317.7	287.1	313.1	278.1	279.6	280.4
19	273.5	181.2	162.0	178.8	173.2	193.2	209.3	216.7	208.4	205.0	208.9	201.1	223.9	221.7	207.3	190.7	198.9	198.9	188.2	160.0	155.5	119.2	95.8	102.3
20	109.1	108.7	126.1	148.7	137.2	115.3	111.3	121.6	123.1	116.9	113.9	114.0	121.9	328.2	312.8	314.2	313.5	302.9	314.7	305.9	227.4	233.9	254.0	266.7
21	294.5	318.8	323.7	301.4	303.3	308.8	308.2	308.8	296.6	289.9	293.1	290.3	271.0	285.8	299.5	280.6	268.9	280.1	292.6	290.4	279.7	239.1	194.7	206.2
22	230.6	132.4	124.9	144.5	291.6	279.8	154.7	62.5	314.9	64.1	92.7	113.0	138.5	116.6	319.2	318.2	320.6	311.2	313.5	327.3	311.6	325.4	316.8	311.4
23	310.0	319.2	314.5	313.0	310.7	310.6	317.1	318.5	318.5	317.1	313.8	311.8	313.4	314.3	312.0	312.1	312.5	300.3	295.8	305.0	297.0	298.8	297.2	305.9
24	304.3	307.8	317.9	318.4	316.0	312.1	308.0	317.9	313.3	308.3	306.3	314.2	311.0	306.6	305.5	305.3	304.6	300.9	294.4	303.5	306.1	309.6	318.0	310.7
25	310.9	317.2	311.6	313.2	320.8	307.9	309.0	310.7	307.8	309.8	314.0	314.3	314.5	317.9	314.1	311.8	312.5	311.2	313.2	314.8	313.8	314.0	315.3	328.6
26	326.5	326.8	322.9	330.1	318.8	316.3	320.5	324.6	322.7	315.5	314.0	311.9	308.5	311.1	305.9	309.2	309.2	309.3	309.7	309.0	316.8	309.2	301.4	306.0
27	305.5	308.0	307.9	307.9	306.6	315.5	300.2	313.1	315.2	305.7	310.2	319.6	308.6	318.7	312.6	298.0	129.3	114.4	110.1	130.2	120.7	138.5	154.0	157.3
28	155.6	154.6	153.1	156.7	158.3	156.1	159.5	162.3	167.2	167.6	165.5	163.2	165.7	162.6	163.1	176.3	150.4	157.3	136.8	175.2	141.9	157.2	157.5	136.3
29	159.9	137.8	110.6	85.6	298.3	303.7	301.7	309.9	300.0	305.7	319.9	324.6	317.7	313.5	308.8	315.0	319.4	326.7	328.5	317.8	315.6	323.2	311.3	316.3
30	321.2	306.1	307.1	310.4	303.1	304.9	301.9	296.0	293.8	296.6	300.7	303.1	303.7	311.3	316.2	309.7	299.3	310.6	315.0	311.0	309.8	318.7	323.7	318.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	311.1	302.2	325.6	326.1	325.9	323.4	320.6	329.7	321.9	325.2	300.3	302.6	315.7	308.1	314.8	321.1	316.3	312.6	306.2	299.2	299.4	293.8	305.9	296.8
2	314.1	115.2	110.5	110.6	157.2	180.8	201.1	265.3	355.7	321.3	305.7	309.1	318.4	314.0	306.3	305.1	308.8	310.1	305.5	309.0	314.8	314.9	313.1	309.9
3	307.3	311.7	307.8	309.8	313.3	315.0	316.5	311.9	308.2	309.6	305.7	313.8	305.1	308.4	306.2	307.1	312.0	326.6	324.3	320.2	308.5	306.5	298.2	301.0
4	303.0	301.5	313.1	302.8	295.6	184.4	92.5	107.8	110.9	116.6	124.8	133.7	136.5	122.8	121.5	122.2	116.5	118.5	119.7	120.3	122.1	119.2	119.5	118.8
5	116.3	115.5	116.2	116.6	119.0	117.6	117.8	120.4	115.4	114.8	116.8	116.5	115.4	118.7	121.8	122.4	124.1	126.9	124.8	120.7	120.3	120.9	118.5	119.5
6	117.4	115.9	115.8	117.8	121.9	119.5	118.9	123.4	124.2	127.0	134.2	140.1	148.7	150.6	150.4	152.9	148.0	146.6	136.9	140.9	129.4	119.9	113.6	113.5
7	114.6	113.7	112.5	114.6	111.8	114.0	113.4	114.1	115.2	112.4	113.8	112.8	114.4	117.2	118.3	115.5	119.7	118.9	121.6	120.2	117.7	117.6	118.5	120.1
8	126.3	148.1	151.0	171.0	191.6	160.5	152.0	150.1	137.3	124.8	125.9	127.6	134.3	133.1	128.1	127.6	123.2	117.2	120.2	125.7	125.9	125.5	123.7	124.2
9	126.2	127.7	128.5	126.1	128.5	128.8	121.9	120.4	122.6	123.7	122.6	129.3	130.7	137.0	151.8	177.1	191.6	187.7	185.2	191.7	190.5	195.3	180.5	157.8
10	179.3	156.2	175.7	190.8	141.2	123.0	124.2	112.2	112.7	113.5	128.4	141.8	143.1	160.6	158.0	136.9	117.1	113.1	120.8	120.0	116.1	125.8	124.8	120.3
11	129.5	146.8	149.7	160.7	121.7	219.2	230.1	181.8	89.5	234.8	213.6	215.4	222.7	221.0	181.3	226.8	280.1	270.1	286.8	291.7	296.6	297.5	297.1	300.7
12	304.4	306.0	306.9	303.0	308.2	313.1	305.4	308.2	308.5	311.6	324.4	305.3	309.5	303.0	275.6	168.1	299.5	315.5	319.6	314.1	307.1	329.8	321.6	82.6
13	316.5	161.8	123.2	117.6	116.6	112.3	105.9	115.9	109.9	113.4	115.9	113.5	109.7	113.8	107.8	109.5	112.1	114.0	115.4	115.8	116.6	115.7	112.9	112.1
14	112.5	112.0	112.6	109.9	101.3	82.3	100.4	91.4	85.2	96.2	105.2	109.3	104.5	74.1	66.6	59.3	69.1	62.4	84.5	105.6	100.0	106.0	109.3	111.6
15	113.3	116.3	119.4	116.1	115.9	116.6	115.9	88.0	59.8	52.7	24.8	33.9	57.8	68.3	72.9	73.2	89.3	100.2	107.7	111.5	104.6	104.0	110.7	112.3
16	118.2	119.9	112.4	114.3	122.6	127.6	128.8	129.3	141.2	149.7	158.6	169.4	215.5	233.4	238.2	136.1	115.0	134.0	204.0	174.9	207.9	231.6	21.7	327.0
17	315.3	311.3	316.0	316.5	313.8	304.7	309.9	313.9	312.0	307.8	309.8	301.8	285.5	331.3	91.4	110.3	107.3	116.7	114.0	111.1	100.3	106.4	125.9	131.6
18	101.6	91.5	68.7	92.2	64.3	88.3	115.5	110.7	110.0	104.3	113.0	113.8	122.7	126.4	127.9	122.6	124.1	125.4	133.7	135.3	103.5	80.7	99.1	95.8
19	85.8	71.0	88.1	113.3	127.1	126.8	131.7	125.8	124.5	120.6	122.0	123.2	126.2	128.0	130.4	129.8	132.8	144.8	151.3	144.1	132.1	139.4	136.3	135.9
20	138.6	134.1	134.2	91.8	330.2	330.5	320.2	313.2	287.4	309.5	308.4	312.6	316.3	303.7	302.7	202.4	201.2	299.7	320.6	302.8	319.8	314.7	295.5	321.2
21	321.9	338.3	122.1	91.3	135.2	178.2	79.2	107.3	133.8	115.1	118.1	79.2	98.7	116.8	231.4	322.3	302.6	311.1	319.7	304.3	308.3	308.6	321.6	317.0
22	319.4	313.3	306.2	301.4	314.0	304.9	315.2	306.7	314.8	315.0	297.9	324.3	312.2	313.4	310.1	308.8	308.2	308.5	300.9	317.7	308.8	218.5	109.2	317.3
23	29.1	338.0	325.3	312.0	313.1	310.5	219.1	122.8	114.5	118.0	112.7	137.1	134.5	115.0	120.4	130.9	121.5	120.0	109.6	124.0	131.0	121.2	118.6	118.3
24	117.2	114.2	112.2	117.9	122.7	108.2	113.9	129.1	128.8	122.2	113.9	117.3	106.7	106.2	99.4	67.0	360.0	314.9	315.2	336.9	328.2	321.0	59.0	119.6
25	108.6	70.1	56.4	76.4	105.1	124.5	125.4	113.7	119.4	102.8	105.9	109.9	110.0	92.5	90.2	95.7	90.3	93.6	93.2	74.7	74.6	87.7	97.7	79.8
26	79.4	93.8	103.9	110.0	110.5	122.0	122.7	121.1	125.9	9.1	41.9	99.7	115.8	96.9	96.1	97.4	101.7	119.6	94.0	91.8	95.4	91.3	84.1	67.3
27	73.5	55.1	62.1	61.3	49.0	33.8	46.8	39.3	349.7	18.0	36.6	5.8	324.8	308.4	304.0	303.7	292.5	291.8	2.1	331.1	3.8	51.3	72.6	95.7
28	99.2	85.5	71.8	76.4	96.6	101.8	105.8	86.5	91.6	85.8	68.2	63.0	97.6	70.2	98.6	115.4	73.3	76.7	101.3	57.9	68.5	88.9	95.8	81.6
29	93.5	83.0	67.6	62.5	70.6	96.1	107.6	110.8	110.3	111.2	111.2	114.2	119.4	119.8	116.0	89.6	81.9	89.6	100.4	106.6	106.2	76.9	81.8	87.8
30	62.8	50.4	49.0	50.5	19.5	15.0	30.3	51.0	337.4	327.5	334.2	315.1	324.6	297.5	49.8	32.5	8.3	43.0	55.0	77.4	70.9	65.6	62.0	59.6
31	3.5	342.0	42.3	77.3	58.6	346.9	94.5	111.5	107.4	92.1	75.0	73.1	98.3	42.1	72.6	89.9	91.7	82.1	327.5	16.1	355.5	7.5	335.8	59.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	93.1	125.1	104.7	35.2	85.6	88.6	112.8	112.7	118.6	113.8	127.1	119.5	120.8	119.8	99.2	103.0	65.6	109.7	95.8	70.9	83.8	55.6	69.4	90.7
2	80.5	93.1	96.7	57.7	62.8	79.8	92.4	93.0	78.4	93.3	129.0	135.1	108.9	117.3	122.6	131.2	112.9	120.8	115.8	101.6	114.5	116.5	111.6	104.3
3	107.3	105.2	99.0	102.9	103.1	125.2	133.6	133.7	115.1	104.7	110.1	111.5	111.0	117.3	117.1	129.9	127.3	133.7	115.6	117.7	114.4	113.8	119.0	124.9
4	129.4	138.9	126.9	240.4	292.7	325.6	42.0	99.4	98.8	351.1	106.2	119.8	159.5	159.6	166.1	250.1	285.6	294.2	314.4	111.3	105.6	116.6	122.0	114.3
5	25.0	296.3	1.6	336.7	330.6	301.5	349.8	265.3	138.0	120.0	154.7	141.0	240.1	313.0	308.6	307.8	306.4	307.3	306.6	306.8	312.8	307.9	313.8	314.9
6	334.0	125.3	108.7	109.0	150.8	165.5	171.7	177.8	197.3	190.8	132.2	208.3	253.2	318.7	312.0	312.1	325.7	307.0	173.6	117.4	132.7	106.7	128.6	67.2
7	359.2	302.7	297.6	306.7	109.9	291.1	317.8	296.3	311.3	299.2	27.4	337.0	340.1	9.1	59.0	35.0	44.9	80.4	5.5	41.8	59.3	49.8	42.7	40.6
8	23.7	340.3	356.7	311.6	306.2	349.6	66.7	86.7	70.7	77.2	313.4	309.3	307.2	309.2	303.8	300.7	308.6	314.5	313.1	313.6	313.6	309.6	315.3	311.6
9	309.5	310.4	307.4	316.5	310.4	309.3	310.1	311.2	306.1	308.1	314.9	316.7	136.0	333.4	309.9	94.0	131.7	133.4	123.3	334.0	11.5	318.9	309.1	312.9
10	286.3	115.8	106.6	109.5	120.7	104.8	118.6	120.9	144.7	126.5	135.2	176.1	359.8	140.0	107.4	114.2	122.2	117.9	130.0	120.5	83.7	97.1	36.4	184.0
11	182.9	91.9	271.9	327.0	327.1	313.9	282.8	266.4	186.3	114.9	170.2	266.9	294.6	312.0	327.7	336.4	305.8	320.2	312.3	303.0	313.4	309.8	306.1	315.0
12	322.1	313.6	316.8	314.0	312.3	318.2	311.4	301.8	313.4	311.0	310.5	316.8	309.2	316.2	312.2	315.9	312.2	314.9	306.5	303.4	301.6	304.2	304.6	306.5
13	306.9	304.9	297.7	302.1	294.7	301.1	304.4	305.2	302.7	301.8	299.7	304.0	301.3	301.0	302.7	312.0	308.0	308.2	316.3	300.5	303.9	311.5	304.8	308.5
14	309.9	307.4	305.8	299.2	305.3	311.3	133.5	118.6	133.6	119.2	134.7	127.4	124.2	117.1	117.1	113.4	114.2	122.7	125.3	125.8	110.3	114.0	116.5	120.4
15	118.3	126.0	120.2	116.1	107.8	120.8	128.7	123.7	119.7	115.5	114.0								107.3	108.6	99.7	93.4	98.4	79.6
16	83.6	71.4	72.5	70.0	96.5	95.8	66.4	63.0	70.0	64.8	62.6	48.5	9.7	317.4	307.7	301.3	317.7	308.0	320.8	311.7	310.4	309.4	313.3	312.2
17	310.7	317.0	314.8	314.1	310.4	311.8	312.0	311.0	312.5	309.7	309.4	306.3	311.9	309.8	310.3	314.9	322.1	315.9	313.8	316.4	322.7	303.4	311.9	313.4
18	321.1	336.5	317.4	320.8	316.3	306.9	309.4	313.9	315.0	321.6	317.3	317.5	321.7	322.2	315.2	314.6	310.2	308.5	315.7	318.4	311.4	316.2	310.8	316.6
19	321.5	320.4	319.1	312.1	315.2	304.7	307.2	315.9	309.1	306.9	303.4	303.2	309.4	308.6	307.0	322.6	316.3	309.1	311.8	315.2	319.5	318.7	310.4	299.6
20	309.5	306.6	317.0	313.3	310.6	319.6	316.7	315.3	319.0	318.5	317.2	318.9	317.0	318.1	321.0	317.0	316.8	314.6	314.9	317.6	316.6	313.3	315.0	317.8
21	318.3	317.1	313.9	314.1	312.5	308.8	306.4	304.3	305.7	308.4	312.8	334.3	341.1	343.7	345.1	340.8	338.2	338.0	335.1	330.6	326.9	324.7	318.6	319.1
22	325.6	330.3	325.5	319.4	318.6	320.9	322.1	321.1	319.7	322.0	321.4	321.6	326.7	329.5	323.2	326.1	327.2	325.6	329.1	327.2	319.5	317.3	325.2	330.1
23	319.4	323.5	325.3	322.4	324.7	327.4	327.0	322.3	323.1	329.0	330.0	330.0	328.4	331.0	327.8	321.3	337.3	330.0	326.1	340.1	327.7	317.6	317.1	320.6
24	320.6	314.3	316.6	311.6	307.8	315.6	323.3	310.1	322.0	329.9	322.0	327.8	330.1	330.8	331.8	330.7	325.6	326.5	317.6	323.2	326.3	320.4	318.5	316.0
25	315.0	312.0	314.8	306.5	314.0	308.6	315.8	320.0	316.4	318.1	320.4	319.8	314.6	312.0	312.1	316.0	307.4	311.7	318.7	316.0	323.2	324.2	318.9	313.1
26	309.6	308.0	314.8	316.4	315.4	319.8	318.7	320.5	314.2	315.8	314.3	308.7	316.5	322.4	317.4	312.6	317.5	312.5	318.5	319.9	306.4	307.0	315.0	314.7
27	311.2	316.3	314.3	314.4	311.5	317.1	320.5	322.4	322.8	323.1	322.1	327.7	319.9	318.0	319.4	322.7	323.4	329.9	332.5	331.7	330.0	327.8	325.4	324.4
28	326.6	327.6	331.7	324.5	324.2	328.5	324.6	328.0	329.6	329.3	321.8	322.8	322.6	325.5	330.6	330.2	332.0	334.9	335.9	324.6	312.5	301.2	309.0	309.4
29	303.4	301.6	305.1	301.3	299.8	308.9	316.1	313.6	321.1	326.6	310.5	311.6	323.7	316.6	318.0	312.4	316.4	313.2	312.2	318.3	314.1	317.8	326.4	328.8
30	326.8	326.8	327.6	334.8	336.6	331.1	342.2	326.0	320.1	328.8	313.6	313.9	316.2	311.4	313.2	309.3	307.8	310.6	301.4	305.5	315.2	316.2	297.7	82.0
31	321.0	305.4	305.7	324.4	315.6	315.0	323.0	313.5	312.8	308.7	311.1	314.4	311.4	311.9	308.2	316.4	314.7	312.7	311.6	305.8	313.1	312.5	320.3	313.5

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	318.8	319.2	313.4	300.2	310.4	305.6	301.3	304.1	313.2	316.9	319.3	321.5	325.3	322.4	331.4	321.7	323.0	323.8	322.7	316.3	324.3	319.3	314.8	318.5
2	313.3	319.6	319.2	313.7	312.0	312.1	310.2	310.7	298.5	309.3	309.0	311.7	294.8	310.3	301.8	297.7	271.2	154.4	131.5	119.1	133.1	116.6	118.9	118.7
3	134.0	138.1	143.0	156.0	162.2	151.7	144.5	147.0	135.0	124.1	126.6	122.2	123.6	125.0	126.6	125.7	116.5	118.5	127.1	131.3	127.6	127.5	115.1	114.4
4	116.9	110.3	110.4	112.9	113.8	114.4	111.4	111.9	111.1	111.1	111.8	112.2	114.0	113.9	114.7	114.0	113.9	109.8	111.2	113.0	111.7	112.5	112.3	106.2
5	99.7	98.7	103.0	105.1	110.9	110.0	103.7	104.1	104.5	101.4	101.8	112.6	112.8	112.5	112.9	115.1	115.5	111.5	100.0	83.4	67.0	89.5	105.5	101.3
6	100.0	94.4	91.1	90.3	106.3	98.8	103.5	119.1	142.5	154.5	205.7	213.8	223.0	221.8	220.1	215.3	198.2	196.5	181.7	183.7	184.2	180.9	176.3	168.9
7	162.6	158.8	146.8	143.2	158.0	174.1	200.4	221.6	226.3	236.9	239.4	258.7	267.6	273.3	281.3	290.2	303.6	312.8	308.4	311.9	295.4	256.0	224.3	241.8
8	128.3	144.1	114.1	105.2	110.5	111.6	116.2	116.3	124.3	132.4	150.8	125.2	115.1	111.4	115.3	115.4	111.5	111.6	113.6	114.2	115.5	116.1	113.3	110.1
9	111.0	112.1	115.6	114.4	112.4	112.2	110.1	103.2	82.9	62.0	91.8	108.9	102.2	108.2	110.3	122.9	121.2	118.3	123.4	122.4	117.6	120.2	113.7	121.7
10	125.6	120.2	117.4	118.9	115.7	114.4	115.3	113.1	122.8	126.3	122.7	119.5	118.6	126.1	130.8	127.5	128.7	124.7	123.2	121.7	126.0	128.2	130.1	135.4
11	128.3	119.1	118.6	123.4	138.5	107.8	22.8	347.7	326.8	329.7	327.3	342.6	333.2	329.2	327.5	316.7	312.1	351.8	94.1	118.6	129.0	121.0	118.5	128.5
12	154.0	2.9	313.0	304.3	315.9	326.2	327.0	310.1	290.6	297.7	295.8	293.9	292.5	285.1	287.0	278.7	261.3	243.9	175.1	155.0	85.4	359.0	351.7	351.7
13	8.3	108.5	108.1	110.8	104.4	104.9	103.8	119.8	129.7	112.2	131.2	152.8	122.5	126.6	130.8	126.3	129.3	124.6	125.5	125.0	127.9	132.5	134.3	137.9
14	133.3	134.7	132.6	133.8	135.5	136.8	139.5	137.9	138.9	134.3	130.9	128.5	130.7	131.9	131.6	128.1	123.6	125.6	124.0	128.7	129.2	131.1	134.1	132.5
15	130.7	129.5	124.8	123.8	124.5	122.5	122.9	128.3	129.0	129.7	126.7	126.8	130.9	128.4	125.6	127.0	127.9	134.1	127.7	130.3	137.5	140.3	149.2	147.4
16	151.8	150.4	158.7	158.2	163.2	165.2	164.2	152.1	140.8	139.5	121.6	145.0	143.7	155.3	151.0	141.6	150.5	149.5	145.6	159.9	154.1	159.8	164.0	148.3
17	149.7	133.5	118.7	128.4	121.3	127.9	122.0	123.3	117.3	119.2	118.3	120.0	123.8	123.2	120.6	120.0	119.9	121.1	118.8	123.9	122.6	122.6	126.4	127.9
18	135.6	137.3	134.2	136.6	139.8	137.7	130.6	128.2	129.5	131.1	128.7	130.0	130.3	126.6	128.0	132.1	136.1	140.0	154.2	160.7	173.6	194.5	210.1	207.3
19	217.1	219.7	211.0	207.3	204.8	220.7	228.5	236.1	230.2	219.7	218.3	229.9	192.5	206.6	222.1	214.7	220.7	242.9	253.1	256.9	248.4	238.7	247.5	241.8
20	230.6	226.9	226.5	219.6	222.7	210.7	212.9	194.1	200.4	220.2	238.5	217.3	227.0	223.8	226.7	252.9	282.1	274.9	268.0	267.6	268.1	269.5	277.5	290.4
21	289.3	279.4	277.1	284.3	296.3	297.0	300.4	304.9	311.0	308.9	236.8	143.0	241.2	261.6	300.2	277.2	279.6	290.4	268.8	270.1	293.1	303.3	279.5	282.5
22	320.0	310.8	292.2	285.5	272.6	273.4	278.5	277.5	276.6	294.2	313.2	308.3	299.7	286.8	279.8	270.1	264.5	244.1	224.8	217.2	213.6	171.3	167.8	149.8
23	158.5	163.5	164.7	175.7	187.3	201.4	280.7	293.5	294.4	299.5	312.9	314.0	321.5	317.3	314.7	327.0	309.8	311.1	306.9	321.1	316.6	311.6	336.2	338.4
24	334.6	312.1	321.7	328.2	316.1	311.6	319.3	320.0	301.6	304.2	301.2	310.5	315.6	161.4	152.6	172.5	78.0	131.2	129.4	140.3	139.0	130.6	133.0	141.7
25	133.5	135.6	124.8	133.2	171.4	164.5	158.1	165.9	155.0	127.0	162.0	255.5	292.8	315.9	305.4	321.1	320.9	309.7	287.9	282.7	273.5	263.3	265.0	265.6
26	267.1	263.6	262.3	262.4	264.0	280.7	281.3	266.9	271.5	247.7	264.5	256.5	253.7	246.6	263.3	101.3	91.7	92.0	100.5	101.7	105.1	107.1	112.3	151.4
27	164.6	174.3	243.1	306.0	312.9	321.7	322.5	324.1	325.9	325.2	323.8	322.2	330.6	336.2	330.3	335.9	332.7	328.6	326.8	327.7	326.0	329.2	329.2	327.2
28	330.4	327.0	329.6	319.2	319.5	310.3	305.6	303.5	296.4	291.5	309.4	313.2	322.8	323.2	317.5	322.8	320.5	331.1	320.7	320.0	332.9	329.4	326.9	318.5

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	323.6	326.1	320.9	307.8	307.1	307.3	302.8	313.7	301.4	312.7	24.9	70.4	147.7	122.3	114.9	122.5	137.6	119.7	122.2	134.4	149.1	160.2	151.2	154.5
2	153.7	163.0	147.2	143.6	143.9	144.5	140.6	137.1	123.8	119.0	123.1	122.1	120.5	121.2	120.8	123.2	120.7	120.9	123.8	124.6	123.5	123.3	126.4	125.2
3	125.8	130.1	130.8	126.3	127.3	130.3	142.8	159.6	161.3	169.0	169.8	171.0	173.0	181.7	192.0	202.6	203.8	212.9	185.5	130.7	141.0	139.1	117.2	128.3
4	132.3	146.9	144.2	138.2	144.1	149.7	151.6	149.5	154.2	160.9	146.0	145.0	151.7	144.9	141.3	144.1	150.1	148.4	136.7	135.3	128.6	134.6	140.0	139.4
5	134.6	136.7	149.7	149.3	174.2	193.0	192.8	206.2	213.6	197.7	186.7	193.4	183.1	211.2	204.4	218.6	248.3	246.7	258.7	278.7	292.7	276.8	279.9	278.0
6	297.9	293.4	326.3	321.4	312.6	315.1	300.3	299.3	270.6	238.0	215.9	231.3	307.3	134.7	72.1	38.0	260.8	249.5	304.7	308.8	352.1	340.0	320.7	317.5
7	312.8	311.6	314.5	319.8	313.0	320.3	309.5	319.6	313.2	309.4	320.7	313.5	313.3	314.1	321.3	308.1	302.8	310.6	307.9	315.0	317.9	319.1	324.9	330.1
8	317.7	317.8	316.7	318.8	316.0	318.9	327.3	331.1	328.3	335.3	308.6	333.6	334.1	318.1	315.4	335.0	331.8	325.3	324.2	321.7	322.8	315.1	321.0	318.1
9	324.3	315.8	313.4	318.0	322.2	324.7	315.9	324.6	330.5	327.1	325.9	319.9	320.9	326.3	326.1	319.3	324.2	329.2	335.7	334.2	333.5	339.3	335.7	334.3
10	322.7	324.0	324.8	314.4	308.4	304.8	300.3	308.5	310.3	302.6	302.0	313.3	318.9	320.2	306.1	311.9	307.5	156.9	126.8	120.2	122.5	125.9	140.4	136.3
11	135.9	135.5	125.3	124.7	131.3	126.9	127.8	122.4	122.6	119.7	113.9	116.0	116.6	119.3	121.1	117.0	115.3	115.9	117.5	118.3	120.8	118.4	115.6	123.4
12	121.1	116.8	125.8	128.8	129.4	122.4	122.2	121.5	117.2	122.3	125.4	141.5	142.2	130.9	111.9	113.5	105.3	103.9	106.9	109.9	152.0	146.5	122.7	168.6
13	150.7	111.6	46.9	133.3	135.0	290.3	311.7	301.8	304.1	309.5	292.5	307.2	308.4	312.7	306.0	310.7	314.9	325.3	325.3	303.0	304.6	303.1	307.1	311.5
14	314.2	316.0	323.3	333.9	325.7	306.8	321.7	323.9	315.6	316.0	318.3	310.4	328.3	320.2	323.2	305.9	313.0	315.3	330.7	315.4	313.5	306.5	317.4	122.1
15	144.5	153.9	136.3	146.7	124.5	157.8	210.1	177.8	142.8	128.1	135.5	163.1	340.3	89.9	124.6	129.0	145.1	148.1	143.6	142.8	143.1	145.0	146.6	143.9
16	149.3	154.6	136.6	132.3	130.3	138.2	140.4	119.7	126.1	129.8	113.4	116.2	117.6	112.4	118.7	126.2	133.8	133.6	128.9	131.7	146.5	133.6	135.0	134.6
17	128.0	129.6	126.9	128.5	126.4	131.1	128.3	129.6	128.8	129.0	135.4	131.4	142.0	148.6	127.6	130.9	136.6	135.6	126.9	126.6	125.0	129.2	130.9	132.5
18	130.2	133.9	129.0	126.4	124.4	128.7	134.3	126.7	106.3	102.3	104.4	102.7	102.7	130.1	345.8	357.4	61.7	83.2	85.2	111.9	120.5	180.3	270.3	312.6
19	309.4	308.1	302.5	136.0	140.3	136.2	130.9	120.1	121.4	118.6	121.8	137.8	134.5	133.8	139.7	145.3	149.6	156.4	146.1	148.9	163.6	156.2	159.8	146.8
20	157.5	170.6	168.0	160.9	143.4	135.6	137.6	148.2	140.2	132.7	94.7	95.6	109.7	99.1	312.5	315.4	336.0	327.9	325.0	321.5	330.7	336.8	331.1	327.2
21	323.2	325.0	324.1	324.1	326.8	327.5	329.8	330.1	329.8	332.0	333.9	323.2	320.2	324.4	328.3	329.7	327.3	318.1	317.7	312.9	316.8	317.1	309.3	316.1
22	315.6	300.8	309.9	309.4	309.2	318.7	319.6	319.5	319.1	326.9	323.0	328.1	330.9	331.5	331.5	334.2	335.2	335.4	334.8	323.6	305.5	304.5	306.4	306.7
23	307.4	303.8	307.0	310.8	309.6	308.0	303.2	314.0	206.7	317.1	309.8	318.1	325.9	305.8	313.2	314.3	307.9	295.7	299.1	305.5	318.6	314.5	309.6	307.3
24	316.1	310.7	322.8	317.4	312.1	314.3	315.2	329.6	330.3	321.2	327.5	333.1	323.4	321.0	325.0	335.3	335.4	334.6	331.9	330.8	332.0	335.5	333.3	310.0
25	311.0	309.7	306.6	303.2	300.3	302.5	303.8	303.2	302.8	310.1	312.4	331.1	327.1	326.8	331.9	332.9	334.3	328.2	320.6	313.5	316.3	311.4	316.5	316.3
26	316.1	312.6	304.9	306.1	306.3	310.9	303.6	302.0	304.2	308.8	305.5	306.2	303.7	311.0	307.5	302.1	301.6	295.8	302.3	304.6	306.3	303.4	308.5	307.3
27	309.3	309.9	305.8	309.3	309.0	307.4	304.2	313.1	261.1	121.0	116.4	105.1	108.9	121.6	113.9	145.0	135.8	115.5	141.6	149.8	158.9	177.7	137.1	112.4
28	118.3	111.8	123.7	112.0	114.4	125.6	114.7	127.9	133.4	141.1	125.6	115.0	117.9	105.7	101.5	119.4	114.3	205.5	225.7	281.2	295.6	299.5	302.4	302.2
29	305.8	324.5	315.7	310.4	312.5	311.1	302.2	307.3	313.5	297.1	301.9	306.9	317.6	150.0	130.8	6.3	100.2	143.2	173.5	158.2	153.7	155.1	142.0	128.5
30	125.3	128.6	134.2	131.5	124.9	127.0	121.9	120.6	121.3	116.7	119.1	120.9	118.6	117.5	115.6	116.7	117.9	117.0	118.8	117.8	118.6	117.9	115.8	116.6
31	117.0	117.3	117.7	119.7	122.5	121.8	121.5	120.1	122.1	169.6	206.2	205.2	204.7	222.7	243.3	251.1	256.1	260.1	263.1	264.5	272.6	316.1	309.7	307.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	307.6	318.0	310.4	310.4	310.2	305.8	305.1	310.1	313.4	298.4	286.2	263.8	268.3	289.3	263.3	248.3	253.9	248.8	218.5	152.8	200.2	219.5	198.3	138.8
2	127.0	191.2	184.9	211.7	243.8	162.9	198.9	170.4	126.5	131.1	129.2	116.9	143.4	163.4	131.7	103.4	116.8	119.4	113.2	137.4	115.6	116.7	108.2	112.3
3	109.9	116.5	115.5	112.6	113.4	114.9	111.9	114.4	113.0	116.9	117.0	118.7	116.2	117.9	122.8	130.5	137.5	144.4	144.2	131.1	125.8	134.0	124.2	123.9
4	133.4	140.2	136.8	129.4	131.1	132.5	144.0	147.1	129.3	102.6	145.5	147.4	138.2	137.6	142.2	235.6	313.9	355.0	355.5	333.2	323.7	321.9	324.9	315.6
5	322.0	311.2	315.2	320.6	325.6	319.7	322.4	325.8	325.2	333.7	325.5	324.4	321.7	321.7	326.6	326.8	327.8	328.9	329.0	326.7	316.7	318.3	321.5	328.7
6	324.8	330.9	324.5	320.9	318.6	323.6	324.7	310.3	311.8	322.7	309.7	307.7	317.9	316.6	321.2	316.0	313.1	306.6	303.6	310.8	310.1	247.4	131.3	110.2
7	106.3	109.7	121.0	129.1	141.4	136.1	155.3	165.7	142.2	157.9	164.3	147.5	129.6	132.3	138.1	142.8	134.1	126.0	124.6	131.0	129.5	126.4	120.9	120.7
8	127.1	125.7	126.9	127.3	122.2	123.8	119.9	115.0	115.9	121.1	120.6	125.9	133.0	130.0	128.6	133.9	143.4	154.5	157.7	157.5	147.8	156.7	161.6	178.7
9	196.5	186.1	172.5	182.1	174.1	182.8	177.2	174.0	189.1	188.1	196.6	202.5	210.2	212.0	217.9	215.9	194.4	190.2	215.8	209.9	198.0	206.3	204.0	205.7
10	123.2	143.0	202.0	199.7	219.1	229.4	230.1	232.3	233.1	237.2	240.8	274.5	301.9	289.5	293.5	268.1	266.7	268.7	267.9	269.6	283.8	313.0	214.8	217.1
11	234.1	157.2	171.0	127.5	121.4	112.4	94.7	91.2	99.0	98.6	99.9	113.2	110.9	111.9	112.2	115.0	117.4	113.3	107.2	106.9	107.3	110.7	109.7	111.8
12	113.6	114.2	116.8	116.9	117.8	111.1	109.5	115.0	117.7	117.7	122.1	129.8	142.4	147.7	160.8	189.5	201.5	204.2	209.9	213.7	215.3	217.1	223.6	184.2
13	202.5	201.1	270.1	324.6	323.0	316.4	326.7	318.5	314.1	313.1	309.0	310.5	316.0	315.9	316.2	317.5	322.4	320.3	312.8	314.8	314.6	311.9	314.3	327.1
14	333.0	335.3	333.1	331.6	331.9	337.8	335.3	333.0	334.1	333.8	337.6	325.5	332.6	329.8	326.6	330.4	327.8	327.0	325.2	323.6	320.6	310.3	308.6	306.9
15	314.6	322.0	322.9	319.0	313.3	320.5	322.8	322.0	333.2	331.5	321.3	333.0	327.2	331.5	332.4	323.6	329.9	334.8	339.1	317.2	313.6	307.6	306.1	106.7
16	119.8	139.6	118.1	125.5	128.7	123.3	125.0	122.9	119.7	121.4	121.4	116.9	115.5	114.2	113.7	114.7	114.4	117.0	113.4	106.7	90.7	80.2	70.7	58.7
17	51.1	53.6	54.0	51.9	52.9	62.8	84.3	103.8	112.5	123.3	108.4	112.0	129.9	123.6	132.4	137.1	128.6	129.0	146.6	136.9	153.4	80.6	315.0	326.2
18	318.5	318.0	317.7	299.2	309.8	322.9	303.7	342.9	311.6	86.7	129.0	257.5	287.7	241.0	173.5	189.7	217.7	253.7	245.9	238.5	252.3	224.3	239.4	255.4
19	283.9	72.2	144.2	172.2	209.7	223.7	157.2	267.1	270.8	258.6	262.4	331.4	290.0	226.1	233.6	225.5	207.5	178.4	200.7	222.7	229.9	228.7	216.9	210.3
20	222.0	213.4	197.4	109.1	121.7	139.4	97.7	117.9	131.5	121.6	114.6	121.1	144.8	139.6	127.5	127.2	122.2	124.8	122.8	118.9	117.6	120.1	119.5	115.1
21	115.2	116.6	115.6	108.8	109.5	111.4	113.8	115.9	113.2	115.3	119.1	120.2	121.3	121.6	120.7	124.1	148.5	171.7	162.6	160.0	106.1	120.0	125.4	139.7
22	130.9	125.4	109.1	125.5	112.9	121.7	142.7	160.0	147.3	278.8	79.9	146.4	286.0	283.6	258.9	244.8	302.5	296.2	302.4	170.1	139.6	171.1	165.0	165.8
23	166.5	159.2	138.1	139.2	129.4	138.9	134.9	124.7	123.8	123.2	142.4	147.5	147.1	139.9	145.8	231.0	238.2	298.3	315.8	324.3	315.7	310.4	310.0	314.4
24	315.0	314.2	312.3	323.3	318.6	312.4	307.0	308.8	315.1	308.9	307.6	304.7	300.0	297.4	292.1	281.8	259.8	250.7	241.5	236.6	227.6	223.1	222.4	226.4
25	219.2	206.5	200.8	185.6	187.9	172.9	166.6	157.5	147.4	131.7	119.5	118.5	124.2	144.5	145.0	128.2	129.5	124.7	117.7	114.7	116.2	116.3	116.9	105.2
26	105.2	104.8	106.2	112.1	111.2	114.0	94.8	103.5	101.5	94.6	90.6	100.0	139.0	130.7	146.2	160.4	169.4	169.2	166.6	90.6	69.3	61.6	57.4	61.1
27	57.4	53.2	36.7	12.2	24.0	40.3	337.2	350.2	306.2	321.9	313.1	307.5	332.1	342.0	330.6	339.7	349.4	347.3	342.9	347.7	343.0	328.3	328.0	327.8
28	321.5	319.6	312.6	306.1	304.8	304.0	315.4	313.2	308.9	309.5	282.0	164.0	168.5	180.7	152.8	141.1	123.5	115.8	93.2	38.8	110.6	202.4	299.4	284.4
29	256.4	313.9	307.7	305.9	303.1	299.8	308.9	315.7	317.1	309.7	316.9	322.4	326.7	330.1	328.8	326.8	311.6	314.6	317.0	320.4	308.5	301.0	297.9	301.9
30	306.9	309.3	312.4	307.8	306.9	314.4	328.8	130.3	116.2	120.3	124.8	118.5	141.6	141.7	133.2	140.5	147.6	139.5	120.2	119.4	121.6	125.7	122.5	118.1

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	112.4	117.0	120.4	115.5	121.8	120.2	114.8	114.7	112.7	112.1	112.3	112.2	111.1	110.9	108.8	106.3	104.7	106.0	101.7	93.2	91.3	93.9	97.2	99.5
2	91.0	91.1	81.7	82.8	82.7	85.0	81.9	100.7	138.2	133.7	130.4	131.3	126.4	127.7	132.6	120.1	128.7	124.5	120.9	124.6	121.5	124.3	125.9	131.0
3	127.6	123.8	122.9	126.6	113.0	103.9	95.5	84.6	95.8	85.3	68.5	76.0	59.0	68.3	73.7	66.2	66.9	79.4	68.9	157.4	235.3	180.7	236.8	299.5
4	330.7	354.3	49.9	67.8	109.6	124.6	124.6	122.9	124.6	130.8	130.1	131.9	135.9	133.6	130.9	127.2	126.1	120.5	118.1	119.2	117.8	114.8	114.7	114.2
5	113.5	117.0	117.7	118.3	117.5	121.9	121.5	118.0	117.7	115.9	118.6	115.2	117.3	122.6	125.0	126.3	127.1	124.6	119.3	129.5	131.3	112.0	129.8	169.8
6	158.9	158.1	111.8	111.8	108.9	123.9	127.9	121.3	140.1	176.6	201.3	222.1	227.8	223.3	218.2	215.0	203.7	208.0	213.7	221.5	220.6	220.7	219.2	217.7
7	211.8	201.5	213.1	215.3	222.3	220.8	213.9	213.6	214.8	221.3	215.6	210.1	209.3	224.5	217.9	225.6	219.3	216.6	226.7	218.7	224.8	226.3	219.4	247.0
8	140.1	121.9	116.6	124.7	130.2	127.5	122.5	117.8	104.4	114.8	114.2	117.7	119.5	111.3	98.3	100.0	102.1	115.2	113.7	102.7	78.5	93.7	102.6	83.0
9	86.0	69.6	70.9	67.9	73.8	79.4	96.2	89.5	99.1	93.3	103.0	134.7	153.2	130.7	121.9	124.5	129.0	206.7	90.3	173.4	251.8	42.1	70.7	75.7
10	79.5	71.1	91.0	78.3	29.0	20.4	120.7	318.8	324.9	316.2	268.0	249.6	258.3	271.5	312.3	318.5	273.4	293.7	297.7	306.7	307.4	306.9	318.2	325.1
11	54.9	82.9	149.9	161.0	117.7	175.6	261.0	185.5	255.4	231.5	231.1	251.4	254.0	265.5	235.7	67.3	275.2	340.6	320.3	314.2	313.8	308.2	310.3	317.4
12	319.2	310.3	317.4	319.2	318.2	317.7	318.6	321.4	323.0	321.1	326.8	328.8	327.8	333.8	329.2	338.0	339.0	331.2	317.9	297.6	301.8	300.3	324.2	314.5
13	323.7	320.3	313.9	310.9	307.8	305.2	307.6	302.9	337.9	304.9	225.3	232.7	248.0	239.7	225.9	224.3	220.7	221.7	183.8	178.3	171.0	238.4	149.4	142.6
14	143.4	147.6	156.4	141.9	128.7	142.0	159.3	151.3	143.5	145.9	139.5	141.4	149.6	157.1	135.8	136.3	145.2	142.7	147.0	139.7	144.7	143.9	147.3	155.2
15	161.8	167.6	170.6	174.7	169.4	153.5	174.7	207.4	306.3	282.8	281.6	268.9	242.9	239.3	251.3	224.1	227.0	217.7	209.9	201.4	221.8	227.6	253.1	262.3
16	261.9	153.4	162.5	325.5	327.9	322.4	316.3	299.3	295.9	293.5	275.2	255.5	248.5	250.3	246.2	262.0	251.6	227.2	218.3	209.9	185.0	201.8	191.5	213.9
17	228.6	289.2	312.1	325.0	309.4	322.0	336.3	12.2	86.7	119.5	141.3	133.4	147.0	155.1	147.9	131.9	124.4	136.5	144.6	145.1	147.7	153.3	161.3	153.2
18	163.6	160.1	161.1	169.7	175.1	189.4	152.7	130.2	183.8	220.4	191.1	213.6	223.5	242.5	248.4	246.1	252.2	262.0	255.7	248.6	251.3	247.0	246.4	189.3
19	256.5	278.4	289.0	299.0	242.3	222.1	131.0	120.6	115.2	137.0	152.9	134.7	137.5	134.1	129.7	129.1	121.5	117.8	117.3	117.2	118.4	117.7	118.2	125.3
20	128.7	132.9	132.1	126.1	127.5	130.4	129.7	127.7	123.1	127.5	128.8	125.9	127.6	123.8	120.5	126.8	143.2	145.2	162.0	255.4	311.7	313.2	312.6	315.2
21	314.7	310.2	312.0	313.3	314.6	319.5	330.5	334.8	337.7	340.1	334.7	334.5	335.6	332.9	341.1	339.9	332.2	329.8	335.9	339.2	335.9	337.4	343.3	336.5
22	329.4	327.8	327.6	327.5	331.1	331.7	335.3	341.5	342.9	337.4	333.2	335.5	343.9	347.6	353.6	356.3	343.4	347.3	347.6	347.6	337.3	342.3	339.2	332.8
23	328.6	333.3	319.4	310.3	316.8	308.0	311.9	323.9	308.9	314.4	329.7	351.0	21.3	49.4	359.2	343.0	2.7	343.1	338.4	342.6	326.6	313.1	309.8	315.5
24	311.2	294.5	304.0	308.7	300.1	307.7	318.9	318.2	313.0	323.7	322.9	257.0	251.4	240.2	227.5	239.9	309.6	310.3	292.7	275.3	284.2	299.1	310.5	310.3
25	308.6	309.9	310.5	304.6	307.4	310.4	316.3	309.2	328.8	322.4	327.8	350.8	2.6	339.8	330.8	203.5	220.6	228.8	256.8	264.1	290.7	306.4	318.5	323.1
26	320.3	309.9	312.2	316.0	313.1	297.8	298.0	316.7	333.9	331.1	335.4	344.4	352.1	349.6	342.2	341.0	340.0	338.3	340.5	337.2	328.8	314.4	325.7	329.0
27	337.3	320.0	321.3	335.6	343.1	341.9	339.3	331.0	329.1	331.6	333.4	333.6	339.2	337.5	345.0	347.4	348.1	354.4	348.2	349.4	358.1	350.3	343.2	327.9
28	324.1	303.0	300.4	291.7	162.8	147.7	146.4	162.2	172.2	177.3	244.7	337.0	326.1	296.9	304.1	307.8	308.2	302.7	278.5	203.9	216.6	177.6	174.2	172.5
29	173.4	172.7	168.5	164.3	164.5	163.1	157.6	154.1	147.6	149.6	151.8	156.5	156.3	160.0	154.9	151.1	153.9	160.6	158.8	170.2	177.3	177.1	168.1	164.3
30	167.4	174.6	173.7	153.6	137.2	163.4	158.5	189.3	207.8	168.3	166.1	161.0	176.5	186.8	175.9	157.1	160.2	161.2	165.7	163.4	163.7	155.7	150.3	191.5
31	197.8	192.7	191.4	136.5	181.9	189.7	190.1	189.2	185.2	199.2	208.2	204.5	209.6	227.2	226.5	227.4	231.0	228.9	233.0	230.3	220.6	220.5	268.3	251.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	259.8	326.8	320.1	305.7	318.1	312.3	315.7	331.0	340.3	343.1	331.4	340.5	337.8	342.7	338.0	332.6	313.8	302.8	304.0	264.2	267.1	269.6	272.7	296.3
2	294.4	296.4	298.5	304.8	307.6	305.5	308.2	316.1	329.1	0.1	352.6	335.2	329.9	308.5	313.1	317.4	305.3	320.2	314.2	321.9	319.3	303.2	310.0	323.0
3	326.8	321.1	320.3	328.9	324.5	325.0	336.9	336.9	335.3	341.2	342.0	335.6	335.7	329.6	327.3	325.0	327.5	332.6	338.4	337.2	338.0	328.4	324.0	328.0
4	328.4	328.0	321.2	324.7	330.1	344.8	346.3	338.2	333.2	332.5	336.2	341.3	343.3	337.3	339.0	340.8	344.4	346.0	347.3	349.8	342.7	338.0	330.3	326.6
5	326.2	321.1	329.3	325.8	315.4	315.6	318.3	319.1	319.9	329.8	330.4	354.5	347.9	328.8	342.1	333.2	326.8	324.4	337.6	321.0	311.6	272.8	273.2	268.9
6	258.9	229.7	199.0	186.2	125.1	112.0	112.6	121.4	125.7	137.2	184.6	177.5	164.0	157.5	154.1	143.9	142.1	141.2	142.7	141.2	143.0	146.4	148.3	143.7
7	143.0	141.9	137.3	127.8	131.2	135.0	137.4	127.8	121.9	124.0	126.3	125.1	128.9	130.3	129.5	126.3	127.5	125.4	125.6	118.5	114.7	118.3	119.6	123.5
8	125.1	126.3	123.0	119.8	121.6	123.3	122.7	122.3	121.7	119.9	121.6	120.3	119.6	117.4	120.0	119.7	116.9	118.8	119.8	121.0	121.5	120.4	115.2	113.4
9	113.7	118.7	118.1	120.3	121.6	122.6	121.5	123.5	120.4	117.5	122.0	120.4	118.0	116.8	116.3	115.7	118.6	126.1	131.3	128.4	133.7	132.0	128.6	123.4
10	127.8	123.1	124.4	121.9	122.4	123.6	124.8	122.1	122.7	123.2	126.2	126.1	122.5	123.2	118.9	122.8	120.8	121.8	118.8	118.2	118.5	118.6	119.4	118.7
11	116.9	117.1	117.1	118.2	117.4	118.8	120.7	123.3	124.3	123.3	124.4	125.6	125.4	122.7	123.3	122.8	124.3	127.7	124.1	122.8	122.4	122.1	125.8	123.5
12	122.5	122.8	125.8	125.1	120.7	122.7	125.9	127.4	132.8	133.2	133.1	136.3	137.6	140.2	140.5	143.2	143.9	148.8	145.1	140.7	151.0	152.7	146.4	151.6
13	151.0	146.4	150.5	151.8	154.4	146.4	146.8	124.0	123.0	132.3	128.9	135.6	152.2	157.5	152.2	152.8	160.2	172.4	170.9	196.6	174.3	232.9	295.7	299.2
14	329.3	329.3	331.2	306.4	324.4	319.6	307.6	325.4	335.6	18.4	4.7	64.4	73.4	81.4	76.4	91.3	89.3	39.0	114.4	164.7	150.2	57.4	5.6	316.7
15	312.5	310.7	309.4	310.3	306.1	314.0	317.0	318.3	311.7	345.6	347.7	0.0	11.4	344.6	4.2	145.2	159.7	129.6	174.3	165.3	170.6	173.5	162.9	168.0
16	154.0	155.8	153.8	159.6	169.3	172.9	160.2	158.1	144.4	160.1	154.7	152.0	153.1	144.7	144.8	146.5	139.5	125.1	129.5	136.0	133.5	129.5	146.1	163.1
17	157.4	138.2	135.6	127.8	123.3	130.6	142.6	160.4	164.3	161.5	150.3	148.6	153.6	169.5	168.9	162.6	157.3	158.5	154.1	152.4	150.0	151.5	156.9	154.6
18	155.9	147.2	62.8	351.4	10.3	98.3	120.8	118.1	105.5	118.5	132.4	124.5	127.5	125.0	119.7	126.3	127.6	128.6	134.8	137.3	139.7	142.5	116.0	83.3
19	109.4	135.2	133.4	131.7	125.3	121.2	137.1	144.1	341.6	23.9	60.6	82.8	89.7	133.1	131.9	172.8	97.8	193.3	188.4	163.6	166.1	175.0	169.1	158.7
20	160.5	134.8	126.7	137.4	126.1	116.2	110.7	107.6	119.4	10.1	336.6	320.2	81.9	162.5	164.6	149.0	149.7	133.7	128.4	129.1	130.1	126.2	132.6	136.5
21	153.3	150.7	155.8	173.2	183.5	279.8	327.5	337.3	345.5	351.1	353.4	351.1	3.5	358.4	268.6	314.6	303.9	315.2	323.3	338.9	315.8	302.5	297.9	299.2
22	297.1	300.6	312.8	323.0	318.2	319.8	319.8	321.9	336.0	20.3	139.2	171.5	161.1	152.2	147.4	148.9	140.3	141.3	131.7	127.8	135.7	133.7	135.8	129.5
23	128.6	131.4	136.2	137.4	147.6	144.1	148.7	147.0	144.3	151.6	154.0	151.7	147.4	145.7	141.4	152.4	145.3	143.3	154.4	163.3	164.2	158.3	165.8	154.8
24	143.6	151.4	165.5	172.8	156.3	128.4	298.0	329.2	342.4	355.2	351.0	2.8	34.4	58.0	7.3	30.1	206.6	198.6	238.1	300.0	271.8	295.7	279.8	288.5
25	316.2	309.6	298.2	309.5	3.5	323.8	315.6	324.2	60.6	113.4	155.0	183.5	207.9	194.2	186.8	186.3	186.6	167.1	159.9	160.3	158.6	170.9	168.3	172.3
26	176.6	169.7	152.1	155.8	152.0	165.9	120.3	121.2	144.6	305.6	306.0	320.9	266.2	296.3	262.6	229.4	251.4	201.4	178.9	169.2	167.9	179.9	175.4	186.1
27	184.6	269.0	275.8	283.8	313.8	313.5	326.6	330.2	324.0	323.4	339.3	9.3	256.4	312.7	266.3	222.9	224.7	225.6	231.4	264.6	272.8	286.5	323.7	319.4
28	286.7	291.1	277.1	294.8	294.6	124.9	129.0	178.9	219.7	188.9	196.4	185.5	203.7	252.5	241.1	236.0	236.2	211.9	197.1	232.1	225.5	176.1	160.9	170.2
29	162.9	172.6	189.6	181.9	176.7	171.0	141.0	157.5	151.4	142.5	161.2	166.7	144.1	147.1	147.9	139.9	135.1	130.7	137.7	142.1	152.7	163.3	152.8	143.6
30	139.7	148.4	155.6	160.6	170.3	177.8	187.9	191.8	197.1	206.5	200.6	204.1	220.1	225.3	221.5	213.7	275.9	290.7	324.0	7.0	335.3	298.4	253.7	211.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	243.5	288.3	325.6	314.0	336.5	1.3	43.9	120.7	358.6	350.7	343.3	60.4	24.3	325.7	330.0	301.4	292.5	263.9	270.8	260.7	259.5	270.0	270.3	308.0
2	294.5	284.8	316.2	316.9	318.0	311.1	318.7	311.7	319.8	309.8	314.3	316.7	297.9	315.7	304.7	314.5	317.0	314.1	328.8	333.6	329.5	328.0	333.3	330.7
3	322.7	313.9	308.3	312.4	314.0	310.1	306.2	320.9	322.4	328.3	357.6	0.1	0.1	350.0	322.2	331.1	166.9	171.9	190.4	222.8	268.6	237.2	132.5	146.1
4	139.1	126.2	141.5	139.1	139.8	125.3	52.1	1.7	347.6	331.0	330.1	322.0	330.0	311.9	302.0	280.3	270.7	255.2	258.0	239.3	213.3	178.8	143.8	142.9
5	141.9	130.4	128.8	139.4	144.9	140.1	131.7	129.6	138.0	125.9	123.6	117.2	124.5	157.2	257.7	197.2	257.2	206.5	241.3	112.8	103.6	114.4	74.1	273.2
6	345.5	254.6	294.6	218.3	145.3	312.8	323.0	109.9	117.9	114.8	111.1	16.2	150.1	163.5	164.3	180.3	200.1	12.4	256.3	170.2	184.3	137.1	158.4	175.5
7	144.1	125.3	138.0	156.6	155.2	148.5	145.0	147.2	154.1	151.8	155.9	157.4	153.4	147.0	159.7	164.2	154.4	149.4	177.1	167.8	173.3	165.5	180.9	191.0
8	197.2	201.3	203.8	214.9	212.0	217.5	216.1	217.1	218.2	221.4	216.8	257.9	27.2	82.2	227.5	157.5	341.1	308.6	295.7	308.6	299.5	294.3	287.9	311.6
9	344.0	308.7	312.3	311.8	304.9	316.8	312.3	322.6	328.6	40.2	84.3	103.6	134.4	146.5	150.5	146.3	150.9	158.8	151.0	148.3	137.6	139.5	139.6	133.1
10	131.1	120.4	118.7	120.1									118.7	124.2	120.0	116.9	118.9	126.6	119.7	121.0	124.2	129.1		
11		130.7	129.2	127.3	132.3	140.1	129.5	119.0	112.5		104.9	92.6	109.0	120.3	121.6	126.5	128.8	125.2	126.1	94.0	135.5	149.5	167.1	189.2
12	163.4	163.2	167.3	179.2	198.7	202.4	172.8	170.4	129.8	139.0	176.8	250.3	300.0	322.5	309.5	317.4	312.1	314.2	312.9	315.4	316.3	328.8	341.7	339.8
13	328.5	298.9	314.2	297.8	352.6	354.7	356.6	306.3	310.8	311.6	310.2	308.9	314.6	302.7	247.4	350.2	174.5	219.1	211.6	213.5	212.7	212.1	216.0	220.5
14	218.3	213.4	212.1	219.4	219.3	215.9	206.9	207.5	222.3	225.2	225.0	216.2	219.4	219.3	216.0	219.1	219.3	213.0	217.3	213.6	217.5	214.7	204.1	200.3
15	202.4	210.0	204.7	200.2	200.2	216.6	228.2	220.3	215.7	217.9	230.5	231.7	223.4	217.3	213.5	205.3	222.7	205.8	198.4	190.8	193.0	211.2	216.1	203.7
16	189.1	182.4	176.4	173.8	166.0	171.0	168.7	163.1	162.9	157.6	151.0	139.9	136.1	129.8	133.6	127.7	121.8	117.9	116.0	120.5	121.8	122.2	120.3	120.7
17	118.9	124.5	127.1	114.5	116.5	117.1	113.6	115.3	114.4	111.0	113.0	115.9	117.6	116.9	117.9	118.6	118.9	119.1	118.0	119.4	121.6	120.7	120.0	119.2
18	121.9	122.7	119.8	119.8	118.5	118.2	117.4	113.8	122.7	121.3	119.4	122.3	125.5	119.2	118.7	119.7	118.7	118.7	118.8	121.4	120.0	122.2	123.5	127.0
19	124.7	123.7	127.3	127.3	127.1	127.1	121.3	128.0	130.2	132.2	136.9	132.7	110.5	98.4	102.4	90.5	95.6	90.4	96.6	84.5	96.3	100.9	89.7	110.2
20	135.0	152.6	136.3	138.6	146.8	169.9	191.8	159.2	278.3	319.9	317.7	310.3	344.4	345.0	345.4	347.8	357.0	17.0	34.0	81.8	78.9	79.4	85.7	94.5
21	117.4	90.8	98.2	159.0	182.2	168.4	175.3	170.4	169.0	178.8	161.3	133.4	108.5	94.5	142.4	290.8	320.5	217.0	162.8	124.9	132.6	312.6	59.0	136.3
22	153.0	155.5	158.1	162.5	151.8	126.9	119.6	120.0	112.8	108.5	103.7	345.9	352.2	310.2	310.8	336.9	14.9	74.3	109.8	137.4	140.6	138.0	147.9	171.7
23	156.1	161.7	163.2	144.1	129.1	117.2	125.2	121.8	128.6	113.5	115.2	109.2	112.9	119.4	109.1	110.0	97.7	100.3	94.8	111.8	129.1	63.7	63.5	91.6
24	98.9	102.5	126.1	108.5	121.6	142.0	142.6	148.4	143.8	113.1	116.5	125.7	122.1	110.6	113.8	111.4	113.5	111.0	104.8	106.9	95.0	111.9	121.5	124.2
25	124.8	155.7	157.0	144.3	128.0	116.8	123.9	121.2	126.0	130.9	131.0	128.3	122.4	104.3	116.0	118.5	116.8	113.8	113.8	121.1	121.1	125.6	120.2	118.2
26	126.0	143.3	151.6	161.2	166.4	178.6	173.6	193.6	189.0	173.1	201.1	188.0	192.2	163.0	166.4	124.1	144.8	151.2	219.1	218.5	210.0	210.3	214.5	221.3
27	222.8	215.5	216.3	219.9	219.7	220.0	220.0	227.8	228.9	229.4	228.6	228.8	226.4	209.8	173.4	160.5	346.6	328.0	309.2	127.9	132.0	108.3	179.2	146.6
28	126.2	163.4	152.4	170.6	171.7	171.4	163.1	261.4	116.2	144.1	156.5	139.6	137.0	138.3	136.4	135.3	140.2	153.4	163.9	172.8	200.7	197.6	193.7	197.2
29	199.0	202.9	211.5	214.1	189.6	203.5	190.3	216.8	223.5	222.8	237.3	243.9	235.9	234.2	236.1	247.9	256.0	267.2	276.0	270.3	265.8	266.2	261.7	260.8
30	234.7	225.0	229.5	230.9	221.0	221.8	236.4	239.4	241.5	244.2	252.4	272.2	274.7	285.4	296.6	328.6	213.6	201.5	222.2	315.5	306.8	310.6	315.9	312.3
31	316.6	315.4	312.6	312.6	309.8	306.6	304.3	306.9	299.9	303.8	301.6	298.9	304.1	301.6	303.1	304.0	305.1	308.0	304.0	306.2	306.4	294.9	292.5	294.2

Total Hours in Month 744 **Hours Data Available** 732 **Data Recovery** 98.4%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.4	16.7	16.8	7.0	3.6	6.5	16.9	9.3	14.3	12.9	15.3	27.7	11.0	10.4	13.3	13.6	8.0	6.8	6.3	6.0	5.3	5.5	5.0	6.4	27.7	3.6	10.7
2	4.4	5.5	6.5	4.5	3.9	5.9	4.4	5.8	5.7	8.6	8.9	9.6	6.9	5.9	7.7	7.9	7.1	6.8	40.1	8.4	17.9	17.1	15.4	19.1	40.1	3.9	9.7
3	21.8	16.1	21.5	9.0	10.8	9.8	8.7	7.4	12.4	13.6	15.0	14.6	23.7	28.3	29.5	15.1	8.5	8.0	11.7	5.2	12.5	9.8	8.9	14.5	29.5	5.2	14.0
4	8.8	8.8	8.9	9.9	16.3	13.1	25.7	16.4	22.9	30.9	49.6	19.7	49.9	17.9	12.3	13.7	8.6	20.8	31.8	34.4	24.0	13.8	22.7	36.5	49.9	8.6	21.6
5	25.2	16.5	22.1	17.6	34.9	14.1	13.4	34.4	36.9	26.1	9.4	15.0	12.5	17.2	11.9	10.3	11.0	7.8	6.9	6.7	6.6	5.7	12.9	12.0	36.9	5.7	16.1
6	25.6	17.6	17.7	10.6	11.9	19.0	13.5	40.1	32.4	47.8	32.1	44.5	51.8	25.8	13.1	16.5	17.1	11.2	11.2	5.2	4.9	3.1	7.5	6.8	51.8	3.1	20.3
7	11.6	11.7	11.7	48.2	22.5	28.0	36.7	7.9	6.5	10.6	39.2	38.4	10.6	14.0	26.8	50.9	16.5	12.3	13.3	10.1	3.6	2.0	3.5	2.8	50.9	2.0	18.3
8	3.2	3.4	4.2	2.5	2.9	3.2	3.1	3.9	7.3	9.1	19.8	46.3	47.2	46.6	26.8	20.9	13.4	8.5	9.6	6.3	16.5	37.0	10.4	9.6	47.2	2.5	15.1
9	4.7	5.1	5.0	4.3	3.3	4.7	4.7	6.2	6.0	9.8	10.7	11.0	10.5	12.4	10.7	8.9	7.6	7.3	5.6	4.6	3.3	12.9	9.4	5.0	12.9	3.3	7.2
10	14.5	13.4	18.2	19.8	26.5	8.2	13.5	7.0	10.9	24.4	24.3	22.2	18.4	14.8	10.1	9.8	9.6	11.0	13.1	8.3	4.5	5.9	6.6	3.8	26.5	3.8	13.3
11	5.0	3.7	4.4	4.6	2.6	2.5	2.5	3.3	5.5	7.4	9.0	9.1	9.7	19.9	46.3	46.6	20.0	31.0	28.8	9.5	8.9	5.1	4.0	2.2	46.6	2.2	12.1
12	23.1	16.7	6.0	8.3	7.6	6.2	10.7	9.5	13.4	10.3	8.7	13.8	9.9	11.2	8.5	11.5	8.9	7.9	7.4	5.0	6.1	4.2	4.2	3.3	23.1	3.3	9.3
13	2.8	3.2	9.0	6.7	6.5	12.0	6.1	7.8	14.2	12.2	14.2	14.1	17.2	16.5	11.5	7.3	6.4	11.6	6.6	5.8	6.2	11.4	7.2	3.7	17.2	2.8	9.2
14	4.1	4.0	7.6	9.8	8.1	8.7	21.8	6.7	8.5	12.8	13.1	14.8	16.4	29.4	17.0	21.0	10.4	7.4	11.0	46.9	14.3	10.0	4.6	5.9	46.9	4.0	13.1
15	5.0	6.0	6.5	5.3	5.0	4.9	7.3	5.4	7.0	7.4	8.1	7.5	10.2	10.4	7.7	8.0	8.2	7.4	5.3	5.1	6.7	6.3	7.0	9.8	10.4	4.9	7.0
16	11.1	9.2	8.7	8.0	4.2	4.4	4.5	4.9	5.0	5.7	5.6	4.9	5.4	5.8	5.5	5.3	5.5	5.1	4.5	4.8	4.6	4.7	4.4	4.6	11.1	4.2	5.7
17	4.6	4.5	4.4	4.4	5.2	4.2	4.1	5.2	10.0	5.9	6.4	12.0	7.1	7.7	6.5	7.5	11.9	8.1	10.7	11.5	5.9	10.7	15.6	13.6	15.6	4.1	7.8
18	12.1	7.5	12.2	9.9	9.6	18.4	13.5	19.0	17.7	5.7	9.6	8.0	7.3	7.5	6.8	5.9	7.9	8.6	12.2	32.2	23.0	39.5	33.9	36.0	39.5	5.7	15.2
19	40.1	30.8	49.6	11.6	19.0	8.7	5.7	6.4	4.9	7.1	7.5	6.4	7.2	8.0	6.2	7.2	6.6	5.0	3.5	4.5	4.1	4.0	4.5	4.4	49.6	3.5	11.0
20	8.5	7.5	5.3	5.9	7.8	7.0	6.5	4.5	7.7	8.4	6.9	8.2	9.1	9.8	9.0	5.8	8.0	5.8	10.6	7.2	5.2	5.0	4.6	4.9	10.6	4.5	7.1
21	5.0	5.5	5.4	7.0	5.3	5.8	5.0	4.8	5.7	5.8	6.2	8.3	5.6	12.1	10.5	11.8	9.7	10.4	8.9	4.5	5.4	3.5	3.7	6.5	12.1	3.5	6.7
22	9.1	22.7	16.8	6.2	7.7	12.7	11.2	7.3	7.8	6.4	5.0	5.1	4.7	4.5	4.7	5.0	5.1	5.1	5.4	5.9	5.9	5.2	5.0	5.6	22.7	4.5	7.5
23	5.5	5.5	8.6	6.2	7.0	10.9	5.9	6.8	6.1	7.6	6.5	6.4	8.2	8.7	7.7	7.9	6.9	7.5	7.7	7.9	6.3	5.8	5.7	5.5	10.9	5.5	7.0
24	5.1	5.2	5.8	6.2	10.7	22.8	14.7	15.4	12.4	17.7	3.8	3.7	4.0	4.9	6.1	6.2	5.5	6.3	5.5	4.8	3.6	5.1	4.8	4.5	22.8	3.6	7.7
25	4.7	5.7	4.1	6.4	6.9	7.8	22.3	8.6	7.8	12.1	21.4	20.5	16.5	13.2	24.0	8.7	12.8	11.4	7.4	3.4	3.8	2.9	5.1	3.3	24.0	2.9	10.0
26	3.3	3.4	3.7	3.5	7.0	6.5	7.2	5.4	7.1	5.7	5.4	7.7	6.6	8.3	7.1	6.1	5.9	4.5	3.7	4.0	3.8	4.0	4.7	3.8	8.3	3.3	5.4
27	5.3	7.2	6.7	4.7	4.0	13.6	6.1	9.0	4.6	7.0	7.8	9.8	10.5	9.6	11.1	5.5	5.4	5.0	6.7	11.8	30.3	11.3	11.8	10.9	30.3	4.0	9.0
28	9.1	6.5	9.3	7.4	7.3	5.2	6.0	5.8	6.9	5.6	7.1	7.6	6.6	8.5	6.8	5.9	7.2	6.1	8.6	5.5	6.8	5.2	5.1	5.9	9.3	5.1	6.7
29	5.8	6.2	5.1	5.1	5.4	5.3	4.8	5.2	5.4	5.2	4.5	4.9	5.6	5.4	5.4	6.8	7.7	5.3	6.8	6.0	5.0	4.6	4.9	3.8	7.7	3.8	5.4
30	5.7	6.4	5.7	4.4	5.8	5.1	4.4	4.4	4.9	5.4	6.0	6.0	5.7	5.5	5.1	6.0	5.1	5.8	4.3	5.2	4.1	4.2	4.3	4.0	6.4	4.0	5.1
31	4.0	5.0	6.7	5.2	4.5	4.0	4.6	3.6	4.5	6.0	6.0	5.3	6.6	5.9	5.8	6.1	6.0	4.9	5.1	4.4	5.3	6.7	3.3	3.2	6.7	3.2	5.1
Max.	**40.1**	**30.8**	**49.6**	**48.2**	**34.9**	**28.0**	**36.7**	**40.1**	**36.9**	**47.8**	**49.6**	**46.3**	**51.8**	**46.6**	**46.3**	**50.9**	**20.0**	**31.0**	**40.1**	**46.9**	**30.3**	**39.5**	**33.9**	**36.5**	**51.8**		
Min.	**2.8**	**3.2**	**3.7**	**2.5**	**2.6**	**2.5**	**2.5**	**3.3**	**4.5**	**5.2**	**3.8**	**3.7**	**4.0**	**4.5**	**4.7**	**5.0**	**5.1**	**4.5**	**3.5**	**3.4**	**3.3**	**2.0**	**3.3**	**2.2**		**2.0**	
Avg.	**10.0**	**9.3**	**10.5**	**8.7**	**9.1**	**9.3**	**10.2**	**9.3**	**10.4**	**11.6**	**12.7**	**14.0**	**13.6**	**13.1**	**12.3**	**11.9**	**9.0**	**8.7**	**10.3**	**9.4**	**8.5**	**8.8**	**8.1**	**8.4**			**10.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.8	3.2	4.8	3.8	4.5	5.9	3.9	4.5	4.6	5.4	5.9	7.2	9.0	8.6	9.7	9.2	7.8	6.6	5.6	3.9	6.4	6.2	7.1	6.8	9.7	2.8	6.0
2	4.7	6.5	5.0	7.0	32.8	50.7	7.6	11.2	8.9	10.1	7.8	6.9	7.5	7.4	6.0	5.0	5.6	5.2	5.4	5.6	5.0	4.8	4.8	4.5	50.7	4.5	9.4
3	4.9	5.8	5.8	5.8	6.1	5.1	5.1	4.9	4.6	4.7	4.3	4.5	4.5	4.8	4.8	5.6	5.0	4.8	4.6	3.9	4.0	4.5	4.9	4.4	6.1	3.9	4.9
4	10.0	10.2	17.9	39.3	22.9	12.1	12.9	23.0	43.0	17.8	9.8	8.1	10.1	8.4	9.7	10.7	14.2	5.7	5.3	5.6	5.2	5.0	5.6	5.1	43.0	5.0	13.2
5	5.5	5.1	5.4	6.2	6.0	5.5	4.8	4.8	5.0	4.8	4.3	4.5	5.1	5.4	5.3	5.3	5.3	5.8	5.8	5.3	5.1	7.4	5.6	7.5	7.5	4.3	5.4
6	5.8	12.6	22.5	12.3	7.4	8.8	31.7	20.6	16.5	5.5	6.0	5.3	6.9	7.2	8.6	7.5	6.4	6.4	7.7	5.6	5.3	6.0	5.1	5.5	31.7	5.1	9.7
7	5.8	7.1	5.3	20.7	7.5	23.6	46.7	27.1	9.7	12.4	8.6	9.2	8.3	10.1	8.2	7.8	6.6	6.1	4.4	3.8	3.2	9.2	7.5	8.0	46.7	3.2	11.1
8	31.8	9.3	13.5	6.2	3.8	4.8	3.9	4.5	20.9	22.2	9.4	21.2	9.9	8.8	8.3	7.0	6.3	4.6	6.0	5.4	4.9	6.0	5.7	6.3	31.8	3.8	9.6
9	5.9	5.6	6.9	6.8	6.6	7.6	6.0	5.7	5.4	6.6	6.1	5.1	5.8	5.3	6.8	9.9	9.8	6.4	6.8	5.9	6.0	5.0	5.4	6.1	9.9	5.0	6.4
10	9.4	7.7	5.9	5.0	5.1	4.0	4.4	10.2	54.6	59.1	23.1	15.0	15.9	13.4	14.9	11.1	22.1	12.9	10.9	5.7	22.5	15.2	7.5	6.4	59.1	4.0	15.1
11	6.4	6.8	5.3	6.3	4.9	5.6	4.6	5.3	5.1	5.1	5.4	4.9	5.2	5.9	6.1	6.4	5.3	5.5	6.2	6.3	5.8	5.5	7.1	7.5	7.5	4.6	5.8
12	9.8	9.0	7.4	7.0	6.7	8.0	7.9	8.5	8.0	7.9	7.4	7.1	6.4	7.2	5.9	6.6	5.7	5.8	5.3	5.0	4.8	4.6	5.1	6.2	9.8	4.6	6.8
13	8.4	7.6	5.2	3.6	4.7	15.2	26.1	5.4	6.9	9.5	10.8	12.6	12.7	10.3	12.8	9.0	10.9	10.9	12.2	18.6	5.1	7.1	8.7	17.2	26.1	3.6	10.5
14	9.7	6.6	9.8	5.7	7.5	6.2	9.9	7.6	6.2	6.3	9.7	12.3	10.3	9.9	7.7	6.5	6.7	5.5	5.2	5.1	4.8	4.8	4.8	5.2	12.3	4.8	7.2
15	4.8	4.8	4.6	4.5	4.6	4.9	4.7	5.1	5.3	5.5	5.0	5.3	5.1	5.0	4.7	4.9	4.6	11.9	8.1	5.7	5.9	4.9	5.9	17.9	17.9	4.5	6.0
16	5.2	8.2	19.1	6.8	8.3	41.6	42.4	18.8	24.7	41.2	9.6	13.9	9.5	8.4	7.5	8.4	10.5	7.7	8.2	6.2	3.9	5.9	4.5	5.8	42.4	3.9	13.6
17	5.9	9.0	18.4	13.5	17.9	17.6	39.1	10.4	12.7	5.8	22.1	19.9	41.6	48.9	15.1	4.9	33.6	8.7	8.4	7.6	5.5	4.3	3.6	7.0	48.9	3.6	15.9
18	5.0	8.1	2.6	3.5	2.1	2.0	8.0	6.1	5.8	3.8	7.4	4.6	6.6	7.3	7.3	6.6	6.1	6.4	2.8	1.7	1.8	4.5	3.4	4.1	8.1	1.7	4.9
19	4.2	4.7	3.0	3.7	3.0	3.9	3.7	5.0	9.2	8.3	15.8	8.5	9.4	7.3	7.4	7.3	6.2	5.2	4.4	3.5	3.6	3.9	5.2	2.5	15.8	2.5	5.8
20	3.3	3.5	3.4	6.2	6.8	7.7	7.7	3.4	2.7	4.5	8.5	10.1	10.0	8.3	9.9	7.8	6.7	5.3	6.3	5.4	10.2	5.8	11.4	5.2	11.4	2.7	6.7
21	6.9	13.7	17.9	6.0	6.3	16.8	10.4	8.3	6.4	5.8	8.6	10.0	8.9	6.5	5.2	5.3	5.2	6.7	6.0	6.9	6.0	5.1	5.3	3.8	17.9	3.8	7.8
22	4.7	5.4	6.5	8.1	8.3	6.6	5.6	5.5	5.6	4.6	4.6	4.8	4.8	5.5	5.4	9.3	8.4	10.1	5.3	6.1	7.9	6.6	9.8	8.2	10.1	4.6	6.6
23	12.3	10.2	9.9	9.1	8.5	7.2	6.6	8.2	6.0	4.9	5.5	7.3	6.2	6.1	6.5	5.3	5.3	6.0	16.4	6.3	7.7	6.8	6.6	6.2	16.4	4.9	7.5
24	5.8	5.9	6.3	5.8	5.0	5.2	5.0	5.3	6.4	5.3	6.2	5.8	7.6	7.4	7.3	7.0	6.4	7.2	7.0	7.2	5.7	6.2	5.8	4.9	7.6	4.9	6.2
25	5.5	5.2	5.8	4.8	4.8	4.6	4.0	4.6	6.3	5.2	5.1	5.5	5.9	6.0	8.9	8.9	7.6	6.0	5.8	9.1	7.0	6.1	4.6	3.4	9.1	3.4	5.9
26	7.4	12.7	9.2	6.6	6.1	6.6	5.6	5.6	4.9	4.7	4.4	5.3	6.0	5.9	5.6	5.3	4.6	4.7	4.6	4.6	4.9	4.7	4.5	4.5	12.7	4.4	5.8
27	4.6	4.7	4.8	4.7	4.7	4.7	5.1	10.9	11.4	7.6	47.3	23.1	6.6	5.8	6.8	6.3	8.9	6.4	6.6	5.6	8.3	7.3	14.3	6.9	47.3	4.6	9.3
28	8.3	10.7	15.3	14.1	3.8	4.6	5.8	7.5	11.2	10.6	9.8	8.4	11.2	18.5	6.9	9.3	7.2	8.7	33.6	10.7	36.1	12.8	19.2	33.3	36.1	3.8	13.2
29	16.0	20.7	9.2	8.8	4.5	6.5	10.6	6.6	5.2	5.9	6.0	8.9	5.2	7.7	7.0	6.8	6.3	4.5	3.8	6.3	7.2	43.9	35.7	21.6	43.9	3.8	11.0
30	32.5	22.2	21.3	5.8	26.5	12.8	18.7	14.9	9.8	20.7	27.1	6.8	13.9	26.1	22.6	16.2	8.2	5.6	6.6	6.1	4.0	3.0	3.0	3.3	32.5	3.0	14.1
Max.	**32.5**	**22.2**	**22.5**	**39.3**	**32.8**	**50.7**	**46.7**	**27.1**	**54.6**	**59.1**	**47.3**	**23.1**	**41.6**	**48.9**	**22.6**	**16.2**	**33.6**	**12.9**	**33.6**	**18.6**	**36.1**	**43.9**	**35.7**	**33.3**	**59.1**		
Min.	**2.8**	**3.2**	**2.6**	**3.5**	**2.1**	**2.0**	**3.7**	**3.4**	**2.7**	**3.8**	**4.3**	**4.5**	**4.5**	**4.8**	**4.7**	**4.9**	**4.6**	**4.5**	**2.8**	**1.7**	**1.8**	**3.0**	**3.0**	**2.5**		**1.7**	
Avg.	**8.4**	**8.4**	**9.3**	**8.3**	**8.2**	**10.5**	**12.0**	**9.0**	**11.1**	**10.7**	**10.4**	**9.1**	**9.2**	**9.8**	**8.3**	**7.6**	**8.5**	**6.8**	**7.5**	**6.1**	**7.1**	**7.4**	**7.6**	**7.8**			**8.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.4	3.4	3.3	3.3	3.6	3.6	3.7	4.2	4.2	4.7	5.3	5.2	5.3	5.9	5.8	5.7	5.5	4.1	4.0	3.8	3.6	3.7	3.7	3.7	5.9	3.3	4.3
2	3.6	3.6	2.7	2.6	3.7	9.4	5.1	6.7	5.0	7.5	6.9	6.0	6.1	6.0	8.5	11.8	6.4	6.8	7.7	6.7	5.5	6.1	8.9	5.7	11.8	2.6	6.2
3	29.4	9.4	7.7	13.3	39.2	32.5	40.0	37.0	8.5	10.6	7.5	8.2	12.2	16.9	45.0	25.1	21.7	11.8	11.5	43.9	36.6	17.1	27.0	12.9	45.0	7.5	21.9
4	16.6	25.5	7.5	12.5	4.3	6.0	10.1	11.1	15.4	9.4	11.5	8.5	7.7	7.0	7.3	11.4	15.2	9.1	6.9	8.9	5.2	4.9	5.0	4.7	25.5	4.3	9.7
5	5.3	36.6	18.7	9.9	13.5	13.0	8.8	18.8	8.6	10.1	15.0	13.6	8.8	8.0	6.7	5.9	8.0	6.5	11.2	6.5	15.5	17.7	11.3	5.5	36.6	5.3	11.8
6	12.2	12.1	21.0	9.3	21.4	19.3	12.5	16.7	15.6	8.8	8.0	7.2	14.8	6.8	13.7	5.3	8.6	8.7	5.3	10.9	10.1	5.4	18.2	7.3	21.4	5.3	11.6
7	2.9	5.4	13.5	8.0	4.9	4.6	4.4	4.8	4.5	4.2	4.4	4.9	4.6	4.7	9.5	7.3	8.1	9.5	8.6	12.4	18.8	27.5	10.7	6.6	27.5	2.9	8.1
8	7.4	6.3	7.6	24.3	13.1	13.3	7.5	7.8	6.3	7.7	21.5	12.9	22.3	8.6	7.2	7.8	6.2	8.3	10.6	35.5	24.0	5.8	8.8	7.9	35.5	5.8	12.0
9	8.8	10.4	8.3	28.5	16.5	9.1	12.2	10.4	6.3	4.6	8.0	7.0	5.5	4.9	6.6	6.2	5.0	5.5	6.2	6.4	5.7	4.4	3.8	4.0	28.5	3.8	8.1
10	5.1	3.9	3.9	3.9	6.5	0.1	0.1	0.0	0.1	0.1	0.1	0.1	13.5	1.3	15.4	14.9	7.8	10.1	18.8	5.5	4.1	3.6	3.2	5.1	18.8	0.0	5.3
11	6.5	4.9	5.5	8.1	9.3	7.5	8.2	4.6	5.7	6.5	7.6	7.4	6.1	7.5	7.8	6.9	6.4	4.2	3.7	3.9	4.3	4.4	3.8	3.7	9.3	3.7	6.0
12	3.6	3.6	3.4	4.0	3.1	3.1	4.4	3.0	3.5	3.8	4.3	4.9	6.6	7.7	8.0	7.4	7.1	6.4	8.7	7.5	7.7	11.1	16.8	11.8	16.8	3.0	6.3
13	8.3	8.0	5.2	3.3	4.6	7.2	4.1	11.5	6.1	4.6	7.2	11.7	14.4	11.6	15.2	14.2	5.6	16.4	10.0	10.5	9.0	4.8	4.5	4.4	16.4	3.3	8.4
14	3.9	5.2	5.0	7.2	9.0	5.0	9.8	9.9	18.6	7.9	15.6	9.5	6.4	5.3	5.9	8.1	4.3	3.4	3.7	3.4	4.8	5.6	10.3	6.6	18.6	3.4	7.3
15	8.7	22.2	36.1	29.2	11.9	6.7	9.3	5.3	6.7	24.1	28.7	22.1	9.8	6.1	6.5	6.3	5.3	3.3	4.2	6.6	4.3	3.7	4.3	3.4	36.1	3.3	11.5
16	8.8	3.1	6.1	5.2	4.8	5.3	5.1	4.6	4.6	4.5	47.0	19.9	11.6	10.5	4.7	8.1	6.1	35.5	7.3	13.8	12.8	8.1	6.0	6.4	47.0	3.1	10.4
17	5.6	4.7	4.6	5.3	4.3	4.6	5.3	5.0	4.7	5.1	13.2	11.9	6.8	6.2	6.9	5.6	6.1	6.1	8.0	6.9	6.0	5.8	5.6	5.5	13.2	4.3	6.2
18	5.1	5.0	4.4	4.4	4.5	4.0	4.0	4.7	4.0	3.1	3.8	10.1	31.4	18.5	6.8	5.4	6.8	7.6	9.1	5.6	8.1	7.9	6.3	5.6	31.4	3.1	7.3
19	5.9	5.3	6.7	5.1	5.9	5.0	6.0	4.9	5.1	5.4	5.2	5.7	5.3	4.9	4.6	4.5	4.7	4.8	4.7	4.9	4.8	4.9	4.8	4.4	6.7	4.4	5.1
20	4.4	4.4	4.7	4.4	4.7	4.7	4.4	4.5	4.8	4.9	4.9	5.3	5.0	11.0	6.4	11.3	25.2	6.6	8.8	5.2	4.6	5.3	4.7	3.6	25.2	3.6	6.4
21	5.8	8.6	6.3	24.7	23.6	8.7	6.8	5.1	5.9	4.9	3.3	3.7	3.1	2.6	3.9	9.8	7.3	4.2	3.7	3.2	3.0	3.5	3.9	5.7	24.7	2.6	6.7
22	3.4	4.6	6.9	6.4	4.8	3.6	3.9	3.9	3.3	3.1	3.0	3.6	3.9	3.7	3.2	4.0	3.2	3.3	5.4	3.1	2.7	2.8	1.9	3.6	6.9	1.9	3.8
23	5.5	2.7	5.4	3.8	2.2	2.0	3.7	2.5	3.2	3.9	3.9	4.0	3.3	3.4	3.5	3.1	3.0	3.4	3.0	2.9	2.9	3.6	3.2	3.5	5.5	2.0	3.4
24	3.5	3.7	3.4	3.8	3.1	4.4	3.1	2.9	4.8	7.9	4.7	4.1	5.0	3.6	5.1	5.0	4.5	7.2	4.3	4.6	4.8	4.7	4.3	3.1	7.9	2.9	4.4
25	3.0	2.9	3.4	3.0	2.7	4.0	4.2	4.6	4.0	5.1	4.2	3.8	4.9	5.2	4.5	4.2	3.8	3.5	3.7	3.7	3.8	5.0	3.9	4.5	5.2	2.7	4.0
26	3.9	4.2	4.1	4.0	3.3	3.6	3.6	2.6	2.9	3.5	3.7	4.8	4.5	5.7	6.5	4.8	3.4	3.1	3.3	3.7	5.7	3.8	5.3	5.5	6.5	2.6	4.1
27	4.3	6.0	4.5	7.5	9.9	49.8	43.0	46.7	25.4	35.0	14.6	6.9	29.2	12.6	17.6	8.5	28.2	25.7	24.6	19.4	7.8	31.7	55.1	33.2	55.1	4.3	22.8
28	25.6	9.4	14.0	19.8	20.2	19.0	5.1	6.0	7.5	20.7	8.3	6.9	4.4	7.8	9.5	11.6	10.5	12.1	13.6	12.1	9.8	5.0	44.9	9.5	44.9	4.4	13.0
29	7.1	13.6	33.6	7.3	13.7	9.7	5.5	4.4	4.1	4.3	4.6	5.1	6.2	4.9	5.6	5.7	4.5	3.8	4.7	5.4	5.3	7.4	9.4	5.1	33.6	3.8	7.5
30	4.0	3.8	4.0	4.1	3.9	4.1	4.8	5.5	6.3	4.4	5.6	3.9	4.4	3.3	3.1	2.8	2.5	2.6	3.4	4.6	3.0	3.0	5.2	4.3	6.3	2.5	4.0
31	3.7	3.9	4.2	3.9	3.8	3.5	4.4	5.8	7.6	5.0	5.2	5.7	4.9	3.3	4.3	8.2	6.2	3.4	4.1	4.8	5.3	5.0	3.4	6.9	8.2	3.3	4.8
Max.	**29.4**	**36.6**	**36.1**	**29.2**	**39.2**	**49.8**	**43.0**	**46.7**	**25.4**	**35.0**	**47.0**	**22.1**	**31.4**	**18.5**	**45.0**	**25.1**	**28.2**	**35.5**	**24.6**	**43.9**	**36.6**	**31.7**	**55.1**	**33.2**	**55.1**		
Min.	**2.9**	**2.7**	**2.7**	**2.6**	**2.2**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**3.1**	**1.3**	**3.1**	**2.8**	**2.5**	**2.6**	**3.0**	**2.9**	**2.7**	**2.8**	**1.9**	**3.1**		**0.0**	
Avg.	**7.3**	**7.9**	**8.6**	**9.0**	**9.0**	**8.9**	**8.2**	**8.6**	**6.9**	**7.6**	**9.2**	**7.6**	**9.0**	**7.0**	**8.5**	**8.0**	**8.0**	**8.0**	**7.5**	**8.9**	**8.0**	**7.5**	**9.9**	**6.6**			**8.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.1	4.0	3.0	3.2	6.0	3.3	4.0	3.9	3.7	3.1	2.7	3.6	3.4	4.4	6.7	8.7	4.4	3.2	4.2	4.9	2.9	3.7	3.8	4.6	8.7	2.7	4.1
2	3.8	4.0	4.6	5.6	9.0	3.7	5.0	3.9	4.4	4.0	3.5	3.9	4.9	6.1	6.4	4.4	6.2	4.9	2.5	2.8	2.1	4.4	3.3	4.9	9.0	2.1	4.5
3	3.5	5.6	6.0	5.2	5.1	3.1	6.0	5.5	4.6	3.7	4.1	3.8	4.4	3.9	3.6	4.5	4.2	3.6	4.1	4.1	5.8	3.8	3.3	3.4	6.0	3.1	4.4
4	4.2	3.3	2.8	3.6	6.1	4.0	4.3	4.5	4.5	4.1	4.4	4.7	4.0	3.6	3.1	3.2	3.9	4.5	3.0	3.0	3.0	3.1	2.8	2.5	6.1	2.5	3.8
5	3.7	3.5	3.8	3.9	3.1	3.7	2.5	2.2	2.7	3.2	3.4	2.7	3.1	3.4	2.4	2.7	2.8	2.6	3.1	4.0	6.3	4.7	21.8	23.1	23.1	2.2	4.9
6	12.7	8.3	8.3	14.3	15.0	3.7	4.3	3.4	3.5	3.4	3.2	3.1	3.1	3.1	3.2	3.0	2.6	2.7	6.6	4.1	4.3	3.6	3.6	4.0	15.0	2.6	5.3
7	5.2	3.8	3.7	7.0	6.6	5.3	6.8	5.4	4.4	5.0	3.7	5.0	6.9	6.2	4.9	3.6	3.1	3.6	3.0	3.4	2.8	2.8	3.0	3.1	7.0	2.8	4.5
8	3.8	3.6	3.2	3.0	2.9	4.2	2.8	3.3	3.3	4.9	6.6	5.0	3.9	4.5	5.3	4.1	4.0	2.6	2.6	3.2	3.7	5.3	5.0	5.3	6.6	2.6	4.0
9	4.9	6.8	5.4	4.5	3.8	4.6	4.5	3.4	3.0	3.8	4.3	4.1	3.9	2.7	2.8	2.8	4.0	3.4	3.7	3.5	3.3	3.4	3.2	3.5	6.8	2.7	3.9
10	4.1	4.0	4.0	3.9	3.4	2.9	2.8	2.9	2.9	3.1	3.3	3.1	2.9	3.2	3.0	3.0	3.2	2.9	2.8	2.8	2.7	2.9	3.2	3.0	4.1	2.7	3.2
11	3.2	3.2	2.8	3.0	3.1	3.8	3.4	3.6	3.6	3.2	3.4	3.6	3.5	3.9	3.5	4.2	3.6	3.6	4.5	3.0	4.1	3.4	2.9	2.9	4.5	2.8	3.5
12	3.5	3.0	3.3	3.4	2.8	3.2	3.6	4.1	4.4	4.2	3.9	4.5	4.5	4.2	3.3	3.3	2.7	2.8	3.5	3.9	3.6	5.5	4.7	6.2	6.2	2.7	3.8
13	4.5	4.4	8.0	7.6	3.6	5.7	4.9	6.6	6.1	7.8	9.8	8.5	4.4	10.5	28.6	21.2	8.8	8.2	11.9	12.9	7.2	6.4	6.2	5.1	28.6	3.6	8.7
14	4.9	4.3	4.3	4.3	5.8	6.6	5.5	4.1	3.5	4.8	10.0	8.6	10.6	23.7	5.4	7.8	14.9	15.9	4.9	5.1	5.1	5.3	11.1	11.6	23.7	3.5	7.8
15	6.7	7.1	5.5	8.1	13.0	17.5	29.1	9.4	3.3	3.3	3.5	3.3	2.9	3.8	4.7	2.8	16.9	8.9	4.7	31.3	6.1	7.1	5.7	12.1	31.3	2.8	9.0
16	19.1	16.7	5.9	6.5	6.7	6.9	7.0	3.9	4.6	4.5	4.4	3.7	4.2	4.2	4.4	4.9	4.4	3.9	3.9	3.9	3.8	3.9	4.7	4.9	19.1	3.7	5.9
17	7.4	5.5	5.0	5.2	4.9	4.5	4.7	5.5	5.0	9.3	5.4	6.3	5.5	5.7	7.8	5.2	5.5	5.6	6.3	8.5	9.8	14.1	0.7	0.2	14.1	0.2	6.0
18	0.1	9.3	5.8	8.8	13.9	10.4	6.9	11.2	6.1	10.9	16.4	5.3	33.1	24.7	9.6	19.7	7.1	3.1	3.9	51.5	33.6	10.5	10.7	18.6	51.5	0.1	13.8
19	36.3	19.5	26.2	13.2	23.4	17.8	5.4	4.5	3.6	4.7	4.8	6.8	4.1	3.5	6.8	9.7	4.7	5.5	8.2	14.0	11.7	10.9	5.1	7.8	36.3	3.5	10.8
20	8.2	4.8	9.3	6.6	11.3	9.0	8.4	6.4	5.7	6.7	9.0	7.0	11.2	5.8	12.3	3.3	5.2	5.9	10.8	19.8	38.1	7.2	9.6	6.9	38.1	3.3	9.5
21	11.9	15.8	3.2	3.7	3.5	4.2	5.5	6.1	5.4	6.1	2.1	9.2	9.0	2.6	4.3	4.0	8.9	16.3	38.2	15.0	14.2	44.0	9.7	8.2	44.0	2.1	10.5
22	15.7	43.1	29.7	58.8	27.3	30.1	54.3	54.6	36.0	35.4	28.0	7.7	49.2	15.9	7.5	7.6	7.6	4.4	3.9	6.2	4.6	5.2	3.8	2.7	58.8	2.7	22.5
23	5.0	4.1	2.5	3.1	3.7	3.3	2.3	2.4	3.0	3.0	3.0	2.6	2.6	3.2	2.5	2.4	2.9	2.0	2.9	4.4	3.2	2.9	2.2	1.7	5.0	1.7	3.0
24	2.8	4.5	5.4	4.0	2.4	3.5	2.8	3.7	3.7	2.5	3.4	2.4	2.9	2.1	2.3	2.8	2.6	2.8	3.2	3.5	3.7	2.8	2.6	2.1	5.4	2.1	3.1
25	2.0	2.3	2.7	3.1	3.2	2.6	2.3	2.2	1.9	2.1	2.3	2.4	2.5	2.6	2.4	2.3	2.1	2.6	3.3	2.1	2.5	3.0	3.1	2.8	3.3	1.9	2.5
26	2.3	2.9	2.8	2.2	2.5	2.8	2.9	2.9	3.0	2.5	2.2	2.8	2.1	3.4	5.8	4.7	2.8	3.2	3.7	3.0	3.6	3.4	3.9	3.4	5.8	2.1	3.1
27	3.5	3.0	3.6	3.4	4.8	4.0	5.8	6.1	7.1	6.4	3.7	4.5	5.4	3.2	3.2	28.9	7.6	6.1	5.2	8.4	7.7	4.4	5.2	3.6	28.9	3.0	6.0
28	3.9	2.8	2.6	2.9	3.5	3.6	3.9	4.1	5.4	5.2	5.6	4.9	4.2	5.7	9.0	12.3	6.1	12.6	10.0	22.8	13.2	18.5	22.1	7.2	22.8	2.6	8.0
29	12.0	9.3	10.4	30.6	27.9	3.9	1.8	4.6	2.5	3.5	5.0	4.5	2.8	2.2	2.6	3.0	7.0	4.7	5.2	5.2	4.8	7.9	4.0	3.1	30.6	1.8	7.0
30	6.6	3.1	4.9	4.3	3.9	2.7	2.8	3.3	2.4	1.9	2.2	2.6	3.0	4.2	2.9	2.6	5.7	7.6	6.6	3.0	4.4	3.3	4.4	5.6	7.6	1.9	3.9
Max.	**36.3**	**43.1**	**29.7**	**58.8**	**27.9**	**30.1**	**54.3**	**54.6**	**36.0**	**35.4**	**28.0**	**9.2**	**49.2**	**24.7**	**28.6**	**28.9**	**16.9**	**16.3**	**38.2**	**51.5**	**38.1**	**44.0**	**22.1**	**23.1**	**58.8**		
Min.	**0.1**	**2.3**	**2.5**	**2.2**	**2.4**	**2.6**	**1.8**	**2.2**	**1.9**	**1.9**	**2.1**	**2.4**	**2.1**	**2.1**	**2.3**	**2.3**	**2.1**	**2.0**	**2.5**	**2.1**	**2.1**	**2.8**	**0.7**	**0.2**		**0.1**	
Avg.	**7.0**	**7.2**	**6.3**	**7.9**	**7.7**	**6.2**	**6.9**	**6.3**	**5.1**	**5.5**	**5.6**	**4.7**	**6.9**	**5.9**	**5.7**	**6.4**	**5.5**	**5.3**	**6.0**	**8.8**	**7.4**	**6.9**	**5.8**	**5.8**			**6.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.3	7.3	4.0	3.4	3.3	5.5	5.5	9.1	4.6	3.4	5.1	4.5	3.2	4.3	4.9	3.9	4.7	3.8	3.1	3.2	6.7	3.8	4.2	23.0	23.0	3.1	5.4
2	17.6	36.1	8.5	8.7	10.4	8.2	16.1	18.5	53.4	8.7	7.1	6.7	5.4	4.9	3.4	3.1	2.3	3.6	2.5	2.9	2.7	2.7	2.9	3.0	53.4	2.3	10.0
3	2.5	2.8	2.9	2.7	2.7	3.2	3.2	4.0	3.0	4.0	3.8	4.2	3.4	4.7	4.5	4.0	3.9	6.6	6.1	6.1	4.9	5.3	3.6	4.0	6.6	2.5	4.0
4	4.1	4.3	4.0	5.2	7.5	21.8	9.2	7.8	5.5	6.8	6.1	4.3	6.3	4.0	3.9	5.5	3.9	3.4	3.5	3.5	3.4	4.1	3.9	4.0	21.8	3.4	5.7
5	4.1	4.7	4.1	4.6	3.4	3.9	4.8	5.9	4.3	3.9	3.5	3.8	4.0	3.7	3.6	3.7	3.8	4.2	4.3	4.0	3.5	4.0	3.6	3.6	5.9	3.4	4.0
6	3.7	3.9	3.7	4.1	4.0	4.0	3.7	3.7	3.4	4.3	4.9	3.9	4.4	3.7	4.8	3.8	4.8	3.8	3.4	5.5	4.3	3.6	3.9	3.8	5.5	3.4	4.0
7	4.0	3.7	4.0	4.0	4.0	4.0	4.1	3.9	4.2	4.2	4.1	4.2	4.2	4.2	4.2	4.1	4.3	4.0	4.3	3.8	4.1	4.0	4.1	4.2	4.3	3.7	4.1
8	5.0	5.8	5.1	6.1	7.5	7.3	6.6	7.4	7.5	4.6	4.3	4.5	4.8	4.7	4.6	4.9	4.3	3.9	4.1	4.5	4.8	4.7	4.3	4.8	7.5	3.9	5.3
9	4.6	4.8	4.8	4.6	4.8	4.4	4.2	4.3	4.1	4.0	3.8	3.9	3.9	3.9	4.6	5.0	8.1	4.4	4.9	4.9	4.3	4.3	10.2	18.5	18.5	3.8	5.4
10	6.0	6.4	6.8	7.8	20.5	8.8	6.4	6.4	6.5	4.5	4.8	6.2	4.2	4.9	5.3	7.5	9.3	4.1	4.8	3.9	3.9	3.1	3.8	4.1	20.5	3.1	6.3
11	4.3	4.5	5.7	12.7	33.9	5.9	5.1	24.3	20.9	27.1	6.0	5.4	6.8	9.8	23.1	8.8	18.9	12.5	4.3	3.6	2.6	2.4	3.0	2.8	33.9	2.4	10.6
12	2.8	2.4	2.1	3.5	3.0	3.2	3.2	3.9	2.9	3.5	3.5	7.7	10.4	8.1	43.0	46.7	19.4	26.9	22.7	9.6	8.7	45.2	36.3	65.0	65.0	2.1	16.0
13	40.8	44.7	14.0	45.9	25.0	7.0	8.8	8.3	3.7	4.1	2.8	7.5	4.7	3.6	3.8	3.9	4.2	4.3	4.5	4.6	4.3	4.2	4.3	4.3	45.9	2.8	11.0
14	4.4	4.0	3.9	4.3	5.2	9.2	4.8	4.8	5.9	7.7	12.3	11.2	8.4	5.4	4.4	5.3	4.4	4.2	8.5	5.3	4.7	3.8	3.9	4.2	12.3	3.8	5.8
15	4.1	4.2	4.1	3.9	4.1	4.2	5.2	7.8	8.4	14.3	8.8	49.8	10.0	6.4	9.9	10.0	7.9	4.7	4.2	4.1	4.0	4.4	4.3	4.1	49.8	3.9	8.0
16	4.3	4.2	3.8	4.2	4.1	4.5	4.8	4.5	5.7	5.5	4.5	6.5	4.3	4.1	35.4	17.0	20.2	19.2	8.1	24.5	7.5	30.4	35.8	5.9	35.8	3.8	11.2
17	17.9	6.2	4.8	5.3	3.5	3.6	4.4	3.9	4.4	8.2	22.7	12.4	15.1	22.7	15.1	12.9	7.5	6.1	4.8	4.6	7.0	4.6	5.5	4.7	22.7	3.5	8.7
18	11.9	5.2	19.0	29.2	8.6	6.6	8.5	4.5	5.3	6.8	5.7	3.7	4.1	3.7	4.2	7.3	5.4	7.7	9.1	35.2	31.7	5.0	8.7	12.6	35.2	3.7	10.4
19	14.2	15.5	17.5	4.0	4.8	3.9	4.2	3.6	3.8	4.3	4.8	4.8	4.6	4.1	4.0	4.6	4.2	6.4	6.1	5.2	8.4	7.1	7.5	4.3	17.5	3.6	6.3
20	8.2	4.9	6.7	6.7	25.1	31.9	17.5	15.2	24.9	7.9	4.8	6.0	3.9	7.5	54.0	43.1	12.9	25.7	10.2	50.3	4.3	10.7	45.9	4.1	54.0	3.9	18.0
21	7.1	21.7	27.5	53.8	10.7	15.4	41.7	22.1	15.8	10.5	35.9	21.4	14.2	23.5	27.1	46.2	6.8	4.2	5.6	3.4	4.2	3.6	2.9	3.3	53.8	2.9	17.9
22	3.2	3.2	2.8	4.5	6.6	3.3	5.7	4.1	3.2	7.7	14.0	4.4	3.4	3.8	3.7	11.3	5.1	5.8	6.5	8.7	6.7	22.7	21.7	46.4	46.4	2.8	8.7
23	59.5	14.0	11.0	5.5	5.8	8.9	36.7	25.7	10.1	7.4	9.8	8.6	14.5	6.9	8.1	6.6	4.5	6.0	3.8	8.6	6.6	4.5	3.5	3.4	59.5	3.4	11.7
24	4.8	5.2	5.3	5.2	4.0	10.0	6.4	6.1	4.1	6.4	7.4	6.0	6.3	5.2	7.5	45.9	56.4	43.4	12.6	25.0	15.2	21.9	38.5	12.4	56.4	4.0	15.0
25	23.3	15.9	39.3	12.0	6.0	5.2	7.0	5.4	4.3	4.5	3.8	3.5	3.5	4.0	6.5	5.4	6.8	6.0	48.8	23.3	11.7	6.5	5.6	7.6	48.8	3.5	11.1
26	5.8	6.3	5.0	4.0	6.0	4.4	3.7	3.8	12.7	16.4	8.8	24.5	18.8	16.3	7.6	8.3	7.9	7.8	5.1	5.9	7.4	19.9	12.6	5.6	24.5	3.7	9.4
27	8.5	7.7	23.0	8.9	6.9	11.7	7.2	13.1	21.9	24.2	14.7	18.9	18.0	22.8	6.2	6.7	13.1	28.7	15.8	31.8	21.3	13.8	14.6	33.0	33.0	6.2	16.3
28	30.4	12.0	13.8	6.4	8.3	8.3	7.5	7.8	4.9	8.9	10.1	13.2	22.1	10.3	34.7	20.8	14.7	15.5	20.5	6.4	18.4	24.7	12.2	23.6	34.7	4.9	14.8
29	21.5	29.8	16.7	10.2	7.3	6.0	3.5	3.4	3.8	3.6	3.6	3.6	4.0	4.0	5.2	10.7	5.8	5.8	4.8	3.6	4.6	18.4	11.6	10.4	29.8	3.4	8.4
30	10.0	5.2	4.0	4.4	11.9	11.4	10.1	16.1	12.8	7.5	8.5	4.7	7.1	24.4	13.2	11.9	20.7	13.9	11.1	23.9	15.3	8.7	9.9	9.5	24.4	4.0	11.5
31	13.1	21.7	19.3	18.9	23.4	27.6	41.2	11.4	9.9	55.2	25.1	38.1	9.9	46.2	12.8	17.6	14.3	40.5	23.1	33.3	46.4	30.2	18.6	26.6	55.2	9.9	26.0
Max.	**59.5**	**44.7**	**39.3**	**53.8**	**33.9**	**31.9**	**41.7**	**25.7**	**53.4**	**55.2**	**35.9**	**49.8**	**22.1**	**46.2**	**54.0**	**46.7**	**56.4**	**43.4**	**48.8**	**50.3**	**46.4**	**45.2**	**45.9**	**65.0**	**65.0**		
Min.	**2.5**	**2.4**	**2.1**	**2.7**	**2.7**	**3.2**	**3.2**	**3.4**	**2.9**	**3.4**	**2.8**	**3.5**	**3.2**	**3.6**	**3.4**	**3.1**	**2.3**	**3.4**	**2.5**	**2.9**	**2.6**	**2.4**	**2.9**	**2.8**		**2.1**	
Avg.	**11.6**	**10.3**	**9.6**	**9.8**	**9.1**	**8.5**	**9.7**	**8.7**	**9.2**	**9.4**	**8.6**	**9.9**	**7.7**	**9.2**	**12.0**	**12.8**	**10.0**	**10.9**	**9.1**	**11.7**	**9.2**	**10.7**	**11.3**	**11.8**			**10.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.4	17.8	26.8	10.3	11.5	6.5	9.8	6.2	5.6	8.1	6.4	4.2	5.7	10.2	10.1	7.4	19.1	13.1	10.7	11.2	9.7	12.6	7.1	15.8	26.8	4.2	10.8
2	7.6	10.3	17.2	12.8	3.7	10.8	12.4	11.8	4.1	7.8	9.1	13.0	16.3	9.7	4.8	11.0	7.4	7.4	7.9	7.3	7.4	3.8	4.2	6.0	17.2	3.7	8.9
3	4.8	4.7	4.1	3.8	4.8	21.8	13.1	13.6	5.2	6.9	7.3	6.7	11.8	10.7	7.9	6.9	7.8	3.6	6.0	3.4	4.0	3.3	3.6	3.1	21.8	3.1	7.0
4	3.4	10.7	11.9	45.8	17.4	23.7	40.5	4.5	43.4	33.0	30.7	9.3	11.1	7.1	10.0	47.6	22.0	12.0	4.9	48.9	11.4	16.7	9.2	33.2	48.9	3.4	21.2
5	77.9	35.4	28.2	49.8	29.5	17.6	34.3	46.5	15.4	8.8	21.7	23.8	30.7	5.5	3.3	2.1	3.2	2.4	2.6	2.6	3.3	3.1	2.6	3.3	77.9	2.1	18.9
6	13.9	30.7	5.2	5.3	8.1	3.5	4.5	11.9	9.0	17.7	35.4	36.8	23.2	19.9	3.6	6.6	20.1	11.2	53.0	21.1	52.3	5.9	21.5	63.6	63.6	3.5	20.2
7	16.0	32.3	42.8	27.5	72.3	12.1	6.5	16.5	21.0	6.8	47.8	47.1	22.9	27.6	12.5	25.4	8.7	7.3	23.3	16.4	5.2	10.7	18.8	6.3	72.3	5.2	22.2
8	9.8	13.0	21.8	21.3	18.3	26.7	16.6	11.7	7.9	38.4	8.1	6.2	3.5	3.9	3.8	3.2	4.5	3.2	2.5	3.2	4.8	4.0	4.7	4.6	38.4	2.5	10.2
9	4.5	4.8	3.3	6.9	3.8	3.7	2.5	3.0	5.0	4.0	3.6	44.1	30.9	21.0	35.9	34.9	11.9	8.1	12.4	32.5	36.5	28.9	9.9	6.6	44.1	2.5	15.0
10	7.5	35.7	18.7	4.2	7.2	6.4	7.2	24.8	30.5	10.5	36.3	26.7	67.1	25.1	9.6	7.0	9.7	4.8	7.4	7.1	29.3	13.5	50.0	28.5	67.1	4.2	19.8
11	29.0	23.7	29.0	9.8	9.9	7.3	8.2	32.7	46.0	8.0	18.8	25.7	31.8	38.4	20.9	38.8	12.8	4.4	6.7	5.4	7.5	4.3	5.3	6.2	46.0	4.3	17.9
12	6.1	6.1	4.9	4.0	4.1	4.1	3.0	3.1	4.7	3.9	3.0	3.3	2.9	3.4	3.7	3.5	3.1	3.9	4.6	3.5	3.3	3.5	4.1	3.6	6.1	2.9	3.9
13	3.0	2.5	2.9	2.8	3.9	3.5	3.0	2.7	2.9	3.4	3.1	3.9	3.9	2.9	2.2	3.2	3.4	4.6	6.0	3.2	3.6	4.5	5.7	5.5	6.0	2.2	3.6
14	4.2	4.5	5.0	4.8	7.1	29.8	18.8	11.1	7.5	8.2	13.6	10.7	5.6	5.0	4.6	4.9	5.6	7.6	7.1	7.7	5.9	7.9	8.3	9.0	29.8	4.2	8.5
15	6.8	6.1	7.1	3.1	4.6	9.2	5.7	5.3	6.0	4.8	4.4								3.5	3.4	5.0	4.4	4.2	6.1	9.2	3.1	5.3
16	11.3	6.5	10.3	8.4	15.4	16.6	10.0	8.3	5.2	9.3	6.2	4.7	15.4	23.0	7.2	7.6	12.4	7.6	43.0	7.9	2.7	3.6	2.6	2.5	43.0	2.5	10.3
17	2.8	4.0	3.9	3.3	2.3	3.2	3.5	3.3	2.6	3.3	3.5	3.3	3.4	5.2	4.3	4.7	3.0	3.0	3.7	3.5	4.6	5.5	5.7	7.0	7.0	2.3	3.9
18	5.6	4.2	5.4	3.7	4.5	3.0	2.3	2.9	2.2	4.6	4.5	6.0	5.1	3.3	3.4	2.6	4.0	3.6	4.9	3.5	3.6	3.3	4.5	4.4	6.0	2.2	4.0
19	4.4	3.1	3.7	4.3	5.4	4.3	3.9	4.1	4.8	5.9	4.0	4.2	3.9	3.9	4.2	4.5	5.4	4.3	3.3	2.7	3.5	3.1	4.5	4.0	5.9	2.7	4.1
20	3.4	4.0	3.1	3.8	3.8	3.8	2.8	2.4	3.3	2.1	2.0	1.7	2.5	2.1	2.7	3.3	2.9	3.2	2.3	2.5	2.4	2.9	2.9	3.0	4.0	1.7	2.9
21	2.7	3.1	3.3	2.9	3.6	2.7	4.2	5.4	4.2	4.3	6.6	5.7	5.1	4.0	4.4	5.8	5.9	4.7	4.7	3.6	3.6	3.5	3.6	3.5	6.6	2.7	4.2
22	3.5	3.5	3.8	3.2	2.7	2.3	2.0	2.4	2.7	2.6	2.6	2.7	4.0	3.4	3.0	3.2	3.4	3.1	2.8	3.1	2.2	3.0	3.2	2.7	4.0	2.0	3.0
23	2.6	2.2	2.4	2.2	2.2	2.6	2.7	3.5	2.5	3.6	2.4	2.1	3.2	2.9	2.4	2.8	4.4	3.5	4.3	5.6	3.5	5.2	3.3	2.5	5.6	2.1	3.1
24	2.5	4.1	4.7	4.1	3.5	3.2	2.7	4.2	2.3	3.7	2.3	2.8	2.4	2.7	4.2	3.3	3.0	3.7	3.1	2.2	3.2	2.3	2.5	6.1	6.1	2.2	3.3
25	4.2	3.5	5.4	5.1	4.8	4.9	4.3	2.4	2.6	2.4	2.0	1.7	3.9	2.7	3.0	2.8	3.2	3.1	2.7	2.7	5.1	3.5	2.9	2.7	5.4	1.7	3.4
26	3.3	2.5	3.1	2.8	2.6	3.5	2.2	1.9	4.2	3.8	4.1	4.1	4.0	2.9	3.5	5.5	6.0	3.2	1.7	3.0	3.6	2.9	4.6	2.6	6.0	1.7	3.4
27	4.0	2.8	4.0	2.3	3.9	5.0	1.8	1.8	1.8	2.6	3.0	2.7	3.0	2.0	2.3	2.4	2.6	2.9	2.9	3.2	2.8	2.5	2.7	3.0	5.0	1.8	2.8
28	2.6	2.9	3.3	2.5	2.3	2.5	2.9	3.4	3.2	3.8	3.9	3.6	5.2	4.2	3.9	3.6	4.2	3.4	4.5	4.1	4.4	2.9	3.8	5.6	5.6	2.3	3.6
29	4.1	2.5	3.1	2.9	3.3	3.5	4.6	3.4	3.6	5.2	2.8	3.3	7.3	7.9	10.7	3.5	3.2	2.1	2.9	5.1	3.0	4.5	5.8	6.6	10.7	2.1	4.4
30	7.0	5.8	3.3	4.8	6.7	6.3	4.8	7.5	3.6	6.3	2.2	3.7	3.9	2.4	2.6	2.3	2.7	5.0	3.9	3.7	3.9	5.6	32.3	59.7	59.7	2.2	7.9
31	43.7	15.0	12.1	3.9	8.6	3.4	6.1	5.1	5.9	4.7	3.2	3.0	4.0	3.9	2.6	4.9	3.2	3.2	2.9	2.8	2.5	2.3	3.6	6.9	43.7	2.3	6.5
Max.	**77.9**	**35.7**	**42.8**	**49.8**	**72.3**	**29.8**	**40.5**	**46.5**	**46.0**	**38.4**	**47.8**	**47.1**	**67.1**	**38.4**	**35.9**	**47.6**	**22.0**	**13.1**	**53.0**	**48.9**	**52.3**	**28.9**	**50.0**	**63.6**	**77.9**		
Min.	**2.5**	**2.2**	**2.4**	**2.2**	**2.2**	**2.3**	**1.8**	**1.8**	**1.8**	**2.1**	**2.0**	**1.7**	**2.4**	**2.0**	**2.2**	**2.1**	**2.6**	**2.1**	**1.7**	**2.2**	**2.2**	**2.3**	**2.5**	**2.5**		**1.7**	
Avg.	**10.1**	**9.9**	**9.8**	**8.8**	**9.1**	**8.3**	**8.0**	**8.6**	**8.7**	**7.7**	**9.8**	**10.6**	**11.5**	**8.9**	**6.6**	**8.8**	**7.0**	**5.1**	**8.1**	**7.6**	**7.9**	**5.9**	**8.0**	**10.5**			**8.6**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.9	3.3	3.5	3.9	3.6	3.9	2.8	3.1	3.4	3.1	3.2	3.7	3.7	2.4	4.3	2.7	2.2	2.2	3.1	2.9	3.7	3.2	2.2	3.6	4.9	2.2	3.3
2	3.0	3.6	4.4	2.7	3.6	2.7	3.2	2.9	4.6	4.7	4.5	3.4	4.7	3.8	4.5	9.6	20.2	17.9	5.2	4.2	13.2	4.9	4.3	5.0	20.2	2.7	5.9
3	6.6	4.7	6.7	5.4	4.4	4.8	4.3	4.4	4.7	4.2	4.2	4.4	4.2	4.9	4.6	4.0	4.6	4.6	5.1	4.7	4.3	4.3	4.6	4.0	6.7	4.0	4.7
4	4.1	3.7	3.7	3.8	3.5	3.9	4.0	4.3	3.9	4.1	4.1	4.3	4.2	4.5	4.3	4.1	4.0	4.5	4.3	4.1	3.9	4.8	4.3	6.4	6.4	3.5	4.2
5	5.0	5.9	5.3	5.1	5.1	4.6	4.8	4.7	5.1	6.0	5.9	5.2	4.6	4.2	3.8	3.9	3.6	3.5	6.5	10.3	7.4	6.1	5.7	4.2	10.3	3.5	5.3
6	4.3	6.7	6.5	8.1	6.3	5.7	6.4	12.5	10.1	8.3	3.6	4.5	3.5	4.2	4.5	5.9	4.9	5.0	4.8	6.2	5.6	6.9	5.4	5.0	12.5	3.5	6.0
7	4.7	6.7	5.4	3.7	3.5	5.1	6.2	4.8	4.5	3.4	3.5	3.7	3.4	2.7	2.7	2.3	3.9	5.7	5.9	7.7	6.8	16.0	13.2	6.9	16.0	2.3	5.5
8	23.0	9.3	6.3	7.4	4.1	5.5	5.3	5.4	5.7	8.8	9.2	12.8	4.3	3.4	3.3	3.4	3.3	3.6	3.7	3.9	4.1	4.0	4.1	4.0	23.0	3.3	6.2
9	4.4	3.9	4.1	4.2	4.3	4.4	3.9	4.1	7.6	5.7	8.9	5.9	5.4	4.7	5.3	4.2	4.6	4.7	3.6	4.0	4.0	4.3	4.4	4.2	8.9	3.6	4.8
10	4.0	4.5	4.4	4.0	4.1	3.8	3.9	3.8	3.9	3.9	3.8	3.8	4.1	4.6	4.4	4.3	4.1	4.0	3.5	3.8	4.4	4.3	4.5	4.8	4.8	3.5	4.1
11	5.0	4.0	3.6	3.8	9.6	17.1	25.4	19.1	4.8	6.8	4.6	3.6	5.3	4.8	8.1	10.6	12.0	19.3	10.6	5.6	13.3	11.0	6.1	8.9	25.4	3.6	9.3
12	44.3	20.7	6.8	8.0	4.6	6.1	6.8	4.6	2.5	2.6	2.9	2.9	2.9	2.6	3.5	5.4	4.3	10.4	34.5	35.5	26.5	19.1	0.3	0.1	44.3	0.1	10.7
13	13.0	8.2	5.9	4.7	9.4	9.8	7.6	6.0	5.2	8.8	7.9	5.8	8.1	4.8	4.5	3.7	3.9	3.8	3.9	4.2	4.2	4.4	4.4	4.4	13.0	3.7	6.1
14	4.4	4.4	4.0	4.5	4.3	4.5	4.6	4.6	4.7	4.2	3.7	3.9	4.3	4.4	4.3	3.8	3.6	3.5	3.6	3.8	4.0	4.1	4.1	4.0	4.7	3.5	4.1
15	4.0	3.9	3.5	3.8	3.5	3.7	3.9	4.1	4.0	3.9	3.9	3.8	4.3	4.0	3.6	3.7	4.0	4.9	4.5	5.0	5.2	4.3	4.0	4.5	5.2	3.5	4.1
16	7.3	5.3	4.2	5.4	6.2	5.9	4.5	4.9	4.2	8.8	5.4	7.2	5.6	4.7	5.9	5.7	5.6	5.0	6.4	7.7	6.5	5.8	5.8	4.8	8.8	4.2	5.8
17	3.6	5.0	9.1	10.7	10.5	7.5	4.1	3.6	3.6	3.8	3.9	3.8	4.2	3.9	3.9	4.0	3.9	3.7	4.1	3.7	3.9	3.8	3.9	4.3	10.7	3.6	4.8
18	4.5	4.5	4.1	4.0	3.8	4.1	3.7	3.4	3.7	4.1	4.5	4.3	4.1	4.0	4.3	4.3	4.1	4.6	6.7	11.6	5.4	5.7	5.0	5.1	11.6	3.4	4.7
19	7.1	5.8	5.6	7.1	6.0	6.5	8.3	5.5	5.1	12.2	6.1	5.1	8.1	6.0	4.0	3.8	4.3	5.4	6.4	6.9	5.0	3.7	4.2	5.3	12.2	3.7	6.0
20	3.6	4.7	3.5	3.4	3.7	7.7	6.2	10.5	8.9	7.6	8.6	17.5	7.5	4.6	4.0	4.4	7.4	2.7	2.7	2.1	2.2	2.5	2.8	2.3	17.5	2.1	5.5
21	2.1	2.1	1.5	1.9	2.6	2.8	2.1	2.4	2.8	7.9	19.5	19.1	33.7	3.6	12.5	4.1	2.2	12.2	2.1	1.3	9.9	9.1	2.7	6.2	33.7	1.3	6.9
22	6.3	6.1	7.7	9.9	1.9	1.4	2.9	1.5	1.6	6.7	8.1	3.5	4.5	3.3	6.2	5.2	3.3	4.8	5.1	4.6	4.7	5.1	5.6	5.7	9.9	1.4	4.8
23	4.2	3.6	4.2	3.4	3.9	13.8	4.2	1.7	3.0	2.8	4.4	3.3	7.7	8.0	2.6	3.9	2.9	3.2	2.6	3.6	3.6	3.7	4.6	4.6	13.8	1.7	4.3
24	6.7	5.9	6.7	5.1	5.4	2.2	2.6	2.3	8.6	7.8	3.3	4.0	22.2	9.7	25.7	43.2	41.0	5.1	7.4	8.2	11.9	14.1	9.3	10.1	43.2	2.2	11.2
25	9.8	9.3	8.3	10.4	3.2	3.6	3.4	3.6	6.2	6.4	21.1	6.4	5.9	4.1	3.7	3.7	2.4	4.4	3.2	2.7	2.1	2.2	2.2	3.9	21.1	2.1	5.5
26	2.8	2.2	1.7	1.9	3.8	5.1	5.1	2.9	4.7	19.4	21.0	2.7	4.0	4.2	29.5	33.3	8.9	3.7	4.3	4.5	8.4	11.0	16.3	6.9	33.3	1.7	8.7
27	5.6	4.2	23.3	4.7	4.0	3.6	4.2	3.5	4.1	2.8	2.6	3.0	2.9	3.7	3.3	3.1	3.1	2.9	3.2	3.1	2.7	2.3	2.6	2.8	23.3	2.3	4.2
28	2.7	2.8	4.2	3.8	3.3	5.5	5.3	8.5	7.6	4.5	5.6	3.9	2.9	3.0	3.0	2.5	2.6	2.1	2.6	1.9	3.0	5.2	3.8	2.6	8.5	1.9	3.9
Max.	**44.3**	**20.7**	**23.3**	**10.7**	**10.5**	**17.1**	**25.4**	**19.1**	**10.1**	**19.4**	**21.1**	**19.1**	**33.7**	**9.7**	**29.5**	**43.2**	**41.0**	**19.3**	**34.5**	**35.5**	**26.5**	**19.1**	**16.3**	**10.1**	**44.3**		
Min.	**2.1**	**2.1**	**1.5**	**1.9**	**1.9**	**1.4**	**2.1**	**1.5**	**1.6**	**2.6**	**2.6**	**2.7**	**2.9**	**2.4**	**2.6**	**2.3**	**2.2**	**2.1**	**2.1**	**1.3**	**2.1**	**2.2**	**0.3**	**0.1**		**0.1**	
Avg.	**7.2**	**5.5**	**5.6**	**5.2**	**4.7**	**5.5**	**5.3**	**5.1**	**5.0**	**6.2**	**6.7**	**5.6**	**6.4**	**4.4**	**6.2**	**6.9**	**6.2**	**5.6**	**5.7**	**6.0**	**6.4**	**6.3**	**5.0**	**4.8**			**5.7**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.7	2.2	2.4	3.2	3.3	2.8	3.0	5.0	3.8	4.4	41.0	68.6	43.7	6.0	5.0	8.5	11.4	8.5	11.3	9.3	5.2	4.0	5.4	5.2	68.6	2.2	11.1
2	4.8	5.4	4.4	5.5	4.1	4.4	4.1	3.4	3.9	4.2	3.6	3.5	3.1	3.3	3.4	3.7	3.9	3.9	4.1	2.7	3.6	3.9	2.6	2.9	5.5	2.6	3.8
3	2.6	3.5	2.9	2.9	3.0	3.3	2.6	4.5	3.6	3.4	3.9	4.5	4.5	3.7	3.6	4.2	6.7	9.8	16.6	13.2	12.0	15.6	10.0	8.0	16.6	2.6	6.2
4	5.8	4.6	5.2	8.4	4.5	4.0	2.9	3.9	4.0	4.7	4.5	4.8	3.9	3.6	4.0	4.3	6.7	6.4	4.4	3.7	3.8	4.9	3.9	3.7	8.4	2.9	4.6
5	3.4	3.4	3.8	3.7	5.2	4.7	6.4	4.9	5.7	8.3	11.0	7.2	11.8	6.1	8.6	7.9	4.2	5.7	7.8	5.3	11.7	8.4	5.2	5.1	11.8	3.4	6.5
6	6.1	14.6	9.8	4.5	3.3	6.1	11.4	7.6	24.5	10.2	6.3	32.8	26.2	25.5	18.7	65.6	30.5	10.2	7.3	25.0	33.5	39.9	13.7	6.5	65.6	3.3	18.3
7	5.4	4.5	3.1	3.1	3.9	3.6	3.2	2.1	2.8	4.0	3.6	3.4	2.8	2.4	2.5	3.3	3.2	4.6	2.2	2.6	2.1	3.7	3.2	3.8	5.4	2.1	3.3
8	2.3	1.9	2.1	2.3	2.6	2.8	3.1	2.8	2.8	4.2	4.6	4.8	3.2	3.9	4.5	4.9	3.7	2.6	2.6	2.8	2.8	2.6	3.8	3.8	4.9	1.9	3.2
9	3.4	3.2	3.1	2.8	2.6	2.4	2.9	3.1	3.0	2.8	2.5	2.7	2.4	2.3	2.3	2.5	3.9	4.4	2.9	2.7	2.5	3.8	2.8	2.5	4.4	2.3	2.9
10	4.4	4.5	3.0	4.2	3.8	5.3	3.1	3.3	3.5	4.4	5.1	7.2	5.6	6.6	9.4	17.0	28.6	19.9	5.3	5.0	5.1	8.6	3.4	4.6	28.6	3.0	7.1
11	4.4	4.2	6.2	6.2	3.3	2.9	2.6	2.5	2.5	3.2	3.3	3.5	4.0	3.4	3.3	3.4	3.3	3.2	3.4	3.0	3.1	3.2	4.0	3.6	6.2	2.5	3.6
12	3.2	3.6	3.0	3.7	3.7	2.8	2.7	3.2	4.1	3.8	3.8	5.8	4.3	4.4	8.3	4.0	4.0	2.3	3.5	5.0	26.0	12.0	18.0	41.4	41.4	2.3	7.4
13	58.7	21.2	17.6	38.2	19.1	19.1	15.3	10.1	10.1	4.9	6.5	7.8	5.6	4.6	3.5	2.7	5.5	3.7	3.6	2.9	2.6	4.4	2.4	2.6	58.7	2.4	11.4
14	3.3	3.2	3.7	4.6	4.0	3.0	4.6	3.7	5.4	4.4	3.3	5.0	33.6	33.1	9.7	9.4	6.0	6.6	9.3	11.6	8.1	10.4	13.3	33.6	33.6	3.0	9.7
15	5.5	7.9	6.7	11.8	5.1	16.5	31.2	43.4	22.3	5.7	5.1	14.9	58.7	23.0	11.8	11.5	6.5	8.5	5.1	6.4	4.3	4.5	2.6	3.3	58.7	2.6	13.4
16	2.1	3.5	4.5	4.0	5.5	5.1	4.4	5.5	7.9	9.0	3.0	3.4	3.7	2.7	2.9	2.7	2.8	3.0	3.9	3.8	3.6	3.8	4.8	5.0	9.0	2.1	4.2
17	4.3	3.8	3.1	3.0	2.1	3.2	2.6	2.0	2.1	3.0	3.4	4.3	4.1	4.8	3.9	4.1	4.0	4.9	3.7	3.0	3.1	3.0	3.2	3.9	4.9	2.0	3.4
18	3.3	3.5	3.5	3.6	4.1	4.5	5.1	26.6	16.0	3.6	3.1	3.1	44.7	24.5	20.6	22.7	11.8	7.8	43.3	10.8	6.2	24.7	29.1	3.5	44.7	3.1	13.7
19	3.2	9.0	42.2	9.7	4.6	9.2	6.9	8.3	9.2	4.4	7.4	3.7	3.6	4.0	4.1	4.5	8.5	7.0	5.3	5.4	6.4	4.7	6.1	5.7	42.2	3.2	7.6
20	5.6	3.7	4.6	4.5	7.3	4.6	3.6	3.8	3.3	3.6	7.3	5.5	7.6	21.7	3.5	7.0	4.9	3.1	2.2	2.4	2.8	3.1	2.5	2.6	21.7	2.2	5.0
21	2.1	2.3	2.5	2.4	2.7	2.6	2.8	2.9	3.0	2.4	3.1	4.6	3.0	4.9	4.3	4.1	4.4	3.1	3.5	4.8	3.9	4.3	6.3	4.7	6.3	2.1	3.5
22	3.6	11.7	5.8	5.0	2.9	3.1	3.3	3.2	3.4	2.3	3.4	3.2	2.9	3.0	2.9	3.3	3.6	3.2	3.0	4.9	3.2	3.6	3.6	3.4	11.7	2.3	3.8
23	4.8	4.4	3.7	2.6	3.2	3.9	8.4	9.9	24.0	34.7	2.4	6.2	18.2	6.5	7.6	4.7	3.5	1.9	2.8	6.3	6.1	3.8	4.9	3.9	34.7	1.9	7.4
24	3.2	3.5	3.8	3.6	3.5	7.9	4.5	3.9	3.0	4.3	4.1	3.9	3.6	3.7	3.6	3.5	3.1	3.2	2.6	3.4	3.5	4.5	4.3	4.7	7.9	2.6	3.9
25	3.5	3.4	3.3	3.3	2.9	4.1	3.0	3.9	3.1	4.9	4.3	7.8	10.3	3.9	7.2	7.5	3.1	3.0	3.6	4.0	2.7	3.6	4.3	5.5	10.3	2.7	4.4
26	4.2	5.2	3.2	2.9	4.0	3.9	4.0	4.1	3.8	5.6	3.1	2.7	2.8	3.4	3.4	3.4	3.3	4.6	2.0	2.4	2.2	3.8	4.0	3.5	5.6	2.0	3.6
27	3.0	3.6	5.1	4.7	4.2	4.6	6.0	9.5	19.1	12.3	11.0	7.0	6.8	8.8	10.6	6.2	8.7	9.2	7.2	9.8	7.9	5.4	14.2	8.9	19.1	3.0	8.1
28	6.6	3.6	7.6	10.3	5.6	5.5	6.8	4.7	4.8	4.9	5.1	4.8	7.9	7.1	4.2	9.7	38.3	9.8	5.5	6.3	5.1	2.9	2.8	2.1	38.3	2.1	7.2
29	3.2	4.2	5.5	2.2	3.1	3.9	3.8	2.8	4.1	7.2	5.4	10.1	28.0	18.3	12.5	45.5	15.5	7.4	10.2	8.1	9.5	7.9	4.7	3.3	45.5	2.2	9.4
30	2.6	3.3	3.3	3.5	3.0	3.2	3.2	3.0	3.5	3.7	3.4	3.3	3.3	3.3	3.6	3.5	3.2	3.6	3.5	3.5	3.6	3.5	3.5	3.7	3.7	2.6	3.4
31	3.6	3.5	3.6	3.1	3.0	3.2	2.9	2.8	2.9	9.1	6.4	12.5	8.4	5.2	8.2	13.2	7.1	6.5	6.8	6.5	10.2	6.9	4.9	3.7	13.2	2.8	6.0
Max.	**58.7**	**21.2**	**42.2**	**38.2**	**19.1**	**19.1**	**31.2**	**43.4**	**24.5**	**34.7**	**41.0**	**68.6**	**58.7**	**33.1**	**20.6**	**65.6**	**38.3**	**19.9**	**43.3**	**25.0**	**33.5**	**39.9**	**29.1**	**41.4**	**68.6**		
Min.	**2.1**	**1.9**	**2.1**	**2.2**	**2.1**	**2.4**	**2.6**	**2.0**	**2.1**	**2.3**	**2.4**	**2.7**	**2.4**	**2.3**	**2.3**	**2.5**	**2.8**	**1.9**	**2.0**	**2.4**	**2.1**	**2.6**	**2.4**	**2.1**		**1.9**	
Avg.	**5.6**	**5.2**	**5.9**	**5.6**	**4.3**	**5.0**	**5.5**	**6.5**	**6.9**	**6.1**	**5.9**	**8.5**	**12.0**	**8.3**	**6.5**	**9.6**	**8.2**	**5.9**	**6.4**	**6.0**	**6.7**	**7.1**	**6.4**	**6.4**			**6.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.1	2.9	2.9	3.0	5.4	3.0	3.7	3.9	5.1	4.9	14.3	6.4	9.2	34.0	3.0	3.4	3.0	3.1	30.7	60.0	10.9	9.5	12.7	24.0	60.0	2.9	10.9
2	12.4	11.5	6.7	5.3	39.4	28.5	9.0	21.4	8.7	9.5	26.4	32.2	13.7	13.3	18.8	6.8	5.8	14.7	6.1	8.7	5.3	6.2	3.7	3.0	39.4	3.0	13.2
3	3.2	4.1	2.9	3.6	3.7	5.9	9.2	8.8	3.0	3.2	3.0	3.0	3.3	3.4	3.1	3.9	3.6	3.6	3.8	5.8	4.5	4.6	4.0	3.7	9.2	2.9	4.2
4	3.5	4.1	4.2	4.5	4.1	4.1	4.4	4.3	12.7	14.7	3.5	4.5	2.8	3.2	5.7	23.3	8.4	3.0	2.7	4.9	3.5	4.8	2.9	3.1	23.3	2.7	5.7
5	4.7	4.6	4.0	4.6	3.7	4.2	4.4	3.5	4.1	3.6	2.8	3.3	4.3	3.9	3.8	4.3	2.7	2.7	2.4	4.0	5.9	4.5	4.5	4.5	5.9	2.4	4.0
6	3.2	3.7	4.2	3.9	5.5	4.9	3.1	4.4	5.8	5.3	4.4	6.9	5.3	6.4	6.6	8.2	6.8	7.3	7.8	6.0	10.6	27.3	10.2	7.1	27.3	3.1	6.9
7	5.7	5.7	5.3	2.7	3.5	7.1	3.8	5.4	12.9	8.7	6.1	4.6	4.4	4.1	4.0	3.5	4.3	5.0	6.8	4.4	3.8	3.8	3.4	3.4	12.9	2.7	5.1
8	3.6	3.3	3.2	3.3	3.6	4.1	4.1	3.8	4.2	3.7	3.1	3.7	4.3	4.3	3.9	4.1	4.0	4.2	4.0	4.8	4.9	4.7	3.9	5.1	5.1	3.1	4.0
9	4.9	4.8	3.3	4.1	3.9	4.5	3.9	4.0	4.4	3.9	4.7	4.6	5.5	5.6	6.1	4.9	5.2	4.7	8.4	7.9	12.0	7.9	4.3	4.2	12.0	3.3	5.3
10	28.8	16.0	6.3	14.6	3.6	4.0	3.2	2.8	2.7	2.5	3.6	4.5	3.6	4.2	4.8	4.0	3.4	3.9	3.3	3.5	9.5	28.0	8.0	6.8	28.8	2.5	7.3
11	5.5	30.4	20.4	18.3	8.6	11.7	4.7	3.0	4.6	4.8	4.3	5.8	3.6	5.0	3.1	3.4	2.6	2.9	2.9	3.3	2.9	2.0	2.1	2.1	30.4	2.0	6.6
12	2.0	2.2	2.4	2.2	2.1	3.4	3.9	4.0	3.6	4.0	2.8	2.9	3.8	4.0	4.2	4.3	4.3	4.5	4.1	7.9	3.4	3.2	3.7	15.5	15.5	2.0	4.1
13	10.8	16.8	34.8	50.1	8.3	4.0	3.9	3.1	2.1	2.1	2.2	2.3	2.0	2.2	2.2	2.3	2.8	3.0	2.4	2.4	2.3	2.3	2.6	3.5	50.1	2.0	7.1
14	3.4	2.9	2.6	2.8	2.9	3.0	3.3	3.1	3.2	3.1	3.3	3.1	3.4	3.3	3.8	3.2	3.0	2.3	3.7	5.7	3.8	3.3	3.6	6.0	6.0	2.3	3.4
15	7.3	5.4	4.1	3.0	3.6	4.3	4.5	6.2	3.6	3.4	4.0	2.6	3.1	3.6	3.8	4.2	3.4	2.7	7.2	15.3	8.8	16.9	39.0	23.7	39.0	2.6	7.6
16	9.3	7.4	4.9	5.0	4.1	3.2	2.4	2.7	2.8	3.0	3.1	3.1	3.5	3.3	3.3	3.0	3.2	2.9	2.9	3.6	4.1	6.7	8.8	3.6	9.3	2.4	4.2
17	3.7	4.0	3.6	3.8	3.6	5.5	8.2	4.4	4.1	4.3	8.1	7.7	4.2	3.6	5.2	4.8	5.1	3.4	6.7	6.4	20.8	20.5	34.3	2.8	34.3	2.8	7.4
18	2.7	2.2	9.8	5.6	7.5	4.3	12.5	32.2	44.4	43.7	30.2	29.6	6.1	15.8	17.0	26.1	32.4	12.4	11.3	9.6	22.2	71.2	40.8	48.3	71.2	2.2	22.4
19	51.5	38.2	41.5	39.9	24.3	17.6	14.6	13.2	5.9	8.2	18.7	31.6	19.2	3.5	8.3	5.4	17.5	18.3	7.8	4.9	4.1	5.4	7.1	9.7	51.5	3.5	17.3
20	8.7	8.2	16.4	24.6	29.7	12.2	20.7	8.9	8.0	6.3	5.5	5.1	4.7	4.6	3.9	3.6	2.9	2.8	2.6	3.0	2.9	2.6	2.6	2.4	29.7	2.4	8.0
21	2.5	2.6	2.7	3.7	2.8	2.6	2.8	3.2	4.5	4.0	4.1	3.3	3.1	3.0	3.1	3.4	6.2	7.7	4.9	4.6	15.7	3.2	2.6	2.5	15.7	2.5	4.1
22	4.5	4.6	5.3	8.6	4.6	7.0	17.0	23.6	52.4	35.7	12.6	34.1	13.1	9.9	8.9	12.2	7.0	5.9	8.3	33.0	6.8	13.0	5.5	4.6	52.4	4.5	14.1
23	3.4	4.1	7.8	8.5	5.7	5.2	4.3	4.1	4.0	4.6	5.9	4.0	4.6	4.2	8.8	16.2	18.6	17.9	5.7	4.6	2.6	2.4	2.7	3.2	18.6	2.4	6.4
24	4.1	4.6	2.8	3.6	3.6	2.1	2.3	3.5	3.4	2.6	2.7	3.3	3.1	2.7	2.6	4.6	3.0	3.7	3.5	2.5	4.6	4.0	2.9	3.4	4.6	2.1	3.3
25	6.0	8.0	9.2	10.7	10.4	9.8	8.2	10.2	6.0	6.6	5.5	5.3	6.5	4.7	4.6	6.7	5.1	3.3	3.8	3.8	3.1	2.9	3.4	4.2	10.7	2.9	6.2
26	3.6	4.6	3.8	4.7	5.0	4.0	3.4	3.4	3.7	3.9	3.9	8.3	9.8	7.4	5.7	6.4	4.0	3.7	5.0	10.4	4.1	4.8	7.5	7.8	10.4	3.4	5.4
27	4.8	61.0	20.0	19.4	9.9	11.1	37.9	42.5	19.2	7.5	5.4	3.3	4.4	4.0	3.5	3.2	3.9	3.1	3.1	3.2	2.7	4.6	4.1	4.6	61.0	2.7	11.9
28	4.7	4.3	5.2	3.7	2.7	2.8	4.0	4.6	5.3	4.1	32.7	16.8	14.6	16.6	13.0	10.7	10.1	17.0	11.2	32.0	51.0	31.2	35.3	14.0	51.0	2.7	14.5
29	12.2	6.5	7.4	2.8	4.2	3.2	5.4	6.1	9.7	3.7	3.3	3.6	2.3	2.6	2.9	2.9	4.3	2.8	3.6	3.5	2.4	1.8	3.0	2.2	12.2	1.8	4.3
30	3.2	2.2	2.6	1.7	2.9	4.2	24.2	6.7	8.4	7.8	9.4	10.2	12.5	8.0	8.1	6.9	4.1	4.7	3.5	3.0	2.5	2.9	3.3	3.4	24.2	1.7	6.1
Max.	**51.5**	**61.0**	**41.5**	**50.1**	**39.4**	**28.5**	**37.9**	**42.5**	**52.4**	**43.7**	**32.7**	**34.1**	**19.2**	**34.0**	**18.8**	**26.1**	**32.4**	**18.3**	**30.7**	**60.0**	**51.0**	**71.2**	**40.8**	**48.3**	**71.2**		
Min.	**2.0**	**2.2**	**2.4**	**1.7**	**2.1**	**2.1**	**2.3**	**2.7**	**2.1**	**2.1**	**2.2**	**2.3**	**2.0**	**2.2**	**2.2**	**2.3**	**2.6**	**2.3**	**2.4**	**2.4**	**2.3**	**1.8**	**2.1**	**2.1**		**1.7**	
Avg.	**7.6**	**9.4**	**8.3**	**9.1**	**7.4**	**6.4**	**7.9**	**8.4**	**8.8**	**7.4**	**8.0**	**8.7**	**6.1**	**6.5**	**5.9**	**6.7**	**6.4**	**5.9**	**6.0**	**9.1**	**8.1**	**10.2**	**9.1**	**7.7**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.2	3.3	3.1	3.0	2.9	3.2	3.2	3.0	3.1	3.1	3.6	3.7	3.6	3.3	4.0	4.3	4.1	3.3	4.5	5.3	3.6	4.2	5.0	5.1	5.3	2.9	3.7
2	5.1	5.7	7.3	7.8	13.9	7.1	5.2	11.8	13.3	19.1	9.0	7.3	3.2	3.1	3.9	4.2	3.9	4.1	3.8	3.2	3.1	3.3	3.3	3.3	19.1	3.1	6.4
3	3.0	3.0	3.0	3.0	7.3	5.7	7.1	7.3	9.9	10.6	7.6	10.1	4.8	5.3	5.2	5.1	6.5	6.9	16.0	24.4	44.4	18.0	12.1	15.6	44.4	3.0	10.1
4	6.4	22.4	29.3	17.4	9.0	5.0	3.2	3.1	3.2	3.6	3.5	3.7	3.9	3.6	4.0	3.5	3.6	3.1	3.3	3.3	3.3	3.3	3.4	3.3	29.3	3.1	6.3
5	3.4	3.4	3.4	3.5	3.6	3.3	3.2	3.1	3.5	3.7	3.3	3.8	3.4	3.5	3.4	3.2	3.8	3.9	3.1	3.1	3.7	6.2	10.7	15.8	15.8	3.1	4.4
6	4.1	5.1	9.7	20.9	16.2	20.2	11.0	13.0	9.8	9.0	7.5	5.0	3.4	4.7	4.4	4.3	5.7	4.9	4.2	3.4	3.8	3.5	5.5	5.8	20.9	3.4	7.7
7	11.1	9.5	6.8	5.8	4.0	4.6	6.0	7.8	6.8	8.2	7.3	7.4	6.3	6.2	7.5	8.3	7.2	6.6	7.5	8.1	15.3	21.0	21.0	16.3	21.0	4.0	9.0
8	17.8	11.9	5.7	5.6	7.9	5.5	5.7	5.8	5.8	5.4	6.4	4.8	4.8	4.7	4.7	5.8	5.0	3.8	4.0	8.3	6.8	4.8	5.6	5.0	17.8	3.8	6.3
9	5.1	15.4	15.4	7.0	6.1	6.6	4.7	5.1	6.6	6.5	6.8	8.4	5.4	5.3	4.0	6.4	28.1	32.1	20.9	28.2	23.3	12.6	10.4	10.8	32.1	4.0	11.7
10	7.8	6.6	8.9	35.3	12.1	16.2	26.5	9.7	8.4	7.8	6.0	3.8	5.4	18.0	8.6	34.8	6.1	7.9	3.0	3.7	4.6	3.2	3.8	9.5	35.3	3.0	10.7
11	25.5	16.2	37.6	5.9	9.3	27.3	30.9	54.9	34.2	4.4	6.6	7.2	10.1	4.0	16.5	25.5	10.3	8.5	5.9	3.8	2.6	2.7	4.7	6.7	54.9	2.6	15.1
12	4.5	4.7	6.7	4.5	4.8	4.0	4.2	2.9	2.5	2.7	3.6	3.8	3.8	3.8	3.8	3.6	3.4	3.0	4.1	3.9	5.1	4.7	6.3	7.1	7.1	2.5	4.2
13	4.9	4.4	4.5	4.9	3.7	3.2	9.7	6.7	8.7	57.3	7.4	9.9	15.8	20.9	5.9	2.8	3.6	3.9	14.2	17.6	24.9	37.4	18.5	6.6	57.3	2.8	12.4
14	6.9	6.0	4.7	7.1	9.6	9.3	6.5	6.8	4.7	5.9	8.2	7.2	8.3	8.6	6.1	5.9	5.2	4.4	4.2	3.8	4.1	3.0	3.3	4.2	9.6	3.0	6.0
15	5.7	6.0	4.4	8.6	8.9	11.9	11.1	24.8	12.4	5.9	4.9	42.0	10.1	56.8	12.1	12.0	10.6	5.7	9.2	8.2	4.4	3.9	6.7	3.5	56.8	3.5	12.1
16	5.1	60.9	11.7	33.4	3.6	3.7	7.4	7.8	5.3	4.9	9.5	6.5	3.8	3.9	5.6	10.1	5.5	4.4	3.7	4.8	7.6	3.2	15.8	4.6	60.9	3.2	9.7
17	21.4	8.2	5.0	14.3	7.8	6.4	18.6	32.0	13.0	14.9	11.4	8.3	9.2	7.5	8.0	5.6	5.1	5.9	4.9	4.7	4.1	4.2	5.2	4.6	32.0	4.1	9.6
18	3.7	3.8	4.3	3.0	4.6	8.6	9.6	16.9	22.8	17.5	11.9	6.4	4.2	5.2	4.6	4.8	5.0	3.0	3.9	4.2	2.8	2.6	3.4	56.6	56.6	2.6	8.9
19	16.1	4.4	16.9	30.1	16.8	38.9	51.7	11.9	9.4	7.1	5.6	6.2	5.4	5.2	4.7	4.3	4.5	4.3	4.2	4.0	3.7	4.2	4.4	4.8	51.7	3.7	11.2
20	5.1	5.3	4.5	3.7	3.4	3.2	3.1	3.1	3.6	3.9	4.4	4.1	6.5	4.6	4.5	3.9	5.1	6.0	6.5	16.2	4.5	2.5	3.5	2.9	16.2	2.5	4.8
21	2.3	3.0	2.9	2.8	2.9	3.0	3.3	3.4	3.9	3.7	3.8	3.7	4.0	5.0	4.9	4.4	3.8	4.1	3.8	3.6	4.1	5.1	3.9	3.9	5.1	2.3	3.7
22	3.5	3.7	5.3	4.2	3.1	3.1	3.9	3.9	4.1	5.1	5.0	4.8	5.7	6.2	5.6	6.3	5.2	5.2	5.3	4.2	3.2	3.5	2.9	3.5	6.3	2.9	4.4
23	3.2	3.8	2.9	4.7	3.8	4.8	4.1	4.9	5.1	7.0	7.6	8.4	15.4	23.9	26.5	14.9	15.6	9.2	3.9	3.3	4.1	4.6	3.9	3.5	26.5	2.9	7.9
24	3.2	5.6	4.5	5.2	3.3	5.2	6.7	3.7	5.1	11.3	24.1	11.0	11.6	12.2	11.0	10.1	20.7	16.6	9.3	3.7	3.6	4.8	4.0	2.1	24.1	2.1	8.3
25	2.9	3.1	3.0	2.6	3.0	2.9	3.0	6.6	8.5	13.7	26.3	33.6	20.7	27.0	30.1	39.3	10.2	9.5	6.9	26.8	18.2	6.1	4.3	4.2	39.3	2.6	13.0
26	2.6	2.9	3.5	2.9	3.0	7.9	4.9	5.3	5.4	4.9	7.3	7.0	8.0	12.5	11.4	10.7	7.2	6.4	3.8	3.1	4.4	7.6	10.6	7.5	12.5	2.6	6.3
27	4.0	12.0	10.3	3.4	2.7	3.0	3.8	3.3	3.5	5.7	5.4	5.9	6.2	5.0	5.1	4.7	6.3	5.6	5.6	4.6	4.3	5.3	3.5	5.3	12.0	2.7	5.2
28	9.1	6.6	4.6	19.0	9.7	5.0	7.4	7.2	8.6	13.0	40.7	50.4	39.9	21.6	23.5	21.1	20.3	18.6	19.5	7.3	5.7	18.6	4.1	3.4	50.4	3.4	16.0
29	3.3	3.7	2.9	2.9	4.1	3.2	3.6	5.7	6.9	7.6	7.7	8.6	8.4	9.0	10.0	9.6	10.0	6.9	5.4	4.6	4.6	4.5	3.3	3.7	10.0	2.9	5.8
30	2.7	3.2	3.3	7.5	7.8	13.9	22.9	24.0	8.8	13.0	11.2	11.5	11.2	9.2	11.5	9.2	7.4	6.6	5.3	5.0	4.8	5.2	7.1	6.6	24.0	2.7	9.1
31	4.3	8.2	7.5	18.2	14.7	7.9	7.8	5.8	6.3	7.6	4.5	7.5	8.9	6.0	7.6	6.6	7.9	6.0	8.1	7.6	6.6	15.8	18.3	13.1	18.3	4.3	8.9
Max.	**25.5**	**60.9**	**37.6**	**35.3**	**16.8**	**38.9**	**51.7**	**54.9**	**34.2**	**57.3**	**40.7**	**50.4**	**39.9**	**56.8**	**30.1**	**39.3**	**28.1**	**32.1**	**20.9**	**28.2**	**44.4**	**37.4**	**21.0**	**56.6**	**60.9**		
Min.	**2.3**	**2.9**	**2.9**	**2.6**	**2.7**	**2.9**	**3.0**	**2.9**	**2.5**	**2.7**	**3.3**	**3.7**	**3.2**	**3.1**	**3.4**	**2.8**	**3.4**	**3.0**	**3.0**	**3.1**	**2.6**	**2.5**	**2.9**	**2.1**		**2.1**	
Avg.	**6.7**	**8.4**	**7.9**	**9.6**	**6.9**	**8.2**	**9.7**	**10.0**	**8.2**	**9.5**	**9.0**	**10.1**	**8.4**	**10.2**	**8.7**	**9.5**	**8.0**	**7.1**	**6.7**	**7.6**	**7.7**	**7.4**	**7.1**	**8.0**			**8.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	23.2	4.6	64.1	4.9	5.7	5.5	7.5	12.9	13.1	11.6	15.8	14.7	14.9	27.1	17.7	16.6	25.0	23.7	11.0	5.7	4.7	3.9	6.1	44.9	64.1	3.9	16.0
2	3.2	3.7	4.0	3.1	3.9	2.2	3.0	5.5	9.8	9.4	11.4	16.8	13.5	13.6	12.7	7.2	9.0	6.8	5.9	4.6	4.4	4.5	5.1	4.7	16.8	2.2	7.0
3	4.1	6.7	4.2	3.8	5.3	4.6	7.2	5.0	5.5	6.0	7.1	8.7	10.1	8.3	11.7	9.9	10.7	8.6	6.8	6.5	4.6	3.3	2.7	3.4	11.7	2.7	6.4
4	3.3	4.3	4.8	5.1	4.5	4.3	4.3	4.2	6.0	6.1	6.9	8.1	8.3	9.8	9.4	9.6	9.8	8.7	7.2	5.3	4.9	3.7	3.0	2.8	9.8	2.8	6.0
5	2.6	3.5	4.0	3.9	2.8	3.5	4.0	4.5	6.3	9.3	21.1	21.0	23.3	28.4	25.6	33.5	21.2	23.5	20.6	21.6	20.8	7.2	4.2	3.4	33.5	2.6	13.3
6	4.0	7.2	15.0	19.1	10.0	6.6	12.1	10.6	12.2	12.4	21.5	19.6	13.4	11.7	13.3	9.1	8.7	8.3	7.5	7.2	5.9	5.9	6.2	6.5	21.5	4.0	10.6
7	6.8	6.1	4.8	4.5	4.8	5.0	5.8	5.0	5.0	4.9	6.3	5.7	5.5	5.8	6.0	4.9	5.1	4.5	4.2	4.5	5.0	5.2	4.5	4.2	6.8	4.2	5.2
8	4.0	4.3	4.5	4.5	4.6	4.5	4.6	4.5	4.7	4.7	4.8	5.0	5.6	5.4	5.2	5.0	5.0	5.1	4.9	4.7	5.0	4.9	4.3	4.5	5.6	4.0	4.8
9	4.4	4.5	4.4	4.7	4.9	5.0	5.0	5.1	5.0	5.1	5.3	5.2	5.6	5.6	5.0	5.5	5.4	5.0	5.8	4.7	5.2	5.2	4.6	4.6	5.8	4.4	5.0
10	4.8	4.9	4.7	4.7	5.1	4.8	4.9	5.1	5.2	5.7	5.8	6.1	5.6	5.6	6.0	5.9	5.8	4.9	5.4	5.2	5.1	5.1	5.0	4.9	6.1	4.7	5.3
11	4.7	4.6	4.5	4.8	4.9	4.8	4.8	4.7	4.7	5.2	4.9	4.7	5.2	5.5	5.0	5.2	5.3	5.3	4.7	4.7	4.9	4.6	5.2	4.5	5.5	4.5	4.9
12	4.3	4.5	4.6	4.2	4.5	3.8	4.9	5.4	4.9	4.7	5.7	6.4	5.9	5.4	5.6	5.7	5.5	6.8	6.2	6.9	7.5	5.4	6.2	4.8	7.5	3.8	5.4
13	4.5	4.7	3.4	4.6	2.9	4.6	6.7	6.1	7.3	6.1	9.3	12.6	15.8	12.7	12.7	15.0	13.1	10.2	8.1	8.3	21.9	7.9	10.4	5.3	21.9	2.9	8.9
14	17.6	22.9	27.0	54.6	5.3	3.6	5.7	20.8	7.9	22.3	9.0	25.1	14.8	14.5	23.1	26.0	20.4	26.4	16.9	53.7	34.3	10.9	14.9	6.9	54.6	3.6	20.2
15	7.4	3.9	3.2	3.4	4.2	3.4	5.1	5.8	7.6	6.8	9.9	10.5	21.8	13.5	15.6	16.3	29.2	11.2	7.1	6.5	6.4	13.1	10.3	7.8	29.2	3.2	9.6
16	5.2	4.8	4.5	3.5	4.1	5.4	4.2	6.4	6.2	5.4	5.7	6.2	5.4	6.2	5.2	4.5	5.5	4.3	4.7	5.4	5.1	3.8	6.4	7.8	7.8	3.5	5.2
17	8.0	6.8	5.3	3.6	7.3	3.5	5.9	7.2	6.5	7.5	10.3	12.4	13.1	9.0	9.2	9.0	8.5	7.7	7.0	6.4	6.3	6.0	6.1	6.2	13.1	3.5	7.5
18	5.6	14.1	56.4	26.3	16.9	15.0	11.7	10.1	11.8	8.6	8.1	7.0	5.4	7.5	6.8	6.3	5.7	5.4	5.3	5.2	5.2	5.7	18.6	19.6	56.4	5.2	12.0
19	26.7	12.9	5.4	6.1	5.4	6.6	10.0	14.6	41.9	29.0	17.1	21.9	27.7	18.2	21.5	28.1	37.6	14.8	13.3	9.5	6.0	8.5	15.2	6.6	41.9	5.4	16.9
20	5.2	11.2	7.4	6.0	5.3	5.3	9.9	18.2	29.1	34.8	23.2	49.3	34.3	38.4	10.0	5.0	7.7	5.8	6.1	6.5	6.0	4.7	7.6	20.2	49.3	4.7	14.9
21	5.3	4.3	5.6	18.4	7.8	28.0	18.4	17.9	14.2	10.0	9.6	15.3	24.8	43.3	20.7	23.0	12.1	23.2	43.5	16.3	7.5	3.2	2.1	3.7	43.5	2.1	15.7
22	3.2	3.0	5.5	4.1	4.1	3.4	5.4	5.8	5.9	11.5	22.6	9.7	9.7	6.2	5.9	5.9	6.1	5.9	6.0	5.9	5.1	5.8	6.4	6.0	22.6	3.0	6.6
23	5.7	5.3	4.8	5.4	5.3	4.4	4.8	4.6	4.9	5.0	6.0	8.0	7.0	10.7	10.5	8.4	7.4	8.4	7.4	6.9	5.6	6.1	4.0	5.9	10.7	4.0	6.4
24	5.4	4.1	5.1	5.1	8.9	6.6	38.0	10.1	13.8	14.6	17.8	23.9	44.9	54.0	22.1	49.3	14.3	9.1	24.5	20.0	9.4	9.4	8.5	13.1	54.0	4.1	18.0
25	13.6	4.3	4.7	3.9	7.4	28.0	16.8	11.1	27.2	21.7	24.3	24.8	26.8	16.3	14.9	13.2	13.4	9.3	8.5	5.6	6.7	6.8	5.1	4.3	28.0	3.9	13.3
26	5.7	5.3	5.9	8.3	10.1	12.9	16.0	16.3	16.0	43.4	28.0	25.3	27.6	34.8	18.7	11.4	15.4	28.8	15.3	5.8	5.1	5.7	10.2	11.0	43.4	5.1	15.9
27	10.9	34.5	11.9	47.4	9.2	6.7	5.2	7.2	11.8	22.7	63.8	44.8	50.0	23.0	21.2	17.5	11.7	12.0	10.5	7.3	5.1	5.6	10.5	11.3	63.8	5.1	19.2
28	4.9	18.4	2.8	10.6	39.5	34.1	12.2	15.0	5.7	10.8	10.6	8.8	13.7	13.5	10.8	12.5	11.5	12.0	18.9	8.7	7.2	17.1	15.8	15.8	39.5	2.8	13.8
29	16.4	12.9	8.0	10.7	8.7	14.9	9.3	17.6	9.2	10.3	13.0	11.3	12.6	12.1	8.5	8.4	8.2	6.5	6.5	5.8	6.0	6.0	6.9	7.3	17.6	5.8	9.9
30	5.8	6.7	6.9	6.5	5.3	7.2	6.6	7.1	11.0	11.5	14.0	12.4	11.6	8.6	11.6	17.0	18.4	17.0	30.9	26.7	23.4	15.5	10.2	9.2	30.9	5.3	12.5
Max.	**26.7**	**34.5**	**64.1**	**54.6**	**39.5**	**34.1**	**38.0**	**20.8**	**41.9**	**43.4**	**63.8**	**49.3**	**50.0**	**54.0**	**25.6**	**49.3**	**37.6**	**28.8**	**43.5**	**53.7**	**34.3**	**17.1**	**18.6**	**44.9**	**64.1**		
Min.	**2.6**	**3.0**	**2.8**	**3.1**	**2.8**	**2.2**	**3.0**	**4.2**	**4.7**	**4.7**	**4.8**	**4.7**	**5.2**	**5.4**	**5.0**	**4.5**	**5.0**	**4.3**	**4.2**	**4.5**	**4.4**	**3.2**	**2.1**	**2.8**		**2.1**	
Avg.	**7.6**	**8.0**	**9.9**	**9.9**	**7.3**	**8.3**	**8.7**	**9.1**	**10.7**	**12.2**	**14.0**	**15.0**	**16.1**	**15.8**	**12.4**	**13.2**	**12.1**	**11.0**	**11.0**	**9.7**	**8.3**	**6.7**	**7.5**	**8.7**			**10.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.1	15.6	14.7	9.3	12.9	23.0	33.3	21.2	42.3	45.7	48.0	42.7	54.5	20.3	23.8	34.1	21.2	12.3	9.9	8.6	5.3	6.6	6.2	17.8	54.5	5.3	22.5
2	16.9	12.3	5.6	6.7	8.1	5.0	3.2	7.3	9.1	8.4	12.8	14.5	14.5	11.8	12.6	16.0	14.3	8.9	8.5	5.9	5.1	4.1	4.0	4.5	16.9	3.2	9.2
3	3.3	4.0	5.8	6.2	4.4	5.2	4.4	9.4	6.1	8.7	12.0	10.6	20.6	21.4	27.0	25.0	46.8	10.2	7.9	25.8	14.0	10.6	37.5	12.1	46.8	3.3	14.1
4	11.2	15.1	24.7	18.3	6.1	9.7	45.4	40.5	45.3	37.6	42.3	45.2	36.1	33.4	41.2	34.7	14.4	13.5	10.6	8.6	5.8	23.4	21.2	22.3	45.4	5.8	25.3
5	15.3	24.9	9.9	11.2	11.0	21.8	10.7	9.1	10.4	8.8	13.7	27.6	52.9	33.5	42.6	16.0	29.5	11.2	27.7	25.8	10.9	14.2	34.0	49.1	52.9	8.8	21.7
6	46.3	10.3	14.6	17.2	14.2	29.5	25.9	24.8	10.2	13.5	16.2	45.8	44.3	11.4	10.8	11.9	9.6	46.0	18.8	13.1	42.1	42.5	7.8	18.2	46.3	7.8	22.7
7	12.5	6.6	8.0	6.2	4.5	5.6	5.0	5.6	5.8	6.1	5.3	5.9	6.8	5.9	6.4	5.5	5.0	6.0	8.1	6.9	6.8	7.5	12.8	6.7	12.8	4.5	6.7
8	6.1	9.1	29.0	9.7	13.5	6.6	5.4	5.5	4.5	5.5	18.5	29.1	16.8	26.4	46.9	48.9	43.6	14.3	14.2	15.0	11.4	6.4	9.9	15.5	48.9	4.5	17.1
9	10.4	6.0	5.9	4.2	3.2	4.9	5.1	7.1	14.7	26.9	25.9	13.4	12.1	11.6	10.6	13.6	8.8	7.7	6.2	5.8	8.4	8.1	5.3	4.8	26.9	3.2	9.6
10	4.7	4.5	3.9	4.1									4.4	4.3	5.0	5.5	5.5	6.1	5.0	5.6	6.3	31.1			31.1	3.9	6.9
11		5.2	5.1	5.2	5.3	5.3	7.5	6.8	5.9		7.5	7.0	6.5	5.8	5.3	6.5	5.9	6.8	7.8	21.2	16.2	16.1	32.5	59.8	59.8	5.1	11.4
12	11.2	8.3	8.4	14.3	11.0	9.1	18.5	20.4	34.8	9.5	19.6	16.1	20.8	4.9	4.3	6.8	8.0	9.0	13.9	14.3	17.2	14.8	20.0	22.1	34.8	4.3	14.0
13	24.2	16.1	8.7	5.2	17.0	7.6	13.5	5.8	3.8	5.0	3.7	3.3	3.8	7.4	19.4	48.6	14.1	8.0	6.9	10.2	6.7	5.7	6.0	5.9	48.6	3.3	10.7
14	5.9	6.5	6.5	4.4	4.8	5.6	6.4	7.6	4.9	4.4	10.6	6.2	6.6	5.7	6.2	5.2	6.9	6.4	5.9	6.0	5.9	8.1	8.8	8.3	10.6	4.4	6.4
15	8.7	7.1	8.0	6.7	6.9	5.4	4.4	6.1	5.5	6.4	5.3	4.7	4.2	5.2	9.1	16.2	4.1	7.4	8.9	11.0	11.4	10.0	9.2	11.8	16.2	4.1	7.6
16	15.5	12.5	9.9	9.7	8.4	6.2	7.2	10.0	7.0	5.4	4.8	5.2	4.2	4.5	4.5	4.8	5.3	5.7	4.8	5.5	6.1	7.5	5.6	7.0	15.5	4.2	7.0
17	6.3	6.2	6.0	7.1	8.3	6.9	7.8	7.0	7.2	5.4	5.1	4.8	4.4	4.4	4.1	4.5	4.4	4.7	5.1	5.7	5.7	5.9	6.7	5.3	8.3	4.1	5.8
18	4.7	4.7	4.7	5.3	5.0	5.5	5.7	5.9	5.3	4.2	3.8	4.2	5.0	5.0	4.5	4.7	4.4	5.1	5.2	5.2	5.7	6.3	5.7	5.8	6.3	3.8	5.1
19	5.2	5.5	4.9	5.0	4.4	5.2	4.7	4.7	4.3	4.9	5.4	5.7	6.2	9.9	5.3	6.5	6.3	10.0	9.0	13.0	9.1	8.4	14.3	9.2	14.3	4.3	7.0
20	14.4	10.5	8.7	11.0	6.3	7.5	6.9	22.5	11.0	5.9	5.5	7.4	19.3	9.4	4.3	4.5	4.9	7.4	11.0	15.2	11.8	9.4	13.2	11.2	22.5	4.3	10.0
21	22.2	11.6	8.7	15.9	6.4	13.4	12.0	6.8	5.7	7.2	10.7	8.4	10.6	28.7	27.9	27.1	10.6	21.4	23.1	48.2	53.0	30.7	30.6	8.5	53.0	5.7	18.7
22	9.3	5.7	6.2	5.1	6.8	9.1	7.1	8.7	4.4	8.0	7.0	36.5	34.7	5.8	5.0	10.7	19.7	8.5	9.6	9.8	11.5	10.1	9.4	9.1	36.5	4.4	10.7
23	5.8	6.3	6.0	8.4	6.4	5.0	5.5	10.4	8.3	6.0	5.6	5.7	5.8	4.6	5.3	6.1	8.5	7.2	8.2	7.6	16.6	38.0	8.2	11.1	38.0	4.6	8.6
24	9.3	6.5	10.1	8.8	5.2	5.2	8.7	7.1	5.5	15.6	13.0	7.9	6.3	5.7	5.6	5.1	4.9	5.8	8.3	13.3	6.9	8.0	5.2	5.5	15.6	4.9	7.7
25	6.5	11.0	5.2	6.5	7.1	4.6	4.2	4.3	4.7	4.1	3.8	3.9	5.5	5.5	4.7	4.2	7.6	6.3	6.4	5.3	5.8	6.5	8.2	10.5	11.0	3.8	5.9
26	10.7	9.5	9.3	8.6	7.3	8.8	5.9	8.8	10.3	24.8	8.6	10.3	14.6	13.6	21.2	49.1	15.0	30.0	7.0	7.3	8.5	8.3	8.2	8.9	49.1	5.9	13.1
27	9.9	7.3	5.4	5.8	5.6	5.0	4.7	4.2	3.8	3.8	3.5	3.9	5.4	23.1	22.9	16.0	16.9	22.0	24.6	36.8	20.1	25.6	30.9	42.9	42.9	3.5	14.6
28	27.1	19.2	13.7	21.4	26.5	15.7	14.9	40.8	34.5	10.1	13.6	12.0	10.6	14.7	37.8	15.7	12.6	11.4	10.3	8.1	10.6	7.5	6.0	8.4	40.8	6.0	16.8
29	6.5	9.8	9.5	6.3	10.5	6.8	14.3	15.1	5.6	7.0	6.6	5.8	4.7	4.3	4.3	4.8	6.1	7.5	6.0	6.8	8.9	5.9	7.3	7.2	15.1	4.3	7.4
30	9.7	6.9	5.6	6.1	7.7	5.7	5.4	5.4	5.6	6.6	5.3	5.7	4.2	6.2	5.6	12.8	37.5	18.0	19.8	13.9	5.4	5.8	6.2	6.5	37.5	4.2	9.1
31	5.8	5.3	6.8	4.9	4.9	3.2	2.8	3.2	3.5	3.6	3.7	4.3	5.1	4.3	5.5	5.7	7.4	6.9	5.6	7.0	7.2	7.3	7.4	5.4	7.4	2.8	5.3
Max.	**46.3**	**24.9**	**29.0**	**21.4**	**26.5**	**29.5**	**45.4**	**40.8**	**45.3**	**45.7**	**48.0**	**45.8**	**54.5**	**33.5**	**46.9**	**49.1**	**46.8**	**46.0**	**27.7**	**48.2**	**53.0**	**42.5**	**37.5**	**59.8**	**59.8**		
Min.	**3.3**	**4.0**	**3.9**	**4.1**	**3.2**	**3.2**	**2.8**	**3.2**	**3.5**	**3.6**	**3.5**	**3.3**	**3.8**	**4.3**	**4.1**	**4.2**	**4.1**	**4.7**	**4.8**	**5.2**	**5.1**	**4.1**	**4.0**	**4.5**		**2.8**	
Avg.	**11.9**	**9.4**	**9.0**	**8.5**	**8.3**	**8.6**	**10.2**	**11.4**	**11.0**	**10.7**	**11.6**	**13.5**	**14.6**	**11.6**	**14.2**	**15.4**	**13.2**	**11.3**	**10.5**	**12.7**	**11.8**	**12.9**	**12.9**	**14.1**			**11.6**

Total Hours in Month 744 **Hours Data Available** 732 **Data Recovery** 98.4%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.3	4.7	2.5	3.8	3.6	3.5	2.4	2.4	2.5	3.8	3.5	6.1	5.9	6.7	5.9	5.1	7.0	7.6	7.7	7.6	6.9	7.3	7.2	7.7	7.7	2.4	5.2
2	11.6	13.2	12.8	11.4	12.0	10.7	9.8	9.0	7.4	8.7	9.6	6.6	9.3	9.0	7.1	9.2	7.1	5.0	4.2	6.8	5.6	8.9	7.5	5.5	13.2	4.2	8.7
3	9.6	9.6	6.1	7.6	5.8	3.5	4.2	4.4	3.4	3.6	7.0	6.9	4.9	3.7	5.4	7.7	7.3	6.5	5.3	5.3	4.7	4.5	3.5	3.3	9.6	3.3	5.6
4	3.1	3.7	3.7	3.4	3.7	5.2	2.5	2.4	2.8	3.3	3.5	4.4	2.9	2.7	3.7	4.0	5.4	10.0	4.4	4.4	3.9	3.4	2.5	2.0	10.0	2.0	3.8
5	2.3	4.3	2.0	2.6	3.7	3.5	3.6	4.1	3.2	4.6	4.0	4.8	6.2	6.1	7.6	7.1	6.6	6.6	8.0	8.3	8.9	8.0	8.1	5.1	8.9	2.0	5.4
6	2.5	5.9	4.1	2.5	1.8	2.4	2.8	3.0	4.1	3.4	4.4	2.9	3.0	5.3	7.7	8.7	6.5	6.2	6.1	6.9	4.9	3.7	3.3	3.5	8.7	1.8	4.4
7	2.3	2.5	3.2	3.7	8.4	7.7	5.4	7.7	7.2	6.7	5.6	7.2	7.6	7.0	6.8	7.1	6.5	6.2	5.3	4.8	5.3	5.2	4.9	4.5	8.4	2.3	5.8
8	3.8	3.7	3.3	4.1	4.0	3.5	3.9	3.7	4.4	4.9	3.6	3.5	4.5	4.8	5.8	5.5	6.9	6.0	5.2	4.2	3.4	2.7	4.1	4.2	6.9	2.7	4.3
9	5.8	5.9	5.1	4.0	3.5	3.7	4.1	5.1	6.5	7.9	7.6	8.5	8.2	8.4	9.1	10.8	12.1	10.4	10.0	9.3	9.5	8.1	10.6	7.7	12.1	3.5	7.6
10	4.7	4.4	3.7	2.3	2.4	3.3	2.5	4.2	4.0	5.9	4.6	5.4	7.4	7.7	8.6	8.6	6.8	4.3	4.4	4.5	4.6	4.2	4.4	4.3	8.6	2.3	4.9
11	4.8	4.7	4.2	4.4	4.7	4.4	4.9	4.8	6.3	6.5	7.4	7.1	7.1	5.7	4.9	4.4	5.4	5.2	4.7	3.8	3.4	3.5	4.0	5.1	7.4	3.4	5.1
12	4.0	2.2	2.2	2.3	2.8	2.2	3.4	2.8	4.2	5.5	7.0	10.4	9.9	10.6	10.1	9.0	8.6	8.3	7.2	7.5	8.4	7.6	6.8	6.6	10.6	2.2	6.2
13	5.7	6.3	4.2	4.4	3.4	3.7	3.7	3.1	3.0	3.5	5.5	7.0	7.2	8.4	8.2	9.2	9.0	9.1	9.6	9.7	9.2	7.8	5.3	4.9	9.7	3.0	6.3
14	6.1	5.5	5.1	5.3	4.3	3.0	2.3	3.3	3.2	3.7	4.1	4.8	5.6	5.9	5.9	5.3	6.8	7.8	6.2	5.7	3.8	4.1	4.4	3.7	7.8	2.3	4.8
15	5.7	6.2	6.4	7.5	7.6	7.3	7.5	9.0	7.5	8.7	9.7	11.8	11.0	11.0	13.6	12.8	14.1	13.1	15.2	14.4	13.5	13.8	11.6	9.6	15.2	5.7	10.4
16	8.7	10.0	9.8	10.5	11.6	12.3	12.2	11.6	13.6	14.5	16.6	17.5	18.9	17.5	18.9	18.0	19.6	18.6	16.9	17.0	16.6	15.9	15.7	17.3	19.6	8.7	15.0
17	18.2	19.1	16.8	17.5	16.1	7.3	6.2	5.5	6.9	7.0	5.9	5.4	7.8	10.3	8.5	8.7	7.1	6.9	7.7	7.8	4.2	4.8	3.7	3.7	19.1	3.7	8.9
18	3.0	6.0	4.9	3.4	4.1	2.5	2.8	2.6	5.6	5.0	3.7	6.0	8.7	9.4	9.0	7.5	8.3	3.5	5.0	6.0	3.5	3.0	2.3	2.3	9.4	2.3	4.9
19	1.9	3.2	1.9	2.0	2.2	3.7	6.3	5.9	5.9	5.9	7.7	10.7	13.0	10.6	13.4	12.5	13.4	12.4	12.3	9.7	8.9	9.2	7.8	8.5	13.4	1.9	7.9
20	8.2	8.8	7.1	6.9	7.3	8.2	8.3	9.4	9.2	8.2	7.5	9.0	8.9	8.6	8.5	8.7	7.6	8.7	6.5	12.5	13.9	14.1	16.1	14.6	16.1	6.5	9.4
21	14.8	16.0	17.7	15.1	13.1	10.8	13.7	11.8	12.8	13.6	16.1	14.9	13.1	15.3	12.4	12.3	12.9	12.0	10.3	8.5	7.4	7.3	6.8	4.9	17.7	4.9	12.2
22	3.9	2.5	3.7	4.2	4.2	4.0	5.1	6.5	8.4	11.6	12.5	17.6	20.3	20.2	21.0	22.2	26.6	25.6	28.1	27.8	24.6	22.7	24.8	24.1	28.1	2.5	15.5
23	25.3	25.6	26.5	27.0	20.4	17.3	19.3	26.7	21.3	19.8	20.7	22.4	26.0	23.1	23.1	22.6	22.5	21.1	20.9	21.9	19.9	20.2	18.5	19.5	27.0	17.3	22.2
24	18.9	16.2	14.0	11.4	6.5	4.7	4.0	3.2	2.9	10.0	14.7	14.3	13.7	13.3	13.6	12.7	11.5	11.5	11.2	11.2	8.5	6.4	6.8	6.4	18.9	2.9	10.3
25	5.8	4.1	3.8	3.2	2.9	4.4	3.3	3.3	3.7	4.2	5.5	8.6	7.0	7.9	7.3	8.0	8.9	8.0	8.9	7.7	6.9	7.1	7.7	8.2	8.9	2.9	6.1
26	9.3	10.2	10.7	10.4	7.6	10.0	9.3	8.4	11.2	15.4	18.8	19.6	20.1	18.6	17.2	18.2	20.5	20.6	22.1	18.0	14.8	15.0	10.0	11.3	22.1	7.6	14.5
27	10.8	8.5	8.2	10.0	10.4	8.7	7.6	8.9	13.7	12.3	11.2	10.8	11.4	10.0	8.9	9.2	7.8	8.1	6.8	5.3	3.2	5.2	4.9	6.5	13.7	3.2	8.7
28	8.0	7.5	5.7	7.2	8.1	8.2	9.2	9.4	10.0	10.5	11.0	14.7	11.7	20.8	19.5	19.2	20.6	19.2	15.7	16.2	16.0	16.2	14.9	14.2	20.8	5.7	13.1
29	13.5	12.7	13.5	13.8	12.1	10.8	10.2	9.8	9.8	11.5	10.6	10.2	9.2	8.6	8.4	6.3	8.4	9.7	7.8	9.0	10.2	8.8	8.6	7.7	13.8	6.3	10.0
30	5.8	3.8	4.0	5.4	6.6	5.9	5.7	8.8	10.3	11.4	13.4	11.3	11.5	13.7	14.4	13.7	13.4	12.2	12.7	10.0	11.4	12.6	11.9	11.9	14.4	3.8	10.1
31	12.5	11.5	10.5	12.2	10.5	12.0	11.6	14.9	15.0	16.8	17.4	15.9	17.7	18.9	16.6	18.7	16.6	14.1	15.2	12.7	8.6	10.6	13.8	14.6	18.9	8.6	14.1
Max.	**25.3**	**25.6**	**26.5**	**27.0**	**20.4**	**17.3**	**19.3**	**26.7**	**21.3**	**19.8**	**20.7**	**22.4**	**26.0**	**23.1**	**23.1**	**22.6**	**26.6**	**25.6**	**28.1**	**27.8**	**24.6**	**22.7**	**24.8**	**24.1**	**28.1**		
Min.	**1.9**	**2.2**	**1.9**	**2.0**	**1.8**	**2.2**	**2.3**	**2.4**	**2.5**	**3.3**	**3.5**	**2.9**	**2.9**	**2.7**	**3.7**	**4.0**	**5.4**	**3.5**	**4.2**	**3.8**	**3.2**	**2.7**	**2.3**	**2.0**		**1.8**	
Avg.	**7.9**	**8.0**	**7.3**	**7.4**	**6.9**	**6.4**	**6.4**	**7.0**	**7.4**	**8.3**	**9.1**	**9.9**	**10.3**	**10.6**	**10.7**	**10.7**	**11.0**	**10.5**	**10.1**	**9.8**	**8.9**	**8.8**	**8.5**	**8.2**			**8.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.7	13.0	11.4	11.1	11.3	9.2	8.5	9.7	11.9	13.0	13.7	15.9	14.4	15.0	13.8	14.7	12.0	12.3	11.5	10.6	7.1	6.9	6.3	4.4	15.9	4.4	11.3
2	4.4	4.0	3.7	4.1	2.5	2.2	2.8	3.9	5.1	7.7	9.8	14.2	17.5	19.1	20.5	20.6	17.1	20.2	15.7	18.5	18.3	21.1	20.3	21.8	21.8	2.2	12.3
3	21.3	21.4	17.0	17.1	18.1	15.4	18.0	17.0	18.0	18.8	19.1	17.6	18.9	21.2	22.7	22.5	20.5	19.9	19.1	14.9	12.5	12.4	10.8	7.1	22.7	7.1	17.6
4	4.5	4.8	2.4	2.3	1.8	2.6	3.0	2.3	1.6	2.9	4.0	5.1	5.9	6.6	6.9	7.3	6.7	7.3	7.4	8.4	8.4	7.8	8.4	9.9	9.9	1.6	5.3
5	9.0	10.4	10.5	10.3	10.0	11.6	12.0	10.3	11.4	12.3	16.0	18.2	18.6	18.8	19.4	19.9	17.0	14.4	15.1	15.2	14.4	12.1	11.0	9.2	19.9	9.0	13.6
6	9.4	7.1	4.0	8.2	8.3	5.5	4.6	5.1	8.2	10.5	10.0	9.3	9.8	10.8	10.5	10.8	11.2	9.9	9.1	9.4	9.2	12.9	11.6	11.2	12.9	4.0	9.0
7	8.5	8.3	6.6	6.5	5.9	4.3	4.8	4.4	3.8	5.4	5.3	6.7	8.7	8.9	10.5	11.8	11.4	11.0	9.7	7.6	6.5	6.4	6.3	5.7	11.8	3.8	7.3
8	3.6	3.7	4.5	4.6	5.2	5.2	3.0	3.9	3.1	3.8	4.9	5.7	5.7	8.2	12.6	12.8	11.7	12.1	13.1	19.2	23.0	23.0	22.4	22.4	23.0	3.0	9.9
9	23.3	24.8	17.9	15.8	17.0	13.8	14.7	14.8	14.5	17.3	16.4	12.4	11.6	10.9	11.7	10.4	10.9	9.5	9.2	11.3	11.5	10.1	9.3	11.8	24.8	9.2	13.8
10	11.4	12.3	13.0	13.0	17.0	18.2	18.5	14.1	8.9	9.5	11.9	9.4	7.0	8.8	7.5	7.2	4.1	3.7	4.9	5.2	3.0	2.3	3.7	4.5	18.5	2.3	9.1
11	6.7	6.5	11.0	12.3	13.6	12.6	12.5	15.2	17.5	20.4	20.7	20.1	20.6	19.7	20.9	21.5	21.7	20.7	18.8	17.5	19.9	21.8	19.1	15.5	21.8	6.5	16.9
12	8.3	10.3	10.0	11.0	10.8	9.2	11.8	12.7	12.9	15.9	13.6	15.2	15.9	19.3	17.5	17.6	19.9	20.1	20.3	21.2	21.8	22.4	18.0	15.6	22.4	8.3	15.5
13	16.1	14.4	13.6	13.9	12.6	8.9	6.6	10.0	6.3	3.8	6.2	7.8	7.8	9.0	8.0	5.1	5.2	4.9	4.7	4.4	4.4	3.4	2.9	3.7	16.1	2.9	7.6
14	2.2	3.1	3.5	4.4	4.4	3.8	3.6	4.3	4.7	5.3	6.8	7.6	8.8	11.5	13.5	14.0	15.9	15.0	16.7	19.5	22.1	22.9	22.4	23.1	23.1	2.2	10.8
15	24.8	26.6	26.2	26.7	27.4	27.7	27.7	26.5	29.8	25.6	27.0	26.4	26.1	23.9	25.3	26.7	24.7	18.6	6.5	5.4	5.9	6.8	6.7	8.6	29.8	5.4	21.1
16	13.0	12.7	12.3	12.1	7.9	2.5	5.3	5.1	3.5	4.7	5.1	7.4	8.5	8.7	8.4	10.1	7.8	6.2	6.9	7.5	7.0	8.3	6.3	7.6	13.0	2.5	7.7
17	5.4	4.7	4.0	2.4	2.2	2.1	1.8	1.6	1.4	2.3	2.7	3.8	3.5	4.5	4.9	5.2	5.2	3.1	2.7	2.8	3.1	5.1	5.2	5.7	5.7	1.4	3.6
18	6.6	6.8	8.4	7.6	6.9	6.4	6.7	5.3	6.2	7.2	9.5	10.1	11.7	12.3	14.3	12.8	11.5	12.2	9.8	7.0	8.0	6.6	5.9	6.2	14.3	5.3	8.6
19	5.5	5.3	5.2	4.8	4.0	3.7	3.8	3.6	4.9	7.0	9.4	10.8	11.7	12.3	12.3	12.5	11.4	10.5	10.2	9.0	8.2	8.8	8.6	9.8	12.5	3.6	8.1
20	10.8	9.5	10.6	9.7	7.0	5.8	5.2	5.0	5.9	7.3	6.8	7.5	8.7	9.1	9.6	10.0	9.2	7.0	5.6	3.6	3.9	5.1	5.5	6.5	10.8	3.6	7.3
21	6.2	5.3	7.0	7.6	4.8	3.7	3.3	6.4	5.9	6.6	7.4	5.8	6.6	8.1	7.8	7.3	7.7	11.2	9.1	10.3	11.9	11.5	9.9	9.4	11.9	3.3	7.5
22	10.1	10.5	9.9	10.6	11.2	9.9	11.2	12.4	17.7	21.3	23.2	27.9	26.9	24.9	22.1	20.1	19.1	19.6	20.1	17.4	16.2	16.0	17.4	16.2	27.9	9.9	17.2
23	16.2	11.8	10.2	8.8	7.7	7.4	7.1	6.4	5.8	8.0	10.0	10.1	13.4	18.3	17.0	15.5	15.7	14.0	13.4	12.0	16.4	16.3	19.9	19.1	19.9	5.8	12.5
24	15.5	14.1	14.6	18.1	19.4	15.5	15.6	14.4	13.6	15.1	14.8	13.8	13.2	15.0	18.7	15.0	14.2	13.9	13.9	13.9	14.7	13.9	14.1	12.7	19.4	12.7	14.9
25	14.0	14.4	14.7	15.4	16.2	15.3	14.7	12.9	13.7	11.9	11.6	11.8	11.4	11.6	11.2	10.9	10.2	10.8	9.4	10.6	9.1	10.9	9.8	9.4	16.2	9.1	12.2
26	7.0	4.3	4.2	4.1	5.2	4.9	4.6	5.7	8.1	10.0	12.4	18.6	22.0	24.1	26.1	24.0	25.5	24.9	28.8	27.8	27.1	33.7	32.2	27.1	33.7	4.1	17.2
27	26.7	27.5	26.6	28.7	29.7	27.3	30.8	12.3	7.9	8.5	6.5	11.1	14.5	15.4	14.4	13.1	12.3	10.9	9.0	8.3	6.8	4.1	2.8	2.2	30.8	2.2	14.9
28	3.4	3.6	3.4	4.3	5.7	5.2	4.7	4.5	2.8	2.4	2.9	4.0	4.1	4.1	4.2	3.9	4.0	2.5	1.9	3.9	3.0	3.5	3.6	2.0	5.7	1.9	3.6
29	3.7	3.9	5.2	6.2	7.9	8.1	6.3	6.7	7.2	7.6	7.2	9.2	11.9	12.0	8.5	9.9	9.9	6.8	4.6	3.7	4.1	3.6	3.8	5.1	12.0	3.6	6.8
30	3.9	2.3	2.8	3.7	3.1	2.2	2.2	2.1	2.1	2.1	1.9	2.8	3.0	4.6	4.5	4.5	7.6	9.2	7.8	9.8	11.5	12.5	12.8	13.1	13.1	1.9	5.5
Max.	**26.7**	**27.5**	**26.6**	**28.7**	**29.7**	**27.7**	**30.8**	**26.5**	**29.8**	**25.6**	**27.0**	**27.9**	**26.9**	**24.9**	**26.1**	**26.7**	**25.5**	**24.9**	**28.8**	**27.8**	**27.1**	**33.7**	**32.2**	**27.1**	**33.7**		
Min.	**2.2**	**2.3**	**2.4**	**2.3**	**1.8**	**2.1**	**1.8**	**1.6**	**1.4**	**2.1**	**1.9**	**2.8**	**3.0**	**4.1**	**4.2**	**3.9**	**4.0**	**2.5**	**1.9**	**2.8**	**3.0**	**2.3**	**2.8**	**2.0**		**1.4**	
Avg.	**10.5**	**10.2**	**9.8**	**10.2**	**10.1**	**9.0**	**9.2**	**8.6**	**8.8**	**9.8**	**10.5**	**11.5**	**12.3**	**13.2**	**13.5**	**13.3**	**12.7**	**12.1**	**11.2**	**11.2**	**11.3**	**11.7**	**11.2**	**10.9**			**11.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	14.3	15.5	15.0	18.2	18.1	18.6	17.9	17.0	15.3	15.8	15.7	15.6	16.1	17.0	15.6	14.7	16.0	15.7	12.8	10.5	10.8	11.2	11.4	10.5	18.6	10.5	15.0
2	10.2	9.1	9.1	8.7	7.3	5.7	6.5	4.3	3.6	3.5	8.2	9.1	8.2	8.1	11.3	10.5	10.4	7.2	5.3	4.8	6.5	6.5	5.9	4.6	11.3	3.5	7.3
3	4.8	3.3	4.3	3.8	2.5	3.1	3.3	2.1	2.8	3.8	4.3	4.1	3.9	4.8	4.2	4.4	3.3	3.5	4.0	2.4	1.7	5.0	6.2	3.2	6.2	1.7	3.7
4	4.7	4.1	4.4	4.1	5.3	6.7	8.3	7.7	11.0	9.8	12.5	10.8	10.4	9.5	8.9	11.1	11.2	11.4	10.0	6.2	11.3	11.8	13.2	13.8	13.8	4.1	9.1
5	12.8	9.9	8.4	8.8	6.7	5.8	5.9	6.0	7.4	6.4	8.3	8.8	7.2	5.7	5.5	4.3	3.7	4.3	3.7	4.0	3.5	2.3	2.1	2.1	12.8	2.1	6.0
6	3.2	3.7	2.9	2.0	1.7	2.1	2.8	2.8	4.2	5.1	4.3	3.7	3.1	4.6	5.2	5.5	6.0	6.8	5.9	3.7	3.7	3.4	3.8	6.0	6.8	1.7	4.0
7	7.1	7.6	5.8	9.3	13.7	14.4	17.0	15.4	13.2	15.3	15.9	14.7	13.1	12.8	13.2	9.4	6.4	5.4	3.3	2.9	3.6	2.9	2.4	1.9	17.0	1.9	9.4
8	2.0	2.9	2.9	2.0	2.4	2.9	3.2	3.3	3.4	2.1	1.2	1.3	3.3	3.3	4.0	3.7	3.1	2.4	1.9	1.2	1.8	1.8	2.7	2.8	4.0	1.2	2.6
9	2.6	3.2	2.9	2.6	2.3	3.4	4.0	5.2	0.2	0.2	6.3	8.2	9.9	10.0	9.1	10.7	12.0	11.1	9.3	9.6	8.0	9.1	10.1	9.3	12.0	0.2	6.6
10	8.9	8.9	8.3	6.9	4.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	8.0	9.1	9.0	8.7	9.1	0.2	3.2
11	6.9	6.6	6.0	5.9	5.6	7.0	5.8	6.3	6.7	7.3	7.7	6.2	6.4	7.3	7.8	6.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.8	0.2	4.5
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	11.5	13.2	11.5	9.2	7.5	4.6	4.0	3.3	2.2	2.8	2.9	13.2	0.2	3.2
13	2.8	3.9	3.6	3.5	3.3	3.6	3.5	3.6	3.9	4.0	4.8	4.5	4.7	4.4	5.0	5.3	4.8	5.5	6.4	6.8	6.7	8.2	7.9	8.1	8.2	2.8	4.9
14	8.3	8.2	8.5	6.1	5.3	5.1	3.3	2.6	8.8	9.1	7.1	4.9	5.2	5.7	5.2	3.4	3.8	7.7	8.7	10.7	12.1	13.2	12.0	12.2	13.2	2.6	7.4
15	10.5	10.1	8.9	8.3	9.0	5.1	4.6	5.8	8.1	8.1	5.3	2.9	2.9	4.5	5.1	6.1	6.0	6.6	6.8	6.4	8.8	10.2	9.3	9.6	10.5	2.9	7.0
16	8.2	7.9	7.1	8.4	5.1	4.9	4.4	4.0	4.6	3.9	2.7	2.7	4.5	5.9	7.1	5.9	6.9	7.4	8.2	5.2	7.6	11.5	13.3	14.1	14.1	2.7	6.7
17	13.7	16.9	16.8	16.4	18.2	21.4	21.5	23.4	23.3	22.4	21.8	22.3	22.1	24.2	23.0	24.4	21.7	21.3	20.4	19.9	20.5	20.5	21.1	21.7	24.4	13.7	20.8
18	19.7	21.3	20.9	21.1	18.0	16.8	17.2	15.0	15.2	13.7	15.0	10.8	8.4	11.6	13.1	11.5	8.6	9.8	12.3	11.9	10.5	11.2	9.8	9.1	21.3	8.4	13.9
19	10.9	13.4	15.2	15.5	15.6	13.4	13.5	13.9	15.7	16.6	20.2	19.3	19.9	24.3	25.4	25.0	29.0	30.8	31.7	31.9	31.3	31.8	31.2	29.7	31.9	10.9	21.9
20	29.9	29.5	29.1	29.2	29.4	29.7	28.2	28.5	31.4	31.2	33.6	27.0	23.8	7.3	9.2	7.6	9.1	11.6	12.5	11.7	11.9	11.8	8.6	9.7	33.6	7.3	20.5
21	10.0	11.6	8.9	3.3	7.1	5.4	4.9	5.3	8.6	7.6	5.6	4.9	5.1	4.2	3.2	2.6	2.8	9.4	9.7	9.6	9.9	11.0	9.4	8.4	11.6	2.6	7.0
22	9.9	10.2	7.0	8.3	9.0	9.2	9.8	8.8	8.5	8.0	7.9	7.6	6.4	10.5	13.5	12.9	10.4	11.0	7.6	9.3	8.3	7.0	7.5	6.5	13.5	6.4	9.0
23	6.4	6.1	5.4	6.2	7.5	7.6	7.6	8.5	7.8	7.7	8.1	11.7	15.6	16.8	16.6	16.6	16.2	18.8	15.5	14.3	12.0	10.3	9.0	5.5	18.8	5.4	10.7
24	4.0	3.4	2.8	2.9	2.9	2.7	3.8	4.0	4.3	4.4	4.6	5.0	4.5	6.6	6.0	7.5	6.8	5.0	4.5	4.0	4.3	4.0	4.4	4.4	7.5	2.7	4.5
25	4.3	4.9	4.7	4.3	3.7	3.9	3.9	3.4	2.3	2.4	2.4	2.6	2.3	2.6	2.9	3.4	3.0	3.1	2.4	2.5	2.6	2.4	2.9	3.3	4.9	2.3	3.2
26	3.4	3.4	3.5	3.2	3.3	3.4	2.8	2.4	2.6	3.1	3.7	4.0	3.3	3.8	4.0	3.7	4.9	5.0	4.4	4.9	3.8	2.9	2.4	2.5	5.0	2.4	3.5
27	2.2	1.8	1.6	1.2	1.1	0.8	0.9	1.0	1.0	1.0	1.2	1.0	1.0	1.1	0.9	0.8	0.9	1.0	0.9	1.0	1.4	1.3	1.5	0.7	2.2	0.7	1.1
28	1.5	1.7	1.6	1.6	1.7	2.1	1.6	1.7	1.7	2.6	2.9	3.2	5.4	6.1	5.5	6.7	6.4	6.4	5.2	4.4	3.7	2.6	1.8	1.9	6.7	1.5	3.3
29	2.2	1.9	2.0	2.8	3.6	3.3	2.9	2.9	2.6	2.6	2.6	2.3	2.2	2.0	2.3	2.5	2.5	2.3	2.3	2.2	2.1	1.7	1.5	2.1	3.6	1.5	2.4
30	2.1	2.4	2.5	2.6	2.5	2.3	2.4	2.5	2.9	2.6	2.7	2.5	2.3	3.3	5.8	6.9	7.3	7.8	9.3	9.9	10.8	9.3	8.4	12.7	12.7	2.1	5.2
31	11.4	12.3	12.0	12.4	10.0	10.9	8.6	10.2	8.4	8.0	9.3	10.0	10.9	12.7	11.6	6.8	8.8	11.0	10.0	15.1	16.7	11.2	7.9	5.9	16.7	5.9	10.5
Max.	**29.9**	**29.5**	**29.1**	**29.2**	**29.4**	**29.7**	**28.2**	**28.5**	**31.4**	**31.2**	**33.6**	**27.0**	**23.8**	**24.3**	**25.4**	**25.0**	**29.0**	**30.8**	**31.7**	**31.9**	**31.3**	**31.8**	**31.2**	**29.7**	**33.6**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.7**	**7.9**	**7.5**	**7.4**	**7.3**	**7.1**	**7.1**	**7.0**	**7.4**	**7.4**	**8.0**	**7.5**	**7.5**	**8.1**	**8.5**	**8.1**	**7.8**	**8.3**	**7.7**	**7.5**	**8.0**	**8.0**	**7.7**	**7.6**			**7.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.3	7.1	6.6	5.3	4.8	4.5	4.5	3.6	5.1	5.2	4.6	5.1	4.8	4.3	3.9	3.1	3.4	3.5	4.1	5.2	5.9	6.7	6.0	5.9	7.3	3.1	5.0
2	5.0	4.9	4.1	4.2	3.7	3.9	3.5	4.0	4.1	4.2	3.7	3.9	4.5	3.7	2.9	4.5	4.4	4.4	4.1	4.0	5.4	5.2	7.1	6.3	7.1	2.9	4.4
3	7.2	6.7	7.6	7.6	10.5	11.5	11.9	10.0	12.0	12.9	16.2	18.0	22.7	25.5	23.1	22.2	24.0	25.2	22.9	22.2	23.8	24.9	25.4	25.7	25.7	6.7	17.5
4	24.7	19.7	19.7	20.0	22.0	19.1	19.6	21.2	20.2	20.0	19.5	19.4	17.9	19.2	22.1	20.8	17.5	22.7	20.0	17.6	18.0	15.8	20.1	20.1	24.7	15.8	19.9
5	19.2	22.3	20.0	19.3	21.1	21.0	19.5	20.3	21.1	20.9	19.2	17.0	17.0	18.9	15.9	16.6	14.1	14.1	12.7	12.9	11.2	5.5	3.7	7.9	22.3	3.7	16.3
6	7.4	8.4	9.1	7.0	23.2	20.5	15.4	18.8	15.0	19.1	23.0	21.7	23.3	22.2	20.0	20.1	20.6	20.6	18.4	13.4	12.2	10.1	11.3	13.5	23.3	7.0	16.4
7	15.7	16.9	16.5	14.8	10.0	11.0	10.9	9.8	11.8	10.8	11.0	11.7	8.2	7.2	7.1	7.2	7.0	6.5	7.2	6.8	6.9	7.2	7.3	6.7	16.9	6.5	9.8
8	6.6	6.1	5.6	5.5	5.4	4.9	5.0	5.1	5.1	4.4	5.1	4.7	4.6	4.8	4.7	4.5	6.8	6.8	7.6	9.0	9.3	9.8	11.0	11.6	11.6	4.4	6.4
9	11.6	13.1	15.4	16.1	16.2	15.1	16.1	18.0	20.2	18.3	18.2	19.9	18.0	18.1	19.3	21.0	24.2	23.1	23.2	22.7	23.2	22.0	21.1	22.7	24.2	11.6	19.0
10	20.4	17.8	17.0	15.9	16.9	18.8	18.4	17.8	16.1	15.4	15.0	16.5	16.4	16.7	16.9	16.2	16.7	17.3	16.8	16.5	15.8	14.7	13.1	13.2	20.4	13.1	16.5
11	11.7	10.8	10.7	12.2	11.8	12.1	11.6	11.9	11.4	10.8	10.0	9.5	9.3	8.3	8.1	8.0	8.8	8.4	7.7	7.6	6.8	6.9	7.0	6.7	12.2	6.7	9.5
12	6.4	6.6	5.5	3.7	3.6	3.2	3.1	3.8	4.6	6.3	7.6	8.1	7.0	6.8	7.1	7.6	7.8	7.8	9.3	9.8	10.6	11.6	9.5	11.7	11.7	3.1	7.0
13	10.7	8.1	10.8	11.0	11.5	10.5	8.4	10.2	10.1	7.8	8.5	7.7	4.2	3.3	2.5	2.2	3.0	2.9	1.9	2.2	2.1	2.2	1.9	3.0	11.5	1.9	6.1
14	5.1	7.0	7.8	8.7	10.5	17.5	15.9	11.6	8.5	5.7	6.3	4.6	3.8	13.2	14.6	15.4	14.4	17.0	17.6	19.3	17.8	17.9	16.8	16.9	19.3	3.8	12.2
15	13.9	11.4	9.5	8.1	7.5	3.3	1.7	4.4	4.3	4.0	4.6	4.9	4.0	4.0	3.5	4.2	3.3	3.4	3.3	2.1	2.7	3.5	4.4	3.5	13.9	1.7	5.0
16	5.8	4.8	6.8	6.5	9.9	8.8	9.6	12.2	10.6	13.1	13.0	11.2	12.5	12.9	15.6	14.0	13.0	11.5	13.2	11.1	9.7	9.7	11.4	10.3	15.6	4.8	10.7
17	11.4	11.9	13.3	14.2	10.6	12.3	12.6	12.3	10.1	7.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	14.2	0.2	5.0
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.8	2.8	2.9	2.9	3.2	3.2	3.9	5.9	5.8	4.6	5.9	0.2	1.7
19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	10.0	9.2	7.5	8.9	9.7	10.8	9.2	7.5	8.3	7.2	6.1	3.5	3.9	2.9	4.1	3.9	10.8	0.2	4.8
20	3.3	4.4	4.6	4.8	4.7	5.5	5.2	4.1	3.9	5.9	3.7	3.1	3.0	2.1	2.1	2.2	1.9	1.9	2.2	1.3	1.1	1.1	1.5	2.4	5.9	1.1	3.2
21	2.3	3.5	3.9	3.9	3.1	2.8	2.4	1.9	1.7	1.1	0.5	0.5	0.5	0.5	0.6	0.6	2.5	1.6	2.7	2.7	3.2	2.5	2.0	2.1	3.9	0.5	2.1
22	2.0	1.4	1.8	1.6	2.1	1.8	1.3	0.9	1.8	1.5	1.5	2.0	1.5	2.1	2.6	2.1	2.1	2.8	2.9	3.0	3.3	3.7	3.5	3.9	3.9	0.9	2.2
23	4.8	4.9	5.9	6.4	6.1	6.2	5.7	7.0	7.1	6.4	5.5	5.9	5.4	4.4	5.0	4.1	3.8	3.7	3.1	2.2	2.0	1.8	2.1	2.5	7.1	1.8	4.7
24	2.5	2.4	2.7	3.3	3.7	5.0	5.2	5.1	4.4	5.0	5.9	5.5	6.3	6.4	5.5	4.7	5.5	5.7	5.0	5.2	5.5	5.6	5.2	5.5	6.4	2.4	4.9
25	5.5	5.8	5.7	5.7	6.0	6.5	6.1	6.2	6.4	6.9	6.5	6.2	4.9	4.5	4.4	5.1	4.8	5.3	5.8	6.0	6.7	7.3	6.3	5.7	7.3	4.4	5.8
26	6.6	6.0	6.3	5.5	5.9	6.4	6.2	6.0	5.9	6.3	5.8	5.8	5.8	5.7	5.4	6.0	6.6	6.2	5.3	5.9	5.6	5.5	4.5	4.2	6.6	4.2	5.8
27	3.7	4.2	4.5	4.2	4.0	3.6	3.6	3.5	3.3	3.3	3.1	3.3	2.8	2.8	2.8	1.6	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	4.5	0.3	2.4
28	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	4.0	3.9	3.4	3.4	3.4	3.6	3.0	2.9	2.8	1.8	2.4	3.1	2.1	2.4	1.7	1.8	4.0	0.5	2.1
29	2.5	1.7	1.3	0.8	1.5	2.4	3.8	4.4	5.4	4.9	4.0	4.1	4.5	3.5	3.1	3.5	3.4	2.9	3.8	2.9	2.3	3.0	2.5	2.4	5.4	0.8	3.1
30	2.9	3.5	4.0	2.9	2.7	3.1	2.9	3.4	3.3	3.8	3.8	3.1	2.8	2.5	3.4	3.7	2.8	3.1	3.4	3.5	3.7	3.3	3.1	3.1	4.0	2.5	3.2
Max.	**24.7**	**22.3**	**20.0**	**20.0**	**23.2**	**21.0**	**19.6**	**21.2**	**21.1**	**20.9**	**23.0**	**21.7**	**23.3**	**25.5**	**23.1**	**22.2**	**24.2**	**25.2**	**23.2**	**22.7**	**23.8**	**24.9**	**25.4**	**25.7**	**25.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.6**	**7.4**	**7.6**	**7.3**	**8.0**	**8.1**	**7.7**	**7.9**	**8.3**	**8.2**	**7.9**	**7.9**	**7.6**	**7.9**	**7.9**	**7.8**	**7.9**	**8.0**	**7.9**	**7.5**	**7.5**	**7.3**	**7.3**	**7.6**			**7.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.6	3.5	4.0	4.1	4.0	3.2	3.1	3.2	2.5	1.6	1.3	0.5	0.5	0.6	2.3	1.9	0.5	0.4	0.5	0.4	0.4	0.2	0.2	0.2	4.1	0.2	1.7
2	0.2	0.2	0.2	0.2	0.7	0.8	0.5	0.4	0.2	0.5	0.6	0.5	0.5	0.5	0.5	0.5	1.1	1.2	1.3	1.4	1.5	1.4	1.4	1.4	1.5	0.2	0.7
3	1.3	1.5	1.5	1.5	1.5	1.5	1.2	1.4	2.4	2.3	1.3	2.2	2.0	2.1	2.2	2.1	2.2	1.2	1.0	0.9	1.1	1.0	0.9	0.9	2.4	0.9	1.5
4	1.4	1.4	1.3	0.5	0.5	0.4	0.4	0.5	0.4	0.6	0.7	0.6	0.8	0.6	0.6	0.6	0.8	1.0	0.7	0.9	1.0	0.9	0.9	0.8	1.4	0.4	0.8
5	0.7	0.6	0.6	0.7	12.1	14.1	13.0	13.4	17.3	18.0	19.7	19.2	18.5	18.7	17.8	18.4	18.7	18.9	19.5	24.0	23.5	24.9	26.2	26.9	26.9	0.6	16.1
6	28.1	31.5	31.0	30.2	27.2	28.4	27.2	25.2	23.1	23.9	20.4	12.8	12.9	9.0	10.0	8.4	8.1	5.9	0.2	0.2	0.2	0.2	0.2	22.7	31.5	0.2	16.1
7	30.8	32.4	33.4	34.1	37.1	38.6	39.3	40.0	36.9	34.0	32.9	33.6	32.4	29.0	27.6	27.1	29.5	27.5	24.4	23.3	23.0	22.2	21.1	19.1	40.0	19.1	30.4
8	17.5	14.6	15.0	12.4	11.7	9.0	9.4	10.0	14.5	15.5	18.5	18.5	22.3	21.6	21.1	22.0	22.1	23.8	26.7	25.6	27.8	27.3	29.0	29.6	29.6	9.0	19.4
9	28.5	30.0	28.1	28.2	24.8	22.6	21.9	21.5	20.1	21.9	19.6	17.5	16.6	14.2	11.3	6.9	9.3	9.6	9.2	9.9	9.6	8.9	8.4	6.8	30.0	6.8	16.9
10	6.9	5.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.4	9.5	7.3	6.8	5.2	6.4	7.4	10.0	9.9	12.6	13.2	10.3	10.8	11.0	13.2	0.2	5.9
11	8.5	8.8	5.2	3.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	8.8	0.2	1.3
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	13.5	13.9	11.4	13.6	15.6	20.6	24.4	28.1	31.9	32.0	36.7	36.6	34.5	32.3	36.7	0.2	14.5
14	35.7	33.1	26.4	29.8	27.1	13.2	20.6	16.9	17.4	19.9	18.8	18.3	20.9	21.9	21.7	19.4	21.1	21.6	17.8	14.9	13.9	19.6	30.4	29.8	35.7	13.2	22.1
15	27.7	25.7	24.4	25.8	23.5	22.8	18.8	10.3	8.8	16.7	14.5	7.7	8.9	8.4	8.2	8.1	8.9	12.3	15.7	28.9	28.0	29.2	30.2	31.1	31.1	7.7	18.5
16	30.2	27.2	27.6	28.2	26.8	23.6	23.4	23.3	18.9	16.4	11.2	9.4	7.9	6.3	4.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	30.2	0.2	11.9
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	8.8	14.1	12.2	10.5	13.4	16.2	17.4	17.4	0.2	4.0
18	14.1	9.9	7.9	6.8	7.6	6.5	8.9	12.4	13.5	9.7	14.8	20.6	19.7	17.6	15.4	14.0	16.3	15.0	17.6	11.5	9.4	5.1	6.6	4.8	20.6	4.8	11.9
19	6.1	10.8	17.5	18.2	18.6	24.8	19.6	25.0	24.0	22.9	22.7	22.7	21.1	23.1	19.4	20.8	21.1	13.8	16.0	19.2	13.1	16.1	17.3	12.9	25.0	6.1	18.6
20	8.5	8.3	3.8	4.0	2.6	3.6	3.7	3.1	1.8	3.7	4.2	4.6	5.2	4.8	3.9	3.9	9.0	6.2	3.8	2.8	3.6	3.8	2.4	3.7	9.0	1.8	4.4
21	3.2	2.4	1.9	2.1	2.6	3.4	2.8	1.5	2.1	2.4	2.0	2.0	1.8	2.4	1.9	1.9	3.2	3.1	3.0	3.7	5.7	6.0	6.3	6.9	6.9	1.5	3.1
22	6.0	5.7	6.3	7.6	6.2	5.5	4.6	5.2	6.1	6.2	3.1	4.7	5.2	5.0	4.1	3.4	2.7	2.7	2.8	2.5	3.0	1.6	1.5	1.4	7.6	1.4	4.3
23	1.3	2.1	2.7	2.6	2.3	2.1	1.3	1.8	3.1	2.5	2.4	2.3	2.5	3.5	3.1	4.5	3.1	4.1	4.5	3.2	3.3	5.4	6.3	8.7	8.7	1.3	3.3
24	12.3	13.9	10.6	11.8	12.9	12.0	9.6	11.5	10.8	11.4	7.8	7.0	6.2	5.7	4.9	4.3	2.3	2.7	5.2	5.9	3.8	3.3	2.1	2.2	13.9	2.1	7.5
25	2.5	2.2	3.9	4.3	3.7	4.7	9.6	13.7	14.0	13.3	13.0	12.0	12.2	8.3	7.0	7.8	14.3	14.8	11.3	10.5	10.3	13.2	13.1	12.6	14.8	2.2	9.7
26	13.0	13.7	20.9	24.8	22.3	22.5	20.6	22.1	15.7	5.2	5.6	6.6	6.3	4.5	7.2	4.5	4.4	5.2	6.0	5.0	5.2	5.2	6.6	9.9	24.8	4.4	11.0
27	9.3	11.3	12.9	12.2	13.7	16.6	16.4	16.5	11.0	8.5	8.5	8.8	3.9	4.7	5.0	5.2	5.3	5.1	5.4	4.5	5.6	11.4	12.9	12.6	16.6	3.9	9.5
28	6.7	8.3	9.7	13.8	16.0	17.3	15.9	16.2	12.6	7.7	11.3	12.1	9.1	10.7	10.0	8.8	10.8	13.9	14.3	11.8	12.6	13.1	12.6	12.1	17.3	6.7	12.0
29	12.9	10.2	9.4	11.6	11.3	9.8	14.2	20.8	21.7	19.2	20.1	19.6	19.6	17.1	18.2	13.6	12.7	12.4	12.8	10.7	10.5	7.1	7.2	10.2	21.7	7.1	13.9
30	9.9	13.8	14.7	15.5	12.8	14.8	14.5	14.2	11.4	5.9	5.0	4.4	4.3	4.7	4.2	5.7	8.7	14.7	16.7	11.5	14.2	12.4	8.5	12.3	16.7	4.2	10.6
31	6.7	5.9	13.4	12.4	5.7	3.8	2.9	3.7	3.7	1.8	2.2	4.1	3.0	2.9	4.5	4.6	4.2	4.1	2.6	2.6	3.2	3.4	2.8	2.2	13.4	1.8	4.4
Max.	**35.7**	**33.1**	**33.4**	**34.1**	**37.1**	**38.6**	**39.3**	**40.0**	**36.9**	**34.0**	**32.9**	**33.6**	**32.4**	**29.0**	**27.6**	**27.1**	**29.5**	**28.1**	**31.9**	**32.0**	**36.7**	**36.6**	**34.5**	**32.3**	**40.0**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**10.7**	**10.8**	**10.8**	**11.2**	**10.9**	**10.5**	**10.5**	**10.8**	**10.2**	**9.4**	**9.8**	**9.6**	**9.1**	**8.7**	**8.3**	**7.9**	**8.8**	**9.3**	**9.5**	**9.5**	**9.5**	**9.8**	**10.2**	**11.1**			**9.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.7	4.0	4.4	4.7	4.8	3.9	3.3	4.6	8.0	10.3	8.6	10.2	8.0	7.6	5.7	5.5	3.1	3.7	3.8	4.0	2.6	3.7	4.6	7.3	10.3	2.6	5.4
2	6.2	4.8	3.2	6.1	7.4	4.6	3.7	5.0	6.3	5.4	4.3	6.0	3.4	6.7	5.6	7.7	6.7	6.4	4.8	6.2	17.3	18.4	14.9	11.0	18.4	3.2	7.2
3	15.0	9.4	13.0	14.1	14.0	9.9	6.8	7.8	9.4	4.8	3.7	6.2	6.1	5.3	6.2	7.5	9.5	7.7	8.6	4.7	4.6	4.1	4.8	6.0	15.0	3.7	7.9
4	5.0	3.1	2.1	2.4	2.0	1.7	1.9	2.3	2.0	1.6	2.4	3.1	4.4	5.6	5.0	3.7	2.8	2.5	2.9	3.1	2.9	3.8	3.9	4.7	5.6	1.6	3.1
5	1.9	2.5	3.6	3.4	3.0	2.5	2.5	2.8	3.5	3.6	3.6	2.0	2.1	4.9	5.5	6.0	5.2	6.5	7.2	6.6	6.3	5.2	4.5	4.1	7.2	1.9	4.1
6	2.7	2.1	4.0	4.2	5.5	7.0	6.3	4.7	3.3	2.4	2.0	2.1	3.2	2.7	3.4	2.9	2.5	1.8	1.4	3.2	4.2	4.5	2.4	2.2	7.0	1.4	3.4
7	1.4	1.7	2.6	2.5	1.6	2.0	2.3	2.7	2.6	3.2	3.6	3.6	2.4	5.5	6.0	9.5	7.8	5.4	5.2	7.8	8.3	11.5	14.0	15.8	15.8	1.4	5.4
8	15.3	7.5	15.1	6.6	5.2	14.9	15.4	6.8	6.5	3.1	3.7	3.7	4.5	5.8	5.5	5.2	5.0	5.4	5.8	5.4	5.5	6.1	4.4	5.1	15.4	3.1	7.0
9	4.0	4.0	3.9	4.5	4.3	4.6	3.9	3.7	2.9	2.9	3.4	2.4	2.1	1.5	1.7	1.6	3.5	3.6	2.9	2.1	1.8	2.4	1.8	2.3	4.6	1.5	3.0
10	2.0	1.7	2.0	1.5	1.1	1.5	1.2	1.5	1.3	1.6	1.5	1.4	2.5	2.1	1.8	2.4	2.6	2.3	1.6	1.7	1.5	1.3	1.0	0.9	2.6	0.9	1.7
11	0.8	0.7	1.0	1.3	1.2	1.7	1.3	1.2	1.2	1.5	1.1	1.3	1.1	1.0	1.2	0.9	1.8	1.7	2.1	1.8	1.6	1.7	1.8	1.6	2.1	0.7	1.4
12	1.4	1.7	1.9	2.4	2.4	3.0	3.0	3.0	3.5	3.7	3.9	4.5	4.4	2.8	2.6	2.5	2.3	2.6	2.6	2.7	3.5	3.6	3.7	3.8	4.5	1.4	3.0
13	3.5	3.7	3.5	3.1	2.9	3.1	3.2	3.1	2.9	3.0	3.3	3.3	3.7	3.9	3.9	2.8	3.7	3.0	3.2	3.0	2.5	2.3	2.2	2.0	3.9	2.0	3.1
14	2.4	2.4	2.1	2.1	1.8	1.8	1.9	1.4	2.8	3.0	3.8	3.6	3.6	6.4	7.4	7.8	8.2	8.8	8.6	8.2	9.2	10.1	9.4	8.4	10.1	1.4	5.2
15	7.8	5.9	8.2	8.4	9.7	7.6	6.6	6.5	5.6	6.8	7.3	8.5	11.6	12.1	47.9	23.8	12.8	14.4	12.0	11.9	8.7	6.9	5.9	9.5	47.9	5.6	11.1
16	10.0	12.3	12.0	12.1	6.9	9.3	13.7	14.2	11.8	9.2	6.5	7.1	6.4	4.8	4.1	2.9	2.9	2.8	2.0	4.0	4.9	5.7	6.1	6.7	14.2	2.0	7.4
17	6.7	6.8	7.1	6.6	6.4	6.2	7.1	6.6	7.2	7.1	6.4	8.4	8.9	6.8	6.9	7.7	7.8	8.1	8.0	8.4	6.2	7.1	7.7	6.0	8.9	6.0	7.2
18	7.2	9.7	8.5	9.3	11.6	13.5	12.6	11.8	11.7	9.7	7.9	9.6	11.8	12.1	13.4	12.9	11.0	9.9	9.8	13.2	13.0	10.8	9.5	10.6	13.5	7.2	10.9
19	10.3	13.5	13.4	11.5	10.8	8.6	12.1	11.9	10.4	9.3	9.2	9.1	7.8	8.9	8.6	9.4	7.6	7.0	9.5	11.8	12.7	10.8	10.1	8.8	13.5	7.0	10.1
20	9.5	8.6	8.5	9.5	8.8	8.1	7.8	7.9	7.7	6.5	7.6	6.3	6.6	7.1	6.8	8.1	8.0	7.4	6.5	6.6	8.7	8.3	7.4	7.3	9.5	6.3	7.7
21	6.9	8.5	9.2	10.1	10.8	12.1	13.5	14.4	13.7	15.2	15.4	16.4	16.8	18.6	19.2	20.7	22.1	23.1	24.8	23.5	22.6	21.0	20.5	20.8	24.8	6.9	16.7
22	22.9	25.2	24.2	25.7	28.0	27.5	27.0	25.3	25.1	25.2	21.5	20.4	21.4	20.8	19.1	20.1	20.8	18.8	20.8	22.3	22.8	22.1	21.8	25.6	28.0	18.8	23.1
23	24.8	24.9	24.3	23.4	22.7	23.2	22.4	19.8	18.4	16.2	25.1	20.3	17.2	16.8	17.5	19.2	14.3	19.9	19.5	22.1	16.7	16.0	17.4	17.8	25.1	14.3	20.0
24	17.0	17.4	18.0	15.9	15.8	16.2	17.6	14.5	16.6	18.7	19.0	18.7	18.2	18.4	14.7	16.7	16.5	15.7	14.9	16.2	12.0	14.7	14.3	11.9	19.0	11.9	16.2
25	9.2	9.1	7.5	9.5	9.4	9.2	6.8	7.1	7.5	7.7	8.1	8.7	9.3	7.4	6.8	7.5	7.2	9.0	8.9	10.2	10.7	8.4	13.5	13.4	13.5	6.8	8.8
26	12.6	12.9	11.4	11.8	7.8	8.8	8.3	8.6	7.4	5.9	5.4	6.1	6.4	6.2	5.8	5.0	4.2	5.5	6.5	6.5	7.5	9.8	8.4	11.3	12.9	4.2	7.9
27	10.9	11.6	11.7	12.7	14.3	16.0	14.9	17.0	16.8	18.7	20.7	21.3	24.1	24.0	23.6	26.2	23.1	24.0	23.9	23.9	20.9	25.3	24.4	29.2	29.2	10.9	20.0
28	30.1	29.2	29.8	23.9	26.3	25.9	22.3	22.5	21.7	15.4	15.3	14.7	13.7	13.9	59.2	12.9	11.5	8.7	5.8	7.0	5.8	6.8	7.0	6.6	59.2	5.8	18.2
29	6.1	8.9	8.4	8.8	9.5	9.3	8.4	7.6	8.1	6.8	8.1	9.1	7.2	7.7	7.3	8.7	8.5	9.3	9.7	8.1	8.1	8.4	9.3	8.0	9.7	6.1	8.3
30	9.8	9.0	8.4	9.4	8.5	10.1	9.5	6.6	6.8	6.7	6.0	5.1	5.2	6.4	5.7	5.6	5.4	5.3	3.4	2.8	3.8	4.1	2.9	2.0	10.1	2.0	6.2
31	2.3	3.1	4.3	3.9	3.6	3.9	4.5	4.2	3.7	5.0	5.3	4.9	5.7	6.5	7.0	7.0	6.4	7.0	9.9	10.2	9.6	9.4	8.7	6.8	10.2	2.3	6.0
Max.	**30.1**	**29.2**	**29.8**	**25.7**	**28.0**	**27.5**	**27.0**	**25.3**	**25.1**	**25.2**	**25.1**	**21.3**	**24.1**	**24.0**	**59.2**	**26.2**	**23.1**	**24.0**	**24.8**	**23.9**	**22.8**	**25.3**	**24.4**	**29.2**	**59.2**		
Min.	**0.8**	**0.7**	**1.0**	**1.3**	**1.1**	**1.5**	**1.2**	**1.2**	**1.2**	**1.5**	**1.1**	**1.3**	**1.1**	**1.0**	**1.2**	**0.9**	**1.8**	**1.7**	**1.4**	**1.7**	**1.5**	**1.3**	**1.0**	**0.9**		**0.7**	
Avg.	**8.7**	**8.6**	**8.9**	**8.8**	**8.6**	**9.0**	**8.8**	**8.3**	**8.3**	**7.7**	**7.9**	**8.0**	**8.1**	**8.4**	**10.8**	**9.0**	**8.2**	**8.3**	**8.3**	**8.7**	**8.6**	**8.8**	**8.7**	**9.0**			**8.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.5	7.0	8.1	9.6	10.6	10.1	13.0	12.2	13.2	14.6	16.9	16.4	17.1	15.3	14.3	14.3	17.2	16.6	16.2	15.3	14.5	16.1	15.2	15.1	17.2	5.5	13.5
2	15.3	14.1	12.7	10.9	10.7	8.6	9.0	9.8	8.4	7.8	7.4	6.6	4.7	5.0	4.7	2.9	2.5	2.9	3.3	4.2	3.9	6.5	10.0	11.3	15.3	2.5	7.6
3	16.3	14.1	17.2	18.4	18.2	21.7	24.0	23.6	23.1	23.9	18.5	19.3	17.5	15.5	16.9	17.6	14.7	17.9	18.7	20.8	20.2	21.3	23.1	22.4	24.0	14.1	19.4
4	23.7	21.4	23.7	24.5	27.0	29.0	27.0	26.7	32.2	31.2	31.3	32.0	36.1	38.8	31.9	35.1	37.0	37.3	40.8	33.1	31.3	33.7	31.7	28.0	40.8	21.4	31.0
5	27.4	26.7	24.7	30.3	29.9	29.5	27.9	24.3	25.6	22.1	18.9	25.3	24.3	25.6	23.9	20.7	21.0	19.7	16.9	16.2	16.2	21.8	26.5	23.7	30.3	16.2	23.7
6	17.6	15.0	12.9	14.5	13.1	10.5	10.0	7.6	7.7	12.4	15.3	18.3	20.9	21.0	20.3	17.3	16.5	15.0	12.3	10.1	9.5	8.8	9.2	9.0	21.0	7.6	13.5
7	8.2	7.3	8.5	10.0	9.7	10.8	12.7	12.0	11.1	10.9	14.1	15.3	13.8	13.2	10.3	11.7	10.6	5.7	5.1	4.7	3.5	3.4	5.4	5.4	15.3	3.4	9.3
8	3.2	2.5	5.0	5.2	4.5	5.7	5.9	6.9	7.7	7.7	9.2	9.2	21.6	24.0	27.6	29.1	34.2	32.0	34.5	34.5	35.1	36.7	37.1	37.5	37.5	2.5	19.0
9	33.8	36.2	36.0	39.4	36.0	29.0	27.1	24.0	18.2	15.1	15.3	13.2	16.2	14.7	14.0	14.6	17.0	21.1	21.4	22.3	30.5	33.7	36.2	37.0	39.4	13.2	25.1
10	42.5	37.6	35.7	35.0	31.2	34.6	33.4	29.6	26.4	19.0	18.6	22.6	21.4	22.3	22.0	22.9	23.1	24.9	21.6	21.2	21.5	22.7	22.5	23.1	42.5	18.6	26.5
11	19.6	19.7	17.7	15.0	10.0	3.1	4.3	4.6	5.2	7.7	10.2	9.8	8.5	6.4	6.5	6.1	4.2	3.5	3.9	4.7	2.2	2.7	4.1	5.4	19.7	2.2	7.7
12	3.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.6	0.2	0.4
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	8.5	10.5	14.9	16.4	20.9	23.3	22.2	24.0	25.3	25.4	27.2	27.0	28.0	28.0	0.2	11.5
14	26.9	29.0	32.0	28.5	29.9	27.7	27.0	29.5	29.1	27.9	28.5	24.7	23.3	23.9	26.2	28.3	29.3	27.7	26.0	27.0	26.8	26.9	27.9	29.3	32.0	23.3	27.6
15	30.4	27.8	27.7	26.8	26.0	28.3	28.5	28.9	30.0	30.4	33.6	33.1	39.1	39.9	36.4	34.3	32.4	30.9	29.9	24.9	25.6	21.6	17.7	13.2	39.9	13.2	29.1
16	10.1	7.8	7.1	5.3	2.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	10.1	0.2	1.6
17	0.2	0.2	13.4	9.0	11.2	16.1	20.1	23.3	27.8	26.3	24.7	25.0	27.5	27.8	30.3	30.8	28.1	25.9	25.1	26.9	27.0	25.3	21.7	22.5	30.8	0.2	21.5
18	18.5	17.1	17.2	14.8	14.3	16.4	18.9	20.3	24.2	27.0	29.9	27.5	30.6	32.0	29.0	26.9	23.5	20.3	17.0	21.1	17.3	20.6	20.3	20.7	32.0	14.3	21.9
19	16.3	12.6	9.9	11.1	12.0	11.7	10.5	13.6	11.1	9.1	10.0	10.2	6.2	11.0	11.1	9.8	10.4	12.8	9.2	9.3	8.8	10.3	11.4	10.9	16.3	6.2	10.8
20	9.8	7.3	7.6	6.8	6.0	5.4	5.2	5.1	4.8	5.0	5.2	4.2	6.7	6.5	7.9	10.5	8.7	8.3	9.7	10.2	13.7	13.9	14.8	14.2	14.8	4.2	8.2
21	13.6	13.5	15.3	15.3	14.4	9.4	8.6	8.4	8.1	3.7	3.4	3.3	12.5	14.6	12.3	11.7	8.9	8.3	10.8	11.7	9.9	8.6	8.8	10.5	15.3	3.3	10.2
22	8.0	5.3	7.9	10.7	13.1	13.6	14.0	13.3	14.4	12.9	10.2	8.6	9.6	9.2	9.0	10.1	12.8	12.4	10.0	8.7	10.3	9.2	6.4	6.4	14.4	5.3	10.2
23	7.8	9.3	8.5	8.8	7.8	8.3	11.3	9.0	8.4	7.1	6.8	9.7	9.2	9.2	10.5	13.4	12.2	10.8	10.4	10.0	8.3	9.7	13.0	12.8	13.4	6.8	9.7
24	11.1	8.1	9.2	7.9	7.5	7.8	8.2	8.4	5.9	4.5	4.8	3.9	3.8	2.4	2.2	2.0	2.2	2.8	2.7	2.4	3.4	3.3	4.3	7.9	11.1	2.0	5.3
25	5.9	5.2	7.4	8.2	9.1	7.1	6.4	6.1	4.4	4.8	9.7	14.0	19.3	16.1	16.2	18.9	15.6	13.6	8.7	7.9	10.6	11.4	11.3	12.4	19.3	4.4	10.4
26	12.5	11.5	10.3	10.0	9.2	7.1	7.2	8.2	7.7	6.4	8.5	9.6	8.8	8.9	6.3	3.1	4.9	6.4	9.2	9.5	8.6	8.1	9.6	11.3	12.5	3.1	8.5
27	11.0	9.2	11.1	13.6	18.7	24.8	24.0	20.8	21.5	22.9	22.7	23.8	24.1	21.5	22.8	23.3	24.7	22.8	23.1	24.7	25.7	25.9	24.1	25.3	25.9	9.2	21.3
28	23.3	22.7	26.6	23.0	22.5	28.2	26.4	24.9	20.1	21.8	24.7	21.9	20.1	19.7	21.6	22.0	22.2	21.4	19.2	19.0	16.9	13.8	11.4	11.5	28.2	11.4	21.0
Max.	**42.5**	**37.6**	**36.0**	**39.4**	**36.0**	**34.6**	**33.4**	**29.6**	**32.2**	**31.2**	**33.6**	**33.1**	**39.1**	**39.9**	**36.4**	**35.1**	**37.0**	**37.3**	**40.8**	**34.5**	**35.1**	**36.7**	**37.1**	**37.5**	**42.5**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**15.1**	**13.9**	**14.8**	**14.7**	**14.5**	**14.5**	**14.7**	**14.3**	**14.2**	**13.7**	**14.2**	**14.9**	**16.2**	**16.4**	**16.1**	**16.4**	**16.3**	**15.8**	**15.4**	**15.2**	**15.3**	**15.8**	**16.1**	**16.3**			**15.2**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.7	11.2	10.9	11.2	12.4	13.1	10.6	7.0	5.9	4.3	2.7	1.5	3.2	4.2	5.3	6.4	8.4	7.5	9.2	12.7	15.7	14.5	18.0	20.5	20.5	1.5	9.5
2	16.8	18.3	16.5	16.0	18.1	15.9	16.6	16.6	16.0	14.9	15.8	15.7	15.9	17.6	16.3	13.1	12.0	11.6	12.2	11.7	12.3	11.4	12.1	11.8	18.3	11.4	14.8
3	10.2	10.2	10.6	10.5	10.2	9.8	7.3	6.7	8.5	9.8	9.9	9.6	10.8	10.2	11.2	9.3	8.1	6.4	5.4	4.4	3.9	2.8	1.7	1.9	11.2	1.7	7.9
4	2.1	3.0	2.8	3.8	6.4	8.2	8.0	8.2	7.6	6.7	8.1	7.6	9.0	9.2	9.5	10.4	12.1	11.0	11.3	11.7	12.5	11.1	9.8	9.3	12.5	2.1	8.3
5	8.6	8.3	6.3	5.1	5.1	5.9	5.0	4.4	4.6	4.0	4.1	3.6	3.6	3.5	3.6	4.3	4.4	4.8	3.5	4.2	2.1	3.5	3.7	3.4	8.6	2.1	4.6
6	4.1	3.9	2.6	2.9	3.4	3.2	2.1	1.6	1.6	1.6	3.1	2.6	1.9	2.1	1.1	0.7	1.3	1.3	1.3	2.2	1.5	1.6	2.6	2.6	4.1	0.7	2.2
7	2.6	2.7	2.8	2.9	2.9	3.7	3.3	4.5	5.4	5.6	5.2	6.5	6.3	7.1	6.9	7.6	7.1	10.2	10.5	10.1	9.6	9.1	11.9	11.8	11.9	2.6	6.5
8	15.3	20.0	20.7	21.2	18.6	16.9	19.3	18.7	18.2	16.6	16.1	18.0	15.7	14.4	14.1	15.0	14.3	17.2	18.6	19.2	19.0	18.8	20.5	20.4	21.2	14.1	17.8
9	18.6	18.2	20.2	20.8	19.4	19.3	18.1	18.6	18.9	21.8	17.9	19.3	21.0	21.1	21.0	18.6	16.2	20.9	19.2	19.9	18.9	20.9	17.9	17.2	21.8	16.2	19.3
10	13.5	14.8	13.9	12.0	11.4	10.1	10.4	11.8	11.8	8.8	7.4	6.9	7.7	6.7	5.9	7.2	4.1	4.4	6.5	6.4	6.8	10.9	13.9	15.0	15.0	4.1	9.5
11	15.5	19.4	26.5	24.0	22.4	21.4	24.5	28.5	27.6	29.9	27.4	26.1	27.9	25.5	28.4	26.8	24.5	24.8	22.7	25.2	24.4	23.1	18.7	22.4	29.9	15.5	24.5
12	22.1	22.4	24.0	24.5	17.1	16.7	16.6	15.6	14.5	14.1	14.0	11.0	10.0	8.7	8.9	4.4	5.5	4.9	4.7	5.5	3.3	2.9	2.7	3.6	24.5	2.7	11.6
13	2.5	1.8	2.0	2.1	2.6	2.8	2.5	1.9	3.0	3.0	2.4	2.3	2.7	3.0	3.4	3.8	5.1	6.4	6.6	8.2	6.8	8.4	8.8	9.4	9.4	1.8	4.2
14	9.2	8.1	8.8	9.4	7.7	6.2	7.2	6.1	5.4	5.3	5.7	4.2	3.1	3.8	4.8	3.3	4.4	4.4	4.5	3.1	2.5	2.5	1.9	2.0	9.4	1.9	5.1
15	2.1	2.9	3.4	3.3	3.6	2.5	2.1	2.1	2.1	2.7	2.9	2.2	1.8	2.2	2.8	3.0	3.0	4.9	4.5	6.0	4.8	6.1	7.8	8.8	8.8	1.8	3.7
16	10.4	10.7	8.9	6.5	6.7	7.4	6.7	5.7	4.1	4.9	6.2	6.4	8.8	10.2	12.1	13.2	12.8	13.5	12.6	14.4	13.8	12.9	14.1	12.6	14.4	4.1	9.8
17	12.9	12.4	12.3	12.1	12.1	11.3	11.4	11.4	12.4	12.3	13.3	12.0	10.1	11.1	13.6	15.2	14.5	14.9	16.5	16.6	17.3	18.7	19.1	17.6	19.1	10.1	13.8
18	17.7	17.8	14.4	11.5	11.5	11.2	9.2	4.6	6.2	7.7	7.2	6.5	4.0	2.6	1.6	2.3	7.7	7.3	2.9	4.4	3.3	2.8	2.9	3.7	17.8	1.6	7.1
19	3.0	2.3	2.1	2.5	2.9	2.6	2.7	3.2	4.6	6.8	11.3	16.2	17.3	14.9	19.2	19.2	17.5	14.7	12.8	11.4	10.5	11.0	12.5	13.5	19.2	2.1	9.8
20	16.9	13.3	11.0	10.1	8.2	7.9	8.5	7.8	6.3	4.6	3.8	3.2	2.8	6.4	6.0	0.2	0.2	12.9	13.5	16.8	18.8	27.0	22.6	19.7	27.0	0.2	10.4
21	19.4	18.1	19.9	19.3	20.1	20.7	20.6	19.6	19.2	18.5	15.1	13.9	12.7	9.7	10.9	11.1	10.4	11.5	12.7	11.4	12.0	8.9	7.5	14.6	20.7	7.5	14.9
22	15.2	13.8	11.4	13.2	17.4	19.3	21.1	21.0	17.9	21.7	21.6	20.2	19.7	18.9	19.1	19.7	13.7	13.9	11.6	8.6	7.2	7.3	7.5	6.8	21.7	6.8	15.3
23	4.4	3.8	4.4	5.4	6.6	5.0	3.9	3.5	3.6	4.6	5.0	5.2	2.5	3.4	3.2	4.0	8.0	9.2	9.0	5.5	6.0	11.7	13.2	14.7	14.7	2.5	6.1
24	12.2	13.4	12.7	11.6	12.3	9.1	13.0	15.8	13.0	10.4	14.9	15.9	13.4	12.0	11.2	13.8	12.8	14.9	14.4	12.2	12.2	9.0	9.0	8.2	15.9	8.2	12.4
25	10.4	8.2	7.8	9.7	9.2	10.1	10.5	11.1	12.1	11.6	12.2	10.7	10.4	10.6	10.0	11.1	11.5	12.3	11.8	10.7	11.9	11.6	9.1	10.0	12.3	7.8	10.6
26	9.8	8.0	7.6	7.7	8.4	9.1	9.4	10.0	9.2	8.7	9.3	7.8	7.3	6.8	5.9	5.6	5.1	5.6	5.8	5.9	5.3	3.7	3.5	2.7	10.0	2.7	7.0
27	4.0	4.1	4.0	4.2	4.4	4.5	4.2	4.6	3.1	2.5	2.5	2.8	3.3	2.5	2.0	2.3	2.7	3.2	3.8	5.1	4.2	3.1	2.8	3.2	5.1	2.0	3.5
28	4.3	6.4	5.9	6.2	8.8	8.3	7.8	6.5	6.2	6.3	6.8	4.5	4.5	3.7	4.1	2.6	2.4	2.1	2.0	2.4	3.7	4.8	5.3	4.4	8.8	2.0	5.0
29	4.8	4.8	4.6	5.1	5.6	5.1	6.0	6.0	5.7	4.4	3.6	2.7	2.2	2.5	2.5	2.1	2.6	3.1	4.5	4.4	3.0	4.4	8.8	12.4	12.4	2.1	4.6
30	15.4	15.3	15.1	16.6	19.1	21.7	23.3	21.6	21.9	22.2	24.7	28.8	31.5	31.9	32.8	36.2	37.6	38.9	38.3	40.0	38.0	38.1	37.7	36.8	40.0	15.1	28.5
31	36.4	35.2	33.8	32.3	30.6	30.2	29.4	27.4	25.2	21.7	7.6	7.1	5.7	6.0	5.1	5.5	5.5	5.4	6.0	4.4	2.6	2.3	4.2	7.5	36.4	2.3	15.7
Max.	**36.4**	**35.2**	**33.8**	**32.3**	**30.6**	**30.2**	**29.4**	**28.5**	**27.6**	**29.9**	**27.4**	**28.8**	**31.5**	**31.9**	**32.8**	**36.2**	**37.6**	**38.9**	**38.3**	**40.0**	**38.0**	**38.1**	**37.7**	**36.8**	**40.0**		
Min.	**2.1**	**1.8**	**2.0**	**2.1**	**2.6**	**2.5**	**2.1**	**1.6**	**1.6**	**1.6**	**2.4**	**1.5**	**1.8**	**2.1**	**1.1**	**0.2**	**0.2**	**1.3**	**1.3**	**2.2**	**1.5**	**1.6**	**1.7**	**1.9**		**0.2**	
Avg.	**11.4**	**11.4**	**11.2**	**11.1**	**11.1**	**10.9**	**11.0**	**10.7**	**10.4**	**10.3**	**9.9**	**9.7**	**9.6**	**9.4**	**9.8**	**9.6**	**9.5**	**10.5**	**10.3**	**10.5**	**10.1**	**10.5**	**10.7**	**11.2**			**10.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.8	8.2	9.6	8.2	5.5	7.5	9.8	9.9	9.2	5.2	5.9	4.0	5.1	8.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.9	0.2	4.4
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	3.2	4.1	6.7	6.8	8.1	8.3	12.3	12.8	12.8	0.2	2.7
3	11.3	11.6	13.1	14.0	12.1	14.5	13.0	13.1	20.3	23.7	24.3	24.4	22.5	23.2	22.7	20.6	21.1	21.0	19.6	16.7	14.8	18.0	18.6	20.4	24.4	11.3	18.1
4	19.8	25.2	22.2	19.7	17.4	14.7	13.5	12.4	10.7	8.1	13.3	11.5	10.1	8.7	7.0	2.7	3.7	6.8	6.0	6.0	6.6	7.5	9.1	10.0	25.2	2.7	11.4
5	9.8	9.2	14.0	15.6	13.5	16.0	13.2	13.7	14.4	18.3	17.1	15.4	15.6	17.0	17.9	17.6	18.2	21.0	21.9	21.3	19.0	16.5	16.3	17.0	21.9	9.2	16.2
6	21.2	18.3	16.2	16.2	14.7	13.1	13.4	11.4	11.1	10.1	9.8	8.0	5.8	4.7	5.2	4.7	3.4	3.2	2.8	3.7	3.0	2.0	3.8	3.7	21.2	2.0	8.7
7	3.5	2.8	3.2	4.4	7.9	6.2	7.5	7.3	6.8	7.4	6.4	7.3	8.8	10.1	11.9	12.6	14.0	15.0	15.9	17.3	19.4	22.3	23.8	22.5	23.8	2.8	11.0
8	24.6	26.8	24.9	24.4	22.9	22.3	20.9	21.5	19.7	20.7	21.7	19.1	14.0	14.3	14.1	13.2	11.5	11.3	12.0	10.6	10.1	10.2	11.0	10.3	26.8	10.1	17.2
9	10.6	8.6	9.6	10.0	9.8	9.8	8.5	10.0	9.5	8.1	9.1	9.5	9.7	10.0	8.9	8.8	6.2	6.0	6.6	6.4	4.6	8.3	8.3	7.6	10.6	4.6	8.5
10	3.9	3.8	4.8	7.5	7.0	9.9	11.8	12.0	12.8	12.2	12.0	13.9	9.9	11.5	10.8	11.5	12.3	10.8	8.3	7.8	5.9	3.0	4.4	8.8	13.9	3.0	9.0
11	7.7	3.9	3.0	2.7	3.5	5.6	8.0	8.4	9.0	9.9	8.6	7.9	8.9	9.9	12.6	16.0	17.0	16.4	14.0	13.0	12.8	12.7	11.3	11.2	17.0	2.7	9.8
12	10.2	9.9	8.2	8.1	7.7	7.9	7.5	8.6	10.0	11.0	11.4	11.6	13.9	15.3	14.1	10.9	10.4	9.3	7.9	7.9	6.6	6.5	5.6	4.2	15.3	4.2	9.4
13	4.0	3.5	1.3	0.2	0.2	5.6	7.6	8.6	9.3	10.6	10.9	12.1	15.4	20.0	21.2	21.3	21.9	19.3	19.6	17.9	17.8	16.4	14.5	14.2	21.9	0.2	12.2
14	17.4	18.5	16.8	16.5	20.2	19.1	19.6	21.8	21.1	22.0	22.9	23.5	23.3	22.8	22.6	26.3	24.0	22.0	20.0	19.8	20.2	18.2	13.8	17.6	26.3	13.8	20.4
15	17.4	13.4	16.8	18.3	16.8	17.2	20.0	16.9	17.9	19.2	19.1	22.2	19.9	20.4	18.8	17.1	20.5	18.9	17.0	8.7	9.4	7.2	4.5	5.7	22.2	4.5	16.0
16	11.1	10.3	12.6	15.9	15.3	18.6	21.8	23.3	27.3	28.8	28.1	27.4	29.4	29.5	27.2	26.4	28.6	29.3	27.8	23.5	15.5	14.6	16.4	15.2	29.5	10.3	21.8
17	14.5	16.2	17.7	18.7	18.2	17.7	13.8	11.5	11.3	13.2	14.2	11.6	17.4	11.4	11.8	8.4	11.5	11.3	7.5	5.9	5.2	3.4	4.9	5.2	18.7	3.4	11.8
18	6.4	6.0	4.8	5.1	3.9	3.2	2.6	2.3	2.7	1.8	2.8	1.7	2.0	2.1	2.0	2.0	2.9	3.1	3.0	3.6	4.3	3.4	6.3	6.3	6.4	1.7	3.5
19	5.0	4.2	3.9	5.1	4.6	3.8	4.4	3.9	6.8	5.7	3.5	2.3	5.8	6.8	5.9	5.6	6.0	4.4	7.5	6.8	5.7	5.1	5.4	5.7	7.5	2.3	5.1
20	4.8	5.0	4.4	2.7	3.5	3.7	2.5	3.1	3.6	3.9	4.7	9.0	11.1	13.3	19.3	20.0	16.2	17.9	18.4	18.5	20.6	18.7	17.6	19.8	20.6	2.5	10.9
21	20.1	20.8	21.0	20.2	16.5	16.6	18.7	21.5	16.3	22.3	23.4	18.2	17.1	16.6	15.3	17.4	17.7	10.1	7.1	5.4	5.6	9.3	8.7	9.2	23.4	5.4	15.6
22	6.4	4.3	4.0	2.4	2.5	0.2	0.2	1.4	1.2	1.3	1.5	1.3	1.8	1.7	1.0	2.1	3.3	2.3	1.7	1.8	2.0	2.2	3.7	3.4	6.4	0.2	2.2
23	5.0	4.6	6.0	5.9	5.4	5.1	4.8	4.7	5.3	5.8	6.3	6.7	5.8	5.1	4.1	2.9	2.4	3.9	4.4	4.8	8.2	9.3	9.5	8.8	9.5	2.4	5.6
24	8.9	8.2	7.9	10.5	10.7	12.7	12.6	13.5	13.5	13.6	13.7	13.0	12.8	13.3	13.6	12.4	13.5	12.8	12.7	13.9	14.7	15.3	14.5	11.3	15.3	7.9	12.5
25	9.5	6.0	5.2	4.4	4.0	3.8	4.2	3.8	2.7	2.5	2.9	4.6	6.5	5.9	4.6	5.5	8.7	10.3	11.9	12.6	12.5	13.9	14.9	14.3	14.9	2.5	7.3
26	14.9	13.8	10.5	11.7	10.8	12.4	9.0	11.4	6.9	8.1	8.2	7.8	6.2	4.2	4.8	3.4	3.8	4.1	3.9	6.9	8.4	7.6	9.7	10.1	14.9	3.4	8.3
27	11.3	10.8	10.3	7.2	9.0	8.7	6.2	4.0	4.2	3.7	5.8	6.1	7.2	8.2	9.2	9.9	10.3	11.0	10.9	9.0	8.0	8.1	11.5	13.3	13.3	3.7	8.5
28	13.5	12.6	10.8	8.6	8.4	8.3	8.0	7.0	5.8	5.0	3.4	4.6	4.9	3.9	4.4	4.4	3.9	3.8	2.8	1.8	2.3	1.5	1.4	1.5	13.5	1.4	5.5
29	2.4	3.9	4.1	4.4	6.9	6.8	6.6	6.5	6.8	10.6	11.7	12.5	12.5	11.4	9.5	9.2	11.2	10.9	9.5	7.7	7.1	7.4	7.7	7.0	12.5	2.4	8.1
30	5.4	5.1	5.1	4.3	3.9	3.0	2.3	3.8	4.0	3.6	3.1	3.5	4.3	4.2	4.8	6.6	8.7	10.7	12.6	14.0	12.5	14.0	13.1	15.4	15.4	2.3	7.0
Max.	**24.6**	**26.8**	**24.9**	**24.4**	**22.9**	**22.3**	**21.8**	**23.3**	**27.3**	**28.8**	**28.1**	**27.4**	**29.4**	**29.5**	**27.2**	**26.4**	**28.6**	**29.3**	**27.8**	**23.5**	**20.6**	**22.3**	**23.8**	**22.5**	**29.5**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**10.3**	**9.9**	**9.7**	**9.8**	**9.4**	**9.8**	**9.7**	**9.9**	**10.0**	**10.5**	**10.9**	**10.7**	**10.9**	**11.1**	**10.9**	**10.7**	**11.2**	**11.0**	**10.7**	**10.0**	**9.7**	**9.7**	**10.1**	**10.4**			**10.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	16.1	17.0	17.8	19.2	20.3	23.3	26.3	26.8	24.7	23.8	26.6	28.8	29.5	28.4	23.2	20.0	20.0	20.0	15.2	14.8	12.6	10.9	11.1	10.6	29.5	10.6	20.3
2	12.6	13.3	13.6	10.7	7.5	11.6	11.0	7.3	3.7	3.0	7.2	13.2	14.6	14.7	17.7	17.3	14.1	13.0	12.5	14.1	16.9	14.1	13.9	13.3	17.7	3.0	12.1
3	14.7	14.8	16.5	16.5	14.1	9.9	8.6	6.8	4.7	4.9	4.9	6.6	7.6	7.5	8.2	7.5	6.1	9.0	8.5	6.7	5.7	4.7	3.7	2.6	16.5	2.6	8.4
4	3.1	2.4	1.5	1.5	3.5	14.0	15.7	18.6	19.4	20.5	17.6	17.7	19.9	19.4	16.8	18.6	18.2	21.0	23.4	23.2	24.7	24.3	25.8	25.9	25.9	1.5	16.5
5	25.5	28.3	29.9	31.0	28.5	28.7	24.1	21.3	22.0	22.7	22.0	22.5	21.5	20.4	20.1	20.1	17.5	16.8	15.5	15.0	11.4	8.9	7.6	6.3	31.0	6.3	20.3
6	5.2	4.6	2.0	2.2	1.3	1.0	1.1	0.7	2.9	3.0	7.1	8.1	8.8	9.1	10.2	10.2	9.2	10.6	10.8	11.1	11.7	12.2	11.5	11.0	12.2	0.7	6.9
7	11.2	11.1	11.6	11.8	12.8	10.8	9.7	10.4	10.9	10.8	9.2	11.4	9.7	9.0	10.1	8.2	7.2	7.5	6.9	5.9	6.2	6.7	4.0	1.1	12.8	1.1	8.9
8	1.7	1.8	2.2	3.4	3.3	2.7	3.1	4.5	6.4	6.1	8.6	10.2	11.4	9.5	7.6	6.7	7.0	13.5	15.6	13.5	9.7	9.2	8.4	7.2	15.6	1.7	7.2
9	6.3	6.5	11.0	11.0	11.3	13.2	12.3	13.2	12.3	11.8	10.9	9.1	7.9	9.4	7.9	5.1	3.2	3.4	5.4	2.7	3.8	6.1	9.7	12.4	13.2	2.7	8.6
10	9.7	5.2	3.1	3.7	3.1	3.8	2.3	2.1	2.9	2.5	2.1	3.6	2.9	7.1	5.9	12.8	9.7	9.8	8.2	8.2	4.4	5.2	4.9	5.3	12.8	2.1	5.4
11	5.8	3.6	3.5	3.2	2.3	2.7	3.3	2.8	2.2	3.2	3.3	2.5	3.3	3.7	3.7	6.0	7.8	7.1	11.4	4.6	10.2	8.3	9.2	8.1	11.4	2.2	5.1
12	8.5	12.3	12.0	11.0	11.8	11.7	11.2	10.9	12.3	11.6	10.9	11.5	12.2	11.5	11.6	12.4	12.6	11.4	10.2	10.3	11.7	10.2	10.3	9.7	12.6	8.5	11.2
13	8.1	10.1	9.0	8.6	8.1	6.4	5.0	4.4	2.2	2.7	3.8	3.9	2.1	2.5	3.7	5.4	5.2	4.7	3.6	5.4	5.2	4.4	3.5	3.1	10.1	2.1	5.0
14	3.4	4.4	4.7	5.3	3.6	5.9	4.7	5.0	7.3	6.9	7.2	8.1	9.0	9.9	10.6	10.0	13.1	12.2	12.2	14.3	14.1	17.7	17.5	12.2	17.7	3.4	9.1
15	8.7	6.6	6.8	5.8	3.5	2.9	2.8	2.9	3.3	4.4	4.8	3.2	2.7	2.7	3.7	4.5	4.0	5.8	5.5	4.5	5.8	5.5	11.0	11.8	11.8	2.7	5.1
16	10.2	3.9	2.9	6.0	4.3	5.3	5.1	4.7	6.0	4.8	3.9	2.5	3.5	3.5	3.2	3.0	3.9	5.9	5.4	5.7	4.1	4.6	4.3	4.8	10.2	2.5	4.7
17	3.9	3.9	4.0	2.8	3.7	4.0	4.4	3.8	4.8	6.4	9.0	9.4	11.0	11.0	10.6	11.2	11.6	10.3	10.2	10.2	8.6	9.1	7.5	7.4	11.6	2.8	7.4
18	6.0	5.8	5.1	5.6	5.6	4.7	3.7	2.2	2.9	4.4	5.7	7.4	6.7	8.0	11.9	9.7	10.2	12.6	10.0	10.7	10.6	10.5	8.7	7.4	12.6	2.2	7.3
19	5.5	5.2	4.5	2.1	2.8	2.3	1.6	3.0	5.5	8.4	9.0	12.7	15.4	16.3	26.3	26.2	21.1	20.2	23.0	23.2	23.0	18.6	19.4	16.1	26.3	1.6	13.0
20	16.5	17.7	15.0	14.7	16.0	19.8	19.3	19.9	20.1	19.3	18.3	18.1	15.2	15.1	15.4	11.7	10.2	6.8	4.3	3.6	8.3	10.6	10.9	11.4	20.1	3.6	14.1
21	12.3	12.2	12.4	12.3	13.3	14.2	17.0	18.0	19.3	19.3	20.2	26.2	26.2	24.1	23.2	19.9	21.6	22.2	22.1	21.8	17.9	17.2	18.9	18.1	26.2	12.2	18.7
22	17.9	17.6	17.2	15.3	15.5	17.8	19.1	20.1	20.1	18.7	19.8	21.8	23.5	17.4	16.6	15.6	16.4	15.4	16.1	14.4	16.3	14.5	13.7	13.1	23.5	13.1	17.2
23	13.4	9.9	8.5	5.6	5.0	4.4	5.2	5.7	5.6	6.3	7.0	7.0	7.8	6.6	7.1	8.4	8.5	11.4	11.5	9.8	7.9	9.3	7.2	7.1	13.4	4.4	7.8
24	7.6	6.6	4.3	5.3	4.7	3.0	2.5	4.3	5.1	3.6	3.4	3.5	3.6	4.5	4.4	5.4	8.1	8.4	6.9	7.8	8.7	7.7	5.6	5.5	8.7	2.5	5.4
25	6.2	6.5	5.7	7.3	6.9	6.2	6.2	5.6	4.6	4.5	4.1	6.1	5.8	5.1	4.8	8.2	7.8	7.9	8.3	7.2	4.8	6.3	5.7	6.6	8.3	4.1	6.2
26	5.8	7.8	6.6	7.8	8.4	6.3	6.2	7.3	8.4	10.6	11.8	13.6	13.1	12.4	16.5	14.5	14.3	15.1	14.4	12.7	10.7	10.3	10.8	13.5	16.5	5.8	10.8
27	10.9	10.7	14.7	15.8	16.9	15.8	15.7	16.4	13.4	13.3	14.8	18.9	19.0	20.0	20.4	19.4	20.3	17.6	15.7	13.0	13.9	9.4	10.4	11.1	20.4	9.4	15.3
28	10.9	6.8	4.3	3.8	5.8	5.6	6.2	9.0	7.6	5.7	3.9	4.9	7.3	8.3	6.8	7.6	8.2	6.5	7.8	8.0	8.4	8.3	7.2	7.7	10.9	3.8	6.9
29	6.6	6.8	7.6	7.7	10.8	9.2	9.1	8.5	9.1	10.5	10.5	10.8	11.8	12.0	11.1	11.0	10.4	10.6	10.1	10.3	9.2	9.9	9.5	7.8	12.0	6.6	9.6
30	7.6	7.5	7.0	6.2	4.1	5.0	4.0	7.7	7.8	8.7	9.0	9.3	11.0	11.6	12.4	11.9	9.8	9.3	9.2	8.7	7.6	7.6	7.1	11.0	12.4	4.0	8.4
31	9.7	10.6	11.2	9.2	11.0	11.8	11.2	10.0	9.6	12.3	12.3	10.3	8.7	8.0	10.1	7.3	7.6	7.8	5.4	4.7	5.1	5.0	3.0	3.5	12.3	3.0	8.6
Max.	**25.5**	**28.3**	**29.9**	**31.0**	**28.5**	**28.7**	**26.3**	**26.8**	**24.7**	**23.8**	**26.6**	**28.8**	**29.5**	**28.4**	**26.3**	**26.2**	**21.6**	**22.2**	**23.4**	**23.2**	**24.7**	**24.3**	**25.8**	**25.9**	**31.0**		
Min.	**1.7**	**1.8**	**1.5**	**1.5**	**1.3**	**1.0**	**1.1**	**0.7**	**2.2**	**2.5**	**2.1**	**2.5**	**2.1**	**2.5**	**3.2**	**3.0**	**3.2**	**3.4**	**3.6**	**2.7**	**3.8**	**4.4**	**3.0**	**1.1**		**0.7**	
Avg.	**9.4**	**9.1**	**8.9**	**8.8**	**8.7**	**9.2**	**9.0**	**9.2**	**9.3**	**9.5**	**10.0**	**11.1**	**11.4**	**11.2**	**11.7**	**11.5**	**11.1**	**11.4**	**11.1**	**10.5**	**10.3**	**9.9**	**9.7**	**9.4**			**10.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.7	2.1	3.5	3.9	3.4	3.6	4.4	4.8	4.7	5.6	5.7	7.8	7.0	6.2	6.4	7.3	6.8	7.3	10.7	7.8	8.7	9.3	8.1	3.5	10.7	2.1	5.9
2	3.7	4.1	4.1	3.8	4.2	4.3	5.4	4.5	5.4	6.4	8.9	9.8	10.5	9.1	10.1	10.2	10.4	11.6	12.6	11.6	10.5	8.9	9.8	9.2	12.6	3.7	7.9
3	10.2	12.7	10.8	14.2	14.2	13.7	15.0	17.7	18.6	17.9	18.0	18.0	15.9	15.8	17.6	17.1	15.3	16.0	16.5	15.8	15.4	14.5	12.5	11.6	18.6	10.2	15.2
4	11.4	10.8	10.4	11.5	10.3	11.3	13.6	14.7	14.4	15.8	17.2	18.6	16.9	17.6	17.1	16.4	17.3	16.6	15.0	13.9	13.9	12.0	11.4	13.1	18.6	10.3	14.2
5	13.5	13.3	13.0	8.1	8.6	7.9	8.9	9.0	8.8	8.6	7.8	6.8	7.2	7.9	8.6	8.8	7.9	8.0	6.7	6.5	5.3	4.6	4.9	4.7	13.5	4.6	8.1
6	4.4	4.5	4.9	4.3	3.4	3.7	4.0	4.6	6.1	6.0	7.6	11.1	13.1	13.8	15.1	15.6	13.7	14.4	16.2	15.8	15.4	13.8	13.4	13.3	16.2	3.4	9.9
7	11.5	13.8	17.5	17.5	18.9	18.5	13.4	17.6	20.2	20.1	21.5	22.2	21.2	22.0	21.6	22.1	18.2	20.0	19.7	18.4	15.4	13.1	13.9	15.9	22.2	11.5	18.1
8	18.7	20.9	22.7	21.1	20.9	21.6	20.5	23.0	23.0	24.8	24.9	24.0	26.2	29.4	26.6	24.8	26.2	27.3	27.2	29.0	31.7	31.6	32.8	33.2	33.2	18.7	25.5
9	31.0	28.6	30.5	29.8	27.2	26.5	29.5	27.6	29.1	29.9	29.0	30.6	31.8	32.5	32.9	30.5	31.6	31.7	26.3	28.1	26.6	27.4	27.5	27.2	32.9	26.3	29.3
10	22.0	22.3	22.7	22.8	25.0	24.0	22.7	27.0	27.1	27.2	24.0	26.3	26.9	28.2	28.3	27.1	24.7	27.5	27.1	23.7	23.6	25.4	25.7	24.3	28.3	22.0	25.2
11	25.5	27.1	26.9	28.5	27.4	29.1	27.0	27.2	26.7	26.7	27.6	27.6	26.0	25.2	24.7	25.5	24.0	22.8	23.0	22.0	21.6	20.3	17.9	20.5	29.1	17.9	25.0
12	21.3	20.1	18.8	17.4	16.4	16.0	16.7	15.3	15.8	14.9	16.2	12.6	15.6	16.8	16.2	16.0	15.2	14.9	10.0	10.3	11.6	7.6	9.0	7.1	21.3	7.1	14.7
13	7.3	7.3	6.2	6.7	6.4	6.3	5.6	6.2	11.4	11.6	7.7	7.8	7.6	8.7	9.4	8.9	7.6	7.2	6.4	5.0	3.1	2.7	1.6	3.5	11.6	1.6	6.8
14	3.9	2.5	2.5	2.2	2.7	3.2	2.6	2.7	3.3	4.0	4.7	6.5	6.1	5.2	3.7	4.4	5.5	5.0	7.2	2.8	2.6	3.8	5.3	5.5	7.2	2.2	4.1
15	4.5	5.3	5.1	5.4	5.5	6.6	7.1	6.0	7.1	7.5	7.7	8.8	7.5	8.4	9.7	8.7	5.3	5.9	7.1	7.3	7.0	5.6	5.6	5.2	9.7	4.5	6.7
16	5.3	5.9	5.5	4.8	6.0	6.0	6.2	5.3	5.0	5.6	7.1	9.6	11.5	13.1	12.5	13.0	14.0	14.1	14.6	13.9	12.7	11.3	9.3	7.8	14.6	4.8	9.2
17	8.7	7.5	7.2	5.5	3.5	3.7	4.3	6.9	7.3	7.2	7.4	8.8	9.8	11.3	9.7	9.7	11.1	10.6	11.2	10.3	10.0	9.3	9.2	9.9	11.3	3.5	8.3
18	6.6	3.6	3.5	3.4	3.3	3.8	2.5	3.3	5.5	7.8	8.7	11.7	14.0	13.3	15.7	20.7	23.9	20.3	22.1	20.1	18.3	16.9	10.4	5.2	23.9	2.5	11.0
19	5.7	9.7	7.3	6.1	4.8	5.0	3.4	2.8	3.9	4.0	8.5	6.9	7.3	8.5	7.6	8.6	9.1	7.8	6.2	13.4	12.9	8.3	7.3	5.4	13.4	2.8	7.1
20	5.4	7.4	8.9	4.8	4.2	3.2	3.1	2.9	3.5	3.0	4.3	5.4	9.1	7.7	17.7	15.5	13.6	12.3	11.4	12.5	11.1	10.7	10.0	8.7	17.7	2.9	8.2
21	7.0	7.4	5.7	3.4	3.0	2.4	2.2	3.7	4.9	7.2	7.5	8.4	6.6	4.3	6.1	10.0	10.4	7.8	7.1	8.4	4.9	6.1	7.4	9.1	10.4	2.2	6.3
22	11.1	12.5	9.9	7.8	7.5	7.7	8.4	7.6	7.8	6.7	6.3	8.3	9.9	11.8	12.6	13.4	11.3	11.8	11.8	10.7	10.5	9.4	8.7	7.8	13.4	6.3	9.6
23	7.8	7.9	10.1	11.3	8.5	8.8	9.8	8.3	8.1	8.6	9.5	9.2	9.4	9.2	8.9	8.7	8.4	6.3	7.2	8.2	9.0	9.7	9.4	6.3	11.3	6.3	8.7
24	5.4	5.1	4.8	6.3	5.8	2.5	2.1	3.6	5.5	5.9	6.6	6.6	7.0	4.8	5.8	6.8	8.2	6.2	4.8	3.1	4.0	3.5	3.4	3.6	8.2	2.1	5.1
25	3.2	3.4	5.2	6.2	5.6	5.0	2.8	3.2	4.7	6.1	7.5	6.4	7.5	10.9	11.5	10.4	11.1	11.8	9.8	8.1	6.3	6.2	6.8	7.1	11.8	2.8	6.9
26	7.2	6.6	5.6	5.7	4.3	3.5	2.9	3.0	4.6	7.3	5.5	7.6	7.0	6.9	6.0	6.4	5.6	5.3	9.4	9.2	8.5	9.2	8.2	9.7	9.7	2.9	6.5
27	7.6	5.4	6.3	2.7	4.5	3.3	4.1	4.7	5.1	4.4	3.8	4.3	4.4	5.7	9.5	8.4	9.3	9.2	8.5	9.2	11.0	10.3	7.6	7.2	11.0	2.7	6.5
28	6.8	5.9	6.4	6.5	2.4	2.3	4.9	7.2	9.3	8.3	8.7	10.6	9.1	10.6	8.0	7.4	8.8	6.3	4.8	7.6	8.6	5.1	7.6	6.8	10.6	2.3	7.1
29	6.9	8.2	9.1	5.7	7.8	6.3	5.3	6.2	5.9	6.5	5.9	5.8	6.1	8.6	12.7	16.4	17.8	17.6	17.2	17.8	17.5	13.7	14.2	16.0	17.8	5.3	10.6
30	15.4	13.9	14.2	14.1	13.0	13.2	13.1	13.9	11.5	9.6	10.2	10.8	10.9	8.6	8.1	5.9	6.1	5.9	4.8	3.5	3.7	3.8	2.9	3.7	15.4	2.9	9.2
Max.	**31.0**	**28.6**	**30.5**	**29.8**	**27.4**	**29.1**	**29.5**	**27.6**	**29.1**	**29.9**	**29.0**	**30.6**	**31.8**	**32.5**	**32.9**	**30.5**	**31.6**	**31.7**	**27.2**	**29.0**	**31.7**	**31.6**	**32.8**	**33.2**	**33.2**		
Min.	**2.7**	**2.1**	**2.5**	**2.2**	**2.4**	**2.3**	**2.1**	**2.7**	**3.3**	**3.0**	**3.8**	**4.3**	**4.4**	**4.3**	**3.7**	**4.4**	**5.3**	**5.0**	**4.8**	**2.8**	**2.6**	**2.7**	**1.6**	**3.5**		**1.6**	
Avg.	**10.1**	**10.2**	**10.3**	**9.7**	**9.3**	**9.1**	**9.0**	**9.7**	**10.5**	**10.8**	**11.2**	**12.0**	**12.3**	**12.7**	**13.3**	**13.5**	**13.3**	**13.0**	**12.7**	**12.5**	**12.0**	**11.1**	**10.7**	**10.4**			**11.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum Instantaneous Wind Speed (Climtrncs) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.8	2.3	3.8	4.7	3.5	3.1	2.2	2.5	3.0	2.9	2.9	3.6	4.5	6.1	4.9	6.4	6.9	7.1	9.3	7.3	7.6	7.7	7.8	6.8	9.3	2.2	5.0
2	3.3	3.7	4.4	3.8	3.7	4.3	4.6	5.1	7.2	7.4	8.1	9.4	10.4	9.9	10.0	10.7	12.2	13.9	13.4	12.6	10.4	10.1	11.0	11.3	13.9	3.3	8.4
3	13.1	13.0	10.9	8.1	7.9	6.8	6.2	6.3	7.8	8.8	7.1	6.7	7.2	6.4	6.2	6.0	8.4	7.4	7.2	6.9	6.7	6.0	3.2	3.1	13.1	3.1	7.4
4	2.7	2.1	2.1	2.5	2.7	2.2	1.7	2.9	3.3	4.4	4.6	5.9	7.5	7.2	6.3	9.4	8.6	9.1	9.2	8.3	8.6	7.6	7.5	4.5	9.4	1.7	5.5
5	4.2	2.5	2.1	3.2	3.1	3.5	3.8	3.2	3.0	3.5	4.1	4.3	4.6	10.4	6.5	9.9	15.5	6.2	3.8	2.8	3.1	2.9	2.7	4.0	15.5	2.1	4.7
6	2.2	3.8	4.4	3.1	3.1	1.7	3.2	2.9	4.0	4.8	4.6	6.8	6.7	9.2	9.6	9.9	8.4	9.4	4.9	4.0	5.4	4.6	6.2	6.3	9.9	1.7	5.4
7	6.3	5.0	6.2	7.0	7.6	6.0	5.3	7.7	9.6	10.3	10.7	8.8	10.2	11.1	10.5	10.5	11.2	10.2	8.1	6.8	8.4	9.1	7.7	9.9	11.2	5.0	8.5
8	10.4	10.8	7.8	11.3	11.0	6.6	7.6	7.1	7.2	7.0	4.3	3.8	4.0	4.4	3.7	4.7	4.5	4.4	4.9	5.6	4.0	6.3	5.7	4.2	11.3	3.7	6.3
9	2.0	2.9	4.2	3.9	4.7	4.7	4.6	4.7	4.6	3.8	5.3	6.8	9.0	9.1	10.9	11.6	11.8	11.7	12.9	12.7	15.4	14.7	15.2	18.3	18.3	2.0	8.6
10	18.4	19.6	19.7	18.4									21.0	19.5	32.9	47.3	22.0	21.9	21.6	20.2	18.5	18.3	13.9	14.2	47.3	13.9	21.7
11	13.5	10.8	8.4	10.0	10.3	7.2	7.3	8.2	7.1		7.7	7.5	8.0	8.7	9.5	9.1	8.7	8.2	6.6	6.3	5.8	4.6	5.3	4.0	13.5	4.0	7.9
12	4.6	4.8	2.3	1.8	2.5	3.0	4.5	5.3	7.0	5.1	6.2	6.7	7.5	7.9	7.5	7.6	9.2	12.2	12.1	10.0	8.6	8.7	4.9	5.8	12.2	1.8	6.5
13	6.0	5.6	5.3	5.3	4.8	5.7	4.3	8.7	9.7	8.8	7.2	9.1	8.5	9.5	9.2	9.2	9.4	10.9	11.7	12.9	12.9	11.7	13.5	16.9	16.9	4.3	9.0
14	15.7	14.5	13.6	13.4	11.8	11.5	12.2	10.3	8.9	8.4	9.1	9.3	8.9	8.5	8.6	9.8	10.8	10.0	10.2	10.5	10.9	10.9	10.7	9.6	15.7	8.4	10.8
15	8.7	6.7	6.5	6.8	5.8	5.5	6.2	7.0	6.4	6.5	7.2	7.4	7.6	8.3	7.3	7.8	8.8	9.2	8.0	6.8	7.1	5.9	5.9	7.0	9.2	5.5	7.1
16	7.7	7.7	8.4	8.3	10.6	14.5	14.5	14.9	16.2	17.4	17.6	17.6	18.8	19.6	19.9	20.8	20.6	18.0	16.7	14.1	13.0	11.9	11.8	10.6	20.8	7.7	14.6
17	12.5	13.3	15.7	15.7	17.0	17.3	17.0	18.3	18.5	21.0	22.5	23.1	20.9	21.5	18.6	19.8	20.2	18.8	18.9	19.3	17.2	16.9	18.2	26.6	26.6	12.5	18.7
18	24.0	22.3	22.8	23.3	16.4	16.5	17.4	21.4	19.6	21.6	22.8	22.1	21.6	23.3	20.2	20.9	20.3	19.7	19.1	19.3	20.2	17.4	17.5	15.5	24.0	15.5	20.2
19	17.4	15.5	14.8	11.7	10.1	6.6	5.5	5.6	4.7	5.8	10.0	10.8	9.2	9.1	7.6	8.0	8.0	7.5	8.1	6.4	4.6	4.1	3.3	2.9	17.4	2.9	8.2
20	3.6	5.2	5.3	5.2	5.0	6.4	6.5	7.7	8.2	8.8	9.7	12.2	11.2	10.7	10.0	9.1	8.9	8.6	8.1	7.9	8.4	8.0	9.0	8.1	12.2	3.6	8.0
21	6.9	6.0	4.8	4.1	1.5	1.6	1.3	3.3	5.2	5.2	6.3	7.2	4.3	10.1	9.0	10.8	10.4	9.8	9.4	10.0	9.2	5.0	6.4	4.4	10.8	1.3	6.3
22	4.3	3.2	1.7	2.2	3.4	3.1	3.1	4.4	5.2	5.7	8.2	6.3	7.0	8.8	9.0	8.7	8.0	6.6	7.7	10.0	11.9	11.3	11.5	12.2	12.2	1.7	6.8
23	13.3	13.6	11.8	12.2	13.0	13.1	14.1	10.0	9.4	5.7	4.1	3.7	3.7	9.1	5.8	5.3	5.0	5.5	5.9	3.2	3.0	2.9	3.2	5.1	14.1	2.9	7.6
24	3.8	7.0	5.3	9.5	10.1	7.6	7.4	6.8	7.8	4.7	2.8	4.3	5.4	7.2	7.8	7.7	8.6	7.2	8.3	9.0	12.1	11.7	11.9	10.3	12.1	2.8	7.7
25	11.5	13.3	13.0	12.8	6.3	5.2	3.3	7.5	7.5	8.1	9.7	9.7	10.3	8.6	9.2	9.7	8.1	7.2	6.9	4.7	4.0	4.1	4.1	4.5	13.3	3.3	7.9
26	4.4	3.7	4.0	4.7	4.6	3.3	2.6	2.5	3.7	7.0	7.7	7.1	7.6	8.1	9.3	10.1	11.2	11.7	10.9	10.2	8.1	7.6	7.9	9.4	11.7	2.5	7.0
27	9.4	8.7	7.4	6.2	6.6	3.4	3.6	2.3	2.1	3.7	3.1	5.4	6.0	5.2	6.4	5.6	5.6	5.3	4.5	5.3	3.8	3.2	2.8	1.7	9.4	1.7	4.9
28	2.7	2.2	2.4	1.8	1.8	1.7	3.1	3.8	7.2	6.9	6.9	8.5	10.8	11.3	12.1	11.0	12.0	13.7	15.6	15.5	16.8	15.8	15.5	15.8	16.8	1.7	9.0
29	16.1	16.2	17.9	19.7	18.7	17.9	16.8	15.0	14.2	13.9	10.5	9.7	11.7	13.1	11.3	15.0	15.7	15.5	17.0	15.7	15.0	13.6	11.6	9.7	19.7	9.7	14.6
30	9.8	11.4	8.6	9.4	8.0	5.3	2.9	3.6	2.7	3.7	5.5	6.1	6.8	7.9	10.3	14.7	14.4	16.4	15.3	17.3	16.1	14.9	12.2	9.2	17.3	2.7	9.7
31	9.3	8.2	8.9	8.1	6.7	7.6	6.9	6.2	7.6	8.4	8.4	7.6	7.1	11.1	10.2	8.7	7.3	5.7	5.3	4.9	3.8	3.4	2.5	3.7	11.1	2.5	7.0
Max.	**24.0**	**22.3**	**22.8**	**23.3**	**18.7**	**17.9**	**17.4**	**21.4**	**19.6**	**21.6**	**22.8**	**23.1**	**21.6**	**23.3**	**32.9**	**47.3**	**22.0**	**21.9**	**21.6**	**20.2**	**20.2**	**18.3**	**18.2**	**26.6**	**47.3**		
Min.	**2.0**	**2.1**	**1.7**	**1.8**	**1.5**	**1.6**	**1.3**	**2.3**	**2.1**	**2.9**	**2.8**	**3.6**	**3.7**	**4.4**	**3.7**	**4.7**	**4.5**	**4.4**	**3.8**	**2.8**	**3.0**	**2.9**	**2.5**	**1.7**		**1.3**	
Avg.	**8.8**	**8.6**	**8.2**	**8.3**	**7.4**	**6.8**	**6.7**	**7.2**	**7.6**	**7.9**	**8.2**	**8.6**	**9.3**	**10.3**	**10.3**	**11.5**	**11.0**	**10.6**	**10.4**	**9.9**	**9.7**	**9.1**	**8.7**	**8.9**			**8.9**

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.0	4.5	2.0	3.4	3.5	3.4	2.1	2.1	2.3	3.3	3.1	5.4	5.2	5.5	5.1	4.5	5.9	6.9	6.9	6.4	6.4	6.4	6.8	6.7	6.9	2.0	4.7
2	10.5	11.8	10.9	10.0	10.3	9.3	8.8	8.3	6.8	6.9	8.5	6.0	8.4	8.0	6.3	8.2	6.5	4.4	3.9	6.1	4.9	7.1	5.6	4.4	11.8	3.9	7.6
3	8.4	7.9	4.9	5.8	4.5	3.3	4.0	4.0	2.8	3.0	6.0	5.3	4.2	3.2	4.8	6.3	7.0	6.0	4.5	4.8	4.1	4.2	3.3	2.9	8.4	2.8	4.8
4	2.8	3.4	3.6	3.1	3.2	4.8	2.2	2.0	2.2	2.9	3.0	4.1	2.3	2.4	3.1	3.4	4.9	8.5	4.2	3.8	3.6	3.3	2.3	1.9	8.5	1.9	3.4
5	2.2	3.8	1.9	2.4	3.4	3.3	3.2	3.8	2.8	3.7	3.6	3.8	5.4	5.1	6.0	6.0	5.6	5.8	7.0	7.7	7.9	7.1	7.3	4.7	7.9	1.9	4.7
6	2.4	5.3	3.7	2.4	1.7	2.1	2.7	2.7	3.4	3.0	3.5	2.6	2.2	4.7	5.5	7.3	5.6	5.5	5.1	6.5	4.7	3.6	3.0	3.4	7.3	1.7	3.9
7	2.3	2.4	3.0	3.5	6.4	6.0	4.5	6.8	6.4	5.9	4.6	5.1	6.5	6.4	6.0	4.1	5.5	5.6	4.8	4.3	5.1	5.0	4.7	4.4	6.8	2.3	5.0
8	3.7	3.6	3.2	4.0	3.9	3.4	3.6	3.6	3.8	4.1	3.1	2.9	3.9	3.6	4.6	4.8	5.6	5.3	4.6	3.7	3.1	2.3	3.8	3.9	5.6	2.3	3.8
9	5.4	5.5	4.7	3.8	3.3	3.6	3.9	4.5	5.4	7.0	6.7	7.2	7.0	7.2	8.1	9.6	11.0	9.6	8.6	8.3	8.9	6.6	9.6	7.6	11.0	3.3	6.8
10	4.6	4.2	3.0	2.3	2.3	3.0	2.3	3.8	3.5	3.0	4.0	4.3	5.4	6.8	8.0	7.3	6.1	3.5	4.0	4.1	4.2	3.9	4.2	3.9	8.0	2.3	4.2
11	4.5	4.2	4.0	4.2	4.6	4.3	4.7	4.4	5.7	5.8	6.2	6.3	6.1	5.2	4.1	3.6	4.3	4.3	4.0	3.3	3.2	3.2	3.7	4.8	6.3	3.2	4.5
12	3.9	2.1	2.2	2.3	2.5	2.1	3.0	2.4	3.6	4.6	6.3	6.9	8.9	8.9	8.6	8.5	7.5	7.4	6.3	6.6	7.4	6.6	6.4	6.3	8.9	2.1	5.5
13	5.3	6.0	4.2	3.7	3.2	3.3	3.3	2.9	2.4	3.0	4.5	6.0	6.3	6.6	7.3	8.1	8.0	8.1	8.3	8.5	7.6	7.0	4.9	4.5	8.5	2.4	5.5
14	5.7	5.0	4.7	4.5	4.1	2.9	2.2	3.0	3.0	3.1	3.2	3.9	4.8	5.0	4.8	4.8	6.0	7.1	5.4	5.4	3.6	3.9	4.2	3.5	7.1	2.2	4.3
15	5.2	5.8	5.6	6.6	6.9	6.7	6.7	8.1	6.7	8.0	8.8	9.7	9.3	9.7	11.5	11.4	12.6	11.7	13.4	13.1	11.9	12.1	10.4	7.4	13.4	5.2	9.1
16	7.4	8.0	8.4	9.5	10.4	11.2	11.0	10.7	12.0	12.9	14.7	15.8	16.9	15.5	16.8	16.6	16.8	16.0	15.4	15.4	14.8	14.0	14.1	15.5	16.9	7.4	13.3
17	15.7	17.0	15.9	14.2	13.6	6.8	5.6	4.9	6.0	6.4	5.3	4.6	7.0	7.6	7.4	7.7	6.2	6.1	6.8	6.9	3.6	4.5	3.2	3.2	17.0	3.2	7.8
18	2.5	5.2	4.2	3.2	3.9	2.2	2.5	2.4	4.5	4.8	3.7	5.4	7.9	8.6	8.0	6.9	7.6	3.2	4.6	5.0	3.1	2.8	2.2	2.1	8.6	2.1	4.4
19	1.7	2.9	1.8	1.9	1.9	3.5	5.8	5.4	5.5	5.1	7.1	9.4	10.5	9.5	11.6	11.0	11.8	11.5	11.4	8.3	8.1	8.0	7.3	8.1	11.8	1.7	7.0
20	7.6	7.6	6.3	5.9	6.3	7.2	7.3	8.1	8.2	7.2	6.7	7.8	7.3	7.7	7.5	7.8	6.7	7.3	5.4	10.9	12.2	12.5	14.5	12.7	14.5	5.4	8.3
21	13.5	13.9	15.1	13.3	11.9	9.4	11.0	11.1	11.5	11.9	14.5	13.6	11.8	14.3	10.8	11.4	11.5	9.6	9.8	7.9	6.6	6.7	6.2	4.5	15.1	4.5	10.9
22	3.7	2.1	3.3	3.8	3.7	3.5	4.2	5.2	7.2	10.0	11.0	15.3	18.1	17.8	18.1	19.7	22.8	22.3	24.0	25.3	19.4	19.6	22.0	21.4	25.3	2.1	13.5
23	21.7	21.7	22.1	22.3	17.7	14.0	16.7	23.2	17.4	16.3	17.3	19.0	19.8	20.1	18.4	18.9	19.3	18.5	16.3	17.5	16.6	16.4	15.1	16.7	23.2	14.0	18.5
24	16.0	15.2	12.3	9.8	5.5	4.7	3.7	2.4	2.7	9.2	13.3	12.9	12.4	12.1	11.7	11.4	10.3	10.8	10.5	10.0	7.5	5.6	6.3	5.8	16.0	2.4	9.2
25	5.4	3.8	3.6	3.0	2.9	4.1	3.2	3.1	3.3	3.4	4.3	6.5	5.8	6.5	5.8	6.6	7.9	6.8	8.1	7.0	6.2	6.7	6.9	7.5	8.1	2.9	5.4
26	8.4	9.1	10.1	9.6	6.6	8.5	8.5	7.4	10.0	13.0	16.7	17.4	18.0	16.5	14.8	16.3	17.7	19.0	20.1	16.4	13.1	13.3	9.2	10.0	20.1	6.6	12.9
27	9.6	7.7	6.7	9.3	9.5	8.2	6.6	7.8	12.3	10.8	9.9	9.9	10.0	8.9	8.0	8.4	7.3	7.4	6.3	5.0	3.0	4.5	4.3	5.7	12.3	3.0	7.8
28	7.0	7.0	5.0	6.1	7.6	7.3	8.4	8.6	9.3	8.4	9.0	13.5	9.7	17.5	15.8	16.6	18.2	16.1	13.8	14.4	13.2	13.9	13.4	12.0	18.2	5.0	11.3
29	11.2	11.6	12.0	12.3	10.4	9.5	9.2	8.8	9.1	10.1	9.4	9.4	8.4	7.9	7.7	5.8	7.7	8.4	6.9	8.2	9.4	8.3	7.8	6.8	12.3	5.8	9.0
30	5.3	3.5	3.8	4.9	5.9	5.5	5.3	7.8	9.5	10.5	11.8	10.2	10.0	12.3	12.6	12.2	12.6	11.1	11.1	8.8	10.3	10.9	10.3	10.8	12.6	3.5	9.0
31	11.6	10.7	8.9	10.2	9.7	11.0	9.5	13.0	13.0	13.8	15.8	14.4	16.4	16.9	15.4	17.7	14.8	12.4	13.9	11.1	7.2	9.8	11.8	13.2	17.7	7.2	12.6
Max.	**21.7**	**21.7**	**22.1**	**22.3**	**17.7**	**14.0**	**16.7**	**23.2**	**17.4**	**16.3**	**17.3**	**19.0**	**19.8**	**20.1**	**18.4**	**19.7**	**22.8**	**22.3**	**24.0**	**25.3**	**19.4**	**19.6**	**22.0**	**21.4**	**25.3**		
Min.	**1.7**	**2.1**	**1.8**	**1.9**	**1.7**	**2.1**	**2.1**	**2.0**	**2.2**	**2.9**	**3.0**	**2.6**	**2.2**	**2.4**	**3.1**	**3.4**	**4.3**	**3.2**	**3.9**	**3.3**	**3.0**	**2.3**	**2.2**	**1.9**		**1.7**	
Avg.	**7.1**	**7.2**	**6.5**	**6.5**	**6.2**	**5.7**	**5.7**	**6.2**	**6.5**	**7.1**	**7.9**	**8.5**	**8.9**	**9.3**	**9.2**	**9.4**	**9.7**	**9.2**	**8.9**	**8.7**	**7.8**	**7.7**	**7.6**	**7.3**			**7.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.6	11.4	10.2	10.1	10.1	7.9	7.5	8.8	10.6	11.3	11.8	13.6	12.9	11.6	11.6	11.3	10.7	11.1	10.4	9.2	5.5	5.7	5.7	4.3	13.6	4.3	9.8
2	4.1	3.8	3.6	3.9	2.4	2.0	2.6	3.6	4.2	7.0	9.0	12.6	14.6	15.8	18.0	18.0	15.2	16.1	13.9	15.8	16.1	17.8	17.7	18.8	18.8	2.0	10.7
3	18.1	17.7	14.4	14.2	14.6	13.6	15.0	14.3	16.1	16.3	17.4	15.7	16.3	19.1	19.8	19.5	17.4	17.3	16.3	12.5	11.0	10.8	10.2	6.6	19.8	6.6	15.2
4	3.8	4.0	2.2	1.7	1.5	2.3	2.6	2.1	1.4	2.4	3.8	4.7	4.8	5.8	5.7	5.8	6.1	6.7	6.6	7.5	7.5	7.1	7.4	9.0	9.0	1.4	4.7
5	7.8	9.0	9.1	9.0	8.9	10.0	10.4	9.2	10.3	11.0	14.6	16.1	15.5	16.9	16.8	16.7	14.5	12.3	12.8	12.5	12.4	10.3	9.8	7.9	16.9	7.8	11.8
6	8.3	6.8	3.5	7.5	7.3	5.1	4.1	4.0	7.4	9.6	9.1	8.6	8.7	9.2	9.6	9.4	10.0	8.9	8.0	8.2	8.2	11.0	10.4	10.2	11.0	3.5	8.0
7	7.4	7.7	6.0	6.0	5.4	3.9	3.9	3.5	3.3	5.0	4.7	6.1	8.0	6.0	9.6	11.0	10.7	9.9	9.0	7.2	6.2	6.3	5.8	5.3	11.0	3.3	6.6
8	3.2	3.4	4.2	4.3	5.0	5.0	2.9	3.8	2.9	2.8	4.5	4.8	5.3	7.4	10.9	11.1	10.3	11.2	12.2	17.1	19.1	20.2	18.6	19.9	20.2	2.8	8.7
9	19.2	20.3	15.2	13.1	14.4	10.8	12.7	12.4	12.6	14.5	13.7	11.2	10.4	10.2	10.4	9.3	9.8	8.2	7.9	9.8	9.9	8.8	8.3	10.5	20.3	7.9	11.8
10	10.2	10.1	11.4	11.3	15.0	16.6	16.6	11.9	7.3	7.5	8.9	8.2	6.0	8.1	6.8	5.7	3.4	3.2	4.5	4.9	2.9	2.3	3.4	4.4	16.6	2.3	7.9
11	6.2	5.5	8.9	10.3	10.8	10.8	11.2	12.8	15.7	18.8	17.9	18.2	17.9	17.4	18.1	16.7	18.6	18.0	16.3	15.5	16.7	19.2	17.0	13.1	19.2	5.5	14.6
12	7.4	9.1	8.6	9.8	9.6	7.9	10.0	11.1	11.3	12.8	12.0	12.8	13.6	16.5	15.3	16.1	16.6	17.6	16.9	18.1	19.0	18.5	15.4	12.3	19.0	7.4	13.3
13	13.7	12.2	11.9	12.3	11.2	7.6	5.5	9.0	5.6	3.2	5.5	6.4	6.9	7.4	6.8	4.7	4.4	4.7	4.1	4.2	4.2	3.3	2.4	2.7	13.7	2.4	6.7
14	2.1	3.0	3.3	4.3	4.2	3.5	3.3	4.0	4.4	4.9	5.6	6.4	7.8	10.0	12.1	12.3	13.6	13.3	14.3	17.0	19.9	19.9	19.9	19.4	19.9	2.1	9.5
15	21.9	22.6	22.3	22.9	25.2	23.8	23.5	22.4	24.0	22.2	22.9	22.9	23.0	20.7	22.2	22.6	20.8	16.5	6.2	4.8	5.4	6.0	5.9	7.2	25.2	4.8	18.2
16	11.5	11.4	11.5	11.1	7.1	2.1	4.4	4.8	2.9	4.2	4.7	6.8	7.5	7.4	7.6	7.5	6.9	5.3	6.5	6.9	6.4	7.6	5.7	7.1	11.5	2.1	6.9
17	5.2	4.4	3.3	2.2	2.0	2.0	1.7	1.6	1.3	2.1	2.3	2.6	2.8	4.2	4.6	4.7	4.6	2.9	2.4	2.5	2.9	4.5	4.8	5.3	5.3	1.3	3.2
18	6.1	6.2	7.6	7.1	6.6	6.0	6.1	4.9	5.8	6.7	8.7	9.2	10.7	10.5	11.2	11.5	10.3	9.8	9.1	6.8	7.6	6.5	5.4	5.6	11.5	4.9	7.7
19	5.0	4.4	4.9	4.6	3.8	3.5	3.7	3.5	4.0	6.4	8.6	9.4	10.4	11.3	10.6	11.2	10.0	9.5	9.0	8.1	7.4	7.8	8.0	8.5	11.3	3.5	7.2
20	9.2	8.7	9.5	8.6	6.1	5.2	4.1	4.4	5.6	6.6	6.1	6.5	7.6	8.4	8.5	9.1	8.0	6.5	5.4	3.5	3.7	4.5	5.1	6.0	9.5	3.5	6.5
21	5.9	4.9	6.1	6.1	4.6	3.1	3.1	5.8	5.4	6.0	7.0	5.2	5.8	7.2	7.3	6.8	6.5	9.8	8.2	8.8	10.2	10.2	8.9	8.7	10.2	3.1	6.7
22	9.1	8.6	7.9	8.9	9.3	9.0	10.0	10.5	15.5	19.4	20.3	22.3	22.9	20.4	18.9	17.3	16.2	16.6	15.8	15.5	13.1	13.5	13.7	13.5	22.9	7.9	14.5
23	12.1	10.2	7.8	7.7	7.0	6.5	6.1	5.4	5.2	7.2	8.9	8.8	11.5	16.1	15.4	14.0	13.4	12.2	11.5	10.8	14.5	14.5	17.8	17.6	17.8	5.2	10.9
24	13.9	12.5	12.6	14.1	16.6	13.8	13.8	12.4	11.2	13.5	13.0	12.2	11.8	13.4	15.5	12.8	13.0	12.0	12.2	11.7	13.2	12.2	12.4	11.2	16.6	11.2	13.0
25	12.3	12.4	12.2	13.1	14.6	13.6	13.2	11.3	11.7	10.8	10.5	10.6	10.0	10.0	10.0	9.6	8.5	10.0	8.8	9.1	8.3	9.3	8.8	8.4	14.6	8.3	10.7
26	6.6	3.7	3.7	3.9	4.7	4.5	3.9	5.0	7.0	9.2	11.3	16.4	18.8	20.7	22.9	20.6	21.9	21.7	25.1	23.9	23.1	27.7	28.8	24.5	28.8	3.7	15.0
27	23.6	23.9	23.0	25.4	25.3	22.5	24.9	10.4	6.8	7.3	5.6	10.0	12.0	14.1	12.3	11.0	10.4	9.9	7.6	7.5	6.1	3.8	2.7	2.1	25.4	2.1	12.8
28	2.9	3.3	3.1	4.0	5.3	4.8	4.4	3.7	2.7	2.2	2.7	3.7	3.6	3.5	3.8	3.5	3.7	2.3	1.8	3.6	2.6	3.2	3.4	1.9	5.3	1.8	3.3
29	3.4	3.7	4.6	5.8	7.0	7.4	5.7	5.7	6.5	7.2	6.6	8.6	10.4	11.2	7.8	8.8	8.3	6.3	4.1	3.5	3.5	3.1	3.2	3.9	11.2	3.1	6.1
30	3.3	2.1	2.5	3.3	3.0	2.1	2.2	2.0	1.7	1.7	1.8	2.7	2.7	4.3	4.1	3.7	7.1	8.1	7.2	8.8	10.8	11.8	11.8	11.9	11.9	1.7	5.0
Max.	**23.6**	**23.9**	**23.0**	**25.4**	**25.3**	**23.8**	**24.9**	**22.4**	**24.0**	**22.2**	**22.9**	**22.9**	**23.0**	**20.7**	**22.9**	**22.6**	**21.9**	**21.7**	**25.1**	**23.9**	**23.1**	**27.7**	**28.8**	**24.5**	**28.8**		
Min.	**2.1**	**2.1**	**2.2**	**1.7**	**1.5**	**2.0**	**1.7**	**1.6**	**1.3**	**1.7**	**1.8**	**2.6**	**2.7**	**3.5**	**3.8**	**3.5**	**3.4**	**2.3**	**1.8**	**2.5**	**2.6**	**2.3**	**2.4**	**1.9**		**1.3**	
Avg.	**9.2**	**8.9**	**8.5**	**8.9**	**9.0**	**7.9**	**8.0**	**7.5**	**7.7**	**8.7**	**9.3**	**10.1**	**10.7**	**11.5**	**11.8**	**11.4**	**11.0**	**10.6**	**9.8**	**9.8**	**9.9**	**10.2**	**9.9**	**9.6**			**9.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.7	14.2	13.4	16.5	17.0	16.8	15.6	15.3	14.1	14.8	14.4	14.1	14.6	14.8	14.0	13.5	14.3	14.6	11.3	9.7	9.5	10.1	10.2	9.3	17.0	9.3	13.5
2	9.1	8.4	8.4	8.1	6.7	5.0	5.3	3.7	3.4	3.2	7.6	8.5	7.4	7.3	9.9	9.2	9.0	6.4	4.9	4.4	5.7	6.2	5.6	4.0	9.9	3.2	6.6
3	4.1	3.0	3.7	3.1	2.3	2.6	2.9	2.0	2.4	3.4	4.0	3.7	3.4	4.2	4.2	3.6	3.0	3.2	3.7	2.0	1.5	4.6	5.6	2.9	5.6	1.5	3.3
4	4.3	3.6	4.2	3.8	5.0	5.8	7.4	5.4	8.6	8.0	10.4	8.6	9.5	8.5	8.2	9.7	8.3	9.6	8.7	5.6	10.1	10.2	11.4	12.1	12.1	3.6	7.8
5	11.3	8.4	7.4	7.7	5.7	5.0	5.0	5.1	6.8	5.1	7.1	7.0	6.2	5.0	4.7	3.8	3.5	4.0	3.4	3.8	3.3	2.0	2.1	2.0	11.3	2.0	5.2
6	2.8	3.6	2.6	2.0	1.6	1.9	2.7	2.6	3.9	4.5	3.7	3.4	2.7	4.3	4.9	5.3	5.6	6.4	5.5	3.5	3.5	3.2	3.5	5.2	6.4	1.6	3.7
7	6.4	7.2	5.1	8.5	12.1	12.2	13.9	12.3	11.2	13.9	14.2	12.8	12.0	11.4	11.5	8.5	5.7	5.2	3.0	2.6	3.0	2.5	2.2	1.8	14.2	1.8	8.3
8	1.8	2.8	2.8	1.8	2.2	2.8	3.0	2.9	3.1	2.0	1.0	1.2	2.9	2.9	3.2	3.1	2.8	2.2	1.8	1.1	1.6	1.7	2.5	2.3	3.2	1.0	2.3
9	2.4	2.9	2.7	2.1	2.2	3.1	3.6	4.6	0.2	0.2	5.9	7.5	9.2	9.3	8.4	9.1	10.8	9.9	8.5	8.6	7.5	8.4	9.0	8.7	10.8	0.2	6.0
10	7.8	8.2	7.5	6.4	4.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.2	8.3	8.5	8.3	8.5	0.2	2.9
11	5.9	5.5	4.8	5.6	4.9	6.3	5.1	5.6	6.0	6.2	6.5	5.7	5.8	6.2	7.0	5.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.0	0.2	3.9
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	10.5	11.6	10.6	8.5	6.7	4.2	3.3	2.7	2.1	2.5	2.6	11.6	0.2	2.8
13	2.4	3.6	3.3	3.3	3.2	3.5	3.3	3.3	3.6	3.8	4.4	3.9	3.9	3.9	4.2	4.7	4.5	5.0	6.0	5.3	5.9	6.9	7.0	7.3	7.3	2.4	4.4
14	7.6	7.3	7.5	5.6	4.7	4.6	2.7	2.5	7.9	7.9	6.6	4.0	4.8	5.2	4.7	3.0	3.5	6.8	8.2	9.7	10.5	10.8	9.8	10.4	10.8	2.5	6.5
15	8.4	8.4	5.5	6.3	7.5	4.7	4.2	5.4	7.4	7.5	5.2	2.8	2.6	4.2	4.8	5.5	5.6	6.0	5.9	5.9	8.1	9.2	8.2	8.7	9.2	2.6	6.2
16	7.9	6.6	6.5	6.8	4.7	4.6	4.1	3.6	4.4	3.8	2.6	2.3	3.9	5.1	6.4	5.4	6.2	5.1	7.3	4.3	5.8	9.5	11.5	12.4	12.4	2.3	5.9
17	12.5	14.2	15.0	14.0	16.1	18.6	18.6	19.9	20.4	18.8	17.3	18.9	18.2	21.5	18.9	20.5	19.1	18.3	17.9	16.5	17.9	17.4	18.7	18.3	21.5	12.5	17.8
18	16.3	17.9	17.6	18.4	16.7	15.0	14.8	13.3	13.5	12.5	14.0	9.6	6.8	9.9	12.2	10.1	8.1	8.3	10.5	10.1	9.2	10.0	8.3	8.3	18.4	6.8	12.1
19	9.2	11.6	12.9	13.8	12.6	11.6	11.1	12.3	13.5	14.5	17.5	17.0	17.8	22.1	22.7	21.8	24.2	27.3	26.3	27.8	27.0	27.4	27.2	26.7	27.8	9.2	19.0
20	26.2	26.6	25.8	26.1	26.2	25.5	25.2	25.0	26.4	27.8	30.3	23.3	20.3	6.9	8.7	6.8	8.1	9.9	10.6	10.1	10.5	10.5	8.0	8.7	30.3	6.8	18.1
21	8.9	9.8	7.9	2.7	6.3	4.9	4.6	4.9	7.5	6.8	5.2	4.5	4.8	4.0	3.0	2.3	2.5	8.8	9.1	9.0	9.2	10.1	8.1	7.6	10.1	2.3	6.3
22	9.1	9.1	6.1	6.9	7.6	8.4	8.7	8.0	7.7	7.5	7.3	7.1	5.6	9.5	12.6	11.8	9.5	10.0	6.9	8.7	7.8	6.8	7.2	6.3	12.6	5.6	8.2
23	6.2	6.0	5.2	5.9	7.0	7.4	7.3	8.0	7.5	6.8	7.5	10.3	14.6	15.5	15.3	15.3	15.1	17.3	14.7	13.1	10.8	9.4	8.1	5.2	17.3	5.2	10.0
24	3.8	3.2	2.7	2.7	2.8	2.5	3.7	3.8	3.7	4.3	4.1	4.5	4.4	6.3	5.6	7.0	6.3	4.7	3.9	3.6	3.8	3.7	3.8	4.2	7.0	2.5	4.1
25	4.0	4.3	4.3	4.0	3.5	3.5	3.6	3.0	2.1	2.2	2.3	2.4	2.2	2.3	2.6	3.0	2.8	2.8	2.3	2.3	2.3	2.1	2.5	2.8	4.3	2.1	2.9
26	3.0	3.0	3.0	2.8	2.9	3.0	2.5	2.2	2.4	2.8	3.3	3.6	3.2	3.5	3.7	3.4	4.5	4.5	4.1	4.1	3.7	2.7	2.3	2.4	4.5	2.2	3.2
27	2.1	1.6	1.6	1.1	1.0	0.7	0.8	0.9	0.9	0.9	1.1	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.9	1.4	1.2	1.4	0.7	2.1	0.7	1.1
28	1.4	1.7	1.5	1.3	1.4	1.9	1.6	1.6	1.7	1.6	2.7	3.0	4.9	5.6	5.0	5.9	5.8	5.7	4.6	3.9	3.4	2.5	1.7	1.7	5.9	1.3	3.0
29	2.1	1.7	1.7	2.6	3.1	2.9	2.8	2.7	2.5	2.5	2.4	2.1	2.1	1.7	2.0	2.2	2.3	2.1	2.2	2.0	2.0	1.6	1.4	1.9	3.1	1.4	2.2
30	2.0	2.2	2.4	2.4	2.4	2.2	2.2	2.4	2.7	2.6	2.5	2.4	2.2	3.2	5.5	6.7	6.8	7.5	8.7	8.8	9.7	8.7	7.7	11.5	11.5	2.0	4.8
31	10.6	10.6	10.8	11.3	9.2	10.2	7.8	9.1	7.7	7.3	8.1	9.2	10.1	12.3	10.6	5.8	8.0	10.5	9.4	13.8	15.0	9.7	7.3	5.6	15.0	5.6	9.6
Max.	**26.2**	**26.6**	**25.8**	**26.1**	**26.2**	**25.5**	**25.2**	**25.0**	**26.4**	**27.8**	**30.3**	**23.3**	**20.3**	**22.1**	**22.7**	**21.8**	**24.2**	**27.3**	**26.3**	**27.8**	**27.0**	**27.4**	**27.2**	**26.7**	**30.3**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.9**	**7.0**	**6.6**	**6.6**	**6.6**	**6.4**	**6.3**	**6.2**	**6.6**	**6.6**	**7.1**	**6.6**	**6.7**	**7.4**	**7.6**	**7.3**	**7.0**	**7.4**	**6.9**	**6.6**	**7.1**	**7.1**	**6.9**	**6.8**			**6.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.4	6.8	6.2	5.1	4.6	4.4	4.4	3.5	4.9	5.0	4.5	4.7	4.6	4.1	3.7	2.9	3.2	3.3	3.8	4.9	5.4	6.4	5.9	5.6	6.8	2.9	4.8
2	4.7	4.6	3.9	4.0	3.4	3.8	3.4	3.9	3.9	4.0	3.6	3.8	4.3	3.5	2.8	4.3	4.2	4.2	3.9	3.9	5.2	5.1	6.6	5.9	6.6	2.8	4.2
3	6.5	6.2	7.2	7.1	9.3	10.8	10.9	9.0	10.9	12.0	15.1	16.8	21.6	23.8	21.6	20.2	20.7	22.8	20.4	19.2	20.8	22.6	22.8	23.5	23.8	6.2	15.9
4	23.2	17.5	18.1	18.4	16.3	17.0	16.7	18.7	17.5	17.8	17.8	17.1	16.0	16.5	19.4	19.1	16.0	19.6	18.2	16.1	16.2	14.0	18.1	17.9	23.2	14.0	17.6
5	16.6	19.4	18.5	16.4	19.1	17.3	18.1	18.1	17.9	18.0	16.8	15.9	15.5	16.2	15.3	15.3	13.4	13.0	11.6	12.3	10.1	5.0	3.5	6.3	19.4	3.5	14.6
6	6.3	7.6	7.5	6.0	20.3	18.6	14.0	16.6	13.9	17.4	21.2	19.9	21.3	20.0	18.0	18.7	19.0	18.7	17.1	12.4	11.4	9.4	10.4	11.7	21.3	6.0	14.9
7	12.9	15.5	15.1	12.9	8.0	10.0	9.7	8.9	10.6	9.7	10.5	11.1	7.7	7.3	6.2	6.6	6.6	5.9	6.6	6.5	6.4	6.8	6.6	6.3	15.5	5.9	8.9
8	6.0	5.6	5.4	5.2	5.1	4.2	4.7	4.7	4.7	4.3	4.6	4.2	4.4	4.7	4.5	4.2	6.1	6.5	7.3	8.3	8.9	8.9	10.4	9.7	10.4	4.2	5.9
9	10.5	11.9	14.2	14.7	14.6	14.0	14.7	16.8	17.9	17.8	17.1	18.5	17.1	17.1	18.6	19.5	21.8	21.2	21.4	20.3	20.9	19.6	19.3	19.5	21.8	10.5	17.4
10	17.8	15.8	15.6	14.1	14.8	16.6	17.0	15.7	14.5	14.2	13.5	14.8	14.7	15.7	15.7	14.8	14.8	15.4	15.0	14.9	14.4	13.0	11.6	11.9	17.8	11.6	14.8
11	10.4	9.7	9.7	11.1	10.8	11.2	10.8	11.0	10.8	9.3	9.3	8.9	8.9	7.7	7.7	7.3	8.2	7.9	6.8	7.0	6.6	6.5	6.6	6.5	11.2	6.5	8.8
12	6.0	6.4	5.1	3.5	3.2	3.0	2.7	3.6	4.3	6.1	7.3	7.8	6.9	6.5	6.6	7.0	7.6	7.6	8.4	9.1	10.2	11.0	8.6	11.1	11.1	2.7	6.6
13	10.2	7.6	10.4	10.3	10.8	9.7	8.2	9.5	9.3	7.1	7.3	7.2	4.1	3.2	2.3	2.0	2.6	2.5	1.7	2.0	1.9	2.0	1.7	2.8	10.8	1.7	5.7
14	4.6	6.3	6.9	7.8	9.1	15.3	13.3	11.0	7.7	5.0	5.2	3.9	3.5	11.7	12.5	13.0	11.6	14.5	15.0	15.2	15.3	15.5	14.3	12.4	15.5	3.5	10.4
15	11.4	9.3	8.6	7.2	6.4	2.6	1.6	4.2	4.1	3.9	4.5	4.6	3.9	3.9	3.4	3.9	3.2	3.3	3.3	2.0	2.4	3.3	3.9	3.0	11.4	1.6	4.5
16	5.2	4.5	6.2	5.6	8.7	7.4	8.7	10.9	10.1	11.6	11.6	10.5	11.0	11.7	13.1	12.3	11.4	9.9	11.1	9.8	8.2	8.1	9.2	9.0	13.1	4.5	9.4
17	9.9	10.3	12.0	11.0	9.2	10.8	11.1	10.7	9.1	6.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	12.0	0.2	4.3
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.5	2.4	2.8	2.7	3.1	3.1	3.7	5.5	5.6	4.4	5.6	0.2	1.6
19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.1	8.7	6.8	8.0	9.1	9.8	8.7	6.6	7.6	6.7	5.2	3.1	3.6	2.2	3.8	3.6	9.8	0.2	4.3
20	3.1	4.1	4.3	4.4	4.0	5.1	4.7	3.7	3.6	3.9	3.5	3.0	2.9	2.0	2.0	2.2	1.8	1.8	2.1	1.3	1.0	1.0	1.5	2.1	5.1	1.0	2.9
21	2.1	3.3	3.8	3.8	3.1	2.6	2.2	1.6	1.4	1.0	0.4	0.4	0.3	0.4	0.5	0.5	2.4	1.4	2.5	2.4	3.0	2.4	1.9	2.0	3.8	0.3	1.9
22	1.6	1.3	1.4	1.3	1.9	1.6	1.1	0.8	1.7	1.4	1.3	1.8	1.4	1.9	2.4	2.0	2.0	2.7	2.7	2.8	3.1	3.5	3.3	3.8	3.8	0.8	2.0
23	4.3	4.5	5.6	6.0	5.8	5.6	5.5	6.5	6.6	6.0	5.2	5.6	5.1	4.3	4.6	4.0	3.7	3.6	3.0	2.0	1.9	1.7	2.0	2.4	6.6	1.7	4.4
24	2.5	2.2	2.7	3.1	3.6	4.8	4.9	4.8	4.1	4.7	5.3	5.2	5.9	6.1	5.2	4.5	5.3	5.3	4.5	4.7	5.0	5.3	5.0	5.3	6.1	2.2	4.6
25	5.3	5.5	5.4	5.2	5.5	6.0	5.9	5.9	6.1	6.7	6.2	5.9	4.6	4.2	4.1	4.8	4.6	5.0	5.1	5.7	6.2	6.7	6.0	5.4	6.7	4.1	5.5
26	6.2	5.7	5.8	5.2	5.5	5.9	5.8	5.5	5.6	6.0	5.7	5.6	5.6	5.5	5.0	5.6	6.0	5.8	5.0	5.5	5.4	5.2	4.2	3.9	6.2	3.9	5.5
27	3.5	4.0	4.2	4.0	3.8	3.4	3.4	3.4	3.2	3.1	3.0	3.0	2.6	2.7	2.7	1.5	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	4.2	0.2	2.2
28	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	3.5	3.5	3.1	3.0	3.2	3.3	2.8	2.6	2.6	1.6	2.2	2.8	1.9	2.3	1.7	1.7	3.5	0.3	1.9
29	2.3	1.6	1.2	0.7	1.4	2.3	3.7	4.2	5.1	4.8	3.8	3.9	4.3	3.3	3.0	3.1	3.2	2.7	3.6	2.8	2.2	2.7	2.4	2.3	5.1	0.7	2.9
30	2.7	3.4	3.7	2.6	2.5	2.9	2.8	3.1	3.1	3.5	3.6	3.0	2.6	2.3	3.2	3.5	2.6	2.5	3.0	3.3	3.2	3.1	3.0	2.8	3.7	2.3	3.0
Max.	**23.2**	**19.4**	**18.5**	**18.4**	**20.3**	**18.6**	**18.1**	**18.7**	**17.9**	**18.0**	**21.2**	**19.9**	**21.6**	**23.8**	**21.6**	**20.2**	**21.8**	**22.8**	**21.4**	**20.3**	**20.9**	**22.6**	**22.8**	**23.5**	**23.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.8**	**6.7**	**7.0**	**6.6**	**7.0**	**7.3**	**7.0**	**7.2**	**7.5**	**7.4**	**7.3**	**7.3**	**7.1**	**7.3**	**7.3**	**7.2**	**7.2**	**7.3**	**7.1**	**6.8**	**6.8**	**6.6**	**6.7**	**6.8**			**7.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.4	3.2	3.5	3.8	3.7	2.8	2.8	2.7	2.3	1.6	1.1	0.4	0.3	0.4	2.1	1.7	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	3.8	0.2	1.5
2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.3	0.2	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.9	1.0	1.1	1.2	1.1	1.2	1.2	1.2	1.2	0.2	0.6
3	1.1	1.3	1.3	1.3	1.3	1.2	1.0	1.2	2.1	2.0	1.1	2.0	1.8	1.8	2.0	1.9	2.0	1.1	0.8	0.7	0.9	0.8	0.7	0.6	2.1	0.6	1.3
4	1.4	1.4	1.1	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.6	0.8	0.4	0.6	0.7	0.6	0.6	0.6	1.4	0.3	0.6
5	0.6	0.5	0.4	0.4	10.9	13.0	11.7	11.3	14.8	15.7	17.4	17.4	16.8	17.1	15.8	16.6	16.8	16.7	17.4	22.0	20.6	21.6	22.6	23.6	23.6	0.4	14.2
6	24.6	28.3	28.1	26.4	24.0	24.7	23.9	22.1	20.7	21.7	18.0	11.6	11.1	8.2	8.3	7.2	6.8	5.1	0.2	0.2	0.2	0.2	0.2	20.0	28.3	0.2	14.2
7	27.7	28.1	29.4	30.8	31.6	35.0	35.9	35.1	33.9	29.7	29.6	28.9	28.2	26.0	24.5	24.2	25.5	24.2	20.9	21.4	20.5	20.2	18.6	17.0	35.9	17.0	26.9
8	15.6	12.8	12.1	10.3	9.6	8.1	8.6	8.6	12.5	13.8	16.4	15.6	18.3	18.9	18.9	18.1	19.7	20.2	24.1	22.9	24.5	23.7	25.4	26.0	26.0	8.1	16.9
9	24.5	25.1	24.4	23.9	22.2	20.1	19.3	18.7	17.9	17.5	16.9	15.3	14.3	12.8	10.0	6.6	6.8	8.8	7.8	8.9	8.9	8.4	7.8	5.7	25.1	5.7	14.7
10	5.8	4.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.2	8.3	6.6	6.2	4.8	5.6	6.3	8.8	8.7	11.4	11.6	9.5	10.0	9.6	11.6	0.2	5.1
11	6.9	7.3	4.6	3.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.3	0.2	1.1
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	12.7	13.4	10.6	11.4	13.4	17.5	21.9	23.6	28.0	27.8	32.2	31.5	30.2	27.7	32.2	0.2	12.7
14	31.1	29.5	23.3	23.5	22.9	10.9	16.8	15.1	14.3	17.0	16.1	13.9	17.9	18.5	18.2	17.1	18.7	18.2	14.9	12.8	12.4	17.8	27.3	26.7	31.1	10.9	18.9
15	24.9	23.1	21.9	22.2	20.6	19.3	15.8	9.3	7.5	13.9	11.9	6.4	7.4	7.5	7.6	6.9	7.7	10.6	14.2	27.2	24.8	25.6	26.4	28.4	28.4	6.4	16.3
16	25.9	24.1	25.0	23.8	23.7	20.9	20.4	20.7	16.2	14.2	9.8	8.4	7.2	5.7	4.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	25.9	0.2	10.5
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.2	12.3	10.6	8.4	11.3	13.9	15.3	15.3	0.2	3.3
18	12.7	8.0	7.3	5.9	6.6	5.5	7.6	11.4	11.8	8.2	13.1	18.2	17.8	15.6	13.1	11.7	13.4	12.9	14.6	10.0	7.9	4.3	5.8	4.4	18.2	4.3	10.3
19	5.1	9.1	15.3	15.7	16.1	21.8	17.9	22.5	21.2	20.4	20.9	20.2	18.1	20.7	16.7	18.1	18.9	11.2	12.8	16.3	11.9	13.3	13.6	11.7	22.5	5.1	16.2
20	7.8	7.7	3.4	3.5	2.4	3.2	3.5	2.7	1.7	3.5	4.0	4.3	4.9	4.7	3.5	3.7	8.0	5.8	3.6	2.7	3.5	3.6	2.2	3.7	8.0	1.7	4.1
21	3.0	2.4	1.8	2.1	2.4	3.1	2.5	1.4	2.0	2.3	1.9	1.9	1.7	2.2	1.8	1.9	2.9	2.9	2.9	3.6	5.3	5.8	6.2	6.8	6.8	1.4	2.9
22	5.7	5.3	6.0	7.2	5.8	5.3	4.4	4.7	5.7	5.9	2.9	4.5	4.7	4.6	3.9	3.1	2.6	2.4	2.6	2.5	2.9	1.5	1.5	1.4	7.2	1.4	4.0
23	1.3	1.9	2.6	2.5	2.2	2.0	1.2	1.7	2.7	2.3	2.2	2.1	2.2	3.2	2.9	4.0	2.9	3.7	4.1	3.1	3.1	4.5	5.6	7.8	7.8	1.2	3.0
24	10.6	11.6	9.0	10.4	11.6	10.3	8.5	10.0	9.9	10.1	7.2	6.4	5.6	5.3	4.4	3.6	2.1	2.5	4.0	4.5	3.0	2.7	1.9	2.0	11.6	1.9	6.5
25	2.3	2.1	3.6	3.9	3.2	4.4	7.5	12.0	12.3	11.3	11.4	10.6	10.7	7.6	6.3	6.5	11.7	12.1	9.9	8.9	8.8	12.0	11.7	10.4	12.3	2.1	8.4
26	11.4	10.9	17.9	21.1	19.3	19.4	18.4	19.3	14.6	4.5	5.1	4.3	4.7	4.1	6.2	4.1	3.9	4.7	5.5	4.4	4.7	4.7	6.1	8.6	21.1	3.9	9.5
27	8.3	10.2	11.4	10.0	11.5	13.2	13.8	13.4	9.7	6.8	7.3	7.3	3.2	4.3	4.8	5.0	4.2	4.2	4.4	3.0	5.2	9.1	11.3	10.9	13.8	3.0	8.0
28	6.1	6.5	8.3	11.7	13.8	14.8	12.4	12.5	12.5	6.0	9.4	10.0	7.8	9.7	6.9	6.9	8.8	11.6	10.8	10.7	10.9	10.9	11.1	10.7	14.8	6.0	10.0
29	10.8	8.3	7.0	9.5	9.9	7.4	12.4	19.0	19.2	17.1	18.1	18.3	17.6	15.6	15.4	11.7	11.2	10.8	11.9	9.8	9.3	6.4	6.5	8.5	19.2	6.4	12.1
30	8.4	12.3	12.1	13.5	11.9	12.1	11.5	11.8	10.7	5.2	4.3	4.2	4.1	4.1	3.5	5.2	7.2	10.1	13.6	9.5	12.5	10.4	7.8	9.5	13.6	3.5	9.0
31	6.0	4.2	10.8	10.6	5.0	3.4	2.5	3.3	3.4	1.7	2.1	3.6	2.8	2.8	4.3	4.4	4.0	3.7	2.5	2.0	2.7	3.0	2.5	1.8	10.8	1.7	3.9
Max.	**31.1**	**29.5**	**29.4**	**30.8**	**31.6**	**35.0**	**35.9**	**35.1**	**33.9**	**29.7**	**29.6**	**28.9**	**28.2**	**26.0**	**24.5**	**24.2**	**25.5**	**24.2**	**28.0**	**27.8**	**32.2**	**31.5**	**30.2**	**28.4**	**35.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**9.4**	**9.4**	**9.4**	**9.6**	**9.5**	**9.2**	**9.1**	**9.4**	**9.1**	**8.2**	**8.6**	**8.4**	**8.0**	**7.7**	**7.2**	**6.9**	**7.6**	**7.8**	**8.2**	**8.4**	**8.4**	**8.6**	**9.0**	**9.7**			**8.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.3	3.3	3.9	4.3	4.3	3.4	2.8	3.9	7.3	9.1	7.2	9.0	7.2	6.2	5.5	5.1	2.5	3.4	3.2	3.3	2.4	3.5	4.4	6.8	9.1	2.4	4.8
2	6.0	4.6	3.1	5.7	6.8	5.0	3.5	4.5	5.5	5.0	3.8	5.4	3.1	5.5	5.0	6.1	6.1	5.3	4.1	5.7	15.7	16.4	12.9	9.2	16.4	3.1	6.4
3	11.9	8.1	11.1	12.4	12.1	7.9	5.7	7.0	7.8	4.0	3.3	5.7	5.6	4.3	4.9	6.7	8.1	7.2	7.1	4.6	4.1	3.6	4.7	5.5	12.4	3.3	6.8
4	4.6	3.1	1.8	2.2	1.8	1.6	1.7	2.2	1.9	1.6	2.2	2.9	4.0	5.3	4.6	3.5	2.5	2.4	2.9	2.8	2.5	3.6	3.5	4.1	5.3	1.6	2.9
5	1.6	2.3	3.2	2.6	2.8	2.3	2.4	2.6	3.2	3.3	3.0	1.9	2.0	4.8	5.3	5.8	5.1	5.9	6.9	6.0	6.0	5.0	4.5	4.0	6.9	1.6	3.9
6	2.5	1.8	3.5	3.8	5.2	6.3	5.5	4.2	3.1	2.3	1.8	2.0	3.0	2.6	3.3	2.8	2.3	1.7	1.1	2.9	3.5	3.9	2.1	1.6	6.3	1.1	3.0
7	1.4	1.5	2.5	2.4	1.4	1.9	2.3	2.6	2.6	3.1	2.7	3.1	2.3	4.4	5.4	7.6	5.9	5.1	4.8	7.2	7.6	9.5	11.8	13.3	13.3	1.4	4.7
8	13.2	6.2	13.0	5.7	4.0	12.4	12.3	5.5	5.6	2.6	3.5	3.6	4.4	5.4	5.3	5.0	4.7	5.1	5.6	5.1	5.1	5.9	4.0	4.6	13.2	2.6	6.2
9	3.9	3.9	3.8	4.4	4.2	4.5	3.7	3.6	2.9	2.8	3.3	2.4	2.0	1.5	1.7	1.4	3.3	3.5	2.4	2.1	1.7	2.3	1.7	2.2	4.5	1.4	2.9
10	1.9	1.5	1.6	1.4	1.2	1.4	1.2	1.4	1.2	1.6	1.4	1.3	2.3	1.9	1.6	2.1	2.4	2.1	1.6	1.5	1.4	1.2	0.9	0.8	2.4	0.8	1.5
11	0.8	0.7	1.0	1.3	1.1	1.7	1.3	1.1	1.1	1.3	1.0	1.3	1.0	1.0	1.2	0.8	1.7	1.6	2.1	1.8	1.6	1.6	1.7	1.6	2.1	0.7	1.3
12	1.3	1.6	1.7	2.3	2.2	2.8	2.8	2.9	3.3	3.5	3.8	4.3	4.3	2.7	2.5	2.4	2.1	2.5	2.4	2.5	3.1	3.3	3.3	3.5	4.3	1.3	2.8
13	3.2	3.5	3.3	3.0	2.7	2.9	3.0	2.9	2.8	2.9	3.1	3.1	3.2	3.7	3.7	2.7	3.3	2.9	2.9	2.7	2.5	2.2	2.1	2.0	3.7	2.0	2.9
14	2.3	2.3	2.0	1.9	1.7	1.6	1.5	1.3	2.5	2.5	3.6	3.4	3.4	6.0	6.8	7.0	6.9	7.4	7.2	7.5	7.8	7.7	7.3	7.5	7.8	1.3	4.6
15	6.6	5.5	7.2	7.8	7.9	6.8	6.0	5.9	5.1	6.2	6.4	7.4	10.3	10.8	21.6	12.9	11.7	11.5	11.0	10.4	7.7	6.1	5.2	8.6	21.6	5.1	8.6
16	8.2	10.8	9.8	9.8	5.6	7.5	11.7	12.6	10.5	8.4	6.1	6.3	5.7	3.8	3.8	2.6	2.7	2.7	1.8	3.8	4.7	5.5	5.7	6.3	12.6	1.8	6.5
17	6.2	6.4	6.4	6.3	6.1	6.0	6.8	6.4	6.7	6.8	6.1	7.8	8.6	6.5	6.8	7.4	7.5	7.8	7.7	8.0	5.9	6.5	7.2	5.7	8.6	5.7	6.8
18	6.9	9.4	8.5	8.9	10.6	12.4	12.1	11.2	11.2	9.1	7.5	9.2	11.1	11.3	12.0	11.8	10.6	9.1	9.2	12.2	12.1	10.1	8.9	9.7	12.4	6.9	10.2
19	9.7	12.3	12.1	10.5	9.1	7.4	10.8	10.5	9.6	8.5	8.6	8.4	7.2	8.1	8.2	8.9	6.9	6.7	8.8	11.0	11.4	10.2	9.3	8.0	12.3	6.7	9.3
20	9.2	8.0	8.1	8.7	8.0	7.8	7.3	7.5	7.4	6.3	7.4	6.1	6.3	6.8	6.5	7.7	7.7	7.1	6.2	6.3	8.3	8.1	7.0	7.0	9.2	6.1	7.4
21	6.4	7.9	8.7	9.2	10.3	11.5	12.3	13.2	12.8	14.2	14.6	14.1	14.7	15.8	17.2	17.8	19.4	21.6	22.5	21.4	20.8	19.6	18.5	18.9	22.5	6.4	15.1
22	21.3	23.2	22.1	22.8	26.5	25.5	25.0	24.4	23.6	22.4	20.9	18.0	20.0	18.7	17.4	18.7	19.4	17.4	19.7	20.9	21.4	20.6	19.5	23.9	26.5	17.4	21.4
23	23.4	23.5	22.9	21.6	21.2	21.6	20.6	17.8	16.5	14.5	23.3	18.6	17.3	15.6	16.8	18.2	13.5	17.2	18.0	18.4	15.3	14.2	16.5	16.4	23.5	13.5	18.4
24	15.8	16.2	15.4	13.8	13.8	14.7	15.9	13.2	15.0	16.9	16.8	17.4	16.8	17.3	13.7	15.0	15.4	14.4	13.9	15.0	11.6	14.0	13.5	10.4	17.4	10.4	14.8
25	8.9	8.4	7.2	8.6	9.0	8.7	6.5	6.5	7.1	7.4	7.8	8.4	8.8	7.1	6.4	6.8	6.6	8.2	8.2	9.5	10.4	7.9	12.6	12.8	12.8	6.4	8.3
26	11.9	12.2	10.9	11.6	7.5	8.3	7.8	8.4	7.2	5.6	5.2	5.8	6.0	5.7	5.5	4.8	3.9	5.1	6.3	6.3	7.2	9.2	8.1	10.9	12.2	3.9	7.6
27	10.2	10.9	11.2	12.2	12.6	14.5	13.9	15.8	15.7	16.6	18.5	19.7	21.6	22.3	22.1	23.8	21.3	21.9	22.6	21.5	20.0	23.0	22.4	27.9	27.9	10.2	18.4
28	28.6	26.4	27.4	22.0	25.1	24.9	21.4	21.7	20.2	13.5	14.2	13.7	12.3	12.5	59.2	11.9	10.4	8.0	5.3	6.4	5.3	6.5	6.7	6.0	59.2	5.3	17.1
29	5.8	8.5	7.6	8.2	8.9	8.5	7.9	7.1	7.5	6.4	7.8	8.6	6.9	6.9	7.0	8.2	8.1	8.9	8.9	7.7	7.7	7.9	8.7	7.4	8.9	5.8	7.8
30	8.8	8.5	8.1	9.0	8.2	9.0	8.4	6.4	6.4	6.3	5.8	4.8	5.0	6.1	5.4	5.4	5.2	5.1	2.9	2.7	3.6	3.8	2.7	1.7	9.0	1.7	5.8
31	2.1	3.0	4.1	3.6	3.5	3.7	4.3	4.1	3.4	4.8	5.1	4.7	5.4	6.2	6.6	6.5	6.1	6.4	9.4	9.5	9.2	9.2	8.0	5.8	9.5	2.1	5.6
Max.	**28.6**	**26.4**	**27.4**	**22.8**	**26.5**	**25.5**	**25.0**	**24.4**	**23.6**	**22.4**	**23.3**	**19.7**	**21.6**	**22.3**	**59.2**	**23.8**	**21.3**	**21.9**	**22.6**	**21.5**	**21.4**	**23.0**	**22.4**	**27.9**	**59.2**		
Min.	**0.8**	**0.7**	**1.0**	**1.3**	**1.1**	**1.4**	**1.2**	**1.1**	**1.1**	**1.3**	**1.0**	**1.3**	**1.0**	**1.0**	**1.2**	**0.8**	**1.7**	**1.6**	**1.1**	**1.5**	**1.4**	**1.2**	**0.9**	**0.8**		**0.7**	
Avg.	**8.0**	**7.9**	**8.2**	**8.0**	**7.9**	**8.2**	**8.0**	**7.7**	**7.6**	**7.1**	**7.3**	**7.4**	**7.5**	**7.6**	**9.4**	**8.0**	**7.5**	**7.6**	**7.6**	**7.9**	**8.0**	**8.1**	**7.9**	**8.2**			**7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.3	6.6	7.8	8.5	10.2	9.3	12.0	11.0	12.2	13.5	15.6	15.7	15.6	14.8	13.4	13.3	16.1	15.5	14.8	14.0	13.6	14.6	14.1	13.8	16.1	5.3	12.5
2	13.7	12.3	10.5	10.0	9.4	8.2	8.4	8.7	7.6	7.5	6.5	6.3	4.5	4.8	4.0	2.8	2.4	2.7	3.2	3.9	3.7	6.0	9.1	9.5	13.7	2.4	6.9
3	13.2	12.8	14.1	16.0	15.9	19.0	20.3	20.8	20.8	18.2	16.7	16.7	14.8	13.6	15.0	15.1	13.1	15.0	16.1	17.0	17.3	18.7	20.2	19.6	20.8	12.8	16.7
4	21.1	19.0	21.5	21.5	23.9	26.9	24.0	23.7	28.4	28.7	26.6	27.6	33.1	34.3	29.1	30.4	34.0	33.7	34.6	30.7	28.2	28.3	27.8	22.9	34.6	19.0	27.5
5	23.3	23.5	20.9	26.8	25.8	25.1	24.7	21.3	21.8	19.3	16.4	22.2	20.9	23.3	21.2	18.2	18.1	17.2	14.7	14.1	14.3	18.9	23.9	20.7	26.8	14.1	20.7
6	15.3	13.8	11.2	12.3	12.1	9.2	8.6	6.6	6.9	11.5	13.5	16.5	18.8	18.8	17.9	16.6	14.4	13.7	10.8	8.6	8.3	8.0	8.2	7.8	18.8	6.6	12.0
7	7.4	6.8	7.6	9.0	8.9	9.9	11.2	10.9	10.3	10.2	13.1	13.5	12.8	12.6	9.6	11.0	9.8	5.4	4.9	4.4	3.4	3.1	4.8	4.9	13.5	3.1	8.6
8	3.0	2.3	3.9	4.4	4.1	5.2	5.5	6.0	6.5	6.7	7.6	6.9	19.2	21.6	25.3	26.9	29.9	28.8	30.9	30.9	31.4	32.8	32.4	33.6	33.6	2.3	16.9
9	30.4	32.9	32.3	34.8	32.9	26.6	22.9	21.1	15.6	13.6	12.9	11.7	13.6	13.5	12.4	11.7	14.5	18.5	19.3	19.9	26.6	29.5	32.2	33.5	34.8	11.7	22.2
10	37.7	34.2	31.7	32.1	27.9	30.3	30.8	27.7	23.3	17.4	16.3	19.7	19.5	19.1	18.6	20.7	20.7	23.0	19.6	19.3	19.1	20.0	20.2	20.2	37.7	16.3	23.7
11	17.6	17.3	16.4	13.8	9.4	2.9	3.9	3.9	4.7	7.3	9.0	8.7	8.0	5.8	5.8	4.2	3.7	3.0	3.5	4.2	2.0	2.1	3.6	4.7	17.6	2.0	6.9
12	3.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.4	0.2	0.4
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.8	9.0	13.2	14.9	18.7	21.1	19.5	20.6	22.4	22.6	24.4	23.9	24.0	24.4	0.2	10.2
14	23.8	24.9	26.5	25.1	26.9	25.2	23.7	24.2	25.4	24.5	23.8	21.5	20.3	20.7	23.4	24.5	25.6	24.1	22.5	22.9	23.6	23.6	24.6	25.4	26.9	20.3	24.0
15	26.3	24.4	23.3	23.0	23.5	25.2	25.1	25.0	26.9	27.3	30.6	29.7	32.0	35.4	33.2	30.1	28.9	27.5	25.3	22.1	22.1	18.4	15.4	11.7	35.4	11.7	25.5
16	9.4	7.0	6.4	4.6	2.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.4	0.2	1.4
17	0.2	0.2	11.5	7.7	9.6	14.1	18.4	20.3	24.7	24.0	22.1	22.0	24.6	24.6	26.7	27.3	25.9	22.6	23.3	23.9	23.8	21.3	19.7	18.9	27.3	0.2	19.1
18	16.7	15.2	15.4	13.2	12.8	15.2	17.0	18.2	21.5	24.6	24.0	24.2	27.3	28.6	25.3	22.6	20.5	18.4	14.8	16.7	15.5	16.7	18.1	17.9	28.6	12.8	19.2
19	13.7	11.2	8.7	9.7	10.9	10.3	9.3	13.2	10.4	7.7	9.4	9.4	5.5	9.9	9.7	8.8	9.2	10.2	8.3	8.6	8.0	9.6	10.8	8.9	13.7	5.5	9.6
20	8.9	6.6	7.2	6.3	5.5	4.9	5.0	4.4	4.5	4.5	4.7	4.0	6.4	6.0	7.3	9.5	8.7	8.0	8.8	9.7	12.7	12.8	13.5	13.2	13.5	4.0	7.6
21	12.8	13.1	14.4	14.6	13.9	8.9	8.1	7.8	7.6	3.5	2.9	3.1	11.1	13.5	11.6	11.3	8.4	7.6	10.4	11.2	9.7	6.9	8.3	9.9	14.6	2.9	9.6
22	7.0	4.9	7.4	10.1	12.5	13.1	13.5	12.7	13.6	12.0	8.6	8.1	8.0	8.7	8.6	9.9	11.6	11.3	8.9	7.8	9.3	7.9	5.9	5.6	13.6	4.9	9.5
23	7.2	8.6	7.4	7.8	7.3	7.4	10.3	8.6	8.1	6.9	6.4	9.0	8.9	8.5	9.7	12.0	11.6	10.3	9.9	9.0	7.7	8.7	12.0	11.6	12.0	6.4	9.0
24	10.7	7.6	7.7	7.2	6.8	7.6	7.9	8.0	5.9	4.4	4.7	3.8	3.6	2.3	2.1	1.9	2.2	2.7	2.6	2.3	3.1	3.1	3.8	6.0	10.7	1.9	4.9
25	5.1	5.0	6.6	6.9	8.7	6.7	6.0	5.7	3.9	4.0	8.2	13.1	18.0	15.3	14.5	17.3	14.2	12.9	8.0	7.8	10.2	11.2	10.8	11.8	18.0	3.9	9.7
26	12.1	11.0	9.7	9.4	8.7	6.4	6.8	7.9	7.5	5.2	8.1	9.2	8.5	8.1	5.4	2.7	4.5	6.0	8.1	8.9	7.9	6.5	7.6	9.8	12.1	2.7	7.7
27	9.0	8.3	10.5	12.6	17.3	23.1	22.3	19.5	19.3	20.8	21.0	22.3	22.7	19.9	21.5	22.1	23.2	20.9	21.2	22.9	23.1	23.9	22.4	22.0	23.9	8.3	19.7
28	21.5	21.0	24.5	21.0	20.5	23.1	21.6	19.2	17.1	18.0	21.0	20.3	18.6	18.5	19.7	20.9	21.4	20.2	18.1	17.5	15.8	12.8	10.4	10.9	24.5	10.4	18.9
Max.	**37.7**	**34.2**	**32.3**	**34.8**	**32.9**	**30.3**	**30.8**	**27.7**	**28.4**	**28.7**	**30.6**	**29.7**	**33.1**	**35.4**	**33.2**	**30.4**	**34.0**	**33.7**	**34.6**	**30.9**	**31.4**	**32.8**	**32.4**	**33.6**	**37.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**13.4**	**12.5**	**13.0**	**13.2**	**13.1**	**13.0**	**13.1**	**12.8**	**12.7**	**12.2**	**12.5**	**13.3**	**14.5**	**14.8**	**14.5**	**14.7**	**14.8**	**14.3**	**13.7**	**13.6**	**13.7**	**13.9**	**14.4**	**14.3**			**13.6**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.7	10.9	10.3	10.9	11.8	12.2	10.2	6.5	5.6	4.1	2.7	1.5	3.1	4.0	4.6	5.3	7.1	6.8	7.4	11.5	13.1	12.4	15.6	15.9	15.9	1.5	8.5
2	15.3	14.9	14.7	14.1	15.8	13.9	15.1	14.9	14.4	13.1	14.4	14.1	14.5	15.8	14.9	11.3	10.9	10.3	11.1	10.8	11.2	10.6	11.1	10.0	15.8	10.0	13.2
3	9.4	9.1	9.9	9.5	9.1	9.0	6.9	6.5	7.8	8.6	9.2	8.7	9.6	9.2	9.2	8.4	7.6	5.6	4.4	3.2	3.2	2.5	1.6	1.8	9.9	1.6	7.1
4	2.0	2.7	2.7	3.5	6.1	7.5	7.6	7.4	6.9	5.7	7.7	7.0	8.3	8.6	8.8	9.4	11.4	10.0	10.2	10.6	11.7	9.8	9.3	8.6	11.7	2.0	7.6
5	8.0	7.7	6.0	4.7	4.6	5.2	4.7	4.1	4.4	3.8	3.6	3.0	3.2	3.2	3.3	4.1	4.1	4.1	3.1	3.6	2.1	3.3	3.6	3.3	8.0	2.1	4.2
6	3.8	3.8	2.4	2.8	3.2	3.1	2.0	1.5	1.6	1.6	3.0	2.6	1.8	1.9	1.0	0.7	1.3	1.2	1.2	1.9	1.3	1.5	2.4	2.5	3.8	0.7	2.1
7	2.4	2.5	2.7	2.8	2.9	3.4	3.1	4.3	5.2	5.4	5.0	6.1	6.1	6.9	6.6	7.1	6.7	9.4	10.1	9.3	9.1	8.6	11.4	11.0	11.4	2.4	6.2
8	14.5	18.6	19.6	20.0	17.2	15.3	17.5	17.3	17.0	15.0	14.3	16.8	14.8	13.1	12.6	13.5	13.6	16.4	17.6	17.7	17.5	17.5	18.1	18.8	20.0	12.6	16.4
9	17.6	16.3	18.9	18.5	18.3	17.5	17.1	17.6	17.5	20.0	16.8	18.2	19.7	20.0	18.8	17.5	15.1	17.2	17.2	16.7	17.6	17.5	17.1	16.1	20.0	15.1	17.7
10	12.8	13.9	13.1	11.4	10.4	9.3	10.0	11.2	10.9	8.1	6.7	6.6	7.4	6.3	5.6	5.8	3.4	4.0	6.1	6.0	6.3	9.4	12.4	13.7	13.9	3.4	8.8
11	13.6	17.5	21.9	20.1	19.4	19.6	23.2	26.5	25.0	27.6	24.8	23.9	24.1	22.3	25.3	23.7	21.5	22.6	20.1	23.5	22.3	20.9	17.4	20.2	27.6	13.6	22.0
12	20.6	20.3	21.9	21.8	15.0	15.5	15.1	14.2	13.2	12.9	12.7	10.8	9.0	7.8	7.9	4.3	5.0	4.7	4.2	5.1	2.9	2.8	2.5	3.2	21.9	2.5	10.6
13	2.2	1.6	1.7	1.9	2.2	2.7	2.4	1.8	2.9	3.0	2.4	2.2	2.6	2.9	3.2	3.7	4.8	6.1	5.9	7.8	6.6	8.0	8.1	9.0	9.0	1.6	4.0
14	8.4	7.6	8.1	8.2	7.5	5.9	6.7	5.8	5.2	5.0	5.2	3.8	3.0	3.7	4.5	3.0	4.3	4.3	4.1	2.7	2.4	2.4	1.8	1.9	8.4	1.8	4.8
15	2.0	2.6	3.1	3.1	3.4	2.5	2.1	2.1	2.0	2.6	2.8	1.9	1.7	2.0	2.6	2.7	3.0	4.2	4.4	5.1	4.6	5.5	7.4	8.1	8.1	1.7	3.4
16	9.7	9.6	8.1	5.8	6.4	6.2	6.0	5.2	3.9	4.3	5.7	5.9	8.2	9.0	11.3	12.3	12.0	12.5	11.3	12.6	12.2	11.4	12.7	10.5	12.7	3.9	8.9
17	12.1	11.6	11.6	11.3	11.4	10.3	10.5	10.5	11.8	11.2	12.0	11.3	9.5	10.1	12.7	14.1	13.1	12.9	14.2	15.1	16.0	17.4	17.6	15.8	17.6	9.5	12.7
18	15.9	16.0	12.7	9.0	10.5	10.0	8.4	4.4	5.8	7.3	6.8	6.2	3.8	2.3	1.5	2.2	7.1	6.5	2.8	3.5	2.8	2.5	2.6	3.6	16.0	1.5	6.4
19	3.0	2.2	2.0	2.4	2.8	2.4	2.6	3.0	4.2	6.3	10.4	14.9	15.5	13.5	16.7	16.3	15.3	13.3	11.2	10.2	9.3	9.7	11.1	12.2	16.7	2.0	8.8
20	15.7	12.2	10.1	9.0	7.4	7.3	7.9	7.4	6.0	4.1	3.5	3.0	2.6	6.1	5.8	0.2	0.2	12.0	12.8	15.7	17.9	24.0	21.2	18.1	24.0	0.2	9.6
21	18.1	17.0	18.3	18.1	18.7	19.3	19.1	18.0	17.4	17.8	14.2	12.7	11.7	9.2	10.3	10.2	9.3	10.9	11.6	9.9	10.8	8.1	6.9	13.3	19.3	6.9	13.8
22	14.0	12.3	10.4	12.2	16.4	17.5	19.7	19.7	16.2	20.4	20.2	18.7	18.9	17.8	17.9	18.3	12.5	12.2	10.6	8.1	6.7	6.8	6.9	6.5	20.4	6.5	14.2
23	4.2	3.7	4.3	5.0	6.4	5.0	3.8	3.3	3.3	4.4	4.9	5.0	2.4	3.2	3.1	3.7	7.7	8.9	8.6	5.2	5.7	11.4	11.2	12.6	12.6	2.4	5.7
24	11.7	12.0	11.7	10.5	10.9	8.0	11.7	14.0	10.9	9.0	13.9	15.3	12.7	10.9	10.5	12.3	11.8	14.2	13.6	11.1	11.5	7.9	8.4	7.8	15.3	7.8	11.3
25	9.1	7.7	7.4	9.2	8.6	9.5	9.7	9.9	11.0	10.6	10.9	9.8	9.7	9.9	9.4	10.2	10.6	11.6	10.6	9.4	11.1	10.9	7.8	8.7	11.6	7.4	9.7
26	7.8	7.5	7.0	7.3	8.0	8.4	8.7	9.4	8.6	8.3	8.7	7.4	6.7	6.1	5.4	5.3	4.8	5.4	5.6	5.6	5.1	3.5	3.4	2.6	9.4	2.6	6.5
27	3.9	3.9	3.9	3.9	4.1	4.0	3.9	4.0	2.8	2.2	2.3	2.6	3.0	2.4	1.9	2.3	2.5	2.7	3.4	4.5	4.1	2.8	2.7	2.8	4.5	1.9	3.2
28	3.7	5.6	5.5	5.0	7.7	7.3	6.8	5.8	5.4	5.3	5.8	4.2	4.1	3.4	3.7	2.4	2.2	1.9	2.0	2.2	3.2	4.3	5.0	4.2	7.7	1.9	4.4
29	4.5	4.5	4.4	5.0	5.2	4.8	5.8	5.7	5.5	4.4	3.5	2.6	2.2	2.3	2.4	1.8	2.5	2.9	4.1	4.0	3.0	4.2	8.1	10.9	10.9	1.8	4.4
30	14.6	13.8	13.7	15.2	17.1	19.7	20.8	19.5	19.4	20.1	22.2	25.4	28.3	29.1	28.9	32.0	35.2	34.9	34.9	35.2	34.2	33.2	32.6	32.8	35.2	13.7	25.5
31	31.6	31.0	29.9	28.2	28.1	28.5	26.7	25.1	23.2	20.4	6.7	6.3	5.2	5.7	4.9	4.4	5.1	4.9	5.8	4.2	2.5	2.1	3.8	7.1	31.6	2.1	14.2
Max.	**31.6**	**31.0**	**29.9**	**28.2**	**28.1**	**28.5**	**26.7**	**26.5**	**25.0**	**27.6**	**24.8**	**25.4**	**28.3**	**29.1**	**28.9**	**32.0**	**35.2**	**34.9**	**34.9**	**35.2**	**34.2**	**33.2**	**32.6**	**32.8**	**35.2**		
Min.	**2.0**	**1.6**	**1.7**	**1.9**	**2.2**	**2.4**	**2.0**	**1.5**	**1.6**	**1.6**	**2.3**	**1.5**	**1.7**	**1.9**	**1.0**	**0.2**	**0.2**	**1.2**	**1.2**	**1.9**	**1.3**	**1.5**	**1.6**	**1.8**		**0.2**	
Avg.	**10.4**	**10.3**	**10.3**	**10.0**	**10.2**	**10.0**	**10.2**	**9.9**	**9.5**	**9.4**	**9.1**	**9.0**	**8.8**	**8.7**	**8.9**	**8.7**	**8.8**	**9.5**	**9.4**	**9.4**	**9.3**	**9.4**	**9.7**	**10.1**			**9.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.4	7.9	9.2	7.9	5.3	7.2	8.7	8.9	8.1	4.9	5.6	3.9	4.6	8.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.2	0.2	4.2
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.7	3.7	6.0	5.9	7.4	7.2	11.5	12.2	12.2	0.2	2.5
3	10.9	10.7	12.2	13.0	11.3	12.7	10.6	12.0	18.4	22.0	21.9	21.9	20.7	20.1	19.9	17.9	18.6	18.9	17.6	14.7	13.2	15.8	16.0	18.7	22.0	10.6	16.2
4	18.2	22.2	19.7	17.3	14.9	13.3	12.0	11.1	9.9	6.6	12.1	10.2	9.5	8.3	6.2	2.2	2.9	6.6	5.7	5.6	6.1	6.6	8.3	9.3	22.2	2.2	10.2
5	9.1	8.7	13.2	13.4	12.8	15.3	12.1	12.7	13.5	17.5	16.3	14.8	14.4	15.9	16.9	16.7	17.3	19.4	20.8	20.4	15.5	14.4	14.6	15.9	20.8	8.7	15.1
6	19.7	16.8	14.7	14.1	12.4	12.4	12.4	10.6	9.9	9.4	9.3	7.7	5.5	4.4	4.7	4.1	3.2	2.9	2.5	3.5	2.7	1.8	3.5	3.3	19.7	1.8	8.0
7	3.1	2.6	3.0	4.3	7.3	6.0	7.1	7.0	6.3	7.0	5.9	6.7	8.0	8.9	10.9	11.3	12.6	13.2	13.4	15.1	17.3	19.6	21.1	20.1	21.1	2.6	9.9
8	22.1	24.0	22.7	21.4	20.4	19.8	18.9	18.9	17.7	18.3	19.8	17.5	13.1	12.7	12.8	11.7	10.3	10.2	10.7	9.8	9.0	9.1	10.4	9.3	24.0	9.0	15.4
9	9.5	7.9	8.7	9.0	9.2	9.0	7.9	9.0	8.4	7.6	8.4	8.5	8.9	9.2	8.2	8.2	5.9	5.8	5.9	6.0	4.1	7.5	7.5	7.0	9.5	4.1	7.8
10	4.1	3.5	4.2	7.2	6.5	9.4	11.3	11.6	11.9	11.5	11.6	13.1	9.5	10.6	9.9	10.6	11.7	10.2	7.9	7.4	5.7	2.6	3.9	8.1	13.1	2.6	8.5
11	7.2	3.9	2.5	2.4	3.2	5.0	7.3	7.7	8.4	9.2	8.0	7.3	8.0	9.4	11.7	14.6	15.5	15.0	13.2	12.0	12.0	12.0	10.8	10.3	15.5	2.4	9.0
12	9.4	9.2	7.8	7.8	7.2	7.2	6.5	7.9	9.3	10.1	10.7	10.9	12.9	13.8	13.0	10.1	9.5	7.8	7.5	7.5	6.1	5.9	5.4	3.9	13.8	3.9	8.6
13	3.4	3.2	1.2	0.2	0.2	5.0	7.1	8.3	8.9	10.0	10.4	11.5	14.4	18.9	20.0	20.1	19.6	17.9	18.2	16.5	15.8	15.0	13.7	12.0	20.1	0.2	11.3
14	15.6	17.3	15.7	15.5	19.0	17.3	17.6	20.3	19.7	20.6	21.3	22.1	21.5	21.1	20.4	24.3	22.1	20.4	18.6	17.1	18.1	16.2	12.4	13.7	24.3	12.4	18.7
15	14.9	11.6	15.5	17.0	15.4	15.2	17.8	16.1	16.6	17.6	17.7	20.3	18.1	19.0	17.5	16.0	19.4	17.7	16.2	8.3	9.1	6.8	4.4	5.1	20.3	4.4	14.7
16	10.0	9.1	11.3	13.4	13.2	16.5	19.9	21.5	24.6	25.9	25.8	25.2	27.2	26.5	24.5	23.8	26.6	26.4	25.5	21.5	13.8	12.8	13.9	13.5	27.2	9.1	19.7
17	13.3	13.9	15.8	16.7	16.5	14.7	12.1	9.8	10.4	11.9	13.1	10.6	15.2	10.6	10.7	7.7	10.6	10.3	7.0	5.5	4.7	3.1	4.4	5.1	16.7	3.1	10.6
18	6.2	5.9	4.2	4.7	3.8	3.0	2.5	2.3	2.6	1.7	2.6	1.7	1.9	1.8	1.8	1.7	2.6	2.5	2.6	3.0	3.1	2.5	4.3	5.2	6.2	1.7	3.1
19	4.6	4.0	3.3	4.9	4.4	3.5	4.1	3.7	6.3	5.3	3.3	2.1	5.4	6.3	5.5	5.1	4.9	3.8	6.3	6.2	5.6	4.7	5.0	4.9	6.3	2.1	4.7
20	4.3	4.6	4.0	2.4	3.3	3.4	2.2	2.7	3.0	3.6	4.3	8.0	10.1	12.4	16.9	17.4	15.2	16.3	16.6	17.2	18.9	17.6	16.5	17.7	18.9	2.2	9.9
21	18.1	18.7	19.4	18.5	14.9	15.3	16.8	19.0	14.4	18.5	21.0	16.5	15.6	15.3	14.1	15.8	15.7	9.1	6.6	4.7	4.7	8.7	8.3	8.8	21.0	4.7	14.1
22	6.2	3.8	3.4	1.6	2.0	0.2	0.2	1.3	1.0	1.3	1.3	1.2	1.7	1.6	1.0	1.9	3.2	2.2	1.7	1.7	1.8	2.0	3.5	3.3	6.2	0.2	2.0
23	4.8	4.4	5.5	5.2	4.7	4.2	4.2	4.3	4.6	5.5	6.0	6.4	5.6	4.7	3.9	2.4	2.3	3.6	4.2	4.5	7.8	8.6	8.7	8.3	8.7	2.3	5.2
24	7.8	7.3	7.2	9.7	10.0	11.6	11.7	12.3	12.9	13.0	13.1	12.5	12.2	12.7	13.1	11.5	12.1	11.7	11.8	13.1	13.2	13.7	13.1	10.2	13.7	7.2	11.6
25	8.7	5.7	4.8	3.9	3.4	3.4	3.7	3.4	2.5	2.4	2.7	4.0	5.9	5.5	4.4	4.8	8.0	9.7	11.2	11.4	11.7	12.8	13.7	12.9	13.7	2.4	6.7
26	14.0	13.0	9.4	10.7	9.7	11.5	8.4	10.6	6.4	7.2	7.4	7.3	5.7	3.7	4.4	3.0	3.6	3.9	3.8	6.4	7.4	7.1	7.0	8.2	14.0	3.0	7.5
27	9.5	9.0	8.5	6.1	7.5	7.3	5.1	3.7	3.4	3.1	5.4	5.6	6.5	7.5	8.7	9.0	9.3	10.3	10.0	8.2	7.3	7.1	10.5	12.1	12.1	3.1	7.5
28	12.0	11.2	10.4	7.9	8.1	7.9	7.0	6.7	5.5	4.7	3.2	4.0	4.5	3.5	3.9	4.0	3.4	3.2	2.5	1.7	2.1	1.4	1.4	1.4	12.0	1.4	5.1
29	2.3	3.8	3.9	4.2	6.3	6.5	6.5	6.2	6.4	9.1	10.8	12.0	12.1	11.1	8.8	8.7	10.4	9.9	8.8	7.4	6.7	7.1	7.1	6.9	12.1	2.3	7.6
30	5.1	4.8	4.7	4.2	3.8	2.9	2.1	3.4	3.8	3.2	2.9	2.7	3.7	3.6	3.7	6.2	7.2	10.0	11.6	12.5	11.5	12.1	12.2	14.6	14.6	2.1	6.3
Max.	**22.1**	**24.0**	**22.7**	**21.4**	**20.4**	**19.8**	**19.9**	**21.5**	**24.6**	**25.9**	**25.8**	**25.2**	**27.2**	**26.5**	**24.5**	**24.3**	**26.6**	**26.4**	**25.5**	**21.5**	**18.9**	**19.6**	**21.1**	**20.1**	**27.2**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**9.4**	**9.0**	**8.9**	**8.8**	**8.6**	**8.9**	**8.8**	**9.1**	**9.2**	**9.6**	**10.1**	**9.9**	**10.1**	**10.2**	**9.9**	**9.7**	**10.2**	**10.1**	**9.8**	**9.2**	**8.7**	**8.7**	**9.1**	**9.4**			**9.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	15.0	15.9	15.6	17.7	18.6	22.0	23.1	24.1	22.8	22.0	24.5	26.0	27.2	25.7	19.9	17.0	17.0	18.9	12.8	12.3	10.9	9.9	9.8	9.2	27.2	9.2	18.2
2	10.7	12.0	11.0	9.6	6.4	10.0	9.9	6.2	2.9	2.7	6.7	11.6	13.2	13.6	15.4	15.4	12.4	11.8	11.4	12.7	15.2	12.6	12.3	12.1	15.4	2.7	10.7
3	13.7	13.9	14.3	15.3	12.7	7.7	7.6	5.9	3.9	4.2	4.3	5.8	6.8	6.9	7.2	7.0	5.5	7.5	6.6	6.1	5.0	4.3	3.5	2.5	15.3	2.5	7.4
4	3.0	2.0	1.3	1.3	2.9	12.8	14.9	16.5	17.6	18.5	16.0	15.7	17.1	17.1	14.8	16.5	16.5	19.3	20.3	21.1	22.1	22.1	23.6	23.8	23.8	1.3	14.9
5	23.3	26.6	26.4	27.5	25.8	25.9	21.7	20.1	19.3	20.0	19.8	20.1	19.3	18.9	18.2	18.0	15.4	15.7	15.0	13.8	10.4	8.1	6.9	5.6	27.5	5.6	18.4
6	4.9	4.3	1.9	2.0	1.2	0.9	1.0	0.7	2.8	2.8	6.7	7.6	8.3	8.2	9.2	9.1	8.2	9.7	9.9	10.6	10.9	11.1	10.5	9.9	11.1	0.7	6.3
7	10.1	9.7	10.4	9.9	11.6	10.1	8.5	9.0	8.5	10.1	8.3	8.6	8.9	8.2	9.2	7.1	6.6	6.7	6.3	5.2	5.7	6.2	2.9	1.0	11.6	1.0	7.9
8	1.5	1.7	2.0	2.8	3.1	2.5	3.0	4.2	6.1	5.7	8.2	9.3	10.5	9.2	7.1	6.1	6.6	12.1	14.0	12.5	8.8	8.3	7.4	6.4	14.0	1.5	6.6
9	5.9	5.4	9.4	9.8	9.2	11.1	10.9	11.9	11.1	10.6	9.7	8.0	7.2	8.2	7.3	4.7	2.8	3.1	4.9	2.5	3.4	4.8	8.1	9.2	11.9	2.5	7.5
10	8.4	4.8	2.7	3.4	2.7	3.3	2.1	2.1	2.6	2.4	2.1	3.4	2.7	5.9	5.7	11.4	8.5	9.0	7.5	7.5	4.3	4.8	4.6	5.0	11.4	2.1	4.9
11	5.4	3.2	3.0	3.1	2.2	2.6	2.9	2.5	2.1	2.5	2.2	2.2	3.1	3.6	3.4	5.2	7.2	6.6	9.1	4.4	9.2	7.8	8.0	7.7	9.2	2.1	4.5
12	7.6	10.5	9.8	9.8	9.3	10.1	10.2	10.5	11.4	11.0	10.0	10.6	10.5	10.6	10.7	11.6	11.5	10.3	9.4	9.7	10.6	9.3	9.1	8.5	11.6	7.6	10.1
13	7.1	9.1	8.4	8.0	7.3	6.3	4.9	4.3	2.1	2.5	3.5	3.7	1.8	2.3	3.5	5.1	4.6	4.5	3.5	5.2	4.8	3.4	3.3	3.0	9.1	1.8	4.7
14	3.3	3.8	4.1	4.5	3.2	5.2	4.4	4.7	6.5	6.2	6.5	7.1	7.9	8.7	9.7	9.1	12.0	11.4	11.2	12.8	12.6	16.6	15.5	10.8	16.6	3.2	8.2
15	8.0	6.0	5.9	5.2	3.4	2.6	2.6	2.6	3.1	4.1	4.4	3.1	2.5	2.5	3.2	3.2	3.5	5.4	4.9	4.2	5.5	5.2	9.8	10.9	10.9	2.5	4.7
16	8.9	3.5	2.6	5.0	4.0	4.8	4.6	4.5	5.8	4.3	3.5	2.3	3.4	3.3	3.0	2.7	3.7	5.7	5.1	5.3	3.9	4.5	4.2	4.2	8.9	2.3	4.3
17	3.8	3.5	3.6	2.7	3.5	3.7	3.8	3.6	4.0	5.6	7.9	8.6	9.7	9.7	9.1	10.2	10.7	9.4	9.0	9.3	7.8	8.1	6.3	6.7	10.7	2.7	6.7
18	5.6	5.2	4.7	5.2	5.0	4.4	3.5	2.0	2.4	4.0	5.1	7.0	6.3	7.4	10.3	8.7	9.6	11.6	9.4	9.8	10.0	9.7	8.2	6.8	11.6	2.0	6.7
19	5.1	4.8	4.3	1.9	2.7	2.2	1.5	2.7	5.0	7.5	7.9	11.5	13.3	13.8	22.5	23.2	19.0	17.0	20.1	20.9	20.8	16.3	16.7	14.4	23.2	1.5	11.5
20	14.5	15.0	13.6	13.4	14.7	17.8	17.5	18.6	18.6	17.8	16.5	16.2	13.7	13.2	13.7	10.7	9.5	5.9	3.9	3.4	7.7	9.9	9.8	10.5	18.6	3.4	12.8
21	11.4	10.8	11.3	11.4	12.1	13.0	15.5	16.4	17.5	17.8	19.2	24.7	24.3	20.5	21.0	18.1	19.9	20.1	19.9	20.2	16.3	15.4	16.9	16.3	24.7	10.8	17.1
22	16.0	14.9	14.6	14.0	14.0	16.2	16.4	19.0	18.5	17.4	18.1	20.2	21.1	15.5	15.0	13.7	14.3	13.8	13.9	12.9	13.8	13.1	12.1	11.7	21.1	11.7	15.4
23	11.7	8.8	8.0	5.3	4.5	4.0	4.6	5.2	5.2	5.5	6.2	6.1	5.7	5.4	6.3	6.7	7.3	10.5	10.4	8.9	7.1	7.3	6.4	6.7	11.7	4.0	6.8
24	7.1	6.1	4.1	5.1	4.5	2.9	2.3	4.0	4.7	3.4	3.0	2.5	3.2	4.0	4.0	4.9	6.5	6.9	6.2	7.2	8.1	7.1	4.6	5.2	8.1	2.3	4.9
25	5.9	5.9	5.5	7.0	6.7	5.8	5.9	5.3	4.2	3.9	3.5	5.0	4.4	4.3	3.9	6.3	7.1	7.0	7.5	6.5	4.5	5.5	5.2	5.6	7.5	3.5	5.5
26	5.5	7.5	6.3	7.6	7.8	6.2	5.9	7.0	7.7	9.4	10.4	11.9	11.3	10.7	11.8	11.9	12.7	13.8	13.3	11.5	9.6	9.4	8.8	11.5	13.8	5.5	9.6
27	9.9	9.4	12.5	14.0	15.1	14.9	14.0	14.8	12.6	12.2	13.6	16.1	17.4	17.7	17.5	17.4	18.3	15.5	13.3	11.5	11.9	8.1	9.4	9.9	18.3	8.1	13.6
28	9.1	6.4	4.1	3.6	5.1	5.2	5.4	7.6	6.9	5.1	3.2	4.1	6.2	7.0	5.5	6.8	7.1	5.7	7.2	7.3	7.8	7.8	6.6	7.2	9.1	3.2	6.2
29	6.2	6.1	7.2	7.2	9.2	8.2	8.0	7.9	8.5	8.9	9.2	10.2	10.4	10.3	9.6	9.4	9.0	9.8	9.3	9.0	8.2	8.9	8.5	7.1	10.4	6.1	8.6
30	7.1	6.8	6.5	5.8	3.8	4.5	3.0	7.0	7.2	6.6	7.8	8.2	9.4	9.9	10.0	10.7	8.2	8.5	8.4	7.6	7.0	6.9	6.3	9.7	10.7	3.0	7.4
31	8.9	9.3	9.6	7.0	9.4	10.3	9.8	8.9	8.2	11.3	11.1	9.3	7.8	7.2	9.5	6.8	6.9	7.3	5.0	4.4	4.6	4.5	2.7	3.3	11.3	2.7	7.6
Max.	**23.3**	**26.6**	**26.4**	**27.5**	**25.8**	**25.9**	**23.1**	**24.1**	**22.8**	**22.0**	**24.5**	**26.0**	**27.2**	**25.7**	**22.5**	**23.2**	**19.9**	**20.1**	**20.3**	**21.1**	**22.1**	**22.1**	**23.6**	**23.8**	**27.5**		
Min.	**1.5**	**1.7**	**1.3**	**1.3**	**1.2**	**0.9**	**1.0**	**0.7**	**2.1**	**2.4**	**2.1**	**2.2**	**1.8**	**2.3**	**3.0**	**2.7**	**2.8**	**3.1**	**3.5**	**2.5**	**3.4**	**3.4**	**2.7**	**1.0**		**0.7**	
Avg.	**8.5**	**8.1**	**7.9**	**7.9**	**7.8**	**8.3**	**8.0**	**8.4**	**8.4**	**8.6**	**9.0**	**9.9**	**10.1**	**10.0**	**10.2**	**10.2**	**9.9**	**10.3**	**10.0**	**9.6**	**9.3**	**8.9**	**8.6**	**8.5**			**9.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	2.0	3.4	3.5	3.1	3.4	4.0	4.2	4.3	5.0	5.1	5.7	6.0	5.3	5.5	6.3	6.1	6.4	10.0	7.2	8.2	8.3	7.5	3.3	10.0	2.0	5.3
2	3.3	3.7	4.0	3.7	4.1	4.2	5.0	4.0	4.3	4.9	7.4	8.7	9.1	8.3	8.5	9.3	9.5	10.4	11.9	10.7	9.5	7.8	8.3	8.0	11.9	3.3	7.0
3	9.4	11.0	9.6	13.0	12.7	11.7	13.5	16.6	17.0	15.8	15.8	15.9	13.8	14.1	15.4	15.1	13.3	14.6	14.8	14.3	13.9	13.0	11.5	10.3	17.0	9.4	13.6
4	9.8	9.9	9.0	9.4	9.1	10.0	12.2	13.5	13.1	13.8	15.3	15.9	14.6	14.5	15.0	14.1	14.1	14.7	13.5	12.5	12.7	10.8	10.7	12.0	15.9	9.0	12.5
5	12.7	11.9	12.1	7.4	7.6	7.3	8.1	8.2	8.0	7.7	6.3	5.3	5.9	6.5	6.0	6.7	6.4	6.3	5.8	5.5	4.8	4.0	4.5	4.3	12.7	4.0	7.1
6	4.0	4.4	4.7	3.8	3.1	3.3	3.5	3.9	5.4	5.2	6.6	8.4	11.0	12.2	12.5	13.7	12.0	12.6	13.0	13.6	12.9	12.3	11.6	10.7	13.7	3.1	8.5
7	9.7	12.0	14.6	14.8	15.9	16.1	12.1	15.9	18.5	18.0	19.1	19.2	18.3	19.0	18.4	18.9	15.9	17.2	17.0	16.0	13.6	11.9	12.2	14.1	19.2	9.7	15.8
8	16.8	19.4	19.7	19.9	18.4	19.3	18.3	20.3	19.6	20.9	21.5	21.3	22.3	23.4	23.0	22.0	22.5	22.5	22.9	25.1	27.0	27.6	30.4	29.2	30.4	16.8	22.2
9	27.6	25.2	27.3	25.5	23.5	23.3	24.4	24.0	25.4	26.2	25.0	27.4	27.8	28.8	28.7	26.2	26.3	26.9	22.2	24.2	22.6	24.4	24.7	23.7	28.8	22.2	25.5
10	19.4	19.1	20.5	20.4	21.2	21.5	19.7	23.2	23.4	23.2	21.3	23.0	22.8	25.0	25.0	24.2	22.1	24.6	23.3	20.8	21.0	22.0	22.1	21.8	25.0	19.1	22.1
11	22.0	23.7	24.1	23.1	24.2	25.6	24.1	23.4	23.3	22.7	23.2	23.9	22.9	21.9	21.3	22.8	20.9	19.5	20.6	19.4	18.1	18.1	16.6	17.7	25.6	16.6	21.8
12	18.6	17.1	16.5	15.6	14.8	14.1	14.3	13.7	14.1	13.1	14.3	11.2	13.7	14.5	14.0	13.7	13.3	12.1	8.9	8.8	9.5	6.8	7.1	6.6	18.6	6.6	12.8
13	6.5	6.2	5.7	5.9	5.9	5.9	4.7	5.7	10.4	10.5	6.5	7.1	6.6	7.2	8.0	6.9	6.6	6.6	5.8	4.7	2.8	2.5	1.5	3.3	10.5	1.5	6.0
14	3.8	2.3	2.3	2.0	2.5	3.1	2.4	2.5	3.0	3.5	4.0	5.5	5.3	4.5	3.3	3.7	4.6	4.2	5.8	2.5	2.3	3.3	4.7	4.2	5.8	2.0	3.6
15	4.1	5.0	4.8	5.1	5.3	6.1	6.2	5.6	6.3	6.9	6.4	7.5	6.3	7.6	8.5	7.7	4.6	5.1	6.5	6.6	6.5	5.3	5.2	4.4	8.5	4.1	6.0
16	4.8	5.4	5.2	4.6	5.5	5.6	5.9	5.0	4.5	5.2	6.4	8.7	10.6	11.2	10.7	12.0	12.3	12.6	12.7	11.9	11.5	10.1	8.4	6.6	12.7	4.5	8.2
17	6.7	6.6	6.0	4.8	2.8	3.5	3.6	6.4	6.7	6.4	6.3	8.1	8.3	9.3	8.6	8.6	10.1	9.6	9.7	8.7	8.7	8.5	8.3	8.8	10.1	2.8	7.3
18	5.7	3.1	3.2	3.2	3.2	3.7	2.2	2.9	4.9	7.1	7.9	10.3	12.1	11.7	14.0	18.4	20.8	18.1	18.3	17.7	15.4	13.8	9.2	4.0	20.8	2.2	9.6
19	4.6	7.9	6.4	5.5	4.5	4.4	2.8	2.6	3.2	3.2	7.3	6.1	6.5	7.6	6.0	7.7	7.9	7.2	5.5	11.7	12.2	7.5	6.1	5.0	12.2	2.6	6.2
20	4.8	6.2	7.3	4.3	4.0	2.7	2.8	2.3	2.9	2.6	3.6	4.3	7.8	7.1	15.7	13.6	12.1	10.9	10.4	10.8	9.8	9.8	8.9	8.0	15.7	2.3	7.2
21	6.2	6.3	4.7	3.3	2.8	2.3	2.1	3.2	4.2	6.0	6.5	6.3	5.6	3.6	5.3	7.7	9.1	6.3	4.7	7.6	4.3	5.5	7.0	7.9	9.1	2.1	5.4
22	10.1	11.3	9.4	7.0	6.5	7.1	7.3	6.6	7.3	6.0	5.4	7.5	8.0	10.1	11.5	11.2	10.1	10.4	10.3	9.6	9.5	8.4	7.7	6.9	11.5	5.4	8.5
23	6.6	7.1	9.2	10.0	7.2	8.0	8.3	7.8	7.5	7.6	8.9	8.1	8.4	8.1	7.9	7.6	7.2	5.7	6.7	7.4	8.0	8.4	8.3	5.8	10.0	5.7	7.7
24	4.9	4.7	4.4	5.8	5.4	2.3	1.7	3.3	4.7	5.3	5.6	5.1	6.1	4.3	5.0	6.3	6.9	5.5	4.4	2.9	3.7	3.2	3.1	3.4	6.9	1.7	4.5
25	3.0	3.0	4.4	6.0	5.3	4.3	2.9	3.0	3.9	5.0	5.8	5.9	6.2	8.7	9.1	8.7	9.9	9.5	8.1	6.9	5.5	5.3	6.0	6.4	9.9	2.9	6.0
26	6.5	6.2	5.3	5.5	3.7	3.3	2.7	2.6	3.8	5.1	5.0	5.5	6.2	5.9	5.1	5.5	4.8	4.4	8.9	8.5	7.6	8.3	7.7	8.7	8.9	2.6	5.7
27	6.7	4.4	5.7	2.4	3.8	3.2	3.9	4.3	4.5	4.0	3.0	3.1	3.2	4.3	7.0	7.6	7.8	7.6	7.6	8.2	9.6	9.1	6.3	5.4	9.6	2.4	5.5
28	5.6	4.6	6.1	6.1	2.0	1.8	4.0	6.3	7.9	7.5	7.7	8.9	7.3	9.2	6.9	6.6	6.5	5.6	4.0	6.4	7.4	4.2	5.6	6.1	9.2	1.8	6.0
29	5.8	7.2	7.9	4.7	6.4	5.5	4.8	5.7	5.3	5.8	5.1	4.9	5.4	7.6	10.5	14.7	15.1	15.6	14.5	15.5	15.1	12.0	11.7	13.4	15.6	4.7	9.2
30	12.4	11.9	12.3	12.2	11.5	10.8	11.5	12.3	9.7	7.7	8.8	9.3	9.4	7.8	7.2	5.4	5.3	5.2	4.3	3.3	3.5	3.4	2.6	3.4	12.4	2.6	8.0
Max.	**27.6**	**25.2**	**27.3**	**25.5**	**24.2**	**25.6**	**24.4**	**24.0**	**25.4**	**26.2**	**25.0**	**27.4**	**27.8**	**28.8**	**28.7**	**26.2**	**26.3**	**26.9**	**23.3**	**25.1**	**27.0**	**27.6**	**30.4**	**29.2**	**30.4**		
Min.	**2.5**	**2.0**	**2.3**	**2.0**	**2.0**	**1.8**	**1.7**	**2.3**	**2.9**	**2.6**	**3.0**	**3.1**	**3.2**	**3.6**	**3.3**	**3.7**	**4.6**	**4.2**	**4.0**	**2.5**	**2.3**	**2.5**	**1.5**	**3.3**		**1.5**	
Avg.	**8.8**	**9.0**	**9.2**	**8.6**	**8.2**	**8.1**	**8.0**	**8.6**	**9.2**	**9.4**	**9.7**	**10.3**	**10.6**	**11.0**	**11.5**	**11.8**	**11.5**	**11.3**	**11.1**	**11.0**	**10.6**	**9.8**	**9.5**	**9.1**			**9.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Maximum 1 Minute Wind Speed (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.6	2.1	3.4	4.3	3.1	3.0	2.0	2.2	2.7	2.6	2.4	3.0	3.7	4.8	4.3	5.0	5.5	5.9	7.2	6.7	6.8	7.0	6.2	5.7	7.2	2.0	4.3
2	3.0	3.4	4.1	3.6	3.5	4.1	4.4	4.6	6.1	6.3	7.1	8.4	7.5	8.5	7.9	9.2	10.6	12.4	11.8	10.9	9.4	9.4	10.2	10.2	12.4	3.0	7.4
3	11.5	11.3	10.2	7.7	6.7	6.5	5.8	6.0	7.3	7.8	6.0	6.0	6.2	5.6	5.2	5.0	6.4	6.7	6.3	6.1	6.4	4.9	2.5	2.7	11.5	2.5	6.5
4	2.6	2.0	1.8	2.4	2.6	2.1	1.5	2.3	2.7	3.3	3.9	4.8	6.8	6.6	5.6	8.1	7.4	8.2	8.2	7.0	7.5	6.9	6.7	3.4	8.2	1.5	4.8
5	3.7	2.4	2.0	3.1	3.0	3.2	3.5	3.0	2.7	3.0	3.2	3.5	3.6	5.5	5.7	8.1	13.6	5.8	3.4	2.5	2.8	2.6	2.5	3.2	13.6	2.0	4.0
6	1.8	3.5	4.0	2.9	2.9	1.4	2.9	2.6	3.4	3.7	4.0	4.6	5.9	7.2	7.8	8.0	7.3	8.1	4.4	3.6	4.6	4.0	5.7	5.9	8.1	1.4	4.6
7	5.5	4.6	5.7	6.5	7.0	5.4	4.9	6.4	8.3	9.7	9.5	7.8	8.5	9.3	9.2	9.4	9.8	9.0	6.6	5.9	7.8	8.3	7.1	8.6	9.8	4.6	7.5
8	8.5	9.6	6.1	9.7	9.5	6.1	6.5	6.5	6.5	6.3	3.9	3.2	3.6	3.8	2.8	3.3	4.1	4.0	4.6	5.0	3.6	5.5	5.1	3.9	9.7	2.8	5.5
9	1.9	2.7	3.7	3.8	4.5	4.4	4.2	4.5	3.7	3.3	4.3	6.0	7.6	7.9	9.3	10.3	9.9	9.9	10.9	11.8	12.4	12.1	13.5	16.0	16.0	1.9	7.4
10	16.1	17.4	17.8	16.3									18.4	17.4	17.5	30.7	17.7	18.3	18.8	17.1	16.4	15.8	12.0	11.5	30.7	11.5	17.4
11	11.2	8.8	7.4	9.2	9.7	6.7	6.5	7.0	6.2		6.9	6.4	7.1	7.2	8.4	7.4	7.5	7.1	5.7	5.6	5.3	4.0	4.8	2.9	11.2	2.9	6.9
12	4.0	4.3	2.2	1.7	2.4	2.9	3.7	4.4	5.7	4.2	5.0	5.5	6.1	7.1	6.5	5.5	7.4	11.1	11.2	8.7	7.7	7.7	4.7	5.1	11.2	1.7	5.6
13	5.6	5.3	5.0	5.1	4.5	4.9	3.5	7.9	8.1	7.9	6.3	8.0	7.5	8.6	8.3	8.5	8.0	9.7	11.0	11.8	11.5	10.6	12.0	14.9	14.9	3.5	8.1
14	13.7	13.2	12.0	11.3	10.2	10.4	10.1	9.0	8.0	7.7	8.2	8.3	8.0	7.8	7.7	8.6	9.5	9.0	9.0	8.3	9.5	9.4	9.9	8.3	13.7	7.7	9.5
15	8.2	6.2	6.1	6.1	5.3	5.0	5.4	6.5	5.9	5.5	6.3	6.4	7.1	7.2	6.5	6.9	7.4	7.9	7.1	6.1	6.5	5.4	4.8	6.3	8.2	4.8	6.3
16	7.1	6.8	7.6	7.5	9.4	12.7	13.0	13.4	14.6	15.7	15.6	15.7	16.2	16.7	17.6	17.8	17.8	16.1	13.9	12.2	11.1	9.9	9.7	9.6	17.8	6.8	12.8
17	11.0	11.8	14.7	13.5	14.7	15.3	14.7	15.9	16.3	18.4	19.6	21.3	18.5	19.2	17.0	17.8	17.8	17.0	17.0	17.2	13.8	14.7	15.8	23.9	23.9	11.0	16.5
18	21.9	20.3	20.4	20.6	14.4	15.0	15.2	18.3	17.5	19.6	20.7	19.1	19.2	19.7	17.5	18.4	17.7	17.1	17.2	17.0	17.2	15.2	14.7	13.5	21.9	13.5	17.8
19	15.1	13.5	13.2	9.9	8.6	6.1	5.1	5.0	4.3	5.1	8.1	8.7	8.2	8.3	6.6	6.9	7.2	6.9	6.7	5.9	4.2	4.0	3.0	2.7	15.1	2.7	7.2
20	3.4	5.0	5.1	4.6	4.6	5.7	5.8	6.2	6.8	7.4	8.5	10.1	9.2	9.4	8.7	7.4	8.1	7.9	7.0	7.1	7.4	7.3	7.5	7.5	10.1	3.4	7.0
21	6.0	5.7	4.2	3.4	1.4	1.5	1.3	2.9	3.9	4.4	5.6	5.5	4.1	9.2	8.0	9.1	9.2	8.5	8.5	8.1	7.9	4.3	5.1	4.0	9.2	1.3	5.5
22	3.9	3.1	1.6	2.1	3.2	2.9	3.0	4.0	4.8	5.2	7.1	5.6	5.7	7.8	8.1	7.8	7.3	5.8	6.9	8.9	10.7	9.8	9.5	11.0	11.0	1.6	6.1
23	11.8	11.6	9.9	10.3	11.8	12.0	12.2	9.0	8.5	5.3	3.6	3.4	3.1	7.7	5.1	4.6	4.5	4.8	5.1	3.0	2.8	2.7	3.0	4.7	12.2	2.7	6.7
24	3.4	6.2	4.9	8.2	9.0	6.8	6.4	5.9	6.3	4.3	2.4	3.8	4.8	6.0	7.1	7.0	7.8	6.5	7.3	8.0	10.8	10.5	11.1	9.3	11.1	2.4	6.8
25	10.3	11.9	11.7	11.6	5.7	4.6	3.1	6.2	6.8	7.3	8.8	8.8	9.1	7.4	8.1	8.4	7.0	6.5	6.3	4.2	3.5	3.9	3.9	4.3	11.9	3.1	7.1
26	4.0	3.4	3.4	4.1	4.2	2.8	2.3	2.3	3.5	5.9	6.6	6.4	6.7	7.1	8.3	9.3	10.2	10.2	10.0	9.0	7.5	7.0	7.0	8.7	10.2	2.3	6.2
27	8.6	7.9	6.9	5.7	6.0	3.1	3.3	1.8	2.0	3.1	2.8	4.5	5.1	4.3	4.9	4.3	4.8	4.2	3.9	4.6	3.3	3.0	2.6	1.5	8.6	1.5	4.3
28	2.3	2.1	2.2	1.7	1.7	1.6	2.6	3.4	6.4	6.1	6.3	7.1	9.5	10.4	11.2	10.0	10.2	11.5	13.6	12.5	14.3	13.3	13.2	13.7	14.3	1.6	7.8
29	14.2	13.5	15.6	17.7	16.9	15.6	15.2	12.8	12.3	12.5	9.3	8.8	10.7	11.3	10.4	13.6	14.0	13.6	15.5	13.1	14.1	12.1	10.3	8.7	17.7	8.7	13.0
30	8.3	10.4	7.7	8.7	7.4	5.1	2.8	3.4	2.5	3.4	5.2	5.5	6.1	7.1	9.3	13.7	13.4	14.8	14.5	15.3	14.1	13.3	10.7	8.4	15.3	2.5	8.8
31	8.4	7.5	8.0	7.4	5.8	6.8	6.1	5.5	7.1	7.4	7.0	6.7	6.5	10.0	9.3	7.8	6.7	5.2	5.0	4.6	3.7	3.3	2.2	3.3	10.0	2.2	6.3
Max.	**21.9**	**20.3**	**20.4**	**20.6**	**16.9**	**15.6**	**15.2**	**18.3**	**17.5**	**19.6**	**20.7**	**21.3**	**19.2**	**19.7**	**17.6**	**30.7**	**17.8**	**18.3**	**18.8**	**17.2**	**17.2**	**15.8**	**15.8**	**23.9**	**30.7**		
Min.	**1.8**	**2.0**	**1.6**	**1.7**	**1.4**	**1.4**	**1.3**	**1.8**	**2.0**	**2.6**	**2.4**	**3.0**	**3.1**	**3.8**	**2.8**	**3.3**	**4.1**	**4.0**	**3.4**	**2.5**	**2.8**	**2.6**	**2.2**	**1.5**		**1.3**	
Avg.	**7.8**	**7.7**	**7.4**	**7.4**	**6.7**	**6.1**	**5.9**	**6.3**	**6.7**	**7.0**	**7.1**	**7.4**	**8.1**	**8.9**	**8.7**	**9.6**	**9.5**	**9.3**	**9.2**	**8.6**	**8.5**	**8.0**	**7.6**	**7.9**			**7.8**

Total Hours in Month 744 **Hours Data Available** 735 **Data Recovery** 98.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.4	2.6	1.4	2.1	2.5	2.6	1.3	1.4	1.4	2.1	1.9	2.7	3.9	4.6	3.9	3.2	4.5	5.7	5.8	5.5	5.3	5.3	4.8	5.1	5.8	1.3	3.4
2	9.1	9.7	8.2	8.3	8.9	8.0	7.9	5.8	5.8	5.1	6.0	4.6	6.4	5.7	5.0	6.3	4.3	3.7	1.6	4.1	2.8	3.6	3.5	2.5	9.7	1.6	5.7
3	3.5	5.5	2.3	4.1	3.2	2.4	3.1	3.1	2.3	2.3	3.0	3.5	2.5	1.7	1.7	3.9	5.0	4.5	3.2	4.2	3.2	3.2	2.5	1.7	5.5	1.7	3.2
4	1.9	2.3	2.5	2.1	1.8	3.1	1.3	1.2	1.2	1.5	1.3	2.5	1.1	1.3	2.2	2.2	2.9	4.1	2.0	1.8	1.9	2.3	1.2	0.9	4.1	0.9	1.9
5	1.0	2.3	1.0	1.5	1.9	1.6	1.8	2.2	1.2	2.5	2.5	2.7	4.1	3.8	4.8	4.9	4.4	4.8	5.8	6.7	6.1	5.9	4.1	2.4	6.7	1.0	3.3
6	1.3	2.8	2.4	1.8	1.1	1.2	1.9	1.3	1.8	1.4	1.9	1.1	1.1	2.7	4.0	5.3	3.6	3.9	3.6	4.5	3.3	3.1	2.0	2.2	5.3	1.1	2.5
7	1.4	1.4	2.1	1.6	2.8	3.5	2.6	5.2	5.4	4.3	2.4	2.7	4.5	4.7	3.2	1.9	4.1	3.8	3.6	3.4	4.1	4.5	4.0	3.9	5.4	1.4	3.4
8	2.9	2.9	2.7	3.1	3.6	3.2	3.4	3.3	3.2	3.6	2.1	1.2	1.6	1.7	2.6	2.9	4.1	4.0	3.7	2.9	2.0	0.7	2.2	2.5	4.1	0.7	2.7
9	4.7	4.7	3.8	3.2	3.0	2.9	3.0	3.4	4.4	5.2	5.4	5.5	5.6	5.5	6.4	7.6	8.6	7.5	6.8	7.1	7.8	4.7	6.2	5.5	8.6	2.9	5.4
10	2.1	2.7	2.6	1.5	1.2	2.0	1.7	2.9	2.5	1.9	2.5	2.7	3.9	4.6	5.7	5.9	4.4	2.7	2.9	3.5	3.6	3.1	3.3	3.5	5.9	1.2	3.1
11	3.8	3.7	3.5	3.5	4.2	4.0	4.1	4.1	4.8	5.2	5.3	5.5	4.9	3.2	2.1	1.8	2.6	2.5	2.3	2.6	2.4	2.5	3.3	4.3	5.5	1.8	3.6
12	2.6	1.4	1.6	1.5	1.5	1.8	2.0	1.7	2.2	3.5	5.2	4.8	6.2	6.5	6.9	5.9	6.1	6.0	5.1	5.7	5.7	5.4	5.3	5.4	6.9	1.4	4.2
13	4.5	5.2	2.2	2.6	2.5	1.7	2.5	2.1	1.5	2.1	2.9	4.1	4.6	4.5	5.6	6.5	6.4	6.1	7.0	7.0	6.0	3.9	3.9	4.1	7.0	1.5	4.1
14	4.6	4.0	3.2	3.1	2.7	1.8	1.0	2.3	2.0	1.7	2.3	2.8	3.2	2.7	3.4	3.0	4.6	4.8	4.1	2.5	2.2	2.6	3.1	2.8	4.8	1.0	2.9
15	4.1	4.8	4.3	5.4	4.7	5.1	5.3	6.6	5.8	6.4	7.4	7.8	8.0	8.1	9.7	8.9	9.0	8.8	11.0	10.3	8.2	9.4	7.6	4.8	11.0	4.1	7.1
16	5.3	6.1	5.9	6.8	8.5	8.9	8.7	8.7	9.5	10.9	11.7	12.8	13.2	13.0	13.4	13.6	13.8	13.6	12.5	12.7	12.8	11.3	11.9	12.4	13.8	5.3	10.7
17	13.5	13.8	12.5	12.3	9.5	5.5	4.5	3.8	4.4	5.0	4.2	3.1	4.1	5.5	6.1	5.4	4.4	4.1	5.1	3.8	3.0	3.2	2.0	1.9	13.8	1.9	5.9
18	1.8	3.6	2.6	2.1	2.6	1.2	1.7	1.8	2.8	4.1	2.7	3.2	6.3	7.2	6.8	4.2	4.7	2.3	2.8	2.5	2.2	1.8	1.2	0.8	7.2	0.8	3.0
19	1.0	1.9	1.0	1.2	1.2	2.4	4.1	4.7	4.7	4.4	5.7	8.6	9.3	8.5	10.1	9.8	10.9	10.5	9.1	7.3	7.2	6.8	6.5	6.8	10.9	1.0	6.0
20	5.6	5.8	5.3	5.1	5.5	6.1	5.8	6.9	5.9	6.0	5.6	6.5	6.2	6.6	6.1	6.2	5.5	5.2	3.6	7.6	10.3	9.9	11.1	10.2	11.1	3.6	6.6
21	10.7	10.9	11.2	10.3	9.6	7.7	7.7	8.7	8.3	9.6	11.6	10.8	9.9	9.5	8.7	8.1	8.4	7.9	7.8	6.5	5.3	6.1	5.0	3.8	11.6	3.8	8.5
22	2.8	1.2	2.5	2.9	2.6	2.7	3.0	4.3	4.9	6.2	9.0	12.0	15.2	14.9	15.2	16.4	17.3	17.4	18.3	17.3	15.8	16.2	17.5	15.9	18.3	1.2	10.5
23	17.0	17.0	16.8	17.5	13.9	9.3	12.7	14.5	13.8	12.4	14.3	15.6	15.1	14.3	14.3	13.5	14.3	14.0	12.8	12.9	13.9	13.4	12.8	12.9	17.5	9.3	14.1
24	13.7	11.1	9.0	6.5	3.5	2.2	2.4	1.5	1.6	3.8	10.5	11.4	11.2	10.6	10.3	9.7	8.9	8.9	8.9	8.2	6.7	4.9	5.2	4.8	13.7	1.5	7.3
25	3.8	2.8	3.3	2.5	2.2	2.9	2.0	2.3	2.4	2.6	2.4	4.3	3.9	4.2	3.7	3.4	5.0	5.2	6.4	6.5	5.5	6.1	6.3	7.1	7.1	2.0	4.0
26	7.4	8.5	8.8	7.5	5.5	6.3	5.9	6.6	6.4	10.5	13.6	14.9	15.0	13.5	13.2	13.9	15.8	15.6	16.7	14.0	11.8	10.3	8.5	8.4	16.7	5.5	10.8
27	6.0	5.6	5.8	7.9	7.7	4.8	5.0	5.3	10.0	8.7	8.4	7.9	7.7	7.5	6.4	7.5	6.2	5.5	5.1	3.3	1.8	2.4	3.2	3.8	10.0	1.8	6.0
28	4.2	4.7	3.7	4.8	5.6	6.0	6.6	6.8	6.9	7.3	6.8	9.3	7.7	10.8	12.5	12.8	13.2	12.9	9.8	11.3	10.0	11.2	10.9	9.0	13.2	3.7	8.5
29	9.1	8.8	9.3	10.0	7.9	7.6	7.2	6.9	7.1	8.3	8.3	7.9	6.8	6.4	6.3	4.8	6.0	6.9	4.7	6.1	7.7	6.4	6.4	5.6	10.0	4.7	7.2
30	4.0	3.2	3.5	4.2	4.1	4.6	4.4	6.3	7.3	9.4	10.3	9.0	8.9	10.7	10.6	11.1	10.4	9.1	9.5	7.2	8.7	9.5	9.0	9.6	11.1	3.2	7.7
31	8.9	8.0	6.5	8.6	8.3	9.4	7.6	10.1	11.4	10.7	12.5	12.7	13.7	14.6	13.1	14.3	13.0	10.2	11.4	9.0	6.0	6.6	10.7	12.0	14.6	6.0	10.4
Max.	**17.0**	**17.0**	**16.8**	**17.5**	**13.9**	**9.4**	**12.7**	**14.5**	**13.8**	**12.4**	**14.3**	**15.6**	**15.2**	**14.9**	**15.2**	**16.4**	**17.3**	**17.4**	**18.3**	**17.3**	**15.8**	**16.2**	**17.5**	**15.9**	**18.3**		
Min.	**1.0**	**1.2**	**1.0**	**1.2**	**1.1**	**1.2**	**1.0**	**1.2**	**1.2**	**1.4**	**1.3**	**1.1**	**1.1**	**1.3**	**1.7**	**1.8**	**2.6**	**2.3**	**1.6**	**1.8**	**1.8**	**0.7**	**1.2**	**0.8**		**0.7**	
Avg.	**5.3**	**5.5**	**4.9**	**5.0**	**4.6**	**4.3**	**4.3**	**4.7**	**4.9**	**5.4**	**6.1**	**6.6**	**7.0**	**7.1**	**7.2**	**7.3**	**7.5**	**7.2**	**6.9**	**6.7**	**6.2**	**6.0**	**6.0**	**5.7**			**5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.4	10.0	9.0	9.0	8.7	6.8	7.1	7.8	9.2	10.2	10.1	11.5	10.9	9.3	9.1	9.2	9.2	9.6	9.1	6.6	4.5	4.4	4.6	3.6	11.5	3.6	8.3
2	3.7	3.0	2.9	2.9	1.4	0.9	1.9	2.5	3.1	4.9	6.9	9.8	11.5	12.3	14.1	14.7	11.8	11.8	10.6	11.6	13.7	14.0	14.1	15.6	15.6	0.9	8.3
3	15.1	14.5	11.2	10.6	12.0	10.7	11.2	12.6	12.5	13.7	13.9	13.1	13.9	15.3	16.9	15.9	14.4	14.3	12.8	10.5	8.9	8.1	6.9	5.1	16.9	5.1	12.2
4	2.6	2.0	1.4	0.6	0.8	0.9	1.3	0.6	0.5	1.5	2.0	3.7	3.9	4.6	4.8	4.2	4.7	5.7	5.7	5.6	6.0	5.8	6.1	6.8	6.8	0.5	3.4
5	6.5	6.9	6.7	7.0	6.8	7.8	8.8	6.9	7.8	8.6	11.7	13.5	12.9	13.3	13.5	13.5	10.9	8.6	9.7	10.0	10.3	7.6	7.1	5.9	13.5	5.9	9.3
6	6.7	3.1	2.5	4.1	5.2	3.4	2.1	2.3	3.5	7.3	7.0	6.5	6.7	7.8	7.2	7.4	8.3	7.3	6.1	6.5	7.1	8.6	8.3	7.6	8.6	2.1	5.9
7	6.0	4.7	4.8	2.9	4.0	1.8	2.3	1.9	2.4	2.8	3.8	4.8	5.8	4.8	6.9	8.2	8.8	8.2	7.2	5.7	5.7	3.9	4.0	3.6	8.8	1.8	4.8
8	1.4	2.7	2.7	3.6	4.4	3.6	2.5	2.7	1.7	1.6	2.8	3.3	3.8	5.6	7.9	8.4	8.2	9.3	9.7	12.3	15.8	15.8	14.3	14.6	15.8	1.4	6.6
9	15.5	15.2	11.6	10.5	10.3	8.3	10.2	9.8	10.6	10.1	11.1	8.7	8.4	8.6	7.6	6.9	7.2	6.5	5.9	7.3	7.6	6.9	6.7	7.8	15.5	5.9	9.1
10	7.2	7.7	9.4	9.4	10.0	13.0	13.0	8.4	2.9	3.4	5.2	6.0	4.1	5.2	5.1	3.9	2.1	2.1	2.4	3.2	1.4	1.1	2.6	3.2	13.0	1.1	5.5
11	4.7	3.9	7.5	8.4	9.2	8.8	9.4	10.4	12.6	14.9	14.8	15.0	14.3	14.0	14.2	13.8	14.8	14.6	12.2	11.6	12.3	14.3	12.4	5.8	15.0	3.9	11.4
12	5.2	6.4	5.6	7.6	7.0	5.5	6.7	7.2	8.2	9.4	9.3	9.4	10.4	11.1	11.7	12.8	13.5	13.8	14.0	14.5	14.7	14.7	11.7	9.3	14.7	5.2	10.0
13	8.4	8.0	9.6	10.6	9.3	4.6	2.3	6.7	4.2	2.5	2.9	4.2	4.9	5.5	3.9	3.4	3.0	3.3	2.9	2.2	3.4	2.5	1.7	1.8	10.6	1.7	4.7
14	1.4	2.4	2.7	3.4	3.2	3.0	2.3	2.3	3.7	3.8	4.6	5.0	6.3	8.1	9.5	10.5	11.0	10.2	11.0	13.0	16.1	15.9	15.8	15.5	16.1	1.4	7.5
15	18.2	19.0	18.5	19.4	20.3	19.5	18.7	18.0	17.5	17.1	18.9	19.1	18.2	17.5	18.2	18.2	16.6	11.4	4.8	3.8	4.5	5.1	5.1	5.1	20.3	3.8	14.7
16	9.0	8.5	5.7	6.8	4.7	1.0	2.0	2.6	1.4	1.6	3.8	4.6	5.8	5.8	6.1	5.7	4.7	3.6	4.3	4.8	4.7	5.3	4.9	4.3	9.0	1.0	4.7
17	3.6	3.4	1.8	1.5	1.4	1.1	0.8	1.1	0.9	1.6	1.4	1.8	1.4	1.7	3.1	4.1	2.1	2.1	1.6	1.8	2.5	3.9	4.2	4.3	4.3	0.8	2.2
18	4.8	4.6	7.3	5.9	6.1	5.6	5.1	4.0	4.2	6.2	6.9	8.6	9.0	9.1	8.6	7.9	8.4	8.2	6.6	6.2	7.0	5.8	4.7	4.4	9.1	4.0	6.5
19	4.1	3.6	4.3	4.1	3.4	3.2	3.3	3.0	2.7	4.6	5.4	7.8	8.2	9.2	9.1	9.3	8.8	8.5	8.0	7.1	6.3	7.1	6.0	8.0	9.3	2.7	6.0
20	8.5	8.0	8.8	6.3	5.1	3.7	3.1	3.9	4.7	4.9	4.7	4.6	6.2	7.0	6.2	7.4	6.4	5.4	4.1	2.9	2.6	3.4	3.4	5.0	8.8	2.6	5.3
21	4.1	2.7	2.6	4.1	3.0	1.7	1.9	3.6	4.3	5.0	5.2	4.0	4.6	5.6	6.2	5.5	5.8	7.4	6.4	6.9	8.2	8.2	7.5	7.6	8.2	1.7	5.1
22	7.3	7.3	6.6	6.5	7.8	6.4	7.2	7.7	11.0	14.4	16.5	18.8	18.7	16.5	15.4	12.3	11.5	10.7	13.1	12.1	9.6	10.4	8.3	9.4	18.8	6.4	11.1
23	7.5	7.5	5.6	5.7	4.9	4.7	4.4	3.9	4.5	5.8	6.7	7.3	8.9	11.6	12.5	11.5	10.2	9.3	8.5	7.7	9.9	10.9	11.6	12.9	12.9	3.9	8.1
24	11.3	9.4	9.3	11.3	12.6	11.0	11.4	9.9	8.9	10.1	10.7	9.6	9.1	9.4	10.6	9.4	10.1	8.5	9.3	9.0	10.1	9.9	9.5	9.4	12.6	8.5	10.0
25	9.8	10.2	9.8	10.6	10.8	10.7	10.6	9.0	8.3	8.5	8.7	8.3	8.0	8.0	7.7	7.2	6.8	7.2	6.2	6.1	5.8	7.3	7.2	6.3	10.8	5.8	8.3
26	4.7	2.5	2.6	3.0	3.7	3.3	3.1	3.3	5.3	6.3	9.2	12.2	14.8	16.7	18.1	16.5	17.4	16.9	19.9	19.2	19.1	20.9	21.8	19.0	21.8	2.5	11.6
27	18.7	19.5	18.9	20.4	20.7	18.2	14.6	6.4	5.5	5.4	2.5	5.3	9.8	11.8	9.3	8.7	8.1	7.4	6.3	6.2	3.5	2.3	1.5	1.5	20.7	1.5	9.7
28	2.3	2.9	2.3	2.5	4.5	4.6	3.9	2.7	1.7	1.7	2.2	2.8	2.8	2.4	3.2	2.9	2.9	1.6	0.9	1.6	0.9	2.1	2.2	0.9	4.6	0.9	2.4
29	1.8	2.5	3.4	3.5	5.0	5.5	3.7	4.7	5.4	5.9	5.5	6.6	8.0	8.0	6.2	6.9	6.4	5.3	3.5	2.9	2.9	1.3	1.4	2.7	8.0	1.3	4.5
30	1.9	1.1	1.3	2.4	1.5	1.4	1.3	1.2	1.2	1.1	1.1	2.1	1.9	2.3	2.2	2.3	5.3	7.4	6.1	7.3	9.1	10.8	10.9	11.1	11.1	1.1	3.9
Max.	**18.7**	**19.5**	**18.9**	**20.4**	**20.7**	**19.5**	**18.7**	**18.0**	**17.5**	**17.1**	**18.9**	**19.1**	**18.7**	**17.5**	**18.2**	**18.2**	**17.4**	**16.9**	**19.9**	**19.2**	**19.1**	**20.9**	**21.8**	**19.0**	**21.8**		
Min.	**1.4**	**1.1**	**1.3**	**0.6**	**0.8**	**0.9**	**0.8**	**0.6**	**0.5**	**1.1**	**1.1**	**1.8**	**1.4**	**1.7**	**2.2**	**2.3**	**2.1**	**1.6**	**0.9**	**1.6**	**0.9**	**1.1**	**1.4**	**0.9**		**0.5**	
Avg.	**7.1**	**6.8**	**6.5**	**6.8**	**6.9**	**6.0**	**5.9**	**5.6**	**5.7**	**6.5**	**7.2**	**7.9**	**8.4**	**8.9**	**9.2**	**9.0**	**8.6**	**8.2**	**7.6**	**7.5**	**7.8**	**7.9**	**7.5**	**7.3**			**7.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.6	12.9	12.6	13.9	14.8	14.8	14.1	13.5	12.1	12.6	12.0	12.7	12.9	13.6	12.4	11.7	12.8	12.0	10.1	8.7	8.7	8.6	9.2	8.0	14.8	8.0	11.9
2	8.0	7.2	7.3	7.0	5.9	3.9	4.6	2.9	2.9	2.5	5.2	7.3	6.4	6.6	8.2	6.9	6.6	5.0	4.1	3.7	4.4	4.8	3.3	3.4	8.2	2.5	5.3
3	1.8	2.2	2.6	2.0	1.3	1.2	1.3	1.0	1.9	2.3	3.2	3.0	2.5	2.4	2.0	2.2	1.3	1.8	2.2	0.8	0.9	2.1	2.4	1.7	3.2	0.8	1.9
4	2.8	2.1	2.8	2.6	3.9	4.7	5.8	3.6	5.1	6.1	7.0	5.8	7.1	6.6	6.1	6.7	5.7	6.9	4.6	4.1	7.4	9.1	10.0	10.4	10.4	2.1	5.7
5	8.8	5.6	4.5	5.0	3.7	3.5	3.8	2.8	4.5	3.4	3.7	4.3	4.6	3.6	3.5	3.1	2.5	2.9	2.5	2.8	1.7	0.7	1.5	1.7	8.8	0.7	3.5
6	1.5	2.4	1.8	1.2	1.0	1.1	1.7	1.4	2.0	3.1	2.7	2.4	1.9	3.4	2.9	4.1	4.0	4.3	4.0	2.7	2.7	2.8	2.1	3.7	4.3	1.0	2.5
7	5.8	5.1	3.4	5.4	9.2	9.9	11.2	9.7	9.6	11.0	11.3	10.4	9.9	9.0	8.8	6.6	4.5	3.2	1.8	1.6	1.8	1.3	1.5	1.5	11.3	1.3	6.4
8	1.3	1.6	1.8	1.1	1.6	1.6	2.1	2.0	2.0	1.2	0.6	0.5	1.9	2.3	2.6	2.2	2.3	1.2	1.3	0.4	0.8	1.2	1.7	1.8	2.6	0.4	1.5
9	1.5	1.7	1.9	1.1	1.3	2.2	2.6	3.8	4.6	4.5	4.9	6.2	7.8	7.8	7.2	7.7	6.8	5.9	5.7	5.5	5.4	6.6	7.3	7.3	7.8	1.1	4.9
10	6.0	6.8	6.4	5.1	3.2	2.4	1.5	0.3	0.2	0.7	1.4	0.5	0.0	0.0	0.5	1.6	2.2	1.8	0.7	3.1	6.1	6.9	7.6	6.2	7.6	0.0	3.0
11	4.6	4.2	4.0	4.0	3.9	3.9	3.8	4.1	4.9	5.1	4.7	4.8	5.0	4.5	5.7	6.2	8.5	9.9	11.9	10.6	8.6	8.7	9.1	8.7	11.9	3.8	6.2
12	8.5	8.6	9.6	9.6	9.4	10.1	11.1	11.6	12.5	12.9	13.1	12.0	10.4	9.1	9.9	8.2	7.0	5.3	3.1	2.7	2.0	1.7	1.6	1.9	13.1	1.6	8.0
13	1.9	3.0	3.2	3.1	2.7	2.8	2.5	2.2	3.0	3.4	3.6	2.7	3.0	2.9	3.0	3.0	3.6	3.2	4.2	2.9	3.9	5.4	6.0	6.2	6.2	1.9	3.4
14	6.2	6.2	5.7	4.5	3.8	4.5	2.9	2.3	4.6	6.2	4.2	3.0	3.4	4.2	2.9	2.2	2.8	5.3	7.1	8.5	8.4	9.0	7.4	8.3	9.0	2.2	5.1
15	5.8	4.8	3.0	3.2	4.2	3.6	3.3	4.4	4.8	5.3	1.7	1.5	1.9	2.7	4.3	4.5	4.9	5.4	4.7	4.2	7.2	7.9	7.4	7.7	7.9	1.5	4.5
16	6.2	5.9	5.4	5.9	4.2	4.0	3.4	3.2	3.6	3.4	1.7	1.2	2.6	3.5	5.4	3.8	4.5	2.7	5.7	2.8	3.1	5.9	8.5	8.6	8.6	1.2	4.4
17	9.8	11.7	12.1	11.0	13.1	14.6	15.4	15.9	15.6	14.9	12.1	11.1	14.3	16.1	15.0	15.6	14.3	13.6	12.1	11.9	14.2	14.2	14.8	14.6	16.1	9.8	13.7
18	13.1	14.1	15.1	14.7	13.3	12.9	12.0	10.5	10.8	11.2	11.2	6.3	2.8	6.0	8.8	8.0	5.5	5.9	6.4	7.8	6.6	6.9	6.4	6.0	15.1	2.8	9.3
19	7.5	8.7	8.8	10.2	9.6	8.9	8.4	9.6	10.7	11.6	13.8	12.4	14.0	16.9	18.0	17.8	19.7	20.8	21.7	23.0	22.8	22.2	21.5	22.2	23.0	7.5	15.0
20	21.9	21.3	21.2	22.3	21.7	21.5	20.5	20.8	20.6	22.2	21.6	17.5	13.3	4.6	5.2	4.8	4.0	7.9	8.3	8.8	9.3	9.2	5.8	7.1	22.3	4.0	14.2
21	5.4	7.1	6.2	1.1	2.9	4.2	3.9	4.4	6.1	5.8	5.0	4.6	4.6	3.6	2.5	1.9	3.0	6.9	8.0	8.4	8.4	8.8	7.9	6.5	8.8	1.1	5.3
22	7.8	6.8	5.2	5.5	6.5	7.7	9.1	9.2	9.4	10.0	10.4	9.1	9.8	11.6	12.5	10.2	8.6	8.4	6.4	7.9	6.9	6.2	6.8	6.0	12.5	5.2	8.2
23	5.4	5.6	4.9	4.7	6.4	7.4	6.9	7.4	6.7	6.4	8.8	12.8	13.5	14.3	14.5	14.0	13.8	15.4	13.7	12.2	10.2	8.6	7.4	5.4	15.4	4.7	9.4
24	4.4	3.0	2.4	2.0	2.2	1.8	2.5	2.4	2.2	2.3	4.5	7.1	7.5	8.2	6.9	8.3	8.0	7.1	7.0	7.1	7.6	7.2	8.5	10.0	10.0	1.8	5.4
25	9.2	11.7	11.6	10.3	9.5	9.3	8.6	6.8	4.5	4.5	5.3	6.4	5.3	4.9	8.4	10.3	11.0	9.7	8.6	8.7	9.0	8.4	10.2	11.1	11.7	4.5	8.5
26	12.7	11.5	11.9	11.2	12.2	11.9	9.7	8.7	8.7	9.1	11.4	11.9	9.6	8.6	8.8	8.4	10.2	8.3	7.8	7.7	5.0	4.7	3.7	4.1	12.7	3.7	9.1
27	3.5	2.6	2.2	1.7	1.3	0.7	0.9	0.7	1.0	1.0	1.2	1.3	0.8	1.2	1.1	1.1	0.8	0.7	0.7	1.0	1.7	1.3	0.7	0.6	3.5	0.6	1.2
28	1.7	2.0	1.5	1.2	1.2	2.0	2.1	2.1	1.8	1.5	3.1	3.6	5.2	5.6	4.7	5.2	4.9	4.4	3.6	2.9	2.2	2.0	0.9	1.3	5.6	0.9	2.8
29	1.5	1.1	1.2	2.3	2.1	2.7	2.4	2.5	2.5	2.6	2.1	2.0	2.7	2.5	3.0	3.1	3.2	3.2	3.1	2.8	2.7	2.0	1.8	2.4	3.2	1.1	2.4
30	2.8	3.0	3.4	3.3	2.9	2.9	2.6	3.0	3.2	2.9	3.0	2.6	2.5	4.0	5.8	5.7	6.6	7.6	8.5	8.1	9.9	8.3	7.6	10.4	10.4	2.5	5.0
31	10.1	10.3	10.6	10.6	9.3	9.9	7.6	9.1	7.9	7.9	8.6	11.0	12.3	12.8	10.1	4.5	6.6	8.8	8.8	10.5	11.3	8.5	6.9	5.2	12.8	4.5	9.1
Max.	**21.9**	**21.3**	**21.2**	**22.3**	**21.7**	**21.5**	**20.5**	**20.8**	**20.6**	**22.2**	**21.6**	**17.5**	**14.3**	**16.9**	**18.0**	**17.8**	**19.7**	**20.8**	**21.7**	**23.0**	**22.8**	**22.2**	**21.5**	**22.2**	**23.0**		
Min.	**1.3**	**1.1**	**1.2**	**1.1**	**1.0**	**0.7**	**0.9**	**0.3**	**0.2**	**0.7**	**0.6**	**0.5**	**0.0**	**0.0**	**0.5**	**1.1**	**0.8**	**0.7**	**0.7**	**0.4**	**0.8**	**0.7**	**0.7**	**0.6**		**0.0**	
Avg.	**6.4**	**6.5**	**6.3**	**6.0**	**6.1**	**6.2**	**6.1**	**5.9**	**6.1**	**6.4**	**6.5**	**6.4**	**6.4**	**6.6**	**6.8**	**6.4**	**6.5**	**6.6**	**6.4**	**6.2**	**6.5**	**6.5**	**6.4**	**6.5**			**6.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.5	6.2	6.1	4.7	4.1	4.0	4.2	3.2	3.5	4.7	4.1	4.1	4.1	3.8	2.8	2.5	3.0	3.2	3.3	4.5	5.1	5.7	5.3	5.4	6.5	2.5	4.3
2	4.1	4.2	3.4	3.5	2.8	3.4	3.1	3.7	3.6	3.9	3.4	3.5	3.7	2.9	2.7	4.2	4.4	4.6	4.3	4.2	5.4	5.2	5.8	5.2	5.8	2.7	4.0
3	6.7	6.7	7.8	7.5	10.2	13.1	13.5	10.6	12.6	14.5	18.3	20.5	19.6	20.8	18.9	17.3	18.6	20.2	18.2	17.3	16.8	17.9	21.1	21.2	21.2	6.7	15.4
4	18.7	16.3	16.6	16.1	14.2	15.0	15.0	16.0	14.9	16.0	15.8	15.1	13.7	15.1	17.2	16.4	14.6	16.8	16.1	14.6	14.4	13.0	15.8	16.6	18.7	13.0	15.6
5	14.9	16.5	15.9	14.9	16.7	15.7	16.6	16.4	16.2	15.7	14.8	14.1	14.0	14.3	13.9	13.8	12.3	11.8	10.4	10.4	7.4	3.9	2.1	2.8	16.7	2.1	12.7
6	4.2	4.9	5.8	4.2	12.4	14.2	11.2	13.0	12.1	13.8	18.1	16.9	17.8	17.0	15.1	15.8	15.7	16.3	13.8	10.5	8.4	7.8	9.1	9.6	18.1	4.2	12.0
7	10.2	12.6	12.5	6.8	7.1	8.4	9.1	8.1	10.0	8.3	8.4	9.4	6.8	5.1	5.6	6.3	6.1	5.7	6.5	5.9	6.2	6.4	6.5	6.0	12.6	5.1	7.7
8	5.6	5.5	4.9	4.9	4.4	3.9	4.3	4.1	4.2	3.8	3.8	3.8	3.7	4.2	4.0	3.8	5.0	5.9	6.5	7.3	7.9	7.7	8.7	8.5	8.7	3.7	5.3
9	9.3	10.5	11.8	12.4	12.7	12.0	13.1	14.8	15.5	14.9	14.8	15.2	15.4	15.6	16.1	17.6	18.2	18.5	18.0	17.5	18.1	16.9	17.1	17.3	18.5	9.3	15.1
10	14.4	13.7	13.7	12.4	13.5	14.2	14.8	14.5	13.4	12.7	12.4	12.9	13.5	13.5	14.2	13.2	13.3	14.1	14.2	13.6	13.0	11.8	10.4	11.0	14.8	10.4	13.3
11	9.5	9.1	8.8	10.2	10.2	9.9	10.0	9.7	9.2	8.9	8.9	8.6	8.2	7.3	7.2	6.9	7.7	7.1	6.1	6.5	6.0	6.2	6.2	6.0	10.2	6.0	8.1
12	5.6	5.9	5.1	4.1	4.2	3.8	3.2	3.7	4.9	6.6	5.9	6.7	5.3	5.7	5.8	6.6	6.7	7.3	8.1	8.8	9.0	9.0	7.8	8.8	9.0	3.2	6.2
13	8.5	7.0	8.5	7.6	9.5	8.2	6.9	7.5	7.5	5.9	5.8	5.4	3.3	2.1	1.1	1.1	2.1	2.3	1.4	1.9	1.8	2.2	2.8	3.4	9.5	1.1	4.7
14	4.4	6.2	6.6	7.1	7.0	7.6	10.0	7.4	6.1	4.4	3.8	3.0	2.5	5.8	10.1	10.4	7.0	7.9	13.1	13.9	13.4	12.4	10.0	7.9	13.9	2.5	7.8
15	9.5	7.0	6.5	5.1	3.3	1.3	0.7	2.7	3.6	3.4	4.0	3.8	3.5	3.6	3.0	3.7	2.1	2.4	2.7	1.0	1.6	2.2	3.1	2.1	9.5	0.7	3.4
16	2.5	3.3	4.9	4.4	6.4	5.4	7.1	8.5	8.0	8.6	10.5	10.1	9.6	9.6	10.7	9.9	9.2	8.5	8.8	7.6	7.3	6.7	7.2	7.3	10.7	2.5	7.6
17	8.2	8.1	9.2	8.6	7.5	9.4	9.2	8.5	7.0	5.6	9.0	9.6	11.0	11.0	8.6	8.4	6.6	6.5	5.2	4.3	3.6	3.2	1.3	0.7	11.0	0.7	7.1
18	1.0	1.2	0.7	0.0	0.0	1.7	3.5	3.6	3.7	3.4	3.1	4.9	2.0	2.6	2.7	2.6	3.3	3.2	4.0	2.4	3.2	5.8	6.0	3.8	6.0	0.0	2.8
19	1.4	3.0	2.5	5.5	3.7	4.0	5.6	10.0	12.9	10.8	8.4	8.9	12.1	13.7	9.2	6.4	9.3	8.0	5.8	2.7	3.6	2.3	4.3	3.2	13.7	1.4	6.6
20	3.4	4.8	5.2	5.4	4.5	5.4	4.7	4.0	4.2	4.3						2.7	2.3	1.9	2.3	1.0	0.7	1.0	1.6	2.2	5.4	0.7	3.2
21	2.4	3.0	4.9	4.9	4.5	4.3	3.4	2.8	2.3	1.5	2.5	1.9	2.1	4.4	6.2	5.8	4.5	1.8	2.9	3.1	3.5	1.5	3.1	4.2	6.2	1.5	3.4
22	2.2	1.2	1.3	1.0	1.4	1.6	1.0	0.7	1.6	1.5	1.4	2.6	1.5	1.8	3.3	3.5	3.3	4.4	4.8	4.9	5.1	6.6	6.4	7.3	7.3	0.7	2.9
23	7.8	8.4	10.8	12.8	10.9	11.3	11.9	14.3	14.2	12.2	10.6	11.7	10.1	8.7	9.4	7.9	7.3	6.7	4.5	3.5	3.2	3.1	3.3	4.1	14.3	3.1	8.7
24	4.4	3.7	4.7	6.0	7.9	9.8	11.0	11.0	9.2	10.0	11.9	12.4	13.8	13.8	11.3	9.8	10.8	10.4	10.0	10.6	10.8	11.9	12.3	12.2	13.8	3.7	10.0
25	12.6	14.0	11.9	11.7	13.5	13.6	13.5	13.3	14.4	15.6	14.6	12.8	11.3	10.0	9.8	11.0	11.2	11.9	12.3	12.9	15.3	15.9	13.7	15.0	15.9	9.8	13.0
26	16.7	15.9	15.0	15.4	14.3	14.7	15.5	15.1	14.9	14.5	12.7	12.3	13.1	12.9	10.6	12.0	14.0	11.7	11.2	12.1	12.4	12.0	9.7	8.9	16.7	8.9	13.2
27	7.8	8.5	8.9	9.3	8.4	7.4	7.1	6.6	6.5	6.2	6.3	5.7	4.7	4.9	4.5	1.6	1.4	2.4	2.3	2.1	2.2	2.9	4.7	7.0	9.3	1.4	5.4
28	8.0	7.7	7.4	7.7	7.4	7.7	8.0	7.4	6.3	5.4	5.1	5.1	5.0	4.5	2.7	3.0	2.3	1.8	2.5	3.0	1.5	2.1	1.4	1.7	8.0	1.4	4.8
29	2.4	1.4	1.2	0.6	1.4	2.9	4.4	5.2	6.5	6.3	5.0	5.5	6.7	5.9	5.3	5.8	4.8	5.1	6.9	5.0	4.1	4.4	4.0	3.9	6.9	0.6	4.4
30	3.7	5.4	5.7	3.8	4.4	5.2	5.9	6.8	7.1	8.0	8.1	6.7	5.0	4.2	6.5	7.4	4.9	4.9	5.7	7.2	6.2	6.3	6.0	4.9	8.1	3.7	5.8
Max.	**18.7**	**16.5**	**16.6**	**16.1**	**16.7**	**15.7**	**16.6**	**16.4**	**16.2**	**16.0**	**18.3**	**20.5**	**19.6**	**20.8**	**18.9**	**17.6**	**18.6**	**20.2**	**18.2**	**17.5**	**18.1**	**17.9**	**21.1**	**21.2**	**21.2**		
Min.	**1.0**	**1.2**	**0.7**	**0.0**	**0.0**	**1.3**	**0.7**	**0.7**	**1.6**	**1.5**	**1.4**	**1.9**	**1.5**	**1.8**	**1.1**	**1.1**	**1.4**	**1.8**	**1.4**	**1.0**	**0.7**	**1.0**	**1.3**	**0.7**		**0.0**	
Avg.	**7.2**	**7.4**	**7.6**	**7.3**	**7.6**	**8.0**	**8.2**	**8.4**	**8.5**	**8.4**	**8.7**	**8.7**	**8.4**	**8.4**	**8.2**	**7.9**	**7.7**	**7.8**	**7.7**	**7.3**	**7.2**	**7.1**	**7.2**	**7.3**			**7.8**

Total Hours in Month 720 **Hours Data Available** 715 **Data Recovery** 99.3%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.4	4.7	7.4	8.4	9.3	8.8	9.1	8.5	6.4	5.2	4.0	4.7	4.1	4.2	5.6	5.2	3.1	2.5	2.0	1.7	0.7	0.8	0.6	0.2	9.3	0.2	4.7
2	0.1	0.0	0.3	0.2	0.3	1.0	0.8	0.4	0.0	0.8	1.2	1.4	1.8	1.8	2.1	2.4	7.6	8.6	9.9	12.0	12.8	12.4	10.4	10.8	12.8	0.0	4.1
3	10.9	12.5	12.4	12.7	12.6	11.5	9.6	10.5	11.1	9.7	9.9	10.8	9.0	7.2	7.8	8.0	8.3	7.1	4.6	4.8	5.7	4.8	4.7	4.6	12.7	4.6	8.8
4	4.8	4.1	3.2	2.3	2.1	1.3	1.7	2.2	3.2	3.3	4.8	6.5	6.5	9.4	12.0	11.8	13.5	16.9	18.4	18.6	20.1	17.3	16.7	15.5	20.1	1.3	9.0
5	15.1	15.2	15.3	14.7	19.1	18.8	14.4	12.2	15.6	17.4	18.9	17.9	17.5	18.0	17.0	17.3	17.0	17.0	17.1	18.9	17.6	17.9	19.4	20.4	20.4	12.2	17.1
6	21.2	22.9	23.5	22.5	20.6	20.5	20.4	18.9	17.5	17.5	13.1	9.6	9.6	8.4	7.8	7.2	5.7	5.0	6.2	8.1	12.4	15.2	14.8	17.9	23.5	5.0	14.4
7	21.7	23.4	24.8	26.1	26.0	28.6	29.5	30.2	27.3	25.0	24.6	24.2	23.5	22.5	20.7	20.0	20.7	20.1	17.0	18.0	16.4	16.4	15.7	14.2	30.2	14.2	22.3
8	12.7	9.9	9.4	7.4	7.6	5.6	5.4	6.3	7.8	10.9	12.0	13.0	14.8	15.7	15.9	14.7	16.2	17.3	18.3	18.6	20.1	20.3	20.4	20.7	20.7	5.4	13.4
9	21.1	20.7	20.1	19.1	17.9	15.6	15.4	16.1	15.2	15.2	14.6	13.1	12.3	9.7	7.6	5.5	5.7	7.4	6.3	7.3	7.4	6.8	5.1	2.7	21.1	2.7	12.0
10	4.5	2.6	1.1	1.6	2.2	2.4	2.7	3.0	3.2	3.8	6.1	6.2	5.4	5.4	3.9	4.1	4.1	7.1	6.7	9.0	9.9	8.2	8.4	8.2	9.9	1.1	5.0
11	6.1	5.9	3.9	2.4	1.3	3.7	3.6	2.5	1.1	3.3	5.0	6.6	6.4	4.7	2.0	2.6	1.8	4.8	7.7	9.0	11.5	12.0	9.9	11.1	12.0	1.1	5.4
12	11.4	10.0	9.5	7.9	6.7	5.5	6.7	6.3	6.0	4.7	4.2	3.2	2.6	3.0	1.9	1.5	2.0	2.0	1.6	2.1	1.8	0.9	1.0	1.0	11.4	0.9	4.3
13	1.6	0.9	2.1	2.0	1.2	2.9	2.9	3.3	5.6	7.0	10.6	8.4	8.0	10.5	12.3	14.1	16.8	20.1	21.8	22.2	26.4	25.9	23.0	21.6	26.4	0.9	11.3
14	25.7	21.3	19.5	19.0	15.1	6.9	12.6	12.9	11.0	12.8	9.4	10.7	11.5	15.7	16.0	14.6	15.7	15.9	10.5	9.7	9.9	11.7	21.4	20.4	25.7	6.9	14.6
15	20.4	19.1	17.9	19.0	17.3	16.2	10.0	6.2	6.1	7.8	7.0	3.2	5.2	6.0	4.8	4.4	6.0	7.8	11.1	18.8	19.3	19.5	20.8	22.8	22.8	3.2	12.4
16	21.2	20.0	21.2	20.6	19.3	16.7	16.5	15.5	11.8	10.2	7.8	6.1	7.1	5.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2	0.0	8.4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	2.9	5.7	11.4	9.8	7.0	7.8	10.9	12.2	12.2	0.0	2.9
18	8.3	5.6	4.1	2.5	5.0	4.2	4.4	8.7	9.5	4.1	7.9	14.2	14.3	13.5	10.8	8.3	10.7	7.6	7.5	6.0	3.4	3.7	4.2	2.9	14.3	2.5	7.1
19	3.2	3.8	7.0	12.6	13.4	17.2	14.5	17.6	18.1	16.3	13.9	15.4	14.5	16.0	14.2	14.1	14.3	8.9	9.5	12.0	8.6	10.2	10.7	8.3	18.1	3.2	12.3
20	6.5	5.2	2.8	2.6	1.0	1.3	2.1	1.9	0.7	2.2	3.5	3.8	4.5	3.8	1.7	1.7	5.0	3.2	2.4	1.3	2.9	2.4	1.4	3.0	6.5	0.7	2.8
21	2.3	1.5	0.9	0.5	1.4	2.1	0.8	0.7	1.2	1.6	1.0	1.4	0.9	1.1	1.1	0.8	2.1	2.5	2.6	3.2	4.1	5.2	5.2	6.0	6.0	0.5	2.1
22	5.2	4.9	5.5	6.4	5.2	4.7	4.0	4.1	4.9	3.8	2.2	3.7	4.5	4.2	3.3	1.9	2.1	2.0	1.9	1.8	2.1	0.6	0.6	0.7	6.4	0.6	3.3
23	0.3	1.0	1.8	2.0	1.9	1.4	0.4	0.8	1.6	1.6	1.3	1.4	1.3	2.0	2.2	2.4	2.3	2.7	3.1	2.1	1.9	3.1	5.0	7.6	7.6	0.3	2.1
24	9.6	9.4	7.4	7.5	9.7	5.4	6.9	7.0	8.0	7.4	4.7	5.4	4.2	4.0	3.4	1.8	1.0	0.9	2.9	2.8	2.0	1.7	1.0	1.2	9.7	0.9	4.8
25	1.0	1.0	1.5	1.9	2.6	3.1	4.6	8.7	10.5	9.7	9.7	9.3	9.1	5.6	4.5	5.2	8.2	10.3	4.9	4.4	4.9	8.6	9.4	8.1	10.5	1.0	6.1
26	9.0	7.7	13.8	17.0	14.0	16.1	15.5	15.6	9.4	2.4	4.0	2.0	2.7	2.4	3.3	2.9	2.6	3.7	4.4	3.2	3.5	2.9	2.7	6.8	17.0	2.0	7.0
27	5.7	7.3	5.8	7.1	9.1	8.0	11.2	8.0	5.0	3.4	3.8	3.2	2.4	2.8	3.8	4.3	3.1	2.4	2.6	1.8	2.5	5.4	5.9	4.6	11.2	1.8	5.0
28	2.7	3.2	5.5	8.5	9.3	10.6	10.0	10.1	7.7	4.1	5.9	6.9	3.8	6.6	2.4	3.7	6.1	7.4	4.1	7.9	6.6	5.4	5.9	5.6	10.6	2.4	6.3
29	5.5	4.1	4.9	6.0	6.5	6.1	9.4	15.3	15.8	15.3	16.1	15.9	14.9	13.3	11.9	6.5	8.7	8.2	9.7	8.7	7.6	3.4	4.1	5.0	16.1	3.4	9.3
30	5.9	9.2	11.0	11.7	7.8	7.6	8.2	7.2	5.1	4.5	3.2	3.5	3.5	2.6	2.6	3.5	3.8	6.9	10.5	5.2	8.0	7.5	4.4	5.9	11.7	2.6	6.2
31	2.8	2.9	5.8	3.8	3.0	1.6	1.1	2.2	1.8	0.8	1.0	1.3	1.7	1.2	2.1	2.6	1.6	2.5	1.3	1.1	1.3	1.6	1.6	1.0	5.8	0.8	2.0
Max.	**25.7**	**23.4**	**24.8**	**26.1**	**26.0**	**28.6**	**29.5**	**30.2**	**27.3**	**25.0**	**24.6**	**24.2**	**23.5**	**22.5**	**20.7**	**20.0**	**20.7**	**20.1**	**21.8**	**22.2**	**26.4**	**25.9**	**23.0**	**22.8**	**30.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**8.7**	**8.4**	**8.7**	**8.9**	**8.7**	**8.2**	**8.2**	**8.5**	**8.0**	**7.5**	**7.5**	**7.5**	**7.3**	**7.3**	**6.7**	**6.3**	**7.1**	**7.6**	**7.7**	**8.1**	**8.3**	**8.4**	**8.6**	**8.7**			**7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.8	1.9	1.8	2.8	3.0	2.7	2.0	3.3	4.8	6.3	5.8	6.8	5.3	3.8	3.0	2.5	1.5	2.0	2.1	2.4	1.7	1.9	3.0	3.7	6.8	1.5	3.2
2	3.8	2.8	1.8	4.2	5.5	2.3	1.9	3.0	4.5	3.5	2.7	2.6	2.0	3.8	4.1	4.0	4.8	4.1	3.2	3.9	9.1	13.7	10.7	7.2	13.7	1.8	4.5
3	9.4	7.2	9.2	10.0	9.8	4.3	3.8	3.9	6.2	2.9	2.8	4.1	3.1	3.3	3.8	5.4	5.8	5.9	5.6	4.0	3.3	3.0	3.2	4.4	10.0	2.8	5.2
4	3.5	1.5	0.9	0.6	1.1	0.9	0.6	1.6	1.0	0.7	1.1	1.9	2.3	4.2	3.1	1.5	1.6	1.8	2.1	1.5	1.7	2.0	2.3	2.1	4.2	0.6	1.7
5	0.5	1.3	1.5	1.2	1.8	1.4	0.9	1.3	2.2	2.7	2.0	0.9	1.1	4.1	4.8	5.2	4.3	5.5	6.5	5.7	5.1	4.5	4.2	3.1	6.5	0.5	3.0
6	1.5	0.9	2.3	3.1	3.3	5.5	4.7	2.5	2.1	1.6	1.0	0.9	2.1	1.3	2.9	2.5	1.7	1.2	0.5	0.9	1.4	2.7	1.1	0.5	5.5	0.5	2.0
7	0.8	1.0	1.4	1.3	0.6	1.3	1.7	1.7	1.5	2.5	1.1	1.0	1.1	1.8	4.3	3.7	4.2	3.1	2.4	4.3	6.5	6.1	4.7	10.7	10.7	0.6	2.9
8	8.8	4.3	6.5	3.5	2.8	3.8	7.2	4.2	3.8	1.7	2.6	3.1	3.6	4.8	4.7	4.6	4.2	4.3	4.9	4.7	4.5	5.0	3.7	4.0	8.8	1.7	4.4
9	3.0	3.5	3.3	2.6	3.5	3.7	3.3	3.3	2.0	2.2	2.8	1.1	1.0	0.9	1.0	0.6	2.4	2.5	1.4	1.0	0.9	1.4	1.4	1.7	3.7	0.6	2.1
10	1.2	1.0	0.7	1.2	0.7	1.2	1.0	1.1	0.8	1.3	0.9	0.8	1.1	1.7	1.3	1.6	2.2	2.2	1.6	1.6					2.2	0.7	1.3
11																		1.9	2.2	1.8	1.6	1.9	1.8	1.4	2.2	1.4	1.8
12	1.4	1.7	1.8	3.2	3.1	3.2	2.9	2.7	4.1	5.5	5.9	7.3	7.6	6.0	5.8	6.1	5.8	6.0	5.5	5.9	5.7	6.1	6.1	6.5	7.6	1.4	4.8
13	5.7	6.3	5.9	4.9	4.6	5.1	4.9	5.1	4.9	4.9	5.4	5.4	5.3	6.1	7.4	6.2	7.1	6.9	5.7	5.8	5.2	5.0	4.0	3.7	7.4	3.7	5.5
14	5.0	5.4	4.6	4.1	3.5	2.9	2.0	2.6	4.0	4.6	4.9	4.8	4.4	7.1	8.5	8.6	8.4	7.8	8.0	8.2	8.5	8.1	7.3	7.6	8.6	2.0	5.9
15	7.5	6.5	6.8	9.8	8.6	5.7	6.8	6.8	5.3	6.7	7.6	8.9	6.4	1.5	0.0	0.7	0.7	7.4	9.4	8.8	6.4	5.1	4.4	5.4	9.8	0.0	6.0
16	5.3	8.1	6.4	7.5	3.5	4.1	6.9	9.2	8.9	5.0	4.9	5.5	3.5	2.2	2.9	2.0	1.9	1.8	1.1	2.6	4.0	4.1	5.3	6.0	9.2	1.1	4.7
17	6.0	6.1	6.2	5.9	5.7	5.7	6.1	5.7	6.3	6.1	5.8	6.4	7.0	5.6	5.8	5.9	7.1	7.3	6.9	6.6	5.1	5.3	5.2	4.4	7.3	4.4	6.0
18	5.5	8.3	7.1	7.4	8.1	11.6	11.4	10.1	10.3	7.3	6.5	7.4	10.1	10.6	10.6	11.2	8.3	7.3	6.8	9.5	10.4	8.3	7.4	7.3	11.6	5.5	8.7
19	7.7	10.9	9.8	8.3	7.7	6.8	9.1	9.7	8.6	7.3	7.7	7.3	6.7	7.6	7.7	6.8	6.1	6.2	8.1	10.8	11.3	10.4	8.8	7.8	11.3	6.1	8.3
20	8.5	7.8	7.7	8.1	7.0	6.5	6.9	7.1	6.5	6.0	6.9	6.0	5.9	6.5	6.2	6.9	7.2	5.2	5.7	5.6	6.3	6.3	5.7	6.1	8.5	5.2	6.6
21	5.7	7.1	8.2	8.9	9.2	10.3	11.0	11.5	11.4	11.6	11.8	12.3	13.4	14.7	15.4	15.7	16.8	18.4	19.3	19.1	17.3	15.9	15.4	16.7	19.3	5.7	13.2
22	18.6	19.5	18.5	20.5	23.1	23.1	22.4	20.8	19.9	19.8	18.0	15.8	16.3	15.5	14.9	16.3	15.7	15.5	17.4	18.6	19.9	17.5	16.3	21.0	23.1	14.9	18.5
23	20.7	20.0	20.8	19.6	19.4	18.7	17.6	13.5	14.9	12.9	19.9	16.6	14.3	13.6	15.0	15.4	11.8	15.0	15.2	15.5	14.0	12.9	14.2	14.2	20.8	11.8	16.1
24	14.3	14.4	13.9	12.5	12.4	13.7	13.8	12.5	14.3	16.0	15.8	16.1	15.9	15.0	12.6	13.9	14.1	13.2	12.3	13.5	10.2	12.7	11.6	7.8	16.1	7.8	13.4
25	7.5	7.9	6.3	7.1	7.3	7.4	5.9	5.8	6.7	6.8	6.4	7.4	7.9	6.4	6.0	6.6	6.4	7.4	7.5	8.3	7.0	6.8	9.8	11.4	11.4	5.8	7.2
26	9.8	11.1	10.5	10.0	6.9	7.9	7.7	8.0	6.3	4.9	4.9	5.4	5.2	5.2	4.9	3.9	3.5	4.7	5.4	5.3	6.6	8.0	6.8	8.1	11.1	3.5	6.7
27	9.6	10.0	9.4	11.2	11.3	12.7	12.9	13.9	13.8	14.7	17.1	18.3	18.8	19.9	20.0	21.2	19.6	19.8	20.4	19.5	18.3	20.1	20.6	21.9	21.9	9.4	16.5
28	26.3	23.0	23.0	20.0	22.0	21.6	17.4	18.2	17.5	12.1	11.8	11.6	9.5	11.1	11.1	9.7	9.1	6.3	4.9	5.6	4.5	5.8	6.4	5.1	26.3	4.5	13.1
29	5.4	7.2	7.2	7.8	7.7	7.5	7.4	6.4	6.7	5.4	7.1	7.3	5.5	5.7	4.9	7.6	7.5	8.2	8.2	6.9	6.8	6.9	6.6	6.1	8.2	4.9	6.8
30	7.3	6.8	7.3	6.9	4.9	6.7	6.7	4.2	5.5	5.3	5.2	4.4	4.7	5.9	5.5	5.4	5.5	4.2	2.9	2.6	3.1	3.1	1.4	0.7	7.3	0.7	4.8
31	1.0	2.3	2.7	3.4	2.9	3.5	3.9	3.4	3.1	3.6	4.8	4.6	4.9	5.5	6.2	4.8	5.5	5.8	7.5	8.9	8.6	8.0	6.6	4.8	8.9	1.0	4.8
Max.	**26.3**	**23.0**	**23.0**	**20.5**	**23.1**	**23.1**	**22.4**	**20.8**	**19.9**	**19.8**	**19.9**	**18.3**	**18.8**	**19.9**	**20.0**	**21.2**	**19.6**	**19.8**	**20.4**	**19.5**	**19.9**	**20.1**	**20.6**	**21.9**	**26.3**		
Min.	**0.5**	**0.9**	**0.7**	**0.6**	**0.6**	**0.9**	**0.6**	**1.1**	**0.8**	**0.7**	**0.9**	**0.8**	**1.0**	**0.9**	**0.0**	**0.6**	**0.7**	**1.2**	**0.5**	**0.9**	**0.9**	**1.4**	**1.1**	**0.5**		**0.0**	
Avg.	**7.1**	**7.2**	**7.1**	**7.2**	**7.0**	**7.1**	**7.0**	**6.8**	**6.9**	**6.4**	**6.7**	**6.7**	**6.5**	**6.7**	**6.8**	**6.9**	**6.7**	**6.7**	**6.8**	**7.1**	**7.2**	**7.3**	**6.9**	**7.0**			**6.9**

Total Hours in Month 744 **Hours Data Available** 723 **Data Recovery** 97.2%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.0	5.6	6.4	7.5	8.4	7.4	10.1	10.2	10.9	11.8	14.5	14.1	15.4	14.7	12.2	13.6	15.8	15.0	14.5	13.5	12.5	13.3	14.2	13.7	15.8	4.0	11.6
2	13.5	11.8	10.3	9.5	8.9	7.7	8.0	8.3	7.3	6.2	6.3	5.4	3.6	4.4	3.5	2.1	1.4	1.7	2.4	3.1	2.6	4.7	6.1	7.8	13.5	1.4	6.1
3	10.5	10.7	10.9	13.2	14.4	15.0	16.9	17.4	16.2	14.2	13.6	12.8	12.6	11.3	12.6	13.1	10.8	11.7	12.9	14.0	14.6	15.5	16.3	16.5	17.4	10.5	13.7
4	17.9	16.1	17.4	17.7	18.9	20.7	19.7	19.2	22.3	23.7	22.6	23.3	25.0	25.4	24.1	25.8	28.2	27.6	29.2	24.6	24.4	24.2	22.3	17.4	29.2	16.1	22.4
5	17.4	17.3	17.0	19.1	20.6	19.5	19.8	16.3	16.2	15.0	13.4	15.3	17.6	18.5	16.7	15.6	15.6	14.5	10.4	8.4	9.7	14.8	17.0	15.4	20.6	8.4	15.9
6	13.3	11.1	8.3	8.8	8.7	6.5	6.7	3.8	4.3	7.2	12.8	14.5	17.9	17.4	16.0	12.1	12.3	11.5	8.0	7.1	7.2	6.4	6.6	7.1	17.9	3.8	9.8
7	6.5	5.4	6.2	8.3	7.8	7.3	8.6	9.5	8.6	9.0	11.2	12.3	11.5	9.0	8.9	9.7	8.0	4.4	4.0	3.7	2.4	2.4	3.0	3.7	12.3	2.4	7.1
8	1.5	1.8	2.7	3.5	3.3	3.5	4.6	5.3	5.0	5.1	5.0	4.3	12.7	16.1	21.2	23.0	25.0	24.5	26.4	26.4	25.9	26.8	28.0	25.7	28.0	1.5	13.6
9	24.9	27.8	27.3	28.9	25.8	20.0	17.9	16.2	12.2	10.6	9.2	9.3	10.8	10.6	9.4	10.1	11.8	15.2	15.7	16.7	20.2	23.3	26.4	27.2	28.9	9.2	17.8
10	28.5	28.2	24.4	26.0	23.0	25.0	23.7	22.0	19.1	14.4	14.3	15.8	15.4	16.0	15.5	16.8	17.2	17.6	16.8	16.5	16.2	16.2	16.7	16.4	28.5	14.3	19.2
11	14.6	14.9	13.9	10.6	6.1	1.6	1.6	3.2	3.8	6.1	7.8	8.2	6.3	5.1	4.6	3.4	3.1	2.2	2.6	2.9	1.5	2.2	3.5	3.4	14.9	1.5	5.6
12	1.6																								1.6	1.6	1.6
13												8.8	7.3	12.1	15.1	15.8	18.9	18.5	18.3	18.8	19.3	20.2	19.9	18.7	20.2	7.3	16.3
14	19.8	20.4	22.4	21.1	21.9	20.2	19.5	19.2	19.8	20.2	19.7	17.4	17.1	17.3	18.6	20.9	21.3	18.3	18.4	19.9	19.8	19.9	19.5	21.3	22.4	17.1	19.7
15	21.7	20.6	19.6	19.8	19.0	19.9	20.8	20.9	22.3	21.8	24.1	23.7	24.9	29.3	27.5	25.5	23.9	22.0	21.3	17.7	17.1	14.8	12.5	9.4	29.3	9.4	20.8
16	5.4	4.5	2.9	2.3	2.3	1.9	2.1	2.0	1.7	1.1	0.3	2.0	3.6	5.7	4.8	4.8	6.0	7.7	7.6	6.3	6.6	5.9	7.0	9.1	9.1	0.3	4.3
17	10.4	10.6	8.7	5.9	5.7	12.0	14.9	16.2	20.5	20.0	18.8	18.5	19.9	19.4	21.1	21.7	21.7	19.0	18.8	19.6	19.5	18.3	16.3	15.1	21.7	5.7	16.4
18	12.3	12.6	12.8	11.2	10.8	11.5	14.3	15.9	17.8	19.6	20.3	19.1	22.1	23.4	20.6	18.3	17.2	14.1	11.7	12.9	11.6	12.8	15.1	14.3	23.4	10.8	15.5
19	10.7	7.9	7.1	6.6	7.4	6.7	6.6	8.9	7.1	4.6	6.0	7.0	4.2	7.6	8.8	7.7	8.1	8.7	6.7	7.2	6.7	8.1	8.9	7.1	10.7	4.2	7.3
20	7.5	5.1	5.7	5.1	4.7	3.3	4.9	4.5	4.2	4.8	5.6	4.6	8.4	9.0	10.1	14.1	11.3	12.1	12.9	13.5	14.0	12.7	13.3	12.7	14.1	3.3	8.5
21	12.3	11.2	13.3	12.9	10.8	8.4	7.2	7.0	6.0	3.0	2.0	1.8	5.3	11.2	7.1	9.6	6.7	4.9	8.8	10.1	6.6	5.6	7.5	8.4	13.3	1.8	7.8
22	4.6	3.7	4.6	6.9	10.7	11.4	10.7	10.9	12.1	8.6	6.7	7.0	7.1	7.8	7.0	8.1	9.5	8.7	7.2	6.4	7.6	6.4	5.1	5.0	12.1	3.7	7.7
23	6.1	7.4	6.9	7.2	5.7	3.9	8.8	8.4	7.5	6.6	5.1	7.9	5.7	5.8	8.9	9.9	9.6	8.9	8.9	8.6	7.2	7.9	10.6	11.4	11.4	3.9	7.7
24	9.4	6.8	7.0	7.5	7.1	8.2	8.5	8.5	4.1	3.7	4.8	3.6	2.2	1.4	0.8	0.5	0.9	1.9	1.8	1.4	1.6	2.4	3.2	3.9	9.4	0.5	4.2
25	4.2	3.2	4.6	5.9	7.6	5.8	4.8	4.8	3.6	3.4	3.5	10.4	12.9	11.8	13.0	14.3	12.1	10.8	7.3	6.6	8.2	10.0	9.1	9.9	14.3	3.2	7.8
26	10.4	9.7	9.0	8.6	7.2	5.4	5.9	6.7	5.8	3.3	6.4	8.0	6.7	6.7	2.8	1.4	2.7	4.8	6.8	7.3	6.1	5.3	5.7	8.2	10.4	1.4	6.3
27	8.1	6.3	6.3	10.7	13.7	18.3	18.5	17.2	17.5	18.9	18.6	19.1	20.1	17.3	17.9	19.7	20.9	19.0	18.3	19.9	20.3	21.9	20.1	20.1	21.9	6.3	17.0
28	19.9	19.1	19.2	18.2	18.8	20.3	17.7	15.1	12.8	15.9	18.1	18.2	17.1	16.6	16.2	18.9	18.3	18.5	16.7	15.9	14.4	9.6	9.3	10.0	20.3	9.3	16.4
Max.	**28.5**	**28.2**	**27.3**	**28.9**	**25.8**	**25.0**	**23.7**	**22.0**	**22.3**	**23.7**	**24.1**	**23.7**	**25.0**	**29.3**	**27.5**	**25.8**	**28.2**	**27.6**	**29.2**	**26.4**	**25.9**	**26.8**	**28.0**	**27.2**	**29.3**		
Min.	**1.5**	**1.8**	**2.7**	**2.3**	**2.3**	**1.6**	**1.6**	**2.0**	**1.7**	**1.1**	**0.3**	**1.8**	**2.2**	**1.4**	**0.8**	**0.5**	**0.9**	**1.7**	**1.8**	**1.4**	**1.5**	**2.2**	**3.0**	**3.4**		**0.3**	
Avg.	**11.7**	**11.5**	**11.3**	**11.6**	**11.5**	**11.2**	**11.6**	**11.5**	**11.1**	**10.7**	**11.2**	**11.6**	**12.3**	**13.0**	**12.8**	**13.2**	**13.3**	**12.7**	**12.4**	**12.2**	**12.0**	**12.3**	**12.7**	**12.6**			**12.0**

Total Hours in Month 672 **Hours Data Available** 638 **Data Recovery** 94.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.7	9.7	9.7	9.8	11.0	11.3	7.3	5.9	4.4	3.6	1.0	0.4	1.3	2.8	3.7	3.9	5.1	5.3	5.0	8.2	9.5	10.7	11.8	12.9	12.9	0.4	6.9
2	13.0	12.7	12.6	12.4	12.5	12.1	13.1	12.7	12.2	11.2	12.4	12.6	12.5	13.6	11.9	9.6	9.6	8.8	9.6	9.9	9.7	8.9	9.8	8.9	13.6	8.8	11.3
3	8.1	8.2	8.9	9.0	8.5	8.4	6.3	5.9	6.8	7.5	8.4	7.9	8.9	8.4	8.6	7.5	5.6	3.5	2.7	1.9	2.1	1.4	1.1	1.3	9.0	1.1	6.1
4	1.7	2.1	2.4	2.9	4.5	7.2	7.4	7.2	8.0	6.9	7.8	7.6	11.3	13.6	12.6	12.3	14.2	13.4	14.2	14.5	15.6	13.5	12.3	12.0	15.6	1.7	9.4
5	11.1	10.3	8.1	6.3	6.0	6.7	6.1	5.3	5.6	4.9	4.1	4.1	4.0	5.5	5.2	5.6	7.3	7.5	4.4	4.6	2.3	3.7	3.5	4.3	11.1	2.3	5.7
6	4.7	4.7	3.2	4.0	4.8	3.7	2.5	2.0	1.2	1.7	3.8	2.0	1.9	1.4	0.7	0.1	1.2	1.6	1.4	1.5	0.9	1.1	1.9	3.0	4.8	0.1	2.3
7	3.3	3.2	3.7	3.8	3.9	4.4	4.2	5.3	7.3	7.5	7.2	9.8	9.8	10.7	10.2	10.8	9.6	12.7	15.1	14.3	13.1	11.9	15.1	16.4	16.4	3.2	8.9
8	18.9	22.0	22.4	21.9	19.6	17.7	19.6	19.1	19.2	17.1	14.1	15.5	15.7	14.1	13.4	12.8	12.7	16.4	16.3	16.1	16.4	16.3	16.8	16.2	22.4	12.7	17.1
9	16.5	15.7	16.7	17.8	17.6	16.7	15.6	15.8	15.9	17.4	15.7	16.6	18.4	18.5	17.6	15.0	13.4	14.3	15.3	15.7	16.0	16.3	15.3	14.8	18.5	13.4	16.2
10	11.6	12.2	11.1	9.9	8.5	8.0	8.6	10.3	9.9	6.4	5.9	6.1	6.6	5.8	4.8	3.5	2.3	2.0	4.8	5.0	5.5	6.5	10.4	11.9	12.2	2.0	7.4
11	11.1	13.8	17.2	16.4	16.9	17.0	18.2	21.9	22.3	23.7	21.2	19.9	19.8	19.3	21.7	20.2	18.6	19.7	17.5	20.4	19.3	18.1	14.2	16.5	23.7	11.1	18.5
12	17.5	17.0	17.2	16.3	12.9	13.9	13.4	12.6	11.0	11.1	10.7	7.7	7.8	4.9	5.4	3.8	4.3	4.1	3.4	3.7	1.9	1.9	1.6	1.1	17.5	1.1	8.5
13	0.7	0.9	1.1	0.9	1.3	1.5	1.7	1.4	2.0	2.5	1.9	1.7	2.3	2.5	2.7	3.3	3.5	5.9	5.7	6.8	5.6	5.9	7.5	7.8	7.8	0.7	3.2
14	7.7	7.3	7.6	7.6	5.8	5.5	5.6	5.3	4.5	4.1	4.2	2.8	2.0	2.3	3.6	2.2	3.6	3.5	2.9	2.1	2.0	1.8	1.3	0.9	7.7	0.9	4.0
15	1.4	1.9	2.3	1.7	2.7	1.6	1.1	1.1	1.1	1.8	2.0	1.1	0.7	1.0	1.9	1.6	2.1	3.0	3.7	4.1	3.9	4.7	6.0	7.4	7.4	0.7	2.5
16	8.8	8.7	5.7	5.0	5.5	5.5	5.4	4.4	2.9	3.3	4.7	4.9	6.6	8.2	10.0	10.9	10.7	11.0	9.9	10.4	10.2	9.8	9.6	9.0	11.0	2.9	7.5
17	9.9	10.1	10.3	9.6	10.4	9.3	9.5	9.8	10.3	9.6	10.7	9.3	8.1	7.3	10.8	11.3	11.0	10.4	12.2	12.9	13.7	14.6	15.2	12.8	15.2	7.3	10.8
18	13.0	13.0	10.3	7.7	9.3	8.5	6.5	2.4	4.0	6.1	6.1	5.3	1.8	1.1	0.6	0.9	3.0	4.4	0.8	2.4	2.3	1.3	1.2	3.0	13.0	0.6	4.8
19	2.6	1.7	0.8	1.6	2.0	1.8	2.2	2.3	3.2	5.4	6.4	12.2	12.8	11.4	13.3	13.2	11.7	10.0	8.9	8.2	7.9	7.8	9.4	10.3	13.3	0.8	7.0
20	12.5	9.9	9.0	7.2	5.7	6.4	7.0	6.4	4.8	3.6	2.9	2.6	2.3	1.5	6.9	7.8	11.2	11.9	13.1	14.1	16.8	19.6	18.5	16.9	19.6	1.5	9.1
21	17.2	16.2	17.2	16.9	17.1	17.7	17.5	16.4	15.7	15.5	12.9	10.9	10.5	7.9	8.6	9.1	8.4	9.6	10.3	8.9	9.2	7.1	6.0	8.4	17.7	6.0	12.3
22	12.1	8.2	8.6	9.7	13.4	16.2	15.0	17.5	14.5	18.3	16.1	16.9	16.1	16.0	16.3	14.5	11.5	11.1	9.5	6.7	6.1	6.0	6.3	5.1	18.3	5.1	12.2
23	3.5	3.2	3.5	4.3	5.6	4.3	3.0	2.0	1.9	2.9	4.4	3.7	1.6	2.5	2.5	2.9	5.8	8.2	6.9	3.7	4.8	8.9	9.6	11.4	11.4	1.6	4.6
24	10.8	11.3	10.3	9.1	9.1	5.9	8.4	12.4	10.3	8.2	11.3	12.0	10.4	9.9	9.6	11.0	10.0	12.7	12.4	10.2	9.4	6.4	7.0	6.5	12.7	5.9	9.8
25	7.4	7.1	7.0	8.0	8.2	8.5	9.1	9.4	10.0	9.6	10.2	7.7	7.7	9.0	8.5	9.1	9.6	10.4	9.6	8.7	10.1	10.0	6.6	7.5	10.4	6.6	8.7
26	6.8	6.1	6.1	6.5	7.2	7.8	8.2	7.8	8.0	7.6	7.3	6.9	6.3	5.9	5.1	4.9	4.4	4.5	5.5	5.2	4.4	3.3	2.9	2.2	8.2	2.2	5.9
27	3.3	3.6	3.5	3.4	3.7	3.8	3.4	3.2	1.6	1.2	1.7	1.9	2.2	1.2	1.2	1.5	1.6	1.9	2.5	3.3	2.4	2.3	1.8	2.1	3.8	1.2	2.4
28	2.7	4.4	4.2	3.5	6.6	6.1	5.2	4.6	4.7	4.7	3.9	3.4	2.8	2.7	3.1	1.2	1.4	1.2	1.3	1.7	2.7	3.8	4.4	3.9	6.6	1.2	3.5
29	4.1	4.2	4.0	4.6	4.9	4.1	5.0	5.4	4.5	3.4	2.8	2.0	1.2	1.3	1.2	0.7	1.4	2.3	3.1	3.4	2.0	2.8	6.0	8.7	8.7	0.7	3.5
30	12.1	12.0	12.1	12.3	14.8	16.7	17.8	16.0	17.1	16.6	18.8	22.0	23.2	25.0	24.9	27.5	28.8	29.6	29.9	30.8	29.4	28.3	27.5	27.6	30.8	12.0	21.7
31	27.5	26.3	26.2	25.6	25.0	25.9	24.5	22.5	21.3	10.2	5.9	4.4	4.2	4.3	2.1	2.6	4.0	3.8	4.3	3.0	1.2	0.5	1.3	3.4	27.5	0.5	11.7
Max.	**27.5**	**26.3**	**26.2**	**25.6**	**25.0**	**25.9**	**24.5**	**22.5**	**22.3**	**23.7**	**21.2**	**22.0**	**23.2**	**25.0**	**24.9**	**27.5**	**28.8**	**29.6**	**29.9**	**30.8**	**29.4**	**28.3**	**27.5**	**27.6**	**30.8**		
Min.	**0.7**	**0.9**	**0.8**	**0.9**	**1.3**	**1.5**	**1.1**	**1.1**	**1.1**	**1.2**	**1.0**	**0.4**	**0.7**	**1.0**	**0.6**	**0.1**	**1.2**	**1.2**	**0.8**	**1.5**	**0.9**	**0.5**	**1.1**	**0.9**		**0.1**	
Avg.	**9.4**	**9.3**	**9.1**	**8.9**	**9.2**	**9.2**	**9.0**	**8.8**	**8.6**	**8.2**	**8.0**	**7.8**	**7.8**	**7.7**	**8.0**	**7.8**	**8.0**	**8.5**	**8.5**	**8.5**	**8.3**	**8.2**	**8.4**	**8.8**			**8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.5	5.9	9.0	6.8	4.5	6.4	7.1	8.2	5.6	3.9	4.0	2.7	3.5	3.0	9.0	9.1	9.0	10.0	3.3	0.8	3.5	4.3	3.8	0.7	10.0	0.7	5.4
2	0.4	4.1	3.8	4.0	2.1	0.6	2.5	1.4	0.7	0.9	1.4	0.8	1.8	2.1	1.4	2.3	2.2	2.2	4.8	4.6	6.4	5.7	9.0	10.0	10.0	0.4	3.1
3	9.0	9.5	10.5	11.1	10.0	10.9	7.2	7.2	13.4	19.2	19.3	19.2	18.1	17.0	17.1	15.8	15.9	16.3	14.4	12.5	11.5	12.6	13.4	14.5	19.3	7.2	13.6
4	14.3	16.6	16.2	13.8	12.9	10.5	9.2	9.3	7.0	4.1	9.5	7.9	8.5	7.1	4.4	1.4	1.9	5.1	5.0	4.8	5.1	6.1	6.8	8.6	16.6	1.4	8.2
5	7.4	7.7	10.1	12.2	11.6	11.5	10.8	11.1	11.4	15.0	14.7	12.2	11.8	14.1	14.2	14.4	15.5	17.1	18.7	17.3	13.0	12.8	12.4	13.4	18.7	7.4	12.9
6	17.5	13.7	11.3	11.6	10.7	9.7	9.9	9.1	7.5	7.8	8.2	5.7	4.8	3.6	3.8	3.0	2.6	2.4	2.2	2.7	2.2	1.1	2.2	2.1	17.5	1.1	6.5
7	2.4	1.9	2.1	3.8	6.1	4.4	6.0	6.2	3.0	5.1	5.1	5.9	6.0	7.7	8.7	10.2	10.8	11.4	10.3	12.8	13.9	16.2	17.6	16.4	17.6	1.9	8.1
8	18.7	20.8	20.1	18.6	17.4	16.5	15.0	15.2	15.0	15.8	17.2	14.5	10.8	11.1	11.0	9.6	9.0	8.9	9.1	7.4	7.6	7.5	8.5	7.3	20.8	7.3	13.0
9	8.3	7.2	6.9	7.9	7.6	7.9	7.1	7.6	7.1	7.2	8.0	8.6	8.7	8.6	7.7	7.1	5.1	5.0	5.3	4.5	3.0	5.7	6.8	6.1	8.7	3.0	6.9
10	2.2	2.9	3.5	4.4	5.8	7.9	10.1	11.3	12.4	12.6	13.3	12.8	9.8	9.6	8.5	9.3	9.4	8.3	6.6	6.2	3.5	1.1	2.5	5.5	13.3	1.1	7.5
11	5.4	1.9	1.6	1.4	2.6	3.8	6.2	6.9	7.1	6.8	6.9	6.0	7.0	7.3	10.4	13.0	14.2	13.4	11.5	10.2	11.1	11.0	10.0	9.8	14.2	1.4	7.7
12	9.4	8.7	7.3	7.1	6.8	5.5	5.3	6.5	8.4	11.0	12.0	12.8	14.5	15.5	13.6	11.8	11.7	9.7	8.5	7.2	7.1	6.4	5.6	2.9	15.5	2.9	9.0
13	3.2	2.3	1.4	1.4	2.7	4.9	11.2	12.6	15.0	17.0	17.5	18.9	20.4	21.1	21.7	20.7	17.8	16.0	17.1	15.5	15.2	13.9	11.4	11.3	21.7	1.4	12.9
14	13.2	15.2	14.2	13.6	16.8	16.4	15.4	17.7	16.5	18.3	19.3	19.7	18.6	18.1	16.0	20.1	18.3	17.9	15.6	13.4	15.9	13.2	11.4	10.9	20.1	10.9	16.1
15	11.4	9.8	12.3	14.5	13.6	12.3	14.4	11.9	14.8	15.9	16.1	18.1	15.5	16.8	14.2	13.2	16.0	16.2	9.0	6.5	7.1	4.3	2.1	2.5	18.1	2.1	12.0
16	6.7	7.5	9.0	11.3	11.4	12.9	17.4	17.0	20.2	21.6	22.0	20.9	22.2	21.8	20.3	20.2	21.7	22.2	21.6	15.8	11.2	9.1	10.4	12.1	22.2	6.7	16.1
17	11.3	11.9	14.3	15.1	14.5	12.4	9.1	8.4	8.6	7.2	9.9	7.9	11.8	9.6	8.5	6.6	7.4	7.8	5.7	4.4	3.1	1.1	2.0	4.5	15.1	1.1	8.5
18	5.5	5.1	2.8	3.9	2.6	2.6	1.8	1.2	2.0	0.7	1.1	0.8	1.4	1.1	1.2	0.9	1.3	1.4	1.4	2.0	1.9	0.9	1.7	1.9	5.5	0.7	2.0
19	1.7	2.2	1.5	2.0	1.2	2.0	2.3	2.2	4.1	4.1	1.7	1.0	1.5	5.3	4.1	3.8	2.9	2.7	4.8	5.4	4.6	3.8	3.8	3.8	5.4	1.0	3.0
20	3.2	3.6	2.2	1.6	1.6	2.1	1.5	1.8	2.3	3.0	3.3	5.1	8.0	9.8	14.2	14.6	13.5	14.2	14.8	14.9	16.3	15.9	15.2	16.7	16.7	1.5	8.3
21	17.9	17.7	17.3	14.8	13.2	13.9	14.9	16.0	12.3	14.7	17.2	14.4	14.1	13.8	12.8	13.2	11.3	6.5	5.5	4.3	3.7	7.0	7.3	7.9	17.9	3.7	12.1
22	5.5	3.8	2.9	2.1	2.4	2.0	1.4	0.7	0.3	0.1	0.2	0.0	0.9	0.5	0.0	0.1	2.1	1.5	1.2	0.8	1.4	1.4	2.6	2.7	5.5	0.0	1.5
23	3.7	3.8	4.0	3.9	2.9	3.8	3.7	3.6	4.0	4.4	4.8	4.8	4.8	3.9	2.1	1.5	1.4	2.0	3.7	3.7	5.7	8.3	8.5	7.6	8.5	1.4	4.2
24	7.1	6.7	6.9	8.3	8.5	10.9	11.0	10.9	11.5	11.8	12.3	11.8	11.4	11.8	11.7	9.4	11.0	10.5	10.1	11.5	10.8	11.3	10.4	8.9	12.3	6.7	10.3
25	6.8	5.0	4.4	3.9	3.8	3.8	3.8	3.3	2.9	3.0	3.5	5.3	5.6	4.9	3.6	3.5	4.5	8.6	9.4	9.7	10.1	10.4	11.0	10.0	11.0	2.9	5.9
26	9.1	9.1	7.8	7.5	8.1	9.7	7.1	8.0	5.4	5.8	6.0	5.1	3.9	2.8	3.0	2.5	2.9	3.2	3.1	4.1	6.2	5.5	5.7	6.0	9.7	2.5	5.7
27	8.2	4.5	5.9	4.3	4.9	5.2	1.9	2.0	2.2	2.6	4.0	4.9	5.9	6.9	7.6	8.5	8.3	9.6	9.1	7.1	6.5	6.6	8.5	10.6	10.6	1.9	6.1
28	10.6	10.0	9.0	7.5	7.6	7.3	6.6	5.4	4.8	4.2	1.3	2.5	3.0	2.5	2.3	3.0	2.4	2.0	1.5	0.4	1.1	0.6	0.9	0.9	10.6	0.4	4.1
29	1.5	2.5	3.3	3.7	5.2	5.9	4.5	4.0	5.0	6.9	9.9	10.9	10.9	9.9	8.3	7.7	9.2	8.9	7.9	6.8	6.5	6.7	6.2	5.7	10.9	1.5	6.6
30	4.4	4.4	4.2	4.0	3.2	2.1	1.3	1.8	2.4	2.4	1.8	2.2	2.5	2.8	3.1	4.1	6.1	7.2	9.6	11.2	10.5	10.3	10.1	10.5	11.2	1.3	5.1
Max.	**18.7**	**20.8**	**20.1**	**18.6**	**17.4**	**16.5**	**17.4**	**17.7**	**20.2**	**21.6**	**22.0**	**20.9**	**22.2**	**21.8**	**21.7**	**20.7**	**21.7**	**22.2**	**21.6**	**17.3**	**16.3**	**16.2**	**17.6**	**16.7**	**22.2**		
Min.	**0.4**	**1.9**	**1.4**	**1.4**	**1.2**	**0.6**	**1.3**	**0.7**	**0.3**	**0.1**	**0.2**	**0.0**	**0.9**	**0.5**	**0.0**	**0.1**	**1.3**	**1.4**	**1.2**	**0.4**	**1.1**	**0.6**	**0.9**	**0.7**		**0.0**	
Avg.	**7.7**	**7.5**	**7.5**	**7.5**	**7.4**	**7.5**	**7.5**	**7.6**	**7.8**	**8.4**	**9.0**	**8.8**	**8.9**	**9.0**	**8.8**	**8.7**	**8.8**	**8.9**	**8.3**	**7.6**	**7.5**	**7.4**	**7.6**	**7.7**			**8.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.7	13.7	13.8	15.0	16.2	18.0	19.4	20.9	19.8	18.8	20.0	21.8	23.1	19.9	15.8	13.4	12.1	13.4	7.8	8.8	9.3	8.3	8.1	7.0	23.1	7.0	14.9
2	7.2	9.5	8.7	6.3	3.8	7.7	7.2	3.2	2.1	1.2	3.9	7.1	11.5	11.5	12.2	11.8	10.8	9.8	9.8	10.9	12.9	11.3	10.5	10.3	12.9	1.2	8.4
3	11.6	11.9	12.5	11.3	9.7	6.2	5.3	3.9	2.5	2.4	3.0	4.3	5.6	5.8	6.0	5.3	4.2	4.4	4.1	3.8	2.8	2.8	2.0	1.9	12.5	1.9	5.5
4	2.3	1.2	0.8	1.3	1.8	8.6	12.7	14.6	14.9	15.8	14.0	12.9	12.7	14.0	12.9	13.6	14.2	16.0	17.9	18.0	19.1	19.0	20.5	20.5	20.5	0.8	12.5
5	20.3	22.3	23.1	23.9	22.6	20.6	17.9	16.7	17.0	16.4	16.5	16.7	16.4	16.3	15.6	15.2	13.8	13.5	12.7	11.8	8.6	5.1	4.1	3.3	23.9	3.3	15.4
6	3.9	3.2	1.5	1.8	0.5	0.0	0.0	0.0	1.6	2.1	4.2	6.3	7.2	6.9	7.7	8.0	7.0	8.0	8.5	8.5	9.4	9.0	7.5	7.8	9.4	0.0	5.0
7	7.1	6.8	7.8	8.2	9.2	8.0	7.3	6.8	6.7	7.1	6.1	6.9	7.6	7.0	6.6	5.6	5.4	5.7	4.1	3.8	3.9	2.8	1.6	0.6	9.2	0.6	5.9
8	0.9	1.0	1.5	1.9	1.9	2.1	2.1	2.7	4.3	4.9	6.2	7.4	9.2	6.9	5.7	4.2	4.9	8.7	11.9	8.5	6.9	6.9	6.8	4.7	11.9	0.9	5.1
9	4.4	3.1	4.9	7.5	6.9	6.8	8.8	8.8	7.6	8.0	7.4	4.4	5.0	7.0	5.7	3.6	1.6	1.8	2.4	1.5	2.1	2.8	5.9	6.9	8.8	1.5	5.2
10	6.2	3.5	1.9	1.3	1.7	1.6	0.9	1.2	1.9	1.6	1.4	2.6	2.1	2.7	4.4	5.4	6.8	6.6	6.6	5.4	3.9	4.2	4.1	2.7	6.8	0.9	3.4
11	2.7	1.8	1.3	2.5	1.7	1.0	1.7	0.9	1.2	2.5	2.7	2.7	3.8	6.0	4.0	3.3	3.5	6.7	6.1	7.1	6.9	7.3	8.1	8.4	8.4	0.9	3.9
12	8.6	8.1	8.4	8.6	8.3	9.3	9.1	9.2	10.7	9.2	8.4	9.5	9.7	9.2	9.1	10.2	10.5	9.5	8.4	8.8	9.2	6.7	7.9	6.5	10.7	6.5	8.9
13	6.4	8.2	7.4	6.2	6.3	5.0	3.1	2.9	1.6	0.8	2.5	2.3	1.0	1.1	2.2	4.1	3.7	3.4	2.0	3.1	3.1	1.3	2.0	1.8	8.2	0.8	3.4
14	2.7	2.7	3.3	3.4	2.5	3.1	2.9	3.8	5.6	5.4	5.3	5.7	6.0	6.5	8.0	7.4	8.9	9.9	10.1	11.1	10.4	13.4	12.2	8.6	13.4	2.5	6.6
15	6.2	5.0	5.1	3.7	1.7	1.8	1.7	1.6	2.4	3.1	3.5	1.3	1.9	1.1	1.6	2.3	2.6	4.0	3.6	3.0	4.6	3.9	6.5	8.7	8.7	1.1	3.4
16	6.6	1.0	1.0	2.6	3.3	4.3	3.7	3.6	4.6	3.5	2.4	1.8	2.9	2.7	2.3	2.0	2.8	4.3	4.4	4.0	3.0	4.1	2.9	3.6	6.6	1.0	3.2
17	2.4	2.6	2.8	2.0	2.7	3.0	2.3	1.8	2.4	3.8	5.6	7.2	7.8	7.9	7.5	8.4	9.3	8.0	7.8	7.4	7.0	6.8	5.3	5.4	9.3	1.8	5.3
18	5.0	4.4	4.3	4.6	4.2	2.9	2.2	1.1	1.4	2.3	3.6	5.2	5.2	6.4	7.8	7.1	7.1	9.6	8.2	8.7	8.9	8.6	6.4	1.9	9.6	1.1	5.3
19	2.5	3.4	2.5	0.9	1.3	1.2	0.7	1.7	3.3	5.7	7.0	9.1	11.5	11.0	16.9	19.1	14.2	15.3	16.8	18.2	17.3	14.0	15.0	13.1	19.1	0.7	9.2
20	12.7	13.1	13.7	13.9	14.7	16.0	15.8	16.1	16.0	15.2	13.6	13.8	10.8	11.5	11.4	9.5	7.1	4.1	3.0	2.1	4.9	8.8	8.6	9.4	16.1	2.1	11.1
21	10.7	10.0	10.6	10.9	11.8	12.7	13.5	13.4	14.2	16.0	16.8	20.3	20.8	16.5	17.5	15.3	17.3	17.4	17.1	16.7	14.2	11.7	14.6	13.2	20.8	10.0	14.7
22	14.3	13.3	12.1	12.1	12.6	14.4	14.1	16.5	15.7	14.9	16.1	17.2	17.0	13.7	12.5	11.5	12.5	12.1	11.6	11.1	12.5	11.0	11.2	9.4	17.2	9.4	13.3
23	10.7	7.3	6.6	4.8	4.1	3.4	4.1	4.3	4.1	4.6	5.2	4.9	3.8	3.5	3.4	4.4	4.8	6.7	9.0	7.8	6.1	6.1	5.6	6.0	10.7	3.4	5.5
24	6.3	4.7	3.3	4.2	4.0	2.4	1.5	2.8	4.1	2.2	1.8	1.8	2.4	2.5	3.1	3.7	4.1	5.2	4.2	6.3	7.0	5.1	4.1	5.0	7.0	1.5	3.8
25	5.3	5.4	5.0	6.1	6.1	4.9	5.1	3.8	3.3	3.0	2.3	2.3	2.4	2.4	2.2	3.8	4.7	5.1	6.0	3.7	2.9	4.0	4.9	5.1	6.1	2.2	4.2
26	5.3	6.2	5.9	6.2	7.5	4.0	4.9	5.3	7.1	7.3	8.7	9.9	8.9	7.5	9.0	9.4	10.7	11.5	11.0	9.9	7.8	7.5	6.8	9.1	11.5	4.0	7.8
27	8.3	6.5	8.2	12.6	14.1	13.7	12.6	13.0	11.4	10.0	10.8	13.1	14.7	16.0	15.4	15.4	14.8	12.8	10.8	9.4	7.8	7.0	8.2	7.4	16.0	6.5	11.4
28	6.9	5.2	3.7	1.9	2.8	3.4	3.7	6.3	5.2	3.3	1.7	1.7	3.0	4.2	3.8	3.6	4.2	3.6	3.5	6.0	6.6	5.1	6.0	6.1	6.9	1.7	4.2
29	5.8	5.6	6.6	6.6	7.7	7.1	7.4	6.1	6.9	7.7	7.7	8.3	8.5	8.5	8.2	7.9	7.6	7.9	8.1	7.8	7.1	7.5	7.6	6.5	8.5	5.6	7.4
30	6.4	6.4	6.0	3.5	2.6	2.9	1.9	3.0	5.5	4.6	6.2	6.6	7.2	8.1	7.7	7.7	6.8	7.2	7.2	6.3	5.7	5.4	4.7	7.4	8.1	1.9	5.7
31	7.4	7.6	7.5	4.4	6.9	8.0	6.9	7.4	6.6	8.1	8.9	7.8	6.1	6.0	6.1	5.0	4.3	5.0	4.0	3.1	3.6	3.3	1.8	2.0	8.9	1.8	5.7
Max.	**20.3**	**22.3**	**23.1**	**23.9**	**22.6**	**20.6**	**19.4**	**20.9**	**19.8**	**18.8**	**20.0**	**21.8**	**23.1**	**19.9**	**17.5**	**19.1**	**17.3**	**17.4**	**17.9**	**18.2**	**19.1**	**19.0**	**20.5**	**20.5**	**23.9**		
Min.	**0.9**	**1.0**	**0.8**	**0.9**	**0.5**	**0.0**	**0.0**	**0.0**	**1.2**	**0.8**	**1.4**	**1.3**	**1.0**	**1.1**	**1.6**	**2.0**	**1.6**	**1.8**	**2.0**	**1.5**	**2.1**	**1.3**	**1.6**	**0.6**		**0.0**	
Avg.	**7.1**	**6.6**	**6.5**	**6.5**	**6.5**	**6.6**	**6.5**	**6.6**	**6.8**	**6.8**	**7.2**	**7.8**	**8.2**	**8.1**	**8.1**	**8.0**	**7.8**	**8.3**	**8.0**	**7.8**	**7.6**	**7.1**	**7.1**	**6.8**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.6	1.4	1.2	2.6	2.5	2.3	2.8	2.7	3.3	3.7	4.0	3.8	4.3	3.6	3.7	4.2	3.5	3.9	6.4	5.8	6.1	7.1	5.7	1.6	7.1	1.2	3.7
2	2.8	3.2	3.5	3.1	3.6	3.9	4.4	3.5	3.4	3.9	5.6	5.7	5.6	5.8	6.4	7.4	7.6	8.2	9.9	8.0	7.3	7.0	6.8	6.8	9.9	2.8	5.6
3	7.7	8.9	8.7	11.1	10.6	10.5	11.1	13.0	15.3	14.4	13.9	13.0	12.0	11.8	12.0	11.6	11.4	12.6	12.6	12.4	12.6	11.2	10.7	9.2	15.3	7.7	11.6
4	9.1	8.5	8.5	8.5	7.8	8.9	10.2	12.4	11.5	12.3	13.0	13.6	12.2	12.1	12.3	11.5	11.4	12.0	12.0	11.4	10.5	8.5	9.0	10.6	13.6	7.8	10.7
5	11.2	10.3	8.8	6.4	7.1	6.6	6.8	7.5	7.3	6.8	4.6	3.1	3.3	3.5	3.6	4.4	4.4	4.1	3.3	3.5	2.9	3.3	3.8	3.8	11.2	2.9	5.4
6	3.5	3.5	2.9	2.2	2.0	2.6	2.7	3.1	4.1	4.2	4.1	5.4	7.7	9.0	9.0	9.8	9.9	10.4	10.9	10.1	10.0	9.8	9.6	8.1	10.9	2.0	6.4
7	6.9	7.6	11.6	12.5	12.9	12.4	10.4	12.1	15.3	14.8	15.6	15.7	14.7	15.3	14.7	14.4	13.4	14.1	14.0	13.2	11.2	9.6	10.2	11.9	15.7	6.9	12.7
8	13.6	14.8	16.0	16.1	15.4	16.3	15.6	16.5	16.4	17.3	17.6	18.1	18.2	18.9	18.5	17.7	18.1	19.0	19.6	20.5	21.1	22.7	24.8	24.6	24.8	13.6	18.2
9	23.0	20.9	21.9	21.6	19.1	18.7	20.1	19.0	19.8	20.8	20.0	21.8	22.6	23.5	23.7	21.4	20.8	21.7	15.4	19.9	16.9	19.2	19.4	19.5	23.7	15.4	20.5
10	15.4	16.0	16.5	16.8	17.8	17.8	16.5	18.6	19.4	18.7	17.2	17.8	19.0	20.3	20.4	20.1	18.3	20.0	19.2	17.5	17.0	18.4	18.1	18.0	20.4	15.4	18.1
11	18.4	19.9	19.8	19.3	20.2	20.6	19.6	18.6	18.7	18.6	19.0	20.0	18.7	17.8	18.2	17.9	17.5	16.1	16.7	15.8	15.0	14.8	12.3	14.7	20.6	12.3	17.8
12	15.0	14.1	14.1	13.0	11.9	12.0	12.0	11.5	11.3	11.0	10.7	8.4	11.1	11.5	12.0	11.2	11.0	8.4	6.5	7.0	6.4	5.7	6.2	5.8	15.0	5.7	10.3
13	5.7	5.0	5.2	5.3	5.2	5.2	3.9	4.8	6.9	7.9	4.7	4.6	4.9	5.2	5.5	4.7	4.8	4.8	4.7	3.3	1.4	2.0	1.0	1.9	7.9	1.0	4.5
14	1.7	0.9	1.6	0.9	2.0	2.7	2.0	1.5	2.5	1.9	3.0	3.0	3.4	3.1	1.8	1.8	2.5	1.7	2.8	1.1	1.0	2.1	3.1	3.0	3.4	0.9	2.1
15	3.4	4.3	4.6	4.8	4.7	5.3	5.2	4.7	5.3	5.8	5.0	5.6	3.8	4.9	5.0	5.3	2.6	3.7	4.5	5.3	5.0	3.8	3.5	3.3	5.8	2.6	4.5
16	3.5	4.1	4.5	3.9	4.9	4.3	4.4	4.3	3.9	4.6	5.5	7.0	8.3	8.9	8.9	10.0	10.3	10.7	10.1	9.5	8.7	8.5	6.4	5.6	10.7	3.5	6.7
17	5.3	4.8	4.4	3.2	2.1	2.6	2.9	5.0	5.2	5.4	5.1	5.6	5.8	7.7	7.0	7.0	7.9	7.9	7.7	6.7	6.5	6.6	6.4	6.3	7.9	2.1	5.6
18	4.5	2.2	1.2	1.4	2.0	2.0	1.6	2.1	3.0	4.6	6.1	8.0	10.0	9.4	11.0	14.0	16.3	14.8	14.9	13.7	13.1	10.9	4.6	2.0	16.3	1.2	7.2
19	2.3	4.3	4.7	4.3	3.9	2.6	1.9	1.6	1.4	1.7	4.3	3.0	2.5	3.7	3.8	3.7	3.0	5.0	4.0	5.8	8.7	5.6	3.4	4.2	8.7	1.4	3.7
20	3.9	3.8	4.3	3.4	3.2	2.0	2.0	1.4	1.4	1.4	1.9	1.9	3.6	4.2	8.9	11.7	8.9	9.2	8.4	8.5	8.0	8.0	6.7	5.2	11.7	1.4	5.1
21	4.4	4.9	4.0	2.0	2.1	1.1	1.0	1.6	2.7	4.5	4.9	4.2	3.0	1.8	2.9	4.4	6.3	4.4	2.6	4.7	3.5	3.9	6.5	6.5	6.5	1.0	3.7
22	8.3	10.2	6.5	6.2	5.9	6.6	6.5	5.7	6.3	3.5	2.9	6.0	7.0	8.1	9.0	9.1	7.8	8.0	8.5	7.8	7.6	6.9	6.1	5.9	10.2	2.9	6.9
23	5.3	5.5	7.2	7.1	6.1	6.4	7.0	6.3	6.1	6.6	7.2	6.4	7.1	6.4	6.0	6.2	5.6	4.5	5.4	6.2	6.7	6.6	6.5	4.6	7.2	4.5	6.2
24	3.4	3.9	3.4	3.9	3.2	1.7	1.1	2.3	3.4	3.6	3.6	2.9	2.9	2.0	2.7	2.4	5.2	4.1	2.3	1.7	2.5	2.2	1.8	2.5	5.2	1.1	2.9
25	1.7	2.1	3.4	4.1	3.7	2.3	1.7	2.2	1.8	2.8	3.6	3.3	3.6	6.0	6.1	6.5	7.1	7.3	6.2	5.4	4.6	4.4	5.0	5.5	7.3	1.7	4.2
26	5.0	5.1	4.0	4.0	2.5	2.4	1.9	1.2	2.3	2.8	2.6	3.6	3.6	3.2	2.9	4.1	3.2	2.2	5.3	7.1	6.6	6.9	6.1	5.2	7.1	1.2	3.9
27	4.6	1.7	2.9	1.1	2.8	2.4	3.2	3.8	3.6	2.5	1.3	1.6	1.5	2.6	4.4	4.7	5.7	6.0	5.8	6.6	8.1	6.8	5.2	4.7	8.1	1.1	3.9
28	4.6	3.1	5.5	3.7	0.7	1.0	2.2	4.3	6.3	5.4	5.3	6.8	5.8	6.2	4.7	4.6	4.4	3.5	2.6	4.9	4.8	2.3	3.5	3.6	6.8	0.7	4.2
29	3.8	4.7	5.8	3.5	4.8	3.7	3.5	4.2	4.2	4.4	4.0	3.5	3.5	5.1	7.2	10.9	12.1	12.5	11.6	11.8	11.4	10.0	8.1	10.8	12.5	3.5	6.9
30	10.7	8.6	8.6	9.4	9.0	7.5	8.8	8.5	6.1	5.9	5.7	6.5	6.0	5.8	5.0	3.1	3.7	3.6	1.7	1.5	1.7	2.2	1.9	2.3	10.7	1.5	5.6
Max.	**23.0**	**20.9**	**21.9**	**21.6**	**20.2**	**20.6**	**20.1**	**19.0**	**19.8**	**20.8**	**20.0**	**21.8**	**22.6**	**23.5**	**23.7**	**21.4**	**20.8**	**21.7**	**19.6**	**20.5**	**21.1**	**22.7**	**24.8**	**24.6**	**24.8**		
Min.	**1.6**	**0.9**	**1.2**	**0.9**	**0.7**	**1.0**	**1.0**	**1.2**	**1.4**	**1.4**	**1.3**	**1.6**	**1.5**	**1.8**	**1.8**	**1.8**	**2.5**	**1.7**	**1.7**	**1.1**	**1.0**	**2.0**	**1.0**	**1.6**		**0.7**	
Avg.	**7.0**	**6.9**	**7.2**	**6.8**	**6.7**	**6.5**	**6.4**	**6.8**	**7.3**	**7.4**	**7.4**	**7.7**	**7.9**	**8.2**	**8.6**	**8.9**	**8.8**	**8.8**	**8.5**	**8.6**	**8.2**	**7.9**	**7.4**	**7.3**			**7.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	1.2	2.1	3.3	2.0	1.5	1.0	1.3	1.2	0.9	1.1	1.3	1.5	2.9	2.7	2.9	3.9	4.2	5.3	5.6	5.6	5.6	5.4	3.5	5.6	0.9	2.9
2	1.7	2.5	3.7	3.1	2.8	3.7	3.9	3.9	4.9	5.4	5.5	5.4	5.6	6.6	6.4	6.2	8.2	9.6	9.7	8.9	8.1	7.8	9.0	9.2	9.7	1.7	5.9
3	10.7	10.2	8.4	6.5	6.0	5.7	5.3	4.3	6.3	6.5	4.6	4.2	3.3	3.1	3.2	2.7	3.3	5.3	5.2	4.7	4.6	3.5	1.4	1.7	10.7	1.4	5.0
4	1.9	1.2	1.0	1.5	1.9	1.6	0.8	0.8	1.5	1.6	1.9	2.4	3.0	3.4	3.0	4.3	5.5	6.1	6.1	5.6	6.2	4.5	4.0	1.9	6.2	0.8	3.0
5	2.4	1.4	1.5	2.1	2.3	2.4	2.6	2.0	1.9	2.4	2.1	2.1	1.4	2.2	3.2	5.5	4.5	3.9	1.8	1.5	2.0	1.9	1.4	1.7	5.5	1.4	2.3
6	0.8	2.3	2.1	1.6	1.7	0.8	1.6	1.2	2.5	2.7	2.5	1.7	2.7	5.5	6.5	6.6	5.0	4.7	2.0	2.2	3.0	2.5	4.0	3.8	6.6	0.8	2.9
7	3.9	3.9	4.2	5.0	5.9	4.1	4.1	5.5	6.6	7.6	7.6	6.8	6.9	7.6	7.5	8.0	8.5	7.0	4.5	4.6	6.3	6.1	4.8	6.7	8.5	3.9	6.0
8	7.2	6.4	3.5	6.4	4.1	4.2	5.3	5.0	5.6	4.5	2.2	1.8	2.3	2.3	1.4	1.1	2.0	3.0	3.1	3.3	2.4	3.8	4.0	2.0	7.2	1.1	3.6
9	1.3	2.2	3.1	3.5	4.0	3.8	3.9	3.4	2.5	1.5	2.4	3.7	5.3	5.5	7.3	8.0	8.1	8.6	9.5	9.8	9.5	8.6	11.1	12.3	12.3	1.3	5.8
10	13.5	14.6	15.4	13.1									13.0	13.6	13.1	12.1	13.9	14.9	16.9	16.9	15.5	12.7			16.9	12.1	14.2
11		15.7	15.5	14.3	13.3	12.5	8.8	8.2	8.8		6.3	5.7	7.4	7.2	5.5	4.5	5.4	4.5							15.7	4.5	9.0
12	5.5	6.2	5.4	4.1	4.2	4.2	2.3	2.5	1.3	2.8	2.1	1.0	1.2	1.8	2.0	3.0	3.4	4.1	3.2	3.6	3.9	4.4	4.6	4.1	6.2	1.0	3.4
13	3.3	4.6	8.1	9.5	6.7	5.9	5.1	3.7	4.8	4.9	5.0	4.7	4.5	4.1	3.1	1.7	4.3	6.3	6.0	5.1	6.1	6.3	7.3	6.7	9.5	1.7	5.3
14	6.8	6.5	8.0	9.1	9.8	9.5	8.7	8.5	11.9	11.6	9.0	9.4	8.7	7.7	8.2	8.4	6.9	6.5	6.1	6.9	7.1	6.5	6.2	5.8	11.9	5.8	8.1
15	6.6	7.5	6.5	6.8	6.6	7.3	7.8	6.5	6.6	6.0	5.1	4.9	5.5	4.5	3.9	3.4	5.6	4.7	3.9	5.0	5.1	5.4	5.8	5.1	7.8	3.4	5.7
16	4.4	5.3	6.0	5.3	4.9	5.5	3.8	3.1	4.6	6.0	5.7	6.1	6.6	7.8	9.8	11.0	11.0	12.1	13.8	13.1	13.3	13.3	14.0	14.7	14.7	3.1	8.4
17	15.2	14.2	12.2	11.0	8.4	8.6	6.9	7.4	7.5	8.8	8.7	10.5	11.0	11.9	12.9	12.7	13.6	13.6	14.9	16.2	16.3	15.2	15.6	14.6	16.3	6.9	12.0
18	14.9	15.0	14.2	13.6	14.2	11.3	12.4	12.8	17.7	18.0	17.3	17.4	13.8	12.1	12.8	12.6	14.5	14.4	15.9	16.6	16.0	15.3	16.6	14.0	18.0	11.3	14.7
19	14.9	14.4	14.1	14.2	13.6	14.0	12.8	11.9	10.9	12.7	10.6	10.4	8.0	6.9	3.9	3.5	3.8	3.0	3.8	5.5	6.9	6.4	5.5	5.4	14.9	3.0	9.0
20	5.2	4.9	5.0	5.3	4.5	3.5	2.5	1.5	1.4	2.6	3.9	3.7	2.8	3.7	4.9	4.7	4.7	5.3	5.6	5.0	7.1	7.7	7.2	6.2	7.7	1.4	4.5
21	4.9	5.8	5.2	5.0	5.7	5.6	5.1	6.0	6.3	4.2	2.8	2.4	2.6	0.6	0.7	0.7	2.0	1.8	2.5	2.8	2.6	2.8	2.5	6.3	6.3	0.6	3.6
22	7.6	7.2	7.0	7.2	6.8	4.6	3.0	3.2	3.1	2.8	1.8	0.9	0.9	2.5	2.0	1.9	1.7	3.2	4.1	5.0	4.0	3.7	5.8	6.0	7.6	0.9	4.0
23	6.3	6.0	5.0	5.1	6.7	8.3	7.4	6.4	6.8	9.2	9.7	7.7	7.8	9.4	9.7	9.9	6.7	6.2	3.6	2.7	2.0	1.4	5.1	3.6	9.9	1.4	6.3
24	3.3	3.4	3.8	3.5	2.1	2.4	1.8	2.0	3.1	1.4	3.5	3.5	6.1	6.0	5.5	5.3	5.0	4.7	3.0	1.7	2.6	3.7	5.3	6.0	6.1	1.4	3.7
25	5.8	6.2	5.6	5.7	5.5	8.9	9.4	8.5	7.2	9.0	10.5	10.2	9.0	4.4	3.8	2.7	3.9	5.6	6.4	7.1	7.4	7.1	6.3	6.4	10.5	2.7	6.8
26	6.4	5.7	5.1	4.6	3.1	2.8	3.1	3.1	3.2	2.2	2.5	2.3	2.6	3.0	1.8	1.1	1.4	1.3	4.6	5.0	5.0	5.4	5.8	6.2	6.4	1.1	3.6
27	7.4	8.2	9.0	8.7	7.1	6.0	5.9	6.1	6.7	6.9	6.4	5.3	4.3	3.5	1.6	1.4	1.1	1.1	2.0	1.2	2.4	2.6	2.3	2.2	9.0	1.1	4.6
28	2.5	2.9	2.9	2.4	2.1	2.0	1.7	1.3	0.7	1.5	1.4	1.6	1.2	1.1	0.7	1.6	2.3	4.4	4.4	4.8	5.4	6.8	8.7	9.3	9.3	0.7	3.1
29	7.4	7.1	8.8	10.7	9.6	11.5	8.2	9.2	11.4	10.3	10.7	12.6	14.5	13.8	13.2	12.2	9.8	8.5	9.6	7.1	6.8	8.9	9.7	8.4	14.5	6.8	10.0
30	10.0	11.4	11.5	12.0	10.5	10.8	9.2	7.9	6.8	6.8	6.8	6.3	7.5	5.6	3.6	1.6	1.3	1.5	2.4	3.8	5.0	4.9	6.2	7.7	12.0	1.3	6.7
31	10.0	11.0	13.1	10.7	13.3	12.6	12.2	7.9	6.9	7.5	6.0	6.7	6.0	4.7	5.4	4.1	4.1	5.2	6.4	5.9	5.5	5.7	6.4	7.7	13.3	4.1	7.7
Max.	**15.2**	**15.7**	**15.5**	**14.3**	**14.2**	**14.0**	**12.8**	**12.8**	**17.7**	**18.0**	**17.3**	**17.4**	**14.5**	**13.8**	**13.2**	**12.7**	**14.5**	**14.9**	**16.9**	**16.9**	**16.3**	**15.3**	**16.6**	**14.7**	**18.0**		
Min.	**0.8**	**1.2**	**1.0**	**1.5**	**1.7**	**0.8**	**0.8**	**0.8**	**0.7**	**0.9**	**1.1**	**0.9**	**0.9**	**0.6**	**0.7**	**0.7**	**1.1**	**1.1**	**1.8**	**1.2**	**2.0**	**1.4**	**1.4**	**1.7**		**0.6**	
Avg.	**6.5**	**6.9**	**7.0**	**6.9**	**6.3**	**6.2**	**5.5**	**5.2**	**5.7**	**5.8**	**5.5**	**5.4**	**5.7**	**5.6**	**5.5**	**5.3**	**5.7**	**6.0**	**6.2**	**6.2**	**6.5**	**6.4**	**6.6**	**6.5**			**6.0**

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	210.8	259.9	300.3	310.7	307.3	327.9	356.7	96.1	97.0	103.5	108.6	147.5	166.5	168.2	179.5	191.7	168.1	163.4	149.7	155.1	149.3	144.8	130.9	141.4
2	125.7	123.2	129.3	123.8	128.4	122.8	112.5	106.6	108.3	107.1	106.4	102.0	134.0	127.7	133.4	132.7	142.6	147.8	83.0	43.7	42.4	42.3	70.1	69.7
3	55.2	17.1	313.3	4.8	308.1	289.5	292.5	297.9	304.2	320.4	350.6	358.2	22.4	237.8	147.2	171.8	174.4	201.2	181.7	207.8	190.3	210.2	208.6	152.1
4	140.7	149.8	149.4	149.5	167.3	201.2	187.8	144.8	120.5	135.6	217.7	223.7	215.3	112.3	124.6	150.5	209.6	314.7	171.1	145.7	196.8	324.2	169.9	122.8
5	150.4	230.3	149.2	177.9	249.9	144.0	156.2	234.3	247.5	117.3	142.7	169.4	216.7	214.2	209.3	190.1	218.5	218.3	206.4	219.6	223.1	227.3	242.4	219.8
6	138.4	234.2	246.7	346.6	104.0	228.2	317.9	241.7	299.1	13.4	321.0	33.5	257.1	272.6	222.9	246.5	234.6	223.7	236.2	276.5	286.2	281.9	291.6	261.0
7	242.3	235.9	181.6	179.2	161.8	190.2	91.8	277.4	275.9	280.1	252.3	298.7	274.7	280.9	268.5	240.3	283.6	278.3	294.2	288.0	294.5	302.7	302.9	304.1
8	294.6	305.3	307.9	306.4	310.4	306.7	312.5	315.4	325.5	339.6	336.5	295.2	62.1	129.8	138.9	130.4	143.1	167.3	174.0	170.6	195.2	141.4	154.9	163.1
9	171.1	175.2	177.1	178.2	168.4	158.9	160.1	150.7	143.8	122.3	136.0	147.3	150.5	151.8	155.9	150.5	154.0	158.1	161.4	162.5	164.8	160.5	159.2	147.5
10	143.3	214.9	321.2	317.2	108.6	130.8	117.6	101.6	111.6	111.5	140.2	147.8	149.7	155.6	152.6	161.8	167.0	168.9	197.1	231.9	241.4	273.8	315.2	310.8
11	322.4	328.6	329.0	320.2	316.9	309.2	306.4	305.4	312.6	328.4	335.0	347.0	356.2	358.3	355.2	349.8	354.1	349.8	335.8	330.3	297.9	297.2	302.6	306.8
12	311.0	103.4	142.6	138.0	105.7	115.8	170.1	141.2	135.6	140.5	144.2	140.3	125.2	132.2	153.1	158.1	168.6	159.7	155.8	169.7	169.0	158.4	163.1	165.3
13	167.9	166.9	120.0	104.1	122.4	137.6	110.9	124.4	119.6	106.4	115.2	130.1	122.4	133.0	153.4	166.5	164.0	187.4	159.1	165.8	169.1	179.3	147.7	154.8
14	152.6	153.4	141.5	153.1	153.2	165.6	174.0	116.6	126.0	128.2	120.9	124.7	128.0	142.0	136.9	150.2	179.3	183.3	209.4	146.5	141.3	134.0	157.5	140.8
15	154.8	158.7	142.3	160.5	146.7	156.3	152.6	157.9	161.6	161.0	146.8	137.6	143.5	146.9	143.0	142.1	155.4	138.6	136.4	132.7	137.2	129.4	136.6	157.6
16	135.9	140.7	150.7	145.2	129.8	131.2	126.0	118.2	127.7	125.6	123.7	126.2	125.7	122.2	119.3	122.7	122.4	119.4	121.6	119.8	121.2	117.0	117.1	115.3
17	117.7	116.2	114.7	120.3	110.2	95.6	93.4	82.1	54.8	54.3	56.3	55.1	61.8	54.9	77.3	78.4	69.4	81.8	75.4	78.7	93.4	76.5	113.1	102.0
18	113.0	113.9	116.8	126.2	143.9	92.4	130.5	173.8	277.7	325.4	304.9	307.5	314.2	315.2	315.5	316.2	322.2	311.5	294.5	352.1	306.7	247.3	140.7	319.9
19	147.8	284.0	115.8	111.2	211.9	275.4	311.6	317.9	304.7	309.2	301.3	317.3	324.3	326.4	328.0	331.7	328.7	331.8	331.3	327.6	319.3	318.7	318.7	318.8
20	315.7	319.0	320.3	305.3	312.8	320.5	328.9	319.2	321.6	328.0	325.0	325.8	327.2	316.5	293.3	282.1	270.8	272.0	238.6	219.0	239.5	236.3	235.6	233.1
21	233.1	226.3	235.0	250.0	266.2	286.3	290.1	301.8	308.2	318.1	318.3	308.6	306.7	305.4	319.9	325.7	319.3	329.6	313.4	327.7	323.4	322.8	324.1	314.3
22	316.5	52.5	115.4	116.9	113.1	142.4	129.6	122.4	119.1	149.0	135.2	127.2	121.6	123.3	124.3	122.0	121.5	122.0	123.0	122.2	118.3	118.7	117.7	125.3
23	126.5	123.3	131.7	129.2	152.0	203.9	221.7	211.6	199.4	186.4	183.0	184.6	181.5	185.7	183.3	187.8	186.6	181.7	168.3	177.1	172.3	162.9	159.0	159.0
24	154.2	139.5	129.8	134.2	115.0	109.1	95.1	119.7	129.8	259.8	307.4	313.0	312.8	310.3	314.9	314.0	310.8	314.4	310.6	316.6	303.5	304.1	302.5	307.1
25	306.8	309.9	307.1	312.2	292.0	303.4	307.6	316.1	323.5	335.4	1.9	348.8	342.5	348.6	2.5	345.8	329.7	343.5	339.4	331.4	328.6	319.2	318.6	317.1
26	313.5	311.6	310.9	321.7	332.2	314.0	314.6	330.5	343.1	341.3	331.2	336.3	336.2	339.8	333.3	329.4	329.5	328.2	320.1	320.8	318.8	327.1	316.3	323.1
27	318.1	315.2	297.8	332.5	333.0	318.7	306.4	321.8	332.4	325.9	323.9	328.2	325.7	314.4	302.5	290.5	288.5	289.3	287.0	309.2	179.2	165.6	170.1	160.2
28	162.8	187.1	150.9	138.2	144.9	152.7	156.7	159.5	159.2	160.0	158.5	174.4	150.9	175.6	203.5	220.1	216.9	224.3	214.8	222.5	217.0	219.7	225.0	223.3
29	218.7	228.4	238.8	242.5	249.9	250.6	253.1	260.8	265.1	268.0	266.8	264.0	261.2	267.0	266.9	273.2	284.2	276.5	262.4	258.7	268.7	268.9	269.9	274.3
30	289.1	311.2	315.1	308.5	319.7	321.5	312.2	308.6	317.2	326.5	324.1	330.9	334.0	330.0	332.0	329.2	334.0	335.2	326.4	314.8	306.8	306.6	304.6	314.8
31	313.4	316.2	323.6	308.0	311.6	310.5	316.6	322.1	329.9	326.3	331.8	335.1	333.5	332.1	321.5	328.3	322.3	327.4	334.4	335.1	331.7	324.5	325.6	333.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	332.4	322.6	318.2	317.2	318.5	323.2	323.7	322.8	319.8	324.2	331.9	332.6	331.7	324.2	328.0	331.0	334.0	330.4	335.1	333.1	319.9	313.2	313.6	324.6
2	316.8	301.5	294.3	308.3	303.9	119.6	122.5	114.7	120.5	125.8	142.7	134.4	130.5	133.6	139.8	143.3	137.7	131.3	126.9	124.0	127.5	130.5	130.2	130.8
3	129.7	129.1	130.3	134.5	136.9	134.3	132.6	132.9	129.3	124.8	119.9	120.3	115.9	111.3	112.8	114.7	117.0	118.9	117.2	113.0	117.5	121.2	119.7	125.2
4	122.7	113.8	144.9	203.6	131.4	106.3	136.3	131.4	67.7	96.0	106.8	105.2	102.9	102.4	106.2	116.2	145.1	157.0	161.8	157.5	147.9	149.9	147.8	142.6
5	134.8	140.9	144.8	141.9	144.0	146.9	138.4	135.4	129.7	126.1	120.7	120.8	124.9	128.8	132.3	136.1	135.1	135.4	134.2	126.7	126.0	139.2	130.6	143.8
6	146.5	196.8	230.9	225.1	223.8	228.0	219.1	169.4	195.2	224.0	231.1	220.1	208.6	211.1	208.9	202.3	201.4	198.0	197.9	214.9	227.4	235.0	244.2	238.7
7	237.6	237.0	238.5	259.2	267.8	222.7	222.4	342.0	319.4	304.7	299.9	301.0	307.9	294.1	293.5	294.5	301.4	305.3	311.3	308.4	295.1	274.1	238.5	234.4
8	268.9	325.3	324.2	308.4	308.6	307.1	302.6	316.2	353.2	23.5	356.2	57.5	101.0	105.8	121.7	125.4	130.6	144.9	146.8	117.9	122.4	125.6	125.2	127.4
9	127.7	127.6	132.7	129.7	133.4	128.2	118.8	115.2	119.1	139.2	139.4	149.9	148.0	150.6	149.3	162.2	202.2	224.9	230.5	236.6	234.2	232.1	227.7	222.8
10	218.2	223.0	231.8	227.3	222.8	231.7	225.8	233.1	170.6	228.4	226.7	228.5	221.9	192.2	208.0	215.0	175.5	124.1	128.3	95.2	98.7	153.0	118.2	106.3
11	118.8	139.8	125.2	138.2	138.5	132.3	133.1	133.2	131.6	127.1	126.2	122.5	125.8	126.3	128.2	132.4	126.8	126.5	133.1	134.8	129.4	126.1	142.9	198.8
12	197.6	241.8	257.5	258.5	246.9	214.6	216.5	203.3	208.7	201.4	196.8	203.5	219.3	230.0	236.8	239.4	241.6	241.8	244.0	252.5	251.5	253.1	255.9	257.0
13	250.6	252.8	260.6	267.1	264.7	241.7	229.4	251.0	247.8	227.8	218.5	223.7	223.3	230.3	217.1	218.1	221.3	205.2	182.8	157.3	185.1	190.6	217.3	170.2
14	121.8	134.1	130.7	153.3	144.5	125.8	121.8	106.8	118.9	108.6	110.0	122.8	120.4	126.9	129.8	138.0	139.2	137.4	129.6	128.6	125.9	119.0	120.4	123.2
15	120.3	118.0	119.7	120.1	120.9	122.1	121.6	126.2	125.2	128.4	125.6	124.0	121.1	117.9	116.2	118.5	122.0	139.0	183.4	146.8	161.1	149.1	156.7	155.0
16	261.0	260.9	243.2	265.0	258.9	30.4	284.3	266.3	108.3	130.0	268.1	262.8	268.4	254.6	258.5	264.8	227.7	238.7	212.8	216.4	236.2	229.7	225.8	218.0
17	223.9	197.4	159.9	128.7	276.5	2.0	22.5	307.6	303.7	309.3	299.3	319.7	103.9	222.0	302.9	316.6	261.9	294.4	258.5	281.5	301.3	299.6	287.2	300.9
18	298.3	309.4	300.5	296.4	294.8	297.8	308.2	315.7	318.3	306.5	312.6	311.5	307.6	310.8	303.9	300.7	294.7	299.3	300.0	299.8	291.3	299.7	300.4	300.3
19	300.9	303.3	299.0	309.1	314.7	303.1	305.5	300.3	316.9	313.7	344.2	333.1	338.0	337.6	349.9	334.9	334.5	340.9	335.5	330.6	320.8	312.2	308.7	303.1
20	302.7	301.5	305.6	314.3	308.5	311.1	302.8	303.7	300.4	302.8	309.1	324.5	313.3	323.3	331.2	309.0	295.2	309.6	318.9	293.7	271.2	272.6	262.9	239.1
21	227.8	211.2	197.5	223.5	210.7	163.6	124.6	118.8	149.6	155.1	146.4	113.6	130.2	138.1	151.2	156.9	146.5	149.1	148.2	146.3	150.6	144.4	130.1	148.0
22	155.2	151.1	143.0	146.2	160.7	143.6	136.8	134.1	131.6	121.7	122.7	122.1	123.6	125.7	127.0	144.3	157.1	178.3	216.5	209.9	206.9	216.2	204.7	198.1
23	203.9	207.9	183.6	182.2	168.2	165.5	161.9	163.1	149.4	127.2	120.1	120.3	128.0	126.2	129.3	126.0	127.4	137.6	184.7	239.0	252.8	247.7	247.5	251.5
24	241.9	234.6	232.2	231.7	231.8	229.2	233.4	236.3	218.6	223.7	232.6	240.1	238.9	239.6	231.4	223.4	228.2	227.2	219.6	224.4	226.8	229.4	231.1	228.1
25	227.5	230.9	227.9	227.9	231.6	232.1	224.8	226.9	222.1	223.0	226.7	223.5	221.4	217.6	212.1	208.8	206.7	211.0	205.7	209.1	215.5	224.8	220.0	224.9
26	208.9	131.9	132.1	108.5	106.8	108.5	104.0	112.7	112.3	116.1	109.3	112.9	115.6	118.2	114.6	113.2	111.6	113.9	111.2	109.0	108.7	110.6	109.8	113.0
27	112.6	111.1	113.1	116.1	116.3	118.2	113.2	78.5	54.9	82.6	94.0	52.4	49.3	49.9	40.4	35.8	32.5	62.1	70.2	72.7	81.7	67.9	357.4	310.1
28	318.9	325.2	320.4	302.0	308.9	303.6	306.6	308.9	262.0	268.7	293.0	324.8	311.8	325.8	333.3	321.6	326.7	339.3	276.6	270.2	137.6	222.6	238.6	158.6
29	171.0	213.6	210.7	226.8	228.4	213.6	198.4	213.9	209.7	211.0	221.1	262.8	273.2	282.7	292.3	291.6	299.5	297.2	300.8	283.0	273.0	168.3	293.3	263.3
30	258.0	146.4	171.8	219.0	213.8	142.3	183.0	184.1	140.1	119.1	324.2	329.4	331.9	318.2	319.3	324.2	318.9	321.1	329.2	333.0	338.5	325.6	322.8	322.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	322.4	322.2	322.1	320.5	321.5	322.3	321.5	326.0	326.6	326.5	326.2	326.6	323.0	326.6	325.1	329.5	324.0	328.1	323.0	307.5	312.0	315.7	309.8	312.8
2	310.0	309.2	303.7	299.6	299.2	319.8	309.3	315.7	317.5	322.6	314.8	318.7	315.0	314.6	321.4	324.6	335.1	327.3	294.8	303.3	326.9	340.5	324.3	317.6
3	348.1	86.7	121.5	109.7	330.1	179.9	107.7	319.8	306.5	307.2	310.5	327.9	318.7	343.6	324.9	143.8	171.1	150.4	157.5	221.3	316.7	208.3	108.4	50.5
4	44.0	23.6	93.1	61.8	48.1	61.2	64.3	90.1	70.9	98.3	84.9	88.0	103.2	107.7	117.1	95.8	66.5	80.5	85.7	81.3	49.7	52.8	56.4	59.4
5	54.7	54.5	63.5	50.8	41.7	24.0	32.3	17.9	37.6	31.1	8.4	353.2	347.9	3.6	358.1	358.1	15.3	33.0	351.5	356.2	319.9	240.6	141.5	143.8
6	148.8	201.3	232.5	333.3	111.1	132.2	211.2	174.5	197.1	209.5	212.1	228.4	195.6	216.8	216.9	221.0	204.6	204.3	180.6	141.9	137.6	137.4	126.9	121.9
7	109.8	116.7	117.0	125.4	122.2	121.6	123.1	126.6	119.3	120.5	122.3	125.5	123.7	122.7	137.5	178.3	193.4	171.6	132.5	145.3	172.1	149.5	114.5	115.3
8	120.5	111.3	114.6	89.6	97.4	96.2	91.7	93.2	98.7	113.4	98.1	117.9	349.3	328.9	336.1	331.1	325.9	307.2	301.4	292.3	151.6	128.5	118.3	103.2
9	104.1	104.8	101.3	2.3	342.5	324.9	323.0	323.6	315.0	322.1	313.6	314.8	321.8	323.4	315.2	323.7	320.2	322.0	325.5	331.5	335.4	328.8	324.7	326.2
10	329.9	318.8	326.5	323.5	302.7	303.2	274.8	261.2	22.9	57.7	0.7	335.5	195.9	195.4	157.4	103.1	102.1	110.5	147.6	126.1	115.5	123.6	128.2	119.2
11	120.0	129.9	122.5	150.3	148.9	126.6	129.3	133.7	158.0	170.3	178.1	215.5	212.1	209.8	248.1	290.5	307.3	305.8	300.9	295.0	303.5	305.4	306.4	310.4
12	310.1	309.2	310.6	314.4	317.0	317.0	313.9	313.1	316.0	315.7	316.7	317.7	318.0	318.0	307.6	307.3	314.6	316.4	335.5	309.7	301.8	314.0	330.7	299.8
13	314.3	303.6	315.8	316.9	305.3	322.0	308.4	322.9	314.9	313.4	314.1	321.5	318.1	326.5	301.2	289.1	233.9	186.4	181.1	132.5	154.9	145.1	146.0	150.6
14	149.8	163.6	164.0	152.9	137.9	157.4	135.9	119.3	174.7	194.5	143.6	123.4	85.6	82.5	100.7	105.0	111.1	115.4	116.7	113.7	118.0	121.4	109.4	111.5
15	111.1	111.8	107.5	158.6	117.2	91.6	52.6	45.0	66.2	54.5	60.1	337.4	318.0	344.0	348.1	326.4	335.2	324.9	323.1	310.5	319.4	314.3	304.9	309.9
16	315.4	311.3	310.7	319.0	307.4	299.7	301.0	297.5	312.7	312.2	317.8	149.0	193.1	178.5	202.7	186.8	208.3	175.1	204.4	145.2	146.9	161.3	166.3	161.8
17	165.8	146.5	141.7	137.9	120.0	116.2	120.1	120.9	127.7	131.1	154.3	194.5	195.9	205.3	211.5	216.6	216.6	219.4	214.6	214.4	219.1	218.9	219.9	233.8
18	242.6	250.4	262.0	265.1	261.7	262.5	262.7	257.0	254.9	263.8	267.9	254.2	242.4	241.9	252.2	239.0	213.0	206.6	207.5	221.4	195.3	187.0	174.7	157.1
19	142.4	130.0	139.6	135.9	139.6	151.7	153.6	138.1	129.8	129.1	125.6	129.1	123.8	120.4	116.9	114.9	112.8	116.9	115.7	117.0	116.2	116.0	113.9	110.9
20	110.6	111.3	112.5	113.8	114.9	112.6	111.0	112.1	114.8	117.5	118.6	114.0	109.9	65.6	52.7	56.1	18.2	33.5	24.4	25.7	33.5	33.3	1.1	357.0
21	10.9	40.0	39.5	94.3	20.8	11.7	323.4	326.1	317.7	314.8	304.2	299.6	301.8	302.3	299.2	290.7	309.0	295.9	295.6	297.9	300.0	296.6	306.1	319.0
22	311.2	310.5	314.4	312.7	313.1	319.3	312.7	311.3	310.3	313.3	313.4	308.9	310.7	309.1	307.5	304.4	307.1	313.8	306.3	301.2	303.8	299.9	299.8	311.6
23	310.7	315.6	311.9	305.2	305.4	312.4	318.7	316.1	310.4	307.2	320.0	319.5	326.9	324.8	327.2	327.6	328.4	327.0	327.1	326.9	326.4	326.6	327.0	325.3
24	315.1	304.6	309.5	315.4	306.6	308.6	307.1	309.6	322.8	313.1	315.1	308.6	322.7	313.0	310.6	317.9	323.2	328.6	318.9	313.4	321.4	324.9	324.9	329.4
25	328.5	323.3	326.5	324.4	317.5	319.9	324.7	327.6	315.6	311.9	312.6	321.6	324.5	338.2	334.6	334.3	331.5	329.7	328.9	329.1	333.0	334.6	335.9	329.6
26	333.2	331.5	333.9	337.5	336.4	334.0	333.0	330.2	325.1	321.3	324.4	331.1	338.5	343.3	340.5	335.0	332.9	334.6	327.7	325.5	328.1	309.1	298.7	301.6
27	302.5	308.1	306.1	309.7	306.4	228.8	310.2	256.3	294.9	266.9	279.3	275.4	235.1	121.0	121.7	107.1	126.5	83.1	129.7	117.8	120.4	101.1	191.6	213.8
28	311.4	267.6	278.8	337.0	309.1	314.7	312.6	314.3	317.4	317.0	356.5	335.8	346.7	343.1	344.6	345.0	343.0	336.9	347.6	350.8	329.3	331.9	294.1	274.2
29	305.8	280.4	278.6	316.9	342.6	344.1	314.4	318.8	314.8	313.3	313.7	314.5	314.4	312.4	328.9	328.5	330.6	324.1	323.6	318.9	318.3	297.6	296.8	314.8
30	314.2	312.6	312.5	316.7	315.1	310.7	312.0	309.1	310.8	317.1	314.9	320.7	314.2	317.8	312.4	311.5	300.4	310.8	311.0	319.1	314.5	310.7	313.6	317.4
31	317.0	315.2	317.0	309.7	313.0	314.0	312.5	324.2	321.5	303.5	313.2	317.5	320.8	314.4	318.3	329.6	300.0	313.2	314.8	320.2	316.1	319.2	304.7	298.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	307.0	305.6	309.9	315.5	303.0	313.8	313.6	317.5	317.2	314.2	311.3	312.2	318.5	310.4	311.2	304.6	312.2	316.9	322.2	315.1	312.0	317.0	321.7	320.5
2	322.4	322.9	322.2	320.4	311.1	305.2	314.6	318.2	309.1	309.7	304.2	318.4	316.0	310.1	314.6	317.1	329.4	308.7	310.2	312.3	313.5	312.9	310.5	311.6
3	306.9	319.1	326.3	329.1	318.3	322.3	322.8	325.5	325.7	321.5	324.8	332.0	329.8	326.3	325.0	326.2	318.4	322.4	319.1	317.0	317.8	330.8	330.8	327.6
4	327.5	323.6	324.3	327.1	325.8	324.0	317.1	316.3	316.5	322.9	321.5	320.7	322.7	316.9	322.1	321.5	313.7	320.9	330.7	327.3	330.5	324.3	328.0	327.3
5	323.5	322.7	314.7	320.1	323.6	318.1	323.4	322.6	322.0	319.5	319.4	315.7	317.7	317.8	313.0	315.7	316.2	312.6	313.8	310.0	303.8	289.1	165.3	151.0
6	149.2	121.1	115.9	140.7	239.1	263.0	275.8	297.3	306.8	309.2	312.0	307.1	310.3	312.3	316.9	313.8	310.7	314.8	325.3	337.0	338.0	327.4	316.8	311.7
7	314.3	322.2	328.7	318.7	321.2	317.0	318.0	316.8	315.8	313.2	321.2	318.0	335.9	313.1	315.7	305.3	304.7	311.9	311.8	314.7	312.7	311.6	312.1	315.7
8	316.3	316.7	319.5	318.0	311.4	308.3	309.9	309.2	308.5	303.4	300.7	305.5	306.2	312.4	310.8	310.9	312.2	314.1	314.9	314.5	313.9	311.2	309.6	322.7
9	330.5	330.9	337.4	336.7	336.6	330.3	336.1	337.7	339.6	339.4	328.4	331.1	327.3	330.2	325.4	324.6	330.3	326.6	326.8	323.8	324.6	323.8	326.4	325.2
10	318.3	321.5	319.8	318.5	317.9	318.7	318.3	319.2	317.3	314.7	316.4	319.0	320.4	324.5	327.6	322.7	323.5	322.8	322.9	322.3	323.8	322.9	323.3	325.6
11	323.1	330.5	323.4	318.7	320.6	325.5	329.5	327.1	325.9	321.9	318.6	319.8	323.4	322.9	324.2	328.1	335.7	328.2	318.9	316.5	313.0	311.0	302.6	302.6
12	306.7	305.5	305.5	310.7	313.3	309.3	317.0	311.8	310.2	309.8	317.2	316.3	313.3	315.1	315.4	317.9	308.7	312.5	318.5	323.1	328.0	331.9	321.5	324.3
13	325.6	323.8	325.0	316.2	318.5	322.2	324.5	329.7	338.7	328.4	339.9	337.6	309.8	312.0	23.5	55.5	111.3	120.6	120.2	127.2	126.1	117.9	128.7	121.2
14	117.0	121.1	125.2	133.6	128.7	129.0	124.2	117.2	104.7	104.4	115.8	112.3	117.7	53.5	58.8	62.3	87.2	80.1	49.7	48.9	50.2	44.3	32.1	6.7
15	32.2	13.4	356.0	358.6	350.0	343.6	287.8	312.6	317.0	314.4	308.8	317.5	317.7	308.0	312.0	314.9	317.7	321.2	314.8	200.7	140.6	109.5	99.8	106.0
16	99.5	104.3	110.1	112.1	91.0	97.8	102.2	109.1	111.4	115.6	121.0	125.9	127.8	123.9	126.6	128.2	124.6	122.2	127.1	124.1	122.3	123.9	123.6	124.1
17	127.9	137.0	138.5	143.9	156.4	156.9	153.6	168.9	159.6	188.1	222.1	208.7	201.5	208.5	218.9	221.9	212.9	201.3	189.3	190.0	187.9	198.7	164.6	164.4
18	164.0	162.6	160.7	160.5	160.5	41.4	43.8	51.3	38.2	39.6	96.9	91.9	33.6	73.3	71.4	331.1	320.5	311.6	317.7	287.1	313.7	278.5	279.9	280.7
19	274.6	180.0	160.9	177.9	172.6	193.1	209.9	217.8	209.0	205.5	209.6	201.5	225.0	222.7	207.7	190.2	199.0	199.0	187.7	159.4	154.7	118.7	95.1	101.7
20	108.6	108.3	125.4	148.3	136.5	114.8	110.7	121.0	122.3	116.2						306.9	307.7	297.4	308.5	300.8	226.6	230.1	249.5	260.7
21	289.2	313.0	317.5	296.8	298.8	304.0	303.2	304.5	292.9	285.4	290.3	287.0	268.6	281.5	294.1	275.6	264.4	275.0	287.3	285.7	274.9	236.2	190.5	202.3
22	226.8	127.5	120.9	140.7	286.4	277.4	155.2	56.5	308.1	59.1	87.4	108.2	135.4	112.7	312.9	311.5	314.2	305.8	308.2	321.7	306.7	319.9	311.8	306.4
23	305.4	314.3	309.8	308.2	305.9	305.8	312.1	313.5	313.4	312.0	308.8	306.8	308.4	309.3	307.0	307.0	307.4	295.9	291.9	300.7	293.4	295.0	293.7	301.7
24	300.1	303.5	313.2	313.9	311.5	307.8	303.8	313.4	309.1	304.4	302.5	310.0	307.0	302.8	301.6	301.5	300.6	296.9	290.7	299.5	302.0	305.3	313.4	306.3
25	306.5	312.6	307.2	308.7	315.9	303.6	304.7	306.5	303.7	305.6	309.8	310.1	310.4	313.7	310.1	307.8	308.5	307.1	309.1	310.7	309.7	309.9	311.3	324.0
26	322.0	322.3	318.5	325.5	314.6	312.3	316.2	320.0	318.2	311.4	310.0	308.0	304.6	307.1	302.0	305.3	305.1	305.0	305.2	304.5	312.1	304.4	297.0	301.3
27	301.2	303.4	303.3	303.0	302.0	310.6	296.1	308.4	310.1	301.1	305.3	314.1	303.9	314.1	308.1	301.3	124.3	110.0	105.2	125.3	116.2	134.6	150.6	154.3
28	152.6	151.5	150.0	153.7	155.2	153.0	156.2	158.6	163.2	163.5	161.5	159.1	161.5	158.2	158.8	172.0	146.1	152.8	131.9	170.8	137.1	152.3	151.8	132.0
29	155.5	133.1	106.8	80.4	293.1	299.1	297.2	305.2	296.1	301.5	314.9	319.7	312.5	309.1	304.5	310.0	314.2	320.9	322.6	312.8	311.2	318.0	307.3	312.0
30	317.3	303.2	304.2	307.8	301.2	302.9	299.5	293.8	291.3	293.9	298.1	300.6	301.1	308.3	313.1	306.8	296.9	307.7	311.6	308.1	307.0	314.8	319.7	314.9

Total Hours in Month 720 **Hours Data Available** 715 **Data Recovery** 99.3%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	308.5	300.2	321.1	321.2	321.1	318.4	315.9	325.0	316.9	320.0	299.1	301.4	311.9	306.4	311.2	318.0	313.2	310.8	307.1	299.0	299.9	292.9	303.3	289.7
2	311.6	72.3	101.5	100.6	153.2	176.0	197.2	260.2	340.7	312.4	300.5	303.7	311.9	308.0	301.9	301.4	303.2	305.4	302.5	305.4	310.6	310.4	307.8	304.9
3	302.9	306.4	303.0	304.5	307.5	309.3	311.1	306.9	303.5	304.7	301.6	308.4	301.7	304.4	302.8	303.7	308.2	322.4	320.7	316.5	305.2	303.8	296.7	299.3
4	300.8	299.9	311.8	302.7	296.5	51.2	80.1	100.2	105.1	111.5	120.3	129.5	132.2	119.0	119.0	119.7	112.9	114.3	115.3	116.0	117.8	115.0	115.3	114.6
5	112.4	111.4	112.1	112.4	115.0	113.6	113.8	116.3	111.3	110.7	112.5	112.2	111.2	114.4	117.4	118.0	119.7	122.7	120.7	116.6	116.1	116.6	114.3	115.3
6	113.1	111.7	111.7	113.5	117.6	115.2	114.6	119.0	119.8	122.6	129.9	135.9	144.6	146.5	146.7	149.6	144.7	144.8	142.3	139.1	125.0	116.3	109.3	109.1
7	110.3	109.6	108.3	110.4	107.6	109.9	109.1	109.8	111.0	108.2	109.6	108.6	110.2	113.0	114.0	111.1	115.4	114.7	117.3	115.8	113.4	113.2	114.1	115.8
8	121.9	144.0	146.8	167.1	187.7	156.5	147.9	146.1	133.0	120.7	121.8	123.5	130.3	129.0	124.0	123.5	119.1	113.1	116.1	121.6	121.8	121.4	119.5	120.0
9	122.0	123.5	124.5	122.0	124.4	124.7	117.7	116.1	118.3	119.4	118.3	125.1	126.5	132.9	147.9	173.6	187.8	184.1	181.1	187.5	186.5	191.6	176.4	153.4
10	175.3	151.7	177.1	168.2	104.0	118.7	120.2	108.5	108.8	109.4	123.9	137.6	139.0	156.8	154.0	132.8	112.9	108.7	116.6	115.8	111.5	121.4	120.3	115.8
11	125.2	142.7	145.4	156.3	114.6	216.6	227.4	178.1	82.9	232.7	210.6	212.3	219.6	217.9	177.9	223.5	275.9	266.2	282.4	287.4	292.2	293.1	292.8	296.4
12	300.0	301.6	302.8	299.1	304.3	309.7	301.9	304.2	304.6	307.6	319.7	301.5	304.9	298.2	271.8	161.7	295.2	310.6	314.0	309.0	301.1	323.8	313.8	50.6
13	310.4	159.9	119.1	115.0	114.1	108.3	101.5	111.4	105.4	108.9	111.5	108.9	105.0	109.3	103.1	105.0	107.7	109.6	111.0	111.3	112.2	111.2	108.6	107.8
14	108.2	107.7	108.3	105.6	96.7	77.5	95.6	86.6	80.4	91.5	100.8	104.8	100.1	69.7	61.8	54.6	64.6	57.5	79.9	100.9	94.9	101.3	104.7	107.1
15	108.8	111.9	114.9	111.7	111.5	112.3	111.5	83.3	55.3	48.2	19.9	28.4	53.1	63.6	68.1	68.6	84.4	95.2	103.0	107.2	100.0	99.4	106.3	108.0
16	114.0	115.6	108.2	110.1	118.3	123.3	124.6	125.1	137.2	145.7	154.8	165.6	213.0	230.6	270.7	136.9	109.6	128.4	199.9	170.0	203.7	227.8	22.6	321.5
17	310.5	306.0	310.5	310.7	308.7	300.7	305.5	309.3	307.4	302.8	308.3	299.0	284.0	331.4	86.7	105.7	103.1	112.9	110.1	107.2	95.8	102.0	121.7	127.3
18	96.5	86.4	63.5	87.3	59.5	83.7	111.4	106.3	105.7	99.9	108.9	109.5	118.5	122.1	123.7	118.3	119.8	121.1	129.7	132.4	99.9	75.9	94.6	91.3
19	81.4	66.0	83.3	108.9	122.8	122.3	127.4	121.2	120.0	116.2	117.6	118.8	121.8	123.7	126.1	125.6	128.6	140.7	147.3	140.0	127.9	135.2	132.1	131.7
20	134.4	130.0	130.4	87.1	321.3	323.2	313.4	306.6	284.1	304.2	302.9	307.0	310.9	298.6	295.3	196.8	197.7	294.0	315.0	298.9	314.8	309.7	291.1	315.5
21	315.4	331.9	120.1	77.9	131.3	174.1	76.8	104.1	129.3	111.9	112.9	75.4	95.6	113.3	228.4	308.4	298.2	306.6	313.9	299.4	303.3	303.7	316.4	312.2
22	314.3	308.4	301.4	296.5	309.0	300.2	310.1	301.9	309.6	310.0	292.8	318.7	306.9	308.1	304.9	302.1	302.4	302.5	295.3	312.0	302.5	230.7	107.7	311.8
23	343.3	328.6	318.0	306.0	307.1	305.3	222.9	120.2	111.2	114.4	109.4	133.6	131.2	112.2	117.3	127.4	118.3	116.9	106.4	120.9	127.9	118.3	115.7	114.9
24	113.0	109.9	107.9	113.6	118.6	103.5	109.5	124.9	124.6	117.9	109.8	113.1	102.1	101.7	95.1	60.5	350.9	305.5	308.9	329.6	320.8	314.2	51.4	115.7
25	106.5	64.9	50.2	71.8	100.6	120.1	121.2	109.2	115.0	97.9	101.2	105.4	105.6	87.5	85.4	90.6	85.6	88.7	88.7	70.0	69.7	82.8	92.7	75.0
26	74.6	88.8	99.1	105.5	105.9	117.6	118.2	116.7	121.6	2.3	36.4	95.2	111.5	92.4	91.6	93.1	97.3	115.6	89.1	87.1	90.9	88.2	80.0	62.5
27	69.1	50.3	57.5	56.8	44.3	28.8	42.3	34.6	343.5	11.6	31.2	358.4	317.6	302.6	298.1	297.9	286.4	285.9	354.8	323.1	356.5	46.3	68.0	91.6
28	93.9	80.9	67.0	71.7	91.8	97.1	101.2	81.9	86.7	81.2	63.5	58.3	93.2	65.3	94.4	111.4	68.6	72.1	97.0	53.3	64.3	84.7	91.6	77.0
29	89.2	78.5	62.9	57.9	66.2	91.7	103.4	106.5	106.0	107.0	106.6	109.9	115.0	115.7	111.8	84.8	77.2	84.7	95.8	102.4	102.0	71.6	77.2	83.3
30	57.8	45.8	44.4	45.8	14.1	9.7	25.6	46.4	331.2	321.1	327.3	309.9	318.5	292.5	44.7	26.5	1.5	38.3	50.6	74.0	66.5	61.2	57.5	55.2
31	356.1	334.8	37.1	73.0	54.0	339.3	88.2	107.7	103.9	88.5	69.9	68.0	93.8	35.1	68.3	85.0	87.7	78.1	321.4	9.0	348.0	0.2	327.9	53.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	88.5	120.8	104.2	30.1	80.9	84.0	108.8	108.7	114.3	109.5	123.2	115.3	116.6	115.8	95.0	98.5	60.7	105.7	91.7	66.7	79.5	50.9	64.9	86.2
2	76.3	88.7	92.3	53.0	58.1	75.3	88.6	88.7	74.0	89.0	125.0	131.4	104.7	113.0	118.6	127.1	108.6	116.7	111.8	97.0	109.9	112.2	107.1	99.6
3	102.8	100.6	94.0	98.1	98.4	121.4	129.8	129.9	110.8	100.1	105.6	107.1	106.6	113.0	113.0	125.8	123.0	129.5	111.3	113.3	110.2	109.3	114.7	120.6
4	125.7	135.7	122.9	243.0	286.8	319.7	27.3	94.5	94.4	344.0	105.3	115.5	155.9	155.7	162.4	246.3	279.5	288.8	308.4	107.0	101.9	112.5	117.7	111.9
5	5.8	288.3	350.8	329.3	323.7	296.7	343.4	261.8	134.7	115.8	151.1	134.8	236.2	307.4	303.4	302.7	301.2	302.2	301.4	301.5	307.6	302.9	308.3	309.4
6	325.3	122.9	104.7	104.8	146.7	161.9	168.1	174.5	194.4	187.3	128.6	204.6	248.6	313.5	306.5	306.0	319.4	302.6	170.0	114.4	129.0	101.9	127.0	74.9
7	352.8	297.1	293.2	301.0	110.6	286.9	312.2	291.3	304.1	295.1	20.5	324.5	332.6	0.4	54.2	29.2	40.1	75.5	358.4	36.1	54.2	44.9	37.6	36.0
8	18.5	333.2	350.2	304.8	299.7	341.8	62.3	82.2	65.7	72.5	307.4	303.1	301.7	303.5	298.5	295.3	303.0	309.1	307.8	308.3	308.4	304.5	310.4	306.9
9	304.8	305.2	302.0	310.4	304.6	303.9	304.5	305.6	301.0	302.5	308.7	307.6	132.6	324.6	302.5	91.5	128.0	129.5	120.0	344.1	360.0	311.1	301.1	307.2
10	283.8	111.9	102.7	105.5	115.2	99.9	114.1	116.6	140.6	122.1	130.0	173.2	354.2	136.1	103.1	110.2	117.9	114.2	126.4	115.8	76.9	90.5	24.4	173.4
11	189.2	53.2	278.7	321.2	321.6	309.6	279.9	265.2	192.9	110.6	167.0	273.0	293.1	308.4	320.9	332.8	303.3	314.7	307.6	300.1	310.3	307.0	303.8	312.9
12	319.3	310.5	314.2	311.4	309.7	315.3	309.3	300.5	309.7	306.7	306.2	312.1	305.3	312.1	308.2	312.3	309.0	312.2	303.8	301.0	299.2	301.4	301.7	303.5
13	303.9	302.1	295.3	299.6	292.7	298.8	302.1	303.0	300.9	299.9	298.0	302.1	299.8	299.6	300.8	309.0	305.3	305.7	313.0	298.7	301.7	308.8	302.6	306.1
14	307.3	305.3	303.4	296.7	301.3	307.4	128.6	113.1	128.4	114.2	130.5	123.2	119.9	113.0	112.8	108.9	109.8	118.6	121.0	121.4	106.0	109.7	112.3	116.3
15	114.1	122.2	116.3	112.3	103.8	116.8	124.6	119.4	115.5	111.3	109.7								102.5	103.9	94.7	88.1	93.4	74.9
16	78.4	66.7	67.7	65.1	91.6	91.1	61.7	58.4	65.3	59.8	57.7	43.5	2.3	309.1	302.2	295.6	310.9	302.5	314.3	306.1	304.9	303.9	307.7	306.6
17	305.1	311.2	309.1	308.4	305.1	306.6	306.2	305.5	307.0	304.5	304.2	301.3	306.7	304.5	305.0	309.2	315.9	310.1	308.3	311.0	316.8	298.0	306.4	307.9
18	315.2	329.5	310.9	314.7	310.4	301.5	303.9	308.2	309.1	315.6	311.4	311.6	315.6	316.0	309.4	308.8	304.5	303.0	310.0	312.5	305.8	310.4	305.1	310.7
19	315.5	314.4	313.2	306.4	309.4	299.4	302.0	310.3	303.9	301.5	298.5	298.3	304.1	303.3	301.8	316.6	310.3	303.6	306.3	309.6	313.8	313.1	304.9	294.5
20	304.3	301.4	311.6	307.8	305.2	314.1	311.2	309.7	313.5	313.0	311.7	313.3	311.5	312.5	315.5	311.4	311.1	309.2	309.2	312.0	310.8	307.8	309.6	312.3
21	312.7	311.5	308.4	308.7	307.2	303.7	301.3	299.3	300.6	303.3	307.4	327.7	333.9	336.2	337.3	333.4	331.0	330.9	328.2	324.0	320.6	318.5	312.7	313.2
22	319.4	323.7	319.2	313.5	312.6	314.5	315.5	314.2	312.4	315.3	314.7	314.9	320.5	323.3	317.0	320.1	321.1	319.6	323.0	321.0	312.5	310.2	319.1	323.9
23	312.4	317.3	319.0	316.0	318.8	321.6	321.0	315.9	317.0	323.1	323.9	323.9	322.4	325.0	322.0	314.9	330.6	323.7	319.7	333.2	321.3	310.9	310.1	313.9
24	313.7	307.0	309.3	304.5	300.8	308.2	316.6	303.1	315.3	323.6	315.3	321.7	323.8	324.5	325.4	324.6	319.5	320.2	310.5	317.0	320.1	313.6	311.3	309.0
25	308.1	305.1	308.1	300.1	307.7	302.0	309.1	313.6	309.4	311.5	314.1	313.2	307.5	305.4	305.4	309.1	300.8	304.7	311.9	309.5	316.7	318.1	312.1	306.0
26	302.8	301.3	307.6	309.4	308.6	313.6	311.8	313.8	307.6	308.9	307.4	302.2	310.3	316.6	310.5	306.0	310.8	305.4	311.4	312.7	299.4	300.0	308.0	307.4
27	304.0	309.0	307.3	307.0	304.4	310.1	313.2	315.9	316.5	316.9	315.6	321.8	313.7	311.2	312.7	317.0	317.7	324.0	326.4	325.8	324.2	322.4	320.0	318.9
28	321.0	322.0	325.7	319.1	318.6	323.0	318.8	322.3	323.7	323.3	316.0	317.0	316.6	319.6	324.5	323.9	325.6	328.3	329.2	318.6	306.8	296.0	303.6	304.1
29	298.0	296.6	300.0	296.1	294.7	303.5	310.6	308.4	315.4	320.6	305.1	306.2	317.5	311.3	312.6	306.9	310.9	307.7	306.5	312.4	308.2	312.3	320.1	322.2
30	320.9	320.6	321.5	328.5	330.1	324.6	335.6	320.0	314.7	322.9	308.7	309.2	311.3	306.5	308.4	304.7	302.9	305.2	296.1	300.3	310.8	310.9	295.2	67.5
31	312.6	302.2	300.7	317.0	308.6	309.6	316.3	307.7	306.8	303.1	305.7	309.0	306.2	306.6	303.1	311.2	309.4	307.6	306.3	300.6	307.9	307.4	314.7	308.2

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	313.3	313.6	308.2	295.3	305.3	300.7	296.6	299.4	308.1	311.6	313.9	316.1	319.8	317.0	325.3	316.1	317.2	317.9	316.9	310.6	318.3	313.6	309.4	312.9
2	307.9	313.9	313.5	308.3	306.8	307.0	305.1	305.6	293.6	304.2	303.8	306.4	290.1	305.4	296.8	291.3	265.9	150.1	126.8	114.7	128.2	112.0	114.0	113.7
3	129.2	133.5	138.5	151.7	158.0	147.4	140.2	142.8	130.6	119.4	122.0	117.6	119.0	120.4	122.0	121.1	111.9	114.0	122.6	126.9	123.0	123.0	110.6	109.9
4	112.3	105.6	105.7	108.3	109.2	109.8	106.8	107.3	106.5	106.6	107.3	107.7	109.4	109.4	110.2	109.5	109.2	105.0	106.5	108.2	106.9	107.8	107.5	101.3
5	94.6	93.7	98.0	100.2	106.1	105.3	98.7	99.1	99.6	96.5	96.8	107.8	108.1	107.7	108.3	110.6	110.9	106.8	95.2	78.5	62.4	84.7	100.6	96.3
6	95.0	89.6	86.2	85.6	101.6	94.0	98.9	114.7	138.4	150.5	202.0	210.2	219.6	218.4	216.7	211.8	193.9	192.3	177.9	179.5	180.1	176.7	172.2	164.9
7	158.5	154.6	142.4	138.8	153.8	170.1	196.5	218.0	222.7	233.0	235.3	254.3	263.2	268.6	276.6	285.3	298.7	307.5	303.1	306.9	291.0	251.4	220.5	238.0
8	124.0	140.1	110.0	100.8	105.6	107.2	111.7	112.0	120.0	128.1	146.6	120.9	110.8	106.9	110.8	110.9	107.0	107.1	109.1	109.6	111.0	111.5	108.8	105.4
9	106.4	107.5	111.1	109.8	107.9	107.5	105.4	98.3	78.4	57.5	87.4	104.3	97.4	103.6	105.9	118.4	116.7	113.7	118.8	117.8	113.1	115.6	109.2	117.2
10	121.0	115.6	112.8	114.2	111.0	109.8	110.8	108.5	118.2	121.8	118.2	115.0	114.0	121.7	126.4	122.9	124.3	120.3	118.7	117.1	121.6	123.8	125.8	131.1
11	123.9	114.6	114.0	119.0	134.2	103.5	7.7	341.7	320.6	323.4	321.5	336.1	327.1	323.4	321.6	310.9	306.6	345.6	89.4	114.6	124.7	116.8	114.0	124.2
12	152.7	4.1	308.8	299.6	311.1	320.5	321.1	305.2	286.5	293.6	291.9	290.2	288.6	281.5	283.4	274.9	257.8	240.9	172.3	152.5	84.8	178.8	289.1	44.4
13	120.8	104.6	104.4	107.4	100.8	101.1	100.1	115.8	125.0	108.3	126.9	148.6	118.3	122.1	126.2	121.8	124.9	120.0	120.9	120.5	123.4	128.1	130.0	133.8
14	129.0	130.4	128.2	129.5	131.3	132.7	135.4	133.7	134.7	130.0	126.5	124.0	126.2	127.5	127.2	123.6	119.0	121.0	119.4	124.3	124.7	126.7	129.9	128.1
15	126.4	125.1	120.2	119.2	119.9	117.8	118.3	123.8	124.6	125.3	122.3	122.3	126.7	124.2	121.1	122.5	123.5	129.8	123.1	125.5	132.9	135.9	144.9	143.0
16	148.0	147.5	156.8	156.0	160.7	163.5	162.6	149.5	138.2	138.9	134.2	141.0	137.9	150.8	146.5	136.7	146.2	145.5	141.6	156.2	150.2	156.0	160.2	144.2
17	145.8	129.2	114.3	124.1	117.2	123.7	117.5	118.8	112.7	114.5	113.6	115.3	119.2	118.6	115.9	115.4	115.2	116.5	114.2	119.4	118.0	118.1	122.0	123.5
18	131.3	133.0	129.9	132.4	135.5	133.3	126.1	123.8	125.2	126.8	124.3	125.7	126.0	122.1	123.7	128.0	132.0	135.9	150.3	156.8	170.1	190.4	206.2	203.3
19	213.3	216.0	207.4	203.7	201.5	217.9	225.8	233.3	227.3	216.3	214.9	226.5	188.1	202.6	218.4	210.9	217.0	239.0	248.9	252.5	244.3	234.9	243.3	237.9
20	227.4	224.3	224.5	217.8	221.4	209.2	210.9	191.6	198.5	219.3	236.4	214.7	224.7	221.7	224.9	249.5	277.5	270.3	263.6	263.2	263.3	264.7	272.2	284.8
21	283.7	274.2	271.9	279.0	291.0	291.7	295.1	299.3	305.3	303.7	232.5	137.8	237.1	257.5	295.1	272.6	274.7	285.7	264.2	265.2	288.1	298.4	274.4	277.3
22	314.5	305.4	287.4	280.4	267.7	268.5	273.6	272.6	271.8	289.1	307.8	303.0	294.5	281.7	275.2	265.6	260.2	240.2	221.6	214.0	210.4	167.3	163.5	145.5
23	154.3	159.5	160.7	171.9	183.5	197.6	275.9	288.1	289.1	294.2	307.7	308.5	315.8	311.5	309.0	320.9	304.4	305.5	301.5	315.4	311.1	306.2	329.7	331.8
24	328.1	307.1	316.2	322.2	310.5	306.3	313.9	314.6	296.8	299.5	296.4	305.5	311.7	157.0	147.7	152.1	74.0	127.3	124.8	136.0	134.5	126.3	128.8	137.2
25	128.9	131.3	120.6	129.2	167.9	161.1	154.7	162.8	149.2	123.0	157.9	251.8	288.1	310.6	300.4	315.8	315.8	304.8	282.6	277.5	268.7	258.8	260.6	261.2
26	262.6	259.2	258.0	258.0	259.6	276.8	276.6	262.3	267.1	243.6	260.4	252.4	249.8	242.7	258.6	96.4	87.1	87.3	96.2	97.4	100.7	102.8	108.4	147.4
27	160.9	170.8	238.6	300.8	307.6	316.0	316.7	318.3	319.9	319.4	318.1	316.4	324.4	329.6	324.2	329.4	326.5	322.8	321.0	321.8	320.2	323.2	323.1	321.3
28	324.4	321.3	323.6	313.8	314.1	305.2	300.6	298.4	291.4	286.6	304.3	308.0	317.4	317.8	312.4	317.4	315.2	325.1	315.3	314.5	326.7	323.5	321.2	313.1

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	318.0	320.6	315.5	302.7	302.0	302.3	298.0	308.7	296.9	307.9	46.5	73.8	125.4	118.3	111.2	118.5	133.3	115.6	118.3	130.3	145.0	156.3	147.2	150.5
2	149.7	159.3	143.1	139.4	139.7	140.3	136.6	133.2	119.8	115.0	119.0	118.0	116.3	117.0	116.7	119.1	116.5	116.8	119.8	120.4	119.4	119.3	122.4	121.2
3	121.9	126.4	127.1	122.4	123.4	126.4	138.7	155.4	157.3	165.2	166.1	167.3	169.2	177.9	188.0	199.0	200.2	209.4	181.5	126.3	136.9	134.4	112.9	124.7
4	129.3	143.4	140.2	134.4	140.0	145.8	147.6	145.5	150.4	157.7	142.6	141.6	147.6	140.8	137.1	140.1	146.3	144.8	133.1	131.7	125.0	130.9	136.3	135.8
5	131.0	133.1	146.1	145.6	170.4	189.6	189.5	204.0	211.6	195.5	183.8	190.9	179.9	208.4	200.9	215.1	244.3	242.8	254.8	273.9	287.9	272.4	275.1	273.4
6	293.0	288.2	321.1	316.7	308.2	310.4	295.2	295.1	273.4	234.7	212.8	227.9	302.7	130.5	67.6	345.0	257.9	246.4	300.3	302.3	345.0	332.2	315.2	312.0
7	307.5	306.8	309.2	314.4	307.8	315.3	304.6	314.4	308.1	304.5	315.4	308.2	308.0	308.7	315.9	303.5	298.3	305.9	303.1	310.1	312.9	314.0	319.6	324.5
8	312.7	312.8	311.7	313.6	310.9	313.7	321.8	325.2	322.7	329.2	303.8	327.6	328.0	313.0	310.4	328.9	325.9	319.8	318.6	316.2	317.2	310.0	315.6	312.9
9	318.8	310.7	308.4	312.8	316.7	319.1	310.8	319.1	324.5	321.4	320.3	314.6	315.6	320.9	320.7	314.2	318.9	323.4	329.2	327.8	327.2	332.5	329.3	328.0
10	317.2	318.4	319.2	309.2	303.5	300.0	295.6	303.8	305.4	297.8	297.4	308.5	313.9	315.0	301.4	306.3	301.3	154.7	123.0	116.5	118.7	122.0	136.8	132.6
11	132.1	131.9	121.4	120.7	127.4	122.9	123.9	118.2	118.3	115.4	109.9	111.8	112.4	115.0	116.8	112.8	111.2	111.8	113.4	114.1	116.6	114.3	111.6	119.2
12	116.9	112.7	121.7	124.7	125.3	118.2	118.0	117.3	113.1	118.1	121.2	137.7	138.3	126.7	107.4	109.2	100.9	99.5	102.9	105.8	148.5	141.9	117.8	158.8
13	133.2	105.9	41.1	130.9	131.6	284.6	307.0	297.7	299.4	304.4	288.3	302.4	303.7	307.2	301.1	305.7	309.5	319.1	319.0	298.0	299.8	298.2	301.9	306.3
14	309.1	310.8	317.8	327.8	320.2	302.0	316.2	318.3	310.7	310.8	313.0	305.3	322.2	313.6	317.1	300.1	307.4	309.8	324.0	308.9	307.8	301.6	311.8	123.4
15	140.8	150.0	131.8	143.5	120.5	152.7	207.7	173.6	140.5	123.3	131.0	158.5	330.2	85.3	120.7	125.5	141.4	143.6	139.0	138.8	139.3	141.6	143.0	140.0
16	145.4	150.9	132.7	128.5	126.5	134.5	136.8	115.9	122.6	126.3	109.1	112.2	113.3	108.0	114.2	122.0	129.7	129.5	124.8	127.7	142.7	129.5	131.1	130.8
17	124.0	125.6	122.8	124.5	122.4	127.5	124.6	125.6	124.9	124.9	131.4	127.3	137.9	144.7	123.5	126.9	132.7	131.6	122.8	122.5	120.9	125.2	126.9	128.5
18	126.2	130.1	125.0	122.4	120.5	124.8	130.6	123.8	102.2	98.0	100.1	98.3	99.5	126.9	339.1	347.9	56.7	78.6	87.8	108.1	116.8	178.6	264.5	307.3
19	304.2	302.3	301.5	131.2	135.4	130.5	126.1	115.8	118.0	114.8	118.0	133.7	130.4	129.7	135.8	141.6	145.8	152.6	142.2	144.9	159.8	152.3	156.2	143.1
20	154.1	167.4	164.6	157.3	139.6	131.9	134.1	144.6	136.4	128.9	90.3	90.7	107.9	99.1	307.1	309.7	329.3	321.8	319.2	315.7	324.4	329.7	324.5	321.2
21	317.4	318.9	317.8	318.1	320.9	321.4	323.5	323.9	323.7	325.6	327.4	317.4	314.6	318.6	322.4	323.7	321.5	312.5	312.1	307.5	311.2	311.6	304.0	310.4
22	310.1	295.6	304.5	303.9	304.0	313.1	314.0	313.9	313.2	320.8	317.2	322.0	324.7	325.3	325.4	327.8	328.9	329.0	328.3	317.4	300.4	299.4	301.3	301.7
23	302.2	298.5	301.8	305.4	304.5	303.1	298.1	308.6	204.2	311.2	304.4	312.2	319.3	300.9	308.4	309.4	303.0	290.9	294.2	300.2	313.2	309.2	304.4	302.4
24	310.8	305.6	317.4	312.2	307.0	308.9	310.0	323.8	324.3	315.1	321.4	326.8	317.9	315.6	319.4	328.9	329.1	328.3	325.6	324.6	325.6	328.6	326.7	304.9
25	305.9	304.5	301.6	298.3	295.4	297.7	299.1	298.4	298.0	305.1	307.3	325.0	321.3	321.2	325.8	326.8	328.1	322.4	315.1	308.2	310.7	306.2	311.2	310.9
26	310.7	307.3	300.1	301.1	301.3	305.8	298.8	297.2	299.4	303.9	300.7	301.4	299.0	306.1	302.8	297.4	296.8	290.8	297.7	299.8	301.5	298.6	303.6	302.7
27	304.2	304.7	300.9	304.3	303.3	301.6	298.4	306.3	255.7	117.7	112.7	100.6	104.4	117.0	109.2	141.1	131.3	111.5	138.0	146.2	155.3	174.7	133.8	108.7
28	114.7	107.9	120.0	108.1	110.3	121.4	110.4	123.9	129.4	136.9	121.2	110.4	113.2	100.8	96.3	115.2	110.4	204.2	222.7	275.7	290.4	294.2	297.1	297.0
29	300.5	318.1	310.3	305.1	306.9	305.7	297.1	302.1	307.9	291.7	297.1	301.9	312.0	146.7	126.7	1.0	95.9	139.8	170.2	154.6	150.1	151.6	138.4	124.4
30	120.8	124.2	129.9	127.2	120.4	122.6	117.5	116.1	116.8	112.2	114.5	116.2	114.0	112.8	111.0	112.1	113.3	112.4	114.2	113.2	114.1	113.3	111.3	112.1
31	112.5	112.9	113.3	115.3	117.9	117.3	116.9	115.7	117.7	164.7	195.0	198.4	197.9	198.8	199.9	232.1	243.3	248.3	255.9	254.5	248.3	248.9	255.8	263.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

April 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	270.1	293.1	304.8	304.7	304.7	300.5	299.6	304.7	308.4	293.6	280.8	259.3	263.0	273.1	259.6	244.9	250.2	245.0	224.5	196.3	202.7	217.9	203.7	194.8
2	194.1	195.2	182.5	209.5	247.6	266.6	204.3	193.5	179.5	175.9	167.6	163.2	160.5	165.0	126.9	98.6	112.7	115.1	109.0	133.4	111.4	112.6	103.8	108.1
3	105.7	112.4	111.4	108.3	109.1	110.6	107.6	110.2	108.8	112.7	112.8	114.5	112.0	113.6	118.5	126.3	133.4	140.4	140.3	127.1	121.7	130.0	120.0	119.7
4	129.4	136.2	132.8	125.2	126.9	128.5	139.9	142.8	125.1	98.2	141.3	143.1	133.9	133.2	137.9	231.1	307.8	346.9	347.4	326.6	317.7	316.0	319.0	310.0
5	316.1	305.8	309.7	314.7	319.4	314.0	316.7	320.1	319.3	326.6	319.2	318.8	316.2	316.2	320.9	321.2	322.3	323.2	323.2	320.8	311.5	312.9	316.1	322.9
6	319.2	324.9	318.9	315.6	313.5	318.1	319.1	305.1	306.6	317.2	304.8	302.8	312.8	311.5	316.0	310.8	308.0	301.3	297.8	305.3	304.0	243.9	127.7	106.3
7	102.0	105.7	117.1	124.8	137.2	131.6	151.0	162.2	137.6	153.8	160.2	143.1	125.0	127.8	133.4	138.3	129.8	121.6	120.2	126.7	125.3	122.2	116.7	116.4
8	122.9	121.4	122.6	123.1	118.0	119.6	115.7	110.9	111.6	116.7	116.4	121.6	128.8	125.6	124.2	129.4	138.8	150.1	153.5	153.5	143.5	152.7	157.8	175.2
9	192.3	182.2	169.0	178.6	170.5	179.3	173.7	170.5	185.4	183.8	192.5	199.1	207.0	208.8	214.7	212.7	190.6	186.1	212.1	206.3	194.3	202.8	200.1	202.3
10	118.5	138.4	198.6	196.2	216.0	226.2	226.7	229.1	230.1	233.6	237.1	269.6	296.9	284.5	288.4	263.5	262.0	264.1	262.8	264.4	278.6	309.4	211.4	213.5
11	230.4	153.1	166.9	123.0	116.9	108.4	90.1	86.5	94.3	93.9	95.1	108.9	106.7	107.6	108.0	110.8	113.2	109.0	102.9	102.8	102.9	106.7	105.8	107.8
12	109.8	110.6	113.5	113.4	114.4	107.0	105.1	110.9	113.8	113.7	118.3	126.3	139.4	144.3	157.1	184.9	197.3	200.4	206.3	209.9	211.6	213.4	219.9	179.9
13	198.3	197.3	259.4	295.4	318.6	312.6	320.8	313.0	308.5	307.7	303.8	305.0	310.5	310.8	310.6	311.9	316.7	314.6	307.4	309.1	309.0	306.5	308.7	321.0
14	326.6	328.6	326.6	325.2	325.4	330.9	328.6	326.4	327.3	327.0	330.6	319.3	326.1	323.7	320.8	324.3	321.9	321.1	319.4	317.8	314.7	304.7	303.1	301.5
15	309.1	316.2	317.1	313.3	307.7	314.7	316.9	316.1	326.5	325.1	315.5	326.6	321.4	325.5	326.4	318.2	324.2	328.6	332.7	311.5	308.1	302.3	299.7	102.8
16	115.7	135.3	114.0	120.9	124.2	118.8	120.6	118.5	115.3	117.0	117.0	112.6	111.2	109.8	109.3	110.3	110.1	112.6	109.1	102.2	86.1	75.8	66.5	54.5
17	46.8	49.4	49.8	47.7	48.7	58.6	80.0	99.2	108.0	118.9	103.8	107.3	125.5	118.9	127.8	132.5	123.9	124.5	142.2	132.6	148.7	74.5	307.9	320.1
18	312.6	312.2	311.0	293.5	304.0	316.4	297.3	335.9	304.6	83.9	122.5	251.6	282.9	237.9	169.2	185.5	210.9	250.1	242.0	234.7	247.8	220.0	235.3	251.5
19	280.0	65.8	155.4	168.8	207.4	220.4	153.5	263.2	266.4	254.6	258.4	324.9	284.9	222.5	229.9	221.9	203.7	174.3	196.8	219.1	226.2	225.0	213.2	206.5
20	218.4	209.8	193.6	104.6	117.1	135.2	93.6	113.9	127.4	117.4	110.2	116.5	140.4	135.2	123.0	122.8	117.7	120.3	118.3	114.4	113.0	115.7	115.2	110.9
21	111.0	112.4	111.1	104.1	104.9	106.9	109.4	111.5	108.7	110.8	114.7	115.7	116.8	117.1	116.1	119.8	144.4	167.6	158.6	156.1	101.6	115.8	121.1	135.4
22	126.6	121.1	104.8	121.7	108.9	117.9	139.7	158.1	147.0	279.7	77.5	145.0	281.5	279.7	255.7	241.4	297.1	291.3	297.6	166.9	135.2	168.3	161.4	162.4
23	162.8	155.2	134.1	135.2	125.2	135.0	131.2	120.7	119.7	118.9	138.2	143.1	142.6	135.3	141.4	227.9	235.4	293.4	310.3	318.2	309.8	304.9	304.5	308.7
24	309.3	308.4	306.6	317.3	312.8	306.8	301.7	303.4	309.3	303.4	302.1	299.3	294.7	292.1	286.8	276.7	255.2	246.3	237.3	232.6	223.7	219.1	218.4	222.8
25	216.0	203.5	197.7	182.1	184.5	169.0	162.6	153.1	142.7	127.3	115.4	113.8	119.4	139.8	140.5	123.8	125.0	120.1	113.3	110.3	111.8	112.0	112.5	100.5
26	100.5	100.1	101.6	107.8	106.6	109.5	89.5	98.6	96.5	89.3	85.4	95.2	134.4	126.1	141.5	156.2	165.7	165.6	163.0	86.4	64.9	57.2	53.2	56.9
27	53.4	47.9	32.0	6.8	18.7	35.7	330.5	343.4	299.7	315.5	307.2	301.9	325.5	334.8	324.3	332.8	341.9	340.1	336.0	340.4	335.9	322.0	321.5	321.3
28	315.6	313.7	306.8	300.5	299.2	298.4	309.5	307.3	303.3	304.3	276.1	159.9	164.4	176.8	148.4	136.7	119.1	111.4	89.0	36.2	107.7	202.5	293.9	281.7
29	252.2	308.5	302.1	300.6	298.0	294.5	303.6	310.2	311.3	304.1	311.1	316.5	320.6	323.8	322.7	320.8	306.3	309.2	311.4	314.4	302.8	295.4	292.3	296.4
30	301.3	303.7	306.7	302.3	301.3	309.2	321.6	126.4	112.3	116.2	120.5	114.1	137.0	137.1	128.3	135.8	142.9	135.0	115.7	114.9	117.1	121.3	118.0	113.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	108.0	112.5	115.9	111.1	117.3	115.6	110.4	110.3	108.3	107.7	108.0	107.9	106.8	106.6	104.5	101.8	100.1	101.4	96.9	88.5	86.4	89.0	92.4	94.8
2	86.1	86.5	77.2	78.3	78.5	80.5	77.4	96.3	134.1	129.6	126.0	126.9	121.8	123.0	128.1	115.5	124.1	119.9	116.4	120.2	117.1	119.9	121.5	126.7
3	123.2	119.2	118.3	122.1	108.2	99.0	90.7	80.0	91.2	80.8	63.8	71.2	54.2	63.7	69.1	61.6	62.3	74.9	64.3	153.2	230.6	176.9	232.0	293.6
4	324.2	345.3	44.6	61.8	104.8	119.5	120.1	118.4	120.2	126.3	125.6	127.5	131.6	129.3	126.5	122.6	121.6	116.0	113.6	114.8	113.5	110.5	110.3	109.7
5	109.1	112.5	113.1	113.7	113.0	117.3	117.1	113.6	113.3	111.5	114.1	110.8	113.0	118.2	120.6	121.9	122.6	120.1	114.9	125.1	126.9	107.5	125.4	165.8
6	154.9	154.2	106.4	106.8	104.4	120.1	123.9	119.6	135.5	173.0	197.5	218.7	224.1	219.6	214.4	211.1	199.5	204.0	209.8	217.6	216.7	216.8	215.3	213.7
7	207.8	197.2	209.1	211.4	218.4	217.0	210.1	209.9	210.9	217.4	211.7	206.1	205.3	220.7	214.0	221.8	215.4	212.7	222.8	214.9	220.8	222.3	215.1	244.0
8	136.5	117.9	112.4	120.3	125.3	123.1	118.3	113.7	99.7	110.3	109.5	113.0	115.0	106.5	93.3	95.1	97.2	110.6	109.3	98.3	74.0	88.9	98.1	78.4
9	81.2	65.0	66.8	63.8	69.6	75.4	91.7	85.0	94.7	89.0	98.4	130.3	149.0	126.3	117.3	120.1	126.1	203.1	85.9	169.8	247.2	37.0	66.7	71.7
10	75.4	66.8	86.4	74.1	23.2	13.6	117.2	313.1	318.0	309.6	262.8	245.3	253.6	266.4	306.3	313.1	268.2	288.2	292.1	301.0	301.7	301.4	312.7	318.5
11	53.0	78.0	147.7	157.3	112.7	171.1	255.0	186.3	250.6	228.2	227.6	247.3	249.5	260.5	230.8	62.9	269.4	333.3	313.7	308.1	307.7	302.4	304.3	311.2
12	313.0	304.3	311.2	313.0	312.2	311.5	312.3	315.0	316.5	314.8	320.3	322.2	321.4	327.0	322.9	331.2	332.2	324.9	312.0	291.6	295.8	294.5	317.7	308.3
13	317.4	313.9	307.8	304.9	301.9	299.3	301.6	297.7	331.4	297.3	222.0	229.2	243.5	236.1	222.3	220.7	216.9	218.2	180.2	174.2	166.8	235.8	145.3	138.9
14	139.1	143.6	152.6	137.7	124.6	137.6	155.3	147.3	139.3	141.6	135.2	137.0	145.3	152.7	131.2	131.7	140.8	138.3	142.6	135.5	140.5	139.8	143.1	151.2
15	157.9	163.7	166.9	170.8	165.2	149.2	171.2	203.6	300.2	277.5	276.1	264.1	238.7	235.0	247.4	220.3	223.4	214.0	206.4	197.7	218.0	223.7	248.4	257.3
16	257.0	150.3	158.7	319.3	321.4	316.4	310.4	293.6	290.2	287.8	269.6	250.3	244.3	246.1	241.9	256.9	247.1	223.2	214.4	206.3	181.2	197.8	187.6	210.0
17	224.6	284.0	306.5	317.9	303.1	315.0	328.2	5.8	82.1	115.1	137.1	128.9	142.7	150.9	143.6	127.6	119.7	132.0	140.2	140.8	143.5	149.1	157.3	149.2
18	159.8	156.3	157.4	166.1	171.1	185.6	148.4	125.3	179.6	216.5	186.6	209.5	219.7	238.1	243.9	241.7	247.6	257.0	250.9	244.1	246.6	242.4	241.7	185.1
19	251.3	273.1	283.5	292.9	238.9	218.9	127.7	116.6	110.8	132.7	148.7	130.4	133.3	129.8	125.3	124.7	116.8	112.9	112.4	112.0	113.2	112.8	113.4	120.5
20	124.1	128.4	127.5	121.4	122.8	126.0	125.3	123.1	118.5	123.0	124.5	121.4	123.3	119.3	116.1	122.4	139.1	141.0	158.2	250.5	305.7	307.2	306.6	309.1
21	308.8	304.4	306.1	307.3	308.2	312.9	324.1	327.9	330.9	333.1	327.8	327.4	328.4	326.0	333.6	332.6	325.3	323.0	328.8	331.9	328.7	330.3	335.7	329.4
22	322.7	321.1	321.0	320.8	324.2	324.7	328.0	333.7	335.1	330.0	326.2	328.4	336.2	340.0	346.0	348.9	336.3	339.9	340.1	340.0	330.2	334.9	331.8	325.7
23	321.9	326.1	312.7	304.2	310.6	301.8	306.0	317.4	302.9	308.4	322.8	343.5	15.0	44.4	352.9	336.2	356.2	335.9	331.5	335.5	320.2	307.0	304.0	309.5
24	305.2	288.4	298.2	302.7	294.3	302.4	313.3	312.3	307.1	317.3	316.4	252.4	247.1	236.0	223.8	236.0	303.8	304.5	287.2	270.1	278.7	293.2	304.6	304.6
25	302.9	304.3	304.8	299.1	301.8	304.7	310.3	303.5	322.4	316.0	321.4	344.9	356.2	333.3	324.5	200.2	216.9	224.8	252.2	259.1	284.7	301.1	312.2	316.8
26	314.0	304.2	306.3	310.0	307.2	291.9	292.2	310.8	327.1	324.5	328.4	337.0	344.7	342.5	335.2	334.1	333.0	331.4	333.5	330.2	322.1	308.2	319.1	322.3
27	330.1	313.0	314.7	328.5	335.6	334.4	331.9	324.2	322.6	324.9	326.6	326.8	332.0	330.4	337.6	339.9	340.6	346.8	340.7	341.7	351.1	342.6	335.6	321.2
28	317.4	297.1	295.0	288.5	159.9	143.8	142.1	158.4	168.2	172.8	239.6	331.4	320.2	291.5	298.4	302.2	302.8	297.1	273.2	199.9	213.2	173.6	170.5	168.8
29	169.8	169.0	164.9	160.7	160.8	159.4	153.8	150.4	143.7	145.6	147.9	152.6	152.3	155.9	150.6	146.7	149.7	156.5	154.7	166.2	173.3	173.2	164.4	160.7
30	163.7	171.0	170.1	149.3	132.5	159.2	154.2	185.2	204.2	164.3	162.1	157.0	172.3	182.6	171.8	153.0	156.2	157.2	161.7	159.6	159.9	151.8	146.2	187.4
31	193.4	188.4	187.0	132.2	177.5	185.4	185.8	184.9	181.0	194.9	204.4	200.5	205.8	223.5	222.8	223.6	227.1	225.1	229.3	226.7	217.0	216.7	264.1	247.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

June 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	255.5	321.5	317.1	300.4	312.0	306.6	309.9	324.6	333.6	336.4	325.0	333.8	331.2	336.5	331.6	326.3	307.9	297.3	298.5	259.5	262.5	265.0	268.0	291.2
2	289.0	291.4	293.6	299.9	302.7	300.4	302.9	310.4	322.6	353.3	346.0	328.5	323.4	303.0	307.4	311.6	299.9	314.1	308.3	315.7	313.3	297.5	304.2	316.5
3	320.2	314.8	314.1	322.2	318.0	318.6	329.8	329.8	328.3	333.8	334.5	328.6	328.8	323.1	320.9	318.8	321.3	326.1	331.6	330.4	331.0	321.8	317.7	321.6
4	321.8	321.2	314.8	318.2	323.4	337.3	338.7	330.9	326.2	325.6	329.1	333.9	336.0	330.4	332.1	334.0	337.4	338.6	340.0	342.3	335.5	331.0	323.3	320.0
5	319.6	314.9	322.8	319.4	309.3	309.7	312.3	313.0	313.8	323.3	323.9	348.3	341.6	322.5	335.9	326.9	320.5	318.3	331.8	315.1	306.1	267.4	268.4	264.0
6	254.0	225.6	194.5	181.7	120.6	108.0	108.5	117.3	121.6	132.9	180.7	173.4	159.9	153.4	149.8	139.5	137.7	136.9	138.4	137.0	139.0	142.4	144.3	139.7
7	138.9	137.9	133.2	123.3	127.0	130.9	133.2	123.3	117.2	119.3	121.7	120.4	124.4	125.9	125.0	121.6	122.8	120.5	120.8	113.5	109.8	113.6	114.9	118.7
8	120.2	121.8	118.3	114.8	116.6	118.4	117.8	117.3	116.7	115.0	116.6	115.4	114.8	112.5	115.2	114.8	112.0	113.9	114.9	116.0	116.6	115.5	110.3	108.5
9	108.7	113.7	113.2	115.4	116.8	117.6	116.5	118.6	115.5	112.6	117.2	115.5	113.0	111.8	111.4	110.8	113.8	121.5	126.9	123.9	129.5	127.7	124.1	118.6
10	123.3	118.4	119.7	117.1	117.6	119.0	120.1	117.3	118.0	118.5	121.6	121.5	117.7	118.3	114.1	118.0	116.1	117.0	114.0	113.3	113.7	113.8	114.4	113.7
11	112.0	112.2	112.1	113.3	112.4	114.0	115.9	118.4	119.5	118.4	119.5	120.7	120.7	118.0	118.7	118.1	119.6	123.2	119.3	118.0	117.6	117.2	121.1	118.7
12	117.7	118.1	121.2	120.5	115.8	117.8	121.3	122.8	128.6	128.9	128.7	132.1	133.4	136.0	136.2	139.1	139.7	144.6	140.9	136.4	146.8	148.5	142.2	147.3
13	146.7	142.0	146.4	147.7	150.4	142.0	142.6	119.1	118.2	127.7	124.3	131.1	148.0	153.3	148.0	148.5	155.9	168.2	166.8	192.7	170.5	229.1	288.9	293.4
14	322.7	327.2	325.2	287.8	317.2	313.1	301.8	319.0	328.8	13.0	358.3	59.4	68.5	76.5	71.9	86.7	84.7	35.3	109.8	161.5	146.4	52.8	359.9	310.3
15	305.7	304.5	303.4	304.5	300.5	307.9	310.9	312.1	305.8	338.2	340.4	353.2	5.0	337.8	358.1	140.9	155.1	125.0	170.2	161.0	166.5	169.1	158.6	163.8
16	149.8	151.7	150.0	155.9	165.4	168.8	156.1	153.6	139.7	155.7	150.3	147.7	148.8	140.3	140.2	142.0	134.8	120.1	124.8	131.4	128.9	124.8	141.8	159.2
17	153.3	133.5	131.4	123.3	118.9	126.6	138.2	156.2	160.1	157.4	146.1	144.3	149.3	165.3	164.7	158.4	153.1	154.3	150.0	148.1	145.8	147.2	152.7	150.3
18	151.6	142.8	54.7	343.2	3.4	93.5	116.7	113.7	100.8	113.8	127.9	119.7	122.8	120.3	114.8	121.6	123.0	123.9	130.5	133.1	135.4	138.3	111.6	78.9
19	105.8	131.1	129.2	127.5	120.9	117.0	133.0	140.3	333.7	18.0	55.9	78.2	85.0	128.7	127.3	168.7	93.0	189.2	184.1	159.6	162.1	171.0	164.9	154.6
20	156.9	130.4	122.2	133.8	122.0	111.6	106.5	103.6	115.0	3.7	330.0	312.8	77.1	158.7	160.5	144.9	145.6	129.2	123.7	124.5	125.6	121.6	128.3	132.0
21	149.5	146.8	151.8	169.5	180.3	274.0	322.7	330.8	338.3	343.8	346.2	344.4	357.2	353.6	264.0	308.7	298.5	309.5	317.2	332.8	310.0	297.1	292.6	294.1
22	291.6	295.1	307.2	316.8	312.2	313.7	313.8	315.9	329.3	14.3	135.1	167.6	157.1	148.0	143.1	144.6	136.0	136.9	127.1	123.2	131.4	129.3	131.6	125.0
23	124.1	127.0	131.9	133.0	143.4	139.8	144.5	142.7	139.9	147.3	149.9	147.5	143.0	141.3	136.9	148.3	141.0	139.0	150.3	159.1	160.1	154.2	161.8	150.6
24	139.2	147.4	161.5	168.9	151.9	123.2	293.9	322.7	335.5	348.4	344.0	356.2	28.8	55.1	1.3	25.3	202.7	194.7	233.5	294.7	267.1	290.7	273.5	283.4
25	310.8	304.0	292.5	303.5	357.0	317.2	309.1	317.8	55.9	108.9	150.6	179.5	204.0	190.2	182.7	182.0	182.4	162.9	156.0	156.3	154.3	166.8	164.5	168.6
26	172.9	166.0	148.1	151.7	147.6	161.6	115.1	117.3	140.6	299.2	299.7	314.7	261.4	291.0	258.0	225.6	247.3	197.3	174.7	165.0	163.8	175.9	171.4	182.3
27	180.7	263.6	270.7	279.2	308.2	308.6	320.3	323.7	317.5	316.9	330.3	2.9	253.5	307.0	261.9	219.1	220.9	221.8	227.6	260.0	268.0	281.5	317.7	313.9
28	282.0	286.1	272.2	290.1	294.0	121.3	125.0	174.9	216.0	184.7	192.2	181.1	199.8	248.1	236.9	231.9	232.2	208.1	193.1	228.2	221.6	171.8	156.7	165.9
29	158.7	168.0	185.2	177.6	172.4	166.7	136.5	153.2	147.3	138.1	157.0	162.5	139.8	142.8	143.7	135.3	130.4	125.8	133.3	137.8	148.6	159.3	148.8	139.3
30	135.5	144.3	151.6	156.6	166.2	173.4	183.6	187.5	192.7	202.4	196.3	199.8	216.2	221.3	217.5	209.5	270.6	285.1	317.4	1.4	329.8	293.0	249.3	207.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	239.3	283.5	319.3	308.0	329.8	354.9	40.1	117.2	350.8	347.0	337.5	54.7	18.1	318.9	323.5	296.3	287.1	259.0	265.8	256.0	255.0	265.2	265.3	302.7
2	289.5	280.0	310.8	311.3	312.6	305.8	312.5	306.0	313.6	304.0	308.4	310.6	292.4	309.8	299.3	308.7	311.1	308.3	322.4	326.9	322.7	321.0	326.0	323.6
3	316.1	307.8	302.4	306.4	308.0	304.3	300.6	314.7	316.2	321.7	351.1	353.3	353.6	343.2	315.8	324.6	163.3	167.6	185.9	218.3	263.8	232.8	125.8	140.7
4	133.8	120.2	135.3	133.3	135.3	119.8	45.0	356.6	340.1	325.2	323.9	315.4	323.0	305.9	295.6	275.1	266.1	250.8	253.5	235.1	209.3	174.1	139.5	137.4
5	137.2	125.3	124.8	134.2	140.1	134.8	126.2	124.8	133.7	121.3	119.1	112.4	125.9	152.9	252.8	193.1	265.6	202.8	237.3	108.3	98.5	109.3	70.6	266.6
6	339.8	249.3	289.9	214.6	142.2	304.2	316.5	106.4	113.1	110.2	106.5	9.0	146.0	159.3	160.1	176.0	195.8	6.7	253.3	165.8	181.9	133.7	154.2	171.6
7	139.5	120.4	133.5	152.5	151.1	144.1	140.7	142.9	150.0	147.7	151.9	153.4	149.3	142.8	155.6	160.0	150.2	145.1	172.8	163.6	169.0	161.2	176.5	186.6
8	192.7	197.0	198.8	210.8	207.8	213.6	212.2	213.3	214.3	217.4	212.7	253.3	21.8	77.2	223.5	153.2	332.2	302.9	290.3	303.0	294.1	289.1	282.7	306.3
9	337.6	303.3	307.0	306.6	299.4	310.5	306.5	316.3	321.9	35.8	79.5	98.8	130.1	142.3	146.3	142.0	146.7	154.7	146.9	144.2	133.2	135.1	135.4	128.8
10	126.7	115.8	114.0	115.6									114.1	119.6	115.4	112.4	114.3	122.2	115.0	116.3	119.5	120.1		
11		125.4	123.7	122.0	127.0	134.9	124.3	113.9	107.1		99.5	87.0	103.6	114.9	116.3	121.3	123.5	119.9						
12	161.1	161.1	165.2	177.0	196.8	200.9	170.5	168.1	126.5	136.5	174.6	250.9	297.5	320.7	307.7	315.6	310.6	312.6	310.8	313.4	314.2	326.4	339.8	337.7
13	326.3	297.2	312.5	296.2	351.5	352.4	355.5	304.0	309.4	310.2	308.5	307.0	312.8	300.8	245.9	353.2	172.7	217.6	210.2	212.1	211.4	210.9	214.7	219.0
14	216.9	212.1	210.7	218.0	217.8	214.6	205.3	205.9	220.7	223.5	223.6	214.7	218.0	217.9	214.6	217.7	218.2	211.9	216.1	212.4	216.3	213.2	202.5	198.8
15	201.0	208.7	203.2	198.6	198.5	215.4	227.0	219.0	214.4	216.4	229.2	230.3	222.0	215.9	212.1	203.7	221.2	204.5	196.7	189.0	190.9	209.7	214.6	202.1
16	187.1	180.2	174.3	171.6	164.0	168.7	166.5	161.0	160.9	155.6	148.7	137.7	134.0	127.7	131.5	125.4	119.5	115.7	113.9	118.3	119.5	120.1	118.1	118.5
17	116.8	122.4	125.0	112.7	114.6	115.2	111.9	113.5	112.6	109.2	111.1	114.0	115.5	114.8	115.8	116.5	116.7	116.9	115.9	117.1	119.4	118.4	117.7	117.0
18	119.7	120.4	117.4	117.6	116.2	116.0	115.4	111.8	120.6	119.1	117.2	120.0	123.1	117.1	116.5	117.5	116.4	116.5	116.6	119.1	117.7	119.9	121.2	124.8
19	122.4	121.3	125.0	125.0	124.7	124.8	119.0	125.7	128.1	130.1	134.8	130.5	108.6	96.5	100.5	89.0	93.9	88.9	94.8	82.9	94.5	99.0	88.0	108.0
20	132.8	150.6	134.0	136.4	144.6	168.4	190.5	160.6	275.9	317.8	315.4	308.0	341.7	340.9	342.1	344.3	354.0	16.1	32.9	80.3	77.5	77.9	83.9	92.7
21	115.3	89.0	96.0	156.8	179.8	166.3	173.2	168.5	167.4	176.8	159.9	131.5	106.7	94.9	142.7	289.5	318.2	216.4	161.2	123.1	130.8	310.7	53.4	134.1
22	151.0	153.6	156.3	160.9	149.9	124.8	117.6	117.9	111.1	106.7	102.2	343.4	347.6	308.8	309.3	333.6	11.7	73.2	107.9	135.2	138.5	136.0	145.9	169.8
23	154.2	159.9	161.4	142.1	126.9	115.1	123.1	119.8	126.6	111.5	113.1	107.2	110.8	117.3	106.9	107.9	95.8	98.4	92.7	109.8	127.4	61.7	62.4	89.7
24	96.9	100.4	124.0	106.3	119.2	139.6	140.4	147.1	141.7	112.1	114.4	123.5	119.9	108.7	111.8	109.5	111.6	109.1	102.9	105.4	92.9	109.9	119.3	121.9
25	122.6	153.8	155.1	142.1	125.9	114.5	121.5	119.0	123.8	128.8	128.8	126.1	120.4	102.8	114.4	117.0	114.9	112.0	111.8	118.9	119.0	123.4	118.1	116.1
26	123.9	141.2	149.5	159.2	164.4	176.7	171.9	191.6	187.0	170.4	199.9	186.4	190.5	161.0	164.4	119.5	142.5	148.0	217.8	217.0	208.6	208.8	213.0	219.7
27	221.2	213.8	214.6	218.2	217.9	218.3	218.5	226.3	227.5	228.0	227.2	227.4	225.0	208.2	171.8	159.2	344.9	325.3	307.4	127.0	130.1	106.5	177.0	144.3
28	124.2	161.2	150.1	168.3	169.9	169.8	161.4	262.3	114.8	141.9	154.9	137.8	135.1	136.4	133.0	133.6	137.8	151.2	161.8	170.8	198.9	195.7	191.6	195.1
29	197.0	201.0	209.8	212.5	187.6	201.6	188.3	215.1	221.8	221.0	235.7	242.5	234.3	232.7	234.6	246.4	254.7	265.9	274.6	268.9	264.5	264.8	260.4	259.4
30	233.1	223.4	227.9	229.2	219.4	220.2	234.9	237.8	239.9	242.7	251.0	270.9	273.4	284.2	295.2	326.8	214.6	200.6	220.9	313.8	305.5	309.0	314.2	310.7
31	314.8	313.6	311.0	310.9	308.2	305.1	302.9	305.4	298.3	302.5	300.0	297.4	302.7	300.2	301.8	302.5	303.7	306.6	302.6	304.8	304.9	293.5	290.9	292.7

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.7	16.4	16.4	7.1	3.4	6.2	17.0	9.0	14.2	13.0	15.4	27.7	11.0	10.3	13.5	14.2	7.9	6.8	6.4	6.1	5.5	5.7	5.0	6.5	27.7	3.4	10.7
2	4.6	5.7	6.5	4.6	4.1	5.9	4.2	5.9	5.6	8.5	8.9	9.8	6.9	6.0	7.7	8.0	7.3	7.0	39.1	8.2	17.5	16.9	15.1	18.8	39.1	4.1	9.7
3	21.6	16.6	22.2	9.9	10.6	9.8	8.4	7.4	12.1	12.0	15.3	15.3	23.5	28.4	29.8	15.2	8.5	8.5	11.9	5.5	12.8	10.2	8.8	14.7	29.8	5.5	14.1
4	9.0	9.1	9.1	10.3	16.6	13.9	26.1	16.7	22.6	31.4	50.4	19.5	47.4	18.0	12.1	13.6	8.8	21.0	32.2	34.8	24.6	13.5	23.5	36.6	50.4	8.8	21.7
5	24.9	16.2	21.4	17.8	35.2	14.4	13.6	34.7	37.3	26.0	9.4	15.1	12.8	17.8	12.4	10.7	11.2	7.8	7.3	6.7	6.7	5.8	12.4	12.3	37.3	5.8	16.2
6	25.7	18.4	17.9	10.4	12.1	19.6	13.5	40.1	32.8	48.6	32.8	44.5	51.6	25.9	13.1	16.6	17.3	11.3	11.5	5.2	5.0	3.0	7.3	6.8	51.6	3.0	20.5
7	11.6	11.8	11.9	49.7	22.7	29.1	37.1	7.9	6.4	10.7	39.8	39.3	10.5	14.2	27.3	51.5	17.0	12.3	13.3	10.2	3.6	2.0	3.4	2.8	51.5	2.0	18.6
8	3.3	3.4	4.3	2.6	2.7	3.1	2.9	3.8	6.9	8.9	20.3	47.4	48.2	48.1	27.2	20.9	13.5	8.4	9.6	6.3	16.6	38.1	11.1	9.8	48.2	2.6	15.3
9	4.7	4.9	4.6	4.3	3.3	4.9	4.9	6.5	6.1	10.0	10.9	11.3	10.8	12.6	10.8	9.1	7.8	7.4	5.6	4.6	3.2	13.0	9.5	4.9	13.0	3.2	7.3
10	14.6	13.6	17.8	18.8	27.5	8.3	13.8	7.2	11.0	24.5	24.5	24.3	18.6	15.1	10.5	10.1	9.4	10.9	13.7	8.4	4.5	5.8	6.3	3.8	27.5	3.8	13.5
11	4.8	3.6	4.2	4.6	2.5	2.4	2.4	3.2	5.3	7.2	8.6	9.7	11.0	20.6	47.5	47.8	20.4	31.3	29.1	9.7	8.9	5.1	4.0	2.2	47.8	2.2	12.3
12	23.5	16.1	6.1	8.8	7.6	6.2	11.2	9.7	13.5	10.5	8.9	14.0	9.9	11.4	8.7	11.6	8.8	8.0	7.5	4.8	5.9	4.2	4.2	3.4	23.5	3.4	9.3
13	2.9	3.2	9.0	6.9	6.6	12.0	6.1	7.7	14.3	12.4	14.4	14.2	17.3	16.5	11.8	7.4	6.5	11.8	6.7	5.8	6.1	11.7	7.3	3.7	17.3	2.9	9.3
14	4.1	4.1	7.7	10.0	8.4	9.1	21.7	6.8	8.5	12.8	13.0	15.0	16.4	30.3	17.2	21.2	10.6	7.5	11.4	47.3	14.8	10.3	4.6	6.0	47.3	4.1	13.3
15	5.1	6.3	6.6	5.4	5.2	4.9	7.5	5.6	7.2	7.5	8.3	7.8	10.4	10.6	7.9	8.2	8.4	7.5	5.4	5.0	6.6	6.4	7.0	9.9	10.6	4.9	7.1
16	11.3	9.4	8.9	8.1	4.3	4.5	4.7	4.8	5.2	5.8	5.8	5.1	5.6	5.8	5.6	5.4	5.7	5.1	4.5	4.9	4.6	4.6	4.4	4.6	11.3	4.3	5.8
17	4.5	4.5	4.2	4.5	5.1	4.3	4.1	4.8	10.1	5.9	6.3	11.9	7.0	7.6	6.1	7.1	11.7	8.0	10.5	11.5	5.8	10.8	15.6	13.7	15.6	4.1	7.7
18	12.1	7.5	12.4	9.9	9.5	18.0	13.6	19.6	17.4	5.6	9.5	8.0	7.2	7.4	6.7	5.7	7.6	8.4	12.2	31.8	23.1	39.1	33.3	36.2	39.1	5.6	15.1
19	38.1	31.2	49.4	12.2	18.8	8.5	5.7	6.2	4.8	7.1	7.5	6.2	6.8	7.7	5.8	6.8	6.2	4.7	3.3	4.4	3.9	3.9	4.5	4.3	49.4	3.3	10.7
20	8.4	7.4	5.2	5.7	7.6	6.8	6.1	4.3	7.3	8.0	6.7	7.8	8.8	9.6	9.1	5.8	7.9	5.8	10.7	7.3	5.3	5.0	4.7	5.0	10.7	4.3	6.9
21	5.0	5.6	5.3	7.1	5.2	5.8	5.2	4.8	5.6	5.6	5.9	8.1	5.4	11.8	10.1	11.3	9.3	10.0	8.7	4.3	5.2	3.5	3.6	6.1	11.8	3.5	6.6
22	8.7	22.7	17.3	6.2	7.7	12.9	11.4	7.3	7.8	6.5	5.1	5.1	4.7	4.6	4.7	5.0	5.0	5.1	5.4	6.0	5.9	5.1	4.9	5.6	22.7	4.6	7.5
23	5.6	5.4	8.8	6.2	7.2	11.2	6.2	6.9	6.5	7.7	6.3	6.4	8.1	8.8	7.7	8.2	7.1	7.3	7.5	7.7	6.1	5.9	5.8	5.6	11.2	5.4	7.1
24	5.2	5.3	5.9	6.3	10.6	23.2	15.0	15.3	12.2	18.0	3.7	3.5	3.8	4.8	6.0	6.2	5.4	6.2	5.4	4.8	3.6	5.2	4.7	4.4	23.2	3.5	7.7
25	4.6	5.5	4.1	6.4	7.1	7.9	21.5	8.2	7.7	12.2	21.9	21.1	16.6	13.9	24.7	9.0	12.7	11.8	7.8	3.2	3.5	2.8	4.8	3.2	24.7	2.8	10.1
26	3.2	3.2	3.6	3.3	6.7	6.4	7.1	5.2	7.7	5.4	5.1	7.2	6.3	8.7	6.7	5.8	5.6	4.3	3.7	4.0	3.8	3.8	4.6	3.7	8.7	3.2	5.2
27	5.2	7.1	6.5	4.6	3.9	13.8	6.0	8.7	4.4	6.8	7.5	9.4	10.1	9.4	11.0	5.7	5.6	5.1	6.8	11.8	30.4	11.4	11.7	10.9	30.4	3.9	8.9
28	9.2	6.6	9.5	7.5	7.4	5.4	6.1	5.8	6.9	5.7	7.2	7.7	6.8	8.5	7.1	5.9	7.2	6.1	8.8	5.6	7.0	5.2	5.2	5.9	9.5	5.2	6.9
29	5.7	6.2	5.1	5.1	5.5	5.5	4.9	5.1	5.3	5.1	4.4	4.8	5.6	5.3	5.3	6.8	7.7	5.2	6.8	6.0	4.9	4.5	4.8	3.8	7.7	3.8	5.4
30	5.7	6.2	5.5	4.2	5.7	5.0	4.3	4.3	4.8	5.2	5.9	5.7	5.4	5.3	4.8	5.8	4.8	5.6	4.1	5.1	3.9	4.1	4.2	3.8	6.2	3.8	5.0
31	3.9	4.8	6.4	5.1	4.4	3.8	4.5	3.5	4.2	5.8	5.6	5.0	6.2	5.7	5.6	5.9	5.9	4.7	4.7	4.1	5.0	6.5	3.1	3.1	6.5	3.1	4.9
Max.	**38.1**	**31.2**	**49.4**	**49.7**	**35.2**	**29.1**	**37.1**	**40.1**	**37.3**	**48.6**	**50.4**	**47.4**	**51.6**	**48.1**	**47.5**	**51.5**	**20.4**	**31.3**	**39.1**	**47.3**	**30.4**	**39.1**	**33.3**	**36.6**	**51.6**		
Min.	**2.9**	**3.2**	**3.6**	**2.6**	**2.5**	**2.4**	**2.4**	**3.2**	**4.2**	**5.1**	**3.7**	**3.5**	**3.8**	**4.6**	**4.7**	**5.0**	**4.8**	**4.3**	**3.3**	**3.2**	**3.2**	**2.0**	**3.1**	**2.2**		**2.0**	
Avg.	**10.0**	**9.3**	**10.4**	**8.8**	**9.2**	**9.4**	**10.2**	**9.3**	**10.4**	**11.6**	**12.7**	**14.1**	**13.6**	**13.2**	**12.4**	**12.0**	**9.0**	**8.7**	**10.4**	**9.4**	**8.5**	**8.8**	**8.1**	**8.5**			**10.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.6	3.1	4.7	3.7	4.4	5.8	3.8	4.3	4.4	5.2	5.7	6.7	8.7	8.3	9.5	8.9	7.4	6.3	5.2	3.6	6.1	6.1	7.0	6.6	9.5	2.6	5.8
2	4.6	6.5	5.1	7.4	32.8	48.7	7.5	11.4	8.8	10.2	8.0	7.1	7.7	7.5	6.0	5.1	5.8	5.4	5.6	5.7	5.2	5.0	4.9	4.7	48.7	4.6	9.4
3	5.0	6.0	5.9	5.9	6.1	5.2	5.2	5.0	4.7	4.8	4.3	4.4	4.5	4.7	4.7	5.4	4.9	4.7	4.6	3.8	3.9	4.6	4.8	4.5	6.1	3.8	4.9
4	10.1	10.1	18.9	41.3	24.9	12.6	12.8	24.7	53.3	17.4	9.8	8.2	10.2	8.3	9.7	10.8	14.3	5.8	5.4	5.7	5.4	5.2	5.8	5.1	53.3	5.1	14.0
5	5.6	5.2	5.5	6.2	6.1	5.8	4.8	4.9	5.1	5.0	4.3	4.5	5.2	5.6	5.4	5.4	5.3	5.8	5.8	5.4	5.2	7.4	5.6	7.5	7.5	4.3	5.5
6	5.9	12.9	22.8	12.4	7.5	8.9	31.3	20.5	16.6	5.6	6.1	5.3	7.2	7.3	8.8	7.9	6.8	6.8	8.2	5.7	5.4	6.1	5.2	5.3	31.3	5.2	9.9
7	5.8	7.1	5.3	21.9	7.7	23.8	46.4	26.4	9.5	12.3	8.6	9.2	8.3	10.2	8.3	7.8	6.6	6.1	4.3	3.7	3.3	9.2	7.4	8.1	46.4	3.3	11.1
8	31.9	8.8	13.5	6.1	3.7	4.6	3.8	4.5	21.5	22.5	10.6	21.5	10.0	8.8	8.4	7.1	6.4	4.7	6.1	5.4	4.8	6.0	5.7	6.3	31.9	3.7	9.7
9	5.9	5.6	6.9	6.7	6.7	7.6	6.0	5.6	5.3	6.5	6.0	5.3	6.0	5.5	6.8	10.0	10.0	6.5	7.0	5.9	6.0	5.0	5.4	6.2	10.0	5.0	6.4
10	9.6	7.8	6.0	5.1	5.2	4.0	4.6	10.4	54.6	59.0	23.4	15.1	16.2	13.8	15.6	11.4	22.3	12.8	11.0	5.8	19.8	15.4	7.5	6.5	59.0	4.0	15.1
11	6.4	6.7	5.4	6.3	4.8	5.6	4.7	5.2	5.2	5.2	5.4	5.0	5.2	6.0	6.1	6.3	5.4	5.5	6.2	6.4	5.8	5.6	7.1	7.6	7.6	4.7	5.8
12	10.3	9.1	7.5	7.1	6.7	8.2	8.0	8.8	8.3	8.4	7.9	7.4	6.4	7.3	5.8	6.6	5.7	5.8	5.4	5.0	5.0	4.7	5.1	6.2	10.3	4.7	6.9
13	8.4	7.8	5.2	3.7	4.6	15.4	25.9	5.6	6.9	9.8	10.9	12.7	13.0	10.4	13.3	9.3	11.1	11.2	12.3	18.3	5.1	7.0	9.0	17.2	25.9	3.7	10.6
14	9.7	6.5	9.9	5.8	7.4	6.0	9.8	7.8	6.1	6.2	9.6	12.2	10.3	10.0	7.8	6.6	6.8	5.5	5.3	5.2	4.9	4.7	4.7	5.3	12.2	4.7	7.3
15	4.7	4.8	4.6	4.4	4.6	4.9	4.7	5.2	5.4	5.5	5.1	5.3	5.1	4.8	4.6	4.9	4.6	11.8	8.2	5.8	6.0	5.0	6.0	18.3	18.3	4.4	6.0
16	5.1	8.4	19.5	6.8	8.4	41.5	46.4	19.2	24.8	41.5	9.6	13.8	9.3	8.5	7.5	8.3	10.6	7.8	8.5	6.3	3.8	6.0	4.7	5.9	46.4	3.8	13.8
17	5.9	9.2	18.5	13.4	18.0	19.0	40.9	10.2	12.2	5.7	22.1	20.2	41.8	48.9	15.1	4.9	34.0	8.7	8.4	7.4	5.6	4.3	3.6	7.1	48.9	3.6	16.0
18	5.0	8.0	2.5	3.5	2.2	2.0	7.8	6.1	5.6	3.7	7.3	4.5	6.6	7.1	7.3	6.6	6.3	6.3	2.8	1.7	1.8	4.6	3.3	4.0	8.0	1.7	4.9
19	4.1	4.7	2.9	3.6	3.0	3.8	3.6	5.0	8.9	8.1	16.0	8.1	9.1	7.8	8.9	6.9	5.8	5.0	4.1	3.2	3.5	3.9	5.1	2.4	16.0	2.4	5.7
20	3.3	3.5	3.3	6.1	6.6	7.7	7.6	3.3	2.7	4.5	8.4	9.7	9.8	8.0	9.7	7.7	6.8	5.3	6.2	5.7	10.0	5.9	11.5	5.2	11.5	2.7	6.6
21	6.9	13.8	18.2	6.0	6.4	17.0	10.5	8.4	6.5	5.9	8.6	10.1	8.9	6.6	5.4	5.3	5.3	6.8	6.1	7.1	6.3	5.2	5.4	3.9	18.2	3.9	7.9
22	4.8	5.5	6.5	8.2	8.2	6.7	5.7	5.6	5.6	4.6	4.7	4.7	4.9	5.4	5.5	9.2	8.6	10.2	5.4	6.3	8.2	6.7	10.3	8.7	10.3	4.6	6.7
23	12.7	10.5	10.0	9.0	8.4	7.1	6.6	8.0	6.1	5.0	5.4	7.2	6.3	6.1	6.6	5.4	5.4	6.0	16.8	6.4	7.7	6.9	6.7	6.2	16.8	5.0	7.6
24	5.8	5.9	6.4	5.9	5.1	5.2	5.1	5.3	6.4	5.4	6.2	5.6	7.6	7.5	7.4	7.1	6.4	7.2	7.0	7.2	5.9	6.2	5.7	5.0	7.6	5.0	6.2
25	5.6	5.3	5.9	4.9	4.8	4.6	4.1	4.8	6.3	5.3	5.1	5.5	6.0	6.2	9.1	9.3	7.9	6.2	6.1	9.4	7.1	6.1	4.6	3.5	9.4	3.5	6.0
26	7.6	12.5	9.2	6.6	6.2	6.6	5.7	5.5	4.7	4.7	4.3	5.2	5.8	5.8	5.4	5.2	4.5	4.6	4.5	4.5	4.9	4.6	4.5	4.4	12.5	4.3	5.7
27	4.5	4.6	4.7	4.7	4.5	4.6	5.0	10.8	11.3	7.4	47.8	22.8	6.4	5.5	6.7	6.1	8.8	6.3	6.5	5.3	7.9	7.2	14.4	6.5	47.8	4.5	9.2
28	7.9	10.6	15.0	13.6	3.6	4.6	5.6	7.4	10.7	10.3	9.8	8.3	11.2	18.7	6.6	8.9	6.9	8.3	34.6	10.7	36.8	13.1	19.3	33.2	36.8	3.6	13.1
29	16.0	20.8	9.6	8.9	4.6	6.8	11.1	6.7	5.3	6.0	6.1	8.9	5.1	7.7	7.0	6.8	6.3	4.5	3.9	6.3	7.1	41.7	37.3	22.1	41.7	3.9	11.1
30	32.8	22.9	21.3	5.9	27.0	12.6	18.8	15.0	9.8	21.0	28.3	6.5	13.7	25.8	26.1	16.1	8.2	5.4	6.4	5.8	3.7	3.0	3.1	3.3	32.8	3.0	14.2
Max.	**32.8**	**22.9**	**22.8**	**41.3**	**32.8**	**48.7**	**46.4**	**26.4**	**54.6**	**59.0**	**47.8**	**22.8**	**41.8**	**48.9**	**26.1**	**16.1**	**34.0**	**12.8**	**34.6**	**18.3**	**36.8**	**41.7**	**37.3**	**33.2**	**59.0**		
Min.	**2.6**	**3.1**	**2.5**	**3.5**	**2.2**	**2.0**	**3.6**	**3.3**	**2.7**	**3.7**	**4.3**	**4.4**	**4.5**	**4.7**	**4.6**	**4.9**	**4.5**	**4.5**	**2.8**	**1.7**	**1.8**	**3.0**	**3.1**	**2.4**		**1.7**	
Avg.	**8.5**	**8.5**	**9.4**	**8.4**	**8.3**	**10.6**	**12.1**	**9.0**	**11.4**	**10.8**	**10.5**	**9.0**	**9.2**	**9.8**	**8.5**	**7.6**	**8.5**	**6.8**	**7.6**	**6.2**	**7.1**	**7.4**	**7.7**	**7.9**			**8.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.5	3.5	3.4	3.4	3.7	3.7	3.8	4.1	4.0	4.5	5.1	5.1	5.2	5.7	5.6	5.5	5.4	3.8	3.9	3.7	3.4	3.6	3.5	3.5	5.7	3.4	4.2
2	3.4	3.4	2.8	2.6	3.8	9.3	5.1	6.6	4.9	7.2	6.7	6.0	6.0	5.9	8.2	11.6	7.5	6.6	7.7	6.6	5.2	6.1	8.8	5.6	11.6	2.6	6.2
3	29.8	9.4	7.7	13.1	38.5	32.8	38.8	37.1	8.4	9.9	7.2	7.8	12.4	17.5	44.8	25.1	21.5	11.8	11.3	44.4	35.9	16.5	27.6	13.0	44.8	7.2	21.7
4	16.5	25.3	7.4	12.9	4.1	6.1	10.0	11.2	15.0	9.3	11.3	8.3	7.8	7.0	7.2	11.2	14.9	8.7	6.6	8.8	5.0	4.6	4.9	4.8	25.3	4.1	9.5
5	5.2	36.9	18.9	9.8	13.4	12.8	8.7	19.4	8.4	10.0	15.0	14.9	9.7	9.5	8.8	8.0	8.3	6.7	12.4	8.6	15.4	17.3	11.4	5.4	36.9	5.2	12.3
6	12.5	12.3	21.2	8.6	21.9	19.2	12.1	16.8	16.0	9.1	8.2	7.3	15.2	7.0	13.9	5.3	9.1	9.3	5.5	10.8	10.2	5.3	18.4	7.2	21.9	5.3	11.8
7	2.8	5.2	13.3	8.2	4.9	4.5	4.4	4.9	4.4	4.2	4.3	5.0	4.6	4.8	9.5	7.2	8.2	9.5	8.4	12.4	18.8	27.7	10.8	6.5	27.7	2.8	8.1
8	7.4	6.5	7.7	25.1	12.8	13.4	7.6	7.7	6.5	8.0	22.1	13.1	22.7	8.5	7.0	7.4	6.1	7.9	10.2	33.3	24.2	5.8	8.8	8.0	33.3	5.8	12.0
9	9.0	10.8	8.2	29.7	16.8	8.8	12.0	10.2	6.3	4.6	7.8	7.0	5.5	5.0	6.6	6.2	5.0	5.5	6.1	6.2	5.3	4.4	4.2	4.6	29.7	4.2	8.1
10	5.2	4.4	4.3	4.4	10.8	5.9	12.2	37.3	26.4	14.6	14.9	44.7	0.1	0.2	26.1	14.9	7.9	10.1	18.5	5.4	3.9	3.6	3.4	5.1	44.7	0.1	11.8
11	6.5	4.9	5.4	8.1	9.2	7.5	8.3	4.7	5.7	6.3	7.5	7.6	6.2	7.8	7.7	6.8	6.3	4.1	3.7	3.9	4.2	4.3	3.6	3.5	9.2	3.5	6.0
12	3.5	3.4	3.2	4.0	3.2	3.1	4.3	3.0	3.5	3.7	4.2	4.8	6.4	7.5	7.7	7.2	6.9	6.0	8.2	7.2	7.5	10.6	16.8	11.5	16.8	3.0	6.1
13	7.8	7.9	4.9	3.2	4.5	6.9	3.9	11.1	6.0	4.4	6.8	11.4	14.0	11.2	15.1	14.3	5.5	16.7	10.2	10.5	9.0	4.8	4.7	4.7	16.7	3.2	8.3
14	4.2	5.3	5.3	7.4	9.0	5.0	9.8	10.0	18.7	8.2	15.6	9.5	6.3	4.9	5.8	8.2	4.1	3.3	3.7	3.3	4.7	5.6	10.1	6.4	18.7	3.3	7.3
15	8.5	22.0	36.0	30.1	12.0	6.5	9.0	5.2	6.5	24.8	29.3	21.8	9.3	7.4	7.0	5.8	4.9	3.2	4.1	6.2	4.2	3.6	4.1	3.3	36.0	3.2	11.4
16	8.6	3.1	6.0	5.1	4.6	5.1	5.0	4.4	4.5	4.3	45.2	19.8	11.8	10.4	4.8	8.2	6.3	35.7	7.6	13.7	12.8	8.0	5.9	6.3	45.2	3.1	10.3
17	5.5	4.8	4.6	5.3	4.3	4.4	5.2	4.9	4.8	5.2	13.1	12.3	7.3	6.5	7.0	5.6	6.1	6.0	8.1	7.0	6.0	5.7	5.6	5.4	13.1	4.3	6.3
18	5.1	5.0	4.3	4.3	4.3	3.8	3.8	4.5	3.9	3.0	3.6	10.0	32.2	19.0	6.7	5.2	6.9	7.9	9.5	5.6	8.4	7.9	6.0	5.7	32.2	3.0	7.4
19	6.0	5.3	6.8	5.1	5.9	5.0	6.1	4.9	5.1	5.5	5.2	5.8	5.3	4.8	4.6	4.3	4.5	4.7	4.5	4.7	4.6	4.7	4.6	4.3	6.8	4.3	5.1
20	4.3	4.2	4.4	4.2	4.5	4.5	4.1	4.2	4.6	4.7	4.8	5.2	4.9	10.7	6.1	11.0	25.8	6.4	9.3	5.0	4.6	5.3	7.3	8.6	25.8	4.1	6.6
21	6.1	8.5	6.2	24.7	24.1	9.2	6.6	4.8	5.7	4.7	3.1	3.5	2.9	2.4	3.6	9.6	7.0	4.0	3.7	3.1	3.0	3.3	3.7	5.6	24.7	2.4	6.6
22	3.1	4.4	6.7	6.3	4.6	3.6	3.7	3.7	3.2	3.0	2.9	3.4	3.7	3.5	3.1	3.9	3.1	3.2	5.3	3.1	2.7	2.8	2.0	3.5	6.7	2.0	3.7
23	5.4	2.6	5.4	3.7	2.1	2.0	3.6	2.4	3.0	3.8	3.8	3.9	3.2	3.3	3.3	2.9	2.8	3.1	2.7	2.6	2.7	3.3	3.0	3.4	5.4	2.0	3.2
24	3.5	3.7	3.4	3.6	3.0	4.4	3.1	2.8	5.0	7.5	4.6	3.8	5.0	3.4	4.9	5.1	4.7	7.2	4.2	4.5	4.7	4.7	4.3	3.1	7.5	2.8	4.3
25	3.1	3.0	3.5	3.1	2.7	4.0	4.2	4.6	4.1	5.0	4.2	3.8	4.8	4.9	4.4	3.9	3.7	3.5	3.7	3.6	3.8	4.8	3.8	4.3	5.0	2.7	3.9
26	3.7	4.1	4.1	3.9	3.3	3.6	3.6	2.6	3.0	3.5	3.6	4.6	4.4	6.3	7.2	4.6	3.2	3.0	3.2	3.6	5.6	3.7	5.3	5.3	7.2	2.6	4.1
27	4.1	6.0	4.3	7.1	9.5	45.2	37.6	44.2	16.1	20.6	13.0	6.3	27.4	12.6	18.3	8.1	26.4	28.6	24.3	24.0	7.9	32.1	63.1	32.2	63.1	4.1	21.6
28	26.5	9.2	13.5	19.5	19.1	18.7	4.9	6.1	7.3	20.5	9.1	6.5	4.0	8.3	9.6	11.9	10.4	11.9	13.7	12.9	9.6	4.7	42.6	9.3	42.6	4.0	12.9
29	6.8	12.8	33.2	7.1	13.7	9.9	5.2	4.2	4.0	4.1	4.3	4.9	6.0	4.7	5.4	5.4	4.3	3.6	4.7	5.3	5.2	7.3	9.0	5.0	33.2	3.6	7.3
30	3.8	3.6	3.7	3.9	3.8	3.9	4.6	5.3	6.1	4.3	5.4	3.9	4.2	3.2	2.9	2.7	2.6	2.5	3.3	4.5	2.7	2.9	5.0	4.2	6.1	2.5	3.9
31	3.6	3.8	4.0	3.7	3.5	3.2	4.1	5.6	7.3	5.0	5.0	5.4	4.7	3.0	4.3	8.0	6.1	3.2	4.0	4.8	5.1	4.8	3.2	6.8	8.0	3.0	4.7
Max.	**29.8**	**36.9**	**36.0**	**30.1**	**38.5**	**45.2**	**38.8**	**44.2**	**26.4**	**24.8**	**45.2**	**44.7**	**32.2**	**19.0**	**44.8**	**25.1**	**26.4**	**35.7**	**24.3**	**44.4**	**35.9**	**32.1**	**63.1**	**32.2**	**63.1**		
Min.	**2.8**	**2.6**	**2.8**	**2.6**	**2.1**	**2.0**	**3.1**	**2.4**	**3.0**	**3.0**	**2.9**	**3.4**	**0.1**	**0.2**	**2.9**	**2.7**	**2.6**	**2.5**	**2.7**	**2.6**	**2.7**	**2.8**	**2.0**	**3.1**		**0.1**	
Avg.	**7.3**	**7.9**	**8.5**	**9.1**	**9.1**	**8.9**	**8.2**	**9.6**	**7.4**	**7.5**	**9.6**	**8.9**	**8.5**	**7.0**	**8.9**	**7.9**	**7.9**	**8.0**	**7.5**	**9.0**	**7.9**	**7.4**	**10.2**	**6.6**			**8.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.9	3.9	2.9	3.1	5.9	3.1	3.7	3.8	3.6	2.9	2.6	3.4	3.4	4.3	6.6	8.6	4.2	3.1	4.1	4.9	2.7	3.6	3.8	4.6	8.6	2.6	4.0
2	3.8	4.0	4.5	5.4	8.8	3.6	5.0	4.0	4.4	3.9	3.4	3.8	4.7	5.9	6.0	4.2	6.2	4.8	2.4	2.7	2.1	4.3	3.2	4.9	8.8	2.1	4.4
3	3.5	5.4	5.7	5.0	5.0	3.1	6.0	5.3	4.5	3.6	3.9	3.5	4.1	3.8	3.4	4.4	4.1	3.6	4.0	4.0	5.7	3.6	3.0	3.2	6.0	3.0	4.2
4	4.0	3.2	2.7	3.4	5.8	3.9	4.1	4.3	4.4	3.9	4.2	4.6	3.8	3.5	3.1	3.1	3.8	4.3	2.8	2.9	2.8	2.9	2.6	2.3	5.8	2.3	3.6
5	3.6	3.4	3.7	3.7	3.0	3.7	2.4	2.2	2.6	3.1	3.3	2.6	3.0	3.3	2.3	2.6	2.8	2.4	3.0	4.0	6.2	4.9	22.4	23.3	23.3	2.2	4.9
6	12.9	8.4	8.3	14.3	15.4	3.5	4.3	3.4	3.4	3.3	3.1	3.0	3.0	2.9	3.1	2.9	2.6	2.6	6.4	3.8	4.3	3.4	3.5	3.9	15.4	2.6	5.2
7	5.1	3.6	3.5	6.9	6.3	5.1	6.6	5.3	4.3	4.9	3.5	4.9	6.8	6.1	4.8	3.5	3.0	3.5	2.9	3.3	2.7	2.8	3.0	3.0	6.9	2.7	4.4
8	3.7	3.5	3.2	3.0	2.8	4.3	2.6	3.2	3.2	4.9	6.6	4.9	3.8	4.3	5.3	4.0	4.0	2.4	2.6	3.2	3.6	5.2	4.8	5.2	6.6	2.4	3.9
9	4.6	6.6	5.1	4.1	3.5	4.4	4.2	3.2	2.7	3.6	4.1	3.9	3.7	2.5	2.7	2.6	3.7	3.2	3.5	3.3	3.2	3.3	3.0	3.3	6.6	2.5	3.7
10	4.1	3.8	3.9	3.8	3.4	2.8	2.8	2.9	2.9	3.0	3.3	3.0	2.9	3.0	2.8	2.9	3.0	2.7	2.7	2.8	2.5	2.8	3.1	2.9	4.1	2.5	3.1
11	3.1	2.9	2.7	3.0	3.1	3.7	3.1	3.4	3.4	3.1	3.4	3.6	3.5	3.7	3.3	3.9	3.3	3.4	4.4	3.0	4.1	3.4	3.0	2.9	4.4	2.7	3.3
12	3.5	2.9	3.2	3.2	2.6	3.2	3.4	4.1	4.5	4.1	3.8	4.6	4.4	4.1	3.3	3.2	2.7	2.8	3.5	3.8	3.4	5.3	4.7	6.2	6.2	2.6	3.8
13	4.5	4.3	7.8	7.5	3.5	5.5	4.9	6.5	5.9	7.6	10.5	8.4	4.2	10.1	30.4	22.2	8.8	8.1	11.9	13.0	7.1	6.3	6.4	5.1	30.4	3.5	8.8
14	5.0	4.5	4.5	4.5	6.1	6.7	5.6	4.1	3.5	4.9	9.9	8.5	10.4	24.5	5.3	7.7	14.8	15.6	4.5	4.8	4.6	4.9	11.1	12.6	24.5	3.5	7.9
15	6.6	7.9	7.5	9.8	13.9	17.5	29.4	9.4	3.2	3.1	3.4	3.3	2.9	3.8	4.6	2.8	15.0	8.8	4.5	30.9	6.3	7.2	5.9	12.8	30.9	2.8	9.2
16	19.3	16.9	5.7	6.3	6.6	7.0	7.1	3.8	4.5	4.5	4.4	3.7	4.3	4.2	4.4	4.9	4.4	3.9	4.0	4.0	3.7	3.9	4.8	4.9	19.3	3.7	5.9
17	7.5	5.5	4.9	5.1	4.9	4.5	4.8	5.3	5.0	9.6	5.4	6.4	5.8	5.9	7.9	5.4	6.3	6.0	6.6	8.7	9.7	13.3	0.1	0.1	13.3	0.1	6.0
18	0.1	0.3	0.2	0.1	0.2	25.6	6.7	11.2	6.3	10.6	17.0	5.3	34.2	25.1	9.3	19.8	7.1	3.1	4.2	51.5	33.0	10.3	10.7	15.4	51.5	0.1	12.8
19	35.2	19.3	26.5	13.2	23.6	18.4	5.6	4.5	3.7	4.8	4.9	7.2	4.1	3.6	7.2	10.0	4.9	5.8	8.4	14.0	11.9	11.2	5.5	7.9	35.2	3.6	10.9
20	8.3	4.7	9.1	6.8	11.3	9.1	8.2	6.3	5.6	6.5						46.8	4.9	5.4	9.9	19.3	33.7	6.2	9.7	6.7	46.8	4.7	11.5
21	11.5	14.6	3.0	3.5	3.1	3.6	4.8	5.5	5.1	6.5	2.1	9.0	9.1	2.4	4.2	4.0	8.8	16.4	38.4	14.8	14.0	44.1	9.6	8.3	44.1	2.1	10.3
22	15.5	43.0	29.5	56.4	27.2	32.0	54.9	52.3	32.0	35.5	28.3	8.0	49.7	15.9	6.9	7.4	7.3	4.3	3.7	5.9	4.4	5.0	3.7	2.6	56.4	2.6	22.1
23	4.8	4.0	2.4	3.0	3.5	3.2	2.2	2.3	2.9	2.9	2.9	2.5	2.6	3.0	2.4	2.3	2.8	1.9	2.5	4.2	3.0	2.6	2.1	1.7	4.8	1.7	2.8
24	2.7	4.2	5.2	3.8	2.3	3.4	2.7	3.5	3.5	2.4	3.3	2.4	2.8	2.0	2.3	2.7	2.6	2.7	3.1	3.4	3.6	2.7	2.5	2.0	5.2	2.0	3.0
25	2.0	2.1	2.6	3.0	3.0	2.6	2.2	2.1	1.9	2.1	2.3	2.3	2.5	2.4	2.4	2.2	2.0	2.6	3.1	2.0	2.4	2.9	2.9	2.8	3.1	1.9	2.4
26	2.3	2.8	2.6	2.2	2.4	2.6	2.7	2.8	2.8	2.4	2.2	2.8	2.0	3.3	5.5	4.6	2.8	3.1	3.6	2.9	3.5	3.3	3.7	3.2	5.5	2.0	3.0
27	3.3	2.9	3.4	3.2	4.5	3.9	5.6	5.7	6.9	6.2	3.5	4.2	5.3	3.1	3.1	43.6	7.6	6.5	5.6	8.8	8.0	4.4	5.4	3.6	43.6	2.9	6.6
28	4.1	2.9	2.7	3.0	3.5	3.7	4.0	4.1	5.3	5.1	5.6	4.9	4.2	5.7	9.0	12.1	6.2	12.8	10.1	23.1	13.3	18.8	22.0	7.1	23.1	2.7	8.0
29	12.2	10.0	10.8	27.6	26.9	3.7	1.7	4.4	2.4	3.3	4.6	4.2	2.7	2.0	2.3	2.8	6.6	4.4	5.0	5.0	4.5	7.6	3.7	3.0	27.6	1.7	6.7
30	6.3	2.9	4.5	4.0	3.8	2.7	2.8	3.3	2.6	2.0	2.2	2.5	2.9	3.7	2.7	2.3	5.5	7.0	6.0	2.7	3.9	3.0	4.3	5.1	7.0	2.0	3.7
Max.	**35.2**	**43.0**	**29.5**	**56.4**	**27.2**	**32.0**	**54.9**	**52.3**	**32.0**	**35.5**	**28.3**	**9.0**	**49.7**	**25.1**	**30.4**	**46.8**	**15.0**	**16.4**	**38.4**	**51.5**	**33.7**	**44.1**	**22.4**	**23.3**	**56.4**		
Min.	**0.1**	**0.3**	**0.2**	**0.1**	**0.2**	**2.6**	**1.7**	**2.1**	**1.9**	**2.0**	**2.1**	**2.3**	**2.0**	**2.0**	**2.3**	**2.2**	**2.0**	**1.9**	**2.4**	**2.0**	**2.1**	**2.6**	**0.1**	**0.1**		**0.1**	
Avg.	**6.9**	**6.8**	**6.1**	**7.4**	**7.2**	**6.7**	**6.8**	**6.1**	**4.9**	**5.5**	**5.4**	**4.5**	**6.8**	**5.8**	**5.4**	**8.3**	**5.4**	**5.2**	**5.9**	**8.7**	**7.1**	**6.8**	**5.8**	**5.7**			**6.3**

Total Hours in Month 720 **Hours Data Available** 715 **Data Recovery** 99.3%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.6	7.1	4.2	3.6	3.4	5.3	5.2	9.1	4.6	3.4	4.3	4.0	2.8	3.4	4.6	4.0	4.4	3.6	2.8	3.6	6.9	4.0	3.7	13.6	13.6	2.8	4.9
2	11.7	18.3	10.3	10.7	10.4	8.5	16.7	16.6	51.5	7.0	6.5	6.0	4.5	4.1	3.1	2.8	2.9	3.5	2.5	2.5	2.5	2.6	2.6	2.5	51.5	2.5	8.8
3	2.1	2.5	2.3	2.3	2.4	3.1	3.1	3.7	2.4	3.4	3.1	4.0	2.6	3.9	3.7	3.5	3.8	6.4	5.9	5.7	4.0	4.5	3.1	3.4	6.4	2.1	3.5
4	3.4	3.7	4.1	4.3	6.5	32.4	10.5	8.2	6.1	6.6	5.8	4.0	5.6	4.0	3.6	5.3	3.8	3.4	3.4	3.4	3.4	4.1	3.8	4.0	32.4	3.4	6.0
5	4.1	4.8	4.2	4.7	3.4	3.8	4.8	6.0	4.3	4.0	3.5	3.8	4.0	3.6	3.6	3.7	3.8	4.3	4.2	3.9	3.5	3.9	3.5	3.5	6.0	3.4	4.0
6	3.6	3.9	3.7	4.0	3.9	4.0	3.6	3.7	3.4	4.3	5.0	3.9	4.4	3.6	4.7	3.8	4.8	3.1	0.1	4.9	4.3	3.5	4.0	3.9	5.0	0.1	3.8
7	4.0	3.7	4.0	3.9	4.1	4.0	4.1	3.9	4.2	4.3	4.1	4.2	4.2	4.2	4.1	4.1	4.2	3.9	4.2	3.7	4.0	4.0	4.0	4.1	4.3	3.7	4.1
8	5.0	5.8	5.2	6.1	7.5	7.4	6.6	7.4	7.7	4.5	4.2	4.6	4.9	4.8	4.7	5.0	4.2	3.8	4.0	4.6	4.8	4.7	4.3	4.8	7.7	3.8	5.3
9	4.7	4.9	4.9	4.7	4.9	4.5	4.2	4.2	4.1	4.0	3.7	4.0	4.0	3.9	4.6	4.8	8.2	4.3	4.7	4.8	4.1	4.3	10.4	18.7	18.7	3.7	5.4
10	6.0	7.0	28.9	18.9	12.3	9.0	6.6	6.7	6.7	4.6	4.8	6.2	4.1	4.9	5.3	7.6	9.4	4.2	4.8	3.9	3.9	3.2	3.8	4.0	28.9	3.2	7.4
11	4.2	4.5	5.7	12.8	33.5	6.1	4.9	24.2	20.1	27.2	6.1	5.5	6.6	9.7	23.3	8.6	18.1	12.4	4.3	3.6	2.7	2.5	2.9	2.8	33.5	2.5	10.5
12	2.7	2.4	2.1	3.4	2.9	3.1	3.1	3.8	2.9	3.3	3.7	7.5	10.0	7.8	40.4	40.4	18.6	26.9	21.7	9.3	7.8	41.6	33.8	64.9	64.9	2.1	15.2
13	40.5	43.5	14.0	47.9	25.8	7.2	9.1	8.4	3.8	4.2	2.6	7.7	4.8	3.6	4.0	4.0	4.2	4.3	4.4	4.5	4.2	4.1	4.3	4.4	47.9	2.6	11.1
14	4.4	4.0	4.0	4.4	5.4	9.1	5.0	4.7	5.8	7.8	12.5	11.5	8.5	5.4	4.4	5.3	4.5	4.1	8.5	5.5	4.8	4.0	4.0	4.2	12.5	4.0	5.9
15	4.2	4.1	4.0	3.8	4.0	4.2	5.1	7.8	8.3	14.3	9.7	49.6	10.0	6.4	9.9	9.9	7.8	4.8	4.3	4.2	4.2	4.6	4.4	4.1	49.6	3.8	8.1
16	4.1	4.1	3.8	4.1	4.0	4.6	4.8	4.6	5.7	5.5	4.5	6.5	4.3	3.9	8.5	40.5	17.9	19.7	8.7	24.8	7.9	29.8	34.1	5.5	40.5	3.8	10.9
17	18.1	6.1	4.5	4.7	3.3	3.3	4.2	3.8	4.1	7.9	21.3	10.1	14.8	26.5	16.0	13.0	7.6	6.0	4.8	4.7	7.3	4.8	5.4	4.7	26.5	3.3	8.6
18	12.1	5.2	19.7	28.5	8.6	6.7	8.7	4.6	5.4	6.9	5.8	3.7	4.0	3.7	4.3	7.2	5.3	7.7	9.2	33.3	31.4	4.8	9.0	12.9	33.3	3.7	10.4
19	14.4	15.5	17.6	4.0	4.9	4.0	4.2	3.6	3.8	4.2	4.7	4.8	4.6	4.2	4.1	4.8	4.3	6.4	6.2	5.1	8.5	7.1	7.5	4.4	17.6	3.6	6.4
20	8.2	5.0	6.8	6.9	23.6	31.4	16.8	14.3	19.2	7.7	4.7	5.7	3.8	7.4	53.2	41.9	13.2	25.2	9.9	48.3	4.2	10.1	45.6	4.2	53.2	3.8	17.4
21	6.8	22.8	28.8	49.2	10.7	15.5	44.1	21.8	16.0	10.4	36.9	21.7	14.5	23.4	25.9	47.9	6.8	4.2	5.4	3.3	4.1	3.5	2.8	3.3	49.2	2.8	17.9
22	3.0	3.1	2.7	4.5	6.5	3.2	5.6	3.9	3.0	7.5	13.7	4.2	3.2	3.6	3.4	11.1	4.8	5.6	6.1	8.3	6.1	22.1	25.2	42.5	42.5	2.7	8.5
23	62.2	12.9	10.7	5.4	5.5	8.0	33.8	29.6	9.9	7.5	10.1	8.5	14.8	7.1	8.2	6.5	4.4	6.0	3.9	8.7	6.6	4.4	3.5	3.3	62.2	3.3	11.7
24	4.8	5.2	5.4	5.3	4.0	10.2	6.6	6.1	4.2	6.5	7.6	6.0	6.5	5.4	7.8	46.7	54.9	42.3	11.7	24.6	14.8	21.5	35.3	12.5	54.9	4.0	14.8
25	31.5	16.0	42.7	12.7	6.0	5.1	7.1	5.4	4.3	4.6	3.9	3.5	3.5	3.9	6.4	5.5	6.9	5.9	49.1	23.6	11.8	6.3	5.6	7.6	49.1	3.5	11.6
26	5.6	6.3	5.2	4.1	6.2	4.4	3.7	3.7	12.9	16.4	8.9	24.1	19.0	16.5	7.4	8.3	8.1	7.9	5.0	6.0	7.5	20.5	13.0	5.6	24.1	3.7	9.4
27	8.4	7.7	23.6	8.8	7.0	12.6	7.2	13.6	22.1	25.4	15.9	19.2	18.3	22.6	6.1	6.7	12.4	28.9	16.7	32.1	22.9	14.9	14.5	33.1	33.1	6.1	16.7
28	31.5	12.0	13.8	6.3	8.3	8.4	7.7	7.5	4.8	8.8	10.2	13.2	22.4	10.3	35.3	21.2	14.9	15.7	20.8	6.3	18.4	24.7	12.3	23.6	35.3	4.8	14.9
29	21.7	30.5	17.2	10.2	7.2	5.9	3.6	3.4	3.8	3.7	3.7	3.6	3.9	3.9	5.3	10.6	5.7	5.7	5.0	3.8	4.8	19.0	11.7	10.5	30.5	3.4	8.5
30	9.9	5.0	3.9	4.2	12.4	12.4	10.3	16.6	13.0	7.1	8.0	4.6	6.7	24.8	13.9	12.8	21.8	14.2	11.2	23.4	15.3	8.8	9.9	9.6	24.8	3.9	11.6
31	12.8	21.3	20.3	19.3	24.3	28.1	39.2	11.4	10.1	53.1	28.9	38.0	9.9	45.6	13.0	18.5	14.4	41.2	22.3	34.9	46.9	31.0	18.0	25.1	53.1	9.9	26.1
Max.	**62.2**	**43.5**	**42.7**	**49.2**	**33.5**	**32.4**	**44.1**	**29.6**	**51.5**	**53.1**	**36.9**	**49.6**	**22.4**	**45.6**	**53.2**	**47.9**	**54.9**	**42.3**	**49.1**	**48.3**	**46.9**	**41.6**	**45.6**	**64.9**	**64.9**		
Min.	**2.1**	**2.4**	**2.1**	**2.3**	**2.4**	**3.1**	**3.1**	**3.4**	**2.4**	**3.3**	**2.6**	**3.5**	**2.6**	**3.4**	**3.1**	**2.8**	**2.9**	**3.1**	**0.1**	**2.5**	**2.5**	**2.5**	**2.6**	**2.5**		**0.1**	
Avg.	**11.7**	**9.6**	**10.6**	**10.1**	**8.8**	**8.9**	**9.7**	**8.8**	**9.0**	**9.2**	**8.7**	**9.8**	**7.6**	**9.2**	**11.1**	**13.4**	**9.9**	**10.8**	**8.9**	**11.6**	**9.2**	**10.6**	**11.2**	**11.3**			**10.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.8	18.3	21.3	10.5	11.7	6.5	10.0	6.2	5.6	8.3	6.5	4.2	5.8	10.3	10.3	7.6	20.0	13.2	11.0	11.4	9.8	12.4	7.2	15.9	21.3	4.2	10.7
2	7.7	10.4	17.5	13.2	3.7	10.8	12.6	11.9	4.0	8.0	9.2	13.0	16.6	10.0	4.9	11.0	7.4	7.5	8.0	7.5	7.5	3.7	4.3	6.1	17.5	3.7	9.0
3	5.0	4.9	4.2	4.0	5.0	21.7	13.2	13.7	5.1	6.9	7.5	6.8	12.0	10.7	8.1	6.9	7.8	3.6	6.0	3.4	4.1	3.4	3.8	3.1	21.7	3.1	7.1
4	3.5	10.6	11.7	44.6	13.6	25.2	38.6	4.5	42.4	31.9	29.8	9.5	11.2	7.3	10.2	45.8	23.6	11.8	4.5	48.7	11.7	17.5	9.3	32.7	48.7	3.5	20.8
5	80.2	27.9	31.8	49.0	29.1	17.1	33.9	46.7	15.7	8.9	22.2	23.9	30.0	5.2	3.1	2.0	3.0	2.3	2.5	2.4	3.2	2.9	2.5	3.1	80.2	2.0	18.7
6	13.4	30.5	5.5	5.5	8.3	3.5	4.5	12.1	9.2	17.5	36.0	35.9	21.2	19.9	3.4	6.3	19.5	9.6	54.4	22.0	49.6	6.2	19.0	65.1	65.1	3.4	19.9
7	16.5	33.0	45.8	25.1	75.0	11.5	6.0	14.6	19.3	6.5	47.3	44.6	23.8	27.3	13.1	26.9	10.1	7.2	23.0	17.6	5.3	10.9	19.7	6.3	75.0	5.3	22.3
8	10.0	12.7	22.8	20.5	18.2	27.5	16.7	11.8	7.7	38.7	7.8	5.6	3.3	3.6	3.8	3.2	4.3	3.0	2.4	3.1	4.7	3.8	4.4	4.4	38.7	2.4	10.1
9	4.5	4.7	3.1	6.4	3.5	3.4	2.3	2.7	4.7	3.7	3.3	46.3	32.5	20.7	37.2	36.7	12.3	8.2	12.7	23.8	39.8	28.6	9.5	6.2	46.3	2.3	14.9
10	5.9	36.2	18.7	4.4	6.9	6.6	7.1	24.6	31.2	10.6	36.9	28.3	65.0	25.3	9.7	6.7	9.4	4.7	7.5	7.0	29.0	13.2	46.0	21.1	65.0	4.4	19.2
11	27.7	29.7	38.9	9.0	9.2	6.8	7.3	28.0	54.7	7.8	18.7	17.7	31.5	27.6	17.5	26.3	10.0	4.2	6.2	4.8	7.0	4.1	4.7	5.6	54.7	4.1	16.9
12	6.0	5.7	4.7	3.7	3.7	3.8	2.7	3.0	4.2	3.5	2.7	3.1	2.9	3.5	3.8	3.7	3.2	3.9	4.4	3.7	3.4	3.4	3.9	3.3	6.0	2.7	3.7
13	2.7	2.4	3.0	2.7	3.8	3.5	2.8	2.6	2.8	3.2	3.2	3.8	3.9	3.1	2.3	3.0	3.2	4.4	5.6	3.2	3.6	4.1	5.5	5.0	5.6	2.3	3.5
14	3.9	4.1	4.7	4.5	6.7	23.1	23.4	11.7	7.8	8.6	14.2	11.1	5.7	5.0	4.7	5.0	5.5	7.7	7.3	8.0	5.9	7.9	8.4	9.2	23.4	3.9	8.5
15	6.9	6.1	7.1	3.1	4.8	9.3	5.9	5.4	6.0	4.7	4.4								3.5	3.4	5.0	4.3	4.3	6.1	9.3	3.1	5.3
16	11.3	6.5	10.3	8.4	15.7	16.7	9.9	8.4	5.2	9.4	6.3	4.7	15.4	21.1	6.9	7.2	11.0	7.2	36.2	7.3	2.5	3.3	2.3	2.2	36.2	2.2	9.8
17	2.6	3.8	3.6	3.2	2.1	3.0	3.3	3.1	2.4	3.2	3.4	3.1	3.2	4.9	4.0	4.4	3.0	2.8	3.5	3.3	4.5	5.4	5.5	6.8	6.8	2.1	3.7
18	5.3	4.0	5.2	3.5	4.1	2.9	2.1	2.7	2.1	4.4	4.3	5.8	4.7	3.1	3.2	2.5	3.8	3.4	4.7	3.4	3.4	3.2	4.3	4.3	5.8	2.1	3.8
19	4.2	3.0	3.6	4.1	5.2	4.2	3.7	3.9	4.5	5.7	3.8	4.0	3.7	3.7	3.9	4.3	5.1	4.1	3.0	2.6	3.4	3.0	4.4	4.0	5.7	2.6	4.0
20	3.2	3.8	3.0	3.6	3.6	3.7	2.7	2.2	3.3	2.0	1.9	1.6	2.4	2.0	2.6	3.2	2.8	3.1	2.1	2.4	2.3	2.7	2.8	2.9	3.8	1.6	2.7
21	2.7	3.0	3.0	2.7	3.4	2.5	3.9	5.2	4.1	4.0	6.2	5.4	4.7	3.7	4.0	5.3	5.5	4.4	4.3	3.3	3.4	3.3	3.4	3.3	6.2	2.5	3.9
22	3.3	3.2	3.5	3.0	2.5	2.5	2.6	2.9	3.1	3.3	3.0	3.4	4.1	3.3	3.5	3.2	3.3	3.1	2.6	3.0	2.4	3.2	3.4	2.6	4.1	2.4	3.1
23	2.9	2.5	2.6	2.6	2.3	2.4	2.7	4.0	3.0	3.3	2.1	1.9	3.1	2.6	2.3	3.2	4.3	3.3	4.4	5.2	3.4	5.4	3.4	2.9	5.4	1.9	3.2
24	2.8	3.9	4.7	3.9	3.3	3.1	3.0	4.0	2.6	3.4	3.0	2.7	2.2	2.5	4.2	3.1	3.0	3.8	3.3	2.7	3.4	2.8	2.7	6.4	6.4	2.2	3.4
25	4.3	3.3	5.5	4.9	5.2	4.7	4.1	2.8	2.4	2.6	2.4	2.1	3.7	2.4	2.7	2.7	3.0	2.9	3.0	2.8	5.6	3.8	2.8	2.5	5.6	2.1	3.4
26	3.1	2.4	3.1	3.0	2.5	3.7	2.4	2.6	4.3	3.8	3.9	3.9	4.2	3.2	3.7	5.7	6.1	3.0	1.9	3.3	3.4	2.8	4.7	2.5	6.1	1.9	3.5
27	3.7	2.9	4.2	2.1	3.7	5.2	2.3	2.2	2.2	3.0	3.3	2.5	3.1	2.2	2.5	2.8	2.9	2.5	2.7	2.8	2.5	2.2	2.7	3.2	5.2	2.1	2.9
28	2.5	2.7	3.0	2.6	2.5	2.3	3.1	3.2	2.8	3.6	4.0	3.5	5.1	4.0	3.7	3.3	3.9	3.2	4.2	3.9	4.3	2.9	3.6	5.3	5.3	2.3	3.5
29	4.0	2.4	3.0	2.9	3.4	3.3	4.4	3.2	3.3	4.9	2.6	3.1	7.0	7.5	10.8	3.4	3.1	2.0	2.7	5.0	2.9	4.2	5.5	6.3	10.8	2.0	4.2
30	6.5	5.4	3.0	4.5	6.4	6.0	4.6	7.5	3.6	6.0	2.1	3.5	3.7	2.2	2.4	2.1	2.4	4.8	3.7	3.7	3.4	5.2	23.3	53.3	53.3	2.1	7.0
31	36.4	10.1	11.2	3.5	8.5	3.2	5.8	4.8	5.7	4.5	2.9	2.7	3.8	3.7	2.3	4.6	3.0	3.0	2.7	2.7	2.4	2.2	3.5	6.6	36.4	2.2	5.8
Max.	**80.2**	**36.2**	**45.8**	**49.0**	**75.0**	**27.5**	**38.6**	**46.7**	**54.7**	**38.7**	**47.3**	**46.3**	**65.0**	**27.6**	**37.2**	**45.8**	**23.6**	**13.2**	**54.4**	**48.7**	**49.6**	**28.6**	**46.0**	**65.1**	**80.2**		
Min.	**2.5**	**2.4**	**2.6**	**2.1**	**2.1**	**2.3**	**2.1**	**2.2**	**2.1**	**2.0**	**1.9**	**1.6**	**2.2**	**2.0**	**2.3**	**2.0**	**2.4**	**2.0**	**1.9**	**2.4**	**2.3**	**2.2**	**2.3**	**2.2**		**1.6**	
Avg.	**9.9**	**9.7**	**10.1**	**8.5**	**9.0**	**8.1**	**8.0**	**8.5**	**8.9**	**7.6**	**9.8**	**10.3**	**11.3**	**8.4**	**6.5**	**8.4**	**6.9**	**4.9**	**7.9**	**7.3**	**7.8**	**5.9**	**7.4**	**9.9**			**8.4**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.6	3.1	3.4	3.7	3.4	3.8	2.7	3.0	3.2	3.0	3.1	3.6	3.5	2.4	4.1	2.6	2.1	2.1	3.0	2.7	3.5	3.0	2.0	3.4	4.6	2.0	3.1
2	2.9	3.5	4.1	2.6	3.3	2.5	3.0	2.6	4.6	4.5	4.3	3.3	4.6	3.5	4.4	9.4	20.2	18.3	5.5	4.4	13.4	4.9	4.3	4.9	20.2	2.5	5.8
3	6.7	4.7	6.7	5.5	4.4	4.9	4.3	4.4	4.7	4.2	4.3	4.3	4.3	4.9	4.6	4.0	4.6	4.5	5.0	4.8	4.3	4.4	4.6	4.1	6.7	4.0	4.7
4	4.2	3.8	3.8	3.8	3.6	3.9	4.1	4.4	3.9	4.2	4.1	4.3	4.1	4.4	4.3	4.2	3.9	4.5	4.4	4.1	3.9	4.8	4.4	6.5	6.5	3.6	4.2
5	5.0	5.9	5.3	5.2	5.2	4.7	4.9	4.8	5.2	6.0	6.0	5.3	4.6	4.2	3.8	3.8	3.5	3.6	6.3	10.4	7.4	5.9	5.8	4.2	10.4	3.5	5.3
6	4.4	6.7	6.5	8.1	6.4	5.7	6.5	12.5	10.2	8.2	3.7	4.6	3.6	4.2	4.5	6.0	4.9	5.0	4.6	6.0	5.4	6.9	5.3	5.0	12.5	3.6	6.0
7	4.7	6.8	5.4	3.6	3.5	5.1	6.1	4.8	4.4	3.2	3.3	3.6	3.4	2.6	2.6	2.3	3.8	5.5	5.8	7.4	6.9	15.6	13.0	6.7	15.6	2.3	5.4
8	22.7	9.6	6.5	7.9	4.2	5.6	5.4	5.4	5.7	9.0	9.2	13.0	4.3	3.4	3.2	3.3	3.3	3.5	3.7	3.8	3.9	3.9	4.1	4.0	22.7	3.2	6.2
9	4.4	3.8	4.0	4.1	4.3	4.4	4.0	4.3	7.5	5.7	8.8	6.1	5.5	4.8	5.4	4.1	4.5	4.8	3.6	3.9	3.9	4.3	4.3	4.2	8.8	3.6	4.8
10	4.1	4.4	4.3	3.9	4.0	3.7	3.8	3.8	3.9	3.9	3.8	3.8	4.0	4.6	4.5	4.4	4.2	4.1	3.6	3.7	4.3	4.3	4.5	4.9	4.9	3.6	4.1
11	5.1	4.0	3.5	3.8	9.7	17.5	20.7	19.4	4.4	6.5	4.3	3.4	5.0	4.5	7.7	10.2	11.0	19.5	10.8	5.4	13.3	11.2	5.9	8.7	20.7	3.4	9.0
12	49.7	17.3	6.2	7.7	4.2	5.6	6.4	4.4	2.5	2.7	2.9	3.1	3.0	2.6	3.5	5.4	4.4	10.2	33.8	36.3	22.2	45.0	21.5	25.7	49.7	2.5	13.6
13	11.8	9.0	6.5	5.1	10.3	10.3	8.2	6.1	5.4	9.4	8.2	6.2	8.3	4.9	4.6	3.7	3.9	3.7	3.8	4.2	4.2	4.5	4.5	4.4	11.8	3.7	6.3
14	4.4	4.4	4.1	4.6	4.3	4.5	4.6	4.5	4.7	4.2	3.8	4.0	4.4	4.4	4.4	3.9	3.6	3.5	3.6	3.9	4.0	4.2	4.1	4.0	4.7	3.5	4.2
15	4.1	3.9	3.5	3.8	3.5	3.7	3.9	4.2	4.0	4.0	4.0	3.9	4.4	4.1	3.7	3.7	4.1	5.0	4.5	5.1	5.3	4.3	4.0	4.6	5.3	3.5	4.1
16	7.5	5.7	4.6	5.8	6.4	6.1	4.9	5.1	3.6	6.8	7.4	7.4	5.7	5.0	6.1	5.7	5.6	5.0	6.5	7.7	6.7	5.8	5.8	4.8	7.7	3.6	5.9
17	3.6	5.0	9.2	10.8	10.4	7.6	4.1	3.6	3.4	3.7	3.8	3.7	4.2	3.8	3.9	3.9	3.8	3.6	4.2	3.7	3.8	3.8	4.0	4.3	10.8	3.4	4.8
18	4.5	4.5	4.0	3.9	3.8	4.0	3.7	3.4	3.7	4.2	4.6	4.3	4.2	4.0	4.4	4.3	4.2	4.6	6.7	11.5	5.3	5.7	5.1	5.3	11.5	3.4	4.7
19	7.1	5.7	5.7	7.3	6.2	6.4	8.3	5.3	5.0	12.2	6.3	5.1	8.1	6.1	4.1	3.7	4.2	5.2	6.2	6.7	4.8	3.6	4.1	5.1	12.2	3.6	5.9
20	3.6	4.6	3.6	3.4	3.7	8.0	6.4	11.1	9.6	7.7	8.4	18.0	7.4	4.5	3.8	4.1	7.3	2.6	2.6	2.0	2.1	2.3	2.7	2.3	18.0	2.0	5.5
21	2.1	2.0	1.5	1.8	2.6	2.8	2.1	2.3	2.8	7.6	19.5	18.6	33.3	3.5	12.0	4.0	2.1	12.0	2.1	1.3	9.7	8.7	2.5	6.1	33.3	1.3	6.8
22	6.0	5.9	7.6	9.7	1.8	1.4	2.8	1.4	1.6	6.7	7.9	3.4	4.5	3.2	6.1	5.2	3.3	4.6	5.1	4.6	4.7	5.1	5.6	5.7	9.7	1.4	4.7
23	4.2	3.6	4.2	3.4	3.7	13.9	4.2	1.7	3.0	2.8	4.2	3.2	7.4	7.8	2.5	3.6	2.9	3.0	2.5	3.5	3.5	3.6	4.3	4.3	13.9	1.7	4.2
24	6.5	5.7	6.3	4.8	5.3	2.1	2.5	2.3	8.5	7.9	3.3	3.9	19.6	18.5	25.4	38.0	40.7	5.5	6.9	8.2	12.3	14.0	9.1	10.1	40.7	2.1	11.1
25	9.8	9.3	8.4	10.3	3.1	3.6	3.5	3.9	6.4	6.4	21.3	6.2	5.6	3.9	3.6	3.5	2.3	4.3	3.2	2.6	2.1	2.2	2.2	3.9	21.3	2.1	5.5
26	2.7	2.1	1.7	1.8	3.8	5.1	5.0	2.9	4.6	19.3	20.6	2.7	3.9	4.2	28.9	33.2	8.8	3.6	4.3	4.7	8.5	11.1	16.5	7.0	33.2	1.7	8.6
27	5.7	4.1	23.6	4.7	3.9	3.4	4.1	3.3	3.8	2.7	2.5	2.9	2.5	3.5	3.0	2.9	2.8	2.7	3.0	2.8	2.5	2.1	2.3	2.6	23.6	2.1	4.1
28	2.5	2.7	3.8	3.7	3.2	5.3	5.1	8.3	7.5	4.4	5.4	3.8	2.7	2.9	3.0	2.4	2.5	1.9	2.5	1.9	2.8	4.8	3.6	2.5	8.3	1.9	3.7
Max.	**49.7**	**17.3**	**23.6**	**10.8**	**10.4**	**17.5**	**20.7**	**19.4**	**10.2**	**19.3**	**21.3**	**18.6**	**33.3**	**18.5**	**28.9**	**38.0**	**40.7**	**19.5**	**33.8**	**36.3**	**22.2**	**45.0**	**21.5**	**25.7**	**49.7**		
Min.	**2.1**	**2.0**	**1.5**	**1.8**	**1.8**	**1.4**	**2.1**	**1.4**	**1.6**	**2.7**	**2.5**	**2.7**	**2.5**	**2.4**	**2.5**	**2.3**	**2.1**	**1.9**	**2.1**	**1.3**	**2.1**	**2.1**	**2.0**	**2.3**		**1.3**	
Avg.	**7.3**	**5.4**	**5.6**	**5.2**	**4.7**	**5.6**	**5.2**	**5.1**	**4.9**	**6.1**	**6.7**	**5.6**	**6.3**	**4.7**	**6.1**	**6.6**	**6.2**	**5.6**	**5.6**	**6.0**	**6.2**	**7.1**	**5.7**	**5.7**			**5.8**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	2.1	2.4	3.1	3.1	2.7	2.9	4.9	3.7	4.3	45.8	44.7	16.0	5.7	4.9	8.6	11.4	8.5	11.3	9.5	5.2	4.1	5.4	5.3	45.8	2.1	9.1
2	4.9	5.5	4.4	5.5	4.1	4.4	4.0	3.4	3.9	4.1	3.5	3.4	3.0	3.2	3.3	3.7	3.8	3.8	4.0	2.6	3.6	3.8	2.6	2.8	5.5	2.6	3.8
3	2.6	3.5	2.9	2.9	3.0	3.3	2.6	4.5	3.6	3.4	3.9	4.7	4.5	3.6	3.5	4.4	6.9	10.1	16.4	13.2	12.0	15.0	10.0	7.9	16.4	2.6	6.2
4	5.7	4.6	5.1	8.1	4.4	4.0	3.0	4.0	4.0	4.8	4.5	4.7	3.8	3.5	4.1	4.2	6.8	6.3	4.3	3.6	3.7	4.8	3.8	3.6	8.1	3.0	4.6
5	3.3	3.3	3.7	3.6	5.1	4.8	6.6	5.0	5.8	8.8	11.4	7.6	12.1	6.2	8.9	7.9	4.1	5.5	7.7	5.0	11.5	8.3	5.0	4.9	12.1	3.3	6.5
6	5.9	14.3	9.3	4.3	3.3	5.8	11.1	7.6	38.6	10.5	6.1	34.5	24.9	26.4	17.5	57.7	18.3	9.9	6.8	23.7	33.2	35.9	13.0	6.2	57.7	3.3	17.7
7	5.2	4.4	2.9	3.0	3.7	3.4	3.1	2.0	2.7	3.9	3.5	3.3	2.7	2.3	2.5	3.2	3.1	4.5	2.1	2.5	2.0	3.7	3.0	3.5	5.2	2.0	3.2
8	2.2	1.9	2.0	2.2	2.5	2.7	2.9	2.6	2.7	4.0	4.5	4.5	3.0	3.8	4.3	4.6	3.4	2.4	2.4	2.7	2.6	2.4	3.6	3.6	4.6	1.9	3.1
9	3.2	3.0	3.0	2.7	2.4	2.2	2.7	3.0	2.8	2.5	2.4	2.5	2.3	2.2	2.2	2.4	3.6	4.0	2.7	2.5	2.2	3.4	2.5	2.2	4.0	2.2	2.7
10	4.2	4.3	2.8	4.1	3.6	5.3	3.0	3.2	3.4	4.3	5.0	6.9	5.4	6.2	9.2	16.4	24.7	19.2	5.5	5.0	5.2	8.6	3.4	4.6	24.7	2.8	6.8
11	4.5	4.2	6.3	6.3	3.4	3.0	2.7	2.5	2.4	3.1	3.2	3.4	3.9	3.3	3.2	3.3	3.2	3.1	3.3	2.9	3.0	3.1	3.9	3.7	6.3	2.4	3.5
12	3.1	3.5	3.0	3.7	3.8	2.8	2.7	3.1	4.1	3.8	3.8	5.8	4.2	4.4	8.4	4.0	4.2	2.4	3.7	5.1	26.5	12.4	18.4	35.8	35.8	2.4	7.2
13	65.9	17.5	18.3	39.9	19.4	18.2	14.5	9.0	9.6	4.7	6.5	7.4	5.3	4.4	3.3	2.5	5.2	3.5	3.4	2.8	2.5	4.6	2.3	2.4	65.9	2.3	11.4
14	3.1	3.0	3.5	4.2	3.7	2.9	4.4	3.5	5.0	4.1	3.2	4.8	32.3	33.2	9.3	9.1	5.8	6.2	8.7	10.9	7.8	10.0	12.7	35.6	35.6	2.9	9.5
15	5.3	7.9	6.7	11.6	5.0	16.2	31.6	43.4	21.7	5.3	5.1	15.3	54.9	21.7	11.8	11.6	6.8	8.7	5.2	6.7	4.3	4.5	2.6	3.3	54.9	2.6	13.2
16	2.1	3.5	4.5	4.1	5.5	5.1	4.3	5.5	8.1	9.1	3.0	3.4	3.6	2.7	2.8	2.7	2.8	3.0	3.9	3.9	3.5	3.9	4.8	5.0	9.1	2.1	4.2
17	4.3	3.8	3.1	3.0	2.2	3.3	2.6	2.1	2.1	3.0	3.4	4.3	4.1	4.8	3.9	4.1	4.0	4.9	3.7	3.0	3.2	3.0	3.3	4.0	4.9	2.1	3.5
18	3.3	3.6	3.5	3.6	4.1	4.5	5.2	24.1	14.0	3.8	3.3	3.3	43.6	24.3	19.9	24.4	12.1	7.6	44.7	10.8	6.2	24.0	28.2	3.2	44.7	3.2	13.6
19	3.1	8.5	38.3	9.8	4.6	9.2	6.8	8.2	9.1	4.4	7.5	3.7	3.6	4.1	4.1	4.4	8.5	7.1	5.3	5.3	6.4	4.7	6.1	5.7	38.3	3.1	7.4
20	5.6	3.6	4.6	4.5	7.3	4.5	3.5	3.8	3.2	3.6	7.6	5.6	6.5	18.3	3.4	6.7	4.6	2.8	2.1	2.3	2.6	2.9	2.2	2.3	18.3	2.1	4.8
21	2.0	2.1	2.3	2.3	2.5	2.4	2.5	2.6	2.7	2.1	2.8	4.3	2.9	4.6	4.0	3.7	4.1	3.0	3.3	4.6	3.8	4.1	6.0	4.5	6.0	2.0	3.3
22	3.4	11.6	5.7	4.9	2.8	3.0	3.2	3.1	3.2	2.1	3.3	2.9	2.5	2.7	2.5	3.0	3.3	2.9	2.7	4.6	3.1	3.5	3.5	3.2	11.6	2.1	3.6
23	4.5	4.2	3.6	2.4	3.0	3.7	8.0	9.4	23.2	34.1	2.2	5.4	18.0	6.3	7.1	4.4	3.4	2.0	2.7	6.1	5.9	3.8	4.7	3.8	34.1	2.0	7.2
24	3.1	3.3	3.6	3.4	3.4	7.7	4.2	3.6	2.7	4.1	3.9	3.7	3.4	3.6	3.4	3.2	2.9	3.0	2.4	3.1	3.2	4.4	4.1	4.5	7.7	2.4	3.7
25	3.3	3.2	3.2	3.2	2.9	4.1	2.9	3.9	3.0	4.7	4.1	7.3	9.7	3.6	6.7	6.9	2.9	2.8	3.5	3.7	2.6	3.3	4.1	5.3	9.7	2.6	4.2
26	4.0	5.1	3.1	2.8	3.9	3.6	4.0	4.0	3.7	5.4	3.1	2.5	2.7	3.3	3.3	3.3	3.2	4.5	2.0	2.3	2.1	3.6	3.7	3.4	5.4	2.0	3.4
27	2.8	3.3	4.8	4.4	4.0	4.3	5.8	8.9	18.7	12.3	11.2	7.1	7.0	8.6	10.5	6.4	8.7	9.4	7.1	9.9	8.0	5.2	14.5	9.0	18.7	2.8	8.0
28	6.7	3.7	7.6	10.3	5.6	5.5	6.9	4.7	4.8	4.9	5.0	4.7	7.8	7.3	4.2	9.4	40.3	9.1	4.7	6.0	5.0	2.8	2.7	2.0	40.3	2.0	7.2
29	3.2	3.8	5.1	2.1	2.9	3.8	3.8	2.7	3.9	7.2	5.2	9.8	26.4	18.7	11.7	46.7	15.4	7.4	10.2	8.3	9.8	8.0	4.7	3.3	46.7	2.1	9.3
30	2.7	3.4	3.4	3.6	3.0	3.2	3.1	2.9	3.4	3.6	3.2	3.2	3.2	3.1	3.5	3.4	3.2	3.6	3.5	3.5	3.6	3.5	3.5	3.7	3.7	2.7	3.3
31	3.6	3.5	3.6	3.1	3.1	3.2	3.0	2.9	3.0	8.7	3.1	0.2	0.1	0.2	0.5	7.3	2.9	3.8	5.3	3.3	0.6	0.1	1.8	0.4	8.7	0.1	2.8
Max.	**65.9**	**17.5**	**38.3**	**39.9**	**19.4**	**18.2**	**31.6**	**43.4**	**38.6**	**34.1**	**45.8**	**44.7**	**54.9**	**33.2**	**19.9**	**57.7**	**40.3**	**19.2**	**44.7**	**23.7**	**33.2**	**35.9**	**28.2**	**35.8**	**65.9**		
Min.	**2.0**	**1.9**	**2.0**	**2.1**	**2.2**	**2.2**	**2.5**	**2.0**	**2.1**	**2.1**	**2.2**	**0.2**	**0.1**	**0.2**	**0.5**	**2.4**	**2.8**	**2.0**	**2.0**	**2.3**	**0.6**	**0.1**	**1.8**	**0.4**		**0.1**	
Avg.	**5.8**	**4.9**	**5.7**	**5.6**	**4.2**	**4.9**	**5.4**	**6.3**	**7.2**	**6.0**	**5.9**	**7.3**	**10.4**	**7.9**	**6.1**	**9.2**	**7.5**	**5.6**	**6.3**	**5.8**	**6.3**	**6.6**	**6.1**	**6.1**			**6.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.5	5.4	2.5	2.5	4.4	2.3	3.1	3.4	4.3	3.0	10.4	1.3	4.8	11.3	2.6	3.0	2.6	2.6	8.1	0.1	3.7	6.8	4.4	0.1	11.3	0.1	3.9
2	0.1	7.7	3.3	4.7	5.9	16.2	5.1	7.4	0.3	0.3	6.9	7.0	3.3	9.6	18.4	7.0	5.6	14.8	6.1	8.5	5.4	6.2	3.8	3.1	18.4	0.1	6.5
3	3.3	4.1	2.8	3.7	3.8	6.0	9.4	8.9	3.0	3.2	2.9	2.8	3.3	3.3	3.1	3.9	3.6	3.6	3.8	5.8	4.5	4.6	4.0	3.7	9.4	2.8	4.2
4	3.5	4.1	4.2	4.4	4.1	4.0	4.3	4.3	12.8	14.6	3.4	4.4	2.6	3.2	5.6	23.0	8.1	2.8	2.6	4.6	3.2	4.5	2.7	3.0	23.0	2.6	5.6
5	4.5	4.5	3.8	4.4	3.5	4.2	4.1	3.2	3.9	3.3	2.6	3.1	4.1	3.7	3.5	4.0	2.5	2.5	2.2	3.8	5.7	4.2	4.3	4.2	5.7	2.2	3.8
6	3.0	3.3	3.9	3.8	5.3	4.6	2.9	4.3	5.7	5.1	4.3	6.8	5.2	6.3	6.4	7.9	6.6	7.1	7.5	5.6	10.3	27.2	10.2	7.1	27.2	2.9	6.7
7	5.9	5.8	5.4	2.8	3.5	6.9	3.9	5.6	13.0	8.7	6.2	4.5	4.3	4.1	3.9	3.5	4.3	5.0	6.8	4.3	3.8	3.7	3.3	3.3	13.0	2.8	5.1
8	3.6	3.3	3.2	3.3	3.6	4.0	4.0	3.8	4.3	3.6	3.1	3.7	4.2	4.2	3.9	4.0	3.8	4.2	4.1	4.9	5.0	4.9	4.1	5.1	5.1	3.1	4.0
9	4.9	4.6	3.2	4.0	4.0	4.4	3.8	3.9	4.3	3.8	4.6	4.7	5.6	5.7	6.2	4.9	4.9	4.5	8.6	8.0	12.2	7.9	4.5	4.4	12.2	3.2	5.3
10	28.7	16.3	6.3	15.0	3.6	4.0	3.1	2.7	2.7	2.4	3.5	4.4	3.5	4.1	4.8	3.9	3.4	3.9	3.2	3.4	9.6	33.3	8.0	6.8	33.3	2.4	7.5
11	5.3	30.2	20.5	18.2	8.7	12.1	4.8	2.8	4.7	5.0	4.5	5.9	3.6	5.0	3.1	3.3	2.5	2.9	3.1	3.5	3.2	2.1	2.3	2.3	30.2	2.1	6.6
12	2.1	2.3	2.7	2.5	2.3	3.8	4.3	4.4	3.8	4.1	2.8	2.8	3.6	3.8	4.0	4.0	4.4	4.6	4.1	8.0	3.3	3.0	3.7	13.8	13.8	2.1	4.1
13	10.9	14.0	31.3	29.9	7.8	3.8	3.7	3.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.7	2.9	2.2	2.3	2.2	2.2	2.5	3.3	31.3	2.1	5.9
14	3.0	2.6	2.3	2.5	2.6	2.7	3.0	2.8	2.9	2.8	3.0	2.9	3.1	3.0	3.6	2.9	2.8	2.2	3.5	5.4	3.7	3.2	3.5	5.9	5.9	2.2	3.2
15	7.1	5.2	4.0	2.9	3.5	4.1	4.3	6.0	3.2	3.1	3.8	2.4	2.9	3.3	3.4	4.1	3.2	2.5	6.7	15.1	8.8	16.6	34.7	24.6	34.7	2.4	7.3
16	9.4	7.3	4.9	5.0	4.2	3.1	2.4	2.7	2.6	2.8	3.0	3.0	3.4	3.3	3.3	3.0	3.2	2.8	2.9	3.7	4.0	6.7	8.8	3.6	9.4	2.4	4.1
17	3.6	4.0	3.6	3.8	3.6	5.5	8.2	4.4	4.2	4.4	8.1	7.8	4.3	3.5	5.2	4.8	5.0	3.4	6.7	6.3	23.8	21.0	29.4	2.6	29.4	2.6	7.4
18	2.6	2.0	9.2	5.6	6.9	4.1	12.3	32.6	44.9	43.4	26.4	26.3	5.7	15.2	16.9	25.5	28.5	11.8	10.9	9.2	21.6	66.8	40.5	48.0	66.8	2.0	21.5
19	50.9	38.7	43.4	39.2	23.5	17.4	14.7	12.7	5.8	8.1	18.5	31.8	18.9	3.5	8.0	5.3	17.7	18.4	7.9	5.0	4.0	5.4	7.1	9.8	50.9	3.5	17.3
20	8.7	8.3	16.5	24.9	30.1	12.4	21.0	8.9	8.0	6.4	5.4	5.1	4.7	4.6	3.9	3.6	2.8	2.8	2.6	3.0	2.8	2.6	2.7	2.5	30.1	2.5	8.1
21	2.5	2.6	2.8	3.8	2.8	2.7	2.8	3.2	4.5	4.0	4.1	3.3	3.0	3.0	3.0	3.4	6.3	7.7	5.0	4.8	16.0	3.2	2.7	2.6	16.0	2.5	4.2
22	4.7	4.7	5.6	9.0	5.1	7.3	17.5	23.6	51.8	33.5	13.2	31.0	12.9	9.7	7.5	11.3	7.2	5.8	7.7	29.5	7.0	12.8	5.5	4.5	51.8	4.5	13.7
23	3.4	4.1	7.7	8.5	5.6	5.2	4.2	4.0	3.9	4.6	5.9	3.9	4.5	4.0	8.6	16.2	18.5	17.6	5.4	4.4	2.5	2.3	2.6	3.1	18.5	2.3	6.3
24	3.9	4.3	2.7	3.4	3.4	2.0	2.3	3.3	3.3	2.5	2.7	3.2	3.1	2.7	2.6	4.4	2.9	3.7	3.3	2.3	4.6	4.0	2.9	3.4	4.6	2.0	3.2
25	6.1	8.2	9.5	11.1	10.7	10.2	8.4	10.5	6.1	6.5	5.3	5.2	6.4	4.6	4.5	6.7	5.0	3.3	3.7	3.8	3.0	2.8	3.3	4.3	11.1	2.8	6.2
26	3.7	4.7	3.9	4.8	5.1	4.1	3.3	3.6	3.9	3.8	3.7	8.2	9.8	7.3	5.6	6.3	3.9	3.7	5.0	10.3	4.1	4.8	7.6	7.9	10.3	3.3	5.4
27	4.8	60.7	20.3	20.0	10.3	11.3	37.9	42.9	18.5	6.9	5.2	3.2	4.1	3.7	3.1	3.0	3.4	2.7	2.8	2.8	2.5	4.2	3.8	4.3	60.7	2.5	11.8
28	4.5	4.1	5.1	3.6	2.7	2.7	3.8	4.2	5.0	3.9	33.2	16.9	14.7	16.8	13.2	10.7	9.8	16.9	10.8	29.7	52.5	29.3	36.3	13.0	52.5	2.7	14.3
29	11.2	6.0	7.4	2.6	4.2	3.2	5.2	5.8	9.3	3.6	3.1	3.5	2.2	2.4	2.6	2.7	4.2	2.6	3.5	3.3	2.3	1.9	3.0	2.3	11.2	1.9	4.1
30	3.0	2.1	2.4	1.6	2.8	4.1	25.1	6.8	8.6	7.8	9.3	10.1	12.5	8.0	7.9	6.9	4.1	4.6	3.4	2.8	2.5	2.9	3.2	3.2	25.1	1.6	6.1
Max.	**50.9**	**60.7**	**43.4**	**39.2**	**30.1**	**17.4**	**37.9**	**42.9**	**51.8**	**43.4**	**33.2**	**31.8**	**18.9**	**16.8**	**18.4**	**25.5**	**28.5**	**18.4**	**10.9**	**29.7**	**52.5**	**66.8**	**40.5**	**48.0**	**66.8**		
Min.	**0.1**	**2.0**	**2.3**	**1.6**	**2.3**	**2.0**	**2.3**	**2.7**	**0.3**	**0.3**	**2.1**	**1.3**	**2.1**	**2.2**	**2.1**	**2.2**	**2.5**	**2.2**	**2.2**	**0.1**	**2.2**	**1.9**	**2.3**	**0.1**		**0.1**	
Avg.	**7.0**	**9.2**	**8.1**	**8.4**	**6.3**	**5.9**	**7.8**	**7.9**	**8.4**	**6.9**	**7.0**	**7.4**	**5.6**	**5.5**	**5.7**	**6.5**	**6.1**	**5.8**	**5.1**	**6.8**	**7.9**	**10.0**	**8.5**	**6.9**			**7.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.2	3.2	3.0	2.8	2.9	3.1	3.1	3.0	3.1	3.2	3.6	3.7	3.7	3.4	4.1	4.5	4.2	3.3	4.7	5.2	3.4	4.2	5.0	5.2	5.2	2.8	3.7
2	4.9	5.5	7.1	7.6	13.9	6.9	5.1	11.9	13.3	19.2	9.0	7.3	3.2	3.1	4.0	4.2	3.9	4.0	3.5	3.1	3.0	3.2	3.4	3.3	19.2	3.0	6.4
3	3.0	3.0	3.0	3.0	7.3	5.9	7.1	7.3	10.1	10.5	7.6	10.1	4.8	5.2	5.2	5.2	6.5	6.6	15.9	24.6	43.3	18.4	12.3	15.9	43.3	3.0	10.1
4	6.1	21.6	30.6	17.0	9.2	4.9	3.2	3.1	3.1	3.7	3.6	3.7	3.9	3.6	4.1	3.6	3.7	3.0	3.1	3.2	3.2	3.2	3.4	3.2	30.6	3.0	6.3
5	3.4	3.3	3.3	3.4	3.5	3.3	3.2	3.0	3.4	3.6	3.2	3.6	3.3	3.4	3.4	3.2	3.8	3.8	3.0	3.1	3.7	6.2	10.7	15.7	15.7	3.0	4.3
6	4.1	5.0	9.8	21.1	16.6	19.4	10.5	14.8	9.9	9.0	7.7	5.0	3.4	4.5	4.3	4.3	5.9	5.0	4.1	3.4	3.8	3.5	5.5	5.8	21.1	3.4	7.8
7	11.2	9.6	6.9	5.8	4.0	4.6	6.1	7.8	6.9	8.3	7.3	7.5	6.3	6.2	7.5	8.2	7.3	6.7	7.4	8.0	15.1	20.8	20.7	15.3	20.8	4.0	9.0
8	18.3	11.6	5.6	5.6	8.3	5.6	5.7	6.0	6.1	5.4	6.5	4.7	4.7	4.8	4.8	6.0	5.3	3.8	4.0	8.3	6.6	4.7	5.6	4.8	18.3	3.8	6.4
9	5.0	15.4	15.3	7.0	6.0	6.6	4.7	4.9	6.6	6.4	6.8	8.5	5.4	5.3	3.8	6.4	26.1	31.4	21.0	27.6	22.4	13.5	10.3	10.7	31.4	3.8	11.5
10	7.6	6.5	8.8	35.9	12.2	17.0	26.4	9.1	7.8	7.5	5.8	3.6	5.0	17.5	8.3	35.1	6.0	7.8	3.0	3.6	4.5	3.1	3.7	10.1	35.9	3.0	10.7
11	20.8	16.2	37.3	5.9	9.1	27.1	29.3	55.1	33.8	4.2	6.4	6.9	9.7	3.9	16.3	25.9	10.0	8.1	5.6	3.7	2.6	2.6	4.5	6.4	55.1	2.6	14.6
12	4.3	4.5	6.4	4.3	4.6	3.9	4.0	2.7	2.4	2.6	3.3	3.5	3.5	3.5	3.5	3.4	3.1	2.7	4.0	3.8	5.0	4.6	6.1	6.9	6.9	2.4	4.0
13	4.7	4.2	4.4	4.8	3.5	3.1	9.3	6.6	8.4	55.6	7.1	9.5	15.1	18.0	5.8	2.8	3.6	3.8	14.3	17.6	25.3	36.7	18.6	6.6	55.6	2.8	12.1
14	7.0	6.0	4.7	7.1	9.6	9.4	6.5	6.9	4.7	6.0	8.2	7.2	8.4	8.6	6.2	5.8	5.1	4.3	4.2	3.8	4.1	3.0	3.2	4.2	9.6	3.0	6.0
15	5.8	6.1	4.3	8.4	8.9	11.7	10.9	24.5	12.3	5.8	4.7	41.8	9.7	55.7	11.8	12.3	10.7	5.6	9.4	8.3	4.5	3.9	6.4	3.4	55.7	3.4	11.9
16	4.9	61.6	11.1	34.1	3.3	3.5	7.0	7.7	5.3	4.9	9.2	5.9	3.6	3.8	5.3	9.7	5.3	4.4	3.6	5.0	7.8	3.2	15.8	4.7	61.6	3.2	9.6
17	21.5	8.2	4.8	13.6	7.6	6.1	18.4	33.3	13.2	15.1	11.5	8.4	9.4	7.6	8.1	5.7	5.0	5.9	4.7	4.7	4.1	4.2	5.2	4.6	33.3	4.1	9.6
18	3.7	3.7	4.3	2.9	4.4	8.6	9.5	16.6	22.8	17.8	12.0	6.5	4.2	5.1	4.5	4.6	4.8	2.9	3.8	4.2	2.7	2.5	3.4	55.7	55.7	2.5	8.8
19	15.9	4.4	17.0	32.4	16.6	38.6	50.7	12.1	9.5	7.1	5.6	6.2	5.5	5.2	4.9	4.4	4.4	4.3	4.1	3.9	3.6	4.1	4.4	4.8	50.7	3.6	11.2
20	5.3	5.5	4.6	3.7	3.5	3.4	3.2	3.2	3.7	4.0	4.5	4.1	6.5	4.7	4.4	3.9	5.0	5.9	6.4	16.2	4.2	2.3	3.3	2.7	16.2	2.3	4.8
21	2.1	2.8	2.7	2.6	2.7	2.9	3.2	3.2	3.8	3.5	3.6	3.4	3.7	4.6	4.6	4.0	3.5	3.8	3.5	3.3	3.8	4.8	3.6	3.6	4.8	2.1	3.5
22	3.2	3.4	4.9	3.8	2.8	2.8	3.6	3.6	3.8	4.7	4.5	4.4	5.3	5.9	6.1	8.9	4.9	5.3	5.0	3.8	3.0	3.2	2.7	3.3	8.9	2.7	4.3
23	2.9	3.6	2.9	4.5	3.6	4.5	3.9	4.6	4.9	6.6	7.2	9.2	16.1	24.7	27.1	15.2	16.1	9.6	3.8	3.3	3.9	4.4	3.7	3.4	27.1	2.9	7.9
24	3.1	5.5	4.3	5.3	3.2	5.1	6.1	3.6	4.9	10.9	24.3	10.9	11.2	12.0	11.0	9.8	20.2	16.1	8.8	3.5	3.4	4.6	3.8	1.9	24.3	1.9	8.1
25	2.8	2.9	2.7	2.6	2.9	2.8	2.8	6.3	8.1	13.3	26.0	33.6	21.9	27.6	30.4	39.1	10.3	9.0	6.7	25.9	17.6	6.0	4.0	4.0	39.1	2.6	12.9
26	2.4	2.7	3.2	2.8	2.8	7.8	4.9	5.1	5.1	4.6	6.9	6.6	9.4	13.1	11.2	11.3	6.9	6.0	3.6	3.0	4.0	7.3	10.3	7.1	13.1	2.4	6.2
27	3.7	11.8	9.9	3.2	2.5	2.9	3.6	3.0	3.3	5.4	5.1	5.4	5.7	4.7	4.7	4.4	5.7	7.0	5.2	4.3	7.5	5.3	3.3	5.0	11.8	2.5	5.1
28	8.9	6.5	4.6	18.3	9.9	5.0	7.3	7.1	8.4	13.0	40.7	48.9	39.6	21.3	23.2	21.0	20.3	18.6	19.2	7.5	5.7	18.8	3.9	3.3	48.9	3.3	15.9
29	3.2	3.5	2.8	2.8	4.0	3.1	3.5	5.7	7.0	7.7	7.8	8.6	8.4	9.0	10.0	9.6	10.1	6.9	5.4	4.4	4.4	4.4	3.2	3.6	10.1	2.8	5.8
30	2.6	3.1	3.1	7.4	7.8	13.9	23.2	24.1	8.8	12.9	11.2	11.6	11.1	9.1	11.5	9.1	7.3	6.5	5.2	4.9	4.8	5.2	7.3	6.5	24.1	2.6	9.1
31	4.4	8.2	7.4	18.3	14.5	7.7	7.7	5.6	6.1	7.7	4.8	7.7	9.0	6.0	7.6	6.4	7.7	5.9	8.0	7.4	6.5	15.6	17.8	12.8	18.3	4.4	8.8
Max.	**21.5**	**61.6**	**37.3**	**35.9**	**16.6**	**38.6**	**50.7**	**55.1**	**33.8**	**55.6**	**40.7**	**48.9**	**39.6**	**55.7**	**30.4**	**39.1**	**26.1**	**31.4**	**21.0**	**27.6**	**43.3**	**36.7**	**20.7**	**55.7**	**61.6**		
Min.	**2.1**	**2.7**	**2.7**	**2.6**	**2.5**	**2.8**	**2.8**	**2.7**	**2.4**	**2.6**	**3.2**	**3.4**	**3.2**	**3.1**	**3.4**	**2.8**	**3.1**	**2.7**	**3.0**	**3.0**	**2.6**	**2.3**	**2.7**	**1.9**		**1.9**	
Avg.	**6.4**	**8.4**	**7.8**	**9.6**	**6.8**	**8.1**	**9.5**	**10.0**	**8.1**	**9.4**	**8.9**	**9.9**	**8.4**	**10.0**	**8.6**	**9.6**	**7.8**	**7.0**	**6.6**	**7.5**	**7.7**	**7.3**	**6.9**	**7.9**			**8.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	23.0	4.2	63.2	4.9	5.5	5.3	7.2	12.8	12.8	11.5	15.4	14.9	15.0	27.5	17.6	16.3	24.6	22.7	10.8	5.5	4.6	3.8	6.0	43.0	63.2	3.8	15.8
2	3.1	3.6	4.1	3.0	3.7	2.1	2.8	5.3	9.5	11.6	12.4	16.3	13.1	13.3	12.2	7.0	8.8	6.5	5.7	4.4	4.2	4.3	4.8	4.4	16.3	2.1	6.9
3	3.9	6.3	4.0	3.6	5.0	4.3	6.8	4.6	5.1	5.7	6.8	8.7	9.7	7.8	11.1	9.5	10.3	8.1	6.5	6.1	4.3	3.0	2.6	3.1	11.1	2.6	6.1
4	3.0	4.0	4.5	4.8	4.2	3.9	4.0	4.0	5.7	5.7	6.5	7.6	8.4	9.2	8.9	9.2	10.0	8.2	7.0	5.0	4.6	3.5	2.7	2.6	10.0	2.6	5.7
5	2.4	3.3	3.8	3.8	2.7	3.4	3.8	4.4	6.1	9.0	20.6	21.4	23.8	28.6	26.0	33.1	20.6	23.3	20.8	21.7	21.2	7.2	4.1	3.2	33.1	2.4	13.3
6	3.8	7.0	15.0	19.1	9.8	6.9	12.3	10.5	12.4	12.5	21.5	19.8	13.3	11.7	13.4	9.2	8.8	8.4	7.5	7.1	5.8	5.9	6.2	6.5	21.5	3.8	10.6
7	6.9	6.1	4.7	4.6	5.1	5.0	5.9	5.2	5.1	5.0	6.5	5.8	5.8	6.0	6.2	5.1	5.3	4.6	4.3	4.5	4.9	5.2	4.4	4.2	6.9	4.2	5.3
8	4.2	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.8	5.0	5.6	5.4	5.3	4.9	5.0	5.1	4.8	4.7	5.0	4.9	4.3	4.4	5.6	4.2	4.8
9	4.3	4.4	4.3	4.7	5.0	5.1	4.9	5.1	5.0	5.1	5.3	5.2	5.6	5.5	5.0	5.5	5.3	5.2	6.0	4.9	5.4	5.4	4.9	4.7	6.0	4.3	5.1
10	5.0	4.9	4.8	4.7	5.2	4.8	5.1	5.2	5.3	5.8	6.1	6.4	5.7	5.6	6.1	6.0	5.8	5.0	5.3	5.1	5.1	5.1	4.9	4.9	6.4	4.7	5.3
11	4.6	4.5	4.5	4.7	4.8	4.6	4.9	4.8	4.9	5.3	5.0	4.9	5.4	5.6	5.1	5.4	5.4	5.5	4.9	4.8	4.9	4.6	5.3	4.6	5.6	4.5	5.0
12	4.4	4.5	4.8	4.3	4.5	3.8	5.1	5.6	5.0	4.8	5.9	6.5	5.9	5.3	5.6	5.6	5.6	6.8	6.2	7.0	7.5	5.4	6.1	4.8	7.5	3.8	5.5
13	4.5	4.5	3.4	4.7	2.8	4.7	6.6	6.2	7.4	6.3	9.4	12.7	16.1	12.6	12.8	15.1	13.0	10.1	8.0	8.4	21.7	7.5	10.1	5.4	21.7	2.8	8.9
14	18.0	22.2	27.5	56.1	5.0	3.6	5.6	19.7	7.6	23.5	11.0	25.9	14.8	14.5	23.4	26.2	20.5	24.6	17.1	54.0	33.4	10.8	15.0	6.5	56.1	3.6	20.3
15	6.9	3.6	3.1	3.1	4.1	3.2	4.9	5.5	7.3	6.6	10.2	12.7	22.9	13.9	17.3	16.5	29.6	11.2	7.1	6.4	6.3	13.2	10.4	7.8	29.6	3.1	9.7
16	5.1	4.8	4.5	3.4	4.0	5.3	4.1	6.3	6.2	5.3	5.6	6.2	5.4	6.1	5.2	4.5	5.6	4.3	4.9	5.5	5.2	4.0	6.4	7.7	7.7	3.4	5.2
17	8.2	6.9	5.3	3.7	7.4	3.5	5.9	7.2	6.4	7.4	10.5	12.6	13.1	9.0	9.1	9.0	8.5	7.7	6.9	6.4	6.3	6.1	6.1	6.2	13.1	3.5	7.5
18	5.6	14.4	59.8	25.9	16.4	15.3	11.8	10.1	12.0	8.7	8.2	7.1	5.5	7.6	6.7	6.4	6.0	5.7	5.3	5.2	5.2	5.6	18.4	19.6	59.8	5.2	12.2
19	22.5	13.2	5.4	6.3	5.5	6.5	10.0	14.3	43.0	29.7	17.5	22.2	28.1	18.3	21.8	28.3	37.6	14.9	13.3	9.5	5.9	8.3	15.2	6.6	43.0	5.4	16.8
20	5.1	11.5	7.6	5.9	5.4	5.3	10.0	18.8	30.1	37.6	23.4	50.2	33.8	38.6	9.9	5.0	7.7	5.8	6.3	6.6	6.1	4.8	7.7	20.7	50.2	4.8	15.2
21	5.3	4.3	5.6	18.7	7.4	25.2	18.0	18.0	14.2	10.8	10.2	15.8	26.2	46.1	20.4	22.7	11.9	23.1	43.7	16.9	7.2	3.1	2.1	3.8	46.1	2.1	15.9
22	3.1	2.9	5.3	3.8	3.9	3.2	5.1	5.6	5.6	12.2	22.8	9.6	9.8	6.3	6.0	5.9	6.1	5.8	6.2	6.0	5.1	5.9	6.5	6.1	22.8	2.9	6.6
23	5.9	5.3	4.8	5.4	5.4	4.3	4.8	4.6	4.9	5.1	6.0	8.1	7.0	10.8	10.7	8.4	7.3	8.4	7.4	6.9	5.4	6.1	3.8	6.0	10.8	3.8	6.4
24	5.4	4.1	4.9	5.0	8.9	6.8	38.1	9.6	13.9	14.8	18.1	25.0	45.3	55.7	22.6	50.3	14.3	9.1	24.0	20.3	9.1	9.2	8.6	12.8	55.7	4.1	18.2
25	13.7	4.3	4.5	3.8	8.8	27.7	16.4	10.6	28.6	22.3	24.3	24.7	26.8	16.5	15.1	13.3	13.4	9.2	8.3	5.4	6.7	6.6	5.0	4.2	28.6	3.8	13.3
26	5.5	5.2	6.0	8.4	10.3	13.0	16.5	16.2	16.0	42.9	27.5	25.3	27.1	34.9	18.3	11.3	15.1	28.5	15.5	5.7	5.0	5.5	10.2	11.1	42.9	5.0	15.9
27	11.0	34.4	11.7	47.1	8.7	6.3	4.9	6.9	11.5	22.1	63.1	44.7	50.6	22.8	20.9	17.4	11.7	11.9	10.4	7.1	4.9	5.5	10.1	10.7	63.1	4.9	19.0
28	4.9	17.5	2.7	10.0	38.7	35.4	12.1	15.1	5.6	10.8	10.7	8.7	13.9	13.1	10.5	12.3	11.2	12.2	18.9	8.6	7.0	17.2	15.7	15.8	38.7	2.7	13.7
29	15.6	12.7	7.9	10.6	8.6	14.6	9.3	17.7	9.3	10.4	13.1	11.2	12.7	12.5	8.7	8.6	8.5	6.8	6.5	5.8	6.0	6.0	6.9	7.4	17.7	5.8	9.9
30	5.8	6.7	6.9	6.4	5.1	7.0	6.4	7.1	11.2	11.6	14.3	12.5	11.5	8.5	11.6	16.8	18.1	16.6	30.7	27.6	23.4	15.3	10.0	9.3	30.7	5.1	12.5
Max.	**23.0**	**34.4**	**63.2**	**56.1**	**38.7**	**35.4**	**38.1**	**19.7**	**43.0**	**42.9**	**63.1**	**50.2**	**50.6**	**55.7**	**26.0**	**50.3**	**37.6**	**28.5**	**43.7**	**54.0**	**33.4**	**17.2**	**18.4**	**43.0**	**63.2**		
Min.	**2.4**	**2.9**	**2.7**	**3.0**	**2.7**	**2.1**	**2.8**	**4.0**	**4.7**	**4.6**	**4.8**	**4.9**	**5.4**	**5.3**	**5.0**	**4.5**	**5.0**	**4.3**	**4.3**	**4.4**	**4.2**	**3.0**	**2.1**	**2.6**		**2.1**	
Avg.	**7.4**	**7.9**	**10.0**	**9.8**	**7.2**	**8.2**	**8.6**	**9.1**	**10.7**	**12.5**	**14.1**	**15.3**	**16.3**	**16.0**	**12.4**	**13.2**	**12.0**	**10.8**	**11.0**	**9.8**	**8.2**	**6.6**	**7.5**	**8.6**			**10.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.9	15.0	13.8	8.9	12.7	23.7	32.4	21.7	44.0	51.8	47.6	43.4	55.3	19.7	24.0	32.9	20.9	11.9	9.7	8.3	5.1	6.4	5.9	17.7	55.3	5.1	22.7
2	16.4	12.1	5.3	6.3	7.8	4.6	3.1	7.0	8.8	8.0	12.3	13.9	14.2	11.4	12.3	15.5	13.8	8.6	8.1	5.5	4.9	3.9	3.7	4.2	16.4	3.1	8.8
3	3.0	3.7	5.6	5.9	4.2	4.9	4.2	9.2	5.9	8.4	12.7	12.3	21.2	22.0	27.2	24.9	46.9	10.1	7.9	25.5	13.6	10.8	36.9	12.0	46.9	3.0	14.1
4	11.5	14.6	25.9	19.3	5.2	8.3	44.3	41.7	46.6	37.0	41.9	46.2	36.2	32.6	40.6	34.5	14.1	13.1	10.3	8.2	5.8	23.5	21.6	22.2	46.6	5.2	25.2
5	15.7	21.6	9.9	10.3	11.4	21.8	10.9	9.1	10.5	8.9	13.9	28.4	52.6	32.7	42.8	16.0	29.7	11.4	26.9	26.5	10.8	14.4	35.2	48.9	52.6	8.9	21.7
6	46.9	9.8	14.3	17.4	14.1	30.5	29.5	25.8	10.3	13.8	16.8	47.5	44.0	11.3	10.8	11.9	9.7	46.2	18.7	13.2	41.4	41.3	7.8	18.4	47.5	7.8	23.0
7	12.6	6.7	8.0	6.1	4.4	5.5	4.9	5.5	5.7	6.1	5.4	5.9	6.7	5.9	6.4	5.4	5.0	6.0	8.0	6.7	6.6	7.2	12.9	6.7	12.9	4.4	6.7
8	6.1	9.5	29.8	9.7	13.5	6.6	5.4	5.4	4.3	5.3	18.3	28.7	17.4	26.5	45.3	48.2	44.0	13.9	14.1	14.9	11.1	6.4	9.7	14.8	48.2	4.3	17.0
9	9.9	5.8	5.7	4.0	3.0	4.6	4.9	6.7	14.3	27.5	26.5	13.6	12.3	11.8	10.6	13.9	8.8	7.7	6.3	5.9	8.6	8.1	5.3	5.0	27.5	3.0	9.6
10	4.9	4.4	3.9	4.0									4.4	4.3	5.0	5.5	5.5	6.2	5.1	5.7	6.4	35.8			35.8	3.9	7.2
11		5.3	5.2	5.2	5.2	5.1	7.4	6.7	5.8		7.5	6.9	6.5	5.7	5.2	6.4	5.9	18.5							18.5	5.1	6.8
12	11.2	8.3	8.3	14.6	11.2	9.4	18.7	20.6	34.9	9.7	19.7	17.5	20.4	4.8	4.1	6.5	7.8	8.7	13.8	14.1	16.9	14.3	20.5	22.3	34.9	4.1	14.1
13	24.4	16.2	8.5	5.1	17.2	9.2	14.0	5.5	3.6	4.9	3.5	3.0	3.5	7.4	19.5	49.4	14.1	7.8	6.8	10.2	6.5	5.7	5.8	5.8	49.4	3.0	10.7
14	5.7	6.4	6.4	4.1	4.6	5.3	6.5	7.8	4.8	4.4	10.5	6.0	6.4	5.6	6.0	5.1	6.8	6.3	5.8	5.9	5.8	8.1	8.9	8.5	10.5	4.1	6.3
15	8.8	7.0	8.1	7.0	7.1	5.3	4.4	6.0	5.4	6.3	5.2	4.7	4.1	5.0	9.3	16.3	4.0	7.6	9.0	11.1	11.5	10.1	9.0	11.8	16.3	4.0	7.7
16	15.6	12.5	9.8	9.5	8.2	6.0	7.0	9.9	6.8	5.4	4.8	5.0	4.1	4.5	4.4	4.8	5.2	5.5	4.5	5.3	6.0	7.4	5.4	6.9	15.6	4.1	6.9
17	6.1	6.1	5.9	6.8	8.1	6.7	7.6	6.8	7.0	5.2	4.8	4.5	4.2	4.2	3.9	4.3	4.2	4.5	4.8	5.5	5.6	5.7	6.6	5.1	8.1	3.9	5.6
18	4.7	4.7	4.6	5.2	4.8	5.3	5.5	5.7	5.1	4.0	3.6	4.2	4.9	4.7	4.4	4.5	4.3	4.8	5.0	5.1	5.5	6.2	5.7	5.9	6.2	3.6	4.9
19	5.1	5.5	5.0	5.0	4.5	5.2	4.6	4.7	4.5	5.0	5.2	5.7	6.0	9.8	5.5	6.4	6.2	9.8	8.9	12.8	9.0	8.4	14.0	9.2	14.0	4.5	6.9
20	14.4	10.5	8.6	11.0	6.3	7.4	6.9	24.4	10.0	5.5	5.1	7.1	19.8	9.6	4.0	5.0	7.5	7.6	11.2	15.0	11.4	9.0	12.8	10.9	24.4	4.0	10.0
21	22.3	11.5	8.5	15.7	6.2	13.5	12.0	6.6	5.6	7.0	10.5	8.5	10.4	28.5	26.5	26.4	10.4	20.9	23.0	48.1	53.3	30.7	33.3	8.5	53.3	5.6	18.7
22	9.5	5.8	6.3	5.1	6.9	8.9	6.9	8.4	4.3	8.0	7.2	36.6	35.5	5.6	4.8	10.6	19.9	8.3	9.6	9.8	11.5	10.0	9.5	9.0	36.6	4.3	10.7
23	5.8	6.3	6.1	8.5	6.4	4.7	5.3	10.2	8.1	5.9	5.4	5.5	5.7	4.5	5.2	6.0	8.3	7.2	8.1	7.5	16.3	36.2	7.9	10.9	36.2	4.5	8.4
24	9.3	6.6	9.9	8.6	5.0	5.3	9.0	7.3	5.5	16.2	12.8	7.7	6.1	5.4	5.5	5.0	4.6	5.6	8.3	13.1	6.8	7.9	5.0	5.3	16.2	4.6	7.6
25	6.4	11.0	5.3	6.4	7.0	4.4	4.0	4.1	4.6	4.1	3.9	3.9	5.4	5.5	4.4	4.1	7.5	6.1	6.3	5.1	5.7	6.4	8.0	10.2	11.0	3.9	5.8
26	10.6	9.5	9.3	8.6	7.2	8.6	5.7	8.8	10.3	24.9	9.1	10.3	14.8	13.8	21.1	48.9	14.9	30.2	7.0	7.3	8.5	8.4	8.3	8.8	48.9	5.7	13.1
27	9.8	7.3	5.2	5.6	5.4	4.7	4.5	4.2	3.7	3.8	3.6	3.8	5.4	23.2	23.1	16.0	17.0	22.5	24.9	37.4	20.1	25.8	31.4	42.9	42.9	3.6	14.6
28	27.0	19.4	13.6	21.3	26.7	15.8	14.9	39.2	33.1	10.1	13.5	12.2	10.7	14.7	43.7	15.9	12.4	11.4	10.2	8.1	10.8	7.7	6.1	8.6	43.7	6.1	17.0
29	6.7	9.8	9.6	6.1	10.6	6.9	14.3	15.1	5.4	7.0	6.3	5.8	4.5	4.2	4.0	4.7	6.0	7.3	5.8	6.7	8.8	5.8	7.1	7.1	15.1	4.0	7.3
30	9.7	6.8	5.6	6.2	7.7	5.6	5.2	5.3	5.4	6.5	5.1	5.5	4.0	6.1	5.5	12.2	37.5	18.1	20.0	13.8	5.3	5.6	5.9	6.2	37.5	4.0	8.9
31	5.5	4.9	6.5	4.5	4.5	3.0	2.6	2.9	3.3	3.3	3.4	4.2	4.9	4.3	5.3	5.5	7.2	6.7	5.5	6.8	7.0	7.2	7.4	5.3	7.4	2.6	5.1
Max.	**46.9**	**21.6**	**29.8**	**21.3**	**26.7**	**30.5**	**44.3**	**41.7**	**46.6**	**51.8**	**47.6**	**47.5**	**55.3**	**32.7**	**45.3**	**49.4**	**46.9**	**46.2**	**26.9**	**48.1**	**53.3**	**41.3**	**36.9**	**48.9**	**55.3**		
Min.	**3.0**	**3.7**	**3.9**	**4.0**	**3.0**	**3.0**	**2.6**	**2.9**	**3.3**	**3.3**	**3.4**	**3.0**	**3.5**	**4.2**	**3.9**	**4.1**	**4.0**	**4.5**	**4.5**	**5.1**	**4.9**	**3.9**	**3.7**	**4.2**		**2.6**	
Avg.	**11.9**	**9.2**	**9.0**	**8.5**	**8.2**	**8.6**	**10.2**	**11.4**	**10.9**	**10.8**	**11.5**	**13.6**	**14.6**	**11.5**	**14.2**	**15.2**	**13.2**	**11.6**	**10.4**	**12.3**	**11.5**	**12.8**	**12.3**	**12.4**			**11.5**

Total Hours in Month 744 **Hours Data Available** 726 **Data Recovery** 97.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

August 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.00
3	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	1.6	1.0	0.8	0.8	0.0	4.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	10.40
5	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.2	1.8	0.8	0.2	0.2	0.0	0.2	1.4	1.2	0.2	0.4	0.0	0.6	0.4	0.0	0.4	0.0	0.0	0.0	0.0	8.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.2	2.0	0.0	1.4	10.4	0.6	0.0	0.0	0.0	0.0	16.20
19	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	0.2	0.4	0.2	0.0	0.2	2.60
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.6	0.8	5.00
23	0.4	0.8	0.4	1.8	1.0	0.2	0.2	0.0	0.0	0.2	0.2	0.8	1.2	0.8	3.4	0.0	0.6	0.2	1.0	0.0	1.0	1.2	0.6	0.8	16.80
24	0.4	0.4	1.2	1.2	0.4	0.4	1.2	0.2	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.20
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.8	0.8	0.8	3.80
28	1.2	2.8	1.6	1.0	0.2	0.6	0.4	0.4	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.8	0.4	0.4	0.4	12.20
29	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.60
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 86.80

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

September 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.60
3	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	1.4	2.4	6.60
4	2.6	3.4	3.6	2.6	1.4	1.0	1.0	0.2	0.6	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.80
5	0.6	1.4	0.4	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.4	0.6	2.4	1.6	0.6	2.6	3.2	3.8	1.2	1.4	22.40
6	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.4	1.4	1.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.40
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.4	0.4	1.20
9	1.4	2.4	1.6	2.4	2.6	1.0	1.4	1.4	2.8	3.2	3.4	1.8	1.6	0.0	0.8	1.8	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	30.60
10	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	3.0	2.2	2.8	8.60
12	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	1.2	0.4	0.6	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.20
15	0.2	0.2	0.6	0.8	0.6	0.8	0.8	1.0	0.8	0.8	0.2	0.2	0.0	0.2	0.0	0.0	1.8	0.4	0.6	0.2	0.0	0.0	0.6	0.0	10.80
16	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.0	1.20
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.20
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.6	0.6	1.0	0.2	0.4	0.0	0.2	0.2	0.0	0.2	0.0	4.00
22	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.0	1.4	1.0	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	5.00
23	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.4	5.2	1.6	1.0	0.0	0.0	0.0	0.0	11.80
24	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.4	1.8	0.6	0.0	0.0	0.4	0.0	0.6	0.0	0.0	0.2	0.0	0.2	4.80
25	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0	0.6	0.4	0.4	0.2	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	3.80
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.2	0.8	0.6	0.4	0.8	0.2	0.2	4.80
28	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.40
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 146.80

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

October 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.4	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.4	0.4	0.4	0.6	0.6	0.2	5.60
6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	0.6	1.0	1.2	0.8	0.6	1.0	0.6	0.4	0.6	0.8	9.00
8	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.6	0.8			0.6	0.4	0.4	0.6	0.0	0.4	0.0	0.0	0.0	0.2	0.0	5.60
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.20
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.60
14	0.6	0.6	0.4	0.6	0.6	0.6	0.6	0.2	3.0	0.2	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.00
15	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	1.20
17	0.8	0.4	0.2	0.0	0.0	0.0	0.2	1.6	2.2	5.0	4.8	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.20
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
19	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.80
20	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		0.20
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									

Total Precipitation (mm) = 52.60

Total Hours in Month 744 **Hours Data Available** 548 **Data Recovery** 73.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

November 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1																									
2																									
3																		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	1.0	0.4	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.80
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.80
15	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
16	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.4	0.4	0.2	0.4	0.0	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	2.80
17	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80
18	0.0	0.0	0.0	0.0	0.8	0.4	0.6	0.4	0.2	0.0	0.2	0.2	0.6	0.4	0.4	0.2	0.2	0.4	1.6	0.4	0.4	0.2	0.0	0.0	7.60
19	0.0	0.0	0.0	0.2	0.0	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.27
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.0	1.52
26	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
29	0.0	0.0	0.3	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
30	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76

Total Precipitation (mm) = 24.13

Total Hours in Month 720 **Hours Data Available** 652 **Data Recovery** 90.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

December 2005

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.3	0.0	0.3	0.0	0.0	0.5	0.5	0.0	0.0	0.0	2.54
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	2.0	2.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	7.11
6	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.0	0.0	3.3	0.8	2.5	1.0	0.5	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	12.70
7	0.0	0.0	0.8	0.0	0.0	0.0	0.0	6.9	2.0	0.8	0.8	0.0	1.8	0.0	1.8	2.0	0.0	0.8	2.5	1.0	0.0	0.8	0.8	2.0	24.64
8	1.3	1.0	2.8	2.3	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.89
9	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.3	1.3	0.0	1.3	0.5	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.10
10	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
11	0.0	0.8	0.3	0.3	0.0	0.5	0.8	0.0	0.5	0.5	0.0	0.5	0.0	0.5	0.5	0.3	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	6.10
12	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	4.83
14	0.0	0.0	0.8	0.0	3.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.83
15	0.0	0.0	0.8	0.0	1.0	0.0	2.5	0.8	0.3	1.3	0.0	0.3	0.8	1.0	1.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	11.94
16	1.0	0.8	0.0	0.0	2.0	0.8	0.3	0.0	1.8	1.0	0.5	1.0	0.0	1.0	1.8	0.5	1.3	1.0	0.5	0.8	0.3	0.0	0.0	0.0	16.26
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.29
20	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
27	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	3.30
30	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 118.36

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.3	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.5	1.0	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.02
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25

Total Precipitation (mm) = 9.14

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.8	0.0	0.0	0.0	0.0	1.3	1.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.8	0.0	2.0	0.0	1.8	2.5	3.8	15.75
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.0	0.0	0.0	0.0	0.0	0.0	4.06
6	0.0	1.0	0.5	0.0	0.0	0.8	1.0	0.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.86
7	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	2.3	3.81
9	0.8	0.0	0.0	0.0	0.0	5.8	3.8	1.3	0.8	0.0	0.8	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	15.49
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	4.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.43
11	0.0	0.0	0.0	0.8	0.8	0.0	0.0	1.3	1.8	1.0	0.8	0.0	0.0	1.8	1.8	1.3	1.8	1.8	1.8	0.8	0.0	0.3	0.0	0.3	17.78
12	0.8	0.5	0.0	0.3	0.0	0.8	0.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.3	2.79
14	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	0.5	0.8	1.3	0.0	7.87
16	1.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.52
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	7.37
18	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	2.3	1.3	0.0	1.5	0.0	0.0	12.95
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
21	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.76
23	0.5	0.5	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
24	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
25	0.0	0.0	0.0	0.8	0.5	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.32
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	2.5	4.06
27	1.3	0.8	0.3	0.0	0.0	0.8	0.0	0.0	0.8	0.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.86
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.27

Total Precipitation (mm) = 135.38

Total Hours in Month 672 **Hours Data Available** 671 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.76
2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.03
3	0.3	0.3	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	0.0	0.8	0.5	0.3	0.8	0.0	0.0	4.06
5	0.5	0.0	0.5	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	4.83
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	3.05
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.8	0.0	5.59
12	0.0	0.0	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	3.30
13	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
18	0.0	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	2.29
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	1.0	1.5	2.3	0.5	1.0	1.5	0.0	11.43
20	1.0	0.5	0.0	0.3	0.0	0.8	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.5	0.0	0.0	0.0			0.0	0.0	4.57
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.76
31	1.8	1.3	0.0	0.0	0.0	0.0	0.0	2.5	1.3	7.9	1.0	1.0	1.3	0.5	0.5	0.5	0.3	0.3	0.0	0.3	0.5	0.0	0.3	0.0	21.08

Total Precipitation (mm) = 69.85

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.8	0.0	1.0	1.0	0.8	0.8	0.3	0.3	0.0	0.0	0.0	0.0	6.10
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.8	0.5	1.5	1.0	0.0	1.8	0.8	0.8	0.5	8.89
9	0.3	0.0	0.8	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.10
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.8	0.5	2.29
12	0.0	0.0	1.0	0.5	0.5	1.3	0.5	0.0	1.0	0.0	0.0	0.0	0.0	1.5	2.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.14
13	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	2.8	1.8	0.0	0.0	0.0	5.33
17	0.0	0.0	0.0	0.0	0.0	2.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.8	0.0	1.3	0.0	0.0	0.0	0.0	6.10
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 51.31

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.30
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	1.0	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.30
5	0.0	0.0	0.0	0.0	0.0	1.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.3	0.0	0.3	4.83
6	0.0	0.0	1.0	1.0	1.3	1.3	0.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.84
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.51
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
21	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 21.84

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.0	0.5	0.0	0.0	1.78
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.52
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.3	2.29
11	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.8	0.5	0.0	0.3	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	6.35
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.8	1.3	0.3	0.0	7.37
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	3.0	1.8	0.5	1.0	2.3	2.8	0.8	0.0	14.48
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.3	2.8	2.0	1.5	1.0	0.5	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.18
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
18	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.78
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	3.6	0.8	0.0	0.3	3.3	2.5	1.3	0.5	1.0	16.26
23	0.8	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.3	1.78
30	0.5	1.5	1.8	2.3	1.8	2.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.16

Total Precipitation (mm) = 81.28

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Total Precipitation (mm)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0																	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.51
12				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.5	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.0	1.27
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.27
24	0.0	0.0	0.3	0.8	0.3	0.5	0.5	0.0	0.3	0.3	0.5	0.5	0.0	0.3	0.0	0.0	0.3	0.8	0.8	1.5	0.5	0.5	0.0	0.0	8.38
25	0.0	1.0	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	5.08
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25

Total Precipitation (mm) = 19.81

Total Hours in Month 744 **Hours Data Available** 720 **Data Recovery** 96.8%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meteorological Station - Daily Total Pan Evaporation (mm)

August 2005- July 2006

Day	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1	1.6	3.3	0.0	-	-	-	-	-	-	-	0.2	1.0
2	0.0	1.5	0.0	-	-	-	-	-	-	-	4.1	5.6
3	0.0	0.0	0.8	-	-	-	-	-	-	-	5.5	6.6
4	0.0	0.0	7.9	-	-	-	-	-	-	-	9.0	4.5
5	1.1	0.0	0.0	-	-	-	-	-	-	-	6.6	5.6
6	3.6	0.0	0.0	-	-	-	-	-	-	-	6.2	0.0
7	3.3	0.5	0.0	-	-	-	-	-	-	-	7.2	0.0
8	3.8	0.0	0.0	-	-	-	-	-	-	-	0.0	0.0
9	8.1	0.0	-	-	-	-	-	-	-	-	4.1	1.1
10	4.6	0.0	-	-	-	-	-	-	-	-	2.9	7.2
11	5.3	0.0	-	-	-	-	-	-	-	-	0.0	4.1
12	7.5	0.0	-	-	-	-	-	-	-	2.0	0.0	0.2
13	6.0	0.1	-	-	-	-	-	-	-	7.6	0.0	5.5
14	4.7	1.6	-	-	-	-	-	-	-	4.0	1.3	0.0
15	3.8	0.0	-	-	-	-	-	-	-	4.6	0.0	0.0
16	2.9	0.0	-	-	-	-	-	-	-	1.9	0.0	0.4
17	0.0	0.0	-	-	-	-	-	-	-	2.1	0.0	3.4
18	0.0	0.7	-	-	-	-	-	-	-	0.3	0.0	2.7
19	3.3	2.2	-	-	-	-	-	-	-	2.4	1.8	3.7
20	0.0	1.4	-	-	-	-	-	-	-	0.0	1.0	6.8
21	1.8	0.0	-	-	-	-	-	-	-	0.0	1.1	0.0
22	0.0	0.0	-	-	-	-	-	-	-	3.1	0.0	1.3
23	0.0	0.0	-	-	-	-	-	-	-	4.0	0.0	0.0
24	0.0	0.0	-	-	-	-	-	-	-	4.5	1.3	0.0
25	3.1	0.0	-	-	-	-	-	-	-	6.0	2.3	0.0
26	5.1	4.0	-	-	-	-	-	-	-	8.4	5.2	3.8
27	0.0	0.0	-	-	-	-	-	-	-	9.8	4.0	1.0
28	0.0	0.0	-	-	-	-	-	-	-	6.9	6.0	4.8
29	0.0	0.0	-	-	-	-		-	-	10.1	0.0	0.6
30	0.7	0.0	-	-	-	-		-	-	6.8	0.0	0.0
31	3.1		-		-	-		-		3.7		0.6
Total	73.7	15.4	8.7	-	-	-	-	-	-	88.1	69.8	70.4

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2F

Pebble 1 Station, 2006 Annual Data Report for the Pebble Project Meteorological Monitoring Program

Pebble 1 Station
2006 Annual Data Report
January 2006 – December 2006

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

prepared for

The Pebble Partnership

March 2008

Pebble 1 Station
2006 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

March 2008

prepared for

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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary **4**
1.2 Measurements Method Table **5**
1.3 Variations from the Quality Assurance Project Plan **5**

2.0 Station Performance Summary **10**

2.1 Significant Project Events **10**
2.2 Missing, Invalid, and Adjusted Data **11**
2.3 Network Data Completeness **11**
2.4 Precision Statistics **13**
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics **14**
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **20**

3.1 Air Quality Data Summary **20**
3.2 Meteorological Data Summary **20**
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 20
3.2.2 Temperature Climatology 32
3.3.3 Other Meteorological Parameters 37

4.0 References **43**

List of Figures

1-1 Map of the Pebble Project Area 7
1-2 Map of the Pebble 1 Station 8
1-3 Pebble 1 Meteorological Monitoring Station 9
3-1 Annual Pebble 1 Station Wind Roses 22
3-2 Quarterly Pebble 1 Wind Roses (Climatronics) 23
3-3 Quarterly Pebble 1 Wind Roses (RM Young) 24
3-4 Annual Wind Rose Superimposed on Site Map 31
3-5 Hourly Average 2-m and 10-m Temperatures 35
3-6 Hourly Average Vertical Temperature Difference 36
3-7 Hourly Average Relative Humidity 39

3-8 Barometric Pressure 40
3-9 Hourly Average Solar Radiation 41
3-10 Daily and Cumulative Precipitation 42

List of Tables

E-1 Meteorological Data Capture – Valid Hours per Month 2
E-2 Meteorological Data Capture – Percent Data Capture 3
1-1 Meteorological Measurement Methods 6
2-1 Chronology of Significant Events 10
2-2 Percentage of Final Data Set Flagged 12
2-3 Pebble 1 Station Percent Data Capture 13
2-4 Initial Performance Audit Summary 16
2-5 January 15, 2006 Semi-Annual Performance Audit Summary. 17
2-6 July 10-12, 2006 Semi-Annual Performance Audit Summary 18
2-7 October 11-13, 2006 Supplemental Performance Audit Summary. 19
3-1 Average and Maximum Wind Speeds 20
3-2 Average and Maximum Wind Speeds at Iliamna Airport 21
3-3 2006 Wind Rose Analysis Table (Climatronics) 25
3-4 Quarter A Wind Rose Analysis Table (Climatronics) 26
3-5 Quarter B Wind Rose Analysis Table (Climatronics) 26
3-6 Quarter C Wind Rose Analysis Table (Climatronics) 27
3-7 Quarter D Wind Rose Analysis Table (Climatronics) 27
3-8 2006 Wind Rose Analysis Table (RM Young) 28
3-9 Quarter A Wind Rose Analysis Table (RM Young) 29
3-10 Quarter B Wind Rose Analysis Table (RM Young) 29
3-11 Quarter C Wind Rose Analysis Table (RM Young) 30
3-12 Quarter D Wind Rose Analysis Table (RM Young) 30
3-13 2-Meter Temperature Summary at Pebble 1 Station 33
3-14 10-Meter Temperature Summary at Pebble 1 Station 34
3-15 Relative Humidity, Barometric Pressure, and Solar Radiation Summary 38

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Hourly/Daily/Monthly Data Summaries
E Validated Manual Particulate (Field and Laboratory) Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

Prevention of Significant Deterioration (PSD) quality meteorological monitoring for the Pebble Project began on August 1, 2005 and will be ongoing. This report provides details of the 2006 calendar year of meteorological measurements collected from January 1, 2006 through December 31, 2006 at the proposed mill location.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 1 (Mine PSD) meteorological monitoring station. The Pebble 1 meteorological monitoring station met all PSD requirements during the monitoring year.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp[4]	Δ T[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2006	741	741	741	612	737	737	723	737	737	744	744	744	741	N/A[3]
February 2006	672	672	672	616	672	672	638	672	672	672	672	672	671	N/A
March 2006	744	744	744	742	744	744	744	744	744	744	744	744	742	N/A
April 2006	720	720	720	690	720	720	720	720	720	720	720	720	720	N/A
May 2006	744	744	744	744	744	744	744	744	744	744	744	744	744	479
June 2006	720	720	720	720	720	720	720	720	720	720	720	720	719	720
July 2006	739	739	739	741	741	741	735	735	735	744	744	744	729	744
August 2006	744	744	744	744	744	744	744	744	744	744	744	744	736	744
September 2006	720	720	720	720	720	720	720	720	720	720	720	720	720	720
October 2006	744	744	744	691	744	744	744	744	744	744	744	744	739	249
November 2006	720	720	720	591	720	720	720	720	720	720	720	720	704	N/A
December 2006	744	744	744	733	744	744	744	744	744	744	744	744	741	N/A
Monitoring Year	**8,752**	**8,752**	**8,752**	**8,344**	**8,750**	**8,750**	**8,696**	**8,744**	**8,744**	**8,760**	**8,760**	**8,760**	**8,706**	**3,656**[3]

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 12 to October 10.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	ΔT	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2006	99.6%	99.6%	99.6%	82.3%	99.1%	99.1%	97.2%	99.1%	99.1%	100%	100%	100%	99.6%	N/A[3]
February 2006	100%	100%	100%	91.7%	100%	100%	94.9%	100%	100%	100%	100%	100%	99.9%	N/A
March 2006	100%	100%	100%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**99.9%**	**99.9%**	**99.9%**	**91.2%**	**99.7%**	**99.7%**	**97.5%**	**99.7%**	**99.7%**	**100%**	**100%**	**100%**	**99.7%**	N/A
April 2006	100%	100%	100%	95.8%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
May 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
June 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.9%	100%
Quarter B	**100%**	**100%**	**100%**	**98.6%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
July 2006	99.3%	99.3%	99.3%	99.6%	99.6%	99.6%	98.8%	98.8%	98.8%	100%	100%	100%	98.0%	100%
August 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98.9%	100%
September 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter C	**99.8%**	**99.8%**	**99.8%**	**99.9%**	**99.9%**	**99.9%**	**99.6%**	**99.6%**	**99.6%**	**100%**	**100%**	**100%**	**99.0%**	**100%**
October 2006	100%	100%	100%	92.9%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	100%
November 2006	100%	100%	100%	82.1%	100%	100%	100%	100%	100%	100%	100%	100%	97.8%	N/A
December 2006	100%	100%	100%	98.5%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	N/A
Quarter D	**100%**	**100%**	**100%**	**91.3%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**98.9%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**99.9%**	**95.3%**	**99.9%**	**99.9%**	**99.3%**	**99.8%**	**99.8%**	**100.0%**	**100.0%**	**100.0%**	**99.4%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 12 to October 10.

1.0 Introduction

1.1 Project Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. This project currently consists of three PSD-quality meteorological monitoring stations located at the proposed mill site (Pebble 1), the tailings storage facility (Pebble 4), and port site (Pebble Port). An additional, non-PSD meteorological monitoring station (Pebble 3) is being used for engineering and mine design purposes. Of the three PSD-quality meteorological monitoring stations, continuous measurements were made at the Pebble 1 and Pebble Port stations beginning on August 1, 2005. This data report focuses on data collected from January 1, 2006 though December 31, 2006 at the Pebble 1 meteorological station.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 1 station.

The Pebble 1 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Air temperature, ten meters above ground (degrees Celsius [°C])
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]))
- Wind speed (meters per second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])
- Relative humidity (percent [%])
- Solar radiation (Watts per square meter [W/m^2])
- Barometric Pressure (millibar [mb]).
- Precipitation (millimeters [mm])
- Evaporation (millimeters [mm])

Measurements of these parameters will provide at least two years of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 1 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble Mine PSD station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 1 station.

1.3 Variations from the Quality Assurance Project Plan

During the 2006 monitoring year, there were no variations from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 12 in	± .254 mm	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.

[2] Instantaneous barometric pressure measurements are collected for 1 second during every hour.

[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

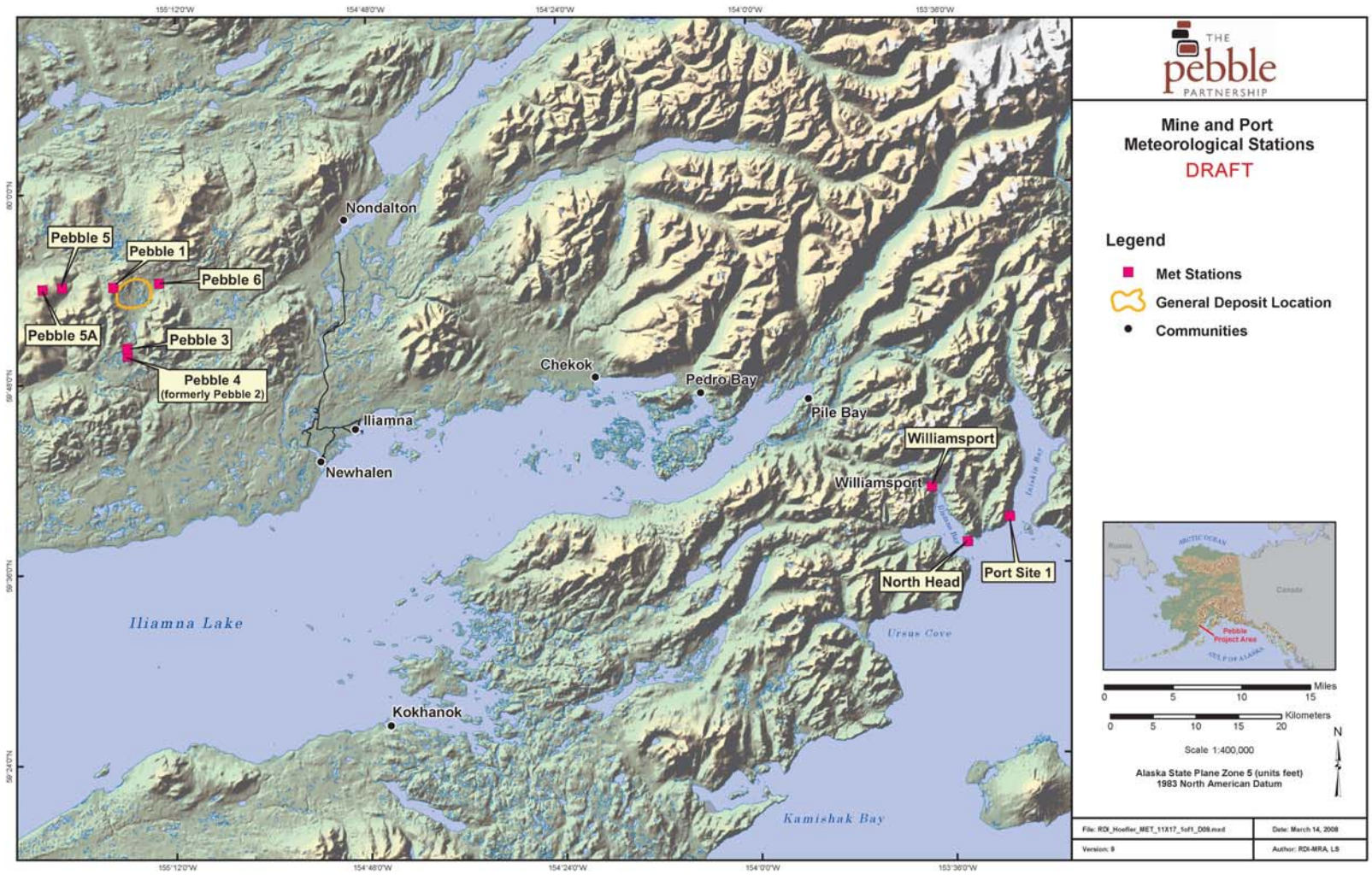


Figure 1-2. Map of the Pebble 1 Station

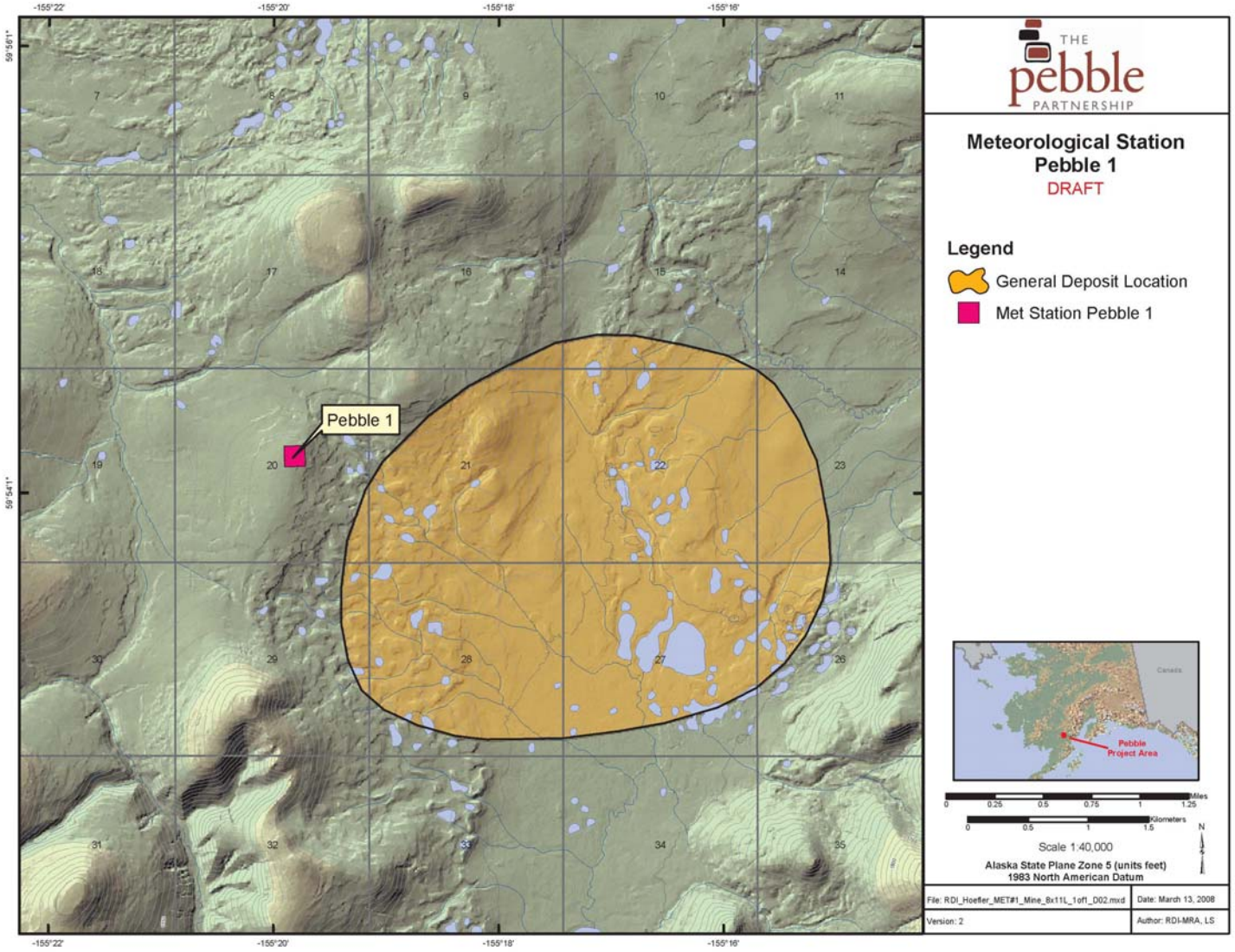


Figure 1-3. Pebble 1 Meteorological Monitoring Station

2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 1 station relevant to the 2006 meteorological monitoring year.

Table 2-1. Chronology of Events

Date	Event
June 6 – 11, 2005	Initial site installation and setup
June 10, 2005	Initial performance audit for all parameters
July 18, 2005	Performance audit and calibration of barometric pressure, relative humidity and temperature sensors. Maintenance performed on evaporation sensor.
July 20, 2005	Performance audit and calibration of precipitation gauge.
July 21, 2005	Rewiring of relative humidity and 2-meter temperature sensors. Re-audit of relative humidity and temperature sensors.
January 1, 2006	Beginning of 2006 monitoring year
January 11-18, 2006	Significant period of icing of Climatronics wind speed sensor
January 15, 2006	Semi-annual performance audit, all sensors passed
February 11, 2006	Shelter anchored
February 18, 2006	Maintenance work performed on precipitation gauge windscreen.
April 22, 2006	Maintenance work performed on precipitation gauge windscreen.
May 4, 2006	Follow-up maintenance of precipitation gauge and evaporation pan.
May 11, 2006	Evaporation pan returned to service for data collection. Back-up precipitation gauge installed.
June 10, 2006	Structural maintenance performed on shelter and precipitation gauge wind screen.
July 10-12, 2006	Semi-annual performance audit, all sensors passed
August 19, 2006	Reset precipitation gauges, calibration check performed

Table 2-1 (continued). Chronology of Events

Date	Event
October 11-13, 2006	Winterized evaporation pan and NOAH precipitation gauge, tested NOAH and Metone precipitation gauges, installed snowfall adaptor on Metone gauge, audited precipitation and evaporation gauge
October 30, 2006	Thermo/Electric Generator turned on at 1300 hrs
November 16, 2006	Installation of webcam, new datalogger, FW radio, TEG plumbing, and checked NOAH precipitation gauge
November 27, 2006	Thermo/Electric Generator restarted
December 15, 2006	Installed controlled ventilation system, custom chimney cap with circulating base, checked both precipitation gauges and refreshed the ethylene-glycol mixture
December 31, 2006	End of 2006 monitoring year

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 1 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2006 monitoring year at the Pebble 1 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	1.3%
	< 0.1 m/s variation for 3 consecutive hours	2.7%
	<0.5 m/s variation for 12 consecutive hours	1.9%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	1.8%
	< 10° variation over 18 consecutive hours	2.7%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.9%
	< 0.1 m/s variation for 3 consecutive hours	0.8%
	<0.5 m/s variation for 12 consecutive hours	0.2%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	1.8%
	< 10° variation over 18 consecutive hours	2.9%
Temperature (2 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.2%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.0%
	< 0.5°C variation for 12 consecutive hours	1.2%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	2.3%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	0.0%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	0.0%
	< 0.5°C variation for 12 consecutive hours	0.9%
	Equals ambient temperature for 12 consecutive hours	1.1%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	0.0%
	> 6 mb variation for 3 consecutive hours	0.0%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	33.3%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).

[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 1 Station Percent Data Capture.

Period	Meteorological Parameters													
	2-m Temp	10-m Temp[4]	Δ T[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2006	99.6%	99.6%	99.6%	82.3%	99.1%	99.1%	97.2%	99.1%	99.1%	100%	100%	100%	99.6%	N/A[3]
February 2006	100%	100%	100%	91.7%	100%	100%	94.9%	100%	100%	100%	100%	100%	99.9%	N/A
March 2006	100%	100%	100%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**99.9%**	**99.9%**	**99.9%**	**91.2%**	**99.7%**	**99.7%**	**97.5%**	**99.7%**	**99.7%**	**100%**	**100%**	**100%**	**99.7%**	N/A
April 2006	100%	100%	100%	95.8%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
May 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
June 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.9%	100%
Quarter B	**100%**	**100%**	**100%**	**98.6%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
July 2006	99.3%	99.3%	99.3%	99.6%	99.6%	99.6%	98.8%	98.8%	98.8%	100%	100%	100%	98.0%	100%
August 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98.9%	100%
September 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter C	**99.8%**	**99.8%**	**99.8%**	**99.9%**	**99.9%**	**99.9%**	**99.6%**	**99.6%**	**99.6%**	**100%**	**100%**	**100%**	**99.0%**	**100%**
October 2006	100%	100%	100%	92.9%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	100%
November 2006	100%	100%	100%	82.1%	100%	100%	100%	100%	100%	100%	100%	100%	97.8%	N/A
December 2006	100%	100%	100%	98.5%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	N/A
Quarter D	**100%**	**100%**	**100%**	**91.3%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**98.9%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**99.9%**	**95.3%**	**99.9%**	**99.9%**	**99.3%**	**99.8%**	**99.8%**	**100.0%**	**100.0%**	**100.0%**	**99.4%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 12 to October 10.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A preliminary systems and performance audit was conducted at the Pebble 1 station on June 10, 2005 and again from July 18 through July 21, 2005. The audits performed in July were necessary since the relative humidity sensor transfer standard was not available during the June 10, 2005 audit and additional electrical work was required for the temperature sensors. Specifically, the relative humidity probe was audited on July 18, 2005 and the temperature probes were re-audited on July 21, 2005. Additional audits were conducted on the barometric pressure sensor and precipitation gauge on July 18 and July 20, 2005, respectively. The results of the initial systems and performance audit are presented in Table 2-4. The complete systems and performance audit report is available in Appendix C.

A semiannual performance audit was conducted at the Pebble 1 station on January 15, 2006 and July 10 through 12, 2006. The results of these performance audits are presented in Tables 2-5 and 2-6. The evaporation pan and tipping bucket precipitation gauge were audited prior to winterization on October 11 through 13, 2006, see Table 2-7. Performance audits involve reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with established PSD

limits to assess the accuracy of the sensor. Complete performance audit reports for the monitoring year are available in Appendix C.

A technical systems audit was performed during the July 10 through 12, 2006 performance audit. During each technical audit, the power supply, DAS, communications system, and audited sensors all worked properly. The systems audit found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system. Appendix C contains the complete technical systems audit report.

Table 2-4. Initial Performance Audit Summary

Parameter	EPA Limit	Units	Maximum Reading	Pass/Fail
Datalogger Time (AST)	≤ ±5:00	Min:Sec	0:03	Pass
Temperature Accuracy (2-m)[1]	≤ ±0.5	°C	0.35	Pass
Temperature Accuracy (10-m)[1]	≤ ±0.5	°C	0.35	Pass
Temperature Difference (ΔT)[1]	≤ ±0.1	°C	0.00	Pass
Wind Speed[2] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[2] Torque	≤ ±0.005	oz-in	< 0.003	Pass
Wind Direction[2] Alignment	≤ ±5	°	3.3	Pass
Wind Direction[2] Linearity	≤ 3	°	0.5	Pass
Wind Direction[2] Torque	≤ 0.104	oz-in	0.060	Pass
Wind Speed[3] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[3] Torque	≤ ±0.014	oz-in	0.006	Pass
Wind Direction[3] Alignment	≤ ±5	°	3.0	Pass
Wind Direction[3] Linearity	≤ 3	°	1.6	Pass
Wind Direction[3] Torque	≤ 11.0	gm-cm	5.0	Pass
Relative Humidity[4] (Dew Point Temperature)	≤ ±1.5	°C	0.3	Pass
Barometric Pressure[4]	≤ ±3	mb	1.4	Pass
Solar Radiation	≤ ±5	% obs	NT[5]	N/A
Precipitation[6]	≤ ±10	% input	-8.5	Pass
Evaporation	≤ ±10	% input	-5.0	Pass

[1] Temperature sensors audited on July 21, 2005.

[2] Parameters audited for Climatronics wind sensor.

[3] Parameters audited for RM Young wind sensor.

[4] Relative humidity probe and barometric pressure sensor audited on July 18, 2005.

[5] NT = Not tested.

[6] Precipitation gauge audited on July 20, 2005.

Table 2-5. January 15, 2006 Semi-Annual Performance Audit Summary

Parameter	EPA Limit	Units	Maximum Reading	Pass/Fail
Datalogger Time (AST)	≤ ±5:00	Min:Sec	00:03	Pass
Temperature Accuracy (2-m)	≤ ±0.5	°C	0.11	Pass
Temperature Accuracy (10-m)	≤ ±0.5	°C	0.11	Pass
Temperature Difference (ΔT)	≤ ±0.1	°C	0.00	Pass
Wind Speed[1] Accuracy	≤ ±0.2 + 5%	m/s	0.00	Pass
Wind Speed[1] Torque	≤ ±0.005	oz-in	< 0.003	Pass
Wind Direction[1] Alignment	≤ ±5	°	2.3	Pass
Wind Direction[1] Linearity	≤ 3	°	1.3	Pass
Wind Direction[1] Torque	≤ 0.104	oz-in	0.070	Pass
Wind Speed[2] Accuracy	≤ ±0.2 + 5%	m/s	0.02	Pass
Wind Speed[2] Torque	≤ ±0.014	oz-in	0.010	Pass
Wind Direction[2] Alignment	≤ ±5	°	4.2	Pass
Wind Direction[2] Linearity	≤ 3	°	2.4	Pass
Wind Direction[2] Torque	≤ 0.152	oz-in	0.139	Pass
Relative Humidity (Dew Point Temperature)	≤ ±1.5	°C	1.0	Pass
Barometric Pressure	≤ ±3	mb	1.2	Pass
Solar Radiation	≤ ±5	% obs	NT[3]	N/A
Precipitation	≤ ±10	% input	9.5	Pass
Evaporation	≤ ±10	% input	NT	Pass

[1] Parameters audited for Climatronics wind sensor.

[2] Parameters audited for RM Young wind sensor.

[3] NT = Not tested.

Table 2-6. July 10-12, 2006 Semi-Annual Performance Audit Summary

Parameter	EPA Limit	Units	Maximum Reading	Pass/Fail
Datalogger Time	≤ ±5:00	Min:Sec	03.05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.5	Pass
Wind Speed Torque[1]	≤ 0.0049	oz-in	< 0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)[1]	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)[1]	≤ ±5	% input	0.00	Pass
Wind Direction Torque[1]	≤ 0.104	oz-in	0.07	Pass
Wind Dir. Azim. Align. (as-found)[1]	≤ ±5	Degree	4.7	Pass
Wind Direction Accuracy[1]	≤ ±5	Degree		Pass
Wind Direction Linearity[1]	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)[1]	≤ ±5	Degree	4.7	Pass
Wind Speed Torque[2]	≤ 0.014	oz-in	0.013	Pass
Low Wind Spd. Accuracy (≤5m/s)[2]	≤ ±0.2	m/s	1.2	Pass
High Wind Spd. Accuracy (>5m/s)[2]	≤ ±5	% input	1.2	Pass
Wind Direction Torque[2]	≤ 11	g-cm	0.042	Pass
Wind Dir. Azim. Align. (as-found)[2]	≤ ±5	Degree	2.1	Pass
Wind Direction Accuracy[1]	≤ ±5	Degree		Pass
Wind Direction Linearity[1]	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)[1]	≤ ±5	Degree	2.1	Pass
Barometric Pressure	≤ ±3	Mbar	0.5	Pass
Solar Radiation[3]	≤ ±5+Res	% input	-5.8	Pass
Weighing Precipitation	≤ ±10	% input	-6.9	Pass
Evaporation	≤ ±10	% input	2.3	Pass

[1] Parameters audited for Climatronics wind sensor.

[2] Parameters audited for RM Young wind sensor.

[3] Max % error value of 9.6 within limit of 5% input + resolution, see audit.

Table 2-7. October 11-13, 2006 Supplemental Performance Audit Summary[1]

Parameter	EPA Limit	Units	Maximum Reading	Pass/Fail
Tipping Precipitation (Pre-Calibration)	≤ ±10	% input	-5.3	Pass
Tipping Precipitation (Post-calibration)	≤ ±10	% input	2.4	Pass
Weighing Precipitation	≤ ±10	% input	8.9	Pass
Evaporation	≤ ±10	% input	-2.6	Pass

[1] Gauges audited prior to winterizing.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2006 meteorological monitoring year at the Pebble Mine PSD station. The mean hourly average wind speed during the 2006 monitoring year was 8.16 m/s and 8.13 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 31.91 m/s and 30.82 m/s were measured by the CLM and RMY sensors, respectively, at 10:00 AM on March 30.

Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 30 km from the Pebble 1 Station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 4.30 m/s, while the maximum hourly average wind speed was 20.12 m/s, recorded on November 14.

Table 3-1. Average and Maximum Wind Speeds

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	**9.05**	**9.02**	**31.91**	**30.82**
Quarter B	**7.67**	**7.65**	**26.14**	**24.81**
Quarter C	**6.38**	**6.35**	**24.71**	**23.64**
Quarter D	**9.74**	**9.53**	**30.69**	**29.15**
Monitoring Year	**8.16**	**8.13**	**31.91**	**30.82**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the second monitoring year. Winds were predominantly from the northwest and southeast, other wind components are minor. Figures 3-2 and 3-3 present the quarterly wind roses

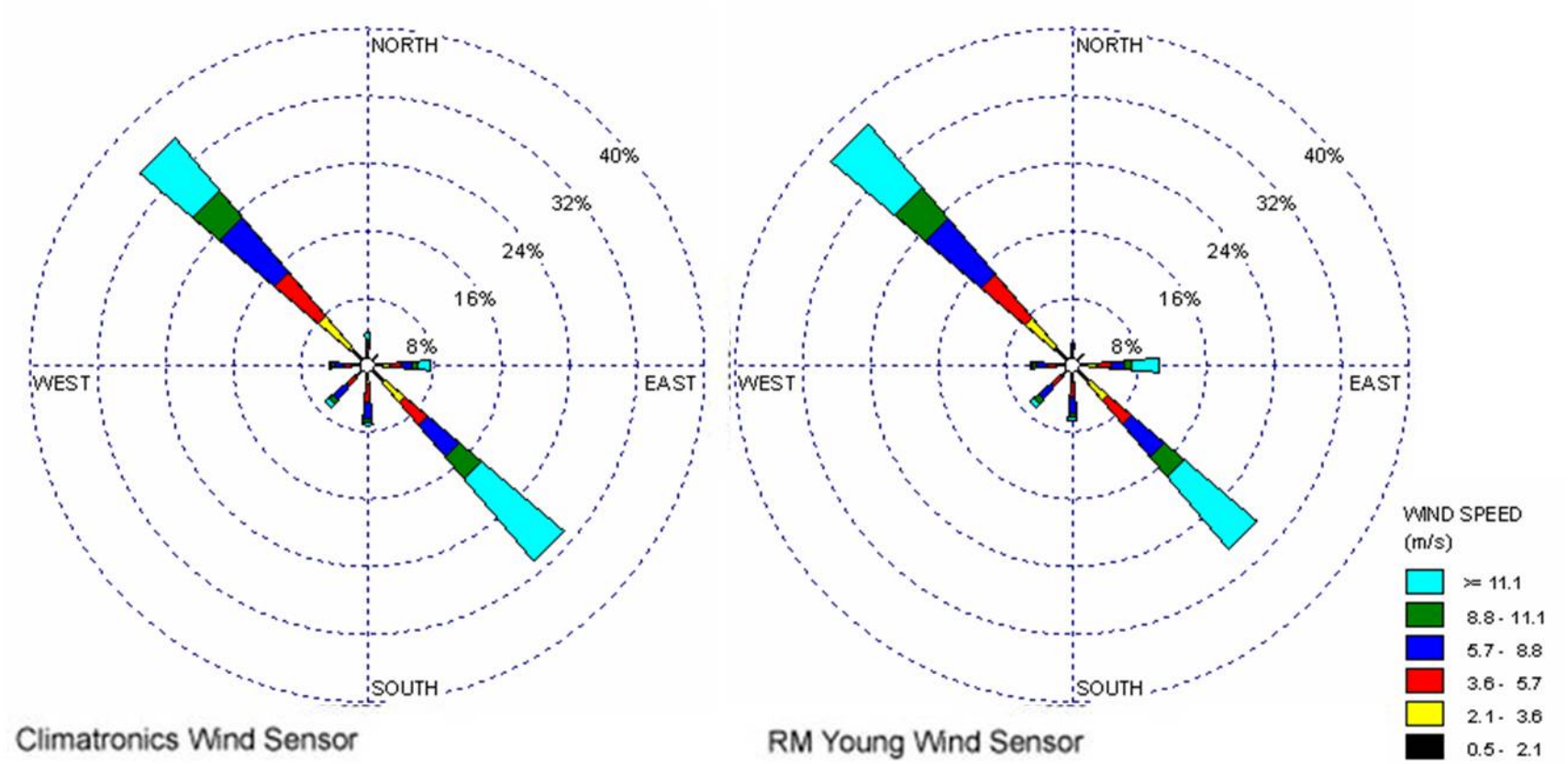
for the CLM and RMY sensors, respectively. All of the quarterly wind roses are characterized by major wind components from the northwest and southeast. Quarter B and Quarter C wind roses exhibited other minor wind components from the north, east, south, west and southwest directions. The Quarter A and Quarter D wind roses indicate a lack of southwesterly winds during this period. Tables 3-3 through 3-7 are the annual and quarterly wind tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Table 3-2. Average and Maximum Wind Speeds at Iliamna Airport

Monitoring Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
Quarter A	4.67	17.88
Quarter B	3.47	13.41
Quarter C	3.67	16.09
Quarter D	5.39	20.12
Monitoring Year	4.30	20.12

Figure 3-4 shows the 2006 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the proposed location of the Pebble Mine and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 1 station.

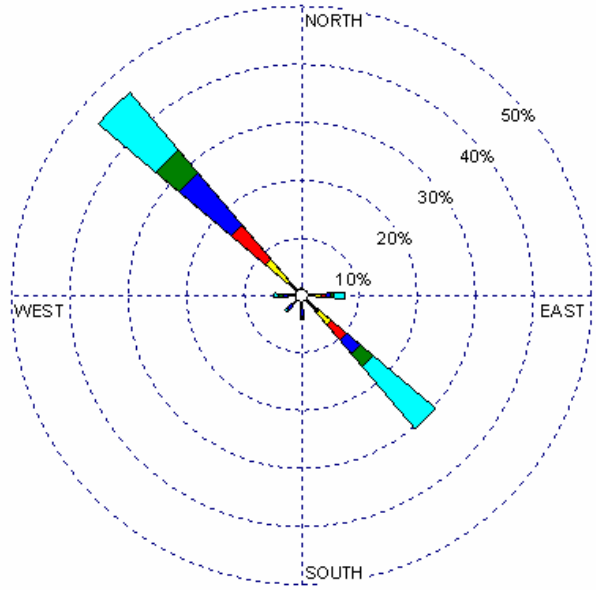
Figure 3-1. Annual[1] Pebble 1 Station Wind Roses



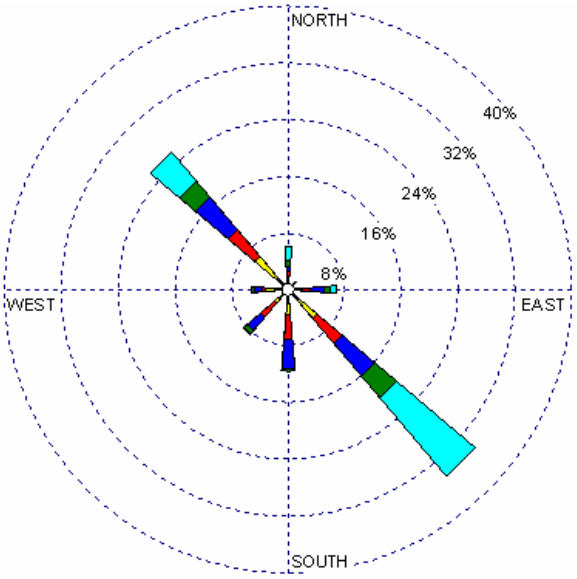
[1] January 1, 2006 to December 31, 2006

Figure 3-2. Quarterly Pebble 1 Station Wind Roses (Climatronics)

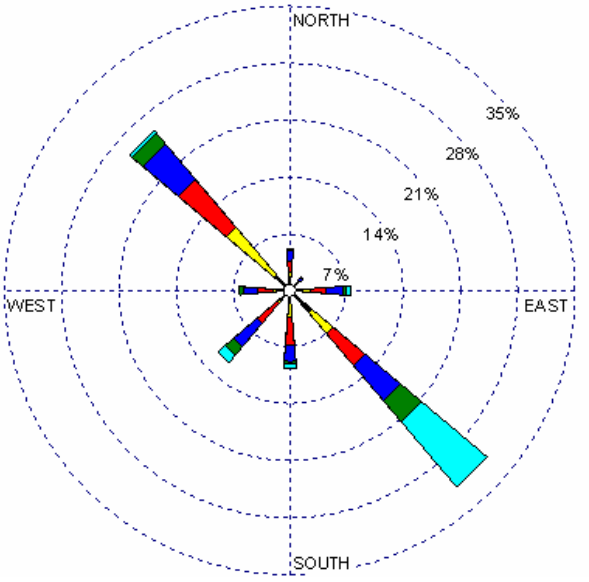
Quarter A (1/1/06 – 3/31/06)



Quarter B (4/1/06 – 6/30/06)



Quarter C (7/1/06 – 9/30/06)



Quarter D (10/1/06 – 12/31/06)

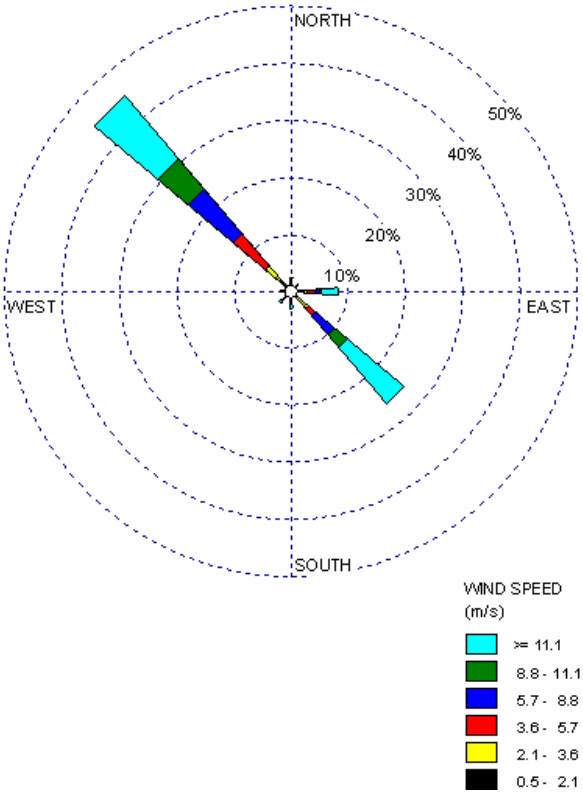
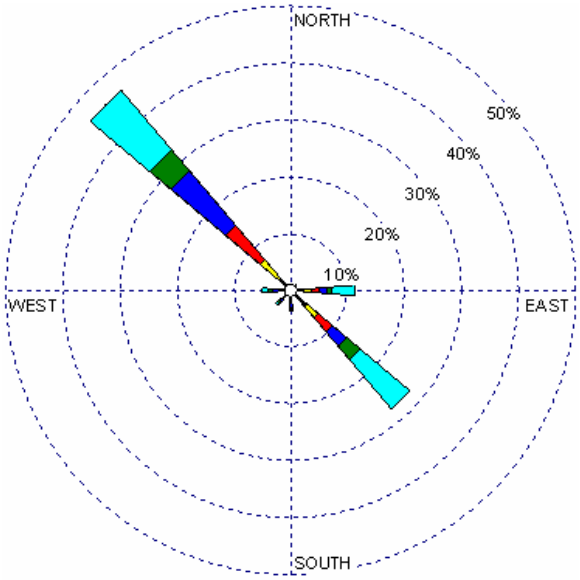
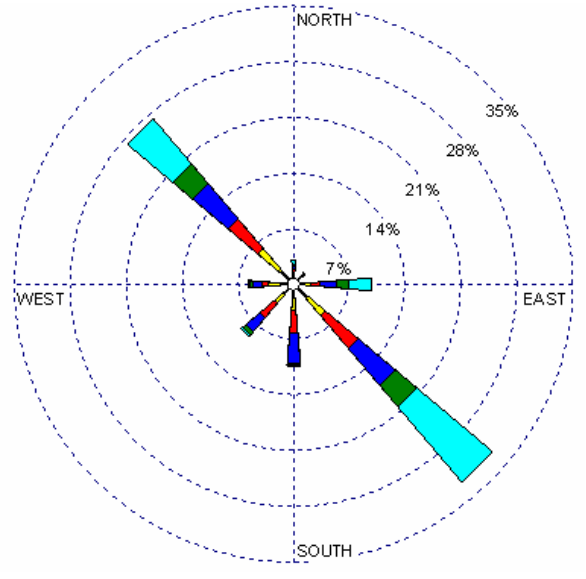


Figure 3-3. Quarterly Pebble 1 Station Wind Roses (RM Young)

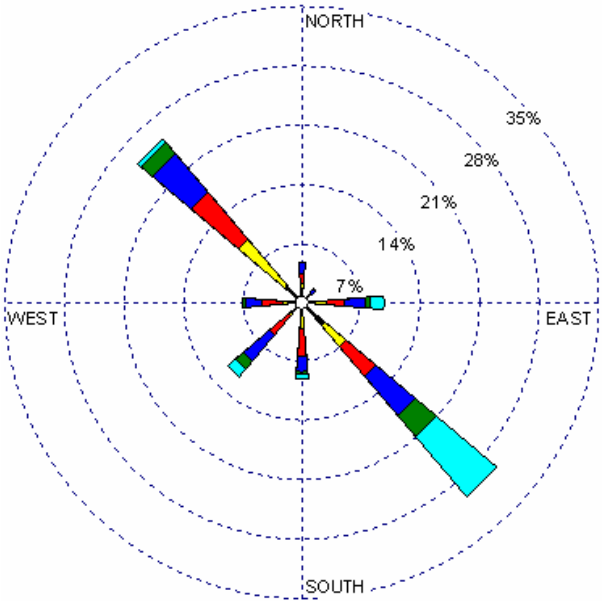
Quarter A (1/1/06 – 3/31/06)



Quarter B (4/1/06 – 6/30/06)



Quarter C (7/1/06 – 9/30/06)



Quarter D (10/1/06 – 12/31/06)

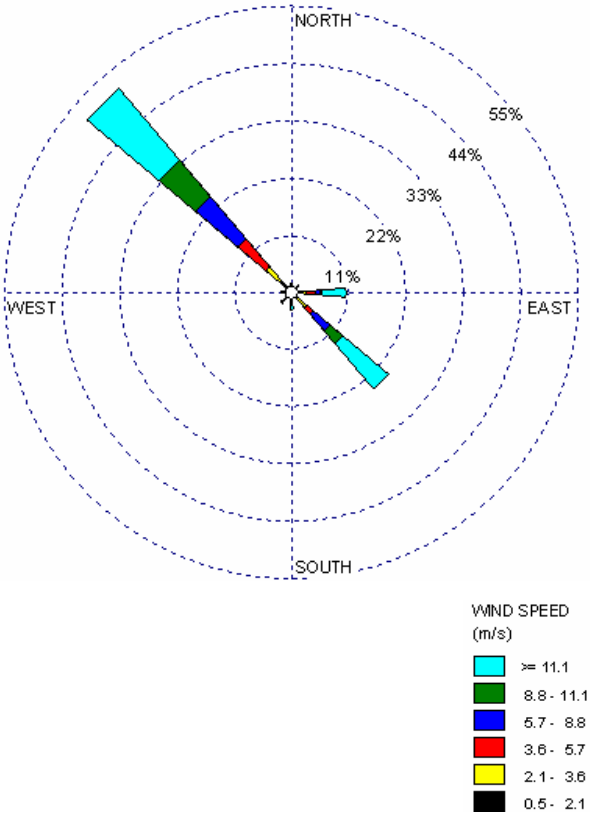


Table 3-3. 2006 Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: 2007
Start Date: January 1, 2006 End Date: December 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.83%	0.56%	0.77%	0.60%	0.26%	0.90%	3.93%
NE	0.41%	0.28%	0.43%	0.28%	0.08%	0.30%	1.79%
E	1.33%	1.42%	1.30%	1.40%	0.56%	1.62%	7.62%
SE	2.80%	3.01%	3.67%	4.88%	3.30%	12.88%	30.53%
S	0.76%	1.55%	2.16%	1.96%	0.40%	0.40%	7.22%
SW	0.74%	0.83%	1.74%	2.22%	0.64%	0.61%	6.78%
W	1.11%	0.86%	0.94%	1.10%	0.41%	0.19%	4.61%
NW	2.72%	4.95%	6.87%	8.35%	4.21%	8.15%	35.25%
Sub-Total:	10.71%	13.46%	17.88%	20.78%	9.86%	25.05%	97.74%
Calms (<0.5m/s):							2.64%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2006 End Date: March 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.76%	0.10%	0.10%	0.15%	0.05%	0.41%	1.57%
NE	0.51%	0.10%	0.36%	0.20%	0.15%	0.00%	1.32%
E	1.83%	1.62%	0.86%	0.66%	0.66%	2.03%	7.67%
SE	4.06%	2.69%	3.50%	3.15%	2.84%	13.91%	30.15%
S	0.71%	0.81%	0.81%	1.42%	0.25%	0.41%	4.42%
SW	0.56%	0.66%	0.71%	1.42%	0.20%	0.41%	3.96%
W	1.07%	0.46%	0.30%	1.52%	0.81%	0.66%	4.82%
NW	3.40%	4.97%	7.56%	11.73%	5.23%	12.94%	45.84%
Sub-Total:	12.89%	11.42%	14.21%	20.25%	10.20%	30.76%	99.75%
Calms (<0.5m/s):							0.23%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2006 End Date: June 30, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.60%	0.88%	1.16%	0.79%	0.84%	1.86%	6.13%
NE	0.33%	0.42%	0.42%	0.14%	0.05%	0.28%	1.62%
E	1.07%	1.02%	1.07%	2.04%	0.93%	0.74%	6.87%
SE	2.18%	3.25%	4.69%	5.94%	3.99%	14.48%	34.54%
S	1.07%	2.51%	3.62%	3.99%	0.37%	0.00%	11.56%
SW	1.21%	1.39%	2.55%	2.55%	0.56%	0.09%	8.36%
W	1.58%	1.67%	0.60%	0.97%	0.42%	0.05%	5.29%
NW	2.27%	3.90%	4.92%	5.99%	2.97%	5.43%	25.49%
Sub-Total:	10.31%	15.04%	19.03%	22.42%	10.12%	22.93%	99.86%
Calms (<0.5m/s):							0.13%
Total:							100.00%

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2006 End Date: September 30, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.32%	1.09%	1.36%	1.27%	0.09%	0.09%	5.22%
NE	0.63%	0.41%	0.50%	0.63%	0.14%	0.00%	2.31%
E	1.22%	1.45%	1.81%	2.04%	0.45%	0.63%	7.62%
SE	3.63%	3.40%	5.08%	5.76%	3.36%	10.39%	31.61%
S	1.04%	2.36%	3.49%	1.90%	0.32%	0.50%	9.61%
SW	1.00%	1.13%	3.22%	3.81%	1.27%	1.18%	11.61%
W	1.18%	0.91%	2.00%	1.72%	0.45%	0.05%	6.30%
NW	2.59%	7.66%	7.62%	5.76%	1.77%	0.32%	25.71%
Sub-Total:	12.61%	18.41%	25.08%	22.90%	7.85%	13.15%	100.00%
Calms (<0.5m/s):							9.48%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2006 End Date: December 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.70%	0.15%	0.45%	0.15%	0.05%	1.34%	2.83%
NE	0.20%	0.20%	0.50%	0.15%	0.00%	0.99%	2.04%
E	1.34%	1.74%	1.54%	0.84%	0.25%	3.38%	9.09%
SE	1.59%	2.93%	1.54%	4.92%	3.23%	14.05%	28.25%
S	0.25%	0.50%	0.65%	0.55%	0.70%	0.74%	3.38%
SW	0.20%	0.15%	0.40%	1.09%	0.55%	0.79%	3.18%
W	0.70%	0.40%	0.84%	0.25%	0.00%	0.05%	2.23%
NW	2.93%	3.53%	8.04%	11.17%	7.60%	15.69%	48.96%
Sub-Total:	7.89%	9.58%	13.95%	19.12%	12.36%	37.04%	82.88%
Calms (<0.5m/s):							0.04%
Total:							100.00%

Table 3-8. 2006 Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: 2007
Start Date: January 1, 2006 End Date: December 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.76%	0.54%	0.55%	0.46%	0.09%	0.33%	2.74%
NE	0.39%	0.30%	0.47%	0.36%	0.10%	0.31%	1.93%
E	1.44%	1.55%	1.62%	1.65%	0.77%	3.31%	10.35%
SE	2.83%	2.82%	3.69%	4.94%	3.18%	11.15%	28.61%
S	0.84%	1.21%	1.92%	1.92%	0.37%	0.41%	6.68%
SW	0.86%	0.83%	1.68%	2.03%	0.70%	0.60%	6.70%
W	1.25%	0.78%	1.15%	1.14%	0.45%	0.30%	5.08%
NW	2.80%	4.58%	6.77%	8.67%	4.72%	9.82%	37.35%
Sub-Total:	11.18%	12.62%	17.86%	21.16%	10.38%	26.24%	99.44%
Calms (<0.5m/s):							0.81%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter A
Start Date: January 1, 2006 End Date: March 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.72%	0.19%	0.05%	0.05%	0.05%	0.00%	1.05%
NE	0.24%	0.19%	0.52%	0.29%	0.24%	0.00%	1.48%
E	1.95%	1.72%	1.53%	1.24%	0.86%	4.15%	11.44%
SE	3.96%	2.43%	3.19%	3.43%	2.96%	11.49%	27.45%
S	0.52%	0.33%	0.86%	1.48%	0.19%	0.33%	3.72%
SW	0.57%	0.24%	0.81%	1.24%	0.38%	0.38%	3.62%
W	1.00%	0.48%	0.52%	1.24%	0.91%	1.00%	5.15%
NW	2.86%	4.24%	7.91%	12.54%	4.77%	13.63%	45.95%
Sub-Total:	11.82%	9.82%	15.40%	21.50%	10.34%	30.98%	99.86%
Calms (<0.5m/s):							0.14%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter B
Start Date: April 1, 2006 End Date: June 30, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.55%	0.64%	0.82%	0.27%	0.23%	0.60%	3.11%
NE	0.41%	0.46%	0.46%	0.32%	0.05%	0.32%	2.01%
E	1.10%	1.24%	1.01%	2.20%	1.37%	2.84%	9.75%
SE	2.29%	2.98%	5.45%	6.09%	3.43%	12.36%	32.60%
S	1.37%	2.01%	2.88%	3.75%	0.23%	0.09%	10.35%
SW	1.37%	1.88%	2.38%	2.24%	0.60%	0.27%	8.75%
W	1.79%	1.42%	0.82%	1.19%	0.41%	0.14%	5.77%
NW	2.38%	3.57%	4.85%	5.72%	3.34%	7.28%	27.15%
Sub-Total:	11.26%	14.19%	18.68%	21.79%	9.66%	23.90%	99.50%
Calms (<0.5m/s):							0.49%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter C
Start Date: July 1, 2006 End Date: September 30, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.18%	1.09%	1.23%	1.23%	0.09%	0.05%	4.87%
NE	0.59%	0.36%	0.45%	0.68%	0.14%	0.00%	2.23%
E	1.46%	1.55%	2.14%	2.32%	0.59%	1.68%	9.73%
SE	3.73%	3.14%	4.64%	5.96%	3.23%	9.32%	30.01%
S	1.14%	2.09%	3.27%	1.73%	0.36%	0.50%	9.10%
SW	1.09%	1.05%	3.00%	4.00%	1.23%	1.14%	11.51%
W	1.46%	0.86%	2.41%	1.86%	0.50%	0.05%	7.14%
NW	2.77%	7.05%	7.32%	5.96%	1.73%	0.45%	25.28%
Sub-Total:	13.42%	17.19%	24.47%	23.74%	7.87%	13.19%	99.86%
Calms (<0.5m/s):							0.13%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

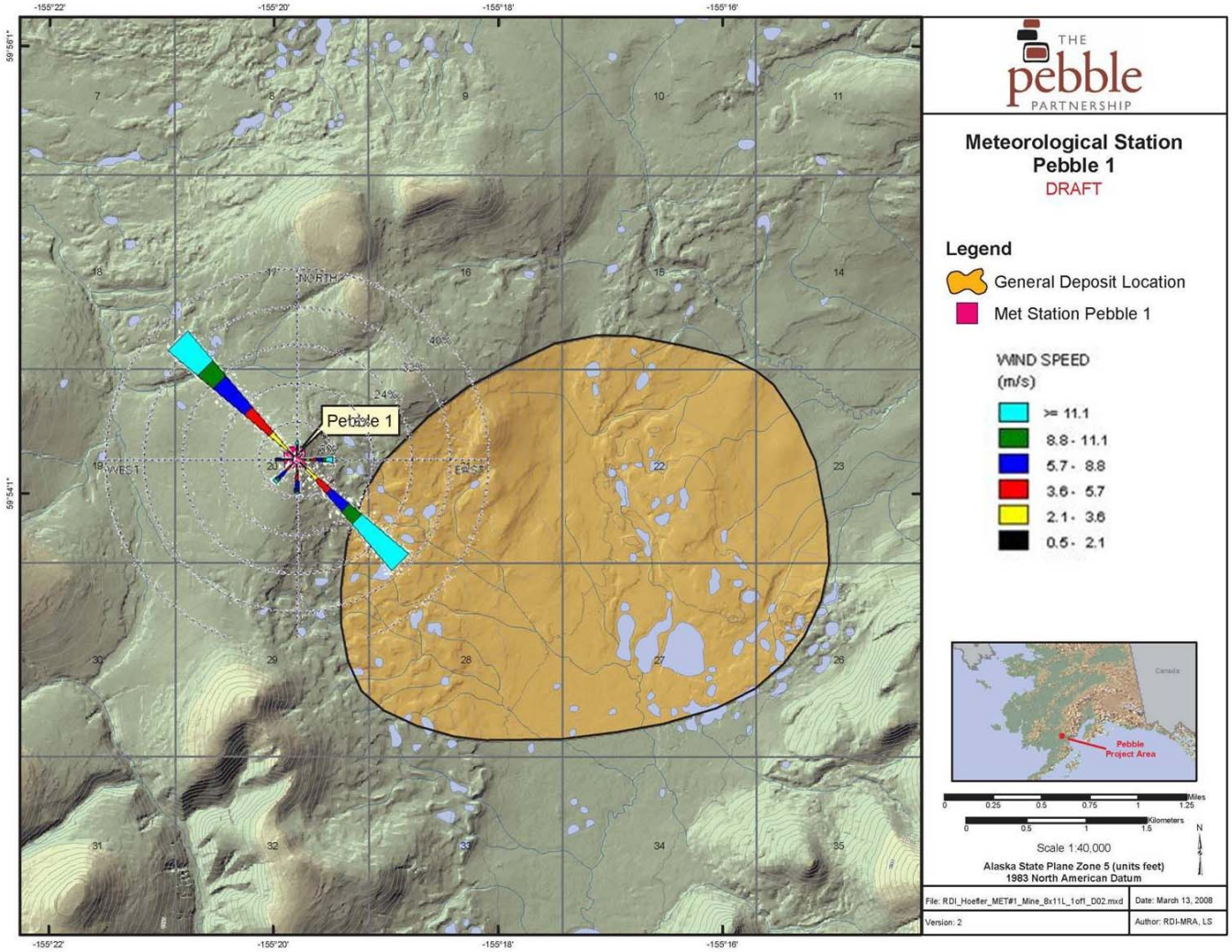
Station ID: Pebble 1 (RM Young) Run ID: Quarter D
Start Date: October 1, 2006 End Date: December 31, 2006

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.59%	0.23%	0.09%	0.27%	0.00%	0.68%	1.86%
NE	0.32%	0.18%	0.45%	0.14%	0.00%	0.91%	1.99%
E	1.27%	1.72%	1.81%	0.82%	0.27%	4.62%	10.51%
SE	1.40%	2.72%	1.50%	4.21%	3.08%	11.46%	24.38%
S	0.32%	0.36%	0.63%	0.73%	0.68%	0.73%	3.44%
SW	0.41%	0.14%	0.50%	0.59%	0.59%	0.59%	2.81%
W	0.77%	0.36%	0.82%	0.27%	0.00%	0.05%	2.27%
NW	3.17%	3.44%	7.02%	10.60%	9.02%	18.03%	51.29%
Sub-Total:	8.25%	9.15%	12.82%	17.63%	13.64%	37.06%	98.55%
Calms (<0.5m/s):							1.40%
Total:							100.00%

Figure 3-4. Annual[1] Wind Rose Superimposed on Site Map



[1] January 1, 2006 to December 31, 2006

3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Daily average temperatures at the Pebble 1 station ranged from 17.3°C on May 26 to -33.3°C on January 28. The average 2-meter temperature during the monitoring year was -1.6°C, which is less than the mean temperature of 0.7°C observed 30 km away at the Iliamna Airport during the same time span.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. There was considerable monthly temperature variation throughout the late-autumn and winter months. The coldest temperatures were observed during January 2006. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 5.3°C measured at 3:00 PM on April 2. The greatest negative vertical temperature difference was -5.9°C measured at 1:00 PM on March 1.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2006	-0.96	-33.29	-16.08	1.27	-35.30
February 2006	0.33	-30.00	-7.55	1.38	-31.63
March 2006	-2.37	-20.87	-8.92	0.02	0.11
Quarter A	**0.33**	**-33.29**	**-10.95**	**1.38**	**-35.30**
April 2006	0.50	-12.57	-4.20	1.78	-16.36
May 2006	16.77	-4.61	4.81	22.99	-7.17
June 2006	11.87	4.66	8.27	19.28	-0.06
Quarter B	**16.77**	**-12.57**	**2.98**	**22.99**	**-16.36**
July 2006	16.45	7.22	10.63	22.40	5.71
August 2006	12.69	6.89	8.97	16.75	4.11
September 2006	11.45	0.38	7.13	15.80	-2.34
Quarter C	**16.45**	**0.38**	**8.93**	**22.99**	**-2.34**
October 2006	7.87	-8.81	1.10	10.61	-11.79
November 2006	-2.28	-23.34	-13.41	-0.82	-24.25
December 2006	0.51	-21.04	-9.98	1.30	-21.91
Quarter D	**7.87**	**-23.34**	**-7.36**	**10.61**	**-24.25**
Monitoring Year	**16.77**	**-33.29**	**-1.57**	**22.99**	**-35.30**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2006	-0.56	-33.33	-15.67	1.55	-35.34
February 2006	0.77	-29.81	-7.35	1.70	-31.35
March 2006	-1.82	-20.90	-8.60	0.17	36.76
Quarter A	**0.77**	**-33.33**	**-10.64**	**1.70**	**-35.34**
April 2006	0.45	-12.42	-4.05	1.85	-15.64
May 2006	17.29	-4.89	4.90	22.22	-6.83
June 2006	11.79	4.58	8.10	18.65	0.70
Quarter B	**17.29**	**-12.42**	**3.00**	**22.22**	**-15.64**
July 2006	16.26	6.97	10.43	21.18	5.70
August 2006	12.69	6.70	8.92	15.51	5.11
September 2006	11.78	0.76	7.19	15.11	-1.76
Quarter C	**16.26**	**0.76**	**8.86**	**22.22**	**-1.76**
October 2006	7.84	-8.42	1.19	10.54	-11.09
November 2006	-2.28	-23.29	-13.08	-0.72	-24.20
December 2006	0.61	-20.25	-9.45	1.60	-21.35
Quarter D	**7.84**	**-23.29**	**-7.05**	**10.54**	**-24.20**
Monitoring Year	**17.29**	**-33.33**	**-1.42**	**22.22**	**-35.34**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

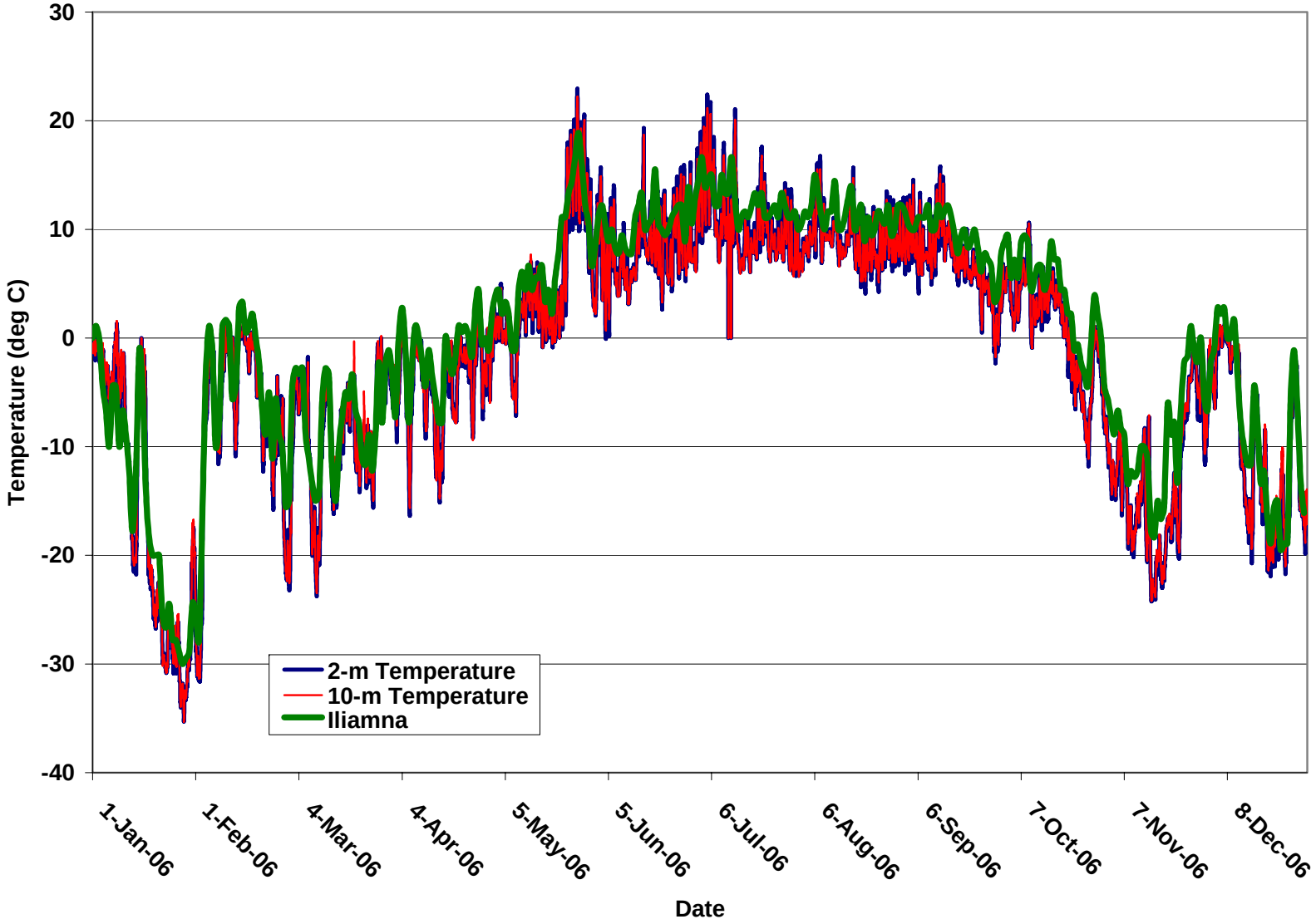
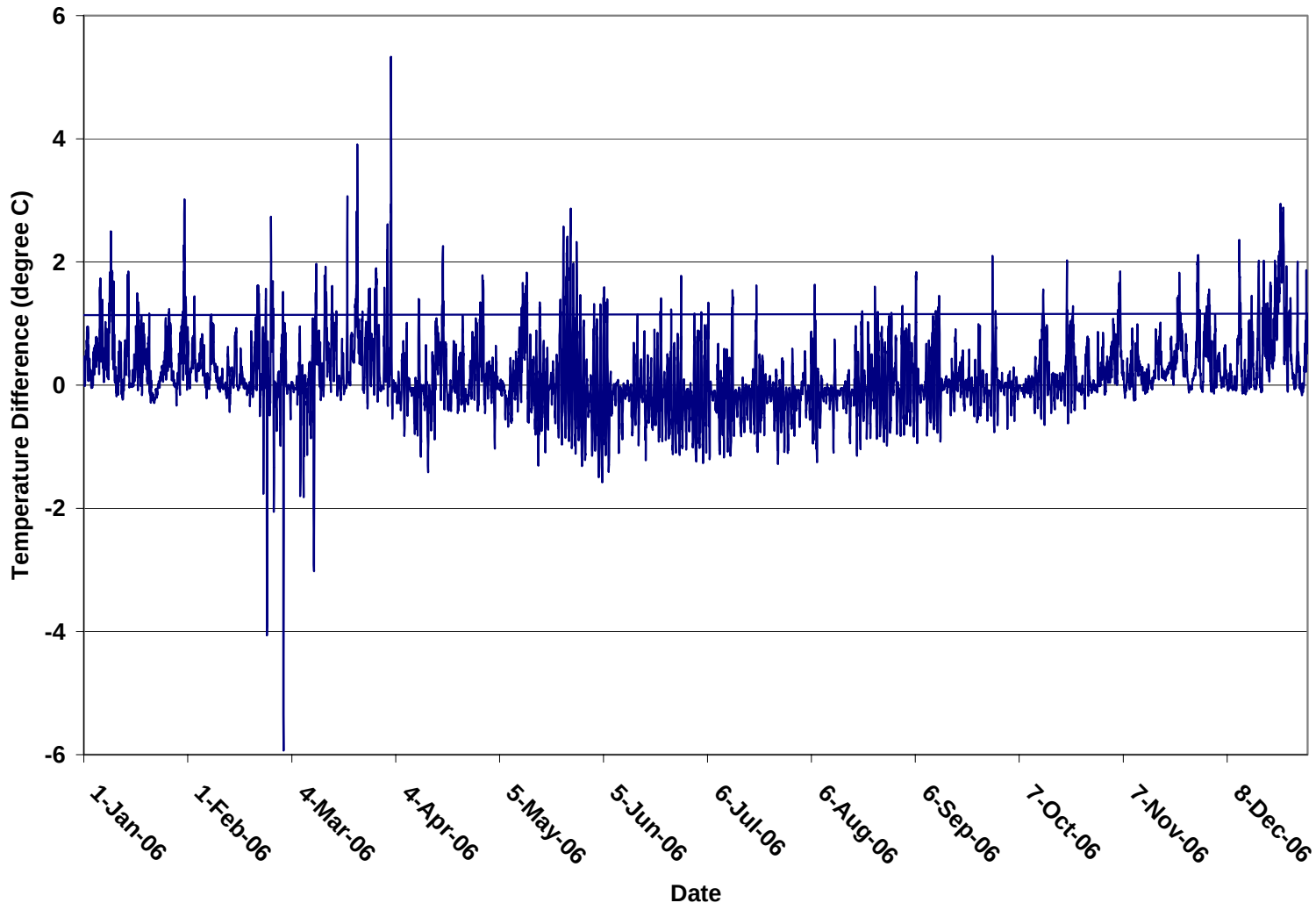


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation. These parameters are summarized in Table 3-15.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 1 station was 85.2 percent. The minimum relative humidity was 18.5 percent measured on May 26. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 76 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 906 mb on December 19 to a maximum of 980 mb observed on February 16. The mean barometric pressure during the monitoring year was 949 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 756 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 897 W/m^2 recorded on June 27 at 1:00 PM. The mean hourly average solar radiation for the monitoring year was 107 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the first PSD monitoring year. The maximum total daily precipitation was 34.8 mm measured on August 14 and, consequently, the maximum monthly precipitation was 189.2 mm during August 2006. The cumulative precipitation during the monitoring year was 984 mm. Winter precipitation data (October through April) should be closely examined before use for modeling purposes due to the utilization of snowfall adaptors.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 1 station was 88.1 mm during May.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, solar radiation, and precipitation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mbar)	Minimum Barometric Pressure (mbar)	Maximum Barometric Pressure (mbar)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2006	82.83	60.86	938.97	919.85	960.57	18.14	206.60
February 2006	88.49	41.28	951.65	907.33	980.21	46.19	402.20
March 2006	88.33	36.76	950.07	929.39	968.31	120.44	632.60
Quarter A	**86.49**	**36.76**	**946.74**	**907.33**	**980.21**	**62.10**	**632.60**
April 2006	89.74	49.79	944.96	920.92	958.53	200.63	800.00
May 2006	74.22	18.52	954.06	925.34	971.31	239.13	803.00
June 2006	76.41	21.14	956.61	941.10	968.68	192.10	897.00
Quarter B	**80.06**	**18.52**	**951.90**	**920.92**	**971.31**	**210.93**	**897.00**
July 2006	84.61	44.35	956.29	940.91	969.29	176.94	812.00
August 2006	89.85	52.06	952.46	938.58	961.37	112.25	686.70
September 2006	85.64	43.37	949.63	927.29	972.79	90.10	587.10
Quarter C	**86.71**	**43.37**	**952.83**	**927.29**	**980.21**	**126.80**	**897.00**
October 2006	92.63	60.13	947.99	918.68	969.78	42.70	403.10
November 2006	84.26	42.14	950.33	929.79	969.72	27.62	211.50
December 2006	85.43	31.04	931.19	906.06	967.08	9.70	151.40
Quarter D	**87.47**	**31.04**	**943.09**	**906.06**	**969.78**	**26.66**	**403.10**
Monitoring Year	**85.19**	**18.52**	**948.64**	**906.06**	**980.21**	**106.58**	**897.00**

Figure 3-7. Hourly Average Relative Humidity

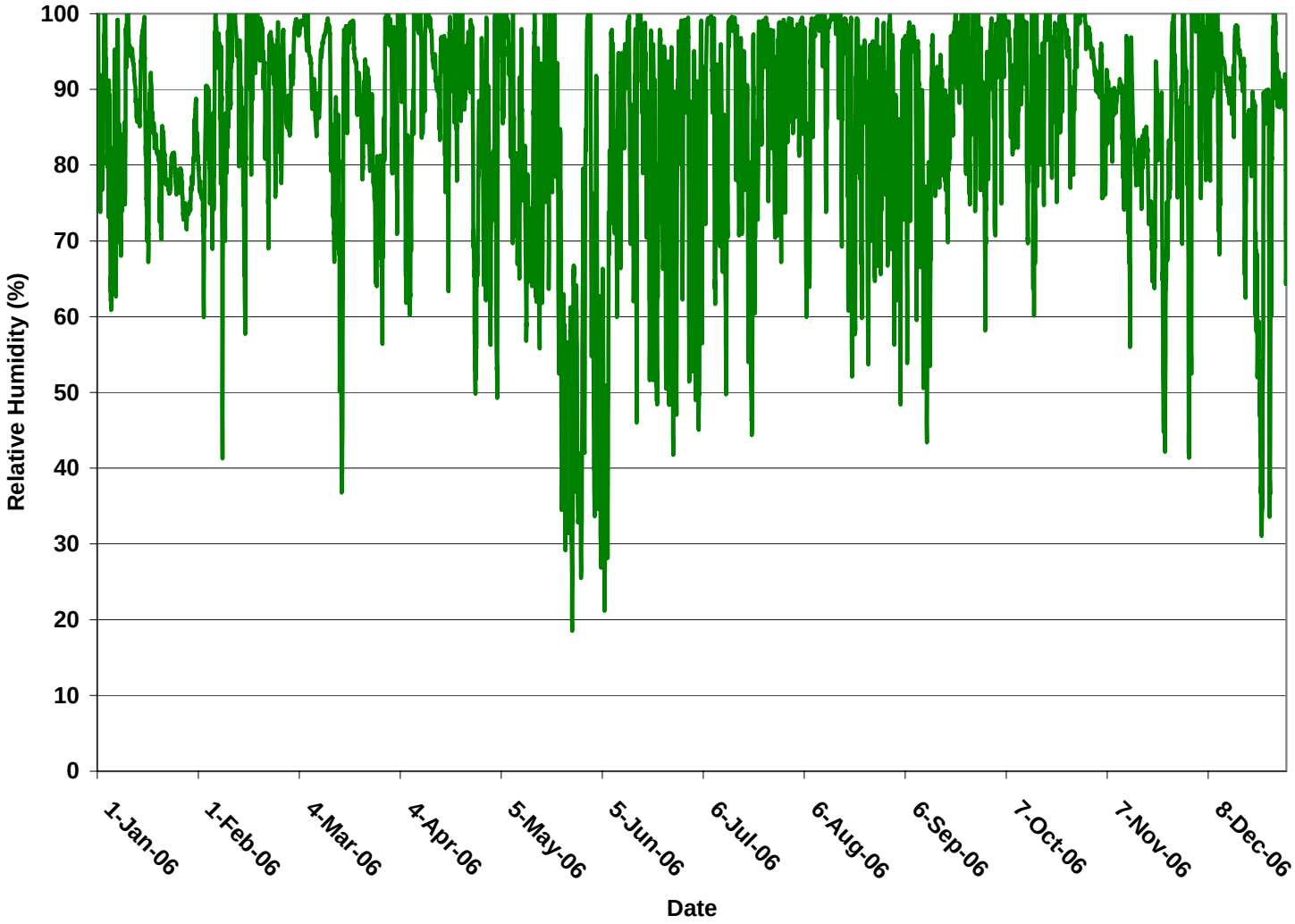


Figure 3-8. Barometric Pressure

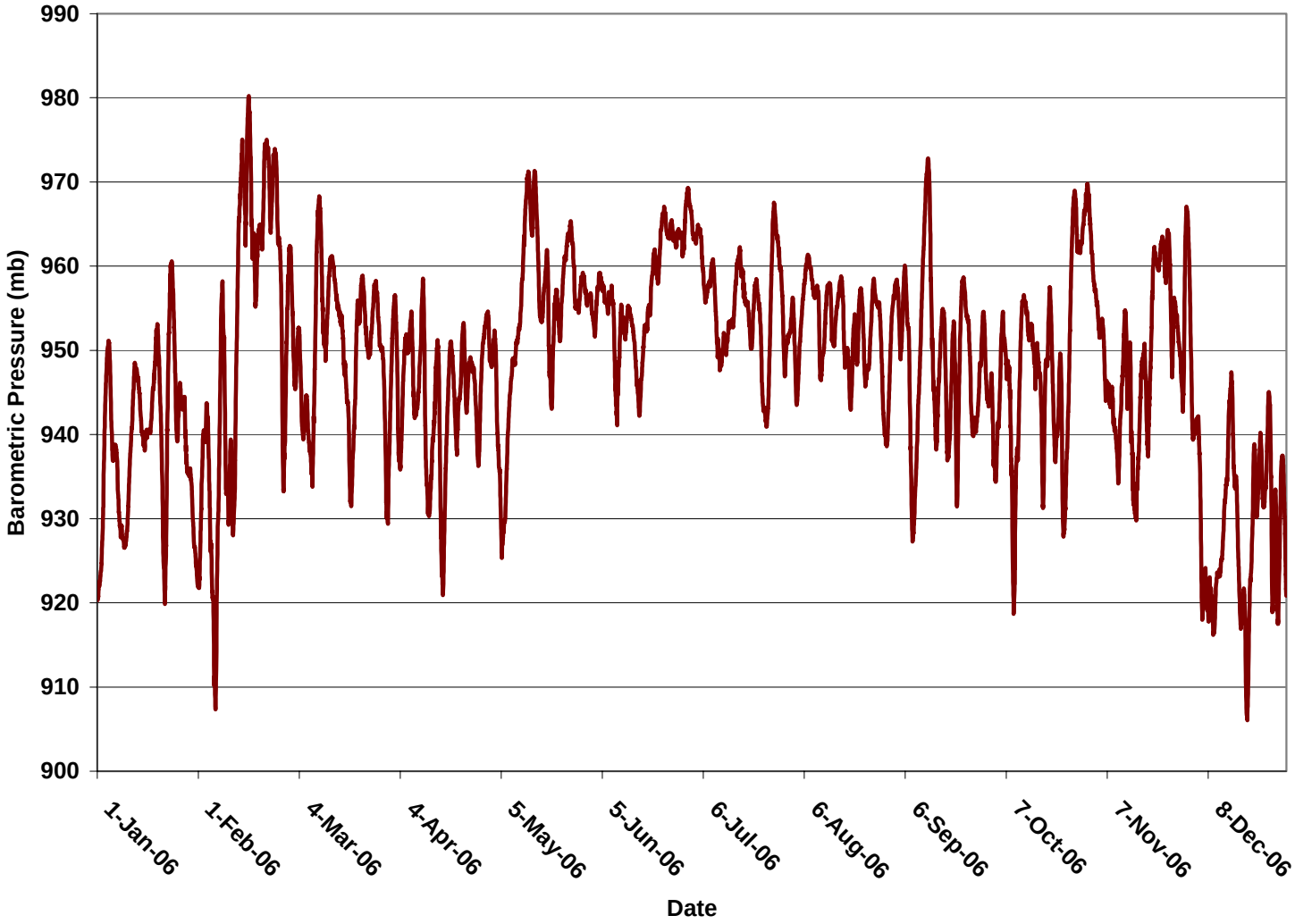


Figure 3-9. Hourly Average Solar Radiation

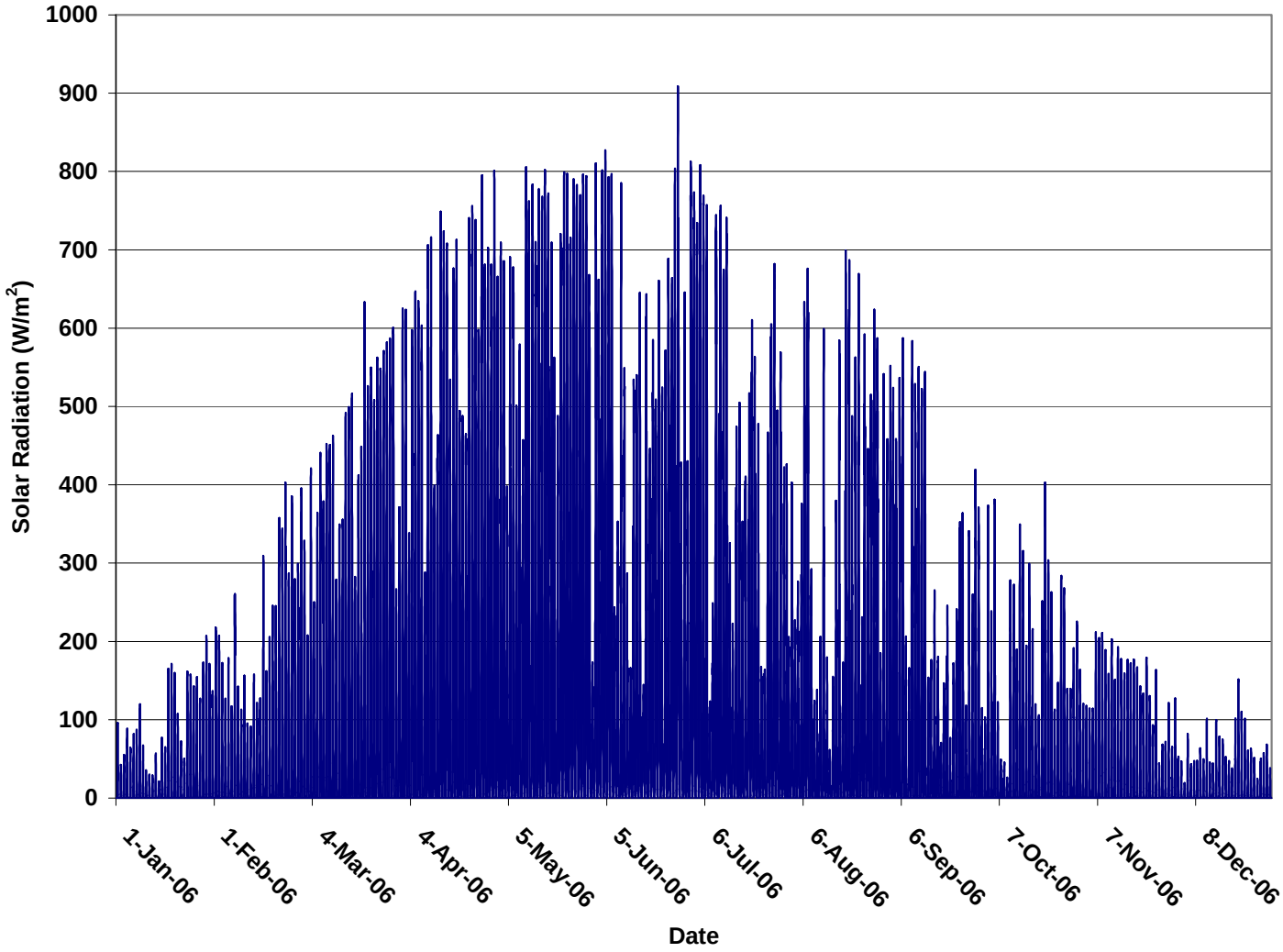
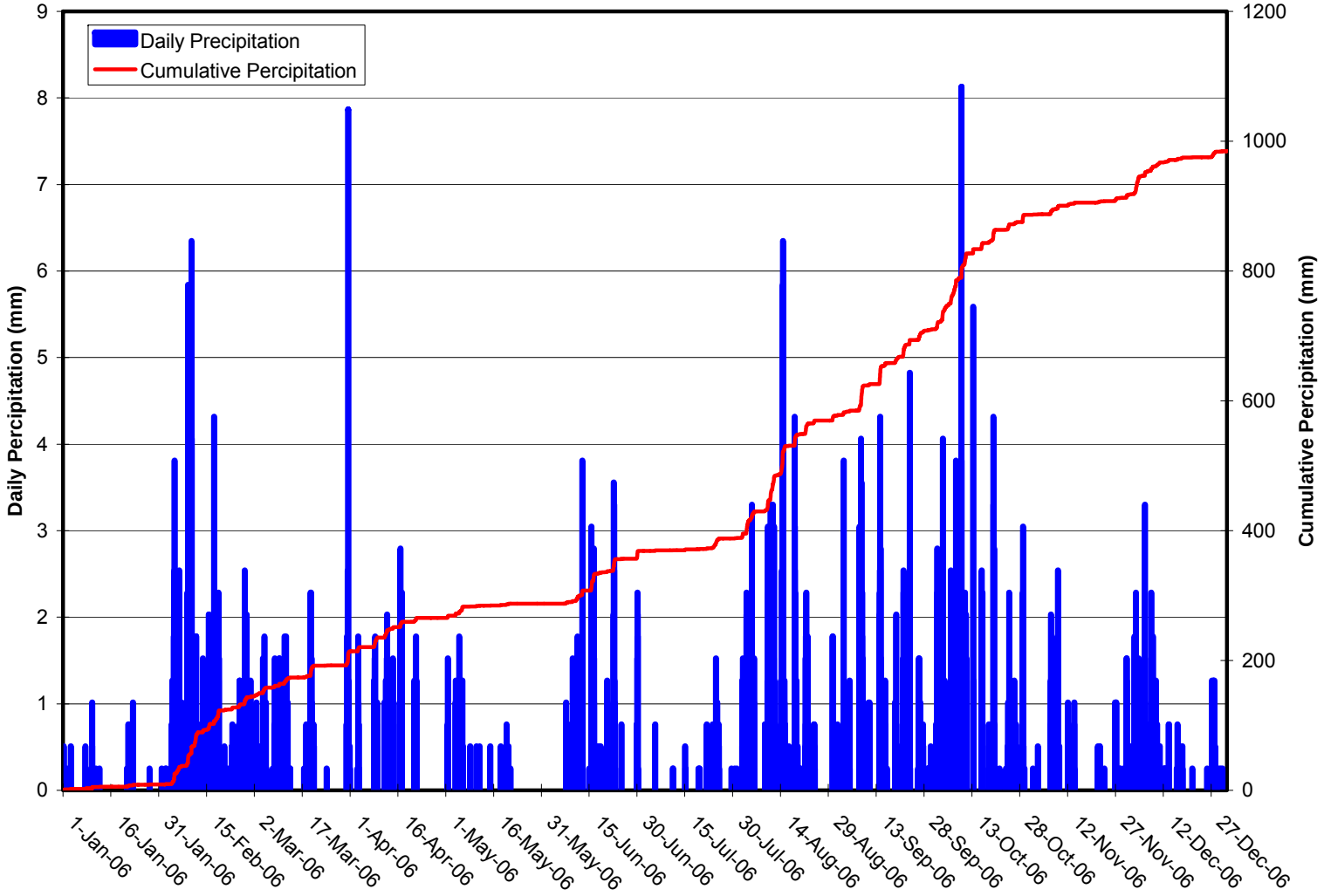


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2006.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2006

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2006	99.6%	99.6%	99.6%	82.3%	99.1%	99.1%	97.2%	99.1%	99.1%	100%	100%	100%	99.6%	N/A[3]
February 2006	100%	100%	100%	91.7%	100%	100%	94.9%	100%	100%	100%	100%	100%	99.9%	N/A
March 2006	100%	100%	100%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**99.9%**	**99.9%**	**99.9%**	**91.2%**	**99.7%**	**99.7%**	**97.5%**	**99.7%**	**99.7%**	**100%**	**100%**	**100%**	**99.7%**	N/A
April 2006	100%	100%	100%	95.8%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
May 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
June 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.9%	100%
Quarter B	**100%**	**100%**	**100%**	**98.6%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
July 2006	99.3%	99.3%	99.3%	99.6%	99.6%	99.6%	98.8%	98.8%	98.8%	100%	100%	100%	98.0%	100%
August 2006	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98.9%	100%
September	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter C	**99.8%**	**99.8%**	**99.8%**	**99.9%**	**99.9%**	**99.9%**	**99.6%**	**99.6%**	**99.6%**	**100%**	**100%**	**100%**	**99.0%**	**100%**
October 2006	100%	100%	100%	92.9%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	100%
November 2006	100%	100%	100%	82.1%	100%	100%	100%	100%	100%	100%	100%	100%	97.8%	N/A
December 2006	100%	100%	100%	98.5%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	N/A
Quarter D	**100%**	**100%**	**100%**	**91.3%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**98.9%**	**100%**
Monitoring	**99.9%**	**99.9%**	**99.9%**	**95.3%**	**99.9%**	**99.9%**	**99.3%**	**99.8%**	**99.8%**	**100.0%**	**100.0%**	**100.0%**	**99.4%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 12 to October 10.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

Pebble 1 PSD Station

Third Quarter 2005

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

September 2006

Northern Dynasty Mines
Pebble 1 PSD Meteorological Monitoring Station
Annual Systems and Performance Audits
(Third Quarter 2005)

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

September 2006

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station On-Site Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Wind Speed 7
3.1.4 Wind Direction 8
3.1.5 Relative Humidity 9
3.1.6 Barometric Pressure 9
3.1.7 Precipitation 9
3.1.8 Evaporation 10
3.1.9 Solar Radiation 10

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 June 10, 2005 & July 2005 Performance Audit Summary 12

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, wind swept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan is located roughly 125 feet south of the tower. Between the tower and the precipitation gauge is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Precipitation (mm H_2O): Met One Model 370 Tipping Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of this document, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question-answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

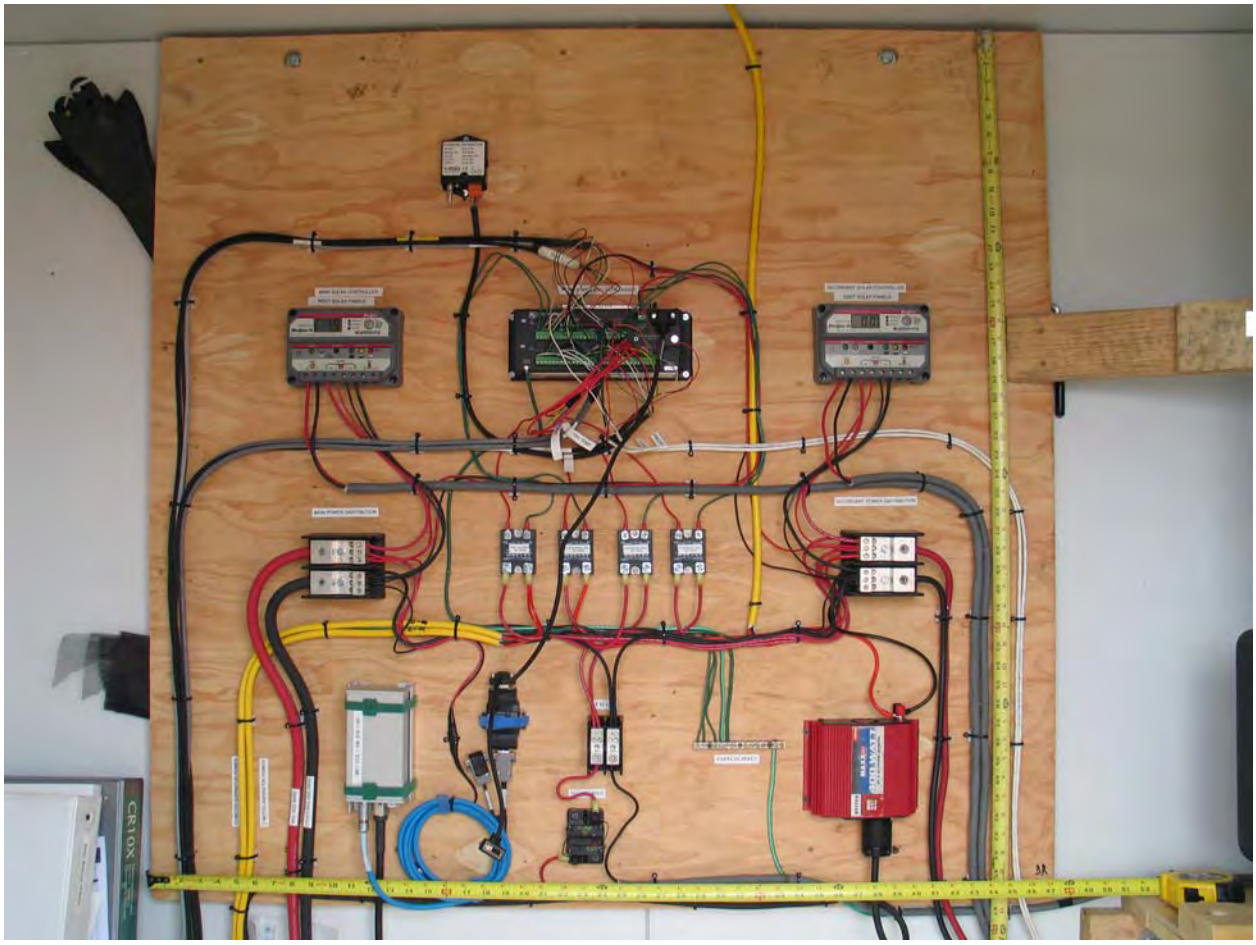
2.2 Meteorological Station On-Site Systems Audit

The on-site systems audit of the Pebble 1 station was conducted on June 10, 2005. Eric Brudie of HCG completed the systems audit with Dominic Shallies and Jared Cockman of HCG and Terry Wassilie of NDM assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan and gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which

allow leveling. The evaporation deck is surrounded by a 6' high fence to repel thirsty animals. All instrumentation wires from the tower, precipitation gauge and evaporation gauge are housed in conduit in order to repel hungry animals. These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. A Campbell Scientific SC932A interface converts the DAS signal to a RS-232 DCE modem signal. Three FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 35-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a 21-Watt Global Thermoelectric Model 5030 Thermo-Electric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a Morningstar ProStar-15 solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three panels are dedicated to the aspirator fans, Climatronics heaters, shelter lighting and 120VAC power; wired through a Morningstar ProStar-15 solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the aspirator/heater power system. Aspirator fans and heaters are controlled through relays connected to the DAS control ports. Logic programmed into the DAS reduces power consumption by limiting heater use to weather conditions conducive to icing and turns fans off at night when voltage is low, considered an upset condition. Also the TEG power is routed through relays which shunt power to the critical DAS/sensor system during upset conditions.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately

identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit checklists
- Keep a file on site containing copies of previous checklists.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input
Solar Radiation[1]	Collocated NIST sensor	≤ ±5% of input+resolutuion[2]

1. Solar radiation not audited.
2. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of water baths; hot water (35°C to 45°C), warm water (15°C to 25°C), and a water/ice bath (0°C). Each water bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments. The difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded

during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.4 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS

programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.5 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Precipitation

The tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge opening using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured

volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.8 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing enough water to bring the initial level to approximately 50 mm, the minimum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to the pan to raise the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper limit of approximately 240mm. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.1.9 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.2 Performance Audit Results

The initial performance audit was conducted at the Pebble 1 station on June 10, 2005, shortly after startup. Dominic Shallies and Jared Cockman of HCG and Terry Wassilie of NDM assisted. Some station instruments were also audited during July of 2005. The relative humidity sensor was audited on July 18, 2005 because the transfer standard was not available in early June. On July 21, 2005 the thermistors were rewired to bypass the Met-One aspirator junction box and were subsequently audited. The bypass wiring was prompted by temperature errors observed while using identical junction boxes at the NDM Port meteorological monitoring station; the Pebble 1 station modifications were preventative. All sensors, except the solar radiation sensor, were challenged with certified audit equipment and yielded errors below the PSD limits. The solar radiation audit was not completed because adequate audit equipment was not available at the time of the audit. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 June 10, 2005 & July 2005 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:03	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.35	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.35	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
2-m Temperature Accuracy[1]	≤ ±0.5	°C	0.30	Pass
10-m Temperature Accuracy[1]	≤ ±0.5	°C	0.30	Pass
Air Temperature Difference[1]	≤ ±0.1	°C	0.00	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.5	Pass
Wind Direction Linearity	≤ 3	Degree	0.5	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.006	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	5.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	-2.4	Pass
Wind Direction Linearity	≤ 3	Degree	1.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.0	Pass
Relative Humidity (dew point) [2]	≤ ±1.5	°C	0.4	Pass
Barometric Pressure[2]	≤ ±3	Mbar	1.4	Pass
Tipping Precipitation[3]	≤ ±10	% input	-8.5	Pass
Evaporation	≤ ±10	% input	-5.0	Pass
Solar Radiation	≤ ±5+Res	% input	No Test	N/A

1. Thermistors rewired on 07/21/05 to temporarily bypass aspirator junction box.
2. Relative humidity tested and barometric pressure retested on 07/18/05.
3. Tipping precipitation gauge tested on 06/10-11/05 and 07/20/05.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Audit Date:** 10-Jun-05
Witnesses: D. Shallies, Jared Cockman, Terry Wassilie **Auditor:** Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 3
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 4
3.2.1 Data Acquisition System (DAS) and Communications System 4
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 5
3.3 Station Location and Siting 6
3.3.1 Tower 6
3.3.2 Temperature and Relative Humidity Sensors 6
3.3.3 Wind Speed and Wind Direction Sensors 7
3.3.4 Relative Humidity and Barometric Pressure 7
3.3.5 Precipitation 7
3.3.6 Evaporation 7
3.3.7 Solar Radiation 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 11
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 13
8.0 COMMENTS AND SUGGESTIONS 13

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is wind swept and treeless with very little organics. There are virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

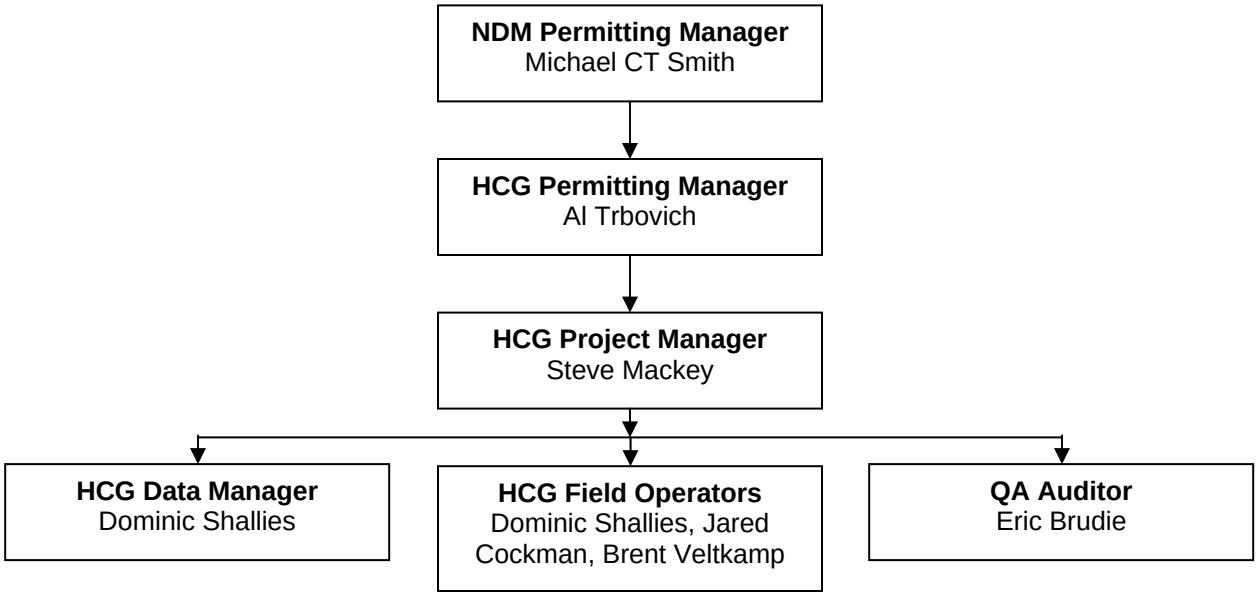
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.180' N
155° 20' W	155° 19.804' W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw diagram indicating the organizational structure of the monitoring program. Include names and titles:



3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR10X	X43107
DAS Wiring Panel	Campbell Scientific	CR10X	32768
Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Primary Wind Speed	Climatronics	F460-100075	5007
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Primary Wind Direction	Climatronics	F460-100076	4691
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	66725
Backup Wind Speed Prop	RM Young	08254	63047
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Relative Humidity	Vaisala	HMP45AC	A1040018
Barometric Pressure	Vaisala	PTB101B	A0710039
Precipitation-Tipping	Met-One	370	D5874
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None
Solar Radiation	LI-COR	Li-200SX	PY49464

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS to SC932A interface to FreeWave RF network to SixNet modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a 21-Watt propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can shunt the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not required.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings at HCG office.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resol. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

EPA Recommended Meteorological Instrument Standards (Continued)

Parameter	Instrument Specifications	EPA Standard	Pass?
Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Siting

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature and Relative Humidity Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)? ■ Yes □ No Comments: None.

Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.4 Relative Humidity and Barometric Pressure

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.
Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on wiring panel.

3.3.5 Precipitation

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds the gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.6 Evaporation

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.

Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

3.3.7 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	□ Yes ■ No	Comments: All operators have one to two years onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

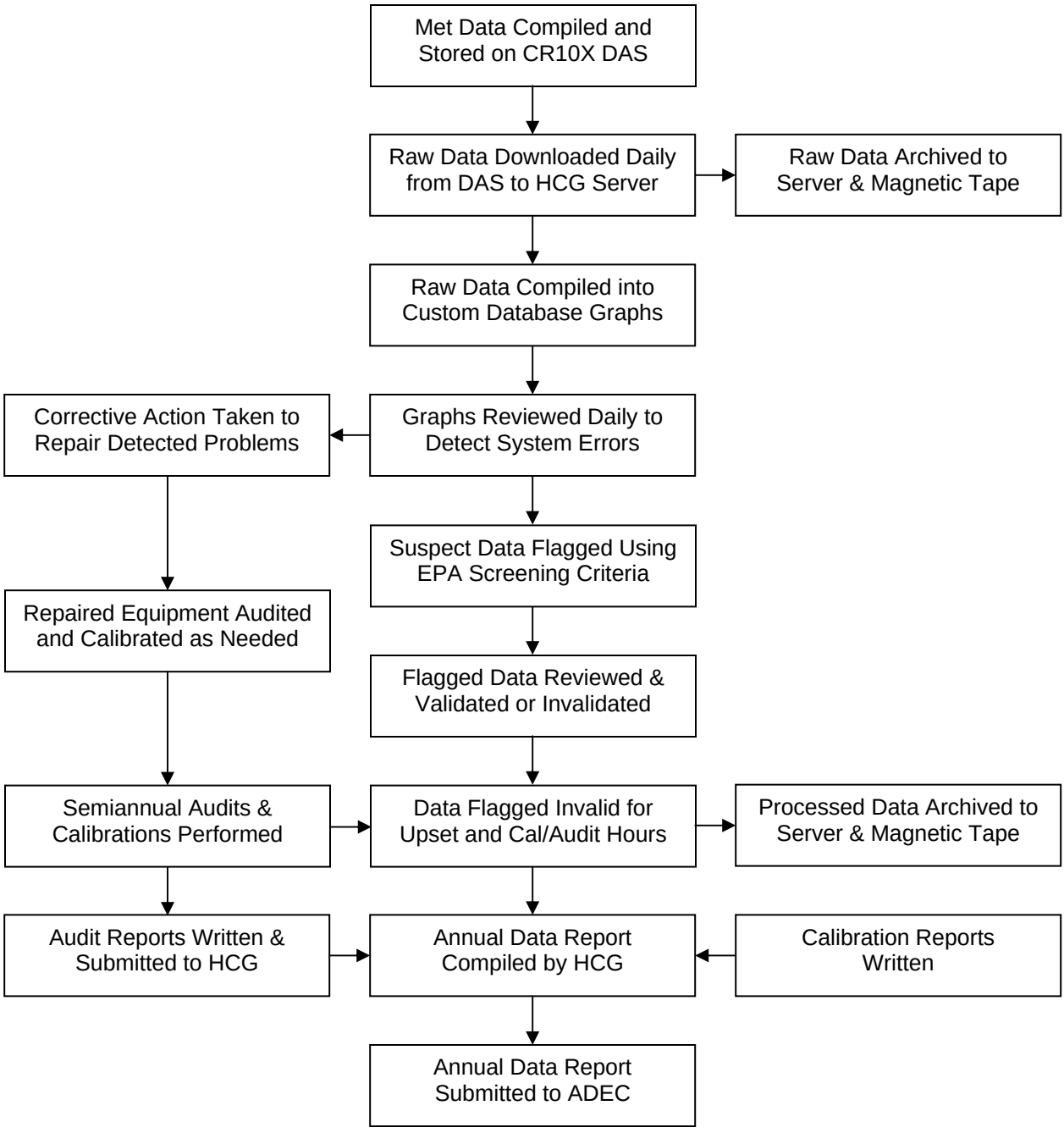
5.2 Station Monitoring Plan and Report Forms

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate Calibration Report Form and copies of previous calibrations and audits?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Isaac Bertschi
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: All tests in this audit on 06/10/05 unless otherwise noted.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
13:05:00	13:04:57	**-00:03**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor:	**Make:** Met One	**Model:** 062MP	**S.N.#:** E3383 # 1/2	**Range:** -50 to 50 **°C**
10-M Thermistor:	**Make:** Met One	**Model:** 062MP	**S.N.#:** E3383 # 2/2	**Range:** -50 to 50 **°C**
Audit Digital Thermometer:	**Make:** Van Waters & Rogers	**Model:** 61220-601	**S.N.#:** 51091749	**Range:** -40 to 150 **°C**
Audit Probe:	**Make:** Van Waters & Rogers	**Model:** 61220-604	**S.N.#:** 51091789	**Range:** -40 to 150 **°C**

COLLOCATED THERMISTOR TEST										
	Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
	Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Date: 06/10/05	Ice Bath	0	-0.18	0.17	0.35	Pass	0.17	0.35	Pass	0.00	Pass
Begin: 1400	Warm	15 to 25	23.77	23.98	0.21	Pass	23.98	0.21	Pass	0.00	Pass
End: 1420	Hot	35 to 45	38.49	38.77	0.28	Pass	38.77	0.28	Pass	0.00	Pass
			Max Abs. Error		0.35	**PASS**		0.35	**PASS**	0.00	**PASS**
Date: 07/21/05	Ice Bath	0	-0.11	0.12	0.23	Pass	0.12	0.23	Pass	0.00	Pass
Begin: 1300	Warm	15 to 25	16.53	16.73	0.20	Pass	16.73	0.20	Pass	0.00	Pass
End: 1315	Hot	35 to 45	41.53	41.83	0.30	Pass	41.83	0.30	Pass	0.00	Pass
			Max Abs. Error		0.30	**PASS**		0.30	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Met-One motor aspirated shields Model 076B-4: 2-m SN E3490, 10-m SN E3489. More tests run on 07/21/05 after bypassing Met-One aspirator junction box.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:** Vaisala	**Model:** HMP45ASP	**S.N.#:** A1040018	**Range:** 0.8 to 100 **% RH**
Audit Equipment:	**Make:** Vaisala	**Model:** HMI 41	**S.N.#:** X0650080	**Range:** 0 to 100 **% RH**
Audit Equipment:	**Probe#** HMI41 X07450015			

COLLOCATED STANDARD TEST								
Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
07/18/05	1440	69.2	12.1	6.6	70.9	12.1	7.0	0.4	Pass
07/18/05	1445	70.2	12.0	6.7	71.4	12.0	7.0	0.2	Pass
						Max Abs. Error		0.4	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
06/10/05	1430	28.21	28.09	951.1	952.0	0.9	Pass
07/18/05	1430	28.53	28.41	962.0	963.4	1.4	Pass
				Max Abs. Error		1.4	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/23/05	
Audit Inst	Offset Amount
24.13	-0.13
26.18	-0.13
28.12	-0.12
30.12	-0.12
Intercept	**-0.18**
Slope	**0.0020**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5007 **Cup #:** 2284 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 06/10/05
Begin: 1445
End: 1455

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 06/10/05
Begin: 1550
End: 1605

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.006	**PASS**
New	0.014	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
8000	40.96	40.96	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: Broke prop SN 62965 during initial install and replaced with prop SN 63047.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4691 **Vane #:** 1440 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.8 **E of N**

TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.060	**PASS**
New	0.104	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	89.0	91.6	2.6	Pass
Compass	164.0	166.2	2.2	Pass
Compass	262.0	264.4	2.4	Pass
Compass	8.0	8.3	0.3	Pass
Cone Mtn	144.3	145.6	1.3	Pass
BM Pig	241.9	238.6	-3.3	Pass
Peak El 1984	9.8	11.9	2.1	Pass
Compass	88.5	89.2	0.7	Pass
		Max Abs. Error	**3.3**	**PASS**
		Mean Abs. Error	**1.9**	**GOOD**

Date: 06/10/05
Time: Begin: 1345 End: 1450

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.4	-0.6	Pass
West	270.0	270.4	0.4	Pass
North	360.0	359.7	-0.3	Pass
East	90.0	89.2	-0.8	Pass
North	360.0	359.6	-0.4	Pass
West	270.0	269.8	-0.2	Pass
South	180.0	179.2	-0.8	Pass
East	90.0	89.0	-1.0	Pass
	Max Abs. Error		**1.0**	**PASS**
	Mean Abs. Error		**0.6**	**PASS**

Time: Begin: 1528 End: 1533
Date: 06/10/05

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.4	-0.6	Pass	330.0	331.5	1.5	Pass
60.0	59.8	-0.2	Pass	360.0	0.1	0.1	Pass
90.0	90.2	0.2	Pass	30.0	29.5	-0.5	Pass
120.0	120.4	0.4	Pass	60.0	60.0	0.0	Pass
150.0	150.3	0.3	Pass	90.0	90.2	0.2	Pass
180.0	180.5	0.5	Pass	120.0	120.7	0.7	Pass
210.0	210.6	0.6	Pass	150.0	150.3	0.3	Pass
240.0	240.9	0.9	Pass	180.0	180.6	0.6	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**1.5**	**PASS**
300.0	301.1	1.1	Pass	**Mean Abs. Error**		**0.5**	**PASS**

Date: 06/10/05 **Time:** Begin: 1515 End: 1520

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	1.0	2.8	1.8	Pass
Compass	107.0	107.8	0.8	Pass
Compass	166.0	166.4	0.4	Pass
Compass	285.0	288.3	3.3	Pass
Compass	323.0	325.9	2.9	Pass
		Max Abs. Error	**3.3**	**PASS**
		Mean Abs. Error	**1.8**	**GOOD**

Date: 06/11/05
Time: Begin: 815 End: 900

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Wind direction azimuth rechecked on 6/11/05.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.8 **E of N**

TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	5.0	**PASS**
New	11.0	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	89.0	90.4	1.4	Pass
Compass	164.0	166.0	2.0	Pass
Compass	262.0	262.7	0.7	Pass
Compass	8.0	7.7	-0.3	Pass
Compass	101.0	100.6	-0.4	Pass

Date: 06/10/05 **Max Abs. Error** **2.0** **PASS**
Time: Begin: 1345 End: 1450 **Mean Abs. Error** **1.0** **GOOD**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.9	-1.1	Pass	150.0	147.6	-2.4	Pass	270.0	268.6	-1.4	Pass
60.0	58.9	-1.1	Pass	180.0	177.6	-2.4	Pass	300.0	298.2	-1.8	Pass
90.0	88.3	-1.7	Pass	210.0	208.2	-1.8	Pass	330.0	329.1	-0.9	Pass
120.0	118.0	-2.0	Pass	240.0	237.9	-2.1	Pass	355.0	354.0	-1.0	Pass

Date: 06/10/05 **Max Abs. Error** **2.4** **PASS**
Time: Begin: 1608 End: 1620 **Mean Abs. Error** **1.6** **PASS**

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	3.0	4.6	1.6	Pass
Compass	75.0	76.4	1.4	Pass
Compass	107.0	106.9	-0.1	Pass
Compass	167.0	165.8	-1.2	Pass
Compass	284.0	285.3	1.3	Pass
Compass	327.0	330.0	3.0	Pass

Date: 06/11/05 **Max Abs. Error** **3.0** **PASS**
Time: Begin: 815 End: 900 **Mean Abs. Error** **1.4** **GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Wind direction azimuth rechecked on 6/11/05.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** D. Shallies, Jared Cockman, Terry Wassili **Audit Date:** Jun-Jul, 2005

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1305	800	24.7	0.0	0.0	0.0	23.0	1400	23.0	-6.9%	Pass	Date: 06/10/2005
1405	800	24.7	0.0	0.0	0.0	22.6	1500	22.6	-8.5%	Pass	Date: 06/10/2005
925	800	24.7	0.0	0.0	0.0	23.6	1000	23.6	-4.5%	Pass	Date: 06/11/2005
1105	650	20.0	0.0	0.0	0.0	20.0	1200	20.0	0.0%	Pass	Date: 07/20/2005
1410	650	20.0	5.4	0.0	0.0	24.8	1500	19.4	-3.0%	Pass	Date: 07/20/2005
							Max Abs. Error		**8.5%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Tests run on 6/10/05, 6/11/05 and 7/20/05.

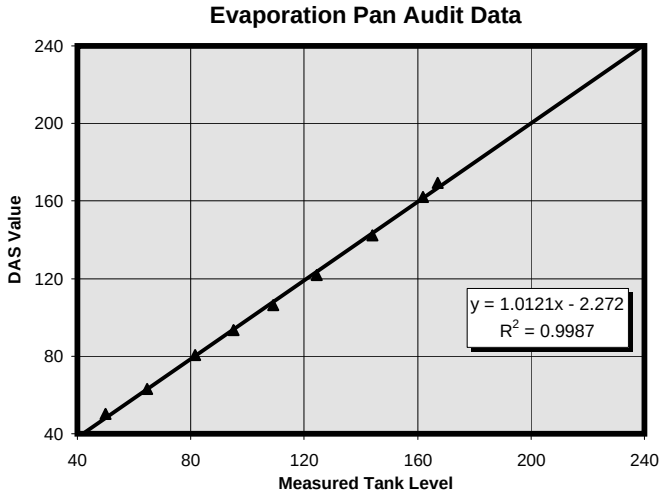
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

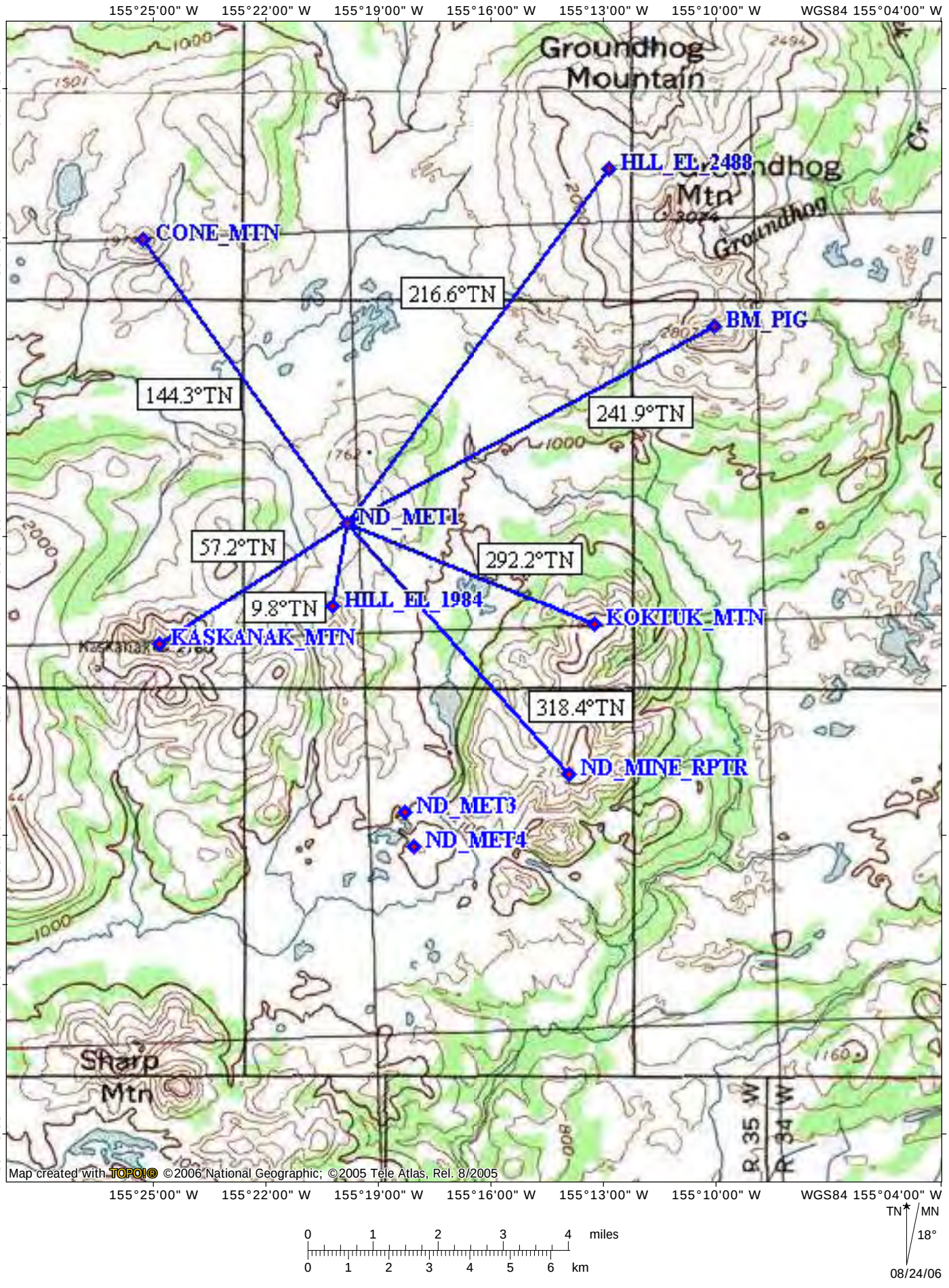
EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
50.0	50.1	47.7	-2.4	-5.0%	Pass
64.5	63.0	62.2	-0.8	-1.2%	Pass
81.5	80.5	79.2	-1.3	-1.6%	Pass
95.0	93.5	92.7	-0.8	-0.8%	Pass
109.0	106.4	106.7	0.3	0.3%	Pass
124.5	121.7	122.2	0.5	0.4%	Pass
144.0	142.4	141.7	-0.7	-0.5%	Pass
162.0	162.2	159.7	-2.5	-1.5%	Pass
167.0	169.3	164.7	-4.6	-2.8%	Pass
	Max Abs. Error		**4.6**	**5.0%**	**PASS**
	Intercept	**-2.3**	**Slope**	**1.0121**	**PASS**



Date: 06/10/05 **Time:** Begin: 1600 End: 1650

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.


TOPO! map printed on 08/24/06 from "Pebble_Sta1_(08-16-06).tpo"
155°25'00" W
155°22'00" W
155°19'00" W
155°16'00" W
155°13'00" W
155°10'00" W
WGS84 155°04'00" W
60°00'00" N
59°58'00" N
59°56'00" N
59°54'00" N
59°52'00" N
59°50'00" N
59°48'00" N
59°46'00" N
Groundhog Mountain
HILL_EL_2488
CONE_MTN
216.6°TN
BM_PIG
144.3°TN
241.9°TN
ND_MET1
57.2°TN
292.2°TN
9.8°TN
HILL_EL_1984
KOKTUK_MTN
KASKANAK_MTN
318.4°TN
ND_MINE_RPTR
ND_MET3
ND_MET4
Sharp Mtn
R. 35 W.
R. 34 W.
Map created with TOPO!© ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
0 1 2 3 4 miles
0 1 2 3 4 5 6 km
TN MN
18°
08/24/06

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate No. 1750.01

ACCREDITED

Calibration complies with ISO 17025

Cert. No.:4000-1103531

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 51091789

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	10/18/05	A4A12029
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	A42238		
Temperature Probe	149	7/20/05	A4715024
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	93139		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 4/27/05 **Cal Due: 4/27/07**

Test Conditions: 24.0°C 41.0 %RH 1016 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C		N.A.		0.001	0.003	Y	-0.049	0.051	0.013	3.8:1
°C		N.A.		25.001	25.002	Y	24.951	25.051	0.013	3.8:1
°C		N.A.		59.999	59.999	Y	59.949	60.049	0.013	3.8:1
°C		N.A.		100.001	100.007	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full.

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.

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VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052305.01

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 5/23/2005 Lab temperature 73.6 °F
Lab pressure 661.65 mm Hg

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)
24.00	24.13	0.13	-0.13
26.05	26.18	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.12	0.12	-0.12

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)

Reviewed: _____ Date: 5-23-05

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 Rpm - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 3 May 2005

Tested By EJC

Meteorological Instruments

YOUNG

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 Rpm		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 29 October 2004

Tested By EJC

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City, Michigan 49686 USA
Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: Houston Precision

P.O.#:6632

Product Identification

Product Type: Torque Watch
Serial Number: 4864

Model Number: 366-3
Part Number: 060-SQF41199-01
Order Code: TQ3663

Product Specifications

Full Scale Range: 0.003-0.03 OZ IN
Calibrated At: 0.003-0.03 OZ IN

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW150

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 09/02/04

Certificate Number: 086-6000-01
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 5% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480. Calibration procedures are in compliance with ANSI/NCSL Z540-1-1994.

This is a quality record.

Approved and Certified By: Michael A Stanley
Factory Supervisor

Printed: 09/02/2004

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-3 SERIAL NUMBER: 4864 Units = oz in Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
.000	-.0002	.0000	.0000	.0002
.003	-.0000	.0036	.0031	.0060
.006	.0030	.0058	.0062	.0090
.009	.0060	.0086	.0092	.0120
.012	.0090	.0128	.0127	.0150
.015	.0120	.0162	.0161	.0180
.018	.0150	.0195	.0197	.0210
.021	.0180	.0225	.0219	.0240
.024	.0210	.0257	.0246	.0270
.027	.0240	.0296	.0288	.0300
.030	.0270	.0320	.0322	.0330

Max pos error (% FS) = 8.7 % at .027
Max neg error (% FS) = -1.2 % at .009

Torque Watch is a: PASS

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: Houston Precision

P.O.#:6743

Product Identification

Product Type: Torque Watch
Serial Number: 5042

Model Number: 366-0
Part Number: 060-SQF41201-01
Order Code: TQ3660

Product Specifications

Full Scale Range: 0.06-0.6 IN OZ
Calibrated At: 0.06-0.6 IN OZ

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW151

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 12/01/04

Certificate Number: 086-6000-01
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 5% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480. Calibration procedures are in compliance with ANSI/NCSL Z540-1-1994.

This is a quality record.

Approved and Certified By: Joe Belcher Jr., Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-0 SERIAL NUMBER: 5042 Units = oz in Accuracy = 5 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
.00	-.003	0.000	0.000	.003
.06	.030	.056	.060	.090
.12	.090	.121	.121	.150
.18	.150	.168	.180	.210
.24	.210	.223	.255	.270
.30	.270	.299	.319	.330
.36	.330	.359	.373	.390
.42	.390	.407	.424	.450
.48	.450	.481	.494	.510
.54	.510	.531	.537	.570
.60	.570	.592	.610	.630

Max pos error (% FS) = 3.1 % at .300
Max neg error (% FS) = -2.9 % at .240

Torque Watch is a: PASS

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

Pebble 1 PSD Station

First Quarter 2006

Quality Assurance Performance Audit

for the

Pebble Project
NORTHERN DYNASTY MINES INC.

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

September 2006

Northern Dynasty Mines
Pebble 1 PSD Meteorological Monitoring Station
Semiannual Performance Audit
(First Quarter 2006)

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

September 2006

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 PERFORMANCE AUDIT 2

2.1 Performance Audit Methodology 2

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Wind Speed 3
2.1.4 Wind Direction 4
2.1.5 Relative Humidity 5
2.1.6 Barometric Pressure 5
2.1.7 Precipitation 5
2.1.8 Evaporation 5
2.1.9 Solar Radiation 6

2.2 Performance Audit Results 7

2.3 Performance Audit Recommendations 7

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 1 January 15, 2006 Performance Audit Summary 8
Table 2-3 Pebble 1 Fall 2005 Supplemental Audit Summaries 9

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, wind swept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan is located roughly 125 feet south of the tower. Between the tower and the precipitation gauge is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Precipitation (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer.

This report has been prepared for NDM to serve as a quantitative review of the Pebble 1 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input
Solar Radiation[1]	Collocated NIST sensor	≤ ±5% of input+resolutuion[2]

1. Solar radiation not audited.
2. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of water baths; hot water (35°C to 45°C), warm water (15°C to 25°C), and a water/ice bath (0°C). Each water bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments. The difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded

during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.4 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS

programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.5 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured

volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.8 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing enough water to bring the initial level to approximately 50 mm, the minimum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to the pan to raise the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper limit of approximately 240mm. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.1.9 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.2 Performance Audit Results

The performance audit was conducted at the Pebble 1 station primarily on January 15, 2006, with Dominic Shallies of HCG assisting. Some station instruments were also audited during October and November of 2005. On October 8, 2005 the evaporation pan and tipping precipitation gauge were audited prior to winterization. The temperature sensors were audited on October 18, 2005 after thermistors were permanently rewired to bypass the Met-One aspirator junction box. The bypass wiring was prompted by temperature errors observed while using identical junction boxes at the NDM Port meteorological monitoring station; the Pebble 1 modifications were preventative. On November 20, 2005 the Met-One tipping Precipitation gauge was replaced with an ETI weighing precipitation gauge. The RM Young wind sensor had to be rewired through a pulse to millivolt converter in order to free up a pulse channel for the new gauge. Thus, both the new gauge and RM Young wind sensor were audited on that day.

All sensors, except the solar radiation sensor, were challenged with certified audit equipment and yielded errors below the PSD limits, except as noted. The exception was the as–found RM Young azimuth alignment tested on November 20, 2005. This sensor was knocked out of alignment during the audit while chipping ice from the mounting arm. The operator reviewed the wind direction data from both the RM Young and Climatronics sensors for the period prior to this event and found the data corroborated this conclusion. The solar radiation audit was not completed because adequate audit equipment was not available at the time of the audit. Table 2-2 contains summary data from the January 2006 audit and Table 2-3 summarizes the supplemental Fall 2005 tests. Complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 1 January 15, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:03	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	-0.2	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-2.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.1	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.010	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.02	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	-0.4	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.8	Pass
Wind Direction Linearity	≤ 3	Degree	2.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.0	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Barometric Pressure	≤ ±3	Mbar	1.2	Pass
Weighing Precipitation	≤ ±10	% input	9.5	Pass
Solar Radiation	≤ ±5+Res	% input	No Test	N/A

Table 2-3 Pebble 1 Fall 2005 Supplemental Audit Summaries

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:14	Pass
2-m Temperature Accuracy[1]	≤ ±0.5	°C	0.13	Pass
10-m Temperature Accuracy[1]	≤ ±0.5	°C	0.13	Pass
Air Temperature Difference[1]	≤ ±0.1	°C	0.00	Pass
RM Young Wind System **Before** Rewiring[2]				
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	14.7	Fail[4]
Wind Direction Accuracy	≤ ±5	Degree	4.9	Pass
Wind Direction Linearity	≤ 3	Degree	2.7	Pass
RM Young Wind System **After** Rewiring[2]				
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	-0.06	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.4	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.4	Pass
Wind Direction Linearity	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-4.4	Pass
Weighing Precipitation[2]	≤ ±10	% input	-7.3	Pass
Tipping Precipitation[3]	≤ ±10	% input	3.0	Pass
Evaporation[3]	≤ ±10	% input	3.7	Pass

1. Thermistors rewired on 10/18/05 to permanently bypass aspirator junction box.
2. RM Young and weighing precipitation gauge tested on 11/20/05.
3. Tipping precipitation gauge and evaporation gauge tested on 10/08/05.
4. RM Young knocked out of alignment just prior to test.

5. REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:40:00	15:39:57	**-00:03**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220-601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220-604 **S.N.#:** 51091789 **Range:** -40 to 150 **°C**

Begin: 1420
End: 1440

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Ice Bath	0	-0.01	0.10	0.11	Pass	0.10	0.11	Pass	0.00	Pass
Warm	15 to 25	22.64	22.68	0.04	Pass	22.68	0.04	Pass	0.00	Pass
Hot	35 to 45	37.77	37.87	0.10	Pass	37.87	0.10	Pass	0.00	Pass
		Max Abs. Error		0.11	**PASS**		0.11	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Met-One motor aspirated shields Model 076B-4: 2-m SN E3490, 10-m SN E3489.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45ASP **S.N.#:** A1040018 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1645	81.0	-1.8	-4.6	87.8	-1.9	-3.6	1.0	Pass
1705	81.6	-1.9	-4.6	87.2	-2.1	-3.9	0.7	Pass
					Max Abs. Error		1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1535	27.79	27.67	936.9	938.1	1.2	Pass
			Max Abs. Error		1.2	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/23/05	
Audit Inst	Offset Amount
24.13	-0.13
26.18	-0.13
28.12	-0.12
30.12	-0.12
Intercept	**-0.18**
Slope	**0.0020**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5007 **Cup #:** 2284 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1445
End: 1450

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.67	N/A	-0.2	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.2**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1515
End: 1530

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.010	**PASS**
New	0.014	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.07	0.02	N/A	Pass
1000	5.12	5.11	N/A	-0.2	Pass
2000	10.24	10.20	N/A	-0.4	Pass
5000	25.60	25.70	N/A	0.4	Pass
10000	51.20	51.23	N/A	0.1	Pass
	Max Abs. Error		**0.02**	**0.4**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4691 **Vane #:** 1440 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	102.0	100.6	-1.4	Pass
Compass	167.5	166.1	-1.4	Pass
Compass	265.0	262.7	-2.3	Pass
Compass	341.0	339.0	-2.0	Pass
		Max Abs. Error	**2.3**	**PASS**
		Mean Abs. Error	**1.8**	**GOOD**

Time: Begin: 1200 End: 1300

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0			
West	270.0			
North	360.0			
East	90.0			
North	360.0			
West	270.0			
South	180.0			
East	90.0			
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	330.0	333.0	3.0	Pass
60.0	60.7	0.7	Pass	355.0	357.3	2.3	Pass
90.0	91.2	1.2	Pass	30.0	30.5	0.5	Pass
120.0	121.5	1.5	Pass	60.0	60.8	0.8	Pass
150.0	150.9	0.9	Pass	90.0	91.3	1.3	Pass
180.0	181.2	1.2	Pass	120.0	121.2	1.2	Pass
210.0	210.7	0.7	Pass	150.0	150.8	0.8	Pass
240.0	241.7	1.7	Pass	180.0	181.3	1.3	Pass
270.0	272.0	2.0	Pass	**Max Abs. Error**		**3.0**	**PASS**
300.0	302.0	2.0	Pass	**Mean Abs. Error**		**1.3**	**PASS**

Time: Begin: 1504 End: 1510

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	113.5	110.5	-3.0	Pass
Compass	294.0	297.1	3.1	Pass
		Max Abs. Error	**3.1**	**PASS**
		Mean Abs. Error	**3.1**	**ALERT**

Time: Begin: 1630 End: 900

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Few data points for post-audit alignment test on a windy day, yielding an alert for a high average.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	10.0	**PASS**
New	11.0	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	102.0	101.5	-0.5	Pass
Compass	167.5	167.3	-0.2	Pass
Compass	265.0	262.7	-2.3	Pass
Compass	341.0	336.8	-4.2	Pass
		Max Abs. Error	**4.2**	**PASS**
Time: Begin: 1200 End: 1300		**Mean Abs. Error**	**1.8**	**GOOD**

BENCH STAND ACCURACY & LINEARITY TEST											
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	34.8	4.8	Pass	150.0	153.4	3.4	Pass	270.0	271.5	1.5	Pass
60.0	63.6	3.6	Pass	180.0	182.9	2.9	Pass	300.0	300.7	0.7	Pass
90.0	93.5	3.5	Pass	210.0	212.4	2.4	Pass	330.0	330.4	0.4	Pass
120.0	123.7	3.7	Pass	240.0	241.8	1.8	Pass	355.0	355.1	0.1	Pass
								Max Abs. Error		**4.8**	**PASS**
Time: Begin: 1515 End: 1520								**Mean Abs. Error**		**2.4**	**PASS**

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	113.5	114.6	1.1	Pass
Compass	294.0	291.0	-3.0	Pass
		Max Abs. Error	**3.0**	**PASS**
Time: Begin: 1630 End: 1700		**Mean Abs. Error**	**2.1**	**GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 15-Jan-06

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1428		800	11.0	0.00	8.64	8.64	N/A	N/A	Initial pour not registered.
1453		800	11.0	8.64	19.81	11.17	1.9%	Pass	
1455		800	11.0	19.81	31.75	11.94	8.9%	Pass	
1501		800	11.0	0.00	11.96	11.96	9.1%	Pass	
1505		800	11.0	11.96	23.88	11.92	8.8%	Pass	
1510		800	11.0	23.88	35.81	11.93	8.9%	Pass	
1515		800	11.0	35.81	47.81	12.00	9.5%	Pass	
1520		800	11.0	47.81	59.79	11.98	9.3%	Pass	
1525		800	11.0	59.79	71.77	11.98	9.3%	Pass	
1530		800	11.0	71.77	83.76	11.99	9.4%	Pass	
					Max Abs. Error		**9.5%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Limited water available.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

• *GENERAL NOTES:*

1) On 10/08/05 the Nova Lynx evaporation pan and Met-One tipping precipitation gauge were audited and winterized.
2) On 10/18/05 the temperature sensors were audited after permanent bypass of the Met-One aspirator junction box.
3) On 11/20/05 the Met-One tipping precipitation gauge was replaced with an ETI weighing gauge. The RM Young wind sensor was rewired through a converter in order to free up a channel for the ETI device and was thus audited before and after rewiring.

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1205	800	24.7	0.0	0.0	0.0	24.6	1300	24.6	-0.4%	Pass	Date: 10/08/2005
1305	800	24.7	0.0	0.0	0.0	24.6	1400	24.6	-0.4%	Pass	Date: 10/08/2005
1710	650	20.0	1.6	0.0	0.0	22.2	1800	20.6	3.0%	Pass	Date: 11/03/2005
							Max Abs. Error	**3.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Tests run on 10/8/05 and 11/03/05.

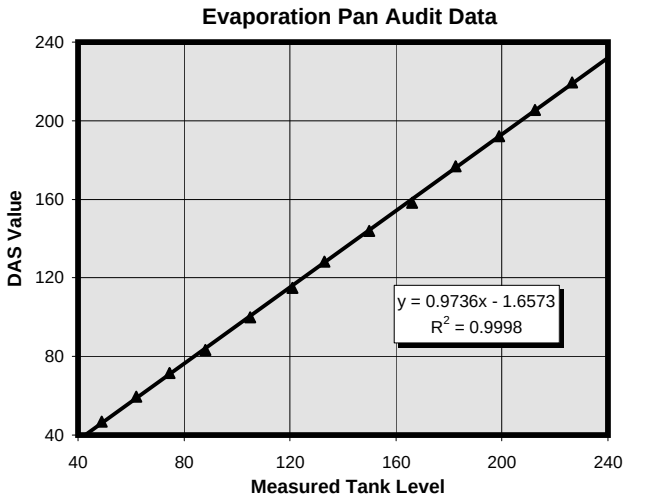
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
49.0	46.93	47.3	0.4	0.9%	Pass
62.0	59.44	60.3	0.9	1.5%	Pass
74.5	71.58	72.8	1.3	1.7%	Pass
88.0	83.20	86.3	3.1	3.6%	Pass
105.0	99.80	103.3	3.5	3.4%	Pass
121.0	115.06	119.3	4.3	3.6%	Pass
133.0	128.15	131.3	3.2	2.4%	Pass
150.0	144.06	148.3	4.3	2.9%	Pass
166.0	158.30	164.3	6.0	3.7%	Pass
182.5	176.94	180.8	3.9	2.2%	Pass
199.0	192.01	197.3	5.3	2.7%	Pass
212.5	205.41	210.8	5.4	2.6%	Pass
226.5	219.59	224.8	5.3	2.3%	Pass
241.0	233.31	239.3	6.0	2.5%	Pass
	Max Abs. Error		**6.0**	**3.7%**	**PASS**
	Intercept	**-1.7**	**Slope**	**0.9736**	**PASS**



Date: 10/08/05 **Time:** Begin: 1233 End: 1315

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Instrument audited before winterization.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Date: 10/08/05.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:22:24	16:22:10	**-00:14**	**PASS**

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST									
Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1628	4.75	500	6.9	100.58	106.93	6.35	-7.3%	Pass	Date: 11/20/05.
					Max Abs. Error		**7.3%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Instrument installed on 11/20/05. Time for only one audit point due to weather and helicopter schedule.

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3383 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220-601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220-604 **S.N.#:** 51091789 **Range:** -40 to 150 **°C**

Date: 10/18/05
Begin: 1603
End: 1625

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Ice Bath	0	0.00	0.08	0.08	Pass	0.08	0.08	Pass	0.00	Pass
Warm	15 to 25	19.87	19.88	0.01	Pass	19.88	0.01	Pass	0.00	Pass
Hot	35 to 45	40.55	40.68	0.13	Pass	40.68	0.13	Pass	0.00	Pass
		Max Abs. Error		0.13	**PASS**		0.13	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Checked thermistors after permanent bypass of Met-One aspirator junction box.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG (Pre-Conversion)*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 11/20/05
Begin: 1115
End: 1120

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: Values **before** installing pulse to mv converter.

SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG (Pre-Conversion)*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	104.5	118.6	14.1	Fail
Compass	169.0	182.5	13.5	Fail
Compass	270.0	284.1	14.1	Fail
Compass	9.5	24.2	14.7	Fail
	Max Abs. Error		**14.7**	**FAIL**
	Mean Abs. Error		**14.1**	**ALERT**

Prior to installing converter **Date:** 11/20/05 **Time:** Begin: 1040 End: 1105

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	34.9	4.9	Pass	150.0	149.9	-0.1	Pass	270.0	274.9	4.9	Pass
60.0	63.1	3.1	Pass	180.0	180.4	0.4	Pass	300.0	303.8	3.8	Pass
90.0	92.8	2.8	Pass	210.0	212.1	2.1	Pass	330.0	334.2	4.2	Pass
120.0	121.8	1.8	Pass	240.0	242.1	2.1	Pass	355.0	357.0	2.0	Pass
								Max Abs. Error		**4.9**	**PASS**
								Mean Abs. Error		**2.7**	**PASS**

Prior to installing converter **Date:** 11/20/05 **Time:** Begin: 1120 End: 1125

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.
Comments: RM Young wind sensor placed on a pulse to mv converter in order to free a DAS channel for the ETI Noah gauge. The RM Young extension arm was frozen up and knocked out of alignment just prior to in-situ azimuth audit.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct-Nov, 2005

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG (Post-Conversion)*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63047 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 11/20/05
Begin: 1305
End: 1310

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: Values **after** installing pulse to mv converter.

SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	1.99	-0.06	N/A	Pass
1000	5.12	5.19	N/A	1.4	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.66	N/A	0.2	Pass
10000	51.20	51.22	N/A	0.0	Pass
	Max Abs. Error		**0.06**	**1.4**	**PASS**

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG (Post-Conversion)*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.7 **E of N**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	32.3	2.3	Pass	150.0	153.2	3.2	Pass	270.0	272.0	2.0	Pass
60.0	61.2	1.2	Pass	180.0	182.1	2.1	Pass	300.0	301.2	1.2	Pass
90.0	93.9	3.9	Pass	210.0	212.2	2.2	Pass	330.0	330.8	0.8	Pass
120.0	124.4	4.4	Pass	240.0	242.3	2.3	Pass	355.0	355.1	0.1	Pass
								Max Abs. Error		**4.4**	**PASS**
								Mean Abs. Error		**2.1**	**PASS**

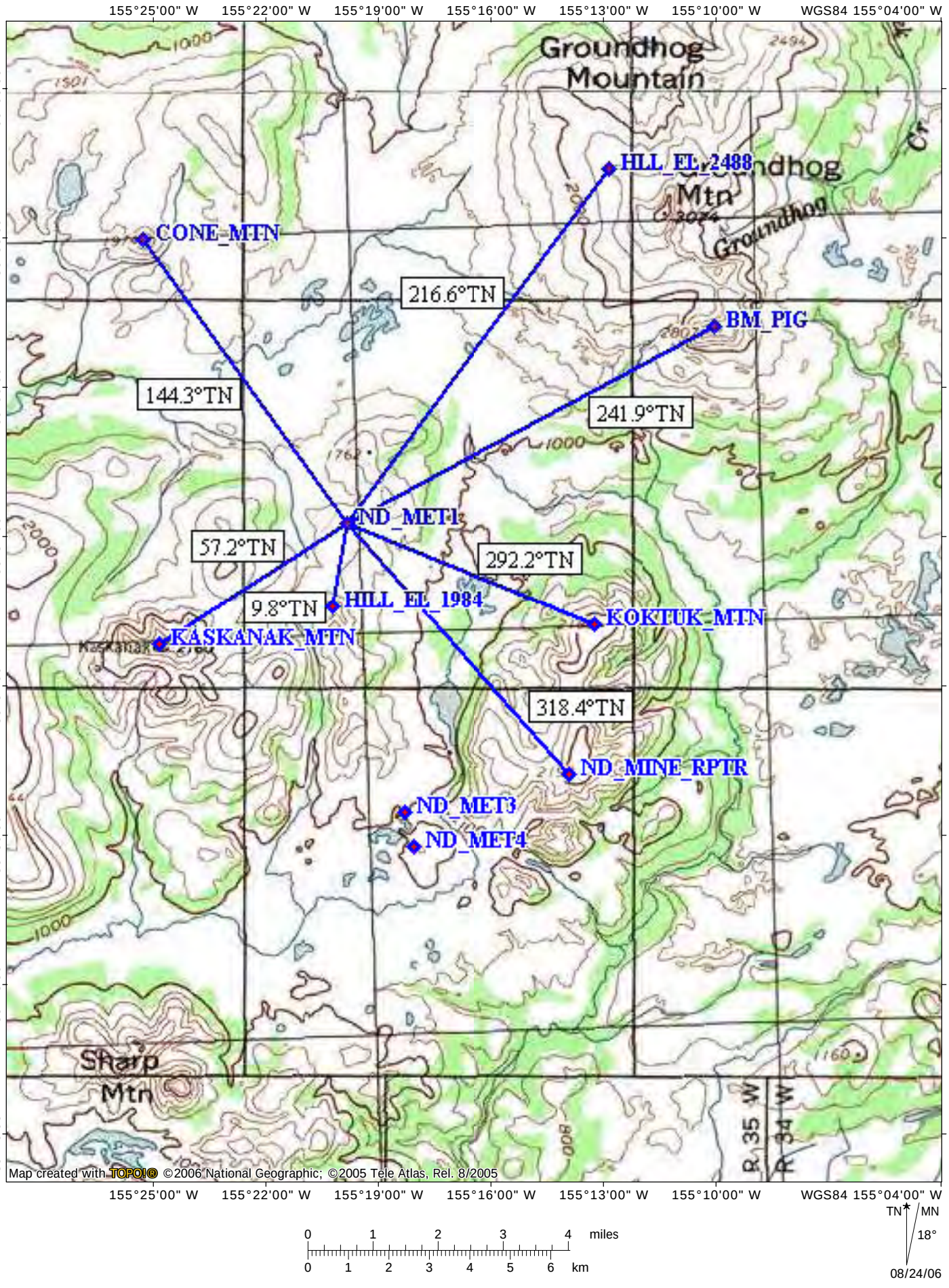
After installing converter **Date:** 11/20/05 **Time:** Begin: 1315 End: 1320

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	96.0	95.4	-0.6	Pass
Compass	167.5	165.4	-2.1	Pass
Compass	259.5	256.0	-3.5	Pass
Compass	6.0	1.6	-4.4	Pass
	Max Abs. Error		**4.4**	**PASS**
	Mean Abs. Error		**2.7**	**GOOD**

After installing converter **Date:** 11/20/05 **Time:** Begin: 1445 End: 1515

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.
Comments: RM Young wind sensor placed on a pulse to mv converter in order to make room for the ETI Noah gauge.


TOPO! map printed on 08/24/06 from "Pebble_Sta1_(08-16-06).tpo"
155°25'00" W
155°22'00" W
155°19'00" W
155°16'00" W
155°13'00" W
155°10'00" W
WGS84 155°04'00" W
60°00'00" N
59°58'00" N
59°56'00" N
59°54'00" N
59°52'00" N
59°50'00" N
59°48'00" N
59°46'00" N
Groundhog Mountain
HILL_EL_2488
CONE_MTN
216.6°TN
BM_PIG
144.3°TN
241.9°TN
ND_MET1
57.2°TN
292.2°TN
9.8°TN
HILL_EL_1984
KOKTUK_MTN
KASKANAK_MTN
318.4°TN
ND_MINE_RPTR
ND_MET3
ND_MET4
Sharp Mtn
R. 35 W.
R. 34 W.
Map created with TOPO!© ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
0 1 2 3 4 miles
0 1 2 3 4 5 6 km
TN MN
18°
08/24/06

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate No. 1750.01

ACCREDITED

Calibration complies with ISO 17025

Cert. No.:4000-1103531

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 51091789

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	10/18/05	A4A12029
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	A42238		
Temperature Probe	149	7/20/05	A4715024
Thermistor Module	A27129	6/24/05	1000171514
Temperature Calibration Bath	93139		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 4/27/05 **Cal Due: 4/27/07**

Test Conditions: 24.0°C 41.0 %RH 1016 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C		N.A.		0.001	0.003	Y	-0.049	0.051	0.013	3.8:1
°C		N.A.		25.001	25.002	Y	24.951	25.051	0.013	3.8:1
°C		N.A.		59.999	59.999	Y	59.949	60.049	0.013	3.8:1
°C		N.A.		100.001	100.007	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full.

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.

Traceable® is a registered trademark of Control Company © 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052305.01

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 5/23/2005 Lab temperature 73.6 °F
Lab pressure 661.65 mm Hg

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)
24.00	24.13	0.13	-0.13
26.05	26.18	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.12	0.12	-0.12

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer (in. Hg)	Transfer Standard (in. Hg)	Difference from Reference (in. Hg)	Transfer Standard Correction* (in. Hg)

Reviewed: _____ Date: 5-23-05

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 Rpm - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 3 May 2005

Tested By EJC

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 17 November 2005

Tested By EC

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 8884 **TRACEABILITY CERTIFICATE NO.** 05090203

ISSUED TO: Hoefler Consulting Group

INSTRUMENT: 366-3, .003-.03 Inch Ounces Torque Watch, Waters Manufacturing, Inc, S/N 4864

DATE DONE: September 02, 2005 **DATE DUE:** September 01, 2006

CERTIFIED BY METROLOGIST: E.P. Young **TEMPERATURE:** 72 °F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

PROCEDURE/LIMITATIONS/ACCURACY STATEMENT: T.O. 33k6-4-2630-1. Accuracy: +/- 10 % of Full Scale.

COMPLIANCE

Alaska Calibration, Inc.'s calibration practices and procedures comply with the requirements of ANSI/SO/Z540-1 and ANS/ ISO/IEC17025: 2000 and relevant requirements of ISO 9002: 1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. This Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	33479
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	12/20/2005
		PO#:	Verbal
Contact:	Chris Lindsey	**Page:**	1
Dept:			
Gage:	.06-.60 oz Torque Watch	**Control:**	5042
Mfg:	Honeywell	**Model:**	.06-.60 oz Torque Watch
Location:		**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Cal-Tech Calibration, INC
Original Certificate (attached) # 1768

Reference HPI S/O # 13385

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
:

Last / Next Cal Dates: -->

Gage Status: PASS

Next Calibration Due: 12/20/2006

Certified By: Jorge Ashook Signature: Jorge A. Ashook

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 21C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994, ISO10012-1, and Houston Precision's Quality manual.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Gary Deterling Lab Manager.
*This Report shall not be reproduced except in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

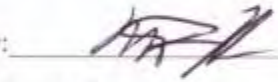
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 1768
Instrument Make: Honeywell
Model: .06-.60" oz Torque Watch
S/N: None
ID: 5042

Date: 12-20-05
Temp: 74 Deg f
Humidity: 40%
Rec. In Tol.
Due Date: 12-20-06

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: 

Accuracy: +\- 5% of full scale.

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	**1g-100g**	**822/265036-01**	**3-22-06**

Inch Oz. Range	As Found	After Adjust	Final Reading
.06	.05	none	.05
.18	.17	none	.17
.36	.35	none	.35
.48	.47	none	.47
.60	.59	none	.59

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

Pebble 1 PSD Station

Third Quarter 2006

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

September 2006

Northern Dynasty Mines
Pebble 1 PSD Meteorological Monitoring Station
Annual Systems and Performance Audits
(Third Quarter 2006)

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

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September 2006

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station On-Site Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Wind Speed 7
3.1.4 Wind Direction 8
3.1.5 Relative Humidity 9
3.1.6 Barometric Pressure 10
3.1.7 Precipitation 10
3.1.8 Evaporation 10
3.1.9 Solar Radiation 11

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 July 10-12, 2006 Performance Audit Summary 12

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble Station 1 is located just west of the mine ore body on top of a gentle, wind swept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan is collocated with a tipping precipitation gauge roughly 125 feet south of the tower. Between the tower and the weighing precipitation gauge is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Precipitation 1 (mm H_2O): ETI Model Noah II Weighing Gauge
- Precipitation 2 (mm H_2O): Met One Model 370 Tipping Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of this document, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question-answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

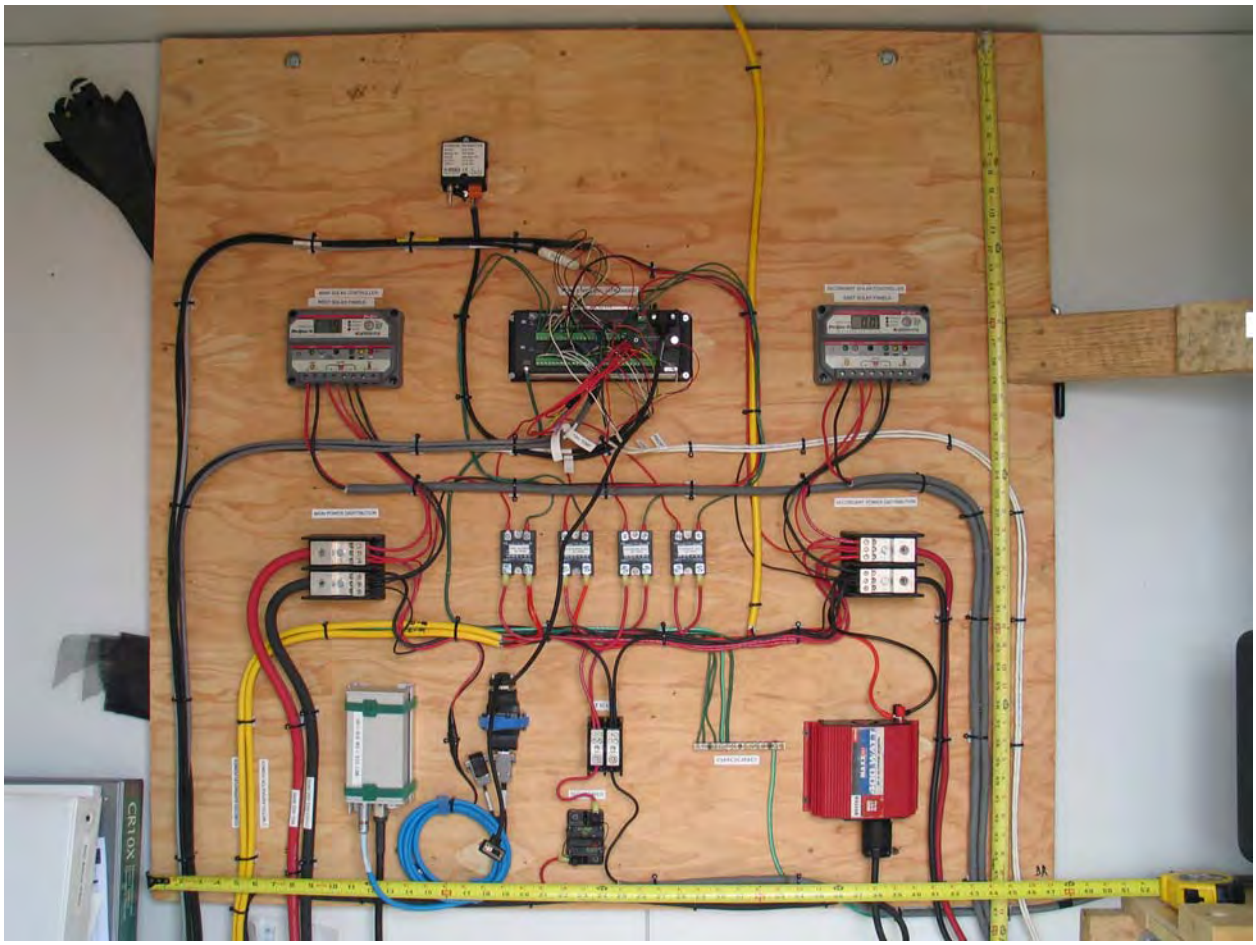
2.2 Meteorological Station On-Site Systems Audit

The on-site systems audit of the Pebble 1 station was conducted on July 10-12, 2006. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence to repel thirsty animals. All instrumentation wires

from the tower, precipitation gauge and evaporation gauge are housed in conduit in order to repel hungry animals. These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. A Campbell Scientific SC932A interface converts the DAS signal to a RS-232 DCE modem signal. Three FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 35-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a 21-Watt Global Thermoelectric Model 5030 Thermo-Electric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a Morningstar ProStar-15 solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three panels are dedicated to the aspirator fans, Climatronics heaters, shelter lighting and 120VAC power; wired through a Morningstar ProStar-15 solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the aspirator/heater power system. Aspirator fans and heaters are controlled through relays connected to the DAS control ports. Logic programmed into the DAS reduces power consumption by limiting heater use to weather conditions conducive to icing and turns fans off at night when voltage is low, considered an upset condition. Also the TEG power is routed through relays which shunt power to the critical DAS/sensor system during upset conditions.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately

identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit checklists
- Keep files on site containing copies of previous checklists.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor’s threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The

instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.4 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital

raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.5 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.8 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing enough water to bring the initial level to approximately 50 mm, the minimum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to the pan to raise the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper limit of approximately 240mm. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.1.9 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 1 station on July 10-12, 2005 with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits, except the ETI weighing precipitation gauge. The ETI gauge was found out of compliance, replaced and then re-audited. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 July 10-12, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time (pre-adjustment)	≤ ±5:00	Min:Sec	-3:05	Pass
Datalogger Time (post-adjustment)	≤ ±5:00	Min:Sec	0:06	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque (old bearings)	≤ 0.104	oz-in	0.070	Pass
Wind Direction Torque (new bearings)	≤ 0.104	oz-in	0.010	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.2	Pass
RM Young Wind System				
Wind Speed Torque (old bearings)	≤ 0.014	oz-in	0.013	Pass
Wind Speed Torque (new bearings)	≤ 0.014	oz-in	0.012	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.02	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.2	Pass
Wind Direction Torque (old bearings)	≤ 11	g-cm	11.0	Pass
Wind Direction Torque (new bearings)	≤ 11	g-cm	3.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.3	Pass
Wind Direction Linearity	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.8	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.5	Pass
Barometric Pressure	≤ ±3	Mbar	0.5	Pass
Weighing Precipitation (old gauge)	≤ ±10	% input	-17.8	Fail
Weighing Precipitation (new gauge)	≤ ±10	% input	8.8	Pass
Tipping Precipitation	≤ ±10	% input	-6.9	Pass
Evaporation	≤ ±10	% input	2.3	Pass
Solar Radiation	≤ ±5+Res	% input	-5.8	Pass

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Audit Date:** 10-Jul-06
Witnesses: Dominic Shallies **Auditor:** Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 3
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 4
3.2.1 Data Acquisition System (DAS) and Communications System 4
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 5
3.3 Station Location and Siting 6
3.3.1 Tower 6
3.3.2 Temperature and Relative Humidity Sensors 6
3.3.3 Wind Speed and Wind Direction Sensors 7
3.3.4 Relative Humidity and Barometric Pressure 7
3.3.5 Precipitation 7
3.3.6 Evaporation 8
3.3.7 Solar Radiation 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 11
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 13
8.0 COMMENTS AND SUGGESTIONS 13

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is wind swept and treeless with very little organics. There are virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

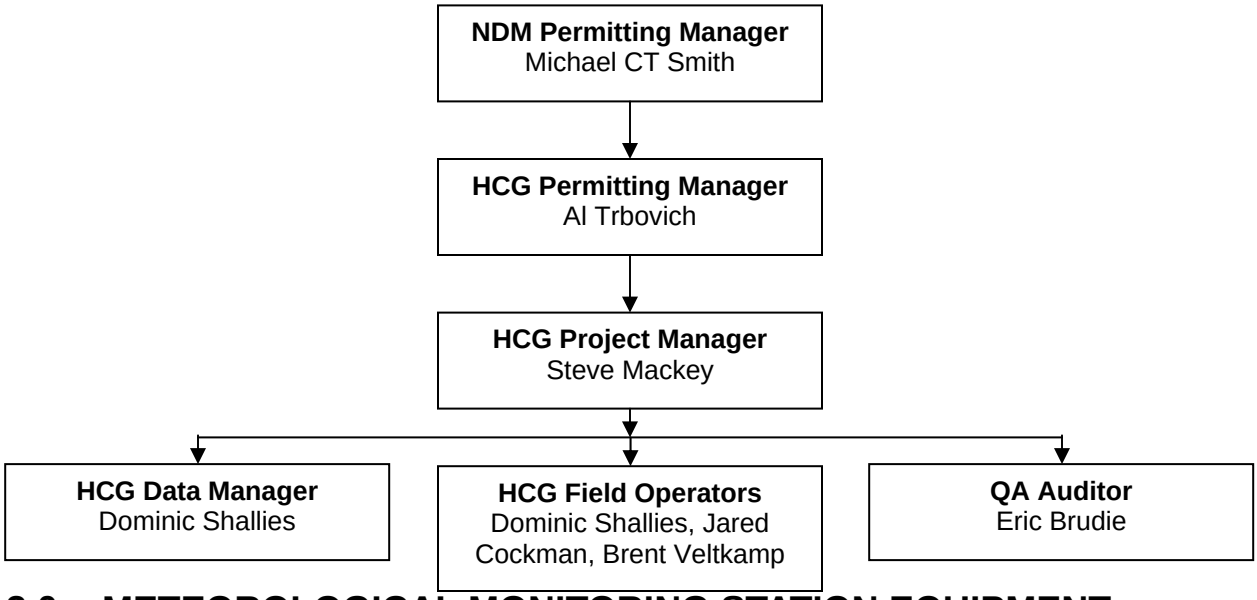
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.180' N
155° 20' W	155° 19.804' W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw diagram indicating the organizational structure of the monitoring program. Include names and titles:



3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR10X	X43107
DAS Wiring Panel	Campbell Scientific	CR10X	32768
Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Primary Wind Speed	Climatronics	F460-100075	5007
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Primary Wind Direction	Climatronics	F460-100076	4691
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	66725
Backup Wind Spd Prop (Old)[1]	RM Young	08254	63047
Backup Wind Spd Prop (New)[1]	RM Young	08254	63112
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Relative Humidity	Vaisala	HMP45AC	A1040018
Barometric Pressure	Vaisala	PTB101B	A0710039
Precipitation-Tipping	Met-One	370	D5874
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	334 – Original
Precipitation-Weighing	ETI	8205-00710 Noah II	343 – Replacement
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None
Solar Radiation	LI-COR	Li-200SX	PY49464

1. Prop SN 63047 broken during audit and replaced.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS to SC932A interface to FreeWave RF network to SixNet modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a 21-Watt propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can shunt the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not required.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings at HCG office.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resol. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

EPA Recommended Meteorological Instrument Standards (Continued)

Parameter	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10” range	Not Specified	N/A
Range:	2” to 10”	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Siting

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature and Relative Humidity Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.4 Relative Humidity and Barometric Pressure

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.
Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on wiring panel.

3.3.5 Precipitation

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.

Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.6 Evaporation

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

3.3.7 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	□ Yes ■ No	Comments: All operators have at least two years onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.

Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

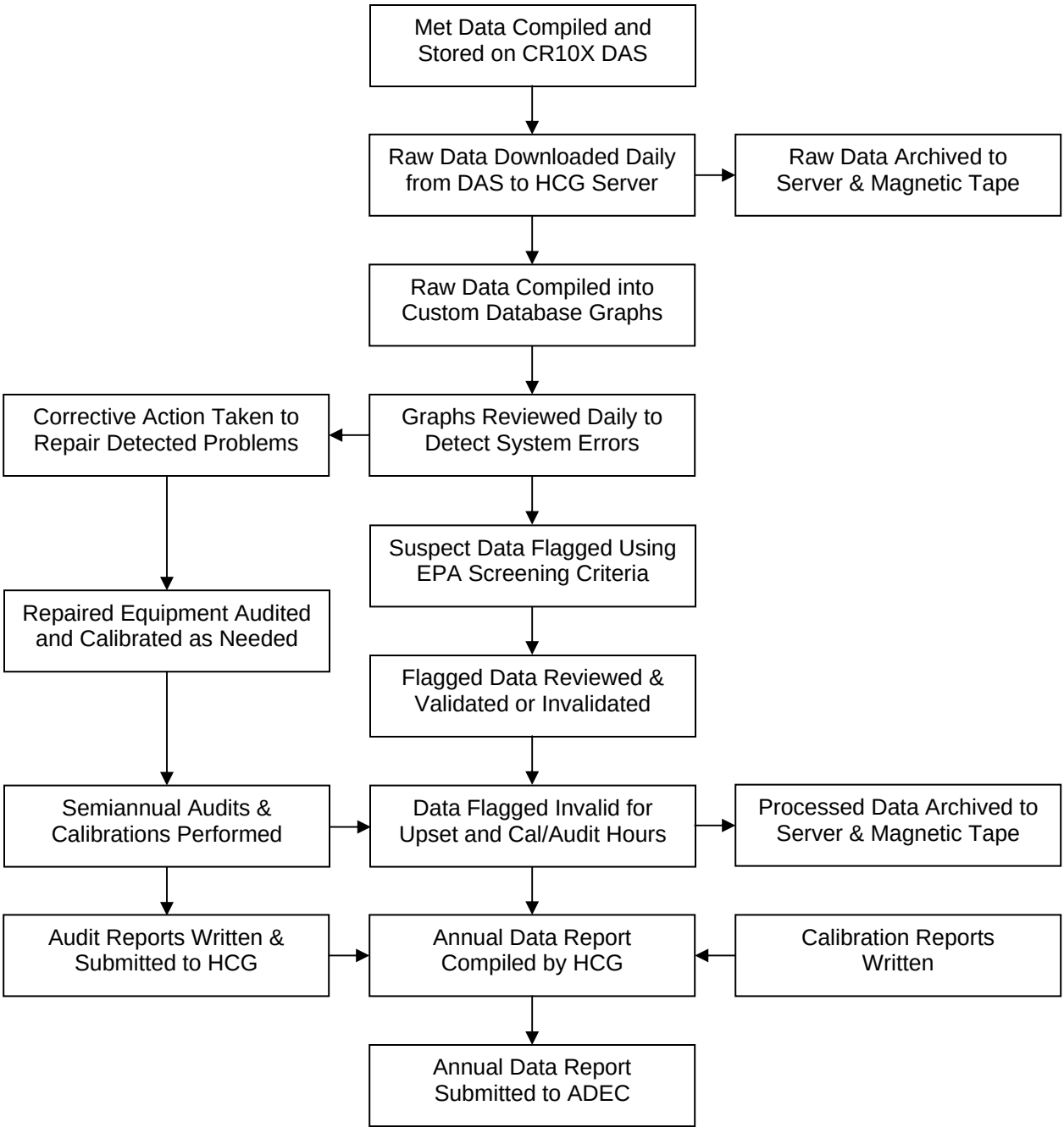
5.2 Station Monitoring Plan and Report Forms

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate Calibration Report Form and copies of previous calibrations and audits?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Isaac Bertschi
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Time check on 7/11/06 and reset and re-audited.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
9:23:30	9:20:25	**-03:05**	**PASS**
9:25:00	9:25:06	**00:06**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 10.0 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50	**°C**	
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50	**°C**	
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220-601	**S.N.#:**	51091749	**Range:**	-40 to 150	**°C**	
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220-604	**S.N.#:**	240301145	**Range:**	-40 to 150	**°C**	

Date: 07/11/06
Begin: 1100
End: 1130

Date: 07/10/06
Begin: 1540
End: 1700

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Very Cold	-35 to -45	-16.65	-16.18	0.47	Pass	-16.18	0.47	Pass	0.00	Pass
Cold	-15 to -25	-15.65	-15.17	0.48	Pass	-15.17	0.48	Pass	0.00	Pass
Ice Bath	0	-0.02	0.11	0.13	Pass	0.11	0.13	Pass	0.00	Pass
Warm	15 to 25	23.48	23.55	0.07	Pass	23.55	0.07	Pass	0.00	Pass
Hot	35 to 45	38.78	38.92	0.14	Pass	38.92	0.14	Pass	0.00	Pass
		Max Abs. Error		0.48	**PASS**		0.48	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Very cold test done on 7/11/06 with limited dry ice available, all other tests on 7/10/06.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:**	0.8 to 100	**% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100	**% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015							

COLLOCATED STANDARD TEST									
Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
07/10/06	1610	68.1	N/A	6.8	69.5	12.7	7.3	0.5	Pass
07/10/06	1615	69.6	N/A	7.1	71.5	12.6	7.6	0.5	Pass
						Max Abs. Error		0.5	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
07/10/06	1558	28.13	28.01	948.6	949.1	0.5	Pass
07/11/06	1540	28.17	28.05	949.9	949.9	0.0	Pass
				Max Abs. Error		0.5	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/24/06	
Audit Inst	Offset Amount
24.13	-0.13
26.24	-0.13
28.12	-0.12
30.11	-0.11
Intercept	**-0.22**
Slope	**0.0035**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5007 **Cup #:** 2284 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 07/10/06
Begin: 1635
End: 1645

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

● *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63112* **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Date: 07/10/06
Begin: 1645
End: 1655

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.013	**PASS**
New	0.014	0.012	**PASS**

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.07	0.02	N/A	Pass
1000	5.12	5.18	N/A	1.2	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.58	N/A	-0.1	Pass
10000	51.20	51.30	N/A	0.2	Pass
	Max Abs. Error		**0.02**	**1.2**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: *Prop # 63047 broken during audit & replaced with prop # 63112.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4691 **Vane #:** 1440 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	0.010	**PASS**

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass (Before removal-07/10/06)	122.5	126.0	3.5	Pass
Cone Mtn (Before removal-7/10/06)	144.3	149.0	4.7	Pass
Cone Mtn (Before removal-7/11/06)	144.3	148.9	4.6	Pass
		Max Abs. Error	**4.7**	**PASS**
		Mean Abs. Error	**4.3**	**ALERT**

Date: 7/10/06 & 07/11/06
Time: Begin: 1425 End: 1550

CROSSARM-VANE ACCUR. & LIN. TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.8	0.8	Pass
West	270.0	272.1	2.1	Pass
North	360.0	0.1	0.1	Pass
East	90.0	91.3	1.3	Pass
North	360.0	0.1	0.1	Pass
West	270.0	271.8	1.8	Pass
South	180.0	180.8	0.8	Pass
East	90.0	91.8	1.8	Pass
	Max Abs. Error		**2.1**	**PASS**
	Mean Abs. Error		**1.1**	**PASS**

Time: Begin: 1556 End: 1600
Date: 07/10/06

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.2	0.2	Pass	330.0	332.1	2.1	Pass
60.0	60.0	0.0	Pass	355.0	356.3	1.3	Pass
90.0	90.6	0.6	Pass	30.0	29.7	-0.3	Pass
120.0	120.3	0.3	Pass	60.0	60.8	0.8	Pass
150.0	150.0	0.0	Pass	90.0	91.4	1.4	Pass
180.0	180.5	0.5	Pass	120.0	121.2	1.2	Pass
210.0	210.0	0.0	Pass	150.0	150.3	0.3	Pass
240.0	240.4	0.4	Pass	180.0	180.3	0.3	Pass
270.0	270.6	0.6	Pass	**Max Abs. Error**		**2.1**	**PASS**
300.0	300.4	0.4	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Date: 07/10/06 **Time:** Begin: 1550 End: 1553

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	145.3	1.0	Pass
Peak 1984	9.8	9.1	-0.7	Pass
Koktuk Mtn	292.2	293.6	1.4	Pass
Hill 2488	216.5	218.0	1.5	Pass
BM Pig	241.9	243.3	1.4	Pass
Compass	81.0	82.0	1.0	Pass
Met repeater	318.4	320.6	2.2	Pass
		Max Abs. Error	**2.2**	**PASS**
		Mean Abs. Error	**1.3**	**GOOD**

Date: 07/11/06
Time: Begin: 1450 End: 1530

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Extremely windy on 07/10/06, only able to capture two points on that day prior to removal from the tower. On 07/11/06 one single point checked and then crossarm re-aligned on muffler clamp and re-audited.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.5 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	11.0	**PASS**
New	11.0	3.0	**PASS**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	122.5	123.5	1.0	Pass
Compass	120.0	121.6	1.6	Pass
Cone Mtn	144.3	146.4	2.1	Pass
Cone Mtn - Post Audit	144.3	145.8	1.5	Pass

Date: 07/10/06 **Max Abs. Error** **2.1** **PASS**
Time: Begin: 1420 End: 1550 **Mean Abs. Error** **1.6** **GOOD**

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.5	1.5	Pass	150.0	154.3	4.3	Pass	270.0	271.4	1.4	Pass
60.0	62.4	2.4	Pass	180.0	183.1	3.1	Pass	300.0	300.9	0.9	Pass
90.0	93.5	3.5	Pass	210.0	212.7	2.7	Pass	330.0	330.1	0.1	Pass
120.0	123.8	3.8	Pass	240.0	241.7	1.7	Pass	355.0	354.6	-0.4	Pass

Date: 07/10/06 **Max Abs. Error** **4.3** **PASS**
Time: Begin: 1700 End: 1710 **Mean Abs. Error** **2.1** **PASS**

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	144.8	0.5	Pass
Peak 1984	9.8	10.4	0.6	Pass
Koktuk Mtn	292.2	290.6	-1.6	Pass
Hill 2488	216.6	213.4	-3.2	Pass
BM Pig	241.9	238.1	-3.8	Pass
Compass	81.0	82.8	1.8	Pass
Met repeater	318.4	317.7	-0.7	Pass

Date: 07/11/06 **Max Abs. Error** **3.8** **PASS**
Time: Begin: 1440 End: 1530 **Mean Abs. Error** **1.7** **GOOD**

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: Few data points taken under extremely windy conditions on 07/10/06. Bearings replaced and instrument returned to tower and single post-audit point taken after return to tower. Full suite of post-audit values taken under less windy conditions on 07/11/06.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *WEIGHING PRECIPITATION GAUGE AUDIT (PRE-REPLACEMENT)*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 334 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1450	2.25	1600	21.9	0.00	19.30	19.30	-12.0%	Fail	
1455		1600	21.9	19.30	38.61	19.31	-11.9%	Fail	
1501		1600	21.9	0.00	19.30	19.30	-12.0%	Fail	
1505	5.75	1600	21.9	19.30	33.02	13.72	N/A	Fail	Bottle poured in too fast, very low reading.
1512		1600	21.9	33.02	51.56	18.54	-15.5%	Fail	
1530		1600	21.9	51.56	69.85	18.29	-16.6%	Fail	
1545	8.50	1600	21.9	69.85	88.14	18.29	-16.6%	Fail	
1610		1600	21.9	0.00	18.29	18.29	-16.6%	Fail	
1625		1600	21.9	18.29	36.32	18.03	-17.8%	Fail	
1633	11.00	1600	21.9	36.32	46.99	10.67	N/A	Fail	Instrument stopped working at 11".
					Max Abs. Error		**17.8%**	**FAIL**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Audit date 07/11/06. Instrument had quit working at 11", before being drained for audit. Instrument consistently read low with extreme low values disregarded as noted.

● *WEIGHING PRECIPITATION GAUGE AUDIT (POST-REPLACEMENT)*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1650	2.00	1600	21.9	48.77	72.64	23.87	8.8%	Pass	Date: 07/11/06.
1655		1600	21.9	72.64	96.51	23.87	8.8%	Pass	Date: 07/11/06.
0650		1600	21.9	0.00	22.35	22.35	1.9%	Pass	Date: 07/12/06.
0701	5.50	1600	21.9	0.25	23.37	23.12	5.4%	Pass	Date: 07/12/06.
0710		1600	21.9	23.37	46.23	22.86	4.2%	Pass	Date: 07/12/06.
0721	7.25	1600	21.9	46.23	69.34	23.11	5.4%	Pass	Date: 07/12/06.
0729		1600	21.9	69.34	92.20	22.86	4.2%	Pass	Date: 07/12/06.
0735	9.13	1600	21.9	92.20	115.06	22.86	4.2%	Pass	Date: 07/12/06.
0741		1600	21.9	115.06	135.64	20.58	-6.2%	Pass	Date: 07/12/06.
0749	10.75	1600	21.9	135.64	158.50	22.86	4.2%	Pass	Date: 07/12/06.
	`								
					Max Abs. Error		**8.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Gauge left with 3.75" of water, glycol & oil.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int1/Int2:** DAS hourly data and/or adjustments.

PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int 1 mm	Int 2 mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1546	800	24.7	0.8	10.6	0.0	13.8	1627	23.6	-4.5%	Pass	CR510 on 05/04/06.
1627	800	24.7	13.8	0.0	0.0	38.0	1700	24.2	-2.0%	Pass	CR510 on 05/04/06.
1240	400	12.3	0.0	5.2	0.0	7.4	1500	12.6	2.4%	Pass	CR510 on 07/10/06.
1020	800	24.7	0.0	20.6	0.0	2.4	1116	23.0	-6.9%	Pass	Station CR01X on 07/11/06.
1117	800	24.7	2.4	0.0	0.0	26.2	1158	23.8	-3.6%	Pass	Station CR01X on 07/11/06.
1202	650	20.0	0.0	0.2	0.0	19.8	1255	20.0	0.0%	Pass	Mostly full tip retrieved on
											07/12/06 at 0700.
							Max Abs. Error	**6.9%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Initial tests on 05/04/06 when tipping gauge installed.

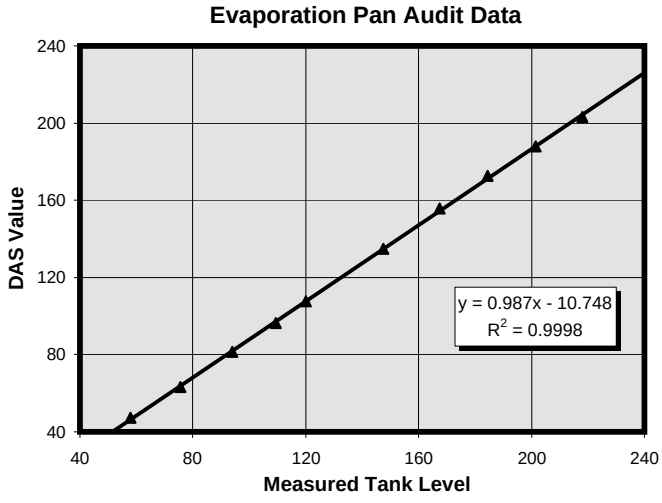
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
58.0	47.21	47.3	0.0	0.1%	Pass
75.5	63.30	64.8	1.5	2.2%	Pass
94.0	81.61	83.3	1.6	2.0%	Pass
109.5	96.53	98.8	2.2	2.3%	Pass
120.0	107.70	109.3	1.6	1.4%	Pass
147.5	134.74	136.8	2.0	1.5%	Pass
167.5	155.71	156.8	1.0	0.7%	Pass
184.5	172.74	173.8	1.0	0.6%	Pass
201.5	187.80	190.8	3.0	1.5%	Pass
218.0	203.30	207.3	4.0	1.9%	Pass
	Max Abs. Error		**4.0**	**2.3%**	**PASS**
	Intercept	**-10.7**	**Slope**	**0.9870**	**PASS**



Date: 07/12/06 **Time:** Begin: 900 End: 1045

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Adjusted chain on sensor wheel to match tank to DAS readings after audit. Single point reading: Tank=139mm, DAS=139.12mm.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

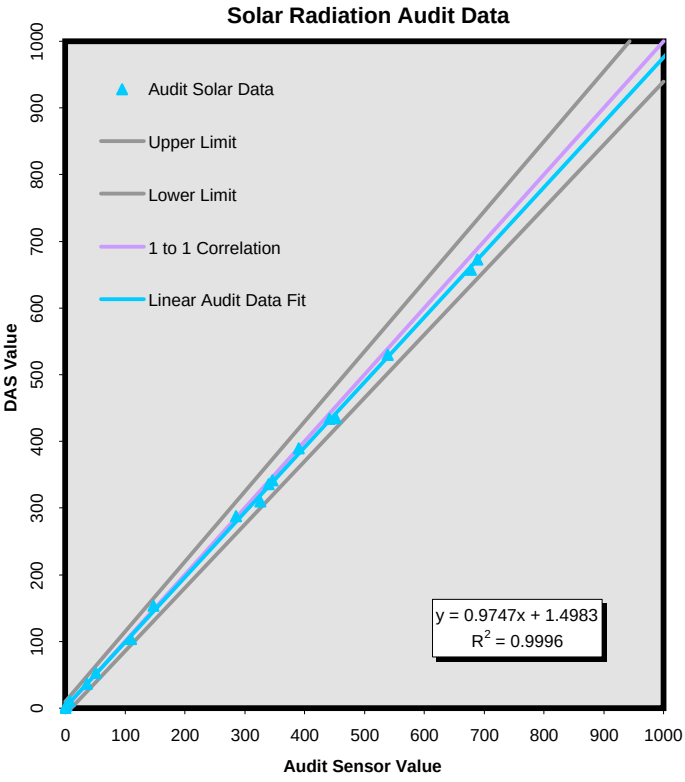
Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 1 (Mine)
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** July 10-12, 2006

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.0 **Meters**

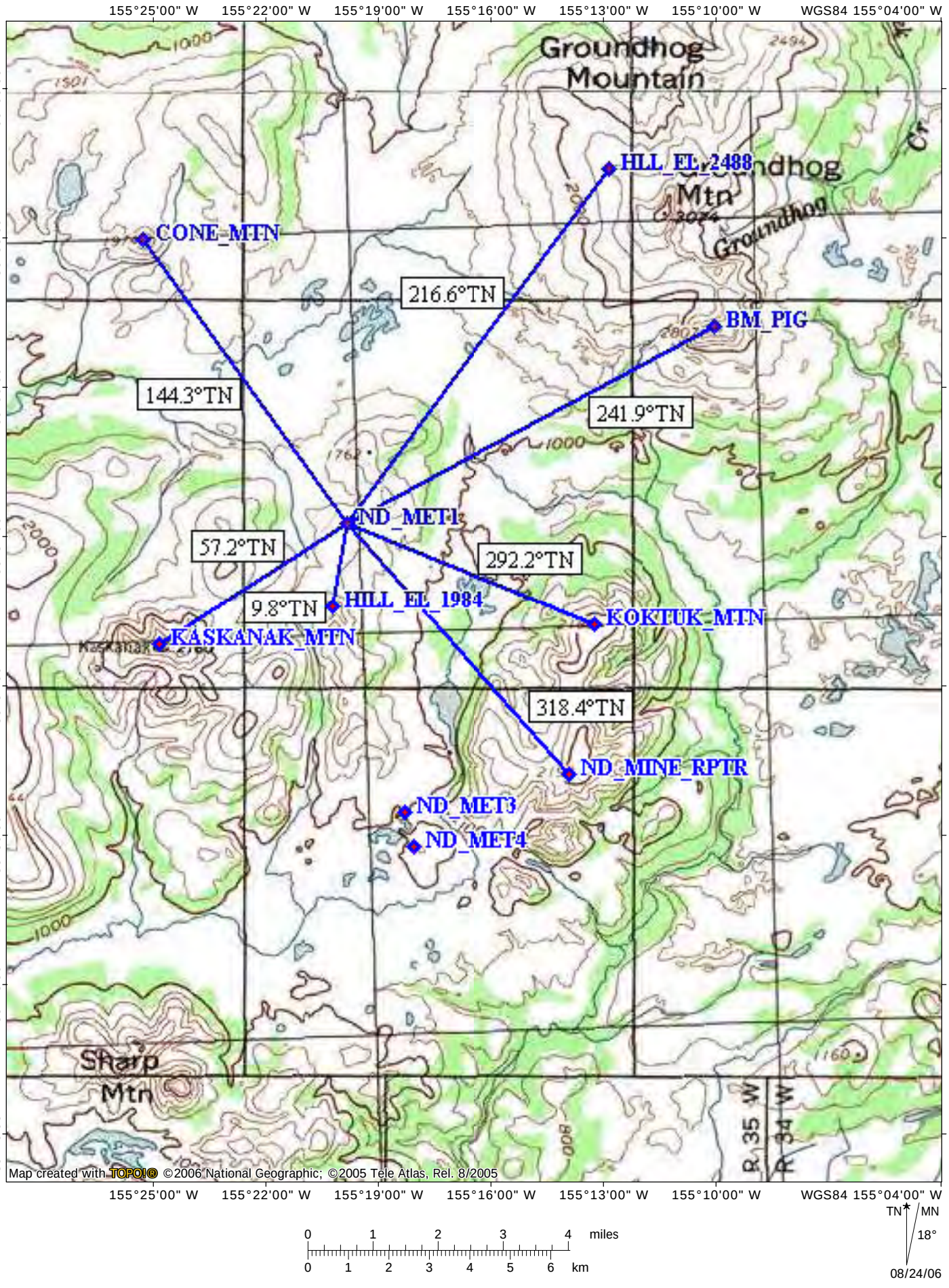
Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY49464 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION SENSOR TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1400	441.2	434.2	-7.0	±32.1	-1.6%	Pass
1500	678.1	657.5	-20.6	±43.9	-3.0%	Pass
1600	688.8	672.4	-16.4	±44.4	-2.4%	Pass
1700	452.3	434.5	-17.8	±32.6	-3.9%	Pass
1800	326.1	309.6	-16.5	±26.3	-5.1%	Pass
1900	389.9	390.0	0.1	±29.5	0.0%	Pass
2000	346.8	341.2	-5.6	±27.3	-1.6%	Pass
2100	109.7	103.3	-6.4	±15.5	-5.8%	Pass
2200	36.0	36.3	0.3	±11.8	n/a	Pass
2300	2.2	3.4	1.2	±10.1	n/a	Pass
2400	0.0	0.1	0.1	±10.0	n/a	Pass
100	0.0	0.0	0.0	±10.0	n/a	Pass
200	0.1	0.0	-0.1	±10.0	n/a	Pass
300	0.2	0.0	-0.2	±10.0	n/a	Pass
400	0.2	0.3	0.1	±10.0	n/a	Pass
500	8.0	10.4	2.4	±10.4	n/a	Pass
600	51.5	52.7	1.2	±12.6	2.2%	Pass
700	147.9	153.1	5.2	±17.4	3.5%	Pass
800	285.5	288.2	2.7	±24.3	0.9%	Pass
900	340.2	336.2	-4.0	±27.0	-1.2%	Pass
1000	539.1	529.3	-9.8	±37.0	-1.8%	Pass
Corr. Val	**0.9998**	**Max Abs. Percent Error**			**5.8%**	**PASS**
R² Value	**0.9996**	**Intercept**	**1.5**	**Slope**	**0.9747**	**PASS**



Begin Date: 07/10/06 **End Date:** 07/11/06

PSD Limits: Max Absolute Error <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Comments: None.


TOPO! map printed on 08/24/06 from "Pebble_Sta1_(08-16-06).tpo"
155°25'00" W
155°22'00" W
155°19'00" W
155°16'00" W
155°13'00" W
155°10'00" W
WGS84 155°04'00" W
60°00'00" N
59°58'00" N
59°56'00" N
59°54'00" N
59°52'00" N
59°50'00" N
59°48'00" N
59°46'00" N
Groundhog Mountain
HILL_EL_2488
CONE_MTN
216.6°TN
BM_PIG
144.3°TN
241.9°TN
ND_MET1
57.2°TN
292.2°TN
9.8°TN
HILL_EL_1984
KOKTUK_MTN
KASKANAK_MTN
318.4°TN
ND_MINE_RPTR
ND_MET3
ND_MET4
Sharp Mtn
R. 35 W.
R. 34 W.
Map created with TOPO!© ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
0 1 2 3 4 miles
0 1 2 3 4 5 6 km
TN MN
18°
08/24/06

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate 1750.01

Calibration complies with ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 4000-1338226

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Dominic Shallies, Anchorage, AK 99503 U.S.A. (RMA:933478)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	12/08/06	A5B28010-1
Thermistor Module	A17118	8/12/06	A5819038
Temperature Calibration Bath TC179	A45240		
Temperature Calibration Bath TC191	A42238		
Temperature Probe	157	9/01/06	A5815063
Thermistor Module	A27129	7/05/06	1000189003

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 6/07/06 **Cal Due: 6/07/07**

Test Conditions: 25.5°C 39.0 %RH 1013 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.000	0.072	N	0.000	-0.004	Y	-0.050	0.050	0.013	3.8:1
°C	25.000	25.020	Y	25.000	24.999	Y	24.950	25.050	0.013	3.8:1
°C	60.002	59.999	Y	60.001	59.999	Y	59.951	60.051	0.013	3.8:1
°C	100.002	100.001	Y	100.002	100.004	Y	99.952	100.052	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company

© 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions	
Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052406. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 05/24/06 Lab temperature 72.8 °F
Lab pressure 663.1 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.13	0.13	-0.13
26.11	26.24	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.11	0.11	-0.11

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R Sanders Date: 5-24-06

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 RPM - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 24 May 2006

Tested By EJC

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 17 November 2005

Tested By EC

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 8884 **TRACEABILITY CERTIFICATE NO.** 05090203

ISSUED TO: Hoefler Consulting Group

INSTRUMENT: 366-3, .003-.03 Inch Ounces Torque Watch, Waters Manufacturing, Inc, S/N 4864

DATE DONE: September 02, 2005 **DATE DUE:** September 01, 2006

CERTIFIED BY METROLOGIST: E.P. Young **TEMPERATURE:** 72 °F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

PROCEDURE/LIMITATIONS/ACCURACY STATEMENT: T.O. 33k6-4-2630-1. Accuracy: +/- 10 % of Full Scale.

COMPLIANCE

Alaska Calibration, Inc.'s calibration practices and procedures comply with the requirements of ANSI/SO/Z540-1 and ANS/ ISO/IEC17025: 2000 and relevant requirements of ISO 9002: 1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. This Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	33479
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	12/20/2005
		PO#:	Verbal
Contact:	Chris Lindsey	**Page:**	1
Dept:			
Gage:	.06-.60 oz Torque Watch	**Control:**	5042
Mfg:	Honeywell	**Model:**	.06-.60 oz Torque Watch
Location:		**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Cal-Tech Calibration, INC
Original Certificate (attached) # 1768

Reference HPI S/O # 13385

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
:

Last / Next Cal Dates: -->

Gage Status: PASS

Next Calibration Due: 12/20/2006

Certified By: Jorge Ashook Signature: Jorge A. Ashook

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 21C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994, ISO10012-1, and Houston Precision's Quality manual.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Gary Deterling Lab Manager.
*This Report shall not be reproduced except in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

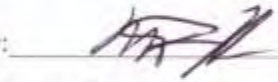
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 1768
Instrument Make: Honeywell
Model: .06-.60" oz Torque Watch
S/N: None
ID: 5042

Date: 12-20-05
Temp: 74 Deg f
Humidity: 40%
Rec. In Tol.
Due Date: 12-20-06

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: 

Accuracy: +\- 5% of full scale.

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1g-100g	822/265036-01	3-22-06

Inch Oz. Range	As Found	After Adjust	Final Reading
.06	.05	none	.05
.18	.17	none	.17
.36	.35	none	.35
.48	.47	none	.47
.60	.59	none	.59

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, Ak 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. MacKay

ORDER NUMBER: 176322

LOT NUMBER: 19680

MODEL NUMBER: 11-F5008

SERIAL NUMBER: 5080799319

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.33×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}.

Shipped to:
Hoefler Consulting Group
Anchorage, AK

Date of Test: October 20, 2005

In Charge of Test: R. T. Eppley

S.O. Number: 60557
Date: January 11, 2006

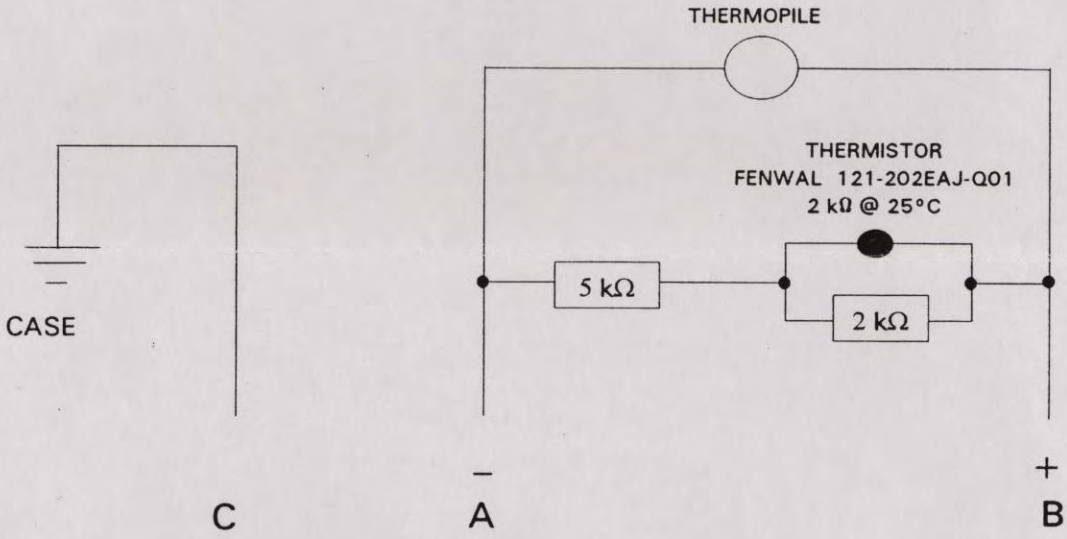
Reviewed by: George L. Eppley

Remarks:

PRECISION SPECTRAL PYRANOMETER
MODEL PSP

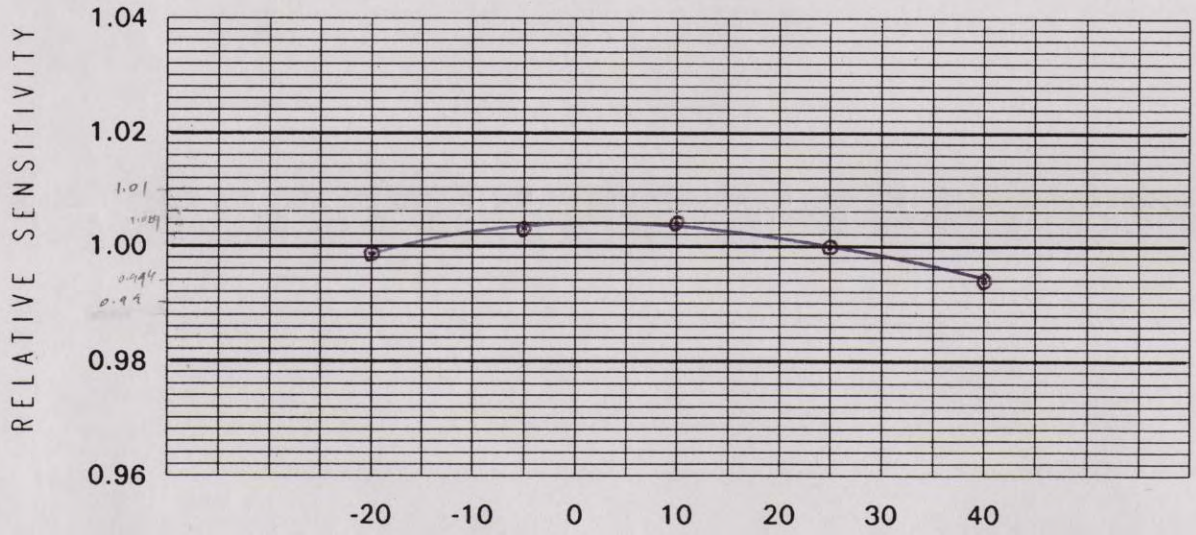
INSTRUMENT SERIAL NUMBER: 34377F3

INTERNAL WIRING



PIN CONNECTIONS ON PLUG

TEMPERATURE DEPENDENCE



EPLAB

TESTED BY: R. Eseman

DATE: Oct 18, 2005

Appendix D

Validated Continuous Data Summaries

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.9	2.0	1.9	2.8	3.0	2.7	2.1	3.2	4.6	6.1	5.7	6.7	5.3	3.8	3.1	2.6	1.6	2.1	2.2	2.4	1.8	2.0	3.0	3.7	6.7	1.6	3.2
2	3.8	2.8	2.0	4.1	5.4	2.3	2.0	3.0	4.5	3.5	2.7	2.7	2.1	3.9	4.1	4.0	4.8	4.1	3.3	3.9	9.2	13.9	10.7	7.2	13.9	2.0	4.6
3	9.4	7.2	9.2	10.0	10.1	4.5	3.9	4.0	5.9	2.8	2.7	3.8	2.9	3.1	3.6	5.1	5.6	5.7	5.4	3.9	3.3	3.1	3.2	4.4	10.1	2.7	5.1
4	3.5	1.6	1.0	0.8	1.3	1.0	0.7	1.8	1.2	0.9	1.3	2.0	2.4	4.2	3.2	1.7	1.7	1.9	2.1	1.7	1.8	2.1	2.3	2.2	4.2	0.7	1.9
5	0.8	1.4	1.7	1.5	1.8	1.5	1.1	1.4	2.3	2.8	2.1	1.1	1.2	4.0	4.7	5.0	4.2	5.3	6.3	5.5	4.9	4.4	4.0	3.1	6.3	0.8	3.0
6	1.7	1.1	2.4	3.2	3.4	5.5	4.7	2.6	2.2	1.7	1.2	1.0	2.1	1.4	2.8	2.5	1.7	1.3	0.7	1.1	1.6	2.7	1.3	0.8	5.5	0.7	2.1
7	1.0	1.1	1.5	1.4	0.8	1.4	1.7	1.8	1.6	2.4	1.3	1.2	1.2	2.0	4.2	3.8	4.1	3.1	2.5	4.2	6.3	5.9	4.8	10.5	10.5	0.8	2.9
8	8.7	4.3	6.4	3.5	2.9	4.0	7.1	4.2	3.8	1.9	2.6	3.1	3.5	4.7	4.5	4.4	4.1	4.2	4.8	4.5	4.4	4.9	3.6	4.0	8.7	1.9	4.3
9	3.0	3.5	3.2	2.6	3.4	3.6	3.2	3.1	2.0	2.2	2.8	1.2	1.1	1.1	1.1	0.8	2.5	2.6	1.6	1.1	1.1	1.5	1.5	1.8	3.6	0.8	2.1
10	1.3	1.1	0.9	1.2	0.8	1.2	1.0	1.0	0.8	1.2	0.9	0.8	1.0	1.3	1.1	1.3	1.7	1.7	1.3	1.2	0.8	0.8	0.5	0.5	1.7	0.5	1.1
11	0.4	0.4	0.5	0.8	0.9	1.2	0.9	0.7	0.6	1.0	0.7	0.8	0.6	0.5	0.7	0.5	1.2								1.2	0.4	0.7
12																											
13																											
14																											
15																											
16																											
17						5.5	5.9	5.5	6.1	6.0	5.7	6.4	6.9	5.4	5.7	5.7	6.9	7.2	6.8	6.6	5.1	5.4	5.2	4.3	7.2	4.3	5.9
18	5.3	8.0	6.9	7.2	7.9	11.4	11.2	9.9	10.0	7.2	6.3	7.2	9.7	10.4	10.3	11.0	8.1	7.0	6.6	9.3	10.2	8.1	7.2	7.0	11.4	5.3	8.5
19	7.4	10.5	9.4	7.9	7.3	6.5	8.8	9.4	8.3	7.0	7.4	7.0	6.2	6.9	7.1	6.2	5.7	5.7	7.4	10.0	10.4	9.5	8.1	7.2	10.5	5.7	7.8
20	7.8	7.3	7.3	7.8	6.7	6.2	6.6	6.9	6.2	5.8	6.6	5.8	5.7	6.2	5.9	6.6	6.9	5.0	5.5	5.4	6.1	6.1	5.5	5.9	7.8	5.0	6.3
21	5.4	6.8	7.9	8.6	9.0	10.1	10.8	11.5	11.3	11.5	11.7	12.1	13.3	14.7	15.5	15.8	16.9	18.6	19.6	19.4	17.6	16.1	15.5	16.9	19.6	5.4	13.2
22	18.9	19.9	18.8	21.0	23.8	23.7	23.0	21.4	20.5	20.3	18.3	16.0	16.5	15.7	15.0	16.5	15.8	15.6	17.5	18.8	20.1	17.6	16.4	21.3	23.8	15.0	18.9
23	21.0	20.3	21.1	19.9	19.6	18.9	17.6	13.3	14.8	12.6	19.9	16.5	14.1	13.4	14.9	15.4	11.6	15.1	15.2	15.5	14.0	12.8	14.1	14.0	21.1	11.6	16.1
24	14.0	14.1	13.7	12.2	12.0	13.2	13.2	12.0	13.6	15.4	15.4	15.8	15.8	14.9	12.4	13.8	14.0	13.1	12.1	13.3	10.1	12.5	11.3	7.6	15.8	7.6	13.1
25	7.2	7.6	6.0	6.7	6.9	7.0	5.5	5.4	6.3	6.3	5.9	6.8	7.2	5.9	5.7	6.3	6.2	7.2	7.2	8.0	6.8	6.5	9.6	11.2	11.2	5.4	6.9
26	9.6	10.9	10.1	9.6	6.6	7.5	7.2	7.6	6.0	4.7	4.6	5.2	5.0	5.1	4.7	3.8	3.4	4.5	5.2	5.1	6.4	7.7	6.6	7.9	10.9	3.4	6.5
27	9.3	9.7	9.1	10.9	11.1	12.5	12.7	13.7	13.7	14.6	17.1	18.4	18.9	20.0	20.1	21.5	19.9	20.1	20.6	19.7	18.4	20.2	20.7	22.1	22.1	9.1	16.5
28	26.8	23.5	23.4	20.3	22.3	21.9	17.5	18.4	17.6	11.8	11.5	11.3	9.2	10.8	10.9	9.4	8.8	6.1	4.7	5.4	4.4	5.6	6.1	4.9	26.8	4.4	13.0
29	5.2	6.9	7.0	7.5	7.5	7.3	7.1	6.2	6.5	5.2	6.9	7.0	5.3	5.5	4.8	7.3	7.3	7.9	8.0	6.7	6.6	6.7	6.4	6.0	8.0	4.8	6.6
30	7.1	6.7	7.1	6.7	4.8	6.4	6.4	4.1	5.3	5.0	5.0	4.2	4.4	5.4	4.9	4.7	4.8	3.5	2.5	2.3	2.8	2.9	1.4	0.9	7.1	0.9	4.6
31	1.1	2.2	2.7	3.3	2.9	3.4	3.8	3.3	3.0	3.5	4.6	4.4	4.7	5.3	6.0	4.7	5.3	5.6	7.2	8.7	8.4	7.9	6.5	4.7	8.7	1.1	4.7
Max.	26.8	23.5	23.4	21.0	23.8	23.7	23.0	21.4	20.5	20.3	19.9	18.4	18.9	20.0	20.1	21.5	19.9	20.1	20.6	19.7	20.1	20.2	20.7	22.1	26.8		
Min.	0.4	0.4	0.5	0.8	0.8	1.0	0.7	0.7	0.6	0.9	0.7	0.8	0.6	0.5	0.7	0.5	1.2	1.3	0.7	1.1	0.8	0.8	0.5	0.5		0.4	
Avg.	7.3	7.2	7.2	7.3	7.3	7.3	7.1	6.7	6.9	6.3	6.6	6.5	6.4	6.7	6.8	6.9	6.7	7.0	7.0	7.3	7.3	7.5	7.0	7.2			7.0

Total Hours in Month 744 **Hours Data Available** 612 **Data Recovery** 82.3%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.9	5.5	6.3	7.4	8.3	7.3	9.9	10.0	10.4	11.1	13.4	12.9	13.9	13.1	10.8	12.1	14.8	14.2	13.8	12.8	11.8	12.5	13.4	12.8	14.8	3.9	10.9
2	12.6	10.9	9.6	8.8	8.3	7.2	7.5	7.6	6.7	5.7	5.8	5.0	3.4	4.2	3.3	2.1	1.5	1.8	2.5	3.2	2.7	4.7	6.2	7.8	12.6	1.5	5.8
3	10.7	10.8	11.0	13.4	14.7	15.5	17.5	18.1	16.8	14.5	14.0	13.0	12.8	11.4	12.8	13.4	10.8	11.8	13.2	14.3	15.0	15.9	16.8	17.0	18.1	10.7	14.0
4	18.5	16.5	17.9	18.2	19.5	21.6	20.5	19.9	23.3	24.9	23.7	24.4	26.3	26.6	25.3	27.1	29.7	29.1	30.8	25.8	25.6	25.4	23.3	17.9	30.8	16.5	23.4
5	17.8	17.8	17.5	19.7	21.4	20.2	20.5	16.7	16.6	15.3	13.6	15.7	18.1	19.1	17.1	16.0	15.9	14.7	10.4	8.3	9.7	15.0	17.5	15.7	21.4	8.3	16.3
6	13.4	11.1	8.1	8.8	8.5	6.2	6.5	3.8	4.1	6.9	11.8	13.4	16.9	16.7	15.6	11.9	12.2	11.3	7.7	6.8	6.9	6.2	6.3	6.7	16.9	3.8	9.5
7	6.2	5.1	6.0	8.0	7.5	7.0	8.5	9.3	8.3	8.6	11.0	12.2	11.2	8.7	8.5	9.4	7.7	4.3	3.9	3.6	2.4	2.4	3.0	3.7	12.2	2.4	6.9
8	1.7	1.9	2.8	3.6	3.3	3.6	4.6	5.3	5.0	5.1	5.0	4.3	13.0	16.6	22.2	24.2	26.3	25.7	27.8	27.9	27.3	28.3	29.5	27.0	29.5	1.7	14.2
9	26.1	29.3	28.7	30.5	27.1	20.7	18.4	16.6	12.2	10.6	9.3	9.3	10.8	10.6	9.4	10.1	11.9	15.5	16.1	17.1	21.0	24.4	27.7	28.7	30.5	9.3	18.4
10	30.0	29.6	25.6	27.3	24.1	26.2	24.8	22.9	19.7	14.8	14.5	16.1	15.6	16.3	15.8	17.2	17.7	18.1	17.2	16.9	16.7	16.6	17.2	16.9	30.0	14.5	19.9
11	14.9	15.2	14.0	10.6	6.1	1.7	1.8	3.0	3.3	5.7	7.5	7.8	6.0	4.7	4.2	3.1	2.8	2.1	2.0	2.2	1.2	1.7	2.5	2.6	15.2	1.2	5.3
12																											
13												6.7	5.6	9.8	13.0	14.5	17.9	17.6	17.7	18.8	19.6	20.8	20.5	19.3	20.8	5.6	15.5
14	20.7	21.4	23.6	22.1	23.1	21.2	20.4	20.1	20.8	21.1	20.5	18.0	17.7	17.9	19.4	21.9	22.2	19.0	19.1	20.7	20.7	20.8	20.3	22.3	23.6	17.7	20.6
15	22.8	21.5	20.4	20.6	19.7	20.7	21.7	21.9	23.4	22.9	25.4	24.9	26.3	30.9	29.1	26.9	25.2	23.1	22.2	18.1	17.4	15.1	12.7	9.6	30.9	9.6	21.8
16	5.8	5.8	4.8	3.6	0.4																				5.8	0.4	4.1
17			5.1	5.4	5.2	11.4	14.5	16.0	20.7	20.3	19.3	18.8	20.3	20.2	22.0	22.6	22.7	19.6	19.2	20.2	20.1	18.9	16.9	15.5	22.7	5.1	17.0
18	12.3	12.7	13.0	11.2	10.8	11.5	14.6	16.2	18.3	20.4	21.1	19.8	23.1	24.6	21.5	19.0	17.6	14.4	11.8	13.0	12.2	12.6	15.2	14.8	24.6	10.8	15.9
19	10.9	7.9	7.1	6.7	7.9	7.4	6.8	9.8	7.6	4.7	6.0	6.8	3.9	7.0	8.3	7.2	7.6	8.0	6.1	6.7	6.2	7.6	8.4	6.7	10.9	3.9	7.2
20	7.4	5.2	5.9	5.1	4.5	3.2	3.6	3.3	3.1	3.4	3.4	2.7	4.7	5.1	6.2	8.1	6.3	6.9	7.5	8.6	11.1	11.4	12.1	11.8	12.1	2.7	6.3
21	11.8	11.0	13.6	13.3	10.9	8.3	7.0	6.9	5.8	3.0	2.1	2.0	5.4	11.5	7.2	9.8	6.8	5.0	9.1	10.3	6.7	5.6	7.6	8.6	13.6	2.0	7.9
22	4.6	3.8	4.6	6.9	10.9	11.5	10.8	11.0	12.3	8.6	6.6	6.9	7.0	7.7	6.9	8.0	9.5	8.6	7.1	6.3	7.5	6.3	5.0	4.9	12.3	3.8	7.6
23	5.9	7.3	6.8	6.9	5.6	3.8	8.6	8.1	7.1	6.2	4.8	7.5	5.5	5.6	8.6	9.5	9.3	8.6	8.6	8.3	6.9	7.5	10.0	10.6	10.6	3.8	7.4
24	8.6	6.3	6.2	6.5	6.1	7.1	7.1	7.1	3.5	3.1	4.1	3.3	2.3	1.7	1.3	1.0	1.4	2.2	2.1	1.8	1.9	2.6	3.2	4.0	8.6	1.0	3.9
25	4.2	3.3	4.5	5.8	7.4	5.8	5.1	4.8	3.1	2.9	1.1	10.6	13.1	11.2	12.6	14.2	11.7	10.5	7.3	6.6	8.4	10.4	9.5	10.2	14.2	1.1	7.7
26	10.6	9.8	9.0	8.6	7.2	5.4	5.8	6.6	5.8	3.5	6.4	8.0	6.7	6.7	3.0	1.6	2.8	4.8	6.8	7.2	6.0	5.2	5.6	8.0	10.6	1.6	6.3
27	7.9	6.1	6.2	10.3	13.3	18.1	18.2	16.9	17.1	18.6	18.5	19.1	20.2	17.4	18.1	19.9	21.2	19.1	18.5	20.2	20.5	22.2	20.2	20.0	22.2	6.1	17.0
28	19.9	19.0	19.1	18.2	18.8	20.4	17.8	15.2	12.8	16.0	18.3	18.4	17.1	16.5	16.2	19.1	18.5	18.7	16.7	15.9	14.3	9.4	9.1	9.8	20.4	9.1	16.5
Max.	**30.0**	**29.6**	**28.7**	**30.5**	**27.1**	**26.2**	**24.8**	**22.9**	**23.4**	**24.9**	**25.4**	**24.9**	**26.3**	**30.9**	**29.1**	**27.1**	**29.7**	**29.1**	**30.8**	**27.9**	**27.3**	**28.3**	**29.5**	**28.7**	**30.9**		
Min.	**1.7**	**1.9**	**2.8**	**3.6**	**0.4**	**1.7**	**1.8**	**3.0**	**3.1**	**2.9**	**1.1**	**2.0**	**2.3**	**1.7**	**1.3**	**1.0**	**1.4**	**1.8**	**2.0**	**1.8**	**1.2**	**1.7**	**2.5**	**2.6**		**0.4**	
Avg.	**12.4**	**11.8**	**11.4**	**11.8**	**11.6**	**11.7**	**12.1**	**11.9**	**11.5**	**11.1**	**11.5**	**11.8**	**12.6**	**13.2**	**13.0**	**13.5**	**13.5**	**12.9**	**12.5**	**12.4**	**12.3**	**12.7**	**13.1**	**12.8**			**12.3**

Total Hours in Month 672 **Hours Data Available** 616 **Data Recovery** 91.7%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.4	9.5	9.4	9.6	10.8	11.1	7.1	5.7	4.3	3.5	1.2	0.7	1.6	2.8	3.7	3.9	5.1	5.3	5.0	8.2	9.5	10.8	12.0	13.1	13.1	0.7	6.9
2	13.2	12.9	12.8	12.6	12.7	12.3	13.3	13.0	12.5	11.2	12.5	12.6	12.5	13.7	12.0	9.6	9.6	8.7	9.6	9.8	9.6	8.8	9.8	9.0	13.7	8.7	11.4
3	8.2	8.2	8.8	8.5	8.1	7.9	5.9	5.5	6.3	7.0	7.9	7.5	8.5	8.2	8.4	7.3	5.5	3.6	2.8	2.0	2.2	1.5	1.2	1.4	8.8	1.2	5.9
4	1.7	2.1	2.4	2.7	4.1	6.5	6.5	6.2	6.0	4.8	6.0	5.9	6.8	7.8	7.6	7.9	8.7	8.3	9.0	9.2	9.9	8.5	7.8	7.6	9.9	1.7	6.4
5	7.1	6.6	5.2	4.0	3.8	4.3	3.9	3.4	3.5	3.0	2.4	2.4	2.2	2.5	2.4	2.6	3.4	3.7	2.4	2.6	1.4	2.1	2.1	2.5	7.1	1.4	3.3
6	2.7	2.8	1.9	2.3	2.8	2.2	1.6	1.3	0.9	1.1	2.1	1.3	1.2	1.0	0.6	0.3	0.9	1.1	1.0	1.0	0.7	0.9	1.3	1.9	2.8	0.3	1.4
7	2.1	2.0	2.4	2.4	2.5	2.8	2.7	3.3	4.5	4.6	4.3	5.6	5.6	6.1	5.9	6.5	6.0	7.9	9.3	8.8	8.1	7.2	9.2	10.0	10.0	2.0	5.4
8	11.8	16.4	18.1	17.8	16.0	14.3	15.8	15.3	15.4	13.6	11.2	12.4	12.5	11.3	11.1	10.8	11.0	14.7	15.0	14.9	15.3	15.2	15.8	15.3	18.1	10.8	14.2
9	15.6	14.9	16.0	17.2	17.1	16.2	15.0	15.2	15.4	17.1	15.2	16.3	18.2	18.4	17.5	14.9	13.2	14.2	15.2	15.7	15.9	16.2	15.2	14.7	18.4	13.2	15.9
10	11.4	12.0	10.8	9.6	8.3	7.8	8.3	10.0	9.7	6.3	5.7	5.8	6.4	5.6	4.7	3.4	2.3	2.1	4.8	5.0	5.4	6.4	10.4	12.0	12.0	2.1	7.3
11	11.2	14.1	17.7	16.9	17.4	17.5	18.9	22.9	23.5	24.9	22.2	20.7	20.6	20.1	22.7	21.0	19.3	20.4	18.0	21.3	20.1	18.7	14.5	16.9	24.9	11.2	19.2
12	18.1	17.5	17.7	16.8	13.1	14.1	13.5	12.6	10.8	11.0	10.5	7.5	7.8	4.8	5.3	3.7	4.2	4.0	3.4	3.6	2.0	2.0	1.7	1.3	18.1	1.3	8.6
13	0.9	1.1	1.2	1.1	1.4	1.5	1.7	1.4	2.0	2.3	1.8	1.7	2.2	2.4	2.6	3.2	3.4	5.6	5.5	6.6	5.4	5.7	7.2	7.6	7.6	0.9	3.1
14	7.4	7.0	7.3	7.4	5.6	5.3	5.4	5.1	4.4	4.0	4.1	2.7	2.0	2.3	3.5	2.3	3.6	3.4	2.9	2.1	2.1	1.9	1.4	1.1	7.4	1.1	3.9
15	1.6	2.1	2.3	1.9	2.8	1.7	1.3	1.3	1.3	1.9	2.1	1.3	0.9	1.2	2.0	1.8	2.2	3.1	3.7	4.1	3.8	4.6	6.0	7.3	7.3	0.9	2.6
16	8.7	8.6	5.7	5.0	5.4	5.5	5.4	4.4	3.0	3.3	4.7	4.9	6.6	8.1	10.0	10.9	10.7	11.0	9.9	10.5	10.3	9.8	9.7	9.0	11.0	3.0	7.5
17	9.9	10.1	10.4	9.6	10.4	9.4	9.6	9.8	10.3	9.6	10.8	9.3	8.1	7.3	10.8	11.4	11.1	10.4	12.3	13.1	13.9	14.6	15.5	12.9	15.5	7.3	10.9
18	13.2	13.2	10.4	7.6	9.3	8.5	6.5	2.4	4.0	5.9	5.9	5.2	1.9	1.3	0.9	1.1	3.1	4.4	1.1	2.5	2.4	1.4	1.4	2.9	13.2	0.9	4.8
19	2.5	1.7	1.0	1.7	2.1	1.9	2.2	2.3	3.1	4.9	5.8	12.2	13.0	11.5	13.6	13.7	12.0	10.1	9.0	8.2	7.7	7.6	9.3	10.3	13.7	1.0	7.0
20	12.7	9.8	8.8	7.0	5.5	6.2	6.8	6.2	4.6	3.4	2.9	2.6	2.1	1.6	0.4			1.7	11.8	13.1	16.4	19.5	18.5	16.7	19.5	0.4	8.1
21	17.0	15.7	16.9	16.6	16.8	17.5	17.3	16.1	15.4	15.3	12.4	10.4	10.1	7.6	8.3	8.9	8.2	9.3	10.1	8.7	8.9	6.9	5.9	8.2	17.5	5.9	12.0
22	11.9	8.1	8.4	9.5	13.3	16.1	14.9	17.5	14.5	18.5	16.1	17.0	16.1	16.0	16.3	14.4	11.2	10.8	9.3	6.5	5.9	5.8	6.1	4.9	18.5	4.9	12.0
23	3.4	3.1	3.4	4.2	5.5	4.2	2.9	2.0	2.0	2.9	4.2	3.6	1.7	2.5	2.5	2.9	5.6	8.0	6.7	3.7	4.7	8.7	9.4	11.2	11.2	1.7	4.5
24	10.5	11.1	10.0	8.9	8.9	5.8	8.3	12.1	9.5	7.4	11.0	11.8	10.1	9.6	9.3	10.7	9.7	12.5	12.2	10.0	9.2	6.3	6.8	6.3	12.5	5.8	9.5
25	7.2	6.8	6.7	7.7	8.0	8.2	8.8	9.2	9.8	9.3	9.9	7.4	7.4	8.6	8.2	8.8	9.4	10.1	9.3	8.5	9.9	9.7	6.4	7.3	10.1	6.4	8.4
26	6.6	5.9	5.9	6.2	6.9	7.5	7.9	7.5	7.7	7.4	7.1	6.6	6.1	5.7	4.9	4.7	4.3	4.4	5.3	5.1	4.3	3.2	2.8	2.2	7.9	2.2	5.7
27	3.3	3.5	3.4	3.3	3.6	3.7	3.4	3.2	1.6	1.4	1.8	2.0	2.3	1.4	1.3	1.6	1.7	2.1	2.6	3.3	2.5	2.3	1.9	2.2	3.7	1.3	2.5
28	2.8	4.4	4.2	3.5	6.5	6.1	5.2	4.6	4.7	4.7	3.9	3.4	2.8	2.7	3.1	1.4	1.6	1.3	1.4	1.8	2.7	3.8	4.3	3.9	6.5	1.3	3.5
29	4.1	4.1	3.9	4.5	4.7	4.0	4.8	5.2	4.3	3.4	2.8	2.1	1.3	1.5	1.4	0.9	1.5	2.3	3.1	3.4	2.1	2.9	5.9	8.7	8.7	0.9	3.5
30	12.2	12.1	12.2	12.4	15.1	17.1	18.3	16.4	17.6	17.0	19.6	23.0	24.4	26.3	26.2	28.8	30.6	31.2	31.2	31.9	30.4	29.2	28.4	28.6	31.9	12.1	22.5
31	28.5	27.2	27.0	26.2	25.1	25.5	24.2	22.1	20.9	10.0	5.6	4.5	4.2	4.5	3.0	2.7	3.9	3.7	4.1	2.9	1.5	1.7	2.4	4.9	28.5	1.5	11.9
Max.	**28.5**	**27.2**	**27.0**	**26.2**	**25.1**	**25.5**	**24.2**	**22.9**	**23.5**	**24.9**	**22.2**	**23.0**	**24.4**	**26.3**	**26.2**	**28.8**	**30.6**	**31.2**	**31.2**	**31.9**	**30.4**	**29.2**	**28.4**	**28.6**	**31.9**		
Min.	**0.9**	**1.1**	**1.0**	**1.1**	**1.4**	**1.5**	**1.3**	**1.3**	**0.9**	**1.1**	**1.2**	**0.7**	**0.9**	**1.0**	**0.4**	**0.3**	**0.9**	**1.1**	**1.0**	**1.0**	**0.7**	**0.9**	**1.2**	**1.1**		**0.3**	
Avg.	**9.0**	**8.9**	**8.8**	**8.5**	**8.8**	**8.8**	**8.6**	**8.5**	**8.2**	**7.8**	**7.5**	**7.4**	**7.3**	**7.2**	**7.4**	**7.4**	**7.4**	**7.7**	**8.0**	**8.0**	**7.9**	**7.9**	**8.1**	**8.4**			**8.1**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	6.6	8.3	6.3	4.2	5.9	6.7	7.9	5.1	3.6	3.9	2.8	3.5	2.2											8.3	2.2	5.3
2																	1.4	2.2	4.6	4.5	6.3	5.6	9.0	10.0	10.0	1.4	5.4
3	9.0	9.4	10.5	11.1	10.0	11.0	7.2	7.2	13.7	19.8	20.0	20.0	18.7	17.5	17.5	16.2	16.3	16.7	14.6	12.5	11.5	12.8	13.4	14.6	20.0	7.2	13.8
4	14.5	17.0	16.5	13.8	12.9	10.4	9.1	9.3	7.0	4.1	9.5	7.9	8.4	7.0	4.4	1.5	2.0	5.0	4.8	4.6	4.9	5.9	6.6	8.3	17.0	1.5	8.1
5	7.2	7.5	9.8	11.9	11.3	11.2	10.2	10.5	10.9	14.8	14.4	11.9	11.6	13.9	14.0	14.2	15.3	17.0	18.8	17.3	12.8	12.5	12.2	13.2	18.8	7.2	12.7
6	17.5	13.5	11.1	11.4	10.4	9.4	9.6	8.9	7.3	7.5	7.9	5.5	4.6	3.5	3.7	3.0	2.6	2.4	2.2	2.7	2.2	1.2	2.3	2.2	17.5	1.2	6.4
7	2.5	2.0	2.3	3.8	6.0	4.4	6.0	6.1	3.1	5.1	5.0	5.9	5.9	7.7	8.7	10.2	10.9	11.5	10.3	13.0	14.1	16.6	18.1	16.7	18.1	2.0	8.2
8	19.3	21.7	20.9	19.2	17.9	17.1	15.3	15.5	14.9	16.2	17.7	14.7	10.8	11.1	11.0	9.5	9.0	8.9	9.2	7.5	7.6	7.6	8.7	7.4	21.7	7.4	13.3
9	7.8	6.8	6.7	7.6	7.4	7.6	6.9	7.2	6.8	6.3	6.9	7.4	7.5	7.6	7.0	6.6	4.8	4.7	5.0	4.3	2.9	5.5	6.5	5.8	7.8	2.9	6.4
10	2.2	2.8	3.2	4.1	5.3	7.3	9.4	10.3	10.9	10.3	10.5	10.9	8.4	8.9	8.3	9.4	9.5	8.3	6.5	6.1	3.5	1.3	2.6	5.5	10.9	1.3	6.9
11	5.3	2.0	1.7	1.5	2.6	3.7	6.1	6.7	7.1	6.8	6.9	5.9	6.9	7.2	10.3	13.1	14.4	13.6	11.8	10.5	11.0	10.9	10.0	9.3	14.4	1.5	7.7
12	8.8	8.3	7.0	6.9	6.6	5.4	5.2	6.1	7.6	8.8	9.3	9.9	11.0	11.6	9.8	8.2	8.2	6.8	6.0	5.5	5.5	4.9	4.3	2.4	11.6	2.4	7.2
13	2.5	1.9	0.4			2.4	6.1	7.0	8.2	9.1	9.4	10.4	12.2	16.3	18.7	18.9	16.9	15.3	16.5	15.1	14.8	13.4	11.0	10.9	18.9	0.4	10.8
14	12.8	14.8	13.8	13.2	16.4	15.9	14.7	17.1	16.2	18.2	19.3	19.6	18.6	18.0	15.8	20.2	18.4	18.0	15.5	13.3	15.8	13.0	11.2	10.7	20.2	10.7	15.8
15	11.2	9.6	12.1	14.4	13.4	12.2	14.3	11.8	14.7	15.8	16.1	18.1	15.5	16.7	14.0	13.0	15.9	16.1	8.8	6.3	6.9	4.2	2.1	2.6	18.1	2.1	11.9
16	6.7	7.4	9.0	11.4	11.5	13.1	17.9	17.5	21.0	22.5	23.0	21.8	23.2	22.9	21.1	20.9	22.7	23.2	22.5	16.1	11.3	9.1	10.4	12.0	23.2	6.7	16.6
17	11.1	11.7	14.2	15.0	14.4	12.3	9.1	8.3	8.5	7.2	9.9	7.8	11.8	9.6	8.5	6.6	7.3	7.7	5.6	4.4	3.2	1.3	2.1	4.4	15.0	1.3	8.4
18	5.2	4.9	2.8	3.9	2.6	2.6	1.8	1.4	2.0	1.0	1.0	1.0	1.5	1.3	1.4	1.1	1.5	1.5	1.7	2.1	2.1	1.2	1.9	2.0	5.2	1.0	2.1
19	1.9	2.2	1.7	2.2	1.5	2.1	2.5	2.4	3.8	3.5	1.6	1.1	1.7	5.2	4.1	3.8	3.0	2.8	4.8	5.3	4.5	3.8	3.8	3.8	5.3	1.1	3.0
20	3.3	3.6	2.3	1.7	1.8	2.2	1.6	1.9	2.4	3.0	3.3	5.0	7.9	9.8	14.4	14.9	13.7	14.5	15.3	15.4	16.8	16.0	14.8	15.9	16.8	1.6	8.4
21	16.9	17.0	17.5	15.1	13.3	14.1	15.1	16.3	12.3	14.9	17.5	14.2	13.7	13.4	11.7	13.3	11.3	6.2	5.3	4.2	3.5	6.8	7.0	7.3	17.5	3.5	12.0
22	4.6	2.6	1.7	0.4	0.7			0.6	0.6	0.8	0.8	0.7	1.1	0.8	0.8	0.7	2.1	1.6	1.3	1.0	1.5	1.5	2.6	2.7	4.6	0.4	1.4
23	3.6	3.8	4.0	3.9	3.0	3.8	3.7	3.6	4.0	4.3	4.8	4.8	4.8	3.9	2.2	1.6	1.5	2.0	3.6	3.6	5.5	8.1	8.2	7.3	8.2	1.5	4.1
24	6.9	6.4	6.6	8.1	8.3	10.6	10.7	10.6	11.2	11.6	12.0	11.6	11.2	11.6	11.5	9.2	11.0	10.5	10.1	11.6	11.0	11.6	10.5	8.7	12.0	6.4	10.1
25	6.2	4.2	3.5	2.8	2.8	2.6	2.7	2.3	2.0	2.0	2.3	3.3	4.3	4.4	3.4	3.4	4.4	8.5	9.3	9.6	10.0	10.4	11.0	10.0	11.0	2.0	5.2
26	9.1	9.1	7.5	7.3	7.9	9.6	7.0	7.9	5.3	5.7	6.0	5.1	3.9	2.8	3.0	2.5	2.9	3.2	3.1	4.1	6.1	5.3	5.6	5.9	9.6	2.5	5.7
27	8.1	4.5	5.9	4.6	5.0	5.1	2.0	2.2	2.3	2.6	3.9	4.8	5.7	6.6	7.3	8.2	8.0	9.2	8.8	6.8	6.2	6.3	8.2	10.3	10.3	2.0	5.9
28	10.3	9.7	8.7	7.3	7.3	7.0	6.4	5.2	4.7	4.1	1.5	2.6	3.1	2.6	2.4	3.0	2.5	2.1	1.7	0.6	1.3	0.9	1.0	1.0	10.3	0.6	4.0
29	1.6	2.5	3.2	3.7	5.0	5.7	4.4	4.0	4.9	6.7	9.6	10.5	10.6	9.6	8.0	7.4	8.9	8.6	7.6	6.5	6.3	6.5	6.0	5.6	10.6	1.6	6.4
30	4.3	4.3	4.1	3.9	3.2	2.1	1.4	1.9	2.5	2.5	1.9	2.4	2.6	2.9	3.1	4.1	6.0	7.2	9.6	11.3	10.6	10.3	10.1	10.5	11.3	1.4	5.1
Max.	**19.3**	**21.7**	**20.9**	**19.2**	**17.9**	**17.1**	**17.9**	**17.5**	**21.0**	**22.5**	**23.0**	**21.8**	**23.2**	**22.9**	**21.1**	**20.9**	**22.7**	**23.2**	**22.5**	**17.3**	**16.8**	**16.6**	**18.1**	**16.7**	**23.2**		
Min.	**1.6**	**1.9**	**0.4**	**0.4**	**0.7**	**2.1**	**1.4**	**0.6**	**0.6**	**0.8**	**0.8**	**0.7**	**1.1**	**0.8**	**0.8**	**0.7**	**1.4**	**1.5**	**1.3**	**0.6**	**1.3**	**0.9**	**1.0**	**1.0**		**0.4**	
Avg.	**7.8**	**7.5**	**7.5**	**7.7**	**7.6**	**7.7**	**7.6**	**7.5**	**7.6**	**8.2**	**8.8**	**8.5**	**8.6**	**8.8**	**8.8**	**8.7**	**8.7**	**8.8**	**8.4**	**7.8**	**7.6**	**7.4**	**7.6**	**7.8**			**8.1**

Total Hours in Month 720 **Hours Data Available** 690 **Data Recovery** 95.8%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.8	13.8	14.0	15.2	16.6	18.5	20.1	21.8	20.6	19.5	20.8	22.8	24.3	20.7	16.1	13.5	12.2	13.6	7.8	8.8	9.3	8.3	8.1	7.0	24.3	7.0	15.3
2	7.2	9.5	8.6	6.2	3.8	7.6	7.2	3.3	2.2	1.4	3.9	7.1	11.6	11.5	12.3	11.9	10.8	9.8	9.8	10.9	13.1	11.4	10.5	10.4	13.1	1.4	8.4
3	11.6	12.0	12.6	11.4	9.7	6.1	5.3	3.9	2.6	2.5	3.0	4.2	5.4	5.7	5.9	5.2	4.1	4.4	4.1	3.8	2.9	2.8	2.1	2.0	12.6	2.0	5.6
4	2.3	1.4	0.9	1.0	1.5	7.2	12.7	14.8	15.2	16.2	14.3	13.1	12.9	14.2	13.0	13.7	14.4	16.3	18.4	18.6	19.7	19.7	21.2	21.1	21.2	0.9	12.7
5	20.9	23.1	24.0	24.9	23.3	21.2	18.1	17.0	17.4	16.8	16.9	17.1	16.7	16.6	15.9	15.5	14.0	13.6	12.8	11.9	8.5	5.1	4.2	3.3	24.9	3.3	15.8
6	3.9	3.1	1.3	1.5	0.8	0.6	0.6	0.4	1.5	2.1	4.2	6.3	7.1	6.8	7.6	8.0	7.0	8.0	8.5	8.5	9.4	9.0	7.5	7.8	9.4	0.4	5.1
7	7.1	6.9	7.9	8.4	9.5	8.1	7.4	6.8	6.7	7.2	6.1	6.9	7.6	6.9	6.6	5.6	5.3	5.6	4.1	3.8	3.9	2.9	1.7	0.8	9.5	0.8	6.0
8	1.0	1.2	1.6	2.0	2.0	2.2	2.2	2.8	4.3	4.8	6.1	7.3	9.1	6.8	5.6	4.2	4.8	8.6	12.0	8.5	6.8	6.9	6.7	4.6	12.0	1.0	5.1
9	4.4	3.1	4.9	7.4	6.8	6.8	8.8	8.7	7.6	8.0	7.3	4.3	5.0	6.9	5.6	3.6	1.8	2.0	2.5	1.7	2.2	2.9	5.8	6.8	8.8	1.7	5.2
10	6.1	3.5	2.0	1.5	1.8	1.8	1.1	1.3	2.0	1.7	1.5	2.6	2.2	2.8	4.3	5.3	6.7	6.4	6.4	5.2	3.8	4.1	4.0	2.7	6.7	1.1	3.4
11	2.7	1.9	1.5	2.6	1.8	1.2	1.8	1.1	1.4	2.5	2.7	2.7	3.8	5.9	4.0	3.3	3.5	6.5	5.9	6.8	6.6	7.0	7.8	8.2	8.2	1.1	3.9
12	8.3	7.8	8.2	8.3	8.0	9.0	8.8	8.9	10.4	8.9	8.1	9.2	9.4	8.9	8.8	10.0	10.2	9.2	8.2	8.6	9.0	6.5	7.7	6.3	10.4	6.3	8.6
13	6.1	7.9	7.2	6.0	6.1	4.8	3.1	2.9	1.7	1.0	2.5	2.4	1.2	1.3	2.3	4.1	3.8	3.5	2.1	3.2	3.2	1.5	2.1	1.9	7.9	1.0	3.4
14	2.8	2.7	3.3	3.4	2.5	3.2	3.0	3.8	5.6	5.4	5.3	5.7	6.0	6.5	8.0	7.4	8.9	9.9	10.1	11.2	10.5	13.7	12.5	8.6	13.7	2.5	6.7
15	6.2	5.0	5.0	3.8	1.9	1.9	1.8	1.7	2.4	3.1	3.4	1.5	2.0	1.3	1.8	2.5	2.7	4.0	3.7	3.1	4.6	3.9	6.4	8.7	8.7	1.3	3.4
16	6.6	1.2	1.1	2.6	3.2	4.1	3.6	3.6	4.5	3.4	2.4	1.9	2.9	2.7	2.4	2.1	2.8	4.4	4.4	4.0	3.0	4.1	3.0	3.6	6.6	1.1	3.2
17	2.5	2.7	2.7	2.1	2.7	3.0	2.4	2.2	2.5	3.9	5.6	7.2	7.8	7.9	7.5	8.3	9.3	8.0	7.7	7.4	7.0	6.8	5.3	5.4	9.3	2.1	5.3
18	5.0	4.3	4.2	4.5	4.2	2.9	2.2	1.3	1.5	2.4	3.7	5.2	5.2	6.3	7.7	7.0	7.0	9.5	8.1	8.6	8.8	8.6	6.3	2.2	9.5	1.3	5.3
19	2.6	3.4	2.6	1.1	1.4	1.3	0.9	1.8	3.4	5.7	7.0	9.1	11.6	11.0	17.4	19.9	14.1	14.7	16.4	17.8	16.9	13.5	13.9	11.8	19.9	0.9	9.1
20	11.4	11.4	11.7	11.8	12.4	16.3	16.2	16.5	16.4	15.6	13.8	14.0	10.8	11.5	11.4	9.5	7.1	4.1	3.1	2.2	4.8	8.5	8.3	9.1	16.5	2.2	10.7
21	10.5	9.8	10.5	10.6	11.1	11.9	13.2	13.1	14.0	15.9	16.7	20.4	21.0	16.5	17.5	15.2	17.2	17.4	17.1	16.6	14.0	11.5	14.4	12.9	21.0	9.8	14.5
22	14.1	13.0	11.9	11.9	12.4	14.2	13.9	16.3	15.6	14.7	15.9	17.2	16.9	13.6	12.5	11.8	12.3	11.8	11.4	10.9	12.3	10.7	11.0	9.2	17.2	9.2	13.1
23	10.4	7.0	6.4	4.6	4.0	3.4	4.0	4.2	4.0	4.5	5.0	5.0	3.8	3.1	2.6	2.3	4.2	6.2	8.7	7.6	6.0	5.9	5.5	5.7	10.4	2.3	5.2
24	6.1	4.7	3.3	4.1	3.9	2.4	1.6	2.8	4.0	2.2	2.0	2.0	2.5	2.6	3.2	3.7	4.0	5.1	4.2	6.1	6.9	5.0	4.0	4.9	6.9	1.6	3.8
25	5.1	5.2	4.9	5.9	5.9	4.8	5.0	3.8	3.2	3.0	2.4	2.5	2.7	2.5	2.4	3.8	4.8	5.1	6.0	3.8	2.9	4.0	4.7	4.9	6.0	2.4	4.1
26	5.0	6.0	5.7	6.0	7.2	4.0	4.8	5.2	6.8	7.0	8.4	9.7	8.9	7.4	8.8	9.2	10.4	11.2	10.7	9.7	7.7	7.3	6.7	8.9	11.2	4.0	7.6
27	8.1	6.4	8.0	12.4	14.0	13.5	12.3	12.8	11.1	9.7	10.6	12.9	14.5	15.8	15.3	15.2	14.7	12.9	10.6	9.3	8.4	6.8	8.0	7.1	15.8	6.4	11.3
28	6.7	5.1	3.6	2.0	2.9	3.4	3.7	6.3	5.2	3.4	1.9	1.9	3.2	4.2	3.8	3.6	4.2	3.6	3.5	6.0	6.6	5.1	5.9	6.0	6.7	1.9	4.2
29	5.7	5.6	6.6	6.6	7.7	7.1	7.3	6.1	6.9	7.7	7.6	8.2	8.5	8.5	8.3	7.9	7.6	7.9	8.0	7.8	7.0	7.5	7.6	6.4	8.5	5.6	7.3
30	6.3	6.3	5.8	3.6	2.6	2.9	2.0	3.1	5.5	4.6	6.2	6.6	7.2	8.1	7.7	7.7	6.8	7.2	7.2	6.3	5.7	5.4	4.7	7.4	8.1	2.0	5.7
31	7.4	7.6	7.5	4.5	7.0	8.1	7.0	7.5	6.6	8.1	8.9	7.8	6.1	5.9	6.1	5.0	4.3	5.0	3.9	3.1	3.5	3.4	1.9	2.0	8.9	1.9	5.8
Max.	**20.9**	**23.1**	**24.0**	**24.9**	**23.3**	**21.2**	**20.1**	**21.8**	**20.6**	**19.5**	**20.8**	**22.8**	**24.3**	**20.7**	**17.5**	**19.9**	**17.2**	**17.4**	**18.4**	**18.6**	**19.7**	**19.7**	**21.2**	**21.1**	**24.9**		
Min.	**1.0**	**1.2**	**0.9**	**1.0**	**0.8**	**0.6**	**0.6**	**0.4**	**1.4**	**1.0**	**1.5**	**1.5**	**1.2**	**1.3**	**1.8**	**2.1**	**1.8**	**2.0**	**2.1**	**1.7**	**2.2**	**1.5**	**1.7**	**0.8**		**0.4**	
Avg.	**7.0**	**6.5**	**6.4**	**6.4**	**6.4**	**6.6**	**6.5**	**6.6**	**6.9**	**6.9**	**7.2**	**7.9**	**8.3**	**8.1**	**8.1**	**7.9**	**7.8**	**8.2**	**8.0**	**7.8**	**7.6**	**7.1**	**7.1**	**6.7**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.7	1.5	1.3	2.6	2.5	2.3	2.8	2.7	3.3	3.7	3.9	3.8	4.3	3.7	3.8	4.1	3.5	3.9	6.2	5.7	6.1	7.1	5.7	1.7	7.1	1.3	3.7
2	2.8	3.2	3.5	3.1	3.5	3.8	4.3	3.4	3.4	4.2	5.8	5.6	5.4	5.7	6.3	7.1	7.4	7.9	9.6	7.7	7.1	6.9	6.6	6.6	9.6	2.8	5.4
3	7.4	8.6	8.5	10.8	10.4	10.2	10.8	12.8	15.1	14.2	13.7	12.8	11.8	11.6	11.8	11.3	11.2	12.3	12.3	12.2	12.3	11.0	10.5	9.0	15.1	7.4	11.3
4	8.9	8.2	8.2	8.2	7.5	8.6	10.0	12.1	11.2	12.0	12.8	13.3	12.0	11.8	12.0	11.2	11.2	11.7	11.8	11.1	10.2	8.3	8.8	10.4	13.3	7.5	10.5
5	11.0	10.1	8.6	6.2	6.8	6.4	6.5	7.3	7.0	6.5	4.5	3.2	3.5	3.6	3.7	4.5	4.4	4.1	3.3	3.5	2.9	3.4	3.8	3.8	11.0	2.9	5.4
6	3.6	3.5	2.9	2.4	2.1	2.7	2.8	3.2	4.2	4.2	4.2	5.4	7.7	9.0	9.1	9.9	10.0	10.5	11.0	10.2	10.1	9.9	9.7	8.2	11.0	2.1	6.5
7	6.9	7.7	11.8	12.7	13.2	12.6	10.5	12.3	15.6	15.1	16.1	16.1	15.1	15.8	15.2	14.8	13.6	14.4	14.3	13.4	11.2	9.7	10.2	12.0	16.1	6.9	12.9
8	13.9	15.2	16.5	16.6	15.8	16.7	16.0	16.9	16.9	17.9	18.2	18.8	18.9	19.6	19.2	18.4	18.8	19.8	20.5	21.4	22.0	23.8	26.1	25.9	26.1	13.9	18.9
9	24.1	21.9	23.0	22.6	19.9	19.4	20.9	19.7	20.7	21.7	20.8	22.9	23.8	24.7	24.9	22.4	21.7	22.8	15.9	20.8	17.5	20.1	20.3	20.3	24.9	15.9	21.4
10	15.8	16.5	17.0	17.4	18.4	18.5	17.0	19.3	20.2	19.5	17.8	18.4	19.8	21.2	21.3	21.0	19.1	20.9	20.0	18.0	17.5	19.1	18.7	18.6	21.3	15.8	18.8
11	19.0	20.7	20.6	20.1	21.1	21.5	20.4	19.2	19.4	19.3	19.7	20.8	19.5	18.4	18.8	18.6	18.1	16.7	17.2	16.2	15.3	15.1	12.5	15.0	21.5	12.5	18.5
12	15.4	14.4	14.4	13.2	12.0	12.2	12.1	11.6	11.5	11.2	10.8	8.4	11.2	11.6	12.1	11.3	11.2	8.4	6.4	6.9	6.4	5.6	6.1	5.8	15.4	5.6	10.4
13	5.6	4.9	5.1	5.2	5.1	5.1	3.8	4.7	6.8	7.9	4.8	4.6	4.9	5.2	5.5	4.7	4.8	4.8	4.6	3.4	1.6	2.0	1.2	2.0	7.9	1.2	4.5
14	1.8	1.1	1.7	1.1	2.0	2.7	2.0	1.6	2.5	2.1	3.3	3.2	3.4	3.1	2.0	2.0	2.6	1.9	2.9	1.3	1.2	2.2	3.0	3.0	3.4	1.1	2.2
15	3.4	4.2	4.5	4.7	4.6	5.1	5.1	4.5	5.1	5.6	5.0	5.9	4.0	4.9	5.3	5.2	2.6	3.7	4.4	5.2	4.9	3.8	3.5	3.3	5.9	2.6	4.5
16	3.5	4.1	4.4	3.9	4.9	4.3	4.3	4.2	3.9	4.5	5.4	6.9	8.2	8.9	8.9	10.0	10.4	10.8	10.2	9.6	8.8	8.5	6.4	5.6	10.8	3.5	6.7
17	5.2	4.8	4.4	3.3	2.2	2.7	2.9	5.0	5.2	5.4	5.1	5.6	5.8	7.7	6.9	7.0	7.9	7.9	7.7	6.7	6.4	6.6	6.3	6.3	7.9	2.2	5.6
18	4.5	2.3	1.5	1.5	2.1	2.1	1.7	2.2	3.1	4.6	6.1	7.9	10.0	9.4	11.0	14.3	16.7	15.2	15.3	14.0	13.3	11.1	4.8	2.1	16.7	1.5	7.4
19	2.5	4.4	4.6	4.2	3.9	2.7	2.0	1.8	1.6	1.9	4.3	3.1	2.6	3.8	3.9	3.8	3.2	5.0	4.1	5.8	8.7	5.6	3.4	4.2	8.7	1.6	3.8
20	3.9	3.9	4.3	3.4	3.2	2.1	2.1	1.6	1.7	1.6	2.0	2.1	3.7	4.2	9.0	11.8	8.9	9.2	8.4	8.6	8.0	8.0	6.7	5.3	11.8	1.6	5.2
21	4.4	4.9	4.1	2.1	2.1	1.2	1.2	1.7	2.8	4.6	5.0	4.3	3.2	2.0	3.0	4.4	6.1	4.4	2.6	4.9	3.4	3.8	6.4	6.4	6.4	1.2	3.7
22	8.2	10.1	6.4	6.0	5.7	6.4	6.3	5.5	6.0	3.6	3.0	6.0	7.0	8.1	8.9	9.0	7.8	8.0	8.5	7.7	7.5	6.9	6.0	5.8	10.1	3.0	6.8
23	5.2	5.4	7.2	7.1	6.1	6.3	7.0	6.2	6.1	6.6	7.2	6.4	7.1	6.4	6.0	6.2	5.6	4.5	5.4	6.1	6.7	6.6	6.5	4.6	7.2	4.5	6.2
24	3.5	3.9	3.5	3.9	3.3	1.8	1.3	2.3	3.4	3.8	3.8	3.1	3.1	2.3	2.9	2.6	5.2	4.1	2.4	1.8	2.6	2.2	1.9	2.6	5.2	1.3	3.0
25	1.8	2.2	3.3	4.0	3.9	2.4	1.8	2.2	2.0	3.0	3.7	3.4	3.7	6.0	6.1	6.5	7.1	7.3	6.2	5.4	4.7	4.4	5.0	5.5	7.3	1.8	4.2
26	5.0	5.0	4.0	4.0	2.6	2.4	2.0	1.4	2.4	2.9	2.7	3.6	3.7	3.2	3.0	4.2	3.3	2.4	5.4	7.0	6.5	6.8	6.1	5.3	7.0	1.4	4.0
27	4.6	1.9	3.0	1.3	2.8	2.4	3.2	3.7	3.5	2.6	1.6	1.9	1.8	2.7	4.4	4.7	5.8	6.0	5.8	6.6	8.0	6.7	5.1	4.6	8.0	1.3	3.9
28	4.6	3.2	5.4	3.7	1.0	1.2	2.3	4.3	6.3	5.4	5.3	6.9	5.8	6.1	4.7	4.6	4.5	3.5	2.7	4.9	4.8	2.4	3.6	3.7	6.9	1.0	4.2
29	3.8	4.8	5.8	3.4	4.7	3.7	3.5	4.2	4.2	4.4	4.0	3.6	3.6	5.1	7.2	11.0	12.3	12.8	11.9	12.0	11.6	10.1	8.0	10.9	12.8	3.4	6.9
30	10.8	8.6	8.6	9.4	9.0	7.5	8.9	8.6	6.2	5.9	5.7	6.5	6.0	5.8	5.0	3.2	3.7	3.6	1.9	1.7	1.8	2.2	2.0	2.3	10.8	1.7	5.6
Max.	**24.1**	**21.9**	**23.0**	**22.6**	**21.1**	**21.5**	**20.9**	**19.7**	**20.7**	**21.7**	**20.8**	**22.9**	**23.8**	**24.7**	**24.9**	**22.4**	**21.7**	**22.8**	**20.5**	**21.4**	**22.0**	**23.8**	**26.1**	**25.9**	**26.1**		
Min.	**1.7**	**1.1**	**1.3**	**1.1**	**1.0**	**1.2**	**1.2**	**1.4**	**1.6**	**1.6**	**1.6**	**1.9**	**1.8**	**2.0**	**2.0**	**2.0**	**2.6**	**1.9**	**1.9**	**1.3**	**1.2**	**2.0**	**1.2**	**1.7**		**1.0**	
Avg.	**7.1**	**7.0**	**7.3**	**6.9**	**6.7**	**6.6**	**6.5**	**6.9**	**7.4**	**7.5**	**7.5**	**7.8**	**8.0**	**8.4**	**8.7**	**9.0**	**8.9**	**8.9**	**8.6**	**8.7**	**8.3**	**8.0**	**7.5**	**7.4**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	1.3	2.1	3.2	2.0	1.6	1.2	1.5	1.5	1.1	1.3	1.6	1.8	3.0	2.8	3.0	3.9	4.2	5.2	5.5	5.6	5.6	5.4	3.5	5.6	1.1	2.9
2	1.8	2.5	3.6	3.1	2.8	3.6	3.8	3.8	4.7	5.3	5.3	5.3	5.5	6.4	6.2	6.0	8.0	9.4	9.4	8.6	7.9	7.6	8.8	8.9	9.4	1.8	5.8
3	10.5	9.9	8.2	6.3	5.8	5.6	5.1	4.2	6.1	6.3	4.8	4.5	3.5	3.3	3.3	2.8	3.5	5.3	5.3	4.7	4.6	3.6	1.6	1.9	10.5	1.6	5.0
4	2.0	1.3	1.2	1.7	2.0	1.7	1.1	1.1	1.7	1.8	2.0	2.6	3.1	3.5	3.1	4.3	5.4	6.1	6.1	5.5	6.2	4.6	4.1	2.1	6.2	1.1	3.1
5	2.5	1.5	1.6	2.2	2.4	2.5	2.7	2.1	2.0	2.5	2.3	2.3	1.7	2.4	3.4	5.5	4.6	3.9	1.9	1.7	2.1	2.0	1.6	1.8	5.5	1.5	2.5
6	1.0	2.3	2.2	1.8	1.8	1.0	1.7	1.4	2.6	2.9	2.7	2.0	2.8	5.5	6.5	6.6	5.0	5.2	2.1	2.3	3.1	2.5	3.9	3.8	6.6	1.0	3.0
7	3.8	3.8	4.2	4.9	5.8	4.1	4.1	5.4	6.6	7.6	7.6	6.7	6.9	7.6	7.5	8.0	8.5	7.0	4.5	4.5	6.2	6.1	4.8	6.7	8.5	3.8	6.0
8	7.2	6.5	3.7	6.4	4.1	4.2	5.2	5.0	5.5	4.5	2.3	1.9	2.4	2.4	1.6	1.4	2.2	3.0	3.1	3.3	2.4	3.7	4.0	2.1	7.2	1.4	3.7
9	1.5	2.3	3.1	3.4	3.9	3.7	3.8	3.3	2.6	1.7	2.6	3.8	5.4	5.5	7.2	8.0	8.1	8.5	9.5	9.8	9.5	8.6	11.3	12.5	12.5	1.5	5.8
10	13.8	15.0	15.8	13.3	13.2	13.8	13.3	12.2	14.1	15.3	17.5	17.5	13.2	13.8	13.3	12.2	14.1	15.3	17.5	17.5	16.0	15.1			17.5	12.2	14.7
11		16.2	15.9	14.6	13.6	12.8	8.8	8.2	8.8		6.3	5.6	7.4	7.1	5.5	4.5	5.4	4.7	5.2	3.4	4.1	5.2	5.4	6.2	16.2	3.4	8.0
12	5.5	6.2	5.4	4.1	4.3	4.2	2.5	2.6	1.5	2.9	2.2	1.2	1.4	1.9	2.1	3.0	3.3	4.0	3.2	3.6	3.8	4.4	4.6	4.2	6.2	1.2	3.4
13	3.4	4.6	7.9	9.3	6.6	6.1	5.7	3.6	4.6	4.8	4.8	4.6	4.4	4.0	3.2	1.9	4.3	6.3	5.9	5.1	6.1	6.3	7.3	6.6	9.3	1.9	5.3
14	6.7	6.5	8.0	9.1	9.9	9.6	8.8	8.6	12.2	11.9	9.2	9.6	8.8	7.8	8.2	8.5	6.9	6.5	6.1	6.9	7.1	6.5	6.2	5.7	12.2	5.7	8.1
15	6.6	7.5	6.5	6.8	6.5	7.3	7.8	6.5	6.6	6.0	5.1	4.8	5.4	4.5	3.9	3.4	5.5	4.7	3.9	5.0	5.1	5.3	5.8	5.0	7.8	3.4	5.7
16	4.5	5.3	5.9	5.3	4.9	5.5	3.7	3.2	4.6	5.9	5.7	6.0	6.5	7.8	9.9	11.1	11.0	12.2	13.9	13.3	13.5	13.5	14.3	15.1	15.1	3.2	8.4
17	15.6	14.6	12.4	11.1	8.5	8.6	6.9	7.4	7.5	8.8	8.8	10.6	11.1	12.0	13.1	12.8	13.8	13.8	15.3	16.7	16.8	15.5	16.0	15.0	16.8	6.9	12.2
18	15.3	15.4	14.5	13.9	14.5	11.4	12.5	13.0	18.3	18.7	17.8	18.0	14.1	12.3	12.9	12.7	14.8	14.7	16.4	17.1	16.4	15.7	17.1	14.3	18.7	11.4	15.1
19	15.3	14.7	14.4	14.6	13.9	14.3	13.0	12.1	11.0	13.0	10.8	10.5	8.0	6.8	3.9	3.5	3.8	3.0	3.8	5.4	6.9	6.4	5.4	5.4	15.3	3.0	9.2
20	5.2	4.9	5.0	5.3	4.5	3.5	2.6	1.7	1.5	2.6	3.9	3.6	2.9	3.8	4.8	4.7	5.0	5.4	5.7	5.0	7.0	7.6	7.1	6.2	7.6	1.5	4.6
21	4.9	5.8	5.1	5.0	5.7	5.6	5.1	6.0	6.3	4.2	2.9	2.5	2.7	0.8	0.9	0.9	2.1	2.0	2.6	2.9	2.8	2.8	2.6	6.3	6.3	0.8	3.7
22	7.6	7.2	7.0	7.2	6.7	4.6	3.0	3.3	3.2	2.8	1.9	1.1	1.2	2.5	2.1	2.0	1.9	3.2	4.1	5.0	4.0	3.7	5.8	6.0	7.6	1.1	4.0
23	6.3	5.9	4.9	5.1	6.6	8.2	7.4	6.4	6.9	9.2	9.7	7.7	7.7	9.4	9.6	9.9	6.7	6.1	3.6	2.7	2.1	1.5	5.0	3.6	9.9	1.5	6.3
24	3.3	3.4	3.8	3.5	2.2	2.4	1.8	2.0	3.1	1.5	3.6	3.5	6.1	6.0	5.5	5.3	5.0	4.7	3.0	1.8	2.6	3.7	5.2	6.0	6.1	1.5	3.7
25	5.7	6.1	5.5	5.6	5.4	8.8	9.3	8.4	7.2	9.0	10.5	10.3	9.0	4.4	3.7	2.7	3.9	5.5	6.3	7.0	7.3	7.1	6.3	6.3	10.5	2.7	6.7
26	6.3	5.7	5.1	4.6	3.2	2.8	3.1	3.1	3.3	2.4	2.6	2.4	2.7	3.1	1.9	1.3	1.6	1.5	4.5	5.0	5.0	5.4	5.8	6.2	6.3	1.3	3.7
27	7.4	8.2	9.0	8.7	7.1	6.0	5.8	6.0	6.7	6.9	6.4	5.3	4.3	3.6	1.8	1.5	1.3	1.3	2.1	1.4	2.6	2.7	2.5	2.4	9.0	1.3	4.6
28	2.7	3.0	3.0	2.5	2.2	2.1	1.8	1.4	0.9	1.6	1.5	1.7	1.4	1.3	0.9	1.7	2.4	4.4	4.4	4.8	5.4	6.8	8.7	9.4	9.4	0.9	3.2
29	7.4	7.2	8.9	10.8	9.7	11.7	8.3	9.4	11.6	10.5	10.8	12.7	14.8	14.0	13.4	12.2	9.8	8.4	9.4	7.0	6.7	8.8	9.7	8.4	14.8	6.7	10.1
30	10.0	11.5	11.6	12.2	10.6	11.0	9.2	7.8	6.7	6.7	6.7	6.2	7.4	5.5	3.5	1.7	1.5	1.6	2.4	3.7	4.9	4.7	6.0	7.4	12.2	1.5	6.7
31	9.7	10.8	12.9	10.4	13.1	12.4	12.0	7.7	6.8	7.3	5.8	6.5	5.8	4.6	5.2	4.0	4.0	5.1	6.2	5.7	5.3	5.5	6.3	7.5	13.1	4.0	7.5
Max.	**15.6**	**16.2**	**15.9**	**14.6**	**14.5**	**14.3**	**13.3**	**13.0**	**18.3**	**18.7**	**17.8**	**18.0**	**14.8**	**14.0**	**13.4**	**12.8**	**14.8**	**15.3**	**17.5**	**17.5**	**16.8**	**15.7**	**17.1**	**15.1**	**18.7**		
Min.	**1.0**	**1.3**	**1.2**	**1.7**	**1.8**	**1.0**	**1.1**	**1.1**	**0.9**	**1.1**	**1.3**	**1.1**	**1.2**	**0.8**	**0.9**	**0.9**	**1.3**	**1.3**	**1.9**	**1.4**	**2.1**	**1.5**	**1.6**	**1.8**		**0.8**	
Avg.	**6.5**	**7.0**	**7.0**	**7.0**	**6.6**	**6.5**	**5.8**	**5.4**	**6.0**	**6.2**	**6.0**	**5.9**	**5.8**	**5.7**	**5.5**	**5.4**	**5.7**	**6.0**	**6.2**	**6.2**	**6.4**	**6.4**	**6.6**	**6.5**			**6.2**

Total Hours in Month 744 **Hours Data Available** 740 **Data Recovery** 99.5%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.6	5.0	4.8	5.5	5.9	5.3	3.3	3.0	3.0	4.2	4.4	5.3	5.7	5.7	6.8	6.9	6.9	6.8	6.7	7.4	7.9	7.4	8.2	7.7	8.2	3.0	5.7
2	6.5	6.2	7.2	7.4	6.6	5.8	5.2	4.2	5.0	6.0	6.2	5.7	5.1	5.1	5.8	5.3	9.4	10.5	11.4	12.4	12.4	11.7	11.8	11.8	12.4	4.2	7.7
3	12.1	15.3	16.2	17.4	16.0	15.2	12.0	9.6	5.9	5.5	6.0	6.2	7.3	8.4	8.4	9.2	10.0	8.5	5.9	5.6	5.1	6.4	6.2	6.1	17.4	5.1	9.3
4	6.2	5.2	2.8	3.1	2.7	3.9	4.7	4.7	4.1	3.8	3.7	3.7	2.8	2.1	2.5	1.9	0.9	1.4	1.4	1.1	1.2	0.8	1.0	2.0	6.2	0.8	2.8
5	1.3	1.0	0.6	1.2	2.3	3.0	3.9	4.3	4.4	4.6	4.8	5.4	6.5	6.2	5.9	6.4	5.0	5.6	4.5	3.3	4.3	4.1	4.1	3.2	6.5	0.6	4.0
6	3.5	4.1	4.2	6.0	5.6	6.1	7.4	9.3	9.7	8.5	6.6	5.9	5.5	6.5	6.5	6.9	6.6	7.1	6.9	5.3	4.1	4.8	4.5	5.1	9.7	3.5	6.1
7	5.1	5.3	4.2	4.1	3.9	3.8	3.0	3.4	2.4	2.3	3.4	3.8	4.7	6.0	7.9	7.9	8.4	8.2	7.7	4.0	2.5	1.5	1.8	1.1	8.4	1.1	4.4
8	1.1	2.1	1.3	1.2	1.9	1.7	1.1	2.4	3.4	4.0	4.4	4.2	3.9	3.0	3.3	2.9	2.8	2.9	4.8	3.5	2.5	2.1	1.1	1.2	4.8	1.1	2.6
9	0.8	1.1	1.2	1.6	1.1	1.5	2.5	2.8	3.5	3.4	2.7	2.9	3.8	4.2	3.3	4.9	5.4	5.1	5.6	5.3	5.8	6.3	7.4	6.8	7.4	0.8	3.7
10	6.2	6.0	7.0	6.9	6.3	7.8	8.3	7.9	8.0	6.0	6.0	6.9	7.6	9.6	11.6	12.9	15.2	15.1	14.6	14.8	16.4	17.5	15.8	14.7	17.5	6.0	10.4
11	13.4	10.5	9.1	8.8	8.2	9.8	7.5	7.6	11.1	10.4	10.2	8.7	7.3	6.4	5.0	4.8	6.0	4.6	4.7	4.2	4.0	3.6	4.2	5.5	13.4	3.6	7.3
12	5.2	6.6	6.5	7.6	8.0	7.5	7.6	8.1	9.3	9.8	9.5	10.7	9.8	7.6	7.7	7.9	8.9	7.9	6.9	6.9	6.4	5.0	5.5	4.7	10.7	4.7	7.6
13	3.8	4.9	1.9	3.1	3.9	5.0	3.9	3.6	4.9	5.7	6.9	5.7	5.7	5.6	5.2	5.9	4.7	7.5	6.1	8.0	6.1	6.1	6.1	6.6	8.0	1.9	5.3
14	5.0	4.1	5.6	5.1	3.0	4.0	4.3	5.2	6.6	7.2	5.2	8.2	10.8	14.2	14.3	12.2	9.7	6.6	4.3	7.7	10.0	9.4	8.6	8.2	14.3	3.0	7.5
15	7.3	7.8	9.1	9.5	7.4	6.7	6.1	7.8	7.1	7.3	7.6	6.3	6.1	6.3	5.7	5.7	5.4	4.6	4.5	4.1	3.2	3.4	2.9	1.9	9.5	1.9	6.0
16	0.9	0.6	1.2	1.7	2.0	3.0	2.9	2.5	3.1	3.0	2.4	2.5	3.3	3.0	2.0	2.0	2.3	4.3	1.9	1.5	1.4	1.3	0.9	0.5	4.3	0.5	2.1
17	0.9	1.1	1.2	1.1	1.2	0.9	0.9	0.9	1.7	2.7	2.6	3.2	4.6	6.8	7.0	6.2	5.4	7.2	8.4	8.6	11.1	12.3	13.6	12.3	13.6	0.9	5.1
18	13.0	11.9	18.3	16.0	16.7	18.2	18.7	17.9	19.2	17.3	17.1	15.9	16.1	15.7	13.4	12.2	11.0	9.6	7.8	6.9	6.5	5.3	6.4	5.3	19.2	5.3	13.2
19	4.4	5.1	6.3	6.2	6.1	4.3	4.0	3.0	1.9	2.8	3.3	5.5	8.0	9.3	8.0	9.0	9.6	10.3	9.2	7.7	4.6	3.0	4.0	5.5	10.3	1.9	5.9
20	4.3	5.9	6.6	6.0	3.9	2.7	3.6	4.4	5.6	4.8	4.5	3.3	5.7	7.5	7.7	7.3	7.6	9.0	9.4	8.2	6.4	4.4	3.3	3.0	9.4	2.7	5.6
21	3.5	3.7	3.6	3.6	3.7	3.3	3.3	2.7	2.2	1.1	1.9	2.7	2.8	3.7	4.2	4.2	5.4	5.5	6.1	7.9	9.1	11.0	10.6	10.5	11.0	1.1	4.8
22	9.4	10.7	9.8	10.3	11.7	13.8	13.1	12.6	11.9	11.2	10.5	8.9	8.8	7.2	9.1	9.1	10.1	10.2	8.8	6.2	6.1	4.5	3.3	2.3	13.8	2.3	9.2
23	2.2	1.5	1.0	1.4	1.5	2.0	0.9	1.1	1.2	2.0	1.6	1.7	3.2	2.7	4.5	3.5	2.7	3.2	3.3	4.9	5.7	5.2	5.8	7.2	7.2	0.9	2.9
24	6.9	8.7	11.0	11.1	8.1	5.1	4.8	5.6	5.0	3.5	6.7	6.6	6.6	6.1	5.7	6.7	7.8	8.5	7.9	5.2	6.2	6.2	7.3	8.7	11.1	3.5	6.9
25	9.2	8.4	8.3	7.8	8.5	5.6	4.1	4.5	3.2	2.7	3.2	4.0	4.4	5.3	4.2	4.6	4.0	3.7	3.3	4.1	4.2	3.7	2.7	3.1	9.2	2.7	4.9
26	3.6	2.9	1.9	2.2	4.5	5.2	4.4	2.7	1.9	3.5	5.7	6.5	5.2	3.5	3.8	3.2	3.8	3.1	2.8	2.0	2.7	2.3	2.7	2.9	6.5	1.9	3.5
27	2.7	2.5	2.7	1.8	2.3	2.1	1.1	1.2	2.1	3.2	3.5	2.9	4.3	4.6	5.2	6.2	7.4	5.7	5.7	4.4	4.2	6.4	6.3	5.3	7.4	1.1	3.9
28	4.2	3.4	4.1	2.5	0.9	0.8	1.2	1.4	2.7	4.3	4.9	3.7	3.7	3.4	5.4	5.6	5.4	5.5	4.4	4.1	3.3	3.6	3.2	4.2	5.6	0.8	3.6
29	3.3	3.5	2.9	3.0	2.6	3.4	3.4	2.7	3.4	3.4	3.3	2.9	3.3	2.4	3.1	2.8	2.8	3.8	5.3	5.0	6.0	4.6	5.3	5.1	6.0	2.4	3.6
30	4.6	7.5	9.3	11.5	13.2	15.3	14.5	13.3	9.2	7.3	7.6	7.0	4.8	4.3	5.9	6.0	5.8	5.7	7.0	6.1	5.2	5.2	5.4	6.2	15.3	4.3	7.8
31	3.7	2.3	4.2	4.4	4.4	4.2	3.6	5.2	6.7	8.1	7.8	8.1	10.0	10.6	12.2	11.4	12.0	11.4	11.2	10.5	6.2	7.3	7.3	7.2	12.2	2.3	7.5
Max.	**13.4**	**15.3**	**18.3**	**17.4**	**16.7**	**18.2**	**18.7**	**17.9**	**19.2**	**17.3**	**17.1**	**15.9**	**16.1**	**15.7**	**14.3**	**12.9**	**15.2**	**15.1**	**14.6**	**14.8**	**16.4**	**17.5**	**15.8**	**14.7**	**19.2**		
Min.	**0.8**	**0.6**	**0.6**	**1.1**	**0.9**	**0.8**	**0.9**	**0.9**	**1.2**	**1.1**	**1.6**	**1.7**	**2.8**	**2.1**	**2.0**	**1.9**	**0.9**	**1.4**	**1.4**	**1.1**	**1.2**	**0.8**	**0.9**	**0.5**		**0.5**	
Avg.	**5.1**	**5.3**	**5.6**	**5.8**	**5.6**	**5.7**	**5.3**	**5.3**	**5.5**	**5.5**	**5.6**	**5.7**	**6.0**	**6.2**	**6.5**	**6.5**	**6.7**	**6.7**	**6.4**	**6.0**	**5.8**	**5.7**	**5.7**	**5.7**			**5.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.8	5.8	4.6	4.1	3.4	3.9	4.5	4.9	6.3	7.5	6.7	5.1	5.5	5.2	5.2	7.9	9.4	9.5	9.0	8.2	7.9	7.6	7.3	6.2	9.5	3.4	6.3
2	7.5	8.0	8.2	5.9	5.1	4.9	5.3	5.2	5.3	6.0	8.3	8.4	6.7	5.9	6.8	7.0	7.1	6.7	4.0	6.3	3.4	2.1	2.0	1.2	8.4	1.2	5.7
3	1.8	2.3	1.7	1.5	1.9	2.3	3.0	3.0	3.0	2.5	2.2	2.0	1.7	1.9	2.7	2.4	2.6	2.6	1.1	0.8	0.8	1.0	1.9	1.8	3.0	0.8	2.0
4	1.8	0.9	2.0	3.6	3.1	2.6	2.9	3.2	3.2	2.8	3.6	3.6	2.3	1.7	1.7	2.0	7.0	3.8	2.3	2.7	5.4	4.6	3.6	3.8	7.0	0.9	3.1
5	4.2	4.4	4.0	4.0	4.2	3.5	3.6	4.9	4.6	6.0	6.3	7.1	8.9	9.6	9.3	9.9	10.1	8.8	7.6	7.1	5.3	3.6	3.2	1.7	10.1	1.7	5.9
6	1.8	2.1	3.2	4.4	5.2	5.2	5.3	5.4	5.6	5.9	6.4	6.6	7.8	7.5	6.8	6.5	5.5	5.8	6.0	5.2	6.8	7.6	9.9	9.5	9.9	1.8	5.9
7	9.3	4.3	3.4	3.0	3.5	4.1	5.2	4.7	8.8	12.1	16.7	18.8	20.2	22.6	24.6	24.4	22.7	23.4	22.4	24.5	23.8	23.0	23.7	22.7	24.6	3.0	15.5
8	22.3	23.0	22.9	23.1	22.1	22.8	21.0	20.3	19.2	16.7	16.9	15.6	14.4	14.1	14.4	12.8	11.8	12.1	11.3	10.6	11.1	11.0	9.8	8.4	23.1	8.4	16.2
9	7.9	7.5	6.9	4.2	2.1	2.6	3.3	1.9	2.9	5.3	5.1	6.6	5.9	5.2	5.8	5.7	6.9	6.9	6.3	6.8	5.5	4.5	4.9	4.8	7.9	1.9	5.2
10	3.3	3.5	2.2	2.0	2.4	2.9	1.3	0.9	1.8	2.3	2.4	2.3	2.3	3.3	2.8	2.6	4.7	4.5	2.2	1.2	2.1	2.2	2.3	1.0	4.7	0.9	2.4
11	1.3	1.8	1.4	1.4	0.8	2.9	3.3	3.8	3.4	2.3	2.1	2.8	3.9	3.4	3.1	2.8	3.6	3.6	3.8	5.1	3.9	2.2	2.4	3.7	5.1	0.8	2.9
12	4.1	3.7	4.1	4.5	4.0	3.1	3.5	2.8	2.3	2.5	4.1	4.2	3.2	3.2	3.2	4.0	4.0	4.4	4.1	4.3	3.4	3.0	3.3	3.1	4.5	2.3	3.6
13	3.6	3.7	3.8	3.1	2.6	2.2	1.3	2.1	2.7	3.8	5.0	8.8	9.9	11.4	13.3	13.5	14.1	16.1	14.8	17.9	22.4	24.1	23.3	21.4	24.1	1.3	10.2
14	24.7	23.4	23.9	23.2	23.3	22.7	21.6	24.3	23.3	21.2	19.6	19.4	19.7	20.9	22.5	22.9	24.0	22.7	24.3	22.5	21.6	20.3	18.2	19.4	24.7	18.2	22.1
15	19.4	19.0	19.0	19.5	19.6	19.5	16.6	15.5	18.6	21.9	19.5	19.2	21.0	20.9	21.5	19.5	19.5	19.6	19.2	18.1	17.3	17.4	14.3	16.0	21.9	14.3	18.8
16	15.8	16.1	14.4	12.8	11.9	10.9	10.9	11.0	11.3	9.5	12.0	11.4	10.7	10.1	10.2	8.3	7.2	7.7	7.4	7.3	5.8	6.5	6.1	5.3	16.1	5.3	10.0
17	4.2	5.5	6.0	6.4	9.5	7.0	7.2	6.3	6.1	5.3	6.2	6.6	6.3	6.6	6.3	5.1	5.2	4.6	4.2	4.2	4.3	5.0	5.0	4.5	9.5	4.2	5.7
18	3.9	3.7	3.6	3.9	3.1	3.7	5.4	11.7	13.1	14.4	14.2	15.3	16.4	16.1	16.0	18.1	19.2	20.0	22.3	21.1	22.5	22.3	22.6	19.0	22.6	3.1	13.8
19	18.8	18.5	8.1	6.5	4.6	3.8	2.5	4.6	4.8	4.9	3.9	1.8	2.4	3.8	1.2	1.7	1.3	1.4	2.7	2.6	1.0	1.2	3.2	3.2	18.8	1.0	4.5
20	2.0	1.9	1.9	2.8	3.5	3.3	3.9	4.4	4.2	6.3	6.0	5.4	5.0	4.2	5.2	3.3	4.0	4.7	6.0	7.5	7.2	6.9	5.0	3.2	7.5	1.9	4.5
21	1.6	1.1	1.2	1.5	2.1	3.1	5.0	3.5	5.7	8.9	9.1	7.5	7.5	6.0	3.9	3.5	5.9	7.7	10.0	7.8	7.6	6.8	6.6	5.8	10.0	1.1	5.4
22	5.5	5.5	6.6	6.5	8.0	8.6	11.0	9.1	8.6	9.6	7.8	5.4	6.5	7.4	6.6	6.5	6.2	4.5	6.2	8.0	8.8	8.6	8.2	8.2	11.0	4.5	7.4
23	7.1	5.7	5.0	5.0	5.5	4.4	4.2	3.9	3.9	4.3	4.1	6.2	7.2	6.3	6.2	6.4	5.0	4.1	3.5	2.7	3.7	3.8	3.6	3.6	7.2	2.7	4.8
24	2.2	3.0	2.6	2.4	2.8	1.6	2.6	1.8	1.3	0.9	2.0	3.2	5.0	3.9	5.0	5.8	6.8	6.1	6.1	6.5	7.0	5.1	4.9	4.8	7.0	0.9	3.9
25	5.2	5.1	4.3	5.1	4.7	3.5	2.6	2.7	2.9	2.4	2.7	1.9	2.4	4.2	4.8	7.5	9.2	10.2	10.4	9.8	10.4	10.0	5.7	3.0	10.4	1.9	5.4
26	2.1	2.0	1.2	1.7	2.8	5.0	4.1	4.4	3.7	2.5	2.6	2.8	2.9	3.0	2.4	1.0	1.1	1.0	1.7	0.8	1.7	2.1	2.8	2.9	5.0	0.8	2.4
27	2.4	3.7	3.7	4.4	4.8	4.2	4.5	5.4	3.2	3.1	2.2	2.4	2.5	2.6	3.3	4.1	2.7	1.3	1.2	1.4	1.5	1.2	0.9	1.1	5.4	0.9	2.8
28	2.2	1.7	1.1	1.3	1.7	2.0	2.8	3.0	4.4	5.4	6.0	6.8	7.8	8.3	8.9	9.2	10.5	10.3	11.0	9.1	8.5	8.9	7.4	7.5	11.0	1.1	6.1
29	5.9	4.4	1.3	1.6	2.7	4.3	6.1	6.2	6.5	6.7	6.7	9.1	9.0	10.4	11.1	9.4	8.2	7.9	5.8	5.2	5.6	5.1	4.5	3.2	11.1	1.3	6.1
30	3.2	3.5	1.9	1.0	0.9	1.2	1.8	1.9	2.3	2.5	2.4	2.9	3.9	6.3	9.4	8.4	9.0	8.7	9.1	11.1	11.4	12.4	12.6	14.1	14.1	0.9	5.9
Max.	**24.7**	**23.4**	**23.9**	**23.2**	**23.3**	**22.8**	**21.6**	**24.3**	**23.3**	**21.9**	**19.6**	**19.4**	**21.0**	**22.6**	**24.6**	**24.4**	**24.0**	**23.4**	**24.3**	**24.5**	**23.8**	**24.1**	**23.7**	**22.7**	**24.7**		
Min.	**1.3**	**0.9**	**1.1**	**1.0**	**0.8**	**1.2**	**1.3**	**0.9**	**1.3**	**0.9**	**2.0**	**1.8**	**1.7**	**1.7**	**1.2**	**1.0**	**1.1**	**1.0**	**1.1**	**0.8**	**0.8**	**1.0**	**0.9**	**1.0**		**0.8**	
Avg.	**6.7**	**6.5**	**5.8**	**5.7**	**5.7**	**5.7**	**5.9**	**6.1**	**6.4**	**6.8**	**7.1**	**7.3**	**7.6**	**7.9**	**8.1**	**8.1**	**8.5**	**8.4**	**8.2**	**8.2**	**8.3**	**8.0**	**7.6**	**7.1**			**7.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	14.1	14.6	14.2	12.8	12.7	14.5	14.6	12.2	13.8	16.0	14.7	14.3	14.1	14.6	15.2	15.3	15.3	13.9	14.2	12.3	11.2	11.9	14.8	14.7	16.0	11.2	14.0
2	13.8	14.7	14.2	13.1	11.1	11.7	12.2	11.7	10.1	10.4	10.4	10.3	9.2	11.2	10.6	9.9	11.4	11.6	14.1	14.6	16.4	18.6	20.3	20.5	20.5	9.2	13.0
3	21.7	22.2	21.8	23.3	22.7	20.3	19.6	18.0	15.2	13.3	13.0	12.3	11.9	12.0	12.1	10.4	10.8	12.0	11.6	10.4	12.1	12.1	14.6	13.7	23.3	10.4	15.3
4	13.7	13.9	15.5	16.4	12.0	11.0	13.8	15.6	12.6	11.8	9.2	9.8	9.3	6.8	6.0	4.3	6.4	3.5	3.4	2.8	2.8	3.9	3.6	4.4	16.4	2.8	8.9
5	3.6	2.3	1.5	1.3	2.0	2.9	4.8	5.4	5.1	4.4	5.7	6.3	4.7	4.7	4.1	3.0	5.8	6.5	7.1	9.5	10.7	9.9	8.2	4.0	10.7	1.3	5.2
6	3.6	2.8	2.8	4.9	5.1	7.2	9.2	9.3	10.9	11.2	11.0	8.8	7.4	9.1	8.7	8.4	7.4	9.9	10.5	9.9	11.2	10.8	11.6	12.4	12.4	2.8	8.5
7	13.5	13.5	13.9	14.8	15.8	16.2	17.3	16.6	16.4	16.4	17.0	15.8	15.8	14.9	16.1	17.2	18.1	19.2	19.8	21.5	21.9	21.2	22.4	24.2	24.2	13.5	17.5
8	22.9	23.2	25.7	25.1	26.2	25.9	24.6	25.5	26.0	26.9	25.4	24.6	25.4	26.1	27.0	24.7	21.4	22.7	21.2	21.9	20.8	19.8	18.2	26.8	27.0	18.2	24.1
9	28.2	28.0	26.4	26.1	25.0	25.8	26.4	27.0	27.2	27.4	26.2	26.0	25.9	27.1	24.4	24.9	24.4	23.4	21.5	12.6	11.2	10.3	5.6	5.3	28.2	5.3	22.3
10	0.9	0.8									4.8	7.2	10.9	13.3	14.8	15.1	15.9	14.0	13.8	13.0	12.5	11.0	10.4	10.8	15.9	0.8	10.6
11	10.3	13.3	11.1	11.3	8.8	7.9	7.9	8.7	7.4	6.4	6.0	8.1	8.5	7.8	8.0	5.7	6.2	5.7	3.4	2.8	2.7	2.6	3.6	3.3	13.3	2.6	7.0
12	3.2	3.8	1.7	1.1	1.1	4.2	3.0	2.7	3.0	3.5	3.9	3.3	3.1	4.1	6.1	6.3	8.0	7.0	5.7	4.2	7.3	5.3	5.0	4.1	8.0	1.1	4.2
13	3.0	2.9	2.3	1.3	1.9	1.9	1.3	1.2	1.2	1.1	0.8	2.0	2.4	3.2	3.2	3.7	4.0	3.4	3.9	3.2	4.0	3.7	3.4	3.4	4.0	0.8	2.6
14	3.5	3.0	3.7	4.2	3.2	3.5	2.8	2.9	3.9	4.1	2.0	1.9	2.2	4.2	4.6	5.6	5.1	2.4	2.8	3.2	3.2	3.4	3.1	3.2	5.6	1.9	3.4
15	3.0	1.8	2.9	3.8	5.9	5.2	6.5	8.3	9.2	8.5	10.5	9.4	9.8	10.7	11.0	11.2	12.6	10.9	10.0	10.8	10.3	11.6	13.2	17.4	17.4	1.8	8.9
16	18.9	16.5	17.0	15.5	11.7	9.9	7.7	6.5	6.6	6.7	6.4	7.3	6.6	6.9	7.4	9.3	10.3	10.7	11.3	11.2	12.8	12.0	11.3	10.0	18.9	6.4	10.4
17	10.7	10.9	10.2	7.9	7.6	8.2	8.5	9.8	8.3	7.8	7.6	7.3	7.9	8.9	8.0	8.5	8.7	10.2	7.9	11.0	11.7	12.2	13.2	12.3	13.2	7.3	9.4
18	13.6	15.6	15.6	17.1	17.0	15.9	16.5	15.4	11.6	13.7	9.9	5.4	1.7	3.4	2.0	2.1	2.9	4.4	5.4	4.8	3.5	2.5	4.4	6.7	17.1	1.7	8.8
19	6.3	4.9	3.5	4.0	4.4	3.5	3.9	3.4	3.9	4.3	5.8	6.3	7.6	6.6	8.2	8.8	8.0	6.7	3.2	2.2	4.1	2.9	3.8	5.8	8.8	2.2	5.1
20	8.2	5.4	7.5	5.4	6.2	6.6	4.2	4.0	3.2	2.7	2.3	2.7	2.9	3.2	3.9	3.0	2.1	1.7	2.0	1.4	1.5	0.9	1.3	1.3	8.2	0.9	3.5
21	1.2	1.4	4.3	5.4	5.8	7.1	7.8	8.5	6.7	5.9	6.2	6.8	7.9	6.6	5.2	5.9	4.0	3.2	2.7	2.0	2.0	2.5	2.7	3.8	8.5	1.2	4.8
22	3.9	3.9	4.2	5.0	4.9	4.3	3.7	3.6	2.7	2.9	2.1	1.4	1.4	1.4	1.9	3.4	4.3	3.9	3.4	3.4	3.8	4.8	5.8	7.0	7.0	1.4	3.6
23	6.9	7.3	7.5	8.5	7.7	7.9	8.3	8.4	8.5	7.5	6.8	8.0	8.7	7.9	7.8	6.6	5.3	4.0	1.8	0.8	1.4	1.9	2.4	3.2	8.7	0.8	6.0
24	3.4	4.5	5.1	6.0	6.9	9.0	5.9	5.2	5.5	2.8	4.8	5.1	6.6	7.8	8.4	6.7	4.7	5.4	6.6	7.9	8.4	7.0	8.0	9.5	9.5	2.8	6.3
25	10.0	9.6	10.3	10.6	12.2	14.8	16.0	16.2	15.6	15.3	16.1	15.7	15.2	14.7	13.2	12.9	12.5	13.4	14.7	14.3	13.5	13.7	14.4	15.3	16.2	9.6	13.8
26	15.0	13.6	16.0	16.8	17.3	17.6	17.4	16.9	18.7	17.9	16.7	14.0	15.0	13.5	17.1	19.2	17.1	16.1	15.6	13.5	12.2	15.0	13.6	12.4	19.2	12.2	15.8
27	14.7	10.8	12.3	10.8	9.2	9.1	8.4	8.1	8.5	10.2	10.1	8.6	7.8	5.0	4.5	4.8	4.5	3.0	2.9	1.6	0.8	1.1	1.4	1.1	14.7	0.8	6.6
28	0.9	1.5	2.3	2.3	2.6	2.9	3.0	3.1	3.0	3.2	2.5	3.3	2.9	4.5	8.3	10.3	11.3	11.4	11.2	12.9	14.0	13.4	12.9	11.8	14.0	0.9	6.5
29	8.2	8.4	9.0	12.4	10.6	11.1	10.7	10.3	12.3	11.3	10.2	8.5	8.1	8.3	6.4	9.2	11.2	10.4	11.7	12.4	11.7	10.2	8.6	6.4	12.4	6.4	9.9
30	6.2	6.1	4.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	6.2	0.2	0.9
31	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Max.	**28.2**	**28.0**	**26.4**	**26.1**	**26.2**	**25.9**	**26.4**	**27.0**	**27.2**	**27.4**	**26.2**	**26.0**	**25.9**	**27.1**	**27.0**	**24.9**	**24.4**	**23.4**	**21.5**	**21.9**	**21.9**	**21.2**	**22.4**	**26.8**	**28.2**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**9.3**	**9.1**	**9.6**	**9.6**	**9.3**	**9.5**	**9.5**	**9.5**	**9.3**	**9.1**	**8.7**	**8.4**	**8.4**	**8.7**	**8.9**	**8.9**	**9.0**	**8.7**	**8.5**	**8.1**	**8.4**	**8.3**	**8.5**	**8.9**			**8.9**

Total Hours in Month 744 **Hours Data Available** 736 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.7	13.4	12.3	13.0	17.4	17.8	19.3	20.9	19.2	18.1	16.8	14.8	10.1	11.1	14.0	19.0	20.9	0.2	10.2
7	18.8	19.9	17.8	17.3	14.4	13.7	15.3	13.6	12.9	11.7	12.3	12.9	12.0	14.0	17.8	15.7	14.8	14.6	15.7	16.6	16.3	13.5	14.5	16.9	19.9	11.7	15.1
8	16.2	14.2	11.0	11.3	10.6	10.7	12.1	14.1	14.7	12.3	7.0	6.1	10.7	10.0	9.3	12.7	11.6	10.6	11.6	12.2	14.0	16.3	18.4	18.7	18.7	6.1	12.3
9	14.4	13.6	12.9	11.1	10.9	9.0	10.3	9.8	8.9	6.7	7.1	5.5	5.3	5.7	5.9	5.6	5.8	6.1	5.5	5.8	5.2	5.1	4.9	4.8	14.4	4.8	7.7
10	5.4	5.5	5.8	5.3	6.7	7.5	8.1	10.8	12.0	13.8	15.7	15.6	13.8	11.6	10.1	7.9	7.4	7.8	7.3	9.1	9.0	9.0	9.3	10.8	15.7	5.3	9.4
11	9.3	8.7	9.4	9.3	6.9	6.8	7.1	8.2	7.0	6.4	5.6	5.6	5.9	8.8	13.2	11.6	12.5	12.5	16.2	16.9	16.5	17.6	18.7	19.5	19.5	5.6	10.8
12	19.3	18.4	16.5	18.3	19.4	18.3	19.6	14.9	12.5	12.1	12.7	13.3	12.3	14.4	16.3	17.5	14.6	13.2	16.1	15.9	12.8	12.2	11.7	11.6	19.6	11.6	15.1
13	12.9	12.5	10.2	10.1	10.4	12.5	12.5	12.8	16.0	15.6	18.5	20.7	21.4	21.6	22.6	23.6	22.6	24.2	24.8	25.0	26.0	24.2	23.0	19.7	26.0	10.1	18.5
14	16.6	16.7	14.3	9.8	8.1	6.5	8.9	13.6	14.5	21.5	22.7	19.3	19.2	21.9	21.2	19.6	23.1	23.3	24.4	24.8	28.7	27.4	21.0	21.9	28.7	6.5	18.7
15	26.9	23.6	21.8	18.9	21.2	20.4	24.4	23.4	25.0	25.2	22.6	24.2	25.9	23.1	20.9	23.3	23.3	21.3	24.3	26.6	26.6	26.4	25.5	24.2	26.9	18.9	23.7
16	24.2	22.4	23.1	22.3	16.4	13.1	13.5	15.0	13.2	13.4	14.2	12.3	14.5	8.6	7.9	9.9	10.2	9.1	5.6	6.6	7.8	8.7	9.1	9.5	24.2	5.6	12.9
17	8.1	7.8	9.2	8.6	9.4	10.7	10.1	10.1	8.0	10.3	9.0	10.6	10.1	8.6	9.4	8.3	8.8	8.3	8.6	10.2	8.2	9.2	6.1	7.7	10.7	6.1	9.0
18	7.8	7.4	7.8	8.8	10.0	7.7	9.0	9.1	8.4	9.6	8.8	9.1	10.2	9.7	8.0	10.2	14.8	15.9	18.7	17.5	17.2	15.6	16.1	16.8	18.7	7.4	11.4
19	17.2	16.7	16.0	20.2	15.4	13.2	17.6	19.3	19.7	18.7	17.8	16.4	19.6	19.6	20.0	21.8	18.5	17.9	16.7	16.5	20.4	19.4	20.0	15.9	21.8	13.2	18.1
20	12.1	13.5	19.3	13.4	14.1	16.9	14.7	13.2	13.6	14.4	13.0	12.8	14.8	11.8	12.0	13.5	15.2	14.0	12.8	13.2	15.6	19.5	18.6	19.8	19.8	11.8	14.6
21	18.7	16.7	13.5	12.0	13.2	12.4	12.5	11.4	11.0	10.7	10.3	11.0	8.8	9.2	9.1	12.0	12.4	13.0	13.0	12.9	11.6	10.3	11.9	11.7	18.7	8.8	12.1
22	10.1	10.3	8.4	9.1	8.6	7.8	6.3	7.1	8.2	10.0	10.6	10.9	9.0	9.8	8.9	8.5	11.2	11.1	8.3	8.9	9.2	10.9	11.1	10.5	11.2	6.3	9.4
23	6.4	4.5	5.1	5.1	5.8	6.1	5.2	6.2	6.9	6.3	5.1	4.4	3.9	3.7	3.9	4.0	3.2	2.5	1.7	1.9	1.8	2.9	2.8	3.0	6.9	1.7	4.3
24	3.7	2.9	2.9	3.1	2.8	3.6	3.0	3.3	3.8	4.4	4.4	6.0	7.3	7.7	8.1	9.1	8.2	12.9	13.1	12.4	13.7	14.8	13.2	13.0	14.8	2.8	7.4
25	14.6	16.0	15.2	12.9	10.3	9.5	9.1	8.2	7.3	5.8	5.3	6.2	6.7	6.6	6.3	6.3	7.5	7.9	8.2	8.3	7.9	8.0	8.4	7.7	16.0	5.3	8.8
26	8.0	9.2	8.9	12.4	13.7	14.6	15.5	17.8	15.8	20.0	22.5	24.0	24.7	25.7	26.5	25.5	25.2	27.6	27.9	29.6	29.5	29.2	30.4	30.7	30.7	8.0	21.5
27	30.1	29.3	30.2	28.3	25.5	25.1	22.9	20.1	19.0	16.8	14.7	13.4	13.0	13.9	14.6	15.2	14.9	14.6	15.9	15.5	14.9	15.8	17.2	17.6	30.2	13.0	19.1
28	16.0	15.7	14.2	15.0	14.5	14.7	14.4	13.9	12.2	11.4	9.1	8.1	7.7	8.0	8.0	7.9	5.4	4.0	1.6	1.4	1.6	1.0	2.6	4.2	16.0	1.0	8.8
29	5.2	5.5	6.7	7.2	6.7	7.0	6.9	6.4	6.9	7.4	6.2	4.6	4.1	3.4	2.0	1.7	3.5	4.2	3.6	5.4	6.5	9.5	9.7	11.4	11.4	1.7	5.9
30	11.8	13.4	12.3	15.3	17.8	18.6	19.9	19.6	18.1	16.8	15.5	16.0	14.9	14.2	11.6	9.5	8.6	15.3	14.6	10.9	10.8	10.6	11.9	12.5	19.9	8.6	14.2
Max.	**30.1**	**29.3**	**30.2**	**28.3**	**25.5**	**25.1**	**24.4**	**23.4**	**25.0**	**25.2**	**22.7**	**24.2**	**25.9**	**25.7**	**26.5**	**25.5**	**25.2**	**27.6**	**27.9**	**29.6**	**29.5**	**29.2**	**30.4**	**30.7**	**30.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**11.2**	**10.8**	**10.5**	**10.2**	**9.8**	**9.6**	**10.0**	**10.1**	**10.0**	**10.5**	**10.1**	**10.1**	**10.5**	**10.3**	**10.5**	**10.8**	**10.8**	**11.0**	**11.1**	**11.3**	**11.4**	**11.6**	**11.7**	**12.0**			**10.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (Climtrncs) (m/s)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.3	10.2	10.1	8.1	8.0	8.6	11.1	12.7	12.2	11.0	10.6	11.5	12.2	12.5	13.4	14.1	8.3	6.1	6.4	3.9	4.0	4.0	2.6	2.8	14.1	2.6	9.0
2	2.4	3.0	3.8	3.4	2.6	4.6	4.5	2.1	2.9	3.8	4.3	4.5	2.6	5.0	2.7	4.8	1.8	2.1	3.3	5.3	5.3	3.5	2.4	1.3	5.3	1.3	3.4
3	4.8	5.8	5.2	4.3	4.3	3.6	4.6	4.0	2.8	3.1	2.2	2.2	2.5	3.6	4.4	4.5	4.6	4.8	5.8	5.6	5.6	4.9	5.1	5.2	5.8	2.2	4.3
4	4.6	4.5	4.9	3.4	2.7	2.7	0.9	0.2	0.2	0.2	0.2	0.2	0.2	3.5	6.6	7.6	8.2	8.0	8.2	7.3	7.5	9.8	10.8	12.7	12.7	0.2	4.8
5	11.1	13.1	12.7	12.8	14.4	12.7	6.0	8.9	12.0	10.5	5.2	5.1	5.3	5.1	5.0	6.6	7.0	4.6	7.6	11.3	12.9	13.5	13.5	15.6	15.6	4.6	9.7
6	15.1	14.4	13.9	13.5	13.7	13.6	6.2	3.4	3.1	6.7	14.7	12.9	15.6	17.6	17.1	18.2	18.6	17.7	16.4	17.4	17.4	18.9	20.4	18.8	20.4	3.1	14.4
7	21.0	20.7	14.0	9.9	7.0	4.0	3.2	1.8	2.8	3.1	2.7	3.6	3.4	3.3	2.1	4.9	3.5	3.6	3.8	4.9	4.0	5.6	6.9	8.2	21.0	1.8	6.2
8	11.1	16.3	19.1	20.2	20.1	16.6	12.5	15.4	15.3	14.0	9.0	7.8	7.3	8.1	8.5	7.7	7.7	4.2	2.4	6.1	3.2	4.5	4.6	0.7	20.2	0.7	10.1
9	4.6	4.4	2.7	6.9	12.3	11.5	11.3	12.7	15.9	15.2	14.6	16.9	19.1	17.3	19.1	17.7	14.1	12.3	11.6	10.4	11.5	13.1	13.1	13.0	19.1	2.7	12.5
10	12.7	12.8	12.4	13.0	13.5	12.3	12.6	11.7	11.0	11.2	11.5	11.4	11.2	10.1	8.7	7.6	8.8	8.2	8.6	6.9	5.7	4.3	3.1	5.1	13.5	3.1	9.8
11	4.2	3.4	2.4	2.1	1.3	1.6	1.5	1.5	1.3	1.1	1.4	2.1	2.3	3.7	5.8	6.7	5.4	6.1	5.8	8.1	8.5	7.3	6.3	6.2	8.5	1.1	4.0
12	5.0	5.7	4.8	4.5	4.5	4.4	4.7	4.2	4.6	4.6	4.5	5.0	5.4	5.7	5.4	5.6	5.6	5.6	5.6	6.5	6.9	6.6	6.1	5.8	6.9	4.2	5.3
13	5.4	5.4	5.5	5.8	6.0	6.3	6.6	6.8	6.5	6.2	6.3	5.9	6.0	6.7	6.9	7.1	7.0	7.6	8.1	7.5	8.9	9.2	10.5	10.6	10.6	5.4	7.0
14	8.0	8.7	9.1	8.7	8.8	8.7	8.3	6.1	5.8	6.1	5.8	4.1	4.0	5.4	5.9	5.7	5.5	5.2	4.6	4.5	5.2	6.0	6.4	7.5	9.1	4.0	6.4
15	6.6	7.6	7.7	6.7	5.6	4.1	5.0	5.0	3.2	2.2	1.4	0.8	1.6	2.6	2.8	2.8	3.4	4.7	8.1	10.8	14.4	15.0	13.8	16.3	16.3	0.8	6.3
16	15.7	16.1	16.5	15.4	16.3	15.5	14.1	13.5	14.3	14.4	12.9	13.1	12.6	10.8	9.8	7.5	5.0	4.5	3.0	1.9	0.9	0.8	0.6	0.2	16.5	0.2	9.8
17	0.5	2.0	1.4	2.0	2.3	3.4	4.2	4.1	4.5	3.9	3.6	3.3	3.6	4.2	4.2	4.1	4.8	5.5	7.0	7.0	7.2	6.1	5.8	6.1	7.2	0.5	4.2
18	6.4	7.2	7.2	5.5	5.5	5.1	5.4	5.9	5.4	5.1	4.1	4.3	3.2	2.0	1.9	1.7	1.6	1.4	1.2	1.2	1.3	0.8	0.2	0.2	7.2	0.2	3.5
19	0.2	0.2	0.2	0.7	1.8	1.9	1.5	1.0	1.2	1.9	2.7	5.3	3.8	8.3	8.8	8.4	9.9	9.6	10.8	11.0	10.7	8.1	9.1	7.9	11.0	0.2	5.2
20	8.5	7.8	5.4	6.4	9.4	8.8	9.1	9.0	7.7	9.1	10.2	10.5	6.5	6.9	7.2	6.4	5.9	7.5	6.4	4.5	5.9	6.9	6.4	4.8	10.5	4.5	7.4
21	5.2	6.0	3.7	3.5	4.1	3.2	2.6	0.9	1.0	1.2	1.3	1.3	1.3	1.1	0.7	1.1	2.7	2.5	2.5	2.8	3.1	3.1	2.1	1.3	6.0	0.7	2.4
22	0.8	1.2	1.0	2.7	3.5	3.8	5.7	5.3	5.3	5.3	6.3	7.0	8.0	9.8	10.1	8.5	8.9	9.7	10.9	9.0	8.1	9.4	11.4	9.0	11.4	0.8	6.7
23	9.8	10.7	9.6	9.7	10.7	11.9	11.1	10.7	9.0	10.1	11.3	11.1	13.1	11.8	9.6	9.5	9.0	9.2	8.8	9.3	9.0	8.1	9.1	6.8	13.1	6.8	9.9
24	7.6	6.9	6.6	6.5	5.6	5.9	4.9	4.2	5.3	5.0	4.2	5.6	5.5	5.5	6.9	7.8	7.5	7.3	7.7	8.2	8.6	10.4	10.4	13.2	13.2	4.2	7.0
25	16.1	14.5	13.9	13.5	13.2	11.9	12.2	13.2	12.0	11.1	8.8	8.1	7.5	7.2	7.1	5.9	5.7	5.3	5.4	3.7	5.9	6.2	5.7	4.6	16.1	3.7	9.1
26	3.5	3.2	2.0	1.8	1.9	1.7	1.8	1.7	1.5	1.7	0.9	0.9	0.7	0.7	0.5	1.2	1.6	1.7	2.3	3.4	3.7	4.8	7.4	10.4	10.4	0.5	2.5
27	7.8	5.8	5.4	16.2	13.6	14.5	16.9	18.9	18.9	15.8	16.3	15.9	19.2	19.5	18.2	18.1	18.3	17.1	14.7	13.6	12.3	24.4	26.8	24.8	26.8	5.4	16.4
28	23.8	19.6	15.5	15.8	14.4	11.9	10.0	9.2	7.8	8.3	9.0	8.1	7.6	7.4	5.8	3.6	2.4	2.4	4.4	1.1	1.3	1.3	3.0	4.7	23.8	1.1	8.3
29	6.8	9.8	10.8	13.6	13.1	12.8	13.5	12.6	13.0	13.4	14.0	15.3	16.3	17.6	18.3	11.6	11.7	12.3	14.2	12.2	13.0	11.4	11.9	14.6	18.3	6.8	13.1
30	13.1	10.1	6.2	10.0	12.7	10.9	7.8	6.4	6.4	5.3	4.0	2.7	1.1	1.7	4.0	4.8	3.5	4.1	1.8	2.1	1.2	1.1	1.0	0.7	13.1	0.7	5.1
31	1.3	1.6	1.6	2.2	2.0	1.7	1.9	2.0	2.3	2.1	1.2	1.2	1.8	1.7	1.5	1.9	2.6	2.3	3.2	3.4	4.3	4.3	4.5	6.2	6.2	1.2	2.4
Max.	**23.8**	**20.7**	**19.1**	**20.2**	**20.1**	**16.6**	**16.9**	**18.9**	**18.9**	**15.8**	**16.3**	**16.9**	**19.2**	**19.5**	**19.1**	**18.2**	**18.6**	**17.7**	**16.4**	**17.4**	**17.4**	**24.4**	**26.8**	**24.8**	**26.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.7**	**1.3**	**1.6**	**0.9**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.7**	**0.5**	**1.1**	**1.6**	**1.4**	**1.2**	**1.1**	**0.9**	**0.8**	**0.2**	**0.2**		**0.2**	
Avg.	**8.2**	**8.3**	**7.6**	**8.0**	**8.2**	**7.8**	**7.2**	**6.9**	**6.9**	**6.9**	**6.6**	**6.7**	**6.8**	**7.3**	**7.4**	**7.2**	**6.8**	**6.5**	**6.8**	**6.8**	**7.0**	**7.5**	**7.8**	**7.9**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	93.1	125.1	104.7	35.2	85.6	88.6	112.8	112.7	118.6	113.8	127.1	119.5	120.8	119.8	99.2	103.0	65.6	109.7	95.8	70.9	83.8	55.6	69.4	90.7
2	80.5	93.1	96.7	57.7	62.8	79.8	92.4	93.0	78.4	93.3	129.0	135.1	108.9	117.3	122.6	131.2	112.9	120.8	115.8	101.6	114.5	116.5	111.6	104.3
3	107.3	105.2	99.0	102.9	103.1	125.2	133.6	133.7	115.1	104.7	110.1	111.5	111.0	117.3	117.1	129.9	127.3	133.7	115.6	117.7	114.4	113.8	119.0	124.9
4	129.4	138.9	126.9	240.4	292.7	325.6	42.0	99.4	98.8	351.1	106.2	119.8	159.5	159.6	166.1	250.1	285.6	294.2	314.4	111.3	105.6	116.6	122.0	114.3
5	25.0	296.3	1.6	336.7	330.6	301.5	349.8	265.3	138.0	120.0	154.7	141.0	240.1	313.0	308.6	307.8	306.4	307.3	306.6	306.8	312.8	307.9	313.8	314.9
6	334.0	125.3	108.7	109.0	150.8	165.5	171.7	177.8	197.3	190.8	132.2	208.3	253.2	318.7	312.0	312.1	325.7	307.0	173.6	117.4	132.7	106.7	128.6	67.2
7	359.2	302.7	297.6	306.7	109.9	291.1	317.8	296.3	311.3	299.2	27.4	337.0	340.1	9.1	59.0	35.0	44.9	80.4	5.5	41.8	59.3	49.8	42.7	40.6
8	23.7	340.3	356.7	311.6	306.2	349.6	66.7	86.7	70.7	77.2	313.4	309.3	307.2	309.2	303.8	300.7	308.6	314.5	313.1	313.6	313.6	309.6	315.3	311.6
9	309.5	310.4	307.4	316.5	310.4	309.3	310.1	311.2	306.1	308.1	314.9	316.7	136.0	333.4	309.9	94.0	131.7	133.4	123.3	334.0	11.5	318.9	309.1	312.9
10	286.3	115.8	106.6	109.5	120.7	104.8	118.6	120.9	144.7	126.5	135.2	176.1	359.8	140.0	107.4	114.2	122.2	117.9	130.0	120.5	83.7	97.1	36.4	184.0
11	182.9	91.9	271.9	327.0	327.1	313.9	282.8	266.4	186.3	114.9	170.2	266.9	294.6	312.0	327.7	336.4	305.8	320.2	312.3	303.0	313.4	309.8	306.1	315.0
12	322.1	313.6	316.8	314.0	312.3	318.2	311.4	301.8	313.4	311.0	310.5	316.8	309.2	316.2	312.2	315.9	312.2	314.9	306.5	303.4	301.6	304.2	304.6	306.5
13	306.9	304.9	297.7	302.1	294.7	301.1	304.4	305.2	302.7	301.8	299.7	304.0	301.3	301.0	302.7	312.0	308.0	308.2	316.3	300.5	303.9	311.5	304.8	308.5
14	309.9	307.4	305.8	299.2	305.3	311.3	133.5	118.6	133.6	119.2	134.7	127.4	124.2	117.1	117.1	113.4	114.2	122.7	125.3	125.8	110.3	114.0	116.5	120.4
15	118.3	126.0	120.2	116.1	107.8	120.8	128.7	123.7	119.7	115.5	114.0								107.3	108.6	99.7	93.4	98.4	79.6
16	83.6	71.4	72.5	70.0	96.5	95.8	66.4	63.0	70.0	64.8	62.6	48.5	9.7	317.4	307.7	301.3	317.7	308.0	320.8	311.7	310.4	309.4	313.3	312.2
17	310.7	317.0	314.8	314.1	310.4	311.8	312.0	311.0	312.5	309.7	309.4	306.3	311.9	309.8	310.3	314.9	322.1	315.9	313.8	316.4	322.7	303.4	311.9	313.4
18	321.1	336.5	317.4	320.8	316.3	306.9	309.4	313.9	315.0	321.6	317.3	317.5	321.7	322.2	315.2	314.6	310.2	308.5	315.7	318.4	311.4	316.2	310.8	316.6
19	321.5	320.4	319.1	312.1	315.2	304.7	307.2	315.9	309.1	306.9	303.4	303.2	309.4	308.6	307.0	322.6	316.3	309.1	311.8	315.2	319.5	318.7	310.4	299.6
20	309.5	306.6	317.0	313.3	310.6	319.6	316.7	315.3	319.0	318.5	317.2	318.9	317.0	318.1	321.0	317.0	316.8	314.6	314.9	317.6	316.6	313.3	315.0	317.8
21	318.3	317.1	313.9	314.1	312.5	308.8	306.4	304.3	305.7	308.4	312.8	334.3	341.1	343.7	345.1	340.8	338.2	338.0	335.1	330.6	326.9	324.7	318.6	319.1
22	325.6	330.3	325.5	319.4	318.6	320.9	322.1	321.1	319.7	322.0	321.4	321.6	326.7	329.5	323.2	326.1	327.2	325.6	329.1	327.2	319.5	317.3	325.2	330.1
23	319.4	323.5	325.3	322.4	324.7	327.4	327.0	322.3	323.1	329.0	330.0	330.0	328.4	331.0	327.8	321.3	337.3	330.0	326.1	340.1	327.7	317.6	317.1	320.6
24	320.6	314.3	316.6	311.6	307.8	315.6	323.3	310.1	322.0	329.9	322.0	327.8	330.1	330.8	331.8	330.7	325.6	326.5	317.6	323.2	326.3	320.4	318.5	316.0
25	315.0	312.0	314.8	306.5	314.0	308.6	315.8	320.0	316.4	318.1	320.4	319.8	314.6	312.0	312.1	316.0	307.4	311.7	318.7	316.0	323.2	324.2	318.9	313.1
26	309.6	308.0	314.8	316.4	315.4	319.8	318.7	320.5	314.2	315.8	314.3	308.7	316.5	322.4	317.4	312.6	317.5	312.5	318.5	319.9	306.4	307.0	315.0	314.7
27	311.2	316.3	314.3	314.4	311.5	317.1	320.5	322.4	322.8	323.1	322.1	327.7	319.9	318.0	319.4	322.7	323.4	329.9	332.5	331.7	330.0	327.8	325.4	324.4
28	326.6	327.6	331.7	324.5	324.2	328.5	324.6	328.0	329.6	329.3	321.8	322.8	322.6	325.5	330.6	330.2	332.0	334.9	335.9	324.6	312.5	301.2	309.0	309.4
29	303.4	301.6	305.1	301.3	299.8	308.9	316.1	313.6	321.1	326.6	310.5	311.6	323.7	316.6	318.0	312.4	316.4	313.2	312.2	318.3	314.1	317.8	326.4	328.8
30	326.8	326.8	327.6	334.8	336.6	331.1	342.2	326.0	320.1	328.8	313.6	313.9	316.2	311.4	313.2	309.3	307.8	310.6	301.4	305.5	315.2	316.2	297.7	82.0
31	321.0	305.4	305.7	324.4	315.6	315.0	323.0	313.5	312.8	308.7	311.1	314.4	311.4	311.9	308.2	316.4	314.7	312.7	311.6	305.8	313.1	312.5	320.3	313.5

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	318.8	319.2	313.4	300.2	310.4	305.6	301.3	304.1	313.2	316.9	319.3	321.5	325.3	322.4	331.4	321.7	323.0	323.8	322.7	316.3	324.3	319.3	314.8	318.5
2	313.3	319.6	319.2	313.7	312.0	312.1	310.2	310.7	298.5	309.3	309.0	311.7	294.8	310.3	301.8	297.7	271.2	154.4	131.5	119.1	133.1	116.6	118.9	118.7
3	134.0	138.1	143.0	156.0	162.2	151.7	144.5	147.0	135.0	124.1	126.6	122.2	123.6	125.0	126.6	125.7	116.5	118.5	127.1	131.3	127.6	127.5	115.1	114.4
4	116.9	110.3	110.4	112.9	113.8	114.4	111.4	111.9	111.1	111.1	111.8	112.2	114.0	113.9	114.7	114.0	113.9	109.8	111.2	113.0	111.7	112.5	112.3	106.2
5	99.7	98.7	103.0	105.1	110.9	110.0	103.7	104.1	104.5	101.4	101.8	112.6	112.8	112.5	112.9	115.1	115.5	111.5	100.0	83.4	67.0	89.5	105.5	101.3
6	100.0	94.4	91.1	90.3	106.3	98.8	103.5	119.1	142.5	154.5	205.7	213.8	223.0	221.8	220.1	215.3	198.2	196.5	181.7	183.7	184.2	180.9	176.3	168.9
7	162.6	158.8	146.8	143.2	158.0	174.1	200.4	221.6	226.3	236.9	239.4	258.7	267.6	273.3	281.3	290.2	303.6	312.8	308.4	311.9	295.4	256.0	224.3	241.8
8	128.3	144.1	114.1	105.2	110.5	111.6	116.2	116.3	124.3	132.4	150.8	125.2	115.1	111.4	115.3	115.4	111.5	111.6	113.6	114.2	115.5	116.1	113.3	110.1
9	111.0	112.1	115.6	114.4	112.4	112.2	110.1	103.2	82.9	62.0	91.8	108.9	102.2	108.2	110.3	122.9	121.2	118.3	123.4	122.4	117.6	120.2	113.7	121.7
10	125.6	120.2	117.4	118.9	115.7	114.4	115.3	113.1	122.8	126.3	122.7	119.5	118.6	126.1	130.8	127.5	128.7	124.7	123.2	121.7	126.0	128.2	130.1	135.4
11	128.3	119.1	118.6	123.4	138.5	107.8	22.8	347.7	326.8	329.7	327.3	342.6	333.2	329.2	327.5	316.7	312.1	351.8	94.1	118.6	129.0	121.0	118.5	128.5
12	154.0	2.9	313.0	304.3	315.9	326.2	327.0	310.1	290.6	297.7	295.8	293.9	292.5	285.1	287.0	278.7	261.3	243.9	175.1	155.0	85.4	359.0	351.7	351.7
13	8.3	108.5	108.1	110.8	104.4	104.9	103.8	119.8	129.7	112.2	131.2	152.8	122.5	126.6	130.8	126.3	129.3	124.6	125.5	125.0	127.9	132.5	134.3	137.9
14	133.3	134.7	132.6	133.8	135.5	136.8	139.5	137.9	138.9	134.3	130.9	128.5	130.7	131.9	131.6	128.1	123.6	125.6	124.0	128.7	129.2	131.1	134.1	132.5
15	130.7	129.5	124.8	123.8	124.5	122.5	122.9	128.3	129.0	129.7	126.7	126.8	130.9	128.4	125.6	127.0	127.9	134.1	127.7	130.3	137.5	140.3	149.2	147.4
16	151.8	150.4	158.7	158.2	163.2	165.2	164.2	152.1	140.8	139.5	121.6	145.0	143.7	155.3	151.0	141.6	150.5	149.5	145.6	159.9	154.1	159.8	164.0	148.3
17	149.7	133.5	118.7	128.4	121.3	127.9	122.0	123.3	117.3	119.2	118.3	120.0	123.8	123.2	120.6	120.0	119.9	121.1	118.8	123.9	122.6	122.6	126.4	127.9
18	135.6	137.3	134.2	136.6	139.8	137.7	130.6	128.2	129.5	131.1	128.7	130.0	130.3	126.6	128.0	132.1	136.1	140.0	154.2	160.7	173.6	194.5	210.1	207.3
19	217.1	219.7	211.0	207.3	204.8	220.7	228.5	236.1	230.2	219.7	218.3	229.9	192.5	206.6	222.1	214.7	220.7	242.9	253.1	256.9	248.4	238.7	247.5	241.8
20	230.6	226.9	226.5	219.6	222.7	210.7	212.9	194.1	200.4	220.2	238.5	217.3	227.0	223.8	226.7	252.9	282.1	274.9	268.0	267.6	268.1	269.5	277.5	290.4
21	289.3	279.4	277.1	284.3	296.3	297.0	300.4	304.9	311.0	308.9	236.8	143.0	241.2	261.6	300.2	277.2	279.6	290.4	268.8	270.1	293.1	303.3	279.5	282.5
22	320.0	310.8	292.2	285.5	272.6	273.4	278.5	277.5	276.6	294.2	313.2	308.3	299.7	286.8	279.8	270.1	264.5	244.1	224.8	217.2	213.6	171.3	167.8	149.8
23	158.5	163.5	164.7	175.7	187.3	201.4	280.7	293.5	294.4	299.5	312.9	314.0	321.5	317.3	314.7	327.0	309.8	311.1	306.9	321.1	316.6	311.6	336.2	338.4
24	334.6	312.1	321.7	328.2	316.1	311.6	319.3	320.0	301.6	304.2	301.2	310.5	315.6	161.4	152.6	172.5	78.0	131.2	129.4	140.3	139.0	130.6	133.0	141.7
25	133.5	135.6	124.8	133.2	171.4	164.5	158.1	165.9	155.0	127.0	162.0	255.5	292.8	315.9	305.4	321.1	320.9	309.7	287.9	282.7	273.5	263.3	265.0	265.6
26	267.1	263.6	262.3	262.4	264.0	280.7	281.3	266.9	271.5	247.7	264.5	256.5	253.7	246.6	263.3	101.3	91.7	92.0	100.5	101.7	105.1	107.1	112.3	151.4
27	164.6	174.3	243.1	306.0	312.9	321.7	322.5	324.1	325.9	325.2	323.8	322.2	330.6	336.2	330.3	335.9	332.7	328.6	326.8	327.7	326.0	329.2	329.2	327.2
28	330.4	327.0	329.6	319.2	319.5	310.3	305.6	303.5	296.4	291.5	309.4	313.2	322.8	323.2	317.5	322.8	320.5	331.1	320.7	320.0	332.9	329.4	326.9	318.5

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	323.6	326.1	320.9	307.8	307.1	307.3	302.8	313.7	301.4	312.7	24.9	70.4	147.7	122.3	114.9	122.5	137.6	119.7	122.2	134.4	149.1	160.2	151.2	154.5
2	153.7	163.0	147.2	143.6	143.9	144.5	140.6	137.1	123.8	119.0	123.1	122.1	120.5	121.2	120.8	123.2	120.7	120.9	123.8	124.6	123.5	123.3	126.4	125.2
3	125.8	130.1	130.8	126.3	127.3	130.3	142.8	159.6	161.3	169.0	169.8	171.0	173.0	181.7	192.0	202.6	203.8	212.9	185.5	130.7	141.0	139.1	117.2	128.3
4	132.3	146.9	144.2	138.2	144.1	149.7	151.6	149.5	154.2	160.9	146.0	145.0	151.7	144.9	141.3	144.1	150.1	148.4	136.7	135.3	128.6	134.6	140.0	139.4
5	134.6	136.7	149.7	149.3	174.2	193.0	192.8	206.2	213.6	197.7	186.7	193.4	183.1	211.2	204.4	218.6	248.3	246.7	258.7	278.7	292.7	276.8	279.9	278.0
6	297.9	293.4	326.3	321.4	312.6	315.1	300.3	299.3	270.6	238.0	215.9	231.3	307.3	134.7	72.1	38.0	260.8	249.5	304.7	308.8	352.1	340.0	320.7	317.5
7	312.8	311.6	314.5	319.8	313.0	320.3	309.5	319.6	313.2	309.4	320.7	313.5	313.3	314.1	321.3	308.1	302.8	310.6	307.9	315.0	317.9	319.1	324.9	330.1
8	317.7	317.8	316.7	318.8	316.0	318.9	327.3	331.1	328.3	335.3	308.6	333.6	334.1	318.1	315.4	335.0	331.8	325.3	324.2	321.7	322.8	315.1	321.0	318.1
9	324.3	315.8	313.4	318.0	322.2	324.7	315.9	324.6	330.5	327.1	325.9	319.9	320.9	326.3	326.1	319.3	324.2	329.2	335.7	334.2	333.5	339.3	335.7	334.3
10	322.7	324.0	324.8	314.4	308.4	304.8	300.3	308.5	310.3	302.6	302.0	313.3	318.9	320.2	306.1	311.9	307.5	156.9	126.8	120.2	122.5	125.9	140.4	136.3
11	135.9	135.5	125.3	124.7	131.3	126.9	127.8	122.4	122.6	119.7	113.9	116.0	116.6	119.3	121.1	117.0	115.3	115.9	117.5	118.3	120.8	118.4	115.6	123.4
12	121.1	116.8	125.8	128.8	129.4	122.4	122.2	121.5	117.2	122.3	125.4	141.5	142.2	130.9	111.9	113.5	105.3	103.9	106.9	109.9	152.0	146.5	122.7	168.6
13	150.7	111.6	46.9	133.3	135.0	290.3	311.7	301.8	304.1	309.5	292.5	307.2	308.4	312.7	306.0	310.7	314.9	325.3	325.3	303.0	304.6	303.1	307.1	311.5
14	314.2	316.0	323.3	333.9	325.7	306.8	321.7	323.9	315.6	316.0	318.3	310.4	328.3	320.2	323.2	305.9	313.0	315.3	330.7	315.4	313.5	306.5	317.4	122.1
15	144.5	153.9	136.3	146.7	124.5	157.8	210.1	177.8	142.8	128.1	135.5	163.1	340.3	89.9	124.6	129.0	145.1	148.1	143.6	142.8	143.1	145.0	146.6	143.9
16	149.3	154.6	136.6	132.3	130.3	138.2	140.4	119.7	126.1	129.8	113.4	116.2	117.6	112.4	118.7	126.2	133.8	133.6	128.9	131.7	146.5	133.6	135.0	134.6
17	128.0	129.6	126.9	128.5	126.4	131.1	128.3	129.6	128.8	129.0	135.4	131.4	142.0	148.6	127.6	130.9	136.6	135.6	126.9	126.6	125.0	129.2	130.9	132.5
18	130.2	133.9	129.0	126.4	124.4	128.7	134.3	126.7	106.3	102.3	104.4	102.7	102.7	130.1	345.8	357.4	61.7	83.2	85.2	111.9	120.5	180.3	270.3	312.6
19	309.4	308.1	302.5	136.0	140.3	136.2	130.9	120.1	121.4	118.6	121.8	137.8	134.5	133.8	139.7	145.3	149.6	156.4	146.1	148.9	163.6	156.2	159.8	146.8
20	157.5	170.6	168.0	160.9	143.4	135.6	137.6	148.2	140.2	132.7	94.7	95.6	109.7	99.1	312.5	315.4	336.0	327.9	325.0	321.5	330.7	336.8	331.1	327.2
21	323.2	325.0	324.1	324.1	326.8	327.5	329.8	330.1	329.8	332.0	333.9	323.2	320.2	324.4	328.3	329.7	327.3	318.1	317.7	312.9	316.8	317.1	309.3	316.1
22	315.6	300.8	309.9	309.4	309.2	318.7	319.6	319.5	319.1	326.9	323.0	328.1	330.9	331.5	331.5	334.2	335.2	335.4	334.8	323.6	305.5	304.5	306.4	306.7
23	307.4	303.8	307.0	310.8	309.6	308.0	303.2	314.0	206.7	317.1	309.8	318.1	325.9	305.8	313.2	314.3	307.9	295.7	299.1	305.5	318.6	314.5	309.6	307.3
24	316.1	310.7	322.8	317.4	312.1	314.3	315.2	329.6	330.3	321.2	327.5	333.1	323.4	321.0	325.0	335.3	335.4	334.6	331.9	330.8	332.0	335.5	333.3	310.0
25	311.0	309.7	306.6	303.2	300.3	302.5	303.8	303.2	302.8	310.1	312.4	331.1	327.1	326.8	331.9	332.9	334.3	328.2	320.6	313.5	316.3	311.4	316.5	316.3
26	316.1	312.6	304.9	306.1	306.3	310.9	303.6	302.0	304.2	308.8	305.5	306.2	303.7	311.0	307.5	302.1	301.6	295.8	302.3	304.6	306.3	303.4	308.5	307.3
27	309.3	309.9	305.8	309.3	309.0	307.4	304.2	313.1	261.1	121.0	116.4	105.1	108.9	121.6	113.9	145.0	135.8	115.5	141.6	149.8	158.9	177.7	137.1	112.4
28	118.3	111.8	123.7	112.0	114.4	125.6	114.7	127.9	133.4	141.1	125.6	115.0	117.9	105.7	101.5	119.4	114.3	205.5	225.7	281.2	295.6	299.5	302.4	302.2
29	305.8	324.5	315.7	310.4	312.5	311.1	302.2	307.3	313.5	297.1	301.9	306.9	317.6	150.0	130.8	6.3	100.2	143.2	173.5	158.2	153.7	155.1	142.0	128.5
30	125.3	128.6	134.2	131.5	124.9	127.0	121.9	120.6	121.3	116.7	119.1	120.9	118.6	117.5	115.6	116.7	117.9	117.0	118.8	117.8	118.6	117.9	115.8	116.6
31	117.0	117.3	117.7	119.7	122.5	121.8	121.5	120.1	122.1	169.6	206.2	205.2	204.7	222.7	243.3	251.1	256.1	260.1	263.1	264.5	272.6	316.1	309.7	307.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	307.6	318.0	310.4	310.4	310.2	305.8	305.1	310.1	313.4	298.4	286.2	263.8	268.3	289.3	263.3	248.3	253.9	248.8	218.5	152.8	200.2	219.5	198.3	138.8
2	127.0	191.2	184.9	211.7	243.8	162.9	198.9	170.4	126.5	131.1	129.2	116.9	143.4	163.4	131.7	103.4	116.8	119.4	113.2	137.4	115.6	116.7	108.2	112.3
3	109.9	116.5	115.5	112.6	113.4	114.9	111.9	114.4	113.0	116.9	117.0	118.7	116.2	117.9	122.8	130.5	137.5	144.4	144.2	131.1	125.8	134.0	124.2	123.9
4	133.4	140.2	136.8	129.4	131.1	132.5	144.0	147.1	129.3	102.6	145.5	147.4	138.2	137.6	142.2	235.6	313.9	355.0	355.5	333.2	323.7	321.9	324.9	315.6
5	322.0	311.2	315.2	320.6	325.6	319.7	322.4	325.8	325.2	333.7	325.5	324.4	321.7	321.7	326.6	326.8	327.8	328.9	329.0	326.7	316.7	318.3	321.5	328.7
6	324.8	330.9	324.5	320.9	318.6	323.6	324.7	310.3	311.8	322.7	309.7	307.7	317.9	316.6	321.2	316.0	313.1	306.6	303.6	310.8	310.1	247.4	131.3	110.2
7	106.3	109.7	121.0	129.1	141.4	136.1	155.3	165.7	142.2	157.9	164.3	147.5	129.6	132.3	138.1	142.8	134.1	126.0	124.6	131.0	129.5	126.4	120.9	120.7
8	127.1	125.7	126.9	127.3	122.2	123.8	119.9	115.0	115.9	121.1	120.6	125.9	133.0	130.0	128.6	133.9	143.4	154.5	157.7	157.5	147.8	156.7	161.6	178.7
9	196.5	186.1	172.5	182.1	174.1	182.8	177.2	174.0	189.1	188.1	196.6	202.5	210.2	212.0	217.9	215.9	194.4	190.2	215.8	209.9	198.0	206.3	204.0	205.7
10	123.2	143.0	202.0	199.7	219.1	229.4	230.1	232.3	233.1	237.2	240.8	274.5	301.9	289.5	293.5	268.1	266.7	268.7	267.9	269.6	283.8	313.0	214.8	217.1
11	234.1	157.2	171.0	127.5	121.4	112.4	94.7	91.2	99.0	98.6	99.9	113.2	110.9	111.9	112.2	115.0	117.4	113.3	107.2	106.9	107.3	110.7	109.7	111.8
12	113.6	114.2	116.8	116.9	117.8	111.1	109.5	115.0	117.7	117.7	122.1	129.8	142.4	147.7	160.8	189.5	201.5	204.2	209.9	213.7	215.3	217.1	223.6	184.2
13	202.5	201.1	270.1	324.6	323.0	316.4	326.7	318.5	314.1	313.1	309.0	310.5	316.0	315.9	316.2	317.5	322.4	320.3	312.8	314.8	314.6	311.9	314.3	327.1
14	333.0	335.3	333.1	331.6	331.9	337.8	335.3	333.0	334.1	333.8	337.6	325.5	332.6	329.8	326.6	330.4	327.8	327.0	325.2	323.6	320.6	310.3	308.6	306.9
15	314.6	322.0	322.9	319.0	313.3	320.5	322.8	322.0	333.2	331.5	321.3	333.0	327.2	331.5	332.4	323.6	329.9	334.8	339.1	317.2	313.6	307.6	306.1	106.7
16	119.8	139.6	118.1	125.5	128.7	123.3	125.0	122.9	119.7	121.4	121.4	116.9	115.5	114.2	113.7	114.7	114.4	117.0	113.4	106.7	90.7	80.2	70.7	58.7
17	51.1	53.6	54.0	51.9	52.9	62.8	84.3	103.8	112.5	123.3	108.4	112.0	129.9	123.6	132.4	137.1	128.6	129.0	146.6	136.9	153.4	80.6	315.0	326.2
18	318.5	318.0	317.7	299.2	309.8	322.9	303.7	342.9	311.6	86.7	129.0	257.5	287.7	241.0	173.5	189.7	217.7	253.7	245.9	238.5	252.3	224.3	239.4	255.4
19	283.9	72.2	144.2	172.2	209.7	223.7	157.2	267.1	270.8	258.6	262.4	331.4	290.0	226.1	233.6	225.5	207.5	178.4	200.7	222.7	229.9	228.7	216.9	210.3
20	222.0	213.4	197.4	109.1	121.7	139.4	97.7	117.9	131.5	121.6	114.6	121.1	144.8	139.6	127.5	127.2	122.2	124.8	122.8	118.9	117.6	120.1	119.5	115.1
21	115.2	116.6	115.6	108.8	109.5	111.4	113.8	115.9	113.2	115.3	119.1	120.2	121.3	121.6	120.7	124.1	148.5	171.7	162.6	160.0	106.1	120.0	125.4	139.7
22	130.9	125.4	109.1	125.5	112.9	121.7	142.7	160.0	147.3	278.8	79.9	146.4	286.0	283.6	258.9	244.8	302.5	296.2	302.4	170.1	139.6	171.1	165.0	165.8
23	166.5	159.2	138.1	139.2	129.4	138.9	134.9	124.7	123.8	123.2	142.4	147.5	147.1	139.9	145.8	231.0	238.2	298.3	315.8	324.3	315.7	310.4	310.0	314.4
24	315.0	314.2	312.3	323.3	318.6	312.4	307.0	308.8	315.1	308.9	307.6	304.7	300.0	297.4	292.1	281.8	259.8	250.7	241.5	236.6	227.6	223.1	222.4	226.4
25	219.2	206.5	200.8	185.6	187.9	172.9	166.6	157.5	147.4	131.7	119.5	118.5	124.2	144.5	145.0	128.2	129.5	124.7	117.7	114.7	116.2	116.3	116.9	105.2
26	105.2	104.8	106.2	112.1	111.2	114.0	94.8	103.5	101.5	94.6	90.6	100.0	139.0	130.7	146.2	160.4	169.4	169.2	166.6	90.6	69.3	61.6	57.4	61.1
27	57.4	53.2	36.7	12.2	24.0	40.3	337.2	350.2	306.2	321.9	313.1	307.5	332.1	342.0	330.6	339.7	349.4	347.3	342.9	347.7	343.0	328.3	328.0	327.8
28	321.5	319.6	312.6	306.1	304.8	304.0	315.4	313.2	308.9	309.5	282.0	164.0	168.5	180.7	152.8	141.1	123.5	115.8	93.2	38.8	110.6	202.4	299.4	284.4
29	256.4	313.9	307.7	305.9	303.1	299.8	308.9	315.7	317.1	309.7	316.9	322.4	326.7	330.1	328.8	326.8	311.6	314.6	317.0	320.4	308.5	301.0	297.9	301.9
30	306.9	309.3	312.4	307.8	306.9	314.4	328.8	130.3	116.2	120.3	124.8	118.5	141.6	141.7	133.2	140.5	147.6	139.5	120.2	119.4	121.6	125.7	122.5	118.1

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	112.4	117.0	120.4	115.5	121.8	120.2	114.8	114.7	112.7	112.1	112.3	112.2	111.1	110.9	108.8	106.3	104.7	106.0	101.7	93.2	91.3	93.9	97.2	99.5
2	91.0	91.1	81.7	82.8	82.7	85.0	81.9	100.7	138.2	133.7	130.4	131.3	126.4	127.7	132.6	120.1	128.7	124.5	120.9	124.6	121.5	124.3	125.9	131.0
3	127.6	123.8	122.9	126.6	113.0	103.9	95.5	84.6	95.8	85.3	68.5	76.0	59.0	68.3	73.7	66.2	66.9	79.4	68.9	157.4	235.3	180.7	236.8	299.5
4	330.7	354.3	49.9	67.8	109.6	124.6	124.6	122.9	124.6	130.8	130.1	131.9	135.9	133.6	130.9	127.2	126.1	120.5	118.1	119.2	117.8	114.8	114.7	114.2
5	113.5	117.0	117.7	118.3	117.5	121.9	121.5	118.0	117.7	115.9	118.6	115.2	117.3	122.6	125.0	126.3	127.1	124.6	119.3	129.5	131.3	112.0	129.8	169.8
6	158.9	158.1	111.8	111.8	108.9	123.9	127.9	121.3	140.1	176.6	201.3	222.1	227.8	223.3	218.2	215.0	203.7	208.0	213.7	221.5	220.6	220.7	219.2	217.7
7	211.8	201.5	213.1	215.3	222.3	220.8	213.9	213.6	214.8	221.3	215.6	210.1	209.3	224.5	217.9	225.6	219.3	216.6	226.7	218.7	224.8	226.3	219.4	247.0
8	140.1	121.9	116.6	124.7	130.2	127.5	122.5	117.8	104.4	114.8	114.2	117.7	119.5	111.3	98.3	100.0	102.1	115.2	113.7	102.7	78.5	93.7	102.6	83.0
9	86.0	69.6	70.9	67.9	73.8	79.4	96.2	89.5	99.1	93.3	103.0	134.7	153.2	130.7	121.9	124.5	129.0	206.7	90.3	173.4	251.8	42.1	70.7	75.7
10	79.5	71.1	91.0	78.3	29.0	20.4	120.7	318.8	324.9	316.2	268.0	249.6	258.3	271.5	312.3	318.5	273.4	293.7	297.7	306.7	307.4	306.9	318.2	325.1
11	54.9	82.9	149.9	161.0	117.7	175.6	261.0	185.5	255.4	231.5	231.1	251.4	254.0	265.5	235.7	67.3	275.2	340.6	320.3	314.2	313.8	308.2	310.3	317.4
12	319.2	310.3	317.4	319.2	318.2	317.7	318.6	321.4	323.0	321.1	326.8	328.8	327.8	333.8	329.2	338.0	339.0	331.2	317.9	297.6	301.8	300.3	324.2	314.5
13	323.7	320.3	313.9	310.9	307.8	305.2	307.6	302.9	337.9	304.9	225.3	232.7	248.0	239.7	225.9	224.3	220.7	221.7	183.8	178.3	171.0	238.4	149.4	142.6
14	143.4	147.6	156.4	141.9	128.7	142.0	159.3	151.3	143.5	145.9	139.5	141.4	149.6	157.1	135.8	136.3	145.2	142.7	147.0	139.7	144.7	143.9	147.3	155.2
15	161.8	167.6	170.6	174.7	169.4	153.5	174.7	207.4	306.3	282.8	281.6	268.9	242.9	239.3	251.3	224.1	227.0	217.7	209.9	201.4	221.8	227.6	253.1	262.3
16	261.9	153.4	162.5	325.5	327.9	322.4	316.3	299.3	295.9	293.5	275.2	255.5	248.5	250.3	246.2	262.0	251.6	227.2	218.3	209.9	185.0	201.8	191.5	213.9
17	228.6	289.2	312.1	325.0	309.4	322.0	336.3	12.2	86.7	119.5	141.3	133.4	147.0	155.1	147.9	131.9	124.4	136.5	144.6	145.1	147.7	153.3	161.3	153.2
18	163.6	160.1	161.1	169.7	175.1	189.4	152.7	130.2	183.8	220.4	191.1	213.6	223.5	242.5	248.4	246.1	252.2	262.0	255.7	248.6	251.3	247.0	246.4	189.3
19	256.5	278.4	289.0	299.0	242.3	222.1	131.0	120.6	115.2	137.0	152.9	134.7	137.5	134.1	129.7	129.1	121.5	117.8	117.3	117.2	118.4	117.7	118.2	125.3
20	128.7	132.9	132.1	126.1	127.5	130.4	129.7	127.7	123.1	127.5	128.8	125.9	127.6	123.8	120.5	126.8	143.2	145.2	162.0	255.4	311.7	313.2	312.6	315.2
21	314.7	310.2	312.0	313.3	314.6	319.5	330.5	334.8	337.7	340.1	334.7	334.5	335.6	332.9	341.1	339.9	332.2	329.8	335.9	339.2	335.9	337.4	343.3	336.5
22	329.4	327.8	327.6	327.5	331.1	331.7	335.3	341.5	342.9	337.4	333.2	335.5	343.9	347.6	353.6	356.3	343.4	347.3	347.6	347.6	337.3	342.3	339.2	332.8
23	328.6	333.3	319.4	310.3	316.8	308.0	311.9	323.9	308.9	314.4	329.7	351.0	21.3	49.4	359.2	343.0	2.7	343.1	338.4	342.6	326.6	313.1	309.8	315.5
24	311.2	294.5	304.0	308.7	300.1	307.7	318.9	318.2	313.0	323.7	322.9	257.0	251.4	240.2	227.5	239.9	309.6	310.3	292.7	275.3	284.2	299.1	310.5	310.3
25	308.6	309.9	310.5	304.6	307.4	310.4	316.3	309.2	328.8	322.4	327.8	350.8	2.6	339.8	330.8	203.5	220.6	228.8	256.8	264.1	290.7	306.4	318.5	323.1
26	320.3	309.9	312.2	316.0	313.1	297.8	298.0	316.7	333.9	331.1	335.4	344.4	352.1	349.6	342.2	341.0	340.0	338.3	340.5	337.2	328.8	314.4	325.7	329.0
27	337.3	320.0	321.3	335.6	343.1	341.9	339.3	331.0	329.1	331.6	333.4	333.6	339.2	337.5	345.0	347.4	348.1	354.4	348.2	349.4	358.1	350.3	343.2	327.9
28	324.1	303.0	300.4	291.7	162.8	147.7	146.4	162.2	172.2	177.3	244.7	337.0	326.1	296.9	304.1	307.8	308.2	302.7	278.5	203.9	216.6	177.6	174.2	172.5
29	173.4	172.7	168.5	164.3	164.5	163.1	157.6	154.1	147.6	149.6	151.8	156.5	156.3	160.0	154.9	151.1	153.9	160.6	158.8	170.2	177.3	177.1	168.1	164.3
30	167.4	174.6	173.7	153.6	137.2	163.4	158.5	189.3	207.8	168.3	166.1	161.0	176.5	186.8	175.9	157.1	160.2	161.2	165.7	163.4	163.7	155.7	150.3	191.5
31	197.8	192.7	191.4	136.5	181.9	189.7	190.1	189.2	185.2	199.2	208.2	204.5	209.6	227.2	226.5	227.4	231.0	228.9	233.0	230.3	220.6	220.5	268.3	251.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	259.8	326.8	320.1	305.7	318.1	312.3	315.7	331.0	340.3	343.1	331.4	340.5	337.8	342.7	338.0	332.6	313.8	302.8	304.0	264.2	267.1	269.6	272.7	296.3
2	294.4	296.4	298.5	304.8	307.6	305.5	308.2	316.1	329.1	0.1	352.6	335.2	329.9	308.5	313.1	317.4	305.3	320.2	314.2	321.9	319.3	303.2	310.0	323.0
3	326.8	321.1	320.3	328.9	324.5	325.0	336.9	336.9	335.3	341.2	342.0	335.6	335.7	329.6	327.3	325.0	327.5	332.6	338.4	337.2	338.0	328.4	324.0	328.0
4	328.4	328.0	321.2	324.7	330.1	344.8	346.3	338.2	333.2	332.5	336.2	341.3	343.3	337.3	339.0	340.8	344.4	346.0	347.3	349.8	342.7	338.0	330.3	326.6
5	326.2	321.1	329.3	325.8	315.4	315.6	318.3	319.1	319.9	329.8	330.4	354.5	347.9	328.8	342.1	333.2	326.8	324.4	337.6	321.0	311.6	272.8	273.2	268.9
6	258.9	229.7	199.0	186.2	125.1	112.0	112.6	121.4	125.7	137.2	184.6	177.5	164.0	157.5	154.1	143.9	142.1	141.2	142.7	141.2	143.0	146.4	148.3	143.7
7	143.0	141.9	137.3	127.8	131.2	135.0	137.4	127.8	121.9	124.0	126.3	125.1	128.9	130.3	129.5	126.3	127.5	125.4	125.6	118.5	114.7	118.3	119.6	123.5
8	125.1	126.3	123.0	119.8	121.6	123.3	122.7	122.3	121.7	119.9	121.6	120.3	119.6	117.4	120.0	119.7	116.9	118.8	119.8	121.0	121.5	120.4	115.2	113.4
9	113.7	118.7	118.1	120.3	121.6	122.6	121.5	123.5	120.4	117.5	122.0	120.4	118.0	116.8	116.3	115.7	118.6	126.1	131.3	128.4	133.7	132.0	128.6	123.4
10	127.8	123.1	124.4	121.9	122.4	123.6	124.8	122.1	122.7	123.2	126.2	126.1	122.5	123.2	118.9	122.8	120.8	121.8	118.8	118.2	118.5	118.6	119.4	118.7
11	116.9	117.1	117.1	118.2	117.4	118.8	120.7	123.3	124.3	123.3	124.4	125.6	125.4	122.7	123.3	122.8	124.3	127.7	124.1	122.8	122.4	122.1	125.8	123.5
12	122.5	122.8	125.8	125.1	120.7	122.7	125.9	127.4	132.8	133.2	133.1	136.3	137.6	140.2	140.5	143.2	143.9	148.8	145.1	140.7	151.0	152.7	146.4	151.6
13	151.0	146.4	150.5	151.8	154.4	146.4	146.8	124.0	123.0	132.3	128.9	135.6	152.2	157.5	152.2	152.8	160.2	172.4	170.9	196.6	174.3	232.9	295.7	299.2
14	329.3	329.3	331.2	306.4	324.4	319.6	307.6	325.4	335.6	18.4	4.7	64.4	73.4	81.4	76.4	91.3	89.3	39.0	114.4	164.7	150.2	57.4	5.6	316.7
15	312.5	310.7	309.4	310.3	306.1	314.0	317.0	318.3	311.7	345.6	347.7	0.0	11.4	344.6	4.2	145.2	159.7	129.6	174.3	165.3	170.6	173.5	162.9	168.0
16	154.0	155.8	153.8	159.6	169.3	172.9	160.2	158.1	144.4	160.1	154.7	152.0	153.1	144.7	144.8	146.5	139.5	125.1	129.5	136.0	133.5	129.5	146.1	163.1
17	157.4	138.2	135.6	127.8	123.3	130.6	142.6	160.4	164.3	161.5	150.3	148.6	153.6	169.5	168.9	162.6	157.3	158.5	154.1	152.4	150.0	151.5	156.9	154.6
18	155.9	147.2	62.8	351.4	10.3	98.3	120.8	118.1	105.5	118.5	132.4	124.5	127.5	125.0	119.7	126.3	127.6	128.6	134.8	137.3	139.7	142.5	116.0	83.3
19	109.4	135.2	133.4	131.7	125.3	121.2	137.1	144.1	341.6	23.9	60.6	82.8	89.7	133.1	131.9	172.8	97.8	193.3	188.4	163.6	166.1	175.0	169.1	158.7
20	160.5	134.8	126.7	137.4	126.1	116.2	110.7	107.6	119.4	10.1	336.6	320.2	81.9	162.5	164.6	149.0	149.7	133.7	128.4	129.1	130.1	126.2	132.6	136.5
21	153.3	150.7	155.8	173.2	183.5	279.8	327.5	337.3	345.5	351.1	353.4	351.1	3.5	358.4	268.6	314.6	303.9	315.2	323.3	338.9	315.8	302.5	297.9	299.2
22	297.1	300.6	312.8	323.0	318.2	319.8	319.8	321.9	336.0	20.3	139.2	171.5	161.1	152.2	147.4	148.9	140.3	141.3	131.7	127.8	135.7	133.7	135.8	129.5
23	128.6	131.4	136.2	137.4	147.6	144.1	148.7	147.0	144.3	151.6	154.0	151.7	147.4	145.7	141.4	152.4	145.3	143.3	154.4	163.3	164.2	158.3	165.8	154.8
24	143.6	151.4	165.5	172.8	156.3	128.4	298.0	329.2	342.4	355.2	351.0	2.8	34.4	58.0	7.3	30.1	206.6	198.6	238.1	300.0	271.8	295.7	279.8	288.5
25	316.2	309.6	298.2	309.5	3.5	323.8	315.6	324.2	60.6	113.4	155.0	183.5	207.9	194.2	186.8	186.3	186.6	167.1	159.9	160.3	158.6	170.9	168.3	172.3
26	176.6	169.7	152.1	155.8	152.0	165.9	120.3	121.2	144.6	305.6	306.0	320.9	266.2	296.3	262.6	229.4	251.4	201.4	178.9	169.2	167.9	179.9	175.4	186.1
27	184.6	269.0	275.8	283.8	313.8	313.5	326.6	330.2	324.0	323.4	339.3	9.3	256.4	312.7	266.3	222.9	224.7	225.6	231.4	264.6	272.8	286.5	323.7	319.4
28	286.7	291.1	277.1	294.8	294.6	124.9	129.0	178.9	219.7	188.9	196.4	185.5	203.7	252.5	241.1	236.0	236.2	211.9	197.1	232.1	225.5	176.1	160.9	170.2
29	162.9	172.6	189.6	181.9	176.7	171.0	141.0	157.5	151.4	142.5	161.2	166.7	144.1	147.1	147.9	139.9	135.1	130.7	137.7	142.1	152.7	163.3	152.8	143.6
30	139.7	148.4	155.6	160.6	170.3	177.8	187.9	191.8	197.1	206.5	200.6	204.1	220.1	225.3	221.5	213.7	275.9	290.7	324.0	7.0	335.3	298.4	253.7	211.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	243.5	288.3	325.6	314.0	336.5	1.3	43.9	120.7	358.6	350.7	343.3	60.4	24.3	325.7	330.0	301.4	292.5	263.9	270.8	260.7	259.5	270.0	270.3	308.0
2	294.5	284.8	316.2	316.9	318.0	311.1	318.7	311.7	319.8	309.8	314.3	316.7	297.9	315.7	304.7	314.5	317.0	314.1	328.8	333.6	329.5	328.0	333.3	330.7
3	322.7	313.9	308.3	312.4	314.0	310.1	306.2	320.9	322.4	328.3	357.6	0.1	0.1	350.0	322.2	331.1	166.9	171.9	190.4	222.8	268.6	237.2	132.5	146.1
4	139.1	126.2	141.5	139.1	139.8	125.3	52.1	1.7	347.6	331.0	330.1	322.0	330.0	311.9	302.0	280.3	270.7	255.2	258.0	239.3	213.3	178.8	143.8	142.9
5	141.9	130.4	128.8	139.4	144.9	140.1	131.7	129.6	138.0	125.9	123.6	117.2	124.5	157.2	257.7	197.2	257.2	206.5	241.3	112.8	103.6	114.4	74.1	273.2
6	345.5	254.6	294.6	218.3	145.3	312.8	323.0	109.9	117.9	114.8	111.1	16.2	150.1	163.5	164.3	180.3	200.1	12.4	256.3	170.2	184.3	137.1	158.4	175.5
7	144.1	125.3	138.0	156.6	155.2	148.5	145.0	147.2	154.1	151.8	155.9	157.4	153.4	147.0	159.7	164.2	154.4	149.4	177.1	167.8	173.3	165.5	180.9	191.0
8	197.2	201.3	203.8	214.9	212.0	217.5	216.1	217.1	218.2	221.4	216.8	257.9	27.2	82.2	227.5	157.5	341.1	308.6	295.7	308.6	299.5	294.3	287.9	311.6
9	344.0	308.7	312.3	311.8	304.9	316.8	312.3	322.6	328.6	40.2	84.3	103.6	134.4	146.5	150.5	146.3	150.9	158.8	151.0	148.3	137.6	139.5	139.6	133.1
10	131.1	120.4	118.7	120.1	118.7	124.2	120.0	116.9	118.9	126.6	119.7	121.0	118.7	124.2	120.0	116.9	118.9	126.6	119.7	121.0	124.2	129.1		
11		130.7	129.2	127.3	132.3	140.1	129.5	119.0	112.5		104.9	92.6	109.0	120.3	121.6	126.5	128.8	125.2	126.1	94.0	135.5	149.5	167.1	189.2
12	163.4	163.2	167.3	179.2	198.7	202.4	172.8	170.4	129.8	139.0	176.8	250.3	300.0	322.5	309.5	317.4	312.1	314.2	312.9	315.4	316.3	328.8	341.7	339.8
13	328.5	298.9	314.2	297.8	352.6	354.7	356.6	306.3	310.8	311.6	310.2	308.9	314.6	302.7	247.4	350.2	174.5	219.1	211.6	213.5	212.7	212.1	216.0	220.5
14	218.3	213.4	212.1	219.4	219.3	215.9	206.9	207.5	222.3	225.2	225.0	216.2	219.4	219.3	216.0	219.1	219.3	213.0	217.3	213.6	217.5	214.7	204.1	200.3
15	202.4	210.0	204.7	200.2	200.2	216.6	228.2	220.3	215.7	217.9	230.5	231.7	223.4	217.3	213.5	205.3	222.7	205.8	198.4	190.8	193.0	211.2	216.1	203.7
16	189.1	182.4	176.4	173.8	166.0	171.0	168.7	163.1	162.9	157.6	151.0	139.9	136.1	129.8	133.6	127.7	121.8	117.9	116.0	120.5	121.8	122.2	120.3	120.7
17	118.9	124.5	127.1	114.5	116.5	117.1	113.6	115.3	114.4	111.0	113.0	115.9	117.6	116.9	117.9	118.6	118.9	119.1	118.0	119.4	121.6	120.7	120.0	119.2
18	121.9	122.7	119.8	119.8	118.5	118.2	117.4	113.8	122.7	121.3	119.4	122.3	125.5	119.2	118.7	119.7	118.7	118.7	118.8	121.4	120.0	122.2	123.5	127.0
19	124.7	123.7	127.3	127.3	127.1	127.1	121.3	128.0	130.2	132.2	136.9	132.7	110.5	98.4	102.4	90.5	95.6	90.4	96.6	84.5	96.3	100.9	89.7	110.2
20	135.0	152.6	136.3	138.6	146.8	169.9	191.8	159.2	278.3	319.9	317.7	310.3	344.4	345.0	345.4	347.8	357.0	17.0	34.0	81.8	78.9	79.4	85.7	94.5
21	117.4	90.8	98.2	159.0	182.2	168.4	175.3	170.4	169.0	178.8	161.3	133.4	108.5	94.5	142.4	290.8	320.5	217.0	162.8	124.9	132.6	312.6	59.0	136.3
22	153.0	155.5	158.1	162.5	151.8	126.9	119.6	120.0	112.8	108.5	103.7	345.9	352.2	310.2	310.8	336.9	14.9	74.3	109.8	137.4	140.6	138.0	147.9	171.7
23	156.1	161.7	163.2	144.1	129.1	117.2	125.2	121.8	128.6	113.5	115.2	109.2	112.9	119.4	109.1	110.0	97.7	100.3	94.8	111.8	129.1	63.7	63.5	91.6
24	98.9	102.5	126.1	108.5	121.6	142.0	142.6	148.4	143.8	113.1	116.5	125.7	122.1	110.6	113.8	111.4	113.5	111.0	104.8	106.9	95.0	111.9	121.5	124.2
25	124.8	155.7	157.0	144.3	128.0	116.8	123.9	121.2	126.0	130.9	131.0	128.3	122.4	104.3	116.0	118.5	116.8	113.8	113.8	121.1	121.1	125.6	120.2	118.2
26	126.0	143.3	151.6	161.2	166.4	178.6	173.6	193.6	189.0	173.1	201.1	188.0	192.2	163.0	166.4	124.1	144.8	151.2	219.1	218.5	210.0	210.3	214.5	221.3
27	222.8	215.5	216.3	219.9	219.7	220.0	220.0	227.8	228.9	229.4	228.6	228.8	226.4	209.8	173.4	160.5	346.6	328.0	309.2	127.9	132.0	108.3	179.2	146.6
28	126.2	163.4	152.4	170.6	171.7	171.4	163.1	261.4	116.2	144.1	156.5	139.6	137.0	138.3	136.4	135.3	140.2	153.4	163.9	172.8	200.7	197.6	193.7	197.2
29	199.0	202.9	211.5	214.1	189.6	203.5	190.3	216.8	223.5	222.8	237.3	243.9	235.9	234.2	236.1	247.9	256.0	267.2	276.0	270.3	265.8	266.2	261.7	260.8
30	234.7	225.0	229.5	230.9	221.0	221.8	236.4	239.4	241.5	244.2	252.4	272.2	274.7	285.4	296.6	328.6	213.6	201.5	222.2	315.5	306.8	310.6	315.9	312.3
31	316.6	315.4	312.6	312.6	309.8	306.6	304.3	306.9	299.9	303.8	301.6	298.9	304.1	301.6	303.1	304.0	305.1	308.0	304.0	306.2	306.4	294.9	292.5	294.2

Total Hours in Month 744 **Hours Data Available** 740 **Data Recovery** 99.5%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	235.3	220.0	217.5	222.0	217.8	195.2	207.5	172.6	162.6	175.4	155.2	150.4	151.5	155.8	147.3	147.9	135.5	135.8	138.4	138.5	145.1	134.8	127.6	133.5
2	141.5	141.0	138.1	138.6	134.2	140.2	200.8	175.2	170.6	154.6	155.2	160.0	142.1	135.1	122.8	131.5	121.4	119.3	117.7	117.7	121.5	120.1	122.6	120.1
3	120.2	115.5	113.7	114.7	118.6	119.4	112.9	104.1	82.6	70.0	80.2	66.4	68.2	59.3	54.9	55.7	51.1	26.2	2.0	356.6	347.6	349.8	343.4	339.0
4	351.2	10.8	321.1	304.8	304.7	301.1	302.3	316.3	319.9	336.4	332.6	297.1	351.1	292.4	192.6	150.3	225.1	146.0	142.0	127.5	127.7	111.0	129.1	170.3
5	147.3	153.0	52.0	308.9	298.9	282.0	281.7	295.3	311.5	299.2	292.6	295.8	295.6	287.4	294.5	296.2	291.2	305.7	342.9	306.8	301.3	310.7	297.5	294.2
6	300.0	314.9	314.9	324.3	321.9	321.4	318.1	321.1	328.5	336.9	337.4	349.0	353.1	335.3	329.6	326.6	328.6	319.1	323.3	322.2	305.3	296.4	301.6	297.8
7	298.0	301.6	295.7	296.1	297.8	301.9	311.9	302.8	307.1	312.9	327.3	325.6	294.2	266.2	258.8	259.3	260.2	264.1	262.0	256.1	238.0	45.9	235.1	93.9
8	148.9	268.9	289.0	253.2	294.4	312.0	186.8	307.4	309.2	296.7	303.3	305.4	303.5	299.1	305.7	321.3	323.9	319.7	283.8	288.4	294.4	334.7	325.9	219.4
9	121.5	243.6	127.7	151.7	129.9	126.6	138.2	132.1	177.6	156.2	206.8	194.9	189.9	161.4	169.2	173.1	162.4	147.1	142.8	142.5	149.0	156.4	159.0	158.9
10	156.6	153.8	151.6	165.4	173.9	154.4	166.1	169.1	161.5	169.3	150.2	140.5	124.0	119.5	117.1	116.7	119.4	117.6	113.7	115.4	114.5	114.0	112.3	113.8
11	118.7	127.3	134.6	140.8	145.1	147.9	135.9	148.5	152.9	146.4	146.3	153.8	191.7	200.4	209.4	215.9	219.6	207.0	207.6	212.1	214.7	213.2	230.9	296.6
12	295.5	296.6	299.1	300.9	302.8	304.8	303.4	307.1	311.7	328.1	326.7	328.1	316.7	315.4	318.3	302.8	296.6	306.0	318.4	316.4	304.1	303.5	297.9	292.9
13	275.8	278.7	200.7	205.8	225.6	219.0	210.0	202.9	206.5	215.1	222.8	218.9	217.5	216.8	212.9	208.2	209.2	218.6	205.7	213.0	209.5	215.1	211.6	216.0
14	213.4	197.9	206.2	193.4	120.9	148.7	140.1	121.6	108.5	103.4	97.4	109.7	106.5	113.3	120.3	118.6	118.9	107.0	103.6	116.1	112.3	121.0	114.6	105.4
15	111.5	113.6	120.2	118.6	119.3	125.1	109.7	112.8	109.9	114.9	123.6	109.9	104.8	121.0	125.1	123.9	128.7	132.8	125.7	121.5	120.7	127.5	114.1	125.0
16	128.5	106.7	338.7	321.6	315.3	317.8	326.8	328.2	332.4	334.1	332.2	319.1	318.1	300.1	313.5	149.2	256.2	203.3	183.8	147.1	115.2	213.9	209.0	113.3
17	170.6	135.1	142.2	256.4	312.6	359.7	250.3	260.1	294.2	311.0	303.0	289.6	292.9	286.7	246.5	219.1	215.0	237.1	224.1	220.8	220.0	220.7	219.6	209.1
18	204.7	209.9	213.7	211.1	213.3	215.5	214.3	210.9	212.6	206.1	200.2	196.4	194.9	195.6	199.9	228.8	226.0	226.0	232.1	252.0	245.7	218.5	233.7	252.0
19	281.4	274.1	282.2	292.6	293.1	288.9	239.2	292.4	254.7	234.6	143.6	195.9	220.8	229.7	233.8	217.5	208.9	200.2	199.8	200.2	166.7	117.1	129.4	137.6
20	132.2	114.6	111.8	123.5	89.7	7.9	12.1	351.3	349.1	335.5	339.0	328.5	346.6	341.4	333.1	313.4	330.5	329.9	328.3	329.4	325.4	316.1	317.1	300.9
21	293.8	299.7	305.9	297.9	312.5	289.6	311.3	310.0	309.1	56.9	125.0	120.7	134.5	153.9	151.0	156.2	146.8	140.5	144.1	145.6	137.4	127.8	136.0	150.9
22	142.8	151.2	160.5	189.3	190.7	189.1	191.6	196.9	197.6	198.4	199.8	209.6	227.7	252.6	290.6	293.9	289.5	299.3	305.6	312.9	322.6	305.5	315.5	281.7
23	253.7	281.9	213.2	240.6	241.7	274.8	257.0	310.2	125.9	122.3	112.9	108.4	95.2	118.2	162.8	150.2	154.8	148.7	172.4	171.2	174.9	161.9	148.3	125.0
24	127.4	126.0	117.8	114.1	107.1	113.2	101.8	103.3	90.2	54.6	37.4	23.2	2.2	358.0	344.0	335.6	347.6	353.4	353.6	337.4	306.8	300.8	288.6	280.8
25	290.3	295.5	298.4	294.5	287.8	290.1	293.8	290.8	316.1	304.2	310.6	309.3	318.9	290.3	297.4	322.3	311.9	318.0	5.4	11.2	6.2	12.4	357.7	6.0
26	344.8	316.3	329.3	105.6	136.9	139.7	167.7	200.7	291.3	311.8	328.2	330.0	345.5	0.6	141.2	151.6	169.2	195.9	229.8	310.6	319.6	306.0	306.2	315.1
27	330.7	294.5	328.8	303.6	310.3	306.8	0.4	256.9	305.8	315.9	306.3	335.0	317.2	329.6	310.6	316.4	316.8	299.2	320.7	309.0	298.5	294.3	288.7	280.7
28	275.8	279.4	280.7	305.5	101.6	125.2	153.0	14.1	321.3	319.5	316.6	309.2	302.8	294.6	278.4	289.4	282.7	293.1	310.5	286.3	312.6	301.8	290.9	295.3
29	290.2	293.9	306.4	299.1	304.3	295.7	305.0	318.3	311.0	312.7	321.0	328.3	350.9	343.3	183.2	127.9	127.1	113.4	126.1	154.9	154.9	138.2	121.7	115.0
30	116.6	110.6	105.4	114.6	119.9	115.9	113.2	113.6	101.9	97.1	92.5	82.0	77.5	70.7	57.4	52.6	38.3	22.9	13.3	32.9	34.1	37.9	44.3	36.5
31	35.4	298.1	303.9	297.3	313.0	314.2	323.5	306.9	315.8	321.0	315.7	324.9	321.9	331.4	333.0	344.3	338.5	333.3	326.3	327.4	338.5	334.2	334.2	324.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	315.4	307.6	308.8	313.2	306.5	305.4	310.6	304.2	324.4	326.2	326.8	334.1	332.6	335.8	341.1	328.6	342.5	344.6	337.3	335.4	328.0	318.6	321.2	318.6
2	317.3	313.5	319.4	321.3	319.4	317.8	309.1	307.4	305.2	321.7	332.9	334.5	343.7	347.2	355.9	359.4	359.0	15.1	0.7	7.9	36.1	196.8	164.3	212.6
3	327.0	322.4	341.4	306.0	293.4	310.3	308.4	306.2	312.6	315.1	323.2	318.2	303.8	328.2	17.1	193.7	165.8	297.1	130.2	238.2	12.4	105.8	165.2	193.4
4	197.7	60.8	317.7	317.0	317.9	311.1	310.9	310.9	308.0	312.5	316.1	315.7	326.7	325.1	22.2	347.1	89.2	155.3	159.8	277.1	163.4	153.8	117.3	145.7
5	163.7	163.6	156.5	158.8	160.5	158.0	151.3	138.1	140.6	133.2	118.5	121.8	121.9	122.2	123.4	129.7	125.5	131.6	131.9	132.7	142.8	142.2	157.9	166.3
6	169.4	279.6	306.0	310.7	312.2	319.5	313.4	312.4	310.5	310.3	333.8	330.1	312.1	307.8	309.4	304.2	298.6	286.4	272.0	259.9	237.7	232.5	231.0	225.6
7	220.0	192.8	184.1	163.1	133.4	121.3	101.1	106.5	135.6	135.0	125.4	120.6	120.6	119.7	120.1	121.2	123.3	119.3	125.5	124.4	118.4	117.8	116.4	112.6
8	115.0	113.1	113.4	113.0	110.5	110.2	110.7	114.6	117.0	115.7	118.8	121.7	123.0	119.5	119.2	120.7	116.3	115.2	117.2	119.9	123.7	123.0	114.0	112.4
9	107.8	114.6	105.9	109.1	79.3	20.6	59.2	44.9	40.8	65.6	84.1	57.0	86.8	157.0	163.5	155.0	138.8	147.4	163.3	160.8	152.0	151.1	129.7	131.7
10	117.7	118.0	159.6	146.4	147.4	139.5	104.6	134.7	145.7	125.6	104.9	108.8	117.4	77.1	287.2	218.0	195.6	179.8	239.1	260.6	204.7	148.4	213.2	207.1
11	298.8	312.1	348.0	340.3	348.4	315.0	308.7	305.1	304.9	313.4	323.2	322.2	340.2	328.0	334.0	339.0	310.7	311.9	315.2	299.8	295.8	283.4	296.4	295.1
12	299.8	308.6	312.3	296.0	296.2	309.9	306.1	311.9	323.7	317.4	316.7	314.1	328.8	310.0	291.2	288.8	285.8	288.5	305.2	294.3	288.2	299.5	301.9	308.9
13	319.2	322.4	318.3	301.4	301.3	317.2	269.2	108.5	114.9	113.6	112.9	122.8	123.0	121.7	122.0	124.0	121.2	121.3	118.0	115.1	115.4	116.1	120.5	120.5
14	116.1	115.3	116.5	116.3	116.9	117.8	117.4	120.7	123.5	120.7	120.6	115.0	118.1	116.9	118.2	117.2	114.9	116.6	117.6	118.3	119.6	119.7	121.2	120.8
15	118.2	119.4	121.3	118.7	121.3	117.6	114.1	115.0	118.1	116.8	116.3	117.1	116.9	117.4	115.1	116.0	112.5	115.7	115.3	120.8	120.3	114.3	119.0	119.1
16	124.9	125.7	129.0	130.5	130.0	122.6	119.9	125.2	132.0	133.2	130.9	131.6	138.1	137.0	133.7	142.4	132.3	124.9	132.2	136.1	141.2	146.4	150.3	139.6
17	137.4	126.5	130.4	116.7	128.0	126.9	130.6	131.3	131.4	134.5	140.5	134.0	140.9	148.5	146.4	147.1	147.8	157.8	162.8	166.3	165.1	169.1	167.0	163.7
18	155.5	148.7	133.0	112.4	127.4	130.0	121.5	119.8	120.0	118.1	115.9	115.1	108.6	108.9	105.4	108.0	111.8	111.2	111.2	112.6	110.5	112.8	114.2	115.4
19	116.9	114.2	101.9	82.8	87.1	83.1	81.1	75.2	74.9	80.3	97.0	63.7	89.9	98.7	135.2	94.4	102.3	71.0	25.3	61.4	94.7	221.2	201.5	242.0
20	316.2	306.5	298.4	312.1	300.9	290.6	291.7	293.4	305.0	292.0	283.1	279.1	282.8	270.0	253.2	214.1	207.1	214.8	219.0	227.2	228.9	234.2	233.6	211.5
21	179.4	235.2	215.4	101.8	113.9	99.5	107.7	104.7	109.8	110.3	108.9	99.9	98.1	96.0	99.5	76.6	65.0	58.0	48.5	9.3	1.9	358.7	3.4	350.8
22	314.5	295.9	282.6	290.1	300.7	291.1	281.5	270.5	261.5	262.0	262.7	246.6	259.0	259.3	254.0	263.3	259.4	223.5	221.6	232.4	241.7	238.4	241.0	239.1
23	233.9	227.4	228.5	229.7	224.4	226.2	229.9	225.5	219.8	226.9	223.4	218.1	230.5	225.5	213.6	211.9	204.0	198.2	182.7	158.3	162.0	162.3	137.2	144.1
24	125.8	142.5	160.5	193.5	141.3	126.3	163.0	148.6	196.5	347.0	315.3	320.5	320.4	327.3	323.3	310.7	309.8	314.8	309.2	303.8	303.0	306.5	311.6	301.8
25	306.7	303.3	311.6	302.6	305.4	312.4	309.6	312.2	313.2	310.9	315.0	331.8	105.7	118.1	113.3	121.2	123.6	128.9	123.3	124.0	127.8	123.3	136.0	105.3
26	126.6	156.0	121.7	321.3	10.0	55.4	41.6	38.0	21.1	8.0	6.6	352.2	9.3	8.2	58.8	116.1	161.1	59.3	13.6	111.0	150.8	119.6	107.4	109.6
27	127.3	156.8	191.7	253.1	248.5	235.1	221.4	212.5	205.6	217.0	186.0	175.0	154.4	158.5	145.7	101.4	98.1	80.3	9.1	331.0	96.7	92.0	39.2	339.2
28	4.3	333.3	323.7	328.0	329.6	321.4	299.7	319.5	351.8	335.4	335.8	328.8	319.5	323.4	325.1	328.3	329.6	324.7	311.6	304.3	301.0	304.5	306.0	293.2
29	295.4	287.0	318.2	212.8	231.0	293.4	307.9	309.2	303.2	302.3	311.6	314.1	309.5	308.8	311.0	312.8	307.3	313.3	319.5	307.5	306.2	305.1	306.0	295.8
30	310.7	298.9	284.1	273.3	78.0	123.0	116.5	111.0	113.3	114.3	113.2	124.3	121.1	109.2	128.3	132.8	134.8	133.1	131.1	121.5	117.4	116.4	113.8	112.1

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	109.5	111.5	111.2	111.8	111.3	112.2	111.1	109.0	111.4	110.9	113.5	117.5	112.6	112.1	109.8	117.0	116.9	116.0	114.4	111.5	117.9	121.0	119.2	116.5
2	116.2	112.8	114.0	119.2	119.4	116.6	117.5	123.3	127.8	125.2	122.7	122.5	121.8	117.3	112.1	113.4	115.5	114.8	119.5	120.8	120.6	114.4	112.3	114.4
3	110.9	112.0	112.4	114.7	122.1	118.0	113.1	120.0	125.7	131.2	132.9	130.9	127.3	125.7	127.2	147.5	171.8	180.4	201.8	176.3	166.1	174.2	191.0	202.5
4	214.1	213.9	219.5	214.6	206.5	194.1	187.0	208.6	209.6	198.7	190.2	181.7	162.1	126.6	176.0	172.1	202.9	201.2	157.6	111.4	107.8	106.8	118.0	97.6
5	116.1	147.6	128.4	144.2	220.8	240.4	279.9	272.6	277.2	284.9	282.7	291.1	284.9	282.6	261.4	268.6	219.3	228.3	217.7	221.4	218.8	214.9	211.0	177.6
6	149.3	147.6	121.9	131.2	109.3	117.8	125.4	129.0	129.0	131.9	141.8	164.4	154.5	133.4	130.2	135.6	131.5	128.0	127.7	124.3	121.7	120.3	118.5	116.7
7	116.3	117.4	117.5	115.8	114.5	115.2	116.4	115.5	114.9	120.6	117.8	117.4	117.0	118.5	116.6	116.0	116.3	114.7	116.2	118.7	121.3	121.1	117.0	119.9
8	122.5	117.4	112.3	109.0	108.7	111.5	112.1	114.5	114.2	113.9	113.7	113.8	113.4	112.6	111.7	113.0	115.9	114.6	115.1	113.6	112.9	113.2	109.2	116.3
9	114.5	113.5	115.2	113.3	115.8	111.2	109.0	112.6	116.8	115.7	116.0	117.3	113.2	112.5	114.2	116.3	115.7	115.5	128.9	201.3	203.1	212.8	219.8	226.7
10	248.9	251.2	170.7	126.6	117.8	119.6	94.0	95.9	116.0	126.1	129.2	125.5	122.0	124.7	128.1	129.2	131.2	143.4	157.2	169.2	173.9	166.9	170.8	181.9
11	185.4	200.5	188.9	200.6	176.8	203.7	202.4	197.2	200.8	206.6	191.4	207.7	204.8	193.7	212.3	206.1	202.6	195.2	164.9	141.9	147.0	117.4	105.0	107.8
12	114.3	114.0	109.9	346.0	288.9	132.9	128.9	121.2	107.5	102.1	95.4	98.5	99.1	112.0	101.4	110.8	120.1	118.4	119.3	113.1	130.4	111.3	106.1	109.5
13	107.0	116.8	89.9	336.5	310.6	304.8	341.5	96.1	111.3	162.8	349.6	316.7	321.8	321.1	342.9	351.0	353.5	329.1	298.9	290.1	306.7	299.8	295.5	297.9
14	301.5	314.5	299.9	306.5	308.5	299.4	295.8	284.9	284.9	275.1	308.8	315.8	321.1	307.4	293.3	285.7	290.2	334.1	320.7	304.1	314.8	312.7	309.8	306.0
15	312.9	353.1	143.6	116.7	110.8	128.4	135.2	126.4	141.1	153.1	143.7	149.5	141.1	135.1	136.9	141.1	144.2	133.3	137.4	136.8	134.6	131.0	127.9	123.1
16	126.6	137.0	129.4	131.1	138.5	134.0	128.4	138.1	135.1	136.1	132.2	146.5	145.0	145.9	133.0	129.5	131.3	128.7	128.4	123.2	123.2	118.5	119.8	129.0
17	125.0	129.9	127.7	118.4	117.3	122.9	119.8	126.4	118.3	120.5	122.5	130.8	130.0	127.9	137.2	133.1	121.0	122.5	124.7	123.1	119.3	117.8	114.0	113.2
18	112.6	117.5	120.2	112.6	113.7	113.5	114.2	113.7	116.9	127.2	123.3	116.0	39.6	7.1	350.7	290.7	283.2	269.4	286.8	286.0	285.3	266.6	269.3	270.3
19	259.2	246.9	199.5	191.9	216.9	197.5	196.0	154.6	171.5	154.6	149.1	144.2	146.7	135.2	139.0	142.7	132.7	173.5	197.8	162.3	199.5	136.1	144.4	181.1
20	217.2	189.2	204.1	201.7	207.5	208.2	178.0	187.4	180.6	169.1	126.8	130.4	132.5	110.8	103.4	118.9	134.0	117.4	103.8	112.5	134.0	76.2	295.7	296.6
21	286.7	284.0	291.3	310.8	315.6	307.8	305.5	304.0	305.7	307.6	309.3	306.8	297.9	314.4	313.6	322.6	325.3	334.3	297.9	316.7	321.7	330.2	321.1	311.6
22	318.9	298.6	300.5	307.1	306.5	306.1	307.4	310.6	307.2	314.7	313.0	310.0	347.4	107.4	22.2	344.9	352.5	338.0	318.7	308.5	303.2	306.6	310.9	312.1
23	310.7	309.6	305.6	311.5	314.3	313.5	307.2	309.4	317.9	315.1	323.3	319.5	330.6	321.6	306.7	309.4	316.5	319.2	313.0	300.6	136.4	123.6	110.2	105.5
24	113.7	108.6	105.6	113.0	112.7	110.7	101.9	102.6	99.5	85.5	49.4	59.6	47.7	19.7	9.0	345.5	326.4	327.8	336.4	327.0	306.1	309.4	316.1	318.7
25	320.5	313.7	312.6	323.7	325.1	313.9	316.2	314.9	311.8	306.2	310.5	313.3	312.0	312.4	305.9	308.2	309.2	309.9	311.0	311.2	315.0	317.9	320.7	319.5
26	319.9	316.5	317.7	319.3	325.2	326.0	325.4	326.2	329.4	329.6	319.7	312.6	304.1	309.6	319.1	327.0	325.4	316.7	323.7	322.8	331.0	326.3	323.3	322.8
27	323.5	325.0	318.0	312.1	315.3	311.7	302.8	309.2	309.7	313.1	316.5	318.7	315.1	325.8	309.6	304.4	299.5	289.4	287.3	275.4	270.2	269.8	115.9	116.4
28	214.0	117.0	115.8	115.4	122.0	118.0	112.1	113.1	116.0	114.6	109.0	112.4	119.7	137.6	140.5	141.4	146.2	144.3	140.0	136.7	139.1	135.8	134.2	136.2
29	163.2	152.8	169.1	198.2	213.8	210.7	218.2	218.9	219.9	217.0	216.3	203.8	197.5	202.7	198.9	209.4	217.4	221.6	225.0	227.7	229.9	229.7	236.2	229.3
30	229.3	228.7	215.8	209.8	209.7	209.8	210.8	223.6	226.5	226.6	226.1	257.8	302.6	310.0	306.0	310.9	309.5	312.0	307.4	311.4	308.7	320.1	330.0	336.4
31	325.4	315.3	310.6	316.5	313.4	327.3	325.4	316.4	322.0	329.8	332.6	332.6	335.6	336.3	334.8	328.1	324.9	320.5	316.5	311.9	310.7	309.0	308.2	305.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	303.5	303.2	303.6	299.2	300.8	306.9	306.8	307.2	309.2	308.4	311.1	309.5	319.3	328.6	330.2	326.3	331.7	331.6	333.3	331.0	321.1	319.2	314.1	315.5
2	316.3	314.3	317.8	315.6	304.8	298.2	301.2	298.1	301.2	302.9	300.1	307.2	311.9	325.8	326.9	326.9	321.1	332.2	315.9	321.8	306.6	301.4	304.7	307.1
3	295.7	296.8	297.2	296.5	299.9	301.0	298.5	293.0	298.2	299.6	300.0	307.0	299.5	299.0	319.3	314.3	316.2	315.4	324.1	308.6	302.5	302.1	302.5	303.4
4	305.2	310.5	303.1	304.1	306.5	305.8	306.4	311.9	323.9	323.4	311.6	315.7	309.1	303.9	309.1	312.0	312.7	311.0	311.6	308.2	307.5	341.0	106.1	105.2
5	112.3	120.9	123.0	109.3	104.3	93.1	290.7	279.9	304.4	314.2	296.9	306.6	305.9	303.3	306.4	316.8	308.9	305.9	305.9	302.8	308.3	306.1	305.7	317.1
6	314.1	307.7	310.8	310.8	309.3	313.8	312.2	312.3	317.9	312.1	309.2	319.3	328.6	327.4	334.3	333.1	331.4	323.5	315.0	314.7	311.9	332.2	333.1	329.3
7	329.3	329.4	322.5	320.1	324.0	333.6	322.8	312.5	320.7	316.9	319.1	322.6	324.1	318.9	317.6	321.0	325.3	324.7	330.7	331.1	327.6	340.8	333.6	335.0
8	333.1	327.9	325.0	321.2	323.1	325.9	322.2	319.6	322.7	318.4	319.7	321.7	329.3	329.5	331.5	330.9	321.5	320.9	325.7	331.4	329.1	330.9	330.9	330.5
9	335.1	330.2	323.4	318.3	311.3	310.0	319.9	327.2	314.9	306.8	302.8	311.6	310.2	310.8	305.6	311.3	308.2	311.3	302.5	309.8	310.3	313.5	307.4	310.9
10	308.9	302.2	308.8	314.3	309.0	308.1	307.4	312.9	311.4	311.2	314.0	313.4	314.8	312.8	310.2	302.2	306.4	306.8	304.5	321.2	310.7	322.7	312.6	334.6
11	328.1	319.3	319.0	325.4	322.1	319.9	316.5	316.5	321.9	314.5	314.8	307.4	308.1	305.3	311.8	311.6	319.6	321.0	331.2	322.8	318.5	331.0	328.9	332.3
12	326.9	320.3	316.8	327.9	328.7	323.2	325.4	316.6	310.0	303.4	315.8	297.2	297.5	303.1	315.8	316.7	307.4	298.7	312.4	323.0	318.6	312.4	309.9	310.3
13	310.5	308.9	308.6	313.2	315.5	319.6	315.5	331.9	330.8	339.1	340.6	336.0	342.2	344.1	338.0	337.5	342.8	345.6	344.8	340.8	341.3	342.9	337.8	339.6
14	336.1	344.6	344.3	314.3	306.3	326.1	305.5	297.5	300.8	303.3	307.8	331.8	333.2	328.4	329.2	337.4	329.3	329.4	332.0	338.8	337.1	337.5	345.6	341.8
15	331.1	333.3	333.1	335.9	336.3	323.1	325.4	320.0	329.4	331.4	328.7	329.1	333.5	333.6	338.4	337.3	333.7	332.8	335.1	334.5	331.9	332.0	332.0	332.9
16	338.2	334.8	327.3	329.7	332.0	331.7	338.6	337.7	336.3	335.7	338.4	333.6	337.8	328.5	326.5	338.7	324.0	324.2	318.5	303.8	304.7	307.1	309.1	311.3
17	314.5	323.0	313.2	310.5	306.4	311.7	306.0	295.8	308.5	321.6	308.5	320.3	315.0	311.8	322.4	320.1	312.2	306.2	322.1	328.3	319.2	316.1	309.7	318.5
18	315.4	317.8	314.9	331.4	335.8	315.5	303.1	312.2	316.3	307.9	315.8	304.8	307.8	318.9	319.2	313.6	317.6	323.7	328.4	326.6	328.5	323.0	327.4	320.2
19	323.3	317.2	332.3	323.1	302.2	307.1	299.6	304.5	309.8	307.3	302.3	308.4	312.0	316.8	327.9	333.6	317.2	307.1	290.8	298.1	308.7	312.0	321.7	316.8
20	302.5	323.3	322.2	306.5	305.5	317.7	321.6	318.7	317.8	316.5	317.1	320.8	326.3	332.4	326.9	317.8	327.4	334.0	327.7	330.1	322.5	327.8	331.2	331.2
21	333.5	327.8	322.6	304.1	303.4	308.2	304.4	310.5	308.3	309.1	315.2	329.3	319.1	322.5	326.9	324.7	320.7	316.8	320.7	316.8	319.8	323.3	319.8	318.9
22	321.8	324.6	331.6	320.9	326.4	321.0	327.2	327.9	320.6	312.8	307.5	319.6	316.6	322.1	316.0	311.3	318.8	325.0	316.7	326.2	322.2	307.2	314.8	331.9
23	322.9	314.9	322.8	318.0	317.0	307.7	307.7	316.7	315.9	312.8	309.2	319.5	308.6	305.4	309.8	306.7	304.5	308.9	132.2	142.6	121.4	128.1	132.3	126.9
24	124.0	124.3	119.6	132.6	151.4	133.6	132.4	132.2	128.0	130.5	142.0	143.7	129.7	123.5	114.5	118.3	114.5	127.9	120.3	121.8	124.4	117.1	114.8	112.7
25	109.4	109.4	110.0	111.8	117.1	114.8	113.9	116.2	120.4	129.9	136.3	122.5	120.2	120.9	124.4	127.0	147.6	146.2	145.8	148.7	147.0	134.3	134.1	129.7
26	125.2	126.3	127.4	130.3	130.0	126.9	125.5	124.1	119.6	118.5	117.8	117.8	118.3	119.3	117.6	116.0	115.1	114.9	113.3	114.7	113.1	112.3	113.8	118.1
27	118.9	118.8	120.2	118.4	117.9	119.1	120.9	121.1	120.7	121.3	122.3	122.3	122.2	122.5	119.7	119.9	117.7	118.0	117.8	118.2	119.6	118.0	117.3	119.3
28	118.8	120.2	118.0	118.4	117.1	114.9	113.9	114.8	117.0	120.7	122.7	123.7	122.9	130.1	125.7	127.7	122.9	124.0	114.9	125.7	114.4	263.6	303.0	304.1
29	304.8	303.2	308.7	311.1	316.7	311.7	311.3	311.7	312.7	323.7	314.0	311.7	305.4	312.7	326.5	98.2	103.8	109.1	114.5	120.2	136.5	131.4	138.1	143.7
30	135.2	135.3	130.6	125.1	121.4	121.0	120.1	119.7	118.7	118.4	118.6	121.9	131.0	152.2	168.4	179.0	222.4	297.2	306.1	303.2	304.0	303.9	305.8	307.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (Climtrncs) (Degrees)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	306.3	305.3	310.3	310.9	315.0	327.8	323.0	316.9	322.1	317.8	313.0	312.4	312.2	304.4	327.9	332.1	325.8	314.7	291.7	303.6	311.1	303.9	297.2	310.8
2	314.3	105.7	112.2	123.3	144.2	160.1	154.7	46.8	320.6	31.1	50.8	59.1	88.7	67.0	28.3	50.3	118.0	87.5	32.7	51.2	53.3	41.8	87.0	1.3
3	309.7	328.6	335.6	314.0	317.5	303.3	296.4	300.2	295.5	316.2	324.3	317.6	318.0	314.8	314.9	315.7	314.2	311.4	304.1	305.6	306.5	310.0	311.9	311.5
4	313.8	306.6	308.2	308.4	313.2	319.6	338.5	127.0	153.9	13.5	305.2	286.4	119.9	114.4	110.9	113.6	119.3	116.8	126.7	123.3	120.1	123.2	124.5	119.6
5	117.1	120.4	127.1	126.8	129.6	122.3	108.2	95.1	106.2	98.2	96.0	89.7	89.5	82.7	98.1	111.1	115.7	71.5	38.7	44.3	53.8	49.6	47.5	51.5
6	51.0	51.5	48.6	49.8	49.9	51.0	93.5	96.0	96.8	118.2	110.0	114.0	116.1	110.7	115.6	114.8	114.0	113.2	114.6	112.6	119.2	120.5	112.6	114.1
7	113.2	114.7	121.4	118.1	97.5	92.3	128.5	109.6	100.2	90.5	82.0	82.7	103.4	99.7	85.1	89.7	97.6	114.8	125.4	102.7	115.2	108.0	111.9	112.3
8	110.2	110.6	112.0	112.9	111.9	108.9	110.9	116.7	115.0	124.4	128.6	123.8	111.0	119.7	124.5	89.3	86.1	89.9	33.7	25.5	130.4	91.9	99.7	251.8
9	111.2	133.0	110.8	101.7	107.7	105.4	107.0	105.6	109.5	109.3	111.7	111.4	110.4	111.0	112.5	106.9	104.6	107.1	106.5	105.8	105.2	107.2	106.5	107.4
10	114.0	115.9	117.3	118.5	122.6	124.8	127.0	131.9	129.7	128.2	130.8	128.2	127.0	128.0	124.2	120.1	116.3	122.3	121.9	117.9	119.3	107.7	118.3	119.7
11	125.5	122.8	114.9	112.9	94.6	101.0	72.2	312.6	310.9	307.8	300.5	303.3	319.1	304.9	304.8	304.8	303.8	317.1	327.2	335.0	332.8	325.0	310.0	306.9
12	303.4	310.0	305.4	307.1	333.5	334.5	346.6	332.0	337.9	336.4	338.3	333.7	333.5	335.8	328.7	319.2	314.9	310.2	314.2	314.6	317.5	316.1	314.9	315.3
13	313.6	308.7	307.3	307.8	307.0	306.2	305.3	308.8	308.0	305.3	306.1	308.6	312.9	315.4	318.5	314.8	313.7	312.1	313.6	311.2	324.1	322.8	323.2	324.9
14	322.6	323.9	321.9	318.2	315.6	329.4	330.2	309.7	310.4	312.0	307.5	312.3	300.7	305.3	309.2	308.9	302.0	303.9	305.8	307.4	312.0	319.0	319.8	324.4
15	323.0	314.2	314.1	319.6	325.3	319.5	314.9	309.4	301.2	301.9	297.9	312.0	100.2	112.0	109.6	110.3	116.7	117.5	120.4	117.1	121.1	115.2	117.5	115.1
16	113.5	117.6	119.6	121.3	122.7	124.3	125.4	125.2	124.3	124.4	131.6	142.4	145.7	148.8	148.1	146.4	147.6	146.6	131.5	130.1	113.7	104.6	180.7	315.1
17	302.9	312.2	317.3	311.0	316.6	315.1	321.1	320.6	318.4	318.1	310.5	315.8	309.3	303.5	301.7	300.5	305.6	306.7	314.6	314.8	316.7	312.5	316.7	313.2
18	311.4	311.3	312.9	307.8	306.0	303.4	308.3	302.4	310.9	305.0	309.0	308.7	310.3	312.4	311.4	305.8	305.4	302.6	305.5	307.0	301.2	283.0	268.9	161.1
19	115.7	102.4	106.9	114.7	116.5	120.9	117.0	75.8	5.1	337.9	328.0	357.5	302.2	303.7	325.3	307.1	318.1	314.4	315.5	319.2	315.4	298.1	305.7	317.8
20	312.6	310.2	307.0	312.7	322.0	305.8	301.3	304.7	305.5	300.5	304.2	304.0	294.9	295.7	305.8	316.7	298.3	303.3	311.6	315.7	307.6	306.2	310.5	311.8
21	304.5	312.3	317.8	311.6	308.9	318.3	319.7	278.0	324.6	131.3	180.6	337.6	130.4	70.4	74.1	92.5	115.0	127.4	150.1	155.4	194.6	223.6	225.4	188.7
22	205.5	50.2	99.7	316.2	303.0	304.8	310.1	311.7	307.0	307.5	301.1	304.4	307.1	305.8	307.5	314.8	320.8	317.8	322.6	314.7	308.3	310.4	314.1	325.6
23	322.1	322.8	316.7	322.5	323.9	316.2	318.7	315.4	307.9	305.5	304.4	309.6	305.0	310.4	312.8	306.7	312.9	312.6	310.8	310.1	310.9	316.1	309.6	309.8
24	312.3	308.2	306.2	303.6	312.5	301.9	303.8	302.1	304.4	304.0	303.8	306.4	306.8	304.9	306.2	305.8	306.0	309.7	315.6	311.9	313.6	312.5	317.5	316.2
25	321.3	308.7	311.7	318.7	325.9	320.8	322.3	323.2	321.9	310.1	304.5	311.6	314.2	311.5	312.1	314.8	314.1	311.8	307.9	295.1	285.5	297.5	295.8	301.7
26	299.8	300.3	332.6	306.6	300.2	307.6	304.5	299.3	300.4	313.0	306.7	314.2	315.0	342.6	149.7	110.5	110.7	110.4	115.5	108.7	109.8	118.5	119.3	119.3
27	108.7	93.4	67.4	106.3	105.9	102.3	102.5	101.3	97.7	97.3	83.9	58.5	48.5	43.2	38.9	44.1	47.0	34.9	33.4	49.4	93.2	108.3	114.5	116.9
28	118.2	123.3	119.6	116.0	119.2	111.7	120.0	130.2	131.5	133.5	135.0	133.0	144.0	136.6	144.1	115.3	121.3	132.7	132.8	39.8	95.4	306.3	315.7	338.3
29	316.9	330.2	326.7	305.8	312.4	302.1	305.1	311.7	323.1	311.7	323.8	321.4	321.3	319.6	317.5	323.4	312.4	318.1	321.1	317.4	321.1	323.7	320.0	319.3
30	317.0	320.4	304.8	315.3	316.8	323.0	314.8	307.0	303.6	303.5	309.4	320.1	308.9	167.5	196.7	226.9	227.7	232.9	332.3	346.8	295.4	118.5	100.2	116.6
31	306.8	312.5	310.3	316.2	299.9	319.8	327.6	313.2	321.3	306.2	274.5	128.1	118.8	107.4	101.9	307.4	304.5	304.5	309.1	302.1	307.7	313.4	308.0	303.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.4	17.8	26.8	10.3	11.5	6.5	9.8	6.2	5.6	8.1	6.4	4.2	5.7	10.2	10.1	7.4	19.1	13.1	10.7	11.2	9.7	12.6	7.1	15.8	26.8	4.2	10.8
2	7.6	10.3	17.2	12.8	3.7	10.8	12.4	11.8	4.1	7.8	9.1	13.0	16.3	9.7	4.8	11.0	7.4	7.4	7.9	7.3	7.4	3.8	4.2	6.0	47.2	3.7	8.9
3	4.8	4.7	4.1	3.8	4.8	21.8	13.1	13.6	5.2	6.9	7.3	6.7	11.8	10.7	7.9	6.9	7.8	3.6	6.0	3.4	4.0	3.3	3.6	3.1	21.8	3.1	7.0
4	3.4	10.7	11.9	45.8	17.4	23.7	40.5	4.5	43.4	33.0	30.7	9.3	11.1	7.1	10.0	47.6	22.0	12.0	4.9	48.9	11.4	16.7	9.2	33.2	48.9	3.4	21.2
5	77.9	35.4	28.2	49.8	29.5	17.6	34.3	46.5	15.4	8.8	21.7	23.8	30.7	5.5	3.3	2.1	3.2	2.4	2.6	2.6	3.3	3.1	2.6	3.3	77.9	2.1	18.9
6	13.9	30.7	5.2	5.3	8.1	3.5	4.5	11.9	9.0	17.7	35.4	36.8	23.2	19.9	3.6	6.6	20.1	11.2	53.0	21.1	52.3	5.9	21.5	63.6	63.6	3.5	20.2
7	16.0	32.3	42.8	27.5	72.3	12.1	6.5	16.5	21.0	6.8	47.8	47.1	22.9	27.6	12.5	25.4	8.7	7.3	23.3	16.4	5.2	10.7	18.8	6.3	72.3	5.2	22.2
8	9.8	13.0	21.8	21.3	18.3	26.7	16.6	11.7	7.9	38.4	8.1	6.2	3.5	3.9	3.8	3.2	4.5	3.2	2.5	3.2	4.8	4.0	4.7	4.6	38.4	2.5	10.2
9	4.5	4.8	3.3	6.9	3.8	3.7	2.5	3.0	5.0	4.0	3.6	44.1	30.9	21.0	35.9	34.9	11.9	8.1	12.4	32.5	36.5	28.9	9.9	6.6	44.1	2.5	15.0
10	7.5	35.7	18.7	4.2	7.2	6.4	7.2	24.8	30.5	10.5	36.3	26.7	67.1	25.1	9.6	7.0	9.7	4.8	7.4	7.1	29.3	13.5	50.0	28.5	67.1	4.2	19.8
11	29.0	23.7	29.0	9.8	9.9	7.3	8.2	32.7	46.0	8.0	18.8	25.7	31.8	38.4	20.9	38.8	12.8	4.4	6.7	5.4	7.5	4.3	5.3	6.2	46.0	4.3	17.9
12	6.1	6.1	4.9	4.0	4.1	4.1	3.0	3.1	4.7	3.9	3.0	3.3	2.9	3.4	3.7	3.5	3.1	3.9	4.6	3.5	3.3	3.5	4.1	3.6	6.1	2.9	3.9
13	3.0	2.5	2.9	2.8	3.9	3.5	3.0	2.7	2.9	3.4	3.1	3.9	3.9	2.9	2.2	3.2	3.4	4.6	6.0	3.2	3.6	4.5	5.7	5.5	6.0	2.2	3.6
14	4.2	4.5	5.0	4.8	7.1	29.8	18.8	11.1	7.5	8.2	13.6	10.7	5.6	5.0	4.6	4.9	5.6	7.6	7.1	7.7	5.9	7.9	8.3	9.0	29.8	4.2	8.5
15	6.8	6.1	7.1	3.1	4.6	9.2	5.7	5.3	6.0	4.8	4.4								3.5	3.4	5.0	4.4	4.2	6.1	9.2	3.1	5.3
16	11.3	6.5	10.3	8.4	15.4	16.6	10.0	8.3	5.2	9.3	6.2	4.7	15.4	23.0	7.2	7.6	12.4	7.6	43.0	7.9	2.7	3.6	2.6	2.5	43.0	2.5	10.3
17	2.8	4.0	3.9	3.3	2.3	3.2	3.5	3.3	2.6	3.3	3.5	3.3	3.4	5.2	4.3	4.7	3.0	3.0	3.7	3.5	4.6	5.5	5.7	7.0	7.0	2.3	3.9
18	5.6	4.2	5.4	3.7	4.5	3.0	2.3	2.9	2.2	4.6	4.5	6.0	5.1	3.3	3.4	2.6	4.0	3.6	4.9	3.5	3.6	3.3	4.5	4.4	6.0	2.2	4.0
19	4.4	3.1	3.7	4.3	5.4	4.3	3.9	4.1	4.8	5.9	4.0	4.2	3.9	3.9	4.2	4.5	5.4	4.3	3.3	2.7	3.5	3.1	4.5	4.0	5.9	2.7	4.1
20	3.4	4.0	3.1	3.8	3.8	3.8	2.8	2.4	3.3	2.1	2.0	1.7	2.5	2.1	2.7	3.3	2.9	3.2	2.3	2.5	2.4	2.9	2.9	3.0	4.0	1.7	2.9
21	2.7	3.1	3.3	2.9	3.6	2.7	4.2	5.4	4.2	4.3	6.6	5.7	5.1	4.0	4.4	5.8	5.9	4.7	4.7	3.6	3.6	3.5	3.6	3.5	6.6	2.7	4.2
22	3.5	3.5	3.8	3.2	2.7	2.3	2.0	2.4	2.7	2.6	2.6	2.7	4.0	3.4	3.0	3.2	3.4	3.1	2.8	3.1	2.2	3.0	3.2	2.7	4.0	2.0	3.0
23	2.6	2.2	2.4	2.2	2.2	2.6	2.7	3.5	2.5	3.6	2.4	2.1	3.2	2.9	2.4	2.8	4.4	3.5	4.3	5.6	3.5	5.2	3.3	2.5	5.6	2.1	3.1
24	2.5	4.1	4.7	4.1	3.5	3.2	2.7	4.2	2.3	3.7	2.3	2.8	2.4	2.7	4.2	3.3	3.0	3.7	3.1	2.2	3.2	2.3	2.5	6.1	6.1	2.2	3.3
25	4.2	3.5	5.4	5.1	4.8	4.9	4.3	2.4	2.6	2.4	2.0	1.7	3.9	2.7	3.0	2.8	3.2	3.1	2.7	2.7	5.1	3.5	2.9	2.7	5.4	1.7	3.4
26	3.3	2.5	3.1	2.8	2.6	3.5	2.2	1.9	4.2	3.8	4.1	4.1	4.0	2.9	3.5	5.5	6.0	3.2	1.7	3.0	3.6	2.9	4.6	2.6	6.0	1.7	3.4
27	4.0	2.8	4.0	2.3	3.9	5.0	1.8	1.8	1.8	2.6	3.0	2.7	3.0	2.0	2.3	2.4	2.6	2.9	2.9	3.2	2.8	2.5	2.7	3.0	5.0	1.8	2.8
28	2.6	2.9	3.3	2.5	2.3	2.5	2.9	3.4	3.2	3.8	3.9	3.6	5.2	4.2	3.9	3.6	4.2	3.4	4.5	4.1	4.4	2.9	3.8	5.6	5.6	2.3	3.6
29	4.1	2.5	3.1	2.9	3.3	3.5	4.6	3.4	3.6	5.2	2.8	3.3	7.3	7.9	10.7	3.5	3.2	2.1	2.9	5.1	3.0	4.5	5.8	6.6	10.7	2.1	4.4
30	7.0	5.8	3.3	4.8	6.7	6.3	4.8	7.5	3.6	6.3	2.2	3.7	3.9	2.4	2.6	2.3	2.7	5.0	3.9	3.7	3.9	5.6	32.3	59.7	59.7	2.2	7.9
31	43.7	15.0	12.1	3.9	8.6	3.4	6.1	5.1	5.9	4.7	3.2	3.0	4.0	3.9	2.6	4.9	3.2	3.2	2.9	2.8	2.5	2.3	3.6	6.9	43.7	2.3	6.5
Max.	**77.9**	**35.7**	**42.8**	**49.8**	**72.3**	**29.8**	**40.5**	**46.5**	**46.0**	**38.4**	**47.8**	**47.1**	**67.1**	**38.4**	**35.9**	**47.6**	**22.0**	**13.1**	**53.0**	**48.9**	**52.3**	**28.9**	**50.0**	**63.6**	**77.9**		
Min.	**2.5**	**2.2**	**2.4**	**2.2**	**2.2**	**2.3**	**1.8**	**1.8**	**1.8**	**2.1**	**2.0**	**1.7**	**2.4**	**2.0**	**2.2**	**2.1**	**2.6**	**2.1**	**1.7**	**2.2**	**2.2**	**2.3**	**2.5**	**2.5**		**1.7**	
Avg.	**10.1**	**9.9**	**9.8**	**8.8**	**9.1**	**8.3**	**8.0**	**8.6**	**8.7**	**7.7**	**9.8**	**10.6**	**11.5**	**8.9**	**6.6**	**8.8**	**7.0**	**5.1**	**8.1**	**7.6**	**7.9**	**5.9**	**8.0**	**10.5**			**8.6**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.9	3.3	3.5	3.9	3.6	3.9	2.8	3.1	3.4	3.1	3.2	3.7	3.7	2.4	4.3	2.7	2.2	2.2	3.1	2.9	3.7	3.2	2.2	3.6	4.9	2.2	3.3
2	3.0	3.6	4.4	2.7	3.6	2.7	3.2	2.9	4.6	4.7	4.5	3.4	4.7	3.8	4.5	9.6	20.2	17.9	5.2	4.2	13.2	4.9	4.3	5.0	20.2	2.7	5.9
3	6.6	4.7	6.7	5.4	4.4	4.8	4.3	4.4	4.7	4.2	4.2	4.4	4.2	4.9	4.6	4.0	4.6	4.6	5.1	4.7	4.3	4.3	4.6	4.0	6.7	4.0	4.7
4	4.1	3.7	3.7	3.8	3.5	3.9	4.0	4.3	3.9	4.1	4.1	4.3	4.2	4.5	4.3	4.1	4.0	4.5	4.3	4.1	3.9	4.8	4.3	6.4	6.4	3.5	4.2
5	5.0	5.9	5.3	5.1	5.1	4.6	4.8	4.7	5.1	6.0	5.9	5.2	4.6	4.2	3.8	3.9	3.6	3.5	6.5	10.3	7.4	6.1	5.7	4.2	10.3	3.5	5.3
6	4.3	6.7	6.5	8.1	6.3	5.7	6.4	12.5	10.1	8.3	3.6	4.5	3.5	4.2	4.5	5.9	4.9	5.0	4.8	6.2	5.6	6.9	5.4	5.0	12.5	3.5	6.0
7	4.7	6.7	5.4	3.7	3.5	5.1	6.2	4.8	4.5	3.4	3.5	3.7	3.4	2.7	2.7	2.3	3.9	5.7	5.9	7.7	6.8	16.0	13.2	6.9	16.0	2.3	5.5
8	23.0	9.3	6.3	7.4	4.1	5.5	5.3	5.4	5.7	8.8	9.2	12.8	4.3	3.4	3.3	3.4	3.3	3.6	3.7	3.9	4.1	4.0	4.1	4.0	23.0	3.3	6.2
9	4.4	3.9	4.1	4.2	4.3	4.4	3.9	4.1	7.6	5.7	8.9	5.9	5.4	4.7	5.3	4.2	4.6	4.7	3.6	4.0	4.0	4.3	4.4	4.2	8.9	3.6	4.8
10	4.0	4.5	4.4	4.0	4.1	3.8	3.9	3.8	3.9	3.9	3.8	3.8	4.1	4.6	4.4	4.3	4.1	4.0	3.5	3.8	4.4	4.3	4.5	4.8	4.8	3.5	4.1
11	5.0	4.0	3.6	3.8	9.6	17.1	25.4	19.1	4.8	6.8	4.6	3.6	5.3	4.8	8.1	10.6	12.0	19.3	10.6	5.6	13.3	11.0	6.1	8.9	25.4	3.6	9.3
12	44.3	20.7	6.8	8.0	4.6	6.1	6.8	4.6	2.5	2.6	2.9	2.9	2.9	2.6	3.5	5.4	4.3	10.4	34.5	35.5	26.5	19.1	0.3	0.1	44.3	0.1	10.7
13	13.0	8.2	5.9	4.7	9.4	9.8	7.6	6.0	5.2	8.8	7.9	5.8	8.1	4.8	4.5	3.7	3.9	3.8	3.9	4.2	4.2	4.4	4.4	4.4	13.0	3.7	6.1
14	4.4	4.4	4.0	4.5	4.3	4.5	4.6	4.6	4.7	4.2	3.7	3.9	4.3	4.4	4.3	3.8	3.6	3.5	3.6	3.8	4.0	4.1	4.1	4.0	4.7	3.5	4.1
15	4.0	3.9	3.5	3.8	3.5	3.7	3.9	4.1	4.0	3.9	3.9	3.8	4.3	4.0	3.6	3.7	4.0	4.9	4.5	5.0	5.2	4.3	4.0	4.5	5.2	3.5	4.1
16	7.3	5.3	4.2	5.4	6.2	5.9	4.5	4.9	4.2	8.8	5.4	7.2	5.6	4.7	5.9	5.7	5.6	5.0	6.4	7.7	6.5	5.8	5.8	4.8	8.8	4.2	5.8
17	3.6	5.0	9.1	10.7	10.5	7.5	4.1	3.6	3.6	3.8	3.9	3.8	4.2	3.9	3.9	4.0	3.9	3.7	4.1	3.7	3.9	3.8	3.9	4.3	10.7	3.6	4.8
18	4.5	4.5	4.1	4.0	3.8	4.1	3.7	3.4	3.7	4.1	4.5	4.3	4.1	4.0	4.3	4.3	4.1	4.6	6.7	11.6	5.4	5.7	5.0	5.1	11.6	3.4	4.7
19	7.1	5.8	5.6	7.1	6.0	6.5	8.3	5.5	5.1	12.2	6.1	5.1	8.1	6.0	4.0	3.8	4.3	5.4	6.4	6.9	5.0	3.7	4.2	5.3	12.2	3.7	6.0
20	3.6	4.7	3.5	3.4	3.7	7.7	6.2	10.5	8.9	7.6	8.6	17.5	7.5	4.6	4.0	4.4	7.4	2.7	2.7	2.1	2.2	2.5	2.8	2.3	17.5	2.1	5.5
21	2.1	2.1	1.5	1.9	2.6	2.8	2.1	2.4	2.8	7.9	19.5	19.1	33.7	3.6	12.5	4.1	2.2	12.2	2.1	1.3	9.9	9.1	2.7	6.2	33.7	1.3	6.9
22	6.3	6.1	7.7	9.9	1.9	1.4	2.9	1.5	1.6	6.7	8.1	3.5	4.5	3.3	6.2	5.2	3.3	4.8	5.1	4.6	4.7	5.1	5.6	5.7	9.9	1.4	4.8
23	4.2	3.6	4.2	3.4	3.9	13.8	4.2	1.7	3.0	2.8	4.4	3.3	7.7	8.0	2.6	3.9	2.9	3.2	2.6	3.6	3.6	3.7	4.6	4.6	13.8	1.7	4.3
24	6.7	5.9	6.7	5.1	5.4	2.2	2.6	2.3	8.6	7.8	3.3	4.0	22.2	9.7	25.7	43.2	41.0	5.1	7.4	8.2	11.9	14.1	9.3	10.1	43.2	2.2	11.2
25	9.8	9.3	8.3	10.4	3.2	3.6	3.4	3.6	6.2	6.4	21.1	6.4	5.9	4.1	3.7	3.7	2.4	4.4	3.2	2.7	2.1	2.2	2.2	3.9	21.1	2.1	5.5
26	2.8	2.2	1.7	1.9	3.8	5.1	5.1	2.9	4.7	19.4	21.0	2.7	4.0	4.2	29.5	33.3	8.9	3.7	4.3	4.5	8.4	11.0	16.3	6.9	33.3	1.7	8.7
27	5.6	4.2	23.3	4.7	4.0	3.6	4.2	3.5	4.1	2.8	2.6	3.0	2.9	3.7	3.3	3.1	3.1	2.9	3.2	3.1	2.7	2.3	2.6	2.8	23.3	2.3	4.2
28	2.7	2.8	4.2	3.8	3.3	5.5	5.3	8.5	7.6	4.5	5.6	3.9	2.9	3.0	3.0	2.5	2.6	2.1	2.6	1.9	3.0	5.2	3.8	2.6	8.5	1.9	3.9
Max.	**44.3**	**20.7**	**23.3**	**10.7**	**10.5**	**17.1**	**25.4**	**19.1**	**10.1**	**19.4**	**21.1**	**19.1**	**33.7**	**9.7**	**29.5**	**43.2**	**41.0**	**19.3**	**34.5**	**35.5**	**26.5**	**19.1**	**16.3**	**10.1**	**44.3**		
Min.	**2.1**	**2.1**	**1.5**	**1.9**	**1.9**	**1.4**	**2.1**	**1.5**	**1.6**	**2.6**	**2.6**	**2.7**	**2.9**	**2.4**	**2.6**	**2.3**	**2.2**	**2.1**	**2.1**	**1.3**	**2.1**	**2.2**	**0.3**	**0.1**		**0.1**	
Avg.	**7.2**	**5.5**	**5.6**	**5.2**	**4.7**	**5.5**	**5.3**	**5.1**	**5.0**	**6.2**	**6.7**	**5.6**	**6.4**	**4.4**	**6.2**	**6.9**	**6.2**	**5.6**	**5.7**	**6.0**	**6.4**	**6.3**	**5.0**	**4.8**			**5.7**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.7	2.2	2.4	3.2	3.3	2.8	3.0	5.0	3.8	4.4	41.0	68.6	43.7	6.0	5.0	8.5	11.4	8.5	11.3	9.3	5.2	4.0	5.4	5.2	68.6	2.2	11.1
2	4.8	5.4	4.4	5.5	4.1	4.4	4.1	3.4	3.9	4.2	3.6	3.5	3.1	3.3	3.4	3.7	3.9	3.9	4.1	2.7	3.6	3.9	2.6	2.9	5.5	2.6	3.8
3	2.6	3.5	2.9	2.9	3.0	3.3	2.6	4.5	3.6	3.4	3.9	4.5	4.5	3.7	3.6	4.2	6.7	9.8	16.6	13.2	12.0	15.6	10.0	8.0	16.6	2.6	6.2
4	5.8	4.6	5.2	8.4	4.5	4.0	2.9	3.9	4.0	4.7	4.5	4.8	3.9	3.6	4.0	4.3	6.7	6.4	4.4	3.7	3.8	4.9	3.9	3.7	8.4	2.9	4.6
5	3.4	3.4	3.8	3.7	5.2	4.7	6.4	4.9	5.7	8.3	11.0	7.2	11.8	6.1	8.6	7.9	4.2	5.7	7.8	5.3	11.7	8.4	5.2	5.1	11.8	3.4	6.5
6	6.1	14.6	9.8	4.5	3.3	6.1	11.4	7.6	24.5	10.2	6.3	32.8	26.2	25.5	18.7	65.6	30.5	10.2	7.3	25.0	33.5	39.9	13.7	6.5	65.6	3.3	18.3
7	5.4	4.5	3.1	3.1	3.9	3.6	3.2	2.1	2.8	4.0	3.6	3.4	2.8	2.4	2.5	3.3	3.2	4.6	2.2	2.6	2.1	3.7	3.2	3.8	5.4	2.1	3.3
8	2.3	1.9	2.1	2.3	2.6	2.8	3.1	2.8	2.8	4.2	4.6	4.8	3.2	3.9	4.5	4.9	3.7	2.6	2.6	2.8	2.8	2.6	3.8	3.8	4.9	1.9	3.2
9	3.4	3.2	3.1	2.8	2.6	2.4	2.9	3.1	3.0	2.8	2.5	2.7	2.4	2.3	2.3	2.5	3.9	4.4	2.9	2.7	2.5	3.8	2.8	2.5	4.4	2.3	2.9
10	4.4	4.5	3.0	4.2	3.8	5.3	3.1	3.3	3.5	4.4	5.1	7.2	5.6	6.6	9.4	17.0	28.6	19.9	5.3	5.0	5.1	8.6	3.4	4.6	28.6	3.0	7.1
11	4.4	4.2	6.2	6.2	3.3	2.9	2.6	2.5	2.5	3.2	3.3	3.5	4.0	3.4	3.3	3.4	3.3	3.2	3.4	3.0	3.1	3.2	4.0	3.6	6.2	2.5	3.6
12	3.2	3.6	3.0	3.7	3.7	2.8	2.7	3.2	4.1	3.8	3.8	5.8	4.3	4.4	8.3	4.0	4.0	2.3	3.5	5.0	26.0	12.0	18.0	41.4	41.4	2.3	7.4
13	58.7	21.2	17.6	38.2	19.1	19.1	15.3	10.1	10.1	4.9	6.5	7.8	5.6	4.6	3.5	2.7	5.5	3.7	3.6	2.9	2.6	4.4	2.4	2.6	58.7	2.4	11.4
14	3.3	3.2	3.7	4.6	4.0	3.0	4.6	3.7	5.4	4.4	3.3	5.0	33.6	33.1	9.7	9.4	6.0	6.6	9.3	11.6	8.1	10.4	13.3	33.6	33.6	3.0	9.7
15	5.5	7.9	6.7	11.8	5.1	16.5	31.2	43.4	22.3	5.7	5.1	14.9	58.7	23.0	11.8	11.5	6.5	8.5	5.1	6.4	4.3	4.5	2.6	3.3	58.7	2.6	13.4
16	2.1	3.5	4.5	4.0	5.5	5.1	4.4	5.5	7.9	9.0	3.0	3.4	3.7	2.7	2.9	2.7	2.8	3.0	3.9	3.8	3.6	3.8	4.8	5.0	9.0	2.1	4.2
17	4.3	3.8	3.1	3.0	2.1	3.2	2.6	2.0	2.1	3.0	3.4	4.3	4.1	4.8	3.9	4.1	4.0	4.9	3.7	3.0	3.1	3.0	3.2	3.9	4.9	2.0	3.4
18	3.3	3.5	3.5	3.6	4.1	4.5	5.1	26.6	16.0	3.6	3.1	3.1	44.7	24.5	20.6	22.7	11.8	7.8	43.3	10.8	6.2	24.7	29.1	3.5	44.7	3.1	13.7
19	3.2	9.0	42.2	9.7	4.6	9.2	6.9	8.3	9.2	4.4	7.4	3.7	3.6	4.0	4.1	4.5	8.5	7.0	5.3	5.4	6.4	4.7	6.1	5.7	42.2	3.2	7.6
20	5.6	3.7	4.6	4.5	7.3	4.6	3.6	3.8	3.3	3.6	7.3	5.5	7.6	21.7	3.5	7.0	4.9	3.1	2.2	2.4	2.8	3.1	2.5	2.6	21.7	2.2	5.0
21	2.1	2.3	2.5	2.4	2.7	2.6	2.8	2.9	3.0	2.4	3.1	4.6	3.0	4.9	4.3	4.1	4.4	3.1	3.5	4.8	3.9	4.3	6.3	4.7	6.3	2.1	3.5
22	3.6	11.7	5.8	5.0	2.9	3.1	3.3	3.2	3.4	2.3	3.4	3.2	2.9	3.0	2.9	3.3	3.6	3.2	3.0	4.9	3.2	3.6	3.6	3.4	11.7	2.3	3.8
23	4.8	4.4	3.7	2.6	3.2	3.9	8.4	9.9	24.0	34.7	2.4	6.2	18.2	6.5	7.6	4.7	3.5	1.9	2.8	6.3	6.1	3.8	4.9	3.9	34.7	1.9	7.4
24	3.2	3.5	3.8	3.6	3.5	7.9	4.5	3.9	3.0	4.3	4.1	3.9	3.6	3.7	3.6	3.5	3.1	3.2	2.6	3.4	3.5	4.5	4.3	4.7	7.9	2.6	3.9
25	3.5	3.4	3.3	3.3	2.9	4.1	3.0	3.9	3.1	4.9	4.3	7.8	10.3	3.9	7.2	7.5	3.1	3.0	3.6	4.0	2.7	3.6	4.3	5.5	10.3	2.7	4.4
26	4.2	5.2	3.2	2.9	4.0	3.9	4.0	4.1	3.8	5.6	3.1	2.7	2.8	3.4	3.4	3.4	3.3	4.6	2.0	2.4	2.2	3.8	4.0	3.5	5.6	2.0	3.6
27	3.0	3.6	5.1	4.7	4.2	4.6	6.0	9.5	19.1	12.3	11.0	7.0	6.8	8.8	10.6	6.2	8.7	9.2	7.2	9.8	7.9	5.4	14.2	8.9	19.1	3.0	8.1
28	6.6	3.6	7.6	10.3	5.6	5.5	6.8	4.7	4.8	4.9	5.1	4.8	7.9	7.1	4.2	9.7	38.3	9.8	5.5	6.3	5.1	2.9	2.8	2.1	38.3	2.1	7.2
29	3.2	4.2	5.5	2.2	3.1	3.9	3.8	2.8	4.1	7.2	5.4	10.1	28.0	18.3	12.5	45.5	15.5	7.4	10.2	8.1	9.5	7.9	4.7	3.3	45.5	2.2	9.4
30	2.6	3.3	3.3	3.5	3.0	3.2	3.2	3.0	3.5	3.7	3.4	3.3	3.3	3.3	3.6	3.5	3.2	3.6	3.5	3.5	3.6	3.5	3.5	3.7	3.7	2.6	3.4
31	3.6	3.5	3.6	3.1	3.0	3.2	2.9	2.8	2.9	9.1	6.4	12.5	8.4	5.2	8.2	13.2	7.1	6.5	6.8	6.5	10.2	6.9	4.9	3.7	13.2	2.8	6.0
Max.	**58.7**	**21.2**	**42.2**	**38.2**	**19.1**	**19.1**	**31.2**	**43.4**	**24.5**	**34.7**	**41.0**	**68.6**	**58.7**	**33.1**	**20.6**	**65.6**	**38.3**	**19.9**	**43.3**	**25.0**	**33.5**	**39.9**	**29.1**	**41.4**	**68.6**		
Min.	**2.1**	**1.9**	**2.1**	**2.2**	**2.1**	**2.4**	**2.6**	**2.0**	**2.1**	**2.3**	**2.4**	**2.7**	**2.4**	**2.3**	**2.3**	**2.5**	**2.8**	**1.9**	**2.0**	**2.4**	**2.1**	**2.6**	**2.4**	**2.1**		**1.9**	
Avg.	**5.6**	**5.2**	**5.9**	**5.6**	**4.3**	**5.0**	**5.5**	**6.5**	**6.9**	**6.1**	**5.9**	**8.5**	**12.0**	**8.3**	**6.5**	**9.6**	**8.2**	**5.9**	**6.4**	**6.0**	**6.7**	**7.1**	**6.4**	**6.4**			**6.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.1	2.9	2.9	3.0	5.4	3.0	3.7	3.9	5.1	4.9	14.3	6.4	9.2	34.0	3.0	3.4	3.0	3.1	30.7	60.0	10.9	9.5	12.7	24.0	60.0	2.9	10.9
2	12.4	11.5	6.7	5.3	39.4	28.5	9.0	21.4	8.7	9.5	26.4	32.2	13.7	13.3	18.8	6.8	5.8	14.7	6.1	8.7	5.3	6.2	3.7	3.0	39.4	3.0	13.2
3	3.2	4.1	2.9	3.6	3.7	5.9	9.2	8.8	3.0	3.2	3.0	3.0	3.3	3.4	3.1	3.9	3.6	3.6	3.8	5.8	4.5	4.6	4.0	3.7	9.2	2.9	4.2
4	3.5	4.1	4.2	4.5	4.1	4.1	4.4	4.3	12.7	14.7	3.5	4.5	2.8	3.2	5.7	23.3	8.4	3.0	2.7	4.9	3.5	4.8	2.9	3.1	23.3	2.7	5.7
5	4.7	4.6	4.0	4.6	3.7	4.2	4.4	3.5	4.1	3.6	2.8	3.3	4.3	3.9	3.8	4.3	2.7	2.7	2.4	4.0	5.9	4.5	4.5	4.5	5.9	2.4	4.0
6	3.2	3.7	4.2	3.9	5.5	4.9	3.1	4.4	5.8	5.3	4.4	6.9	5.3	6.4	6.6	8.2	6.8	7.3	7.8	6.0	10.6	27.3	10.2	7.1	27.3	3.1	6.9
7	5.7	5.7	5.3	2.7	3.5	7.1	3.8	5.4	12.9	8.7	6.1	4.6	4.4	4.1	4.0	3.5	4.3	5.0	6.8	4.4	3.8	3.8	3.4	3.4	12.9	2.7	5.1
8	3.6	3.3	3.2	3.3	3.6	4.1	4.1	3.8	4.2	3.7	3.1	3.7	4.3	4.3	3.9	4.1	4.0	4.2	4.0	4.8	4.9	4.7	3.9	5.1	5.1	3.1	4.0
9	4.9	4.8	3.3	4.1	3.9	4.5	3.9	4.0	4.4	3.9	4.7	4.6	5.5	5.6	6.1	4.9	5.2	4.7	8.4	7.9	12.0	7.9	4.3	4.2	12.0	3.3	5.3
10	28.8	16.0	6.3	14.6	3.6	4.0	3.2	2.8	2.7	2.5	3.6	4.5	3.6	4.2	4.8	4.0	3.4	3.9	3.3	3.5	9.5	28.0	8.0	6.8	28.8	2.5	7.3
11	5.5	30.4	20.4	18.3	8.6	11.7	4.7	3.0	4.6	4.8	4.3	5.8	3.6	5.0	3.1	3.4	2.6	2.9	2.9	3.3	2.9	2.0	2.1	2.1	30.4	2.0	6.6
12	2.0	2.2	2.4	2.2	2.1	3.4	3.9	4.0	3.6	4.0	2.8	2.9	3.8	4.0	4.2	4.3	4.3	4.5	4.1	7.9	3.4	3.2	3.7	15.5	15.5	2.0	4.1
13	10.8	16.8	34.8	50.1	8.3	4.0	3.9	3.1	2.1	2.1	2.2	2.3	2.0	2.2	2.2	2.3	2.8	3.0	2.4	2.4	2.3	2.3	2.6	3.5	50.1	2.0	7.1
14	3.4	2.9	2.6	2.8	2.9	3.0	3.3	3.1	3.2	3.1	3.3	3.1	3.4	3.3	3.8	3.2	3.0	2.3	3.7	5.7	3.8	3.3	3.6	6.0	6.0	2.3	3.4
15	7.3	5.4	4.1	3.0	3.6	4.3	4.5	6.2	3.6	3.4	4.0	2.6	3.1	3.6	3.8	4.2	3.4	2.7	7.2	15.3	8.8	16.9	39.0	23.7	39.0	2.6	7.6
16	9.3	7.4	4.9	5.0	4.1	3.2	2.4	2.7	2.8	3.0	3.1	3.1	3.5	3.3	3.3	3.0	3.2	2.9	2.9	3.6	4.1	6.7	8.8	3.6	9.3	2.4	4.2
17	3.7	4.0	3.6	3.8	3.6	5.5	8.2	4.4	4.1	4.3	8.1	7.7	4.2	3.6	5.2	4.8	5.1	3.4	6.7	6.4	20.8	20.5	34.3	2.8	34.3	2.8	7.4
18	2.7	2.2	9.8	5.6	7.5	4.3	12.5	32.2	44.4	43.7	30.2	29.6	6.1	15.8	17.0	26.1	32.4	12.4	11.3	9.6	22.2	71.2	40.8	48.3	71.2	2.2	22.4
19	51.5	38.2	41.5	39.9	24.3	17.6	14.6	13.2	5.9	8.2	18.7	31.6	19.2	3.5	8.3	5.4	17.5	18.3	7.8	4.9	4.1	5.4	7.1	9.7	51.5	3.5	17.3
20	8.7	8.2	16.4	24.6	29.7	12.2	20.7	8.9	8.0	6.3	5.5	5.1	4.7	4.6	3.9	3.6	2.9	2.8	2.6	3.0	2.9	2.6	2.6	2.4	29.7	2.4	8.0
21	2.5	2.6	2.7	3.7	2.8	2.6	2.8	3.2	4.5	4.0	4.1	3.3	3.1	3.0	3.1	3.4	6.2	7.7	4.9	4.6	15.7	3.2	2.6	2.5	15.7	2.5	4.1
22	4.5	4.6	5.3	8.6	4.6	7.0	17.0	23.6	52.4	35.7	12.6	34.1	13.1	9.9	8.9	12.2	7.0	5.9	8.3	33.0	6.8	13.0	5.5	4.6	52.4	4.5	14.1
23	3.4	4.1	7.8	8.5	5.7	5.2	4.3	4.1	4.0	4.6	5.9	4.0	4.6	4.2	8.8	16.2	18.6	17.9	5.7	4.6	2.6	2.4	2.7	3.2	18.6	2.4	6.4
24	4.1	4.6	2.8	3.6	3.6	2.1	2.3	3.5	3.4	2.6	2.7	3.3	3.1	2.7	2.6	4.6	3.0	3.7	3.5	2.5	4.6	4.0	2.9	3.4	4.6	2.1	3.3
25	6.0	8.0	9.2	10.7	10.4	9.8	8.2	10.2	6.0	6.6	5.5	5.3	6.5	4.7	4.6	6.7	5.1	3.3	3.8	3.8	3.1	2.9	3.4	4.2	10.7	2.9	6.2
26	3.6	4.6	3.8	4.7	5.0	4.0	3.4	3.4	3.7	3.9	3.9	8.3	9.8	7.4	5.7	6.4	4.0	3.7	5.0	10.4	4.1	4.8	7.5	7.8	10.4	3.4	5.4
27	4.8	61.0	20.0	19.4	9.9	11.1	37.9	42.5	19.2	7.5	5.4	3.3	4.4	4.0	3.5	3.2	3.9	3.1	3.1	3.2	2.7	4.6	4.1	4.6	61.0	2.7	11.9
28	4.7	4.3	5.2	3.7	2.7	2.8	4.0	4.6	5.3	4.1	32.7	16.8	14.6	16.6	13.0	10.7	10.1	17.0	11.2	32.0	51.0	31.2	35.3	14.0	51.0	2.7	14.5
29	12.2	6.5	7.4	2.8	4.2	3.2	5.4	6.1	9.7	3.7	3.3	3.6	2.3	2.6	2.9	2.9	4.3	2.8	3.6	3.5	2.4	1.8	3.0	2.2	12.2	1.8	4.3
30	3.2	2.2	2.6	1.7	2.9	4.2	24.2	6.7	8.4	7.8	9.4	10.2	12.5	8.0	8.1	6.9	4.1	4.7	3.5	3.0	2.5	2.9	3.3	3.4	24.2	1.7	6.1
Max.	**51.5**	**61.0**	**41.5**	**50.1**	**39.4**	**28.5**	**37.9**	**42.5**	**52.4**	**43.7**	**32.7**	**34.1**	**19.2**	**34.0**	**18.8**	**26.1**	**32.4**	**18.3**	**30.7**	**60.0**	**51.0**	**71.2**	**40.8**	**48.3**	**71.2**		
Min.	**2.0**	**2.2**	**2.4**	**1.7**	**2.1**	**2.1**	**2.3**	**2.7**	**2.1**	**2.1**	**2.2**	**2.3**	**2.0**	**2.2**	**2.2**	**2.3**	**2.6**	**2.3**	**2.4**	**2.4**	**2.3**	**1.8**	**2.1**	**2.1**		**1.7**	
Avg.	**7.6**	**9.4**	**8.3**	**9.1**	**7.4**	**6.4**	**7.9**	**8.4**	**8.8**	**7.4**	**8.0**	**8.7**	**6.1**	**6.5**	**5.9**	**6.7**	**6.4**	**5.9**	**6.0**	**9.1**	**8.1**	**10.2**	**9.1**	**7.7**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.2	3.3	3.1	3.0	2.9	3.2	3.2	3.0	3.1	3.1	3.6	3.7	3.6	3.3	4.0	4.3	4.1	3.3	4.5	5.3	3.6	4.2	5.0	5.1	5.3	2.9	3.7
2	5.1	5.7	7.3	7.8	13.9	7.1	5.2	11.8	13.3	19.1	9.0	7.3	3.2	3.1	3.9	4.2	3.9	4.1	3.8	3.2	3.1	3.3	3.3	3.3	19.1	3.1	6.4
3	3.0	3.0	3.0	3.0	7.3	5.7	7.1	7.3	9.9	10.6	7.6	10.1	4.8	5.3	5.2	5.1	6.5	6.9	16.0	24.4	44.4	18.0	12.1	15.6	44.4	3.0	10.1
4	6.4	22.4	29.3	17.4	9.0	5.0	3.2	3.1	3.2	3.6	3.5	3.7	3.9	3.6	4.0	3.5	3.6	3.1	3.3	3.3	3.3	3.3	3.4	3.3	29.3	3.1	6.3
5	3.4	3.4	3.4	3.5	3.6	3.3	3.2	3.1	3.5	3.7	3.3	3.8	3.4	3.5	3.4	3.2	3.8	3.9	3.1	3.1	3.7	6.2	10.7	15.8	15.8	3.1	4.4
6	4.1	5.1	9.7	20.9	16.2	20.2	11.0	13.0	9.8	9.0	7.5	5.0	3.4	4.7	4.4	4.3	5.7	4.9	4.2	3.4	3.8	3.5	5.5	5.8	20.9	3.4	7.7
7	11.1	9.5	6.8	5.8	4.0	4.6	6.0	7.8	6.8	8.2	7.3	7.4	6.3	6.2	7.5	8.3	7.2	6.6	7.5	8.1	15.3	21.0	21.0	16.3	21.0	4.0	9.0
8	17.8	11.9	5.7	5.6	7.9	5.5	5.7	5.8	5.8	5.4	6.4	4.8	4.8	4.7	4.7	5.8	5.0	3.8	4.0	8.3	6.8	4.8	5.6	5.0	17.8	3.8	6.3
9	5.1	15.4	15.4	7.0	6.1	6.6	4.7	5.1	6.6	6.5	6.8	8.4	5.4	5.3	4.0	6.4	28.1	32.1	20.9	28.2	23.3	12.6	10.4	10.8	32.1	4.0	11.7
10	7.8	6.6	8.9	35.3	12.1	16.2	26.5	9.7	8.4	7.8	6.0	3.8	5.4	18.0	8.6	34.8	6.1	7.9	3.0	3.7	4.6	3.2	3.8	9.5	35.3	3.0	10.7
11	25.5	16.2	37.6	5.9	9.3	27.3	30.9	54.9	34.2	4.4	6.6	7.2	10.1	4.0	16.5	25.5	10.3	8.5	5.9	3.8	2.6	2.7	4.7	6.7	54.9	2.6	15.1
12	4.5	4.7	6.7	4.5	4.8	4.0	4.2	2.9	2.5	2.7	3.6	3.8	3.8	3.8	3.8	3.6	3.4	3.0	4.1	3.9	5.1	4.7	6.3	7.1	7.1	2.5	4.2
13	4.9	4.4	4.5	4.9	3.7	3.2	9.7	6.7	8.7	57.3	7.4	9.9	15.8	20.9	5.9	2.8	3.6	3.9	14.2	17.6	24.9	37.4	18.5	6.6	57.3	2.8	12.4
14	6.9	6.0	4.7	7.1	9.6	9.3	6.5	6.8	4.7	5.9	8.2	7.2	8.3	8.6	6.1	5.9	5.2	4.4	4.2	3.8	4.1	3.0	3.3	4.2	9.6	3.0	6.0
15	5.7	6.0	4.4	8.6	8.9	11.9	11.1	24.8	12.4	5.9	4.9	42.0	10.1	56.8	12.1	12.0	10.6	5.7	9.2	8.2	4.4	3.9	6.7	3.5	56.8	3.5	12.1
16	5.1	60.9	11.7	33.4	3.6	3.7	7.4	7.8	5.3	4.9	9.5	6.5	3.8	3.9	5.6	10.1	5.5	4.4	3.7	4.8	7.6	3.2	15.8	4.6	60.9	3.2	9.7
17	21.4	8.2	5.0	14.3	7.8	6.4	18.6	32.0	13.0	14.9	11.4	8.3	9.2	7.5	8.0	5.6	5.1	5.9	4.9	4.7	4.1	4.2	5.2	4.6	32.0	4.1	9.6
18	3.7	3.8	4.3	3.0	4.6	8.6	9.6	16.9	22.8	17.5	11.9	6.4	4.2	5.2	4.6	4.8	5.0	3.0	3.9	4.2	2.8	2.6	3.4	56.6	56.6	2.6	8.9
19	16.1	4.4	16.9	30.1	16.8	38.9	51.7	11.9	9.4	7.1	5.6	6.2	5.4	5.2	4.7	4.3	4.5	4.3	4.2	4.0	3.7	4.2	4.4	4.8	51.7	3.7	11.2
20	5.1	5.3	4.5	3.7	3.4	3.2	3.1	3.1	3.6	3.9	4.4	4.1	6.5	4.6	4.5	3.9	5.1	6.0	6.5	16.2	4.5	2.5	3.5	2.9	16.2	2.5	4.8
21	2.3	3.0	2.9	2.8	2.9	3.0	3.3	3.4	3.9	3.7	3.8	3.7	4.0	5.0	4.9	4.4	3.8	4.1	3.8	3.6	4.1	5.1	3.9	3.9	5.1	2.3	3.7
22	3.5	3.7	5.3	4.2	3.1	3.1	3.9	3.9	4.1	5.1	5.0	4.8	5.7	6.2	5.6	6.3	5.2	5.2	5.3	4.2	3.2	3.5	2.9	3.5	6.3	2.9	4.4
23	3.2	3.8	2.9	4.7	3.8	4.8	4.1	4.9	5.1	7.0	7.6	8.4	15.4	23.9	26.5	14.9	15.6	9.2	3.9	3.3	4.1	4.6	3.9	3.5	26.5	2.9	7.9
24	3.2	5.6	4.5	5.2	3.3	5.2	6.7	3.7	5.1	11.3	24.1	11.0	11.6	12.2	11.0	10.1	20.7	16.6	9.3	3.7	3.6	4.8	4.0	2.1	24.1	2.1	8.3
25	2.9	3.1	3.0	2.6	3.0	2.9	3.0	6.6	8.5	13.7	26.3	33.6	20.7	27.0	30.1	39.3	10.2	9.5	6.9	26.8	18.2	6.1	4.3	4.2	39.3	2.6	13.0
26	2.6	2.9	3.5	2.9	3.0	7.9	4.9	5.3	5.4	4.9	7.3	7.0	8.0	12.5	11.4	10.7	7.2	6.4	3.8	3.1	4.4	7.6	10.6	7.5	12.5	2.6	6.3
27	4.0	12.0	10.3	3.4	2.7	3.0	3.8	3.3	3.5	5.7	5.4	5.9	6.2	5.0	5.1	4.7	6.3	5.6	5.6	4.6	4.3	5.3	3.5	5.3	12.0	2.7	5.2
28	9.1	6.6	4.6	19.0	9.7	5.0	7.4	7.2	8.6	13.0	40.7	50.4	39.9	21.6	23.5	21.1	20.3	18.6	19.5	7.3	5.7	18.6	4.1	3.4	50.4	3.4	16.0
29	3.3	3.7	2.9	2.9	4.1	3.2	3.6	5.7	6.9	7.6	7.7	8.6	8.4	9.0	10.0	9.6	10.0	6.9	5.4	4.6	4.6	4.5	3.3	3.7	10.0	2.9	5.8
30	2.7	3.2	3.3	7.5	7.8	13.9	22.9	24.0	8.8	13.0	11.2	11.5	11.2	9.2	11.5	9.2	7.4	6.6	5.3	5.0	4.8	5.2	7.1	6.6	24.0	2.7	9.1
31	4.3	8.2	7.5	18.2	14.7	7.9	7.8	5.8	6.3	7.6	4.5	7.5	8.9	6.0	7.6	6.6	7.9	6.0	8.1	7.6	6.6	15.8	18.3	13.1	18.3	4.3	8.9
Max.	**25.5**	**60.9**	**37.6**	**35.3**	**16.8**	**38.9**	**51.7**	**54.9**	**34.2**	**57.3**	**40.7**	**50.4**	**39.9**	**56.8**	**30.1**	**39.3**	**28.1**	**32.1**	**20.9**	**28.2**	**44.4**	**37.4**	**21.0**	**56.6**	**60.9**		
Min.	**2.3**	**2.9**	**2.9**	**2.6**	**2.7**	**2.9**	**3.0**	**2.9**	**2.5**	**2.7**	**3.3**	**3.7**	**3.2**	**3.1**	**3.4**	**2.8**	**3.4**	**3.0**	**3.0**	**3.1**	**2.6**	**2.5**	**2.9**	**2.1**		**2.1**	
Avg.	**6.7**	**8.4**	**7.9**	**9.6**	**6.9**	**8.2**	**9.7**	**10.0**	**8.2**	**9.5**	**9.0**	**10.1**	**8.4**	**10.2**	**8.7**	**9.5**	**8.0**	**7.1**	**6.7**	**7.6**	**7.7**	**7.4**	**7.1**	**8.0**			**8.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	23.2	4.6	64.1	4.9	5.7	5.5	7.5	12.9	13.1	11.6	15.8	14.7	14.9	27.1	17.7	16.6	25.0	23.7	11.0	5.7	4.7	3.9	6.1	44.9	64.1	3.9	16.0
2	3.2	3.7	4.0	3.1	3.9	2.2	3.0	5.5	9.8	9.4	11.4	16.8	13.5	13.6	12.7	7.2	9.0	6.8	5.9	4.6	4.4	4.5	5.1	4.7	16.8	2.2	7.0
3	4.1	6.7	4.2	3.8	5.3	4.6	7.2	5.0	5.5	6.0	7.1	8.7	10.1	8.3	11.7	9.9	10.7	8.6	6.8	6.5	4.6	3.3	2.7	3.4	11.7	2.7	6.4
4	3.3	4.3	4.8	5.1	4.5	4.3	4.3	4.2	6.0	6.1	6.9	8.1	8.3	9.8	9.4	9.6	9.8	8.7	7.2	5.3	4.9	3.7	3.0	2.8	9.8	2.8	6.0
5	2.6	3.5	4.0	3.9	2.8	3.5	4.0	4.5	6.3	9.3	21.1	21.0	23.3	28.4	25.6	33.5	21.2	23.5	20.6	21.6	20.8	7.2	4.2	3.4	33.5	2.6	13.3
6	4.0	7.2	15.0	19.1	10.0	6.6	12.1	10.6	12.2	12.4	21.5	19.6	13.4	11.7	13.3	9.1	8.7	8.3	7.5	7.2	5.9	5.9	6.2	6.5	21.5	4.0	10.6
7	6.8	6.1	4.8	4.5	4.8	5.0	5.8	5.0	5.0	4.9	6.3	5.7	5.5	5.8	6.0	4.9	5.1	4.5	4.2	4.5	5.0	5.2	4.5	4.2	6.8	4.2	5.2
8	4.0	4.3	4.5	4.5	4.6	4.5	4.6	4.5	4.7	4.7	4.8	5.0	5.6	5.4	5.2	5.0	5.0	5.1	4.9	4.7	5.0	4.9	4.3	4.5	5.6	4.0	4.8
9	4.4	4.5	4.4	4.7	4.9	5.0	5.0	5.1	5.0	5.1	5.3	5.2	5.6	5.6	5.0	5.5	5.4	5.0	5.8	4.7	5.2	5.2	4.6	4.6	5.8	4.4	5.0
10	4.8	4.9	4.7	4.7	5.1	4.8	4.9	5.1	5.2	5.7	5.8	6.1	5.6	5.6	6.0	5.9	5.8	4.9	5.4	5.2	5.1	5.1	5.0	4.9	6.1	4.7	5.3
11	4.7	4.6	4.5	4.8	4.9	4.8	4.8	4.7	4.7	5.2	4.9	4.7	5.2	5.5	5.0	5.2	5.3	5.3	4.7	4.7	4.9	4.6	5.2	4.5	5.5	4.5	4.9
12	4.3	4.5	4.6	4.2	4.5	3.8	4.9	5.4	4.9	4.7	5.7	6.4	5.9	5.4	5.6	5.7	5.5	6.8	6.2	6.9	7.5	5.4	6.2	4.8	7.5	3.8	5.4
13	4.5	4.7	3.4	4.6	2.9	4.6	6.7	6.1	7.3	6.1	9.3	12.6	15.8	12.7	12.7	15.0	13.1	10.2	8.1	8.3	21.9	7.9	10.4	5.3	21.9	2.9	8.9
14	17.6	22.9	27.0	54.6	5.3	3.6	5.7	20.8	7.9	22.3	9.0	25.1	14.8	14.5	23.1	26.0	20.4	26.4	16.9	53.7	34.3	10.9	14.9	6.9	54.6	3.6	20.2
15	7.4	3.9	3.2	3.4	4.2	3.4	5.1	5.8	7.6	6.8	9.9	10.5	21.8	13.5	15.6	16.3	29.2	11.2	7.1	6.5	6.4	13.1	10.3	7.8	29.2	3.2	9.6
16	5.2	4.8	4.5	3.5	4.1	5.4	4.2	6.4	6.2	5.4	5.7	6.2	5.4	6.2	5.2	4.5	5.5	4.3	4.7	5.4	5.1	3.8	6.4	7.8	7.8	3.5	5.2
17	8.0	6.8	5.3	3.6	7.3	3.5	5.9	7.2	6.5	7.5	10.3	12.4	13.1	9.0	9.2	9.0	8.5	7.7	7.0	6.4	6.3	6.0	6.1	6.2	13.1	3.5	7.5
18	5.6	14.1	56.4	26.3	16.9	15.0	11.7	10.1	11.8	8.6	8.1	7.0	5.4	7.5	6.8	6.3	5.7	5.4	5.3	5.2	5.2	5.7	18.6	19.6	56.4	5.2	12.0
19	26.7	12.9	5.4	6.1	5.4	6.6	10.0	14.6	41.9	29.0	17.1	21.9	27.7	18.2	21.5	28.1	37.6	14.8	13.3	9.5	6.0	8.5	15.2	6.6	41.9	5.4	16.9
20	5.2	11.2	7.4	6.0	5.3	5.3	9.9	18.2	29.1	34.8	23.2	49.3	34.3	38.4	10.0	5.0	7.7	5.8	6.1	6.5	6.0	4.7	7.6	20.2	49.3	4.7	14.9
21	5.3	4.3	5.6	18.4	7.8	28.0	18.4	17.9	14.2	10.0	9.6	15.3	24.8	43.3	20.7	23.0	12.1	23.2	43.5	16.3	7.5	3.2	2.1	3.7	43.5	2.1	15.7
22	3.2	3.0	5.5	4.1	4.1	3.4	5.4	5.8	5.9	11.5	22.6	9.7	9.7	6.2	5.9	5.9	6.1	5.9	6.0	5.9	5.1	5.8	6.4	6.0	22.6	3.0	6.6
23	5.7	5.3	4.8	5.4	5.3	4.4	4.8	4.6	4.9	5.0	6.0	8.0	7.0	10.7	10.5	8.4	7.4	8.4	7.4	6.9	5.6	6.1	4.0	5.9	10.7	4.0	6.4
24	5.4	4.1	5.1	5.1	8.9	6.6	38.0	10.1	13.8	14.6	17.8	23.9	44.9	54.0	22.1	49.3	14.3	9.1	24.5	20.0	9.4	9.4	8.5	13.1	54.0	4.1	18.0
25	13.6	4.3	4.7	3.9	7.4	28.0	16.8	11.1	27.2	21.7	24.3	24.8	26.8	16.3	14.9	13.2	13.4	9.3	8.5	5.6	6.7	6.8	5.1	4.3	28.0	3.9	13.3
26	5.7	5.3	5.9	8.3	10.1	12.9	16.0	16.3	16.0	43.4	28.0	25.3	27.6	34.8	18.7	11.4	15.4	28.8	15.3	5.8	5.1	5.7	10.2	11.0	43.4	5.1	15.9
27	10.9	34.5	11.9	47.4	9.2	6.7	5.2	7.2	11.8	22.7	63.8	44.8	50.0	23.0	21.2	17.5	11.7	12.0	10.5	7.3	5.1	5.6	10.5	11.3	63.8	5.1	19.2
28	4.9	18.4	2.8	10.6	39.5	34.1	12.2	15.0	5.7	10.8	10.6	8.8	13.7	13.5	10.8	12.5	11.5	12.0	18.9	8.7	7.2	17.1	15.8	15.8	39.5	2.8	13.8
29	16.4	12.9	8.0	10.7	8.7	14.9	9.3	17.6	9.2	10.3	13.0	11.3	12.6	12.1	8.5	8.4	8.2	6.5	6.5	5.8	6.0	6.0	6.9	7.3	17.6	5.8	9.9
30	5.8	6.7	6.9	6.5	5.3	7.2	6.6	7.1	11.0	11.5	14.0	12.4	11.6	8.6	11.6	17.0	18.4	17.0	30.9	26.7	23.4	15.5	10.2	9.2	30.9	5.3	12.5
Max.	**26.7**	**34.5**	**64.1**	**54.6**	**39.5**	**34.1**	**38.0**	**20.8**	**41.9**	**43.4**	**63.8**	**49.3**	**50.0**	**54.0**	**25.6**	**49.3**	**37.6**	**28.8**	**43.5**	**53.7**	**34.3**	**17.1**	**18.6**	**44.9**	**64.1**		
Min.	**2.6**	**3.0**	**2.8**	**3.1**	**2.8**	**2.2**	**3.0**	**4.2**	**4.7**	**4.7**	**4.8**	**4.7**	**5.2**	**5.4**	**5.0**	**4.5**	**5.0**	**4.3**	**4.2**	**4.5**	**4.4**	**3.2**	**2.1**	**2.8**		**2.1**	
Avg.	**7.6**	**8.0**	**9.9**	**9.9**	**7.3**	**8.3**	**8.7**	**9.1**	**10.7**	**12.2**	**14.0**	**15.0**	**16.1**	**15.8**	**12.4**	**13.2**	**12.1**	**11.0**	**11.0**	**9.7**	**8.3**	**6.7**	**7.5**	**8.7**			**10.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.1	15.6	14.7	9.3	12.9	23.0	33.3	21.2	42.3	45.7	48.0	42.7	54.5	20.3	23.8	34.1	21.2	12.3	9.9	8.6	5.3	6.6	6.2	17.8	54.5	5.3	22.5
2	16.9	12.3	5.6	6.7	8.1	5.0	3.2	7.3	9.1	8.4	12.8	14.5	14.5	11.8	12.6	16.0	14.3	8.9	8.5	5.9	5.1	4.1	4.0	4.5	16.9	3.2	9.2
3	3.3	4.0	5.8	6.2	4.4	5.2	4.4	9.4	6.1	8.7	12.0	10.6	20.6	21.4	27.0	25.0	46.8	10.2	7.9	25.8	14.0	10.6	37.5	12.1	46.8	3.3	14.1
4	11.2	15.1	24.7	18.3	6.1	9.7	45.4	40.5	45.3	37.6	42.3	45.2	36.1	33.4	41.2	34.7	14.4	13.5	10.6	8.6	5.8	23.4	21.2	22.3	45.4	5.8	25.3
5	15.3	24.9	9.9	11.2	11.0	21.8	10.7	9.1	10.4	8.8	13.7	27.6	52.9	33.5	42.6	16.0	29.5	11.2	27.7	25.8	10.9	14.2	34.0	49.1	52.9	8.8	21.7
6	46.3	10.3	14.6	17.2	14.2	29.5	25.9	24.8	10.2	13.5	16.2	45.8	44.3	11.4	10.8	11.9	9.6	46.0	18.8	13.1	42.1	42.5	7.8	18.2	46.3	7.8	22.7
7	12.5	6.6	8.0	6.2	4.5	5.6	5.0	5.6	5.8	6.1	5.3	5.9	6.8	5.9	6.4	5.5	5.0	6.0	8.1	6.9	6.8	7.5	12.8	6.7	12.8	4.5	6.7
8	6.1	9.1	29.0	9.7	13.5	6.6	5.4	5.5	4.5	5.5	18.5	29.1	16.8	26.4	46.9	48.9	43.6	14.3	14.2	15.0	11.4	6.4	9.9	15.5	48.9	4.5	17.1
9	10.4	6.0	5.9	4.2	3.2	4.9	5.1	7.1	14.7	26.9	25.9	13.4	12.1	11.6	10.6	13.6	8.8	7.7	6.2	5.8	8.4	8.1	5.3	4.8	26.9	3.2	9.6
10	4.7	4.5	3.9	4.1	4.4	4.3	5.0	5.5	5.5	6.1	5.0	5.6	4.4	4.3	5.0	5.5	5.5	6.1	5.0	5.6	6.3	31.1			31.1	3.9	6.2
11		5.2	5.1	5.2	5.3	5.3	7.5	6.8	5.9		7.5	7.0	6.5	5.8	5.3	6.5	5.9	6.8	7.8	21.2	16.2	16.1	32.5	59.8	59.8	5.1	11.4
12	11.2	8.3	8.4	14.3	11.0	9.1	18.5	20.4	34.8	9.5	19.6	16.1	20.8	4.9	4.3	6.8	8.0	9.0	13.9	14.3	17.2	14.8	20.0	22.1	34.8	4.3	14.0
13	24.2	16.1	8.7	5.2	17.0	7.6	13.5	5.8	3.8	5.0	3.7	3.3	3.8	7.4	19.4	48.6	14.1	8.0	6.9	10.2	6.7	5.7	6.0	5.9	48.6	3.3	10.7
14	5.9	6.5	6.5	4.4	4.8	5.6	6.4	7.6	4.9	4.4	10.6	6.2	6.6	5.7	6.2	5.2	6.9	6.4	5.9	6.0	5.9	8.1	8.8	8.3	10.6	4.4	6.4
15	8.7	7.1	8.0	6.7	6.9	5.4	4.4	6.1	5.5	6.4	5.3	4.7	4.2	5.2	9.1	16.2	4.1	7.4	8.9	11.0	11.4	10.0	9.2	11.8	16.2	4.1	7.6
16	15.5	12.5	9.9	9.7	8.4	6.2	7.2	10.0	7.0	5.4	4.8	5.2	4.2	4.5	4.5	4.8	5.3	5.7	4.8	5.5	6.1	7.5	5.6	7.0	15.5	4.2	7.0
17	6.3	6.2	6.0	7.1	8.3	6.9	7.8	7.0	7.2	5.4	5.1	4.8	4.4	4.4	4.1	4.5	4.4	4.7	5.1	5.7	5.7	5.9	6.7	5.3	8.3	4.1	5.8
18	4.7	4.7	4.7	5.3	5.0	5.5	5.7	5.9	5.3	4.2	3.8	4.2	5.0	5.0	4.5	4.7	4.4	5.1	5.2	5.2	5.7	6.3	5.7	5.8	6.3	3.8	5.1
19	5.2	5.5	4.9	5.0	4.4	5.2	4.7	4.7	4.3	4.9	5.4	5.7	6.2	9.9	5.3	6.5	6.3	10.0	9.0	13.0	9.1	8.4	14.3	9.2	14.3	4.3	7.0
20	14.4	10.5	8.7	11.0	6.3	7.5	6.9	22.5	11.0	5.9	5.5	7.4	19.3	9.4	4.3	4.5	4.9	7.4	11.0	15.2	11.8	9.4	13.2	11.2	22.5	4.3	10.0
21	22.2	11.6	8.7	15.9	6.4	13.4	12.0	6.8	5.7	7.2	10.7	8.4	10.6	28.7	27.9	27.1	10.6	21.4	23.1	48.2	53.0	30.7	30.6	8.5	53.0	5.7	18.7
22	9.3	5.7	6.2	5.1	6.8	9.1	7.1	8.7	4.4	8.0	7.0	36.5	34.7	5.8	5.0	10.7	19.7	8.5	9.6	9.8	11.5	10.1	9.4	9.1	36.5	4.4	10.7
23	5.8	6.3	6.0	8.4	6.4	5.0	5.5	10.4	8.3	6.0	5.6	5.7	5.8	4.6	5.3	6.1	8.5	7.2	8.2	7.6	16.6	38.0	8.2	11.1	38.0	4.6	8.6
24	9.3	6.5	10.1	8.8	5.2	5.2	8.7	7.1	5.5	15.6	13.0	7.9	6.3	5.7	5.6	5.1	4.9	5.8	8.3	13.3	6.9	8.0	5.2	5.5	15.6	4.9	7.7
25	6.5	11.0	5.2	6.5	7.1	4.6	4.2	4.3	4.7	4.1	3.8	3.9	5.5	5.5	4.7	4.2	7.6	6.3	6.4	5.3	5.8	6.5	8.2	10.5	11.0	3.8	5.9
26	10.7	9.5	9.3	8.6	7.3	8.8	5.9	8.8	10.3	24.8	8.6	10.3	14.6	13.6	21.2	49.1	15.0	30.0	7.0	7.3	8.5	8.3	8.2	8.9	49.1	5.9	13.1
27	9.9	7.3	5.4	5.8	5.6	5.0	4.7	4.2	3.8	3.8	3.5	3.9	5.4	23.1	22.9	16.0	16.9	22.0	24.6	36.8	20.1	25.6	30.9	42.9	42.9	3.5	14.6
28	27.1	19.2	13.7	21.4	26.5	15.7	14.9	40.8	34.5	10.1	13.6	12.0	10.6	14.7	37.8	15.7	12.6	11.4	10.3	8.1	10.6	7.5	6.0	8.4	40.8	6.0	16.8
29	6.5	9.8	9.5	6.3	10.5	6.8	14.3	15.1	5.6	7.0	6.6	5.8	4.7	4.3	4.3	4.8	6.1	7.5	6.0	6.8	8.9	5.9	7.3	7.2	15.1	4.3	7.4
30	9.7	6.9	5.6	6.1	7.7	5.7	5.4	5.4	5.6	6.6	5.3	5.7	4.2	6.2	5.6	12.8	37.5	18.0	19.8	13.9	5.4	5.8	6.2	6.5	37.5	4.2	9.1
31	5.8	5.3	6.8	4.9	4.9	3.2	2.8	3.2	3.5	3.6	3.7	4.3	5.1	4.3	5.5	5.7	7.4	6.9	5.6	7.0	7.2	7.3	7.4	5.4	7.4	2.8	5.3
Max.	**46.3**	**24.9**	**29.0**	**21.4**	**26.5**	**29.5**	**45.4**	**40.8**	**45.3**	**45.7**	**48.0**	**45.8**	**54.5**	**33.5**	**46.9**	**49.1**	**46.8**	**46.0**	**27.7**	**48.2**	**53.0**	**42.5**	**37.5**	**59.8**	**59.8**		
Min.	**3.3**	**4.0**	**3.9**	**4.1**	**3.2**	**3.2**	**2.8**	**3.2**	**3.5**	**3.6**	**3.5**	**3.3**	**3.8**	**4.3**	**4.1**	**4.2**	**4.1**	**4.7**	**4.8**	**5.2**	**5.1**	**4.1**	**4.0**	**4.5**		**2.8**	
Avg.	**11.9**	**9.4**	**9.0**	**8.5**	**8.2**	**8.5**	**10.0**	**11.2**	**10.8**	**10.5**	**11.4**	**13.2**	**14.6**	**11.6**	**14.2**	**15.4**	**13.2**	**11.3**	**10.5**	**12.7**	**11.8**	**12.9**	**12.9**	**14.1**			**11.6**

Total Hours in Month 744 **Hours Data Available** 740 **Data Recovery** 99.5%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.1	5.9	7.6	9.7	6.0	13.3	11.9	14.0	12.0	7.1	7.4	7.0	6.7	7.5	6.8	8.0	6.2	6.0	6.4	5.1	5.0	4.9	4.7	5.8	14.0	4.7	7.6
2	6.5	6.7	5.3	4.8	4.7	7.5	6.5	8.4	7.7	6.1	8.2	8.6	10.2	10.0	10.4	8.8	5.0	4.8	4.9	4.8	4.5	4.4	4.1	4.3	10.4	4.1	6.5
3	4.6	4.5	4.7	4.4	5.3	4.8	5.4	5.8	5.4	6.6	6.4	7.0	6.8	5.9	5.7	6.0	5.4	7.1	4.1	4.5	5.7	4.5	4.7	3.4	7.1	3.4	5.4
4	4.9	4.2	12.1	5.8	5.3	7.7	3.9	4.5	7.2	7.1	12.5	11.0	17.3	14.4	41.1	10.4	31.5	11.0	6.7	6.8	7.9	11.9	7.1	14.3	41.1	3.9	11.1
5	15.6	13.2	21.2	9.1	4.7	4.7	4.9	4.4	6.8	5.9	6.5	6.3	5.6	6.5	5.7	6.7	7.9	9.2	7.4	7.7	4.2	3.9	4.4	7.5	21.2	3.9	7.5
6	6.5	6.8	5.4	4.5	3.6	2.6	2.9	3.1	4.2	7.6	10.2	10.9	11.8	9.2	8.4	10.6	9.6	8.8	7.5	4.8	4.7	4.4	3.3	3.2	11.8	2.6	6.4
7	3.0	3.6	3.4	3.6	3.5	3.4	3.6	2.6	5.8	6.9	8.0	15.4	17.6	11.5	7.8	7.9	7.0	5.5	5.1	11.0	24.6	33.7	26.6	27.6	33.7	2.6	10.4
8	25.8	11.6	18.8	19.0	15.3	41.5	36.7	7.6	7.6	6.8	11.4	12.2	12.6	15.3	14.4	14.1	15.6	11.3	8.4	6.8	7.3	7.1	30.2	30.7	41.5	6.8	16.2
9	36.4	18.6	19.2	12.6	39.3	12.4	7.3	14.0	18.7	16.8	13.5	16.9	8.5	12.2	15.3	14.5	10.9	6.8	6.3	7.5	8.6	5.6	4.9	5.2	39.3	4.9	13.8
10	4.6	4.6	5.3	6.3	6.5	5.4	6.5	7.0	6.9	7.9	6.9	5.7	5.4	4.5	5.2	5.0	4.4	5.0	4.7	4.7	4.7	4.8	4.9	5.2	7.9	4.4	5.5
11	5.2	5.7	6.2	5.5	4.9	5.3	5.5	5.9	5.4	6.0	5.4	6.0	7.7	9.1	9.5	7.1	6.9	8.2	7.4	7.5	5.7	6.2	11.3	3.9	11.3	3.9	6.6
12	3.0	3.3	4.0	2.7	3.0	3.3	3.3	3.9	4.5	4.7	6.4	4.8	5.5	9.5	9.1	6.3	6.6	6.2	7.3	4.2	3.7	3.7	3.2	3.6	9.5	2.7	4.8
13	9.3	4.9	31.2	18.9	6.4	4.3	8.5	10.0	7.8	6.3	5.4	5.2	4.9	5.6	7.4	9.0	10.3	6.8	9.0	4.9	8.4	6.0	5.6	6.1	31.2	4.3	8.4
14	10.9	13.4	6.1	19.5	31.2	10.8	10.3	6.7	6.0	4.3	5.2	6.5	5.3	4.7	4.7	4.6	5.5	8.7	15.4	6.9	5.1	5.2	4.9	5.1	31.2	4.3	8.6
15	5.0	4.6	4.5	4.2	5.9	5.4	6.0	4.3	5.0	5.2	4.8	7.4	5.0	5.7	5.8	8.5	5.9	7.0	5.7	4.5	5.1	5.8	5.3	5.0	8.5	4.2	5.5
16	42.9	13.7	15.1	5.6	5.8	3.1	6.0	6.7	7.0	8.0	12.7	15.7	10.8	12.3	31.0	13.3	54.9	9.2	16.1	10.3	10.8	21.1	38.0	22.3	54.9	3.1	16.3
17	23.2	17.5	17.1	31.6	17.8	17.9	41.5	41.7	14.4	8.6	15.3	14.1	14.1	8.9	12.4	5.3	7.8	5.5	6.7	6.0	5.1	4.7	4.9	6.6	41.7	4.7	14.5
18	6.3	7.7	5.2	5.2	5.0	4.5	4.9	5.3	4.9	5.3	4.7	5.5	6.2	5.8	6.6	5.3	4.2	4.2	4.8	6.7	5.0	5.9	5.6	7.7	7.7	4.2	5.5
19	4.0	4.0	4.3	3.4	2.7	6.8	10.8	26.4	35.4	23.6	45.8	15.6	6.8	7.6	8.4	9.8	8.1	5.4	6.4	5.2	19.1	8.0	9.8	5.5	45.8	2.7	11.8
20	6.3	5.2	4.1	7.7	10.0	23.8	6.5	6.5	5.1	4.9	6.3	11.8	9.1	9.2	9.6	13.0	9.9	9.1	5.8	4.0	3.6	5.1	5.5	6.0	23.8	3.6	7.8
21	4.1	4.9	6.7	3.4	5.1	6.8	3.5	6.1	9.5	47.5	12.2	11.5	20.7	15.6	9.5	10.4	8.1	5.0	3.8	4.6	5.5	4.4	5.3	7.9	47.5	3.4	9.3
22	8.8	9.2	6.3	6.1	6.4	6.5	6.6	6.0	6.1	5.8	6.5	6.3	5.3	9.6	6.2	4.6	4.7	4.6	4.7	5.3	4.2	5.8	5.2	9.7	9.7	4.2	6.3
23	7.6	5.2	36.7	10.5	6.3	7.4	37.1	29.5	16.8	10.7	19.5	31.3	14.0	32.3	18.8	17.2	24.6	17.0	6.1	3.3	4.1	5.1	8.4	7.3	37.1	3.3	15.7
24	11.5	5.9	4.3	4.6	3.9	4.5	4.4	5.5	5.1	13.5	8.6	9.3	6.3	4.7	5.3	5.4	5.2	5.1	4.4	4.9	4.9	3.7	3.2	3.9	13.5	3.2	5.7
25	3.5	3.5	2.9	4.0	3.8	5.3	4.9	3.2	9.2	15.9	15.5	13.7	12.0	12.8	15.8	14.0	9.6	16.1	7.0	4.5	2.6	5.2	13.9	7.6	16.1	2.6	8.6
26	14.1	9.9	17.2	20.8	5.1	8.6	5.4	15.8	12.0	6.8	7.4	7.9	7.6	19.8	22.8	14.3	11.3	17.2	11.5	18.0	5.7	12.7	4.5	8.4	22.8	4.5	11.9
27	6.8	5.8	5.6	6.7	4.2	5.9	53.2	22.1	13.1	9.3	14.0	15.7	16.5	14.7	15.5	8.9	11.6	6.3	5.3	4.1	3.9	3.1	4.5	4.7	53.2	3.1	10.9
28	4.3	7.4	5.7	14.8	48.3	52.4	12.8	40.1	11.7	8.0	8.5	12.3	14.4	18.1	12.3	10.8	5.4	7.3	15.4	4.5	10.8	5.8	5.6	4.6	52.4	4.3	14.2
29	5.8	5.3	6.7	3.5	7.6	3.5	2.9	6.3	6.4	5.4	9.6	13.9	12.3	38.8	43.8	20.0	19.7	13.9	7.3	4.8	3.3	5.0	5.0	6.0	43.8	2.9	10.7
30	7.3	6.8	4.9	5.0	4.8	4.8	4.7	4.7	4.2	3.8	4.7	5.4	6.5	7.7	7.9	6.4	12.7	9.4	6.5	6.1	6.6	7.4	5.7	4.7	12.7	3.8	6.2
31	15.2	7.7	3.9	5.1	4.9	5.1	6.3	3.5	4.0	3.8	6.6	7.1	6.6	6.5	5.0	5.6	5.7	4.8	5.1	5.3	9.0	4.5	4.7	3.4	15.2	3.4	5.8
Max.	**42.9**	**18.6**	**36.7**	**31.6**	**48.3**	**52.4**	**53.2**	**41.7**	**35.4**	**47.5**	**45.8**	**31.3**	**20.7**	**38.8**	**43.8**	**20.0**	**54.9**	**17.2**	**16.1**	**18.0**	**24.6**	**33.7**	**38.0**	**30.7**	**54.9**		
Min.	**3.0**	**3.3**	**2.9**	**2.7**	**2.7**	**2.6**	**2.9**	**2.6**	**4.0**	**3.8**	**4.7**	**4.8**	**4.9**	**4.5**	**4.7**	**4.6**	**4.2**	**4.2**	**3.8**	**3.3**	**2.6**	**3.1**	**3.2**	**3.2**		**2.6**	
Avg.	**10.3**	**7.5**	**9.7**	**8.7**	**9.3**	**9.7**	**10.8**	**10.7**	**8.9**	**9.2**	**10.2**	**10.6**	**9.7**	**11.5**	**12.5**	**9.4**	**11.0**	**8.1**	**7.2**	**6.1**	**6.8**	**7.1**	**8.2**	**8.0**			**9.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.5	3.4	4.4	4.1	4.0	4.5	3.6	3.8	7.0	5.5	6.0	10.1	8.1	9.5	13.3	7.8	8.8	5.2	4.2	4.7	3.7	3.7	5.0	3.7	13.3	3.4	5.7
2	5.4	4.4	2.9	3.5	5.9	5.9	3.9	3.0	4.3	8.1	6.5	5.5	5.7	7.7	7.4	8.7	6.7	11.8	7.9	11.4	24.0	29.0	16.4	29.7	29.7	2.9	9.4
3	31.0	12.5	17.6	43.6	7.3	6.5	3.4	3.5	4.1	7.1	11.8	31.9	35.8	47.3	20.1	16.3	17.6	29.5	57.5	41.2	44.0	19.3	14.7	19.9	57.5	3.4	22.6
4	31.5	36.7	14.5	2.1	4.7	4.8	6.0	6.3	5.5	6.8	9.6	11.6	19.1	32.0	36.5	23.8	38.5	27.8	27.1	17.9	5.9	9.2	6.7	7.4	38.5	2.1	16.3
5	9.5	6.0	4.7	4.6	5.1	6.0	6.1	4.8	5.6	5.8	6.3	7.5	5.8	7.1	6.3	7.4	6.4	6.2	5.9	5.1	5.2	6.4	14.2	14.8	14.8	4.6	6.8
6	14.7	8.7	4.2	3.7	4.2	3.5	3.1	4.2	4.3	5.5	8.1	8.9	9.8	10.1	12.1	11.4	10.6	5.7	4.0	8.9	5.5	4.8	4.7	4.6	14.7	3.1	6.9
7	4.7	20.0	15.9	8.9	7.4	9.8	5.3	21.3	6.2	5.0	4.6	4.7	4.8	4.9	4.7	5.1	4.8	5.5	5.5	5.2	5.0	5.0	5.2	4.9	21.3	4.6	7.3
8	5.1	5.3	5.2	5.1	5.0	4.6	4.7	4.8	5.0	4.8	4.8	4.5	4.6	4.9	4.6	4.5	5.1	4.8	4.9	4.9	4.7	4.7	4.5	6.0	6.0	4.5	4.9
9	5.8	4.5	4.3	6.4	38.3	19.5	7.9	29.6	11.9	9.9	10.2	12.0	18.7	10.6	7.9	7.0	6.8	7.0	5.6	5.4	5.4	6.8	6.7	3.2	38.3	3.2	10.5
10	6.8	5.3	25.1	20.4	8.0	7.1	52.2	45.4	19.7	15.1	10.2	44.8	28.1	34.7	12.6	28.1	14.2	8.0	40.0	19.9	11.3	16.4	34.2	44.2	52.2	5.3	23.0
11	34.8	9.3	41.3	18.6	48.6	4.7	3.4	2.0	3.4	7.7	11.3	13.0	17.6	20.5	27.2	29.2	18.2	13.6	14.8	2.7	5.2	22.6	5.4	3.1	48.6	2.0	15.8
12	3.0	4.3	4.5	3.9	3.6	5.1	2.3	3.9	4.0	6.0	7.9	11.1	19.9	21.5	29.1	22.1	14.2	13.9	5.1	3.4	4.6	4.0	4.0	3.5	29.1	2.3	8.5
13	4.0	3.4	3.5	3.0	4.3	4.8	34.0	7.6	12.1	7.8	8.8	6.4	8.2	6.4	6.1	5.1	5.4	5.0	4.7	4.9	4.9	4.9	4.9	5.3	34.0	3.0	6.9
14	4.9	5.0	5.0	4.8	5.1	4.9	5.1	4.9	5.1	5.4	5.3	5.2	5.3	5.0	4.9	5.1	5.2	5.1	5.0	5.2	5.0	5.4	5.2	4.8	5.4	4.8	5.1
15	4.6	5.3	5.2	4.9	4.7	5.0	5.1	5.1	5.3	4.9	5.1	4.8	4.9	5.0	4.9	5.1	5.2	4.8	5.2	4.6	4.7	4.7	5.2	4.6	5.3	4.6	5.0
16	4.6	4.9	5.4	5.6	5.5	4.6	4.2	4.1	4.5	4.9	4.9	6.2	6.7	6.8	6.9	7.4	7.2	6.5	5.7	5.0	4.0	3.7	4.5	5.2	7.4	3.7	5.4
17	7.4	3.7	4.6	3.9	4.9	4.4	4.3	4.5	4.9	5.8	6.5	6.4	6.3	5.9	8.0	7.9	7.5	7.8	5.1	4.0	5.1	5.1	2.8	3.3	8.0	2.8	5.4
18	4.3	5.5	9.9	10.2	9.5	11.5	7.0	4.5	4.5	4.8	5.4	5.7	4.9	4.9	5.1	5.4	4.5	4.6	4.6	4.5	4.5	4.4	4.8	5.3	11.5	4.3	5.8
19	5.0	5.1	9.6	9.4	7.6	11.7	14.7	6.6	6.9	5.9	12.6	16.9	12.1	6.8	17.8	16.3	26.9	23.3	9.0	8.0	16.7	15.0	6.1	9.5	26.9	5.0	11.6
20	4.4	4.4	4.7	4.6	2.6	3.2	5.7	4.3	5.4	3.9	6.2	6.6	7.6	8.3	7.7	14.0	13.1	6.6	9.3	4.9	5.0	4.9	10.4	13.6	14.0	2.6	6.7
21	14.3	26.3	26.4	9.0	9.7	6.4	6.5	5.6	5.2	5.3	4.6	4.8	4.7	5.4	7.3	11.6	10.1	8.9	6.4	10.2	4.0	7.0	7.4	5.5	26.4	4.0	8.9
22	3.5	5.7	5.5	4.8	3.9	3.1	3.3	4.2	4.5	4.4	4.5	9.5	7.0	5.6	7.2	5.3	5.8	7.3	5.4	6.2	5.0	5.0	5.1	5.1	9.5	3.1	5.3
23	4.6	5.7	5.4	6.4	6.0	7.3	7.5	6.0	7.1	5.2	5.7	6.1	6.9	7.1	7.9	6.8	8.2	8.9	10.5	7.4	3.4	5.4	6.0	5.2	10.5	3.4	6.5
24	6.1	11.0	8.8	17.7	3.6	12.2	15.7	9.9	15.6	45.8	15.3	20.1	6.9	14.9	7.2	12.3	8.9	7.3	3.0	2.2	2.0	3.3	3.8	3.1	45.8	2.0	10.7
25	5.6	4.3	5.4	3.8	3.5	3.8	4.9	5.5	6.6	7.6	6.6	33.1	20.9	10.8	10.1	5.9	6.1	4.5	4.8	4.6	4.1	4.6	11.3	12.8	33.1	3.5	8.0
26	10.9	12.2	31.8	12.6	12.9	4.9	9.3	14.2	12.1	9.9	13.0	8.8	7.2	8.2	14.3	36.5	36.7	19.5	14.3	23.3	20.5	6.6	4.5	8.1	36.7	4.5	14.7
27	12.7	8.7	12.9	6.4	9.5	5.7	10.3	3.5	8.5	7.2	23.6	26.3	21.5	23.8	12.1	9.6	5.5	27.9	15.4	34.5	12.0	20.6	51.1	22.1	51.1	3.5	16.3
28	4.9	8.1	9.5	7.6	6.3	6.9	3.6	6.9	4.7	5.0	6.7	6.8	5.0	5.1	5.0	6.4	5.2	4.8	3.8	3.0	2.7	2.6	3.8	3.2	9.5	2.6	5.3
29	2.7	5.5	31.2	26.2	14.0	5.3	7.1	3.3	3.0	3.5	5.7	5.6	6.7	6.1	6.8	6.4	4.4	3.7	5.6	3.5	3.2	3.5	5.1	7.5	31.2	2.7	7.3
30	5.8	4.6	8.3	24.8	36.2	9.0	5.6	7.2	4.8	6.8	8.5	13.5	11.0	7.7	6.3	5.7	5.9	6.2	6.3	5.3	5.1	5.2	5.2	4.8	36.2	4.6	8.7
Max.	**34.8**	**36.7**	**41.3**	**43.6**	**48.6**	**19.5**	**52.2**	**45.4**	**19.7**	**45.8**	**23.6**	**44.8**	**35.8**	**47.3**	**36.5**	**36.5**	**38.5**	**29.5**	**57.5**	**41.2**	**44.0**	**29.0**	**51.1**	**44.2**	**57.5**		
Min.	**2.7**	**3.4**	**2.9**	**2.1**	**2.6**	**3.1**	**2.3**	**2.0**	**3.0**	**3.5**	**4.5**	**4.5**	**4.6**	**4.9**	**4.6**	**4.5**	**4.4**	**3.7**	**3.0**	**2.2**	**2.0**	**2.6**	**2.8**	**3.1**		**2.0**	
Avg.	**8.9**	**8.3**	**11.3**	**9.7**	**9.7**	**6.6**	**8.5**	**8.0**	**6.7**	**7.7**	**8.2**	**11.9**	**11.1**	**11.8**	**10.9**	**11.5**	**10.8**	**10.1**	**10.2**	**9.1**	**7.9**	**8.1**	**9.0**	**9.1**			**9.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.6	4.5	4.3	4.6	4.7	4.7	4.8	5.0	5.2	4.8	5.0	5.2	5.6	5.7	5.2	5.1	4.7	4.6	4.7	4.5	4.4	4.5	4.5	4.4	5.7	4.3	4.8
2	4.6	4.4	4.5	4.5	4.2	4.6	4.5	4.6	4.4	4.5	4.9	4.8	6.0	4.8	4.8	4.9	4.8	5.0	4.4	4.6	4.6	4.7	5.0	4.9	6.0	4.2	4.7
3	4.7	5.0	4.8	4.7	5.1	4.8	5.1	5.3	5.3	5.7	5.7	5.8	6.0	6.0	6.7	6.2	8.3	5.8	8.6	6.0	6.7	6.4	7.4	7.6	8.6	4.7	6.0
4	7.0	7.1	5.8	5.6	6.4	6.5	6.4	6.6	5.4	5.5	6.8	5.7	6.7	7.2	10.8	12.3	9.8	25.1	13.5	13.7	15.1	7.8	8.0	4.6	25.1	4.6	8.7
5	7.4	14.5	12.8	19.8	33.4	15.3	4.2	3.6	4.6	8.9	4.2	5.6	10.4	10.8	28.9	17.2	11.9	9.2	7.7	5.8	4.5	5.2	5.6	22.0	33.4	3.6	11.4
6	11.0	12.3	6.2	4.3	6.5	5.0	4.1	4.6	4.4	4.6	6.7	7.0	6.6	7.4	5.1	5.3	5.2	5.0	5.3	4.8	4.5	4.5	4.4	4.3	12.3	4.1	5.8
7	4.4	4.3	4.3	4.6	4.5	4.3	4.5	4.5	4.4	4.6	4.5	4.7	4.5	4.8	4.6	4.7	4.8	4.9	4.7	4.5	4.4	4.5	4.9	4.9	4.9	4.3	4.6
8	4.9	5.1	5.0	4.7	4.7	4.7	4.5	4.6	4.8	5.2	4.7	4.7	4.9	4.8	4.8	4.9	5.1	5.0	5.0	5.1	4.8	4.8	4.4	4.9	5.2	4.4	4.8
9	5.2	5.1	4.9	5.0	4.8	4.8	4.7	5.1	5.2	5.3	5.2	5.1	5.1	4.9	5.2	5.4	5.0	5.1	12.4	8.4	5.8	6.2	9.2	8.9	12.4	4.7	5.9
10	21.5	13.6	17.5	5.1	7.2	6.9	5.4	4.8	8.0	8.5	8.8	8.8	5.8	5.6	5.7	5.3	5.6	6.4	6.0	6.7	6.0	6.5	7.4	6.4	21.5	4.8	7.9
11	7.4	6.2	7.6	6.5	7.4	6.2	6.6	8.3	7.6	7.2	11.4	6.4	5.9	8.0	7.7	10.0	6.6	5.6	9.5	12.4	7.2	13.6	7.9	8.1	13.6	5.6	8.0
12	5.9	6.0	17.5	39.1	43.3	5.5	6.8	4.3	7.4	6.1	6.1	11.2	10.2	11.3	5.0	5.7	4.7	4.4	5.6	12.3	5.6	8.9	6.0	6.4	43.3	4.3	10.2
13	11.3	6.7	7.0	28.3	16.2	18.6	38.9	37.4	30.0	28.5	32.7	10.1	8.0	8.5	10.5	9.4	4.8	5.2	2.7	5.5	2.8	8.1	4.6	4.2	38.9	2.7	14.2
14	6.5	11.2	8.1	6.3	4.4	2.3	4.0	3.9	4.2	5.7	13.0	8.5	12.6	9.5	10.6	6.5	5.2	14.1	11.8	7.7	4.6	3.8	4.4	3.2	14.1	2.3	7.2
15	6.1	22.8	36.1	4.5	7.7	8.5	7.1	6.0	5.9	4.6	5.1	4.9	5.2	7.6	6.7	4.9	4.9	5.0	4.5	5.8	6.8	5.2	5.3	5.2	36.1	4.5	7.8
16	7.8	7.3	5.7	5.9	6.8	5.8	4.9	7.2	7.9	5.5	5.6	6.9	8.5	7.8	6.5	4.6	4.7	5.0	4.8	4.7	4.7	4.4	4.3	4.8	8.5	4.3	5.9
17	5.1	4.9	4.7	4.7	4.7	3.8	4.5	4.2	4.0	4.7	5.9	6.2	7.1	6.5	7.4	6.2	5.9	4.2	4.8	4.8	4.2	4.6	5.1	4.7	7.4	3.8	5.1
18	4.6	4.4	4.7	4.4	4.5	4.4	4.8	4.9	4.8	4.6	5.3	8.4	17.0	13.5	39.9	11.6	8.4	5.3	3.3	3.9	6.3	12.3	6.1	4.9	39.9	3.3	8.0
19	5.3	6.8	12.7	10.8	13.6	20.2	15.1	10.6	10.4	7.9	8.0	5.8	5.6	10.8	7.0	5.6	7.6	22.1	16.5	20.5	16.1	17.2	12.4	12.5	22.1	5.3	11.7
20	5.7	8.2	8.1	7.2	7.4	6.2	16.3	20.8	15.7	22.2	19.1	14.0	9.4	8.5	8.9	7.3	8.0	10.9	4.8	9.5	44.2	24.7	43.1	9.9	44.2	4.8	14.2
21	16.7	16.9	5.9	3.3	3.3	2.5	2.9	2.0	2.1	4.0	3.5	4.0	4.8	7.0	7.9	6.8	5.3	9.3	6.9	7.8	8.2	11.6	10.8	6.6	16.9	2.0	6.7
22	4.9	4.7	6.0	2.9	3.6	4.2	3.3	3.0	2.6	2.4	5.1	8.9	26.7	33.8	28.4	8.8	4.1	4.9	2.7	3.4	4.2	2.6	3.8	3.7	33.8	2.4	7.4
23	3.9	2.7	2.6	3.4	3.1	4.0	4.2	2.6	3.6	4.3	5.1	5.4	5.2	4.8	5.6	7.9	6.9	7.2	10.2	36.5	15.0	7.9	8.9	7.3	36.5	2.6	7.0
24	6.2	6.3	5.3	7.7	5.3	4.8	6.7	5.9	6.3	15.1	10.0	10.5	13.1	7.1	4.9	7.0	5.5	3.5	3.2	5.1	2.7	2.9	2.6	2.8	15.1	2.6	6.3
25	3.4	2.9	3.0	2.9	3.6	2.9	2.8	3.0	3.3	2.9	3.4	3.3	3.6	4.1	3.2	3.4	3.2	3.3	3.0	3.0	3.0	3.3	3.1	3.0	4.1	2.8	3.2
26	3.1	3.1	3.1	3.1	3.4	3.4	3.8	4.1	3.5	3.5	4.0	4.3	3.8	4.2	3.7	3.1	3.0	4.4	3.5	3.6	4.4	3.6	3.9	3.1	4.4	3.0	3.6
27	2.5	4.0	3.0	3.6	4.0	4.1	3.5	3.0	3.6	3.5	2.0	2.9	4.9	5.4	3.6	3.0	2.4	7.5	5.7	9.7	51.4	37.5	17.6	32.8	51.4	2.0	9.2
28	41.9	11.5	6.6	10.1	6.0	7.0	7.5	8.9	9.0	11.2	12.0	9.4	8.1	6.8	4.9	4.8	5.0	5.0	5.0	5.0	4.5	4.3	5.1	6.4	41.9	4.3	8.6
29	8.2	5.9	5.9	6.5	6.8	7.5	5.6	5.4	4.5	4.4	5.7	8.3	9.1	10.0	16.1	7.7	5.5	5.0	4.8	4.0	4.2	3.7	4.2	4.6	16.1	3.7	6.4
30	3.9	3.9	3.6	0.1	0.1	0.1	0.2	3.3	0.2	0.3	0.1	22.7	3.0	5.0	5.0	4.5	3.6	3.3	2.5	2.8	4.2	5.2	3.6	3.9	22.7	0.1	3.5
31	4.8	3.3	4.1	3.3	3.3	3.4	3.7	4.8	4.2	4.0	3.3	3.4	3.9	3.8	4.0	4.4	4.2	3.7	4.8	3.6	3.7	2.8	2.9	3.2	4.8	2.8	3.8
Max.	**41.9**	**22.8**	**36.1**	**39.1**	**43.3**	**20.2**	**38.9**	**37.4**	**30.0**	**28.5**	**32.7**	**22.7**	**26.7**	**33.8**	**39.9**	**17.2**	**11.9**	**25.1**	**16.5**	**36.5**	**51.4**	**37.5**	**43.1**	**32.8**	**51.4**		
Min.	**2.5**	**2.7**	**2.6**	**0.1**	**0.1**	**0.1**	**0.2**	**2.0**	**0.2**	**0.3**	**0.1**	**2.9**	**3.0**	**3.8**	**3.2**	**3.0**	**2.4**	**3.3**	**2.5**	**2.8**	**2.7**	**2.6**	**2.6**	**2.8**		**0.1**	
Avg.	**7.8**	**7.3**	**7.5**	**7.3**	**7.7**	**6.0**	**6.5**	**6.5**	**6.2**	**6.8**	**7.2**	**7.2**	**7.7**	**7.9**	**9.0**	**6.6**	**5.6**	**6.9**	**6.2**	**7.6**	**8.7**	**7.8**	**7.3**	**6.9**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.9	2.7	3.0	3.1	3.4	4.0	5.7	3.6	3.4	2.9	3.5	3.3	4.3	4.3	5.5	5.8	5.3	6.7	4.9	4.9	4.3	4.0	4.3	5.0	6.7	2.7	4.2
2	5.2	3.5	4.6	3.4	2.8	2.9	4.0	3.5	4.0	6.5	4.7	4.3	3.8	6.7	5.2	4.8	3.4	4.0	8.5	10.9	3.4	4.8	6.1	6.2	10.9	2.8	4.9
3	4.3	4.2	4.3	4.8	3.6	4.8	6.7	3.6	3.6	3.0	2.9	4.4	3.6	3.2	6.5	5.5	4.8	6.1	6.0	4.5	3.4	5.2	4.0	6.2	6.7	2.9	4.5
4	3.6	3.2	4.7	3.5	3.6	4.7	3.9	4.7	6.3	5.8	7.1	4.1	3.5	4.8	3.5	4.6	2.6	6.2	3.8	3.0	10.7	41.2	3.9	5.4	41.2	2.6	6.2
5	8.1	6.8	9.3	6.1	7.3	23.6	67.6	9.9	8.6	6.9	6.3	7.5	2.3	4.6	4.3	2.5	2.2	2.4	2.0	2.7	2.8	2.9	4.3	3.6	67.6	2.0	8.5
6	4.1	4.5	3.1	4.0	4.1	3.6	2.9	3.0	3.7	3.1	3.7	3.9	4.1	4.2	4.4	3.7	3.3	4.7	4.6	6.1	5.6	3.9	3.5	3.1	6.1	2.9	3.9
7	3.2	3.8	4.2	3.7	3.8	4.4	4.4	5.1	4.3	3.9	4.3	4.3	4.4	3.9	3.2	3.6	3.9	3.9	4.1	3.5	4.6	4.2	4.5	3.2	5.1	3.2	4.0
8	3.7	3.5	3.5	2.3	2.1	2.8	3.9	3.3	4.4	3.3	6.1	4.7	3.7	4.5	3.9	3.8	4.0	4.6	3.6	3.9	3.3	3.2	3.1	2.7	6.1	2.1	3.7
9	3.2	3.1	2.4	2.8	4.8	5.5	4.7	3.7	3.5	4.3	3.9	5.8	5.8	3.6	3.5	3.5	2.4	3.3	3.2	3.1	4.4	4.5	5.3	3.9	5.8	2.4	3.9
10	3.8	3.5	4.1	5.3	5.7	4.0	2.8	2.8	2.4	2.5	2.5	3.0	2.8	3.4	3.7	3.8	2.3	3.4	3.8	5.0	14.9	5.5	5.5	5.6	14.9	2.3	4.3
11	6.7	4.9	4.6	4.6	7.9	4.2	3.6	4.8	7.2	7.4	8.8	3.9	4.2	3.4	4.7	3.5	5.9	5.4	3.9	3.1	3.8	5.1	3.2	3.1	8.8	3.1	4.9
12	2.8	2.7	3.6	6.1	3.3	2.9	4.0	5.8	6.5	10.6	6.2	4.0	4.9	3.6	3.7	2.9	4.6	4.0	5.0	2.9	3.5	3.2	2.6	2.6	10.6	2.6	4.3
13	2.5	2.4	2.8	2.8	3.2	4.1	4.1	3.6	3.6	3.4	3.6	3.4	3.6	3.8	3.3	3.0	3.4	3.4	3.1	3.0	3.1	2.9	3.3	3.3	4.1	2.4	3.3
14	4.1	3.5	4.3	5.8	4.3	4.1	4.3	2.5	2.6	2.6	3.2	6.1	3.6	3.8	3.7	3.8	3.4	3.7	4.0	4.1	3.8	4.1	5.1	5.3	6.1	2.5	4.0
15	4.0	4.1	3.8	5.0	4.3	5.4	5.1	4.1	3.0	3.2	4.4	3.6	3.4	3.9	4.2	3.5	4.2	5.1	3.4	2.9	3.3	3.2	3.1	3.3	5.4	2.9	3.9
16	4.0	4.0	2.9	2.9	3.5	3.8	3.7	3.1	3.5	3.1	3.2	3.7	4.3	4.8	5.0	3.2	4.2	3.9	5.2	3.6	3.4	3.9	3.7	5.2	5.2	2.9	3.8
17	10.7	6.1	3.8	6.1	3.7	3.7	4.2	2.8	7.8	4.1	7.3	6.5	7.0	6.4	5.8	6.7	7.3	3.9	5.0	5.1	7.8	4.6	6.7	5.8	10.7	2.8	5.8
18	4.4	3.6	4.4	5.2	5.6	5.5	4.7	6.4	4.5	4.3	6.5	4.1	3.2	6.1	8.6	8.6	3.4	4.9	3.5	5.8	4.2	3.9	5.6	4.8	8.6	3.2	5.1
19	4.2	3.5	5.2	4.7	6.0	7.3	8.2	5.4	4.0	5.4	6.1	5.3	5.3	6.7	5.9	5.2	6.6	7.9	7.0	9.8	7.8	6.2	4.8	6.2	9.8	3.5	6.0
20	9.6	9.7	5.7	6.4	4.6	4.6	6.0	4.9	4.4	3.7	3.4	4.9	3.5	4.3	4.3	4.4	4.3	4.3	4.9	6.9	8.1	3.8	3.5	4.3	9.7	3.4	5.2
21	4.1	3.6	4.9	4.5	4.0	3.6	3.4	3.4	2.1	2.4	3.0	3.6	3.3	3.2	4.0	3.2	3.0	2.9	2.6	2.6	2.7	3.2	3.9	3.6	4.9	2.1	3.4
22	3.3	3.8	3.8	4.0	5.4	5.0	5.3	3.7	3.3	3.9	3.9	4.0	5.3	4.2	5.8	5.7	3.1	3.9	8.4	6.2	4.8	4.4	3.5	4.3	8.4	3.1	4.5
23	6.6	4.6	3.2	3.5	3.4	2.4	2.9	5.7	2.8	5.4	6.5	2.8	3.3	4.6	4.0	5.1	6.5	17.4	30.2	9.8	12.1	7.0	6.1	5.2	30.2	2.4	6.7
24	4.6	5.3	5.5	5.7	7.6	6.6	7.4	7.7	5.3	7.3	9.9	4.9	4.5	5.3	5.6	5.1	6.9	3.7	5.3	4.9	4.0	3.7	4.6	4.0	9.9	3.7	5.6
25	3.2	3.0	2.8	3.2	3.5	3.8	3.4	3.4	3.5	4.7	5.3	4.6	4.8	3.8	3.6	4.4	4.4	3.6	4.4	4.9	4.0	4.8	5.3	6.0	6.0	2.8	4.1
26	4.9	5.8	3.2	4.2	3.9	3.8	4.0	3.5	3.3	3.8	3.9	4.1	4.0	4.0	4.1	4.2	4.6	4.1	4.1	4.3	4.3	4.3	4.6	4.2	5.8	3.2	4.1
27	4.1	4.2	4.0	4.2	4.2	4.1	3.9	3.9	4.2	4.2	4.2	4.3	4.1	4.0	3.7	3.7	3.6	3.6	3.5	3.7	3.7	3.7	3.6	3.7	4.3	3.5	3.9
28	4.0	4.1	4.1	3.9	4.0	3.7	3.8	4.0	3.9	3.7	4.5	4.6	4.8	3.7	3.4	2.9	4.5	8.8	57.2	13.9	26.4	23.8	8.3	4.5	57.2	2.9	8.8
29	3.0	3.1	2.3	2.1	3.0	1.6	2.0	2.1	2.1	2.0	3.4	3.8	3.5	3.5	47.9	17.5	5.6	6.0	8.2	6.0	4.9	6.5	6.5	4.0	47.9	1.6	6.3
30	5.1	4.2	4.9	4.3	3.9	3.8	3.8	3.8	4.1	3.9	3.8	4.0	5.0	4.4	5.4	5.7	14.6	3.6	3.6	3.3	3.8	3.6	4.4	2.4	14.6	2.4	4.6
Max.	**10.7**	**9.7**	**9.3**	**6.4**	**7.9**	**23.6**	**67.6**	**9.9**	**8.6**	**10.6**	**9.9**	**7.5**	**7.0**	**6.7**	**47.9**	**17.5**	**14.6**	**17.4**	**57.2**	**13.9**	**26.4**	**41.2**	**8.3**	**6.2**	**67.6**		
Min.	**2.5**	**2.4**	**2.3**	**2.1**	**2.1**	**1.6**	**2.0**	**2.1**	**2.1**	**2.0**	**2.5**	**2.8**	**2.3**	**3.2**	**3.2**	**2.5**	**2.2**	**2.4**	**2.0**	**2.6**	**2.7**	**2.9**	**2.6**	**2.4**		**1.6**	
Avg.	**4.6**	**4.2**	**4.1**	**4.3**	**4.4**	**4.8**	**6.5**	**4.3**	**4.2**	**4.4**	**4.9**	**4.4**	**4.1**	**4.4**	**6.0**	**4.8**	**4.6**	**5.0**	**7.2**	**5.2**	**5.9**	**6.2**	**4.6**	**4.4**			**4.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (Climtrncs)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.8	2.7	4.9	5.7	8.2	6.5	3.5	2.9	3.0	3.5	4.9	3.9	2.9	5.3	7.6	4.1	4.6	9.4	4.8	14.3	4.7	3.8	6.1	4.7	14.3	2.7	5.2
2	18.6	15.2	7.5	8.1	5.0	5.5	5.0	28.8	8.5	31.4	7.9	15.9	18.2	9.8	37.0	5.6	25.0	28.8	26.3	4.3	5.2	19.9	35.0	27.5	37.0	4.3	16.7
3	8.4	5.7	4.6	5.0	4.9	6.7	3.3	5.1	6.1	10.7	7.0	3.3	4.8	2.2	2.9	3.5	3.0	4.1	2.7	2.7	3.6	3.7	4.1	5.2	10.7	2.2	4.7
4	4.2	3.1	2.5	3.1	3.6	2.5	28.5	27.7	24.9	28.8	45.1	34.0	31.2	6.6	4.1	4.4	3.4	3.1	3.4	3.3	3.8	3.2	3.1	3.4	45.1	2.5	11.7
5	3.4	3.4	3.1	3.0	3.3	3.2	5.9	4.1	3.9	5.6	4.0	4.9	6.5	8.4	7.4	5.3	5.4	9.4	6.6	7.3	4.3	4.1	4.3	4.4	9.4	3.0	5.1
6	4.3	4.5	4.6	4.2	3.9	4.2	18.0	7.1	3.7	7.7	3.6	3.5	3.5	3.2	3.5	3.5	3.7	3.5	3.7	3.6	3.4	3.5	3.3	3.5	18.0	3.2	4.6
7	3.4	3.5	3.8	4.1	10.2	8.9	13.9	21.7	5.7	6.8	9.5	5.7	4.9	5.6	10.4	6.9	8.7	8.0	7.9	5.0	4.9	4.6	5.5	5.6	21.7	3.4	7.3
8	4.0	3.8	3.7	3.5	3.2	3.0	3.3	3.7	3.5	4.0	4.7	4.6	5.3	5.6	9.4	5.7	4.1	5.2	11.3	6.5	34.4	4.9	10.6	38.8	38.8	3.0	7.8
9	7.1	14.9	21.8	20.2	3.7	3.4	3.6	3.2	3.1	3.3	2.8	3.4	3.4	3.5	3.5	3.6	3.8	4.2	3.9	3.8	4.1	3.9	3.9	3.8	21.8	2.8	5.7
10	3.7	3.4	3.3	3.5	3.7	3.8	4.0	3.9	3.8	3.8	3.9	3.9	3.9	4.2	3.8	3.7	3.5	4.9	3.4	6.2	7.3	3.9	5.0	4.3	7.3	3.3	4.1
11	5.8	4.7	3.5	5.3	10.6	8.6	14.3	22.4	45.0	44.6	13.5	4.3	5.7	3.2	3.3	2.7	1.8	4.1	5.0	2.8	2.6	6.1	5.7	3.8	45.0	1.8	9.6
12	4.6	4.4	3.0	3.5	6.2	6.6	5.9	4.9	4.8	4.0	3.9	3.3	7.2	6.5	4.5	3.3	2.7	2.7	3.0	3.3	2.4	3.2	2.6	2.4	7.2	2.4	4.1
13	2.6	3.2	2.7	2.7	1.8	1.6	1.8	2.1	1.9	1.9	2.1	2.2	2.6	2.7	2.6	2.4	2.7	2.4	2.4	3.0	2.8	2.3	2.8	2.8	3.2	1.6	2.4
14	2.2	2.3	3.0	2.6	2.8	2.5	2.9	3.6	5.1	4.1	2.1	4.1	3.6	2.6	2.2	2.6	2.1	2.3	3.0	4.2	4.0	3.0	3.1	3.0	5.1	2.1	3.0
15	3.5	3.3	2.9	3.6	3.6	10.3	6.2	4.5	4.7	8.0	11.5	22.4	8.9	5.1	5.8	5.5	6.0	7.6	6.9	10.5	9.8	9.0	5.5	3.5	22.4	2.9	7.0
16	3.7	3.2	3.1	3.3	3.2	3.6	3.4	3.4	3.2	3.5	4.2	4.5	4.5	4.1	4.2	4.0	6.3	8.3	13.0	18.0	16.1	15.0	36.3	28.3	36.3	3.1	8.4
17	7.6	5.7	8.0	5.4	2.5	3.1	3.2	3.1	2.4	2.9	3.2	2.8	3.4	2.7	2.4	3.4	3.4	3.7	3.3	2.7	2.9	3.4	2.9	3.2	8.0	2.4	3.6
18	2.9	2.5	3.1	3.7	3.8	2.5	2.8	3.2	5.2	3.1	2.8	2.0	3.6	7.0	5.3	5.3	4.7	4.1	10.2	7.0	5.3	10.3	28.0	17.7	28.0	2.0	6.1
19	8.5	5.1	5.1	8.6	14.6	4.9	7.2	19.3	26.8	33.0	28.7	10.7	7.3	2.9	7.4	4.0	3.9	3.0	3.2	3.3	3.5	6.6	3.7	3.4	33.0	2.9	9.4
20	3.1	3.5	5.3	5.3	4.5	3.8	2.0	3.0	3.3	2.5	3.0	3.8	5.3	4.6	4.8	3.7	3.7	3.3	3.9	4.0	3.6	2.7	2.9	3.5	5.3	2.0	3.7
21	3.1	3.1	7.5	5.4	4.5	6.5	8.5	49.0	52.8	48.5	26.4	49.4	21.6	31.5	46.8	13.0	4.6	8.5	6.8	12.0	11.6	5.0	18.2	20.6	52.8	3.1	19.4
22	37.6	34.4	54.1	24.6	4.1	13.6	3.0	3.7	5.3	5.4	3.2	3.5	3.4	3.6	2.4	6.1	7.9	4.2	3.2	7.2	6.7	5.8	3.7	6.3	54.1	2.4	10.5
23	3.3	3.7	4.9	5.5	4.6	5.4	5.8	4.2	3.1	3.1	2.2	2.5	2.9	2.8	3.6	2.9	2.2	2.3	2.4	3.0	1.9	1.9	2.6	1.9	5.8	1.9	3.3
24	2.4	2.4	3.6	2.4	2.5	2.7	4.1	3.5	4.5	3.3	2.9	2.7	3.9	4.1	3.6	2.5	2.3	2.7	2.4	1.9	3.4	2.2	4.2	2.9	4.5	1.9	3.0
25	4.0	3.7	3.2	3.5	3.9	4.0	4.7	3.0	3.5	4.5	3.4	5.1	4.0	4.0	3.6	3.6	4.0	2.3	3.1	11.9	4.8	4.3	3.0	3.5	11.9	2.3	4.1
26	5.9	4.3	6.9	4.2	5.7	5.0	3.9	3.3	7.5	3.3	8.6	10.1	14.3	22.6	39.6	10.2	5.9	8.0	7.0	5.3	5.0	5.4	3.5	5.2	39.6	3.3	8.4
27	12.6	26.6	25.9	4.8	3.5	3.3	3.5	3.8	5.0	4.3	4.7	7.1	4.2	4.5	4.5	4.8	4.4	4.8	5.7	4.9	8.6	3.8	3.6	3.5	26.6	3.3	6.8
28	3.4	3.9	4.0	3.9	3.8	3.3	3.5	3.8	7.1	3.7	3.8	4.0	5.4	6.7	6.7	8.4	13.6	12.4	19.6	37.9	10.4	34.7	5.0	18.7	37.9	3.3	9.5
29	2.8	2.3	5.9	4.3	3.8	4.3	4.4	5.8	4.5	3.3	3.2	2.9	2.4	3.1	3.6	3.9	3.0	2.7	2.8	3.0	2.6	2.7	3.3	2.9	5.9	2.3	3.5
30	2.7	2.7	4.8	4.6	2.8	3.0	3.0	3.4	3.6	4.3	3.8	4.9	17.4	23.5	9.2	5.1	30.4	11.3	7.6	8.1	39.7	17.7	10.4	44.2	44.2	2.7	11.2
31	9.2	9.0	7.9	6.3	14.2	10.0	12.9	13.8	11.2	8.1	18.5	11.7	6.7	10.2	13.6	33.0	7.1	6.1	5.1	5.4	10.4	9.2	5.8	4.6	33.0	4.6	10.4
Max.	**37.6**	**34.4**	**54.1**	**24.6**	**14.6**	**13.6**	**28.5**	**49.0**	**52.8**	**48.5**	**45.1**	**49.4**	**31.2**	**31.5**	**46.8**	**33.0**	**30.4**	**28.8**	**26.3**	**37.9**	**39.7**	**34.7**	**36.3**	**44.2**	**54.1**		
Min.	**2.2**	**2.3**	**2.5**	**2.4**	**1.8**	**1.6**	**1.8**	**2.1**	**1.9**	**1.9**	**2.1**	**2.0**	**2.4**	**2.2**	**2.2**	**2.4**	**1.8**	**2.3**	**2.4**	**1.9**	**1.9**	**1.9**	**2.6**	**1.9**		**1.6**	
Avg.	**6.2**	**6.3**	**7.4**	**5.6**	**5.0**	**5.0**	**6.3**	**8.9**	**8.9**	**9.8**	**8.0**	**8.0**	**7.2**	**6.8**	**8.7**	**5.7**	**6.1**	**6.0**	**6.2**	**7.0**	**7.5**	**6.8**	**7.7**	**9.3**			**7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.8	1.9	1.8	2.8	3.0	2.7	2.0	3.3	4.8	6.3	5.8	6.8	5.3	3.8	3.0	2.5	1.5	2.0	2.1	2.4	1.7	1.9	3.0	3.7	6.8	1.5	3.2
2	3.8	2.8	1.8	4.2	5.5	2.3	1.9	3.0	4.5	3.5	2.7	2.6	2.0	3.8	4.1	4.0	4.8	4.1	3.2	3.9	9.1	13.7	10.7	7.2	13.7	1.8	4.5
3	9.4	7.2	9.2	10.0	9.8	4.3	3.8	3.9	6.2	2.9	2.8	4.1	3.1	3.3	3.8	5.4	5.8	5.9	5.6	4.0	3.3	3.0	3.2	4.4	10.0	2.8	5.2
4	3.5	1.5	0.9	0.6	1.1	0.9	0.6	1.6	1.0	0.7	1.1	1.9	2.3	4.2	3.1	1.5	1.6	1.8	2.1	1.5	1.7	2.0	2.3	2.1	4.2	0.6	1.7
5	0.5	1.3	1.5	1.2	1.8	1.4	0.9	1.3	2.2	2.7	2.0	0.9	1.1	4.1	4.8	5.2	4.3	5.5	6.5	5.7	5.1	4.5	4.2	3.1	6.5	0.5	3.0
6	1.5	0.9	2.3	3.1	3.3	5.5	4.7	2.5	2.1	1.6	1.0	0.9	2.1	1.3	2.9	2.5	1.7	1.2	0.5	0.9	1.4	2.7	1.1	0.5	5.5	0.5	2.0
7	0.8	1.0	1.4	1.3	0.6	1.3	1.7	1.7	1.5	2.5	1.1	1.0	1.1	1.8	4.3	3.7	4.2	3.1	2.4	4.3	6.5	6.1	4.7	10.7	10.7	0.6	2.9
8	8.8	4.3	6.5	3.5	2.8	3.8	7.2	4.2	3.8	1.7	2.6	3.1	3.6	4.8	4.7	4.6	4.2	4.3	4.9	4.7	4.5	5.0	3.7	4.0	8.8	1.7	4.4
9	3.0	3.5	3.3	2.6	3.5	3.7	3.3	3.3	2.0	2.2	2.8	1.1	1.0	0.9	1.0	0.6	2.4	2.5	1.4	1.0	0.9	1.4	1.4	1.7	3.7	0.6	2.1
10	1.2	1.0	0.7	1.2	0.7	1.2	1.0	1.1	0.8	1.3	0.9	0.8	1.1	1.7	1.3	1.6	2.2	2.2	1.6	1.6					2.2	0.7	1.3
11																		1.9	2.2	1.8	1.6	1.9	1.8	1.4	2.2	1.4	1.8
12	1.4	1.7	1.8	3.2	3.1	3.2	2.9	2.7	4.1	5.5	5.9	7.3	7.6	6.0	5.8	6.1	5.8	6.0	5.5	5.9	5.7	6.1	6.1	6.5	7.6	1.4	4.8
13	5.7	6.3	5.9	4.9	4.6	5.1	4.9	5.1	4.9	4.9	5.4	5.4	5.3	6.1	7.4	6.2	7.1	6.9	5.7	5.8	5.2	5.0	4.0	3.7	7.4	3.7	5.5
14	5.0	5.4	4.6	4.1	3.5	2.9	2.0	2.6	4.0	4.6	4.9	4.8	4.4	7.1	8.5	8.6	8.4	7.8	8.0	8.2	8.5	8.1	7.3	7.6	8.6	2.0	5.9
15	7.5	6.5	6.8	9.8	8.6	5.7	6.8	6.8	5.3	6.7	7.6	8.9	6.4	1.5	0.0	0.7	0.7	7.4	9.4	8.8	6.4	5.1	4.4	5.4	9.8	0.0	6.0
16	5.3	8.1	6.4	7.5	3.5	4.1	6.9	9.2	8.9	5.0	4.9	5.5	3.5	2.2	2.9	2.0	1.9	1.8	1.1	2.6	4.0	4.1	5.3	6.0	9.2	1.1	4.7
17	6.0	6.1	6.2	5.9	5.7	5.7	6.1	5.7	6.3	6.1	5.8	6.4	7.0	5.6	5.8	5.9	7.1	7.3	6.9	6.6	5.1	5.3	5.2	4.4	7.3	4.4	6.0
18	5.5	8.3	7.1	7.4	8.1	11.6	11.4	10.1	10.3	7.3	6.5	7.4	10.1	10.6	10.6	11.2	8.3	7.3	6.8	9.5	10.4	8.3	7.4	7.3	11.6	5.5	8.7
19	7.7	10.9	9.8	8.3	7.7	6.8	9.1	9.7	8.6	7.3	7.7	7.3	6.7	7.6	7.7	6.8	6.1	6.2	8.1	10.8	11.3	10.4	8.8	7.8	11.3	6.1	8.3
20	8.5	7.8	7.7	8.1	7.0	6.5	6.9	7.1	6.5	6.0	6.9	6.0	5.9	6.5	6.2	6.9	7.2	5.2	5.7	5.6	6.3	6.3	5.7	6.1	8.5	5.2	6.6
21	5.7	7.1	8.2	8.9	9.2	10.3	11.0	11.5	11.4	11.6	11.8	12.3	13.4	14.7	15.4	15.7	16.8	18.4	19.3	19.1	17.3	15.9	15.4	16.7	19.3	5.7	13.2
22	18.6	19.5	18.5	20.5	23.1	23.1	22.4	20.8	19.9	19.8	18.0	15.8	16.3	15.5	14.9	16.3	15.7	15.5	17.4	18.6	19.9	17.5	16.3	21.0	23.1	14.9	18.5
23	20.7	20.0	20.8	19.6	19.4	18.7	17.6	13.5	14.9	12.9	19.9	16.6	14.3	13.6	15.0	15.4	11.8	15.0	15.2	15.5	14.0	12.9	14.2	14.2	20.8	11.8	16.1
24	14.3	14.4	13.9	12.5	12.4	13.7	13.8	12.5	14.3	16.0	15.8	16.1	15.9	15.0	12.6	13.9	14.1	13.2	12.3	13.5	10.2	12.7	11.6	7.8	16.1	7.8	13.4
25	7.5	7.9	6.3	7.1	7.3	7.4	5.9	5.8	6.7	6.8	6.4	7.4	7.9	6.4	6.0	6.6	6.4	7.4	7.5	8.3	7.0	6.8	9.8	11.4	11.4	5.8	7.2
26	9.8	11.1	10.5	10.0	6.9	7.9	7.7	8.0	6.3	4.9	4.9	5.4	5.2	5.2	4.9	3.9	3.5	4.7	5.4	5.3	6.6	8.0	6.8	8.1	11.1	3.5	6.7
27	9.6	10.0	9.4	11.2	11.3	12.7	12.9	13.9	13.8	14.7	17.1	18.3	18.8	19.9	20.0	21.2	19.6	19.8	20.4	19.5	18.3	20.1	20.6	21.9	21.9	9.4	16.5
28	26.3	23.0	23.0	20.0	22.0	21.6	17.4	18.2	17.5	12.1	11.8	11.6	9.5	11.1	11.1	9.7	9.1	6.3	4.9	5.6	4.5	5.8	6.4	5.1	26.3	4.5	13.1
29	5.4	7.2	7.2	7.8	7.7	7.5	7.4	6.4	6.7	5.4	7.1	7.3	5.5	5.7	4.9	7.6	7.5	8.2	8.2	6.9	6.8	6.9	6.6	6.1	8.2	4.9	6.8
30	7.3	6.8	7.3	6.9	4.9	6.7	6.7	4.2	5.5	5.3	5.2	4.4	4.7	5.9	5.5	5.4	5.5	4.2	2.9	2.6	3.1	3.1	1.4	0.7	7.3	0.7	4.8
31	1.0	2.3	2.7	3.4	2.9	3.5	3.9	3.4	3.1	3.6	4.8	4.6	4.9	5.5	6.2	4.8	5.5	5.8	7.5	8.9	8.6	8.0	6.6	4.8	8.9	1.0	4.8
Max.	**26.3**	**23.0**	**23.0**	**20.5**	**23.1**	**23.1**	**22.4**	**20.8**	**19.9**	**19.8**	**19.9**	**18.3**	**18.8**	**19.9**	**20.0**	**21.2**	**19.6**	**19.8**	**20.4**	**19.5**	**19.9**	**20.1**	**20.6**	**21.9**	**26.3**		
Min.	**0.5**	**0.9**	**0.7**	**0.6**	**0.6**	**0.9**	**0.6**	**1.1**	**0.8**	**0.7**	**0.9**	**0.8**	**1.0**	**0.9**	**0.0**	**0.6**	**0.7**	**1.2**	**0.5**	**0.9**	**0.9**	**1.4**	**1.1**	**0.5**		**0.0**	
Avg.	**7.1**	**7.2**	**7.1**	**7.2**	**7.0**	**7.1**	**7.0**	**6.8**	**6.9**	**6.4**	**6.7**	**6.7**	**6.5**	**6.7**	**6.8**	**6.9**	**6.7**	**6.7**	**6.8**	**7.1**	**7.2**	**7.3**	**6.9**	**7.0**			**6.9**

Total Hours in Month 744 **Hours Data Available** 723 **Data Recovery** 97.2%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.0	5.6	6.4	7.5	8.4	7.4	10.1	10.2	10.9	11.8	14.5	14.1	15.4	14.7	12.2	13.6	15.8	15.0	14.5	13.5	12.5	13.3	14.2	13.7	15.8	4.0	11.6
2	13.5	11.8	10.3	9.5	8.9	7.7	8.0	8.3	7.3	6.2	6.3	5.4	3.6	4.4	3.5	2.1	1.4	1.7	2.4	3.1	2.6	4.7	6.1	7.8	13.5	1.4	6.1
3	10.5	10.7	10.9	13.2	14.4	15.0	16.9	17.4	16.2	14.2	13.6	12.8	12.6	11.3	12.6	13.1	10.8	11.7	12.9	14.0	14.6	15.5	16.3	16.5	17.4	10.5	13.7
4	17.9	16.1	17.4	17.7	18.9	20.7	19.7	19.2	22.3	23.7	22.6	23.3	25.0	25.4	24.1	25.8	28.2	27.6	29.2	24.6	24.4	24.2	22.3	17.4	29.2	16.1	22.4
5	17.4	17.3	17.0	19.1	20.6	19.5	19.8	16.3	16.2	15.0	13.4	15.3	17.6	18.5	16.7	15.6	15.6	14.5	10.4	8.4	9.7	14.8	17.0	15.4	20.6	8.4	15.9
6	13.3	11.1	8.3	8.8	8.7	6.5	6.7	3.8	4.3	7.2	12.8	14.5	17.9	17.4	16.0	12.1	12.3	11.5	8.0	7.1	7.2	6.4	6.6	7.1	17.9	3.8	9.8
7	6.5	5.4	6.2	8.3	7.8	7.3	8.6	9.5	8.6	9.0	11.2	12.3	11.5	9.0	8.9	9.7	8.0	4.4	4.0	3.7	2.4	2.4	3.0	3.7	12.3	2.4	7.1
8	1.5	1.8	2.7	3.5	3.3	3.5	4.6	5.3	5.0	5.1	5.0	4.3	12.7	16.1	21.2	23.0	25.0	24.5	26.4	26.4	25.9	26.8	28.0	25.7	28.0	1.5	13.6
9	24.9	27.8	27.3	28.9	25.8	20.0	17.9	16.2	12.2	10.6	9.2	9.3	10.8	10.6	9.4	10.1	11.8	15.2	15.7	16.7	20.2	23.3	26.4	27.2	28.9	9.2	17.8
10	28.5	28.2	24.4	26.0	23.0	25.0	23.7	22.0	19.1	14.4	14.3	15.8	15.4	16.0	15.5	16.8	17.2	17.6	16.8	16.5	16.2	16.2	16.7	16.4	28.5	14.3	19.2
11	14.6	14.9	13.9	10.6	6.1	1.6	1.6	3.2	3.8	6.1	7.8	8.2	6.3	5.1	4.6	3.4	3.1	2.2	2.6	2.9	1.5	2.2	3.5	3.4	14.9	1.5	5.6
12	1.6																								1.6	1.6	1.6
13												8.8	7.3	12.1	15.1	15.8	18.9	18.5	18.3	18.8	19.3	20.2	19.9	18.7	20.2	7.3	16.3
14	19.8	20.4	22.4	21.1	21.9	20.2	19.5	19.2	19.8	20.2	19.7	17.4	17.1	17.3	18.6	20.9	21.3	18.3	18.4	19.9	19.8	19.9	19.5	21.3	22.4	17.1	19.7
15	21.7	20.6	19.6	19.8	19.0	19.9	20.8	20.9	22.3	21.8	24.1	23.7	24.9	29.3	27.5	25.5	23.9	22.0	21.3	17.7	17.1	14.8	12.5	9.4	29.3	9.4	20.8
16	5.4	4.5	2.9	2.3	2.3	1.9	2.1	2.0	1.7	1.1	0.3	2.0	3.6	5.7	4.8	4.8	6.0	7.7	7.6	6.3	6.6	5.9	7.0	9.1	9.1	0.3	4.3
17	10.4	10.6	8.7	5.9	5.7	12.0	14.9	16.2	20.5	20.0	18.8	18.5	19.9	19.4	21.1	21.7	21.7	19.0	18.8	19.6	19.5	18.3	16.3	15.1	21.7	5.7	16.4
18	12.3	12.6	12.8	11.2	10.8	11.5	14.3	15.9	17.8	19.6	20.3	19.1	22.1	23.4	20.6	18.3	17.2	14.1	11.7	12.9	11.6	12.8	15.1	14.3	23.4	10.8	15.5
19	10.7	7.9	7.1	6.6	7.4	6.7	6.6	8.9	7.1	4.6	6.0	7.0	4.2	7.6	8.8	7.7	8.1	8.7	6.7	7.2	6.7	8.1	8.9	7.1	10.7	4.2	7.3
20	7.5	5.1	5.7	5.1	4.7	3.3	4.9	4.5	4.2	4.8	5.6	4.6	8.4	9.0	10.1	14.1	11.3	12.1	12.9	13.5	14.0	12.7	13.3	12.7	14.1	3.3	8.5
21	12.3	11.2	13.3	12.9	10.8	8.4	7.2	7.0	6.0	3.0	2.0	1.8	5.3	11.2	7.1	9.6	6.7	4.9	8.8	10.1	6.6	5.6	7.5	8.4	13.3	1.8	7.8
22	4.6	3.7	4.6	6.9	10.7	11.4	10.7	10.9	12.1	8.6	6.7	7.0	7.1	7.8	7.0	8.1	9.5	8.7	7.2	6.4	7.6	6.4	5.1	5.0	12.1	3.7	7.7
23	6.1	7.4	6.9	7.2	5.7	3.9	8.8	8.4	7.5	6.6	5.1	7.9	5.7	5.8	8.9	9.9	9.6	8.9	8.9	8.6	7.2	7.9	10.6	11.4	11.4	3.9	7.7
24	9.4	6.8	7.0	7.5	7.1	8.2	8.5	8.5	4.1	3.7	4.8	3.6	2.2	1.4	0.8	0.5	0.9	1.9	1.8	1.4	1.6	2.4	3.2	3.9	9.4	0.5	4.2
25	4.2	3.2	4.6	5.9	7.6	5.8	4.8	4.8	3.6	3.4	3.5	10.4	12.9	11.8	13.0	14.3	12.1	10.8	7.3	6.6	8.2	10.0	9.1	9.9	14.3	3.2	7.8
26	10.4	9.7	9.0	8.6	7.2	5.4	5.9	6.7	5.8	3.3	6.4	8.0	6.7	6.7	2.8	1.4	2.7	4.8	6.8	7.3	6.1	5.3	5.7	8.2	10.4	1.4	6.3
27	8.1	6.3	6.3	10.7	13.7	18.3	18.5	17.2	17.5	18.9	18.6	19.1	20.1	17.3	17.9	19.7	20.9	19.0	18.3	19.9	20.3	21.9	20.1	20.1	21.9	6.3	17.0
28	19.9	19.1	19.2	18.2	18.8	20.3	17.7	15.1	12.8	15.9	18.1	18.2	17.1	16.6	16.2	18.9	18.3	18.5	16.7	15.9	14.4	9.6	9.3	10.0	20.3	9.3	16.4
Max.	**28.5**	**28.2**	**27.3**	**28.9**	**25.8**	**25.0**	**23.7**	**22.0**	**22.3**	**23.7**	**24.1**	**23.7**	**25.0**	**29.3**	**27.5**	**25.8**	**28.2**	**27.6**	**29.2**	**26.4**	**25.9**	**26.8**	**28.0**	**27.2**	**29.3**		
Min.	**1.5**	**1.8**	**2.7**	**2.3**	**2.3**	**1.6**	**1.6**	**2.0**	**1.7**	**1.1**	**0.3**	**1.8**	**2.2**	**1.4**	**0.8**	**0.5**	**0.9**	**1.7**	**1.8**	**1.4**	**1.5**	**2.2**	**3.0**	**3.4**		**0.3**	
Avg.	**11.7**	**11.5**	**11.3**	**11.6**	**11.5**	**11.2**	**11.6**	**11.5**	**11.1**	**10.7**	**11.2**	**11.6**	**12.3**	**13.0**	**12.8**	**13.2**	**13.3**	**12.7**	**12.4**	**12.2**	**12.0**	**12.3**	**12.7**	**12.6**			**12.0**

Total Hours in Month 672 **Hours Data Available** 638 **Data Recovery** 94.9%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.7	9.7	9.7	9.8	11.0	11.3	7.3	5.9	4.4	3.6	1.0	0.4	1.3	2.8	3.7	3.9	5.1	5.3	5.0	8.2	9.5	10.7	11.8	12.9	12.9	0.4	6.9
2	13.0	12.7	12.6	12.4	12.5	12.1	13.1	12.7	12.2	11.2	12.4	12.6	12.5	13.6	11.9	9.6	9.6	8.8	9.6	9.9	9.7	8.9	9.8	8.9	13.6	8.8	11.3
3	8.1	8.2	8.9	9.0	8.5	8.4	6.3	5.9	6.8	7.5	8.4	7.9	8.9	8.4	8.6	7.5	5.6	3.5	2.7	1.9	2.1	1.4	1.1	1.3	9.0	1.1	6.1
4	1.7	2.1	2.4	2.9	4.5	7.2	7.4	7.2	8.0	6.9	7.8	7.6	11.3	13.6	12.6	12.3	14.2	13.4	14.2	14.5	15.6	13.5	12.3	12.0	15.6	1.7	9.4
5	11.1	10.3	8.1	6.3	6.0	6.7	6.1	5.3	5.6	4.9	4.1	4.1	4.0	5.5	5.2	5.6	7.3	7.5	4.4	4.6	2.3	3.7	3.5	4.3	11.1	2.3	5.7
6	4.7	4.7	3.2	4.0	4.8	3.7	2.5	2.0	1.2	1.7	3.8	2.0	1.9	1.4	0.7	0.1	1.2	1.6	1.4	1.5	0.9	1.1	1.9	3.0	4.8	0.1	2.3
7	3.3	3.2	3.7	3.8	3.9	4.4	4.2	5.3	7.3	7.5	7.2	9.8	9.8	10.7	10.2	10.8	9.6	12.7	15.1	14.3	13.1	11.9	15.1	16.4	16.4	3.2	8.9
8	18.9	22.0	22.4	21.9	19.6	17.7	19.6	19.1	19.2	17.1	14.1	15.5	15.7	14.1	13.4	12.8	12.7	16.4	16.3	16.1	16.4	16.3	16.8	16.2	22.4	12.7	17.1
9	16.5	15.7	16.7	17.8	17.6	16.7	15.6	15.8	15.9	17.4	15.7	16.6	18.4	18.5	17.6	15.0	13.4	14.3	15.3	15.7	16.0	16.3	15.3	14.8	18.5	13.4	16.2
10	11.6	12.2	11.1	9.9	8.5	8.0	8.6	10.3	9.9	6.4	5.9	6.1	6.6	5.8	4.8	3.5	2.3	2.0	4.8	5.0	5.5	6.5	10.4	11.9	12.2	2.0	7.4
11	11.1	13.8	17.2	16.4	16.9	17.0	18.2	21.9	22.3	23.7	21.2	19.9	19.8	19.3	21.7	20.2	18.6	19.7	17.5	20.4	19.3	18.1	14.2	16.5	23.7	11.1	18.5
12	17.5	17.0	17.2	16.3	12.9	13.9	13.4	12.6	11.0	11.1	10.7	7.7	7.8	4.9	5.4	3.8	4.3	4.1	3.4	3.7	1.9	1.9	1.6	1.1	17.5	1.1	8.5
13	0.7	0.9	1.1	0.9	1.3	1.5	1.7	1.4	2.0	2.5	1.9	1.7	2.3	2.5	2.7	3.3	3.5	5.9	5.7	6.8	5.6	5.9	7.5	7.8	7.8	0.7	3.2
14	7.7	7.3	7.6	7.6	5.8	5.5	5.6	5.3	4.5	4.1	4.2	2.8	2.0	2.3	3.6	2.2	3.6	3.5	2.9	2.1	2.0	1.8	1.3	0.9	7.7	0.9	4.0
15	1.4	1.9	2.3	1.7	2.7	1.6	1.1	1.1	1.1	1.8	2.0	1.1	0.7	1.0	1.9	1.6	2.1	3.0	3.7	4.1	3.9	4.7	6.0	7.4	7.4	0.7	2.5
16	8.8	8.7	5.7	5.0	5.5	5.5	5.4	4.4	2.9	3.3	4.7	4.9	6.6	8.2	10.0	10.9	10.7	11.0	9.9	10.4	10.2	9.8	9.6	9.0	11.0	2.9	7.5
17	9.9	10.1	10.3	9.6	10.4	9.3	9.5	9.8	10.3	9.6	10.7	9.3	8.1	7.3	10.8	11.3	11.0	10.4	12.2	12.9	13.7	14.6	15.2	12.8	15.2	7.3	10.8
18	13.0	13.0	10.3	7.7	9.3	8.5	6.5	2.4	4.0	6.1	6.1	5.3	1.8	1.1	0.6	0.9	3.0	4.4	0.8	2.4	2.3	1.3	1.2	3.0	13.0	0.6	4.8
19	2.6	1.7	0.8	1.6	2.0	1.8	2.2	2.3	3.2	5.4	6.4	12.2	12.8	11.4	13.3	13.2	11.7	10.0	8.9	8.2	7.9	7.8	9.4	10.3	13.3	0.8	7.0
20	12.5	9.9	9.0	7.2	5.7	6.4	7.0	6.4	4.8	3.6	2.9	2.6	2.3	1.5	6.9	7.8	11.2	11.9	13.1	14.1	16.8	19.6	18.5	16.9	19.6	1.5	9.1
21	17.2	16.2	17.2	16.9	17.1	17.7	17.5	16.4	15.7	15.5	12.9	10.9	10.5	7.9	8.6	9.1	8.4	9.6	10.3	8.9	9.2	7.1	6.0	8.4	17.7	6.0	12.3
22	12.1	8.2	8.6	9.7	13.4	16.2	15.0	17.5	14.5	18.3	16.1	16.9	16.1	16.0	16.3	14.5	11.5	11.1	9.5	6.7	6.1	6.0	6.3	5.1	18.3	5.1	12.2
23	3.5	3.2	3.5	4.3	5.6	4.3	3.0	2.0	1.9	2.9	4.4	3.7	1.6	2.5	2.5	2.9	5.8	8.2	6.9	3.7	4.8	8.9	9.6	11.4	11.4	1.6	4.6
24	10.8	11.3	10.3	9.1	9.1	5.9	8.4	12.4	10.3	8.2	11.3	12.0	10.4	9.9	9.6	11.0	10.0	12.7	12.4	10.2	9.4	6.4	7.0	6.5	12.7	5.9	9.8
25	7.4	7.1	7.0	8.0	8.2	8.5	9.1	9.4	10.0	9.6	10.2	7.7	7.7	9.0	8.5	9.1	9.6	10.4	9.6	8.7	10.1	10.0	6.6	7.5	10.4	6.6	8.7
26	6.8	6.1	6.1	6.5	7.2	7.8	8.2	7.8	8.0	7.6	7.3	6.9	6.3	5.9	5.1	4.9	4.4	4.5	5.5	5.2	4.4	3.3	2.9	2.2	8.2	2.2	5.9
27	3.3	3.6	3.5	3.4	3.7	3.8	3.4	3.2	1.6	1.2	1.7	1.9	2.2	1.2	1.2	1.5	1.6	1.9	2.5	3.3	2.4	2.3	1.8	2.1	3.8	1.2	2.4
28	2.7	4.4	4.2	3.5	6.6	6.1	5.2	4.6	4.7	4.7	3.9	3.4	2.8	2.7	3.1	1.2	1.4	1.2	1.3	1.7	2.7	3.8	4.4	3.9	6.6	1.2	3.5
29	4.1	4.2	4.0	4.6	4.9	4.1	5.0	5.4	4.5	3.4	2.8	2.0	1.2	1.3	1.2	0.7	1.4	2.3	3.1	3.4	2.0	2.8	6.0	8.7	8.7	0.7	3.5
30	12.1	12.0	12.1	12.3	14.8	16.7	17.8	16.0	17.1	16.6	18.8	22.0	23.2	25.0	24.9	27.5	28.8	29.6	29.9	30.8	29.4	28.3	27.5	27.6	30.8	12.0	21.7
31	27.5	26.3	26.2	25.6	25.0	25.9	24.5	22.5	21.3	10.2	5.9	4.4	4.2	4.3	2.1	2.6	4.0	3.8	4.3	3.0	1.2	0.5	1.3	3.4	27.5	0.5	11.7
Max.	**27.5**	**26.3**	**26.2**	**25.6**	**25.0**	**25.9**	**24.5**	**22.5**	**22.3**	**23.7**	**21.2**	**22.0**	**23.2**	**25.0**	**24.9**	**27.5**	**28.8**	**29.6**	**29.9**	**30.8**	**29.4**	**28.3**	**27.5**	**27.6**	**30.8**		
Min.	**0.7**	**0.9**	**0.8**	**0.9**	**1.3**	**1.5**	**1.1**	**1.1**	**1.1**	**1.2**	**1.0**	**0.4**	**0.7**	**1.0**	**0.6**	**0.1**	**1.2**	**1.2**	**0.8**	**1.5**	**0.9**	**0.5**	**1.1**	**0.9**		**0.1**	
Avg.	**9.4**	**9.3**	**9.1**	**8.9**	**9.2**	**9.2**	**9.0**	**8.8**	**8.6**	**8.2**	**8.0**	**7.8**	**7.8**	**7.7**	**8.0**	**7.8**	**8.0**	**8.5**	**8.5**	**8.5**	**8.3**	**8.2**	**8.4**	**8.8**			**8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.5	5.9	9.0	6.8	4.5	6.4	7.1	8.2	5.6	3.9	4.0	2.7	3.5	3.0	9.0	9.1	9.0	10.0	3.3	0.8	3.5	4.3	3.8	0.7	10.0	0.7	5.4
2	0.4	4.1	3.8	4.0	2.1	0.6	2.5	1.4	0.7	0.9	1.4	0.8	1.8	2.1	1.4	2.3	2.2	2.2	4.8	4.6	6.4	5.7	9.0	10.0	10.0	0.4	3.1
3	9.0	9.5	10.5	11.1	10.0	10.9	7.2	7.2	13.4	19.2	19.3	19.2	18.1	17.0	17.1	15.8	15.9	16.3	14.4	12.5	11.5	12.6	13.4	14.5	19.3	7.2	13.6
4	14.3	16.6	16.2	13.8	12.9	10.5	9.2	9.3	7.0	4.1	9.5	7.9	8.5	7.1	4.4	1.4	1.9	5.1	5.0	4.8	5.1	6.1	6.8	8.6	16.6	1.4	8.2
5	7.4	7.7	10.1	12.2	11.6	11.5	10.8	11.1	11.4	15.0	14.7	12.2	11.8	14.1	14.2	14.4	15.5	17.1	18.7	17.3	13.0	12.8	12.4	13.4	18.7	7.4	12.9
6	17.5	13.7	11.3	11.6	10.7	9.7	9.9	9.1	7.5	7.8	8.2	5.7	4.8	3.6	3.8	3.0	2.6	2.4	2.2	2.7	2.2	1.1	2.2	2.1	17.5	1.1	6.5
7	2.4	1.9	2.1	3.8	6.1	4.4	6.0	6.2	3.0	5.1	5.1	5.9	6.0	7.7	8.7	10.2	10.8	11.4	10.3	12.8	13.9	16.2	17.6	16.4	17.6	1.9	8.1
8	18.7	20.8	20.1	18.6	17.4	16.5	15.0	15.2	15.0	15.8	17.2	14.5	10.8	11.1	11.0	9.6	9.0	8.9	9.1	7.4	7.6	7.5	8.5	7.3	20.8	7.3	13.0
9	8.3	7.2	6.9	7.9	7.6	7.9	7.1	7.6	7.1	7.2	8.0	8.6	8.7	8.6	7.7	7.1	5.1	5.0	5.3	4.5	3.0	5.7	6.8	6.1	8.7	3.0	6.9
10	2.2	2.9	3.5	4.4	5.8	7.9	10.1	11.3	12.4	12.6	13.3	12.8	9.8	9.6	8.5	9.3	9.4	8.3	6.6	6.2	3.5	1.1	2.5	5.5	13.3	1.1	7.5
11	5.4	1.9	1.6	1.4	2.6	3.8	6.2	6.9	7.1	6.8	6.9	6.0	7.0	7.3	10.4	13.0	14.2	13.4	11.5	10.2	11.1	11.0	10.0	9.8	14.2	1.4	7.7
12	9.4	8.7	7.3	7.1	6.8	5.5	5.3	6.5	8.4	11.0	12.0	12.8	14.5	15.5	13.6	11.8	11.7	9.7	8.5	7.2	7.1	6.4	5.6	2.9	15.5	2.9	9.0
13	3.2	2.3	1.4	1.4	2.7	4.9	11.2	12.6	15.0	17.0	17.5	18.9	20.4	21.1	21.7	20.7	17.8	16.0	17.1	15.5	15.2	13.9	11.4	11.3	21.7	1.4	12.9
14	13.2	15.2	14.2	13.6	16.8	16.4	15.4	17.7	16.5	18.3	19.3	19.7	18.6	18.1	16.0	20.1	18.3	17.9	15.6	13.4	15.9	13.2	11.4	10.9	20.1	10.9	16.1
15	11.4	9.8	12.3	14.5	13.6	12.3	14.4	11.9	14.8	15.9	16.1	18.1	15.5	16.8	14.2	13.2	16.0	16.2	9.0	6.5	7.1	4.3	2.1	2.5	18.1	2.1	12.0
16	6.7	7.5	9.0	11.3	11.4	12.9	17.4	17.0	20.2	21.6	22.0	20.9	22.2	21.8	20.3	20.2	21.7	22.2	21.6	15.8	11.2	9.1	10.4	12.1	22.2	6.7	16.1
17	11.3	11.9	14.3	15.1	14.5	12.4	9.1	8.4	8.6	7.2	9.9	7.9	11.8	9.6	8.5	6.6	7.4	7.8	5.7	4.4	3.1	1.1	2.0	4.5	15.1	1.1	8.5
18	5.5	5.1	2.8	3.9	2.6	2.6	1.8	1.2	2.0	0.7	1.1	0.8	1.4	1.1	1.2	0.9	1.3	1.4	1.4	2.0	1.9	0.9	1.7	1.9	5.5	0.7	2.0
19	1.7	2.2	1.5	2.0	1.2	2.0	2.3	2.2	4.1	4.1	1.7	1.0	1.5	5.3	4.1	3.8	2.9	2.7	4.8	5.4	4.6	3.8	3.8	3.8	5.4	1.0	3.0
20	3.2	3.6	2.2	1.6	1.6	2.1	1.5	1.8	2.3	3.0	3.3	5.1	8.0	9.8	14.2	14.6	13.5	14.2	14.8	14.9	16.3	15.9	15.2	16.7	16.7	1.5	8.3
21	17.9	17.7	17.3	14.8	13.2	13.9	14.9	16.0	12.3	14.7	17.2	14.4	14.1	13.8	12.8	13.2	11.3	6.5	5.5	4.3	3.7	7.0	7.3	7.9	17.9	3.7	12.1
22	5.5	3.8	2.9	2.1	2.4	2.0	1.4	0.7	0.3	0.1	0.2	0.0	0.9	0.5	0.0	0.1	2.1	1.5	1.2	0.8	1.4	1.4	2.6	2.7	5.5	0.0	1.5
23	3.7	3.8	4.0	3.9	2.9	3.8	3.7	3.6	4.0	4.4	4.8	4.8	4.8	3.9	2.1	1.5	1.4	2.0	3.7	3.7	5.7	8.3	8.5	7.6	8.5	1.4	4.2
24	7.1	6.7	6.9	8.3	8.5	10.9	11.0	10.9	11.5	11.8	12.3	11.8	11.4	11.8	11.7	9.4	11.0	10.5	10.1	11.5	10.8	11.3	10.4	8.9	12.3	6.7	10.3
25	6.8	5.0	4.4	3.9	3.8	3.8	3.8	3.3	2.9	3.0	3.5	5.3	5.6	4.9	3.6	3.5	4.5	8.6	9.4	9.7	10.1	10.4	11.0	10.0	11.0	2.9	5.9
26	9.1	9.1	7.8	7.5	8.1	9.7	7.1	8.0	5.4	5.8	6.0	5.1	3.9	2.8	3.0	2.5	2.9	3.2	3.1	4.1	6.2	5.5	5.7	6.0	9.7	2.5	5.7
27	8.2	4.5	5.9	4.3	4.9	5.2	1.9	2.0	2.2	2.6	4.0	4.9	5.9	6.9	7.6	8.5	8.3	9.6	9.1	7.1	6.5	6.6	8.5	10.6	10.6	1.9	6.1
28	10.6	10.0	9.0	7.5	7.6	7.3	6.6	5.4	4.8	4.2	1.3	2.5	3.0	2.5	2.3	3.0	2.4	2.0	1.5	0.4	1.1	0.6	0.9	0.9	10.6	0.4	4.1
29	1.5	2.5	3.3	3.7	5.2	5.9	4.5	4.0	5.0	6.9	9.9	10.9	10.9	9.9	8.3	7.7	9.2	8.9	7.9	6.8	6.5	6.7	6.2	5.7	10.9	1.5	6.6
30	4.4	4.4	4.2	4.0	3.2	2.1	1.3	1.8	2.4	2.4	1.8	2.2	2.5	2.8	3.1	4.1	6.1	7.2	9.6	11.2	10.5	10.3	10.1	10.5	11.2	1.3	5.1
Max.	**18.7**	**20.8**	**20.1**	**18.6**	**17.4**	**16.5**	**17.4**	**17.7**	**20.2**	**21.6**	**22.0**	**20.9**	**22.2**	**21.8**	**21.7**	**20.7**	**21.7**	**22.2**	**21.6**	**17.3**	**16.3**	**16.2**	**17.6**	**16.7**	**22.2**		
Min.	**0.4**	**1.9**	**1.4**	**1.4**	**1.2**	**0.6**	**1.3**	**0.7**	**0.3**	**0.1**	**0.2**	**0.0**	**0.9**	**0.5**	**0.0**	**0.1**	**1.3**	**1.4**	**1.2**	**0.4**	**1.1**	**0.6**	**0.9**	**0.7**		**0.0**	
Avg.	**7.7**	**7.5**	**7.5**	**7.5**	**7.4**	**7.5**	**7.5**	**7.6**	**7.8**	**8.4**	**9.0**	**8.8**	**8.9**	**9.0**	**8.8**	**8.7**	**8.8**	**8.9**	**8.3**	**7.6**	**7.5**	**7.4**	**7.6**	**7.7**			**8.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.7	13.7	13.8	15.0	16.2	18.0	19.4	20.9	19.8	18.8	20.0	21.8	23.1	19.9	15.8	13.4	12.1	13.4	7.8	8.8	9.3	8.3	8.1	7.0	23.1	7.0	14.9
2	7.2	9.5	8.7	6.3	3.8	7.7	7.2	3.2	2.1	1.2	3.9	7.1	11.5	11.5	12.2	11.8	10.8	9.8	9.8	10.9	12.9	11.3	10.5	10.3	12.9	1.2	8.4
3	11.6	11.9	12.5	11.3	9.7	6.2	5.3	3.9	2.5	2.4	3.0	4.3	5.6	5.8	6.0	5.3	4.2	4.4	4.1	3.8	2.8	2.8	2.0	1.9	12.5	1.9	5.5
4	2.3	1.2	0.8	1.3	1.8	8.6	12.7	14.6	14.9	15.8	14.0	12.9	12.7	14.0	12.9	13.6	14.2	16.0	17.9	18.0	19.1	19.0	20.5	20.5	20.5	0.8	12.5
5	20.3	22.3	23.1	23.9	22.6	20.6	17.9	16.7	17.0	16.4	16.5	16.7	16.4	16.3	15.6	15.2	13.8	13.5	12.7	11.8	8.6	5.1	4.1	3.3	23.9	3.3	15.4
6	3.9	3.2	1.5	1.8	0.5	0.0	0.0	0.0	1.6	2.1	4.2	6.3	7.2	6.9	7.7	8.0	7.0	8.0	8.5	8.5	9.4	9.0	7.5	7.8	9.4	0.0	5.0
7	7.1	6.8	7.8	8.2	9.2	8.0	7.3	6.8	6.7	7.1	6.1	6.9	7.6	7.0	6.6	5.6	5.4	5.7	4.1	3.8	3.9	2.8	1.6	0.6	9.2	0.6	5.9
8	0.9	1.0	1.5	1.9	1.9	2.1	2.1	2.7	4.3	4.9	6.2	7.4	9.2	6.9	5.7	4.2	4.9	8.7	11.9	8.5	6.9	6.9	6.8	4.7	11.9	0.9	5.1
9	4.4	3.1	4.9	7.5	6.9	6.8	8.8	8.8	7.6	8.0	7.4	4.4	5.0	7.0	5.7	3.6	1.6	1.8	2.4	1.5	2.1	2.8	5.9	6.9	8.8	1.5	5.2
10	6.2	3.5	1.9	1.3	1.7	1.6	0.9	1.2	1.9	1.6	1.4	2.6	2.1	2.7	4.4	5.4	6.8	6.6	6.6	5.4	3.9	4.2	4.1	2.7	6.8	0.9	3.4
11	2.7	1.8	1.3	2.5	1.7	1.0	1.7	0.9	1.2	2.5	2.7	2.7	3.8	6.0	4.0	3.3	3.5	6.7	6.1	7.1	6.9	7.3	8.1	8.4	8.4	0.9	3.9
12	8.6	8.1	8.4	8.6	8.3	9.3	9.1	9.2	10.7	9.2	8.4	9.5	9.7	9.2	9.1	10.2	10.5	9.5	8.4	8.8	9.2	6.7	7.9	6.5	10.7	6.5	8.9
13	6.4	8.2	7.4	6.2	6.3	5.0	3.1	2.9	1.6	0.8	2.5	2.3	1.0	1.1	2.2	4.1	3.7	3.4	2.0	3.1	3.1	1.3	2.0	1.8	8.2	0.8	3.4
14	2.7	2.7	3.3	3.4	2.5	3.1	2.9	3.8	5.6	5.4	5.3	5.7	6.0	6.5	8.0	7.4	8.9	9.9	10.1	11.1	10.4	13.4	12.2	8.6	13.4	2.5	6.6
15	6.2	5.0	5.1	3.7	1.7	1.8	1.7	1.6	2.4	3.1	3.5	1.3	1.9	1.1	1.6	2.3	2.6	4.0	3.6	3.0	4.6	3.9	6.5	8.7	8.7	1.1	3.4
16	6.6	1.0	1.0	2.6	3.3	4.3	3.7	3.6	4.6	3.5	2.4	1.8	2.9	2.7	2.3	2.0	2.8	4.3	4.4	4.0	3.0	4.1	2.9	3.6	6.6	1.0	3.2
17	2.4	2.6	2.8	2.0	2.7	3.0	2.3	1.8	2.4	3.8	5.6	7.2	7.8	7.9	7.5	8.4	9.3	8.0	7.8	7.4	7.0	6.8	5.3	5.4	9.3	1.8	5.3
18	5.0	4.4	4.3	4.6	4.2	2.9	2.2	1.1	1.4	2.3	3.6	5.2	5.2	6.4	7.8	7.1	7.1	9.6	8.2	8.7	8.9	8.6	6.4	1.9	9.6	1.1	5.3
19	2.5	3.4	2.5	0.9	1.3	1.2	0.7	1.7	3.3	5.7	7.0	9.1	11.5	11.0	16.9	19.1	14.2	15.3	16.8	18.2	17.3	14.0	15.0	13.1	19.1	0.7	9.2
20	12.7	13.1	13.7	13.9	14.7	16.0	15.8	16.1	16.0	15.2	13.6	13.8	10.8	11.5	11.4	9.5	7.1	4.1	3.0	2.1	4.9	8.8	8.6	9.4	16.1	2.1	11.1
21	10.7	10.0	10.6	10.9	11.8	12.7	13.5	13.4	14.2	16.0	16.8	20.3	20.8	16.5	17.5	15.3	17.3	17.4	17.1	16.7	14.2	11.7	14.6	13.2	20.8	10.0	14.7
22	14.3	13.3	12.1	12.1	12.6	14.4	14.1	16.5	15.7	14.9	16.1	17.2	17.0	13.7	12.5	11.5	12.5	12.1	11.6	11.1	12.5	11.0	11.2	9.4	17.2	9.4	13.3
23	10.7	7.3	6.6	4.8	4.1	3.4	4.1	4.3	4.1	4.6	5.2	4.9	3.8	3.5	3.4	4.4	4.8	6.7	9.0	7.8	6.1	6.1	5.6	6.0	10.7	3.4	5.5
24	6.3	4.7	3.3	4.2	4.0	2.4	1.5	2.8	4.1	2.2	1.8	1.8	2.4	2.5	3.1	3.7	4.1	5.2	4.2	6.3	7.0	5.1	4.1	5.0	7.0	1.5	3.8
25	5.3	5.4	5.0	6.1	6.1	4.9	5.1	3.8	3.3	3.0	2.3	2.3	2.4	2.4	2.2	3.8	4.7	5.1	6.0	3.7	2.9	4.0	4.9	5.1	6.1	2.2	4.2
26	5.3	6.2	5.9	6.2	7.5	4.0	4.9	5.3	7.1	7.3	8.7	9.9	8.9	7.5	9.0	9.4	10.7	11.5	11.0	9.9	7.8	7.5	6.8	9.1	11.5	4.0	7.8
27	8.3	6.5	8.2	12.6	14.1	13.7	12.6	13.0	11.4	10.0	10.8	13.1	14.7	16.0	15.4	15.4	14.8	12.8	10.8	9.4	7.8	7.0	8.2	7.4	16.0	6.5	11.4
28	6.9	5.2	3.7	1.9	2.8	3.4	3.7	6.3	5.2	3.3	1.7	1.7	3.0	4.2	3.8	3.6	4.2	3.6	3.5	6.0	6.6	5.1	6.0	6.1	6.9	1.7	4.2
29	5.8	5.6	6.6	6.6	7.7	7.1	7.4	6.1	6.9	7.7	7.7	8.3	8.5	8.5	8.2	7.9	7.6	7.9	8.1	7.8	7.1	7.5	7.6	6.5	8.5	5.6	7.4
30	6.4	6.4	6.0	3.5	2.6	2.9	1.9	3.0	5.5	4.6	6.2	6.6	7.2	8.1	7.7	7.7	6.8	7.2	7.2	6.3	5.7	5.4	4.7	7.4	8.1	1.9	5.7
31	7.4	7.6	7.5	4.4	6.9	8.0	6.9	7.4	6.6	8.1	8.9	7.8	6.1	6.0	6.1	5.0	4.3	5.0	4.0	3.1	3.6	3.3	1.8	2.0	8.9	1.8	5.7
Max.	**20.3**	**22.3**	**23.1**	**23.9**	**22.6**	**20.6**	**19.4**	**20.9**	**19.8**	**18.8**	**20.0**	**21.8**	**23.1**	**19.9**	**17.5**	**19.1**	**17.3**	**17.4**	**17.9**	**18.2**	**19.1**	**19.0**	**20.5**	**20.5**	**23.9**		
Min.	**0.9**	**1.0**	**0.8**	**0.9**	**0.5**	**0.0**	**0.0**	**0.0**	**1.2**	**0.8**	**1.4**	**1.3**	**1.0**	**1.1**	**1.6**	**2.0**	**1.6**	**1.8**	**2.0**	**1.5**	**2.1**	**1.3**	**1.6**	**0.6**		**0.0**	
Avg.	**7.1**	**6.6**	**6.5**	**6.5**	**6.5**	**6.6**	**6.5**	**6.6**	**6.8**	**6.8**	**7.2**	**7.8**	**8.2**	**8.1**	**8.1**	**8.0**	**7.8**	**8.3**	**8.0**	**7.8**	**7.6**	**7.1**	**7.1**	**6.8**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.6	1.4	1.2	2.6	2.5	2.3	2.8	2.7	3.3	3.7	4.0	3.8	4.3	3.6	3.7	4.2	3.5	3.9	6.4	5.8	6.1	7.1	5.7	1.6	7.1	1.2	3.7
2	2.8	3.2	3.5	3.1	3.6	3.9	4.4	3.5	3.4	3.9	5.6	5.7	5.6	5.8	6.4	7.4	7.6	8.2	9.9	8.0	7.3	7.0	6.8	6.8	9.9	2.8	5.6
3	7.7	8.9	8.7	11.1	10.6	10.5	11.1	13.0	15.3	14.4	13.9	13.0	12.0	11.8	12.0	11.6	11.4	12.6	12.6	12.4	12.6	11.2	10.7	9.2	15.3	7.7	11.6
4	9.1	8.5	8.5	8.5	7.8	8.9	10.2	12.4	11.5	12.3	13.0	13.6	12.2	12.1	12.3	11.5	11.4	12.0	12.0	11.4	10.5	8.5	9.0	10.6	13.6	7.8	10.7
5	11.2	10.3	8.8	6.4	7.1	6.6	6.8	7.5	7.3	6.8	4.6	3.1	3.3	3.5	3.6	4.4	4.4	4.1	3.3	3.5	2.9	3.3	3.8	3.8	11.2	2.9	5.4
6	3.5	3.5	2.9	2.2	2.0	2.6	2.7	3.1	4.1	4.2	4.1	5.4	7.7	9.0	9.0	9.8	9.9	10.4	10.9	10.1	10.0	9.8	9.6	8.1	10.9	2.0	6.4
7	6.9	7.6	11.6	12.5	12.9	12.4	10.4	12.1	15.3	14.8	15.6	15.7	14.7	15.3	14.7	14.4	13.4	14.1	14.0	13.2	11.2	9.6	10.2	11.9	15.7	6.9	12.7
8	13.6	14.8	16.0	16.1	15.4	16.3	15.6	16.5	16.4	17.3	17.6	18.1	18.2	18.9	18.5	17.7	18.1	19.0	19.6	20.5	21.1	22.7	24.8	24.6	24.8	13.6	18.2
9	23.0	20.9	21.9	21.6	19.1	18.7	20.1	19.0	19.8	20.8	20.0	21.8	22.6	23.5	23.7	21.4	20.8	21.7	15.4	19.9	16.9	19.2	19.4	19.5	23.7	15.4	20.5
10	15.4	16.0	16.5	16.8	17.8	17.8	16.5	18.6	19.4	18.7	17.2	17.8	19.0	20.3	20.4	20.1	18.3	20.0	19.2	17.5	17.0	18.4	18.1	18.0	20.4	15.4	18.1
11	18.4	19.9	19.8	19.3	20.2	20.6	19.6	18.6	18.7	18.6	19.0	20.0	18.7	17.8	18.2	17.9	17.5	16.1	16.7	15.8	15.0	14.8	12.3	14.7	20.6	12.3	17.8
12	15.0	14.1	14.1	13.0	11.9	12.0	12.0	11.5	11.3	11.0	10.7	8.4	11.1	11.5	12.0	11.2	11.0	8.4	6.5	7.0	6.4	5.7	6.2	5.8	15.0	5.7	10.3
13	5.7	5.0	5.2	5.3	5.2	5.2	3.9	4.8	6.9	7.9	4.7	4.6	4.9	5.2	5.5	4.7	4.8	4.8	4.7	3.3	1.4	2.0	1.0	1.9	7.9	1.0	4.5
14	1.7	0.9	1.6	0.9	2.0	2.7	2.0	1.5	2.5	1.9	3.0	3.0	3.4	3.1	1.8	1.8	2.5	1.7	2.8	1.1	1.0	2.1	3.1	3.0	3.4	0.9	2.1
15	3.4	4.3	4.6	4.8	4.7	5.3	5.2	4.7	5.3	5.8	5.0	5.6	3.8	4.9	5.0	5.3	2.6	3.7	4.5	5.3	5.0	3.8	3.5	3.3	5.8	2.6	4.5
16	3.5	4.1	4.5	3.9	4.9	4.3	4.4	4.3	3.9	4.6	5.5	7.0	8.3	8.9	8.9	10.0	10.3	10.7	10.1	9.5	8.7	8.5	6.4	5.6	10.7	3.5	6.7
17	5.3	4.8	4.4	3.2	2.1	2.6	2.9	5.0	5.2	5.4	5.1	5.6	5.8	7.7	7.0	7.0	7.9	7.9	7.7	6.7	6.5	6.6	6.4	6.3	7.9	2.1	5.6
18	4.5	2.2	1.2	1.4	2.0	2.0	1.6	2.1	3.0	4.6	6.1	8.0	10.0	9.4	11.0	14.0	16.3	14.8	14.9	13.7	13.1	10.9	4.6	2.0	16.3	1.2	7.2
19	2.3	4.3	4.7	4.3	3.9	2.6	1.9	1.6	1.4	1.7	4.3	3.0	2.5	3.7	3.8	3.7	3.0	5.0	4.0	5.8	8.7	5.6	3.4	4.2	8.7	1.4	3.7
20	3.9	3.8	4.3	3.4	3.2	2.0	2.0	1.4	1.4	1.4	1.9	1.9	3.6	4.2	8.9	11.7	8.9	9.2	8.4	8.5	8.0	8.0	6.7	5.2	11.7	1.4	5.1
21	4.4	4.9	4.0	2.0	2.1	1.1	1.0	1.6	2.7	4.5	4.9	4.2	3.0	1.8	2.9	4.4	6.3	4.4	2.6	4.7	3.5	3.9	6.5	6.5	6.5	1.0	3.7
22	8.3	10.2	6.5	6.2	5.9	6.6	6.5	5.7	6.3	3.5	2.9	6.0	7.0	8.1	9.0	9.1	7.8	8.0	8.5	7.8	7.6	6.9	6.1	5.9	10.2	2.9	6.9
23	5.3	5.5	7.2	7.1	6.1	6.4	7.0	6.3	6.1	6.6	7.2	6.4	7.1	6.4	6.0	6.2	5.6	4.5	5.4	6.2	6.7	6.6	6.5	4.6	7.2	4.5	6.2
24	3.4	3.9	3.4	3.9	3.2	1.7	1.1	2.3	3.4	3.6	3.6	2.9	2.9	2.0	2.7	2.4	5.2	4.1	2.3	1.7	2.5	2.2	1.8	2.5	5.2	1.1	2.9
25	1.7	2.1	3.4	4.1	3.7	2.3	1.7	2.2	1.8	2.8	3.6	3.3	3.6	6.0	6.1	6.5	7.1	7.3	6.2	5.4	4.6	4.4	5.0	5.5	7.3	1.7	4.2
26	5.0	5.1	4.0	4.0	2.5	2.4	1.9	1.2	2.3	2.8	2.6	3.6	3.6	3.2	2.9	4.1	3.2	2.2	5.3	7.1	6.6	6.9	6.1	5.2	7.1	1.2	3.9
27	4.6	1.7	2.9	1.1	2.8	2.4	3.2	3.8	3.6	2.5	1.3	1.6	1.5	2.6	4.4	4.7	5.7	6.0	5.8	6.6	8.1	6.8	5.2	4.7	8.1	1.1	3.9
28	4.6	3.1	5.5	3.7	0.7	1.0	2.2	4.3	6.3	5.4	5.3	6.8	5.8	6.2	4.7	4.6	4.4	3.5	2.6	4.9	4.8	2.3	3.5	3.6	6.8	0.7	4.2
29	3.8	4.7	5.8	3.5	4.8	3.7	3.5	4.2	4.2	4.4	4.0	3.5	3.5	5.1	7.2	10.9	12.1	12.5	11.6	11.8	11.4	10.0	8.1	10.8	12.5	3.5	6.9
30	10.7	8.6	8.6	9.4	9.0	7.5	8.8	8.5	6.1	5.9	5.7	6.5	6.0	5.8	5.0	3.1	3.7	3.6	1.7	1.5	1.7	2.2	1.9	2.3	10.7	1.5	5.6
Max.	**23.0**	**20.9**	**21.9**	**21.6**	**20.2**	**20.6**	**20.1**	**19.0**	**19.8**	**20.8**	**20.0**	**21.8**	**22.6**	**23.5**	**23.7**	**21.4**	**20.8**	**21.7**	**19.6**	**20.5**	**21.1**	**22.7**	**24.8**	**24.6**	**24.8**		
Min.	**1.6**	**0.9**	**1.2**	**0.9**	**0.7**	**1.0**	**1.0**	**1.2**	**1.4**	**1.4**	**1.3**	**1.6**	**1.5**	**1.8**	**1.8**	**1.8**	**2.5**	**1.7**	**1.7**	**1.1**	**1.0**	**2.0**	**1.0**	**1.6**		**0.7**	
Avg.	**7.0**	**6.9**	**7.2**	**6.8**	**6.7**	**6.5**	**6.4**	**6.8**	**7.3**	**7.4**	**7.4**	**7.7**	**7.9**	**8.2**	**8.6**	**8.9**	**8.8**	**8.8**	**8.5**	**8.6**	**8.2**	**7.9**	**7.4**	**7.3**			**7.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	1.2	2.1	3.3	2.0	1.5	1.0	1.3	1.2	0.9	1.1	1.3	1.5	2.9	2.7	2.9	3.9	4.2	5.3	5.6	5.6	5.6	5.4	3.5	5.6	0.9	2.9
2	1.7	2.5	3.7	3.1	2.8	3.7	3.9	3.9	4.9	5.4	5.5	5.4	5.6	6.6	6.4	6.2	8.2	9.6	9.7	8.9	8.1	7.8	9.0	9.2	9.7	1.7	5.9
3	10.7	10.2	8.4	6.5	6.0	5.7	5.3	4.3	6.3	6.5	4.6	4.2	3.3	3.1	3.2	2.7	3.3	5.3	5.2	4.7	4.6	3.5	1.4	1.7	10.7	1.4	5.0
4	1.9	1.2	1.0	1.5	1.9	1.6	0.8	0.8	1.5	1.6	1.9	2.4	3.0	3.4	3.0	4.3	5.5	6.1	6.1	5.6	6.2	4.5	4.0	1.9	6.2	0.8	3.0
5	2.4	1.4	1.5	2.1	2.3	2.4	2.6	2.0	1.9	2.4	2.1	2.1	1.4	2.2	3.2	5.5	4.5	3.9	1.8	1.5	2.0	1.9	1.4	1.7	5.5	1.4	2.3
6	0.8	2.3	2.1	1.6	1.7	0.8	1.6	1.2	2.5	2.7	2.5	1.7	2.7	5.5	6.5	6.6	5.0	4.7	2.0	2.2	3.0	2.5	4.0	3.8	6.6	0.8	2.9
7	3.9	3.9	4.2	5.0	5.9	4.1	4.1	5.5	6.6	7.6	7.6	6.8	6.9	7.6	7.5	8.0	8.5	7.0	4.5	4.6	6.3	6.1	4.8	6.7	8.5	3.9	6.0
8	7.2	6.4	3.5	6.4	4.1	4.2	5.3	5.0	5.6	4.5	2.2	1.8	2.3	2.3	1.4	1.1	2.0	3.0	3.1	3.3	2.4	3.8	4.0	2.0	7.2	1.1	3.6
9	1.3	2.2	3.1	3.5	4.0	3.8	3.9	3.4	2.5	1.5	2.4	3.7	5.3	5.5	7.3	8.0	8.1	8.6	9.5	9.8	9.5	8.6	11.1	12.3	12.3	1.3	5.8
10	13.5	14.6	15.4	13.1	13.0	13.6	13.1	12.1	13.9	14.9	16.9	16.9	13.0	13.6	13.1	12.1	13.9	14.9	16.9	16.9	15.5	12.7			16.9	12.1	14.2
11		15.7	15.5	14.3	13.3	12.5	8.8	8.2	8.8		6.3	5.7	7.4	7.2	5.5	4.5	5.4	4.5							15.7	4.5	9.0
12	5.5	6.2	5.4	4.1	4.2	4.2	2.3	2.5	1.3	2.8	2.1	1.0	1.2	1.8	2.0	3.0	3.4	4.1	3.2	3.6	3.9	4.4	4.6	4.1	6.2	1.0	3.4
13	3.3	4.6	8.1	9.5	6.7	5.9	5.1	3.7	4.8	4.9	5.0	4.7	4.5	4.1	3.1	1.7	4.3	6.3	6.0	5.1	6.1	6.3	7.3	6.7	9.5	1.7	5.3
14	6.8	6.5	8.0	9.1	9.8	9.5	8.7	8.5	11.9	11.6	9.0	9.4	8.7	7.7	8.2	8.4	6.9	6.5	6.1	6.9	7.1	6.5	6.2	5.8	11.9	5.8	8.1
15	6.6	7.5	6.5	6.8	6.6	7.3	7.8	6.5	6.6	6.0	5.1	4.9	5.5	4.5	3.9	3.4	5.6	4.7	3.9	5.0	5.1	5.4	5.8	5.1	7.8	3.4	5.7
16	4.4	5.3	6.0	5.3	4.9	5.5	3.8	3.1	4.6	6.0	5.7	6.1	6.6	7.8	9.8	11.0	11.0	12.1	13.8	13.1	13.3	13.3	14.0	14.7	14.7	3.1	8.4
17	15.2	14.2	12.2	11.0	8.4	8.6	6.9	7.4	7.5	8.8	8.7	10.5	11.0	11.9	12.9	12.7	13.6	13.6	14.9	16.2	16.3	15.2	15.6	14.6	16.3	6.9	12.0
18	14.9	15.0	14.2	13.6	14.2	11.3	12.4	12.8	17.7	18.0	17.3	17.4	13.8	12.1	12.8	12.6	14.5	14.4	15.9	16.6	16.0	15.3	16.6	14.0	18.0	11.3	14.7
19	14.9	14.4	14.1	14.2	13.6	14.0	12.8	11.9	10.9	12.7	10.6	10.4	8.0	6.9	3.9	3.5	3.8	3.0	3.8	5.5	6.9	6.4	5.5	5.4	14.9	3.0	9.0
20	5.2	4.9	5.0	5.3	4.5	3.5	2.5	1.5	1.4	2.6	3.9	3.7	2.8	3.7	4.9	4.7	4.7	5.3	5.6	5.0	7.1	7.7	7.2	6.2	7.7	1.4	4.5
21	4.9	5.8	5.2	5.0	5.7	5.6	5.1	6.0	6.3	4.2	2.8	2.4	2.6	0.6	0.7	0.7	2.0	1.8	2.5	2.8	2.6	2.8	2.5	6.3	6.3	0.6	3.6
22	7.6	7.2	7.0	7.2	6.8	4.6	3.0	3.2	3.1	2.8	1.8	0.9	0.9	2.5	2.0	1.9	1.7	3.2	4.1	5.0	4.0	3.7	5.8	6.0	7.6	0.9	4.0
23	6.3	6.0	5.0	5.1	6.7	8.3	7.4	6.4	6.8	9.2	9.7	7.7	7.8	9.4	9.7	9.9	6.7	6.2	3.6	2.7	2.0	1.4	5.1	3.6	9.9	1.4	6.3
24	3.3	3.4	3.8	3.5	2.1	2.4	1.8	2.0	3.1	1.4	3.5	3.5	6.1	6.0	5.5	5.3	5.0	4.7	3.0	1.7	2.6	3.7	5.3	6.0	6.1	1.4	3.7
25	5.8	6.2	5.6	5.7	5.5	8.9	9.4	8.5	7.2	9.0	10.5	10.2	9.0	4.4	3.8	2.7	3.9	5.6	6.4	7.1	7.4	7.1	6.3	6.4	10.5	2.7	6.8
26	6.4	5.7	5.1	4.6	3.1	2.8	3.1	3.1	3.2	2.2	2.5	2.3	2.6	3.0	1.8	1.1	1.4	1.3	4.6	5.0	5.0	5.4	5.8	6.2	6.4	1.1	3.6
27	7.4	8.2	9.0	8.7	7.1	6.0	5.9	6.1	6.7	6.9	6.4	5.3	4.3	3.5	1.6	1.4	1.1	1.1	2.0	1.2	2.4	2.6	2.3	2.2	9.0	1.1	4.6
28	2.5	2.9	2.9	2.4	2.1	2.0	1.7	1.3	0.7	1.5	1.4	1.6	1.2	1.1	0.7	1.6	2.3	4.4	4.4	4.8	5.4	6.8	8.7	9.3	9.3	0.7	3.1
29	7.4	7.1	8.8	10.7	9.6	11.5	8.2	9.2	11.4	10.3	10.7	12.6	14.5	13.8	13.2	12.2	9.8	8.5	9.6	7.1	6.8	8.9	9.7	8.4	14.5	6.8	10.0
30	10.0	11.4	11.5	12.0	10.5	10.8	9.2	7.9	6.8	6.8	6.8	6.3	7.5	5.6	3.6	1.6	1.3	1.5	2.4	3.8	5.0	4.9	6.2	7.7	12.0	1.3	6.7
31	10.0	11.0	13.1	10.7	13.3	12.6	12.2	7.9	6.9	7.5	6.0	6.7	6.0	4.7	5.4	4.1	4.1	5.2	6.4	5.9	5.5	5.7	6.4	7.7	13.3	4.1	7.7
Max.	**15.2**	**15.7**	**15.5**	**14.3**	**14.2**	**14.0**	**13.1**	**12.8**	**17.7**	**18.0**	**17.3**	**17.4**	**14.5**	**13.8**	**13.2**	**12.7**	**14.5**	**14.9**	**16.9**	**16.9**	**16.3**	**15.3**	**16.6**	**14.7**	**18.0**		
Min.	**0.8**	**1.2**	**1.0**	**1.5**	**1.7**	**0.8**	**0.8**	**0.8**	**0.7**	**0.9**	**1.1**	**0.9**	**0.9**	**0.6**	**0.7**	**0.7**	**1.1**	**1.1**	**1.8**	**1.2**	**2.0**	**1.4**	**1.4**	**1.7**		**0.6**	
Avg.	**6.5**	**6.9**	**7.0**	**6.9**	**6.5**	**6.4**	**5.8**	**5.4**	**6.0**	**6.1**	**5.9**	**5.8**	**5.7**	**5.6**	**5.5**	**5.3**	**5.7**	**6.0**	**6.2**	**6.2**	**6.5**	**6.4**	**6.6**	**6.5**			**6.1**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.6	5.0	4.8	5.5	5.9	5.3	3.3	3.0	3.0	4.3	4.5	5.4	5.8	5.7	6.8	6.9	6.9	6.8	6.7	7.5	7.9	7.5	8.2	7.8	8.2	3.0	5.8
2	6.6	6.2	7.2	7.5	6.6	5.8	5.3	4.3	5.0	6.1	6.3	5.8	5.0	5.1	5.8	5.3	9.5	10.5	11.4	12.3	12.3	11.7	11.8	11.7	12.3	4.3	7.7
3	11.9	15.0	15.9	17.0	15.7	14.9	11.9	9.6	6.0	5.7	6.1	6.3	7.4	8.5	8.6	9.3	10.1	8.5	5.2	5.4	5.2	6.7	6.5	6.3	17.0	5.2	9.3
4	6.1	4.8	2.8	3.2	2.7	4.0	4.9	4.9	4.2	3.9	3.7	3.8	2.6	2.0	2.4	1.8	0.6	1.3	1.3	1.0	1.1	0.6	0.9	2.0	6.1	0.6	2.8
5	1.2	0.9	0.3	1.1	2.3	3.1	4.0	4.4	4.6	4.7	4.9	5.5	6.7	6.3	6.1	6.6	5.1	5.8	4.5	3.4	4.4	4.2	4.2	3.2	6.7	0.3	4.1
6	3.5	4.1	4.2	6.2	5.8	6.3	7.7	9.6	10.0	8.7	6.8	6.0	5.4	6.7	6.8	7.2	6.8	7.4	7.1	5.5	4.2	4.8	4.6	5.3	10.0	3.5	6.3
7	5.2	5.4	4.2	4.2	4.0	3.8	3.1	3.5	2.3	2.3	3.4	3.8	4.7	6.1	8.0	8.0	8.5	8.3	7.9	4.0	2.5	1.3	1.7	1.0	8.5	1.0	4.5
8	0.9	2.0	1.1	1.1	1.8	1.6	0.9	2.4	3.4	4.1	4.6	4.3	4.0	3.0	3.4	2.9	2.7	3.0	4.9	3.6	2.5	2.0	1.0	1.1	4.9	0.9	2.6
9	0.6	0.9	1.0	1.5	0.9	1.4	2.5	2.8	3.4	3.3	2.6	2.8	3.8	4.2	3.2	4.9	5.4	5.2	5.7	5.3	5.9	6.3	7.4	6.9	7.4	0.6	3.7
10	6.3	6.1	7.0	7.0	6.3	7.8	8.3	8.0	8.0	6.1	6.0	7.0	7.7	9.7	11.5	12.8	14.9	14.9	14.4	14.6	16.1	17.1	15.5	14.5	17.1	6.0	10.3
11	13.3	10.5	9.1	8.8	8.2	9.7	7.5	7.6	10.9	10.3	10.1	8.7	7.4	6.4	5.0	4.9	6.0	4.7	4.8	4.2	4.0	3.6	4.3	5.6	13.3	3.6	7.3
12	5.4	6.8	6.7	7.8	8.2	7.8	7.8	8.3	9.5	10.1	9.8	11.0	10.1	7.9	7.9	8.1	9.1	8.2	7.2	7.1	6.6	5.2	5.7	4.8	11.0	4.8	7.8
13	3.8	5.0	1.7	3.1	3.9	5.0	3.9	3.6	4.9	5.8	7.0	5.8	5.8	5.7	5.2	5.9	4.7	7.5	6.1	8.0	6.1	6.2	6.1	6.6	8.0	1.7	5.3
14	5.0	4.0	5.6	5.1	2.8	4.0	4.3	5.3	6.7	7.3	5.3	8.2	10.8	14.0	14.1	12.1	9.8	6.7	4.3	7.7	10.1	9.5	8.7	8.2	14.1	2.8	7.5
15	7.3	7.9	9.1	9.6	7.5	6.8	6.2	7.9	7.1	7.4	7.7	6.4	6.2	6.4	5.7	5.7	5.5	4.6	4.5	4.1	3.1	3.4	2.8	1.8	9.6	1.8	6.0
16	0.7	0.4	1.1	1.7	2.0	3.1	2.9	2.6	3.2	3.0	2.3	2.4	3.3	3.1	1.9	1.9	2.1	4.3	1.9	1.4	1.2	1.2	0.7	0.2	4.3	0.2	2.0
17	0.7	0.9	1.0	0.9	1.0	0.7	0.6	0.7	1.7	2.8	2.6	3.2	4.6	6.9	7.1	6.2	5.4	7.3	8.4	8.6	11.0	12.1	13.1	12.0	13.1	0.6	5.0
18	12.6	11.6	17.6	15.5	16.1	17.4	17.9	17.2	18.3	16.6	16.5	15.4	15.5	15.2	13.1	12.1	10.9	9.6	7.8	6.9	6.5	5.3	6.4	5.3	18.3	5.3	12.8
19	4.5	5.2	6.4	6.3	6.3	4.4	4.0	3.0	1.8	2.8	3.2	5.5	8.0	9.3	8.1	9.0	9.6	10.3	9.2	7.7	4.5	3.0	4.0	5.5	10.3	1.8	5.9
20	4.3	5.9	6.7	6.1	3.9	2.6	3.4	4.3	5.8	5.0	4.7	3.4	5.8	7.7	8.0	7.6	7.9	9.3	9.7	8.5	6.6	4.5	3.3	3.0	9.7	2.6	5.7
21	3.5	3.8	3.6	3.6	3.8	3.3	3.4	2.7	2.1	0.9	1.8	2.7	2.7	3.7	4.1	4.2	5.4	5.5	6.1	7.9	9.1	11.0	10.6	10.5	11.0	0.9	4.8
22	9.4	10.6	9.8	10.2	11.4	13.4	12.7	12.3	11.7	11.1	10.3	8.9	8.8	7.3	9.3	9.3	10.3	10.5	9.0	6.4	6.3	4.7	3.4	2.3	13.4	2.3	9.1
23	2.2	1.3	0.9	1.3	1.4	1.9	0.6	1.0	1.0	1.9	1.4	1.5	3.1	2.6	4.5	3.4	2.5	3.2	3.3	4.9	5.8	5.2	5.8	7.3	7.3	0.6	2.8
24	6.9	8.7	11.0	11.1	8.1	5.2	4.8	5.7	5.0	3.5	6.9	6.7	6.4	6.0	6.0	7.0	8.1	8.6	8.0	5.4	6.4	6.3	7.5	8.8	11.1	3.5	7.0
25	9.4	8.6	8.6	8.0	8.6	5.7	4.2	4.7	3.2	2.6	3.2	4.1	4.5	5.4	4.3	4.7	4.1	3.7	3.2	3.8	3.6	3.5	2.5	2.8	9.4	2.5	4.9
26	3.4	2.9	1.8	2.0	4.5	5.2	4.4	2.6	1.8	3.6	5.9	6.8	5.4	3.5	3.8	3.2	3.8	3.1	2.8	2.0	2.7	2.3	2.7	3.0	6.8	1.8	3.5
27	2.7	2.5	2.7	1.8	2.4	2.0	0.9	1.0	2.1	3.3	3.6	2.8	4.4	4.5	5.3	6.4	7.7	5.9	6.0	4.5	4.3	6.5	6.5	5.4	7.7	0.9	4.0
28	4.3	3.4	4.1	2.5	0.7	0.6	1.1	1.2	2.7	4.4	5.1	3.7	3.7	3.4	5.5	5.8	5.6	5.6	4.5	4.2	3.3	3.7	3.2	4.3	5.8	0.6	3.6
29	3.3	3.5	2.9	3.0	2.5	3.4	3.5	2.6	3.4	3.5	3.3	2.9	3.2	2.2	3.0	2.7	2.6	3.7	5.4	5.1	6.1	4.6	5.4	5.1	6.1	2.2	3.6
30	4.6	7.5	9.3	11.4	13.1	15.1	14.3	13.3	9.3	7.4	7.7	7.1	4.8	4.4	6.0	6.2	5.9	5.5	6.8	6.3	5.4	5.4	5.5	6.4	15.1	4.4	7.9
31	3.7	2.3	4.3	4.5	4.6	4.4	3.8	5.3	7.0	8.4	8.1	8.5	10.3	10.9	12.6	11.7	12.3	11.7	11.5	10.8	6.3	7.6	7.6	7.5	12.6	2.3	7.7
Max.	**13.3**	**15.0**	**17.6**	**17.0**	**16.1**	**17.4**	**17.9**	**17.2**	**18.3**	**16.6**	**16.5**	**15.4**	**15.5**	**15.2**	**14.1**	**12.8**	**14.9**	**14.9**	**14.4**	**14.6**	**16.1**	**17.1**	**15.5**	**14.5**	**18.3**		
Min.	**0.6**	**0.4**	**0.3**	**0.9**	**0.7**	**0.6**	**0.6**	**0.7**	**1.0**	**0.9**	**1.4**	**1.5**	**2.6**	**2.0**	**1.9**	**1.8**	**0.6**	**1.3**	**1.3**	**1.0**	**1.1**	**0.6**	**0.7**	**0.2**		**0.2**	
Avg.	**5.1**	**5.3**	**5.6**	**5.8**	**5.6**	**5.7**	**5.3**	**5.3**	**5.5**	**5.5**	**5.7**	**5.7**	**6.1**	**6.3**	**6.5**	**6.6**	**6.8**	**6.8**	**6.4**	**6.1**	**5.9**	**5.7**	**5.7**	**5.7**			**5.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.0	6.0	4.8	4.3	3.5	4.1	4.6	5.1	6.6	7.8	6.9	5.3	5.7	5.4	5.4	8.2	9.6	9.8	9.3	8.5	8.1	7.9	7.6	6.5	9.8	3.5	6.5
2	7.8	8.2	8.5	6.2	5.2	5.1	5.5	5.4	5.5	6.2	8.6	8.7	6.8	6.1	6.6	6.5	6.5	6.5	3.8	5.9	3.4	2.0	1.9	1.0	8.7	1.0	5.7
3	1.7	2.3	1.5	1.4	1.9	2.3	3.1	3.1	3.1	2.5	2.1	1.9	1.4	1.7	2.6	2.3	2.5	2.6	0.8	0.6	0.6	0.7	1.7	1.7	3.1	0.6	1.9
4	1.7	0.7	2.0	3.8	3.2	2.7	2.9	3.2	3.3	2.8	3.7	3.7	2.2	1.6	1.5	1.9	6.9	3.8	2.2	2.6	5.4	4.7	3.7	3.8	6.9	0.7	3.1
5	4.2	4.4	4.0	4.0	4.2	3.5	3.6	5.0	4.6	6.0	6.4	7.2	8.9	9.6	9.3	9.9	10.1	8.8	7.6	7.1	5.3	3.5	3.2	1.6	10.1	1.6	5.9
6	1.7	2.0	3.3	4.6	5.4	5.4	5.5	5.6	5.8	6.2	6.7	6.9	8.0	7.7	7.1	6.7	5.6	6.0	6.1	5.2	6.8	7.7	9.9	9.5	9.9	1.7	6.1
7	9.3	4.2	3.3	3.0	3.5	4.1	5.3	4.8	8.8	12.0	16.3	18.3	19.6	21.7	23.5	23.3	21.9	22.5	21.4	23.5	22.8	22.1	22.8	21.9	23.5	3.0	15.0
8	21.5	22.1	22.0	22.2	21.4	22.0	20.3	19.6	18.6	16.4	16.5	15.4	14.2	14.0	14.2	12.7	11.8	12.0	11.3	10.6	11.1	10.9	9.9	8.5	22.2	8.5	15.8
9	8.0	7.5	7.0	4.2	2.0	2.5	3.4	1.7	2.8	5.4	5.2	6.8	6.0	5.3	5.8	5.8	7.0	7.0	6.3	6.9	5.5	4.6	5.0	4.8	8.0	1.7	5.3
10	3.3	3.5	2.0	1.8	2.4	2.9	1.1	0.7	1.7	2.2	2.3	2.1	2.1	3.1	2.8	2.5	4.6	4.5	2.1	1.0	2.0	2.1	2.3	0.8	4.6	0.7	2.3
11	1.2	1.8	1.2	1.3	0.6	2.9	3.3	3.9	3.5	2.2	2.0	2.9	3.8	3.4	3.0	2.7	3.6	3.7	3.9	5.3	3.9	2.1	2.4	3.7	5.3	0.6	2.8
12	4.2	3.8	4.2	4.6	4.1	3.2	3.6	2.8	2.3	2.5	4.2	4.4	3.1	3.2	3.2	4.1	4.1	4.5	4.2	4.4	3.4	3.0	3.3	3.1	4.6	2.3	3.6
13	3.7	3.7	3.9	3.1	2.6	2.2	1.1	2.0	2.6	3.8	5.0	8.9	9.9	11.3	13.2	13.3	13.9	15.7	14.5	17.4	21.5	23.1	22.3	20.6	23.1	1.1	10.0
14	23.6	22.4	22.9	22.3	22.4	21.8	20.7	23.3	22.3	20.4	19.0	18.9	19.1	20.2	21.6	22.0	22.9	21.8	23.2	21.6	20.8	19.6	17.7	18.8	23.6	17.7	21.2
15	18.8	18.4	18.4	18.9	19.0	18.9	16.3	15.3	18.1	21.1	18.9	18.7	20.3	20.3	20.8	18.9	18.9	19.1	18.7	17.7	16.9	17.0	14.1	15.7	21.1	14.1	18.3
16	15.5	15.7	14.1	12.6	11.8	10.9	10.9	10.9	11.2	9.6	11.9	11.3	10.6	10.0	10.1	8.4	7.3	7.7	7.5	7.3	5.9	6.5	6.1	5.3	15.7	5.3	10.0
17	4.2	5.5	6.1	6.5	9.4	7.0	7.2	6.3	6.1	5.3	6.2	6.6	6.3	6.6	6.3	5.1	5.2	4.6	4.2	4.2	4.4	5.1	5.0	4.6	9.4	4.2	5.8
18	3.9	3.7	3.6	3.9	3.0	3.7	5.4	11.6	13.0	14.2	14.0	15.1	16.2	15.8	15.8	17.7	18.7	19.5	21.5	20.4	21.6	21.5	21.7	18.4	21.7	3.0	13.5
19	18.3	18.0	8.1	6.6	4.7	3.8	2.5	4.6	4.9	5.0	3.9	1.7	2.3	3.8	1.0	1.6	1.1	1.2	2.6	2.6	0.8	1.1	3.2	3.2	18.3	0.8	4.4
20	2.0	1.9	1.9	2.9	3.5	3.4	4.0	4.5	4.3	6.5	6.2	5.5	5.1	4.2	5.3	3.2	4.0	4.7	6.0	7.6	7.3	7.0	5.0	3.2	7.6	1.9	4.5
21	1.5	0.9	1.1	1.4	2.0	3.1	5.0	3.5	5.8	9.0	9.2	7.6	7.6	6.1	4.0	3.6	6.0	7.9	10.2	7.0	6.7	6.6	5.9	5.7	10.2	0.9	5.3
22	5.7	5.7	6.8	6.7	8.3	8.8	11.1	9.2	8.7	9.6	7.9	5.5	6.6	7.5	6.7	6.7	6.3	4.5	6.2	8.0	8.9	8.6	8.3	8.3	11.1	4.5	7.5
23	7.2	5.7	5.1	5.1	5.5	4.5	4.2	3.9	3.9	4.3	4.1	6.3	7.2	6.4	6.2	6.4	5.1	4.1	3.5	2.6	3.7	3.8	3.7	3.6	7.2	2.6	4.8
24	2.2	2.9	2.6	2.4	2.8	1.4	2.6	1.7	1.2	0.6	1.9	3.2	5.2	4.0	5.2	6.0	7.1	6.3	6.3	6.7	7.2	5.3	5.2	5.1	7.2	0.6	4.0
25	5.4	5.3	4.5	5.3	4.8	3.6	2.7	2.8	2.9	2.4	2.7	1.8	2.3	4.2	4.8	7.6	9.2	10.2	10.4	9.8	10.4	9.9	5.7	2.9	10.4	1.8	5.5
26	2.0	2.0	1.0	1.7	2.8	5.1	4.2	4.5	3.8	2.3	2.4	2.8	2.6	2.7	2.3	0.8	0.9	0.8	1.6	0.6	1.6	2.1	2.8	2.9	5.1	0.6	2.3
27	2.4	3.7	3.7	4.4	4.8	4.2	4.5	5.4	3.2	3.0	2.1	2.3	2.4	2.5	3.3	4.2	2.7	1.1	1.1	1.3	1.3	1.0	0.6	0.9	5.4	0.6	2.8
28	1.8	1.6	1.0	1.2	1.7	2.1	2.8	3.1	4.5	5.6	6.2	7.1	8.1	8.6	9.2	9.5	10.8	10.6	11.3	9.3	8.7	9.1	7.6	7.6	11.3	1.0	6.2
29	6.1	4.5	1.2	1.4	2.7	4.4	6.3	6.4	6.7	6.9	6.9	9.4	9.2	10.7	11.3	9.7	8.5	8.2	6.0	5.4	5.7	5.3	4.6	3.3	11.3	1.2	6.3
30	3.2	3.5	1.8	0.9	0.7	1.0	1.6	1.8	2.2	2.4	2.3	2.7	3.9	6.4	9.4	8.4	9.0	8.7	9.1	11.0	11.3	12.3	12.5	14.0	14.0	0.7	5.8
Max.	**23.6**	**22.4**	**22.9**	**22.3**	**22.4**	**22.0**	**20.7**	**23.3**	**22.3**	**21.1**	**19.0**	**18.9**	**20.3**	**21.7**	**23.5**	**23.3**	**22.9**	**22.5**	**23.2**	**23.5**	**22.8**	**23.1**	**22.8**	**21.9**	**23.6**		
Min.	**1.2**	**0.7**	**1.0**	**0.9**	**0.6**	**1.0**	**1.1**	**0.7**	**1.2**	**0.6**	**1.9**	**1.7**	**1.4**	**1.6**	**1.0**	**0.8**	**0.9**	**0.8**	**0.8**	**0.6**	**0.6**	**0.7**	**0.6**	**0.8**		**0.6**	
Avg.	**6.6**	**6.4**	**5.7**	**5.6**	**5.7**	**5.7**	**5.8**	**6.1**	**6.4**	**6.8**	**7.1**	**7.3**	**7.6**	**7.8**	**8.1**	**8.0**	**8.4**	**8.3**	**8.1**	**8.1**	**8.1**	**7.9**	**7.5**	**7.0**			**7.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.9	14.5	14.1	12.8	12.7	14.3	14.4	12.2	13.6	15.7	14.5	14.1	13.9	14.4	14.9	15.1	15.1	13.8	14.1	12.2	11.2	11.8	14.6	14.5	15.7	11.2	13.8
2	13.7	14.6	14.1	13.0	11.1	11.7	12.1	11.6	10.1	10.4	10.3	10.3	9.3	11.2	10.6	10.0	11.4	11.6	13.9	14.3	16.0	18.1	19.7	19.9	19.9	9.3	12.9
3	20.9	21.4	21.0	22.4	21.8	19.6	19.0	17.5	14.9	13.1	12.9	12.2	11.8	11.9	12.0	10.4	10.7	11.9	11.6	10.4	12.1	12.0	14.3	13.4	22.4	10.4	15.0
4	13.4	13.6	15.1	15.9	11.8	10.9	13.5	15.2	12.4	11.6	9.1	9.7	9.3	6.9	6.0	4.3	6.4	3.4	3.4	2.8	2.8	4.0	3.6	4.4	15.9	2.8	8.7
5	3.7	2.3	1.4	1.1	1.9	2.8	4.9	5.5	5.1	4.5	5.8	6.5	4.8	4.8	4.1	3.0	5.8	6.6	7.1	9.4	10.5	9.8	8.1	3.9	10.5	1.1	5.1
6	3.5	2.8	2.7	5.0	5.2	7.3	9.2	9.3	10.9	11.1	11.0	8.9	7.5	9.2	8.7	8.4	7.4	9.9	10.4	9.9	11.1	10.8	11.5	12.4	12.4	2.7	8.5
7	13.4	13.4	13.7	14.6	15.6	15.9	16.9	16.3	16.1	16.0	16.6	15.5	15.5	14.7	15.8	16.8	17.6	18.6	19.2	20.7	21.0	20.4	21.5	23.1	23.1	13.4	17.0
8	21.9	22.2	24.7	24.1	25.1	24.8	23.6	24.4	24.9	25.7	24.3	23.6	24.3	25.0	25.8	23.7	20.7	21.8	20.5	21.1	20.2	19.2	17.8	25.6	25.8	17.8	23.1
9	26.9	26.7	25.2	25.0	23.9	24.7	25.3	25.8	25.9	26.1	25.0	24.8	24.8	25.8	23.4	23.8	23.4	22.4	20.7	12.4	11.1	10.1	5.6	5.3	26.9	5.3	21.4
10	1.8	4.0	2.2	2.0	1.9	1.8	3.4	3.7	3.6	3.8	5.7	7.3	10.8	13.1	14.5	14.8	15.6	13.7	13.6	13.0	12.5	10.9	10.4	10.7	15.6	1.8	8.1
11	10.2	13.0	11.0	11.2	8.9	7.9	7.9	8.7	7.4	6.4	6.1	8.1	8.5	7.8	7.9	5.7	6.2	5.7	3.3	2.8	2.7	2.5	3.6	3.2	13.0	2.5	6.9
12	3.2	3.8	1.6	0.9	0.9	4.2	3.0	2.7	2.9	3.5	4.0	3.2	3.0	4.1	6.2	6.4	8.0	7.1	5.8	4.2	7.3	5.3	5.0	4.1	8.0	0.9	4.2
13	2.9	2.9	2.3	1.1	1.8	1.9	1.0	0.9	1.0	0.9	0.5	1.9	2.4	3.2	3.2	3.6	4.0	3.5	4.0	3.2	4.1	3.8	3.4	3.4	4.1	0.5	2.5
14	3.6	3.1	3.7	4.3	3.3	3.6	2.8	2.9	4.0	4.1	2.0	1.8	2.1	4.3	4.7	5.7	5.2	2.3	2.8	3.2	3.3	3.5	3.2	3.4	5.7	1.8	3.5
15	3.0	1.7	2.8	3.8	6.0	5.2	6.6	8.4	9.2	8.5	10.4	9.4	9.8	10.7	10.9	11.2	12.5	10.9	10.0	10.8	10.2	11.5	13.0	17.0	17.0	1.7	8.9
16	18.3	16.1	16.5	15.1	11.6	9.8	7.7	6.6	6.7	6.7	6.4	7.4	6.7	6.9	7.4	9.3	10.2	10.6	11.2	11.1	12.7	11.9	11.2	10.0	18.3	6.4	10.3
17	10.6	10.9	10.1	7.9	7.7	8.2	8.5	9.8	8.3	7.9	7.7	7.4	7.9	8.9	8.0	8.5	8.7	10.2	8.0	10.9	11.7	12.1	13.0	12.2	13.0	7.4	9.4
18	13.5	15.3	15.4	16.8	16.7	15.7	16.2	15.1	11.6	13.5	9.9	5.4	1.6	3.5	1.9	2.1	2.9	4.5	5.6	5.0	3.5	2.5	4.4	6.9	16.8	1.6	8.7
19	6.4	5.0	3.5	4.0	4.4	3.4	3.9	3.5	3.9	4.3	5.9	6.4	7.6	6.6	8.3	8.9	8.0	6.7	3.2	2.2	4.4	3.2	4.1	5.8	8.9	2.2	5.1
20	8.2	5.4	7.5	5.4	6.3	6.6	4.1	3.9	4.0	2.6	2.2	2.7	2.9	3.2	3.9	2.9	2.0	1.6	1.9	1.3	1.3	0.7	1.2	1.2	8.2	0.7	3.5
21	1.1	1.2	4.4	5.6	6.1	7.4	8.1	8.8	7.0	6.1	6.4	7.0	8.2	6.8	5.4	6.1	4.1	3.2	2.7	2.0	1.9	2.4	2.7	3.9	8.8	1.1	4.9
22	4.0	4.0	4.4	5.2	5.0	4.4	3.8	3.7	2.7	2.9	2.1	1.3	1.3	1.2	1.7	3.3	4.4	4.1	3.6	3.5	3.8	5.0	5.9	7.2	7.2	1.2	3.7
23	7.2	7.5	7.8	8.8	8.0	8.2	8.5	8.6	8.7	7.6	8.0	8.8	9.0	8.2	8.1	6.8	5.4	4.1	1.7	0.6	1.2	1.8	2.3	3.1	9.0	0.6	6.3
24	3.4	4.5	5.1	6.0	6.9	9.0	6.0	5.3	5.4	2.8	5.0	5.1	6.8	8.0	7.6	6.6	5.0	5.7	6.9	8.3	8.8	7.9	9.7	11.1	11.1	2.8	6.5
25	10.8	10.5	11.3	11.6	13.1	15.8	17.2	17.5	17.0	16.5	17.3	16.5	15.7	15.0	13.6	13.2	12.8	13.7	15.0	14.6	13.8	14.0	14.6	15.4	17.5	10.5	14.4
26	15.2	13.9	16.1	17.0	17.4	17.7	17.4	17.0	18.6	17.9	16.7	14.2	15.2	13.7	17.1	19.2	17.2	16.2	15.8	13.7	12.4	15.1	13.8	12.6	19.2	12.4	15.9
27	14.9	11.0	12.5	11.1	9.4	9.3	8.6	8.4	8.8	10.4	10.4	8.9	8.1	5.1	4.6	4.9	4.7	3.0	2.9	1.4	0.5	0.8	1.3	1.0	14.9	0.5	6.7
28	0.7	1.3	2.2	2.3	2.6	2.9	2.9	3.0	3.0	3.1	2.4	3.2	2.9	4.6	8.5	10.3	11.2	11.3	11.2	12.8	13.7	13.1	12.5	11.6	13.7	0.7	6.4
29	8.3	8.4	8.8	12.2	10.5	11.0	10.7	10.3	12.1	11.2	10.1	8.4	8.1	8.2	6.4	9.1	11.1	10.5	11.6	12.3	11.4	9.0	6.4	5.2	12.3	5.2	9.6
30	5.2	5.2	3.8	1.3	0.5	0.8	1.0	1.3	1.2	0.0	0.1	1.2	6.7	8.9	6.8	6.3	5.5	7.0	7.2	6.5	5.9	6.3	6.7	7.0	8.9	0.0	4.3
31	5.4	7.0	7.6	9.7	9.9	11.0	9.6	10.7	10.6	10.8	13.3	11.6	9.9	10.2	11.9	10.8	9.8	9.4	7.8	9.1	7.9	6.9	6.8	6.0	13.3	5.4	9.3
Max.	**26.9**	**26.7**	**25.2**	**25.0**	**25.1**	**24.8**	**25.3**	**25.8**	**25.9**	**26.1**	**25.0**	**24.8**	**24.8**	**25.8**	**25.8**	**23.8**	**23.4**	**22.4**	**20.7**	**21.1**	**21.0**	**20.4**	**21.5**	**25.6**	**26.9**		
Min.	**0.7**	**1.2**	**1.4**	**0.9**	**0.5**	**0.8**	**1.0**	**0.9**	**1.0**	**0.0**	**0.1**	**1.2**	**1.3**	**1.2**	**1.7**	**2.1**	**2.0**	**1.6**	**1.7**	**0.6**	**0.5**	**0.7**	**1.2**	**1.0**		**0.0**	
Avg.	**9.3**	**9.3**	**9.4**	**9.6**	**9.3**	**9.6**	**9.6**	**9.6**	**9.4**	**9.2**	**9.1**	**8.8**	**8.9**	**9.2**	**9.4**	**9.4**	**9.4**	**9.2**	**8.9**	**8.6**	**8.7**	**8.6**	**8.8**	**9.2**			**9.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.6	6.0	5.3	5.1	5.1	5.3	4.5	5.4	5.0	5.1	4.5	4.1	3.8	4.7	3.8	4.0	4.3	3.7	4.1	5.6	7.0	7.8	6.1	5.4	7.8	3.7	5.1
2	4.9	4.3	4.2	3.9	3.6	3.1	2.7	2.0	1.5	1.1	0.9	0.8	0.8	0.8	0.8	0.8	0.6	1.0	0.8	0.9	0.8	0.4	0.0	0.0	4.9	0.0	1.7
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.7	3.8	3.8	0.0	0.2
4	6.3	5.3	6.6	6.2	6.1	6.2	6.4	6.5	6.4	6.3	5.5	6.5	5.8	5.5	6.0	5.3	4.6	4.3	4.0	3.8	2.2	1.0	2.0	2.8	6.6	1.0	5.1
5	2.1	2.1	2.1	2.4	2.0	1.0	0.4	1.6	1.4	1.7	2.0	2.9	3.6	3.8	4.3	4.6	4.3	4.8	4.7	4.6	3.8	4.1	3.2	3.4	4.8	0.4	3.0
6	3.4	4.0	6.0	6.7	5.6	6.7	10.3	12.7	14.3	14.8	13.6	14.2	18.3	18.5	19.6	20.9	19.3	18.3	17.0	15.1	10.5	11.5	14.3	19.0	20.9	3.4	13.1
7	18.8	19.8	17.7	17.2	14.5	13.8	15.4	13.7	13.0	11.9	12.4	13.1	12.1	14.0	17.5	15.6	14.7	14.6	15.5	16.3	16.0	13.4	14.3	16.5	19.8	11.9	15.1
8	15.9	14.1	11.0	11.2	10.5	10.5	11.9	14.0	14.6	12.5	7.2	6.4	10.8	10.1	9.4	12.7	11.6	10.6	11.6	12.2	13.9	16.1	17.9	18.2	18.2	6.4	12.3
9	14.3	13.5	12.8	10.9	10.4	8.8	10.0	9.7	8.8	6.7	7.1	5.7	5.8	6.4	6.7	6.2	6.3	6.6	6.0	6.3	5.7	5.5	5.3	5.3	14.3	5.3	7.9
10	5.9	5.9	6.2	5.7	7.1	8.1	8.9	11.3	12.0	13.7	15.4	15.4	13.8	11.7	10.3	8.1	7.6	7.9	7.4	9.2	9.0	9.1	9.4	10.7	15.4	5.7	9.6
11	9.3	8.8	9.4	9.0	6.6	6.5	6.9	8.6	7.8	7.1	6.3	6.6	7.0	9.3	13.1	11.5	12.4	12.4	16.0	16.7	16.3	17.4	18.5	19.2	19.2	6.3	10.9
12	19.1	18.3	16.5	18.2	19.3	18.2	19.4	15.0	12.7	12.3	12.8	13.5	12.5	14.5	16.4	17.5	14.8	13.4	16.2	16.1	13.0	12.5	12.0	12.0	19.4	12.0	15.3
13	13.2	12.9	10.6	10.4	10.8	13.2	13.2	13.5	16.2	15.8	18.5	20.5	21.2	21.3	22.3	23.2	22.3	23.8	24.3	24.6	25.5	23.7	22.7	19.5	25.5	10.4	18.5
14	16.6	16.7	14.4	10.0	8.4	6.8	9.2	13.8	14.5	21.2	22.3	19.2	19.1	21.6	20.9	19.4	22.7	22.9	24.0	24.3	28.1	26.7	20.5	21.5	28.1	6.8	18.5
15	26.4	23.2	21.5	18.8	20.9	20.2	24.0	23.0	24.6	24.7	22.3	23.8	25.5	22.7	20.6	23.0	22.9	21.1	23.9	26.1	26.1	25.9	25.0	23.8	26.4	18.8	23.3
16	23.8	22.1	22.7	22.0	16.4	13.2	13.7	15.1	13.3	13.5	14.4	12.5	14.6	8.8	8.2	10.2	10.4	9.4	5.8	6.8	8.1	9.0	9.4	9.8	23.8	5.8	13.0
17	8.3	8.0	9.5	8.9	9.7	11.0	10.3	10.3	8.2	10.5	9.2	10.9	10.4	8.9	9.7	8.5	9.1	8.6	8.9	10.4	8.4	9.4	6.3	8.0	11.0	6.3	9.2
18	8.1	7.7	8.1	9.1	10.3	8.0	9.3	9.4	8.7	9.9	9.1	9.4	10.5	9.9	8.2	10.3	14.8	15.9	18.6	17.5	17.2	15.6	16.1	16.8	18.6	7.7	11.6
19	17.2	16.8	16.1	20.1	15.4	13.3	17.4	19.1	19.5	18.5	17.6	16.4	19.5	19.4	19.8	21.5	18.4	17.8	16.6	16.4	20.1	19.2	19.8	16.0	21.5	13.3	18.0
20	12.3	13.7	19.2	13.6	14.3	17.0	14.9	13.5	13.8	14.6	13.2	13.0	14.9	12.0	12.2	13.7	15.3	14.1	13.0	13.4	15.7	19.3	18.5	19.6	19.6	12.0	14.8
21	18.6	16.7	13.7	12.2	13.4	12.6	12.8	11.7	11.3	11.0	10.6	11.3	9.1	9.5	9.3	12.2	12.6	13.2	13.2	13.1	11.8	10.5	12.1	11.9	18.6	9.1	12.3
22	10.6	11.1	8.9	8.9	9.4	8.2	6.6	7.5	8.5	10.5	11.1	11.3	9.3	10.2	9.2	8.7	11.5	11.3	8.6	9.2	9.5	11.1	11.4	10.7	11.5	6.6	9.7
23	6.5	4.6	5.1	5.1	5.8	6.1	5.3	6.3	7.0	6.5	5.3	4.6	4.2	3.9	4.1	4.1	3.3	2.5	1.5	1.8	1.6	2.9	2.7	2.9	7.0	1.5	4.3
24	3.7	2.8	2.8	3.1	2.7	3.6	3.0	3.3	3.8	4.5	4.4	6.1	7.3	7.8	8.2	9.1	8.3	12.8	13.0	12.3	13.5	14.6	13.1	12.9	14.6	2.7	7.4
25	14.5	15.8	15.1	12.8	10.2	9.5	9.2	8.3	7.3	5.9	5.3	6.3	6.8	6.7	6.4	6.3	7.6	7.9	8.2	8.3	7.9	8.1	8.4	7.8	15.8	5.3	8.8
26	8.0	9.2	8.9	12.3	13.5	14.4	15.2	17.3	15.5	19.3	21.6	22.9	23.6	24.5	25.3	24.4	24.1	26.3	26.7	28.2	28.1	27.8	28.9	29.2	29.2	8.0	20.6
27	28.6	27.8	28.6	26.8	24.3	23.9	21.9	19.4	18.5	16.3	14.3	13.1	12.7	13.6	14.4	15.0	14.7	14.4	15.6	15.2	14.6	15.5	16.8	17.1	28.6	12.7	18.5
28	15.7	15.4	14.0	14.7	14.3	14.5	14.2	13.7	12.1	11.4	9.1	8.1	7.7	8.1	8.0	7.9	5.4	4.0	1.4	1.2	1.5	0.9	2.6	4.3	15.7	0.9	8.8
29	5.4	5.7	7.0	7.4	7.0	7.3	7.1	6.7	7.3	7.7	6.5	4.8	4.2	3.5	1.9	1.5	3.5	4.2	3.6	5.4	6.5	9.5	9.7	11.4	11.4	1.5	6.0
30	11.7	13.2	12.2	14.9	17.3	18.2	19.3	19.1	17.5	16.3	15.7	16.3	15.3	14.5	11.8	9.8	8.9	15.8	15.0	11.6	11.4	11.0	12.0	12.4	19.3	8.9	14.2
Max.	**28.6**	**27.8**	**28.6**	**26.8**	**24.3**	**23.9**	**24.0**	**23.0**	**24.6**	**24.7**	**22.3**	**23.8**	**25.5**	**24.5**	**25.3**	**24.4**	**24.1**	**26.3**	**26.7**	**28.2**	**28.1**	**27.8**	**28.9**	**29.2**	**29.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**0.4**	**0.0**	**0.0**		**0.0**	
Avg.	**11.9**	**11.5**	**11.2**	**10.9**	**10.5**	**10.3**	**10.8**	**11.0**	**10.8**	**11.0**	**10.6**	**10.7**	**11.0**	**10.9**	**10.9**	**11.2**	**11.2**	**11.5**	**11.5**	**11.7**	**11.8**	**12.0**	**12.0**	**12.4**			**11.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.2	10.0	9.9	8.0	7.8	8.4	10.6	12.1	11.8	10.7	10.4	11.3	12.1	12.5	13.6	14.4	8.5	6.2	6.6	4.0	4.1	4.1	2.6	2.9	14.4	2.6	8.9
2	2.3	2.9	3.8	3.4	2.6	4.6	4.5	2.0	3.0	3.8	4.4	4.5	2.5	5.1	2.6	4.9	1.6	2.0	3.2	5.4	5.5	3.6	2.2	1.2	5.5	1.2	3.4
3	5.3	6.3	5.7	4.8	5.2	4.4	5.4	4.7	3.4	3.7	2.8	2.9	3.4	4.6	5.4	5.4	5.4	5.6	6.7	6.4	6.4	5.7	6.0	6.0	6.7	2.8	5.1
4	5.3	5.2	5.7	4.0	3.2	3.2	1.2	0.4	0.7	0.7	1.4	1.6	2.0	5.4	7.8	8.6	9.2	9.2	9.5	8.5	8.9	11.3	12.0	13.6	13.6	0.4	5.8
5	11.6	13.3	12.8	12.9	14.4	12.7	6.1	9.0	12.0	10.5	5.2	5.1	5.3	5.1	5.0	6.7	7.1	4.7	7.8	11.5	13.0	13.7	13.7	15.7	15.7	4.7	9.8
6	15.2	14.6	14.1	13.7	13.9	13.8	6.3	4.2	3.9	8.3	17.6	15.3	15.6	17.2	16.8	17.8	18.2	17.4	16.2	17.1	17.0	18.4	19.9	18.4	19.9	3.9	14.6
7	20.4	20.0	13.9	9.9	7.1	4.0	3.2	1.6	2.8	3.1	2.6	3.6	3.4	3.3	2.0	5.0	3.5	3.6	3.8	4.9	4.1	5.7	7.1	8.3	20.4	1.6	6.1
8	11.2	16.1	18.7	19.6	19.7	16.5	12.6	15.4	15.2	13.9	9.2	7.9	7.4	8.2	8.5	7.8	7.9	4.3	2.3	6.6	3.4	4.7	4.8	0.8	19.7	0.8	10.1
9	5.4	5.1	3.0	7.5	12.8	11.9	11.7	12.8	15.8	15.1	14.6	16.7	18.7	17.0	18.7	17.4	13.5	12.1	11.4	10.7	12.0	14.0	14.2	14.2	18.7	3.0	12.8
10	14.0	14.0	13.6	14.0	14.1	12.8	13.0	12.1	11.4	11.6	11.9	11.8	11.6	10.7	9.2	8.0	9.0	8.5	8.8	7.1	6.0	4.4	3.3	5.2	14.1	3.3	10.2
11	4.3	3.5	2.5	2.1	1.2	1.5	1.4	1.5	1.2	0.9	1.4	2.1	2.4	3.9	6.1	7.1	5.8	6.4	6.1	8.5	8.9	7.6	6.6	6.5	8.9	0.9	4.1
12	5.4	6.2	5.4	4.9	5.0	4.6	6.9	6.0	6.9	7.3	7.2	7.7	8.6	9.8	9.0	9.3	9.3	9.5	9.8	11.4	12.1	11.5	10.7	10.1	12.1	4.6	8.1
13	9.4	9.2	9.7	10.1	10.6	11.2	11.8	12.4	12.0	11.5	11.7	11.2	11.2	12.6	13.1	13.3	13.3	14.5	15.7	14.7	17.6	18.4	21.1	21.2	21.2	9.2	13.2
14	15.6	17.1	17.9	17.4	17.6	18.0	16.8	11.9	11.1	11.8	11.1	7.7	7.7	10.8	11.6	11.4	10.9	9.9	8.6	8.5	10.0	11.6	12.4	14.6	18.0	7.7	12.6
15	12.5	13.5	13.6	12.0	10.2	7.3	9.0	8.8	5.4	3.7	2.2	1.1	2.9	5.2	5.6	5.7	6.9	8.8	12.0	12.3	15.3	15.4	13.9	16.2	16.2	1.1	9.1
16	15.7	15.9	16.3	15.3	16.1	15.3	14.0	13.5	14.4	14.4	13.1	13.3	12.8	11.1	10.3	8.0	5.9	5.5	3.8	2.5	1.1	1.0	0.9	0.1	16.3	0.1	10.0
17	2.3	2.7	1.9	2.7	3.2	5.5	6.9	6.8	7.4	6.2	5.7	5.3	5.7	6.7	6.6	6.4	7.3	8.0	9.8	10.2	11.1	9.6	9.3	9.8	11.1	1.9	6.5
18	10.6	12.0	12.1	9.1	9.2	8.6	9.3	10.2	9.1	8.9	6.9	7.1	5.1	3.1	2.6	1.5	0.8	0.7	0.9	1.7	2.1	1.2	0.3	0.9	12.1	0.3	5.6
19	2.1	2.5	2.9	3.2	3.4	3.5	2.7	1.5	1.6	2.8	4.0	6.9	4.9	9.8	9.7	9.1	10.6	10.3	11.4	11.5	11.2	8.4	9.5	8.4	11.5	1.5	6.3
20	9.0	8.2	5.7	6.8	9.8	9.2	9.4	9.2	7.9	9.3	10.5	10.9	6.8	7.3	7.6	6.8	6.2	7.9	6.8	4.8	6.2	7.4	6.8	5.1	10.9	4.8	7.7
21	5.5	6.4	3.8	3.6	4.3	3.3	2.6	0.8	0.9	1.0	1.2	1.2	1.2	1.0	0.4	1.0	2.7	2.4	2.4	2.7	3.0	3.0	2.0	1.1	6.4	0.4	2.4
22	0.6	1.0	0.8	2.7	3.6	3.9	6.0	5.6	5.7	5.5	6.5	7.3	8.3	10.1	10.4	8.8	9.2	10.0	11.2	9.2	8.4	9.7	11.7	9.2	11.7	0.6	6.9
23	10.1	10.9	9.9	10.0	11.0	12.2	11.4	11.0	9.3	10.3	11.6	11.3	13.3	12.1	9.9	9.8	9.4	9.5	9.1	9.7	9.3	8.4	9.4	7.1	13.3	7.1	10.2
24	7.9	7.1	6.8	6.7	5.8	6.1	5.1	4.3	5.4	5.2	4.3	5.8	5.7	5.7	7.2	8.0	7.8	7.6	8.0	8.5	8.9	10.7	10.6	13.5	13.5	4.3	7.2
25	16.1	15.0	14.5	14.3	14.0	12.6	13.0	14.2	13.0	12.1	9.6	8.9	8.4	8.2	8.1	6.8	6.5	6.0	6.0	4.1	6.5	6.9	6.4	5.6	16.1	4.1	9.9
26	4.1	3.5	2.2	1.8	1.6	1.3	1.3	1.3	1.1	1.3	0.8	0.8	0.5	0.6	0.0	1.4	3.2	3.2	3.9	4.3	4.0	4.8	7.5	10.4	10.4	0.0	2.7
27	7.8	5.7	5.2	15.9	13.5	14.4	16.6	18.5	18.4	15.5	16.1	15.9	19.1	19.4	18.2	18.1	18.3	17.2	14.9	13.8	12.3	23.5	25.6	23.8	25.6	5.2	16.1
28	22.9	19.0	15.2	15.8	14.4	12.0	10.0	9.3	7.9	8.5	9.3	8.5	8.0	7.8	6.0	3.7	2.3	2.3	4.5	0.9	1.2	1.1	3.1	4.7	22.9	0.9	8.3
29	7.2	10.2	11.3	13.9	13.4	13.1	13.8	12.9	13.4	13.6	14.3	15.5	16.5	17.7	18.3	11.8	11.9	12.5	14.6	12.8	13.8	12.1	12.6	15.2	18.3	7.2	13.4
30	13.5	10.4	6.4	10.3	13.0	11.2	8.1	6.6	6.6	5.6	4.3	2.9	1.0	1.7	4.2	5.0	3.6	4.3	1.8	2.2	1.1	1.0	0.9	0.5	13.5	0.5	5.2
31	1.2	1.5	1.5	2.1	1.9	1.6	2.0	2.4	2.8	2.4	1.2	1.4	2.1	2.2	1.8	2.3	3.2	2.6	3.6	3.6	4.4	4.5	4.6	6.4	6.4	1.2	2.6
Max.	**22.9**	**20.0**	**18.7**	**19.6**	**19.7**	**18.0**	**16.8**	**18.5**	**18.4**	**15.5**	**17.6**	**16.7**	**19.1**	**19.4**	**18.7**	**18.1**	**18.3**	**17.4**	**16.2**	**17.1**	**17.6**	**23.5**	**25.6**	**23.8**	**25.6**		
Min.	**0.6**	**1.0**	**0.8**	**1.8**	**1.2**	**1.3**	**1.2**	**0.4**	**0.7**	**0.7**	**0.8**	**0.8**	**0.5**	**0.6**	**0.0**	**1.0**	**0.8**	**0.7**	**0.9**	**0.9**	**1.1**	**1.0**	**0.3**	**0.1**		**0.0**	
Avg.	**9.2**	**9.3**	**8.6**	**9.0**	**9.1**	**8.7**	**8.1**	**7.8**	**7.8**	**7.7**	**7.5**	**7.5**	**7.6**	**8.2**	**8.3**	**8.1**	**7.7**	**7.5**	**7.8**	**7.7**	**8.0**	**8.5**	**8.8**	**8.9**			**8.2**

Total Hours In Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	88.5	120.8	104.2	30.1	80.9	84.0	108.8	108.7	114.3	109.5	123.2	115.3	116.6	115.8	95.0	98.5	60.7	105.7	91.7	66.7	79.5	50.9	64.9	86.2
2	76.3	88.7	92.3	53.0	58.1	75.3	88.6	88.7	74.0	89.0	125.0	131.4	104.7	113.0	118.6	127.1	108.6	116.7	111.8	97.0	109.9	112.2	107.1	99.6
3	102.8	100.6	94.0	98.1	98.4	121.4	129.8	129.9	110.8	100.1	105.6	107.1	106.6	113.0	113.0	125.8	123.0	129.5	111.3	113.3	110.2	109.3	114.7	120.6
4	125.7	135.7	122.9	243.0	286.8	319.7	27.3	94.5	94.4	344.0	105.3	115.5	155.9	155.7	162.4	246.3	279.5	288.8	308.4	107.0	101.9	112.5	117.7	111.9
5	5.8	288.3	350.8	329.3	323.7	296.7	343.4	261.8	134.7	115.8	151.1	134.8	236.2	307.4	303.4	302.7	301.2	302.2	301.4	301.5	307.6	302.9	308.3	309.4
6	325.3	122.9	104.7	104.8	146.7	161.9	168.1	174.5	194.4	187.3	128.6	204.6	248.6	313.5	306.5	306.0	319.4	302.6	170.0	114.4	129.0	101.9	127.0	74.9
7	352.8	297.1	293.2	301.0	110.6	286.9	312.2	291.3	304.1	295.1	20.5	324.5	332.6	0.4	54.2	29.2	40.1	75.5	358.4	36.1	54.2	44.9	37.6	36.0
8	18.5	333.2	350.2	304.8	299.7	341.8	62.3	82.2	65.7	72.5	307.4	303.1	301.7	303.5	298.5	295.3	303.0	309.1	307.8	308.3	308.4	304.5	310.4	306.9
9	304.8	305.2	302.0	310.4	304.6	303.9	304.5	305.6	301.0	302.5	308.7	307.6	132.6	324.6	302.5	91.5	128.0	129.5	120.0	344.1	360.0	311.1	301.1	307.2
10	283.8	111.9	102.7	105.5	115.2	99.9	114.1	116.6	140.6	122.1	130.0	173.2	354.2	136.1	103.1	110.2	117.9	114.2	126.4	115.8	76.9	90.5	24.4	173.4
11	189.2	53.2	278.7	321.2	321.6	309.6	279.9	265.2	192.9	110.6	167.0	273.0	293.1	308.4	320.9	332.8	303.3	314.7	307.6	300.1	310.3	307.0	303.8	312.9
12	319.3	310.5	314.2	311.4	309.7	315.3	309.3	300.5	309.7	306.7	306.2	312.1	305.3	312.1	308.2	312.3	309.0	312.2	303.8	301.0	299.2	301.4	301.7	303.5
13	303.9	302.1	295.3	299.6	292.7	298.8	302.1	303.0	300.9	299.9	298.0	302.1	299.8	299.6	300.8	309.0	305.3	305.7	313.0	298.7	301.7	308.8	302.6	306.1
14	307.3	305.3	303.4	296.7	301.3	307.4	128.6	113.1	128.4	114.2	130.5	123.2	119.9	113.0	112.8	108.9	109.8	118.6	121.0	121.4	106.0	109.7	112.3	116.3
15	114.1	122.2	116.3	112.3	103.8	116.8	124.6	119.4	115.5	111.3	109.7								102.5	103.9	94.7	88.1	93.4	74.9
16	78.4	66.7	67.7	65.1	91.6	91.1	61.7	58.4	65.3	59.8	57.7	43.5	2.3	309.1	302.2	295.6	310.9	302.5	314.3	306.1	304.9	303.9	307.7	306.6
17	305.1	311.2	309.1	308.4	305.1	306.6	306.2	305.5	307.0	304.5	304.2	301.3	306.7	304.5	305.0	309.2	315.9	310.1	308.3	311.0	316.8	298.0	306.4	307.9
18	315.2	329.5	310.9	314.7	310.4	301.5	303.9	308.2	309.1	315.6	311.4	311.6	315.6	316.0	309.4	308.8	304.5	303.0	310.0	312.5	305.8	310.4	305.1	310.7
19	315.5	314.4	313.2	306.4	309.4	299.4	302.0	310.3	303.9	301.5	298.5	298.3	304.1	303.3	301.8	316.6	310.3	303.6	306.3	309.6	313.8	313.1	304.9	294.5
20	304.3	301.4	311.6	307.8	305.2	314.1	311.2	309.7	313.5	313.0	311.7	313.3	311.5	312.5	315.5	311.4	311.1	309.2	309.2	312.0	310.8	307.8	309.6	312.3
21	312.7	311.5	308.4	308.7	307.2	303.7	301.3	299.3	300.6	303.3	307.4	327.7	333.9	336.2	337.3	333.4	331.0	330.9	328.2	324.0	320.6	318.5	312.7	313.2
22	319.4	323.7	319.2	313.5	312.6	314.5	315.5	314.2	312.4	315.3	314.7	314.9	320.5	323.3	317.0	320.1	321.1	319.6	323.0	321.0	312.5	310.2	319.1	323.9
23	312.4	317.3	319.0	316.0	318.8	321.6	321.0	315.9	317.0	323.1	323.9	323.9	322.4	325.0	322.0	314.9	330.6	323.7	319.7	333.2	321.3	310.9	310.1	313.9
24	313.7	307.0	309.3	304.5	300.8	308.2	316.6	303.1	315.3	323.6	315.3	321.7	323.8	324.5	325.4	324.6	319.5	320.2	310.5	317.0	320.1	313.6	311.3	309.0
25	308.1	305.1	308.1	300.1	307.7	302.0	309.1	313.6	309.4	311.5	314.1	313.2	307.5	305.4	305.4	309.1	300.8	304.7	311.9	309.5	316.7	318.1	312.1	306.0
26	302.8	301.3	307.6	309.4	308.6	313.6	311.8	313.8	307.6	308.9	307.4	302.2	310.3	316.6	310.5	306.0	310.8	305.4	311.4	312.7	299.4	300.0	308.0	307.4
27	304.0	309.0	307.3	307.0	304.4	310.1	313.2	315.9	316.5	316.9	315.6	321.8	313.7	311.2	312.7	317.0	317.7	324.0	326.4	325.8	324.2	322.4	320.0	318.9
28	321.0	322.0	325.7	319.1	318.6	323.0	318.8	322.3	323.7	323.3	316.0	317.0	316.6	319.6	324.5	323.9	325.6	328.3	329.2	318.6	306.8	296.0	303.6	304.1
29	298.0	296.6	300.0	296.1	294.7	303.5	310.6	308.4	315.4	320.6	305.1	306.2	317.5	311.3	312.6	306.9	310.9	307.7	306.5	312.4	308.2	312.3	320.1	322.2
30	320.9	320.6	321.5	328.5	330.1	324.6	335.6	320.0	314.7	322.9	308.7	309.2	311.3	306.5	308.4	304.7	302.9	305.2	296.1	300.3	310.8	310.9	295.2	67.5
31	312.6	302.2	300.7	317.0	308.6	309.6	316.3	307.7	306.8	303.1	305.7	309.0	306.2	306.6	303.1	311.2	309.4	307.6	306.3	300.6	307.9	307.4	314.7	308.2

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	313.3	313.6	308.2	295.3	305.3	300.7	296.6	299.4	308.1	311.6	313.9	316.1	319.8	317.0	325.3	316.1	317.2	317.9	316.9	310.6	318.3	313.6	309.4	312.9
2	307.9	313.9	313.5	308.3	306.8	307.0	305.1	305.6	293.6	304.2	303.8	306.4	290.1	305.4	296.8	291.3	265.9	150.1	126.8	114.7	128.2	112.0	114.0	113.7
3	129.2	133.5	138.5	151.7	158.0	147.4	140.2	142.8	130.6	119.4	122.0	117.6	119.0	120.4	122.0	121.1	111.9	114.0	122.6	126.9	123.0	123.0	110.6	109.9
4	112.3	105.6	105.7	108.3	109.2	109.8	106.8	107.3	106.5	106.6	107.3	107.7	109.4	109.4	110.2	109.5	109.2	105.0	106.5	108.2	106.9	107.8	107.5	101.3
5	94.6	93.7	98.0	100.2	106.1	105.3	98.7	99.1	99.6	96.5	96.8	107.8	108.1	107.7	108.3	110.6	110.9	106.8	95.2	78.5	62.4	84.7	100.6	96.3
6	95.0	89.6	86.2	85.6	101.6	94.0	98.9	114.7	138.4	150.5	202.0	210.2	219.6	218.4	216.7	211.8	193.9	192.3	177.9	179.5	180.1	176.7	172.2	164.9
7	158.5	154.6	142.4	138.8	153.8	170.1	196.5	218.0	222.7	233.0	235.3	254.3	263.2	268.6	276.6	285.3	298.7	307.5	303.1	306.9	291.0	251.4	220.5	238.0
8	124.0	140.1	110.0	100.8	105.6	107.2	111.7	112.0	120.0	128.1	146.6	120.9	110.8	106.9	110.8	110.9	107.0	107.1	109.1	109.6	111.0	111.5	108.8	105.4
9	106.4	107.5	111.1	109.8	107.9	107.5	105.4	98.3	78.4	57.5	87.4	104.3	97.4	103.6	105.9	118.4	116.7	113.7	118.8	117.8	113.1	115.6	109.2	117.2
10	121.0	115.6	112.8	114.2	111.0	109.8	110.8	108.5	118.2	121.8	118.2	115.0	114.0	121.7	126.4	122.9	124.3	120.3	118.7	117.1	121.6	123.8	125.8	131.1
11	123.9	114.6	114.0	119.0	134.2	103.5	7.7	341.7	320.6	323.4	321.5	336.1	327.1	323.4	321.6	310.9	306.6	345.6	89.4	114.6	124.7	116.8	114.0	124.2
12	152.7	4.1	308.8	299.6	311.1	320.5	321.1	305.2	286.5	293.6	291.9	290.2	288.6	281.5	283.4	274.9	257.8	240.9	172.3	152.5	84.8	178.8	289.1	44.4
13	120.8	104.6	104.4	107.4	100.8	101.1	100.1	115.8	125.0	108.3	126.9	148.6	118.3	122.1	126.2	121.8	124.9	120.0	120.9	120.5	123.4	128.1	130.0	133.8
14	129.0	130.4	128.2	129.5	131.3	132.7	135.4	133.7	134.7	130.0	126.5	124.0	126.2	127.5	127.2	123.6	119.0	121.0	119.4	124.3	124.7	126.7	129.9	128.1
15	126.4	125.1	120.2	119.2	119.9	117.8	118.3	123.8	124.6	125.3	122.3	122.3	126.7	124.2	121.1	122.5	123.5	129.8	123.1	125.5	132.9	135.9	144.9	143.0
16	148.0	147.5	156.8	156.0	160.7	163.5	162.6	149.5	138.2	138.9	134.2	141.0	137.9	150.8	146.5	136.7	146.2	145.5	141.6	156.2	150.2	156.0	160.2	144.2
17	145.8	129.2	114.3	124.1	117.2	123.7	117.5	118.8	112.7	114.5	113.6	115.3	119.2	118.6	115.9	115.4	115.2	116.5	114.2	119.4	118.0	118.1	122.0	123.5
18	131.3	133.0	129.9	132.4	135.5	133.3	126.1	123.8	125.2	126.8	124.3	125.7	126.0	122.1	123.7	128.0	132.0	135.9	150.3	156.8	170.1	190.4	206.2	203.3
19	213.3	216.0	207.4	203.7	201.5	217.9	225.8	233.3	227.3	216.3	214.9	226.5	188.1	202.6	218.4	210.9	217.0	239.0	248.9	252.5	244.3	234.9	243.3	237.9
20	227.4	224.3	224.5	217.8	221.4	209.2	210.9	191.6	198.5	219.3	236.4	214.7	224.7	221.7	224.9	249.5	277.5	270.3	263.6	263.2	263.3	264.7	272.2	284.8
21	283.7	274.2	271.9	279.0	291.0	291.7	295.1	299.3	305.3	303.7	232.5	137.8	237.1	257.5	295.1	272.6	274.7	285.7	264.2	265.2	288.1	298.4	274.4	277.3
22	314.5	305.4	287.4	280.4	267.7	268.5	273.6	272.6	271.8	289.1	307.8	303.0	294.5	281.7	275.2	265.6	260.2	240.2	221.6	214.0	210.4	167.3	163.5	145.5
23	154.3	159.5	160.7	171.9	183.5	197.6	275.9	288.1	289.1	294.2	307.7	308.5	315.8	311.5	309.0	320.9	304.4	305.5	301.5	315.4	311.1	306.2	329.7	331.8
24	328.1	307.1	316.2	322.2	310.5	306.3	313.9	314.6	296.8	299.5	296.4	305.5	311.7	157.0	147.7	152.1	74.0	127.3	124.8	136.0	134.5	126.3	128.8	137.2
25	128.9	131.3	120.6	129.2	167.9	161.1	154.7	162.8	149.2	123.0	157.9	251.8	288.1	310.6	300.4	315.8	315.8	304.8	282.6	277.5	268.7	258.8	260.6	261.2
26	262.6	259.2	258.0	258.0	259.6	276.8	276.6	262.3	267.1	243.6	260.4	252.4	249.8	242.7	258.6	96.4	87.1	87.3	96.2	97.4	100.7	102.8	108.4	147.4
27	160.9	170.8	238.6	300.8	307.6	316.0	316.7	318.3	319.9	319.4	318.1	316.4	324.4	329.6	324.2	329.4	326.5	322.8	321.0	321.8	320.2	323.2	323.1	321.3
28	324.4	321.3	323.6	313.8	314.1	305.2	300.6	298.4	291.4	286.6	304.3	308.0	317.4	317.8	312.4	317.4	315.2	325.1	315.3	314.5	326.7	323.5	321.2	313.1

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	318.0	320.6	315.5	302.7	302.0	302.3	298.0	308.7	296.9	307.9	46.5	73.8	125.4	118.3	111.2	118.5	133.3	115.6	118.3	130.3	145.0	156.3	147.2	150.5
2	149.7	159.3	143.1	139.4	139.7	140.3	136.6	133.2	119.8	115.0	119.0	118.0	116.3	117.0	116.7	119.1	116.5	116.8	119.8	120.4	119.4	119.3	122.4	121.2
3	121.9	126.4	127.1	122.4	123.4	126.4	138.7	155.4	157.3	165.2	166.1	167.3	169.2	177.9	188.0	199.0	200.2	209.4	181.5	126.3	136.9	134.4	112.9	124.7
4	129.3	143.4	140.2	134.4	140.0	145.8	147.6	145.5	150.4	157.7	142.6	141.6	147.6	140.8	137.1	140.1	146.3	144.8	133.1	131.7	125.0	130.9	136.3	135.8
5	131.0	133.1	146.1	145.6	170.4	189.6	189.5	204.0	211.6	195.5	183.8	190.9	179.9	208.4	200.9	215.1	244.3	242.8	254.8	273.9	287.9	272.4	275.1	273.4
6	293.0	288.2	321.1	316.7	308.2	310.4	295.2	295.1	273.4	234.7	212.8	227.9	302.7	130.5	67.6	345.0	257.9	246.4	300.3	302.3	345.0	332.2	315.2	312.0
7	307.5	306.8	309.2	314.4	307.8	315.3	304.6	314.4	308.1	304.5	315.4	308.2	308.0	308.7	315.9	303.5	298.3	305.9	303.1	310.1	312.9	314.0	319.6	324.5
8	312.7	312.8	311.7	313.6	310.9	313.7	321.8	325.2	322.7	329.2	303.8	327.6	328.0	313.0	310.4	328.9	325.9	319.8	318.6	316.2	317.2	310.0	315.6	312.9
9	318.8	310.7	308.4	312.8	316.7	319.1	310.8	319.1	324.5	321.4	320.3	314.6	315.6	320.9	320.7	314.2	318.9	323.4	329.2	327.8	327.2	332.5	329.3	328.0
10	317.2	318.4	319.2	309.2	303.5	300.0	295.6	303.8	305.4	297.8	297.4	308.5	313.9	315.0	301.4	306.3	301.3	154.7	123.0	116.5	118.7	122.0	136.8	132.6
11	132.1	131.9	121.4	120.7	127.4	122.9	123.9	118.2	118.3	115.4	109.9	111.8	112.4	115.0	116.8	112.8	111.2	111.8	113.4	114.1	116.6	114.3	111.6	119.2
12	116.9	112.7	121.7	124.7	125.3	118.2	118.0	117.3	113.1	118.1	121.2	137.7	138.3	126.7	107.4	109.2	100.9	99.5	102.9	105.8	148.5	141.9	117.8	158.8
13	133.2	105.9	41.1	130.9	131.6	284.6	307.0	297.7	299.4	304.4	288.3	302.4	303.7	307.2	301.1	305.7	309.5	319.1	319.0	298.0	299.8	298.2	301.9	306.3
14	309.1	310.8	317.8	327.8	320.2	302.0	316.2	318.3	310.7	310.8	313.0	305.3	322.2	313.6	317.1	300.1	307.4	309.8	324.0	308.9	307.8	301.6	311.8	123.4
15	140.8	150.0	131.8	143.5	120.5	152.7	207.7	173.6	140.5	123.3	131.0	158.5	330.2	85.3	120.7	125.5	141.4	143.6	139.0	138.8	139.3	141.6	143.0	140.0
16	145.4	150.9	132.7	128.5	126.5	134.5	136.8	115.9	122.6	126.3	109.1	112.2	113.3	108.0	114.2	122.0	129.7	129.5	124.8	127.7	142.7	129.5	131.1	130.8
17	124.0	125.6	122.8	124.5	122.4	127.5	124.6	125.6	124.9	124.9	131.4	127.3	137.9	144.7	123.5	126.9	132.7	131.6	122.8	122.5	120.9	125.2	126.9	128.5
18	126.2	130.1	125.0	122.4	120.5	124.8	130.6	123.8	102.2	98.0	100.1	98.3	99.5	126.9	339.1	347.9	56.7	78.6	87.8	108.1	116.8	178.6	264.5	307.3
19	304.2	302.3	301.5	131.2	135.4	130.5	126.1	115.8	118.0	114.8	118.0	133.7	130.4	129.7	135.8	141.6	145.8	152.6	142.2	144.9	159.8	152.3	156.2	143.1
20	154.1	167.4	164.6	157.3	139.6	131.9	134.1	144.6	136.4	128.9	90.3	90.7	107.9	99.1	307.1	309.7	329.3	321.8	319.2	315.7	324.4	329.7	324.5	321.2
21	317.4	318.9	317.8	318.1	320.9	321.4	323.5	323.9	323.7	325.6	327.4	317.4	314.6	318.6	322.4	323.7	321.5	312.5	312.1	307.5	311.2	311.6	304.0	310.4
22	310.1	295.6	304.5	303.9	304.0	313.1	314.0	313.9	313.2	320.8	317.2	322.0	324.7	325.3	325.4	327.8	328.9	329.0	328.3	317.4	300.4	299.4	301.3	301.7
23	302.2	298.5	301.8	305.4	304.5	303.1	298.1	308.6	204.2	311.2	304.4	312.2	319.3	300.9	308.4	309.4	303.0	290.9	294.2	300.2	313.2	309.2	304.4	302.4
24	310.8	305.6	317.4	312.2	307.0	308.9	310.0	323.8	324.3	315.1	321.4	326.8	317.9	315.6	319.4	328.9	329.1	328.3	325.6	324.6	325.6	328.6	326.7	304.9
25	305.9	304.5	301.6	298.3	295.4	297.7	299.1	298.4	298.0	305.1	307.3	325.0	321.3	321.2	325.8	326.8	328.1	322.4	315.1	308.2	310.7	306.2	311.2	310.9
26	310.7	307.3	300.1	301.1	301.3	305.8	298.8	297.2	299.4	303.9	300.7	301.4	299.0	306.1	302.8	297.4	296.8	290.8	297.7	299.8	301.5	298.6	303.6	302.7
27	304.2	304.7	300.9	304.3	303.3	301.6	298.4	306.3	255.7	117.7	112.7	100.6	104.4	117.0	109.2	141.1	131.3	111.5	138.0	146.2	155.3	174.7	133.8	108.7
28	114.7	107.9	120.0	108.1	110.3	121.4	110.4	123.9	129.4	136.9	121.2	110.4	113.2	100.8	96.3	115.2	110.4	204.2	222.7	275.7	290.4	294.2	297.1	297.0
29	300.5	318.1	310.3	305.1	306.9	305.7	297.1	302.1	307.9	291.7	297.1	301.9	312.0	146.7	126.7	1.0	95.9	139.8	170.2	154.6	150.1	151.6	138.4	124.4
30	120.8	124.2	129.9	127.2	120.4	122.6	117.5	116.1	116.8	112.2	114.5	116.2	114.0	112.8	111.0	112.1	113.3	112.4	114.2	113.2	114.1	113.3	111.3	112.1
31	112.5	112.9	113.3	115.3	117.9	117.3	116.9	115.7	117.7	164.7	195.0	198.4	197.9	198.8	199.9	232.1	243.3	248.3	255.9	254.5	248.3	248.9	255.8	263.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	270.1	293.1	304.8	304.7	304.7	300.5	299.6	304.7	308.4	293.6	280.8	259.3	263.0	273.1	259.6	244.9	250.2	245.0	224.5	196.3	202.7	217.9	203.7	194.8
2	194.1	195.2	182.5	209.5	247.6	266.6	204.3	193.5	179.5	175.9	167.6	163.2	160.5	165.0	126.9	98.6	112.7	115.1	109.0	133.4	111.4	112.6	103.8	108.1
3	105.7	112.4	111.4	108.3	109.1	110.6	107.6	110.2	108.8	112.7	112.8	114.5	112.0	113.6	118.5	126.3	133.4	140.4	140.3	127.1	121.7	130.0	120.0	119.7
4	129.4	136.2	132.8	125.2	126.9	128.5	139.9	142.8	125.1	98.2	141.3	143.1	133.9	133.2	137.9	231.1	307.8	346.9	347.4	326.6	317.7	316.0	319.0	310.0
5	316.1	305.8	309.7	314.7	319.4	314.0	316.7	320.1	319.3	326.6	319.2	318.8	316.2	316.2	320.9	321.2	322.3	323.2	323.2	320.8	311.5	312.9	316.1	322.9
6	319.2	324.9	318.9	315.6	313.5	318.1	319.1	305.1	306.6	317.2	304.8	302.8	312.8	311.5	316.0	310.8	308.0	301.3	297.8	305.3	304.0	243.9	127.7	106.3
7	102.0	105.7	117.1	124.8	137.2	131.6	151.0	162.2	137.6	153.8	160.2	143.1	125.0	127.8	133.4	138.3	129.8	121.6	120.2	126.7	125.3	122.2	116.7	116.4
8	122.9	121.4	122.6	123.1	118.0	119.6	115.7	110.9	111.6	116.7	116.4	121.6	128.8	125.6	124.2	129.4	138.8	150.1	153.5	153.5	143.5	152.7	157.8	175.2
9	192.3	182.2	169.0	178.6	170.5	179.3	173.7	170.5	185.4	183.8	192.5	199.1	207.0	208.8	214.7	212.7	190.6	186.1	212.1	206.3	194.3	202.8	200.1	202.3
10	118.5	138.4	198.6	196.2	216.0	226.2	226.7	229.1	230.1	233.6	237.1	269.6	296.9	284.5	288.4	263.5	262.0	264.1	262.8	264.4	278.6	309.4	211.4	213.5
11	230.4	153.1	166.9	123.0	116.9	108.4	90.1	86.5	94.3	93.9	95.1	108.9	106.7	107.6	108.0	110.8	113.2	109.0	102.9	102.8	102.9	106.7	105.8	107.8
12	109.8	110.6	113.5	113.4	114.4	107.0	105.1	110.9	113.8	113.7	118.3	126.3	139.4	144.3	157.1	184.9	197.3	200.4	206.3	209.9	211.6	213.4	219.9	179.9
13	198.3	197.3	259.4	295.4	318.6	312.6	320.8	313.0	308.5	307.7	303.8	305.0	310.5	310.8	310.6	311.9	316.7	314.6	307.4	309.1	309.0	306.5	308.7	321.0
14	326.6	328.6	326.6	325.2	325.4	330.9	328.6	326.4	327.3	327.0	330.6	319.3	326.1	323.7	320.8	324.3	321.9	321.1	319.4	317.8	314.7	304.7	303.1	301.5
15	309.1	316.2	317.1	313.3	307.7	314.7	316.9	316.1	326.5	325.1	315.5	326.6	321.4	325.5	326.4	318.2	324.2	328.6	332.7	311.5	308.1	302.3	299.7	102.8
16	115.7	135.3	114.0	120.9	124.2	118.8	120.6	118.5	115.3	117.0	117.0	112.6	111.2	109.8	109.3	110.3	110.1	112.6	109.1	102.2	86.1	75.8	66.5	54.5
17	46.8	49.4	49.8	47.7	48.7	58.6	80.0	99.2	108.0	118.9	103.8	107.3	125.5	118.9	127.8	132.5	123.9	124.5	142.2	132.6	148.7	74.5	307.9	320.1
18	312.6	312.2	311.0	293.5	304.0	316.4	297.3	335.9	304.6	83.9	122.5	251.6	282.9	237.9	169.2	185.5	210.9	250.1	242.0	234.7	247.8	220.0	235.3	251.5
19	280.0	65.8	155.4	168.8	207.4	220.4	153.5	263.2	266.4	254.6	258.4	324.9	284.9	222.5	229.9	221.9	203.7	174.3	196.8	219.1	226.2	225.0	213.2	206.5
20	218.4	209.8	193.6	104.6	117.1	135.2	93.6	113.9	127.4	117.4	110.2	116.5	140.4	135.2	123.0	122.8	117.7	120.3	118.3	114.4	113.0	115.7	115.2	110.9
21	111.0	112.4	111.1	104.1	104.9	106.9	109.4	111.5	108.7	110.8	114.7	115.7	116.8	117.1	116.1	119.8	144.4	167.6	158.6	156.1	101.6	115.8	121.1	135.4
22	126.6	121.1	104.8	121.7	108.9	117.9	139.7	158.1	147.0	279.7	77.5	145.0	281.5	279.7	255.7	241.4	297.1	291.3	297.6	166.9	135.2	168.3	161.4	162.4
23	162.8	155.2	134.1	135.2	125.2	135.0	131.2	120.7	119.7	118.9	138.2	143.1	142.6	135.3	141.4	227.9	235.4	293.4	310.3	318.2	309.8	304.9	304.5	308.7
24	309.3	308.4	306.6	317.3	312.8	306.8	301.7	303.4	309.3	303.4	302.1	299.3	294.7	292.1	286.8	276.7	255.2	246.3	237.3	232.6	223.7	219.1	218.4	222.8
25	216.0	203.5	197.7	182.1	184.5	169.0	162.6	153.1	142.7	127.3	115.4	113.8	119.4	139.8	140.5	123.8	125.0	120.1	113.3	110.3	111.8	112.0	112.5	100.5
26	100.5	100.1	101.6	107.8	106.6	109.5	89.5	98.6	96.5	89.3	85.4	95.2	134.4	126.1	141.5	156.2	165.7	165.6	163.0	86.4	64.9	57.2	53.2	56.9
27	53.4	47.9	32.0	6.8	18.7	35.7	330.5	343.4	299.7	315.5	307.2	301.9	325.5	334.8	324.3	332.8	341.9	340.1	336.0	340.4	335.9	322.0	321.5	321.3
28	315.6	313.7	306.8	300.5	299.2	298.4	309.5	307.3	303.3	304.3	276.1	159.9	164.4	176.8	148.4	136.7	119.1	111.4	89.0	36.2	107.7	202.5	293.9	281.7
29	252.2	308.5	302.1	300.6	298.0	294.5	303.6	310.2	311.3	304.1	311.1	316.5	320.6	323.8	322.7	320.8	306.3	309.2	311.4	314.4	302.8	295.4	292.3	296.4
30	301.3	303.7	306.7	302.3	301.3	309.2	321.6	126.4	112.3	116.2	120.5	114.1	137.0	137.1	128.3	135.8	142.9	135.0	115.7	114.9	117.1	121.3	118.0	113.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	108.0	112.5	115.9	111.1	117.3	115.6	110.4	110.3	108.3	107.7	108.0	107.9	106.8	106.6	104.5	101.8	100.1	101.4	96.9	88.5	86.4	89.0	92.4	94.8
2	86.1	86.5	77.2	78.3	78.5	80.5	77.4	96.3	134.1	129.6	126.0	126.9	121.8	123.0	128.1	115.5	124.1	119.9	116.4	120.2	117.1	119.9	121.5	126.7
3	123.2	119.2	118.3	122.1	108.2	99.0	90.7	80.0	91.2	80.8	63.8	71.2	54.2	63.7	69.1	61.6	62.3	74.9	64.3	153.2	230.6	176.9	232.0	293.6
4	324.2	345.3	44.6	61.8	104.8	119.5	120.1	118.4	120.2	126.3	125.6	127.5	131.6	129.3	126.5	122.6	121.6	116.0	113.6	114.8	113.5	110.5	110.3	109.7
5	109.1	112.5	113.1	113.7	113.0	117.3	117.1	113.6	113.3	111.5	114.1	110.8	113.0	118.2	120.6	121.9	122.6	120.1	114.9	125.1	126.9	107.5	125.4	165.8
6	154.9	154.2	106.4	106.8	104.4	120.1	123.9	119.6	135.5	173.0	197.5	218.7	224.1	219.6	214.4	211.1	199.5	204.0	209.8	217.6	216.7	216.8	215.3	213.7
7	207.8	197.2	209.1	211.4	218.4	217.0	210.1	209.9	210.9	217.4	211.7	206.1	205.3	220.7	214.0	221.8	215.4	212.7	222.8	214.9	220.8	222.3	215.1	244.0
8	136.5	117.9	112.4	120.3	125.3	123.1	118.3	113.7	99.7	110.3	109.5	113.0	115.0	106.5	93.3	95.1	97.2	110.6	109.3	98.3	74.0	88.9	98.1	78.4
9	81.2	65.0	66.8	63.8	69.6	75.4	91.7	85.0	94.7	89.0	98.4	130.3	149.0	126.3	117.3	120.1	126.1	203.1	85.9	169.8	247.2	37.0	66.7	71.7
10	75.4	66.8	86.4	74.1	23.2	13.6	117.2	313.1	318.0	309.6	262.8	245.3	253.6	266.4	306.3	313.1	268.2	288.2	292.1	301.0	301.7	301.4	312.7	318.5
11	53.0	78.0	147.7	157.3	112.7	171.1	255.0	186.3	250.6	228.2	227.6	247.3	249.5	260.5	230.8	62.9	269.4	333.3	313.7	308.1	307.7	302.4	304.3	311.2
12	313.0	304.3	311.2	313.0	312.2	311.5	312.3	315.0	316.5	314.8	320.3	322.2	321.4	327.0	322.9	331.2	332.2	324.9	312.0	291.6	295.8	294.5	317.7	308.3
13	317.4	313.9	307.8	304.9	301.9	299.3	301.6	297.7	331.4	297.3	222.0	229.2	243.5	236.1	222.3	220.7	216.9	218.2	180.2	174.2	166.8	235.8	145.3	138.9
14	139.1	143.6	152.6	137.7	124.6	137.6	155.3	147.3	139.3	141.6	135.2	137.0	145.3	152.7	131.2	131.7	140.8	138.3	142.6	135.5	140.5	139.8	143.1	151.2
15	157.9	163.7	166.9	170.8	165.2	149.2	171.2	203.6	300.2	277.5	276.1	264.1	238.7	235.0	247.4	220.3	223.4	214.0	206.4	197.7	218.0	223.7	248.4	257.3
16	257.0	150.3	158.7	319.3	321.4	316.4	310.4	293.6	290.2	287.8	269.6	250.3	244.3	246.1	241.9	256.9	247.1	223.2	214.4	206.3	181.2	197.8	187.6	210.0
17	224.6	284.0	306.5	317.9	303.1	315.0	328.2	5.8	82.1	115.1	137.1	128.9	142.7	150.9	143.6	127.6	119.7	132.0	140.2	140.8	143.5	149.1	157.3	149.2
18	159.8	156.3	157.4	166.1	171.1	185.6	148.4	125.3	179.6	216.5	186.6	209.5	219.7	238.1	243.9	241.7	247.6	257.0	250.9	244.1	246.6	242.4	241.7	185.1
19	251.3	273.1	283.5	292.9	238.9	218.9	127.7	116.6	110.8	132.7	148.7	130.4	133.3	129.8	125.3	124.7	116.8	112.9	112.4	112.0	113.2	112.8	113.4	120.5
20	124.1	128.4	127.5	121.4	122.8	126.0	125.3	123.1	118.5	123.0	124.5	121.4	123.3	119.3	116.1	122.4	139.1	141.0	158.2	250.5	305.7	307.2	306.6	309.1
21	308.8	304.4	306.1	307.3	308.2	312.9	324.1	327.9	330.9	333.1	327.8	327.4	328.4	326.0	333.6	332.6	325.3	323.0	328.8	331.9	328.7	330.3	335.7	329.4
22	322.7	321.1	321.0	320.8	324.2	324.7	328.0	333.7	335.1	330.0	326.2	328.4	336.2	340.0	346.0	348.9	336.3	339.9	340.1	340.0	330.2	334.9	331.8	325.7
23	321.9	326.1	312.7	304.2	310.6	301.8	306.0	317.4	302.9	308.4	322.8	343.5	15.0	44.4	352.9	336.2	356.2	335.9	331.5	335.5	320.2	307.0	304.0	309.5
24	305.2	288.4	298.2	302.7	294.3	302.4	313.3	312.3	307.1	317.3	316.4	252.4	247.1	236.0	223.8	236.0	303.8	304.5	287.2	270.1	278.7	293.2	304.6	304.6
25	302.9	304.3	304.8	299.1	301.8	304.7	310.3	303.5	322.4	316.0	321.4	344.9	356.2	333.3	324.5	200.2	216.9	224.8	252.2	259.1	284.7	301.1	312.2	316.8
26	314.0	304.2	306.3	310.0	307.2	291.9	292.2	310.8	327.1	324.5	328.4	337.0	344.7	342.5	335.2	334.1	333.0	331.4	333.5	330.2	322.1	308.2	319.1	322.3
27	330.1	313.0	314.7	328.5	335.6	334.4	331.9	324.2	322.6	324.9	326.6	326.8	332.0	330.4	337.6	339.9	340.6	346.8	340.7	341.7	351.1	342.6	335.6	321.2
28	317.4	297.1	295.0	288.5	159.9	143.8	142.1	158.4	168.2	172.8	239.6	331.4	320.2	291.5	298.4	302.2	302.8	297.1	273.2	199.9	213.2	173.6	170.5	168.8
29	169.8	169.0	164.9	160.7	160.8	159.4	153.8	150.4	143.7	145.6	147.9	152.6	152.3	155.9	150.6	146.7	149.7	156.5	154.7	166.2	173.3	173.2	164.4	160.7
30	163.7	171.0	170.1	149.3	132.5	159.2	154.2	185.2	204.2	164.3	162.1	157.0	172.3	182.6	171.8	153.0	156.2	157.2	161.7	159.6	159.9	151.8	146.2	187.4
31	193.4	188.4	187.0	132.2	177.5	185.4	185.8	184.9	181.0	194.9	204.4	200.5	205.8	223.5	222.8	223.6	227.1	225.1	229.3	226.7	217.0	216.7	264.1	247.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	255.5	321.5	317.1	300.4	312.0	306.6	309.9	324.6	333.6	336.4	325.0	333.8	331.2	336.5	331.6	326.3	307.9	297.3	298.5	259.5	262.5	265.0	268.0	291.2
2	289.0	291.4	293.6	299.9	302.7	300.4	302.9	310.4	322.6	353.3	346.0	328.5	323.4	303.0	307.4	311.6	299.9	314.1	308.3	315.7	313.3	297.5	304.2	316.5
3	320.2	314.8	314.1	322.2	318.0	318.6	329.8	329.8	328.3	333.8	334.5	328.6	328.8	323.1	320.9	318.8	321.3	326.1	331.6	330.4	331.0	321.8	317.7	321.6
4	321.8	321.2	314.8	318.2	323.4	337.3	338.7	330.9	326.2	325.6	329.1	333.9	336.0	330.4	332.1	334.0	337.4	338.6	340.0	342.3	335.5	331.0	323.3	320.0
5	319.6	314.9	322.8	319.4	309.3	309.7	312.3	313.0	313.8	323.3	323.9	348.3	341.6	322.5	335.9	326.9	320.5	318.3	331.8	315.1	306.1	267.4	268.4	264.0
6	254.0	225.6	194.5	181.7	120.6	108.0	108.5	117.3	121.6	132.9	180.7	173.4	159.9	153.4	149.8	139.5	137.7	136.9	138.4	137.0	139.0	142.4	144.3	139.7
7	138.9	137.9	133.2	123.3	127.0	130.9	133.2	123.3	117.2	119.3	121.7	120.4	124.4	125.9	125.0	121.6	122.8	120.5	120.8	113.5	109.8	113.6	114.9	118.7
8	120.2	121.8	118.3	114.8	116.6	118.4	117.8	117.3	116.7	115.0	116.6	115.4	114.8	112.5	115.2	114.8	112.0	113.9	114.9	116.0	116.6	115.5	110.3	108.5
9	108.7	113.7	113.2	115.4	116.8	117.6	116.5	118.6	115.5	112.6	117.2	115.5	113.0	111.8	111.4	110.8	113.8	121.5	126.9	123.9	129.5	127.7	124.1	118.6
10	123.3	118.4	119.7	117.1	117.6	119.0	120.1	117.3	118.0	118.5	121.6	121.5	117.7	118.3	114.1	118.0	116.1	117.0	114.0	113.3	113.7	113.8	114.4	113.7
11	112.0	112.2	112.1	113.3	112.4	114.0	115.9	118.4	119.5	118.4	119.5	120.7	120.7	118.0	118.7	118.1	119.6	123.2	119.3	118.0	117.6	117.2	121.1	118.7
12	117.7	118.1	121.2	120.5	115.8	117.8	121.3	122.8	128.6	128.9	128.7	132.1	133.4	136.0	136.2	139.1	139.7	144.6	140.9	136.4	146.8	148.5	142.2	147.3
13	146.7	142.0	146.4	147.7	150.4	142.0	142.6	119.1	118.2	127.7	124.3	131.1	148.0	153.3	148.0	148.5	155.9	168.2	166.8	192.7	170.5	229.1	288.9	293.4
14	322.7	327.2	325.2	287.8	317.2	313.1	301.8	319.0	328.8	13.0	358.3	59.4	68.5	76.5	71.9	86.7	84.7	35.3	109.8	161.5	146.4	52.8	359.9	310.3
15	305.7	304.5	303.4	304.5	300.5	307.9	310.9	312.1	305.8	338.2	340.4	353.2	5.0	337.8	358.1	140.9	155.1	125.0	170.2	161.0	166.5	169.1	158.6	163.8
16	149.8	151.7	150.0	155.9	165.4	168.8	156.1	153.6	139.7	155.7	150.3	147.7	148.8	140.3	140.2	142.0	134.8	120.1	124.8	131.4	128.9	124.8	141.8	159.2
17	153.3	133.5	131.4	123.3	118.9	126.6	138.2	156.2	160.1	157.4	146.1	144.3	149.3	165.3	164.7	158.4	153.1	154.3	150.0	148.1	145.8	147.2	152.7	150.3
18	151.6	142.8	54.7	343.2	3.4	93.5	116.7	113.7	100.8	113.8	127.9	119.7	122.8	120.3	114.8	121.6	123.0	123.9	130.5	133.1	135.4	138.3	111.6	78.9
19	105.8	131.1	129.2	127.5	120.9	117.0	133.0	140.3	333.7	18.0	55.9	78.2	85.0	128.7	127.3	168.7	93.0	189.2	184.1	159.6	162.1	171.0	164.9	154.6
20	156.9	130.4	122.2	133.8	122.0	111.6	106.5	103.6	115.0	3.7	330.0	312.8	77.1	158.7	160.5	144.9	145.6	129.2	123.7	124.5	125.6	121.6	128.3	132.0
21	149.5	146.8	151.8	169.5	180.3	274.0	322.7	330.8	338.3	343.8	346.2	344.4	357.2	353.6	264.0	308.7	298.5	309.5	317.2	332.8	310.0	297.1	292.6	294.1
22	291.6	295.1	307.2	316.8	312.2	313.7	313.8	315.9	329.3	14.3	135.1	167.6	157.1	148.0	143.1	144.6	136.0	136.9	127.1	123.2	131.4	129.3	131.6	125.0
23	124.1	127.0	131.9	133.0	143.4	139.8	144.5	142.7	139.9	147.3	149.9	147.5	143.0	141.3	136.9	148.3	141.0	139.0	150.3	159.1	160.1	154.2	161.8	150.6
24	139.2	147.4	161.5	168.9	151.9	123.2	293.9	322.7	335.5	348.4	344.0	356.2	28.8	55.1	1.3	25.3	202.7	194.7	233.5	294.7	267.1	290.7	273.5	283.4
25	310.8	304.0	292.5	303.5	357.0	317.2	309.1	317.8	55.9	108.9	150.6	179.5	204.0	190.2	182.7	182.0	182.4	162.9	156.0	156.3	154.3	166.8	164.5	168.6
26	172.9	166.0	148.1	151.7	147.6	161.6	115.1	117.3	140.6	299.2	299.7	314.7	261.4	291.0	258.0	225.6	247.3	197.3	174.7	165.0	163.8	175.9	171.4	182.3
27	180.7	263.6	270.7	279.2	308.2	308.6	320.3	323.7	317.5	316.9	330.3	2.9	253.5	307.0	261.9	219.1	220.9	221.8	227.6	260.0	268.0	281.5	317.7	313.9
28	282.0	286.1	272.2	290.1	294.0	121.3	125.0	174.9	216.0	184.7	192.2	181.1	199.8	248.1	236.9	231.9	232.2	208.1	193.1	228.2	221.6	171.8	156.7	165.9
29	158.7	168.0	185.2	177.6	172.4	166.7	136.5	153.2	147.3	138.1	157.0	162.5	139.8	142.8	143.7	135.3	130.4	125.8	133.3	137.8	148.6	159.3	148.8	139.3
30	135.5	144.3	151.6	156.6	166.2	173.4	183.6	187.5	192.7	202.4	196.3	199.8	216.2	221.3	217.5	209.5	270.6	285.1	317.4	1.4	329.8	293.0	249.3	207.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	239.3	283.5	319.3	308.0	329.8	354.9	40.1	117.2	350.8	347.0	337.5	54.7	18.1	318.9	323.5	296.3	287.1	259.0	265.8	256.0	255.0	265.2	265.3	302.7
2	289.5	280.0	310.8	311.3	312.6	305.8	312.5	306.0	313.6	304.0	308.4	310.6	292.4	309.8	299.3	308.7	311.1	308.3	322.4	326.9	322.7	321.0	326.0	323.6
3	316.1	307.8	302.4	306.4	308.0	304.3	300.6	314.7	316.2	321.7	351.1	353.3	353.6	343.2	315.8	324.6	163.3	167.6	185.9	218.3	263.8	232.8	125.8	140.7
4	133.8	120.2	135.3	133.3	135.3	119.8	45.0	356.6	340.1	325.2	323.9	315.4	323.0	305.9	295.6	275.1	266.1	250.8	253.5	235.1	209.3	174.1	139.5	137.4
5	137.2	125.3	124.8	134.2	140.1	134.8	126.2	124.8	133.7	121.3	119.1	112.4	125.9	152.9	252.8	193.1	265.6	202.8	237.3	108.3	98.5	109.3	70.6	266.6
6	339.8	249.3	289.9	214.6	142.2	304.2	316.5	106.4	113.1	110.2	106.5	9.0	146.0	159.3	160.1	176.0	195.8	6.7	253.3	165.8	181.9	133.7	154.2	171.6
7	139.5	120.4	133.5	152.5	151.1	144.1	140.7	142.9	150.0	147.7	151.9	153.4	149.3	142.8	155.6	160.0	150.2	145.1	172.8	163.6	169.0	161.2	176.5	186.6
8	192.7	197.0	198.8	210.8	207.8	213.6	212.2	213.3	214.3	217.4	212.7	253.3	21.8	77.2	223.5	153.2	332.2	302.9	290.3	303.0	294.1	289.1	282.7	306.3
9	337.6	303.3	307.0	306.6	299.4	310.5	306.5	316.3	321.9	35.8	79.5	98.8	130.1	142.3	146.3	142.0	146.7	154.7	146.9	144.2	133.2	135.1	135.4	128.8
10	126.7	115.8	114.0	115.6	114.1	119.6	115.4	112.4	114.3	122.2	115.0	116.3	114.1	119.6	115.4	112.4	114.3	122.2	115.0	116.3	119.5	120.1		
11		125.4	123.7	122.0	127.0	134.9	124.3	113.9	107.1		99.5	87.0	103.6	114.9	116.3	121.3	123.5	119.9						
12	161.1	161.1	165.2	177.0	196.8	200.9	170.5	168.1	126.5	136.5	174.6	250.9	297.5	320.7	307.7	315.6	310.6	312.6	310.8	313.4	314.2	326.4	339.8	337.7
13	326.3	297.2	312.5	296.2	351.5	352.4	355.5	304.0	309.4	310.2	308.5	307.0	312.8	300.8	245.9	353.2	172.7	217.6	210.2	212.1	211.4	210.9	214.7	219.0
14	216.9	212.1	210.7	218.0	217.8	214.6	205.3	205.9	220.7	223.5	223.6	214.7	218.0	217.9	214.6	217.7	218.2	211.9	216.1	212.4	216.3	213.2	202.5	198.8
15	201.0	208.7	203.2	198.6	198.5	215.4	227.0	219.0	214.4	216.4	229.2	230.3	222.0	215.9	212.1	203.7	221.2	204.5	196.7	189.0	190.9	209.7	214.6	202.1
16	187.1	180.2	174.3	171.6	164.0	168.7	166.5	161.0	160.9	155.6	148.7	137.7	134.0	127.7	131.5	125.4	119.5	115.7	113.9	118.3	119.5	120.1	118.1	118.5
17	116.8	122.4	125.0	112.7	114.6	115.2	111.9	113.5	112.6	109.2	111.1	114.0	115.5	114.8	115.8	116.5	116.7	116.9	115.9	117.1	119.4	118.4	117.7	117.0
18	119.7	120.4	117.4	117.6	116.2	116.0	115.4	111.8	120.6	119.1	117.2	120.0	123.1	117.1	116.5	117.5	116.4	116.5	116.6	119.1	117.7	119.9	121.2	124.8
19	122.4	121.3	125.0	125.0	124.7	124.8	119.0	125.7	128.1	130.1	134.8	130.5	108.6	96.5	100.5	89.0	93.9	88.9	94.8	82.9	94.5	99.0	88.0	108.0
20	132.8	150.6	134.0	136.4	144.6	168.4	190.5	160.6	275.9	317.8	315.4	308.0	341.7	340.9	342.1	344.3	354.0	16.1	32.9	80.3	77.5	77.9	83.9	92.7
21	115.3	89.0	96.0	156.8	179.8	166.3	173.2	168.5	167.4	176.8	159.9	131.5	106.7	94.9	142.7	289.5	318.2	216.4	161.2	123.1	130.8	310.7	53.4	134.1
22	151.0	153.6	156.3	160.9	149.9	124.8	117.6	117.9	111.1	106.7	102.2	343.4	347.6	308.8	309.3	333.6	11.7	73.2	107.9	135.2	138.5	136.0	145.9	169.8
23	154.2	159.9	161.4	142.1	126.9	115.1	123.1	119.8	126.6	111.5	113.1	107.2	110.8	117.3	106.9	107.9	95.8	98.4	92.7	109.8	127.4	61.7	62.4	89.7
24	96.9	100.4	124.0	106.3	119.2	139.6	140.4	147.1	141.7	112.1	114.4	123.5	119.9	108.7	111.8	109.5	111.6	109.1	102.9	105.4	92.9	109.9	119.3	121.9
25	122.6	153.8	155.1	142.1	125.9	114.5	121.5	119.0	123.8	128.8	128.8	126.1	120.4	102.8	114.4	117.0	114.9	112.0	111.8	118.9	119.0	123.4	118.1	116.1
26	123.9	141.2	149.5	159.2	164.4	176.7	171.9	191.6	187.0	170.4	199.9	186.4	190.5	161.0	164.4	119.5	142.5	148.0	217.8	217.0	208.6	208.8	213.0	219.7
27	221.2	213.8	214.6	218.2	217.9	218.3	218.5	226.3	227.5	228.0	227.2	227.4	225.0	208.2	171.8	159.2	344.9	325.3	307.4	127.0	130.1	106.5	177.0	144.3
28	124.2	161.2	150.1	168.3	169.9	169.8	161.4	262.3	114.8	141.9	154.9	137.8	135.1	136.4	133.0	133.6	137.8	151.2	161.8	170.8	198.9	195.7	191.6	195.1
29	197.0	201.0	209.8	212.5	187.6	201.6	188.3	215.1	221.8	221.0	235.7	242.5	234.3	232.7	234.6	246.4	254.7	265.9	274.6	268.9	264.5	264.8	260.4	259.4
30	233.1	223.4	227.9	229.2	219.4	220.2	234.9	237.8	239.9	242.7	251.0	270.9	273.4	284.2	295.2	326.8	214.6	200.6	220.9	313.8	305.5	309.0	314.2	310.7
31	314.8	313.6	311.0	310.9	308.2	305.1	302.9	305.4	298.3	302.5	300.0	297.4	302.7	300.2	301.8	302.5	303.7	306.6	302.6	304.8	304.9	293.5	290.9	292.7

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	234.1	218.6	216.1	220.5	216.2	193.2	206.0	170.5	160.6	173.3	153.1	148.3	149.5	153.9	145.3	145.9	133.6	133.9	136.5	136.7	143.1	132.8	125.8	131.7
2	139.6	139.1	136.2	136.8	132.3	138.2	199.2	173.3	168.8	152.8	153.4	158.2	140.1	133.0	120.9	129.5	119.3	117.1	115.6	115.5	119.2	117.8	120.4	117.8
3	118.2	113.5	111.6	112.7	116.5	117.2	110.8	102.0	81.0	68.7	78.9	65.5	67.3	58.6	54.5	55.2	50.8	25.6	0.3	353.3	344.3	346.2	340.3	336.2
4	348.2	10.1	318.0	303.0	302.9	299.5	300.7	314.5	318.1	334.0	330.2	295.4	349.3	290.9	191.2	148.5	233.4	144.0	140.2	125.8	125.8	110.6	127.3	168.3
5	145.1	149.9	43.1	309.3	297.7	280.7	280.1	293.8	309.9	297.6	290.9	294.2	294.0	285.6	293.0	294.6	289.7	303.9	340.5	304.9	299.6	308.9	295.8	292.7
6	298.6	313.4	313.3	322.3	320.2	319.5	316.1	319.1	326.4	334.4	334.9	346.2	350.5	333.0	327.5	324.6	326.7	317.5	321.6	320.2	303.6	294.9	300.4	296.3
7	296.7	300.8	294.5	294.9	296.5	300.8	310.7	301.5	305.4	311.5	325.2	323.5	292.6	264.7	257.3	257.9	258.8	262.5	260.5	254.6	237.5	44.1	233.4	92.7
8	147.5	267.3	288.1	253.7	293.2	312.1	193.1	306.0	307.7	295.1	301.6	303.7	301.8	297.3	304.0	319.2	321.8	317.8	282.3	286.7	292.8	332.9	323.6	218.4
9	125.2	244.8	127.5	150.3	126.3	124.8	136.3	130.1	175.5	154.1	205.2	193.2	188.0	159.5	167.2	170.9	160.4	145.1	140.7	140.4	147.1	154.5	157.3	157.1
10	154.8	151.9	149.8	163.7	172.3	152.7	164.4	167.6	159.8	167.6	148.4	138.6	122.1	117.5	115.0	114.7	117.4	115.6	111.8	113.4	112.6	112.1	110.4	112.0
11	116.8	125.4	132.8	138.8	143.0	146.0	133.8	146.6	151.1	144.4	144.4	152.1	190.1	198.8	207.9	214.7	218.4	205.7	206.3	210.9	213.7	212.2	229.6	295.2
12	294.1	295.0	297.6	299.4	301.3	303.3	302.0	305.7	310.2	326.1	324.7	326.1	315.1	314.0	316.7	301.5	295.2	304.7	316.7	314.8	302.7	302.5	296.7	291.5
13	274.9	277.7	196.5	204.5	224.4	217.7	208.6	201.6	205.2	213.9	221.6	217.6	216.3	215.6	211.8	206.8	207.9	217.3	204.3	211.8	208.4	213.9	210.4	214.9
14	212.1	196.3	205.0	192.1	118.8	146.8	138.1	120.0	107.2	102.0	95.7	108.1	104.8	111.3	118.1	116.7	117.1	105.5	102.2	114.5	110.6	119.1	112.9	103.8
15	110.0	112.0	118.4	116.7	117.5	123.3	108.4	111.1	108.4	113.2	121.7	108.5	103.4	119.4	123.4	122.3	126.9	130.9	123.7	119.6	118.9	125.7	112.7	123.1
16	126.3	106.3	337.1	319.2	313.5	315.8	325.0	326.3	330.4	332.0	330.1	317.3	316.6	298.7	311.8	147.2	253.7	201.7	182.2	144.8	113.5	212.6	208.9	115.2
17	176.9	132.8	141.0	253.5	312.2	2.1	250.9	257.6	292.2	309.9	301.9	288.1	291.4	285.3	245.3	217.9	213.8	235.9	222.7	219.4	218.4	219.3	218.1	207.8
18	203.3	208.7	212.4	210.0	212.3	214.3	213.3	209.8	211.5	205.0	198.9	194.8	193.2	193.9	198.6	227.8	225.0	225.1	231.2	251.1	244.9	217.5	232.8	251.2
19	280.3	273.1	281.1	291.2	291.5	287.3	238.1	291.4	234.9	233.1	140.9	194.6	219.8	228.8	232.8	216.3	207.7	198.6	198.2	198.9	164.5	115.0	127.8	136.0
20	130.3	113.1	110.4	121.7	88.8	7.0	11.1	348.0	345.9	333.4	336.6	326.5	343.7	338.9	331.0	311.9	328.3	327.8	326.2	327.3	323.3	314.4	315.2	298.9
21	292.0	298.0	304.1	296.2	310.9	287.4	309.9	308.3	307.4	51.7	123.5	119.1	132.5	152.0	149.1	154.4	144.8	138.5	142.1	143.6	135.3	125.6	133.8	149.0
22	140.8	149.2	158.7	187.3	188.7	187.1	189.8	195.2	196.0	196.8	198.3	208.5	226.6	251.5	289.2	292.5	288.2	298.2	304.4	311.6	321.0	303.9	314.2	279.1
23	252.5	281.1	215.1	239.7	240.7	273.2	257.9	312.7	126.3	120.7	111.9	108.4	94.1	116.9	160.9	148.2	153.1	146.6	170.9	170.1	173.7	160.4	146.9	123.3
24	125.4	124.0	115.8	112.4	105.7	112.0	100.3	101.7	88.6	53.7	37.3	23.0	0.1	355.8	341.1	333.3	344.3	349.7	350.1	335.0	305.2	299.3	286.9	279.2
25	288.8	294.0	296.8	292.9	286.3	289.0	292.2	289.4	314.7	302.6	309.1	307.8	317.1	289.2	295.9	320.5	310.3	316.5	3.6	11.1	5.7	12.0	355.3	4.2
26	340.7	313.8	326.6	104.3	135.2	137.8	166.2	199.8	289.9	310.4	326.2	327.9	342.4	358.0	139.3	149.6	167.2	194.4	228.7	309.2	318.2	305.0	304.8	312.9
27	328.4	292.6	326.5	301.1	308.8	305.5	348.0	257.3	304.7	314.3	304.7	332.7	315.3	327.8	309.0	314.7	315.3	297.9	319.0	307.6	297.0	293.1	287.5	279.5
28	274.6	278.1	279.5	305.0	101.4	125.9	151.8	16.6	319.7	317.9	314.8	307.6	301.4	293.1	277.0	288.0	281.3	291.8	308.9	284.8	310.8	300.4	289.9	294.3
29	289.0	292.7	305.8	298.3	303.9	294.2	303.9	317.2	309.8	311.1	319.1	326.1	348.1	341.1	181.2	126.2	125.1	111.8	124.0	153.2	153.3	136.2	120.0	113.6
30	115.0	109.0	103.7	112.7	118.0	114.1	111.4	111.6	100.0	95.1	90.6	80.7	76.5	69.8	57.3	52.5	38.1	22.1	12.7	32.3	33.5	37.4	44.1	36.1
31	35.5	296.0	302.4	296.2	311.6	312.8	321.5	305.5	314.2	319.2	314.0	323.0	320.0	329.2	330.6	341.1	335.9	331.0	324.2	325.4	335.9	331.8	331.8	322.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	313.8	306.3	307.4	311.6	305.0	303.8	309.1	302.8	322.4	324.3	324.9	331.9	330.6	333.5	338.7	326.8	339.8	341.8	334.9	333.0	325.7	316.7	319.4	316.8
2	315.7	312.1	317.6	319.7	317.7	316.1	307.6	306.3	303.9	320.1	330.8	332.4	341.2	344.2	353.2	357.8	356.8	14.4	358.4	6.5	34.5	195.9	163.8	212.4
3	324.4	319.6	337.4	294.4	291.5	309.3	306.9	305.1	311.4	313.7	321.4	316.0	302.2	325.9	15.4	192.9	164.2	295.9	130.3	236.5	10.9	105.4	163.4	192.3
4	196.1	56.3	316.2	315.1	317.0	309.0	309.3	308.6	307.0	311.0	314.5	314.0	324.5	322.9	23.9	345.0	88.7	153.7	185.4	276.1	161.9	152.4	116.1	144.1
5	162.3	162.2	155.0	157.3	158.9	156.6	149.7	136.3	138.6	131.1	116.7	119.9	119.9	120.1	121.3	127.5	123.4	129.6	129.9	130.9	141.0	140.3	156.5	164.7
6	168.3	278.6	304.9	309.3	310.6	317.5	311.6	310.9	309.1	308.8	331.6	328.2	310.7	306.7	308.2	303.2	297.4	285.1	270.9	258.8	236.6	231.5	229.9	224.4
7	218.8	191.4	182.1	161.2	131.3	119.5	99.5	104.9	133.7	133.1	123.3	118.6	118.6	117.8	118.1	119.1	121.0	117.2	123.2	122.1	116.2	115.8	114.4	110.8
8	113.1	111.4	111.7	111.3	108.7	108.4	108.9	112.7	115.0	113.8	116.6	119.4	120.7	117.3	117.1	118.6	114.3	113.3	115.2	117.8	121.5	120.9	112.3	110.5
9	106.1	112.9	104.4	107.8	79.0	19.5	58.0	43.9	39.9	64.7	82.7	56.3	85.5	155.1	161.9	153.2	136.7	145.6	161.6	159.1	150.2	149.7	128.0	130.1
10	116.4	116.5	159.0	145.6	146.2	138.1	103.9	145.8	144.8	124.3	103.9	107.3	116.2	76.6	285.7	217.1	193.9	177.7	237.7	259.7	203.7	146.8	212.2	208.0
11	295.8	310.7	345.7	336.3	331.0	313.4	306.4	303.7	303.5	311.8	321.1	320.3	338.0	325.9	332.3	336.9	308.9	310.4	313.7	298.4	294.6	281.9	295.6	294.1
12	298.9	307.8	311.6	295.1	295.2	309.4	305.4	311.1	322.4	315.8	315.1	312.6	326.7	308.3	289.8	287.4	284.4	287.2	303.9	292.2	286.6	298.6	300.7	308.0
13	317.4	319.9	316.1	300.0	300.0	316.4	271.0	107.4	113.9	112.2	111.3	120.8	120.8	119.5	120.0	121.8	119.1	119.2	116.0	113.3	113.6	114.4	118.5	118.4
14	114.3	113.5	114.5	114.3	115.0	115.9	115.4	118.6	121.4	118.6	118.4	113.0	116.1	114.9	116.3	115.4	113.2	114.9	115.7	116.4	117.6	117.8	119.3	118.8
15	116.3	117.5	119.3	116.8	119.3	115.7	112.2	113.2	116.1	114.8	114.3	115.0	115.0	115.5	113.2	114.0	110.7	113.8	113.4	118.5	118.1	112.4	117.1	117.0
16	122.7	123.5	127.0	128.7	128.0	120.7	118.1	123.3	130.0	131.2	128.9	129.6	136.1	135.0	131.7	140.4	130.5	122.9	130.4	134.3	139.2	144.4	148.6	137.9
17	135.7	124.6	128.4	114.8	126.2	125.0	128.8	129.5	129.6	132.6	138.6	132.2	139.0	146.6	144.5	145.2	146.0	155.9	161.2	164.9	163.8	168.0	165.8	162.6
18	154.3	147.3	131.2	111.1	126.3	128.6	120.0	118.1	118.1	116.2	114.1	113.4	107.0	107.3	103.7	106.3	110.1	109.4	109.5	110.9	108.9	111.2	112.5	113.6
19	115.1	112.4	100.2	81.4	85.4	81.6	79.7	73.9	73.8	79.1	95.5	62.7	88.5	97.1	134.5	93.2	102.5	69.7	24.7	60.4	93.7	221.6	200.9	241.2
20	314.0	305.0	297.2	310.7	299.8	289.3	290.3	292.1	303.8	290.5	281.7	277.7	281.3	268.5	252.0	212.6	205.4	213.4	217.7	225.9	227.7	233.1	232.4	210.1
21	178.5	237.7	217.9	100.6	112.7	98.1	106.3	103.5	108.5	108.8	107.3	98.3	96.3	94.3	97.9	75.8	64.3	57.7	48.3	8.4	0.0	356.0	1.8	347.6
22	312.7	294.2	281.0	288.6	299.3	289.6	280.0	269.1	260.2	260.7	261.4	245.5	257.7	258.0	252.8	262.0	258.2	222.5	220.3	231.1	240.3	237.1	239.6	237.9
23	232.8	226.4	227.5	228.6	223.3	225.1	228.8	224.3	218.6	225.8	222.2	216.9	229.5	224.5	212.3	210.8	202.6	196.6	180.9	156.5	160.8	160.8	135.3	141.9
24	124.2	140.6	158.8	192.0	139.5	124.4	161.4	146.6	195.6	345.3	313.4	318.6	318.9	325.1	321.5	309.3	308.7	313.4	308.1	302.5	301.7	305.2	310.2	300.6
25	305.5	302.2	310.7	301.6	304.4	311.7	308.5	310.5	311.3	309.2	313.6	330.0	104.3	116.5	111.6	119.1	121.5	127.0	121.3	122.0	126.0	121.4	134.1	104.2
26	125.0	155.3	120.0	320.1	8.4	55.0	40.9	37.6	19.9	6.0	4.8	349.3	8.3	7.1	57.9	115.9	150.7	56.5	12.6	108.3	149.6	118.1	106.2	108.2
27	125.3	154.9	190.3	251.9	247.4	233.9	220.1	211.3	203.7	215.9	184.5	173.7	152.6	156.8	143.9	99.8	96.8	79.5	7.6	329.2	95.5	89.9	33.3	337.8
28	2.7	331.9	322.1	326.6	327.8	319.9	298.6	318.0	348.9	333.2	333.5	326.8	318.0	321.7	323.4	326.5	327.5	322.9	310.2	303.1	299.7	303.5	305.2	291.7
29	293.8	284.7	316.0	211.9	229.6	292.3	306.9	308.3	302.3	301.3	310.4	312.8	308.3	307.6	309.7	311.5	306.3	312.1	317.9	306.1	305.0	304.0	304.5	294.3
30	309.5	297.6	281.0	271.6	78.9	122.9	115.6	109.7	112.1	113.4	111.8	122.9	119.3	107.6	126.3	130.9	132.9	131.2	129.3	119.6	115.7	114.7	112.2	110.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	108.0	109.7	109.5	110.1	109.7	110.5	109.5	107.5	109.8	109.3	111.8	115.7	110.9	110.3	108.2	115.1	115.0	114.1	112.6	109.9	116.1	119.1	117.2	114.5
2	114.3	111.1	112.1	117.1	117.4	114.7	115.6	121.2	125.7	123.0	120.7	120.4	120.0	115.4	110.5	111.8	113.8	113.1	117.7	118.9	118.8	112.8	110.7	112.8
3	109.4	110.4	110.9	113.0	120.3	116.2	111.5	118.2	123.8	129.3	130.9	128.9	125.5	123.8	125.3	145.5	169.8	178.8	200.5	174.9	164.7	172.7	189.0	201.0
4	212.8	212.6	218.2	213.3	205.2	192.5	185.0	207.2	208.3	197.0	188.4	179.9	160.6	125.3	174.6	170.6	201.7	199.9	156.3	110.5	106.5	105.7	117.1	96.5
5	115.1	145.7	127.0	141.6	219.3	239.4	279.1	271.6	276.5	284.3	281.7	290.1	283.8	281.8	260.4	267.8	218.4	227.4	216.7	220.4	217.7	213.9	210.0	176.3
6	147.4	145.8	120.3	129.6	108.1	116.3	123.7	127.3	127.1	130.0	140.0	163.0	152.8	131.7	128.4	133.8	129.7	126.1	125.8	122.3	119.7	118.5	116.6	114.8
7	114.4	115.4	115.4	113.9	112.7	113.3	114.4	113.6	113.0	118.5	115.7	115.3	115.0	116.5	114.7	114.0	114.4	112.8	114.3	116.6	119.4	119.2	115.3	117.9
8	120.4	115.3	110.5	107.1	107.0	109.8	110.4	112.8	112.4	112.2	112.0	112.2	111.8	111.0	110.1	111.4	114.1	112.8	113.3	111.9	111.2	111.4	107.5	114.6
9	112.9	111.9	113.5	111.6	114.2	109.8	107.6	111.2	115.4	114.2	114.5	115.7	111.8	111.2	112.8	114.8	114.2	113.8	127.2	199.9	201.6	211.6	218.8	225.7
10	248.2	250.6	168.4	124.8	116.7	118.7	92.5	94.5	114.7	124.9	127.6	124.1	120.4	122.8	126.1	127.4	129.4	141.6	155.7	167.8	172.5	165.5	169.2	180.1
11	183.4	198.9	187.0	199.1	175.2	202.3	201.0	195.6	199.4	205.3	190.0	206.8	203.5	192.0	211.1	204.8	201.2	193.6	163.1	140.4	145.6	116.1	103.9	106.8
12	113.3	112.9	108.6	345.0	288.9	131.2	127.3	119.6	106.8	101.1	93.9	97.1	97.9	110.4	99.8	109.4	118.3	116.6	117.6	111.6	128.6	109.8	104.7	108.3
13	105.8	115.4	88.6	333.2	307.6	301.4	333.9	94.5	111.4	164.4	347.3	315.5	320.2	319.6	340.6	348.4	350.5	327.1	297.0	288.3	305.5	298.4	293.9	296.7
14	300.4	313.3	298.7	305.6	307.7	298.3	294.3	283.3	283.5	273.9	307.7	314.7	319.7	306.1	292.1	284.4	289.0	333.1	319.2	302.0	314.0	311.8	308.3	305.1
15	311.4	349.8	142.8	115.7	109.9	127.2	133.8	124.7	139.4	151.3	141.8	147.7	139.3	133.2	135.2	139.2	142.4	131.6	135.7	135.1	132.9	129.2	126.3	121.4
16	124.8	135.2	127.6	129.3	136.7	132.3	126.6	136.4	133.3	134.1	130.2	144.6	143.0	144.0	131.1	127.7	129.6	127.1	126.8	121.5	121.5	116.9	118.1	127.3
17	123.3	128.3	126.1	117.0	115.9	121.2	118.1	124.6	116.8	118.7	120.8	129.0	128.2	126.1	135.4	131.3	119.3	120.6	123.0	121.3	117.6	116.2	112.7	111.8
18	111.3	115.8	118.5	111.2	112.3	112.1	112.7	112.4	115.4	125.5	121.6	114.4	38.6	5.3	348.8	289.3	281.6	268.2	285.5	284.9	284.2	265.8	267.9	269.2
19	258.2	245.9	197.7	189.9	215.9	195.7	194.4	152.9	169.8	152.9	147.4	142.4	144.7	133.3	137.3	140.7	130.9	172.3	196.1	160.0	198.0	134.4	142.6	179.3
20	216.1	187.4	202.7	200.3	206.3	207.0	176.5	185.8	179.2	167.3	125.4	128.9	130.7	109.4	102.0	117.2	132.7	116.5	103.1	112.4	134.8	75.1	294.6	296.3
21	284.6	288.8	290.2	309.6	314.3	306.9	304.7	303.2	305.2	307.2	308.6	306.0	296.9	313.1	312.4	321.2	323.6	331.3	295.8	315.0	319.0	326.9	318.7	310.0
22	317.3	296.9	299.0	305.9	305.4	305.1	306.5	309.7	306.5	313.5	311.9	308.6	344.8	106.0	21.0	342.5	349.2	335.3	317.1	307.0	302.1	305.7	309.6	310.9
23	309.6	308.5	304.7	310.5	312.9	312.5	306.4	308.4	316.5	314.1	321.6	317.8	328.8	320.1	305.8	308.2	315.2	317.7	310.4	300.0	135.5	122.9	109.8	105.1
24	113.1	108.0	104.8	111.9	111.4	109.5	100.8	101.6	98.4	84.6	49.0	59.3	47.3	19.3	8.4	343.9	324.7	326.0	334.3	325.4	305.2	308.3	314.5	317.0
25	318.9	312.4	311.3	322.0	323.4	312.4	314.5	313.3	310.3	304.9	309.0	311.7	310.6	311.0	304.9	307.2	308.1	308.8	309.8	309.9	313.5	316.3	319.0	317.7
26	318.2	314.8	315.9	317.5	323.4	324.3	323.7	324.4	327.3	327.5	317.9	311.2	303.1	308.4	317.5	325.1	323.5	315.0	321.8	321.0	328.8	324.4	321.5	321.1
27	321.5	323.0	316.2	310.6	313.5	310.1	301.7	308.2	308.5	311.5	314.7	316.9	313.8	324.2	308.6	303.4	298.2	287.6	285.5	275.0	277.2	270.4	114.3	112.6
28	215.2	115.9	115.5	115.0	121.1	117.3	111.5	112.5	114.7	113.8	107.9	111.3	118.2	135.8	138.8	139.7	144.6	142.7	138.4	135.2	137.7	134.5	132.9	134.9
29	162.1	151.4	167.9	196.6	212.6	209.5	217.0	217.8	218.5	215.6	215.1	202.3	195.9	201.2	197.3	208.2	216.1	220.3	223.7	226.5	229.0	229.7	237.0	230.1
30	230.0	229.4	210.8	151.7	172.2	210.3	235.8	237.3	238.4	238.8	238.8	250.0	300.7	307.7	302.9	307.5	306.3	308.4	304.2	307.6	305.0	316.3	325.7	331.5
31	321.3	311.4	307.5	313.7	310.3	324.0	321.9	313.4	318.4	325.8	328.9	328.8	330.5	331.5	330.8	324.2	322.5	318.2	314.2	310.0	309.1	307.5	306.8	304.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	302.3	302.4	303.5	299.2	301.1	307.4	307.6	308.0	310.3	309.7	311.8	309.9	318.9	327.5	328.6	323.7	328.8	328.8	330.6	328.3	318.7	317.0	312.4	313.9
2	314.5	312.9	316.4	314.2	305.2	299.7	301.8	298.9	301.3	300.9	298.2	304.1	307.8	321.9	324.1	323.8	318.0	329.6	314.1	319.9	306.0	302.2	305.9	308.1
3	298.2	299.8	300.1	299.9	301.2	299.7	297.1	293.2	297.9	299.2	299.9	305.8	299.0	298.6	317.1	313.5	315.3	315.1	323.6	309.3	302.2	301.5	302.1	303.3
4	305.0	310.4	303.4	304.4	306.5	305.7	305.7	310.4	322.2	321.9	310.0	314.3	308.0	303.3	308.2	310.9	311.7	310.0	310.4	307.5	307.4	346.6	103.8	103.8
5	111.6	119.8	122.4	109.0	103.0	74.4	320.2	284.4	308.0	315.8	297.9	305.1	305.5	303.3	306.1	316.1	308.1	305.0	305.3	302.1	307.3	304.8	304.5	314.7
6	311.2	305.9	309.6	309.5	308.3	312.6	310.8	310.7	316.0	310.5	307.9	317.8	326.9	325.9	332.7	331.4	329.6	322.1	313.5	313.3	310.5	330.2	331.1	327.5
7	327.4	327.6	321.0	318.5	322.3	331.7	321.3	311.3	319.3	315.5	317.6	321.1	322.6	317.5	316.2	319.6	323.7	323.2	329.0	329.4	326.1	338.7	331.8	333.2
8	331.3	326.4	323.5	319.8	321.7	324.2	320.7	318.4	321.4	317.1	318.3	320.2	327.7	327.9	329.9	329.3	320.1	319.5	324.2	329.8	327.5	329.2	329.3	328.9
9	333.4	328.6	322.1	316.8	310.2	309.3	319.0	326.1	314.2	306.3	302.3	311.1	309.8	310.0	304.9	310.5	307.4	310.2	301.6	309.0	309.8	312.7	306.8	310.2
10	308.5	301.7	308.3	313.8	308.4	307.5	306.6	311.7	310.2	310.2	312.7	312.3	313.8	312.1	309.6	301.6	306.0	306.3	303.8	320.0	309.4	321.4	311.7	332.6
11	326.4	317.9	317.3	323.5	320.6	319.0	315.9	316.0	320.8	313.8	313.9	307.3	307.3	304.5	310.5	310.4	318.2	319.5	329.6	321.4	317.2	329.4	327.4	330.4
12	325.5	319.1	315.6	326.4	327.3	321.9	324.1	315.6	309.1	302.4	314.5	296.2	296.4	302.1	314.6	315.4	306.3	297.6	311.2	321.6	317.2	311.2	308.9	309.4
13	309.6	307.9	307.5	311.9	314.2	318.4	314.3	330.0	329.0	336.9	338.3	334.0	339.8	341.5	336.2	335.7	340.5	342.9	342.2	338.8	339.2	340.7	335.9	337.8
14	334.3	342.3	341.9	313.3	305.2	325.1	304.7	296.5	299.8	302.4	306.7	329.9	331.4	326.8	327.8	335.5	327.8	327.8	330.4	336.8	335.2	335.5	343.1	339.4
15	329.5	331.6	331.4	334.2	334.5	321.9	324.1	318.9	328.0	329.9	327.3	327.8	332.0	332.1	336.7	335.6	332.2	331.3	333.4	332.9	330.4	330.5	330.4	331.3
16	336.4	333.1	326.1	328.4	330.5	330.2	336.8	336.0	334.7	334.0	336.5	331.6	335.5	326.7	325.0	336.8	322.7	323.2	317.0	302.6	303.8	306.3	308.2	310.3
17	313.5	321.7	312.1	309.4	305.5	310.7	305.2	294.9	307.4	320.3	307.4	319.0	313.9	310.8	321.2	319.1	311.5	305.6	321.1	327.4	317.7	314.8	308.6	317.3
18	314.3	316.7	313.8	330.2	334.2	314.8	302.5	311.3	315.2	307.2	314.7	304.0	307.0	317.8	318.2	312.7	316.7	322.7	327.6	325.8	327.4	322.0	326.2	319.2
19	322.4	316.3	331.0	322.2	301.5	306.4	299.0	304.0	309.1	306.7	301.7	307.7	311.4	316.2	327.2	332.7	316.6	306.5	290.2	297.6	308.5	311.7	321.3	316.2
20	302.0	322.6	321.9	306.1	305.0	317.2	321.0	318.1	317.3	315.9	316.3	320.1	325.5	331.3	326.1	317.3	326.7	332.9	326.8	329.2	322.1	327.2	330.4	330.5
21	332.6	327.2	322.2	303.6	303.0	307.7	303.8	310.0	307.7	308.6	314.5	328.4	318.6	322.0	326.6	324.2	320.5	316.4	320.5	316.3	319.4	323.1	319.4	318.5
22	321.6	324.4	331.4	322.5	327.2	322.0	327.4	328.1	320.7	312.7	307.2	319.2	316.0	321.3	315.3	310.8	318.0	323.9	316.1	325.3	321.5	307.0	314.4	331.2
23	322.1	314.5	322.3	318.0	317.3	307.4	307.7	316.5	315.7	312.7	309.3	319.6	308.1	304.7	309.3	305.9	303.6	307.9	134.2	142.9	121.8	128.0	132.2	126.9
24	123.5	124.0	119.2	132.2	151.4	133.1	132.0	131.8	127.6	129.8	141.3	143.1	129.0	122.5	113.9	117.5	113.9	127.0	119.6	121.0	123.6	116.4	114.3	112.2
25	109.1	109.1	109.7	111.4	116.4	114.3	113.3	115.3	119.6	129.2	135.7	121.7	119.1	119.7	123.4	125.9	146.9	145.5	145.1	147.8	146.2	133.5	133.2	128.6
26	124.2	125.4	126.6	129.4	129.1	126.1	124.6	123.1	118.7	117.6	116.7	116.9	117.4	118.2	116.6	115.0	114.1	114.1	112.5	113.8	112.0	111.2	112.7	117.0
27	117.8	117.7	119.0	117.3	116.9	118.1	119.8	120.2	119.7	120.3	121.2	121.2	121.1	121.5	118.5	118.8	116.6	116.9	116.8	117.2	118.6	117.0	116.3	118.2
28	117.8	119.1	117.0	117.4	116.2	114.0	113.1	113.9	116.1	119.7	121.6	122.6	121.9	129.0	124.6	126.5	122.1	123.1	115.4	125.9	114.3	264.2	301.6	302.5
29	303.5	301.8	307.6	310.1	315.6	310.7	310.3	310.7	311.4	322.1	312.5	310.4	304.2	311.8	324.1	97.2	103.7	108.8	114.2	119.9	135.4	130.2	136.8	142.4
30	134.1	134.3	129.6	124.3	120.6	120.1	119.3	119.0	118.0	117.9	118.3	121.5	130.7	151.6	167.7	177.9	220.8	296.4	305.9	302.8	303.1	302.8	304.3	306.2

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	305.0	304.0	309.1	310.0	313.8	326.4	321.7	315.6	320.9	316.3	311.9	311.4	311.2	303.5	326.4	330.3	324.3	312.8	290.4	302.2	309.9	302.6	296.3	309.7
2	313.2	104.7	111.7	122.6	143.8	159.1	153.7	39.9	318.1	29.9	50.7	59.2	88.7	66.8	28.8	50.0	117.6	87.8	32.7	51.5	53.7	41.9	88.4	358.4
3	308.2	326.8	333.7	313.7	316.1	302.2	295.0	298.9	294.2	314.3	322.5	316.1	316.6	313.1	313.1	314.2	312.6	310.1	302.9	304.6	305.5	308.8	310.5	310.3
4	312.7	305.7	307.2	307.6	312.3	318.4	340.0	41.8	147.2	11.3	307.3	287.8	119.9	113.5	110.3	112.9	118.5	116.1	125.8	122.5	119.2	122.4	123.4	118.4
5	116.1	119.5	126.0	125.7	128.5	121.1	107.5	93.9	105.6	97.2	95.0	88.8	88.6	82.2	97.3	110.3	114.7	71.0	39.1	45.2	55.0	50.8	48.5	52.5
6	51.9	52.3	49.4	50.5	50.4	51.6	92.8	95.2	96.0	117.7	109.6	113.5	115.4	110.1	114.7	114.0	113.2	112.4	113.7	111.8	118.2	119.4	111.6	113.3
7	112.4	113.7	120.3	117.3	96.9	91.7	127.9	109.2	99.8	89.6	81.0	81.8	102.7	99.2	84.2	88.9	96.9	114.3	124.6	102.1	114.5	107.3	111.3	111.5
8	109.3	109.8	111.2	112.1	111.0	108.2	110.3	115.8	114.3	123.4	127.5	122.7	110.2	118.6	123.5	88.4	85.1	89.0	34.1	25.6	130.0	91.3	99.3	52.6
9	111.2	131.8	109.8	101.1	107.0	104.7	106.5	105.1	109.2	109.0	111.1	110.8	109.8	110.4	111.8	106.2	104.0	106.6	106.0	105.1	104.7	106.7	106.1	106.8
10	113.4	115.3	116.6	117.8	121.9	123.8	125.7	130.7	128.7	127.3	129.9	127.2	126.1	127.1	123.3	119.3	115.7	121.4	121.1	117.1	118.5	107.2	118.0	119.6
11	125.2	122.2	114.3	111.8	93.3	100.3	74.5	311.2	308.0	292.4	298.2	302.3	317.3	303.7	303.5	303.6	302.7	315.5	325.1	333.1	331.1	322.8	308.4	305.9
12	302.5	309.6	305.6	308.2	333.3	334.2	345.1	331.0	336.6	335.5	337.6	333.0	332.3	334.1	327.4	318.1	313.7	309.0	312.8	313.2	316.0	314.7	313.4	314.0
13	312.6	307.8	306.4	306.9	306.1	305.2	304.5	308.1	307.4	304.6	305.4	308.1	312.5	314.8	317.8	314.2	313.1	311.5	313.0	310.5	323.4	322.3	322.5	323.8
14	321.3	322.6	320.7	317.1	314.6	327.9	328.6	308.7	309.5	311.0	306.5	311.2	300.0	305.2	309.3	308.4	301.1	303.1	305.1	306.8	311.3	318.0	318.7	323.0
15	321.5	312.9	312.9	318.2	323.7	317.8	313.5	308.1	300.3	301.5	297.3	344.4	98.6	111.2	109.0	109.6	116.0	116.5	119.2	116.0	120.3	114.5	116.7	114.5
16	112.9	116.9	118.9	120.6	121.9	123.4	124.6	124.4	123.5	123.7	131.0	141.5	144.7	147.7	146.9	145.4	146.9	146.1	131.0	129.7	111.7	103.2	182.6	29.3
17	304.5	313.6	319.3	311.9	317.1	315.2	320.8	319.8	317.1	316.7	309.7	314.5	308.5	302.9	301.2	300.3	305.6	306.8	314.5	314.8	316.2	311.9	316.1	312.7
18	310.9	310.8	312.7	307.7	306.1	303.3	308.4	302.5	311.3	305.7	310.5	310.2	312.4	315.8	315.7	308.4	306.5	304.4	307.3	311.3	307.5	298.0	276.7	276.4
19	211.4	101.1	105.9	113.2	114.4	119.6	115.5	69.9	1.5	335.7	326.2	356.3	300.7	302.5	323.6	305.9	317.0	313.5	314.4	318.0	314.3	297.1	305.1	316.9
20	311.6	309.5	306.0	312.0	320.6	305.0	300.4	303.9	304.7	299.7	303.6	303.3	293.9	294.7	304.9	315.8	297.3	302.3	310.8	315.1	306.8	305.4	309.5	311.1
21	303.7	311.3	316.8	310.9	307.9	317.0	318.4	280.6	323.1	130.9	179.0	332.6	130.1	69.4	84.0	92.3	113.7	126.1	149.6	154.4	194.4	223.5	226.0	190.0
22	214.7	57.1	43.6	316.5	302.6	304.2	309.8	310.6	306.1	306.4	300.1	303.3	306.1	305.0	306.7	313.7	319.5	316.5	321.5	313.6	307.2	309.4	312.9	324.0
23	320.7	321.5	315.6	321.4	322.7	315.3	317.8	314.6	307.1	304.7	303.8	309.0	304.4	309.7	312.1	306.2	312.0	311.8	310.1	309.3	310.1	315.3	309.1	309.0
24	311.6	307.7	305.5	302.8	311.8	301.0	302.9	301.4	303.7	303.4	303.3	305.6	305.8	304.1	305.9	305.7	305.9	309.3	314.7	311.3	313.3	312.2	316.9	315.9
25	320.8	308.7	311.4	318.1	325.0	319.9	321.4	322.3	321.0	309.6	304.2	311.4	313.7	311.3	311.9	314.3	313.8	311.6	307.4	295.2	285.4	297.4	295.8	302.2
26	301.0	302.4	334.0	308.4	302.5	310.0	306.9	302.0	302.5	314.6	310.4	316.1	317.0	342.7	126.5	109.0	109.7	110.2	115.6	108.6	109.8	118.4	118.8	118.9
27	108.2	93.1	67.2	105.7	105.4	101.7	101.8	100.6	97.0	96.5	83.7	59.7	49.9	44.4	39.9	45.4	48.2	35.6	34.0	50.5	93.0	107.7	113.8	116.1
28	117.4	122.5	118.8	115.2	118.3	110.9	119.1	129.1	130.4	132.3	133.7	131.8	142.8	135.3	142.8	114.1	120.7	131.9	131.7	38.9	95.2	300.9	313.9	336.3
29	315.1	328.2	324.9	304.4	310.9	300.7	303.9	310.4	321.7	310.5	322.5	320.1	320.0	318.4	316.2	322.1	311.2	316.7	319.6	315.8	319.4	322.1	318.4	317.9
30	315.7	319.2	303.7	314.1	315.5	321.7	313.7	306.1	302.6	302.3	308.1	318.9	308.1	166.1	196.1	226.4	227.9	232.3	330.3	343.8	291.5	117.3	102.2	113.4
31	307.7	312.2	309.4	315.1	299.0	319.0	326.2	312.0	320.1	305.2	275.1	127.0	118.2	106.2	100.4	304.7	302.8	302.4	307.2	300.8	305.8	311.8	306.9	302.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.8	18.3	21.3	10.5	11.7	6.5	10.0	6.2	5.6	8.3	6.5	4.2	5.8	10.3	10.3	7.6	20.0	13.2	11.0	11.4	9.8	12.4	7.2	15.9	21.3	4.2	10.7
2	7.7	10.4	17.5	13.2	3.7	10.8	12.6	11.9	4.0	8.0	9.2	13.0	16.6	10.0	4.9	11.0	7.4	7.5	8.0	7.5	7.5	3.7	4.3	6.1	17.5	3.7	9.0
3	5.0	4.9	4.2	4.0	5.0	21.7	13.2	13.7	5.1	6.9	7.5	6.8	12.0	10.7	8.1	6.9	7.8	3.6	6.0	3.4	4.1	3.4	3.8	3.1	21.7	3.1	7.1
4	3.5	10.6	11.7	44.6	13.6	25.2	38.6	4.5	42.4	31.9	29.8	9.5	11.2	7.3	10.2	45.8	23.6	11.8	4.5	48.7	11.7	17.5	9.3	32.7	48.7	3.5	20.8
5	80.2	27.9	31.8	49.0	29.1	17.1	33.9	46.7	15.7	8.9	22.2	23.9	30.0	5.2	3.1	2.0	3.0	2.3	2.5	2.4	3.2	2.9	2.5	3.1	80.2	2.0	18.7
6	13.4	30.5	5.5	5.5	8.3	3.5	4.5	12.1	9.2	17.5	36.0	35.9	21.2	19.9	3.4	6.3	19.5	9.6	54.4	22.0	49.6	6.2	19.0	65.1	65.1	3.4	19.9
7	16.5	33.0	45.8	25.1	75.0	11.5	6.0	14.6	19.3	6.5	47.3	44.6	23.8	27.3	13.1	26.9	10.1	7.2	23.0	17.6	5.3	10.9	19.7	6.3	75.0	5.3	22.3
8	10.0	12.7	22.8	20.5	18.2	27.5	16.7	11.8	7.7	38.7	7.8	5.6	3.3	3.6	3.8	3.2	4.3	3.0	2.4	3.1	4.7	3.8	4.4	4.4	38.7	2.4	10.1
9	4.5	4.7	3.1	6.4	3.5	3.4	2.3	2.7	4.7	3.7	3.3	46.3	32.5	20.7	37.2	36.7	12.3	8.2	12.7	23.8	39.8	28.6	9.5	6.2	46.3	2.3	14.9
10	5.9	36.2	18.7	4.4	6.9	6.6	7.1	24.6	31.2	10.6	36.9	28.3	65.0	25.3	9.7	6.7	9.4	4.7	7.5	7.0	29.0	13.2	46.0	21.1	65.0	4.4	19.2
11	27.7	29.7	38.9	9.0	9.2	6.8	7.3	28.0	54.7	7.8	18.7	17.7	31.5	27.6	17.5	26.3	10.0	4.2	6.2	4.8	7.0	4.1	4.7	5.6	54.7	4.1	16.9
12	6.0	5.7	4.7	3.7	3.7	3.8	2.7	3.0	4.2	3.5	2.7	3.1	2.9	3.5	3.8	3.7	3.2	3.9	4.4	3.7	3.4	3.4	3.9	3.3	6.0	2.7	3.7
13	2.7	2.4	3.0	2.7	3.8	3.5	2.8	2.6	2.8	3.2	3.2	3.8	3.9	3.1	2.3	3.0	3.2	4.4	5.6	3.2	3.6	4.1	5.5	5.0	5.6	2.3	3.5
14	3.9	4.1	4.7	4.5	6.7	23.1	23.4	11.7	7.8	8.6	14.2	11.1	5.7	5.0	4.7	5.0	5.5	7.7	7.3	8.0	5.9	7.9	8.4	9.2	23.4	3.9	8.5
15	6.9	6.1	7.1	3.1	4.8	9.3	5.9	5.4	6.0	4.7	4.4								3.5	3.4	5.0	4.3	4.3	6.1	9.3	3.1	5.3
16	11.3	6.5	10.3	8.4	15.7	16.7	9.9	8.4	5.2	9.4	6.3	4.7	15.4	21.1	6.9	7.2	11.0	7.2	36.2	7.3	2.5	3.3	2.3	2.2	36.2	2.2	9.8
17	2.6	3.8	3.6	3.2	2.1	3.0	3.3	3.1	2.4	3.2	3.4	3.1	3.2	4.9	4.0	4.4	3.0	2.8	3.5	3.3	4.5	5.4	5.5	6.8	6.8	2.1	3.7
18	5.3	4.0	5.2	3.5	4.1	2.9	2.1	2.7	2.1	4.4	4.3	5.8	4.7	3.1	3.2	2.5	3.8	3.4	4.7	3.4	3.4	3.2	4.3	4.3	5.8	2.1	3.8
19	4.2	3.0	3.6	4.1	5.2	4.2	3.7	3.9	4.5	5.7	3.8	4.0	3.7	3.7	3.9	4.3	5.1	4.1	3.0	2.6	3.4	3.0	4.4	4.0	5.7	2.6	4.0
20	3.2	3.8	3.0	3.6	3.6	3.7	2.7	2.2	3.3	2.0	1.9	1.6	2.4	2.0	2.6	3.2	2.8	3.1	2.1	2.4	2.3	2.7	2.8	2.9	3.8	1.6	2.7
21	2.7	3.0	3.0	2.7	3.4	2.5	3.9	5.2	4.1	4.0	6.2	5.4	4.7	3.7	4.0	5.3	5.5	4.4	4.3	3.3	3.4	3.3	3.4	3.3	6.2	2.5	3.9
22	3.3	3.2	3.5	3.0	2.5	2.5	2.6	2.9	3.1	3.3	3.0	3.4	4.1	3.3	3.5	3.2	3.3	3.1	2.6	3.0	2.4	3.2	3.4	2.6	4.1	2.4	3.1
23	2.9	2.5	2.6	2.6	2.3	2.4	2.7	4.0	3.0	3.3	2.1	1.9	3.1	2.6	2.3	3.2	4.3	3.3	4.4	5.2	3.4	5.4	3.4	2.9	5.4	1.9	3.2
24	2.8	3.9	4.7	3.9	3.3	3.1	3.0	4.0	2.6	3.4	3.0	2.7	2.2	2.5	4.2	3.1	3.0	3.8	3.3	2.7	3.4	2.8	2.7	6.4	6.4	2.2	3.4
25	4.3	3.3	5.5	4.9	5.2	4.7	4.1	2.8	2.4	2.6	2.4	2.1	3.7	2.4	2.7	2.7	3.0	2.9	3.0	2.8	5.6	3.8	2.8	2.5	5.6	2.1	3.4
26	3.1	2.4	3.1	3.0	2.5	3.7	2.4	2.6	4.3	3.8	3.9	3.9	4.2	3.2	3.7	5.7	6.1	3.0	1.9	3.3	3.4	2.8	4.7	2.5	6.1	1.9	3.5
27	3.7	2.9	4.2	2.1	3.7	5.2	2.3	2.2	2.2	3.0	3.3	2.5	3.1	2.2	2.5	2.8	2.9	2.5	2.7	2.8	2.5	2.2	2.7	3.2	5.2	2.1	2.9
28	2.5	2.7	3.0	2.6	2.5	2.3	3.1	3.2	2.8	3.6	4.0	3.5	5.1	4.0	3.7	3.3	3.9	3.2	4.2	3.9	4.3	2.9	3.6	5.3	5.3	2.3	3.5
29	4.0	2.4	3.0	2.9	3.4	3.3	4.4	3.2	3.3	4.9	2.6	3.1	7.0	7.5	10.8	3.4	3.1	2.0	2.7	5.0	2.9	4.2	5.5	6.3	10.8	2.0	4.2
30	6.5	5.4	3.0	4.5	6.4	6.0	4.6	7.5	3.6	6.0	2.1	3.5	3.7	2.2	2.4	2.1	2.4	4.8	3.7	3.7	3.4	5.2	23.3	53.3	53.3	2.1	7.0
31	36.4	10.1	11.2	3.5	8.5	3.2	5.8	4.8	5.7	4.5	2.9	2.7	3.8	3.7	2.3	4.6	3.0	3.0	2.7	2.7	2.4	2.2	3.5	6.6	36.4	2.2	5.8
Max.	**80.2**	**36.2**	**45.8**	**49.0**	**75.0**	**27.5**	**38.6**	**46.7**	**54.7**	**38.7**	**47.3**	**46.3**	**65.0**	**27.6**	**37.2**	**45.8**	**23.6**	**13.2**	**54.4**	**48.7**	**49.6**	**28.6**	**46.0**	**65.1**	**80.2**		
Min.	**2.5**	**2.4**	**2.6**	**2.1**	**2.1**	**2.3**	**2.1**	**2.2**	**2.1**	**2.0**	**1.9**	**1.6**	**2.2**	**2.0**	**2.3**	**2.0**	**2.4**	**2.0**	**1.9**	**2.4**	**2.3**	**2.2**	**2.3**	**2.2**		**1.6**	
Avg.	**9.9**	**9.7**	**10.1**	**8.5**	**9.0**	**8.1**	**8.0**	**8.5**	**8.9**	**7.6**	**9.8**	**10.3**	**11.3**	**8.4**	**6.5**	**8.4**	**6.9**	**4.9**	**7.9**	**7.3**	**7.8**	**5.9**	**7.4**	**9.9**			**8.4**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.6	3.1	3.4	3.7	3.4	3.8	2.7	3.0	3.2	3.0	3.1	3.6	3.5	2.4	4.1	2.6	2.1	2.1	3.0	2.7	3.5	3.0	2.0	3.4	4.6	2.0	3.1
2	2.9	3.5	4.1	2.6	3.3	2.5	3.0	2.6	4.6	4.5	4.3	3.3	4.6	3.5	4.4	9.4	20.2	18.3	5.5	4.4	13.4	4.9	4.3	4.9	20.2	2.5	5.8
3	6.7	4.7	6.7	5.5	4.4	4.9	4.3	4.4	4.7	4.2	4.3	4.3	4.3	4.9	4.6	4.0	4.6	4.5	5.0	4.8	4.3	4.4	4.6	4.1	6.7	4.0	4.7
4	4.2	3.8	3.8	3.8	3.6	3.9	4.1	4.4	3.9	4.2	4.1	4.3	4.1	4.4	4.3	4.2	3.9	4.5	4.4	4.1	3.9	4.8	4.4	6.5	6.5	3.6	4.2
5	5.0	5.9	5.3	5.2	5.2	4.7	4.9	4.8	5.2	6.0	6.0	5.3	4.6	4.2	3.8	3.8	3.5	3.6	6.3	10.4	7.4	5.9	5.8	4.2	10.4	3.5	5.3
6	4.4	6.7	6.5	8.1	6.4	5.7	6.5	12.5	10.2	8.2	3.7	4.6	3.6	4.2	4.5	6.0	4.9	5.0	4.6	6.0	5.4	6.9	5.3	5.0	12.5	3.6	6.0
7	4.7	6.8	5.4	3.6	3.5	5.1	6.1	4.8	4.4	3.2	3.3	3.6	3.4	2.6	2.6	2.3	3.8	5.5	5.8	7.4	6.9	15.6	13.0	6.7	15.6	2.3	5.4
8	22.7	9.6	6.5	7.9	4.2	5.6	5.4	5.4	5.7	9.0	9.2	13.0	4.3	3.4	3.2	3.3	3.3	3.5	3.7	3.8	3.9	3.9	4.1	4.0	22.7	3.2	6.2
9	4.4	3.8	4.0	4.1	4.3	4.4	4.0	4.3	7.5	5.7	8.8	6.1	5.5	4.8	5.4	4.1	4.5	4.8	3.6	3.9	3.9	4.3	4.3	4.2	8.8	3.6	4.8
10	4.1	4.4	4.3	3.9	4.0	3.7	3.8	3.8	3.9	3.9	3.8	3.8	4.0	4.6	4.5	4.4	4.2	4.1	3.6	3.7	4.3	4.3	4.5	4.9	4.9	3.6	4.1
11	5.1	4.0	3.5	3.8	9.7	17.5	20.7	19.4	4.4	6.5	4.3	3.4	5.0	4.5	7.7	10.2	11.0	19.5	10.8	5.4	13.3	11.2	5.9	8.7	20.7	3.4	9.0
12	49.7	17.3	6.2	7.7	4.2	5.6	6.4	4.4	2.5	2.7	2.9	3.1	3.0	2.6	3.5	5.4	4.4	10.2	33.8	36.3	22.2	45.0	21.5	25.7	49.7	2.5	13.6
13	11.8	9.0	6.5	5.1	10.3	10.3	8.2	6.1	5.4	9.4	8.2	6.2	8.3	4.9	4.6	3.7	3.9	3.7	3.8	4.2	4.2	4.5	4.5	4.4	11.8	3.7	6.3
14	4.4	4.4	4.1	4.6	4.3	4.5	4.6	4.5	4.7	4.2	3.8	4.0	4.4	4.4	4.4	3.9	3.6	3.5	3.6	3.9	4.0	4.2	4.1	4.0	4.7	3.5	4.2
15	4.1	3.9	3.5	3.8	3.5	3.7	3.9	4.2	4.0	4.0	4.0	3.9	4.4	4.1	3.7	3.7	4.1	5.0	4.5	5.1	5.3	4.3	4.0	4.6	5.3	3.5	4.1
16	7.5	5.7	4.6	5.8	6.4	6.1	4.9	5.1	3.6	6.8	7.4	7.4	5.7	5.0	6.1	5.7	5.6	5.0	6.5	7.7	6.7	5.8	5.8	4.8	7.7	3.6	5.9
17	3.6	5.0	9.2	10.8	10.4	7.6	4.1	3.6	3.4	3.7	3.8	3.7	4.2	3.8	3.9	3.9	3.8	3.6	4.2	3.7	3.8	3.8	4.0	4.3	10.8	3.4	4.8
18	4.5	4.5	4.0	3.9	3.8	4.0	3.7	3.4	3.7	4.2	4.6	4.3	4.2	4.0	4.4	4.3	4.2	4.6	6.7	11.5	5.3	5.7	5.1	5.3	11.5	3.4	4.7
19	7.1	5.7	5.7	7.3	6.2	6.4	8.3	5.3	5.0	12.2	6.3	5.1	8.1	6.1	4.1	3.7	4.2	5.2	6.2	6.7	4.8	3.6	4.1	5.1	12.2	3.6	5.9
20	3.6	4.6	3.6	3.4	3.7	8.0	6.4	11.1	9.6	7.7	8.4	18.0	7.4	4.5	3.8	4.1	7.3	2.6	2.6	2.0	2.1	2.3	2.7	2.3	18.0	2.0	5.5
21	2.1	2.0	1.5	1.8	2.6	2.8	2.1	2.3	2.8	7.6	19.5	18.6	33.3	3.5	12.0	4.0	2.1	12.0	2.1	1.3	9.7	8.7	2.5	6.1	33.3	1.3	6.8
22	6.0	5.9	7.6	9.7	1.8	1.4	2.8	1.4	1.6	6.7	7.9	3.4	4.5	3.2	6.1	5.2	3.3	4.6	5.1	4.6	4.7	5.1	5.6	5.7	9.7	1.4	4.7
23	4.2	3.6	4.2	3.4	3.7	13.9	4.2	1.7	3.0	2.8	4.2	3.2	7.4	7.8	2.5	3.6	2.9	3.0	2.5	3.5	3.5	3.6	4.3	4.3	13.9	1.7	4.2
24	6.5	5.7	6.3	4.8	5.3	2.1	2.5	2.3	8.5	7.9	3.3	3.9	19.6	18.5	25.4	38.0	40.7	5.5	6.9	8.2	12.3	14.0	9.1	10.1	40.7	2.1	11.1
25	9.8	9.3	8.4	10.3	3.1	3.6	3.5	3.9	6.4	6.4	21.3	6.2	5.6	3.9	3.6	3.5	2.3	4.3	3.2	2.6	2.1	2.2	2.2	3.9	21.3	2.1	5.5
26	2.7	2.1	1.7	1.8	3.8	5.1	5.0	2.9	4.6	19.3	20.6	2.7	3.9	4.2	28.9	33.2	8.8	3.6	4.3	4.7	8.5	11.1	16.5	7.0	33.2	1.7	8.6
27	5.7	4.1	23.6	4.7	3.9	3.4	4.1	3.3	3.8	2.7	2.5	2.9	2.5	3.5	3.0	2.9	2.8	2.7	3.0	2.8	2.5	2.1	2.3	2.6	23.6	2.1	4.1
28	2.5	2.7	3.8	3.7	3.2	5.3	5.1	8.3	7.5	4.4	5.4	3.8	2.7	2.9	3.0	2.4	2.5	1.9	2.5	1.9	2.8	4.8	3.6	2.5	8.3	1.9	3.7
Max.	**49.7**	**17.3**	**23.6**	**10.8**	**10.4**	**17.5**	**20.7**	**19.4**	**10.2**	**19.3**	**21.3**	**18.6**	**33.3**	**18.5**	**28.9**	**38.0**	**40.7**	**19.5**	**33.8**	**36.3**	**22.2**	**45.0**	**21.5**	**25.7**	**49.7**		
Min.	**2.1**	**2.0**	**1.5**	**1.8**	**1.8**	**1.4**	**2.1**	**1.4**	**1.6**	**2.7**	**2.5**	**2.7**	**2.5**	**2.4**	**2.5**	**2.3**	**2.1**	**1.9**	**2.1**	**1.3**	**2.1**	**2.1**	**2.0**	**2.3**		**1.3**	
Avg.	**7.3**	**5.4**	**5.6**	**5.2**	**4.7**	**5.6**	**5.2**	**5.1**	**4.9**	**6.1**	**6.7**	**5.6**	**6.3**	**4.7**	**6.1**	**6.6**	**6.2**	**5.6**	**5.6**	**6.0**	**6.2**	**7.1**	**5.7**	**5.7**			**5.8**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	2.1	2.4	3.1	3.1	2.7	2.9	4.9	3.7	4.3	45.8	44.7	16.0	5.7	4.9	8.6	11.4	8.5	11.3	9.5	5.2	4.1	5.4	5.3	45.8	2.1	9.1
2	4.9	5.5	4.4	5.5	4.1	4.4	4.0	3.4	3.9	4.1	3.5	3.4	3.0	3.2	3.3	3.7	3.8	3.8	4.0	2.6	3.6	3.8	2.6	2.8	5.5	2.6	3.8
3	2.6	3.5	2.9	2.9	3.0	3.3	2.6	4.5	3.6	3.4	3.9	4.7	4.5	3.6	3.5	4.4	6.9	10.1	16.4	13.2	12.0	15.0	10.0	7.9	16.4	2.6	6.2
4	5.7	4.6	5.1	8.1	4.4	4.0	3.0	4.0	4.0	4.8	4.5	4.7	3.8	3.5	4.1	4.2	6.8	6.3	4.3	3.6	3.7	4.8	3.8	3.6	8.1	3.0	4.6
5	3.3	3.3	3.7	3.6	5.1	4.8	6.6	5.0	5.8	8.8	11.4	7.6	12.1	6.2	8.9	7.9	4.1	5.5	7.7	5.0	11.5	8.3	5.0	4.9	12.1	3.3	6.5
6	5.9	14.3	9.3	4.3	3.3	5.8	11.1	7.6	38.6	10.5	6.1	34.5	24.9	26.4	17.5	57.7	18.3	9.9	6.8	23.7	33.2	35.9	13.0	6.2	57.7	3.3	17.7
7	5.2	4.4	2.9	3.0	3.7	3.4	3.1	2.0	2.7	3.9	3.5	3.3	2.7	2.3	2.5	3.2	3.1	4.5	2.1	2.5	2.0	3.7	3.0	3.5	5.2	2.0	3.2
8	2.2	1.9	2.0	2.2	2.5	2.7	2.9	2.6	2.7	4.0	4.5	4.5	3.0	3.8	4.3	4.6	3.4	2.4	2.4	2.7	2.6	2.4	3.6	3.6	4.6	1.9	3.1
9	3.2	3.0	3.0	2.7	2.4	2.2	2.7	3.0	2.8	2.5	2.4	2.5	2.3	2.2	2.2	2.4	3.6	4.0	2.7	2.5	2.2	3.4	2.5	2.2	4.0	2.2	2.7
10	4.2	4.3	2.8	4.1	3.6	5.3	3.0	3.2	3.4	4.3	5.0	6.9	5.4	6.2	9.2	16.4	24.7	19.2	5.5	5.0	5.2	8.6	3.4	4.6	24.7	2.8	6.8
11	4.5	4.2	6.3	6.3	3.4	3.0	2.7	2.5	2.4	3.1	3.2	3.4	3.9	3.3	3.2	3.3	3.2	3.1	3.3	2.9	3.0	3.1	3.9	3.7	6.3	2.4	3.5
12	3.1	3.5	3.0	3.7	3.8	2.8	2.7	3.1	4.1	3.8	3.8	5.8	4.2	4.4	8.4	4.0	4.2	2.4	3.7	5.1	26.5	12.4	18.4	35.8	35.8	2.4	7.2
13	65.9	17.5	18.3	39.9	19.4	18.2	14.5	9.0	9.6	4.7	6.5	7.4	5.3	4.4	3.3	2.5	5.2	3.5	3.4	2.8	2.5	4.6	2.3	2.4	65.9	2.3	11.4
14	3.1	3.0	3.5	4.2	3.7	2.9	4.4	3.5	5.0	4.1	3.2	4.8	32.3	33.2	9.3	9.1	5.8	6.2	8.7	10.9	7.8	10.0	12.7	35.6	35.6	2.9	9.5
15	5.3	7.9	6.7	11.6	5.0	16.2	31.6	43.4	21.7	5.3	5.1	15.3	54.9	21.7	11.8	11.6	6.8	8.7	5.2	6.7	4.3	4.5	2.6	3.3	54.9	2.6	13.2
16	2.1	3.5	4.5	4.1	5.5	5.1	4.3	5.5	8.1	9.1	3.0	3.4	3.6	2.7	2.8	2.7	2.8	3.0	3.9	3.9	3.5	3.9	4.8	5.0	9.1	2.1	4.2
17	4.3	3.8	3.1	3.0	2.2	3.3	2.6	2.1	2.1	3.0	3.4	4.3	4.1	4.8	3.9	4.1	4.0	4.9	3.7	3.0	3.2	3.0	3.3	4.0	4.9	2.1	3.5
18	3.3	3.6	3.5	3.6	4.1	4.5	5.2	24.1	14.0	3.8	3.3	3.3	43.6	24.3	19.9	24.4	12.1	7.6	44.7	10.8	6.2	24.0	28.2	3.2	44.7	3.2	13.6
19	3.1	8.5	38.3	9.8	4.6	9.2	6.8	8.2	9.1	4.4	7.5	3.7	3.6	4.1	4.1	4.4	8.5	7.1	5.3	5.3	6.4	4.7	6.1	5.7	38.3	3.1	7.4
20	5.6	3.6	4.6	4.5	7.3	4.5	3.5	3.8	3.2	3.6	7.6	5.6	6.5	18.3	3.4	6.7	4.6	2.8	2.1	2.3	2.6	2.9	2.2	2.3	18.3	2.1	4.8
21	2.0	2.1	2.3	2.3	2.5	2.4	2.5	2.6	2.7	2.1	2.8	4.3	2.9	4.6	4.0	3.7	4.1	3.0	3.3	4.6	3.8	4.1	6.0	4.5	6.0	2.0	3.3
22	3.4	11.6	5.7	4.9	2.8	3.0	3.2	3.1	3.2	2.1	3.3	2.9	2.5	2.7	2.5	3.0	3.3	2.9	2.7	4.6	3.1	3.5	3.5	3.2	11.6	2.1	3.6
23	4.5	4.2	3.6	2.4	3.0	3.7	8.0	9.4	23.2	34.1	2.2	5.4	18.0	6.3	7.1	4.4	3.4	2.0	2.7	6.1	5.9	3.8	4.7	3.8	34.1	2.0	7.2
24	3.1	3.3	3.6	3.4	3.4	7.7	4.2	3.6	2.7	4.1	3.9	3.7	3.4	3.6	3.4	3.2	2.9	3.0	2.4	3.1	3.2	4.4	4.1	4.5	7.7	2.4	3.7
25	3.3	3.2	3.2	3.2	2.9	4.1	2.9	3.9	3.0	4.7	4.1	7.3	9.7	3.6	6.7	6.9	2.9	2.8	3.5	3.7	2.6	3.3	4.1	5.3	9.7	2.6	4.2
26	4.0	5.1	3.1	2.8	3.9	3.6	4.0	4.0	3.7	5.4	3.1	2.5	2.7	3.3	3.3	3.3	3.2	4.5	2.0	2.3	2.1	3.6	3.7	3.4	5.4	2.0	3.4
27	2.8	3.3	4.8	4.4	4.0	4.3	5.8	8.9	18.7	12.3	11.2	7.1	7.0	8.6	10.5	6.4	8.7	9.4	7.1	9.9	8.0	5.2	14.5	9.0	18.7	2.8	8.0
28	6.7	3.7	7.6	10.3	5.6	5.5	6.9	4.7	4.8	4.9	5.0	4.7	7.8	7.3	4.2	9.4	40.3	9.1	4.7	6.0	5.0	2.8	2.7	2.0	40.3	2.0	7.2
29	3.2	3.8	5.1	2.1	2.9	3.8	3.8	2.7	3.9	7.2	5.2	9.8	26.4	18.7	11.7	46.7	15.4	7.4	10.2	8.3	9.8	8.0	4.7	3.3	46.7	2.1	9.3
30	2.7	3.4	3.4	3.6	3.0	3.2	3.1	2.9	3.4	3.6	3.2	3.2	3.2	3.1	3.5	3.4	3.2	3.6	3.5	3.5	3.6	3.5	3.5	3.7	3.7	2.7	3.3
31	3.6	3.5	3.6	3.1	3.1	3.2	3.0	2.9	3.0	8.7	3.1	0.2	0.1	0.2	0.5	7.3	2.9	3.8	5.3	3.3	0.6	0.1	1.8	0.4	8.7	0.1	2.8
Max.	**65.9**	**17.5**	**38.3**	**39.9**	**19.4**	**18.2**	**31.6**	**43.4**	**38.6**	**34.1**	**45.8**	**44.7**	**54.9**	**33.2**	**19.9**	**57.7**	**40.3**	**19.2**	**44.7**	**23.7**	**33.2**	**35.9**	**28.2**	**35.8**	**65.9**		
Min.	**2.0**	**1.9**	**2.0**	**2.1**	**2.2**	**2.2**	**2.5**	**2.0**	**2.1**	**2.1**	**2.2**	**0.2**	**0.1**	**0.2**	**0.5**	**2.4**	**2.8**	**2.0**	**2.0**	**2.3**	**0.6**	**0.1**	**1.8**	**0.4**		**0.1**	
Avg.	**5.8**	**4.9**	**5.7**	**5.6**	**4.2**	**4.9**	**5.4**	**6.3**	**7.2**	**6.0**	**5.9**	**7.3**	**10.4**	**7.9**	**6.1**	**9.2**	**7.5**	**5.6**	**6.3**	**5.8**	**6.3**	**6.6**	**6.1**	**6.1**			**6.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.5	5.4	2.5	2.5	4.4	2.3	3.1	3.4	4.3	3.0	10.4	1.3	4.8	11.3	2.6	3.0	2.6	2.6	8.1	0.1	3.7	6.8	4.4	0.1	11.3	0.1	3.9
2	0.1	7.7	3.3	4.7	5.9	16.2	5.1	7.4	0.3	0.3	6.9	7.0	3.3	9.6	18.4	7.0	5.6	14.8	6.1	8.5	5.4	6.2	3.8	3.1	18.4	0.1	6.5
3	3.3	4.1	2.8	3.7	3.8	6.0	9.4	8.9	3.0	3.2	2.9	2.8	3.3	3.3	3.1	3.9	3.6	3.6	3.8	5.8	4.5	4.6	4.0	3.7	9.4	2.8	4.2
4	3.5	4.1	4.2	4.4	4.1	4.0	4.3	4.3	12.8	14.6	3.4	4.4	2.6	3.2	5.6	23.0	8.1	2.8	2.6	4.6	3.2	4.5	2.7	3.0	23.0	2.6	5.6
5	4.5	4.5	3.8	4.4	3.5	4.2	4.1	3.2	3.9	3.3	2.6	3.1	4.1	3.7	3.5	4.0	2.5	2.5	2.2	3.8	5.7	4.2	4.3	4.2	5.7	2.2	3.8
6	3.0	3.3	3.9	3.8	5.3	4.6	2.9	4.3	5.7	5.1	4.3	6.8	5.2	6.3	6.4	7.9	6.6	7.1	7.5	5.6	10.3	27.2	10.2	7.1	27.2	2.9	6.7
7	5.9	5.8	5.4	2.8	3.5	6.9	3.9	5.6	13.0	8.7	6.2	4.5	4.3	4.1	3.9	3.5	4.3	5.0	6.8	4.3	3.8	3.7	3.3	3.3	13.0	2.8	5.1
8	3.6	3.3	3.2	3.3	3.6	4.0	4.0	3.8	4.3	3.6	3.1	3.7	4.2	4.2	3.9	4.0	3.8	4.2	4.1	4.9	5.0	4.9	4.1	5.1	5.1	3.1	4.0
9	4.9	4.6	3.2	4.0	4.0	4.4	3.8	3.9	4.3	3.8	4.6	4.7	5.6	5.7	6.2	4.9	4.9	4.5	8.6	8.0	12.2	7.9	4.5	4.4	12.2	3.2	5.3
10	28.7	16.3	6.3	15.0	3.6	4.0	3.1	2.7	2.7	2.4	3.5	4.4	3.5	4.1	4.8	3.9	3.4	3.9	3.2	3.4	9.6	33.3	8.0	6.8	33.3	2.4	7.5
11	5.3	30.2	20.5	18.2	8.7	12.1	4.8	2.8	4.7	5.0	4.5	5.9	3.6	5.0	3.1	3.3	2.5	2.9	3.1	3.5	3.2	2.1	2.3	2.3	30.2	2.1	6.6
12	2.1	2.3	2.7	2.5	2.3	3.8	4.3	4.4	3.8	4.1	2.8	2.8	3.6	3.8	4.0	4.0	4.4	4.6	4.1	8.0	3.3	3.0	3.7	13.8	13.8	2.1	4.1
13	10.9	14.0	31.3	29.9	7.8	3.8	3.7	3.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.7	2.9	2.2	2.3	2.2	2.2	2.5	3.3	31.3	2.1	5.9
14	3.0	2.6	2.3	2.5	2.6	2.7	3.0	2.8	2.9	2.8	3.0	2.9	3.1	3.0	3.6	2.9	2.8	2.2	3.5	5.4	3.7	3.2	3.5	5.9	5.9	2.2	3.2
15	7.1	5.2	4.0	2.9	3.5	4.1	4.3	6.0	3.2	3.1	3.8	2.4	2.9	3.3	3.4	4.1	3.2	2.5	6.7	15.1	8.8	16.6	34.7	24.6	34.7	2.4	7.3
16	9.4	7.3	4.9	5.0	4.2	3.1	2.4	2.7	2.6	2.8	3.0	3.0	3.4	3.3	3.3	3.0	3.2	2.8	2.9	3.7	4.0	6.7	8.8	3.6	9.4	2.4	4.1
17	3.6	4.0	3.6	3.8	3.6	5.5	8.2	4.4	4.2	4.4	8.1	7.8	4.3	3.5	5.2	4.8	5.0	3.4	6.7	6.3	23.8	21.0	29.4	2.6	29.4	2.6	7.4
18	2.6	2.0	9.2	5.6	6.9	4.1	12.3	32.6	44.9	43.4	26.4	26.3	5.7	15.2	16.9	25.5	28.5	11.8	10.9	9.2	21.6	66.8	40.5	48.0	66.8	2.0	21.5
19	50.9	38.7	43.4	39.2	23.5	17.4	14.7	12.7	5.8	8.1	18.5	31.8	18.9	3.5	8.0	5.3	17.7	18.4	7.9	5.0	4.0	5.4	7.1	9.8	50.9	3.5	17.3
20	8.7	8.3	16.5	24.9	30.1	12.4	21.0	8.9	8.0	6.4	5.4	5.1	4.7	4.6	3.9	3.6	2.8	2.8	2.6	3.0	2.8	2.6	2.7	2.5	30.1	2.5	8.1
21	2.5	2.6	2.8	3.8	2.8	2.7	2.8	3.2	4.5	4.0	4.1	3.3	3.0	3.0	3.0	3.4	6.3	7.7	5.0	4.8	16.0	3.2	2.7	2.6	16.0	2.5	4.2
22	4.7	4.7	5.6	9.0	5.1	7.3	17.5	23.6	51.8	33.5	13.2	31.0	12.9	9.7	7.5	11.3	7.2	5.8	7.7	29.5	7.0	12.8	5.5	4.5	51.8	4.5	13.7
23	3.4	4.1	7.7	8.5	5.6	5.2	4.2	4.0	3.9	4.6	5.9	3.9	4.5	4.0	8.6	16.2	18.5	17.6	5.4	4.4	2.5	2.3	2.6	3.1	18.5	2.3	6.3
24	3.9	4.3	2.7	3.4	3.4	2.0	2.3	3.3	3.3	2.5	2.7	3.2	3.1	2.7	2.6	4.4	2.9	3.7	3.3	2.3	4.6	4.0	2.9	3.4	4.6	2.0	3.2
25	6.1	8.2	9.5	11.1	10.7	10.2	8.4	10.5	6.1	6.5	5.3	5.2	6.4	4.6	4.5	6.7	5.0	3.3	3.7	3.8	3.0	2.8	3.3	4.3	11.1	2.8	6.2
26	3.7	4.7	3.9	4.8	5.1	4.1	3.3	3.6	3.9	3.8	3.7	8.2	9.8	7.3	5.6	6.3	3.9	3.7	5.0	10.3	4.1	4.8	7.6	7.9	10.3	3.3	5.4
27	4.8	60.7	20.3	20.0	10.3	11.3	37.9	42.9	18.5	6.9	5.2	3.2	4.1	3.7	3.1	3.0	3.4	2.7	2.8	2.8	2.5	4.2	3.8	4.3	60.7	2.5	11.8
28	4.5	4.1	5.1	3.6	2.7	2.7	3.8	4.2	5.0	3.9	33.2	16.9	14.7	16.8	13.2	10.7	9.8	16.9	10.8	29.7	52.5	29.3	36.3	13.0	52.5	2.7	14.3
29	11.2	6.0	7.4	2.6	4.2	3.2	5.2	5.8	9.3	3.6	3.1	3.5	2.2	2.4	2.6	2.7	4.2	2.6	3.5	3.3	2.3	1.9	3.0	2.3	11.2	1.9	4.1
30	3.0	2.1	2.4	1.6	2.8	4.1	25.1	6.8	8.6	7.8	9.3	10.1	12.5	8.0	7.9	6.9	4.1	4.6	3.4	2.8	2.5	2.9	3.2	3.2	25.1	1.6	6.1
Max.	**50.9**	**60.7**	**43.4**	**39.2**	**30.1**	**17.4**	**37.9**	**42.9**	**51.8**	**43.4**	**33.2**	**31.8**	**18.9**	**16.8**	**18.4**	**25.5**	**28.5**	**18.4**	**10.9**	**29.7**	**52.5**	**66.8**	**40.5**	**48.0**	**66.8**		
Min.	**0.1**	**2.0**	**2.3**	**1.6**	**2.3**	**2.0**	**2.3**	**2.7**	**0.3**	**0.3**	**2.1**	**1.3**	**2.1**	**2.2**	**2.1**	**2.2**	**2.5**	**2.2**	**2.2**	**0.1**	**2.2**	**1.9**	**2.3**	**0.1**		**0.1**	
Avg.	**7.0**	**9.2**	**8.1**	**8.4**	**6.3**	**5.9**	**7.8**	**7.9**	**8.4**	**6.9**	**7.0**	**7.4**	**5.6**	**5.5**	**5.7**	**6.5**	**6.1**	**5.8**	**5.1**	**6.8**	**7.9**	**10.0**	**8.5**	**6.9**			**7.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.2	3.2	3.0	2.8	2.9	3.1	3.1	3.0	3.1	3.2	3.6	3.7	3.7	3.4	4.1	4.5	4.2	3.3	4.7	5.2	3.4	4.2	5.0	5.2	5.2	2.8	3.7
2	4.9	5.5	7.1	7.6	13.9	6.9	5.1	11.9	13.3	19.2	9.0	7.3	3.2	3.1	4.0	4.2	3.9	4.0	3.5	3.1	3.0	3.2	3.4	3.3	19.2	3.0	6.4
3	3.0	3.0	3.0	3.0	7.3	5.9	7.1	7.3	10.1	10.5	7.6	10.1	4.8	5.2	5.2	5.2	6.5	6.6	15.9	24.6	43.3	18.4	12.3	15.9	43.3	3.0	10.1
4	6.1	21.6	30.6	17.0	9.2	4.9	3.2	3.1	3.1	3.7	3.6	3.7	3.9	3.6	4.1	3.6	3.7	3.0	3.1	3.2	3.2	3.2	3.4	3.2	30.6	3.0	6.3
5	3.4	3.3	3.3	3.4	3.5	3.3	3.2	3.0	3.4	3.6	3.2	3.6	3.3	3.4	3.4	3.2	3.8	3.8	3.0	3.1	3.7	6.2	10.7	15.7	15.7	3.0	4.3
6	4.1	5.0	9.8	21.1	16.6	19.4	10.5	14.8	9.9	9.0	7.7	5.0	3.4	4.5	4.3	4.3	5.9	5.0	4.1	3.4	3.8	3.5	5.5	5.8	21.1	3.4	7.8
7	11.2	9.6	6.9	5.8	4.0	4.6	6.1	7.8	6.9	8.3	7.3	7.5	6.3	6.2	7.5	8.2	7.3	6.7	7.4	8.0	15.1	20.8	20.7	15.3	20.8	4.0	9.0
8	18.3	11.6	5.6	5.6	8.3	5.6	5.7	6.0	6.1	5.4	6.5	4.7	4.7	4.8	4.8	6.0	5.3	3.8	4.0	8.3	6.6	4.7	5.6	4.8	18.3	3.8	6.4
9	5.0	15.4	15.3	7.0	6.0	6.6	4.7	4.9	6.6	6.4	6.8	8.5	5.4	5.3	3.8	6.4	26.1	31.4	21.0	27.6	22.4	13.5	10.3	10.7	31.4	3.8	11.5
10	7.6	6.5	8.8	35.9	12.2	17.0	26.4	9.1	7.8	7.5	5.8	3.6	5.0	17.5	8.3	35.1	6.0	7.8	3.0	3.6	4.5	3.1	3.7	10.1	35.9	3.0	10.7
11	20.8	16.2	37.3	5.9	9.1	27.1	29.3	55.1	33.8	4.2	6.4	6.9	9.7	3.9	16.3	25.9	10.0	8.1	5.6	3.7	2.6	2.6	4.5	6.4	55.1	2.6	14.6
12	4.3	4.5	6.4	4.3	4.6	3.9	4.0	2.7	2.4	2.6	3.3	3.5	3.5	3.5	3.5	3.4	3.1	2.7	4.0	3.8	5.0	4.6	6.1	6.9	6.9	2.4	4.0
13	4.7	4.2	4.4	4.8	3.5	3.1	9.3	6.6	8.4	55.6	7.1	9.5	15.1	18.0	5.8	2.8	3.6	3.8	14.3	17.6	25.3	36.7	18.6	6.6	55.6	2.8	12.1
14	7.0	6.0	4.7	7.1	9.6	9.4	6.5	6.9	4.7	6.0	8.2	7.2	8.4	8.6	6.2	5.8	5.1	4.3	4.2	3.8	4.1	3.0	3.2	4.2	9.6	3.0	6.0
15	5.8	6.1	4.3	8.4	8.9	11.7	10.9	24.5	12.3	5.8	4.7	41.8	9.7	55.7	11.8	12.3	10.7	5.6	9.4	8.3	4.5	3.9	6.4	3.4	55.7	3.4	11.9
16	4.9	61.6	11.1	34.1	3.3	3.5	7.0	7.7	5.3	4.9	9.2	5.9	3.6	3.8	5.3	9.7	5.3	4.4	3.6	5.0	7.8	3.2	15.8	4.7	61.6	3.2	9.6
17	21.5	8.2	4.8	13.6	7.6	6.1	18.4	33.3	13.2	15.1	11.5	8.4	9.4	7.6	8.1	5.7	5.0	5.9	4.7	4.7	4.1	4.2	5.2	4.6	33.3	4.1	9.6
18	3.7	3.7	4.3	2.9	4.4	8.6	9.5	16.6	22.8	17.8	12.0	6.5	4.2	5.1	4.5	4.6	4.8	2.9	3.8	4.2	2.7	2.5	3.4	55.7	55.7	2.5	8.8
19	15.9	4.4	17.0	32.4	16.6	38.6	50.7	12.1	9.5	7.1	5.6	6.2	5.5	5.2	4.9	4.4	4.4	4.3	4.1	3.9	3.6	4.1	4.4	4.8	50.7	3.6	11.2
20	5.3	5.5	4.6	3.7	3.5	3.4	3.2	3.2	3.7	4.0	4.5	4.1	6.5	4.7	4.4	3.9	5.0	5.9	6.4	16.2	4.2	2.3	3.3	2.7	16.2	2.3	4.8
21	2.1	2.8	2.7	2.6	2.7	2.9	3.2	3.2	3.8	3.5	3.6	3.4	3.7	4.6	4.6	4.0	3.5	3.8	3.5	3.3	3.8	4.8	3.6	3.6	4.8	2.1	3.5
22	3.2	3.4	4.9	3.8	2.8	2.8	3.6	3.6	3.8	4.7	4.5	4.4	5.3	5.9	6.1	8.9	4.9	5.3	5.0	3.8	3.0	3.2	2.7	3.3	8.9	2.7	4.3
23	2.9	3.6	2.9	4.5	3.6	4.5	3.9	4.6	4.9	6.6	7.2	9.2	16.1	24.7	27.1	15.2	16.1	9.6	3.8	3.3	3.9	4.4	3.7	3.4	27.1	2.9	7.9
24	3.1	5.5	4.3	5.3	3.2	5.1	6.1	3.6	4.9	10.9	24.3	10.9	11.2	12.0	11.0	9.8	20.2	16.1	8.8	3.5	3.4	4.6	3.8	1.9	24.3	1.9	8.1
25	2.8	2.9	2.7	2.6	2.9	2.8	2.8	6.3	8.1	13.3	26.0	33.6	21.9	27.6	30.4	39.1	10.3	9.0	6.7	25.9	17.6	6.0	4.0	4.0	39.1	2.6	12.9
26	2.4	2.7	3.2	2.8	2.8	7.8	4.9	5.1	5.1	4.6	6.9	6.6	9.4	13.1	11.2	11.3	6.9	6.0	3.6	3.0	4.0	7.3	10.3	7.1	13.1	2.4	6.2
27	3.7	11.8	9.9	3.2	2.5	2.9	3.6	3.0	3.3	5.4	5.1	5.4	5.7	4.7	4.7	4.4	5.7	7.0	5.2	4.3	7.5	5.3	3.3	5.0	11.8	2.5	5.1
28	8.9	6.5	4.6	18.3	9.9	5.0	7.3	7.1	8.4	13.0	40.7	48.9	39.6	21.3	23.2	21.0	20.3	18.6	19.2	7.5	5.7	18.8	3.9	3.3	48.9	3.3	15.9
29	3.2	3.5	2.8	2.8	4.0	3.1	3.5	5.7	7.0	7.7	7.8	8.6	8.4	9.0	10.0	9.6	10.1	6.9	5.4	4.4	4.4	4.4	3.2	3.6	10.1	2.8	5.8
30	2.6	3.1	3.1	7.4	7.8	13.9	23.2	24.1	8.8	12.9	11.2	11.6	11.1	9.1	11.5	9.1	7.3	6.5	5.2	4.9	4.8	5.2	7.3	6.5	24.1	2.6	9.1
31	4.4	8.2	7.4	18.3	14.5	7.7	7.7	5.6	6.1	7.7	4.8	7.7	9.0	6.0	7.6	6.4	7.7	5.9	8.0	7.4	6.5	15.6	17.8	12.8	18.3	4.4	8.8
Max.	**21.5**	**61.6**	**37.3**	**35.9**	**16.6**	**38.6**	**50.7**	**55.1**	**33.8**	**55.6**	**40.7**	**48.9**	**39.6**	**55.7**	**30.4**	**39.1**	**26.1**	**31.4**	**21.0**	**27.6**	**43.3**	**36.7**	**20.7**	**55.7**	**61.6**		
Min.	**2.1**	**2.7**	**2.7**	**2.6**	**2.5**	**2.8**	**2.8**	**2.7**	**2.4**	**2.6**	**3.2**	**3.4**	**3.2**	**3.1**	**3.4**	**2.8**	**3.1**	**2.7**	**3.0**	**3.0**	**2.6**	**2.3**	**2.7**	**1.9**		**1.9**	
Avg.	**6.4**	**8.4**	**7.8**	**9.6**	**6.8**	**8.1**	**9.5**	**10.0**	**8.1**	**9.4**	**8.9**	**9.9**	**8.4**	**10.0**	**8.6**	**9.6**	**7.8**	**7.0**	**6.6**	**7.5**	**7.7**	**7.3**	**6.9**	**7.9**			**8.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	23.0	4.2	63.2	4.9	5.5	5.3	7.2	12.8	12.8	11.5	15.4	14.9	15.0	27.5	17.6	16.3	24.6	22.7	10.8	5.5	4.6	3.8	6.0	43.0	63.2	3.8	15.8
2	3.1	3.6	4.1	3.0	3.7	2.1	2.8	5.3	9.5	11.6	12.4	16.3	13.1	13.3	12.2	7.0	8.8	6.5	5.7	4.4	4.2	4.3	4.8	4.4	16.3	2.1	6.9
3	3.9	6.3	4.0	3.6	5.0	4.3	6.8	4.6	5.1	5.7	6.8	8.7	9.7	7.8	11.1	9.5	10.3	8.1	6.5	6.1	4.3	3.0	2.6	3.1	11.1	2.6	6.1
4	3.0	4.0	4.5	4.8	4.2	3.9	4.0	4.0	5.7	5.7	6.5	7.6	8.4	9.2	8.9	9.2	10.0	8.2	7.0	5.0	4.6	3.5	2.7	2.6	10.0	2.6	5.7
5	2.4	3.3	3.8	3.8	2.7	3.4	3.8	4.4	6.1	9.0	20.6	21.4	23.8	28.6	26.0	33.1	20.6	23.3	20.8	21.7	21.2	7.2	4.1	3.2	33.1	2.4	13.3
6	3.8	7.0	15.0	19.1	9.8	6.9	12.3	10.5	12.4	12.5	21.5	19.8	13.3	11.7	13.4	9.2	8.8	8.4	7.5	7.1	5.8	5.9	6.2	6.5	21.5	3.8	10.6
7	6.9	6.1	4.7	4.6	5.1	5.0	5.9	5.2	5.1	5.0	6.5	5.8	5.8	6.0	6.2	5.1	5.3	4.6	4.3	4.5	4.9	5.2	4.4	4.2	6.9	4.2	5.3
8	4.2	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.8	5.0	5.6	5.4	5.3	4.9	5.0	5.1	4.8	4.7	5.0	4.9	4.3	4.4	5.6	4.2	4.8
9	4.3	4.4	4.3	4.7	5.0	5.1	4.9	5.1	5.0	5.1	5.3	5.2	5.6	5.5	5.0	5.5	5.3	5.2	6.0	4.9	5.4	5.4	4.9	4.7	6.0	4.3	5.1
10	5.0	4.9	4.8	4.7	5.2	4.8	5.1	5.2	5.3	5.8	6.1	6.4	5.7	5.6	6.1	6.0	5.8	5.0	5.3	5.1	5.1	5.1	4.9	4.9	6.4	4.7	5.3
11	4.6	4.5	4.5	4.7	4.8	4.6	4.9	4.8	4.9	5.3	5.0	4.9	5.4	5.6	5.1	5.4	5.4	5.5	4.9	4.8	4.9	4.6	5.3	4.6	5.6	4.5	5.0
12	4.4	4.5	4.8	4.3	4.5	3.8	5.1	5.6	5.0	4.8	5.9	6.5	5.9	5.3	5.6	5.6	5.6	6.8	6.2	7.0	7.5	5.4	6.1	4.8	7.5	3.8	5.5
13	4.5	4.5	3.4	4.7	2.8	4.7	6.6	6.2	7.4	6.3	9.4	12.7	16.1	12.6	12.8	15.1	13.0	10.1	8.0	8.4	21.7	7.5	10.1	5.4	21.7	2.8	8.9
14	18.0	22.2	27.5	56.1	5.0	3.6	5.6	19.7	7.6	23.5	11.0	25.9	14.8	14.5	23.4	26.2	20.5	24.6	17.1	54.0	33.4	10.8	15.0	6.5	56.1	3.6	20.3
15	6.9	3.6	3.1	3.1	4.1	3.2	4.9	5.5	7.3	6.6	10.2	12.7	22.9	13.9	17.3	16.5	29.6	11.2	7.1	6.4	6.3	13.2	10.4	7.8	29.6	3.1	9.7
16	5.1	4.8	4.5	3.4	4.0	5.3	4.1	6.3	6.2	5.3	5.6	6.2	5.4	6.1	5.2	4.5	5.6	4.3	4.9	5.5	5.2	4.0	6.4	7.7	7.7	3.4	5.2
17	8.2	6.9	5.3	3.7	7.4	3.5	5.9	7.2	6.4	7.4	10.5	12.6	13.1	9.0	9.1	9.0	8.5	7.7	6.9	6.4	6.3	6.1	6.1	6.2	13.1	3.5	7.5
18	5.6	14.4	59.8	25.9	16.4	15.3	11.8	10.1	12.0	8.7	8.2	7.1	5.5	7.6	6.7	6.4	6.0	5.7	5.3	5.2	5.2	5.6	18.4	19.6	59.8	5.2	12.2
19	22.5	13.2	5.4	6.3	5.5	6.5	10.0	14.3	43.0	29.7	17.5	22.2	28.1	18.3	21.8	28.3	37.6	14.9	13.3	9.5	5.9	8.3	15.2	6.6	43.0	5.4	16.8
20	5.1	11.5	7.6	5.9	5.4	5.3	10.0	18.8	30.1	37.6	23.4	50.2	33.8	38.6	9.9	5.0	7.7	5.8	6.3	6.6	6.1	4.8	7.7	20.7	50.2	4.8	15.2
21	5.3	4.3	5.6	18.7	7.4	25.2	18.0	18.0	14.2	10.8	10.2	15.8	26.2	46.1	20.4	22.7	11.9	23.1	43.7	16.9	7.2	3.1	2.1	3.8	46.1	2.1	15.9
22	3.1	2.9	5.3	3.8	3.9	3.2	5.1	5.6	5.6	12.2	22.8	9.6	9.8	6.3	6.0	5.9	6.1	5.8	6.2	6.0	5.1	5.9	6.5	6.1	22.8	2.9	6.6
23	5.9	5.3	4.8	5.4	5.4	4.3	4.8	4.6	4.9	5.1	6.0	8.1	7.0	10.8	10.7	8.4	7.3	8.4	7.4	6.9	5.4	6.1	3.8	6.0	10.8	3.8	6.4
24	5.4	4.1	4.9	5.0	8.9	6.8	38.1	9.6	13.9	14.8	18.1	25.0	45.3	55.7	22.6	50.3	14.3	9.1	24.0	20.3	9.1	9.2	8.6	12.8	55.7	4.1	18.2
25	13.7	4.3	4.5	3.8	8.8	27.7	16.4	10.6	28.6	22.3	24.3	24.7	26.8	16.5	15.1	13.3	13.4	9.2	8.3	5.4	6.7	6.6	5.0	4.2	28.6	3.8	13.3
26	5.5	5.2	6.0	8.4	10.3	13.0	16.5	16.2	16.0	42.9	27.5	25.3	27.1	34.9	18.3	11.3	15.1	28.5	15.5	5.7	5.0	5.5	10.2	11.1	42.9	5.0	15.9
27	11.0	34.4	11.7	47.1	8.7	6.3	4.9	6.9	11.5	22.1	63.1	44.7	50.6	22.8	20.9	17.4	11.7	11.9	10.4	7.1	4.9	5.5	10.1	10.7	63.1	4.9	19.0
28	4.9	17.5	2.7	10.0	38.7	35.4	12.1	15.1	5.6	10.8	10.7	8.7	13.9	13.1	10.5	12.3	11.2	12.2	18.9	8.6	7.0	17.2	15.7	15.8	38.7	2.7	13.7
29	15.6	12.7	7.9	10.6	8.6	14.6	9.3	17.7	9.3	10.4	13.1	11.2	12.7	12.5	8.7	8.6	8.5	6.8	6.5	5.8	6.0	6.0	6.9	7.4	17.7	5.8	9.9
30	5.8	6.7	6.9	6.4	5.1	7.0	6.4	7.1	11.2	11.6	14.3	12.5	11.5	8.5	11.6	16.8	18.1	16.6	30.7	27.6	23.4	15.3	10.0	9.3	30.7	5.1	12.5
Max.	**23.0**	**34.4**	**63.2**	**56.1**	**38.7**	**35.4**	**38.1**	**19.7**	**43.0**	**42.9**	**63.1**	**50.2**	**50.6**	**55.7**	**26.0**	**50.3**	**37.6**	**28.5**	**43.7**	**54.0**	**33.4**	**17.2**	**18.4**	**43.0**	**63.2**		
Min.	**2.4**	**2.9**	**2.7**	**3.0**	**2.7**	**2.1**	**2.8**	**4.0**	**4.7**	**4.6**	**4.8**	**4.9**	**5.4**	**5.3**	**5.0**	**4.5**	**5.0**	**4.3**	**4.3**	**4.4**	**4.2**	**3.0**	**2.1**	**2.6**		**2.1**	
Avg.	**7.4**	**7.9**	**10.0**	**9.8**	**7.2**	**8.2**	**8.6**	**9.1**	**10.7**	**12.5**	**14.1**	**15.3**	**16.3**	**16.0**	**12.4**	**13.2**	**12.0**	**10.8**	**11.0**	**9.8**	**8.2**	**6.6**	**7.5**	**8.6**			**10.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.9	15.0	13.8	8.9	12.7	23.7	32.4	21.7	44.0	51.8	47.6	43.4	55.3	19.7	24.0	32.9	20.9	11.9	9.7	8.3	5.1	6.4	5.9	17.7	55.3	5.1	22.7
2	16.4	12.1	5.3	6.3	7.8	4.6	3.1	7.0	8.8	8.0	12.3	13.9	14.2	11.4	12.3	15.5	13.8	8.6	8.1	5.5	4.9	3.9	3.7	4.2	16.4	3.1	8.8
3	3.0	3.7	5.6	5.9	4.2	4.9	4.2	9.2	5.9	8.4	12.7	12.3	21.2	22.0	27.2	24.9	46.9	10.1	7.9	25.5	13.6	10.8	36.9	12.0	46.9	3.0	14.1
4	11.5	14.6	25.9	19.3	5.2	8.3	44.3	41.7	46.6	37.0	41.9	46.2	36.2	32.6	40.6	34.5	14.1	13.1	10.3	8.2	5.8	23.5	21.6	22.2	46.6	5.2	25.2
5	15.7	21.6	9.9	10.3	11.4	21.8	10.9	9.1	10.5	8.9	13.9	28.4	52.6	32.7	42.8	16.0	29.7	11.4	26.9	26.5	10.8	14.4	35.2	48.9	52.6	8.9	21.7
6	46.9	9.8	14.3	17.4	14.1	30.5	29.5	25.8	10.3	13.8	16.8	47.5	44.0	11.3	10.8	11.9	9.7	46.2	18.7	13.2	41.4	41.3	7.8	18.4	47.5	7.8	23.0
7	12.6	6.7	8.0	6.1	4.4	5.5	4.9	5.5	5.7	6.1	5.4	5.9	6.7	5.9	6.4	5.4	5.0	6.0	8.0	6.7	6.6	7.2	12.9	6.7	12.9	4.4	6.7
8	6.1	9.5	29.8	9.7	13.5	6.6	5.4	5.4	4.3	5.3	18.3	28.7	17.4	26.5	45.3	48.2	44.0	13.9	14.1	14.9	11.1	6.4	9.7	14.8	48.2	4.3	17.0
9	9.9	5.8	5.7	4.0	3.0	4.6	4.9	6.7	14.3	27.5	26.5	13.6	12.3	11.8	10.6	13.9	8.8	7.7	6.3	5.9	8.6	8.1	5.3	5.0	27.5	3.0	9.6
10	4.9	4.4	3.9	4.0	4.4	4.3	5.0	5.5	5.5	6.2	5.1	5.7	4.4	4.3	5.0	5.5	5.5	6.2	5.1	5.7	6.4	35.8			35.8	3.9	6.5
11		5.3	5.2	5.2	5.2	5.1	7.4	6.7	5.8		7.5	6.9	6.5	5.7	5.2	6.4	5.9	18.5							18.5	5.1	6.8
12	11.2	8.3	8.3	14.6	11.2	9.4	18.7	20.6	34.9	9.7	19.7	17.5	20.4	4.8	4.1	6.5	7.8	8.7	13.8	14.1	16.9	14.3	20.5	22.3	34.9	4.1	14.1
13	24.4	16.2	8.5	5.1	17.2	9.2	14.0	5.5	3.6	4.9	3.5	3.0	3.5	7.4	19.5	49.4	14.1	7.8	6.8	10.2	6.5	5.7	5.8	5.8	49.4	3.0	10.7
14	5.7	6.4	6.4	4.1	4.6	5.3	6.5	7.8	4.8	4.4	10.5	6.0	6.4	5.6	6.0	5.1	6.8	6.3	5.8	5.9	5.8	8.1	8.9	8.5	10.5	4.1	6.3
15	8.8	7.0	8.1	7.0	7.1	5.3	4.4	6.0	5.4	6.3	5.2	4.7	4.1	5.0	9.3	16.3	4.0	7.6	9.0	11.1	11.5	10.1	9.0	11.8	16.3	4.0	7.7
16	15.6	12.5	9.8	9.5	8.2	6.0	7.0	9.9	6.8	5.4	4.8	5.0	4.1	4.5	4.4	4.8	5.2	5.5	4.5	5.3	6.0	7.4	5.4	6.9	15.6	4.1	6.9
17	6.1	6.1	5.9	6.8	8.1	6.7	7.6	6.8	7.0	5.2	4.8	4.5	4.2	4.2	3.9	4.3	4.2	4.5	4.8	5.5	5.6	5.7	6.6	5.1	8.1	3.9	5.6
18	4.7	4.7	4.6	5.2	4.8	5.3	5.5	5.7	5.1	4.0	3.6	4.2	4.9	4.7	4.4	4.5	4.3	4.8	5.0	5.1	5.5	6.2	5.7	5.9	6.2	3.6	4.9
19	5.1	5.5	5.0	5.0	4.5	5.2	4.6	4.7	4.5	5.0	5.2	5.7	6.0	9.8	5.5	6.4	6.2	9.8	8.9	12.8	9.0	8.4	14.0	9.2	14.0	4.5	6.9
20	14.4	10.5	8.6	11.0	6.3	7.4	6.9	24.4	10.0	5.5	5.1	7.1	19.8	9.6	4.0	5.0	7.5	7.6	11.2	15.0	11.4	9.0	12.8	10.9	24.4	4.0	10.0
21	22.3	11.5	8.5	15.7	6.2	13.5	12.0	6.6	5.6	7.0	10.5	8.5	10.4	28.5	26.5	26.4	10.4	20.9	23.0	48.1	53.3	30.7	33.3	8.5	53.3	5.6	18.7
22	9.5	5.8	6.3	5.1	6.9	8.9	6.9	8.4	4.3	8.0	7.2	36.6	35.5	5.6	4.8	10.6	19.9	8.3	9.6	9.8	11.5	10.0	9.5	9.0	36.6	4.3	10.7
23	5.8	6.3	6.1	8.5	6.4	4.7	5.3	10.2	8.1	5.9	5.4	5.5	5.7	4.5	5.2	6.0	8.3	7.2	8.1	7.5	16.3	36.2	7.9	10.9	36.2	4.5	8.4
24	9.3	6.6	9.9	8.6	5.0	5.3	9.0	7.3	5.5	16.2	12.8	7.7	6.1	5.4	5.5	5.0	4.6	5.6	8.3	13.1	6.8	7.9	5.0	5.3	16.2	4.6	7.6
25	6.4	11.0	5.3	6.4	7.0	4.4	4.0	4.1	4.6	4.1	3.9	3.9	5.4	5.5	4.4	4.1	7.5	6.1	6.3	5.1	5.7	6.4	8.0	10.2	11.0	3.9	5.8
26	10.6	9.5	9.3	8.6	7.2	8.6	5.7	8.8	10.3	24.9	9.1	10.3	14.8	13.8	21.1	48.9	14.9	30.2	7.0	7.3	8.5	8.4	8.3	8.8	48.9	5.7	13.1
27	9.8	7.3	5.2	5.6	5.4	4.7	4.5	4.2	3.7	3.8	3.6	3.8	5.4	23.2	23.1	16.0	17.0	22.5	24.9	37.4	20.1	25.8	31.4	42.9	42.9	3.6	14.6
28	27.0	19.4	13.6	21.3	26.7	15.8	14.9	39.2	33.1	10.1	13.5	12.2	10.7	14.7	43.7	15.9	12.4	11.4	10.2	8.1	10.8	7.7	6.1	8.6	43.7	6.1	17.0
29	6.7	9.8	9.6	6.1	10.6	6.9	14.3	15.1	5.4	7.0	6.3	5.8	4.5	4.2	4.0	4.7	6.0	7.3	5.8	6.7	8.8	5.8	7.1	7.1	15.1	4.0	7.3
30	9.7	6.8	5.6	6.2	7.7	5.6	5.2	5.3	5.4	6.5	5.1	5.5	4.0	6.1	5.5	12.2	37.5	18.1	20.0	13.8	5.3	5.6	5.9	6.2	37.5	4.0	8.9
31	5.5	4.9	6.5	4.5	4.5	3.0	2.6	2.9	3.3	3.3	3.4	4.2	4.9	4.3	5.3	5.5	7.2	6.7	5.5	6.8	7.0	7.2	7.4	5.3	7.4	2.6	5.1
Max.	**46.9**	**21.6**	**29.8**	**21.3**	**26.7**	**30.5**	**44.3**	**41.7**	**46.6**	**51.8**	**47.6**	**47.5**	**55.3**	**32.7**	**45.3**	**49.4**	**46.9**	**46.2**	**26.9**	**48.1**	**53.3**	**41.3**	**36.9**	**48.9**	**55.3**		
Min.	**3.0**	**3.7**	**3.9**	**4.0**	**3.0**	**3.0**	**2.6**	**2.9**	**3.3**	**3.3**	**3.4**	**3.0**	**3.5**	**4.2**	**3.9**	**4.1**	**4.0**	**4.5**	**4.5**	**5.1**	**4.9**	**3.9**	**3.7**	**4.2**		**2.6**	
Avg.	**11.9**	**9.2**	**9.0**	**8.5**	**8.1**	**8.4**	**10.0**	**11.2**	**10.8**	**10.7**	**11.3**	**13.4**	**14.6**	**11.5**	**14.2**	**15.2**	**13.2**	**11.6**	**10.4**	**12.3**	**11.5**	**12.8**	**12.3**	**12.4**			**11.4**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.0	5.9	7.6	9.8	6.0	13.3	12.0	13.9	11.9	6.8	7.4	7.1	6.9	7.6	6.8	8.1	6.2	6.0	6.3	5.0	4.9	4.8	4.6	5.6	13.9	4.6	7.6
2	6.5	6.6	5.1	4.7	4.6	7.5	6.5	8.4	7.4	6.1	8.3	8.6	10.1	9.9	10.3	8.6	4.8	4.6	4.8	4.7	4.4	4.2	4.1	4.2	10.3	4.1	6.5
3	4.4	4.3	4.6	4.1	5.1	4.6	5.3	5.8	5.1	6.2	5.9	6.8	6.6	5.8	5.5	5.9	5.3	7.0	8.1	6.8	6.0	3.9	4.3	3.1	8.1	3.1	5.4
4	5.9	5.0	12.3	5.6	5.1	7.7	3.7	4.2	6.9	6.7	11.9	10.8	17.8	14.6	41.1	10.2	37.8	11.1	6.8	6.7	7.8	12.3	7.8	14.5	41.1	3.7	11.4
5	16.0	13.0	25.4	9.0	4.5	4.6	4.8	4.4	6.5	5.8	6.5	6.3	5.5	6.4	5.6	6.8	7.8	9.1	8.8	7.4	4.0	3.5	4.3	7.6	25.4	3.5	7.7
6	6.4	6.5	5.1	4.1	3.4	2.6	2.6	2.8	3.8	7.1	9.9	11.5	13.1	9.0	8.0	10.2	9.2	8.4	7.2	4.4	4.5	4.3	3.2	3.1	13.1	2.6	6.3
7	2.7	3.3	3.1	3.4	3.4	3.4	3.7	2.6	5.7	6.5	7.7	15.4	17.5	11.5	7.7	7.8	6.9	5.4	4.9	10.9	24.7	36.0	26.3	27.6	36.0	2.6	10.3
8	26.1	11.4	18.6	17.8	15.1	44.1	40.5	7.5	7.4	6.7	11.3	12.1	12.6	15.4	14.1	13.5	15.1	10.9	8.2	6.7	7.2	6.8	30.8	31.4	44.1	6.7	16.3
9	37.5	18.2	19.9	12.9	40.7	12.5	7.5	13.8	19.0	17.0	13.9	17.1	8.5	12.1	15.3	14.4	10.9	6.8	6.2	7.4	8.6	5.6	5.0	5.2	40.7	5.0	14.0
10	4.7	4.5	5.4	6.2	6.4	5.4	6.3	6.9	6.9	7.8	7.0	5.7	5.3	4.4	5.0	4.7	4.3	4.8	4.5	4.6	4.4	4.6	4.7	5.0	7.8	4.3	5.4
11	5.0	5.7	6.1	5.4	4.9	5.4	5.5	5.9	5.6	6.0	5.4	6.0	7.7	9.3	9.5	7.0	6.8	8.2	7.5	7.6	5.7	6.1	11.2	3.7	11.2	3.7	6.5
12	2.7	3.1	3.8	2.4	2.8	3.1	3.1	3.7	4.0	4.3	5.9	4.4	5.2	9.3	8.7	6.2	6.6	6.0	7.1	3.8	3.5	3.5	3.1	3.5	9.3	2.4	4.6
13	9.3	4.6	31.7	18.9	6.2	4.2	8.7	10.2	7.9	6.2	5.3	5.0	4.7	5.4	7.3	9.1	10.4	6.5	9.1	4.6	8.5	5.7	5.5	6.0	31.7	4.2	8.4
14	10.8	13.6	6.1	19.5	31.7	10.9	10.3	6.7	5.9	4.4	5.2	6.4	5.3	4.5	4.6	4.4	5.3	8.6	15.3	6.6	5.0	5.2	4.7	5.1	31.7	4.4	8.6
15	4.8	4.3	4.3	4.1	5.7	5.2	5.8	4.1	4.8	5.0	4.6	7.2	5.0	5.5	5.7	8.3	5.8	7.0	5.5	4.1	5.0	5.7	5.0	4.8	8.3	4.1	5.3
16	38.1	22.2	11.9	5.2	5.4	2.8	5.6	6.3	6.6	7.6	12.3	15.5	10.6	12.4	30.4	13.4	55.4	9.6	16.4	10.4	10.6	21.8	40.1	43.8	55.4	2.8	17.3
17	18.4	17.8	19.8	39.5	17.9	23.3	42.1	43.5	16.5	8.3	15.4	13.9	14.2	8.8	12.3	5.1	7.8	5.4	6.6	5.9	5.0	4.5	4.7	6.6	43.5	4.5	15.1
18	6.4	7.7	5.0	5.2	4.8	4.3	4.8	5.3	4.8	5.4	4.9	5.6	6.4	6.1	6.7	5.2	4.1	4.1	4.6	6.5	4.8	5.8	5.4	7.7	7.7	4.1	5.5
19	3.8	3.8	4.2	3.3	2.6	6.8	10.7	26.2	39.9	23.8	44.5	15.8	6.8	7.6	8.3	10.0	8.2	5.5	6.6	5.4	18.9	7.6	9.6	5.4	44.5	2.6	11.9
20	6.1	5.0	3.8	7.5	9.8	24.3	7.7	7.5	4.5	4.5	5.8	11.4	9.7	8.8	9.1	12.6	9.2	8.5	5.5	3.6	3.1	4.8	5.0	5.8	24.3	3.1	7.6
21	3.9	4.7	6.6	3.2	5.1	6.7	3.0	5.6	9.3	49.3	11.9	11.3	20.5	15.6	9.5	10.5	8.2	4.8	3.7	4.5	5.4	4.5	5.2	8.0	49.3	3.0	9.2
22	8.9	9.2	6.3	6.0	6.4	6.6	6.6	6.2	6.4	5.9	6.7	6.2	5.3	9.4	6.1	4.4	4.6	4.6	4.5	5.0	3.8	5.6	4.9	9.8	9.8	3.8	6.2
23	7.3	5.0	33.7	9.3	6.0	7.7	36.9	21.9	17.1	10.7	19.1	31.2	13.7	32.2	18.8	17.0	25.0	17.0	6.0	3.2	3.8	5.1	8.4	7.1	36.9	3.2	15.1
24	11.3	5.8	4.1	4.3	3.8	4.2	4.5	5.5	4.8	13.7	8.8	9.7	7.7	5.8	4.7	5.0	4.6	5.0	5.5	4.3	4.6	3.7	3.0	3.7	13.7	3.0	5.8
25	3.3	3.4	2.9	3.9	3.7	5.4	4.8	3.1	8.8	16.1	15.1	13.6	11.6	12.7	15.5	13.7	9.4	16.2	7.3	5.7	3.4	6.2	15.4	9.6	16.2	2.9	8.8
26	14.7	10.1	16.6	20.3	5.0	8.5	5.4	15.6	12.1	6.5	7.1	7.7	7.0	20.8	22.7	14.4	11.3	17.6	11.4	17.7	5.4	12.7	4.4	8.1	22.7	4.4	11.8
27	6.4	5.8	5.5	6.5	3.9	5.7	53.7	17.6	13.0	9.1	13.7	15.7	16.3	15.5	15.1	8.5	11.3	6.2	5.1	3.6	3.9	3.0	4.5	4.7	53.7	3.0	10.6
28	4.1	7.2	5.6	15.2	49.5	50.9	12.6	38.1	11.2	7.6	8.1	12.2	14.1	17.9	12.3	10.7	5.3	7.2	15.1	4.3	10.5	5.7	5.4	4.5	50.9	4.1	14.0
29	5.8	5.2	6.5	3.5	7.7	3.4	2.9	6.1	6.1	5.2	9.2	13.5	13.1	39.4	43.9	19.9	19.7	13.6	7.2	4.7	3.4	5.1	4.8	5.8	43.9	2.9	10.7
30	7.1	6.7	5.0	4.9	4.6	4.5	4.5	4.4	4.3	3.8	4.6	5.0	6.2	7.4	7.6	6.3	12.8	10.8	7.4	6.0	6.6	7.3	5.5	4.7	12.8	3.8	6.2
31	15.4	7.5	3.7	5.0	4.8	4.8	6.0	3.3	3.7	3.6	6.2	6.8	6.3	6.1	4.7	4.9	5.3	4.5	4.7	4.9	8.8	4.1	4.2	3.1	15.4	3.1	5.5
Max.	**38.1**	**22.2**	**33.7**	**39.5**	**49.5**	**50.9**	**53.7**	**43.5**	**39.9**	**49.3**	**44.5**	**31.2**	**20.5**	**39.4**	**43.9**	**19.9**	**55.4**	**17.6**	**16.4**	**17.7**	**24.7**	**36.0**	**40.1**	**43.8**	**55.4**		
Min.	**2.7**	**3.1**	**2.9**	**2.4**	**2.6**	**2.6**	**2.6**	**2.6**	**3.7**	**3.6**	**4.6**	**4.4**	**4.7**	**4.4**	**4.6**	**4.4**	**4.1**	**4.1**	**3.7**	**3.2**	**3.1**	**3.0**	**3.0**	**3.1**		**2.4**	
Avg.	**10.0**	**7.6**	**9.7**	**8.7**	**9.2**	**9.8**	**10.9**	**10.2**	**9.0**	**9.1**	**10.0**	**10.5**	**9.7**	**11.5**	**12.4**	**9.3**	**11.1**	**8.1**	**7.4**	**6.0**	**6.7**	**7.1**	**8.2**	**8.7**			**9.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.2	3.1	4.2	3.8	3.8	4.3	3.3	3.7	6.6	5.2	5.7	9.6	7.6	9.4	12.8	7.3	8.3	4.7	3.7	4.2	3.3	3.4	4.6	3.4	12.8	3.1	5.4
2	5.2	4.2	2.7	3.3	5.6	5.6	3.5	2.7	4.1	7.7	6.1	5.1	6.3	7.5	9.6	10.3	9.3	13.0	9.3	12.8	24.6	28.5	16.8	25.7	28.5	2.7	9.6
3	31.0	12.6	17.7	43.2	7.0	6.2	3.2	3.5	3.8	6.7	11.3	32.6	36.5	47.8	20.2	16.9	17.8	29.5	59.0	34.9	44.9	20.6	15.0	20.7	59.0	3.2	22.6
4	29.9	34.9	13.8	1.9	4.5	4.6	5.7	6.1	5.2	6.6	9.4	11.3	19.2	32.3	34.7	23.7	39.0	27.8	19.4	18.3	6.0	9.4	6.6	7.4	39.0	1.9	15.7
5	9.6	6.0	4.7	4.6	5.2	6.0	6.1	4.7	5.4	5.8	6.1	7.3	5.7	6.9	6.3	7.5	6.3	6.1	5.8	5.0	5.0	6.4	14.5	15.1	15.1	4.6	6.8
6	15.1	8.6	3.9	3.5	4.0	3.2	2.7	3.8	4.0	5.4	7.6	8.5	9.5	9.9	12.0	11.3	10.6	5.6	3.7	8.9	5.2	4.5	4.5	4.5	15.1	2.7	6.7
7	4.5	20.0	15.8	9.0	7.3	9.5	5.3	21.3	6.0	4.9	4.5	4.6	4.7	4.8	4.5	5.0	4.8	5.4	5.5	5.1	4.7	4.7	4.9	4.7	21.3	4.5	7.2
8	4.9	5.2	5.0	4.9	4.9	4.5	4.6	4.6	4.7	4.5	4.6	4.4	4.5	4.7	4.4	4.3	4.8	4.6	4.6	4.7	4.6	4.5	4.3	5.7	5.7	4.3	4.7
9	5.7	4.1	4.3	6.2	40.0	20.0	7.6	29.6	12.5	9.7	10.0	11.8	18.4	10.8	8.0	7.1	6.6	7.0	5.5	5.4	5.3	6.7	6.6	3.2	40.0	3.2	10.5
10	6.7	5.1	25.3	20.3	8.1	7.0	54.2	53.6	19.9	15.1	10.1	44.8	27.6	34.8	12.5	26.9	14.4	7.7	40.1	19.8	11.5	16.7	34.2	44.2	54.2	5.1	23.4
11	38.7	8.7	43.8	18.2	55.7	4.5	3.2	1.8	3.2	7.3	10.9	12.4	17.6	20.4	27.8	29.7	18.2	13.3	14.4	2.5	5.3	22.7	5.2	2.9	55.7	1.8	16.2
12	2.7	4.1	4.2	3.6	3.4	4.8	2.2	3.6	3.7	5.7	7.6	10.8	20.0	21.7	28.8	22.1	14.3	13.8	5.0	3.3	4.6	3.8	3.9	3.3	28.8	2.2	8.4
13	3.7	3.3	3.4	2.9	4.1	4.4	34.1	7.7	12.0	7.6	8.6	6.4	8.1	6.3	5.9	5.0	5.2	4.9	4.5	4.6	4.7	4.7	4.8	5.2	34.1	2.9	6.8
14	4.7	4.8	4.6	4.5	4.9	4.6	4.9	4.6	5.0	5.2	5.0	4.9	5.1	4.8	4.6	4.8	5.0	4.9	4.8	4.9	4.7	5.1	5.0	4.6	5.2	4.5	4.8
15	4.4	5.1	5.0	4.6	4.5	4.8	4.9	4.9	5.1	4.7	4.8	4.6	4.8	4.8	4.6	4.9	5.0	4.6	4.9	4.4	4.5	4.5	5.0	4.4	5.1	4.4	4.7
16	4.6	5.0	5.4	5.6	5.5	4.4	4.0	4.1	4.5	4.8	5.0	6.1	6.6	6.7	6.9	7.2	7.1	6.4	5.6	4.8	3.9	3.6	4.4	5.1	7.2	3.6	5.3
17	7.4	3.5	4.6	3.7	4.8	4.5	4.3	4.4	4.8	5.7	6.3	6.3	6.3	5.9	8.0	7.9	7.5	7.9	4.9	3.9	5.1	5.0	2.7	3.2	8.0	2.7	5.4
18	4.3	5.5	9.9	10.1	9.2	11.5	6.8	4.2	4.3	4.7	5.3	5.5	4.8	4.8	5.2	5.4	4.3	4.5	4.3	4.3	4.4	4.2	4.6	5.1	11.5	4.2	5.7
19	4.8	4.7	9.3	9.0	7.2	11.5	14.8	6.2	6.7	5.5	12.6	16.8	12.1	6.6	17.0	16.3	27.6	22.9	8.8	7.9	19.5	12.6	6.4	9.4	27.6	4.7	11.5
20	4.2	4.2	4.6	4.3	2.4	3.1	5.5	4.1	5.2	3.7	6.0	6.5	7.6	8.1	7.6	14.1	13.5	6.6	9.3	4.8	4.9	4.7	10.5	13.9	14.1	2.4	6.6
21	14.1	26.9	27.7	8.8	9.8	6.5	6.5	5.6	5.1	5.1	4.5	4.8	4.8	5.5	7.4	11.4	9.9	8.7	6.4	13.2	8.1	10.0	10.3	7.9	27.7	4.5	9.5
22	3.2	5.6	5.3	4.6	3.8	2.9	3.1	4.0	4.3	4.1	4.3	9.3	6.9	5.4	7.0	5.2	5.7	7.2	5.3	6.1	4.8	4.8	4.9	4.9	9.3	2.9	5.1
23	4.3	5.6	5.3	6.3	6.0	7.3	7.3	5.7	7.0	5.1	5.6	6.0	6.8	7.0	8.0	6.6	8.4	8.9	10.6	7.4	3.4	5.5	6.0	5.2	10.6	3.4	6.5
24	6.0	10.9	8.8	17.9	3.6	12.1	15.7	9.7	15.6	45.1	15.2	19.6	6.6	14.7	6.9	12.0	8.8	7.0	2.7	2.0	1.9	3.0	3.5	3.2	45.1	1.9	10.5
25	5.5	4.3	5.3	3.8	3.4	3.7	4.7	5.2	6.2	7.3	6.2	32.7	21.5	10.7	9.9	5.8	5.9	4.5	4.7	4.5	4.1	4.6	11.3	12.7	32.7	3.4	7.9
26	10.8	12.2	28.7	12.1	13.2	4.8	9.4	14.8	12.3	11.0	14.0	9.4	8.8	10.3	14.4	40.3	45.4	17.6	14.8	23.9	20.9	6.3	4.5	8.1	45.4	4.5	15.3
27	12.6	8.7	13.0	6.3	9.3	5.6	10.3	3.3	8.6	7.1	23.5	26.6	21.6	23.8	12.1	9.6	5.4	28.5	16.0	33.2	11.9	20.9	49.0	22.0	49.0	3.3	16.2
28	7.1	8.4	8.7	7.1	5.9	6.6	3.5	6.6	5.7	4.6	6.3	6.3	4.8	4.9	4.8	6.1	4.8	4.5	3.3	2.8	2.5	2.4	3.6	3.1	8.7	2.4	5.2
29	2.6	5.5	31.5	26.3	14.0	5.3	6.9	3.0	2.9	3.4	5.4	5.3	6.4	5.8	6.5	6.1	4.3	3.3	5.2	3.2	2.9	3.3	4.9	7.4	31.5	2.6	7.1
30	5.6	4.5	8.5	26.1	37.0	9.1	5.5	7.0	4.7	6.6	8.2	13.3	10.9	7.7	6.2	5.7	5.8	6.1	6.2	5.1	4.8	5.0	5.0	4.6	37.0	4.5	8.7
Max.	**38.7**	**34.9**	**43.8**	**43.2**	**55.7**	**20.0**	**54.2**	**53.6**	**19.9**	**45.1**	**23.5**	**44.8**	**36.5**	**47.8**	**34.7**	**40.3**	**45.4**	**29.5**	**59.0**	**34.9**	**44.9**	**28.5**	**49.0**	**44.2**	**59.0**		
Min.	**2.6**	**3.1**	**2.7**	**1.9**	**2.4**	**2.9**	**2.2**	**1.8**	**2.9**	**3.4**	**4.3**	**4.4**	**4.5**	**4.7**	**4.4**	**4.3**	**4.3**	**3.3**	**2.7**	**2.0**	**1.9**	**2.4**	**2.7**	**2.9**		**1.8**	
Avg.	**8.9**	**8.2**	**11.2**	**9.5**	**9.9**	**6.4**	**8.5**	**8.1**	**6.6**	**7.5**	**8.0**	**11.8**	**11.1**	**11.8**	**10.8**	**11.6**	**11.1**	**9.9**	**9.9**	**8.9**	**8.1**	**8.1**	**8.9**	**9.0**			**9.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	4.3	4.2	4.4	4.6	4.6	4.7	4.9	5.0	4.7	4.8	5.0	5.4	5.5	5.1	4.9	4.5	4.3	4.4	4.2	4.2	4.3	4.2	4.1	5.5	4.1	4.6
2	4.3	4.1	4.2	4.2	4.0	4.3	4.2	4.4	4.4	4.4	4.8	4.6	5.8	4.6	4.5	4.7	4.6	4.8	4.2	4.4	4.4	4.5	4.7	4.5	5.8	4.0	4.5
3	4.5	4.9	4.7	4.4	5.0	4.6	4.9	5.1	5.3	5.7	5.6	5.8	5.9	5.9	6.7	6.2	8.2	5.4	8.5	5.7	6.7	6.1	7.4	7.8	8.5	4.4	5.9
4	6.9	7.1	5.7	5.5	6.4	6.4	6.3	6.7	5.3	5.6	6.8	5.2	6.5	7.0	11.1	12.3	9.8	25.2	13.9	13.6	15.1	7.6	7.9	4.8	25.2	4.8	8.7
5	7.3	14.5	12.8	19.6	34.7	15.8	4.0	3.5	4.4	8.9	4.2	5.5	10.3	10.8	29.1	17.2	12.0	9.1	7.6	5.6	4.3	5.0	5.5	22.2	34.7	3.5	11.4
6	10.9	12.3	5.9	4.2	6.3	4.7	4.1	4.6	4.4	4.6	6.7	7.0	6.6	7.4	5.1	5.2	5.1	5.0	5.3	4.6	4.3	4.2	4.1	4.0	12.3	4.0	5.7
7	4.1	4.0	4.1	4.2	4.2	4.0	4.2	4.3	4.2	4.5	4.3	4.5	4.3	4.6	4.3	4.4	4.5	4.6	4.4	4.2	4.2	4.4	4.8	4.8	4.8	4.0	4.3
8	4.8	4.9	4.8	4.5	4.7	4.6	4.3	4.4	4.6	5.0	4.5	4.5	4.8	4.6	4.8	4.8	4.9	4.9	4.7	4.9	4.7	4.6	4.4	4.8	5.0	4.3	4.7
9	4.9	4.9	4.8	4.8	4.6	4.8	4.7	5.0	4.9	5.1	5.1	4.9	4.9	4.8	5.0	5.2	4.8	4.8	12.5	8.4	5.9	6.1	9.2	8.8	12.5	4.6	5.8
10	22.2	13.4	17.9	5.8	7.4	7.2	5.6	5.1	8.1	8.4	8.6	8.6	5.6	5.5	5.7	5.2	5.6	6.3	6.1	6.5	5.7	6.5	7.2	6.0	22.2	5.1	7.9
11	7.1	6.4	7.5	6.6	7.1	6.2	6.7	8.2	7.7	7.3	11.5	6.5	6.0	8.3	7.6	10.3	6.7	5.5	9.5	12.2	7.2	13.1	8.0	8.2	13.1	5.5	8.0
12	5.7	5.7	17.7	38.2	44.9	5.5	6.6	4.2	7.4	6.2	6.1	11.2	10.1	11.1	5.0	5.5	4.4	4.2	5.5	12.0	5.3	8.6	5.8	6.3	44.9	4.2	10.1
13	11.3	6.5	6.7	27.7	15.0	16.6	42.5	39.0	31.9	29.2	33.1	9.9	7.7	8.2	10.2	10.1	5.1	5.1	2.5	5.5	2.6	8.1	4.6	4.3	42.5	2.5	14.3
14	6.6	11.1	8.1	6.1	4.3	2.3	4.1	3.8	4.2	5.8	12.8	8.1	12.2	9.3	10.5	6.4	5.1	14.7	11.9	7.7	4.2	3.4	4.4	3.0	14.7	2.3	7.1
15	6.0	22.9	36.5	4.4	7.6	8.3	6.9	5.9	5.8	4.7	4.9	4.8	5.0	7.5	6.6	4.7	4.8	4.9	4.3	5.8	6.6	5.1	5.2	5.1	36.5	4.3	7.7
16	7.8	7.3	5.7	5.9	6.7	5.5	4.8	7.2	7.8	5.4	5.5	6.9	8.6	7.8	6.5	4.5	4.6	4.9	4.7	4.6	4.5	4.1	4.1	4.7	8.6	4.1	5.8
17	5.0	4.9	4.7	4.4	4.5	3.6	4.2	4.1	3.7	4.4	5.7	6.1	7.0	6.4	7.2	6.0	5.7	4.0	4.8	4.7	4.0	4.4	4.9	4.4	7.2	3.6	4.9
18	4.3	4.1	4.6	4.2	4.2	4.1	4.6	4.6	4.6	4.7	5.2	8.3	17.3	13.8	41.8	11.4	8.3	5.2	3.1	3.7	6.2	12.2	5.9	4.8	41.8	3.1	8.0
19	5.1	6.6	12.6	10.9	13.6	20.5	15.4	10.5	10.1	7.7	8.1	5.7	5.6	10.7	6.8	5.5	7.5	22.1	17.0	20.3	16.2	17.1	12.2	12.3	22.1	5.1	11.7
20	5.5	8.0	8.0	7.3	7.5	6.2	16.2	20.5	15.8	22.3	19.1	13.7	9.3	8.4	8.8	7.2	8.0	11.1	4.9	9.4	42.2	25.9	43.0	9.8	43.0	4.9	14.1
21	16.0	15.8	5.9	3.0	3.1	2.3	2.7	1.9	1.9	3.7	3.1	3.6	4.8	6.9	7.6	6.5	4.8	8.9	7.0	7.5	8.2	11.4	10.5	6.3	16.0	1.9	6.4
22	4.7	4.7	5.9	2.6	3.3	4.2	3.1	2.7	2.5	2.1	4.9	8.4	27.0	33.6	28.2	9.2	3.9	4.5	2.5	3.2	4.1	2.4	3.5	3.4	33.6	2.1	7.3
23	3.5	2.4	2.4	3.1	2.8	3.7	4.1	2.4	3.4	4.0	4.9	5.1	4.8	4.6	5.4	7.7	6.6	6.9	10.1	35.8	15.2	7.9	9.1	7.4	35.8	2.4	6.8
24	6.0	6.3	5.3	7.6	5.1	4.6	6.9	5.9	6.4	15.0	10.0	10.4	13.0	6.9	6.9	7.4	5.1	3.1	2.8	4.9	2.6	2.7	2.3	2.6	15.0	2.3	6.2
25	3.1	2.6	2.7	2.7	3.3	2.5	2.5	2.6	3.0	2.7	3.1	3.0	3.2	3.7	3.0	3.0	2.9	3.0	2.6	2.6	2.6	3.0	3.0	2.9	3.7	2.5	2.9
26	3.0	2.8	2.9	2.9	3.1	3.1	3.6	3.8	3.2	3.1	3.8	4.0	3.8	3.9	3.5	2.8	2.7	4.2	3.3	3.4	4.1	3.2	3.6	2.9	4.2	2.7	3.4
27	2.4	3.8	2.8	3.1	3.6	3.6	3.3	2.7	3.2	3.1	1.7	2.7	4.6	5.1	3.3	2.9	2.3	7.5	5.8	9.9	46.5	39.1	17.6	33.3	46.5	1.7	8.9
28	42.5	11.4	6.4	10.2	6.0	6.8	7.4	8.7	8.8	11.1	12.0	9.2	7.8	6.6	4.8	4.7	5.0	4.9	4.8	4.9	4.4	4.2	5.0	6.3	42.5	4.2	8.5
29	8.1	6.1	5.7	6.5	6.6	7.5	5.4	5.3	4.3	4.1	5.6	8.4	9.3	10.2	16.3	7.8	5.3	4.8	4.8	4.0	4.2	3.9	4.5	5.3	16.3	3.9	6.4
30	4.5	4.4	7.4	9.4	19.9	48.3	0.1	0.8	0.4	0.0	0.1	15.3	2.8	4.6	4.4	3.8	2.6	2.7	1.9	2.0	3.6	4.6	2.7	3.4	48.3	0.0	6.2
31	3.8	2.4	3.1	2.7	2.9	2.9	2.9	4.3	3.8	3.2	2.5	2.8	3.3	3.3	3.5	3.9	4.1	3.5	4.5	3.3	3.5	2.7	2.7	3.0	4.5	2.4	3.3
Max.	**42.5**	**22.9**	**36.5**	**38.2**	**44.9**	**48.3**	**42.5**	**39.0**	**31.9**	**29.2**	**33.1**	**15.3**	**27.0**	**33.6**	**41.8**	**17.2**	**12.0**	**25.2**	**17.0**	**35.8**	**46.5**	**39.1**	**43.0**	**33.3**	**48.3**		
Min.	**2.4**	**2.4**	**2.4**	**2.6**	**2.8**	**2.3**	**0.1**	**0.8**	**0.4**	**0.0**	**0.1**	**2.7**	**2.8**	**3.3**	**3.0**	**2.8**	**2.3**	**2.7**	**1.9**	**2.0**	**2.6**	**2.4**	**2.3**	**2.6**		**0.0**	
Avg.	**7.6**	**7.1**	**7.5**	**7.5**	**8.3**	**7.4**	**6.5**	**6.4**	**6.1**	**6.7**	**7.1**	**6.8**	**7.5**	**7.8**	**9.0**	**6.5**	**5.5**	**6.8**	**6.1**	**7.4**	**8.3**	**7.8**	**7.2**	**6.8**			**7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.8	2.7	2.8	3.0	3.4	3.5	5.1	3.2	3.0	2.8	3.1	2.9	4.1	4.2	5.3	5.8	5.3	6.6	4.8	4.7	4.3	4.0	4.0	4.8	6.6	2.7	4.0
2	5.0	3.1	4.2	2.9	2.4	2.6	3.4	2.9	3.3	5.8	4.1	3.6	3.2	6.2	5.2	4.9	3.5	4.1	8.3	10.4	3.1	4.7	5.6	5.7	10.4	2.4	4.5
3	4.5	4.7	5.5	5.8	3.9	4.1	5.8	3.3	3.4	2.9	2.6	3.8	3.3	2.7	6.3	6.3	5.9	7.0	6.9	5.0	3.3	5.0	3.7	5.7	7.0	2.6	4.6
4	3.5	2.9	4.3	3.2	3.3	4.4	3.5	4.3	6.2	5.6	6.7	3.7	3.2	4.4	3.2	4.3	2.2	5.7	3.3	2.8	9.8	30.3	4.1	5.6	30.3	2.2	5.4
5	8.3	6.6	9.1	6.0	7.2	18.6	52.5	9.5	7.2	6.5	5.9	7.0	2.0	4.4	4.1	2.2	2.1	2.3	1.8	2.6	2.3	2.6	3.6	3.3	52.5	1.8	7.4
6	3.3	4.0	2.8	3.8	3.9	3.3	2.4	2.7	3.5	2.9	3.5	3.8	3.8	3.9	4.1	3.5	2.9	4.5	4.4	5.9	5.4	3.5	3.2	2.8	5.9	2.4	3.7
7	2.9	3.5	4.1	3.6	3.5	4.1	4.2	4.8	4.1	3.6	4.1	4.1	4.2	3.7	3.1	3.4	3.6	3.6	3.8	3.2	4.3	3.8	4.2	3.0	4.8	2.9	3.8
8	3.4	3.2	3.3	2.3	1.9	2.5	3.7	3.2	4.3	3.1	5.9	4.4	3.3	4.1	3.5	3.5	3.7	4.3	3.2	3.5	2.9	2.8	2.8	2.4	5.9	1.9	3.4
9	3.0	2.9	2.2	2.6	4.5	5.3	4.6	3.4	3.2	4.1	3.8	5.6	5.7	3.4	3.4	3.2	2.3	3.1	3.1	2.9	4.1	4.2	5.1	3.8	5.7	2.2	3.7
10	3.6	3.4	3.9	5.2	5.4	3.8	2.6	2.5	2.2	2.2	2.1	2.5	2.5	3.1	3.5	3.8	2.2	3.3	3.7	4.8	14.8	5.4	5.2	5.3	14.8	2.1	4.1
11	6.5	4.6	4.3	4.3	7.5	3.9	3.3	4.5	7.1	7.2	8.4	3.6	4.1	3.3	4.4	3.3	5.7	5.2	3.7	2.8	3.6	4.8	2.9	2.8	8.4	2.8	4.7
12	2.6	2.6	3.5	5.7	3.0	2.9	3.7	5.5	6.4	10.4	6.0	4.0	4.9	3.6	3.5	2.7	4.5	4.0	4.9	2.7	3.4	3.0	2.3	2.4	10.4	2.3	4.1
13	2.2	2.2	2.6	2.5	2.9	3.9	3.9	3.2	3.2	3.1	3.3	3.2	3.1	3.3	3.0	2.9	2.9	2.8	2.6	2.7	2.8	2.5	3.2	3.1	3.9	2.2	3.0
14	3.8	2.9	3.6	5.5	4.2	3.9	4.2	2.4	2.5	2.6	3.0	5.8	3.3	3.5	3.4	3.5	3.1	3.3	3.7	3.7	3.5	3.6	6.5	5.0	6.5	2.4	3.8
15	3.7	3.9	3.6	4.7	4.0	5.2	4.9	4.0	2.8	3.0	4.3	3.4	3.2	3.8	3.9	3.2	4.0	4.7	3.2	2.8	3.1	3.0	2.8	3.1	5.2	2.8	3.7
16	3.8	3.8	2.7	2.6	3.3	3.5	3.4	2.8	3.3	2.8	3.0	3.5	3.9	4.3	4.8	3.0	4.1	3.7	5.0	3.5	3.2	3.6	3.4	5.0	5.0	2.6	3.6
17	10.5	5.7	3.6	5.9	3.5	3.5	4.0	2.7	7.8	4.0	7.1	6.3	6.7	6.2	5.5	6.5	7.1	3.8	4.7	5.0	7.5	4.4	6.6	5.5	10.5	2.7	5.6
18	4.4	3.3	4.2	5.0	5.1	5.1	4.6	6.1	4.2	4.1	6.3	4.0	3.0	5.9	8.5	8.5	3.2	4.8	3.4	5.6	4.0	3.7	5.3	4.7	8.5	3.0	4.9
19	4.0	3.4	4.9	4.5	5.9	7.2	8.2	5.4	3.8	5.3	6.1	5.2	5.1	6.4	5.6	5.0	6.5	7.9	7.1	9.9	7.8	6.2	4.6	6.0	9.9	3.4	5.9
20	9.4	9.4	5.5	6.3	4.6	4.5	5.8	4.7	4.3	3.5	3.3	4.7	3.1	4.0	3.9	4.2	3.9	4.0	4.5	6.5	7.9	3.7	3.3	4.1	9.4	3.1	5.0
21	3.9	3.3	4.7	4.6	4.1	3.7	3.4	3.3	2.0	2.3	2.9	3.3	3.2	3.0	3.6	2.9	2.9	3.1	2.7	2.6	2.6	3.1	3.9	3.7	4.7	2.0	3.3
22	3.1	3.7	3.7	3.9	5.3	5.1	5.2	3.7	3.2	3.8	3.7	3.7	5.1	4.0	5.6	5.6	2.9	3.6	8.2	5.9	4.5	4.2	3.3	4.1	8.2	2.9	4.4
23	6.5	4.4	3.0	3.4	3.3	2.2	2.9	5.5	2.6	5.2	6.5	2.7	3.2	4.5	3.8	4.8	6.4	14.5	34.9	9.9	12.2	6.9	6.1	5.2	34.9	2.2	6.7
24	4.5	5.4	5.5	5.8	7.7	6.7	7.3	7.7	5.3	7.4	9.8	4.9	4.6	5.3	5.3	5.0	6.7	3.8	5.1	4.8	4.0	3.5	4.3	3.8	9.8	3.5	5.6
25	3.1	3.0	2.7	3.0	3.3	3.5	3.1	3.2	3.3	4.7	5.2	4.4	4.7	3.7	3.6	4.4	4.5	3.6	4.4	4.9	4.0	4.7	5.3	6.0	6.0	2.7	4.0
26	4.8	5.8	3.3	4.2	3.9	3.8	3.9	3.4	3.2	3.6	3.7	3.9	3.8	3.9	3.9	4.0	4.4	3.9	4.0	4.0	4.1	4.1	4.5	4.1	5.8	3.2	4.0
27	4.0	4.0	3.9	4.0	4.1	3.9	3.8	3.8	4.1	4.1	4.2	4.2	4.0	4.0	3.7	3.6	3.5	3.5	3.3	3.6	3.6	3.5	3.5	3.6	4.2	3.3	3.8
28	3.8	4.0	3.9	3.7	3.8	3.5	3.6	3.8	3.7	3.6	4.3	4.6	4.6	3.6	3.3	2.8	4.4	8.9	57.4	14.5	28.0	21.9	8.2	4.6	57.4	2.8	8.7
29	2.9	3.2	2.1	1.8	2.8	1.3	1.8	1.7	1.8	1.8	3.1	3.7	3.4	3.4	46.6	16.5	5.6	5.9	7.9	5.8	4.9	6.4	6.5	3.9	46.6	1.3	6.0
30	5.0	4.1	4.9	4.2	3.8	3.7	3.7	3.8	4.1	3.9	3.8	4.0	5.0	4.5	5.2	5.3	14.1	3.7	3.5	3.1	3.6	3.4	4.1	2.0	14.1	2.0	4.4
Max.	**10.5**	**9.4**	**9.1**	**6.3**	**7.7**	**18.6**	**52.5**	**9.5**	**7.8**	**10.4**	**9.8**	**7.0**	**6.7**	**6.4**	**46.6**	**16.5**	**14.1**	**14.5**	**57.4**	**14.5**	**28.0**	**30.3**	**8.2**	**6.0**	**57.4**		
Min.	**2.2**	**2.2**	**2.1**	**1.8**	**1.9**	**1.3**	**1.8**	**1.7**	**1.8**	**1.8**	**2.1**	**2.5**	**2.0**	**2.7**	**3.0**	**2.2**	**2.1**	**2.3**	**1.8**	**2.6**	**2.3**	**2.5**	**2.3**	**2.0**		**1.3**	
Avg.	**4.4**	**4.0**	**3.9**	**4.1**	**4.2**	**4.4**	**5.8**	**4.0**	**4.0**	**4.2**	**4.7**	**4.1**	**3.9**	**4.1**	**5.8**	**4.6**	**4.5**	**4.8**	**7.2**	**5.0**	**5.7**	**5.6**	**4.4**	**4.2**			**4.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Wind Sigma (RMYoung)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.5	2.4	4.9	5.6	7.8	6.1	3.2	2.8	2.8	3.2	4.7	3.7	2.5	5.3	7.2	3.7	4.3	9.4	4.8	14.1	4.6	3.8	6.1	4.6	14.1	2.4	5.0
2	18.8	15.6	7.5	7.9	4.8	5.6	5.0	28.2	8.3	32.1	7.8	16.1	17.9	10.0	37.1	5.5	24.8	29.8	29.3	4.3	5.3	21.2	36.7	27.0	37.1	4.3	16.9
3	8.0	5.3	4.3	4.9	4.6	6.7	3.2	5.1	6.0	10.3	6.8	3.1	4.5	1.9	2.5	3.1	2.6	3.8	2.6	2.5	3.3	3.4	3.8	5.0	10.3	1.9	4.5
4	3.8	2.7	2.2	2.8	3.3	2.4	17.5	18.5	33.5	25.1	37.7	27.5	33.7	6.3	3.9	4.3	3.3	3.1	3.3	3.2	3.7	3.2	3.0	3.2	37.7	2.2	10.5
5	3.2	3.3	3.0	2.9	3.2	3.1	5.9	4.1	3.9	5.6	4.0	4.8	6.4	8.0	7.5	5.3	5.3	9.1	6.5	7.3	4.2	4.1	4.4	4.4	9.1	2.9	5.0
6	4.2	4.4	4.5	4.1	3.8	4.1	17.8	7.0	3.7	7.5	3.4	3.3	3.3	3.0	3.3	3.4	3.5	3.3	3.4	3.4	3.2	3.4	3.2	3.3	17.8	3.0	4.5
7	3.3	3.3	3.6	3.9	10.0	8.7	13.6	21.6	5.7	6.8	9.2	5.4	4.8	5.7	10.2	6.7	8.8	7.9	7.7	5.1	4.6	4.5	5.4	5.4	21.6	3.3	7.2
8	3.9	3.7	3.5	3.4	3.1	3.0	3.2	3.5	3.2	3.8	4.7	4.4	5.2	5.2	9.0	5.4	3.8	5.1	11.4	6.7	35.2	4.8	10.7	18.2	35.2	3.0	6.8
9	7.0	14.9	21.6	19.9	3.6	3.4	3.6	3.3	3.0	3.3	2.7	3.4	3.3	3.4	3.5	3.6	3.9	4.1	3.9	3.9	4.0	3.8	3.8	3.8	21.6	2.7	5.6
10	3.5	3.2	3.1	3.3	3.5	3.7	3.8	3.7	3.6	3.5	3.7	3.8	3.8	4.0	3.6	3.5	3.2	4.7	3.3	6.1	7.3	4.0	4.8	4.2	7.3	3.1	3.9
11	5.7	4.6	3.3	5.4	10.9	8.7	10.9	21.6	45.3	14.4	13.0	4.1	5.3	3.0	3.2	2.7	1.7	3.8	4.7	2.6	2.5	5.8	5.4	3.7	45.3	1.7	8.0
12	4.5	4.3	2.9	3.3	6.2	6.4	6.1	5.0	4.9	4.1	3.7	3.3	7.0	6.3	4.3	3.1	2.6	2.6	2.9	3.1	2.3	3.0	2.4	2.1	7.0	2.1	4.0
13	2.4	3.2	2.7	2.7	1.8	1.7	1.8	2.1	2.1	2.0	2.1	2.3	2.5	2.6	2.6	2.3	2.7	2.6	2.4	3.1	2.9	2.2	2.7	2.8	3.2	1.7	2.4
14	2.1	2.2	3.0	2.6	2.7	2.5	2.8	3.4	4.9	3.9	2.0	4.0	3.4	2.3	2.0	2.4	1.8	2.1	2.8	4.0	3.8	2.7	2.9	2.8	4.9	1.8	2.9
15	3.4	3.2	2.8	3.4	3.3	9.9	6.0	4.3	4.7	8.0	11.1	23.0	9.1	5.2	5.8	5.5	6.0	7.6	6.9	10.5	9.8	9.0	5.4	3.3	23.0	2.8	7.0
16	3.6	3.2	3.1	3.2	3.2	3.5	3.5	3.4	3.2	3.4	4.1	4.3	4.4	4.1	4.2	3.9	6.4	8.4	13.2	18.4	16.7	15.3	37.7	21.5	37.7	3.1	8.2
17	7.5	5.4	6.9	5.4	2.2	3.1	3.1	3.0	2.2	2.6	3.0	2.6	3.0	2.5	2.3	3.3	3.3	3.5	3.1	2.5	2.8	3.3	2.9	3.1	7.5	2.2	3.4
18	2.7	2.5	3.0	3.6	3.7	2.5	2.7	3.2	5.3	3.1	2.8	2.1	3.7	7.4	5.0	4.9	4.3	3.4	9.8	6.8	4.7	7.5	0.0	0.2	9.8	0.0	4.0
19	13.9	5.8	5.5	8.5	14.3	4.9	7.0	18.5	25.8	32.7	28.5	11.2	7.2	2.6	7.0	3.8	3.6	2.8	3.1	3.2	3.4	6.5	3.6	3.1	32.7	2.6	9.4
20	2.9	3.4	5.2	5.1	4.4	3.7	1.9	2.9	3.2	2.4	3.0	3.7	5.2	4.6	4.7	3.6	3.7	3.2	3.8	3.8	3.5	2.6	2.6	3.3	5.2	1.9	3.6
21	3.1	2.9	7.1	5.4	4.3	6.4	8.4	46.3	52.4	49.5	27.0	46.1	21.5	32.3	29.2	14.0	4.6	8.1	7.1	12.1	11.8	4.8	18.5	21.3	52.4	2.9	18.5
22	41.7	27.7	49.6	26.2	4.0	13.2	2.9	3.5	5.3	5.3	3.1	3.3	3.2	3.5	2.2	5.8	7.5	4.0	2.9	6.9	6.5	5.6	3.4	6.1	49.6	2.2	10.1
23	3.1	3.4	4.7	5.1	4.3	5.2	5.6	4.0	2.8	2.9	2.1	2.3	2.9	2.6	3.4	2.7	1.9	2.1	2.1	2.8	1.6	1.8	2.4	1.6	5.6	1.6	3.1
24	2.2	2.1	3.6	2.4	2.2	2.7	4.1	3.6	4.4	3.2	2.9	2.7	3.8	4.1	3.5	2.5	2.2	2.6	2.3	1.7	3.2	2.0	3.9	2.6	4.4	1.7	2.9
25	3.7	3.4	2.9	3.4	3.6	3.7	4.5	2.7	3.1	4.2	3.3	5.0	3.8	3.7	3.3	3.5	3.9	2.1	2.8	11.8	4.8	4.2	2.8	3.5	11.8	2.1	3.9
26	5.8	4.0	6.4	3.8	5.5	4.6	3.6	3.2	7.4	2.9	7.8	9.3	14.0	21.9	51.3	10.7	6.0	8.1	6.7	5.2	5.1	5.2	3.3	5.1	51.3	2.9	8.6
27	12.3	26.2	25.7	4.8	3.5	3.4	3.6	3.9	5.0	4.4	4.3	6.7	4.3	4.7	4.9	4.9	4.5	4.9	5.9	5.0	8.5	3.8	3.5	3.3	26.2	3.3	6.8
28	3.3	3.8	3.9	3.8	3.7	3.2	3.2	3.7	7.0	3.6	3.7	3.9	5.3	6.7	6.6	8.3	13.5	12.1	19.4	37.2	10.2	28.7	4.6	19.5	37.2	3.2	9.1
29	2.6	2.2	5.6	4.1	3.6	4.2	4.3	5.6	4.3	3.1	3.0	2.8	2.4	3.1	3.5	3.7	2.8	2.5	2.8	2.7	2.5	2.4	3.1	2.7	5.6	2.2	3.3
30	2.5	2.6	4.7	4.5	2.6	2.8	2.8	3.3	3.6	4.3	3.6	4.6	18.1	23.6	9.4	5.0	27.3	11.0	7.8	7.8	41.2	17.1	10.7	46.3	46.3	2.5	11.1
31	8.5	8.7	7.5	6.0	13.4	9.3	12.2	13.3	10.6	7.7	19.2	11.7	6.5	10.2	13.4	34.9	6.8	5.6	4.7	5.2	10.2	9.1	5.7	4.4	34.9	4.4	10.2
Max.	**41.7**	**27.7**	**49.6**	**26.2**	**14.3**	**13.2**	**17.8**	**46.3**	**52.4**	**49.5**	**37.7**	**46.1**	**33.7**	**32.3**	**51.3**	**34.9**	**27.3**	**29.8**	**29.3**	**37.2**	**41.2**	**28.7**	**37.7**	**46.3**	**52.4**		
Min.	**2.1**	**2.1**	**2.2**	**2.4**	**1.8**	**1.7**	**1.8**	**2.1**	**2.1**	**2.0**	**2.0**	**2.1**	**2.4**	**1.9**	**2.0**	**2.3**	**1.7**	**2.1**	**2.1**	**1.7**	**1.6**	**1.8**	**0.0**	**0.2**		**0.0**	
Avg.	**6.3**	**5.9**	**7.0**	**5.5**	**4.9**	**4.9**	**5.7**	**8.3**	**9.1**	**8.7**	**7.7**	**7.6**	**7.2**	**6.8**	**8.4**	**5.7**	**5.8**	**5.9**	**6.2**	**6.9**	**7.5**	**6.4**	**6.8**	**7.8**			**6.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.9	-0.9	-1.3	-1.5	-1.1	-1.3	-1.3	-1.4	-1.3	-1.0	-1.0	-1.3	-0.8	-0.4	-0.9	-0.6	-0.7	-1.5	-2.0	-2.1	-1.7	-1.6	-1.7	-1.8	-0.4	-2.1	-1.3
2	-1.4	-1.6	-1.7	-1.1	-1.7	-2.0	-1.6	-1.3	-1.4	-0.9	-0.6	0.1	-0.2	-0.4	-0.4	0.1	-0.6	-0.6	-0.6	-0.8	-0.7	-0.7	-1.0	-1.9	0.1	-2.0	-1.0
3	-1.8	-2.2	-2.3	-2.3	-2.2	-2.2	-2.2	-2.2	-2.1	-2.1	-2.0	-1.9	-1.8	-1.6	-1.4	-1.0	-1.1	-1.1	-1.0	-1.2	-1.2	-1.1	-1.2	-1.1	-1.0	-2.3	-1.7
4	-1.4	-1.3	-1.2	-1.1	-1.4	-2.7	-3.6	-2.9	-2.8	-3.2	-3.4	-2.4	-3.1	-3.3	-3.5	-3.4	-3.6	-3.9	-4.6	-5.0	-4.8	-4.9	-4.6	-4.1	-1.1	-5.0	-3.2
5	-3.8	-3.0	-3.4	-2.8	-3.3	-3.3	-2.8	-2.7	-3.1	-3.0	-2.8	-2.8	-2.6	-4.1	-4.2	-5.2	-4.9	-5.5	-4.9	-5.2	-6.7	-6.8	-6.2	-6.6	-2.6	-6.8	-4.2
6	-6.4	-5.9	-6.0	-6.7	-6.3	-5.2	-5.1	-5.6	-5.8	-5.7	-5.8	-5.0	-5.4	-4.5	-4.5	-4.4	-3.7	-3.7	-4.6	-4.4	-3.8	-3.7	-4.1	-4.1	-3.7	-6.7	-5.0
7	-3.5	-3.3	-4.1	-4.8	-4.5	-4.4	-4.6	-4.5	-4.1	-4.0	-2.5	-1.9	-1.6	-1.9	-0.8	-0.9	-0.9	-1.4	-1.4	-2.5	-1.6	-0.4	0.0	0.4	0.4	-4.8	-2.5
8	0.2	-1.7	-0.7	-2.6	-1.7	-1.3	1.3	0.4	0.6	-0.1	-1.8	-2.6	-3.6	-3.6	-3.4	-2.6	-3.3	-4.7	-5.5	-5.8	-6.5	-6.5	-6.9	-7.7	1.3	-7.7	-2.9
9	-7.9	-7.6	-6.9	-5.7	-7.4	-6.5	-5.7	-6.0	-7.0	-5.2	-4.4	-3.1	-2.1	-2.0	-2.0	-2.5	-4.2	-5.4	-3.3	-2.7	-4.1	-4.1	-3.7	-3.2	-2.0	-7.9	-4.7
10	-4.2	-3.5	-2.2	-1.7	-1.6	-1.5	-1.4	-1.6	-1.6	-1.9	-2.8	-3.2	-4.0	-4.9	-5.3	-6.8	-7.3	-8.5	-9.1	-9.5	-9.5	-9.3	-9.1	-9.0	-1.4	-9.5	-5.0
11	-8.9	-9.1	-9.0	-9.3	-9.4	-9.5	-9.7	-10.2	-10.7	-10.2	-9.8	-9.8	-9.9	-10.2	-9.8	-9.8	-10.0	-9.7	-10.1	-11.2	-11.5	-11.4	-11.5	-11.6	-8.9	-11.6	-10.1
12	-11.4	-11.9	-12.2	-12.5	-12.6	-12.7	-13.1	-13.4	-13.5	-14.1	-14.5	-14.8	-15.2	-15.3	-15.4	-15.7	-16.0	-16.4	-17.3	-18.0	-18.6	-18.2	-18.4	-18.4	-11.4	-18.6	-15.0
13	-19.2	-20.2	-20.7	-21.0	-20.8	-20.8	-21.2	-21.5	-21.5	-21.5	-21.3	-21.2	-20.9	-20.6	-20.8	-21.0	-21.1	-21.2	-21.4	-21.1	-21.1	-21.3	-21.4	-21.5	-19.2	-21.5	-21.0
14	-21.7	-21.8	-20.7	-19.0	-19.1	-17.9	-16.7	-13.5	-12.0	-10.7	-9.8	-8.8	-8.6	-8.7	-8.3	-8.0	-7.5	-7.2	-6.8	-6.3	-6.4	-6.2	-5.9	-5.7	-5.7	-21.8	-11.6
15	-5.5	-5.5	-5.2	-4.9	-4.7	-4.4	-4.3	-4.1	-3.7	-3.7	-3.6	-3.3	-2.6	-2.5				-2.2	-2.0	-1.8	-1.7	-1.9	-2.7	-2.8	-1.7	-5.5	-3.5
16	-2.1	-2.2	-2.1	-1.9	-2.1	-2.2	-2.1	-1.8	-1.8	-1.6	-1.7	-1.6	-2.8	-4.3	-3.6	-3.3	-3.0	-3.6	-4.1	-4.9	-6.3	-7.6	-9.1	-10.2	-1.6	-10.2	-3.6
17	-11.3	-11.7	-12.2	-13.1	-13.3	-13.4	-14.2	-14.8	-15.4	-16.6	-16.5	-16.6	-16.9	-17.2	-17.4	-18.2	-19.8	-20.9	-21.4	-21.8	-21.4	-21.0	-19.2	-20.5	-11.3	-21.8	-16.9
18	-21.2	-21.4	-22.1	-22.3	-22.6	-22.0	-21.6	-21.2	-21.5	-22.1	-23.1	-22.8	-22.3	-21.6	-21.5	-21.3	-22.1	-22.1	-22.0	-22.3	-22.0	-22.7	-23.1	-23.7	-21.2	-23.7	-22.1
19	-23.7	-23.3	-23.4	-23.9	-24.3	-25.0	-25.7	-25.8	-25.9	-25.8	-25.9	-25.8	-25.7	-25.2	-24.8	-25.1	-25.8	-26.4	-26.4	-26.2	-26.2	-26.6	-26.7	-26.1	-23.3	-26.7	-25.4
20	-26.4	-26.2	-25.9	-25.4	-24.0	-25.5	-26.1	-25.9	-25.8	-25.3	-25.4	-25.3	-24.7	-24.1	-24.4	-23.6	-23.2	-23.2	-23.3	-23.0	-22.5	-23.3	-23.1	-22.9	-22.5	-26.4	-24.5
21	-22.8	-22.5	-23.1	-23.1	-22.8	-22.9	-23.1	-23.2	-23.4	-23.8	-24.3	-25.3	-25.8	-26.1	-25.8	-25.9	-25.9	-25.9	-25.9	-26.5	-27.1	-27.6	-28.2	-29.0	-22.5	-29.0	-25.0
22	-29.4	-29.9	-29.8	-29.7	-29.7	-29.6	-29.3	-29.1	-29.0	-29.0	-29.1	-29.2	-29.3	-29.5	-29.6	-29.7	-29.7	-29.7	-29.9	-30.2	-30.4	-30.4	-30.3	-30.5	-29.0	-30.5	-29.7
23	-30.7	-30.8	-30.8	-30.7	-30.6	-30.6	-30.7	-30.7	-30.0	-30.1	-30.0	-30.3	-29.1	-28.3	-27.6	-27.0	-26.8	-26.7	-26.6	-25.8	-26.7	-26.6	-26.2	-26.2	-25.8	-30.8	-28.7
24	-26.1	-25.8	-25.4	-25.8	-26.1	-26.2	-26.1	-26.0	-25.9	-25.8	-26.2	-26.0	-25.9	-25.6	-25.3	-25.5	-25.9	-26.2	-26.6	-27.2	-28.2	-28.7	-28.6	-28.7	-25.3	-28.7	-26.4
25	-29.3	-29.5	-29.3	-29.8	-29.6	-30.1	-30.3	-30.9	-30.5	-30.4	-29.4	-28.5	-28.5	-28.3	-27.3	-27.7	-27.7	-27.5	-28.8	-29.2	-29.8	-30.6	-30.2	-29.6	-27.3	-30.9	-29.3
26	-29.7	-29.2	-29.7	-30.3	-30.9	-29.9	-30.0	-29.8	-29.8	-29.5	-28.9	-27.5	-26.6	-26.2	-26.8	-26.2	-26.2	-26.4	-26.6	-28.0	-28.1	-28.0	-29.3	-30.1	-26.2	-30.9	-28.5
27	-29.7	-30.4	-31.1	-31.6	-31.5	-31.9	-32.9	-33.5	-33.5	-33.8	-33.9	-34.0	-34.0	-33.9	-33.4	-33.3	-33.2	-33.2	-33.0	-32.8	-33.0	-32.5	-32.2	-32.1	-29.7	-34.0	-32.7
28	-31.8	-32.1	-32.6	-32.7	-33.0	-33.2	-33.7	-34.1	-34.2	-34.8	-35.3	-34.8	-34.1	-33.4	-32.1	-32.1	-32.5	-33.2	-33.1	-33.1	-33.4	-33.1	-33.1	-33.3	-31.8	-35.3	-33.3
29	-33.3	-33.1	-33.1	-32.9	-32.7	-32.6	-32.5	-32.1	-31.9	-32.1	-32.1	-30.7	-30.7	-30.4	-30.3	-29.8	-29.6	-30.3	-29.6	-30.4	-30.2	-30.0	-30.6	-30.5	-29.6	-33.3	-31.3
30	-29.1	-29.2	-29.2	-28.7	-28.9	-29.3	-29.6	-29.4	-28.9	-28.7	-28.1	-26.8	-26.7	-26.7	-26.4	-26.7	-26.9	-23.5	-20.7	-20.8	-23.1	-23.1	-21.5	-20.1	-20.1	-29.6	-26.3
31	-20.0	-19.8	-19.0	-19.0	-18.2	-17.9	-17.8	-17.5	-17.6	-18.9	-19.8	-19.7	-19.3	-19.3	-20.2	-20.2	-21.4	-22.1	-23.0	-23.3	-25.1	-26.9	-27.4	-27.0	-17.5	-27.4	-20.8
Max.	0.2	-0.9	-0.7	-1.1	-1.1	-1.3	1.3	0.4	0.6	-0.1	-0.6	0.1	-0.2	-0.4	-0.4	0.1	-0.6	-0.6	-0.6	-0.8	-0.7	-0.4	0.0	0.4	1.3		
Min.	-33.3	-33.1	-33.1	-32.9	-33.0	-33.2	-33.7	-34.1	-34.2	-34.8	-35.3	-34.8	-34.1	-33.9	-33.4	-33.3	-33.2	-33.2	-33.1	-33.1	-33.4	-33.1	-33.1	-33.3		-35.3	
Avg.	-16.0	-16.0	-16.0	-16.1	-16.1	-16.1	-16.0	-16.0	-16.0	-16.0	-16.0	-15.7	-15.6	-15.6	-15.9	-15.9	-16.2	-15.9	-16.0	-16.2	-16.5	-16.7	-16.7	-16.8			-16.0

Total Hours in Month 744 Hours Data Available 741 Data Recovery 99.6%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-27.3	-28.5	-28.9	-28.4	-29.3	-29.6	-29.9	-30.3	-30.7	-30.9	-31.2	-30.6	-29.9	-29.5	-29.2	-29.2	-29.5	-30.1	-30.4	-31.0	-31.5	-31.4	-31.5	-31.6	-27.3	-31.6	-30.0
2	-31.2	-31.2	-31.2	-31.6	-31.5	-31.6	-31.5	-31.2	-31.0	-30.4	-29.6	-29.4	-28.0	-27.5	-26.4	-24.5	-24.3	-25.0	-26.0	-26.3	-25.7	-25.1	-25.0	-23.0	-23.0	-31.6	-28.3
3	-19.5	-18.3	-17.1	-15.9	-15.8	-14.5	-13.4	-12.7	-12.4	-12.2	-11.8	-11.2	-10.6	-10.1	-9.6	-9.5	-9.5	-9.5	-9.0	-8.3	-8.0	-7.8	-7.7	-7.8	-7.7	-19.5	-11.8
4	-7.6	-7.6	-7.6	-7.5	-7.4	-7.2	-7.1	-6.9	-6.9	-6.5	-6.2	-5.9	-5.6	-4.6	-4.0	-4.1	-4.0	-3.9	-3.9	-3.7	-3.4	-2.9	-2.8	-2.5	-2.5	-7.6	-5.4
5	-2.4	-2.9	-2.9	-2.6	-2.5	-2.3	-1.9	-2.2	-1.8	-2.8	-3.1	-2.2	-1.6	-1.3	-1.5	-1.4	-1.0	-0.9	-1.3	-1.6	-1.5	-0.3	0.0	-0.4	0.0	-3.1	-1.8
6	-0.5	-0.8	-1.4	-1.0	-1.0	-1.3	-1.2	-1.2	-1.2	-1.2	-3.2	-3.6	-4.0	-4.4	-4.9	-5.1	-5.4	-5.8	-6.2	-6.9	-6.5	-6.5	-6.7	-6.8	-0.5	-6.9	-3.6
7	-6.8	-6.5	-6.5	-6.3	-6.6	-6.9	-6.6	-6.9	-7.5	-7.8	-8.4	-9.1	-9.3	-9.3	-9.2	-9.6	-10.2	-11.3	-11.6	-11.6	-11.3	-10.6	-10.6	-10.3	-6.3	-11.6	-8.8
8	-10.1	-10.0	-10.4	-11.0	-10.8	-10.5	-10.8	-10.2	-9.3	-7.9	-7.3	-7.6	-7.4	-6.8	-5.9	-5.8	-5.6	-5.2	-4.9	-4.6	-4.3	-4.0	-3.9	-4.0	-3.9	-11.0	-7.4
9	-3.5	-3.6	-3.4	-3.1	-2.8	-2.6	-2.3	-2.7	-2.7	-3.1	-2.6	-2.7	-2.0	-1.4	-0.7	-0.2	0.3	0.5	0.7	0.7	1.4	1.0	0.4	-0.6	1.4	-3.6	-1.5
10	-1.0	-1.3	-1.2	-1.1	-0.7	-0.2	0.0	0.0	-0.7	-1.1	-1.0	-1.0	-1.1	-1.1	-0.7	-0.6	-0.5	-0.5	-0.7	-0.6	-0.6	-0.7	-0.8	-0.8	0.0	-1.3	-0.7
11	-1.4	-1.5	-1.7	-1.6	-1.5	-1.5	-1.5	-1.9	-2.1	-2.1	-2.2	-1.8	-1.7	-1.4	-1.4	-1.3	-1.1	-0.8	-0.4	-0.5	-0.4	-0.1	0.0	0.1	0.1	-2.2	-1.2
12	0.1	0.0	-0.3	-0.5	-0.6	-0.9	-1.6	-2.3	-4.2	-5.1	-5.2	-5.4	-5.8	-6.3	-6.5	-6.5	-6.8	-6.8	-7.9	-9.0	-9.8	-10.4	-10.9	-10.4	0.1	-10.9	-5.1
13	-9.6	-9.8	-9.6	-8.6	-8.3	-8.0	-8.0	-7.9	-7.7	-6.8	-5.5	-3.4	-4.2	-2.8	-2.3	-1.5	-1.2	-1.0	-0.9	-0.5	-0.4	-0.2	0.1	0.1	0.1	-9.8	-4.5
14	0.3	0.6	0.7	0.4	0.0	-0.1	-0.1	-0.1	0.1	0.1	0.0	0.1	0.3	0.2	0.1	0.2	0.1	0.0	0.0	0.3	0.3	0.3	0.2	0.1	0.7	-0.1	0.2
15	0.0	0.4	0.2	0.5	1.0	1.0	0.7	0.6	0.6	0.8	0.7	0.8	0.8	0.6	0.5	0.6	0.5	0.1	-0.1	-0.6	-0.6	-0.4	-0.4	-0.3	1.0	-0.6	0.3
16	-0.3	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6	-0.9	-1.2	-0.8	-0.5	-0.5	-0.3	-0.5	-0.9	-1.1	-2.0	-2.4	-2.4	-2.7	-3.1	-0.3	-3.1	-1.0
17	-3.3	-3.2	-2.5	-2.4	-1.9	-1.6	-0.9	-0.8	-0.5	0.1	0.0	0.2	0.4	0.4	0.5	0.3	0.1	-0.2	-0.4	-0.4	-0.6	-0.7	-0.9	-1.0	0.5	-3.3	-0.8
18	-0.9	-0.9	-0.9	-0.8	-0.9	-0.9	-0.9	-0.9	-0.7	-0.5	-0.2	-0.1	0.2	0.2	-0.3	-0.8	-0.7	-1.0	-1.2	-1.2	-0.7	0.1	0.3	0.0	0.3	-1.2	-0.6
19	-0.7	-1.3	-1.8	-2.1	-2.5	-3.2	-3.9	-4.6	-5.0	-5.5	-5.2	-4.4	-3.2	-3.3	-3.1	-2.9	-2.6	-2.6	-2.9	-3.2	-4.0	-5.1	-5.1	-5.5	-0.7	-5.5	-3.5
20	-5.2	-5.0	-4.8	-4.9	-5.1	-5.4	-5.6	-5.0	-4.9	-4.3	-4.0	-3.5	-3.5	-3.5	-3.2	-3.3	-3.8	-5.0	-5.6	-6.7	-7.6	-8.2	-8.4	-8.6	-3.2	-8.6	-5.2
21	-9.5	-9.9	-10.5	-11.2	-11.7	-12.3	-12.2	-11.4	-11.7	-10.6	-9.0	-7.9	-6.2	-7.2	-7.2	-7.6	-7.3	-7.8	-9.0	-8.7	-8.9	-9.1	-9.8	-9.6	-6.2	-12.3	-9.4
22	-9.9	-9.8	-9.6	-9.8	-9.5	-9.6	-9.3	-10.0	-9.6	-8.8	-8.1	-7.6	-6.5	-6.2	-6.4	-6.9	-7.3	-8.2	-7.9	-7.6	-7.3	-7.8	-8.2	-8.5	-6.2	-10.0	-8.4
23	-8.5	-8.3	-8.0	-7.9	-7.5	-7.1	-6.2	-7.4	-8.5	-7.9	-8.0	-8.3	-6.9	-6.7	-7.3	-7.6	-8.2	-8.8	-8.5	-8.8	-9.4	-9.3	-9.8	-11.6	-6.2	-11.6	-8.2
24	-12.7	-14.0	-13.8	-14.1	-15.0	-15.0	-15.8	-15.8	-15.6	-13.7	-12.4	-10.8	-8.7	-6.8	-6.6	-6.5	-6.9	-9.5	-11.3	-11.6	-10.9	-11.1	-11.2	-10.7	-6.5	-15.8	-11.7
25	-10.7	-10.3	-10.7	-10.5	-9.8	-9.1	-9.0	-8.5	-8.0	-7.4	-6.3	-3.5	-3.7	-5.5	-6.6	-7.3	-8.0	-8.6	-9.9	-10.8	-10.3	-9.7	-8.9	-8.9	-3.5	-10.8	-8.4
26	-9.8	-9.7	-9.0	-9.1	-9.6	-10.6	-10.5	-10.2	-9.7	-9.6	-9.2	-8.4	-7.3	-6.7	-5.9	-5.4	-6.2	-8.2	-8.9	-9.0	-8.9	-8.5	-7.7	-6.4	-5.4	-10.6	-8.5
27	-6.3	-6.1	-5.6	-6.5	-8.4	-9.7	-11.8	-13.0	-14.5	-15.8	-16.5	-17.2	-18.2	-18.4	-18.4	-18.8	-19.0	-19.1	-19.4	-20.0	-20.3	-20.6	-20.9	-21.2	-5.6	-21.2	-15.2
28	-21.6	-21.7	-21.7	-21.6	-22.1	-21.9	-22.0	-22.2	-22.3	-22.0	-21.3	-20.5	-20.0	-18.8	-17.7	-18.0	-18.4	-19.2	-20.1	-21.3	-21.9	-21.9	-22.7	-22.6	-17.7	-22.7	-21.0
Max.	**0.3**	**0.6**	**0.7**	**0.5**	**1.0**	**1.0**	**0.7**	**0.6**	**0.6**	**0.8**	**0.7**	**0.8**	**0.8**	**0.6**	**0.5**	**0.6**	**0.5**	**0.5**	**0.7**	**0.7**	**1.4**	**1.0**	**0.4**	**0.1**	**1.4**		
Min.	**-31.2**	**-31.2**	**-31.2**	**-31.6**	**-31.5**	**-31.6**	**-31.5**	**-31.2**	**-31.0**	**-30.9**	**-31.2**	**-30.6**	**-29.9**	**-29.5**	**-29.2**	**-29.2**	**-29.5**	**-30.1**	**-30.4**	**-31.0**	**-31.5**	**-31.4**	**-31.5**	**-31.6**		**-31.6**	
Avg.	**-7.9**	**-7.9**	**-7.9**	**-7.8**	**-7.9**	**-8.0**	**-8.0**	**-8.1**	**-8.2**	**-8.0**	**-7.8**	**-7.4**	**-6.9**	**-6.7**	**-6.6**	**-6.5**	**-6.7**	**-7.1**	**-7.5**	**-7.7**	**-7.7**	**-7.6**	**-7.7**	**-7.7**			**-7.6**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-22.7	-23.2	-23.2	-23.0	-22.9	-22.8	-22.3	-21.9	-21.2	-19.7	-16.7	-12.0	-11.3	-13.5	-15.0	-15.0	-14.5	-13.6	-13.2	-12.0	-11.6	-11.6	-11.2	-10.8	-10.8	-23.2	-16.9
2	-10.3	-10.1	-10.1	-10.0	-9.7	-9.3	-9.1	-8.6	-8.0	-7.2	-6.4	-5.8	-5.4	-5.0	-4.9	-4.7	-4.5	-4.4	-4.3	-4.1	-4.0	-4.0	-3.7	-3.5	-3.5	-10.3	-6.5
3	-3.5	-3.4	-3.3	-3.4	-3.5	-3.6	-3.8	-4.4	-4.7	-4.5	-4.2	-3.9	-3.8	-4.0	-4.2	-5.0	-5.5	-5.6	-5.8	-6.4	-6.7	-7.0	-6.9	-6.7	-3.3	-7.0	-4.7
4	-6.7	-6.7	-6.6	-6.6	-6.3	-5.6	-5.4	-5.4	-5.0	-4.9	-4.4	-4.1	-3.9	-3.6	-3.7	-3.8	-4.0	-4.2	-4.0	-4.0	-4.0	-4.0	-4.0	-3.9	-3.6	-6.7	-4.8
5	-3.9	-3.9	-4.0	-4.0	-4.1	-4.1	-4.4	-4.7	-4.9	-4.9	-4.7	-3.9	-3.3	-3.0	-2.9	-2.8	-3.6	-4.6	-4.7	-5.0	-5.1	-5.1	-5.0	-5.1	-2.8	-5.1	-4.2
6	-5.2	-5.9	-7.1	-7.3	-7.7	-8.2	-9.3	-9.8	-10.0	-8.3	-7.1	-6.4	-3.1	-3.4	-2.0	-1.8	-3.8	-7.2	-9.2	-9.7	-9.7	-9.4	-9.7	-10.2	-1.8	-10.2	-7.1
7	-10.7	-10.6	-10.8	-10.8	-11.0	-11.0	-11.1	-11.0	-11.2	-11.6	-12.5	-12.2	-12.1	-12.8	-13.0	-12.7	-13.6	-15.3	-16.2	-16.8	-17.7	-18.5	-19.6	-20.1	-10.6	-20.1	-13.5
8	-20.0	-19.3	-18.7	-18.4	-18.2	-18.0	-17.9	-18.1	-18.4	-19.1	-19.0	-18.0	-17.9	-16.4	-15.5	-15.5	-15.9	-16.2	-16.8	-17.8	-18.8	-20.3	-20.8	-21.3	-15.5	-21.3	-18.2
9	-21.8	-22.0	-22.3	-22.5	-22.9	-23.2	-23.4	-23.8	-23.7	-23.2	-22.5	-21.3	-20.0	-19.5	-18.9	-17.8	-17.5	-17.5	-18.4	-19.1	-19.6	-19.7	-20.1	-20.3	-17.5	-23.8	-20.9
10	-20.9	-20.9	-20.9	-20.7	-20.3	-20.0	-18.9	-18.5	-17.9	-16.8	-15.5	-13.1	-12.6	-11.5	-10.5	-9.8	-9.7	-10.0	-10.3	-10.9	-11.1	-10.7	-9.8	-9.5	-9.5	-20.9	-14.6
11	-9.1	-8.9	-8.4	-8.2	-8.3	-8.3	-8.1	-8.2	-7.7	-7.4	-7.6	-7.3	-7.0	-6.4	-6.2	-6.1	-6.2	-6.3	-6.2	-6.2	-6.2	-6.2	-6.1	-6.1	-6.1	-9.1	-7.2
12	-5.8	-5.6	-5.3	-5.2	-5.4	-5.3	-4.8	-4.6	-4.4	-4.2	-4.0	-4.2	-4.4	-4.4	-4.0	-3.8	-3.6	-3.8	-3.8	-3.7	-3.8	-4.6	-5.3	-5.9	-3.6	-5.9	-4.6
13	-5.6	-5.2	-4.7	-4.7	-4.6	-4.8	-5.6	-5.8	-5.7	-6.5	-6.7	-6.7	-7.4	-7.5	-6.9	-7.1	-7.3	-7.8	-9.1	-9.9	-10.5	-11.0	-12.6	-13.7	-4.6	-13.7	-7.4
14	-14.6	-14.0	-14.4	-14.9	-15.2	-14.9	-15.4	-15.9	-15.5	-15.8	-16.2	-14.8	-13.9	-13.6	-13.3	-12.5	-12.3	-12.1	-11.6	-11.7	-12.4	-12.6	-12.5	-12.5	-11.6	-16.2	-13.9
15	-12.9	-13.5	-13.9	-14.4	-14.5	-15.1	-15.6	-15.3	-14.4	-14.2	-14.1	-13.4	-13.7	-13.1	-12.5	-11.9	-11.4	-11.7	-12.0	-11.6	-11.7	-11.6	-11.7	-11.7	-11.4	-15.6	-13.2
16	-11.1	-10.8	-11.4	-11.8	-11.8	-11.6	-11.6	-12.1	-11.0	-10.5	-10.1	-9.4	-8.2	-7.3	-6.6	-6.8	-6.8	-7.1	-7.8	-9.0	-9.4	-9.1	-8.8	-9.4	-6.6	-12.1	-9.6
17	-9.1	-8.8	-9.1	-9.2	-9.9	-10.6	-10.6	-10.3	-9.4	-8.3	-7.2	-7.1	-7.3	-7.7	-6.7	-6.5	-6.1	-5.9	-6.1	-6.1	-6.0	-6.1	-6.0	-6.1	-5.9	-10.6	-7.8
18	-6.2	-6.4	-6.2	-6.2	-6.3	-7.3	-7.2	-7.5	-7.7	-7.0	-6.5	-6.1	-5.9	-5.5	-5.1	-4.6	-4.1	-4.2	-4.6	-4.9	-5.7	-6.2	-6.5	-7.1	-4.1	-7.7	-6.1
19	-6.9	-6.7	-6.8	-6.5	-6.7	-8.0	-8.4	-8.6	-8.0	-7.4	-6.6	-5.7	-5.2	-5.0	-4.5	-4.6	-4.4	-4.4	-4.5	-4.5	-4.4	-4.1	-4.4	-4.4	-4.1	-8.6	-5.9
20	-4.4	-4.6	-4.5	-4.8	-5.1	-4.8	-4.6	-4.6	-4.8	-4.4	-4.1	-3.8	-3.7	-3.4	-4.1	-4.7	-6.1	-7.3	-8.3	-9.1	-9.9	-10.4	-10.9	-11.4	-3.4	-11.4	-6.0
21	-11.5	-11.5	-11.3	-11.5	-11.9	-12.0	-12.1	-12.3	-12.3	-11.9	-11.6	-11.1	-10.4	-9.5	-8.8	-8.7	-8.5	-8.6	-8.8	-9.5	-10.2	-10.9	-11.5	-11.9	-8.5	-12.3	-10.8
22	-12.1	-12.8	-13.1	-13.6	-13.6	-14.2	-14.0	-13.6	-13.1	-12.6	-11.9	-11.4	-10.7	-10.3	-9.9	-9.4	-9.2	-9.0	-9.3	-10.3	-10.6	-10.7	-11.2	-11.2	-9.0	-14.2	-11.6
23	-10.5	-9.4	-9.3	-10.0	-11.1	-10.9	-9.4	-9.4	-9.0	-10.4	-10.8	-9.9	-8.9	-8.8	-8.3	-8.1	-8.3	-9.1	-9.9	-10.7	-11.6	-11.2	-9.8	-10.0	-8.1	-11.6	-9.8
24	-11.6	-11.0	-11.7	-12.1	-12.2	-13.6	-13.8	-13.2	-13.6	-12.7	-11.2	-10.2	-9.4	-8.8	-8.4	-8.2	-8.0	-8.0	-8.7	-9.8	-10.9	-12.0	-11.9	-12.3	-8.0	-13.8	-11.0
25	-12.7	-13.3	-12.6	-12.5	-13.2	-12.7	-12.6	-12.8	-13.0	-12.8	-12.4	-11.5	-10.5	-9.6	-8.9	-8.6	-8.7	-8.9	-9.3	-10.2	-10.9	-11.3	-12.3	-12.9	-8.6	-13.3	-11.4
26	-13.7	-14.3	-14.6	-15.1	-15.1	-15.3	-15.5	-15.6	-15.2	-14.5	-13.8	-13.0	-12.0	-10.8	-10.0	-9.5	-9.1	-9.2	-9.5	-9.8	-10.0	-9.5	-9.4	-9.0	-9.0	-15.6	-12.2
27	-9.1	-8.8	-8.4	-8.7	-8.9	-8.8	-8.0	-7.4	-6.0	-3.0	-2.1	-2.0	-1.7	-1.4	-0.8	-0.8	-0.5	-0.7	-0.9	-1.9	-3.0	-3.4	-3.7	-3.6	-0.5	-9.1	-4.3
28	-3.9	-3.9	-4.2	-4.2	-3.3	-3.5	-3.4	-3.5	-2.9	-2.4	-2.3	-1.7	-1.1	-0.5	-0.2	0.0	0.0	-0.6	-1.2	-1.9	-2.2	-3.0	-3.5	-3.7	0.0	-4.2	-2.4
29	-4.0	-5.0	-5.3	-5.0	-5.8	-6.1	-6.4	-5.6	-6.0	-5.9	-4.5	-3.5	-3.1	-3.0	-2.9	-2.5	-2.9	-3.5	-3.8	-4.3	-4.8	-5.6	-6.0	-5.9	-2.5	-6.4	-4.6
30	-5.6	-4.7	-4.2	-3.9	-3.8	-3.1	-2.8	-2.7	-2.4	-2.3	-2.0	-1.6	-1.5	-1.4	-1.5	-1.6	-1.7	-1.8	-1.9	-1.9	-1.8	-1.8	-1.8	-1.5	-1.4	-5.6	-2.5
31	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.6	-1.7	-1.6	-2.7	-3.8	-4.2	-4.2	-4.4	-4.3	-4.3	-4.2	-4.2	-4.6	-4.8	-4.7	-5.1	-5.2	-5.0	-1.4	-5.2	-3.3
Max.	**-1.4**	**-1.4**	**-1.4**	**-1.4**	**-1.5**	**-1.5**	**-1.6**	**-1.7**	**-1.6**	**-2.3**	**-2.0**	**-1.6**	**-1.1**	**-0.5**	**-0.2**	**0.0**	**0.0**	**-0.6**	**-0.9**	**-1.9**	**-1.8**	**-1.8**	**-1.8**	**-1.5**	**0.0**		
Min.	**-22.7**	**-23.2**	**-23.2**	**-23.0**	**-22.9**	**-23.2**	**-23.4**	**-23.8**	**-23.7**	**-23.2**	**-22.5**	**-21.3**	**-20.0**	**-19.5**	**-18.9**	**-17.8**	**-17.5**	**-17.5**	**-18.4**	**-19.1**	**-19.6**	**-20.3**	**-20.8**	**-21.3**		**-23.8**	
Avg.	**-9.9**	**-9.9**	**-9.9**	**-10.0**	**-10.2**	**-10.3**	**-10.2**	**-10.2**	**-10.0**	**-9.6**	**-9.1**	**-8.4**	**-7.9**	**-7.6**	**-7.2**	**-7.1**	**-7.2**	**-7.5**	**-7.9**	**-8.3**	**-8.7**	**-8.9**	**-9.1**	**-9.2**			**-8.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-4.8	-5.4	-5.6	-6.0	-6.3	-6.2	-6.5	-6.5	-6.4	-6.5	-6.0	-5.3	-5.3	-5.1	-5.5	-5.5	-5.6	-6.1	-5.9	-5.9	-6.0	-6.1	-6.4	-6.0	-4.8	-6.5	-5.9
2	-6.3	-6.0	-6.1	-6.3	-7.0	-7.7	-7.8	-8.9	-9.5	-9.6	-9.1	-7.6	-7.2	-7.1	-6.8	-7.0	-6.7	-6.3	-5.9	-5.9	-6.1	-5.8	-5.6	-5.4	-5.4	-9.6	-7.0
3	-5.1	-5.0	-4.4	-4.0	-3.7	-3.4	-3.1	-3.0	-2.6	-1.7	-1.5	-1.4	-1.1	-0.9	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-5.1	-1.9
4	-0.4	-0.3	-0.2	-0.2	-0.2	0.0	0.1	0.3	0.6	1.0	1.2	1.1	1.0	1.1	1.4	1.2	1.1	0.6	0.6	0.5	0.4	0.6	0.3	0.2	1.4	-0.4	0.5
5	-0.3	-1.2	-2.1	-3.3	-3.9	-5.2	-6.2	-7.0	-7.4	-6.9	-7.1	-7.1	-6.1	-5.8	-5.6	-5.9	-6.2	-6.6	-7.4	-8.2	-9.0	-10.1	-10.7	-11.6	-0.3	-11.6	-6.3
6	-12.6	-13.5	-14.3	-14.9	-15.3	-15.7	-16.4	-15.8	-14.8	-14.0	-12.9	-11.6	-10.4	-9.4	-8.5	-7.7	-7.2	-6.9	-6.9	-6.9	-6.7	-7.0	-5.7	-5.2	-5.2	-16.4	-10.8
7	-5.1	-5.0	-5.0	-4.8	-4.8	-4.7	-4.3	-4.3	-3.6	-2.5	-1.3	-0.7	-0.3	0.6	1.0	0.6	0.3	0.4	0.1	-0.3	-0.5	-0.6	-0.6	-0.6	1.0	-5.1	-1.9
8	-0.6	-0.5	-0.6	-0.7	-1.2	-1.6	-1.6	-1.6	-1.4	-1.1	-1.0	-1.2	-0.9	-0.7	-0.7	-0.8	-1.1	-1.1	-1.5	-1.8	-1.8	-1.8	-1.8	-1.8	-0.5	-1.8	-1.2
9	-1.5	-1.6	-1.8	-1.9	-2.0	-2.0	-2.1	-1.8	-1.7	-1.6	-1.2	-0.9	-0.8	-0.7	-0.5	-0.5	-0.2	-0.4	-1.1	-2.2	-2.5	-3.1	-3.9	-3.8	-0.2	-3.9	-1.7
10	-3.9	-3.8	-3.6	-3.5	-3.5	-3.6	-4.0	-4.1	-4.5	-4.4	-4.2	-4.4	-3.7	-4.0	-4.3	-4.3	-4.6	-5.0	-6.1	-7.1	-8.1	-8.2	-8.2	-8.8	-3.5	-8.8	-5.0
11	-9.3	-9.1	-9.1	-8.3	-8.1	-8.3	-8.2	-8.1	-7.5	-7.0	-6.1	-4.8	-4.3	-4.1	-4.8	-4.0	-3.7	-3.7	-3.6	-3.5	-3.7	-3.8	-3.7	-3.7	-3.5	-9.3	-5.8
12	-3.8	-3.6	-3.5	-3.5	-3.5	-3.4	-3.0	-2.7	-2.3	-2.3	-2.1	-2.0	-1.8	-1.9	-2.5	-2.5	-2.7	-2.4	-2.6	-2.9	-3.3	-4.0	-4.5	-5.2	-1.8	-5.2	-3.0
13	-4.9	-5.3	-4.9	-4.8	-5.0	-4.8	-4.4	-4.9	-5.4	-5.7	-5.7	-5.9	-6.0	-5.6	-5.2	-5.0	-5.4	-5.6	-6.6	-7.9	-9.0	-9.9	-10.7	-10.9	-4.4	-10.9	-6.2
14	-10.9	-11.3	-11.8	-12.2	-12.4	-12.8	-12.8	-12.9	-12.5	-12.0	-11.7	-10.8	-10.0	-9.3	-8.1	-8.0	-7.6	-7.6	-7.8	-8.5	-9.6	-10.6	-11.2	-11.5	-7.6	-12.9	-10.6
15	-11.6	-12.6	-13.2	-13.3	-14.0	-14.7	-15.1	-14.3	-14.3	-14.1	-13.0	-13.1	-12.2	-11.5	-11.0	-9.8	-10.4	-10.7	-10.5	-10.8	-12.4	-13.0	-13.3	-13.0	-9.8	-15.1	-12.6
16	-12.9	-12.8	-12.9	-10.6	-9.2	-9.0	-8.7	-8.2	-7.5	-7.0	-6.4	-5.6	-5.0	-4.9	-4.6	-4.2	-4.2	-4.2	-4.0	-3.7	-3.6	-3.5	-3.6	-3.6	-3.5	-12.9	-6.7
17	-3.3	-3.1	-3.1	-3.2	-3.0	-3.0	-3.3	-3.4	-2.5	-2.8	-2.2	-2.4	-2.4	-2.0	-2.0	-1.8	-1.7	-1.9	-2.3	-2.6	-2.8	-3.2	-3.9	-4.5	-1.7	-4.5	-2.8
18	-5.3	-5.4	-5.1	-4.7	-5.1	-5.0	-3.8	-2.9	-2.5	-2.3	-2.1	-1.8	-1.2	-0.8	-0.6	-0.4	-0.4	-0.5	-0.8	-0.9	-0.8	-1.8	-2.1	-2.5	-0.4	-5.4	-2.5
19	-4.7	-6.2	-6.6	-6.2	-6.3	-6.6	-6.9	-7.0	-7.2	-7.3	-6.9	-6.4	-6.1	-6.2	-6.4	-6.5	-6.7	-6.5	-6.6	-7.2	-7.4	-7.5	-7.5	-7.5	-4.7	-7.5	-6.7
20	-7.6	-7.7	-7.8	-7.8	-7.7	-7.7	-7.6	-7.7	-7.3	-6.7	-5.8	-4.9	-4.0	-3.5	-2.7	-2.6	-2.6	-2.8	-2.7	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-7.8	-5.0
21	-2.5	-2.6	-2.6	-2.2	-1.7	-1.3	-0.9	-0.6	0.1	0.2	0.0	-0.4	-0.4	-0.6	-0.4	0.0	-0.4	-1.2	-1.4	-1.5	-1.5	-1.6	-1.9	-2.5	0.2	-2.6	-1.2
22	-2.6	-2.3	-1.9	-2.0	-2.1	-2.3	-1.9	-1.8	-1.9	-1.7	-1.6	-1.8	-1.2	-1.0	-0.9	-0.7	-0.7	-0.7	-0.7	-1.2	-1.5	-2.1	-2.7	-2.6	-0.7	-2.7	-1.7
23	-2.4	-2.3	-2.4	-2.3	-2.4	-2.6	-2.7	-2.6	-2.3	-1.5	-1.2	-0.9	-0.7	-0.6	-0.4	-0.4	-0.4	-0.2	-0.3	-1.1	-1.8	-2.6	-2.8	-3.5	-0.2	-3.5	-1.7
24	-3.5	-3.6	-4.1	-3.8	-3.5	-3.5	-3.5	-3.7	-3.7	-3.2	-2.6	-2.4	-2.3	-1.9	-1.6	-1.6	-1.9	-2.7	-3.6	-4.4	-5.3	-5.9	-6.7	-7.1	-1.6	-7.1	-3.6
25	-7.5	-7.7	-8.0	-8.3	-8.9	-9.2	-9.2	-9.0	-8.7	-8.1	-7.3	-6.0	-4.9	-4.3	-4.1	-3.1	-2.4	-2.1	-2.1	-2.0	-2.0	-2.1	-2.1	-2.2	-2.0	-9.2	-5.5
26	-2.1	-2.0	-2.2	-2.5	-2.4	-2.0	-2.0	-1.9	-1.7	-0.6	0.5	0.9	0.8	1.3	1.6	1.4	1.4	1.4	1.0	1.2	0.9	0.7	0.6	0.4	1.6	-2.5	-0.2
27	0.0	-0.1	0.3	-0.3	-0.3	0.1	-0.2	-0.4	-0.7	-0.4	0.0	0.5	1.1	1.5	1.5	1.8	1.7	1.3	0.8	0.1	-0.8	-1.3	-2.5	-3.0	1.8	-3.0	0.0
28	-3.2	-4.5	-5.7	-6.2	-6.9	-7.5	-6.7	-6.8	-6.1	-5.1	-4.2	-3.1	-2.5	-2.3	-2.2	-2.6	-2.5	-2.3	-2.3	-2.5	-2.6	-3.4	-4.3	-4.5	-2.2	-7.5	-4.2
29	-4.3	-4.3	-5.1	-4.8	-4.8	-4.8	-4.9	-5.2	-4.2	-3.3	-2.0	-1.1	-0.6	-0.1	0.5	0.8	0.8	0.5	0.0	-1.1	-2.0	-3.2	-3.5	-3.7	0.8	-5.2	-2.5
30	-3.5	-3.5	-3.8	-3.9	-3.5	-3.6	-2.9	-4.1	-5.6	-5.7	-5.7	-4.4	-3.6	-2.8	-2.1	-1.3	-0.6	-0.4	-0.1	-0.2	-0.7	-0.7	-0.9	-0.9	-0.1	-5.7	-2.7
Max.	**0.0**	**-0.1**	**0.3**	**-0.2**	**-0.2**	**0.1**	**0.1**	**0.3**	**0.6**	**1.0**	**1.2**	**1.1**	**1.1**	**1.5**	**1.6**	**1.8**	**1.7**	**1.4**	**1.0**	**1.2**	**0.9**	**0.7**	**0.6**	**0.4**	**1.8**		
Min.	**-12.9**	**-13.5**	**-14.3**	**-14.9**	**-15.3**	**-15.7**	**-16.4**	**-15.8**	**-14.8**	**-14.1**	**-13.0**	**-13.1**	**-12.2**	**-11.5**	**-11.0**	**-9.8**	**-10.4**	**-10.7**	**-10.5**	**-10.8**	**-12.4**	**-13.0**	**-13.3**	**-13.0**		**-16.4**	
Avg.	**-4.9**	**-5.1**	**-5.2**	**-5.2**	**-5.3**	**-5.4**	**-5.3**	**-5.4**	**-5.2**	**-4.8**	**-4.3**	**-3.8**	**-3.4**	**-3.1**	**-2.9**	**-2.7**	**-2.7**	**-2.8**	**-3.0**	**-3.4**	**-3.8**	**-4.2**	**-4.4**	**-4.6**			**-4.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.2	-1.4	-1.9	-2.1	-2.0	-1.4	-0.9	-0.4	0.3	1.1	1.9	2.3	2.6	2.2	2.5	2.8	2.8	2.6	2.1	1.7	1.0	0.6	0.1	-0.2	2.8	-2.1	0.6
2	-0.3	-0.1	0.3	0.1	-0.4	-0.1	0.2	0.5	0.9	1.6	1.6	1.5	1.9	2.1	2.1	2.2	1.9	1.8	1.9	1.3	1.2	0.8	0.8	0.1	2.2	-0.4	1.0
3	0.0	-0.2	-0.2	0.1	0.4	0.4	0.6	1.4	1.8	2.4	3.2	4.2	4.8	4.9	4.9	4.9	5.0	4.4	4.6	2.8	1.6	0.9	0.8	0.4	5.0	-0.2	2.2
4	0.4	0.2	0.3	0.0	-0.4	0.0	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.5	0.7	0.6	0.6	0.6	0.7	0.3	0.2	0.0	-0.1	-0.3	0.7	-0.4	0.3
5	-0.2	-0.2	-0.5	-0.5	-0.4	-0.1	0.3	0.5	1.0	1.2	1.5	2.4	2.0	1.6	2.1	1.7	1.6	1.6	1.5	1.0	0.8	0.2	0.1	-0.1	2.4	-0.5	0.8
6	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.8	-0.7	-0.7	-0.5	-0.5	-0.3	-0.1	-0.5	-0.8	-1.5	-2.3	-3.4	-3.5	-3.6	-0.1	-3.6	-0.9
7	-4.0	-4.1	-4.5	-4.6	-4.9	-5.2	-5.4	-5.3	-5.1	-5.0	-4.8	-4.3	-4.2	-4.5	-4.4	-4.5	-4.3	-4.2	-4.2	-4.0	-4.3	-4.4	-4.7	-5.5	-4.0	-5.5	-4.6
8	-5.9	-6.5	-6.9	-6.9	-7.2	-6.8	-6.0	-5.2	-4.1	-3.3	-2.0	-1.3	-1.0	-1.6	-1.3	-1.1	-0.7	0.4	0.8	0.5	0.2	0.3	0.4	0.2	0.8	-7.2	-2.7
9	0.1	0.1	0.7	0.8	0.8	0.8	0.9	1.3	1.9	2.5	2.5	2.7	2.8	3.2	3.5	3.3	3.5	3.1	3.1	2.5	1.9	2.7	2.7	2.7	3.5	0.1	2.1
10	2.5	2.4	2.2	2.0	2.0	2.2	2.1	1.8	1.9	2.9	2.9	2.8	3.5	4.1	4.6	3.0	1.7	2.4	2.3	2.5	2.8	2.3	2.0	2.4	4.6	1.7	2.6
11	2.6	1.3	0.3	0.5	0.5	1.3	2.3	2.8	3.1	3.2	3.6	3.6	4.2	3.9	5.0	5.3	4.3	4.3	3.3	3.3	2.6	2.8	2.8	3.1	5.3	0.3	2.9
12	2.6	2.8	3.1	2.6	2.2	2.1	2.0	2.1	3.0	4.0	4.8	5.4	5.9	6.5	6.7	7.1	7.0	6.5	6.1	4.7	4.1	2.9	2.3	2.6	7.1	2.0	4.1
13	2.1	1.4	0.6	0.7	0.5	0.5	1.4	2.0	2.8	3.8	4.1	4.2	4.9	5.6	6.0	5.7	6.3	6.0	5.9	5.4	4.9	4.4	3.6	2.9	6.3	0.5	3.6
14	3.0	2.6	2.5	2.3	2.0	3.2	3.3	3.7	3.9	4.4	5.2	6.0	6.5	6.9	7.0	6.2	5.7	5.1	4.5	3.5	2.2	1.8	1.1	0.7	7.0	0.7	3.9
15	0.9	0.6	0.6	0.7	0.7	0.9	0.8	1.7	2.1	2.2	2.7	3.6	4.2	4.8	5.3	6.2	6.6	6.4	5.9	5.8	4.3	3.8	3.2	2.3	6.6	0.6	3.2
16	1.7	1.4	0.9	0.4	-0.2	-0.8	-0.7	0.1	0.7	1.2	1.6	2.8	3.8	4.5	5.1	5.0	5.3	5.2	5.3	4.7	3.5	2.7	1.9	1.2	5.3	-0.8	2.4
17	0.8	0.5	0.2	-0.3	-0.2	-0.1	-0.3	1.3	2.3	3.0	3.5	3.9	4.1	4.5	4.5	4.0	4.0	3.6	3.1	2.2	1.3	1.1	0.9	0.9	4.5	-0.3	2.0
18	0.6	0.6	0.2	0.1	0.4	0.3	0.4	0.4	1.1	1.4	2.0	2.2	2.6	2.5	2.6	3.9	3.8	3.3	2.6	2.2	1.6	0.8	0.5	0.4	3.9	0.1	1.5
19	0.5	0.0	0.0	-0.7	-0.6	-0.9	-0.2	0.5	1.3	1.9	1.6	1.9	2.4	3.1	3.2	2.6	0.3	-0.2	-0.2	-0.1	-0.2	-0.4	-0.2	-0.2	3.2	-0.9	0.6
20	-0.2	-0.1	0.1	0.3	0.3	0.6	0.7	1.0	1.3	1.9	2.3	3.1	3.9	4.2	4.3	4.4	4.1	3.7	4.0	3.7	3.4	2.5	2.2	2.1	4.4	-0.2	2.2
21	1.7	1.5	1.0	0.4	0.2	0.3	0.2	0.1	0.2	0.4	1.3	2.2	2.8	3.1	4.0	4.1	4.6	3.7	4.5	4.8	4.5	4.2	3.6	3.2	4.8	0.1	2.4
22	2.5	2.0	1.7	1.1	0.8	1.1	1.5	2.5	3.4	4.4	5.1	5.7	6.7	8.3	9.6	10.4	10.7	11.1	11.1	10.1	8.1	7.0	5.5	4.6	11.1	0.8	5.6
23	4.4	3.2	2.1	2.3	2.4	4.0	4.6	6.0	7.5	9.7	12.0	13.9	16.0	17.4	17.4	17.7	18.0	17.1	16.5	15.9	14.1	12.6	11.7	10.9	18.0	2.1	10.7
24	10.2	10.2	10.6	9.9	9.8	10.9	11.8	11.6	12.1	13.5	15.2	15.9	16.9	17.7	18.7	18.9	19.1	18.8	18.1	15.8	15.2	14.5	14.4	13.5	19.1	9.8	14.3
25	12.9	12.0	11.1	10.9	10.0	10.5	10.7	11.4	12.8	14.0	15.3	16.7	17.7	18.5	19.5	19.9	20.1	19.4	18.1	17.4	17.9	16.4	15.5	15.0	20.1	10.0	15.1
26	13.7	12.7	11.5	11.3	10.5	11.1	11.2	12.7	14.4	16.5	18.5	20.6	21.7	22.5	22.8	23.0	22.7	21.8	21.0	19.5	17.8	15.8	15.5	13.8	23.0	10.5	16.8
27	11.8	12.1	11.5	9.9	10.2	9.9	10.5	10.3	11.2	13.3	14.1	15.5	17.0	16.7	17.6	19.1	19.4	19.9	18.8	17.0	16.6	14.9	12.8	12.4	19.9	9.9	14.3
28	11.7	11.0	11.3	11.4	12.1	11.3	11.6	12.8	13.2	14.0	15.3	16.7	18.3	19.0	19.7	20.3	20.4	20.6	20.6	18.6	16.7	14.9	13.8	12.9	20.6	11.0	15.3
29	12.2	11.8	11.5	10.9	10.3	9.9	11.0	12.2	13.0	13.9	14.9	15.7	16.2	16.5	16.3	16.0	15.8	15.1	14.1	12.8	11.2	9.8	9.0	8.2	16.5	8.2	12.8
30	7.6	7.1	6.7	6.2	6.0	6.6	7.2	9.4	10.6	11.5	12.4	12.6	13.9	14.6	14.3	13.6	12.8	11.8	10.2	8.9	8.2	7.3	6.7	6.6	14.6	6.0	9.7
31	6.5	6.4	6.1	5.4	5.0	4.6	4.2	4.2	4.1	3.8	3.7	3.6	3.2	2.8	3.3	3.5	3.7	3.8	3.9	3.9	3.8	3.6	3.4	3.1	6.5	2.8	4.2
Max.	**13.7**	**12.7**	**11.5**	**11.4**	**12.1**	**11.3**	**11.8**	**12.8**	**14.4**	**16.5**	**18.5**	**20.6**	**21.7**	**22.5**	**22.8**	**23.0**	**22.7**	**21.8**	**21.0**	**19.5**	**17.9**	**16.4**	**15.5**	**15.0**	**23.0**		
Min.	**-5.9**	**-6.5**	**-6.9**	**-6.9**	**-7.2**	**-6.8**	**-6.0**	**-5.3**	**-5.1**	**-5.0**	**-4.8**	**-4.3**	**-4.2**	**-4.5**	**-4.4**	**-4.5**	**-4.3**	**-4.2**	**-4.2**	**-4.0**	**-4.3**	**-4.4**	**-4.7**	**-5.5**		**-7.2**	
Avg.	**3.3**	**2.9**	**2.7**	**2.4**	**2.3**	**2.5**	**2.8**	**3.3**	**4.0**	**4.7**	**5.3**	**6.0**	**6.6**	**7.0**	**7.3**	**7.4**	**7.3**	**7.1**	**6.8**	**6.0**	**5.3**	**4.6**	**4.2**	**3.7**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.0	2.8	2.4	2.1	2.5	2.9	3.2	3.6	4.2	4.7	5.2	6.3	7.9	9.5	11.0	11.7	12.3	13.2	12.4	12.6	11.2	9.9	8.7	8.1	13.2	2.1	7.1
2	8.7	8.6	8.2	7.7	7.7	8.0	8.3	10.1	11.5	12.2	13.6	14.4	14.6	15.0	15.1	15.1	15.7	15.0	14.7	13.3	12.8	10.5	8.6	7.2	15.7	7.2	11.5
3	5.9	5.6	4.2	3.6	3.5	3.5	4.1	4.4	5.7	6.2	8.0	9.2	10.0	10.6	10.7	10.7	11.1	11.1	10.6	9.9	8.7	6.7	4.9	3.0	11.1	3.0	7.2
4	2.0	0.7	0.6	0.2	-0.1	0.8	2.1	3.1	4.3	5.6	7.1	8.3	9.4	10.3	11.1	11.4	11.4	11.3	10.8	10.0	8.9	6.8	4.0	2.5	11.4	-0.1	5.9
5	2.3	2.2	2.2	1.2	0.2	1.0	2.8	4.0	5.2	6.8	7.7	8.5	9.6	10.8	11.8	12.2	12.7	12.9	12.7	12.6	11.7	9.4	8.2	8.1	12.9	0.2	7.4
6	8.0	7.1	6.4	6.3	6.9	6.3	6.7	7.7	9.3	10.7	12.0	12.7	13.3	13.8	14.1	13.9	13.6	12.9	12.0	10.7	9.5	8.5	7.8	6.5	14.1	6.3	9.9
7	5.6	5.3	5.1	5.3	5.2	4.9	4.9	5.4	6.1	5.7	5.9	6.1	5.8	6.4	6.0	4.9	4.5	4.2	4.0	3.9	3.9	4.0	3.9	3.9	6.4	3.9	5.0
8	4.0	4.1	4.1	3.9	3.9	3.9	3.9	4.2	4.6	5.4	5.6	6.1	7.0	7.3	7.4	7.4	6.9	7.5	7.7	7.2	6.9	6.6	6.9	6.9	7.7	3.9	5.8
9	7.1	6.9	6.7	6.6	6.2	6.2	5.8	5.6	6.4	7.2	7.9	8.6	10.6	9.7	10.0	9.6	9.0	8.4	6.8	6.5	5.5	5.3	4.9	5.2	10.6	4.9	7.2
10	5.0	5.0	4.8	4.5	4.6	4.6	4.6	5.3	6.0	7.0	7.1	7.1	6.9	7.2	7.4	7.2	6.2	5.8	5.2	4.7	3.5	3.2	3.2	3.1	7.4	3.1	5.4
11	3.1	3.2	3.3	3.2	3.2	3.4	3.4	3.6	4.0	4.5	4.7	5.1	5.1	5.5	5.7	6.0	6.2	6.3	5.6	5.4	5.5	5.4	5.4	5.1	6.3	3.1	4.7
12	5.3	5.6	5.6	5.7	5.7	5.5	5.9	6.0	6.3	6.5	6.4	6.5	6.7	6.8	6.8	6.7	6.7	6.4	6.1	6.1	5.9	5.8	5.8	5.6	6.8	5.3	6.1
13	5.5	5.4	5.3	5.4	5.4	5.5	5.7	6.4	7.4	7.2	7.9	9.1	10.1	10.4	10.6	11.1	11.4	10.9	10.2	9.6	9.3	8.7	8.7	8.4	11.4	5.3	8.2
14	7.9	8.1	8.5	7.6	7.6	7.6	8.2	9.0	9.4	10.3	10.8	12.1	12.2	12.4	12.5	13.0	13.2	13.1	12.4	12.3	11.9	11.1	10.6	9.5	13.2	7.6	10.5
15	9.1	8.9	8.4	8.4	8.8	9.2	10.0	10.9	11.8	13.5	15.3	17.0	17.9	18.8	19.3	13.9	12.7	11.8	11.5	10.8	9.5	9.2	9.3	8.9	19.3	8.4	11.9
16	8.7	8.3	8.4	8.4	8.3	8.5	8.4	8.4	8.0	7.7	7.7	7.8	7.8	8.2	8.6	8.5	8.2	7.7	7.9	7.9	7.9	7.5	7.2	6.9	8.7	6.9	8.0
17	7.2	7.3	7.4	7.7	8.3	8.7	9.1	9.1	9.0	9.1	10.5	11.6	12.6	12.2	9.5	10.4	11.0	10.0	9.3	8.6	8.0	7.6	7.5	7.3	12.6	7.2	9.1
18	7.1	6.9	6.8	6.8	7.2	7.8	8.1	8.8	9.9	10.2	10.2	10.6	9.5	9.4	10.3	11.4	10.5	9.9	9.3	8.8	8.3	7.9	7.6	6.8	11.4	6.8	8.7
19	6.5	7.2	7.2	6.4	6.1	6.7	7.5	8.0	9.0	9.7	11.3	11.5	12.1	12.7	13.3	13.4	13.6	13.5	13.6	12.0	8.4	6.9	6.1	5.9	13.6	5.9	9.5
20	5.8	5.9	6.2	5.5	6.0	6.9	7.6	8.3	9.0	10.1	10.5	11.5	12.8	12.5	10.0	6.8	6.1	6.0	6.1	6.8	6.0	5.2	4.4	3.6	12.8	3.6	7.5
21	3.5	3.2	2.9	2.7	3.8	4.3	4.9	6.5	7.9	9.0	9.8	10.8	12.0	12.0	12.3	13.1	12.8	13.1	13.6	13.2	13.5	12.7	10.5	9.1	13.6	2.7	9.0
22	9.6	9.0	8.0	7.4	7.8	8.4	9.9	10.3	11.0	10.7	10.7	10.7	10.7	8.4	6.8	6.1	6.0	5.9	6.0	5.8	5.9	5.8	5.6	5.3	11.0	5.3	8.0
23	5.0	5.2	5.4	5.6	5.5	5.5	5.6	5.9	6.2	6.6	6.9	7.6	8.4	9.1	9.3	9.2	9.2	9.3	9.4	8.7	7.7	6.6	5.8	4.8	9.4	4.8	7.0
24	4.3	4.5	4.7	4.7	4.8	4.8	6.0	7.2	8.8	9.5	10.7	11.6	12.5	12.9	13.6	13.7	13.8	12.7	11.7	12.2	11.8	11.1	11.0	10.4	13.8	4.3	9.5
25	10.2	9.7	8.5	8.0	8.1	8.9	9.3	10.5	12.1	12.9	13.5	14.0	14.6	14.9	14.7	14.5	14.6	13.7	12.3	10.8	9.7	8.7	8.0	7.2	14.9	7.2	11.2
26	6.6	6.3	5.6	5.7	5.5	6.1	6.2	7.2	9.4	11.9	12.8	13.6	14.6	14.4	14.4	14.7	14.7	15.4	15.7	13.2	10.8	9.7	8.8	8.1	15.7	5.5	10.5
27	7.4	7.1	7.6	7.0	6.4	6.6	6.7	7.5	9.1	10.5	12.0	13.3	14.5	14.6	15.6	16.0	15.9	15.8	15.6	14.5	13.2	11.2	9.4	8.3	16.0	6.4	11.1
28	7.2	6.5	5.6	5.3	6.4	6.7	7.2	6.8	6.4	6.8	6.5	7.9	7.9	8.0	8.4	8.1	8.7	8.9	9.2	9.5	9.5	9.1	8.8	8.8	9.5	5.3	7.7
29	8.3	7.9	7.6	7.4	7.4	7.2	7.2	7.7	8.6	9.3	9.9	10.4	11.5	13.5	14.4	16.2	14.6	13.0	11.1	9.7	8.6	7.7	7.4	7.2	16.2	7.2	9.7
30	7.1	7.1	7.0	7.0	7.1	7.4	7.3	7.3	7.3	7.5	7.4	7.5	8.0	7.7	8.0	7.9	8.1	8.4	8.5	8.7	8.5	7.9	7.5	7.3	8.7	7.0	7.6
Max.	**10.2**	**9.7**	**8.5**	**8.4**	**8.8**	**9.2**	**10.0**	**10.9**	**12.1**	**13.5**	**15.3**	**17.0**	**17.9**	**18.8**	**19.3**	**16.2**	**15.9**	**15.8**	**15.7**	**14.5**	**13.5**	**12.7**	**11.0**	**10.4**	**19.3**		
Min.	**2.0**	**0.7**	**0.6**	**0.2**	**-0.1**	**0.8**	**2.1**	**3.1**	**4.0**	**4.5**	**4.7**	**5.1**	**5.1**	**5.5**	**5.7**	**4.9**	**4.5**	**4.2**	**4.0**	**3.9**	**3.5**	**3.2**	**3.2**	**2.5**		**-0.1**	
Avg.	**6.2**	**6.1**	**5.8**	**5.6**	**5.7**	**5.9**	**6.4**	**7.0**	**7.8**	**8.5**	**9.2**	**9.9**	**10.5**	**10.8**	**11.0**	**10.8**	**10.7**	**10.5**	**10.1**	**9.5**	**8.7**	**7.9**	**7.2**	**6.6**			**8.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.8	6.4	6.5	6.3	6.2	6.2	6.3	6.4	6.8	7.0	8.6	11.3	13.3	15.0	16.0	16.9	17.5	17.4	17.1	16.5	15.2	14.0	12.3	11.1	17.5	6.2	11.1
2	9.9	10.4	9.6	8.9	9.1	9.5	9.9	11.0	12.5	13.7	15.1	16.2	17.0	17.6	18.2	18.8	19.0	18.9	18.8	18.1	17.1	14.4	12.6	11.8	19.0	8.9	14.1
3	11.7	11.4	10.6	9.5	8.7	8.9	9.8	11.0	11.6	14.1	15.4	16.6	17.6	18.7	19.9	20.2	20.2	19.9	20.1	19.9	19.2	16.1	13.1	12.3	20.2	8.7	14.8
4	11.4	11.1	10.7	10.2	9.9	10.4	12.7	14.0	15.2	16.5	18.0	19.0	20.2	20.9	21.6	21.9	22.4	22.2	22.0	21.2	18.4	16.3	14.7	14.1	22.4	9.9	16.5
5	13.1	12.7	12.2	11.6	10.8	10.2	10.3	11.0	11.6	12.4	14.2	17.0	19.1	20.0	21.4	21.7	15.7	15.1	16.3	15.9	14.9	14.4	13.9	14.6	21.7	10.2	14.6
6	14.3	13.6	13.7	13.6	12.7	12.9	13.5	14.1	13.8	14.7	15.1	16.6	17.1	17.3	18.0	18.5	17.9	15.4	15.2	15.7	14.7	13.6	12.4	11.8	18.5	11.8	14.8
7	11.2	10.4	10.0	9.7	9.5	9.4	9.5	9.7	9.5	9.7	9.9	10.2	10.6	10.8	10.5	10.1	10.2	10.1	9.8	9.7	9.6	9.6	9.2	8.6	11.2	8.6	9.9
8	8.4	8.0	7.6	7.3	7.2	7.1	7.0	7.2	7.3	7.7	8.1	8.6	9.1	9.5	9.8	10.4	10.7	10.8	11.0	11.2	11.8	10.2	9.9	9.8	11.8	7.0	9.0
9	9.9	9.9	9.3	8.7	8.9	9.4	9.9	10.3	11.4	12.8	14.3	15.9	17.4	17.3	17.2	18.0	17.6	16.6	15.3	14.0	13.1	12.0	11.3	10.4	18.0	8.7	12.9
10	9.9	9.7	9.3	9.1	9.3	9.3	9.3	9.5	10.2	11.2	10.9	11.9	9.3	9.3	9.3	9.5	10.2	11.2	10.9	11.9	12.1	12.6	12.2	12.7	12.7	9.1	10.4
11			11.9	11.3	9.9	9.0	8.0	7.8	7.6		7.6	7.7	7.8	7.9	7.9	8.3	8.7	9.1	10.5				13.1	13.8	13.8	7.6	9.3
12	13.5	13.0	12.0	12.2	12.6	11.7	10.6	10.1	9.1	8.4	8.8	8.9	8.5	8.7	9.2	9.9	11.4	12.3	13.5	14.9	16.5	17.7	18.5	19.4	19.4	8.4	12.1
13	20.4	21.0	19.8	19.3	17.9	16.4	14.8	14.5	14.3	13.2	12.6	12.4	12.7	12.6	12.8	11.2	9.8	9.3	9.1	9.2	8.9	8.7	9.2	9.5	21.0	8.7	13.3
14	9.0	8.7	8.6	8.5	8.4	8.1	7.9	7.7	7.3	6.8	6.5	6.3	6.3	6.2	6.0	6.2	6.3	6.4	6.7	6.9	7.0	7.1	7.2	7.4	9.0	6.0	7.2
15	7.6	7.5	7.4	7.2	7.3	7.5	7.4	7.1	6.9	6.8	6.8	6.7	6.6	6.4	6.3	6.5	6.5	6.8	7.3	7.8	8.6	8.7	9.2	9.5	9.5	6.3	7.3
16	10.2	11.1	11.6	11.2	10.4	9.7	9.6	9.1	8.9	8.0	7.8	7.6	7.6	7.7	7.8	7.9	8.1	8.6	9.2	9.9	10.6	10.9	10.3	10.9	11.6	7.6	9.4
17	10.8	10.2	9.1	8.6	8.1	7.7	7.5	7.3	7.2	7.1	6.9	6.6	6.3	6.1	6.2	6.5	6.9	7.2	7.7	8.5	9.1	9.2	9.8	9.7	10.8	6.1	7.9
18	9.3	9.3	8.4	8.2	8.1	8.0	7.9	8.0	8.0	8.5	8.4	8.2	8.0	7.8	8.1	8.4	8.5	9.0	9.6	10.4	10.5	10.2	10.6	9.7	10.6	7.8	8.8
19	9.1	9.1	9.1	9.0	8.4	8.2	8.2	8.0	7.7	8.0	7.9	7.7	7.4	7.2	7.4	8.2	9.1	9.7	10.6	12.0	12.6	13.0	13.4	13.4	13.4	7.2	9.3
20	13.9	13.3	13.3	13.5	12.7	11.9	11.3	11.2	9.9	9.5	8.8	8.2	8.4	7.9	8.1	9.1	11.2	13.8	15.1	15.6	16.5	16.4	17.5	17.3	17.5	7.9	12.3
21	17.2	17.6	17.4	15.8	14.2	12.7	11.3	9.9	9.2	8.8	8.7	9.4	9.8	9.3	10.5	10.5	11.3	12.9	13.7	14.4	15.1	13.1	12.9	13.6	17.6	8.7	12.5
22	14.1	13.0	12.3	11.5	10.9	10.9	10.5	10.3	10.1	10.3	10.2	9.9	9.9	9.3	9.6	9.8	10.7	11.7	12.2	12.2	12.0	12.1	12.3	10.5	14.1	9.3	11.1
23	10.0	8.7	8.2	8.3	8.4	8.3	7.7	7.3	7.3	7.6	7.8	7.3	7.2	7.2	7.0	7.2	7.6	7.9	8.3	9.0	9.5	9.5	10.4	10.5	10.5	7.0	8.3
24	10.8	11.1	10.6	10.0	9.7	9.5	9.3	9.2	9.2	9.1	9.1	8.7	8.6	8.4	8.1	8.3	8.3	8.5	8.7	8.7	9.4	9.6	9.5	9.8	11.1	8.1	9.2
25	9.9	9.1	8.6	8.2	8.1	8.0	7.6	7.3	7.2	7.3	7.5	7.6	7.7	7.3	7.3	7.5	7.6	7.8	8.1	8.0	8.6	8.9	9.3	10.4	10.4	7.2	8.1
26	10.8	10.7	10.6	10.2	9.7	9.3	8.6	8.2	8.1	8.1	8.1	8.2	8.5	8.6	8.2	7.9	7.9	8.5	8.8	9.3	10.0	11.0	11.2	11.4	11.4	7.9	9.2
27	11.9	11.9	10.9	10.3	10.0	9.2	8.3	8.1	7.8	7.4	7.2	7.3	7.5	7.2	7.0	7.0	7.7	8.5	9.1	9.5	10.2	10.9	12.2	13.0	13.0	7.0	9.2
28	13.7	14.2	14.3	14.0	12.6	11.7	10.4	9.6	9.1	9.3	8.9	8.9	8.4	8.4	9.4	9.7	10.9	11.9	13.0	13.5	13.7	13.4	13.5	13.6	14.3	8.4	11.5
29	12.5	12.1	11.5	11.0	9.4	8.5	7.8	7.5	7.2	7.0	6.9	6.6	6.4	6.3	6.2	6.3	6.4	6.6	7.0	8.1	9.4	11.3	13.2	13.7	13.7	6.2	8.7
30	12.8	11.5	11.5	10.1	8.3	7.5	7.0	6.8	6.7	6.6	6.5	6.4	6.2	6.0	5.9	5.9	5.9	6.1	6.2	6.5	6.7	7.1	7.5	8.4	12.8	5.9	7.5
31	9.1	9.6	11.3	10.5	11.0	9.2	7.6	6.4	5.7	6.4	6.2	6.7	7.2	7.3	7.3	7.5	7.9	8.8	9.1	9.3	9.8	10.0	11.2	10.6	11.3	5.7	8.6
Max.	**20.4**	**21.0**	**19.8**	**19.3**	**17.9**	**16.4**	**14.8**	**14.5**	**15.2**	**16.5**	**18.0**	**19.0**	**20.2**	**20.9**	**21.6**	**21.9**	**22.4**	**22.2**	**22.0**	**21.2**	**19.2**	**17.7**	**18.5**	**19.4**	**22.4**		
Min.	**6.8**	**6.4**	**6.5**	**6.3**	**6.2**	**6.2**	**6.3**	**6.4**	**5.7**	**6.4**	**6.2**	**6.3**	**6.2**	**6.0**	**5.9**	**5.9**	**5.9**	**6.1**	**6.2**	**6.5**	**6.7**	**7.1**	**7.2**	**7.4**		**5.7**	
Avg.	**11.4**	**11.2**	**10.9**	**10.4**	**10.0**	**9.5**	**9.3**	**9.2**	**9.2**	**9.5**	**9.6**	**10.0**	**10.2**	**10.3**	**10.6**	**10.8**	**11.0**	**11.3**	**11.6**	**11.9**	**12.0**	**11.7**	**11.7**	**11.7**			**10.6**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.6	7.2	6.8	6.3	5.9	5.7	5.8	6.0	6.2	6.2	6.4	6.6	7.2	7.2	7.8	8.1	8.1	7.9	7.5	7.5	7.3	7.1	6.7	6.5	8.1	5.7	6.9
2	6.5	6.5	6.7	6.7	6.6	6.7	6.2	6.4	6.8	7.1	7.4	8.4	8.8	9.2	9.0	8.1	8.3	8.8	9.1	8.9	8.3	8.1	8.0	8.1	9.2	6.2	7.7
3	8.0	7.9	7.9	8.4	8.7	8.4	8.3	8.2	8.3	8.6	8.6	8.9	9.3	8.8	9.1	8.9	8.5	8.7	8.7	8.5	8.2	7.8	7.7	7.6	9.3	7.6	8.4
4	7.7	7.8	7.4	7.1	7.2	7.4	7.8	7.9	8.9	9.6	10.3	10.1	10.6	10.4	10.1	9.5	9.9	10.0	10.0	9.9	9.7	9.5	9.2	8.8	10.6	7.1	9.0
5	8.7	8.6	8.6	8.7	8.9	8.8	8.7	8.8	9.1	9.1	9.3	9.6	10.0	10.6	10.8	11.5	12.2	12.1	10.8	10.8	10.6	10.0	9.3	9.3	12.2	8.6	9.8
6	9.0	9.1	9.1	9.4	8.6	7.4	7.6	9.3	10.0	11.0	12.0	13.0	13.9	14.4	14.9	15.6	15.9	16.1	16.1	14.1	13.6	12.0	11.0	11.0	16.1	7.4	11.8
7	11.0	10.4	10.3	10.5	10.4	10.5	11.1	11.9	12.9	12.8	13.3	14.8	16.1	16.4	16.2	16.8	16.7	16.1	15.0	13.8	11.9	9.4	8.5	7.7	16.8	7.7	12.7
8	7.5	6.9	7.2	7.3	7.1	7.1	7.3	7.7	8.1	8.5	9.1	9.5	9.9	10.5	11.1	11.9	12.8	12.9	12.3	11.7	11.2	10.2	10.0	10.0	12.9	6.9	9.5
9	9.9	9.6	9.5	9.4	9.4	9.3	9.0	9.4	9.8	9.4	9.4	9.4	9.2	9.2	9.4	9.6	9.8	9.6	9.7	9.6	9.6	9.5	9.5	9.4	9.9	9.0	9.5
10	9.2	9.2	9.3	9.3	9.1	9.1	9.2	9.2	9.2	9.4	9.6	10.0	10.0	10.0	9.8	9.6	9.5	9.4	9.3	9.1	8.8	8.7	8.7	8.7	10.0	8.7	9.3
11	8.7	8.7	8.6	8.5	8.4	8.4	8.5	8.8	8.9	9.1	9.5	9.9	10.3	10.5	10.7	11.1	10.8	10.7	10.3	10.1	10.0	10.0	10.0	10.0	11.1	8.4	9.6
12	10.1	10.2	10.2	10.1	9.9	9.9	10.0	10.2	10.3	10.0	10.5	11.1	11.6	12.7	13.3	12.9	13.3	13.0	12.5	11.2	10.0	8.8	8.6	8.6	13.3	8.6	10.8
13	8.2	8.3	7.6	7.5	7.5	7.4	7.0	6.7	7.1	7.4	7.6	7.7	8.2	8.4	8.9	9.4	9.3	9.2	8.6	8.6	8.3	8.2	8.0	8.0	9.4	6.7	8.0
14	8.0	7.9	7.7	7.6	7.4	7.3	7.4	7.5	7.7	7.9	8.0	8.6	8.5	8.4	8.4	8.4	8.1	7.7	7.8	7.9	7.7	7.6	7.6	7.6	8.6	7.3	7.9
15	7.6	7.7	7.6	7.7	7.7	7.8	7.8	7.9	8.0	8.3	8.6	8.8	9.2	9.4	9.4	9.7	9.7	9.7	9.4	9.2	9.1	9.0	8.8	8.7	9.7	7.6	8.6
16	8.6	8.7	8.6	8.5	8.5	8.6	8.8	8.9	9.2	9.7	10.2	11.1	11.6	12.0	11.6	11.8	12.7	11.5	11.4	11.3	10.8	10.4	10.1	9.9	12.7	8.5	10.2
17	9.9	9.8	9.4	9.4	9.5	9.5	10.2	11.0	11.0	11.4	12.3	14.3	14.9	15.7	14.4	13.6	13.8	13.4	12.8	11.7	11.0	10.1	9.3	8.8	15.7	8.8	11.5
18	8.5	8.2	7.6	7.3	7.1	6.8	6.6	6.4	6.5	6.5	6.8	7.1	7.3	7.8	8.3	8.4	8.4	8.8	9.2	9.5	9.4	9.1	9.1	8.9	9.5	6.4	7.9
19	8.3	7.2	7.0	6.7	6.5	6.0	6.9	6.4	7.0	7.5	7.7	8.7	8.9	10.7	11.2	11.2	9.8	9.2	8.7	7.4	6.4	4.9	4.7	5.2	11.2	4.7	7.7
20	6.0	6.2	5.9	6.0	6.1	5.9	5.5	5.5	5.4	5.7	6.3	7.5	8.8	10.5	11.0	12.0	12.0	11.8	11.2	10.0	7.8	6.4	6.1	6.1	12.0	5.4	7.7
21	5.7	5.2	4.8	4.5	4.5	4.1	5.1	6.0	7.3	8.6	8.7	9.5	10.5	11.3	11.0	11.2	11.3	10.4	9.6	7.6	6.9	6.9	6.7	6.2	11.3	4.1	7.6
22	6.4	7.3	7.6	7.9	7.8	7.8	7.7	7.5	7.5	7.4	7.4	7.8	8.4	9.9	9.8	9.3	9.9	9.6	9.6	9.2	8.0	6.1	5.7	5.4	9.9	5.4	7.9
23	5.5	6.0	5.9	6.3	6.3	6.3	7.6	7.6	7.7	7.5	8.3	9.6	10.7	11.1	12.0	12.0	12.1	12.1	11.4	10.1	8.7	7.6	7.2	7.2	12.1	5.5	8.6
24	7.7	7.6	7.7	7.8	7.3	6.9	7.2	7.2	6.6	7.3	7.7	7.8	7.5	7.3	7.5	7.9	8.0	7.8	7.8	7.4	6.9	5.8	4.9	5.5	8.0	4.9	7.2
25	5.9	5.3	4.9	5.4	4.8	4.2	4.3	5.4	6.7	7.7	9.1	9.9	10.7	10.8	11.0	11.8	11.3	11.5	10.9	10.5	9.2	8.9	8.3	7.8	11.8	4.2	8.2
26	6.7	6.2	6.6	6.9	7.0	6.9	6.3	6.3	6.7	7.2	8.1	9.1	10.2	11.1	10.9	10.7	10.5	10.8	10.0	8.9	7.5	7.3	7.3	7.3	11.1	6.2	8.2
27	6.8	6.7	6.7	6.6	7.4	7.6	7.8	8.8	9.0	9.1	10.8	11.7	12.2	12.8	13.5	13.2	13.5	13.0	12.6	11.3	10.4	9.7	9.2	8.8	13.5	6.6	10.0
28	9.0	8.9	8.5	8.3	8.0	7.5	7.3	7.5	7.8	8.4	8.8	9.1	10.2	11.8	12.3	13.0	11.8	11.8	11.2	10.6	10.1	8.9	9.2	8.2	13.0	7.3	9.5
29	7.7	8.5	7.9	7.2	6.6	7.2	7.2	6.2	7.3	8.0	9.3	10.7	12.0	12.4	12.7	12.4	12.2	12.2	11.0	9.3	8.1	7.7	7.3	7.2	12.7	6.2	9.1
30	6.9	6.6	7.0	7.5	7.9	8.5	8.2	7.7	7.2	7.1	7.3	7.8	8.5	8.9	9.0	9.2	9.5	9.2	9.0	9.2	9.1	8.8	8.3	8.2	9.5	6.6	8.2
31	8.4	7.8	7.2	7.4	7.3	6.8	6.7	7.5	8.1	8.3	9.1	10.0	11.6	12.0	12.1	12.4	12.5	12.0	11.0	9.6	8.5	8.1	7.9	7.7	12.5	6.7	9.2
Max.	**11.0**	**10.4**	**10.3**	**10.5**	**10.4**	**10.5**	**11.1**	**11.9**	**12.9**	**12.8**	**13.3**	**14.8**	**16.1**	**16.4**	**16.2**	**16.8**	**16.7**	**16.1**	**16.1**	**14.1**	**13.6**	**12.0**	**11.0**	**11.0**	**16.8**		
Min.	**5.5**	**5.2**	**4.8**	**4.5**	**4.5**	**4.1**	**4.3**	**5.4**	**5.4**	**5.7**	**6.3**	**6.6**	**7.2**	**7.2**	**7.5**	**7.9**	**8.0**	**7.7**	**7.5**	**7.4**	**6.4**	**4.9**	**4.7**	**5.2**		**4.1**	
Avg.	**7.9**	**7.8**	**7.7**	**7.7**	**7.6**	**7.5**	**7.6**	**7.8**	**8.1**	**8.4**	**9.0**	**9.6**	**10.2**	**10.7**	**10.9**	**11.0**	**11.0**	**10.9**	**10.5**	**9.8**	**9.1**	**8.5**	**8.2**	**8.0**			**9.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.6	7.5	7.5	7.5	7.4	7.2	7.2	7.4	7.7	8.0	8.7	9.6	10.6	11.4	12.2	12.9	12.7	11.9	10.7	9.6	8.1	7.5	7.7	7.2	12.9	7.2	9.0
2	7.7	7.1	6.8	6.2	5.9	6.4	6.2	6.5	7.8	9.1	9.2	9.8	10.0	10.5	12.2	12.3	12.2	12.9	12.5	9.8	9.2	8.0	7.6	7.8	12.9	5.9	8.9
3	7.5	6.8	6.9	6.8	7.0	6.8	6.2	6.8	7.7	9.4	10.6	12.0	13.0	13.1	12.8	11.3	12.9	10.9	12.2	11.9	10.8	8.9	8.2	7.9	13.1	6.2	9.5
4	8.1	8.2	7.5	7.3	6.9	7.2	7.5	7.3	7.6	9.4	10.6	11.7	12.6	13.1	14.0	14.5	11.3	9.8	10.1	9.5	8.3	8.5	7.6	8.2	14.5	6.9	9.4
5	7.7	7.4	7.3	7.3	7.2	7.2	7.1	7.1	7.7	8.3	8.5	9.2	9.4	10.5	10.1	10.3	10.2	9.4	8.9	8.1	7.0	6.3	6.1	5.8	10.5	5.8	8.1
6	5.8	5.5	5.5	5.0	4.2	4.1	4.1	5.2	6.8	7.9	9.5	10.9	11.6	12.4	13.0	13.4	13.4	12.2	10.8	9.5	8.6	8.0	6.8	6.1	13.4	4.1	8.3
7	6.1	6.0	5.9	6.0	5.9	5.8	5.8	6.1	7.1	7.9	8.9	10.1	10.3	10.0	9.6	8.8	7.7	7.6	7.5	7.2	7.1	7.1	7.3	7.4	10.3	5.8	7.5
8	7.6	7.6	7.7	7.6	7.5	7.5	7.3	7.5	7.6	7.6	7.8	8.0	8.1	8.2	8.0	8.0	8.0	8.1	7.8	7.5	7.3	7.0	6.9	6.9	8.2	6.9	7.6
9	6.8	6.8	6.9	6.8	6.9	6.7	6.3	6.6	8.2	9.9	11.0	12.3	12.8	12.1	11.0	10.5	11.0	10.1	8.8	7.4	6.9	6.3	6.8	6.6	12.8	6.3	8.6
10	5.8	5.4	4.9	5.2	5.8	5.8	5.6	6.6	7.8	8.9	9.2	10.3	11.0	11.1	9.4	10.9	11.1	10.7	9.6	8.8	8.8	8.1	7.5	7.3	11.1	4.9	8.2
11	6.6	6.5	6.5	6.3	6.0	5.9	5.8	6.4	7.4	8.9	10.1	11.4	12.0	12.9	13.5	13.9	14.0	14.1	14.0	11.7	10.3	10.6	10.3	9.9	14.1	5.8	9.8
12	9.5	8.6	8.1	8.2	8.3	8.1	8.5	9.1	9.6	10.8	12.2	13.6	14.3	14.9	15.4	15.7	15.8	15.4	14.3	11.9	10.6	11.0	10.8	10.1	15.8	8.1	11.5
13	9.6	9.2	8.9	9.2	9.6	9.1	8.6	10.4	10.6	11.2	12.4	13.8	14.7	14.8	14.7	14.6	14.0	12.6	11.4	10.7	10.7	10.2	9.3	7.6	14.8	7.6	11.1
14	7.3	7.1	7.1	7.2	7.3	7.6	7.8	8.1	8.2	8.1	8.5	8.7	9.1	9.1	9.7	10.1	10.2	9.9	9.7	9.6	9.5	9.6	9.1	8.8	10.2	7.1	8.6
15	8.8	9.3	9.2	9.2	9.3	9.5	10.1	10.7	10.3	9.7	9.7	9.5	10.4	10.7	10.1	9.9	10.0	10.1	9.5	8.5	8.5	8.5	8.4	8.2	10.7	8.2	9.5
16	8.0	8.0	7.9	7.8	7.7	7.5	7.5	7.7	8.0	8.3	8.8	9.4	9.6	9.8	9.7	9.4	9.2	9.1	8.7	7.9	7.2	6.2	6.6	6.6	9.8	6.2	8.2
17	6.5	6.5	6.4	6.3	6.5	6.4	6.2	6.1	6.1	6.2	6.5	6.9	7.2	7.5	7.9	8.4	8.6	8.5	7.7	7.0	6.1	5.5	5.5	5.2	8.6	5.2	6.7
18	5.3	6.1	6.6	6.0	4.9	5.2	5.4	6.2	6.9	7.3	7.2	7.7	7.9	7.7	7.7	7.8	6.8	6.3	6.5	7.0	7.4	7.4	7.5	7.7	7.9	4.9	6.8
19	7.7	7.9	8.0	7.8	7.6	7.1	6.3	6.5	7.1	7.5	7.7	7.7	8.5	8.2	8.2	8.3	8.3	8.4	7.7	7.3	6.9	6.4	6.3	6.1	8.5	6.1	7.5
20	5.7	5.7	5.4	5.3	5.2	5.4	5.6	6.0	6.2	7.1	7.4	8.1	8.8	9.3	9.3	9.6	10.0	9.3	8.9	8.2	7.8	7.2	6.9	6.6	10.0	5.2	7.3
21	6.2	6.0	5.7	5.7	5.6	5.5	5.6	5.5	5.6	6.1	6.3	6.4	6.5	6.5	6.4	6.3	6.0	6.0	6.1	5.6	5.4	5.3	5.6	5.1	6.5	5.1	5.9
22	4.9	5.3	5.6	5.6	5.7	5.5	5.4	5.7	5.8	5.9	6.6	6.8	7.3	7.5	7.6	8.0	8.1	8.1	6.6	6.2	6.1	6.3	6.2	6.1	8.1	4.9	6.4
23	6.0	5.9	5.9	6.0	5.9	5.8	5.8	5.9	6.1	6.3	6.7	7.2	6.6	6.7	7.3	7.4	7.3	7.4	7.0	6.3	5.6	5.7	5.7	5.4	7.4	5.4	6.3
24	5.3	5.3	5.0	5.0	4.8	4.6	4.7	4.9	5.0	5.8	6.2	7.3	6.3	7.3	7.0	7.7	7.6	7.4	6.1	4.2	3.5	2.8	2.5	2.0	7.7	2.0	5.3
25	1.6	1.7	1.4	1.3	1.2	0.5	0.5	1.4	1.4	2.4	3.5	4.8	6.6	7.2	7.2	7.2	7.4	7.1	6.8	6.3	6.2	6.4	5.4	4.9	7.4	0.5	4.2
26	4.7	4.5	4.5	4.1	4.2	5.0	4.8	5.0	4.8	4.8	4.8	4.7	4.8	5.1	5.5	5.4	5.3	4.9	4.9	4.9	4.8	4.8	4.8	4.9	5.5	4.1	4.8
27	5.0	5.1	5.1	4.6	3.9	3.4	3.3	3.1	3.0	3.6	4.2	5.2	5.8	5.8	5.9	5.6	5.1	4.3	4.1	4.0	4.0	4.0	3.8	3.7	5.9	3.0	4.4
28	3.6	3.5	3.4	3.4	3.3	3.2	3.0	2.8	2.5	2.5	2.7	3.0	3.0	3.1	3.6	3.9	3.4	2.7	1.9	0.7	-0.4	-0.9	-1.3	-0.9	3.9	-1.3	2.3
29	-0.8	-0.9	-0.5	0.3	0.4	-0.3	-1.3	-2.3	-1.0	0.4	1.1	1.9	2.4	2.6	2.0	2.2	2.2	2.2	1.3	0.3	0.0	-0.7	-1.3	-1.2	2.6	-2.3	0.4
30	-0.8	-0.7	-0.8	-0.5	-0.8	-0.7	-0.3	0.0	0.3	0.7	1.7	2.7	3.5	4.2	5.0	4.8	5.1	4.7	4.1	3.6	3.0	3.0	2.5	2.4	5.1	-0.8	1.9
Max.	**9.6**	**9.3**	**9.2**	**9.2**	**9.6**	**9.5**	**10.1**	**10.7**	**10.6**	**11.2**	**12.4**	**13.8**	**14.7**	**14.9**	**15.4**	**15.7**	**15.8**	**15.4**	**14.3**	**11.9**	**10.8**	**11.0**	**10.8**	**10.1**	**15.8**		
Min.	**-0.8**	**-0.9**	**-0.8**	**-0.5**	**-0.8**	**-0.7**	**-1.3**	**-2.3**	**-1.0**	**0.4**	**1.1**	**1.9**	**2.4**	**2.6**	**2.0**	**2.2**	**2.2**	**2.2**	**1.3**	**0.3**	**-0.4**	**-0.9**	**-1.3**	**-1.2**		**-2.3**	
Avg.	**6.0**	**6.0**	**5.9**	**5.8**	**5.7**	**5.6**	**5.6**	**5.9**	**6.3**	**7.0**	**7.6**	**8.4**	**8.8**	**9.1**	**9.2**	**9.3**	**9.2**	**8.7**	**8.2**	**7.4**	**6.8**	**6.5**	**6.2**	**6.0**			**7.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

October *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.4	2.8	2.8	2.9	2.9	3.1	3.2	3.3	3.8	4.4	5.0	5.6	5.9	6.8	6.3	5.8	4.8	4.7	4.8	4.7	4.8	5.1	5.1	4.9	6.8	2.4	4.4
2	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.3	4.2	4.4	4.7	4.7	5.0	5.7	6.0	6.0	6.4	6.5	6.3	6.3	6.4	6.3	6.0	5.6	6.5	4.2	5.3
3	5.5	5.8	6.3	6.5	6.1	5.6	6.0	6.1	6.2	6.7	8.1	8.8	8.4	7.8	6.4	6.6	6.8	6.5	4.6	3.5	3.7	3.7	4.0	4.2	8.8	3.5	6.0
4	4.0	3.9	3.6	2.7	2.4	2.7	2.8	2.5	2.2	2.1	2.4	2.3	2.7	2.8	2.5	2.1	1.9	1.3	0.9	0.7	0.8	0.8	0.8	1.0	4.0	0.7	2.2
5	1.2	1.6	1.6	1.5	1.9	2.2	2.4	2.4	2.8	3.5	4.2	5.1	5.5	6.7	5.4	5.8	5.5	4.1	3.8	3.7	2.9	2.4	2.2	2.1	6.7	1.2	3.3
6	2.0	1.7	1.5	1.6	1.6	1.7	2.0	2.2	2.4	2.9	3.6	4.1	4.4	4.8	5.1	5.0	5.0	4.9	4.7	4.5	4.5	4.6	4.7	4.8	5.1	1.5	3.5
7	4.9	4.9	5.1	5.1	5.2	5.2	5.3	5.2	5.3	5.6	5.9	6.3	6.8	7.0	7.2	7.3	7.3	7.0	6.9	6.8	6.8	6.7	6.5	6.4	7.3	4.9	6.1
8	6.2	5.9	5.4	5.2	5.1	5.0	4.9	5.2	5.3	5.3	5.4	5.4	5.7	5.8	5.2	5.9	6.1	6.3	6.7	6.8	7.4	8.7	8.8	9.2	9.2	4.9	6.1
9	8.9	9.3	9.7	10.1	9.9	9.9	10.0	10.0	10.5	10.6	10.4	9.6	9.4	9.0	8.7	8.5	8.6	8.4	7.7	3.6	2.7	1.5	1.1	0.8	10.6	0.8	7.9
10	0.3	0.1	-0.3	-0.6	-0.8	-0.8	-0.9	-0.9	-0.2	0.1	0.3	0.6	1.6	2.9	3.9	3.9	3.7	3.4	3.4	2.8	2.5	2.8	2.9	3.0	3.9	-0.9	1.4
11	3.2	3.3	2.9	2.2	2.2	1.5	1.1	1.9	2.0	2.2	2.5	2.0	3.2	3.8	3.2	3.7	4.0	3.0	2.5	1.7	1.9	1.8	1.6	1.7	4.0	1.1	2.5
12	1.8	2.1	2.3	2.4	2.2	2.5	2.0	2.2	2.4	2.7	3.2	3.8	5.0	5.8	5.5	5.3	5.4	4.7	4.0	2.6	3.4	3.5	3.5	3.3	5.8	1.8	3.4
13	2.6	2.3	2.4	1.8	1.4	1.0	0.7	2.1	3.4	3.7	4.6	4.9	5.3	6.1	6.6	6.5	6.0	5.1	3.9	3.1	2.9	2.8	2.9	3.1	6.6	0.7	3.5
14	2.7	1.8	1.5	1.5	1.6	2.2	2.8	3.4	2.9	2.9	3.9	4.2	4.5	4.6	4.3	4.2	3.9	3.6	2.9	2.0	1.6	1.5	1.5	1.9	4.6	1.5	2.8
15	1.8	2.0	1.9	1.8	1.8	2.3	3.5	4.2	4.3	3.2	4.1	4.5	5.5	6.3	6.5	5.9	5.2	4.7	3.9	4.3	4.1	4.6	4.7	5.1	6.5	1.8	4.0
16	4.9	4.7	4.7	4.7	4.6	4.6	4.5	4.1	4.2	4.4	5.0	5.7	6.4	6.4	6.2	5.9	5.5	4.5	3.9	3.6	4.0	3.9	3.8	4.0	6.4	3.6	4.8
17	4.0	3.9	3.5	3.0	2.9	2.6	2.9	3.1	3.0	3.6	3.8	4.4	4.7	5.1	5.3	4.7	4.3	3.9	3.1	3.5	3.5	3.7	3.9	3.7	5.3	2.6	3.8
18	3.9	3.4	3.1	3.0	2.9	2.9	3.2	3.6	3.8	3.7	3.9	4.6	5.5	6.3	6.2	5.9	5.3	4.9	4.1	3.5	3.2	3.1	2.9	2.5	6.3	2.5	4.0
19	2.4	2.4	2.6	2.2	1.6	1.3	1.9	1.9	2.3	2.5	2.6	2.9	2.9	3.1	3.2	3.0	2.8	2.3	0.8	0.9	0.4	0.1	0.2	1.1	3.2	0.1	2.0
20	1.1	1.1	1.2	1.0	1.1	0.9	0.3	0.3	0.2	0.3	0.7	1.2	1.6	1.9	2.5	2.7	2.3	2.0	0.9	0.2	0.0	-0.3	-0.7	-0.6	2.7	-0.7	0.9
21	-0.6	-0.6	-1.1	-2.5	-3.5	-3.6	-2.4	-2.6	-3.2	-2.4	-1.3	0.3	1.5	1.5	1.2	1.3	0.5	-0.8	-1.6	-1.9	-2.1	-2.4	-2.4	-2.8	1.5	-3.6	-1.3
22	-2.9	-3.5	-3.3	-3.6	-3.9	-4.3	-4.4	-4.9	-3.8	-3.4	-2.4	-0.9	0.1	1.1	1.3	0.7	-0.2	-1.1	-2.1	-2.4	-2.3	-3.0	-4.3	-4.9	1.3	-4.9	-2.4
23	-5.0	-5.5	-6.1	-5.5	-5.9	-5.8	-5.7	-5.9	-6.6	-5.6	-4.2	-3.5	-2.8	-2.4	-2.0	-1.7	-2.4	-3.3	-4.1	-4.9	-4.7	-4.4	-4.4	-4.5	-1.7	-6.6	-4.5
24	-4.1	-4.1	-4.2	-3.9	-3.4	-3.9	-3.7	-3.3	-2.6	-2.1	-2.1	-1.7	-1.6	-1.7	-2.0	-2.0	-2.0	-2.5	-2.8	-3.2	-4.6	-4.9	-4.8	-4.8	-1.6	-4.9	-3.2
25	-5.1	-5.1	-5.5	-5.7	-5.8	-5.8	-6.0	-6.1	-6.4	-6.7	-6.7	-6.4	-5.9	-5.4	-5.0	-4.9	-4.9	-5.1	-5.7	-5.9	-6.2	-5.9	-6.0	-6.5	-4.9	-6.7	-5.8
26	-7.0	-7.3	-7.2	-7.4	-7.5	-7.5	-7.6	-8.0	-8.4	-8.9	-9.3	-9.3	-9.3	-8.5	-8.1	-8.0	-8.0	-8.1	-8.5	-8.9	-9.1	-9.1	-9.5	-9.8	-7.0	-9.8	-8.3
27	-10.1	-10.9	-10.4	-10.3	-10.8	-11.8	-11.5	-11.5	-11.3	-10.6	-10.1	-9.1	-7.7	-7.0	-6.5	-6.6	-7.0	-7.4	-7.5	-7.2	-7.2	-6.9	-6.1	-6.1	-6.1	-11.8	-8.8
28	-5.7	-5.6	-5.9	-5.9	-5.7	-5.5	-5.0	-4.9	-4.5	-4.6	-3.9	-3.9	-2.9	-2.1	-1.6	-1.2	-1.0	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.7	-0.7	-5.9	-3.2
29	-0.6	-0.4	0.0	1.0	0.7	0.7	0.2	0.1	0.2	-0.1	-0.1	0.1	0.2	0.5	0.6	0.7	0.5	0.4	0.3	0.2	0.0	-0.1	-0.3	-0.4	1.0	-0.6	0.2
30	-0.6	-0.9	-1.2	-1.1	-1.0	-1.0	-1.2	-1.4	-1.7	-2.2	-2.0	-1.5	-0.7	-0.6	-1.1	-1.1	-1.2	-1.4	-1.6	-2.1	-2.0	-1.9	-2.6	-3.0	-0.6	-3.0	-1.5
31	-3.6	-3.3	-3.5	-3.6	-3.5	-3.8	-4.3	-4.7	-5.2	-5.2	-4.9	-4.6	-4.2	-3.9	-4.0	-4.2	-4.7	-5.9	-7.0	-6.9	-6.9	-7.4	-7.8	-8.3	-3.3	-8.3	-5.1
Max.	8.9	9.3	9.7	10.1	9.9	9.9	10.0	10.0	10.5	10.6	10.4	9.6	9.4	9.0	8.7	8.5	8.6	8.4	7.7	6.8	7.4	8.7	8.8	9.2	10.6		
Min.	-10.1	-10.9	-10.4	-10.3	-10.8	-11.8	-11.5	-11.5	-11.3	-10.6	-10.1	-9.3	-9.3	-8.5	-8.1	-8.0	-8.0	-8.1	-8.5	-8.9	-9.1	-9.1	-9.5	-9.8		-11.8	
Avg.	0.8	0.7	0.6	0.5	0.4	0.3	0.4	0.5	0.6	0.7	1.2	1.6	2.2	2.6	2.5	2.5	2.3	1.8	1.2	0.8	0.7	0.7	0.5	0.5			1.1

Total Hours in Month 744 Hours Data Available 744 Data Recovery 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-8.1	-8.2	-7.9	-7.7	-8.0	-8.1	-8.8	-8.6	-8.6	-8.8	-8.4	-8.2	-8.1	-7.8	-7.4	-7.2	-7.3	-7.4	-7.8	-8.0	-8.3	-8.9	-9.5	-9.7	-7.2	-9.7	-8.2
2	-10.2	-10.3	-9.9	-10.3	-10.7	-11.1	-11.6	-11.8	-11.9	-11.8	-11.5	-11.0	-10.6	-10.1	-9.8	-9.9	-10.4	-10.7	-11.6	-11.4	-11.9	-12.1	-12.6	-13.0	-9.8	-13.0	-11.1
3	-13.2	-13.3	-13.7	-14.3	-14.5	-14.5	-14.8	-14.8	-14.8	-14.6	-14.5	-13.6	-12.8	-11.9	-11.6	-11.5	-12.1	-12.3	-13.0	-13.6	-13.7	-13.9	-13.6	-13.7	-11.5	-14.8	-13.5
4	-14.1	-14.3	-13.7	-14.1	-14.6	-14.2	-14.4	-14.1	-14.4	-14.9	-14.9	-14.3	-13.9	-13.2	-12.5	-12.2	-12.5	-12.9	-13.4	-13.6	-13.4	-13.1	-12.5	-12.3	-12.2	-14.9	-13.6
5	-11.5	-10.6	-10.3	-10.0	-9.4	-9.4	-9.9	-11.2	-12.4	-11.2	-10.6	-9.2	-8.7	-8.8	-9.0	-9.3	-9.5	-10.1	-10.8	-10.4	-10.2	-11.5	-11.1	-11.0	-8.7	-12.4	-10.2
6	-12.1	-11.6	-13.2	-14.1	-14.8	-15.4	-16.3	-16.3	-15.5	-15.6	-15.5	-14.4	-12.8	-12.0	-11.4	-11.4	-11.9	-11.9	-12.0	-12.5	-12.6	-12.2	-11.5	-9.7	-9.7	-16.3	-13.2
7	-9.3	-9.1	-9.3	-10.2	-11.2	-10.9	-11.2	-12.0	-12.1	-12.1	-12.0	-12.0	-11.9	-11.5	-12.3	-12.3	-12.6	-12.8	-13.2	-13.7	-13.8	-15.0	-15.3	-15.7	-9.1	-15.7	-12.1
8	-16.3	-17.4	-18.4	-18.8	-19.2	-19.4	-19.1	-18.6	-18.5	-18.7	-18.5	-17.7	-16.8	-15.9	-15.5	-15.8	-16.3	-16.7	-16.7	-16.4	-16.1	-16.1	-15.6	-15.4	-15.4	-19.4	-17.2
9	-15.8	-16.3	-17.2	-18.4	-18.4	-18.7	-18.7	-19.5	-19.8	-19.9	-19.5	-19.1	-18.7	-18.5	-18.1	-18.0	-18.8	-19.5	-19.8	-19.9	-20.2	-19.8	-19.4	-19.0	-15.8	-20.2	-18.8
10	-18.6	-18.4	-18.2	-18.0	-17.7	-17.8	-17.7	-17.4	-17.2	-17.3	-17.5	-17.5	-17.5	-17.4	-16.8	-16.2	-16.7	-17.0	-16.2	-16.1	-15.6	-14.7	-15.2	-15.2	-14.7	-18.6	-17.0
11	-15.5	-15.7	-16.1	-16.4	-16.6	-16.9	-17.0	-17.1	-16.9	-17.4	-17.3	-17.2	-16.2	-15.6	-15.0	-14.6	-13.6	-13.6	-13.7	-14.0	-14.2	-14.0	-14.7	-14.5	-13.6	-17.4	-15.6
12	-14.9	-15.3	-15.3	-15.1	-15.0	-14.9	-14.8	-14.5	-14.3	-13.9	-13.8	-13.3	-12.1	-11.0	-10.0	-9.9	-9.9	-10.3	-10.2	-10.0	-9.6	-9.2	-9.1	-8.9	-8.9	-15.3	-12.3
13	-8.6	-8.4	-8.4	-8.3	-8.5	-9.1	-10.6	-12.0	-13.7	-14.8	-15.5	-16.2	-16.6	-17.2	-18.0	-18.4	-18.9	-19.7	-20.2	-20.3	-20.2	-20.6	-20.3	-19.3	-8.3	-20.6	-15.2
14	-19.1	-19.1	-18.9	-18.4	-18.2	-17.3	-15.7	-13.2	-11.0	-8.5	-7.3	-8.5	-11.3	-13.1	-14.4	-15.1	-15.5	-17.0	-18.1	-18.9	-19.6	-20.4	-21.2	-22.0	-7.3	-22.0	-15.9
15	-22.9	-23.5	-24.0	-24.1	-24.3	-24.1	-23.9	-24.2	-24.2	-24.0	-23.5	-23.4	-23.0	-22.5	-22.3	-22.3	-22.2	-22.8	-23.2	-23.2	-23.2	-23.1	-23.2	-23.3	-22.2	-24.3	-23.3
16	-23.4	-23.5	-23.4	-23.2	-23.2	-23.5	-23.7	-24.0	-24.1	-24.1	-23.7	-23.0	-22.1	-21.4	-21.1	-20.6	-20.7	-20.2	-21.3	-21.8	-21.6	-21.6	-21.1	-20.8	-20.2	-24.1	-22.4
17	-20.5	-20.5	-21.1	-21.2	-21.0	-20.5	-20.1	-20.2	-20.2	-20.1	-20.1	-19.8	-18.5	-18.2	-18.2	-18.5	-19.0	-19.9	-19.8	-20.3	-21.0	-21.1	-20.6	-21.4	-18.2	-21.4	-20.1
18	-21.8	-22.1	-22.2	-22.1	-22.1	-22.4	-22.5	-22.9	-23.0	-22.6	-23.0	-22.3	-21.8	-21.2	-21.1	-21.3	-21.7	-21.9	-21.6	-21.4	-21.5	-22.0	-22.2	-22.2	-21.1	-23.0	-22.0
19	-22.3	-22.4	-21.9	-21.1	-20.9	-21.0	-20.2	-20.3	-20.4	-20.2	-19.9	-19.8	-19.0	-18.3	-17.9	-17.7	-17.5	-17.4	-17.3	-17.2	-17.3	-17.5	-17.5	-17.8	-17.2	-22.4	-19.3
20	-17.4	-17.0	-16.8	-16.6	-16.6	-16.6	-16.9	-16.9	-17.1	-17.1	-17.3	-17.3	-17.0	-17.4	-16.4	-16.5	-16.5	-17.1	-17.3	-17.1	-16.7	-16.7	-17.2	-17.0	-16.4	-17.4	-16.9
21	-17.0	-17.5	-18.1	-18.8	-18.4	-18.1	-18.3	-17.9	-18.5	-18.7	-18.0	-16.5	-16.0	-15.6	-15.6	-15.2	-15.1	-14.8	-14.9	-14.3	-14.4	-14.3	-13.1	-12.7	-12.7	-18.8	-16.3
22	-12.4	-12.4	-12.9	-13.5	-13.7	-14.9	-16.7	-16.6	-17.0	-16.2	-15.5	-15.1	-15.0	-14.6	-14.0	-14.2	-14.4	-15.3	-15.1	-15.9	-17.0	-16.3	-16.8	-18.0	-12.4	-18.0	-15.1
23	-18.3	-18.8	-19.3	-19.5	-19.5	-19.9	-19.4	-19.9	-19.5	-20.2	-19.9	-20.3	-20.0	-19.0	-18.3	-18.4	-18.1	-17.8	-15.8	-13.1	-12.5	-11.9	-11.2	-10.8	-10.8	-20.3	-17.6
24	-10.9	-10.6	-10.1	-10.3	-10.2	-10.3	-10.3	-10.1	-10.1	-9.8	-9.2	-10.0	-9.4	-8.6	-8.8	-9.0	-9.3	-7.7	-7.1	-6.8	-6.7	-6.5	-6.4	-6.4	-6.4	-10.9	-8.9
25	-6.8	-7.0	-7.5	-7.7	-7.8	-7.7	-6.7	-6.4	-6.4	-6.3	-6.6	-6.7	-6.1	-6.4	-6.5	-6.8	-7.0	-7.6	-7.5	-7.2	-7.2	-7.2	-6.8	-6.6	-6.1	-7.8	-6.9
26	-6.7	-6.4	-6.9	-6.1	-5.9	-5.5	-5.1	-4.7	-4.5	-4.2	-4.1	-4.0	-3.8	-3.6	-3.5	-3.6	-3.7	-4.0	-4.0	-3.9	-4.0	-3.9	-3.9	-3.9	-3.5	-6.9	-4.6
27	-3.8	-3.8	-3.8	-3.9	-3.8	-3.6	-3.4	-3.2	-3.0	-2.8	-2.6	-2.3	-2.0	-1.6	-1.5	-1.3	-1.4	-1.4	-1.2	-1.0	-0.9	-0.9	-0.8	-0.8	-0.8	-3.9	-2.3
28	-1.1	-1.2	-1.4	-1.4	-1.4	-1.3	-1.3	-1.5	-1.8	-2.1	-2.3	-2.3	-2.3	-2.5	-2.4	-2.4	-3.2	-3.7	-4.5	-4.3	-4.4	-5.0	-4.9	-5.2	-1.1	-5.2	-2.7
29	-6.5	-6.3	-6.9	-7.5	-7.4	-7.1	-7.3	-6.8	-6.5	-7.0	-7.2	-6.1	-5.5	-6.0	-5.1	-4.9	-6.2	-6.4	-6.9	-7.6	-6.3	-4.3	-3.6	-3.5	-3.5	-7.6	-6.2
30	-3.1	-2.5	-2.8	-3.3	-3.3	-2.9	-2.5	-2.2	-1.9	-1.7	-1.4	-1.1	-1.2	-1.9	-2.4	-2.9	-3.2	-5.1	-5.8	-6.3	-6.3	-6.8	-7.8	-8.9	-1.1	-8.9	-3.6
Max.	**-1.1**	**-1.2**	**-1.4**	**-1.4**	**-1.4**	**-1.3**	**-1.3**	**-1.5**	**-1.8**	**-1.7**	**-1.4**	**-1.1**	**-1.2**	**-1.6**	**-1.5**	**-1.3**	**-1.4**	**-1.4**	**-1.2**	**-1.0**	**-0.9**	**-0.9**	**-0.8**	**-0.8**	**-0.8**		
Min.	**-23.4**	**-23.5**	**-24.0**	**-24.1**	**-24.3**	**-24.1**	**-23.9**	**-24.2**	**-24.2**	**-24.1**	**-23.7**	**-23.4**	**-23.0**	**-22.5**	**-22.3**	**-22.3**	**-22.2**	**-22.8**	**-23.2**	**-23.2**	**-23.2**	**-23.1**	**-23.2**	**-23.3**		**-24.3**	
Avg.	**-13.4**	**-13.5**	**-13.6**	**-13.8**	**-13.9**	**-13.9**	**-14.0**	**-14.0**	**-14.0**	**-13.9**	**-13.7**	**-13.4**	**-13.0**	**-12.7**	**-12.6**	**-12.6**	**-12.8**	**-13.2**	**-13.3**	**-13.3**	**-13.3**	**-13.3**	**-13.3**	**-13.3**			**-13.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-9.7	-10.2	-10.4	-11.2	-11.4	-11.7	-10.9	-11.1	-11.4	-11.4	-10.2	-9.4	-8.9	-8.0	-7.0	-7.6	-8.7	-9.9	-9.7	-8.4	-8.2	-8.2	-7.8	-7.7	-7.0	-11.7	-9.5
2	-6.7	-4.9	-5.7	-5.7	-4.8	-5.7	-5.6	-4.8	-6.6	-4.8	-3.7	-2.6	-1.1	-3.0	-2.3	-2.6	-1.4	-1.4	-1.9	-1.5	-1.1	-1.1	-0.9	-2.8	-0.9	-6.7	-3.5
3	-3.2	-3.5	-4.2	-4.4	-3.9	-4.0	-4.5	-4.7	-3.8	-3.2	-3.2	-2.9	-2.8	-3.3	-4.0	-4.4	-4.7	-4.9	-4.5	-4.5	-4.6	-4.6	-4.9	-5.2	-2.8	-5.2	-4.1
4	-5.5	-5.5	-5.5	-5.9	-6.0	-6.5	-6.3	-4.7	-3.9	-4.5	-5.4	-5.5	-3.3	-2.6	-2.1	-1.3	-0.7	-0.6	-0.5	-0.5	-0.4	-0.4	-0.5	-0.6	-0.4	-6.5	-3.3
5	-0.6	-0.5	-0.7	-0.8	-0.9	-1.0	-1.5	-0.7	0.1	0.4	-0.2	0.2	-0.3	0.2	-0.3	0.2	0.4	0.4	0.8	0.8	0.8	0.9	1.0	1.0	1.0	-1.5	0.0
6	0.7	0.7	0.6	0.4	0.3	0.5	0.5	-0.5	-0.8	-0.5	0.1	0.3	0.6	0.7	0.9	0.9	0.8	0.8	1.0	0.8	1.0	0.8	0.6	0.7	1.0	-0.8	0.5
7	0.9	0.9	0.7	1.0	1.3	0.9	0.3	0.9	0.7	0.5	0.5	0.7	0.0	-0.2	0.4	0.4	0.3	0.6	0.5	-0.3	-0.3	-0.4	-0.5	-0.1	1.3	-0.5	0.4
8	0.5	0.7	0.5	0.0	-0.2	0.0	0.2	-0.2	-0.6	-0.6	-0.7	-0.6	-0.8	-0.4	0.1	-0.1	-1.3	-2.1	-2.2	-2.2	-2.1	-2.7	-3.0	-3.2	0.7	-3.2	-0.9
9	-3.1	-1.9	-2.0	-1.9	-2.2	-2.2	-1.9	-2.1	-1.9	-1.8	-1.4	-0.8	-0.9	-1.1	-1.0	-1.3	-1.5	-1.4	-1.5	-1.5	-1.4	-1.2	-1.2	-1.2	-0.8	-3.1	-1.6
10	-1.0	-1.0	-1.0	-1.1	-1.1	-0.9	-1.0	-1.2	-1.2	-1.3	-1.0	-0.7	-0.5	-0.6	-0.7	-0.9	-1.0	-1.2	-1.3	-1.3	-1.3	-1.6	-1.7	-2.2	-0.5	-2.2	-1.1
11	-1.9	-1.5	-1.3	-1.2	-1.1	-1.1	-1.2	-2.1	-1.6	-1.8	-1.4	-2.0	-2.4	-3.2	-4.0	-5.5	-5.4	-5.6	-6.3	-8.2	-8.8	-9.6	-10.1	-10.6	-1.1	-10.6	-4.1
12	-10.9	-10.9	-11.3	-11.9	-11.6	-11.1	-11.2	-11.4	-11.8	-12.1	-12.0	-11.7	-11.5	-11.5	-11.5	-11.6	-11.9	-12.0	-11.9	-12.0	-12.0	-12.0	-12.1	-12.2	-10.9	-12.2	-11.7
13	-12.3	-12.6	-12.7	-12.8	-13.5	-14.2	-14.8	-15.1	-15.1	-15.5	-15.2	-14.6	-14.5	-14.7	-14.8	-15.2	-15.3	-15.7	-16.1	-15.8	-15.8	-16.2	-16.1	-16.5	-12.3	-16.5	-14.8
14	-17.2	-16.7	-17.0	-17.3	-17.3	-16.9	-17.3	-17.9	-17.0	-17.1	-18.6	-18.9	-17.3	-15.3	-14.8	-15.9	-16.9	-16.9	-16.0	-15.5	-15.3	-15.1	-15.3	-15.0	-14.8	-18.9	-16.6
15	-15.2	-15.5	-16.0	-16.0	-17.0	-18.9	-19.9	-20.3	-20.7	-20.3	-19.3	-18.4	-17.5	-18.1	-18.0	-17.1	-15.5	-13.2	-11.1	-10.5	-9.8	-9.3	-9.2	-9.3	-9.2	-20.7	-15.7
16	-8.8	-8.1	-7.4	-7.0	-6.7	-6.4	-6.2	-6.0	-5.8	-5.6	-5.4	-5.4	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.6	-6.0	-6.0	-6.0	-5.7	-5.2	-5.2	-8.8	-6.1
17	-6.1	-6.6	-6.8	-7.1	-7.6	-8.0	-8.6	-9.2	-9.7	-10.6	-10.7	-10.2	-10.2	-10.1	-10.0	-10.2	-10.1	-10.3	-10.7	-10.8	-10.8	-11.2	-11.9	-12.7	-6.1	-12.7	-9.6
18	-13.3	-13.3	-13.3	-14.0	-15.3	-14.7	-14.5	-14.4	-14.3	-14.6	-14.5	-14.7	-15.8	-16.5	-16.5	-17.1	-15.9	-15.4	-15.1	-14.4	-14.7	-14.1	-13.1	-11.5	-11.5	-17.1	-14.6
19	-12.8	-12.4	-11.8	-11.1	-9.9	-10.2	-9.0	-8.4	-8.7	-10.4	-10.2	-9.9	-11.4	-12.7	-13.4	-13.4	-12.9	-13.2	-13.6	-15.0	-16.7	-18.0	-18.6	-20.1	-8.4	-20.1	-12.6
20	-21.4	-21.2	-21.2	-21.0	-21.0	-21.1	-21.0	-21.4	-21.5	-20.7	-21.2	-20.6	-20.2	-19.8	-19.4	-20.7	-21.4	-21.1	-21.2	-21.3	-21.5	-21.5	-21.9	-21.9	-19.4	-21.9	-21.0
21	-21.2	-21.5	-20.6	-19.4	-19.1	-19.4	-19.2	-18.2	-18.6	-18.3	-19.4	-19.9	-19.8	-20.2	-20.0	-20.1	-20.9	-21.1	-20.4	-20.5	-19.8	-19.5	-19.0	-19.0	-18.2	-21.5	-19.8
22	-19.3	-18.9	-18.6	-19.6	-20.5	-19.9	-21.0	-20.3	-19.3	-18.2	-18.2	-17.8	-17.1	-17.9	-17.7	-17.3	-15.6	-16.7	-17.4	-15.7	-15.8	-16.9	-17.5	-18.9	-15.6	-21.0	-18.2
23	-19.7	-19.3	-18.7	-18.7	-18.1	-18.2	-17.9	-19.7	-20.4	-19.6	-19.8	-19.8	-19.2	-17.7	-18.2	-18.1	-18.5	-18.5	-18.0	-17.7	-17.0	-16.9	-17.5	-16.1	-16.1	-20.4	-18.5
24	-15.7	-16.5	-15.2	-15.3	-14.1	-13.8	-13.4	-12.1	-13.2	-13.1	-13.1	-12.5	-13.4	-13.4	-12.7	-13.2	-12.6	-14.1	-16.3	-17.5	-18.1	-18.8	-18.6	-18.8	-12.1	-18.8	-14.8
25	-17.0	-17.3	-17.8	-18.6	-20.0	-20.2	-20.6	-20.7	-21.3	-21.5	-21.7	-21.7	-21.0	-20.5	-20.8	-20.6	-20.7	-20.3	-19.9	-17.5	-16.3	-17.3	-16.7	-17.2	-16.3	-21.7	-19.5
26	-17.6	-17.9	-18.2	-18.3	-18.3	-18.2	-18.1	-18.3	-17.9	-17.9	-17.1	-16.8	-16.5	-16.5	-16.5	-16.4	-16.4	-15.7	-15.4	-14.2	-12.7	-12.5	-11.9	-11.3	-11.3	-18.3	-16.3
27	-9.7	-8.9	-8.4	-7.3	-7.3	-7.1	-6.2	-5.2	-4.8	-5.3	-5.0	-6.3	-7.3	-6.9	-6.1	-5.5	-5.4	-4.9	-4.5	-4.1	-4.4	-3.1	-2.1	-1.6	-1.6	-9.7	-5.7
28	-1.6	-1.6	-1.6	-2.1	-2.0	-2.0	-2.2	-2.1	-2.4	-2.3	-2.2	-2.3	-2.1	-2.0	-2.1	-2.6	-2.9	-2.5	-2.9	-2.8	-2.5	-3.5	-4.7	-6.0	-1.6	-6.0	-2.5
29	-7.7	-7.9	-6.7	-5.9	-6.3	-6.4	-6.6	-6.9	-7.5	-9.6	-10.6	-11.5	-12.0	-12.0	-12.3	-13.3	-14.4	-15.0	-14.8	-14.9	-15.2	-15.7	-15.8	-15.7	-5.9	-15.8	-11.0
30	-15.6	-15.6	-15.6	-15.6	-15.7	-15.9	-15.9	-15.9	-15.9	-16.0	-16.2	-16.4	-16.1	-15.7	-15.5	-15.9	-15.8	-16.1	-16.1	-16.4	-16.6	-16.8	-16.8	-17.1	-15.5	-17.1	-16.0
31	-17.6	-17.4	-17.0	-17.2	-18.0	-18.0	-18.5	-18.6	-18.7	-19.5	-19.8	-17.4	-16.4	-15.1	-14.4	-18.0	-17.8	-16.8	-16.2	-15.4	-15.0	-14.5	-16.7	-17.6	-14.4	-19.8	-17.2
Max.	**0.9**	**0.9**	**0.7**	**1.0**	**1.3**	**0.9**	**0.5**	**0.9**	**0.7**	**0.5**	**0.5**	**0.7**	**0.6**	**0.7**	**0.9**	**0.9**	**0.8**	**0.8**	**1.0**	**0.8**	**1.0**	**0.9**	**1.0**	**1.0**	**1.3**		
Min.	**-21.4**	**-21.5**	**-21.2**	**-21.0**	**-21.0**	**-21.1**	**-21.0**	**-21.4**	**-21.5**	**-21.5**	**-21.7**	**-21.7**	**-21.0**	**-20.5**	**-20.8**	**-20.7**	**-21.4**	**-21.1**	**-21.2**	**-21.3**	**-21.5**	**-21.5**	**-21.9**	**-21.9**		**-21.9**	
Avg.	**-10.0**	**-9.9**	**-9.8**	**-9.9**	**-10.0**	**-10.1**	**-10.1**	**-10.1**	**-10.2**	**-10.2**	**-10.2**	**-10.0**	**-9.8**	**-9.8**	**-9.7**	**-10.0**	**-10.0**	**-10.0**	**-10.0**	**-9.8**	**-9.8**	**-9.9**	**-10.0**	**-10.2**			**-10.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.5	-0.7	-1.2	-1.4	-1.0	-1.3	-1.3	-1.4	-1.3	-0.8	-0.7	-0.9	-0.3	0.1	-0.4	-0.1	-0.3	-0.9	-1.6	-1.3	-1.1	-0.7	-0.8	-0.9	0.1	-1.6	-0.9
2	-0.5	-0.7	-1.0	-0.4	-0.7	-1.1	-1.0	-1.2	-1.0	-0.3	-0.4	0.1	0.0	-0.4	-0.1	0.3	-0.2	-0.3	-0.3	-0.7	-0.6	-0.6	-0.9	-1.7	0.3	-1.7	-0.6
3	-1.7	-2.2	-2.1	-2.2	-2.2	-2.3	-2.3	-2.2	-2.0	-2.0	-2.0	-1.9	-1.9	-1.5	-1.4	-0.9	-1.1	-0.9	-0.7	-0.7	-0.6	-0.7	-0.7	-0.5	-0.5	-2.3	-1.5
4	-0.8	-0.9	-1.0	-0.9	-1.2	-2.2	-3.1	-2.3	-2.3	-2.8	-2.8	-2.0	-2.7	-2.7	-2.7	-2.9	-2.8	-3.7	-3.9	-4.3	-4.1	-4.1	-4.0	-3.4	-0.8	-4.3	-2.6
5	-3.3	-2.6	-2.8	-2.2	-2.8	-2.6	-2.3	-2.3	-2.7	-2.4	-2.4	-2.5	-2.4	-3.9	-3.6	-4.3	-3.9	-4.0	-3.3	-3.7	-5.5	-5.1	-4.7	-5.2	-2.2	-5.5	-3.4
6	-5.4	-5.2	-5.7	-6.1	-5.3	-4.5	-4.5	-5.0	-5.1	-5.1	-5.1	-4.4	-4.0	-4.0	-3.9	-3.8	-3.1	-3.5	-4.3	-4.0	-3.5	-3.7	-4.0	-3.9	-3.1	-6.1	-4.5
7	-3.4	-3.3	-3.7	-4.3	-4.0	-4.0	-4.0	-3.7	-3.2	-3.0	-1.7	-1.3	-1.1	-1.2	-0.4	-0.5	-0.6	-1.2	-1.0	-1.6	-0.7	0.0	0.1	0.8	0.8	-4.3	-2.0
8	0.5	-1.2	-0.4	-2.3	-1.5	-0.9	1.5	0.5	1.0	0.2	-1.5	-1.7	-2.6	-2.3	-2.5	-1.6	-1.4	-3.7	-3.8	-4.0	-5.0	-4.9	-5.6	-6.0	1.5	-6.0	-2.0
9	-5.4	-5.5	-4.5	-4.2	-5.5	-4.8	-3.8	-4.3	-5.5	-3.5	-2.5	-1.9	-1.7	-1.1	-1.1	-2.0	-3.6	-4.9	-3.0	-2.4	-2.4	-2.9	-3.0	-2.9	-1.1	-5.5	-3.4
10	-3.4	-2.7	-1.9	-1.6	-1.6	-1.4	-1.3	-1.5	-1.5	-1.8	-2.7	-2.9	-3.8	-4.9	-5.2	-7.0	-7.4	-8.7	-9.3	-9.6	-9.6	-9.4	-9.2	-9.0	-1.3	-9.6	-4.9
11	-9.0	-9.2	-9.2	-9.5	-9.5	-9.7	-9.7	-9.9	-10.1	-9.9	-9.7	-9.5	-9.5	-9.5	-9.6	-9.6	-9.8	-9.5	-9.7	-10.8	-11.3	-11.1	-11.1	-10.9	-9.0	-11.3	-9.9
12	-10.7	-11.3	-11.7	-12.4	-12.7	-12.8	-13.2	-13.5	-13.7	-14.3	-14.7	-15.0	-15.5	-15.5	-15.7	-15.9	-16.2	-16.5	-17.3	-17.9	-18.6	-18.3	-18.4	-18.4	-10.7	-18.6	-15.0
13	-18.9	-19.8	-20.3	-20.4	-20.2	-20.2	-20.5	-20.7	-20.8	-20.9	-20.9	-20.9	-20.7	-20.4	-20.6	-20.7	-20.4	-20.7	-20.7	-20.3	-20.3	-20.5	-20.4	-20.4	-18.9	-20.9	-20.4
14	-19.9	-20.7	-19.2	-18.3	-18.6	-16.8	-14.9	-12.4	-11.3	-10.3	-9.7	-8.6	-8.5	-8.7	-8.2	-8.0	-7.5	-7.2	-6.8	-6.4	-6.4	-6.2	-5.9	-5.6	-5.6	-20.7	-11.1
15	-5.5	-5.5	-5.2	-4.9	-4.7	-4.4	-4.4	-4.1	-3.7	-3.7	-3.6	-3.1	-2.3	-2.5				-2.2	-2.0	-1.8	-1.7	-1.8	-2.6	-2.3	-1.7	-5.5	-3.4
16	-2.0	-2.1	-1.9	-1.8	-2.1	-2.1	-1.8	-1.4	-1.5	-1.3	-1.3	-1.1	-1.8	-3.6	-3.2	-3.0	-2.6	-2.8	-3.3	-4.0	-5.2	-6.1	-8.5	-9.7	-1.1	-9.7	-3.1
17	-11.2	-11.4	-12.3	-12.8	-12.9	-12.6	-12.8	-13.6	-14.4	-16.0	-16.1	-16.5	-16.4	-16.3	-17.0	-17.7	-19.4	-20.4	-20.8	-21.1	-20.8	-20.9	-19.2	-20.2	-11.2	-21.1	-16.4
18	-20.2	-20.5	-21.3	-21.1	-22.1	-22.0	-21.7	-21.4	-21.6	-22.1	-22.7	-22.5	-22.1	-21.4	-21.2	-20.9	-21.6	-21.1	-21.4	-21.7	-21.3	-22.0	-22.3	-22.9	-20.2	-22.9	-21.6
19	-23.0	-22.8	-23.1	-23.5	-23.9	-24.6	-25.3	-25.5	-25.6	-25.5	-25.5	-25.4	-25.3	-24.9	-24.5	-24.6	-25.2	-25.9	-26.0	-25.9	-26.1	-26.5	-26.6	-26.1	-22.8	-26.6	-25.0
20	-26.1	-25.7	-25.3	-24.7	-23.2	-24.7	-25.5	-25.6	-25.4	-24.5	-24.9	-24.1	-24.5	-24.2	-24.3	-23.7	-23.4	-23.1	-23.4	-23.1	-22.4	-23.6	-22.9	-23.0	-22.4	-26.1	-24.2
21	-22.8	-22.7	-23.3	-23.3	-23.0	-23.2	-23.3	-23.4	-23.7	-24.0	-24.5	-25.4	-25.9	-26.3	-25.9	-26.1	-26.0	-26.1	-26.1	-26.7	-27.4	-27.9	-28.5	-29.3	-22.7	-29.3	-25.2
22	-29.7	-30.2	-30.0	-29.9	-29.9	-29.8	-29.5	-29.3	-29.2	-29.2	-29.2	-29.3	-29.3	-29.7	-29.8	-29.8	-29.9	-29.9	-30.1	-30.3	-30.5	-30.5	-30.4	-30.5	-29.2	-30.5	-29.8
23	-30.7	-30.8	-30.9	-30.7	-30.6	-30.7	-30.7	-30.7	-30.0	-30.1	-29.9	-30.3	-29.1	-28.3	-27.7	-27.0	-26.7	-26.6	-26.4	-25.7	-26.6	-26.4	-26.0	-26.0	-25.7	-30.9	-28.7
24	-26.0	-25.6	-25.3	-25.6	-25.9	-26.0	-25.8	-25.7	-25.6	-25.5	-26.0	-25.8	-25.8	-25.5	-25.2	-25.3	-25.8	-26.0	-26.4	-27.0	-27.8	-28.4	-28.4	-28.6	-25.2	-28.6	-26.2
25	-29.0	-29.0	-28.8	-29.3	-29.2	-29.9	-29.5	-30.0	-29.5	-29.3	-28.4	-27.7	-28.4	-28.1	-27.2	-27.5	-27.1	-26.5	-28.3	-28.5	-29.2	-30.1	-29.6	-29.4	-26.5	-30.1	-28.7
26	-29.4	-28.9	-29.3	-29.9	-30.2	-28.7	-28.9	-28.7	-28.9	-28.3	-27.6	-26.3	-25.5	-25.9	-26.4	-25.8	-25.7	-25.4	-25.8	-27.0	-27.3	-27.4	-29.0	-29.5	-25.4	-30.2	-27.7
27	-29.2	-30.1	-30.7	-31.4	-31.5	-31.9	-32.8	-33.4	-33.4	-33.7	-33.8	-33.9	-33.9	-33.7	-33.1	-33.1	-32.9	-33.1	-33.0	-32.8	-33.0	-32.4	-32.2	-32.1	-29.2	-33.9	-32.5
28	-31.8	-32.2	-32.6	-32.7	-33.0	-33.2	-33.8	-34.1	-34.2	-34.8	-35.3	-34.9	-34.3	-33.5	-32.4	-32.4	-32.7	-33.2	-33.2	-33.2	-33.3	-33.1	-33.0	-33.1	-31.8	-35.3	-33.3
29	-33.1	-33.0	-33.1	-32.8	-32.6	-32.4	-32.1	-31.7	-31.4	-31.7	-31.6	-30.4	-30.6	-30.4	-30.5	-29.6	-29.3	-29.4	-29.0	-29.6	-29.8	-29.4	-30.2	-30.0	-29.0	-33.1	-31.0
30	-28.2	-28.4	-28.2	-27.8	-28.2	-28.5	-29.0	-28.6	-27.8	-28.0	-27.0	-26.0	-26.2	-26.5	-26.3	-26.5	-25.4	-21.6	-20.4	-19.2	-20.8	-21.1	-18.7	-17.1	-17.1	-29.0	-25.2
31	-17.3	-17.4	-17.2	-17.5	-17.3	-16.8	-17.0	-16.7	-16.9	-17.4	-18.5	-18.8	-18.6	-18.7	-20.1	-19.7	-20.9	-21.9	-23.1	-23.3	-24.7	-26.5	-26.9	-26.0	-16.7	-26.9	-20.0
Max.	0.5	-0.7	-0.4	-0.4	-0.7	-0.9	1.5	0.5	1.0	0.2	-0.4	0.1	0.0	0.1	-0.1	0.3	-0.2	-0.3	-0.3	-0.7	-0.6	0.0	0.1	0.8	1.5		
Min.	-33.1	-33.0	-33.1	-32.8	-33.0	-33.2	-33.8	-34.1	-34.2	-34.8	-35.3	-34.9	-34.3	-33.7	-33.1	-33.1	-32.9	-33.2	-33.2	-33.2	-33.3	-33.1	-33.0	-33.1		-35.3	
Avg.	-15.4	-15.6	-15.6	-15.7	-15.7	-15.7	-15.6	-15.6	-15.6	-15.5	-15.6	-15.3	-15.3	-15.3	-15.7	-15.7	-15.8	-15.5	-15.6	-15.8	-16.0	-16.2	-16.2	-16.2			-15.6

Total Hours in Month 744 Hours Data Available 741 Data Recovery 99.6%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-26.7	-28.0	-28.2	-28.1	-29.1	-29.4	-29.8	-30.2	-30.5	-30.7	-31.1	-30.5	-29.9	-29.6	-29.3	-29.2	-29.4	-29.9	-30.1	-30.8	-31.2	-31.2	-31.2	-31.4	-26.7	-31.4	-29.8
2	-31.0	-31.0	-31.0	-31.3	-31.2	-31.2	-30.9	-30.5	-30.3	-29.7	-28.8	-28.6	-27.7	-26.9	-25.6	-24.2	-23.9	-24.6	-25.3	-25.6	-24.3	-24.3	-23.6	-21.5	-21.5	-31.3	-27.6
3	-18.2	-17.4	-16.5	-15.6	-15.4	-14.1	-13.2	-12.5	-12.2	-12.1	-11.8	-11.1	-10.5	-10.0	-9.5	-9.4	-9.4	-9.4	-8.8	-8.1	-7.7	-7.5	-7.4	-7.5	-7.4	-18.2	-11.5
4	-7.3	-7.3	-7.2	-7.2	-7.2	-7.0	-6.8	-6.6	-6.5	-6.1	-5.7	-5.4	-5.1	-4.1	-3.5	-3.7	-3.7	-3.7	-3.5	-3.0	-2.6	-2.1	-2.0	-1.8	-1.8	-7.3	-5.0
5	-1.7	-2.4	-2.4	-2.0	-1.8	-1.5	-1.2	-1.4	-1.0	-2.2	-2.6	-1.8	-1.4	-1.1	-1.3	-1.1	-0.6	-0.4	-0.6	-0.9	-1.0	0.1	0.3	-0.2	0.3	-2.6	-1.3
6	-0.4	-0.7	-1.4	-0.8	-1.0	-1.3	-1.3	-1.2	-1.2	-1.3	-3.2	-3.6	-4.1	-4.4	-5.1	-5.2	-5.4	-5.7	-6.2	-6.7	-6.4	-6.5	-6.7	-6.8	-0.4	-6.8	-3.6
7	-6.8	-6.4	-6.4	-6.3	-6.7	-7.0	-6.7	-7.0	-7.6	-7.9	-8.4	-9.0	-9.2	-9.2	-9.0	-9.1	-9.4	-10.3	-10.5	-10.5	-10.4	-9.9	-9.9	-9.1	-6.3	-10.5	-8.4
8	-9.5	-9.5	-10.1	-10.6	-10.1	-9.8	-9.9	-9.2	-8.3	-6.9	-6.4	-7.2	-6.7	-6.1	-4.9	-4.8	-4.9	-4.7	-4.5	-4.2	-4.0	-3.6	-3.6	-3.7	-3.6	-10.6	-6.8
9	-3.3	-3.4	-3.1	-2.7	-2.5	-2.2	-2.0	-2.5	-2.5	-3.0	-2.4	-2.6	-2.0	-1.4	-0.6	0.0	0.6	0.9	1.0	0.9	1.5	1.0	0.4	-0.7	1.5	-3.4	-1.3
10	-1.0	-1.3	-1.3	-1.1	-0.7	0.0	0.0	0.0	-0.7	-1.1	-1.0	-1.1	-1.1	-1.2	-0.8	-0.6	-0.4	-0.4	-0.6	-0.5	-0.5	-0.6	-0.6	-0.8	0.0	-1.3	-0.7
11	-1.4	-1.5	-1.7	-1.6	-1.4	-1.4	-1.2	-1.9	-2.1	-2.2	-2.3	-1.8	-1.7	-1.5	-1.5	-1.4	-1.1	-0.8	-0.4	-0.6	-0.5	-0.1	0.0	0.0	0.0	-2.3	-1.3
12	0.0	0.0	-0.4	-0.4	-0.5	-1.0	-1.7	-2.4	-4.3	-5.3	-5.4	-5.6	-6.0	-6.5	-6.7	-6.7	-7.0	-7.0	-7.8	-8.7	-9.3	-10.0	-10.3	-9.9	0.0	-10.3	-5.1
13	-9.2	-9.4	-9.2	-8.3	-8.0	-7.8	-7.8	-7.6	-7.4	-6.6	-5.2	-3.8	-4.2	-3.1	-2.4	-1.6	-1.4	-1.1	-1.0	-0.6	-0.4	-0.2	0.1	0.1	0.1	-9.4	-4.4
14	0.4	0.6	0.8	0.6	0.3	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.5	0.6	0.8	0.1	0.3
15	0.7	1.2	1.0	1.3	1.7	1.7	1.5	1.4	1.4	1.6	1.6	1.4	1.3	1.1	0.7	0.6	0.5	0.1	-0.1	-0.6	-0.6	-0.4	-0.4	-0.4	1.7	-0.6	0.8
16	-0.4	-0.5	-0.5	-0.4	-0.5	-0.6	-0.5	-0.5	-0.7	-0.7	-0.9	-1.0	-0.8	-0.5	-0.4	0.0	-0.2	-0.3	-0.5	-1.5	-2.1	-2.3	-2.7	-3.0	0.0	-3.0	-0.9
17	-3.2	-3.0	-2.2	-2.1	-1.7	-1.3	-0.6	-0.6	-0.4	0.2	0.1	0.2	0.4	0.4	0.5	0.3	0.1	-0.2	-0.3	-0.3	-0.6	-0.8	-1.0	-1.1	0.5	-3.2	-0.7
18	-1.0	-1.0	-0.9	-0.8	-0.9	-1.0	-0.9	-0.9	-0.7	-0.5	-0.2	-0.1	0.2	0.2	-0.2	-0.9	-0.9	-1.1	-1.3	-1.3	-0.7	0.1	0.3	-0.1	0.3	-1.3	-0.6
19	-0.8	-1.4	-2.0	-2.2	-2.6	-3.2	-4.0	-4.6	-5.0	-5.4	-5.2	-4.5	-3.6	-3.5	-3.3	-3.0	-2.7	-2.7	-3.0	-3.2	-3.7	-4.2	-4.5	-4.9	-0.8	-5.4	-3.5
20	-5.1	-4.9	-4.7	-4.8	-4.9	-5.2	-5.2	-5.0	-4.9	-4.5	-4.1	-3.6	-3.5	-3.5	-3.2	-3.3	-3.8	-4.6	-5.1	-6.1	-6.9	-7.6	-7.9	-8.2	-3.2	-8.2	-5.0
21	-8.8	-9.3	-9.8	-10.2	-10.9	-11.3	-11.1	-10.8	-10.9	-10.3	-8.9	-7.9	-6.1	-6.7	-7.2	-7.3	-7.0	-7.4	-7.7	-7.1	-8.0	-8.8	-8.4	-7.9	-6.1	-11.3	-8.7
22	-8.6	-8.7	-9.0	-8.4	-8.0	-8.4	-8.4	-8.8	-8.6	-8.2	-7.9	-7.6	-7.0	-6.5	-6.8	-6.7	-7.3	-8.1	-7.9	-7.6	-7.4	-7.9	-8.3	-8.5	-6.5	-9.0	-7.9
23	-8.5	-8.4	-8.1	-7.8	-7.4	-7.1	-6.2	-7.0	-7.6	-7.4	-8.2	-8.4	-8.3	-8.5	-8.0	-7.8	-8.3	-8.8	-8.6	-8.8	-9.4	-9.3	-9.8	-11.1	-6.2	-11.1	-8.3
24	-11.9	-13.2	-13.0	-13.0	-13.7	-13.7	-14.3	-14.2	-14.5	-13.3	-12.3	-11.3	-10.7	-10.5	-10.7	-10.4	-10.4	-10.6	-10.8	-10.9	-10.3	-10.8	-10.9	-10.3	-10.3	-14.5	-11.9
25	-10.5	-10.1	-10.7	-10.6	-9.8	-9.2	-9.1	-8.6	-8.1	-7.9	-6.5	-3.6	-3.9	-5.8	-6.5	-6.9	-7.3	-7.4	-7.9	-8.0	-8.3	-8.0	-8.0	-8.2	-3.6	-10.7	-8.0
26	-9.0	-8.9	-8.5	-8.6	-8.5	-9.5	-9.1	-8.6	-8.0	-8.9	-8.0	-7.8	-7.4	-7.1	-7.2	-7.4	-7.8	-9.1	-9.3	-9.1	-8.9	-8.5	-7.7	-6.4	-6.4	-9.5	-8.3
27	-6.3	-6.1	-5.5	-6.6	-8.6	-9.9	-12.1	-13.3	-14.8	-16.1	-16.9	-17.9	-18.6	-18.6	-18.7	-18.8	-19.0	-19.2	-19.6	-20.0	-20.1	-20.4	-20.7	-21.0	-5.5	-21.0	-15.4
28	-21.4	-21.5	-21.5	-21.4	-21.9	-21.8	-21.9	-22.1	-22.4	-22.0	-21.6	-21.1	-20.7	-19.4	-18.7	-18.8	-19.1	-19.3	-20.1	-21.0	-21.4	-21.7	-22.1	-22.2	-18.7	-22.4	-21.0
Max.	**0.7**	**1.2**	**1.0**	**1.3**	**1.7**	**1.7**	**1.5**	**1.4**	**1.4**	**1.6**	**1.6**	**1.4**	**1.3**	**1.1**	**0.7**	**0.6**	**0.6**	**0.9**	**1.0**	**0.9**	**1.5**	**1.0**	**0.5**	**0.6**	**1.7**		
Min.	**-31.0**	**-31.0**	**-31.0**	**-31.3**	**-31.2**	**-31.2**	**-30.9**	**-30.5**	**-30.5**	**-30.7**	**-31.1**	**-30.5**	**-29.9**	**-29.6**	**-29.3**	**-29.2**	**-29.4**	**-29.9**	**-30.1**	**-30.8**	**-31.2**	**-31.2**	**-31.2**	**-31.4**		**-31.4**	
Avg.	**-7.5**	**-7.6**	**-7.6**	**-7.5**	**-7.6**	**-7.6**	**-7.6**	**-7.7**	**-7.8**	**-7.8**	**-7.6**	**-7.3**	**-7.1**	**-6.9**	**-6.8**	**-6.7**	**-6.8**	**-7.0**	**-7.2**	**-7.3**	**-7.3**	**-7.3**	**-7.4**	**-7.3**			**-7.4**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-22.2	-22.6	-22.4	-22.4	-22.4	-22.3	-21.6	-20.6	-19.6	-19.1	-17.9	-17.3	-17.3	-18.0	-17.3	-16.1	-14.6	-13.2	-12.5	-11.0	-10.6	-10.7	-10.5	-10.3	-10.3	-22.6	-17.2
2	-9.8	-9.5	-9.5	-9.2	-9.0	-8.9	-8.8	-8.6	-8.0	-7.2	-6.4	-5.9	-5.4	-5.1	-5.0	-4.8	-4.6	-4.5	-4.4	-4.2	-4.0	-4.0	-3.6	-3.5	-3.5	-9.8	-6.4
3	-3.5	-3.4	-3.4	-3.4	-3.5	-3.6	-3.9	-4.5	-4.7	-4.5	-4.2	-4.0	-3.9	-4.3	-4.8	-5.4	-5.7	-5.8	-5.8	-6.4	-6.7	-7.0	-6.8	-6.7	-3.4	-7.0	-4.8
4	-6.7	-6.7	-6.6	-6.6	-6.3	-5.6	-5.4	-5.4	-5.0	-5.0	-4.4	-4.2	-4.0	-3.7	-3.8	-3.9	-4.1	-4.3	-4.1	-4.0	-4.1	-4.0	-4.0	-4.0	-3.7	-6.7	-4.8
5	-3.9	-3.9	-4.0	-4.1	-4.1	-4.2	-4.5	-4.8	-4.9	-4.8	-4.6	-3.8	-3.1	-2.9	-2.8	-2.9	-3.9	-4.7	-4.8	-5.1	-5.1	-4.9	-4.9	-4.9	-2.8	-5.1	-4.2
6	-5.1	-5.8	-6.7	-7.0	-7.4	-8.0	-8.5	-9.3	-9.2	-7.6	-6.1	-5.9	-5.0	-5.0	-3.0	-2.3	-3.7	-7.4	-9.3	-9.5	-9.4	-9.3	-9.7	-10.1	-2.3	-10.1	-7.1
7	-10.4	-10.5	-10.5	-10.5	-10.8	-10.9	-10.9	-11.0	-11.5	-12.3	-13.2	-13.6	-13.9	-13.8	-13.8	-13.9	-14.5	-15.8	-16.2	-16.6	-17.5	-18.4	-19.5	-19.9	-10.4	-19.9	-13.7
8	-19.9	-19.1	-18.6	-18.4	-18.2	-18.0	-18.0	-18.2	-18.6	-19.2	-19.1	-18.3	-18.1	-17.5	-16.3	-15.9	-16.1	-16.5	-17.0	-18.0	-19.2	-20.4	-20.7	-21.3	-15.9	-21.3	-18.4
9	-21.7	-21.8	-22.1	-22.2	-22.6	-22.8	-23.2	-23.4	-23.5	-23.1	-22.6	-21.7	-20.7	-20.0	-19.3	-18.6	-18.3	-18.2	-18.4	-18.9	-19.4	-19.3	-19.9	-19.9	-18.2	-23.5	-20.9
10	-20.5	-20.4	-20.2	-20.1	-19.7	-19.2	-17.8	-17.7	-17.4	-17.4	-16.1	-15.1	-14.9	-14.4	-13.5	-12.3	-11.7	-10.7	-10.4	-10.6	-10.5	-9.8	-8.9	-8.4	-8.4	-20.5	-14.9
11	-8.4	-7.9	-6.9	-6.8	-7.1	-7.0	-6.7	-6.2	-6.0	-6.3	-7.2	-6.5	-6.6	-5.9	-5.5	-5.2	-5.4	-5.5	-5.5	-5.4	-5.4	-5.4	-5.5	-5.7	-5.2	-8.4	-6.3
12	-5.1	-4.9	-4.4	-4.6	-5.2	-5.3	-4.9	-4.6	-4.5	-4.3	-3.4	-3.5	-3.9	-4.2	-4.0	-4.0	-3.8	-3.7	-3.6	-3.5	-3.7	-4.6	-5.1	-5.8	-3.4	-5.8	-4.4
13	-5.2	-4.8	-4.4	-4.6	-4.5	-4.9	-5.6	-5.6	-5.6	-6.5	-6.9	-6.9	-7.4	-7.5	-7.0	-6.6	-6.6	-6.6	-7.3	-8.1	-9.0	-9.7	-11.0	-12.3	-4.4	-12.3	-6.9
14	-13.4	-12.1	-13.2	-13.6	-13.7	-13.5	-14.0	-14.4	-14.2	-15.2	-15.8	-13.9	-12.9	-13.2	-13.1	-12.2	-11.9	-11.4	-10.9	-11.0	-11.8	-11.9	-11.8	-12.0	-10.9	-15.8	-13.0
15	-12.5	-13.0	-13.6	-13.8	-14.0	-14.6	-15.1	-14.9	-14.2	-13.9	-13.9	-13.4	-13.6	-13.0	-12.6	-12.0	-11.2	-11.2	-11.3	-10.6	-10.6	-10.6	-10.2	-10.0	-10.0	-15.1	-12.7
16	-9.8	-9.7	-10.4	-10.8	-10.6	-10.4	-10.5	-11.3	-10.5	-10.2	-9.8	-9.3	-8.1	-7.2	-6.4	-6.3	-6.4	-6.6	-7.1	-8.0	-8.4	-8.3	-8.1	-8.5	-6.3	-11.3	-8.9
17	-8.3	-8.2	-8.5	-8.6	-8.9	-9.5	-9.7	-9.1	-8.7	-8.0	-7.1	-7.0	-7.4	-7.8	-6.9	-6.7	-6.2	-6.0	-6.2	-6.2	-6.1	-6.1	-6.1	-6.1	-6.0	-9.7	-7.5
18	-6.0	-6.4	-6.1	-6.1	-6.1	-7.2	-7.2	-7.5	-7.7	-7.0	-6.6	-6.3	-6.0	-5.6	-5.4	-4.7	-4.2	-4.2	-4.6	-4.9	-5.5	-6.0	-6.1	-6.4	-4.2	-7.7	-6.0
19	-6.4	-6.2	-6.5	-6.3	-6.5	-7.7	-8.1	-8.1	-7.8	-7.2	-6.5	-5.7	-5.4	-5.1	-4.5	-4.7	-4.5	-4.5	-4.5	-4.6	-4.4	-4.1	-4.5	-4.4	-4.1	-8.1	-5.8
20	-4.5	-4.7	-4.6	-4.8	-5.1	-4.8	-4.7	-4.6	-4.5	-3.9	-3.2	-2.6	-1.5	-0.3	-3.0	-4.3	-5.9	-7.1	-8.3	-9.0	-9.8	-10.2	-10.8	-11.2	-0.3	-11.2	-5.6
21	-11.3	-11.4	-11.3	-11.4	-11.7	-12.0	-12.1	-12.3	-12.3	-11.9	-11.5	-10.9	-10.1	-8.8	-8.0	-8.0	-7.8	-8.0	-8.3	-8.9	-9.5	-10.1	-10.7	-11.0	-7.8	-12.3	-10.4
22	-11.5	-12.3	-12.7	-13.0	-13.2	-13.6	-13.6	-13.2	-12.8	-12.1	-11.5	-11.0	-10.3	-9.9	-9.5	-9.0	-8.6	-8.4	-8.6	-9.4	-9.4	-9.4	-9.9	-9.9	-8.4	-13.6	-11.0
23	-9.1	-8.5	-8.3	-8.6	-9.5	-9.3	-7.9	-7.8	-7.8	-7.6	-9.5	-8.5	-5.0	-5.8	-6.1	-6.2	-7.4	-8.4	-8.9	-9.9	-10.8	-10.2	-9.3	-9.5	-5.0	-10.8	-8.3
24	-10.5	-10.2	-11.0	-11.3	-11.9	-13.2	-13.3	-12.6	-12.7	-11.8	-10.6	-9.6	-8.8	-8.2	-7.8	-7.7	-7.4	-7.7	-8.3	-9.2	-10.1	-10.9	-10.8	-11.3	-7.4	-13.3	-10.3
25	-11.7	-12.1	-12.0	-12.0	-12.8	-12.7	-12.6	-12.8	-12.8	-12.8	-12.4	-11.5	-10.6	-9.7	-9.0	-8.6	-8.6	-8.6	-8.9	-9.7	-10.2	-10.5	-11.7	-12.2	-8.6	-12.8	-11.1
26	-12.9	-13.3	-13.7	-14.1	-14.1	-14.3	-14.6	-15.0	-14.8	-14.3	-13.9	-13.2	-12.3	-11.2	-10.3	-9.8	-9.2	-8.8	-8.5	-8.5	-8.7	-8.5	-8.4	-8.0	-8.0	-15.0	-11.7
27	-7.5	-7.7	-7.6	-7.8	-8.1	-8.1	-7.4	-6.3	-4.5	-2.5	-2.0	-1.9	-1.7	-1.3	-0.8	-0.7	-0.4	-0.3	-0.3	-1.1	-2.3	-2.8	-3.1	-3.0	-0.3	-8.1	-3.7
28	-3.3	-3.3	-3.5	-3.8	-2.7	-3.0	-2.9	-2.7	-2.2	-2.1	-2.3	-1.8	-1.2	-0.6	-0.3	0.0	0.2	0.1	0.0	-0.3	-1.4	-1.9	-2.1	-2.3	0.2	-3.8	-1.8
29	-2.7	-3.3	-3.4	-3.2	-3.9	-4.5	-4.7	-3.9	-4.6	-4.7	-4.0	-3.5	-3.4	-3.2	-3.0	-2.8	-3.1	-3.2	-3.0	-3.5	-4.4	-5.0	-5.1	-5.0	-2.7	-5.1	-3.8
30	-4.9	-4.2	-3.9	-3.7	-3.6	-2.9	-2.7	-2.7	-2.5	-2.4	-2.1	-1.7	-1.5	-1.4	-1.6	-1.7	-1.8	-1.9	-2.0	-1.9	-1.8	-1.8	-1.8	-1.6	-1.4	-4.9	-2.4
31	-1.5	-1.4	-1.4	-1.5	-1.5	-1.6	-1.7	-1.7	-1.7	-2.6	-3.4	-3.7	-3.4	-3.7	-3.4	-2.7	-3.7	-3.8	-4.2	-4.4	-4.5	-5.0	-4.9	-4.8	-1.4	-5.0	-3.0
Max.	**-1.5**	**-1.4**	**-1.4**	**-1.5**	**-1.5**	**-1.6**	**-1.7**	**-1.7**	**-1.7**	**-2.1**	**-2.0**	**-1.7**	**-1.2**	**-0.3**	**-0.3**	**0.0**	**0.2**	**0.1**	**0.0**	**-0.3**	**-1.4**	**-1.8**	**-1.8**	**-1.6**	**0.2**		
Min.	**-22.2**	**-22.6**	**-22.4**	**-22.4**	**-22.6**	**-22.8**	**-23.2**	**-23.4**	**-23.5**	**-23.1**	**-22.6**	**-21.7**	**-20.7**	**-20.0**	**-19.3**	**-18.6**	**-18.3**	**-18.2**	**-18.4**	**-18.9**	**-19.4**	**-20.4**	**-20.7**	**-21.3**		**-23.5**	
Avg.	**-9.4**	**-9.3**	**-9.4**	**-9.5**	**-9.6**	**-9.8**	**-9.8**	**-9.7**	**-9.5**	**-9.3**	**-9.0**	**-8.5**	**-8.0**	**-7.7**	**-7.3**	**-7.1**	**-7.1**	**-7.3**	**-7.5**	**-7.8**	**-8.2**	**-8.4**	**-8.6**	**-8.7**			**-8.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-4.8	-5.3	-5.4	-5.7	-6.1	-6.0	-6.1	-6.0	-5.7	-5.4	-4.4	-3.1	-4.1	-2.5	-5.8	-5.9	-5.9	-5.9	-5.5	-5.3	-5.8	-5.8	-6.0	-6.0	-2.5	-6.1	-5.4
2	-6.3	-6.0	-6.1	-6.3	-6.8	-7.5	-7.3	-7.9	-8.1	-7.4	-6.4	-5.1	-4.3	-4.2	-1.5	-3.2	-3.8	-4.0	-5.3	-5.5	-6.0	-6.1	-6.0	-5.8	-1.5	-8.1	-5.7
3	-5.7	-5.4	-4.6	-4.1	-3.7	-3.5	-3.1	-2.9	-2.6	-1.7	-1.5	-1.5	-1.1	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.4	-0.3	-0.2	-0.3	-0.2	-5.7	-2.0
4	-0.5	-0.4	-0.2	-0.2	-0.3	-0.1	0.1	0.3	0.5	0.7	0.9	0.9	0.9	0.9	1.1	1.1	0.9	0.6	0.7	0.7	0.7	0.7	0.4	0.3	1.1	-0.5	0.4
5	-0.4	-1.4	-2.4	-3.4	-4.1	-5.5	-6.4	-7.2	-7.6	-7.2	-7.3	-7.3	-6.5	-6.2	-6.0	-6.1	-6.3	-6.5	-7.2	-7.8	-8.6	-9.7	-10.2	-11.1	-0.4	-11.1	-6.4
6	-12.2	-13.1	-13.9	-14.5	-14.8	-15.2	-15.6	-15.3	-14.6	-14.1	-13.2	-12.1	-11.1	-10.2	-9.3	-8.5	-7.9	-7.3	-6.7	-6.4	-6.4	-6.6	-5.2	-4.9	-4.9	-15.6	-10.8
7	-4.7	-4.7	-4.7	-4.1	-3.9	-4.0	-3.7	-3.3	-3.4	-2.6	-1.6	-1.1	-0.8	0.2	0.7	0.4	0.3	0.3	0.1	-0.2	-0.4	-0.5	-0.5	-0.6	0.7	-4.7	-1.8
8	-0.5	-0.5	-0.5	-0.6	-1.2	-1.6	-1.7	-1.7	-1.4	-1.2	-1.1	-1.2	-1.0	-0.8	-0.8	-0.8	-1.2	-1.3	-1.6	-1.9	-1.9	-1.9	-1.8	-1.8	-0.5	-1.9	-1.3
9	-1.6	-1.6	-1.9	-1.9	-2.0	-2.1	-2.2	-1.9	-1.8	-1.7	-1.6	-1.4	-1.4	-1.3	-1.1	-1.1	-1.0	-1.2	-1.7	-2.2	-2.6	-3.2	-3.7	-3.9	-1.0	-3.9	-1.9
10	-4.0	-3.9	-3.6	-3.5	-3.5	-3.5	-4.1	-4.6	-5.0	-4.9	-5.0	-4.8	-4.5	-4.6	-4.3	-4.5	-4.7	-4.9	-5.4	-5.9	-6.7	-7.7	-7.5	-7.5	-3.5	-7.7	-4.9
11	-7.9	-8.2	-8.6	-8.0	-7.9	-8.3	-8.5	-8.5	-8.2	-7.8	-7.0	-6.0	-5.1	-5.0	-4.8	-4.1	-3.8	-3.8	-3.7	-3.6	-3.7	-3.8	-3.8	-3.8	-3.6	-8.6	-6.0
12	-3.8	-3.7	-3.6	-3.5	-3.5	-3.4	-3.0	-2.8	-2.5	-2.5	-2.3	-2.2	-2.1	-2.3	-2.8	-2.9	-3.0	-2.8	-2.9	-3.1	-3.3	-3.9	-4.1	-4.5	-2.1	-4.5	-3.1
13	-4.6	-4.8	-4.7	-4.8	-5.0	-4.8	-4.4	-5.1	-5.8	-6.1	-6.4	-6.7	-6.9	-6.6	-6.5	-6.5	-6.4	-6.5	-7.4	-8.3	-9.2	-10.1	-10.9	-10.9	-4.4	-10.9	-6.6
14	-11.0	-11.4	-11.9	-12.4	-12.5	-12.9	-12.9	-13.1	-12.8	-12.4	-12.1	-11.3	-10.5	-9.7	-8.8	-8.5	-7.8	-7.8	-8.1	-8.7	-9.5	-10.3	-10.7	-11.1	-7.8	-13.1	-10.8
15	-11.3	-12.3	-12.7	-12.8	-13.6	-14.4	-14.8	-14.5	-14.6	-14.1	-13.6	-13.1	-12.5	-11.8	-11.1	-10.7	-10.7	-10.6	-10.4	-10.9	-11.5	-12.0	-12.2	-12.1	-10.4	-14.8	-12.4
16	-12.1	-11.9	-11.9	-9.6	-8.9	-8.7	-8.1	-7.5	-6.6	-6.3	-6.1	-5.2	-4.6	-4.7	-4.4	-3.6	-3.4	-3.4	-3.2	-2.9	-3.1	-3.1	-3.3	-3.2	-2.9	-12.1	-6.1
17	-2.8	-2.5	-2.5	-2.6	-2.4	-2.6	-2.6	-2.8	-2.3	-2.6	-2.1	-2.6	-2.6	-2.0	-1.9	-1.5	-1.2	-1.1	-1.5	-1.4	-1.5	-2.2	-3.0	-2.6	-1.1	-3.0	-2.2
18	-3.1	-3.1	-3.3	-3.8	-4.0	-3.6	-2.8	-2.2	-2.2	-2.1	-2.1	-2.0	-1.6	-1.2	-0.6	-0.3	-0.3	-0.3	-0.4	-0.2	-0.2	-1.2	-1.4	-1.8	-0.2	-4.0	-1.8
19	-4.3	-5.7	-6.2	-6.1	-6.3	-6.7	-7.0	-7.1	-7.3	-7.5	-7.2	-6.8	-6.5	-6.5	-6.6	-6.8	-6.9	-6.8	-7.1	-7.4	-7.6	-7.6	-7.7	-7.7	-4.3	-7.7	-6.8
20	-7.8	-7.8	-7.9	-7.9	-7.8	-7.7	-7.6	-7.6	-7.5	-6.9	-6.2	-5.3	-4.4	-3.8	-2.8	-2.7	-2.7	-2.9	-2.7	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-7.9	-5.1
21	-2.6	-2.6	-2.4	-1.7	-1.2	-0.7	-0.2	0.1	0.6	0.9	0.5	-0.2	-0.2	-0.6	-0.4	0.0	-0.5	-1.3	-1.5	-1.6	-1.5	-1.6	-1.9	-1.9	0.9	-2.6	-0.9
22	-2.1	-2.1	-1.9	-2.0	-2.1	-2.2	-1.7	-1.6	-1.8	-2.0	-1.8	-2.0	-1.6	-1.4	-1.1	-0.9	-1.1	-1.1	-0.9	-1.1	-1.4	-1.9	-2.3	-2.1	-0.9	-2.3	-1.7
23	-2.1	-2.1	-2.1	-2.1	-2.1	-2.2	-2.2	-2.3	-2.0	-1.5	-1.3	-1.1	-0.9	-0.9	-0.6	-0.6	-0.7	-0.5	-0.4	-0.6	-1.1	-1.6	-2.0	-2.4	-0.4	-2.4	-1.5
24	-2.8	-3.1	-3.5	-3.2	-3.0	-3.0	-3.2	-3.6	-3.7	-3.4	-2.9	-2.8	-2.7	-2.3	-1.9	-1.8	-2.1	-3.0	-3.8	-4.5	-5.4	-6.0	-6.9	-7.3	-1.8	-7.3	-3.6
25	-7.7	-7.9	-8.2	-8.5	-9.0	-9.4	-9.4	-9.2	-8.9	-8.4	-7.6	-6.3	-5.2	-4.7	-4.3	-3.4	-2.6	-2.2	-2.1	-2.0	-2.0	-2.1	-2.1	-2.1	-2.0	-9.4	-5.6
26	-2.0	-2.0	-2.2	-2.5	-2.3	-1.7	-1.8	-1.5	-1.4	-0.6	0.3	0.8	0.7	1.1	1.4	1.3	1.4	1.5	1.3	1.6	1.8	1.5	1.3	0.7	1.8	-2.5	0.0
27	0.5	0.2	0.7	0.4	0.5	0.6	0.0	0.0	-0.4	-0.4	-0.3	0.3	1.0	1.4	1.7	1.9	1.8	1.5	1.1	0.7	0.3	-0.5	-1.5	-2.0	1.9	-2.0	0.4
28	-2.4	-3.6	-4.6	-5.3	-6.0	-6.5	-5.8	-6.1	-6.0	-5.3	-4.6	-3.4	-2.9	-2.7	-2.4	-3.0	-2.8	-2.7	-2.6	-2.6	-2.4	-3.0	-3.9	-4.2	-2.4	-6.5	-3.9
29	-3.6	-3.2	-4.0	-3.8	-3.7	-3.4	-3.7	-4.5	-3.6	-2.9	-1.7	-0.7	-0.2	0.1	0.6	0.8	1.0	0.8	0.4	-0.2	-0.6	-1.4	-2.2	-2.1	1.0	-4.5	-1.7
30	-2.3	-2.0	-2.1	-2.4	-2.5	-2.6	-2.7	-4.1	-5.6	-6.0	-5.9	-4.7	-3.9	-3.1	-2.5	-1.8	-1.0	-0.6	-0.1	-0.1	-0.5	-0.5	-0.7	-0.8	-0.1	-6.0	-2.4
Max.	0.5	0.2	0.7	0.4	0.5	0.6	0.1	0.3	0.6	0.9	0.9	0.9	1.0	1.4	1.7	1.9	1.8	1.5	1.3	1.6	1.8	1.5	1.3	0.7	1.9		
Min.	-12.2	-13.1	-13.9	-14.5	-14.8	-15.2	-15.6	-15.3	-14.6	-14.1	-13.6	-13.1	-12.5	-11.8	-11.1	-10.7	-10.7	-10.6	-10.4	-10.9	-11.5	-12.0	-12.2	-12.1		-15.6	
Avg.	-4.5	-4.7	-4.9	-4.9	-5.0	-5.1	-5.1	-5.1	-5.1	-4.8	-4.4	-3.9	-3.6	-3.2	-2.9	-2.8	-2.8	-2.8	-3.0	-3.1	-3.4	-3.8	-4.1	-4.2			-4.1

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.1	-1.2	-1.7	-1.7	-1.7	-1.1	-0.6	-0.2	0.4	1.1	1.8	2.1	2.3	2.2	2.5	2.8	2.8	2.8	2.3	2.1	1.3	1.0	0.3	0.1	2.8	-1.7	0.8
2	0.0	0.2	0.6	0.3	-0.1	0.2	0.5	0.5	0.8	1.5	1.4	1.3	1.7	1.8	1.9	2.0	1.8	1.8	2.0	1.6	1.7	1.3	1.1	0.2	2.0	-0.1	1.1
3	0.0	-0.1	0.0	0.2	0.5	0.6	0.8	1.4	1.5	2.0	2.4	3.3	3.7	4.1	4.3	4.3	4.4	4.5	4.6	3.0	2.2	1.2	0.9	0.6	4.6	-0.1	2.1
4	0.6	0.6	0.3	-0.1	-0.4	0.0	0.2	0.4	0.6	0.3	0.2	0.3	0.3	0.5	0.7	0.5	0.5	0.6	0.7	0.3	0.2	-0.1	-0.2	-0.3	0.7	-0.4	0.3
5	-0.2	-0.2	-0.6	-0.6	-0.4	0.0	0.4	0.6	1.1	1.3	1.5	2.3	1.9	1.5	1.9	1.6	1.4	1.5	1.5	1.0	0.9	0.2	0.1	-0.2	2.3	-0.6	0.8
6	-0.3	-0.2	-0.2	-0.2	-0.4	-0.3	-0.4	-0.4	-0.5	-0.5	-0.9	-0.8	-0.9	-0.6	-0.8	-0.8	-0.7	-0.9	-1.1	-1.7	-2.5	-3.6	-3.7	-3.9	-0.2	-3.9	-1.1
7	-4.2	-4.4	-4.7	-4.9	-5.2	-5.4	-5.6	-5.6	-5.4	-5.3	-5.2	-4.9	-4.8	-4.9	-4.9	-4.8	-4.6	-4.6	-4.4	-4.2	-4.4	-4.6	-4.8	-5.6	-4.2	-5.6	-4.9
8	-5.9	-6.4	-6.7	-6.6	-6.8	-6.4	-5.8	-5.4	-4.6	-3.8	-2.6	-1.9	-1.6	-2.1	-1.9	-1.6	-1.2	0.2	0.8	0.5	0.3	0.4	0.7	0.5	0.8	-6.8	-2.8
9	0.4	0.5	0.8	1.0	1.0	1.1	1.1	1.4	1.8	2.4	2.5	2.5	2.6	3.0	3.2	3.0	3.4	3.0	2.9	2.5	2.5	3.1	3.1	3.0	3.4	0.4	2.2
10	2.8	2.8	2.5	2.3	2.3	2.5	2.4	2.1	1.9	2.4	2.9	3.2	3.8	4.4	4.8	3.0	2.2	2.7	2.9	3.1	3.3	3.2	2.9	3.2	4.8	1.9	2.9
11	3.1	1.4	0.5	0.8	0.5	1.3	2.2	2.6	2.9	3.0	3.3	3.9	4.4	5.2	5.8	5.5	5.5	5.3	4.3	4.6	3.9	4.5	4.2	3.8	5.8	0.5	3.4
12	3.4	4.2	3.8	3.4	3.1	3.0	2.7	2.6	3.5	4.4	5.2	6.0	6.5	7.0	7.3	7.7	7.7	7.5	7.2	6.3	5.2	3.8	3.5	3.6	7.7	2.6	4.9
13	3.4	3.0	2.4	1.9	1.8	1.6	1.8	2.1	2.6	3.6	3.5	3.7	4.6	5.3	5.4	5.3	5.7	5.8	5.9	5.5	5.1	4.6	3.8	3.2	5.9	1.6	3.8
14	3.4	3.2	3.2	3.1	2.6	3.6	3.5	3.6	3.8	4.0	4.8	5.6	6.1	6.5	6.6	5.8	5.5	5.0	4.6	3.8	2.5	2.2	1.3	0.9	6.6	0.9	4.0
15	1.1	0.9	1.1	1.1	0.9	1.1	1.0	1.4	1.7	2.1	2.6	3.3	3.5	4.3	4.8	5.6	5.8	5.6	5.5	5.6	4.9	4.6	3.8	2.8	5.8	0.9	3.1
16	2.1	1.6	1.1	0.7	-0.2	-0.7	-0.9	0.0	0.2	0.6	1.2	2.0	2.5	3.3	4.0	4.5	4.5	4.4	4.6	4.4	4.1	3.9	2.9	2.6	4.6	-0.9	2.2
17	1.6	0.9	0.8	0.6	0.4	0.3	-0.2	1.0	1.8	2.4	3.0	3.1	3.4	3.8	4.0	3.7	3.5	3.3	3.0	2.2	1.5	1.3	1.0	1.1	4.0	-0.2	2.0
18	1.0	1.0	0.8	0.8	0.7	0.4	0.5	0.3	0.9	1.0	1.5	1.6	1.7	1.8	1.9	2.8	3.4	3.2	2.8	2.3	1.8	1.2	0.9	0.7	3.4	0.3	1.5
19	0.7	0.3	0.3	-0.5	-0.5	-0.2	0.0	0.3	0.8	1.2	0.9	1.3	2.1	2.9	3.1	2.5	0.3	-0.2	-0.2	-0.2	-0.2	-0.4	-0.3	-0.3	3.1	-0.5	0.6
20	-0.2	-0.1	0.1	0.3	0.3	0.6	0.9	1.2	1.5	2.0	2.4	3.1	3.7	3.8	4.1	4.2	4.1	3.6	3.9	3.8	3.8	2.8	2.5	2.3	4.2	-0.2	2.3
21	1.9	1.6	1.0	0.4	0.1	0.2	0.2	0.0	0.1	0.4	1.1	1.7	2.2	2.7	3.4	3.9	4.5	3.7	4.5	4.8	4.8	4.5	3.9	3.6	4.8	0.0	2.3
22	3.0	2.5	2.1	1.5	1.2	1.3	1.5	2.3	3.0	3.8	4.4	5.1	6.0	7.4	8.7	9.7	10.3	10.8	10.9	10.3	8.9	7.9	6.5	5.8	10.9	1.2	5.6
23	5.3	4.3	3.5	3.4	3.6	4.6	5.2	5.9	7.0	9.2	11.4	13.3	15.2	16.4	16.9	17.3	17.5	17.2	16.7	16.3	14.8	14.0	13.3	13.0	17.5	3.4	11.0
24	12.8	11.8	11.7	11.4	11.0	11.7	12.3	11.5	11.8	13.1	14.7	15.4	16.3	17.0	17.9	18.0	18.8	18.7	18.1	17.2	16.9	16.2	15.7	15.5	18.8	11.0	14.8
25	15.1	13.9	13.5	12.8	12.4	12.4	11.8	11.3	12.5	13.6	14.8	16.0	17.0	17.8	18.8	19.1	19.2	18.7	18.0	17.5	18.4	17.7	17.4	16.7	19.2	11.3	15.7
26	15.8	15.1	14.1	13.7	13.4	12.0	11.7	12.6	14.0	16.0	17.9	19.8	20.7	21.5	22.0	22.2	22.1	21.7	21.2	20.2	18.8	17.1	16.2	15.2	22.2	11.7	17.3
27	13.7	13.1	12.1	11.0	11.1	10.7	10.8	10.5	11.0	12.7	13.6	14.9	16.0	15.9	16.6	17.9	18.7	19.3	18.6	17.4	17.4	16.5	15.1	14.1	19.3	10.5	14.5
28	13.3	12.4	12.3	12.2	13.0	12.0	11.7	12.4	12.5	13.3	14.7	16.0	17.4	18.1	18.8	19.4	19.6	19.9	20.1	18.2	16.9	15.6	14.9	14.2	20.1	11.7	15.4
29	13.6	13.2	12.9	12.1	11.4	10.5	10.8	11.6	12.2	12.9	13.8	14.5	14.9	15.2	15.1	14.9	14.8	14.4	13.7	12.7	11.4	10.3	9.7	9.1	15.2	9.1	12.7
30	8.6	8.0	7.8	6.8	6.4	6.9	7.2	9.0	10.0	10.6	11.1	11.4	12.8	13.5	13.2	12.6	12.2	11.3	10.0	8.9	8.2	7.4	6.9	7.0	13.5	6.4	9.5
31	6.7	6.5	6.2	5.4	5.0	4.5	4.0	3.9	3.8	3.5	3.2	3.1	2.7	2.4	2.8	3.2	3.5	3.5	3.7	3.7	3.7	3.4	3.3	3.0	6.7	2.4	3.9
Max.	**15.8**	**15.1**	**14.1**	**13.7**	**13.4**	**12.4**	**12.3**	**12.6**	**14.0**	**16.0**	**17.9**	**19.8**	**20.7**	**21.5**	**22.0**	**22.2**	**22.1**	**21.7**	**21.2**	**20.2**	**18.8**	**17.7**	**17.4**	**16.7**	**22.2**		
Min.	**-5.9**	**-6.4**	**-6.7**	**-6.6**	**-6.8**	**-6.4**	**-5.8**	**-5.6**	**-5.4**	**-5.3**	**-5.2**	**-4.9**	**-4.8**	**-4.9**	**-4.9**	**-4.8**	**-4.6**	**-4.6**	**-4.4**	**-4.2**	**-4.4**	**-4.6**	**-4.8**	**-5.6**		**-6.8**	
Avg.	**3.9**	**3.6**	**3.3**	**3.0**	**2.8**	**2.9**	**3.0**	**3.3**	**3.7**	**4.3**	**4.9**	**5.6**	**6.1**	**6.5**	**6.9**	**7.0**	**7.0**	**6.9**	**6.7**	**6.3**	**5.8**	**5.2**	**4.7**	**4.4**			**4.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.9	2.8	2.4	2.2	2.6	2.8	3.0	3.3	3.7	4.1	4.6	5.5	6.8	8.4	9.8	10.7	11.4	12.4	12.0	12.0	11.2	10.3	9.6	8.8	12.4	2.2	6.8
2	9.6	9.4	9.2	9.0	8.7	9.0	9.0	9.7	10.8	11.4	12.6	13.3	13.7	14.1	14.4	14.5	14.9	14.6	14.3	13.3	12.9	11.1	9.6	8.1	14.9	8.1	11.5
3	7.0	6.2	5.0	4.4	3.8	3.4	3.8	4.1	4.8	5.2	6.8	7.8	8.6	9.1	9.2	9.3	9.9	10.1	9.8	9.4	8.6	7.1	5.5	3.8	10.1	3.4	6.8
4	2.9	2.0	1.5	1.2	0.7	1.0	1.8	2.5	3.4	4.5	5.8	6.9	7.9	8.7	9.6	10.0	10.2	10.3	10.1	9.6	8.8	7.3	5.2	3.9	10.3	0.7	5.7
5	3.4	3.3	3.2	2.5	1.8	1.7	2.6	3.6	4.5	5.9	6.8	7.6	8.6	9.7	10.7	11.1	11.6	12.0	12.0	12.0	11.6	10.5	9.5	9.1	12.0	1.7	7.3
6	9.0	8.5	7.8	7.5	7.4	6.5	6.5	7.3	8.6	9.9	11.0	11.5	11.9	12.4	12.8	12.8	12.6	12.2	11.5	10.5	9.5	8.6	7.8	6.6	12.8	6.5	9.6
7	5.8	5.5	5.3	5.3	5.2	4.9	4.8	5.2	5.6	5.4	5.6	5.6	5.5	6.0	5.7	4.8	4.4	4.1	3.8	3.8	3.8	4.0	3.9	3.9	6.0	3.8	4.9
8	4.0	4.1	4.1	3.9	3.9	3.9	3.9	4.1	4.5	5.1	5.4	5.9	6.7	7.0	7.2	7.3	6.8	7.6	7.7	7.2	6.9	6.6	6.9	6.9	7.7	3.9	5.7
9	7.1	7.0	6.8	6.6	6.3	6.3	5.8	5.7	6.4	6.9	7.6	8.2	9.5	9.1	9.3	9.3	8.8	8.2	6.6	6.4	5.4	5.2	4.9	5.2	9.5	4.9	7.0
10	5.0	5.0	4.7	4.4	4.5	4.6	4.6	5.1	5.7	6.2	6.3	6.3	6.3	6.4	6.5	6.3	5.7	5.4	4.9	4.5	3.4	3.2	3.3	3.1	6.5	3.1	5.1
11	3.1	3.2	3.3	3.2	3.2	3.3	3.4	3.5	3.9	4.4	4.5	4.9	4.9	5.4	5.6	5.8	6.0	6.1	5.6	5.4	5.4	5.4	5.3	5.1	6.1	3.1	4.6
12	5.3	5.7	5.6	5.8	5.7	5.6	6.0	6.0	6.2	6.4	6.3	6.4	6.5	6.5	6.5	6.4	6.5	6.2	5.9	5.9	5.9	5.7	5.7	5.6	6.5	5.3	6.0
13	5.5	5.4	5.3	5.4	5.4	5.4	5.5	6.2	6.9	6.9	7.5	8.6	9.3	9.6	9.8	10.3	10.6	10.3	9.7	9.3	9.3	9.1	9.2	8.6	10.6	5.3	7.9
14	8.5	8.3	8.8	7.8	7.9	8.1	8.2	8.8	9.0	9.9	10.3	11.4	11.6	11.8	12.1	12.6	12.8	12.9	12.3	12.1	11.8	11.3	11.0	9.6	12.9	7.8	10.4
15	9.4	9.5	9.3	9.5	9.5	9.4	10.0	10.7	11.4	12.8	14.4	16.0	17.2	18.2	18.7	14.0	12.8	11.6	11.4	10.7	9.4	9.1	9.3	8.8	18.7	8.8	11.8
16	8.7	8.5	8.7	8.8	8.7	8.5	8.3	8.1	7.8	7.5	7.5	7.5	7.6	8.0	8.3	8.2	8.0	7.6	7.7	7.9	7.8	7.5	7.4	7.1	8.8	7.1	8.0
17	7.6	7.9	8.2	8.6	8.9	9.3	9.2	8.9	8.5	8.5	9.6	10.9	11.7	10.9	8.9	9.8	10.3	9.6	9.0	8.4	7.8	7.4	7.4	7.2	11.7	7.2	8.9
18	7.1	6.9	6.9	7.0	7.7	7.9	7.9	8.6	9.4	9.7	9.6	10.0	9.2	8.9	9.8	10.9	10.1	9.5	9.1	8.7	8.2	7.9	7.6	6.9	10.9	6.9	8.6
19	6.7	7.3	7.3	6.7	6.6	6.8	7.3	7.8	8.6	9.3	10.7	11.0	11.6	12.1	12.6	12.7	13.1	12.8	13.0	11.7	8.2	6.7	5.9	5.8	13.1	5.8	9.3
20	5.9	6.3	6.7	6.2	6.9	7.1	7.4	8.0	8.6	9.5	10.1	11.0	12.1	12.0	9.5	6.5	5.7	5.7	5.8	6.4	6.1	5.6	5.0	4.2	12.1	4.2	7.4
21	4.3	4.0	3.5	3.3	4.2	4.7	5.1	6.1	7.3	8.2	8.9	9.9	11.2	11.6	11.7	12.2	12.1	12.6	13.2	12.8	13.2	12.9	11.7	10.3	13.2	3.3	9.0
22	10.3	9.7	8.9	8.9	9.0	9.1	9.8	10.1	10.6	10.3	10.2	9.8	9.8	8.2	6.6	5.9	5.8	5.7	5.9	5.7	5.8	5.7	5.6	5.2	10.6	5.2	8.0
23	5.0	5.3	5.6	5.8	5.6	5.6	5.6	5.8	6.0	6.3	6.4	7.0	7.7	8.2	8.6	8.6	8.8	8.9	9.1	8.5	7.7	6.8	6.1	5.2	9.1	5.0	6.8
24	4.8	4.9	4.9	5.0	5.2	5.0	5.8	6.8	8.1	8.8	9.8	10.8	11.7	12.3	13.0	13.2	12.9	12.5	11.8	12.1	11.9	11.6	11.5	10.9	13.2	4.8	9.4
25	10.7	10.0	9.4	9.3	9.3	9.4	9.3	10.2	11.6	12.3	12.8	13.3	13.8	13.8	13.7	13.4	13.5	13.0	12.1	10.7	9.7	9.0	8.6	7.8	13.8	7.8	11.1
26	7.2	6.9	6.3	6.3	5.9	6.6	6.1	6.9	8.9	11.1	11.9	12.6	13.5	13.6	13.9	14.1	14.2	14.9	15.1	12.9	10.8	9.7	9.2	8.4	15.1	5.9	10.3
27	7.8	7.8	8.4	7.5	7.1	7.0	6.4	6.9	8.4	9.7	11.4	12.6	13.7	13.8	14.5	14.8	14.8	14.8	14.8	14.0	12.9	11.3	9.8	8.7	14.8	6.4	10.8
28	8.0	7.1	7.4	6.6	6.6	6.8	6.9	6.2	5.8	6.0	6.0	6.9	6.9	7.0	7.8	7.6	8.2	8.5	8.9	9.3	9.3	9.1	8.9	8.8	9.3	5.8	7.5
29	8.3	7.8	7.5	7.3	7.3	7.0	7.0	7.4	8.1	8.7	9.3	9.9	10.9	12.7	13.6	15.1	14.0	12.5	10.7	9.5	8.5	7.6	7.3	7.1	15.1	7.0	9.4
30	7.0	7.0	6.9	7.0	7.0	7.3	7.2	7.2	7.1	7.1	7.0	7.0	7.3	7.0	7.3	7.4	7.5	7.8	8.1	8.4	8.4	7.9	7.5	7.2	8.4	6.9	7.4
Max.	**10.7**	**10.0**	**9.4**	**9.5**	**9.5**	**9.4**	**10.0**	**10.7**	**11.6**	**12.8**	**14.4**	**16.0**	**17.2**	**18.2**	**18.7**	**15.1**	**14.9**	**14.9**	**15.1**	**14.0**	**13.2**	**12.9**	**11.7**	**10.9**	**18.7**		
Min.	**2.9**	**2.0**	**1.5**	**1.2**	**0.7**	**1.0**	**1.8**	**2.5**	**3.4**	**4.1**	**4.5**	**4.9**	**4.9**	**5.4**	**5.6**	**4.8**	**4.4**	**4.1**	**3.8**	**3.8**	**3.4**	**3.2**	**3.3**	**3.1**		**0.7**	
Avg.	**6.6**	**6.4**	**6.3**	**6.1**	**6.1**	**6.1**	**6.3**	**6.7**	**7.3**	**7.9**	**8.6**	**9.2**	**9.8**	**10.1**	**10.2**	**10.2**	**10.1**	**10.0**	**9.7**	**9.3**	**8.7**	**8.0**	**7.5**	**6.9**			**8.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	6.6	6.3	6.3	6.2	6.1	6.1	6.1	6.2	6.5	6.7	8.0	10.8	12.7	14.0	15.1	15.9	16.5	16.5	16.3	15.8	14.9	14.2	12.8	11.8	16.5	6.1	10.8
2	10.6	11.0	10.8	10.0	9.9	10.2	9.8	10.5	11.8	12.8	14.1	15.1	15.8	16.5	17.0	17.6	17.9	17.9	18.0	17.6	17.1	14.9	13.4	12.4	18.0	9.8	13.9
3	12.2	11.9	11.2	10.2	9.6	9.4	9.6	10.5	11.1	13.2	14.5	15.6	16.7	17.8	18.9	19.4	19.4	19.1	19.3	19.4	19.0	16.5	14.0	13.0	19.4	9.4	14.6
4	12.2	12.1	11.8	11.1	10.4	11.1	12.9	13.7	14.7	15.9	17.2	18.2	19.2	19.9	20.6	20.9	21.1	21.2	21.2	20.7	18.2	16.5	15.1	14.5	21.2	10.4	16.3
5	13.6	13.2	12.6	12.2	11.8	10.8	10.4	10.8	11.3	12.0	13.7	16.4	18.5	19.3	20.3	20.6	15.8	15.5	16.3	15.8	15.0	14.7	14.2	15.3	20.6	10.4	14.6
6	15.1	14.6	14.5	14.5	13.5	14.2	13.5	13.8	13.4	14.0	14.4	16.0	16.6	16.5	16.8	17.3	17.2	15.3	15.1	15.6	14.7	13.4	12.5	11.9	17.3	11.9	14.8
7	11.1	10.3	9.9	9.6	9.4	9.3	9.4	9.6	9.4	9.6	9.7	10.0	10.3	10.6	10.3	9.8	9.9	10.0	9.6	9.6	9.5	9.5	9.1	8.5	11.1	8.5	9.8
8	8.3	7.9	7.4	7.2	7.2	7.0	6.9	6.9	7.0	7.3	7.8	8.3	8.7	9.1	9.5	10.1	10.4	10.3	10.6	10.8	11.4	10.4	10.2	10.0	11.4	6.9	8.8
9	10.0	10.0	9.7	9.2	9.5	9.5	9.7	10.0	10.9	12.4	13.7	15.0	16.3	16.2	16.3	16.8	16.7	15.8	14.8	13.7	13.2	12.2	11.5	10.6	16.8	9.2	12.7
10	10.0	9.8	9.4	9.2	9.3	9.2	9.1	9.4	10.0	10.7	10.4	11.1	9.3	9.2	9.1	9.4	10.0	10.7	10.4	11.1	11.2	11.4	11.9	13.3	13.3	9.1	10.2
11			11.4	10.9	9.7	8.8	8.0	7.9	7.7		7.6	7.7	7.8	7.9	7.9	8.2	8.5	8.9	11.1				12.4	12.8	12.8	7.6	9.2
12	12.4	12.1	11.3	11.5	11.9	11.4	10.7	10.3	9.3	8.7	8.9	9.2	8.9	9.1	9.4	9.7	10.9	11.6	12.6	13.9	15.4	16.5	17.3	18.3	18.3	8.7	11.7
13	19.5	20.1	19.5	18.7	17.5	16.4	15.4	15.7	15.6	14.3	14.1	13.9	14.0	14.1	13.2	11.5	9.5	8.9	8.7	8.7	8.3	8.2	8.3	8.7	20.1	8.2	13.4
14	8.6	8.4	8.3	8.3	8.1	8.0	7.8	7.6	7.2	6.7	6.4	6.2	6.2	6.1	5.9	6.0	6.0	6.1	6.3	6.4	6.5	6.6	6.7	7.0	8.6	5.9	7.0
15	7.3	7.2	7.2	7.1	7.2	7.4	7.2	7.0	6.8	6.7	6.8	6.7	6.5	6.4	6.3	6.3	6.3	6.4	6.9	7.3	7.9	8.1	8.4	8.7	8.7	6.3	7.1
16	9.5	10.3	10.8	10.6	10.1	9.6	9.5	9.0	8.8	7.9	7.7	7.6	7.7	7.8	7.9	7.9	8.0	8.5	9.1	9.5	10.1	10.2	9.8	10.1	10.8	7.6	9.1
17	10.0	9.5	8.8	8.4	8.0	7.7	7.5	7.3	7.2	7.1	6.9	6.6	6.2	6.0	6.2	6.5	6.8	7.1	7.5	8.0	8.7	8.8	9.2	9.1	10.0	6.0	7.7
18	9.0	9.0	8.2	8.1	8.0	7.9	7.9	8.0	8.0	8.5	8.4	8.1	8.0	7.8	8.0	8.3	8.4	8.8	9.1	9.7	9.9	9.8	9.8	9.2	9.9	7.8	8.6
19	8.8	8.9	9.0	8.8	8.3	8.2	8.1	8.0	7.8	8.1	7.9	7.7	7.5	7.3	7.6	8.4	8.9	9.4	10.1	11.3	12.1	12.4	12.8	12.9	12.9	7.3	9.2
20	13.1	12.6	12.7	13.0	12.5	12.2	12.1	11.5	10.1	10.1	9.8	9.0	9.3	9.0	9.7	9.7	11.0	13.2	14.3	14.8	15.5	15.7	16.4	16.4	16.4	9.0	12.2
21	16.3	16.8	16.8	15.5	13.9	12.6	11.2	9.8	9.1	8.6	8.7	9.7	10.2	9.8	11.0	10.9	11.0	12.4	13.1	13.7	14.4	12.8	12.6	13.3	16.8	8.6	12.3
22	13.5	12.5	11.9	11.2	10.7	10.8	10.9	10.6	10.6	10.8	10.6	10.2	10.2	9.7	10.0	10.1	10.7	11.5	11.7	11.8	11.5	11.6	11.5	9.8	13.5	9.7	11.0
23	9.5	8.4	8.0	8.1	8.3	8.2	7.8	7.5	7.5	7.7	7.9	7.4	7.3	7.3	7.0	7.1	7.5	7.8	8.0	8.7	9.2	9.3	10.3	10.3	10.3	7.0	8.2
24	10.6	10.8	10.5	9.8	9.6	9.5	9.3	9.3	9.2	9.1	9.1	8.7	8.6	8.4	8.2	8.4	8.4	8.5	8.5	8.6	9.2	9.3	9.3	9.5	10.8	8.2	9.2
25	9.6	8.9	8.4	8.1	8.0	7.9	7.5	7.2	7.1	7.2	7.5	7.6	7.7	7.3	7.4	7.6	7.5	7.6	7.8	7.7	8.2	8.5	8.8	9.7	9.7	7.1	7.9
26	10.1	10.1	10.0	9.7	9.3	9.1	8.6	8.2	8.1	8.1	8.2	8.5	8.6	8.8	8.4	8.1	7.8	8.3	8.3	8.7	9.2	9.9	10.2	10.4	10.4	7.8	8.9
27	10.6	10.7	9.8	9.4	9.4	9.0	8.3	8.0	7.6	7.3	7.1	7.2	7.6	7.2	7.1	7.1	7.5	8.1	8.7	9.2	9.7	10.4	11.5	12.2	12.2	7.1	8.8
28	13.0	13.5	13.7	13.5	12.4	11.7	10.8	10.0	9.3	9.5	9.1	9.2	8.7	8.7	9.6	9.8	10.6	11.4	12.4	12.9	13.0	12.7	12.4	12.6	13.7	8.7	11.3
29	12.0	11.8	11.1	10.6	9.2	8.3	7.7	7.4	7.1	6.9	6.9	6.6	6.4	6.2	6.2	6.2	6.3	6.4	6.8	7.8	9.1	10.6	12.1	12.7	12.7	6.2	8.4
30	11.9	10.7	10.5	9.3	8.0	7.3	6.9	6.7	6.6	6.5	6.4	6.3	6.2	5.9	5.8	5.7	5.8	5.9	5.9	6.1	6.3	6.6	7.0	7.8	11.9	5.7	7.2
31	8.5	9.1	10.6	10.2	10.7	9.3	7.9	6.8	6.3	6.7	6.6	6.8	7.4	7.3	7.3	7.3	7.7	8.4	8.7	8.9	9.2	9.5	10.4	9.9	10.7	6.3	8.4
Max.	**19.5**	**20.1**	**19.5**	**18.7**	**17.5**	**16.4**	**15.4**	**15.7**	**15.6**	**15.9**	**17.2**	**18.2**	**19.2**	**19.9**	**20.6**	**20.9**	**21.1**	**21.2**	**21.2**	**20.7**	**19.0**	**16.5**	**17.3**	**18.3**	**21.2**		
Min.	**6.6**	**6.3**	**6.3**	**6.2**	**6.1**	**6.1**	**6.1**	**6.2**	**6.3**	**6.5**	**6.4**	**6.2**	**6.2**	**5.9**	**5.8**	**5.7**	**5.8**	**5.9**	**5.9**	**6.1**	**6.3**	**6.6**	**6.7**	**7.0**		**5.7**	
Avg.	**11.1**	**10.9**	**10.7**	**10.3**	**9.9**	**9.6**	**9.3**	**9.2**	**9.1**	**9.4**	**9.6**	**9.9**	**10.2**	**10.2**	**10.4**	**10.6**	**10.6**	**10.9**	**11.2**	**11.5**	**11.6**	**11.4**	**11.3**	**11.4**			**10.4**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.6	7.0	6.6	6.2	5.8	5.6	5.6	5.8	6.0	6.0	6.1	6.3	6.7	6.9	7.4	7.7	7.8	7.7	7.3	7.3	7.2	7.0	6.6	6.4	7.8	5.6	6.7
2	6.4	6.4	6.6	6.7	6.5	6.7	6.1	6.2	6.5	6.7	6.9	7.7	8.2	8.5	8.4	7.6	8.1	8.6	8.9	8.7	8.2	8.0	8.0	8.0	8.9	6.1	7.4
3	8.0	7.9	8.0	8.5	8.7	8.4	8.2	8.1	8.2	8.4	8.4	8.8	9.4	9.0	9.3	9.1	8.6	8.8	8.7	8.5	8.3	7.8	7.8	7.7	9.4	7.7	8.4
4	7.9	8.4	7.7	7.4	7.5	7.9	7.8	7.8	8.5	9.2	9.8	9.7	10.2	10.1	9.8	9.2	9.6	9.7	9.8	9.7	9.6	9.4	9.1	8.7	10.2	7.4	8.9
5	8.6	8.6	8.6	8.7	8.8	8.7	8.6	8.6	8.9	8.8	8.8	9.1	9.4	10.1	10.4	11.0	11.6	11.8	10.6	10.6	10.9	10.5	10.1	9.8	11.8	8.6	9.7
6	9.5	9.4	9.4	9.6	9.0	8.2	8.0	9.3	9.6	10.2	11.1	12.0	13.0	13.7	14.1	14.7	15.0	15.3	15.5	14.4	14.1	13.0	12.2	12.6	15.5	8.0	11.8
7	12.7	11.8	11.6	11.4	11.4	11.5	12.1	12.8	12.8	12.1	12.5	13.9	15.1	15.4	15.2	15.5	15.5	15.1	14.3	13.6	12.1	9.6	8.8	8.0	15.5	8.0	12.7
8	7.6	7.1	7.1	7.2	7.0	6.9	7.2	7.5	7.8	8.1	8.5	8.8	9.3	9.9	10.4	11.2	12.2	12.4	11.9	11.4	11.1	10.2	10.1	10.2	12.4	6.9	9.2
9	10.0	9.6	9.5	9.5	9.5	9.3	9.0	9.2	9.6	9.2	9.2	9.2	9.0	9.0	9.2	9.4	9.5	9.4	9.5	9.5	9.5	9.4	9.5	9.4	10.0	9.0	9.4
10	9.2	9.2	9.3	9.3	9.0	9.1	9.1	9.1	9.1	9.2	9.4	9.7	9.8	9.9	9.7	9.5	9.4	9.5	9.3	9.0	8.7	8.6	8.6	8.7	9.9	8.6	9.2
11	8.6	8.6	8.6	8.4	8.4	8.4	8.5	8.7	8.7	8.9	9.3	9.7	9.9	10.2	10.4	10.8	10.6	10.4	10.1	10.0	10.0	9.9	10.0	10.0	10.8	8.4	9.4
12	10.1	10.2	10.2	10.0	9.9	9.9	10.0	10.1	10.1	9.7	10.1	10.6	10.9	11.7	12.2	12.2	12.6	12.5	12.4	11.3	10.2	9.1	9.3	9.2	12.6	9.1	10.6
13	8.7	8.6	7.9	7.8	7.7	7.4	7.0	6.6	6.9	7.2	7.3	7.5	7.9	8.1	8.6	9.0	9.0	9.0	8.5	8.5	8.2	8.1	7.9	7.9	9.0	6.6	8.0
14	7.9	7.8	7.6	7.4	7.3	7.2	7.3	7.4	7.5	7.7	7.9	8.4	8.4	8.3	8.3	8.2	8.0	7.6	7.7	7.9	7.7	7.6	7.5	7.5	8.4	7.2	7.8
15	7.5	7.6	7.5	7.6	7.7	7.7	7.7	7.7	7.9	8.1	8.4	8.6	8.8	9.0	9.3	9.6	9.6	9.6	9.4	9.1	9.0	9.0	8.8	8.7	9.6	7.5	8.5
16	8.6	8.6	8.6	8.6	8.5	8.5	8.7	8.7	8.9	9.3	9.8	10.7	11.2	11.6	11.4	11.5	12.4	11.3	11.3	11.1	10.7	10.6	10.2	9.9	12.4	8.5	10.0
17	9.9	9.8	9.6	9.6	9.7	9.7	10.4	11.1	10.8	11.0	11.8	13.4	14.2	14.7	13.7	13.0	13.3	13.3	12.5	11.5	10.8	9.9	9.2	8.7	14.7	8.7	11.3
18	8.4	8.1	7.6	7.2	7.0	6.7	6.5	6.2	6.4	6.4	6.7	6.9	7.2	7.7	8.1	8.2	8.1	8.5	8.9	9.4	9.5	9.1	9.1	8.9	9.5	6.2	7.8
19	8.5	7.7	7.6	7.1	7.4	7.0	7.6	6.7	7.1	7.2	7.3	8.1	8.5	9.7	10.1	10.2	9.3	8.7	8.2	7.2	6.5	5.3	5.2	5.7	10.2	5.2	7.7
20	6.3	6.3	6.0	6.1	6.1	5.8	5.5	5.4	5.2	5.4	5.9	7.0	8.2	9.6	10.2	11.0	11.2	11.3	11.0	10.1	8.6	7.4	7.1	6.9	11.3	5.2	7.6
21	6.7	6.3	5.9	5.6	5.7	5.2	6.0	6.4	7.1	8.3	8.5	9.1	9.9	10.7	10.5	10.7	10.9	10.3	9.7	7.9	7.0	7.1	6.8	6.2	10.9	5.2	7.8
22	6.4	7.3	7.5	7.8	7.7	7.7	7.6	7.4	7.4	7.2	7.2	7.5	7.8	9.0	9.1	8.7	9.4	9.2	9.4	9.1	8.2	7.1	6.7	6.1	9.4	6.1	7.9
23	6.1	6.7	6.3	6.4	6.6	7.0	7.8	7.8	7.6	7.3	8.0	9.2	10.1	10.5	11.1	11.3	11.6	11.6	11.2	10.4	9.0	8.1	7.7	7.7	11.6	6.1	8.6
24	8.0	7.9	7.8	8.0	7.5	7.2	7.4	7.3	6.6	7.3	7.6	7.6	7.2	7.1	7.2	7.5	7.7	7.4	7.6	7.3	7.1	6.4	6.5	6.5	8.0	6.4	7.3
25	6.5	6.1	6.0	6.0	5.7	5.1	5.4	6.0	6.3	7.1	8.4	9.2	9.8	10.1	10.4	10.9	10.8	11.1	11.0	10.7	10.4	9.8	8.9	8.6	11.1	5.1	8.3
26	7.3	7.0	7.2	7.3	7.4	7.1	6.3	6.3	6.5	6.9	7.6	8.4	9.3	10.4	10.2	10.1	10.0	10.2	9.7	8.7	7.8	8.1	8.2	8.1	10.4	6.3	8.2
27	7.8	7.4	7.5	7.2	7.9	8.0	8.1	9.1	8.8	8.7	10.2	11.0	11.5	12.0	12.7	12.6	12.5	12.4	12.2	11.5	10.9	10.3	9.8	9.5	12.7	7.2	10.0
28	9.6	9.4	9.1	8.9	8.2	7.6	7.3	7.4	7.6	7.9	8.1	8.5	9.5	10.8	11.5	12.2	11.6	11.8	11.2	10.7	10.5	9.8	9.8	9.2	12.2	7.3	9.5
29	8.6	9.2	8.6	8.3	7.8	8.4	8.3	7.0	7.7	7.5	8.5	9.9	11.3	11.8	12.0	11.8	11.7	11.7	10.9	9.8	9.1	8.8	8.3	7.8	12.0	7.0	9.4
30	7.5	7.0	7.2	7.7	8.0	8.6	8.3	7.7	7.2	7.0	7.1	7.7	8.4	8.8	9.1	9.4	9.6	9.3	9.1	9.4	9.3	9.0	8.4	8.5	9.6	7.0	8.3
31	8.8	8.1	8.0	8.2	8.1	7.6	7.5	7.9	8.2	8.0	8.6	9.5	10.8	11.4	11.6	12.0	12.2	11.9	11.0	9.7	8.5	8.0	7.9	7.7	12.2	7.5	9.2
Max.	**12.7**	**11.8**	**11.6**	**11.4**	**11.4**	**11.5**	**12.1**	**12.8**	**12.8**	**12.1**	**12.5**	**13.9**	**15.1**	**15.4**	**15.2**	**15.5**	**15.5**	**15.3**	**15.5**	**14.4**	**14.1**	**13.0**	**12.2**	**12.6**	**15.5**		
Min.	**6.1**	**6.1**	**5.9**	**5.6**	**5.7**	**5.1**	**5.4**	**5.4**	**5.2**	**5.4**	**5.9**	**6.3**	**6.7**	**6.9**	**7.2**	**7.5**	**7.7**	**7.4**	**7.3**	**7.2**	**6.5**	**5.3**	**5.2**	**5.7**		**5.1**	
Avg.	**8.2**	**8.1**	**8.0**	**7.9**	**7.9**	**7.7**	**7.8**	**7.8**	**8.0**	**8.1**	**8.6**	**9.2**	**9.7**	**10.2**	**10.4**	**10.5**	**10.6**	**10.6**	**10.3**	**9.8**	**9.3**	**8.8**	**8.5**	**8.3**			**8.9**

Total Hours In Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.5	7.5	7.5	7.4	7.3	7.2	7.1	7.3	7.4	7.7	8.2	9.0	10.0	10.6	11.4	12.1	12.0	11.5	10.6	9.8	8.7	8.3	8.4	8.2	12.1	7.1	8.9
2	8.4	7.9	7.9	7.5	7.1	7.3	7.0	6.8	7.6	8.6	8.6	9.2	9.5	9.9	11.4	11.6	11.6	12.5	12.4	10.5	10.0	8.8	8.4	8.5	12.5	6.8	9.1
3	7.9	7.6	7.7	7.3	7.7	7.7	7.2	7.5	7.8	8.9	10.1	11.4	12.4	12.8	12.5	11.3	12.5	11.2	12.2	12.0	10.9	9.0	8.7	8.6	12.8	7.2	9.7
4	9.0	8.7	8.2	8.3	7.9	8.0	8.1	7.8	8.0	8.9	9.9	11.0	12.1	12.7	13.7	14.1	11.3	10.3	10.4	9.8	8.5	9.0	8.0	8.9	14.1	7.8	9.7
5	8.2	7.7	7.5	7.6	7.5	7.5	7.4	7.3	7.5	8.0	8.3	8.8	8.9	9.6	9.6	9.7	9.7	9.2	8.8	8.3	7.5	7.0	6.9	6.3	9.7	6.3	8.1
6	6.2	6.0	6.5	6.6	6.0	5.8	5.9	6.2	6.7	7.6	8.9	10.1	10.8	11.4	12.0	12.5	12.7	12.0	10.9	9.8	8.8	8.0	6.7	6.1	12.7	5.8	8.5
7	6.1	6.0	5.8	5.9	5.9	5.8	5.8	6.0	7.0	7.8	8.7	9.9	10.1	9.8	9.3	8.6	7.7	7.6	7.4	7.1	7.1	7.1	7.3	7.3	10.1	5.8	7.4
8	7.5	7.6	7.7	7.6	7.5	7.5	7.3	7.4	7.5	7.5	7.6	7.8	7.9	8.0	7.8	7.8	7.9	7.9	7.7	7.5	7.2	7.1	7.0	6.9	8.0	6.9	7.5
9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.1	8.0	9.4	10.4	11.6	12.1	11.2	10.4	10.0	10.5	9.9	8.5	7.3	6.9	6.6	7.0	7.1	12.1	6.6	8.5
10	6.5	6.2	5.5	5.7	6.2	6.4	6.2	6.9	7.8	8.6	8.8	9.8	10.5	10.5	9.1	10.4	10.6	10.3	9.6	9.1	9.0	8.6	8.1	7.7	10.6	5.5	8.2
11	7.0	7.3	7.3	6.9	6.5	6.7	6.9	7.5	7.9	8.5	9.6	10.8	11.3	12.2	12.8	13.3	13.5	13.5	13.6	12.5	11.2	11.2	10.8	10.7	13.6	6.5	10.0
12	10.6	9.6	9.3	9.4	9.5	9.2	9.5	9.6	9.7	10.4	11.7	12.9	13.7	14.2	14.6	15.0	15.1	15.0	14.4	13.2	11.9	11.8	11.6	11.1	15.1	9.2	11.8
13	10.9	10.5	10.3	10.4	10.5	10.1	9.4	10.7	10.5	10.7	11.7	12.9	13.7	14.0	14.2	14.2	13.8	12.5	11.4	10.8	10.7	10.2	9.3	7.7	14.2	7.7	11.3
14	7.4	7.1	7.1	7.2	7.3	7.5	7.8	8.0	8.1	8.1	8.4	8.7	9.1	9.1	9.7	10.1	10.2	9.9	9.7	9.6	9.6	9.7	9.1	8.8	10.2	7.1	8.6
15	8.9	9.4	9.3	9.3	9.5	9.7	10.2	10.8	10.3	9.7	9.6	9.5	10.3	10.6	10.1	9.9	10.0	10.1	9.4	8.5	8.5	8.6	8.4	8.2	10.8	8.2	9.5
16	8.1	8.1	7.9	7.8	7.7	7.6	7.6	7.8	8.0	8.2	8.7	9.1	9.2	9.4	9.2	9.1	9.0	8.9	8.6	8.0	7.3	6.7	6.8	6.8	9.4	6.7	8.1
17	6.6	6.6	6.5	6.4	6.7	6.6	6.3	6.1	6.0	6.1	6.3	6.7	6.9	7.1	7.5	7.9	8.1	8.1	7.7	7.2	6.7	6.3	6.2	6.1	8.1	6.0	6.8
18	6.2	6.7	6.9	6.3	5.6	5.6	5.6	6.4	6.9	7.2	7.1	7.7	7.8	7.7	7.6	7.6	6.8	6.4	6.6	7.1	7.6	7.6	7.7	7.8	7.8	5.6	6.9
19	7.8	8.1	8.2	8.0	7.9	7.4	6.4	6.7	7.5	7.6	7.8	7.6	8.3	8.1	8.0	8.1	8.2	8.4	7.8	7.5	6.9	6.6	6.8	6.5	8.4	6.4	7.6
20	5.9	5.9	5.7	5.6	5.8	5.9	6.0	6.3	6.3	6.9	7.2	7.8	8.5	9.0	8.9	9.2	9.7	9.0	8.8	8.2	7.8	7.1	6.9	6.6	9.7	5.6	7.3
21	6.2	6.1	5.8	5.7	5.5	5.5	5.5	5.4	5.5	6.0	6.1	6.3	6.3	6.3	6.3	6.3	6.1	6.1	6.2	5.6	5.4	5.5	5.9	5.4	6.3	5.4	5.9
22	5.1	5.9	6.0	5.7	5.7	5.6	5.5	5.7	5.7	5.9	6.5	6.6	6.9	7.2	7.4	7.7	7.9	8.0	6.6	6.2	6.2	6.4	6.3	6.0	8.0	5.1	6.4
23	5.9	5.8	5.9	5.9	5.8	5.7	5.8	5.8	6.0	6.1	6.4	6.8	6.4	6.4	6.8	6.9	7.0	7.2	7.0	6.3	6.0	5.9	5.6	5.3	7.2	5.3	6.2
24	5.2	5.3	5.0	4.9	4.9	4.7	4.8	4.8	4.8	5.5	5.7	6.7	5.8	6.7	6.7	7.2	7.1	7.0	6.3	5.2	4.2	3.4	3.3	2.9	7.2	2.9	5.3
25	2.5	2.1	1.8	1.7	1.2	0.7	1.5	1.8	1.6	2.1	3.0	4.4	6.2	6.8	6.9	6.9	7.3	7.1	6.9	6.4	6.4	6.6	5.4	5.0	7.3	0.7	4.3
26	4.8	4.7	4.6	4.2	4.5	5.2	4.9	5.1	5.0	4.7	4.7	4.6	4.6	4.8	5.3	5.3	5.1	4.7	4.8	4.8	4.7	4.7	4.7	4.8	5.3	4.2	4.8
27	5.0	5.0	5.0	4.5	3.9	3.6	3.5	3.1	3.0	3.3	3.8	4.7	5.2	5.3	5.5	5.3	4.9	4.1	4.0	3.8	3.9	3.9	3.7	3.6	5.5	3.0	4.2
28	3.5	3.4	3.3	3.3	3.2	3.1	2.8	2.7	2.3	2.2	2.3	2.6	2.6	2.7	3.1	3.4	3.1	2.6	2.0	0.9	0.0	-0.4	-0.7	0.2	3.5	-0.7	2.3
29	0.8	1.2	0.4	0.8	1.0	0.3	-0.8	-1.8	-0.5	0.3	0.7	1.3	1.6	2.0	1.7	1.8	2.0	2.2	1.4	0.9	0.8	0.3	-0.1	-0.2	2.2	-1.8	0.8
30	0.2	0.3	-0.1	-0.3	-0.6	-0.5	0.0	0.3	0.6	0.7	1.4	2.3	3.0	3.5	4.5	4.5	4.9	4.6	4.2	3.6	3.1	3.0	2.5	2.4	4.9	-0.6	2.0
Max.	**10.9**	**10.5**	**10.3**	**10.4**	**10.5**	**10.1**	**10.2**	**10.8**	**10.5**	**10.7**	**11.7**	**12.9**	**13.7**	**14.2**	**14.6**	**15.0**	**15.1**	**15.0**	**14.4**	**13.2**	**11.9**	**11.8**	**11.6**	**11.1**	**15.1**		
Min.	**0.2**	**0.3**	**-0.1**	**-0.3**	**-0.6**	**-0.5**	**-0.8**	**-1.8**	**-0.5**	**0.3**	**0.7**	**1.3**	**1.6**	**2.0**	**1.7**	**1.8**	**2.0**	**2.2**	**1.4**	**0.9**	**0.0**	**-0.4**	**-0.7**	**-0.2**		**-1.8**	
Avg.	**6.4**	**6.4**	**6.3**	**6.2**	**6.1**	**6.0**	**5.9**	**6.1**	**6.4**	**6.8**	**7.3**	**7.9**	**8.4**	**8.7**	**8.8**	**8.9**	**8.9**	**8.6**	**8.2**	**7.6**	**7.1**	**6.8**	**6.6**	**6.4**			**7.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.4	2.9	2.8	2.9	2.9	3.0	3.2	3.3	3.8	4.4	5.0	5.5	5.9	6.7	6.2	5.8	4.8	4.7	4.8	4.8	5.0	5.2	5.1	4.9	6.7	2.4	4.4
2	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.2	4.2	4.3	4.6	4.6	4.9	5.6	5.8	5.9	6.4	6.5	6.3	6.3	6.4	6.3	6.0	5.6	6.5	4.2	5.2
3	5.5	5.8	6.3	6.5	6.2	5.6	6.0	6.1	6.1	6.5	7.6	8.1	8.1	7.6	6.4	6.5	6.9	6.7	4.6	3.5	3.7	3.7	4.0	4.1	8.1	3.5	5.9
4	4.0	3.9	3.6	2.9	2.7	2.8	2.9	2.6	2.2	2.1	2.3	2.3	2.4	2.3	2.3	1.8	1.7	1.1	1.0	0.7	0.8	0.7	0.7	0.9	4.0	0.7	2.1
5	1.2	1.5	1.6	1.5	2.0	2.3	2.5	2.7	3.1	3.4	3.9	4.7	5.3	6.1	5.2	5.6	5.4	4.0	3.8	3.6	2.8	2.3	2.1	2.0	6.1	1.2	3.3
6	1.9	1.7	1.6	1.7	1.6	1.8	2.1	2.2	2.3	2.8	3.5	4.0	4.3	4.5	4.9	4.8	4.9	4.8	4.7	4.5	4.5	4.5	4.7	4.8	4.9	1.6	3.5
7	4.9	4.9	5.0	5.1	5.2	5.2	5.3	5.2	5.2	5.6	5.9	6.2	6.7	6.9	7.1	7.2	7.2	7.0	6.8	6.7	6.7	6.6	6.4	6.4	7.2	4.9	6.1
8	6.2	5.8	5.3	5.1	5.0	4.8	4.8	5.1	5.3	5.3	5.4	5.3	5.5	5.6	5.1	5.7	6.0	6.2	6.6	6.7	7.3	8.7	8.9	9.3	9.3	4.8	6.1
9	9.0	9.4	9.7	10.1	9.8	9.9	10.1	10.0	10.4	10.5	10.3	9.5	9.3	8.9	8.6	8.3	8.5	8.4	7.6	3.8	2.7	1.5	1.0	0.8	10.5	0.8	7.8
10	0.2	0.0	-0.4	-0.7	-0.8	-0.8	-0.9	-0.9	-0.4	-0.1	0.4	0.7	1.5	2.7	3.7	3.9	3.7	3.5	3.6	2.9	2.5	2.7	2.9	3.0	3.9	-0.9	1.4
11	3.3	3.4	3.0	2.2	2.2	1.5	1.2	2.0	1.9	2.1	2.3	1.9	2.8	3.4	2.9	3.3	3.7	3.2	3.0	2.1	2.4	2.1	1.8	1.9	3.7	1.2	2.5
12	2.0	2.3	2.5	2.4	2.3	2.6	2.0	2.3	2.4	2.6	3.0	3.6	4.6	5.5	5.3	5.1	5.3	4.8	4.1	2.9	3.6	3.6	3.5	3.4	5.5	2.0	3.4
13	3.0	2.8	2.9	2.3	2.1	1.8	1.5	2.6	3.6	3.9	4.4	4.5	4.8	5.5	6.2	6.3	6.2	5.8	4.8	4.0	4.0	3.9	3.9	4.0	6.3	1.5	3.9
14	3.7	2.8	2.6	3.0	3.2	3.4	3.7	4.1	4.0	3.8	3.8	3.9	4.1	3.9	3.8	3.9	3.9	3.7	3.3	2.6	2.6	2.4	2.3	2.6	4.1	2.3	3.4
15	2.6	2.3	2.4	2.5	2.4	2.9	4.5	5.1	4.8	3.4	4.1	4.4	5.3	6.1	6.4	5.8	5.2	4.9	4.2	4.6	4.4	4.9	4.8	5.1	6.4	2.3	4.3
16	4.9	4.7	4.7	4.7	4.6	4.6	4.4	4.1	4.1	4.3	4.8	5.3	6.0	6.1	6.0	5.8	5.4	4.7	4.1	3.8	4.1	4.0	3.9	4.1	6.1	3.8	4.7
17	4.1	4.0	3.7	3.2	3.0	2.7	2.9	3.2	3.0	3.3	3.6	4.1	4.4	4.7	4.9	4.5	4.1	3.9	3.3	3.6	3.6	3.7	4.0	3.8	4.9	2.7	3.7
18	4.0	3.4	3.1	3.0	2.9	3.0	3.3	3.7	4.0	3.7	3.8	4.4	5.3	6.2	6.1	5.8	5.4	5.0	4.1	3.6	3.3	3.1	2.8	2.5	6.2	2.5	4.0
19	2.4	2.5	2.8	2.4	1.7	1.3	2.0	2.0	2.2	2.4	2.4	2.7	2.7	3.0	3.1	2.8	2.7	2.4	0.8	1.1	0.4	0.1	0.3	1.3	3.1	0.1	2.0
20	1.3	1.2	1.3	1.2	1.2	0.9	0.3	0.3	0.1	0.2	0.6	1.1	1.4	1.6	2.2	2.5	2.4	2.1	1.2	0.5	0.3	0.0	-0.3	-0.1	2.5	-0.3	1.0
21	-0.3	-0.3	-0.1	-1.1	-2.0	-1.5	-1.2	-1.5	-2.0	-1.7	-1.2	0.0	0.9	0.9	0.9	1.0	0.5	-0.4	-1.0	-1.1	-1.5	-1.8	-1.8	-2.0	1.0	-2.0	-0.8
22	-2.2	-3.1	-2.7	-2.6	-3.2	-3.2	-3.4	-3.9	-2.9	-2.9	-2.7	-1.3	-0.3	0.8	1.0	0.5	0.0	-0.5	-1.0	-1.4	-1.5	-1.9	-3.3	-3.7	1.0	-3.9	-1.9
23	-3.7	-4.8	-5.1	-4.8	-5.3	-5.1	-5.0	-5.2	-6.3	-5.9	-4.5	-3.9	-3.2	-2.8	-2.4	-2.1	-2.5	-2.9	-3.8	-4.5	-4.5	-4.1	-4.1	-4.2	-2.1	-6.3	-4.2
24	-3.9	-4.0	-4.1	-3.9	-3.3	-4.0	-3.7	-3.3	-2.7	-2.1	-2.1	-1.7	-1.7	-1.8	-2.1	-2.0	-2.1	-2.5	-2.8	-3.3	-4.7	-4.9	-4.8	-4.9	-1.7	-4.9	-3.2
25	-5.1	-5.2	-5.5	-5.8	-5.8	-5.9	-6.1	-6.2	-6.5	-6.8	-6.8	-6.6	-6.0	-5.5	-5.2	-5.0	-5.0	-5.2	-5.7	-5.8	-6.1	-5.9	-6.1	-6.6	-5.0	-6.8	-5.9
26	-7.0	-7.4	-7.3	-7.5	-7.6	-7.5	-7.6	-8.1	-8.5	-9.0	-9.6	-9.6	-9.6	-8.9	-8.4	-8.0	-7.8	-7.8	-8.0	-8.4	-8.7	-8.8	-9.1	-9.4	-7.0	-9.6	-8.3
27	-9.7	-10.2	-9.9	-9.8	-10.2	-11.1	-10.8	-10.8	-10.5	-10.0	-9.8	-9.1	-7.8	-7.2	-6.7	-6.4	-6.2	-6.7	-6.8	-6.8	-7.0	-6.7	-6.0	-6.0	-6.0	-11.1	-8.4
28	-5.6	-5.5	-5.9	-5.9	-5.7	-5.5	-5.0	-4.9	-4.5	-4.7	-3.9	-3.9	-3.0	-2.1	-1.8	-1.3	-1.0	-0.8	-1.0	-0.9	-1.0	-1.0	-1.0	-0.8	-0.8	-5.9	-3.2
29	-0.6	-0.5	-0.1	1.1	0.8	0.8	0.1	0.1	0.1	-0.2	-0.1	0.0	0.2	0.5	0.6	0.7	0.5	0.3	0.3	0.1	-0.1	-0.2	-0.4	-0.5	1.1	-0.6	0.1
30	-0.6	-0.9	-1.2	-1.2	-1.0	-1.2	-1.2	-1.4	-1.6	-1.8	-1.3	-0.6	-0.3	-0.4	-0.9	-0.9	-1.0	-1.3	-1.5	-1.8	-1.7	-1.9	-2.4	-2.7	-0.3	-2.7	-1.3
31	-3.3	-3.2	-3.5	-3.4	-3.5	-3.7	-4.1	-4.5	-5.0	-4.9	-4.6	-4.4	-4.1	-3.8	-3.8	-4.1	-4.6	-5.6	-6.4	-6.5	-6.5	-6.8	-7.2	-7.4	-3.2	-7.4	-4.8
Max.	**9.0**	**9.4**	**9.7**	**10.1**	**9.8**	**9.9**	**10.1**	**10.0**	**10.4**	**10.5**	**10.3**	**9.5**	**9.3**	**8.9**	**8.6**	**8.3**	**8.5**	**8.4**	**7.6**	**6.7**	**7.3**	**8.7**	**8.9**	**9.3**	**10.5**		
Min.	**-9.7**	**-10.2**	**-9.9**	**-9.8**	**-10.2**	**-11.1**	**-10.8**	**-10.8**	**-10.5**	**-10.0**	**-9.8**	**-9.6**	**-9.6**	**-8.9**	**-8.4**	**-8.0**	**-7.8**	**-7.8**	**-8.0**	**-8.4**	**-8.7**	**-8.8**	**-9.1**	**-9.4**		**-11.1**	
Avg.	**0.9**	**0.8**	**0.8**	**0.7**	**0.6**	**0.5**	**0.6**	**0.6**	**0.7**	**0.8**	**1.1**	**1.5**	**2.0**	**2.3**	**2.4**	**2.4**	**2.3**	**1.9**	**1.4**	**1.0**	**0.9**	**0.8**	**0.7**	**0.7**			**1.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-7.4	-7.6	-7.6	-7.6	-7.8	-7.9	-8.5	-8.4	-8.6	-8.8	-8.6	-8.4	-8.1	-7.9	-7.5	-7.4	-7.4	-7.5	-7.9	-8.1	-8.3	-8.9	-9.3	-9.5	-7.4	-9.5	-8.1
2	-9.9	-10.0	-9.7	-10.0	-10.3	-10.8	-11.1	-11.4	-11.5	-11.4	-11.2	-10.8	-10.5	-10.1	-9.7	-9.8	-10.1	-10.5	-11.2	-11.2	-11.6	-11.9	-12.3	-12.7	-9.7	-12.7	-10.8
3	-13.0	-13.2	-13.6	-13.8	-14.0	-14.1	-14.4	-14.4	-14.2	-14.1	-14.1	-13.2	-12.6	-11.8	-11.5	-11.2	-11.5	-11.6	-12.5	-13.1	-13.1	-13.4	-13.2	-13.1	-11.2	-14.4	-13.1
4	-13.5	-13.2	-12.9	-13.4	-13.7	-13.2	-13.4	-13.3	-14.0	-14.5	-14.6	-14.0	-13.8	-13.2	-12.4	-11.8	-11.8	-12.1	-12.6	-12.7	-12.8	-12.7	-11.9	-11.9	-11.8	-14.6	-13.0
5	-11.2	-10.3	-10.3	-9.9	-9.4	-9.4	-9.6	-11.0	-11.2	-10.6	-9.6	-8.5	-8.0	-7.7	-8.3	-8.6	-8.3	-8.6	-9.2	-8.7	-8.7	-10.5	-10.1	-9.6	-7.7	-11.2	-9.5
6	-10.7	-10.2	-11.6	-12.3	-13.6	-14.3	-15.5	-15.9	-15.1	-15.1	-15.0	-14.0	-12.4	-11.6	-11.1	-11.2	-11.6	-11.7	-11.8	-12.3	-12.3	-11.8	-11.1	-9.5	-9.5	-15.9	-12.6
7	-9.2	-9.0	-9.2	-10.0	-11.0	-11.0	-11.3	-12.1	-12.1	-12.2	-12.2	-12.2	-12.1	-11.7	-12.3	-12.4	-12.7	-12.9	-13.3	-13.8	-13.9	-15.0	-15.4	-15.7	-9.0	-15.7	-12.2
8	-16.3	-17.3	-18.2	-18.5	-18.8	-19.0	-18.8	-18.4	-18.3	-18.5	-18.4	-17.6	-16.7	-15.9	-15.5	-15.6	-16.1	-16.5	-16.6	-16.4	-16.1	-16.1	-15.7	-15.5	-15.5	-19.0	-17.1
9	-15.8	-16.2	-16.9	-18.0	-18.2	-18.4	-18.3	-18.9	-19.4	-19.6	-19.4	-19.0	-18.7	-18.5	-18.0	-17.8	-18.3	-18.5	-19.0	-19.3	-19.5	-19.3	-19.3	-18.8	-15.8	-19.6	-18.5
10	-18.7	-18.6	-18.4	-18.2	-17.9	-18.1	-17.9	-17.6	-17.5	-17.6	-17.7	-17.7	-17.8	-17.6	-17.0	-16.5	-16.5	-16.3	-15.8	-15.6	-15.4	-14.3	-14.6	-14.9	-14.3	-18.7	-17.0
11	-15.2	-15.1	-15.6	-15.9	-16.1	-16.1	-16.0	-16.3	-16.5	-16.9	-17.0	-16.7	-16.0	-15.5	-14.8	-14.3	-13.3	-13.2	-13.4	-13.8	-13.9	-13.7	-14.4	-14.2	-13.2	-17.0	-15.2
12	-14.7	-15.0	-15.0	-14.8	-14.7	-14.6	-14.6	-14.3	-14.2	-13.8	-13.8	-13.3	-12.0	-10.8	-9.8	-9.7	-9.6	-10.0	-9.9	-9.8	-9.5	-9.3	-9.2	-8.9	-8.9	-15.0	-12.1
13	-8.7	-8.5	-8.4	-8.3	-8.6	-9.2	-10.5	-11.8	-13.5	-14.6	-15.4	-16.2	-16.7	-17.4	-18.1	-18.5	-18.9	-19.6	-20.1	-20.2	-20.0	-20.5	-20.1	-19.1	-8.3	-20.5	-15.1
14	-18.8	-18.9	-18.7	-18.3	-18.3	-17.4	-15.8	-13.3	-11.0	-8.4	-7.1	-8.6	-11.1	-12.7	-14.1	-15.0	-15.3	-16.8	-17.9	-18.8	-19.6	-20.3	-21.2	-22.0	-7.1	-22.0	-15.8
15	-22.9	-23.4	-23.9	-24.1	-24.2	-24.1	-23.8	-24.1	-24.1	-23.9	-23.6	-23.4	-22.9	-22.5	-22.2	-22.3	-22.3	-22.7	-23.1	-23.2	-23.1	-23.1	-23.1	-23.2	-22.2	-24.2	-23.3
16	-23.4	-23.4	-23.3	-23.0	-23.0	-23.3	-23.5	-23.8	-23.9	-23.9	-23.5	-22.8	-22.0	-21.3	-20.8	-20.1	-19.8	-19.5	-20.4	-21.0	-21.1	-21.0	-20.4	-20.1	-19.5	-23.9	-22.0
17	-20.0	-20.0	-20.5	-20.5	-20.5	-19.9	-19.6	-19.9	-19.8	-19.7	-19.8	-19.5	-18.3	-18.1	-18.1	-18.3	-18.6	-19.2	-19.0	-19.6	-20.6	-20.4	-19.7	-20.5	-18.1	-20.6	-19.6
18	-20.9	-21.2	-21.2	-21.7	-21.7	-22.1	-22.0	-22.5	-22.6	-22.1	-22.6	-22.0	-21.6	-21.0	-21.0	-21.1	-21.5	-21.6	-21.4	-21.2	-21.4	-21.9	-22.1	-22.0	-20.9	-22.6	-21.7
19	-22.2	-22.2	-21.6	-20.9	-20.8	-20.8	-20.0	-20.2	-20.2	-20.0	-19.8	-19.7	-18.9	-18.2	-17.9	-17.6	-17.4	-17.2	-17.1	-17.0	-17.2	-17.3	-17.3	-17.5	-17.0	-22.2	-19.1
20	-17.2	-16.7	-16.6	-16.5	-16.4	-16.4	-16.7	-16.7	-16.8	-16.9	-17.1	-17.1	-16.8	-17.2	-16.2	-16.2	-16.2	-16.8	-16.9	-16.9	-16.4	-16.4	-16.9	-16.7	-16.2	-17.2	-16.7
21	-16.7	-17.2	-17.8	-18.5	-17.9	-17.6	-17.5	-17.3	-17.8	-18.0	-17.4	-16.1	-15.9	-15.4	-15.4	-15.0	-14.8	-14.4	-14.5	-13.9	-14.0	-13.9	-12.7	-12.6	-12.6	-18.5	-15.9
22	-12.4	-12.4	-12.8	-13.3	-13.5	-14.6	-16.2	-16.0	-16.4	-15.8	-15.0	-14.8	-14.7	-14.2	-13.7	-13.8	-14.1	-14.8	-14.7	-15.5	-16.4	-15.8	-16.4	-17.6	-12.4	-17.6	-14.8
23	-17.9	-18.4	-18.7	-18.6	-18.1	-18.9	-18.5	-19.0	-18.6	-19.4	-18.9	-19.7	-19.4	-17.6	-17.4	-17.2	-16.8	-16.4	-14.0	-12.1	-11.6	-11.0	-10.3	-10.1	-10.1	-19.7	-16.6
24	-9.8	-9.4	-9.2	-9.4	-9.4	-9.4	-9.6	-9.6	-9.5	-8.8	-8.5	-9.0	-8.6	-7.9	-8.1	-8.2	-8.5	-7.0	-6.6	-6.4	-6.4	-6.2	-6.2	-6.2	-6.2	-9.8	-8.2
25	-6.7	-6.8	-7.1	-7.3	-7.4	-7.4	-6.6	-6.2	-6.2	-6.2	-6.5	-6.6	-6.0	-6.1	-6.1	-6.1	-6.2	-6.7	-6.7	-6.7	-6.6	-6.6	-6.4	-6.3	-6.0	-7.4	-6.6
26	-6.4	-6.2	-6.7	-5.9	-5.8	-5.4	-5.0	-4.6	-4.4	-4.2	-4.1	-4.0	-3.9	-3.7	-3.6	-3.7	-3.8	-4.0	-4.1	-4.0	-4.1	-3.9	-3.9	-3.9	-3.6	-6.7	-4.6
27	-3.9	-3.9	-3.9	-4.0	-3.8	-3.6	-3.4	-3.2	-3.1	-2.9	-2.6	-2.4	-2.0	-1.6	-1.4	-1.3	-1.3	-1.3	-1.1	-0.9	-0.8	-0.8	-0.7	-0.7	-0.7	-4.0	-2.3
28	-0.9	-1.1	-1.2	-1.2	-1.2	-1.1	-1.1	-1.2	-1.5	-1.8	-2.1	-2.1	-2.2	-2.2	-2.1	-1.9	-2.6	-3.0	-4.0	-3.8	-3.9	-4.5	-4.1	-4.1	-0.9	-4.5	-2.3
29	-4.9	-4.8	-4.9	-5.5	-5.4	-5.1	-5.2	-4.8	-4.7	-4.9	-5.3	-4.8	-4.8	-5.2	-4.8	-4.6	-5.8	-5.8	-6.3	-6.9	-5.1	-3.6	-3.3	-3.3	-3.3	-6.9	-5.0
30	-3.0	-2.3	-2.7	-3.3	-3.4	-2.9	-2.6	-2.3	-2.0	-1.7	-1.4	-1.2	-1.2	-2.0	-2.5	-3.0	-3.3	-5.2	-5.9	-6.2	-6.2	-6.6	-7.4	-8.4	-1.2	-8.4	-3.6
Max.	**-0.9**	**-1.1**	**-1.2**	**-1.2**	**-1.2**	**-1.1**	**-1.1**	**-1.2**	**-1.5**	**-1.7**	**-1.4**	**-1.2**	**-1.2**	**-1.6**	**-1.4**	**-1.3**	**-1.3**	**-1.3**	**-1.1**	**-0.9**	**-0.8**	**-0.8**	**-0.7**	**-0.7**	**-0.7**		
Min.	**-23.4**	**-23.4**	**-23.9**	**-24.1**	**-24.2**	**-24.1**	**-23.8**	**-24.1**	**-24.1**	**-23.9**	**-23.6**	**-23.4**	**-22.9**	**-22.5**	**-22.2**	**-22.3**	**-22.3**	**-22.7**	**-23.1**	**-23.2**	**-23.1**	**-23.1**	**-23.1**	**-23.2**		**-24.2**	
Avg.	**-13.1**	**-13.1**	**-13.3**	**-13.4**	**-13.5**	**-13.5**	**-13.6**	**-13.6**	**-13.6**	**-13.5**	**-13.4**	**-13.2**	**-12.9**	**-12.5**	**-12.4**	**-12.3**	**-12.5**	**-12.7**	**-12.9**	**-13.0**	**-13.0**	**-13.0**	**-13.0**	**-13.0**			**-13.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-9.0	-9.3	-9.6	-10.5	-10.7	-10.7	-10.2	-10.2	-10.5	-10.3	-9.5	-8.8	-8.4	-7.5	-6.4	-6.8	-8.0	-8.7	-9.1	-7.6	-7.0	-7.1	-6.7	-6.7	-6.4	-10.7	-8.7
2	-5.6	-4.3	-4.9	-4.9	-4.3	-4.8	-4.9	-3.9	-5.2	-3.6	-2.2	-1.2	-0.7	-1.7	-1.3	-1.0	-0.9	-1.0	-0.8	-0.3	-0.1	-0.2	-0.6	-2.7	-0.1	-5.6	-2.5
3	-3.2	-3.4	-4.2	-4.4	-3.8	-3.9	-4.6	-4.7	-3.7	-2.8	-2.5	-2.2	-2.7	-3.3	-4.0	-4.4	-4.8	-5.0	-4.6	-4.6	-4.7	-4.7	-5.0	-5.3	-2.2	-5.3	-4.0
4	-5.6	-5.6	-5.6	-6.0	-6.0	-6.5	-5.5	-3.9	-3.7	-3.3	-4.2	-4.6	-2.4	-2.6	-2.1	-1.3	-0.7	-0.7	-0.5	-0.5	-0.4	-0.4	-0.5	-0.5	-0.4	-6.5	-3.1
5	-0.3	-0.1	-0.4	-0.5	-0.5	-0.5	-1.1	-0.3	0.6	0.6	0.3	0.7	0.2	0.5	0.1	0.5	0.7	0.9	1.2	1.1	1.1	1.1	1.2	1.1	1.2	-1.1	0.3
6	0.9	0.8	0.7	0.5	0.4	0.6	0.5	-0.5	-0.8	-0.5	0.2	0.3	0.7	0.7	1.0	1.0	0.8	0.9	1.0	0.8	1.1	0.9	0.6	0.7	1.1	-0.8	0.6
7	0.8	0.8	0.7	1.2	1.6	1.5	0.8	1.1	1.1	1.2	0.9	1.1	0.2	-0.1	0.7	0.5	0.4	0.7	0.7	-0.2	-0.2	-0.4	-0.4	0.0	1.6	-0.4	0.6
8	0.5	0.7	0.4	-0.1	-0.3	0.1	0.2	-0.3	-0.7	-0.7	-0.8	-0.5	-0.6	-0.3	0.3	0.1	-1.3	-2.1	-2.2	-2.2	-2.1	-2.6	-2.9	-2.9	0.7	-2.9	-0.8
9	-2.8	-1.8	-1.8	-1.7	-1.9	-2.0	-1.7	-2.0	-1.8	-1.6	-1.2	-0.7	-1.0	-1.1	-1.0	-1.4	-1.6	-1.5	-1.5	-1.5	-1.4	-1.3	-1.3	-1.2	-0.7	-2.8	-1.5
10	-1.0	-1.1	-1.0	-1.1	-1.1	-0.9	-0.9	-1.1	-1.1	-1.2	-1.0	-0.7	-0.5	-0.7	-0.8	-1.0	-1.1	-1.3	-1.4	-1.4	-1.4	-1.6	-1.6	-1.9	-0.5	-1.9	-1.1
11	-1.2	-0.8	-0.8	-0.7	-0.8	-0.7	-0.7	-1.5	-0.9	-0.9	-0.6	-1.3	-1.7	-2.2	-2.3	-3.1	-3.6	-3.5	-4.6	-6.4	-7.1	-8.3	-9.4	-9.5	-0.6	-9.5	-3.0
12	-9.6	-9.9	-10.6	-11.0	-11.0	-10.8	-11.0	-11.2	-11.6	-11.8	-11.9	-11.7	-11.6	-11.6	-11.6	-11.7	-12.0	-12.1	-12.0	-12.1	-12.1	-12.1	-12.3	-12.3	-9.6	-12.3	-11.5
13	-12.4	-12.6	-12.8	-12.9	-13.4	-13.8	-14.5	-14.7	-14.9	-15.4	-15.1	-14.7	-14.7	-14.9	-14.9	-15.3	-15.4	-15.7	-16.1	-15.8	-15.9	-16.3	-16.1	-16.4	-12.4	-16.4	-14.8
14	-17.0	-16.7	-16.9	-17.2	-17.2	-16.8	-17.1	-17.7	-16.8	-16.7	-17.6	-17.9	-16.4	-15.2	-14.9	-15.5	-15.9	-15.9	-15.9	-15.5	-15.3	-15.1	-15.3	-15.0	-14.9	-17.9	-16.3
15	-15.2	-15.6	-16.0	-16.0	-16.9	-18.4	-19.2	-19.4	-19.3	-19.1	-18.3	-17.6	-17.1	-17.6	-17.5	-16.6	-14.6	-12.6	-10.8	-10.1	-9.5	-9.0	-8.9	-9.2	-8.9	-19.4	-15.2
16	-8.7	-8.1	-7.4	-7.1	-6.8	-6.5	-6.2	-6.0	-5.8	-5.6	-5.5	-5.4	-5.5	-5.6	-5.5	-5.5	-5.6	-5.5	-5.5	-5.8	-5.9	-6.0	-5.3	-5.0	-5.0	-8.7	-6.1
17	-5.5	-5.8	-6.2	-6.4	-6.5	-6.8	-7.4	-7.7	-8.0	-8.7	-8.7	-8.5	-8.7	-8.6	-8.9	-9.4	-9.7	-10.2	-10.4	-10.7	-10.8	-11.2	-11.9	-12.5	-5.5	-12.5	-8.7
18	-13.1	-13.3	-13.4	-14.1	-15.1	-14.6	-14.5	-14.4	-14.3	-14.7	-14.6	-14.6	-15.3	-16.0	-15.7	-15.9	-14.7	-14.4	-14.2	-13.7	-13.3	-12.9	-11.1	-10.9	-10.9	-16.0	-14.1
19	-11.9	-11.3	-10.8	-10.1	-9.0	-9.2	-8.4	-8.0	-8.2	-9.3	-9.0	-8.6	-10.2	-11.9	-12.5	-12.6	-12.3	-12.7	-13.1	-14.6	-16.4	-17.7	-18.3	-19.5	-8.0	-19.5	-11.9
20	-20.1	-19.8	-20.2	-19.8	-20.4	-20.5	-20.6	-21.1	-21.4	-20.5	-21.0	-20.5	-19.8	-19.1	-19.3	-20.6	-20.5	-19.8	-20.0	-20.2	-20.1	-19.8	-20.5	-20.5	-19.1	-21.4	-20.3
21	-19.7	-19.8	-19.8	-18.8	-18.6	-18.6	-18.6	-17.8	-18.0	-18.0	-18.8	-19.3	-19.5	-19.9	-19.6	-19.8	-20.3	-20.6	-19.8	-19.9	-19.0	-18.4	-18.4	-18.6	-17.8	-20.6	-19.1
22	-18.6	-18.4	-18.1	-18.5	-19.2	-18.8	-19.0	-18.8	-17.9	-16.4	-16.4	-15.9	-15.3	-16.8	-16.9	-16.2	-14.6	-15.3	-16.6	-15.0	-15.1	-16.0	-16.5	-17.8	-14.6	-19.2	-17.0
23	-18.4	-17.9	-17.4	-16.9	-16.5	-17.1	-16.6	-18.1	-18.3	-17.5	-18.1	-17.9	-17.8	-16.2	-16.6	-16.7	-16.3	-16.5	-15.8	-15.7	-14.3	-13.9	-14.8	-13.5	-13.5	-18.4	-16.6
24	-13.2	-14.0	-12.4	-12.5	-11.6	-11.7	-11.2	-10.4	-11.2	-10.8	-10.9	-10.1	-11.3	-11.3	-10.4	-10.9	-10.1	-11.7	-13.4	-14.7	-15.7	-16.6	-17.1	-17.4	-10.1	-17.4	-12.5
25	-16.7	-16.8	-17.4	-18.2	-19.6	-19.8	-20.2	-20.1	-20.5	-20.8	-21.0	-20.9	-19.7	-19.6	-19.6	-19.3	-19.1	-18.4	-18.3	-16.6	-15.6	-16.9	-16.6	-17.2	-15.6	-21.0	-18.7
26	-17.7	-18.0	-18.3	-18.3	-17.8	-17.5	-17.2	-17.3	-16.8	-16.8	-16.4	-16.2	-15.8	-15.4	-15.3	-15.5	-15.7	-15.0	-14.6	-13.3	-11.9	-11.5	-10.5	-10.2	-10.2	-18.3	-15.5
27	-9.2	-8.5	-8.0	-6.8	-6.9	-6.7	-5.8	-4.8	-4.5	-5.0	-4.7	-6.1	-7.2	-6.8	-5.9	-5.4	-5.2	-4.7	-4.4	-3.9	-4.4	-3.1	-2.1	-1.6	-1.6	-9.2	-5.5
28	-1.6	-1.4	-1.6	-2.2	-2.0	-2.0	-2.2	-2.1	-2.4	-2.3	-2.3	-2.3	-2.1	-2.0	-2.1	-2.3	-2.6	-2.1	-2.4	-2.6	-2.3	-2.6	-3.6	-4.2	-1.4	-4.2	-2.3
29	-5.7	-6.6	-6.1	-5.6	-6.0	-6.2	-6.1	-6.5	-7.1	-9.2	-10.3	-11.3	-12.0	-12.1	-12.3	-13.2	-14.1	-14.8	-14.8	-14.9	-15.3	-15.7	-15.9	-15.7	-5.6	-15.9	-10.7
30	-15.7	-15.7	-15.7	-15.7	-15.8	-16.0	-16.1	-16.0	-16.1	-16.1	-16.2	-16.4	-16.2	-15.7	-15.6	-16.0	-15.9	-16.2	-16.1	-16.4	-16.6	-16.8	-16.8	-17.0	-15.6	-17.0	-16.1
31	-17.3	-17.1	-16.8	-17.0	-17.5	-17.5	-17.8	-18.2	-18.2	-18.9	-18.8	-16.8	-15.9	-14.9	-14.2	-16.2	-17.2	-16.1	-15.6	-14.9	-14.5	-14.0	-15.5	-16.6	-14.0	-18.9	-16.5
Max.	**0.9**	**0.8**	**0.7**	**1.2**	**1.6**	**1.5**	**0.8**	**1.1**	**1.1**	**1.2**	**0.9**	**1.1**	**0.7**	**0.7**	**1.0**	**1.0**	**0.8**	**0.9**	**1.2**	**1.1**	**1.1**	**1.1**	**1.2**	**1.1**	**1.6**		
Min.	**-20.1**	**-19.8**	**-20.2**	**-19.8**	**-20.4**	**-20.5**	**-20.6**	**-21.1**	**-21.4**	**-20.8**	**-21.0**	**-20.9**	**-19.8**	**-19.9**	**-19.6**	**-20.6**	**-20.5**	**-20.6**	**-20.0**	**-20.2**	**-20.1**	**-19.8**	**-20.5**	**-20.5**		**-21.4**	
Avg.	**-9.5**	**-9.4**	**-9.4**	**-9.5**	**-9.5**	**-9.6**	**-9.6**	**-9.6**	**-9.6**	**-9.6**	**-9.5**	**-9.4**	**-9.3**	**-9.3**	**-9.2**	**-9.4**	**-9.4**	**-9.4**	**-9.4**	**-9.3**	**-9.2**	**-9.4**	**-9.5**	**-9.7**			**-9.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.46	0.19	0.10	0.13	0.15	-0.01	-0.01	0.01	0.03	0.29	0.33	0.45	0.48	0.46	0.56	0.45	0.42	0.57	0.43	0.73	0.61	0.87	0.90	0.87	0.90	-0.01	0.39
2	0.92	0.95	0.76	0.75	0.95	0.83	0.58	0.07	0.48	0.65	0.19	0.09	0.20	0.09	0.30	0.23	0.43	0.28	0.23	0.08	0.11	0.08	0.08	0.25	0.95	0.07	0.40
3	0.14	0.09	0.16	0.11	-0.03	-0.05	-0.03	0.04	0.07	0.06	0.01	-0.03	-0.04	0.09	0.06	0.18	0.00	0.21	0.31	0.50	0.54	0.41	0.48	0.61	0.61	-0.05	0.16
4	0.59	0.41	0.19	0.17	0.23	0.44	0.49	0.65	0.41	0.47	0.58	0.43	0.44	0.57	0.74	0.56	0.78	0.30	0.72	0.73	0.72	0.77	0.67	0.75	0.78	0.17	0.53
5	0.57	0.43	0.61	0.55	0.51	0.67	0.54	0.44	0.42	0.55	0.39	0.38	0.18	0.18	0.61	0.89	0.94	1.54	1.60	1.49	1.19	1.74	1.53	1.44	1.74	0.18	0.81
6	1.02	0.72	0.38	0.53	0.91	0.75	0.55	0.54	0.70	0.58	0.72	0.52	1.39	0.48	0.60	0.61	0.57	0.27	0.39	0.38	0.22	0.05	0.07	0.18	1.39	0.05	0.55
7	0.19	0.05	0.40	0.48	0.52	0.41	0.66	0.83	0.89	1.02	0.82	0.53	0.48	0.72	0.41	0.43	0.34	0.24	0.43	0.92	0.85	0.40	0.13	0.35	1.02	0.05	0.52
8	0.30	0.49	0.34	0.34	0.21	0.31	0.28	0.09	0.32	0.32	0.35	0.82	1.06	1.33	0.85	1.07	1.83	1.02	1.70	1.72	1.49	1.54	1.21	1.62	1.83	0.09	0.86
9	2.50	2.06	2.49	1.54	1.84	1.73	1.86	1.70	1.52	1.68	1.84	1.23	0.41	0.93	0.90	0.56	0.59	0.50	0.26	0.28	1.69	1.20	0.73	0.36	2.50	0.26	1.27
10	0.83	0.71	0.32	0.08	0.07	0.06	0.04	0.08	0.11	0.08	0.08	0.29	0.19	0.00	0.16	-0.13	-0.02	-0.19	-0.12	-0.13	-0.09	-0.10	-0.10	-0.03	0.83	-0.19	0.09
11	-0.09	-0.10	-0.12	-0.15	-0.09	-0.15	-0.07	0.27	0.54	0.31	0.05	0.33	0.36	0.72	0.27	0.12	0.26	0.24	0.38	0.41	0.21	0.33	0.41	0.66	0.72	-0.15	0.21
12	0.69	0.57	0.49	0.08	-0.11	-0.15	-0.09	-0.13	-0.15	-0.19	-0.17	-0.21	-0.23	-0.24	-0.23	-0.23	-0.21	-0.15	-0.04	0.10	-0.03	-0.09	-0.03	-0.02	0.69	-0.24	-0.03
13	0.28	0.36	0.40	0.53	0.63	0.64	0.69	0.73	0.70	0.60	0.40	0.27	0.22	0.18	0.16	0.29	0.65	0.46	0.71	0.72	0.77	0.85	0.98	1.14	1.14	0.16	0.56
14	1.80	1.14	1.42	0.72	0.57	1.16	1.84	1.11	0.76	0.42	0.14	0.25	0.11	-0.04	0.03	0.02	0.03	0.01	0.01	-0.02	-0.02	0.02	-0.01	0.01	1.84	-0.04	0.48
15	0.02	-0.02	-0.01	0.01	-0.01	-0.02	-0.02	-0.03	-0.03	-0.03	0.06	0.16	0.25	-0.01				0.01	-0.02	-0.01	0.01	0.12	0.16	0.50	0.50	-0.03	0.05
16	0.09	0.06	0.19	0.15	0.08	0.11	0.23	0.36	0.26	0.27	0.41	0.58	0.96	0.75	0.46	0.26	0.47	0.76	0.86	0.85	1.09	1.49	0.63	0.50	1.49	0.06	0.49
17	0.12	0.27	-0.09	0.22	0.40	0.87	1.35	1.24	0.99	0.65	0.37	0.16	0.49	0.95	0.43	0.46	0.43	0.53	0.60	0.69	0.60	0.18	-0.02	0.31	1.35	-0.09	0.51
18	1.06	0.83	0.73	1.14	0.50	0.09	-0.03	-0.16	-0.12	0.01	0.41	0.28	0.21	0.22	0.36	0.41	0.49	1.01	0.65	0.65	0.61	0.64	0.81	0.83	1.14	-0.16	0.48
19	0.71	0.48	0.35	0.44	0.40	0.46	0.36	0.33	0.33	0.35	0.39	0.42	0.39	0.29	0.26	0.49	0.59	0.51	0.48	0.29	0.05	0.13	0.14	0.02	0.71	0.02	0.36
20	0.28	0.41	0.69	0.66	0.77	0.78	0.52	0.31	0.33	0.77	0.52	1.17	0.18	-0.11	0.09	-0.09	-0.15	0.08	-0.16	-0.10	0.09	-0.29	0.23	-0.05	1.17	-0.29	0.29
21	0.08	-0.18	-0.17	-0.16	-0.20	-0.25	-0.19	-0.22	-0.23	-0.23	-0.20	-0.13	-0.15	-0.23	-0.17	-0.17	-0.15	-0.18	-0.23	-0.27	-0.28	-0.27	-0.29	-0.29	0.08	-0.29	-0.20
22	-0.28	-0.26	-0.23	-0.22	-0.24	-0.23	-0.22	-0.20	-0.21	-0.20	-0.07	-0.08	-0.06	-0.14	-0.18	-0.09	-0.14	-0.20	-0.16	-0.11	-0.12	-0.16	-0.11	-0.06	-0.06	-0.28	-0.16
23	-0.06	-0.03	-0.04	-0.01	0.02	-0.04	-0.02	0.07	0.06	0.01	0.05	-0.01	-0.02	-0.05	-0.04	0.00	0.14	0.08	0.13	0.06	0.12	0.21	0.19	0.14	0.21	-0.06	0.04
24	0.18	0.16	0.09	0.11	0.18	0.23	0.31	0.28	0.30	0.32	0.20	0.20	0.10	0.07	0.05	0.11	0.15	0.18	0.27	0.24	0.39	0.29	0.17	0.18	0.39	0.05	0.20
25	0.29	0.45	0.51	0.54	0.42	0.27	0.83	0.92	1.03	1.09	0.97	0.84	0.09	0.27	0.15	0.14	0.67	0.96	0.47	0.78	0.60	0.45	0.58	0.23	1.09	0.09	0.56
26	0.23	0.25	0.39	0.44	0.65	1.17	1.18	1.08	0.94	1.17	1.24	1.15	1.06	0.30	0.37	0.41	0.41	0.98	0.83	1.00	0.85	0.62	0.32	0.60	1.24	0.23	0.74
27	0.47	0.30	0.36	0.22	0.08	0.08	0.09	0.11	0.09	0.11	0.13	0.07	0.16	0.19	0.23	0.20	0.21	0.02	0.00	-0.01	0.03	0.09	0.03	-0.01	0.47	-0.01	0.14
28	-0.01	-0.03	0.00	-0.01	0.03	-0.02	-0.03	0.02	-0.02	-0.04	-0.04	-0.07	-0.13	-0.15	-0.31	-0.33	-0.16	0.04	-0.05	-0.06	0.09	0.00	0.14	0.20	0.20	-0.33	-0.04
29	0.18	0.06	0.04	0.07	0.07	0.16	0.34	0.37	0.51	0.40	0.43	0.30	0.10	-0.06	-0.16	0.16	0.29	0.85	0.56	0.81	0.46	0.60	0.35	0.49	0.85	-0.16	0.31
30	0.87	0.77	0.96	0.86	0.72	0.77	0.55	0.87	1.07	0.67	1.19	0.86	0.57	0.15	0.08	0.20	1.50	1.84	0.34	1.60	2.27	2.01	2.77	3.02	3.02	0.08	1.11
31	2.77	2.40	1.85	1.54	0.97	1.09	0.82	0.73	0.70	1.44	1.28	0.92	0.69	0.58	0.17	0.45	0.50	0.19	-0.08	-0.01	0.40	0.42	0.46	0.94	2.77	-0.08	0.88
Max.	**2.77**	**2.40**	**2.49**	**1.54**	**1.84**	**1.73**	**1.86**	**1.70**	**1.52**	**1.68**	**1.84**	**1.23**	**1.39**	**1.33**	**0.90**	**1.07**	**1.83**	**1.84**	**1.70**	**1.72**	**2.27**	**2.01**	**2.77**	**3.02**	**3.02**		
Min.	**-0.28**	**-0.26**	**-0.23**	**-0.22**	**-0.24**	**-0.25**	**-0.22**	**-0.22**	**-0.23**	**-0.23**	**-0.20**	**-0.21**	**-0.23**	**-0.24**	**-0.31**	**-0.33**	**-0.21**	**-0.20**	**-0.23**	**-0.27**	**-0.28**	**-0.29**	**-0.29**	**-0.29**		**-0.33**	
Avg.	**0.55**	**0.45**	**0.44**	**0.38**	**0.36**	**0.39**	**0.43**	**0.40**	**0.41**	**0.44**	**0.42**	**0.39**	**0.33**	**0.27**	**0.24**	**0.25**	**0.40**	**0.42**	**0.37**	**0.46**	**0.50**	**0.47**	**0.44**	**0.51**			**0.40**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.55	0.50	0.70	0.31	0.22	0.15	0.10	0.12	0.16	0.14	0.08	0.06	-0.01	-0.06	-0.04	0.00	0.08	0.16	0.24	0.19	0.26	0.23	0.28	0.22	0.70	-0.06	0.19
2	0.26	0.27	0.28	0.35	0.38	0.41	0.67	0.69	0.74	0.72	0.78	0.74	0.27	0.66	0.80	0.35	0.41	0.41	0.71	0.74	1.33	0.81	1.38	1.45	1.45	0.26	0.65
3	1.27	0.90	0.63	0.36	0.41	0.38	0.22	0.19	0.13	0.08	0.08	0.10	0.09	0.07	0.06	0.06	0.08	0.12	0.20	0.25	0.27	0.35	0.32	0.29	1.27	0.06	0.29
4	0.35	0.35	0.35	0.35	0.29	0.23	0.26	0.30	0.33	0.46	0.49	0.48	0.49	0.52	0.48	0.39	0.30	0.26	0.43	0.69	0.73	0.76	0.75	0.74	0.76	0.23	0.45
5	0.65	0.45	0.47	0.56	0.71	0.83	0.72	0.77	0.82	0.60	0.52	0.43	0.15	0.19	0.21	0.26	0.36	0.54	0.63	0.65	0.51	0.41	0.28	0.18	0.83	0.15	0.50
6	0.14	0.08	0.02	0.19	0.02	-0.03	-0.03	-0.02	-0.01	-0.04	-0.06	-0.01	-0.03	-0.03	-0.22	-0.12	-0.03	0.02	0.05	0.20	0.13	0.09	0.03	-0.01	0.20	-0.22	0.01
7	0.01	0.02	0.07	-0.01	-0.06	-0.06	-0.05	-0.07	-0.07	-0.06	-0.04	0.11	0.12	0.08	0.22	0.45	0.87	1.00	1.12	1.13	0.88	0.64	0.67	1.15	1.15	-0.07	0.34
8	0.52	0.49	0.34	0.38	0.65	0.70	0.86	0.98	0.99	1.01	0.90	0.40	0.71	0.69	0.95	0.99	0.73	0.51	0.45	0.41	0.34	0.33	0.33	0.24	1.01	0.24	0.62
9	0.22	0.21	0.28	0.34	0.31	0.35	0.31	0.20	0.22	0.11	0.19	0.09	0.07	0.07	0.05	0.13	0.27	0.30	0.22	0.16	0.14	0.05	0.04	-0.04	0.35	-0.04	0.18
10	-0.02	-0.05	-0.07	-0.03	0.05	0.12	0.07	0.03	-0.01	-0.05	-0.05	-0.06	-0.06	-0.11	-0.11	0.01	0.07	0.08	0.11	0.13	0.10	0.11	0.14	0.05	0.14	-0.11	0.02
11	0.00	0.01	-0.04	-0.04	0.08	0.11	0.27	0.00	-0.03	-0.01	-0.05	-0.05	-0.05	-0.07	-0.05	-0.05	-0.04	0.01	0.01	-0.02	-0.06	-0.05	-0.03	-0.03	0.27	-0.07	-0.01
12	-0.01	-0.02	-0.03	0.01	0.04	-0.07	-0.09	-0.07	-0.07	-0.15	-0.17	-0.18	-0.18	-0.19	-0.22	-0.19	-0.17	-0.17	0.15	0.34	0.50	0.46	0.62	0.52	0.62	-0.22	0.03
13	0.44	0.42	0.38	0.31	0.29	0.20	0.18	0.29	0.27	0.15	0.27	-0.44	-0.03	-0.32	-0.17	-0.12	-0.13	-0.10	-0.07	-0.04	-0.03	0.01	0.00	0.03	0.44	-0.44	0.08
14	0.09	0.07	0.15	0.19	0.29	0.29	0.22	0.24	0.23	0.17	0.14	0.13	0.07	0.01	-0.01	-0.05	0.01	0.10	0.15	0.13	0.15	0.19	0.23	0.54	0.54	-0.05	0.16
15	0.78	0.81	0.78	0.85	0.69	0.69	0.77	0.81	0.87	0.84	0.93	0.67	0.54	0.58	0.20	0.04	-0.01	-0.03	0.00	-0.01	-0.04	-0.04	-0.05	-0.05	0.93	-0.05	0.44
16	-0.09	-0.08	-0.03	-0.02	-0.05	-0.04	-0.04	-0.04	-0.04	-0.03	-0.05	0.18	0.07	0.01	0.11	0.22	0.36	0.60	0.58	0.47	0.30	0.10	0.03	0.13	0.60	-0.09	0.11
17	0.10	0.22	0.31	0.28	0.24	0.22	0.21	0.17	0.11	0.09	0.09	0.06	0.02	0.03	-0.01	-0.04	-0.04	-0.01	0.11	0.09	0.02	-0.05	-0.06	-0.06	0.31	-0.06	0.09
18	-0.06	-0.06	-0.05	-0.05	-0.05	-0.03	0.00	0.01	0.04	-0.03	0.00	-0.03	-0.03	0.00	0.01	-0.10	-0.16	-0.08	-0.08	-0.06	-0.04	-0.02	-0.03	-0.06	0.04	-0.16	-0.04
19	-0.11	-0.12	-0.12	-0.12	-0.11	-0.09	-0.10	-0.03	0.01	0.05	-0.02	-0.03	-0.35	-0.23	-0.14	-0.15	-0.13	-0.03	-0.08	0.02	0.26	0.88	0.63	0.61	0.88	-0.35	0.02
20	0.18	0.06	0.13	0.11	0.21	0.26	0.36	0.03	-0.05	-0.20	-0.06	-0.07	-0.03	-0.03	-0.02	-0.03	-0.07	0.40	0.46	0.55	0.63	0.58	0.49	0.45	0.63	-0.20	0.18
21	0.70	0.62	0.72	0.99	0.78	0.99	1.11	0.59	0.75	0.24	0.15	-0.09	0.05	0.52	0.02	0.30	0.26	0.46	1.28	1.62	0.86	0.27	1.44	1.62	1.62	-0.09	0.68
22	1.30	1.16	0.65	1.33	1.49	1.23	0.92	1.12	0.96	0.66	0.24	-0.01	-0.50	-0.27	-0.35	0.18	0.07	0.15	-0.03	-0.05	-0.08	-0.08	-0.06	-0.05	1.49	-0.50	0.42
23	-0.05	-0.06	-0.04	0.02	0.08	0.06	-0.04	0.41	0.94	0.52	-0.17	-0.09	-1.37	-1.77	-0.68	-0.23	-0.06	0.01	-0.06	-0.02	0.04	-0.03	0.07	0.50	0.94	-1.77	-0.08
24	0.84	0.85	0.87	1.03	1.38	1.38	1.56	1.57	1.07	0.41	0.12	-0.51	-2.02	-3.68	-4.07	-3.91	-3.58	-1.12	0.52	0.71	0.55	0.34	0.22	0.44	1.57	-4.07	-0.21
25	0.23	0.19	0.02	-0.05	0.05	-0.09	-0.08	-0.10	-0.06	-0.49	-0.20	-0.04	-0.20	-0.29	0.07	0.39	0.64	1.19	1.93	2.73	2.02	1.73	0.89	0.66	2.73	-0.49	0.46
26	0.82	0.86	0.57	0.54	1.07	1.13	1.34	1.68	1.69	0.75	1.25	0.62	-0.08	-0.38	-1.34	-2.06	-1.61	-0.89	-0.33	-0.05	0.00	0.06	0.03	-0.02	1.69	-2.06	0.24
27	-0.03	0.00	0.04	-0.12	-0.22	-0.23	-0.35	-0.31	-0.33	-0.34	-0.40	-0.75	-0.40	-0.21	-0.24	0.02	0.01	-0.07	-0.20	0.06	0.15	0.17	0.19	0.20	0.20	-0.75	-0.14
28	0.17	0.21	0.21	0.17	0.22	0.14	0.10	0.03	-0.03	-0.07	-0.26	-0.57	-0.65	-0.61	-0.99	-0.77	-0.64	-0.03	0.05	0.25	0.51	0.21	0.62	0.49	0.62	-0.99	-0.05
Max.	**1.30**	**1.16**	**0.87**	**1.33**	**1.49**	**1.38**	**1.56**	**1.68**	**1.69**	**1.01**	**1.25**	**0.74**	**0.71**	**0.69**	**0.95**	**0.99**	**0.87**	**1.19**	**1.93**	**2.73**	**2.02**	**1.73**	**1.44**	**1.62**	**2.73**		
Min.	**-0.11**	**-0.12**	**-0.12**	**-0.12**	**-0.22**	**-0.23**	**-0.35**	**-0.31**	**-0.33**	**-0.49**	**-0.40**	**-0.75**	**-2.02**	**-3.68**	**-4.07**	**-3.91**	**-3.58**	**-1.12**	**-0.33**	**-0.06**	**-0.08**	**-0.08**	**-0.06**	**-0.06**		**-4.07**	
Avg.	**0.33**	**0.30**	**0.27**	**0.29**	**0.34**	**0.33**	**0.34**	**0.34**	**0.34**	**0.20**	**0.17**	**0.04**	**-0.12**	**-0.17**	**-0.19**	**-0.14**	**-0.08**	**0.14**	**0.30**	**0.40**	**0.37**	**0.30**	**0.34**	**0.36**			**0.20**

Total Hours In Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.50	0.66	0.82	0.63	0.55	0.55	0.77	1.23	1.51	0.56	-1.23	-5.35	-5.93	-4.43	-2.33	-1.14	-0.12	0.37	0.72	1.01	0.98	0.88	0.77	0.50	1.51	-5.93	-0.31
2	0.50	0.58	0.65	0.85	0.71	0.44	0.38	0.02	-0.01	-0.02	-0.02	-0.06	-0.07	-0.13	-0.15	-0.08	-0.04	-0.05	-0.03	0.00	-0.04	-0.01	0.01	-0.03	0.85	-0.15	0.14
3	-0.02	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.07	-0.01	-0.02	-0.07	-0.11	-0.13	-0.30	-0.56	-0.36	-0.24	-0.12	-0.05	-0.01	0.03	0.05	0.05	-0.03	0.05	-0.56	-0.09
4	-0.03	-0.02	0.01	0.02	0.05	0.01	-0.03	-0.03	-0.01	-0.02	-0.01	-0.07	-0.04	-0.11	-0.12	-0.11	-0.08	-0.07	-0.06	-0.06	-0.05	-0.06	-0.05	-0.05	0.05	-0.12	-0.04
5	-0.05	-0.05	-0.06	-0.05	-0.05	-0.07	-0.05	-0.06	-0.06	0.04	0.11	0.13	0.15	0.06	0.09	-0.03	-0.32	-0.09	-0.14	-0.16	0.01	0.14	0.03	0.13	0.15	-0.32	-0.02
6	0.04	0.09	0.38	0.33	0.27	0.21	0.73	0.48	0.83	0.72	0.96	0.45	-1.81	-1.57	-0.98	-0.50	0.08	-0.15	-0.12	0.22	0.22	0.11	-0.02	0.09	0.96	-1.81	0.04
7	0.30	0.13	0.22	0.33	0.22	0.17	0.12	0.02	-0.25	-0.65	-0.66	-1.36	-1.82	-1.03	-0.79	-1.16	-0.92	-0.55	0.05	0.16	0.15	0.16	0.08	0.13	0.33	-1.82	-0.29
8	0.13	0.16	0.07	-0.02	0.04	-0.07	-0.08	-0.07	-0.21	-0.16	-0.06	-0.33	-0.26	-1.14	-0.73	-0.35	-0.15	-0.27	-0.16	-0.26	-0.44	-0.07	0.10	-0.01	0.16	-1.14	-0.18
9	0.13	0.21	0.20	0.26	0.25	0.36	0.25	0.38	0.22	0.14	-0.12	-0.36	-0.65	-0.44	-0.43	-0.82	-0.87	-0.69	-0.03	0.24	0.20	0.37	0.18	0.38	0.38	-0.87	-0.03
10	0.40	0.47	0.65	0.64	0.68	0.82	1.09	0.77	0.50	-0.59	-0.59	-1.96	-2.33	-2.92	-3.02	-2.53	-2.03	-0.69	-0.12	0.30	0.56	0.84	0.96	1.12	1.12	-3.02	-0.29
11	0.74	0.96	1.50	1.39	1.25	1.36	1.43	1.97	1.69	1.08	0.33	0.71	0.38	0.46	0.68	0.86	0.83	0.82	0.69	0.86	0.80	0.77	0.54	0.33	1.97	0.33	0.93
12	0.71	0.70	0.89	0.61	0.11	0.00	-0.02	0.01	-0.02	-0.04	0.58	0.70	0.51	0.14	0.02	-0.25	-0.19	0.10	0.25	0.17	0.11	0.05	0.11	0.13	0.89	-0.25	0.22
13	0.33	0.36	0.29	0.12	0.12	-0.08	0.05	0.13	0.15	-0.04	-0.18	-0.15	-0.08	-0.05	-0.02	0.47	0.75	1.14	1.78	1.71	1.52	1.38	1.53	1.39	1.78	-0.18	0.53
14	1.27	1.92	1.27	1.26	1.50	1.46	1.33	1.50	1.29	0.59	0.40	0.83	0.93	0.47	0.14	0.25	0.47	0.70	0.68	0.70	0.66	0.69	0.66	0.53	1.92	0.14	0.90
15	0.38	0.56	0.37	0.60	0.44	0.47	0.54	0.44	0.21	0.23	0.11	0.08	0.12	0.06	-0.12	-0.05	0.21	0.54	0.74	0.98	1.12	1.05	1.47	1.61	1.61	-0.12	0.51
16	1.36	1.12	0.98	0.98	1.17	1.17	1.12	0.79	0.54	0.30	0.30	0.07	0.08	0.06	0.19	0.47	0.41	0.44	0.71	1.01	0.93	0.77	0.70	0.91	1.36	0.06	0.69
17	0.83	0.62	0.56	0.61	1.01	1.04	0.99	1.20	0.72	0.35	0.13	0.01	-0.10	-0.18	-0.17	-0.14	-0.12	-0.09	-0.06	-0.05	-0.05	-0.05	-0.04	0.02	1.20	-0.18	0.29
18	0.16	0.05	0.14	0.13	0.16	0.13	0.00	-0.01	0.08	-0.04	-0.09	-0.16	-0.17	-0.12	-0.25	-0.18	-0.04	-0.01	0.03	0.08	0.12	0.26	0.47	0.75	0.75	-0.25	0.06
19	0.54	0.46	0.36	0.26	0.15	0.24	0.34	0.52	0.22	0.21	0.06	-0.03	-0.12	-0.15	-0.07	-0.10	-0.10	-0.10	-0.07	-0.07	-0.03	-0.01	-0.05	-0.05	0.54	-0.15	0.10
20	-0.05	-0.05	-0.05	-0.04	-0.01	-0.04	-0.03	0.03	0.24	0.48	0.89	1.22	2.20	3.07	1.12	0.32	0.19	0.21	0.04	0.07	0.08	0.15	0.08	0.21	3.07	-0.05	0.43
21	0.21	0.10	0.06	0.09	0.16	0.02	0.01	0.05	0.07	0.00	0.03	0.19	0.28	0.64	0.81	0.73	0.75	0.58	0.47	0.58	0.69	0.85	0.78	0.83	0.85	0.00	0.37
22	0.58	0.50	0.45	0.54	0.41	0.53	0.38	0.38	0.38	0.40	0.36	0.37	0.41	0.39	0.38	0.40	0.56	0.60	0.73	0.92	1.15	1.32	1.26	1.32	1.32	0.36	0.61
23	1.40	0.94	1.01	1.40	1.57	1.62	1.49	1.62	1.21	2.82	1.34	1.41	3.91	2.99	2.24	1.89	0.94	0.78	0.97	0.79	0.88	0.97	0.59	0.51	3.91	0.51	1.47
24	1.07	0.77	0.67	0.79	0.35	0.41	0.51	0.62	0.88	0.83	0.60	0.54	0.58	0.56	0.60	0.56	0.59	0.33	0.35	0.54	0.83	1.03	1.08	1.05	1.08	0.33	0.67
25	1.03	1.20	0.57	0.46	0.39	0.01	-0.08	0.08	0.12	0.02	0.02	-0.08	-0.13	-0.07	-0.07	0.00	0.12	0.27	0.39	0.50	0.68	0.77	0.57	0.61	1.20	-0.13	0.31
26	0.80	0.94	0.96	1.03	0.95	1.02	0.91	0.65	0.41	0.20	-0.02	-0.18	-0.28	-0.33	-0.38	-0.30	-0.08	0.40	1.02	1.26	1.26	1.01	0.93	0.98	1.26	-0.38	0.55
27	1.57	1.19	0.82	0.81	0.78	0.70	0.59	1.13	1.57	0.51	0.12	0.05	0.00	0.04	-0.02	0.07	0.17	0.41	0.56	0.84	0.65	0.65	0.57	0.59	1.57	-0.02	0.60
28	0.55	0.67	0.74	0.41	0.62	0.45	0.46	0.76	0.66	0.35	-0.05	-0.10	-0.15	-0.16	-0.09	-0.01	0.16	0.66	1.14	1.57	0.83	1.06	1.42	1.43	1.57	-0.16	0.56
29	1.32	1.68	1.90	1.75	1.82	1.63	1.68	1.73	1.36	1.17	0.55	0.02	-0.27	-0.12	-0.13	-0.27	-0.18	0.29	0.84	0.74	0.38	0.57	0.98	0.93	1.90	-0.27	0.85
30	0.72	0.52	0.31	0.21	0.14	0.12	0.08	0.05	-0.05	-0.08	-0.08	-0.10	-0.08	-0.02	-0.10	-0.09	-0.06	-0.05	-0.03	-0.01	-0.04	-0.04	-0.04	-0.04	0.72	-0.10	0.05
31	-0.04	-0.04	-0.03	-0.04	-0.05	-0.05	-0.05	-0.05	-0.07	0.09	0.37	0.49	0.80	0.63	0.95	1.58	0.52	0.45	0.33	0.37	0.13	0.12	0.31	0.17	1.58	-0.07	0.29
Max.	**1.57**	**1.92**	**1.90**	**1.75**	**1.82**	**1.63**	**1.68**	**1.97**	**1.69**	**2.82**	**1.34**	**1.41**	**3.91**	**3.07**	**2.24**	**1.89**	**0.94**	**1.14**	**1.78**	**1.71**	**1.52**	**1.38**	**1.53**	**1.61**	**3.91**		
Min.	**-0.05**	**-0.05**	**-0.06**	**-0.05**	**-0.05**	**-0.08**	**-0.08**	**-0.07**	**-0.25**	**-0.65**	**-1.23**	**-5.35**	**-5.93**	**-4.43**	**-3.02**	**-2.53**	**-2.03**	**-0.69**	**-0.16**	**-0.26**	**-0.44**	**-0.07**	**-0.05**	**-0.05**		**-5.93**	
Avg.	**0.56**	**0.56**	**0.54**	**0.53**	**0.51**	**0.47**	**0.48**	**0.52**	**0.46**	**0.30**	**0.13**	**-0.10**	**-0.13**	**-0.12**	**-0.11**	**-0.03**	**0.04**	**0.20**	**0.38**	**0.48**	**0.46**	**0.51**	**0.52**	**0.53**			**0.32**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.06	0.08	0.21	0.34	0.16	0.16	0.39	0.45	0.69	1.09	1.60	2.20	1.13	2.61	-0.30	-0.34	-0.28	0.20	0.44	0.60	0.22	0.30	0.45	0.01	2.61	-0.34	0.52
2	-0.02	0.01	0.02	-0.01	0.21	0.17	0.46	1.03	1.47	2.22	2.66	2.47	2.93	2.81	5.33	3.80	2.82	2.36	0.64	0.45	0.04	-0.29	-0.35	-0.39	5.33	-0.39	1.28
3	-0.55	-0.38	-0.15	-0.10	-0.04	0.00	-0.05	0.08	-0.03	-0.05	-0.01	-0.05	-0.01	-0.05	-0.07	-0.07	-0.10	-0.11	-0.07	-0.06	-0.02	0.04	0.03	-0.02	0.08	-0.55	-0.08
4	-0.04	-0.03	0.01	-0.02	-0.05	-0.07	-0.01	-0.03	-0.13	-0.30	-0.26	-0.20	-0.17	-0.23	-0.28	-0.10	-0.20	-0.08	0.06	0.20	0.22	0.13	0.09	0.06	0.22	-0.30	-0.06
5	-0.16	-0.29	-0.30	-0.11	-0.16	-0.25	-0.25	-0.24	-0.22	-0.29	-0.26	-0.23	-0.41	-0.38	-0.35	-0.25	-0.12	0.04	0.24	0.41	0.33	0.44	0.47	0.51	0.51	-0.41	-0.08
6	0.40	0.38	0.35	0.40	0.44	0.52	0.72	0.55	0.21	-0.09	-0.25	-0.52	-0.75	-0.83	-0.80	-0.78	-0.69	-0.37	0.14	0.52	0.30	0.44	0.51	0.31	0.72	-0.83	0.05
7	0.41	0.32	0.27	0.63	0.90	0.63	0.63	1.01	0.20	-0.01	-0.29	-0.42	-0.50	-0.43	-0.32	-0.23	-0.06	-0.08	0.02	0.12	0.12	0.11	0.11	0.06	1.01	-0.50	0.13
8	0.07	0.03	0.07	0.10	0.02	-0.06	-0.06	-0.07	-0.06	-0.07	-0.11	-0.10	-0.08	-0.04	-0.06	-0.05	-0.12	-0.18	-0.16	-0.11	-0.08	-0.07	-0.06	-0.05	0.10	-0.18	-0.05
9	-0.05	-0.05	-0.06	-0.05	-0.07	-0.05	-0.09	-0.11	-0.12	-0.17	-0.34	-0.53	-0.58	-0.61	-0.62	-0.62	-0.79	-0.77	-0.58	-0.03	-0.08	-0.05	0.13	-0.04	0.13	-0.79	-0.26
10	-0.06	-0.07	0.04	0.01	0.04	0.07	-0.11	-0.46	-0.43	-0.50	-0.73	-0.43	-0.82	-0.52	0.06	-0.20	-0.11	0.15	0.74	1.24	1.40	0.54	0.75	1.35	1.40	-0.82	0.08
11	1.39	0.96	0.47	0.27	0.14	-0.01	-0.30	-0.38	-0.64	-0.82	-0.94	-1.16	-0.81	-0.93	0.01	-0.10	-0.09	-0.10	-0.10	-0.08	-0.06	-0.04	-0.04	-0.04	1.39	-1.16	-0.14
12	-0.04	-0.03	-0.04	-0.04	-0.04	-0.02	0.00	-0.06	-0.15	-0.14	-0.14	-0.21	-0.23	-0.33	-0.27	-0.41	-0.29	-0.35	-0.25	-0.14	-0.04	0.09	0.33	0.65	0.65	-0.41	-0.09
13	0.30	0.46	0.17	0.06	0.01	0.06	-0.04	-0.19	-0.38	-0.42	-0.68	-0.84	-0.86	-0.99	-1.31	-1.42	-1.07	-0.92	-0.89	-0.44	-0.20	-0.17	-0.23	0.00	0.46	-1.42	-0.41
14	-0.06	-0.12	-0.12	-0.14	-0.10	-0.09	-0.12	-0.20	-0.31	-0.46	-0.32	-0.55	-0.52	-0.41	-0.74	-0.52	-0.24	-0.16	-0.31	-0.18	0.14	0.35	0.54	0.40	0.54	-0.74	-0.18
15	0.31	0.31	0.48	0.48	0.41	0.34	0.32	-0.21	-0.32	-0.03	-0.60	0.00	-0.34	-0.28	-0.10	-0.89	-0.30	0.09	0.11	-0.08	0.92	1.01	1.04	0.97	1.04	-0.89	0.15
16	0.82	0.90	1.03	1.09	0.27	0.32	0.61	0.63	0.96	0.62	0.25	0.39	0.47	0.17	0.25	0.63	0.85	0.79	0.84	0.73	0.49	0.44	0.33	0.39	1.09	0.17	0.59
17	0.48	0.61	0.66	0.63	0.57	0.41	0.70	0.55	0.29	0.16	0.03	-0.15	-0.25	-0.04	0.08	0.28	0.55	0.72	0.81	1.14	1.30	1.01	0.88	1.93	1.93	-0.25	0.56
18	2.14	2.26	1.82	0.95	1.05	1.37	0.96	0.70	0.30	0.19	0.03	-0.21	-0.40	-0.36	-0.02	0.07	0.11	0.20	0.49	0.70	0.55	0.58	0.66	0.68	2.26	-0.40	0.62
19	0.47	0.58	0.38	0.08	0.01	-0.04	-0.10	-0.11	-0.13	-0.17	-0.29	-0.37	-0.40	-0.24	-0.16	-0.23	-0.21	-0.32	-0.42	-0.26	-0.21	-0.17	-0.19	-0.20	0.58	-0.42	-0.11
20	-0.17	-0.15	-0.12	-0.11	-0.10	0.02	0.03	0.08	-0.12	-0.21	-0.37	-0.42	-0.40	-0.29	-0.09	-0.03	-0.07	-0.11	-0.10	-0.08	-0.06	-0.06	-0.05	-0.05	0.08	-0.42	-0.13
21	-0.05	-0.01	0.15	0.44	0.48	0.64	0.72	0.70	0.52	0.71	0.49	0.12	0.13	-0.08	-0.06	0.03	-0.11	-0.10	-0.13	-0.07	-0.05	0.00	0.09	0.66	0.72	-0.13	0.22
22	0.54	0.21	0.05	0.05	0.08	0.12	0.15	0.23	0.11	-0.21	-0.17	-0.11	-0.45	-0.39	-0.15	-0.16	-0.42	-0.33	-0.13	0.10	0.18	0.23	0.36	0.47	0.54	-0.45	0.01
23	0.35	0.20	0.23	0.25	0.27	0.47	0.53	0.23	0.27	-0.02	-0.17	-0.21	-0.23	-0.32	-0.22	-0.24	-0.28	-0.31	-0.08	0.47	0.76	0.91	0.86	1.14	1.14	-0.32	0.20
24	0.79	0.54	0.61	0.64	0.48	0.51	0.30	0.11	-0.02	-0.25	-0.29	-0.33	-0.37	-0.43	-0.37	-0.22	-0.26	-0.27	-0.19	-0.10	-0.06	-0.13	-0.23	-0.18	0.79	-0.43	0.01
25	-0.16	-0.18	-0.18	-0.18	-0.19	-0.17	-0.20	-0.18	-0.20	-0.26	-0.31	-0.28	-0.28	-0.32	-0.27	-0.22	-0.16	-0.12	-0.09	-0.06	0.01	0.00	0.05	0.05	0.05	-0.32	-0.16
26	0.08	0.04	-0.04	0.08	0.13	0.33	0.24	0.40	0.32	0.06	-0.18	-0.13	-0.11	-0.17	-0.23	-0.11	0.02	0.17	0.28	0.37	0.87	0.74	0.64	0.33	0.87	-0.23	0.17
27	0.46	0.29	0.34	0.77	0.78	0.52	0.23	0.37	0.29	-0.05	-0.23	-0.24	-0.13	-0.11	0.18	0.07	0.11	0.19	0.32	0.58	1.09	0.79	1.02	0.98	1.09	-0.24	0.36
28	0.77	0.89	1.01	0.97	0.97	1.01	0.94	0.69	0.18	-0.11	-0.42	-0.34	-0.41	-0.40	-0.25	-0.33	-0.31	-0.32	-0.32	-0.03	0.24	0.35	0.33	0.30	1.01	-0.42	0.23
29	0.73	1.07	1.05	1.01	1.16	1.35	1.24	0.74	0.59	0.45	0.34	0.35	0.42	0.28	0.08	0.06	0.12	0.29	0.40	0.86	1.37	1.78	1.27	1.66	1.78	0.06	0.78
30	1.29	1.51	1.70	1.54	0.96	0.96	0.28	0.04	0.00	-0.24	-0.23	-0.30	-0.32	-0.30	-0.37	-0.46	-0.41	-0.19	-0.03	0.08	0.18	0.15	0.16	0.19	1.70	-0.46	0.26
Max.	**2.14**	**2.26**	**1.82**	**1.54**	**1.16**	**1.37**	**1.24**	**1.03**	**1.47**	**2.22**	**2.66**	**2.47**	**2.93**	**2.81**	**5.33**	**3.80**	**2.82**	**2.36**	**0.84**	**1.24**	**1.40**	**1.78**	**1.27**	**1.93**	**5.33**		
Min.	**-0.55**	**-0.38**	**-0.30**	**-0.18**	**-0.19**	**-0.25**	**-0.30**	**-0.46**	**-0.64**	**-0.82**	**-0.94**	**-1.16**	**-0.86**	**-0.99**	**-1.31**	**-1.42**	**-1.07**	**-0.92**	**-0.89**	**-0.44**	**-0.21**	**-0.29**	**-0.35**	**-0.39**		**-1.42**	
Avg.	**0.35**	**0.34**	**0.34**	**0.33**	**0.29**	**0.31**	**0.27**	**0.21**	**0.11**	**0.02**	**-0.07**	**-0.09**	**-0.16**	**-0.12**	**-0.05**	**-0.10**	**-0.07**	**0.00**	**0.06**	**0.23**	**0.33**	**0.32**	**0.33**	**0.40**			**0.15**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.12	0.17	0.24	0.34	0.36	0.33	0.27	0.14	0.06	-0.01	-0.07	-0.15	-0.22	0.02	0.07	0.03	0.01	0.18	0.19	0.35	0.34	0.39	0.25	0.28	0.39	-0.22	0.15
2	0.32	0.30	0.25	0.19	0.25	0.32	0.27	0.05	-0.10	-0.11	-0.20	-0.20	-0.21	-0.29	-0.20	-0.20	-0.10	0.05	0.08	0.33	0.45	0.45	0.34	0.08	0.45	-0.29	0.09
3	0.02	0.12	0.19	0.10	0.18	0.21	0.12	-0.07	-0.24	-0.44	-0.76	-0.84	-1.04	-0.81	-0.60	-0.57	-0.53	0.08	-0.03	0.12	0.64	0.27	0.20	0.16	0.64	-1.04	-0.15
4	0.15	0.38	0.05	-0.06	-0.06	0.02	-0.01	0.09	0.14	0.02	0.02	-0.01	-0.04	-0.05	-0.03	-0.03	-0.07	-0.04	0.03	0.00	0.01	-0.07	-0.04	-0.05	0.38	-0.07	0.01
5	-0.02	-0.05	-0.09	-0.05	-0.03	0.04	0.08	0.07	0.10	0.07	0.06	-0.15	-0.11	-0.12	-0.17	-0.16	-0.17	-0.09	-0.08	0.02	0.07	0.00	-0.01	-0.09	0.10	-0.17	-0.04
6	-0.07	0.00	0.04	-0.01	-0.04	0.01	-0.01	-0.02	-0.09	-0.07	-0.13	-0.10	-0.11	-0.08	-0.27	-0.47	-0.56	-0.48	-0.32	-0.23	-0.21	-0.20	-0.16	-0.23	0.04	-0.56	-0.16
7	-0.22	-0.23	-0.23	-0.24	-0.24	-0.22	-0.24	-0.25	-0.30	-0.28	-0.38	-0.53	-0.68	-0.45	-0.48	-0.31	-0.32	-0.32	-0.17	-0.17	-0.10	-0.15	-0.15	-0.07	-0.07	-0.68	-0.28
8	0.02	0.11	0.19	0.30	0.35	0.44	0.15	-0.16	-0.54	-0.50	-0.60	-0.55	-0.62	-0.54	-0.59	-0.50	-0.49	-0.22	-0.04	0.02	0.06	0.16	0.26	0.28	0.44	-0.62	-0.12
9	0.28	0.40	0.17	0.18	0.23	0.24	0.19	0.12	-0.08	-0.10	-0.06	-0.23	-0.23	-0.21	-0.23	-0.24	-0.15	-0.03	-0.15	0.00	0.55	0.41	0.43	0.34	0.55	-0.24	0.08
10	0.31	0.42	0.33	0.24	0.36	0.33	0.24	0.35	-0.09	-0.43	0.04	0.38	0.25	0.29	0.22	0.08	0.47	0.33	0.56	0.59	0.52	0.94	0.89	0.78	0.94	-0.43	0.35
11	0.47	0.09	0.25	0.37	0.03	0.01	-0.11	-0.16	-0.23	-0.28	-0.26	0.34	0.23	1.26	0.84	0.21	1.15	0.94	0.98	1.30	1.32	1.66	1.48	0.75	1.66	-0.28	0.53
12	0.85	1.48	0.75	0.85	0.97	0.95	0.66	0.48	0.44	0.45	0.41	0.60	0.54	0.52	0.62	0.63	0.64	0.98	1.09	1.61	1.13	0.87	1.13	1.00	1.61	0.41	0.82
13	1.31	1.62	1.83	1.24	1.35	1.10	0.34	0.12	-0.22	-0.11	-0.60	-0.46	-0.28	-0.27	-0.52	-0.49	-0.61	-0.20	-0.03	0.16	0.20	0.24	0.21	0.33	1.83	-0.61	0.26
14	0.48	0.58	0.63	0.82	0.56	0.47	0.15	-0.05	-0.11	-0.33	-0.43	-0.45	-0.38	-0.41	-0.37	-0.38	-0.26	-0.08	0.07	0.25	0.29	0.42	0.26	0.20	0.82	-0.45	0.08
15	0.20	0.36	0.46	0.37	0.17	0.19	0.19	-0.21	-0.33	-0.13	-0.17	-0.24	-0.72	-0.55	-0.55	-0.64	-0.80	-0.76	-0.38	-0.20	0.61	0.88	0.61	0.44	0.88	-0.80	-0.05
16	0.34	0.18	0.17	0.23	0.01	0.10	-0.20	-0.09	-0.47	-0.57	-0.39	-0.85	-1.31	-1.20	-1.09	-0.53	-0.80	-0.81	-0.62	-0.25	0.64	1.27	0.95	1.35	1.35	-1.31	-0.16
17	0.79	0.45	0.58	0.91	0.60	0.46	0.10	-0.28	-0.50	-0.59	-0.54	-0.75	-0.71	-0.69	-0.50	-0.33	-0.53	-0.32	-0.14	0.00	0.19	0.16	0.17	0.22	0.91	-0.75	-0.05
18	0.33	0.38	0.64	0.72	0.26	0.04	0.03	-0.06	-0.16	-0.46	-0.48	-0.64	-0.89	-0.70	-0.72	-1.09	-0.46	-0.07	0.21	0.12	0.21	0.34	0.43	0.23	0.72	-1.09	-0.08
19	0.16	0.30	0.28	0.19	0.15	0.61	0.26	-0.20	-0.50	-0.68	-0.73	-0.56	-0.33	-0.21	-0.07	-0.08	-0.02	-0.04	-0.05	-0.03	-0.02	-0.05	-0.06	-0.05	0.61	-0.73	-0.07
20	-0.02	-0.01	0.01	0.01	0.00	0.05	0.13	0.20	0.16	0.13	0.07	-0.01	-0.15	-0.32	-0.25	-0.16	-0.02	-0.05	-0.14	0.13	0.39	0.33	0.25	0.20	0.39	-0.32	0.04
21	0.18	0.12	0.04	-0.04	-0.05	-0.02	-0.02	-0.08	-0.07	-0.08	-0.19	-0.44	-0.53	-0.42	-0.62	-0.25	-0.09	0.02	-0.04	0.07	0.24	0.29	0.37	0.41	0.41	-0.62	-0.05
22	0.50	0.46	0.42	0.37	0.35	0.22	0.02	-0.16	-0.37	-0.53	-0.69	-0.59	-0.74	-0.85	-0.82	-0.66	-0.40	-0.35	-0.14	0.25	0.81	0.86	1.03	1.20	1.20	-0.85	0.01
23	0.93	1.08	1.39	1.02	1.20	0.60	0.57	-0.18	-0.44	-0.47	-0.55	-0.65	-0.80	-0.97	-0.57	-0.49	-0.44	0.09	0.24	0.37	0.72	1.41	1.61	2.12	2.12	-0.97	0.33
24	2.58	1.51	1.13	1.43	1.27	0.85	0.50	-0.12	-0.29	-0.34	-0.49	-0.48	-0.61	-0.70	-0.81	-0.86	-0.31	-0.05	0.09	1.37	1.75	1.76	1.31	2.01	2.58	-0.86	0.52
25	2.15	1.93	2.37	1.92	2.41	1.89	1.02	-0.08	-0.32	-0.37	-0.54	-0.65	-0.72	-0.67	-0.66	-0.80	-0.91	-0.78	-0.11	0.10	0.57	1.25	1.91	1.70	2.41	-0.91	0.53
26	2.10	2.37	2.61	2.47	2.87	0.94	0.57	-0.05	-0.41	-0.53	-0.63	-0.80	-1.02	-0.98	-0.85	-0.77	-0.54	-0.16	0.12	0.70	1.06	1.25	0.71	1.45	2.87	-1.02	0.52
27	1.98	1.08	0.64	1.11	0.87	0.83	0.38	0.23	-0.18	-0.56	-0.55	-0.60	-0.99	-0.80	-0.96	-1.12	-0.68	-0.58	-0.21	0.49	0.79	1.65	2.33	1.74	2.33	-1.12	0.29
28	1.62	1.43	0.97	0.76	0.88	0.71	0.16	-0.44	-0.72	-0.69	-0.65	-0.72	-0.89	-0.90	-0.89	-0.85	-0.74	-0.66	-0.51	-0.35	0.23	0.69	1.08	1.30	1.62	-0.90	0.03
29	1.47	1.43	1.36	1.25	1.08	0.56	-0.12	-0.57	-0.82	-1.00	-1.13	-1.23	-1.29	-1.32	-1.24	-1.12	-0.95	-0.71	-0.38	-0.09	0.24	0.50	0.66	0.93	1.47	-1.32	-0.10
30	0.97	0.97	1.05	0.65	0.43	0.38	-0.06	-0.42	-0.64	-0.91	-1.22	-1.22	-1.11	-1.13	-1.03	-0.93	-0.57	-0.46	-0.16	-0.03	-0.02	0.04	0.22	0.42	1.05	-1.22	-0.20
31	0.19	0.07	0.11	0.00	0.00	-0.11	-0.19	-0.35	-0.30	-0.33	-0.42	-0.52	-0.42	-0.40	-0.45	-0.34	-0.27	-0.27	-0.24	-0.19	-0.15	-0.12	-0.10	-0.09	0.19	-0.52	-0.20
Max.	**2.58**	**2.37**	**2.61**	**2.47**	**2.87**	**1.89**	**1.02**	**0.48**	**0.44**	**0.45**	**0.41**	**0.60**	**0.54**	**1.26**	**0.84**	**0.63**	**1.15**	**0.98**	**1.09**	**1.61**	**1.75**	**1.76**	**2.33**	**2.12**	**2.87**		
Min.	**-0.22**	**-0.23**	**-0.23**	**-0.24**	**-0.24**	**-0.22**	**-0.24**	**-0.57**	**-0.82**	**-1.00**	**-1.22**	**-1.23**	**-1.31**	**-1.32**	**-1.24**	**-1.12**	**-0.95**	**-0.81**	**-0.62**	**-0.35**	**-0.21**	**-0.20**	**-0.16**	**-0.23**		**-1.32**	
Avg.	**0.66**	**0.63**	**0.61**	**0.57**	**0.54**	**0.41**	**0.18**	**-0.07**	**-0.24**	**-0.33**	**-0.39**	**-0.43**	**-0.52**	**-0.45**	**-0.44**	**-0.43**	**-0.31**	**-0.16**	**-0.01**	**0.22**	**0.44**	**0.58**	**0.60**	**0.62**			**0.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.08	-0.04	0.03	0.17	0.14	-0.09	-0.21	-0.30	-0.44	-0.53	-0.65	-0.79	-1.04	-1.11	-1.15	-1.06	-0.88	-0.77	-0.37	-0.51	-0.03	0.35	0.91	0.74	0.91	-1.15	-0.32
2	0.84	0.82	0.99	1.32	0.99	0.95	0.65	-0.40	-0.68	-0.81	-1.06	-1.07	-0.93	-0.96	-0.66	-0.63	-0.82	-0.39	-0.42	-0.06	0.06	0.60	1.01	0.90	1.32	-1.07	0.01
3	1.08	0.66	0.70	0.78	0.28	-0.05	-0.25	-0.35	-0.97	-1.05	-1.23	-1.41	-1.47	-1.50	-1.48	-1.34	-1.22	-1.02	-0.76	-0.45	-0.05	0.38	0.61	0.78	1.08	-1.50	-0.39
4	0.92	1.31	0.90	0.99	0.76	0.26	-0.24	-0.55	-0.85	-1.09	-1.28	-1.43	-1.47	-1.58	-1.53	-1.42	-1.21	-1.01	-0.70	-0.39	-0.07	0.45	1.27	1.42	1.42	-1.58	-0.27
5	1.05	1.03	0.92	1.30	1.59	0.72	-0.15	-0.41	-0.67	-0.93	-0.96	-0.89	-1.00	-1.14	-1.14	-1.11	-1.12	-0.90	-0.72	-0.52	-0.14	1.08	1.35	1.03	1.59	-1.14	-0.07
6	1.01	1.40	1.39	1.23	0.47	0.29	-0.20	-0.44	-0.73	-0.78	-0.96	-1.12	-1.41	-1.38	-1.30	-1.14	-0.97	-0.71	-0.45	-0.16	0.00	0.02	-0.01	0.07	1.40	-1.41	-0.25
7	0.16	0.17	0.22	0.08	0.03	-0.06	-0.14	-0.20	-0.50	-0.31	-0.29	-0.46	-0.34	-0.40	-0.28	-0.17	-0.13	-0.15	-0.14	-0.10	-0.08	-0.06	-0.04	-0.02	0.22	-0.50	-0.13
8	-0.01	0.00	0.02	0.01	0.00	0.01	-0.04	-0.05	-0.12	-0.26	-0.23	-0.26	-0.33	-0.30	-0.19	-0.09	-0.03	0.03	0.03	0.03	0.00	0.00	0.03	0.05	0.05	-0.33	-0.07
9	0.05	0.04	0.03	0.01	0.02	0.05	0.09	0.03	-0.02	-0.25	-0.32	-0.43	-1.11	-0.61	-0.70	-0.26	-0.23	-0.28	-0.20	-0.18	-0.09	-0.10	-0.09	-0.02	0.09	-1.11	-0.19
10	-0.06	-0.04	-0.07	-0.09	-0.07	-0.06	-0.09	-0.21	-0.33	-0.72	-0.77	-0.82	-0.62	-0.80	-0.88	-0.87	-0.47	-0.40	-0.26	-0.11	-0.03	-0.03	0.02	0.03	0.03	-0.88	-0.32
11	0.00	0.01	0.01	0.00	0.00	-0.04	0.00	-0.04	-0.08	-0.16	-0.16	-0.22	-0.16	-0.16	-0.12	-0.19	-0.18	-0.12	-0.08	-0.05	-0.01	0.00	-0.04	-0.03	0.01	-0.22	-0.08
12	-0.02	0.04	0.04	0.08	0.05	0.04	0.03	-0.02	-0.07	-0.13	-0.17	-0.14	-0.16	-0.25	-0.26	-0.25	-0.17	-0.18	-0.14	-0.13	-0.06	-0.06	-0.04	-0.03	0.08	-0.26	-0.08
13	-0.04	-0.05	-0.01	0.02	0.00	-0.08	-0.17	-0.28	-0.52	-0.26	-0.47	-0.55	-0.82	-0.81	-0.82	-0.76	-0.78	-0.60	-0.44	-0.28	-0.04	0.41	0.53	0.19	0.53	-0.82	-0.27
14	0.69	0.21	0.31	0.15	0.35	0.50	-0.02	-0.23	-0.41	-0.38	-0.53	-0.64	-0.65	-0.54	-0.38	-0.38	-0.37	-0.24	-0.12	-0.21	-0.13	0.18	0.37	0.16	0.69	-0.65	-0.10
15	0.35	0.62	0.95	1.15	0.65	0.20	-0.05	-0.22	-0.35	-0.72	-0.92	-0.98	-0.79	-0.65	-0.64	0.04	0.11	-0.18	-0.18	-0.10	-0.12	-0.07	-0.01	-0.09	1.15	-0.98	-0.08
16	0.05	0.18	0.33	0.37	0.42	0.10	-0.09	-0.21	-0.15	-0.21	-0.24	-0.25	-0.27	-0.21	-0.26	-0.28	-0.21	-0.15	-0.13	-0.02	-0.07	-0.01	0.25	0.27	0.42	-0.28	-0.03
17	0.36	0.53	0.80	0.88	0.62	0.53	0.13	-0.26	-0.46	-0.61	-0.89	-0.68	-0.85	-1.22	-0.57	-0.70	-0.63	-0.46	-0.27	-0.21	-0.18	-0.14	-0.10	-0.09	0.88	-1.22	-0.19
18	-0.09	-0.05	0.14	0.25	0.49	0.11	-0.16	-0.28	-0.48	-0.53	-0.55	-0.62	-0.33	-0.46	-0.53	-0.50	-0.35	-0.34	-0.22	-0.13	-0.06	0.01	0.04	0.07	0.49	-0.62	-0.19
19	0.13	0.11	0.13	0.35	0.44	0.07	-0.17	-0.25	-0.41	-0.41	-0.68	-0.50	-0.48	-0.63	-0.71	-0.73	-0.47	-0.65	-0.60	-0.23	-0.19	-0.25	-0.21	-0.08	0.44	-0.73	-0.27
20	0.13	0.34	0.48	0.69	0.90	0.24	-0.19	-0.28	-0.35	-0.53	-0.44	-0.58	-0.65	-0.52	-0.47	-0.32	-0.44	-0.34	-0.25	-0.36	0.07	0.37	0.59	0.60	0.90	-0.65	-0.06
21	0.83	0.85	0.66	0.63	0.45	0.34	0.24	-0.33	-0.59	-0.78	-0.90	-0.92	-0.77	-0.40	-0.64	-0.84	-0.68	-0.44	-0.37	-0.38	-0.27	0.19	1.20	1.17	1.20	-0.92	-0.07
22	0.71	0.72	0.86	1.41	1.14	0.64	-0.03	-0.16	-0.42	-0.40	-0.53	-0.92	-0.91	-0.27	-0.24	-0.18	-0.20	-0.18	-0.19	-0.10	-0.07	-0.06	-0.04	-0.03	1.41	-0.92	0.02
23	-0.01	0.11	0.22	0.20	0.13	0.09	-0.01	-0.07	-0.13	-0.26	-0.43	-0.65	-0.69	-0.90	-0.75	-0.65	-0.41	-0.41	-0.35	-0.12	-0.04	0.20	0.29	0.36	0.36	-0.90	-0.18
24	0.50	0.42	0.25	0.31	0.45	0.23	-0.18	-0.44	-0.67	-0.73	-0.87	-0.81	-0.79	-0.61	-0.65	-0.55	-0.81	-0.26	0.12	-0.04	0.15	0.54	0.54	0.54	0.54	-0.87	-0.14
25	0.46	0.31	0.84	1.23	1.16	0.49	-0.06	-0.33	-0.41	-0.58	-0.70	-0.68	-0.76	-1.05	-0.99	-1.09	-1.12	-0.66	-0.22	-0.10	0.04	0.30	0.63	0.59	1.23	-1.12	-0.11
26	0.62	0.64	0.68	0.59	0.40	0.45	-0.12	-0.25	-0.51	-0.74	-0.87	-1.03	-1.10	-0.87	-0.52	-0.62	-0.50	-0.51	-0.61	-0.33	-0.04	0.08	0.32	0.33	0.68	-1.10	-0.19
27	0.37	0.64	0.84	0.53	0.66	0.42	-0.27	-0.61	-0.77	-0.79	-0.60	-0.75	-0.82	-0.79	-1.10	-1.11	-1.14	-0.98	-0.80	-0.52	-0.24	0.14	0.35	0.40	0.84	-1.14	-0.29
28	0.78	0.58	1.77	1.30	0.26	0.09	-0.30	-0.64	-0.68	-0.71	-0.53	-1.03	-0.98	-1.01	-0.69	-0.53	-0.47	-0.38	-0.30	-0.22	-0.17	0.00	0.10	-0.03	1.77	-1.03	-0.16
29	-0.01	-0.04	-0.12	-0.10	-0.10	-0.14	-0.19	-0.29	-0.50	-0.54	-0.57	-0.54	-0.55	-0.75	-0.78	-1.05	-0.61	-0.51	-0.36	-0.21	-0.07	-0.06	-0.09	-0.08	-0.01	-1.05	-0.34
30	-0.07	-0.08	-0.08	-0.06	-0.07	-0.08	-0.10	-0.12	-0.19	-0.38	-0.36	-0.50	-0.75	-0.66	-0.69	-0.53	-0.58	-0.58	-0.43	-0.34	-0.15	0.04	-0.04	-0.12	0.04	-0.75	-0.29
Max.	**1.08**	**1.40**	**1.77**	**1.41**	**1.59**	**0.95**	**0.65**	**0.03**	**-0.02**	**-0.13**	**-0.16**	**-0.14**	**-0.16**	**-0.16**	**-0.12**	**0.04**	**0.11**	**0.03**	**0.12**	**0.03**	**0.15**	**1.08**	**1.35**	**1.42**	**1.77**		
Min.	**-0.09**	**-0.08**	**-0.12**	**-0.10**	**-0.10**	**-0.14**	**-0.30**	**-0.64**	**-0.97**	**-1.09**	**-1.28**	**-1.43**	**-1.47**	**-1.58**	**-1.53**	**-1.42**	**-1.22**	**-1.02**	**-0.80**	**-0.52**	**-0.27**	**-0.25**	**-0.21**	**-0.12**		**-1.58**	
Avg.	**0.36**	**0.38**	**0.47**	**0.53**	**0.42**	**0.21**	**-0.08**	**-0.27**	**-0.45**	**-0.55**	**-0.64**	**-0.72**	**-0.77**	**-0.75**	**-0.70**	**-0.64**	**-0.57**	**-0.46**	**-0.33**	**-0.22**	**-0.07**	**0.15**	**0.32**	**0.30**			**-0.17**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.16	-0.10	-0.13	-0.11	-0.10	-0.15	-0.17	-0.19	-0.30	-0.28	-0.55	-0.55	-0.56	-1.01	-0.96	-0.97	-1.01	-0.93	-0.81	-0.61	-0.28	0.18	0.48	0.64	0.64	-1.01	-0.36
2	0.62	0.65	1.17	1.08	0.75	0.70	-0.13	-0.53	-0.74	-0.89	-0.97	-1.12	-1.21	-1.18	-1.24	-1.18	-1.06	-0.95	-0.76	-0.44	-0.04	0.43	0.79	0.65	1.17	-1.24	-0.23
3	0.48	0.47	0.62	0.76	0.89	0.42	-0.18	-0.47	-0.51	-0.89	-0.92	-0.95	-0.85	-0.91	-1.02	-0.80	-0.71	-0.78	-0.73	-0.47	-0.20	0.42	0.88	0.72	0.89	-1.02	-0.20
4	0.76	0.94	1.19	0.93	0.53	0.71	0.16	-0.28	-0.45	-0.59	-0.76	-0.77	-0.98	-1.02	-0.96	-1.03	-1.27	-1.03	-0.84	-0.54	-0.19	0.21	0.34	0.38	1.19	-1.27	-0.19
5	0.49	0.46	0.42	0.67	0.98	0.61	0.07	-0.20	-0.25	-0.38	-0.49	-0.66	-0.61	-0.71	-1.07	-1.10	0.07	0.40	0.01	-0.10	0.19	0.27	0.30	0.65	0.98	-1.10	0.00
6	0.80	0.99	0.75	0.87	0.75	1.34	0.03	-0.31	-0.47	-0.66	-0.63	-0.65	-0.55	-0.85	-1.21	-1.16	-0.67	-0.07	-0.10	-0.08	0.01	-0.11	0.06	0.04	1.34	-1.21	-0.08
7	-0.09	-0.13	-0.13	-0.13	-0.11	-0.10	-0.13	-0.14	-0.16	-0.16	-0.20	-0.20	-0.25	-0.14	-0.21	-0.24	-0.25	-0.15	-0.15	-0.13	-0.10	-0.09	-0.11	-0.11	-0.09	-0.25	-0.15
8	-0.10	-0.12	-0.12	-0.11	-0.09	-0.12	-0.16	-0.20	-0.33	-0.41	-0.30	-0.30	-0.41	-0.43	-0.34	-0.30	-0.33	-0.45	-0.41	-0.38	-0.32	0.25	0.34	0.21	0.34	-0.45	-0.21
9	0.09	0.14	0.41	0.51	0.67	0.13	-0.18	-0.36	-0.53	-0.40	-0.62	-0.87	-1.03	-1.07	-0.91	-1.13	-0.98	-0.81	-0.50	-0.21	0.04	0.24	0.20	0.15	0.67	-1.13	-0.29
10	0.12	0.13	0.10	0.13	0.03	-0.09	-0.12	-0.15	-0.26	-0.55	-0.47	-0.81	0.03	-0.09	-0.12	-0.15	-0.26	-0.55	-0.47	-0.81	-0.91	-1.18	-0.33	0.59	0.59	-1.18	-0.26
11			-0.54	-0.41	-0.15	-0.15	0.00	0.06	0.05		-0.02	-0.06	-0.04	0.00	-0.01	-0.06	-0.17	-0.22	0.58				-0.74	-1.07	0.58	-1.07	-0.16
12	-1.08	-0.87	-0.71	-0.66	-0.65	-0.23	0.04	0.23	0.25	0.29	0.17	0.29	0.33	0.45	0.21	-0.24	-0.53	-0.67	-0.88	-1.02	-1.07	-1.15	-1.11	-1.07	0.45	-1.15	-0.40
13	-0.97	-0.92	-0.31	-0.59	-0.38	0.03	0.55	1.25	1.23	1.15	1.46	1.54	1.31	1.44	0.42	0.29	-0.28	-0.33	-0.45	-0.53	-0.57	-0.54	-0.83	-0.78	1.54	-0.97	0.13
14	-0.43	-0.31	-0.31	-0.27	-0.23	-0.12	-0.10	-0.10	-0.08	-0.08	-0.09	-0.08	-0.08	-0.09	-0.11	-0.20	-0.25	-0.29	-0.36	-0.44	-0.51	-0.52	-0.50	-0.38	-0.08	-0.52	-0.25
15	-0.31	-0.27	-0.22	-0.18	-0.16	-0.13	-0.11	-0.10	-0.09	-0.08	-0.04	-0.04	-0.06	-0.07	-0.08	-0.19	-0.29	-0.35	-0.39	-0.56	-0.68	-0.60	-0.77	-0.76	-0.04	-0.77	-0.27
16	-0.74	-0.83	-0.75	-0.62	-0.36	-0.15	-0.12	-0.11	-0.06	-0.14	-0.10	-0.06	0.10	0.13	0.04	-0.03	-0.13	-0.15	-0.18	-0.42	-0.56	-0.62	-0.52	-0.76	0.13	-0.83	-0.30
17	-0.77	-0.66	-0.33	-0.19	-0.09	-0.04	-0.02	0.01	0.01	0.01	0.01	-0.02	-0.03	-0.04	0.01	-0.01	-0.08	-0.16	-0.24	-0.49	-0.39	-0.36	-0.57	-0.53	0.01	-0.77	-0.21
18	-0.31	-0.29	-0.14	-0.12	-0.10	-0.07	-0.06	-0.03	-0.03	-0.01	-0.03	-0.05	-0.06	-0.06	-0.05	-0.07	-0.10	-0.22	-0.50	-0.70	-0.54	-0.38	-0.77	-0.48	-0.01	-0.77	-0.21
19	-0.29	-0.19	-0.15	-0.13	-0.11	-0.06	-0.02	0.02	0.04	0.06	0.07	0.06	0.08	0.07	0.26	0.13	-0.15	-0.37	-0.48	-0.63	-0.49	-0.62	-0.64	-0.46	0.26	-0.64	-0.17
20	-0.79	-0.68	-0.62	-0.50	-0.15	0.25	0.73	0.27	0.21	0.65	1.06	0.88	0.93	1.10	1.62	0.58	-0.23	-0.57	-0.78	-0.75	-1.00	-0.72	-1.09	-0.93	1.62	-1.09	-0.02
21	-0.87	-0.85	-0.60	-0.31	-0.27	-0.03	-0.03	-0.05	-0.14	-0.14	0.06	0.35	0.49	0.50	0.45	0.42	-0.31	-0.53	-0.60	-0.77	-0.71	-0.28	-0.23	-0.32	0.50	-0.87	-0.20
22	-0.58	-0.45	-0.46	-0.32	-0.17	-0.03	0.32	0.32	0.46	0.48	0.44	0.30	0.35	0.33	0.39	0.32	0.00	-0.21	-0.47	-0.46	-0.54	-0.52	-0.82	-0.80	0.48	-0.82	-0.09
23	-0.56	-0.37	-0.26	-0.17	-0.12	-0.04	0.06	0.14	0.17	0.18	0.12	0.06	0.05	0.06	-0.03	-0.06	-0.13	-0.11	-0.30	-0.28	-0.29	-0.22	-0.13	-0.19	0.18	-0.56	-0.10
24	-0.22	-0.22	-0.12	-0.15	-0.09	-0.05	-0.02	0.07	0.07	0.01	-0.02	-0.02	-0.01	0.04	0.09	0.15	0.05	0.01	-0.14	-0.17	-0.26	-0.27	-0.20	-0.23	0.15	-0.27	-0.07
25	-0.25	-0.23	-0.20	-0.15	-0.12	-0.10	-0.09	-0.05	-0.04	-0.06	-0.04	0.01	0.02	-0.01	0.05	0.05	-0.11	-0.17	-0.30	-0.31	-0.41	-0.42	-0.52	-0.74	0.05	-0.74	-0.17
26	-0.67	-0.57	-0.58	-0.51	-0.32	-0.20	-0.06	0.03	0.02	0.02	0.16	0.25	0.13	0.24	0.20	0.16	-0.07	-0.17	-0.45	-0.67	-0.88	-1.05	-1.01	-1.02	0.25	-1.05	-0.29
27	-1.29	-1.26	-1.10	-0.91	-0.62	-0.24	-0.05	-0.15	-0.18	-0.16	-0.13	-0.04	0.08	0.03	0.09	0.05	-0.26	-0.34	-0.43	-0.31	-0.48	-0.54	-0.77	-0.77	0.09	-1.29	-0.41
28	-0.76	-0.70	-0.62	-0.46	-0.21	-0.01	0.41	0.44	0.24	0.18	0.19	0.29	0.29	0.39	0.22	0.11	-0.30	-0.50	-0.60	-0.61	-0.65	-0.69	-1.09	-0.99	0.44	-1.09	-0.23
29	-0.48	-0.29	-0.36	-0.40	-0.26	-0.21	-0.14	-0.10	-0.10	-0.09	-0.09	-0.04	-0.04	-0.08	-0.09	-0.11	-0.14	-0.19	-0.24	-0.23	-0.32	-0.71	-1.10	-1.00	-0.04	-1.10	-0.28
30	-0.91	-0.80	-1.06	-0.76	-0.29	-0.24	-0.16	-0.10	-0.05	-0.05	-0.04	-0.04	-0.06	-0.10	-0.11	-0.17	-0.15	-0.20	-0.27	-0.35	-0.39	-0.45	-0.56	-0.64	-0.04	-1.06	-0.33
31	-0.62	-0.47	-0.71	-0.29	-0.31	0.08	0.30	0.40	0.60	0.34	0.35	0.12	0.15	-0.01	-0.04	-0.12	-0.20	-0.37	-0.40	-0.39	-0.53	-0.51	-0.83	-0.66	0.60	-0.83	-0.17
Max.	**0.80**	**0.99**	**1.19**	**1.08**	**0.98**	**1.34**	**0.73**	**1.25**	**1.23**	**1.15**	**1.46**	**1.54**	**1.31**	**1.44**	**1.62**	**0.58**	**0.07**	**0.40**	**0.58**	**-0.08**	**0.19**	**0.43**	**0.88**	**0.72**	**1.62**		
Min.	**-1.29**	**-1.26**	**-1.10**	**-0.91**	**-0.65**	**-0.24**	**-0.18**	**-0.53**	**-0.74**	**-0.89**	**-0.97**	**-1.12**	**-1.21**	**-1.18**	**-1.24**	**-1.18**	**-1.27**	**-1.03**	**-0.88**	**-1.02**	**-1.07**	**-1.18**	**-1.11**	**-1.07**		**-1.29**	
Avg.	**-0.33**	**-0.26**	**-0.19**	**-0.11**	**-0.03**	**0.06**	**0.02**	**-0.01**	**-0.05**	**-0.09**	**-0.08**	**-0.10**	**-0.08**	**-0.10**	**-0.15**	**-0.23**	**-0.33**	**-0.37**	**-0.41**	**-0.46**	**-0.43**	**-0.35**	**-0.38**	**-0.34**			**-0.20**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.02	-0.16	-0.12	-0.11	-0.07	-0.07	-0.12	-0.16	-0.21	-0.29	-0.28	-0.32	-0.42	-0.37	-0.39	-0.40	-0.24	-0.19	-0.17	-0.13	-0.11	-0.09	-0.08	-0.09	-0.02	-0.42	-0.19
2	-0.09	-0.09	-0.09	-0.08	-0.08	-0.08	-0.16	-0.22	-0.29	-0.38	-0.49	-0.68	-0.62	-0.61	-0.63	-0.42	-0.21	-0.19	-0.26	-0.20	-0.10	-0.10	-0.05	-0.05	-0.05	-0.68	-0.26
3	-0.04	-0.03	0.04	0.06	0.06	0.02	-0.03	-0.07	-0.08	-0.15	-0.14	-0.10	0.05	0.20	0.18	0.18	0.12	0.15	0.00	-0.01	0.06	0.07	0.04	0.12	0.20	-0.15	0.03
4	0.24	0.56	0.29	0.33	0.36	0.43	0.02	-0.15	-0.38	-0.40	-0.53	-0.40	-0.41	-0.28	-0.30	-0.29	-0.30	-0.24	-0.22	-0.16	-0.12	-0.09	-0.10	-0.11	0.56	-0.53	-0.09
5	-0.04	0.00	0.00	-0.01	-0.03	-0.06	-0.10	-0.14	-0.26	-0.29	-0.43	-0.50	-0.56	-0.57	-0.39	-0.52	-0.55	-0.25	-0.22	-0.17	0.23	0.57	0.87	0.49	0.87	-0.57	-0.12
6	0.44	0.35	0.26	0.21	0.36	0.76	0.41	-0.04	-0.42	-0.77	-0.88	-0.95	-0.91	-0.74	-0.80	-0.88	-0.90	-0.75	-0.58	0.23	0.52	1.04	1.19	1.56	1.56	-0.95	-0.05
7	1.63	1.36	1.23	0.92	1.01	1.05	0.96	0.91	-0.12	-0.66	-0.82	-0.89	-1.04	-0.95	-1.03	-1.26	-1.18	-0.98	-0.75	-0.29	0.15	0.27	0.25	0.27	1.63	-1.26	0.00
8	0.06	0.21	-0.02	-0.12	-0.12	-0.12	-0.11	-0.21	-0.31	-0.42	-0.58	-0.63	-0.65	-0.69	-0.69	-0.67	-0.69	-0.50	-0.43	-0.30	-0.06	0.05	0.10	0.15	0.21	-0.69	-0.28
9	0.08	0.03	0.07	0.07	0.10	0.04	-0.03	-0.17	-0.19	-0.19	-0.20	-0.20	-0.20	-0.19	-0.19	-0.22	-0.27	-0.20	-0.17	-0.10	-0.09	-0.05	-0.05	-0.06	0.10	-0.27	-0.10
10	-0.05	-0.05	-0.04	-0.06	-0.05	-0.05	-0.08	-0.09	-0.12	-0.18	-0.21	-0.30	-0.20	-0.14	-0.16	-0.11	-0.06	0.02	0.02	-0.04	-0.07	-0.06	-0.05	-0.05	0.02	-0.30	-0.09
11	-0.05	-0.04	-0.05	-0.05	-0.05	-0.05	-0.07	-0.14	-0.18	-0.18	-0.26	-0.28	-0.40	-0.33	-0.31	-0.30	-0.23	-0.26	-0.15	-0.13	-0.01	-0.02	-0.02	-0.02	-0.01	-0.40	-0.15
12	-0.02	-0.03	-0.05	-0.03	-0.04	-0.06	-0.08	-0.12	-0.15	-0.28	-0.39	-0.56	-0.75	-1.03	-1.10	-0.72	-0.71	-0.47	-0.11	0.06	0.15	0.23	0.74	0.60	0.74	-1.10	-0.20
13	0.55	0.35	0.26	0.26	0.17	0.00	-0.06	-0.12	-0.16	-0.19	-0.23	-0.22	-0.29	-0.30	-0.36	-0.42	-0.28	-0.21	-0.12	-0.12	-0.09	-0.08	-0.10	-0.10	0.55	-0.42	-0.08
14	-0.10	-0.11	-0.11	-0.11	-0.10	-0.10	-0.11	-0.15	-0.15	-0.17	-0.14	-0.17	-0.14	-0.13	-0.14	-0.12	-0.11	-0.08	-0.05	-0.08	-0.06	-0.06	-0.05	-0.08	-0.05	-0.17	-0.11
15	-0.08	-0.08	-0.07	-0.07	-0.06	-0.05	-0.06	-0.13	-0.14	-0.19	-0.22	-0.24	-0.38	-0.36	-0.20	-0.18	-0.17	-0.13	-0.06	-0.05	-0.06	0.00	-0.02	-0.01	0.00	-0.38	-0.12
16	0.00	-0.07	-0.03	0.07	0.02	-0.02	-0.10	-0.19	-0.30	-0.40	-0.38	-0.46	-0.42	-0.35	-0.20	-0.28	-0.31	-0.17	-0.18	-0.19	-0.13	0.17	0.13	-0.05	0.17	-0.46	-0.16
17	0.02	0.04	0.16	0.19	0.17	0.25	0.19	0.10	-0.16	-0.44	-0.56	-0.86	-0.78	-0.95	-0.67	-0.66	-0.46	-0.16	-0.34	-0.18	-0.16	-0.17	-0.13	-0.11	0.25	-0.95	-0.24
18	-0.11	-0.12	-0.07	-0.08	-0.07	-0.09	-0.10	-0.13	-0.11	-0.11	-0.13	-0.11	-0.13	-0.15	-0.19	-0.17	-0.21	-0.34	-0.29	-0.10	0.10	0.03	0.06	0.02	0.10	-0.34	-0.11
19	0.21	0.52	0.66	0.39	0.91	0.96	0.63	0.26	0.02	-0.24	-0.38	-0.52	-0.33	-1.02	-1.15	-0.94	-0.46	-0.49	-0.50	-0.17	0.13	0.40	0.54	0.50	0.96	-1.15	0.00
20	0.34	0.17	0.11	0.09	0.00	-0.09	-0.06	-0.09	-0.20	-0.29	-0.45	-0.53	-0.63	-0.88	-0.81	-1.04	-0.83	-0.55	-0.26	0.10	0.81	1.03	0.93	0.81	1.03	-1.04	-0.10
21	0.94	1.15	1.13	1.11	1.20	1.13	0.93	0.42	-0.26	-0.24	-0.27	-0.48	-0.59	-0.59	-0.52	-0.53	-0.42	-0.11	0.13	0.24	0.10	0.15	0.09	-0.02	1.20	-0.59	0.20
22	-0.03	-0.02	-0.02	-0.03	-0.04	-0.05	-0.07	-0.09	-0.14	-0.17	-0.18	-0.33	-0.58	-0.88	-0.69	-0.60	-0.54	-0.37	-0.21	-0.06	0.29	1.03	1.02	0.73	1.03	-0.88	-0.08
23	0.66	0.69	0.40	0.13	0.33	0.66	0.21	0.19	-0.08	-0.26	-0.33	-0.39	-0.63	-0.62	-0.86	-0.70	-0.52	-0.46	-0.28	0.32	0.30	0.44	0.50	0.50	0.69	-0.86	0.01
24	0.33	0.25	0.17	0.16	0.21	0.28	0.27	0.12	0.01	-0.09	-0.07	-0.13	-0.26	-0.23	-0.23	-0.31	-0.38	-0.37	-0.22	-0.06	0.18	0.63	1.60	1.00	1.60	-0.38	0.12
25	0.64	0.79	1.08	0.64	0.84	0.86	1.07	0.58	-0.37	-0.55	-0.68	-0.66	-0.87	-0.72	-0.65	-0.84	-0.51	-0.46	0.04	0.23	1.19	0.94	0.61	0.87	1.19	-0.87	0.17
26	0.56	0.72	0.64	0.39	0.46	0.21	0.02	-0.03	-0.12	-0.27	-0.47	-0.66	-0.83	-0.68	-0.68	-0.57	-0.56	-0.57	-0.33	-0.13	0.35	0.80	0.86	0.79	0.86	-0.83	0.00
27	0.95	0.64	0.75	0.64	0.51	0.41	0.34	0.25	-0.18	-0.44	-0.62	-0.71	-0.69	-0.83	-0.83	-0.66	-0.93	-0.57	-0.40	0.13	0.51	0.62	0.54	0.70	0.95	-0.93	0.01
28	0.65	0.51	0.55	0.54	0.25	0.06	0.02	-0.07	-0.22	-0.48	-0.71	-0.56	-0.73	-0.98	-0.84	-0.73	-0.26	-0.05	-0.01	0.18	0.38	0.90	0.61	0.96	0.96	-0.98	0.00
29	0.95	0.73	0.67	1.03	1.11	1.12	1.05	0.81	0.41	-0.44	-0.75	-0.78	-0.75	-0.60	-0.71	-0.55	-0.52	-0.58	-0.12	0.48	0.97	1.18	1.06	0.67	1.18	-0.78	0.27
30	0.56	0.37	0.20	0.19	0.15	0.10	0.08	-0.04	-0.09	-0.12	-0.16	-0.09	-0.11	-0.03	0.10	0.20	0.09	0.07	0.06	0.25	0.29	0.16	0.15	0.35	0.56	-0.16	0.11
31	0.37	0.35	0.77	0.80	0.80	0.72	0.77	0.45	0.06	-0.30	-0.50	-0.52	-0.79	-0.55	-0.43	-0.40	-0.28	-0.10	0.05	0.05	-0.03	-0.02	-0.04	-0.06	0.80	-0.79	0.05
Max.	**1.63**	**1.36**	**1.23**	**1.11**	**1.20**	**1.13**	**1.07**	**0.91**	**0.41**	**-0.09**	**-0.07**	**-0.09**	**0.05**	**0.20**	**0.18**	**0.20**	**0.12**	**0.15**	**0.13**	**0.48**	**1.19**	**1.18**	**1.60**	**1.56**	**1.63**		
Min.	**-0.11**	**-0.16**	**-0.12**	**-0.12**	**-0.12**	**-0.12**	**-0.16**	**-0.22**	**-0.42**	**-0.77**	**-0.88**	**-0.95**	**-1.04**	**-1.03**	**-1.15**	**-1.26**	**-1.18**	**-0.98**	**-0.75**	**-0.30**	**-0.16**	**-0.17**	**-0.13**	**-0.11**		**-1.26**	
Avg.	**0.31**	**0.29**	**0.28**	**0.24**	**0.27**	**0.26**	**0.18**	**0.05**	**-0.16**	**-0.31**	**-0.40**	**-0.46**	**-0.52**	**-0.53**	**-0.51**	**-0.49**	**-0.41**	**-0.31**	**-0.20**	**-0.01**	**0.18**	**0.32**	**0.36**	**0.33**			**-0.05**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.06	-0.07	-0.05	-0.06	-0.07	-0.07	-0.06	-0.14	-0.25	-0.37	-0.59	-0.63	-0.68	-0.76	-0.77	-0.83	-0.73	-0.34	-0.08	0.20	0.62	0.79	0.74	0.93	0.93	-0.83	-0.14
2	0.66	0.80	1.11	1.29	1.22	0.91	0.79	0.33	-0.19	-0.48	-0.55	-0.54	-0.49	-0.60	-0.81	-0.63	-0.62	-0.44	-0.05	0.64	0.81	0.88	0.79	0.64	1.29	-0.81	0.23
3	0.38	0.82	0.81	0.51	0.62	0.85	0.92	0.70	0.05	-0.45	-0.52	-0.63	-0.54	-0.37	-0.33	-0.02	-0.44	0.27	-0.07	0.17	0.13	0.09	0.48	0.68	0.92	-0.63	0.17
4	0.91	0.56	0.70	0.99	0.99	0.82	0.65	0.53	0.39	-0.45	-0.65	-0.66	-0.52	-0.40	-0.39	-0.44	0.01	0.42	0.24	0.27	0.21	0.55	0.46	0.68	0.99	-0.66	0.24
5	0.51	0.39	0.22	0.23	0.25	0.35	0.29	0.24	-0.12	-0.30	-0.24	-0.39	-0.49	-0.84	-0.53	-0.63	-0.58	-0.21	-0.03	0.18	0.48	0.68	0.79	0.49	0.79	-0.84	0.03
6	0.42	0.50	0.98	1.57	1.78	1.71	1.84	1.02	-0.03	-0.39	-0.61	-0.76	-0.88	-0.94	-0.94	-0.85	-0.69	-0.17	0.07	0.27	0.20	0.05	-0.15	-0.08	1.84	-0.94	0.16
7	-0.07	-0.07	-0.08	-0.08	-0.07	-0.05	-0.07	-0.05	-0.08	-0.17	-0.17	-0.18	-0.20	-0.25	-0.29	-0.16	0.00	-0.03	-0.06	-0.03	-0.05	-0.05	0.01	-0.03	0.01	-0.29	-0.10
8	-0.03	-0.02	-0.02	-0.03	-0.05	-0.07	-0.09	-0.10	-0.11	-0.12	-0.15	-0.19	-0.19	-0.24	-0.21	-0.19	-0.16	-0.18	-0.10	-0.05	-0.03	0.03	0.05	0.06	0.06	-0.24	-0.09
9	0.05	0.09	0.16	0.20	0.19	0.30	0.67	0.48	-0.18	-0.47	-0.61	-0.70	-0.76	-0.82	-0.68	-0.44	-0.46	-0.29	-0.28	-0.12	0.00	0.33	0.25	0.50	0.67	-0.82	-0.11
10	0.69	0.73	0.59	0.43	0.41	0.60	0.62	0.26	-0.05	-0.38	-0.35	-0.50	-0.46	-0.61	-0.30	-0.44	-0.55	-0.40	-0.06	0.31	0.14	0.48	0.66	0.44	0.73	-0.61	0.09
11	0.44	0.76	0.86	0.64	0.50	0.86	1.12	1.08	0.46	-0.40	-0.48	-0.61	-0.72	-0.70	-0.66	-0.60	-0.58	-0.53	-0.38	0.75	0.91	0.64	0.50	0.76	1.12	-0.72	0.19
12	1.04	0.99	1.20	1.21	1.19	1.15	1.02	0.57	0.08	-0.39	-0.57	-0.67	-0.63	-0.71	-0.78	-0.77	-0.69	-0.46	0.02	1.22	1.27	0.75	0.86	0.95	1.27	-0.78	0.33
13	1.29	1.27	1.45	1.13	0.89	1.08	0.83	0.37	-0.14	-0.43	-0.71	-0.88	-0.92	-0.86	-0.51	-0.35	-0.20	-0.06	0.05	0.11	0.07	0.06	0.08	0.09	1.45	-0.92	0.15
14	0.07	-0.08	-0.04	-0.03	-0.02	-0.08	-0.06	-0.07	-0.04	-0.07	-0.06	-0.05	0.00	-0.03	-0.02	-0.06	-0.01	-0.01	0.03	0.06	0.05	0.06	0.03	0.05	0.07	-0.08	-0.02
15	0.08	0.11	0.09	0.13	0.12	0.15	0.13	0.13	0.05	-0.02	-0.01	0.04	-0.07	-0.13	-0.04	-0.03	-0.01	-0.02	-0.04	0.02	0.04	0.07	0.07	0.07	0.15	-0.13	0.04
16	0.10	0.09	0.05	0.05	0.04	0.04	0.07	0.08	0.00	-0.06	-0.12	-0.27	-0.38	-0.48	-0.49	-0.37	-0.24	-0.19	-0.07	0.03	0.11	0.43	0.22	0.23	0.43	-0.49	-0.05
17	0.10	0.08	0.08	0.19	0.18	0.14	0.09	0.03	-0.06	-0.15	-0.25	-0.27	-0.32	-0.40	-0.41	-0.43	-0.42	-0.37	-0.03	0.16	0.58	0.78	0.69	0.88	0.88	-0.43	0.04
18	0.91	0.58	0.38	0.36	0.68	0.33	0.17	0.16	0.01	-0.08	-0.06	-0.07	-0.08	-0.05	-0.04	-0.10	0.01	0.13	0.12	0.08	0.20	0.19	0.19	0.15	0.91	-0.10	0.17
19	0.15	0.18	0.18	0.19	0.31	0.28	0.07	0.26	0.37	0.18	0.04	-0.12	-0.20	-0.10	-0.12	-0.15	-0.14	-0.06	0.06	0.19	0.03	0.12	0.47	0.36	0.47	-0.20	0.11
20	0.18	0.20	0.30	0.32	0.57	0.51	0.35	0.25	0.04	-0.15	-0.22	-0.30	-0.35	-0.30	-0.35	-0.41	-0.36	-0.24	-0.04	0.01	-0.05	-0.01	0.06	-0.04	0.57	-0.41	0.00
21	-0.02	0.09	0.03	0.01	-0.03	-0.05	-0.05	-0.08	-0.07	-0.07	-0.13	-0.14	-0.18	-0.20	-0.16	-0.08	0.04	0.10	0.11	0.02	0.04	0.16	0.27	0.29	0.29	-0.20	0.00
22	0.21	0.58	0.47	0.17	0.03	0.08	0.10	-0.03	-0.10	0.00	-0.10	-0.24	-0.33	-0.32	-0.29	-0.26	-0.23	-0.12	-0.06	0.02	0.13	0.09	0.08	-0.04	0.58	-0.33	-0.01
23	-0.03	-0.05	-0.06	-0.05	-0.07	-0.05	-0.05	-0.06	-0.11	-0.21	-0.30	-0.39	-0.19	-0.32	-0.51	-0.46	-0.28	-0.21	-0.07	-0.01	0.41	0.17	-0.05	-0.03	0.41	-0.51	-0.12
24	-0.03	-0.02	-0.05	-0.04	0.13	0.10	0.03	-0.05	-0.12	-0.28	-0.43	-0.61	-0.45	-0.53	-0.33	-0.56	-0.50	-0.36	0.16	0.99	0.76	0.61	0.82	0.90	0.99	-0.61	0.01
25	0.87	0.44	0.40	0.41	0.01	0.20	0.96	0.41	0.20	-0.32	-0.50	-0.46	-0.35	-0.38	-0.35	-0.23	-0.15	-0.03	0.06	0.12	0.16	0.17	-0.02	0.14	0.96	-0.50	0.07
26	0.11	0.24	0.12	0.15	0.24	0.12	0.09	0.17	0.19	-0.04	-0.12	-0.17	-0.20	-0.28	-0.21	-0.15	-0.15	-0.14	-0.11	-0.13	-0.10	-0.06	-0.05	-0.05	0.24	-0.28	-0.02
27	-0.03	-0.05	-0.07	-0.05	-0.01	0.14	0.19	0.00	0.05	-0.31	-0.41	-0.53	-0.58	-0.50	-0.39	-0.37	-0.18	-0.13	-0.10	-0.17	-0.08	-0.09	-0.09	-0.10	0.19	-0.58	-0.16
28	-0.10	-0.12	-0.11	-0.12	-0.09	-0.10	-0.13	-0.12	-0.17	-0.27	-0.38	-0.41	-0.39	-0.43	-0.48	-0.50	-0.22	-0.03	0.05	0.21	0.35	0.51	0.57	1.05	1.05	-0.50	-0.06
29	1.66	2.10	0.90	0.44	0.58	0.58	0.49	0.58	0.48	-0.11	-0.40	-0.65	-0.77	-0.58	-0.31	-0.42	-0.22	-0.01	0.13	0.59	0.86	1.03	1.21	1.00	2.10	-0.77	0.38
30	0.91	0.95	0.69	0.26	0.13	0.26	0.24	0.24	0.28	-0.04	-0.27	-0.40	-0.48	-0.65	-0.48	-0.28	-0.18	-0.07	0.01	0.05	0.08	0.04	0.02	0.03	0.95	-0.65	0.06
Max.	**1.66**	**2.10**	**1.45**	**1.57**	**1.78**	**1.71**	**1.84**	**1.08**	**0.48**	**0.18**	**0.04**	**0.04**	**0.00**	**-0.03**	**-0.02**	**-0.02**	**0.04**	**0.42**	**0.24**	**1.22**	**1.27**	**1.03**	**1.21**	**1.05**	**2.10**		
Min.	**-0.10**	**-0.12**	**-0.11**	**-0.12**	**-0.09**	**-0.10**	**-0.13**	**-0.14**	**-0.25**	**-0.48**	**-0.71**	**-0.88**	**-0.92**	**-0.94**	**-0.94**	**-0.85**	**-0.73**	**-0.53**	**-0.38**	**-0.17**	**-0.10**	**-0.09**	**-0.15**	**-0.10**		**-0.94**	
Avg.	**0.38**	**0.40**	**0.38**	**0.35**	**0.35**	**0.37**	**0.37**	**0.24**	**0.03**	**-0.23**	**-0.33**	**-0.41**	**-0.43**	**-0.46**	**-0.40**	**-0.37**	**-0.30**	**-0.14**	**-0.02**	**0.20**	**0.28**	**0.32**	**0.33**	**0.37**			**0.05**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.06	0.07	0.04	0.00	-0.01	-0.01	0.01	0.01	0.05	0.03	-0.03	-0.06	0.00	-0.10	-0.04	-0.02	-0.05	-0.04	0.00	0.07	0.20	0.14	0.05	0.02	0.20	-0.10	0.02
2	0.01	0.00	-0.01	-0.01	-0.03	-0.03	-0.04	-0.04	-0.06	-0.08	-0.14	-0.15	-0.15	-0.16	-0.12	-0.07	0.02	0.03	0.04	0.03	0.04	0.01	-0.02	0.01	0.04	-0.16	-0.04
3	-0.02	-0.01	0.04	0.03	0.03	0.02	0.04	-0.01	-0.06	-0.21	-0.59	-0.72	-0.34	-0.18	0.02	-0.05	0.14	0.17	-0.03	0.07	-0.02	-0.03	0.02	-0.04	0.17	-0.72	-0.07
4	-0.04	-0.02	0.04	0.20	0.23	0.06	0.04	0.04	-0.03	-0.05	-0.04	-0.04	-0.31	-0.49	-0.15	-0.21	-0.19	-0.17	0.06	-0.07	-0.06	-0.08	-0.07	-0.07	0.23	-0.49	-0.06
5	-0.06	-0.04	-0.05	-0.04	0.09	0.09	0.11	0.29	0.23	-0.12	-0.29	-0.35	-0.17	-0.59	-0.18	-0.26	-0.05	-0.10	-0.06	-0.08	-0.11	-0.09	-0.06	-0.06	0.29	-0.59	-0.08
6	-0.08	-0.01	0.12	0.13	0.04	0.09	0.11	0.06	-0.05	-0.10	-0.10	-0.14	-0.17	-0.21	-0.23	-0.19	-0.15	-0.09	-0.04	-0.03	-0.02	-0.02	0.00	0.00	0.13	-0.23	-0.04
7	0.00	-0.01	-0.03	-0.03	0.00	-0.01	0.00	-0.03	-0.03	-0.04	-0.06	-0.07	-0.09	-0.10	-0.09	-0.09	-0.09	-0.06	-0.06	-0.07	-0.08	-0.05	-0.07	-0.04	0.00	-0.10	-0.05
8	-0.07	-0.09	-0.10	-0.11	-0.10	-0.15	-0.15	-0.06	0.02	-0.01	-0.02	-0.08	-0.19	-0.20	-0.14	-0.14	-0.04	-0.05	-0.02	-0.12	-0.05	0.04	0.10	0.10	0.10	-0.20	-0.07
9	0.07	0.05	0.02	0.02	-0.05	-0.01	0.05	0.01	-0.04	-0.07	-0.10	-0.11	-0.09	-0.11	-0.12	-0.14	-0.11	-0.06	-0.12	0.15	0.00	-0.07	-0.03	-0.01	0.15	-0.14	-0.04
10	-0.09	-0.07	-0.05	-0.07	-0.07	-0.04	-0.02	-0.05	-0.20	-0.13	0.11	0.10	-0.13	-0.14	-0.14	-0.01	0.04	0.08	0.15	0.06	-0.02	-0.03	-0.03	0.00	0.15	-0.20	-0.03
11	0.05	0.08	0.07	0.01	-0.02	0.00	0.12	0.06	-0.07	-0.07	-0.17	-0.16	-0.41	-0.41	-0.29	-0.46	-0.24	0.27	0.46	0.42	0.45	0.29	0.21	0.20	0.46	-0.46	0.02
12	0.22	0.24	0.17	0.04	0.14	0.19	0.02	0.10	-0.03	-0.11	-0.13	-0.24	-0.34	-0.38	-0.19	-0.24	-0.14	0.08	0.10	0.32	0.18	0.07	0.06	0.12	0.32	-0.38	0.01
13	0.32	0.41	0.45	0.53	0.70	0.73	0.74	0.53	0.21	0.19	-0.17	-0.40	-0.49	-0.55	-0.37	-0.22	0.15	0.70	0.90	0.87	1.16	1.15	0.97	0.91	1.16	-0.55	0.39
14	0.97	0.96	1.11	1.45	1.56	1.11	0.92	0.73	1.13	0.99	-0.18	-0.24	-0.44	-0.65	-0.45	-0.26	-0.06	0.08	0.38	0.61	0.94	0.91	0.83	0.68	1.56	-0.65	0.54
15	0.72	0.34	0.57	0.62	0.67	0.64	0.98	0.91	0.53	0.23	0.01	-0.07	-0.15	-0.17	-0.13	-0.08	0.02	0.13	0.25	0.38	0.25	0.22	0.11	0.02	0.98	-0.17	0.29
16	0.01	-0.04	-0.05	-0.06	-0.06	-0.05	-0.07	-0.06	-0.06	-0.09	-0.19	-0.32	-0.46	-0.31	-0.20	-0.13	-0.02	0.13	0.18	0.15	0.08	0.08	0.11	0.11	0.18	-0.46	-0.05
17	0.08	0.09	0.14	0.20	0.07	0.11	0.02	0.03	0.01	-0.26	-0.20	-0.26	-0.32	-0.39	-0.40	-0.24	-0.15	0.05	0.18	0.10	0.04	0.03	0.03	0.03	0.20	-0.40	-0.04
18	0.08	0.02	-0.02	0.03	0.04	0.05	0.10	0.17	0.16	0.05	-0.09	-0.22	-0.19	-0.16	-0.09	-0.05	0.07	0.06	-0.01	0.01	0.05	-0.02	-0.08	-0.04	0.17	-0.22	0.00
19	0.06	0.05	0.13	0.20	0.07	0.04	0.06	0.01	-0.05	-0.12	-0.18	-0.22	-0.26	-0.19	-0.14	-0.12	-0.08	0.04	0.09	0.14	0.01	-0.01	0.04	0.20	0.20	-0.26	-0.01
20	0.16	0.16	0.15	0.14	0.12	0.04	-0.03	-0.03	-0.07	-0.05	-0.08	-0.11	-0.22	-0.29	-0.34	-0.26	0.10	0.15	0.31	0.26	0.26	0.32	0.37	0.48	0.48	-0.34	0.06
21	0.32	0.32	0.98	1.36	1.46	2.03	1.17	1.17	1.22	0.73	0.07	-0.30	-0.62	-0.57	-0.23	-0.28	0.04	0.37	0.61	0.73	0.53	0.54	0.58	0.83	2.03	-0.62	0.54
22	0.67	0.41	0.60	0.98	0.75	1.04	1.03	1.02	0.91	0.48	-0.26	-0.45	-0.33	-0.26	-0.30	-0.18	0.17	0.66	1.08	1.00	0.82	1.12	1.07	1.15	1.15	-0.45	0.55
23	1.28	0.74	0.99	0.77	0.61	0.65	0.69	0.67	0.30	-0.25	-0.34	-0.40	-0.39	-0.41	-0.41	-0.36	-0.10	0.46	0.39	0.34	0.22	0.31	0.29	0.30	1.28	-0.41	0.26
24	0.19	0.12	0.08	0.07	0.06	-0.08	-0.06	-0.05	-0.03	-0.03	-0.05	-0.06	-0.09	-0.07	-0.08	-0.05	-0.06	-0.05	-0.07	-0.08	-0.10	-0.07	-0.05	-0.04	0.19	-0.10	-0.03
25	0.03	-0.06	-0.09	-0.08	-0.08	-0.10	-0.07	-0.07	-0.09	-0.12	-0.11	-0.16	-0.16	-0.12	-0.12	-0.10	-0.09	-0.03	0.03	0.08	0.16	0.03	-0.06	-0.07	0.16	-0.16	-0.06
26	-0.07	-0.06	-0.09	-0.12	-0.09	-0.09	-0.07	-0.11	-0.12	-0.14	-0.22	-0.30	-0.29	-0.39	-0.25	0.05	0.22	0.27	0.43	0.50	0.46	0.35	0.32	0.42	0.50	-0.39	0.03
27	0.37	0.62	0.48	0.52	0.59	0.70	0.67	0.75	0.79	0.60	0.32	0.03	-0.10	-0.16	-0.18	0.14	0.75	0.74	0.66	0.37	0.26	0.24	0.11	0.13	0.79	-0.18	0.39
28	0.14	0.06	-0.01	0.05	0.02	0.01	0.02	-0.03	0.03	-0.08	-0.08	-0.09	-0.10	-0.07	-0.13	-0.08	-0.04	-0.02	-0.05	-0.02	-0.05	-0.05	-0.06	-0.05	0.14	-0.13	-0.03
29	-0.05	-0.07	-0.06	0.08	0.07	0.06	-0.05	-0.04	-0.07	-0.07	-0.02	-0.09	-0.02	-0.03	0.01	0.00	0.01	-0.02	-0.04	-0.05	-0.09	-0.10	-0.09	-0.09	0.08	-0.10	-0.03
30	-0.08	-0.01	-0.03	-0.07	-0.05	-0.12	-0.07	-0.01	0.06	0.43	0.70	0.86	0.45	0.17	0.17	0.19	0.17	0.12	0.12	0.29	0.24	-0.02	0.20	0.27	0.86	-0.12	0.17
31	0.23	0.06	-0.01	0.12	-0.01	0.10	0.23	0.19	0.21	0.37	0.30	0.24	0.13	0.10	0.12	0.14	0.09	0.27	0.62	0.47	0.45	0.61	0.61	0.85	0.85	-0.01	0.27
Max.	**1.28**	**0.96**	**1.11**	**1.45**	**1.56**	**2.03**	**1.17**	**1.17**	**1.22**	**0.99**	**0.70**	**0.86**	**0.45**	**0.17**	**0.17**	**0.19**	**0.75**	**0.74**	**1.08**	**1.00**	**1.16**	**1.15**	**1.07**	**1.15**	**2.03**		
Min.	**-0.09**	**-0.09**	**-0.10**	**-0.12**	**-0.10**	**-0.15**	**-0.15**	**-0.11**	**-0.20**	**-0.26**	**-0.59**	**-0.72**	**-0.62**	**-0.65**	**-0.45**	**-0.46**	**-0.24**	**-0.17**	**-0.12**	**-0.12**	**-0.11**	**-0.10**	**-0.09**	**-0.09**		**-0.72**	
Avg.	**0.18**	**0.14**	**0.18**	**0.22**	**0.22**	**0.23**	**0.21**	**0.20**	**0.15**	**0.06**	**-0.07**	**-0.15**	**-0.21**	**-0.24**	**-0.17**	**-0.12**	**0.01**	**0.13**	**0.21**	**0.22**	**0.20**	**0.19**	**0.18**	**0.20**			**0.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.73	0.60	0.29	0.14	0.20	0.14	0.31	0.23	0.08	-0.04	-0.14	-0.16	-0.06	-0.07	-0.15	-0.15	-0.11	-0.09	-0.10	-0.11	-0.06	0.06	0.12	0.17	0.73	-0.16	0.08
2	0.31	0.35	0.16	0.28	0.38	0.38	0.47	0.42	0.40	0.33	0.29	0.12	0.07	0.04	0.09	0.13	0.26	0.29	0.38	0.22	0.35	0.22	0.23	0.28	0.47	0.04	0.27
3	0.17	0.04	0.12	0.46	0.43	0.42	0.46	0.41	0.64	0.48	0.39	0.44	0.17	0.12	0.16	0.25	0.59	0.71	0.46	0.52	0.56	0.56	0.43	0.63	0.71	0.04	0.40
4	0.61	1.08	0.80	0.76	0.88	0.95	0.98	0.85	0.42	0.38	0.34	0.32	0.14	0.02	0.14	0.43	0.67	0.83	0.78	0.82	0.62	0.40	0.58	0.41	1.08	0.02	0.59
5	0.27	0.25	0.05	0.08	0.00	0.03	0.25	0.19	1.22	0.61	1.03	0.68	0.71	1.02	0.77	0.66	1.12	1.48	1.59	1.66	1.47	1.04	1.02	1.35	1.66	0.00	0.77
6	1.37	1.35	1.61	1.85	1.15	1.10	0.79	0.46	0.46	0.52	0.56	0.45	0.44	0.39	0.32	0.19	0.21	0.18	0.15	0.17	0.29	0.35	0.40	0.17	1.85	0.15	0.62
7	0.09	0.09	0.13	0.19	0.20	-0.03	-0.03	-0.07	-0.09	-0.12	-0.14	-0.15	-0.16	-0.21	0.00	-0.07	-0.09	-0.11	-0.06	-0.03	-0.09	-0.03	-0.09	-0.05	0.20	-0.21	-0.04
8	0.00	0.11	0.19	0.25	0.35	0.43	0.32	0.27	0.20	0.20	0.12	0.05	0.09	0.04	0.07	0.18	0.18	0.16	0.14	0.04	0.00	-0.04	-0.07	-0.07	0.43	-0.07	0.13
9	-0.02	0.09	0.27	0.34	0.24	0.29	0.36	0.56	0.40	0.29	0.14	0.02	-0.02	0.00	0.08	0.19	0.52	0.92	0.75	0.64	0.72	0.46	0.15	0.18	0.92	-0.02	0.32
10	-0.08	-0.15	-0.17	-0.21	-0.21	-0.24	-0.26	-0.22	-0.21	-0.23	-0.18	-0.23	-0.24	-0.19	-0.22	-0.24	0.17	0.68	0.44	0.48	0.23	0.41	0.57	0.25	0.68	-0.26	0.00
11	0.27	0.58	0.50	0.51	0.49	0.77	0.99	0.79	0.46	0.51	0.28	0.47	0.23	0.15	0.22	0.31	0.31	0.40	0.31	0.23	0.24	0.25	0.29	0.29	0.99	0.15	0.41
12	0.27	0.28	0.34	0.31	0.29	0.31	0.25	0.17	0.18	0.10	0.05	0.02	0.05	0.12	0.16	0.17	0.24	0.29	0.30	0.20	0.06	-0.04	-0.08	-0.09	0.34	-0.09	0.16
13	-0.06	-0.03	-0.03	-0.05	-0.07	-0.07	0.11	0.18	0.18	0.21	0.10	-0.01	-0.10	-0.14	-0.12	-0.08	0.02	0.10	0.10	0.15	0.15	0.12	0.18	0.20	0.21	-0.14	0.04
14	0.26	0.19	0.14	0.08	-0.12	-0.09	-0.03	-0.07	-0.01	0.03	0.13	-0.07	0.22	0.34	0.30	0.12	0.23	0.17	0.15	0.10	0.08	0.02	0.05	0.04	0.34	-0.12	0.09
15	0.06	0.05	0.04	0.05	0.05	0.06	0.07	0.07	0.06	0.05	-0.05	0.01	0.04	0.03	0.05	-0.08	-0.03	0.06	0.12	0.09	0.05	0.03	0.09	0.08	0.12	-0.08	0.04
16	0.08	0.12	0.11	0.13	0.18	0.24	0.21	0.20	0.24	0.23	0.21	0.21	0.16	0.11	0.28	0.49	0.91	0.68	0.89	0.81	0.56	0.52	0.72	0.74	0.91	0.08	0.38
17	0.52	0.55	0.57	0.67	0.50	0.60	0.54	0.34	0.43	0.43	0.26	0.28	0.21	0.14	0.09	0.17	0.43	0.73	0.79	0.69	0.45	0.72	0.88	0.83	0.88	0.09	0.49
18	0.83	0.98	1.02	0.48	0.37	0.35	0.45	0.33	0.46	0.55	0.34	0.30	0.17	0.18	0.12	0.15	0.26	0.27	0.24	0.21	0.14	0.14	0.11	0.13	1.02	0.11	0.36
19	0.13	0.18	0.23	0.16	0.15	0.23	0.13	0.12	0.15	0.20	0.09	0.10	0.09	0.09	0.08	0.08	0.17	0.21	0.20	0.18	0.14	0.18	0.22	0.26	0.26	0.08	0.16
20	0.24	0.23	0.17	0.19	0.21	0.23	0.21	0.28	0.31	0.25	0.26	0.23	0.20	0.24	0.27	0.29	0.31	0.27	0.36	0.26	0.27	0.26	0.33	0.35	0.36	0.17	0.26
21	0.30	0.27	0.29	0.28	0.44	0.46	0.77	0.58	0.79	0.69	0.59	0.34	0.10	0.16	0.19	0.19	0.32	0.39	0.45	0.40	0.41	0.43	0.46	0.14	0.79	0.10	0.39
22	0.00	0.01	0.12	0.19	0.26	0.24	0.49	0.56	0.54	0.40	0.47	0.29	0.34	0.35	0.26	0.37	0.34	0.52	0.44	0.36	0.67	0.55	0.36	0.40	0.67	0.00	0.36
23	0.46	0.44	0.58	0.87	1.42	1.02	0.89	0.94	0.87	0.77	0.94	0.58	0.66	1.46	0.92	1.25	1.22	1.44	1.82	0.99	0.93	0.95	0.87	0.72	1.82	0.44	0.96
24	1.12	1.18	0.95	0.92	0.76	0.99	0.72	0.56	0.59	1.00	0.74	0.92	0.77	0.66	0.72	0.84	0.88	0.67	0.49	0.41	0.28	0.26	0.20	0.16	1.18	0.16	0.70
25	0.14	0.21	0.34	0.41	0.36	0.30	0.17	0.15	0.16	0.14	0.15	0.14	0.14	0.28	0.43	0.68	0.75	0.83	0.73	0.54	0.66	0.57	0.41	0.32	0.83	0.14	0.37
26	0.38	0.23	0.20	0.17	0.12	0.09	0.06	0.06	0.06	0.05	-0.01	-0.06	-0.08	-0.10	-0.12	-0.11	-0.06	-0.04	-0.05	-0.04	-0.05	-0.01	-0.01	-0.05	0.38	-0.12	0.03
27	-0.06	-0.07	-0.08	-0.08	-0.06	-0.06	-0.05	-0.06	-0.06	-0.05	-0.06	-0.06	-0.07	0.01	0.07	0.08	0.10	0.06	0.09	0.10	0.11	0.11	0.10	0.10	0.11	-0.08	0.00
28	0.13	0.15	0.17	0.19	0.20	0.19	0.20	0.22	0.25	0.26	0.19	0.21	0.16	0.32	0.31	0.43	0.59	0.70	0.53	0.51	0.53	0.45	0.76	1.09	1.09	0.13	0.36
29	1.66	1.53	2.00	2.01	1.95	1.98	2.10	1.98	1.81	2.11	1.98	1.30	0.73	0.79	0.36	0.27	0.44	0.64	0.58	0.72	1.22	0.69	0.34	0.19	2.11	0.19	1.22
30	0.15	0.20	0.08	-0.03	-0.05	-0.06	-0.05	-0.05	-0.05	-0.05	-0.07	-0.08	-0.03	-0.09	-0.11	-0.09	-0.05	-0.10	-0.11	0.06	0.05	0.24	0.41	0.50	0.50	-0.11	0.03
Max.	**1.66**	**1.53**	**2.00**	**2.01**	**1.95**	**1.98**	**2.10**	**1.98**	**1.81**	**2.11**	**1.98**	**1.30**	**0.77**	**1.46**	**0.92**	**1.25**	**1.22**	**1.48**	**1.82**	**1.66**	**1.47**	**1.04**	**1.02**	**1.35**	**2.11**		
Min.	**-0.08**	**-0.15**	**-0.17**	**-0.21**	**-0.21**	**-0.24**	**-0.26**	**-0.22**	**-0.21**	**-0.23**	**-0.18**	**-0.23**	**-0.24**	**-0.21**	**-0.22**	**-0.24**	**-0.11**	**-0.11**	**-0.11**	**-0.11**	**-0.09**	**-0.04**	**-0.09**	**-0.09**		**-0.26**	
Avg.	**0.34**	**0.37**	**0.37**	**0.39**	**0.37**	**0.37**	**0.40**	**0.35**	**0.36**	**0.34**	**0.30**	**0.22**	**0.17**	**0.21**	**0.19**	**0.24**	**0.36**	**0.44**	**0.43**	**0.38**	**0.37**	**0.33**	**0.33**	**0.32**			**0.33**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.62	0.86	0.85	0.75	0.70	1.00	0.68	0.92	0.89	1.15	0.69	0.63	0.54	0.46	0.60	0.85	0.75	1.18	0.63	0.71	1.28	1.03	1.07	0.91	1.28	0.46	0.82
2	1.14	0.68	0.81	0.87	0.45	0.84	0.74	0.87	1.42	1.25	1.48	1.46	0.39	1.35	0.95	1.55	0.49	0.43	1.15	1.30	0.96	0.96	0.35	0.10	1.55	0.10	0.92
3	0.06	0.07	0.02	0.01	0.12	0.07	-0.11	-0.05	0.10	0.38	0.69	0.72	0.12	0.01	-0.04	-0.09	-0.08	-0.09	-0.10	-0.07	-0.10	-0.10	-0.10	-0.09	0.72	-0.11	0.06
4	-0.10	-0.11	-0.14	-0.09	0.06	-0.05	0.79	0.83	0.27	1.12	1.15	0.87	0.91	0.06	0.02	-0.01	-0.03	-0.03	-0.04	-0.03	-0.02	-0.01	-0.01	0.10	1.15	-0.14	0.23
5	0.29	0.40	0.32	0.33	0.42	0.48	0.43	0.35	0.44	0.22	0.46	0.46	0.51	0.39	0.45	0.24	0.27	0.53	0.45	0.33	0.27	0.21	0.17	0.14	0.53	0.14	0.36
6	0.13	0.14	0.11	0.07	0.06	0.08	0.04	-0.04	-0.05	0.00	0.02	0.02	0.04	0.04	0.05	0.07	0.05	0.12	0.06	0.04	0.14	0.08	-0.01	0.01	0.14	-0.05	0.05
7	-0.02	-0.03	0.05	0.17	0.30	0.61	0.52	0.19	0.40	0.65	0.37	0.46	0.17	0.11	0.27	0.11	0.12	0.12	0.23	0.06	0.04	0.01	0.04	0.05	0.65	-0.03	0.21
8	0.06	0.08	-0.08	-0.08	-0.07	0.03	0.05	-0.06	-0.10	-0.09	-0.06	0.04	0.17	0.18	0.20	0.15	-0.01	-0.06	-0.05	-0.02	0.01	0.08	0.18	0.30	0.30	-0.10	0.04
9	0.35	0.12	0.21	0.19	0.23	0.22	0.13	0.05	0.07	0.15	0.16	0.09	-0.06	-0.03	-0.02	-0.07	-0.08	-0.05	-0.06	-0.05	-0.05	-0.06	-0.07	-0.06	0.35	-0.08	0.05
10	-0.06	-0.06	-0.06	-0.05	-0.07	0.03	0.12	0.15	0.10	0.12	0.04	-0.02	-0.04	-0.07	-0.09	-0.09	-0.09	-0.08	-0.08	-0.07	-0.06	0.01	0.09	0.27	0.27	-0.09	0.00
11	0.65	0.76	0.50	0.47	0.34	0.40	0.48	0.62	0.65	0.81	0.78	0.73	0.66	1.05	1.74	2.36	1.85	2.12	1.75	1.76	1.62	1.24	0.79	1.08	2.36	0.34	1.05
12	1.34	0.98	0.76	0.92	0.57	0.30	0.19	0.14	0.23	0.25	0.10	0.07	-0.10	-0.09	-0.14	-0.13	-0.07	-0.04	-0.08	-0.10	-0.09	-0.11	-0.13	-0.10	1.34	-0.14	0.20
13	-0.08	-0.04	-0.10	-0.05	0.18	0.37	0.38	0.42	0.25	0.16	0.10	-0.11	-0.15	-0.14	-0.15	-0.12	-0.11	-0.06	-0.02	-0.07	-0.10	-0.08	0.00	0.11	0.42	-0.15	0.02
14	0.11	0.04	0.06	0.11	0.18	0.14	0.20	0.25	0.21	0.41	1.04	0.95	0.89	0.05	-0.06	0.39	1.06	0.98	0.12	0.02	0.03	0.00	0.00	0.00	1.06	-0.06	0.30
15	0.01	-0.03	-0.01	-0.03	0.11	0.43	0.64	0.92	1.45	1.15	0.97	0.73	0.40	0.45	0.48	0.47	0.87	0.64	0.33	0.35	0.30	0.29	0.23	0.09	1.45	-0.03	0.47
16	0.11	-0.02	-0.01	-0.04	-0.07	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.06	-0.07	-0.05	-0.02	0.10	0.20	0.06	0.02	0.39	0.25	0.39	-0.07	0.01
17	0.64	0.76	0.56	0.79	1.06	1.17	1.17	1.56	1.68	1.92	2.02	1.69	1.47	1.43	1.15	0.81	0.44	0.11	0.29	0.14	0.01	-0.04	0.02	0.18	2.02	-0.04	0.88
18	0.18	-0.05	-0.09	-0.12	0.18	0.03	-0.02	-0.04	-0.06	-0.11	-0.06	0.12	0.49	0.51	0.79	1.21	1.26	1.02	0.84	0.65	1.37	1.24	2.02	0.65	2.02	-0.12	0.50
19	0.88	1.09	1.00	0.98	0.87	1.03	0.63	0.47	0.50	1.04	1.15	1.32	1.13	0.83	0.91	0.79	0.61	0.44	0.48	0.35	0.23	0.29	0.40	0.64	1.32	0.23	0.75
20	1.33	1.33	0.98	1.18	0.65	0.57	0.38	0.35	0.19	0.18	0.18	0.15	0.38	0.65	0.11	0.06	0.83	1.25	1.24	1.06	1.47	1.67	1.45	1.36	1.67	0.06	0.79
21	1.47	1.61	0.76	0.63	0.43	0.74	0.55	0.43	0.66	0.34	0.63	0.54	0.31	0.29	0.47	0.27	0.58	0.44	0.58	0.56	0.76	1.08	0.61	0.39	1.61	0.27	0.63
22	0.68	0.48	0.48	1.04	1.26	1.04	2.02	1.57	1.37	1.74	1.82	1.94	1.82	1.08	0.80	1.01	1.05	1.31	0.82	0.73	0.77	0.86	0.98	1.17	2.02	0.48	1.16
23	1.26	1.39	1.33	1.75	1.57	1.16	1.25	1.62	2.10	2.05	1.72	1.89	1.35	1.51	1.58	1.49	2.17	1.94	2.18	2.00	2.76	2.94	2.68	2.60	2.94	1.16	1.85
24	2.51	2.49	2.73	2.80	2.52	2.10	2.16	1.66	1.95	2.27	2.19	2.45	2.13	2.15	2.35	2.30	2.46	2.42	2.88	2.85	2.42	2.27	1.54	1.38	2.88	1.38	2.29
25	0.34	0.46	0.41	0.39	0.44	0.40	0.41	0.59	0.82	0.69	0.67	0.85	1.26	0.86	1.21	1.29	1.57	1.93	1.66	0.84	0.67	0.35	0.10	0.02	1.93	0.02	0.76
26	-0.09	-0.11	-0.11	-0.05	0.47	0.64	0.95	1.03	1.18	1.17	0.70	0.63	0.70	1.06	1.22	0.84	0.63	0.72	0.81	0.87	0.79	1.06	1.42	1.07	1.42	-0.11	0.73
27	0.49	0.39	0.46	0.49	0.42	0.35	0.35	0.34	0.32	0.26	0.25	0.19	0.10	0.15	0.20	0.15	0.12	0.16	0.19	0.17	0.03	0.01	0.02	0.02	0.49	0.01	0.23
28	0.07	0.16	0.01	-0.07	0.01	0.00	0.02	0.01	-0.04	-0.04	-0.04	-0.05	-0.03	-0.02	0.06	0.27	0.31	0.37	0.47	0.24	0.21	0.90	1.07	1.77	1.77	-0.07	0.24
29	2.01	1.35	0.63	0.30	0.27	0.28	0.53	0.45	0.41	0.31	0.26	0.12	0.00	-0.05	0.00	0.12	0.30	0.19	0.04	-0.07	-0.05	-0.02	-0.03	-0.04	2.01	-0.07	0.30
30	-0.07	-0.08	-0.09	-0.10	-0.10	-0.13	-0.15	-0.17	-0.17	-0.14	-0.02	0.03	-0.11	0.00	-0.12	-0.11	-0.07	-0.05	0.01	0.00	-0.04	0.00	0.02	0.09	0.09	-0.17	-0.06
31	0.31	0.22	0.27	0.27	0.50	0.52	0.68	0.44	0.48	0.59	1.04	0.60	0.50	0.23	0.22	1.87	0.64	0.74	0.61	0.51	0.52	0.59	1.16	0.99	1.87	0.22	0.61
Max.	**2.51**	**2.49**	**2.73**	**2.80**	**2.52**	**2.10**	**2.16**	**1.66**	**2.10**	**2.27**	**2.19**	**2.45**	**2.13**	**2.15**	**2.35**	**2.36**	**2.46**	**2.42**	**2.88**	**2.85**	**2.76**	**2.94**	**2.68**	**2.60**	**2.94**		
Min.	**-0.10**	**-0.11**	**-0.14**	**-0.12**	**-0.10**	**-0.13**	**-0.15**	**-0.17**	**-0.17**	**-0.14**	**-0.06**	**-0.11**	**-0.15**	**-0.14**	**-0.15**	**-0.13**	**-0.11**	**-0.09**	**-0.10**	**-0.10**	**-0.10**	**-0.11**	**-0.13**	**-0.10**		**-0.17**	
Avg.	**0.54**	**0.49**	**0.41**	**0.45**	**0.45**	**0.48**	**0.52**	**0.51**	**0.57**	**0.64**	**0.66**	**0.63**	**0.51**	**0.47**	**0.49**	**0.58**	**0.58**	**0.60**	**0.56**	**0.49**	**0.52**	**0.54**	**0.53**	**0.50**			**0.53**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	78.6	86.3	95.3	98.3	97.2	98.5	99.8	100.0	99.5	91.6	86.4	86.3	82.6	78.3	79.7	77.3	76.3	80.5	81.7	81.1	78.4	74.6	73.8	77.8	100.0	73.8	85.8
2	79.1	80.0	82.6	78.3	84.8	87.7	86.2	89.9	91.9	83.2	79.4	76.7	78.2	83.7	84.7	77.4	81.4	80.5	80.2	84.7	88.2	90.1	88.1	89.1	91.9	76.7	83.6
3	92.4	97.3	93.9	95.2	99.8	100.0	99.9	98.9	98.3	98.0	99.2	100.0	100.0	95.3	93.9	90.1	94.2	91.0	87.0	88.1	87.4	86.8	84.9	82.1	100.0	82.1	93.9
4	82.1	80.8	81.2	79.7	81.6	84.7	90.2	87.0	81.0	79.0	80.6	73.1	77.8	89.8	91.2	89.3	88.9	88.8	89.3	88.4	81.2	76.2	74.1	71.4	91.2	71.4	82.8
5	67.7	63.4	65.3	62.1	62.5	63.2	62.1	60.9	63.6	63.6	69.9	81.5	82.3	81.1	72.9	78.3	72.5	71.5	63.8	63.0	68.2	66.9	63.0	64.0	82.3	60.9	68.0
6	63.4	63.2	68.3	77.3	80.6	87.1	93.6	95.2	95.3	94.4	95.0	90.9	89.2	81.1	78.8	73.5	63.5	62.7	65.6	70.4	69.8	74.9	85.3	90.8	95.3	62.7	79.6
7	90.4	89.8	92.6	98.1	99.2	98.5	98.4	99.2	98.3	95.7	88.9	82.1	80.3	81.2	78.1	77.9	79.7	83.4	81.1	85.4	81.8	76.7	73.5	69.8	99.2	69.8	86.7
8	70.2	75.8	74.7	79.1	73.7	72.4	68.0	78.8	79.3	79.9	79.6	81.5	84.1	81.3	77.6	73.9	75.3	77.7	80.7	80.7	80.8	81.2	80.7	80.7	84.1	68.0	77.8
9	82.1	81.0	82.6	80.2	82.4	81.6	83.7	79.4	85.7	84.3	80.1	75.7	74.8	75.4	76.5	80.4	84.0	93.8	98.1	97.8	96.7	98.5	98.4	95.5	98.5	74.8	85.4
10	92.9	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.1	98.2	96.8	96.7	95.8	95.6	95.4	95.6	95.6	95.8	95.8	100.0	92.9	97.9
11	95.7	95.6	95.6	95.3	95.4	95.2	95.2	94.6	94.3	95.2	95.2	94.9	94.9	95.0	94.8	95.1	94.8	95.4	94.3	94.0	93.8	94.3	93.9	93.9	95.7	93.8	94.9
12	94.1	93.4	93.2	93.2	93.4	92.7	92.4	92.5	92.3	91.3	91.4	91.1	90.9	90.9	90.7	90.5	90.3	89.7	88.3	88.4	88.3	88.8	88.5	88.2	94.1	88.2	91.0
13	86.6	86.2	86.3	86.3	87.0	86.5	85.7	85.7	86.0	85.9	86.1	85.8	86.1	86.1	85.9	85.8	85.8	86.3	85.9	86.3	85.9	85.7	86.0	85.5	87.0	85.5	86.1
14	85.1	86.0	87.7	88.1	88.3	89.2	90.5	92.7	93.5	93.9	93.4	93.9	95.8	95.7	96.4	96.3	97.0	97.0	97.3	97.4	97.3	97.7	97.7	97.9	97.9	85.1	93.6
15	97.9	98.0	98.1	98.4	98.5	98.6	98.7	98.7	99.0	98.9	98.9	99.6	98.2	94.0	94.3	89.5	87.2	87.1	85.6	83.0	82.0	81.2	82.6	80.6	99.6	80.6	92.9
16	76.0	75.5	75.7	74.6	75.5	74.9	72.6	70.0	70.0	70.6	72.1	71.8	75.5	74.0	72.3	69.5	67.2	69.4	70.9	72.9	76.3	79.1	81.9	85.0	85.0	67.2	73.9
17	87.1	88.8	87.8	89.5	89.7	87.4	88.2	89.9	88.9	91.6	92.2	92.0	91.5	90.9	90.7	90.1	89.1	87.0	86.1	86.3	86.6	87.0	86.4	85.1	92.2	85.1	88.7
18	85.2	84.6	84.5	84.6	84.2	85.1	85.2	85.5	85.6	85.0	85.0	84.7	84.3	83.6	82.9	82.2	83.2	84.2	83.2	84.0	84.0	83.2	84.0	84.0	85.6	82.2	84.3
19	84.1	83.8	83.2	82.9	82.7	82.0	82.0	81.8	81.5	81.6	81.7	81.8	81.7	81.9	81.7	81.6	81.7	81.2	80.9	81.2	80.9	80.5	80.6	80.5	84.1	80.5	81.8
20	79.3	79.0	78.1	77.2	72.5	72.9	75.8	74.7	75.8	74.9	73.2	73.6	72.1	71.2	72.3	70.9	70.2	72.4	78.2	81.6	84.6	83.1	85.2	84.4	85.2	70.2	76.4
21	84.6	84.6	84.3	84.2	84.5	84.2	84.2	83.9	83.8	83.3	83.0	82.1	81.5	81.2	81.5	81.3	81.5	81.4	81.3	80.8	80.1	79.6	78.9	78.2	84.6	78.2	82.3
22	77.8	77.4	77.5	77.5	77.5	77.6	77.9	78.1	78.1	78.1	78.0	78.0	77.9	77.6	77.6	77.4	77.4	77.3	77.2	76.9	76.7	76.7	76.7	76.6	78.1	76.6	77.5
23	76.3	76.2	76.2	76.3	76.4	76.4	76.3	76.4	77.0	76.8	77.0	76.8	78.1	78.8	79.4	80.0	80.2	80.3	80.5	81.1	80.3	80.5	80.8	80.9	81.1	76.2	78.3
24	80.9	81.3	81.6	81.2	80.9	80.9	81.0	81.1	81.1	81.2	80.9	81.1	81.2	81.5	81.7	81.5	81.1	80.8	80.4	79.8	78.8	78.4	78.5	78.4	81.7	78.4	80.6
25	77.7	77.7	77.8	77.3	77.3	76.8	76.8	76.1	76.6	76.7	77.8	78.5	78.4	78.8	79.4	79.1	78.9	79.1	77.9	77.9	77.2	76.4	77.2	77.4	79.4	76.1	77.7
26	77.4	77.8	77.2	76.5	76.3	77.3	76.9	77.2	77.1	77.6	78.2	79.2	79.6	79.4	79.3	79.2	78.5	79.2	79.4	78.7	78.9	78.7	78.0	77.4	79.6	76.3	78.1
27	77.8	76.7	76.1	75.7	75.7	74.9	74.1	73.5	73.6	73.2	73.1	72.8	73.0	73.1	73.6	73.6	73.7	73.7	73.9	74.0	73.8	74.4	74.6	74.8	77.8	72.8	74.3
28	75.0	74.7	74.3	74.1	73.9	73.6	73.0	72.8	72.6	71.9	71.5	72.2	72.7	73.4	74.8	74.6	74.1	73.6	73.9	73.6	73.5	73.8	73.7	73.5	75.0	71.5	73.5
29	73.6	73.8	73.7	74.0	74.1	74.3	74.4	74.8	75.0	74.7	74.7	75.2	74.0	74.2	74.1	75.1	75.3	76.3	77.1	76.7	76.9	77.2	76.6	77.0	77.2	73.6	75.1
30	78.5	77.8	78.1	78.3	78.4	77.7	77.4	77.9	78.3	78.5	79.8	80.7	80.8	80.7	81.1	80.7	80.5	84.0	86.0	85.3	83.8	83.9	85.3	86.6	86.6	77.4	80.8
31	86.4	86.7	87.4	87.4	88.2	88.3	88.5	88.8	88.4	86.9	83.2	81.9	81.6	81.1	82.0	84.3	83.2	83.3	83.3	82.3	81.3	81.2	80.9	81.2	88.8	80.9	84.5
Max.	**97.9**	**98.3**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.1**	**98.2**	**96.8**	**97.0**	**97.0**	**98.1**	**97.8**	**97.3**	**98.5**	**98.4**	**97.9**	**100.0**		
Min.	**63.4**	**63.2**	**65.3**	**62.1**	**62.5**	**63.2**	**62.1**	**60.9**	**63.6**	**63.6**	**69.9**	**71.8**	**72.1**	**71.2**	**72.3**	**69.5**	**63.5**	**62.7**	**63.8**	**63.0**	**68.2**	**66.9**	**63.0**	**64.0**		**60.9**	
Avg.	**81.8**	**82.3**	**82.9**	**83.3**	**83.6**	**83.9**	**84.2**	**84.4**	**84.6**	**83.8**	**83.4**	**83.1**	**83.2**	**82.9**	**82.5**	**81.7**	**81.4**	**82.1**	**82.1**	**82.5**	**82.2**	**82.0**	**82.1**	**82.1**			**82.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	79.6	79.4	79.5	79.8	78.6	78.4	78.3	77.4	77.0	76.7	76.5	77.0	77.5	77.7	77.9	77.8	77.2	76.7	76.7	76.1	75.9	75.9	76.0	75.7	79.8	75.7	77.5
2	76.2	75.9	75.9	75.5	75.7	75.5	75.6	75.9	76.0	75.8	73.4	72.9	71.2	70.8	68.4	61.9	59.9	63.4	68.2	72.6	73.6	72.2	71.9	73.0	76.2	59.9	72.1
3	76.6	78.9	82.3	82.6	84.3	86.4	87.4	87.8	88.8	90.5	90.1	86.1	82.5	81.2	80.8	82.7	83.9	87.3	90.4	89.4	88.3	87.0	87.8	88.5	90.5	76.6	85.5
4	87.2	86.7	86.3	86.6	88.3	90.0	88.7	86.6	86.3	82.9	80.3	79.5	79.6	76.8	74.9	78.5	81.7	81.4	83.7	81.6	81.1	79.1	78.1	77.5	90.0	74.9	82.6
5	78.7	80.4	82.2	78.3	75.3	73.1	71.0	70.2	68.9	73.4	75.9	81.1	86.9	83.0	83.4	81.6	78.0	75.1	74.1	75.7	79.1	78.5	82.1	88.3	88.3	68.9	78.1
6	91.1	92.7	97.6	93.0	97.2	99.5	100.0	100.0	100.0	100.0	98.5	98.6	98.5	98.3	97.8	97.3	95.3	94.6	93.7	92.8	96.0	96.6	97.1	97.3	100.0	91.1	96.8
7	97.1	97.1	95.6	96.4	97.0	97.0	97.4	96.6	96.3	96.2	95.3	94.8	95.5	96.1	93.7	90.2	86.1	89.5	91.1	89.1	86.8	78.8	77.5	92.6	97.4	77.5	92.7
8	93.3	95.7	92.4	88.4	89.1	85.9	82.1	75.3	70.0	49.0	41.3	43.6	59.8	67.2	73.6	73.2	79.4	81.8	82.8	80.5	81.3	80.6	80.4	83.9	95.7	41.3	76.3
9	82.7	83.2	77.3	74.8	73.3	71.1	70.0	74.1	75.8	82.6	81.7	86.9	85.2	84.0	80.2	79.5	78.9	79.6	79.6	84.1	84.0	84.6	82.3	91.0	91.0	70.0	80.3
10	89.6	97.0	97.7	95.7	91.0	85.0	86.7	89.3	97.6	99.7	100.0	100.0	100.0	97.5	95.1	93.4	89.2	87.6	90.7	88.2	87.5	88.6	87.9	91.0	100.0	85.0	92.8
11	94.9	92.9	99.3	99.6	97.9	95.5	93.5	97.7	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.9	98.8
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.8	98.5	98.3	98.1	97.7	97.5	97.4	97.1	97.0	96.2	95.6	95.2	94.6	94.4	94.7	100.0	94.4	97.9
13	95.4	95.0	95.4	96.1	96.2	96.1	95.9	96.0	94.8	90.6	86.5	79.8	81.6	84.0	87.9	93.9	96.1	96.5	95.2	93.4	93.6	94.8	93.2	92.3	96.5	79.8	92.5
14	89.1	87.1	87.6	88.5	90.3	89.8	88.1	85.7	84.8	84.4	85.1	84.0	83.8	85.5	87.6	86.6	85.3	83.5	80.1	75.9	76.4	75.1	74.6	75.3	90.3	74.6	83.9
15	77.5	72.6	68.3	65.4	66.5	65.9	69.0	63.1	60.4	57.7	60.1	61.4	66.8	76.4	81.2	80.7	83.8	91.7	93.3	97.8	99.5	100.0	100.0	100.0	100.0	57.7	77.5
16	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	97.1	92.8	90.7	90.0	90.6	96.1	99.0	99.8	99.9	99.8	100.0	90.0	98.1
17	100.0	96.1	88.0	86.5	84.3	80.8	78.7	81.7	87.7	85.7	89.7	90.5	90.5	90.1	89.0	88.6	90.4	94.6	96.2	97.4	98.7	99.9	100.0	100.0	100.0	78.7	91.0
18	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.5	98.6	97.9	94.9	92.1	95.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.1	99.1
19	100.0	100.0	100.0	100.0	100.0	99.8	99.4	98.5	98.1	97.4	97.9	96.3	97.3	97.0	97.1	97.4	98.4	96.5	95.4	94.0	93.8	94.5	96.3	96.4	100.0	93.8	97.6
20	99.4	99.0	99.0	98.7	98.7	97.9	98.6	98.7	98.6	98.7	98.0	97.1	95.9	97.4	98.3	98.2	98.0	96.6	96.6	95.3	93.8	94.8	95.1	94.1	99.4	93.8	97.4
21	90.1	92.6	91.0	91.4	91.3	91.3	91.8	92.1	93.1	93.6	91.1	89.4	80.8	83.4	84.3	85.2	85.6	85.5	88.5	88.4	88.7	88.7	87.2	84.7	93.6	80.8	88.7
22	88.1	89.3	84.5	83.2	82.5	83.6	82.4	81.6	80.3	77.3	74.9	75.6	71.6	69.0	69.7	71.7	78.4	91.0	96.8	97.2	97.0	96.0	96.0	95.9	97.2	69.0	83.9
23	96.2	96.2	96.4	96.4	96.7	97.0	97.6	95.9	95.7	96.5	95.6	95.4	96.7	94.2	94.0	93.0	93.7	94.9	95.9	95.6	95.2	96.0	94.4	93.0	97.6	93.0	95.5
24	91.9	92.1	92.9	91.6	91.2	91.3	90.6	90.8	91.6	92.6	93.1	92.2	87.3	85.4	82.2	78.6	75.8	76.6	83.5	85.1	82.4	81.7	83.0	83.4	93.1	75.8	87.0
25	82.3	84.2	89.5	94.8	95.5	96.0	95.6	96.5	96.4	97.0	97.9	98.9	98.0	94.6	89.1	86.8	84.5	84.4	82.2	84.8	81.7	84.3	86.0	83.9	98.9	81.7	90.2
26	86.7	88.8	87.6	87.8	87.7	87.8	89.4	88.6	81.7	79.9	79.4	80.6	77.6	79.0	79.9	80.9	82.1	91.2	95.2	95.6	95.9	96.2	96.8	97.7	97.7	77.6	87.3
27	97.2	97.5	97.9	96.5	95.3	94.7	92.9	92.4	91.1	90.3	90.0	89.2	88.6	88.6	88.5	88.1	87.9	87.8	87.5	87.0	86.9	86.6	86.3	86.0	97.9	86.0	90.6
28	85.7	85.6	85.6	85.6	85.2	85.4	85.3	85.1	84.9	85.4	86.1	86.8	87.3	88.5	89.2	88.5	88.1	87.1	86.5	85.5	85.4	85.0	84.5	84.7	89.2	84.5	86.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**76.2**	**72.6**	**68.3**	**65.4**	**66.5**	**65.9**	**69.0**	**63.1**	**60.4**	**49.0**	**41.3**	**43.6**	**59.8**	**67.2**	**68.4**	**61.9**	**59.9**	**63.4**	**68.2**	**72.6**	**73.6**	**72.2**	**71.9**	**73.0**		**41.3**	
Avg.	**90.2**	**90.6**	**90.3**	**89.8**	**89.6**	**89.1**	**88.8**	**88.5**	**88.4**	**87.6**	**87.0**	**86.9**	**86.9**	**87.0**	**86.9**	**86.6**	**86.6**	**87.9**	**89.0**	**89.1**	**89.2**	**88.9**	**88.9**	**90.0**			**88.5**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

March 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	84.6	83.9	84.3	84.4	84.3	84.6	85.1	85.4	86.2	87.8	91.4	94.5	94.2	92.1	91.5	91.7	91.6	92.4	92.5	93.0	91.3	90.6	91.7	92.6	94.5	83.9	89.2
2	92.3	92.0	91.4	91.4	92.1	93.1	94.3	96.0	96.6	97.2	97.6	97.8	98.1	98.2	98.3	98.4	98.5	98.6	98.6	98.8	98.9	98.9	99.2	99.2	99.2	91.4	96.5
3	99.2	99.3	99.3	99.2	99.2	99.2	99.0	98.5	98.5	98.8	98.9	99.0	98.9	98.5	98.6	97.2	97.6	97.9	97.7	97.5	97.2	97.1	97.2	97.3	99.3	97.1	98.4
4	97.3	97.3	97.3	97.3	97.7	98.2	98.1	98.2	98.6	98.6	99.0	98.9	99.1	98.9	98.8	98.8	98.8	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.1	97.3	98.5
5	99.1	99.1	99.0	99.0	99.0	98.9	98.7	98.5	98.5	98.5	98.7	99.3	99.7	99.9	100.0	100.0	99.7	98.9	98.8	98.5	98.4	98.4	98.4	98.4	100.0	98.4	99.0
6	98.3	97.7	97.0	96.9	96.6	96.2	95.5	95.1	95.2	96.7	97.7	98.4	99.9	99.8	100.0	100.0	99.4	97.2	95.7	95.4	95.5	95.7	95.4	94.9	100.0	94.9	97.1
7	94.7	94.7	94.6	94.6	94.4	94.4	94.4	94.4	94.2	93.9	93.4	94.0	94.1	93.3	93.3	93.6	92.7	91.1	90.4	90.0	89.2	88.5	87.6	87.4	94.7	87.4	92.6
8	87.4	88.1	88.6	88.7	88.9	89.1	89.1	88.9	88.6	88.0	88.5	89.4	89.6	91.0	91.4	91.2	90.9	90.4	89.7	88.9	87.9	86.7	86.5	85.9	91.4	85.9	88.9
9	85.6	85.5	85.1	85.0	84.6	84.4	84.0	83.8	84.0	84.6	85.4	86.6	87.6	87.9	88.6	89.5	89.5	89.2	88.5	87.8	87.3	87.6	86.8	87.0	89.5	83.8	86.5
10	86.2	86.5	86.3	86.6	87.0	87.2	88.5	88.2	89.1	90.1	91.4	93.1	93.5	94.3	95.1	95.3	95.3	95.0	94.5	94.2	94.2	94.6	94.8	95.0	95.3	86.2	91.5
11	95.1	95.6	96.2	96.2	96.0	96.2	96.2	96.1	96.5	96.6	96.6	96.7	96.9	97.1	96.9	97.1	97.0	97.1	97.1	97.3	97.2	97.3	97.4	97.4	97.4	95.1	96.7
12	97.5	97.5	97.6	97.8	97.8	98.2	98.4	98.6	98.6	98.7	98.3	98.0	97.9	97.7	98.4	99.0	99.3	99.3	99.4	99.2	98.9	98.4	98.0	97.7	99.4	97.5	98.3
13	98.1	98.2	98.5	98.5	98.5	98.2	97.8	97.9	98.2	97.3	97.4	95.4	92.8	90.1	85.7	83.2	81.2	81.8	79.2	84.6	85.2	85.5	84.2	82.4	98.5	79.2	91.2
14	82.8	82.4	81.2	80.0	80.2	81.2	81.5	78.5	73.2	73.3	74.5	74.1	73.0	73.6	73.7	70.9	71.2	70.2	67.2	69.3	77.8	78.7	81.7	80.9	82.8	67.2	76.3
15	74.1	79.4	83.5	87.2	87.0	88.1	89.0	85.9	78.1	77.4	77.2	75.1	74.7	72.4	69.5	69.0	70.9	71.9	74.0	76.6	84.1	85.9	85.7	86.7	89.0	69.0	79.3
16	85.7	76.4	78.7	80.7	75.0	68.2	70.0	74.9	63.2	54.4	50.1	51.5	51.9	52.5	55.8	56.8	57.7	57.0	57.4	58.9	59.9	52.9	42.3	40.3	85.7	40.3	61.3
17	38.3	36.8	39.0	40.8	39.3	41.9	44.5	52.5	57.1	63.2	69.0	71.3	77.8	94.0	93.4	95.3	96.1	96.7	97.9	97.7	97.5	97.5	97.4	96.7	97.9	36.8	72.2
18	93.3	94.8	90.2	89.1	90.5	95.9	97.2	97.5	98.4	97.7	97.7	98.0	98.0	97.7	97.1	91.7	84.6	84.2	91.1	92.2	95.9	97.2	96.4	96.2	98.4	84.2	94.3
19	98.3	98.1	97.5	97.9	96.9	96.1	97.0	97.1	98.5	97.3	97.2	97.4	97.8	98.1	98.8	98.6	98.7	98.7	98.6	98.9	98.7	98.9	98.7	98.7	98.9	96.1	98.0
20	98.7	98.6	98.6	98.4	98.3	98.5	98.6	98.6	98.7	98.9	99.0	99.1	99.1	99.0	98.5	98.5	96.9	96.1	95.2	95.6	94.9	94.7	94.4	94.0	99.1	94.0	97.5
21	94.1	94.1	94.2	93.9	93.7	93.6	93.6	93.4	93.5	93.7	93.8	93.7	93.4	92.5	91.7	91.0	90.4	89.2	87.3	86.6	88.9	89.1	89.3	90.6	94.2	86.6	91.9
22	90.2	90.6	90.1	91.0	90.9	91.7	91.9	92.2	91.9	92.0	91.5	91.1	90.1	89.5	89.4	89.2	88.0	87.7	86.8	87.6	88.8	88.1	87.5	87.9	92.2	86.8	89.8
23	88.7	89.1	87.1	84.9	85.8	87.0	87.5	82.5	78.1	80.9	83.5	81.6	79.4	81.1	81.0	83.4	84.1	84.1	87.1	88.5	89.6	91.1	87.1	86.6	91.1	78.1	85.0
24	89.2	90.3	90.9	93.3	91.2	92.0	94.0	93.0	92.7	93.2	92.4	88.3	86.2	84.2	83.9	83.7	83.6	83.0	86.0	88.6	90.2	92.7	92.7	92.8	94.0	83.0	89.5
25	92.1	90.9	91.1	88.6	89.4	90.1	90.8	91.5	91.7	90.4	88.5	86.2	83.8	81.7	80.8	80.0	79.4	79.2	79.3	80.5	82.9	84.1	84.6	84.6	92.1	79.2	85.9
26	85.1	86.4	87.6	88.4	88.6	88.6	89.1	89.4	89.1	88.1	87.3	85.8	84.8	82.4	80.3	79.9	79.0	77.8	77.5	77.5	79.4	79.2	77.4	77.5	89.4	77.4	83.6
27	76.9	76.1	75.4	75.6	77.0	77.9	76.3	71.5	69.6	65.0	64.6	65.4	66.2	65.8	65.2	64.2	64.8	64.8	64.0	67.5	75.8	79.5	81.2	80.7	81.2	64.0	71.3
28	80.3	77.7	76.2	75.7	73.4	73.9	74.4	70.9	70.0	74.4	75.6	73.7	72.4	72.9	75.2	76.3	75.8	77.8	78.4	80.2	81.3	74.5	70.3	68.2	81.3	68.2	75.0
29	67.7	71.3	73.2	71.1	74.6	74.3	74.2	66.6	67.6	68.7	63.1	57.4	56.4	62.3	68.9	68.2	67.9	67.8	70.3	72.3	75.3	79.3	80.0	86.3	86.3	56.4	70.2
30	86.2	82.5	82.1	80.6	82.2	85.4	86.5	91.4	97.7	99.5	99.4	98.9	98.1	96.9	97.3	98.5	99.1	99.2	99.4	99.6	99.8	100.0	100.0	100.0	100.0	80.6	94.2
31	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.3	98.2	97.8	97.2	95.8	96.7	96.2	96.2	97.0	97.9	97.9	98.5	99.3	100.0	95.8	98.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.4**	**99.3**	**99.9**	**99.9**	**100.0**	**100.0**	**99.7**	**99.3**	**99.4**	**99.6**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**38.3**	**36.8**	**39.0**	**40.8**	**39.3**	**41.9**	**44.5**	**52.5**	**57.1**	**54.4**	**50.1**	**51.5**	**51.9**	**52.5**	**55.8**	**56.8**	**57.7**	**57.0**	**57.4**	**58.9**	**59.9**	**52.9**	**42.3**	**40.3**		**36.8**	
Avg.	**88.3**	**88.1**	**88.1**	**88.2**	**88.1**	**88.5**	**88.9**	**88.6**	**88.1**	**88.2**	**88.3**	**88.0**	**87.9**	**88.2**	**88.2**	**87.9**	**87.6**	**87.4**	**87.6**	**88.4**	**89.6**	**89.7**	**89.1**	**89.1**			**88.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	98.8	97.6	97.3	97.2	97.4	97.2	97.9	98.3	97.6	93.6	87.4	80.3	78.9	78.9	85.0	83.3	78.9	87.9	89.3	86.7	93.3	94.7	97.3	97.5	98.8	78.9	91.3
2	97.2	98.2	97.9	98.2	96.8	96.8	96.4	96.4	96.6	95.7	96.1	96.7	96.8	96.9	96.9	96.7	96.1	92.0	90.5	83.7	82.3	83.0	77.3	76.0	98.2	76.0	93.0
3	70.9	80.8	88.8	92.9	97.2	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	70.9	97.1
4	100.0	100.0	100.0	100.0	100.0	99.1	96.1	92.8	91.9	88.5	88.3	89.3	91.0	92.1	90.6	91.5	93.2	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.3	95.9
5	100.0	100.0	99.4	97.5	98.1	98.1	97.5	96.8	94.7	89.8	88.3	85.9	82.4	79.2	71.9	66.3	65.3	65.5	66.4	64.2	61.8	66.8	67.9	72.5	100.0	61.8	82.3
6	76.0	76.9	79.3	81.6	83.0	83.6	84.0	82.8	80.7	79.8	76.9	74.2	71.5	69.4	68.4	69.0	66.7	67.1	64.4	64.0	63.0	64.4	63.6	60.2	84.0	60.2	72.9
7	62.2	63.1	62.7	64.8	70.2	73.8	74.3	69.3	68.7	79.9	80.2	80.2	80.6	82.4	82.9	85.5	87.1	85.5	86.0	86.0	85.6	84.5	84.3	89.4	89.4	62.2	77.9
8	90.0	89.8	87.1	84.1	93.0	100.0	100.0	100.0	100.0	99.9	98.6	100.0	100.0	99.4	97.9	98.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.1	97.4
9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	98.5	97.5	97.9	97.4	97.8	100.0	99.9	99.3	100.0	100.0	97.4	99.5
10	99.9	100.0	100.0	100.0	100.0	99.8	99.2	98.3	97.7	97.2	96.4	96.4	94.1	89.7	83.6	91.2	91.6	90.1	90.1	90.1	91.1	92.6	84.2	88.1	100.0	83.6	94.2
11	93.5	94.1	96.4	96.2	96.2	96.3	96.4	95.1	92.9	89.9	88.2	87.4	87.4	87.1	90.3	96.8	98.3	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.1	95.1
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.8	99.5	99.7	99.6	98.7	98.4	98.2	100.0	98.2	99.7
13	98.9	98.5	98.9	98.7	98.6	99.2	99.4	98.0	97.8	97.8	97.7	97.8	97.6	97.6	97.8	97.5	96.7	96.4	95.6	95.1	94.6	94.4	93.8	94.4	99.4	93.8	97.2
14	94.0	93.6	93.5	93.2	93.2	92.8	93.2	92.8	93.1	92.9	93.1	94.4	93.5	94.3	94.7	94.5	94.5	94.4	93.7	92.9	92.2	91.1	90.9	91.0	94.7	90.9	93.2
15	91.3	91.0	91.4	91.1	90.1	90.2	90.9	90.5	89.8	90.5	90.2	90.3	91.5	90.6	91.0	91.0	90.4	91.1	90.4	89.8	88.8	90.0	91.1	89.6	91.5	88.8	90.5
16	84.7	84.9	87.5	86.4	83.3	88.6	91.0	93.4	94.5	94.8	95.4	95.9	95.9	96.7	96.9	96.3	96.0	96.9	96.9	93.1	92.4	93.7	95.4	96.4	96.9	83.3	92.8
17	94.9	93.7	94.3	94.9	95.6	95.9	94.7	94.2	96.3	94.9	96.1	95.8	97.1	94.9	95.4	91.0	86.0	81.3	84.1	81.6	76.4	90.6	91.1	86.9	97.1	76.4	91.6
18	90.9	93.5	95.9	94.6	96.5	96.1	89.7	85.3	87.8	85.1	82.3	83.3	86.8	86.0	80.8	78.5	81.4	79.9	77.0	67.4	63.4	80.1	79.9	80.0	96.5	63.4	84.3
19	89.2	94.9	97.0	97.6	97.1	97.1	99.6	98.9	97.7	97.3	97.4	97.6	97.6	97.5	97.7	96.8	96.9	96.4	95.6	95.8	95.4	95.6	94.5	94.7	99.6	89.2	96.5
20	94.1	92.9	92.3	92.6	93.4	92.5	89.8	89.6	90.3	92.8	95.8	95.8	93.7	91.8	85.6	87.6	93.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.6	94.3
21	100.0	100.0	100.0	96.2	89.8	86.4	84.7	85.4	77.9	83.4	87.1	93.5	95.2	99.3	99.0	92.3	96.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.9	94.4
22	100.0	100.0	100.0	100.0	100.0	100.0	97.0	93.3	92.9	93.8	93.2	97.4	94.1	92.6	89.8	85.8	94.9	93.6	91.6	92.3	95.3	95.8	98.6	100.0	100.0	85.8	95.5
23	100.0	100.0	100.0	98.7	95.3	93.5	93.7	95.6	95.5	93.0	90.9	90.4	90.6	90.6	89.0	90.4	89.4	87.3	87.6	90.6	92.3	91.0	88.8	89.3	100.0	87.3	92.6
24	88.7	89.7	92.8	93.3	90.8	91.0	92.0	94.3	95.0	95.8	95.6	95.8	95.9	94.8	93.0	91.9	90.2	94.2	96.1	95.4	97.3	97.6	97.4	97.1	97.6	88.7	94.0
25	96.9	96.7	96.6	96.2	95.7	95.5	96.3	96.2	96.1	95.6	93.7	91.0	89.6	96.0	99.2	93.1	89.7	97.0	98.7	98.3	96.4	96.8	95.7	95.3	99.2	89.6	95.5
26	94.0	94.4	98.1	98.3	97.0	88.6	86.6	82.7	81.0	77.2	73.1	69.1	71.4	69.1	66.6	65.9	65.3	65.3	66.1	57.8	57.3	55.0	53.0	53.4	98.3	53.0	74.4
27	53.0	52.1	49.8	54.0	53.0	51.8	52.2	55.4	55.9	55.9	63.1	65.0	64.1	64.5	68.2	66.0	65.4	66.9	67.3	69.0	72.6	72.8	78.0	79.1	79.1	49.8	62.3
28	78.5	82.8	86.2	86.8	87.7	88.5	84.9	85.5	84.1	82.2	79.8	82.3	82.4	82.1	79.7	87.9	85.9	87.5	87.6	87.3	84.8	88.9	94.9	96.8	96.8	78.5	85.6
29	95.6	92.9	92.7	93.1	93.8	90.2	86.8	88.8	84.0	81.7	78.1	73.6	71.0	69.0	64.3	64.2	64.2	66.2	71.2	74.2	74.1	77.7	78.6	76.9	95.6	64.2	79.3
30	74.1	71.6	70.1	69.7	65.9	64.8	62.1	72.2	85.3	93.0	99.5	97.6	94.3	91.7	89.5	87.9	85.6	84.3	83.3	82.9	84.0	82.2	82.3	84.9	99.5	62.1	81.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**53.0**	**52.1**	**49.8**	**54.0**	**53.0**	**51.8**	**52.2**	**55.4**	**55.9**	**55.9**	**63.1**	**65.0**	**64.1**	**64.5**	**64.3**	**64.2**	**64.2**	**65.3**	**64.4**	**57.8**	**57.3**	**55.0**	**53.0**	**53.4**		**49.8**	
Avg.	**90.2**	**90.8**	**91.5**	**91.6**	**91.6**	**91.6**	**90.9**	**90.7**	**90.5**	**90.4**	**90.1**	**89.9**	**89.5**	**89.1**	**88.2**	**87.8**	**87.9**	**88.7**	**88.9**	**87.9**	**87.8**	**89.3**	**89.2**	**89.6**			**89.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	90.4	90.5	88.8	84.7	83.9	82.1	78.4	78.6	76.0	72.5	68.7	65.9	62.3	62.0	58.5	56.4	56.3	56.3	60.9	62.5	70.2	72.9	78.0	78.8	90.5	56.3	72.3
2	78.6	77.9	76.3	77.0	78.3	78.7	77.3	75.9	75.6	72.7	77.8	81.8	80.0	79.5	78.7	78.3	80.8	80.7	79.9	82.2	81.3	82.3	83.9	92.5	92.5	72.7	79.5
3	98.6	99.8	96.8	94.1	89.3	86.1	82.9	76.6	75.4	72.6	70.0	60.9	56.2	55.3	55.0	54.7	53.0	53.2	49.3	65.9	77.5	84.3	88.4	93.8	99.8	49.3	74.6
4	93.6	96.9	97.5	99.3	100.0	100.0	100.0	100.0	98.1	98.8	100.0	100.0	100.0	100.0	96.9	97.2	96.7	96.2	94.5	96.1	97.4	99.9	99.1	100.0	100.0	93.6	98.3
5	99.7	99.4	100.0	100.0	98.4	94.1	91.9	90.5	87.2	88.3	88.0	85.5	87.9	90.5	87.2	89.4	89.0	87.1	86.3	90.2	90.5	95.7	94.4	97.0	100.0	85.5	92.0
6	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.8	99.2	98.9	98.3	100.0	99.7	97.8	99.5	97.0	98.6	97.5	96.9	97.8	97.8	100.0	96.9	99.1
7	97.6	97.7	98.1	98.8	99.0	98.6	97.5	95.4	93.0	92.1	91.9	92.8	95.1	94.9	95.3	94.1	91.9	88.8	83.9	83.2	83.0	83.0	81.0	84.3	99.0	81.0	92.1
8	86.0	87.2	89.6	90.6	92.0	90.3	85.3	83.2	78.9	75.3	71.5	69.7	81.7	96.2	100.0	100.0	99.7	91.3	83.9	85.5	86.4	81.9	79.4	79.9	100.0	69.7	86.1
9	80.5	79.4	76.6	76.6	76.1	76.1	76.1	75.2	73.6	72.1	71.5	73.4	77.6	76.3	72.8	73.5	70.6	74.2	74.2	78.7	81.6	70.6	67.8	67.0	81.6	67.0	74.7
10	69.1	70.0	71.1	71.7	75.1	74.9	75.1	77.6	78.6	74.5	73.7	75.7	68.2	65.0	68.6	84.1	91.6	86.6	87.0	86.2	82.0	83.4	83.8	80.6	91.6	65.0	77.3
11	81.3	89.6	96.3	97.9	98.0	95.7	89.1	87.9	87.1	87.5	85.5	83.2	80.6	80.5	76.6	76.3	77.2	75.3	80.6	79.3	82.0	79.5	78.6	76.9	98.0	75.3	84.3
12	78.9	78.6	76.9	78.9	80.4	81.0	81.6	82.6	77.6	73.0	70.3	68.4	66.6	65.1	64.3	60.7	56.8	59.2	58.8	65.5	67.5	70.9	72.5	71.2	82.6	56.8	71.1
13	72.9	75.7	78.8	77.5	78.0	76.9	73.1	73.6	70.4	66.7	72.7	72.6	67.7	64.6	67.7	71.2	68.3	69.7	66.2	68.1	68.9	66.8	69.9	71.4	78.8	64.6	71.2
14	69.4	73.5	74.0	73.9	74.3	68.6	69.6	68.7	70.4	70.1	65.7	64.0	66.2	66.8	64.4	70.6	72.1	74.7	76.1	81.8	87.2	86.6	91.0	95.6	95.6	64.0	74.0
15	95.2	95.4	96.4	97.6	97.3	98.2	99.9	98.6	94.7	90.3	86.3	80.7	76.9	70.6	66.9	62.6	63.5	65.4	64.9	61.9	67.8	68.1	71.8	75.1	99.9	61.9	81.1
16	75.9	76.5	78.2	81.7	87.8	93.3	95.5	92.9	91.0	87.5	85.2	80.7	73.9	67.0	60.9	58.3	59.1	61.1	55.8	59.2	63.2	66.0	68.1	70.9	95.5	55.8	74.6
17	73.2	83.6	86.5	90.4	89.4	90.6	93.4	88.5	79.5	75.7	66.3	61.9	62.9	62.6	61.8	65.0	69.0	71.8	75.3	82.5	86.3	86.2	86.5	84.4	93.4	61.8	78.1
18	85.8	86.1	86.3	87.9	91.5	95.6	97.7	99.1	99.7	99.8	99.9	99.5	100.0	97.3	90.2	77.1	75.1	76.0	78.4	79.1	84.6	89.0	90.0	88.0	100.0	75.1	89.7
19	88.9	90.6	89.6	92.1	92.6	92.5	90.6	89.8	86.8	85.1	89.5	83.5	80.6	73.5	63.6	68.7	96.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	63.6	89.7
20	100.0	100.0	99.5	98.4	99.4	98.9	98.3	99.0	97.4	92.6	89.8	84.8	80.0	78.1	76.7	76.4	78.2	83.5	82.9	83.6	88.5	98.2	100.0	100.0	100.0	76.4	91.0
21	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	93.2	88.9	86.6	81.8	80.2	79.4	83.4	81.0	78.4	79.2	79.6	81.7	83.3	100.0	78.4	90.6
22	86.2	88.0	89.4	92.0	93.5	93.2	91.3	86.0	82.2	78.4	75.8	73.4	69.7	64.0	59.5	55.5	54.2	52.4	52.6	55.9	62.5	65.2	70.5	74.2	93.5	52.4	73.6
23	74.6	79.3	84.8	84.6	84.2	77.0	76.5	72.7	68.9	61.6	54.5	48.8	40.6	34.5	36.2	36.6	34.8	39.9	43.5	45.0	51.8	54.9	56.0	58.2	84.8	34.5	58.3
24	59.7	61.1	60.3	61.9	63.0	59.3	55.8	59.0	58.5	51.1	44.0	43.1	40.4	37.1	34.3	33.9	29.2	30.0	32.6	42.6	42.1	42.1	42.0	44.3	63.0	29.2	47.0
25	45.8	49.4	52.9	53.0	56.7	55.2	55.9	56.3	50.5	47.3	44.3	41.2	36.5	33.9	31.4	34.0	35.0	38.3	40.7	41.1	37.0	39.8	41.2	40.2	56.7	31.4	44.1
26	42.7	45.5	50.5	52.9	58.3	57.7	61.3	58.6	54.2	46.8	41.8	33.2	30.4	30.8	29.8	28.8	26.0	20.2	18.5	22.6	27.1	32.3	33.0	41.8	61.3	18.5	39.4
27	52.7	54.8	58.3	66.1	64.3	66.8	65.3	66.6	64.5	59.2	57.1	53.2	48.6	49.9	47.6	42.6	39.3	36.9	39.5	45.0	44.6	52.2	58.8	59.4	66.8	36.9	53.9
28	62.4	64.2	61.5	60.5	57.6	55.9	53.6	41.3	41.2	41.3	39.5	37.4	35.6	33.6	32.8	33.3	33.1	32.9	33.0	37.9	42.0	41.3	38.1	34.7	64.2	32.8	43.5
29	33.0	34.2	37.6	40.0	39.4	40.7	39.4	39.0	36.7	31.9	28.9	25.5	26.1	26.3	29.2	32.0	31.9	33.1	36.7	42.6	49.6	55.5	59.7	61.9	61.9	25.5	38.0
30	66.1	72.1	75.7	77.9	79.6	76.9	73.0	61.5	54.7	55.2	54.2	50.9	42.4	42.0	47.3	52.9	57.2	62.5	69.4	75.9	79.1	83.7	84.8	83.0	84.8	42.0	65.7
31	81.9	83.4	85.3	87.9	90.2	93.3	96.4	97.4	98.4	99.1	99.3	99.3	99.4	99.7	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	81.9	96.3
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**33.0**	**34.2**	**37.6**	**40.0**	**39.4**	**40.7**	**39.4**	**39.0**	**36.7**	**31.9**	**28.9**	**25.5**	**26.1**	**26.3**	**29.2**	**28.8**	26.0	20.2	**18.5**	**22.6**	**27.1**	**32.3**	**33.0**	**34.7**		**18.5**	
Avg.	**78.1**	**80.0**	**81.1**	**82.1**	**82.8**	**82.2**	**81.3**	**79.7**	**77.4**	**74.8**	**73.0**	**70.4**	**68.4**	**67.2**	**65.7**	**65.9**	**66.5**	**67.1**	**67.2**	**70.2**	**72.8**	**74.5**	**75.7**	**77.0**			**74.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	94.6	88.9	81.0	73.7	67.3	63.0	60.5	54.8	55.4	64.8	69.7	75.3	76.3	71.6	100.0	54.8	83.1
2	61.5	57.4	60.5	64.3	64.1	59.9	62.5	54.8	50.7	48.6	43.6	39.9	40.1	37.6	35.3	35.0	33.6	37.7	41.5	48.5	48.8	57.4	67.0	74.1	74.1	33.6	51.0
3	81.7	84.1	88.7	91.2	91.8	91.5	85.3	83.6	77.3	73.8	64.0	56.3	52.1	50.3	50.6	47.9	41.8	36.1	34.6	35.0	35.6	40.3	45.0	50.5	91.8	34.6	62.0
4	53.2	60.0	59.8	61.0	62.7	60.1	52.7	46.8	41.8	38.0	33.7	31.0	29.8	29.0	27.8	27.5	27.1	26.8	27.6	28.8	33.9	42.6	52.7	58.6	62.7	26.8	42.2
5	58.9	58.6	57.0	61.1	66.3	65.5	58.7	54.0	49.5	43.2	39.3	36.7	34.3	30.2	28.3	27.3	24.1	21.1	22.6	24.6	28.0	35.4	38.8	37.0	66.3	21.1	41.7
6	36.5	39.9	41.9	44.4	39.6	42.7	47.1	49.4	51.0	47.2	40.0	33.0	31.0	30.4	28.8	28.1	29.5	34.5	41.6	46.0	50.5	57.0	63.5	69.9	69.9	28.1	42.6
7	73.8	71.0	68.2	70.5	75.3	80.4	82.0	78.0	72.1	73.5	75.5	76.1	78.6	75.3	78.9	92.2	95.9	97.6	97.2	97.0	97.0	97.0	97.7	97.9	97.9	68.2	83.3
8	97.0	94.6	93.1	94.6	95.6	96.1	95.9	94.5	92.6	88.5	87.5	84.2	78.5	74.0	72.9	73.6	80.1	72.8	71.0	74.9	77.1	78.2	74.0	73.0	97.0	71.0	83.9
9	71.8	73.8	74.6	76.0	77.8	77.9	83.5	84.5	77.2	72.7	67.6	65.3	59.9	63.1	63.8	65.9	71.1	75.3	86.4	87.7	92.1	92.9	94.8	90.3	94.8	59.9	76.9
10	89.7	89.1	91.4	94.8	93.8	92.2	92.9	89.5	83.4	77.0	75.2	73.2	72.2	69.1	67.9	66.4	71.2	72.4	77.1	83.0	94.8	92.3	89.2	89.9	94.8	66.4	82.8
11	94.0	93.2	92.3	93.0	92.3	89.9	91.3	93.4	92.8	92.2	91.0	89.2	88.9	86.5	84.5	84.1	82.4	82.2	88.7	92.2	93.8	95.2	94.6	96.0	96.0	82.2	90.6
12	94.0	91.1	91.6	90.0	91.3	93.6	91.2	91.7	90.4	90.6	93.3	95.1	94.4	94.0	94.7	93.7	93.4	95.7	98.5	98.9	98.8	99.0	99.1	99.1	99.1	90.0	94.3
13	99.1	99.1	99.1	99.1	99.2	99.3	99.7	97.3	90.2	88.6	87.1	82.0	77.6	75.5	74.1	70.9	69.6	73.0	75.9	77.7	77.8	81.2	80.5	81.2	99.7	69.6	85.6
14	84.5	84.5	83.2	85.9	88.0	87.7	86.3	85.1	84.6	81.5	80.0	71.5	70.9	69.6	66.5	62.0	62.9	64.8	72.6	75.1	80.1	83.6	83.5	91.0	91.0	62.0	78.6
15	91.9	90.9	95.3	97.3	98.0	97.9	95.4	90.1	87.6	78.0	71.2	61.5	54.8	46.0	47.2	83.6	92.2	96.6	90.9	96.3	98.7	99.1	99.8	100.0	100.0	46.0	85.8
16	100.0	100.0	100.0	100.0	99.0	96.6	98.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	98.1	96.9	97.0	97.3	100.0	96.6	99.3
17	97.5	96.5	95.3	93.6	89.9	86.9	87.2	92.6	96.5	97.7	90.3	81.8	78.9	81.9	94.6	90.1	83.4	85.5	87.8	92.8	96.2	98.2	97.8	98.2	98.2	78.9	91.3
18	98.6	98.8	98.8	98.8	96.2	92.5	94.9	94.6	88.3	84.4	85.9	79.5	84.6	86.8	79.2	70.4	70.9	75.1	77.5	79.7	82.8	83.3	83.5	86.7	98.8	70.4	86.3
19	88.6	84.0	83.7	88.5	89.7	86.2	81.8	78.8	74.4	70.0	62.3	61.7	54.9	52.8	51.6	55.4	52.8	61.7	60.3	65.2	86.1	96.0	97.8	97.0	97.8	51.6	74.2
20	96.6	94.4	88.6	90.6	85.3	81.7	80.5	76.1	72.5	70.6	68.8	60.9	51.6	58.4	78.5	96.0	94.9	92.4	88.6	79.2	78.2	81.2	83.1	86.3	96.6	51.6	80.6
21	86.2	88.4	91.0	91.3	83.5	78.6	79.3	70.9	66.1	56.5	57.2	56.9	51.1	50.9	54.5	53.8	58.7	55.3	48.9	53.0	48.4	54.4	61.0	64.3	91.3	48.4	65.0
22	62.6	63.0	65.8	68.3	71.4	74.7	72.4	74.3	73.1	78.0	80.3	75.7	77.7	89.9	96.4	97.9	97.5	96.8	95.9	96.5	96.4	96.9	95.6	95.8	97.9	62.6	83.0
23	95.8	92.8	89.7	89.3	89.9	90.0	91.7	90.5	88.6	84.1	81.3	80.2	73.4	70.7	67.5	66.3	66.3	68.0	68.6	73.9	82.3	84.8	87.6	92.1	95.8	66.3	81.9
24	95.7	95.2	93.5	91.1	88.6	90.5	83.9	79.4	74.6	72.7	68.0	63.6	57.3	53.4	50.5	50.6	56.2	63.9	70.8	65.4	67.0	69.0	64.3	67.7	95.7	50.5	72.2
25	67.8	72.6	87.5	93.7	87.4	83.4	85.6	79.1	67.3	60.9	57.1	49.8	48.3	48.7	51.4	53.1	51.1	53.6	59.3	66.8	73.4	75.3	76.2	78.3	93.7	48.3	67.8
26	81.1	84.3	88.2	91.4	93.7	93.7	95.6	90.1	79.4	57.8	52.5	51.4	48.4	51.0	53.1	56.2	55.1	44.7	41.7	61.6	77.0	82.9	86.0	87.7	95.6	41.7	71.0
27	89.7	85.1	78.1	75.2	76.6	79.3	82.1	78.7	68.3	63.9	58.5	58.1	55.6	55.7	54.1	51.2	50.5	50.1	47.0	52.8	56.0	65.3	70.4	75.9	89.7	47.0	65.8
28	80.3	85.7	87.8	91.2	87.3	85.6	85.5	89.3	94.3	94.3	97.7	86.5	83.3	82.4	80.1	83.3	82.4	84.3	84.1	82.3	83.1	86.2	87.5	87.8	97.7	80.1	86.3
29	90.5	93.8	97.0	97.8	98.3	98.9	99.1	99.1	95.5	89.6	90.2	91.0	86.9	76.7	71.6	62.2	64.8	69.8	76.5	82.0	89.4	95.5	97.6	98.2	99.1	62.2	88.0
30	98.6	98.8	98.9	98.9	99.0	99.1	99.2	99.1	99.1	99.0	98.6	96.9	94.7	94.4	91.6	92.6	91.2	88.7	87.6	86.9	87.2	90.3	93.2	93.4	99.2	86.9	94.9
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**98.8**	**99.1**	**99.8**	**100.0**	**100.0**		
Min.	**36.5**	**39.9**	**41.9**	**44.4**	**39.6**	**42.7**	**47.1**	**46.8**	**41.8**	**38.0**	**33.7**	**31.0**	**29.8**	**29.0**	**27.8**	**27.3**	**24.1**	**21.1**	**22.6**	**24.6**	**28.0**	**35.4**	**38.8**	**37.0**		**21.1**	
Avg.	**83.9**	**84.0**	**84.7**	**86.1**	**85.7**	**85.1**	**84.7**	**82.8**	**79.3**	**75.7**	**73.1**	**69.3**	**66.4**	**65.3**	**65.4**	**66.7**	**67.0**	**67.7**	**69.2**	**72.3**	**75.9**	**79.4**	**81.2**	**82.9**			**76.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	94.5	95.6	96.8	97.8	98.3	99.0	99.2	99.3	99.4	99.5	96.9	86.7	79.3	70.3	61.0	56.9	51.4	51.5	58.1	60.4	65.6	67.1	72.4	71.6	99.5	51.4	80.4
2	77.3	75.8	79.3	86.3	88.4	87.0	87.6	85.5	80.7	72.8	66.5	61.3	58.9	57.1	54.3	53.8	54.3	53.4	52.7	54.5	58.1	71.5	77.7	82.4	88.4	52.7	69.9
3	83.8	83.4	86.3	91.2	94.2	95.1	93.9	88.8	86.8	75.6	70.0	65.1	61.0	57.0	52.3	49.0	55.8	58.5	57.1	57.2	56.6	69.2	80.3	81.2	95.1	49.0	72.9
4	83.6	83.2	84.9	87.5	90.8	91.1	82.4	78.4	71.8	69.5	63.9	60.4	49.6	47.1	45.0	47.0	48.1	50.0	49.7	52.3	65.5	72.4	76.0	76.6	91.1	45.0	67.8
5	81.0	83.8	86.7	88.3	92.2	96.8	98.5	99.0	99.1	97.7	87.6	75.3	66.2	63.9	56.5	56.4	72.3	84.5	77.4	84.6	90.2	86.7	88.5	80.4	99.1	56.4	83.1
6	81.1	83.2	81.2	80.9	84.3	85.7	86.1	91.1	93.0	90.7	87.7	81.4	80.7	80.2	77.2	73.9	72.2	76.6	77.6	78.8	86.1	92.5	94.4	96.3	96.3	72.2	83.9
7	96.7	97.5	97.9	98.2	98.4	98.7	99.0	99.2	99.2	99.3	99.4	99.4	99.4	99.0	98.7	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.5	99.5	99.5	96.7	98.9
8	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.6	99.6	98.1	94.3	92.4	92.6	90.2	88.0	86.9	94.4	95.8	96.6	99.7	86.9	96.8
9	97.4	97.7	97.9	98.3	98.9	99.2	99.4	99.4	97.5	86.6	82.0	74.6	66.1	63.7	64.9	61.7	62.1	65.5	71.1	75.5	76.6	77.5	79.1	84.3	99.4	61.7	82.4
10	86.1	88.6	91.2	92.9	91.8	93.1	93.3	91.1	86.6	81.1	81.2	76.2	91.8	93.1	93.3	91.1	86.6	81.1	81.2	76.2	75.2	73.5	72.3	70.9	93.3	70.9	85.0
11	69.3	70.2	71.9	74.7	82.8	88.8	93.9	93.9	95.0		95.8	96.0	94.5	93.4	92.4	89.6	87.6	85.5	78.4	72.5	69.4	67.1	66.1	65.9	96.0	65.9	82.4
12	67.3	70.7	74.6	72.6	71.0	75.4	79.7	78.3	81.2	86.7	83.4	81.0	81.4	81.9	79.0	78.2	69.9	67.4	66.7	65.9	65.1	63.1	60.8	56.8	86.7	56.8	73.3
13	52.8	49.7	52.7	56.1	59.5	68.5	75.2	75.4	72.2	75.9	75.4	74.7	72.0	70.5	74.1	90.2	98.1	98.4	98.9	99.0	98.6	98.4	96.4	95.6	99.0	49.7	78.3
14	98.1	98.9	99.1	99.2	99.3	99.3	99.3	99.1	99.1	99.0	99.1	99.1	99.2	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.6	98.5	97.8	99.6	97.8	99.1
15	98.1	97.8	97.7	98.2	98.7	98.7	98.8	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.3	99.4	99.4	99.5	99.5	98.8	96.8	96.5	94.8	91.0	99.5	91.0	98.2
16	84.5	79.2	78.0	80.1	85.4	88.6	88.7	91.1	91.0	96.3	98.2	98.4	96.4	92.9	90.3	88.6	86.8	86.6	85.0	82.6	79.5	77.7	79.7	73.2	98.4	73.2	86.6
17	70.8	70.7	72.3	73.2	77.4	79.6	80.3	80.3	81.0	83.1	85.4	87.8	93.3	96.8	94.3	92.6	91.4	89.6	86.4	82.9	74.5	73.9	70.9	74.4	96.8	70.7	81.8
18	78.7	81.3	89.2	90.5	91.0	91.9	91.3	89.5	90.3	87.1	88.7	90.8	93.2	95.1	93.2	91.2	90.3	88.4	86.5	81.1	79.2	78.5	76.7	81.5	95.1	76.7	87.3
19	83.5	82.3	81.9	79.5	83.7	85.3	85.2	85.4	87.1	85.6	86.2	87.5	89.1	90.6	89.1	83.6	79.0	78.2	73.6	59.9	55.3	55.6	54.0	55.6	90.6	54.0	78.2
20	57.0	60.6	59.6	58.3	62.3	66.9	67.8	66.0	71.6	72.6	74.1	80.4	76.6	76.5	76.4	73.9	62.6	52.0	49.5	48.9	46.3	46.4	44.4	47.0	80.4	44.4	62.4
21	49.1	47.0	47.2	58.8	67.8	74.9	82.8	90.2	95.2	97.1	97.3	93.3	89.4	90.3	83.4	82.6	83.8	74.7	65.6	62.9	60.4	78.9	79.9	72.4	97.3	47.0	76.0
22	70.4	76.4	79.8	83.9	85.8	83.5	83.4	83.7	82.0	78.8	78.5	80.0	80.0	83.9	82.7	84.0	80.7	74.3	73.2	72.8	77.3	77.3	80.3	92.5	92.5	70.4	80.2
23	96.5	98.5	99.0	99.0	95.5	92.8	91.8	90.2	87.8	86.0	85.6	90.9	92.7	93.8	96.5	96.2	94.9	92.6	91.6	87.1	83.2	87.5	82.7	86.6	99.0	82.7	91.6
24	88.9	88.8	91.5	95.8	97.5	98.5	99.0	99.1	99.1	99.1	99.0	98.7	98.3	96.6	96.6	94.8	94.1	93.0	93.9	96.0	92.9	93.7	93.1	93.2	99.1	88.8	95.5
25	93.8	98.1	99.0	99.2	99.3	99.4	99.4	99.5	99.5	99.4	98.5	96.3	95.2	97.3	97.9	97.5	98.7	98.6	95.9	93.9	90.5	85.1	81.7	78.5	99.5	78.5	95.5
26	75.2	78.0	78.2	82.0	84.8	87.3	90.8	92.0	91.2	88.4	87.0	84.7	83.7	82.4	84.7	89.1	93.7	94.4	97.9	95.0	90.0	84.4	84.0	84.5	97.9	75.2	86.8
27	83.5	82.2	86.0	87.2	87.3	91.8	94.9	96.0	96.0	96.7	97.8	97.8	92.9	93.7	94.4	94.4	94.1	89.7	85.4	83.7	82.6	79.9	76.4	73.3	97.8	73.3	89.1
28	71.9	70.7	70.4	72.1	76.1	78.4	84.5	87.8	90.7	89.5	90.4	90.3	93.7	94.3	89.4	89.5	87.2	80.5	75.2	70.7	72.3	74.6	77.1	81.6	94.3	70.4	81.6
29	89.2	94.2	96.7	94.3	96.9	97.8	98.6	98.7	98.7	98.8	98.9	98.7	97.8	98.6	98.7	98.7	98.8	98.7	98.2	94.7	89.2	81.4	71.3	67.2	98.9	67.2	93.9
30	74.7	81.8	82.5	86.4	93.1	96.3	97.7	97.0	96.7	96.6	96.3	96.5	96.9	97.6	98.1	98.8	99.1	99.2	99.2	99.0	98.0	98.1	97.4	91.9	99.2	74.7	94.5
31	86.8	82.5	74.5	80.4	73.7	80.4	87.1	91.2	96.3	97.8	98.2	98.6	97.1	96.9	97.4	97.6	96.3	93.8	91.2	89.9	87.3	88.1	83.0	85.2	98.6	73.7	89.6
Max.	**99.5**	**99.5**	**99.5**	**99.5**	**99.5**	**99.5**	**99.6**	**99.6**	**99.6**	**99.7**	**99.7**	**99.7**	**99.6**	**99.6**	**99.3**	**99.4**	**99.4**	**99.5**	**99.5**	**99.6**	**99.6**	**99.6**	**99.5**	**99.5**	**99.7**		
Min.	**49.1**	**47.0**	**47.2**	**56.1**	**59.5**	**66.9**	**67.8**	**66.0**	**71.6**	**69.5**	**63.9**	**60.4**	**49.6**	**47.1**	**45.0**	**47.0**	48.1	50.0	**49.5**	**48.9**	**46.3**	**46.4**	**44.4**	**47.0**		**44.4**	
Avg.	**81.3**	**82.2**	**83.3**	**85.2**	**87.3**	**89.3**	**90.6**	**90.8**	**90.8**	**89.5**	**88.6**	**87.1**	**86.0**	**85.6**	**84.1**	**83.6**	**83.2**	**82.2**	**80.8**	**79.5**	**79.0**	**80.3**	**80.2**	**80.2**			**84.6**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	95.3	97.1	98.0	98.3	98.1	98.1	98.9	99.2	99.3	99.4	99.4	99.3	95.5	93.1	91.3	88.1	85.7	88.7	96.6	97.6	98.0	98.9	99.0	99.0	99.4	85.7	96.3
2	99.1	99.1	99.2	99.2	99.2	99.3	98.0	96.9	96.1	97.6	95.3	91.7	87.6	84.2	84.6	95.5	97.7	94.4	92.3	93.1	95.8	97.8	98.0	97.7	99.3	84.2	95.4
3	97.3	95.7	92.1	88.2	86.3	89.5	92.3	93.9	93.2	93.0	92.7	93.3	90.2	94.5	91.8	90.1	91.6	90.8	94.4	96.0	96.2	97.1	98.3	98.6	98.6	86.3	93.2
4	97.8	93.0	95.9	97.2	96.6	93.8	94.5	95.2	91.7	87.5	81.8	84.6	81.2	83.7	89.7	94.3	88.5	91.1	92.6	95.9	98.3	99.0	99.1	99.1	99.1	81.2	92.6
5	99.1	99.2	99.2	99.2	99.2	99.2	99.3	99.4	99.5	99.5	99.5	99.4	98.0	93.4	93.1	89.7	86.1	84.1	90.6	92.6	90.5	90.5	94.4	94.5	99.5	84.1	95.4
6	94.9	97.5	98.0	98.2	97.1	98.0	96.8	90.3	91.0	88.6	82.9	77.5	72.6	69.6	67.4	64.9	64.3	60.8	59.9	69.9	74.6	78.4	78.5	76.6	98.2	59.9	81.2
7	76.1	79.0	82.2	85.1	85.3	82.0	79.6	77.3	78.2	85.5	84.3	72.8	64.3	66.6	69.9	65.9	63.9	67.3	71.8	74.7	81.3	93.8	93.4	96.2	96.2	63.9	78.2
8	97.8	97.8	98.5	98.7	98.6	98.7	99.0	99.3	99.4	99.4	99.0	96.4	95.5	93.1	91.0	88.1	84.5	83.7	86.6	89.6	91.8	96.6	97.4	97.6	99.4	83.7	94.9
9	97.3	97.6	98.0	98.4	98.5	98.5	98.9	99.3	97.0	98.5	98.5	98.5	98.6	99.2	99.4	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	97.0	98.8
10	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.6	99.6	99.3	98.7	97.7	97.7	98.5	98.8	99.0	99.2	99.2	99.7	97.7	99.3
11	99.2	99.3	99.4	99.5	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.6	98.6	93.8	93.0	94.7	95.0	94.8	96.3	97.7	98.7	99.0	99.7	93.0	98.1
12	99.2	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.5	97.5	95.4	91.9	82.0	78.7	75.4	73.8	75.2	78.5	82.4	86.6	84.7	84.8	99.7	73.8	90.9
13	85.3	86.8	89.3	90.8	94.2	96.4	96.2	98.9	99.0	98.8	98.8	98.9	98.5	98.4	98.2	98.4	98.2	98.5	99.0	99.1	98.8	98.9	99.0	99.1	99.1	85.3	96.6
14	99.2	99.2	99.2	99.2	99.3	99.3	99.4	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.6	99.2	99.4	99.4	99.5	99.6	99.8	99.2	99.5
15	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	100.0	100.0	100.0	99.1	97.8	97.9	97.3	97.8	98.5	98.3	98.9	99.2	100.0	97.3	99.3
16	99.4	99.5	99.6	99.6	99.7	99.7	99.8	100.0	100.0	99.7	97.4	92.1	88.2	86.2	90.6	94.7	88.9	96.2	97.3	98.8	99.3	99.5	99.9	99.9	100.0	86.2	96.9
17	100.0	100.0	100.0	100.0	100.0	100.0	96.8	92.1	94.5	94.8	89.5	79.1	74.9	69.2	77.4	87.5	86.5	86.0	90.9	95.1	96.7	98.2	98.6	98.9	100.0	69.2	91.9
18	99.1	99.1	98.2	98.5	98.2	98.4	98.5	98.9	99.2	99.2	99.4	99.3	99.3	99.3	99.3	99.2	99.1	99.3	99.3	97.3	94.7	98.2	98.1	98.2	99.4	94.7	98.6
19	97.8	97.9	98.6	98.0	94.0	92.3	75.9	84.2	83.2	84.5	85.0	85.2	78.7	63.4	60.8	65.6	77.1	77.9	77.7	82.7	86.5	94.6	94.5	94.1	98.6	60.8	84.6
20	89.7	88.9	91.3	94.1	95.4	96.0	98.0	98.5	99.2	99.3	99.5	96.4	84.8	72.6	63.1	56.8	52.7	52.1	52.8	59.3	71.4	72.2	70.9	70.3	99.5	52.1	80.2
21	72.2	75.9	77.8	77.6	77.7	79.5	76.2	73.8	69.9	64.9	69.7	64.8	61.7	57.6	61.8	60.6	58.1	61.7	66.4	82.7	91.6	90.4	92.4	96.2	96.2	57.6	73.4
22	98.5	99.1	99.2	99.3	99.4	99.4	99.4	99.3	99.2	99.0	99.1	99.2	98.9	96.2	93.0	93.2	81.8	80.6	79.0	83.4	88.9	93.7	94.4	95.7	99.4	79.0	94.5
23	94.2	88.1	86.0	80.7	79.5	80.4	78.1	80.5	86.3	89.0	91.1	79.2	67.0	69.0	67.7	62.7	61.0	59.8	66.0	77.4	88.4	93.3	93.3	88.8	94.2	59.8	79.5
24	85.4	87.4	88.7	86.5	87.0	89.0	86.4	87.7	95.9	93.6	85.9	87.2	94.1	95.9	96.5	96.0	94.9	92.5	90.9	90.4	90.6	89.0	90.6	89.1	96.5	85.4	90.5
25	86.8	88.5	89.0	87.8	89.4	91.0	89.5	87.7	85.0	80.5	73.7	68.4	65.1	61.0	59.8	55.3	55.6	53.7	59.2	63.9	69.2	72.6	76.9	79.2	91.0	53.7	74.5
26	81.5	82.9	81.3	80.7	84.9	90.3	95.7	95.9	93.9	93.8	89.4	80.9	77.8	70.0	81.2	80.3	83.5	81.4	84.9	90.9	94.1	93.7	92.1	90.6	95.9	70.0	86.3
27	93.9	94.1	93.7	96.4	95.1	94.3	94.3	86.8	90.7	92.6	81.6	79.5	77.4	73.0	65.3	66.7	66.3	65.6	64.7	74.5	81.9	85.2	87.2	86.5	96.4	64.7	82.8
28	85.0	84.1	87.7	88.6	93.2	96.3	97.9	99.0	99.3	98.2	94.4	93.8	87.1	78.0	74.0	66.7	78.2	80.5	81.9	82.8	83.7	84.1	81.1	85.4	99.3	66.7	86.7
29	85.8	85.6	88.0	92.5	95.6	91.9	90.4	95.3	94.3	94.7	93.8	81.4	65.6	66.2	73.9	75.7	77.1	74.3	74.0	82.2	87.6	90.5	90.8	90.5	95.6	65.6	84.9
30	92.0	90.8	91.0	88.9	85.8	80.5	83.4	90.2	95.8	98.1	98.8	94.7	92.2	90.5	86.7	82.0	82.9	83.9	85.8	77.6	76.2	76.1	79.0	78.6	98.8	76.1	86.7
31	76.6	79.3	82.8	85.8	87.8	90.6	92.2	90.5	90.4	91.0	87.3	85.4	75.3	70.9	69.3	66.7	67.8	69.6	76.1	83.0	94.1	96.5	97.7	98.5	98.5	66.7	83.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**100.0**	**100.0**	**99.8**	**99.8**	**99.9**	**100.0**	**100.0**	**100.0**	**99.8**	**99.8**	**99.8**	**99.6**	**99.6**	**99.6**	**99.6**	**99.9**	**99.9**	**100.0**		
Min.	**72.2**	**75.9**	**77.8**	**77.6**	**77.7**	**79.5**	**75.9**	**73.8**	**69.9**	**64.9**	**69.7**	**64.8**	**61.7**	**57.6**	**59.8**	**55.3**	**52.7**	**52.1**	**52.8**	**59.3**	**69.2**	**72.2**	**70.9**	**70.3**		**52.1**	
Avg.	**92.7**	**92.9**	**93.6**	**93.7**	**94.0**	**94.2**	**93.7**	**93.8**	**94.2**	**94.2**	**92.5**	**89.5**	**86.0**	**83.4**	**83.1**	**82.4**	**81.8**	**81.9**	**83.7**	**87.1**	**90.2**	**92.2**	**92.7**	**92.9**			**89.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	98.7	98.8	98.9	99.0	99.1	99.1	99.2	99.3	99.7	99.8	97.9	91.3	83.2	78.0	72.8	69.3	68.9	72.7	79.5	85.8	92.3	94.9	95.3	95.9	99.8	68.9	90.4
2	96.8	94.7	95.5	95.4	97.2	95.6	93.8	93.4	89.7	86.4	81.4	74.1	73.5	73.4	59.9	59.3	59.6	56.3	59.7	70.9	77.8	87.4	87.3	85.5	97.2	56.3	81.0
3	85.0	89.3	89.2	88.5	87.2	87.3	88.8	87.8	85.7	79.6	73.4	66.4	62.1	62.8	64.9	76.9	66.4	76.6	68.4	67.0	72.8	80.3	82.8	84.5	89.3	62.1	78.1
4	82.6	81.5	84.6	84.5	85.6	84.6	83.9	84.9	86.1	81.8	78.6	71.2	64.3	56.1	52.9	48.4	65.3	70.5	74.0	78.7	84.8	78.9	86.1	81.5	86.1	48.4	76.3
5	85.3	93.1	95.2	91.9	91.1	90.2	92.2	94.4	96.6	93.9	90.0	86.1	84.9	77.6	76.4	74.4	72.8	76.7	81.2	84.6	89.5	90.2	91.4	94.6	96.6	72.8	87.3
6	97.1	97.0	93.9	91.6	93.6	94.7	94.8	92.1	90.6	87.5	80.5	70.6	67.2	63.6	59.1	55.1	53.9	59.1	69.3	80.6	88.6	95.0	96.4	97.2	97.2	53.9	82.0
7	97.6	97.4	97.7	98.3	98.6	98.8	98.9	98.8	94.6	90.2	85.9	75.7	72.6	74.0	76.6	81.5	95.6	96.8	97.2	96.3	97.2	97.0	95.4	95.8	98.9	72.6	92.0
8	94.9	95.5	95.5	95.9	96.6	96.7	97.4	97.8	97.2	97.6	97.9	98.3	98.2	98.3	97.9	97.9	97.8	97.0	96.9	97.1	97.0	95.7	96.2	95.5	98.3	94.9	97.0
9	96.0	95.5	93.9	93.9	93.2	91.6	88.7	86.3	82.1	74.4	68.9	61.1	59.5	69.3	75.9	76.2	71.4	77.2	89.8	95.4	95.3	96.4	92.9	90.7	96.4	59.5	84.0
10	91.5	93.9	94.8	95.1	90.6	90.6	90.9	86.4	82.9	76.6	75.0	69.4	66.5	69.0	83.6	73.4	72.6	72.4	79.1	84.9	80.7	82.2	85.0	84.0	95.1	66.5	82.1
11	85.5	87.0	87.0	88.1	89.9	89.4	89.9	88.7	86.8	83.0	77.8	70.9	71.0	57.2	53.0	50.6	50.7	51.3	51.6	65.1	66.9	64.9	66.4	68.1	89.9	50.6	72.5
12	69.0	73.4	75.7	75.4	74.9	77.2	76.3	73.5	74.4	71.3	68.5	60.9	57.1	55.2	51.6	45.8	43.4	46.7	52.8	64.1	67.8	66.3	68.0	70.7	77.2	43.4	65.0
13	73.4	75.9	75.7	74.5	75.8	76.7	80.4	72.8	73.6	72.7	68.7	63.9	61.7	56.7	53.4	53.5	57.9	59.2	66.2	69.6	69.7	67.5	70.6	86.2	86.2	53.4	69.0
14	88.9	91.1	91.6	91.0	92.2	95.8	96.0	95.6	95.9	97.2	96.8	96.1	94.2	93.9	90.3	85.4	84.0	85.1	84.1	83.4	82.9	81.6	84.8	87.0	97.2	81.6	90.2
15	84.4	79.3	79.0	78.2	77.3	75.9	76.5	76.5	79.2	82.6	83.5	86.5	81.1	77.3	79.7	80.4	80.8	80.4	85.4	93.0	93.0	91.3	91.5	91.6	93.0	75.9	82.7
16	90.7	88.4	88.0	87.5	88.6	88.8	88.2	86.2	84.5	83.2	79.9	77.2	77.0	77.2	78.8	81.4	80.9	80.1	81.0	84.0	88.3	94.6	93.7	90.2	94.6	77.0	84.9
17	92.8	91.8	90.1	88.4	85.0	85.3	88.2	90.4	91.0	91.3	89.4	86.5	84.1	83.3	80.2	79.8	78.6	78.6	82.2	85.8	85.5	86.3	85.2	84.6	92.8	78.6	86.0
18	86.5	84.8	80.0	82.3	86.7	89.2	89.9	84.4	80.2	77.8	79.9	76.7	79.5	82.8	82.2	78.8	86.0	89.2	86.2	79.7	76.0	74.9	73.6	73.9	89.9	73.6	81.7
19	74.4	71.7	69.8	70.3	71.2	77.3	85.2	85.3	79.9	79.3	80.7	82.7	79.9	83.4	81.8	83.4	84.3	80.9	86.7	85.5	86.9	91.3	91.0	91.8	91.8	69.8	81.4
20	96.0	97.1	96.8	96.0	96.1	95.7	94.9	94.0	94.9	94.7	93.5	91.2	86.4	84.3	86.8	86.4	83.9	90.7	92.8	95.7	97.3	97.6	97.6	97.4	97.6	83.9	93.2
21	97.5	97.3	97.5	98.1	98.4	98.6	98.8	98.9	99.2	99.7	99.7	99.7	99.8	99.8	99.9	99.6	94.0	91.3	90.5	94.6	97.2	95.4	90.2	94.2	99.9	90.2	97.1
22	97.0	93.9	93.8	96.8	98.3	98.6	98.6	98.8	98.6	97.9	93.7	94.5	92.5	92.7	91.5	90.2	88.2	88.9	96.2	96.6	93.8	95.0	95.5	97.5	98.8	88.2	95.0
23	97.9	98.3	98.7	98.9	99.0	99.1	99.3	99.6	99.8	99.9	99.9	97.6	94.7	98.6	98.3	95.2	92.7	90.9	90.9	93.5	95.4	96.5	97.9	98.3	99.9	90.9	97.1
24	98.5	98.8	98.9	99.1	99.5	99.7	99.9	99.9	100.0	97.1	94.0	87.4	91.9	86.7	85.6	79.3	78.8	81.4	86.9	92.6	96.7	98.6	99.4	99.7	100.0	78.8	93.8
25	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.5	97.4	93.7	82.2	79.0	79.9	80.7	77.8	76.2	78.8	80.5	78.6	74.8	88.7	91.1	100.0	74.8	90.0
26	93.6	93.9	94.6	96.2	94.9	85.1	86.0	84.0	87.3	90.5	92.2	95.0	95.3	94.5	91.6	91.8	96.1	98.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	84.0	94.2
27	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.9	84.1	81.2	75.6	73.9	76.7	77.6	81.7	87.2	92.7	94.7	96.2	96.9	97.2	97.3	98.2	100.0	73.9	91.9
28	98.8	99.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	97.7	92.1	87.1	84.4	86.3	86.4	90.7	92.8	87.2	85.0	81.3	100.0	81.3	94.5
29	79.9	79.8	76.7	78.1	80.8	88.4	95.4	98.1	92.6	83.6	83.3	82.0	80.1	77.4	81.9	83.4	79.7	76.7	85.2	91.0	86.7	85.9	86.9	85.5	98.1	76.7	84.1
30	82.2	80.6	81.1	80.0	80.2	80.2	78.3	76.8	75.9	78.3	74.6	71.6	67.8	67.6	58.1	62.5	66.5	70.1	70.5	69.6	74.4	74.1	83.0	86.3	86.3	58.1	74.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.8**	**99.9**	**99.6**	**97.8**	**98.4**	**99.1**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**69.0**	**71.7**	**69.8**	**70.3**	**71.2**	**75.9**	**76.3**	**72.8**	**73.6**	**71.3**	**68.5**	**60.9**	**57.1**	**55.2**	**51.6**	**45.8**	43.4	46.7	**51.6**	**64.1**	**66.9**	**64.9**	**66.4**	**68.1**		**43.4**	
Avg.	**90.4**	**90.6**	**90.5**	**90.4**	**90.7**	**91.0**	**91.7**	**90.8**	**89.8**	**87.7**	**85.5**	**81.8**	**79.4**	**78.1**	**77.1**	**76.3**	**76.7**	**78.3**	**81.4**	**85.1**	**86.8**	**87.3**	**88.5**	**89.3**			**85.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	86.4	87.1	91.7	93.8	95.0	94.7	93.8	93.0	90.6	87.0	84.1	81.3	80.9	78.1	79.9	85.8	92.8	93.0	92.2	91.3	89.9	90.0	91.4	93.7	95.0	78.1	89.1
2	94.2	93.8	95.8	96.8	97.7	97.6	97.5	97.6	98.1	98.9	98.9	99.0	99.4	98.4	95.5	95.5	93.1	91.0	91.4	92.2	91.5	91.9	94.7	93.2	99.4	91.0	95.6
3	92.7	92.5	90.1	89.4	88.7	86.5	86.2	89.9	93.7	93.2	82.1	72.3	71.2	72.8	82.8	86.1	75.5	70.7	86.2	95.1	97.4	98.7	97.4	97.8	98.7	70.7	87.0
4	98.1	98.0	96.0	91.5	93.2	96.1	96.6	96.0	97.0	97.7	95.7	98.2	97.2	97.3	94.4	97.1	96.1	99.5	98.8	100.0	100.0	100.0	100.0	100.0	100.0	91.5	97.3
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.8	92.6	88.7	82.4	81.2	74.9	79.6	83.5	85.6	92.7	97.3	98.3	98.8	99.4	99.5	99.1	100.0	74.9	93.7
6	99.1	98.7	98.6	99.2	98.6	96.2	92.2	91.6	96.6	99.3	99.6	100.0	100.0	100.0	100.0	99.3	98.4	99.2	98.7	99.3	98.8	98.9	98.7	98.3	100.0	91.6	98.3
7	98.0	98.0	98.6	98.9	97.6	97.6	97.3	98.0	97.6	97.1	97.8	98.1	98.7	98.6	98.6	98.8	98.7	98.6	98.2	99.0	97.9	96.2	96.0	95.0	99.0	95.0	97.9
8	96.7	96.6	96.5	96.7	95.6	93.5	92.0	88.0	85.1	85.1	83.7	84.6	83.7	84.8	90.9	85.8	86.4	88.8	89.8	92.4	90.6	84.1	83.7	81.4	96.7	81.4	89.0
9	84.1	83.7	85.4	89.2	93.2	91.1	87.1	88.7	89.9	88.2	85.0	84.4	82.2	83.4	85.5	87.9	86.2	86.4	89.7	95.2	97.9	96.8	97.5	96.4	97.9	82.2	89.0
10	97.0	93.8	96.2	99.3	99.9	100.0	100.0	100.0	100.0	100.0	99.5	98.3	96.1	90.7	82.3	82.8	85.0	88.8	87.1	92.8	97.0	98.6	99.2	99.3	100.0	82.3	95.2
11	97.6	94.3	95.3	97.2	99.2	98.7	100.0	99.8	98.5	97.5	96.3	97.7	94.1	91.6	89.1	92.0	88.0	88.6	89.7	94.6	98.5	98.2	99.2	99.9	100.0	88.0	95.7
12	98.7	94.5	93.0	93.1	94.8	91.9	97.0	99.2	98.3	96.5	96.5	97.3	94.6	90.8	92.4	93.7	90.8	91.4	92.4	95.1	95.6	94.6	94.9	94.0	99.2	90.8	94.6
13	94.0	97.4	96.1	95.7	98.1	97.3	98.9	90.5	79.8	79.8	77.8	80.2	79.0	76.7	70.2	70.4	69.6	74.7	77.4	80.8	81.0	80.2	77.8	80.0	98.9	69.6	83.5
14	81.3	87.7	87.5	86.2	87.6	85.0	83.2	80.3	82.8	84.7	82.1	83.4	84.7	87.8	88.8	89.7	90.0	93.1	95.3	97.8	99.4	100.0	100.0	100.0	100.0	80.3	89.1
15	100.0	100.0	100.0	97.9	91.5	82.7	69.6	63.6	67.0	79.2	76.6	76.6	70.2	62.5	60.1	67.5	69.7	67.8	74.7	72.5	74.0	67.1	74.0	81.7	100.0	60.1	76.9
16	89.9	96.6	98.5	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.0	95.2	81.9	77.2	83.2	83.3	82.9	83.5	84.7	87.8	88.5	89.4	86.8	86.7	100.0	77.2	91.5
17	85.7	86.5	88.0	89.1	92.6	94.4	93.2	92.1	92.2	89.7	88.3	85.8	84.1	81.3	80.0	83.6	85.1	84.0	86.4	85.6	84.0	83.7	83.9	87.1	94.4	80.0	86.9
18	85.2	93.1	96.1	93.3	92.3	92.1	88.1	84.8	83.6	85.2	86.0	83.4	77.8	74.7	75.8	79.3	85.4	91.6	95.6	96.3	96.9	97.2	98.4	99.0	99.0	74.7	88.8
19	98.3	98.6	99.0	98.3	98.9	99.5	99.9	100.0	100.0	100.0	100.0	98.8	98.6	97.9	96.5	97.1	98.5	97.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	96.5	99.0
20	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	97.3	95.2	94.2	88.7	80.1	80.7	82.1	89.9	93.6	89.7	88.1	89.2	89.2	100.0	80.1	94.1
21	85.2	80.2	78.3	86.7	93.4	96.7	94.6	94.6	96.9	96.4	96.4	94.6	90.5	90.1	87.5	85.7	88.8	92.5	94.1	96.2	97.8	97.7	97.7	98.8	98.8	78.3	92.1
22	96.8	96.0	94.5	93.5	93.6	94.7	95.6	95.6	92.7	90.9	91.2	86.3	83.1	75.1	76.0	82.1	82.5	82.8	87.7	89.5	88.7	89.5	92.7	95.0	96.8	75.1	89.4
23	95.8	95.8	96.5	93.0	94.2	96.2	94.1	94.9	98.1	99.7	99.3	98.4	94.3	91.4	87.8	84.3	86.1	87.7	90.2	94.6	95.7	94.3	93.1	93.4	99.7	84.3	93.7
24	92.4	92.8	94.1	92.0	87.0	98.2	99.2	99.5	99.9	100.0	100.0	99.9	99.1	98.5	99.3	100.0	100.0	100.0	100.0	99.7	98.9	98.8	98.8	98.7	100.0	87.0	97.8
25	98.5	98.5	98.2	98.1	98.1	98.1	97.9	97.9	97.6	97.4	97.3	97.1	96.8	95.4	97.5	97.7	97.9	96.8	94.4	95.2	94.3	94.8	96.5	96.2	98.5	94.3	97.0
26	95.1	96.1	96.9	96.8	96.3	95.8	95.2	95.2	95.3	94.3	93.4	91.1	88.9	86.3	84.7	83.4	79.3	77.0	81.0	83.2	84.7	86.2	87.6	88.7	96.9	77.0	89.7
27	89.0	89.9	87.9	85.8	86.2	88.9	89.7	88.3	87.6	85.4	84.9	82.9	80.3	79.8	79.1	78.7	79.4	81.5	86.3	87.7	89.5	90.5	87.4	87.2	90.5	78.7	85.6
28	92.5	90.5	89.9	90.3	90.6	95.1	96.7	96.4	99.4	100.0	99.8	99.4	99.8	99.4	96.1	96.7	94.0	92.9	95.7	95.8	98.4	100.0	100.0	100.0	100.0	89.9	96.2
29	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	98.7	98.9	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	99.8
30	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0	99.8	100.0
31	99.7	100.0	99.9	99.9	99.9	99.0	99.0	98.9	98.8	98.6	98.5	98.0	97.0	95.3	95.5	95.7	96.4	97.3	97.1	98.3	97.9	97.6	97.5	97.3	100.0	95.3	98.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**81.3**	**80.2**	**78.3**	**85.8**	**86.2**	**82.7**	**69.6**	**63.6**	**67.0**	**79.2**	**76.6**	**72.3**	**70.2**	**62.5**	**60.1**	**67.5**	**69.6**	**67.8**	**74.7**	**72.5**	**74.0**	**67.1**	**74.0**	**80.0**		**60.1**	
Avg.	**94.3**	**94.5**	**94.8**	**94.9**	**95.3**	**95.4**	**94.7**	**94.0**	**94.0**	**94.0**	**92.9**	**91.7**	**89.7**	**87.9**	**87.6**	**88.5**	**88.4**	**89.4**	**91.6**	**93.5**	**94.0**	**93.6**	**94.0**	**94.4**			**92.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	97.6	97.5	98.0	97.6	97.3	97.2	96.5	97.0	97.2	98.2	97.9	97.6	97.2	97.2	97.3	97.5	97.5	97.4	97.1	96.9	96.6	96.1	95.8	95.6	98.2	95.6	97.2
2	95.2	95.3	95.6	95.2	94.9	94.5	94.3	94.2	94.1	94.5	94.7	94.7	95.1	95.2	95.4	95.2	94.9	94.8	94.2	94.2	94.1	93.9	93.5	93.2	95.6	93.2	94.6
3	93.1	93.0	92.6	92.2	92.1	92.0	91.8	91.8	91.8	91.9	91.9	92.4	92.6	92.1	91.5	89.8	89.7	91.2	92.1	92.1	92.2	91.8	91.1	90.8	93.1	89.7	91.8
4	90.1	91.2	89.8	89.6	90.5	90.0	90.2	89.4	90.7	91.1	91.4	90.7	91.0	89.9	89.4	89.4	88.9	90.7	90.6	91.4	92.1	91.3	91.5	93.7	93.7	88.9	90.6
5	95.4	95.4	95.3	95.7	96.1	95.8	95.2	94.1	94.0	94.7	85.6	75.6	77.3	78.3	76.4	76.8	75.7	78.1	81.6	81.5	81.1	83.4	85.0	82.7	96.1	75.6	86.3
6	85.3	84.0	84.0	84.6	86.5	87.8	89.1	88.8	86.0	82.2	81.2	79.2	76.1	78.3	79.3	83.9	86.3	89.2	90.2	90.5	92.6	92.1	90.6	92.0	92.6	76.1	85.8
7	91.9	85.3	82.8	84.0	86.7	88.7	85.5	90.7	91.1	90.9	89.6	87.8	86.6	83.6	84.4	86.0	87.7	87.4	86.5	83.5	87.9	83.1	87.3	87.6	91.9	82.8	86.9
8	85.4	86.1	88.4	89.3	88.6	88.3	88.6	88.7	88.5	89.0	90.0	89.5	86.6	83.0	80.4	81.8	86.2	87.5	87.1	87.5	88.3	89.0	88.4	87.3	90.0	80.4	87.2
9	86.6	87.5	88.6	89.6	90.2	89.6	88.6	88.5	88.7	89.1	89.3	88.4	87.8	88.6	88.2	86.9	86.9	87.4	87.4	87.5	88.1	88.2	88.6	88.5	90.2	86.6	88.3
10	89.0	89.4	89.6	89.7	89.5	89.5	89.7	89.8	89.8	89.7	89.6	89.6	89.5	89.6	90.1	90.4	89.9	89.9	90.4	90.6	90.9	91.4	91.2	91.1	91.4	89.0	90.0
11	90.8	90.8	90.5	90.4	90.1	90.0	89.9	89.9	89.8	89.9	89.8	90.1	90.4	90.6	89.8	87.3	83.8	83.4	84.1	82.0	80.1	78.3	80.3	79.1	90.8	78.3	87.1
12	79.8	79.9	77.7	77.4	76.7	74.1	77.0	79.9	83.7	86.7	87.3	87.2	86.3	84.8	82.0	82.6	81.9	84.1	85.2	88.0	90.9	94.1	97.1	96.8	97.1	74.1	84.2
13	96.8	96.5	96.4	96.3	96.1	95.5	94.2	93.0	88.0	78.9	75.1	72.9	71.0	71.6	74.7	74.8	67.6	67.2	68.0	71.0	68.3	68.3	65.7	58.3	96.8	58.3	79.4
14	56.0	59.0	73.1	83.8	87.8	90.0	91.7	93.2	94.8	96.2	96.9	95.7	93.8	92.5	91.5	91.1	90.7	89.6	88.8	88.0	87.4	86.9	86.0	85.2	96.9	56.0	87.1
15	84.4	84.0	83.6	83.5	83.3	83.4	83.4	83.1	82.9	82.7	82.6	82.3	81.7	81.7	80.8	80.0	80.5	80.2	79.3	79.1	78.3	77.3	77.5	78.8	84.4	77.3	81.4
16	79.8	79.5	79.0	79.0	79.9	80.8	80.7	81.1	81.5	81.7	81.2	79.1	78.2	77.8	77.7	77.4	80.4	81.1	82.4	83.4	82.0	81.7	81.5	80.7	83.4	77.4	80.3
17	80.6	80.4	81.7	82.1	80.9	80.7	78.8	79.9	79.3	78.9	79.4	80.5	74.9	74.9	74.2	76.5	77.8	81.3	80.6	81.7	83.9	82.3	79.6	79.9	83.9	74.2	79.6
18	81.6	82.1	82.2	82.8	83.1	83.6	83.5	83.8	84.7	83.3	83.9	82.5	82.1	81.1	81.5	81.9	83.6	84.0	83.4	82.4	82.0	83.0	83.8	84.4	84.7	81.1	82.9
19	84.8	85.1	84.6	83.2	82.8	83.7	82.1	82.5	83.0	83.0	81.8	82.2	80.2	78.1	76.8	75.7	75.0	74.5	73.5	72.2	72.7	73.6	74.3	75.1	85.1	72.2	79.2
20	74.3	73.3	72.9	73.4	73.8	73.5	74.6	74.6	75.2	75.1	75.2	75.2	74.0	75.1	70.9	70.8	68.8	70.3	70.3	68.4	65.2	64.7	67.0	65.8	75.2	64.7	71.8
21	64.6	66.6	69.1	71.1	69.8	67.9	67.7	66.1	68.8	69.8	68.1	65.4	64.3	63.7	66.5	66.9	69.5	69.2	74.9	78.0	83.6	88.1	93.7	93.3	93.7	63.7	71.9
22	93.6	93.6	92.7	92.7	92.2	91.1	89.5	89.9	89.5	89.8	85.5	83.2	83.4	82.1	80.6	81.2	81.8	84.6	83.9	84.3	88.0	87.6	87.4	89.0	93.6	80.6	87.4
23	89.1	89.0	88.5	88.7	87.9	88.4	88.3	87.6	88.0	87.4	88.4	88.7	88.7	87.5	86.5	86.2	84.5	84.5	89.6	88.0	81.6	74.2	69.3	65.5	89.6	65.5	85.3
24	64.9	65.9	62.3	57.9	52.5	50.0	48.6	48.3	46.7	44.7	46.0	54.3	51.0	46.5	47.9	52.3	56.1	47.3	42.1	50.7	50.7	50.2	55.1	60.4	65.9	42.1	52.2
25	63.2	63.6	64.5	64.9	68.3	70.7	75.1	73.6	72.9	71.8	71.9	70.2	67.4	68.5	70.0	70.3	69.5	73.1	77.3	81.6	82.1	81.6	81.3	83.3	83.3	63.2	72.4
26	81.4	80.0	78.2	75.7	77.3	78.2	77.9	76.7	78.4	78.4	81.3	81.1	80.8	83.2	84.7	85.1	87.1	92.1	93.1	95.9	97.4	95.5	96.6	98.2	98.2	75.7	84.8
27	98.6	98.8	98.9	98.9	99.0	99.2	99.4	99.6	99.7	99.7	99.6	99.9	99.5	97.0	95.2	94.2	93.2	94.7	94.3	93.0	92.8	93.0	92.0	91.5	99.9	91.5	96.7
28	91.0	89.8	89.6	88.0	87.4	85.7	84.5	83.3	83.6	84.7	83.2	83.7	83.4	81.3	78.9	75.7	80.7	85.3	88.5	86.9	85.2	88.0	85.7	82.8	91.0	75.7	84.9
29	87.9	83.6	82.6	83.7	85.8	85.3	87.0	86.5	84.7	86.4	87.1	86.1	85.9	88.9	86.8	82.5	86.4	86.3	87.3	90.4	83.7	71.8	71.2	81.2	90.4	71.2	84.5
30	78.8	69.6	81.1	97.0	99.0	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.2	97.9	97.4	96.8	95.5	94.6	94.5	100.0	69.6	95.8
Max.	**98.6**	**98.8**	**98.9**	**98.9**	**99.0**	**99.7**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.7**	**98.2**	**97.9**	**97.4**	**97.4**	**96.1**	**97.1**	**98.2**	**100.0**		
Min.	**56.0**	**59.0**	**62.3**	**57.9**	**52.5**	**50.0**	**48.6**	**48.3**	**46.7**	**44.7**	**46.0**	**54.3**	**51.0**	**46.5**	**47.9**	**52.3**	**56.1**	**47.3**	**42.1**	**50.7**	**50.7**	**50.2**	**55.1**	**58.3**		**42.1**	
Avg.	**84.4**	**83.9**	**84.5**	**85.3**	**85.5**	**85.5**	**85.4**	**85.5**	**85.6**	**85.3**	**84.8**	**84.2**	**83.2**	**82.8**	**82.3**	**82.3**	**82.7**	**83.5**	**84.1**	**84.6**	**84.6**	**83.9**	**84.1**	**84.2**			**84.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Relative Humidity (%)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	94.0	92.9	91.1	91.7	91.1	91.9	92.6	92.1	92.0	91.8	88.2	88.3	87.7	82.5	77.4	81.1	82.9	86.3	87.7	79.8	75.4	69.4	68.6	67.3	94.0	67.3	85.2
2	60.0	41.9	44.7	44.7	41.4	57.0	67.8	63.1	67.5	57.0	54.6	56.9	53.9	63.0	60.9	63.2	57.7	56.7	55.8	54.3	52.8	52.5	58.1	94.3	94.3	41.4	57.5
3	99.8	100.0	99.7	99.4	98.8	98.7	99.1	99.2	99.5	99.8	99.9	100.0	100.0	99.7	99.3	99.0	98.8	98.7	99.0	98.9	98.9	98.9	98.7	98.5	100.0	98.5	99.3
4	98.3	98.4	98.3	98.0	97.9	97.6	98.0	99.1	99.5	98.9	98.6	98.6	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6	99.2
5	100.0	99.9	99.0	98.1	96.8	93.8	91.9	88.3	83.5	83.7	84.2	80.7	83.4	82.0	86.4	85.6	85.3	83.2	75.6	76.1	77.8	82.1	83.6	84.0	100.0	75.6	86.9
6	84.7	85.9	88.1	90.9	92.1	89.7	91.0	99.5	100.0	100.0	100.0	98.8	95.2	96.3	96.3	96.6	96.2	95.7	94.8	95.4	92.0	93.8	96.5	94.2	100.0	84.7	94.3
7	91.1	91.5	93.9	88.5	82.5	80.5	82.9	78.4	78.0	80.4	84.6	82.8	92.1	98.3	93.7	92.1	93.7	87.7	88.5	96.6	99.8	100.0	100.0	99.8	100.0	78.0	89.9
8	94.8	93.7	95.2	94.8	96.0	93.2	92.4	98.6	100.0	100.0	100.0	94.3	87.5	82.3	78.3	77.9	91.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	77.9	94.6
9	99.8	98.1	91.6	89.0	91.4	92.7	89.5	95.0	97.9	93.9	90.7	89.9	94.8	96.8	94.1	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.0	96.0
10	100.0	100.0	100.0	100.0	99.8	95.0	92.5	93.8	96.8	96.9	98.0	97.4	98.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	100.0	92.5	98.6
11	89.1	83.0	82.8	80.5	76.9	73.1	71.3	76.8	71.4	71.7	68.2	70.7	71.5	73.3	74.3	75.5	74.7	75.4	77.7	88.7	92.3	95.1	97.4	95.9	97.4	68.2	79.5
12	95.5	95.0	94.3	93.7	94.2	94.4	94.3	94.2	93.8	93.7	93.7	94.0	94.1	94.0	94.1	94.0	93.7	93.7	93.8	93.7	93.7	93.7	93.6	93.5	95.5	93.5	94.0
13	93.5	93.2	93.2	93.0	92.4	92.0	91.5	91.3	91.4	90.9	91.5	91.7	91.7	91.5	91.4	91.2	91.1	90.7	90.5	90.8	90.6	90.3	90.5	90.0	93.5	90.0	91.5
14	89.6	90.1	89.7	89.5	89.6	89.7	89.4	89.0	90.0	89.4	88.4	88.1	90.1	91.2	91.5	90.3	89.9	90.0	90.8	91.0	91.2	91.2	91.2	91.3	91.5	88.1	90.1
15	91.2	90.8	90.5	90.5	89.3	87.9	87.3	86.8	86.7	87.2	88.0	89.0	89.2	88.8	89.0	89.9	91.3	92.9	93.2	92.5	90.3	86.2	83.7	89.6	93.2	83.7	89.2
16	89.1	95.2	95.2	96.6	97.1	97.3	98.0	98.0	98.1	98.2	98.4	98.4	98.3	98.3	98.4	98.5	98.3	98.4	98.2	97.9	98.0	97.9	98.1	98.4	98.5	89.1	97.4
17	97.6	97.6	97.3	97.3	96.9	96.6	96.1	95.7	95.4	94.7	94.8	95.1	95.2	95.2	95.1	95.0	95.2	94.9	94.6	94.6	94.6	94.2	93.6	93.1	97.6	93.1	95.4
18	92.8	92.8	92.7	92.0	91.2	91.9	91.9	92.0	92.0	91.7	91.8	91.6	90.5	90.3	90.2	89.7	91.1	91.3	91.5	92.0	91.6	92.5	93.1	94.1	94.1	89.7	91.8
19	92.9	93.2	90.5	81.0	72.9	69.0	65.5	70.5	72.4	69.7	65.6	62.5	66.0	71.3	74.7	75.1	77.3	80.2	80.3	81.5	82.0	81.1	80.1	82.9	93.2	62.5	76.6
20	86.0	84.9	86.7	86.7	86.5	86.5	86.4	85.9	86.1	86.6	86.2	86.7	87.0	87.3	87.3	86.6	86.2	86.3	86.1	86.1	85.7	85.9	85.4	85.6	87.3	84.9	86.3
21	86.0	85.7	85.9	81.4	80.0	79.8	80.2	78.5	79.4	80.2	83.4	84.5	86.4	88.6	88.4	89.4	89.7	87.9	87.5	87.1	87.3	87.8	88.0	88.0	89.7	78.5	85.0
22	88.0	88.2	88.5	87.4	86.7	87.2	86.2	87.1	87.8	88.0	81.6	64.4	60.2	68.4	71.2	70.9	65.4	66.4	68.8	58.5	58.1	62.8	64.6	67.8	88.5	58.1	75.2
23	68.3	64.7	59.3	55.0	52.0	55.7	52.6	58.0	58.0	54.7	56.7	56.6	59.4	52.9	52.6	53.7	53.3	54.3	53.3	53.7	48.9	46.8	51.1	46.4	68.3	46.4	54.9
24	44.6	48.0	41.6	42.1	36.8	37.5	37.5	31.3	33.6	33.7	33.2	31.0	33.6	34.1	34.4	36.7	34.9	39.3	45.1	49.6	52.5	57.4	72.7	84.1	84.1	31.0	42.7
25	89.6	89.1	88.6	87.7	86.8	86.7	86.3	86.2	85.7	85.5	85.4	85.4	86.1	86.4	86.3	86.4	86.3	86.6	87.0	89.4	89.9	89.2	89.7	89.2	89.9	85.4	87.3
26	88.9	88.6	88.4	88.4	88.5	88.5	88.5	88.4	88.8	88.7	89.6	89.6	90.0	89.8	88.7	74.2	68.3	61.7	55.5	46.6	34.3	33.5	35.6	38.4	90.0	33.5	74.2
27	36.6	39.2	44.5	61.0	66.0	69.4	73.9	64.8	60.0	63.1	62.5	66.8	76.7	81.1	80.7	82.9	86.2	84.7	85.2	85.6	96.8	98.3	97.3	93.7	98.3	36.6	73.2
28	92.7	91.9	94.9	99.9	98.1	95.6	94.5	95.4	99.8	100.0	100.0	100.0	100.0	100.0	98.8	97.2	99.0	93.5	91.7	94.7	91.9	93.0	94.8	88.7	100.0	88.7	96.1
29	94.1	94.7	90.8	90.6	92.8	92.3	88.8	87.7	87.8	89.4	89.8	92.1	92.2	92.3	91.5	91.0	92.2	92.0	91.9	91.7	91.2	90.8	90.7	90.7	94.7	87.7	91.2
30	89.8	87.6	89.1	89.6	88.3	90.1	91.2	91.1	90.9	90.6	90.5	90.5	90.7	90.9	91.1	90.7	90.7	90.5	90.6	90.3	90.2	90.0	90.0	89.7	91.2	87.6	90.2
31	89.3	89.5	89.8	89.5	88.9	88.9	88.3	88.5	88.4	87.6	87.3	89.8	90.3	91.4	92.0	88.2	89.3	89.8	88.8	79.3	72.3	64.3	64.6	66.2	92.0	64.3	85.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**98.7**	**99.1**	**99.5**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**36.6**	**39.2**	**41.6**	**42.1**	**36.8**	**37.5**	**37.5**	**31.3**	**33.6**	**33.7**	**33.2**	**31.0**	**33.6**	**34.1**	**34.4**	**36.7**	**34.9**	**39.3**	**45.1**	**46.6**	**34.3**	**33.5**	**35.6**	**38.4**		**31.0**	
Avg.	**87.3**	**86.6**	**86.3**	**86.1**	**85.1**	**85.2**	**85.1**	**85.3**	**85.6**	**85.1**	**84.7**	**84.1**	**84.9**	**85.7**	**85.4**	**85.2**	**85.5**	**85.4**	**85.3**	**85.0**	**84.5**	**84.5**	**85.5**	**86.9**			**85.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	920	920	920	920	921	921	921	921	921	922	922	922	922	922	922	922	922	922	923	923	923	923	923	923	923	920	921.7
2	923	924	924	924	924	924	925	925	925	926	926	927	927	928	928	928	929	930	931	931	931	933	934	935	935	923	927.5
3	936	937	937	938	939	940	941	941	942	943	943	944	944	945	945	946	946	946	947	947	948	948	949	949	949	936	943.4
4	949	950	950	950	950	950	950	950	951	951	951	951	951	951	951	951	951	950	950	950	949	949	948	948	951	948	950.1
5	947	946	945	945	944	943	942	942	941	941	940	940	939	939	938	938	938	937	937	937	937	937	937	937	947	937	940.3
6	937	937	937	937	937	937	937	937	938	938	939	939	939	939	939	939	939	939	938	938	938	938	938	938	939	937	938.0
7	937	937	937	936	936	935	934	933	933	933	933	932	932	932	931	931	931	930	930	930	930	930	929	929	937	929	932.6
8	929	929	929	929	928	928	928	928	929	929	929	929	929	929	929	928	928	928	928	928	928	928	928	928	929	928	928.3
9	928	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	927	928	928	928	928	927	927.1
10	928	928	929	929	929	929	929	929	930	930	931	931	931	932	932	933	933	934	934	935	935	936	936	936	936	928	931.7
11	937	937	938	938	938	938	938	939	939	939	940	940	940	940	941	941	941	941	942	942	943	943	944	944	944	937	940.2
12	944	945	945	945	946	946	947	947	947	948	948	948	949	949	948	948	948	948	948	948	948	948	947	948	949	944	947.3
13	948	948	948	948	948	947	947	947	947	947	947	947	947	946	947	946	946	946	945	945	945	945	945	945	948	945	946.5
14	945	944	944	944	943	943	943	942	942	942	942	942	941	941	940	940	940	940	940	940	940	940	940	940	945	940	941.7
15	940	940	939	939	939	939	939	939	939	939	939	939	939	939	938	939	939	939	939	940	940	940	940	940	940	938	939.2
16	940	940	940	941	940	940	940	940	940	940	940	941	940	941	940	940	940	940	940	940	940	940	940	940	941	940	940.3
17	940	941	940	940	940	940	940	940	941	941	941	941	941	942	942	942	942	943	943	943	944	944	944	945	945	940	941.7
18	945	945	945	946	945	945	946	946	946	947	947	947	947	948	948	948	948	948	949	949	949	950	951	951	951	945	947.3
19	951	951	952	952	952	952	952	952	952	953	953	953	953	953	952	952	952	951	950	950	950	949	949	949	953	949	951.6
20	948	948	947	947	946	946	945	944	944	943	943	943	942	942	941	940	940	939	938	937	937	936	935	934	948	934	941.9
21	932	931	930	929	928	927	926	925	925	924	925	924	924	923	922	922	921	920	920	920	922	921	923	924	932	920	924.6
22	925	926	927	927	928	930	931	933	935	937	938	941	940	943	943	944	947	947	948	948	949	950	952	952	952	925	939.2
23	952	952	953	954	955	955	957	957	958	959	958	959	960	960	960	960	960	960	960	960	961	960	960	960	961	952	958.0
24	959	959	959	959	958	957	957	957	956	956	955	954	954	953	953	952	951	950	950	949	949	947	947	947	959	947	953.8
25	946	945	944	943	942	942	941	941	940	940	940	939	939	939	939	939	939	940	940	941	941	942	942	942	946	939	941.2
26	943	944	944	945	945	945	945	946	946	946	946	946	946	945	945	945	944	944	944	943	943	943	943	943	946	943	944.6
27	943	943	943	943	944	944	944	944	944	944	944	944	943	944	943	943	944	944	944	944	944	943	943	940	944	940	943.5
28	940	940	940	940	938	939	937	937	938	937	937	937	936	936	936	935	935	936	936	935	935	935	935	936	940	935	936.9
29	936	935	935	935	935	935	935	935	935	936	936	936	936	936	935	935	935	935	935	935	934	934	934	934	936	934	935.2
30	933	933	933	932	932	931	931	930	930	930	929	929	929	928	928	927	927	927	927	927	927	927	927	926	933	926	929.2
31	926	926	926	926	926	925	925	924	924	924	924	924	924	923	923	923	923	923	922	922	922	922	922	922	926	922	923.8
Max.	**959**	**959**	**959**	**959**	**958**	**957**	**957**	**957**	**958**	**959**	**958**	**959**	**960**	**960**	**960**	**960**	**960**	**960**	**960**	**960**	**961**	**960**	**960**	**960**	**961**		
Min.	**920**	**920**	**920**	**920**	**921**	**921**	**921**	**921**	**921**	**922**	**922**	**922**	**922**	**922**	**922**	**922**	**921**	**920**	**920**	**920**	**922**	**921**	**922**	**922**		**920**	
Avg.	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**			**939.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	922	922	922	922	922	922	922	922	923	923	923	924	925	925	927	927	927	928	929	930	930	931	931	932	932	922	925.4
2	933	934	935	935	936	936	937	937	938	939	939	940	940	940	940	940	941	940	940	940	940	940	940	940	941	933	938.3
3	939	940	939	939	939	939	939	939	940	942	942	943	944	944	944	944	943	943	942	942	942	942	942	941	944	939	941.4
4	941	940	940	939	937	937	937	936	935	934	933	933	931	931	930	928	927	927	926	927	927	926	927	927	941	926	932.4
5	926	926	925	924	923	922	921	921	921	921	921	921	921	920	921	920	919	918	917	915	913	911	910	911	926	910	919.4
6	911	911	910	909	909	908	907	907	908	909	910	911	912	914	916	919	920	922	923	924	925	926	927	928	928	907	915.1
7	929	930	930	931	931	932	933	934	935	936	937	938	939	941	941	943	944	945	946	947	949	950	951	953	953	929	939.3
8	954	955	955	956	956	957	957	956	957	958	958	958	956	955	954	953	952	953	952	951	952	951	951	952	958	951	954.5
9	950	948	947	944	944	943	940	940	938	937	935	934	933	933	933	933	934	934	935	934	934	935	934	935	950	933	937.7
10	935	935	934	934	933	930	930	930	929	930	930	930	931	932	933	934	936	936	937	938	938	939	939	939	939	929	933.8
11	939	939	939	938	938	937	936	935	934	933	932	931	930	929	929	928	928	928	929	929	929	929	930	930	939	928	932.6
12	931	932	932	932	933	934	934	935	937	939	941	942	944	945	947	948	949	950	950	951	952	953	953	954	954	931	942.3
13	955	957	958	959	960	960	962	963	964	965	965	966	966	965	966	966	967	967	967	969	968	968	969	969	969	955	964.2
14	970	970	970	971	971	971	972	972	973	973	974	975	975	974	973	972	972	972	972	972	972	972	972	971	975	970	972.1
15	971	971	970	970	970	969	968	968	967	966	967	965	962	964	965	965	966	967	969	970	971	973	974	975	975	962	968.3
16	976	976	977	978	978	978	978	979	979	980	980	980	980	980	979	978	978	978	978	978	977	977	976	975	980	975	978.1
17	974	973	973	972	970	969	969	966	965	965	965	965	964	964	962	961	961	962	962	961	962	962	963	963	974	961	965.5
18	964	964	964	964	964	962	961	960	959	958	958	957	955	956	955	955	956	956	956	956	957	958	958	959	964	955	958.9
19	960	961	962	961	961	962	962	962	963	964	964	964	964	964	964	964	964	964	965	965	965	965	965	965	965	960	963.3
20	965	965	964	964	964	963	963	963	963	964	964	963	963	963	962	962	963	963	964	964	965	965	966	967	967	962	963.9
21	968	968	969	969	971	972	972	973	974	974	974	975	974	974	974	974	974	974	974	974	974	975	975	975	975	968	972.9
22	975	975	974	974	974	973	973	973	973	974	974	974	974	973	973	972	972	972	971	971	970	969	969	968	975	968	972.5
23	967	966	965	965	965	964	964	965	965	966	966	966	967	967	967	968	969	969	970	970	971	971	972	972	972	964	967.3
24	973	973	973	973	973	973	973	973	973	973	974	974	974	974	973	973	973	973	973	973	973	973	972	972	974	972	973.2
25	972	971	970	970	968	968	967	966	965	964	963	963	963	963	963	963	963	963	963	963	963	963	963	962	972	962	965.0
26	962	962	962	962	961	961	961	960	959	958	958	957	956	955	953	952	950	948	946	944	943	941	939	937	962	937	953.5
27	936	935	933	934	933	934	935	936	937	937	938	937	939	939	939	939	941	942	943	944	944	945	947	948	948	933	938.8
28	949	950	951	951	952	952	954	955	955	955	956	957	957	958	958	959	958	959	960	960	961	962	962	962	962	949	956.3
Max.	**976**	**976**	**977**	**978**	**978**	**978**	**978**	**979**	**979**	**980**	**980**	**980**	**980**	**980**	**979**	**978**	**978**	**978**	**978**	**978**	**977**	**977**	**976**	**975**	**980**		
Min.	**911**	**911**	**910**	**909**	**909**	**908**	**907**	**907**	**908**	**909**	**910**	**911**	**912**	**914**	**916**	**919**	**919**	**918**	**917**	**915**	**913**	**911**	**910**	**911**		**907**	
Avg.	**952**	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**952**	**951**	**951**	**952**	**952**	**952**	**952**	**952**	**952**	**953**	**953**			**951.6**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	962	962	962	962	961	962	962	962	962	962	961	961	961	960	959	958	958	957	956	956	955	955	954	955	962	954	959.4
2	954	953	952	951	950	950	949	949	948	948	947	947	946	946	946	946	946	945	945	946	946	946	946	946	954	945	947.9
3	947	947	947	948	948	949	950	950	950	950	951	951	951	952	952	952	952	953	953	952	953	953	953	952	953	947	950.7
4	952	952	951	951	950	949	949	949	949	948	947	947	946	946	945	944	943	942	942	942	941	941	941	941	952	941	946.1
5	940	940	940	940	940	939	940	940	940	940	940	940	940	941	940	941	941	941	942	942	942	943	943	944	944	939	940.8
6	944	944	945	945	945	945	945	944	944	944	944	944	943	942	942	941	941	940	940	940	940	940	939	939	945	939	942.4
7	939	939	939	938	938	938	938	938	938	938	938	938	937	937	937	937	936	936	935	935	936	936	935	935	939	935	937.1
8	934	934	935	936	937	937	938	939	940	940	942	941	943	944	945	945	946	946	948	948	949	950	951	953	953	934	942.5
9	954	955	956	957	958	959	961	961	962	962	963	963	963	964	965	966	967	966	966	967	967	967	967	967	967	954	962.6
10	968	968	968	968	968	968	968	967	967	967	967	967	967	965	965	964	964	963	962	962	961	960	959	959	968	959	965.0
11	958	956	956	956	955	955	953	952	952	952	953	953	952	952	951	952	951	951	951	951	951	951	952	950	958	950	952.7
12	950	951	949	951	951	951	951	951	951	952	952	953	953	954	954	954	954	955	955	956	956	956	957	958	958	949	953.0
13	958	958	959	959	959	959	959	959	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	961	961	958	960.1
14	961	961	961	961	961	961	961	960	960	960	960	960	960	960	960	959	959	959	959	959	958	958	958	958	961	958	959.8
15	958	958	958	957	957	957	957	957	956	956	956	956	957	956	956	956	955	955	955	955	955	955	955	955	958	955	956.2
16	955	955	955	955	955	955	954	954	954	954	955	955	954	954	953	953	954	953	953	953	954	954	954	954	955	953	954.2
17	954	954	954	953	953	953	952	952	952	952	951	951	951	950	949	948	948	948	948	948	947	947	948	949	954	947	950.6
18	948	948	948	948	948	947	947	947	946	946	946	945	945	945	944	944	944	944	944	944	944	944	943	943	948	943	945.5
19	943	943	942	942	942	941	940	939	938	937	936	935	934	933	932	932	932	932	932	932	932	932	932	931	943	931	936.0
20	932	933	933	934	934	935	935	936	936	937	937	938	938	938	938	939	940	940	940	941	941	941	942	942	942	932	937.4
21	943	943	944	944	944	945	946	947	948	949	950	950	951	952	952	953	954	954	954	955	956	956	956	955	956	943	950.0
22	955	956	956	955	954	955	954	954	954	953	954	954	954	954	953	954	955	955	955	956	957	957	957	958	958	953	954.9
23	958	958	958	958	958	958	959	959	959	959	959	959	959	958	958	958	958	957	957	957	957	956	956	956	959	956	957.8
24	955	955	955	955	954	954	953	953	953	953	952	953	953	952	952	951	951	951	951	951	951	950	950	950	955	950	952.4
25	950	950	950	950	950	949	949	949	949	949	950	950	950	950	950	950	950	949	950	950	950	951	951	951	951	949	949.9
26	952	952	952	952	952	952	953	953	953	953	954	954	955	955	955	955	955	955	956	956	957	957	957	957	957	952	954.2
27	957	958	958	957	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	958	957	957.5
28	956	956	955	955	954	954	954	953	953	953	953	953	953	952	952	951	951	950	951	951	951	951	951	951	956	950	952.6
29	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	948	948	947	951	947	949.6
30	946	946	945	944	943	943	942	942	941	941	939	939	937	937	936	934	932	932	931	930	930	931	931	930	946	930	937.6
31	930	930	930	930	929	930	930	931	932	935	935	936	936	937	937	938	939	939	940	941	941	942	943	943	943	929	935.6
Max.	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**967**	**967**	**967**	**967**	**967**	**967**	**965**	**965**	**966**	**967**	**966**	**966**	**967**	**967**	**967**	**967**	**967**	**968**		
Min.	**930**	**930**	**930**	**930**	**929**	**930**	**930**	**931**	**932**	**935**	**935**	**935**	**934**	**933**	**932**	**932**	**932**	**932**	**931**	**930**	**930**	**931**	**931**	**930**		**929**	
Avg.	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**			**950.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	944	944	945	946	946	947	948	948	949	949	950	950	951	951	952	952	952	953	954	954	954	954	955	955	955	944	950.2
2	955	955	956	956	956	956	956	956	956	957	956	956	956	956	955	954	954	953	953	953	952	952	951	950	957	950	954.6
3	949	949	948	947	946	945	945	943	941	940	939	938	938	938	938	937	937	937	937	937	937	937	937	936	949	936	940.5
4	936	936	937	937	938	938	938	938	939	939	940	940	941	942	942	943	943	944	945	945	946	946	946	947	947	936	941.2
5	948	948	948	948	948	950	950	950	950	950	950	951	951	951	951	951	951	950	950	951	952	952	952	951	952	948	950.2
6	950	951	951	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	951	951	952	952	952	953	953	950	950.5
7	953	953	953	953	953	954	954	954	954	955	954	954	954	954	953	952	951	951	951	950	949	948	948	946	955	946	952.1
8	946	945	944	945	944	944	943	942	943	942	942	943	943	942	942	943	942	942	942	942	943	942	943	943	946	942	943.0
9	943	943	943	943	943	943	943	943	944	944	944	944	945	945	945	945	945	946	946	946	947	947	948	948	948	943	944.8
10	949	949	950	950	950	950	950	950	951	951	952	953	954	955	955	956	956	956	957	957	957	958	958	959	959	949	953.4
11	958	958	957	957	956	956	954	953	952	952	951	949	948	946	944	942	941	940	939	938	937	937	936	936	958	936	947.3
12	935	935	935	934	934	934	933	933	933	932	932	931	931	931	931	931	931	931	930	930	930	931	931	931	935	930	932.1
13	931	931	931	931	932	932	933	933	934	934	935	935	935	935	935	936	937	937	937	938	939	939	940	939	940	931	934.9
14	939	939	940	940	940	940	940	941	942	941	942	941	943	942	944	943	944	945	946	946	946	947	948	948	948	939	942.8
15	949	949	948	949	949	950	950	950	950	950	951	950	951	950	951	950	949	949	950	949	948	947	946	945	951	945	949.1
16	943	942	940	939	938	936	935	933	931	931	930	929	928	928	926	926	924	924	923	924	924	923	923	922	943	922	930.0
17	922	922	921	921	922	922	923	924	925	925	927	927	928	929	930	930	931	932	933	934	935	935	936	936	936	921	927.8
18	937	937	938	939	939	939	940	940	941	942	942	943	943	943	944	944	944	945	945	946	946	947	947	948	948	937	942.5
19	948	949	949	949	950	950	950	950	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	949	951	948	950.1
20	949	949	949	948	948	948	947	947	947	947	946	945	945	945	944	944	944	943	943	942	942	942	942	941	949	941	945.4
21	941	940	940	940	939	939	938	938	938	938	939	939	940	940	941	941	942	942	943	943	943	944	944	944	944	938	940.6
22	944	944	944	944	944	944	944	945	945	945	946	945	946	946	946	947	947	947	948	949	950	950	951	951	951	944	946.3
23	952	952	952	952	952	952	953	953	953	953	953	953	953	953	952	952	951	950	950	949	949	948	948	947	953	947	951.3
24	946	945	945	944	944	943	943	943	943	943	943	943	944	944	944	945	945	945	946	946	947	947	947	948	948	943	944.6
25	948	948	948	948	949	948	949	949	949	949	949	949	949	949	949	949	948	948	948	948	948	949	948	949	949	948	948.5
26	948	948	948	948	947	948	948	948	948	948	948	948	948	948	948	947	947	947	947	946	946	946	946	945	948	945	947.3
27	945	945	945	944	944	943	943	943	942	942	942	941	941	940	939	939	938	938	937	937	937	937	936	936	945	936	940.5
28	936	936	937	937	938	938	938	939	939	940	941	942	942	943	944	944	945	945	946	946	947	947	948	948	948	936	941.9
29	949	949	949	949	950	950	950	950	951	951	951	951	951	951	952	952	951	952	952	952	952	953	953	953	953	949	950.9
30	953	953	953	953	953	953	953	953	954	954	954	954	954	954	954	954	954	954	954	954	954	955	955	954	955	953	953.8
Max.	**958**	**958**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**957**	**956**	**956**	**956**	**956**	**955**	**956**	**956**	**956**	**957**	**957**	**957**	**958**	**958**	**959**	**959**		
Min.	**922**	**922**	**921**	**921**	**922**	**922**	**923**	**924**	**925**	**925**	**927**	**927**	**928**	**928**	**926**	**926**	**924**	**924**	**923**	**924**	**924**	**923**	**923**	**922**		**921**	
Avg.	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**			**945.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	954	954	954	953	953	952	951	951	950	950	950	949	949	950	950	950	949	949	949	949	949	949	948	949	954	948	950.4
2	948	948	948	949	949	948	949	950	950	950	951	950	950	951	951	951	951	951	951	951	952	952	952	952	952	948	950.2
3	952	952	951	951	951	951	951	950	950	949	948	947	946	945	944	943	942	942	941	940	940	940	939	939	952	939	946.0
4	939	939	938	938	938	937	936	936	936	936	936	936	935	936	936	935	934	933	932	932	931	931	929	929	939	929	934.8
5	928	927	926	926	925	926	927	928	927	927	927	928	928	928	929	928	929	928	928	929	929	930	930	930	930	925	927.8
6	930	930	930	930	930	930	930	931	931	932	932	933	934	935	935	936	936	936	937	937	938	939	939	940	940	930	933.7
7	940	940	940	941	941	941	942	942	942	943	943	943	944	944	945	945	945	945	945	945	946	946	946	946	946	940	943.4
8	946	947	947	947	947	947	947	948	948	948	949	949	949	949	949	949	949	948	948	949	949	949	949	949	949	946	948.1
9	949	949	948	948	949	948	949	949	949	950	950	950	950	950	951	951	951	951	951	951	951	951	951	951	951	948	949.9
10	951	952	951	952	952	952	952	952	953	953	953	953	952	952	953	953	953	953	953	953	954	954	954	955	955	951	952.7
11	955	955	955	956	957	957	958	958	958	958	958	959	958	959	959	959	960	961	961	962	962	962	962	963	963	955	958.9
12	964	962	963	964	964	965	966	966	966	967	967	967	967	968	968	968	968	969	969	969	969	970	970	971	971	962	966.9
13	971	970	971	970	971	971	971	971	971	971	971	971	971	970	970	970	970	969	969	968	968	968	968	967	971	967	969.9
14	967	966	965	965	965	965	964	964	964	964	964	964	964	964	964	965	964	965	966	966	966	967	968	969	969	964	965.2
15	970	970	971	971	971	971	971	971	971	971	971	970	970	970	969	969	968	968	967	967	967	966	966	965	971	965	969.3
16	965	964	964	963	963	963	962	962	961	960	960	959	958	958	957	956	956	955	955	955	954	954	954	954	965	954	958.8
17	954	954	954	954	954	954	954	954	953	953	953	953	954	954	954	954	954	954	955	955	955	956	956	956	956	953	954.1
18	957	957	957	957	957	957	958	958	958	958	958	958	959	959	959	959	960	960	960	961	961	961	962	962	962	957	958.9
19	962	962	962	961	961	961	960	959	959	958	956	955	954	953	950	951	950	949	948	947	948	947	947	948	962	947	954.5
20	947	947	946	946	945	945	944	944	943	943	943	943	943	943	944	944	945	946	947	948	949	950	950	951	951	943	945.7
21	951	952	952	953	953	953	954	955	955	955	956	954	955	956	956	956	956	956	956	957	957	957	957	957	957	951	955.0
22	957	957	957	956	956	956	955	955	955	955	955	954	954	954	954	953	953	953	952	952	952	952	952	951	957	951	954.1
23	951	951	951	951	952	952	953	953	954	955	955	956	956	956	956	956	956	957	957	957	958	958	958	959	959	951	954.9
24	959	959	959	959	960	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	961	961	962	962	962	959	960.6
25	962	962	962	963	963	963	963	963	964	964	964	964	964	964	964	963	963	963	963	963	963	964	964	964	964	962	963.3
26	964	965	965	965	965	965	965	965	965	965	965	965	965	964	964	963	963	963	963	963	963	963	963	963	965	963	964.1
27	962	962	961	961	960	960	960	960	960	960	959	958	957	957	956	956	955	955	955	955	955	955	955	955	962	955	957.9
28	955	955	955	955	955	955	956	956	956	956	956	956	956	955	955	955	955	954	955	955	955	955	955	956	956	954	955.2
29	956	956	956	956	956	957	957	958	958	958	958	958	958	958	959	959	958	958	958	958	958	958	959	959	959	956	957.7
30	959	959	959	959	959	959	959	959	959	959	959	958	958	958	958	958	957	957	957	957	957	957	957	957	959	957	958.1
31	957	956	956	956	956	956	956	956	956	955	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	955	955.9
Max.	**971**	**970**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**970**	**970**	**971**	**971**		
Min.	**928**	**927**	**926**	**926**	**925**	**926**	**927**	**928**	**927**	**927**	**927**	**928**	**928**	**928**	**929**	**928**	**929**	**928**	**928**	**929**	**929**	**930**	**929**	**929**		**925**	
Avg.	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**			**954.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	956	956	956	956	956	956	956	956	957	957	957	957	957	956	956	956	955	955	955	955	954	955	954	954	957	954	955.8
2	954	954	954	954	954	954	954	953	953	953	953	953	953	953	952	952	952	952	952	952	952	953	953	954	954	952	953.0
3	954	954	954	955	955	956	956	955	956	956	957	957	957	958	957	957	957	957	957	957	958	958	958	959	959	954	956.4
4	959	959	959	959	959	959	959	959	959	959	958	959	959	959	959	958	958	958	957	958	958	958	958	957	959	957	958.5
5	957	957	958	958	957	958	958	957	958	958	957	957	957	957	957	956	956	956	956	956	956	956	956	956	958	956	956.8
6	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	954	954	955	955	955	956	957	957	954	955.5
7	957	956	956	956	955	956	956	956	956	957	956	956	957	956	956	957	957	956	957	957	957	958	957	957	958	955	956.5
8	957	956	956	956	956	956	955	956	955	956	955	955	954	954	953	952	952	950	949	949	949	947	947	945	957	945	952.9
9	946	946	945	945	944	944	944	944	943	942	943	942	943	941	943	943	944	945	945	945	945	946	947	947	947	941	944.2
10	949	949	948	948	948	949	949	949	950	951	951	952	953	953	953	954	954	954	955	955	955	955	956	955	955	948	951.9
11	954	954	953	953	952	953	953	953	953	953	954	953	954	953	953	954	953	953	953	952	953	952	953	952	954	952	953.0
12	952	951	951	952	952	952	952	952	953	952	953	953	953	953	954	954	954	954	955	955	955	955	955	955	955	951	953.3
13	955	955	955	955	955	955	955	955	955	955	955	955	955	954	954	954	954	954	954	954	954	954	954	954	955	954	954.5
14	954	953	953	953	953	953	953	953	953	953	953	952	952	952	952	952	952	951	951	951	951	951	951	951	954	951	952.2
15	950	950	950	949	949	949	949	948	948	948	947	947	946	946	946	946	946	946	946	946	945	945	945	945	950	945	947.2
16	945	945	944	944	943	943	943	942	942	942	942	942	943	943	944	944	944	944	945	945	945	946	946	947	947	942	943.9
17	947	947	947	947	947	947	948	948	949	949	949	949	949	950	950	950	950	951	951	952	952	952	952	953	953	947	949.4
18	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	952	952	953	952	953	953	954	954	955	955	952	952.9
19	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	954	954	954	955	955	956	957	957	958	958	954	955.3
20	958	958	958	958	958	958	959	959	959	959	959	959	959	959	960	960	961	961	961	962	961	961	961	962	962	958	959.6
21	962	962	962	962	961	961	961	961	961	961	961	960	960	960	960	959	959	959	959	959	959	959	959	958	962	958	960.2
22	958	958	958	958	958	958	958	959	959	960	960	960	960	961	961	961	962	962	962	963	963	963	964	964	964	958	960.5
23	964	964	964	964	965	965	965	965	966	966	966	966	966	966	966	966	966	966	966	966	966	966	967	967	967	964	965.6
24	967	967	967	966	966	966	966	966	966	966	966	966	966	965	965	965	964	964	964	964	964	964	964	964	967	964	965.4
25	964	964	964	964	963	963	964	964	964	964	964	964	964	964	964	964	963	964	964	964	964	965	965	965	965	963	963.8
26	965	965	965	965	965	965	965	965	965	965	965	965	965	964	964	964	964	964	963	963	963	964	963	964	965	963	964.4
27	964	964	964	964	963	963	963	963	963	963	963	963	963	962	962	962	962	963	963	962	963	963	963	964	964	962	963.0
28	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	964	963	963.9
29	964	963	964	964	964	964	964	964	964	964	964	964	963	963	962	961	962	961	961	962	962	962	962	962	964	961	962.9
30	962	962	962	963	963	964	964	965	965	965	965	966	966	967	967	967	967	968	968	968	968	968	968	969	969	962	965.7
Max.	967	967	967	966	966	966	966	966	966	966	966	966	966	967	967	967	967	968	968	968	968	968	968	969	969		
Min.	945	945	944	944	943	943	943	942	942	942	942	942	943	941	943	943	944	944	945	945	945	945	945	945		941	
Avg.	957	957	956	956	956	956	957	957	957	957	957	957	957	957	957	957	957	956	956	957	957	957	957	957			956.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	968	967	967	967	967	967	967	969	967	968.3
2	967	967	967	967	967	967	966	967	967	966	966	966	966	965	965	965	964	964	964	964	964	964	964	964	967	964	965.4
3	963	963	963	964	963	963	964	964	963	964	964	963	963	963	963	963	963	963	963	963	963	963	964	964	964	963	963.3
4	964	964	964	964	964	964	965	965	965	965	965	965	965	965	965	964	964	964	964	964	964	964	964	964	965	964	964.3
5	964	964	964	964	964	964	963	964	963	963	963	963	962	962	961	961	961	961	960	960	960	960	960	959	964	959	962.1
6	959	959	958	958	958	958	958	957	957	957	957	957	956	956	956	956	956	956	956	956	956	956	956	956	959	956	956.9
7	956	956	956	957	957	957	957	957	957	957	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	956	957.4
8	958	958	958	958	958	958	959	959	959	959	960	960	960	960	960	960	960	960	960	961	960	961	961	961	961	958	959.5
9	961	960	960	960	960	960	959	959	959	958	958	958	958	957	957	956	956	955	955	955	955	954	954	954	961	954	957.5
10	953	952	952	952	951	951	951	950	950	950	949	950	951	951	951	950	950	950	949	950	949	950	949	949	953	949	950.5
11	949	948	948	948	948	948	948	948	949		948	948	948	948	948	948	949	949	949	949	949	950	950	950	950	948	948.6
12	950	950	950	951	951	951	952	952	952	952	952	952	952	952	952	952	952	952	951	951	951	951	951	951	952	950	951.3
13	950	950	949	950	950	950	951	951	951	951	951	951	951	951	952	952	952	952	953	953	953	953	953	953	953	949	951.5
14	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	953	954	954	954	954	954	953	953.1
15	953	953	953	963	953	953	953	953	954	954	954	954	955	955	955	955	956	956	956	957	957	958	958	958	958	953	954.8
16	958	958	958	958	959	959	959	960	960	960	960	960	960	960	960	960	961	961	961	961	961	961	961	961	961	958	959.9
17	961	961	961	962	962	962	962	962	962	962	961	961	960	960	960	959	959	959	959	959	959	959	960	960	962	959	960.6
18	959	959	959	959	959	959	959	958	957	958	957	956	958	958	957	957	957	956	956	956	956	956	956	956	959	956	957.5
19	955	956	956	956	955	955	955	956	955	956	955	955	956	956	956	955	956	956	955	955	955	955	955	954	956	954	955.3
20	954	954	954	953	953	953	953	953	953	952	952	952	951	951	950	950	950	950	950	950	950	950	950	951	954	950	951.6
21	951	951	951	951	952	952	953	954	954	955	955	955	955	955	956	956	956	957	957	957	957	958	958	958	958	951	954.7
22	958	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	957	956	956	958	956	957.4
23	956	956	955	955	955	955	956	955	955	955	955	954	954	953	953	953	953	952	952	951	950	949	949	948	956	948	953.3
24	947	946	946	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	943	943	943	943	943	943	947	943	943.8
25	943	942	942	942	942	942	942	942	942	941	941	941	941	941	941	941	942	942	942	942	943	943	943	943	943	941	941.9
26	944	944	945	945	946	947	947	948	949	949	950	951	951	952	953	953	954	955	955	956	957	958	958	959	959	944	951.1
27	960	960	961	961	962	962	963	964	964	965	966	966	966	966	966	966	967	967	968	967	967	967	967	967	968	960	964.8
28	967	966	966	966	966	965	965	965	965	964	964	964	964	964	964	963	963	963	963	963	964	963	963	963	967	963	964.3
29	963	963	962	962	961	961	962	962	962	961	961	960	960	960	960	960	960	959	960	960	960	959	960	959	963	959	960.7
30	959	958	958	958	957	957	956	957	956	956	955	955	954	954	953	952	952	951	950	949	949	949	948	948	959	948	953.7
31	947	947	947	947	947	947	948	949	949	949	950	950	950	950	951	951	951	951	951	951	951	951	951	951	951	947	949.5
Max.	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	968	968	967	967	967	967	967	969		
Min.	943	942	942	942	942	942	942	942	942	941	941	941	941	941	941	941	942	942	942	942	943	943	943	943		941	
Avg.	956	956	956	956	956	956	957	957	957	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956			956.3

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	953	953	953	953	952	952.0
2	954	954	954	954	954	955	955	955	955	956	956	956	956	956	956	956	955	955	954	954	954	953	953	953	956	953	954.7
3	952	951	951	950	950	949	949	948	948	947	946	945	945	944	944	944	944	943	944	944	944	944	944	944	952	943	946.5
4	945	945	945	946	946	947	947	947	948	948	949	949	949	950	950	951	951	951	951	951	952	952	952	953	953	945	949.0
5	953	953	953	953	954	954	954	954	955	955	955	955	956	956	956	956	956	956	957	957	957	957	958	958	958	953	955.3
6	958	958	958	958	958	958	958	958	959	959	960	960	960	960	960	960	960	960	960	960	960	961	961	961	961	958	959.4
7	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	960	960	960	960	960	961	960	960.7
8	960	960	960	960	959	959	959	959	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	960	957	958.2
9	957	957	957	956	956	956	956	956	956	957	957	957	957	957	957	957	957	957	957	957	957	957	957	958	958	956	956.9
10	958	958	957	957	957	957	956	956	957	957	956	956	956	955	954	953	952	951	950	949	948	948	947	947	958	947	953.8
11	947	947	947	947	947	946	947	947	947	948	948	948	948	949	949	949	950	950	950	949	950	950	950	950	950	946	948.2
12	950	950	950	950	951	951	951	952	952	953	953	953	954	954	955	955	955	955	956	955	956	957	957	957	957	950	953.4
13	957	957	957	958	958	958	958	958	957	957	957	958	958	958	958	958	958	958	958	958	958	958	958	958	858	957	957.7
14	958	958	957	957	957	956	955	955	954	954	953	952	951	951	951	951	952	952	952	951	951	951	951	951	958	951	953.4
15	951	951	950	950	951	951	950	951	951	951	952	952	953	953	953	953	954	954	954	954	954	955	955	955	955	950	952.4
16	955	955	955	955	955	955	955	956	956	956	956	956	957	957	957	957	957	957	957	957	958	958	958	958	958	955	956.4
17	958	958	958	958	958	958	958	959	959	959	959	958	958	958	958	958	958	957	957	957	956	957	956	956	959	956	957.8
18	955	954	953	953	952	951	951	950	950	950	949	949	948	948	948	948	948	948	949	949	950	950	950	950	955	948	950.1
19	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	948	948	948	947	947	946	946	945	950	945	948.8
20	944	944	944	943	943	943	943	943	943	944	944	944	944	945	945	946	946	946	947	948	949	949	950	951	951	943	945.4
21	951	952	952	952	953	953	953	953	953	953	954	954	954	954	954	954	953	953	952	951	951	950	950	950	954	950	952.5
22	949	949	949	950	949	948	948	949	949	949	949	950	950	951	951	952	953	953	954	955	955	955	956	956	956	948	951.1
23	956	956	957	957	957	957	957	957	957	957	957	957	957	957	957	957	956	956	956	956	955	955	955	955	957	955	956.5
24	954	954	953	953	952	952	952	951	951	950	949	949	948	948	947	947	946	946	946	946	946	946	946	946	954	946	949.1
25	947	947	947	947	947	947	947	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	947	947.6
26	949	949	949	950	950	950	951	951	952	952	952	953	953	953	953	953	954	954	955	955	955	956	956	957	957	949	952.5
27	957	957	957	958	958	958	958	958	958	958	959	958	958	958	958	957	957	957	957	957	957	957	956	956	959	956	957.4
28	956	956	956	956	956	956	956	956	956	955	956	956	955	955	955	955	955	955	955	955	955	956	956	955	956	955	955.5
29	956	956	956	955	955	954	954	954	954	954	953	953	952	952	951	951	950	950	949	949	949	948	947	947	956	947	952.0
30	947	946	945	945	943	943	943	943	943	942	942	942	941	941	941	941	940	940	940	940	940	940	940	940	947	940	941.9
31	940	939	939	939	939	939	939	939	939	939	939	939	939	939	939	940	940	940	941	942	942	943	943	944	944	939	940.0
Max.	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	960	960	961	961	961	961		
Min.	940	939	939	939	939	939	939	939	939	939	939	939	939	939	939	940	940	940	940	940	940	940	940	940		939	
Avg.	953	953	953	953	952	952	952	952	952	953	953	953	953	953	952	952	952	952	952	952	952	952	952	952			952.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	944	944	945	945	946	946	947	947	948	948	949	950	950	951	951	951	951	952	952	953	953	954	954	954	954	944	949.5
2	954	955	955	955	955	955	955	956	956	956	956	957	956	957	956	956	956	956	957	957	958	958	957	958	958	954	956.1
3	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	956	956	958	956	957.7
4	956	955	955	954	954	953	953	952	952	951	951	950	950	950	950	949	949	950	950	950	950	951	951	951	956	949	951.5
5	952	952	952	953	953	954	954	955	956	956	957	957	957	958	958	958	959	959	959	960	960	960	960	960	960	952	956.6
6	960	960	960	959	959	958	958	957	957	956	956	956	955	954	954	954	953	953	953	953	953	953	953	953	960	953	955.7
7	953	952	952	952	951	950	950	949	948	946	945	944	943	942	940	939	938	939	937	936	936	935	934	933	953	933	943.5
8	932	931	929	929	928	928	928	927	927	928	928	928	928	928	928	929	929	929	930	930	930	931	931	932	932	927	929.1
9	932	933	933	934	934	934	934	935	935	936	936	936	937	938	938	938	939	939	940	941	941	942	943	943	943	932	937.1
10	943	944	944	944	945	945	945	946	946	947	947	948	948	949	949	949	950	950	951	952	952	953	954	954	954	943	948.0
11	955	955	956	956	957	957	958	958	959	960	960	961	961	961	961	962	962	962	963	963	964	964	965	965	965	955	960.2
12	966	966	966	967	967	968	968	969	969	970	970	970	971	971	971	971	971	971	971	972	972	972	972	973	973	966	969.7
13	973	973	973	972	972	972	972	971	971	971	970	970	970	968	967	966	965	964	964	961	959	958	959	959	973	958	967.5
14	956	956	955	953	953	952	951	950	951	951	950	950	950	949	948	947	945	946	945	946	945	946	945	944	956	944	949.4
15	944	944	943	943	942	941	941	941	939	939	939	939	938	939	938	940	939	939	939	940	941	941	942	942	944	938	940.6
16	942	943	944	944	945	945	946	946	946	947	946	947	948	948	948	949	949	949	949	950	951	951	951	952	952	942	947.3
17	952	952	953	952	953	953	954	954	954	954	954	955	955	955	955	955	954	954	955	954	954	955	954	954	955	952	954.0
18	954	954	953	952	952	951	950	950	948	948	948	947	946	946	944	943	942	940	939	939	939	938	938	938	954	938	945.8
19	937	938	938	938	937	937	937	937	937	938	938	938	938	939	939	939	939	940	940	941	941	942	943	943	943	937	939.0
20	944	944	945	945	946	946	947	947	948	949	949	950	951	951	952	952	952	952	952	953	953	953	953	953	953	944	949.4
21	953	953	952	951	951	950	949	949	948	947	946	945	944	942	940	939	937	935	934	933	932	932	931	932	953	931	942.7
22	932	933	934	935	936	937	938	940	941	942	943	944	945	946	946	947	947	948	949	950	950	951	952	953	953	932	943.3
23	953	954	954	955	955	956	956	956	957	957	958	958	958	958	958	958	958	958	958	958	958	959	959	959	959	953	957.0
24	959	958	958	958	958	957	957	957	957	957	957	956	956	956	955	955	955	955	954	954	954	954	954	954	959	954	956.1
25	954	954	954	954	954	954	954	953	954	954	953	953	954	953	952	952	951	951	951	950	950	949	949	949	954	949	952.3
26	948	948	947	946	945	944	943	943	943	942	942	942	942	941	941	941	940	940	940	940	940	940	940	940	948	940	942.4
27	940	940	940	941	941	941	941	941	942	942	942	942	942	942	941	941	941	940	940	940	941	941	941	941	942	940	941.0
28	942	942	942	942	942	942	942	943	943	943	944	944	944	944	945	945	945	946	946	947	947	948	948	948	948	942	944.3
29	949	949	949	948	948	948	948	949	949	950	950	951	951	951	952	952	953	953	954	954	954	954	954	955	955	948	951.0
30	954	955	955	954	954	954	954	953	953	953	953	952	951	951	950	949	949	948	947	947	947	946	946	946	955	946	950.8
Max.	973	973	973	972	972	972	972	971	971	971	970	970	971	971	971	971	971	971	971	972	972	972	972	973	973		
Min.	932	931	929	929	928	928	928	927	927	928	928	928	928	928	928	929	929	929	930	930	930	931	931	932		927	
Avg.	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	949	950	950	950			949.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

October *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	945	945	945	945	944	944	944	945	944	944	944	944	944	944	943	943	943	943	943	944	944	944	943	944	945	943	944.1
2	944	944	944	945	945	945	945	946	946	946	947	947	947	947	947	946	946	945	945	944	943	942	941	941	947	941	945.0
3	940	939	938	936	937	937	936	938	938	938	938	937	937	936	936	935	934	935	935	934	934	935	935	935	940	934	936.4
4	936	937	937	938	939	939	939	940	940	941	941	941	941	941	941	941	941	941	941	942	942	943	943	944	944	936	940.4
5	944	945	945	946	946	947	948	948	949	950	950	951	951	952	952	952	952	953	953	953	954	954	954	954	954	944	950.1
6	955	955	954	954	953	952	952	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	949	949	955	949	951.3
7	948	948	948	947	947	947	947	947	948	948	948	948	949	949	948	948	948	948	948	948	948	948	948	947	949	947	947.7
8	948	946	946	946	944	945	944	943	941	941	941	940	937	937	935	936	936	935	936	935	934	931	929	926	948	926	938.9
9	925	925	923	922	922	921	920	919	919	920	921	920	921	922	922	922	924	924	928	930	931	932	933	934	934	919	924.1
10	935	935	936	936	937	937	937	938	938	938	938	938	938	937	937	937	938	939	939	940	941	942	942	943	943	935	938.2
11	944	944	945	946	946	947	948	948	949	950	951	951	951	952	953	953	953	954	954	955	955	955	956	956	956	944	950.7
12	956	956	956	956	956	955	956	956	956	956	956	957	956	956	956	956	955	956	956	956	956	956	956	956	957	955	955.9
13	956	955	955	955	955	955	954	954	954	955	955	954	954	954	953	953	953	952	952	952	952	952	952	952	956	952	953.6
14	952	951	951	952	951	951	951	951	952	952	952	953	953	953	952	953	953	953	953	953	952	953	953	953	953	951	952.2
15	953	952	952	951	951	951	951	950	951	951	950	950	950	949	949	949	949	949	948	949	948	948	947	945	953	945	949.7
16	948	947	948	949	950	950	950	950	950	951	951	951	951	951	950	950	950	950	950	949	949	949	949	949	951	947	949.6
17	948	948	948	948	947	947	947	947	947	947	947	947	947	946	946	946	945	944	944	943	942	941	941	940	948	940	945.5
18	938	937	936	934	934	933	931	932	931	931	932	933	934	935	936	937	938	939	941	942	943	944	944	946	946	931	936.6
19	947	947	948	948	949	949	949	949	949	949	949	949	949	949	948	948	948	949	949	950	950	951	952	953	953	947	949.0
20	953	954	954	955	955	956	956	957	957	957	957	957	957	957	956	956	956	955	955	954	954	953	952	952	957	952	955.2
21	951	951	950	949	948	947	947	946	946	945	945	944	943	943	942	942	941	940	940	939	939	938	938	937	951	937	943.8
22	937	937	937	937	937	937	938	938	939	939	940	940	940	940	940	940	940	940	940	940	940	941	941	942	942	937	939.1
23	942	942	943	943	944	945	946	946	947	948	948	949	949	949	949	950	949	949	949	949	948	948	947	946	950	942	946.9
24	945	943	942	940	938	937	935	934	932	931	930	929	929	928	928	928	928	928	928	928	929	929	929	929	945	928	932.5
25	930	930	931	931	931	931	932	933	934	934	935	936	936	937	937	938	938	938	938	939	940	940	941	942	942	930	935.5
26	942	943	943	943	944	945	946	946	947	948	949	950	951	952	952	952	954	955	956	957	957	958	959	959	959	942	950.3
27	960	960	961	962	962	963	963	964	965	965	966	966	967	967	967	967	967	968	968	968	968	968	969	969	969	960	965.4
28	969	969	969	969	969	968	968	968	968	968	967	967	967	966	965	965	964	964	963	963	962	962	962	962	969	962	965.8
29	962	962	962	962	962	962	962	962	962	962	962	963	963	963	963	962	962	962	962	962	962	962	963	963	963	962	962.1
30	963	963	963	963	963	963	963	963	963	964	964	964	964	964	965	965	965	965	965	965	966	966	966	967	967	963	964.2
31	967	967	966	966	966	967	967	967	967	967	967	968	969	969	968	968	968	969	969	969	970	970	970	970	970	966	967.9
Max.	**969**	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**967**	**968**	**969**	**969**	**968**	**968**	**968**	**969**	**969**	**969**	**970**	**970**	**970**	**970**	**970**		
Min.	**925**	**925**	**923**	**922**	**922**	**921**	**920**	**919**	**919**	**920**	**921**	**920**	**921**	**922**	**922**	**922**	**924**	**924**	**928**	**928**	**929**	**929**	**929**	**926**		**919**	
Avg.	**948**	**948**	**948**	**948**	**947**	**947**	**947**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**949**			**948.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	970	970	970	969	969	969	969	969	968	969	968	968	968	967	967	966	966	965	966	965	965	964	964	964	970	964	967.3
2	964	964	963	963	962	962	962	962	961	962	961	961	961	961	960	960	959	959	959	959	958	958	958	958	964	958	960.7
3	958	958	958	958	957	957	957	957	957	957	957	957	957	957	956	956	956	956	956	955	956	955	956	956	958	955	956.7
4	955	955	955	955	954	954	954	954	953	953	953	953	953	952	952	951	952	951	952	951	952	952	952	952	955	951	952.9
5	952	952	952	952	952	952	952	952	953	953	953	954	954	953	953	953	953	953	953	953	952	952	952	951	954	951	952.5
6	951	950	950	950	949	948	947	947	946	946	946	945	945	944	944	944	945	945	946	946	946	946	945	945	951	944	946.6
7	945	945	946	946	946	945	945	945	946	946	946	946	945	945	945	944	944	944	944	944	944	945	944	943	946	943	944.9
8	944	943	944	944	944	944	944	944	944	945	945	946	945	945	945	944	944	944	944	944	943	942	941	941	946	941	943.9
9	942	942	941	941	942	941	941	940	941	941	941	941	941	941	940	940	940	939	939	939	939	939	938	938	942	938	940.2
10	938	938	937	937	937	936	936	936	935	935	934	934	935	935	936	936	937	937	938	939	939	940	941	941	941	934	937.0
11	942	942	942	942	943	943	943	943	944	945	945	946	946	946	946	946	946	947	947	947	948	948	948	949	949	942	945.1
12	950	951	951	951	952	952	952	953	954	954	954	955	954	955	954	954	954	954	954	954	953	952	951	950	955	950	952.8
13	948	948	947	946	945	943	944	944	944	944	944	944	945	945	945	946	947	946	947	947	948	948	949	950	950	943	946.0
14	951	950	950	949	949	948	945	944	941	939	939	940	940	940	940	939	938	938	938	937	933	936	938	936	951	933	941.5
15	932	934	934	934	932	934	932	932	932	933	933	932	931	932	931	932	931	932	930	930	930	931	930	931	934	930	931.8
16	931	931	931	934	934	933	934	934	935	935	936	936	936	937	937	937	937	938	938	939	939	940	941	941	941	931	936.0
17	942	942	943	943	944	945	944	945	946	947	947	947	947	948	948	948	948	949	949	949	949	949	949	949	949	942	946.5
18	949	949	949	950	950	949	949	950	950	950	951	951	950	950	949	949	948	948	947	947	947	947	945	945	951	945	948.7
19	944	944	942	942	941	940	940	939	939	939	939	938	938	937	938	938	940	941	941	941	942	942	944	943	944	937	940.6
20	944	944	945	946	946	947	948	948	948	949	949	950	950	951	952	953	954	955	955	957	956	956	957	957	957	944	950.7
21	958	959	960	960	960	961	961	961	962	962	962	962	962	962	962	962	961	962	961	961	961	961	961	961	962	958	961.0
22	960	960	960	960	960	961	961	961	960	960	960	961	960	960	960	960	960	960	960	959	959	960	960	960	961	959	960.1
23	961	961	961	961	961	961	962	962	962	962	962	963	963	963	963	963	963	963	963	963	963	963	964	963	964	961	962.1
24	963	963	963	963	963	962	962	962	962	962	962	962	961	961	960	960	960	959	959	959	959	959	959	959	963	959	961.1
25	958	958	958	959	960	960	961	961	962	963	963	964	964	964	964	964	964	964	964	964	964	964	964	964	964	958	962.2
26	964	963	962	962	961	961	960	960	960	958	957	957	956	955	955	954	953	951	950	949	949	948	947	947	964	947	955.8
27	948	948	948	949	950	951	952	953	954	955	956	956	956	956	956	956	956	955	956	956	956	955	955	955	956	948	953.7
28	955	955	955	955	954	954	954	954	954	954	954	954	954	953	953	953	953	953	952	952	952	951	951	951	955	951	953.3
29	951	951	951	951	950	950	950	950	950	949	949	950	949	949	948	948	947	947	947	946	946	946	946	946	951	946	948.6
30	945	945	945	944	943	943	943	943	944	945	945	945	946	948	950	951	951	954	956	957	959	960	960	961	961	943	949.2
Max.	970	970	970	969	969	969	969	969	968	969	968	968	968	967	967	966	966	965	966	965	965	964	964	964	970		
Min.	931	931	931	934	932	933	932	932	932	933	933	932	931	932	931	932	931	932	930	930	930	931	930	931		930	
Avg.	951	950	950	950	950	950	950	950	950	950	950	951	950	950	950	950	950	950	950	950	950	950	950	950			950.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Barometric Pressure (mbar)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	962	964	964	965	965	966	966	966	967	967	967	967	967	966	965	966	966	966	966	965	965	965	964	964	967	962	965.4
2	963	963	962	962	961	961	960	959	958	958	957	956	955	954	953	952	951	951	950	949	948	947	947	945	963	945	955.0
3	944	943	942	941	941	940	940	940	939	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	944	939	940.4
4	940	940	941	941	941	941	941	941	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	940	941.5
5	942	941	941	940	940	940	939	938	938	938	937	937	935	935	934	933	932	931	929	928	927	926	924	923	942	923	934.4
6	922	921	920	919	918	918	919	919	920	919	920	921	920	921	921	921	921	922	922	922	922	921	922	922	922	918	920.5
7	921	923	924	924	924	923	923	922	922	922	922	922	921	921	920	920	919	919	919	919	919	919	919	919	924	919	921.2
8	919	918	918	918	918	918	918	919	920	922	923	923	922	921	921	921	920	921	920	921	922	922	921	921	923	918	920.3
9	921	921	921	920	920	920	919	919	918	918	918	917	917	917	916	916	916	917	917	917	916	916	917	917	921	916	917.9
10	917	918	918	919	919	920	920	920	921	922	922	922	922	923	923	923	923	923	924	924	924	923	923	923	924	917	921.5
11	923	923	923	923	923	923	923	923	923	924	924	924	924	924	923	923	923	924	924	924	924	924	925	925	925	923	923.6
12	925	925	925	925	925	925	925	925	926	926	926	926	927	927	928	928	928	929	929	929	930	930	931	931	931	925	927.2
13	931	932	932	932	932	932	932	933	933	933	934	934	934	934	934	934	935	934	935	935	934	935	935	937	937	931	933.6
14	937	937	938	938	939	940	940	942	942	943	943	944	944	944	944	944	944	945	945	945	945	945	945	946	946	937	942.5
15	946	946	947	947	947	947	946	946	946	946	945	944	943	942	941	940	940	938	938	937	936	936	936	936	947	936	942.4
16	935	935	934	934	934	934	934	934	934	934	934	935	935	935	935	935	935	934	934	933	933	932	931	931	935	931	933.8
17	930	929	928	928	927	926	925	925	924	924	924	923	923	922	922	921	920	919	919	919	918	918	918	917	930	917	922.9
18	917	917	917	918	918	918	917	918	918	919	919	919	920	920	920	920	920	921	921	921	921	922	922	922	922	917	919.3
19	922	922	921	921	921	920	920	919	918	918	916	915	914	911	911	909	909	908	908	907	907	907	907	906	922	906	914.0
20	906	907	907	907	908	909	909	910	911	912	914	915	916	917	918	918	919	920	921	921	922	922	923	923	923	906	914.8
21	923	923	923	923	924	924	924	924	925	926	926	927	928	928	929	929	930	931	932	933	934	935	936	937	937	923	928.1
22	938	938	939	939	939	939	938	938	938	938	938	937	935	935	934	933	933	932	932	932	931	931	930	931	939	930	935.3
23	930	931	931	931	931	932	932	933	933	933	934	934	935	936	936	936	937	937	938	938	938	939	939	940	940	930	934.7
24	940	940	940	940	940	939	939	939	938	938	937	936	936	935	934	934	933	933	932	932	933	932	932	932	940	932	936.1
25	931	932	931	932	932	933	931	932	932	933	933	933	934	934	934	934	934	934	934	934	935	935	936	936	936	931	933.2
26	937	938	939	939	940	940	940	941	942	943	943	944	944	945	945	945	945	945	945	945	944	944	943	944	945	937	942.5
27	944	943	942	940	939	938	936	935	935	934	932	931	928	926	923	921	921	919	919	919	920	919	920	922	944	919	929.4
28	923	925	925	925	926	928	928	929	930	931	932	932	933	933	933	933	933	933	933	932	931	931	929	928	933	923	929.8
29	926	924	923	922	921	920	919	919	918	918	918	918	918	918	919	920	921	921	922	923	924	925	925	927	927	918	921.1
30	928	929	930	930	931	931	932	933	934	935	936	937	937	937	937	937	937	937	937	937	938	937	937	937	938	928	934.7
31	937	936	936	936	935	934	934	933	932	932	932	931	930	929	928	927	927	926	925	924	923	923	922	921	937	921	929.8
Max.	**963**	**964**	**964**	**965**	**965**	**966**	**966**	**966**	**967**	**967**	**967**	**967**	**967**	**966**	**965**	**966**	**966**	**966**	**966**	**965**	**965**	**965**	**964**	**964**	**967**		
Min.	**906**	**907**	**907**	**907**	**908**	**909**	**909**	**910**	**911**	**912**	**914**	**915**	**914**	**911**	**911**	**909**	**909**	**908**	**908**	**907**	**907**	**907**	**907**	**906**		**906**	
Avg.	**932**	**932**	**932**	**932**	**932**	**932**	**931**	**931**	**932**	**932**	**932**	**932**	**932**	**931**	**931**	**931**	**931**	**931**	**931**	**931**	**930**	**930**	**930**	**930**			**931.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

January 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	7	39	90	96	56	32	4	0	0	0	0	0	0	0	96	0	13
2	0	0	0	0	0	0	0	0	0	0	5	24	37	42	41	20	3	0	0	0	0	0	0	0	42	0	7
3	0	0	0	0	0	0	0	0	0	0	3	19	38	55	53	33	5	0	0	0	0	0	0	0	55	0	9
4	0	0	0	0	0	0	0	0	0	0	8	37	57	88	76	50	7	0	0	0	0	0	0	0	88	0	13
5	0	0	0	0	0	0	0	0	0	0	5	44	47	64	58	63	14	0	0	0	0	0	0	0	64	0	12
6	0	0	0	0	0	0	0	0	0	0	10	21	40	61	81	82	19	0	0	0	0	0	0	0	82	0	13
7	0	0	0	0	0	0	0	0	0	0	8	32	59	87	49	42	4	0	0	0	0	0	0	0	87	0	12
8	0	0	0	0	0	0	0	0	0	0	15	54	100	120	119	54	11	0	0	0	0	0	0	0	120	0	20
9	0	0	0	0	0	0	0	0	0	0	6	27	47	47	67	26	5	0	0	0	0	0	0	0	67	0	9
10	0	0	0	0	0	0	0	0	0	0	6	21	36	24	20	11	2	0	0	0	0	0	0	0	36	0	5
11	0	0	0	0	0	0	0	0	0	0	3	14	26	30	21	13	4	0	0	0	0	0	0	0	30	0	5
12	0	0	0	0	0	0	0	0	0	0	4	16	22	29	22	17	8	0	0	0	0	0	0	0	29	0	5
13	0	0	0	0	0	0	0	0	0	0	9	34	51	57	53	38	10	0	0	0	0	0	0	0	57	0	10
14	0	0	0	0	0	0	0	0	0	0	1	5	8	16	15	21	6	0	0	0	0	0	0	0	21	0	3
15	0	0	0	0	0	0	0	0	0	0	11	52	63	77	46	34	11	0	0	0	0	0	0	0	77	0	12
16	0	0	0	0	0	0	0	0	0	0	5	22	47	64	65	27	14	1	0	0	0	0	0	0	65	0	10
17	0	0	0	0	0	0	0	0	0	1	22	50	129	165	150	55	25	1	0	0	0	0	0	0	165	0	25
18	0	0	0	0	0	0	0	0	0	1	22	87	147	172	160	103	27	1	0	0	0	0	0	0	172	0	30
19	0	0	0	0	0	0	0	0	0	1	26	93	133	160	154	87	33	1	0	0	0	0	0	0	160	0	29
20	0	0	0	0	0	0	0	0	0	1	20	63	94	107	77	48	15	1	0	0	0	0	0	0	107	0	18
21	0	0	0	0	0	0	0	0	0	1	13	36	57	73	69	39	14	1	0	0	0	0	0	0	73	0	13
22	0	0	0	0	0	0	0	0	0	0	11	28	45	50	41	46	19	0	0	0	0	0	0	0	50	0	10
23	0	0	0	0	0	0	0	0	0	1	28	92	142	162	154	115	41	2	0	0	0	0	0	0	162	0	31
24	0	0	0	0	0	0	0	0	0	1	30	86	136	158	154	122	52	2	0	0	0	0	0	0	158	0	31
25	0	0	0	0	0	0	0	0	0	1	30	76	115	139	143	118	57	2	0	0	0	0	0	0	143	0	28
26	0	0	0	0	0	0	0	0	0	1	39	89	125	150	154	133	60	2	0	0	0	0	0	0	154	0	31
27	0	0	0	0	0	0	0	0	0	1	16	28	38	103	127	83	35	2	0	0	0	0	0	0	127	0	18
28	0	0	0	0	0	0	0	0	0	1	22	70	139	173	155	132	58	4	0	0	0	0	0	0	173	0	31
29	0	0	0	0	0	0	0	0	0	5	55	124	183	207	199	156	57	5	0	0	0	0	0	0	207	0	41
30	0	0	0	0	0	0	0	0	0	5	48	105	159	172	166	134	60	6	0	0	0	0	0	0	172	0	36
31	0	0	0	0	0	0	0	0	0	5	63	130	116	122	137	122	54	7	0	0	0	0	0	0	137	0	31
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**63**	**130**	**183**	**207**	**199**	**156**	**60**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**207**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**8**	**16**	**15**	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**52**	**81**	**99**	**93**	**66**	**24**	**1**	**0**	**0**	**0**	**0**	**0**	**0**			**18**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	5	52	130	195	218	208	169	90	6	0	0	0	0	0	0	218	0	45
2	0	0	0	0	0	0	0	0	0	8	61	138	187	207	203	171	94	7	0	0	0	0	0	0	207	0	45
3	0	0	0	0	0	0	0	0	0	4	39	73	131	157	171	106	48	8	0	0	0	0	0	0	171	0	31
4	0	0	0	0	0	0	0	0	0	4	29	56	77	127	100	50	34	15	0	0	0	0	0	0	127	0	20
5	0	0	0	0	0	0	0	0	0	6	31	51	146	177	94	57	24	6	0	0	0	0	0	0	177	0	25
6	0	0	0	0	0	0	0	0	0	7	39	92	117	95	116	109	44	11	0	0	0	0	0	0	117	0	26
7	0	0	0	0	0	0	0	0	0	8	55	154	259	183	261	197	109	16	0	0	0	0	0	0	261	0	52
8	0	0	0	0	0	0	0	0	0	16	61	102	137	142	108	70	33	7	0	0	0	0	0	0	142	0	28
9	0	0	0	0	0	0	0	0	0	5	32	53	58	112	91	93	58	8	0	0	0	0	0	0	112	0	21
10	0	0	0	0	0	0	0	0	0	8	32	60	71	138	156	105	65	40	1	0	0	0	0	0	156	0	28
11	0	0	0	0	0	0	0	0	0	6	34	62	76	95	84	67	39	11	0	0	0	0	0	0	95	0	20
12	0	0	0	0	0	0	0	0	0	7	29	68	85	62	91	67	33	11	0	0	0	0	0	0	91	0	19
13	0	0	0	0	0	0	0	0	1	13	50	81	114	128	157	108	48	16	0	0	0	0	0	0	157	0	30
14	0	0	0	0	0	0	0	0	1	13	52	86	121	122	94	100	56	13	0	0	0	0	0	0	122	0	27
15	0	0	0	0	0	0	0	0	0	11	37	72	88	127	91	73	41	17	0	0	0	0	0	0	127	0	23
16	0	0	0	0	0	0	0	0	1	17	66	165	213	307	292	233	152	43	2	0	0	0	0	0	307	0	62
17	0	0	0	0	0	0	0	0	1	23	72	106	161	141	128	70	51	13	1	0	0	0	0	0	161	0	32
18	0	0	0	0	0	0	0	0	1	29	65	112	204	174	124	83	52	16	1	0	0	0	0	0	204	0	36
19	0	0	1	1	2	1	1	1	3	31	135	245	188	169	156	143	84	44	4	0	0	0	0	0	245	0	50
20	0	0	1	1	1	1	1	1	3	18	125	211	243	140	132	118	112	47	4	0	0	0	0	0	243	0	48
21	0	0	0	0	0	0	0	0	4	39	99	244	326	334	355	273	162	56	4	0	0	0	0	0	355	0	79
22	0	0	0	0	0	0	0	0	7	70	151	208	337	344	315	223	164	56	5	0	0	0	0	0	344	0	78
23	0	0	0	0	0	0	0	0	9	66	118	227	402	282	320	216	187	80	5	0	0	0	0	0	402	0	80
24	0	0	0	0	0	0	0	0	6	45	116	198	260	286	277	261	197	94	9	0	0	0	0	0	286	0	73
25	0	0	0	0	0	0	0	0	3	24	61	134	209	382	358	275	180	77	10	0	0	0	0	0	382	0	71
26	0	0	0	0	0	0	0	0	7	58	101	210	261	279	227	217	117	55	7	0	0	0	0	0	279	0	64
27	0	0	0	0	0	0	0	0	7	50	131	204	297	271	247	203	241	135	21	0	0	0	0	0	297	0	75
28	0	0	0	0	0	0	0	0	18	118	240	331	381	395	373	308	214	104	14	0	0	0	0	0	395	0	104
Max.	**0**	**0**	**1**	**1**	**2**	**1**	**1**	**1**	**18**	**118**	**240**	**331**	**402**	**395**	**373**	**308**	**241**	**135**	**21**	**0**	**0**	**0**	**0**	**0**	**402**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**29**	**51**	**58**	**62**	**84**	**50**	**24**	**6**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**25**	**76**	**138**	**191**	**200**	**190**	**149**	**97**	**36**	**3**	**0**	**0**	**0**	**0**	**0**			**46**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	15	93	209	293	328	298	251	217	139	79	12	0	0	0	0	0	328	0	81
2	0	0	0	0	0	0	0	0	8	41	82	127	153	207	197	125	91	37	8	0	0	0	0	0	207	0	45
3	0	0	0	0	0	0	0	0	9	78	169	247	317	386	421	397	257	100	27	0	0	0	0	0	421	0	100
4	0	0	0	0	0	0	0	0	13	41	86	130	219	250	181	176	128	56	15	0	0	0	0	0	250	0	54
5	0	0	0	0	0	0	0	0	8	32	159	195	286	317	364	334	261	80	27	0	0	0	0	0	364	0	86
6	0	0	0	0	0	0	0	1	38	119	254	333	420	441	420	357	254	96	23	1	0	0	0	0	441	0	115
7	0	0	0	0	0	0	0	1	19	74	164	335	377	224	231	338	285	107	26	1	0	0	0	0	377	0	91
8	0	0	0	0	0	0	0	1	23	54	157	334	404	452	433	424	282	136	27	1	0	0	0	0	452	0	114
9	0	0	0	0	0	0	0	2	54	179	286	372	432	451	432	370	282	168	45	1	0	0	0	0	451	0	128
10	0	0	0	0	0	0	0	2	56	175	271	350	433	463	439	265	173	102	29	1	0	0	0	0	463	0	115
11	0	0	0	0	0	0	0	1	28	74	118	158	210	279	213	163	123	73	24	1	0	0	0	0	279	0	61
12	0	0	0	0	0	0	0	1	32	103	139	211	281	328	348	289	225	96	38	2	0	0	0	0	348	0	87
13	0	0	0	0	0	0	0	2	23	61	129	202	225	339	356	327	196	104	35	3	0	0	0	0	356	0	83
14	0	0	0	0	0	0	0	6	79	206	321	414	473	491	466	404	311	194	69	4	0	0	0	0	491	0	143
15	0	0	0	0	0	0	0	5	83	210	326	420	480	499	476	412	319	198	72	4	0	0	0	0	499	0	146
16	0	0	0	0	0	0	0	7	84	187	292	431	491	515	440	300	272	228	60	6	0	0	0	0	515	0	138
17	0	0	0	0	0	0	0	9	81	135	210	246	282	270	262	224	166	86	23	2	0	0	0	0	282	0	83
18	0	0	0	0	0	0	0	5	32	120	227	304	387	411	344	319	179	142	55	5	0	0	0	0	411	0	105
19	0	0	0	0	0	0	0	17	83	141	197	250	445	390	231	201	141	98	37	5	0	0	0	0	445	0	93
20	0	0	0	0	0	0	0	8	35	134	231	333	462	633	395	316	159	127	108	13	0	0	0	0	633	0	123
21	0	0	0	0	0	0	0	7	39	133	197	321	433	515	525	432	350	230	115	12	0	0	0	0	525	0	138
22	0	0	0	0	0	0	0	27	150	276	345	473	533	550	526	460	364	241	110	13	0	0	0	0	550	0	170
23	0	0	0	0	0	0	0	35	115	287	259	439	498	508	487	452	379	247	116	15	0	0	0	0	508	0	160
24	0	0	0	0	0	0	0	30	141	273	391	477	546	562	539	473	376	254	122	18	0	0	0	0	562	0	175
25	0	0	0	0	0	0	0	15	100	228	345	488	547	548	544	470	374	253	121	20	0	0	0	0	548	0	169
26	0	0	0	0	0	0	1	37	157	286	405	495	553	571	544	476	380	255	127	21	0	0	0	0	571	0	179
27	0	0	0	0	0	0	1	42	170	300	416	506	563	582	556	488	391	269	138	25	0	0	0	0	582	0	185
28	0	0	0	0	0	0	1	46	172	323	421	518	587	587	562	490	394	271	141	27	0	0	0	0	587	0	189
29	0	0	0	0	0	0	2	59	184	310	430	524	581	601	574	506	406	278	134	25	0	0	0	0	601	0	192
30	0	0	0	0	0	0	1	16	57	89	145	236	247	265	210	159	118	89	36	11	0	0	0	0	265	0	70
31	0	0	0	0	0	0	1	17	69	139	233	319	371	365	370	331	272	164	78	19	0	0	0	0	371	0	115
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**59**	**184**	**323**	**430**	**524**	**587**	**633**	**574**	**506**	**406**	**278**	**141**	**27**	**0**	**0**	**0**	**0**	**633**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**32**	**82**	**127**	**153**	**207**	**181**	**125**	**91**	**37**	**8**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**70**	**158**	**246**	**338**	**405**	**429**	**398**	**345**	**260**	**157**	**65**	**8**	**0**	**0**	**0**	**0**			**120**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	2	40	106	190	364	548	625	624	593	526	426	284	158	50	1	0	0	0	625	0	189
2	0	0	0	0	0	0	4	44	144	267	359	410	420	491	623	438	371	235	103	37	1	0	0	0	623	0	164
3	0	0	0	0	0	0	2	33	108	190	221	242	288	335	339	324	284	185	61	16	1	0	0	0	339	0	110
4	0	0	0	0	0	0	4	76	227	240	259	310	326	592	518	326	197	173	113	47	1	0	0	0	592	0	142
5	0	0	0	0	0	0	3	35	234	371	440	427	643	647	628	551	454	327	191	60	2	0	0	0	647	0	209
6	0	0	0	0	0	0	10	101	236	367	488	580	609	635	613	554	444	314	162	32	2	0	0	0	635	0	214
7	0	0	0	0	0	0	4	75	228	275	388	555	547	594	603	486	246	245	105	30	1	0	0	0	603	0	183
8	0	0	0	0	0	0	3	28	76	106	164	174	241	274	288	281	276	200	164	43	2	0	0	0	288	0	97
9	0	0	0	0	0	0	10	56	151	230	430	581	656	706	652	684	361	285	213	76	4	0	0	0	706	0	212
10	0	0	0	0	0	0	10	50	180	384	574	576	714	716	528	470	402	343	215	80	5	0	0	0	716	0	219
11	0	0	0	0	0	0	12	84	158	210	300	379	390	388	399	371	237	174	105	38	4	0	0	0	399	0	135
12	0	0	0	0	0	0	10	56	126	216	302	404	434	402	403	463	356	292	145	48	7	0	0	0	463	0	153
13	0	0	0	0	0	0	17	56	182	247	345	425	541	743	687	587	439	329	216	85	9	0	0	0	743	0	205
14	0	0	0	0	0	1	43	153	385	543	585	616	721	698	670	603	505	377	231	97	11	0	0	0	721	0	260
15	0	0	0	0	0	1	35	158	296	434	549	638	692	708	679	606	510	386	238	105	10	0	0	0	708	0	252
16	0	0	0	0	0	1	20	85	173	262	350	362	534	526	328	317	253	169	93	39	5	0	0	0	534	0	147
17	0	0	0	0	0	1	33	108	196	290	302	409	510	676	568	636	554	341	262	122	20	0	0	0	676	0	209
18	0	0	0	0	0	2	40	172	360	301	516	598	706	713	688	621	520	393	257	115	12	0	0	0	713	0	250
19	0	0	0	0	0	2	23	84	143	253	365	469	485	481	493	423	335	247	141	55	10	0	0	0	493	0	167
20	0	0	0	0	0	2	50	147	227	272	369	487	419	421	485	409	330	216	118	53	9	0	0	0	487	0	167
21	0	0	0	0	0	1	19	86	166	195	298	455	465	426	459	436	280	228	278	47	11	0	0	0	465	0	160
22	0	0	0	0	0	3	45	129	244	457	361	448	734	640	558	542	377	307	168	66	18	0	0	0	734	0	212
23	0	0	0	0	0	4	33	107	172	352	543	693	679	755	729	624	546	338	279	124	26	1	0	0	755	0	250
24	0	0	0	0	0	2	31	120	311	538	521	523	613	738	633	413	498	355	231	130	38	1	0	0	738	0	237
25	0	0	0	0	0	3	33	95	191	312	422	527	597	590	495	446	311	197	117	55	15	0	0	0	597	0	184
26	0	0	0	0	0	5	50	155	324	495	640	556	641	711	793	612	439	313	206	116	31	1	0	0	793	0	254
27	0	0	0	0	0	5	51	143	244	433	581	654	680	611	678	609	495	406	277	129	26	1	0	0	680	0	251
28	0	0	0	0	0	7	83	209	346	488	605	637	702	615	498	438	347	293	240	86	27	1	0	0	702	0	234
29	0	0	0	0	0	10	50	153	355	491	464	641	681	647	577	615	569	437	304	164	42	2	0	0	681	0	258
30	0	0	0	0	0	12	98	221	342	495	609	741	800	776	725	656	561	441	335	195	61	2	0	0	800	0	295
Max.	**0**	**0**	**0**	**0**	**0**	**12**	**98**	**221**	**385**	**543**	**640**	**741**	**800**	**776**	**793**	**684**	**569**	**441**	**335**	**195**	**61**	**2**	**0**	**0**	**800**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**76**	**106**	**164**	**174**	**241**	**274**	**288**	**281**	**197**	**169**	**61**	**16**	**1**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**102**	**221**	**330**	**424**	**502**	**570**	**596**	**564**	**502**	**397**	**294**	**191**	**78**	**14**	**0**	**0**	**0**			**201**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	14	58	147	271	385	495	573	662	452	407	365	300	210	136	63	22	1	0	0	662	0	190
2	0	0	0	0	0	9	58	138	238	379	351	356	657	708	693	682	562	439	398	107	36	3	0	0	708	0	242
3	0	0	0	0	0	12	49	189	265	331	443	638	597	685	651	483	420	193	178	85	38	3	0	0	685	0	219
4	0	0	0	0	0	7	85	141	182	203	356	398	372	322	335	264	241	187	150	54	24	1	0	0	398	0	138
5	0	0	0	0	0	16	53	132	128	179	225	687	427	426	502	384	420	344	203	94	33	2	0	0	687	0	177
6	0	0	0	0	0	3	16	39	97	213	496	676	588	652	636	451	280	234	211	100	26	4	0	0	676	0	197
7	0	0	0	0	0	6	35	128	245	278	361	429	501	494	385	278	236	201	153	82	28	3	0	0	501	0	160
8	0	0	0	0	1	30	134	272	406	467	555	555	577	408	378	361	339	289	210	88	30	5	0	0	577	0	213
9	0	0	0	0	0	13	52	165	278	294	225	374	383	456	436	362	350	226	143	84	36	6	0	0	456	0	162
10	0	0	0	0	1	13	47	117	304	549	643	728	780	803	648	312	446	360	243	146	94	7	0	0	803	0	260
11	0	0	0	0	156	253	530	649	726	733	762	744	682	629	219	99	168	59	10	0	0	0	0	0	762	0	267
12	0	0	0	0	2	40	150	276	412	540	649	731	774	783	755	687	599	480	346	212	90	12	0	0	783	0	314
13	0	0	0	0	3	51	170	300	391	501	643	641	710	638	628	675	489	300	195	147	65	9	0	0	710	0	273
14	0	0	0	0	3	51	170	235	285	496	631	711	774	778	747	695	593	481	350	211	73	13	0	0	778	0	304
15	0	0	0	0	2	24	150	276	255	383	551	519	422	701	767	635	605	336	208	103	30	4	0	0	767	0	249
16	0	0	0	0	3	28	106	157	308	494	570	760	792	801	708	699	602	481	352	216	93	15	0	0	801	0	299
17	0	0	0	0	5	41	110	324	442	516	629	731	761	771	534	306	546	456	308	161	44	10	0	0	771	0	279
18	0	0	0	0	2	7	47	107	250	270	250	280	454	453	471	709	428	449	180	170	94	19	1	0	709	0	193
19	0	0	0	0	6	54	150	293	420	528	559	411	333	259	219	164	40	39	49	18	11	4	0	0	559	0	148
20	0	0	0	0	5	25	55	113	205	239	248	354	409	487	348	283	158	128	138	64	46	7	0	0	487	0	138
21	0	0	0	0	3	21	48	104	158	248	447	716	681	472	637	334	365	166	329	192	102	23	1	0	716	0	210
22	0	0	0	0	8	61	173	299	433	560	700	656	783	799	760	678	553	511	372	194	86	23	1	0	799	0	319
23	0	0	0	0	7	64	172	296	428	553	658	735	784	796	613	596	489	271	365	235	120	28	2	0	796	0	301
24	0	0	0	0	8	73	181	307	412	531	638	707	705	699	714	610	492	405	275	193	133	29	2	0	714	0	296
25	0	0	0	0	10	71	173	299	430	553	658	735	782	790	764	694	609	494	363	234	121	29	2	0	790	0	325
26	0	0	0	0	8	66	168	293	427	550	649	719	779	783	759	692	600	484	358	229	118	31	2	0	783	0	321
27	0	0	0	0	7	44	108	139	277	443	436	549	685	606	652	767	526	491	267	94	88	26	2	0	767	0	259
28	0	0	0	1	15	50	152	300	411	529	665	742	787	796	769	702	622	500	380	246	129	41	5	0	796	0	327
29	0	0	0	0	12	80	187	310	441	563	665	740	785	794	765	700	611	500	374	247	133	36	3	0	794	0	331
30	0	0	0	0	12	70	168	304	405	566	665	644	603	591	561	513	287	206	71	38	42	17	1	0	665	0	240
31	0	0	0	0	2	20	37	94	75	124	165	173	126	117	142	100	77	73	51	31	19	7	0	0	173	0	60
Max.	**0**	**0**	**0**	**1**	**156**	**253**	**530**	**649**	**726**	**733**	**762**	**760**	**792**	**803**	**769**	**767**	**622**	**511**	**398**	**247**	**133**	**41**	**5**	**0**	**803**		
Min.	**0**	**0**	**0**	**0**	**0**	**3**	**16**	**39**	**75**	**124**	**165**	**173**	**126**	**117**	**142**	**99**	**40**	**39**	**10**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**9**	**43**	**122**	**224**	**323**	**426**	**516**	**594**	**618**	**611**	**568**	**493**	**421**	**322**	**238**	**133**	**65**	**14**	**1**	**0**			**239**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	10	56	69	115	195	242	250	448	683	751	806	626	529	429	222	204	94	45	4	0	806	0	241
2	0	0	0	1	14	80	186	311	437	552	661	628	483	562	318	326	482	217	274	137	128	40	5	0	661	0	243
3	0	0	0	1	14	96	170	219	459	503	676	740	785	801	765	707	628	516	389	268	152	47	6	0	801	0	331
4	0	0	0	1	19	96	204	331	462	584	690	774	813	827	797	728	633	522	395	267	154	50	5	0	827	0	348
5	0	0	0	1	20	93	175	239	353	435	550	599	659	791	763	631	642	526	398	268	150	52	5	0	791	0	306
6	0	0	0	1	14	76	199	317	454	532	656	752	786	797	778	712	628	517	392	263	80	22	1	0	797	0	332
7	0	0	0	0	7	35	57	112	236	138	150	244	162	233	162	122	85	86	80	37	20	7	1	0	244	0	82
8	0	0	0	0	4	28	73	98	156	293	296	334	351	284	177	130	110	62	44	22	21	11	1	0	351	0	104
9	0	0	0	0	3	18	39	72	111	292	251	409	785	372	435	153	110	117	61	93	13	8	2	0	785	0	139
10	0	0	0	0	3	15	24	125	220	430	456	436	389	546	513	525	219	192	91	32	13	4	1	0	546	0	176
11	0	0	0	0	5	20	29	61	92	158	181	287	176	176	149	166	138	86	44	38	30	14	1	0	287	0	77
12	0	0	0	0	1	11	19	39	65	96	114	70	110	165	141	103	77	58	41	41	9	7	2	0	165	0	49
13	0	0	0	0	8	29	82	138	347	154	257	299	532	515	467	520	422	257	173	114	57	29	8	0	532	0	184
14	0	0	0	1	6	25	80	141	206	267	310	538	414	347	307	255	196	126	79	131	69	18	3	0	538	0	147
15	0	0	0	1	15	41	114	155	252	519	643	646	629	376	373	67	62	78	101	30	12	4	1	0	646	0	172
16	0	0	0	1	10	23	36	63	36	61	95	101	119	118	144	145	106	70	68	82	45	27	7	0	145	0	57
17	0	0	0	1	8	30	59	193	209	320	614	384	504	635	242	467	331	153	82	45	23	14	3	0	635	0	180
18	0	0	0	1	19	54	112	187	322	302	351	357	264	347	412	442	300	262	189	114	74	38	9	0	442	0	173
19	0	0	0	1	14	68	126	196	308	318	382	314	367	515	482	579	278	333	402	79	67	30	2	0	579	0	202
20	0	0	0	1	13	86	206	268	403	491	255	475	509	413	272	169	172	153	141	278	121	36	11	0	509	0	186
21	0	0	0	1	11	79	203	309	462	459	574	661	536	214	519	547	470	331	309	222	184	91	11	0	661	0	258
22	0	0	0	1	15	55	132	124	190	223	408	422	514	126	70	47	52	47	68	15	13	7	3	0	514	0	106
23	0	0	0	0	4	16	32	58	85	148	223	377	378	572	393	316	197	205	161	197	172	53	13	1	572	0	150
24	0	0	0	1	10	52	185	309	461	519	672	688	594	559	465	367	468	116	78	118	101	25	2	0	688	0	241
25	0	0	0	1	22	99	202	324	449	609	587	491	568	609	640	664	642	335	101	73	44	29	6	0	664	0	271
26	0	0	0	1	6	51	147	249	453	566	662	731	796	489	246	301	225	405	423	286	166	76	9	1	796	0	262
27	0	0	0	1	18	94	197	319	445	568	657	712	897	336	740	738	627	532	410	232	158	64	12	0	897	0	323
28	0	0	0	2	19	96	208	324	253	232	190	428	424	422	227	155	143	109	78	53	39	20	4	0	428	0	143
29	0	0	0	1	6	33	61	112	206	222	232	258	294	425	433	645	350	307	147	55	13	5	1	0	645	0	159
30	0	0	0	0	3	11	16	27	67	198	177	284	430	324	341	235	223	224	174	116	57	17	4	0	430	0	122
Max.	**0**	**0**	**0**	**2**	**22**	**99**	**208**	**331**	**462**	**609**	**690**	**774**	**897**	**827**	**806**	**738**	**642**	**532**	**423**	**286**	**184**	**91**	**13**	**1**	**897**		
Min.	**0**	**0**	**0**	**0**	**1**	**11**	**16**	**27**	**36**	**61**	**95**	**70**	**110**	**118**	**70**	**47**	**52**	**47**	**41**	**15**	**9**	**4**	**1**	**0**		**0**	
Avg.	**0**	**0**	**0**	**1**	**11**	**52**	**115**	**184**	**280**	**348**	**407**	**463**	**498**	**455**	**419**	**386**	**318**	**246**	**187**	**130**	**76**	**30**	**5**	**0**			**192**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	5	25	59	87	182	297	447	768	756	812	794	736	650	535	418	290	171	68	10	0	812	0	296
2	0	0	0	1	15	89	192	313	441	560	647	739	728	734	773	712	559	509	392	245	131	37	11	0	773	0	326
3	0	0	0	1	9	52	167	256	299	522	609	706	693	695	731	593	566	454	407	273	155	59	8	0	731	0	302
4	0	0	0	1	14	85	182	304	428	544	625	565	802	728	613	645	677	524	392	269	166	64	8	0	802	0	318
5	0	0	0	0	7	42	86	128	203	258	516	637	759	757	768	628	17	55	177	168	130	46	3	0	768	0	224
6	0	0	0	0	10	31	137	291	429	541	646	438	321	571	756	712	306	31	107	91	20	3	3	0	756	0	227
7	0	0	0	0	1	6	23	37	43	51	82	79	116	85	85	103	121	41	22	21	13	13	0	0	121	0	39
8	0	0	0	0	2	12	25	48	112	171	158	179	249	207	167	200	167	154	131	169	148	22	4	0	249	0	97
9	0	0	0	1	6	23	66	239	348	314	618	703	740	744	580	723	633	517	389	266	163	56	6	0	744	0	297
10	0	0	0	1	5	44	47	70	163	305	333	480	5	44	47	70	163	305	333	480	461	750	465	688	750	0	219
11	754	575	452	276	61	31	5	0	0		0	0	0	10	18	45	84	128	311	388	468	407	434	658	754	0	222
12	672	435	310	390	341	103	36	3	0	0	0	0	0	10	53	153	288	336	529	634	707	741	700	718	741	0	298
13	623	522	201	348	200	79	29	5	0	0	0	0	0	5	22	75	103	158	216	273	226	196	324	255	623	0	161
14	136	90	116	88	69	16	8	3	0	0	0	0	0	1	12	63	79	101	140	179	223	200	173	132	223	0	76
15	100	98	70	49	39	29	10	2	0	0	0	0	0	2	21	64	87	129	199	272	367	300	396	337	396	0	107
16	381	474	409	314	155	82	15	1	0	0	0	0	0	2	15	54	100	112	132	283	343	349	284	500	500	0	167
17	462	403	169	104	38	17	3	0	0	0	0	0	0	1	7	26	63	97	165	285	225	246	353	261	462	0	122
18	166	149	72	46	24	11	7	1	0	0	0	0	0	1	21	27	49	121	362	404	278	254	411	232	411	0	110
19	145	101	93	77	50	32	20	2	0	0	0	0	0	2	15	53	101	196	244	353	286	327	352	252	353	0	113
20	516	339	381	386	258	145	28	2	0	0	0	0	0	4	49	153	271	378	459	445	544	425	610	483	610	0	245
21	470	485	315	149	98	31	17	2	0	0	0	0	0	2	22	65	276	435	509	556	563	142	210	367	563	0	196
22	412	248	228	133	87	54	23	3	0	0	0	0	0	1	13	41	84	173	248	250	280	296	477	319	477	0	140
23	309	141	76	52	50	54	11	1	0	0	0	0	0	1	12	53	82	84	151	148	168	151	152	135	309	0	76
24	155	130	66	59	36	21	7	0	0	0	0	0	0	0	4	21	37	54	77	112	158	137	134	164	164	0	57
25	139	74	56	34	19	16	9	1	0	0	0	0	0	0	6	23	32	80	157	215	267	282	328	465	465	0	92
26	407	357	337	239	107	52	20	1	0	0	0	0	0	0	7	22	54	111	189	320	472	588	518	477	588	0	178
27	604	605	403	337	244	94	24	1	0	0	0	0	0	1	34	88	111	154	184	212	301	394	666	651	666	0	213
28	680	579	466	290	163	78	16	0	0	0	0	0	0	1	24	76	190	284	270	279	288	278	493	362	680	0	201
29	103	103	199	144	108	44	10	0	0	0	0	0	0	0	4	20	29	55	94	127	181	448	569	483	569	0	113
30	429	325	466	238	49	23	4	0	0	0	0	0	0	0	6	26	26	57	70	107	138	188	258	375	466	0	116
31	308	283	421	198	237	40	11	0	0	0	0	0	0	0	6	40	70	161	154	147	226	271	426	290	426	0	137
Max.	**754**	**605**	**466**	**390**	**341**	**145**	**192**	**313**	**441**	**560**	**647**	**768**	**802**	**812**	**794**	**736**	**677**	**535**	**529**	**634**	**707**	**750**	**700**	**718**	**812**		
Min.	**0**	**0**	**0**	**0**	**1**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**20**	**17**	**31**	**22**	**21**	**13**	**3**	**0**	**0**		**0**	
Avg.	**257**	**210**	**171**	**128**	**81**	**47**	**42**	**58**	**85**	**119**	**151**	**171**	**167**	**175**	**183**	**204**	**196**	**211**	**246**	**266**	**267**	**250**	**283**	**278**			**177**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

August 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	7	10	28	47	77	84	135	205	168	193	151	109	73	51	34	15	3	0	0	205	0	58
2	0	0	0	0	0	2	33	74	108	171	249	399	364	333	338	159	102	116	176	81	33	4	0	0	399	0	114
3	0	0	0	0	0	4	22	43	61	96	112	224	197	190	215	98	121	92	54	33	15	1	0	0	224	0	66
4	0	0	0	0	0	13	46	79	214	197	276	176	212	155	154	124	139	113	79	48	22	2	0	0	276	0	85
5	0	0	0	0	0	2	15	38	89	97	179	244	285	231	184	313	371	186	135	71	38	6	0	0	371	0	104
6	0	0	0	0	0	16	108	207	336	449	521	633	574	357	422	467	496	385	318	77	73	8	0	0	633	0	227
7	0	0	0	0	0	11	61	117	296	450	542	651	673	419	520	619	541	423	305	158	60	7	0	0	673	0	244
8	0	0	0	0	0	2	18	59	117	170	257	247	234	260	287	290	292	166	126	78	28	2	0	0	292	0	110
9	0	0	0	0	0	2	20	61	100	53	64	51	43	58	56	103	123	65	63	18	8	1	0	0	123	0	37
10	0	0	0	0	0	2	15	29	42	69	93	138	89	66	82	60	67	41	15	8	2	0	0	0	138	0	34
11	0	0	0	0	0	2	14	60	98	120	182	186	205	141	152	204	163	157	84	83	17	1	0	0	205	0	78
12	0	0	0	0	0	2	16	29	66	132	201	384	450	598	388	285	346	278	131	62	22	2	0	0	598	0	141
13	0	0	0	0	0	1	7	16	33	53	73	66	111	109	159	178	119	63	16	15	3	1	0	0	178	0	43
14	0	0	0	0	0	1	9	27	36	50	37	61	36	48	44	22	15	15	12	13	2	0	0	0	61	0	18
15	0	0	0	0	0	0	3	18	35	62	87	84	155	155	124	141	130	81	43	25	11	1	0	0	155	0	48
16	0	0	0	0	0	1	13	45	91	181	250	379	312	266	197	181	236	45	64	58	57	4	0	0	379	0	99
17	0	0	0	0	0	1	17	51	116	281	350	584	432	564	273	271	178	79	108	36	12	0	0	0	584	0	140
18	0	0	0	0	0	1	7	29	31	37	52	69	85	103	122	83	112	173	120	92	23	1	0	0	173	0	48
19	0	0	0	0	0	2	22	40	102	151	215	392	234	687	593	362	201	204	195	95	23	2	0	0	687	0	147
20	0	0	0	0	0	0	4	14	50	78	169	340	409	623	504	687	484	357	247	128	31	1	0	0	687	0	172
21	0	0	0	0	0	3	51	151	238	226	203	319	487	354	261	272	214	93	38	13	3	0	0	0	487	0	122
22	0	0	0	0	0	0	4	17	65	62	93	210	327	561	442	360	349	223	176	60	23	0	0	0	561	0	124
23	0	0	0	0	0	1	33	112	163	233	331	434	462	428	665	579	491	377	243	123	30	1	0	0	665	0	196
24	0	0	0	0	0	0	4	20	33	81	113	136	143	104	95	146	229	202	175	76	23	0	0	0	229	0	66
25	0	0	0	0	0	1	31	144	267	390	503	414	592	378	422	472	344	253	108	67	24	0	0	0	592	0	184
26	0	0	0	0	0	0	10	51	63	123	196	310	445	437	440	373	236	296	114	75	22	0	0	0	445	0	133
27	0	0	0	0	0	0	14	110	148	230	400	514	334	453	436	325	507	283	187	49	6	0	0	0	514	0	166
28	0	0	0	0	0	0	10	44	88	182	281	225	320	624	336	310	143	137	84	37	8	0	0	0	624	0	118
29	0	0	0	0	0	0	22	125	241	331	462	530	585	449	493	367	382	378	217	79	5	0	0	0	585	0	194
30	0	0	0	0	0	0	2	9	28	53	106	174	185	148	138	111	84	65	61	15	1	0	0	0	185	0	49
31	0	0	0	0	0	0	10	45	99	197	311	294	541	332	287	269	210	118	74	9	0	0	0	0	541	0	117
Max.	**0**	**0**	**0**	**0**	**0**	**16**	**108**	**207**	**336**	**450**	**542**	**651**	**673**	**687**	**665**	**687**	**541**	**423**	**318**	**158**	**73**	**8**	**0**	**0**	**687**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**	**28**	**37**	**37**	**51**	**36**	**48**	**44**	**22**	**15**	**15**	**12**	**8**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**21**	**61**	**113**	**164**	**226**	**290**	**314**	**316**	**291**	**270**	**243**	**179**	**123**	**59**	**21**	**2**	**0**	**0**			**112**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	15	40	87	137	273	280	342	449	441	458	425	227	131	54	4	0	0	0	458	0	140
2	0	0	0	0	0	0	14	78	207	340	340	283	236	312	552	331	430	282	138	25	6	0	0	0	552	0	149
3	0	0	0	0	0	0	10	102	224	344	451	523	483	269	177	263	369	80	190	38	3	0	0	0	523	0	147
4	0	0	0	0	0	0	8	88	132	313	457	450	350	365	369	355	70	80	71	12	2	0	0	0	457	0	130
5	0	0	0	0	0	0	5	29	116	159	159	215	307	537	277	435	405	202	133	55	3	0	0	0	537	0	127
6	0	0	0	0	0	0	5	90	211	330	442	517	574	587	568	494	377	141	79	20	0	0	0	0	587	0	185
7	0	0	0	0	0	0	2	24	74	110	155	172	206	133	150	71	22	17	17	10	0	0	0	0	206	0	49
8	0	0	0	0	0	0	0	7	18	39	87	127	136	166	124	104	77	96	35	9	0	0	0	0	166	0	43
9	0	0	0	0	0	0	3	54	196	329	413	488	447	581	293	218	320	272	163	14	0	0	0	0	581	0	158
10	0	0	0	0	0	0	3	64	218	301	278	523	447	465	226	365	328	254	39	10	0	0	0	0	523	0	147
11	0	0	0	0	0	0	3	64	186	303	407	486	543	551	526	441	355	297	190	34	0	0	0	0	551	0	183
12	0	0	0	0	0	0	3	62	180	297	403	482	508	523	516	462	365	250	131	24	0	0	0	0	523	0	175
13	0	0	0	0	0	0	3	60	179	298	406	485	530	543	392	344	211	101	36	5	0	0	0	0	543	0	150
14	0	0	0	0	0	0	0	2	11	22	38	30	34	50	127	153	86	54	27	5	0	0	0	0	153	0	27
15	0	0	0	0	0	0	0	6	40	68	83	107	176	97	51	35	32	36	16	2	0	0	0	0	176	0	31
16	0	0	0	0	0	0	0	12	47	73	138	199	198	265	257	160	101	95	103	8	0	0	0	0	265	0	69
17	0	0	0	0	0	0	0	4	23	55	98	123	131	156	169	175	173	180	45	6	0	0	0	0	180	0	56
18	0	0	0	0	0	0	1	16	59	57	46	66	49	25	36	70	55	37	14	1	0	0	0	0	70	0	22
19	0	0	0	0	0	0	0	9	24	55	72	94	147	95	78	139	92	53	21	2	0	0	0	0	147	0	37
20	0	0	0	0	0	0	0	8	53	97	128	153	181	139	163	245	189	115	22	3	0	0	0	0	245	0	62
21	0	0	0	0	0	0	0	5	13	28	40	44	66	76	43	29	22	22	7	0	0	0	0	0	76	0	17
22	0	0	0	0	0	0	0	8	30	69	99	127	166	172	168	145	147	66	16	2	0	0	0	0	172	0	51
23	0	0	0	0	0	0	0	4	23	57	103	175	57	143	240	194	98	79	27	1	0	0	0	0	240	0	50
24	0	0	0	0	0	0	0	4	45	188	242	343	176	281	118	346	281	190	56	3	0	0	0	0	346	0	95
25	0	0	0	0	0	0	0	23	133	243	320	360	225	179	154	151	121	70	26	1	0	0	0	0	360	0	84
26	0	0	0	0	0	0	0	3	26	52	62	59	69	118	68	52	39	26	6	0	0	0	0	0	118	0	24
27	0	0	0	0	0	0	0	8	53	129	143	339	324	198	154	124	45	23	8	0	0	0	0	0	339	0	65
28	0	0	0	0	0	0	0	2	16	58	97	118	124	158	188	259	141	68	21	1	0	0	0	0	259	0	52
29	0	0	0	0	0	0	0	9	107	215	319	419	320	331	190	216	127	65	16	0	0	0	0	0	419	0	97
30	0	0	0	0	0	0	0	9	52	125	208	326	293	371	308	165	113	51	9	0	0	0	0	0	371	0	85
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**102**	**224**	**344**	**457**	**523**	**574**	**587**	**568**	**494**	**430**	**297**	**190**	**55**	**6**	**0**	**0**	**0**	**587**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**11**	**22**	**38**	**30**	**34**	**25**	**36**	**29**	**22**	**17**	**6**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**30**	**93**	**163**	**217**	**270**	**262**	**278**	**237**	**233**	**187**	**118**	**60**	**12**	**1**	**0**	**0**	**0**			**90**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

October 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	9	45	78	72	58	115	44	55	51	23	8	0	0	0	0	0	115	0	23
2	0	0	0	0	0	0	0	1	9	25	63	62	62	103	83	56	40	18	6	0	0	0	0	0	103	0	22
3	0	0	0	0	0	0	0	2	35	142	357	372	198	136	55	123	92	76	5	0	0	0	0	0	372	0	66
4	0	0	0	0	0	1	0	1	30	49	52	99	198	234	58	123	40	23	4	0	0	0	0	1	234	0	38
5	1	1	1	1	1	0	0	3	73	119	153	276	161	381	110	156	66	32	5	0	0	1	1	0	381	0	64
6	0	0	0	0	0	0	0	1	12	40	46	60	66	101	122	71	47	14	2	1	1	1	1	1	122	0	25
7	1	1	1	1	1	1	1	1	11	29	38	42	49	49	37	39	26	5	1	0	0	0	0	0	49	0	14
8	0	0	0	0	0	0	0	0	9	25	19	24	32	36	33	45	23	10	1	0	0	0	0	0	45	0	11
9	0	0	0	0	0	0	0	0	3	7	17	19	26	25	16	15	6	5	1	0	0	0	0	0	26	0	6
10	0	0	0	0	0	0	0	2	29	60	145	276	228	205	177	76	16	8	1	0	0	0	0	0	276	0	51
11	0	0	0	0	0	0	0	1	18	61	74	181	180	166	141	273	129	24	5	0	0	0	0	0	273	0	52
12	0	0	0	0	0	0	0	0	17	37	55	126	189	177	66	97	148	27	2	0	0	0	0	0	189	0	39
13	0	0	0	0	0	0	0	1	37	139	232	303	344	349	317	248	159	56	3	0	0	0	0	0	349	0	91
14	0	0	0	0	0	0	0	1	23	108	201	156	297	314	167	116	75	51	1	0	0	0	0	0	314	0	63
15	0	0	0	0	0	0	0	0	17	65	119	124	174	195	168	109	62	20	1	0	0	0	0	0	195	0	44
16	0	0	0	0	0	0	0	0	3	17	75	163	299	196	124	97	80	30	1	0	0	0	0	0	299	0	45
17	0	0	0	0	0	0	0	0	10	114	62	120	142	210	215	86	57	28	1	0	0	0	0	0	215	0	44
18	0	0	0	0	0	0	0	0	8	50	115	120	110	95	84	59	37	16	0	0	0	0	0	0	120	0	29
19	0	0	0	0	0	0	0	0	7	24	60	99	105	78	58	46	14	1	0	0	0	0	0	0	105	0	21
20	0	0	0	0	0	0	1	1	11	39	69	129	163	213	251	203	115	29	1	0	0	0	0	0	251	0	51
21	0	0	0	0	0	0	0	0	16	103	195	292	403	295	187	213	98	18	0	0	0	0	0	0	403	0	76
22	0	0	0	0	0	0	0	0	20	123	210	265	300	304	269	204	117	20	0	0	0	0	0	0	304	0	76
23	0	0	0	0	0	0	0	0	14	65	139	255	263	255	230	149	68	18	0	0	0	0	0	0	263	0	61
24	0	0	0	0	0	0	0	0	3	24	49	101	112	71	66	39	23	6	0	0	0	0	0	0	112	0	21
25	0	0	0	0	0	0	0	0	7	44	90	131	135	146	109	94	47	10	0	0	0	0	0	0	146	0	34
26	0	0	0	0	0	0	0	0	3	41	107	188	246	265	282	205	100	9	0	0	0	0	0	0	282	0	60
27	0	0	0	0	0	0	0	0	7	79	167	241	268	265	215	159	80	6	0	0	0	0	0	0	268	0	62
28	0	0	0	0	0	0	0	0	7	35	76	122	140	124	88	55	27	18	0	0	0	0	0	0	140	0	29
29	0	1	0	0	0	0	0	0	3	22	45	106	118	139	84	54	27	5	1	1	1	1	1	1	139	0	25
30	1	1	1	1	1	1	1	1	4	29	83	191	129	127	102	104	51	8	2	1	2	2	1	1	191	1	35
31	2	1	1	1	1	1	1	1	3	31	128	156	185	225	213	113	43	6	1	1	1	1	0	0	225	0	46
Max.	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**3**	**73**	**142**	**357**	**372**	**403**	**381**	**317**	**273**	**159**	**76**	**8**	**1**	**2**	**2**	**1**	**1**	**403**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**7**	**17**	**19**	**26**	**25**	**16**	**15**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**15**	**58**	**107**	**157**	**174**	**180**	**135**	**112**	**63**	**20**	**2**	**0**	**0**	**0**	**0**	**0**			**43**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	5	45	82	117	106	164	106	62	20	4	0	0	0	0	0	0	164	0	30
2	0	0	0	0	0	0	0	0	1	35	69	95	114	121	116	82	34	2	0	0	0	0	0	0	121	0	28
3	0	0	0	0	0	0	0	0	1	33	64	89	110	118	108	74	32	2	0	0	0	0	0	0	118	0	26
4	0	0	0	0	0	0	0	0	1	45	85	105	114	115	99	69	28	2	0	0	0	0	0	0	115	0	28
5	0	0	0	0	0	0	0	0	1	32	65	88	108	114	107	79	33	2	0	0	0	0	0	0	114	0	26
6	0	0	0	0	0	0	0	0	1	37	97	134	183	212	188	90	17	2	0	0	0	0	0	0	212	0	40
7	0	0	0	0	0	0	0	0	1	19	48	103	138	205	151	94	17	2	0	0	0	0	0	0	205	0	32
8	0	0	0	0	0	0	0	0	1	28	108	177	205	211	190	132	32	1	0	0	0	0	0	0	211	0	45
9	0	0	0	0	0	0	0	0	1	19	88	152	185	189	163	122	37	1	0	0	0	0	0	0	189	0	40
10	0	0	0	0	0	0	0	0	0	8	29	69	125	158	92	51	13	1	0	0	0	0	0	0	158	0	23
11	0	0	0	0	0	0	0	0	0	23	92	160	193	203	192	141	39	1	0	0	0	0	0	0	203	0	43
12	0	0	0	0	0	0	0	0	0	22	44	131	147	151	130	69	15	0	0	0	0	0	0	0	151	0	30
13	0	0	0	0	0	0	0	0	0	21	89	157	190	192	160	97	22	1	0	0	0	0	0	0	192	0	39
14	0	0	0	0	0	0	0	0	0	7	65	104	176	153	149	88	18	1	0	0	0	0	0	0	176	0	32
15	0	0	0	0	0	0	0	0	0	11	68	133	159	157	141	96	17	0	0	0	0	0	0	0	159	0	33
16	0	0	0	0	0	0	0	0	0	6	68	139	173	177	148	84	16	1	0	0	0	0	0	0	177	0	34
17	0	0	0	0	0	0	0	0	0	5	61	134	168	172	144	81	14	0	0	0	0	0	0	0	172	0	32
18	0	0	0	0	0	0	0	0	0	10	77	149	177	173	144	79	14	0	0	0	0	0	0	0	177	0	34
19	0	0	0	0	0	0	0	0	0	7	49	86	163	167	139	74	13	0	0	0	0	0	0	0	167	0	29
20	0	0	0	0	0	0	0	0	0	5	56	119	142	88	130	70	12	0	0	0	0	0	0	0	142	0	26
21	0	0	0	0	0	0	0	0	0	7	49	111	133	87	82	52	13	0	0	0	0	0	0	0	133	0	22
22	0	0	0	0	0	0	0	0	0	5	50	127	176	179	147	72	9	0	0	0	0	0	0	0	179	0	32
23	0	0	0	0	0	0	0	0	0	4	36	84	122	130	115	66	9	0	0	0	0	0	0	0	130	0	24
24	0	0	0	0	0	0	0	0	0	8	53	93	66	92	48	30	7	0	0	0	0	0	0	0	93	0	17
25	0	0	0	0	0	0	0	0	0	4	34	88	162	141	116	57	4	0	0	0	0	0	0	0	162	0	25
26	0	0	0	0	0	0	0	0	0	0	10	26	44	39	22	11	2	0	0	0	0	0	0	0	44	0	7
27	0	0	0	0	0	0	0	0	0	1	11	38	47	68	60	24	6	0	0	0	0	0	0	0	68	0	11
28	0	0	0	0	0	0	0	0	0	1	21	55	72	63	57	26	5	0	0	0	0	0	0	0	72	0	13
29	0	0	0	0	0	0	0	0	0	3	29	83	121	122	84	26	3	0	0	0	0	0	0	0	122	0	20
30	0	0	0	0	0	0	0	0	0	0	9	26	25	55	65	42	14	0	0	1	1	1	1	1	65	0	10
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**45**	**108**	**177**	**205**	**212**	**192**	**141**	**39**	**4**	**0**	**1**	**1**	**1**	**1**	**1**	**212**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**26**	**25**	**39**	**22**	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**57**	**106**	**135**	**140**	**120**	**71**	**17**	**1**	**0**	**0**	**0**	**0**	**0**	**0**			**28**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Solar (Watts/m^2)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1	1	1	1	1	0	0	0	0	2	24	76	120	127	97	41	5	0	0	0	0	0	0	0	127	0	21
2	0	0	0	0	0	0	0	0	0	1	15	50	49	34	53	23	4	0	0	0	0	0	0	0	53	0	10
3	0	0	0	0	0	0	0	0	0	0	3	15	38	47	25	12	1	0	0	0	0	0	0	0	47	0	6
4	0	0	0	0	0	0	0	0	0	0	5	12	17	17	19	17	2	0	0	0	0	0	0	0	19	0	4
5	0	0	0	0	0	0	0	0	0	0	12	33	64	82	65	22	1	0	0	0	0	0	0	0	82	0	12
6	0	0	0	0	0	0	0	0	0	0	4	14	29	43	35	21	2	0	0	0	0	0	0	0	43	0	6
7	0	0	0	0	0	0	0	0	0	0	10	29	47	43	40	21	3	0	0	0	0	0	0	0	47	0	8
8	0	0	0	0	0	0	0	0	0	0	8	28	46	48	31	12	4	0	0	0	0	0	0	0	48	0	7
9	0	0	0	0	0	0	0	0	0	0	10	39	63	51	44	12	2	0	0	0	0	0	0	0	63	0	9
10	0	0	0	0	0	0	0	0	0	0	9	34	49	43	30	13	2	0	0	0	0	0	0	0	49	0	8
11	0	0	0	0	0	0	0	0	0	0	9	48	93	101	79	28	2	0	0	0	0	0	0	0	101	0	15
12	0	0	0	0	0	0	0	0	0	0	13	35	45	33	30	14	1	0	0	0	0	0	0	0	45	0	7
13	0	0	0	0	0	0	0	0	0	0	12	27	37	44	25	10	1	0	0	0	0	0	0	0	44	0	7
14	0	0	0	0	0	0	0	0	0	0	6	37	89	99	59	28	2	0	0	0	0	0	0	0	99	0	13
15	0	0	0	0	0	0	0	0	0	0	6	25	41	79	51	32	4	0	0	0	0	0	0	0	79	0	10
16	0	0	0	0	0	0	0	0	0	0	4	21	37	46	75	59	6	0	0	0	0	0	0	0	75	0	10
17	0	0	0	0	0	0	0	0	0	0	5	20	52	45	33	20	5	0	0	0	0	0	0	0	52	0	8
18	0	0	0	0	0	0	0	0	0	0	4	16	40	47	44	20	1	0	0	0	0	0	0	0	47	0	7
19	0	0	0	0	0	0	0	0	0	0	4	24	36	38	30	15	3	0	0	0	0	0	0	0	38	0	6
20	0	0	0	0	0	0	0	0	0	0	8	31	50	49	84	100	5	0	0	0	0	0	0	0	100	0	14
21	0	0	0	0	0	0	0	0	0	0	19	86	136	151	123	48	3	0	0	0	0	0	0	0	151	0	24
22	0	0	0	0	0	0	0	0	0	0	4	15	55	110	57	21	5	0	0	0	0	0	0	0	110	0	11
23	0	0	0	0	0	0	0	0	0	0	8	46	89	101	77	31	3	0	0	0	0	0	0	0	101	0	15
24	0	0	0	0	0	0	0	0	0	0	6	23	40	53	60	34	4	0	0	0	0	0	0	0	60	0	9
25	0	0	0	0	0	0	0	0	0	0	7	30	54	63	54	31	3	0	0	0	0	0	0	0	63	0	10
26	0	0	0	0	0	0	0	0	0	0	10	38	50	52	49	18	2	0	0	0	0	0	0	0	52	0	9
27	0	0	0	0	0	0	0	0	0	0	2	9	21	24	21	10	1	0	0	0	0	0	0	0	24	0	4
28	0	0	0	0	0	0	0	0	0	0	5	24	46	45	24	50	5	0	0	0	0	0	0	0	50	0	8
29	0	0	0	0	0	0	0	0	0	0	5	23	44	57	45	28	4	0	0	0	0	0	0	0	57	0	9
30	0	0	0	0	0	0	0	0	0	0	6	31	68	65	37	17	3	0	0	0	0	0	0	0	68	0	10
31	0	0	0	0	0	0	0	0	0	0	4	23	29	31	37	12	2	0	0	0	0	0	0	0	37	0	6
Max.	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**24**	**86**	**136**	**151**	**123**	**100**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**151**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**	**17**	**17**	**19**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**31**	**54**	**60**	**49**	**27**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**10**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

January *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.3	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.5	1.0	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.02
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25

Total Precipitation (mm) = 9.14

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

February 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.8	0.0	0.0	0.0	0.0	1.3	1.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.8	0.0	2.0	0.0	1.8	2.5	3.8	15.75
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.0	0.0	0.0	0.0	0.0	0.0	4.06
6	0.0	1.0	0.5	0.0	0.0	0.8	1.0	0.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.86
7	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	2.3	3.81
9	0.8	0.0	0.0	0.0	0.0	5.8	3.8	1.3	0.8	0.0	0.8	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	15.49
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	4.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.43
11	0.0	0.0	0.0	0.8	0.8	0.0	0.0	1.3	1.8	1.0	0.8	0.0	0.0	1.8	1.8	1.3	1.8	1.8	1.8	0.8	0.0	0.3	0.0	0.3	17.78
12	0.8	0.5	0.0	0.3	0.0	0.8	0.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.3	2.79
14	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	0.5	0.8	1.3	0.0	7.87
16	1.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.52
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	7.37
18	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	2.3	1.3	0.0	1.5	0.0	0.0	12.95
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
21	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.76
23	0.5	0.5	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
24	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
25	0.0	0.0	0.0	0.8	0.5	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.32
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	2.5	4.06
27	1.3	0.8	0.3	0.0	0.0	0.8	0.0	0.0	0.8	0.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.86
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.27

Total Precipitation (mm) = 135.38

Total Hours in Month 672 **Hours Data Available** 671 **Data Recovery** 99.9%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

March *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.76
2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.03
3	0.3	0.3	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	0.0	0.8	0.5	0.3	0.8	0.0	0.0	4.06
5	0.5	0.0	0.5	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	4.83
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	3.05
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.8	0.0	5.59
12	0.0	0.0	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	3.30
13	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
18	0.0	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	2.29
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	1.0	1.5	2.3	0.5	1.0	1.5	0.0	11.43
20	1.0	0.5	0.0	0.3	0.0	0.8	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.5	0.0	0.0	0.0			0.0	0.0	4.57
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.76
31	1.8	1.3	0.0	0.0	0.0	0.0	0.0	2.5	1.3	7.9	1.0	1.0	1.3	0.5	0.5	0.5	0.3	0.3	0.0	0.3	0.5	0.0	0.3	0.0	21.08

Total Precipitation (mm) = 69.85

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

April *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.8	0.0	1.0	1.0	0.8	0.8	0.3	0.3	0.0	0.0	0.0	0.0	6.10
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.8	0.5	1.5	1.0	0.0	1.8	0.8	0.8	0.5	8.89
9	0.3	0.0	0.8	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.10
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.8	0.5	2.29
12	0.0	0.0	1.0	0.5	0.5	1.3	0.5	0.0	1.0	0.0	0.0	0.0	0.0	1.5	2.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.14
13	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	2.8	1.8	0.0	0.0	0.0	5.33
17	0.0	0.0	0.0	0.0	0.0	2.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.8	0.0	1.3	0.0	0.0	0.0	0.0	6.10
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 51.31

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

May *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.30
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	1.0	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.30
5	0.0	0.0	0.0	0.0	0.0	1.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.3	0.0	0.3	4.83
6	0.0	0.0	1.0	1.0	1.3	1.3	0.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.84
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.51
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
21	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 21.84

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

June *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.0	0.5	0.0	0.0	1.78
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.52
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.3	2.29
11	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.8	0.5	0.0	0.3	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	6.35
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.8	1.3	0.3	0.0	7.37
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	3.0	1.8	0.5	1.0	2.3	2.8	0.8	0.0	14.48
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.3	2.8	2.0	1.5	1.0	0.5	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.18
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
18	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.78
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	3.6	0.8	0.0	0.3	3.3	2.5	1.3	0.5	1.0	16.26
23	0.8	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.3	1.78
30	0.5	1.5	1.8	2.3	1.8	2.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.16

Total Precipitation (mm) = 81.28

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

July *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.51
12				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.5	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.0	1.27
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.27
24	0.0	0.0	0.3	0.8	0.3	0.5	0.5	0.0	0.3	0.3	0.5	0.5	0.0	0.3	0.0	0.0	0.3	0.8	0.8	1.5	0.5	0.5	0.0	0.0	8.38
25	0.0	1.0	1.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	5.08
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25

Total Precipitation (mm) = 19.81

Total Hours in Month 744 **Hours Data Available** 728 **Data Recovery** 97.8%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

August *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.76
2	1.3	0.3	0.5	1.3	1.0	1.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.10
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.3	1.8	1.5	1.8	1.3	1.0	0.0	0.8	2.0	0.8	0.8	0.3	1.5	0.5	0.0	19.30
4	0.0	0.5	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.3	0.3	0.0	0.3	0.3	0.3	0.5	0.0	5.08
5	0.3	3.3	1.0	0.0	0.0	0.0	1.0	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	1.0	0.0	0.0	0.0	0.0	0.0	9.65
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.3	1.3	1.8	6.60
10	1.5	3.0	2.3	2.5	0.5	0.3	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.5	3.3	1.5	20.57
11	1.8	0.8	1.0	0.8	0.5	0.3	0.3	0.3	0.5	0.5	0.8	1.8	0.5	1.8	3.3	0.3	0.5	1.0	0.3	0.5	0.3	1.5	2.5	3.0	24.64
12	1.3	0.8	0.8	0.0	0.0	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.81
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.03
14	0.0	0.3	0.5	0.8	0.5	1.3	0.5	0.8	1.5	2.3	2.5	0.5	0.0	1.8	2.3	1.8	4.1	5.8	6.4	0.0	0.5	0.5	0.3	0.0	34.80
15	0.3	1.0	1.3	0.0	0.3	1.3	1.0	0.8	0.8	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.13
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0				0.0	0.0	0.0	0.0	0.76
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	3.0	2.5	2.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.8	1.3	15.75
19	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.3						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78
20	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	0.8	1.8	1.5	6.10
22	2.0	1.5	2.3	0.0	0.0	0.3	0.0	0.3	0.3	0.5	0.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	9.91
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.8	0.8	0.5	0.8	0.3	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	4.57
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.0	0.8	0.5	0.3	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	6.86
31	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.27

Total Precipitation (mm) = 189.23

Total Hours in Month 744 **Hours Data Available** 736 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

September 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	4.06
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.02
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.52
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	3.0	0.0	1.3	1.3	1.0	0.0	7.87
8	0.0	0.0	0.0	0.0	0.0	0.0	4.1	3.6	2.5	3.6	2.3	1.5	1.5	1.0	1.8	2.3	1.5	1.3	1.5	0.8	0.3	0.5	0.0	0.5	30.48
9	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.29
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	2.0	1.8	2.3	2.5	2.5	4.3	2.5	2.8	2.8	0.5	1.5	0.8	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	27.69
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.8	0.0	1.3	0.8	0.0	0.3	0.0	4.06
16	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.8	1.78
19	0.3	0.0	1.0	0.0	0.0	0.0	2.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.3	0.3	0.3	0.3	0.5	0.0	0.0	0.3	6.86
20	0.3	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.5	2.3	2.5	2.3	1.0	0.0	0.0	2.3	0.0	0.3	0.0	0.5	14.73
22	1.0	0.8	0.5	0.5	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.06
23	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.8	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.11
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.5	0.8	1.0	1.5	0.3	0.3	0.0	0.5	0.8	0.8	1.0	0.3	0.8	0.3	0.3	10.16
27	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.3	0.0	0.0	0.3	0.3	0.0	3.05
28	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
29	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
30	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02

Total Precipitation (mm) = 132.33

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

October *2006*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.8	0.3	0.0	0.0	0.0	2.03
2	0.0	0.0	1.3	2.8	2.3	0.0	0.5	0.3	1.0	0.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.40
3	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3	0.5	0.0	0.0	2.5	2.5	4.1	2.5	1.3	16.51
4	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	1.3	0.3	0.0	0.3	1.0	0.3	0.8	0.0	0.5	0.3	0.3	0.3	0.5	0.0	6.86
5	0.5	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.8	1.0	0.0	0.0	0.3	0.0	0.0	4.57
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.5	2.3	2.0	0.8	0.5	1.3	1.0	0.3	0.5	0.5	0.0	0.5	0.3	0.0	12.95
7	0.8	0.8	0.8	0.0	0.0	0.3	0.0	0.5	1.5	1.8	0.0	0.3	2.0	0.8	0.0	0.5	1.0	0.0	1.0	1.8	0.0	1.0	0.0	0.0	14.73
8	2.5	3.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.8	1.0	0.0	0.8	0.0	0.0	12.19
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	8.1	3.8	2.3	1.0	0.3	0.3	16.51
10	0.3	0.0	0.5	0.8	0.5	0.8	0.3	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.3	1.0	2.0	1.5	1.0	12.45
11	0.5	0.3	1.5	2.0	1.5	1.3	1.5	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.64
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.86
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	1.8	2.5	1.8	0.5	0.0	0.0	2.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.40
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.8	0.0	0.5	0.0	0.0	3.30
19	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.3	0.0	0.3	0.0	0.3	0.3	0.0	0.8	0.3	4.3	3.3	0.8	1.3	0.3	0.0	2.8	15.49
20	0.0	0.0	0.3	0.8	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
24	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.5	1.0	1.0	0.3	1.0	0.0	0.0	0.5	2.3	0.5	0.3	0.0	0.0	0.0	0.0	0.0	8.13
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	2.79
27	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	2.3	3.05
29	3.0	1.8	1.0	1.3	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.13
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 176.53

Total Hours in Month 744 **Hours Data Available** 739 **Data Recovery** 99.3%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

November 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.51
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.3	0.5	2.0	0.0	0.0	0.0	0.0	4.57
7	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	3.05
8	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.78
9	2.5	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.81
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	2.79
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.8	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.00
16		0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.00
19	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.00
20		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
22	0.0	0.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0	0.0	1.78
27	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.32

Total Precipitation (mm) = 30.48

Total Hours in Month 720 **Hours Data Available** 704 **Data Recovery** 97.8%

HCG, Inc.

Pebble 1 Meterological Station - Total Rainfall (mm)

December 2006

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.3	0.0	0.0	1.27
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.78
3	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.3	0.5	0.8	1.5	2.3	1.5	0.5	0.8	1.0	0.8	0.8	1.0	1.5	1.0	0.3	0.8	0.3	16.76
4	0.8	1.3	0.5	1.0	0.5	0.8	0.5	1.5	0.5	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.3	0.0	0.0	0.0	9.14
5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
6	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.5	0.8	0.3				0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	6.10
7	0.0	0.0	0.8	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
8	0.0	0.0	0.0	0.0	0.0	2.3	1.0	0.0	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.3	0.0	0.0	0.0	6.60
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	1.78
10	0.0	0.3	0.8	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.5	0.5	0.3	0.3	0.5	0.0	0.0	4.57
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	1.27
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.0	0.3	0.8	0.0	0.0	0.8	0.0	0.0	0.0	2.79
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.5	0.3	0.0	0.0	0.0	1.27
18	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.3	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	5.59
28	0.0	1.3	0.3	0.0	0.0	0.0	0.3	0.5	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
30	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 67.31

Total Hours In Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Daily Total Pan Evaporation (mm)

January2006- December 2006

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	0.2	1.0	0.0	2.8	0.0	-	-
2	-	-	-	-	-	4.1	5.6	0.0	1.9	0.0	-	-
3	-	-	-	-	-	5.5	6.6	0.0	0.0	0.0	-	-
4	-	-	-	-	-	9.0	4.5	0.0	0.0	0.0	-	-
5	-	-	-	-	-	6.6	5.6	0.0	1.0	0.0	-	-
6	-	-	-	-	-	6.2	0.0	2.8	2.7	0.0	-	-
7	-	-	-	-	-	7.2	0.0	4.4	0.0	0.0	-	-
8	-	-	-	-	-	0.0	0.0	1.4	0.0	6.2	-	-
9	-	-	-	-	-	4.1	1.1	0.0	0.5	0.0	-	-
10	-	-	-	-	-	2.9	7.2	0.0	1.7	0.0	-	-
11	-	-	-	-	-	0.0	4.1	0.0	2.2	-	-	-
12	-	-	-	-	2.0	0.0	0.2	0.0	3.0	-	-	-
13	-	-	-	-	7.6	0.0	5.5	0.0	2.8	-	-	-
14	-	-	-	-	4.0	1.3	0.0	0.0	0.0	-	-	-
15	-	-	-	-	4.6	0.0	0.0	0.0	0.0	-	-	-
16	-	-	-	-	1.9	0.0	0.4	0.0	0.9	-	-	-
17	-	-	-	-	2.1	0.0	3.4	0.0	1.3	-	-	-
18	-	-	-	-	0.3	0.0	2.7	0.0	1.3	-	-	-
19	-	-	-	-	2.4	1.8	3.7	0.0	0.0	-	-	-
20	-	-	-	-	0.0	1.0	6.8	2.5	0.0	-	-	-
21	-	-	-	-	0.0	1.1	0.0	0.0	0.0	-	-	-
22	-	-	-	-	3.1	0.0	1.3	0.0	0.0	-	-	-
23	-	-	-	-	4.0	0.0	0.0	1.5	0.0	-	-	-
24	-	-	-	-	4.5	1.3	0.0	0.0	0.0	-	-	-
25	-	-	-	-	6.0	2.3	0.0	2.0	0.1	-	-	-
26	-	-	-	-	8.4	5.2	3.8	0.0	0.0	-	-	-
27	-	-	-	-	9.8	4.0	1.0	1.7	0.0	-	-	-
28	-	-	-	-	6.9	6.0	4.8	1.7	0.0	-	-	-
29	-	-	-	-	10.1	0.0	0.6	2.1	1.4	-	-	-
30	-	-	-	-	6.8	0.0	0.0	0.0	1.7	-	-	-
31		-			3.7		0.6	0.4		-		-
Total	-	-	-	-	88.2	69.8	70.5	20.5	25.3	6.2	-	-

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2G

2007 Annual Data Report, Pebble 1 Station, for the Pebble Project Meteorological Monitoring Program

2007 Annual Data Report
Pebble 1 Station

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

April 2008

Pebble 1 Station
2007 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2008

prepared for

The Pebble Partnership
Anchorage, Alaska

prepared by

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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary 4
1.2 Measurements Method Table 5
1.3 Variations from the Quality Assurance Project Plan 5

2.0 Station Performance Summary **10**

2.1 Significant Project Events 10
2.2 Missing, Invalid, and Adjusted Data 11
2.3 Network Data Completeness 11
2.4 Precision Statistics 13
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics 14
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **21**

3.1 Air Quality Data Summary 21
3.2 Meteorological Data Summary 21
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 21
3.2.2 Temperature Climatology 33
3.3.3 Other Meteorological Parameters 38

4.0 References **44**

List of Figures

1-1 Map of the Pebble Project Area 7
1-2 Map of the Pebble 1 Station 8
1-3 Pebble 1 Meteorological Monitoring Station 9
3-1 2007 Pebble 1 Station Wind Roses 23
3-2 Quarterly Pebble 1 Wind Roses (Climatronics) 24
3-3 Quarterly Pebble 1 Wind Roses (RM Young) 25
3-4 2007 Wind Rose Superimposed on Site Map 32
3-5 Hourly Average 2-Meter and 10-Meter Temperatures 36
3-6 Hourly Average Vertical Temperature Difference 37
3-7 Hourly Average Relative Humidity 40

3-8 Barometric Pressure 41
3-9 Hourly Average Solar Radiation 42
3-10 Daily and Cumulative Precipitation 43

List of Tables

E-1 Meteorological Data Capture – Valid Hours per Month 2
E-2 Meteorological Data Capture – Percent Data Capture 3
1-1 Meteorological Measurement Methods 6
2-1 Chronology of Significant Events 10
2-2 Percentage of Final Data Set Flagged 12
2-3 Pebble 1 Station Percent Data Capture 13
2-4 January 17, 2007 Performance Audit Summary 16
2-5 February 6, 2007 Supplemental Performance Audit Summary 17
2-6 September 2, 2007 Performance Audit Summary (CR10X) 18
2-7 September 3-4, 2007 Performance Audit Summary (CR1000) 19
2-8 February 5-6, 2007 Performance Audit Summary 20
3-1 Average and Maximum Wind Speeds 21
3-2 Average and Maximum Wind Speeds at Iliamna Airport 22
3-3 2007 Annual Wind Rose Analysis Table (Climatronics) 26
3-4 Quarter A Wind Rose Analysis Table (Climatronics) 27
3-5 Quarter B Wind Rose Analysis Table (Climatronics) 27
3-6 Quarter C Wind Rose Analysis Table (Climatronics) 28
3-7 Quarter D Wind Rose Analysis Table (Climatronics) 28
3-8 2007 Annual Wind Rose Analysis Table (RM Young) 29
3-9 Quarter A Wind Rose Analysis Table (RM Young) 30
3-10 Quarter B Wind Rose Analysis Table (RM Young) 30
3-11 Quarter C Wind Rose Analysis Table (RM Young) 31
3-12 Quarter D Wind Rose Analysis Table (RM Young) 31
3-13 2-Meter Temperature Summary at Pebble 1 Station 34
3-14 10-Meter Temperature Summary at Pebble 1 Station 35
3-15 Relative Humidity, Barometric Pressure, and Solar Radiation Summary 39

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Data Summaries
E Validated Manual Particulate Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

Prevention of Significant Deterioration (PSD) quality meteorological monitoring for the Pebble Project began on August 1, 2005 and will be ongoing. This report provides details of the 2007 calendar year of meteorological measurements collected from January 1, 2007 through December 31, 2007 at the proposed mill location.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 1 (Mine PSD) meteorological monitoring station. The Pebble 1 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of the Delta T parameter, which did not meet the minimum PSD monitoring requirement of 90 percent data capture or better during Monitoring Quarters A (January 1, 2007 through March 31, 2007), B (April 1, 2007 through June 30, 2007), and Quarter C (July 1, 2007 through September 30, 2007) as a result of the failure of the 10-meter temperature sensor. However, the Delta T data capture rates from the previous monitoring year will fulfill modeling needs for air permitting purposes.

In addition, a February wind storm caused damage to the secondary wind sensor and subsequently data loss. However the primary wind sensor met the 90 percent data capture goals for all months and quarters for the monitoring year.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp[4]	Δ T[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2007	739	384	384	739	739	739	704	704	704	744	744	744	742	N/A[3]
February 2007	672	0	0	672	672	672	536	536	536	672	672	672	667	N/A
March 2007	744	0	0	744	744	744	744	744	744	744	744	744	742	N/A
April 2007	720	0	0	720	720	720	720	720	720	720	720	720	720	N/A
May 2007	744	0	0	744	744	744	744	744	744	744	744	744	741	718
June 2007	720	0	0	720	720	720	720	720	720	720	720	720	720	720
July 2007	744	0	0	744	744	744	744	744	744	744	744	744	744	744
August 2007	744	42	42	744	744	744	744	744	744	744	744	744	742	742
September 2007	712	711	711	695	713	713	713	713	713	712	712	713	708	713
October 2007	744	744	744	744	744	744	744	744	744	744	744	744	741	285
November 2007	720	720	720	720	720	720	720	720	720	720	720	720	720	N/A
December 2007	672	672	672	672	672	672	672	672	672	672	672	672	672	N/A
Monitoring Year	**8,675**	**3,273**	**3,273**	**8,658**	**8,676**	**8,676**	**8,505**	**8,505**	**8,505**	**8,680**	**8,680**	**8,681**	**8,659**	**3,922**[3]

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 2 to October 12.
[4] Data captured in the previous monitoring year can fulfill modeling needs for air permitting purposes.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp[4]	Δ T[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2007	99.3%	51.6%	51.6%	99.3%	99.3%	99.3%	94.6%	94.6%	94.6%	100%	100%	100%	99.7%	N/A[3]
February 2007	100%	0.0%	0.0%	100%	100%	100%	79.8%	79.8%	79.8%	100%	100%	100%	99.3%	N/A
March 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**99.8%**	**17.8%**	**17.8%**	**99.8%**	**99.8%**	**99.8%**	**91.9%**	**91.9%**	**91.9%**	**100%**	**100%**	**100%**	**99.6%**	N/A
April 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
May 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	99.7%
June 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**0.0%**	**0.0%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
July 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2007	100%	5.6%	5.6%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	99.7%
September 2007	98.9%	98.8%	98.8%	96.5%	99.0%	99.0%	99.0%	99.0%	99.0%	98.9%	98.9%	99.0%	98.3%	99.0%
Quarter C	**99.6%**	**34.1%**	**34.1%**	**98.9%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.6%**	**99.6%**	**99.7%**	**99.4%**	**99.6%**
October 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	100%
November 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2007	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	N/A
Quarter D	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.6%**	**100%**
Monitoring Year	**99.0%**	**37.4%**	**37.4%**	**98.8%**	**99.1%**	**99.1%**	**97.1%**	**97.1%**	**97.1%**	**99.1%**	**99.1%**	**99.1%**	**98.9%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 2 to October 12.
[4] Data captured in the previous monitoring year can fulfill modeling needs for air permitting purposes.

1.0 Introduction

1.1 Project Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. This project currently consists of three PSD-quality meteorological monitoring stations located at the proposed mill site (Pebble 1), the tailings storage facility (Pebble 4), and port site (Pebble Port). An additional, non-PSD meteorological monitoring station (Pebble 3) is being used for engineering and mine design purposes. Of the three PSD-quality meteorological monitoring stations, continuous measurements were made at the Pebble 1 and Pebble Port stations beginning on August 1, 2005. This data report focuses on data collected from January 1, 2007 though December 31, 2007 at the Pebble 1 meteorological station.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 1 station. A separate annual data report has been prepared for each of the Pebble 4 and Pebble Port stations.

The Pebble 1 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Air temperature, ten meters above ground (degrees Celsius [°C])
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]))
- Wind speed (meters per second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])
- Relative humidity (percent [%])
- Solar radiation (Watts per square meter [W/m^2])
- Barometric Pressure (millibar [mb]).
- Precipitation (millimeters [mm])
- Evaporation (millimeters [mm])

Measurements of these parameters will provide at least one year of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 1 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble 1 station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 1 station.

1.3 Variations from the Quality Assurance Project Plan

During the 2007 monitoring year, there were no variations from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 12 in	± .254 mm	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for 1 second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

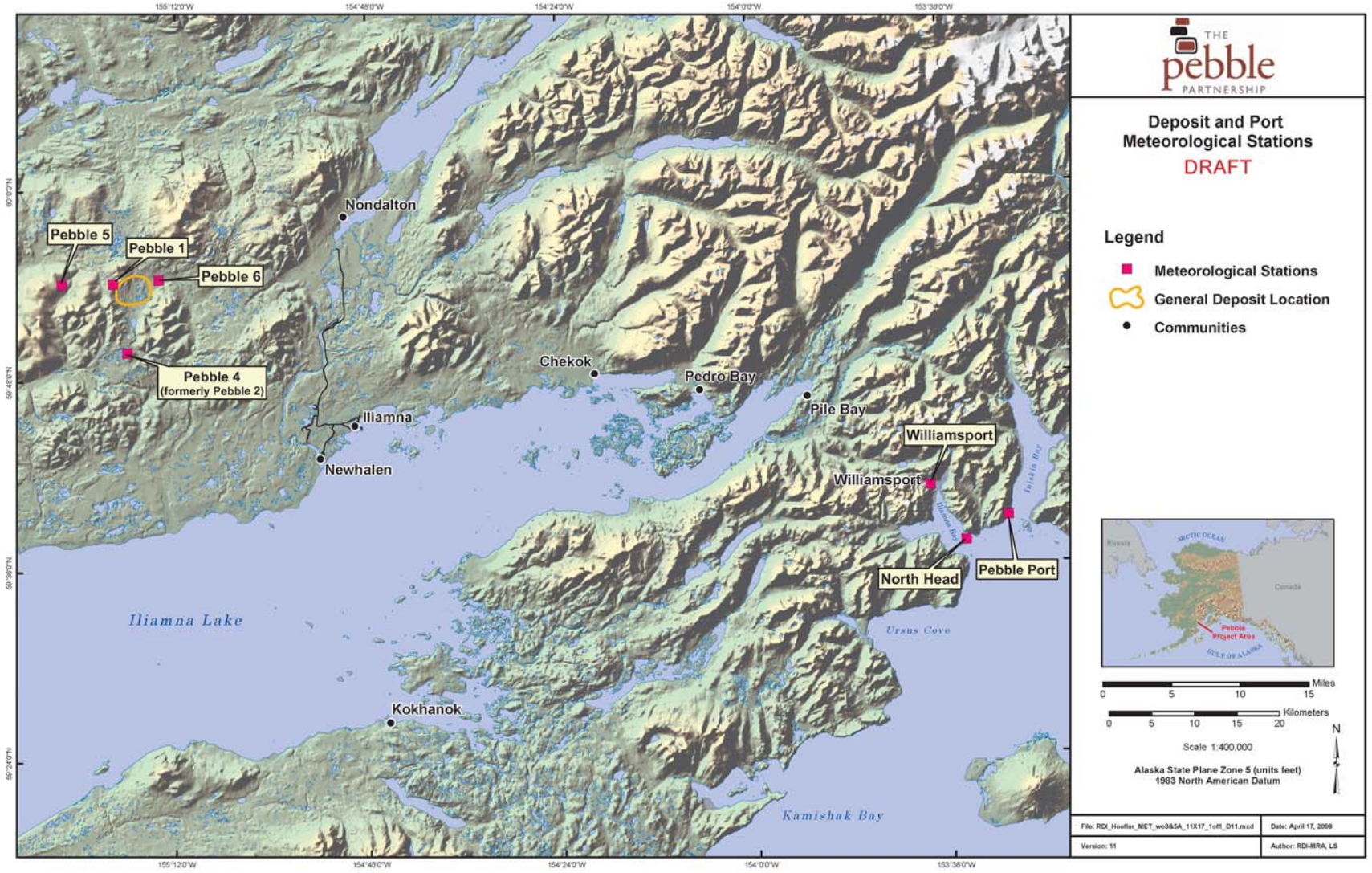


Figure 1-2. Map of the Pebble 1 Station

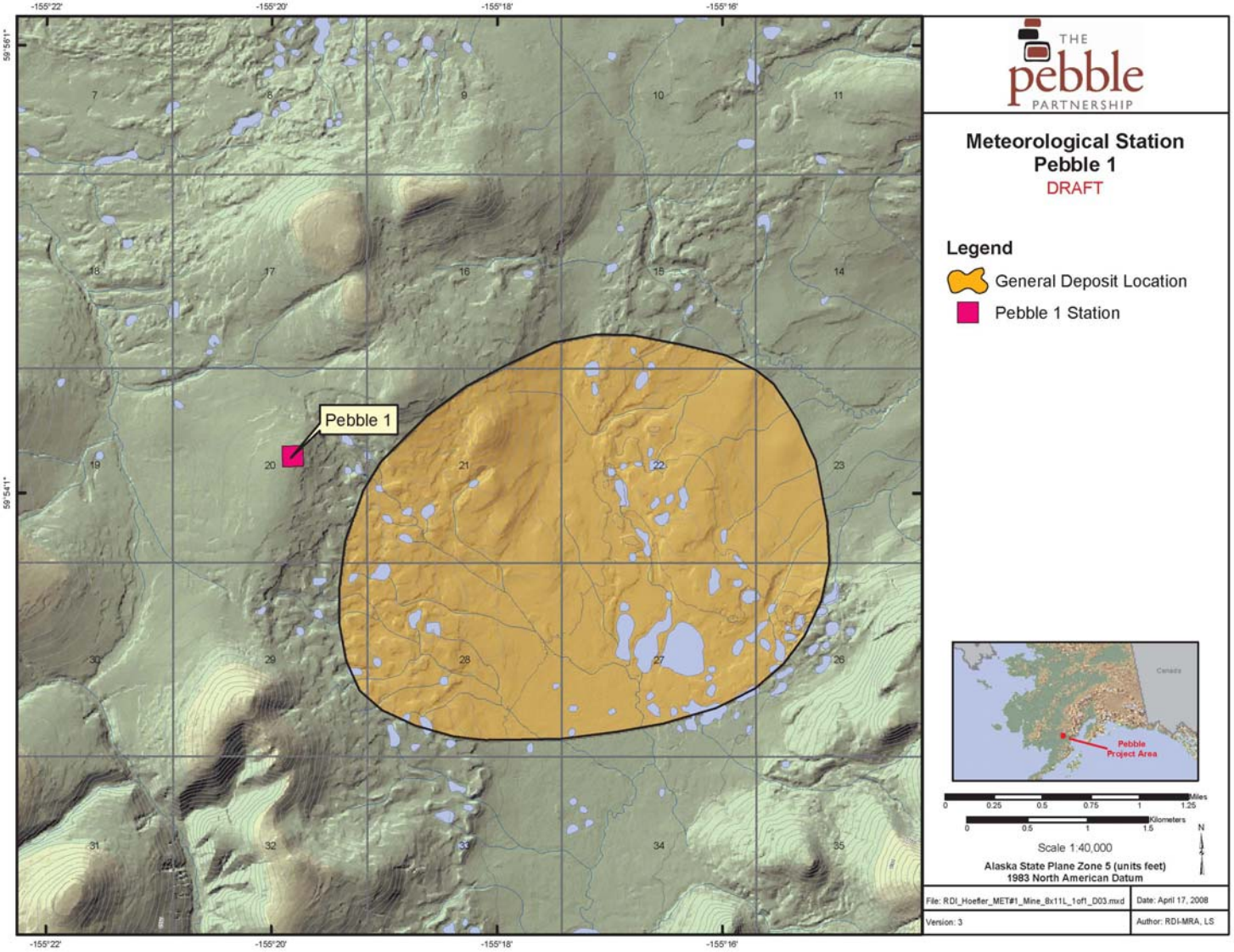


Figure 1-3. Pebble 1 Meteorological Monitoring Station

2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 1 station relevant to the 2007 meteorological monitoring year.

Table 2-1. Chronology of Significant Events

Date	Event
January 1, 2007	Beginning of 2007 monitoring year.
January 17, 2007	Full audit performed (all sensors passed), refreshed NOAH gauge, inspected Metone precipitation gauge.
February 6, 2007	Replaced R.M. Young instrument, refreshed precipitation gauges, repaired wind screen snow fencing.
March 22, 2007	Calibrated and refreshed NOAH gauge, replaced aspirator and vent fan control relay, uploaded new datalogger program.
May 1-2, 2007	Calibrated and refreshed precipitation gauges, calibrated and started evaporation gauge, cleaned station and tightened guy wires.
August 7, 2007	Site visit in response to NOAH precipitation gauge malfunction and to perform power system diagnostics.
September 2-4, 2007	Installed CR1000 data logger performed audits before and after installation, 10-meter temperature sensor failed first audit, all other sensors passed.
November 7th, 2007	Started TEGs and serviced precipitation instruments.
December 31, 2007	Ending of 2007 monitoring year.
February 5-6, 2008	Full audit performed (all sensors passed).

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 1 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2007 monitoring year at the Pebble 1 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	1.5%
	< 0.1 m/s variation for 3 consecutive hours	2.6%
	<0.5 m/s variation for 12 consecutive hours	1.1%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	1.7%
	< 10° variation over 18 consecutive hours	1.6%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.9%
	< 0.1 m/s variation for 3 consecutive hours	0.8%
	<0.5 m/s variation for 12 consecutive hours	0.2%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.2%
	<1° variation over 3 consecutive hours	1.6%
	< 10° variation over 18 consecutive hours	1.6%
Temperature (2 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.6%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.2%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	0.7%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	0.0%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	1.0%
	< 0.5°C variation for 12 consecutive hours	2.6%
	Equals ambient temperature for 12 consecutive hours	3.4%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	0.0%
	> 6 mb variation for 3 consecutive hours	0.1%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	50.0%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 1 Station Percent Data Capture.

Period	Meteorological Parameters													
	2-m Temp	10-m Temp[4]	Δ T[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2007	99.3%	51.6%	51.6%	99.3%	99.3%	99.3%	94.6%	94.6%	94.6%	100%	100%	100%	99.7%	N/A[3]
February 2007	100%	0.0%	0.0%	100%	100%	100%	79.8%	79.8%	79.8%	100%	100%	100%	99.3%	N/A
March 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**99.8%**	**17.8%**	**17.8%**	**99.8%**	**99.8%**	**99.8%**	**91.9%**	**91.9%**	**91.9%**	**100%**	**100%**	**100%**	**99.6%**	N/A
April 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
May 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	99.7%
June 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**0.0%**	**0.0%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
July 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2007	100%	5.6%	5.6%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	99.7%
September 2007	98.9%	98.8%	98.8%	96.5%	99.0%	99.0%	99.0%	99.0%	99.0%	98.9%	98.9%	99.0%	98.3%	99.0%
Quarter C	**99.6%**	**34.1%**	**34.1%**	**98.9%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.6%**	**99.6%**	**99.7%**	**99.4%**	**99.6%**
October 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	100%
November 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2007	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	N/A
Quarter D	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.6%**	**100%**
Monitoring Year	**99.0%**	**37.4%**	**37.4%**	**98.8%**	**99.1%**	**99.1%**	**97.1%**	**97.1%**	**97.1%**	**99.1%**	**99.1%**	**99.1%**	**98.9%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 2 to October 12.
[4] Data captured in the previous monitoring year can fulfill modeling needs for air permitting purposes.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

The first annual performance audit was conducted at the Pebble 1 station on January 17, 2007. The results of this audit are presented in Table 2-4. Additional sensor audits were conducted on February 6, 2007 on a new RM Young wind instrument after its installation due to windstorm damage sustained by the original instrument. A summary of the results from this supplemental performance audit is presented in Table 2-5.

The second annual performance audit was conducted at the Pebble 1 station on September 2, 2007. All sensors passed except for the Ten meter temperature sensor. 10-meter temperature data, and associated Delta T data from January 17 to September 2, 2007 was invalidated as a result of this audit finding. A second audit was performed on all station sensors on September 3 and September 4, 2007 to check sensor operation after upgrading the CR10X data logger with a CR1000 data logger. All sensors passed.

A performance audit was also performed on February 5 and 6, 2008 on all instruments except the tipping precipitation gauge due to the extreme cold ambient temperature. All tested sensors passed the audit when challenged with certified equipment. The results of the performance audits are presented in Tables 2-6, 2-7, and 2-8.

Performance audits involve reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with established PSD limits to assess the accuracy of the sensor. Complete performance audit reports for the monitoring year are available in Appendix C.

A technical systems audit was performed during the September 2 though 4, 2007 performance audit. During each technical audit, the power supply, DAS, communications system, and audited sensors all worked properly. The systems audit found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system. Appendix C contains the complete technical systems audit report.

Table 2-4. January 17, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:01	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	-0.5	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.090	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	1.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.8	Pass
Wind Direction Torque	≤ 11	g-cm	8.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-2.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-2.1	Pass
Barometric Pressure	≤ ±3	Mbar	1.2	Pass
Solar Radiation	≤ ±5+Res	% input	-9.6[1]	Pass
Weighing Precipitation	≤ ±10	% input	7.7	Pass
Tipping Precipitation	≤ ±10	% input	-0.4	Pass

[1] Max percent error value of 9.6 within limit of 5% input and resolution, see audit.

Table 2-5. February 6, 2007 Supplemental Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System[1]				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.4	Pass
Wind Direction Torque	≤ 11	g-cm	6.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.3	Pass
Weighing Precipitation	≤ ±10	% input	7.7	Pass

[1]Instrument audited after replacement due to storm damage.

Table 2-6. September 2, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.68	Fail[1]
Air Temperature Difference	≤ ±0.1	°C	0.40	Fail[1]
Relative Humidity (dew point)	≤ ±1.5	°C	0.4	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.100	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.2	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
Barometric Pressure	≤ ±3	Mbar	-0.1	Pass
Solar Radiation	≤ ±5+Res	% input	-8.7	Pass
Weighing Precipitation	≤ ±10	% input	7.7	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	N/A
Evaporation	≤ ±10	% input	5.2	Pass

[1]Thermistors replaced after CR10X audit.

[2]Not re-tested until after DAS/sensor change.

[3]Max percent error value of 8.7 within limit of 5% input + resolution, see audit.

Table 2-7. September 3-4, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-1:00	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.2	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.1	Pass
Barometric Pressure	≤ ±3	Mbar	-0.6	Pass
Solar Radiation	≤ ±5+Res	% input	5.2[2]	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Tipping Precipitation	≤ ±10	% input	-10.0[3]	Pass
Evaporation	≤ ±10	% input	3.5	Pass

[1]New DAS/sensor, no as-found value.

[2]Max percent error value of 5.2 within limit of 5% input + resolution, see audit.

[3]Single point at 10 pecent, five other readings at 1 percent to 6 percent error.

Table 2-6. February 5-6, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:52	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.34	Fail[1]
Air Temperature Difference	≤ ±0.1	°C	0.00	Fail[1]
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.050	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.0	Pass
Wind Direction Linearity	≤ 3	Degree	0.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.8	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.9	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.6	Pass
Barometric Pressure	≤ ±3	Mbar	0.0	Pass
Solar Radiation	≤ ±5+Res	% input	-8.4[1]	Pass
Weighing Precipitation	≤ ±10	% input	8.8	Pass
Tipping Precipitation	≤ ±10	% input	**N/A**[2]	N/A

[1]Max percent error value of 8.4 within limit of 5% input + resolution, see audit.

[2]Too cold to run tipping gauge drip tests.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2007 meteorological monitoring year at the Pebble 1 station. The mean hourly average wind speed during the 2007 monitoring year was 7.95 m/s and 8.18 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 39.99 m/s and 37.87 m/s were measured by the CLM and RMY sensors, respectively, on January 30.

Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 30 km from the Pebble 1 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.95 m/s, while the maximum hourly average wind speed was 17.88 m/s, recorded on December 9.

Table 3-1. Average and Maximum Wind Speeds

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	**9.98**	**9.87**	**39.99**	**37.87**
Quarter B	**7.00**	**7.02**	**30.31**	**28.92**
Quarter C	**6.39**	**6.47**	**27.65**	**26.23**
Quarter D	**8.47**	**9.56**	**30.41**	**28.97**
Monitoring Year	**7.95**	**8.18**	**39.99**	**37.87**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the second monitoring year. Winds were predominantly from the northwest and southeast, other wind components are minor. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. All of the quarterly wind roses are characterized by major wind components from the northwest and southeast. Quarter B and Quarter C wind roses exhibited other minor wind components from the north, east, south, west and southwest directions. The Quarter A and Quarter D wind roses indicate a lack of southwesterly winds during this period. Tables 3-3 through 3-7 are the annual and quarterly wind tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Table 3-2. Average and Maximum Wind Speeds at Iliamna Airport

Monitoring Period	Mean Daily Average Wind Speed (m/s)	Maximum Daily Average Wind Speed (m/s)
Quarter A	4.15	17.43
Quarter B	2.98	16.99
Quarter C	3.20	15.20
Quarter D	5.49	17.88
Monitoring Year	**3.95**	**17.88**

Figure 3-4 shows the 2007 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological station and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 1 station.

Figure 3-1. 2007 Pebble 1 Station Wind Roses

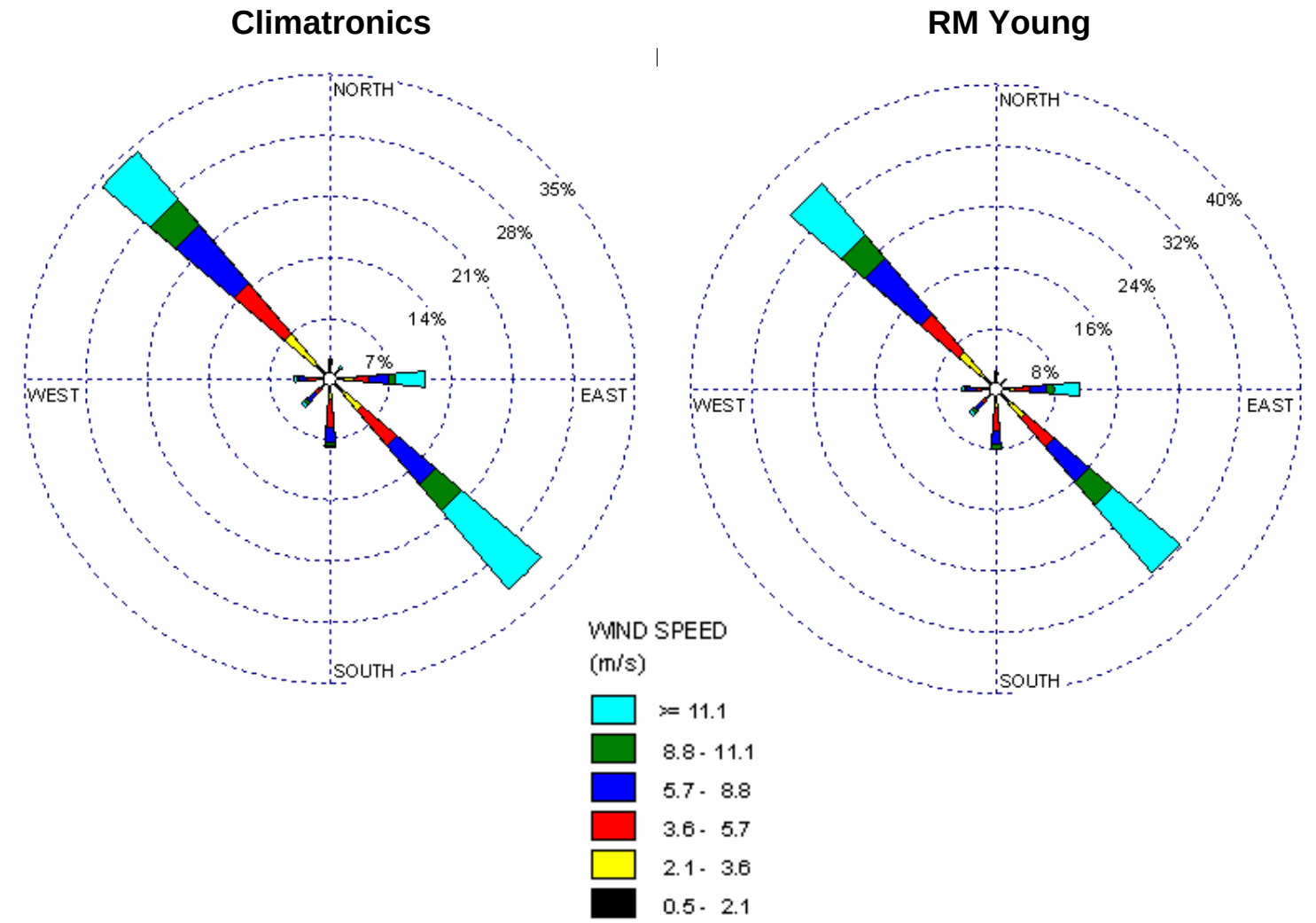
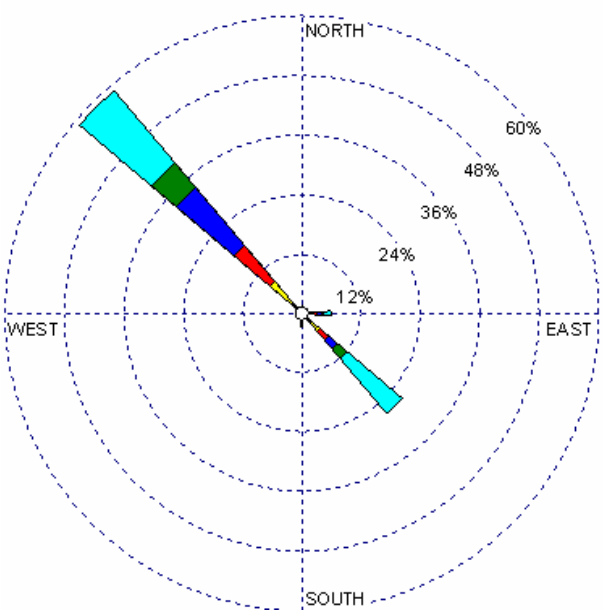
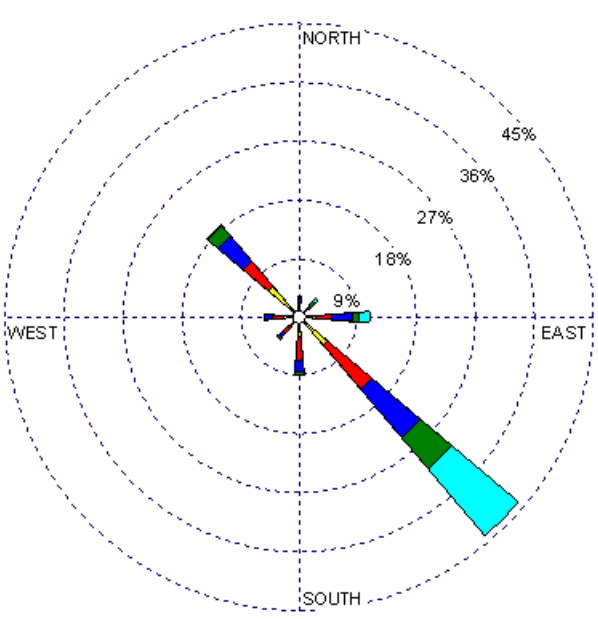


Figure 3-2. Quarterly Pebble 1 Station Wind Roses (Climatronics)

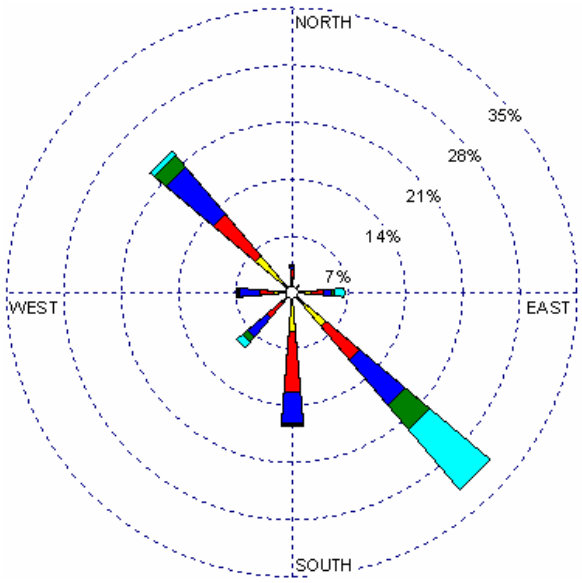
Quarter A (1/1/07 – 3/31/07)



Quarter B (4/1/07 – 6/30/07)



Quarter C (7/1/07 – 9/30/07)



Quarter D (10/1/07 – 12/31/07)

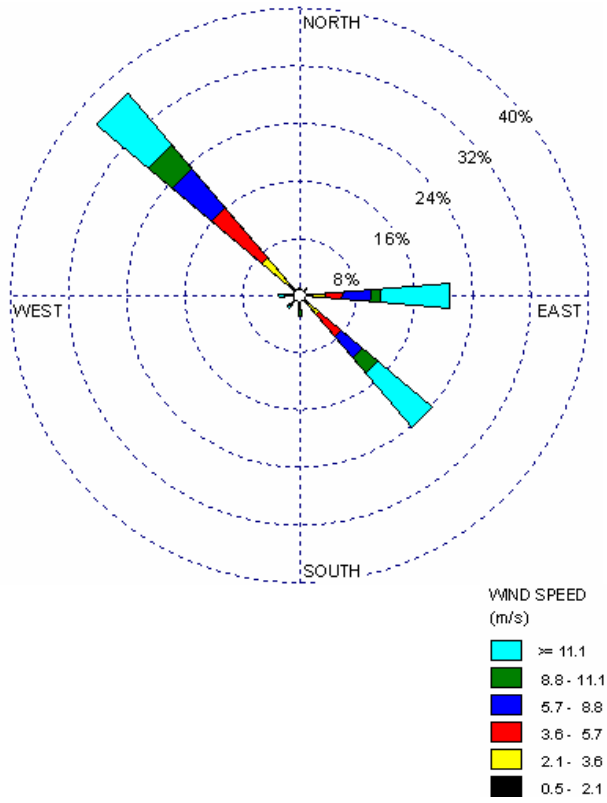
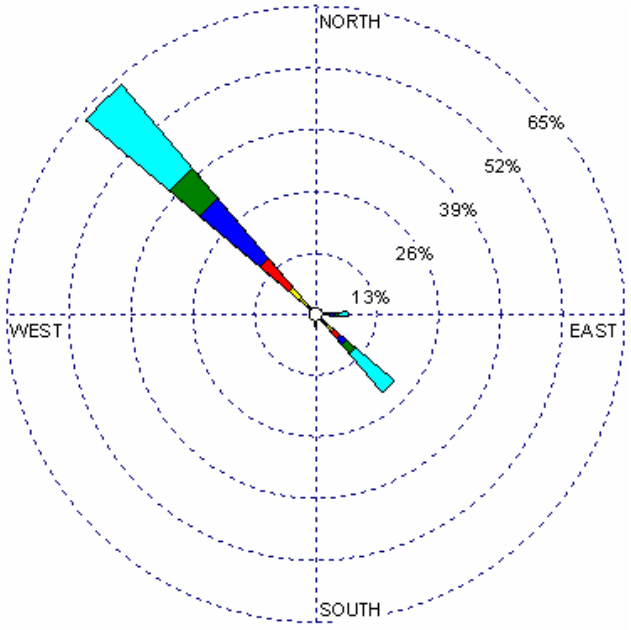
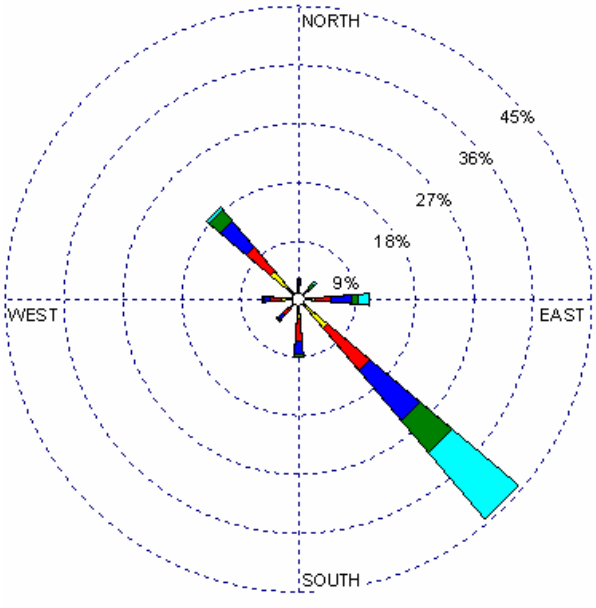


Figure 3-3. Quarterly Pebble 1 Station Wind Roses (RM Young)

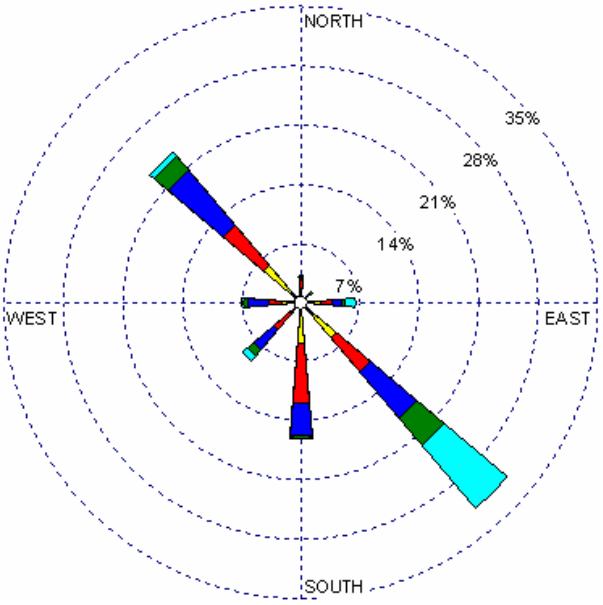
Quarter A (1/1/07 – 3/31/07)



Quarter B (4/1/07 – 6/30/07)



Quarter C (7/1/07 – 9/30/07)



Quarter D (10/1/07 – 12/31/07)

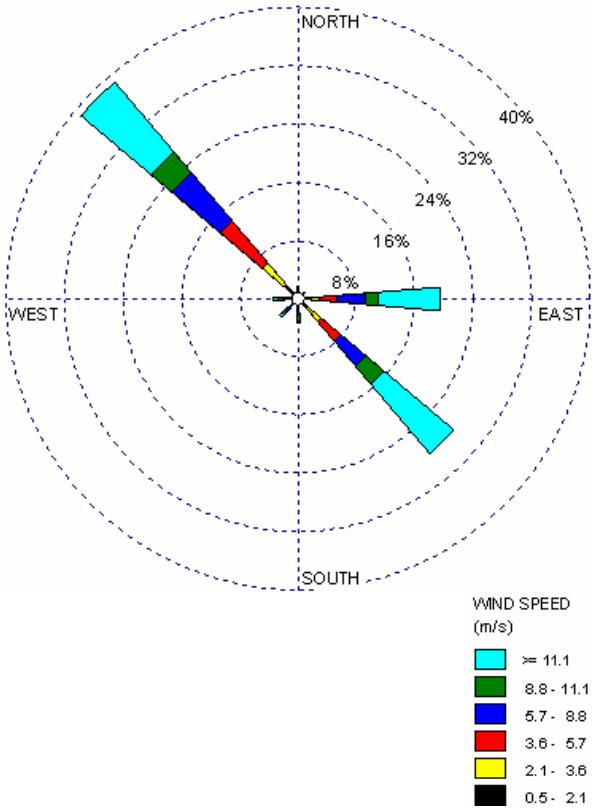


Table 3-3. 2007 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: 2007
Start Date: January 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.64%	0.50%	0.55%	0.34%	0.15%	0.25%	2.43%
NE	0.38%	0.30%	0.27%	0.32%	0.47%	0.20%	1.94%
E	1.14%	1.65%	1.71%	2.29%	0.73%	3.47%	10.98%
SE	2.07%	2.88%	5.19%	5.80%	3.85%	11.87%	31.65%
S	0.89%	1.61%	3.21%	1.65%	0.44%	0.10%	7.90%
SW	0.54%	0.62%	1.24%	1.19%	0.36%	0.42%	4.37%
W	0.77%	0.85%	1.09%	1.03%	0.18%	0.27%	4.19%
NW	2.24%	4.69%	7.55%	8.72%	3.68%	7.23%	34.12%
Sub-Total:	8.67%	13.10%	20.80%	21.33%	9.86%	23.80%	97.57%
Calms (<0.5m/s):							2.40%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2007 End Date: March 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.42%	0.05%	0.09%	0.23%	0.05%	0.79%	1.62%
NE	0.37%	0.00%	0.05%	0.14%	0.37%	0.00%	0.93%
E	1.44%	0.88%	0.93%	0.84%	0.42%	1.44%	5.94%
SE	2.88%	2.00%	2.41%	2.27%	2.60%	14.53%	26.69%
S	0.88%	0.46%	0.93%	0.19%	0.33%	0.09%	2.88%
SW	0.19%	0.05%	0.19%	0.33%	0.19%	0.46%	1.39%
W	0.37%	0.28%	0.37%	0.28%	0.09%	0.05%	1.44%
NW	2.74%	5.90%	9.33%	15.23%	6.55%	18.94%	58.68%
Sub-Total:	9.29%	9.61%	14.30%	19.50%	10.59%	36.30%	99.58%
Calms (<0.5m/s):							0.40%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2007 End Date: June 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.60%	0.82%	0.92%	0.60%	0.41%	0.00%	3.34%
NE	0.41%	0.64%	0.64%	0.64%	0.92%	0.69%	3.94%
E	0.96%	1.65%	2.34%	3.34%	0.82%	1.69%	10.81%
SE	1.60%	4.17%	8.88%	9.62%	6.18%	13.37%	43.82%
S	0.92%	2.11%	3.66%	1.88%	0.46%	0.00%	9.02%
SW	0.87%	1.05%	1.42%	1.01%	0.23%	0.09%	4.67%
W	1.01%	1.60%	1.65%	1.05%	0.09%	0.00%	5.40%
NW	2.34%	3.89%	5.13%	5.04%	2.01%	0.23%	18.64%
Sub-Total:	8.70%	15.93%	24.63%	23.17%	11.13%	16.07%	99.63%
Calms (<0.5m/s):							0.35%
Total:							100.00%

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2007 End Date: September 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.96%	0.92%	1.10%	0.23%	0.05%	0.23%	3.48%
NE	0.41%	0.37%	0.05%	0.41%	0.14%	0.00%	1.37%
E	0.82%	1.69%	1.37%	1.10%	0.23%	1.28%	6.50%
SE	2.06%	3.53%	5.36%	7.28%	3.89%	9.62%	31.75%
S	1.42%	3.53%	7.38%	3.76%	0.23%	0.14%	16.45%
SW	0.73%	0.92%	2.52%	3.02%	0.87%	0.87%	8.93%
W	1.10%	1.28%	1.69%	2.34%	0.23%	0.23%	6.87%
NW	1.65%	4.31%	6.69%	7.60%	1.88%	0.64%	22.77%
Sub-Total:	9.16%	16.54%	26.16%	25.74%	7.51%	13.01%	98.12%
Calms (<0.5m/s):							1.80%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.56%	0.19%	0.09%	0.28%	0.09%	0.00%	1.22%
NE	0.33%	0.19%	0.33%	0.09%	0.47%	0.09%	1.50%
E	1.36%	2.39%	2.20%	3.88%	1.45%	9.55%	20.82%
SE	1.73%	1.78%	4.02%	3.93%	2.67%	9.97%	24.10%
S	0.33%	0.28%	0.80%	0.75%	0.75%	0.19%	3.09%
SW	0.37%	0.47%	0.80%	0.37%	0.14%	0.23%	2.39%
W	0.61%	0.23%	0.61%	0.42%	0.33%	0.80%	2.99%
NW	2.25%	4.68%	9.12%	7.07%	4.35%	9.31%	36.78%
Sub-Total:	7.53%	10.20%	17.97%	16.80%	10.25%	30.14%	92.89%
Calms (<0.5m/s):							6.79%
Total:							100.00%

Table 3-8. 2007 Annual Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: 2007
Start Date: January 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.66%	0.52%	0.60%	0.31%	0.12%	0.20%	2.40%
NE	0.47%	0.26%	0.26%	0.29%	0.54%	0.20%	2.02%
E	1.16%	1.41%	1.83%	2.34%	0.89%	3.34%	10.98%
SE	2.33%	2.85%	4.87%	5.96%	4.06%	11.59%	31.65%
S	0.98%	1.58%	3.12%	1.75%	0.49%	0.09%	8.01%
SW	0.53%	0.65%	1.33%	1.33%	0.46%	0.46%	4.75%
W	0.83%	0.87%	1.06%	1.19%	0.29%	0.27%	4.52%
NW	2.32%	4.10%	6.55%	9.57%	3.99%	8.79%	35.32%
Sub-Total:	9.28%	12.23%	19.61%	22.74%	10.84%	24.95%	99.65%
Calms (<0.5m/s):							0.34%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter A
Start Date: January 1, 2007 End Date: March 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.35%	0.00%	0.15%	0.15%	0.00%	0.50%	1.16%
NE	0.35%	0.00%	0.00%	0.15%	0.40%	0.00%	0.91%
E	1.51%	0.71%	1.06%	1.06%	0.55%	1.92%	6.81%
SE	3.53%	1.46%	1.87%	1.77%	2.42%	10.74%	21.79%
S	0.81%	0.35%	0.81%	0.40%	0.40%	0.05%	2.82%
SW	0.10%	0.05%	0.20%	0.35%	0.25%	0.45%	1.41%
W	0.35%	0.30%	0.35%	0.35%	0.10%	0.05%	1.51%
NW	2.72%	4.84%	7.87%	16.64%	8.22%	23.00%	63.29%
Sub-Total:	9.73%	7.72%	12.30%	20.88%	12.36%	36.71%	99.70%
Calms (<0.5m/s):							0.27%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter B
Start Date: April 1, 2007 End Date: June 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.64%	0.92%	0.92%	0.50%	0.32%	0.00%	3.30%
NE	0.46%	0.50%	0.69%	0.50%	1.01%	0.69%	3.85%
E	1.19%	1.56%	2.29%	3.25%	0.96%	1.74%	10.99%
SE	1.83%	4.08%	8.47%	10.03%	6.36%	13.32%	44.09%
S	0.92%	2.11%	3.62%	1.83%	0.50%	0.00%	8.97%
SW	0.87%	1.01%	1.42%	0.96%	0.23%	0.09%	4.58%
W	1.14%	1.60%	1.69%	1.10%	0.09%	0.00%	5.63%
NW	2.43%	3.39%	4.81%	5.17%	2.29%	0.46%	18.54%
Sub-Total:	9.48%	15.16%	23.90%	23.35%	11.77%	16.30%	99.95%
Calms (<0.5m/s):							0.04%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter C
Start Date: July 1, 2007 End Date: September 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.86%	0.86%	1.00%	0.27%	0.05%	0.23%	3.27%
NE	0.77%	0.36%	0.14%	0.36%	0.23%	0.00%	1.86%
E	0.95%	1.45%	1.36%	1.18%	0.27%	1.27%	6.50%
SE	2.18%	3.41%	5.18%	7.18%	4.13%	9.72%	31.80%
S	1.73%	3.23%	6.95%	3.91%	0.23%	0.09%	16.13%
SW	0.73%	1.00%	2.59%	3.09%	0.91%	0.82%	9.13%
W	1.23%	1.09%	1.54%	2.50%	0.41%	0.23%	7.00%
NW	1.59%	4.27%	6.22%	8.41%	2.14%	0.73%	23.35%
Sub-Total:	10.04%	15.67%	24.99%	26.90%	8.36%	13.09%	99.05%
Calms (<0.5m/s):							0.86%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

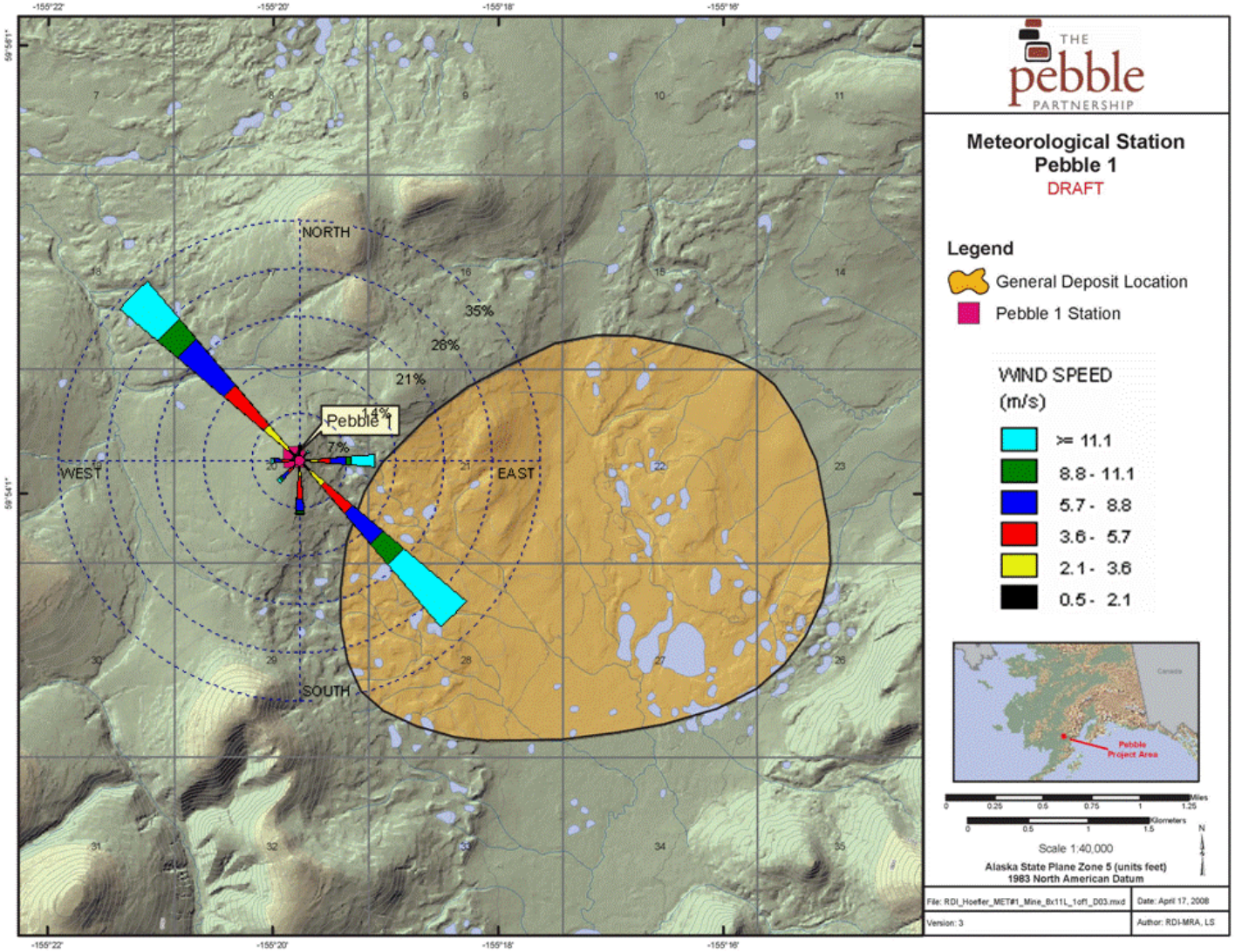
Station ID: Pebble 1 (RM Young) Run ID: Quarter D
Start Date: October 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.75%	0.23%	0.28%	0.28%	0.09%	0.09%	1.73%
NE	0.28%	0.14%	0.19%	0.14%	0.51%	0.09%	1.36%
E	1.03%	1.87%	2.57%	3.79%	1.78%	8.42%	19.47%
SE	1.87%	2.29%	3.65%	4.45%	3.14%	12.54%	27.94%
S	0.42%	0.47%	0.80%	0.70%	0.84%	0.23%	3.46%
SW	0.37%	0.47%	0.98%	0.80%	0.42%	0.47%	3.51%
W	0.56%	0.42%	0.56%	0.70%	0.56%	0.80%	3.60%
NW	2.57%	3.98%	7.44%	8.70%	3.70%	12.45%	38.84%
Sub-Total:	7.86%	9.87%	16.47%	19.56%	11.04%	35.10%	99.91%
Calms (<0.5m/s):							0.08%
Total:							100.00%

Figure 3-4. 2007 Wind Rose Superimposed on Site Map



3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Daily average temperatures at the Pebble 1 station ranged from 22.8°C on August 12 to -33.8°C on January 7. The average 2-meter temperature during the monitoring year was -0.7°C, which is less than the mean temperature of 1.78°C observed at the Iliamna Airport during the same time span.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. There was considerable monthly temperature variation throughout the late-autumn and winter months. The coldest temperatures were observed during January. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 2.6°C measured on September 2. The greatest negative vertical temperature difference was -1.8°C measured on September 5.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2007	2.42	-32.43	-12.19	5.42	-33.80
February 2007	2.80	-21.56	-7.59	6.37	-23.27
March 2007	-1.78	-26.58	-17.53	-0.07	1.62
Quarter A	**2.80**	**-32.43**	**-12.60**	**6.37**	**-33.80**
April 2007	4.98	-2.18	0.59	9.24	-5.05
May 2007	6.59	0.73	4.03	12.21	-1.87
June 2007	16.00	4.76	8.36	21.75	1.10
Quarter B	**16.00**	**-2.18**	**4.32**	**21.75**	**-5.05**
July 2007	16.89	6.71	11.14	21.36	6.09
August 2007	17.37	8.33	11.16	22.18	6.55
September 2007	9.67	3.17	6.67	16.10	1.64
Quarter C	**17.37**	**3.17**	**9.70**	**22.18**	**1.64**
October 2007	3.24	-6.58	-1.97	5.80	-9.09
November 2007	3.52	-16.21	-3.07	4.14	-18.50
December 2007	0.40	-26.38	-9.28	3.37	-27.43
Quarter D	**3.52**	**-26.38**	**-4.64**	**5.80**	**-27.43**
Monitoring Year	**17.37**	**-32.43**	**-0.72**	**22.18**	**-33.80**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2007	-1.93	-31.87	-17.36	-1.61	-33.30
February 2007	N/A	N/A	N/A	N/A	N/A
March 2007	N/A	N/A	N/A	N/A	N/A
Quarter A	**N/A**	**-31.87**	**-17.36**	**-1.61**	**-33.30**
April 2007	N/A	N/A	N/A	N/A	N/A
May 2007	N/A	N/A	N/A	N/A	N/A
June 2007	N/A	N/A	N/A	N/A	N/A
Quarter B	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
July 2007	N/A	N/A	N/A	N/A	N/A
August 2007	11.32	10.64	10.93	14.30	7.57
September 2007	9.62	3.07	6.67	17.26	1.75
Quarter C	**11.32**	**0.00**	**6.90**	**17.26**	**1.75**
October 2007	3.24	-6.51	-1.84	5.19	-9.04
November 2007	3.86	-15.74	-2.85	4.50	-17.71
December 2007	1.00	-25.92	-9.03	3.74	-27.09
Quarter D	**3.86**	**-25.92**	**-4.44**	**5.19**	**-27.09**
Monitoring Year	**11.32**	**-31.87**	**-3.35**	**17.26**	**-33.30**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

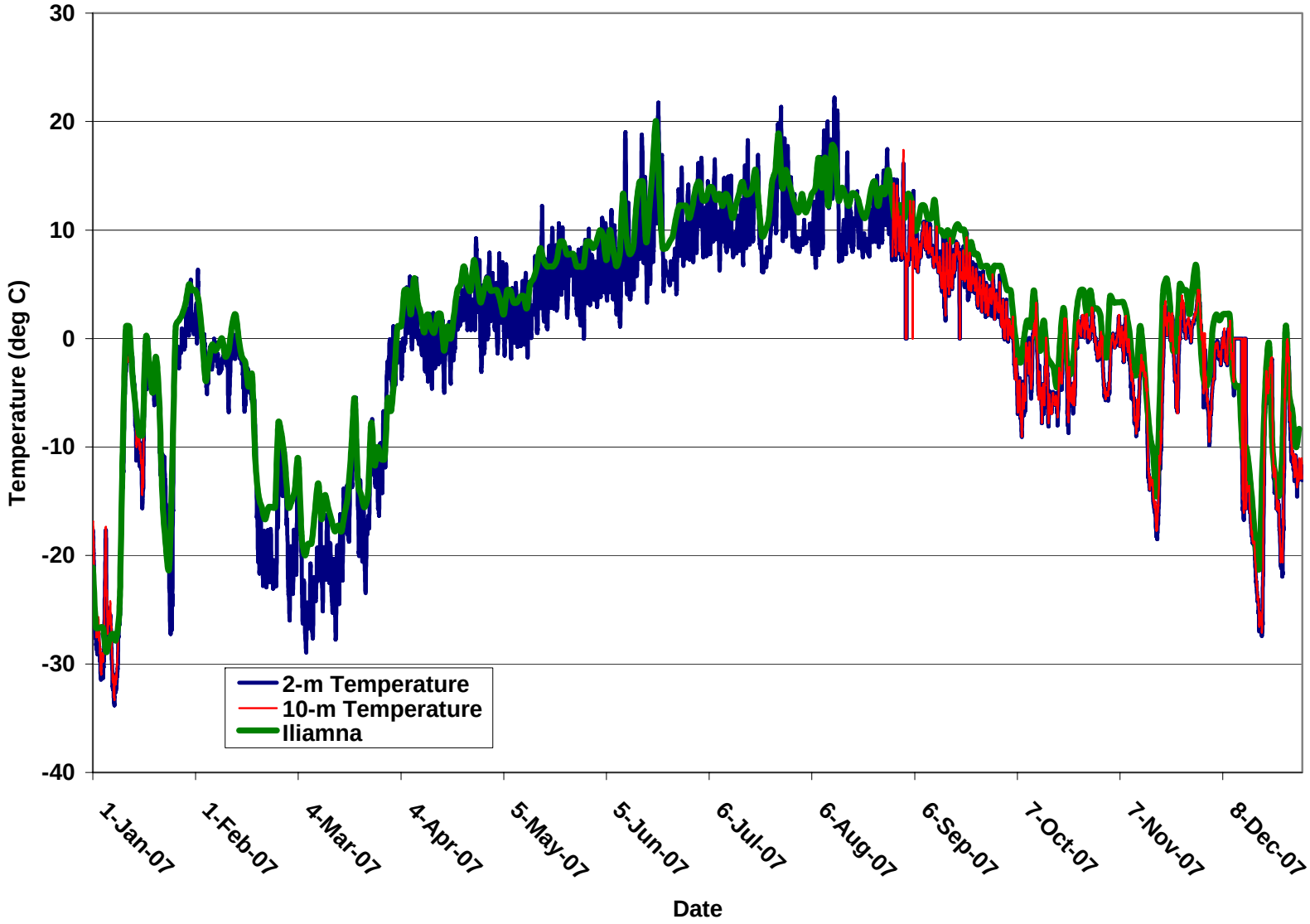
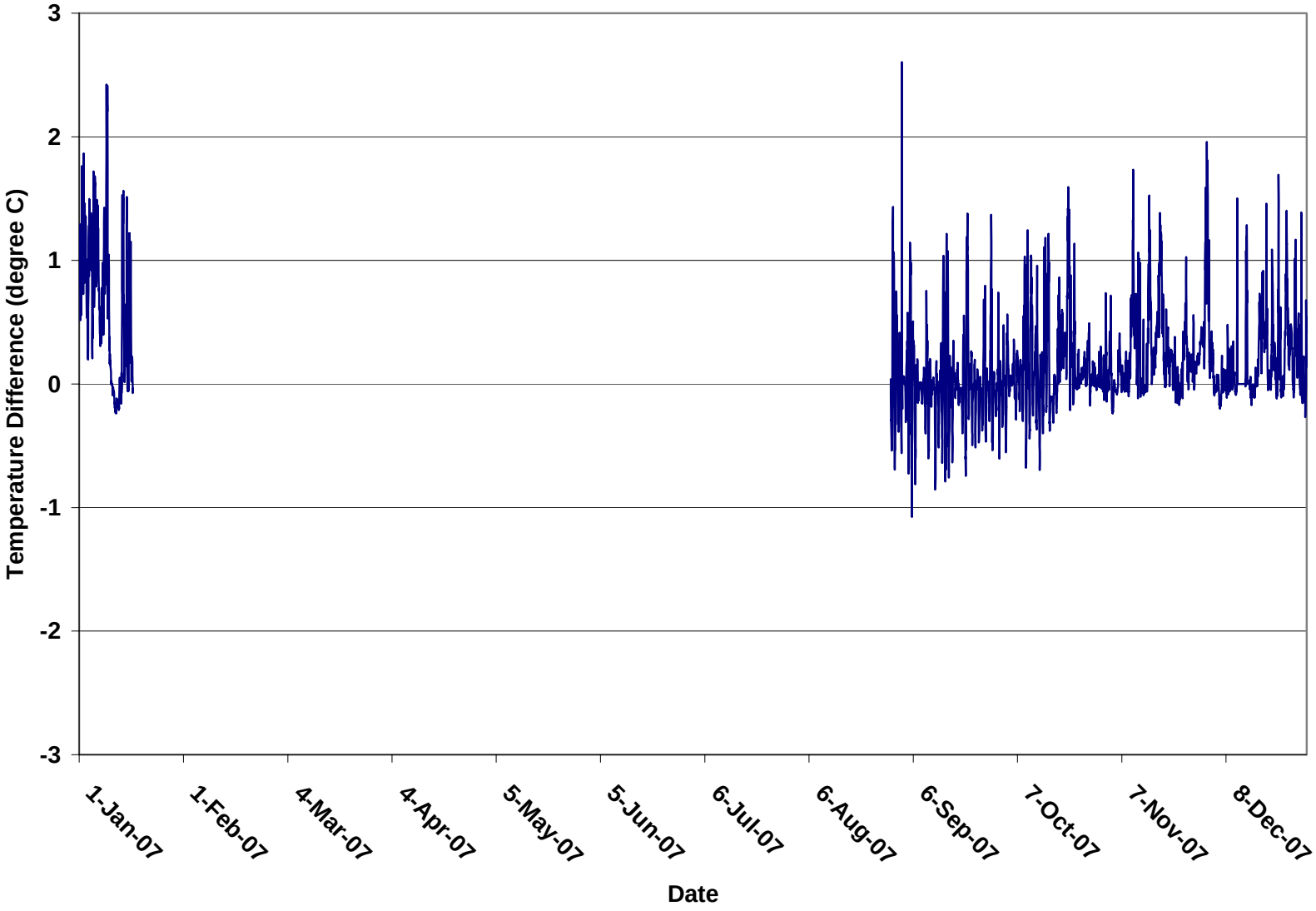


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation. These parameters are summarized in Table 3-15.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 1 station was 83.9 percent. The minimum relative humidity was 26.2 percent measured on March 31. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 75.5 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 911 mb on October 30 to a maximum of 973 mb observed on March 31. The mean barometric pressure during the monitoring year was 948 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 1,007 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 897 W/m^2 recorded on June 27. The mean hourly average solar radiation for the monitoring year was 100 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the 2007 monitoring year. The highest maximum total daily precipitation was 33.0 mm measured on September 8. The maximum monthly precipitation was 256.5 mm during September. The cumulative precipitation during the monitoring year was 879 mm. Daily winter precipitation data (October through April) should be closely examined before use because of snowfall adaptors may influence daily totals.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 1 station was 71.5 mm in June.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, solar radiation, and precipitation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mbar)	Minimum Barometric Pressure (mbar)	Maximum Barometric Pressure (mbar)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2007	87.90	42.81	943.94	916.68	971.33	14.28	197.00
February 2007	81.54	43.28	950.22	931.48	970.30	53.29	387.20
March 2007	69.94	26.18	948.76	915.93	973.15	138.09	707.00
Quarter A	**79.74**	**26.18**	**947.56**	**915.93**	**973.15**	**69.06**	**707.00**
April 2007	80.03	32.34	942.89	914.68	971.93	162.19	733.00
May 2007	79.13	41.11	953.33	943.31	962.90	183.15	805.00
June 2007	80.03	32.65	955.24	940.91	968.18	192.14	847.00
Quarter B	**79.72**	**32.34**	**950.52**	**914.68**	**971.93**	**179.20**	**847.00**
July 2007	83.90	48.62	955.65	947.23	963.46	157.51	803.00
August 2007	85.70	43.17	956.38	936.49	970.21	129.27	732.00
September 2007	91.56	54.21	949.15	929.37	960.94	73.02	663.00
Quarter C	**86.99**	**43.17**	**953.79**	**929.37**	**970.21**	**120.62**	**803.00**
October 2007	89.27	49.40	939.79	911.07	960.08	54.12	440.00
November 2007	91.45	50.48	939.06	916.43	970.39	16.82	200.20
December 2007	86.17	40.26	941.40	922.20	962.28	8.61	129.80
Quarter D	**89.03**	**40.26**	**940.05**	**911.07**	**970.39**	**27.23**	**440.00**
Monitoring Year	**83.86**	**26.18**	**948.04**	**911.07**	**973.15**	**99.55**	**847.00**

Figure 3-7. Hourly Average Relative Humidity

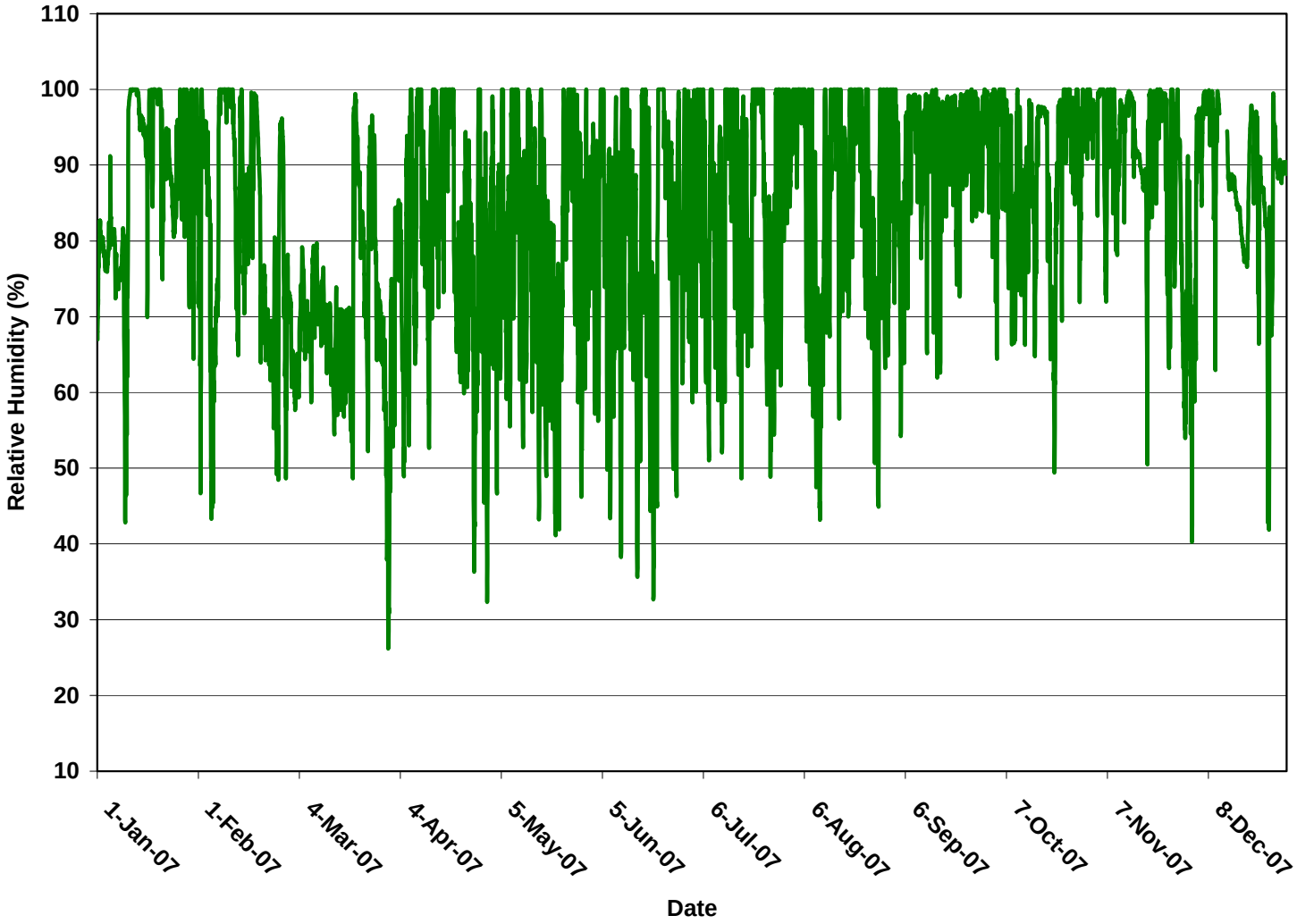


Figure 3-8. Barometric Pressure

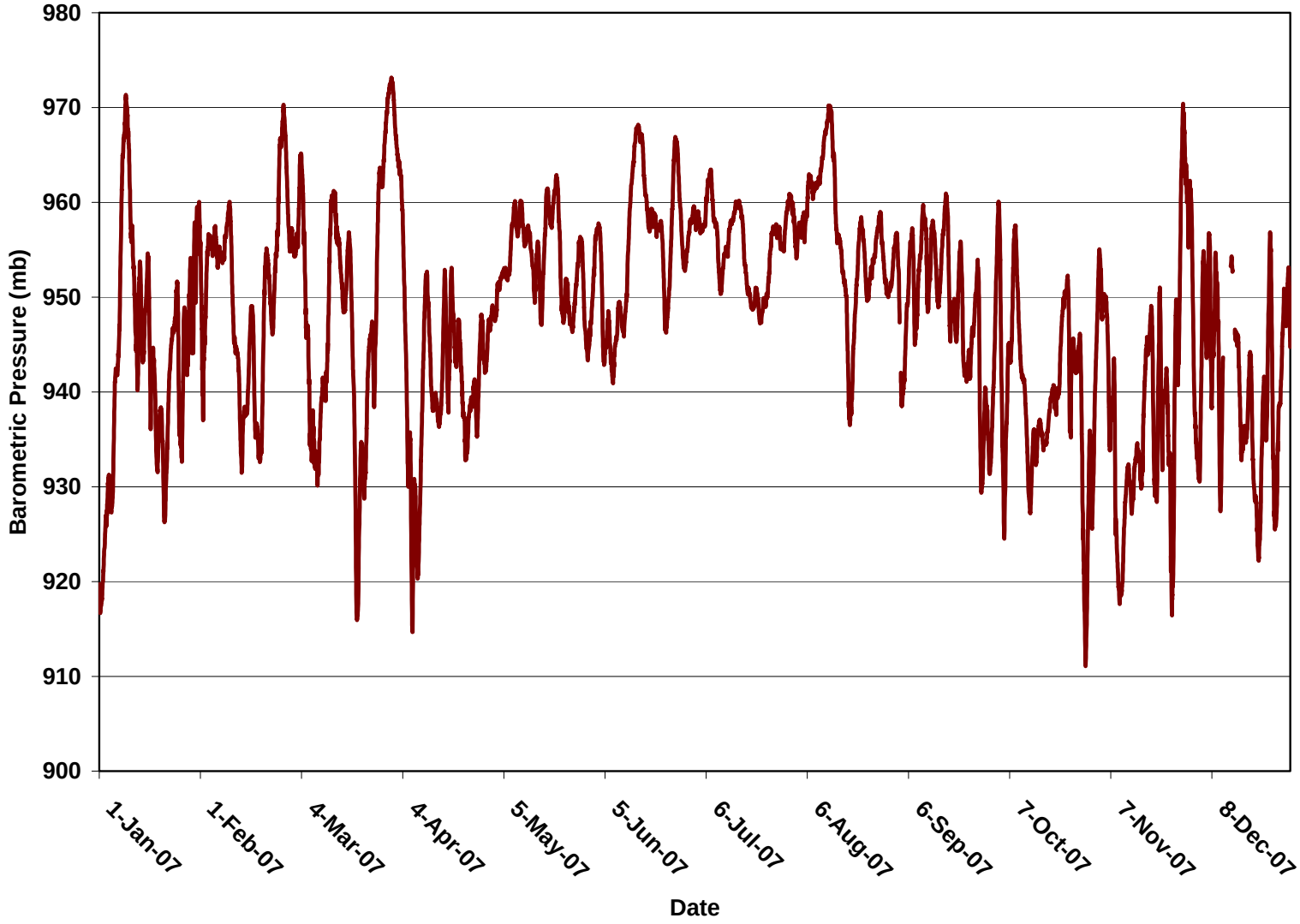


Figure 3-9. Hourly Average Solar Radiation

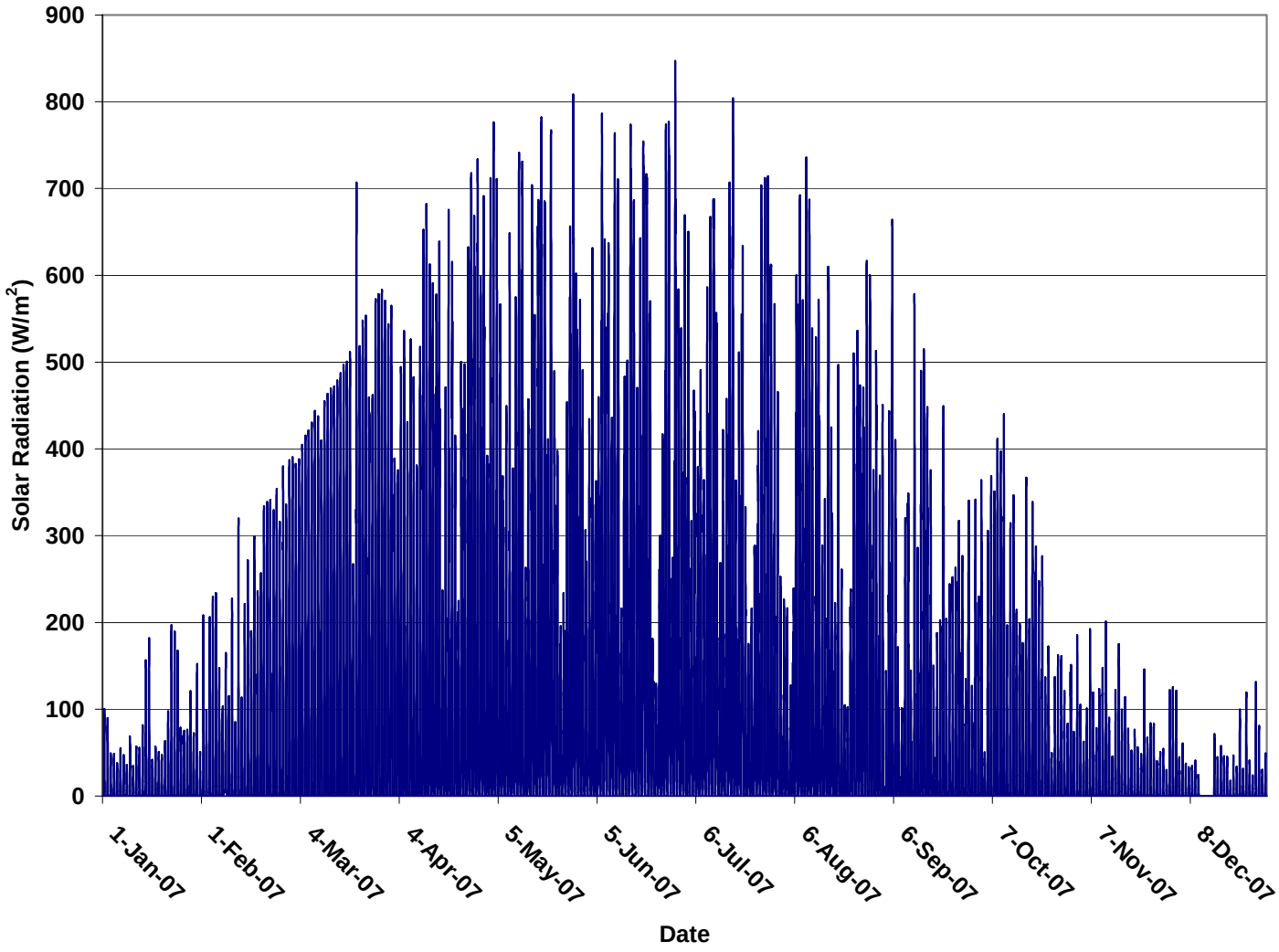
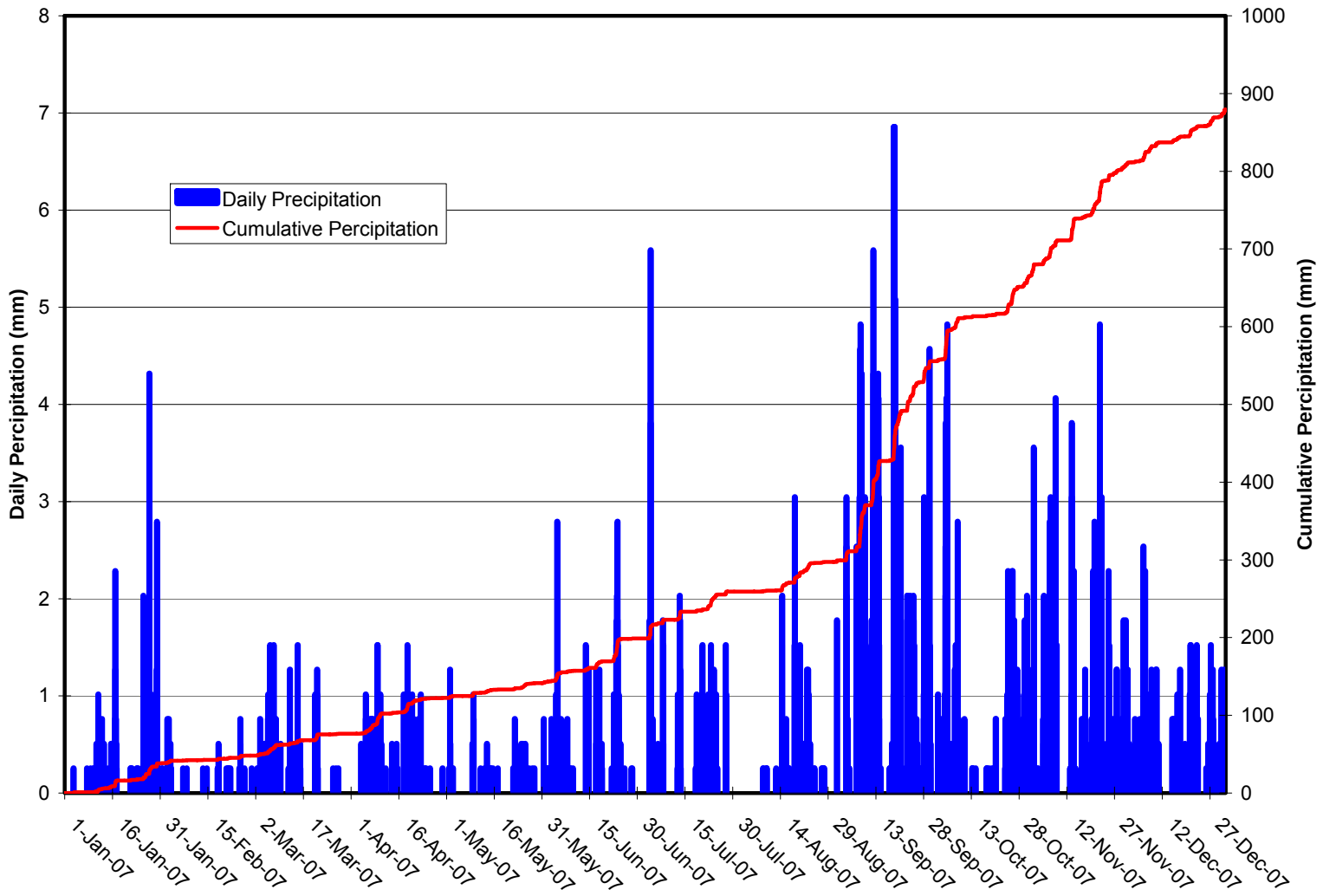


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2006.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2007

Period	Meteorological Parameters													
	2-m Temp	10-m Temp[4]	ΔT[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2007	99.3%	51.6%	51.6%	99.3%	99.3%	99.3%	94.6%	94.6%	94.6%	100%	100%	100%	99.7%	N/A[3]
February 2007	100%	0.0%	0.0%	100%	100%	100%	79.8%	79.8%	79.8%	100%	100%	100%	99.3%	N/A
March 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**99.8%**	**17.8%**	**17.8%**	**99.8%**	**99.8%**	**99.8%**	**91.9%**	**91.9%**	**91.9%**	**100%**	**100%**	**100%**	**99.6%**	N/A
April 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
May 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	99.7%
June 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**0.0%**	**0.0%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
July 2007	100%	0.0%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2007	100%	5.6%	5.6%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	99.7%
September	98.9%	98.8%	98.8%	96.5%	99.0%	99.0%	99.0%	99.0%	99.0%	98.9%	98.9%	99.0%	98.3%	99.0%
Quarter C	**99.6%**	**34.1%**	**34.1%**	**98.9%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.6%**	**99.6%**	**99.7%**	**99.4%**	**99.6%**
October 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	100%
November 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2007	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	90.3%	N/A
Quarter D	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.7%**	**96.6%**	**100%**
Monitoring Year	**99.0%**	**37.4%**	**37.4%**	**98.8%**	**99.1%**	**99.1%**	**97.1%**	**97.1%**	**97.1%**	**99.1%**	**99.1%**	**99.1%**	**98.9%**	**100%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 2 to October 12.
[4] Data captured in the previous monitoring year can fulfill modeling needs for air permitting purposes.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

Pebble 1
PSD Meteorological Monitoring Station

January 2007

Quality Assurance Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
January 2007
Quality Assurance Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION **1**

2.0 PERFORMANCE AUDIT **2**

2.1 Performance Audit Methodology **2**

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 7

2.2 Performance Audit Results **7**

2.3 Performance Audit Recommendations **7**

3.0 REFERENCES **10**

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 1 January 17, 2007 Performance Audit Summary 8
Table 2-3 Pebble 1 Oct. 11-13, 2006 Supplemental Performance Audit Summary 9
Table 2-4 Pebble 1 February 6, 2007 Supplemental Performance Audit Summary 9

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as a quantitative review of the Pebble 1 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed + **EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited by adding measured water volumes to the gauge opening using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

The performance audit was conducted at the Pebble 1 station on January 17, 2007, with Dominic Shallies of HCG assisting. Supplemental audits of some instruments were performed during October of 2006 and February of 2007. On October 11-13, 2006 the evaporation pan and precipitation gauges were audited prior to winterization. On February 6, 2007 the RM Young wind sensor replaced and audited after being destroyed in a wind storm on January 30, 2007.

All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Table 2-2 contains summary data from the January 2007 audit and Tables 2-3 and 2-4 summarize the supplemental performance audits. Complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 1 January 17, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:01	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.48	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	-0.5	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.090	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	1.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.8	Pass
Wind Direction Torque	≤ 11	g-cm	8.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-2.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-2.1	Pass
Barometric Pressure	≤ ±3	Mbar	1.2	Pass
Solar Radiation	≤ ±5+Res	% input	-9.6[1]	Pass
Tipping Precipitation	≤ ±10	% input	-0.4	Pass
Weighing Precipitation	≤ ±10	% input	7.7	Pass

1. Max % error value of 9.6 within limit of 5% input + resolution, see audit.

Table 2-3 Pebble 1 Oct. 11-13, 2006 Supplemental Performance Audit Summary

Parameter[1]	Limit	Units	Max Err	Status
Tipping Precipitation (Pre-Calibration)	≤ ±10	% input	-5.3	Pass
Tipping Precipitation (Post-calibration)	≤ ±10	% input	2.4	Pass
Weighing Precipitation	≤ ±10	% input	8.9	Pass
Evaporation	≤ ±10	% input	-2.6	Pass

1. Gauges audited prior to winterizing.

Table 2-4 Pebble 1 February 6, 2007 Supplemental Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System[1]				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.4	Pass
Wind Direction Torque	≤ 11	g-cm	6.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.3	Pass
Weighing Precipitation	≤ ±10	% input	7.7	Pass

1. Instrument audited after replacement due to storm damage.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 17, 2007

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
11:31:00	11:31:01	**00:01**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1425
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	38.08	38.31	0.23	Pass	38.31	0.23	Pass	0.00	Pass
Warm	15 to 25	12.40	12.57	0.17	Pass	12.57	0.17	Pass	0.00	Pass
Ice Bath	0	-0.03	0.15	0.18	Pass	0.15	0.18	Pass	0.00	Pass
Cold	-15 to -25	-21.11	-20.63	0.48	Pass	-20.63	0.48	Pass	0.00	Pass
Very Cold	-35 to -45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Max Abs. Error		0.48	**PASS**		0.48	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Insufficient dry ice to reach extreme cold.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:**	0.8 to 100 % RH
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 % RH
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1206	93.9	-3.2	-3.2	99.5	-3.6	-3.7	-0.5	Pass
1246	90.9	-2.7	-2.9	98.6	-3.2	-3.4	-0.5	Pass
1330	91.0	-2.5	-3.6	94.2	-2.9	-3.7	-0.1	Pass
						Max Abs. Error	0.5	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b + Ta) + \ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 17, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5007	**Cup #:**	2284	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4691	**Vane #:**	1440	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319		**Magnetic Declin:**	17.5	**E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1520 End: 1522

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	293.2	1.1	Pass
Koktuk Mtn (180°)	112.1	113.1	1.0	Pass
Cone Mtn	144.3	144.1	-0.2	Pass
Cone Mtn (180°)	324.3	326.0	1.7	Pass
Compass	42.0	41.7	-0.3	Pass
			Max Abs. Error	**1.7** **PASS**
			Mean Abs. Error	**0.9** **GOOD**

Time: Begin: 1400 End: 1420

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.2	0.2	Pass
West	270.0	272.1	2.1	Pass
North	360.0	0.0	0.0	Pass
East	90.0	91.5	1.5	Pass
North	360.0	0.6	0.6	Pass
West	270.0	272.2	2.2	Pass
South	180.0	181.4	1.4	Pass
East	90.0	92.1	2.1	Pass
	Max Abs. Error		**2.2**	**PASS**
	Mean Abs. Error		**1.3**	**PASS**

Time: Begin: 1508 End: 1510

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.0	-1.0	Pass	330.0	331.1	1.1	Pass
60.0	59.3	-0.7	Pass	355.0	355.0	0.0	Pass
90.0	89.9	-0.1	Pass	30.0	29.6	-0.4	Pass
120.0	120.4	0.4	Pass	60.0	60.2	0.2	Pass
150.0	150.2	0.2	Pass	90.0	90.4	0.4	Pass
180.0	179.8	-0.2	Pass	120.0	120.3	0.3	Pass
210.0	209.7	-0.3	Pass	150.0	150.6	0.6	Pass
240.0	240.0	0.0	Pass	180.0	180.3	0.3	Pass
270.0	270.3	0.3	Pass	**Max Abs. Error**		**1.1**	**PASS**
300.0	300.5	0.5	Pass	**Mean Abs. Error**		**0.4**	**PASS**

Time: Begin: 1513 End: 1515

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	0.004	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.090	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	293.9	1.8	Pass
Koktuk Mtn (180°)	112.1	114.3	2.2	Pass
Cone Mtn	144.3	146.3	2.0	Pass
Compass	91.0	92.2	1.2	Pass
			Max Abs. Error	**2.2** **PASS**
			Mean Abs. Error	**1.8** **GOOD**

Time: Begin: 1755 End: 1805

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment). Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Very windy, limited direction points.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 17, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 66725 **Prop #:** 63112 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA01674
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.5 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.06	0.01	N/A	Pass
1000	5.12	5.16	N/A	0.8	Pass
2000	10.24	10.28	N/A	0.4	Pass
5000	25.60	25.63	N/A	0.1	Pass
10000	51.20	51.30	N/A	0.2	Pass
	Max Abs. Error		**0.01**	**0.8**	**PASS**

Time: Begin: 1450 End: 1455
Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ / Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	290.0	-2.1	Pass
Koktuk Mtn (180°)	112.1	112.4	0.3	Pass
Cone Mtn	144.3	144.6	0.3	Pass
Cone Mtn (180°)	324.3	323.1	-1.2	Pass
Compass	42.0	40.6	-1.4	Pass
Time: Begin: 1400		**Max Abs. Error**	**2.1**	**PASS**
End: 1420		**Mean Abs. Error**	**1.1**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.4	1.4	Pass	150.0	149.9	-0.1	Pass	270.0	269.1	-0.9	Pass
60.0	60.7	0.7	Pass	180.0	179.2	-0.8	Pass	300.0	299.1	-0.9	Pass
90.0	90.7	0.7	Pass	210.0	208.8	-1.2	Pass	330.0	328.9	-1.1	Pass
120.0	120.2	0.2	Pass	240.0	238.4	-1.6	Pass	355.0	355.2	0.2	Pass
				Time: Begin:	1445	**Max Abs. Error**		**1.6**		**PASS**	
				End:	1450	**Mean Abs. Error**		**0.8**		**PASS**	

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	<0.003	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	8.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ / Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	290.0	-2.1	Pass
Koktuk Mtn (180°)	112.1	113.9	1.8	Pass
Cone Mtn	144.3	145.4	1.1	Pass
Compass	91.0	92.9	1.9	Pass
Time: Begin: 1755		**Max Abs. Error**	**2.1**	**PASS**
End: 1805		**Mean Abs. Error**	**1.7**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Very windy, limited direction points.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 17, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1145	27.96	27.84	942.8	943.6	0.8	Pass
1740	27.94	27.82	942.1	943.3	1.2	Pass
			Max Abs. Error		1.2	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/24/06	
Audit Inst	Offset Amount
24.13	-0.13
26.24	-0.13
28.12	-0.12
30.11	-0.11
Intercept	**-0.22**
Slope	**0.0035**

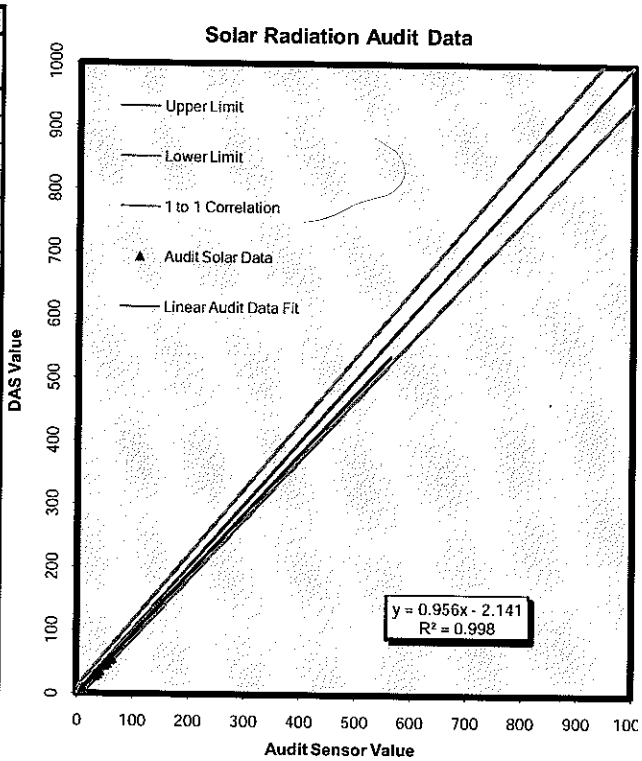
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY49464 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1135	39.6	36.3	-3.3	±12.0	n/a	Pass
1217	49.4	44.8	-4.6	±12.5	n/a	Pass
1200	36.0	32.1	-3.8	±11.8	n/a	Pass
1300	53.0	47.9	-5.1	±12.7	-9.6%	Pass
1400	62.0	56.9	-5.0	±13.1	-8.1%	Pass
1500	57.7	53.5	-4.3	±12.9	-7.4%	Pass
1600	31.5	28.9	-2.7	±11.6	n/a	Pass
1700	10.5	7.3	-3.1	±10.5	n/a	Pass
Corr. Val	**0.9994**	**Max Abs. Percent Error**			**9.6%**	**PASS**
R² Value	**0.9988**	**Intercept**	**-2.1**	**Slope**	**0.9565**	**PASS**



Begin Date: 01/17/07 **End Date:** 01/17/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when $R^2 > 0.995$.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 17, 2007

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1440	800	24.7	0.2	17.2	7.6	1700	24.6	-0.4%	Pass	End mm = 1600+1700 hr.
						Max Abs. Error	**0.4%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Snowfall adapter on.

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1114	4.50	1600	21.9	0.00	23.11	23.11	5.4%	Pass	
1142		1600	21.9	23.11	45.47	22.36	2.0%	Pass	
1200		1600	21.9	45.47	69.09	23.62	7.7%	Pass	
1211		1600	21.9	0.00	18.03	18.03	N/A	N/A	Lost water during test; disregard.
1222	8.00	1600	21.9	18.03	39.62	21.59	-1.6%	Pass	
1233		1600	21.9	39.62	62.74	23.12	5.4%	Pass	
1244		1600	21.9	62.74	85.85	23.11	5.4%	Pass	
1255		1600	21.9	85.85	107.95	22.10	0.8%	Pass	
	11.50								
					Max Abs. Error		**7.7%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct 11-13, 2006

• *TIPPING PRECIPITATION GAUGE AUDIT (w/o Snowfall)*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
10/11/06	902	800	24.7	0.0	23.4	0.2	1005	23.6	-4.5%	Pass	
10/11/06	1005	800	24.7	0.2	0.0	23.6	1053	23.4	-5.3%	Pass	1.2 mm more on 1100 hr.
							Max Abs. Error	**5.3%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Instrument calibrated after tests.

• *TIPPING PRECIPITATION GAUGE AUDIT (with snowfall)*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
10/13/06	1140	800	24.7	0.0	17.4	7.0	1215	24.4	-1.2%	Pass	Snowfall adapter on.
10/13/06	1235	400	12.3	7.0	19.0	0.6	1400	12.6	2.4%	Pass	Snowfall adapter on.
							Max Abs. Error	**2.4%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Re tested and calibrated further before these tests on 10-13-06.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct 11-13, 2006

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 1.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

	WEIGHING PRECIPITATION GAUGE VOLUME TEST									
Date:	Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
10/11/06	955	3.00	1600	21.9	3.30	24.38	21.08	-3.9%	Pass	
10/11/06	1008		1600	21.9	0.00	22.86	22.86	4.2%	Pass	
10/11/06	1020		1600	21.9	22.86	45.72	22.86	4.2%	Pass	
10/11/06	1029	5.75	800	11.0	45.72	57.66	11.94	8.9%	Pass	
10/11/06	1048		1600	21.9	57.66	81.28	23.62	7.7%	Pass	
10/11/06	1100		1600	21.9	81.28	104.10	22.82	4.1%	Pass	
10/11/06	1119	8.63	1600	21.9	0.00	22.61	22.61	3.1%	Pass	
10/11/06	1129		1600	21.9	22.61	45.21	22.61	3.1%	Pass	
10/11/06	1137		1600	21.9	45.21	67.82	22.61	3.1%	Pass	
10/11/06	1251	11.00	800	11.0	67.82	79.25	11.43	4.3%	Pass	
10/13/06	1015		400	5.5	0.00	5.59	5.59	2.0%	Pass	
						Max Abs. Error		8.9%	PASS	

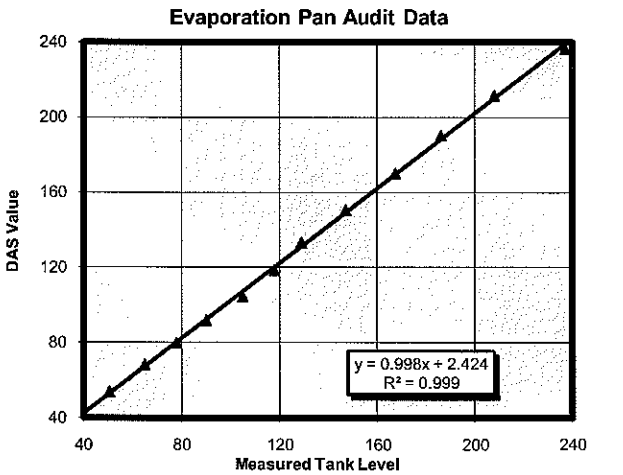
PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found at 10-5/8". Largest test tip drains 800 mil in 2-min.

• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST						
Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	237.0	236.4	239.4	-3.0	-1.3%	Pass
	208.0	211.4	210.4	1.0	0.5%	Pass
	186.0	190.5	188.4	2.0	1.1%	Pass
	167.5	169.9	169.9	0.0	0.0%	Pass
	147.0	150.8	149.4	1.3	0.9%	Pass
	129.0	133.1	131.4	1.6	1.3%	Pass
	118.0	118.3	120.4	-2.1	-1.8%	Pass
	105.0	104.6	107.4	-2.8	-2.6%	Pass
	90.0	91.5	92.4	-0.9	-1.0%	Pass
	78.0	80.0	80.4	-0.4	-0.5%	Pass
	65.0	67.9	67.4	0.4	0.7%	Pass
	50.5	53.8	52.9	0.8	1.6%	Pass
		Max Abs. Error		3.0	2.6%	PASS
		Intercept	2.4	Slope	0.9987	PASS



Time: Begin: 1135 End: 1230

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Audited before winterizing on 10/11/06.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 6, 2007

• *HORI ONTA WIND SENSOR AUDIT R OUNG A*

Height: 10.4 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 67731 **Prop #:** 63798 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA01674
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.5 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.04	-0.01	N/A	Pass
1000	5.12	5.14	N/A	0.4	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
9000	46.08	46.18	N/A	0.2	Pass
	Max Abs. Error		**0.01**	**0.4**	**PASS**

Time: Begin: 1540 End: 1545

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ / Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.7	1.7	Pass	150.0	151.3	1.3	Pass	270.0	268.5	-1.5	Pass
60.0	62.0	2.0	Pass	180.0	180.6	0.6	Pass	300.0	297.7	-2.3	Pass
90.0	92.5	2.5	Pass	210.0	209.8	-0.2	Pass	330.0	327.2	-2.8	Pass
120.0	121.9	1.9	Pass	240.0	239.1	-0.9	Pass	355.0	352.3	-2.7	Pass
				Time:	Begin:	1530		**Max Abs. Error**		**2.8**	**PASS**
					End:	1535		**Mean Abs. Error**		**1.7**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.007	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	6.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ / Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	291.8	-0.3	Pass
Mt Iliamna	264.4	262.6	-1.8	Pass
Gnd_Hog_Spire_2488	216.5	217.1	0.6	Pass
Cone Mtn	144.3	147.6	3.3	Pass
Compass	86.0	88.9	2.9	Pass
Hill 1984	9.7	10.3	0.6	Pass
Time: Begin: 1620	**Max Abs. Error**		**3.3**	**PASS**
End: 1640	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: RM Young instrument replaced after wind storm destroyed previously installed instrument. Single point check on Climatronics; Koktuk Mtn DAS reading of 294.4° for a true value of 292.1°.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 6, 2007

• *WEIGHING PRECIPITATION GAUGE AUDIT*

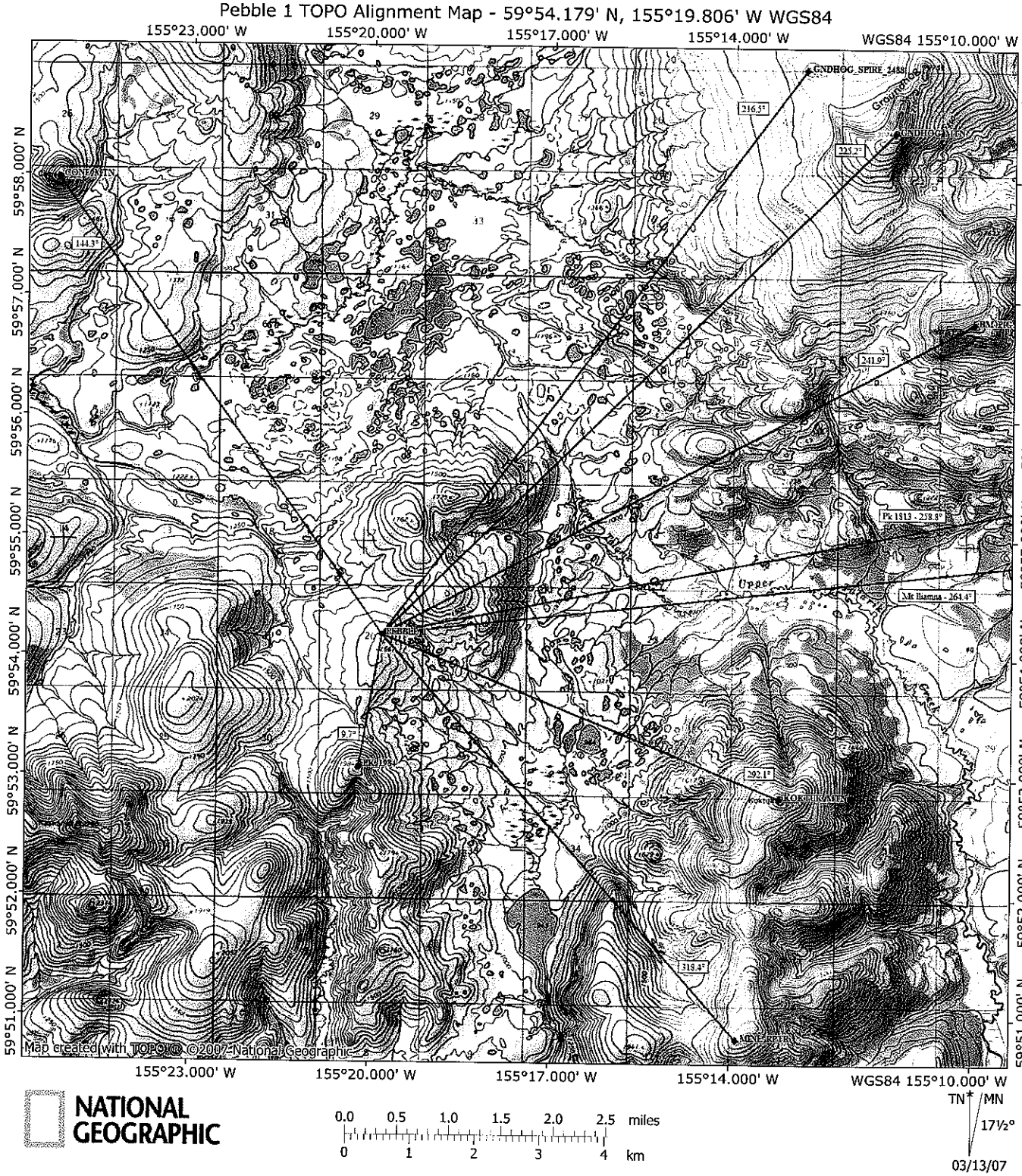
Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1530	4.25	1600	21.9	0.00	23.62	23.62	7.7%	Pass	
1542		1600	21.9	23.62	46.74	23.12	5.4%	Pass	
1559		1600	21.9	46.74	69.85	23.11	5.4%	Pass	
1618	6.75	1600	21.9	0.00	20.57	20.57	-6.2%	Pass	
1632		1600	21.9	20.57	43.43	22.86	4.2%	Pass	
1658		1600	21.9	43.43	66.29	22.86	4.2%	Pass	
1710		1600	21.9	0.00	23.37	23.37	6.6%	Pass	
					Max Abs. Error		**7.7%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.


Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84
155°23.000' W
155°20.000' W
155°17.000' W
155°14.000' W
WGS84 155°10.000' W
59°58.000' N
59°57.000' N
59°56.000' N
59°55.000' N
59°54.000' N
59°53.000' N
59°52.000' N
59°51.000' N
GNDHOG_SPIRE_2488
216.5°
325.2°
241.9°
Pk 1813 - 238.8°
Mt Iliamna - 264.4°
97°
392.1°
318.4°
144.3°
Map created with TOPO!® ©2007 National Geographic
NATIONAL GEOGRAPHIC
0.0 0.5 1.0 1.5 2.0 2.5 miles
0 1 2 3 4 km
TN MN
17½°
03/13/07

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate 1750.01

Calibration complies with ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 4000-1338226

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Dominic Shallies, Anchorage, AK 99503 U.S.A. (RMA:933478)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	12/08/06	A5B28010-1
Thermistor Module	A17118	8/12/06	A5819038
Temperature Calibration Bath TC179	A45240		
Temperature Calibration Bath TC191	A42238		
Temperature Probe	157	9/01/06	A5815063
Thermistor Module	A27129	7/05/06	1000189003

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 6/07/06 **Cal Due: 6/07/07**

Test Conditions: 25.5°C 39.0 %RH 1013 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.000	0.072	N	0.000	-0.004	Y	-0.050	0.050	0.013	3.8:1
°C	25.000	25.020	Y	25.000	24.999	Y	24.950	25.050	0.013	3.8:1
°C	60.002	59.999	Y	60.001	59.999	Y	59.951	60.051	0.013	3.8:1
°C	100.002	100.001	Y	100.002	100.004	Y	99.952	100.052	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company © 2005 Control Company

VAISALA Certificate of Calibration

Report #: 112006-X0740015-RH **RMA #:** 95-56707 **Calibration Date:** Nov-20-2006
Model #: HMI41/HMP45 **Serial #:** X0650080/X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH, -20 to 60°C, Temp. Recommended Calibration Due Date: Nov-20-2007

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK USA

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% RH against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11% and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U S Guide to the Expression of Uncertainty in Measurement *Note: the 0% and 97% RH points are not ISO17025 Accredited

Calibration Data (As Found)

Out of Tolerance: NO

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.12	21.20	0.08	0.21	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.30	-0.33	2.00	0.50 *
11.55	11.30	-0.25	2.00	0.92
75.10	74.60	-0.50	2.00	1.02
97.60	96.40	-1.20	3.00	1.50 *

Calibration Data (As Left)

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.57	21.60	0.03	0.21	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.43	11.60	0.17	2.00	0.92
75.10	75.10	0.00	2.00	1.02
97.60	96.70	-0.90	3.00	1.50 *

Problem Noted: None
Action Taken: The Unit Was Calibrated

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN 274176, dated Oct. 2006. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994 This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 3A

Model Number	Serial Number	Calibration Date	Due Date
Power Supply	21609085	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7781003	Jan. 12, 2006	Jan. 12, 2007
HMK13B	V324	Oct. 13, 2006	Apr. 13, 2007
HMP233	671210	Nov. 10, 2006	Feb. 10, 2007
HMT333	B0920004	Sep. 27, 2006	Dec. 27, 2006
HMI41/HMP45	S1130071	Sep. 1, 2006	Dec. 1, 2006

Ambient Conditions

Temperature:	21.80 °C
Humidity:	49.10 %RH

Approved By

Technical Operator
Johnson François

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 RPM		
	- Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 24 May 2006

Tested By EF

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EB

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc. Calibration Report

8729 Gulf Freeway
Houston, TX 77017-6504

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:** **PO#:**	10/25/2006 1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			
Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:
Parameter:

Text:

Comments:
Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "In" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sean

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE #300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 50807993 19

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052406. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 05/24/06 Lab temperature 72.8 °F
Lab pressure 663.1 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.13	0.13	-0.13
26.11	26.24	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.11	0.11	-0.11

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R L S Date: 5-24-06

Roger L. Sanders, PE

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EPLAB
Scientific Instruments for Precision Measurements Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble 1
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION **1**

2.0 SYSTEMS AUDIT **2**

2.1 Systems Audit Methodology **2**

2.2 Meteorological Station Onsite Systems Audit **2**

2.3 Operations, Data Management and Documentation Systems Audit **4**

2.4 Comments and Suggestions **5**

3.0 PERFORMANCE AUDIT **6**

3.1 Performance Audit Methodology **6**

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 11

3.2 Performance Audit Results **11**

3.3 Performance Audit Recommendations **11**

4.0 REFERENCES **14**

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 September 2, 2007 Performance Audit Summary (CR10X) 12
Table 3-3 Pebble 1 September 3-4, 2007 Performance Audit Summary (CR1000) 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

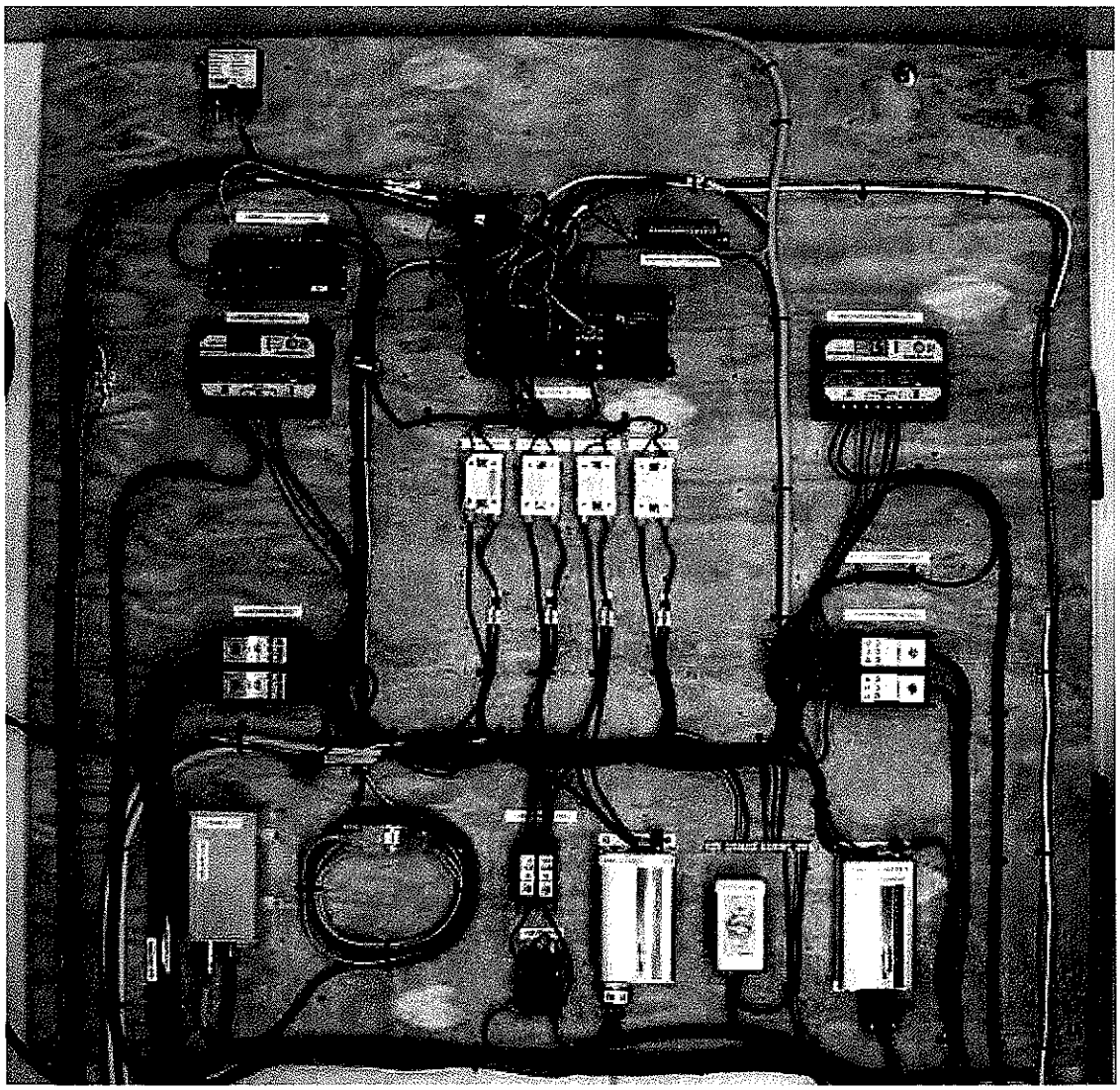
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 1 station was conducted in early September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20' diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6' by 8' deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6' high fence and all instrumentation wires from the tower,

precipitation gauges and evaporation gauge are protected in conduit These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X/CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater

radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates

a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. During the recent audit the operator upgraded the data acquisition system and added current shunts to the system in order to remotely monitor the aspirator fans. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed + **EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audits were conducted at the Pebble 1 station from September 2-4, 2007, with Dominic Shallies of HCG assisting. The station was audited as found on September 2, 2007. After the initial audit the datalogger was upgraded from a Campbell Scientific CR10X to a CR1000 and the thermistors, RH sensor, Climatronics wind sensor and solar radiation sensor were also replaced. After these station modifications the station was re-audited on September 3-4, 2007. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits, except the 10-meter thermistor during the initial audit. Summary audit results are contained in Tables 3-2 and 3-3, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 September 2, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.68	Fail[1]
Air Temperature Difference	≤ ±0.1	°C	0.40	Fail[1]
Relative Humidity (dew point)	≤ ±1.5	°C	0.4	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.100	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.2	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
Barometric Pressure	≤ ±3	Mbar	-0.1	Pass
Solar Radiation	≤ ±5+Res	% input	-8.7[3]	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	N/A
Weighing Precipitation	≤ ±10	% input	7.7	Pass
Evaporation	≤ ±10	% input	5.2	Pass

1. Thermistors replaced after CR10X audit.
2. Not re-tested until after DAS/sensor change.
3. Max % error value of 8.7 within limit of 5% input + resolution, see audit.

Table 3-3 Pebble 1 September 3-4, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-1:00	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.2	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.1	Pass
Barometric Pressure	≤ ±3	Mbar	-0.6	Pass
Solar Radiation	≤ ±5+Res	% input	5.2[2]	Pass
Tipping Precipitation	≤ ±10	% input	-10.0[3]	Pass
Weighing Precipitation	≤ ±10	% input	7.8	Pass
Evaporation	≤ ±10	% input	3.5	Pass

1. New DAS/sensor, no as-found value.
2. Max % error value of 5.2 within limit of 5% input + resolution, see audit.
3. Single point at 10%, five other readings at 1% to 6% error.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Siting 6
3.3.1 Tower 6
3.3.2 Temperature and Relative Humidity Sensors 6
3.3.3 Wind Speed and Wind Direction Sensors 7
3.3.4 Relative Humidity and Barometric Pressure 7
3.3.5 Precipitation 7
3.3.6 Evaporation 8
3.3.7 Solar Radiation 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

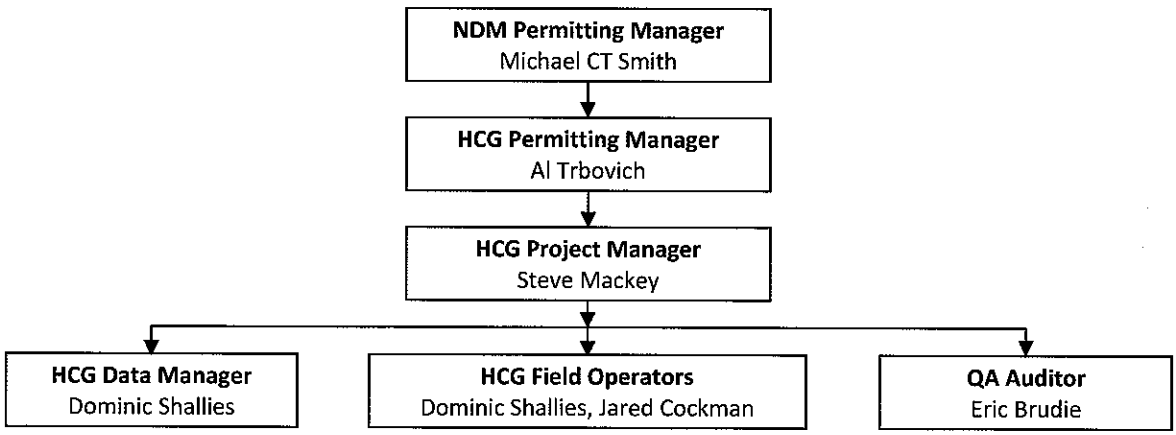
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.180' N
155° 20' W	155° 19.804' W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
Old DAS[1]	Campbell Scientific	CR10X	X43107
Old DAS Wiring Panel	Campbell Scientific	CR10X	32768
New DAS[2]	Campbell Scientific	CR1000	Unknown
New DAS Wiring Panel	Campbell Scientific	CR1000	4678
Old Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Old Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
New Temperature (2-meter)	Met One	062MP	E3361, ID #1/2
New Temperature (10-meter)	Met One	062MP	E3361, ID #2/2
Old Relative Humidity	Vaisala	HMP45AC	A1040018
New Relative Humidity	Vaisala	HMP45AC	B4850667
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Old Primary Wind Speed	Climatronics	F460-100075	5007
New Primary Wind Speed	Climatronics	F460-100075	3977
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Old Primary Wind Direction	Climatronics	F460-100076	4691
New Primary Wind Direction	Climatronics	F460-100076	4661
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	67731
Backup Wind Spd Prop	RM Young	08254	63798
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Barometric Pressure	Vaisala	PTB101B	A0710039
Old Solar Radiation	LI-COR	Li-200SX	PY49464
New Solar Radiation	LI-COR	Li-200SX	PY56427
Precipitation-Tipping	Met-One	370	D5874
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	389
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None

1. DAS and some sensors replaced after initial audit on Sep 02, 2007.
2. New DAS and sensors audited on Sep 03-04, 2007.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance? ■ Yes □ No Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.

Is the DAS rated for operation in the expected local temperature range? ■ Yes □ No Comments: -55°C to + 85°C.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	□ Yes ■ No	Comments: 10 meter thermistor failed initial audit and was replaced and re-audited.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Siting

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature and Relative Humidity Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the ground beneath the temperature sensors natural native material?	■ Yes □ No	Comments: None.
Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.4 Relative Humidity and Barometric Pressure

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.
Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.5 Precipitation

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.6 Evaporation

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

3.3.7 Solar Radiation

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: The lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

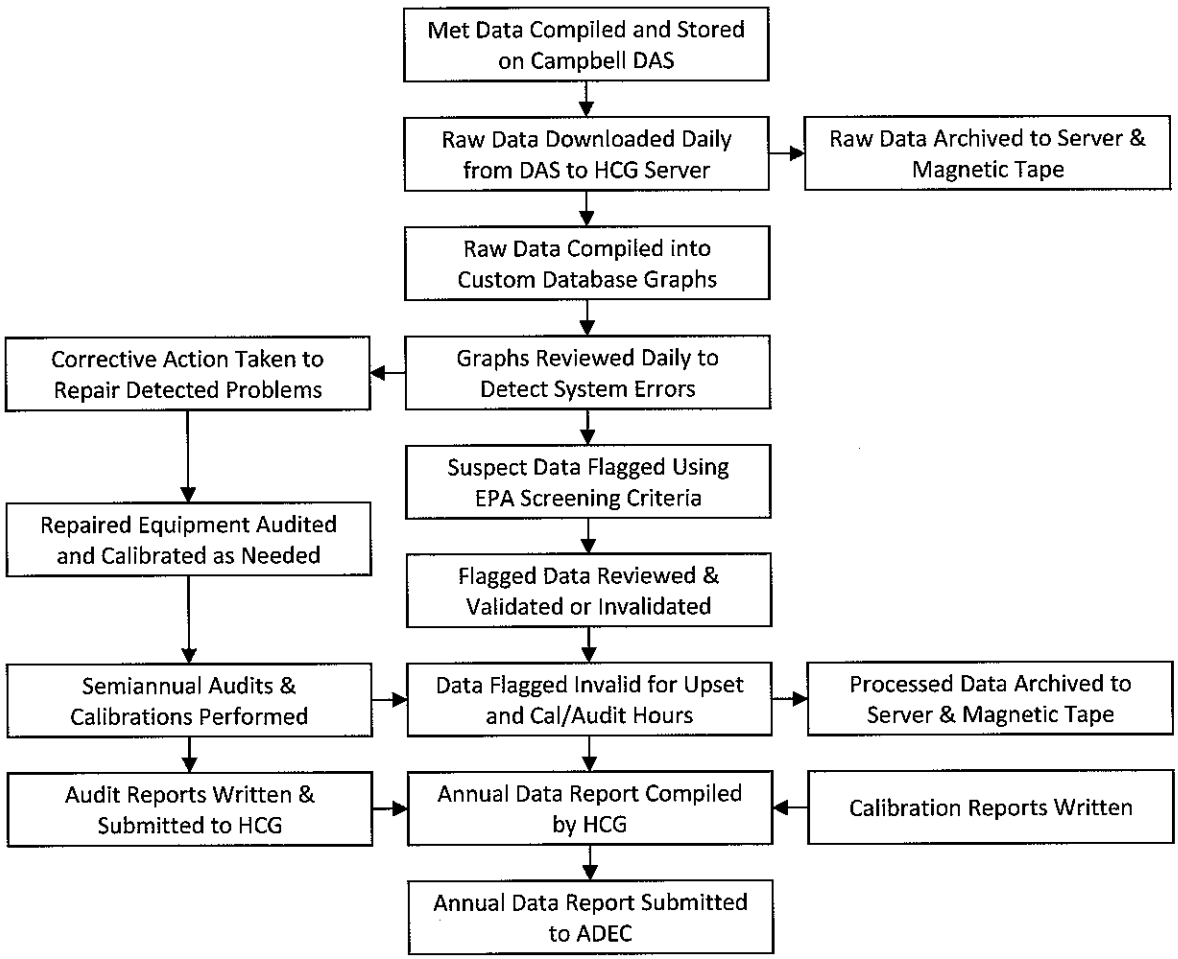
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing? ■ Yes □ No Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use? ■ Yes □ No Comments: None.

Are adjusted and unadjusted data sets maintained? ■ Yes □ No Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies

Position: Lead Operator & Data Manager

Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck

Position: Data Management

Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey

Position: Project Manager

Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie

Position: Field Auditor

Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Audit of station with CR10X datalogger.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:46:30	15:46:28	**-00:02**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1430
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	36.42	36.70	0.28	Pass	37.10	0.68	Fail	0.40	Fail
Warm	15 to 25	19.36	19.48	0.12	Pass	19.67	0.31	Pass	0.19	Fail
Ice Bath	0	0.00	0.14	0.14	Pass	0.19	0.19	Pass	0.05	Pass
Cold	-15 to -25	-15.69	-15.61	0.08	Pass	-15.61	0.08	Pass	0.00	Pass
Very Cold	-35 to -45	-38.60	-38.92	-0.32	Pass	-38.92	-0.32	Pass	0.00	Pass
		Max Abs. Error		0.32	**PASS**		0.68	**FAIL**	0.40	**FAIL**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Thermistors failed for unknown reason.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:** 0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:** 0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015					

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
901	96.2	8.7	8.1	100.0	8.3	8.3	0.2	Pass
950	92.5	9.5	8.5	100.0	8.9	8.9	0.4	Pass
1140	87.4	10.2	8.2	88.8	9.9	8.1	-0.1	Pass
1412	69.0	12.2	6.6	70.5	12.0	6.8	0.2	Pass
					Max Abs. Error		0.4	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5007	**Cup #:**	2284	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4691	**Vane #:**	1440	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319		**Magnetic Declin:**	17.3	**E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1330 End: 1333

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	293.8	1.7	Pass
Peak 1984	9.7	10.1	0.4	Pass
Pebble 5A	87.9	91.1	3.2	Pass
Cone Mtn	144.3	146.9	2.6	Pass
Compass	216.0	217.7	1.7	Pass
Compass	270.0	270.0	0.0	Pass
	Max Abs. Error		**3.2**	**PASS**
	Mean Abs. Error		**1.6**	**GOOD**

Time: Begin: 1200 End: 1235

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.2	0.2	Pass
West	270.0	269.5	-0.5	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.8	0.8	Pass
North	360.0	0.1	0.1	Pass
West	270.0	270.9	0.9	Pass
South	180.0	180.9	0.9	Pass
East	90.0	92.2	2.2	Pass
	Max Abs. Error		**2.2**	**PASS**
	Mean Abs. Error		**0.7**	**PASS**

Time: Begin: 1334 End: 1337

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.8	0.8	Pass	330.0	332.8	2.8	Pass
60.0	60.9	0.9	Pass	355.0	357.2	2.2	Pass
90.0	91.6	1.6	Pass	30.0	30.8	0.8	Pass
120.0	121.2	1.2	Pass	60.0	61.0	1.0	Pass
150.0	150.8	0.8	Pass	90.0	91.2	1.2	Pass
180.0	181.2	1.2	Pass	120.0	121.5	1.5	Pass
210.0	210.4	0.4	Pass	150.0	150.8	0.8	Pass
240.0	241.5	1.5	Pass	180.0	180.9	0.9	Pass
270.0	271.5	1.5	Pass	**Max Abs. Error**		**2.8**	**PASS**
300.0	301.1	1.1	Pass	**Mean Abs. Error**		**1.2**	**PASS**

Time: Begin: 1340 End: 1343

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.100	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 67731	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.3	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.06	0.01	N/A	Pass
1000	5.12	5.06	N/A	-1.2	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.63	N/A	0.1	Pass
10000	51.20	51.36	N/A	0.3	Pass
	Max Abs. Error	**0.01**	**1.2**	**PASS**	

Time: Begin: 1245 End: 1250

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.0	-0.1	Pass
Peak 1984	9.7	10.8	1.1	Pass
Pebble 5A	87.9	91.6	3.7	Pass
Cone Mtn	144.3	147.3	3.0	Pass
Compass	216.0	215.9	-0.1	Pass
Compass	270.0	268.5	-1.5	Pass
Time: Begin: 1200	**Max Abs. Error**		**3.7**	**PASS**
End: 1235	**Mean Abs. Error**		**1.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	150.0	150.6	0.6	Pass	270.0	268.4	-1.6	Pass
60.0	60.9	0.9	Pass	180.0	180.1	0.1	Pass	300.0	297.8	-2.2	Pass
90.0	91.2	1.2	Pass	210.0	209.7	-0.3	Pass	330.0	327.2	-2.8	Pass
120.0	120.8	0.8	Pass	240.0	239.0	-1.0	Pass	355.0	352.3	-2.7	Pass
				Time: Begin: 1250				**Max Abs. Error**		**2.8**	**PASS**
				End: 1254				**Mean Abs. Error**		**1.2**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.005	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1547	28.32	28.22	955.8	955.7	-0.1	Pass
			Max Abs. Error		0.1	PASS

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	-0.18
Slope	0.0031

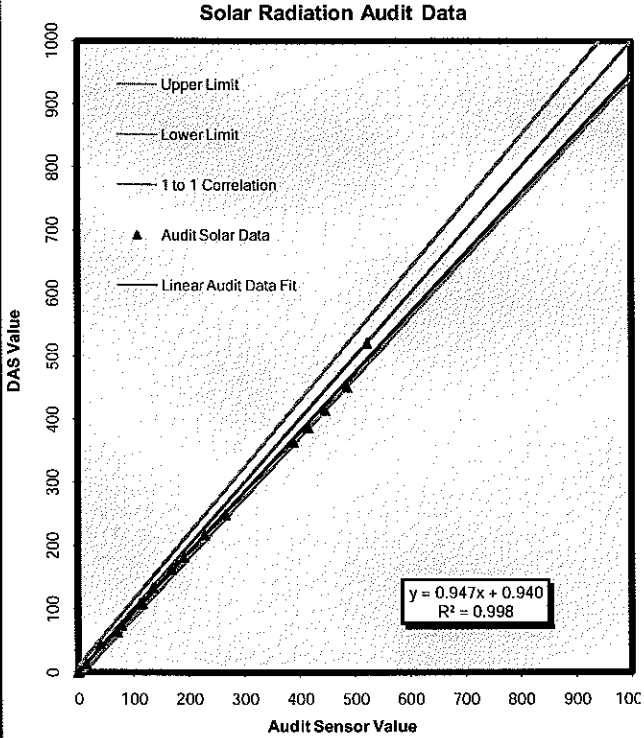
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY49464 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
905	77.1	74.3	-2.8	±13.9	-3.6%	Pass
950	132.9	132.3	-0.6	±16.6	-0.5%	Pass
1128	520.4	519.7	-0.7	±36.0	-0.1%	Pass
1540	189.4	181.2	-8.2	±19.5	-4.3%	Pass
725	13.8	13.7	0.0	±10.7	n/a	Pass
900	38.6	44.1	5.5	±11.9	n/a	Pass
1000	109.9	107.0	-2.9	±15.5	-2.6%	Pass
1100	265.0	248.1	-16.9	±23.3	-6.4%	Pass
1200	414.3	386.1	-28.2	±30.7	-6.8%	Pass
1300	484.6	450.4	-34.2	±34.2	-7.1%	Pass
1400	445.1	414.7	-30.4	±32.3	-6.8%	Pass
1500	388.6	363.6	-25.0	±29.4	-6.4%	Pass
1600	226.6	216.8	-9.8	±21.3	-4.3%	Pass
1700	166.9	160.8	-6.1	±18.3	-3.7%	Pass
1800	115.2	109.2	-6.0	±15.8	-5.2%	Pass
1900	69.3	63.3	-6.0	±13.5	-8.7%	Pass
2000	14.1	12.9	-1.2	±10.7	n/a	Pass
2100	1.1	0.9	-0.2	±10.1	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	0.9990	Max Abs. Percent Error			8.7%	PASS
R^2 Value	0.9980	Intercept	0.9	Slope	0.9478	FAIL



Begin Date: 09/02/07 **End Date:** 09/03/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R^2 > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: No test until after DAS change.

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
859	4.00	1600	21.9	0.00	21.84	21.84	-0.4%	Pass	
905		1600	21.9	0.00	23.62	23.62	7.7%	Pass	
945		1600	21.9	23.62	46.99	23.37	6.6%	Pass	
955		1600	21.9	46.99	70.40	23.41	6.7%	Pass	
1025		1600	21.9	0.00	23.37	23.37	6.6%	Pass	
1120	7.75	1600	21.9	0.00	23.62	23.62	7.7%	Pass	
1142		1600	21.9	23.62	46.74	23.12	5.4%	Pass	
1256		1600	21.9	0.00	23.36	23.36	6.5%	Pass	
1305		1600	21.9	0.25	23.62	23.37	6.6%	Pass	
					Max Abs. Error		**7.7%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found with 6" in gauge.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

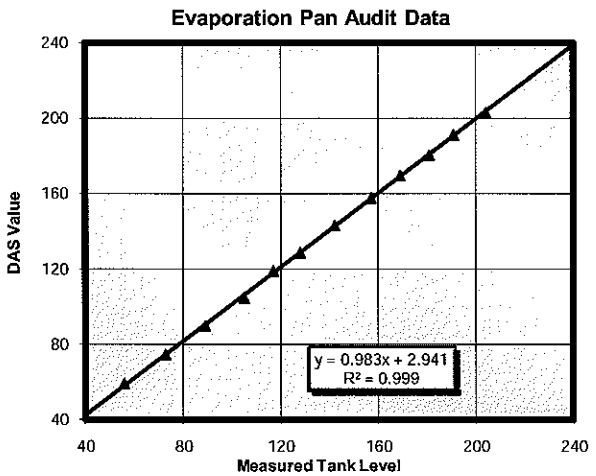
• *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	56.0	58.9	56.0	2.9	5.2%	Pass
	73.0	74.3	73.0	1.3	1.8%	Pass
	89.0	90.0	89.0	1.0	1.1%	Pass
	105.0	104.6	105.0	-0.4	-0.4%	Pass
	117.0	118.9	117.0	1.9	1.6%	Pass
	128.0	128.6	128.0	0.6	0.5%	Pass
	142.0	143.2	142.0	1.2	0.8%	Pass
	157.0	157.6	157.0	0.6	0.4%	Pass
	169.0	169.5	169.0	0.5	0.3%	Pass
	181.0	180.5	181.0	-0.5	-0.3%	Pass
	191.0	191.0	191.0	0.0	0.0%	Pass
	204.0	203.1	204.0	-0.9	-0.4%	Pass
		Max Abs. Error		**2.9**	**5.2%**	**PASS**
		Intercept	**2.9**	**Slope**	**0.9832**	**PASS**



Time: Begin: 1310 End: 1405

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Audit of station with CR1000 datalogger.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:02:30	16:01:30	-01:00	PASS

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3361 # 1/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3361 # 2/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1315
End: 1340

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	35.33	35.43	0.10	Pass	35.43	0.10	Pass	0.00	Pass
Warm	15 to 25	21.02	21.04	0.02	Pass	21.04	0.02	Pass	0.00	Pass
Ice Bath	0	0.15	0.12	-0.03	Pass	0.12	-0.03	Pass	0.00	Pass
Cold	-15 to -25	-23.05	-23.00	0.05	Pass	-23.00	0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-33.25	-33.22	0.03	Pass	-33.22	0.03	Pass	0.00	Pass
		Max Abs. Error		0.10	**PASS**		0.10	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Replacement thermistors.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45C-L	**S.N.#:**	B4850667	**Range:**	0.8 to 100 % RH
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 % RH
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1050	67.8	10.2	4.4	67.2	10.1	4.3	-0.1	Pass
1350	58.2	12.2	4.3	58.4	12.2	4.3	0.0	Pass
1713	71.4	11.1	6.2	71.6	11.3	6.4	0.2	Pass
						Max Abs. Error	0.2	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: New RH sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:** Climatronics	**Model:** 100075	**S.N.#:** 3977	**Cup #:** 2284	**Range:** 0-60	m/s			
Wind Dir Sensor:	**Make:** Climatronics	**Model:** 100076	**S.N.#:** 4661	**Vane #:** 1440	**Range:** 0-360	Deg			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** Climatronics	**Model:** 101984	**S.N.#:** 145	**Torque:** Honeywell Mdl 366-0	**S.N.#:** 5042				
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.3	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1530 End: 1535

Conversion: Heavy Duty Al Cups: m/s = rpm+42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:		**Max Abs. Error**		
End:		**Mean Abs. Error**		

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.2	-0.8	Pass
West	270.0	270.9	0.9	Pass
North	360.0	0.7	0.7	Pass
East	90.0	88.9	-1.1	Pass
North	360.0	0.6	0.6	Pass
West	270.0	271.0	1.0	Pass
South	180.0	180.0	0.0	Pass
East	90.0	90.6	0.6	Pass
	Max Abs. Error		**1.1**	**PASS**
	Mean Abs. Error		**0.7**	**PASS**

Time: Begin: 1551 End: 1554

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.2	-0.8	Pass	330.0	330.8	0.8	Pass
60.0	58.4	-1.6	Pass	355.0	355.3	0.3	Pass
90.0	89.4	-0.6	Pass	30.0	29.2	-0.8	Pass
120.0	120.3	0.3	Pass	60.0	58.7	-1.3	Pass
150.0	149.8	-0.2	Pass	90.0	89.3	-0.7	Pass
180.0	179.3	-0.7	Pass	120.0	120.4	0.4	Pass
210.0	208.7	-1.3	Pass	150.0	149.8	-0.2	Pass
240.0	239.9	-0.1	Pass	180.0	178.8	-1.2	Pass
270.0	270.1	0.1	Pass	**Max Abs. Error**		**1.6**	**PASS**
300.0	300.2	0.2	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Time: Begin: 1537 End: 1540

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.1	0.0	Pass
Gnd Hog Spire 2488	216.5	215.3	-1.2	Pass
Cone Mtn	144.3	144.2	-0.1	Pass
Pebble 5A	87.9	86.9	-1.0	Pass
Peak 1984	9.7	9.9	0.2	Pass
Compass	351.0	350.1	-0.9	Pass
Time: Begin: 1600	**Max Abs. Error**		**1.2**	**PASS**
End: 1630	**Mean Abs. Error**		**0.6**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind speed sensor SN 5007 got wet during audit and was replaced by sensor SN 3977. Wind direction sensor SN 4691 was replaced by SN 4661 for routine bearing maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 67731	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.3	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1505 End: 1510

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.3	-1.7	Pass	150.0	148.4	-1.6	Pass	270.0	268.4	-1.6	Pass
60.0	58.7	-1.3	Pass	180.0	179.6	-0.4	Pass	300.0	298.5	-1.5	Pass
90.0	88.7	-1.3	Pass	210.0	209.3	-0.7	Pass	330.0	328.0	-2.0	Pass
120.0	118.8	-1.2	Pass	240.0	238.7	-1.3	Pass	355.0	353.1	-1.9	Pass
				Time: Begin:	1510	**Max Abs. Error**			**2.0**		**PASS**
				End:	1515	**Mean Abs. Error**			**1.4**		**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	<0.003	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Cone Mtn	144.3	144.7	0.4	Pass
Pebble 5A	87.9	89.0	1.1	Pass
Peak 1984	9.7	9.4	-0.3	Pass
Koktuk Mtn	292.1	289.0	-3.1	Pass
Gnd Hog Spire 2488	216.5	213.8	-2.7	Pass
Compass	351.0	349.0	-2.0	Pass
Time: Begin: 1600	**Max Abs. Error**		**3.1**	**PASS**
End: 1630	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1446	27.90	27.80	941.5	940.9	-0.6	Pass
			Max Abs. Error		0.6	PASS

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	-0.18
Slope	0.0031

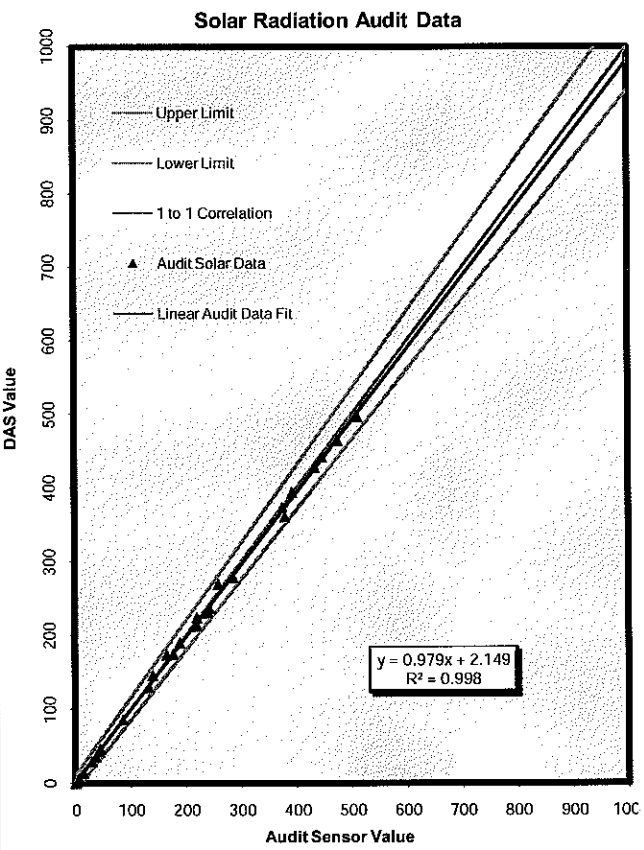
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56427 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1204	219.4	223.3	3.9	±21.0	1.8%	Pass
925	284.4	277.9	-6.5	±24.2	-2.3%	Pass
1333	391.3	392.6	1.3	±29.6	0.3%	Pass
708	188.0	189.5	1.5	±19.4	0.8%	Pass
1030	510.4	495.5	-14.9	±35.5	-2.9%	Pass
1140	377.8	359.8	-18.0	±28.9	-4.8%	Pass
1600	84.6	85.5	0.9	±14.2	1.1%	Pass
1700	42.1	42.2	0.1	±12.1	n/a	Pass
1800	44.7	46.0	1.3	±12.2	n/a	Pass
1900	28.6	28.2	-0.5	±11.4	n/a	Pass
2000	13.4	12.4	-1.0	±10.7	n/a	Pass
2100	1.3	1.0	-0.2	±10.1	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
900	176.6	173.7	-2.9	±18.8	-1.6%	Pass
1000	239.1	230.2	-8.9	±22.0	-3.7%	Pass
1100	220.4	211.8	-8.6	±21.0	-3.9%	Pass
1200	242.1	236.1	-6.0	±22.1	-2.5%	Pass
1300	374.2	373.5	-0.7	±28.7	-0.2%	Pass
1400	432.5	427.2	-5.3	±31.6	-1.2%	Pass
1500	445.7	441.9	-3.8	±32.3	-0.9%	Pass
1700	164.5	173.1	8.6	±18.2	5.2%	Pass
1800	257.9	268.4	10.5	±22.9	4.1%	Pass
1900	138.7	145.1	6.4	±16.9	4.6%	Pass
2000	35.9	35.3	-0.7	±11.8	n/a	Pass
700	5.0	6.0	1.0	±10.2	n/a	Pass
800	43.1	45.3	2.2	±12.2	n/a	Pass
900	132.0	129.2	-2.8	±16.6	-2.1%	Pass
1100	474.2	463.5	-10.7	±33.7	-2.3%	Pass
Corr. Val	0.9994	Max Abs. Percent Error			5.2%	PASS
R^2 Value	0.9988	Intercept	2.1	Slope	0.9796	PASS



Begin Date: 09/03/07 **End Date:** 09/05/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R^2 > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: New instrument.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/03/07	1340	650	20.0	0.8		20.6	1410	19.8	-1.0%	Pass	
09/03/07	1415	650	20.0	0.0		19.2	1500	19.2	-4.0%	Pass	
09/03/07	1505	650	20.0	0.0		20.4	1600	20.4	2.0%	Pass	Rain affected.
09/04/07	815	650	20.0	0.0		18.0	900	18.0	-10.0%	Pass	
09/04/07	1020	650	20.0	0.0		18.8	1100	18.8	-6.0%	Pass	
09/04/07	1330	650	20.0	0.0	16.2	3.0	1430	19.2	-4.0%	Pass	
09/04/07	1435	650	20.0	3.0	14.2	7.8	1600	19.0	-5.0%	Pass	
							Max Abs. Error	**10.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: 10% error within limits, but appears to be an aberration.

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Date:	Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
09/03/07	1330	5.00	1600	21.9	0.25	22.86	22.61	3.1%	Pass	
09/03/07	1445		1600	21.9	0.00	20.83	20.83	-5.0%	Pass	
09/03/07	1500		1600	21.9	20.83	44.20	23.37	6.6%	Pass	
09/03/07	1510		1600	21.9	0.76	25.40	24.64	N/A	N/A	Rain affected, ignore.
09/04/07	759		1600	21.9	0.00	23.11	23.11	5.4%	Pass	
09/04/07	938		1600	21.9	0.76	24.39	23.63	7.8%	Pass	
09/04/07	1026	11.00	1600	21.9	0.51	23.62	23.11	5.4%	Pass	
							Max Abs. Error	**7.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found with 6" in gauge.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

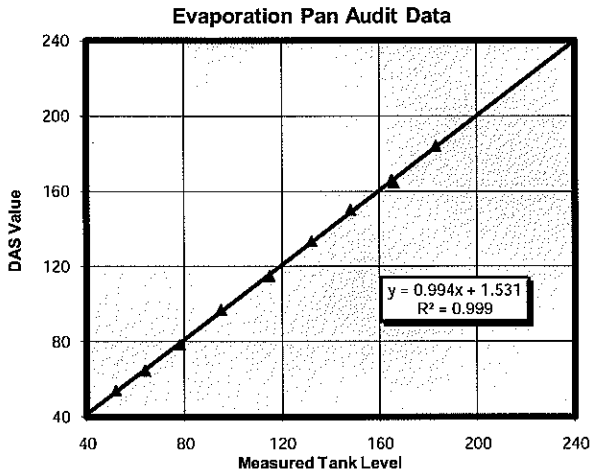
• *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

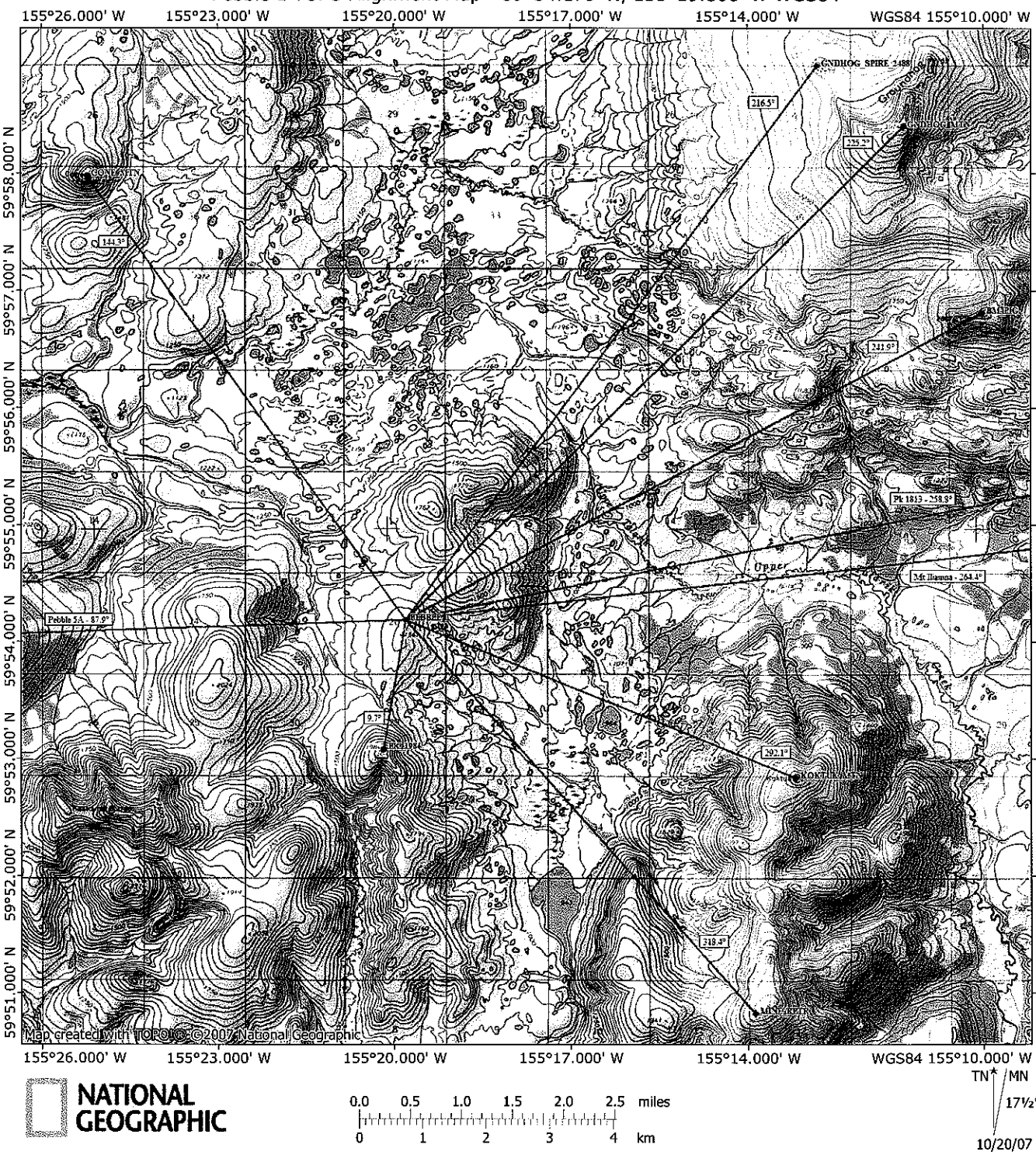
EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	165.0	165.7	165.0	0.7	0.4%	Pass
	183.0	183.9	183.0	0.9	0.5%	Pass
	166.0	164.6	166.0	-1.4	-0.8%	Pass
	148.0	150.0	148.0	2.0	1.4%	Pass
	132.0	133.6	132.0	1.6	1.2%	Pass
	115.0	114.8	115.0	-0.2	-0.2%	Pass
	95.0	97.1	95.0	2.1	2.2%	Pass
	78.0	78.4	78.0	0.4	0.5%	Pass
	64.0	64.4	64.0	0.4	0.6%	Pass
	52.0	53.8	52.0	1.8	3.5%	Pass
		Max Abs. Error		**2.1**	**3.5%**	**PASS**
		Intercept	**1.5**	**Slope**	**0.9941**	**PASS**



Time: Begin: 1514 End: 1541

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Date 9/4/07.


Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84
155°26.000' W
155°23.000' W
155°20.000' W
155°17.000' W
155°14.000' W
WGS84 155°10.000' W
59°58.000' N
59°57.000' N
59°56.000' N
59°55.000' N
59°54.000' N
59°53.000' N
59°52.000' N
59°51.000' N
GNDHOG SPIRE 2488
216.5°
225.7°
144.3°
341.9°
Pk 1813 - 258.5°
Mt Iliamna - 264.4°
Pebble 5A - 87.9°
9.7°
297.1°
318.3°
Map created with TOPO! ©2007 National Geographic
NATIONAL GEOGRAPHIC
0.0 0.5 1.0 1.5 2.0 2.5 miles
0 1 2 3 4 km
TN
MN
17½°
10/20/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**

Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A

Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions

Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EJC

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EJ

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE #300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079931 9

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date: 10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

S.O. Number: 60951
Date: November 30, 2006

Remarks:

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

Reviewed by: Thomas D. Kirk

Pebble 1
PSD Meteorological Monitoring Station

February 2008

Quality Assurance Performance Audit

for the

Pebble Project Meteorological Monitoring Program

Iliamna, Alaska

THE pebble PARTNERSHIP

prepared for

The Pebble Limited Partnership, care of Pebble Mines Corporation

Pebble 1 PSD Meteorological Monitoring Station
February 2008
Quality Assurance Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION **1**

2.0 PERFORMANCE AUDIT **2**

2.1 Performance Audit Methodology **2**

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 7

2.2 Performance Audit Results **7**

2.3 Performance Audit Recommendations **7**

3.0 REFERENCES **9**

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 1 February 5-6, 2008 Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for The Pebble Limited Partnership, care of Pebble Mines Corporation; in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as a quantitative review of the Pebble 1 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental

Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed + **EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited by adding measured water volumes to the gauge opening using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

A performance audit was conducted at the Pebble 1 station on February 5-6, 2008, with Dominic Shallies of HCG assisting. All sensors except the tipping precipitation gauge were challenged with certified audit equipment and yielded errors below the PSD limits. Attempts were made to audit the tipping precipitation gauge, but the ambient temperature was too cold to operate the testing device. Table 2-2 contains summary data from the audit and complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 1 February 5-6, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:52	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.050	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.0	Pass
Wind Direction Linearity	≤ 3	Degree	0.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.8	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.9	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.6	Pass
Barometric Pressure	≤ ±3	Mbar	0.0	Pass
Solar Radiation	≤ ±5+Res	% input	-8.4[1]	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	Pass
Weighing Precipitation	≤ ±10	% input	8.8	Pass

1. Max % error value of 8.4 within limit of 5% input + resolution, see audit.
2. Too cold to run tipping gauge drip tests.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Meteorological Measurement Methods Validation Criteria", ADEC, November 2007.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5-6, 2008

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: DAS CR1000 SN: 4821. Wire panel # 4678.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:51:00	15:50:08	**-00:52**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3361 # 1/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3361 # 2/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1550
End: 1630

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	41.56	41.72	0.16	Pass	41.72	0.16	Pass	0.00	Pass
Warm	15 to 25	21.99	22.00	0.01	Pass	22.00	0.01	Pass	0.00	Pass
Ice Bath	0	0.00	0.09	0.09	Pass	0.09	0.09	Pass	0.00	Pass
Cold	-15 to -25	-21.41	-21.14	0.27	Pass	-21.14	0.27	Pass	0.00	Pass
Very Cold	-35 to -45	-36.56	-36.22	0.34	Pass	-36.22	0.34	Pass	0.00	Pass
		Max Abs. Error	0.34	**PASS**		0.34	**PASS**	0.00	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45C-L	**S.N.#:**	B4850667	**Range:**	0.8 to 100 % RH
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 % RH
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Date	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
02/06/08	1345	51.3	-24.6	-31.1	60.2	-25.3	-30.3	0.8	Pass
02/06/08	1350	50.5	-24.7	-31.3	58.8	-25.6	-30.9	0.4	Pass
						Max Abs. Error		0.8	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5-6, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:** Climatronics	**Model:** 100075	**S.N.#:** 3977	**Cup #:** 2284	**Range:** 0-60	**m/s**			
Wind Dir Sensor:	**Make:** Climatronics	**Model:** 100076	**S.N.#:** 4661	**Vane #:** 1440	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** Climatronics	**Model:** 101984	**S.N.#:** 145	**Torque:** Honeywell Mdl 366-0	**S.N.#:** 5042				
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.2	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
1900	44.87	44.86	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1350 End: 1352

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	93.5	91.6	-1.9	Pass
Spire 2488	216.5	212.4	-4.1	Pass
Koktuk Mtn	292.1	289.2	-2.9	Pass
Compass	14.5	14.0	-0.5	Pass
Compass	164.5	162.7	-1.8	Pass
Max Abs. Error			**4.1**	**PASS**
Mean Abs. Error			**2.2**	**GOOD**

Time: Begin: 1315 End: 1340

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.5	-0.5	Pass
West	270.0	268.3	-1.7	Pass
North	360.0	0.2	0.2	Pass
East	90.0	89.2	-0.8	Pass
North	360.0	0.2	0.2	Pass
West	270.0	270.0	0.0	Pass
South	180.0	179.3	-0.7	Pass
East	90.0	90.3	0.3	Pass
	Max Abs. Error		**1.7**	**PASS**
	Mean Abs. Error		**0.5**	**PASS**

Time: Begin: 1357 End: 1400

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.6	-0.4	Pass	330.0	331.0	1.0	Pass
60.0	59.4	-0.6	Pass	355.0	355.4	0.4	Pass
90.0	89.8	-0.2	Pass	30.0	30.1	0.1	Pass
120.0	120.0	0.0	Pass	60.0	59.3	-0.7	Pass
150.0	149.9	-0.1	Pass	90.0	89.4	-0.6	Pass
180.0	179.9	-0.1	Pass	120.0	119.9	-0.1	Pass
210.0	209.9	-0.1	Pass	150.0	149.8	-0.2	Pass
240.0	240.2	0.2	Pass	180.0	179.9	-0.1	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**1.0**	**PASS**
300.0	300.5	0.5	Pass	**Mean Abs. Error**		**0.3**	**PASS**

Time: Begin: 1407 End: 1410

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.050	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.2	0.1	Pass
Compass	86.5	87.6	1.1	Pass
Compass	161.0	159.6	-1.4	Pass
Compass	5.0	7.8	2.8	Pass
Max Abs. Error			**2.8**	**PASS**
Mean Abs. Error			**1.3**	**GOOD**

Time: Begin: 1410 End: 1430

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Motor too cold to run at 2000 rpm.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5-6, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:**	RM Young	**Model:**	05305 AQ	**S.N.#:**	67731	**Prop #:**	63798	**Range:** 0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:** 4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674			
Dir Audit Eq:	**Linearity:**	RMY Mdl 18112 Bench Stand	**S.N.#:**	None	**Torque:**	RMY Mdl 18331 Torque Gauge			**S.N.#:** None
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.2	**E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1516 End: 1518

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	93.5	93.4	-0.1	Pass
Spire 2488	216.5	212.2	-4.3	Pass
Koktuk Mtn	292.1	290.1	-2.0	Pass
Compass	14.5	14.2	-0.3	Pass
Compass	164.5	163.2	-1.3	Pass
Time: Begin: 1315	**Max Abs. Error**		**4.3**	**PASS**
End: 1340	**Mean Abs. Error**		**1.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.4	-0.6	Pass	150.0	149.8	-0.2	Pass	270.0	266.7	-3.3	Pass
60.0	60.1	0.1	Pass	180.0	178.9	-1.1	Pass	300.0	296.7	-3.3	Pass
90.0	88.3	-1.7	Pass	210.0	209.7	-0.3	Pass	330.0	326.7	-3.3	Pass
120.0	117.5	-2.5	Pass	240.0	236.8	-3.2	Pass	355.0	352.0	-3.0	Pass
				Time:	Begin: 1500			**Max Abs. Error**		**3.3**	**PASS**
					End: 1504			**Mean Abs. Error**		**1.9**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.005	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	10.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	291.2	-0.9	Pass
Compass	86.5	86.7	0.2	Pass
Compass	161.0	162.6	1.6	Pass
Compass	5.0	5.0	0.0	Pass
Time: Begin: 1410	**Max Abs. Error**		**1.6**	**PASS**
End: 1430	**Mean Abs. Error**		**0.7**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5-6, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1525	27.97	27.87	943.87	943.90	0.03	Pass
			Max Abs. Error		0.03	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

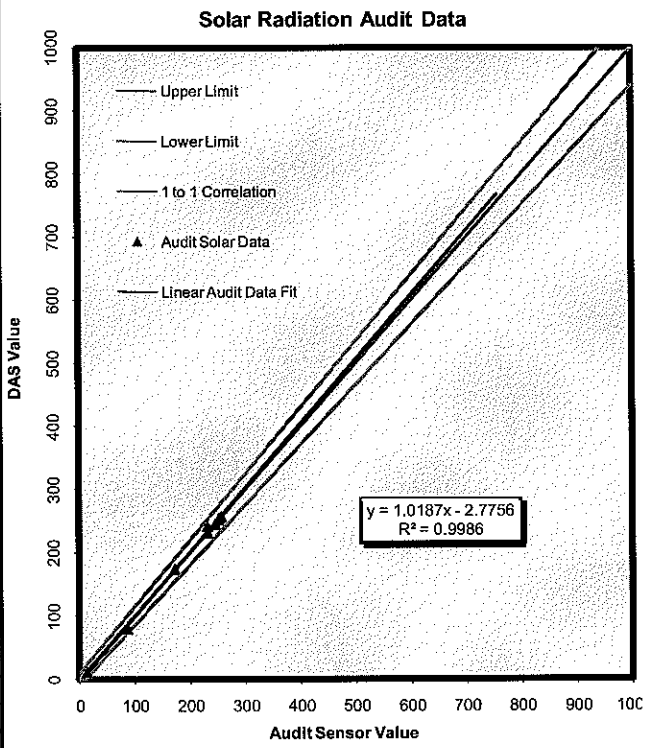
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56427 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1310	245.6	245.0	-0.6	±22.3	-0.2%	Pass
1330	256.3	257.1	0.8	±22.8	0.3%	Pass
1350	250.6	252.0	1.4	±22.5	0.6%	Pass
1435	231.4	241.5	10.1	±21.6	4.4%	Pass
900	0.0	0.0	0.0	±10.0	n/a	Pass
1000	12.6	10.6	-2.0	±10.6	n/a	Pass
1100	86.0	78.7	-7.3	±14.3	-8.4%	Pass
1200	172.0	173.5	1.5	±18.6	0.9%	Pass
1300	232.4	230.7	-1.7	±21.6	-0.7%	Pass
1400	252.3	254.8	2.5	±22.6	1.0%	Pass
Corr. Val	**0.9993**	**Max Abs. Percent Error**			**8.4%**	**PASS**
R² Value	**0.9986**	**Intercept**	**-2.8**	**Slope**	**1.0187**	**PASS**



Begin Date: 02/05/08 **End Date:** 02/06/08

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when $R^2 > 0.995$.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5-6, 2008

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
02/06/08	1405	650	20.0	0.0		16.8	1410	16.8	-16.0%	Fail	Very cold.
02/06/08	1425	650	20.0	18.4		36.0	1500	17.6	-12.0%	Fail	Very cold.
							Max Abs. Error	**16.0%**	**FAIL**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold for drip tests; disregard.

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

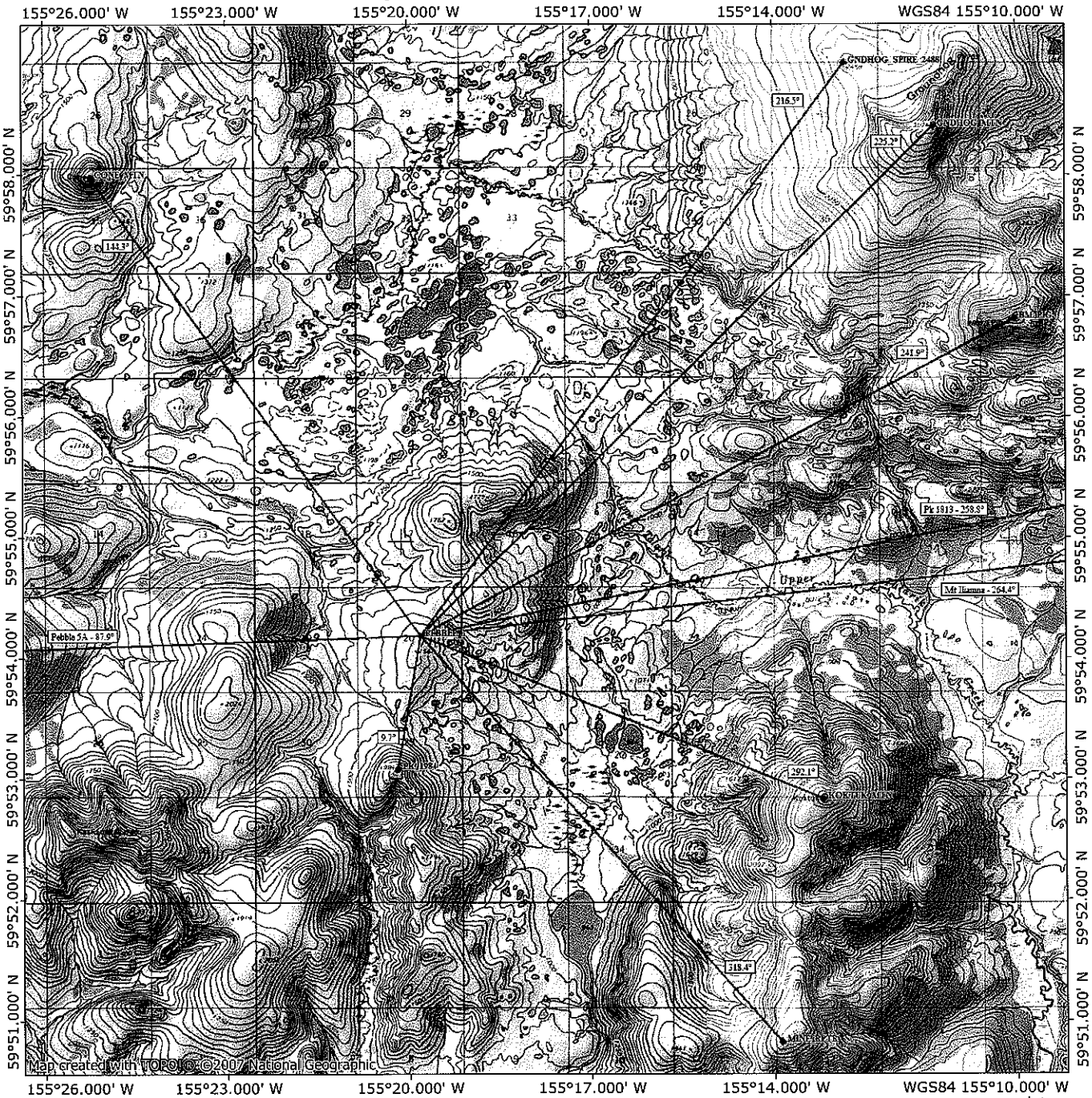
Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1135	5.00	1600	21.9	18.03	41.15	23.12	5.4%	Pass	
1159		1600	21.9	41.15	64.01	22.86	4.2%	Pass	
1218		1600	21.9	0.00	22.61	22.61	3.1%	Pass	
1235	7.50	1600	21.9	22.61	45.72	23.11	5.4%	Pass	
1309		1600	21.9	45.72	69.35	23.63	7.8%	Pass	
1340		1600	21.9	2.29	26.16	23.87	8.8%	Pass	
1407		1600	21.9	26.16	49.79	23.63	7.8%	Pass	
						Max Abs. Error	**8.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 2.5 miles
0 1 2 3 4 km

TN MN
17½°
10/20/07

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Blade Unit

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07.	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**

Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A

Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions

Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EM

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: J. Soeun (2)

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sean

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner: HOEFLER Consulting Group
Name: _____

Address: 341 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER: _____

MODEL NUMBER: 5008

SERIAL NUMBER: 5080199319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
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EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24 x 10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: R. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Appendix D

Validated Continuous Data Summaries

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	8.7	9.0	9.0	9.2	7.7	8.2	7.5	8.0	9.0	9.6	9.6	9.4	10.2	10.3	7.8	7.1	6.4	6.4	7.0	6.9	6.3	6.2	6.3	10.3	6.2	8.0
2	6.1	5.8	5.5	5.2	5.6	5.9	4.7	6.0	7.6	7.9	7.1	7.4	6.8	7.1	7.7	7.3	7.5	6.7	6.8	7.0	6.7	7.4	6.1	5.7	7.9	4.7	6.6
3	6.2	6.6	7.0	6.3	7.2	9.4	11.8	9.9	9.3	11.2	11.0	9.9	9.6	9.1	8.0	6.8	5.6	6.5	5.9	5.1	5.7	5.0	4.3	4.8	11.8	4.3	7.6
4	5.6	4.6	3.6	3.0	3.2	3.0	3.0	3.1	3.2	3.0	3.2	3.3	2.6	1.8	1.7	2.3	1.7	1.0	1.0	0.8	1.5	1.3	1.3	1.6	5.6	0.8	2.5
5	1.4	1.0	2.2	3.6	4.0	3.3	3.7	5.5	5.9	5.0	4.1	3.7	4.3	4.8	4.6	4.4	4.6	3.8	3.4	3.0	2.3	2.8	2.5	2.5	5.9	1.0	3.6
6	2.3	1.8	2.2	1.8	1.4	1.9	2.2	2.4	2.1	2.2	2.4	2.9	3.4	4.0	5.7	5.9	4.8	5.7	7.2	8.0	6.4	7.3	7.9	7.4	8.0	1.4	4.1
7	8.8	7.6	8.5	7.7	7.6	9.0	9.8	9.9	10.2	9.6	9.1	8.1	8.5	9.1	8.3	9.1	9.3	8.3	7.7	7.2	6.3	6.4	6.6	6.3	10.2	6.3	8.3
8	6.9	7.0	6.6	5.7	4.7	5.0	6.0	5.5	5.1	5.1	5.7	5.2	5.2	5.8	5.9	6.6	7.3	7.3	7.7	8.0	7.6	8.1	8.7	6.9	8.7	4.7	6.4
9	6.1	6.5	5.9	5.6	5.3	4.9	5.1	5.1	5.4	5.0	4.2	3.4	1.7	2.1	3.1	4.1	6.8	6.6	7.9	7.3	9.1	11.2	9.3	10.3	11.2	1.7	5.9
10	10.7	9.1	8.7	7.7	9.5	10.7	11.4	13.3	9.6	11.7	9.3	13.9	16.2	17.0	17.8	18.7	18.6	18.7	20.1	18.7	17.7	18.4	18.5	17.5	20.1	7.7	14.3
11	16.5	15.5	14.1	14.3	15.4	15.8	15.9	15.5	16.1	17.5	18.6	18.7	20.5	20.1	19.9	19.7	20.7	21.3	20.4	22.6	22.8	20.5	21.2	21.9	22.8	14.1	18.6
12	19.4	20.2	21.4	20.9	19.2	18.4	18.9	18.7	20.0	18.6	18.6	18.3	17.6	19.2	19.3	22.1	21.9	21.9	22.1	21.8	19.9	17.8	16.0	15.1	22.1	15.1	19.5
13	20.3	17.1	15.8	13.4	12.0	10.6	12.0	10.7	9.8	11.5	9.4	5.1	5.6	4.5	2.7	1.8	1.9	1.7	0.4	2.7	2.1	2.6	2.4	3.1	20.3	0.4	7.5
14	4.2	4.7	7.6	7.9	11.3	12.1	9.9	10.9	13.2	15.0	11.9	10.8	13.3	15.3	16.0	14.6	15.4	17.6	16.6	15.3	14.7	12.4	11.9	10.1	17.6	4.2	12.2
15	9.2	7.6	6.3	5.7	4.8	4.6	5.4	5.9	5.8	5.9	6.3	6.3	5.5	5.0	5.5	6.2	6.7	6.8	5.8	5.1	5.1	4.4	2.4	2.6	9.2	2.4	5.6
16	2.4	1.7	0.5	1.4	1.1	1.5	2.8	5.3	7.5	10.0	16.2	22.4	22.3	22.7	23.6	24.5	25.2	26.2	27.3	27.5	25.2	20.6	17.1	14.5	27.5	0.5	14.6
17	13.3	13.1	10.0	7.9	9.2	8.3	7.5	8.1	11.3	10.3	10.7	12.5	16.6								11.6	15.7	14.6	16.2	16.6	7.5	11.6
18	13.2	10.9	9.2	6.7	4.9	3.6	3.7	3.7	4.9	3.7	1.0	2.3	2.2	1.5	1.6	1.4	1.7	2.2	2.5	2.9	3.6	3.3	3.0	3.6	13.2	1.0	4.0
19	3.4	2.3	1.6	1.2	0.8	1.2	0.9	0.6	0.8	1.5	1.2	1.4	1.7	2.8	2.9	2.8	2.7	3.2	4.3	4.8	4.1	3.3	3.6	3.2	4.8	0.6	2.3
20	3.3	4.7	5.3	5.3	5.9	7.4	7.5	9.3	7.9	7.9	8.4	5.3	2.5	1.3	5.0	6.0	5.6	6.3	4.9	6.3	7.0	7.2	6.3	5.6	9.3	1.3	5.9
21	6.3	6.0	6.0	5.4	5.1	5.4	3.8	6.0	6.8	8.0	7.6	5.2	6.6	5.0	4.5	4.7	4.0	4.0	3.6	4.6	5.6	3.7	7.1	12.1	12.1	3.6	5.7
22	10.2	7.7	6.6	4.5	2.5	2.2	3.3	2.5	1.6	2.0	2.5	1.9	1.5	1.0	2.6	3.2	3.6	3.8	3.8	4.2	2.5	3.1	3.4	3.3	10.2	1.0	3.5
23	2.7	2.4	2.9	2.8	3.5	3.6	3.8	3.2	3.6	3.4	4.0	5.5	4.2	4.4	5.1	6.0	7.1	7.0	7.3	6.2	4.8	4.9	6.0	6.7	7.3	2.4	4.6
24	6.2	5.6	7.3	6.9	7.3	6.9	6.4	5.3	4.8	6.5	6.4	5.3	3.8	3.8	2.8	3.1	4.0	4.3	4.0	4.0	3.4	2.3	2.8	2.4	7.3	2.3	4.8
25	1.7	2.3	0.9	4.1	8.0	10.1	7.7	7.5	15.1	17.5	19.7	23.2	27.0	26.3	25.8	26.6	21.0	17.4	20.1	22.0	22.8	24.9	25.9	25.1	27.0	0.9	16.8
26	25.6	25.9	25.8	24.8	25.7	25.6	27.0	26.6	25.6	25.9	24.6	22.5	19.6	17.2	17.3	15.6	14.9	13.7	12.6	12.4	12.0	13.1	11.6	9.7	27.0	9.7	19.8
27	10.8	12.8	14.9	15.1	17.8	19.9	20.4	21.8	21.6	21.4	21.8	25.1	29.3	27.3	25.5	23.4	24.0	24.3	24.3	18.0	22.0	23.2	24.8	23.4	29.3	10.8	21.4
28	21.2	19.0	17.7	17.2	17.7	15.9	14.5	15.0	14.2	13.7	12.5	10.6	9.2	8.2	9.1	9.4	10.5	11.5	10.6	12.9	12.2	13.1	12.6	13.9	21.2	8.2	13.4
29	15.7	16.3	16.4	16.8	10.5	19.4	22.2	22.7	25.1	30.0	29.6	25.2	22.1	23.8	26.4	22.2	21.4	19.5	21.2	23.3	26.2	25.8	23.9	24.8	30.0	10.5	22.1
30	19.3	17.9	16.3	17.3	20.3	20.9	21.4	22.6	23.4	26.1	29.8	30.9	34.1	40.0	38.1	36.6	32.0	27.1	25.9	27.6	29.0	23.1	24.4	18.6	40.0	16.3	25.9
31	16.6	21.0	22.6	19.9	20.9	20.4	20.3	21.4	19.4	19.0	18.0	18.0	15.0	12.6	12.5	10.2	10.4	13.1	15.2	16.3	13.8	14.7	20.3	18.9	22.6	10.2	17.1
Max.	**25.6**	**25.9**	**25.8**	**24.8**	**25.7**	**25.6**	**27.0**	**26.6**	**25.6**	**30.0**	**29.8**	**30.9**	**34.1**	**40.0**	**38.1**	**36.6**	**32.0**	**27.1**	**27.3**	**27.6**	**29.0**	**25.8**	**25.9**	**25.1**	**40.0**		
Min.	**1.4**	**1.0**	**0.5**	**1.2**	**0.8**	**1.2**	**0.9**	**0.6**	**0.8**	**1.5**	**1.0**	**1.4**	**1.5**	**1.0**	**1.6**	**1.4**	**1.7**	**1.0**	**0.4**	**0.8**	**1.5**	**1.3**	**1.3**	**1.6**		**0.4**	
Avg.	**9.7**	**9.5**	**9.3**	**8.9**	**9.1**	**9.5**	**9.7**	**10.0**	**10.5**	**11.1**	**11.1**	**11.1**	**11.2**	**11.1**	**11.3**	**11.1**	**10.9**	**10.8**	**10.9**	**11.1**	**11.0**	**10.8**	**10.7**	**10.5**			**10.4**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.4	10.3	14.1	13.1	15.6	17.5	17.1	16.3	17.0	16.8	12.7	14.9	17.1	21.4	24.5	25.9	29.9	28.7	25.2	23.9	28.6	30.2	26.2	25.2	30.2	10.3	20.2
2	22.5	23.2	23.3	21.4	22.4	24.5	24.9	24.3	24.6	25.4	24.3	23.8	23.5	23.5	24.9	26.0	25.0	21.9	20.0	20.5	20.1	19.4	18.7	19.7	26.0	18.7	22.8
3	19.0	19.5	16.5	16.4	15.4	15.9	13.6	11.6	10.7	9.3	7.9	7.6	4.3	4.4	4.1	4.2	3.7	2.3	1.2	1.2	1.9	3.4	4.4	4.1	19.5	1.2	8.4
4	3.7	3.3	4.2	3.6	3.2	3.9	4.3	4.7	3.9	4.6	4.7	5.0	4.6	2.5	1.5	1.7	0.9	0.7	1.8	1.5	1.8	2.9	2.8	3.5	5.0	0.7	3.1
5	4.0	4.8	6.0	5.5	4.2	6.7	7.5	7.3	4.4	4.5	5.5	5.3	4.8	5.9	6.6	8.3	10.5	10.7	10.1	9.8	8.1	10.3	11.1	11.0	11.1	4.0	7.2
6	13.8	17.1	15.6	13.4	12.5	13.6	13.8	14.0	14.0	13.9	11.4	10.5	9.8	9.6	9.1	8.5			4.6	2.4	1.7	2.0	3.2	3.7	17.1	1.7	9.9
7	3.3	3.9	5.3	4.7	3.9	1.7	1.1	3.0	2.2	1.6	1.0	0.5	1.7	2.2	1.9	2.1	1.7	1.3	2.1	2.7	1.9	1.4	1.4	1.1	5.3	0.5	2.2
8	2.5	3.0	2.8	2.5	2.3	3.8	4.4	5.1	6.1	5.6	5.2	4.7	4.7	4.2	4.2	3.9	3.9	4.1	4.2	3.9	4.5	3.6	3.8	3.9	6.1	2.3	4.0
9	3.7	3.6	4.4	3.6	4.0	4.3	4.4	3.8	3.7	4.3	4.5	3.7	3.9	4.7	6.0	5.3	4.4	2.8	1.5	1.3	1.6	0.9	0.8	1.8	6.0	0.8	3.5
10	1.2	1.6	1.5	1.4	1.3	1.4	2.9	2.8	3.8	4.4	3.6	4.3	4.5	4.0	4.4	5.0	4.7	2.9	2.9	3.2	3.2	2.5	2.4	1.7	5.0	1.2	3.0
11	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	4.2	7.2	7.1	5.1	7.2	8.7	11.0	11.9	11.6	15.7	16.4	14.3	14.6	14.5	13.8	16.4	0.2	6.9
12	13.2	13.8	14.1	12.9	12.6	12.6	12.5	11.2	9.2	11.1	11.6	11.4	10.8	12.1	11.9	10.3	9.9	10.4	8.6	7.2	8.0	9.3	8.6	4.7	14.1	4.7	10.7
13	8.9	9.8	9.9	10.4	8.6	8.8	10.4	10.6	9.1	7.9	5.7	4.1	3.2	3.5	4.8	5.6	10.2	14.7	14.9	14.2	13.9	12.6	11.8	9.6	14.9	3.2	9.3
14	10.7	10.5	10.2	10.8	9.3	9.3	9.2	9.4	9.6	8.5	7.3	10.8	10.1	8.5	8.4	8.4	7.2	5.8	4.5	5.1	3.4	1.6	1.5	1.0	10.8	1.0	7.5
15	1.4	1.7	1.1	0.6	1.3	1.6	2.4	2.3	2.0	2.2	2.1	2.7	1.7	2.0	1.9	2.6	2.8	2.9	3.4	3.4	2.6	2.0	1.7	1.3	3.4	0.6	2.1
16	1.3	1.4	0.9	1.8	1.3	2.4	1.8	1.7	2.0	2.0	2.5	4.0	4.0	4.5	3.4	2.3	1.5	1.0	0.5	0.5	1.1	1.4	1.1	0.5	4.5	0.5	1.9
17	0.7	1.1	0.9	1.7	2.5	2.6	1.6	1.9	1.1	0.7	0.8	1.0	2.1	3.4	3.6	6.2	5.4	6.4	6.7	5.9	4.5	4.2	3.4	3.0	6.7	0.7	3.0
18	2.7	2.3	1.9	2.2	1.8	1.1	1.4	1.5	1.4	1.5	1.7	1.3	1.0	0.7	0.7	0.8	0.9	0.7	0.8	1.7	2.4	2.4	2.8	3.1	3.1	0.7	1.6
19	4.2	4.9	5.0	6.2	7.1	10.1	11.5	11.1	10.3	10.5	9.9	9.6	7.5	8.6	10.0	10.2	11.7	14.2	15.8	15.5	14.5	15.2	16.9	16.8	16.9	4.2	10.7
20	17.3	18.7	16.1	13.9	13.8	11.7	11.7	14.0	14.8	14.1	13.6	14.7	13.0	13.0	14.0	15.0	16.4	17.7	14.6	12.6	13.6	17.0	16.7	13.4	18.7	11.7	14.6
21	17.2	16.5	18.8	20.2	20.7	21.9	16.6	12.5	12.3	11.2	10.6	12.7	11.8	12.4	13.5	11.9	9.0	8.4	8.9	8.3	8.0	6.9	7.2	10.8	21.9	6.9	12.8
22	8.9	7.1	5.1	6.9	6.9	6.9	6.4	7.1	6.9	6.5	5.8	4.8	4.2	4.2	4.8	4.8	4.9	5.8	5.8	5.0	7.5	7.9	5.8	6.2	8.9	4.2	6.1
23	5.6	6.3	7.3	5.6	6.6	7.6	8.8	8.2	7.6	7.1	8.2	7.5	10.0	11.8	12.8	11.6	8.6	8.9	9.3	6.3	6.3	7.4	9.3	11.3	12.8	5.6	8.3
24	11.5	10.0	7.7	7.0	8.5	10.9	11.1	10.9	12.4	9.2	11.1	14.0	17.0	14.9	17.4	17.9	17.7	19.2	20.0	20.4	22.1	18.3	16.5	19.9	22.1	7.0	14.4
25	21.2	17.6	15.5	17.2	16.7	15.9	12.3	9.9	9.5	10.7	8.7	8.5	7.5	6.6	5.9	7.5	6.2	4.2	6.0	6.2	6.0	5.9	6.4	6.7	21.2	4.2	9.9
26	7.8	7.1	6.5	7.9	5.9	5.9	4.9	4.6	6.1	7.1	5.8	2.7	2.6	3.9	4.4	6.4	7.9	8.5	6.8	6.9	6.7	6.7	7.2	7.6	8.5	2.6	6.2
27	8.1	8.7	8.7	7.0	6.7	5.9	6.7	6.6	6.5	6.0	5.4	5.9	5.6	5.9	5.9	4.5	4.5	5.4	5.8	5.8	4.3	3.5	2.8	3.8	8.7	2.8	5.8
28	4.2	4.2	5.1	5.8	5.4	5.3	5.6	5.3	6.7	6.0	6.6	7.8	9.5	8.7	9.6	10.8	11.7	9.3	10.8	5.9	8.4	10.4	7.5	9.6	11.7	4.2	7.5
Max.	**22.5**	**23.2**	**23.3**	**21.4**	**22.4**	**24.5**	**24.9**	**24.3**	**24.6**	**25.4**	**24.3**	**23.8**	**23.5**	**23.5**	**24.9**	**26.0**	**29.9**	**28.7**	**25.2**	**23.9**	**28.6**	**30.2**	**26.2**	**25.2**	**30.2**		
Min.	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.6**	**0.7**	**0.8**	**0.5**	**1.0**	**0.7**	**0.7**	**0.8**	**0.9**	**0.7**	**0.5**	**0.5**	**1.1**	**0.9**	**0.8**	**0.5**		**0.2**	
Avg.	**8.3**	**8.3**	**8.2**	**8.0**	**7.9**	**8.4**	**8.2**	**7.9**	**7.8**	**7.7**	**7.3**	**7.5**	**7.3**	**7.6**	**8.2**	**8.5**	**8.6**	**8.5**	**8.3**	**7.8**	**7.9**	**8.0**	**7.7**	**7.8**			**8.0**

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.3	8.7	9.7	10.8	8.3	10.3	9.7	9.6	9.1	9.0	9.0	9.2	10.7	10.2	10.8	11.4	11.0	12.6	14.9	13.1	12.4	14.3	13.4	13.2	14.9	8.3	10.8
2	12.9	14.5	13.5	13.9	14.3	14.4	15.3	14.9	14.2	14.8	14.1	13.8	15.2	13.7	13.5	14.7	15.2	14.5	12.0	16.0	17.7	21.0	19.3	19.7	21.0	12.0	15.1
3	16.5	15.5	16.0	14.7	13.0	13.6	13.8	14.9	10.9	13.1	10.5	5.5	7.2	7.1	7.5	6.9	9.5	8.1	7.5	8.1	9.2	7.9	7.4	11.6	16.5	5.5	10.7
4	13.8	14.8	17.3	18.0	17.9	17.1	16.2	15.5	15.1	14.5	16.1	17.2	15.7	20.0	19.4	20.9	20.1	21.0	19.9	15.6	14.5	14.5	15.5	14.7	21.0	13.8	16.9
5	15.0	16.8	16.5	16.0	17.8	16.6	20.3	19.1	19.1	21.5	23.0	21.9	21.6	19.1	21.1	19.7	20.4	19.5	18.8	19.8	21.0	18.6	15.7	16.4	23.0	15.0	19.0
6	15.1	13.7	15.5	17.2	19.8	22.6	21.2	21.8	19.4	21.2	22.3	27.1	26.5	25.5	26.3	26.9	27.5	26.7	26.4	25.8	26.4	26.2	25.8	21.9	27.5	13.7	22.9
7	21.4	22.8	24.5	29.0	28.5	21.7	23.3	26.1	22.2	24.5	22.5	19.5	23.1	27.2	27.8	27.5	23.8	23.4	26.2	24.9	23.9	26.8	27.0	26.0	29.0	19.5	24.7
8	25.8	25.0	21.4	20.0	20.1	19.8	18.7	16.4	15.7	13.7	13.9	13.0	13.1	12.1	10.5	11.6	14.5	16.6	17.5	18.7	21.5	22.8	23.5	17.8	25.8	10.5	17.6
9	14.5	13.0	11.8	13.9	14.7	16.7	15.7	11.0	11.9	13.0	14.0	15.7	12.1	11.9	11.3	11.2	10.1	9.7	9.3	7.6	6.9	6.7	6.4	6.0	16.7	6.0	11.5
10	5.7	5.6	5.6	5.9	7.0	7.8	7.0	8.8	10.0	10.3	11.6	9.2	6.7	5.4	7.2	7.7	7.9	7.9	7.6	7.6	7.5	7.7	7.5	9.3	11.6	5.4	7.7
11	9.9	10.9	12.7	12.6	12.6	17.1	17.4	15.8	13.9	16.5	16.8	17.2	13.1	13.8	16.0	15.8	17.0	19.2	20.9	19.7	20.3	21.1	18.5	16.8	21.1	9.9	16.1
12	17.2	20.8	20.9	22.0	18.4	16.0	16.9	16.4	16.3	19.9	19.6	17.6	19.4	17.8	20.5	20.4	20.2	18.4	19.4	14.8	20.8	18.8	19.2	15.5	22.0	14.8	18.6
13	13.5	13.9	13.3	15.1	15.7	17.8	16.0	15.7	17.1	17.1	15.7	17.7	18.0	17.7	18.7	17.7	18.6	16.8	20.0	19.8	17.4	18.5	18.2	21.4	21.4	13.3	17.1
14	20.7	19.6	20.0	19.4	17.5	19.1	18.0	19.6	16.6	15.7	19.9	21.8	24.0	22.2	21.3	21.3	23.6	24.4	20.1	20.9	18.6	17.6	19.1	20.8	24.4	15.7	20.1
15	18.3	21.0	15.3	15.8	15.5	10.7	8.8	7.0	7.5	7.5	7.3	7.8	8.9	7.8	7.6	8.4	9.4	10.5	12.0	12.6	13.6	14.9	14.3	10.2	21.0	7.0	11.4
16	8.4	8.4	6.0	5.9	6.6	6.0	6.4	6.9	6.9	7.0	9.0	7.6	6.9	6.4	7.6	7.6	8.5	8.3	7.5	6.9	6.6	7.7	7.3	6.8	9.0	5.9	7.2
17	6.8	6.1	5.8	5.7	4.5	4.1	4.1	4.3	3.3	4.5	3.6	4.4	5.0	4.0	3.5	3.1	3.7	3.9	4.6	5.3	4.8	4.2	3.2	2.5	6.8	2.5	4.4
18	3.0	1.5	0.8	1.3	2.1	2.7	2.7	2.5	1.0	0.9	0.8	1.1	1.8	2.6	2.5	2.1	2.5	2.3	3.8	5.5	6.4	7.0	5.7	5.5	7.0	0.8	2.8
19	5.2	4.6	5.6	4.8	4.5	4.3	4.2	4.2	3.8	3.1	3.7	3.3	2.1	2.4	2.1	2.1	2.7	2.3	2.7	3.0	2.6	2.5	2.2	1.5	5.6	1.5	3.3
20	0.9	2.2	2.6	2.9	3.7	3.5	6.4	6.5	9.6	11.7	13.6	14.3	12.5	12.2	12.4	12.2	13.1	11.7	8.2	8.9	7.8	6.9	5.8	4.7	14.3	0.9	8.1
21	4.6	4.6	2.4	3.4	3.9	4.8	6.6	7.5	9.3	10.9	10.8	10.7	11.8	11.7	10.3	7.9	9.0	8.4	8.1	6.5	6.9	5.4	6.3	6.3	11.8	2.4	7.4
22	8.5	10.4	10.1	8.8	7.6	7.6	4.9	4.4	6.2	7.1	7.0	7.3	7.3	6.6	8.9	7.7	8.7	7.5	6.8	5.1	5.8	6.7	8.8	10.4	10.4	4.4	7.5
23	11.2	10.0	9.2	10.1	12.4	14.5	12.6	12.6	11.1	8.4	8.0	9.8	12.7	12.4	12.6	15.1	16.8	15.5	14.5	12.3	11.3	11.3	10.3	11.1	16.8	8.0	11.9
24	10.5	10.0	6.4	4.5	6.5	6.0	6.0	5.3	6.3	5.7	6.1	5.8	5.3	5.3	4.9	4.4	5.0	5.4	5.8	5.6	3.8	3.0	2.7	1.9	10.5	1.9	5.5
25	1.1	1.7	1.4	1.4	1.0	1.6	2.1	2.3	2.3	2.0	2.1	1.9	2.2	1.5	1.4	4.1	3.2	2.4	3.0	3.6	6.0	6.9	8.3	8.4	8.4	1.0	3.0
26	7.9	5.8	8.0	8.6	14.0	15.6	15.3	13.0	10.8	9.9	13.3	16.7	8.6	6.1	6.4	6.6	3.8	5.8	4.9	6.8	8.7	10.4	10.8	9.8	16.7	3.8	9.5
27	8.5	7.3	8.2	8.8	8.5	8.4	9.4	8.4	10.0	12.2	12.8	10.9	13.4	14.4	12.8	9.6	12.9	12.7	11.8	9.9	11.4	13.5	14.9	15.2	15.2	7.3	11.1
28	11.7	11.7	11.9	11.8	10.9	11.3	13.4	12.4	14.6	14.9	14.1	15.8	15.2	11.2	12.4	12.2	9.5	9.5	9.3	8.7	9.6	10.1	10.0	8.7	15.8	8.7	11.7
29	6.9	6.3	6.2	9.3	5.6	5.5	6.9	6.5	7.2	6.0	6.8	7.7	8.4	9.7	11.3	11.2	9.5	10.1	10.8	12.4	12.4	11.0	12.1	11.2	12.4	5.5	8.8
30	11.1	10.9	10.8	8.8	10.3	10.8	10.6	8.0	6.3	4.7	4.7	4.3	4.9	5.0	3.1	2.3	2.1	2.9	2.0	2.0	1.6	1.0	1.0	1.7	11.1	1.0	5.4
31	1.8	1.9	2.3	2.8	2.4	2.1	1.9	2.1	1.6	2.3	2.2	2.0	1.0	0.9	1.3	2.6	4.0	4.7	5.5	4.8	5.1	5.1	5.1	5.4	5.5	0.9	3.0
Max.	**25.8**	**25.0**	**24.5**	**29.0**	**28.5**	**22.6**	**23.3**	**26.1**	**22.2**	**24.5**	**23.0**	**27.1**	**26.5**	**27.2**	**27.8**	**27.5**	**27.5**	**26.7**	**26.4**	**25.8**	**26.4**	**26.8**	**27.0**	**26.0**	**29.0**		
Min.	**0.9**	**1.5**	**0.8**	**1.3**	**1.0**	**1.6**	**1.9**	**2.1**	**1.0**	**0.9**	**0.8**	**1.1**	**1.0**	**0.9**	**1.3**	**2.1**	**2.1**	**2.3**	**2.0**	**2.0**	**1.6**	**1.0**	**1.0**	**1.5**		**0.8**	
Avg.	**10.9**	**11.0**	**10.7**	**11.1**	**11.1**	**11.3**	**11.3**	**10.9**	**10.6**	**11.1**	**11.4**	**11.5**	**11.4**	**11.1**	**11.4**	**11.4**	**11.7**	**11.7**	**11.7**	**11.4**	**11.7**	**11.9**	**11.8**	**11.4**			**11.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

April 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	4.6	4.2	3.9	3.3	3.5	3.9	4.8	4.6	3.5	4.6	3.5	4.2	3.3	3.5	2.3	1.4	0.9	0.9	1.2	1.5	2.0	2.1	2.6	5.0	0.9	3.2
2	2.9	2.9	2.5	3.5	4.5	5.8	6.3	6.9	8.5	8.5	9.6	12.5	14.2	14.8	14.5	14.4	14.7	15.0	15.0	14.4	15.2	13.9	12.7	11.7	15.2	2.5	10.2
3	15.1	17.1	15.5	14.5	14.5	14.7	12.3	10.6	10.9	11.8	11.0	13.2	12.6	13.1	12.1	12.5	11.7	12.3	12.3	12.3	12.3	12.6	12.4	10.9	17.1	10.6	12.8
4	11.2	13.2	11.4	8.2	6.3	5.7	6.1	6.3	6.8	6.6	7.2	11.4	11.3	10.9	11.9	11.0	10.2	9.9	7.8	6.1	4.1	2.5	2.1	2.6	13.2	2.1	8.0
5	1.4	0.9	1.9	2.1	1.6	5.5	6.6	9.9	10.3	8.8	10.2	15.5	15.3	14.2	13.9	12.3	10.5	13.3	24.4	24.8	22.9	20.5	19.2	19.0	24.8	0.9	11.9
6	20.3	22.3	20.8	23.2	18.6	16.6	15.3	12.7	12.6	6.4	9.1	10.6	10.1	11.9	11.3	9.0	6.5	8.2	8.2	6.6	6.8	5.9	5.4	4.3	23.2	4.3	11.8
7	3.6	1.5	2.7	3.0	6.1	15.1	17.0	20.3	20.5	21.1	21.2	20.5	21.3	19.6	17.5	18.1	19.2	16.7	13.1	9.4	8.0	3.2	5.2	6.9	21.3	1.5	12.9
8	11.7	12.6	13.0	12.2	12.3	12.8	10.5	9.2	8.9	8.8	9.4	8.7	8.5	8.4	9.4	9.7	8.5	6.0	2.7	2.9	4.6	2.2	3.3	6.7	13.0	2.2	8.5
9	7.7	7.0	4.4	2.9	2.7	1.7	1.9	0.4	0.2	0.2	0.2	0.2	0.2	4.4	10.3	11.6	12.5	11.7	10.6	11.4	12.0	13.4	11.3	12.7	13.4	0.2	6.3
10	11.5	10.6	9.6	8.8	6.3	3.6	4.9	6.3	7.2	6.3	7.5	9.8	11.3	10.9	9.2	9.5	9.1	8.3	8.3	8.3	7.2	7.8	7.0	5.7	11.5	3.6	8.1
11	5.8	6.5	6.3	6.1	5.7	6.7	7.5	6.3	4.6	4.5	2.6	3.6	6.2	7.1	8.2	10.1	10.6	11.2	9.6	9.8	6.0	5.9	4.3	5.2	11.2	2.6	6.7
12	6.6	5.4	2.9	2.8	2.8	1.4	1.7	1.8	1.6	1.8	1.9	1.8	1.6	1.3	2.0	2.7	2.6	2.8	1.7	1.9	1.5	2.0	3.8	4.5	6.6	1.3	2.5
13	5.1	5.0	5.0	5.0	5.0	4.8	5.2	5.1	4.9	5.0	2.9	3.9	4.2	4.1	3.5	3.6	2.5	1.7	4.6	5.2	3.9	2.5	2.9	2.3	5.2	1.7	4.1
14	1.9	2.7	2.6	1.7	1.9	1.0	2.3	3.1	2.6	2.9	2.9	3.4	4.1	5.3	7.1	8.0	8.2	7.7	8.0	6.8	8.0	8.3	8.0	8.0	8.3	1.0	4.8
15	10.8	10.4	12.9	12.6	11.6	8.3	7.0	7.3	6.3	8.7	7.4	9.0	8.6	7.9	6.8	5.4	5.4	4.1	2.9	2.3	1.8	3.0	5.5	5.9	12.9	1.8	7.2
16	7.1	6.6	5.9	6.0	6.3	5.8	5.6	4.7	4.2	4.5	5.6	4.2	4.5	5.7	8.9	11.9	11.9	9.2	6.7	5.5	4.2	3.0	4.3	2.9	11.9	2.9	6.1
17	2.5	1.6	2.3	5.7	7.9	8.0	16.3	18.7	23.1	22.6	22.3	24.2	25.2	25.9	26.4	26.8	28.9	29.2	30.1	29.8	30.2	30.3	29.8	28.2	30.3	1.6	20.7
18	30.1	28.5	27.2	25.3	24.6	24.1	23.7	22.5	22.1	23.5	23.2	22.5	20.6	19.3	19.0	18.2	16.6	9.6	6.5	5.1	3.7	0.5	2.1	3.0	30.1	0.5	17.6
19	2.7	0.4	0.2	3.2	7.7	11.1	14.9	13.5	14.3	16.4	16.8	16.6	18.9	19.5	18.0	17.9	14.7	14.3	16.3	16.3	16.1	14.6	15.1	14.6	19.5	0.2	13.1
20	16.4	19.3	17.7	16.9	16.1	13.7	4.4	5.9	7.9	8.2	9.3	15.9	16.9	16.4	19.0	19.4	17.9	17.3	13.9	14.2	13.1	11.8	12.7	9.1	19.4	4.4	13.9
21	8.3	10.0	8.5	10.8	8.1	7.3	6.6	5.8	3.2	6.6	12.5	15.0	15.9	15.0	17.2	14.3	14.3	15.3	14.7	14.3	15.9	15.0	16.3	16.7	17.2	3.2	12.0
22	18.2	17.3	19.0	17.1	14.1	16.0	14.1	13.6	15.4	10.9	11.3	13.4	15.6	15.5	14.5	13.1	14.5	13.1	11.1	10.5	10.5	9.7	8.9	4.8	19.0	4.8	13.4
23	4.2	8.5	11.9	7.4	7.6	14.3	12.1	7.5	10.0	10.4	8.7	6.5	6.3	7.0	3.8	1.7	5.4	3.4	3.7	4.3	2.2	2.5	3.8	5.4	14.3	1.7	6.6
24	7.4	7.5	6.5	4.3	1.4	1.3	1.7	4.2	4.1	6.6	4.4	5.7	6.8	6.7	3.0	3.0	2.3	1.9	2.8	4.5	4.9	5.3	3.0	5.7	7.5	1.3	4.4
25	7.0	5.5	5.2	6.5	10.6	12.3	10.1	8.0	7.3	8.6	12.5	14.0	17.2	18.4	17.8	15.3	13.1	12.2	12.3	8.7	4.6	1.4	4.0	3.7	18.4	1.4	9.8
26	4.6	4.1	6.3	5.2	4.7	5.2	5.4	5.8	5.2	4.9	5.2	5.4	3.6	5.3	6.0	6.8	7.5	10.3	9.3	8.4	7.4	7.4	7.2	5.8	10.3	3.6	6.1
27	5.9	4.4	3.2	2.1	4.4	5.2	5.4	4.5	5.3	5.3	4.8	5.6	6.0	7.3	7.1	8.1	7.7	7.5	6.9	7.0	6.9	5.5	5.8	9.9	9.9	2.1	5.9
28	6.7	4.5	6.7	5.1	2.8	2.8	4.2	3.3	2.1	3.0	2.1	2.5	3.6	3.9	6.0	8.1	9.2	10.0	9.0	9.9	8.1	5.6	4.2	4.4	10.0	2.1	5.3
29	6.4	10.5	9.9	10.0	9.1	10.7	10.3	7.2	7.0	8.6	10.7	15.0	14.2	13.5	13.3	12.8	10.5	10.4	8.8	7.6	5.8	3.6	1.9	2.8	15.0	1.9	9.2
30	4.1	5.2	5.6	4.2	2.3	1.0	1.6	2.1	2.2	2.7	4.0	5.3	4.5	3.6	4.1	3.4	3.7	2.7	3.8	4.1	4.8	3.5	3.5	2.6	5.6	1.0	3.5
Max.	**30.1**	**28.5**	**27.2**	**25.3**	**24.6**	**24.1**	**23.7**	**22.5**	**23.1**	**23.5**	**23.2**	**24.2**	**25.2**	**25.9**	**26.4**	**26.8**	**28.9**	**29.2**	**30.1**	**29.8**	**30.2**	**30.3**	**29.8**	**28.2**	**30.3**		
Min.	**1.4**	**0.4**	**0.2**	**1.7**	**1.4**	**1.0**	**1.6**	**0.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**1.3**	**2.0**	**1.7**	**1.4**	**0.9**	**0.9**	**1.2**	**1.5**	**0.5**	**1.9**	**2.3**		**0.2**	
Avg.	**8.4**	**8.6**	**8.4**	**8.0**	**7.7**	**8.2**	**8.2**	**7.9**	**8.1**	**8.3**	**8.7**	**10.0**	**10.4**	**10.7**	**10.8**	**10.7**	**10.4**	**9.9**	**9.5**	**9.1**	**8.5**	**7.5**	**7.6**	**7.6**			**8.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.7	1.4	1.3	2.3	2.1	1.4	1.8	1.3	2.3	2.7	3.0	1.9	1.7	2.0				1.8	2.8	4.1	2.1	1.9	1.5	2.3	4.1	1.3	2.1
2	2.6	2.4	1.2	1.9	1.1	2.5	3.6	3.2	2.5	2.5	2.0	3.5	3.6	8.3	5.5	6.6	9.6	11.5	11.0	12.3	12.0	10.0	7.2	7.7	12.3	1.1	5.6
3	8.1	4.9	4.8	4.6	3.8	3.4	2.1	1.6	1.0	2.1	4.0	3.9	3.6	2.7	2.5	2.8	3.7	8.6	5.5	3.8	3.3	2.9	1.5	3.0	8.6	1.0	3.7
4	3.7	3.6	2.3	1.9	1.8	2.6	1.1	1.5	1.1	1.5	1.7	1.8	2.7	4.1	5.1	4.7	5.0	5.2	4.9	3.3	2.1	1.4	2.6	2.7	5.2	1.1	2.8
5	1.8	3.2	3.0	3.0	2.2	3.4	4.7	4.3	2.8	2.5	5.4	5.3	5.6	5.7	5.5	6.3	6.8	8.2	7.4	6.9	7.6	7.9	8.1	8.0	8.2	1.8	5.2
6	7.3	5.6	7.8	8.1	8.5	7.3	6.0	5.5	4.8	6.8	6.7	6.6	6.8	7.3	8.0	9.4	9.6	9.5	9.1	9.6	9.4	8.7	7.9	7.8	9.6	4.8	7.7
7	7.7	8.5	8.3	7.9	6.2	4.8	5.0	3.5	3.0	4.5	4.3	4.3	3.4	3.7	4.7	3.9	3.9	4.2	3.6	3.7	4.1	4.2	5.5	5.4	8.5	3.0	4.9
8	3.8	1.1	1.6	1.1	0.7	1.0	1.4	1.6	1.2	1.1	1.7	1.2	1.9	1.7	2.9	5.2	4.9	4.3	4.2	4.2	3.6	3.1	3.9	3.3	5.2	0.7	2.5
9	1.4	2.0	1.7	1.1	1.3	3.4	4.1	4.3	4.2	4.3	3.8	4.1	4.0	4.9	5.3	5.7	5.9	5.5	5.6	5.2	4.1	3.6	2.7	2.6	5.9	1.1	3.8
10	3.0	3.0	2.7	2.3	2.0	2.1	1.5	1.2	1.2	1.5	2.9	2.6	3.2	3.9	4.0	3.9	4.8	5.3	4.8	4.7	5.2	4.8	3.6	4.5	5.3	1.2	3.3
11	3.7	4.5	2.6	2.5	3.4	5.6	5.5	6.1	6.0	9.7	11.0	9.8	8.6	8.7	8.7	9.1	9.1	8.8	8.5	8.5	8.8	8.5	8.1	7.5	11.0	2.5	7.2
12	6.5	5.4	5.3	6.1	5.4	5.1	6.7	6.7	6.4	7.7	9.7	10.0	9.2	10.2	11.2	11.3	11.3	11.1	10.8	10.3	9.2	8.5	6.9	6.2	11.3	5.1	8.2
13	4.1	4.2	5.7	5.9	6.1	6.2	5.5	5.2	4.7	6.3	7.0	8.9	8.6	8.9	9.0	8.7	9.0	8.6	7.1	7.0	5.7	4.3	3.5	4.5	9.0	3.5	6.4
14	4.2	3.1	3.4	4.3	8.0	8.8	5.3	5.1	5.2	6.4	9.0	9.0	8.2	8.6	5.4	7.4	8.1	9.2	10.6	8.1	8.9	7.8	5.8	6.6	10.6	3.1	6.9
15	4.4	4.5	5.1	6.9	6.3	5.3	3.0	2.1	2.8	3.3	3.3	6.7	8.4	9.0	6.6	5.3	4.8	4.8	4.0	1.8	2.6	5.8	5.3	5.0	9.0	1.8	4.9
16	5.1	5.4	3.8	5.7	6.5	6.2	5.7	4.9	4.1	4.1	3.6	4.4	4.2	6.2	3.7	2.2	3.9	6.6	5.2	5.2	7.1	7.8	9.3	9.7	9.7	2.2	5.4
17	9.4	8.5	8.4	8.1	6.8	6.5	6.4	5.7	5.5	5.2	6.5	8.6	8.6	9.2	8.4	10.0	11.1	11.7	11.4	10.9	10.1	7.7	6.5	4.9	11.7	4.9	8.2
18	4.1	5.4	7.3	5.4	5.4	5.4	5.5	5.1	5.6	5.9	5.2	5.0	4.3	3.9	4.0	4.6	3.9	3.2	2.3	2.0	3.5	2.6	2.8	3.1	7.3	2.0	4.4
19	4.2	3.2	3.0	2.8	3.2	4.1	2.7	2.9	4.0	3.1	3.5	4.7	5.6	6.1	5.4	6.4	7.2	6.7	7.4	7.8	6.0	4.1	2.7	2.8	7.8	2.7	4.6
20	2.5	1.9	1.7	1.7	1.2	0.8	1.4	1.1	1.2	1.4	2.8	1.8	1.9	2.2	2.6	3.5	4.5	5.3	5.3	5.1	5.9	4.3	4.9	5.0	5.9	0.8	2.9
21	4.1	1.6	1.9	1.4	1.5	1.1	1.0	1.0	1.5	2.3	1.5	2.4	3.3	4.1	4.5	6.5	7.8	9.0	10.1	11.3	13.2	13.7	11.8	11.8	13.7	1.0	5.3
22	12.2	10.6	11.0	11.0	10.9	8.8	6.7	8.7	11.6	8.4	13.9	11.8	12.9	13.9	13.5	11.4	12.6	12.0	11.9	7.1	4.9	3.8	5.1	4.7	13.9	3.8	10.0
23	4.0	2.1	2.9	3.1	2.6	3.3	1.6	3.1	5.8	5.9	8.9	12.9	14.6	16.8	17.5	16.3	13.3	18.0	17.0	18.0	16.9	14.8	14.8	15.7	18.0	1.6	10.4
24	14.9	13.2	14.6	16.2	16.4	14.5	12.4	13.4	14.1	16.1	15.5	10.5	10.5	8.7	7.7	12.7	11.1	9.8	12.2	11.9	12.7	7.9	6.4	4.9	16.4	4.9	12.0
25	3.0	5.0	3.8	5.2	4.2	4.2	3.0	2.5	3.2	3.3	3.1	3.7	4.2	4.5	4.1	4.0	3.6	4.4	4.7	2.8	1.4	1.2	1.9	3.8	5.2	1.2	3.5
26	4.5	5.1	3.8	5.3	6.8	5.3	5.4	5.4	5.7	7.1	6.4	5.0	6.5	8.7	9.4	10.6	9.8	9.3	10.4	9.6	9.1	10.1	9.1	8.2	10.6	3.8	7.3
27	7.1	6.2	6.2	5.9	6.1	6.8	7.4	6.5	7.2	6.9	7.8	8.3	8.5	8.3	9.1	9.5	9.4	10.1	10.9	11.2	11.4	11.4	9.3	6.6	11.4	5.9	8.3
28	6.8	7.7	6.8	8.0	8.0	6.0	5.5	5.2	4.9	5.9	7.1	8.7	10.2	9.8	12.5	11.7	11.2	10.8	8.0	8.2	8.5	7.0	7.0	5.2	12.5	4.9	7.9
29	5.7	4.2	2.1	2.6	2.8	4.9	5.5	5.5	5.5	6.6	6.1	5.0	3.3	2.3	3.9	2.9	6.0	5.8	4.1	4.7	4.7	4.6	4.1	2.4	6.6	2.1	4.4
30	2.0	0.9	1.1	2.1	2.9	2.7	2.0	2.2	1.9	1.2	1.8	2.7	3.7	7.7	8.6	10.2	9.4	8.8	9.2	7.5	6.1	6.3	5.3	4.4	10.2	0.9	4.6
31	4.9	4.2	2.6	3.7	4.4	4.0	5.4	8.0	14.1	11.5	12.5	11.4	9.2	6.8	3.9	1.9	3.6	4.5	3.6	3.7	4.3	5.5	5.0	5.1	14.1	1.9	6.0
Max.	**14.9**	**13.2**	**14.6**	**16.2**	**16.4**	**14.5**	**12.4**	**13.4**	**14.1**	**16.1**	**15.5**	**12.9**	**14.6**	**16.8**	**17.5**	**16.3**	**13.3**	**18.0**	**17.0**	**18.0**	**16.9**	**14.8**	**14.8**	**15.7**	**18.0**		
Min.	**1.4**	**0.9**	**1.1**	**1.1**	**0.7**	**0.8**	**1.0**	**1.0**	**1.0**	**1.1**	**1.5**	**1.2**	**1.7**	**1.7**	**2.5**	**1.9**	**3.6**	**1.8**	**2.3**	**1.8**	**1.4**	**1.2**	**1.5**	**2.3**		**0.7**	
Avg.	**5.1**	**4.6**	**4.4**	**4.8**	**4.8**	**4.8**	**4.4**	**4.3**	**4.7**	**5.1**	**5.8**	**6.0**	**6.2**	**6.7**	**6.8**	**7.2**	**7.5**	**7.8**	**7.5**	**7.1**	**6.9**	**6.3**	**5.8**	**5.7**			**5.8**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	5.9	4.6	3.4	4.8	4.1	4.9	5.1	4.3	5.5	6.5	8.4	9.2	10.7	8.6	12.0	12.5	9.8	12.2	7.9	9.8	8.0	6.9	6.5	12.5	3.4	7.4
2	6.7	4.9	4.1	5.6	6.0	5.8	5.6	5.0	4.8	3.7	4.6	5.2	5.5	5.2	4.5	5.1	4.7	4.2	4.0	3.7	4.4	4.9	4.3	4.1	6.7	3.7	4.9
3	2.7	2.1	1.3	2.0	3.3	3.4	3.0	2.5	2.3	1.7	2.6	3.0	2.3	2.1	3.2	2.3	2.8	3.0	2.5	2.0	2.5	1.8	2.7	4.3	4.3	1.3	2.6
4	5.5	6.3	6.0	6.8	7.8	7.1	8.3	7.4	6.0	5.3	6.1	6.4	6.2	6.3	4.4	2.9	2.5	1.6	5.2	8.9	9.4	10.4	8.9	9.0	10.4	1.6	6.4
5	8.6	8.7	7.6	6.2	5.5	4.8	3.2	5.4	8.4	10.1	11.7	14.4	16.6	18.0	18.7	17.5	17.2	17.2	15.1	14.3	14.7	13.3	12.5	13.5	18.7	3.2	11.8
6	9.5	6.4	7.2	9.5	10.5	10.1	6.7	3.5	2.1	2.2	4.6	5.0	6.3	5.9	5.3	7.3	7.6	6.6	4.9	4.3	5.8	4.1	4.6	3.6	10.5	2.1	6.0
7	2.3	1.8	2.3	2.9	3.1	4.9	5.8	5.5	5.9	6.1	8.0	8.7	9.6	8.1	7.9	17.4	18.2	17.7	18.6	17.3	13.9	13.9	13.2	9.8	18.6	1.8	9.3
8	5.6	7.6	6.1	5.8	4.2	3.4	3.2	2.4	5.3	4.9	3.1	3.1	4.7	4.3	6.7	6.9	7.2	7.3	10.4	11.1	11.3	11.2	9.6	8.2	11.3	2.4	6.4
9	4.8	5.5	5.1	4.6	3.3	2.4	1.9	2.1	3.2	3.6	3.4	4.2	3.9	3.5	4.5	3.7	3.0	2.1	2.4	4.3	5.6	6.0	6.8	7.7	7.7	1.9	4.1
10	7.4	7.5	6.8	7.8	8.4	8.5	8.5	8.9	9.8	9.6	9.6	9.2	7.9	6.5	5.8	5.5	5.6	3.6	5.1	4.0	5.0	3.0	2.9	3.3	9.8	2.9	6.7
11	2.2	2.1	5.2	5.4	5.8	4.5	4.5	4.5	3.5	4.0	5.0	4.7	5.5	7.2	8.7	7.7	9.6	9.6	11.5	9.4	9.2	9.3	7.5	6.1	11.5	2.1	6.4
12	6.3	6.2	5.4	5.4	4.5	3.1	3.4	3.2	3.8	4.6	5.7	5.8	5.5	5.6	5.4	5.0	4.2	4.3	4.3	3.7	3.3	3.1	3.4	2.9	6.3	2.9	4.5
13	2.5	2.0	1.9	2.8	2.2	1.8	2.4	2.4	2.6	2.9	2.5	2.3	2.1	4.7	4.3	2.7	1.9	3.4	3.5	3.7	5.2	5.0	3.6	3.9	5.2	1.8	3.0
14	4.1	4.1	5.1	5.6	6.5	5.9	4.6	5.2	5.0	4.4	4.6	4.5	3.0	3.4	2.7	3.0	2.6	2.1	2.4	3.9	4.5	5.0	7.5	8.1	8.1	2.1	4.5
15	5.9	5.7	6.2	6.4	5.9	6.8	8.7	8.8	9.4	9.2	10.2	9.5	8.9	7.8	7.0	8.3	9.2	8.8	9.4	8.9	9.4	8.7	7.3	6.3	10.2	5.7	8.0
16	7.0	7.5	6.8	7.5	8.1	8.0	8.5	7.2	7.0	6.0	5.7	6.8	7.7	8.5	7.9	8.1	7.8	7.0	6.8	7.9	8.2	7.8	7.0	7.9	8.5	5.7	7.4
17	6.8	5.5	7.1	6.2	5.4	4.6	3.6	2.9	3.2	2.7	2.2	1.7	3.3	2.7	2.1	3.6	4.0	3.8	4.1	3.5	4.1	3.8	3.9	4.3	7.1	1.7	4.0
18	4.4	3.8	3.9	3.8	3.5	4.0	3.1	2.3	2.6	2.7	3.1	2.8	1.5	2.3	2.0	2.0	2.5	3.7	2.0	3.4	3.5	2.4	2.9	2.4	4.4	1.5	2.9
19	3.6	4.9	5.3	5.1	5.2	5.7	5.2	5.2	7.8	8.9	7.7	9.2	9.3	9.4	9.7	10.2	10.7	10.1	9.4	10.2	11.1	10.9	9.2	8.6	11.1	3.6	8.0
20	8.1	9.0	9.1	8.9	9.0	9.9	9.1	8.4	9.4	10.0	11.1	11.4	11.6	10.7	10.4	10.5	10.8	11.7	10.4	10.6	11.4	10.9	12.3	8.1	12.3	8.1	10.1
21	6.5	7.4	7.0	7.7	7.3	6.5	6.3	6.2	7.3	6.6	6.5	7.7	7.3	7.5	8.1	8.3	7.5	7.9	7.2	6.6	8.9	9.8	9.6	9.8	9.8	6.2	7.6
22	6.4	2.3	2.5	1.9	1.3	1.9	3.9	5.1	5.1	4.2	4.7	4.2	3.5	3.9	4.2	4.0	3.6	4.3	4.5	4.8	4.2	3.7	5.0	6.2	6.4	1.3	4.0
23	6.0	6.3	6.8	9.0	10.5	10.9	12.5	13.2	13.0	14.1	14.1	15.6	16.4	16.4	15.6	15.1	15.4	15.3	15.6	14.1	13.3	15.2	13.6	13.4	16.4	6.0	13.0
24	13.4	13.2	11.9	11.0	10.1	9.6	8.0	8.0	7.6	8.0	7.1	9.0	11.8	11.8	12.3	10.9	10.3	10.8	11.4	11.9	11.9	10.7	9.5	8.0	13.4	7.1	10.4
25	6.9	7.6	7.5	8.1	8.1	7.1	7.3	8.1	8.6	9.0	10.2	11.0	10.6	10.8	11.7	13.0	13.4	12.2	12.1	11.6	12.1	10.0	8.5	8.1	13.4	6.9	9.7
26	7.7	6.4	5.7	6.7	7.9	6.1	6.2	6.0	6.2	6.8	6.1	5.0	5.5	3.7	4.0	3.4	3.3	2.5	2.6	3.6	5.5	5.9	5.9	4.8	7.9	2.5	5.3
27	3.7	3.4	3.9	3.1	2.7	2.9	3.0	2.8	2.4	2.7	1.7	2.8	4.0	4.6	5.5	5.9	6.8	6.7	6.3	6.5	6.1	6.3	4.2	2.0	6.8	1.7	4.2
28	1.2	1.9	3.1	3.1	2.0	1.8	2.0	2.1	1.8	2.3	2.4	2.3	3.3	3.2	4.4	4.7	5.0	3.2	2.7	6.2	6.5	6.5	5.6	5.0	6.5	1.2	3.4
29	4.7	4.7	5.0	3.3	2.7	2.4	2.5	3.3	3.2	4.0	3.8	4.3	4.4	4.7	4.9	4.6	4.5	5.7	6.3	6.0	5.6	5.3	4.4	3.4	6.3	2.4	4.3
30	2.1	2.5	1.8	2.8	0.6	1.3	2.5	3.1	3.9	2.8	2.7	3.6	3.5	4.0	4.0	4.7	4.5	4.6	4.9	4.4	4.9	6.9	3.6	3.6	6.9	0.6	3.5
Max.	**13.4**	**13.2**	**11.9**	**11.0**	**10.5**	**10.9**	**12.5**	**13.2**	**13.0**	**14.1**	**14.1**	**15.6**	**16.6**	**18.0**	**18.7**	**17.5**	**18.2**	**17.7**	**18.6**	**17.3**	**14.7**	**15.2**	**13.6**	**13.5**	**18.7**		
Min.	**1.2**	**1.8**	**1.3**	**1.9**	**0.6**	**1.3**	**1.9**	**2.1**	**1.8**	**1.7**	**1.7**	**1.7**	**1.5**	**2.1**	**2.0**	**2.0**	**1.9**	**1.6**	**2.0**	**2.0**	**2.5**	**1.8**	**2.7**	**2.0**		**0.6**	
Avg.	**5.6**	**5.4**	**5.4**	**5.6**	**5.5**	**5.3**	**5.3**	**5.2**	**5.5**	**5.6**	**5.9**	**6.4**	**6.7**	**6.8**	**6.8**	**7.2**	**7.3**	**7.0**	**7.3**	**7.3**	**7.7**	**7.5**	**6.9**	**6.4**			**6.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.6	1.9	2.3	2.4	1.9	2.6	2.6	3.2	3.5	3.7	4.1	4.8	4.2	3.8	5.1	6.2	5.3	4.6	4.5	5.1	5.2	4.0	2.5	2.2	6.2	1.9	3.7
2	1.8	2.8	4.0	2.8	2.7	1.8	1.0	0.9	1.1	4.2	4.8	5.7	5.1	4.9	4.5	5.1	5.4	5.2	6.1	6.0	6.4	6.4	4.7	4.9	6.4	0.9	4.1
3	4.0	3.1	2.5	1.4	1.6	5.0	4.9	4.5	5.1	4.9	3.4	2.8	3.5	3.7	3.3	2.6	4.1	6.3	6.4	5.8	5.1	4.0	4.1	4.4	6.4	1.4	4.0
4	5.5	6.7	5.9	5.5	6.1	6.2	5.5	5.8	5.5	5.7	5.9	6.7	7.1	6.5	7.0	8.1	9.1	8.7	7.1	4.7	4.0	4.4	4.8	6.5	9.1	4.0	6.2
5	6.3	5.4	5.7	6.4	4.8	3.2	2.2	1.3	2.1	3.5	4.0	4.8	4.7	4.0	4.0	4.9	4.5	3.1	1.3	7.0	7.7	7.8	7.5	7.1	7.8	1.3	4.7
6	5.4	5.7	5.1	5.1	5.2	5.2	4.8	3.8	3.8	3.1	3.8	3.9	2.5	2.5	2.8	2.9	3.7	3.3	2.9	2.8	2.1	1.6	2.4	1.4	5.7	1.4	3.6
7	1.4	1.9	2.1	2.5	2.4	2.4	2.5	1.8	1.6	2.4	1.8	1.8	2.6	2.0	1.9	3.5	3.2	2.9	2.2	3.3	3.8	1.9	1.6	2.4	3.8	1.4	2.3
8	2.3	2.2	1.7	1.2	1.0	1.2	1.2	1.8	1.9	3.2	2.9	4.0	4.8	5.3	5.0	5.3	6.3	7.2	7.7	8.8	8.6	8.3	8.9	8.9	8.9	1.0	4.6
9	9.7	9.8	7.2	7.3	5.3	6.9	6.4	6.6	6.2	5.5	3.6	2.7	3.5	3.3	3.3	2.0	2.2	3.2	3.3	4.1	3.6	3.0	3.0	3.4	9.8	2.0	4.8
10	3.6	3.2	3.7	2.9	2.4	1.3	1.3	1.5	2.1	3.7	4.2	4.6	3.9	2.6	5.3	4.8	5.2	8.3	8.3	7.8	6.7	6.2	5.9	6.3	8.3	1.3	4.4
11	6.6	6.0	5.3	5.5	5.3	7.2	6.6	6.7	6.6	6.3	6.3	6.9	7.4	7.5	7.4	6.9	6.7	6.6	6.6	6.5	6.9	6.0	5.5	3.8	7.5	3.8	6.4
12	4.1	2.7	2.2	2.7	1.8	2.5	2.5	2.6	2.9	2.8	3.7	3.0	3.2	3.6	4.4	4.8	6.6	4.8	3.8	3.9	3.9	3.5	4.5	5.2	6.6	1.8	3.6
13	4.9	5.0	5.3	5.0	5.3	4.7	3.8	4.0	4.1	3.4	3.7	4.1	5.4	5.2	5.3	5.0	5.2	4.5	4.2	3.6	3.7	3.4	3.4	3.7	5.4	3.4	4.4
14	2.9	3.7	3.8	3.5	3.9	3.0	2.7	2.6	4.1	3.1	3.7	4.7	5.1	4.9	4.9	6.5	6.9	6.7	6.3	5.7	4.6	4.2	4.6	4.8	6.9	2.6	4.5
15	3.5	3.3	2.5	2.3	2.5	2.9	1.3	1.1	1.9	1.8	2.2	2.4	2.2	1.9	5.0	6.1	6.6	7.2	6.5	6.0	6.0	6.4	5.6	4.4	7.2	1.1	3.8
16	3.1	3.6	1.8	3.0	3.8	4.6	4.8	5.4	5.7	5.7	7.0	6.9	6.7	5.9	5.7	5.8	6.6	6.0	6.0	6.7	7.8	8.2	7.7	6.0	8.2	1.8	5.6
17	5.9	5.6	4.6	4.7	4.7	3.8	3.7	3.8	4.4	4.3	3.2	3.2	2.0	1.7	3.6	4.0	6.4	7.8	9.0	8.5	6.7	6.2	6.7	7.1	9.0	1.7	5.1
18	6.6	5.8	7.6	6.7	7.8	6.0	5.9	4.1	3.2	3.0	2.9	2.4	1.8	3.5	3.2	4.8	5.2	4.5	4.9	3.5	2.0	1.6	1.1	1.2	7.8	1.1	4.1
19	2.2	3.2	3.0	2.8	2.7	2.7	2.8	2.5	3.3	3.9	3.7	3.2	3.1	3.4	2.6	2.1	2.4	2.0	3.9	3.3	2.6	1.8	2.7	2.5	3.9	1.8	2.9
20	1.8	1.7	1.5	0.8	0.4	0.9	0.7	1.1	1.2	1.2	2.0	3.2	1.6	1.3	2.0	3.2	3.5	3.6	4.9	5.6	5.1	6.3	7.1	4.4	7.1	0.4	2.7
21	4.4	1.7	1.4	1.1	1.9	2.2	2.8	1.4	2.5	3.3	3.0	2.8	1.8	4.2	5.0	6.4	6.9	6.9	6.5	5.6	5.1	5.0	5.3	4.3	6.9	1.1	3.8
22	3.8	5.5	6.0	5.7	6.2	6.6	6.7	6.4	6.8	6.5	6.3	6.0	6.5	6.4	6.5	6.0	5.4	5.4	5.8	5.4	5.1	3.9	4.0	5.2	6.8	3.8	5.8
23	4.5	4.7	4.3	2.7	1.6	1.2	1.6	1.5	2.8	3.1	3.9	3.7	4.5	5.0	6.2	7.3	9.1	10.8	11.3	9.8	10.5	9.1	9.4	10.9	11.3	1.2	5.8
24	10.8	9.6	10.9	12.7	12.9	11.8	11.6	9.4	7.2	6.2	6.7	6.1	5.2	3.7	5.3	5.8	6.6	6.2	3.8	3.0	2.7	2.2	5.9	6.2	12.9	2.2	7.2
25	6.9	6.8	4.8	3.5	6.6	9.9	3.0	8.3	8.7	9.8	10.2	8.6	5.9	6.6	6.7	5.7	6.2	5.1	4.3	6.2	4.4	3.7	2.6	2.0	10.2	2.0	6.1
26	3.2	2.2	1.0	1.1	3.0	3.7	3.6	4.8	5.2	5.2	5.2	4.1	3.8	3.8	3.3	2.4	2.7	3.4	4.5	5.9	6.5	4.0	3.1	3.7	6.5	1.0	3.7
27	1.8	3.2	3.9	3.8	3.6	4.3	3.7	4.7	4.8	5.1	5.7	5.1	5.1	6.3	7.1	6.8	6.0	5.9	8.4	6.5	6.2	4.4	4.6	3.8	8.4	1.8	5.0
28	3.9	5.0	5.1	5.3	4.8	4.9	4.4	5.1	4.9	4.1	5.1	6.0	4.6	5.7	6.6	6.4	6.9	6.9	7.8	7.7	8.0	8.5	7.1	4.9	8.5	3.9	5.8
29	3.8	2.9	3.6	3.9	4.7	5.2	6.6	7.1	6.0	6.3	6.0	5.8	6.7	6.9	6.7	6.8	5.9	5.7	5.9	5.1	6.2	6.5	4.7	4.1	7.1	2.9	5.5
30	4.8	4.1	3.9	4.0	3.2	2.5	2.7	2.5	1.5	1.9	1.2	1.4	2.4	3.3	2.1	3.7	5.2	5.0	5.2	5.0	5.1	4.0	4.5	5.0	5.2	1.2	3.5
31	3.7	3.2	3.1	3.1	3.5	3.1	3.9	3.9	4.5	5.4	6.1	6.3	6.2	6.5	7.0	6.8	7.4	8.4	6.9	7.4	9.8	11.7	12.5	12.4	12.5	3.1	6.4
Max.	**10.8**	**9.8**	**10.9**	**12.7**	**12.9**	**11.8**	**11.6**	**9.4**	**8.7**	**9.8**	**10.2**	**8.6**	**7.4**	**7.5**	**7.4**	**8.1**	**9.1**	**10.8**	**11.3**	**9.8**	**10.5**	**11.7**	**12.5**	**12.4**	**12.9**		
Min.	**1.4**	**1.7**	**1.0**	**0.8**	**0.4**	**0.9**	**0.7**	**0.9**	**1.1**	**1.2**	**1.2**	**1.4**	**1.6**	**1.3**	**1.9**	**2.0**	**2.2**	**2.0**	**1.3**	**2.8**	**2.0**	**1.6**	**1.1**	**1.2**		**0.4**	
Avg.	**4.4**	**4.3**	**4.0**	**3.9**	**4.0**	**4.2**	**3.8**	**3.9**	**4.0**	**4.3**	**4.4**	**4.4**	**4.3**	**4.4**	**4.8**	**5.1**	**5.6**	**5.7**	**5.7**	**5.7**	**5.5**	**5.1**	**5.1**	**4.9**			**4.6**

Total Hours In Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.1	10.5	9.7	11.9	10.7	10.7	13.7	13.6	13.6	15.4	16.9	15.7	15.6	12.6	12.5	14.2	13.9	13.6	11.9	13.4	14.7	14.5	14.0	14.4	16.9	9.7	13.3
2	12.8	13.3	13.4	16.4	14.0	14.7	15.8	15.3	15.9	17.1	17.2	16.2	17.6	17.1	15.3	16.9	17.9	15.6	14.7	12.9	12.0	11.7	10.8	8.5	17.9	8.5	14.7
3	9.4	9.3	8.6	8.9	7.0	6.8	7.5	7.6	7.7	7.9	8.3	11.2	10.8	12.0	13.7	14.4	15.4	15.2	14.1	12.5	11.5	11.4	11.0	13.7	15.4	6.8	10.6
4	13.7	15.1	13.4	13.1	15.0	13.6	11.7	11.8	13.1	13.7	14.0	14.1	12.8	11.0	11.3	10.4	11.1	12.9	13.4	12.7	12.2	11.1	10.7	12.4	15.1	10.4	12.7
5	11.2	11.3	12.0	12.4	13.5	9.6	7.4	7.4	6.2	10.1	11.3	10.6	12.2	13.9	12.6	12.6	13.8	12.0	12.6	10.4	10.5	13.1	13.5	14.2	14.2	6.2	11.4
6	13.1	12.6	11.4	10.5	11.1	7.3	8.6	10.8	10.3	12.5	12.3	11.8	12.3	12.7	12.4	11.8	11.7	12.4	10.7	12.3	11.7	9.8	8.7	7.9	13.1	7.3	11.1
7	6.5	6.1	5.7	7.3	10.9	9.4	7.4	8.2	10.4	10.6	11.2	11.3	10.8	11.5	11.8	11.8	10.5	11.3	12.0	10.6	9.8	8.0	7.0	5.7	12.0	5.7	9.4
8	5.4	6.2	4.2	3.8	6.7	4.5	5.7	7.3	7.0	6.9	7.5	8.0	8.2	7.8	7.2	5.4	7.0	6.8	7.1	7.6	6.2	5.5	6.8	7.4	8.2	3.8	6.5
9	7.2	5.9	5.4	5.6	5.8	6.1	5.6	7.1	6.1	6.0	3.3	4.4	3.3	2.0	2.5	1.8	1.6	4.6	4.7	4.3	4.2	3.7	3.2	2.1	7.2	1.6	4.4
10	2.8	4.5	4.4	3.7	3.5	2.4	2.0	1.0	1.0	2.2	3.0	2.4	3.0	2.9	3.6	3.7	4.1	4.5	5.0	4.4	4.5	4.3	4.4	4.3	5.0	1.0	3.4
11	3.8	2.3	2.7	4.0	2.7	1.7	2.2	2.7	2.8	2.8	2.3	1.3	1.8	2.5	2.2	3.2	3.1	4.1	4.3	3.4	2.1	2.0	2.2	2.6	4.3	1.3	2.7
12	3.1	2.3	4.7	3.6	3.5	3.0	3.2	2.1	1.9	1.7	1.9	2.3	4.0	4.6	2.2	3.9	3.6	4.1	5.5	5.2	6.7	3.3	6.9	5.7	6.9	1.7	3.7
13	2.9	0.7	1.6	3.0	3.3	2.5	2.0	1.6	1.7	1.7	2.4	4.0	3.7	3.9	4.0	4.4	4.2	5.8	4.9	4.7	3.9	6.8	8.8	9.8	9.8	0.7	3.8
14	10.0	10.9	11.1	6.8	4.0	3.4	2.0	5.5	6.5	5.6	6.0	4.9	5.1	4.8	4.9	3.7	3.6	4.2	4.6	2.6	2.3	3.8	4.4	4.7	11.1	2.0	5.2
15	6.2	6.4	6.7	8.3	7.9	11.0	9.5	10.1	9.8	10.7	8.5	10.4	9.5	7.9	8.9	7.4	6.5	6.8	6.6	5.9	5.2	6.0	4.2	3.7	11.0	3.7	7.7
16	3.5	3.2	2.1	1.6	1.3	1.6	1.2	1.1	1.9	2.7	2.0	2.2	2.0	2.0	1.5	2.0	1.5	2.2	4.8	4.7	4.9	5.1	4.5	4.3	5.1	1.1	2.7
17	4.3	4.3	4.4	4.3	5.4	6.5	5.6	6.1	4.5	4.7	7.9	8.5	7.7	8.1	7.1	8.5	9.3	11.7	12.5	11.7	12.0	12.1	11.5	12.1	12.5	4.3	7.9
18	12.1	11.9	13.6	14.0	14.3	15.5	16.3	17.3	16.7	17.0	17.9	18.5	18.6	18.7	20.2	21.6	20.7	21.4	20.1	21.3	21.5	20.1	19.5	20.6	21.6	11.9	17.9
19	20.0	19.9	20.4	20.0	17.9	15.2	11.3	10.3	13.6	13.0	11.8	13.3	14.8	14.9	16.4	16.4	17.4	16.8	15.1	14.9	15.7	13.4	12.5	10.4	20.4	10.3	15.2
20	9.7	7.0	6.5	6.4	7.0	8.2	7.5	6.9	9.0	8.2	7.3	6.0	6.2	6.9	8.0	9.2	9.6	9.9	11.0	10.8	10.7	8.2	8.0	7.2	11.0	6.0	8.1
21	7.0	8.0	9.4	9.5	8.6	9.9	10.0	8.8	6.9	7.8	7.8	9.5	9.7	9.9	9.8	8.3	8.6	8.0	7.5	7.8	7.4	6.9	9.1	8.5	10.0	6.9	8.5
22	8.6	8.8	9.3	10.7	11.1	9.3	8.3	8.8	8.5	8.2	8.6	9.0	9.0	9.0	9.0	9.0	9.5	9.3	8.6	8.7	9.0	8.0	7.4	6.1	11.1	6.1	8.8
23	4.5	3.7	2.9	1.6	1.2	2.2	1.2	0.7	1.4	2.4	4.0	4.9	6.0	5.6	6.4	7.0	7.0	7.2	7.3	6.6	6.8	6.6	6.9	6.4	7.3	0.7	4.6
24	7.2	5.9	8.2	8.8	7.5	7.5	7.7	7.3	6.4	6.8	7.6	6.6	6.9	7.1	4.7	4.0	4.6	2.6	4.4	2.8	2.3	2.0	1.8	3.7	8.8	1.8	5.6
25	3.6	2.4	2.1	2.2	3.4	4.7	3.3	2.2	1.9	2.3	2.4	2.6	3.4	3.5	5.2	5.0	6.1	7.7	7.5	6.2	4.8	6.4	3.9	3.9	7.7	1.9	4.0
26	4.6	5.0	4.3	5.0	3.0	3.2	2.7	3.1	3.7	3.1	3.8	5.4	5.9	6.2	5.8	5.7	5.7	6.6	6.8	5.6	5.1	3.6	3.8	4.1	6.8	2.7	4.7
27	6.1	6.4	5.9	5.1	3.4	4.3	3.1	1.9	3.2	3.6	3.2	5.2	6.5	5.8	5.1	3.9	4.0	4.8	3.7	2.5	2.6	2.0	1.4	1.4	6.5	1.4	4.0
28	1.5	3.3	2.5	2.4	1.3	1.4	0.8	1.8	1.8	1.4	1.6	2.3	2.3	3.2	4.5	3.9	3.3	3.5	4.9	6.6	7.3	8.3	5.7	6.1	8.3	0.8	3.4
29	5.5	5.8	6.9	7.5	8.3	7.4	7.8	9.7	9.9	9.9	9.7	9.6	10.7	10.1	10.3	10.2	8.9	9.5	9.4	8.4	6.9	7.3	8.1	7.6	10.7	5.5	8.6
30	5.9	5.8	6.1	6.0	6.6	7.8	7.8	8.3	7.1	6.7	5.8	5.4	4.6	4.6	4.3	5.1	4.2	3.5	3.1	3.6	3.8	4.4	5.1	4.8	8.3	3.1	5.4
31	4.0	4.3	4.1	3.6	3.8	3.8	3.9	3.6	3.2	2.9	3.9	3.9	3.2	2.9	2.8	2.9	3.0	3.0	1.5	1.3	1.1	1.7	2.3	2.0	4.3	1.1	3.0
Max.	**20.0**	**19.9**	**20.4**	**20.0**	**17.9**	**15.5**	**16.3**	**17.3**	**16.7**	**17.1**	**17.9**	**18.5**	**18.6**	**18.7**	**20.2**	**21.6**	**20.7**	**21.4**	**20.1**	**21.3**	**21.5**	**20.1**	**19.5**	**20.6**	**21.6**		
Min.	**1.5**	**0.7**	**1.6**	**1.6**	**1.2**	**1.4**	**0.8**	**0.7**	**1.0**	**1.4**	**1.6**	**1.3**	**1.8**	**2.0**	**1.5**	**1.8**	**1.5**	**2.2**	**1.5**	**1.3**	**1.1**	**1.7**	**1.4**	**1.4**		**0.7**	
Avg.	**7.3**	**7.2**	**7.2**	**7.3**	**7.2**	**6.9**	**6.5**	**6.8**	**6.9**	**7.3**	**7.5**	**7.8**	**8.0**	**7.9**	**7.9**	**8.0**	**8.1**	**8.4**	**8.4**	**7.9**	**7.7**	**7.5**	**7.4**	**7.3**			**7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.8	0.8	1.3	2.0	1.8	2.1	2.0	1.3	2.6	3.7	4.8	4.4	3.9	3.5	3.5	4.0	4.5	4.6	4.5	5.1	5.0	5.4	5.9	4.9	5.9	0.8	3.4
2	4.9	4.6	4.6	4.4	3.7	3.5	3.6	4.3	3.4	3.1	3.2	4.0	5.2	3.7	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5.2	0.2	2.5
3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2								0.2	1.0	14.6	1.5	0.2	0.2	0.2	0.2	0.2	14.6	0.2	1.2
4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.4	0.2	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	4.9	5.4	5.2	5.6	4.4	4.5	3.4	4.5	5.5	3.9	1.8	1.9	1.5	5.6	0.2	2.3
6	1.0	2.9	3.5	1.2	1.4	2.2	2.5	3.5	4.0	5.5	5.0	5.1	5.4	5.5	6.5	5.5	5.5	6.7	5.6	3.9	3.4	3.5	3.1	2.7	6.7	1.0	4.0
7	3.3	5.2	5.7	5.6	6.1	6.9	6.5	10.8	10.9	14.6	14.6	15.6	18.2	19.7	20.1	21.8	22.4	20.6	21.8	22.0	22.1	21.5	22.7	23.7	23.7	3.3	15.1
8	21.1	18.9	15.9	14.7	12.0	13.0	14.0	12.7	11.8	12.0	12.5	13.0	11.6	10.0	10.1	9.8	9.2	9.5	6.8	7.9	6.4	5.8	6.7	7.5	21.1	5.8	11.4
9	7.4	6.3	6.6	6.3	6.2	7.8	7.7	6.7	5.2	5.2	5.3	4.7	4.8	5.1	5.7	5.2	4.9	3.9	2.3	2.3	2.9	4.2	3.5	2.1	7.8	2.1	5.1
10	1.5	2.3	2.9	1.9	2.2	2.0	1.9	1.5	1.5	2.4	2.7	4.3	5.8	8.0	11.0	12.3	12.2	10.6	9.6	10.9	14.0	16.2	14.9	14.5	16.2	1.5	7.0
11	14.2	15.1	15.7	16.4	18.0	18.2	18.8	19.4	20.1	19.5	20.8	20.5	22.7	24.2	22.6	23.7	23.9	27.7	27.1	22.4	22.7	23.7	24.9	23.2	27.7	14.2	21.1
12	21.4	20.8	20.2	18.2	13.4	8.9	5.8	4.6	4.3	4.5	3.8	3.5	5.2	7.0	6.6	7.0	6.9	6.7	8.1	8.6	8.7	8.7	8.2	6.9	21.4	3.5	9.1
13	5.1	4.3	4.4	4.6	4.6	4.9	5.6	7.2	6.4	5.8	5.1	4.7	5.1	5.6	5.7	4.1	4.1	5.1	4.4	4.3	4.8	4.7	3.7	3.3	7.2	3.3	4.9
14	2.6	2.0	2.8	2.8	3.4	3.3	2.8	1.6	1.7	0.8	0.8	1.4	1.6	2.1	2.1	2.4	4.9	4.8	6.3	6.3	6.6	6.9	8.7	7.1	8.7	0.8	3.6
15	7.8	5.0	7.4	8.4	7.8	8.1	7.4	7.1	6.8	5.6	8.7	9.6	10.2	10.3	11.5	10.1	9.5	10.7	9.5	8.6	7.0	4.7	5.5	6.6	11.5	4.7	8.1
16	8.4	6.7	5.9	6.2	6.7	5.7	5.6	5.7	4.2	3.3	3.2	4.6	5.7	5.7	5.4	6.2	7.0	6.7	5.9	6.9	8.7	7.7	7.7	5.1	8.7	3.2	6.0
17	2.9	1.8	2.1	1.2	3.9	4.3	6.9	6.3	4.8	4.9	4.5	4.9	5.1	6.3	5.6	4.9	3.9	3.0	3.6	3.2	4.4	5.2	5.1	5.3	6.9	1.2	4.3
18	6.3	6.6	8.6	7.3	8.7	9.9	12.5	12.2	10.2	14.2	17.1	19.9	22.8	21.3	22.1	21.4	20.4	18.3	17.1	16.2	14.6	11.2	6.5	4.4	22.8	4.4	13.7
19	5.5	6.5	6.2	6.9	6.6	6.2	5.2	8.7	5.5	5.5	7.8	8.6	10.0	10.5		12.5	13.2	13.3	13.4	12.3	12.6	10.2	11.9	10.9	13.4	5.2	9.1
20	10.6	12.6	12.7	13.4	12.1	10.2	11.0	10.7	10.7	10.2	9.8	8.0	8.2	7.2	7.0	5.8	5.9	5.4	6.1	6.1	3.6	4.3	3.0	7.3	13.4	3.0	8.4
21	4.5	3.0	3.1	4.7	6.3	6.9	6.9	7.6	8.8	7.9	8.7	9.3	10.0	9.7	8.9	7.9	7.5	7.6	6.7	5.8	6.3	4.8	4.8	3.6	10.0	3.0	6.7
22	4.5	3.9	4.8	3.5	3.0	3.2	3.3	2.2	1.1	1.1	2.9	5.7	6.2	7.3	10.0	11.0	12.6	13.2	13.2	13.2	10.1	9.6	12.4	8.2	13.2	1.1	6.9
23	5.4	4.1	2.3	4.5	3.1	3.5	3.5	2.7	2.4	4.0	4.2	4.3	5.2	7.1	8.4	9.0	8.2	7.0	7.7	8.5	7.7	7.7	7.6	6.0	9.0	2.3	5.6
24	6.2	6.9	4.4	7.1	8.4	6.8	6.6	6.7	7.1	7.9	8.8	7.5	7.2	6.2	8.3	6.7	6.9	5.8	6.5	5.2	3.6	4.4	5.8	7.3	8.8	3.6	6.6
25	6.9	7.6	7.9	5.4	6.0	7.6	9.2	8.7	8.4	8.9	7.3	6.3	7.4	6.8	6.7	7.1	6.6	8.0	8.2	7.6	7.6	7.3	7.1	7.8	9.2	5.4	7.4
26	6.5	6.4	5.4	6.0	5.9	3.4	2.6	1.7	2.0	2.3	3.0	4.5	3.4	2.7	1.9	1.6	1.4	3.1	4.5	5.2	5.0	4.6	5.5	6.7	6.7	1.4	4.0
27	7.2	7.7	8.2	5.8	3.1	2.6	2.2	1.4	2.1	1.9	2.8	2.5	4.5	4.6	4.7	5.3	6.8	7.8	9.2	12.5	15.8	18.6	19.7	19.1	19.7	1.4	7.3
28	18.3	18.3	19.8	18.8	16.2	17.4	15.5	13.4	12.1	9.9	8.8	9.4	9.2	8.2	6.1	4.6	3.0	3.5	3.3	2.5	2.2	1.6	2.6	2.8	19.8	1.6	9.5
29	5.4	6.5	6.9	7.1	6.7	5.4	5.3	3.9	3.4	2.8	1.9	3.2	2.0	4.5	5.1	5.0	5.0	3.4	3.4	3.8	4.4	5.4	5.3	4.9	7.1	1.9	4.6
30	6.1	5.7	6.6	5.7	6.0	6.4	7.7	7.7	8.3	6.6	7.1	8.4	9.4	7.2	6.4	4.5	4.3	5.0	6.4	6.0	2.9	1.8	4.2	3.0	9.4	1.8	6.0
Max.	**21.4**	**20.8**	**20.2**	**18.8**	**18.0**	**18.2**	**18.8**	**19.4**	**20.1**	**19.5**	**20.8**	**20.5**	**22.8**	**24.2**	**22.6**	**23.7**	**23.9**	**27.7**	**27.1**	**22.4**	**22.7**	**23.7**	**24.9**	**23.7**	**27.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.6**	**6.4**	**6.6**	**6.4**	**6.1**	**6.0**	**6.1**	**6.0**	**5.9**	**6.0**	**6.5**	**7.0**	**7.6**	**7.8**	**7.8**	**7.5**	**7.5**	**8.0**	**7.6**	**7.4**	**7.3**	**7.1**	**7.3**	**6.9**			**6.9**

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	5.1	4.7	3.4	3.7	5.4	4.8	3.8	3.2	1.5	2.6	3.0	2.5	4.8	7.8	9.1	10.3	9.9	12.1	11.0	12.3	10.1	11.2	12.9	12.9	1.5	6.7
2	12.1	13.4	14.3	15.8	16.0	14.9	14.0	13.2	12.1	11.8	13.7	14.6	14.6	12.4	12.1	12.0	12.3	11.7	12.0	11.5	12.0	10.3	10.3	9.9	16.0	9.9	12.8
3	10.8	11.4	11.5	11.9	11.0	9.1	9.2	7.8	8.7	9.3	11.0	10.9	10.9	9.5	9.6	10.3	10.3	11.1	6.4	4.4	1.6	1.3	1.0	1.3	11.9	1.0	8.4
4	1.9	1.2	1.5	2.9	4.3	4.7	7.0	6.6	11.6	12.6	16.1	16.7	18.2	18.0	17.7	16.7	14.9	13.4	12.8	13.7	12.4	13.0	13.7	12.4	18.2	1.2	11.0
5	11.7	12.0	12.7	13.1	14.4	14.5	12.9	11.2	9.3	9.7	8.3	6.7	2.9	6.7	13.4	14.6	15.4	15.4	17.4	14.1	11.5	8.4	10.6	12.1	17.4	2.9	11.6
6	11.1	10.0	11.6	12.7	13.2	13.4	13.1	16.0	15.1	15.2	12.5	10.5	12.9	13.3	11.4	11.7	12.0	11.0	10.3	9.0	6.1	7.2	8.3	8.1	16.0	6.1	11.5
7	7.8	6.3	7.1	5.8	6.5	7.3	7.1	7.6	10.9	12.3	13.2	13.6	14.1	16.0	16.5	15.8	15.5	16.5	17.9	17.0	15.1	16.4	13.1	11.3	17.9	5.8	12.1
8	11.7	11.1	10.0	13.5	14.8	13.4	10.1	8.8	9.6	12.1	12.9	12.4	13.5	12.6	12.4	12.0	11.9	9.6	7.8	6.6	7.7	8.6	10.8	6.6	14.8	6.6	10.8
9	7.1	7.7	6.6	4.6	2.3	1.7	1.3	1.5	1.8	1.6	1.1	0.9	1.0	1.2	2.2	2.5	4.1	5.2	5.5	3.2	3.3	4.3	6.1	6.3	7.7	0.9	3.5
10	6.5	7.1	7.5	6.9	6.0	7.7	8.8	7.7	7.8	7.8	8.3	8.9	7.6	8.3	10.1	8.3	7.8	7.5	6.9	4.9	4.1	3.7	3.1	3.2	10.1	3.1	6.9
11	2.9	3.5	3.7	3.0	3.3	2.5	2.5	1.5	1.4	2.1	3.0	3.8	4.4	6.5	7.3	8.0	8.9	8.2	8.4	7.2	7.8	8.3	9.7	11.1	11.1	1.4	5.4
12	10.3	9.7	9.0	6.7	6.2	6.7	5.4	2.5	1.6	1.1	1.1	1.2	1.6	2.5	2.5	2.8	2.8	2.2	2.6	4.3	6.5	4.5	5.0	4.5	10.3	1.1	4.3
13	5.0	5.1	4.5	4.8	5.0	4.7	5.2	8.3	6.7	7.1	6.3	6.7	7.4	7.3	6.6	6.7	7.7	8.6	9.9	8.0	8.3	8.6	8.6	9.4	9.9	4.5	6.9
14	8.0	6.7	8.1	9.9	8.3	6.8	6.3	6.5	5.2	4.0	3.5	4.4	4.6	3.6	3.9	3.0	5.2	5.3	4.5	5.3	5.7	5.1	4.2	2.9	9.9	2.9	5.5
15	1.9	2.3	2.5	2.0	1.4	1.0	0.9	1.7	3.3	1.9	1.6	1.7	1.4	1.8	1.5	1.6	1.4	1.4	1.8	2.9	3.3	2.9	2.7	2.6	3.3	0.9	2.0
16	3.0	3.4	3.3	2.8	2.9	3.8	5.1	6.0	6.0	5.8	5.2	5.9	6.4	7.8	8.6	9.4	8.9	8.0	8.0	8.9	9.9	10.4	8.8	7.4	10.4	2.8	6.5
17	6.7	6.8	7.7	7.8	8.4	7.8	6.8	6.6	6.5	6.9	6.7	5.5	5.3	5.8	6.3	6.1	5.4	4.5	5.7	5.2	4.8	4.6	5.0	4.8	8.4	4.5	6.2
18	3.8	3.4	3.3	3.0	2.7	2.6	2.8	2.6	2.5	2.4	2.3	2.4	2.2	2.4	3.4	4.3	4.8	4.9	5.6	6.3	6.0	6.7	6.7	5.5	6.7	2.2	3.9
19	5.7	5.6	4.1	4.3	3.9	2.1	2.3	1.7	1.3	1.6	1.8	1.7	1.0	0.5	1.2	1.3	1.5	1.8	1.6	3.0	2.8	3.2	3.2	3.2	5.7	0.5	2.5
20	2.0	2.3	1.8	2.6	2.2	2.3	2.9	2.6	2.4	2.1	3.0	2.9	4.6	6.2	5.6	6.5	6.6	5.4	7.2	8.0	9.5	10.0	8.4	9.8	10.0	1.8	4.9
21	9.5	10.0	8.6	9.8	10.1	12.2	15.8	8.5	7.4	5.2	4.1	5.0	5.0	6.6	8.6	6.4	4.6	3.4	1.9	2.1	2.9	3.5	4.1	4.2	15.8	1.9	6.6
22	4.4	4.6	5.5	5.4	5.6	4.6	4.3	3.8	2.9	1.4	2.1	2.1	1.4	1.9	2.5	3.2	3.5	2.4	1.3	1.7	1.5	2.0	2.1	2.0	5.6	1.3	3.0
23	2.0	2.1	1.5	1.6	2.1	1.9	1.6	1.8	2.0	2.2	1.8	2.6	2.6	3.7	3.7	3.4	1.9	4.7	6.9	6.2	4.6	2.6	2.8	2.5	6.9	1.5	2.9
24	2.2	3.0	2.5	2.5	4.1	4.5	3.9	3.4	3.5	5.4	5.3	6.9	5.2	7.2	6.8	4.6	2.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.2	0.2	3.1
25	0.2	0.2	8.6	15.6	16.3	20.2	23.6	23.0	24.9	27.7	28.7	28.8	28.2	27.5	25.7	25.0	23.9	24.4	23.0	20.9	13.7	7.5	5.7	7.4	28.8	0.2	18.8
26	4.6	4.8	4.1	4.1	4.2	5.8	4.7	3.4	5.2	5.3	5.2	4.7	5.0	4.9	4.8	4.8	4.3	4.4	4.0	5.2	7.6	9.7	9.8	9.1	9.8	3.4	5.4
27	7.1	8.7	9.9	10.1	9.0	7.7	5.7	6.8	3.7	2.8	3.6	5.0	2.4	3.1	9.3	9.4	7.7	8.0	7.2	5.7	3.9	2.3	4.0	4.8	10.1	2.3	6.2
28	3.9	4.9	3.7	2.0	1.8	1.0	1.9	2.4	3.7	4.1	4.0	4.3	4.9	4.1	3.9	4.6	4.7	4.4	6.4	5.8	6.4	8.2	9.9	13.8	13.8	1.0	4.8
29	14.9	16.8	18.0	19.2	19.2	18.3	20.5	22.8	23.3	25.0	21.6	22.8	24.5	24.4	20.0	21.4	19.7	15.9	13.1	13.1	20.6	20.2	19.6	17.8	25.0	13.1	19.7
30	7.7	5.1	9.1	9.9	9.5	12.1	8.4	6.1	6.6	6.6	6.0	4.6	3.5	1.8	3.5	1.8	1.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	12.1	0.2	4.4
31	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.6	8.4	6.9	4.7	5.1	3.6	5.1	3.3	1.5	5.2	5.0	5.4	8.4	0.2	2.6
Max.	**14.9**	**16.8**	**18.0**	**19.2**	**19.2**	**20.2**	**23.6**	**23.0**	**24.9**	**27.7**	**28.7**	**28.8**	**28.2**	**27.5**	**25.7**	**25.0**	**23.9**	**24.4**	**23.0**	**20.9**	**20.6**	**20.2**	**19.6**	**17.8**	**28.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**1.0**	**0.5**	**1.2**	**1.3**	**1.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.2**	**6.3**	**6.7**	**7.0**	**7.1**	**7.1**	**7.1**	**6.7**	**6.8**	**6.9**	**7.0**	**7.2**	**7.2**	**7.8**	**8.3**	**8.1**	**8.0**	**7.5**	**7.5**	**7.1**	**6.9**	**6.8**	**6.9**	**6.9**			**7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.0	5.0	4.7	5.4	3.9	2.6	4.4	2.8	0.8	0.6	0.2	0.2	0.6	1.3	1.2	1.2	1.8	0.5	0.2	0.2	0.2	0.2	0.2	0.2	6.0	0.2	1.9
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
4	0.2	0.2	0.2	7.5	15.6	15.8	15.9	15.7	14.8	15.2	15.0	13.2	13.0	14.1	12.2	10.9	11.1	11.9	10.8	9.4	8.9	9.4	9.5	8.8	15.9	0.2	10.8
5	9.1	7.8	7.2	7.6	8.1	6.0	3.6	2.5	3.3	3.9	4.5	3.7	2.9	3.4	4.4	3.8	4.0	6.2	6.7	6.0	5.8	6.2	7.6	6.3	9.1	2.5	5.4
6	8.6	11.4	12.3	11.6	12.5	12.2	12.5	17.2	16.9	17.3	20.7	19.6	20.4	24.8	22.9	16.3	20.3	21.7	19.7	18.1	19.1	18.8	16.2	11.0	24.8	8.6	16.8
7	8.8	8.7	9.7	12.1	12.0	14.7	15.7	13.9	13.1	14.1	13.8	15.4	14.9	13.8	11.6	9.2	10.5	9.1	9.0	10.2	8.5	9.9	8.4	1.6	15.7	1.6	11.2
8	0.2	0.2	0.2	0.2	0.2	0.2	0.4	20.8	22.9	22.5	24.6	26.5	23.3	16.9	15.7	16.2	16.7	15.5	13.6	13.1	13.3	11.7	7.9	8.5	26.5	0.2	12.1
9	10.6	8.2	8.9	8.4	7.9	8.1	8.8	8.7	7.8	7.6	7.5	7.7	7.3	8.8	11.1	10.5	10.3	10.2	7.1	7.2	7.1	3.4	2.1	1.8	11.1	1.8	7.8
10	2.8	3.9	4.0	4.5	4.6	5.3	4.9	4.7	5.3	4.1	5.9	5.1	6.0	7.1	7.9	7.9	6.1	4.9	3.8	2.9	4.2	3.3	4.7	4.0	7.9	2.8	4.9
11	3.7	2.8	3.0	2.9	3.8	4.1	3.7	3.8	3.5	2.7	3.1	3.6	4.2	3.7	3.0	3.2	4.5	4.5	3.6	2.5	2.0	1.1	1.4	1.1	4.5	1.1	3.2
12	1.1	1.2	1.3	0.5	0.6	1.0	1.2	1.2	1.0	1.5	1.5	1.3	1.2	1.5	2.1	3.5	4.0	4.7	5.3	6.0	5.8	4.9	5.9	6.2	6.2	0.5	2.7
13	7.7	7.4	6.9	6.6	6.1	6.5	7.8	9.2	9.1	8.3	8.6	8.0	6.5	4.3	5.4	3.8	1.3	2.4	3.6	5.9	6.0	5.7	6.8	7.7	9.2	1.3	6.3
14	8.1	6.9	7.1	7.7	7.2	6.0	6.7	4.5	2.6	2.4	2.0	2.4	2.5	2.6	2.1	1.1	1.9	2.5	3.3	2.5	0.3	0.2	0.2	0.2	8.1	0.2	3.5
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.1	6.4	7.4	9.9	10.4	10.5	10.5	7.7	8.8	10.5	0.2	3.4
16	11.6	13.4	14.0	14.1	15.3	14.5	15.7	16.1	16.1	16.4	17.2	17.1	16.9	16.6	17.2	16.4	14.6	14.1	17.8	16.2	16.7	15.1	14.9	14.9	17.8	11.6	15.5
17	12.5	13.6	15.0	14.8	15.7	15.6	14.3	13.0	13.6	14.2	14.3	13.3	14.8	13.7	13.6	14.1	13.8	12.4	9.1	9.1	10.8	11.2	9.7	9.7	15.7	9.1	13.0
18	8.5	7.6	6.5	5.6	5.2	4.4	4.4	4.2	4.2	4.0	3.3	3.9	3.8	3.5	3.2	2.8	2.5	2.7	2.5	1.6	0.9	0.9	1.4	1.7	8.5	0.9	3.7
19	1.6	1.7	2.5	1.5	2.2	2.0	2.5	2.6	3.2	3.9	4.2	4.0	6.9	7.7	6.6	5.6	7.1	4.5	3.8	6.2	4.4	2.8	5.1	6.7	7.7	1.5	4.1
20	8.1	8.2	6.8	6.3	7.5	14.8	19.0	19.5	21.9	24.8	25.5	26.6	26.6	30.4	26.9	23.6	21.1	19.4	10.7	9.6	12.8	9.6	9.6	9.3	30.4	6.3	16.6
21	11.3	14.3	15.0	11.7	11.9	13.3	15.9	13.4	11.9	13.1	16.6	15.0	14.6	12.5	14.6	15.3	14.5	17.8	20.1	19.9	16.9	16.7	13.4	16.8	20.1	11.3	14.9
22	15.2	11.0	11.0	12.6	5.8	2.8	4.5	6.1	6.6	10.0	22.3	21.9	21.0	19.4	15.6	15.0	15.1	11.1	19.5	23.3	21.0	15.1	14.7	9.6	23.3	2.8	13.8
23	9.2	10.3	9.9	8.4	9.5	12.2	11.0	7.5	4.5	4.6	4.5	3.9	4.0	3.1	4.1	2.2	2.0	2.5	1.4	4.6	5.4	6.4	7.4	7.5	12.2	1.4	6.1
24	4.5	3.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	9.7	13.5	14.5	15.8	20.5	23.7	19.9	20.1	19.3	22.8	23.7	0.2	7.9
25	20.9	23.3	21.9	20.6	18.7	17.8	13.1	11.7	14.1	13.9	18.2	14.6	12.7	13.3	13.9	12.4	17.9	19.0	9.8	4.5	4.6	2.9	5.7	8.9	23.3	2.9	13.9
26	9.8	12.3	10.2	8.5	7.0	4.4	4.7	3.8	3.1	2.9	3.0	4.0	4.7	4.3	3.5	4.4	4.9	7.8	8.0	8.2	8.6	8.4	11.8	12.9	12.9	2.9	6.7
27	13.2	13.0	14.4	14.5	16.3	18.0	18.6	20.6	20.4	21.3	21.9	22.9	25.5	26.5	27.5	24.1	20.4	18.2	17.4	21.1	18.9	16.9	16.4	14.0	27.5	13.0	19.2
28	9.5	8.7	8.5	9.9	8.8	6.9	4.8	5.0	5.0	5.3	5.4	7.5	9.3	9.0	8.9	9.6	10.2	10.7	12.3	13.7	12.8	12.6	11.9	11.5	13.7	4.8	9.1
29	11.3	10.8	7.5	7.5	6.9	12.7	15.3	17.6	19.3	18.5	14.5	17.8	21.0	17.9	17.4	19.5	19.7	21.4	21.9	22.9	23.9	23.6	24.7	24.1	24.7	6.9	17.4
30	25.8	25.1	24.4	24.6	25.1	24.5	23.8	22.1	24.8	25.8	23.4	23.7	25.3	23.3	22.8	20.3	22.7	26.2	25.0	24.2	28.7	23.4	26.1	22.3	28.7	20.3	24.3
Max.	**25.8**	**25.1**	**24.4**	**24.6**	**25.1**	**24.5**	**23.8**	**22.1**	**24.8**	**25.8**	**25.5**	**26.6**	**26.6**	**30.4**	**27.5**	**24.1**	**22.7**	**26.2**	**25.0**	**24.2**	**28.7**	**23.6**	**26.1**	**24.1**	**30.4**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**8.0**	**8.0**	**7.8**	**7.9**	**8.0**	**8.3**	**8.5**	**9.0**	**9.0**	**9.3**	**10.1**	**10.1**	**10.4**	**10.2**	**10.2**	**9.8**	**10.0**	**10.2**	**9.9**	**10.1**	**10.0**	**9.1**	**9.0**	**8.7**			**9.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (Climatronics) (m/s)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	17.0	20.5	18.7	16.1	13.6	11.3	10.4	12.2	10.1	11.3	13.8	13.0	11.0	11.9	6.7	7.3	6.8	6.0	3.0	1.9	3.6	2.8	4.8	5.7	20.5	1.9	10.0
2	5.0	4.6	4.3	3.8	3.1	2.5	3.8	3.6	4.1	2.0	1.6	2.2	1.4	1.7	4.4	5.9	4.0	2.5	1.3	1.0	2.8	5.5	6.1	3.5	6.1	1.0	3.4
3	3.8	7.8	10.1	16.5	16.9	17.3	17.6	17.1	16.8	14.6	12.7	12.9	11.2	9.0	7.9	5.8	3.1	1.9	2.5	2.9	3.6	2.7	4.1	3.1	17.6	1.9	9.2
4	4.8	4.4	4.4	3.9	3.9	4.2	5.3	6.5	8.1	8.3	8.4	5.5	5.7	7.1	7.5	8.8	8.7	9.6	11.4	13.5	13.2	12.7	11.6	11.5	13.5	3.9	7.9
5	9.3	9.3	9.1	9.4	8.2	9.8	10.4	11.7	10.5	10.1	10.3	10.8	13.2	15.8	17.4	18.4	17.7	19.0	20.3	21.2	22.7	23.8	23.8	26.7	26.7	8.2	15.0
6	27.5	28.2	28.3	27.7	28.7	26.6	27.0	25.3	26.2	25.6	24.3	21.6	19.8	16.9	15.1	12.5	7.7	3.0	3.5	4.3	6.7	5.6	4.2	2.7	28.7	2.7	17.5
7	3.7	2.9	2.6	3.2	3.2	3.1	3.3	3.2	1.4	0.2	0.2	0.2	10.7	12.8	12.7	16.0	18.4	18.7	18.3	19.0	19.3	19.7	18.8	16.1	19.7	0.2	9.5
8	16.8	14.7	11.5	9.6	9.7	8.9	6.1	5.2	5.7	6.4	7.1	8.6	10.8	8.7	9.3	6.4	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	16.8	0.2	6.2
9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	14.9	15.7	15.7	14.7	15.7	16.8	18.3	22.4	24.2	22.5	19.0	24.2	0.2	8.4
10	18.1	18.9	16.3	16.0	13.8	12.6	5.8	8.9	9.8	6.9	8.8	7.1	6.1	8.5	10.2	9.9	7.9	6.7	4.4	3.9	5.4	7.4	9.0	11.0	18.9	3.9	9.7
11	12.5	13.0	14.4	13.8	12.6	11.9	8.7	6.8	5.8	3.9															14.4	3.9	10.3
12																											
13																			5.7	5.1	5.9	4.9	4.7	4.9	5.9	4.7	5.2
14	5.0	4.4	4.3	5.9	6.2	5.3	5.4	6.0	6.2																6.2	4.3	5.4
15	7.3	6.7	7.3	8.0	8.4	9.6	9.2	9.0	8.2	8.0	8.6	9.8	10.0	10.6	10.9	11.6	11.2	10.4	10.7	10.0	10.8	9.6	12.3	12.1	12.3	6.7	9.6
16	10.9	11.3	11.7	10.9	11.4	12.0	11.7	10.7	10.4	10.8	11.3	11.6	10.7	10.5	12.3	11.3	10.6	11.3	10.6	11.3	11.7	13.0	13.8	13.7	13.8	10.4	11.5
17	11.7	13.5	13.6	13.8	13.6	12.5	12.5	11.3	11.8	10.8	10.6	9.3	10.8	10.5	10.3	9.2	9.4	8.4	7.5	6.4	4.9	4.3	4.3	3.9	13.8	3.9	9.8
18	4.3	4.1	3.5	4.3	4.2	4.7	4.4	4.5	4.3	4.9	4.8	4.1	3.9	3.9	4.2	4.7	4.8	4.7	4.1	4.5	5.3	4.8	4.6	4.5	5.3	3.5	4.4
19	5.2	6.0	6.3	7.3	6.8	7.0	6.4	5.4	6.8	7.2	5.6	4.8	4.3	5.4	5.8	5.6	5.1	4.8	4.4	5.5	5.0	4.2	3.1	3.3	7.3	3.1	5.5
20	3.3	1.8	0.8	0.2	0.2	0.2	0.2	0.2	2.2	5.5	7.1	7.5	8.9	8.4	7.1	5.0	4.7	5.0	5.5	4.7	4.2	3.5	3.3	3.4	8.9	0.2	3.9
21	3.3	5.9	7.1	7.9	8.5	8.2	7.5	6.1	5.9	4.6	4.9	3.8	4.2	4.6	5.3	3.2	4.5	5.1	6.8	8.4	10.0	6.8	5.3	11.4	11.4	3.2	6.2
22	14.2	14.9	15.3	14.2	15.0	16.8	16.8	15.8	15.1	15.5	16.0	15.4	15.2	15.0	15.7	13.4	13.5	13.3	12.9	12.9	12.1	9.4	9.8	10.6	16.8	9.4	14.1
23	13.1	13.6	11.5	11.9	11.1	4.5	4.0	4.4	5.7	5.6	6.8	6.6	6.9	8.9	8.2	5.5	5.1	3.7	1.6	0.9	2.6	2.0	1.7	1.3	13.6	0.9	6.1
24	0.9	1.1	1.1	1.9	2.7	4.4	4.9	9.3	11.5	12.6	13.7	14.1	17.2	17.2	19.0	20.0	19.2	19.3	19.5	18.1	18.3	17.5	17.7	19.4	20.0	0.9	12.5
25	19.9	19.1	18.5	18.2	18.1	17.4	15.7	14.5	13.7	14.5	13.9	15.2	17.0	17.4	17.1	16.6	15.4	14.3	13.4	13.0	11.5	12.1	10.7	9.2	19.9	9.2	15.3
26	9.3	6.9	5.5	4.3	5.2	3.3	2.1	5.6	4.2	7.8	7.9	5.6	8.7	7.9	5.7	6.1	10.9	15.7	19.7	19.2	18.5	20.9	19.9	18.3	20.9	2.1	10.0
27	21.5	23.6	23.1	23.0	24.7	21.7	21.0	21.8	18.3	15.3	14.4	12.3	11.9	11.4	10.5	8.6	7.6	7.4	6.6	3.0	2.5	5.4	5.3	6.4	24.7	2.5	13.6
28	10.0	14.4	15.3	12.5	7.7	13.6	15.5	11.8	12.7	9.4	6.4	6.2	5.2	5.2	5.4	6.0	5.4	5.7	5.7	6.9	9.5	10.2	11.9	13.7	15.5	5.2	9.4
29	15.7	15.6	15.9	16.0	16.1	14.0	13.5	13.3	14.0	11.9	12.4	13.0	11.1	10.2	12.2	9.3	10.3	12.2	11.5	9.8	9.1	8.2	7.4	7.4	16.1	7.4	12.1
30	7.1	5.7	4.4	4.4	4.7	3.2	3.0	3.3	3.8	3.5	2.6	2.7	2.3	3.0	2.1	1.7	2.1	2.9	4.8	5.7	6.3	5.6	6.3	5.4	7.1	1.7	4.0
31	3.9	3.8	3.5	3.3	3.5	3.5	3.1	3.7	4.4	4.9	4.9	4.6	4.9	4.3	3.9	4.9	5.4	5.5	5.2	5.3	5.8	4.7	4.6	5.1	5.8	3.1	4.4
Max.	**27.5**	**28.2**	**28.3**	**27.7**	**28.7**	**26.6**	**27.0**	**25.3**	**26.2**	**25.6**	**24.3**	**21.6**	**19.8**	**17.4**	**19.0**	**20.0**	**19.2**	**19.3**	**20.3**	**21.2**	**22.7**	**24.2**	**23.8**	**26.7**	**28.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**1.7**	**2.1**	**1.7**	**1.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**9.8**	**10.2**	**9.9**	**9.9**	**9.7**	**9.3**	**8.8**	**8.9**	**8.9**	**8.7**	**8.9**	**8.5**	**9.0**	**9.7**	**9.7**	**9.2**	**8.7**	**8.6**	**8.5**	**8.5**	**9.1**	**9.0**	**9.0**	**9.1**			**9.2**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.4	9.0	9.2	9.3	9.5	7.9	8.4	7.7	8.3	9.3	9.9	9.8	9.7	10.5	10.5	8.1	7.4	6.7	6.6	7.3	7.2	6.6	6.4	6.6	10.5	6.4	8.3
2	6.4	5.9	5.6	5.2	5.7	6.0	4.7	6.0	7.6	7.9	7.2	7.6	7.0	7.3	7.8	7.5	7.7	6.9	7.1	7.3	6.9	7.6	6.3	5.8	7.9	4.7	6.7
3	6.4	6.9	7.3	6.6	7.6	10.3	13.4	11.3	10.7	13.1	13.1	11.8	11.7	11.2	9.6	8.1	6.6	7.7	7.1	6.0	6.8	6.0	5.2	5.8	13.4	5.2	8.7
4	6.8	5.5	4.2	3.5	3.8	3.5	3.5	3.6	3.7	3.5	3.8	3.9	3.1	2.1	2.0	2.7	2.0	1.0	1.0	0.7	1.6	1.3	1.4	1.8	6.8	0.7	2.9
5	1.6	1.1	2.5	4.1	4.6	3.9	4.3	6.6	7.2	6.0	4.9	4.3	5.1	5.7	5.4	5.2	5.5	4.5	4.1	3.6	2.8	3.3	2.9	2.9	7.2	1.1	4.3
6	2.8	2.1	2.6	2.1	1.6	2.2	2.6	2.9	2.6	2.6	2.9	3.4	4.0	4.7	6.7	7.1	5.6	6.8	8.7	9.8	7.7	8.9	9.7	8.9	9.8	1.6	5.0
7	10.8	9.3	10.7	9.7	9.6	11.5	12.6	12.7	13.3	12.5	11.8	10.5	11.2	12.0	11.0	12.2	12.4	11.1	10.3	9.5	8.3	8.3	8.6	8.3	13.3	8.3	10.8
8	9.2	9.3	8.7	7.5	6.1	6.5	7.9	7.2	6.7	6.7	7.6	6.9	6.8	7.8	8.3	9.3	10.5	10.6	10.9	11.2	10.4	10.8	11.4	8.6	11.4	6.1	8.6
9	7.3	7.8	7.0	6.6	6.1	5.6	5.7	5.6	5.8	5.3	4.4	3.5	1.6	2.0	3.1	4.0	6.8	6.6	7.9	7.3	9.1	11.1	9.3	10.3	11.1	1.6	6.2
10	10.7	9.1	8.7	7.7	9.5	10.7	11.3	13.1	9.6	11.7	9.3	13.7	15.7	16.5	17.3	18.2	18.2	18.3	19.7	18.4	17.5	18.3	18.5	17.5	19.7	7.7	14.1
11	16.5	15.4	14.1	14.2	15.1	15.6	15.6	15.3	15.9	17.2	18.2	18.5	20.2	19.8	19.6	19.4	20.2	20.5	19.5	21.3	21.4	19.6	20.1	20.8	21.4	14.1	18.1
12	18.6	19.8	21.0	20.6	18.9	18.1	18.7	18.8	19.7	18.2	18.2	17.8	17.0	18.3	18.2	20.3	20.2	20.3	20.7	20.9	19.2	17.1	15.5	14.5	21.0	14.5	18.8
13	19.3	15.9	14.7	12.6	11.3	9.9	11.0	10.0	9.5	11.0	9.1	5.3	5.8	4.8	2.9	1.8	1.3	0.9	0.9	4.0	3.3	3.6	3.4	3.9	19.3	0.9	7.3
14	4.9	5.5	8.7	8.4	11.2	11.7	9.8	10.7	12.7	14.7	12.1	11.4	14.2	14.9	15.2	14.0	14.6	16.5	15.7	14.6	14.4	12.6	11.6	10.0	16.5	4.9	12.1
15	9.0	7.4	6.8	6.8	5.6	5.3	6.2	7.1	7.0	7.1	7.8	8.1	7.1	6.2	7.7	11.2	12.3	12.1	9.8	8.6	8.3	6.1	2.8	3.2	12.3	2.8	7.5
16	2.6	1.8	0.3	1.6	1.2	1.8	5.0	9.5	9.4	9.8	15.5	21.1	21.3	21.7	22.6	23.5	24.1	25.1	26.1	26.2	24.1	19.8	16.7	14.3	26.2	0.3	14.4
17	13.2	13.1	10.1	8.1	9.4	8.6	8.1	9.4	13.2	11.3	11.3	12.8	16.5								11.6	15.4	14.4	15.9	16.5	8.1	11.9
18	13.2	10.9	9.2	6.8	5.0	3.8	4.0	3.9	5.1	3.8	0.8	2.4	2.4	1.5	1.7	1.4	1.7	2.4	2.7	3.2	4.0	3.7	3.7	4.6	13.2	0.8	4.2
19	4.4	3.0	1.9	1.4	0.9	1.4	1.0	0.5	1.0	2.1	1.6	1.7	2.2	3.5	3.8	3.8	3.8	4.5	6.4	7.3	5.9	4.6	5.2	4.5	7.3	0.5	3.2
20	4.5	6.5	7.2	7.0	7.8	9.5	9.4	11.2	9.6	9.7	10.2	6.3	2.8	1.4	5.8	6.7	5.7	6.5	4.9	6.8	7.6	7.7	6.7	6.0	11.2	1.4	7.0
21	6.7	6.3	6.3	5.7	5.3	5.6	4.0	6.2	7.1	8.2	7.8	5.3	6.7	5.1	4.6	4.8	4.1	4.1	3.6	4.7	5.8	3.7	7.1	12.0	12.0	3.6	5.9
22	10.2	7.8	6.7	4.6	2.4	2.0	3.3	2.5	1.5	1.9	2.4	1.9	1.5	0.9	2.6	3.3	3.7	3.9	4.0	4.3	2.5	3.2	3.5	3.4	10.2	0.9	3.5
23	2.7	2.4	3.6	3.5	4.4	4.6	4.9	3.8	4.4	4.2	4.9	6.9	5.2	5.4	6.4	7.7	9.1	9.0	9.8	8.3	6.4	6.6	8.0	9.1	9.8	2.4	5.9
24	8.5	7.6	10.1	9.4	10.1	9.6	8.8	7.3	6.7	9.3	9.3	7.7	5.5	5.5	3.8	4.3	5.8	6.4	6.0	5.9	5.0	3.2	3.8	3.3	10.1	3.2	6.8
25	2.3	3.1	1.4	5.9	10.7	10.9	8.1	7.9	15.5	17.6	19.4	22.4	25.8	25.2	24.8	25.4	20.3	17.0	19.6	21.3	22.0	23.9	24.9	24.1	25.8	1.4	16.6
26	24.5	24.8	24.7	23.8	24.6	24.5	25.8	25.5	24.5	24.8	23.7	21.8	19.1	16.9	16.9	15.3	14.6	13.5	12.5	12.3	11.9	12.9	11.5	9.7	25.8	9.7	19.2
27	10.8	12.7	14.6	14.9	17.4	19.4	19.8	21.0	20.9	20.6	21.0	24.1	27.8	25.8	24.1	22.3	22.9	23.4	23.3	17.6	21.2	22.4	23.8	22.5	27.8	10.8	20.6
28	20.5	18.5	17.4	17.1	17.5	15.9	14.5	15.2	14.4	14.0	12.8	10.8	9.4	8.4	9.3	9.6	10.6	11.6	10.7	12.9	12.2	13.0	12.6	13.8	20.5	8.4	13.4
29	15.4	16.0	16.1	16.5	10.6	18.9	21.4	21.8	24.0	28.7	28.3	24.2	21.4	23.0	25.3	21.5	20.8	19.0	20.6	22.5	25.2	24.9	23.1	24.0	28.7	10.6	21.4
30	18.7	17.5	16.0	16.9	19.7	20.2	20.7	21.8	22.5	24.9	28.4	29.4	32.4	37.9											37.9	16.0	23.3
31																											
Max.	**24.5**	**24.8**	**24.7**	**23.8**	**24.6**	**24.5**	**25.8**	**25.5**	**24.5**	**28.7**	**28.4**	**29.4**	**32.4**	**37.9**	**25.3**	**25.4**	**24.1**	**25.1**	**26.1**	**26.2**	**25.2**	**24.9**	**24.9**	**24.1**	**37.9**		
Min.	**1.6**	**1.1**	**0.3**	**1.4**	**0.9**	**1.4**	**1.0**	**0.5**	**1.0**	**1.9**	**0.8**	**1.7**	**1.5**	**0.9**	**1.7**	**1.4**	**1.3**	**0.9**	**0.9**	**0.7**	**1.6**	**1.3**	**1.4**	**1.8**		**0.3**	
Avg.	**9.8**	**9.4**	**9.3**	**8.9**	**9.1**	**9.5**	**9.8**	**10.2**	**10.7**	**11.3**	**11.3**	**11.2**	**11.3**	**11.2**	**10.6**	**10.7**	**10.7**	**10.6**	**10.7**	**10.8**	**10.7**	**10.6**	**10.3**	**10.2**			**10.4**

Total Hours in Month 744 **Hours Data Available** 703 **Data Recovery** 94.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1																											
2																											
3																											
4																											
5																											
6																			4.7	2.4	1.6	1.9	3.1	3.7	4.7	1.6	2.9
7	3.3	3.9	5.3	4.7	3.9	1.6	0.9	3.0	2.1	1.5	0.9	0.4	1.8	2.3	1.9	2.1	1.7	1.2	2.0	2.7	1.7	1.2	1.3	0.9	5.3	0.4	2.2
8	2.4	2.9	2.7	2.4	2.2	3.7	4.3	5.0	6.6	6.7	6.3	5.5	5.4	4.9	5.1	5.0	5.4	5.7	5.9	5.4	5.8	4.5	4.5	4.5	6.7	2.2	4.7
9	4.0	3.7	4.6	3.7	4.1	4.4	4.5	3.9	3.7	4.4	4.6	3.7	3.9	4.7	6.1	5.3	4.5	2.8	1.4	1.2	1.4	0.7	0.6	1.8	6.1	0.6	3.5
10	1.1	1.4	1.3	1.2	1.1	1.3	3.0	2.8	3.8	4.3	3.8	4.1	4.1	3.9	4.8	5.3	5.1	3.3	3.2	3.4	3.4	2.6	2.4	1.6	5.3	1.1	3.0
11	0.8	0.9	1.6	1.5	1.2	1.2	1.8	5.1	8.1	8.9	12.3	10.6	6.7	8.8	10.0	11.5	11.9	11.5	15.4	16.2	14.2	14.4	14.2	13.6	16.2	0.8	8.4
12	13.0	13.5	13.8	12.7	12.4	12.6	12.4	11.2	9.3	11.1	11.6	11.4	10.8	12.0	11.9	10.4	9.9	10.4	8.6	7.3	8.1	9.4	8.7	4.7	13.8	4.7	10.7
13	9.1	10.1	10.1	10.6	8.8	9.0	10.6	10.8	9.3	8.1	5.8	4.1	3.2	3.5	4.9	5.7	10.2	14.5	14.7	14.1	13.8	12.5	11.7	9.7	14.7	3.2	9.4
14	10.8	10.6	10.3	10.8	9.5	9.5	9.4	9.6	9.8	8.7	7.5	10.9	10.2	8.7	8.5	8.5	7.3	5.8	4.5	5.2	3.4	1.5	1.3	0.9	10.9	0.9	7.6
15	1.3	1.7	0.9	0.4	1.2	1.5	2.4	2.3	2.0	2.1	2.1	2.7	1.6	1.9	1.8	2.7	2.9	3.0	3.5	3.5	2.6	2.0	1.7	1.2	3.5	0.4	2.0
16	1.2	1.2	0.7	1.7	1.2	2.3	1.7	1.6	1.9	1.8	2.4	4.0	4.0	4.6	3.5	2.2	1.4	0.8	0.3	0.2	0.9	1.2	0.9	0.3	4.6	0.2	1.7
17	0.5	1.0	0.7	1.6	2.5	2.6	1.5	1.7	0.9	0.5	0.6	0.8	2.0	3.4	3.6	6.3	5.5	6.5	6.8	6.0	4.5	4.2	3.4	3.0	6.8	0.5	2.9
18	2.7	2.3	1.8	2.2	1.7	1.0	1.3	1.4	1.3	1.5	1.7	1.3	0.9	0.5	0.5	0.5	0.7	0.5	0.5	1.6	2.4	2.4	2.9	3.3	3.3	0.5	1.5
19	4.5	5.3	5.3	6.6	7.6	10.8	12.3	11.9	11.1	11.5	11.0	10.8	8.7	10.9	13.5	13.5	13.8	15.5	16.7	16.3	15.1	15.6	17.2	17.1	17.2	4.5	11.8
20	17.5	18.7	16.1	14.1	13.9	12.0	11.9	14.2	14.9	14.2	13.8	14.9	13.2	13.2	14.2	15.1	16.4	17.7	14.8	12.8	13.8	17.0	16.7	13.5	18.7	11.9	14.8
21	17.2	16.6	18.7	20.0	20.5	21.6	16.7	12.7	12.5	11.5	10.8	12.9	12.1	12.7	13.7	12.1	9.3	8.7	9.2	8.6	8.3	7.2	7.4	11.1	21.6	7.2	13.0
22	9.2	7.3	5.3	7.1	7.2	7.1	6.6	7.3	7.1	6.8	6.0	5.0	4.4	4.4	5.0	5.0	5.1	6.0	6.0	5.2	7.8	8.2	6.0	6.5	9.2	4.4	6.3
23	5.8	6.5	7.6	5.8	6.8	7.8	9.1	8.5	7.9	7.3	8.5	7.8	10.3	12.0	13.1	11.9	8.8	9.1	9.6	6.6	6.5	7.6	9.6	11.5	13.1	5.8	8.6
24	11.7	10.3	7.9	7.3	8.7	11.2	11.4	11.2	12.6	9.4	11.3	14.2	17.0	15.0	17.4	17.9	17.7	19.1	19.8	20.2	21.8	18.3	16.5	19.8	21.8	7.3	14.5
25	21.0	17.5	15.6	17.2	16.7	16.0	12.5	10.1	9.8	10.9	9.0	8.8	7.7	6.8	6.2	7.8	6.4	4.3	6.2	6.5	6.3	6.1	6.7	7.0	21.0	4.3	10.1
26	8.0	7.3	6.7	8.1	6.2	6.7	6.2	6.0	8.6	10.6	8.6	4.0	4.1	6.4	6.8	8.1	8.5	8.9	7.1	7.3	7.1	7.1	7.7	8.1	10.6	4.0	7.2
27	8.5	9.0	9.0	7.3	6.9	6.2	7.0	6.9	6.8	6.2	5.6	6.2	5.8	6.2	6.1	4.7	4.7	5.7	6.1	6.1	4.4	3.5	2.8	3.9	9.0	2.8	6.1
28	4.4	4.4	5.3	6.0	5.7	5.5	5.8	5.5	7.0	6.2	6.9	8.1	9.8	8.9	9.8	11.1	11.9	9.5	11.1	6.0	8.6	10.6	7.8	9.8	11.9	4.4	7.7
Max.	**21.0**	**18.7**	**18.7**	**20.0**	**20.5**	**21.6**	**16.7**	**14.2**	**14.9**	**14.2**	**13.8**	**14.9**	**17.0**	**15.0**	**17.4**	**17.9**	**17.7**	**19.1**	**19.8**	**20.2**	**21.8**	**18.3**	**17.2**	**19.8**	**21.8**		
Min.	**0.5**	**0.9**	**0.7**	**0.4**	**1.1**	**1.0**	**0.9**	**1.4**	**0.9**	**0.5**	**0.6**	**0.4**	**0.9**	**0.5**	**0.5**	**0.5**	**0.7**	**0.5**	**0.3**	**0.2**	**0.9**	**0.7**	**0.6**	**0.3**		**0.2**	
Avg.	**7.2**	**7.1**	**6.9**	**7.0**	**6.8**	**7.1**	**7.0**	**6.9**	**7.1**	**7.0**	**6.9**	**6.9**	**6.7**	**7.1**	**7.6**	**7.9**	**7.7**	**7.7**	**7.7**	**7.2**	**7.1**	**6.9**	**6.7**	**6.8**			**7.1**

Total Hours in Month 672 **Hours Data Available** 534 **Data Recovery** 79.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.5	8.9	9.8	10.9	8.6	10.4	9.9	9.8	9.4	9.3	9.2	9.5	10.9	10.4	11.0	11.7	11.2	12.8	15.1	13.3	12.6	14.4	13.5	13.4	15.1	8.5	11.0
2	13.1	14.6	13.7	14.0	14.4	14.6	15.3	15.0	14.3	15.0	14.2	14.0	15.4	13.9	13.8	14.9	15.4	14.7	12.2	16.1	17.8	20.8	19.2	19.5	20.8	12.2	15.2
3	16.5	15.7	16.1	14.8	13.2	13.7	14.0	15.1	11.2	13.3	10.6	5.7	7.5	7.4	7.8	7.1	9.8	8.4	7.8	8.4	9.4	8.1	7.6	11.8	16.5	5.7	10.9
4	14.0	14.9	17.3	18.0	17.9	17.2	16.3	15.7	15.2	14.6	16.2	17.2	15.9	19.9	19.3	20.7	20.0	20.8	19.8	15.8	14.7	14.7	15.7	14.8	20.8	14.0	16.9
5	15.2	16.8	16.6	16.1	17.8	16.6	20.1	19.0	18.9	21.3	22.8	21.7	21.4	18.9	20.9	19.5	20.2	19.3	18.7	19.6	20.8	18.5	15.7	16.4	22.8	15.2	18.9
6	15.2	13.8	15.5	17.1	19.6	22.4	21.0	21.6	19.2	21.0	22.0	26.7	26.2	25.1	25.9	26.5	27.1	26.3	26.0	25.4	26.0	25.8	25.4	21.7	27.1	13.8	22.6
7	21.2	22.5	24.2	28.6	28.1	21.4	22.9	25.7	21.9	24.1	22.3	19.4	22.8	26.8	27.4	27.1	23.4	23.1	25.8	24.5	23.6	26.4	26.6	25.6	28.6	19.4	24.4
8	25.4	24.6	21.2	19.8	19.9	19.7	18.6	16.4	15.8	13.9	14.1	13.2	13.3	12.3	10.8	11.8	14.7	16.7	17.5	18.6	21.3	22.5	23.2	17.7	25.4	10.8	17.6
9	14.6	13.2	12.0	14.1	14.9	16.8	15.8	11.2	12.1	13.1	14.2	15.8	12.4	12.2	11.6	11.5	10.4	10.0	9.6	7.9	7.2	7.0	6.6	6.3	16.8	6.3	11.7
10	5.9	5.9	5.8	6.2	7.3	8.1	7.3	9.0	10.3	10.6	11.8	9.4	7.0	5.6	7.5	8.0	8.2	8.2	7.9	7.9	7.8	8.0	7.9	9.5	11.8	5.6	8.0
11	10.1	11.1	12.9	12.8	12.8	17.1	17.4	15.9	14.0	16.6	16.8	17.3	13.3	14.0	16.1	15.9	17.0	19.1	20.7	19.6	20.2	20.9	18.4	16.8	20.9	10.1	16.1
12	17.2	20.6	20.7	21.7	18.2	16.1	16.8	16.3	16.3	19.7	19.4	17.6	19.3	17.8	20.4	20.3	20.0	18.3	19.3	14.9	20.6	18.7	19.1	15.7	21.7	14.9	18.5
13	13.7	14.1	13.4	15.2	15.8	17.8	16.1	15.8	17.1	17.1	15.8	17.7	18.0	17.6	18.7	17.7	18.6	16.8	19.8	19.6	17.4	18.4	18.1	21.2	21.2	13.4	17.1
14	20.4	19.4	19.8	19.2	17.4	18.9	17.9	19.4	16.6	15.8	19.7	21.5	23.6	21.9	21.1	21.1	23.3	24.1	20.0	20.7	18.5	17.6	19.0	20.6	24.1	15.8	19.9
15	18.2	20.7	15.4	15.8	15.5	10.9	9.0	7.2	7.7	7.7	7.6	8.1	9.2	8.1	7.9	8.8	9.7	10.8	12.3	12.8	13.8	15.0	14.4	10.4	20.7	7.2	11.5
16	8.7	8.6	6.2	6.1	6.8	6.2	6.7	7.1	7.3	7.3	9.3	7.8	7.2	6.7	8.0	8.0	8.8	8.7	7.8	7.1	6.9	8.0	7.6	7.1	9.3	6.1	7.5
17	7.0	6.3	6.1	6.0	4.7	4.3	4.2	4.4	3.4	4.6	3.7	4.6	5.2	4.1	3.5	3.2	3.8	4.0	4.8	5.5	4.9	4.4	3.3	2.5	7.0	2.5	4.5
18	3.0	1.4	0.6	1.2	2.1	2.7	2.7	2.4	0.8	0.7	0.6	0.9	1.7	2.6	2.5	2.0	2.4	2.2	3.9	5.7	6.6	7.2	5.8	5.7	7.2	0.6	2.8
19	5.4	4.7	5.8	5.0	4.7	4.5	4.3	4.4	4.0	3.2	3.8	3.4	2.1	2.4	2.1	2.1	2.8	2.3	2.8	3.0	2.6	2.5	2.2	1.4	5.8	1.4	3.4
20	0.6	2.1	2.6	2.9	3.7	3.4	6.4	6.6	9.5	11.6	13.4	14.1	12.4	12.2	12.4	12.2	13.0	11.6	8.3	9.1	8.0	7.0	5.9	4.8	14.1	0.6	8.1
21	4.7	4.8	2.4	3.5	4.0	5.0	6.8	7.7	9.4	11.0	10.8	10.6	11.7	11.7	10.3	8.0	9.1	8.5	8.2	6.7	7.1	5.5	6.6	6.7	11.7	2.4	7.5
22	9.0	11.0	10.5	9.1	7.8	7.8	4.8	4.3	6.2	7.3	7.7	7.9	7.6	6.8	9.2	8.0	9.0	7.9	7.1	5.4	6.0	7.0	9.1	10.8	11.0	4.3	7.8
23	11.6	10.2	9.5	10.4	12.6	14.7	12.8	12.8	11.4	8.7	8.3	10.1	13.0	12.7	12.9	15.3	16.9	15.6	14.7	12.5	11.5	11.5	10.5	11.4	16.9	8.3	12.1
24	10.8	10.3	6.6	4.6	6.7	6.3	6.2	5.4	6.5	5.9	6.4	6.0	5.4	5.5	5.1	4.5	5.2	5.5	6.0	5.8	3.9	3.1	2.7	1.8	10.8	1.8	5.7
25	0.9	1.5	1.3	1.3	0.8	1.5	2.0	2.2	2.3	1.9	2.1	1.8	2.1	1.4	1.3	4.2	3.3	2.4	3.0	3.7	6.2	7.1	8.6	8.6	8.6	0.8	3.0
26	8.0	5.8	8.0	8.7	13.9	15.4	15.0	12.8	10.8	9.8	12.9	16.0	8.4	6.2	6.6	6.8	3.8	6.0	5.1	7.1	9.0	10.6	11.4	10.4	16.0	3.8	9.5
27	9.2	8.0	8.9	9.4	8.9	8.8	9.8	8.7	10.4	12.4	13.0	11.2	13.7	14.6	13.0	9.9	13.2	13.0	12.1	10.2	11.7	13.7	15.1	15.3	15.3	8.0	11.4
28	12.0	12.0	12.2	12.2	11.1	11.5	13.5	12.6	14.8	15.1	14.3	16.0	15.4	11.5	12.7	12.5	9.8	9.8	9.6	9.0	9.8	10.4	10.2	8.9	16.0	8.9	11.9
29	7.1	6.5	6.4	9.5	5.8	5.7	7.1	6.8	7.4	6.2	7.1	8.0	8.7	10.0	11.6	11.5	9.8	10.4	11.1	12.6	12.6	11.2	12.3	11.4	12.6	5.7	9.0
30	11.3	11.2	11.1	9.1	10.6	11.0	10.8	8.2	6.5	4.9	4.8	4.5	5.1	5.2	3.2	2.3	2.0	2.9	2.0	1.9	1.5	0.9	0.8	1.6	11.3	0.8	5.6
31	1.7	1.8	2.2	2.7	2.3	2.0	1.8	2.0	1.4	2.2	2.0	1.9	0.9	0.7	1.2	2.6	4.1	4.9	5.8	5.0	5.2	5.3	5.3	5.6	5.8	0.7	2.9
Max.	**25.4**	**24.6**	**24.2**	**28.6**	**28.1**	**22.4**	**22.9**	**25.7**	**21.9**	**24.1**	**22.8**	**26.7**	**26.2**	**26.8**	**27.4**	**27.1**	**27.1**	**26.3**	**26.0**	**25.4**	**26.0**	**26.4**	**26.6**	**25.6**	**28.6**		
Min.	**0.6**	**1.4**	**0.6**	**1.2**	**0.8**	**1.5**	**1.8**	**2.0**	**0.8**	**0.7**	**0.6**	**0.9**	**0.9**	**0.7**	**1.2**	**2.0**	**2.0**	**2.2**	**2.0**	**1.9**	**1.5**	**0.9**	**0.8**	**1.4**		**0.6**	
Avg.	**11.0**	**11.1**	**10.8**	**11.2**	**11.2**	**11.4**	**11.4**	**11.0**	**10.7**	**11.2**	**11.5**	**11.6**	**11.5**	**11.2**	**11.5**	**11.5**	**11.8**	**11.8**	**11.8**	**11.5**	**11.8**	**12.0**	**11.9**	**11.5**			**11.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

April 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.3	4.8	4.3	4.0	3.4	3.6	4.0	5.0	4.8	3.6	4.8	3.6	4.4	3.3	3.6	2.3	1.3	0.7	0.7	1.1	1.4	1.9	1.9	2.5	5.3	0.7	3.2
2	2.8	2.9	2.4	3.5	4.5	5.9	6.4	7.0	8.5	8.6	9.6	12.4	14.0	14.6	14.3	14.2	14.5	14.8	14.8	14.2	14.9	13.7	12.6	11.7	14.9	2.4	10.1
3	14.8	16.7	15.2	14.3	14.3	14.5	12.2	10.6	10.9	11.7	11.0	13.1	12.6	13.0	12.0	12.5	11.7	12.2	12.2	12.2	12.3	12.5	12.3	10.8	16.7	10.6	12.7
4	11.1	13.1	11.3	8.3	6.4	5.7	6.1	6.4	6.9	6.7	7.4	11.4	11.3	11.0	11.9	11.0	10.2	10.0	7.9	6.2	4.2	2.4	2.0	2.5	13.1	2.0	8.0
5	1.3	0.6	1.8	2.0	1.5	5.6	6.7	10.1	10.5	9.1	10.5	15.7	15.4	14.4	14.2	12.5	10.8	13.1	23.5	23.8	22.1	19.9	18.7	18.5	23.8	0.6	11.8
6	19.7	21.5	20.1	22.4	18.1	16.4	15.1	12.7	12.6	6.5	9.3	10.9	10.4	12.2	11.5	9.3	6.8	7.9	8.4	6.8	6.7	5.4	5.3	4.4	22.4	4.4	11.7
7	3.7	1.4	2.7	3.1	6.3	15.0	16.8	20.0	20.0	20.3	20.1	20.1	21.2	19.4	17.1	17.7	18.7	16.4	13.0	9.4	8.0	3.1	5.2	7.0	21.2	1.4	12.7
8	12.0	12.9	13.2	12.5	12.6	13.1	10.8	9.5	9.2	9.1	9.7	9.0	8.8	8.7	9.7	10.0	8.7	6.1	2.6	2.9	4.6	2.1	3.3	6.7	13.2	2.1	8.7
9	7.8	7.1	5.0	4.6	3.6	1.5	2.1	1.7	1.9	2.6	4.5	6.4	6.5	9.2	11.8	11.5	12.4	11.7	10.8	11.4	11.9	13.2	11.5	13.2	13.2	1.5	7.7
10	12.1	11.3	10.3	9.6	6.9	4.0	5.3	6.8	7.7	6.7	7.9	10.6	12.0	12.1	9.5	9.5	9.1	8.4	8.4	8.3	7.2	7.8	7.0	5.7	12.1	4.0	8.5
11	5.9	6.6	6.3	6.2	5.8	6.8	7.5	6.4	4.6	4.6	2.5	3.6	6.3	7.2	8.3	10.1	10.6	11.2	9.7	9.8	5.9	5.9	4.3	5.2	11.2	2.5	6.7
12	6.7	5.4	2.8	2.8	2.8	1.2	1.5	1.7	1.5	1.8	1.8	1.7	1.5	1.1	1.9	2.7	2.6	2.8	1.6	1.9	1.4	2.0	3.9	4.7	6.7	1.1	2.5
13	5.3	5.2	5.2	5.2	5.2	5.0	5.4	5.3	5.1	5.3	3.0	4.0	4.4	4.3	3.6	3.7	2.3	1.6	4.8	5.4	4.0	2.7	3.0	2.6	5.4	1.6	4.2
14	2.1	3.0	2.8	1.8	2.0	0.9	2.4	3.2	2.6	2.9	3.0	3.5	4.1	5.3	7.1	8.1	8.3	7.8	8.0	6.8	8.1	8.4	8.2	8.1	8.4	0.9	4.9
15	10.8	10.5	12.8	12.6	11.6	8.4	7.1	7.4	6.4	8.8	7.5	9.1	8.7	8.0	6.9	5.5	5.5	4.1	2.8	2.2	1.7	3.1	5.6	6.1	12.8	1.7	7.2
16	7.3	6.8	6.1	6.2	6.5	6.0	5.8	4.9	4.4	4.6	5.8	4.3	4.6	5.9	9.0	11.8	11.6	9.2	6.8	5.5	4.2	3.0	4.3	3.5	11.8	3.0	6.2
17	3.4	3.0	3.3	6.1	8.0	8.0	16.0	18.3	22.2	21.7	21.5	23.3	24.2	24.8	25.4	25.8	27.6	27.9	28.7	28.6	28.8	28.9	28.5	27.0	28.9	3.0	20.0
18	28.8	27.3	26.0	24.3	23.6	23.2	22.7	21.7	21.3	22.6	22.3	21.7	20.0	18.7	18.5	17.8	16.2	10.1	7.0	5.4	3.8	0.7	2.4	3.5	28.8	0.7	17.1
19	3.0	1.3	3.1	5.8	7.8	11.7	15.6	14.0	14.8	16.6	16.6	16.3	18.4	19.0	17.6	17.5	14.5	14.1	16.0	16.0	15.9	14.5	14.9	14.5	19.0	1.3	13.3
20	16.2	18.9	17.4	16.6	15.9	13.6	4.5	6.0	8.0	8.4	9.4	15.7	16.7	16.1	18.6	18.9	17.5	17.0	13.8	14.0	13.0	11.8	12.5	9.1	18.9	4.5	13.7
21	8.4	10.1	8.6	10.8	8.2	7.3	6.7	5.9	3.1	6.6	12.5	14.7	15.7	14.9	16.9	14.2	14.2	15.1	14.5	14.1	15.6	14.7	16.0	16.4	16.9	3.1	11.9
22	17.8	17.0	18.6	16.8	14.1	15.8	14.0	13.5	15.2	11.0	11.4	13.4	15.5	15.3	14.4	13.0	14.4	13.1	11.2	10.7	10.7	9.8	9.0	4.8	18.6	4.8	13.3
23	4.1	8.6	11.9	7.4	7.5	14.5	12.3	7.6	10.2	10.6	8.9	6.7	6.5	7.1	3.8	1.6	5.3	3.4	3.6	4.4	2.1	2.5	3.8	5.4	14.5	1.6	6.7
24	7.4	7.6	6.6	4.4	1.2	1.1	1.6	4.2	4.1	6.7	4.5	5.8	6.9	6.8	2.9	2.9	2.2	1.8	2.7	4.6	5.0	5.4	2.9	5.7	7.6	1.1	4.4
25	7.1	5.6	5.3	6.6	10.7	12.3	10.2	8.1	7.4	8.6	12.5	14.0	16.9	18.0	17.4	15.0	13.0	12.1	12.3	8.7	4.6	1.2	4.0	3.7	18.0	1.2	9.8
26	4.7	4.2	6.4	5.2	4.7	5.2	5.6	5.7	5.5	5.1	5.4	5.5	3.6	5.4	5.8	7.0	7.6	10.6	9.6	8.7	7.7	7.6	7.5	6.0	10.6	3.6	6.3
27	6.1	4.5	3.2	2.0	4.4	5.3	5.4	4.5	5.4	5.3	4.8	5.7	6.0	7.4	7.2	8.2	7.8	7.5	7.0	7.1	6.9	5.4	5.7	9.8	9.8	2.0	5.9
28	6.6	4.3	6.7	4.9	2.7	2.7	4.1	3.2	2.0	2.9	2.0	2.5	3.5	3.8	6.1	8.2	9.2	10.0	9.1	9.9	8.2	5.7	4.2	4.4	10.0	2.0	5.3
29	6.4	10.4	9.8	10.0	9.1	10.7	10.3	7.2	7.1	8.7	10.8	14.8	14.1	13.4	13.2	12.7	10.6	10.4	8.9	7.6	5.9	3.6	1.8	2.7	14.8	1.8	9.2
30	4.1	5.2	5.7	4.3	2.3	0.8	1.4	2.0	2.1	2.6	4.0	5.5	4.6	3.6	4.1	3.3	3.7	2.6	3.8	4.1	4.8	3.5	3.5	2.5	5.7	0.8	3.5
Max.	**28.8**	**27.3**	**26.0**	**24.3**	**23.6**	**23.2**	**22.7**	**21.7**	**22.2**	**22.6**	**22.3**	**23.3**	**24.2**	**24.8**	**25.4**	**25.8**	**27.6**	**27.9**	**28.7**	**28.6**	**28.8**	**28.9**	**28.5**	**27.0**	**28.9**		
Min.	**1.3**	**0.6**	**1.8**	**1.8**	**1.2**	**0.8**	**1.4**	**1.7**	**1.5**	**1.8**	**1.8**	**1.7**	**1.5**	**1.1**	**1.9**	**1.6**	**1.3**	**0.7**	**0.7**	**1.1**	**1.4**	**0.7**	**1.8**	**2.5**		**0.6**	
Avg.	**8.4**	**8.6**	**8.5**	**8.1**	**7.7**	**8.2**	**8.2**	**8.0**	**8.2**	**8.3**	**8.8**	**10.2**	**10.6**	**10.8**	**10.8**	**10.6**	**10.3**	**9.8**	**9.5**	**9.1**	**8.4**	**7.4**	**7.5**	**7.6**			**8.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.7	1.3	1.2	2.1	1.9	1.2	1.7	1.2	2.2	2.6	2.9	1.8	1.6	1.8				1.6	2.8	4.1	2.0	1.8	1.4	2.3	4.1	1.2	2.0
2	2.5	2.4	1.1	1.8	0.9	2.5	3.7	3.2	2.4	2.5	1.9	3.5	3.6	8.3	5.5	6.6	9.6	11.4	10.9	12.2	11.9	9.9	7.3	7.8	12.2	0.9	5.6
3	8.1	5.0	4.8	4.6	3.9	3.4	2.0	1.4	0.8	2.1	4.1	3.8	3.5	2.5	2.4	2.7	3.7	9.0	5.6	3.8	3.2	2.9	1.4	3.1	9.0	0.8	3.7
4	3.8	3.7	2.2	1.9	1.8	2.6	1.0	1.3	0.9	1.2	1.5	1.6	2.6	4.0	5.1	4.7	5.0	5.2	4.9	3.3	2.0	1.2	2.6	2.6	5.2	0.9	2.8
5	1.8	3.2	3.1	3.1	2.1	3.5	4.7	4.4	2.8	2.7	5.7	5.6	5.8	6.0	5.6	6.5	7.1	8.5	7.6	7.1	7.8	8.1	8.2	8.2	8.5	1.8	5.4
6	7.5	5.7	8.1	8.4	8.8	7.6	6.3	5.8	5.0	7.0	7.0	6.8	7.0	7.6	8.4	9.6	9.9	9.8	9.4	9.9	9.7	9.0	8.2	8.0	9.9	5.0	7.9
7	8.0	8.7	8.6	8.1	6.4	4.8	5.2	3.6	3.0	4.6	4.4	4.5	3.5	3.8	4.9	3.9	4.0	4.4	3.6	3.7	4.1	4.2	5.6	5.5	8.7	3.0	5.0
8	3.7	0.9	1.4	1.0	0.5	0.9	1.3	1.5	1.0	0.9	1.5	0.9	1.8	1.5	2.8	5.2	4.9	4.3	4.2	4.2	3.6	3.0	3.9	3.2	5.2	0.5	2.4
9	1.2	1.9	1.5	0.9	1.2	3.5	4.3	4.5	4.5	4.6	4.2	4.5	4.4	5.0	5.3	5.8	6.0	5.5	5.7	5.2	4.1	3.6	2.7	2.6	6.0	0.9	3.9
10	3.0	3.0	2.7	2.2	1.9	2.0	1.4	1.1	1.0	1.3	2.8	2.5	3.1	3.9	4.0	3.9	4.8	5.3	4.9	4.7	5.3	4.9	3.6	4.5	5.3	1.0	3.2
11	3.7	4.5	2.5	2.4	3.4	5.7	5.6	6.2	6.1	9.7	10.9	9.8	8.6	8.7	8.7	9.1	9.1	8.9	8.6	8.6	8.8	8.5	8.1	7.5	10.9	2.4	7.2
12	6.5	5.4	5.3	6.2	5.4	5.2	6.7	6.8	6.5	7.7	9.8	10.0	9.3	10.2	11.1	11.2	11.3	11.1	10.7	10.2	9.2	8.5	7.0	6.3	11.3	5.2	8.2
13	4.1	4.2	5.8	6.0	6.2	6.3	5.7	5.5	5.1	6.5	7.1	9.0	8.8	9.0	9.1	8.9	9.1	8.7	7.3	7.2	5.9	4.4	3.6	4.5	9.1	3.6	6.6
14	4.3	3.1	3.4	4.3	8.2	8.9	5.4	5.1	5.1	6.6	9.2	9.1	8.4	8.7	5.4	7.5	8.2	9.2	10.5	8.2	8.9	7.9	5.8	6.6	10.5	3.1	7.0
15	4.4	4.6	5.1	7.0	6.4	5.4	2.9	2.0	2.7	3.2	3.2	6.8	8.5	9.1	6.7	5.3	4.8	4.8	4.0	1.6	2.6	5.9	5.4	5.2	9.1	1.6	4.9
16	5.4	5.7	3.8	6.0	6.8	6.5	6.0	5.1	4.3	4.2	3.7	4.4	4.0	6.3	3.7	2.1	3.8	6.7	5.3	5.3	7.2	7.9	9.3	9.7	9.7	2.1	5.5
17	9.4	8.6	8.5	8.2	7.0	6.6	6.6	5.8	5.6	5.2	6.5	8.6	8.6	9.2	8.4	10.0	11.1	11.6	11.4	10.9	10.1	7.7	6.5	5.0	11.6	5.0	8.2
18	4.1	5.4	7.3	5.5	5.4	5.4	5.6	5.2	5.7	5.9	5.2	5.0	4.2	3.8	3.9	4.6	3.8	3.0	2.1	1.9	3.5	2.6	2.7	3.1	7.3	1.9	4.4
19	4.3	3.2	3.0	2.8	3.2	4.3	2.6	2.9	4.1	3.1	3.6	4.8	5.6	6.2	5.4	6.5	7.3	6.8	7.4	7.9	6.1	4.0	2.6	2.7	7.9	2.6	4.6
20	2.5	1.7	1.6	1.5	1.0	0.6	1.2	1.0	1.0	1.2	2.7	1.6	1.7	2.1	2.5	3.5	4.4	5.3	5.3	5.1	6.0	4.3	4.9	5.1	6.0	0.6	2.8
21	4.2	1.4	1.7	1.2	1.4	1.0	0.8	0.8	1.4	2.2	1.2	2.2	3.1	4.0	4.4	6.6	7.8	9.0	10.1	11.2	13.0	13.5	11.7	11.7	13.5	0.8	5.2
22	12.0	10.5	10.9	10.9	10.8	8.8	6.8	8.8	11.6	8.5	13.7	11.7	12.7	13.7	13.3	11.4	12.4	11.9	11.8	7.1	4.9	3.8	5.2	4.7	13.7	3.8	9.9
23	4.0	2.0	2.8	3.1	2.5	3.2	1.5	3.1	5.8	6.0	8.9	12.8	14.3	16.4	17.1	15.9	13.1	17.5	16.6	17.5	16.5	14.5	14.5	15.3	17.5	1.5	10.2
24	14.7	13.1	14.4	15.8	16.0	14.2	12.3	13.2	13.9	15.7	15.2	10.4	10.5	8.6	7.7	12.6	11.1	9.8	12.1	11.8	12.6	8.0	6.5	5.0	16.0	5.0	11.9
25	2.9	5.1	3.7	5.3	4.3	4.2	2.9	2.4	3.1	3.3	3.1	3.8	4.2	4.6	4.1	4.1	3.6	4.4	4.7	2.8	1.3	1.1	1.9	3.9	5.3	1.1	3.5
26	4.7	5.3	3.9	5.3	6.9	5.4	5.4	5.5	5.8	7.2	6.5	5.0	6.5	8.7	9.5	10.6	9.8	9.4	10.3	9.6	9.1	10.0	9.1	8.2	10.6	3.9	7.4
27	7.1	6.3	6.3	6.0	6.1	6.8	7.4	6.6	7.2	7.0	7.8	8.3	8.6	8.3	9.1	9.5	9.4	10.1	10.8	11.1	11.4	11.4	9.3	6.6	11.4	6.0	8.3
28	6.9	7.7	6.8	8.0	8.1	6.0	5.5	5.2	5.0	5.9	7.1	8.7	10.2	9.8	12.4	11.6	11.1	10.8	8.0	8.3	8.5	7.0	7.0	5.3	12.4	5.0	8.0
29	5.8	4.2	2.0	2.6	2.8	5.1	5.7	5.7	5.7	5.9	5.4	4.7	3.2	2.2	3.6	2.7	6.1	5.8	4.0	4.7	4.7	4.7	4.1	2.3	6.1	2.0	4.3
30	1.9	0.6	1.0	2.0	3.0	2.8	2.0	2.1	1.9	1.0	1.6	2.6	3.6	7.8	8.6	10.2	9.4	8.9	9.3	7.5	6.2	6.3	5.3	4.4	10.2	0.6	4.6
31	4.9	4.3	2.6	3.7	4.4	4.0	5.5	8.1	13.8	11.4	12.3	11.3	9.2	6.9	3.9	1.8	3.5	4.6	3.6	3.7	4.3	5.5	5.0	5.2	13.8	1.8	6.0
Max.	**14.7**	**13.1**	**14.4**	**15.8**	**16.0**	**14.2**	**12.3**	**13.2**	**13.9**	**15.7**	**15.2**	**12.8**	**14.3**	**16.4**	**17.1**	**15.9**	**13.1**	**17.5**	**16.6**	**17.5**	**16.5**	**14.5**	**14.5**	**15.3**	**17.5**		
Min.	**1.2**	**0.6**	**1.0**	**0.9**	**0.5**	**0.6**	**0.8**	**0.8**	**0.8**	**0.9**	**1.2**	**0.9**	**1.6**	**1.5**	**2.4**	**1.8**	**3.5**	**1.6**	**2.1**	**1.6**	**1.3**	**1.1**	**1.4**	**2.3**		**0.5**	
Avg.	**5.1**	**4.6**	**4.4**	**4.8**	**4.8**	**4.8**	**4.4**	**4.4**	**4.7**	**5.1**	**5.8**	**6.0**	**6.1**	**6.7**	**6.8**	**7.1**	**7.5**	**7.8**	**7.5**	**7.1**	**6.9**	**6.3**	**5.8**	**5.7**			**5.8**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	6.0	4.6	3.4	4.8	4.1	4.9	5.2	4.3	5.6	6.6	8.5	9.2	10.7	8.7	11.8	12.3	9.7	12.0	7.9	9.8	8.0	6.9	6.6	12.3	3.4	7.4
2	6.8	4.9	4.1	5.6	6.0	5.9	5.7	5.1	4.9	3.8	4.6	5.3	5.6	5.2	4.5	5.2	4.7	4.2	4.0	3.6	4.4	4.9	4.4	4.1	6.8	3.6	4.9
3	2.7	2.0	1.1	1.9	3.3	3.5	3.0	2.4	2.2	1.6	2.5	2.9	2.1	2.0	3.1	2.1	2.8	3.0	2.4	1.8	2.4	1.6	2.7	4.4	4.4	1.1	2.5
4	5.7	6.5	6.3	7.2	8.1	7.3	8.6	7.7	6.3	5.6	6.4	6.8	6.4	6.4	4.5	2.8	2.4	1.5	5.2	8.9	9.4	10.4	9.0	9.1	10.4	1.5	6.6
5	8.7	8.7	7.7	6.3	5.6	4.9	3.2	5.5	8.5	10.2	11.6	14.1	16.2	17.5	18.2	17.1	16.8	16.8	14.9	14.1	14.5	13.2	12.4	13.3	18.2	3.2	11.6
6	9.4	6.4	7.2	9.4	10.4	10.0	6.8	3.5	2.0	1.9	4.5	5.0	6.3	6.0	5.3	7.4	7.7	6.6	4.9	4.3	5.9	4.1	4.6	3.6	10.4	1.9	6.0
7	2.2	1.7	2.2	2.9	3.0	5.0	6.0	5.6	6.0	6.2	8.1	8.8	9.7	8.2	7.9	17.0	17.7	17.3	18.1	16.8	13.7	13.7	13.0	9.8	18.1	1.7	9.2
8	5.5	7.6	6.1	5.9	4.2	3.4	3.1	2.3	5.3	4.9	3.0	2.9	4.7	4.2	6.8	7.0	7.2	7.3	10.4	11.1	11.2	11.1	9.6	8.2	11.2	2.3	6.4
9	4.8	5.5	5.1	4.6	3.3	2.3	1.8	2.0	3.2	3.7	3.5	4.0	3.6	3.3	4.0	3.6	2.8	2.0	2.2	4.4	5.9	6.3	7.1	8.0	8.0	1.8	4.0
10	7.7	7.8	7.0	8.1	8.7	8.9	8.8	9.1	10.1	9.9	10.0	9.6	8.2	6.7	6.3	5.6	5.8	5.1	5.3	4.1	5.2	2.9	2.9	3.3	10.1	2.9	7.0
11	2.1	2.0	5.2	5.5	5.8	4.5	4.6	4.5	3.5	4.0	5.1	4.7	5.5	7.2	8.8	7.7	9.6	9.6	11.4	9.5	9.2	9.4	7.5	6.2	11.4	2.0	6.4
12	6.4	6.3	5.5	5.4	4.6	3.1	3.4	3.2	3.8	4.7	5.7	5.9	5.6	5.7	5.5	5.0	4.2	4.4	4.4	3.7	3.3	3.1	3.4	2.9	6.4	2.9	4.5
13	2.5	1.8	1.8	2.7	2.1	1.8	2.4	2.4	2.7	2.9	2.5	2.2	2.0	4.8	4.4	2.6	1.7	3.3	3.6	3.8	5.3	5.0	3.7	4.0	5.3	1.7	3.0
14	4.2	4.2	5.2	5.9	6.7	6.1	4.8	5.4	5.2	4.6	4.8	4.6	2.8	3.5	2.6	3.0	2.6	2.0	2.3	3.9	4.6	5.0	7.6	8.4	8.4	2.0	4.6
15	6.1	5.9	6.4	6.6	6.2	7.1	9.0	9.1	9.7	9.5	10.5	9.7	8.8	7.6	7.1	8.5	9.2	9.0	9.7	9.2	9.7	9.0	7.5	6.5	10.5	5.9	8.2
16	7.2	7.7	7.1	7.8	8.4	8.3	8.8	7.4	7.2	6.2	5.9	6.9	7.9	8.7	8.0	8.2	7.9	7.1	6.9	7.9	8.3	7.8	7.1	7.9	8.8	5.9	7.6
17	6.8	5.7	7.2	6.2	5.5	4.7	3.6	2.8	3.2	2.7	2.1	1.5	3.3	2.6	2.0	3.4	4.1	3.8	4.1	3.4	4.2	4.0	4.0	4.4	7.2	1.5	4.0
18	4.5	4.0	4.0	3.8	3.5	4.1	3.2	2.3	2.6	2.7	3.1	2.7	1.3	2.2	1.8	1.7	2.4	3.8	1.9	3.4	3.5	2.3	2.8	2.4	4.5	1.3	2.9
19	3.7	5.1	5.5	5.3	5.4	5.9	5.4	5.4	8.2	9.3	8.1	9.5	9.7	9.7	9.9	10.5	11.0	10.3	9.7	10.6	11.4	11.3	9.5	8.9	11.4	3.7	8.3
20	8.4	9.3	9.5	9.2	9.3	10.2	9.4	8.6	9.8	10.3	11.4	11.7	11.9	11.1	10.7	10.8	11.2	12.0	10.8	10.8	11.7	11.1	12.5	8.3	12.5	8.3	10.4
21	6.7	7.6	7.2	7.9	7.5	6.7	6.5	6.4	7.5	6.8	6.7	7.9	7.5	7.6	8.3	8.5	7.6	8.1	7.4	6.7	9.0	9.8	9.6	9.7	9.8	6.4	7.7
22	6.3	2.1	2.3	1.7	1.2	1.8	3.7	5.1	5.1	4.3	4.7	4.2	3.5	3.9	4.2	4.0	3.6	4.4	4.7	4.9	4.3	3.7	5.0	6.3	6.3	1.2	4.0
23	6.1	6.4	6.9	9.0	10.5	10.9	12.3	13.1	12.9	14.0	14.0	15.3	16.1	16.1	15.4	14.9	15.3	15.2	15.4	14.0	13.3	15.0	13.5	13.3	16.1	6.1	12.9
24	13.4	13.1	11.9	11.1	10.1	9.6	8.0	8.1	7.7	8.1	7.2	9.1	11.8	11.8	12.3	10.9	10.3	10.8	11.4	11.9	11.8	10.7	9.6	8.0	13.4	7.2	10.3
25	6.9	7.6	7.6	8.2	8.2	7.1	7.4	8.1	8.6	9.0	10.2	10.9	10.6	10.8	11.6	12.8	13.3	12.1	11.9	11.5	12.0	9.9	8.4	8.1	13.3	6.9	9.7
26	7.7	6.5	5.7	6.7	7.9	6.1	6.2	6.1	6.3	6.8	6.1	5.0	5.5	3.6	3.9	3.3	3.2	2.3	2.5	3.5	5.6	6.0	6.0	4.8	7.9	2.3	5.3
27	3.8	3.5	4.0	3.2	2.8	3.0	3.1	2.8	2.4	2.7	1.3	2.6	3.9	4.6	5.5	6.0	6.8	6.7	6.3	6.6	6.2	6.4	4.2	1.9	6.8	1.3	4.2
28	1.0	1.8	3.1	3.0	1.9	1.7	1.9	2.1	1.7	2.2	2.3	2.1	3.3	3.2	4.4	4.8	5.0	3.2	2.7	6.2	6.6	6.5	5.6	5.0	6.6	1.0	3.4
29	4.8	4.8	5.0	3.3	2.6	2.4	2.4	3.2	3.1	3.9	3.8	4.3	4.3	4.7	4.9	4.6	4.4	5.7	6.4	6.0	5.7	5.4	4.5	3.5	6.4	2.4	4.3
30	2.0	2.5	1.7	2.8	0.4	1.1	2.4	3.1	3.9	2.7	2.6	3.5	3.4	4.0	4.0	4.7	4.5	4.6	4.9	4.4	4.9	7.0	3.6	3.5	7.0	0.4	3.4
Max.	**13.4**	**13.1**	**11.9**	**11.1**	**10.5**	**10.9**	**12.3**	**13.1**	**12.9**	**14.0**	**14.0**	**15.3**	**16.2**	**17.5**	**18.2**	**17.1**	**17.7**	**17.3**	**18.1**	**16.8**	**14.5**	**15.0**	**13.5**	**13.3**	**18.2**		
Min.	**1.0**	**1.7**	**1.1**	**1.7**	**0.4**	**1.1**	**1.8**	**2.0**	**1.7**	**1.6**	**1.3**	**1.5**	**1.3**	**2.0**	**1.8**	**1.7**	**1.7**	**1.5**	**1.9**	**1.8**	**2.4**	**1.6**	**2.7**	**1.9**		**0.4**	
Avg.	**5.6**	**5.5**	**5.5**	**5.7**	**5.6**	**5.4**	**5.3**	**5.3**	**5.6**	**5.7**	**6.0**	**6.4**	**6.7**	**6.8**	**6.8**	**7.2**	**7.3**	**7.1**	**7.3**	**7.3**	**7.8**	**7.5**	**6.9**	**6.5**			**6.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.6	1.8	2.2	2.4	1.8	2.6	2.6	3.3	3.6	3.8	4.3	4.9	4.3	3.9	5.2	6.4	5.4	4.8	4.6	5.2	5.3	4.1	2.4	2.1	6.4	1.8	3.8
2	1.7	2.7	4.0	2.7	2.6	1.7	0.9	0.7	0.9	4.3	4.9	5.9	5.3	5.1	4.6	5.3	5.7	5.4	6.4	6.3	6.7	6.7	4.9	5.0	6.7	0.7	4.2
3	4.1	3.1	2.6	1.3	1.5	5.0	4.9	4.5	5.1	5.0	3.3	2.7	3.4	3.7	3.2	2.5	4.0	6.3	6.5	5.9	5.2	4.0	4.1	4.5	6.5	1.3	4.0
4	5.6	6.8	6.0	5.5	6.2	6.3	5.6	5.9	5.5	5.7	6.0	6.7	7.1	6.6	7.0	8.1	9.1	8.8	7.2	4.7	4.0	4.4	4.8	6.6	9.1	4.0	6.3
5	6.4	5.4	5.8	6.5	4.8	3.1	2.1	1.1	2.0	3.6	4.1	4.9	4.9	4.2	4.1	5.0	4.6	3.1	1.1	7.0	7.8	7.9	7.6	7.1	7.9	1.1	4.8
6	5.4	5.8	5.1	5.1	5.3	5.3	4.8	3.8	3.8	3.1	3.9	3.9	2.4	2.3	2.7	2.8	3.7	3.2	2.8	2.8	2.0	1.5	2.2	1.3	5.8	1.3	3.5
7	1.3	1.8	2.0	2.4	2.3	2.3	2.5	1.7	1.5	2.4	1.7	1.6	2.5	1.9	1.8	3.5	3.2	2.9	2.2	3.3	3.8	1.8	1.5	2.3	3.8	1.3	2.3
8	2.3	2.2	1.6	1.1	0.8	1.1	1.1	1.8	1.8	3.2	2.9	4.1	4.9	5.4	5.0	5.3	6.4	7.2	7.7	8.9	8.6	8.3	8.9	8.9	8.9	0.8	4.6
9	9.6	9.7	7.1	7.3	5.3	7.0	6.5	6.7	6.2	5.6	3.6	2.6	3.5	3.2	3.3	1.8	2.1	3.1	3.3	4.1	3.6	3.0	3.0	3.5	9.7	1.8	4.8
10	3.6	3.3	3.8	2.9	2.4	1.2	1.2	1.4	2.1	3.5	3.8	4.1	3.9	2.6	5.4	4.8	5.3	8.3	8.4	7.9	6.7	6.3	5.9	6.3	8.4	1.2	4.4
11	6.6	6.0	5.3	5.5	5.4	7.2	6.7	6.7	6.7	6.3	6.3	6.9	7.4	7.5	7.5	7.0	6.7	6.6	6.6	6.5	6.9	6.0	5.5	3.7	7.5	3.7	6.4
12	4.1	2.6	2.0	2.6	1.7	2.6	2.5	2.6	2.9	2.8	3.7	2.9	3.2	3.7	4.4	4.8	6.7	4.9	3.8	3.9	3.9	3.5	4.6	5.2	6.7	1.7	3.6
13	4.9	5.0	5.3	5.1	5.4	4.8	3.8	4.1	4.1	3.5	3.7	4.1	5.5	5.3	5.4	5.1	5.3	4.6	4.2	3.7	3.7	3.4	3.4	3.7	5.5	3.4	4.5
14	2.8	3.7	3.8	3.5	3.9	3.0	2.7	2.5	4.1	3.1	3.7	4.8	5.2	5.0	4.9	6.6	7.0	6.7	6.4	5.8	4.6	4.3	4.6	4.9	7.0	2.5	4.5
15	3.5	3.3	2.4	2.3	2.5	2.8	1.1	0.9	1.8	1.6	2.2	2.4	2.1	1.6	5.0	6.2	6.7	7.3	6.7	6.1	6.1	6.5	5.7	4.4	7.3	0.9	3.8
16	3.1	3.6	1.7	3.0	3.9	4.7	5.0	5.6	5.9	5.9	7.3	7.2	7.0	6.0	6.0	6.1	6.9	6.3	6.2	7.0	8.1	8.5	8.0	6.2	8.5	1.7	5.8
17	6.0	5.8	4.8	4.9	4.9	4.0	3.9	4.0	4.6	4.4	3.2	3.0	1.9	1.5	3.5	4.0	6.4	7.9	9.0	8.6	6.7	6.2	6.7	7.2	9.0	1.5	5.1
18	6.7	5.9	7.6	6.7	7.8	6.0	6.0	4.1	3.2	3.0	2.9	2.3	1.6	3.3	2.9	4.8	5.3	4.6	5.0	3.5	1.9	1.5	0.9	1.1	7.8	0.9	4.1
19	2.2	3.2	3.0	2.9	2.7	2.8	2.9	2.5	3.4	4.0	3.9	3.2	3.0	3.5	2.5	2.0	2.3	1.9	3.9	3.3	2.6	1.7	2.6	2.4	4.0	1.7	2.9
20	1.7	1.6	1.4	0.6	0.3	0.7	0.5	0.9	1.0	1.0	1.8	3.2	1.5	1.1	1.9	3.1	3.5	3.6	5.0	5.8	5.2	6.4	7.2	4.4	7.2	0.3	2.7
21	4.3	1.5	1.2	1.0	1.8	2.2	2.8	1.3	2.4	3.3	3.0	2.8	1.6	4.1	5.0	6.4	6.9	7.0	6.6	5.7	5.2	5.0	5.3	4.4	7.0	1.0	3.8
22	3.9	5.6	6.1	5.8	6.3	6.7	6.8	6.5	6.9	6.6	6.4	6.1	6.6	6.5	6.6	6.0	5.5	5.5	5.8	5.5	5.2	3.9	4.0	5.3	6.9	3.9	5.8
23	4.6	4.7	4.4	2.7	1.6	1.1	1.5	1.4	2.8	3.1	3.9	3.8	4.5	5.1	6.3	7.4	9.2	10.8	11.2	9.8	10.5	9.2	9.5	10.8	11.2	1.1	5.8
24	10.8	9.7	10.9	12.7	12.8	11.7	11.5	9.5	7.3	6.3	6.8	6.2	5.3	3.8	5.4	5.9	6.7	6.3	3.9	3.0	2.7	2.1	6.1	6.4	12.8	2.1	7.2
25	7.0	7.0	4.8	3.4	6.6	10.1	2.9	8.5	8.9	10.0	10.5	8.8	6.1	6.8	6.9	5.8	6.4	5.2	4.4	6.3	4.4	3.8	2.6	1.9	10.5	1.9	6.2
26	3.1	2.1	0.8	1.0	3.1	3.8	3.7	5.0	5.4	5.4	5.4	4.2	3.9	3.7	3.0	2.2	2.5	3.3	4.6	6.0	6.6	4.0	3.0	3.7	6.6	0.8	3.7
27	1.7	3.3	4.0	3.9	3.7	4.5	3.8	4.9	5.0	5.3	6.0	5.3	5.2	6.6	7.4	7.1	6.2	6.1	8.1	6.7	6.0	4.6	4.8	3.9	8.1	1.7	5.2
28	4.0	5.2	5.3	5.5	5.0	5.1	4.6	5.3	5.1	4.2	5.3	6.2	4.7	5.9	6.8	6.6	7.1	7.1	8.0	7.9	8.2	8.7	7.3	5.1	8.7	4.0	6.0
29	3.9	2.9	3.7	4.0	4.9	5.5	6.9	7.4	6.3	6.5	6.2	6.0	7.0	7.2	7.0	7.1	6.1	5.9	6.1	5.3	6.4	6.8	4.8	4.2	7.4	2.9	5.8
30	4.9	4.2	4.0	4.1	3.3	2.5	2.7	2.5	1.5	1.9	1.0	1.2	2.3	3.3	2.0	3.7	5.2	5.0	5.2	5.1	5.1	4.0	4.6	5.0	5.2	1.0	3.5
31	3.7	3.2	3.0	3.0	3.5	3.1	3.9	3.9	4.6	5.5	6.2	6.4	6.3	6.6	7.1	6.9	7.4	8.4	6.9	7.4	9.9	11.6	12.3	12.3	12.3	3.0	6.4
Max.	**10.8**	**9.7**	**10.9**	**12.7**	**12.8**	**11.7**	**11.5**	**9.5**	**8.9**	**10.0**	**10.5**	**8.8**	**7.4**	**7.5**	**7.5**	**8.1**	**9.2**	**10.8**	**11.2**	**9.8**	**10.5**	**11.6**	**12.3**	**12.3**	**12.8**		
Min.	**1.3**	**1.5**	**0.8**	**0.6**	**0.3**	**0.7**	**0.5**	**0.7**	**0.9**	**1.0**	**1.0**	**1.2**	**1.5**	**1.1**	**1.8**	**1.8**	**2.1**	**1.9**	**1.1**	**2.8**	**1.9**	**1.5**	**0.9**	**1.1**		**0.3**	
Avg.	**4.4**	**4.3**	**4.1**	**3.9**	**4.0**	**4.2**	**3.8**	**3.9**	**4.1**	**4.3**	**4.4**	**4.5**	**4.3**	**4.4**	**4.8**	**5.2**	**5.7**	**5.7**	**5.7**	**5.8**	**5.6**	**5.2**	**5.1**	**5.0**			**4.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.1	10.5	9.7	11.8	10.6	10.7	13.5	13.4	13.5	15.2	16.5	15.4	15.3	12.5	12.4	14.0	13.7	13.4	11.8	13.2	14.5	14.3	13.9	14.3	16.5	9.7	13.1
2	12.7	13.2	13.2	16.1	13.9	14.5	15.6	15.0	15.6	16.7	16.8	15.9	17.3	16.8	15.1	16.5	17.4	15.4	14.5	12.9	12.0	11.7	10.8	8.6	17.4	8.6	14.5
3	9.4	9.2	8.6	8.8	7.0	6.8	7.5	7.6	7.8	8.0	8.3	11.1	10.8	11.9	13.5	14.1	15.1	14.9	13.9	12.4	11.5	11.4	11.0	13.6	15.1	6.8	10.6
4	13.6	14.9	13.4	13.0	14.8	13.5	11.7	11.8	13.0	13.5	13.8	13.8	12.6	10.9	11.2	10.3	11.1	12.8	13.3	12.5	12.1	11.0	10.7	12.3	14.9	10.3	12.6
5	11.2	11.2	11.9	12.3	13.3	9.6	7.5	7.5	6.3	9.9	11.1	10.4	12.0	13.5	12.3	12.3	13.4	11.8	12.4	10.4	10.5	12.9	13.4	14.1	14.1	6.3	11.3
6	13.1	12.6	11.5	10.6	11.1	7.5	8.8	11.0	10.5	12.8	12.6	12.1	12.6	13.0	12.7	12.1	12.0	12.8	11.0	12.6	12.0	10.1	9.0	8.1	13.1	7.5	11.3
7	6.7	6.2	5.9	7.6	11.2	9.7	7.6	8.5	10.8	10.9	11.5	11.6	11.1	11.8	12.2	12.2	10.8	11.6	12.3	11.0	10.2	8.3	7.2	5.9	12.3	5.9	9.7
8	5.6	6.5	4.3	3.8	7.0	4.7	5.9	7.6	7.3	7.3	7.8	8.4	8.5	8.1	7.5	5.6	7.3	7.1	7.4	7.9	6.5	5.7	7.1	7.6	8.5	3.8	6.8
9	7.5	6.1	5.6	5.9	6.1	6.4	5.8	7.4	6.3	6.3	3.1	4.4	3.1	1.7	2.4	1.6	2.0	4.6	4.7	4.3	4.3	3.7	3.1	2.0	7.5	1.6	4.5
10	2.7	4.6	4.5	3.7	3.5	2.4	1.9	0.9	0.8	2.1	3.0	2.9	3.0	2.8	3.5	3.6	4.1	4.5	5.1	4.4	4.6	4.4	4.5	4.4	5.1	0.8	3.4
11	3.8	2.2	2.7	4.1	2.7	1.6	2.2	2.8	2.9	2.8	2.3	1.0	1.5	2.3	2.0	3.2	3.0	4.1	4.4	3.4	2.0	2.0	2.1	2.6	4.4	1.0	2.7
12	3.1	2.2	4.7	3.6	3.4	2.9	3.2	2.0	1.8	1.6	1.9	2.1	4.1	4.7	2.1	3.9	4.4	6.0	5.5	5.2	6.7	3.3	7.0	5.8	7.0	1.6	3.8
13	2.8	0.6	1.4	2.9	3.3	2.4	1.9	1.5	1.6	1.5	2.2	4.0	3.6	3.9	4.0	4.4	4.2	5.9	4.9	4.8	3.9	6.8	8.8	9.8	9.8	0.6	3.8
14	10.0	10.9	11.0	6.7	3.7	3.2	1.8	5.5	6.5	5.6	6.1	5.0	5.2	4.9	5.0	3.7	3.6	4.3	4.7	2.6	2.2	3.8	4.3	5.0	11.0	1.8	5.2
15	6.5	6.7	7.0	8.6	8.2	11.3	9.8	10.4	10.1	11.0	8.8	10.7	9.8	8.3	9.3	7.7	6.8	7.1	6.9	6.2	5.4	6.3	4.3	3.8	11.3	3.8	8.0
16	3.6	3.3	2.1	1.5	1.2	1.5	1.1	0.9	1.9	2.8	1.8	2.1	1.9	1.8	1.3	1.8	1.3	2.0	4.8	4.7	5.0	5.1	4.6	4.3	5.1	0.9	2.6
17	4.3	4.3	4.4	4.4	5.4	6.6	5.6	6.1	4.5	4.7	7.9	8.5	7.7	8.1	7.1	8.6	9.3	11.6	12.4	11.6	12.0	12.0	11.5	12.0	12.4	4.3	7.9
18	12.0	11.9	13.5	13.9	14.2	15.3	16.0	16.9	16.4	16.7	17.5	18.1	18.1	18.3	19.7	20.9	20.0	20.7	19.5	20.7	20.8	19.5	19.0	19.9	20.9	11.9	17.5
19	19.4	19.3	19.7	19.4	17.4	15.0	11.3	10.3	13.4	12.9	11.9	13.2	14.6	14.6	16.0	16.0	17.0	16.4	14.8	14.6	15.4	13.3	12.4	10.4	19.7	10.3	14.9
20	9.8	7.1	6.5	6.5	7.1	8.3	7.6	7.0	9.0	8.3	7.4	6.1	6.3	7.0	8.0	9.2	9.6	9.9	10.9	10.7	10.6	8.1	8.0	7.3	10.9	6.1	8.2
21	7.1	8.1	9.5	9.5	8.6	9.9	10.0	8.9	7.0	7.9	7.9	9.6	9.7	10.0	9.9	8.4	8.7	8.0	7.5	7.8	7.5	7.0	9.1	8.6	10.0	7.0	8.6
22	8.6	8.9	9.3	10.7	11.2	9.4	8.4	8.9	8.6	8.3	8.7	9.1	9.1	9.1	9.1	9.1	9.5	9.4	8.7	8.8	9.2	8.2	7.5	6.2	11.2	6.2	8.9
23	4.6	3.7	2.9	1.4	1.0	2.1	1.0	0.5	1.3	2.4	4.2	5.1	6.3	5.9	6.7	7.3	7.3	7.6	7.6	6.9	7.0	6.8	7.1	6.6	7.6	0.5	4.7
24	7.3	6.0	8.5	9.1	7.8	7.8	8.0	7.5	6.7	7.1	7.9	6.9	7.2	7.4	4.7	4.0	4.7	2.6	4.5	2.7	2.2	1.9	1.7	3.7	9.1	1.7	5.7
25	3.6	2.4	2.0	2.1	3.4	4.8	3.3	2.1	1.9	2.2	2.4	2.6	3.4	3.4	5.3	5.1	6.2	7.7	7.6	6.2	4.8	6.4	3.9	3.9	7.7	1.9	4.0
26	4.6	5.1	4.4	5.1	3.0	3.2	2.7	3.0	3.7	3.0	3.8	5.4	6.0	6.3	5.9	5.8	5.8	6.7	6.9	5.6	5.1	3.6	3.9	4.1	6.9	2.7	4.7
27	6.2	6.5	6.0	5.2	3.4	3.8	2.8	1.8	3.2	3.6	3.1	5.3	6.6	6.0	5.1	3.9	4.0	4.8	3.7	2.5	2.5	2.0	1.3	1.3	6.6	1.3	3.9
28	1.4	3.3	2.4	2.3	1.1	1.2	0.6	1.6	1.6	1.1	1.4	2.2	2.0	3.0	4.2	3.8	3.2	3.5	5.1	6.9	7.5	8.6	6.0	6.3	8.6	0.6	3.3
29	5.7	6.1	7.3	7.9	8.6	7.7	8.1	10.1	10.3	10.2	10.1	10.0	11.0	10.5	10.7	10.6	9.3	9.8	9.7	8.8	7.2	7.5	8.4	7.8	11.0	5.7	8.9
30	6.1	6.0	6.4	6.3	6.8	8.1	8.1	8.6	7.4	7.0	6.1	5.5	4.6	4.6	4.2	5.1	4.1	3.5	3.0	3.5	3.5	4.5	5.3	5.0	8.6	3.0	5.5
31	4.2	4.5	4.3	3.7	4.0	4.0	4.1	3.7	3.3	2.9	4.1	4.0	3.2	2.9	2.7	2.8	2.9	3.0	1.4	1.2	0.9	1.6	2.3	1.9	4.5	0.9	3.1
Max.	**19.4**	**19.3**	**19.7**	**19.4**	**17.4**	**15.3**	**16.0**	**16.9**	**16.4**	**16.7**	**17.5**	**18.1**	**18.1**	**18.3**	**19.7**	**20.9**	**20.0**	**20.7**	**19.5**	**20.7**	**20.8**	**19.5**	**19.0**	**19.9**	**20.9**		
Min.	**1.4**	**0.6**	**1.4**	**1.4**	**1.0**	**1.2**	**0.6**	**0.5**	**0.8**	**1.1**	**1.4**	**1.0**	**1.5**	**1.7**	**1.3**	**1.6**	**1.3**	**2.0**	**1.4**	**1.2**	**0.9**	**1.6**	**1.3**	**1.3**		**0.5**	
Avg.	**7.4**	**7.2**	**7.2**	**7.4**	**7.2**	**7.0**	**6.6**	**6.8**	**6.9**	**7.3**	**7.5**	**7.8**	**8.0**	**7.9**	**7.9**	**8.0**	**8.1**	**8.5**	**8.4**	**8.0**	**7.7**	**7.5**	**7.4**	**7.3**			**7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.6	1.2	1.9	1.7	2.0	1.9	1.2	2.5	3.7	4.9	4.5	4.0	3.5	3.4	4.0	4.5	4.6	4.5	5.2	5.1	5.5	6.0	5.0	6.0	0.6	3.4
2	5.0	4.6	4.7	4.5	3.7	3.5	3.6	4.4	3.4	3.1	3.2	4.0	5.1	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	2.2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								0.1	0.9	8.4	17.8	17.4	18.0	17.8	17.0	17.7	18.0	0.0	6.8
4	14.9	13.2	13.3	10.9	5.0	2.4	1.1	3.0	3.5	4.8	5.4	3.1	1.3	5.8	4.0	3.0	3.0	5.9	7.5	9.4	9.1	9.2	7.9	8.1	14.9	1.1	6.4
5	6.5	6.0	6.9	5.9	6.5	5.6	4.6	3.0	3.4	2.2	3.1	5.4	5.5	5.4	5.7	4.4	4.5	3.4	4.6	5.5	3.8	1.7	1.9	1.4	6.9	1.4	4.4
6	0.9	2.9	3.5	1.1	1.3	2.1	2.4	3.5	4.0	5.5	5.1	5.1	5.5	5.5	6.6	5.5	5.5	6.7	5.7	3.9	3.4	3.6	3.2	2.7	6.7	0.9	4.0
7	3.3	5.3	5.7	5.6	6.1	6.9	6.6	10.7	10.8	14.3	14.3	15.2	17.6	19.0	19.3	20.9	21.4	19.7	20.8	21.1	21.2	20.6	21.8	22.7	22.7	3.3	14.6
8	20.2	18.2	15.5	14.4	11.8	12.8	13.6	12.5	11.6	11.8	12.3	12.8	11.5	9.9	10.1	9.7	9.2	9.4	6.9	8.0	6.5	5.9	6.7	7.6	20.2	5.9	11.2
9	7.5	6.4	6.6	6.3	6.2	7.8	7.7	6.7	5.2	5.3	5.4	4.7	4.9	5.2	5.7	5.3	4.9	3.9	2.2	2.2	2.8	4.3	3.6	2.1	7.8	2.1	5.1
10	1.4	2.2	2.8	1.7	2.1	1.9	1.8	1.3	1.3	2.4	2.6	4.4	5.8	8.1	10.9	12.1	12.0	10.5	9.6	10.7	13.7	15.7	14.6	14.2	15.7	1.3	6.8
11	13.9	14.8	15.3	15.9	17.4	17.6	18.1	18.6	19.3	18.7	19.9	19.6	21.6	23.2	21.7	22.7	22.7	26.2	25.7	21.4	21.7	22.6	23.6	22.2	26.2	13.9	20.2
12	20.5	20.0	19.4	17.6	13.1	8.9	5.8	4.6	4.4	4.5	3.8	3.5	5.2	7.1	6.7	7.0	6.9	6.7	8.0	8.6	8.6	8.6	8.1	6.9	20.5	3.5	8.9
13	5.1	4.3	4.4	4.6	4.6	4.9	5.7	7.2	6.4	5.8	5.1	4.8	5.2	5.6	5.8	4.2	4.1	5.1	4.4	4.4	4.8	4.7	3.7	3.3	7.2	3.3	4.9
14	2.6	2.0	2.8	2.7	3.4	3.3	2.8	1.4	1.6	0.6	0.6	1.2	1.5	2.0	2.0	2.3	5.0	5.0	6.6	6.4	6.8	7.1	8.9	7.3	8.9	0.6	3.6
15	8.0	5.0	7.6	8.6	8.0	8.3	7.6	7.3	7.1	5.8	8.9	9.8	10.4	10.5	11.7	10.3	9.7	10.9	9.6	8.7	7.1	4.8	5.5	6.7	11.7	4.8	8.3
16	8.6	6.8	6.0	6.3	6.8	5.8	5.7	5.8	4.3	3.4	3.2	4.7	5.9	5.9	5.6	6.4	7.2	6.8	6.1	7.0	8.8	7.8	7.7	5.1	8.8	3.2	6.1
17	2.7	1.6	1.9	1.0	3.9	4.3	6.9	6.4	4.9	4.9	4.6	4.9	5.1	6.4	5.6	4.9	3.9	2.9	3.6	3.2	4.4	5.2	5.1	5.3	6.9	1.0	4.3
18	6.3	6.7	8.6	7.4	8.6	9.8	12.3	12.0	10.0	13.9	16.6	19.0	21.7	20.3	21.1	20.5	19.5	17.7	16.6	15.7	14.3	11.1	6.6	4.5	21.7	4.5	13.4
19	5.6	6.5	6.3	6.9	6.7	6.2	5.2	8.7	5.5	5.5	7.7	8.6	9.9	10.4		12.3	13.0	13.0	13.2	12.1	12.4	10.1	11.7	10.8	13.2	5.2	9.1
20	10.5	12.4	12.4	13.1	11.9	10.1	10.9	10.6	10.6	10.1	9.7	8.0	8.2	7.3	7.1	5.9	6.0	5.5	6.1	6.2	3.7	4.3	2.9	7.4	13.1	2.9	8.4
21	4.7	3.1	3.1	4.8	6.5	7.1	7.1	7.8	9.0	8.0	8.9	9.6	10.2	9.9	9.1	8.2	7.7	7.9	6.9	6.0	6.5	4.9	5.0	3.6	10.2	3.1	6.9
22	4.7	4.0	5.0	3.6	3.1	3.3	3.4	2.2	0.9	1.0	2.8	5.7	6.2	7.3	10.0	10.9	12.4	13.0	13.0	13.0	10.1	9.6	12.3	8.3	13.0	0.9	6.9
23	5.5	4.2	2.2	4.5	3.1	3.5	3.5	2.6	2.4	4.0	4.2	4.3	5.3	7.2	8.4	9.0	8.2	7.0	7.7	8.5	7.7	7.8	7.6	6.0	9.0	2.2	5.6
24	6.3	6.9	4.4	7.1	8.4	6.8	6.6	6.7	7.2	8.0	8.9	7.6	7.3	6.2	8.3	6.7	6.9	5.9	6.5	5.3	3.6	4.4	5.9	7.4	8.9	3.6	6.6
25	7.0	7.7	7.9	5.4	6.0	7.6	9.2	8.7	8.4	9.0	7.3	6.3	7.4	6.8	6.8	7.2	6.6	8.0	8.2	7.6	7.6	7.3	7.1	7.8	9.2	5.4	7.5
26	6.5	6.5	5.5	6.0	6.0	3.3	2.6	1.5	2.0	2.2	2.9	4.5	3.4	2.7	1.8	1.5	1.3	3.1	4.6	5.3	5.1	4.7	5.6	6.8	6.8	1.3	4.0
27	7.4	7.8	8.3	5.9	3.0	2.5	2.2	1.2	2.0	1.8	2.8	2.4	4.5	4.6	4.7	5.3	6.8	7.8	9.2	12.3	15.3	17.9	18.9	18.5	18.9	1.2	7.2
28	17.7	17.7	19.1	18.2	15.8	16.9	15.2	13.2	11.9	9.9	8.8	9.3	9.2	8.2	6.2	4.7	3.0	3.5	3.3	2.4	2.1	1.5	2.6	2.8	19.1	1.5	9.3
29	5.6	6.6	7.1	7.3	6.9	5.5	5.5	4.0	3.5	2.9	1.9	3.3	1.9	4.5	5.1	5.1	5.1	3.4	3.4	3.9	4.4	5.4	5.4	4.9	7.3	1.9	4.7
30	6.1	5.7	6.7	5.7	6.0	6.5	7.7	7.7	8.3	6.6	7.1	8.4	9.4	7.2	6.4	4.5	4.3	5.1	6.5	6.0	2.9	1.7	4.2	2.9	9.4	1.7	6.0
Max.	**20.5**	**20.0**	**19.4**	**18.2**	**17.4**	**17.6**	**18.1**	**18.6**	**19.3**	**18.7**	**19.9**	**19.6**	**21.7**	**23.2**	**21.7**	**22.7**	**22.7**	**26.2**	**25.7**	**21.4**	**21.7**	**22.6**	**23.6**	**22.7**	**26.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.9**	**0.6**	**0.6**	**1.2**	**1.3**	**0.0**	**0.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.2**	**7.0**	**7.1**	**6.8**	**6.5**	**6.2**	**6.2**	**6.2**	**6.0**	**6.2**	**6.6**	**7.1**	**7.6**	**7.8**	**7.9**	**7.5**	**7.5**	**7.9**	**8.3**	**8.2**	**8.1**	**7.9**	**8.0**	**7.7**			**7.2**

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.6	5.2	4.8	3.4	3.7	5.4	4.9	3.9	3.2	1.3	2.6	3.0	2.4	5.0	8.1	9.4	10.5	10.1	12.2	11.1	12.4	10.3	11.3	12.9	12.9	1.3	6.7
2	12.2	13.4	14.2	15.7	15.9	14.8	14.0	13.3	12.2	12.0	13.8	14.7	14.7	12.6	12.3	12.2	12.5	11.9	12.2	11.6	12.1	10.4	10.5	10.1	15.9	10.1	12.9
3	11.0	11.6	11.7	12.1	11.2	9.4	9.4	8.1	9.0	9.5	11.2	11.2	11.2	9.8	9.9	10.6	10.6	11.4	6.6	4.5	1.4	1.2	0.9	1.1	12.1	0.9	8.5
4	1.7	1.0	1.4	2.9	4.3	4.6	7.0	6.6	11.5	12.4	15.7	16.2	17.6	17.4	17.1	16.2	14.6	13.2	12.6	13.8	12.5	12.9	13.4	12.1	17.6	1.0	10.8
5	11.6	11.9	12.8	13.0	14.1	14.2	12.7	11.5	10.3	10.5	8.4	6.8	2.9	6.8	13.5	14.6	15.4	15.4	17.3	14.2	11.7	8.7	10.8	12.3	17.3	2.9	11.7
6	11.4	10.2	11.8	12.8	13.3	13.5	13.1	16.0	15.0	15.1	12.6	10.7	13.2	13.5	11.7	11.9	12.3	11.2	10.5	9.2	6.3	7.4	8.5	8.3	16.0	6.3	11.6
7	8.4	7.7	9.4	7.8	8.9	10.2	10.0	10.9	13.2	12.6	13.3	13.8	14.3	16.1	16.5	15.9	15.6	16.6	17.8	17.0	15.2	16.4	13.2	11.5	17.8	7.7	13.0
8	11.9	11.3	10.2	13.6	14.9	13.5	10.3	9.0	9.8	12.1	13.4	12.7	13.7	12.9	12.7	12.2	12.1	9.8	8.0	6.8	7.8	8.9	11.0	6.8	14.9	6.8	11.1
9	7.4	7.9	6.9	4.7	2.2	1.6	1.1	1.3	1.7	1.5	0.9	0.7	0.8	1.1	2.2	2.5	4.3	5.4	5.7	3.3	3.3	4.4	6.3	6.5	7.9	0.7	3.5
10	6.6	7.3	7.7	7.1	6.2	7.9	9.0	7.9	8.0	8.0	8.7	9.4	7.9	8.6	10.3	8.6	8.0	7.8	7.1	4.9	4.2	3.7	3.1	3.3	10.3	3.1	7.1
11	2.9	3.6	3.8	3.1	3.3	2.5	2.6	1.4	1.2	2.0	3.0	3.8	4.4	6.5	7.3	8.1	9.0	8.2	8.4	7.3	7.8	8.3	9.7	11.1	11.1	1.2	5.4
12	10.2	9.6	9.0	6.7	6.3	6.8	5.5	2.4	1.5	1.0	0.9	1.0	1.5	2.5	2.5	2.7	2.8	2.2	2.6	4.5	6.7	4.6	5.1	4.7	10.2	0.9	4.3
13	5.2	5.2	4.6	5.0	5.2	4.9	5.4	8.6	7.0	7.4	6.5	7.0	7.7	7.6	6.8	6.9	7.9	8.8	10.1	8.1	8.5	8.8	8.8	9.6	10.1	4.6	7.1
14	8.3	7.0	8.5	10.1	8.6	7.1	6.7	7.1	5.7	4.5	4.1	5.5	6.1	4.8	5.6	4.2	6.4	5.8	4.8	5.6	6.0	5.4	4.4	2.9	10.1	2.9	6.1
15	1.8	2.3	2.5	1.9	1.3	0.8	0.7	1.5	3.3	1.8	1.4	1.5	1.3	1.8	1.4	1.4	1.2	1.3	1.7	2.7	3.2	3.0	2.7	2.7	3.3	0.7	1.9
16	3.1	3.5	3.4	2.8	2.9	3.9	5.3	6.2	6.2	6.0	5.4	6.1	6.6	8.1	8.9	9.7	9.2	8.3	8.3	9.1	10.1	10.7	9.1	7.7	10.7	2.8	6.7
17	7.0	7.2	8.0	8.1	8.7	8.1	7.1	6.9	6.8	7.1	7.0	5.8	5.3	6.0	6.6	6.4	5.6	4.8	5.9	5.5	5.1	4.9	5.3	5.1	8.7	4.8	6.4
18	4.0	3.7	3.4	3.0	2.5	2.1	1.9	1.7	1.5	1.4	1.4	1.4	1.4	3.1	5.1	5.0	5.2	5.3	6.1	6.8	6.5	7.2	7.2	5.9	7.2	1.4	3.9
19	6.1	6.0	4.4	4.6	4.1	2.1	2.2	1.7	1.3	1.6	1.8	1.7	0.8	0.2	1.0	1.2	1.4	1.7	1.5	3.0	2.7	3.2	3.1	3.1	6.1	0.2	2.5
20	1.9	2.3	1.7	2.5	2.1	2.2	2.9	2.5	2.3	2.0	3.0	2.9	4.7	6.3	5.7	6.5	6.6	5.5	7.2	8.0	9.5	9.9	8.4	9.8	9.9	1.7	4.9
21	9.5	10.0	8.6	9.8	10.0	12.0	15.4	8.5	7.4	5.3	4.1	5.1	5.1	6.7	8.8	6.5	4.6	3.4	1.8	2.1	2.9	3.6	4.2	4.3	15.4	1.8	6.6
22	4.6	4.7	5.7	5.6	5.8	4.7	4.4	3.8	2.9	1.3	2.1	2.1	1.2	1.8	2.4	3.2	3.5	2.2	1.2	1.6	1.4	1.9	2.1	1.9	5.8	1.2	3.0
23	2.0	2.1	1.4	1.5	2.0	1.8	1.5	1.7	1.9	2.2	1.7	2.6	2.6	3.9	3.9	3.4	1.9	4.9	7.0	6.2	4.6	2.6	2.9	2.5	7.0	1.4	2.9
24	2.1	3.0	2.4	2.5	4.0	4.4	3.8	3.3	3.6	5.5	5.3	6.9	5.2	7.3	7.0	4.9	4.5	4.8	3.5	4.7	5.0	5.9	5.5	6.1	7.3	2.1	4.6
25	5.6	7.7	13.7	15.2	15.8	19.4	22.6	21.9	23.7	26.2	27.2	27.4	26.8	26.2	24.6	23.9	22.9	23.4	22.0	20.1	13.8	7.8	6.0	7.4	27.4	5.6	18.8
26	4.6	4.8	4.1	4.2	4.3	5.9	5.0	3.6	5.3	5.4	5.3	4.8	5.0	4.9	4.8	4.8	4.3	4.4	4.0	5.2	7.6	9.7	9.8	9.0	9.8	3.6	5.5
27	7.1	8.7	9.9	10.1	9.0	7.8	5.8	6.8	4.3	3.3	3.7	5.0	2.3	3.0	9.2	9.4	7.7	8.0	7.3	5.7	3.9	2.3	4.0	4.8	10.1	2.3	6.2
28	3.9	5.0	3.6	1.9	1.7	0.9	1.8	2.4	3.7	4.1	4.0	4.4	5.0	4.1	4.0	4.6	4.7	4.4	6.5	5.9	6.5	8.2	9.9	13.6	13.6	0.9	4.8
29	14.5	16.3	17.4	18.5	18.5	17.7	19.7	21.7	22.2	23.8	20.7	21.8	23.3	23.2	19.2	20.4	18.9	15.5	12.9	12.9	19.8	19.5	18.9	17.2	23.8	12.9	18.9
30	7.7	5.2	9.3	10.6	10.5	12.4	8.0	6.2	7.0	7.3	6.8	5.4	4.2	2.1	4.1	1.9	4.2	6.5	6.0	3.4	2.7	4.3	3.4	3.2	12.4	1.9	5.9
31	2.8	4.3	2.7	6.3	11.1	12.6	10.8	9.1	10.3	11.5	12.3	11.2	11.3	9.8	7.9	5.3	5.8	3.9	5.6	6.4	6.7	7.0	5.8	6.3	12.6	2.7	7.8
Max.	**14.5**	**16.3**	**17.4**	**18.5**	**18.5**	**19.4**	**22.6**	**21.9**	**23.7**	**26.2**	**27.2**	**27.4**	**26.8**	**26.2**	**24.6**	**23.9**	**22.9**	**23.4**	**22.0**	**20.1**	**19.8**	**19.5**	**18.9**	**17.2**	**27.4**		
Min.	**1.7**	**1.0**	**1.4**	**1.5**	**1.3**	**0.8**	**0.7**	**1.3**	**1.2**	**1.0**	**0.9**	**0.7**	**0.8**	**0.2**	**1.0**	**1.2**	**1.2**	**1.3**	**1.2**	**1.6**	**1.4**	**1.2**	**0.9**	**1.1**		**0.2**	
Avg.	**6.5**	**6.8**	**7.1**	**7.3**	**7.5**	**7.6**	**7.4**	**7.0**	**7.2**	**7.3**	**7.4**	**7.5**	**7.4**	**7.9**	**8.4**	**8.2**	**8.2**	**7.9**	**7.9**	**7.5**	**7.4**	**7.2**	**7.3**	**7.2**			**7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.9	5.9	5.5	6.4	4.8	3.4	5.9	3.9	0.8	2.7	3.1	2.1	2.2	2.2	1.8	1.3	2.1	4.8	7.7	9.6	12.3	12.5	10.7	10.7	12.5	0.8	5.4
2	10.7	10.5	6.6	2.4	2.7	3.2	3.9	3.9	3.4	3.7	4.8	5.0	5.2	5.4	5.9	6.7	8.8	8.2	8.7	8.5	9.1	8.7	7.7	7.9	10.7	2.4	6.3
3	8.0	7.1	5.7	4.9	4.2	3.2	2.2	1.0	0.6	0.5	0.2	0.5	0.6	0.7	0.9	1.3	4.1	6.0	4.9	3.8	5.5	8.4	9.1	9.3	9.3	0.2	3.9
4	11.4	13.1	15.2	16.0	17.7	17.9	18.3	18.0	17.1	17.5	17.1	15.2	15.0	16.1	14.4	12.8	13.1	14.2	13.0	11.6	11.1	10.7	10.0	9.4	18.3	9.4	14.4
5	9.7	8.4	7.8	8.1	8.4	6.4	4.4	3.4	4.1	4.5	4.8	4.5	3.6	4.3	5.1	4.7	4.7	6.5	6.1	5.5	5.2	5.8	8.7	7.2	9.7	3.4	5.9
6	10.0	13.6	14.7	13.5	14.4	13.6	13.4	16.9	16.4	16.8	20.0	18.9	19.7	23.6	21.9	15.9	19.5	20.8	19.1	17.5	18.4	18.3	15.9	10.9	23.6	10.0	16.8
7	8.8	9.0	10.0	12.2	12.1	14.5	15.7	14.6	13.9	15.1	14.2	15.0	14.5	13.6	11.5	9.3	10.6	9.2	9.2	10.2	9.1	10.3	8.8	2.8	15.7	2.8	11.4
8	3.3	4.2	5.3	7.5	6.4	11.0	16.4	20.7	22.3	21.9	23.7	25.6	22.5	16.5	15.3	15.8	16.2	15.1	13.3	12.9	13.1	11.7	8.0	8.6	25.6	3.3	14.1
9	10.6	8.3	8.9	8.3	7.8	7.9	8.7	8.6	7.8	7.6	7.5	7.7	7.3	8.8	11.0	10.5	10.2	10.2	7.2	7.2	7.1	3.4	1.9	1.6	11.0	1.6	7.8
10	2.7	3.7	4.1	4.6	4.7	5.5	5.0	4.9	5.5	4.2	6.1	5.3	6.2	7.3	8.2	8.2	6.3	5.1	3.9	2.9	4.4	3.4	4.9	4.2	8.2	2.7	5.1
11	3.8	2.9	3.0	3.0	3.9	4.1	3.8	3.8	3.5	2.6	3.1	3.6	5.9	6.3	5.4	5.4	6.8	6.2	4.8	3.3	2.7	1.4	1.8	1.9	6.8	1.4	3.9
12	1.9	2.1	2.2	0.6	0.8	1.9	2.2	2.1	1.7	3.1	3.2	2.9	2.1	2.7	3.7	6.1	7.1	7.9	8.2	8.7	8.4	6.8	8.2	8.6	8.7	0.6	4.3
13	10.7	10.1	9.5	9.2	8.5	9.1	11.1	12.7	12.5	11.4	11.5	9.3	7.0	4.6	5.8	4.1	1.1	2.7	4.2	6.7	6.6	6.1	7.2	8.8	12.7	1.1	7.9
14	10.0	8.6	8.9	9.6	8.8	7.4	8.3	5.5	3.4	2.8	2.3	2.9	3.1	3.1	2.5	1.3	2.1	3.1	3.9	2.9	1.2	1.1	1.8	1.9	10.0	1.1	4.4
15	2.2	2.9	2.9	3.8	6.2	6.7	7.5	7.0	7.4	9.1	8.5	8.6	9.3	10.7	10.9	12.0	10.4	12.1	16.1	16.5	16.1	16.1	11.9	13.5	16.5	2.2	9.5
16	17.7	20.2	20.8	20.8	22.5	21.2	23.0	23.5	23.5	23.9	25.0	24.8	24.5	24.2	25.2	23.9	21.3	20.4	25.7	22.8	23.3	21.0	20.5	20.5	25.7	17.7	22.5
17	17.1	18.6	20.5	20.2	21.5	21.4	19.6	17.6	18.3	19.3	19.5	18.3	20.4	18.7	18.4	19.1	18.4	16.3	11.9	11.9	14.2	15.0	13.3	13.3	21.5	11.9	17.6
18	11.8	10.4	8.8	7.5	7.0	5.9	5.8	5.5	5.5	5.2	4.5	5.4	5.3	4.9	4.5	4.0	3.4	3.7	3.3	2.1	1.0	0.9	1.7	2.0	11.8	0.9	5.0
19	1.8	1.9	2.9	1.7	2.4	2.2	2.6	2.7	3.3	4.1	4.4	4.1	7.3	8.0	6.9	5.8	7.3	4.6	3.8	6.4	4.4	2.8	5.2	6.9	8.0	1.7	4.3
20	8.3	8.9	7.7	7.3	8.8	16.2	18.4	18.9	21.0	23.6	24.3	25.3	25.3	29.0	25.7	22.5	20.3	18.8	10.7	9.7	12.8	9.8	9.6	9.3	29.0	7.3	16.3
21	11.3	14.2	14.8	11.6	11.9	13.4	15.6	13.2	11.8	12.9	16.2	14.7	14.4	12.4	14.3	15.0	14.2	17.3	19.4	19.2	16.5	16.3	13.2	16.3	19.4	11.3	14.6
22	14.9	10.9	11.0	12.5	6.0	3.1	5.1	7.3	8.9	12.7	21.6	21.1	20.3	18.9	15.3	14.8	14.8	11.1	18.8	22.3	20.2	14.8	14.4	9.9	22.3	3.1	13.8
23	9.4	10.4	9.9	8.4	9.3	12.1	10.6	7.4	4.8	4.9	4.8	4.3	4.3	3.3	4.1	2.0	1.7	2.5	1.1	4.7	5.4	6.3	6.9	6.8	12.1	1.1	6.1
24	4.6	3.7	2.2	1.5	2.0	2.0	2.6	2.4	3.2	3.3	5.1	6.5	6.3	12.4	16.8	18.9	19.7	19.2	21.5	22.5	18.6	19.0	18.4	21.6	22.5	1.5	10.6
25	19.8	21.9	20.7	19.7	18.5	17.6	13.1	11.7	14.0	13.8	17.6	14.4	12.7	13.2	13.8	12.3	17.5	18.5	9.8	4.6	4.6	2.9	5.9	9.1	21.9	2.9	13.6
26	10.0	12.5	10.4	7.5	6.2	4.4	4.8	3.8	3.0	2.8	3.0	4.0	4.7	4.3	3.5	4.5	4.9	7.9	8.0	8.2	8.7	8.2	11.9	12.8	12.8	2.8	6.7
27	13.0	12.8	14.2	14.2	15.9	17.5	18.1	19.9	19.7	20.5	21.0	21.9	24.3	25.2	26.1	22.9	19.6	17.6	16.9	20.3	18.2	16.4	16.0	13.7	26.1	12.8	18.6
28	9.5	8.7	8.5	9.9	8.8	7.0	4.9	5.0	5.0	5.3	5.4	7.0	9.2	10.2	9.7	9.5	10.2	10.6	12.2	13.5	12.7	12.4	11.7	11.4	13.5	4.9	9.1
29	11.2	10.7	7.5	7.6	6.9	12.5	15.0	17.1	18.6	18.0	14.2	17.3	20.2	17.4	16.9	18.8	19.0	20.5	21.0	21.8	22.7	22.5	23.4	22.9	23.4	6.9	16.8
30	24.5	23.8	23.2	23.3	23.8	23.3	22.7	21.1	23.5	24.5	22.3	22.6	24.0	22.2	21.8	19.6	21.7	24.9	23.7	23.0	27.1	22.3	24.8	21.3	27.1	19.6	23.1
Max.	**24.5**	**23.8**	**23.2**	**23.3**	**23.8**	**23.3**	**23.0**	**23.5**	**23.5**	**24.5**	**25.0**	**25.6**	**25.3**	**29.0**	**26.1**	**23.9**	**21.7**	**24.9**	**25.7**	**23.0**	**27.1**	**22.5**	**24.8**	**22.9**	**29.0**		
Min.	**1.8**	**1.9**	**2.2**	**0.6**	**0.8**	**1.9**	**2.2**	**1.0**	**0.6**	**0.5**	**0.2**	**0.5**	**0.6**	**0.7**	**0.9**	**1.3**	**1.1**	**2.5**	**1.1**	**2.1**	**1.0**	**0.9**	**1.7**	**1.6**		**0.2**	
Avg.	**9.8**	**10.0**	**9.8**	**9.5**	**9.4**	**9.9**	**10.3**	**10.1**	**10.2**	**10.6**	**11.3**	**11.3**	**11.6**	**11.7**	**11.6**	**11.0**	**11.2**	**11.5**	**11.3**	**11.4**	**11.4**	**10.5**	**10.5**	**10.2**			**10.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Speed (RMYoung) (m/s)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.4	19.7	18.0	15.6	13.3	11.2	10.3	12.1	10.1	11.2	13.5	12.8	10.9	11.7	6.7	7.4	6.8	6.0	2.9	1.8	3.7	2.8	4.9	5.9	19.7	1.8	9.8
2	5.2	4.8	4.5	3.9	3.1	2.5	4.0	3.7	4.2	2.0	1.5	2.1	1.2	1.6	4.5	5.9	4.0	2.5	1.2	0.8	2.7	5.5	6.1	3.5	6.1	0.8	3.4
3	3.7	7.8	10.0	16.1	16.5	16.8	17.1	16.6	16.3	14.3	12.5	12.7	11.1	9.0	7.9	5.8	3.1	1.8	2.4	2.7	3.5	2.6	4.0	3.0	17.1	1.8	9.0
4	4.7	4.3	4.3	3.9	3.8	4.2	5.3	6.5	8.1	8.3	8.4	5.6	5.9	7.2	7.6	9.3	9.7	10.9	12.6	14.2	13.5	12.7	11.4	11.2	14.2	3.8	8.1
5	9.1	9.2	8.9	9.3	8.1	9.4	9.9	11.3	10.3	10.0	10.2	10.7	12.9	15.4	16.8	17.8	17.2	18.4	19.6	20.3	21.7	22.6	22.7	25.4	25.4	8.1	14.5
6	26.2	26.8	26.9	26.3	27.2	25.4	25.8	24.3	25.1	24.5	23.5	21.1	19.5	16.7	15.0	12.6	7.9	3.2	3.6	4.5	7.0	5.9	4.5	3.1	27.2	3.1	16.9
7	3.9	3.2	3.1	3.5	3.5	3.4	3.6	3.5	2.4	2.1	3.8	8.5	12.2	14.0	14.0	18.5	21.6	22.0	21.0	21.1	20.6	20.3	19.4	16.5	22.0	2.1	11.1
8	17.1	15.0	11.8	9.6	9.4	6.3	1.9	1.8	4.9	7.6	7.7	9.0	11.2	8.6	9.3	6.6	1.8	5.3	7.2	7.4	8.7	9.1	7.5	7.2	17.1	1.8	8.0
9	4.9	2.8	2.7	3.5	4.3	5.3	5.5	6.4	5.6	7.5	11.3	14.1	14.0	15.1	15.4	15.5	14.5	15.5	16.5	17.7	21.4	23.0	21.5	18.3	23.0	2.7	11.8
10	17.6	18.3	15.9	15.7	13.6	12.5	5.9	9.1	10.0	6.9	9.1	7.3	6.4	8.8	10.6	10.4	8.4	7.3	4.9	4.5	6.2	8.0	9.6	11.6	18.3	4.5	9.9
11	13.5	14.0	15.7	15.0	13.2	12.0	8.8	7.0	6.0	4.2															15.7	4.2	10.9
12																											
13																			6.5	5.8	6.8	5.6	5.4	4.7	6.8	4.7	5.8
14	3.8	2.5	1.9	2.6	2.7	2.3	4.1	5.5	5.6																5.6	1.9	3.4
15	12.3	10.9	11.9	12.8	13.6	15.6	15.0	14.7	13.4	13.1	14.1	16.0	16.4	17.5	18.0	19.5	18.8	17.6	18.2	17.3	18.5	17.2	21.6	21.0	21.6	10.9	16.0
16	18.8	19.6	20.2	18.9	19.8	20.8	20.3	18.6	18.0	18.8	19.5	20.0	18.4	18.1	21.4	19.7	18.6	20.0	18.5	19.7	20.6	22.9	24.2	24.5	24.5	18.0	20.0
17	20.5	23.7	24.5	24.7	24.4	22.0	22.5	20.7	21.4	19.4	19.0	16.8	19.3	19.0	18.4	16.1	16.7	14.9	13.3	11.1	8.1	7.1	7.0	6.2	24.7	6.2	17.4
18	6.9	6.4	5.5	6.7	6.5	7.3	6.9	7.0	6.7	7.6	7.5	6.3	6.1	6.0	6.5	7.7	7.7	7.4	6.3	7.0	8.5	7.6	7.2	7.2	8.5	5.5	6.9
19	8.3	9.7	10.5	12.2	11.3	11.9	10.9	9.0	11.7	12.5	9.5	8.0	7.0	9.1	9.9	9.6	8.6	8.0	7.4	9.4	8.3	6.9	5.1	5.4	12.5	5.1	9.2
20	5.5	3.2	2.1	2.3	3.7	4.0	5.4	6.7	8.1	10.1	13.1	13.7	16.0	15.0	12.5	8.6	8.1	8.6	9.4	8.0	7.1	5.8	5.5	5.6	16.0	2.1	7.8
21	5.4	9.9	12.1	13.4	14.7	14.3	13.1	11.5	11.0	8.0	8.8	6.9	7.9	7.9	8.8	5.0	7.0	7.9	10.4	12.5	13.1	8.0	5.8	12.1	14.7	5.0	9.8
22	14.5	15.1	15.4	14.2	14.8	16.5	16.5	15.5	14.9	15.3	15.7	15.2	15.0	14.8	15.5	13.4	13.4	13.3	12.9	12.9	12.1	9.4	9.7	10.5	16.5	9.4	14.0
23	12.8	13.3	11.3	11.8	10.9	4.4	4.0	4.4	5.8	5.7	6.9	6.7	7.1	9.0	8.3	5.6	5.1	3.7	1.5	0.7	2.6	1.9	1.7	1.2	13.3	0.7	6.1
24	0.7	1.1	1.0	2.0	2.7	5.2	5.7	10.8	12.2	13.2	14.2	14.5	17.4	17.3	19.0	20.0	19.1	19.2	19.4	18.1	18.3	17.5	17.8	19.4	20.0	0.7	12.7
25	19.8	19.0	18.5	18.3	18.2	17.4	15.8	14.6	14.0	14.6	13.9	15.1	16.7	17.1	16.9	16.5	15.3	14.3	13.5	13.1	11.7	12.3	11.0	9.4	19.8	9.4	15.3
26	9.5	7.1	5.6	4.3	5.2	3.3	2.0	5.5	4.1	7.8	7.9	5.6	8.6	8.0	5.7	6.1	10.8	15.4	19.0	18.6	18.0	20.2	19.2	17.8	20.2	2.0	9.8
27	20.6	22.6	22.1	22.0	23.5	20.8	20.3	20.9	17.8	15.1	14.2	12.2	11.8	11.3	10.5	8.6	7.6	7.4	6.7	3.0	2.7	6.0	5.9	6.8	23.5	2.7	13.3
28	10.1	14.1	14.8	12.3	7.7	13.4	15.4	11.9	12.8	9.6	6.6	6.4	5.5	5.4	5.6	6.3	5.6	6.0	6.3	7.7	10.7	11.6	14.4	15.5	15.5	5.4	9.8
29	16.1	15.6	15.8	16.0	16.1	14.2	14.2	14.2	14.7	12.1	12.5	13.1	11.3	10.4	12.3	9.5	10.4	12.4	11.9	10.2	9.6	9.3	8.5	8.6	16.1	8.5	12.5
30	8.2	6.4	4.9	4.9	5.5	3.7	3.4	3.6	4.3	4.3	2.7	2.4	2.9	4.0	2.8	2.2	2.6	3.9	5.7	6.4	6.9	6.1	6.8	6.0	8.2	2.2	4.6
31	4.3	4.2	3.9	3.6	3.8	3.8	3.4	4.1	4.9	5.5	5.5	5.1	5.4	4.6	4.2	5.3	5.8	5.9	5.7	5.8	6.2	5.0	4.9	5.3	6.2	3.4	4.9
Max.	**26.2**	**26.8**	**26.9**	**26.3**	**27.2**	**25.4**	**25.8**	**24.3**	**25.1**	**24.5**	**23.5**	**21.1**	**19.5**	**19.0**	**21.4**	**20.0**	**21.6**	**22.0**	**21.0**	**21.1**	**21.7**	**23.0**	**24.2**	**25.4**	**27.2**		
Min.	**0.7**	**1.1**	**1.0**	**2.0**	**2.7**	**2.3**	**1.9**	**1.8**	**2.4**	**2.0**	**1.5**	**2.1**	**1.2**	**1.6**	**2.8**	**2.2**	**1.8**	**1.8**	**1.2**	**0.7**	**2.6**	**1.9**	**1.7**	**1.2**		**0.7**	
Avg.	**11.1**	**11.4**	**11.2**	**11.2**	**11.1**	**10.7**	**10.2**	**10.4**	**10.5**	**10.4**	**10.9**	**10.7**	**11.0**	**11.2**	**11.3**	**10.7**	**10.2**	**10.3**	**10.2**	**10.1**	**10.7**	**10.5**	**10.5**	**10.5**			**10.7**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	303.2	302.0	303.5	312.7	309.6	303.6	304.2	305.0	303.5	299.7	300.4	297.1	302.3	307.0	305.3	304.5	304.6	307.4	303.8	308.2	315.3	306.3	306.8	304.6
2	309.7	317.9	318.2	304.5	322.9	319.0	311.3	303.2	306.4	302.0	303.9	310.2	314.1	318.6	302.5	306.6	308.4	312.8	317.5	313.8	311.9	306.2	308.2	311.9
3	304.7	303.0	302.4	300.0	302.3	306.2	307.1	315.6	313.1	306.8	311.1	314.0	311.0	316.8	309.0	313.7	316.3	303.8	302.9	297.8	300.7	312.3	320.1	316.7
4	311.7	306.2	303.5	309.8	310.1	311.9	303.8	313.0	309.5	304.5	308.9	311.2	306.5	304.0	308.3	312.2	303.0	6.5	98.8	81.0	115.8	112.0	123.2	173.6
5	188.0	125.1	313.5	309.5	304.3	311.0	316.4	305.0	301.2	312.0	306.1	303.9	314.4	310.1	303.6	308.4	302.8	302.2	298.3	300.8	313.1	311.3	316.4	308.6
6	303.5	296.9	310.8	312.2	303.8	307.8	303.7	319.9	312.1	314.2	320.1	313.8	305.4	305.1	306.0	302.0	307.8	311.0	308.0	308.1	309.8	302.6	312.0	308.2
7	310.2	316.7	315.6	310.2	318.5	315.8	309.7	311.3	300.8	311.9	311.5	313.1	322.9	302.4	306.5	299.5	312.6	306.9	310.2	313.3	305.5	312.3	312.1	302.6
8	304.5	300.6	306.2	313.6	316.8	312.9	313.8	316.1	315.3	308.6	304.5	316.8	315.2	313.5	322.4	310.3	317.1	322.4	307.6	308.1	307.8	304.7	305.9	306.2
9	303.6	305.3	299.8	296.7	309.3	311.9	305.7	311.7	312.0	312.0	310.0	319.9	96.5	117.2	107.3	137.1	164.7	155.8	157.3	152.6	153.6	156.4	151.5	158.1
10	160.5	148.2	155.5	163.8	147.1	146.6	143.9	140.9	124.9	108.5	106.2	126.3	122.1	125.0	126.0	123.4	124.0	125.3	122.3	124.2	124.5	123.9	126.9	129.1
11	123.3	123.9	123.5	120.2	119.9	116.6	115.6	113.7	113.4	117.3	119.3	117.7	117.8	118.3	117.2	113.0	115.1	116.1	118.5	117.7	114.9	112.8	113.0	111.6
12	108.6	113.7	114.1	114.2	113.2	114.4	114.7	114.5	120.0	122.6	122.1	120.4	118.1	120.2	119.0	118.4	115.2	115.8	114.8	118.0	118.4	120.8	120.6	161.0
13	242.9	232.6	232.1	236.4	231.3	218.1	204.5	208.7	195.8	192.5	202.0	164.6	179.3	187.2	169.8	129.3	77.1	57.5	357.3	351.5	328.6	323.6	311.4	305.9
14	302.9	301.1	306.4	318.2	318.5	318.2	317.5	315.7	322.9	332.5	315.3	314.6	332.1	332.7	330.9	325.6	323.2	324.6	318.5	319.1	316.4	317.4	313.7	306.6
15	308.4	308.8	307.4	308.3	304.7	303.1	304.9	299.0	300.7	309.3	309.9	309.5	314.4	306.0	305.1	307.5	310.5	307.9	310.1	313.0	311.1	313.9	306.9	304.8
16	304.5	297.7	163.4	102.0	88.9	108.4	121.8	116.2	117.1	104.5	112.4	112.8	111.1	112.3	111.1	112.5	111.5	112.0	113.6	115.7	117.2	119.2	121.3	121.8
17	123.0	125.7	131.2	145.7	146.1	144.0	128.2	124.0	132.0	136.0	118.2	131.2	131.7								121.2	137.9	133.8	125.2
18	120.4	127.0	139.1	137.7	108.8	100.6	102.9	100.7	96.3	105.3	131.4	291.6	307.2	306.9	285.8	304.3	302.2	305.4	303.1	298.3	310.5	306.7	303.8	300.0
19	304.7	303.8	305.2	315.2	292.1	309.5	329.9	42.4	153.5	195.3	99.2	111.0	105.3	90.5	110.3	111.7	120.1	116.4	104.3	124.9	116.3	116.4	118.6	111.0
20	106.6	116.2	113.0	121.7	123.1	123.0	119.2	118.3	115.4	116.3	111.0	97.9	102.0	103.7	48.9	36.9	0.9	8.5	347.7	313.1	322.0	322.4	327.8	308.4
21	310.3	315.4	320.3	314.6	318.4	307.8	325.3	293.4	305.7	296.1	297.6	288.6	278.9	279.8	248.0	228.3	221.9	254.2	258.9	259.6	258.7	292.8	246.5	252.6
22	248.4	235.5	221.2	212.9	159.4	151.7	129.1	126.1	125.3	109.1	107.6	101.1	105.8	29.6	318.0	308.3	311.1	308.3	306.9	310.1	312.3	304.3	304.6	306.6
23	311.1	306.7	330.5	303.3	307.9	326.0	322.7	310.7	316.9	320.1	308.4	305.7	299.8	302.1	300.3	301.8	301.7	305.5	313.7	311.2	317.6	320.5	317.4	319.1
24	320.0	313.3	311.0	305.6	306.2	307.3	302.9	309.2	314.7	304.3	311.3	315.5	323.7	318.2	305.0	300.3	313.1	320.2	317.9	309.3	298.7	302.9	308.3	305.8
25	299.8	297.7	180.1	125.0	115.0	113.9	107.9	101.6	109.8	112.7	111.7	114.5	114.4	114.9	112.8	109.1	106.6	110.1	110.7	109.6	111.6	111.9	110.1	112.7
26	116.8	115.8	116.1	114.5	114.1	113.5	115.2	114.6	115.0	115.8	116.1	121.4	126.7	128.0	130.6	133.0	137.6	134.8	129.0	135.4	135.2	133.8	133.0	126.8
27	127.0	126.8	124.8	118.6	116.3	115.9	119.2	119.9	117.3	122.3	114.9	115.9	119.0	114.7	109.0	114.9	115.6	115.0	119.1	114.6	114.8	114.1	109.7	113.3
28	115.0	115.2	116.4	116.3	115.7	112.5	116.5	114.0	116.5	121.9	123.0	133.6	141.1	156.3	136.9	130.6	128.5	130.2	131.5	127.9	127.9	132.5	124.0	125.1
29	123.6	122.3	115.8	109.7	105.7	113.0	113.4	122.0	120.6	120.5	116.1	120.3	118.1	116.1	113.7	117.1	119.2	119.8	117.2	117.5	114.7	115.0	116.0	116.9
30	123.2	118.3	117.6	119.9	121.6	115.8	114.7	112.8	113.8	112.1	112.9	116.6	121.4	121.4	123.0	115.9	124.4	135.3	134.9	130.7	125.6	133.9	136.5	137.8
31	139.5	132.6	133.8	139.4	140.3	144.2	142.7	139.2	148.3	145.9	149.7	154.1	149.7	139.2	133.1	140.0	121.4	132.3	131.4	127.8	131.2	133.9	125.9	128.7

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	140.3	142.7	128.9	130.8	127.0	123.1	130.4	131.1	129.4	124.2	144.7	156.2	142.0	123.7	127.7	118.7	117.0	111.2	114.2	110.0	119.2	122.5	125.7	121.1
2	119.4	114.9	119.9	121.8	121.1	119.0	123.9	123.0	121.2	123.0	122.7	120.2	122.3	123.8	123.6	124.0	122.0	121.5	118.0	116.1	119.9	120.6	123.4	122.8
3	124.4	123.7	123.1	124.5	124.5	125.3	122.8	125.6	136.0	140.2	146.2	146.1	139.0	130.9	141.8	172.9	198.4	161.8	220.8	311.8	310.6	317.4	312.4	307.4
4	308.5	299.1	310.2	312.8	304.4	308.8	318.1	317.0	304.8	314.9	318.1	308.5	312.9	304.5	226.4	130.4	147.6	349.1	314.4	288.5	144.8	126.4	115.5	117.3
5	125.8	115.1	140.3	150.0	133.2	129.7	136.3	125.6	136.3	128.7	125.8	117.8	135.9	143.6	147.0	139.5	127.2	124.8	128.5	134.1	132.4	138.9	142.2	136.1
6	136.1	135.3	136.3	135.3	129.5	129.7	128.7	126.6	125.3	126.7	130.3	132.0	128.4	128.6	128.1	126.1			114.2	108.3	127.5	138.7	93.8	86.2
7	93.7	104.0	107.9	104.3	125.8	141.1	218.8	159.6	166.4	158.5	289.3	298.2	170.0	137.6	144.4	303.8	313.3	35.0	109.1	87.6	92.8	83.8	108.8	115.9
8	112.3	122.1	132.1	137.6	123.0	153.1	153.5	153.2	159.3	159.6	158.3	158.6	156.3	162.3	159.3	163.8	162.8	157.1	157.4	167.2	164.5	158.9	157.4	151.8
9	141.8	145.8	151.7	153.6	165.2	159.8	164.4	155.0	145.7	154.3	146.9	137.7	132.7	136.7	146.9	150.6	154.4	146.8	131.6	135.2	165.1	357.3	317.7	316.0
10	311.3	357.3	33.0	32.1	337.0	296.5	324.7	324.6	334.2	323.5	321.2	318.8	315.0	313.4	319.6	318.8	321.3	317.4	322.7	329.1	328.0	309.7	317.9	318.2
11	315.1	136.7	130.9	139.1	130.3	129.4	117.2	120.9	143.5	137.7	127.0	123.7	131.3	127.8	122.9	125.3	124.0	122.8	121.8	124.6	121.6	113.0	115.4	118.7
12	120.3	118.2	114.5	122.2	121.8	119.5	120.1	117.6	111.7	116.2	114.9	113.9	116.9	116.6	116.7	119.1	117.9	110.9	109.2	90.5	84.5	88.2	82.3	100.4
13	67.0	52.6	57.2	58.5	39.3	35.1	51.1	59.1	55.7	59.4	69.6	79.2	97.6	79.0	81.9	99.3	112.7	128.1	129.3	125.0	120.5	122.6	126.3	127.6
14	119.6	120.7	117.6	117.4	110.7	110.6	116.6	117.7	121.7	111.3	107.3	122.0	124.7	123.2	126.9	125.1	128.7	138.0	139.6	118.2	100.6	114.1	87.8	0.8
15	341.4	325.3	350.0	176.0	308.6	302.3	314.2	308.2	314.7	318.0	297.0	320.9	308.2	314.7	303.7	314.8	307.8	314.3	316.3	310.0	307.1	309.8	321.0	305.1
16	299.6	72.8	337.7	282.8	170.5	155.9	154.0	112.3	113.5	115.2	137.5	158.1	160.5	175.1	172.1	176.5	151.3	155.5	237.5	89.1	140.2	125.4	120.8	162.2
17	144.7	169.3	166.0	139.7	154.1	165.9	151.4	145.0	147.8	178.1	170.4	52.3	117.8	102.6	113.9	113.6	119.3	153.0	148.2	151.8	123.7	139.7	123.0	124.9
18	140.6	133.6	116.2	123.8	106.8	101.8	100.9	116.6	119.8	132.5	128.0	123.1	121.5	145.6	157.9	126.1	74.8	160.8	37.9	337.3	322.8	318.0	310.4	309.3
19	311.9	310.4	301.8	313.5	321.3	313.0	318.2	310.0	320.8	316.7	313.6	310.0	306.2	314.5	316.5	320.9	325.5	323.6	327.7	323.1	319.3	326.2	325.3	328.9
20	327.8	323.8	309.0	304.2	307.5	327.9	332.2	343.0	335.7	337.0	331.3	325.3	324.7	321.5	327.6	329.3	328.4	321.0	318.6	312.7	315.0	316.6	318.6	308.4
21	314.6	316.6	329.8	328.7	330.3	332.3	332.3	329.3	321.8	319.2	325.4	325.1	318.7	319.1	314.5	317.6	326.2	319.4	321.0	315.2	320.1	316.6	311.2	312.5
22	323.0	317.0	307.4	309.9	327.7	338.1	316.2	313.8	312.1	307.3	306.6	311.0	329.2	320.0	319.3	303.4	294.2	298.8	315.0	312.9	309.6	314.2	313.3	314.1
23	312.6	318.2	329.2	312.0	309.5	312.6	309.1	312.2	314.3	312.9	316.8	306.5	308.7	315.1	317.9	314.2	299.3	301.5	301.4	306.4	303.2	309.8	317.4	312.0
24	313.0	308.1	306.2	310.8	305.2	307.4	317.1	314.5	311.7	315.1	317.0	320.0	330.8	329.9	330.1	332.0	329.4	328.4	319.7	318.3	315.2	320.9	329.9	334.0
25	337.0	344.2	336.8	329.4	326.5	322.2	321.5	306.6	309.8	315.0	325.8	323.7	311.8	312.4	317.1	306.6	327.9	319.5	326.2	319.1	317.2	318.5	315.8	309.5
26	302.0	307.4	307.7	305.7	310.4	316.8	329.3	320.1	311.9	319.6	321.9	327.2	331.0	311.2	313.1	309.0	315.3	317.4	322.0	323.2	312.2	315.0	320.5	317.5
27	318.7	326.4	329.1	322.4	328.7	325.9	334.8	326.7	320.0	312.9	318.3	330.4	304.4	305.0	318.6	311.5	311.9	308.9	318.5	323.2	319.8	315.4	315.8	318.1
28	319.3	308.7	308.4	310.1	316.5	312.8	315.1	312.4	330.0	313.5	319.9	318.2	315.7	300.4	309.5	326.4	319.6	328.8	328.8	311.6	322.2	319.1	316.0	308.6

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	319.7	306.2	298.7	299.9	308.1	303.9	306.0	302.3	309.8	305.1	307.2	316.6	312.4	317.8	322.6	327.4	328.9	335.6	334.9	334.2	334.6	333.4	325.5	321.7
2	321.2	326.9	323.8	323.1	323.2	324.9	324.8	325.6	324.3	325.5	315.5	317.9	322.6	318.6	326.2	331.6	327.3	325.7	330.6	329.2	327.1	327.4	330.3	332.2
3	327.4	325.0	325.6	324.4	317.3	321.9	321.2	324.2	330.3	335.0	338.6	307.0	318.8	307.4	324.2	333.5	325.6	320.2	331.7	308.0	298.3	307.3	320.2	321.4
4	325.0	337.3	340.1	340.0	331.6	328.8	322.7	319.3	313.3	312.2	313.6	315.3	326.3	325.9	332.6	332.7	335.0	335.3	340.1	336.9	330.7	323.2	319.2	320.3
5	318.3	315.8	320.2	331.9	336.7	338.2	338.2	331.3	327.5	332.2	336.1	337.8	341.2	333.3	333.5	333.5	330.4	336.3	334.1	336.0	333.8	329.8	333.0	333.1
6	327.9	328.2	329.7	332.5	335.8	337.8	335.1	337.4	332.2	331.2	338.2	336.6	332.3	334.0	328.2	322.5	322.2	323.6	321.5	320.2	320.8	322.2	323.0	315.2
7	319.2	322.5	319.1	325.5	326.8	315.3	315.2	312.9	314.3	323.4	324.2	334.8	332.7	332.4	334.5	335.7	330.2	329.3	329.5	329.1	327.8	328.2	326.4	325.5
8	327.7	328.3	330.1	327.0	330.9	332.3	332.0	331.2	331.0	329.7	328.8	331.1	326.1	331.3	337.2	328.0	326.4	328.2	328.0	326.7	328.2	325.2	327.4	325.5
9	325.7	326.6	322.8	323.8	323.0	323.2	324.8	321.3	321.0	322.4	329.7	333.5	332.6	334.0	331.0	328.4	331.1	330.4	331.8	328.9	313.1	309.2	302.4	302.7
10	311.4	309.5	308.5	308.1	303.1	306.8	314.0	317.6	337.4	337.4	327.9	326.7	328.7	335.0	314.9	332.9	333.0	328.6	337.5	331.7	315.1	314.0	317.3	303.5
11	307.0	327.5	318.9	315.0	316.1	319.0	316.4	320.7	325.1	319.5	322.4	332.2	335.9	340.5	339.8	337.3	333.5	337.9	338.9	328.4	326.6	328.5	320.4	319.0
12	316.4	315.3	315.4	312.3	313.0	325.6	313.5	301.2	307.2	318.5	326.8	319.5	327.8	332.6	329.0	329.7	322.6	330.1	325.5	323.6	325.8	322.0	327.0	334.7
13	324.8	323.0	325.5	328.2	326.4	330.1	317.9	327.3	329.1	330.0	321.9	326.0	324.9	328.9	325.9	330.0	326.3	327.2	326.3	323.0	319.4	318.2	309.4	310.4
14	312.6	317.5	317.8	320.8	315.6	318.0	315.8	315.9	314.6	315.6	321.0	321.9	325.0	325.5	330.5	336.7	337.0	327.8	326.1	321.5	324.6	335.8	332.3	330.1
15	337.2	328.7	334.1	335.7	334.0	335.8	328.4	308.2	303.0	307.9	315.3	330.5	330.8	324.1	334.6	333.3	327.7	329.2	326.3	322.2	318.8	323.2	324.8	317.8
16	315.0	309.4	304.2	304.4	301.0	301.7	303.2	304.7	318.3	318.7	329.7	317.6	329.7	323.8	319.8	319.7	319.7	323.0	342.6	340.9	326.8	309.1	307.8	303.2
17	301.5	299.4	303.4	300.1	307.0	307.0	308.4	298.1	312.4	309.2	315.3	314.8	306.4	322.3	310.4	302.8	315.0	319.3	316.2	303.8	309.8	310.2	311.1	297.7
18	305.3	303.4	281.6	296.7	312.7	304.8	303.1	301.0	274.9	303.3	94.2	94.5	312.9	312.3	282.7	265.8	271.9	273.0	294.5	297.7	299.1	298.9	302.2	305.4
19	303.2	299.8	303.1	308.6	305.9	305.4	305.5	307.5	304.2	311.4	308.7	310.7	311.5	318.2	317.3	307.2	311.7	284.0	299.3	300.1	300.1	314.3	314.0	305.8
20	114.7	129.0	129.0	127.2	121.8	126.3	138.9	135.9	134.9	124.4	124.7	113.2	109.0	111.2	107.2	103.6	104.9	103.7	96.7	101.4	102.9	104.0	108.2	103.9
21	100.6	91.9	92.4	113.9	121.0	156.5	149.6	139.0	148.7	151.9	200.3	218.0	238.0	235.8	230.3	229.6	265.3	264.0	256.8	289.0	308.9	298.3	327.3	325.7
22	309.9	314.4	306.9	312.5	313.0	315.5	311.1	302.7	303.3	312.4	309.2	306.5	312.2	309.6	319.8	325.6	325.4	330.0	318.1	306.6	300.8	302.4	309.2	315.5
23	317.9	308.2	307.7	308.8	313.2	307.0	309.2	321.0	317.2	319.2	318.5	309.0	311.4	306.8	307.0	315.4	312.3	322.8	321.1	315.0	311.5	307.6	308.8	313.2
24	311.7	320.5	317.9	319.3	302.5	314.5	309.6	300.9	300.0	306.0	307.3	300.6	294.6	303.1	307.0	305.2	306.7	299.2	292.4	296.3	301.0	301.8	306.7	313.5
25	124.1	122.8	130.4	150.4	102.4	121.2	123.5	113.3	113.8	125.5	120.1	127.8	118.8	119.7	129.1	204.3	207.9	156.9	129.6	125.4	104.7	105.3	114.1	113.6
26	124.0	104.2	88.3	91.7	114.0	115.4	122.1	137.4	165.7	199.6	206.8	214.0	197.9	208.1	218.4	227.0	251.8	268.9	291.8	304.1	307.4	310.5	311.5	319.4
27	316.0	309.6	315.7	317.9	321.3	318.3	321.6	319.0	323.6	322.0	326.6	326.2	325.9	318.9	319.1	313.9	317.1	310.6	310.0	316.9	321.8	332.0	332.5	340.1
28	342.7	325.3	319.8	319.1	310.5	310.9	307.1	305.8	311.5	318.2	311.7	320.3	320.7	318.9	322.4	317.3	316.0	314.9	317.4	320.0	312.8	309.8	309.7	311.5
29	313.4	307.5	310.8	308.7	316.8	319.1	312.9	306.2	311.4	325.9	329.2	314.9	307.5	308.3	309.6	303.7	312.1	310.3	307.4	310.1	304.6	313.2	317.1	311.4
30	313.3	314.1	319.4	310.4	314.3	316.7	311.9	311.2	311.6	306.9	297.8	310.4	309.6	307.0	305.9	298.9	302.0	306.1	311.5	302.6	306.7	359.9	122.0	127.3
31	123.1	113.4	118.4	116.1	129.9	140.0	166.0	169.6	155.3	162.8	155.4	142.2	92.2	309.9	316.3	300.3	298.8	306.5	300.2	300.0	303.7	309.1	315.5	319.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	315.5	313.6	311.5	308.0	315.1	307.6	306.0	308.9	309.0	315.5	314.6	320.1	312.4	308.6	307.7	294.0	328.1	37.0	122.1	110.0	144.0	121.7	138.9	158.3
2	159.6	151.9	148.2	153.9	146.3	138.3	140.7	131.3	125.3	120.4	120.6	121.5	123.3	122.8	125.9	126.4	126.7	127.8	125.8	127.9	129.1	123.4	119.1	119.5
3	120.9	118.3	120.4	116.4	118.8	121.0	121.5	122.3	125.5	126.9	120.4	117.6	118.9	118.7	122.7	119.1	120.1	122.3	123.8	124.0	113.2	118.2	121.4	119.0
4	118.2	116.3	121.1	107.9	90.8	95.0	98.2	98.1	101.4	110.0	104.8	116.9	116.4	115.9	122.0	123.0	117.1	116.5	101.6	96.5	93.5	97.3	105.0	125.5
5	114.2	43.9	41.9	89.1	43.7	71.7	81.0	59.9	53.9	36.7	49.9	57.3	62.8	58.2	56.1	54.2	56.3	109.5	108.0	110.4	116.8	114.8	111.2	111.9
6	115.9	117.1	118.1	115.4	119.3	115.6	116.6	104.1	105.3	92.1	52.7	52.7	52.5	52.6	54.0	41.7	37.0	26.9	31.8	38.4	359.2	356.7	10.5	44.3
7	54.8	51.6	133.2	179.3	157.6	129.4	119.3	127.0	120.9	117.5	120.3	119.9	120.6	122.2	120.4	117.7	117.8	122.0	125.0	110.7	118.2	107.3	91.4	88.2
8	55.5	55.0	51.4	47.3	46.4	42.3	38.9	33.6	31.3	31.3	40.1	37.8	51.7	51.9	52.9	55.0	60.5	93.4	147.9	94.9	129.9	105.7	103.5	132.3
9	123.0	111.2	125.5	111.1	95.3	98.5	68.1	94.9	85.3	110.2	120.7	113.0	106.8	115.7	120.0	121.3	123.8	121.9	125.2	124.1	123.4	124.1	122.6	126.1
10	133.6	130.8	134.1	135.5	143.5	152.4	140.6	131.4	140.3	140.0	125.1	130.5	131.8	143.6	143.2	138.1	133.8	128.6	127.2	132.2	134.0	139.1	142.1	143.2
11	148.5	155.8	145.9	143.0	129.0	130.3	126.9	131.7	129.6	126.4	139.4	123.2	120.2	132.8	136.0	138.9	130.8	133.0	139.0	140.0	135.2	117.5	103.6	114.9
12	109.8	103.3	95.6	43.2	356.6	336.7	318.2	325.4	324.8	311.6	305.9	298.9	312.0	280.5	262.5	260.4	285.5	289.0	293.0	301.2	303.2	300.7	314.3	310.4
13	310.9	314.4	314.1	310.5	310.5	315.9	308.2	312.0	313.3	312.6	306.9	332.4	331.0	323.6	328.1	341.0	341.3	309.1	310.9	292.3	340.6	334.3	4.8	315.1
14	315.5	302.4	300.4	306.1	322.3	355.5	101.9	94.0	126.7	136.0	120.5	140.3	135.9	138.6	135.7	139.4	142.5	146.1	141.7	131.9	130.8	130.7	115.6	110.7
15	115.1	105.6	114.8	113.3	111.6	112.4	110.5	112.9	109.8	107.6	107.2	107.4	105.7	104.8	109.8	114.3	134.6	176.9	233.4	278.5	295.9	306.6	278.9	299.1
16	296.5	295.9	303.2	308.0	303.4	307.4	310.8	314.3	312.3	309.9	299.7	307.4	265.6	262.7	232.5	228.4	233.6	224.3	221.3	223.2	210.9	186.6	157.9	136.2
17	142.9	135.5	141.8	122.3	132.3	108.9	119.3	117.2	121.3	121.6	118.4	118.9	113.9	114.0	113.6	113.8	113.9	114.8	115.3	111.9	112.8	111.5	113.5	115.0
18	114.3	115.8	114.6	116.7	115.1	115.1	116.8	116.8	117.5	115.9	115.1	115.6	120.5	123.4	123.4	125.0	128.0	161.5	171.6	171.9	153.2	122.8	334.6	330.9
19	333.4	47.9	124.1	133.6	138.0	117.5	118.2	124.1	125.3	119.9	119.7	121.8	122.9	120.3	122.8	124.8	125.7	125.6	123.4	126.2	115.8	114.0	113.7	110.9
20	116.5	118.3	117.9	116.0	114.8	115.7	88.8	96.2	101.2	98.6	95.4	110.1	113.2	112.7	116.3	118.0	118.5	116.5	120.3	120.6	127.4	131.0	131.2	116.6
21	113.0	108.9	108.5	117.5	111.5	109.2	104.6	112.5	116.7	103.9	121.8	125.5	119.8	115.5	111.2	118.8	117.0	122.4	123.3	126.1	121.6	124.5	118.6	113.4
22	116.4	112.2	112.9	109.9	105.7	112.3	104.7	104.4	117.9	108.7	114.4	109.9	109.7	98.8	87.6	95.5	88.6	92.4	81.5	77.1	73.6	73.0	70.9	93.8
23	98.9	91.1	91.0	90.7	76.6	58.3	59.6	76.6	66.7	59.7	57.7	50.7	63.0	136.7	150.6	306.8	167.9	138.1	142.1	135.9	115.9	82.8	139.0	116.3
24	114.0	118.3	113.0	96.7	110.2	106.6	119.5	121.1	112.6	106.5	108.2	109.2	114.3	84.1	96.2	221.0	163.3	176.2	174.9	162.8	161.5	156.5	118.1	98.5
25	112.8	102.1	90.9	101.0	109.0	113.3	105.9	99.9	97.4	100.2	105.6	102.9	113.6	108.9	120.2	122.8	126.5	127.6	124.9	132.0	117.4	306.1	46.0	99.2
26	80.2	72.0	68.5	73.0	76.4	50.7	44.6	357.2	330.9	328.8	340.4	344.4	339.3	332.3	355.4	344.7	346.1	335.0	334.3	327.4	320.9	305.2	302.1	304.0
27	308.8	310.5	301.8	220.1	170.9	176.2	183.1	163.2	156.9	163.6	152.9	140.5	142.5	149.8	184.1	184.0	181.3	187.7	220.0	229.3	228.1	203.5	203.7	209.9
28	224.0	172.1	204.2	186.4	130.2	137.3	149.7	162.7	151.6	124.1	130.9	120.4	124.1	138.7	147.2	139.8	136.3	135.5	145.4	134.2	138.0	136.3	143.0	154.2
29	150.8	137.5	127.0	118.3	119.1	121.7	123.5	110.7	103.5	106.7	113.8	120.4	113.1	107.4	110.7	109.5	109.8	117.0	125.0	129.1	128.0	106.4	148.3	175.6
30	165.4	164.4	161.6	159.1	121.7	44.5	349.8	341.8	316.3	341.5	49.9	56.7	59.0	49.4	51.0	55.8	53.8	134.8	176.9	197.6	209.8	211.7	217.9	250.9

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	314.3	304.9	192.6	143.6	295.3	150.7	195.8	129.1	151.0	140.6	157.6	228.5	268.5	349.4				152.0	138.7	149.0	169.4	312.9	317.0	225.5
2	200.7	221.1	181.0	243.4	91.6	283.9	303.2	306.5	319.5	304.3	323.3	180.8	181.0	130.2	99.4	124.9	138.4	137.0	128.8	131.4	131.0	129.4	131.2	135.2
3	119.1	133.5	125.0	128.0	147.1	156.2	177.5	196.8	227.4	312.0	327.5	346.4	348.4	332.1	271.2	260.5	271.7	324.3	292.3	254.3	239.7	271.3	243.8	296.7
4	310.6	315.2	292.6	304.8	312.7	319.4	315.3	267.6	325.5	32.7	299.8	268.4	264.9	256.0	226.2	235.2	237.2	259.8	287.4	87.2	143.8	143.3	264.0	277.1
5	293.0	316.5	317.8	315.8	313.5	320.5	315.3	320.3	304.4	311.6	313.7	309.8	306.3	307.7	289.9	283.8	304.5	293.8	288.0	289.0	290.6	278.8	273.2	278.9
6	292.2	295.2	305.0	302.8	306.1	303.6	310.4	309.6	293.1	300.6	309.6	299.7	300.1	309.9	314.7	307.4	309.3	310.9	313.9	311.4	306.6	307.0	305.1	304.1
7	304.5	304.0	306.4	304.2	307.4	315.8	319.4	317.1	314.2	301.2	313.4	302.7	314.9	300.3	314.1	303.1	329.0	331.1	322.9	247.0	249.0	256.1	268.3	271.7
8	267.8	105.9	96.7	308.3	124.5	138.2	122.6	124.7	126.0	210.7	331.2	358.6	267.5	278.7	218.3	216.4	223.0	227.8	230.5	217.5	215.5	197.6	200.0	185.3
9	222.7	141.3	132.7	238.4	70.0	106.7	104.8	106.4	104.3	111.5	111.3	128.0	154.3	138.3	142.1	136.3	139.9	145.5	147.9	147.5	144.4	171.8	176.6	172.4
10	163.8	174.6	183.6	194.7	187.0	161.2	160.8	168.9	138.3	146.6	133.7	137.7	156.7	181.2	188.9	167.3	159.6	154.3	156.0	148.4	142.2	142.5	146.3	126.4
11	126.4	113.8	125.5	116.5	125.6	124.4	117.0	111.2	112.4	121.2	124.4	124.4	129.3	124.1	132.7	131.8	134.5	135.9	143.0	145.4	141.7	145.3	147.9	144.2
12	151.2	159.1	156.0	146.6	151.2	136.1	130.9	133.1	129.2	122.5	122.1	124.8	127.1	139.3	140.4	134.3	133.4	128.5	134.3	135.9	132.5	145.4	152.3	134.4
13	130.7	123.5	126.0	132.2	129.5	124.1	118.6	119.0	117.0	121.7	111.0	119.3	119.5	120.3	117.2	113.2	112.1	108.4	104.3	101.7	101.2	96.4	85.6	76.9
14	46.0	80.9	84.8	74.7	58.2	54.3	14.0	15.7	14.9	36.2	62.6	71.9	72.2	107.6	151.4	130.7	134.9	127.6	129.5	130.0	125.8	126.9	134.0	125.3
15	111.0	115.8	116.0	131.1	122.3	113.1	101.5	102.7	96.3	102.3	101.1	121.0	123.8	125.5	148.5	144.5	156.1	149.4	186.7	180.5	305.4	291.9	308.5	311.9
16	318.9	335.0	330.3	316.0	320.1	326.0	328.6	324.9	327.8	334.9	337.0	40.2	26.6	69.2	84.3	137.1	146.9	160.9	161.1	170.6	171.5	170.3	156.6	157.0
17	158.8	161.4	165.0	171.5	169.3	166.5	168.8	155.1	149.9	154.3	142.5	126.9	131.1	140.6	153.6	154.9	155.0	152.7	150.3	145.6	136.5	145.4	146.0	143.1
18	149.7	148.2	138.1	137.1	143.5	148.3	145.2	147.4	153.8	147.6	147.5	140.1	137.3	130.5	164.8	158.7	154.8	200.2	205.0	225.6	217.3	252.3	262.1	300.5
19	278.5	290.3	292.3	298.0	311.1	312.6	299.3	303.7	301.1	328.6	284.9	263.5	264.9	245.3	223.3	242.7	230.9	235.4	236.7	241.9	237.3	232.3	265.1	260.6
20	294.0	250.5	250.6	194.6	82.0	240.7	278.5	251.1	34.5	343.6	10.5	350.1	340.9	295.3	272.9	235.4	221.9	216.7	215.6	223.4	231.2	232.5	232.8	232.4
21	246.9	285.7	261.5	185.5	154.8	220.8	300.1	303.9	307.8	328.3	1.4	147.1	127.0	147.0	138.0	119.3	127.1	133.1	134.2	127.5	132.1	133.0	122.1	126.2
22	132.3	133.2	125.7	125.3	132.5	109.7	98.5	107.9	96.3	94.0	109.9	131.8	130.8	127.0	144.0	152.4	135.6	131.5	135.6	153.8	170.3	153.4	151.4	149.0
23	132.8	140.3	28.6	80.2	93.0	81.6	101.9	97.1	107.9	114.7	130.2	122.7	127.4	129.4	123.8	127.3	133.6	123.5	119.6	122.6	126.1	128.7	129.9	132.0
24	125.1	132.0	128.5	128.9	128.2	127.9	134.2	133.4	129.7	126.6	125.1	123.9	141.0	143.4	147.3	139.1	147.0	148.1	137.8	128.9	127.1	101.4	103.0	124.4
25	121.8	118.9	117.0	100.1	105.1	113.6	108.4	114.7	106.5	105.9	111.2	152.8	162.7	156.8	153.2	157.7	162.7	159.5	143.5	141.2	136.0	226.8	292.4	304.8
26	306.1	324.3	332.8	184.4	176.9	164.9	151.5	126.1	151.0	158.3	154.4	136.5	158.0	161.2	162.4	153.2	149.3	143.8	134.6	139.2	129.8	131.7	128.7	136.2
27	142.7	151.6	151.5	159.9	158.9	156.0	151.6	132.5	148.6	136.8	133.4	136.8	137.3	141.6	139.5	140.7	142.0	144.6	141.9	144.7	145.2	150.2	163.4	153.2
28	161.4	160.4	148.9	132.6	145.9	137.6	127.6	132.6	119.7	125.0	120.2	129.8	131.5	132.6	122.4	136.4	154.1	149.0	141.9	145.8	147.0	144.5	150.4	161.0
29	174.9	183.3	218.5	292.3	310.7	306.5	307.7	313.7	330.5	359.4	6.0	0.6	46.5	51.2	3.6	33.8	164.8	160.5	175.4	167.2	159.5	175.2	177.5	197.6
30	186.1	231.5	159.9	295.0	307.2	323.2	312.7	300.2	318.8	320.8	86.6	107.2	119.1	125.6	122.3	125.7	141.5	150.5	147.7	138.9	141.3	143.9	147.0	121.0
31	147.6	129.5	114.1	102.1	102.2	111.2	112.7	110.3	129.7	137.7	133.9	125.8	127.5	119.4	92.0	67.7	91.5	96.3	112.7	120.9	141.9	129.2	118.3	115.3

Total Hours In Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	110.1	101.8	104.0	125.3	91.4	93.9	98.3	131.7	133.6	116.6	115.3	125.4	131.2	123.6	115.7	132.7	138.0	137.9	138.6	120.7	124.0	124.6	128.6	121.1
2	113.4	112.8	121.9	136.9	135.1	139.0	130.8	123.7	120.7	128.0	134.7	126.5	122.7	126.7	113.2	132.7	139.2	142.7	143.5	141.9	141.1	137.0	138.5	163.9
3	194.6	192.7	111.0	107.2	130.5	153.2	163.8	176.8	133.1	122.9	125.5	119.8	117.2	125.9	132.6	66.2	147.1	145.7	45.4	302.5	167.9	245.2	306.2	311.6
4	313.6	320.7	331.7	328.9	315.3	315.2	314.9	324.0	330.7	334.5	326.7	349.5	352.2	351.5	346.2	18.6	178.7	241.7	174.2	174.3	165.5	159.1	168.5	165.2
5	157.7	155.9	152.9	149.4	151.0	150.5	142.2	106.9	117.8	120.2	128.2	130.7	125.1	122.4	118.8	118.6	116.7	115.8	121.8	120.9	118.8	118.8	121.9	127.6
6	126.9	144.9	133.6	127.0	127.8	136.3	108.3	111.3	92.4	52.1	47.0	81.4	114.0	162.5	167.3	164.1	167.4	181.1	194.7	181.5	180.3	182.1	177.4	176.2
7	178.6	155.4	115.9	327.3	340.5	47.1	63.9	82.6	74.6	96.1	79.2	83.3	90.5	108.9	101.0	122.5	118.9	120.2	118.9	116.1	111.9	115.6	131.5	114.5
8	108.1	111.8	104.0	112.9	117.4	115.4	124.1	121.8	125.4	133.0	135.2	124.7	97.7	102.8	118.5	125.9	120.3	115.4	123.7	124.7	126.3	131.0	142.6	148.6
9	125.8	141.8	147.3	165.5	172.5	205.5	280.0	312.5	324.8	341.0	332.0	4.8	1.6	349.6	6.1	355.6	4.3	85.1	27.4	343.6	341.7	321.3	310.9	309.0
10	310.5	309.0	315.5	316.2	320.7	317.1	307.3	307.4	313.4	323.0	327.0	326.6	323.9	323.7	324.1	319.9	320.6	318.0	317.2	319.8	327.1	91.4	103.9	118.8
11	145.9	136.8	158.7	170.6	194.4	191.3	149.4	139.3	126.6	127.0	155.2	158.0	154.6	154.6	160.6	162.1	158.2	153.9	154.5	143.8	145.5	147.6	148.9	150.8
12	158.7	158.4	160.7	161.8	151.6	143.5	155.3	138.2	147.9	149.9	145.3	147.4	155.9	159.9	156.1	165.3	163.0	154.6	156.6	165.8	160.4	173.8	168.0	185.8
13	198.5	204.3	251.9	262.9	281.1	324.3	317.7	318.5	331.0	323.7	329.5	313.9	333.2	268.5	284.8	287.5	306.9	246.5	217.8	270.1	271.4	269.2	285.0	293.7
14	287.0	286.5	300.3	310.1	296.3	302.3	308.8	308.8	301.1	310.8	333.3	329.5	359.4	320.7	299.9	260.1	262.7	205.7	262.9	277.4	275.0	268.9	279.1	300.4
15	311.1	311.0	323.2	316.7	323.7	319.6	328.7	323.8	322.8	329.5	336.1	340.4	345.7	350.9	342.3	331.0	341.4	323.2	319.1	329.1	324.9	325.3	324.2	309.1
16	310.6	307.5	317.6	320.8	320.9	319.6	322.0	315.0	324.4	318.7	307.5	305.6	298.9	294.5	291.1	293.7	292.1	283.3	274.0	259.5	238.4	233.0	237.0	252.9
17	253.0	248.3	226.3	225.4	229.7	231.6	242.0	236.5	259.7	277.5	310.1	322.5	339.9	310.4	339.8	348.9	328.9	346.1	351.6	342.1	319.6	337.5	305.1	304.5
18	302.8	324.2	303.2	292.6	309.5	311.1	311.9	319.3	327.6	315.5	323.4	355.7	332.6	305.1	12.1	234.3	140.2	216.5	172.4	171.0	213.3	146.1	266.3	305.5
19	306.7	311.7	317.6	320.2	307.4	309.5	310.5	320.5	326.7	333.4	332.0	341.7	336.6	341.7	344.1	338.5	339.3	344.7	334.9	325.1	333.7	329.9	327.3	317.3
20	313.0	321.5	319.7	317.3	313.9	310.8	312.4	311.3	320.5	327.3	324.1	327.0	331.1	334.4	333.4	337.4	326.3	322.6	335.6	324.6	312.3	306.0	307.0	299.8
21	307.6	319.3	316.9	310.3	301.1	309.8	304.7	307.7	310.7	311.9	315.0	313.5	294.0	301.2	301.0	300.4	294.9	293.3	289.3	285.4	259.3	244.4	252.0	246.0
22	215.2	98.0	113.8	359.5	141.1	151.5	190.4	203.9	195.9	169.9	170.8	175.0	169.6	164.2	159.5	178.6	167.9	161.1	171.4	158.4	157.0	156.5	153.4	156.4
23	145.4	136.5	135.2	127.3	127.1	126.1	123.6	120.9	117.3	115.1	118.4	120.3	121.9	120.9	120.3	116.5	112.5	114.3	113.6	114.4	112.5	114.7	115.0	115.5
24	114.1	116.8	117.8	121.3	123.3	124.6	120.2	127.0	122.3	116.2	114.1	112.4	123.1	124.0	121.8	125.8	136.9	131.0	126.7	127.3	123.6	124.5	126.4	125.9
25	129.0	134.7	132.2	125.8	123.6	128.9	133.3	134.1	136.5	141.3	131.2	126.5	123.1	124.1	128.6	122.5	123.6	130.4	129.3	128.4	127.4	131.9	132.5	132.2
26	131.1	145.0	150.8	148.6	128.1	130.8	137.6	140.6	141.5	128.2	136.3	149.6	150.6	144.1	125.9	140.1	151.5	153.1	223.1	229.1	269.2	267.3	268.6	271.6
27	288.4	292.0	302.3	305.7	312.4	320.7	317.6	307.3	311.3	333.9	2.6	122.8	148.1	151.7	152.0	156.7	159.4	168.7	163.0	176.7	198.5	225.5	241.0	137.1
28	61.7	310.0	303.5	267.0	261.4	183.5	273.1	263.6	101.7	119.4	144.1	123.4	143.0	147.3	146.2	135.1	153.6	158.2	170.8	124.2	125.9	129.2	132.3	132.1
29	125.0	131.7	148.7	146.1	136.8	148.0	143.6	142.5	118.4	127.8	153.5	147.7	155.5	151.9	163.3	192.8	215.1	225.5	261.6	258.8	259.3	265.1	280.7	291.8
30	285.3	279.3	261.6	237.5	255.1	182.0	208.7	219.1	226.7	187.5	175.0	180.7	171.6	184.5	176.2	164.1	178.7	158.1	155.8	149.8	141.1	155.3	152.0	151.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	162.2	144.2	153.2	164.5	258.5	325.2	319.4	305.4	315.2	316.8	331.6	340.3	328.4	315.7	292.0	291.9	291.0	291.9	284.2	283.2	284.5	281.6	290.0	86.6
2	120.3	148.8	174.4	173.8	156.0	145.5	191.4	133.8	4.4	313.8	305.8	307.2	317.7	320.1	317.9	313.1	331.2	322.8	325.6	325.9	326.6	314.2	321.5	308.2
3	299.0	303.1	276.2	125.5	157.6	172.2	170.2	164.2	165.3	166.1	173.3	161.8	159.0	157.6	151.2	160.1	153.3	164.4	162.0	164.2	168.7	173.8	187.6	176.4
4	170.8	162.7	163.5	163.1	157.2	164.4	155.8	160.9	161.4	159.2	143.9	143.6	130.9	133.1	130.4	128.4	126.9	122.5	127.1	132.1	137.6	155.4	161.0	159.5
5	163.0	161.2	162.2	160.6	167.9	188.9	160.9	169.7	277.5	316.1	310.5	308.1	303.2	317.5	320.0	303.1	305.9	298.5	20.4	163.2	161.7	158.9	159.8	149.6
6	145.3	138.2	142.2	140.6	143.0	148.0	138.4	126.8	118.0	123.4	155.1	152.2	132.5	133.2	149.3	151.7	143.4	153.5	150.7	160.7	173.1	191.4	351.9	13.9
7	162.2	158.3	144.2	177.5	155.3	162.8	194.5	167.2	256.7	320.8	321.5	2.3	334.1	356.8	294.6	320.3	314.3	303.5	312.0	222.5	182.3	133.5	115.5	132.5
8	135.5	138.5	208.0	348.2	147.3	157.0	139.4	125.5	123.5	100.9	114.7	157.1	148.6	158.9	148.4	151.5	153.6	139.9	139.1	126.3	128.7	150.4	157.7	157.2
9	142.4	140.3	137.7	136.2	139.8	148.5	143.9	147.6	132.5	116.4	104.1	90.6	103.8	91.4	108.3	92.3	85.1	162.9	218.0	188.6	200.8	244.4	285.3	307.7
10	301.6	306.8	309.3	310.2	329.1	297.3	282.6	308.1	319.4	355.0	3.3	3.2	324.8	315.9	172.0	192.0	160.7	153.2	160.0	163.1	166.0	155.7	158.8	157.4
11	148.4	153.2	160.3	147.2	147.8	141.1	151.6	150.3	147.1	145.3	145.4	140.8	146.1	147.3	142.5	148.4	161.0	162.4	159.2	163.1	161.1	164.4	170.0	153.4
12	157.8	133.6	152.1	166.1	257.2	309.3	311.6	319.6	325.4	333.5	321.8	322.0	327.3	330.6	333.2	175.5	183.8	158.2	163.4	154.7	158.0	162.1	160.6	162.6
13	155.2	162.7	165.9	161.1	165.0	156.1	173.9	162.6	158.5	149.0	133.3	149.2	157.3	155.1	155.4	158.4	156.4	164.6	166.1	174.6	180.0	171.5	165.4	166.0
14	163.1	177.2	174.8	173.8	168.0	165.8	155.9	145.7	158.5	157.3	145.0	157.6	155.9	158.2	153.8	158.9	150.8	151.1	156.8	160.6	157.5	160.9	158.8	166.9
15	189.3	184.9	196.4	188.8	177.4	185.7	128.5	161.6	321.2	343.8	327.5	344.0	345.2	343.2	252.4	259.9	254.1	264.7	262.6	263.6	259.2	265.9	270.4	255.2
16	261.2	292.2	294.1	297.9	317.4	308.5	313.8	309.0	310.2	310.5	317.0	323.8	325.9	332.7	329.9	328.4	311.0	313.9	311.5	304.1	303.0	302.7	307.6	319.4
17	316.8	315.0	305.9	309.5	311.6	309.5	313.1	317.6	315.2	311.9	338.8	352.3	15.2	60.3	149.7	158.6	152.7	152.3	159.1	160.0	154.7	159.5	150.7	149.2
18	147.0	144.0	141.8	137.6	139.6	140.8	126.9	141.8	151.5	130.4	139.9	20.1	5.2	357.0	15.2	154.7	165.4	168.6	161.8	168.3	158.2	178.5	237.7	268.3
19	314.7	321.0	319.4	314.8	312.4	315.2	313.1	320.0	311.4	309.4	312.3	318.8	324.4	310.3	315.2	64.9	142.1	202.0	238.1	268.4	258.5	240.2	254.7	248.4
20	305.1	268.0	246.4	302.6	151.1	336.9	188.3	297.0	258.1	332.4	109.1	283.4	324.9	282.8	293.9	52.1	53.6	248.3	289.6	280.6	285.6	266.1	262.9	255.0
21	235.3	182.3	155.9	163.0	213.2	224.3	227.8	248.9	164.5	220.3	226.4	195.3	206.9	203.3	207.5	217.8	217.5	221.8	219.3	212.3	207.0	203.6	209.0	199.7
22	181.4	185.2	180.7	173.2	176.6	167.7	177.4	181.2	176.7	181.6	177.2	176.8	183.5	176.4	176.3	162.5	154.2	145.4	146.7	146.2	141.3	124.1	129.9	136.2
23	135.8	138.1	140.6	129.6	116.4	185.8	175.3	131.4	122.9	143.8	154.7	158.5	146.7	141.6	133.8	122.6	119.8	120.5	123.2	123.8	121.5	118.6	121.1	130.1
24	124.9	123.4	114.2	116.3	118.2	121.0	127.2	116.0	105.2	104.5	102.3	99.0	100.6	84.6	82.1	69.5	78.5	82.9	89.1	72.2	86.0	82.4	66.3	66.8
25	64.6	64.8	62.4	77.0	75.0	56.6	106.9	60.0	60.2	57.4	59.9	58.2	67.8	59.2	64.6	77.1	70.7	89.1	85.1	92.0	96.5	92.5	108.1	203.8
26	208.9	252.0	218.8	259.3	314.0	304.9	307.9	306.0	315.5	315.5	321.4	325.1	340.8	347.3	0.7	6.5	312.6	257.8	268.8	270.2	275.1	277.9	261.2	297.3
27	321.3	305.7	301.1	301.6	317.7	315.7	315.6	317.6	312.9	316.0	328.9	343.4	340.9	329.4	320.7	322.2	320.1	314.5	341.8	340.8	359.1	327.0	312.1	324.5
28	306.1	308.7	307.0	307.0	313.9	305.0	308.8	319.3	310.5	313.0	306.8	307.6	310.3	305.1	300.0	300.0	292.4	287.3	275.9	275.0	285.8	273.2	287.7	319.7
29	315.4	318.0	322.9	308.3	313.8	312.6	314.7	313.3	319.7	314.2	326.3	327.8	326.8	325.2	320.0	314.2	317.4	343.1	328.6	328.5	296.2	312.3	300.7	299.8
30	299.0	301.6	309.3	302.0	313.2	325.1	316.4	303.7	308.3	324.4	133.0	112.4	127.7	188.7	161.0	227.0	219.6	223.0	224.5	217.7	215.6	183.8	170.0	205.6
31	209.9	203.0	201.4	164.4	158.5	163.1	160.7	147.8	149.7	149.6	150.9	152.7	156.2	146.0	149.4	150.8	143.9	148.4	131.4	126.7	119.7	123.3	124.7	123.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	119.9	119.1	123.3	119.1	118.2	117.1	128.1	121.6	119.4	121.4	123.3	124.3	127.4	126.4	124.4	122.8	127.9	128.8	122.6	123.3	120.0	118.1	117.9	115.3
2	113.7	114.6	119.8	117.3	115.5	115.4	116.2	118.0	119.9	118.9	117.5	119.2	117.5	119.0	119.2	117.7	120.6	124.4	119.1	115.1	113.2	115.0	112.7	114.5
3	130.1	133.0	132.4	125.6	122.6	125.1	125.4	125.5	119.2	117.8	129.0	133.7	129.3	126.6	129.2	127.8	126.6	126.9	127.9	128.9	125.3	120.2	124.3	121.3
4	121.2	121.8	118.8	117.5	119.2	120.9	118.6	120.1	122.8	124.1	126.4	130.5	133.9	137.3	140.8	141.2	143.7	148.1	142.5	137.9	138.7	139.1	139.4	134.1
5	137.9	138.9	138.7	134.0	137.9	138.7	152.1	159.1	164.2	199.4	201.6	193.5	197.5	203.5	203.3	199.7	203.1	213.5	230.4	232.6	232.5	236.8	245.7	256.0
6	259.9	269.5	266.9	267.6	271.1	302.1	293.8	287.5	302.2	311.2	307.4	310.3	308.2	305.8	311.3	312.7	316.8	314.2	320.0	313.4	308.8	310.8	310.6	304.3
7	306.5	304.4	313.6	313.0	313.2	320.7	315.8	324.6	334.8	336.4	339.9	341.4	343.2	339.2	337.3	339.5	335.3	335.6	339.7	335.6	331.8	327.6	328.1	316.4
8	311.6	325.7	321.8	312.7	323.9	308.0	315.6	322.5	328.5	328.6	325.5	327.6	328.1	334.6	330.3	330.1	328.1	310.4	328.9	323.7	322.5	323.3	311.0	309.5
9	316.1	317.8	314.2	324.8	316.0	322.9	311.1	321.0	317.7	320.2	354.1	346.8	350.9	327.6	295.6	312.5	249.6	181.7	188.0	186.1	197.8	202.0	198.7	177.3
10	149.1	169.2	171.6	167.8	165.0	166.9	153.6	148.1	125.7	111.0	117.0	116.8	150.1	155.3	146.5	157.8	156.1	161.6	162.3	165.6	171.3	175.8	166.0	162.1
11	155.3	139.6	50.8	307.9	318.0	344.1	330.8	330.0	316.3	321.2	316.3	337.3	329.0	134.3	166.3	180.4	187.9	222.7	260.6	266.3	231.7	199.4	165.7	187.3
12	191.4	198.2	220.6	196.6	180.1	155.5	130.2	165.6	165.6	186.7	178.0	264.3	298.2	255.7	162.5	175.9	195.2	225.6	219.0	244.0	256.7	266.7	269.7	274.3
13	228.6	164.6	125.4	190.6	215.0	171.5	157.1	156.9	121.2	114.0	120.7	194.5	214.8	214.5	219.4	213.7	190.8	218.6	217.5	214.4	194.8	237.3	253.1	232.0
14	222.5	231.7	231.2	233.1	254.1	282.0	158.1	232.6	223.5	219.3	225.4	216.9	217.1	203.0	216.0	193.4	172.7	231.5	228.1	275.4	263.0	345.2	350.3	329.7
15	313.2	306.9	304.9	313.7	308.6	314.0	318.0	314.4	318.9	325.3	319.8	324.2	327.4	340.3	329.5	335.5	331.7	326.1	333.8	340.8	333.6	327.5	327.7	305.1
16	308.5	313.4	305.5	291.4	0.2	65.5	21.7	320.8	305.7	321.3	60.7	317.2	326.7	355.4	335.4	18.6	345.7	96.5	171.1	165.8	170.6	161.2	165.8	159.0
17	159.9	164.7	159.6	164.9	155.9	147.9	150.7	158.1	144.2	134.7	121.9	127.9	135.0	128.5	127.5	115.6	124.4	126.5	125.1	125.1	123.1	124.2	121.7	124.3
18	121.1	116.2	114.2	115.9	117.7	117.2	116.5	117.9	119.4	119.8	117.2	114.9	115.4	113.2	110.9	110.9	113.9	113.0	112.6	114.0	115.4	114.8	114.8	112.9
19	115.8	118.0	120.2	119.0	120.1	121.4	114.9	112.1	117.2	117.8	114.4	120.7	121.7	128.1	127.3	127.5	126.4	128.9	131.9	133.7	130.9	134.6	129.4	122.3
20	117.0	124.1	129.8	123.8	117.1	121.2	123.0	121.0	120.9	125.0	113.0	117.9	119.2	118.6	121.5	121.6	119.0	123.0	128.4	124.5	129.5	133.1	130.6	117.5
21	118.4	123.1	125.0	127.4	129.2	122.5	119.1	114.4	105.6	108.8	108.5	119.6	126.3	122.0	126.4	123.5	125.0	129.2	128.8	124.5	120.6	128.5	134.3	129.2
22	121.7	122.7	123.8	124.4	124.5	127.5	125.8	121.7	120.0	122.6	120.1	122.9	121.3	121.6	124.4	123.6	121.3	125.5	121.5	118.6	114.9	116.9	124.6	113.9
23	107.1	98.9	103.0	94.3	53.6	38.0	67.4	282.5	299.6	312.8	311.4	328.3	322.1	326.0	324.5	325.6	329.6	328.7	327.2	318.7	307.1	304.5	303.8	302.4
24	298.4	304.3	302.7	306.3	307.1	307.2	309.6	310.6	311.1	327.0	324.9	328.2	316.5	317.0	339.1	4.9	298.3	290.3	90.2	141.0	156.2	129.3	133.3	164.2
25	156.4	160.4	140.0	141.2	190.5	217.0	191.4	169.9	144.5	143.9	124.8	134.5	163.7	156.8	139.9	129.2	137.6	130.5	135.8	147.0	161.7	161.0	153.0	141.6
26	130.2	142.4	146.4	144.2	124.5	126.6	112.2	133.4	145.2	140.7	134.4	121.8	125.0	122.3	120.2	153.0	138.7	118.9	123.6	142.3	141.0	132.4	107.1	101.5
27	84.8	86.6	93.4	74.0	28.0	360.0	356.0	343.0	88.3	106.6	87.7	72.9	71.2	78.1	92.8	125.0	110.9	169.3	175.8	187.0	170.5	225.6	261.7	300.8
28	278.6	306.4	303.4	320.9	108.9	120.1	59.3	122.0	106.6	80.3	69.7	40.3	14.1	51.7	12.8	344.2	5.5	327.0	309.0	303.0	297.4	305.8	322.9	316.7
29	319.6	323.4	324.6	325.0	337.3	326.3	328.2	325.6	329.7	323.3	323.2	332.2	323.3	325.0	332.1	329.4	326.1	325.2	323.5	333.9	330.0	325.1	327.4	324.7
30	322.9	329.3	320.5	311.5	304.9	309.3	309.0	315.7	319.8	323.1	324.5	347.3	350.1	348.9	357.1	345.4	345.0	337.5	344.4	355.2	353.6	300.0	319.5	313.1
31	307.6	307.0	302.9	316.6	315.5	309.7	308.3	313.0	311.5	314.4	312.2	313.7	316.7	320.7	323.0	0.3	144.3	312.8	234.4	157.3	88.9	324.8	320.7	299.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	263.2	318.6	138.1	202.5	131.6	147.4	124.1	128.4	163.4	169.3	168.1	178.9	171.1	157.2	155.7	149.7	147.6	148.5	151.1	171.3	171.9	175.5	171.6	174.5
2	168.0	162.2	162.3	162.0	162.7	161.2	154.6	165.9	160.4	185.0	197.1	206.5	190.7	301.5	348.0	352.0	344.8	340.2	339.7	339.9	339.7	338.8	338.0	337.2
3	336.8	336.5	335.9	335.6	335.5	335.3	335.2	334.9								142.5	0.0	125.7	112.0	111.1	112.6	111.8	112.5	114.8
4	108.7	113.7	114.0	107.0	94.3	113.0	42.5	51.2	59.7	0.0	303.3	240.8	315.9	39.8	18.4	351.1	317.8	294.8	283.2	281.0	289.2	292.8	300.9	296.2
5	292.1	304.4	296.2	302.5	284.1	291.9	293.8	298.0	295.1	294.7	0.0	261.0	279.9	296.4	274.7	255.5	82.4	113.8	194.4	205.9	185.5	274.1	297.8	227.8
6	218.3	208.4	214.1	314.3	284.1	180.8	212.2	218.6	220.1	199.9	186.8	178.9	186.7	202.0	201.2	195.1	165.0	158.4	150.8	143.0	161.5	161.2	122.2	118.3
7	99.3	121.7	128.2	122.1	127.7	122.4	109.3	108.6	114.9	112.0	110.1	113.5	115.7	114.0	114.9	115.6	114.8	111.5	111.7	110.2	114.0	115.4	113.3	112.6
8	114.5	117.7	120.4	121.1	127.7	129.6	128.5	129.1	132.8	127.1	130.9	126.7	130.5	141.4	149.5	152.8	153.8	149.4	153.8	169.0	180.1	163.8	154.6	157.9
9	158.6	162.4	160.8	160.0	154.1	142.1	152.2	158.5	154.4	154.9	147.7	143.1	143.4	149.8	144.6	149.6	132.8	142.0	156.1	114.2	124.8	159.4	141.8	98.9
10	158.0	169.5	165.8	155.4	137.9	168.0	152.6	151.7	164.2	172.0	102.1	86.5	108.9	125.8	135.1	138.9	138.9	133.7	135.5	128.4	122.8	119.0	117.9	117.9
11	116.9	117.5	115.3	117.2	118.2	116.1	115.8	113.0	114.4	117.1	116.3	112.4	110.4	105.5	109.1	110.4	115.4	116.2	113.3	109.1	107.6	110.7	117.4	113.6
12	113.2	113.7	117.9	117.7	128.9	143.3	144.4	149.0	159.4	159.9	163.4	163.1	167.1	171.3	172.5	174.9	195.3	212.2	199.7	208.9	203.2	198.8	190.0	207.1
13	192.3	162.4	152.5	149.8	139.6	131.3	138.9	140.6	156.5	180.5	185.2	176.3	158.3	170.0	175.9	158.4	141.6	144.9	139.0	186.2	160.1	154.2	133.0	189.5
14	152.6	134.6	99.9	99.7	99.2	111.9	117.9	92.5	101.1	74.3	339.6	99.0	53.9	345.9	330.1	332.4	321.8	304.0	301.2	291.6	296.5	297.3	299.0	303.3
15	298.1	289.7	299.5	292.3	299.0	302.9	301.5	309.1	309.8	306.9	299.7	303.5	310.5	309.1	302.8	315.1	308.2	292.6	287.1	291.9	289.3	292.7	281.6	275.4
16	273.5	269.5	272.5	277.2	272.5	283.2	291.5	290.7	299.9	317.8	311.1	312.0	312.2	308.1	300.9	308.6	300.2	279.7	281.2	271.5	262.9	267.6	269.1	257.9
17	318.5	250.1	229.7	71.3	214.3	209.7	238.0	236.2	224.5	208.7	188.0	191.0	185.3	202.8	176.1	183.8	168.8	141.7	134.6	119.3	94.7	100.3	103.3	106.8
18	121.3	121.6	128.9	134.1	122.9	128.3	119.3	114.3	101.2	108.5	112.5	114.4	113.5	109.4	113.7	119.0	121.7	118.8	117.9	118.0	116.0	120.8	164.3	166.1
19	213.8	224.4	222.5	221.5	237.5	213.7	189.2	219.8	201.9	174.6	188.5	198.9	201.1	204.3		216.0	216.4	221.0	213.3	211.9	213.0	208.2	211.9	208.0
20	209.6	216.5	209.6	216.0	215.4	212.0	212.4	217.7	219.5	217.2	212.4	211.6	223.4	231.6	246.5	244.2	255.3	245.7	237.6	280.1	292.5	310.8	302.0	275.7
21	304.7	295.4	283.9	287.9	289.7	297.0	296.3	293.9	292.2	293.5	296.9	303.9	304.0	301.2	298.6	306.9	296.8	306.6	308.4	302.3	298.1	311.0	299.0	298.2
22	305.3	313.8	333.3	310.6	307.4	306.6	304.4	314.2	41.0	101.0	112.8	110.5	108.4	102.2	113.1	116.4	117.1	105.2	105.8	102.0	100.8	100.4	103.0	100.1
23	95.3	91.3	89.8	92.7	65.2	80.0	89.1	96.2	120.6	116.6	128.9	138.3	147.4	141.5	143.5	138.1	142.8	136.0	143.4	155.0	185.6	204.3	202.2	203.7
24	205.0	206.7	198.3	220.2	239.4	250.3	251.6	236.0	232.1	232.8	237.7	231.8	230.0	214.1	217.6	188.6	182.4	179.9	216.2	196.6	111.3	109.8	152.3	160.9
25	253.2	256.8	234.2	228.9	210.6	217.2	228.6	234.2	235.8	246.0	241.8	215.7	226.0	228.5	217.4	209.8	213.0	221.3	225.2	216.5	230.1	232.2	221.5	218.5
26	223.0	225.5	213.6	224.9	230.4	229.2	254.0	261.2	274.7	191.9	228.6	262.2	253.8	223.0	249.0	260.8	113.4	285.7	268.8	264.1	270.2	279.5	265.3	263.4
27	270.0	268.3	271.9	286.0	292.2	245.1	267.8	181.7	158.6	137.2	171.0	122.1	132.9	138.7	138.7	145.3	126.1	117.6	114.6	122.6	119.5	117.0	115.6	109.6
28	109.9	111.9	108.0	109.2	111.3	109.6	116.9	125.9	129.5	131.6	137.3	131.5	125.5	125.0	123.3	99.6	97.9	86.0	88.0	88.8	88.6	69.8	4.1	317.7
29	310.4	303.0	299.8	299.2	302.7	302.1	300.1	293.6	292.4	298.0	308.7	299.8	246.7	190.3	201.0	212.2	215.6	177.8	151.3	146.9	187.2	218.4	228.1	241.1
30	253.4	231.3	217.7	204.5	174.8	169.6	162.6	156.7	147.5	137.6	130.5	189.4	217.2	192.6	192.5	165.4	159.8	169.3	163.3	176.7	139.6	143.0	206.6	229.7

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	244.4	256.3	244.5	245.7	242.3	243.8	237.0	232.6	267.8	297.6	299.8	306.0	323.6	317.4	312.5	300.6	289.9	289.5	282.5	291.4	287.8	287.3	286.3	284.0
2	285.4	288.5	284.2	285.3	286.9	287.0	287.7	292.4	293.9	297.4	300.1	304.3	308.2	306.9	305.1	312.1	310.3	312.1	305.9	300.9	296.9	293.2	296.8	298.2
3	299.6	303.5	303.6	305.9	301.9	298.4	299.4	299.0	305.2	308.0	307.6	318.0	323.6	325.0	320.9	330.1	327.2	331.6	314.2	321.6	338.3	267.1	316.4	308.9
4	353.8	23.1	85.9	102.9	99.2	110.8	106.9	119.7	127.7	122.9	115.2	115.9	115.7	115.2	116.4	116.0	121.4	120.9	127.6	132.2	129.6	130.5	139.9	136.1
5	133.6	136.7	127.8	134.5	134.3	136.4	134.5	137.7	121.1	106.4	102.0	107.6	207.5	280.8	294.7	297.6	294.3	299.2	292.1	299.3	303.9	293.5	287.6	297.7
6	300.9	295.5	299.3	301.0	303.4	308.8	310.0	309.2	320.6	322.5	324.3	319.6	314.1	320.5	327.3	324.5	320.3	312.0	309.5	312.7	303.6	316.8	307.8	306.6
7	310.3	311.4	309.6	314.7	318.3	312.7	319.7	313.9	317.9	315.1	317.0	321.3	326.5	327.5	329.4	331.8	333.6	335.9	332.8	332.6	328.1	326.5	322.8	316.4
8	311.7	316.3	316.5	322.9	323.0	325.1	316.7	312.9	319.4	313.8	311.8	316.4	323.5	328.5	332.6	324.6	322.6	329.3	320.5	314.4	313.5	311.4	317.3	334.1
9	323.9	323.2	310.4	311.5	302.4	338.6	134.5	90.9	111.3	313.0	314.0	90.7	271.6	289.1	308.6	310.8	322.6	328.2	327.8	323.1	297.9	302.1	297.1	297.8
10	293.0	295.6	298.7	298.7	302.7	294.9	290.5	299.6	303.7	301.7	304.4	315.7	320.4	326.9	313.7	319.3	303.1	318.1	325.5	319.4	305.0	310.4	303.3	304.8
11	303.1	311.1	307.5	303.9	301.6	303.0	321.3	306.3	99.0	100.1	113.9	120.7	122.0	110.6	110.8	108.2	106.6	115.2	117.0	116.9	122.8	123.1	124.5	122.2
12	123.5	124.3	125.5	115.6	115.1	117.2	116.8	121.9	68.7	343.7	177.7	314.9	287.0	314.3	337.5	337.1	321.4	307.2	306.5	335.5	334.7	302.2	301.1	299.9
13	298.2	297.4	307.0	310.6	312.4	312.6	313.0	300.7	303.2	302.5	310.5	306.9	309.0	314.8	290.3	295.6	301.3	303.9	299.6	299.8	301.0	306.3	305.5	305.1
14	304.8	299.7	302.6	304.3	307.0	312.0	310.8	307.6	304.5	304.9	311.3	308.8	309.9	320.7	321.3	336.7	320.5	318.2	315.8	335.1	335.3	345.3	333.6	317.6
15	306.0	304.9	309.0	286.1	297.0	265.7	305.5	122.7	115.5	107.1	114.8	112.6	312.3	306.4	296.6	338.2	304.7	340.4	333.2	343.4	329.1	301.5	308.9	311.5
16	307.8	306.4	305.9	298.5	302.6	303.8	305.7	301.1	304.6	306.7	307.3	302.5	310.8	306.0	307.1	310.2	304.0	305.8	311.1	327.9	317.5	316.5	310.0	307.6
17	310.1	310.8	307.9	302.1	299.3	300.9	299.8	300.1	300.2	297.1	303.9	305.2	308.6	305.7	312.0	312.6	321.4	331.1	311.6	304.3	300.7	300.7	299.7	298.2
18	296.7	297.4	297.9	297.7	301.4	296.1	309.7	308.2	301.1	305.7	310.7	305.3	321.4	317.9	302.2	292.5	308.2	303.5	290.2	290.5	294.9	293.7	288.1	283.2
19	287.5	284.0	302.7	322.7	307.5	294.6	294.0	313.6	298.9	292.6	264.9	291.8	217.2	29.6	118.8	120.6	121.1	117.1	99.4	90.6	94.1	85.2	76.9	98.8
20	99.5	116.8	126.7	121.7	105.1	96.3	102.0	107.5	99.4	104.1	93.3	106.3	110.4	107.4	109.7	103.8	99.6	92.4	93.1	87.3	85.9	89.5	90.6	94.6
21	98.4	92.5	91.1	89.4	93.4	100.8	110.8	94.1	94.0	61.8	89.6	65.2	82.7	79.9	52.0	54.8	76.7	69.0	331.6	321.1	292.7	306.9	303.1	296.6
22	301.9	298.5	309.6	306.2	300.0	304.9	304.9	307.6	312.9	332.8	313.0	316.2	78.1	115.5	112.2	118.7	102.0	105.2	300.1	288.8	290.1	145.9	111.9	155.1
23	133.8	153.9	130.7	115.5	130.8	128.7	150.3	122.3	130.6	135.9	149.2	173.5	161.6	171.2	155.1	124.7	99.7	317.8	300.4	288.4	288.1	299.2	287.7	286.4
24	183.2	225.3	174.6	117.4	103.0	113.7	120.1	124.1	107.0	104.2	124.7	159.5	161.1	194.2	190.2	170.7	149.8	151.5	118.4	93.1	90.5	92.9	93.3	101.4
25	118.6	116.5	122.0	113.8	112.6	109.5	110.2	113.2	110.6	107.3	106.7	107.9	107.8	107.0	105.9	105.5	107.6	108.6	110.3	112.0	133.7	136.4	147.5	135.8
26	132.2	137.1	140.2	139.0	122.2	109.2	115.5	130.5	142.5	145.2	141.9	147.8	135.1	129.4	134.2	115.3	108.8	105.9	116.8	116.9	108.9	106.7	106.2	110.1
27	105.9	106.8	106.7	107.6	108.0	114.8	113.6	122.0	91.5	58.4	60.3	74.9	102.0	117.0	108.7	111.9	106.8	121.7	123.6	129.0	121.8	114.9	110.5	120.0
28	113.7	120.6	119.0	118.3	137.9	93.3	138.4	150.5	165.1	158.2	145.7	148.3	143.8	147.2	149.9	143.5	145.5	121.9	115.4	119.8	110.9	117.4	116.3	113.3
29	113.8	110.3	112.1	111.8	110.9	109.1	107.2	108.5	109.0	106.3	106.9	107.2	109.6	108.8	110.9	111.0	108.3	108.1	96.8	103.7	107.5	108.8	109.0	111.1
30	88.0	67.0	50.1	44.3	37.0	38.0	1.7	342.2	305.5	293.1	298.9	302.7	294.9	242.5	234.7	320.1	201.3	216.4	234.2	227.8	205.4	222.6	237.6	240.0
31	266.1	268.0	222.3	240.2	248.6	244.9	236.8	233.4	233.9	228.2	217.8	212.4	211.8	206.0	190.5	162.1	152.6	122.9	106.2	96.7	98.3	104.4	95.7	85.6

Total Hours In Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	87.7	68.3	84.9	77.3	67.7	51.5	58.4	69.9	24.1	315.4	318.7	315.7	301.7	306.5	224.9	152.2	167.7	277.6	277.0	277.6	279.6	277.2	272.9	271.8
2	278.4	280.0	282.4	334.9	279.3	285.9	296.9	299.3	301.9	300.7	294.1	294.2	294.8	298.8	311.2	313.8	304.9	293.3	291.8	302.5	307.5	307.0	305.0	301.9
3	303.9	304.2	307.1	297.6	294.9	291.0	291.5	302.7	292.3	265.9	244.8	136.5	184.9	121.1	117.0	115.4	160.9	169.4	151.4	115.1	113.6	117.2	120.0	119.2
4	113.1	108.8	108.7	108.9	111.6	114.4	109.7	110.3	113.3	114.3	116.0	117.3	118.5	123.9	120.3	121.7	122.9	124.2	123.0	132.2	135.7	124.4	116.6	113.6
5	114.9	113.6	112.7	113.3	115.1	112.8	111.1	100.9	98.7	100.9	106.7	101.4	109.2	108.0	104.3	103.9	102.2	106.2	105.2	111.3	109.5	117.0	114.9	108.3
6	115.0	113.2	113.8	112.3	112.5	107.3	104.4	102.5	104.9	104.4	106.6	104.9	104.4	106.9	105.8	101.8	104.8	105.8	106.2	111.7	110.2	111.3	123.1	149.6
7	151.1	127.0	113.8	121.6	116.5	111.3	111.2	113.0	117.9	124.7	118.5	121.6	124.9	134.1	158.1	157.2	172.0	169.6	174.7	197.7	197.0	200.5	192.9	150.9
8	146.9	142.1	106.0	104.4	101.9	102.0	101.0	105.7	107.4	104.2	105.1	105.5	108.8	119.3	115.0	115.6	120.8	121.8	116.5	112.3	112.9	103.3	109.9	119.7
9	118.0	115.5	119.8	110.7	109.9	110.5	113.1	112.9	118.1	121.7	118.5	116.6	112.4	114.0	116.0	113.3	117.6	117.1	115.9	108.6	112.1	99.9	84.5	344.4
10	320.7	314.8	299.4	300.8	298.7	297.4	305.7	304.8	299.9	300.9	303.6	309.3	312.4	305.3	310.1	304.9	303.2	317.9	318.8	305.0	310.6	304.5	321.7	313.2
11	302.4	295.5	308.9	299.9	299.6	301.3	298.4	299.6	297.6	297.6	297.8	300.3	303.2	297.7	311.2	308.5	305.4	309.4	307.2	319.8	304.1	302.3	292.7	279.5
12	295.4	291.8	294.7	315.3	149.1	131.9	142.0	119.9	127.6	181.8	189.2	188.3	128.0	108.7	98.9	93.7	102.7	104.4	93.4	95.4	115.9	115.5	117.5	118.0
13	110.7	105.0	107.2	105.5	106.0	105.9	110.2	111.7	110.2	107.6	107.8	101.8	91.2	120.7	155.8	256.5	31.9	101.8	97.6	100.9	91.2	100.9	106.6	112.3
14	134.8	143.8	146.9	139.1	139.9	147.7	137.1	140.9	148.4	94.5	90.8	109.8	110.6	112.7	111.5	112.3	94.5	106.1	103.0	92.5	56.2	52.8	18.1	306.8
15	296.0	301.7	303.9	299.7	301.4	304.6	311.6	324.2	311.6	326.9	322.0	323.5	323.8	318.2	309.9	319.4	325.6	319.3	321.6	322.1	313.9	318.9	324.3	320.2
16	312.9	312.9	312.0	310.5	307.3	313.2	318.1	316.5	315.9	316.3	318.0	319.4	324.6	330.1	327.9	328.7	328.4	327.0	331.0	327.9	331.6	329.8	327.8	329.2
17	326.0	327.4	323.6	319.4	327.4	327.3	328.2	322.7	317.9	310.6	310.7	310.3	316.1	318.3	318.4	324.0	321.8	313.0	321.5	327.2	321.7	318.9	325.8	319.7
18	314.6	305.0	297.3	299.6	302.7	305.4	294.4	298.9	301.5	298.1	307.2	299.1	302.0	304.1	305.9	308.3	303.0	297.3	299.1	296.1	306.7	4.6	137.9	112.7
19	104.2	102.5	99.2	84.0	104.0	122.6	114.2	144.1	109.3	124.4	118.2	111.8	109.5	113.5	113.8	115.7	116.3	115.5	113.5	98.7	108.1	103.4	98.0	96.4
20	99.5	97.9	96.5	96.6	94.7	106.2	106.4	106.9	107.6	107.5	107.1	107.5	106.7	109.7	114.8	112.4	109.5	102.5	93.4	85.7	77.6	60.4	98.7	89.1
21	81.1	81.6	90.0	98.4	100.2	105.0	119.9	133.4	139.6	128.2	122.0	119.4	121.1	117.2	114.4	123.7	130.6	120.4	118.4	119.2	120.2	119.0	114.2	124.2
22	131.2	121.1	113.2	107.5	92.7	80.8	73.6	81.0	93.1	104.0	107.1	107.0	106.3	103.2	96.0	91.8	85.7	96.5	102.9	111.6	118.8	126.1	141.2	166.8
23	165.6	169.7	171.6	173.8	183.1	204.7	199.8	192.7	192.4	198.3	203.5	189.2	192.3	213.0	215.1	215.5	215.8	215.9	215.4	214.9	220.9	223.7	224.4	218.5
24	209.3	213.4	219.2	233.3	227.6	149.7	158.0	119.4	115.8	107.3	108.0	101.6	98.0	104.8	109.7	104.9	107.1	107.0	105.6	107.3	105.8	104.0	104.4	107.5
25	105.3	106.6	107.1	110.2	105.1	105.8	101.5	84.4	92.1	89.4	94.5	92.0	72.8	86.6	87.7	93.8	95.2	93.4	72.8	59.9	79.7	58.7	48.2	54.0
26	39.9	43.6	34.1	3.2	7.9	358.9	45.5	77.3	97.3	115.8	141.8	151.9	152.0	166.9	138.1	146.0	133.2	143.0	145.0	150.1	152.5	134.9	127.4	122.2
27	127.2	120.4	109.2	109.9	111.9	109.6	108.2	107.8	108.8	109.5	112.8	110.7	112.3	109.2	109.6	110.2	114.6	117.6	111.9	114.7	116.4	119.5	116.5	119.9
28	125.4	123.3	127.2	131.2	136.4	138.2	120.7	143.5	146.5	145.5	142.6	145.0	145.8	138.2	123.6	132.5	132.8	128.4	128.4	122.8	120.5	122.7	133.6	131.8
29	130.9	135.0	126.4	121.9	107.1	112.0	116.2	118.3	116.8	117.7	117.8	114.4	119.4	117.6	118.7	114.8	113.0	114.8	120.9	120.1	122.4	122.8	120.3	117.3
30	115.2	117.3	115.7	114.0	116.1	116.7	112.4	112.7	113.4	118.8	118.4	113.7	112.3	115.7	118.9	117.9	123.3	128.1	124.9	121.6	117.6	124.5	121.0	121.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	131.7	130.2	133.4	136.8	129.0	122.2	131.1	130.8	145.7	149.4	138.2	154.3	135.8	137.4	151.2	165.1	171.0	155.8	150.4	231.9	300.8	304.4	302.3	304.7
2	304.7	304.9	312.6	309.7	308.6	305.4	307.2	302.1	306.8	301.1	345.5	300.1	41.4	198.7	203.4	183.9	171.7	286.7	21.8	69.2	92.6	82.8	84.6	107.4
3	126.7	108.7	103.9	109.8	110.4	110.0	109.0	108.3	110.8	109.0	103.7	99.2	102.7	93.9	86.2	89.5	75.7	50.0	126.0	111.1	124.9	137.7	112.4	116.7
4	108.9	117.8	115.9	117.4	119.0	117.5	111.8	105.9	112.1	108.0	101.7	120.8	114.8	104.2	118.1	135.9	132.8	124.9	132.3	138.9	138.6	128.0	147.9	136.5
5	150.3	145.5	143.5	147.3	153.8	149.1	149.9	151.6	150.0	139.4	129.3	119.3	117.7	117.9	117.3	115.8	118.1	117.0	117.7	118.4	115.3	112.6	117.4	115.3
6	113.6	113.6	111.4	112.2	113.4	112.8	115.6	115.0	114.6	114.8	114.3	112.4	111.6	112.8	118.2	122.3	144.0	154.9	220.4	221.4	207.1	203.3	197.8	190.7
7	186.4	169.0	128.6	140.5	119.7	124.5	116.5	120.1	102.4	103.0	108.7	105.0	109.2	104.9	104.4	106.3	105.8	107.2	106.4	104.4	102.9	103.1	103.1	104.0
8	110.3	118.7	142.1	160.1	163.8	166.7	163.1	155.8	149.4	141.8	137.8	120.1	116.6	131.8	141.9	158.0	241.5	209.6	211.2	219.9	230.3	230.0	232.3	231.7
9	202.3	148.6	128.2	130.0	118.9	93.1	99.4	99.8	106.2	117.5	117.2	124.2	119.7	117.6	110.9	118.0	115.7	116.7	114.7	113.7	112.6	117.5	119.5	116.8
10	110.5	117.4	117.6	105.3	98.7	88.7	70.1	61.4	50.3	357.0	23.7	358.4	324.8	328.5	340.1	339.5	333.5	333.6	315.8	304.1	301.5	305.3	301.1	300.6
11	299.4	297.2	300.2	300.1	294.4	297.2	293.8	288.3	273.0	304.2														
12																								
13																			323.1	311.4	317.6	313.1	310.0	307.5
14	307.5	309.4	310.7	315.1	311.6	300.9	314.7	305.4	302.4															
15	309.6	320.9	315.3	319.7	321.0	318.7	315.6	312.2	307.0	306.8	308.3	310.1	310.6	308.1	308.5	307.3	308.6	310.0	313.2	319.0	317.5	329.6	326.9	319.3
16	310.8	312.6	314.2	314.8	315.7	316.6	322.0	323.4	317.6	315.1	314.0	316.2	314.6	315.9	323.0	325.0	327.8	329.9	324.7	324.6	327.7	328.0	323.1	328.4
17	324.4	321.8	328.0	326.2	326.0	323.5	328.1	331.3	329.8	329.7	328.9	330.1	327.1	328.4	324.8	319.2	322.5	325.1	325.0	317.8	314.8	317.0	309.1	310.1
18	306.0	304.4	306.0	298.8	296.9	303.0	308.1	302.8	296.9	297.8	298.0	302.5	311.1	306.4	302.2	324.0	320.4	310.7	305.9	298.1	298.2	300.6	312.3	313.0
19	305.1	309.1	317.4	311.9	313.2	308.0	313.1	304.7	310.7	309.7	302.3	298.2	295.9	299.8	300.4	301.7	306.4	295.1	294.1	303.8	303.9	295.8	288.0	295.6
20	305.1	300.3	292.6	130.1	107.2	108.0	113.9	112.9	108.6	110.5	107.5	110.6	121.6	119.2	119.0	118.5	120.5	121.4	117.9	117.2	127.6	138.0	136.8	108.4
21	108.6	119.5	117.8	117.9	120.8	116.6	126.8	159.8	161.0	151.3	152.3	140.5	144.1	150.0	136.1	108.3	125.0	122.8	126.1	122.0	120.7	121.1	106.0	122.6
22	120.8	110.6	105.4	106.8	109.9	107.8	111.9	112.1	115.0	119.7	118.7	112.9	111.9	116.1	117.9	117.4	123.7	126.4	122.9	125.2	125.8	176.9	211.2	213.7
23	214.3	224.4	227.8	232.0	217.4	185.2	191.1	200.4	214.6	218.8	232.5	233.8	255.7	256.5	264.2	272.5	266.2	253.3	318.0	346.5	203.6	207.8	296.9	359.4
24	56.6	323.5	315.9	309.7	309.6	317.2	308.2	329.8	327.5	322.4	320.6	330.4	331.5	333.1	336.2	335.5	331.7	329.1	318.5	315.7	319.9	317.5	308.6	313.6
25	312.6	313.4	319.1	322.0	321.2	322.1	318.8	321.2	311.3	315.0	307.3	301.6	299.3	300.9	302.7	301.6	303.1	306.4	303.4	304.4	305.3	312.8	321.5	323.7
26	311.0	303.4	290.2	268.7	281.1	294.6	119.8	109.0	118.5	127.8	124.0	108.9	107.0	116.3	129.5	110.9	107.9	111.4	112.2	106.0	105.4	106.1	104.8	103.2
27	106.0	107.8	105.8	107.4	108.5	107.6	105.9	106.2	105.6	103.2	102.5	103.0	100.8	99.5	95.3	92.3	90.6	93.6	89.4	116.0	106.4	128.8	154.5	162.5
28	158.2	176.8	193.1	194.8	209.1	265.1	290.0	281.3	287.5	300.6	316.6	311.4	314.7	311.9	309.1	327.1	319.2	304.8	318.3	324.1	331.0	325.7	322.6	322.3
29	315.8	317.0	314.1	312.3	312.0	309.5	306.4	303.6	302.5	302.0	300.3	307.8	307.9	301.0	300.5	316.6	305.9	299.8	303.5	297.7	295.8	298.6	300.3	299.7
30	299.0	307.6	308.4	307.5	315.2	311.5	314.0	308.5	316.5	337.4	313.3	324.0	331.4	338.7	308.7	317.9	336.8	348.4	321.0	305.8	324.2	317.6	297.2	302.6
31	296.5	311.9	309.0	306.1	311.2	306.0	308.5	305.6	310.1	313.3	307.3	306.2	312.9	306.8	301.4	309.0	310.1	309.9	310.8	309.4	313.4	314.2	309.1	319.0

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	302.3	301.3	302.6	311.6	308.8	302.9	303.6	304.5	303.1	299.0	299.7	296.4	301.7	306.4	304.7	304.0	304.4	306.9	303.4	307.6	314.6	305.8	306.3	304.1
2	309.0	316.7	317.8	304.3	321.6	317.9	310.8	302.9	306.2	301.7	303.6	309.8	313.3	317.9	302.3	306.0	307.8	312.1	316.5	313.2	311.4	305.9	307.9	311.4
3	304.5	302.6	302.2	299.8	302.2	306.3	307.0	315.2	312.8	306.7	310.8	313.5	310.7	316.3	309.0	313.7	316.1	303.7	302.7	297.8	300.6	312.1	319.9	316.4
4	311.6	306.4	303.9	310.0	310.3	312.1	304.4	313.4	310.1	305.0	308.8	310.8	305.8	304.6	309.3	311.5	302.6	358.0	94.7	68.3	115.0	110.3	120.9	173.0
5	187.7	115.1	312.8	308.6	303.9	310.8	315.8	304.7	301.0	311.8	306.3	304.2	314.2	310.4	303.4	308.0	302.3	301.7	298.1	300.2	312.9	310.6	316.3	308.0
6	303.7	297.5	310.4	312.6	304.2	307.2	303.0	318.5	311.4	314.0	318.8	312.7	304.5	304.0	305.1	301.0	306.9	310.3	307.2	307.2	309.0	301.9	311.0	307.6
7	309.3	315.6	314.4	309.4	317.6	314.9	309.0	310.5	300.5	311.1	310.7	312.2	322.1	301.9	305.8	299.0	311.8	306.2	309.5	312.6	305.1	311.6	311.4	302.2
8	304.0	300.3	305.8	313.5	317.1	313.0	313.9	316.0	314.9	308.8	304.7	316.5	314.4	313.3	321.8	309.8	316.3	321.2	306.6	307.0	306.7	303.5	304.7	305.3
9	302.6	304.5	299.4	296.4	309.0	311.5	305.2	311.5	311.5	311.6	309.6	318.5	96.2	116.6	106.2	135.9	164.0	155.0	156.6	151.8	153.0	155.9	150.7	157.6
10	160.3	147.4	154.9	163.5	146.4	145.7	143.1	140.2	124.3	108.3	106.1	125.6	121.3	124.1	125.2	122.7	123.2	124.6	121.6	123.5	123.9	123.3	126.3	128.3
11	122.5	123.0	122.6	119.2	119.0	115.8	114.9	113.1	112.8	116.7	118.6	117.2	117.2	117.8	116.6	112.5	114.5	115.6	117.9	117.1	114.3	112.1	112.3	110.8
12	107.9	113.2	113.5	113.6	112.6	113.9	114.1	113.9	119.5	122.1	121.6	120.0	117.4	119.5	118.3	117.6	114.4	115.1	114.0	117.3	117.7	120.0	120.0	159.9
13	241.7	231.5	231.0	235.2	230.2	217.0	203.4	207.8	194.1	190.8	200.8	163.4	178.3	186.1	168.9	130.8	110.5	110.3	109.4	348.4	327.2	322.7	310.9	305.7
14	302.4	300.3	305.2	316.8	317.0	316.7	316.0	314.1	321.1	330.4	313.7	313.1	330.2	330.7	328.9	324.0	321.6	322.8	317.2	317.7	314.9	316.0	312.4	305.4
15	307.5	307.9	306.8	307.4	304.0	303.3	305.0	299.0	300.6	309.1	309.7	309.1	314.0	306.3	305.5	306.1	309.2	306.5	308.9	312.1	310.7	315.7	311.2	308.9
16	309.4	302.8	7.8	102.3	87.4	108.2	121.3	115.4	116.3	103.8	111.6	112.2	110.5	111.7	110.5	111.8	110.8	111.4	113.1	115.1	116.6	118.4	120.3	120.7
17	122.0	124.7	130.0	144.4	144.8	142.9	127.4	123.1	130.9	134.7	116.9	130.0	130.8								120.1	136.5	132.5	123.7
18	119.0	125.7	137.7	136.5	108.0	100.2	102.6	100.2	95.5	105.0	136.1	290.7	306.5	305.2	285.0	303.4	301.8	305.2	303.2	298.1	310.1	306.4	303.5	299.9
19	304.8	304.1	306.0	316.4	297.1	311.4	331.5	36.5	149.4	195.0	77.1	109.8	104.3	89.0	109.6	111.6	119.8	115.6	103.4	123.5	114.8	114.8	117.1	110.0
20	105.3	114.6	111.8	120.2	121.5	121.4	117.8	116.8	114.3	115.1	109.8	96.4	101.4	102.7	48.7	37.3	359.8	7.8	346.3	311.9	320.9	321.1	326.4	307.4
21	309.4	314.8	319.7	313.7	317.4	307.4	324.6	293.1	305.1	295.8	297.3	288.5	278.8	279.7	247.9	228.2	221.8	254.4	258.9	259.6	258.7	292.9	245.6	252.7
22	248.4	235.6	221.2	212.5	158.2	150.7	127.6	124.9	124.2	109.5	107.7	101.2	106.0	27.8	316.8	307.9	310.7	307.9	306.5	309.5	311.3	303.8	304.0	306.1
23	312.9	309.2	330.2	303.8	307.9	325.9	322.8	311.5	317.5	320.1	308.2	306.1	299.8	302.0	300.5	301.6	301.0	304.5	312.7	310.3	316.5	319.6	316.5	318.0
24	318.9	312.3	310.0	304.7	305.3	306.5	302.1	309.0	314.7	303.6	310.4	314.9	323.4	317.9	304.8	299.9	313.0	320.2	317.4	308.7	298.1	302.5	307.4	304.8
25	299.5	297.4	182.9	124.5	114.3	113.1	107.2	100.8	109.1	111.9	110.8	113.4	113.4	113.9	111.8	108.2	105.7	109.3	109.8	108.7	110.6	111.0	109.3	111.8
26	115.8	114.7	115.0	113.5	113.1	112.6	114.2	113.6	114.1	114.8	115.1	120.2	125.4	126.7	129.2	131.6	136.2	133.3	127.7	134.0	133.7	132.4	131.6	125.6
27	125.7	125.6	123.5	117.5	115.3	114.9	118.0	118.8	116.2	121.1	114.0	115.0	117.9	113.6	108.1	113.8	114.6	114.0	118.0	113.7	113.8	113.3	109.0	112.5
28	114.2	114.3	115.4	115.2	114.8	111.8	115.7	113.2	115.6	120.9	122.0	132.5	139.9	155.2	135.6	129.3	127.3	129.0	130.4	126.7	126.7	131.4	122.8	123.8
29	122.4	121.1	114.9	109.1	105.1	112.8	114.7	123.0	121.4	120.2	115.6	119.3	117.2	115.3	113.2	116.4	118.2	118.8	116.2	116.4	113.7	114.1	115.0	115.9
30	122.1	117.2	116.4	118.6	120.4	114.7	113.7	111.9	113.1	111.7	114.1	119.4	125.4	126.7										
31																								

Total Hours in Month 744 **Hours Data Available** 703 **Data Recovery** 94.5%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1																								
2																								
3																								
4																								
5																								
6																			114.4	108.8	129.0	139.0	94.6	86.6
7	94.4	104.6	108.2	104.7	126.2	142.9	224.6	159.8	166.7	158.6	287.8	280.1	171.0	137.2	144.5	302.0	312.0	34.5	109.9	87.9	94.2	84.3	109.8	118.6
8	113.3	122.6	132.5	137.7	123.1	153.3	153.8	153.7	159.8	160.0	158.7	159.0	156.9	162.9	159.8	164.1	162.9	157.2	157.4	167.6	164.8	159.1	157.5	151.8
9	141.4	145.4	151.7	153.3	165.4	159.8	164.4	155.1	145.3	154.2	146.9	137.2	132.6	136.8	146.9	150.6	154.6	147.1	132.1	136.8	167.6	353.0	313.5	313.8
10	308.6	354.6	32.9	29.9	335.0	293.6	323.4	323.4	332.8	322.8	320.0	318.1	314.4	312.7	318.2	317.4	320.2	316.4	321.3	327.3	326.6	310.4	319.0	320.7
11	319.7	137.4	130.7	138.7	129.6	128.4	116.0	120.4	142.4	136.1	126.3	123.2	130.8	127.5	122.8	125.4	124.3	123.0	122.2	124.7	121.9	113.3	115.7	119.0
12	120.7	118.7	114.9	122.5	122.2	120.0	120.5	118.0	112.3	116.7	115.4	114.4	117.4	117.1	117.0	119.3	118.2	111.3	109.6	91.3	85.4	89.0	83.1	101.1
13	67.9	53.7	58.2	59.4	40.6	36.4	52.3	60.0	56.6	60.2	70.6	80.1	98.4	79.9	82.6	99.9	113.0	128.0	129.2	125.0	120.6	122.6	126.0	127.4
14	119.5	120.8	117.8	117.5	111.1	111.1	116.9	118.1	121.9	111.9	107.9	122.2	124.8	123.4	126.9	125.1	128.7	138.0	139.6	118.4	101.1	115.8	88.3	359.5
15	338.4	322.7	347.2	211.9	307.5	301.4	312.2	305.7	313.2	316.3	295.9	318.7	306.6	313.8	303.4	314.5	306.7	312.9	315.8	309.1	306.0	308.3	319.1	303.1
16	295.2	73.8	324.0	282.9	172.2	156.3	155.2	113.3	114.6	115.9	137.1	157.9	160.3	175.4	172.3	176.9	151.4	157.2	247.0	100.1	143.4	126.5	121.6	174.4
17	151.2	171.2	173.7	139.3	153.7	166.2	151.3	144.7	149.5	183.1	213.9	51.8	118.2	103.0	114.1	113.5	119.3	152.8	148.1	151.6	124.0	139.8	123.4	125.0
18	140.9	133.8	116.7	124.3	107.7	103.4	102.1	117.4	120.8	133.0	128.4	123.4	121.6	150.9	161.1	129.6	79.6	169.5	30.0	334.2	321.4	317.0	309.8	308.6
19	310.9	309.2	300.7	312.3	320.3	311.8	316.9	308.8	319.7	315.6	312.6	309.1	305.5	313.9	315.5	319.6	324.3	322.5	326.6	322.2	318.6	325.5	324.3	327.8
20	326.8	323.0	308.1	303.3	306.6	327.0	331.0	341.3	334.4	335.6	330.2	324.4	323.9	320.9	326.8	328.6	327.7	320.3	317.9	311.8	314.1	315.7	317.8	307.5
21	313.8	315.8	328.8	327.7	329.3	331.1	331.2	328.3	321.0	318.5	324.2	324.2	318.1	318.5	314.0	317.2	325.8	318.9	320.2	314.3	319.3	315.6	310.2	311.4
22	322.3	316.3	306.3	309.0	326.6	336.4	315.2	312.9	311.1	306.5	305.7	310.5	328.0	319.7	319.1	302.9	293.0	297.6	314.0	311.7	308.5	313.3	312.4	313.4
23	311.7	316.8	327.6	311.1	308.6	311.7	308.1	311.1	313.4	312.2	316.2	305.9	308.1	314.6	317.4	313.7	298.6	300.7	300.5	305.4	302.2	308.9	316.4	311.2
24	312.0	307.1	305.3	309.8	304.1	306.4	316.4	313.7	310.8	314.1	316.2	319.2	329.7	329.0	329.3	331.1	328.7	327.7	319.0	317.5	314.3	320.1	328.9	332.8
25	335.6	342.4	335.5	328.4	325.6	321.4	320.7	305.8	309.1	314.3	325.2	323.0	311.2	312.0	316.6	305.7	327.0	318.6	325.1	317.9	316.0	317.3	314.8	308.9
26	301.3	306.9	306.8	304.7	309.6	316.1	328.7	319.9	311.5	318.6	320.8	326.7	329.9	310.1	312.1	308.3	314.8	316.5	321.0	322.3	310.8	313.8	319.4	316.3
27	317.5	325.2	327.7	321.5	327.6	324.5	333.2	325.4	319.0	311.8	316.9	329.0	303.6	304.0	317.8	310.8	310.9	307.8	317.3	322.0	318.3	314.0	314.7	316.8
28	318.2	307.6	307.6	309.2	315.6	312.0	314.3	311.6	329.2	313.0	319.0	317.7	314.9	299.7	308.9	325.6	319.0	328.1	327.9	310.3	320.9	317.8	315.1	307.8

Total Hours in Month 672 **Hours Data Available** 534 **Data Recovery** 79.5%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	318.6	305.2	297.8	299.1	307.4	303.1	305.3	301.5	309.1	304.4	306.5	316.0	311.9	317.1	322.0	326.8	328.1	334.4	333.8	332.9	333.3	332.0	324.5	320.8
2	320.3	325.8	323.0	322.2	322.3	323.9	323.8	324.5	323.3	324.4	314.5	317.0	321.8	317.8	325.5	330.6	326.5	324.9	329.7	328.1	326.1	326.3	329.1	331.0
3	326.4	324.0	324.6	323.4	316.4	321.0	320.3	323.3	329.2	333.5	336.7	306.1	318.0	306.7	323.5	332.6	324.8	319.4	330.6	307.0	297.2	306.4	319.1	320.3
4	323.9	335.8	338.4	338.4	330.5	327.8	321.9	318.5	312.4	311.4	312.8	314.4	325.4	325.1	331.5	331.6	333.8	334.1	338.6	335.6	329.5	322.2	318.3	319.4
5	317.4	314.9	319.3	330.7	335.3	336.7	336.7	330.0	326.4	330.8	334.4	336.1	339.3	332.1	332.3	332.5	329.5	335.1	333.1	334.6	332.4	328.6	331.8	331.9
6	326.9	327.3	328.6	331.2	334.3	336.2	333.7	335.9	330.9	329.9	336.4	334.8	330.9	332.5	327.2	321.8	321.6	323.0	320.9	319.4	320.0	321.3	322.1	314.4
7	318.4	321.7	318.3	324.6	325.8	314.5	314.3	312.0	313.4	322.5	323.2	333.4	331.3	331.1	333.2	334.4	329.3	328.5	328.6	328.0	326.8	327.2	325.5	324.6
8	326.7	327.2	329.0	326.1	329.8	331.1	330.8	330.1	329.9	328.7	327.8	330.0	325.3	330.3	336.0	327.3	325.7	327.3	327.0	325.7	327.0	324.2	326.3	324.6
9	324.8	325.6	321.8	322.8	322.1	322.2	323.7	320.2	320.0	321.4	328.4	332.1	331.3	332.8	330.0	327.5	330.1	329.4	330.6	327.4	311.7	307.9	301.3	301.8
10	310.5	308.5	307.6	307.0	302.1	305.6	312.9	316.1	335.6	335.4	326.4	325.4	327.4	333.5	314.0	331.6	331.8	327.6	335.9	329.8	313.4	312.7	316.2	302.4
11	305.8	326.1	317.8	313.8	315.0	317.9	315.3	319.7	324.0	318.3	321.3	330.6	334.4	338.9	338.2	336.0	332.4	336.5	337.3	327.3	325.5	327.3	319.4	318.0
12	315.3	314.2	314.3	311.2	312.0	324.5	312.4	300.2	306.1	317.4	325.5	318.5	326.7	331.3	328.0	328.7	321.9	329.0	324.6	322.6	324.7	321.0	325.8	333.2
13	323.5	322.0	324.3	326.7	325.2	328.7	316.8	326.2	327.7	328.5	320.8	324.9	323.9	327.7	325.1	329.0	325.5	326.4	325.4	322.2	318.4	317.2	308.4	309.5
14	311.6	316.5	316.7	319.8	314.5	317.0	314.7	314.8	313.6	314.4	320.0	320.9	324.0	324.5	329.3	335.1	335.5	326.8	325.2	320.6	323.5	334.3	330.8	328.9
15	335.5	327.5	332.7	334.2	332.6	334.3	327.0	307.0	301.9	306.8	314.1	329.1	329.4	323.3	333.3	332.2	326.9	328.2	325.3	321.2	317.6	321.7	323.5	316.5
16	313.7	308.2	303.2	303.4	299.9	300.7	302.2	303.7	317.4	317.5	328.1	316.3	328.3	322.8	319.0	318.8	318.8	322.1	340.6	338.9	324.9	307.6	306.5	301.8
17	300.2	298.3	302.3	299.0	306.0	306.1	307.4	297.0	311.7	308.4	314.6	314.0	305.5	321.5	309.8	302.2	314.1	318.4	315.1	302.3	308.3	308.8	309.6	296.5
18	304.3	301.6	281.6	296.7	311.9	304.2	302.1	300.1	272.9	279.2	101.1	96.9	311.2	311.4	282.1	265.5	271.7	272.7	293.4	296.3	297.6	297.6	301.1	304.2
19	302.0	298.4	301.7	307.8	305.0	304.3	304.2	306.5	303.3	310.7	308.0	310.2	310.6	317.2	316.4	306.3	310.6	283.1	298.0	298.5	298.6	312.4	311.7	302.9
20	122.7	129.8	129.4	127.7	122.2	126.5	138.6	135.9	134.8	124.3	124.6	113.4	109.2	111.5	107.6	104.0	105.3	104.2	97.3	101.9	103.3	104.4	108.5	104.3
21	101.1	92.6	93.5	114.3	121.3	156.3	149.4	138.6	148.5	151.9	201.1	218.6	238.4	236.3	231.1	230.4	265.4	264.1	256.9	288.3	307.8	297.3	325.7	324.2
22	308.8	313.1	305.7	311.3	312.0	314.3	309.7	301.4	302.4	311.6	308.1	305.6	311.2	308.7	318.7	324.7	324.4	328.6	316.6	305.2	299.4	301.0	307.8	314.2
23	316.7	307.0	306.6	307.6	312.2	305.9	308.2	320.2	316.2	318.2	317.5	308.1	310.6	306.1	306.3	314.6	311.5	322.0	320.2	313.9	310.3	306.2	307.5	312.0
24	310.7	319.6	316.6	318.3	301.6	313.6	308.8	299.8	298.7	305.0	306.3	299.7	293.9	302.5	306.3	304.6	305.9	298.1	291.2	295.0	299.7	300.4	305.5	312.1
25	125.8	123.6	130.1	150.5	102.2	122.6	123.8	113.8	114.4	125.2	120.0	127.7	119.0	121.5	129.3	204.7	208.5	156.9	129.8	125.7	105.2	105.6	114.3	113.8
26	123.9	104.8	88.8	92.0	114.1	115.5	122.0	137.2	165.7	200.0	207.4	214.5	198.3	209.0	219.2	227.8	252.1	268.7	290.9	303.1	306.4	309.4	310.4	318.4
27	314.7	308.2	314.1	316.6	320.0	316.9	320.5	317.5	322.2	320.8	325.3	325.0	324.7	317.9	318.1	313.0	316.3	309.7	309.0	315.8	320.6	330.5	330.9	338.1
28	340.8	324.2	318.8	318.1	309.3	309.8	306.0	304.7	310.5	317.1	310.7	319.4	319.9	318.1	321.5	316.4	314.9	313.9	316.2	318.7	311.4	308.3	308.4	310.3
29	312.2	306.7	309.9	307.4	316.1	317.8	311.6	305.1	310.4	325.0	328.1	313.7	306.5	307.4	308.6	302.8	311.1	309.3	306.3	308.8	303.3	311.9	315.7	309.9
30	312.1	312.7	318.3	309.0	312.9	315.3	310.6	309.9	310.2	305.9	296.9	309.5	308.6	306.2	304.9	298.0	300.8	304.8	310.4	301.0	303.9	351.3	123.9	128.0
31	124.2	114.6	119.4	117.1	130.4	140.7	166.8	169.9	156.3	163.4	155.3	142.2	94.7	307.2	315.4	300.4	297.7	305.4	298.9	298.5	302.2	307.7	313.9	318.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	313.8	311.9	310.0	306.5	314.0	306.1	304.6	307.9	307.7	314.4	313.5	318.8	311.3	308.0	306.8	292.8	324.6	38.2	125.7	111.9	144.0	121.6	138.5	157.9
2	159.8	152.3	148.2	154.0	146.4	138.3	140.6	131.2	125.3	120.5	120.5	121.5	123.2	122.7	125.7	126.2	126.5	127.6	125.7	127.7	129.0	123.3	119.1	119.6
3	120.9	118.3	120.3	116.5	118.8	121.0	121.4	122.2	125.4	126.7	120.4	117.6	118.9	118.7	122.6	119.1	120.1	122.3	123.8	124.0	113.4	118.3	121.4	119.1
4	118.3	116.4	121.1	108.1	91.3	95.2	98.5	98.6	101.7	110.2	105.0	116.8	116.3	115.8	121.8	122.9	117.1	116.5	101.9	96.9	94.0	98.0	105.9	125.7
5	115.5	44.2	42.5	89.5	44.0	72.2	81.6	60.5	54.7	37.6	50.7	57.9	63.4	58.7	56.9	54.9	57.1	109.6	108.1	110.5	116.9	115.0	111.3	112.1
6	115.9	117.3	118.3	115.6	119.4	115.8	116.8	104.5	105.7	92.6	53.8	53.8	53.6	53.7	55.1	43.0	38.5	27.8	32.9	39.7	357.1	355.0	10.2	45.0
7	55.6	52.3	133.3	179.9	157.3	129.5	119.5	127.1	121.3	118.0	120.8	120.5	121.0	122.0	120.4	117.8	117.9	122.2	125.0	111.0	118.4	108.4	92.4	89.0
8	56.4	56.0	52.6	48.6	47.7	43.7	40.2	34.9	32.4	32.4	41.4	39.0	52.8	53.1	54.1	56.0	61.4	94.1	148.1	95.9	130.2	106.8	104.3	132.2
9	122.8	111.5	125.6	111.4	96.0	99.1	68.8	95.4	86.2	110.2	120.3	112.6	107.0	115.6	119.4	120.6	123.9	121.7	125.8	124.1	123.1	123.9	122.4	125.9
10	133.5	130.7	134.0	135.5	143.6	152.5	140.6	131.2	140.4	140.2	125.1	130.4	131.5	143.6	143.1	137.9	133.5	128.3	127.1	132.0	133.8	138.9	141.9	143.1
11	148.4	155.9	145.8	142.9	129.0	130.2	126.8	131.5	129.9	126.5	139.7	123.4	120.2	132.5	135.4	138.4	130.5	132.7	138.6	139.7	135.0	117.8	104.7	115.4
12	110.4	104.3	96.7	43.8	354.6	331.1	315.1	322.0	321.4	309.1	303.9	297.6	308.9	277.3	262.3	260.5	284.8	287.9	291.9	299.5	301.0	299.4	312.9	309.0
13	309.5	312.9	312.6	309.2	309.1	314.7	307.1	310.5	312.0	311.2	306.0	330.7	329.4	322.2	326.6	339.2	339.8	306.5	309.8	291.1	338.5	332.8	3.6	313.5
14	314.2	301.1	298.9	305.0	321.1	351.7	102.7	95.0	126.8	136.0	120.6	140.2	135.7	138.5	135.3	139.0	142.1	145.7	141.4	131.8	130.7	130.6	115.9	111.2
15	115.3	106.1	115.0	113.4	111.9	112.6	110.9	113.3	110.1	108.0	107.4	107.6	106.0	105.2	110.0	114.6	134.3	177.0	234.7	278.2	294.9	306.0	278.4	298.7
16	296.0	295.1	302.8	307.7	302.9	307.1	310.3	314.0	311.8	309.7	298.8	306.6	265.9	263.3	233.5	229.4	234.4	225.0	222.0	224.0	211.9	187.3	158.2	136.4
17	143.3	135.8	141.8	122.2	132.1	109.3	119.3	117.2	121.3	121.6	118.5	119.1	114.2	114.4	113.8	114.1	114.3	115.2	115.7	112.3	113.2	112.0	114.0	115.5
18	114.8	116.3	115.0	117.1	115.5	115.5	117.2	117.2	117.9	116.3	115.5	116.0	120.7	123.6	123.6	125.2	128.1	161.9	172.1	172.6	153.3	131.2	343.5	329.8
19	331.7	15.8	124.4	133.8	138.3	117.5	118.3	124.0	125.2	119.9	119.9	121.8	122.9	120.4	122.7	124.8	125.7	125.7	123.5	126.3	116.0	114.2	114.0	111.3
20	116.8	118.5	118.2	116.3	115.1	116.0	89.4	96.8	101.8	99.1	96.0	110.4	113.3	112.9	116.5	118.1	118.7	116.7	120.5	120.8	127.6	131.1	131.3	116.9
21	113.4	109.3	109.0	117.8	112.0	109.7	105.1	113.1	117.7	104.6	122.1	125.6	119.9	115.7	111.3	118.9	117.1	122.5	123.3	126.1	121.7	124.6	118.7	113.5
22	116.6	112.3	113.0	110.1	106.0	112.5	105.0	104.8	118.2	109.1	114.6	110.3	110.1	99.3	88.2	96.0	89.1	92.9	82.2	77.8	74.2	73.8	71.5	94.5
23	99.8	91.8	91.6	91.4	77.4	59.1	60.6	77.3	67.5	60.5	58.3	51.8	63.7	136.6	150.6	305.8	168.5	138.2	142.4	136.0	117.1	83.9	139.2	116.9
24	114.2	118.5	113.3	97.3	111.9	108.5	120.3	121.7	113.5	106.9	108.6	109.5	114.5	84.8	97.1	222.4	164.1	176.7	175.7	163.2	161.8	156.6	118.6	99.2
25	113.0	102.5	91.5	101.4	109.3	113.6	106.3	100.2	97.8	100.6	105.9	103.1	113.7	109.0	120.1	122.6	126.4	127.4	124.9	131.9	117.6	292.0	46.4	99.8
26	81.0	72.6	69.2	73.7	77.7	51.2	45.6	356.8	329.4	327.4	338.4	342.5	338.0	331.0	353.9	342.8	344.4	333.7	333.0	326.4	320.0	304.0	301.1	303.2
27	308.2	309.6	300.8	219.8	171.4	176.9	183.8	163.6	157.2	164.1	153.2	140.6	142.5	149.7	184.4	184.3	181.5	187.8	220.8	230.3	229.0	204.0	204.5	211.0
28	225.2	172.1	205.1	186.7	130.5	137.5	149.8	163.0	152.1	124.6	131.5	120.7	124.5	138.9	147.1	139.5	136.1	135.4	145.2	134.2	138.0	136.4	143.3	154.5
29	151.2	137.6	127.1	118.6	119.4	121.8	123.6	111.1	103.8	107.1	114.0	120.4	113.2	107.5	110.8	109.7	110.1	117.0	125.0	129.0	128.2	107.2	149.4	176.2
30	166.4	164.8	161.9	159.3	122.5	44.3	345.4	339.2	313.7	340.0	50.4	57.4	59.6	50.1	51.9	56.3	54.5	134.8	177.0	198.2	210.7	212.8	219.1	252.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	314.7	302.3	192.1	144.6	293.8	151.6	197.8	129.8	151.3	140.9	157.8	228.9	267.6	347.2				152.1	138.8	149.3	170.9	309.7	315.3	224.9
2	202.1	222.8	181.8	243.9	92.9	283.4	302.5	305.6	317.9	303.9	322.4	181.3	181.4	130.2	99.9	124.7	138.1	136.8	128.6	131.4	131.0	129.4	131.2	135.2
3	119.1	133.7	125.2	128.5	147.2	156.6	178.7	198.6	229.0	310.9	326.2	344.6	346.8	331.0	270.3	260.4	271.6	323.2	291.7	254.7	240.2	271.0	244.3	296.3
4	310.2	314.5	292.2	303.3	311.9	318.6	315.0	267.9	322.6	31.7	298.3	267.8	264.9	256.5	227.3	236.1	238.1	260.1	287.3	87.8	144.2	144.1	263.9	277.1
5	292.7	315.1	316.4	315.0	313.2	319.4	314.7	319.6	304.5	311.4	312.9	309.1	305.5	307.0	289.4	283.4	303.8	293.3	287.5	288.4	289.8	278.3	273.0	278.6
6	291.5	294.4	304.4	302.1	305.2	302.8	309.9	308.8	292.5	299.8	308.7	299.0	299.4	309.1	313.8	306.6	308.5	310.0	312.9	310.5	305.8	306.2	304.3	303.3
7	303.8	303.3	305.6	303.4	306.5	315.1	318.5	316.2	313.5	300.5	312.6	302.1	314.1	299.6	313.3	302.4	327.6	329.7	321.6	247.7	249.5	256.6	268.5	271.9
8	267.6	107.0	98.0	306.5	133.2	137.4	123.3	124.6	126.5	211.9	330.3	358.0	267.5	278.2	218.7	217.3	224.0	228.7	231.4	218.5	216.5	198.4	200.8	185.9
9	226.5	141.5	133.1	238.5	69.6	107.4	105.4	107.0	104.9	111.7	111.7	128.2	154.5	138.4	142.2	136.3	139.9	145.5	147.9	147.5	144.4	172.4	177.5	173.4
10	164.3	175.3	184.6	196.5	188.6	162.1	161.9	170.3	138.2	146.9	134.0	137.7	156.8	181.4	189.2	167.5	159.7	154.2	155.9	148.4	142.2	142.5	146.4	126.4
11	126.7	114.5	126.3	117.3	125.9	124.7	117.3	111.5	112.6	121.2	124.3	124.3	129.1	123.9	132.5	131.5	134.3	135.6	142.8	145.3	141.7	145.1	147.9	144.2
12	151.3	159.1	156.0	146.8	151.2	136.7	131.1	133.4	129.2	122.6	122.2	124.7	127.2	139.3	140.3	134.2	133.2	128.3	134.2	135.9	132.5	145.3	152.3	134.3
13	130.8	123.7	126.1	132.1	129.3	123.9	118.8	119.2	117.2	121.7	111.2	119.3	119.4	120.2	117.2	113.3	112.3	108.6	104.7	102.1	101.7	96.9	86.3	77.6
14	46.9	81.4	85.5	75.3	59.1	55.2	13.6	15.7	14.8	37.2	63.2	72.6	72.8	108.0	151.4	130.6	134.8	127.5	129.5	130.0	125.8	127.0	134.2	125.3
15	111.7	116.1	116.2	131.0	122.4	113.4	102.1	103.7	97.4	103.3	101.8	121.0	123.9	125.5	148.6	144.5	156.0	149.2	187.0	179.8	304.8	291.3	308.1	311.4
16	317.7	333.2	328.4	314.7	318.8	324.6	327.2	323.7	326.4	333.1	335.3	40.6	26.6	69.9	85.2	137.8	147.2	161.0	161.1	170.9	171.8	170.6	156.6	157.0
17	158.9	161.6	165.1	171.9	169.7	166.8	169.1	155.1	150.0	154.4	142.6	127.1	131.1	140.5	153.6	154.7	154.7	152.5	150.2	145.6	136.5	145.4	146.2	143.2
18	149.8	148.3	138.3	137.4	143.7	148.7	145.6	147.7	154.0	147.8	147.7	140.2	137.6	130.8	165.0	158.6	155.0	200.4	205.5	227.4	218.3	252.4	262.1	300.3
19	278.3	289.9	291.8	297.4	310.7	312.1	298.7	303.3	300.5	327.3	284.4	263.7	265.1	245.8	224.1	243.2	231.5	235.9	237.1	242.4	237.9	232.9	265.3	260.7
20	293.5	251.0	253.1	195.7	83.5	250.6	277.4	251.2	33.9	341.4	8.7	347.5	339.4	294.7	272.8	236.1	222.8	217.5	216.2	224.1	231.9	233.3	233.6	233.3
21	247.3	283.2	261.8	185.5	155.3	221.6	298.4	302.0	306.5	326.7	359.1	149.0	127.7	147.2	138.1	119.6	127.1	133.1	134.3	127.6	132.2	133.0	122.3	126.3
22	132.4	133.3	125.7	125.2	132.5	110.0	98.8	108.1	96.6	94.3	110.0	131.8	130.8	126.9	144.0	152.3	135.5	131.5	135.6	154.0	170.6	153.7	151.9	149.2
23	133.0	142.9	28.9	80.7	93.7	82.2	103.2	97.7	108.1	114.9	130.2	122.5	127.3	129.3	123.6	127.1	133.6	123.4	119.5	122.4	125.9	128.6	129.9	132.0
24	124.9	131.9	128.4	128.8	128.0	127.7	134.2	133.5	129.6	126.5	125.0	124.0	140.9	143.5	147.4	139.2	147.1	148.2	137.8	128.8	127.1	101.6	103.3	124.5
25	122.0	119.1	117.5	100.5	105.7	113.9	108.7	115.2	106.9	106.4	111.6	152.8	162.8	156.7	153.3	157.8	162.8	159.7	143.7	141.2	135.9	228.0	291.8	303.9
26	305.1	322.8	330.6	184.8	177.2	164.9	151.5	125.9	150.9	158.3	154.4	136.4	158.1	161.3	162.4	153.2	149.3	143.7	134.5	139.1	129.6	131.5	128.5	136.1
27	142.4	151.6	151.5	160.0	158.8	155.8	151.4	132.4	148.5	136.7	133.4	136.6	137.3	141.5	139.3	140.5	142.0	144.5	141.8	144.6	145.2	150.2	163.6	153.4
28	161.5	160.6	149.0	132.6	146.2	137.8	127.5	132.7	120.1	125.1	120.4	129.8	131.4	132.6	122.2	136.3	154.1	149.1	142.1	145.8	147.0	144.6	150.4	161.5
29	175.6	184.4	219.6	291.8	309.7	305.4	306.3	312.6	328.9	358.0	5.2	359.2	47.0	52.3	2.3	34.5	165.2	160.6	175.6	167.5	159.7	175.5	177.8	198.8
30	187.4	233.4	161.0	294.4	306.4	322.1	311.3	299.2	317.4	318.2	89.3	107.8	119.7	125.7	122.3	125.6	141.5	150.6	147.7	139.1	141.4	144.0	147.1	121.2
31	147.7	129.9	114.5	102.6	102.7	111.8	113.1	110.7	129.8	137.7	133.9	125.6	127.3	119.5	92.5	68.3	92.3	96.9	113.0	121.2	142.1	129.4	118.5	115.4

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	110.4	102.0	104.7	125.7	92.1	94.5	98.7	131.8	133.7	116.8	115.4	125.6	131.2	123.5	115.8	132.7	138.0	137.9	138.5	120.8	123.9	124.5	128.3	121.1
2	113.6	113.2	122.0	136.9	135.0	139.1	130.8	123.7	120.7	128.0	134.7	126.5	122.7	126.8	113.5	132.8	139.3	142.9	143.7	142.0	141.1	137.1	138.6	164.2
3	195.9	194.0	111.1	108.3	130.8	153.3	164.0	177.3	133.2	123.1	125.7	120.1	117.8	126.2	132.9	66.6	147.8	146.0	46.6	298.0	168.4	245.9	305.2	310.4
4	312.5	319.3	329.7	327.2	314.0	314.0	313.7	322.8	329.2	332.7	325.2	347.1	349.7	349.2	344.2	18.0	179.2	242.4	174.6	174.5	165.7	159.3	168.8	165.5
5	157.8	156.0	153.0	149.3	151.1	150.5	142.2	107.4	117.8	120.0	128.0	130.6	124.8	122.2	118.7	118.5	116.7	115.8	121.7	120.7	118.7	118.8	121.8	127.5
6	126.9	145.0	133.7	127.0	127.6	136.3	108.4	111.6	93.2	52.1	46.9	81.8	114.1	162.5	167.2	163.9	167.2	180.9	195.2	181.9	180.5	182.5	177.6	176.9
7	179.8	157.4	116.2	325.4	338.3	47.5	64.6	83.3	75.1	96.4	79.4	83.6	90.6	109.0	101.3	122.3	118.7	119.9	118.8	115.9	111.9	115.5	131.5	114.5
8	108.4	111.9	104.3	113.0	117.7	115.6	124.2	122.2	125.3	133.0	135.4	125.2	97.9	103.1	118.4	125.8	120.1	115.4	123.6	124.6	126.2	131.0	142.6	148.6
9	125.9	142.1	147.6	165.9	173.0	207.1	279.6	311.5	323.3	339.1	330.2	3.8	0.3	347.9	5.3	354.4	3.5	86.3	27.3	341.6	339.6	320.1	309.8	308.1
10	309.4	307.9	314.3	314.8	319.2	315.5	306.2	306.5	312.2	321.7	325.6	325.1	322.5	322.6	322.9	318.6	319.4	316.8	316.0	318.5	326.3	92.6	104.1	118.5
11	145.8	136.7	158.6	170.6	194.9	191.6	149.2	139.1	126.5	127.1	155.2	158.1	154.9	154.6	160.6	162.1	158.0	153.7	154.3	143.7	145.5	147.7	149.0	150.8
12	158.6	158.4	160.7	161.9	151.4	143.3	155.3	138.0	147.7	149.9	145.1	147.3	155.8	159.9	156.1	165.5	163.0	154.6	156.7	165.9	160.5	174.0	168.5	186.9
13	199.5	205.9	251.7	262.9	281.0	323.7	316.3	317.2	329.6	322.5	327.7	312.1	331.9	268.5	284.3	286.2	305.3	246.5	218.6	270.2	271.3	269.3	284.6	293.3
14	286.3	285.6	299.6	309.3	295.4	301.6	308.1	307.9	300.4	309.9	331.6	327.9	358.3	319.3	299.1	260.1	262.7	206.3	262.7	277.1	274.8	269.0	278.7	299.4
15	310.2	309.9	321.7	315.3	322.3	318.0	327.0	322.3	321.4	327.8	334.1	338.3	343.6	349.2	340.5	329.5	339.8	322.0	317.9	327.7	323.5	324.0	322.8	308.0
16	309.6	306.3	316.2	319.4	319.5	318.1	320.4	313.7	322.9	317.5	306.5	304.9	298.1	293.8	290.4	293.1	291.4	282.7	273.7	259.5	239.0	233.8	237.6	253.1
17	253.3	248.7	227.1	226.3	230.7	232.7	243.1	237.6	260.0	277.5	309.4	321.2	338.2	309.3	338.3	347.3	327.3	344.0	349.4	340.6	318.3	335.5	304.2	303.5
18	301.9	322.8	302.1	291.4	308.7	310.3	310.4	318.1	326.1	314.5	322.1	354.1	329.9	303.4	11.5	234.2	140.6	217.2	173.0	171.4	214.1	146.1	265.8	304.7
19	305.7	310.7	316.3	318.9	306.3	308.3	309.4	319.0	325.1	331.6	330.3	339.4	334.6	339.6	341.9	336.6	337.4	342.6	333.2	323.6	331.9	328.3	325.6	315.9
20	311.8	319.9	318.0	315.8	312.6	309.5	311.0	310.2	319.1	325.6	322.5	325.4	329.4	332.7	331.7	335.5	324.9	321.3	333.7	323.2	311.1	305.0	305.9	298.9
21	306.6	317.9	315.6	308.9	300.2	308.8	303.7	306.8	309.7	310.9	313.9	312.4	293.4	300.4	300.2	299.7	294.2	292.6	288.7	284.7	259.4	244.7	252.3	246.3
22	215.4	99.9	114.6	355.8	148.1	151.8	190.1	204.6	196.5	170.1	170.8	175.0	169.7	164.4	159.6	178.8	168.0	161.2	171.6	158.5	157.0	156.4	153.4	156.5
23	145.4	136.3	135.2	127.0	126.8	125.9	123.2	120.6	117.1	114.9	118.2	120.0	121.5	120.6	120.0	116.3	112.4	114.1	113.3	114.1	112.2	114.5	114.8	115.3
24	114.0	116.7	117.7	121.2	123.0	124.4	120.0	126.9	122.2	116.1	114.1	112.5	122.9	123.7	121.6	125.5	136.8	130.8	126.5	127.0	123.4	124.3	126.2	125.7
25	128.8	134.5	131.9	125.5	123.4	128.6	133.1	134.0	136.4	141.3	131.0	126.2	122.9	123.8	128.4	122.2	123.4	130.2	129.0	128.1	127.0	131.6	132.4	132.0
26	130.9	145.1	151.0	148.6	127.9	130.9	137.7	140.6	141.5	128.0	136.2	149.5	150.5	144.0	126.2	140.1	151.1	153.4	222.9	229.1	268.9	267.2	268.5	271.5
27	288.2	291.6	302.0	305.1	311.2	319.3	315.8	306.3	310.1	331.9	0.8	123.7	148.4	151.8	151.9	156.5	159.1	168.5	162.9	176.8	198.9	226.1	241.6	138.2
28	74.7	309.0	302.9	267.1	261.9	184.4	273.2	263.8	102.2	119.5	144.3	123.8	143.0	147.4	146.2	135.1	153.6	158.3	170.9	124.0	125.7	128.9	132.1	131.9
29	124.8	131.7	149.0	146.1	136.7	148.8	143.8	142.7	118.7	127.9	153.6	148.0	155.7	151.9	163.2	193.0	215.5	226.1	261.3	258.8	259.4	264.9	280.2	291.5
30	285.1	278.9	262.2	238.1	252.2	182.2	209.6	220.0	227.6	188.0	175.2	181.1	171.9	184.6	175.9	164.1	178.7	158.0	155.8	149.8	141.0	155.2	152.4	151.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	162.6	144.4	153.7	165.0	258.3	322.8	317.8	304.6	314.1	315.5	329.7	338.2	326.8	314.6	291.3	291.3	290.4	291.3	283.7	282.7	284.1	281.4	288.6	88.0
2	120.7	148.4	174.6	174.1	156.1	145.2	192.5	134.1	3.4	312.6	304.8	306.2	316.3	318.6	316.6	312.0	329.4	321.3	324.0	324.3	324.8	312.8	319.8	307.0
3	298.1	302.2	275.6	127.0	160.9	172.5	170.4	164.4	165.6	166.2	173.4	161.9	159.0	157.7	151.4	160.5	153.3	164.3	162.0	164.1	168.8	174.0	188.3	176.6
4	171.0	162.6	163.5	163.0	157.1	164.4	155.7	161.0	161.3	159.2	143.8	143.4	130.5	132.8	130.2	128.1	126.7	122.2	126.9	131.9	137.5	155.4	160.9	159.4
5	162.9	161.1	162.1	160.6	168.3	189.5	161.0	170.0	276.8	314.8	309.5	307.2	302.2	316.3	318.7	302.3	304.8	297.6	27.3	163.1	161.6	158.9	159.9	149.5
6	145.1	138.0	142.2	140.6	143.0	148.2	138.5	126.9	118.4	123.6	155.1	152.2	132.6	133.6	149.3	151.6	143.5	153.4	150.6	160.8	173.2	192.1	350.0	9.2
7	164.2	158.8	144.9	178.7	155.4	162.9	196.2	167.9	256.4	319.3	320.3	1.3	332.4	355.6	293.8	318.7	313.1	302.7	310.9	222.9	182.8	133.4	115.0	131.7
8	134.9	137.7	207.3	349.9	146.2	154.6	138.7	125.6	123.8	101.1	114.8	157.1	148.5	158.9	148.4	151.5	153.6	139.8	138.9	126.0	128.5	150.3	157.7	157.2
9	142.1	140.1	137.5	136.1	139.8	148.4	143.7	147.6	132.2	116.3	104.5	91.3	104.1	91.6	108.5	93.3	85.9	163.0	218.6	188.5	201.2	244.9	285.3	306.9
10	300.9	305.8	308.0	309.0	326.6	291.7	281.5	306.4	317.6	353.1	2.2	2.3	323.5	311.3	171.9	192.3	160.7	153.1	160.1	163.2	166.0	155.7	158.8	157.4
11	148.3	153.4	160.4	147.1	147.7	141.0	151.7	150.3	147.2	145.4	145.7	140.9	146.2	147.3	142.4	148.4	160.8	162.3	159.1	162.9	161.1	164.4	170.0	153.2
12	157.5	133.2	152.5	166.4	257.7	308.7	309.8	318.0	323.7	331.5	320.3	320.4	325.7	329.2	331.6	176.5	183.9	158.4	163.5	154.8	158.0	161.9	160.7	162.7
13	155.4	162.7	165.9	161.1	164.9	155.9	174.2	162.6	158.4	148.8	133.3	149.1	157.3	155.2	155.3	158.3	156.3	164.6	166.0	174.9	180.1	171.8	165.6	166.1
14	163.2	177.5	174.9	174.1	168.3	166.0	155.9	145.5	158.4	157.4	145.0	157.6	155.9	158.3	153.8	158.8	150.7	151.1	156.8	160.6	157.5	160.9	158.9	166.9
15	189.9	185.3	197.5	189.7	178.1	186.3	128.7	161.9	319.7	341.9	325.9	342.0	343.5	341.8	252.6	260.0	254.3	264.5	262.5	263.5	259.2	265.7	270.3	255.2
16	261.4	291.8	293.4	297.8	316.2	307.7	312.6	308.0	309.1	309.5	315.8	322.3	324.3	331.0	328.0	326.7	310.1	312.8	310.6	303.4	302.1	302.0	306.5	318.2
17	315.5	313.5	304.8	308.6	310.4	308.6	311.8	315.9	314.0	310.8	336.8	350.2	15.0	60.8	149.9	158.7	152.6	152.2	159.1	160.0	154.7	159.6	150.6	149.2
18	146.9	144.1	141.7	137.7	139.5	140.7	126.7	141.8	151.6	130.6	140.0	19.2	3.9	355.1	15.0	154.8	165.4	168.7	161.8	168.4	158.4	179.2	239.7	270.1
19	313.6	318.8	317.2	313.6	311.0	313.8	311.8	318.1	310.3	308.5	311.4	317.7	323.0	309.2	314.1	66.3	142.3	202.6	238.7	268.5	259.0	241.1	255.1	248.9
20	304.7	268.6	247.1	302.7	158.5	332.0	197.1	296.2	258.8	330.8	110.8	283.1	323.7	283.3	293.4	52.0	53.7	246.7	289.0	280.3	285.1	266.0	262.9	255.3
21	236.1	182.8	156.2	163.9	214.0	225.3	228.9	250.9	165.1	221.0	227.1	196.0	209.2	203.9	208.0	218.4	218.0	222.3	219.8	213.0	207.7	204.2	209.8	200.1
22	181.4	185.2	180.7	173.2	176.5	167.7	177.5	181.1	176.6	181.4	177.1	176.7	183.4	176.3	176.3	162.4	154.0	145.2	146.5	145.9	141.1	124.1	129.9	135.9
23	135.5	137.8	140.3	129.1	116.4	185.2	174.9	130.2	122.8	143.5	154.5	158.2	146.5	141.4	133.4	122.3	119.5	120.1	122.7	123.5	121.2	118.4	120.7	129.7
24	124.4	123.0	114.0	116.0	117.9	120.6	126.9	115.8	105.2	104.5	102.2	98.8	100.4	84.7	82.3	69.7	78.7	83.3	89.3	72.6	86.3	83.1	66.5	67.1
25	65.0	65.1	62.7	77.6	75.5	57.0	107.4	60.4	60.5	57.6	60.2	58.6	68.1	59.5	65.1	77.4	71.2	89.2	85.6	92.2	96.6	92.9	108.3	205.2
26	209.7	252.4	218.6	254.3	312.8	304.2	306.6	304.9	313.8	314.1	319.9	323.4	338.6	345.2	359.3	5.9	308.7	257.3	268.7	270.1	274.8	277.9	261.7	296.9
27	320.9	305.1	300.8	301.2	316.9	314.7	314.9	315.9	311.7	314.8	327.2	341.1	339.0	327.6	319.3	320.8	318.8	313.4	341.3	338.5	358.3	325.4	310.7	322.0
28	305.5	307.6	306.0	305.9	312.9	304.5	308.5	318.1	309.6	311.8	306.0	306.8	309.5	304.4	299.4	299.4	291.9	286.7	275.5	274.7	285.3	273.0	287.2	318.8
29	314.9	317.1	322.1	307.8	313.0	311.7	313.5	312.3	318.5	313.2	324.7	326.2	325.2	323.7	318.8	313.2	316.3	341.0	327.0	326.7	295.5	311.1	299.4	298.9
30	298.1	300.8	308.6	301.3	312.2	323.3	315.6	302.8	307.4	323.0	124.6	112.8	127.6	189.3	161.4	228.0	220.3	223.6	225.2	218.4	216.3	184.0	170.1	206.3
31	210.6	203.7	201.9	164.3	158.3	163.0	160.5	147.4	149.3	149.4	150.7	152.5	156.1	145.7	149.3	150.5	143.6	148.2	131.1	126.4	119.6	123.0	124.3	123.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	119.6	118.9	122.9	118.9	118.2	117.0	127.9	121.4	119.2	121.1	122.9	124.0	127.1	126.1	124.0	122.4	127.6	128.5	122.3	122.9	119.7	117.9	117.7	115.2
2	113.5	114.4	119.6	117.1	115.3	115.2	116.0	117.8	119.6	118.7	117.3	118.9	117.2	118.6	118.9	117.4	120.3	123.9	118.7	114.8	113.0	114.9	112.6	114.4
3	129.9	132.7	132.0	125.3	122.3	124.8	124.9	125.0	118.9	117.5	128.6	133.5	128.9	126.3	128.8	127.4	126.3	126.5	127.6	128.6	124.9	119.7	123.9	120.9
4	120.8	121.4	118.4	117.1	118.9	120.4	118.3	119.8	122.4	123.6	126.0	130.2	133.6	137.0	140.5	140.8	143.5	147.9	142.2	137.6	138.4	138.7	139.1	133.8
5	137.6	138.7	138.5	133.8	137.5	138.4	151.9	159.0	163.9	199.8	202.2	193.9	198.0	204.2	204.1	200.2	203.7	214.3	231.2	233.4	233.3	237.4	246.1	256.3
6	260.0	269.4	267.0	267.6	271.1	301.3	293.0	286.9	301.3	310.3	306.7	309.6	307.5	305.2	310.5	311.9	316.0	313.6	319.3	312.4	308.0	310.0	309.7	303.4
7	305.7	303.6	312.7	312.3	312.2	319.7	315.0	323.5	333.2	334.7	338.1	339.6	341.3	337.5	335.8	337.8	333.8	334.0	337.9	334.0	330.4	326.1	326.4	314.9
8	310.2	324.0	319.9	311.5	322.4	307.0	314.3	321.0	327.1	327.2	324.3	326.3	326.8	332.9	328.9	328.7	326.4	309.5	327.4	322.3	321.0	321.6	309.6	308.3
9	314.7	316.5	313.0	323.1	314.6	321.7	309.8	319.3	316.3	318.9	352.3	344.6	349.0	327.0	294.3	308.9	250.1	181.8	187.9	186.2	198.1	202.6	199.1	177.5
10	148.9	169.6	172.4	168.3	165.4	167.8	153.8	149.4	127.8	111.8	117.1	117.2	150.4	155.7	146.7	157.8	156.0	161.4	162.2	165.5	171.6	176.3	166.5	162.5
11	155.7	139.7	53.9	306.8	316.1	340.9	327.8	327.0	314.1	319.5	314.8	332.2	327.0	134.3	166.9	180.4	188.1	223.3	260.8	266.4	232.4	200.4	166.0	187.6
12	191.4	198.3	221.0	196.7	180.3	155.0	129.9	165.2	165.7	187.3	178.1	262.6	297.5	255.7	162.3	176.3	195.5	225.9	219.4	244.3	256.6	266.4	269.6	274.1
13	228.1	172.1	126.0	190.9	215.7	171.6	157.3	156.7	121.3	114.8	121.2	195.1	215.5	214.9	219.9	214.2	190.8	219.1	217.8	214.9	194.9	237.6	253.3	232.3
14	222.9	232.1	231.7	233.4	254.1	281.7	160.3	232.9	223.9	219.9	225.9	217.6	217.9	203.7	216.8	193.8	172.8	232.3	228.8	275.1	263.2	342.9	348.1	327.8
15	311.9	305.9	303.9	312.4	307.6	312.7	316.6	313.1	317.4	323.7	318.5	322.8	325.9	338.1	327.8	333.6	329.9	324.5	331.8	338.4	331.7	325.7	325.8	303.8
16	307.4	311.9	304.6	289.9	359.3	64.4	31.4	322.5	304.3	320.0	61.2	315.9	325.4	353.2	334.1	17.9	342.1	97.5	171.0	165.7	170.4	161.0	165.6	158.7
17	160.0	164.8	159.6	165.2	155.9	147.7	150.7	158.0	144.1	134.5	121.6	127.6	134.9	128.2	127.3	115.4	124.0	126.1	124.8	124.6	122.7	123.8	121.3	124.0
18	120.8	115.8	114.0	115.7	117.3	116.8	116.1	117.5	118.9	119.4	116.7	114.6	115.0	112.7	110.6	110.7	113.6	112.7	112.3	113.5	115.0	114.5	114.5	112.6
19	115.6	117.6	119.8	118.7	119.9	121.1	114.7	111.8	116.8	117.6	114.1	120.3	121.3	127.6	126.8	127.0	125.8	128.5	131.5	133.3	130.4	134.1	128.9	121.8
20	116.7	123.6	129.3	123.4	117.0	120.9	122.8	120.6	120.4	124.4	112.7	117.6	118.9	118.3	121.1	121.3	118.7	122.7	127.9	124.1	129.1	132.7	130.2	117.3
21	118.1	122.8	124.5	127.0	128.7	121.9	118.8	114.2	105.5	108.7	108.4	119.1	125.8	121.3	125.8	123.0	124.5	128.8	128.3	124.1	120.3	128.1	133.9	128.9
22	121.3	122.4	123.4	123.9	123.9	127.0	125.3	121.2	119.6	122.1	119.6	122.5	120.8	121.2	123.9	123.0	120.9	125.1	121.1	118.2	114.6	116.5	124.1	113.8
23	107.2	99.2	103.4	94.7	52.8	37.0	67.5	202.3	298.6	312.1	310.4	326.6	320.6	324.5	322.9	324.0	327.9	327.0	325.6	317.4	306.3	303.6	302.9	301.6
24	297.5	303.7	301.8	305.4	306.1	306.3	308.6	309.5	310.0	325.2	323.3	326.5	315.3	316.0	337.5	4.2	297.7	289.7	90.3	140.9	156.0	129.3	133.6	164.1
25	156.1	160.1	139.8	141.0	190.4	217.7	191.8	170.2	144.2	143.7	124.8	134.4	163.6	156.8	139.6	128.9	137.5	130.0	135.5	146.8	161.8	161.1	153.1	141.8
26	130.3	142.4	146.6	144.3	124.4	126.4	112.3	133.4	145.4	140.7	134.2	121.6	124.7	122.1	119.9	152.9	138.5	118.5	123.3	142.2	141.0	132.5	107.2	101.9
27	84.9	86.6	93.3	73.9	27.3	357.8	353.1	340.1	88.2	106.8	87.9	73.0	71.4	78.3	93.1	124.8	111.0	169.2	175.7	186.9	170.8	226.7	262.3	299.8
28	276.6	305.1	301.6	319.5	108.4	121.8	36.8	123.6	107.3	81.7	70.0	38.9	13.1	51.4	11.9	342.5	4.2	325.5	308.2	302.4	296.6	304.8	321.4	315.1
29	318.1	321.7	322.9	323.3	335.0	324.6	326.4	324.0	327.8	321.7	321.7	330.3	321.9	323.6	330.4	328.0	324.7	323.8	322.2	332.2	328.3	323.4	325.6	323.0
30	321.0	327.1	319.0	310.2	304.0	308.3	308.1	314.4	318.2	321.6	323.0	344.9	348.1	346.9	355.2	343.5	343.4	335.9	343.1	353.4	351.1	299.1	317.8	311.6
31	306.6	306.3	302.0	315.1	314.6	308.9	307.5	312.0	310.7	313.4	311.2	312.6	315.5	319.6	321.5	359.4	145.1	310.9	234.1	159.9	90.2	323.3	319.1	298.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	262.7	315.8	139.3	203.3	131.5	147.2	124.6	128.3	163.6	169.3	168.2	179.0	171.2	157.1	155.7	149.7	147.5	148.3	151.0	171.3	172.2	175.8	171.9	174.8
2	168.1	162.3	162.4	162.0	162.7	161.1	154.4	165.8	160.2	185.1	197.5	207.1	191.9	271.7	23.6	145.2	155.5	126.4	124.9	135.0	149.6	149.5	149.3	148.9
3	148.6	148.3	148.3	148.1	148.1	148.1	148.1	148.1								71.9	28.8	111.7	110.8	109.6	110.9	109.8	111.1	113.7
4	107.6	112.6	113.0	106.1	94.1	112.4	48.5	51.7	60.2	35.1	49.3	109.1	53.6	40.6	19.0	351.1	317.7	294.5	283.1	280.8	288.9	292.2	300.5	295.6
5	291.7	304.5	296.2	302.6	284.2	291.9	294.0	298.3	295.2	293.5	286.1	285.3	282.0	298.5	276.7	257.6	84.7	116.0	197.2	208.5	188.0	275.9	299.4	230.0
6	217.3	210.9	216.4	316.2	271.1	182.7	214.1	221.0	222.6	202.5	189.3	181.4	189.3	204.8	203.8	197.6	167.3	160.6	152.6	144.6	164.0	163.5	123.7	120.0
7	101.5	123.3	129.8	123.9	129.6	124.4	111.2	110.3	116.7	113.7	111.8	115.3	117.6	115.9	116.8	117.5	116.7	113.2	113.4	112.0	115.7	117.1	115.1	114.2
8	116.1	119.4	122.0	122.8	129.2	131.1	130.3	130.8	134.5	128.9	132.4	128.4	132.0	142.9	151.4	154.8	155.8	151.5	156.0	171.4	182.5	166.0	156.4	160.0
9	160.8	164.7	163.1	162.3	156.1	143.8	154.2	160.8	156.3	156.9	149.4	144.8	145.0	151.7	146.4	151.6	134.4	143.9	158.5	116.2	126.8	161.9	143.8	100.8
10	160.3	171.0	167.7	157.1	138.9	169.2	154.0	151.9	163.9	174.3	104.4	88.7	110.5	127.6	136.8	140.7	140.7	135.4	137.1	130.1	124.6	120.7	119.6	119.5
11	118.6	119.1	117.1	119.0	119.9	117.9	117.5	114.7	116.0	118.8	118.1	114.2	112.2	107.4	110.9	112.1	117.2	118.0	115.1	111.0	109.5	112.7	119.3	115.5
12	115.1	115.6	119.6	119.4	130.5	145.0	145.9	150.5	161.3	162.0	165.5	165.2	169.5	173.9	174.8	177.3	197.6	214.5	202.1	211.3	205.7	201.1	192.2	209.5
13	194.5	164.7	154.4	151.6	141.2	132.7	140.5	142.2	158.6	183.0	187.6	178.8	160.5	172.5	178.3	160.5	143.2	146.8	140.7	188.7	162.3	156.2	134.4	191.9
14	154.3	135.7	102.1	102.2	101.4	113.4	119.4	93.1	102.6	48.1	358.2	102.3	57.2	348.2	332.3	334.8	324.0	306.1	303.2	293.2	297.9	298.5	300.4	305.3
15	299.7	291.7	301.0	293.6	300.7	304.7	303.4	311.3	312.2	308.9	301.3	305.3	312.4	310.9	304.4	317.0	310.1	294.4	288.8	293.4	290.7	294.5	283.7	277.4
16	275.4	271.5	274.6	279.3	274.5	285.4	293.5	292.4	302.0	319.6	313.1	314.0	314.2	310.2	302.9	310.7	302.0	281.7	283.1	273.4	264.9	269.9	271.2	260.1
17	320.3	250.5	232.6	73.4	216.4	211.9	239.9	238.3	226.8	211.2	190.4	193.4	187.8	205.3	178.6	186.1	171.1	143.6	136.1	121.2	97.3	102.6	105.5	108.9
18	123.0	123.2	130.4	135.6	124.6	130.0	121.0	116.2	103.3	110.2	114.3	116.0	115.1	111.0	115.4	120.7	123.2	120.3	119.4	119.4	117.4	122.3	166.5	168.1
19	216.0	226.5	224.6	223.7	239.5	216.0	191.4	221.9	204.3	177.0	190.6	201.3	203.5	206.7		218.3	218.6	223.1	215.5	214.2	215.3	210.5	214.3	210.4
20	211.9	218.6	212.0	218.1	217.6	214.4	214.8	219.8	221.5	219.3	214.8	214.0	225.6	233.7	248.7	246.3	257.5	247.9	239.8	282.0	294.4	313.0	304.2	277.6
21	306.7	297.1	286.1	290.0	291.3	298.5	297.7	295.2	293.6	294.9	298.3	305.6	305.8	302.9	300.3	308.9	298.6	308.5	310.5	303.8	299.5	312.9	300.6	299.7
22	307.0	315.6	334.9	311.9	308.9	308.3	306.1	315.8	40.7	102.9	114.4	112.0	110.1	104.0	114.8	118.2	118.8	107.1	107.4	103.8	102.6	102.2	104.7	101.9
23	97.5	93.6	91.7	94.9	67.9	82.3	91.4	98.2	122.4	118.3	130.5	139.9	149.2	143.2	145.3	139.7	144.6	137.4	145.1	157.1	188.2	206.8	204.5	206.1
24	207.4	209.2	200.7	222.4	241.4	252.4	253.5	238.0	234.2	234.9	239.6	233.8	232.1	216.4	219.8	191.1	184.8	182.4	218.7	199.3	113.2	111.7	154.3	163.3
25	255.2	258.9	236.3	231.1	213.2	219.6	230.7	236.3	237.8	248.0	244.0	218.1	228.1	230.7	219.9	212.3	215.4	223.5	227.5	218.9	232.2	234.4	223.6	220.7
26	225.2	227.6	216.1	227.2	232.5	231.4	256.4	273.4	277.4	193.6	231.0	264.3	255.8	225.4	251.5	262.5	116.0	287.7	270.9	266.1	272.2	281.4	267.5	265.3
27	272.1	270.4	273.9	288.3	294.2	247.5	269.6	183.5	161.0	138.7	173.6	123.9	134.8	140.5	140.4	147.2	127.9	119.4	116.4	124.3	121.2	118.6	117.3	111.3
28	111.5	113.5	109.6	110.7	112.8	111.2	118.6	127.3	131.0	133.0	138.8	132.9	127.0	126.4	124.7	101.6	100.0	88.7	90.3	91.2	91.3	49.3	6.3	319.1
29	312.2	304.7	301.1	300.6	304.1	303.7	301.3	294.8	294.0	299.4	310.9	301.5	248.6	192.7	203.4	214.8	218.0	180.3	153.3	148.7	189.5	220.6	230.2	243.1
30	255.6	233.4	220.0	207.0	177.3	172.3	165.1	158.8	149.4	139.2	132.0	191.6	219.5	194.9	195.0	167.9	161.8	171.8	165.8	179.3	141.0	143.2	209.1	232.1

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	246.7	258.6	246.8	247.9	244.4	245.9	239.1	234.8	270.1	303.2	302.4	308.3	325.7	319.5	314.6	302.5	291.6	291.1	284.3	292.9	289.5	288.9	287.9	285.8
2	287.2	290.0	286.0	287.0	288.6	288.7	289.4	293.8	295.2	298.8	301.6	306.0	310.2	308.7	306.8	314.1	312.3	314.0	307.7	302.5	298.2	294.5	298.1	299.7
3	301.1	305.3	305.3	307.7	303.7	300.0	301.2	300.6	307.1	309.9	309.4	319.9	325.5	327.0	323.0	332.1	329.2	333.7	316.1	323.5	339.5	268.1	314.5	308.4
4	353.5	23.7	92.4	105.3	101.3	113.0	108.8	121.2	129.3	124.5	117.0	117.7	117.3	116.9	118.0	117.7	123.0	122.5	129.1	133.6	130.8	131.8	141.7	137.7
5	135.2	138.3	129.1	135.9	135.7	137.9	135.8	139.0	122.1	108.0	103.4	109.3	212.3	282.6	296.0	299.0	295.8	300.5	293.5	300.7	305.3	294.8	289.0	299.0
6	302.3	296.8	300.7	302.4	305.0	310.8	311.9	311.2	322.4	324.2	325.9	321.5	315.9	322.3	329.1	326.2	322.1	313.8	311.3	314.3	305.1	318.6	309.5	308.3
7	312.4	313.5	311.7	316.6	320.2	314.7	321.4	315.7	319.7	316.9	318.8	323.0	328.2	329.2	331.1	333.7	335.6	337.8	334.6	334.2	329.6	328.0	324.4	318.0
8	313.3	318.0	318.2	324.5	324.6	326.5	318.4	314.7	321.3	315.8	313.7	318.3	325.1	330.4	334.7	326.6	324.5	331.3	322.2	316.1	315.4	313.2	318.9	335.8
9	325.6	324.7	312.1	312.9	303.2	339.5	140.6	93.6	113.4	313.5	303.8	103.2	276.0	292.1	310.9	313.0	325.0	330.4	329.7	324.4	299.0	303.7	298.0	298.9
10	294.1	296.7	300.1	300.1	304.4	296.3	291.9	301.0	305.3	303.3	306.1	317.7	322.4	328.9	315.7	321.3	304.9	320.1	327.4	320.9	306.5	312.4	304.8	306.6
11	304.6	313.0	309.0	305.1	303.3	304.4	323.1	310.6	100.8	102.3	115.5	122.4	123.7	112.3	112.6	110.0	108.3	117.0	118.8	118.6	124.5	124.7	126.1	123.9
12	125.1	125.9	126.9	117.2	116.9	118.9	118.8	124.5	71.0	344.0	182.3	314.6	288.7	316.1	339.5	339.1	323.5	309.0	308.3	337.2	336.4	303.7	302.6	301.3
13	299.5	299.0	309.1	312.8	314.1	314.6	314.8	302.1	304.9	304.1	312.4	308.7	310.8	316.8	292.2	297.2	303.1	305.7	301.1	301.2	302.5	307.9	307.2	306.8
14	306.4	301.1	304.4	306.1	309.0	314.2	312.9	309.6	306.6	307.8	314.9	311.9	312.5	322.6	323.0	339.0	322.1	319.9	317.4	336.9	337.2	347.0	335.1	318.6
15	306.5	305.6	310.1	287.1	297.5	272.1	305.3	127.7	117.0	109.5	116.8	115.0	312.3	308.5	297.5	339.9	306.5	341.5	333.9	344.5	329.5	303.2	310.7	313.4
16	309.3	307.9	307.2	299.5	304.2	305.9	308.0	302.9	306.6	308.9	309.6	304.4	312.9	307.8	309.0	312.0	305.7	307.6	312.9	329.7	319.3	318.3	311.9	309.5
17	312.1	312.8	309.8	303.8	300.8	302.4	301.4	301.7	301.7	298.5	305.6	307.1	310.9	307.6	313.9	314.5	323.2	333.1	313.4	306.0	302.3	302.4	301.4	300.3
18	299.0	300.1	301.0	301.4	306.0	300.0	312.7	310.8	304.0	308.3	313.3	308.0	323.3	319.8	303.4	294.1	309.7	305.1	291.7	291.9	296.0	295.0	289.7	285.1
19	289.0	285.7	304.2	324.7	308.5	295.4	295.6	316.3	299.6	293.2	266.2	293.2	214.1	34.8	121.1	123.0	122.9	119.1	102.2	93.4	97.0	88.1	79.6	101.3
20	101.5	117.9	128.3	123.9	106.8	98.0	103.7	109.8	101.9	106.8	95.7	108.6	111.9	109.2	111.5	105.7	101.7	94.8	95.5	89.8	88.2	91.8	92.9	96.7
21	100.2	94.7	93.3	91.7	95.5	102.6	112.5	96.1	96.1	63.9	91.8	67.7	84.9	82.3	54.8	57.7	79.0	74.3	332.9	321.6	293.9	308.4	304.8	297.8
22	303.6	299.9	311.5	307.6	301.7	307.0	306.6	309.8	315.0	317.9	314.8	317.2	80.4	117.4	113.9	120.5	103.9	107.5	298.8	290.6	292.5	149.4	113.9	157.5
23	135.5	156.0	132.9	117.4	132.1	129.2	151.3	123.2	131.8	137.0	150.6	175.3	163.3	173.6	157.1	126.4	101.8	319.2	302.1	290.7	290.4	302.0	289.8	288.5
24	185.0	227.4	177.0	118.8	105.4	115.7	121.8	125.6	108.8	106.0	126.5	161.8	163.1	196.6	192.6	173.2	151.5	153.4	120.1	95.4	93.1	95.2	95.6	103.2
25	120.0	117.9	123.7	115.6	114.3	111.1	112.0	115.0	112.3	109.1	108.5	109.7	109.6	108.6	107.5	107.1	109.3	110.3	112.0	113.6	135.1	137.8	149.5	137.0
26	133.3	138.6	141.8	140.5	123.7	110.7	116.6	131.6	144.1	146.8	143.4	149.7	136.6	130.8	135.6	117.0	110.6	107.6	118.5	118.4	110.5	108.3	107.8	111.8
27	107.6	108.5	108.3	109.2	109.6	116.5	115.2	123.5	93.6	60.9	62.4	77.3	104.1	119.3	110.5	113.5	108.6	123.2	125.0	130.3	123.2	116.8	112.0	121.7
28	115.3	122.2	120.6	120.2	140.2	94.9	140.2	152.7	167.7	160.1	147.2	150.0	145.3	149.0	151.8	145.1	147.2	123.4	117.0	121.3	112.6	119.1	118.0	115.0
29	115.5	112.1	113.8	113.6	112.6	110.8	109.0	110.3	110.7	108.1	108.7	108.9	111.4	110.5	112.6	112.7	110.0	109.7	98.8	105.6	109.3	110.6	110.7	112.8
30	90.1	69.3	52.9	47.4	39.9	40.8	3.0	343.9	307.4	294.4	300.4	304.3	296.6	244.8	236.7	326.4	203.6	218.4	236.0	229.9	207.5	224.6	239.7	242.1
31	268.5	270.4	224.7	241.9	250.1	246.5	238.4	235.3	235.6	230.0	219.7	214.7	214.0	208.4	193.0	164.4	154.6	124.5	108.4	99.2	100.6	106.4	98.2	88.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	90.4	70.8	87.4	79.8	70.3	54.3	60.9	72.2	37.4	317.9	321.0	318.1	304.7	310.0	230.7	153.5	169.2	279.9	279.2	279.6	281.6	279.1	274.7	273.5
2	280.2	282.0	284.4	338.0	281.6	287.9	299.1	301.3	304.1	302.6	295.7	295.8	296.4	300.7	313.4	315.9	306.7	294.7	293.3	304.2	309.7	309.0	306.7	303.3
3	305.0	305.5	309.5	300.6	298.8	294.9	295.5	305.7	296.4	269.9	150.4	137.6	188.5	121.6	118.5	116.5	164.7	174.0	154.3	115.3	114.2	118.3	121.8	120.8
4	114.6	110.5	110.3	110.5	113.1	115.8	111.2	111.8	114.7	115.7	117.4	118.7	120.0	125.0	121.6	122.9	124.1	125.5	124.1	133.8	137.4	125.6	117.5	114.7
5	116.0	114.7	113.8	114.4	116.4	114.2	112.6	102.2	100.2	102.5	108.7	102.2	110.2	109.1	105.0	104.1	102.3	107.0	106.8	113.3	111.4	119.4	116.7	109.7
6	116.4	114.4	115.3	113.8	114.1	108.7	105.8	103.8	106.3	105.8	108.3	106.6	106.0	108.6	107.5	103.4	106.6	107.5	107.9	113.4	112.0	113.1	124.7	151.5
7	153.1	128.6	115.2	123.0	118.1	112.9	112.9	114.6	119.4	125.8	119.9	123.1	126.3	135.5	160.3	159.3	174.6	172.3	177.2	200.1	199.4	202.9	195.3	152.5
8	148.3	143.5	108.2	106.6	103.8	103.7	102.7	107.4	109.3	106.0	107.1	107.4	110.6	120.8	116.6	117.2	122.4	123.3	118.2	114.1	114.6	105.1	111.5	121.2
9	119.5	117.1	121.4	112.4	111.5	112.3	114.8	114.6	119.7	123.3	120.2	118.2	114.1	115.7	117.5	114.9	119.1	118.7	117.5	110.5	114.1	101.8	87.9	341.3
10	321.3	315.6	300.9	302.7	300.3	298.7	307.6	306.8	301.4	302.4	305.2	311.2	314.5	307.2	312.0	306.8	304.8	320.0	320.8	306.5	312.6	306.6	323.6	315.0
11	303.8	296.7	310.1	301.2	300.8	303.4	301.0	302.7	301.2	301.5	302.2	304.7	305.9	299.4	312.8	310.3	307.1	311.0	309.5	323.1	308.8	308.7	297.6	284.4
12	300.5	297.5	304.2	347.0	119.1	126.2	138.6	119.2	125.2	183.7	191.6	190.1	127.4	109.5	100.1	94.5	103.4	105.0	94.5	96.6	116.8	116.6	118.4	118.9
13	111.6	105.9	108.0	106.5	107.3	107.0	111.1	112.8	111.3	108.7	108.9	103.4	93.3	122.6	157.6	258.6	348.1	103.2	98.8	102.0	92.9	102.7	108.4	113.9
14	136.0	145.4	148.9	140.9	141.7	149.8	138.8	142.7	150.1	96.9	92.5	111.5	112.4	114.5	113.0	111.1	95.4	108.1	105.1	94.3	56.9	17.7	21.7	310.2
15	298.6	304.0	306.4	301.6	302.9	306.1	313.4	326.4	313.5	329.6	324.5	326.0	326.1	320.6	311.9	321.7	327.5	320.5	322.6	322.9	314.7	319.7	325.2	321.2
16	314.0	314.0	313.0	311.5	308.4	314.4	319.2	317.7	317.1	317.5	319.1	320.6	325.7	331.2	329.0	329.9	329.7	328.4	332.1	329.2	332.9	331.4	329.3	330.7
17	327.7	329.1	325.2	321.0	329.0	328.9	329.9	324.4	319.6	312.3	312.5	312.1	317.8	319.8	320.0	325.7	323.4	314.6	323.3	329.0	323.6	320.9	327.9	321.7
18	316.9	307.2	299.4	301.6	304.8	307.9	296.8	301.2	303.9	300.5	310.2	301.7	304.4	306.8	309.1	310.9	305.8	299.9	301.7	299.9	314.6	10.2	138.4	114.3
19	105.2	104.0	101.5	85.0	104.9	122.7	115.6	146.5	111.7	126.3	120.1	114.2	111.7	115.3	115.4	117.2	118.0	117.2	115.2	100.6	109.7	105.2	99.8	98.5
20	101.7	100.0	98.5	98.5	96.7	108.2	108.2	108.8	109.5	109.5	109.0	109.6	108.7	111.8	116.8	114.3	111.5	104.4	95.6	88.1	79.9	62.8	100.9	91.4
21	83.5	84.0	92.3	100.6	102.3	107.0	121.8	135.1	141.3	129.9	123.7	121.1	122.8	119.1	116.3	125.4	132.3	122.1	120.3	120.9	121.9	120.8	116.1	125.9
22	132.8	122.9	115.2	109.6	95.0	82.8	75.6	83.3	96.2	106.1	109.1	108.9	108.2	105.1	98.1	94.0	87.9	98.7	105.0	113.5	120.6	127.7	143.1	169.1
23	168.0	172.4	174.3	176.5	185.6	207.0	202.1	195.2	195.0	200.9	206.3	191.6	195.0	198.3	211.1	242.7	306.9	254.8	205.4	209.1	223.8	226.4	227.3	221.9
24	213.1	219.2	222.4	194.8	163.0	152.1	160.8	122.5	119.3	110.8	110.9	103.8	99.6	106.5	112.1	107.0	109.1	108.6	107.3	109.1	107.6	105.7	106.1	109.3
25	107.0	108.5	109.1	112.0	106.9	107.6	103.4	86.7	94.2	91.6	96.5	94.0	75.0	88.8	89.8	95.9	97.2	95.5	74.9	62.1	81.9	60.9	50.4	56.3
26	42.5	46.4	36.7	5.0	9.6	0.7	48.3	79.6	99.4	117.5	143.8	153.5	153.9	169.2	139.4	147.6	134.6	144.5	146.6	152.0	154.4	136.5	129.0	123.9
27	128.9	122.1	111.0	111.8	113.8	111.5	110.2	109.8	110.8	111.5	114.8	112.8	114.4	111.3	111.6	112.2	116.5	119.4	113.8	116.6	118.3	121.4	118.5	121.8
28	127.2	125.0	129.0	132.8	138.0	139.9	122.4	145.6	148.6	147.2	144.4	147.3	147.8	139.6	124.9	134.1	134.4	130.0	130.2	124.7	122.4	124.6	135.3	133.6
29	132.6	136.8	128.1	123.8	109.2	114.0	118.2	120.2	118.6	119.6	119.7	116.4	121.3	119.6	120.6	116.8	115.0	116.7	122.9	122.1	124.5	124.8	122.3	119.4
30	117.3	119.4	117.8	116.1	118.3	118.8	114.5	114.7	115.5	120.8	120.4	115.7	114.4	117.8	121.0	119.9	125.2	129.9	126.8	123.6	119.8	126.4	123.0	123.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	133.6	131.9	135.2	138.7	130.9	124.0	132.9	132.5	147.6	151.6	140.2	156.6	137.6	139.2	153.3	167.6	173.6	158.0	152.5	233.6	302.0	306.3	304.0	306.6
2	306.7	306.6	314.7	310.9	309.6	306.6	308.8	303.5	308.4	302.7	343.4	298.5	36.8	205.3	206.0	186.2	174.2	288.8	358.7	69.3	95.1	85.1	86.5	109.7
3	128.9	110.7	105.8	111.8	112.3	112.0	111.0	110.3	112.7	110.9	105.6	101.1	104.6	96.0	88.2	91.6	78.0	51.4	128.5	113.7	127.1	140.3	115.1	119.3
4	111.4	119.7	117.9	119.5	120.9	119.4	114.4	108.0	113.9	110.0	103.7	122.7	116.7	106.4	120.3	137.5	134.2	126.3	133.5	140.3	140.2	129.8	149.9	138.3
5	152.5	147.7	145.5	149.5	156.3	151.5	152.3	153.9	152.3	141.3	131.2	121.2	119.6	119.8	119.1	117.8	120.1	119.0	119.6	120.3	117.3	114.7	119.6	117.4
6	115.8	115.8	113.5	114.3	115.6	114.9	117.7	117.1	116.8	116.8	116.3	114.5	113.6	114.9	120.2	124.1	146.0	156.8	222.2	223.6	209.6	205.7	200.1	192.7
7	188.8	171.1	129.7	141.9	121.4	126.2	118.6	122.1	103.7	103.7	110.6	107.1	111.0	106.7	106.3	108.2	107.6	108.8	108.3	106.4	104.8	104.9	105.0	105.8
8	112.0	120.5	144.0	162.4	166.3	171.0	165.5	158.1	152.7	144.0	139.9	122.3	119.2	133.7	144.0	160.4	251.5	212.0	213.9	222.2	232.5	232.3	234.8	234.2
9	204.7	149.0	130.3	132.0	120.8	95.1	101.5	102.0	108.2	119.6	119.1	126.2	121.7	119.7	112.7	119.9	117.9	118.5	116.5	115.4	114.4	119.3	121.4	118.7
10	112.5	119.5	119.9	107.5	101.0	91.0	72.2	63.6	52.7	359.2	26.1	0.5	326.8	330.4	342.0	341.4	335.5	335.7	317.6	305.9	303.1	307.1	302.7	302.4
11	301.0	298.8	301.7	301.6	296.2	298.5	295.0	289.8	275.0	306.3														
12																								
13																			325.6	313.8	320.1	315.8	313.6	312.5
14	311.2	312.2	312.3	317.3	314.0	303.1	317.4	308.5	305.2															
15	311.6	323.1	317.3	321.9	323.1	320.7	317.5	314.2	309.1	309.0	310.4	312.2	312.9	310.4	310.8	309.5	311.0	312.4	315.6	321.5	319.9	332.3	329.3	321.5
16	313.0	314.7	316.3	317.0	317.7	318.7	324.3	325.7	319.8	317.3	316.2	318.3	316.9	318.3	325.2	327.4	330.2	332.3	326.8	326.6	329.6	329.8	324.8	330.1
17	326.3	323.5	329.6	327.6	327.3	324.9	329.4	332.8	331.0	331.2	330.3	331.6	328.3	329.7	326.1	320.6	324.0	326.8	326.8	319.8	317.1	319.5	311.4	312.5
18	308.4	307.0	308.8	301.4	299.5	305.7	310.6	305.5	299.6	300.5	300.7	305.4	314.4	309.7	305.5	326.6	323.0	313.5	309.0	301.1	301.0	303.5	315.1	316.2
19	308.3	312.0	320.2	314.8	316.2	311.1	315.9	307.6	313.6	312.8	305.5	301.4	299.3	303.1	303.7	305.1	310.1	298.7	298.0	307.5	307.3	299.7	292.4	300.3
20	309.7	306.1	301.3	118.8	107.3	108.1	114.2	113.7	109.6	111.9	108.6	111.8	122.7	120.5	120.1	119.6	121.6	122.4	118.9	118.1	128.4	138.8	137.4	108.8
21	109.0	120.4	118.7	118.9	121.7	117.6	128.0	162.1	163.5	153.3	154.4	141.8	145.6	152.2	137.9	109.4	126.5	124.5	127.4	123.6	122.7	123.1	108.0	124.8
22	123.1	112.9	107.5	109.1	112.1	110.0	114.2	114.4	117.3	122.0	121.1	115.2	114.2	118.4	120.3	119.8	125.9	128.5	125.1	127.3	127.9	179.0	213.4	215.8
23	216.4	226.5	230.0	234.0	219.5	187.4	193.5	202.8	216.9	220.7	234.3	235.8	257.7	258.7	266.3	274.7	268.4	255.0	320.3	347.6	205.6	208.5	299.6	0.1
24	56.8	327.8	319.5	313.4	314.0	319.3	310.5	331.3	329.2	324.1	322.2	332.0	333.1	334.6	337.7	337.0	333.1	330.6	320.1	317.5	321.6	319.1	310.2	315.3
25	314.2	315.2	320.9	323.8	323.0	323.9	320.6	322.9	313.1	316.9	309.0	303.2	300.8	302.4	304.3	303.2	304.6	308.0	304.9	306.0	306.9	314.5	323.5	325.5
26	312.5	305.0	291.4	270.5	282.1	295.9	121.8	110.4	120.0	129.1	126.0	111.4	109.3	118.8	132.0	113.5	110.5	113.8	114.5	108.4	107.7	108.3	107.0	105.4
27	108.2	109.9	108.0	109.5	110.8	109.8	108.1	108.3	107.8	105.4	104.8	105.3	103.1	101.7	97.8	94.7	93.1	96.1	92.0	118.7	108.8	130.9	156.6	164.8
28	160.7	179.4	195.4	197.2	211.5	267.1	291.6	283.0	289.1	302.2	318.8	313.4	316.8	314.0	311.0	329.4	321.7	306.8	320.4	326.3	333.3	328.2	324.8	324.1
29	317.9	319.0	315.8	313.8	313.4	311.1	308.2	305.3	304.1	303.5	301.8	309.4	309.5	302.7	302.0	318.7	307.7	301.3	305.1	299.3	297.9	300.6	302.3	301.7
30	301.0	310.3	311.6	310.9	318.2	314.7	317.5	312.2	320.2	342.9	318.4	327.0	335.7	343.2	312.7	322.0	340.8	351.5	323.2	307.7	327.0	320.0	299.4	304.8
31	299.0	315.0	311.9	309.2	314.3	309.0	311.7	308.6	313.1	316.1	310.5	309.2	315.7	309.5	304.2	311.7	312.7	312.4	313.7	312.3	316.5	317.8	313.3	323.5

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.6	3.2	3.9	3.4	3.1	3.8	3.7	3.5	3.6	3.7	2.9	2.8	3.9	2.3	3.2	3.3	2.9	5.6	3.0	3.6	4.4	2.7	2.3	3.7	5.6	2.3	3.5
2	2.9	5.3	5.0	2.8	4.6	2.8	5.8	3.4	2.3	3.1	4.6	4.0	2.7	2.9	2.4	3.1	2.6	3.0	3.0	3.3	3.6	1.8	3.1	3.3	5.8	1.8	3.4
3	2.9	2.4	3.2	4.7	2.8	2.5	3.1	2.4	2.8	1.4	1.5	2.5	2.4	2.2	2.6	4.5	7.2	3.2	2.3	2.7	2.6	3.9	4.6	3.9	7.2	1.4	3.1
4	2.0	3.5	3.1	4.9	5.9	4.1	4.3	3.6	3.9	4.2	4.8	4.1	6.0	16.7	6.8	7.0	11.2	29.7	16.9	26.7	8.0	10.8	13.9	8.4	29.7	2.0	8.8
5	19.3	45.0	3.2	4.3	3.2	3.8	2.6	3.6	2.5	4.5	5.6	5.6	3.7	3.5	2.6	3.6	2.5	2.8	4.2	3.2	5.4	3.0	4.1	4.1	45.0	2.5	6.1
6	3.5	8.3	2.8	3.7	6.9	4.4	2.9	3.3	4.0	5.0	4.2	3.9	5.3	4.1	3.3	2.9	3.1	4.5	3.8	2.6	4.6	2.9	3.4	3.0	8.3	2.6	4.0
7	3.3	3.6	4.0	5.1	4.7	3.3	3.0	3.2	2.9	2.3	3.3	3.4	4.1	3.7	3.6	2.9	2.6	2.2	2.9	3.7	3.3	4.3	3.2	3.2	5.1	2.2	3.4
8	2.0	2.3	2.4	7.0	9.4	5.7	2.7	3.0	2.1	2.8	1.6	3.1	3.0	2.7	4.5	3.2	3.1	3.7	3.3	2.3	2.7	3.4	3.5	3.7	9.4	1.6	3.5
9	3.4	2.6	2.7	3.3	2.7	3.0	4.6	3.5	2.4	2.7	3.4	5.0	18.0	11.0	5.0	11.5	4.7	4.7	3.9	5.9	4.0	4.1	4.2	4.1	18.0	2.4	5.0
10	5.6	6.0	5.4	8.8	6.2	3.4	5.6	5.6	6.4	8.0	10.3	5.3	3.8	3.9	4.1	4.0	3.8	3.8	3.4	3.6	3.7	3.7	3.8	3.9	10.3	3.4	5.1
11	3.8	3.8	3.9	3.9	3.7	3.4	3.4	3.4	3.3	3.5	3.3	3.2	3.1	3.4	3.3	3.1	3.0	3.0	3.1	3.1	3.1	3.4	3.4	3.1	3.9	3.0	3.3
12	3.3	3.2	3.2	2.9	3.2	3.1	3.4	3.4	3.5	3.4	3.6	3.4	3.0	3.0	3.0	3.1	3.2	3.1	3.2	3.3	3.5	3.6	3.6	8.8	8.8	2.9	3.5
13	6.0	4.1	3.8	3.9	4.1	4.5	4.4	5.1	5.4	4.3	4.5	8.6	6.0	7.9	19.2	12.8	15.2	12.2	13.6	5.2	8.3	8.9	7.6	4.0	19.2	3.8	7.5
14	3.3	3.3	2.8	3.5	3.7	4.8	5.4	4.0	5.5	3.8	4.9	6.7	4.2	3.4	2.8	2.9	2.2	3.4	1.6	2.1	1.9	2.6	3.6	2.6	6.7	1.6	3.5
15	1.9	3.0	2.4	2.3	1.8	2.3	2.9	2.3	4.1	2.9	2.4	2.4	4.2	2.3	2.5	2.2	1.5	2.9	3.1	5.0	6.2	5.2	12.0	5.5	12.0	1.5	3.5
16	6.2	11.2	51.3	13.9	39.0	15.1	7.7	3.3	10.9	9.3	4.0	3.2	3.4	3.2	3.1	3.0	3.2	3.2	3.2	3.2	3.3	3.3	3.0	3.1	51.3	3.0	8.9
17	3.2	3.3	3.6	4.0	3.6	3.7	5.4	6.2	4.0	4.7	5.9	7.2	3.5								4.9	4.0	4.0	3.5	7.2	3.2	4.4
18	3.1	3.5	3.5	6.7	3.9	2.6	4.0	3.5	3.1	3.9	33.6	10.7	6.7	7.9	8.5	14.2	4.1	2.2	3.3	6.8	8.0	2.7	3.9	3.5	33.6	2.2	6.4
19	2.5	2.3	3.9	5.2	19.2	14.6	8.0	24.3	10.6	13.1	20.7	9.7	9.9	7.8	5.0	6.5	7.2	6.5	4.6	11.8	12.6	12.7	5.9	9.6	24.3	2.3	9.8
20	6.9	6.1	4.0	4.0	3.7	3.6	3.4	3.1	3.2	3.3	4.2	5.4	15.9	30.3	10.5	9.6	18.5	14.4	7.3	4.1	3.3	5.4	4.5	3.1	30.3	3.1	7.4
21	3.3	3.5	3.7	3.9	3.5	2.7	6.2	7.5	5.3	6.3	5.6	8.5	5.2	7.4	8.0	7.2	9.0	13.3	11.9	8.2	6.9	31.4	43.5	4.5	43.5	2.7	9.0
22	5.9	4.2	6.6	4.2	18.7	21.6	9.3	6.0	8.0	5.2	5.3	5.5	6.2	18.1	5.3	2.3	2.6	2.4	4.9	2.7	6.0	3.6	2.0	5.0	21.6	2.0	6.7
23	3.8	5.9	14.9	5.1	4.5	4.8	3.3	3.6	3.3	4.3	3.3	3.3	7.0	3.6	3.3	2.7	2.5	2.7	3.0	6.8	4.7	5.0	3.9	3.3	14.9	2.5	4.5
24	3.1	3.0	2.7	3.4	2.3	2.6	3.2	5.9	7.2	2.9	2.5	5.9	4.7	4.3	6.3	3.8	3.9	2.5	2.9	3.9	9.0	11.9	6.6	8.2	11.9	2.3	4.7
25	9.0	4.7	31.6	7.0	10.2	4.8	7.1	6.8	3.4	3.1	4.3	4.5	3.5	3.5	3.4	3.9	4.5	5.0	3.8	3.3	3.1	2.9	3.0	3.2	31.6	2.9	5.8
26	3.2	3.1	3.3	3.4	3.4	3.7	3.4	3.6	3.9	3.8	3.4	3.7	3.7	4.0	3.8	4.2	3.9	3.7	4.0	3.8	3.7	3.8	5.5	5.7	5.7	3.1	3.8
27	3.2	3.5	3.2	3.5	3.1	3.1	3.3	3.5	3.6	3.6	3.8	3.3	3.5	3.1	2.8	3.2	3.3	3.1	3.4	3.6	3.7	3.5	3.3	3.1	3.8	2.8	3.3
28	3.2	3.6	3.1	3.2	3.1	3.4	3.0	2.9	3.2	3.1	3.7	3.5	3.8	4.6	4.2	3.9	3.5	4.3	4.2	4.9	4.7	4.7	3.1	3.3	4.9	2.9	3.7
29	3.0	3.9	3.9	4.3	3.9	4.0	3.3	3.3	3.3	2.9	3.2	3.3	3.7	3.2	3.2	3.6	3.0	3.2	3.6	3.6	3.8	3.7	3.7	3.8	4.3	2.9	3.5
30	11.0	3.4	3.4	3.6	3.3	3.6	3.5	3.8	3.5	3.8	3.9	3.8	3.7	4.1	3.9	3.9	4.9	5.1	4.7	5.3	4.5	4.4	4.1	4.3	11.0	3.3	4.3
31	5.3	5.4	5.3	4.9	4.4	4.4	4.4	4.4	4.5	3.9	4.4	3.8	4.7	5.4	5.9	5.2	5.9	5.6	4.6	3.9	5.5	5.5	3.6	3.9	5.9	3.6	4.8
Max.	19.3	45.0	51.3	13.9	39.0	21.6	9.3	24.3	10.9	13.1	33.6	10.7	18.0	30.3	19.2	14.2	18.5	29.7	16.9	26.7	12.6	31.4	43.5	9.6	51.3		
Min.	1.9	2.3	2.4	2.3	1.8	2.3	2.6	2.3	2.1	1.4	1.5	2.4	2.4	2.2	2.4	2.2	1.5	2.2	1.6	2.1	1.9	1.8	2.0	2.6		1.4	
Avg.	4.6	5.5	6.5	4.7	6.3	4.9	4.4	4.7	4.4	4.3	5.6	4.8	5.2	6.1	4.9	4.9	5.0	5.5	4.7	5.1	4.9	5.6	5.8	4.4			5.1

Total Hours in Month 744 Hours Data Available 737 Data Recovery 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.1	6.7	4.9	6.2	4.2	4.1	4.2	3.8	4.3	4.3	5.9	4.0	5.3	4.0	4.1	4.2	4.0	4.0	3.8	4.6	4.2	3.7	4.9	3.6	6.7	3.6	4.5
2	3.8	4.1	3.8	4.5	4.0	3.9	4.2	3.9	3.9	4.0	4.3	4.0	4.2	4.2	4.2	3.9	3.5	4.1	3.9	3.9	3.9	3.7	3.7	3.7	4.5	3.5	4.0
3	4.0	4.0	3.9	4.1	4.0	4.1	4.1	4.3	4.2	5.0	5.8	5.5	8.6	11.5	13.1	7.9	10.6	14.6	42.1	10.4	11.2	7.6	2.6	3.6	42.1	2.6	8.2
4	3.3	3.3	3.0	4.2	5.8	5.7	2.8	2.9	4.2	4.5	2.9	4.3	3.5	6.0	21.0	14.5	44.5	46.8	8.2	12.4	28.8	5.2	4.2	6.6	46.8	2.8	10.4
5	5.2	5.5	5.8	4.4	7.2	6.0	7.1	6.0	12.0	8.6	5.8	6.2	7.1	6.7	6.3	3.9	3.9	6.1	4.9	6.9	8.6	7.0	5.1	4.1	12.0	3.9	6.3
6	3.6	3.5	4.6	3.8	4.0	3.5	3.4	3.4	3.1	2.9	3.0	3.8	3.7	3.4	3.3	3.7			4.8	6.2	13.8	10.3	6.5	4.1	13.8	2.9	4.7
7	6.5	6.5	4.0	3.9	7.7	13.8	49.7	3.8	8.4	12.8	33.2	45.4	11.1	8.4	14.0	9.7	7.9	22.8	9.6	7.2	12.9	16.0	6.3	13.0	49.7	3.8	13.9
8	7.3	7.6	7.4	8.7	5.9	3.6	2.8	3.7	3.0	3.0	3.1	4.1	4.1	4.5	4.7	5.3	4.3	4.0	4.6	4.8	3.9	3.5	7.7	4.7	8.7	2.8	4.8
9	6.6	8.8	6.1	7.3	5.3	6.6	3.6	6.1	4.0	4.9	7.0	6.4	7.3	5.7	3.5	5.7	5.6	8.1	10.0	12.3	17.6	25.7	32.8	10.0	32.8	3.5	9.0
10	14.7	14.6	13.8	25.9	20.0	20.3	6.1	5.2	4.8	4.9	7.6	5.4	5.5	6.1	6.2	7.8	5.7	6.8	5.3	7.2	6.2	4.6	4.8	3.9	25.9	3.9	8.9
11	23.5	47.8	5.9	7.0	5.2	6.2	8.5	9.4	5.6	6.2	9.1	8.5	11.1	4.6	4.3	4.1	3.5	3.4	3.5	3.6	3.7	3.7	3.6	3.6	47.8	3.4	8.1
12	3.7	3.6	3.4	3.5	3.4	3.3	3.6	3.4	3.1	3.6	3.9	4.0	3.8	3.6	4.0	5.3	4.4	3.7	3.3	5.3	6.2	6.1	11.7	11.2	11.7	3.1	4.6
13	10.6	5.7	5.1	4.3	6.4	6.7	5.3	4.6	5.8	5.7	15.3	16.1	11.0	9.4	9.3	5.8	5.1	3.8	3.9	4.2	3.7	3.9	4.4	5.9	16.1	3.7	6.8
14	3.8	4.0	4.3	4.1	4.7	4.5	4.2	3.6	4.1	4.9	5.0	4.1	3.8	4.3	4.3	4.1	3.4	4.6	6.0	7.2	4.4	8.0	24.2	14.2	24.2	3.4	5.8
15	9.5	7.6	38.1	56.8	5.2	4.8	3.3	5.2	5.4	5.6	4.3	5.4	5.9	7.2	3.1	3.6	2.4	2.6	3.0	2.4	3.2	3.7	6.0	30.7	56.8	2.4	9.4
16	66.5	30.2	68.6	28.3	30.7	8.8	9.9	10.4	6.5	6.9	8.3	4.0	5.6	5.1	4.8	9.4	10.4	32.9	17.1	51.1	21.9	7.9	8.6	37.6	68.6	4.0	20.5
17	32.6	40.8	48.1	17.1	7.9	9.2	18.8	7.1	11.8	16.2	28.3	20.1	12.4	8.7	9.8	5.5	10.1	4.5	3.9	4.7	7.2	7.4	8.7	4.2	48.1	3.9	14.4
18	6.2	7.6	6.2	5.6	6.5	13.1	11.8	9.2	7.4	5.0	6.9	12.0	8.8	33.0	27.4	42.7	39.6	53.0	36.9	25.8	7.6	6.2	2.9	2.6	53.0	2.6	16.0
19	2.7	2.5	3.7	4.1	4.9	4.2	3.7	3.9	4.0	3.2	3.5	3.0	2.5	3.1	3.4	3.5	2.6	2.6	2.7	3.6	3.7	5.3	3.5	3.7	5.3	2.5	3.5
20	2.9	4.8	7.4	4.1	5.8	4.3	4.7	4.2	3.9	3.6	3.5	3.1	3.6	3.8	4.3	3.6	3.9	3.0	3.7	4.2	5.1	3.8	3.3	4.0	7.4	2.9	4.1
21	4.3	3.8	4.0	3.1	3.2	2.5	2.7	3.1	4.3	3.6	4.8	3.1	3.3	3.8	2.9	3.0	3.1	3.7	2.8	4.9	4.6	4.6	4.5	2.5	4.9	2.5	3.6
22	3.4	3.7	3.5	2.5	3.6	6.8	2.8	2.7	3.8	2.6	3.4	3.5	5.7	5.4	3.7	3.6	6.0	3.7	3.2	3.6	3.0	2.0	4.1	4.2	6.8	2.0	3.8
23	4.4	5.7	5.7	4.6	4.1	3.1	3.0	3.3	3.5	4.0	3.6	4.8	4.2	3.2	2.8	3.1	2.8	3.0	2.6	5.2	5.3	3.4	4.8	3.5	5.7	2.6	3.9
24	1.9	3.0	3.0	4.6	4.4	2.8	2.5	2.5	1.9	3.2	2.5	4.0	2.9	3.5	3.1	3.7	2.9	3.0	3.2	3.0	3.4	4.3	3.0	4.7	4.7	1.9	3.2
25	4.1	5.7	4.8	4.5	5.1	5.3	5.5	5.6	5.2	2.8	4.7	5.1	3.4	3.8	4.4	2.8	5.1	6.6	4.9	3.1	2.5	3.8	3.5	3.4	6.6	2.5	4.4
26	3.9	4.6	4.2	4.5	8.0	4.7	5.8	4.6	4.8	3.8	5.7	7.0	8.8	3.7	3.4	2.2	3.1	2.7	3.4	2.5	3.0	2.6	1.9	2.1	8.8	1.9	4.2
27	2.2	2.2	2.2	3.0	3.0	3.7	3.1	3.2	2.7	2.9	6.6	5.1	6.2	7.0	7.3	5.6	4.4	3.3	4.7	7.8	7.1	6.4	4.6	4.8	7.8	2.2	4.5
28	3.7	2.6	4.7	3.2	4.8	3.9	3.9	5.1	3.2	4.1	5.7	4.8	3.0	4.0	4.2	5.7	6.2	5.3	3.9	10.4	6.0	6.9	5.8	4.0	10.4	2.6	4.8
Max.	**66.5**	**47.8**	**68.6**	**56.8**	**30.7**	**20.3**	**49.7**	**10.4**	**12.0**	**16.2**	**33.2**	**45.4**	**12.4**	**33.0**	**27.4**	**42.7**	**44.5**	**53.0**	**42.1**	**51.1**	**28.8**	**25.7**	**32.8**	**37.6**	**68.6**		
Min.	**1.9**	**2.2**	**2.2**	**2.5**	**3.0**	**2.5**	**2.5**	**2.5**	**1.9**	**2.6**	**2.5**	**3.0**	**2.5**	**3.1**	**2.8**	**2.2**	**2.4**	**2.6**	**2.6**	**2.4**	**2.5**	**2.0**	**1.9**	**2.1**		**1.9**	
Avg.	**8.9**	**8.9**	**10.0**	**8.5**	**6.6**	**6.1**	**6.8**	**4.8**	**5.0**	**5.1**	**7.3**	**7.4**	**5.9**	**6.4**	**6.7**	**6.6**	**7.7**	**9.7**	**7.5**	**8.2**	**7.6**	**6.3**	**6.7**	**7.3**			**7.2**

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.6	5.4	4.1	3.5	4.8	3.5	4.9	3.6	4.3	4.9	4.1	5.6	3.7	4.8	4.1	4.3	5.0	5.1	3.0	5.0	3.5	3.2	3.3	4.3	6.6	3.0	4.4
2	3.3	4.3	3.6	3.1	3.4	3.6	3.3	2.8	2.6	3.7	4.3	3.6	2.7	3.7	3.4	3.2	3.8	4.0	3.5	2.7	3.1	3.2	3.4	3.3	4.3	2.6	3.4
3	4.0	3.1	3.0	5.0	4.1	4.1	3.2	3.4	4.1	3.8	7.2	9.4	5.6	4.7	4.8	5.7	3.7	6.6	6.9	4.6	4.5	11.9	8.7	5.0	11.9	3.0	5.3
4	5.0	2.8	3.8	5.1	4.2	2.6	3.9	4.0	4.5	4.8	4.8	3.6	3.6	2.8	3.0	2.9	3.1	2.8	3.2	3.5	3.6	4.1	3.5	3.1	5.1	2.6	3.7
5	3.7	3.5	3.9	3.5	3.4	3.5	2.9	2.9	2.9	3.0	3.8	4.5	4.7	3.7	3.5	3.7	3.8	3.7	3.2	3.2	2.7	2.9	3.7	3.2	4.7	2.7	3.5
6	3.3	3.8	3.9	3.2	3.1	2.9	2.7	2.9	2.9	3.5	3.4	3.2	3.2	3.7	3.4	3.4	3.2	3.8	3.2	3.3	3.6	3.8	3.6	4.5	4.5	2.7	3.4
7	4.2	3.9	3.8	3.0	2.9	4.6	4.0	3.6	4.1	3.5	4.2	4.8	4.2	3.5	3.5	3.6	4.2	3.9	3.2	3.3	3.1	2.8	2.7	2.9	4.8	2.7	3.6
8	3.1	2.9	2.8	2.9	3.3	3.1	3.0	3.0	3.6	3.6	3.6	3.5	3.2	4.1	4.4	4.0	3.2	3.1	3.1	3.2	3.3	3.1	3.0	3.6	4.4	2.8	3.3
9	3.5	5.1	5.2	3.8	3.2	3.4	3.5	4.9	5.1	4.7	5.6	4.4	4.2	4.0	4.3	4.6	4.2	4.1	3.2	3.1	3.1	2.9	2.9	3.0	5.6	2.9	4.0
10	3.3	3.9	2.8	3.7	3.0	3.2	5.4	6.7	4.3	5.2	6.9	5.4	5.8	5.1	5.7	4.2	3.9	3.7	3.2	3.5	3.8	3.2	4.4	3.4	6.9	2.8	4.3
11	4.7	5.7	4.2	4.7	4.4	4.8	2.9	3.1	4.9	3.5	2.9	3.5	4.3	4.1	4.1	3.8	4.0	3.4	3.8	3.5	3.5	3.9	4.1	4.0	5.7	2.9	4.0
12	4.2	2.9	3.3	3.2	4.0	5.1	4.8	4.2	3.2	3.0	3.4	3.5	3.7	4.3	3.9	4.6	4.0	3.4	3.5	4.7	3.4	2.8	2.6	3.5	5.1	2.6	3.7
13	3.5	3.6	3.1	3.2	2.4	2.6	3.1	3.1	3.1	2.8	3.4	3.1	3.4	3.4	3.5	4.6	4.3	4.7	3.5	3.0	3.0	3.4	4.8	6.1	6.1	2.4	3.5
14	3.5	2.9	3.1	2.8	3.9	2.9	3.2	3.1	3.4	4.0	3.0	3.4	3.2	3.6	3.6	4.4	4.1	3.4	3.7	3.0	3.7	3.7	3.0	3.2	4.4	2.8	3.4
15	3.1	4.0	3.3	3.0	2.8	2.8	2.8	3.6	3.0	3.3	5.4	3.7	4.3	5.1	6.1	4.8	5.4	3.7	3.4	3.0	3.3	3.9	4.2	4.4	6.1	2.8	3.8
16	5.7	4.4	3.5	3.9	4.0	3.9	4.3	3.5	5.3	4.8	4.5	9.0	7.7	4.8	3.9	4.3	4.2	3.8	3.7	2.9	3.0	2.4	2.9	2.9	9.0	2.4	4.3
17	2.8	3.3	2.7	2.6	6.4	5.8	5.9	4.4	4.1	5.5	5.6	3.6	4.7	4.6	6.1	7.4	8.1	8.3	4.0	2.7	2.2	2.2	3.1	5.5	8.3	2.2	4.7
18	3.0	20.7	55.4	16.0	3.8	4.9	3.6	5.6	40.3	48.0	44.7	26.5	12.7	6.5	6.9	8.8	8.2	9.3	9.4	1.9	2.2	2.2	3.4	2.8	55.4	1.9	14.5
19	2.7	3.4	2.7	2.0	2.5	2.4	2.7	2.5	2.8	3.7	2.3	3.3	8.4	10.4	10.0	13.5	10.5	9.7	6.1	5.4	6.6	8.3	8.9	33.4	33.4	2.0	6.8
20	37.9	8.4	5.5	8.1	3.8	6.6	7.0	4.9	5.9	4.5	4.1	5.4	4.5	4.4	4.7	4.2	4.1	4.1	4.5	4.4	4.7	4.7	5.1	4.6	37.9	3.8	6.5
21	3.4	5.1	13.1	6.1	5.2	5.9	3.1	3.8	3.8	3.9	10.0	5.8	6.8	4.3	3.3	6.3	3.1	3.0	3.6	6.4	4.4	4.2	5.0	6.5	13.1	3.0	5.2
22	4.2	3.1	3.3	3.8	4.1	2.8	6.3	6.6	3.8	3.0	4.5	3.2	3.0	3.5	2.4	2.3	2.9	2.5	3.7	3.4	3.4	2.7	2.9	4.5	6.6	2.3	3.6
23	3.0	4.2	3.7	2.6	3.4	2.7	3.1	3.4	3.8	5.4	5.2	2.9	3.1	3.1	2.5	2.6	2.4	2.8	2.3	2.4	2.4	2.1	3.0	4.0	5.4	2.1	3.2
24	3.4	3.8	5.8	7.0	3.8	4.8	3.6	2.9	3.6	5.0	4.9	3.5	3.2	3.9	5.0	6.4	3.6	3.8	2.7	3.1	3.5	3.8	3.8	11.3	11.3	2.7	4.4
25	39.1	10.9	12.6	25.1	40.9	12.5	11.6	5.8	8.1	8.1	14.3	7.9	8.4	60.9	36.3	9.8	17.5	13.4	10.9	7.2	5.1	7.1	5.0	3.9	60.9	3.9	15.9
26	12.0	8.0	4.9	7.0	3.9	3.3	3.5	3.9	5.4	5.7	3.8	3.1	11.7	6.6	5.9	5.9	8.9	4.7	6.3	2.3	1.7	2.0	2.6	2.8	12.0	1.7	5.2
27	4.0	4.1	3.1	3.2	2.4	3.5	3.7	4.2	6.3	5.7	7.7	5.4	3.1	3.7	4.3	7.0	5.4	4.4	4.3	3.5	5.2	3.8	4.3	3.8	7.7	2.4	4.4
28	4.0	3.7	3.0	2.8	5.5	5.9	3.4	2.5	3.1	3.1	4.9	2.5	2.1	4.0	3.3	3.5	6.5	5.2	3.4	4.0	8.1	4.0	5.5	3.2	8.1	2.1	4.1
29	4.0	5.1	5.4	2.4	5.2	6.0	4.0	3.6	3.5	5.7	3.7	2.6	2.4	2.7	2.7	1.8	2.9	2.1	2.7	2.5	2.1	3.3	2.6	2.8	6.0	1.8	3.4
30	2.5	3.5	3.9	3.2	2.6	2.5	1.7	2.4	3.8	2.9	4.1	2.9	3.4	5.3	11.4	6.6	11.6	7.5	6.7	9.9	16.7	48.4	32.6	6.9	48.4	1.7	8.5
31	9.5	6.5	6.4	5.0	10.2	14.1	11.4	10.3	15.7	3.2	3.7	7.5	25.8	15.2	9.1	5.9	2.7	2.5	1.7	2.2	3.7	2.6	3.3	2.1	25.8	1.7	7.5
Max.	**39.1**	**20.7**	**55.4**	**25.1**	**40.9**	**14.1**	**11.6**	**10.3**	**40.3**	**48.0**	**44.7**	**26.5**	**25.8**	**60.9**	**36.3**	**13.5**	**17.5**	**13.4**	**10.9**	**9.9**	**16.7**	**48.4**	**32.6**	**33.4**	**60.9**		
Min.	**2.5**	**2.8**	**2.7**	**2.0**	**2.4**	**2.4**	**1.7**	**2.4**	**2.6**	**2.8**	**2.3**	**2.5**	**2.1**	**2.7**	**2.4**	**1.8**	**2.4**	**2.1**	**1.7**	**1.9**	**1.7**	**2.0**	**2.6**	**2.1**		**1.7**	
Avg.	**6.5**	**5.0**	**6.1**	**5.0**	**5.2**	**4.5**	**4.3**	**4.0**	**5.7**	**5.7**	**6.3**	**5.2**	**5.5**	**6.6**	**5.8**	**5.1**	**5.3**	**4.7**	**4.2**	**3.8**	**4.1**	**5.2**	**4.9**	**5.1**			**5.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.0	2.6	4.0	3.5	4.1	2.3	2.8	3.2	2.8	4.3	2.2	3.6	2.5	3.9	3.9	7.6	15.7	23.7	24.9	42.7	9.2	3.3	8.0	5.3	42.7	2.0	7.8
2	4.5	4.1	3.8	6.5	5.6	5.3	6.2	4.6	3.4	2.9	3.4	3.4	3.1	3.7	4.7	5.2	5.4	4.0	3.5	4.2	4.1	3.6	3.5	3.5	6.5	2.9	4.3
3	3.0	2.9	3.1	3.3	3.3	3.6	3.3	3.6	3.1	2.8	3.2	3.3	3.7	3.9	4.4	3.7	4.1	3.4	3.5	3.7	3.5	3.4	3.3	3.5	4.4	2.8	3.5
4	3.2	2.9	3.3	4.7	4.6	3.0	3.8	2.8	5.2	7.2	8.0	5.6	4.1	4.4	4.6	4.3	3.6	5.4	5.4	5.2	7.8	7.5	11.1	13.0	13.0	2.8	5.4
5	22.9	30.1	21.2	13.4	18.8	9.0	10.6	6.4	5.9	6.8	5.9	4.3	4.8	5.1	4.8	4.9	5.8	9.7	4.3	4.2	3.8	3.8	3.7	3.8	30.1	3.7	8.9
6	4.0	3.6	3.7	3.7	4.0	4.1	3.9	3.5	3.2	8.5	6.0	4.3	5.3	5.2	5.3	4.8	5.0	8.6	9.2	6.6	3.8	5.2	5.6	7.6	9.2	3.2	5.2
7	9.0	22.9	8.8	9.4	9.7	5.5	4.3	4.2	3.7	3.7	3.9	3.6	4.0	3.8	4.0	4.0	3.9	4.1	3.7	6.0	4.7	9.9	7.6	9.5	22.9	3.6	6.4
8	3.9	4.3	4.7	4.7	4.5	4.2	4.9	4.9	4.9	5.5	5.2	5.1	5.4	6.1	4.9	4.6	7.4	12.8	17.5	19.0	13.8	13.7	12.6	7.9	19.0	3.9	7.6
9	7.3	5.7	4.9	6.3	6.4	20.3	12.9	11.7	7.1	5.7	5.8	3.4	4.4	4.3	3.4	3.9	3.6	3.3	3.0	3.5	3.5	3.7	3.7	3.6	20.3	3.0	5.9
10	3.7	4.0	3.5	3.9	4.0	5.5	3.6	4.5	3.2	4.6	3.6	3.7	3.9	3.4	3.5	3.6	3.5	4.1	4.4	4.0	3.8	3.3	4.3	4.6	5.5	3.2	3.9
11	5.3	5.6	5.9	4.5	6.8	5.4	6.4	4.9	9.5	8.5	10.9	7.4	5.4	4.7	4.3	4.2	4.4	4.0	4.1	4.5	8.9	10.8	12.4	10.0	12.4	4.0	6.6
12	5.8	4.3	9.4	11.5	18.3	21.9	24.6	16.0	17.6	13.2	12.6	7.4	14.4	16.7	7.1	4.7	7.0	7.8	9.5	13.6	6.0	22.3	5.2	3.5	24.6	3.5	11.7
13	4.5	3.0	4.4	3.2	2.5	3.3	2.2	3.8	2.5	2.8	3.6	5.4	8.7	8.4	8.6	8.9	10.2	34.6	6.2	6.6	12.9	9.1	10.6	6.1	34.6	2.2	7.2
14	7.8	2.8	3.6	4.5	7.0	45.3	9.6	5.8	9.8	7.1	9.2	13.2	7.5	10.1	5.1	5.3	4.2	4.8	4.9	5.6	5.2	4.3	4.0	6.6	45.3	2.8	8.1
15	3.8	5.0	4.1	3.4	3.6	3.5	3.4	4.5	4.7	4.6	4.8	7.0	6.5	6.2	7.4	7.1	7.2	9.5	7.4	8.4	12.4	8.6	3.8	8.1	12.4	3.4	6.0
16	3.9	2.3	3.9	3.0	3.3	2.5	3.4	3.4	2.7	3.4	2.9	8.7	8.7	2.4	5.6	2.9	3.4	4.3	6.8	4.9	9.4	12.1	9.5	6.4	12.1	2.3	5.0
17	7.1	9.3	10.2	7.2	7.8	10.7	3.9	4.0	3.9	3.9	4.2	3.8	4.0	4.1	4.0	4.0	3.9	3.9	4.1	3.9	4.0	3.5	3.6	3.6	10.7	3.5	5.1
18	3.6	3.8	3.8	4.0	3.8	3.6	3.8	3.6	3.9	3.4	3.4	3.4	3.7	3.5	3.6	3.5	4.1	6.8	9.1	12.3	6.8	39.6	11.4	3.3	39.6	3.3	6.3
19	4.7	21.5	7.2	5.5	5.2	4.7	3.6	3.1	3.4	3.6	3.2	3.7	3.9	3.8	4.3	3.9	4.3	3.7	3.7	4.6	3.8	3.5	3.4	3.6	21.5	3.1	4.8
20	3.6	3.5	3.5	3.5	3.7	4.1	7.0	6.0	4.9	3.4	4.8	3.9	4.1	4.8	4.3	4.8	4.0	3.8	3.7	3.3	3.7	3.7	4.3	6.2	7.0	3.3	4.3
21	7.7	4.9	3.4	3.3	3.6	3.7	5.1	4.1	7.9	10.8	3.7	4.2	3.4	4.0	4.3	4.1	4.1	3.7	3.7	3.5	3.3	4.0	3.4	3.3	10.8	3.3	4.5
22	3.6	3.5	3.5	3.6	4.7	4.4	4.1	5.1	4.0	5.3	4.5	4.2	5.5	5.9	5.1	6.0	6.2	6.1	6.0	4.8	4.9	4.9	5.3	11.8	11.8	3.5	5.1
23	22.2	9.3	4.7	13.2	44.0	3.9	8.0	10.6	10.4	5.3	4.0	6.4	8.5	13.2	14.2	30.9	28.0	15.8	13.8	7.9	18.1	12.7	17.8	10.3	44.0	3.9	13.9
24	6.9	4.4	4.2	6.1	29.2	45.9	11.1	6.3	8.4	5.8	6.9	8.1	8.5	12.8	32.6	10.4	25.3	18.7	23.6	14.0	5.6	10.9	16.7	7.6	45.9	4.2	13.7
25	5.2	6.4	6.3	4.8	5.7	4.1	3.9	4.8	4.1	5.3	6.9	6.3	5.0	4.5	4.2	5.0	5.3	5.1	4.8	5.1	7.3	41.6	11.6	9.8	41.6	3.9	7.2
26	9.0	8.5	10.1	15.3	17.4	15.0	8.8	11.6	3.7	5.7	5.7	8.6	14.9	11.6	9.9	8.4	8.2	5.5	5.2	3.9	5.2	5.9	3.2	2.9	17.4	2.9	8.5
27	3.8	4.0	4.5	28.9	9.7	9.5	5.5	5.8	5.8	6.0	8.9	9.0	9.5	8.8	6.8	5.2	7.4	9.0	4.2	3.5	3.3	20.8	8.4	3.2	28.9	3.2	8.0
28	7.2	30.2	6.9	28.8	9.7	11.8	12.4	17.3	25.1	10.4	14.2	15.3	14.4	14.8	10.4	6.4	6.9	6.7	6.6	5.8	5.2	5.9	14.5	11.1	30.2	5.2	12.4
29	9.2	5.2	5.7	4.6	5.1	4.4	3.8	7.3	4.6	4.5	6.3	4.9	6.3	7.8	8.4	7.0	6.6	6.5	6.6	5.8	5.0	8.8	10.9	6.9	10.9	3.8	6.3
30	10.9	4.8	4.2	5.7	7.2	22.1	41.0	17.2	17.8	16.0	19.5	10.8	15.8	19.3	17.2	32.6	19.4	41.5	17.6	14.9	4.9	8.9	5.3	10.5	41.5	4.2	16.0
Max.	**22.9**	**30.2**	**21.2**	**28.9**	**44.0**	**45.9**	**41.0**	**17.3**	**25.1**	**16.0**	**19.5**	**15.3**	**15.8**	**19.3**	**32.6**	**32.6**	**28.0**	**41.5**	**24.9**	**42.7**	**18.1**	**41.6**	**17.8**	**13.0**	**45.9**		
Min.	**2.0**	**2.3**	**3.1**	**3.0**	**2.5**	**2.3**	**2.2**	**2.8**	**2.5**	**2.8**	**2.2**	**3.3**	**2.5**	**2.4**	**3.4**	**2.9**	**3.4**	**3.3**	**3.0**	**3.3**	**3.3**	**3.3**	**3.2**	**2.9**		**2.0**	
Avg.	**6.6**	**7.5**	**5.7**	**7.5**	**8.8**	**9.8**	**7.6**	**6.5**	**6.6**	**6.0**	**6.2**	**6.1**	**6.7**	**7.0**	**7.0**	**7.1**	**7.6**	**9.4**	**7.7**	**7.9**	**6.5**	**10.0**	**7.6**	**6.6**			**7.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.5	41.5	56.1	30.4	28.5	25.2	18.2	18.1	9.9	12.5	13.2	16.3	20.9	46.3				16.8	11.4	8.9	12.4	26.6	37.0	28.0	56.1	8.9	23.3
2	14.8	9.9	19.3	9.5	28.8	23.4	4.9	9.3	9.6	8.0	41.1	13.5	16.4	7.7	9.4	11.2	7.7	6.4	6.2	5.8	4.9	4.4	5.5	5.0	41.1	4.4	11.8
3	5.4	7.5	4.6	9.2	6.4	6.2	7.9	8.6	11.8	10.3	8.4	13.0	14.7	24.2	29.5	16.9	18.9	7.3	10.5	16.1	14.1	7.4	11.8	7.5	29.5	4.6	11.6
4	5.9	6.0	7.1	6.6	6.8	9.0	45.1	22.0	37.8	28.0	27.3	12.3	33.2	12.5	10.4	10.2	8.4	8.3	14.6	13.4	15.6	22.2	16.1	10.0	45.1	5.9	16.2
5	44.2	5.3	4.8	5.6	16.8	4.1	4.0	5.4	4.5	8.8	4.9	5.2	6.4	7.3	9.9	10.7	8.5	6.3	6.9	4.1	3.0	2.5	2.1	2.9	44.2	2.1	7.7
6	3.7	6.1	3.7	2.3	3.9	2.9	3.4	3.6	5.0	5.2	7.0	9.2	6.9	6.8	6.7	7.2	6.9	5.5	5.8	4.4	3.4	3.4	2.8	2.7	9.2	2.3	4.9
7	2.6	2.9	3.3	2.9	7.1	11.5	6.0	8.5	12.7	6.6	7.0	7.3	11.4	13.0	11.0	17.6	12.3	9.4	12.8	15.4	6.9	9.7	3.1	6.4	17.6	2.6	8.6
8	48.5	52.5	15.4	52.0	51.7	35.8	7.6	12.2	28.2	33.2	48.2	51.6	13.9	19.3	23.0	11.3	10.1	8.4	9.2	8.4	6.6	9.8	4.6	39.5	52.5	4.6	25.0
9	52.0	19.6	8.3	17.4	19.9	5.7	4.0	4.2	4.0	4.5	5.0	6.6	5.4	8.2	8.1	11.4	10.7	9.4	10.4	8.2	7.8	5.5	7.3	10.3	52.0	4.0	10.6
10	5.9	7.3	9.1	7.6	9.7	6.8	8.4	11.6	15.8	18.0	13.8	17.6	16.9	15.0	17.2	16.7	14.3	11.1	11.2	8.9	5.0	4.3	6.0	4.0	18.0	4.0	10.9
11	3.0	4.7	8.8	9.1	6.9	4.7	5.4	3.9	5.5	5.9	6.6	7.9	9.7	9.8	10.2	9.6	9.8	10.3	7.1	6.5	5.2	3.5	3.4	3.7	10.3	3.0	6.7
12	4.8	7.2	6.4	4.0	6.0	6.4	4.1	4.4	5.8	6.3	6.9	8.2	10.7	8.6	7.4	7.8	8.7	6.6	8.1	6.5	6.2	5.1	6.1	5.5	10.7	4.0	6.6
13	10.1	10.1	4.2	4.8	4.5	4.7	5.1	5.0	6.4	7.0	5.6	4.8	5.6	4.9	7.1	6.7	6.2	6.0	5.2	5.2	5.0	5.0	4.9	5.8	10.1	4.2	5.8
14	8.3	9.5	9.3	5.9	8.3	7.6	26.4	15.3	17.3	9.3	8.3	8.8	8.6	11.3	9.1	6.1	5.8	7.4	5.7	6.0	4.2	4.6	4.6	5.2	26.4	4.2	8.9
15	9.4	6.8	11.6	5.9	6.6	7.3	4.7	9.2	9.3	9.6	16.6	9.2	8.4	7.8	11.2	11.5	12.6	12.7	15.0	41.7	15.0	4.5	9.0	3.6	41.7	3.6	10.8
16	2.5	4.4	7.4	4.3	3.5	3.2	3.0	3.7	4.4	6.1	10.2	17.7	16.2	11.2	16.0	35.3	22.8	6.4	6.1	9.1	6.0	6.4	5.6	4.6	35.3	2.5	9.0
17	4.6	4.8	4.4	4.5	4.2	4.8	4.1	4.7	4.8	4.9	9.5	9.9	10.7	13.0	8.5	7.7	7.0	5.9	6.2	5.5	5.1	4.8	5.0	6.1	13.0	4.1	6.3
18	6.5	4.2	3.4	6.5	6.4	7.0	5.1	4.4	7.0	10.1	15.3	16.1	19.2	23.5	23.9	18.1	27.5	35.3	28.9	33.8	7.6	7.4	12.6	13.4	35.3	3.4	14.3
19	7.4	6.1	4.1	4.8	4.5	2.5	5.0	5.4	4.6	9.4	14.7	8.8	11.6	12.8	10.6	11.0	9.5	9.5	7.9	6.8	4.7	5.0	30.6	13.5	30.6	2.5	8.8
20	15.5	18.4	37.5	32.1	29.5	57.0	30.9	17.9	46.1	56.0	30.3	60.8	38.8	39.0	15.9	13.5	12.8	13.3	11.3	11.3	6.0	5.9	3.8	2.7	60.8	2.7	25.3
21	19.9	34.7	48.5	35.8	12.4	26.1	19.6	32.2	16.3	14.2	62.5	44.2	35.1	22.8	24.3	16.1	10.2	10.6	9.9	7.2	5.3	5.1	5.1	4.7	62.5	4.7	21.8
22	4.5	5.2	4.8	4.4	4.6	8.6	6.6	6.0	8.1	9.6	11.2	6.5	5.1	5.7	8.1	6.3	6.9	7.1	7.1	10.5	8.5	12.8	6.2	8.3	12.8	4.4	7.2
23	8.6	47.6	10.9	7.8	6.6	4.5	15.0	6.8	6.1	7.4	6.4	5.5	5.7	5.4	5.0	6.9	7.1	5.0	5.0	5.0	4.6	5.9	5.1	5.1	47.6	4.5	8.3
24	4.3	4.3	4.0	4.2	3.8	4.2	5.4	5.6	5.8	5.5	5.3	8.4	10.0	13.4	13.5	5.9	5.9	6.8	4.6	5.1	5.8	5.3	6.3	6.3	13.5	3.8	6.2
25	9.3	5.9	8.4	5.9	6.8	8.6	7.7	9.1	8.3	6.9	5.7	5.1	4.7	6.0	7.2	7.5	7.8	5.9	6.3	8.2	13.0	23.7	9.0	4.0	23.7	4.0	8.0
26	3.3	3.6	5.1	36.8	5.8	8.6	6.6	6.6	6.6	4.2	6.0	10.1	8.7	5.7	6.8	5.4	5.2	5.3	5.1	5.7	6.5	5.1	3.9	4.1	36.8	3.3	7.1
27	4.1	4.4	5.3	4.5	4.6	4.9	5.3	7.8	6.3	7.9	9.7	7.9	9.8	10.7	9.0	7.7	8.2	8.0	6.5	5.7	4.8	4.4	5.1	5.0	10.7	4.1	6.6
28	5.3	4.4	4.8	4.3	4.7	3.5	6.1	5.2	9.9	9.4	8.2	8.2	10.2	9.6	8.9	8.4	7.7	7.2	7.9	7.1	6.8	6.9	4.8	4.7	10.2	3.5	6.8
29	3.7	7.1	14.0	9.7	4.7	2.4	4.1	5.3	7.0	4.9	8.5	13.9	28.6	39.8	46.5	25.9	48.8	10.7	18.8	20.7	7.9	7.7	7.0	13.1	48.8	2.4	15.0
30	21.7	26.5	19.4	23.9	2.8	4.6	6.7	8.6	9.8	42.9	44.7	22.4	18.1	6.8	8.5	8.7	9.8	7.9	6.3	7.3	6.7	7.0	8.0	9.8	44.7	2.8	14.1
31	6.2	7.3	5.7	5.5	5.0	6.1	5.5	5.4	5.6	6.4	6.1	7.9	6.8	7.9	11.9	16.8	13.7	7.7	8.2	8.9	7.2	6.7	5.2	6.1	16.8	5.0	7.5
Max.	**52.0**	**52.5**	**56.1**	**52.0**	**51.7**	**57.0**	**45.1**	**32.2**	**46.1**	**56.0**	**62.5**	**60.8**	**38.8**	**46.3**	**46.5**	**35.3**	**48.8**	**35.3**	**28.9**	**41.7**	**15.6**	**26.6**	**37.0**	**39.5**	**62.5**		
Min.	**2.5**	**2.9**	**3.3**	**2.3**	**2.8**	**2.4**	**3.0**	**3.6**	**4.0**	**4.2**	**4.9**	**4.8**	**4.7**	**4.9**	**5.0**	**5.4**	**5.2**	**5.0**	**4.6**	**4.1**	**3.0**	**2.5**	**2.1**	**2.7**		**2.1**	
Avg.	**11.5**	**12.4**	**11.6**	**11.9**	**10.4**	**10.2**	**9.4**	**8.9**	**11.0**	**12.2**	**15.3**	**14.4**	**13.8**	**14.1**	**13.2**	**11.9**	**11.7**	**9.2**	**9.2**	**10.2**	**7.2**	**7.7**	**8.0**	**8.1**			**11.0**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	6.1	8.3	10.9	11.9	8.6	9.3	8.1	10.0	9.6	5.8	6.4	5.1	5.9	7.6	5.9	6.6	7.1	5.8	8.0	5.9	5.7	5.5	4.7	11.9	4.7	7.2
2	4.9	5.3	5.5	4.0	4.5	3.8	4.8	5.8	6.9	7.5	9.5	8.7	8.2	12.1	13.7	14.8	13.3	14.6	15.2	12.4	7.7	7.3	5.6	6.2	15.2	3.8	8.4
3	8.4	5.8	15.5	8.7	5.2	4.8	7.0	9.8	9.5	12.0	16.3	16.9	23.1	28.1	25.1	33.3	34.2	30.5	28.4	47.3	14.1	10.7	5.2	4.2	47.3	4.2	16.8
4	2.3	2.9	2.5	2.3	3.0	3.3	3.3	3.6	4.1	5.1	5.4	4.1	5.2	6.4	8.7	13.6	17.9	28.8	41.2	11.0	5.6	6.1	6.9	6.0	41.2	2.3	8.3
5	6.0	6.2	5.9	5.2	5.9	5.4	12.0	7.6	6.3	5.1	5.4	5.6	5.1	5.4	5.5	5.7	6.1	6.0	5.8	4.9	5.1	5.6	5.1	4.6	12.0	4.6	5.9
6	5.9	9.7	8.5	6.6	4.7	5.1	12.3	10.3	19.2	44.5	19.5	15.5	16.2	13.1	23.8	9.8	9.6	8.8	18.6	19.9	10.2	16.0	9.5	13.5	44.5	4.7	13.8
7	13.9	12.7	25.5	25.8	14.0	8.1	11.1	12.9	10.8	10.4	12.2	10.2	9.7	13.4	12.3	6.0	6.2	6.7	5.0	6.1	6.1	5.0	4.6	7.5	25.8	4.6	10.7
8	8.5	5.7	9.5	6.8	7.8	8.0	4.8	9.7	8.2	7.4	21.8	28.5	24.7	19.2	14.4	11.2	9.3	11.3	6.4	5.6	6.0	5.3	4.5	4.5	28.5	4.5	10.4
9	19.9	14.7	6.9	4.6	12.5	7.8	15.1	9.3	6.5	7.8	12.2	12.5	12.9	17.6	11.7	19.6	25.1	33.6	35.9	10.1	6.5	3.6	2.3	2.7	35.9	2.3	13.0
10	2.4	2.2	2.6	2.7	3.1	2.9	2.0	2.4	3.7	5.7	6.7	8.0	10.9	12.3	17.5	17.3	16.6	17.4	11.3	15.2	10.4	25.4	12.2	9.5	25.4	2.0	9.2
11	29.6	17.6	9.6	8.3	6.6	10.7	7.1	5.8	6.0	8.9	8.7	13.0	12.0	11.5	9.5	12.2	8.8	8.6	6.8	6.4	7.5	5.6	5.9	5.0	29.6	5.0	9.6
12	4.9	5.2	5.9	5.8	6.4	7.6	5.4	6.6	5.1	6.1	6.5	6.2	8.6	9.2	8.0	8.5	9.5	12.1	9.6	12.4	9.8	9.0	3.7	13.0	13.0	3.7	7.7
13	8.3	27.0	9.0	5.0	13.2	9.5	8.1	9.9	7.6	13.3	17.0	21.8	28.4	12.8	9.9	28.5	50.6	18.4	11.3	9.4	4.4	5.0	5.5	5.2	50.6	4.4	14.1
14	3.7	3.0	3.5	3.9	2.5	3.3	4.0	3.6	3.9	6.2	7.6	10.1	26.4	19.8	32.2	14.0	17.0	18.9	14.3	9.2	5.7	3.8	3.2	3.4	32.2	2.5	9.3
15	3.2	5.1	5.7	4.1	2.8	4.2	4.1	3.5	4.1	4.8	6.6	9.4	11.5	11.9	14.8	12.1	13.4	9.9	8.6	7.0	6.0	4.2	3.1	4.2	14.8	2.8	6.9
16	3.2	4.1	4.6	4.6	4.4	3.3	3.9	5.6	5.2	7.5	11.2	8.7	10.3	8.8	11.7	10.2	10.6	12.2	8.4	6.7	5.7	4.5	4.2	4.6	12.2	3.2	6.8
17	5.4	6.1	4.8	4.8	5.0	5.3	6.1	14.5	8.1	13.0	15.8	57.5	11.2	15.0	21.6	13.8	15.6	15.9	8.7	11.5	6.7	6.6	4.6	4.1	57.5	4.1	11.7
18	4.8	4.9	3.4	6.2	4.1	5.4	5.7	6.0	9.9	9.9	11.6	11.8	50.5	33.7	53.8	37.3	17.0	11.0	20.9	30.7	7.7	41.8	10.2	15.5	53.8	3.4	17.2
19	3.0	3.0	2.2	3.0	3.8	3.6	3.1	5.5	3.9	5.8	7.4	8.2	7.0	9.3	9.3	9.2	10.8	10.5	8.5	6.5	6.1	4.8	4.5	4.4	10.8	2.2	6.0
20	3.5	3.0	3.1	3.8	3.3	2.9	3.5	3.8	5.0	5.9	6.4	8.2	7.8	9.7	9.3	10.5	8.3	8.6	6.3	7.0	3.8	4.2	3.4	3.8	10.5	2.9	5.6
21	5.1	8.0	9.7	6.0	3.5	4.3	3.8	3.4	4.6	6.2	8.9	9.0	10.3	12.4	9.3	9.5	11.3	7.5	8.4	8.5	10.1	3.9	4.5	7.1	12.4	3.4	7.3
22	23.0	58.2	52.5	49.6	25.7	19.9	29.5	13.9	16.3	18.0	13.7	10.4	11.8	11.5	10.3	10.8	11.1	7.2	7.5	6.5	7.8	8.2	5.4	5.8	58.2	5.4	18.1
23	5.3	5.7	5.8	4.9	4.5	4.8	4.5	4.6	4.8	5.0	5.4	5.1	4.9	4.7	4.9	4.9	4.4	4.8	4.5	4.7	4.8	4.4	4.8	4.5	5.8	4.4	4.9
24	4.4	4.6	4.6	4.3	4.4	4.5	4.8	5.1	5.7	7.6	6.6	7.3	5.1	5.0	4.9	5.2	6.6	5.3	6.2	5.8	6.3	7.0	5.7	6.4	7.6	4.3	5.6
25	5.5	5.8	5.4	5.6	5.7	5.1	5.3	4.5	5.4	6.6	7.4	5.9	6.1	5.7	6.6	5.9	5.9	7.1	6.5	5.4	4.7	5.1	4.8	4.2	7.4	4.2	5.7
26	4.2	5.4	4.9	5.6	4.1	4.5	4.3	6.1	9.1	9.2	10.8	10.9	10.7	22.5	20.4	35.8	34.8	33.7	34.8	42.6	8.8	5.4	4.1	4.7	42.6	4.1	14.1
27	6.1	6.8	5.1	3.8	5.2	1.7	4.5	3.3	7.6	14.3	44.6	45.0	20.7	19.9	14.3	12.8	11.9	10.5	11.6	10.2	6.9	3.9	9.6	32.1	45.0	1.7	13.0
28	51.8	29.4	17.2	12.2	25.7	17.0	13.0	25.0	30.2	9.1	14.1	16.1	8.1	10.5	7.6	9.4	8.9	8.9	8.7	6.3	5.4	4.8	4.5	6.0	51.8	4.5	14.6
29	8.1	10.1	4.6	13.1	13.5	8.8	12.2	7.8	11.3	11.9	8.9	15.4	15.6	17.9	19.1	18.3	16.4	12.0	11.0	10.2	5.4	7.3	17.1	13.1	19.1	4.6	12.0
30	15.7	15.6	16.1	6.5	48.3	25.7	7.5	7.4	6.1	20.9	19.8	14.6	17.0	18.1	15.2	11.9	13.1	11.3	8.5	11.6	8.1	6.0	5.6	4.9	48.3	4.9	14.0
Max.	**51.8**	**58.2**	**52.5**	**49.6**	**48.3**	**25.7**	**29.5**	**25.0**	**30.2**	**44.5**	**44.6**	**57.5**	**50.5**	**33.7**	**53.8**	**37.3**	**50.6**	**33.7**	**41.2**	**47.3**	**14.1**	**41.8**	**17.1**	**32.1**	**58.2**		
Min.	**2.3**	**2.2**	**2.2**	**2.3**	**2.5**	**1.7**	**2.0**	**2.4**	**3.7**	**4.8**	**5.4**	**4.1**	**4.9**	**4.7**	**4.9**	**4.9**	**4.4**	**4.8**	**4.5**	**4.7**	**3.8**	**3.6**	**2.3**	**2.7**		**1.7**	
Avg.	**9.2**	**10.0**	**8.9**	**8.0**	**8.8**	**7.0**	**7.4**	**7.5**	**8.2**	**10.2**	**11.8**	**13.7**	**13.5**	**13.5**	**14.4**	**13.9**	**14.4**	**13.3**	**12.8**	**12.0**	**7.0**	**7.9**	**5.9**	**7.2**			**10.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.7	9.2	3.9	4.2	13.6	5.6	6.4	5.2	5.6	8.5	10.3	11.2	12.8	16.8	9.1	8.1	10.0	9.0	5.6	4.9	4.4	4.6	44.6	15.4	44.6	3.9	9.7
2	10.7	10.3	6.2	11.0	10.8	12.8	31.7	27.7	42.2	10.3	11.6	10.0	12.8	13.0	10.7	15.4	13.1	12.6	11.8	7.7	8.3	5.6	5.6	4.0	42.2	4.0	13.2
3	4.3	4.6	8.0	21.4	26.4	9.8	5.1	7.2	6.9	8.5	12.8	13.4	11.7	16.5	19.0	33.5	15.8	10.4	7.1	5.5	5.0	6.0	6.9	5.9	33.5	4.3	11.3
4	5.1	5.1	5.3	6.6	6.3	4.9	7.9	5.2	4.9	4.8	6.7	6.3	7.1	6.3	6.4	6.7	6.4	4.2	5.0	5.5	7.2	4.0	4.9	4.8	7.9	4.0	5.7
5	4.7	4.7	5.4	3.9	4.8	10.1	13.3	11.5	13.2	9.7	10.4	11.5	12.1	10.4	9.4	12.6	8.8	15.3	38.5	5.6	5.3	5.5	5.5	6.4	38.5	3.9	9.9
6	6.6	5.2	5.7	5.3	4.8	4.6	5.3	4.9	6.0	9.2	9.3	6.2	10.5	15.4	11.7	13.2	12.0	15.9	14.5	11.0	15.8	24.9	11.1	38.3	38.3	4.6	11.1
7	11.1	6.8	3.9	6.7	8.0	10.1	8.6	11.2	35.5	12.2	27.8	38.6	32.8	40.8	31.5	18.7	19.4	17.9	19.1	22.0	27.6	20.9	12.3	9.4	40.8	3.9	18.9
8	8.4	8.8	17.8	40.4	36.8	20.5	25.6	9.6	6.5	13.1	13.9	8.5	6.4	6.6	8.3	7.1	6.9	7.2	7.3	5.7	5.2	5.5	4.3	4.0	40.4	4.0	11.8
9	4.9	6.4	7.3	5.4	7.3	3.9	3.9	4.2	5.0	6.7	10.9	14.3	13.4	25.3	9.7	38.5	29.1	16.5	15.3	18.9	12.7	12.9	11.9	4.9	38.5	3.9	12.0
10	3.9	2.5	4.1	6.5	14.4	45.5	11.8	13.2	12.5	7.8	8.5	8.3	19.3	30.2	8.8	7.5	11.6	6.6	6.3	6.2	6.0	5.8	4.9	5.8	45.5	2.5	10.7
11	5.0	7.0	6.4	4.6	3.7	4.1	5.0	5.5	5.6	9.3	9.2	9.9	11.2	12.2	8.9	12.0	12.2	11.9	11.6	8.9	6.1	5.1	5.5	10.1	12.2	3.7	8.0
12	8.5	13.5	13.1	15.1	47.2	5.5	5.9	9.4	11.4	14.5	17.3	17.5	16.2	20.0	15.6	31.3	11.0	13.0	14.7	7.5	6.6	6.7	4.2	4.0	47.2	4.0	13.7
13	4.5	4.8	5.0	5.8	5.4	5.5	6.6	5.7	6.4	5.2	8.2	7.1	5.3	5.8	6.1	6.6	6.4	7.2	6.9	4.8	5.1	5.2	4.7	5.5	8.2	4.5	5.8
14	6.0	6.1	7.1	6.8	4.8	5.3	6.8	10.5	5.0	7.9	9.7	9.7	11.0	9.6	8.2	7.3	6.8	7.0	6.1	5.9	6.1	7.0	5.7	4.9	11.0	4.8	7.1
15	7.7	6.3	10.7	11.6	13.3	15.9	18.6	22.5	18.6	12.2	10.9	12.1	11.3	30.8	14.4	7.5	7.1	7.2	6.4	5.3	5.4	4.0	4.8	7.9	30.8	4.0	11.3
16	12.7	8.4	49.7	8.5	8.4	6.7	4.3	4.0	6.4	5.7	5.5	7.8	10.5	13.8	11.9	8.5	7.8	9.4	11.3	7.5	6.7	5.4	4.1	2.6	49.7	2.6	9.5
17	3.3	3.4	3.9	3.3	2.3	1.8	2.3	4.0	4.2	8.8	13.9	16.4	40.4	43.7	29.1	20.2	11.8	11.2	8.0	6.4	7.2	6.4	5.6	3.8	43.7	1.8	10.9
18	5.8	6.5	10.7	8.7	7.3	6.2	5.9	11.2	11.0	10.6	12.0	21.9	31.7	15.9	16.3	19.0	6.6	10.0	6.3	6.5	10.1	18.8	11.4	35.7	35.7	5.8	12.7
19	10.9	4.7	5.2	3.5	3.0	6.7	6.4	5.3	4.7	5.2	6.0	9.4	16.5	20.7	33.5	46.9	25.9	19.8	10.7	7.4	10.0	12.2	8.6	8.7	46.9	3.0	12.2
20	15.2	8.6	12.8	38.4	56.8	29.6	65.8	16.0	17.7	16.1	56.7	9.9	18.7	15.5	17.0	44.6	19.9	29.6	11.7	7.7	6.3	4.8	4.2	7.5	65.8	4.2	22.1
21	15.3	31.2	28.1	33.2	12.9	10.6	5.4	25.0	19.7	6.5	11.0	24.7	52.7	11.4	10.9	7.6	6.0	6.5	5.8	8.0	9.5	8.7	7.3	11.0	52.7	5.4	15.4
22	12.3	7.8	6.7	7.6	7.3	7.1	6.2	6.6	7.7	7.0	6.7	8.1	6.6	8.7	8.0	7.5	8.4	7.2	5.8	5.1	6.4	6.4	7.8	4.6	12.3	4.6	7.2
23	4.2	5.0	4.8	6.3	10.0	16.9	14.7	11.7	7.4	7.9	6.6	8.1	8.1	7.2	6.3	5.1	4.8	4.9	5.1	5.4	5.0	5.1	5.1	4.5	16.9	4.2	7.1
24	4.4	4.5	4.3	4.1	4.4	4.5	4.7	5.0	6.8	4.4	5.1	5.9	6.1	9.5	9.0	9.0	6.8	7.4	9.2	9.8	9.8	16.0	6.5	8.8	16.0	4.1	6.9
25	10.5	7.8	16.3	32.1	23.0	6.2	23.0	7.2	5.6	6.1	5.4	6.2	12.6	8.2	9.7	12.7	7.2	6.6	8.5	6.7	14.2	7.3	6.0	9.9	32.1	5.4	10.8
26	10.0	18.1	42.9	53.6	4.2	3.8	4.3	3.4	4.1	3.6	4.9	10.2	13.3	14.6	15.4	24.2	35.0	44.7	24.8	6.4	4.9	7.6	30.0	12.6	53.6	3.4	16.5
27	13.1	7.2	4.9	4.0	4.3	2.9	3.2	2.6	3.1	4.3	5.8	8.6	10.6	8.5	8.4	11.5	9.4	12.6	15.4	8.3	6.9	11.9	8.8	11.0	15.4	2.6	7.8
28	4.2	3.5	4.0	3.7	5.2	4.1	4.3	8.2	4.1	5.2	5.0	7.5	12.1	11.8	8.6	10.2	9.8	8.2	7.1	8.9	5.4	3.6	4.6	5.3	12.1	3.5	6.4
29	9.3	10.1	8.1	7.8	4.3	4.0	3.9	5.3	5.4	5.4	8.5	11.4	12.2	9.4	8.8	8.9	11.5	12.3	10.0	11.2	7.3	4.1	5.6	4.7	12.3	3.9	7.9
30	3.6	4.1	4.1	5.7	4.7	5.7	4.7	9.3	10.2	15.2	39.5	16.1	12.7	20.0	33.0	21.5	8.3	11.3	8.7	7.2	7.8	7.5	10.2	9.3	39.5	3.6	11.7
31	8.9	11.6	22.4	19.6	7.8	7.8	13.7	5.0	6.6	5.8	5.9	6.4	6.6	6.8	7.1	7.0	10.3	9.8	9.8	7.2	6.9	6.6	5.6	5.1	22.4	5.0	8.8
Max.	**15.3**	**31.2**	**49.7**	**53.6**	**56.8**	**45.5**	**65.8**	**27.7**	**42.2**	**16.1**	**56.7**	**38.6**	**52.7**	**43.7**	**33.5**	**46.9**	**35.0**	**44.7**	**38.5**	**22.0**	**27.6**	**24.9**	**44.6**	**38.3**	**65.8**		
Min.	**3.3**	**2.5**	**3.9**	**3.3**	**2.3**	**1.8**	**2.3**	**2.6**	**3.1**	**3.6**	**4.9**	**5.9**	**5.3**	**5.8**	**6.1**	**5.1**	**4.8**	**4.2**	**5.0**	**4.8**	**4.4**	**3.6**	**4.1**	**2.6**		**1.8**	
Avg.	**7.7**	**7.9**	**10.9**	**12.8**	**12.0**	**9.3**	**10.8**	**9.1**	**10.0**	**8.3**	**12.1**	**11.7**	**15.0**	**15.6**	**13.2**	**15.8**	**11.8**	**12.0**	**10.8**	**7.9**	**8.1**	**8.3**	**8.7**	**8.9**			**10.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.6	5.2	5.3	5.0	5.2	5.3	5.6	5.1	5.1	4.5	4.4	4.7	5.1	6.0	6.2	5.4	5.7	6.1	6.1	5.5	4.8	4.9	4.5	4.7	6.2	4.4	5.2
2	5.1	5.3	4.9	4.5	5.1	4.7	4.9	5.1	4.8	4.9	4.8	5.0	4.9	4.8	5.3	5.1	5.0	5.2	5.0	5.0	4.8	5.0	5.1	6.1	6.1	4.5	5.0
3	6.1	5.8	5.9	5.6	6.2	5.6	5.3	5.1	4.8	5.6	6.5	5.2	5.4	5.3	5.3	5.5	5.6	5.3	5.2	5.6	5.0	4.8	5.3	4.7	6.5	4.7	5.4
4	4.4	4.6	5.1	4.9	4.6	4.8	5.2	5.5	5.1	5.1	5.0	5.4	5.8	6.3	6.0	6.8	5.8	5.2	5.0	4.7	4.9	6.2	6.1	5.1	6.8	4.4	5.3
5	5.7	6.4	5.7	5.2	5.4	9.5	10.7	6.6	6.8	6.6	5.5	6.4	7.7	5.8	6.1	6.1	5.7	6.4	4.8	4.0	3.9	4.7	5.1	5.0	10.7	3.9	6.1
6	4.0	3.9	3.3	4.6	9.0	8.5	4.3	3.3	4.5	4.9	5.5	5.5	5.4	5.6	5.1	7.0	5.0	5.6	6.0	4.1	4.4	3.7	3.6	3.4	9.0	3.3	5.0
7	3.9	5.2	4.7	4.2	3.5	4.2	4.5	3.7	4.9	5.2	7.0	6.8	6.4	7.7	8.1	8.2	7.1	7.6	7.2	6.0	5.4	4.3	3.4	5.5	8.2	3.4	5.6
8	5.9	4.9	6.3	7.9	4.1	5.4	5.7	5.1	5.1	5.1	5.5	7.1	8.0	9.3	9.8	13.9	9.6	12.0	7.1	6.4	4.2	5.0	3.1	2.7	13.9	2.7	6.6
9	2.3	2.9	3.2	2.9	2.9	3.1	3.2	2.3	3.7	6.0	10.4	8.6	22.8	45.6	42.0	47.9	38.8	25.5	10.0	8.8	5.9	13.8	12.9	14.6	47.9	2.3	14.2
10	9.9	8.5	3.7	3.7	3.5	3.5	6.0	20.1	25.1	11.1	14.4	19.9	23.4	27.5	26.1	17.3	17.0	11.0	7.9	5.9	3.9	2.8	3.0	3.4	27.5	2.8	11.6
11	6.9	4.9	21.1	3.1	9.8	9.8	11.4	8.6	7.9	7.1	13.6	63.9	41.5	25.3	30.3	15.5	19.6	9.6	8.6	6.1	10.2	11.7	9.3	19.6	63.9	3.1	15.6
12	22.4	35.5	10.1	22.0	19.7	21.9	9.8	30.8	22.0	14.4	41.7	49.7	14.6	27.1	17.4	25.2	10.0	23.4	9.3	9.8	6.1	19.3	3.5	3.7	49.7	3.5	19.6
13	24.3	28.3	16.3	15.8	8.3	31.6	31.9	17.1	14.5	18.8	19.2	21.1	14.3	15.2	15.0	10.8	15.7	9.3	11.7	9.9	10.2	6.7	6.6	6.3	31.9	6.3	15.8
14	5.6	5.1	5.3	28.9	68.3	54.3	55.6	9.9	7.7	6.0	5.6	6.2	5.9	8.1	7.3	11.9	14.9	12.2	7.6	18.0	11.6	13.5	5.9	4.5	68.3	4.5	15.8
15	3.9	3.8	4.7	4.0	4.4	3.9	4.0	3.8	4.3	4.3	4.8	5.2	5.4	5.6	5.7	6.2	5.1	5.2	5.2	4.7	5.5	3.1	4.1	6.0	6.2	3.1	4.7
16	3.7	4.7	8.1	7.7	26.4	16.5	30.7	44.2	14.3	8.3	41.4	16.9	25.3	39.0	44.9	46.8	61.4	20.8	14.7	6.4	7.7	8.7	7.3	8.8	61.4	3.7	21.4
17	5.1	4.4	5.1	6.7	6.5	6.8	10.6	4.7	6.2	9.1	6.8	7.5	8.1	8.2	9.2	7.2	7.9	6.3	5.7	5.5	4.7	4.7	4.2	4.5	10.6	4.2	6.5
18	4.0	4.4	4.6	5.0	4.8	4.5	4.3	4.4	4.3	4.7	4.7	4.3	4.5	4.4	4.9	4.6	4.9	5.3	5.6	5.2	4.9	4.9	5.2	4.8	5.6	4.0	4.7
19	5.1	5.0	4.8	4.7	5.1	5.3	6.0	5.8	5.2	4.8	5.6	5.1	4.8	4.5	4.7	4.9	4.6	4.7	4.9	5.2	4.9	5.2	5.0	4.7	6.0	4.5	5.0
20	4.9	5.4	5.1	4.8	5.1	5.0	5.3	5.3	5.0	4.5	5.1	5.8	6.4	6.4	5.9	6.3	5.9	7.3	6.0	4.6	4.7	4.8	4.3	6.4	7.3	4.3	5.4
21	4.9	4.0	4.1	4.0	4.4	3.9	4.4	4.2	4.2	4.5	4.9	4.8	4.6	4.5	4.9	5.2	5.3	5.6	6.1	5.1	4.7	5.2	4.2	4.2	6.1	3.9	4.7
22	4.3	4.4	4.1	3.7	3.6	4.2	4.5	4.3	4.5	4.7	4.7	5.3	4.9	5.4	5.2	4.7	5.0	5.2	4.6	4.5	4.3	4.0	3.7	5.7	5.7	3.6	4.6
23	4.9	4.5	5.8	10.2	26.7	22.0	32.6	27.9	11.3	4.0	6.4	9.3	5.1	7.2	7.9	7.2	5.2	6.2	4.4	4.2	2.9	3.0	2.8	4.6	32.6	2.8	9.4
24	3.0	5.1	3.5	3.2	3.0	2.8	3.2	3.9	4.9	5.4	5.7	7.0	7.4	7.2	10.5	23.8	6.5	18.7	9.3	10.4	10.2	8.5	8.7	8.8	23.8	2.8	7.5
25	5.7	13.3	9.6	11.6	12.7	4.8	10.2	19.1	16.1	7.2	10.5	12.6	9.3	17.3	9.5	10.2	16.2	8.9	6.7	8.3	10.5	5.0	8.5	16.5	19.1	4.8	10.8
26	9.3	6.0	4.5	4.8	8.0	3.8	5.8	6.9	4.2	7.0	13.8	8.9	12.7	9.0	8.6	9.4	7.3	7.1	8.7	13.0	9.7	7.9	10.8	5.2	13.8	3.8	8.0
27	5.1	4.6	4.8	4.7	9.5	15.7	13.3	21.5	7.5	7.1	12.0	12.8	9.4	11.2	12.9	11.2	20.4	8.5	9.9	12.3	9.5	19.2	14.0	7.9	21.5	4.6	11.0
28	10.9	3.8	9.1	15.1	53.2	26.1	46.7	19.5	21.3	36.1	30.5	25.7	36.2	39.9	15.3	20.7	34.7	14.7	9.7	5.0	2.9	3.7	6.8	4.2	53.2	2.9	20.5
29	4.2	6.9	8.7	6.6	7.8	6.1	5.4	4.1	4.3	5.1	6.0	6.1	4.4	7.0	8.0	7.8	8.2	8.1	5.5	5.8	3.8	3.8	4.1	2.8	8.7	2.8	5.9
30	3.7	5.6	5.0	4.2	3.4	3.1	3.0	4.2	4.3	4.0	5.2	8.4	11.9	10.9	11.6	11.6	12.1	14.9	17.9	13.4	12.3	7.3	5.3	5.2	17.9	3.0	7.8
31	2.9	6.4	2.6	5.2	4.3	4.1	4.7	4.6	5.9	6.7	6.5	9.8	19.5	21.8	26.3	19.6	37.6	31.4	33.4	42.8	14.5	19.0	8.0	4.9	42.8	2.6	14.3
Max.	**24.3**	**35.5**	**21.1**	**28.9**	**68.3**	**54.3**	**55.6**	**44.2**	**25.1**	**36.1**	**41.7**	**63.9**	**41.5**	**45.6**	**44.9**	**47.9**	**61.4**	**31.4**	**33.4**	**42.8**	**14.5**	**19.3**	**14.0**	**19.6**	**68.3**		
Min.	**2.3**	**2.9**	**2.6**	**2.9**	**2.9**	**2.8**	**3.0**	**2.3**	**3.7**	**4.0**	**4.4**	**4.3**	**4.4**	**4.4**	**4.7**	**4.6**	**4.6**	**4.7**	**4.4**	**4.0**	**2.9**	**2.8**	**2.8**	**2.7**		**2.3**	
Avg.	**6.4**	**7.1**	**6.3**	**7.2**	**11.1**	**10.0**	**11.6**	**10.2**	**8.1**	**7.5**	**10.4**	**12.0**	**11.3**	**13.2**	**12.4**	**12.7**	**13.3**	**10.4**	**8.4**	**8.3**	**6.5**	**7.2**	**5.9**	**6.3**			**9.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	34.8	25.5	11.7	13.6	16.5	5.6	7.6	32.8	29.9	8.6	5.7	9.0	14.1	10.0	12.6	9.9	11.3	11.3	7.2	6.7	4.4	4.2	3.5	4.4	34.8	3.5	12.5
2	4.4	4.9	3.5	4.7	5.4	7.1	4.9	4.7	7.6	10.0	12.4	13.9	13.5	52.0	48.9	1.9	2.2	0.9	0.2	0.2	0.1	0.1	0.1	0.1	52.0	0.1	8.5
3	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.4								14.5	0.0	31.8	4.5	4.5	4.5	4.6	4.6	4.9	31.8	0.0	4.5
4	5.7	5.5	5.3	11.8	8.1	10.1	45.0	10.2	19.3	0.0	82.6	73.3	71.6	21.5	17.3	25.4	23.5	7.6	11.1	8.5	6.1	3.0	8.1	3.1	82.6	0.0	20.2
5	7.3	9.4	11.9	8.7	8.0	8.5	14.1	12.6	11.1	89.2	0.0	50.7	22.9	19.8	18.0	43.7	24.2	31.4	14.8	5.2	32.4	34.9	10.4	55.7	89.2	0.0	22.7
6	43.8	14.7	7.1	91.2	93.3	33.3	50.5	17.4	12.0	7.1	12.0	7.7	10.7	8.4	9.2	19.0	12.4	7.5	6.6	4.1	7.7	10.7	19.0	20.1	93.3	4.1	21.9
7	12.1	7.8	7.7	7.6	6.5	7.5	7.2	5.5	6.9	4.9	5.0	4.7	4.6	5.0	4.7	4.9	4.9	5.0	5.2	5.1	5.1	4.8	4.9	4.9	12.1	4.6	5.9
8	5.0	5.1	5.0	5.2	6.0	6.1	8.6	6.0	6.4	8.5	6.4	9.0	6.9	7.2	6.9	10.1	6.9	11.9	12.8	14.1	9.1	14.1	5.5	6.0	14.1	5.0	7.9
9	5.2	6.8	5.3	5.1	5.1	6.6	8.4	6.8	5.6	6.4	6.2	7.7	7.6	8.2	7.9	7.7	9.2	16.7	50.5	35.4	24.1	6.4	11.0	10.4	50.5	5.1	11.3
10	42.3	35.6	20.7	18.3	15.7	37.9	17.5	47.7	53.8	52.0	13.1	9.5	8.9	8.4	7.1	5.4	5.3	9.0	7.4	6.8	5.3	4.8	4.6	5.6	53.8	4.6	18.4
11	5.0	5.4	5.4	4.9	5.0	5.0	5.7	5.1	5.1	5.8	6.7	5.1	5.4	5.2	5.6	5.7	5.3	5.5	5.0	5.4	5.0	4.8	5.2	5.5	6.7	4.8	5.3
12	4.6	4.5	4.9	4.9	7.4	7.6	5.4	5.5	11.2	9.6	11.6	14.6	12.8	10.5	11.8	11.1	7.8	9.5	9.7	6.1	6.4	6.7	9.0	9.3	14.6	4.5	8.4
13	21.3	8.1	4.7	5.0	7.9	5.8	5.1	6.1	10.0	14.6	11.0	10.8	9.8	9.9	10.4	11.3	6.8	18.8	8.2	26.3	10.0	8.9	15.8	23.7	26.3	4.7	11.3
14	7.8	17.2	11.2	8.9	7.1	6.6	6.7	45.4	18.9	94.9	93.2	38.7	48.9	28.7	22.5	28.4	23.0	7.5	9.9	3.7	3.0	2.2	2.5	4.1	94.9	2.2	22.5
15	6.5	8.7	3.0	3.3	3.8	3.7	7.5	4.9	4.0	7.9	4.8	7.3	6.9	10.8	6.4	7.9	8.2	8.0	6.2	3.9	2.7	5.2	7.2	5.8	10.8	2.7	6.0
16	3.4	4.5	4.3	3.8	4.5	9.7	5.5	7.8	7.6	9.6	9.6	11.2	10.7	10.2	11.4	10.4	11.0	7.7	11.8	17.7	4.9	4.2	5.2	11.9	17.7	3.4	8.3
17	82.1	56.1	66.6	77.4	40.3	18.0	8.1	4.8	10.7	11.1	12.3	9.2	16.4	6.7	10.9	10.9	15.9	16.6	9.5	17.2	6.4	7.0	7.9	8.0	82.1	4.8	22.1
18	9.5	8.0	5.7	7.6	7.9	6.5	7.3	18.8	12.0	7.2	5.6	5.7	4.8	5.1	5.4	5.5	5.6	5.5	5.0	6.2	5.5	6.4	15.7	14.4	18.8	4.8	7.8
19	10.9	8.2	7.0	17.8	9.3	9.9	13.8	9.3	16.5	11.4	8.9	8.7	7.8	8.1		7.8	6.2	7.1	8.2	7.8	7.5	10.5	9.6	8.5	17.8	6.2	9.6
20	7.6	6.6	7.1	6.4	5.7	5.6	5.3	6.0	5.4	5.9	6.1	9.6	5.7	10.2	7.6	11.1	7.9	13.6	20.9	20.7	15.9	44.4	24.6	4.5	44.4	4.5	11.0
21	8.7	4.9	11.3	13.9	3.4	5.8	4.2	3.8	3.3	4.2	4.4	6.1	5.9	6.4	6.8	8.4	6.7	6.9	8.1	5.3	5.3	6.8	11.8	7.0	13.9	3.3	6.6
22	4.5	8.7	9.4	21.7	16.3	10.9	7.0	14.4	63.3	35.9	10.0	4.1	6.3	6.8	5.4	4.9	4.7	9.4	5.5	5.2	4.9	4.7	5.4	5.2	63.3	4.1	11.4
23	5.8	6.8	15.1	11.0	20.8	22.1	7.5	9.2	22.3	6.2	18.3	12.4	7.3	6.6	6.0	5.8	6.3	5.4	9.3	7.4	14.9	6.0	8.6	8.3	22.3	5.4	10.4
24	7.7	5.2	7.9	17.6	6.7	10.2	12.1	7.3	6.2	6.1	5.5	6.0	10.4	13.6	22.9	14.7	18.5	14.9	10.0	17.7	10.9	12.9	11.1	11.7	22.9	5.2	11.2
25	21.5	9.0	6.8	8.9	6.7	6.5	6.6	5.6	5.2	5.7	10.3	12.6	14.2	8.7	11.3	9.4	15.8	7.0	10.9	10.1	7.5	7.1	7.4	4.9	21.5	4.9	9.2
26	6.5	6.9	8.0	6.5	7.4	13.3	19.8	79.0	35.6	63.7	19.6	13.1	24.3	33.6	51.8	62.7	73.4	11.2	13.2	4.2	6.2	6.2	4.4	3.5	79.0	3.5	23.9
27	3.4	3.5	4.6	11.9	27.5	40.6	30.4	58.3	35.6	16.7	38.2	17.3	17.1	11.2	11.1	8.2	12.0	6.1	5.4	6.0	5.2	4.7	4.8	4.5	58.3	3.4	16.0
28	4.8	5.2	4.9	4.9	5.1	4.6	5.6	5.8	5.4	5.4	5.7	6.3	5.3	5.1	5.7	7.8	11.9	11.6	9.0	10.4	17.5	85.3	61.2	13.6	85.3	4.6	12.8
29	2.7	5.5	2.1	3.5	3.4	3.7	3.7	6.2	8.2	5.3	9.6	7.4	90.7	15.0	15.9	9.3	6.8	19.0	10.6	10.6	38.9	11.5	8.9	13.6	90.7	2.1	13.0
30	8.3	9.0	8.9	12.1	9.0	8.2	7.1	9.3	6.9	6.3	7.8	30.1	6.6	11.0	10.9	10.3	16.5	11.1	11.8	9.3	23.7	34.2	19.0	9.9	34.2	6.3	12.4
Max.	**82.1**	**56.1**	**66.6**	**91.2**	**93.3**	**40.6**	**50.5**	**79.0**	**63.3**	**94.9**	**93.2**	**73.3**	**90.7**	**52.0**	**51.8**	**62.7**	**73.4**	**31.8**	**50.5**	**35.4**	**38.9**	**85.3**	**61.2**	**55.7**	**94.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.4**	**0.5**	**0.4**	**3.3**	**0.0**	**0.0**	**4.1**	**4.6**	**5.0**	**4.7**	**1.9**	**0.0**	**0.9**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**		**0.0**	
Avg.	**13.1**	**10.2**	**9.2**	**13.9**	**12.3**	**10.9**	**11.3**	**15.2**	**15.4**	**17.9**	**15.3**	**14.5**	**16.5**	**12.5**	**13.3**	**13.1**	**12.3**	**11.2**	**10.3**	**9.7**	**10.0**	**12.2**	**10.6**	**9.8**			**12.5**

Total Hours In Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	15.0	5.7	9.0	13.4	17.5	8.9	6.4	8.7	22.0	22.7	13.8	9.5	22.1	7.4	6.3	9.0	6.4	5.7	3.9	4.8	5.1	3.4	3.9	4.1	22.7	3.4	9.8
2	4.0	3.8	3.7	3.6	3.3	3.7	3.8	3.8	3.6	3.1	3.2	3.9	3.5	3.9	6.2	6.8	5.7	5.8	4.7	3.1	3.1	3.5	3.2	3.9	6.8	3.1	4.0
3	2.8	4.2	4.1	4.8	3.7	3.1	4.7	3.4	3.9	5.0	5.5	5.8	5.8	9.2	8.6	7.9	7.5	6.3	9.5	18.1	40.9	27.2	27.5	60.6	60.6	2.8	11.7
4	48.4	40.4	26.4	17.1	9.6	8.2	7.4	12.2	5.1	7.6	4.5	4.9	4.6	4.3	4.8	5.3	5.6	5.6	5.8	4.8	6.9	5.7	5.8	6.2	48.4	4.3	10.7
5	8.4	8.7	5.2	7.3	5.6	5.5	6.6	7.0	5.3	5.8	5.3	8.1	91.0	14.9	4.1	3.4	4.3	6.5	4.1	5.5	7.9	6.8	5.7	3.4	91.0	3.4	9.9
6	5.6	4.4	4.4	3.1	3.1	3.8	4.1	4.0	4.1	3.5	3.6	4.4	4.8	8.1	4.8	4.5	4.2	4.6	3.6	6.1	6.3	5.1	4.4	4.4	8.1	3.1	4.5
7	4.2	4.0	4.1	4.3	5.4	5.5	4.1	4.3	4.0	4.0	4.1	3.7	4.4	4.7	4.1	4.7	4.7	5.4	3.6	4.0	4.3	3.8	5.0	4.8	5.5	3.6	4.4
8	5.3	6.5	6.0	6.0	4.3	3.5	7.8	7.4	7.5	3.2	4.1	7.3	4.5	4.6	5.4	5.9	4.7	4.3	3.3	3.8	3.6	3.5	5.5	3.2	7.8	3.2	5.0
9	5.2	6.7	4.2	10.4	15.3	45.4	69.1	21.2	42.7	61.0	70.5	39.6	64.2	16.4	10.4	11.8	7.9	5.5	5.0	6.6	7.6	10.9	2.9	4.3	70.5	2.9	22.7
10	3.0	3.2	3.5	3.9	4.1	4.9	4.2	5.6	4.1	3.5	3.9	5.6	6.8	7.2	6.4	5.7	5.4	4.9	6.7	5.6	9.2	8.9	13.5	8.1	13.5	3.0	5.7
11	7.8	5.6	4.8	7.2	5.7	20.3	8.8	50.0	65.0	14.8	7.5	7.6	8.1	5.9	5.3	5.1	5.1	5.7	4.4	6.3	7.0	4.2	4.0	4.3	65.0	4.0	11.3
12	4.1	4.4	4.0	6.6	6.2	7.0	4.4	11.7	49.3	47.7	49.5	61.5	24.2	8.6	12.0	13.2	13.9	21.0	12.6	9.5	4.4	11.5	4.7	3.2	61.5	3.2	16.5
13	4.3	5.8	2.5	3.5	5.3	9.4	8.5	4.6	3.8	3.9	7.7	5.0	6.6	6.7	8.2	6.3	6.1	5.6	3.5	2.9	4.2	4.5	3.3	3.6	9.4	2.5	5.2
14	3.4	4.4	4.1	3.1	3.0	3.2	4.3	3.2	3.8	7.7	6.5	7.3	6.0	10.3	10.3	6.6	5.1	6.9	7.6	8.3	6.7	3.6	10.3	9.3	10.3	3.0	6.0
15	12.7	8.1	12.3	10.1	10.1	38.5	71.6	22.5	5.6	13.9	42.4	36.0	24.0	8.4	16.4	27.3	32.5	14.9	13.0	15.9	16.3	5.0	14.4	10.9	71.6	5.0	20.1
16	7.9	4.7	7.6	7.8	5.2	3.8	4.1	3.7	4.3	3.2	4.5	4.9	8.0	3.3	5.2	5.9	3.5	3.7	7.0	4.3	4.0	4.4	3.1	3.8	8.0	3.1	4.9
17	3.9	4.9	4.8	4.5	2.2	2.5	2.2	2.5	2.6	2.1	4.0	4.8	3.5	3.6	4.3	4.8	8.0	4.9	3.3	2.6	3.2	2.9	2.5	2.3	8.0	2.1	3.6
18	3.4	4.1	4.5	3.1	3.6	4.1	6.1	6.5	5.7	4.0	6.7	4.8	5.7	8.8	4.8	10.5	6.9	12.9	3.6	2.7	3.0	5.7	3.6	4.0	12.9	2.7	5.4
19	5.0	6.4	10.4	7.0	6.4	13.4	10.9	12.5	26.7	19.4	22.7	13.6	69.3	66.0	27.8	13.9	12.3	12.2	15.2	9.1	14.8	13.5	9.2	13.5	69.3	5.0	18.0
20	17.6	10.3	10.3	8.2	11.5	6.9	6.6	12.5	9.0	8.6	12.5	15.3	7.3	6.4	7.4	5.7	6.8	8.0	7.8	6.4	8.3	7.5	7.2	6.1	17.6	5.7	8.9
21	5.4	6.5	10.8	8.1	5.4	6.3	4.4	7.5	8.4	29.4	9.4	15.1	16.5	27.6	5.0	12.6	25.5	82.1	39.0	23.3	5.3	4.9	3.9	3.8	82.1	3.8	15.3
22	4.7	4.0	6.3	4.9	3.7	6.8	4.4	5.9	6.3	87.1	54.8	42.3	65.5	8.1	7.4	8.9	6.5	17.4	67.2	31.3	26.7	42.5	18.7	26.2	87.1	3.7	23.2
23	6.9	12.7	33.5	17.9	12.8	8.1	36.2	9.2	9.1	14.9	44.7	42.9	30.1	12.6	17.5	8.4	20.4	23.0	7.1	6.1	6.6	4.7	6.5	22.8	44.7	4.7	17.3
24	26.7	6.4	45.7	13.3	6.9	11.2	7.7	8.6	15.1	10.0	15.7	3.8	10.5	7.2	7.6	7.0	7.9	5.0	19.7	6.4	7.8	5.3	8.2	6.8	45.7	3.8	11.3
25	9.2	5.3	4.7	6.0	5.4	4.6	4.5	4.5	4.8	4.6	4.2	4.3	4.1	4.2	4.4	4.4	4.7	4.7	4.7	4.6	9.1	5.9	9.8	5.1	9.8	4.1	5.3
26	7.3	8.6	9.6	7.4	9.9	6.4	9.4	13.1	8.7	10.4	8.3	7.7	9.6	6.3	6.2	10.0	7.9	11.9	9.0	6.7	4.3	5.7	3.8	5.7	13.1	3.8	8.1
27	4.6	6.0	4.4	5.3	6.9	9.0	6.4	9.7	9.2	12.9	10.1	14.6	19.5	17.2	7.4	5.7	6.5	4.0	3.9	6.0	11.5	23.6	14.3	11.7	23.6	3.9	9.6
28	11.1	7.4	10.9	12.5	30.4	40.5	9.9	9.1	9.1	8.6	12.5	6.9	10.4	10.6	11.6	9.0	7.1	7.2	7.2	5.0	7.2	4.0	4.5	4.3	40.5	4.0	10.7
29	4.4	4.7	5.0	4.8	4.5	4.5	4.6	4.3	4.5	4.3	4.2	4.2	4.6	4.9	5.4	5.1	5.4	4.8	10.6	10.2	4.7	4.4	4.6	5.3	10.6	4.2	5.2
30	8.1	9.9	13.4	5.5	6.5	5.3	13.9	19.0	7.5	3.0	3.2	4.0	7.3	42.7	34.9	59.2	13.3	5.8	9.2	16.4	24.6	21.2	20.8	19.2	59.2	3.0	15.6
31	27.6	13.6	15.2	15.7	6.2	8.1	7.8	5.7	5.2	4.7	5.3	5.4	5.9	8.4	9.5	12.7	11.7	8.8	8.2	4.9	9.1	5.4	9.2	10.7	27.6	4.7	9.4
Max.	**48.4**	**40.4**	**45.7**	**17.9**	**30.4**	**45.4**	**71.6**	**50.0**	**65.0**	**87.1**	**70.5**	**61.5**	**91.0**	**66.0**	**34.9**	**59.2**	**32.5**	**82.1**	**67.2**	**31.3**	**40.9**	**42.5**	**27.5**	**60.6**	**91.0**		
Min.	**2.8**	**3.2**	**2.5**	**3.1**	**2.2**	**2.5**	**2.2**	**2.5**	**2.6**	**2.1**	**3.2**	**3.7**	**3.5**	**3.3**	**4.1**	**3.4**	**3.5**	**3.7**	**3.3**	**2.6**	**3.0**	**2.9**	**2.5**	**2.3**		**2.1**	
Avg.	**9.3**	**7.5**	**9.5**	**7.6**	**7.4**	**10.1**	**11.4**	**9.8**	**11.8**	**14.0**	**14.7**	**13.1**	**18.0**	**11.6**	**9.0**	**9.9**	**8.8**	**10.5**	**10.1**	**8.1**	**9.2**	**8.7**	**7.9**	**9.2**			**10.3**

Total Hours In Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.6	10.2	15.4	17.4	16.3	21.8	13.3	13.3	53.1	11.9	9.5	13.2	8.9	8.3	24.6	27.8	52.2	13.3	6.0	3.7	3.3	3.1	2.9	2.9	53.1	2.9	15.0
2	3.4	2.4	6.6	24.1	16.0	8.1	11.7	9.9	9.1	8.6	4.9	3.7	4.3	9.3	3.6	4.7	6.5	2.6	2.4	4.3	2.3	2.4	2.8	3.5	24.1	2.3	6.6
3	2.3	2.9	4.5	5.7	4.0	4.3	3.3	11.2	14.2	16.7	72.4	12.2	28.2	23.7	8.8	10.2	15.0	6.2	9.8	10.2	10.4	5.9	8.0	6.9	72.4	2.3	12.4
4	6.3	4.1	3.9	4.0	4.1	4.1	3.9	4.0	3.8	4.0	4.2	4.0	4.8	5.0	4.1	4.3	4.3	4.6	4.9	7.4	6.1	5.3	5.0	4.4	7.4	3.8	4.6
5	4.0	3.8	3.9	3.6	3.5	4.4	5.3	5.1	4.0	3.9	5.8	5.6	4.4	5.3	4.0	4.8	5.5	4.3	5.3	4.8	5.3	6.9	5.3	6.2	6.9	3.5	4.8
6	5.2	3.8	3.9	3.6	3.8	5.2	5.5	4.3	4.5	4.0	3.9	3.9	4.0	3.8	4.0	4.5	4.8	4.1	4.4	4.8	4.3	4.2	10.2	4.8	10.2	3.6	4.6
7	6.9	16.5	5.9	5.4	4.3	4.5	4.0	3.9	5.4	5.4	5.6	5.6	4.5	7.0	9.3	8.8	5.4	6.2	12.0	5.0	8.6	6.0	9.0	46.2	46.2	3.9	8.4
8	17.7	11.2	10.0	5.2	6.0	4.8	4.9	4.3	4.0	3.9	4.1	4.1	6.0	5.1	5.3	4.7	4.8	5.3	4.2	4.6	5.2	4.5	5.8	6.3	17.7	3.9	5.9
9	4.6	5.8	5.0	5.8	5.2	6.6	5.9	4.7	6.1	6.3	5.9	4.0	6.3	4.1	4.1	3.9	4.6	3.8	5.5	7.3	5.7	26.4	20.7	58.2	58.2	3.8	9.0
10	17.1	30.4	7.0	5.6	5.0	3.2	5.2	3.7	4.6	5.4	3.2	3.4	6.5	2.7	6.7	2.4	2.6	10.1	5.9	9.5	5.8	6.6	5.2	6.1	30.4	2.4	6.8
11	6.9	4.5	8.6	6.9	5.3	10.7	7.1	5.1	5.1	6.8	6.0	5.9	5.0	5.5	11.6	6.1	4.4	7.2	5.9	7.8	11.0	22.1	13.0	10.1	22.1	4.4	7.9
12	16.9	9.6	28.7	57.5	61.9	44.8	26.7	23.3	14.9	32.7	12.1	29.6	12.8	10.2	17.6	7.2	5.0	6.1	7.0	10.8	9.5	9.5	5.0	4.9	61.9	4.9	19.3
13	4.8	4.4	3.9	4.2	7.0	5.0	4.9	4.0	4.3	4.1	4.9	4.7	7.2	25.9	31.3	39.8	54.6	7.5	7.7	6.4	4.3	6.2	6.1	8.3	54.6	3.9	10.9
14	5.1	6.1	5.2	5.9	6.7	5.3	4.6	7.9	17.4	11.7	12.9	9.8	8.0	10.2	7.5	18.6	19.1	5.6	5.6	32.4	36.6	55.3	23.5	31.4	55.3	4.6	14.7
15	8.7	4.7	11.3	8.6	5.4	3.6	10.5	5.7	8.4	4.5	5.3	5.0	5.2	5.9	3.7	4.8	6.6	8.3	3.2	4.7	4.7	4.6	4.5	6.0	11.3	3.2	6.0
16	3.1	2.8	2.9	3.2	3.1	3.8	3.3	3.1	3.1	3.1	3.4	3.3	3.5	2.6	2.6	2.9	4.4	3.8	3.1	2.8	2.8	2.7	2.8	3.5	4.4	2.6	3.2
17	4.0	3.9	6.2	4.4	2.9	3.6	3.8	3.3	4.2	3.6	3.3	3.8	4.3	2.8	3.2	3.6	4.7	3.6	9.8	6.9	3.8	3.7	2.3	4.2	9.8	2.3	4.2
18	6.3	4.0	4.5	4.4	6.5	6.4	8.0	7.1	4.0	4.1	5.1	4.4	4.3	3.0	3.3	7.1	5.0	7.1	3.0	6.1	14.9	90.9	7.8	12.0	90.9	3.0	9.6
19	7.4	12.0	9.9	44.3	9.9	20.5	8.9	23.9	6.4	13.7	5.9	10.0	4.2	6.5	5.4	8.7	5.9	8.6	11.5	7.8	6.7	12.5	6.5	5.3	44.3	4.2	10.9
20	4.7	4.1	4.2	4.0	4.2	4.4	3.7	3.6	3.7	3.4	3.6	3.6	3.5	3.8	3.4	4.0	4.2	4.2	6.4	8.4	10.9	17.1	12.3	7.6	17.1	3.4	5.5
21	10.3	4.9	8.1	6.5	4.3	4.2	9.3	4.1	5.1	5.3	4.5	4.6	4.5	4.1	4.2	6.0	4.8	5.1	4.0	4.2	4.0	4.8	4.1	5.7	10.3	4.0	5.3
22	5.6	11.0	4.7	6.2	9.9	19.3	16.6	11.1	8.6	5.0	3.8	4.0	4.1	4.3	4.7	5.5	6.5	6.7	5.8	5.2	4.1	5.0	12.0	7.1	19.3	3.8	7.4
23	6.5	4.1	5.3	7.3	9.1	3.9	5.2	7.9	13.4	8.7	9.5	11.7	9.4	9.6	0.4	0.4	0.4	0.1	0.2	2.2	7.7	5.6	2.5	5.6	13.4	0.1	5.7
24	7.3	8.9	16.5	4.8	19.9	12.9	17.2	13.1	6.2	5.8	3.7	5.4	11.7	4.2	4.0	4.3	4.3	4.3	4.4	3.8	5.1	4.7	4.3	4.0	19.9	3.7	7.5
25	3.9	3.9	4.7	3.9	4.2	3.8	5.2	6.9	7.8	7.4	14.3	9.0	5.4	7.7	7.6	8.3	6.0	6.3	30.7	31.4	18.4	38.4	14.0	6.4	38.4	3.8	10.6
26	5.5	4.4	11.6	10.9	13.6	36.4	30.5	19.0	11.1	7.9	6.0	5.2	7.1	9.2	10.7	6.8	11.0	5.0	5.1	5.9	5.0	4.8	5.7	5.3	36.4	4.4	10.2
27	4.1	6.3	4.2	4.6	4.1	3.7	3.8	3.7	3.8	4.1	4.3	4.4	4.8	4.4	4.2	4.6	5.3	4.4	4.1	4.0	4.0	3.7	4.1	5.2	6.3	3.7	4.3
28	4.5	4.1	6.3	5.6	7.9	8.5	12.5	7.1	9.3	6.7	10.0	4.7	3.8	3.8	7.1	5.0	4.8	4.6	4.5	4.9	4.2	5.0	5.0	4.6	12.5	3.8	6.0
29	5.5	5.2	8.0	11.9	11.5	5.6	6.5	4.5	4.8	4.2	5.0	4.4	4.0	4.8	5.0	4.7	4.6	4.3	4.2	4.6	5.3	4.3	4.6	4.6	11.9	4.0	5.5
30	4.3	4.6	3.9	4.3	4.4	5.1	4.6	5.0	4.1	4.4	4.4	4.7	4.3	4.1	4.2	4.1	4.7	4.4	5.2	5.4	3.8	4.1	3.9	3.9	5.4	3.8	4.4
Max.	**17.7**	**30.4**	**28.7**	**57.5**	**61.9**	**44.8**	**30.5**	**23.9**	**53.1**	**32.7**	**72.4**	**29.6**	**28.2**	**25.9**	**31.3**	**39.8**	**54.6**	**13.3**	**30.7**	**32.4**	**36.6**	**90.9**	**23.5**	**58.2**	**90.9**		
Min.	**2.3**	**2.4**	**2.9**	**3.2**	**2.9**	**3.2**	**3.3**	**3.1**	**3.1**	**3.1**	**3.2**	**3.3**	**3.5**	**2.6**	**0.4**	**0.4**	**0.4**	**0.1**	**0.2**	**2.2**	**2.3**	**2.4**	**2.3**	**2.9**		**0.1**	
Avg.	**6.7**	**6.8**	**7.5**	**9.7**	**9.0**	**9.3**	**8.5**	**7.8**	**8.5**	**7.2**	**8.2**	**6.6**	**6.5**	**6.9**	**7.2**	**7.6**	**9.1**	**5.6**	**6.4**	**7.6**	**7.5**	**12.5**	**7.3**	**9.7**			**7.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (Climatronics)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	5.4	5.4	5.9	8.4	8.0	8.6	13.4	6.9	8.7	12.2	13.3	10.3	6.6	16.7	10.6	6.5	8.2	28.4	57.6	11.3	11.6	4.7	3.6	57.6	3.6	11.6
2	5.3	8.3	10.6	8.2	15.7	12.9	7.1	4.5	7.2	25.9	73.9	74.7	85.9	68.4	16.6	9.1	12.3	34.4	95.8	75.0	24.4	10.5	5.6	15.4	95.8	4.5	29.5
3	20.5	6.4	6.1	4.3	4.0	3.9	4.1	4.3	4.2	5.1	4.8	4.3	5.1	5.9	14.3	11.4	23.4	51.5	26.2	19.3	16.5	26.7	10.2	14.1	51.5	3.9	12.4
4	21.7	13.8	11.3	9.0	10.7	10.8	31.4	10.1	5.2	7.1	7.5	10.1	9.5	5.9	7.1	5.2	5.4	4.9	5.0	4.4	5.1	5.9	7.1	6.8	31.4	4.4	9.2
5	6.1	7.7	8.3	10.6	11.5	6.8	5.5	4.7	5.7	8.9	5.8	4.2	4.0	4.5	4.4	5.1	4.9	4.5	4.3	4.2	5.0	4.2	4.3	4.0	11.5	4.0	5.8
6	4.2	4.5	4.2	4.2	4.1	4.2	4.0	4.1	4.0	4.0	3.9	3.7	3.7	3.9	4.2	4.6	9.1	19.8	27.0	7.6	4.2	10.4	13.7	16.5	27.0	3.7	7.2
7	11.9	17.6	12.3	6.0	12.3	6.9	8.2	13.0	19.7	30.2	12.1	3.8	6.2	3.7	4.0	3.6	3.6	3.6	3.8	4.3	4.5	4.2	3.8	4.3	30.2	3.6	8.5
8	4.6	4.7	14.2	4.4	6.8	6.8	6.2	7.0	8.9	5.3	6.4	5.3	3.8	7.4	6.6	11.5	48.1	23.5	5.6	16.5	3.8	4.9	3.5	4.2	48.1	3.5	9.2
9	32.9	48.7	41.1	14.6	17.9	5.5	9.6	6.0	5.3	4.0	6.3	10.8	5.2	8.7	4.4	5.4	4.9	5.3	4.6	4.6	5.2	4.3	5.4	5.6	48.7	4.0	11.1
10	7.5	5.7	4.5	9.2	7.7	13.9	9.5	11.3	6.3	26.5	5.9	16.9	7.3	9.8	2.7	3.9	6.4	5.6	6.0	5.0	4.7	2.7	3.6	2.6	26.5	2.6	7.7
11	3.0	2.5	2.6	2.6	5.6	2.7	2.8	7.3	6.2	14.2															14.2	2.5	5.0
12																											
13																			4.1	6.7	6.2	6.1	4.0	5.3	6.7	4.0	5.4
14	6.3	3.6	6.3	6.5	6.3	5.6	9.1	4.2	3.6																9.1	3.6	5.7
15	5.6	6.4	3.2	3.0	2.7	2.9	4.3	4.8	2.8	4.4	5.8	4.6	3.4	3.2	2.8	2.8	2.8	3.0	3.1	3.0	3.6	4.3	3.2	7.5	7.5	2.7	3.9
16	3.4	3.3	3.1	3.2	3.2	2.7	3.3	3.3	4.2	3.8	3.6	4.2	4.2	4.8	3.2	3.6	2.9	3.5	3.3	3.0	2.8	2.6	3.3	2.5	4.8	2.5	3.4
17	4.2	4.1	2.3	2.5	2.9	3.5	3.5	3.1	2.9	4.0	3.6	4.1	3.1	3.6	4.7	3.7	2.9	2.6	3.2	5.5	4.2	7.4	6.1	7.9	7.9	2.3	4.0
18	6.1	5.6	9.5	4.5	3.1	5.2	9.0	4.5	4.1	4.0	3.1	10.4	7.7	10.4	6.6	9.0	4.9	4.9	4.3	4.5	3.4	6.8	5.5	5.6	10.4	3.1	5.9
19	4.2	3.4	5.7	6.4	4.3	4.2	3.6	4.8	3.6	4.3	3.8	5.2	4.3	5.9	4.3	3.8	4.7	4.9	5.5	3.6	8.1	8.1	7.9	9.1	9.1	3.4	5.2
20	10.4	7.5	8.3	46.8	9.5	7.9	6.1	8.1	6.2	5.0	3.2	3.3	6.0	7.2	4.2	5.2	6.3	4.5	4.0	4.5	6.8	7.6	5.9	6.3	46.8	3.2	7.9
21	7.8	3.5	3.4	3.4	3.5	3.3	8.9	6.0	5.1	4.0	8.9	15.0	5.1	6.3	11.1	7.4	5.7	5.4	3.8	3.8	4.5	9.5	20.5	5.4	20.5	3.3	6.7
22	4.6	5.4	3.6	3.4	3.4	3.5	3.9	3.5	4.2	3.9	4.3	3.3	3.5	4.5	3.6	3.5	4.0	3.6	3.5	3.8	4.2	27.4	5.4	5.0	27.4	3.3	5.0
23	5.2	4.7	6.7	6.8	16.4	25.6	23.9	7.4	8.1	6.8	9.0	12.3	9.1	4.1	3.1	11.6	6.2	14.0	27.0	64.4	25.0	77.8	42.7	58.2	77.8	3.1	19.8
24	26.4	31.7	12.0	6.3	8.8	7.5	5.3	7.0	3.8	5.2	4.7	3.8	3.5	2.9	2.9	2.7	3.4	5.4	4.8	3.1	3.0	3.6	3.7	2.9	31.7	2.7	6.8
25	3.2	3.6	4.4	2.5	2.6	3.6	4.6	3.5	5.3	3.8	5.6	3.0	2.6	2.1	2.8	2.4	2.7	2.5	3.4	3.9	4.4	5.1	4.2	4.8	5.6	2.1	3.6
26	6.4	10.9	5.9	10.6	21.0	25.9	71.9	20.3	10.1	11.3	8.8	16.7	8.0	9.3	13.7	11.1	11.8	3.9	3.7	3.7	3.9	3.6	3.9	3.2	71.9	3.2	12.5
27	3.3	3.1	3.3	3.6	3.2	3.0	3.1	3.3	3.4	3.7	4.7	3.5	3.6	4.1	4.3	4.9	5.5	6.3	6.4	14.4	7.9	18.8	8.2	11.1	18.8	3.0	5.7
28	4.1	10.5	7.0	5.8	10.5	18.1	4.6	4.6	4.8	3.5	6.6	5.3	6.1	3.1	5.1	7.4	10.9	3.4	8.1	4.8	4.2	4.1	3.8	3.9	18.1	3.1	6.3
29	2.8	2.6	3.2	2.4	2.2	2.0	1.7	2.0	2.8	2.8	6.3	4.3	8.7	4.3	2.8	10.1	9.3	3.0	2.5	2.2	2.9	2.5	2.2	3.0	10.1	1.7	3.7
30	2.4	6.3	3.5	2.9	7.6	7.2	6.6	9.5	5.0	5.1	14.3	5.9	7.3	13.4	18.3	15.0	28.9	11.2	13.0	12.3	12.9	10.5	4.2	4.2	28.9	2.4	9.5
31	6.4	4.1	2.4	3.7	3.5	3.3	3.9	3.0	4.3	3.0	5.0	3.4	6.0	3.4	6.3	4.3	3.8	3.5	3.7	4.3	5.0	6.0	5.1	6.4	6.4	2.4	4.3
Max.	**32.9**	**48.7**	**41.1**	**46.8**	**21.0**	**25.9**	**71.9**	**20.3**	**19.7**	**30.2**	**73.9**	**74.7**	**85.9**	**68.4**	**18.3**	**15.0**	**48.1**	**51.5**	**95.8**	**75.0**	**25.0**	**77.8**	**42.7**	**58.2**	**95.8**		
Min.	**2.4**	**2.5**	**2.3**	**2.4**	**2.2**	**2.0**	**1.7**	**2.0**	**2.8**	**2.8**	**3.1**	**3.0**	**2.6**	**2.1**	**2.7**	**2.4**	**2.7**	**2.5**	**2.5**	**2.2**	**2.8**	**2.5**	**2.2**	**2.5**		**1.7**	
Avg.	**8.2**	**8.5**	**7.4**	**7.0**	**7.6**	**7.5**	**9.5**	**6.5**	**5.6**	**7.8**	**8.9**	**9.5**	**8.6**	**8.0**	**6.7**	**6.6**	**8.9**	**9.2**	**11.2**	**12.5**	**7.1**	**10.6**	**7.2**	**8.2**			**8.3**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.4	3.1	3.8	3.1	2.8	3.7	3.6	3.4	3.5	3.7	2.9	2.8	3.9	2.2	3.1	3.2	2.9	5.4	3.0	3.4	4.2	2.6	2.2	3.7	5.4	2.2	3.4
2	2.7	5.1	4.8	2.8	4.3	2.6	5.5	3.4	2.2	3.0	4.6	3.8	2.5	2.9	2.2	2.9	2.5	2.7	2.7	3.0	3.5	1.7	3.0	3.1	5.5	1.7	3.2
3	2.8	2.3	3.1	4.6	2.7	2.4	3.0	2.1	2.5	1.4	1.4	2.3	2.3	2.0	2.6	4.3	7.1	3.1	2.2	2.6	2.5	3.9	4.5	3.7	7.1	1.4	3.0
4	1.9	3.4	3.0	4.7	5.8	3.9	4.2	3.3	3.7	3.9	4.5	3.9	5.7	13.8	6.3	6.6	9.9	30.6	18.9	28.5	7.7	10.3	14.0	8.7	30.6	1.9	8.6
5	27.2	48.4	3.2	4.1	3.1	3.7	2.3	3.4	2.4	4.5	5.4	5.3	3.4	3.3	2.5	3.4	2.3	2.6	4.0	3.0	5.5	2.9	3.7	3.9	48.4	2.3	6.4
6	3.4	8.2	2.6	3.6	6.5	4.0	2.8	3.1	3.7	4.5	3.8	3.5	5.0	3.8	3.1	2.7	3.0	4.4	3.5	2.4	4.5	2.8	3.1	2.7	8.2	2.4	3.8
7	3.0	3.5	3.8	4.8	4.6	3.1	2.8	3.0	2.8	2.0	3.1	3.2	4.0	3.7	3.5	2.8	2.5	2.1	2.8	3.6	3.2	4.2	3.2	3.3	4.8	2.0	3.3
8	2.0	2.4	2.5	6.9	9.1	5.6	2.9	2.9	2.1	2.8	2.0	3.1	2.9	2.8	4.4	3.1	2.9	3.6	3.2	2.2	2.6	3.2	3.3	3.5	9.1	2.0	3.4
9	3.3	2.5	2.6	3.3	2.7	2.9	4.5	3.4	2.3	2.6	3.4	4.7	18.1	11.1	5.1	11.4	5.0	4.9	4.1	6.2	4.1	4.2	4.3	4.3	18.1	2.3	5.0
10	5.8	6.2	5.6	8.8	6.3	3.4	5.6	5.5	6.3	7.9	10.0	5.2	3.7	3.8	4.0	4.0	3.8	3.7	3.3	3.5	3.6	3.6	3.7	3.8	10.0	3.3	5.0
11	3.7	3.7	3.8	3.8	3.5	3.2	3.2	3.2	3.1	3.3	3.2	3.0	2.9	3.1	3.1	3.1	2.9	2.9	3.0	3.0	3.0	3.3	3.3	3.1	3.8	2.9	3.2
12	3.3	3.2	3.2	2.9	3.2	3.1	3.4	3.4	3.4	3.3	3.5	3.4	2.9	3.0	3.0	3.1	3.1	3.1	3.3	3.2	3.4	3.6	3.6	8.7	8.7	2.9	3.5
13	5.9	4.1	3.7	3.7	4.0	4.2	4.4	5.1	5.6	4.3	4.6	8.5	5.9	7.7	18.7	13.4	0.2	0.1	11.3	5.2	7.7	8.6	7.3	3.8	18.7	0.1	6.2
14	3.1	3.1	2.7	3.3	3.5	4.7	5.2	3.8	5.2	3.5	4.7	6.5	3.9	3.1	2.4	2.6	1.9	3.2	1.5	1.9	1.7	2.5	3.5	2.4	6.5	1.5	3.3
15	1.7	2.9	2.3	2.3	1.9	2.3	2.9	2.4	4.1	2.8	2.3	2.3	4.1	2.2	2.6	2.0	1.4	2.8	3.0	4.9	6.3	5.0	12.3	5.2	12.3	1.4	3.4
16	5.7	10.7	43.6	13.6	30.4	14.6	7.5	3.2	10.7	9.4	4.0	3.1	3.4	3.1	3.1	2.9	3.1	3.1	3.0	3.0	3.2	3.1	2.9	3.0	43.6	2.9	8.1
17	3.1	3.3	3.5	3.9	3.5	3.6	5.3	6.0	3.9	4.6	5.8	7.2	3.4								4.6	3.8	3.9	3.5	7.2	3.1	4.3
18	2.9	3.5	3.4	6.7	3.8	2.5	4.0	3.5	3.2	3.8	32.0	9.9	6.4	7.2	8.1	13.8	3.7	2.0	3.1	6.8	7.7	2.5	3.7	3.4	32.0	2.0	6.1
19	2.3	2.1	3.8	4.4	17.9	13.7	5.7	16.6	9.9	13.7	19.6	9.7	9.8	7.8	4.8	6.3	6.8	6.3	4.9	11.6	12.4	12.6	5.6	9.4	19.6	2.1	9.1
20	6.8	5.8	3.8	3.7	3.4	3.4	3.1	2.8	3.0	3.0	4.1	5.4	16.7	30.2	10.9	9.5	19.3	15.0	8.0	3.8	3.2	5.0	4.3	2.8	30.2	2.8	7.4
21	3.1	3.3	3.4	3.8	3.3	2.6	6.1	7.2	5.2	6.3	5.4	8.3	5.1	7.3	7.9	7.2	8.9	13.2	11.7	8.1	6.8	30.9	43.6	4.3	43.6	2.6	8.9
22	5.8	4.1	6.6	4.2	18.3	21.6	9.0	5.6	7.3	5.0	5.3	5.7	6.1	18.4	5.0	2.0	2.4	2.2	4.7	2.6	5.6	3.4	1.9	4.8	21.6	1.9	6.6
23	3.5	5.4	15.2	4.9	4.5	4.6	3.1	3.5	3.3	4.3	3.3	3.3	7.0	3.5	3.3	2.6	2.4	2.5	3.0	6.8	4.8	5.0	3.8	3.2	15.2	2.4	4.4
24	3.1	2.9	2.7	3.2	2.1	2.5	3.1	6.0	7.5	2.6	2.6	5.9	4.9	4.3	6.2	3.7	3.8	2.5	3.0	3.8	8.7	11.4	6.3	7.6	11.4	2.1	4.6
25	8.4	4.5	43.6	6.8	10.1	4.6	7.0	6.8	3.3	3.0	4.2	4.3	3.3	3.3	3.2	3.8	4.5	4.9	3.7	3.3	3.0	2.8	2.9	3.1	43.6	2.8	6.2
26	3.0	3.0	3.1	3.2	3.3	3.6	3.3	3.5	3.8	3.7	3.2	3.5	3.6	4.0	3.7	4.1	3.7	3.6	3.8	3.7	3.6	3.6	5.4	5.6	5.6	3.0	3.7
27	3.1	3.4	3.2	3.3	3.0	3.0	3.2	3.4	3.4	3.6	3.6	3.2	3.4	3.0	2.9	3.1	3.2	2.9	3.3	3.4	3.5	3.4	3.3	3.0	3.6	2.9	3.2
28	3.1	3.4	2.9	3.0	2.8	3.2	2.8	2.7	3.0	3.1	3.5	3.4	3.7	4.5	4.1	3.7	3.4	4.2	4.1	4.8	4.7	4.6	3.0	3.2	4.8	2.7	3.5
29	2.9	3.7	3.7	4.3	3.8	4.0	3.9	3.4	3.5	2.9	3.1	3.2	3.5	3.1	3.1	3.4	3.0	3.1	3.5	3.5	3.8	3.6	3.4	3.6	4.3	2.9	3.5
30	11.0	3.2	3.2	3.4	3.2	3.5	3.3	3.7	3.4	3.9	4.9	5.9	6.3	7.2											11.0	3.2	4.7
31																											
Max.	**27.2**	**48.4**	**43.6**	**13.6**	**30.4**	**21.6**	**9.0**	**16.6**	**10.7**	**13.7**	**32.0**	**9.9**	**18.1**	**30.2**	**18.7**	**13.8**	**19.3**	**30.6**	**18.9**	**28.5**	**12.4**	**30.9**	**43.6**	**9.4**	**48.4**		
Min.	**1.7**	**2.1**	**2.3**	**2.3**	**1.9**	**2.3**	**2.3**	**2.1**	**2.1**	**1.4**	**1.4**	**2.3**	**2.3**	**2.0**	**2.2**	**2.0**	**0.2**	**0.1**	**1.5**	**1.9**	**1.7**	**1.7**	**1.9**	**2.4**		**0.1**	
Avg.	**4.7**	**5.5**	**6.5**	**4.5**	**5.9**	**4.8**	**4.2**	**4.3**	**4.2**	**4.2**	**5.5**	**4.8**	**5.3**	**6.0**	**4.7**	**4.8**	**4.3**	**5.0**	**4.6**	**5.1**	**4.8**	**5.4**	**5.8**	**4.3**			**5.0**

Total Hours in Month 744 **Hours Data Available** 703 **Data Recovery** 94.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1																											
2																											
3																											
4																											
5																											
6																			4.8	6.3	13.5	10.5	6.6	4.1	13.5	4.1	7.6
7	6.6	6.4	3.9	3.9	7.9	11.3	41.8	3.9	8.5	13.0	30.4	55.4	11.6	8.5	14.8	9.5	7.6	23.1	9.5	7.2	13.2	16.1	6.3	12.9	55.4	3.9	13.9
8	7.2	7.4	7.3	8.7	5.8	3.7	2.9	3.7	3.0	3.0	3.1	4.2	4.1	4.7	4.8	5.4	4.4	4.1	4.7	5.0	4.1	3.6	7.9	4.8	8.7	2.9	4.9
9	6.7	9.0	6.2	7.4	5.5	6.8	3.7	6.3	4.0	5.0	7.0	6.2	7.1	5.7	3.5	5.6	5.6	8.0	9.5	11.9	17.5	28.1	29.2	9.7	29.2	3.5	9.0
10	14.0	15.8	14.4	27.6	20.2	19.3	5.8	5.0	4.5	4.8	7.4	5.3	5.4	6.0	6.0	7.6	5.6	6.6	5.1	7.1	6.0	4.4	4.8	3.8	27.6	3.8	8.9
11	17.6	37.8	6.0	7.6	5.2	6.5	8.8	9.4	5.7	6.4	9.1	8.2	11.2	4.4	4.1	3.8	3.2	3.2	3.4	3.4	3.5	3.7	3.5	3.5	37.8	3.2	7.5
12	3.6	3.5	3.3	3.4	3.2	3.3	3.4	3.3	3.0	3.5	3.7	3.8	3.7	3.5	4.0	5.2	4.2	3.6	3.3	5.3	6.1	5.9	11.5	11.1	11.5	3.0	4.5
13	10.6	5.5	5.0	4.2	6.5	6.7	5.2	4.6	5.6	5.6	15.4	16.3	10.9	9.5	9.4	5.7	4.9	3.8	3.9	4.0	3.6	3.8	4.3	5.7	16.3	3.6	6.7
14	3.7	3.9	4.2	4.0	4.6	4.4	4.0	3.4	4.0	4.8	4.8	4.0	3.7	4.3	4.2	4.0	3.4	4.5	5.9	7.1	4.4	7.7	24.9	14.6	24.9	3.4	5.8
15	9.4	7.7	38.1	56.8	5.1	4.9	3.3	5.0	5.4	5.4	4.3	5.4	5.9	7.4	3.2	3.5	2.3	2.4	3.0	2.3	2.9	3.7	5.8	23.5	56.8	2.3	9.0
16	60.4	32.6	67.4	28.6	31.4	9.0	10.1	10.5	6.5	6.7	8.2	4.1	5.5	5.2	5.0	9.6	10.3	32.0	11.2	46.2	22.1	7.8	8.4	39.2	67.4	4.1	19.9
17	34.5	40.1	42.8	17.0	8.0	9.5	19.1	7.1	11.7	15.8	27.3	19.5	12.2	8.7	9.6	5.4	10.0	4.6	3.9	4.6	7.1	7.4	8.6	4.2	42.8	3.9	14.1
18	6.1	7.6	6.0	5.5	6.4	13.0	11.7	9.0	7.2	4.9	6.8	11.7	8.8	28.4	26.9	42.8	41.8	49.9	47.5	27.0	7.3	6.3	3.0	2.6	49.9	2.6	16.2
19	2.7	2.5	3.8	4.1	4.8	4.2	3.7	3.9	3.9	3.2	3.5	3.0	2.5	3.0	3.3	3.4	2.5	2.5	2.6	3.5	3.7	5.1	3.5	3.5	5.1	2.5	3.4
20	2.7	4.7	7.5	4.1	5.8	4.2	4.5	3.9	3.7	3.5	3.3	3.0	3.4	3.7	4.2	3.4	3.7	3.0	3.7	4.3	5.1	3.8	3.3	4.1	7.5	2.7	4.0
21	4.4	3.7	3.9	2.9	3.0	2.4	2.6	3.0	4.3	3.6	4.8	3.0	3.3	3.8	3.0	3.1	3.0	3.6	2.8	4.9	4.6	4.6	4.6	2.5	4.9	2.4	3.6
22	3.3	3.6	3.6	2.5	3.6	6.8	3.0	2.8	4.2	2.6	3.5	3.5	5.4	5.3	3.6	3.7	6.0	3.7	3.2	3.6	2.9	2.0	4.1	4.3	6.8	2.0	3.8
23	4.4	5.9	5.6	4.5	4.2	3.1	2.9	3.3	3.6	4.0	3.6	4.8	4.2	3.3	2.9	3.2	2.8	3.0	2.6	5.2	5.3	3.5	4.9	3.6	5.9	2.6	3.9
24	2.0	3.0	3.0	4.6	4.4	2.8	2.5	2.5	2.0	3.3	2.6	4.0	2.7	3.4	2.9	3.5	2.8	2.9	3.2	3.0	3.4	4.3	2.8	4.4	4.6	2.0	3.2
25	3.9	5.4	4.6	4.3	4.9	5.3	5.5	5.6	5.2	2.8	4.6	5.0	3.4	3.8	4.4	2.9	5.0	6.5	4.7	3.0	2.5	3.8	3.5	3.3	6.5	2.5	4.3
26	4.0	4.6	4.2	4.6	8.0	4.7	5.6	4.5	4.6	3.6	5.5	6.6	8.6	3.6	3.4	2.2	3.1	2.6	3.3	2.4	3.0	2.6	1.9	2.2	8.6	1.9	4.1
27	2.3	2.1	2.1	2.9	2.7	3.6	3.1	3.1	2.7	2.9	6.3	4.9	6.3	7.0	7.2	5.6	4.4	3.3	4.6	7.8	6.9	6.4	4.5	4.7	7.8	2.1	4.5
28	3.6	2.7	4.8	3.2	4.8	3.8	3.9	5.1	3.0	4.1	5.6	4.9	3.0	4.0	4.3	5.6	6.2	5.0	3.7	10.4	6.0	6.9	5.8	4.0	10.4	2.7	4.8
Max.	**60.4**	**40.1**	**67.4**	**56.8**	**31.4**	**19.3**	**41.8**	**10.5**	**11.7**	**15.8**	**30.4**	**55.4**	**12.2**	**28.4**	**26.9**	**42.8**	**41.8**	**49.9**	**47.5**	**46.2**	**22.1**	**28.1**	**29.2**	**39.2**	**67.4**		
Min.	**2.0**	**2.1**	**2.1**	**2.5**	**2.7**	**2.4**	**2.5**	**2.5**	**2.0**	**2.6**	**2.6**	**3.0**	**2.5**	**3.0**	**2.9**	**2.2**	**2.3**	**2.4**	**2.6**	**2.3**	**2.5**	**2.0**	**1.9**	**2.2**		**1.9**	
Avg.	**9.7**	**9.8**	**11.2**	**9.7**	**7.1**	**6.3**	**7.1**	**4.9**	**4.8**	**5.1**	**7.8**	**8.5**	**6.0**	**6.2**	**6.1**	**6.6**	**6.5**	**8.3**	**6.5**	**8.1**	**6.7**	**6.6**	**7.1**	**7.7**			**7.3**

Total Hours in Month 672 **Hours Data Available** 534 **Data Recovery** 79.5%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.5	5.4	4.1	3.5	4.8	3.4	4.9	3.6	4.2	4.9	4.1	5.6	3.7	4.8	4.0	4.1	4.9	4.8	2.8	4.7	3.3	3.0	3.2	4.2	6.5	2.8	4.3
2	3.3	4.2	3.4	3.0	3.4	3.5	3.2	2.7	2.6	3.6	4.3	3.6	2.7	3.7	3.3	3.0	3.7	3.9	3.4	2.6	2.9	3.1	3.3	3.1	4.3	2.6	3.3
3	3.9	3.0	2.9	4.8	4.1	4.0	3.2	3.4	3.9	3.6	7.3	9.4	5.6	4.8	4.6	5.4	3.7	6.4	6.5	4.6	4.5	11.7	8.6	4.9	11.7	2.9	5.2
4	4.9	2.6	3.5	4.8	4.0	2.5	3.8	4.0	4.5	4.8	4.8	3.7	3.4	2.7	2.8	2.8	3.0	2.7	3.0	3.3	3.4	3.9	3.5	3.1	4.9	2.5	3.6
5	3.7	3.5	3.8	3.2	3.3	3.3	2.7	2.8	2.7	2.8	3.6	4.3	4.5	3.5	3.3	3.5	3.6	3.5	3.0	3.1	2.5	2.7	3.5	3.1	4.5	2.5	3.3
6	3.1	3.6	3.7	3.1	3.0	2.7	2.6	2.7	2.8	3.3	3.3	3.0	3.1	3.5	3.2	3.3	3.1	3.7	3.1	3.3	3.5	3.7	3.4	4.5	4.5	2.6	3.3
7	4.2	3.7	3.8	2.9	2.7	4.6	4.0	3.6	4.1	3.4	4.0	4.5	3.9	3.2	3.3	3.4	4.0	3.7	3.0	3.0	2.9	2.6	2.5	2.7	4.6	2.5	3.5
8	2.9	2.7	2.5	2.7	3.1	3.0	2.8	2.8	3.3	3.4	3.5	3.2	3.0	3.8	4.2	3.8	3.1	2.9	2.8	3.0	3.0	3.0	2.9	3.4	4.2	2.5	3.1
9	3.4	4.9	5.1	3.7	3.1	3.3	3.4	4.9	5.0	4.6	5.4	4.1	4.0	3.8	4.0	4.4	3.9	3.8	3.0	3.0	3.0	2.8	2.9	3.0	5.4	2.8	3.9
10	3.2	3.9	2.7	3.6	3.0	3.1	5.3	6.4	4.3	4.9	6.6	5.2	5.5	4.8	5.7	4.2	3.7	3.4	3.0	3.3	3.7	3.2	4.4	3.4	6.6	2.7	4.2
11	4.6	5.5	4.2	4.7	4.5	4.8	2.9	3.2	4.8	3.5	2.9	3.3	4.0	3.8	3.8	3.6	3.8	3.2	3.5	3.3	3.3	3.6	4.1	4.0	5.5	2.9	3.9
12	4.2	2.9	3.2	3.2	3.9	4.8	4.7	4.1	3.2	3.0	3.2	3.5	3.5	4.0	3.6	4.3	3.9	3.2	3.4	4.5	3.1	2.7	2.4	3.2	4.8	2.4	3.6
13	3.4	3.6	2.9	3.0	2.3	2.3	3.1	2.8	2.8	2.5	3.4	2.9	3.3	3.1	3.2	4.3	4.1	4.5	3.4	3.0	3.0	3.4	4.7	6.1	6.1	2.3	3.4
14	3.5	2.9	3.1	2.8	3.9	2.9	3.1	3.1	3.3	4.0	3.1	3.4	3.0	3.5	3.4	4.2	3.9	3.1	3.6	3.0	3.5	3.5	2.8	2.9	4.2	2.8	3.3
15	2.9	3.8	3.1	2.9	2.5	2.7	2.7	3.6	2.9	3.2	5.3	3.4	4.1	5.0	5.7	4.6	5.1	3.4	3.2	3.1	3.3	3.8	4.2	4.5	5.7	2.5	3.7
16	5.7	4.3	3.5	3.9	4.0	4.0	4.3	3.5	5.3	4.7	4.2	8.9	7.3	4.7	4.0	4.3	4.2	3.8	3.4	2.6	2.7	2.3	2.8	2.8	8.9	2.3	4.2
17	2.8	3.2	2.7	2.6	6.3	5.9	5.9	4.3	4.1	5.5	5.5	3.5	4.7	4.5	6.1	7.3	7.8	8.3	3.9	2.7	2.2	2.2	2.9	5.1	8.3	2.2	4.6
18	3.1	15.0	49.6	15.0	3.3	5.1	3.8	5.6	39.7	45.4	43.6	28.4	12.5	6.4	6.6	8.4	7.9	8.9	9.3	1.9	2.2	2.2	3.4	2.8	49.6	1.9	13.8
19	2.8	3.4	2.7	2.0	2.6	2.5	2.8	2.5	2.8	3.7	2.3	3.3	8.1	10.3	9.7	13.2	10.1	9.6	6.1	5.4	6.5	8.1	8.6	26.5	26.5	2.0	6.5
20	36.0	8.4	5.5	8.0	3.7	6.6	7.0	4.9	5.8	4.3	4.0	5.3	4.4	4.3	4.6	4.2	4.0	4.0	4.5	4.3	4.6	4.6	5.0	4.5	36.0	3.7	6.4
21	3.3	5.0	13.1	5.9	5.1	6.0	3.1	3.8	3.9	4.0	10.3	5.7	6.7	4.2	3.2	6.1	3.0	2.9	3.5	6.2	4.4	4.2	4.8	6.3	13.1	2.9	5.2
22	4.2	3.0	3.3	3.7	4.1	2.8	6.5	6.5	3.8	3.0	4.4	3.2	2.8	3.5	2.4	2.2	2.8	2.2	3.7	3.4	3.5	2.7	2.8	4.6	6.5	2.2	3.5
23	3.0	4.2	3.7	2.6	3.4	2.7	3.1	3.4	3.8	5.3	5.1	2.8	3.0	3.1	2.4	2.6	2.3	2.6	2.4	2.3	2.4	2.0	3.0	3.9	5.3	2.0	3.1
24	3.4	3.9	5.9	6.9	3.9	4.7	3.6	3.0	3.6	5.0	4.8	3.5	3.1	3.9	5.0	6.4	3.6	3.9	2.7	3.2	3.5	3.7	3.9	10.8	10.8	2.7	4.4
25	40.1	10.9	11.3	24.0	47.0	11.5	11.1	5.7	8.0	7.9	13.9	7.7	8.2	60.3	35.8	9.6	17.4	13.0	10.8	7.2	5.1	7.0	4.9	3.8	60.3	3.8	15.9
26	11.8	7.8	4.9	6.9	3.9	3.2	3.4	3.9	5.5	5.8	3.9	3.0	11.8	6.6	5.9	5.9	8.7	4.5	6.2	2.4	1.8	2.0	2.5	2.8	11.8	1.8	5.2
27	4.0	4.1	2.9	3.2	2.3	3.5	3.8	4.1	6.1	5.7	7.3	5.2	2.9	3.7	4.3	7.0	5.4	4.4	4.3	3.5	5.2	3.6	4.0	3.5	7.3	2.3	4.3
28	3.8	3.5	3.0	2.9	5.5	5.9	3.4	2.5	3.1	3.1	4.8	2.5	2.2	3.9	3.3	3.5	6.5	5.2	3.4	4.0	8.2	4.0	5.6	3.2	8.2	2.2	4.0
29	4.0	5.2	5.5	2.4	5.2	5.7	3.8	3.6	3.5	5.6	3.4	2.5	2.4	2.7	2.7	1.8	2.9	2.1	2.7	2.4	2.1	3.3	2.7	2.7	5.7	1.8	3.4
30	2.4	3.4	3.9	3.1	2.6	2.5	1.6	2.3	3.8	2.9	4.1	2.9	3.3	5.4	11.2	6.7	11.6	7.4	6.6	9.7	16.2	47.8	37.1	6.8	47.8	1.6	8.6
31	9.6	6.5	6.3	5.0	10.2	14.2	11.3	10.4	15.7	3.3	3.8	7.8	25.3	13.3	8.5	5.8	2.7	2.5	1.8	2.2	3.8	2.6	3.3	2.2	25.3	1.8	7.4
Max.	**40.1**	**15.0**	**49.6**	**24.0**	**47.0**	**14.2**	**11.3**	**10.4**	**39.7**	**45.4**	**43.6**	**28.4**	**25.3**	**60.3**	**35.8**	**13.2**	**17.4**	**13.0**	**10.8**	**9.7**	**16.2**	**47.8**	**37.1**	**26.5**	**60.3**		
Min.	**2.4**	**2.6**	**2.5**	**2.0**	**2.3**	**2.3**	**1.6**	**2.3**	**2.6**	**2.5**	**2.3**	**2.5**	**2.2**	**2.7**	**2.4**	**1.8**	**2.3**	**2.1**	**1.8**	**1.9**	**1.8**	**2.0**	**2.4**	**2.2**		**1.6**	
Avg.	**6.4**	**4.8**	**5.8**	**4.8**	**5.3**	**4.4**	**4.2**	**4.0**	**5.6**	**5.5**	**6.1**	**5.1**	**5.4**	**6.4**	**5.6**	**5.0**	**5.1**	**4.6**	**4.1**	**3.7**	**4.0**	**5.1**	**5.0**	**4.8**			**5.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

April 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.9	2.6	4.0	3.5	4.0	2.2	2.7	3.2	2.7	4.2	2.0	3.5	2.3	3.8	3.8	7.5	15.9	24.7	24.7	44.3	9.7	3.3	8.1	5.2	44.3	1.9	7.9
2	4.4	4.1	3.8	6.5	5.6	5.2	6.1	4.5	3.3	2.8	3.3	3.4	3.0	3.6	4.6	5.1	5.3	3.9	3.4	4.1	4.0	3.5	3.5	3.4	6.5	2.8	4.2
3	2.9	2.8	3.1	3.2	3.3	3.5	3.3	3.6	3.0	2.7	3.1	3.2	3.5	3.8	4.2	3.6	4.0	3.3	3.4	3.6	3.4	3.4	3.2	3.4	4.2	2.7	3.4
4	3.2	2.9	3.1	4.6	4.5	3.0	3.9	2.8	5.1	7.1	7.9	5.5	4.0	4.3	4.5	4.1	3.5	5.2	5.4	5.2	7.8	7.6	11.1	12.8	12.8	2.8	5.4
5	22.9	31.2	21.1	13.2	19.1	9.0	10.5	6.3	5.8	6.8	5.7	4.2	4.8	5.0	4.7	4.7	5.5	9.5	4.3	4.2	3.7	3.8	3.7	3.7	31.2	3.7	8.9
6	4.0	3.5	3.6	3.7	3.9	4.1	3.8	3.3	3.2	8.5	5.8	4.1	5.1	4.9	5.1	4.7	4.9	9.2	9.3	6.7	6.2	5.7	6.9	7.7	9.3	3.2	5.3
7	8.9	22.3	8.9	9.5	9.9	5.4	4.1	4.0	3.5	3.5	3.7	3.5	3.8	3.6	3.9	3.9	3.8	4.0	3.5	5.8	4.6	9.8	7.5	9.4	22.3	3.5	6.3
8	3.8	4.2	4.5	4.6	4.3	4.2	4.8	4.9	4.9	5.5	5.3	5.1	5.2	5.9	4.8	4.4	7.3	12.4	17.1	19.0	13.7	13.6	12.5	7.8	19.0	3.8	7.5
9	7.2	5.5	4.9	6.2	6.3	20.6	12.7	11.6	7.0	5.7	5.7	3.3	4.2	4.0	3.1	3.7	3.5	3.3	3.0	3.4	3.4	3.6	3.6	3.6	20.6	3.0	5.8
10	3.7	4.0	3.5	3.9	4.0	5.6	3.8	4.5	3.4	4.7	3.5	3.7	4.0	3.5	3.6	3.6	3.5	4.1	4.3	3.9	3.7	3.2	4.3	4.5	5.6	3.2	3.9
11	5.3	5.7	6.0	4.4	6.7	5.2	6.3	4.9	9.4	8.4	10.8	7.2	5.3	4.7	4.2	4.2	4.3	4.0	4.1	4.5	8.5	10.5	12.3	9.8	12.3	4.0	6.5
12	5.6	4.2	9.5	11.6	18.7	23.3	23.8	15.8	17.8	12.6	11.9	7.3	14.1	15.1	6.7	4.5	6.9	7.7	9.3	13.2	5.9	22.1	5.1	3.4	23.8	3.4	11.5
13	4.3	2.7	4.2	3.1	2.4	3.2	2.1	3.6	2.4	2.7	3.5	5.0	8.4	8.1	8.2	8.8	10.5	34.6	6.2	6.6	13.0	9.2	11.9	5.8	34.6	2.1	7.1
14	7.5	2.8	3.5	4.5	6.7	48.1	9.7	5.7	9.8	7.0	9.0	13.2	7.4	10.1	5.0	5.3	4.2	4.8	4.9	5.5	5.1	4.2	3.9	6.3	48.1	2.8	8.1
15	3.7	4.9	4.0	3.3	3.6	3.5	3.3	4.4	4.6	4.6	4.8	6.7	6.3	6.1	7.3	7.0	7.1	9.7	7.3	8.2	12.0	8.4	3.7	8.1	12.0	3.3	5.9
16	4.2	2.4	4.1	3.0	3.4	2.5	3.3	3.3	2.6	3.2	2.9	8.6	8.4	2.3	5.5	2.9	3.4	4.3	6.9	4.9	9.4	12.4	9.5	6.3	12.4	2.3	5.0
17	7.1	9.3	10.2	7.1	7.6	10.5	3.9	3.8	3.8	3.7	4.1	3.7	3.9	4.0	3.9	4.0	3.7	3.9	4.0	3.9	4.0	3.5	3.6	3.6	10.5	3.5	5.0
18	3.6	3.8	3.8	3.9	3.8	3.6	3.8	3.6	3.9	3.3	3.3	3.3	3.7	3.4	3.5	3.4	4.1	6.9	9.2	12.5	6.8	29.7	20.7	2.3	29.7	2.3	6.2
19	3.4	32.2	7.2	5.5	5.2	4.6	3.5	3.1	3.4	3.5	3.2	3.6	3.8	3.7	4.2	3.8	4.3	3.6	3.6	4.5	3.7	3.5	3.3	3.5	32.2	3.1	5.1
20	3.4	3.4	3.4	3.4	3.6	4.1	7.0	6.0	4.9	3.4	4.7	3.8	4.1	4.7	4.3	4.7	3.9	3.8	3.6	3.2	3.6	3.6	4.3	6.0	7.0	3.2	4.2
21	7.5	4.8	3.3	3.3	3.6	3.7	5.0	4.0	7.8	10.8	3.6	4.1	3.4	4.0	4.2	4.1	4.1	3.6	3.6	3.5	3.2	3.9	3.4	3.3	10.8	3.2	4.4
22	3.5	3.5	3.5	3.6	4.6	4.3	4.0	4.9	3.9	5.1	4.4	4.1	5.4	5.8	4.9	6.0	6.1	6.0	5.9	4.7	4.9	4.9	5.4	11.7	11.7	3.5	5.1
23	21.9	9.2	4.6	13.2	44.3	3.8	7.9	10.4	10.3	5.2	3.8	6.1	8.4	13.0	14.3	29.7	27.5	15.7	13.7	8.0	18.3	12.7	17.8	9.9	44.3	3.8	13.8
24	6.8	4.2	4.2	6.1	29.3	47.3	10.9	6.2	8.3	5.7	6.8	8.0	8.4	12.7	32.9	10.2	25.4	19.0	23.4	14.5	5.7	11.0	16.5	7.4	47.3	4.2	13.8
25	5.0	6.3	6.2	4.8	5.6	4.0	3.8	4.7	4.0	5.3	6.8	6.3	5.0	4.5	4.1	4.8	5.2	5.1	4.7	5.0	7.1	40.4	12.2	9.6	40.4	3.8	7.1
26	9.1	8.4	10.2	15.5	17.7	15.2	8.7	11.7	3.7	5.4	5.6	9.1	15.1	11.7	11.9	8.7	8.9	5.3	4.9	3.7	5.1	5.8	3.2	2.9	17.7	2.9	8.6
27	3.8	3.9	4.5	28.8	9.8	9.6	5.4	5.8	5.9	6.1	9.0	8.9	9.5	9.0	6.8	5.1	7.4	9.2	4.3	3.5	3.4	20.9	8.8	3.3	28.8	3.3	8.0
28	7.2	29.9	7.1	28.9	9.4	11.7	12.7	17.4	25.3	10.1	14.0	15.0	14.5	15.0	10.5	6.4	6.8	6.7	6.5	5.7	5.1	5.9	14.5	11.0	29.9	5.1	12.4
29	9.3	5.2	5.6	4.4	4.9	4.2	3.7	7.1	4.5	4.4	6.1	4.8	6.2	7.6	8.2	7.0	6.5	6.4	6.4	5.7	4.9	8.7	10.7	7.0	10.7	3.7	6.2
30	11.3	4.9	4.4	5.7	7.1	23.1	44.7	17.1	17.4	16.7	19.7	10.6	15.9	19.6	17.4	32.6	19.8	42.5	17.8	15.1	5.2	9.2	5.3	10.1	44.7	4.4	16.4
Max.	**22.9**	**32.2**	**21.1**	**28.9**	**44.3**	**48.1**	**44.7**	**17.4**	**25.3**	**16.7**	**19.7**	**15.0**	**15.9**	**19.6**	**32.9**	**32.6**	**27.5**	**42.5**	**24.7**	**44.3**	**18.3**	**40.4**	**20.7**	**12.8**	**48.1**		
Min.	**1.9**	**2.4**	**3.1**	**3.0**	**2.4**	**2.2**	**2.1**	**2.8**	**2.4**	**2.7**	**2.0**	**3.2**	**2.3**	**2.3**	**3.1**	**2.9**	**3.4**	**3.3**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**2.3**		**1.9**	
Avg.	**6.5**	**7.8**	**5.7**	**7.4**	**8.8**	**9.9**	**7.6**	**6.4**	**6.5**	**6.0**	**6.1**	**6.0**	**6.6**	**6.9**	**7.0**	**6.9**	**7.6**	**9.4**	**7.6**	**7.9**	**6.5**	**9.6**	**8.0**	**6.4**			**7.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.7	43.0	53.8	30.9	29.1	25.0	18.7	18.1	10.0	12.3	13.1	16.3	20.4	47.6				16.8	11.4	8.9	12.1	26.2	37.6	27.3	53.8	8.9	23.3
2	14.8	10.0	18.7	9.3	27.7	23.2	4.9	9.1	9.2	8.0	41.6	13.8	16.5	7.7	9.2	11.0	7.7	6.4	6.1	5.8	4.9	4.4	5.4	5.0	41.6	4.4	11.7
3	5.2	7.5	4.6	9.2	6.4	6.3	7.8	8.8	11.1	10.2	8.0	13.5	15.6	24.4	29.0	17.1	18.6	7.1	10.3	15.8	13.8	7.1	11.3	7.4	29.0	4.6	11.5
4	5.8	5.8	7.2	6.4	6.6	8.5	45.0	22.6	34.8	27.7	27.8	11.8	31.6	12.1	10.5	10.0	8.3	8.1	15.2	13.2	15.7	22.1	15.8	9.9	45.0	5.8	15.9
5	44.3	5.1	4.8	5.1	16.9	3.9	3.9	5.3	4.4	8.4	4.8	5.2	6.5	7.2	9.7	10.5	8.5	6.3	6.8	4.1	3.0	2.4	2.0	2.8	44.3	2.0	7.6
6	3.6	6.0	3.6	2.3	3.9	3.0	3.2	3.5	5.0	5.1	6.8	9.1	6.9	6.7	6.6	7.1	6.8	5.4	5.7	4.3	3.3	3.2	2.8	2.6	9.1	2.3	4.9
7	2.6	2.9	3.2	2.9	7.0	11.4	5.8	8.2	12.0	6.5	6.9	7.2	11.3	13.0	10.9	17.5	11.9	9.0	12.6	14.9	6.6	9.5	3.0	6.3	17.5	2.6	8.5
8	48.5	52.2	15.3	51.6	54.4	33.5	7.0	11.6	27.8	32.2	48.2	53.6	13.9	19.4	23.2	11.4	10.1	8.4	9.2	8.5	6.6	9.9	4.6	39.6	54.4	4.6	25.0
9	49.6	19.3	8.4	17.0	21.2	5.7	4.1	4.1	3.9	4.3	4.9	6.6	5.4	8.3	8.1	11.3	10.6	9.4	10.4	8.2	7.7	5.6	7.5	10.3	49.6	3.9	10.5
10	5.9	7.4	9.3	7.7	10.0	7.1	8.8	11.3	15.6	17.8	13.9	18.4	16.7	15.2	17.6	16.9	14.4	11.2	11.3	8.9	5.0	4.2	6.0	4.1	18.4	4.1	11.0
11	2.9	4.6	8.8	8.8	6.9	4.7	5.2	3.8	5.3	5.8	6.5	7.8	9.7	9.8	10.1	9.5	9.7	10.3	7.1	6.6	5.2	3.6	3.5	3.7	10.3	2.9	6.7
12	4.9	7.3	6.3	4.0	6.1	6.4	4.2	4.5	5.8	6.1	6.8	8.2	10.5	8.5	7.4	7.7	8.7	6.5	8.1	6.4	6.2	5.1	6.1	5.5	10.5	4.0	6.5
13	9.9	9.9	4.1	4.8	4.5	4.6	5.0	4.9	6.3	6.8	5.6	4.8	5.5	4.8	6.9	6.5	6.2	5.9	5.2	5.2	5.0	5.0	4.8	5.7	9.9	4.1	5.7
14	8.4	9.4	9.2	5.9	8.4	7.6	26.7	16.0	18.3	9.3	8.3	8.8	8.6	11.1	9.1	6.0	5.9	7.2	5.7	6.0	4.1	4.5	4.5	5.1	26.7	4.1	8.9
15	9.4	6.6	11.4	5.8	6.5	7.1	4.6	9.1	9.1	9.6	16.3	9.1	8.3	7.7	11.3	11.6	12.8	12.7	15.4	42.4	14.6	4.5	8.8	3.4	42.4	3.4	10.8
16	2.5	4.6	8.0	4.3	3.3	2.9	2.8	3.6	4.2	5.7	10.1	18.1	17.1	11.3	16.2	34.5	23.9	6.5	6.2	9.1	6.1	6.5	5.6	4.7	34.5	2.5	9.1
17	4.6	4.9	4.5	4.5	4.3	5.0	4.2	4.7	4.8	5.0	9.7	9.8	10.7	13.0	8.6	7.8	7.1	6.0	6.2	5.5	5.1	4.8	5.0	6.1	13.0	4.2	6.3
18	6.6	4.3	3.5	6.6	6.5	7.0	5.1	4.5	7.1	10.2	15.3	16.1	19.2	23.5	24.6	18.1	27.6	34.6	28.7	32.4	7.6	7.3	12.5	13.0	34.6	3.5	14.2
19	7.2	6.1	4.2	4.8	4.4	2.6	4.9	5.3	4.5	9.0	14.4	8.6	11.3	12.5	10.5	10.8	9.3	9.5	7.8	6.7	4.6	5.0	30.2	12.9	30.2	2.6	8.6
20	15.1	18.1	36.3	32.0	29.6	39.2	31.4	17.1	46.4	56.3	30.0	61.5	40.3	38.9	15.8	13.3	12.7	13.4	11.4	11.2	5.9	5.8	3.6	2.6	61.5	2.6	24.5
21	19.6	42.0	48.6	35.6	12.6	24.7	18.5	33.5	15.8	13.8	63.7	44.1	35.4	23.0	24.1	16.0	10.1	10.5	9.9	7.1	5.3	5.1	5.0	4.6	63.7	4.6	22.0
22	4.4	5.2	4.8	4.4	4.7	8.6	6.5	5.9	8.1	9.6	11.1	6.5	5.1	5.7	8.2	6.4	6.9	7.1	7.1	10.4	8.6	12.9	6.2	8.4	12.9	4.4	7.2
23	8.6	47.8	11.7	7.8	6.5	4.5	15.1	6.6	6.0	7.3	6.4	5.5	5.7	5.4	5.0	6.8	7.1	5.0	4.9	4.9	4.7	5.9	5.2	5.2	47.8	4.5	8.3
24	4.3	4.4	4.0	4.3	3.9	4.3	5.4	5.6	5.8	5.5	5.3	8.4	10.0	13.4	13.5	5.9	5.9	6.8	4.6	5.2	5.8	5.3	6.2	6.2	13.5	3.9	6.3
25	9.2	5.8	8.3	5.8	6.8	8.4	7.6	9.2	8.2	6.9	5.6	5.1	4.8	6.0	7.2	7.6	7.9	5.9	6.3	8.2	12.8	23.7	8.7	3.9	23.7	3.9	7.9
26	3.3	3.4	4.9	37.1	5.8	8.7	6.8	6.6	6.6	4.3	6.1	9.9	8.7	5.8	6.9	5.5	5.2	5.4	5.1	5.8	6.4	5.1	3.9	4.0	37.1	3.3	7.1
27	4.1	4.4	5.4	4.5	4.6	4.9	5.3	7.6	6.4	7.9	9.7	7.9	9.9	10.7	9.0	7.7	8.2	8.1	6.5	5.6	4.8	4.4	5.3	5.0	10.7	4.1	6.6
28	5.4	4.5	4.8	4.4	4.7	3.6	6.1	5.3	9.6	9.4	8.1	8.1	10.1	9.5	8.8	8.4	7.7	7.3	7.8	7.0	6.7	6.8	4.9	4.8	10.1	3.6	6.8
29	3.6	7.1	13.9	9.4	4.5	2.3	3.9	5.1	6.6	7.0	10.4	15.5	29.2	41.4	46.9	27.4	48.8	10.8	18.9	20.9	7.8	7.8	6.9	13.3	48.8	2.3	15.4
30	21.7	26.2	19.4	23.0	2.7	4.4	6.3	8.6	9.2	45.9	47.5	22.4	17.9	6.8	8.4	8.6	9.9	7.8	6.3	7.3	6.7	6.9	7.8	9.7	47.5	2.7	14.2
31	6.4	7.3	5.6	5.6	5.0	6.0	5.3	5.3	5.5	6.3	6.1	7.9	6.8	7.8	11.8	16.9	13.9	7.7	8.1	8.8	7.2	6.6	5.2	6.1	16.9	5.0	7.5
Max.	**49.6**	**52.2**	**53.8**	**51.6**	**54.4**	**39.2**	**45.0**	**33.5**	**46.4**	**56.3**	**63.7**	**61.5**	**40.3**	**47.6**	**46.9**	**34.5**	**48.8**	**34.6**	**28.7**	**42.4**	**15.7**	**26.2**	**37.6**	**39.6**	**63.7**		
Min.	**2.5**	**2.9**	**3.2**	**2.3**	**2.7**	**2.3**	**2.8**	**3.5**	**3.9**	**4.3**	**4.8**	**4.8**	**4.8**	**4.8**	**5.0**	**5.5**	**5.2**	**5.0**	**4.6**	**4.1**	**3.0**	**2.4**	**2.0**	**2.6**		**2.0**	
Avg.	**11.4**	**12.7**	**11.5**	**11.8**	**10.5**	**9.5**	**9.4**	**8.9**	**10.7**	**12.3**	**15.5**	**14.5**	**13.8**	**14.1**	**13.2**	**11.9**	**11.7**	**9.1**	**9.2**	**10.2**	**7.1**	**7.6**	**7.9**	**8.0**			**10.9**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	6.1	8.3	10.8	11.7	8.5	9.3	8.0	9.9	9.4	5.7	6.3	5.1	5.8	7.4	5.9	6.5	7.1	5.8	7.9	5.8	5.6	5.6	4.6	11.7	4.6	7.2
2	4.8	5.2	5.4	4.0	4.4	3.8	4.6	5.7	6.7	7.5	9.5	8.7	8.1	12.0	13.6	14.8	13.3	14.5	15.3	12.4	7.6	7.4	5.6	6.2	15.3	3.8	8.4
3	8.6	5.7	15.9	8.7	5.3	4.8	7.1	9.9	9.3	11.9	16.1	16.6	22.3	28.8	25.0	34.3	33.6	31.2	29.6	46.6	14.1	10.6	4.9	4.0	46.6	4.0	16.9
4	2.2	2.7	2.3	2.2	2.9	3.3	3.2	3.5	3.9	4.9	5.2	4.6	5.8	8.0	9.2	14.0	18.4	29.0	40.7	11.1	5.7	6.1	6.9	6.2	40.7	2.2	8.4
5	6.0	6.3	5.9	5.2	6.0	5.4	11.9	7.4	6.2	5.0	5.4	5.7	5.1	5.4	5.4	5.7	6.1	5.9	5.7	4.8	5.1	5.4	5.0	4.7	11.9	4.7	5.9
6	5.9	9.7	8.6	6.6	4.7	5.1	12.3	10.2	19.2	45.8	20.5	15.5	16.2	13.3	23.7	9.8	9.6	9.0	18.7	20.4	10.4	16.1	9.5	13.8	45.8	4.7	13.9
7	14.3	12.8	26.2	26.0	14.8	8.2	11.0	12.9	10.8	10.3	12.2	10.1	9.6	13.3	12.2	6.0	6.1	6.6	5.0	6.0	5.9	4.9	4.7	7.5	26.2	4.7	10.7
8	8.3	5.6	9.4	6.7	7.8	7.8	4.8	9.4	8.1	7.5	21.7	28.5	24.6	19.3	14.4	11.1	9.2	11.1	6.4	5.6	5.9	5.3	4.5	4.5	28.5	4.5	10.3
9	19.7	14.6	7.1	4.6	12.9	8.0	14.7	9.1	6.4	7.4	11.7	13.8	14.4	18.3	13.5	20.2	26.7	34.8	36.4	9.9	6.2	3.5	2.2	2.6	36.4	2.2	13.3
10	2.3	2.1	2.5	2.6	3.0	2.7	1.9	2.4	3.6	5.5	6.4	7.7	10.5	12.0	17.0	16.9	16.2	17.2	11.1	15.0	10.3	25.4	12.2	9.4	25.4	1.9	9.0
11	30.1	17.8	9.8	8.3	6.7	11.0	7.2	5.8	5.9	8.8	8.7	13.0	12.1	11.5	9.5	12.3	8.8	8.6	6.8	6.4	7.5	5.7	5.9	5.0	30.1	5.0	9.7
12	4.8	5.3	6.0	5.9	6.5	7.6	5.4	6.6	5.1	6.1	6.5	6.3	8.7	9.3	8.1	8.6	9.6	12.0	9.6	12.4	9.8	9.1	3.8	13.4	13.4	3.8	7.8
13	8.7	26.0	8.5	5.0	12.9	8.9	8.0	9.6	7.3	13.1	17.1	22.1	28.8	12.6	9.7	28.8	49.3	18.1	11.4	9.1	4.2	4.9	5.4	5.1	49.3	4.2	13.9
14	3.7	3.0	3.5	3.9	2.4	3.3	4.0	3.6	3.9	6.0	7.3	9.6	27.1	19.3	32.0	13.6	16.7	18.8	14.4	9.0	5.6	3.8	3.1	3.3	32.0	2.4	9.2
15	3.1	4.9	5.6	4.0	2.7	4.1	3.8	3.4	4.0	4.6	6.2	9.0	12.3	12.8	15.5	11.9	14.0	9.6	8.4	6.7	5.8	4.1	2.9	4.0	15.5	2.7	6.8
16	3.1	4.0	4.4	4.5	4.3	3.3	3.8	5.5	5.1	7.3	10.9	8.6	10.2	8.8	11.6	10.1	10.5	12.0	8.2	6.5	5.5	4.4	4.0	4.4	12.0	3.1	6.7
17	5.3	6.0	4.7	4.8	5.1	5.2	6.0	14.3	7.9	12.8	15.9	58.4	11.2	14.7	21.8	14.6	15.3	16.1	9.3	11.8	6.4	6.3	4.5	4.0	58.4	4.0	11.8
18	4.6	4.8	3.2	6.1	3.9	5.3	5.6	5.7	9.7	9.8	11.3	13.1	50.4	32.4	53.6	36.5	17.1	11.2	21.3	30.8	7.7	41.6	10.1	15.4	53.6	3.2	17.1
19	3.0	2.9	2.1	2.8	3.7	3.5	2.9	5.2	3.7	5.4	7.0	7.9	6.6	9.1	9.6	9.0	10.4	11.2	8.0	6.3	5.8	4.6	4.2	4.3	11.2	2.1	5.8
20	3.3	2.9	3.0	3.7	3.1	2.7	3.3	3.6	4.9	5.6	6.2	7.8	7.5	9.2	8.8	10.2	8.0	8.3	6.0	6.7	3.6	4.1	3.2	3.8	10.2	2.7	5.4
21	4.9	7.8	9.4	5.8	3.5	4.2	3.7	3.4	4.5	6.0	8.6	8.8	10.2	12.2	9.2	9.3	11.1	7.4	8.3	8.4	9.9	3.9	4.4	6.9	12.2	3.4	7.2
22	22.5	58.5	51.5	49.8	26.1	20.1	29.8	14.0	16.4	18.1	13.9	10.4	11.9	11.5	10.3	10.8	11.2	7.2	7.5	6.5	7.8	8.1	5.5	5.9	58.5	5.5	18.1
23	5.3	5.7	5.8	5.0	4.6	4.7	4.6	4.5	4.7	4.9	5.3	5.0	4.8	4.7	4.9	4.8	4.3	4.7	4.4	4.5	4.7	4.4	4.7	4.4	5.8	4.3	4.8
24	4.3	4.5	4.5	4.2	4.3	4.4	4.7	5.1	5.6	7.4	6.6	7.2	5.0	4.9	4.8	5.2	6.7	5.4	6.2	5.8	6.3	6.9	5.7	6.4	7.4	4.2	5.5
25	5.6	5.9	5.5	5.5	5.7	5.2	5.4	4.6	5.3	6.6	7.4	5.9	6.0	5.7	6.5	5.8	5.9	7.1	6.5	5.4	4.7	5.1	4.8	4.2	7.4	4.2	5.7
26	4.4	5.4	4.9	5.6	4.2	4.5	4.3	6.1	9.1	9.2	10.9	11.1	10.7	22.4	20.4	36.1	34.6	33.8	34.6	42.1	8.6	5.3	4.1	4.6	42.1	4.1	14.0
27	6.0	6.7	5.1	3.7	5.0	1.7	4.4	3.1	7.4	14.4	45.8	45.7	20.8	19.9	14.3	12.8	12.0	10.5	11.6	10.2	6.8	4.0	9.5	31.7	45.8	1.7	13.0
28	52.1	29.7	16.7	11.9	26.2	16.9	12.5	24.9	30.7	9.0	14.1	16.2	8.2	10.6	7.6	9.3	8.8	8.9	8.7	6.1	5.4	4.9	4.6	6.1	52.1	4.6	14.6
29	8.2	9.9	4.6	13.3	13.7	8.9	12.5	7.8	11.3	11.8	8.8	15.4	15.6	17.9	19.3	18.5	16.5	12.1	10.7	9.9	5.3	7.1	16.7	12.8	19.3	4.6	12.0
30	15.3	15.3	15.9	6.2	47.4	26.4	7.6	7.4	6.1	20.8	20.0	14.5	17.1	18.4	15.3	11.9	13.3	11.3	8.5	11.6	8.2	6.0	5.6	5.0	47.4	5.0	14.0
Max.	**52.1**	**58.5**	**51.5**	**49.8**	**47.4**	**26.4**	**29.8**	**24.9**	**30.7**	**45.8**	**45.8**	**58.4**	**50.4**	**32.4**	**53.6**	**36.5**	**49.3**	**34.8**	**40.7**	**46.6**	**14.1**	**41.6**	**16.7**	**31.7**	**58.5**		
Min.	**2.2**	**2.1**	**2.1**	**2.2**	**2.4**	**1.7**	**1.9**	**2.4**	**3.6**	**4.6**	**5.2**	**4.6**	**4.8**	**4.7**	**4.8**	**4.8**	**4.3**	**4.7**	**4.4**	**4.5**	**3.6**	**3.5**	**2.2**	**2.6**		**1.7**	
Avg.	**9.2**	**9.9**	**8.9**	**7.9**	**8.8**	**7.0**	**7.3**	**7.4**	**8.1**	**10.1**	**11.8**	**13.8**	**13.6**	**13.5**	**14.5**	**14.0**	**14.3**	**13.3**	**12.8**	**11.9**	**6.9**	**7.8**	**5.8**	**7.1**			**10.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.8	9.3	3.9	4.2	13.4	5.4	6.1	5.0	5.4	8.2	9.9	11.2	12.4	16.3	9.0	8.1	9.9	8.9	5.5	4.8	4.4	4.5	44.8	16.4	44.8	3.9	9.7
2	10.6	10.3	6.3	11.4	10.8	12.9	32.4	26.7	44.0	10.1	11.4	9.8	12.4	12.9	10.4	15.0	12.5	12.4	11.4	7.5	7.9	5.5	5.4	3.8	44.0	3.8	13.1
3	4.3	4.4	7.7	21.3	28.2	9.9	5.2	7.3	7.0	8.4	12.9	13.4	11.7	16.5	19.1	33.9	15.7	10.4	7.2	5.5	4.9	6.1	7.0	5.8	33.9	4.3	11.4
4	5.1	5.2	5.3	6.6	6.2	5.0	7.9	5.2	4.9	4.7	6.7	6.3	7.2	6.3	6.4	6.7	6.5	4.2	5.0	5.6	7.1	3.9	4.9	4.8	7.9	3.9	5.7
5	4.8	4.7	5.4	3.9	4.9	10.4	13.6	11.4	12.8	9.4	10.1	11.2	11.9	10.0	9.1	12.4	8.6	15.1	38.7	5.6	5.3	5.5	5.5	6.4	38.7	3.9	9.9
6	6.6	5.2	5.8	5.3	4.7	4.7	5.3	4.9	5.9	9.1	9.4	6.2	10.3	15.3	11.7	13.2	12.0	16.0	14.5	11.0	16.0	24.1	12.1	31.9	31.9	4.7	10.9
7	11.1	7.0	3.9	6.9	8.2	10.4	8.9	11.1	34.9	12.0	28.7	40.4	34.4	40.9	33.7	18.3	19.1	17.8	18.7	22.0	27.7	20.3	12.2	9.5	40.9	3.9	19.1
8	8.3	9.0	17.7	39.4	36.2	19.9	26.2	9.4	6.2	12.9	13.8	8.5	6.4	6.7	8.4	7.1	7.0	7.3	7.3	5.7	5.3	5.5	4.3	4.0	39.4	4.0	11.8
9	4.9	6.4	7.3	5.4	7.4	4.0	3.9	4.3	5.0	6.5	10.8	14.5	13.2	25.8	9.6	39.0	29.7	16.9	15.3	18.8	13.1	12.6	11.6	4.7	39.0	3.9	12.1
10	4.0	2.3	4.0	6.2	13.8	40.2	10.6	12.4	12.1	8.8	9.8	10.0	19.3	32.2	9.0	7.8	11.5	6.7	6.2	6.2	6.1	5.8	4.8	5.7	40.2	2.3	10.6
11	5.0	7.0	6.5	4.6	3.8	4.1	5.0	5.6	5.7	9.4	9.2	10.0	11.4	12.3	9.0	12.0	12.2	11.9	11.7	8.9	6.0	5.1	5.5	10.1	12.3	3.8	8.0
12	8.5	13.3	13.4	15.7	46.0	5.3	5.5	9.2	10.9	14.2	17.3	17.1	15.9	20.3	15.5	32.4	11.0	13.0	14.7	7.5	6.6	6.6	4.2	4.0	46.0	4.0	13.7
13	4.6	4.7	5.0	5.8	5.5	5.5	6.7	5.7	6.3	5.2	8.0	7.1	5.4	5.9	6.1	6.6	6.4	7.2	6.9	4.8	5.0	5.3	4.7	5.5	8.0	4.6	5.8
14	6.1	6.1	7.1	6.8	4.9	5.3	6.9	10.5	5.0	7.9	9.7	9.7	11.1	9.6	8.2	7.4	6.8	7.0	6.0	5.9	6.2	7.1	5.7	5.0	11.1	4.9	7.2
15	7.9	6.5	10.8	12.0	13.5	16.0	17.9	23.2	18.1	12.6	10.4	12.2	11.3	30.3	13.9	7.3	6.9	7.0	6.2	5.2	5.2	4.0	4.8	7.7	30.3	4.0	11.3
16	12.5	8.2	49.8	8.3	7.9	6.4	4.1	3.8	6.2	5.5	5.4	7.5	10.1	13.4	11.4	8.1	7.6	9.1	11.0	7.3	6.6	5.2	4.0	2.6	49.8	2.6	9.3
17	3.1	3.2	3.8	3.1	2.1	1.6	2.1	3.8	4.1	8.5	14.1	17.4	41.2	46.3	29.7	20.6	11.7	11.2	8.1	6.4	7.2	6.3	5.6	3.9	46.3	1.6	11.1
18	5.8	6.6	10.7	8.6	7.3	6.2	5.9	11.2	11.0	10.7	11.9	22.3	32.8	17.0	17.3	19.0	6.7	10.0	6.3	6.5	10.1	18.8	11.0	34.0	34.0	5.8	12.8
19	10.5	4.6	5.0	3.3	2.8	6.4	6.0	5.1	4.5	5.0	5.8	9.0	16.4	20.3	33.7	47.6	25.8	19.9	10.6	7.3	9.8	12.0	8.3	8.4	47.6	2.8	12.0
20	14.9	8.2	12.7	37.4	55.9	33.6	61.4	15.6	17.4	16.5	58.0	9.7	18.8	15.6	17.1	45.3	20.1	29.1	11.4	7.6	6.2	4.7	4.1	7.3	61.4	4.1	22.0
21	15.3	31.5	28.4	33.4	12.8	10.6	5.4	23.9	19.5	6.4	10.7	24.8	52.6	11.7	11.1	7.5	5.8	6.5	5.7	7.9	9.5	8.8	7.4	11.3	52.6	5.4	15.3
22	12.4	7.7	6.5	7.5	7.2	7.0	6.0	6.4	7.7	6.8	6.7	8.1	6.6	8.7	8.0	7.4	8.4	7.2	5.9	5.1	6.5	6.3	7.8	4.6	12.4	4.6	7.2
23	4.2	5.0	4.7	6.4	9.9	17.4	14.8	11.4	7.0	7.7	6.6	8.2	8.1	7.2	6.3	5.0	4.7	4.9	5.0	5.4	5.0	5.0	5.0	4.7	17.4	4.2	7.1
24	4.4	4.4	4.2	4.0	4.2	4.3	4.8	4.8	6.7	4.5	5.1	6.0	6.3	9.4	9.0	9.2	6.8	7.3	9.1	10.0	9.7	16.0	6.5	8.8	16.0	4.0	6.9
25	10.6	7.8	16.6	32.7	23.4	6.1	22.8	7.3	5.6	6.0	5.5	6.1	12.6	8.3	9.8	12.8	7.2	6.5	8.4	6.6	14.1	7.0	5.9	9.5	32.7	5.5	10.8
26	9.9	17.8	42.3	54.1	3.9	3.7	4.0	3.2	3.8	3.4	4.8	9.9	13.4	15.2	16.6	25.9	35.5	44.5	25.0	6.1	4.8	7.5	30.1	12.2	54.1	3.2	16.6
27	13.0	6.9	4.8	3.8	4.0	2.7	2.9	2.5	2.9	4.1	5.5	8.9	10.7	8.3	8.1	11.2	9.1	12.2	15.4	8.0	7.6	11.5	8.5	11.0	15.4	2.5	7.6
28	4.1	3.3	3.9	3.5	4.9	3.9	4.2	7.9	3.8	4.9	4.8	7.3	12.0	11.6	8.5	10.1	9.9	8.0	6.9	8.7	5.3	3.5	4.3	5.1	12.0	3.3	6.3
29	8.8	9.7	7.5	7.6	4.1	3.7	3.7	5.0	5.2	5.1	8.2	11.1	11.7	9.0	8.5	8.6	11.2	12.1	9.6	10.8	7.2	3.9	5.3	4.6	12.1	3.7	7.6
30	3.5	3.9	4.0	5.6	4.5	5.5	4.4	9.2	10.0	14.7	37.3	15.7	12.5	20.1	33.2	21.9	8.2	11.2	8.7	7.1	7.7	7.7	10.3	9.4	37.3	3.5	11.5
31	8.9	11.9	22.7	19.8	7.7	7.8	13.9	4.9	6.6	5.9	6.0	6.5	6.6	6.9	7.1	7.1	10.3	9.9	9.7	7.2	7.0	6.6	5.5	5.1	22.7	4.9	8.8
Max.	**15.3**	**31.5**	**49.8**	**54.1**	**55.9**	**40.2**	**61.4**	**26.7**	**44.0**	**16.5**	**58.0**	**40.4**	**52.6**	**46.3**	**33.7**	**47.6**	**35.5**	**44.5**	**38.7**	**22.0**	**27.7**	**24.1**	**44.8**	**34.0**	**61.4**		
Min.	**3.1**	**2.3**	**3.8**	**3.1**	**2.1**	**1.6**	**2.1**	**2.5**	**2.9**	**3.4**	**4.8**	**6.0**	**5.4**	**5.9**	**6.1**	**5.0**	**4.7**	**4.2**	**5.0**	**4.8**	**4.4**	**3.5**	**4.0**	**2.6**		**1.6**	
Avg.	**7.7**	**7.8**	**10.9**	**12.7**	**11.9**	**9.2**	**10.6**	**9.0**	**9.9**	**8.2**	**12.1**	**11.8**	**15.0**	**15.8**	**13.4**	**15.9**	**11.8**	**12.0**	**10.7**	**7.8**	**8.1**	**8.2**	**8.6**	**8.6**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.4	5.0	5.1	4.9	5.0	5.0	5.7	5.0	5.0	4.4	4.4	4.7	5.1	6.0	6.1	5.3	5.7	6.1	6.1	5.4	4.7	4.8	4.5	4.6	6.1	4.4	5.2
2	4.9	5.2	4.7	4.4	4.9	4.6	4.7	4.9	4.7	4.7	4.7	4.9	4.7	4.7	5.2	5.0	4.9	5.2	4.9	4.9	4.6	4.8	5.0	5.9	5.9	4.4	4.9
3	6.2	5.9	5.9	5.6	6.1	5.5	5.2	5.0	4.6	5.5	6.5	5.3	5.5	5.2	5.4	5.6	5.5	5.3	5.2	5.6	5.0	4.7	5.3	4.6	6.5	4.6	5.4
4	4.3	4.5	5.0	4.8	4.6	4.7	5.0	5.4	5.0	5.1	5.0	5.5	5.9	6.4	6.1	6.8	5.8	5.2	5.1	4.8	4.9	6.3	6.2	5.1	6.8	4.3	5.3
5	5.7	6.5	5.8	5.2	5.5	9.5	10.8	6.6	6.8	6.7	5.6	6.6	7.9	5.9	6.2	6.3	5.8	6.5	4.8	3.9	3.8	4.5	5.2	4.9	10.8	3.8	6.1
6	3.8	3.9	3.2	4.4	8.8	8.2	4.3	3.2	4.3	4.8	5.4	5.3	5.3	5.4	4.9	6.8	4.9	5.5	5.9	4.0	4.4	3.6	3.5	3.2	8.8	3.2	4.9
7	3.8	5.0	4.5	4.1	3.3	4.0	4.4	3.5	4.6	4.8	6.7	6.9	7.1	7.3	7.7	7.7	6.9	7.3	6.8	5.7	5.1	4.1	3.2	5.2	7.7	3.2	5.4
8	5.6	4.7	6.1	7.6	4.0	5.3	5.4	4.9	4.8	4.8	5.3	6.8	7.7	9.0	9.3	13.7	9.1	11.7	6.8	6.2	4.1	4.8	2.8	2.6	13.7	2.6	6.4
9	2.2	2.8	2.9	2.8	2.7	3.0	2.9	2.2	3.6	5.8	11.3	9.3	22.6	47.6	41.2	46.9	38.8	25.7	10.2	8.9	6.1	14.1	13.2	14.6	47.6	2.2	14.2
10	9.8	8.8	3.7	3.8	3.5	3.4	5.9	20.5	25.3	11.0	14.3	19.4	23.6	28.1	26.3	17.3	17.1	11.1	7.9	5.9	3.8	2.7	3.0	3.4	28.1	2.7	11.6
11	7.0	5.0	22.2	3.0	9.1	10.5	11.9	8.3	7.5	6.7	13.2	66.4	41.7	25.4	30.6	15.7	19.7	9.7	8.4	6.0	10.0	11.7	9.6	19.5	66.4	3.0	15.8
12	22.8	34.7	10.2	22.2	19.6	21.5	9.9	30.8	22.3	14.1	41.6	49.6	14.4	27.1	17.2	25.1	10.2	23.4	9.2	9.6	6.0	21.3	3.4	3.6	49.6	3.4	19.6
13	24.3	28.2	15.4	16.0	8.4	31.6	34.3	17.2	14.3	19.9	19.1	21.2	14.6	15.5	15.1	10.9	16.0	9.3	11.7	9.9	10.2	6.6	6.4	6.2	34.3	6.2	15.9
14	5.5	5.1	5.2	28.4	67.5	54.7	56.1	9.9	7.7	5.9	5.6	6.0	5.8	8.3	7.2	11.9	15.0	12.1	7.6	17.8	11.4	13.5	7.0	4.3	67.5	4.3	15.8
15	3.7	3.6	4.4	3.9	4.2	3.7	3.9	3.6	4.1	4.2	4.7	5.0	5.1	5.4	5.4	5.9	4.8	5.0	5.0	4.4	5.2	2.9	4.1	5.8	5.9	2.9	4.5
16	3.6	4.5	7.8	7.2	26.2	15.7	34.0	42.5	14.3	8.3	41.1	16.5	26.2	39.0	45.3	47.7	62.4	21.1	14.8	6.4	7.5	8.7	7.4	8.8	62.4	3.6	21.5
17	5.1	4.4	5.1	6.8	6.5	6.8	10.6	4.7	6.3	9.1	6.6	7.4	8.0	8.2	9.0	7.0	7.8	6.3	5.8	5.4	4.6	4.6	4.1	4.4	10.6	4.1	6.5
18	3.9	4.3	4.5	4.8	4.8	4.5	4.2	4.3	4.3	4.6	4.6	4.2	4.3	4.4	4.8	4.6	4.8	5.3	5.5	5.2	4.8	4.8	5.2	4.7	5.5	3.9	4.6
19	5.1	4.9	4.7	4.6	5.1	5.2	5.8	5.7	5.1	4.7	5.5	4.9	4.7	4.6	4.8	4.9	4.7	4.7	4.9	5.3	5.0	5.3	5.1	4.7	5.8	4.6	5.0
20	4.7	5.3	5.2	4.6	4.9	4.9	5.3	5.4	5.0	4.5	5.0	5.6	6.3	6.4	5.8	6.3	5.8	7.2	6.0	4.6	4.8	4.9	4.3	6.1	7.2	4.3	5.4
21	4.7	4.0	4.1	4.2	4.4	3.8	4.4	4.1	4.2	4.4	4.8	4.8	4.6	4.4	4.9	5.1	5.2	5.7	6.1	5.0	4.5	5.2	4.3	4.2	6.1	3.8	4.6
22	4.3	4.3	4.1	3.7	3.6	4.3	4.6	4.2	4.3	4.6	4.6	5.3	4.8	5.2	5.2	4.7	4.8	5.1	4.5	4.3	4.1	3.8	3.7	5.6	5.6	3.6	4.5
23	4.9	4.6	5.7	9.4	26.5	22.9	33.7	31.6	10.7	3.9	6.2	9.1	5.0	6.8	7.5	6.9	4.9	5.9	4.2	4.1	2.8	2.9	2.7	4.6	33.7	2.7	9.5
24	3.0	4.9	3.4	3.1	2.9	2.6	3.1	3.7	4.6	5.1	5.5	6.6	7.2	7.0	11.2	24.3	6.4	18.8	9.3	10.3	10.2	8.4	8.5	8.8	24.3	2.6	7.4
25	5.7	13.3	9.5	11.4	12.7	4.7	10.3	19.3	16.1	7.1	10.2	12.4	9.4	17.0	9.6	10.2	16.3	8.9	6.7	8.4	10.4	5.0	8.6	16.4	19.3	4.7	10.8
26	9.1	6.0	4.4	4.8	8.0	3.7	5.7	7.0	4.2	7.0	13.9	8.9	12.5	8.9	8.5	9.5	7.4	6.9	8.6	12.9	9.7	8.0	10.6	5.3	13.9	3.7	8.0
27	5.0	4.4	4.7	4.7	10.2	17.7	15.3	21.8	7.6	6.9	12.3	13.0	9.4	11.2	12.8	11.2	20.4	8.4	9.9	12.7	9.4	18.8	13.4	7.4	21.8	4.4	11.2
28	10.5	3.8	8.6	14.6	51.5	25.5	37.7	19.5	20.7	36.8	31.6	24.8	37.0	40.8	15.9	21.0	35.8	14.5	9.5	5.0	2.8	3.6	6.5	3.9	51.5	2.8	20.1
29	4.0	6.6	8.2	6.3	7.5	5.8	5.2	3.9	4.0	5.0	5.8	5.8	4.3	6.7	7.5	7.5	7.9	7.7	5.3	5.5	3.7	3.6	3.8	2.7	8.2	2.7	5.6
30	3.5	5.3	4.8	4.0	3.3	2.9	2.9	4.1	4.2	3.9	5.1	8.8	12.4	11.8	13.0	12.3	12.6	15.3	18.4	14.4	13.1	7.1	5.1	4.9	18.4	2.9	8.0
31	2.8	6.4	2.5	5.0	4.1	4.0	4.6	4.4	5.7	6.5	6.4	9.5	19.5	22.0	25.9	20.6	37.5	31.3	34.5	41.4	15.1	18.6	7.5	5.0	41.4	2.5	14.2
Max.	**24.3**	**34.7**	**22.2**	**28.4**	**67.5**	**54.7**	**56.1**	**42.5**	**25.3**	**36.8**	**41.6**	**66.4**	**41.7**	**47.6**	**45.3**	**47.7**	**62.4**	**31.3**	**34.5**	**41.4**	**15.1**	**21.3**	**13.4**	**19.5**	**67.5**		
Min.	**2.2**	**2.8**	**2.5**	**2.8**	**2.7**	**2.6**	**2.9**	**2.2**	**3.6**	**3.9**	**4.4**	**4.2**	**4.3**	**4.4**	**4.8**	**4.6**	**4.7**	**4.7**	**4.2**	**3.9**	**2.8**	**2.7**	**2.7**	**2.6**		**2.2**	
Avg.	**6.3**	**7.0**	**6.2**	**7.1**	**10.9**	**10.0**	**11.5**	**10.2**	**7.9**	**7.4**	**10.4**	**12.0**	**11.4**	**13.3**	**12.4**	**12.7**	**13.4**	**10.4**	**8.4**	**8.2**	**6.5**	**7.2**	**5.9**	**6.2**			**9.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	34.4	26.9	10.5	13.5	16.8	5.4	7.5	33.1	29.8	8.5	5.8	9.2	14.2	10.0	12.6	9.8	11.3	11.4	7.2	6.7	4.4	4.1	3.6	4.3	34.4	3.6	12.5
2	4.5	4.9	3.5	4.6	5.4	7.1	4.8	4.9	7.4	10.1	12.6	14.2	13.8	49.6	44.8	28.5	1.4	6.9	0.2	3.2	0.0	0.0	0.1	0.1	49.6	0.0	9.7
3	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1								29.0	20.2	20.8	4.5	4.5	4.4	4.6	4.7	4.9	29.0	0.0	5.8
4	5.7	5.6	5.2	11.4	7.8	10.0	40.6	10.1	19.2	11.9	17.9	20.1	22.0	21.9	17.9	25.4	23.6	7.5	11.0	8.4	5.9	2.8	8.4	3.2	40.6	2.8	13.5
5	7.4	9.6	12.2	8.9	7.9	8.4	14.2	12.9	11.1	89.1	68.2	13.3	22.9	19.8	17.9	43.6	23.9	31.3	14.7	5.3	32.7	34.0	10.3	54.0	89.1	5.3	23.9
6	30.7	14.6	6.9	91.8	84.7	33.5	50.8	17.3	11.8	7.2	12.0	7.6	10.6	8.4	9.3	19.0	12.6	7.8	6.8	4.1	8.0	11.3	18.8	19.7	91.8	4.1	21.1
7	11.8	7.7	7.5	7.5	6.5	7.5	7.2	5.4	6.9	5.1	5.0	4.7	4.6	4.9	4.9	5.0	5.0	4.9	5.1	5.0	5.0	4.6	4.8	4.9	11.8	4.6	5.9
8	4.9	5.0	4.8	5.1	5.9	6.0	8.5	5.8	6.2	8.5	6.4	8.9	6.9	7.5	7.1	10.4	7.2	12.1	13.1	14.3	8.9	14.4	5.6	6.3	14.4	4.8	7.9
9	5.5	7.2	5.6	5.3	5.4	6.7	8.7	7.1	5.8	6.7	6.2	7.8	7.7	8.4	8.1	7.9	9.1	16.8	50.1	34.7	24.3	6.8	11.3	9.7	50.1	5.3	11.4
10	42.8	35.6	21.0	18.5	16.0	38.6	18.1	48.0	54.7	52.5	12.9	9.3	8.8	8.3	7.2	5.5	5.4	9.0	7.5	6.5	5.2	4.8	4.5	5.6	54.7	4.5	18.6
11	5.0	5.3	5.3	4.9	5.0	5.0	5.6	5.1	5.1	5.8	6.7	5.1	5.4	5.1	5.5	5.7	5.2	5.5	4.8	5.2	4.9	4.8	5.1	5.4	6.7	4.8	5.3
12	4.5	4.4	4.8	4.8	7.3	7.8	5.5	5.6	11.7	9.9	11.9	14.8	12.9	10.5	11.8	11.0	7.9	9.4	9.8	6.0	6.4	6.8	9.0	9.3	14.8	4.4	8.5
13	21.3	8.3	4.8	5.1	8.0	5.8	5.2	6.2	10.3	14.5	10.9	10.8	10.0	9.9	10.2	11.5	7.0	19.1	8.3	26.3	10.3	9.3	16.0	24.0	26.3	4.8	11.4
14	8.3	17.6	10.7	8.6	6.7	6.4	6.7	36.5	18.1	85.7	82.0	34.8	48.0	29.1	21.4	28.5	22.9	7.9	10.1	3.6	3.0	2.3	2.7	4.4	85.7	2.3	21.1
15	7.0	8.6	3.1	3.2	4.0	3.9	8.1	5.1	4.0	8.2	5.0	7.4	6.9	11.0	6.6	7.9	8.3	8.0	6.0	3.7	2.4	5.2	7.0	5.7	11.0	2.4	6.1
16	3.3	4.5	4.2	3.8	4.4	9.8	5.4	8.0	7.8	9.5	9.8	11.3	10.8	10.4	11.5	10.5	11.2	7.6	11.7	17.5	4.9	4.1	5.1	11.8	17.5	3.3	8.3
17	82.4	54.1	61.7	74.3	40.3	17.9	8.1	4.6	10.5	11.1	12.3	9.3	16.4	6.8	10.8	10.8	16.1	16.6	9.5	16.9	6.1	6.8	7.7	7.8	82.4	4.6	21.6
18	9.4	7.9	5.7	7.6	7.8	6.4	7.2	18.5	11.5	7.1	5.5	5.6	4.8	4.9	5.4	5.5	5.4	5.4	4.8	6.1	5.3	6.3	16.0	14.4	18.5	4.8	7.7
19	10.8	8.1	6.9	17.7	9.3	9.7	13.8	9.2	16.5	11.4	8.8	8.8	7.8	8.1		7.6	6.0	7.0	8.0	7.6	7.3	10.4	9.5	8.4	17.7	6.0	9.5
20	7.4	6.4	6.9	6.1	5.5	5.4	5.1	5.8	5.2	5.7	5.9	9.3	5.7	10.2	7.6	11.0	7.9	13.5	20.7	20.6	15.9	44.4	24.5	4.5	44.4	4.5	10.9
21	8.9	4.7	11.3	13.9	3.2	5.9	4.2	3.7	3.1	4.1	4.5	6.3	6.1	6.6	7.1	8.6	6.8	7.1	8.2	5.6	5.4	6.8	12.0	7.3	13.9	3.1	6.7
22	4.7	8.9	9.4	21.6	16.6	11.2	7.4	13.9	62.7	35.6	9.8	4.1	6.2	6.6	5.5	4.8	4.7	9.3	5.3	5.0	4.7	4.5	5.0	5.0	62.7	4.1	11.3
23	5.4	6.5	14.7	10.6	20.2	21.6	7.2	8.8	22.7	6.2	18.5	12.5	7.4	6.8	6.1	5.9	6.5	5.5	9.5	7.6	14.8	6.0	8.6	8.3	22.7	5.4	10.3
24	7.7	5.2	8.0	17.4	6.6	10.2	12.1	7.2	6.2	6.1	5.4	6.0	10.2	13.4	22.7	14.5	18.5	14.9	9.9	17.8	10.6	12.5	11.5	12.0	22.7	5.2	11.1
25	21.4	8.9	6.7	8.7	6.5	6.3	6.6	5.5	5.2	5.6	10.4	12.5	14.2	8.6	11.1	9.3	15.7	6.9	10.7	9.8	7.6	7.0	7.3	4.8	21.4	4.8	9.0
26	6.4	6.9	7.8	6.4	7.4	13.2	19.9	72.7	36.0	63.7	19.3	13.1	23.9	32.9	51.5	62.2	72.3	11.1	13.0	4.1	6.1	6.2	4.3	3.5	72.7	3.5	23.5
27	3.3	3.5	4.5	12.1	27.4	40.4	30.2	59.0	36.3	17.4	38.3	17.0	17.0	11.3	11.1	8.3	11.9	6.1	5.3	5.8	5.1	4.7	4.7	4.4	59.0	3.3	16.0
28	4.8	5.2	4.8	4.8	5.0	4.5	5.5	5.6	5.2	5.4	5.8	6.3	5.3	5.1	5.5	7.5	11.3	11.4	8.8	10.1	17.3	81.5	61.5	13.6	81.5	4.5	12.6
29	2.7	5.9	2.2	3.8	3.7	3.8	3.9	5.9	8.0	5.5	9.8	7.5	90.1	15.0	15.9	9.2	6.6	19.1	10.8	10.8	39.1	11.3	8.8	13.5	90.1	2.2	13.0
30	8.4	8.9	8.7	12.1	9.0	8.3	7.4	9.6	7.1	6.4	7.7	30.4	6.4	11.0	10.9	10.3	16.7	11.3	12.1	9.2	24.3	34.6	19.3	9.9	34.6	6.4	12.5
Max.	**82.4**	**54.1**	**61.7**	**91.8**	**84.7**	**40.4**	**50.8**	**72.7**	**62.7**	**89.1**	**82.0**	**34.8**	**90.1**	**49.6**	**51.5**	**62.2**	**72.3**	**31.3**	**50.1**	**34.7**	**39.1**	**81.5**	**61.5**	**54.0**	**91.8**		
Min.	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**3.1**	**4.1**	**4.5**	**4.1**	**4.6**	**4.9**	**4.9**	**4.8**	**1.4**	**4.9**	**0.2**	**3.2**	**0.0**	**0.0**	**0.1**	**0.1**		**0.0**	
Avg.	**12.7**	**10.2**	**9.0**	**13.8**	**12.0**	**10.9**	**11.2**	**14.7**	**15.4**	**18.1**	**15.0**	**11.3**	**14.7**	**12.5**	**13.1**	**14.5**	**13.0**	**11.0**	**10.2**	**9.7**	**10.0**	**12.1**	**10.6**	**9.7**			**12.3**

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.9	5.6	8.9	13.3	17.6	8.8	6.3	8.6	22.2	18.9	13.5	9.7	22.1	7.3	6.3	9.2	6.3	5.5	3.8	4.6	4.9	3.1	3.6	3.9	22.2	3.1	9.5
2	3.8	3.5	3.4	3.4	3.1	3.4	3.6	3.7	3.4	3.2	3.3	4.0	3.5	4.0	6.4	6.8	5.7	5.8	4.8	3.1	3.2	3.4	3.3	4.0	6.8	3.1	4.0
3	2.9	4.4	4.2	4.8	3.8	3.2	4.9	3.5	3.9	5.0	5.6	5.7	5.8	9.4	8.5	7.8	7.7	6.3	9.5	18.9	42.0	26.9	19.6	58.7	58.7	2.9	11.4
4	44.6	41.8	10.2	17.1	9.4	8.0	7.3	11.9	5.0	7.4	4.4	4.8	4.5	4.4	4.7	5.2	5.4	5.5	5.7	5.0	7.0	5.8	6.0	6.2	44.6	4.4	9.9
5	8.6	8.9	5.3	7.4	5.6	5.7	6.7	7.3	5.1	5.6	5.2	7.9	91.2	14.6	4.0	3.5	4.1	6.5	3.9	5.6	8.2	6.6	5.5	3.6	91.2	3.5	9.9
6	5.8	4.4	4.5	3.2	3.2	3.9	4.1	4.0	4.0	3.3	3.6	4.4	4.7	8.1	4.9	4.5	4.1	4.7	3.5	6.1	6.6	5.0	4.4	4.6	8.1	3.2	4.6
7	4.0	3.9	4.1	4.0	5.1	5.3	3.9	4.1	3.8	3.9	3.9	3.7	4.4	4.7	4.1	4.8	4.8	5.4	3.6	4.0	4.2	3.7	4.9	4.8	5.4	3.6	4.3
8	5.3	6.5	5.9	5.9	4.2	3.4	7.8	7.5	7.4	3.1	4.0	7.2	4.4	4.6	5.5	6.0	4.7	4.4	3.3	3.8	3.7	3.4	5.4	3.3	7.8	3.1	5.0
9	5.2	6.5	4.2	10.8	15.4	46.2	53.2	22.1	39.4	61.1	22.3	22.0	60.9	14.2	10.5	11.8	7.9	5.4	5.0	6.4	7.5	11.3	3.1	4.5	61.1	3.1	19.0
10	2.8	3.3	3.8	4.1	4.5	5.0	4.0	5.8	4.3	3.6	4.1	5.5	6.8	7.2	6.4	5.7	5.6	4.8	6.6	5.5	9.4	9.0	13.8	8.4	13.8	2.8	5.8
11	8.1	5.6	5.1	7.3	6.0	20.2	8.6	44.9	64.9	14.4	7.5	7.5	8.0	5.9	5.4	5.2	5.1	5.7	4.4	6.2	6.9	4.0	3.9	4.1	64.9	3.9	11.0
12	4.0	4.3	4.0	6.6	6.1	7.0	4.4	11.5	50.1	48.4	49.6	61.9	24.3	8.7	12.6	13.4	14.0	21.3	12.6	9.5	4.6	11.5	4.9	3.4	61.9	3.4	16.6
13	4.3	5.8	2.6	3.2	5.2	9.3	8.3	4.8	4.0	4.1	7.8	5.2	6.7	6.7	8.1	6.3	6.4	5.8	3.6	3.0	4.4	4.5	3.4	3.7	9.3	2.6	5.3
14	3.6	4.6	4.2	3.3	3.1	3.2	4.3	3.2	3.9	7.7	6.5	7.5	5.9	10.2	10.4	7.0	5.1	6.9	7.5	8.3	6.9	3.4	10.5	9.3	10.5	3.1	6.1
15	12.6	8.2	12.4	9.8	10.0	21.3	63.6	22.6	5.7	13.0	42.8	36.5	19.7	8.4	15.6	27.8	31.8	14.9	13.2	16.2	16.9	5.2	14.4	11.2	63.6	5.2	18.9
16	8.0	4.8	7.9	7.7	5.4	4.0	4.3	3.9	4.5	3.4	4.5	5.1	8.0	3.4	5.4	5.9	3.6	3.8	7.0	4.4	3.9	4.3	3.1	3.9	8.0	3.1	5.0
17	3.9	4.9	4.9	4.8	2.2	2.6	2.2	2.5	2.6	2.2	4.2	4.8	3.6	3.7	4.3	4.8	8.0	5.0	3.2	2.5	3.2	2.8	2.4	2.3	8.0	2.2	3.7
18	3.4	4.0	4.6	3.1	3.8	4.1	5.5	6.3	5.7	4.0	6.4	4.7	5.7	9.0	5.0	10.4	7.2	13.0	3.3	2.4	2.9	5.4	3.3	3.9	13.0	2.4	5.3
19	4.6	6.2	10.6	7.1	6.8	13.0	10.8	12.2	26.9	19.1	22.4	14.1	54.9	61.6	27.7	13.9	12.0	11.9	15.1	9.0	14.9	13.5	9.4	13.4	61.6	4.6	17.1
20	17.1	10.1	10.3	8.4	11.3	6.5	6.5	12.1	8.9	8.5	12.1	14.9	7.4	6.3	7.2	5.6	6.6	7.8	7.4	6.1	8.1	7.3	7.0	5.8	17.1	5.6	8.7
21	5.2	6.2	10.5	7.8	5.1	6.2	4.4	7.1	8.1	29.4	9.2	15.0	16.2	27.1	4.8	12.5	25.2	81.6	39.4	23.2	5.1	4.9	4.3	3.8	81.6	3.8	15.1
22	5.0	4.2	6.2	4.8	3.9	7.1	4.3	5.9	6.0	81.0	54.2	38.1	67.4	8.1	7.5	8.8	6.3	17.5	60.3	24.6	20.7	39.1	18.5	26.7	81.0	3.9	21.9
23	6.9	13.3	33.4	18.1	12.9	7.8	36.5	9.2	9.1	15.1	45.1	43.1	30.7	12.6	17.9	8.3	19.9	23.3	6.9	5.9	6.5	5.1	6.3	23.2	45.1	5.1	17.4
24	26.3	6.3	46.5	12.7	6.8	10.9	7.5	8.4	14.8	9.7	15.7	3.9	10.7	7.2	7.5	7.0	8.2	5.1	19.2	6.2	7.5	5.1	8.1	6.4	46.5	3.9	11.2
25	9.2	5.2	4.5	5.9	5.4	4.4	4.4	4.3	4.6	4.5	3.9	4.1	4.1	4.1	4.3	4.3	4.6	4.6	4.7	4.5	9.2	6.1	10.0	5.2	10.0	3.9	5.3
26	7.3	8.8	9.7	7.6	9.9	6.4	9.0	13.3	8.9	10.6	8.5	7.8	9.9	6.2	6.2	10.0	7.7	11.6	8.7	6.6	4.3	5.6	3.7	5.7	13.3	3.7	8.1
27	4.6	5.9	4.4	5.2	6.8	8.9	6.4	9.5	8.9	12.8	10.0	14.5	19.2	16.1	7.2	5.7	6.4	3.9	3.7	6.0	11.6	23.4	14.1	11.5	23.4	3.7	9.4
28	10.8	7.2	11.2	12.5	31.3	37.1	10.2	9.4	9.5	8.9	12.8	7.1	10.6	10.8	12.0	9.3	7.2	7.0	7.2	4.9	7.2	4.0	4.5	4.3	37.1	4.0	10.7
29	4.3	4.6	5.0	4.7	4.5	4.5	4.5	4.3	4.4	4.2	4.1	4.1	4.6	4.8	5.2	5.1	5.2	4.7	10.3	10.1	4.6	4.2	4.5	5.2	10.3	4.1	5.1
30	7.9	9.8	13.1	5.5	6.6	5.3	14.1	18.9	7.8	2.9	3.3	4.2	7.0	42.7	34.9	54.1	13.0	5.4	9.0	16.2	24.5	21.0	20.5	19.3	54.1	2.9	15.3
31	28.1	13.8	15.1	15.7	6.4	8.3	7.5	5.6	5.1	4.6	5.0	5.1	5.7	8.3	9.5	13.1	12.1	8.6	7.9	4.6	8.8	5.2	8.7	10.5	28.1	4.6	9.3
Max.	**44.6**	**41.8**	**46.5**	**18.1**	**31.3**	**46.2**	**63.6**	**44.9**	**64.9**	**81.0**	**54.2**	**61.9**	**91.2**	**61.6**	**34.9**	**54.1**	**31.8**	**81.6**	**60.3**	**24.6**	**42.0**	**39.1**	**20.5**	**58.7**	**91.2**		
Min.	**2.8**	**3.3**	**2.6**	**3.1**	**2.2**	**2.6**	**2.2**	**2.5**	**2.6**	**2.2**	**3.3**	**3.7**	**3.5**	**3.4**	**4.0**	**3.5**	**3.6**	**3.8**	**3.2**	**2.4**	**2.9**	**2.8**	**2.4**	**2.3**		**2.2**	
Avg.	**9.1**	**7.5**	**9.1**	**7.6**	**7.5**	**9.4**	**10.6**	**9.6**	**11.7**	**13.7**	**13.1**	**12.4**	**17.4**	**11.3**	**9.0**	**9.8**	**8.8**	**10.4**	**9.8**	**7.8**	**9.0**	**8.5**	**7.6**	**9.2**			**10.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.3	10.2	15.1	17.1	16.2	21.6	13.3	13.2	42.3	11.8	9.4	12.7	9.1	8.3	24.1	28.8	52.7	13.3	6.1	3.8	3.3	3.2	2.9	2.8	52.7	2.8	14.5
2	3.5	2.4	6.6	24.1	15.8	8.2	11.9	10.2	9.6	8.9	4.9	3.7	4.3	9.4	3.7	4.7	6.8	2.5	2.2	4.6	2.4	2.5	3.0	3.6	24.1	2.2	6.6
3	2.4	3.1	4.6	5.5	3.8	3.9	2.9	11.0	13.1	17.2	27.3	13.4	30.4	24.4	9.7	11.1	15.9	6.5	10.8	10.4	10.4	5.8	7.9	6.7	30.4	2.4	10.8
4	6.2	4.0	3.7	3.9	4.1	4.0	3.9	3.9	3.7	3.9	4.2	3.9	4.7	4.9	3.9	4.2	4.2	4.7	4.9	7.6	6.3	5.3	4.8	4.5	7.6	3.7	4.6
5	4.1	3.8	4.0	3.6	3.5	4.6	5.5	5.5	4.1	4.1	5.9	5.7	4.7	5.5	4.1	4.9	5.5	4.3	5.6	5.1	5.6	7.4	5.7	6.5	7.4	3.5	5.0
6	5.5	3.9	4.1	3.8	3.9	5.3	5.5	4.3	4.5	4.1	3.8	3.9	4.0	3.8	4.0	4.3	4.7	4.1	4.3	4.7	4.2	4.1	10.0	5.0	10.0	3.8	4.6
7	7.1	16.8	5.8	5.3	4.1	4.4	3.8	3.7	5.2	5.2	5.3	5.4	4.4	7.3	9.7	9.2	5.2	6.2	12.1	5.0	8.7	6.1	9.0	47.0	47.0	3.7	8.4
8	18.0	11.4	9.8	5.2	5.7	4.7	4.7	4.1	4.0	3.7	4.0	4.0	5.9	4.9	5.2	4.5	4.7	5.1	4.1	4.5	5.0	4.3	5.8	6.2	18.0	3.7	5.8
9	4.5	5.8	4.9	5.7	5.1	6.6	5.9	4.7	6.0	6.1	5.7	3.8	6.2	4.0	4.0	3.8	4.5	3.7	5.4	7.1	5.5	26.4	21.2	53.6	53.6	3.7	8.8
10	17.7	30.3	7.2	5.8	5.1	3.2	5.3	3.9	4.9	5.6	3.4	3.3	6.4	2.8	6.9	2.4	2.7	10.2	5.9	9.8	5.7	6.7	5.1	6.3	30.3	2.4	6.9
11	7.2	4.2	8.5	6.9	5.4	10.4	7.1	5.0	5.0	6.7	6.0	6.0	5.2	5.5	11.5	6.1	4.3	7.4	5.9	7.8	10.7	22.0	13.2	10.6	22.0	4.2	7.9
12	17.1	10.0	28.2	50.2	47.5	44.7	27.5	24.4	14.3	34.6	13.0	31.4	12.4	10.1	17.4	7.0	4.8	6.0	6.9	10.6	9.4	9.4	4.9	4.8	50.2	4.8	18.6
13	4.9	4.3	4.0	4.2	7.0	5.0	4.9	4.0	4.3	4.0	4.9	4.7	7.1	25.8	31.6	35.4	46.7	7.2	7.4	6.1	4.1	6.0	5.9	7.9	46.7	4.0	10.3
14	5.2	6.3	5.3	6.0	6.8	5.4	4.8	8.1	17.8	11.0	12.5	9.0	7.7	10.0	6.6	15.6	16.7	5.4	5.5	31.5	31.0	32.4	22.3	30.2	32.4	4.8	13.0
15	8.6	4.8	11.5	8.6	5.8	3.8	11.0	6.1	8.6	4.7	5.6	5.2	5.4	5.8	3.7	4.9	6.6	8.3	3.1	4.7	4.8	4.6	4.5	6.0	11.5	3.1	6.1
16	3.1	2.8	2.8	3.2	3.2	3.7	3.1	3.0	3.0	3.0	3.3	3.2	3.5	2.5	2.6	2.8	4.3	3.7	3.0	2.7	2.8	2.7	2.8	3.5	4.3	2.5	3.1
17	4.0	3.9	6.3	4.4	2.9	3.7	3.8	3.3	4.2	3.6	3.3	3.8	4.3	2.7	3.2	3.6	4.7	3.5	10.0	7.1	3.8	3.8	2.2	4.1	10.0	2.2	4.2
18	6.1	4.1	4.6	4.6	6.7	6.6	7.8	7.1	4.2	4.1	5.3	4.6	4.6	3.2	3.4	6.8	5.6	7.2	3.2	6.6	13.5	77.8	8.3	12.0	77.8	3.2	9.1
19	6.8	12.1	9.8	42.0	9.9	20.5	8.8	24.3	6.2	14.0	5.8	10.0	4.2	6.5	5.4	8.7	5.8	8.5	11.4	7.8	6.6	12.2	6.4	5.2	42.0	4.2	10.8
20	4.6	4.0	4.1	4.0	4.1	4.4	3.7	3.4	3.5	3.4	3.5	3.5	3.5	3.7	3.3	3.9	4.2	4.1	6.3	8.3	10.8	16.8	12.1	7.5	16.8	3.3	5.5
21	10.2	4.8	7.9	6.2	4.1	4.1	9.1	4.1	5.1	5.2	4.3	4.4	4.3	3.9	4.1	5.8	4.8	4.9	3.7	4.0	3.7	4.6	4.0	5.5	10.2	3.7	5.1
22	5.5	10.8	4.5	6.1	9.7	19.3	16.4	11.0	8.8	4.7	3.7	4.0	4.1	4.2	4.6	5.4	6.4	6.5	5.7	5.0	4.0	4.8	12.2	7.2	19.3	3.7	7.3
23	6.6	4.1	5.2	7.2	9.0	4.0	5.3	8.0	13.7	8.9	9.8	11.9	9.6	11.0	10.5	47.2	13.8	19.2	41.9	11.3	7.4	5.5	2.7	5.4	47.2	2.7	11.6
24	7.4	12.9	21.0	25.5	10.2	13.3	17.5	12.8	5.9	5.7	3.7	5.5	11.7	4.3	3.9	4.1	4.1	4.1	4.2	3.7	4.8	4.4	4.1	3.8	25.5	3.7	8.3
25	3.8	3.7	4.4	3.8	4.0	3.7	5.0	6.8	7.7	7.2	14.1	8.9	5.4	7.6	7.5	8.1	5.8	6.1	30.7	31.4	18.5	38.8	13.8	6.0	38.8	3.7	10.5
26	5.4	4.3	11.7	7.7	11.7	37.0	30.6	19.2	10.9	7.7	5.9	5.2	7.3	9.3	10.7	6.8	11.0	5.1	5.1	6.0	4.9	4.7	5.6	5.1	37.0	4.3	10.0
27	4.0	6.0	4.1	4.6	4.1	3.6	3.7	3.6	3.8	4.1	4.2	4.3	4.7	4.4	4.1	4.5	5.1	4.1	4.0	3.8	3.8	3.5	3.9	5.0	6.0	3.5	4.2
28	4.3	4.0	6.2	5.4	8.0	8.5	12.4	7.1	9.4	6.7	10.2	4.7	3.7	3.9	6.9	5.0	4.7	4.4	4.4	4.7	4.0	4.9	5.0	4.5	12.4	3.7	6.0
29	5.4	5.1	7.8	11.7	11.3	5.5	6.3	4.3	4.7	4.1	4.8	4.2	3.8	4.7	4.8	4.6	4.6	4.2	4.1	4.4	5.2	4.1	4.3	4.4	11.7	3.8	5.4
30	4.2	4.4	3.8	4.2	4.3	4.9	4.5	4.8	4.0	4.2	4.2	4.6	4.3	3.9	4.0	4.0	4.4	4.4	5.0	5.2	3.7	4.0	3.8	3.8	5.2	3.7	4.3
Max.	**18.0**	**30.3**	**28.2**	**50.2**	**47.5**	**44.7**	**30.6**	**24.4**	**42.3**	**34.6**	**27.3**	**31.4**	**30.4**	**25.8**	**31.6**	**47.2**	**52.7**	**19.2**	**41.9**	**31.5**	**31.0**	**77.8**	**22.3**	**53.6**	**77.8**		
Min.	**2.4**	**2.4**	**2.8**	**3.2**	**2.9**	**3.2**	**2.9**	**3.0**	**3.0**	**3.0**	**3.3**	**3.2**	**3.5**	**2.5**	**2.6**	**2.4**	**2.7**	**2.5**	**2.2**	**2.7**	**2.4**	**2.5**	**2.2**	**2.8**		**2.2**	
Avg.	**6.7**	**6.9**	**7.6**	**9.9**	**8.1**	**9.3**	**8.5**	**7.8**	**8.1**	**7.3**	**6.7**	**6.6**	**6.6**	**6.9**	**7.5**	**8.9**	**9.2**	**6.2**	**7.8**	**7.8**	**7.2**	**11.3**	**7.2**	**9.5**			**7.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Wind Sigma (RMYoung)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.0	5.3	5.3	5.9	8.3	7.8	8.5	13.4	7.0	8.8	12.4	13.6	10.3	6.6	17.1	10.8	6.3	8.4	29.1	57.0	11.3	11.9	4.9	3.7	57.0	3.7	11.7
2	5.6	8.5	10.3	8.3	15.2	12.6	7.2	4.6	6.9	19.3	70.8	68.8	87.1	64.7	16.6	9.2	12.3	33.6	93.1	69.7	24.7	10.7	5.5	15.4	93.1	4.6	28.4
3	20.6	6.4	6.1	4.2	4.1	3.8	4.0	4.3	4.1	5.1	4.6	4.2	5.0	5.8	14.3	11.4	23.5	50.9	26.2	18.9	16.5	26.8	10.1	13.8	50.9	3.8	12.3
4	21.5	13.9	11.3	8.9	10.6	10.7	32.6	9.9	5.2	7.0	7.3	10.0	9.3	5.9	7.0	5.2	5.4	4.7	5.0	4.5	5.1	5.7	7.3	6.9	32.6	4.5	9.2
5	6.2	7.8	8.4	10.9	11.8	6.9	5.6	4.7	5.7	9.0	5.6	4.0	3.8	4.4	4.2	5.0	4.7	4.3	4.1	4.1	4.9	4.1	4.2	4.0	11.8	3.8	5.8
6	4.1	4.5	4.1	4.1	4.1	4.2	3.9	4.0	3.9	3.9	3.8	3.6	3.6	3.7	4.0	4.4	9.2	20.2	27.5	7.4	4.1	10.4	14.4	17.2	27.5	3.6	7.3
7	12.0	18.5	12.0	6.0	12.0	6.6	7.9	12.7	19.3	29.0	11.7	3.6	6.1	3.5	3.9	3.5	3.5	3.6	3.6	4.2	4.4	4.0	3.6	4.1	29.0	3.5	8.3
8	4.5	4.5	14.2	4.3	6.5	7.3	6.5	7.0	8.6	5.2	6.4	5.2	3.6	7.5	6.6	11.4	50.9	23.8	5.6	16.6	3.7	4.8	3.6	4.2	50.9	3.6	9.3
9	32.9	47.0	41.3	14.7	17.9	5.5	9.6	6.0	5.2	4.0	6.0	10.7	5.1	8.6	4.3	5.2	4.8	5.1	4.4	4.3	5.1	4.2	5.2	5.5	47.0	4.0	10.9
10	7.4	5.7	4.4	9.2	7.5	13.8	9.6	11.2	6.1	26.6	6.0	17.5	7.0	9.8	2.6	3.8	6.3	5.6	5.8	5.2	4.8	2.7	3.6	2.6	26.6	2.6	7.7
11	2.9	2.4	2.6	2.5	5.3	2.6	2.5	6.9	6.1	14.6															14.6	2.4	4.8
12																											
13																			3.8	6.7	6.1	5.8	4.0	5.5	6.7	3.8	5.3
14	6.1	3.3	6.2	6.1	5.9	5.6	9.2	4.4	3.7																9.2	3.3	5.6
15	5.6	6.6	3.1	3.0	2.8	2.9	4.3	4.8	2.8	4.4	5.8	4.6	3.4	3.3	2.8	2.8	2.7	2.9	3.1	3.0	3.6	4.4	3.3	7.4	7.4	2.7	3.9
16	3.5	3.2	3.0	3.2	3.1	2.7	3.4	3.4	4.2	3.7	3.6	4.1	4.2	5.0	3.3	3.8	3.0	3.7	3.2	3.0	3.0	2.8	3.3	2.7	5.0	2.7	3.4
17	4.3	3.9	2.5	2.6	2.8	3.5	3.7	3.2	3.1	4.1	3.6	4.1	3.1	3.7	4.6	3.5	2.7	2.4	2.9	5.4	4.0	7.4	6.1	7.7	7.7	2.4	3.9
18	6.2	5.7	9.4	4.4	2.9	5.1	8.9	4.5	3.9	3.8	2.9	10.3	7.4	10.2	6.5	8.7	4.7	4.8	4.1	4.4	3.3	6.7	5.5	5.3	10.3	2.9	5.8
19	4.4	3.3	5.4	6.2	4.2	4.1	3.4	4.6	3.5	4.1	3.7	5.0	4.2	5.7	4.3	3.7	4.6	4.8	5.3	3.6	8.1	8.0	7.7	9.1	9.1	3.3	5.0
20	9.9	7.7	8.5	46.2	9.3	8.0	6.0	8.0	6.2	4.9	3.1	3.1	5.8	7.1	4.0	5.0	6.1	4.4	3.9	4.2	6.6	8.0	6.3	5.9	46.2	3.1	7.8
21	7.6	3.2	3.1	3.1	3.1	3.1	8.9	6.0	5.0	4.1	9.2	15.6	5.2	6.5	11.3	7.4	5.7	5.2	3.6	3.4	4.2	9.3	20.5	5.1	20.5	3.1	6.6
22	4.2	5.5	3.4	3.2	3.2	3.3	3.8	3.2	4.0	3.6	4.1	3.1	3.2	4.4	3.3	3.2	3.7	3.3	3.2	3.4	3.9	27.4	5.1	4.7	27.4	3.1	4.7
23	4.9	4.5	6.5	6.6	16.3	25.7	23.8	7.5	7.8	6.5	8.9	12.3	9.0	4.0	3.1	12.2	6.2	14.1	26.9	63.5	24.9	77.6	42.6	55.5	77.6	3.1	19.6
24	23.7	30.2	11.7	5.8	8.3	7.2	5.1	6.9	3.5	5.1	4.6	3.6	3.4	2.6	2.7	2.5	3.2	5.2	4.6	2.9	2.8	3.5	3.6	2.7	30.2	2.5	6.5
25	3.0	3.4	4.2	2.2	2.3	3.3	4.5	3.2	5.2	3.7	5.7	2.9	2.4	1.9	2.6	2.1	2.5	2.4	3.3	3.9	4.2	5.0	4.1	4.9	5.7	1.9	3.5
26	6.4	11.1	5.8	10.5	20.7	25.6	71.4	20.9	10.4	11.5	8.9	16.5	8.0	9.3	13.6	10.9	11.7	3.8	3.6	3.6	3.7	3.5	3.8	3.0	71.4	3.0	12.4
27	3.2	2.9	3.1	3.4	3.1	2.7	2.9	3.1	3.2	3.5	4.5	3.3	3.2	3.8	4.1	4.7	5.2	6.1	6.2	14.3	7.8	18.7	8.0	11.0	18.7	2.7	5.5
28	4.0	10.1	7.0	5.7	10.2	18.0	4.3	4.4	4.6	3.4	6.7	5.4	6.1	3.0	5.1	7.4	10.9	3.3	8.1	4.8	4.0	4.0	3.5	3.7	18.0	3.0	6.2
29	2.7	2.4	3.0	2.1	1.9	1.7	1.4	1.8	2.7	2.7	6.2	4.3	8.8	4.3	2.7	10.2	9.4	2.8	2.3	1.9	2.6	2.4	2.0	2.8	10.2	1.4	3.6
30	2.1	6.5	3.4	2.7	7.5	7.0	6.5	9.3	4.7	5.9	14.7	6.1	8.1	15.0	17.7	14.7	29.6	11.5	13.3	12.5	13.3	10.5	4.0	4.2	29.6	2.1	9.6
31	6.3	3.8	2.3	3.7	3.3	3.2	3.9	3.0	4.1	2.5	4.9	3.3	5.7	3.2	6.2	4.2	3.8	3.4	3.6	4.1	4.8	5.8	4.8	6.2	6.3	2.3	4.2
Max.	**32.9**	**47.0**	**41.3**	**46.2**	**20.7**	**25.7**	**71.4**	**20.9**	**19.3**	**29.0**	**70.8**	**68.8**	**87.1**	**64.7**	**17.7**	**14.7**	**50.9**	**50.9**	**93.1**	**69.7**	**24.9**	**77.6**	**42.6**	**55.5**	**93.1**		
Min.	**2.1**	**2.4**	**2.3**	**2.1**	**1.9**	**1.7**	**1.4**	**1.8**	**2.7**	**2.5**	**2.9**	**2.9**	**2.4**	**1.9**	**2.6**	**2.1**	**2.5**	**2.4**	**2.3**	**1.9**	**2.6**	**2.4**	**2.0**	**2.6**		**1.4**	
Avg.	**8.0**	**8.3**	**7.3**	**6.9**	**7.4**	**7.4**	**9.4**	**6.5**	**5.5**	**7.5**	**8.7**	**9.2**	**8.6**	**7.9**	**6.6**	**6.6**	**9.0**	**9.1**	**11.0**	**12.2**	**7.0**	**10.6**	**7.2**	**8.0**			**8.1**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-17.6	-17.7	-17.8	-18.4	-18.8	-19.8	-19.8	-20.9	-21.4	-22.8	-23.5	-23.8	-24.4	-24.5	-24.0	-24.6	-25.8	-26.0	-26.7	-26.7	-27.6	-27.4	-27.3	-27.5	-17.6	-27.6	-23.1
2	-28.3	-28.1	-28.6	-28.6	-27.9	-28.6	-28.7	-28.6	-29.1	-28.3	-27.4	-28.2	-27.9	-27.9	-28.5	-27.8	-27.1	-27.3	-28.0	-28.2	-28.9	-28.6	-28.4	-29.2	-27.1	-29.2	-28.3
3	-29.0	-29.0	-29.0	-29.1	-29.7	-29.8	-29.1	-30.4	-31.1	-31.3	-31.1	-31.5	-31.4	-31.2	-30.6	-30.6	-30.2	-29.9	-30.2	-30.3	-30.2	-31.0	-31.0	-30.3	-29.0	-31.5	-30.3
4	-31.3	-31.3	-31.0	-30.3	-30.4	-30.2	-30.3	-29.6	-29.7	-28.8	-28.9	-27.9	-26.9	-25.5	-24.6	-23.6	-23.2	-21.6	-19.4	-18.9	-18.1	-17.7	-17.6	-18.2	-17.6	-31.3	-25.6
5	-18.6	-20.1	-22.9	-25.1	-24.7	-24.9	-24.7	-26.1	-27.2	-27.4	-28.2	-27.7	-28.0	-28.1	-27.3	-27.6	-28.1	-27.3	-27.2	-26.6	-26.3	-27.2	-27.3	-26.7	-18.6	-28.2	-26.0
6	-26.6	-26.2	-26.1	-25.9	-25.7	-25.4	-25.7	-25.6	-26.0	-26.4	-26.6	-26.9	-27.4	-27.7	-28.0	-28.1	-28.8	-29.5	-29.7	-29.7	-30.3	-31.1	-31.6	-32.1	-25.4	-32.1	-27.8
7	-32.0	-32.3	-31.6	-31.6	-31.8	-31.9	-32.5	-33.1	-33.1	-33.5	-33.0	-33.2	-33.8	-32.4	-31.6	-31.7	-32.1	-32.6	-32.3	-32.2	-32.6	-32.5	-32.5	-32.0	-31.6	-33.8	-32.4
8	-32.5	-31.8	-32.0	-32.2	-31.5	-30.9	-30.8	-31.1	-31.2	-31.0	-30.7	-30.4	-30.4	-29.5	-29.3	-28.6	-27.8	-27.5	-27.4	-27.5	-26.5	-26.2	-25.6	-25.7	-25.6	-32.5	-29.5
9	-25.5	-26.4	-25.9	-25.4	-24.8	-25.5	-24.3	-23.8	-21.6	-21.1	-19.9	-19.4	-17.7	-16.8	-16.8	-17.5	-16.1	-15.8	-15.3	-14.9	-14.4	-14.2	-13.5	-13.8	-13.5	-26.4	-19.6
10	-12.9	-12.6	-13.3	-12.4	-12.1	-12.3	-12.0	-11.2	-10.5	-9.7	-9.0	-8.2	-7.3	-6.4	-5.7	-5.4	-5.1	-4.8	-4.2	-3.9	-3.8	-3.6	-3.4	-3.3	-3.3	-13.3	-8.0
11	-3.1	-2.9	-2.6	-2.4	-2.3	-2.2	-2.1	-2.1	-2.1	-1.9	-1.9	-1.9	-1.7	-1.6	-1.6	-1.7	-1.6	-1.6	-1.6	-1.5	-1.5	-1.5	-1.5	-1.6	-1.5	-3.1	-1.9
12	-1.9	-1.8	-1.9	-2.0	-2.0	-2.0	-1.9	-2.0	-1.8	-1.9	-1.9	-1.9	-1.9	-1.9	-1.8	-1.5	-1.5	-1.5	-1.5	-1.5	-1.6	-1.4	-1.5	-1.7	-1.4	-2.0	-1.8
13	-2.6	-3.4	-3.8	-3.9	-3.6	-3.4	-3.5	-3.7	-3.9	-3.9	-4.1	-4.3	-4.2	-4.4	-4.8	-4.5	-4.6	-5.2	-6.1	-8.0	-7.5	-7.3	-7.8	-8.1	-2.6	-8.1	-4.9
14	-9.2	-9.7	-10.2	-11.3	-10.4	-10.6	-10.5	-10.2	-10.0	-9.5	-8.9	-8.7	-8.4	-8.6	-9.1	-9.3	-9.4	-8.7	-8.8	-8.9	-9.3	-9.6	-10.2	-9.5	-8.4	-11.3	-9.5
15	-9.5	-10.1	-10.7	-11.3	-11.8	-11.3	-10.2	-9.8	-9.9	-10.2	-10.6	-10.5	-10.8	-12.0	-11.5	-11.1	-11.4	-11.8	-12.2	-12.9	-13.9	-15.0	-14.8	-15.6	-9.5	-15.6	-11.6
16	-14.9	-14.2	-12.9	-13.0	-13.9	-13.7	-12.0	-11.6	-9.6	-9.4	-8.2	-7.3	-7.1	-7.0	-6.2	-5.7	-5.2	-4.8	-4.5	-4.1	-4.1	-4.2	-4.3	-4.3	-4.1	-14.9	-8.4
17	-4.0	-3.8	-3.9	-4.4	-4.7	-4.6	-4.7	-4.7	-4.2	-4.2	-4.1	-3.8	-3.4								-2.1	-2.0	-2.0	-2.0	-2.0	-4.7	-3.7
18	-2.4	-2.6	-2.6	-3.1	-3.4	-3.2	-3.1	-3.2	-3.4	-3.4	-3.4	-3.5	-3.3	-3.2	-3.0	-2.6	-2.6	-2.9	-3.4	-4.0	-4.0	-4.4	-4.7	-4.4	-2.4	-4.7	-3.3
19	-4.6	-4.7	-4.6	-4.1	-3.9	-4.1	-4.3	-4.3	-4.3	-4.6	-5.2	-5.1	-5.2	-6.1	-5.6	-5.4	-5.2	-4.9	-4.8	-4.1	-3.9	-3.8	-4.1	-4.1	-3.8	-6.1	-4.6
20	-4.1	-3.4	-3.4	-3.4	-3.2	-3.2	-3.5	-4.0	-4.2	-4.1	-4.4	-5.1	-5.4	-4.9	-4.6	-3.4	-4.2	-3.8	-4.8	-4.9	-5.0	-5.4	-5.1	-5.3	-3.2	-5.4	-4.3
21	-5.8	-6.3	-6.8	-8.0	-9.1	-10.5	-9.9	-10.0	-11.6	-12.5	-12.6	-11.7	-10.9	-10.7	-10.7	-10.9	-10.9	-10.9	-10.8	-10.7	-10.9	-10.8	-10.9	-10.7	-5.8	-12.6	-10.2
22	-10.7	-10.8	-10.8	-11.4	-11.9	-12.0	-12.2	-12.4	-11.9	-12.0	-12.1	-11.8	-11.3	-10.9	-11.6	-12.1	-12.2	-12.9	-13.0	-13.3	-13.1	-13.0	-13.0	-13.9	-10.7	-13.9	-12.1
23	-15.0	-15.2	-15.4	-16.0	-16.0	-16.9	-17.1	-17.4	-17.8	-18.0	-18.5	-18.3	-18.7	-19.2	-18.5	-18.4	-19.6	-19.7	-18.9	-19.1	-19.7	-19.9	-20.5	-21.3	-15.0	-21.3	-18.1
24	-22.1	-23.1	-23.1	-23.3	-23.5	-24.1	-24.8	-25.5	-26.4	-26.7	-27.0	-27.2	-27.2	-26.6	-26.3	-26.2	-26.3	-26.2	-26.6	-26.9	-25.5	-23.4	-24.0	-23.9	-22.1	-27.2	-25.2
25	-23.6	-24.6	-21.8	-19.5	-15.8	-15.9	-14.9	-12.8	-10.9	-9.8	-7.5	-5.6	-4.3	-3.9	-3.4	-3.0	-2.9	-2.7	-2.1	-2.0	-1.7	-1.6	-1.6	-1.5	-1.5	-24.6	-8.9
26	-1.3	-1.4	-1.5	-1.6	-1.6	-1.6	-1.6	-1.4	-1.4	-1.3	-1.4	-1.2	-1.1	-0.9	-0.7	-0.9	-0.9	-1.0	-1.4	-1.8	-2.0	-2.0	-2.2	-2.7	-0.7	-2.7	-1.4
27	-2.6	-2.2	-1.9	-1.7	-1.6	-1.3	-1.0	-0.9	-1.0	-1.1	-1.1	-1.0	-1.2	-1.3	-1.4	-1.2	-0.8	-0.6	-0.9	-0.2	0.7	0.9	0.9	0.8	0.9	-2.6	-0.9
28	0.5	0.3	-0.1	-0.4	-0.3	-0.7	-0.7	-0.8	-0.9	-0.9	-0.9	-0.8	-0.8	-1.0	-0.3	-0.2	-0.4	-0.2	-0.8	-0.7	-0.3	-0.1	-0.1	0.3	0.5	-1.0	-0.4
29	0.4	0.8	0.9	1.6	1.1	2.3	2.5	1.6	1.2	1.0	1.5	1.9	2.5	2.8	2.6	2.4	1.9	1.9	1.8	1.5	1.1	0.6	0.3	0.3	2.8	0.3	1.5
30	0.3	0.6	0.9	1.1	1.4	1.6	1.6	1.7	2.2	2.7	3.3	4.1	4.9	5.4	4.5	4.2	4.6	3.3	2.2	2.2	1.8	1.2	1.0	0.8	5.4	0.3	2.4
31	0.9	1.6	2.2	2.0	2.0	2.0	1.5	1.9	1.2	0.7	1.1	0.4	0.4	0.5	0.8	0.6	0.6	0.7	0.7	0.6	1.6	2.1	2.0	1.8	2.2	0.4	1.3
Max.	**0.9**	**1.6**	**2.2**	**2.0**	**2.0**	**2.3**	**2.5**	**1.9**	**2.2**	**2.7**	**3.3**	**4.1**	**4.9**	**5.4**	**4.5**	**4.2**	**4.6**	**3.3**	**2.2**	**2.2**	**1.8**	**2.1**	**2.0**	**1.8**	**5.4**		
Min.	**-32.5**	**-32.3**	**-32.0**	**-32.2**	**-31.8**	**-31.9**	**-32.5**	**-33.1**	**-33.1**	**-33.5**	**-33.0**	**-33.2**	**-33.8**	**-32.4**	**-31.6**	**-31.7**	**-32.1**	**-32.6**	**-32.3**	**-32.2**	**-32.6**	**-32.5**	**-32.5**	**-32.1**		**-33.8**	
Avg.	**-12.6**	**-12.7**	**-12.6**	**-12.7**	**-12.6**	**-12.7**	**-12.6**	**-12.6**	**-12.6**	**-12.6**	**-12.5**	**-12.3**	**-12.1**	**-12.2**	**-12.0**	**-11.9**	**-11.9**	**-11.9**	**-11.9**	**-12.0**	**-11.6**	**-11.6**	**-11.7**	**-11.8**			**-12.2**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	1.1	1.6	1.9	2.3	3.2	3.0	1.5	2.3	2.7	2.1	-0.4	1.4	3.7	3.5	5.1	6.4	6.3	4.9	5.2	5.2	3.1	0.8	0.3	6.4	-0.4	2.8
2	0.1	0.2	0.2	0.5	0.7	0.9	1.3	1.0	0.8	0.7	0.7	0.7	0.8	1.0	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.2	0.2	1.3	0.1	0.6
3	0.2	-0.1	-0.3	-0.2	0.0	-0.3	-0.5	-0.6	-0.6	-0.7	-0.8	-0.7	-0.2	0.2	0.4	0.4	0.0	-0.5	-0.6	-0.5	-1.4	-2.3	-2.7	-2.9	0.4	-2.9	-0.6
4	-2.5	-2.5	-3.4	-3.6	-3.5	-3.5	-4.3	-4.5	-4.4	-4.7	-5.0	-5.1	-4.9	-3.8	-2.2	-1.5	-1.7	-2.3	-3.2	-4.1	-2.3	-1.7	-2.2	-2.2	-1.5	-5.1	-3.3
5	-2.0	-1.8	-1.5	-2.1	-2.1	-1.4	-2.1	-1.5	-0.8	-1.7	-2.6	-1.6	-0.8	-0.9	-1.4	-1.6	-1.0	-0.6	-1.2	-0.6	-1.5	-2.2	-2.9	-2.6	-0.6	-2.9	-1.6
6	-2.3	-2.5	-2.4	-2.1	-2.0	-1.9	-1.4	-1.3	-1.0	-1.2	-1.6	-1.3	-0.8	-0.6	-0.2	0.0			-0.9	-1.0	-0.8	-1.1	-0.4	-0.7	0.0	-2.5	-1.2
7	-0.5	-0.3	-0.5	-0.7	-1.5	-2.0	-1.9	-1.7	-1.7	-2.1	-2.1	-2.0	-1.6	-2.4	-2.6	-2.3	-1.8	-1.4	-1.4	-1.7	-2.3	-2.3	-2.4	-2.5	-0.3	-2.6	-1.7
8	-2.8	-3.2	-2.7	-2.7	-3.1	-2.8	-3.0	-3.1	-3.1	-3.2	-2.9	-3.1	-3.1	-2.9	-2.6	-2.5	-2.5	-2.7	-2.8	-2.9	-2.5	-2.1	-2.0	-2.1	-2.0	-3.2	-2.8
9	-2.3	-2.3	-2.0	-2.2	-1.8	-1.9	-1.8	-1.6	-2.2	-1.7	-1.8	-1.9	-1.0	-0.8	-0.7	-0.6	-0.8	-0.9	-1.3	-1.6	-2.0	-1.8	-1.8	-1.7	-0.6	-2.3	-1.6
10	-1.6	-1.4	-1.0	-1.3	-1.4	-1.5	-2.2	-2.4	-2.5	-2.4	-2.1	-2.1	-2.2	-2.3	-2.2	-1.8	-1.9	-2.3	-3.1	-4.7	-5.5	-5.7	-6.2	-6.6	-1.0	-6.6	-2.8
11	-6.8	-5.5	-4.8	-5.0	-5.1	-5.1	-5.1	-4.9	-4.2	-4.0	-3.3	-3.3	-3.1	-2.5	-2.0	-1.7	-1.3	-1.1	-1.4	-1.4	-1.4	-1.5	-1.8	-1.8	-1.1	-6.8	-3.3
12	-1.8	-1.8	-1.6	-1.5	-1.4	-1.3	-1.2	-1.1	-1.1	-1.1	-1.2	-1.2	-0.9	-0.5	0.2	0.3	-0.1	-0.1	-0.5	-1.1	-1.5	-1.6	-1.9	-1.9	0.3	-1.9	-1.1
13	-1.7	-1.3	-1.2	-1.1	-1.0	-0.8	-0.2	-0.4	-0.9	-1.1	-0.5	0.0	0.3	0.4	0.8	1.2	0.8	0.8	0.4	-0.3	-0.6	-0.6	-0.7	-1.0	1.2	-1.7	-0.4
14	-1.4	-1.4	-1.4	-1.4	-1.4	-1.6	-1.6	-1.7	-1.6	-1.6	-1.8	-1.7	-1.5	-1.1	-1.0	-0.9	-1.1	-1.4	-1.5	-1.7	-2.3	-1.6	-1.6	-1.9	-0.9	-2.3	-1.5
15	-2.1	-2.1	-1.9	-1.7	-2.3	-2.6	-3.3	-3.3	-3.1	-3.7	-3.7	-4.6	-3.6	-3.9	-4.3	-6.1	-6.1	-6.2	-6.4	-6.7	-6.2	-6.1	-5.4	-5.9	-1.7	-6.7	-4.2
16	-6.2	-4.3	-4.6	-5.2	-3.3	-3.5	-3.4	-3.4	-3.7	-3.7	-3.5	-3.4	-3.3	-3.2	-3.1	-2.9	-2.8	-2.7	-3.0	-3.0	-2.9	-3.1	-3.3	-3.5	-2.7	-6.2	-3.5
17	-3.4	-3.7	-3.7	-4.2	-4.5	-4.6	-4.7	-4.9	-4.8	-5.0	-4.8	-4.7	-4.9	-4.3	-4.0	-3.9	-3.9	-4.7	-5.0	-5.3	-5.5	-5.6	-5.3	-5.2	-3.4	-5.6	-4.6
18	-5.8	-5.9	-5.8	-5.9	-5.9	-5.9	-5.8	-5.9	-5.8	-5.8	-5.8	-5.7	-5.6	-5.7	-5.8	-5.5	-5.5	-5.6	-5.8	-6.6	-7.2	-7.1	-7.4	-7.6	-5.5	-7.6	-6.1
19	-8.0	-8.6	-9.0	-9.3	-9.7	-10.5	-11.3	-11.7	-12.1	-12.7	-13.8	-15.3	-16.5	-16.2	-15.8	-15.4	-15.8	-16.9	-17.7	-18.8	-19.8	-20.2	-20.6	-20.2	-8.0	-20.6	-14.4
20	-20.4	-19.7	-19.2	-20.0	-20.4	-20.7	-21.5	-21.7	-21.5	-21.4	-21.2	-20.1	-19.2	-18.2	-17.0	-16.4	-16.0	-16.1	-16.5	-17.3	-17.8	-18.0	-18.4	-18.7	-16.0	-21.7	-19.1
21	-18.8	-19.7	-19.7	-20.1	-20.5	-20.9	-21.3	-21.7	-22.3	-22.8	-22.6	-22.3	-21.3	-19.7	-18.9	-18.4	-18.0	-17.7	-18.0	-18.7	-19.2	-19.9	-20.6	-20.5	-17.7	-22.8	-20.1
22	-21.0	-20.9	-21.2	-21.4	-21.4	-20.8	-22.0	-22.7	-23.0	-22.8	-22.8	-21.9	-21.6	-20.7	-19.4	-18.4	-18.2	-17.8	-17.7	-18.5	-19.0	-19.4	-19.6	-19.6	-17.7	-23.0	-20.5
23	-20.4	-20.8	-20.8	-20.9	-20.3	-20.9	-20.7	-21.7	-22.0	-22.5	-22.5	-21.7	-20.3	-19.5	-18.8	-18.0	-17.6	-17.7	-18.5	-19.2	-19.7	-20.2	-21.3	-20.8	-17.6	-22.5	-20.3
24	-21.4	-21.1	-21.1	-20.6	-21.1	-21.3	-21.7	-22.0	-22.2	-23.1	-22.2	-21.6	-21.1	-20.4	-20.5	-20.5	-20.4	-20.6	-21.2	-21.9	-22.2	-22.5	-22.9	-22.6	-20.4	-23.1	-21.5
25	-22.6	-22.2	-22.5	-22.4	-22.6	-22.5	-22.4	-22.7	-22.9	-22.9	-22.4	-21.3	-19.9	-18.4	-17.1	-15.9	-15.7	-15.7	-17.1	-17.5	-17.2	-16.5	-15.9	-15.1	-15.1	-22.9	-19.6
26	-14.0	-12.6	-11.5	-9.8	-10.1	-10.4	-10.2	-10.0	-8.7	-8.8	-9.4	-10.5	-10.2	-9.5	-9.2	-8.4	-8.0	-8.4	-9.4	-10.1	-10.9	-11.7	-12.1	-12.3	-8.0	-14.0	-10.2
27	-13.2	-13.6	-14.1	-14.0	-14.5	-14.4	-14.5	-14.2	-14.0	-14.4	-13.4	-13.1	-13.0	-12.2	-11.3	-10.9	-10.8	-10.6	-11.2	-11.0	-11.3	-10.6	-10.2	-10.6	-10.2	-14.5	-12.5
28	-11.1	-11.4	-11.8	-12.4	-13.0	-13.5	-13.6	-14.0	-15.0	-16.1	-17.0	-17.1	-17.2	-16.9	-16.6	-16.9	-17.8	-18.4	-19.3	-20.4	-21.6	-22.0	-22.2	-22.5	-11.1	-22.5	-16.6
Max.	**1.0**	**1.1**	**1.6**	**1.9**	**2.3**	**3.2**	**3.0**	**1.5**	**2.3**	**2.7**	**2.1**	**0.7**	**1.4**	**3.7**	**3.5**	**5.1**	**6.4**	**6.3**	**4.9**	**5.2**	**5.2**	**3.1**	**0.8**	**0.3**	**6.4**		
Min.	**-22.6**	**-22.2**	**-22.5**	**-22.4**	**-22.6**	**-22.5**	**-22.4**	**-22.7**	**-23.0**	**-23.1**	**-22.8**	**-22.3**	**-21.6**	**-20.7**	**-20.5**	**-20.5**	**-20.4**	**-20.6**	**-21.2**	**-21.9**	**-22.2**	**-22.5**	**-22.9**	**-22.6**		**-23.1**	
Avg.	**-7.6**	**-7.5**	**-7.4**	**-7.5**	**-7.5**	**-7.6**	**-7.8**	**-7.9**	**-7.9**	**-8.1**	**-8.1**	**-8.1**	**-7.7**	**-7.2**	**-6.8**	**-6.5**	**-6.7**	**-6.8**	**-7.1**	**-7.5**	**-7.8**	**-8.0**	**-8.2**	**-8.3**			**-7.6**

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-23.3	-23.6	-23.7	-23.5	-23.8	-24.8	-25.2	-25.4	-25.5	-26.0	-25.8	-24.7	-23.7	-22.4	-21.1	-20.1	-19.4	-19.2	-19.1	-19.6	-20.3	-21.0	-21.8	-21.8	-19.1	-26.0	-22.7
2	-22.1	-21.8	-22.1	-22.2	-22.6	-22.5	-22.7	-23.2	-23.3	-23.3	-23.5	-22.9	-21.6	-20.5	-19.4	-18.2	-17.7	-17.6	-17.8	-18.1	-18.3	-18.6	-19.0	-19.3	-17.6	-23.5	-20.7
3	-19.7	-20.1	-20.5	-20.2	-20.9	-20.9	-21.0	-21.2	-21.7	-21.8	-21.4	-20.5	-19.2	-17.8	-16.6	-15.5	-14.8	-14.5	-14.8	-15.2	-15.6	-16.0	-16.1	-16.8	-14.5	-21.8	-18.4
4	-17.2	-17.6	-16.9	-16.5	-16.9	-17.5	-17.1	-17.8	-17.9	-18.0	-17.3	-17.0	-16.8	-16.3	-15.8	-15.5	-15.2	-15.3	-15.8	-16.9	-18.2	-18.8	-19.3	-20.0	-15.2	-20.0	-17.2
5	-20.6	-21.4	-22.3	-23.2	-23.8	-24.6	-25.0	-25.6	-26.3	-26.2	-25.8	-25.2	-24.6	-23.9	-23.1	-22.5	-22.3	-22.4	-22.7	-23.5	-24.3	-25.1	-25.5	-25.9	-20.6	-26.3	-24.0
6	-26.5	-26.9	-27.3	-27.6	-27.9	-28.1	-28.5	-28.6	-28.8	-28.9	-28.4	-27.5	-26.9	-26.1	-25.3	-24.9	-24.4	-24.3	-24.5	-25.0	-25.3	-25.4	-25.5	-25.8	-24.3	-28.9	-26.6
7	-26.0	-26.1	-26.0	-26.1	-26.4	-26.5	-26.7	-26.7	-26.6	-26.5	-26.0	-24.9	-24.1	-23.1	-22.3	-21.4	-21.0	-20.7	-21.0	-21.8	-22.8	-23.4	-24.2	-24.9	-20.7	-26.7	-24.4
8	-25.5	-26.0	-26.5	-26.9	-26.9	-27.1	-27.4	-27.5	-27.5	-27.6	-27.4	-26.9	-26.1	-24.9	-23.8	-22.9	-22.3	-22.0	-22.1	-22.6	-22.9	-22.9	-22.9	-23.2	-22.0	-27.6	-25.1
9	-23.4	-23.7	-23.9	-24.2	-24.2	-24.2	-24.2	-24.0	-23.9	-23.3	-23.0	-23.0	-22.3	-21.5	-20.7	-19.9	-19.3	-19.3	-19.7	-20.8	-21.8	-22.3	-22.0	-21.5	-19.3	-24.2	-22.3
10	-21.3	-21.0	-20.8	-20.7	-20.5	-20.8	-20.9	-20.8	-20.5	-21.1	-21.4	-21.3	-19.9	-19.1	-17.7	-17.3	-16.7	-16.4	-16.9	-17.9	-19.4	-20.4	-20.6	-20.5	-16.4	-21.4	-19.7
11	-20.9	-21.7	-21.7	-22.3	-22.8	-23.4	-23.8	-24.4	-24.9	-25.1	-24.8	-24.1	-23.1	-22.1	-21.3	-20.4	-19.8	-19.4	-19.2	-19.4	-19.6	-19.5	-19.8	-20.2	-19.2	-25.1	-21.8
12	-20.7	-20.9	-21.2	-21.2	-21.3	-21.6	-21.8	-21.8	-22.2	-22.0	-21.3	-20.7	-19.8	-18.4	-17.3	-16.6	-16.4	-16.2	-16.3	-16.6	-16.9	-17.5	-18.1	-18.4	-16.2	-22.2	-19.4
13	-18.9	-19.3	-20.0	-20.5	-20.7	-20.6	-21.2	-21.5	-21.9	-22.5	-22.0	-21.4	-20.7	-20.0	-19.3	-18.8	-18.9	-19.1	-19.4	-20.0	-20.9	-21.1	-21.3	-21.8	-18.8	-22.5	-20.5
14	-22.9	-23.6	-23.9	-24.2	-24.3	-24.4	-24.7	-24.9	-25.3	-24.9	-24.2	-23.3	-22.6	-22.0	-21.2	-20.7	-20.4	-20.3	-20.6	-21.1	-21.7	-22.3	-22.8	-23.1	-20.3	-25.3	-22.9
15	-23.5	-24.1	-24.7	-25.3	-25.9	-26.7	-27.3	-27.8	-27.6	-27.2	-26.3	-25.0	-23.8	-22.6	-21.6	-20.8	-19.9	-19.2	-19.1	-19.9	-21.0	-21.7	-21.8	-22.2	-19.1	-27.8	-23.5
16	-23.1	-23.4	-23.5	-23.5	-23.5	-23.8	-24.0	-24.3	-24.5	-24.0	-22.9	-21.7	-20.3	-18.9	-17.6	-16.6	-16.2	-16.3	-16.8	-17.9	-19.5	-20.7	-21.0	-20.9	-16.2	-24.5	-21.0
17	-21.1	-21.0	-21.1	-21.4	-21.5	-21.5	-21.6	-21.8	-22.0	-22.3	-21.3	-20.3	-19.1	-18.3	-17.1	-15.8	-14.6	-13.8	-13.9	-15.3	-16.8	-17.4	-17.1	-16.5	-13.8	-22.3	-18.8
18	-16.8	-16.4	-16.1	-16.7	-17.5	-17.8	-17.3	-17.9	-17.1	-17.3	-17.5	-17.0	-15.9	-15.6	-14.8	-14.5	-13.9	-13.5	-13.5	-14.8	-16.4	-17.1	-17.5	-18.1	-13.5	-18.1	-16.3
19	-17.9	-17.5	-18.2	-18.4	-18.2	-18.5	-18.4	-18.7	-18.4	-17.9	-18.0	-17.2	-15.9	-14.8	-13.7	-12.7	-11.7	-11.0	-11.1	-11.7	-11.8	-11.9	-12.0	-12.1	-11.0	-18.7	-15.3
20	-11.9	-11.9	-12.6	-13.2	-13.6	-13.2	-13.4	-13.7	-12.7	-11.5	-10.5	-9.6	-9.3	-9.0	-7.7	-7.2	-6.9	-6.7	-6.5	-6.6	-6.7	-6.3	-5.9	-5.8	-5.8	-13.7	-9.7
21	-6.2	-6.2	-6.0	-5.9	-6.0	-6.1	-6.1	-5.9	-5.7	-5.5	-8.3	-9.9	-9.2	-9.2	-9.3	-9.0	-9.4	-9.6	-9.9	-10.6	-11.9	-12.7	-13.1	-15.0	-5.5	-15.0	-8.6
22	-15.7	-16.0	-16.5	-16.8	-17.5	-18.6	-19.8	-19.6	-20.0	-20.1	-19.8	-18.2	-17.1	-16.0	-14.7	-13.7	-13.2	-13.1	-13.5	-14.0	-14.9	-16.0	-17.0	-17.2	-13.1	-20.1	-16.6
23	-17.5	-18.1	-18.7	-19.3	-19.5	-19.1	-20.0	-20.5	-20.6	-19.9	-20.4	-19.6	-18.7	-18.0	-17.4	-16.7	-15.8	-15.4	-15.6	-16.2	-17.5	-19.1	-19.4	-19.5	-15.4	-20.6	-18.4
24	-20.0	-21.4	-21.5	-22.3	-22.5	-23.1	-23.3	-23.4	-23.5	-23.0	-22.3	-21.5	-20.7	-19.6	-18.6	-17.8	-17.3	-17.3	-17.5	-18.0	-18.1	-17.9	-17.6	-17.6	-17.3	-23.5	-20.2
25	-16.8	-16.6	-16.7	-16.4	-16.6	-16.7	-17.1	-17.2	-17.5	-17.3	-16.7	-16.1	-15.4	-14.1	-13.3	-11.6	-11.0	-11.3	-10.9	-10.9	-10.5	-10.5	-10.9	-11.1	-10.5	-17.5	-14.3
26	-9.9	-10.6	-10.0	-8.8	-8.1	-7.8	-7.4	-7.4	-8.1	-9.5	-10.5	-11.1	-11.6	-11.8	-11.7	-11.7	-11.7	-11.9	-11.7	-11.8	-12.2	-12.6	-12.6	-12.4	-7.4	-12.6	-10.5
27	-12.1	-11.0	-12.0	-13.3	-13.1	-13.3	-13.1	-13.7	-13.6	-12.9	-12.2	-12.3	-11.4	-11.2	-10.9	-10.2	-10.3	-10.4	-10.3	-11.1	-11.7	-12.6	-13.1	-14.4	-10.2	-14.4	-12.1
28	-14.7	-15.3	-15.7	-15.5	-15.3	-14.6	-15.4	-16.1	-16.2	-16.3	-15.4	-14.5	-13.3	-12.1	-11.1	-10.4	-9.9	-9.7	-9.9	-10.7	-11.2	-11.8	-12.2	-12.7	-9.7	-16.3	-13.3
29	-13.4	-13.5	-13.1	-12.4	-12.5	-12.7	-13.6	-13.4	-14.3	-13.8	-13.2	-12.1	-10.9	-9.4	-8.2	-7.6	-7.0	-6.7	-7.1	-7.8	-8.4	-9.2	-10.2	-10.0	-6.7	-14.3	-10.8
30	-11.0	-9.8	-9.3	-10.0	-9.9	-10.8	-10.9	-11.9	-10.8	-10.1	-9.3	-8.3	-7.5	-6.8	-5.8	-4.3	-3.7	-3.4	-3.1	-3.1	-2.9	-2.6	-2.1	-2.3	-2.1	-11.9	-7.1
31	-2.6	-2.6	-3.3	-3.7	-3.3	-2.7	-2.1	-1.8	-1.9	-1.7	-1.7	-1.6	-0.7	-0.2	-0.1	-0.3	-0.1	-0.3	-0.4	-0.8	-1.8	-2.7	-2.9	-3.1	-0.1	-3.7	-1.8
Max.	**-2.6**	**-2.6**	**-3.3**	**-3.7**	**-3.3**	**-2.7**	**-2.1**	**-1.8**	**-1.9**	**-1.7**	**-1.7**	**-1.6**	**-0.7**	**-0.2**	**-0.1**	**-0.3**	**-0.1**	**-0.3**	**-0.4**	**-0.8**	**-1.8**	**-2.6**	**-2.1**	**-2.3**	**-0.1**		
Min.	**-26.5**	**-26.9**	**-27.3**	**-27.6**	**-27.9**	**-28.1**	**-28.5**	**-28.6**	**-28.8**	**-28.9**	**-28.4**	**-27.5**	**-26.9**	**-26.1**	**-25.3**	**-24.9**	**-24.4**	**-24.3**	**-24.5**	**-25.0**	**-25.3**	**-25.4**	**-25.5**	**-25.9**		**-28.9**	
Avg.	**-18.2**	**-18.4**	**-18.6**	**-18.8**	**-18.9**	**-19.2**	**-19.4**	**-19.6**	**-19.7**	**-19.6**	**-19.3**	**-18.7**	**-17.8**	**-16.9**	**-16.1**	**-15.3**	**-14.9**	**-14.7**	**-14.9**	**-15.5**	**-16.2**	**-16.7**	**-16.9**	**-17.2**			**-17.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.9	-2.5	-3.0	-3.2	-3.9	-3.7	-3.7	-4.7	-5.1	-4.7	-3.8	-3.0	-2.8	-1.8	-1.0	-0.4	0.6	1.1	0.7	0.3	-0.3	-1.1	-2.4	-2.0	1.1	-5.1	-2.2
2	-1.9	-2.5	-2.5	-2.8	-2.9	-3.3	-3.6	-4.3	-4.3	-3.6	-2.8	-1.5	-1.0	-0.6	-0.6	-0.6	-0.7	-0.9	-1.1	-1.4	-1.7	-1.8	-2.0	-2.2	-0.6	-4.3	-2.1
3	-2.0	-2.0	-2.0	-1.8	-1.8	-1.9	-2.1	-2.1	-2.1	-2.0	-2.0	-1.6	-1.2	-0.9	-0.8	-0.4	-0.5	-0.7	-0.8	-1.2	-1.5	-1.5	-1.5	-2.2	-0.4	-2.2	-1.5
4	-2.0	-2.3	-2.5	-3.2	-3.3	-3.7	-3.5	-3.5	-2.9	-2.2	-1.6	-1.1	-0.6	-0.2	0.0	-0.3	-0.3	-0.3	-0.6	-1.1	-1.1	-1.2	-0.9	-0.9	0.0	-3.7	-1.6
5	-0.1	0.0	-0.1	-0.1	-0.1	-0.4	-0.5	0.0	0.4	1.1	2.1	2.3	2.5	3.4	3.5	3.9	4.7	4.4	2.1	2.0	1.2	1.4	1.3	1.1	4.7	-0.5	1.5
6	1.0	0.5	0.8	1.3	1.0	1.5	1.4	1.3	1.2	1.7	1.9	2.8	3.8	4.1	4.9	5.4	5.7	4.9	3.3	1.4	0.6	1.4	2.1	2.8	5.7	0.5	2.4
7	2.9	2.9	2.0	0.7	0.1	-0.6	-1.0	-0.8	-0.6	-0.5	-0.3	0.1	0.1	0.1	0.5	1.2	1.7	1.6	1.5	0.9	0.4	0.2	0.9	1.0	2.9	-1.0	0.6
8	1.1	1.1	0.8	1.0	1.4	1.8	1.8	2.4	2.6	2.7	3.5	4.8	5.4	5.5	5.4	5.4	5.5	4.9	4.3	4.5	3.7	2.8	2.7	1.1	5.5	0.8	3.2
9	0.7	0.4	0.2	0.0	0.2	0.3	0.3	-0.2	-0.2	-0.4	-0.5	-0.4	-0.3	-0.1	0.2	0.7	0.6	0.4	0.2	0.5	0.5	0.2	-0.2	-0.5	0.7	-0.5	0.1
10	-0.5	-0.7	-0.8	-1.0	-1.1	-1.3	-1.4	-1.4	-1.5	-1.5	-1.4	-1.4	-0.6	-0.3	-0.1	-0.1	0.2	0.1	0.2	0.0	-0.4	-1.0	-1.6	-1.5	0.2	-1.6	-0.8
11	-1.5	-2.3	-2.7	-2.8	-2.5	-2.4	-2.7	-3.0	-2.4	-1.8	-1.7	-1.0	-0.1	0.1	0.4	0.5	0.2	0.2	-0.2	-0.8	-1.7	-2.5	-2.9	-2.8	0.5	-3.0	-1.5
12	-3.0	-3.4	-3.3	-3.4	-3.9	-3.8	-3.5	-3.7	-3.4	-2.9	-2.6	-2.2	-1.1	-0.3	0.5	0.9	1.7	1.8	2.3	1.9	1.4	0.4	-0.4	-1.2	2.3	-3.9	-1.3
13	-2.3	-3.1	-3.2	-2.9	-3.3	-3.7	-3.9	-4.2	-4.5	-4.6	-3.4	-2.6	-1.8	-0.6	0.2	1.1	1.8	2.4	2.0	0.5	-0.2	-0.8	-1.1	-1.3	2.4	-4.6	-1.7
14	-1.4	-1.6	-2.2	-1.8	-2.4	-2.0	-2.3	-2.7	-2.6	-2.5	-2.2	-1.8	-1.3	-0.2	0.7	0.8	0.7	0.9	0.9	0.3	-0.2	-1.4	-1.6	-2.2	0.9	-2.7	-1.2
15	-2.1	-2.3	-2.0	-2.1	-1.9	-2.2	-2.4	-2.1	-2.0	-1.0	-0.9	0.3	0.2	0.8	1.1	0.9	1.6	1.8	1.2	0.5	0.4	-0.4	-0.8	-0.6	1.8	-2.4	-0.6
16	-0.6	-0.9	-1.0	-1.7	-1.9	-2.2	-1.7	-1.9	-1.7	-0.9	0.5	1.8	1.6	1.6	0.9	-0.7	-1.4	-1.7	-1.8	-2.2	-3.0	-3.7	-4.5	-4.3	1.8	-4.5	-1.3
17	-4.9	-4.9	-5.0	-4.3	-2.8	-2.6	-1.4	-1.3	-1.1	-1.0	-1.3	-1.5	-1.4	-1.3	-1.3	-1.3	-1.3	-1.1	-0.9	-0.9	-0.8	-0.7	-0.6	-0.6	-0.6	-5.0	-1.8
18	-0.6	-0.7	-0.6	-0.5	-0.5	-0.2	0.0	-0.2	-0.1	0.1	0.4	0.8	1.3	1.5	1.3	0.8	0.7	-0.7	-1.9	-2.2	-2.6	-2.8	-3.4	-3.9	1.5	-3.9	-0.6
19	-4.2	-3.6	-2.5	-1.8	-1.7	-0.9	-0.5	-0.5	-0.4	-0.1	0.1	0.4	0.4	0.1	-0.3	-0.8	-1.2	-1.3	-1.5	-1.9	-2.0	-1.9	-1.6	-1.3	0.4	-4.2	-1.2
20	-1.2	-1.1	-1.2	-1.2	-0.9	-0.7	-1.0	-0.3	0.2	0.1	0.8	2.0	2.2	2.6	3.1	2.9	2.8	2.4	1.5	1.5	1.2	1.0	0.9	0.9	3.1	-1.2	0.8
21	1.0	1.1	0.8	1.3	1.3	1.4	1.6	1.0	1.3	2.0	2.6	2.8	3.0	3.6	3.8	3.3	3.1	2.4	2.3	1.7	1.2	1.3	1.6	1.9	3.8	0.8	2.0
22	1.6	1.6	1.8	1.6	2.1	2.4	2.6	2.7	2.7	2.4	2.4	3.6	4.3	4.5	4.1	4.0	4.3	3.6	3.1	2.4	2.4	2.3	2.3	1.7	4.5	1.6	2.8
23	2.0	2.1	1.9	2.6	2.2	2.5	2.5	2.7	3.0	3.5	5.2	5.9	6.5	6.1	5.1	5.7	5.0	3.8	4.7	2.8	3.1	3.5	2.2	1.5	6.5	1.5	3.6
24	1.1	0.8	0.9	1.1	1.3	1.6	1.4	1.4	1.4	2.4	3.0	4.3	5.3	5.1	4.2	4.2	4.9	5.2	5.2	4.3	2.9	2.2	1.4	0.9	5.3	0.8	2.8
25	0.8	0.9	1.1	0.8	1.1	1.2	1.1	0.9	1.3	1.9	2.6	3.6	3.3	2.1	2.7	3.4	3.2	3.6	3.2	2.6	2.2	1.8	2.1	1.9	3.6	0.8	2.1
26	2.0	1.7	1.6	1.8	1.5	1.9	2.0	1.2	0.8	1.8	3.1	5.6	7.1	8.0	9.1	9.2	9.0	8.8	8.8	8.5	8.2	6.2	4.9	4.7	9.2	0.8	4.9
27	4.1	4.0	4.9	4.7	3.1	2.6	2.5	2.6	3.5	3.6	4.1	5.0	6.0	6.7	6.9	6.7	7.2	7.0	5.3	3.8	2.5	1.4	0.4	-0.4	7.2	-0.4	4.1
28	-0.8	-0.6	-1.0	-1.4	-2.1	-2.6	-3.1	-2.9	-2.6	-2.6	-2.3	-1.1	1.0	2.9	4.0	4.5	4.9	4.4	3.4	3.1	1.8	0.4	-0.5	-1.1	4.9	-3.1	0.2
29	-1.4	-1.0	-0.7	-0.7	-0.9	-1.0	-1.0	-0.6	0.7	2.3	3.1	3.4	3.4	4.8	5.3	5.1	5.1	5.6	5.7	5.2	4.1	3.0	2.9	2.2	5.7	-1.4	2.3
30	0.9	0.1	-0.1	0.4	0.6	1.0	0.9	0.3	0.6	1.9	4.5	5.6	6.3	6.8	7.2	7.5	7.8	7.9	7.4	6.7	5.5	4.2	3.5	3.4	7.9	-0.1	3.8
Max.	**4.1**	**4.0**	**4.9**	**4.7**	**3.1**	**2.6**	**2.6**	**2.7**	**3.5**	**3.6**	**5.2**	**5.9**	**7.1**	**8.0**	**9.1**	**9.2**	**9.0**	**8.8**	**8.8**	**8.5**	**8.2**	**6.2**	**4.9**	**4.7**	**9.2**		
Min.	**-4.9**	**-4.9**	**-5.0**	**-4.3**	**-3.9**	**-3.8**	**-3.9**	**-4.7**	**-5.1**	**-4.7**	**-3.8**	**-3.0**	**-2.8**	**-1.8**	**-1.3**	**-1.3**	**-1.4**	**-1.7**	**-1.9**	**-2.2**	**-3.0**	**-3.7**	**-4.5**	**-4.3**		**-5.1**	
Avg.	**-0.5**	**-0.6**	**-0.7**	**-0.7**	**-0.7**	**-0.7**	**-0.7**	**-0.8**	**-0.6**	**-0.2**	**0.4**	**1.2**	**1.7**	**2.1**	**2.4**	**2.4**	**2.6**	**2.4**	**2.0**	**1.5**	**0.9**	**0.4**	**0.1**	**-0.1**			**0.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.4	3.8	3.5	2.5	2.4	1.9	1.6	2.1	2.2	3.1	3.7	4.2	4.7	5.3				4.1	5.0	4.1	3.4	3.2	2.9	2.4	5.3	1.6	3.3
2	2.4	2.0	2.4	2.2	2.3	1.0	1.2	0.8	1.7	2.1	3.1	3.4	4.0	3.1	2.9	5.1	5.1	3.7	3.3	2.4	1.3	0.9	0.3	-0.3	5.1	-0.3	2.3
3	-0.5	-0.9	-1.1	-1.4	-1.1	-1.1	-0.9	-0.9	-0.2	0.6	2.0	3.3	4.4	5.6	6.4	7.4	7.8	6.1	4.8	5.2	5.0	3.7	4.0	3.3	7.8	-1.4	2.6
4	2.2	1.8	1.9	2.4	2.4	1.5	1.7	1.9	2.1	3.2	3.7	3.9	4.8	5.6	6.5	7.0	7.0	6.8	6.5	4.8	4.3	4.0	3.5	2.8	7.0	1.5	3.8
5	2.1	0.7	0.7	0.0	-0.4	-1.5	-1.6	-1.2	-1.0	-0.1	0.4	1.0	1.7	3.2	4.4	5.1	5.9	6.8	6.5	6.2	5.0	4.4	3.8	3.8	6.8	-1.6	2.3
6	3.7	3.3	2.8	1.7	0.9	0.6	0.2	0.7	1.1	1.5	2.5	3.1	3.3	3.7	3.8	3.7	4.0	3.8	3.2	2.7	2.2	1.7	1.2	0.7	4.0	0.2	2.3
7	0.1	-0.1	-0.1	-0.7	-1.5	-1.9	-1.9	-1.4	0.1	1.1	1.6	2.0	2.5	3.2	3.9	4.7	4.3	4.3	4.2	3.3	2.9	2.5	2.1	1.9	4.7	-1.9	1.5
8	1.7	1.2	0.8	0.3	0.3	0.0	-0.4	-0.4	-0.1	0.3	0.7	1.5	2.2	2.9	4.2	5.1	4.9	4.7	4.6	4.4	3.8	3.0	2.2	1.1	5.1	-0.4	2.0
9	0.3	0.1	-0.2	-0.5	-0.8	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.1	0.0	0.5	1.1	1.9	2.7	3.2	3.3	3.3	2.7	1.8	0.7	0.1	3.3	-0.8	0.7
10	0.0	-0.1	-0.5	-0.7	-0.1	0.1	0.4	0.4	0.9	1.4	2.2	2.9	3.8	4.5	4.9	5.1	5.3	4.9	4.5	4.0	3.7	2.6	1.7	1.2	5.3	-0.7	2.2
11	0.0	0.2	0.2	0.0	-0.5	-0.4	-0.6	0.1	1.4	2.6	3.4	4.2	4.9	5.5	5.8	6.1	6.0	5.6	5.2	4.3	3.4	1.9	0.6	0.0	6.1	-0.6	2.5
12	-0.3	-0.6	-0.7	-1.2	-1.6	-1.8	-1.3	-0.2	0.9	2.1	3.2	4.0	4.4	5.0	5.1	5.2	5.2	4.4	4.1	3.6	2.7	1.8	1.1	0.9	5.2	-1.8	1.9
13	0.8	0.8	0.5	0.6	0.6	0.5	0.3	0.1	0.1	0.5	1.0	2.0	2.1	2.1	2.5	2.8	3.0	2.9	3.1	3.0	2.8	2.5	2.3	2.2	3.1	0.1	1.6
14	2.7	2.6	2.7	2.6	2.8	3.1	3.1	3.1	4.0	5.3	6.8	7.1	7.6	6.5	5.2	4.6	3.8	3.5	3.9	3.5	2.9	2.3	1.5	1.1	7.6	1.1	3.8
15	0.5	0.6	1.2	0.8	0.5	0.9	0.8	1.4	2.0	3.0	3.5	4.8	5.3	5.9	5.5	5.7	6.4	6.7	6.8	6.7	7.2	5.9	4.4	3.4	7.2	0.5	3.7
16	3.0	2.9	3.5	2.9	2.8	2.8	3.1	4.1	5.2	6.5	8.2	10.4	11.5	12.2	12.1	11.5	11.0	10.3	9.6	9.2	6.6	4.3	3.1	2.4	12.2	2.4	6.6
17	2.2	2.0	1.8	1.7	1.6	1.6	1.6	1.7	2.2	2.8	5.1	6.5	7.1	7.3	7.0	7.3	7.1	6.6	5.9	5.0	4.1	3.0	2.2	1.7	7.3	1.6	4.0
18	1.0	1.2	1.2	1.1	1.1	0.8	1.2	1.8	2.6	3.8	4.6	5.5	6.2	6.9	7.3	7.9	7.9	8.5	8.3	7.9	7.2	6.8	5.9	5.1	8.5	0.8	4.7
19	4.5	4.0	4.1	4.1	3.4	2.8	3.6	4.9	6.1	6.5	7.0	7.4	8.3	9.1	9.1	9.9	10.2	10.1	9.6	8.9	7.6	6.3	5.7	4.6	10.2	2.8	6.6
20	4.2	4.5	4.1	3.8	3.7	3.0	2.7	2.8	3.8	5.1	5.8	6.1	6.6	7.0	7.2	7.7	8.3	8.6	8.4	8.2	7.7	6.4	4.1	2.8	8.6	2.7	5.5
21	2.6	3.4	3.2	3.1	2.9	2.8	3.2	3.7	4.7	5.7	6.6	7.8	8.7	9.4	10.1	10.6	10.2	10.1	9.3	8.3	7.1	6.0	5.2	4.7	10.6	2.6	6.2
22	4.4	4.6	4.6	4.3	4.4	4.6	4.5	5.0	5.0	5.9	4.1	4.8	5.9	7.5	7.1	7.2	8.4	9.7	10.2	7.5	5.8	5.2	5.1	4.9	10.2	4.1	5.8
23	4.7	4.6	5.3	5.5	5.5	5.4	5.8	6.3	7.0	7.8	8.4	8.5	7.6	7.6	7.6	7.7	7.3	7.0	5.8	5.1	4.5	4.4	3.8	3.4	8.5	3.4	6.1
24	2.7	2.3	2.1	2.0	1.9	2.0	2.2	2.4	2.9	4.2	4.7	5.4	5.9	6.7	7.0	7.6	6.3	6.7	6.9	8.4	8.2	7.5	6.9	6.3	8.4	1.9	5.0
25	5.8	6.1	5.9	6.2	6.4	6.5	6.5	6.9	6.8	6.7	6.8	6.6	6.0	6.0	6.2	6.2	6.4	6.8	7.3	7.4	7.4	7.1	6.9	6.4	7.4	5.8	6.6
26	6.3	6.3	6.6	5.2	4.1	4.3	4.1	5.1	4.9	4.5	4.9	5.8	6.2	5.9	6.2	6.0	4.8	4.9	4.8	4.4	4.3	4.2	3.7	3.1	6.6	3.1	5.0
27	2.7	2.8	2.4	2.4	2.4	2.2	2.2	2.8	3.7	4.5	5.8	6.6	7.1	7.9	7.3	8.2	7.8	7.7	7.5	6.8	5.8	4.8	3.3	2.2	8.2	2.2	4.9
28	1.8	1.7	1.5	1.5	1.5	1.2	1.4	2.6	3.4	4.3	5.3	6.2	6.8	6.7	8.3	8.1	7.2	6.6	5.3	5.3	4.6	3.6	2.7	1.5	8.3	1.2	4.1
29	1.4	1.0	1.5	1.3	1.7	0.0	0.5	2.0	3.5	5.1	6.6	7.9	8.5	8.7	8.9	9.1	8.9	8.6	9.0	8.3	7.5	6.6	4.5	4.0	9.1	0.0	5.2
30	4.1	4.6	4.5	3.7	3.4	3.3	3.5	4.1	4.7	5.7	7.1	7.7	8.3	8.9	9.3	9.9	10.1	9.5	8.0	6.7	5.9	5.4	4.4	3.9	10.1	3.3	6.1
31	3.3	3.1	3.3	4.3	4.6	4.5	4.3	4.7	5.0	4.6	5.3	7.7	7.0	6.2	6.3	6.7	7.3	7.6	7.4	6.9	5.9	5.3	4.9	4.4	7.7	3.1	5.4
Max.	**6.3**	**6.3**	**6.6**	**6.2**	**6.4**	**6.5**	**6.5**	**6.9**	**7.0**	**7.8**	**8.4**	**10.4**	**11.5**	**12.2**	**12.1**	**11.5**	**11.0**	**10.3**	**10.2**	**9.2**	**8.2**	**7.5**	**6.9**	**6.4**	**12.2**		
Min.	**-0.5**	**-0.9**	**-1.1**	**-1.4**	**-1.6**	**-1.9**	**-1.9**	**-1.4**	**-1.0**	**-0.3**	**-0.3**	**-0.1**	**0.0**	**0.5**	**1.1**	**1.9**	**2.7**	**2.9**	**3.1**	**2.4**	**1.3**	**0.9**	**0.3**	**-0.3**		**-1.9**	
Avg.	**2.4**	**2.3**	**2.2**	**2.0**	**1.8**	**1.6**	**1.7**	**2.2**	**2.8**	**3.5**	**4.3**	**5.1**	**5.6**	**6.0**	**6.3**	**6.7**	**6.7**	**6.5**	**6.2**	**5.7**	**5.0**	**4.2**	**3.4**	**2.8**			**4.0**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	4.4	4.1	3.9	3.7	3.7	3.6	4.1	4.8	6.4	6.5	7.1	6.8	7.0	6.3	6.8	7.1	6.3	5.5	5.1	5.0	4.8	4.1	3.7	7.1	3.6	5.2
2	3.6	3.4	3.3	3.3	3.1	2.9	3.1	3.3	3.6	3.8	4.3	5.1	6.0	6.9	7.5	8.3	8.6	8.7	8.9	8.8	8.5	7.6	6.3	5.3	8.9	2.9	5.6
3	4.6	4.5	4.9	4.6	4.5	4.1	3.9	4.4	4.9	5.2	6.1	6.8	7.6	8.4	9.5	9.6	10.6	11.1	10.4	10.9	10.0	10.0	9.2	7.5	11.1	3.9	7.2
4	6.0	5.0	4.3	4.4	5.1	5.1	5.9	6.4	6.9	6.8	7.3	7.5	8.0	8.8	9.5	10.5	10.1	10.6	10.1	6.8	5.7	5.1	4.7	4.2	10.6	4.2	6.9
5	4.0	3.8	3.7	3.6	3.5	3.5	3.7	4.2	4.3	4.4	5.1	5.8	6.9	7.4	7.0	6.8	7.3	7.5	6.8	6.1	6.0	5.7	5.0	4.6	7.5	3.5	5.3
6	4.5	4.4	4.4	4.5	4.3	4.5	4.3	4.7	5.7	7.5	9.4	10.6	11.8	11.4	11.6	10.7	10.3	9.6	9.4	8.8	7.1	5.4	4.5	3.6	11.8	3.6	7.2
7	4.0	5.2	5.2	3.9	3.9	5.5	6.0	6.4	8.2	9.3	10.4	9.8	9.9	8.7	8.0	8.0	6.8	6.2	5.7	5.2	5.1	4.6	3.7	2.9	10.4	2.9	6.4
8	2.2	2.7	2.7	2.5	2.4	2.4	2.7	3.6	4.5	4.8	5.6	6.7	8.3	7.1	7.4	7.8	7.7	7.9	6.3	5.3	4.8	4.2	3.1	2.3	8.3	2.2	4.8
9	1.5	1.6	1.1	1.2	1.2	1.3	2.0	2.7	3.4	4.0	5.4	6.7	7.4	8.0	8.3	9.0	9.4	8.4	8.6	8.9	8.8	8.0	7.3	7.1	9.4	1.1	5.5
10	6.8	6.7	5.9	5.4	5.6	5.7	5.7	6.1	7.5	8.9	10.4	12.7	14.4	15.7	16.8	18.0	18.7	18.8	19.0	18.7	18.2	13.3	10.2	7.2	19.0	5.4	11.5
11	6.5	5.2	5.1	4.7	4.1	4.1	4.1	4.6	5.0	5.8	6.6	7.9	10.1	11.3	12.5	12.2	11.5	10.2	8.8	7.8	6.8	5.0	4.3	3.8	12.5	3.8	7.0
12	3.8	3.7	3.7	3.7	3.6	3.6	3.6	3.7	4.0	4.3	4.5	4.5	4.7	4.9	5.1	5.4	6.3	6.8	7.1	7.5	7.3	7.2	6.0	5.2	7.5	3.6	5.0
13	5.1	4.9	5.0	5.0	5.0	4.6	4.5	5.1	6.0	6.7	7.4	8.2	8.9	8.6	8.6	9.6	10.2	10.2	8.6	8.6	8.7	8.1	7.6	7.2	10.2	4.5	7.2
14	7.0	6.9	6.4	5.7	5.8	5.8	5.9	6.5	7.9	8.8	9.7	10.9	12.0	12.4	11.9	12.5	11.0	11.4	12.4	12.8	12.5	11.8	11.2	10.7	12.8	5.7	9.6
15	9.1	9.1	9.1	8.2	7.4	7.9	8.3	8.9	9.6	11.1	13.0	14.5	15.7	16.8	17.6	18.1	18.8	18.6	18.6	18.0	17.6	16.6	14.6	11.9	18.8	7.4	13.3
16	10.4	9.6	8.9	8.7	8.0	7.0	7.4	8.6	9.8	11.1	12.3	13.3	14.2	14.7	14.9	14.8	14.7	14.3	13.7	12.8	11.4	10.5	9.6	8.6	14.9	7.0	11.2
17	7.3	6.3	4.9	4.0	3.5	3.4	3.3	3.6	3.8	4.3	4.9	5.7	6.0	6.0	6.6	8.4	9.3	9.8	8.3	7.9	8.4	8.4	8.0	7.2	9.8	3.3	6.2
18	6.9	6.7	6.6	6.6	5.8	5.0	5.5	6.2	7.1	8.2	9.0	9.5	10.0	10.5	11.4	12.4	12.5	11.2	12.4	11.0	11.5	9.6	9.2	9.3	12.5	5.0	8.9
19	8.9	8.0	7.1	7.5	8.2	8.0	8.2	8.6	9.6	10.7	12.0	13.9	15.6	16.6	17.7	18.6	19.4	19.8	20.1	20.1	19.8	18.8	16.8	15.0	20.1	7.1	13.7
20	13.4	12.6	12.3	11.6	11.0	10.6	11.2	12.3	13.5	15.0	16.5	17.8	19.2	20.1	20.7	21.1	21.8	21.4	19.9	19.9	18.6	17.0	14.8	12.9	21.8	10.6	16.0
21	12.4	12.7	12.2	10.9	10.3	10.1	10.0	10.4	11.0	11.8	13.2	14.4	14.6	15.3	16.1	16.1	16.8	16.9	16.4	16.3	14.9	12.4	11.6	10.8	16.9	10.0	13.2
22	9.2	8.5	6.5	5.8	5.7	5.0	4.3	4.6	4.8	5.1	5.8	5.9	6.1	6.2	6.6	6.8	7.0	7.1	7.2	7.1	6.8	6.7	6.5	6.3	9.2	4.3	6.3
23	6.2	6.1	6.0	6.1	6.0	5.9	5.8	5.9	5.9	6.0	6.0	6.1	6.1	6.1	6.1	6.1	5.9	5.7	5.5	5.4	5.1	5.3	5.5	5.4	6.2	5.1	5.8
24	5.1	5.1	5.1	4.9	4.9	5.1	5.3	5.8	6.3	6.5	6.5	7.0	7.1	6.9	7.0	6.9	7.1	6.9	6.9	7.0	6.9	6.5	6.0	5.8	7.1	4.9	6.2
25	5.6	5.6	5.5	5.5	5.5	5.4	5.5	5.8	6.2	6.6	7.4	7.4	7.2	6.8	7.4	8.0	8.3	8.2	8.0	7.7	7.2	6.8	6.0	5.2	8.3	5.2	6.6
26	4.8	4.3	4.1	4.2	4.7	4.4	5.1	6.7	7.3	8.2	9.3	9.3	9.9	10.5	11.7	12.1	12.7	13.1	13.8	13.5	13.5	12.4	10.3	8.9	13.8	4.1	8.9
27	8.6	8.4	7.9	7.8	8.0	7.6	7.8	8.7	9.7	11.1	12.1	12.9	13.5	14.3	14.7	14.8	15.7	15.8	15.5	15.1	14.0	12.2	10.8	9.5	15.8	7.6	11.5
28	8.9	8.0	7.5	7.1	6.8	6.7	6.7	6.9	7.1	7.3	7.8	8.3	8.3	8.5	9.1	9.8	10.3	9.9	9.8	10.6	10.6	10.1	9.5	9.0	10.6	6.7	8.5
29	8.8	8.5	7.6	7.5	7.7	7.4	7.4	8.2	9.1	10.4	10.7	11.9	12.8	13.6	13.7	13.8	14.0	14.2	13.4	12.8	11.5	10.7	9.2	8.4	14.2	7.4	10.5
30	7.9	7.6	7.3	7.3	7.6	7.6	7.9	8.0	8.3	8.4	9.3	9.5	10.3	11.0	11.1	11.6	11.7	11.4	11.0	11.0	10.3	9.1	8.3	7.7	11.7	7.3	9.2
Max.	**13.4**	**12.7**	**12.3**	**11.6**	**11.0**	**10.6**	**11.2**	**12.3**	**13.5**	**15.0**	**16.5**	**17.8**	**19.2**	**20.1**	**20.7**	**21.1**	**21.8**	**21.4**	**20.1**	**20.1**	**19.8**	**18.8**	**16.8**	**15.0**	**21.8**		
Min.	**1.5**	**1.6**	**1.1**	**1.2**	**1.2**	**1.3**	**2.0**	**2.7**	**3.4**	**3.8**	**4.3**	**4.5**	**4.7**	**4.9**	**5.1**	**5.4**	**5.9**	**5.7**	**5.5**	**5.1**	**4.8**	**4.2**	**3.1**	**2.3**		**1.1**	
Avg.	**6.6**	**6.3**	**5.9**	**5.7**	**5.6**	**5.5**	**5.6**	**6.2**	**6.9**	**7.6**	**8.5**	**9.3**	**10.0**	**10.3**	**10.7**	**11.1**	**11.4**	**11.3**	**10.9**	**10.6**	**10.1**	**9.1**	**8.1**	**7.2**			**8.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.4	7.7	8.0	7.9	7.3	7.1	7.3	7.8	8.3	9.4	10.9	11.9	12.2	12.9	12.6	13.2	13.6	13.5	13.2	12.8	12.3	11.7	11.0	9.2	13.6	7.1	10.4
2	8.9	8.7	8.6	8.3	8.2	7.9	8.3	8.8	10.0	11.7	12.2	13.5	14.6	14.7	14.7	15.6	15.3	16.0	16.2	15.9	15.8	15.1	13.6	12.5	16.2	7.9	12.3
3	12.2	12.2	12.0	12.0	10.9	10.4	10.3	11.1	11.6	11.8	12.4	12.8	13.6	14.4	15.0	15.9	16.7	16.3	15.1	12.4	11.4	10.8	10.3	10.4	16.7	10.3	12.6
4	9.9	8.9	8.4	8.3	8.3	7.5	7.8	7.9	8.3	9.1	9.8	10.5	10.9	10.6	11.1	11.7	12.1	11.4	10.7	10.5	10.9	10.8	10.4	9.4	12.1	7.5	9.8
5	8.8	8.3	8.0	7.9	7.6	8.0	8.7	9.0	10.2	11.7	12.4	12.9	13.4	12.9	13.5	14.5	13.8	12.4	13.3	10.6	8.6	8.1	7.9	7.9	14.5	7.6	10.4
6	7.8	8.1	8.1	8.1	8.1	8.0	8.1	7.8	7.9	8.5	8.7	8.7	9.1	9.9	10.5	11.3	12.1	12.7	13.1	13.1	13.3	13.0	11.3	10.8	13.3	7.8	9.9
7	10.8	10.8	10.3	9.5	9.9	9.5	9.0	10.4	12.1	12.7	13.7	14.3	15.0	15.3	15.7	16.1	16.5	16.5	16.5	15.3	13.4	12.6	11.4	10.5	16.5	9.0	12.8
8	9.5	9.2	9.8	9.9	9.7	9.4	9.7	9.2	9.5	9.9	10.3	10.3	10.5	10.9	11.2	11.3	11.1	10.9	11.7	11.1	10.7	9.8	8.4	7.9	11.7	7.9	10.1
9	7.7	7.5	6.9	6.4	6.2	6.6	6.8	7.4	7.9	8.9	9.2	9.6	10.7	11.8	11.6	12.7	13.1	13.2	13.4	13.1	12.7	12.4	11.1	9.6	13.4	6.2	9.8
10	9.5	9.6	9.3	8.9	9.6	9.2	9.7	10.6	11.1	12.5	13.1	13.2	14.8	14.3	13.7	14.0	14.4	13.2	11.9	10.9	10.2	9.5	9.1	8.5	14.8	8.5	11.3
11	8.4	8.3	8.4	8.6	8.3	8.3	8.1	8.0	8.3	10.1	11.4	12.7	13.6	14.0	14.5	14.8	14.7	14.9	14.6	14.0	13.1	11.8	10.2	9.5	14.9	8.0	11.2
12	9.2	8.9	8.7	8.6	9.1	8.6	8.5	8.8	10.4	11.7	12.8	13.0	13.3	14.3	15.0	13.8	12.4	10.4	10.4	9.8	9.6	9.7	9.2	9.0	15.0	8.5	10.6
13	8.8	8.3	8.1	7.9	7.6	7.5	7.5	7.6	7.7	7.7	7.9	8.1	8.3	8.5	8.7	9.0	9.3	9.5	9.8	9.5	9.3	9.1	8.9	8.6	9.8	7.5	8.5
14	8.6	8.3	8.1	8.1	8.0	7.9	7.9	8.0	8.2	8.7	9.7	10.5	10.9	10.9	11.3	11.3	10.3	10.3	10.3	10.1	9.5	9.5	9.1	8.7	11.3	7.9	9.3
15	8.6	8.6	8.4	8.3	8.5	8.4	8.1	8.3	8.8	9.2	9.3	9.6	10.4	11.0	12.6	12.6	12.8	12.1	12.0	11.9	11.3	10.7	10.0	9.6	12.8	8.1	10.0
16	8.9	8.4	8.3	7.9	7.2	7.2	6.8	7.6	8.1	8.9	9.7	11.2	12.9	14.2	13.8	14.2	14.7	15.2	15.9	16.0	15.2	14.2	12.6	9.9	16.0	6.8	11.2
17	8.8	9.5	9.9	8.8	8.4	8.3	8.6	9.5	10.8	12.2	13.6	14.6	15.6	16.4	17.3	18.0	18.3	18.0	16.1	13.7	11.9	10.9	9.7	9.1	18.3	8.3	12.4
18	9.2	9.3	9.3	9.0	8.9	8.7	8.6	8.9	9.6	10.3	11.1	11.8	12.4	13.6	13.6	12.2	11.6	11.4	10.8	10.6	10.9	11.0	10.7	10.5	13.6	8.6	10.6
19	9.9	9.1	9.0	9.3	9.4	9.4	9.0	9.1	10.1	10.7	11.5	12.1	13.3	14.4	14.5	14.2	14.5	14.8	14.5	14.7	14.5	14.0	13.3	13.2	14.8	9.0	12.0
20	12.9	12.7	13.0	12.7	12.8	12.2	12.4	12.6	13.1	13.5	14.8	14.2	14.0	14.3	15.4	14.8	14.9	16.7	17.0	16.2	15.8	14.7	12.7	11.6	17.0	11.6	13.9
21	11.1	10.9	10.1	9.9	9.5	9.1	8.7	8.8	8.7	8.4	8.4	8.3	9.1	9.6	10.0	9.8	9.5	9.2	8.3	7.7	7.4	7.0	6.6	6.2	11.1	6.2	8.8
22	6.2	6.4	6.4	6.3	6.2	6.2	6.1	6.1	6.2	6.3	6.4	6.6	6.8	7.0	7.2	7.2	7.3	7.5	7.3	7.0	6.9	6.8	6.9	6.9	7.5	6.1	6.7
23	6.9	7.0	7.0	6.9	6.8	6.7	6.6	6.6	6.9	7.3	7.8	8.0	8.2	8.4	8.3	8.3	8.2	8.0	8.1	8.1	8.0	7.7	7.5	7.6	8.4	6.6	7.5
24	7.6	7.5	7.7	7.8	7.8	7.6	7.5	7.6	7.6	7.9	8.9	9.4	9.4	9.6	10.2	10.3	10.7	11.2	10.9	10.8	10.8	10.9	10.7	10.5	11.2	7.5	9.2
25	10.7	10.7	10.8	10.7	10.7	11.1	10.7	11.3	11.9	13.3	13.5	13.8	14.7	15.0	15.3	15.2	14.8	14.9	14.7	14.3	14.2	13.8	13.1	12.7	15.3	10.7	13.0
26	12.1	12.1	12.6	11.9	9.7	10.0	9.9	10.5	11.5	12.1	13.0	15.0	16.5	17.5	18.5	18.6	18.5	19.7	19.8	19.5	18.4	17.0	16.2	15.8	19.8	9.7	14.8
27	16.0	15.6	15.1	15.5	14.7	14.4	14.1	14.0	14.2	15.4	16.8	17.2	18.1	19.5	19.5	20.9	20.8	21.4	20.4	18.6	17.3	16.5	14.7	15.6	21.4	14.0	16.9
28	15.3	13.9	13.5	12.2	10.1	9.3	9.0	9.6	10.2	11.0	12.2	13.8	15.0	16.1	17.2	17.7	18.2	18.5	18.4	18.0	17.3	14.9	13.2	10.4	18.5	9.0	14.0
29	10.2	10.4	10.0	9.8	9.4	9.6	10.1	10.2	10.3	10.6	11.5	13.5	15.4	15.9	16.6	17.0	17.3	17.8	17.5	17.1	16.1	15.5	13.7	13.1	17.8	9.4	13.3
30	12.3	12.3	11.6	11.2	10.9	10.2	10.2	10.7	11.0	11.5	11.5	11.8	12.2	12.9	12.7	13.5	14.2	14.9	14.1	13.1	12.4	11.5	10.9	9.9	14.9	9.9	12.0
31	9.5	9.4	9.2	9.0	8.6	8.4	8.5	8.6	9.1	9.2	9.5	9.9	10.3	10.6	11.7	12.5	13.0	13.3	11.8	10.6	10.0	9.5	8.9	8.7	13.3	8.4	10.0
Max.	**16.0**	**15.6**	**15.1**	**15.5**	**14.7**	**14.4**	**14.1**	**14.0**	**14.2**	**15.4**	**16.8**	**17.2**	**18.1**	**19.5**	**19.5**	**20.9**	**20.8**	**21.4**	**20.4**	**19.5**	**18.4**	**17.0**	**16.2**	**15.8**	**21.4**		
Min.	**6.2**	**6.4**	**6.4**	**6.3**	**6.2**	**6.2**	**6.1**	**6.1**	**6.2**	**6.3**	**6.4**	**6.6**	**6.8**	**7.0**	**7.2**	**7.2**	**7.3**	**7.5**	**7.3**	**7.0**	**6.9**	**6.8**	**6.6**	**6.2**		**6.1**	
Avg.	**9.8**	**9.6**	**9.5**	**9.3**	**9.0**	**8.8**	**8.8**	**9.1**	**9.7**	**10.4**	**11.1**	**11.7**	**12.4**	**12.9**	**13.3**	**13.6**	**13.7**	**13.7**	**13.5**	**12.8**	**12.2**	**11.6**	**10.7**	**10.1**			**11.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

August *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.5	8.4	8.4	8.4	8.5	8.5	8.3	8.1	8.1	8.2	8.4	8.8	9.3	9.1	9.3	9.1	9.3	9.2	8.6	8.5	8.4	8.3	8.1	8.1	9.3	8.1	8.6
2	8.2	8.0	8.0	8.1	8.0	8.0	8.2	8.3	8.1	8.2	8.6	8.6	8.6	8.7	8.8	9.0	9.2	9.1	9.0	8.9	9.1	9.2	8.9	8.8	9.2	8.0	8.6
3	8.8	8.7	8.7	8.8	8.8	8.6	8.6	8.6	8.7	9.1	9.4	9.8	9.7	10.3	10.5	10.7	10.9	10.7	10.4	9.7	9.1	9.0	8.9	8.8	10.9	8.6	9.4
4	8.9	8.9	8.9	8.8	8.8	8.8	8.8	8.9	8.9	8.9	9.0	9.1	9.2	9.5	9.5	9.5	9.6	9.5	9.7	9.8	9.7	9.6	9.7	9.7	9.8	8.8	9.2
5	9.8	9.9	9.9	9.9	9.6	9.6	9.5	9.7	10.1	10.6	10.4	10.1	10.1	9.6	9.3	9.2	9.7	9.9	9.9	10.3	10.6	10.5	9.9	9.8	10.6	9.2	9.9
6	9.0	8.1	8.0	7.8	8.0	8.0	8.2	8.5	9.0	9.8	10.5	11.0	11.4	12.3	12.3	12.5	12.2	12.6	12.5	11.8	11.5	10.4	9.5	7.6	12.6	7.6	10.1
7	6.9	6.8	6.8	6.6	7.3	7.1	6.5	7.4	9.0	9.7	10.9	11.3	11.9	13.1	13.9	14.8	15.0	15.0	15.3	14.8	14.2	12.9	11.0	9.9	15.3	6.5	10.8
8	9.0	8.6	8.2	8.1	7.7	8.0	8.4	8.7	9.0	9.6	11.5	13.0	14.2	15.4	15.9	16.5	16.6	16.7	16.7	16.4	15.3	13.7	12.2	11.1	16.7	7.7	12.1
9	10.4	9.9	10.0	9.8	10.0	9.3	8.3	9.2	11.4	12.8	13.6	14.8	15.8	16.8	17.7	18.3	18.7	19.2	18.7	17.7	17.3	15.7	14.9	15.5	19.2	8.3	14.0
10	14.5	12.8	12.8	13.1	13.0	13.4	13.3	13.5	14.2	15.2	16.0	17.1	18.1	18.7	19.2	19.8	20.0	20.0	19.4	18.5	17.2	16.1	15.2	14.7	20.0	12.8	16.1
11	14.0	14.7	13.5	12.1	12.8	13.0	12.7	12.5	12.7	13.6	14.6	16.2	17.2	17.7	18.3	18.3	18.4	18.2	17.6	16.9	16.4	15.7	15.4	14.9	18.4	12.1	15.3
12	14.7	15.1	14.5	14.2	13.5	13.0	12.9	13.1	13.2	13.5	14.0	14.6	15.9	17.1	17.8	18.8	20.3	21.9	21.9	22.2	21.3	19.6	18.0	17.0	22.2	12.9	16.6
13	16.9	17.4	17.0	16.2	15.1	15.3	15.3	15.1	15.1	16.2	17.5	18.7	19.3	20.1	20.0	20.2	20.4	21.0	20.6	19.9	18.6	16.7	15.1	13.6	21.0	13.6	17.6
14	12.4	11.1	9.1	7.5	7.6	7.1	7.3	7.6	7.6	7.6	7.5	7.6	7.9	8.1	8.8	9.5	9.2	9.2	9.3	9.1	9.6	8.8	7.9	7.7	12.4	7.1	8.5
15	7.4	7.4	7.2	7.5	7.6	8.1	8.3	8.4	8.5	8.8	9.2	10.2	10.3	10.5	10.8	11.0	10.9	10.9	10.8	10.7	10.6	10.2	9.9	9.8	11.0	7.2	9.4
16	9.6	9.3	9.2	8.7	9.2	8.6	7.8	8.2	9.5	9.7	11.2	12.5	13.8	14.7	15.4	16.3	16.8	17.1	16.1	14.7	13.6	11.6	11.3	11.1	17.1	7.8	11.9
17	11.2	10.6	9.9	9.6	9.3	9.1	9.1	8.9	9.8	10.0	11.3	12.1	11.5	11.6	11.4	11.3	11.2	11.7	11.4	11.2	10.1	9.6	9.2	8.7	12.1	8.7	10.4
18	8.4	8.7	9.0	9.0	8.5	8.0	8.2	8.1	8.1	8.5	8.7	8.6	8.5	8.6	9.3	10.1	10.5	11.1	10.9	10.8	10.8	10.6	10.7	10.7	11.1	8.0	9.3
19	10.8	11.0	10.9	10.4	10.7	10.5	10.6	10.5	10.8	11.2	11.8	12.4	12.9	12.8	12.7	13.0	13.6	13.0	12.1	11.2	10.4	10.1	9.9	9.7	13.6	9.7	11.4
20	9.4	9.0	8.7	8.4	8.4	8.4	8.5	8.6	8.7	8.6	8.7	8.9	9.5	9.8	10.1	10.6	11.0	11.6	11.3	10.6	9.9	9.0	8.5	8.3	11.6	8.3	9.3
21	8.4	8.5	8.6	8.3	8.0	8.0	7.9	7.7	7.5	7.7	7.9	8.4	8.7	8.7	9.0	9.2	9.7	9.6	9.7	9.7	9.5	9.1	8.8	8.5	9.7	7.5	8.6
22	8.3	8.3	8.4	8.4	8.3	8.2	8.2	8.2	8.2	8.1	8.2	8.6	8.9	9.1	9.2	8.9	8.9	9.1	9.0	8.8	8.5	8.1	8.0	7.9	9.2	7.9	8.5
23	7.9	7.8	7.7	8.1	8.4	8.4	8.1	7.7	7.6	7.7	8.7	9.6	10.0	10.4	10.9	11.3	11.6	11.8	11.6	11.6	11.1	10.6	10.3	10.1	11.8	7.6	9.5
24	10.2	10.1	10.2	10.0	9.5	9.3	9.0	8.9	9.1	9.9	10.8	11.6	13.0	13.6	14.0	14.2	13.3	14.6	13.3	11.7	11.6	11.2	11.0	10.4	14.6	8.9	11.3
25	10.4	10.2	10.2	10.1	10.0	9.4	9.1	8.9	8.9	9.1	9.5	9.8	10.1	11.3	12.4	13.4	15.0	14.9	14.3	13.5	11.8	10.3	9.9	9.8	15.0	8.9	10.9
26	9.8	9.2	8.9	8.8	8.4	8.7	8.7	9.0	9.2	10.2	11.2	12.3	12.8	12.8	13.1	13.0	12.5	12.8	13.3	12.2	11.1	10.5	10.0	9.7	13.3	8.4	10.8
27	9.7	9.4	9.0	9.8	9.6	8.9	9.1	9.0	10.6	11.2	12.5	14.3	14.4	14.7	15.2	15.4	15.5	15.2	15.1	15.0	13.7	12.7	12.7	12.4	15.5	8.9	12.3
28	12.0	10.7	10.5	10.5	11.2	11.4	11.2	10.8	11.0	12.3	13.1	13.9	14.8	15.7	16.2	16.6	17.0	17.0	17.5	17.2	15.5	13.1	11.8	11.2	17.5	10.5	13.4
29	10.4	10.3	10.8	10.2	10.3	10.0	10.0	9.7	9.6	9.7	10.0	10.4	11.1	12.7	14.0	14.4	14.6	14.8	14.4	14.3	13.3	11.4	10.6	9.4	14.8	9.4	11.5
30	8.9	8.5	8.1	7.8	7.3	7.2	7.3	7.5	8.1	9.0	9.6	10.8	11.6	12.2	12.8	13.5	13.9	14.4	14.7	14.5	11.9	10.8	9.9	8.9	14.7	7.2	10.4
31	9.2	8.8	8.4	8.1	7.4	7.4	7.2	7.4	7.9	8.8	9.2	9.5	11.5	13.2	14.1	14.6	13.9	13.1	12.3	13.0	11.9	11.2	10.1	10.3	14.6	7.2	10.4
Max.	**16.9**	**17.4**	**17.0**	**16.2**	**15.1**	**15.3**	**15.3**	**15.1**	**15.1**	**16.2**	**17.5**	**18.7**	**19.3**	**20.1**	**20.0**	**20.2**	**20.4**	**21.9**	**21.9**	**22.2**	**21.3**	**19.6**	**18.0**	**17.0**	**22.2**		
Min.	**6.9**	**6.8**	**6.8**	**6.6**	**7.3**	**7.1**	**6.5**	**7.4**	**7.5**	**7.6**	**7.5**	**7.6**	**7.9**	**8.1**	**8.8**	**8.9**	**8.9**	**9.1**	**8.6**	**8.5**	**8.4**	**8.1**	**7.9**	**7.6**		**6.5**	
Avg.	**10.1**	**9.9**	**9.7**	**9.4**	**9.4**	**9.3**	**9.2**	**9.3**	**9.6**	**10.1**	**10.7**	**11.4**	**12.0**	**12.5**	**13.0**	**13.3**	**13.5**	**13.7**	**13.5**	**13.1**	**12.4**	**11.5**	**10.9**	**10.5**			**11.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.2	11.4	11.0	10.2	9.6	9.3	8.8	7.9	8.1	8.4	8.5	8.9	9.0	9.2	9.5	10.4	11.0	11.6	11.3	10.8	9.3	8.1	7.5	7.2	11.6	7.2	9.5
2	7.4	7.6	7.5	7.5	7.4	7.4	7.5	7.9	8.1	8.4	8.8	9.3	10.1	11.0	11.9	16.1	10.3	8.1	10.4	9.9	9.1	8.7	8.4	8.2	16.1	7.4	9.0
3	7.9	7.8	7.6	7.7	7.8	7.8	7.7	7.7								7.6	7.3	7.2	7.0	7.0	7.0	6.9	6.9	7.1	7.9	6.9	7.4
4	7.0	7.3	7.6	7.6	6.8	7.1	7.1	7.6	8.0	8.9	9.8	10.1	10.8	11.9	12.3	13.0	13.2	11.0	12.2	11.1	9.3	8.5	8.1	8.3	13.2	6.8	9.4
5	8.1	7.4	8.0	8.7	8.0	8.0	7.8	8.0	8.6	9.1	10.0	11.7	12.2	12.4	13.2	13.5	9.9	9.1	8.8	8.8	8.9	8.6	8.3	8.7	13.5	7.4	9.4
6	8.7	8.1	7.5	7.6	7.7	7.5	7.2	6.5	6.9	7.3	7.9	8.3	8.4	8.8	9.5	9.3	9.7	9.6	9.1	8.5	8.1	7.2	6.4	6.2	9.7	6.2	8.0
7	6.1	6.7	6.8	6.8	6.8	7.0	7.1	7.3	7.4	7.9	7.8	7.8	8.1	8.4	8.5	8.9	8.8	8.5	8.5	7.6	7.5	7.7	7.9	8.1	8.9	6.1	7.7
8	8.3	8.4	8.5	8.7	8.9	9.1	9.3	9.6	9.8	9.7	9.7	9.6	9.7	9.8	9.9	10.2	10.3	10.7	10.8	10.7	10.5	10.1	9.5	9.3	10.8	8.3	9.6
9	9.0	8.7	8.4	8.5	8.5	8.7	8.7	8.4	8.2	8.4	8.8	9.2	9.0	9.3	9.9	10.2	10.7	10.9	10.7	9.7	9.4	8.5	8.0	7.8	10.9	7.8	9.1
10	8.4	8.2	8.0	8.2	7.6	7.8	7.8	7.8	8.1	8.6	9.1	9.8	10.5	10.6	10.4	10.5	10.1	10.4	9.9	9.0	8.4	8.0	7.8	7.8	10.6	7.6	8.9
11	7.7	7.8	8.0	8.0	7.9	7.7	7.8	7.6	7.7	8.2	8.6	8.0	8.0	7.6	7.0	7.0	6.9	7.0	6.7	6.6	6.6	6.8	7.2	7.3	8.6	6.6	7.5
12	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.1	7.2	7.4	7.5	8.1	9.6	10.6	10.9	11.1	10.6	8.7	7.9	7.2	6.7	6.8	7.0	6.8	11.1	6.7	8.1
13	6.6	6.2	6.1	6.1	6.1	6.3	6.2	6.2	6.3	6.4	6.5	6.4	6.8	8.0	7.6	7.3	7.2	6.7	6.0	6.2	5.8	5.7	5.6	5.1	8.0	5.1	6.4
14	4.8	4.7	4.8	4.8	4.7	4.6	4.4	4.3	4.7	5.5	6.3	6.7	7.2	7.9	8.4	9.4	9.1	8.8	8.2	6.8	5.9	4.5	4.1	2.8	9.4	2.8	6.0
15	3.7	3.3	3.2	3.0	2.3	2.3	2.1	1.7	1.6	2.6	4.4	6.0	7.1	7.7	7.6	7.5	8.2	9.2	9.4	7.7	5.8	4.7	6.1	6.0	9.4	1.6	5.1
16	5.7	5.5	5.2	5.2	4.6	4.3	4.4	4.2	3.9	4.1	5.7	7.0	7.9	8.5	9.2	9.1	9.8	9.7	9.5	8.9	6.5	6.3	6.1	5.6	9.8	3.9	6.5
17	5.5	5.5	5.3	4.7	4.9	4.8	4.6	4.5	4.7	5.1	5.2	5.4	5.6	6.5	7.3	8.0	8.0	8.2	8.0	7.4	6.3	5.7	5.9	6.0	8.2	4.5	6.0
18	6.5	6.4	6.3	6.3	6.4	6.5	6.7	7.3	7.6	7.6	8.0	8.3	8.9	8.8	8.8	8.5	8.7	8.7	8.5	8.3	8.1	7.9	7.9	8.3	8.9	6.3	7.7
19	8.7	8.5	8.6	8.3	7.8	7.5	7.5	7.4	7.3	7.4	7.5	7.7	7.7	7.8		8.1	7.3	6.7	6.5	6.2	6.1	6.2	6.1	6.1	8.7	6.1	7.3
20	5.9	5.7	5.8	5.6	5.7	5.9	5.8	5.8	5.7	5.6	5.5	5.9	6.2	6.6	7.3	7.9	8.2	8.4	7.7	6.4	6.0	6.2	5.8	5.9	8.4	5.5	6.3
21	5.8	5.1	4.7	5.0	5.4	5.3	5.3	5.3	5.4	5.6	6.5	7.3	7.9	8.4	9.1	8.6	9.0	9.7	8.8	8.0	6.0	5.1	5.1	5.1	9.7	4.7	6.6
22	4.4	4.4	4.1	3.6	4.5	4.0	3.7	3.9	4.6	5.0	4.8	5.6	6.2	7.1	8.1	8.0	7.9	7.4	6.3	5.2	4.8	4.6	4.6	4.4	8.1	3.6	5.3
23	4.4	4.3	4.4	4.5	4.8	5.1	4.9	4.8	4.8	4.8	5.4	6.4	6.7	7.0	6.9	6.5	6.0	5.7	5.7	5.6	5.4	5.3	5.4	5.5	7.0	4.3	5.4
24	5.5	5.1	5.1	5.3	5.0	4.5	4.2	4.4	4.5	4.7	5.4	5.8	6.6	6.8	6.2	6.1	5.3	5.9	4.5	4.3	3.5	3.5	3.6	3.3	6.8	3.3	5.0
25	3.1	3.3	3.1	2.9	3.4	4.0	4.3	4.3	4.2	4.1	5.1	5.6	5.7	6.1	6.1	6.1	5.4	5.1	4.8	4.4	4.4	4.5	4.2	3.9	6.1	2.9	4.5
26	3.6	3.5	3.3	3.0	2.8	2.8	2.7	2.6	2.5	2.8	4.3	5.3	5.3	5.1	5.0	5.6	5.5	6.2	6.0	5.3	4.9	4.8	4.6	4.4	6.2	2.5	4.3
27	3.7	3.7	3.6	2.9	3.4	4.0	3.4	3.0	2.6	2.0	2.6	3.2	4.0	4.3	5.1	4.9	4.6	4.9	4.8	4.9	4.9	4.7	4.3	3.8	5.1	2.0	3.9
28	3.7	3.6	3.0	2.4	2.2	2.3	2.4	2.6	2.7	2.8	3.2	3.4	3.6	3.7	3.9	4.2	4.4	4.8	4.5	4.1	3.8	4.1	4.3	3.7	4.8	2.2	3.5
29	2.9	2.8	2.5	2.6	2.3	2.1	2.6	2.9	2.9	3.3	4.4	5.5	5.9	6.5	6.2	5.9	5.6	5.1	4.9	4.9	4.4	4.5	4.4	4.2	6.5	2.1	4.1
30	3.9	3.3	2.0	1.8	2.2	2.4	2.4	2.5	2.4	2.6	2.7	3.8	4.1	4.3	3.9	4.2	4.1	4.4	4.0	3.1	2.9	3.1	3.3	3.3	4.4	1.8	3.2
Max.	**11.2**	**11.4**	**11.0**	**10.2**	**9.6**	**9.3**	**9.3**	**9.6**	**9.8**	**9.7**	**10.0**	**11.7**	**12.2**	**12.4**	**13.2**	**16.1**	**13.2**	**11.6**	**12.2**	**11.1**	**10.5**	**10.1**	**9.5**	**9.3**	**16.1**		
Min.	**2.9**	**2.8**	**2.0**	**1.8**	**2.2**	**2.1**	**2.1**	**1.7**	**1.6**	**2.0**	**2.6**	**3.2**	**3.6**	**3.7**	**3.9**	**4.2**	**4.1**	**4.4**	**4.0**	**3.1**	**2.9**	**3.1**	**3.3**	**2.8**		**1.6**	
Avg.	**6.2**	**6.1**	**5.9**	**5.8**	**5.8**	**5.8**	**5.7**	**5.7**	**5.7**	**6.0**	**6.6**	**7.1**	**7.5**	**7.9**	**8.2**	**8.4**	**8.1**	**7.9**	**7.7**	**7.2**	**6.5**	**6.2**	**6.1**	**6.0**			**6.7**

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.0	2.8	2.5	2.6	2.8	2.3	2.0	2.0	2.3	2.5	3.2	3.8	4.4	4.8	5.2	5.8	5.1	3.7	3.4	3.0	2.8	2.9	2.6	5.8	2.0	3.3
2	2.3	1.9	1.5	1.4	1.4	1.3	1.3	1.3	1.1	1.1	1.2	1.4	2.1	2.8	3.1	3.2	3.6	3.5	3.2	1.7	1.2	0.6	0.6	0.1	3.6	0.1	1.8
3	0.0	0.3	0.3	0.4	0.3	0.0	-0.1	0.0	0.2	0.4	0.7	1.7	2.8	3.2	3.1	3.5	3.3	3.6	3.0	2.1	1.7	1.6	1.5	1.3	3.6	-0.1	1.5
4	1.1	1.4	1.3	0.7	-0.1	-0.3	-0.2	0.9	1.6	1.0	0.8	1.0	1.2	1.5	1.6	1.7	1.7	1.3	0.7	0.4	0.4	0.3	0.9	1.1	1.7	-0.3	0.9
5	0.9	0.6	0.3	0.5	0.5	0.6	0.5	0.3	0.1	0.3	0.7	1.0	0.7	1.2	1.4	1.8	1.9	1.5	1.2	0.8	0.0	-0.5	-0.9	-1.2	1.9	-1.2	0.6
6	-1.6	-2.4	-2.4	-2.4	-2.4	-2.3	-2.4	-2.9	-3.4	-3.7	-3.5	-3.0	-2.5	-2.1	-1.8	-1.8	-1.7	-1.7	-2.2	-2.8	-3.3	-3.3	-4.5	-4.9	-1.6	-4.9	-2.7
7	-5.5	-5.8	-6.4	-7.0	-6.9	-6.8	-6.4	-6.4	-6.6	-6.6	-6.1	-5.4	-4.7	-4.3	-4.4	-3.9	-3.7	-3.7	-4.2	-5.1	-5.9	-6.5	-7.0	-7.3	-3.7	-7.3	-5.7
8	-7.4	-7.0	-7.0	-7.3	-7.8	-7.9	-8.4	-8.7	-8.9	-9.1	-8.7	-7.7	-6.4	-5.5	-4.8	-4.2	-4.0	-4.3	-5.1	-5.8	-5.5	-5.0	-5.7	-7.1	-4.0	-9.1	-6.6
9	-6.4	-6.8	-6.1	-6.8	-5.6	-5.7	-5.5	-4.7	-5.8	-6.7	-5.3	-2.7	-2.1	-1.3	-0.7	-0.1	0.0	-0.4	-1.0	-1.7	-2.3	-2.0	-1.4	-1.3	0.0	-6.8	-3.4
10	-1.8	-2.7	-2.4	-2.0	-2.3	-1.9	-2.1	-2.3	-3.3	-3.3	-2.5	-1.7	-1.1	-0.5	0.1	0.0	0.0	-0.5	-1.3	-2.9	-3.1	-3.7	-4.0	-4.1	0.1	-4.1	-2.1
11	-4.4	-4.8	-5.2	-5.4	-5.5	-4.7	-4.8	-5.0	-4.5	-4.1	-3.6	-2.9	-2.3	-1.1	-0.3	0.4	0.4	0.3	0.2	0.0	0.4	0.6	0.7	0.7	0.7	-5.5	-2.3
12	0.8	1.1	1.1	0.8	1.1	1.3	0.6	0.1	0.8	0.8	1.0	1.6	1.7	2.2	2.6	2.9	3.3	3.4	3.1	1.8	0.9	-0.2	-0.6	-0.9	3.4	-0.9	1.3
13	-1.4	-1.5	-1.6	-2.0	-2.5	-3.0	-4.0	-4.3	-4.6	-5.1	-5.2	-5.2	-4.5	-3.8	-3.1	-2.5	-2.5	-2.8	-3.8	-4.9	-4.9	-4.5	-4.4	-4.4	-1.4	-5.2	-3.6
14	-4.9	-5.3	-5.4	-5.4	-5.5	-5.6	-5.9	-6.3	-7.3	-7.8	-7.7	-5.9	-5.4	-4.6	-4.2	-4.6	-4.3	-4.4	-4.6	-4.2	-4.3	-5.7	-6.9	-6.8	-4.2	-7.8	-5.5
15	-6.5	-6.4	-6.3	-6.3	-6.4	-6.4	-6.0	-5.6	-5.0	-4.7	-4.0	-2.7	-3.6	-2.4	-1.5	-0.1	0.1	-0.1	-0.4	-1.1	-1.5	-1.7	-2.0	-2.4	0.1	-6.5	-3.5
16	-2.4	-3.2	-3.4	-3.3	-4.2	-5.9	-6.6	-7.4	-8.0	-8.1	-8.0	-7.1	-6.3	-6.1	-5.5	-5.0	-4.8	-5.1	-5.6	-5.8	-5.9	-6.3	-6.4	-6.5	-2.4	-8.1	-5.7
17	-6.5	-6.5	-6.6	-6.7	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.7	-6.6	-6.4	-6.0	-5.5	-5.1	-4.9	-4.9	-4.9	-4.9	-5.0	-5.1	-5.3	-5.6	-4.9	-6.8	-6.0
18	-5.5	-5.4	-5.6	-5.7	-5.7	-5.8	-5.9	-6.1	-6.0	-6.1	-6.1	-5.6	-5.5	-5.2	-5.0	-5.2	-5.3	-5.4	-5.6	-5.7	-5.7	-5.7	-6.2	-6.3	-5.0	-6.3	-5.7
19	-6.8	-6.6	-6.5	-6.8	-8.0	-7.7	-7.2	-6.7	-6.4	-6.4	-6.1	-5.5	-4.5	-3.7	-3.3	-2.9	-2.9	-3.2	-3.3	-4.1	-3.8	-3.4	-3.3	-3.8	-2.9	-8.0	-5.1
20	-3.7	-4.3	-3.8	-3.8	-4.0	-4.0	-4.7	-4.4	-4.0	-4.2	-4.7	-3.9	-3.5	-3.0	-2.5	-1.9	-1.7	-1.4	-1.3	-1.2	-0.6	0.0	-0.1	-0.3	0.0	-4.7	-2.8
21	-0.2	0.3	0.5	0.5	0.3	0.6	1.4	0.7	0.6	0.5	0.5	0.8	1.1	1.6	1.3	1.4	1.4	1.1	0.6	0.0	-0.3	-0.9	-1.6	-2.4	1.6	-2.4	0.4
22	-3.5	-4.2	-5.5	-6.9	-6.3	-7.0	-8.0	-7.8	-7.9	-7.0	-8.1	-8.6	-5.8	-4.3	-3.7	-3.0	-2.4	-2.9	-4.9	-6.0	-5.8	-4.6	-4.6	-5.3	-2.4	-8.6	-5.6
23	-5.8	-5.9	-5.8	-5.9	-5.9	-6.0	-5.7	-5.8	-5.8	-6.1	-5.6	-5.8	-5.3	-4.9	-4.5	-4.3	-4.2	-4.2	-4.9	-6.3	-6.9	-6.6	-6.0	-5.0	-4.2	-6.9	-5.6
24	-4.7	-4.5	-5.2	-5.9	-6.1	-5.9	-5.6	-5.3	-5.2	-5.0	-4.2	-3.0	-2.4	-1.0	-0.3	-0.3	-0.5	-0.6	-0.6	-0.8	-0.8	-0.7	-0.5	-0.3	-0.3	-6.1	-2.9
25	-0.6	-0.9	0.2	0.9	1.2	1.4	0.7	1.0	1.3	1.2	1.3	1.3	1.6	1.4	1.3	1.1	0.7	0.6	0.8	0.9	0.4	0.4	0.4	0.6	1.6	-0.9	0.8
26	0.8	0.9	1.0	0.9	0.9	0.8	0.3	0.2	0.8	1.0	1.3	1.1	1.3	1.6	1.9	2.0	1.9	2.0	2.0	1.9	1.6	1.5	1.5	1.4	2.0	0.2	1.3
27	1.0	1.3	1.2	0.9	0.9	1.0	0.9	1.1	0.1	0.9	1.1	1.4	1.6	2.2	2.1	1.2	0.8	1.4	1.4	1.5	1.4	1.6	1.8	2.0	2.2	0.1	1.3
28	1.5	1.2	1.1	1.1	1.0	1.0	1.0	0.5	-0.3	-0.3	0.1	0.4	0.5	0.8	1.0	1.0	0.8	0.8	0.5	0.3	0.0	-0.1	0.0	0.4	1.5	-0.3	0.6
29	0.6	0.6	0.7	0.7	0.7	0.7	0.8	1.1	1.3	1.8	2.1	2.5	2.5	2.9	2.4	2.5	2.7	2.5	2.2	1.9	2.1	1.1	0.7	0.7	2.9	0.6	1.6
30	0.8	1.1	1.0	0.6	0.7	0.8	0.4	0.3	0.2	-0.1	-0.2	-0.3	-0.2	0.1	-0.1	-0.3	-0.6	-0.8	-0.9	-1.0	-1.1	-0.8	-0.8	-0.9	1.1	-1.1	-0.1
31	-1.2	-1.3	-1.5	-1.4	-1.7	-2.0	-2.0	-1.3	-1.0	-1.0	-1.2	-1.2	-0.9	-0.7	-0.7	-0.6	-0.4	-0.9	-1.8	-1.9	-1.9	-1.5	-1.6	-1.0	-0.4	-2.0	-1.3
Max.	**3.2**	**3.0**	**2.8**	**2.5**	**2.6**	**2.8**	**2.3**	**2.0**	**2.0**	**2.3**	**2.5**	**3.2**	**3.8**	**4.4**	**4.8**	**5.2**	**5.8**	**5.1**	**3.7**	**3.4**	**3.0**	**2.8**	**2.9**	**2.6**	**5.8**		
Min.	**-7.4**	**-7.0**	**-7.0**	**-7.3**	**-8.0**	**-7.9**	**-8.4**	**-8.7**	**-8.9**	**-9.1**	**-8.7**	**-8.6**	**-6.4**	**-6.1**	**-5.5**	**-5.2**	**-5.3**	**-5.4**	**-5.6**	**-6.3**	**-6.9**	**-6.6**	**-7.0**	**-7.3**		**-9.1**	
Avg.	**-2.2**	**-2.3**	**-2.4**	**-2.6**	**-2.6**	**-2.7**	**-2.8**	**-2.8**	**-2.9**	**-2.9**	**-2.7**	**-2.2**	**-1.7**	**-1.1**	**-0.8**	**-0.6**	**-0.5**	**-0.7**	**-1.1**	**-1.6**	**-1.8**	**-1.9**	**-2.0**	**-2.1**			**-2.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-1.0	-0.2	-0.4	-0.4	0.2	0.4	0.6	0.2	0.1	-0.4	-0.6	-0.4	-0.3	-0.2	0.0	0.1	0.0	-1.0	-1.8	-2.4	-2.7	-3.0	-3.2	-3.5	0.6	-3.5	-0.8
2	-3.7	-3.9	-4.0	-4.5	-4.2	-4.7	-4.9	-5.3	-5.4	-5.0	-4.9	-4.7	-4.6	-4.6	-5.2	-5.7	-5.1	-4.9	-5.2	-5.5	-5.4	-5.3	-5.3	-5.3	-3.7	-5.7	-4.9
3	-5.2	-5.0	-5.1	-5.3	-5.1	-5.0	-5.1	-5.3	-5.4	-5.6	-5.7	-5.1	-5.0	-4.8	-4.7	-4.2	-4.1	-4.7	-5.1	-4.9	-4.4	-4.0	-3.4	-2.9	-2.9	-5.7	-4.8
4	-2.7	-2.4	-1.8	-1.3	-1.0	-0.7	-0.5	-0.4	-0.3	-0.1	0.1	0.0	0.0	0.3	0.1	-0.1	-0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.0	0.4	-2.7	-0.4
5	-0.1	-0.2	-0.2	-0.2	-0.3	-0.4	-0.6	-0.8	-0.8	-0.8	-0.8	-0.7	-0.6	-0.5	-0.3	-0.2	-0.2	-0.4	-0.2	-0.3	-0.3	-0.4	-0.3	-0.6	-0.1	-0.8	-0.4
6	-0.4	0.0	0.0	0.0	0.2	0.1	0.2	0.6	0.4	0.5	0.8	0.9	1.1	1.5	1.9	2.0	2.0	1.8	1.4	1.1	0.7	0.3	-0.2	-0.7	2.0	-0.7	0.7
7	-0.5	-0.3	-0.5	-0.6	-0.2	-0.1	-0.1	-0.1	0.3	0.4	0.5	0.8	1.1	0.9	0.5	0.4	0.5	0.3	-0.3	-0.7	-0.9	-1.0	-1.0	-1.1	1.1	-1.1	-0.1
8	-1.0	-1.5	-2.1	-2.0	-2.2	-2.0	-1.1	0.0	0.4	0.0	0.1	0.7	0.6	0.7	1.3	1.2	1.6	1.9	1.4	1.3	1.0	0.3	0.0	0.0	1.9	-2.2	0.0
9	-0.1	-0.6	-0.6	-0.5	-0.6	-0.6	-1.0	-1.3	-1.4	-1.5	-1.3	-0.9	-0.7	-0.3	-0.3	-0.3	-0.7	-1.0	-2.0	-1.6	-1.5	-2.1	-1.8	-2.3	-0.1	-2.3	-1.0
10	-1.9	-2.1	-2.6	-2.8	-3.2	-3.3	-4.1	-4.5	-4.3	-4.2	-5.5	-5.5	-4.7	-4.1	-3.9	-4.0	-3.6	-3.9	-3.8	-4.3	-4.7	-4.4	-5.4	-5.6	-1.9	-5.6	-4.0
11	-5.7	-5.6	-5.8	-5.4	-6.1	-6.6	-6.9	-7.3	-7.7	-7.8	-7.7	-7.3	-7.3	-7.5	-7.4	-7.5	-7.9	-8.0	-7.8	-8.0	-8.3	-9.0	-8.9	-7.9	-5.4	-9.0	-7.3
12	-7.8	-7.7	-7.8	-7.1	-6.9	-6.3	-7.8	-8.4	-8.3	-8.2	-8.4	-7.7	-7.4	-7.3	-6.9	-6.6	-6.3	-6.0	-5.9	-5.7	-4.9	-4.5	-4.0	-3.7	-3.7	-8.4	-6.7
13	-3.3	-3.4	-3.2	-3.1	-3.0	-2.7	-2.6	-2.4	-2.2	-2.2	-2.1	-2.0	-2.3	-2.4	-2.0	-2.9	-2.9	-3.0	-2.7	-2.6	-2.7	-2.5	-2.3	-2.1	-2.0	-3.4	-2.6
14	-2.2	-2.3	-2.3	-2.4	-2.4	-2.5	-2.7	-3.1	-3.5	-3.5	-3.6	-3.5	-3.0	-3.1	-3.2	-3.2	-3.6	-3.6	-4.4	-5.0	-4.5	-4.5	-4.3	-5.3	-2.2	-5.3	-3.4
15	-5.4	-5.7	-5.9	-5.8	-7.7	-8.6	-8.7	-9.2	-10.3	-11.3	-12.3	-12.1	-12.3	-12.9	-12.6	-12.5	-12.7	-13.0	-12.8	-13.3	-13.1	-13.4	-14.0	-13.6	-5.4	-14.0	-10.8
16	-12.9	-12.9	-12.9	-13.0	-12.9	-13.0	-13.2	-13.6	-13.7	-13.7	-13.8	-13.7	-13.5	-13.4	-13.2	-13.3	-13.4	-13.3	-13.2	-13.2	-13.5	-13.9	-14.0	-14.3	-12.9	-14.3	-13.4
17	-15.0	-15.2	-15.2	-15.3	-15.2	-15.2	-15.4	-15.7	-15.7	-15.8	-15.9	-16.1	-16.0	-15.9	-15.7	-15.5	-15.9	-16.0	-16.7	-17.1	-17.6	-17.5	-18.0	-18.3	-15.0	-18.3	-16.1
18	-18.1	-17.8	-17.9	-18.0	-17.9	-18.5	-17.8	-17.9	-17.8	-16.8	-16.6	-17.0	-17.1	-16.3	-16.3	-16.0	-15.5	-14.6	-14.4	-13.1	-12.0	-11.8	-11.7	-11.3	-11.3	-18.5	-15.9
19	-11.2	-11.7	-12.0	-11.5	-11.0	-10.9	-10.7	-9.2	-9.6	-10.3	-9.9	-8.9	-8.0	-6.6	-5.9	-5.8	-5.6	-5.0	-4.4	-4.1	-4.0	-3.7	-3.1	-2.5	-2.5	-12.0	-7.7
20	-2.1	-1.8	-1.6	-1.1	-0.8	-0.1	1.5	1.9	2.6	2.7	2.7	2.4	2.2	2.2	1.8	2.3	2.7	3.0	2.3	1.3	1.1	1.2	1.5	1.6	3.0	-2.1	1.2
21	1.6	1.6	0.8	0.6	0.8	0.3	0.9	1.2	1.3	1.6	1.8	1.4	1.4	1.4	1.5	1.8	2.0	2.1	2.0	2.0	2.0	2.0	1.5	1.8	2.1	0.3	1.5
22	1.8	1.7	1.5	1.4	0.2	-0.1	0.1	0.1	-0.2	0.6	1.0	1.1	0.7	0.9	0.7	1.1	1.3	1.3	1.9	2.0	1.8	1.5	0.9	-0.5	2.0	-0.5	0.9
23	-1.0	-1.0	-0.8	-0.9	-1.1	-1.5	-1.6	-1.7	-2.0	-2.2	-2.6	-2.7	-3.1	-3.4	-3.6	-4.0	-3.7	-3.6	-4.0	-3.2	-3.4	-4.3	-5.5	-6.4	-0.8	-6.4	-2.8
24	-6.1	-6.1	-6.2	-6.3	-6.6	-6.4	-6.5	-6.8	-6.8	-6.6	-6.8	-6.3	-5.2	-3.9	-2.7	-2.1	-1.6	-1.4	-1.2	-1.1	-0.7	-0.5	-0.4	0.2	0.2	-6.8	-4.1
25	0.0	0.1	0.0	0.3	0.8	1.3	1.7	1.8	1.6	2.0	2.9	2.9	1.6	2.4	2.8	2.9	3.2	3.4	2.9	2.6	3.0	3.0	2.9	2.9	3.4	0.0	2.0
26	2.5	2.3	2.4	1.9	2.1	2.7	2.9	2.6	2.2	1.5	1.3	0.9	0.7	0.6	0.6	0.8	0.8	0.7	0.6	0.3	0.0	0.0	0.7	1.0	2.9	0.0	1.3
27	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.3	1.2	1.4	1.4	1.7	1.7	1.6	1.6	1.7	1.7	1.7	1.6	1.5	1.2	1.0	1.0	1.0	1.7	1.0	1.3
28	0.9	0.9	0.8	0.6	0.6	0.6	0.1	0.0	0.1	-0.4	-0.3	-0.2	0.0	0.0	0.4	0.7	0.9	1.2	1.3	1.3	1.3	1.5	1.5	1.4	1.5	-0.4	0.6
29	1.4	1.5	1.6	1.6	1.6	1.4	1.4	1.5	1.7	1.8	1.8	1.7	2.0	2.1	2.2	2.2	2.2	2.1	1.9	2.0	2.0	2.1	2.2	2.2	2.2	1.4	1.8
30	2.4	2.6	2.7	2.9	2.8	3.0	3.2	3.3	3.6	3.5	3.3	3.7	4.1	4.1	4.0	4.0	4.0	4.0	4.0	3.9	3.9	4.0	3.7	3.3	4.1	2.4	3.5
Max.	**2.5**	**2.6**	**2.7**	**2.9**	**2.8**	**3.0**	**3.2**	**3.3**	**3.6**	**3.5**	**3.3**	**3.7**	**4.1**	**4.1**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**3.9**	**3.9**	**4.0**	**3.7**	**3.3**	**4.1**		
Min.	**-18.1**	**-17.8**	**-17.9**	**-18.0**	**-17.9**	**-18.5**	**-17.8**	**-17.9**	**-17.8**	**-16.8**	**-16.6**	**-17.0**	**-17.1**	**-16.3**	**-16.3**	**-16.0**	**-15.9**	**-16.0**	**-16.7**	**-17.1**	**-17.6**	**-17.5**	**-18.0**	**-18.3**		**-18.5**	
Avg.	**-3.2**	**-3.2**	**-3.3**	**-3.2**	**-3.3**	**-3.3**	**-3.3**	**-3.3**	**-3.3**	**-3.4**	**-3.4**	**-3.2**	**-3.1**	**-2.9**	**-2.8**	**-2.8**	**-2.7**	**-2.7**	**-2.8**	**-2.9**	**-2.9**	**-2.9**	**-3.0**	**-3.1**			**-3.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 2 meters (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	3.4	2.7	2.4	2.3	2.1	1.6	1.2	0.6	0.9	1.2	1.2	0.2	0.2	0.2	0.0	-0.5	-0.5	-0.8	-0.8	-1.4	-0.4	-1.6	-2.3	3.4	-2.3	0.6
2	-2.4	-3.1	-3.2	-4.1	-4.5	-4.5	-6.3	-5.8	-6.2	-4.4	-4.2	-4.6	-3.3	-2.7	-1.1	-1.2	-1.4	-4.0	-3.8	-3.9	-4.3	-4.7	-4.7	-5.1	-1.1	-6.3	-3.9
3	-5.0	-5.1	-5.0	-4.7	-5.1	-5.5	-5.8	-6.1	-5.9	-5.8	-5.8	-6.1	-6.5	-6.5	-6.3	-6.4	-7.0	-7.5	-7.9	-8.6	-8.8	-9.0	-9.8	-9.4	-4.7	-9.8	-6.7
4	-9.7	-9.2	-9.2	-8.9	-7.9	-7.9	-8.1	-7.2	-6.9	-6.7	-6.9	-7.0	-6.6	-6.4	-5.9	-5.4	-5.2	-5.2	-5.1	-5.0	-4.8	-4.6	-4.4	-4.2	-4.2	-9.7	-6.6
5	-4.1	-4.1	-4.0	-3.8	-3.7	-3.6	-3.7	-3.8	-3.7	-3.7	-3.4	-3.0	-2.2	-1.7	-1.3	-1.2	-1.0	-0.9	-0.8	-0.7	-0.5	-0.5	-0.4	-0.5	-0.4	-4.1	-2.3
6	-0.7	-0.5	-0.6	-0.6	-0.4	-0.6	-0.5	-0.3	-0.2	-0.2	-0.3	-0.4	-0.5	-0.7	-0.7	-1.0	-1.4	-1.5	-1.6	-1.9	-1.5	-1.2	-1.1	-1.2	-0.2	-1.9	-0.8
7	-1.4	-1.2	-1.1	-1.2	-1.2	-1.4	-1.7	-1.8	-2.1	-2.3	-2.4	-2.3	-1.4	-1.4	-1.3	-1.0	-0.8	-0.7	-0.6	-0.5	-0.3	0.0	0.0	-0.1	0.0	-2.4	-1.2
8	-0.2	-0.2	-0.4	-0.5	-0.8	-0.5	-0.6	-0.4	0.2	0.6	0.5	0.3	0.6	0.5	0.0	-0.4	-0.5	-0.9	-1.7	-2.1	-2.1	-2.0	-1.5	-1.6	0.6	-2.1	-0.6
9	-1.8	-1.6	-1.6	-1.5	-1.5	-1.6	-1.9	-2.2	-2.5	-2.2	-1.3	-0.4	-0.1	0.2	0.3	0.5	0.7	0.8	0.9	0.7	0.6	0.6	0.6	0.5	0.9	-2.5	-0.6
10	0.4	0.6	0.7	1.0	1.3	0.6	-0.1	-0.4	-0.5	-0.9	-0.6	-0.8	-1.4	-1.3	-1.6	-1.7	-1.8	-1.7	-1.6	-1.4	-1.3	-1.4	-1.8	-2.2	1.3	-2.2	-0.8
11	-2.6	-2.8	-3.0	-3.5	-3.5	-3.5	-4.2	-4.7	-5.2	-5.2															-2.6	-5.2	-3.8
12																											
13																			-8.8	-9.2	-10.4	-11.6	-12.6	-14.0	-8.8	-14.0	-11.1
14	-14.4	-15.8	-15.7	-15.5	-15.5	-14.9	-15.3	-16.3	-16.7																-14.4	-16.7	-15.6
15	-15.5	-15.7	-14.6	-13.4	-13.2	-13.4	-13.6	-13.7	-14.0	-13.6	-13.6	-13.8	-13.6	-13.6	-13.5	-13.8	-13.7	-13.6	-13.7	-13.6	-13.7	-13.6	-13.6	-13.6	-13.2	-15.7	-13.8
16	-13.9	-14.7	-15.2	-15.5	-15.7	-16.0	-15.9	-16.0	-16.0	-16.3	-16.7	-16.9	-16.9	-17.1	-17.3	-17.6	-18.0	-18.2	-18.3	-18.1	-17.8	-17.9	-18.2	-18.4	-13.9	-18.4	-16.8
17	-18.8	-18.9	-18.8	-18.9	-18.8	-18.9	-18.9	-18.8	-18.8	-18.8	-18.8	-19.0	-18.9	-18.8	-18.9	-19.2	-19.7	-20.1	-20.6	-21.0	-21.1	-21.4	-21.9	-22.0	-18.8	-22.0	-19.6
18	-22.2	-22.5	-22.4	-22.8	-22.7	-22.7	-23.0	-23.4	-23.4	-23.5	-23.7	-23.9	-24.0	-24.2	-24.0	-24.0	-24.2	-24.8	-25.1	-25.4	-25.1	-25.6	-26.4	-26.7	-22.2	-26.7	-24.0
19	-27.0	-27.0	-26.8	-26.8	-26.3	-25.6	-25.6	-26.9	-26.5	-26.0	-26.3	-26.1	-26.1	-26.0	-25.7	-26.1	-26.3	-26.6	-26.4	-26.8	-27.4	-26.9	-26.6	-25.8	-25.6	-27.4	-26.4
20	-26.3	-23.7	-22.5	-22.1	-21.8	-20.2	-18.1	-17.2	-16.1	-14.7	-13.9	-13.3	-11.8	-10.6	-9.6	-8.6	-8.0	-7.5	-7.3	-6.6	-6.3	-6.2	-5.8	-5.7	-5.7	-26.3	-13.5
21	-5.2	-3.9	-3.4	-3.1	-2.9	-3.0	-3.2	-3.7	-4.3	-4.8	-5.1	-4.8	-4.9	-5.1	-4.9	-5.6	-5.9	-5.5	-5.7	-5.4	-5.3	-5.2	-5.2	-4.5	-2.9	-5.9	-4.6
22	-3.9	-3.7	-3.5	-3.4	-3.2	-3.0	-2.9	-3.2	-3.3	-3.0	-2.6	-2.6	-2.4	-2.2	-2.1	-2.2	-2.0	-2.4	-2.3	-2.1	-1.9	-3.2	-5.1	-5.5	-1.9	-5.5	-3.0
23	-6.5	-8.5	-9.6	-10.0	-10.3	-10.5	-11.3	-12.0	-12.8	-12.9	-12.3	-12.4	-12.5	-12.4	-13.8	-14.2	-14.2	-13.6	-12.5	-12.2	-12.4	-12.6	-12.3	-12.9	-6.5	-14.2	-11.9
24	-13.0	-13.5	-13.6	-14.2	-14.7	-15.3	-15.0	-15.7	-15.5	-15.5	-15.4	-15.2	-15.0	-14.9	-15.0	-15.2	-15.1	-15.1	-15.6	-15.9	-15.8	-15.3	-15.3	-15.5	-13.0	-15.9	-15.0
25	-16.3	-17.1	-17.4	-17.7	-17.6	-18.0	-18.1	-18.5	-19.0	-19.7	-20.6	-20.7	-21.0	-21.0	-20.9	-20.8	-21.0	-21.2	-20.6	-20.6	-20.2	-20.2	-21.4	-21.9	-16.3	-21.9	-19.6
26	-21.6	-21.5	-21.7	-20.5	-19.0	-17.8	-16.7	-17.6	-15.8	-13.3	-12.1	-12.6	-12.7	-11.6	-9.9	-8.4	-6.7	-4.9	-4.7	-5.5	-5.5	-4.9	-4.5	-4.0	-4.0	-21.7	-12.2
27	-3.6	-3.3	-2.9	-2.5	-2.4	-2.0	-1.6	-1.1	-0.8	-0.9	-0.9	-0.7	-0.5	-0.6	-0.6	-0.7	-0.8	-0.8	-0.9	-1.8	-2.2	-1.7	-1.8	-2.1	-0.5	-3.6	-1.6
28	-2.1	-3.7	-5.9	-6.8	-6.8	-7.4	-7.2	-7.7	-6.9	-7.5	-9.1	-8.8	-9.0	-9.3	-9.1	-10.1	-10.8	-11.1	-11.3	-11.3	-11.0	-10.8	-10.3	-10.4	-2.1	-11.3	-8.5
29	-10.6	-10.9	-10.9	-10.9	-11.2	-11.4	-11.6	-11.6	-11.3	-12.1	-11.7	-11.1	-11.8	-11.9	-12.3	-13.1	-13.1	-12.4	-12.1	-11.4	-11.0	-10.9	-10.8	-10.8	-10.6	-13.1	-11.5
30	-10.9	-11.0	-11.1	-11.1	-11.3	-11.8	-12.5	-12.3	-12.9	-14.3	-14.6	-14.6	-13.6	-13.5	-13.3	-12.9	-12.3	-12.7	-12.8	-13.1	-13.0	-12.6	-12.3	-12.0	-10.9	-14.6	-12.6
31	-11.8	-11.9	-11.5	-11.2	-11.3	-11.5	-11.8	-12.0	-12.4	-12.7	-12.8	-12.6	-12.6	-12.2	-12.2	-12.2	-11.9	-12.1	-12.1	-11.7	-11.9	-12.5	-13.1	-12.2	-11.2	-13.1	-12.1
Max.	**3.0**	**3.4**	**2.7**	**2.4**	**2.3**	**2.1**	**1.6**	**1.2**	**0.6**	**0.9**	**1.2**	**1.2**	**0.6**	**0.5**	**0.3**	**0.5**	**0.7**	**0.8**	**0.9**	**0.7**	**0.6**	**0.6**	**0.6**	**0.5**	**3.4**		
Min.	**-27.0**	**-27.0**	**-26.8**	**-26.8**	**-26.3**	**-25.6**	**-25.6**	**-26.9**	**-26.5**	**-26.0**	**-26.3**	**-26.1**	**-26.1**	**-26.0**	**-25.7**	**-26.1**	**-26.3**	**-26.6**	**-26.4**	**-26.8**	**-27.4**	**-26.9**	**-26.6**	**-26.7**		**-27.4**	
Avg.	**-9.2**	**-9.3**	**-9.4**	**-9.4**	**-9.3**	**-9.3**	**-9.4**	**-9.6**	**-9.6**	**-9.3**	**-9.4**	**-9.3**	**-9.2**	**-9.1**	**-8.9**	**-9.0**	**-9.0**	**-9.1**	**-9.1**	**-9.1**	**-9.2**	**-9.2**	**-9.4**	**-9.4**			**-9.3**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-16.6	-16.9	-16.9	-17.5	-17.8	-18.9	-18.7	-19.6	-20.6	-22.3	-22.8	-23.1	-23.3	-23.6	-23.4	-24.0	-24.6	-25.0	-25.4	-24.9	-26.1	-26.0	-25.9	-26.2	-16.6	-26.2	-22.1
2	-26.8	-27.1	-27.5	-27.1	-27.1	-27.2	-27.5	-27.4	-27.3	-27.3	-26.5	-26.8	-26.8	-27.1	-27.3	-26.4	-25.7	-26.3	-26.8	-26.9	-27.6	-27.3	-27.0	-27.8	-25.7	-27.8	-27.0
3	-27.7	-28.0	-28.0	-28.2	-28.9	-29.1	-28.6	-29.4	-30.1	-30.6	-30.3	-30.9	-31.0	-30.9	-30.4	-30.4	-29.8	-29.3	-29.4	-29.3	-29.0	-29.9	-29.8	-29.5	-27.7	-31.0	-29.5
4	-29.8	-29.8	-29.7	-29.3	-29.3	-29.1	-28.9	-28.5	-28.3	-27.7	-27.7	-26.9	-25.9	-24.3	-23.3	-22.6	-22.2	-20.2	-18.3	-18.1	-17.7	-17.5	-17.3	-17.6	-17.3	-29.8	-24.6
5	-18.0	-19.8	-22.0	-23.7	-23.6	-23.7	-23.3	-24.4	-25.6	-25.7	-26.6	-27.1	-27.3	-26.9	-26.0	-26.4	-26.4	-25.7	-25.5	-25.2	-25.2	-26.0	-26.3	-25.8	-18.0	-27.3	-24.8
6	-25.7	-25.2	-25.2	-25.1	-24.9	-24.3	-24.2	-24.5	-24.9	-25.4	-25.6	-25.7	-26.2	-26.6	-26.5	-26.8	-27.5	-28.4	-28.7	-28.8	-29.5	-30.3	-30.9	-31.5	-24.2	-31.5	-26.8
7	-31.4	-31.7	-31.0	-31.2	-31.3	-31.5	-32.1	-32.8	-32.8	-33.0	-32.6	-32.7	-33.3	-32.1	-31.1	-31.3	-31.5	-31.8	-31.6	-31.5	-31.9	-31.8	-31.7	-31.2	-31.0	-33.3	-31.9
8	-31.5	-31.0	-31.1	-31.4	-31.0	-30.5	-30.0	-30.1	-30.0	-29.7	-29.3	-29.1	-29.1	-28.2	-28.1	-27.8	-27.1	-26.6	-26.6	-26.5	-25.5	-25.2	-24.8	-24.5	-24.5	-31.5	-28.5
9	-24.1	-24.8	-24.0	-23.0	-23.1	-24.3	-22.6	-21.7	-19.3	-18.9	-17.5	-17.6	-17.2	-16.1	-16.0	-16.6	-15.4	-14.8	-14.3	-13.9	-13.4	-13.5	-13.1	-13.6	-13.1	-24.8	-18.3
10	-12.6	-12.3	-13.1	-12.2	-11.9	-12.1	-11.9	-11.0	-10.4	-9.6	-8.9	-8.2	-7.3	-6.4	-5.7	-5.4	-5.1	-4.8	-4.2	-3.9	-3.8	-3.6	-3.4	-3.4	-3.4	-13.1	-8.0
11	-3.2	-2.9	-2.6	-2.4	-2.3	-2.3	-2.2	-2.1	-2.2	-2.0	-2.1	-2.1	-1.9	-1.7	-1.8	-1.9	-1.9	-1.8	-1.9	-1.7	-1.7	-1.7	-1.7	-1.8	-1.7	-3.2	-2.1
12	-2.0	-2.0	-2.0	-2.1	-2.1	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-1.9	-1.7	-1.6	-1.7	-1.7	-1.7	-1.8	-1.6	-1.6	-1.8	-1.6	-2.1	-1.9
13	-2.6	-3.4	-3.8	-3.9	-3.7	-3.5	-3.6	-3.8	-4.0	-4.0	-4.3	-4.5	-4.3	-4.5	-4.8	-4.6	-4.6	-4.9	-5.5	-6.5	-6.7	-6.6	-6.9	-7.0	-2.6	-7.0	-4.7
14	-7.7	-8.2	-8.9	-9.7	-9.6	-10.0	-9.8	-9.5	-9.5	-9.1	-8.8	-8.7	-8.4	-8.5	-8.6	-8.7	-8.8	-8.4	-8.6	-8.8	-9.0	-9.2	-9.6	-9.4	-7.7	-10.0	-9.0
15	-9.3	-9.6	-10.1	-10.0	-10.3	-10.3	-9.9	-9.7	-10.0	-10.3	-10.6	-10.6	-10.8	-11.5	-11.4	-11.2	-11.3	-11.6	-11.9	-12.1	-12.8	-14.0	-13.9	-14.4	-9.3	-14.4	-11.1
16	-13.7	-13.3	-12.8	-12.7	-13.7	-12.9	-11.3	-10.5	-8.5	-8.7	-7.8	-6.9	-7.0	-7.0	-6.2	-5.5	-5.0	-4.6	-4.2	-4.0	-4.0	-4.2	-4.4	-4.3	-4.0	-13.7	-8.0
17	-4.0																								-4.0	-4.0	-4.0
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Max.	-2.0	-2.0	-2.0	-2.1	-2.1	-2.1	-2.1	-2.1	-2.0	-2.0	-2.0	-2.0	-1.9	-1.7	-1.8	-1.7	-1.6	-1.7	-1.7	-1.7	-1.7	-1.6	-1.6	-1.8	-1.6		
Min.	-31.5	-31.7	-31.1	-31.4	-31.3	-31.5	-32.1	-32.8	-32.8	-33.0	-32.6	-32.7	-33.3	-32.1	-31.1	-31.3	-31.5	-31.8	-31.6	-31.5	-31.9	-31.8	-31.7	-31.5		-33.3	
Avg.	-16.9	-17.9	-18.0	-18.1	-18.1	-18.2	-17.9	-17.9	-17.8	-17.9	-17.7	-17.7	-17.6	-17.3	-17.0	-17.0	-16.8	-16.6	-16.5	-16.5	-16.6	-16.8	-16.8	-16.9			-16.6

Total Hours in Month 744 Hours Data Available 385 Data Recovery 51.7%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

February *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 672 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

March *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Max.																											
Min.																											
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Total Hours in Month	744	Hours Data Available	0	Data Recovery	0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month	720	Hours Data Available	0	Data Recovery	0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month	744	**Hours Data Available**	0	**Data Recovery**	0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

August *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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30								7.6	8.0	8.7	9.3	10.4	11.2	11.7	12.2	12.9	13.4	13.9	14.3	14.2	12.8	11.7	11.2	10.3	14.3	7.6	11.4
31	10.0	9.6	9.5	9.1	8.4	8.5	8.2	7.7	7.8	8.6	8.7	8.9	10.9	12.5	13.5	14.1	13.4	12.8	12.5	13.1	12.2	11.9	10.8	11.1	14.1	7.7	10.6
Max.	**10.0**	**9.6**	**9.5**	**9.1**	**8.4**	**8.5**	**8.2**	**7.7**	**8.0**	**8.7**	**9.3**	**10.4**	**11.2**	**12.5**	**13.5**	**14.1**	**13.4**	**13.9**	**14.3**	**14.2**	**12.8**	**11.9**	**11.2**	**11.1**	**14.3**		
Min.	**10.0**	**9.6**	**9.5**	**9.1**	**8.4**	**8.5**	**8.2**	**7.6**	**7.8**	**8.6**	**8.7**	**8.9**	**10.9**	**11.7**	**12.2**	**12.9**	**13.4**	**12.8**	**12.5**	**13.1**	**12.2**	**11.7**	**10.8**	**10.3**		**7.6**	
Avg.	**10.0**	**9.6**	**9.5**	**9.1**	**8.4**	**8.5**	**8.2**	**7.6**	**7.9**	**8.7**	**9.0**	**9.7**	**11.0**	**12.1**	**12.9**	**13.5**	**13.4**	**13.4**	**13.4**	**13.7**	**12.5**	**11.8**	**11.0**	**10.7**			**11.0**

Total Hours in Month 744 **Hours Data Available** 41 **Data Recovery** 5.5%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.8	11.7	11.2	10.8	10.0	9.7	9.1	8.2	8.1	8.1	8.2	8.5	8.7	8.9	9.2	10.1	10.7	11.2	11.1	10.6	9.4	8.4	7.9	7.7	11.8	7.7	9.5
2	7.7	7.7	7.6	7.5	7.4	7.4	7.5	7.9	8.1	8.3	8.6	8.9	9.5	10.6	14.5	17.3	10.5	8.1	10.2	9.8	9.1	8.7	8.5	8.2	17.3	7.4	9.1
3	8.0	7.9	7.7	7.8	7.8	7.8	7.8	7.8								7.5	7.2	6.9	6.7	6.7	6.7	6.7	6.8	7.2	8.0	6.7	7.3
4	7.2	7.6	7.9	7.8	7.2	7.4	7.4	8.2	8.3	8.9	9.6	9.9	10.6	11.4	11.7	12.3	12.6	10.7	11.8	11.0	9.6	9.1	8.6	8.8	12.6	7.2	9.4
5	9.1	8.5	8.9	9.3	9.0	8.9	8.8	8.8	8.9	9.1		11.0	11.5	11.6	12.1	12.6	9.6	9.1	9.0	9.2	9.2	9.1	8.7	9.0	12.6	8.5	9.6
6	8.8	8.4	7.8	7.9	7.9	7.8	7.4	6.6	6.8	7.1	7.6	7.8	7.9	8.2	8.7	8.7	9.1	9.2	8.9	8.5	8.3	7.4	6.5	6.2	9.2	6.2	7.9
7	6.1	6.7	6.8	6.8	7.0	7.2	7.3	7.4	7.4	7.7	7.8	7.9	8.1	8.2	8.4	8.7	8.7	8.4	8.5	7.6	7.5	7.7	7.9	8.1	8.7	6.1	7.7
8	8.3	8.4	8.5	8.7	8.9	9.1	9.3	9.6	9.8	9.7	9.7	9.5	9.6	9.7	9.7	10.1	10.2	10.5	10.7	10.6	10.5	10.1	9.5	9.3	10.7	8.3	9.6
9	9.0	8.7	8.5	8.6	8.6	8.8	8.8	8.4	8.2	8.4	8.6	9.0	8.8	9.1	9.5	9.8	10.3	10.6	10.6	9.5	9.4	9.1	8.7	8.2	10.6	8.2	9.1
10	8.7	8.5	8.5	8.4	7.8	8.2	8.0	8.0	8.3	8.6	8.7	9.2	9.9	10.1	10.0	9.9	9.7	10.2	9.8	9.1	8.5	8.2	8.0	8.0	10.2	7.8	8.8
11	7.9	8.0	8.1	8.0	7.9	7.7	7.8	7.7	7.7	8.0	8.4	8.0	8.0	7.5	6.9	6.9	6.9	7.0	6.6	6.5	6.6	6.8	7.2	7.3	8.4	6.5	7.5
12	7.4	7.5	7.5	7.5	7.4	7.4	7.5	7.1	7.1	7.2	7.2	7.8	9.0	9.8	10.0	10.3	10.0	8.4	7.7	7.2	6.9	7.0	7.0	6.9	10.3	6.9	7.9
13	6.7	6.3	6.2	6.1	6.1	6.3	6.2	6.3	6.3	6.3	6.3	6.2	6.4	7.5	7.3	7.0	7.0	6.6	5.9	6.1	5.8	5.7	5.6	5.1	7.5	5.1	6.3
14	4.9	4.8	4.8	4.8	4.7	4.7	4.6	4.6	4.8	5.3	6.1	6.5	6.9	7.5	8.0	8.7	8.6	8.4	8.1	6.9	6.6	5.5	4.7	3.9	8.7	3.9	6.0
15	4.4	3.9	4.0	3.7	3.0	2.9	2.8	2.3	2.1	2.4	4.0	5.5	6.4	6.9	7.1	7.1	7.8	8.5	8.8	7.8	6.7	6.0	6.3	6.1	8.8	2.1	5.3
16	5.8	5.5	5.3	5.5	4.8	4.8	5.1	5.3	4.7	4.1	5.1	6.6	7.4	7.8	8.4	8.5	9.2	9.3	9.1	8.7	6.8	6.5	6.2	5.6	9.3	4.1	6.5
17	5.5	5.6	5.4	4.8	5.0	4.8	4.7	4.6	4.7	5.0	5.1	5.2	5.4	6.2	6.9	7.4	7.5	7.8	7.8	7.5	6.5	6.0	6.2	6.2	7.8	4.6	5.9
18	6.7	6.6	6.4	6.3	6.5	6.5	6.7	7.4	7.7	7.6	8.1	8.3	8.8	8.7	8.7	8.5	8.6	8.6	8.4	8.3	8.0	7.9	7.9	8.3	8.8	6.3	7.7
19	8.8	8.6	8.6	8.4	7.9	7.6	7.5	7.4	7.4	7.3	7.5	7.6	7.5	7.6		7.9	7.2	6.6	6.4	6.2	6.1	6.2	6.0	6.0	8.8	6.0	7.3
20	5.9	5.7	5.7	5.6	5.7	5.8	5.8	5.7	5.6	5.6	5.4	5.7	6.0	6.3	6.9	7.5	7.9	8.1	7.6	6.5	6.4	6.3	5.9	6.0	8.1	5.4	6.2
21	5.7	5.4	5.3	5.3	5.5	5.3	5.4	5.4	5.4	5.5	6.2	6.9	7.3	7.8	8.4	8.3	8.5	9.3	8.6	8.3	7.0	6.1	6.2	5.9	9.3	5.3	6.6
22	5.5	5.5	5.5	4.7	5.4	5.1	4.6	4.5	5.1	5.2	4.8	5.3	5.9	6.9	7.9	7.9	7.9	7.6	6.5	5.2	4.7	4.5	4.6	4.4	7.9	4.4	5.6
23	4.4	4.4	4.4	4.6	4.9	5.2	5.2	5.0	5.1	5.0	5.3	6.0	6.3	6.5	6.6	6.3	5.9	5.6	5.6	5.6	5.4	5.3	5.3	5.5	6.6	4.4	5.4
24	5.5	5.1	5.0	5.3	5.2	4.6	4.4	4.5	4.5	4.6	5.3	5.5	6.1	6.4	5.9	5.9	5.2	5.9	4.5	4.3	3.5	3.5	3.6	3.2	6.4	3.2	4.9
25	3.2	3.5	3.1	2.9	3.4	3.9	4.2	4.3	4.3	4.1	4.9	5.1	5.2	5.6	5.6	5.7	5.1	4.8	4.7	4.3	4.4	4.5	4.2	3.9	5.7	2.9	4.4
26	3.6	3.5	3.2	3.0	2.7	2.7	2.7	2.5	2.4	2.8	4.0	4.9	4.9	4.8	4.8	5.3	5.3	5.9	5.9	5.3	5.1	5.1	5.0	5.0	5.9	2.4	4.2
27	4.4	4.0	4.1	3.5	3.8	4.2	3.8	3.3	3.4	2.5	2.4	2.8	3.6	3.8	4.6	4.6	4.4	4.6	4.8	4.9	5.0	4.8	4.4	3.9	5.0	2.4	4.0
28	3.8	3.6	2.9	2.4	2.1	2.3	2.4	2.6	2.7	2.8	3.1	3.3	3.4	3.5	3.7	3.9	4.2	4.5	4.4	4.1	4.0	4.3	4.6	4.1	4.6	2.1	3.5
29	3.5	3.3	3.4	3.7	3.6	3.2	3.3	3.4	3.7	3.8	4.1	5.0	5.5	5.9	5.6	5.4	5.2	4.8	4.8	4.8	4.4	4.6	4.4	4.3	5.9	3.2	4.3
30	4.0	3.3	2.0	1.8	2.1	2.3	2.4	2.5	2.3	2.5	2.6	3.7	3.9	4.0	3.7	4.0	4.0	4.2	3.8	3.1	2.9	3.0	3.3	3.2	4.2	1.8	3.1
Max.	**11.8**	**11.7**	**11.2**	**10.8**	**10.0**	**9.7**	**9.3**	**9.6**	**9.8**	**9.7**	**9.7**	**11.0**	**11.5**	**11.6**	**14.5**	**17.3**	**12.6**	**11.2**	**11.8**	**11.0**	**10.5**	**10.1**	**9.5**	**9.3**	**17.3**		
Min.	**3.2**	**3.3**	**2.0**	**1.8**	**2.1**	**2.3**	**2.4**	**2.3**	**2.1**	**2.4**	**2.4**	**2.8**	**3.4**	**3.5**	**3.7**	**3.9**	**4.0**	**4.2**	**3.8**	**3.1**	**2.9**	**3.0**	**3.3**	**3.2**		**1.8**	
Avg.	**6.4**	**6.3**	**6.1**	**6.1**	**6.0**	**6.0**	**5.9**	**5.9**	**5.9**	**6.0**	**6.2**	**6.8**	**7.2**	**7.5**	**7.9**	**8.1**	**7.8**	**7.7**	**7.6**	**7.1**	**6.7**	**6.5**	**6.3**	**6.2**			**6.7**

Total Hours in Month 720 **Hours Data Available** 711 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.0	2.8	2.6	2.7	2.8	2.8	2.7	2.4	2.5	2.6	2.9	3.5	4.0	4.4	4.8	5.2	4.9	3.6	3.5	3.1	3.0	3.1	2.7	5.2	2.4	3.3
2	2.3	2.0	1.5	1.3	1.3	1.2	1.2	1.2	1.1	1.0	1.1	1.2	1.8	2.4	2.8	3.0	3.3	3.6	3.4	2.1	1.6	1.0	0.8	0.3	3.6	0.3	1.8
3	0.1	0.4	0.3	0.4	0.3	0.0	0.0	0.0	0.1	0.3	0.4	1.4	2.3	2.7	2.6	2.9	2.9	3.4	3.0	2.4	2.0	2.0	1.9	1.8	3.4	0.0	1.4
4	1.6	1.7	1.6	1.1	0.2	-0.1	0.0	1.0	1.7	1.1	0.8	1.0	1.2	1.4	1.6	1.6	1.7	1.3	0.7	0.3	0.4	0.3	0.9	1.2	1.7	-0.1	1.0
5	0.9	0.7	0.3	0.5	0.6	0.6	0.5	0.3	0.1	0.3	0.7	1.0	0.7	1.2	1.6	1.9	2.0	1.6	1.2	0.9	0.1	-0.4	-0.6	-0.9	2.0	-0.9	0.7
6	-1.4	-2.2	-2.4	-2.5	-2.5	-2.4	-2.5	-3.0	-3.5	-3.8	-3.7	-3.2	-2.6	-2.3	-2.1	-2.0	-1.8	-1.8	-2.2	-2.6	-3.2	-3.2	-4.2	-4.7	-1.4	-4.7	-2.7
7	-5.2	-5.7	-6.2	-6.8	-6.7	-6.8	-6.4	-6.3	-6.4	-6.5	-6.1	-5.5	-4.8	-4.4	-4.4	-4.1	-3.9	-3.9	-4.2	-5.0	-5.7	-6.3	-6.8	-7.2	-3.9	-7.2	-5.6
8	-7.3	-6.8	-6.9	-7.2	-7.7	-7.8	-8.2	-8.5	-8.8	-9.0	-8.8	-8.0	-6.7	-5.7	-5.1	-4.4	-4.1	-4.3	-4.9	-5.2	-5.2	-4.8	-5.3	-6.4	-4.1	-9.0	-6.6
9	-6.2	-6.1	-5.2	-5.8	-5.2	-5.4	-5.1	-4.4	-5.4	-5.7	-4.5	-2.7	-2.4	-2.0	-1.4	-0.7	-0.4	-0.5	-0.5	-1.0	-1.6	-1.6	-1.1	-0.8	-0.4	-6.2	-3.1
10	-1.2	-1.5	-1.9	-2.0	-2.1	-1.8	-2.0	-2.3	-3.2	-3.2	-2.5	-1.8	-1.4	-0.9	-0.4	-0.3	-0.4	-0.8	-1.1	-2.4	-2.6	-3.1	-3.3	-3.4	-0.3	-3.4	-1.9
11	-3.7	-3.8	-4.2	-4.6	-4.7	-4.2	-4.3	-4.5	-3.9	-3.7	-3.6	-3.0	-2.4	-1.3	-0.5	0.2	0.2	0.2	0.2	0.0	0.5	0.6	0.8	0.8	0.8	-4.7	-2.0
12	0.9	1.2	1.2	1.0	1.3	1.4	0.9	0.3	1.2	1.0	1.4	1.7	1.5	1.9	2.3	2.6	2.9	3.3	3.3	2.8	1.5	0.3	-0.2	-0.7	3.3	-0.7	1.5
13	-1.2	-1.4	-1.6	-2.0	-2.5	-3.1	-4.1	-4.3	-4.6	-5.2	-5.4	-5.6	-5.0	-4.4	-3.8	-3.1	-3.0	-3.2	-3.9	-4.7	-4.7	-4.6	-4.5	-4.5	-1.2	-5.6	-3.8
14	-4.9	-5.4	-5.5	-5.5	-5.5	-5.7	-6.0	-6.4	-7.0	-7.8	-7.7	-6.2	-5.7	-5.0	-4.6	-4.8	-4.5	-4.5	-4.6	-4.3	-4.2	-4.8	-5.8	-6.1	-4.2	-7.8	-5.5
15	-6.1	-6.1	-6.1	-6.2	-6.2	-5.9	-5.3	-4.5	-4.3	-4.4	-3.8	-2.6	-3.4	-2.6	-1.7	-0.3	0.1	0.1	0.0	-0.5	-1.2	-1.2	-1.4	-1.5	0.1	-6.2	-3.1
16	-1.7	-2.4	-2.7	-2.8	-3.2	-4.6	-5.5	-6.6	-7.0	-7.5	-7.8	-7.1	-6.6	-6.4	-5.8	-5.3	-5.1	-5.3	-5.8	-5.9	-6.0	-6.4	-6.5	-6.6	-1.7	-7.8	-5.4
17	-6.6	-6.7	-6.7	-6.8	-6.9	-6.9	-6.9	-7.0	-6.9	-6.9	-6.8	-6.8	-6.6	-6.3	-5.8	-5.4	-5.1	-5.1	-5.0	-5.0	-5.1	-5.2	-5.4	-5.6	-5.0	-7.0	-6.1
18	-5.5	-5.5	-5.6	-5.7	-5.7	-5.8	-5.9	-6.1	-6.0	-6.1	-6.1	-5.8	-5.7	-5.5	-5.3	-5.4	-5.4	-5.5	-5.7	-5.8	-5.7	-5.7	-5.9	-6.1	-5.3	-6.1	-5.7
19	-6.4	-6.4	-6.5	-6.6	-7.3	-7.2	-6.6	-6.2	-5.9	-5.7	-5.3	-4.7	-4.2	-3.7	-3.3	-2.8	-2.7	-2.9	-3.0	-3.7	-3.5	-3.3	-3.1	-3.4	-2.7	-7.3	-4.8
20	-3.4	-3.8	-3.5	-3.3	-3.5	-3.5	-4.1	-3.9	-3.5	-3.7	-4.1	-3.6	-3.4	-2.7	-2.3	-1.6	-1.4	-1.2	-1.0	-0.8	-0.3	0.3	0.2	0.0	0.3	-4.1	-2.4
21	0.1	0.7	0.9	0.9	0.7	1.0	1.9	1.0	0.9	0.9	0.8	1.1	1.2	1.6	1.4	1.5	1.6	1.8	1.3	0.7	0.4	0.1	-0.3	-1.2	1.9	-1.2	0.9
22	-2.1	-2.9	-3.9	-5.4	-5.0	-5.9	-7.1	-7.0	-7.0	-5.6	-7.3	-7.7	-5.1	-4.4	-3.8	-3.2	-2.6	-2.8	-4.0	-5.1	-4.9	-4.5	-4.5	-4.9	-2.1	-7.7	-4.9
23	-5.4	-5.6	-5.6	-5.7	-5.7	-5.8	-5.5	-5.5	-5.6	-5.9	-5.4	-5.4	-5.3	-5.1	-4.7	-4.4	-4.2	-4.3	-4.9	-5.7	-6.1	-6.0	-4.9	-4.5	-4.2	-6.1	-5.3
24	-4.3	-4.0	-5.1	-5.9	-6.2	-5.9	-5.6	-5.3	-5.1	-5.0	-4.2	-3.0	-2.4	-1.0	-0.3	-0.3	-0.5	-0.7	-0.6	-0.8	-0.8	-0.7	-0.4	-0.2	-0.2	-6.2	-2.8
25	-0.4	-0.6	0.3	1.0	1.5	1.5	0.7	1.1	1.3	1.2	1.3	1.3	1.7	1.5	1.4	1.2	0.8	0.6	0.8	0.9	0.4	0.4	0.4	0.7	1.7	-0.6	0.9
26	0.8	1.0	1.1	1.0	1.0	0.9	0.4	0.2	0.9	1.1	1.4	1.2	1.4	1.7	2.0	2.1	2.1	2.2	2.2	2.0	1.8	1.7	1.7	1.6	2.2	0.2	1.4
27	1.2	1.4	1.3	0.9	1.0	1.1	1.1	1.3	0.1	1.0	1.2	1.6	1.7	2.2	2.2	1.3	0.9	1.5	1.6	1.8	1.7	1.9	2.2	2.3	2.3	0.1	1.4
28	1.7	1.4	1.3	1.4	1.5	1.3	1.3	0.9	0.1	0.2	0.2	0.3	0.5	0.6	0.8	0.8	0.7	0.8	0.5	0.3	0.0	-0.1	0.0	0.5	1.7	-0.1	0.7
29	0.6	0.6	0.7	0.7	0.7	0.7	0.8	1.1	1.4	1.9	2.3	2.6	2.6	2.9	2.4	2.5	2.8	2.6	2.4	2.1	2.2	1.0	0.6	0.7	2.9	0.6	1.6
30	0.9	1.2	1.1	0.6	0.8	0.9	0.4	0.3	0.2	-0.1	-0.3	-0.3	-0.2	0.1	0.0	-0.3	-0.5	-0.8	-0.9	-1.0	-1.1	-0.8	-0.8	-0.9	1.2	-1.1	-0.1
31	-1.2	-1.3	-1.5	-1.3	-1.6	-1.7	-1.8	-1.4	-1.0	-1.0	-1.3	-1.2	-0.9	-0.7	-0.5	-0.5	-0.4	-0.7	-1.5	-1.8	-1.7	-1.4	-1.6	-1.0	-0.4	-1.8	-1.2
Max.	**3.2**	**3.0**	**2.8**	**2.6**	**2.7**	**2.8**	**2.8**	**2.7**	**2.4**	**2.5**	**2.6**	**2.9**	**3.5**	**4.0**	**4.4**	**4.8**	**5.2**	**4.9**	**3.6**	**3.5**	**3.1**	**3.0**	**3.1**	**2.7**	**5.2**		
Min.	**-7.3**	**-6.8**	**-6.9**	**-7.2**	**-7.7**	**-7.8**	**-8.2**	**-8.5**	**-8.8**	**-9.0**	**-8.8**	**-8.0**	**-6.7**	**-6.4**	**-5.8**	**-5.4**	**-5.4**	**-5.5**	**-5.8**	**-5.9**	**-6.1**	**-6.4**	**-6.8**	**-7.2**		**-9.0**	
Avg.	**-1.9**	**-2.0**	**-2.1**	**-2.3**	**-2.4**	**-2.5**	**-2.6**	**-2.6**	**-2.7**	**-2.7**	**-2.6**	**-2.2**	**-1.8**	**-1.3**	**-1.0**	**-0.7**	**-0.6**	**-0.7**	**-1.0**	**-1.3**	**-1.5**	**-1.7**	**-1.7**	**-1.9**			**-1.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-1.0	-0.2	-0.4	-0.4	0.2	0.4	0.6	0.3	0.1	-0.4	-0.6	-0.5	-0.3	-0.3	0.3	0.2	0.0	-1.1	-1.9	-2.5	-2.8	-3.1	-3.3	-3.5	0.6	-3.5	-0.8
2	-3.7	-3.8	-3.9	-4.4	-4.1	-4.2	-4.2	-4.8	-5.1	-4.8	-4.6	-4.5	-4.7	-4.8	-5.3	-5.6	-5.1	-4.9	-5.2	-5.5	-5.3	-5.3	-5.2	-5.2	-3.7	-5.6	-4.8
3	-5.1	-5.0	-5.1	-5.3	-5.1	-5.0	-5.1	-5.2	-5.2	-5.3	-5.3	-5.0	-4.7	-4.5	-4.4	-4.0	-4.0	-4.2	-4.4	-4.7	-4.2	-3.9	-3.4	-2.8	-2.8	-5.3	-4.6
4	-2.7	-2.5	-1.9	-1.5	-1.2	-0.9	-0.8	-0.7	-0.6	-0.4	-0.2	-0.2	-0.2	0.2	0.1	-0.1	-0.1	0.2	0.3	0.2	0.3	0.4	0.3	-0.1	0.4	-2.7	-0.5
5	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5	-0.7	-0.8	-0.9	-0.9	-0.8	-0.7	-0.7	-0.6	-0.4	-0.3	-0.3	-0.5	-0.3	-0.3	-0.3	-0.4	-0.1	-0.3	-0.1	-0.9	-0.5
6	-0.2	0.1	0.1	0.1	0.3	0.3	0.5	0.9	0.8	0.9	1.1	1.1	1.3	1.7	2.0	2.1	2.2	1.9	1.5	1.2	0.8	0.2	-0.3	-0.7	2.2	-0.7	0.8
7	-0.6	-0.3	-0.5	-0.4	-0.2	-0.1	-0.1	-0.1	0.3	0.4	0.5	0.8	1.1	1.0	0.5	0.4	0.6	0.4	-0.4	-0.8	-0.9	-1.0	-1.0	-1.1	1.1	-1.1	-0.1
8	-1.0	-1.4	-1.9	-2.0	-2.1	-1.9	-1.0	0.2	0.4	-0.1	0.1	0.7	0.6	0.7	1.4	1.4	1.8	2.1	1.6	1.5	1.1	0.2	-0.1	-0.1	2.1	-2.1	0.1
9	-0.1	-0.7	-0.7	-0.6	-0.6	-0.6	-0.8	-1.1	-1.1	-1.2	-1.1	-0.8	-0.6	-0.2	-0.1	-0.1	-0.2	-0.4	-1.3	-1.2	-1.0	-1.5	-1.2	-1.6	-0.1	-1.6	-0.8
10	-1.4	-1.6	-1.9	-2.3	-2.5	-2.4	-2.9	-3.3	-3.0	-3.0	-3.8	-3.9	-3.6	-3.2	-3.3	-3.5	-3.2	-3.4	-3.4	-4.0	-4.4	-4.1	-4.9	-5.1	-1.4	-5.1	-3.3
11	-5.1	-5.3	-5.1	-5.0	-5.5	-6.2	-6.2	-6.5	-7.0	-7.5	-7.5	-7.3	-7.2	-7.4	-7.2	-7.3	-7.4	-7.6	-7.7	-8.0	-8.4	-8.7	-7.8	-7.3	-5.0	-8.7	-6.9
12	-7.4	-7.2	-6.9	-6.2	-5.9	-5.6	-7.1	-8.1	-8.1	-7.6	-7.5	-6.7	-7.2	-7.4	-7.0	-6.6	-6.3	-6.0	-6.0	-5.7	-5.0	-4.5	-4.1	-3.8	-3.8	-8.1	-6.4
13	-3.4	-3.4	-3.2	-3.1	-3.0	-2.7	-2.6	-2.5	-2.3	-2.3	-2.0	-1.5	-2.4	-2.5	-2.0	-2.9	-3.0	-3.0	-2.7	-2.6	-2.7	-2.6	-2.4	-2.2	-1.5	-3.4	-2.6
14	-2.3	-2.3	-2.4	-2.4	-2.5	-2.5	-2.8	-3.1	-3.4	-3.5	-3.2	-3.2	-3.1	-3.2	-3.2	-3.2	-3.3	-3.3	-4.0	-4.5	-4.2	-3.9	-3.6	-4.3	-2.3	-4.5	-3.2
15	-4.9	-4.7	-4.8	-4.6	-6.2	-7.2	-7.6	-8.1	-9.0	-10.0	-11.3	-11.2	-11.6	-12.2	-12.1	-12.0	-12.1	-12.4	-12.4	-13.0	-12.8	-13.3	-13.9	-13.6	-4.6	-13.9	-10.0
16	-12.8	-12.8	-12.8	-12.8	-12.7	-12.8	-13.0	-13.3	-13.4	-13.5	-13.5	-13.4	-13.3	-13.3	-13.2	-13.2	-13.2	-13.1	-13.0	-13.0	-13.4	-13.7	-13.8	-14.2	-12.7	-14.2	-13.2
17	-14.7	-14.8	-14.9	-14.8	-15.0	-15.0	-15.1	-15.3	-15.3	-15.4	-15.5	-15.6	-15.5	-15.4	-15.1	-15.0	-15.4	-15.5	-16.4	-16.6	-17.0	-17.0	-17.2	-17.5	-14.7	-17.5	-15.6
18	-17.7	-17.4	-17.4	-17.0	-16.9	-17.6	-16.9	-16.8	-16.5	-15.5	-15.4	-15.8	-16.0	-15.3	-15.4	-15.0	-14.3	-13.4	-13.3	-12.1	-10.8	-10.9	-10.9	-10.9	-10.8	-17.7	-15.0
19	-10.8	-11.3	-11.6	-11.0	-10.6	-10.2	-10.1	-8.5	-9.2	-9.7	-9.3	-8.7	-7.8	-6.4	-5.8	-5.8	-5.4	-5.0	-4.4	-4.0	-4.0	-3.7	-3.1	-2.5	-2.5	-11.6	-7.5
20	-2.1	-1.8	-1.6	-1.1	-0.8	0.1	2.1	2.2	2.9	3.0	3.0	2.6	2.4	2.4	2.0	2.6	3.1	3.4	2.7	1.5	1.2	1.3	1.8	1.9	3.4	-2.1	1.4
21	1.9	1.8	0.9	0.7	0.9	0.3	1.0	1.4	1.4	1.8	2.0	1.6	1.5	1.6	1.8	2.0	2.3	2.4	2.2	2.2	2.3	2.2	1.8	2.0	2.4	0.3	1.7
22	2.0	1.9	1.7	1.5	0.2	-0.2	0.1	0.1	-0.2	0.6	1.1	1.2	0.7	1.0	0.8	1.3	1.5	1.6	2.2	2.3	2.1	1.7	1.0	-0.7	2.3	-0.7	1.1
23	-1.2	-1.1	-0.8	-1.0	-1.2	-1.6	-1.7	-1.8	-2.1	-2.3	-2.6	-2.8	-3.2	-3.6	-3.6	-3.9	-3.7	-3.6	-3.9	-3.4	-3.5	-4.4	-5.6	-6.4	-0.8	-6.4	-2.9
24	-6.3	-6.2	-6.3	-6.4	-6.6	-6.5	-6.7	-6.9	-6.9	-6.7	-6.8	-6.3	-5.2	-3.9	-2.7	-2.2	-1.7	-1.4	-1.2	-0.9	-0.7	-0.4	-0.2	0.2	0.2	-6.9	-4.1
25	-0.1	0.0	-0.1	0.3	0.9	1.7	2.0	2.0	1.8	2.2	3.3	3.2	1.8	2.8	3.1	3.3	3.6	3.9	3.3	2.9	3.5	3.4	3.5	3.4	3.9	-0.1	2.3
26	2.9	2.8	3.1	3.0	2.9	3.3	3.2	2.9	2.6	1.7	1.6	1.0	0.8	0.6	0.7	0.8	0.9	0.8	0.6	0.3	0.0	0.0	0.8	1.1	3.3	0.0	1.6
27	1.2	1.3	1.2	1.3	1.4	1.4	1.3	1.4	1.3	1.5	1.6	1.8	1.8	1.7	1.7	1.9	2.0	1.9	1.8	1.6	1.4	1.1	1.1	1.2	2.0	1.1	1.5
28	1.0	1.0	0.9	0.6	0.7	0.7	0.4	0.5	0.6	0.1	-0.3	-0.2	-0.1	0.0	0.4	0.8	1.0	1.3	1.4	1.4	1.4	1.6	1.6	1.6	1.6	-0.3	0.8
29	1.5	1.6	1.7	1.7	1.7	1.5	1.5	1.7	1.9	2.0	2.0	1.9	2.2	2.3	2.4	2.4	2.4	2.3	2.1	2.1	2.2	2.3	2.3	2.4	2.4	1.5	2.0
30	2.6	2.8	2.9	3.1	3.1	3.2	3.5	3.7	3.9	3.8	3.6	4.1	4.5	4.5	4.4	4.4	4.5	4.4	4.4	4.3	4.2	4.5	4.0	3.6	4.5	2.6	3.8
Max.	**2.9**	**2.8**	**3.1**	**3.1**	**3.1**	**3.3**	**3.5**	**3.7**	**3.9**	**3.8**	**3.6**	**4.1**	**4.5**	**4.5**	**4.4**	**4.4**	**4.5**	**4.4**	**4.4**	**4.3**	**4.2**	**4.5**	**4.0**	**3.6**	**4.5**		
Min.	**-17.7**	**-17.4**	**-17.4**	**-17.0**	**-16.9**	**-17.6**	**-16.9**	**-16.8**	**-16.5**	**-15.5**	**-15.5**	**-15.8**	**-16.0**	**-15.4**	**-15.4**	**-15.0**	**-15.4**	**-15.5**	**-16.4**	**-16.6**	**-17.0**	**-17.0**	**-17.2**	**-17.5**		**-17.7**	
Avg.	**-3.1**	**-3.0**	**-3.1**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.1**	**-3.1**	**-2.9**	**-3.0**	**-2.8**	**-2.7**	**-2.6**	**-2.4**	**-2.4**	**-2.6**	**-2.7**	**-2.7**	**-2.8**	**-2.8**	**-2.9**			**-2.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature at 10 meters (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.3	3.7	3.0	2.8	2.7	2.4	1.9	1.7	1.0	1.4	1.7	1.7	0.4	0.3	0.3	0.3	-0.1	0.1	0.2	0.2	-0.2	0.5	-0.4	-0.7	3.7	-0.7	1.2
2	-1.0	-1.7	-2.0	-3.1	-3.6	-3.9	-5.1	-4.4	-4.2	-3.3	-2.4	-2.8	-1.5	-1.0	0.5	-0.3	-0.6	-2.8	-3.0	-3.4	-3.7	-3.9	-3.6	-4.4	0.5	-5.1	-2.7
3	-4.5	-4.9	-4.8	-4.6	-5.1	-5.4	-5.7	-5.8	-5.7	-5.5	-5.5	-5.8	-6.2	-6.3	-6.2	-6.2	-6.7	-7.1	-7.6	-8.4	-8.7	-8.8	-9.5	-9.2	-4.5	-9.5	-6.4
4	-9.5	-9.0	-8.9	-8.6	-7.7	-7.9	-8.0	-7.2	-7.0	-6.7	-6.9	-6.9	-6.7	-6.5	-6.0	-5.4	-5.3	-5.3	-5.2	-5.0	-4.9	-4.7	-4.5	-4.3	-4.3	-9.5	-6.6
5	-4.2	-4.1	-4.0	-3.9	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.4	-3.0	-2.2	-1.6	-1.3	-1.2	-1.0	-0.9	-0.7	-0.6	-0.5	-0.6	-0.5	-0.6	-0.5	-4.2	-2.4
6	-0.9	-0.7	-0.8	-0.8	-0.6	-0.8	-0.6	-0.4	-0.4	-0.4	-0.4	-0.6	-0.7	-0.8	-0.8	-1.1	-1.5	-1.5	-1.5	-1.7	-1.5	-1.2	-1.2	-1.3	-0.4	-1.7	-0.9
7	-1.4	-1.2	-1.2	-1.3	-1.3	-1.4	-1.6	-1.6	-2.0	-2.3	-2.4	-2.3	-1.4	-1.4	-1.3	-1.0	-0.9	-0.7	-0.7	-0.5	-0.3	0.1	0.1	-0.1	0.1	-2.4	-1.2
8	-0.2	-0.2	-0.4	-0.6	-0.9	-0.6	-0.7	-0.3	0.2	0.6	0.7	0.8	0.9	0.6	-0.1	-0.5	-0.5	-0.9	-1.6	-2.1	-1.8	-1.8	-1.6	-1.6	0.9	-2.1	-0.5
9	-1.9	-1.6	-1.7	-1.5	-1.5	-1.6	-1.9	-2.2	-2.4	-1.9	-1.3	-0.3	0.0	0.3	0.5	0.8	0.9	0.9	1.0	0.8	0.6	0.6	0.6	0.6	1.0	-2.4	-0.5
10	0.5	0.8	0.9	1.3	1.6	0.7	-0.1	-0.4	-0.5	-0.8	-0.5	-0.7	-1.3	-1.2	-1.6	-1.8	-1.9	-1.8	-1.7	-1.5	-1.4	-1.5	-1.9	-2.3	1.6	-2.3	-0.7
11	-2.6	-2.9	-3.0	-3.5	-3.5	-3.5	-3.8	-4.0	-3.7	-3.8															-2.6	-4.0	-3.4
12																											
13																			-8.8	-9.2	-10.3	-11.1	-11.9	-12.9	-8.8	-12.9	-10.7
14	-13.4	-14.6	-14.8	-14.4	-14.2	-13.9	-14.7	-15.6	-16.0																-13.4	-16.0	-14.6
15	-15.4	-15.7	-14.6	-13.5	-13.2	-13.4	-13.6	-13.7	-14.1	-13.7	-13.7	-13.9	-13.8	-13.7	-13.7	-13.9	-13.8	-13.7	-13.7	-13.7	-13.7	-13.7	-13.6	-13.6	-13.2	-15.7	-13.9
16	-14.0	-14.8	-15.2	-15.6	-15.7	-16.0	-16.0	-16.1	-16.1	-16.3	-16.7	-16.9	-17.0	-17.2	-17.4	-17.6	-18.0	-18.1	-18.1	-18.0	-17.8	-17.9	-18.2	-18.4	-14.0	-18.4	-16.8
17	-18.7	-18.8	-18.8	-18.8	-18.7	-18.8	-18.9	-18.8	-18.8	-18.7	-18.7	-18.9	-18.9	-18.8	-18.8	-19.1	-19.5	-19.8	-20.2	-20.5	-20.6	-20.9	-21.2	-21.5	-18.7	-21.5	-19.4
18	-21.5	-21.8	-22.0	-22.1	-22.2	-22.2	-22.6	-22.8	-22.7	-22.9	-23.2	-23.5	-23.9	-24.1	-23.9	-23.8	-23.7	-24.2	-24.6	-24.5	-24.6	-25.2	-25.8	-25.9	-21.5	-25.9	-23.5
19	-26.1	-26.6	-26.4	-26.3	-25.9	-25.2	-25.2	-26.4	-26.1	-25.7	-26.0	-25.8	-25.8	-25.7	-25.4	-25.7	-26.0	-26.2	-25.9	-26.3	-27.1	-26.5	-26.0	-24.9	-24.9	-27.1	-26.0
20	-24.9	-22.6	-22.2	-21.7	-21.3	-19.6	-17.5	-16.9	-15.8	-14.6	-13.9	-13.4	-11.7	-10.6	-9.6	-8.7	-8.0	-7.4	-7.2	-6.5	-6.2	-6.1	-5.8	-5.7	-5.7	-24.9	-13.2
21	-5.2	-3.9	-3.4	-3.1	-3.0	-3.1	-3.2	-3.7	-4.3	-4.7	-4.9	-4.7	-4.7	-4.8	-4.6	-5.1	-4.8	-4.6	-4.8	-4.6	-4.5	-4.4	-4.6	-4.0	-3.0	-5.2	-4.3
22	-3.6	-3.3	-3.0	-3.1	-2.9	-2.9	-2.7	-2.9	-3.2	-2.8	-2.2	-2.3	-2.1	-2.0	-1.8	-2.1	-1.9	-2.2	-2.1	-1.9	-1.8	-3.2	-5.1	-5.6	-1.8	-5.6	-2.8
23	-6.6	-8.6	-9.6	-10.0	-10.3	-10.6	-11.4	-12.1	-12.7	-12.6	-11.9	-11.9	-11.7	-11.8	-12.3	-12.5	-12.7	-12.4	-12.1	-12.0	-12.1	-12.2	-12.3	-12.7	-6.6	-12.7	-11.5
24	-12.8	-13.1	-13.2	-13.7	-14.3	-14.7	-15.0	-15.7	-15.6	-15.6	-15.6	-15.3	-15.0	-14.9	-15.1	-15.3	-15.2	-15.1	-15.5	-15.9	-15.7	-15.2	-15.4	-15.6	-12.8	-15.9	-14.9
25	-16.3	-17.1	-17.4	-17.6	-17.6	-17.9	-18.2	-18.5	-19.0	-19.5	-20.3	-20.4	-20.6	-20.6	-20.5	-20.4	-20.6	-20.5	-19.9	-19.7	-19.4	-19.5	-20.1	-20.5	-16.3	-20.6	-19.2
26	-20.2	-20.4	-20.6	-19.5	-18.4	-17.0	-15.8	-17.2	-15.3	-12.7	-11.8	-12.2	-12.3	-11.1	-9.8	-8.2	-6.3	-4.7	-4.6	-5.4	-5.3	-4.6	-4.3	-3.8	-3.8	-20.6	-11.7
27	-3.3	-3.0	-2.6	-2.2	-1.9	-1.6	-1.2	-0.7	-0.3	-0.5	-0.4	-0.2	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7	-1.7	-2.2	-1.7	-1.7	-2.1	-0.1	-3.3	-1.3
28	-2.2	-3.8	-6.0	-6.8	-6.9	-7.5	-7.3	-7.6	-6.8	-7.1	-8.1	-7.9	-8.2	-8.4	-8.8	-9.0	-9.6	-9.9	-10.5	-10.7	-10.6	-10.5	-10.1	-10.1	-2.2	-10.7	-8.1
29	-10.4	-10.7	-10.7	-10.7	-11.1	-11.4	-11.5	-11.5	-11.1	-11.9	-11.4	-10.6	-11.4	-11.4	-11.7	-12.8	-12.6	-11.9	-11.6	-11.2	-11.0	-10.9	-10.8	-10.8	-10.4	-12.8	-11.3
30	-10.9	-11.0	-11.2	-11.2	-11.4	-11.6	-12.2	-12.1	-12.6	-12.9	-13.5	-13.7	-13.3	-13.4	-13.5	-13.0	-12.4	-12.8	-13.0	-13.2	-13.1	-12.6	-12.5	-12.1	-10.9	-13.7	-12.5
31	-11.8	-11.7	-11.3	-11.1	-11.3	-11.6	-11.7	-12.1	-12.5	-12.8	-12.9	-12.7	-12.7	-12.4	-12.5	-12.4	-12.1	-12.2	-12.1	-11.1	-11.5	-12.0	-12.9	-11.4	-11.1	-12.9	-12.0
Max.	**3.3**	**3.7**	**3.0**	**2.8**	**2.7**	**2.4**	**1.9**	**1.7**	**1.0**	**1.4**	**1.7**	**1.7**	**0.9**	**0.6**	**0.5**	**0.8**	**0.9**	**0.9**	**1.0**	**0.8**	**0.6**	**0.6**	**0.6**	**0.6**	**3.7**		
Min.	**-26.1**	**-26.6**	**-26.4**	**-26.3**	**-25.9**	**-25.2**	**-25.2**	**-26.4**	**-26.1**	**-25.7**	**-26.0**	**-25.8**	**-25.8**	**-25.7**	**-25.4**	**-25.7**	**-26.0**	**-26.2**	**-25.9**	**-26.3**	**-27.1**	**-26.5**	**-26.0**	**-25.9**		**-27.1**	
Avg.	**-9.0**	**-9.1**	**-9.2**	**-9.1**	**-9.1**	**-9.1**	**-9.2**	**-9.4**	**-9.4**	**-9.0**	**-9.1**	**-9.0**	**-9.0**	**-8.8**	**-8.7**	**-8.8**	**-8.7**	**-8.7**	**-8.8**	**-8.9**	**-8.9**	**-8.9**	**-9.1**	**-9.1**			**-9.1**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	0.81	0.94	0.90	0.99	0.91	1.05	1.29	0.75	0.52	0.64	0.70	1.15	0.84	0.64	0.56	1.14	1.03	1.25	1.76	1.55	1.42	1.40	1.27	1.76	0.52	1.02
2	1.5	0.98	1.08	1.56	0.73	1.34	1.18	1.21	1.87	1.04	0.86	1.44	1.13	0.82	1.25	1.46	1.45	1.07	1.11	1.28	1.36	1.33	1.35	1.36	1.87	0.73	1.24
3	1.3	0.99	0.95	0.94	0.88	0.70	0.54	0.96	1.01	0.67	0.75	0.60	0.40	0.32	0.21	0.20	0.32	0.62	0.75	1.08	1.14	1.18	1.28	0.87	1.28	0.20	0.78
4	1.5	1.47	1.32	0.98	1.08	1.12	1.32	1.14	1.38	1.05	1.19	0.98	0.92	1.23	1.29	0.96	0.98	1.36	1.12	0.83	0.35	0.21	0.30	0.56	1.50	0.21	1.03
5	0.6	0.37	0.92	1.39	1.14	1.20	1.46	1.72	1.51	1.65	1.57	0.62	0.75	1.21	1.28	1.23	1.68	1.61	1.63	1.40	1.05	1.19	0.94	0.93	1.72	0.37	1.21
6	0.9	1.06	0.88	0.79	0.83	1.12	1.49	1.17	1.11	1.00	1.03	1.18	1.21	1.12	1.45	1.26	1.26	1.01	0.98	0.88	0.75	0.77	0.74	0.61	1.49	0.61	1.02
7	0.6	0.61	0.60	0.40	0.55	0.45	0.32	0.31	0.37	0.46	0.39	0.46	0.50	0.37	0.44	0.33	0.54	0.78	0.75	0.67	0.70	0.74	0.78	0.78	0.78	0.31	0.54
8	1.0	0.83	0.91	0.80	0.50	0.40	0.80	0.93	1.13	1.29	1.43	1.30	1.36	1.26	1.16	0.87	0.73	0.95	0.82	0.99	0.99	1.03	0.81	1.27	1.43	0.40	0.98
9	1.5	1.60	1.96	2.42	1.75	1.20	1.68	2.07	2.29	2.21	2.41	1.77	0.53	0.71	0.83	0.89	0.72	0.95	1.05	1.00	0.95	0.62	0.45	0.27	2.42	0.27	1.32
10	0.4	0.31	0.16	0.24	0.24	0.20	0.15	0.19	0.14	0.12	0.10	0.06	0.00	0.02	0.02	0.00	0.00	0.00	-0.01	-0.01	0.00	-0.03	-0.09	-0.08	0.38	-0.09	0.09
11	-0.1	-0.04	-0.03	-0.03	-0.07	-0.06	-0.06	-0.06	-0.07	-0.08	-0.12	-0.16	-0.15	-0.19	-0.19	-0.18	-0.21	-0.21	-0.23	-0.23	-0.21	-0.22	-0.23	-0.24	-0.03	-0.24	-0.14
12	-0.2	-0.16	-0.12	-0.12	-0.12	-0.13	-0.13	-0.16	-0.15	-0.14	-0.16	-0.17	-0.13	-0.15	-0.15	-0.20	-0.16	-0.18	-0.21	-0.18	-0.20	-0.16	-0.12	-0.10	-0.10	-0.21	-0.15
13	0.0	0.05	0.04	0.00	-0.09	-0.13	-0.13	-0.11	-0.12	-0.13	-0.14	-0.16	-0.14	-0.11	0.09	-0.08	-0.03	0.31	0.56	1.53	0.76	0.71	0.91	1.09	1.53	-0.16	0.20
14	1.5	1.50	1.30	1.57	0.88	0.56	0.72	0.61	0.45	0.39	0.12	0.02	0.01	0.08	0.49	0.56	0.58	0.27	0.28	0.14	0.25	0.42	0.65	0.16	1.57	0.01	0.56
15	0.2	0.48	0.66	1.28	1.51	0.97	0.28	0.07	-0.03	-0.06	0.01	-0.04	0.02	0.50	0.08	-0.06	0.12	0.17	0.30	0.79	1.09	0.97	0.90	1.22	1.51	-0.06	0.47
16	1.2	0.93	0.17	0.39	0.28	0.79	0.70	1.12	1.15	0.67	0.38	0.38	0.15	0.03	0.02	0.15	0.20	0.22	0.22	0.17	0.08	-0.01	-0.07	-0.04	1.22	-0.07	0.39
17	0.0																								-0.02	-0.02	-0.02
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Max.	1.5	1.60	1.96	2.42	1.75	1.34	1.68	2.07	2.29	2.21	2.41	1.77	1.36	1.26	1.45	1.46	1.68	1.61	1.63	1.76	1.55	1.42	1.40	1.36	2.42		
Min.	-0.2	-0.16	-0.12	-0.12	-0.12	-0.13	-0.13	-0.16	-0.15	-0.14	-0.16	-0.17	-0.15	-0.19	-0.19	-0.20	-0.21	-0.21	-0.23	-0.23	-0.21	-0.22	-0.23	-0.24		-0.24	
Avg.	0.7	0.74	0.73	0.84	0.69	0.66	0.71	0.78	0.80	0.67	0.65	0.56	0.48	0.50	0.56	0.50	0.58	0.62	0.65	0.76	0.66	0.64	0.62	0.62			0.62

Total Hours in Month 744 Hours Data Available 385 Data Recovery 51.7%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 672 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month	720	Hours Data Available	0	Data Recovery	0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Max.																											
Min.																											
Avg.																											

Total Hours in Month	744	Hours Data Available	0	Data Recovery	0.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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30								0.04	-0.09	-0.30	-0.29	-0.39	-0.49	-0.53	-0.53	-0.54	-0.51	-0.49	-0.39	-0.24	0.85	0.85	1.31	1.43	1.43	-0.54	-0.02
31	0.8	0.80	1.07	0.92	0.95	1.06	0.91	0.23	-0.10	-0.19	-0.46	-0.55	-0.69	-0.67	-0.54	-0.53	-0.45	-0.28	0.20	0.12	0.31	0.69	0.75	0.74	1.07	-0.69	0.21
Max.	**0.8**	**0.80**	**1.07**	**0.92**	**0.95**	**1.06**	**0.91**	**0.23**	**-0.09**	**-0.19**	**-0.29**	**-0.39**	**-0.49**	**-0.53**	**-0.53**	**-0.53**	**-0.45**	**-0.28**	**0.20**	**0.12**	**0.85**	**0.85**	**1.31**	**1.43**	**1.43**		
Min.	**0.8**	**0.80**	**1.07**	**0.92**	**0.95**	**1.06**	**0.91**	**0.04**	**-0.10**	**-0.30**	**-0.46**	**-0.55**	**-0.69**	**-0.67**	**-0.54**	**-0.54**	**-0.51**	**-0.49**	**-0.39**	**-0.24**	**0.31**	**0.69**	**0.75**	**0.74**		**-0.69**	
Avg.	**0.8**	**0.80**	**1.07**	**0.92**	**0.95**	**1.06**	**0.91**	**0.14**	**-0.09**	**-0.24**	**-0.37**	**-0.47**	**-0.59**	**-0.60**	**-0.54**	**-0.54**	**-0.48**	**-0.39**	**-0.10**	**-0.06**	**0.58**	**0.77**	**1.03**	**1.09**			**0.10**

Total Hours in Month 744 **Hours Data Available** 41 **Data Recovery** 5.5%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.33	0.25	0.56	0.38	0.39	0.27	0.27	-0.01	-0.22	-0.28	-0.33	-0.32	-0.26	-0.29	-0.34	-0.39	-0.35	-0.20	-0.17	0.19	0.32	0.37	0.42	0.60	-0.39	0.05
2	0.2	0.06	0.05	0.04	0.01	0.01	0.04	0.02	-0.01	-0.10	-0.24	-0.39	-0.56	-0.37	2.61	1.16	0.18	-0.02	-0.20	-0.07	0.01	0.03	0.03	0.02	2.61	-0.56	0.11
3	0.1	0.06	0.06	0.06	0.05	0.05	0.06	0.05								-0.07	-0.09	-0.25	-0.31	-0.27	-0.27	-0.29	-0.10	0.14	0.14	-0.31	-0.06
4	0.2	0.27	0.27	0.23	0.34	0.35	0.30	0.58	0.25	-0.03	-0.21	-0.24	-0.23	-0.48	-0.63	-0.73	-0.59	-0.32	-0.41	-0.14	0.22	0.58	0.48	0.49	0.58	-0.73	0.02
5	1.0	1.14	0.90	0.57	1.01	0.89	0.98	0.77	0.37	0.06		-0.69	-0.69	-0.76	-1.08	-0.94	-0.32	0.02	0.20	0.40	0.34	0.51	0.42	0.23	1.14	-1.08	0.23
6	0.1	0.35	0.32	0.34	0.21	0.32	0.26	0.06	-0.04	-0.20	-0.32	-0.43	-0.51	-0.68	-0.81	-0.53	-0.60	-0.41	-0.20	0.00	0.12	0.15	0.04	-0.01	0.35	-0.81	-0.10
7	0.0	-0.02	0.00	0.05	0.14	0.20	0.19	0.13	0.07	-0.15	-0.02	0.00	-0.02	-0.13	-0.10	-0.12	-0.13	-0.07	-0.05	-0.04	-0.01	0.01	0.01	-0.01	0.20	-0.15	0.00
8	0.0	-0.02	-0.01	0.00	-0.02	-0.01	0.00	0.01	0.01	-0.03	-0.04	-0.05	-0.10	-0.15	-0.16	-0.14	-0.16	-0.15	-0.08	-0.04	-0.03	-0.02	0.00	0.00	0.01	-0.16	-0.05
9	0.0	0.03	0.04	0.09	0.13	0.13	0.11	0.06	0.00	-0.04	-0.15	-0.18	-0.17	-0.24	-0.36	-0.39	-0.40	-0.24	-0.14	-0.16	0.07	0.60	0.75	0.41	0.75	-0.40	0.00
10	0.3	0.36	0.48	0.22	0.29	0.35	0.16	0.16	0.18	-0.01	-0.37	-0.60	-0.58	-0.48	-0.43	-0.54	-0.46	-0.21	-0.13	0.07	0.14	0.15	0.17	0.15	0.48	-0.60	-0.03
11	0.2	0.20	0.14	0.08	0.04	0.02	0.03	0.03	-0.03	-0.19	-0.18	0.01	0.01	-0.05	-0.08	-0.09	-0.06	-0.02	-0.04	-0.05	-0.03	0.01	0.03	0.05	0.20	-0.19	0.00
12	0.0	0.01	0.00	-0.01	-0.02	-0.03	-0.03	-0.04	-0.05	-0.12	-0.25	-0.29	-0.54	-0.85	-0.83	-0.76	-0.62	-0.22	-0.18	-0.02	0.12	0.19	0.05	0.06	0.19	-0.85	-0.18
13	0.1	0.08	0.00	0.00	-0.01	-0.02	0.00	0.02	-0.04	-0.09	-0.17	-0.19	-0.38	-0.51	-0.34	-0.32	-0.24	-0.07	-0.07	0.00	0.02	-0.03	-0.01	0.04	0.08	-0.51	-0.09
14	0.1	0.08	0.05	-0.01	0.03	0.09	0.22	0.33	0.09	-0.20	-0.22	-0.24	-0.29	-0.43	-0.45	-0.64	-0.47	-0.38	-0.10	0.10	0.69	0.98	0.62	1.04	1.04	-0.64	0.04
15	0.7	0.61	0.75	0.69	0.75	0.65	0.70	0.59	0.49	-0.13	-0.36	-0.54	-0.69	-0.79	-0.45	-0.40	-0.46	-0.69	-0.58	0.13	0.85	1.22	0.25	0.15	1.22	-0.79	0.14
16	0.1	0.00	0.08	0.36	0.16	0.48	0.73	1.07	0.77	-0.01	-0.51	-0.40	-0.52	-0.70	-0.76	-0.57	-0.57	-0.44	-0.35	-0.26	0.23	0.23	0.07	0.03	1.07	-0.76	-0.03
17	0.0	0.03	0.07	0.13	0.14	0.02	0.05	0.07	0.04	-0.08	-0.12	-0.19	-0.16	-0.37	-0.43	-0.64	-0.50	-0.34	-0.25	0.08	0.24	0.28	0.35	0.22	0.35	-0.64	-0.06
18	0.2	0.22	0.07	0.02	0.05	0.04	0.07	0.09	0.09	0.07	0.05	-0.05	-0.11	-0.07	-0.03	-0.05	-0.05	-0.05	-0.03	0.00	-0.02	-0.04	-0.03	0.00	0.22	-0.11	0.02
19	0.0	0.12	0.07	0.06	0.17	0.13	0.03	0.04	0.03	-0.06	-0.05	-0.10	-0.17	-0.17		-0.15	-0.13	-0.14	-0.07	-0.03	-0.03	-0.04	-0.04	-0.04	0.17	-0.17	-0.02
20	0.0	-0.04	-0.04	-0.04	-0.04	-0.03	-0.05	-0.06	-0.06	-0.07	-0.09	-0.18	-0.23	-0.29	-0.40	-0.38	-0.32	-0.32	-0.11	0.14	0.40	0.12	0.10	0.14	0.40	-0.40	-0.08
21	0.0	0.25	0.55	0.33	0.17	0.02	0.05	0.08	0.05	-0.06	-0.30	-0.39	-0.61	-0.59	-0.74	-0.34	-0.53	-0.41	-0.18	0.24	0.92	0.93	1.19	0.78	1.19	-0.74	0.06
22	1.1	1.08	1.38	1.14	0.88	1.04	0.92	0.57	0.47	0.13	-0.04	-0.29	-0.27	-0.25	-0.13	-0.04	0.06	0.16	0.16	0.01	-0.03	-0.04	-0.01	-0.03	1.38	-0.29	0.33
23	0.0	0.05	0.05	0.05	0.06	0.16	0.26	0.22	0.23	0.25	-0.17	-0.39	-0.41	-0.50	-0.27	-0.15	-0.13	-0.12	-0.10	-0.08	-0.04	-0.03	-0.02	-0.01	0.26	-0.50	-0.05
24	0.0	0.00	-0.02	-0.01	0.16	0.16	0.20	0.12	-0.04	-0.10	-0.13	-0.25	-0.51	-0.38	-0.26	-0.21	-0.13	-0.04	-0.02	0.03	0.02	-0.04	-0.02	-0.05	0.20	-0.51	-0.06
25	0.0	0.12	0.07	0.07	-0.04	-0.04	-0.03	0.03	0.02	0.01	-0.12	-0.47	-0.47	-0.45	-0.43	-0.39	-0.30	-0.23	-0.12	-0.09	0.00	0.05	0.06	0.00	0.12	-0.47	-0.11
26	0.0	-0.03	-0.07	-0.08	-0.08	-0.06	-0.06	-0.08	-0.04	-0.09	-0.26	-0.38	-0.37	-0.26	-0.29	-0.28	-0.21	-0.33	-0.17	-0.03	0.18	0.31	0.40	0.68	0.68	-0.38	-0.07
27	0.6	0.35	0.44	0.58	0.33	0.19	0.35	0.32	0.80	0.46	-0.23	-0.32	-0.42	-0.42	-0.47	-0.33	-0.29	-0.21	-0.07	0.02	0.06	0.07	0.13	0.01	0.80	-0.47	0.08
28	0.0	0.00	-0.05	-0.05	-0.02	-0.01	0.02	0.00	-0.03	-0.05	-0.09	-0.12	-0.15	-0.16	-0.19	-0.30	-0.26	-0.25	-0.14	-0.03	0.21	0.27	0.28	0.46	0.46	-0.30	-0.03
29	0.6	0.52	0.92	1.05	1.37	1.15	0.69	0.54	0.77	0.52	-0.27	-0.47	-0.32	-0.54	-0.52	-0.48	-0.43	-0.28	-0.18	-0.11	-0.01	0.08	0.03	0.05	1.37	-0.54	0.19
30	0.1	0.07	-0.04	-0.05	-0.07	-0.07	-0.07	-0.06	-0.07	-0.09	-0.13	-0.15	-0.18	-0.23	-0.26	-0.22	-0.18	-0.21	-0.14	-0.06	0.01	-0.01	-0.02	-0.05	0.10	-0.26	-0.09
Max.	**1.1**	**1.14**	**1.38**	**1.14**	**1.37**	**1.15**	**0.98**	**1.07**	**0.80**	**0.52**	**0.05**	**0.01**	**0.01**	**-0.05**	**2.61**	**1.16**	**0.18**	**0.16**	**0.20**	**0.40**	**0.92**	**1.22**	**1.19**	**1.04**	**2.61**		
Min.	**0.0**	**-0.04**	**-0.07**	**-0.08**	**-0.08**	**-0.07**	**-0.07**	**-0.08**	**-0.07**	**-0.22**	**-0.51**	**-0.69**	**-0.69**	**-0.85**	**-1.08**	**-0.94**	**-0.62**	**-0.69**	**-0.58**	**-0.27**	**-0.27**	**-0.29**	**-0.10**	**-0.05**		**-1.08**	
Avg.	**0.2**	**0.21**	**0.23**	**0.22**	**0.22**	**0.22**	**0.21**	**0.20**	**0.15**	**-0.02**	**-0.19**	**-0.29**	**-0.34**	**-0.40**	**-0.31**	**-0.31**	**-0.29**	**-0.22**	**-0.14**	**-0.01**	**0.15**	**0.22**	**0.19**	**0.18**			**0.01**

Total Hours in Month 720 **Hours Data Available** 711 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	-0.02	-0.01	0.12	0.07	0.09	0.51	0.74	0.38	0.13	0.09	-0.30	-0.27	-0.39	-0.45	-0.42	-0.61	-0.19	-0.08	0.08	0.07	0.19	0.15	0.05	0.74	-0.61	0.00
2	0.0	0.03	0.00	-0.07	-0.09	-0.08	-0.09	-0.06	-0.07	-0.10	-0.13	-0.20	-0.35	-0.33	-0.24	-0.25	-0.25	0.08	0.24	0.36	0.44	0.48	0.22	0.17	0.48	-0.35	-0.01
3	0.1	0.06	0.02	0.00	0.01	-0.01	0.07	0.00	-0.02	-0.14	-0.29	-0.36	-0.55	-0.50	-0.51	-0.54	-0.37	-0.19	0.04	0.24	0.29	0.41	0.32	0.51	0.51	-0.55	-0.06
4	0.6	0.26	0.28	0.34	0.27	0.17	0.15	0.13	0.12	0.01	-0.02	-0.05	-0.09	-0.10	-0.03	-0.04	-0.03	-0.06	-0.05	-0.01	0.01	0.01	0.07	0.07	0.56	-0.10	0.08
5	0.0	0.04	0.01	0.02	0.02	0.03	0.01	0.00	-0.01	-0.01	0.02	0.00	0.01	0.09	0.16	0.12	0.09	0.04	0.02	0.12	0.16	0.11	0.36	0.32	0.36	-0.01	0.07
6	0.2	0.18	0.05	-0.11	-0.11	-0.10	-0.10	-0.10	-0.13	-0.11	-0.13	-0.17	-0.17	-0.23	-0.29	-0.24	-0.13	-0.11	0.02	0.25	0.18	0.06	0.27	0.19	0.27	-0.29	-0.03
7	0.2	0.15	0.19	0.18	0.14	0.01	0.02	0.09	0.13	0.10	0.03	-0.03	-0.11	-0.13	-0.08	-0.19	-0.22	-0.16	0.00	0.11	0.20	0.18	0.17	0.15	0.22	-0.22	0.05
8	0.2	0.13	0.14	0.10	0.12	0.14	0.14	0.10	0.11	0.05	-0.10	-0.26	-0.25	-0.30	-0.30	-0.24	-0.16	-0.01	0.21	0.55	0.28	0.11	0.39	0.63	0.63	-0.30	0.07
9	0.2	0.66	0.91	1.03	0.38	0.35	0.38	0.33	0.42	0.96	0.80	-0.01	-0.34	-0.68	-0.64	-0.55	-0.37	-0.10	0.45	0.73	0.76	0.38	0.33	0.47	1.03	-0.68	0.29
10	0.6	1.24	0.46	0.05	0.16	0.16	0.15	-0.04	0.15	0.04	0.01	-0.13	-0.31	-0.34	-0.44	-0.37	-0.38	-0.20	0.17	0.43	0.49	0.66	0.70	0.68	1.24	-0.44	0.16
11	0.7	1.04	1.02	0.73	0.86	0.50	0.43	0.44	0.63	0.41	-0.02	-0.08	-0.16	-0.19	-0.26	-0.25	-0.14	-0.04	0.00	0.03	0.06	0.08	0.10	0.07	1.04	-0.26	0.25
12	0.1	0.09	0.09	0.17	0.15	0.16	0.26	0.18	0.41	0.29	0.47	0.09	-0.21	-0.32	-0.29	-0.34	-0.37	-0.11	0.20	0.96	0.60	0.54	0.43	0.23	0.96	-0.37	0.16
13	0.2	0.08	0.00	-0.04	-0.01	-0.07	-0.13	-0.09	-0.05	-0.13	-0.28	-0.39	-0.49	-0.55	-0.70	-0.63	-0.54	-0.37	-0.02	0.24	0.19	-0.01	-0.07	-0.09	0.24	-0.70	-0.16
14	-0.1	-0.04	-0.09	-0.09	-0.09	-0.09	-0.11	-0.06	0.26	0.02	-0.08	-0.30	-0.32	-0.40	-0.40	-0.17	-0.25	-0.13	-0.01	-0.03	0.09	0.92	1.11	0.65	1.11	-0.40	0.01
15	0.3	0.30	0.23	0.15	0.20	0.48	0.63	1.18	0.72	0.36	0.19	0.09	0.23	-0.23	-0.18	-0.18	-0.02	0.23	0.48	0.53	0.35	0.45	0.55	0.90	1.18	-0.23	0.33
16	0.7	0.83	0.79	0.48	0.99	1.22	1.08	0.82	0.99	0.63	0.22	-0.02	-0.32	-0.30	-0.38	-0.38	-0.29	-0.23	-0.16	-0.14	-0.12	-0.12	-0.11	-0.10	1.22	-0.38	0.25
17	-0.1	-0.10	-0.11	-0.11	-0.12	-0.12	-0.12	-0.12	-0.11	-0.11	-0.10	-0.19	-0.21	-0.24	-0.31	-0.27	-0.19	-0.13	-0.09	-0.08	-0.08	-0.07	-0.02	0.08	0.08	-0.31	-0.13
18	0.0	-0.06	0.06	0.07	-0.04	-0.04	-0.05	-0.05	-0.04	-0.05	-0.07	-0.16	-0.18	-0.22	-0.24	-0.21	-0.17	-0.13	-0.08	-0.06	-0.02	0.04	0.28	0.18	0.28	-0.24	-0.05
19	0.4	0.14	0.00	0.12	0.72	0.52	0.54	0.52	0.50	0.64	0.86	0.84	0.31	0.01	0.09	0.14	0.18	0.32	0.35	0.38	0.24	0.11	0.21	0.37	0.86	0.00	0.36
20	0.3	0.43	0.30	0.47	0.56	0.51	0.60	0.52	0.44	0.52	0.57	0.29	0.18	0.26	0.13	0.22	0.23	0.19	0.29	0.34	0.27	0.30	0.29	0.32	0.60	0.13	0.36
21	0.3	0.42	0.34	0.36	0.33	0.41	0.41	0.22	0.30	0.36	0.37	0.29	0.10	0.04	0.09	0.16	0.26	0.71	0.70	0.73	0.69	1.09	1.35	1.16	1.35	0.04	0.47
22	1.4	1.28	1.59	1.51	1.33	1.16	0.90	0.81	0.97	1.41	0.78	0.96	0.65	-0.06	-0.15	-0.20	-0.21	0.07	0.87	0.87	0.88	0.13	0.14	0.36	1.59	-0.21	0.73
23	0.4	0.28	0.20	0.22	0.21	0.19	0.20	0.28	0.18	0.19	0.18	0.33	-0.02	-0.17	-0.14	-0.13	-0.09	-0.13	-0.05	0.67	0.83	0.62	1.14	0.48	1.14	-0.17	0.25
24	0.4	0.51	0.14	0.06	-0.03	-0.03	0.00	0.01	0.05	0.02	-0.02	-0.02	-0.02	-0.03	-0.03	-0.04	-0.05	-0.03	-0.02	-0.02	-0.04	-0.04	0.04	0.16	0.51	-0.05	0.04
25	0.2	0.22	0.08	0.14	0.28	0.14	-0.02	0.06	0.05	-0.03	0.04	0.03	0.08	0.08	0.07	0.05	0.01	0.00	0.03	0.06	0.01	0.01	0.00	0.06	0.28	-0.03	0.07
26	0.1	0.08	0.13	0.10	0.10	0.12	0.05	0.04	0.10	0.09	0.10	0.10	0.09	0.10	0.12	0.12	0.14	0.13	0.18	0.16	0.22	0.20	0.26	0.21	0.26	0.04	0.12
27	0.2	0.17	0.14	0.05	0.09	0.11	0.15	0.15	-0.02	0.16	0.15	0.20	0.06	-0.01	0.10	0.04	0.04	0.10	0.22	0.29	0.29	0.31	0.35	0.23	0.35	-0.02	0.15
28	0.2	0.24	0.27	0.26	0.42	0.27	0.27	0.49	0.44	0.49	0.06	-0.06	-0.09	-0.15	-0.18	-0.15	-0.08	-0.06	-0.02	0.00	-0.02	0.01	0.00	0.08	0.49	-0.18	0.11
29	0.0	0.07	0.06	0.01	-0.01	-0.01	0.03	0.03	0.06	0.11	0.18	0.13	0.06	0.02	-0.01	0.07	0.10	0.16	0.16	0.17	0.07	-0.01	-0.02	0.05	0.18	-0.02	0.06
30	0.1	0.14	0.07	0.02	0.02	0.07	0.03	0.04	0.02	-0.02	-0.04	-0.05	-0.05	0.01	0.05	0.00	0.01	0.02	0.03	0.01	0.03	0.02	0.01	0.00	0.14	-0.05	0.02
31	0.0	0.08	0.01	0.06	0.05	0.26	0.19	-0.02	-0.01	0.01	-0.01	-0.02	-0.03	0.02	0.12	0.08	-0.03	0.13	0.30	0.13	0.22	0.16	-0.04	-0.03	0.30	-0.04	0.07
Max.	**1.4**	**1.28**	**1.59**	**1.51**	**1.33**	**1.22**	**1.08**	**1.18**	**0.99**	**1.41**	**0.86**	**0.96**	**0.65**	**0.26**	**0.16**	**0.22**	**0.26**	**0.71**	**0.87**	**0.96**	**0.88**	**1.09**	**1.35**	**1.16**	**1.59**		
Min.	**-0.1**	**-0.10**	**-0.11**	**-0.11**	**-0.12**	**-0.12**	**-0.13**	**-0.12**	**-0.13**	**-0.14**	**-0.29**	**-0.39**	**-0.55**	**-0.68**	**-0.70**	**-0.63**	**-0.61**	**-0.37**	**-0.16**	**-0.14**	**-0.12**	**-0.12**	**-0.11**	**-0.10**		**-0.70**	
Avg.	**0.3**	**0.29**	**0.24**	**0.21**	**0.22**	**0.21**	**0.21**	**0.21**	**0.22**	**0.20**	**0.12**	**0.02**	**-0.09**	**-0.17**	**-0.17**	**-0.15**	**-0.13**	**-0.01**	**0.14**	**0.26**	**0.25**	**0.24**	**0.29**	**0.28**			**0.13**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.02	-0.02	-0.03	0.01	0.00	0.03	0.02	0.02	-0.04	-0.06	-0.04	-0.02	-0.07	0.23	0.06	-0.01	-0.09	-0.13	-0.13	-0.09	-0.08	-0.08	-0.04	0.23	-0.13	-0.02
2	0.0	0.11	0.07	0.10	0.09	0.44	0.74	0.54	0.30	0.23	0.26	0.17	-0.07	-0.14	-0.09	0.08	-0.07	-0.02	0.05	0.05	0.07	0.04	0.07	0.08	0.74	-0.14	0.13
3	0.1	0.02	-0.01	0.02	0.01	-0.05	-0.03	0.13	0.15	0.31	0.42	0.11	0.30	0.31	0.28	0.13	0.09	0.50	0.72	0.28	0.20	0.09	0.07	0.09	0.72	-0.05	0.18
4	0.0	-0.12	-0.16	-0.21	-0.23	-0.23	-0.23	-0.24	-0.21	-0.23	-0.21	-0.19	-0.19	-0.05	-0.02	-0.04	-0.03	0.01	0.03	0.00	-0.01	0.01	-0.01	-0.03	0.03	-0.24	-0.11
5	-0.1	-0.05	-0.06	-0.05	-0.05	-0.06	-0.07	-0.06	-0.05	-0.05	-0.05	-0.05	-0.08	-0.08	-0.09	-0.08	-0.07	-0.06	-0.03	-0.03	-0.03	-0.02	0.21	0.27	0.27	-0.09	-0.03
6	0.2	0.12	0.10	0.11	0.16	0.23	0.28	0.34	0.40	0.41	0.31	0.22	0.22	0.19	0.12	0.10	0.15	0.10	0.09	0.07	0.08	-0.02	-0.07	-0.05	0.41	-0.07	0.16
7	0.0	-0.03	0.08	0.15	0.05	0.01	-0.02	0.00	0.03	-0.02	0.00	0.01	0.03	0.04	0.01	-0.01	0.04	0.09	-0.06	-0.04	0.00	-0.06	-0.03	-0.05	0.15	-0.06	0.01
8	-0.1	0.07	0.19	0.04	0.05	0.07	0.10	0.26	0.09	-0.06	0.02	0.01	-0.06	0.01	0.06	0.14	0.18	0.19	0.17	0.16	0.09	-0.04	-0.06	-0.06	0.26	-0.06	0.06
9	0.0	-0.10	-0.06	-0.06	-0.04	-0.03	0.17	0.21	0.25	0.21	0.16	0.10	0.04	0.07	0.21	0.27	0.43	0.58	0.69	0.38	0.45	0.55	0.54	0.72	0.72	-0.10	0.24
10	0.5	0.49	0.62	0.47	0.70	0.88	1.16	1.17	1.33	1.21	1.73	1.58	1.07	0.90	0.53	0.47	0.39	0.43	0.46	0.29	0.29	0.33	0.50	0.50	1.73	0.29	0.75
11	0.5	0.31	0.73	0.46	0.56	0.36	0.72	0.73	0.66	0.38	0.14	0.00	0.06	0.12	0.11	0.15	0.51	0.38	0.08	-0.03	-0.12	0.25	1.07	0.67	1.07	-0.12	0.37
12	0.4	0.51	0.98	0.90	1.01	0.65	0.71	0.28	0.21	0.58	0.87	0.98	0.17	-0.09	-0.10	-0.01	0.05	-0.02	-0.07	-0.07	-0.04	-0.06	-0.07	-0.07	1.01	-0.10	0.32
13	0.0	-0.06	-0.06	-0.05	-0.03	-0.04	-0.01	-0.03	-0.04	-0.03	0.08	0.52	-0.09	-0.07	-0.06	-0.08	-0.04	-0.03	-0.02	-0.01	-0.03	-0.04	-0.04	-0.05	0.52	-0.09	-0.01
14	-0.1	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.03	0.14	0.03	0.33	0.30	-0.05	-0.06	0.00	0.00	0.29	0.33	0.45	0.45	0.33	0.68	0.76	0.97	0.97	-0.06	0.19
15	0.5	0.92	1.10	1.19	1.53	1.40	1.13	1.07	1.23	1.25	1.07	0.88	0.72	0.69	0.53	0.52	0.66	0.58	0.37	0.23	0.23	0.19	0.03	0.00	1.53	0.00	0.75
16	0.0	0.10	0.12	0.15	0.17	0.20	0.21	0.23	0.23	0.24	0.25	0.30	0.20	0.10	0.07	0.10	0.21	0.21	0.17	0.14	0.13	0.18	0.17	0.13	0.30	0.04	0.17
17	0.3	0.33	0.34	0.42	0.24	0.26	0.29	0.46	0.43	0.40	0.42	0.48	0.51	0.55	0.59	0.50	0.53	0.50	0.38	0.47	0.56	0.54	0.88	0.76	0.88	0.24	0.47
18	0.4	0.38	0.47	0.96	0.98	0.87	0.97	1.08	1.38	1.24	1.22	1.29	1.15	0.97	0.88	1.04	1.23	1.21	1.11	1.01	1.15	0.93	0.79	0.45	1.38	0.38	0.97
19	0.4	0.41	0.46	0.46	0.43	0.73	0.59	0.69	0.38	0.60	0.68	0.18	0.22	0.26	0.15	0.08	0.19	0.04	0.03	0.04	-0.03	-0.02	-0.03	-0.03	0.73	-0.03	0.29
20	0.0	-0.02	-0.02	-0.01	-0.01	0.19	0.60	0.27	0.32	0.27	0.29	0.21	0.20	0.20	0.17	0.27	0.44	0.46	0.36	0.15	0.14	0.14	0.23	0.30	0.60	-0.02	0.21
21	0.2	0.19	0.08	0.15	0.07	-0.02	0.10	0.15	0.14	0.19	0.21	0.20	0.18	0.19	0.25	0.23	0.28	0.28	0.23	0.23	0.25	0.27	0.23	0.23	0.28	-0.02	0.19
22	0.2	0.24	0.23	0.16	-0.04	-0.05	0.00	-0.02	-0.04	0.07	0.09	0.11	0.03	0.10	0.06	0.19	0.19	0.25	0.38	0.28	0.23	0.22	0.13	-0.15	0.38	-0.15	0.12
23	-0.1	-0.09	-0.07	-0.10	-0.10	-0.06	-0.09	-0.11	-0.10	-0.07	0.03	-0.11	-0.12	-0.16	0.02	0.14	-0.06	-0.01	0.08	-0.13	-0.11	-0.10	-0.13	0.01	0.14	-0.16	-0.06
24	-0.1	-0.17	-0.16	-0.14	0.00	-0.10	-0.13	-0.12	-0.12	-0.12	-0.06	-0.02	-0.07	-0.01	-0.03	-0.07	-0.04	0.02	0.08	0.12	-0.02	0.09	0.17	0.01	0.17	-0.17	-0.04
25	-0.1	-0.10	-0.12	-0.04	0.10	0.43	0.37	0.24	0.21	0.23	0.42	0.30	0.20	0.35	0.36	0.37	0.40	0.50	0.44	0.32	0.48	0.36	0.65	0.43	0.65	-0.12	0.28
26	0.4	0.50	0.66	1.03	0.84	0.65	0.35	0.39	0.33	0.22	0.29	0.13	0.06	0.07	0.02	0.06	0.11	0.09	0.04	-0.01	-0.04	-0.04	0.05	0.12	1.03	-0.04	0.26
27	0.2	0.25	0.18	0.19	0.19	0.17	0.15	0.12	0.13	0.14	0.12	0.14	0.11	0.10	0.11	0.18	0.21	0.21	0.24	0.17	0.20	0.15	0.17	0.13	0.25	0.10	0.16
28	0.1	0.09	0.10	0.02	0.06	0.11	0.36	0.56	0.53	0.49	0.05	0.00	-0.05	-0.05	-0.01	0.07	0.08	0.13	0.15	0.16	0.16	0.18	0.16	0.15	0.56	-0.05	0.15
29	0.1	0.15	0.10	0.08	0.09	0.15	0.16	0.17	0.18	0.19	0.19	0.23	0.19	0.20	0.20	0.20	0.25	0.21	0.17	0.15	0.16	0.18	0.16	0.19	0.25	0.08	0.17
30	0.2	0.20	0.23	0.24	0.24	0.24	0.30	0.34	0.32	0.32	0.33	0.35	0.36	0.38	0.40	0.44	0.46	0.37	0.36	0.36	0.33	0.44	0.32	0.35	0.46	0.19	0.33
Max.	**0.5**	**0.92**	**1.10**	**1.19**	**1.53**	**1.40**	**1.16**	**1.17**	**1.38**	**1.25**	**1.73**	**1.58**	**1.15**	**0.97**	**0.88**	**1.04**	**1.23**	**1.21**	**1.11**	**1.01**	**1.15**	**0.93**	**1.07**	**0.97**	**1.73**		
Min.	**-0.1**	**-0.17**	**-0.16**	**-0.21**	**-0.23**	**-0.23**	**-0.23**	**-0.24**	**-0.21**	**-0.23**	**-0.21**	**-0.19**	**-0.19**	**-0.16**	**-0.10**	**-0.08**	**-0.07**	**-0.09**	**-0.13**	**-0.13**	**-0.12**	**-0.10**	**-0.13**	**-0.15**		**-0.24**	
Avg.	**0.1**	**0.15**	**0.20**	**0.22**	**0.23**	**0.24**	**0.30**	**0.29**	**0.30**	**0.29**	**0.32**	**0.28**	**0.17**	**0.17**	**0.16**	**0.18**	**0.23**	**0.25**	**0.23**	**0.17**	**0.17**	**0.18**	**0.23**	**0.20**			**0.22**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.4	0.36	0.31	0.36	0.36	0.31	0.30	0.43	0.42	0.48	0.50	0.47	0.22	0.14	0.13	0.29	0.40	0.62	1.00	1.02	1.15	0.92	1.18	1.59	1.59	0.13	0.56
2	1.4	1.40	1.20	0.97	0.87	0.65	1.24	1.49	1.96	1.02	1.81	1.81	1.80	1.64	1.52	0.89	0.82	1.16	0.73	0.51	0.59	0.84	1.16	0.65	1.96	0.51	1.17
3	0.4	0.18	0.18	0.09	0.05	0.10	0.17	0.25	0.29	0.36	0.33	0.30	0.27	0.22	0.10	0.20	0.28	0.43	0.30	0.16	0.12	0.15	0.33	0.16	0.44	0.05	0.23
4	0.2	0.15	0.28	0.27	0.17	0.05	0.06	0.00	-0.05	-0.07	-0.01	0.07	-0.08	-0.09	-0.09	-0.08	-0.07	-0.06	-0.05	-0.01	-0.03	-0.06	-0.06	-0.06	0.28	-0.09	0.02
5	-0.1	-0.05	-0.06	-0.06	-0.06	-0.05	-0.03	0.08	0.05	0.01	0.03	0.01	0.04	0.03	0.00	-0.05	0.01	0.07	0.04	0.04	-0.01	-0.04	-0.04	-0.11	0.08	-0.11	-0.01
6	-0.2	-0.16	-0.17	-0.17	-0.18	-0.20	-0.13	-0.12	-0.18	-0.16	-0.11	-0.13	-0.15	-0.12	-0.08	-0.07	-0.06	-0.04	0.10	0.23	0.06	-0.03	-0.06	-0.07	0.23	-0.20	-0.09
7	-0.1	-0.07	-0.07	-0.07	-0.06	-0.03	0.12	0.11	0.05	0.01	0.03	0.00	-0.05	-0.05	-0.05	-0.03	-0.05	-0.05	-0.04	0.00	0.04	0.11	0.06	0.02	0.12	-0.07	0.00
8	0.0	0.02	-0.02	-0.07	-0.06	-0.08	-0.11	0.07	0.04	0.08	0.16	0.48	0.34	0.13	-0.07	-0.09	-0.01	0.00	0.05	0.06	0.29	0.23	-0.06	-0.06	0.48	-0.11	0.05
9	0.0	-0.05	-0.03	-0.06	-0.05	-0.05	-0.03	0.00	0.10	0.26	0.05	0.10	0.09	0.12	0.20	0.31	0.21	0.13	0.09	0.01	-0.05	0.01	0.00	0.06	0.31	-0.06	0.06
10	0.1	0.23	0.28	0.34	0.34	0.11	0.05	0.02	0.04	0.03	0.04	0.08	0.07	0.09	0.00	-0.02	-0.06	-0.07	-0.05	-0.08	-0.07	-0.07	-0.09	-0.09	0.34	-0.09	0.05
11	-0.1	-0.07	-0.04	-0.06	-0.04	-0.01	0.35	0.73	1.50	1.43															1.50	-0.08	0.37
12																											
13																			0.03	-0.02	0.11	0.48	0.68	1.08	1.08	-0.02	0.39
14	1.0	1.20	0.90	1.09	1.29	0.98	0.66	0.76	0.65																1.29	0.65	0.94
15	0.0	-0.04	0.01	-0.04	-0.03	0.00	0.06	-0.04	-0.11	-0.09	-0.07	-0.10	-0.12	-0.13	-0.17	-0.11	-0.11	-0.09	-0.04	-0.08	-0.03	-0.08	-0.03	0.00	0.06	-0.17	-0.06
16	-0.1	-0.07	-0.04	-0.08	-0.01	-0.02	-0.06	-0.09	-0.11	-0.06	-0.04	0.00	-0.09	-0.11	-0.06	-0.06	-0.01	0.05	0.13	0.10	0.02	-0.02	0.05	-0.01	0.13	-0.11	-0.03
17	0.0	0.10	0.04	0.10	0.03	0.06	0.01	-0.02	0.01	0.05	0.09	0.20	0.07	0.08	0.06	0.13	0.21	0.29	0.38	0.45	0.46	0.49	0.66	0.52	0.66	-0.02	0.19
18	0.7	0.63	0.39	0.65	0.58	0.53	0.36	0.56	0.70	0.57	0.53	0.36	0.09	0.12	0.09	0.21	0.43	0.65	0.48	0.90	0.48	0.40	0.61	0.85	0.90	0.09	0.49
19	0.9	0.42	0.46	0.53	0.49	0.44	0.37	0.50	0.42	0.26	0.33	0.34	0.29	0.33	0.35	0.34	0.29	0.48	0.44	0.41	0.33	0.41	0.63	0.89	0.92	0.26	0.44
20	1.5	1.08	0.37	0.41	0.47	0.61	0.57	0.32	0.23	0.06	-0.01	-0.05	0.07	0.01	0.01	-0.02	0.00	0.02	0.11	0.09	0.06	0.06	0.05	0.00	1.46	-0.05	0.25
21	0.0	0.02	-0.03	-0.03	-0.02	-0.03	-0.01	-0.05	-0.03	0.06	0.23	0.06	0.21	0.32	0.32	0.48	1.09	0.90	0.94	0.74	0.85	0.81	0.60	0.46	1.09	-0.05	0.33
22	0.3	0.41	0.48	0.33	0.31	0.11	0.22	0.28	0.12	0.25	0.34	0.30	0.29	0.25	0.29	0.04	0.09	0.20	0.21	0.14	0.16	0.00	-0.05	-0.08	0.48	-0.08	0.21
23	-0.1	-0.12	-0.07	0.02	0.05	-0.04	-0.07	-0.10	0.03	0.28	0.42	0.54	0.77	0.58	1.43	1.69	1.48	1.17	0.31	0.19	0.33	0.31	0.03	0.17	1.69	-0.12	0.39
24	0.1	0.43	0.36	0.44	0.37	0.62	0.04	-0.06	-0.04	-0.10	-0.11	-0.07	0.01	0.00	-0.06	-0.05	-0.04	0.00	0.05	0.05	0.06	0.06	-0.04	-0.10	0.62	-0.11	0.08
25	0.0	0.04	0.07	0.04	-0.01	0.02	-0.04	0.03	0.06	0.19	0.28	0.29	0.36	0.40	0.43	0.39	0.48	0.69	0.77	0.89	0.76	0.75	1.23	1.39	1.39	-0.04	0.39
26	1.4	1.13	1.14	1.01	0.60	0.76	0.85	0.44	0.45	0.62	0.31	0.36	0.39	0.51	0.15	0.19	0.39	0.26	0.12	0.11	0.18	0.26	0.25	0.25	1.40	0.11	0.51
27	0.3	0.24	0.31	0.35	0.47	0.38	0.43	0.48	0.47	0.46	0.46	0.46	0.42	0.40	0.30	0.28	0.29	0.24	0.24	0.10	0.03	0.00	0.01	-0.02	0.48	-0.02	0.29
28	0.0	-0.04	-0.11	-0.09	-0.06	-0.06	-0.06	0.06	0.11	0.37	1.01	0.83	0.78	0.88	0.29	1.08	1.16	1.17	0.81	0.64	0.40	0.27	0.24	0.28	1.17	-0.11	0.41
29	0.2	0.26	0.14	0.19	0.09	0.05	0.08	0.14	0.20	0.21	0.28	0.45	0.46	0.51	0.57	0.36	0.47	0.47	0.48	0.14	0.06	0.05	0.02	-0.04	0.57	-0.04	0.24
30	0.0	-0.05	-0.08	-0.09	-0.02	0.20	0.27	0.21	0.36	1.39	1.08	0.83	0.30	0.02	-0.12	-0.12	-0.12	-0.11	-0.16	-0.12	-0.05	-0.02	-0.15	-0.15	1.39	-0.16	0.14
31	0.0	0.14	0.22	0.18	-0.02	-0.06	0.07	-0.12	-0.11	-0.10	-0.09	-0.13	-0.11	-0.19	-0.27	-0.17	-0.11	-0.10	-0.01	0.68	0.42	0.55	0.14	0.79	0.79	-0.27	0.06
Max.	**1.5**	**1.40**	**1.20**	**1.09**	**1.29**	**0.98**	**1.24**	**1.49**	**1.96**	**1.43**	**1.81**	**1.81**	**1.80**	**1.64**	**1.52**	**1.69**	**1.48**	**1.17**	**1.00**	**1.02**	**1.15**	**0.92**	**1.23**	**1.59**	**1.96**		
Min.	**-0.2**	**-0.16**	**-0.17**	**-0.17**	**-0.18**	**-0.20**	**-0.13**	**-0.12**	**-0.18**	**-0.16**	**-0.11**	**-0.13**	**-0.15**	**-0.19**	**-0.27**	**-0.17**	**-0.12**	**-0.11**	**-0.16**	**-0.12**	**-0.07**	**-0.08**	**-0.15**	**-0.15**		**-0.27**	
Avg.	**0.3**	**0.27**	**0.22**	**0.23**	**0.20**	**0.18**	**0.20**	**0.22**	**0.26**	**0.28**	**0.29**	**0.29**	**0.25**	**0.23**	**0.19**	**0.22**	**0.28**	**0.31**	**0.27**	**0.26**	**0.24**	**0.24**	**0.26**	**0.30**			**0.27**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	66.2	67.0	68.0	69.9	70.0	72.3	71.6	75.0	75.6	77.0	76.5	76.7	78.6	79.8	78.4	78.9	80.8	81.6	82.7	81.7	82.4	82.7	82.1	81.1	82.7	66.2	76.5
2	81.3	81.0	80.7	80.7	80.6	80.0	79.8	79.8	79.3	79.9	80.3	79.5	79.9	79.7	79.4	79.9	80.5	80.1	79.9	79.6	78.8	79.0	79.4	78.4	81.3	78.4	79.9
3	78.8	78.6	78.7	78.4	77.8	77.9	78.4	77.0	76.5	76.3	76.3	76.0	76.0	76.3	76.9	76.7	77.4	77.4	77.3	77.1	77.2	76.4	76.5	77.1	78.8	76.0	77.2
4	75.9	76.2	76.5	77.2	76.9	77.2	77.2	77.7	77.9	78.6	78.6	79.6	80.7	81.9	82.4	82.5	80.4	79.1	79.9	79.0	79.5	81.6	84.9	91.2	91.2	75.9	79.7
5	89.8	87.9	84.9	83.2	83.1	83.0	83.1	81.5	80.7	80.4	79.7	80.1	79.6	79.5	80.3	79.8	79.6	80.3	80.4	81.0	81.1	80.2	80.4	80.8	89.8	79.5	81.7
6	80.9	81.3	81.2	81.5	81.6	81.5	81.2	80.9	80.5	80.1	79.5	77.7	75.2	73.2	72.4	72.6	75.8	77.6	77.8	77.9	78.3	77.7	76.8	76.1	81.6	72.4	78.3
7	75.6	75.2	76.0	75.8	75.6	75.5	74.9	74.3	74.3	73.8	74.6	74.0	73.6	74.9	75.7	75.6	75.2	74.8	75.1	75.1	74.7	74.8	74.9	75.3	76.0	73.6	75.0
8	74.8	75.5	75.3	75.1	75.9	76.4	76.5	76.2	76.2	76.3	76.7	76.9	76.8	78.0	78.0	78.8	79.5	79.8	79.9	79.9	80.8	81.1	81.7	81.5	81.7	74.8	77.8
9	81.5	80.1	76.0	72.8	70.5	69.8	67.4	65.3	61.1	59.8	56.8	55.1	48.0	43.2	42.8	45.4	71.1	72.3	65.4	55.8	46.4	50.5	52.7	62.8	81.5	42.8	61.4
10	61.5	54.4	68.3	63.4	62.0	64.3	80.8	79.8	72.6	76.9	83.5	90.6	96.8	97.3	97.6	97.7	97.9	98.1	98.6	98.6	98.8	99.0	99.0	99.2	99.2	54.4	84.9
11	99.3	99.4	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.9	100.0	100.0	100.0	100.0	99.3	99.9
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
13	99.9	99.7	99.4	99.2	99.5	100.0	99.9	99.5	99.4	99.6	99.5	99.7	99.6	99.3	99.1	99.3	99.1	98.7	98.0	96.7	97.4	97.3	97.0	96.7	100.0	96.7	98.9
14	95.8	95.6	95.0	94.6	95.1	95.0	95.1	95.2	95.5	96.0	96.4	96.3	96.6	96.2	95.9	95.8	95.7	96.2	96.2	96.3	95.9	95.6	94.9	95.7	96.6	94.6	95.7
15	96.1	95.5	95.1	94.3	94.0	94.6	95.4	95.5	95.3	95.1	94.8	95.0	94.4	93.7	94.3	94.4	94.0	94.0	93.6	93.0	92.0	91.7	91.5	91.1	96.1	91.1	94.1
16	91.7	92.4	93.4	92.9	92.1	93.0	93.9	93.5	81.3	69.9	73.4	81.4	87.7	94.0	95.1	90.4	89.8	89.9	89.7	90.2	92.6	96.6	98.2	99.4	99.4	69.9	90.1
17	99.9	99.6	99.6	99.3	99.0	98.9	98.9	99.0	99.2	99.2	99.2	99.4	99.7								86.8	86.8	86.0	84.5	99.9	84.5	96.2
18	86.8	88.0	88.0	95.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.6	99.8	100.0	100.0	100.0	100.0	100.0	99.7	99.7	99.3	99.0	99.4	100.0	86.8	98.1
19	99.0	99.1	99.2	99.7	99.8	99.5	99.4	99.4	99.4	99.1	98.7	98.8	98.6	98.0	98.6	98.7	98.9	99.1	99.2	100.0	99.9	100.0	99.9	100.0	100.0	98.0	99.3
20	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	99.2	98.8	98.4	95.6	85.7	78.2	82.0	78.1	87.5	97.4	96.1	89.2	77.7	74.9	100.0	74.9	93.3
21	78.3	80.5	80.9	82.8	87.8	91.6	85.9	82.7	89.8	92.4	93.3	92.2	93.3	94.1	93.0	91.7	92.0	91.4	89.8	90.2	90.2	89.3	91.3	89.5	94.1	78.3	88.9
22	88.1	88.7	90.5	92.1	94.7	94.9	94.9	94.3	94.1	93.9	93.7	94.0	94.2	93.0	89.2	88.3	88.4	89.8	91.2	91.7	94.5	94.7	94.0	92.9	94.9	88.1	92.3
23	91.6	91.3	91.0	90.8	90.5	89.9	89.7	89.6	89.2	89.0	88.6	88.8	88.4	88.0	88.7	88.5	87.3	87.7	88.3	88.0	87.5	87.4	86.7	86.1	91.6	86.1	88.9
24	85.3	84.4	84.7	84.3	83.9	83.5	83.0	82.1	81.2	81.4	80.7	80.6	80.5	81.2	81.5	81.5	81.5	81.5	81.0	81.2	82.5	84.3	83.5	83.8	85.3	80.5	82.5
25	83.9	83.0	86.5	87.5	86.2	83.1	92.3	93.8	94.6	95.3	94.7	93.1	92.4	94.1	94.4	96.0	95.0	91.0	86.7	85.5	87.4	88.4	89.7	90.9	96.0	83.0	90.2
26	90.8	91.8	92.8	92.0	92.6	94.2	94.6	93.2	93.8	97.6	100.0	100.0	100.0	99.9	94.2	89.2	86.1	87.3	89.8	87.6	84.6	82.9	83.3	85.4	100.0	82.9	91.8
27	83.2	82.8	85.3	85.1	87.5	90.6	92.9	91.5	92.1	92.1	96.7	99.4	100.0	100.0	100.0	95.6	84.8	81.5	85.4	80.5	80.7	82.9	85.7	86.6	100.0	80.5	89.3
28	87.8	89.3	94.9	96.4	95.2	99.8	98.4	99.9	100.0	100.0	100.0	99.2	97.8	99.7	96.2	94.7	94.7	93.7	94.9	93.8	91.3	90.0	88.8	86.1	100.0	86.1	95.1
29	85.9	84.1	82.8	76.2	78.2	71.5	71.2	80.0	86.5	91.6	91.2	91.9	88.9	86.7	90.0	91.7	96.3	96.4	98.0	99.9	100.0	100.0	100.0	100.0	100.0	71.2	89.1
30	100.0	100.0	96.6	93.9	94.0	93.0	93.7	94.5	86.8	80.9	76.1	71.6	64.7	64.4	72.9	74.7	71.7	80.2	86.8	86.7	90.0	94.4	97.7	99.8	100.0	64.4	86.0
31	97.2	92.2	87.4	88.7	86.7	85.1	87.7	85.2	92.3	98.5	95.5	100.0	100.0	100.0	98.7	98.6	97.8	94.8	93.8	96.2	91.9	84.7	83.5	83.7	100.0	83.5	92.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**61.5**	**54.4**	**68.0**	**63.4**	**62.0**	**64.3**	**67.4**	**65.3**	**61.1**	**59.8**	**56.8**	**55.1**	**48.0**	**43.2**	**42.8**	**45.4**	**71.1**	**72.3**	**65.4**	**55.8**	**46.4**	**50.5**	**52.7**	**62.8**		**42.8**	
Avg.	**87.3**	**86.9**	**87.4**	**87.2**	**87.4**	**87.6**	**88.3**	**88.3**	**87.9**	**88.1**	**88.2**	**88.6**	**88.4**	**88.0**	**87.7**	**87.2**	**87.8**	**87.7**	**88.2**	**88.0**	**87.7**	**87.7**	**87.6**	**88.1**			**87.8**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	88.9	88.4	84.7	82.8	79.9	72.3	71.2	79.2	76.7	75.0	77.0	94.1	79.5	63.5	64.9	54.6	46.7	47.6	57.2	59.4	61.9	79.4	96.8	100.0	100.0	46.7	74.2
2	100.0	100.0	100.0	97.6	95.6	94.1	91.4	95.3	97.2	96.5	95.2	95.0	92.3	90.0	91.3	91.0	91.5	91.8	92.4	91.4	89.7	90.4	92.2	91.0	100.0	89.7	93.9
3	91.5	93.9	95.8	95.2	94.9	94.3	95.1	95.8	94.0	93.6	93.7	94.1	91.8	89.3	87.6	88.9	91.7	90.1	90.3	83.4	87.0	91.5	94.4	92.1	95.8	83.4	92.1
4	85.3	85.7	87.5	88.5	85.7	83.4	85.5	85.6	83.4	83.7	84.5	84.6	85.3	82.3	70.6	62.8	63.3	69.3	74.1	82.2	60.7	50.1	51.9	48.5	88.5	48.5	76.0
5	46.1	43.3	44.8	48.2	46.8	45.8	50.2	48.1	44.8	48.0	51.0	45.4	46.8	50.7	59.1	63.8	62.0	58.9	61.5	58.8	62.8	64.9	68.4	67.4	68.4	43.3	53.6
6	66.7	68.0	66.2	63.4	64.7	64.9	63.7	65.6	66.5	70.4	71.3	69.4	70.0	71.1	71.9	71.3			74.2	74.4	73.4	75.0	70.1	73.8	75.0	63.4	69.4
7	73.9	72.0	72.6	75.3	83.1	94.7	96.0	97.9	98.0	99.0	99.1	99.8	99.8	100.0	100.0	100.0	99.9	99.4	96.7	99.9	100.0	100.0	100.0	100.0	100.0	72.0	94.0
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	100.0	99.9	100.0
9	99.7	99.5	100.0	99.8	100.0	99.7	99.7	98.5	100.0	100.0	100.0	100.0	98.0	96.9	95.6	95.6	95.8	96.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0	95.6	99.0
10	99.1	97.8	98.1	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.4	98.6	98.1	97.7	100.0	97.7	99.5
11	97.6	99.5	99.7	99.5	99.3	99.5	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.4	95.4	98.1	96.1	94.3	94.3	94.3	93.5	100.0	93.5	98.2
12	93.5	93.0	92.5	91.2	93.5	91.4	89.7	87.4	86.8	87.0	87.1	84.0	79.8	76.2	73.3	71.6	71.4	71.0	71.9	71.3	71.2	71.0	72.8	71.7	93.5	71.0	81.3
13	69.6	66.8	66.7	67.7	68.1	67.0	64.9	69.7	78.5	84.3	78.1	75.7	77.4	80.7	80.0	78.4	84.4	86.1	89.6	96.4	99.0	99.0	96.8	96.3	99.0	64.9	80.1
14	96.9	94.4	93.2	94.7	95.0	99.5	100.0	100.0	100.0	97.5	98.0	95.7	92.1	89.8	89.8	89.4	89.2	87.0	84.4	80.5	82.7	77.5	74.2	74.3	100.0	74.2	90.7
15	74.9	76.7	73.4	70.4	76.2	77.9	78.9	76.7	75.6	78.5	79.8	82.4	79.1	79.6	80.4	86.2	86.9	86.7	86.8	88.8	84.3	84.2	81.3	81.1	88.8	70.4	80.3
16	80.0	79.8	78.7	79.2	76.9	79.9	79.9	78.5	79.4	80.5	83.9	88.7	88.5	89.4	89.7	88.7	86.5	85.6	87.4	85.2	83.5	83.4	83.4	83.2	89.7	76.9	83.3
17	80.1	81.4	85.3	91.0	94.6	95.4	97.2	99.6	99.4	98.5	95.7	94.5	94.2	84.2	82.2	77.7	79.4	89.3	93.8	94.1	93.5	89.4	86.7	87.1	99.6	77.7	90.2
18	91.8	93.2	94.0	98.1	99.5	98.9	98.9	98.7	98.5	98.5	98.4	98.4	98.5	98.4	98.5	98.8	99.2	98.9	98.8	98.4	98.3	98.3	97.8	97.3	99.5	91.8	97.8
19	96.8	96.4	96.0	95.8	95.4	94.7	94.2	93.9	93.6	93.0	91.9	90.5	90.1	90.4	90.8	90.9	90.3	89.4	88.7	87.9	87.2	86.9	86.3	85.9	96.8	85.9	91.5
20	83.8	77.1	64.6	63.9	65.4	67.0	71.7	72.9	72.5	70.7	70.0	70.2	68.7	66.9	66.5	69.2	69.3	69.7	67.7	68.8	71.1	73.7	72.4	70.9	83.8	63.9	70.2
21	71.7	74.0	75.1	76.6	76.8	75.9	73.4	73.1	74.3	75.6	74.0	73.9	71.3	67.3	65.5	64.2	64.9	64.3	65.1	65.0	65.2	66.9	69.4	68.0	76.8	64.2	70.5
22	69.3	67.6	68.1	67.6	67.2	64.9	68.6	70.4	71.0	70.0	69.5	67.1	67.6	66.2	66.0	65.7	64.5	63.6	67.6	68.4	68.5	68.4	67.9	65.8	71.0	63.6	67.6
23	67.9	67.4	66.0	65.3	61.6	63.4	62.9	66.7	67.4	68.7	69.5	69.2	66.5	66.6	65.5	64.3	63.1	64.2	67.6	67.1	67.3	63.5	68.6	68.9	69.5	61.6	66.2
24	67.7	60.7	59.0	55.3	57.6	65.0	68.4	72.9	75.7	79.4	80.5	78.3	77.2	70.5	62.2	60.4	61.2	60.7	57.7	58.8	59.0	60.5	61.0	55.3	80.5	55.3	65.2
25	52.6	49.2	50.5	50.6	51.0	49.8	50.0	52.3	52.1	55.1	55.7	54.9	54.3	48.4	55.4	68.2	76.9	79.9	80.3	82.0	83.5	86.1	88.6	91.3	91.3	48.4	63.3
26	92.9	93.7	94.2	95.5	95.1	94.7	94.8	95.0	95.8	95.7	95.2	94.4	94.9	95.3	95.4	96.2	96.2	95.5	94.3	94.5	94.7	94.2	93.8	93.4	96.2	92.9	94.8
27	92.5	91.5	90.1	84.6	80.3	75.8	74.0	70.6	69.9	72.6	72.7	72.5	76.4	69.7	62.2	63.3	63.7	65.0	67.0	58.2	60.1	52.0	48.6	55.4	92.5	48.6	70.4
28	58.8	59.3	57.8	61.4	69.3	71.6	72.7	72.4	74.1	77.6	78.2	76.9	76.5	74.2	71.3	71.7	71.6	69.6	69.3	69.4	72.3	73.2	71.3	71.2	78.2	57.8	70.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**46.1**	**43.3**	**44.8**	**48.2**	**46.8**	**45.8**	**50.0**	**48.1**	**44.8**	**48.0**	**51.0**	**45.4**	**46.8**	**48.4**	**55.4**	**54.6**	**46.7**	47.6	57.2	**58.2**	**59.0**	**50.1**	**48.6**	**48.5**		**43.3**	
Avg.	**81.8**	**81.1**	**80.5**	**80.7**	**81.2**	**81.5**	**81.9**	**82.7**	**83.0**	**83.9**	**83.9**	**83.9**	**82.7**	**80.6**	**79.8**	**79.8**	**80.3**	**80.6**	**81.5**	**81.4**	**81.1**	**81.2**	**81.7**	**81.5**			**81.6**

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	72.6	72.9	72.3	71.5	70.8	72.2	72.3	72.1	71.3	71.9	70.7	68.2	66.7	64.8	63.1	61.8	60.7	60.9	62.5	61.4	62.3	65.0	65.6	64.1	72.9	60.7	67.4
2	64.5	64.5	63.2	63.3	64.5	63.1	64.6	64.9	63.9	63.5	62.7	62.8	62.8	59.5	60.0	58.5	58.7	57.7	58.3	58.6	58.5	60.6	60.0	60.6	64.9	57.7	61.6
3	59.7	59.6	61.5	59.2	60.8	61.2	62.1	62.0	65.1	64.8	64.5	63.5	61.9	61.6	61.0	60.3	62.0	62.6	61.2	60.1	59.3	60.5	62.9	65.4	65.4	59.2	61.8
4	68.0	69.8	66.6	65.5	67.7	69.8	68.6	70.1	70.6	71.2	71.7	74.2	74.0	73.3	73.1	72.3	71.0	71.1	71.6	73.9	78.2	79.2	78.9	78.3	79.2	65.5	72.0
5	77.4	77.2	77.0	76.4	75.6	76.2	75.7	75.5	75.5	73.9	71.3	69.7	68.3	68.0	66.4	65.3	65.9	64.4	65.0	65.6	66.4	67.7	68.2	67.7	77.4	64.4	70.8
6	69.5	70.3	69.9	69.2	69.5	70.0	71.3	71.2	71.6	72.1	70.6	68.3	67.4	67.4	66.6	66.2	66.4	65.7	65.5	65.4	65.6	65.7	65.6	66.0	72.1	65.4	68.2
7	67.1	68.3	67.4	67.9	68.8	69.0	70.3	70.4	69.9	70.4	68.4	66.4	65.1	63.4	61.2	58.7	58.9	59.9	60.6	65.1	69.9	71.1	74.1	75.5	75.5	58.7	67.0
8	75.2	76.3	77.5	77.7	76.9	77.9	78.6	78.2	78.6	79.4	78.8	76.3	74.0	73.5	71.8	69.6	67.5	67.2	69.4	72.3	73.8	73.8	73.7	74.0	79.4	67.2	74.7
9	74.9	75.4	76.0	76.1	76.7	79.0	79.0	78.9	79.7	78.8	77.8	76.7	75.0	73.2	71.7	70.4	69.0	69.0	70.0	72.4	73.1	73.7	73.6	73.4	79.7	69.0	74.7
10	73.9	73.4	72.6	73.1	72.4	72.7	72.6	72.0	70.4	70.5	71.7	73.4	71.7	69.4	68.6	67.1	66.1	66.1	67.1	69.8	73.5	74.7	72.8	71.4	74.7	66.1	71.1
11	72.2	73.6	72.9	74.5	75.3	75.3	74.0	75.0	76.2	76.5	75.6	74.5	72.9	70.7	69.7	68.5	67.9	67.1	66.5	68.0	69.5	68.2	66.9	68.4	76.5	66.5	71.7
12	70.3	70.4	71.1	70.5	71.0	71.6	71.1	68.5	68.6	64.7	62.5	62.6	64.8	64.3	66.4	68.3	65.1	63.9	63.4	64.9	63.1	64.1	67.3	67.9	71.6	62.5	66.9
13	68.0	67.4	67.8	67.0	67.8	66.2	68.1	67.9	68.8	71.8	71.3	70.9	69.8	68.5	67.3	65.6	64.2	63.1	61.0	63.3	65.8	65.4	64.5	64.5	71.8	61.0	66.9
14	65.3	65.6	63.8	64.5	64.1	63.3	65.0	64.4	65.7	63.1	61.0	59.5	58.8	58.3	56.6	56.4	55.5	54.9	54.4	55.8	56.9	57.8	59.9	61.1	65.7	54.4	60.5
15	62.5	65.6	66.3	67.4	68.9	70.6	71.9	73.9	73.0	71.1	69.6	67.9	65.8	63.9	61.5	59.8	57.3	57.0	59.2	62.5	64.6	65.5	65.3	66.4	73.9	57.0	65.7
16	68.4	70.0	70.5	70.9	70.5	70.1	70.0	70.7	71.0	70.2	69.0	67.5	65.4	63.6	60.9	59.1	57.7	58.1	60.0	64.0	68.3	71.0	70.8	67.7	71.0	57.7	66.9
17	65.8	65.2	65.4	66.6	66.8	66.9	67.4	69.5	69.4	70.8	69.5	69.0	67.6	66.8	65.1	61.8	57.7	56.8	58.1	62.5	65.8	66.1	64.6	62.3	70.8	56.8	65.3
18	62.1	60.8	58.5	60.4	63.9	65.2	63.7	65.4	62.2	63.8	70.0	70.9	64.5	63.3	61.1	60.7	61.0	60.1	61.4	66.0	69.2	70.0	69.7	71.0	71.0	58.5	64.4
19	70.8	68.9	70.2	70.5	70.1	70.8	70.4	71.2	69.9	68.5	70.2	70.1	66.3	63.5	61.9	60.5	58.8	56.3	57.7	57.3	54.9	55.2	55.9	57.1	71.2	54.9	64.5
20	55.6	53.5	56.2	58.8	61.5	58.3	56.6	57.0	55.7	53.8	51.1	48.6	64.4	93.6	96.6	96.7	96.9	97.1	97.6	97.3	96.7	90.4	83.8	80.1	97.6	48.6	73.2
21	91.0	98.1	99.3	99.4	99.4	98.2	98.1	98.2	98.3	98.7	95.5	95.1	95.5	95.3	94.7	93.2	91.3	90.2	91.5	93.6	93.8	93.5	93.0	91.1	99.4	90.2	95.3
22	90.4	90.1	89.3	88.9	87.6	88.7	88.3	88.0	87.5	87.2	87.5	88.4	89.1	89.0	84.7	82.8	82.7	81.0	79.7	77.7	78.5	80.0	82.7	83.9	90.4	77.7	85.6
23	82.6	82.4	82.6	82.8	82.4	80.4	81.6	83.9	83.2	81.0	82.1	82.3	81.5	80.7	81.3	81.3	81.7	80.2	78.9	80.0	80.0	79.4	75.6	71.7	83.9	71.7	80.8
24	70.0	72.0	70.1	70.5	70.1	71.8	73.2	73.0	72.7	70.6	68.8	68.5	68.7	67.1	67.3	68.7	69.6	68.7	66.3	64.7	62.0	60.9	60.3	59.2	73.2	59.2	68.1
25	53.5	52.2	52.9	56.9	72.0	79.9	82.8	87.9	89.8	89.9	89.7	90.1	91.0	91.2	91.5	92.5	92.3	95.1	95.1	94.8	94.6	94.1	92.5	86.7	95.1	52.2	83.7
26	80.1	80.8	78.9	82.8	87.7	89.0	93.5	96.6	96.1	94.6	93.7	91.9	91.2	90.0	89.2	88.7	86.7	87.7	87.1	90.3	93.5	93.2	93.0	93.1	96.6	78.9	89.6
27	93.2	94.0	92.7	92.0	89.5	82.7	80.0	79.4	80.3	80.0	77.3	78.5	77.0	77.2	78.3	70.4	69.6	69.9	64.2	65.7	65.1	69.5	72.3	74.4	94.0	64.2	78.0
28	72.4	73.4	73.1	71.0	69.0	66.6	70.2	71.7	72.3	73.6	71.3	72.2	72.0	71.0	71.3	71.7	72.1	70.8	72.1	71.5	71.3	70.5	70.1	70.5	73.6	66.6	71.3
29	70.4	70.6	67.7	65.4	64.5	64.0	66.9	67.2	69.5	69.1	69.1	68.5	68.5	65.1	63.7	65.2	66.2	64.6	66.4	69.9	64.5	63.4	64.2	60.7	70.6	60.7	66.5
30	62.3	57.6	58.6	61.4	61.1	64.6	65.2	67.0	60.3	58.3	57.9	56.5	57.9	58.7	57.3	49.0	49.2	52.2	50.0	47.9	46.6	41.5	37.9	38.4	67.0	37.9	54.9
31	40.5	40.8	43.3	42.8	39.8	31.9	27.2	26.2	26.4	26.8	28.5	31.6	30.8	31.4	34.6	43.4	48.0	50.2	53.4	51.8	54.5	55.4	46.8	47.3	55.4	26.2	39.7
Max.	**93.2**	**98.1**	**99.3**	**99.4**	**99.4**	**98.2**	**98.1**	**98.2**	**98.3**	**98.7**	**95.5**	**95.1**	**95.5**	**95.3**	**96.6**	**96.7**	**96.9**	**97.1**	**97.6**	**97.3**	**96.7**	**94.1**	**93.0**	**93.1**	**99.4**		
Min.	**40.5**	**40.8**	**43.3**	**42.8**	**39.8**	**31.9**	**27.2**	**26.2**	**26.4**	**26.8**	**28.5**	**31.6**	**30.8**	**31.4**	**34.6**	**43.4**	**48.0**	50.2	50.0	**47.9**	**46.6**	**41.5**	**37.9**	**38.4**		**26.2**	
Avg.	**70.0**	**70.3**	**70.2**	**70.5**	**71.2**	**71.2**	**71.6**	**72.2**	**72.0**	**71.6**	**71.0**	**70.5**	**70.0**	**69.9**	**69.2**	**68.2**	**67.7**	**67.4**	**67.6**	**68.8**	**69.7**	**69.9**	**69.4**	**69.0**			**70.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	59.0	68.6	71.9	72.1	72.0	72.3	74.0	75.0	69.3	65.1	61.6	59.4	64.8	63.6	61.8	59.4	53.1	52.8	55.5	56.7	58.7	64.2	70.7	65.7	75.0	52.8	64.5
2	57.3	62.5	68.0	69.6	64.7	55.6	55.9	67.2	80.9	84.3	84.4	81.3	80.0	78.3	78.4	78.3	79.5	80.9	80.7	81.5	80.9	80.1	79.1	76.4	84.4	55.6	74.4
3	75.4	78.9	80.1	78.9	78.7	81.0	84.6	83.3	82.9	82.5	85.4	83.8	80.1	76.2	77.5	74.7	76.6	77.5	79.1	81.2	79.4	75.9	76.6	84.9	85.4	74.7	79.8
4	78.0	77.5	78.6	81.4	80.1	80.2	79.3	79.8	75.8	71.2	69.7	68.4	66.3	65.4	62.9	62.9	64.9	64.0	65.8	66.4	65.0	62.6	59.3	57.6	81.4	57.6	70.1
5	50.1	48.9	50.4	52.8	50.8	58.1	65.9	64.3	65.1	65.2	63.1	64.9	66.1	65.3	65.4	65.0	59.7	60.1	83.6	83.5	90.8	88.6	90.7	91.5	91.5	48.9	67.1
6	92.5	93.9	91.2	85.3	88.2	83.2	82.1	79.6	81.7	80.8	84.3	77.2	68.6	64.8	58.0	54.7	53.0	56.3	70.6	87.9	96.4	89.1	80.2	75.2	96.4	53.0	78.1
7	78.9	80.2	86.7	96.6	99.7	100.0	100.0	100.0	100.0	100.0	99.5	95.6	94.5	96.8	94.2	86.9	80.3	79.3	80.5	85.7	89.4	90.7	82.4	82.5	100.0	78.9	90.9
8	82.7	84.3	84.8	83.3	80.6	77.2	75.4	70.5	68.9	71.5	69.7	65.9	64.0	63.7	64.6	66.4	65.1	66.4	73.2	68.6	74.5	81.7	81.7	95.0	95.0	63.7	74.2
9	98.9	97.2	97.6	98.9	94.4	92.6	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	96.4	98.1	99.8	96.2	92.8	94.6	99.5	100.0	100.0	92.6	98.0
10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.0	86.6	80.3	82.0	80.8	80.8	76.9	80.1	83.5	87.4	88.7	87.5	100.0	76.9	92.0
11	87.9	93.7	94.5	91.6	88.6	86.4	88.5	89.5	84.9	77.9	78.9	78.6	76.3	77.4	76.1	73.9	75.3	76.3	75.9	76.9	82.1	85.2	84.7	82.3	94.5	73.9	82.6
12	81.1	82.0	81.2	75.5	73.9	73.7	75.1	77.2	75.3	72.0	69.4	68.5	66.9	67.2	66.2	62.7	58.6	59.0	53.1	52.7	52.7	58.3	67.3	71.2	82.0	52.7	68.4
13	76.5	80.0	83.5	85.5	88.1	90.3	92.0	94.1	96.1	97.4	96.9	97.7	95.8	90.2	84.2	80.0	74.4	69.7	71.6	81.6	90.5	99.3	99.8	100.0	100.0	69.7	88.1
14	100.0	99.6	96.7	95.2	96.5	95.2	98.3	100.0	100.0	100.0	100.0	100.0	100.0	94.3	82.1	80.3	83.0	79.9	79.5	84.4	86.9	92.2	97.0	99.6	100.0	79.5	93.4
15	99.8	95.7	85.5	91.2	89.8	96.2	96.4	94.3	93.5	85.4	87.8	77.6	82.4	80.1	79.2	79.2	73.4	71.2	76.1	80.0	77.4	84.1	88.4	86.8	99.8	71.2	85.5
16	87.1	86.4	87.2	90.4	89.8	91.3	87.2	87.5	87.0	85.0	82.2	80.4	82.9	82.4	89.1	98.9	100.0	99.5	96.2	94.5	94.6	96.8	100.0	100.0	100.0	80.4	90.7
17	100.0	99.4	97.5	97.2	87.2	85.1	73.2	73.7	82.8	87.8	97.2	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	73.2	95.0
18	100.0	100.0	100.0	100.0	100.0	96.8	92.7	94.3	93.7	93.1	93.2	92.1	87.4	86.5	89.4	94.5	96.5	99.9	99.8	98.8	100.0	100.0	100.0	100.0	100.0	86.5	96.2
19	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	95.0	95.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	98.2	96.8	100.0	100.0	95.0	99.4
20	100.0	100.0	98.8	99.9	95.5	97.1	100.0	97.4	92.7	96.1	89.6	78.8	77.4	75.6	73.2	73.8	75.4	75.2	80.3	76.1	77.8	77.5	77.8	76.5	100.0	73.2	85.9
21	74.0	72.2	71.7	69.6	70.8	67.2	65.3	68.6	66.3	65.8	68.9	71.4	71.1	68.0	66.9	72.5	72.4	75.2	74.8	80.2	82.5	80.8	79.4	79.9	82.5	65.3	72.3
22	77.3	75.1	75.4	78.5	73.5	73.3	68.0	62.5	68.2	72.9	77.5	68.7	62.5	61.4	64.7	70.2	67.7	73.2	77.7	84.5	81.3	80.6	79.7	82.9	84.5	61.4	73.2
23	79.1	76.9	77.3	72.0	76.9	79.2	79.5	77.5	77.9	77.0	70.2	65.5	59.9	63.9	67.8	65.7	70.9	82.9	76.7	89.2	87.3	79.4	88.6	94.4	94.4	59.9	76.5
24	93.9	91.6	91.6	90.2	88.6	86.8	88.5	88.1	88.0	82.1	78.3	69.3	61.4	60.7	68.3	72.7	64.4	62.8	63.1	71.3	79.2	84.5	90.7	93.3	93.9	60.7	79.6
25	91.0	90.1	85.5	88.2	84.2	82.6	82.4	83.2	80.2	78.3	73.7	70.2	72.3	85.0	79.0	75.2	74.6	74.3	71.3	77.3	79.5	82.3	76.2	75.2	91.0	70.2	79.7
26	72.6	74.7	73.8	71.4	72.8	67.4	65.5	71.4	78.0	71.6	67.6	55.5	45.9	42.9	36.3	40.7	41.4	39.7	41.1	42.9	42.3	51.3	57.0	57.9	78.0	36.3	57.6
27	59.8	59.0	54.6	54.9	64.3	67.4	69.4	71.1	68.3	70.7	70.4	66.0	59.8	57.5	60.2	62.9	60.9	64.6	79.5	83.9	90.9	94.0	96.3	99.7	99.7	54.6	70.3
28	100.0	98.0	97.9	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.3	81.3	73.2	68.1	68.4	65.4	71.0	65.6	72.2	78.7	82.9	85.6	100.0	65.4	87.6
29	88.2	88.0	85.8	86.9	86.3	87.2	86.8	84.8	77.0	68.5	65.2	64.9	61.0	53.8	50.0	49.8	48.4	45.4	47.9	51.1	56.3	60.7	61.4	66.5	88.2	45.4	67.6
30	77.7	87.7	94.3	92.1	89.6	84.7	82.0	84.1	81.1	77.5	59.5	50.4	45.0	38.3	35.1	33.7	32.3	37.2	44.5	48.2	55.3	58.6	58.0	56.3	94.3	32.3	62.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**50.1**	**48.9**	**50.4**	**52.8**	**50.8**	**55.6**	**55.9**	**62.5**	**65.1**	**65.1**	**59.5**	**50.4**	**45.0**	**38.3**	**35.1**	**33.7**	**32.3**	**37.2**	**41.1**	**42.9**	**42.3**	**51.3**	**57.0**	**56.3**		**32.3**	
Avg.	**84.0**	**84.7**	**84.7**	**85.0**	**84.2**	**83.6**	**83.5**	**84.0**	**83.9**	**82.7**	**81.5**	**78.4**	**75.9**	**74.1**	**72.8**	**72.7**	**71.6**	**72.3**	**74.9**	**77.6**	**80.0**	**81.9**	**83.0**	**84.1**			**80.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	56.6	55.1	56.1	63.8	68.3	72.1	77.5	74.7	79.1	75.7	73.5	71.2	67.5	64.8				83.9	76.9	86.1	88.4	86.1	87.9	89.6	89.6	55.1	74.0
2	89.5	91.0	87.9	89.3	88.9	97.0	97.7	99.1	92.9	97.3	89.4	91.7	79.1	81.6	87.3	68.1	63.1	70.8	69.1	69.0	74.0	78.0	81.0	81.1	99.1	63.1	83.9
3	79.7	79.1	78.8	79.0	77.4	77.6	77.9	79.9	78.6	74.4	70.3	68.7	64.6	56.4	51.5	47.4	46.6	65.6	74.1	69.5	70.3	77.2	71.7	75.5	79.9	46.6	70.5
4	84.4	88.0	89.1	85.6	86.2	90.1	89.7	89.6	89.4	85.8	82.6	80.0	75.0	73.0	68.0	63.7	61.8	62.4	63.4	74.7	74.7	74.6	78.2	80.6	90.1	61.8	78.8
5	83.5	93.9	97.4	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	93.1	85.8	80.2	73.3	69.9	71.9	73.3	77.9	80.0	83.2	83.7	100.0	69.9	89.4
6	79.7	77.1	76.0	78.4	80.2	82.4	83.3	80.4	77.1	72.3	67.9	68.6	65.4	60.0	59.1	61.1	60.5	62.2	66.6	70.1	73.1	76.0	80.1	82.5	83.3	59.1	72.5
7	85.1	84.0	83.1	85.7	88.4	88.5	86.6	87.0	82.3	77.3	73.9	72.1	69.2	64.6	60.3	55.5	57.9	59.8	61.2	79.2	82.1	85.0	86.2	88.4	88.5	55.5	76.8
8	90.1	96.9	96.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	90.6	84.3	77.9	74.0	71.1	69.7	70.5	71.5	73.0	76.6	80.0	85.7	100.0	69.7	87.7
9	89.5	91.3	95.5	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.2	91.6	85.6	84.0	81.1	82.8	91.9	97.2	100.0	100.0	81.1	95.2
10	100.0	98.9	99.4	99.6	98.0	94.0	90.6	89.5	91.9	93.6	86.9	80.9	75.9	72.7	65.0	63.0	61.7	65.5	69.0	70.6	70.4	78.8	84.1	86.8	100.0	61.7	82.8
11	90.8	87.2	81.6	79.9	79.7	80.2	84.2	82.7	78.0	70.6	64.1	60.4	58.1	55.4	54.4	53.2	52.8	55.5	59.4	63.2	69.6	78.6	85.3	89.2	90.8	52.8	71.4
12	91.6	91.9	90.3	90.4	91.0	91.4	91.5	89.7	84.3	78.1	68.8	65.4	65.6	61.5	61.4	65.3	63.0	64.2	67.9	70.0	78.4	84.1	89.6	91.4	91.9	61.4	78.6
13	91.9	92.7	99.1	99.7	99.3	99.8	100.0	100.0	100.0	100.0	100.0	97.8	99.5	99.9	99.0	99.3	98.7	98.4	97.2	93.9	98.5	97.6	97.7	94.8	100.0	91.9	98.1
14	83.7	80.3	78.9	78.6	75.8	73.4	74.3	74.2	72.8	68.9	63.1	61.3	57.4	67.5	82.7	84.0	90.2	89.6	84.5	83.4	85.3	87.5	91.7	91.6	91.7	57.4	78.4
15	92.8	92.9	88.5	91.3	93.1	92.4	94.9	90.8	87.1	84.2	81.8	75.9	72.2	65.8	73.0	73.7	69.9	68.5	69.2	67.7	63.9	72.4	77.7	83.2	94.9	63.9	80.1
16	87.1	87.0	84.5	84.1	84.6	84.8	83.1	79.0	74.3	66.6	55.3	48.3	46.3	43.2	44.9	49.9	53.0	56.1	60.8	65.7	79.9	93.6	98.1	97.8	98.1	43.2	71.2
17	98.2	97.6	99.8	100.0	100.0	100.0	100.0	100.0	99.3	96.4	83.3	65.7	58.7	58.4	63.9	62.1	62.1	65.0	66.2	72.2	77.9	84.4	87.2	90.9	100.0	58.4	82.9
18	93.5	92.6	91.3	90.8	89.8	89.9	85.7	86.0	83.5	73.1	66.5	60.8	57.4	54.5	54.2	53.6	51.9	49.6	49.0	50.2	55.0	57.6	59.4	60.7	93.5	49.0	69.0
19	60.5	64.3	71.2	75.4	80.8	84.9	85.3	81.4	74.6	71.7	66.5	63.1	62.4	63.2	61.3	60.7	56.3	56.3	59.7	64.5	67.7	70.5	76.5	77.7	85.3	56.3	69.0
20	81.6	81.4	80.8	78.4	80.1	82.4	74.3	76.8	77.9	71.7	69.9	67.0	65.7	64.3	64.9	64.4	61.3	57.8	55.2	57.4	63.8	67.9	78.4	82.1	82.4	55.2	71.1
21	81.2	71.8	75.1	70.1	72.3	68.1	64.3	63.7	61.6	55.9	49.2	46.8	44.0	47.2	45.1	41.1	45.8	43.3	44.7	47.1	50.3	56.2	60.0	61.3	81.2	41.1	56.9
22	63.4	62.6	64.2	68.2	68.7	64.6	65.1	63.2	65.1	58.9	77.0	69.9	63.3	49.5	55.2	63.4	51.1	41.9	42.1	60.7	69.3	69.5	66.9	67.7	77.0	41.9	62.1
23	73.2	75.6	67.9	66.5	68.2	69.4	67.3	65.9	63.7	63.7	62.0	61.6	64.2	64.7	65.9	66.8	73.5	71.3	75.8	80.7	84.5	83.5	88.4	90.4	90.4	61.6	71.4
24	95.9	98.1	100.0	99.9	99.0	99.8	98.0	96.5	94.3	90.6	88.8	86.0	87.5	80.0	79.4	80.0	89.4	88.2	86.4	77.5	79.5	84.1	88.5	92.4	100.0	77.5	90.0
25	95.3	92.0	92.5	88.9	87.2	85.8	85.2	83.9	86.1	90.2	93.9	96.5	99.8	100.0	100.0	100.0	100.0	100.0	99.8	98.4	97.8	99.3	98.9	100.0	100.0	83.9	94.6
26	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	91.7	88.6	86.7	92.5	93.9	95.1	92.3	87.9	85.2	89.2	92.1	100.0	85.2	95.5
27	95.2	97.9	100.0	100.0	100.0	100.0	100.0	100.0	98.7	91.1	80.8	76.3	73.8	70.3	72.7	68.9	70.5	70.5	71.2	72.6	75.2	79.9	91.0	96.8	100.0	68.9	85.6
28	95.8	97.7	97.9	98.1	96.4	99.3	97.4	92.5	89.5	81.1	75.7	68.3	65.1	69.3	58.7	62.2	71.4	70.8	76.3	74.6	77.7	82.7	89.3	94.3	99.3	58.7	82.6
29	86.6	86.4	85.2	84.3	82.0	88.5	93.1	92.3	87.6	79.7	72.1	59.6	48.5	46.2	52.2	50.7	52.3	52.4	52.4	55.9	62.2	69.3	78.8	80.8	93.1	46.2	70.8
30	79.4	77.1	77.7	81.7	83.7	85.9	86.4	88.0	86.2	82.6	74.2	69.7	66.4	64.5	63.7	60.5	63.1	70.5	76.5	81.8	85.0	86.5	91.3	95.8	95.8	60.5	78.3
31	100.0	100.0	99.8	91.9	87.9	87.1	87.7	88.2	83.9	86.6	81.6	67.0	70.5	77.8	78.8	74.4	73.7	71.2	71.4	72.1	78.4	82.3	85.8	89.5	100.0	67.0	82.8
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**98.4**	**98.5**	**99.3**	**98.9**	**100.0**	**100.0**		
Min.	**56.6**	**55.1**	**56.1**	**63.8**	**68.2**	**64.6**	**64.3**	**63.2**	**61.6**	**55.9**	**49.2**	**46.8**	**44.0**	**43.2**	**44.9**	**41.1**	**45.8**	41.9	42.1	**47.1**	**50.3**	**56.2**	**59.4**	**60.7**		**41.1**	
Avg.	**86.3**	**86.5**	**86.6**	**87.0**	**87.3**	**88.0**	**87.8**	**86.9**	**85.2**	**81.9**	**78.0**	**74.1**	**71.3**	**69.2**	**69.2**	**67.7**	**67.7**	**68.7**	**69.9**	**72.5**	**75.9**	**79.9**	**83.8**	**86.3**			**79.1**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	88.0	86.6	88.5	89.5	91.1	90.4	90.1	86.9	83.2	78.2	75.7	73.7	77.2	76.0	81.6	76.6	73.8	76.9	78.4	81.1	79.4	81.7	88.3	91.7	91.7	73.7	82.7
2	92.3	92.7	90.6	91.5	93.6	95.5	93.2	92.0	89.3	88.2	85.7	80.3	76.4	71.7	66.1	59.0	57.2	57.6	57.6	59.9	62.2	72.5	81.2	82.4	95.5	57.2	78.7
3	86.7	87.5	86.2	90.0	91.2	93.2	92.8	93.2	93.1	91.8	85.8	81.6	75.7	71.4	67.2	65.0	58.8	56.2	61.5	58.1	61.1	62.5	67.1	73.1	93.2	56.2	77.1
4	78.9	83.2	87.4	90.2	89.7	91.0	89.0	88.5	88.6	94.8	98.8	99.9	100.0	98.1	92.6	89.3	94.4	92.6	94.9	100.0	100.0	100.0	100.0	100.0	100.0	78.9	93.4
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	92.0	82.9	77.9	78.0	77.7	75.2	73.9	77.4	80.4	79.8	80.8	83.7	85.0	100.0	73.9	89.3
6	87.2	87.3	85.7	85.0	85.6	83.6	86.3	85.3	80.2	73.0	62.9	54.6	49.8	60.5	59.2	66.2	67.9	70.2	70.5	72.7	80.0	86.3	88.7	91.3	91.3	49.8	75.8
7	91.7	85.0	82.1	89.5	92.2	75.5	71.1	68.7	61.0	52.4	43.4	44.3	44.5	53.9	59.8	62.9	68.6	71.0	71.8	73.9	74.2	78.1	82.8	88.8	92.2	43.4	70.3
8	91.0	86.5	85.7	86.7	85.6	84.8	83.2	79.4	76.4	74.8	70.6	65.1	56.8	66.4	64.3	66.6	66.5	65.4	74.1	77.6	76.9	78.9	86.3	91.4	91.4	56.8	76.7
9	93.4	94.0	96.5	96.8	99.0	97.5	90.7	89.2	90.2	88.4	79.5	72.4	68.3	65.8	69.2	66.2	66.0	77.6	80.2	76.9	78.2	87.7	91.7	88.7	99.0	65.8	83.5
10	86.3	84.4	85.3	85.4	85.3	84.7	85.3	85.1	78.6	72.6	68.2	58.1	51.8	47.8	44.7	40.9	38.7	38.2	38.3	39.0	43.5	67.1	80.6	94.8	94.8	38.2	66.0
11	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.4	90.0	79.1	73.1	66.1	66.3	65.8	69.3	75.0	78.9	83.9	93.6	98.4	100.0	100.0	65.8	88.9
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.9	87.9	84.2	80.9	82.8	82.1	88.9	93.9	100.0	80.9	95.7
13	95.5	94.0	90.3	86.0	86.7	91.4	97.3	95.7	87.3	83.8	77.2	72.9	68.1	72.0	74.4	70.2	65.6	70.1	86.3	86.8	84.8	87.6	86.6	86.6	97.3	65.6	83.2
14	86.1	86.7	88.8	92.0	88.4	86.8	87.4	86.7	80.6	77.0	72.6	67.4	61.8	61.7	66.0	68.6	80.7	78.1	71.2	70.5	72.1	74.8	75.2	76.3	92.0	61.7	77.4
15	80.5	81.3	81.2	84.5	87.9	88.7	86.8	84.5	79.6	74.5	66.0	59.5	54.4	49.9	44.7	39.5	36.3	35.8	35.6	36.1	36.8	40.8	47.2	56.5	88.7	35.6	61.2
16	60.3	61.7	65.9	68.8	72.0	75.7	75.7	72.5	69.4	66.3	63.8	59.6	54.3	51.4	51.3	50.9	51.4	51.8	54.1	61.6	70.0	75.6	81.3	81.3	81.3	50.9	64.4
17	89.4	94.4	99.3	97.9	98.6	98.1	98.9	100.0	99.9	95.3	92.7	87.0	86.8	88.5	86.6	75.0	72.0	70.5	88.1	96.2	92.1	90.9	95.6	99.0	100.0	70.5	91.4
18	98.8	99.6	100.0	99.1	99.1	100.0	100.0	99.8	98.3	93.9	86.2	80.4	75.1	76.1	71.1	63.4	62.1	74.7	64.9	82.8	75.7	82.8	87.6	87.6	100.0	62.1	85.8
19	91.6	89.9	97.6	95.5	90.8	92.7	94.4	95.2	93.5	88.5	82.9	74.9	68.1	63.2	57.7	52.9	49.2	46.6	44.3	45.0	47.9	49.9	56.4	61.8	97.6	44.3	72.1
20	68.0	70.8	72.2	74.1	76.1	77.2	75.1	71.3	66.6	62.0	55.8	51.2	47.0	44.0	41.6	38.9	32.7	33.1	36.6	37.0	40.2	48.0	54.4	62.0	77.2	32.7	55.7
21	64.1	60.0	61.9	67.4	70.4	72.6	75.4	74.3	71.4	68.8	64.9	61.1	59.9	56.1	50.7	48.7	45.0	45.6	45.5	44.9	61.6	77.7	80.0	81.6	81.6	44.9	62.9
22	85.7	86.5	96.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.7	98.7
23	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.9	92.3	94.6	100.0	92.3	99.3
24	97.2	96.5	93.9	94.3	95.1	93.1	91.5	88.2	85.6	87.5	90.8	89.3	86.1	90.9	90.7	90.2	89.5	89.3	90.8	88.2	85.8	87.0	88.9	89.3	97.2	85.6	90.4
25	91.4	91.3	92.9	93.3	94.7	95.8	94.2	93.5	91.3	86.5	80.9	80.6	82.1	85.9	83.0	78.5	75.0	75.7	76.9	77.8	79.3	80.8	84.2	88.3	95.8	75.0	85.6
26	88.5	90.9	92.5	93.0	91.4	92.1	91.1	86.9	83.7	79.0	73.1	70.4	66.7	62.3	58.2	54.5	51.8	51.0	49.9	52.8	55.0	64.0	76.6	84.1	93.0	49.9	73.3
27	85.3	86.0	86.2	87.5	86.4	87.1	87.6	85.3	78.4	68.8	64.7	62.3	63.3	58.4	52.6	49.0	47.0	49.6	46.3	51.5	57.7	64.6	74.4	79.8	87.6	46.3	69.2
28	82.3	86.7	92.3	93.4	96.0	96.4	97.0	97.5	99.4	99.7	96.6	94.1	97.6	98.6	91.7	85.4	82.2	83.9	83.3	79.4	75.7	77.1	78.5	77.4	99.7	75.7	89.3
29	76.3	76.8	80.7	80.4	79.4	80.8	82.5	80.2	77.8	71.8	71.5	68.0	65.7	61.2	62.7	64.6	64.6	63.9	69.2	70.8	75.7	80.9	84.2	89.1	89.1	61.2	74.1
30	90.0	91.9	97.0	97.8	99.9	100.0	100.0	100.0	98.7	96.2	89.1	86.4	83.6	78.5	78.3	75.5	74.8	73.5	76.0	76.1	81.1	90.4	92.8	93.6	100.0	73.5	88.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**60.3**	**60.0**	**61.9**	**67.4**	**70.4**	**72.6**	**71.1**	**68.7**	**61.0**	**52.4**	**43.4**	**44.3**	**44.5**	**44.0**	**41.6**	**38.9**	**32.7**	**33.1**	**35.6**	**36.1**	**36.8**	**40.8**	**47.2**	**56.5**		**32.7**	
Avg.	**87.4**	**87.7**	**89.2**	**90.3**	**90.9**	**90.8**	**90.6**	**89.3**	**86.7**	**83.8**	**79.9**	**75.9**	**72.8**	**72.0**	**70.3**	**68.1**	**67.0**	**67.7**	**69.4**	**71.2**	**73.1**	**78.0**	**82.5**	**85.7**			**80.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	95.6	94.8	94.2	91.2	92.4	97.7	98.6	97.1	99.8	93.1	80.5	74.7	69.5	67.1	70.9	69.1	66.8	66.6	67.7	69.9	73.3	76.3	78.6	87.9	99.8	66.6	82.2
2	89.2	91.5	93.9	96.0	96.7	98.6	93.6	94.7	88.6	78.5	73.6	67.7	62.1	61.1	62.7	58.7	61.4	60.3	60.7	61.2	65.5	74.1	81.9	87.5	98.6	58.7	77.5
3	90.3	91.6	95.4	94.7	99.9	91.1	86.4	82.4	77.6	78.5	78.4	77.8	74.1	70.9	68.4	64.6	60.6	60.1	62.3	80.8	84.8	84.3	86.7	84.9	99.9	60.1	80.3
4	85.3	89.9	98.9	100.0	100.0	100.0	100.0	100.0	99.0	94.8	91.6	85.5	82.6	85.8	83.3	81.3	77.3	82.1	88.3	89.8	88.4	87.8	89.1	90.7	100.0	77.3	90.5
5	95.1	99.7	100.0	99.6	97.1	92.2	89.2	90.2	87.9	83.4	81.3	77.0	74.4	77.8	74.6	70.0	72.7	84.7	80.1	93.7	100.0	100.0	100.0	100.0	100.0	70.0	88.4
6	100.0	96.6	92.3	91.6	87.3	87.1	87.8	93.0	95.6	95.9	90.6	92.0	90.2	85.3	79.9	77.8	72.5	68.2	65.6	62.8	61.3	64.3	80.1	78.4	100.0	61.3	83.2
7	76.8	71.4	73.8	68.7	67.8	72.2	75.2	69.4	61.3	65.3	59.6	58.6	60.1	56.1	54.8	53.3	51.0	51.3	51.5	59.4	66.9	75.9	80.9	84.0	84.0	51.0	65.2
8	89.5	92.5	91.2	94.2	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	95.2	86.4	84.4	81.6	84.8	85.6	86.0	100.0	81.6	94.6
9	85.5	84.2	85.3	87.9	90.3	89.5	87.5	82.6	81.2	77.9	78.6	77.2	73.5	69.6	77.1	66.6	63.2	66.9	66.9	70.8	72.3	75.0	82.7	86.8	90.3	63.2	78.3
10	84.3	84.1	86.3	88.7	83.7	82.9	73.4	67.7	72.4	69.7	70.3	66.5	58.9	64.7	72.6	71.1	66.7	71.1	76.8	80.5	86.3	92.7	93.2	93.8	93.8	58.9	77.4
11	95.1	93.6	89.8	88.4	91.5	88.2	89.8	92.4	93.7	83.6	73.9	64.6	59.5	57.5	55.9	56.1	57.0	54.1	52.1	52.9	57.2	66.9	73.2	76.3	95.1	52.1	73.5
12	76.4	79.8	82.8	81.1	76.7	82.0	86.3	88.8	86.2	77.1	70.3	65.5	65.3	61.8	58.7	70.2	84.7	99.3	100.0	100.0	99.9	98.1	99.9	95.6	100.0	58.7	82.8
13	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.1	94.9	90.8	94.2	95.2	98.2	96.0	99.7	100.0	90.8	98.6
14	95.8	99.2	98.6	97.1	98.9	99.9	100.0	100.0	100.0	98.1	92.3	88.7	84.8	86.0	82.6	84.5	88.1	90.0	91.3	93.2	97.9	97.7	99.7	100.0	100.0	82.6	94.4
15	100.0	100.0	99.9	99.9	98.6	99.2	99.8	100.0	100.0	99.4	98.7	98.9	90.4	83.5	74.2	72.8	71.1	72.3	72.5	71.7	74.7	78.8	83.0	83.4	100.0	71.1	88.5
16	84.8	88.0	89.7	93.5	98.9	99.8	100.0	100.0	99.0	94.8	91.7	83.5	75.2	67.8	69.9	66.1	66.8	64.4	62.3	62.5	67.5	74.1	78.1	88.5	100.0	62.3	82.0
17	94.5	89.6	85.2	88.8	90.6	91.3	90.9	89.6	86.3	81.3	74.2	68.1	62.1	59.7	60.5	59.3	55.5	48.6	61.6	72.8	81.4	85.6	91.2	96.4	96.4	48.6	77.7
18	95.9	92.7	91.7	93.5	93.9	97.2	99.1	98.0	91.9	86.7	81.5	78.8	73.7	68.0	68.8	79.3	81.6	87.0	90.6	90.9	87.7	83.0	83.0	82.4	99.1	68.0	86.5
19	85.5	88.9	93.0	93.8	96.1	93.9	93.7	91.7	86.5	83.4	81.2	78.9	73.0	64.3	63.5	65.8	65.6	63.5	70.7	68.2	68.9	71.2	70.9	67.4	96.1	63.5	78.3
20	69.7	73.5	73.5	74.3	73.5	77.5	76.4	79.1	80.2	80.0	75.3	79.2	80.0	77.4	72.4	76.2	73.8	68.1	66.1	69.6	71.3	80.9	91.6	96.2	96.2	66.1	76.5
21	98.1	96.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.3	92.3	88.2	86.1	86.1	88.4	94.5	99.3	100.0	100.0	100.0	100.0	100.0	86.1	97.0
22	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	99.1	99.9	99.1	98.1	100.0	100.0	100.0	100.0	100.0	100.0	98.1	99.8
23	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	97.0	96.9	99.1	100.0	99.2	100.0	96.9	99.6
24	100.0	100.0	99.2	96.2	93.5	95.2	94.1	95.2	98.0	100.0	92.5	85.2	86.6	91.6	88.2	86.7	83.6	83.2	87.7	87.5	85.2	79.7	76.5	75.9	100.0	75.9	90.1
25	73.2	73.0	72.6	73.1	72.3	69.4	71.7	69.1	68.9	64.5	63.4	62.5	59.2	58.4	58.4	58.8	59.6	61.0	64.1	63.9	64.0	67.0	72.1	73.9	73.9	58.4	66.4
26	75.9	72.7	69.1	72.3	85.9	84.6	84.5	81.6	81.7	80.9	77.1	67.1	60.6	54.6	50.1	48.9	56.1	52.8	52.3	53.0	56.1	60.7	66.0	67.7	85.9	48.9	67.2
27	66.9	68.3	72.9	72.9	75.7	77.3	79.3	81.6	83.7	80.2	73.3	72.8	70.8	65.8	63.8	59.5	57.5	54.4	58.5	68.6	76.7	78.5	86.2	79.8	86.2	54.4	71.9
28	77.1	80.5	77.7	82.6	96.5	99.6	99.3	100.0	100.0	96.8	91.4	83.9	78.5	72.5	67.4	64.1	63.8	63.3	64.2	66.7	70.0	81.6	87.3	99.0	100.0	63.3	81.8
29	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	85.4	73.4	69.5	66.7	64.6	64.8	60.9	62.9	64.8	70.8	71.7	80.7	81.8	100.0	60.9	84.1
30	84.1	83.5	86.9	88.5	92.6	98.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.2	92.0	88.4	83.4	80.0	82.0	86.2	87.9	90.6	94.1	97.9	100.0	80.0	92.2
31	99.1	97.7	98.9	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	90.7	86.1	82.3	84.4	87.7	89.3	87.7	88.9	89.8	100.0	82.3	95.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**66.9**	**68.3**	**69.1**	**68.7**	**67.8**	**69.4**	**71.7**	**67.7**	**61.3**	**64.5**	**59.6**	**58.6**	**58.9**	**54.6**	**50.1**	**48.9**	**51.0**	**48.6**	**51.5**	**52.9**	**56.1**	**60.7**	**66.0**	**67.4**		**48.6**	
Avg.	**89.1**	**89.5**	**90.1**	**90.6**	**91.9**	**92.4**	**92.1**	**91.7**	**91.0**	**88.5**	**85.2**	**81.9**	**78.6**	**76.3**	**74.9**	**73.9**	**73.4**	**73.4**	**74.6**	**77.5**	**80.0**	**82.8**	**86.4**	**88.1**			**83.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	90.9	92.5	93.2	92.9	93.5	95.5	99.3	100.0	97.8	95.3	93.8	90.1	85.9	85.4	84.5	87.9	87.2	87.2	90.5	89.2	89.7	90.8	93.7	92.3	100.0	84.5	91.6
2	93.0	94.2	95.6	94.2	95.8	94.8	91.4	92.6	97.5	98.9	95.8	99.0	99.9	100.0	100.0	98.6	98.3	99.7	99.9	100.0	97.8	95.2	96.9	97.2	100.0	91.4	96.9
3	97.5	99.5	99.5	97.7	99.0	99.5	99.4	100.0	100.0	99.9	99.4	98.2	99.3	95.3	93.6	91.0	87.0	87.3	89.5	93.2	98.2	100.0	100.0	100.0	100.0	87.0	96.8
4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	98.6	98.2	97.8	100.0	97.8	99.8
5	96.2	95.5	96.4	96.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	100.0	95.5	99.3
6	100.0	100.0	99.3	97.8	95.4	95.0	98.2	97.1	95.8	88.8	84.1	81.8	77.0	73.2	69.5	68.5	70.7	66.7	68.0	69.5	73.3	81.5	84.1	91.3	100.0	66.7	84.4
7	96.2	95.9	97.8	98.6	97.9	96.7	99.8	100.0	96.3	90.5	82.1	75.9	73.7	68.5	65.0	64.2	64.1	63.4	61.0	64.2	67.4	73.6	81.3	84.9	100.0	61.0	81.6
8	88.8	91.3	92.4	93.5	97.7	99.3	100.0	100.0	100.0	100.0	92.1	81.9	74.6	67.0	63.6	59.1	56.8	57.5	57.2	57.9	63.6	73.2	79.3	84.1	100.0	56.8	80.5
9	85.9	87.3	86.6	87.0	85.7	88.1	91.8	91.6	86.7	80.8	78.9	72.9	65.5	60.5	55.7	47.5	49.9	57.9	60.3	63.5	63.8	67.2	64.9	58.6	91.8	47.5	72.4
10	65.5	73.8	71.7	68.0	69.4	68.2	68.8	69.9	70.8	68.8	68.4	64.6	57.5	55.1	50.9	45.6	44.8	45.0	45.5	43.2	49.3	51.9	56.6	55.8	73.8	43.2	59.5
11	61.2	55.3	56.2	60.6	58.8	63.8	66.8	69.7	72.9	72.2	70.0	66.1	62.3	65.8	63.8	67.3	68.7	61.1	61.0	70.2	74.1	75.0	73.4	75.4	75.4	55.3	66.3
12	80.1	77.7	83.8	88.2	93.9	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.9	91.8	89.1	81.4	72.3	71.1	67.8	70.3	75.8	81.9	86.9	100.0	67.8	87.8
13	87.5	85.8	87.8	87.3	87.8	88.4	87.9	90.6	93.7	92.7	87.0	78.4	73.3	69.2	69.7	69.1	69.0	67.4	69.8	71.2	80.8	89.7	85.7	88.3	93.7	67.4	81.6
14	97.2	100.0	99.7	97.3	88.7	90.9	89.8	86.7	92.2	96.9	98.8	99.7	99.9	99.8	98.4	93.3	98.8	97.9	97.4	99.0	94.4	99.2	100.0	100.0	100.0	86.7	96.5
15	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.0	95.2	91.7	89.4	91.2	96.9	98.6	99.7	100.0	100.0	100.0	100.0	100.0	89.4	98.4
16	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	86.6	75.9	71.4	65.4	62.9	57.9	56.5	72.7	77.8	69.9	85.7	87.8	87.5	100.0	56.5	85.7
17	87.3	89.8	93.0	96.5	100.0	90.8	88.6	91.8	91.6	88.2	79.7	74.2	75.3	74.6	75.1	74.5	76.3	71.3	70.7	73.8	80.0	84.6	85.9	87.2	100.0	70.7	83.4
18	87.1	83.4	80.6	80.5	87.5	95.0	92.1	92.6	94.8	93.7	92.5	93.0	92.3	93.5	84.2	79.2	79.4	76.8	78.7	79.5	79.8	80.5	78.6	75.8	95.0	75.8	85.5
19	74.5	73.4	73.5	78.3	75.4	76.9	76.5	77.0	78.0	76.4	75.2	72.4	70.0	70.9	72.0	72.9	71.6	75.1	80.0	86.3	94.1	97.1	99.6	100.0	100.0	70.0	79.0
20	99.6	96.4	97.1	99.7	100.0	100.0	99.0	97.3	97.5	100.0	100.0	100.0	98.3	93.2	89.6	84.3	80.3	77.8	78.1	81.2	84.1	89.3	91.6	92.1	100.0	77.8	92.8
21	91.5	90.4	88.0	90.3	94.3	95.7	96.6	97.3	100.0	100.0	99.9	99.8	99.9	100.0	99.7	98.9	95.0	96.3	94.4	92.8	93.2	95.8	97.6	98.5	100.0	88.0	96.1
22	96.6	94.1	94.9	97.2	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.6	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.1	99.2
23	100.0	100.0	100.0	98.2	92.3	89.1	91.7	95.8	98.9	100.0	99.9	97.6	95.5	93.5	89.5	86.9	84.5	82.3	81.9	82.9	87.1	88.7	88.9	89.4	100.0	81.9	92.3
24	88.8	88.7	88.1	89.6	92.7	94.0	95.7	97.5	96.9	93.5	89.1	85.4	81.0	77.8	75.2	76.3	83.6	71.0	84.2	92.0	99.0	100.0	100.0	99.9	100.0	71.0	89.2
25	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	83.8	78.5	67.7	67.1	68.4	73.5	83.2	89.2	88.8	83.3	100.0	67.1	90.9
26	79.5	80.9	81.7	79.9	81.1	81.2	81.4	81.6	83.8	82.0	78.8	74.4	73.1	72.9	72.5	74.6	75.2	70.4	65.8	72.9	78.1	81.4	83.6	85.7	85.7	65.8	78.0
27	83.0	81.6	82.2	75.9	78.0	83.0	82.4	82.1	75.6	75.5	67.6	59.6	55.8	51.3	50.7	53.3	52.3	58.7	59.0	59.8	66.0	68.0	65.4	64.9	83.0	50.7	68.0
28	66.1	74.4	75.1	73.7	68.0	65.9	66.0	66.4	67.4	63.2	59.9	55.5	53.7	46.6	45.2	46.8	46.0	46.3	44.9	47.7	58.4	70.4	79.9	84.3	84.3	44.9	61.3
29	87.7	90.1	91.2	93.9	96.6	100.0	100.0	100.0	100.0	100.0	99.6	95.4	92.2	82.7	74.9	71.8	69.9	69.8	71.6	70.1	75.0	85.0	89.7	92.7	100.0	69.8	87.5
30	93.4	95.0	97.3	98.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.9	79.6	76.7	73.7	69.0	67.7	64.8	63.2	65.4	77.2	85.5	89.1	91.7	100.0	63.2	86.7
31	93.4	95.9	95.9	97.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.6	76.1	69.2	64.8	72.9	73.0	76.8	71.1	79.9	83.5	88.1	87.6	100.0	64.8	88.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**61.2**	**55.3**	**56.2**	**60.6**	**58.8**	**63.8**	**66.0**	**66.4**	**67.4**	**63.2**	**59.9**	**55.5**	**53.7**	**46.6**	**45.2**	**45.6**	**44.8**	45.0	44.9	**43.2**	**49.3**	**51.9**	**56.6**	**55.8**		**43.2**	
Avg.	**89.3**	**89.8**	**90.3**	**90.6**	**91.2**	**92.0**	**92.4**	**92.8**	**93.2**	**92.2**	**90.0**	**86.9**	**83.9**	**81.0**	**78.0**	**76.3**	**75.7**	**74.8**	**76.1**	**77.9**	**81.5**	**85.7**	**87.4**	**88.1**			**85.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	77.8	74.6	78.4	87.8	92.3	94.4	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.7	85.0	82.6	82.9	86.2	91.7	97.5	100.0	99.9	100.0	74.6	92.6
2	99.9	99.8	98.8	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.6	91.0	82.3	74.3	71.8	74.7	82.6	88.3	90.5	94.2	96.7	99.5	100.0	100.0	71.8	93.4
3	100.0	97.4	97.8	97.9	96.4	95.3	93.9	92.4								95.0	95.7	95.3	94.3	94.2	92.2	88.7	84.5	81.4	100.0	81.4	93.7
4	83.0	81.4	79.2	79.9	84.3	82.7	82.9	78.2	75.6	72.2	68.5	68.2	64.8	60.4	59.1	54.2	54.7	70.8	64.2	74.4	82.3	82.6	85.1	82.8	85.1	54.2	73.8
5	79.6	82.8	83.7	82.5	84.2	84.6	82.2	81.4	80.3	82.1	78.2	68.8	68.2	69.0	67.7	63.8	80.0	87.8	87.5	85.5	84.8	85.5	88.0	88.3	88.3	63.8	80.3
6	88.9	93.1	96.5	93.8	93.4	91.4	90.6	96.7	97.0	96.3	93.4	92.6	93.3	91.5	81.8	79.0	75.5	71.1	74.3	80.5	82.5	92.0	97.6	98.7	98.7	71.1	89.2
7	99.0	99.2	99.1	97.4	95.8	94.2	92.8	92.4	90.4	88.1	88.8	90.7	90.1	89.2	87.4	83.6	83.6	84.2	85.1	94.8	96.3	96.7	96.7	96.8	99.2	83.6	92.2
8	97.7	98.3	98.7	98.9	99.0	99.1	98.3	96.2	94.8	96.6	97.7	98.9	99.1	99.2	99.3	99.1	99.2	99.0	98.8	98.5	97.8	98.5	99.2	99.3	99.3	94.8	98.4
9	99.3	99.2	98.5	95.7	94.6	92.3	91.6	95.3	97.7	95.9	96.1	94.9	96.2	96.5	96.1	93.9	90.7	85.1	85.1	93.4	95.6	95.6	96.2	98.2	99.3	85.1	94.7
10	95.9	96.8	96.7	95.5	98.2	98.4	99.1	98.5	96.8	94.5	94.0	91.9	88.9	88.9	88.9	87.9	88.3	82.3	79.3	77.7	78.2	81.0	81.7	82.2	99.1	77.7	90.1
11	82.7	82.9	83.6	84.5	84.7	86.9	87.4	88.5	87.6	86.7	84.9	89.7	85.6	89.9	96.8	97.0	96.2	94.5	97.0	97.3	96.7	95.0	94.4	96.0	97.3	82.7	90.3
12	96.4	97.2	97.5	98.2	98.6	99.1	99.3	99.3	99.4	99.4	98.2	92.6	76.7	68.4	65.8	65.2	69.1	83.8	90.1	89.0	92.5	93.3	92.7	92.8	99.4	65.2	89.8
13	91.7	96.5	98.7	98.9	98.2	99.1	98.6	96.8	98.7	98.4	96.1	96.7	97.0	91.0	89.1	94.8	95.9	93.8	93.4	93.6	96.4	98.9	99.2	95.3	99.2	89.1	96.1
14	97.1	98.2	99.1	99.6	99.7	99.8	99.9	99.8	99.2	96.6	92.8	92.9	87.6	82.6	72.9	67.9	70.8	72.9	77.0	87.1	88.8	93.4	94.8	97.5	99.9	67.9	90.3
15	95.6	96.7	95.9	95.5	96.5	96.6	96.7	98.3	100.0	100.0	96.2	88.1	79.1	77.3	73.9	74.7	71.1	63.8	61.9	69.7	77.3	80.8	85.2	92.3	100.0	61.9	86.0
16	97.5	98.8	98.4	94.8	97.5	96.8	96.9	92.4	94.2	97.9	94.4	82.9	75.4	70.9	65.2	66.2	62.6	63.4	64.0	75.3	90.9	91.5	87.4	85.9	98.8	62.6	85.0
17	85.6	81.2	81.5	89.1	91.0	96.1	94.4	95.1	95.1	98.4	98.2	94.6	91.9	89.0	85.0	83.2	84.3	84.6	84.6	88.4	94.6	96.6	94.3	93.0	98.4	81.2	90.4
18	89.3	90.8	93.2	94.4	92.8	92.8	93.3	91.0	89.2	89.1	88.1	86.4	83.2	91.8	94.6	97.7	98.5	98.5	98.7	98.3	98.5	98.9	99.0	99.1	99.1	83.2	93.6
19	98.5	96.4	96.1	94.8	92.9	95.2	95.9	96.3	95.7	97.0	95.2	95.2	95.9	96.1		87.4	90.7	94.5	93.5	95.1	97.1	97.4	97.3	97.5	98.5	87.4	95.3
20	98.1	98.3	98.3	98.7	98.9	98.7	98.8	98.9	99.0	98.4	96.4	96.9	98.4	97.3	92.0	88.0	84.7	84.7	88.0	92.3	94.9	93.3	94.0	96.2	99.0	84.7	95.1
21	98.5	99.1	97.3	98.5	99.0	99.2	97.7	97.0	97.2	97.3	95.5	91.0	88.2	84.7	79.3	81.4	80.0	74.2	82.4	82.8	89.8	91.9	91.8	92.7	99.2	74.2	91.1
22	93.8	95.5	94.3	97.3	94.3	96.2	97.4	97.4	91.2	86.8	90.1	89.3	85.5	79.6	73.2	74.1	72.6	73.1	83.1	92.7	97.4	98.4	96.3	98.2	98.4	72.6	89.5
23	99.4	99.2	98.9	97.6	93.9	89.8	90.1	90.0	89.1	92.1	93.4	91.0	89.4	86.8	87.6	87.7	95.3	98.8	99.1	99.2	98.8	97.8	97.8	97.1	99.4	86.8	94.2
24	96.1	96.1	98.3	97.4	92.3	90.7	91.4	93.5	98.2	99.3	97.8	96.3	92.9	91.2	89.2	91.3	87.3	87.9	91.5	91.7	98.6	99.7	99.4	98.3	99.7	87.3	94.4
25	97.1	93.0	96.3	99.3	99.7	99.7	99.6	98.7	97.6	96.8	91.6	92.1	92.4	91.2	90.6	89.1	92.5	92.4	91.9	96.1	95.3	93.6	95.0	96.6	99.7	89.1	94.9
26	97.5	98.2	99.3	99.8	99.9	100.0	100.0	100.0	100.0	99.4	93.3	84.3	82.6	87.0	90.2	90.0	94.0	88.8	88.9	94.2	95.4	94.8	95.3	94.5	100.0	82.6	94.5
27	95.9	95.7	92.9	94.3	91.0	87.6	90.0	93.1	92.9	98.2	98.8	99.7	98.8	96.6	89.2	85.9	92.4	83.2	85.8	87.3	84.5	85.1	88.3	94.3	99.7	83.2	91.7
28	94.7	95.7	97.4	98.3	98.8	98.6	98.2	96.9	95.7	96.3	96.8	95.8	96.6	96.4	96.6	96.3	96.2	92.6	92.7	96.0	95.6	90.1	84.1	89.7	98.8	84.1	95.3
29	96.4	96.0	95.8	94.6	95.5	96.9	96.3	95.3	92.9	92.2	89.8	85.9	86.2	83.9	84.6	86.8	89.1	94.5	98.0	99.1	98.1	95.6	96.6	94.5	99.1	83.9	93.1
30	92.8	93.9	96.0	98.1	99.6	99.7	100.0	100.0	100.0	100.0	100.0	99.9	98.0	94.9	94.2	96.7	96.2	96.8	98.3	97.1	98.2	99.8	99.2	99.7	100.0	92.8	97.9
Max.	**100.0**	**99.8**	**99.3**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.1**	**99.2**	**99.0**	**99.1**	**99.2**	**98.8**	**99.8**	**100.0**	**100.0**	**100.0**		
Min.	**77.8**	**74.6**	**78.4**	**79.9**	**84.2**	**82.7**	**82.2**	**78.2**	**75.6**	**72.2**	**68.5**	**68.2**	**64.8**	**60.4**	**59.1**	**54.2**	**54.7**	**63.4**	**61.9**	**69.7**	**77.3**	**80.8**	**81.7**	**81.4**		**54.2**	
Avg.	**93.9**	**94.1**	**94.5**	**95.1**	**95.1**	**95.1**	**95.0**	**95.0**	**94.7**	**94.7**	**93.3**	**91.2**	**88.7**	**87.0**	**84.4**	**84.1**	**84.9**	**85.3**	**86.7**	**89.9**	**92.5**	**93.4**	**93.7**	**94.3**			**91.5**

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	99.7	99.2	99.7	99.0	97.8	95.8	92.7	92.4	93.8	94.7	97.5	97.8	95.6	91.3	86.9	86.2	83.7	85.9	95.1	93.1	94.9	90.3	91.7	92.3	99.7	83.7	93.6
2	94.1	93.8	94.3	95.7	95.9	97.1	97.5	97.7	98.5	99.4	99.3	98.9	97.6	93.7	90.6	90.0	86.7	80.4	77.8	85.5	86.4	90.4	95.2	98.9	99.4	77.8	93.1
3	99.9	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.4	86.3	81.1	83.0	81.0	79.1	73.5	71.9	78.9	81.1	80.3	77.6	73.2	100.0	71.9	89.2
4	71.1	65.0	64.4	71.7	84.0	88.2	90.3	84.0	82.9	94.3	98.8	99.6	99.3	97.0	95.3	95.4	96.1	98.3	99.2	99.8	100.0	100.0	100.0	100.0	100.0	64.4	90.6
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	97.3	96.2	87.7	84.2	88.9	92.7	86.9	85.5	100.0	84.2	96.6
6	88.4	92.1	94.8	98.7	100.0	100.0	99.8	99.1	98.6	98.4	98.6	94.4	91.3	88.3	85.9	85.9	84.3	84.0	87.8	87.2	92.3	95.5	97.7	98.6	100.0	84.0	93.4
7	98.4	98.3	96.9	97.2	96.8	97.4	96.9	95.9	93.1	89.8	87.1	84.8	81.2	77.7	76.1	74.4	74.6	73.8	75.0	79.2	80.7	82.0	85.2	85.7	98.4	73.8	86.6
8	86.9	89.3	88.6	90.3	92.8	93.1	95.3	95.5	95.3	96.6	95.9	92.1	83.3	77.8	73.6	69.4	66.3	69.0	73.8	80.0	81.9	79.5	82.9	85.9	96.6	66.3	84.8
9	82.5	83.2	76.2	78.3	72.2	70.8	72.8	66.5	71.6	78.2	72.1	67.5	69.9	69.6	70.8	68.4	68.6	66.9	70.6	73.5	78.5	82.6	86.4	83.3	86.4	66.5	74.2
10	83.7	85.3	87.5	93.0	97.0	89.3	91.4	97.1	99.4	100.0	99.4	95.2	88.5	81.2	73.5	75.5	80.6	82.2	80.3	86.3	86.5	90.4	93.0	93.5	100.0	73.5	88.7
11	95.6	97.3	97.7	97.6	97.4	92.5	90.2	90.6	84.2	81.0	80.3	78.1	79.3	74.3	72.8	74.8	80.3	86.4	86.3	89.4	85.4	84.4	83.1	84.8	97.7	72.8	86.0
12	83.2	80.6	82.7	84.8	81.8	79.8	83.0	85.0	80.0	80.1	78.0	73.1	73.6	71.2	69.6	68.6	67.4	66.2	68.0	73.5	81.5	86.8	87.6	89.5	89.5	66.2	78.1
13	90.0	88.3	89.2	91.0	90.2	92.4	92.4	88.6	88.2	89.3	88.4	88.6	85.9	82.1	79.7	76.5	75.9	76.9	81.1	86.4	87.9	87.4	89.0	93.0	93.0	75.9	86.6
14	98.6	98.4	98.0	97.9	97.7	97.3	97.1	96.7	95.7	95.7	96.0	97.3	97.4	98.0	98.0	97.8	98.1	97.7	97.1	87.3	84.5	87.4	88.8	90.3	98.6	84.5	95.4
15	88.6	87.6	86.0	86.4	87.1	88.2	87.9	88.4	87.8	88.2	85.9	82.3	85.7	83.5	81.5	68.4	67.1	64.8	64.8	67.5	72.7	74.3	76.9	79.0	88.6	64.8	80.4
16	75.2	77.6	76.8	75.7	79.1	86.0	88.8	91.8	94.3	95.6	96.3	95.2	93.5	93.5	93.1	90.5	89.9	91.4	95.7	97.8	97.4	97.0	96.9	96.8	97.8	75.2	90.2
17	96.8	96.7	96.7	96.6	96.5	96.5	96.5	96.4	96.4	96.5	96.5	96.5	96.7	97.0	97.4	97.6	97.7	97.7	97.7	97.7	97.6	97.5	97.4	97.2	97.7	96.4	97.0
18	97.4	97.4	97.2	97.3	97.2	97.2	97.0	97.0	97.0	96.9	97.0	97.3	97.4	97.6	97.6	97.5	97.5	97.4	97.3	97.2	97.2	97.2	96.8	96.9	97.6	96.8	97.2
19	96.3	96.7	96.7	96.4	95.5	96.1	96.2	96.7	96.7	96.9	97.1	96.5	86.4	80.1	79.4	77.7	77.3	79.4	80.9	88.9	87.4	84.3	83.8	86.0	97.1	77.3	89.6
20	84.4	88.4	86.8	84.2	82.7	80.8	85.1	84.3	80.8	79.8	75.3	68.6	67.7	64.3	67.2	71.2	72.4	70.9	71.6	68.8	68.4	65.9	69.4	74.0	88.4	64.3	75.5
21	73.8	70.8	68.7	68.1	70.4	70.4	68.8	72.1	71.5	71.3	70.2	64.9	63.7	61.6	62.6	58.3	53.7	49.4	49.8	50.0	55.3	59.7	61.5	61.2	73.8	49.4	63.7
22	64.6	69.3	73.9	81.7	78.4	82.2	86.9	85.3	85.9	82.2	86.5	90.3	84.4	84.1	82.7	82.9	84.8	88.7	87.3	88.3	87.8	94.1	97.9	95.5	97.9	64.6	84.4
23	95.5	93.3	89.4	88.9	90.3	92.3	94.5	97.1	97.8	98.5	96.6	97.2	98.2	98.6	97.9	98.6	98.4	98.4	97.9	96.4	96.3	96.6	90.7	75.0	98.6	75.0	94.8
24	69.4	70.5	87.9	97.8	98.2	97.8	97.8	97.7	97.7	97.7	98.4	99.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	69.4	96.2
25	100.0	100.0	100.0	99.8	95.9	90.2	96.5	96.1	94.8	94.7	94.1	94.3	93.7	97.4	98.5	98.9	99.3	99.8	99.9	99.7	99.8	100.0	100.0	100.0	100.0	90.2	97.6
26	100.0	100.0	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	96.8	96.9	97.0	94.5	91.4	90.2	91.2	91.0	89.0	89.0	100.0	89.0	96.9
27	90.8	91.1	94.4	97.7	97.2	95.5	95.6	93.2	98.9	94.8	90.8	89.0	87.6	86.2	87.8	94.9	96.7	94.2	94.1	91.6	90.7	89.8	87.8	84.8	98.9	84.8	92.3
28	90.0	93.1	91.3	90.3	88.9	86.8	87.8	92.0	99.0	98.7	100.0	100.0	100.0	100.0	99.6	99.1	99.2	97.7	99.6	100.0	100.0	99.9	99.4	94.7	100.0	86.8	96.1
29	92.9	93.6	93.3	94.0	94.3	93.6	91.8	88.2	84.5	76.7	72.3	71.9	74.1	74.1	79.4	79.1	77.6	80.1	81.4	83.8	82.8	94.5	97.5	96.0	97.5	71.9	85.3
30	93.4	88.5	88.6	94.3	94.7	93.6	96.1	96.9	98.6	100.0	100.0	100.0	100.0	100.0	99.8	98.9	99.3	97.0	93.3	91.8	94.4	94.3	96.6	96.7	100.0	88.5	96.1
31	98.2	97.5	98.6	96.1	95.2	92.5	97.4	99.1	98.7	98.4	97.9	98.0	97.2	96.1	94.9	95.1	96.7	96.4	97.4	100.0	95.5	90.8	97.9	99.8	100.0	90.8	96.9
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**64.6**	**65.0**	**64.4**	**68.1**	**70.4**	**70.4**	**68.8**	**66.5**	**71.5**	**71.3**	**70.2**	**64.9**	**63.7**	**61.6**	**62.6**	**58.3**	**53.7**	**49.4**	**49.8**	**50.0**	**55.3**	**59.7**	**61.5**	**61.2**		**49.4**	
Avg.	**89.7**	**89.7**	**90.2**	**91.6**	**91.8**	**91.4**	**92.4**	**92.3**	**92.3**	**92.4**	**91.8**	**90.4**	**88.9**	**87.0**	**86.2**	**85.4**	**85.3**	**85.0**	**85.5**	**86.9**	**87.9**	**88.9**	**89.8**	**89.6**			**89.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	99.9	95.5	98.2	100.0	98.7	97.0	95.5	98.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.1	98.3	98.5	98.3	98.1	98.2	100.0	95.5	98.8
2	98.7	98.7	98.4	97.4	93.7	93.3	93.6	96.0	97.1	94.5	92.4	90.9	92.6	94.1	98.1	98.6	97.6	97.9	98.0	97.8	97.8	97.8	97.7	97.7	98.7	90.9	96.3
3	97.7	97.9	97.7	97.7	97.8	97.8	97.7	97.5	97.6	97.4	97.3	97.8	97.7	97.8	96.7	95.6	98.1	94.5	96.6	97.8	95.7	93.9	86.2	83.3	98.1	83.3	96.1
4	90.9	98.9	99.5	99.3	99.2	99.6	99.7	99.5	99.5	99.2	99.0	99.2	99.6	99.1	99.2	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.9	99.2
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	95.0	92.0	100.0	92.0	99.4
6	88.8	87.0	85.9	85.6	83.3	82.6	81.6	76.1	76.4	75.2	72.9	74.4	75.0	73.1	72.0	72.7	73.8	77.1	80.5	83.3	86.2	92.0	98.0	99.9	99.9	72.0	81.4
7	100.0	100.0	100.0	96.8	94.3	95.4	97.2	99.0	97.2	97.8	98.4	96.1	91.2	89.7	95.0	99.2	95.7	95.2	99.7	100.0	99.3	99.9	100.0	99.9	100.0	89.7	97.4
8	100.0	100.0	100.0	100.0	99.6	98.8	99.0	95.2	93.5	98.1	97.7	95.3	96.9	99.6	99.8	96.2	88.4	83.6	89.9	91.7	93.2	98.8	100.0	100.0	100.0	83.6	96.5
9	99.6	100.0	99.8	99.0	98.5	97.4	94.6	94.8	92.7	93.1	91.8	85.9	85.9	82.6	80.5	79.1	78.6	80.2	87.4	86.1	83.6	82.2	80.3	79.2	100.0	78.6	88.9
10	78.1	84.3	87.0	86.6	87.0	87.0	90.5	92.6	89.3	87.3	91.1	93.2	90.6	88.3	88.6	91.0	91.0	92.0	90.4	93.0	96.7	95.3	97.0	98.1	98.1	78.1	90.3
11	98.1	98.6	98.5	97.6	97.3	98.2	97.3	96.6	95.9	95.9	95.9	96.0	95.9	95.8	95.9	95.8	95.3	95.7	95.7	95.4	95.2	94.4	95.2	95.7	98.6	94.4	96.3
12	95.7	95.7	95.9	95.6	90.8	82.4	92.3	96.6	97.8	96.8	95.8	94.4	96.9	97.1	97.4	97.3	96.7	96.9	97.1	97.5	97.6	98.1	98.6	98.8	98.8	82.4	95.8
13	98.9	98.9	99.0	99.0	99.1	99.2	98.9	99.2	99.4	99.4	98.8	96.5	99.6	99.8	99.8	99.0	99.3	99.5	99.4	99.3	99.3	99.4	99.5	99.6	99.8	96.5	99.2
14	99.4	99.5	99.4	99.4	99.4	99.4	99.2	99.0	98.7	98.8	98.7	98.8	99.0	98.9	98.9	98.8	98.4	98.5	98.0	97.6	97.6	96.3	90.9	92.3	99.5	90.9	98.1
15	98.0	98.4	96.3	88.4	89.7	90.8	90.7	90.7	94.8	94.5	94.6	93.8	93.1	92.5	92.4	92.2	91.9	91.8	91.9	91.5	91.7	91.4	91.0	91.5	98.4	88.4	92.7
16	91.9	91.8	91.9	91.7	91.9	91.7	91.5	91.3	91.2	91.2	91.1	91.2	91.3	91.4	91.5	91.4	91.3	91.5	91.5	91.5	91.2	90.9	90.8	90.5	91.9	90.5	91.4
17	89.9	89.9	89.8	89.7	89.7	89.7	89.4	89.3	89.3	89.3	89.0	88.9	89.0	89.1	89.2	89.2	88.8	89.1	88.1	88.0	87.7	87.7	87.1	86.8	89.9	86.8	88.9
18	87.1	87.3	87.2	87.1	87.2	86.6	87.3	87.1	87.3	88.2	88.1	87.8	87.8	88.5	88.5	88.8	89.1	89.5	89.5	89.3	87.0	83.7	80.4	77.2	89.5	77.2	87.0
19	74.7	72.7	69.7	64.8	60.7	58.9	57.2	50.5	62.9	88.4	94.7	95.8	95.9	89.6	83.1	81.6	85.5	89.7	89.3	92.7	99.4	99.1	99.2	99.4	99.4	50.5	81.5
20	99.5	99.5	99.5	99.9	99.9	99.7	94.3	90.4	86.6	84.1	84.7	87.3	88.8	89.9	95.5	92.8	86.7	83.1	87.7	95.4	95.3	91.8	86.6	85.9	99.9	83.1	91.9
21	87.1	87.8	94.4	94.5	95.0	99.5	99.8	99.8	99.4	98.2	97.4	96.9	97.3	98.6	98.9	96.0	85.8	85.0	86.2	86.4	85.1	85.5	90.0	87.2	99.8	85.0	93.0
22	84.9	86.3	87.2	88.8	98.3	100.0	99.7	99.9	99.9	100.0	100.0	99.6	99.2	99.3	99.7	99.7	98.1	96.5	94.1	93.5	97.3	99.0	99.5	100.0	100.0	84.9	96.7
23	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	99.4	99.3	99.2	99.5	99.0	97.8	98.2	97.3	96.5	95.8	98.1	99.6	98.9	97.9	97.7	97.4	100.0	95.8	98.8
24	97.9	97.6	97.1	96.9	96.7	97.3	96.8	96.7	96.7	96.7	96.4	97.0	97.8	98.5	99.0	99.3	99.5	99.4	98.2	93.5	90.8	86.7	87.0	89.1	99.5	86.7	95.9
25	95.4	97.3	98.7	97.1	90.2	83.2	77.5	75.5	80.6	79.4	73.0	73.7	83.6	77.1	73.8	72.2	69.2	65.5	67.4	67.3	64.6	63.2	66.1	67.7	98.7	63.2	77.5
26	72.0	71.9	68.5	72.0	69.7	65.9	70.2	76.7	79.7	90.1	94.3	98.2	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	65.9	88.7
27	100.0	99.6	98.5	97.3	96.8	95.5	94.6	91.2	90.2	86.3	83.3	79.6	79.1	76.5	75.9	73.9	74.7	76.6	78.3	79.0	81.4	85.3	86.8	88.1	100.0	73.9	86.2
28	90.5	90.8	91.5	95.4	96.3	97.7	98.2	97.5	97.0	98.7	100.0	100.0	100.0	100.0	100.0	98.5	96.0	93.8	91.8	92.0	92.4	91.4	93.0	93.5	100.0	90.5	95.7
29	93.1	93.0	91.9	92.4	91.3	92.4	93.3	92.5	90.3	88.3	87.2	85.7	82.9	80.8	78.1	77.0	77.0	77.5	79.6	79.3	77.7	74.4	73.4	73.1	93.3	73.1	84.3
30	71.0	68.5	67.6	66.9	69.0	67.9	65.4	63.7	63.2	65.8	68.2	62.7	58.3	58.0	58.8	58.5	57.5	55.7	55.1	55.8	55.4	54.0	56.8	58.7	71.0	54.0	61.8
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**71.0**	**68.5**	**67.6**	**64.8**	**60.7**	**58.9**	**57.2**	**50.5**	**62.9**	**65.8**	**68.2**	**62.7**	**58.3**	**58.0**	**58.8**	**58.5**	**57.5**	**55.7**	**55.1**	**55.8**	**55.4**	**54.0**	**56.8**	**58.7**		**50.5**	
Avg.	**92.6**	**92.9**	**93.0**	**92.6**	**92.0**	**91.5**	**91.4**	**91.1**	**91.4**	**92.4**	**92.4**	**91.9**	**92.1**	**91.4**	**91.5**	**91.1**	**90.0**	**89.7**	**90.6**	**91.1**	**91.2**	**90.9**	**90.7**	**90.7**			**91.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Relative Humidity (%)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	59.4	56.0	61.8	62.7	62.1	62.9	62.7	63.4	73.5	71.7	64.4	67.3	84.2	87.8	88.0	87.5	91.2	87.4	85.5	83.7	82.0	70.7	74.1	80.2	91.2	56.0	73.8
2	82.4	83.9	87.9	76.8	70.2	72.1	81.4	76.6	77.0	69.6	71.5	72.8	70.1	67.0	54.5	61.5	63.9	69.5	69.6	69.4	69.5	54.4	41.3	40.3	87.9	40.3	68.9
3	42.4	68.8	67.0	69.5	71.4	69.7	69.0	68.9	65.2	61.4	59.5	60.7	63.2	62.5	63.0	60.0	59.9	58.8	60.6	66.0	67.5	67.3	75.0	72.0	75.0	42.4	64.5
4	72.5	67.0	66.3	66.8	64.4	77.5	91.7	87.6	93.8	96.6	96.0	96.0	96.0	96.0	96.3	96.5	96.6	96.5	96.6	96.6	96.8	96.9	97.1	97.3	97.3	64.4	89.0
5	97.4	97.4	97.4	97.5	97.3	96.8	94.9	93.4	93.1	94.4	90.7	89.1	89.5	90.5	91.2	93.3	91.7	89.4	88.9	87.2	85.2	85.5	84.6	88.2	97.5	84.6	91.9
6	92.0	91.1	93.1	94.3	94.3	96.8	97.8	96.9	96.3	96.1	97.9	98.9	99.1	99.3	99.4	99.6	99.6	99.6	97.6	99.2	99.6	99.6	99.7	99.8	99.8	91.1	97.4
7	99.8	99.8	99.7	99.6	99.6	99.5	99.1	99.0	98.7	98.1	96.7	98.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.2	99.2	99.4	99.5	99.8	96.7	99.2
8	99.6	99.7	99.8	99.9	99.9	99.8	99.7	99.4	99.7	99.4	97.4	92.6	92.7	96.3	99.1	99.7	99.2	97.7	97.7	98.7	98.7	98.9	99.5	99.6	99.9	92.6	98.5
9	99.6	99.3	99.7	99.8	99.7	99.6	98.8	98.8	97.0	92.6	94.0	93.5	93.0	90.3	87.5	82.9	83.3	83.4	83.8	87.3	90.1	88.5	87.1	81.9	99.8	81.9	92.1
10	77.3	69.2	66.3	62.9	63.9	78.3	85.8	86.4	88.9	94.0	93.4	93.6	97.3	93.0	96.6	98.7	99.2	99.7	99.8	99.8	99.7	99.6	99.4	99.1	99.8	62.9	89.2
11	98.9	98.7	98.5	98.2	98.2	98.1	97.7	97.2	96.9	96.8															98.9	96.8	97.9
12																											
13																			94.5	94.1	93.1	92.0	90.9	89.9	94.5	89.9	92.4
14	89.3	88.2	88.3	88.7	88.6	89.0	88.2	87.6	86.7																89.3	86.7	88.3
15	86.8	86.9	88.2	88.8	88.8	88.5	88.5	88.4	88.2	88.5	88.4	88.3	88.5	88.5	88.5	88.3	88.4	88.4	88.4	88.5	88.4	88.4	88.4	88.3	88.8	86.8	88.3
16	88.0	87.3	87.1	86.8	86.6	86.4	86.6	86.4	86.4	86.1	85.7	85.6	85.7	85.5	85.2	85.0	84.7	84.6	84.6	84.9	85.0	84.9	84.6	84.5	88.0	84.5	85.8
17	84.1	84.2	84.2	84.2	84.4	84.3	84.4	84.5	84.5	84.5	84.4	84.3	84.3	84.5	84.4	84.1	83.7	83.3	82.9	82.6	82.4	82.2	81.7	81.8	84.5	81.7	83.7
18	81.0	81.3	81.3	80.8	80.8	80.7	80.4	80.0	80.2	79.9	79.8	79.5	79.4	79.2	79.4	79.5	79.2	78.7	78.5	78.2	78.6	78.1	77.4	77.3	81.3	77.3	79.5
19	77.2	77.3	77.6	77.6	78.2	78.8	78.5	77.4	78.2	78.5	78.2	78.4	78.2	78.5	78.7	78.1	78.0	77.6	77.7	77.2	76.6	77.4	77.7	78.2	78.8	76.6	77.9
20	77.7	80.6	80.8	81.3	81.6	83.1	85.1	85.7	86.9	87.9	88.5	88.9	90.5	91.4	92.3	93.1	93.6	94.0	94.2	94.9	95.1	95.3	95.7	95.8	95.8	77.7	88.9
21	96.2	97.3	97.6	97.8	97.9	97.9	97.9	97.5	97.2	96.9	96.8	97.1	96.9	96.8	96.9	96.4	96.2	96.5	95.8	95.7	94.2	89.4	84.9	87.7	97.9	84.9	95.6
22	92.6	88.7	90.9	92.8	93.4	96.0	95.3	94.9	96.5	94.9	93.0	92.0	91.5	92.2	92.2	97.1	95.7	94.0	92.3	93.0	91.9	95.0	95.5	96.4	97.1	88.7	93.7
23	94.9	93.1	90.7	87.3	84.0	73.1	77.6	82.2	85.0	80.1	71.9	70.5	66.4	78.6	82.9	81.4	85.4	91.1	90.0	89.4	89.2	90.8	91.0	89.5	94.9	66.4	84.0
24	88.9	88.2	88.4	87.6	87.2	87.0	86.8	86.5	86.7	86.6	86.8	87.0	87.0	87.1	86.9	86.9	86.9	87.0	86.5	86.4	86.6	87.0	86.8	86.6	88.9	86.4	87.1
25	85.8	85.2	85.1	84.9	85.0	84.5	84.5	84.1	83.7	82.8	82.4	82.5	81.9	82.1	82.2	82.2	82.0	82.0	82.4	82.4	82.9	82.4	81.2	80.1	85.8	80.1	83.1
26	78.8	76.0	73.7	67.0	55.9	45.4	42.8	62.1	56.8	63.1	67.0	59.5	59.1	45.3	41.8	54.2	73.2	78.7	84.5	84.4	80.5	78.6	77.5	76.0	84.5	41.8	65.9
27	80.0	82.1	80.6	78.3	78.9	75.6	72.6	70.8	67.6	67.5	68.7	68.8	68.8	71.4	72.3	73.6	74.8	75.5	77.5	90.6	98.1	99.3	99.5	99.0	99.5	67.5	78.8
28	99.2	97.1	96.0	95.6	95.5	94.7	95.1	94.7	91.9	91.8	94.9	95.2	94.3	93.8	93.3	92.5	91.8	90.5	89.6	89.6	89.7	89.8	90.2	90.1	99.2	89.6	93.2
29	89.8	89.5	89.6	89.5	89.2	89.1	88.9	88.9	89.0	88.2	88.8	89.2	88.3	88.3	88.7	88.4	89.1	89.4	89.7	90.4	90.5	90.6	90.7	90.7	90.7	88.2	89.4
30	90.6	90.5	90.5	90.4	90.2	89.7	89.3	89.5	88.6	87.7	87.6	87.9	88.5	88.5	88.6	89.1	89.5	89.1	88.9	88.8	89.0	89.3	89.5	89.8	90.6	87.6	89.2
31	89.8	89.8	90.1	90.4	90.2	90.1	89.8	89.6	89.3	89.1	89.1	89.3	89.3	89.6	89.5	89.5	89.8	89.6	89.6	90.4	89.5	89.2	88.8	89.8	90.4	88.8	89.6
Max.	**99.8**	**99.8**	**99.8**	**99.9**	**99.9**	**99.8**	**99.7**	**99.4**	**99.7**	**99.4**	**97.9**	**98.9**	**99.4**	**99.4**	**99.4**	**99.7**	**99.6**	**99.7**	**99.8**	**99.8**	**99.7**	**99.6**	**99.7**	**99.8**	**99.9**		
Min.	**42.4**	**56.0**	**61.8**	**62.7**	**55.9**	**45.4**	**42.8**	**62.1**	**56.8**	**61.4**	**59.5**	**59.5**	**59.1**	**45.3**	**41.8**	**54.2**	**59.9**	58.8	60.6	**66.0**	**67.5**	**54.4**	**41.3**	**40.3**		**40.3**	
Avg.	**85.9**	**86.0**	**86.1**	**85.4**	**84.7**	**85.0**	**85.9**	**86.2**	**86.3**	**85.9**	**84.9**	**84.7**	**85.3**	**85.3**	**85.1**	**85.9**	**86.9**	**87.1**	**87.4**	**88.2**	**88.2**	**87.2**	**86.8**	**86.8**			**86.1**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	921	920	919	919	918	918	917	917	917	917	917	918	918	917	918	918	918	918	918	918	918	918	919	919	921	917	918.1
2	919	920	920	920	920	921	921	921	921	922	922	923	923	923	923	924	924	924	925	925	925	926	926	926	926	919	922.7
3	927	927	927	927	927	926	926	927	927	927	928	928	928	929	929	930	930	930	931	931	931	931	931	931	931	926	928.6
4	931	931	931	931	930	930	929	928	928	927	927	928	928	928	928	928	927	927	927	928	928	928	928	928	931	927	928.5
5	928	929	929	929	930	930	930	931	932	933	934	935	936	937	938	938	939	940	941	941	941	941	941	942	942	928	935.2
6	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	943	943	943	943	944	944	944	944	944	942	942.5
7	944	945	946	947	947	947	948	948	949	950	952	953	953	954	955	955	956	957	958	959	960	961	961	962	962	944	952.9
8	963	963	964	965	965	965	965	965	965	966	967	967	966	967	967	967	967	967	967	968	968	968	969	970	970	963	966.2
9	970	970	971	971	971	971	971	971	970	970	970	970	970	970	969	969	969	968	968	968	967	967	968	966	971	966	969.4
10	966	966	966	965	964	964	964	962	962	962	961	960	959	959	958	957	957	956	956	957	956	956	956	956	966	956	960.3
11	957	958	957	957	956	956	956	955	954	954	954	954	953	953	953	952	952	952	951	950	950	950	949	949	958	949	953.5
12	948	947	946	946	946	946	945	945	944	945	946	946	945	944	943	942	941	940	940	940	941	942	942	943	948	940	943.9
13	945	947	949	950	951	952	951	952	952	952	953	954	953	953	953	953	953	951	951	951	949	949	948	948	954	945	950.9
14	947	946	946	945	944	944	944	944	943	943	944	944	943	944	944	944	944	945	945	946	946	947	947	948	948	943	944.9
15	948	949	949	949	949	949	949	949	949	950	950	951	951	952	952	952	952	953	954	954	954	955	954	954	955	948	951.1
16	954	954	954	953	952	951	950	949	948	947	945	945	944	943	941	940	939	938	936	937	938	939	940	941	954	936	944.9
17	941	942	943	943	943	944	943	943	943	944	944	944	944								943	942	942	942	944	941	942.9
18	942	941	940	940	939	938	937	937	936	935	935	934	933	933	933	932	932	932	932	932	932	932	932	933	942	932	935.1
19	933	934	934	934	935	935	935	936	936	937	937	937	938	938	938	938	938	938	938	938	938	938	938	938	938	933	936.6
20	938	938	938	938	937	936	936	935	935	935	935	935	934	933	932	931	930	930	929	928	928	927	926	926	938	926	933.0
21	926	926	927	927	927	927	927	928	928	929	930	930	931	931	932	932	932	932	933	933	934	935	934	935	935	926	930.2
22	936	937	938	938	939	939	939	940	940	940	941	942	942	942	942	942	942	943	943	943	944	944	944	945	945	936	941.1
23	945	945	945	945	946	945	945	945	946	946	946	946	947	946	946	946	946	946	947	947	947	947	946	947	947	945	946.0
24	947	947	947	947	947	948	947	948	947	948	948	949	950	950	951	951	951	950	951	951	952	951	951	952	952	947	949.2
25	951	950	950	949	948	946	946	943	941	940	938	937	936	936	935	936	937	937	936	936	935	935	934	935	951	934	940.3
26	935	934	935	935	935	933	933	934	933	934	935	936	937	939	939	940	941	942	943	944	945	946	947	948	948	933	938.4
27	949	949	949	949	948	948	949	948	948	948	948	947	947	946	946	946	945	944	944	943	943	942	942	942	949	942	946.2
28	942	943	943	943	943	944	944	944	945	945	947	948	949	950	950	950	950	952	952	952	953	953	953	954	954	942	947.8
29	954	953	952	953	951	949	948	947	945	944	946	947	948	945	946	945	946	946	945	945	944	946	948	950	954	944	947.6
30	954	955	955	956	957	958	958	958	955	953	952	951	951	949	950	950	954	954	956	956	957	958	958	960	960	949	954.8
31	958	958	958	957	956	957	956	957	957	957	958	959	960	960	960	960	959	958	958	957	957	955	954	955	960	954	957.5
Max.	**970**	**970**	**971**	**971**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**969**	**970**	**971**		
Min.	**919**	**920**	**919**	**919**	**918**	**918**	**917**	**917**	**917**	**917**	**917**	**918**	**918**	**917**	**918**	**918**	**918**	**918**	**918**	**918**	**918**	**918**	**919**	**919**		**917**	
Avg.	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**943**	**943**	**943**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**945**			**943.9**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	956	956	954	953	952	951	950	950	949	949	948	947	947	942	943	940	940	941	941	938	937	940	941	942	956	937	946.1
2	942	944	943	945	944	945	946	946	945	945	946	947	948	948	948	948	950	950	951	952	952	952	953	953	953	942	947.7
3	954	954	955	955	954	955	955	955	955	956	956	956	957	957	957	956	956	956	956	956	955	955	956	956	957	954	955.5
4	956	957	956	956	956	956	955	955	955	955	955	955	955	955	955	955	955	954	954	955	955	955	955	955	957	954	955.2
5	955	956	956	956	956	956	956	956	957	957	957	957	957	958	957	957	956	956	956	956	956	956	956	955	958	955	956.3
6	955	954	954	954	954	953	953	953	953	953	954	954	954	954	954	954			955	955	955	955	955	955	955	953	954.3
7	955	955	955	955	955	955	955	954	954	954	954	955	955	954	955	954	954	954	954	954	954	954	954	954	955	954	954.3
8	954	954	954	954	954	954	954	954	954	955	955	956	956	956	956	956	956	956	956	956	956	957	957	957	957	954	955.4
9	957	957	957	958	958	958	958	958	958	958	958	959	959	959	959	959	959	960	959	960	960	960	960	960	960	957	958.7
10	960	960	959	959	959	958	958	958	957	957	956	956	955	955	954	953	952	952	951	950	950	950	949	949	960	949	954.9
11	948	948	947	947	946	946	946	945	945	945	945	946	946	946	945	945	945	944	944	944	945	945	945	945	948	944	945.5
12	945	944	944	944	944	944	944	944	944	944	944	944	944	944	943	943	942	942	942	942	941	941	941	940	945	940	943.2
13	939	939	938	937	937	935	935	935	934	934	933	933	933	933	933	932	931	932	932	933	934	934	935	935	939	931	934.5
14	936	936	937	937	937	937	937	937	937	938	938	938	938	938	938	938	938	938	938	937	938	938	938	938	938	936	937.5
15	938	938	938	938	938	938	938	938	938	938	939	939	939	940	940	940	941	941	941	942	942	943	943	944	944	938	939.7
16	945	945	945	945	946	946	947	947	947	948	948	949	949	949	949	949	949	949	949	949	949	949	949	949	949	945	947.7
17	949	948	948	948	947	946	946	945	944	944	942	942	941	940	939	938	937	937	936	936	935	935	935	936	949	935	941.4
18	936	936	937	937	937	936	937	937	936	936	936	936	936	936	936	935	935	934	933	933	933	933	933	933	937	933	935.3
19	933	933	934	934	933	933	933	933	933	933	933	934	934	934	934	933	934	934	934	935	936	936	937	938	938	933	934.0
20	938	939	941	941	942	944	944	945	946	947	948	948	949	949	950	951	950	951	952	953	953	952	953	954	954	938	947.6
21	954	955	954	954	954	953	955	955	955	955	955	954	954	954	954	954	954	954	953	954	953	953	953	952	955	952	953.9
22	952	952	952	952	951	951	951	950	950	950	950	949	949	949	949	948	948	948	947	947	947	947	947	947	952	947	949.3
23	947	946	946	946	947	946	947	947	948	948	948	949	949	949	950	950	951	951	952	952	953	953	953	953	953	946	949.2
24	953	954	954	955	954	955	954	954	955	955	955	955	956	957	957	956	957	957	957	958	958	960	961	960	961	953	956.1
25	960	961	963	963	964	965	965	966	966	966	967	967	967	967	966	967	967	966	966	966	966	967	967	967	967	960	965.4
26	967	968	968	968	969	968	969	969	969	969	970	970	969	970	969	969	969	969	969	969	968	968	968	968	970	967	968.7
27	967	967	967	967	966	966	965	965	964	964	964	963	963	962	962	961	961	960	960	959	959	959	958	958	967	958	962.7
28	958	957	957	957	957	956	956	955	955	955	955	955	955	955	955	955	955	955	955	956	956	956	956	957	958	955	955.8
Max.	**967**	**968**	**968**	**968**	**969**	**968**	**969**	**969**	**969**	**969**	**970**	**970**	**969**	**970**	**969**	**969**	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**970**		
Min.	**933**	**933**	**934**	**934**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**932**	**931**	**932**	**932**	**933**	**933**	**933**	**933**	**933**		**931**	
Avg.	**950**	**950**	**951**	**951**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**951**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**			**950.2**

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	957	957	957	957	957	956	956	956	956	956	956	956	956	956	955	955	955	955	954	955	955	955	955	955	957	954	955.7
2	955	954	955	954	955	955	955	955	955	956	956	956	956	957	956	957	956	956	957	956	955	955	956	957	957	954	955.6
3	958	958	958	959	959	959	960	961	962	962	964	964	964	965	965	965	965	965	965	965	965	965	965	965	965	958	962.5
4	964	964	963	963	963	963	963	962	962	962	961	961	960	959	958	957	957	956	957	957	956	956	955	955	964	955	959.7
5	954	953	952	952	951	949	948	949	947	947	946	946	947	947	947	946	947	947	946	946	946	947	947	946	954	946	948.0
6	947	946	946	944	943	942	941	941	941	940	939	938	937	936	934	936	935	935	935	935	935	934	935	934	947	934	938.7
7	935	934	934	933	933	936	934	934	935	937	936	938	936	936	935	936	936	936	935	935	935	932	933	933	938	932	934.9
8	932	933	933	933	932	932	932	932	933	934	934	933	934	934	934	933	933	932	932	931	931	931	930	932	934	930	932.5
9	932	932	932	932	932	931	932	933	933	933	934	935	935	935	935	935	936	936	937	937	938	938	938	938	938	931	934.5
10	939	939	939	939	939	940	940	940	940	940	940	941	941	942	941	941	941	940	940	940	940	941	940	940	942	939	940.1
11	940	940	940	939	940	939	939	940	939	939	940	941	942	942	942	942	942	941	942	943	943	943	944	944	944	939	941.1
12	944	945	944	945	947	948	948	949	950	951	952	953	954	954	954	955	956	956	957	957	957	958	958	959	959	944	952.2
13	960	960	960	960	960	960	961	961	960	961	960	961	961	961	960	960	959	961	959	961	961	961	960	960	961	959	960.3
14	961	961	961	961	961	961	961	960	960	960	959	958	958	959	958	958	956	957	957	956	957	957	956	957	961	956	958.7
15	956	956	957	956	956	956	956	956	955	956	956	956	956	956	956	955	955	955	954	954	954	953	953	953	957	953	955.1
16	953	953	952	952	952	952	952	951	951	951	951	951	951	951	950	950	949	949	949	949	948	949	949	949	953	948	950.6
17	949	949	949	949	948	949	949	949	949	949	949	949	950	950	950	950	951	951	951	952	952	953	953	954	954	948	950.0
18	954	954	955	955	955	955	955	956	956	956	957	957	957	957	957	956	956	956	956	956	955	955	955	954	957	954	955.6
19	954	954	953	953	952	951	950	950	949	949	948	948	947	946	945	944	944	943	942	942	942	941	941	941	954	941	947.1
20	940	940	939	939	938	937	936	935	933	933	931	931	929	927	926	924	921	920	919	917	917	916	916	916	940	916	928.3
21	916	916	916	916	916	917	917	917	918	918	919	920	921	923	924	925	926	926	927	928	929	930	931	931	931	916	921.9
22	932	932	933	934	934	934	935	935	935	934	935	934	935	934	934	933	933	933	933	933	932	932	932	931	935	931	933.3
23	931	930	930	930	929	929	930	930	931	931	931	931	931	932	931	932	931	932	933	934	935	936	936	937	937	929	931.8
24	938	938	939	940	940	940	941	942	942	942	943	943	944	944	944	944	945	945	945	945	945	946	946	945	946	938	942.8
25	946	946	946	946	946	946	946	946	946	946	947	947	947	947	947	947	947	947	946	946	945	944	944	943	947	943	946.0
26	943	942	941	940	939	939	938	939	940	940	940	941	943	944	945	945	945	946	946	946	947	948	949	950	950	938	943.2
27	951	952	953	954	955	955	956	957	958	958	959	960	960	960	961	961	962	962	962	963	963	963	963	964	964	951	958.8
28	964	963	964	963	963	963	963	963	962	962	962	962	962	962	962	962	962	962	962	962	962	962	963	963	964	962	962.4
29	963	964	964	964	965	964	964	965	965	966	966	966	967	967	967	967	967	968	968	967	968	968	968	969	969	963	966.1
30	969	969	970	970	970	969	970	971	971	971	971	971	971	971	971	971	972	972	971	972	972	972	972	972	972	969	970.8
31	972	972	972	972	972	972	972	973	972	973	973	973	973	973	973	973	973	973	973	972	973	972	973	973	973	972	972.6
Max.	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**973**	**972**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**973**	**972**	**973**	**972**	**973**	**973**	**972**	**973**	
Min.	**916**	**916**	**916**	**916**	**916**	**917**	**917**	**917**	**918**	**918**	**919**	**920**	**921**	**923**	**924**	**924**	**921**	**920**	**919**	**917**	**917**	**916**	**916**	**916**		**916**	
Avg.	**949**	**949**	**949**	**948**	**948**	**948**	**948**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**			**948.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	972	972	972	972	971	971	971	971	970	970	970	969	969	969	969	968	968	968	967	967	967	967	967	967	972	967	969.3
2	967	967	966	966	966	966	966	965	965	965	965	965	964	965	965	965	964	964	964	964	964	964	964	964	967	964	964.9
3	963	963	964	964	963	963	963	963	963	963	963	962	963	963	962	962	961	961	960	960	960	959	959	959	964	959	961.9
4	958	957	957	956	956	955	954	954	953	953	952	951	951	950	950	949	948	947	947	946	946	945	945	945	958	945	951.1
5	944	943	943	942	941	940	939	938	937	937	935	934	932	932	931	930	931	930	931	931	933	934	935	935	944	930	935.8
6	935	935	934	935	936	936	935	935	935	935	933	932	930	928	927	925	923	921	919	918	917	915	915	915	936	915	927.8
7	915	915	917	918	920	921	922	924	926	927	929	929	930	930	931	929	930	930	930	930	930	929	929	928	931	915	925.8
8	927	926	926	924	924	924	923	923	922	922	922	921	921	921	920	920	921	921	921	921	922	922	923	924	927	920	922.6
9	924	925	926	926	926	927	927	928	928	929	930	931	931	932	933	933	934	934	935	936	936	937	938	938	938	924	930.9
10	939	939	940	941	942	942	942	943	943	944	944	945	946	947	947	948	948	949	949	949	950	950	951	951	951	939	945.5
11	952	952	952	952	952	952	952	952	953	953	953	952	952	952	951	951	950	950	950	949	949	949	949	948	953	948	951.2
12	948	948	947	947	946	946	946	945	945	944	944	944	943	943	943	942	941	941	941	940	940	940	940	939	948	939	943.4
13	939	939	938	938	938	938	938	938	938	938	938	939	939	939	939	939	938	938	939	939	939	940	940	940	940	938	938.7
14	940	940	940	940	940	939	939	939	939	939	939	939	939	938	938	938	938	938	937	937	937	937	937	937	940	937	938.5
15	936	936	937	936	936	937	937	937	937	937	937	937	938	938	938	938	938	938	938	938	939	939	940	940	940	936	937.5
16	940	941	941	941	942	943	943	944	945	945	946	947	948	948	949	949	950	951	951	952	953	953	953	952	953	940	947.0
17	952	952	951	951	950	949	948	947	946	946	946	945	945	945	944	943	942	940	940	940	939	939	939	939	952	939	944.8
18	938	939	940	941	942	941	942	943	943	943	944	945	947	947	948	948	949	951	952	952	952	953	953	953	953	938	946.1
19	953	952	952	952	951	950	950	950	949	949	948	948	948	948	948	948	947	947	946	946	946	945	945	945	953	945	948.5
20	944	944	944	943	943	944	944	944	944	944	943	943	944	943	943	944	944	945	945	945	946	946	947	948	948	943	944.3
21	947	948	948	947	948	948	948	947	947	947	946	945	946	945	945	945	944	945	944	943	942	942	942	943	948	942	945.5
22	942	942	941	941	941	940	940	939	939	939	938	938	937	938	938	937	937	938	937	937	937	937	937	937	942	937	938.7
23	937	935	935	934	933	933	934	933	933	933	933	933	933	934	934	933	934	934	934	934	934	934	935	935	937	933	933.9
24	935	936	936	937	937	937	937	937	938	938	938	938	938	939	938	938	938	938	938	938	938	939	939	939	939	935	937.8
25	939	939	939	939	939	939	939	939	939	938	939	939	939	939	939	941	940	940	940	941	941	941	941	941	941	938	939.7
26	941	941	941	940	940	940	939	939	939	939	938	938	937	937	937	936	936	935	935	935	936	936	937	937	941	935	937.9
27	937	938	938	939	939	940	940	941	941	942	943	943	944	944	944	945	945	945	946	946	947	947	947	947	947	937	942.8
28	948	948	948	948	948	948	948	948	947	947	948	947	947	946	946	945	944	944	944	943	944	944	944	944	948	943	946.1
29	943	943	943	943	942	942	942	942	942	942	942	942	942	943	943	943	943	943	943	943	944	944	945	945	945	942	942.9
30	945	946	946	947	947	947	947	947	947	948	947	948	948	947	947	947	947	947	946	947	947	947	947	947	948	945	946.9
Max.	**972**	**972**	**972**	**972**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**967**	**967**	**967**	**967**	**967**	**967**	**972**		
Min.	**915**	**915**	**917**	**918**	**920**	**921**	**922**	**923**	**922**	**922**	**922**	**921**	**921**	**921**	**920**	**920**	**921**	**921**	**919**	**918**	**917**	**915**	**915**	**915**		**915**	
Avg.	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**943**	**942**	**942**	**942**	**942**	**943**	**943**	**943**			**942.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	947	948	948	948	948	948	948	948	949	949	949	949	949	949				949	948	948	948	948	949	949	949	947	948.4
2	949	948	948	948	948	948	947	947	948	948	948	948	948	948	948	948	948	948	949	949	950	950	951	950	951	947	948.5
3	951	951	951	951	951	951	951	951	952	952	952	952	952	951	951	951	951	951	951	951	951	952	952	952	952	951	951.3
4	952	952	952	952	952	952	952	952	952	952	952	953	952	952	952	952	952	952	952	953	953	953	952	953	953	952	952.3
5	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	952	952	952	952	952	952	952	953	952	952.7
6	952	953	952	952	952	952	952	953	953	953	953	953	953	952	953	953	952	953	953	953	953	953	954	954	954	952	952.6
7	954	955	955	955	956	956	956	957	957	957	957	958	958	958	958	958	958	958	958	958	958	958	959	959	959	954	957.0
8	959	959	960	959	960	960	960	960	960	960	960	960	960	959	959	959	958	958	958	957	957	957	957	957	960	957	958.9
9	957	957	957	957	956	956	956	956	957	957	957	957	957	957	958	958	958	958	958	959	959	959	960	960	960	956	957.6
10	960	960	960	960	960	960	960	960	960	960	960	960	960	959	959	959	958	958	958	958	957	958	957	957	960	957	959.1
11	957	957	957	956	956	956	956	956	956	955	955	956	956	956	956	956	956	956	956	956	956	956	957	957	957	955	956.0
12	957	957	957	957	957	957	957	957	957	957	957	958	957	957	957	957	957	956	956	956	956	957	957	957	958	956	956.9
13	957	956	956	956	955	955	955	955	955	955	955	955	955	954	954	954	954	953	953	953	953	953	953	953	957	953	954.5
14	953	953	952	952	951	951	951	950	950	950	950	949	949	950	951	951	951	951	952	952	952	953	953	954	954	949	951.3
15	954	955	954	954	955	955	955	956	956	956	956	955	955	955	955	955	954	954	953	953	953	952	952	951	956	951	954.4
16	951	951	950	949	949	948	948	948	947	947	947	947	947	947	947	947	948	948	949	949	950	951	951	952	952	947	948.7
17	952	953	952	953	953	954	954	954	954	955	955	956	956	956	957	957	957	957	957	958	959	959	960	961	961	952	955.8
18	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	959	959	959	959	961	959	960.6
19	959	959	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	958	958	958	959	959	959	959	957	958.0
20	959	960	960	960	960	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	961	962	962	963	963	959	960.8
21	963	963	963	963	963	962	962	962	963	962	962	962	962	961	961	961	960	960	959	959	958	958	958	958	963	958	961.0
22	957	957	957	956	956	955	954	954	953	952	952	952	951	950	950	950	949	949	949	949	949	948	948	948	957	948	951.9
23	948	948	948	948	947	947	947	947	948	948	948	948	948	948	949	949	949	949	950	950	951	951	951	952	952	947	948.7
24	952	952	952	951	952	952	952	951	951	951	951	951	951	951	950	949	949	949	948	948	949	949	949	949	952	948	950.4
25	949	948	948	948	948	947	947	947	947	947	947	947	947	947	947	948	947	947	947	947	947	947	947	946	949	946	947.3
26	946	947	947	947	947	947	947	948	948	948	948	949	948	949	949	949	949	949	949	950	949	950	950	950	950	946	948.4
27	951	951	951	951	951	951	951	952	952	952	952	953	953	953	954	954	953	953	953	954	954	954	955	956	956	951	952.7
28	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	955	956	956	956	956	956	956	956	956	956	955	955.9
29	955	955	955	954	954	953	953	952	952	952	951	950	950	949	949	948	948	947	947	947	947	947	947	946	955	946	950.3
30	946	946	946	946	945	945	945	945	945	945	944	945	944	944	944	943	943	943	944	944	944	944	944	945	946	943	944.5
31	945	945	945	945	945	945	946	945	946	947	946	947	947	947	947	947	947	947	947	948	948	948	948	949	949	945	946.5
Max.	**963**	**963**	**963**	**963**	**963**	**962**	**962**	**962**	**963**	**962**	**962**	**962**	**962**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**962**	**962**	**963**	**963**		
Min.	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**944**	**945**	**944**	**944**	**944**	**943**	**943**	**943**	**944**	**944**	**944**	**944**	**944**	**945**		**943**	
Avg.	**954**	**954**	**954**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**954**	**954**			**953.3**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	949	950	950	950	950	950	950	950	951	951	952	952	952	953	953	952	953	953	954	954	955	955	955	956	956	949	952.1
2	956	957	957	956	956	956	956	956	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	958	958	956	956.8
3	958	958	958	958	957	957	957	957	957	957	957	957	957	957	956	956	955	955	955	954	954	954	953	952	958	952	956.1
4	952	951	951	950	949	948	947	946	946	945	944	944	943	943	943	943	943	943	943	943	943	943	944	944	952	943	945.5
5	944	944	945	945	945	945	945	945	945	945	945	945	945	946	945	946	947	947	948	948	948	948	948	948	948	944	945.8
6	949	948	948	948	948	947	947	947	947	947	946	946	945	945	945	944	944	944	943	943	943	943	943	943	949	943	945.6
7	943	942	942	942	942	942	942	941	941	941	941	941	941	942	942	942	942	943	943	944	944	944	944	944	944	941	942.3
8	945	945	945	945	945	945	945	945	945	946	946	946	945	945	946	946	946	946	946	947	947	947	948	949	949	945	945.9
9	949	949	949	949	949	949	949	949	949	950	950	950	949	949	949	949	949	949	949	948	948	948	948	948	950	948	949.0
10	948	948	947	947	947	947	947	947	947	947	946	947	947	946	946	946	946	946	946	946	946	946	947	947	948	946	946.7
11	948	948	948	948	948	949	949	949	949	949	949	949	950	950	950	950	950	951	951	951	952	953	953	954	954	948	949.9
12	954	955	955	955	956	956	956	957	957	957	958	958	959	959	959	960	960	960	960	960	960	961	961	962	962	954	958.1
13	962	962	962	962	962	962	963	963	963	963	963	963	964	964	964	964	964	964	964	964	964	965	965	966	966	962	963.4
14	966	966	966	966	966	966	967	967	967	967	967	967	968	968	968	968	968	968	968	968	968	968	967	968	968	966	967.1
15	968	968	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	967	966	966	966	966	967	967	968	966	967.4
16	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	965	965	965	964	964	964	963	963	963	967	963	965.7
17	962	962	962	962	962	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	959	959	959	959	962	959	960.7
18	959	959	959	958	958	958	958	957	957	957	957	957	957	957	957	957	957	957	957	957	958	958	958	959	959	957	957.7
19	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959	958	958	958	958	957	957	958	958	958	959	957	958.6
20	959	959	959	959	958	959	959	959	959	958	959	958	958	958	958	957	957	957	957	956	957	957	957	958	959	956	957.9
21	957	957	958	957	957	957	957	957	958	958	958	958	958	957	957	957	957	957	957	957	957	957	957	957	958	957	957.3
22	958	958	958	958	958	958	958	957	957	957	957	957	957	956	956	956	955	955	954	954	954	953	953	952	958	952	956.1
23	952	952	951	950	950	949	948	948	947	947	947	947	947	947	947	947	946	946	947	947	947	947	947	947	952	946	948.0
24	948	948	948	948	948	948	949	949	949	949	950	950	950	950	950	951	951	951	951	951	951	952	953	953	953	948	949.9
25	954	954	954	955	955	955	956	956	957	957	958	958	959	959	959	959	960	960	960	961	962	962	963	963	963	954	958.2
26	964	964	965	964	965	965	965	966	966	966	967	966	967	967	967	967	967	967	967	966	966	966	966	966	967	964	965.9
27	966	966	966	966	966	966	965	965	965	965	964	964	963	963	963	962	962	961	961	961	960	960	960	960	966	960	963.3
28	960	960	959	959	959	959	958	958	958	957	957	957	957	956	956	955	955	955	955	954	954	954	954	954	960	954	956.7
29	954	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	954	954	954	954	954	954	953	953.4
30	955	955	955	955	955	955	955	955	955	956	956	956	956	957	957	957	957	957	957	957	957	957	957	958	958	955	956.0
Max.	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**967**	**968**	**968**		
Min.	**943**	**942**	**942**	**942**	**942**	**942**	**942**	**941**	**941**	**941**	**941**	**941**	**941**	**942**	**942**	**942**	**942**	**943**	**943**	**943**	**943**	**943**	**943**	**943**		**941**	
Avg.	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**956**			**955.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	959	959	959	958	958.1
2	959	959	959	959	959	960	959	960	959	959	959	959	959	959	959	958	958	958	958	958	957	957	958	958	960	957	958.6
3	958	958	958	958	958	958	958	958	958	959	959	959	959	959	959	959	958	958	958	958	958	958	958	958	959	958	958.3
4	958	958	958	957	957	957	957	957	957	957	957	957	957	958	957	957	957	957	957	957	957	957	957	957	958	957	957.3
5	957	957	958	958	958	958	958	958	958	958	957	958	958	958	957	958	958	958	958	958	959	959	960	960	960	957	957.9
6	960	961	960	960	960	960	961	961	961	962	962	962	962	962	962	962	962	962	962	962	962	962	962	963	963	960	961.5
7	963	963	963	963	963	963	963	963	963	963	963	963	963	963	962	962	962	961	961	961	961	961	960	960	963	960	962.3
8	960	959	959	959	959	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	957	958	957	958	960	957	958.2
9	958	958	958	958	958	958	957	957	957	957	957	957	956	956	955	955	954	954	954	953	953	953	953	953	958	953	955.6
10	952	952	952	952	951	951	951	951	951	950	950	950	950	950	950	951	951	951	951	951	952	952	952	952	952	950	951.2
11	953	953	953	953	953	953	953	953	954	954	954	954	954	955	954	955	954	954	954	954	954	954	955	955	955	953	954.0
12	955	955	955	955	955	955	955	955	955	955	955	955	955	954	954	954	955	955	956	956	956	956	956	957	957	954	955.1
13	957	957	957	957	957	957	957	957	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	957	957.6
14	958	958	958	958	958	958	958	958	958	958	958	958	959	959	959	959	959	959	959	959	959	959	960	960	960	958	958.7
15	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	959	960	959	959	960	960	960	960	959	959.8
16	960	960	960	960	960	960	959	959	960	960	960	960	959	959	959	959	959	959	959	958	959	958	959	959	960	958	959.3
17	958	959	958	958	958	958	958	957	957	957	956	956	956	955	955	954	954	954	953	953	953	954	953	953	959	953	955.7
18	953	953	953	953	953	953	952	952	952	952	951	951	951	951	951	951	951	950	950	950	951	951	951	951	953	950	951.5
19	951	951	951	951	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	949	949	949	949	951	949	949.8
20	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	950	950	950	949	949.0
21	950	951	951	951	951	951	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	950	950	950	951	950	950.5
22	949	949	949	948	948	948	948	948	948	947	947	947	947	948	948	948	947	947	947	947	947	947	948	948	949	947	947.8
23	948	948	948	948	948	948	948	948	949	949	949	950	950	950	950	950	950	949	950	950	949	950	950	950	950	948	949.1
24	950	950	950	949	949	949	949	949	950	950	950	950	950	950	950	950	950	950	950	950	950	950	951	951	951	949	949.9
25	951	952	952	952	952	952	953	952	953	953	953	954	954	955	955	955	955	955	955	955	956	955	956	956	956	951	953.7
26	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957.0
27	957	957	957	957	957	957	957	957	958	958	958	958	958	958	957	957	957	956	956	957	957	957	957	957	958	956	957.1
28	957	957	957	957	957	957	957	957	957	957	957	957	957	957	956	956	956	956	955	955	955	955	955	955	957	955	956.4
29	956	956	956	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	956	956	956	955	955.3
30	956	956	957	957	957	957	957	958	958	958	958	958	958	959	959	959	959	959	959	959	959	959	959	960	960	956	958.2
31	960	960	960	960	960	960	960	960	960	960	960	961	961	961	961	961	960	960	961	961	960	960	960	961	961	960	960.3
Max.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**963**	**963**		
Min.	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**947**	**947**	**947**	**947**	**948**	**948**	**948**	**947**	**947**	**947**	**947**	**947**	**947**	**948**	**948**		**947**	
Avg.	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**955**	**955**	**955**	**955**	**955**	**955**	**956**	**956**			**955.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	961	961	960	960	960	960	959	959	959	959	959	959	960	960	960	959	959	959	959	959	958	958	958	958	961	958	959.3
2	958	958	957	957	957	956	956	956	955	955	955	955	955	955	954	954	954	954	954	955	955	955	955	956	958	954	955.6
3	956	956	956	957	956	957	957	957	958	958	958	958	958	958	958	957	957	957	958	958	958	958	958	957	958	956	957.2
4	957	957	957	957	956	957	957	957	957	957	957	957	958	958	958	959	958	958	958	959	959	959	959	958	959	956	957.7
5	957	957	957	956	956	957	957	957	958	958	958	958	958	958	958	958	958	959	959	959	959	958	959	959	959	956	957.9
6	960	960	961	960	961	962	961	962	962	962	962	963	963	963	963	963	962	962	962	962	962	962	962	962	963	960	961.9
7	963	963	962	962	962	962	962	962	962	962	962	962	962	961	961	961	961	960	960	961	961	961	961	961	963	960	961.5
8	961	961	961	961	961	961	962	961	962	962	962	962	962	962	962	962	962	962	962	962	961	961	962	962	962	961	961.6
9	962	962	962	962	962	962	962	962	962	962	963	963	963	963	963	962	962	962	962	962	962	962	962	963	963	962	962.2
10	963	963	964	963	963	963	964	964	964	964	964	965	965	965	965	965	965	965	965	965	965	965	965	966	966	963	964.3
11	966	966	966	967	967	967	967	967	967	967	967	968	967	967	967	967	968	968	968	968	968	968	968	968	968	966	967.2
12	968	968	968	969	969	969	969	969	969	969	969	970	970	970	970	970	970	970	970	969	969	970	970	970	970	968	969.2
13	970	970	970	970	970	970	969	969	969	970	969	969	968	968	968	967	967	966	966	965	965	965	965	965	970	965	968.0
14	965	964	965	965	965	965	964	964	963	963	963	962	961	961	960	959	959	958	958	958	957	957	957	957	965	957	961.3
15	957	957	957	956	956	956	956	956	956	956	956	956	957	956	956	957	956	956	956	956	956	956	956	956	957	956	956.2
16	956	956	956	956	955	955	955	955	955	955	955	954	954	954	954	953	953	953	953	953	953	953	953	953	956	953	954.2
17	953	952	952	952	952	952	951	952	952	952	951	951	952	951	951	951	951	951	951	951	950	950	950	950	953	950	951.3
18	950	950	948	948	947	946	945	945	944	944	943	943	943	942	941	940	938	939	938	937	937	938	938	937	950	937	942.6
19	936	937	937	937	937	938	938	938	938	938	938	938	938	938	939	939	939	940	941	941	941	942	943	943	943	936	939.0
20	944	945	945	945	945	945	945	946	946	946	947	947	948	948	948	948	948	949	949	949	949	950	950	951	951	944	947.3
21	951	951	951	952	952	952	952	952	953	953	953	954	954	954	955	955	955	956	956	956	956	956	957	957	957	951	953.9
22	957	957	957	957	958	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	958	957	957.6
23	957	957	956	956	956	956	956	956	956	955	955	955	955	955	954	954	954	953	953	952	952	952	952	951	957	951	954.5
24	951	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	951	951	951	951	950	950.2
25	951	952	952	952	952	952	952	952	952	953	953	953	953	953	953	953	952	952	952	952	953	953	953	954	954	951	952.5
26	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	955	955	956	956	956	954	954.3
27	956	956	956	956	956	956	956	957	957	957	957	957	957	957	957	957	957	957	957	957	958	958	958	958	958	956	957.0
28	958	959	959	959	958	959	959	959	959	959	959	959	959	958	958	958	957	957	956	956	956	956	956	956	959	956	957.8
29	956	955	955	955	955	955	954	954	954	954	954	954	953	953	953	952	952	952	952	952	951	952	952	952	956	951	953.3
30	952	952	951	951	951	951	950	951	951	951	951	951	951	951	951	951	951	950	950	950	950	951	951	950	952	950	950.7
31	950	951	951	951	951	951	951	951	951	951	951	951	952	951	951	951	951	951	951	951	951	952	952	952	952	950	951.1
Max.	**970**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**969**	**970**	**969**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**969**	**969**	**970**	**970**	**970**	**970**		
Min.	**936**	**937**	**937**	**937**	**937**	**938**	**938**	**938**	**938**	**938**	**938**	**938**	**938**	**938**	**939**	**939**	**938**	**939**	**938**	**937**	**937**	**938**	**938**	**937**		**936**	
Avg.	**957**	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**957**	**957**	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**			**956.4**

Total Hours In Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	952	952	953	953	953	953	953	954	954	954	955	955	955	955	955	955	955	955	955	955	955	955	956	956	956	952	954.4
2	956	956	956	957	957	957	957	957	957	957	957	957	957	956	956	956	955	955	954	954	953	953	953	953	957	953	955.6
3	952	952	951	950	949	949	948	947								942	941	941	940	939	939	938	939	938	952	938	944.6
4	939	939	939	939	940	940	940	940	940	940	940	940	940	941	941	941	941	941	941	942	942	943	944	944	944	939	940.7
5	944	945	945	946	946	946	947	947	948	948	949	949	949	949	949	949	949	949	949	949	950	950	951	951	951	944	948.1
6	951	952	952	952	953	954	954	954	955	955	955	955	956	956	956	956	955	955	956	956	956	956	957	957	957	951	954.6
7	957	957	957	957	957	957	957	957	957	955	955	954	954	953	952	952	951	950	949	947	947	946	945	945	957	945	952.8
8	945	946	945	946	947	947	947	947	947	947	947	947	947	947	947	948	948	948	949	949	950	951	951	951	951	945	947.8
9	952	952	952	953	953	953	953	953	953	954	954	954	954	954	954	954	954	954	955	955	955	955	956	956	956	952	953.9
10	957	957	957	958	958	959	959	959	959	959	959	960	960	959	959	958	958	959	958	958	958	958	958	958	960	957	958.3
11	958	958	958	958	958	958	957	957	957	957	957	956	956	953	954	953	952	949	950	950	949	948	949	949	958	948	954.3
12	949	949	949	949	950	951	951	951	951	951	952	952	952	952	952	952	952	953	953	953	954	955	956	957	957	949	951.8
13	957	957	957	957	958	957	957	957	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	957	958	957	957.3
14	956	956	956	956	955	955	955	954	954	954	953	953	953	952	952	951	951	951	950	950	950	949	949	950	956	949	952.7
15	950	949	949	949	949	949	949	949	950	950	950	950	950	951	951	951	951	951	951	952	952	952	953	953	953	949	950.5
16	953	954	954	954	955	955	955	955	955	956	956	957	957	957	957	957	957	957	957	957	957	957	958	958	958	953	956.0
17	959	959	959	959	960	959	959	960	960	960	961	961	961	961	961	960	961	960	960	960	960	960	959	959	959	959	959.9
18	959	958	958	958	956	956	954	954	953	952	952	950	949	948	947	947	946	946	946	945	945	946	946	947	959	945	950.8
19	947	948	948	948	948	948	948	949	948	949	949	949	949	949		949	949	950	949	949	949	950	950	950	950	947	948.7
20	950	950	949	949	948	948	947	947	946	946	946	946	946	946	945	945	945	945	945	946	946	947	947	947	950	945	946.8
21	948	949	949	949	950	950	951	951	952	952	953	953	953	954	954	955	955	954	955	955	955	955	956	956	956	948	952.6
22	956	956	955	955	954	954	953	953	952	952	951	950	949	949	948	946	946	945	944	944	943	943	943	943	956	943	949.3
23	942	942	942	942	942	942	942	942	942	942	943	943	943	943	943	942	942	942	941	941	941	941	942	942	943	941	942.0
24	941	941	942	941	942	943	943	943	943	944	944	944	944	944	944	944	943	942	942	942	941	941	942	942	944	941	942.7
25	943	943	944	944	944	944	945	945	945	946	946	947	947	947	947	947	946	946	946	946	946	946	946	947	947	943	945.5
26	947	947	947	947	948	948	948	949	949	949	950	950	950	950	950	950	950	950	951	951	951	952	952	953	953	947	949.6
27	953	953	953	953	953	954	954	953	953	953	952	952	952	950	950	949	947	946	944	942	940	938	937	935	954	935	948.6
28	934	933	932	932	931	930	930	930	929	929	930	930	930	930	930	930	930	931	931	932	932	933	933	934	934	929	931.1
29	934	935	936	936	937	938	938	938	939	939	940	940	940	940	940	940	940	940	939	939	938	938	938	939	940	934	938.4
30	938	938	938	938	937	937	936	936	936	935	935	935	935	934	934	933	932	932	932	931	931	931	931	932	938	931	934.5
Max.	**959**	**959**	**959**	**959**	**960**	**959**	**959**	**960**	**960**	**960**	**961**	**961**	**961**	**961**	**961**	**960**	**961**	**960**	**960**	**960**	**960**	**959**	**959**	**959**	**961**		
Min.	**934**	**933**	**932**	**932**	**931**	**930**	**930**	**930**	**929**	**929**	**930**	**930**	**930**	**930**	**930**	**930**	**930**	**931**	**931**	**932**	**932**	**933**	**933**	**934**		**929**	
Avg.	**949**	**949**	**949**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**949**	**949**	**948**	**948**	**948**	**948**	**948**	**948**	**949**			**949.2**

Total Hours in Month 720 **Hours Data Available** 712 **Data Recovery** 98.9%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	932	932	932	933	932	933	933	933	933	934	934	935	936	936	936	936	937	937	938	938	939	939	940	940	940	932	935.3
2	940	941	941	941	941	942	942	943	944	945	945	946	946	948	948	948	949	950	950	951	952	952	953	953	953	940	946.3
3	954	954	955	955	956	956	957	957	958	958	959	959	960	960	960	960	959	959	960	959	959	958	958	957	960	954	957.7
4	956	955	954	953	951	950	949	947	946	945	943	942	941	940	939	938	937	937	934	935	934	933	933	932	956	932	942.7
5	932	931	929	928	927	926	926	925	925	925	925	927	929	929	929	930	931	932	933	934	935	935	936	936	936	925	929.7
6	936	937	937	938	938	939	939	940	941	942	943	943	944	945	945	945	945	945	945	945	945	945	944	944	945	936	942.0
7	944	944	943	944	943	943	943	943	943	944	944	944	945	945	945	946	945	946	947	948	948	949	950	951	951	943	945.4
8	952	953	953	953	954	955	956	956	956	956	956	957	957	957	957	958	957	957	957	957	958	957	956	956	958	952	955.9
9	955	955	954	954	953	953	952	952	952	952	951	951	950	950	949	949	948	948	948	947	947	947	947	946	955	946	950.4
10	946	945	945	945	945	944	944	944	944	943	943	943	942	942	942	942	942	941	942	942	942	942	942	942	946	941	943.0
11	942	941	941	941	941	941	941	941	941	941	941	941	941	941	941	940	940	940	939	939	939	939	938	938	942	938	940.4
12	937	937	937	937	936	936	935	935	934	934	934	933	933	932	932	931	931	930	930	929	929	929	929	929	937	929	932.9
13	929	928	928	928	928	928	927	927	927	928	928	928	929	929	930	930	930	931	931	931	932	932	933	933	933	927	929.4
14	934	934	934	935	935	936	936	936	936	936	936	936	936	936	936	936	935	934	934	934	933	933	933	933	936	933	934.8
15	933	932	932	933	933	933	933	933	933	934	934	935	935	935	935	936	936	936	936	936	936	936	937	937	937	932	934.5
16	937	937	937	937	937	937	937	937	937	937	937	937	937	937	936	936	936	936	936	935	935	935	936	935	937	935	936.4
17	936	935	935	935	935	934	934	934	934	934	934	934	935	935	934	934	934	934	934	935	935	935	935	935	936	934	934.5
18	935	935	935	935	934	935	935	935	935	935	935	936	936	936	936	936	936	936	936	936	936	937	937	937	937	934	935.5
19	937	938	938	938	938	938	938	938	938	938	939	939	939	939	939	939	939	939	939	939	939	940	940	940	940	937	938.7
20	940	940	940	940	940	940	940	940	940	940	941	941	941	941	940	940	940	940	939	939	938	939	938	938	941	938	939.9
21	939	939	939	938	938	938	938	939	940	940	940	940	940	940	940	940	939	940	940	940	940	940	940	940	940	938	939.3
22	940	940	940	940	940	941	941	941	941	942	943	943	944	944	945	945	945	945	946	946	947	947	947	947	947	940	943.3
23	948	948	948	948	948	949	948	948	949	949	950	950	950	949	949	949	949	949	950	950	951	951	951	951	951	948	949.2
24	951	951	950	950	950	950	950	950	950	950	950	951	951	952	952	952	952	952	952	952	952	952	951	951	952	950	951.0
25	950	949	948	947	946	943	943	941	940	938	936	936	936	936	936	936	935	935	937	938	940	942	942	943	950	935	940.6
26	943	944	944	944	944	944	944	944	945	945	945	946	946	946	945	945	945	944	944	944	943	943	943	943	946	943	944.3
27	943	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	943	943	943	943	944	944	944	942	942.5
28	944	944	945	945	945	945	945	945	945	946	946	946	946	946	946	946	945	944	944	943	942	942	940	939	946	939	944.4
29	938	937	936	935	934	933	931	930	928	928	927	925	925	924	924	922	922	921	921	919	919	918	917	917	938	917	926.3
30	916	915	914	913	912	911	911	911	911	912	913	913	914	915	915	916	917	918	920	921	922	922	923	925	925	911	915.9
31	926	926	928	928	929	930	931	932	932	933	934	935	935	936	936	936	935	935	934	933	932	931	930	929	936	926	931.8
Max.	**956**	**955**	**955**	**955**	**956**	**956**	**957**	**957**	**958**	**958**	**959**	**959**	**960**	**960**	**960**	**960**	**959**	**959**	**960**	**959**	**959**	**958**	**958**	**957**	**960**		
Min.	**916**	**915**	**914**	**913**	**912**	**911**	**911**	**911**	**911**	**912**	**913**	**913**	**914**	**915**	**915**	**916**	**917**	**918**	**920**	**919**	**919**	**918**	**917**	**917**		**911**	
Avg.	**940**	**940**	**940**	**940**	**940**	**939**	**939**	**939**	**939**	**939**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**			**939.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	928	927	927	926	926	926	926	926	926	927	928	929	929	930	930	930	931	931	932	933	934	935	936	937	937	926	929.5
2	937	938	939	940	940	941	941	941	942	943	943	944	944	945	945	945	946	946	947	947	948	948	949	949	949	937	943.7
3	950	951	951	952	952	953	953	953	954	954	955	955	955	955	955	954	954	954	954	954	953	953	953	953	955	950	953.3
4	952	951	951	950	949	949	948	948	948	948	949	949	949	949	949	949	949	949	949	949	950	950	950	950	952	948	949.2
5	950	950	950	950	949	949	950	949	949	950	950	950	950	950	950	950	949	948	948	948	948	948	947	947	950	947	949.1
6	946	946	946	945	943	943	942	941	940	939	938	938	936	934	935	935	934	934	935	934	934	935	938	939	946	934	938.9
7	939	939	939	939	938	937	937	937	937	937	937	938	938	938	939	939	939	940	941	941	942	942	943	944	944	937	939.3
8	943	943	941	941	940	936	935	932	930	928	927	925	927	927	926	926	925	925	925	924	924	924	923	923	943	923	929.9
9	922	922	922	921	921	921	920	920	919	920	919	919	919	919	918	918	918	918	918	918	919	919	919	919	922	918	919.4
10	919	919	919	919	919	919	919	919	919	919	919	920	920	920	920	921	921	922	922	923	923	924	924	924	924	919	920.4
11	925	926	926	926	927	927	927	927	928	928	928	929	929	929	929	929	929	930	930	930	931	931	931	931	931	925	928.4
12	932	932	932	932	932	932	932	932	932	932	932	932	932	932	931	931	931	931	931	930	930	930	930	930	932	930	931.4
13	930	930	930	930	929	929	928	928	928	927	927	927	928	928	928	929	929	929	929	929	929	929	929	929	930	927	928.6
14	930	930	931	931	932	932	932	932	932	932	932	933	933	933	933	933	933	933	933	933	933	934	934	934	934	930	932.5
15	934	934	935	934	934	934	934	934	934	934	934	934	934	934	933	934	933	933	933	933	933	933	933	932	935	932	933.5
16	931	931	931	931	930	930	930	930	930	931	930	930	931	931	931	932	933	933	932	934	935	935	936	937	937	930	931.9
17	938	937	938	939	939	939	941	941	941	941	941	942	942	943	943	942	943	944	945	944	944	944	945	945	945	937	941.6
18	945	945	946	945	945	945	944	944	944	944	945	945	945	945	945	945	944	945	945	945	945	946	946	947	947	944	945.0
19	947	947	947	948	948	948	948	948	949	949	949	949	949	948	948	947	947	946	945	944	943	942	941	939	949	939	946.6
20	938	937	936	935	933	932	932	931	931	930	931	930	930	929	931	930	930	931	932	931	930	930	929	930	938	929	931.6
21	929	929	928	930	930	931	933	935	936	937	938	939	940	941	942	943	944	945	945	948	949	950	950	951	951	928	939.3
22	950	951	950	949	948	947	946	943	943	940	939	938	937	937	936	935	934	933	932	933	934	935	937	938	951	932	940.2
23	938	939	939	940	939	940	939	940	940	940	939	940	940	940	939	940	940	940	940	941	941	941	942	942	942	938	939.9
24	942	943	942	942	941	941	941	940	940	939	938	939	937	935	935	935	934	934	932	932	933	933	932	933	943	932	937.2
25	933	933	934	933	932	930	929	927	924	924	921	923	922	921	919	917	917	916	918	918	919	919	919	920	934	916	923.7
26	919	920	921	921	923	924	926	927	929	931	933	935	937	939	941	942	943	945	946	947	948	948	948	949	949	919	935.1
27	950	950	949	949	948	947	947	946	945	945	944	944	943	941	941	942	943	944	943	943	944	945	945	947	950	941	945.1
28	948	949	949	950	952	953	954	956	957	958	959	960	961	962	963	963	964	964	965	965	966	967	968	968	968	948	959.2
29	969	970	970	970	970	969	968	967	968	969	969	967	967	968	967	966	966	965	965	963	963	963	964	964	970	963	966.9
30	962	964	963	963	962	963	961	961	960	960	962	960	961	960	960	960	958	956	958	955	957	957	956	959	964	955	959.9
Max.	**969**	**970**	**970**	**970**	**970**	**969**	**968**	**967**	**968**	**969**	**969**	**967**	**967**	**968**	**967**	**966**	**966**	**965**	**965**	**965**	**966**	**967**	**968**	**968**	**970**		
Min.	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**919**	**918**	**917**	**917**	**916**	**918**	**918**	**919**	**919**	**919**	**919**		**916**	
Avg.	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**939**	**940**	**940**	**940**			**939.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Barometric Pressure (mbar)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	958	959	959	961	961	962	961	962	961	961	961	961	961	961	961	960	960	960	958	958	957	956	955	955	962	955	959.6
2	954	952	951	950	949	948	947	945	945	944	943	942	941	940	940	939	939	938	938	938	937	936	936	937	954	936	942.8
3	936	936	935	935	935	934	934	933	933	933	933	933	933	933	933	933	933	932	932	932	931	931	931	931	936	931	933.2
4	931	931	931	931	931	931	931	931	932	933	934	936	936	937	938	939	940	941	942	943	944	945	947	948	948	931	936.9
5	949	951	952	952	953	954	954	954	954	955	955	955	954	954	953	953	953	952	952	951	950	950	950	948	955	948	952.4
6	947	948	947	946	945	945	945	944	944	944	944	945	945	946	947	948	950	951	952	953	953	954	955	956	956	944	948.0
7	956	956	957	957	957	956	956	956	955	955	954	953	952	950	948	945	943	942	942	941	938	938	938	938	957	938	949.3
8	939	940	942	942	943	944	944	944	944	944	944	944	944	945	945	946	946	947	948	949	950	951	952	953	953	939	945.5
9	954	955	955	955	954	954	953	952	953	952	951	951	952	951	951	951	951	950	950	948	946	947	947	947	955	946	951.2
10	945	945	942	940	939	937	935	934	932	931	930	929	928	928	927	928	928	929	929	930	931	932	933	934	945	927	933.2
11	935	936	937	939	940	941	942	943	943	944															944	935	939.9
12																											
13																											
14	954	954	954	953	953	953	953	953	953										953	953	954	954	954	954	954	953	953.7
15	947	946	946	946	946	945	946	946	946	946	946	946	946	946	945	945	945	945	945	945	946	945	945	945	954	953	953.4
16	946	945	945	945	943	943	943	943	942	941	941	940	940	940	939	938	937	936	937	937	935	934	933	935	947	945	945.7
17	934	933	933	933	934	934	934	934	934	934	936	934	935	935	936	936	936	936	936	936	936	936	936	936	946	933	939.9
18	936	936	936	936	935	935	935	935	935	935	935	935	935	935	935	935	935	935	936	936	936	937	937	938	936	933	935.0
19	938	938	939	940	940	941	941	941	941	942	943	943	944	944	944	944	944	944	944	944	943	944	943	943	938	935	935.6
20	943	942	941	941	940	939	938	937	935	935	934	933	933	933	933	932	932	931	931	930	930	930	930	930	944	938	942.2
21	930	929	929	929	929	929	929	929	929	929	929	929	929	928	928	928	927	927	926	925	926	926	925	924	943	930	934.6
22	924	924	923	923	923	922	922	922	923	922	923	923	924	924	924	924	924	925	926	926	926	927	928	928	930	924	927.7
23	928	930	931	932	933	933	934	934	935	936	937	937	938	938	939	939	939	940	940	941	941	941	941	942	928	922	924.2
24	941	941	941	940	940	939	938	938	938	938	938	937	936	936	935	935	935	935	936	937	937	939	939	940	942	928	936.6
25	941	942	943	944	945	946	947	948	949	949	950	951	951	953	953	955	955	956	956	957	957	956	956	955	941	935	937.9
26	955	955	954	952	951	950	949	947	946	945	944	943	940	939	938	936	934	933	933	933	932	932	930	930	957	941	950.7
27	928	927	927	926	926	927	926	925	926	926	926	926	926	926	926	926	926	927	927	927	928	928	929	930	955	930	941.8
28	930	931	933	934	935	934	936	936	937	938	938	939	938	938	939	939	939	939	939	939	939	939	939	939	930	925	926.8
29	939	940	940	941	941	941	942	942	943	943	944	945	945	945	946	946	946	946	947	948	948	948	949	949	939	930	936.8
30	950	950	951	951	951	951	950	951	950	950	950	950	950	949	949	948	947	947	947	947	947	947	948	949	949	939	944.4
31	949	950	951	951	951	951	952	952	953	953	953	953	953	953	952	952	951	950	949	948	947	947	945	945	951	947	949.2
Max.	**958**	**959**	**959**	**961**	**961**	**962**	**961**	**962**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**960**	**960**	**960**	**958**	**958**	**957**	**956**	**956**	**956**	953	945	950.5
Min.	**924**	**924**	**923**	**923**	**923**	**922**	**922**	**922**	**923**	**922**	**923**	**923**	**924**	**924**	**924**	**924**	**924**	**925**	**926**	**925**	**926**	**926**	**925**	**924**	**962**		
Avg.	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**	**941**		**922**	
																											941.4

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

January 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	0	7	46	90	100	85	40	5	0	0	0	0	0	0	100	0	16
2	0	0	0	0	0	0	0	0	0	0	0	4	29	64	90	81	46	6	0	0	0	0	0	0	90	0	13
3	0	0	0	0	0	0	0	0	0	0	0	6	23	40	49	44	27	6	0	0	0	0	0	0	49	0	8
4	0	0	0	0	0	0	0	0	0	0	0	3	15	37	47	48	28	4	0	0	0	0	0	0	48	0	8
5	0	0	0	0	0	0	0	0	0	0	0	6	20	33	38	35	23	5	0	0	0	0	0	0	38	0	7
6	0	0	0	0	0	0	0	0	0	0	0	6	23	40	52	55	38	5	0	0	0	0	0	0	55	0	9
7	0	0	0	0	0	0	0	0	0	0	0	6	23	37	37	47	33	6	0	0	0	0	0	0	47	0	8
8	0	0	0	0	0	0	0	0	0	0	0	6	21	31	36	34	24	6	0	0	0	0	0	0	36	0	7
9	0	0	0	0	0	0	0	0	0	0	0	10	40	68	55	59	57	6	0	0	0	0	0	0	68	0	12
10	0	0	0	0	0	0	0	0	0	0	0	3	15	26	35	31	20	4	0	0	0	0	0	0	35	0	6
11	0	0	0	0	0	0	0	0	0	0	0	5	25	45	57	44	29	7	0	0	0	0	0	0	57	0	9
12	0	0	0	0	0	0	0	0	0	0	0	10	41	51	55	46	16	4	0	0	0	0	0	0	55	0	9
13	0	0	0	0	0	0	1	1	1	1	1	7	31	53	81	65	48	17	1	0	0	0	0	0	81	0	13
14	0	0	0	0	0	0	0	0	0	0	1	21	55	89	155	134	81	23	1	1	0	0	0	0	155	0	24
15	0	0	0	0	0	0	0	0	0	0	1	14	68	106	180	165	119	20	1	0	0	0	0	0	180	0	28
16	0	0	0	0	0	0	0	0	0	0	0	6	30	37	42	38	23	7	0	0	0	0	0	0	42	0	8
17	0	0	0	0	0	0	0	0	0	0	0	7	32								0	0	0	0	32	0	2
18	0	0	0	0	0	0	0	0	0	0	0	9	28	41	47	51	35	11	1	0	0	0	0	0	51	0	9
19	0	0	0	0	0	0	0	0	0	0	0	24	41	41	47	41	21	10	0	0	0	0	0	0	47	0	9
20	0	0	0	0	0	0	0	0	0	0	0	8	27	50	63	62	42	17	1	0	0	0	0	0	63	0	11
21	0	0	0	0	0	0	0	0	0	0	1	23	63	96	87	72	58	27	1	0	0	0	0	0	96	0	18
22	0	0	0	0	0	0	0	0	0	0	2	32	90	169	197	170	120	26	2	0	0	0	0	0	197	0	34
23	0	0	0	0	0	0	0	0	0	0	2	24	62	74	123	189	102	18	2	0	0	0	0	0	189	0	25
24	0	0	0	0	0	0	0	0	0	0	2	65	138	167	160	126	88	47	2	0	0	0	0	0	167	0	33
25	0	0	0	0	0	0	0	0	0	0	0	13	78	51	75	60	69	25	2	0	0	0	0	0	78	0	16
26	0	0	0	0	0	0	0	0	0	0	1	12	36	66	75	73	42	16	2	0	0	0	0	0	75	0	13
27	0	0	0	0	0	0	0	0	0	0	1	18	48	71	77	70	66	30	3	0	0	0	0	0	77	0	16
28	0	0	0	0	0	0	0	0	0	0	2	20	73	97	121	77	63	21	3	0	0	0	0	0	121	0	20
29	0	0	0	0	0	0	0	0	0	0	2	47	56	60	72	42	26	15	2	0	0	0	0	0	72	0	13
30	0	0	0	0	0	0	0	0	0	0	4	51	89	109	117	149	28	13	4	0	0	0	0	0	149	0	23
31	0	0	0	0	0	0	0	0	0	0	1	10	27	36	51	32	28	17	3	0	0	0	0	0	51	0	9
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**4**	**65**	**138**	**169**	**197**	**189**	**120**	**47**	**4**	**1**	**0**	**0**	**0**	**0**	**197**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**15**	**26**	**35**	**31**	**16**	**4**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**16**	**45**	**66**	**81**	**74**	**48**	**14**	**1**	**0**	**0**	**0**	**0**	**0**			**14**

Total Hours in Month 744 **Hours Data Available** 737 **Data Recovery** 99.1%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

February 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	5	32	73	133	208	207	123	45	5	0	0	0	0	0	208	0	35
2	0	0	0	0	0	0	0	0	0	0	5	37	74	99	98	76	52	19	4	0	0	0	0	0	99	0	19
3	0	0	0	0	0	0	0	0	0	0	8	34	162	142	148	206	155	79	11	0	0	0	0	0	206	0	39
4	0	0	0	0	0	0	0	0	0	0	8	72	157	208	230	217	171	91	12	0	0	0	0	0	230	0	49
5	0	0	0	0	0	0	0	0	0	0	10	77	162	214	234	219	174	96	12	0	0	0	0	0	234	0	50
6	0	0	0	0	0	0	0	0	0	0	11	44	76	86	148	100			11	0	0	0	0	0	148	0	22
7	0	0	0	0	0	0	0	0	0	0	6	38	55	94	89	97	103	44	13	0	0	0	2	5	103	0	23
8	5	5	5	5	5	5	4	4	4	4	12	37	59	75	118	165	141	53	15	4	3	3	2	2	165	2	31
9	1	1	1	0	0	0	0	0	0	0	8	44	73	104	115	109	77	36	6	0	0	0	0	0	115	0	24
10	0	0	0	0	0	0	0	0	1	1	13	43	171	219	227	194	127	66	22	1	0	0	0	0	227	0	45
11	0	0	0	0	0	0	0	0	0	0	7	29	44	66	85	79	55	25	8	0	0	0	0	0	85	0	17
12	0	0	0	0	0	0	0	0	0	0	22	82	112	143	281	318	192	82	21	1	0	0	0	0	318	0	52
13	0	0	0	0	0	0	0	0	0	0	17	51	75	88	107	113	80	51	11	1	0	0	0	0	113	0	25
14	0	0	0	0	0	0	0	0	0	0	20	49	161	219	221	137	98	64	30	2	0	0	0	0	221	0	42
15	0	0	0	0	0	0	0	0	0	1	16	100	155	272	167	158	142	79	26	2	0	0	0	0	272	0	47
16	0	0	0	0	0	0	0	0	0	1	19	61	121	146	189	171	152	82	27	2	0	0	0	0	189	0	40
17	0	0	0	0	0	0	0	0	0	1	31	129	233	286	299	287	251	93	33	2	0	0	0	0	299	0	69
18	0	0	0	0	0	0	0	0	0	1	22	65	116	141	120	235	210	80	31	3	0	0	0	0	235	0	43
19	0	0	0	0	0	0	0	0	0	2	44	108	170	215	240	257	255	219	121	5	0	0	0	0	257	0	68
20	0	0	0	0	0	0	0	0	0	3	90	201	269	315	334	315	263	183	78	5	0	0	0	0	334	0	86
21	0	0	0	0	0	0	0	0	0	3	64	173	258	316	339	323	269	187	84	6	0	0	0	0	339	0	84
22	0	0	0	0	0	0	0	0	0	4	68	175	260	318	341	315	102	142	104	12	0	0	0	0	341	0	77
23	0	0	0	0	0	0	0	0	0	5	72	177	260	326	315	329	284	176	80	10	0	0	0	0	329	0	85
24	0	0	0	0	0	0	0	0	0	7	79	181	271	330	354	333	281	203	100	11	0	0	0	0	354	0	90
25	0	0	0	0	0	0	0	0	0	10	70	172	260	316	249	210	158	141	65	8	0	0	0	0	316	0	69
26	0	0	0	0	0	0	0	0	0	8	59	159	239	292	285	380	308	193	93	15	0	0	0	0	380	0	85
27	0	0	0	0	0	0	0	0	0	15	77	146	248	302	336	298	232	140	48	10	0	0	0	0	336	0	77
28	0	0	0	0	0	0	0	0	0	10	88	188	283	361	387	369	317	231	125	20	0	0	0	0	387	0	99
Max.	**5**	**5**	**5**	**5**	**5**	**5**	**4**	**4**	**4**	**15**	**90**	**201**	**283**	**361**	**387**	**380**	**317**	**231**	**125**	**20**	**3**	**3**	**2**	**5**	**387**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**29**	**44**	**66**	**85**	**76**	**52**	**19**	**4**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**34**	**97**	**164**	**208**	**224**	**222**	**177**	**107**	**43**	**4**	**0**	**0**	**0**	**0**			**53**

Total Hours in Month 672 **Hours Data Available** 670 **Data Recovery** 99.7%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

March 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	17	113	220	307	367	390	373	316	232	123	22	0	0	0	0	390	0	103
2	0	0	0	0	0	0	0	0	0	18	106	212	299	359	383	370	314	231	127	24	0	0	0	0	383	0	102
3	0	0	0	0	0	0	0	0	0	19	112	219	308	361	388	367	302	232	120	24	0	0	0	0	388	0	102
4	0	0	0	0	0	0	0	0	0	22	124	235	324	383	405	386	330	246	138	31	1	0	0	0	405	0	109
5	0	0	0	0	0	0	0	0	0	27	137	245	334	392	415	398	340	256	149	34	1	0	0	0	415	0	114
6	0	0	0	0	0	0	0	0	1	31	142	251	341	400	421	405	347	263	156	39	1	0	0	0	421	0	117
7	0	0	0	0	0	0	0	0	0	33	151	258	349	409	430	414	355	268	161	46	1	0	0	0	430	0	120
8	0	0	0	0	0	0	0	0	1	27	114	217	348	411	444	395	321	231	117	34	1	0	0	0	444	0	111
9	0	0	0	0	0	0	0	0	1	35	143	223	354	416	438	420	363	277	168	41	2	0	0	0	438	0	120
10	0	0	0	0	0	0	0	0	1	46	155	217	298	379	410	389	370	283	176	56	2	0	0	0	410	0	116
11	0	0	0	0	0	0	0	0	2	51	173	282	374	432	455	437	378	292	183	61	2	0	0	0	455	0	130
12	0	0	0	0	0	0	0	0	2	60	182	291	386	443	464	444	383	295	186	66	3	0	0	0	464	0	134
13	0	0	0	0	0	0	0	0	3	66	189	300	391	448	470	450	391	305	195	71	3	0	0	0	470	0	137
14	0	0	0	0	0	0	0	0	4	71	194	304	395	454	472	455	396	309	197	69	4	0	0	0	472	0	138
15	0	0	0	0	0	0	0	0	5	77	199	309	400	459	479	460	401	314	203	82	5	0	0	0	479	0	141
16	0	0	0	0	0	0	0	0	6	84	205	316	408	466	487	468	409	321	209	88	6	0	0	0	487	0	145
17	0	0	0	0	0	0	0	0	8	91	215	327	417	476	497	478	417	330	217	94	7	0	0	0	497	0	149
18	0	0	0	0	0	0	0	0	6	64	209	303	425	481	501	481	420	333	221	98	9	0	0	0	501	0	148
19	0	0	0	0	0	0	0	0	11	105	228	341	433	492	512	493	432	343	229	106	11	0	0	0	512	0	156
20	0	0	0	0	0	0	0	0	11	65	116	145	168	265	247	234	230	155	87	34	5	0	0	0	265	0	73
21	0	0	0	0	0	0	0	0	8	45	141	288	330	316	536	707	560	339	211	81	10	0	0	0	707	0	149
22	0	0	0	0	0	0	0	0	19	118	233	329	418	493	517	518	458	369	234	90	15	0	0	0	518	0	159
23	0	0	0	0	0	0	0	0	12	129	257	374	470	529	548	527	464	355	248	103	19	0	0	0	548	0	168
24	0	0	0	0	0	0	0	0	24	139	266	383	475	534	554	532	469	377	260	135	21	0	0	0	554	0	174
25	0	0	0	0	0	0	0	0	25	151	273	256	328	459	384	442	438	235	154	64	14	0	0	0	459	0	134
26	0	0	0	0	0	0	0	0	16	48	100	197	278	344	443	462	411	324	206	89	24	0	0	0	462	0	123
27	0	0	0	0	0	0	0	1	35	157	286	407	500	556	573	550	484	391	272	147	29	0	0	0	573	0	183
28	0	0	0	0	0	0	0	1	38	164	295	412	504	561	579	557	491	399	280	153	31	0	0	0	579	0	186
29	0	0	0	0	0	0	0	1	45	177	291	415	504	565	583	560	492	401	281	146	33	0	0	0	583	0	187
30	0	0	0	0	0	0	0	2	49	159	285	403	494	554	571	546	469	409	280	141	31	0	0	0	571	0	183
31	0	0	0	0	0	0	0	2	51	124	216	335	452	522	544	518	494	366	285	170	38	1	0	0	544	0	172
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**51**	**177**	**295**	**415**	**504**	**565**	**583**	**707**	**560**	**409**	**285**	**170**	**38**	**1**	**0**	**0**	**707**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**100**	**145**	**168**	**265**	**247**	**234**	**230**	**155**	**87**	**22**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**78**	**189**	**291**	**381**	**443**	**469**	**459**	**401**	**306**	**196**	**79**	**11**	**0**	**0**	**0**			**138**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

April *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	2	50	161	291	400	510	565	492	495	394	358	226	140	43	1	0	0	565	0	172
2	0	0	0	0	0	0	0	2	45	160	254	347	282	388	380	369	352	297	183	97	31	1	0	0	388	0	133
3	0	0	0	0	0	0	0	1	24	75	106	204	276	298	349	374	307	266	227	106	25	1	0	0	374	0	110
4	0	0	0	0	0	0	0	3	44	131	263	336	495	495	477	285	280	235	195	67	18	1	0	0	495	0	139
5	0	0	0	0	0	0	0	7	100	179	205	309	369	536	386	504	372	181	196	145	24	1	0	0	536	0	146
6	0	0	0	0	0	0	0	8	81	126	175	230	300	342	431	309	241	133	89	36	12	1	0	0	431	0	105
7	0	0	0	0	0	0	0	3	38	132	292	372	288	501	458	526	431	237	189	82	20	1	0	0	526	0	149
8	0	0	0	0	0	0	0	6	61	116	212	460	483	425	371	359	332	165	160	75	33	2	0	0	483	0	136
9	0	0	0	0	0	0	0	3	26	41	77	150	283	381	377	334	282	205	157	91	42	2	0	0	381	0	102
10	0	0	0	0	0	0	0	7	41	102	191	245	388	517	437	354	462	334	231	120	88	6	0	0	517	0	147
11	0	0	0	0	0	0	0	13	83	139	212	344	597	571	653	589	455	513	365	231	70	8	0	0	653	0	202
12	0	0	0	0	0	0	0	8	49	246	372	477	568	663	682	629	592	410	378	208	70	9	0	0	682	0	223
13	0	0	0	0	0	0	0	13	67	196	221	331	370	506	571	612	542	496	381	190	25	6	0	0	612	0	189
14	0	0	0	0	0	0	0	11	85	154	243	436	452	591	488	381	423	462	376	177	61	9	0	0	591	0	181
15	0	0	0	0	0	0	0	11	67	164	224	325	337	442	468	320	574	469	237	70	41	8	0	0	574	0	156
16	0	0	0	0	0	0	0	16	65	278	386	541	549	638	639	406	357	446	378	171	57	11	0	0	639	0	206
17	0	0	0	0	0	0	1	12	57	96	106	207	203	219	237	208	185	160	112	72	72	9	0	0	237	0	81
18	0	0	0	0	0	0	0	9	25	98	182	350	443	468	343	291	189	167	204	113	40	8	0	0	468	0	122
19	0	0	0	0	0	0	1	25	76	140	358	675	437	270	400	316	194	176	126	79	31	6	0	0	675	0	138
20	0	0	0	0	0	0	0	17	61	150	255	319	382	403	616	436	545	320	147	97	60	8	0	0	616	0	159
21	0	0	0	0	0	0	1	22	67	107	190	369	332	348	415	378	274	147	152	117	28	9	0	0	415	0	123
22	0	0	0	0	0	0	2	19	53	93	205	201	196	211	168	225	192	97	90	65	21	4	0	0	225	0	77
23	0	0	0	0	0	0	3	47	116	197	496	369	312	447	311	317	208	365	280	173	115	27	1	0	496	0	158
24	0	0	0	0	0	0	1	20	72	184	275	457	496	356	283	341	362	210	204	125	71	19	0	0	496	0	145
25	0	0	0	0	0	0	1	25	57	133	151	415	291	423	591	629	438	483	307	204	59	19	1	0	629	0	176
26	0	0	0	0	0	0	7	80	177	277	404	566	647	697	717	662	456	504	462	356	239	31	1	0	717	0	262
27	0	0	0	0	0	0	8	108	252	332	457	573	640	666	512	461	610	498	355	120	75	28	1	0	666	0	237
28	0	0	0	0	0	0	7	39	96	166	241	470	636	628	733	667	615	537	407	298	157	36	2	0	733	0	239
29	0	0	0	0	0	0	8	68	231	314	363	493	328	590	529	404	282	337	424	294	169	50	2	0	590	0	204
30	0	0	0	0	0	0	13	96	216	348	478	583	691	666	500	542	502	539	430	203	155	55	3	0	691	0	251
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**108**	**252**	**348**	**496**	**675**	**691**	**697**	**733**	**667**	**615**	**539**	**462**	**356**	**239**	**55**	**3**	**0**	**733**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**41**	**77**	**150**	**196**	**211**	**168**	**208**	**185**	**97**	**89**	**36**	**12**	**1**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**23**	**83**	**168**	**263**	**385**	**419**	**475**	**467**	**424**	**381**	**325**	**256**	**144**	**65**	**13**	**0**	**0**			**162**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

May *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	4	42	107	222	280	338	382	313				320	204	86	39	13	1	0	382	0	112
2	0	0	0	0	0	0	9	48	93	172	318	381	368	381	453	707	608	455	480	319	163	94	3	0	707	0	210
3	0	0	0	0	0	0	15	69	192	341	471	589	674	742	744	775	699	412	259	271	172	18	2	0	775	0	269
4	0	0	0	0	0	0	13	96	231	351	247	211	457	622	710	699	587	580	334	100	83	53	4	0	710	0	224
5	0	0	0	0	0	0	12	59	79	151	217	234	302	406	484	345	395	566	443	240	66	26	2	0	566	0	168
6	0	0	0	0	0	0	10	34	111	185	310	368	283	341	294	273	309	240	136	98	65	28	2	0	368	0	129
7	0	0	0	0	0	1	23	87	115	144	178	216	259	324	449	430	153	178	123	78	61	22	3	0	449	0	118
8	0	0	0	0	0	0	6	28	70	106	148	211	305	285	556	648	495	282	248	198	68	23	3	0	648	0	153
9	0	0	0	0	0	0	6	32	61	82	148	183	207	262	348	368	377	350	374	284	163	85	10	0	377	0	139
10	0	0	0	0	0	1	16	80	125	219	320	414	553	575	571	512	444	404	418	220	120	32	5	0	575	0	209
11	0	0	0	0	0	2	29	125	248	352	485	608	695	735	741	719	658	570	460	332	203	86	12	0	741	0	294
12	0	0	0	0	0	1	26	129	238	366	500	606	498	664	730	718	653	476	426	306	150	62	8	0	730	0	273
13	0	0	0	0	0	0	2	12	35	52	79	160	221	229	225	263	224	198	202	133	87	29	5	0	263	0	90
14	0	0	0	0	0	0	9	52	156	211	426	419	454	277	254	188	143	122	203	116	78	30	6	0	454	0	131
15	0	0	0	0	0	1	14	52	89	219	242	422	330	381	454	592	704	570	436	339	218	99	18	0	704	0	216
16	0	0	0	0	0	2	20	105	148	200	294	458	554	435	312	274	264	233	202	168	126	53	13	1	554	0	161
17	0	0	0	0	0	1	12	55	107	207	491	474	652	593	578	685	673	591	463	300	149	44	10	0	685	0	253
18	0	0	0	0	0	3	46	150	273	402	496	591	688	764	782	778	599	632	310	70	56	39	10	0	782	0	279
19	0	0	0	0	0	5	54	154	224	267	204	304	530	685	594	683	650	619	466	362	147	91	25	1	685	0	253
20	0	0	0	0	0	4	47	148	249	391	328	313	280	242	215	273	408	364	357	276	247	125	22	1	408	0	179
21	0	0	0	0	0	5	53	156	278	407	535	655	719	748	766	712	584	570	467	372	253	111	32	2	766	0	309
22	0	0	0	0	0	2	26	75	133	133	55	167	226	282	249	484	414	369	409	211	117	55	11	0	484	0	142
23	0	0	0	0	0	5	12	64	96	198	228	335	175	233	275	397	383	217	89	66	34	18	6	1	397	0	118
24	0	0	0	0	0	1	13	38	82	175	103	106	174	109	132	196	111	120	108	72	75	16	6	0	196	0	68
25	0	0	0	0	0	2	21	43	50	66	83	120	149	234	142	134	190	168	166	175	104	40	15	1	234	0	79
26	0	0	0	0	0	6	18	41	97	100	174	162	187	285	435	452	188	188	203	81	71	39	13	1	452	0	114
27	0	0	0	0	0	3	21	105	253	317	413	459	521	569	349	654	486	532	466	365	249	126	18	2	654	0	246
28	0	0	0	0	0	6	39	148	180	223	271	281	397	463	805	637	643	502	233	300	248	66	16	3	805	0	228
29	0	0	0	0	0	8	75	176	296	425	555	600	464	302	231	298	261	314	535	130	96	63	25	4	600	0	202
30	0	0	0	0	0	6	39	105	101	182	318	297	272	288	337	434	571	539	264	122	112	56	19	2	571	0	169
31	0	0	0	0	0	8	37	84	161	210	328	490	275	223	259	216	157	184	119	54	44	23	11	2	490	0	120
Max.	**0**	**0**	**0**	**0**	**0**	**8**	**75**	**176**	**296**	**425**	**555**	**655**	**719**	**764**	**805**	**778**	**704**	**632**	**535**	**372**	**253**	**126**	**32**	**4**	**805**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**	**35**	**52**	**55**	**106**	**149**	**109**	**132**	**134**	**111**	**120**	**89**	**54**	**34**	**13**	**1**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**2**	**23**	**84**	**151**	**228**	**298**	**360**	**395**	**419**	**449**	**485**	**434**	**383**	**310**	**201**	**125**	**54**	**11**	**1**			**183**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

June *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	3	13	60	113	306	170	245	254	235	177	208	270	172	99	49	46	22	6	1	306	0	102
2	0	0	0	0	0	8	31	53	56	94	164	219	307	395	434	389	322	341	263	164	89	58	16	1	434	0	142
3	0	0	0	0	0	2	23	59	116	145	253	266	352	335	631	334	484	467	196	235	78	134	51	6	631	0	174
4	0	0	0	0	0	5	32	44	76	79	137	172	229	336	266	233	168	360	279	73	63	29	4	1	360	0	108
5	0	0	0	0	0	2	15	53	35	74	208	325	447	458	302	282	289	343	185	139	113	131	21	6	458	0	143
6	0	0	0	0	1	10	33	78	241	446	547	431	623	786	782	745	715	594	407	217	162	51	33	6	786	0	288
7	0	0	0	0	0	18	103	160	342	428	642	442	540	373	292	539	378	467	398	374	265	134	38	7	642	0	247
8	0	0	0	0	0	11	59	149	159	148	278	446	556	459	443	633	576	420	212	221	153	87	25	6	633	0	210
9	0	0	0	0	0	8	34	85	126	232	361	392	399	326	376	436	380	227	218	225	115	47	20	3	436	0	167
10	0	0	0	0	1	12	40	105	170	304	457	633	721	757	764	764	621	467	334	220	199	106	32	3	764	0	279
11	0	0	0	0	0	10	54	103	146	188	230	551	679	572	710	502	633	632	543	385	269	67	16	2	710	0	262
12	0	0	0	0	0	2	12	35	67	108	105	122	129	165	141	185	216	184	170	135	91	104	29	6	216	0	84
13	0	0	0	0	1	8	33	106	135	180	264	391	310	140	224	479	378	259	119	164	130	45	17	3	479	0	141
14	0	0	0	0	1	7	43	89	161	239	311	491	501	265	257	472	197	235	260	199	122	43	15	7	501	0	163
15	0	0	0	0	1	23	87	190	182	379	554	648	707	773	740	663	719	540	537	377	281	165	67	8	773	0	318
16	0	0	0	0	2	22	81	201	307	418	527	592	668	681	686	550	523	428	258	157	91	48	14	2	686	0	261
17	0	0	0	0	0	2	14	52	135	213	242	363	254	193	281	469	463	324	137	142	135	79	29	4	469	0	147
18	0	0	0	0	1	9	47	130	183	332	267	270	265	295	641	429	224	192	416	198	170	40	22	7	641	0	172
19	0	0	0	0	1	22	86	158	195	274	270	649	734	754	744	735	708	596	493	403	269	165	60	11	754	0	305
20	1	0	0	0	1	17	89	189	308	431	550	651	716	710	682	682	711	622	252	273	152	88	35	6	716	0	299
21	0	0	0	0	1	8	36	86	224	301	520	555	484	543	549	439	556	569	329	230	122	42	16	3	569	0	234
22	0	0	0	0	0	3	33	61	71	79	180	168	140	78	108	100	86	131	113	81	41	22	9	1	180	0	63
23	0	0	0	0	0	2	8	13	17	30	37	64	98	129	118	78	82	81	70	46	50	43	14	2	129	0	41
24	0	0	0	0	0	4	10	29	68	103	111	148	203	228	260	183	227	224	256	300	259	143	20	4	300	0	116
25	0	0	0	0	0	4	21	57	103	121	272	257	220	188	304	415	396	310	237	160	94	61	23	7	415	0	135
26	1	0	0	0	1	12	54	181	162	320	489	321	442	565	750	774	729	710	564	347	301	170	44	9	774	0	289
27	0	0	0	0	2	16	98	155	251	439	477	563	620	775	699	636	733	465	357	292	205	81	27	4	775	0	287
28	0	0	0	0	0	4	26	46	68	119	179	182	164	249	219	202	272	92	82	176	78	46	40	13	272	0	94
29	1	0	0	0	2	21	85	190	308	384	240	549	769	847	755	650	687	687	547	383	171	146	33	10	847	0	311
30	1	0	0	0	0	17	75	119	200	187	269	309	493	582	545	519	345	229	148	180	58	55	27	5	582	0	182
Max.	**1**	**0**	**0**	**0**	**2**	**23**	**103**	**201**	**342**	**446**	**642**	**651**	**769**	**847**	**782**	**774**	**733**	**710**	**564**	**403**	**301**	**170**	**67**	**13**	**847**		
Min.	**0**	**0**	**0**	**0**	**0**	**2**	**8**	**13**	**17**	**30**	**37**	**64**	**98**	**78**	**108**	**78**	**82**	**81**	**70**	**46**	**41**	**22**	**4**	**1**		**0**	
Avg.	**0**	**0**	**0**	**0**	**1**	**10**	**46**	**101**	**157**	**237**	**310**	**381**	**434**	**440**	**463**	**457**	**436**	**379**	**283**	**218**	**146**	**82**	**27**	**5**			**192**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

July *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	6	22	69	96	235	439	539	416	370	246	372	346	164	110	101	77	36	14	2	539	0	153
2	0	0	0	0	0	6	29	152	255	409	349	505	669	451	332	430	229	332	363	218	214	101	43	3	669	0	212
3	0	0	0	0	0	5	28	154	269	319	269	235	341	483	518	649	578	445	248	97	84	13	5	1	649	0	198
4	0	0	0	0	0	2	12	32	59	137	159	259	234	193	314	278	273	199	138	149	103	55	24	4	314	0	109
5	0	0	0	0	0	6	30	74	282	396	466	436	458	234	425	441	121	94	159	61	31	17	6	1	466	0	156
6	0	0	0	0	0	3	20	31	64	145	194	185	269	325	300	377	380	359	307	235	265	96	38	7	380	0	150
7	0	0	0	0	0	6	41	117	287	417	381	453	487	355	378	305	322	237	165	63	75	33	19	1	487	0	173
8	0	0	0	0	0	1	11	27	65	154	115	95	204	361	306	236	144	140	278	154	99	71	33	3	361	0	104
9	0	0	0	0	0	3	18	40	124	242	263	265	403	585	313	399	293	440	325	290	254	163	63	9	585	0	187
10	0	0	0	0	0	9	71	172	278	230	279	291	667	238	257	237	303	326	209	120	92	39	26	3	667	0	160
11	0	0	0	0	0	8	57	102	162	427	559	634	687	655	669	660	654	684	506	393	229	83	21	4	687	0	300
12	0	0	0	0	0	6	60	161	314	442	556	376	240	536	543	267	201	99	177	72	63	55	26	4	556	0	175
13	0	0	0	0	0	1	9	21	22	27	57	84	182	175	195	242	269	266	185	71	35	25	11	2	269	0	78
14	0	0	0	0	0	3	20	63	112	130	298	420	382	282	277	337	184	151	159	139	44	69	15	1	420	0	129
15	0	0	0	0	0	1	18	39	83	123	78	185	172	140	450	366	411	217	288	169	103	61	16	2	450	0	122
16	0	0	0	0	0	4	22	56	115	161	315	479	624	698	267	301	373	339	411	352	202	148	41	4	698	0	205
17	0	0	0	0	0	5	55	156	272	397	516	616	656	607	641	803	700	629	494	304	179	118	34	3	803	0	299
18	0	0	0	0	0	1	12	43	123	185	220	346	297	363	260	150	164	193	183	106	106	51	8	1	363	0	117
19	0	0	0	0	0	2	26	81	178	151	144	223	462	508	296	178	346	190	182	136	86	47	13	1	508	0	135
20	0	0	0	0	0	2	28	102	126	275	555	232	146	321	235	334	310	628	564	280	184	140	22	3	628	0	187
21	0	0	0	0	0	2	18	51	72	70	99	151	194	268	332	292	209	214	90	52	26	14	2	0	332	0	90
22	0	0	0	0	0	0	4	15	34	60	78	125	174	176	138	105	121	138	79	52	28	17	3	1	176	0	56
23	0	0	0	0	0	1	5	21	56	118	160	164	216	171	123	85	59	54	79	33	19	6	2	0	216	0	57
24	0	0	0	0	0	0	8	28	68	154	285	262	231	288	265	210	226	260	186	139	71	34	12	0	288	0	114
25	0	0	0	0	0	1	14	46	146	313	208	219	377	340	420	307	191	233	190	144	87	79	36	1	420	0	140
26	0	0	0	0	0	1	18	67	129	102	182	463	539	703	590	393	338	618	387	287	120	23	8	1	703	0	207
27	0	0	0	0	0	1	10	48	92	173	345	326	386	545	411	712	363	412	351	144	86	26	9	1	712	0	185
28	0	0	0	0	0	1	13	32	75	255	237	530	648	708	714	681	635	550	424	310	164	52	16	1	714	0	252
29	0	0	0	0	0	1	22	44	91	149	315	525	612	507	601	611	512	487	383	200	86	80	11	0	612	0	218
30	0	0	0	0	0	0	7	23	63	92	75	104	209	301	175	275	367	566	261	150	96	33	9	0	566	0	117
31	0	0	0	0	0	1	5	35	64	89	131	207	201	165	203	295	290	463	142	38	29	29	6	0	463	0	100
Max.	**0**	**0**	**0**	**0**	**0**	**9**	**71**	**172**	**314**	**442**	**559**	**634**	**687**	**708**	**714**	**803**	**700**	**684**	**564**	**393**	**265**	**163**	**63**	**9**	**803**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**15**	**22**	**27**	**57**	**84**	**146**	**140**	**123**	**85**	**59**	**54**	**79**	**33**	**19**	**6**	**2**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**23**	**68**	**135**	**212**	**269**	**320**	**380**	**389**	**361**	**365**	**320**	**327**	**259**	**163**	**108**	**59**	**19**	**2**			**158**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

August 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	2	7	25	59	123	145	253	149	174	241	183	142	51	47	21	6	3	0	253	0	68
2	0	0	0	0	0	0	3	11	33	68	67	58	80	105	117	110	224	198	105	64	63	27	4	0	224	0	56
3	0	0	0	0	0	0	2	11	17	29	57	155	133	173	196	216	191	163	93	28	20	6	1	0	216	0	62
4	0	0	0	0	0	0	0	3	11	18	22	35	44	78	67	54	56	84	127	64	24	7	1	0	127	0	29
5	0	0	0	0	0	0	3	11	18	45	153	85	137	188	123	136	239	162	83	62	46	25	3	0	239	0	63
6	0	0	0	0	0	0	5	62	214	333	440	390	373	599	453	347	371	567	352	120	112	34	7	0	599	0	199
7	0	0	0	0	0	0	11	72	192	262	387	351	310	568	669	691	583	356	433	311	192	81	8	0	691	0	228
8	0	0	0	0	0	0	11	46	76	162	359	353	451	571	427	454	273	309	227	235	109	53	6	0	571	0	172
9	0	0	0	0	0	0	12	97	203	322	451	526	626	691	697	732	439	568	449	212	174	58	6	0	732	0	261
10	0	0	0	0	0	0	9	79	195	317	438	542	621	656	687	680	615	530	403	267	173	60	4	0	687	0	261
11	0	0	0	0	0	0	11	83	150	263	401	515	538	458	434	377	377	248	159	107	56	19	2	0	538	0	175
12	0	0	0	0	0	0	1	5	21	40	108	127	197	230	213	230	390	528	414	286	167	58	5	0	528	0	126
13	0	0	0	0	0	0	6	69	181	301	419	476	571	528	404	402	385	438	417	167	60	14	1	0	571	0	202
14	0	0	0	0	0	0	1	18	75	72	57	67	106	119	228	289	222	150	136	83	101	11	1	0	289	0	72
15	0	0	0	0	0	0	1	6	24	95	129	341	188	171	205	159	118	113	114	82	57	20	1	0	341	0	76
16	0	0	0	0	0	0	4	77	198	302	404	528	610	533	338	597	429	321	198	144	166	46	1	0	610	0	204
17	0	0	0	0	0	0	2	23	139	122	284	424	216	253	155	114	134	324	309	292	96	33	2	0	424	0	122
18	0	0	0	0	0	0	1	7	45	102	128	143	101	110	141	222	170	158	80	79	58	21	1	0	222	0	65
19	0	0	0	0	0	0	1	25	99	162	198	180	186	154	221	356	497	315	152	84	64	15	0	0	497	0	113
20	0	0	0	0	0	0	0	3	8	20	33	42	86	110	146	173	200	261	208	137	99	18	1	0	261	0	64
21	0	0	0	0	0	0	0	6	17	32	33	47	71	74	93	101	104	69	46	40	17	4	0	0	104	0	31
22	0	0	0	0	0	0	0	3	14	36	50	77	92	102	91	64	67	66	66	35	12	3	0	0	102	0	32
23	0	0	0	0	0	0	0	6	26	95	217	205	195	228	238	229	218	193	126	72	27	5	0	0	238	0	87
24	0	0	0	0	0	0	1	33	67	127	191	268	510	236	160	266	342	378	207	32	23	10	0	0	510	0	119
25	0	0	0	0	0	0	0	11	32	106	123	122	233	446	427	429	536	439	329	231	112	17	0	0	536	0	150
26	0	0	0	0	0	0	1	30	61	188	344	473	383	338	411	272	158	253	372	229	117	18	0	0	473	0	152
27	0	0	0	0	0	0	1	28	130	249	371	469	281	254	400	423	298	409	319	262	138	13	0	0	469	0	168
28	0	0	0	0	0	0	0	29	142	224	368	475	555	604	616	589	487	328	306	212	90	6	0	0	616	0	210
29	0	0	0	0	0	0	0	18	37	81	145	235	313	533	600	532	475	432	305	200	74	5	0	0	600	0	166
30	0	0	0	0	0	0	0	20	108	233	147	188	255	285	289	251	277	375	305	194	17	3	0	0	375	0	123
31	0	0	0	0	0	0	0	16	99	234	287	405	511	466	410	447	259	239	98	132	16	2	0	0	511	0	151
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**97**	**214**	**333**	**451**	**542**	**626**	**691**	**697**	**732**	**615**	**568**	**449**	**311**	**192**	**81**	**8**	**0**	**732**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**8**	**18**	**22**	**35**	**44**	**74**	**67**	**54**	**56**	**66**	**46**	**28**	**12**	**2**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**30**	**86**	**152**	**224**	**272**	**298**	**323**	**317**	**328**	**301**	**294**	**225**	**146**	**81**	**23**	**2**	**0**			**129**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	7	52	150	115	183	158	146	147	315	369	331	209	179	18	3	0	0	369	0	99
2	0	0	0	0	0	0	0	3	14	44	107	248	386	450	415	364	217	161	109	63	13	1	0	0	450	0	108
3	0	0	0	0	0	0	0	2								142	86	42	46	28	12	1	0	0	142	0	21
4	0	0	0	0	0	0	0	4	50	174	230	212	236	374	427	442	300	173	268	145	35	2	0	0	442	0	128
5	0	0	0	0	0	0	0	6	45	129		464	408	397	663	644	95	48	26	34	18	1	0	0	663	0	129
6	0	0	0	0	0	0	0	4	26	89	153	206	230	407	363	189	319	195	87	25	10	0	0	0	407	0	96
7	0	0	0	0	0	0	0	3	36	171	45	42	68	101	96	96	72	40	28	14	6	0	0	0	171	0	34
8	0	0	0	0	0	0	0	1	11	22	20	45	73	93	101	85	95	99	33	16	10	0	0	0	101	0	29
9	0	0	0	0	0	0	0	1	10	38	90	101	93	135	232	264	317	160	89	88	18	1	0	0	317	0	68
10	0	0	0	0	0	0	0	5	76	208	273	337	289	268	250	348	303	172	174	61	11	0	0	0	348	0	116
11	0	0	0	0	0	0	0	1	19	144	138	88	44	51	36	62	45	40	19	19	3	0	0	0	144	0	30
12	0	0	0	0	0	0	0	1	12	37	115	205	452	576	541	450	347	115	117	55	11	0	0	0	576	0	126
13	0	0	0	0	0	0	0	0	4	23	69	67	202	286	169	143	92	42	65	15	6	0	0	0	286	0	49
14	0	0	0	0	0	0	0	2	30	140	131	141	181	335	320	488	194	212	100	64	16	0	0	0	488	0	98
15	0	0	0	0	0	0	0	2	55	154	298	444	514	475	253	227	287	441	337	82	9	0	0	0	514	0	149
16	0	0	0	0	0	0	0	2	31	139	305	209	327	394	443	269	331	238	168	122	9	0	0	0	443	0	124
17	0	0	0	0	0	0	0	0	7	15	38	88	92	231	222	375	238	181	131	53	8	0	0	0	375	0	70
18	0	0	0	0	0	0	0	0	5	18	34	102	150	95	51	22	44	33	25	15	5	0	0	0	150	0	25
19	0	0	0	0	0	0	0	1	19	27	35	66	103	103		184	128	97	59	16	1	0	0	0	184	0	36
20	0	0	0	0	0	0	0	0	12	22	53	78	87	114	201	189	196	180	52	8	2	0	0	0	201	0	50
21	0	0	0	0	0	0	0	0	14	57	206	285	401	368	443	181	333	251	186	69	4	0	0	0	443	0	117
22	0	0	0	0	0	0	0	1	20	71	102	199	204	202	158	90	52	33	12	4	0	0	0	0	204	0	48
23	0	0	0	0	0	0	0	0	10	42	131	205	183	243	116	87	47	36	24	10	1	0	0	0	243	0	47
24	0	0	0	0	0	0	0	0	5	29	68	103	251	162	156	126	88	68	15	7	0	0	0	0	251	0	45
25	0	0	0	0	0	0	0	0	10	51	137	261	214	247	225	211	123	87	58	23	1	0	0	0	261	0	69
26	0	0	0	0	0	0	0	0	18	70	194	317	235	106	181	146	102	165	90	16	1	0	0	0	317	0	68
27	0	0	0	0	0	0	0	0	9	66	154	204	166	204	275	127	112	96	40	10	0	0	0	0	275	0	61
28	0	0	0	0	0	0	0	0	3	17	51	68	83	81	87	135	107	109	46	10	1	0	0	0	135	0	33
29	0	0	0	0	0	0	0	0	12	122	221	277	182	341	183	193	139	66	34	9	0	0	0	0	341	0	74
30	0	0	0	0	0	0	0	0	3	18	49	63	125	111	96	81	55	84	30	4	0	0	0	0	125	0	30
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**76**	**208**	**305**	**464**	**514**	**576**	**663**	**644**	**369**	**441**	**337**	**179**	**35**	**3**	**0**	**0**	**663**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**15**	**20**	**42**	**44**	**51**	**36**	**22**	**44**	**33**	**12**	**4**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**21**	**79**	**127**	**183**	**212**	**245**	**245**	**222**	**174**	**133**	**89**	**42**	**8**	**0**	**0**	**0**			**73**

Total Hours in Month 720 **Hours Data Available** 711 **Data Recovery** 98.8%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	9	52	84	135	106	165	270	245	338	96	28	11	0	0	0	0	338	0	64
2	0	0	0	0	0	0	0	0	2	14	40	100	222	157	132	158	229	92	74	14	0	0	0	0	229	0	51
3	0	0	0	0	0	0	0	0	7	99	171	285	364	274	291	292	234	245	62	6	0	0	0	0	364	0	97
4	0	0	0	0	0	0	0	0	1	12	28	30	45	50	35	43	32	24	14	4	0	0	0	0	50	0	13
5	0	0	0	0	0	0	0	0	2	19	56	124	96	214	305	261	186	85	55	23	0	0	0	0	305	0	59
6	0	0	0	0	0	0	0	0	2	24	106	191	193	290	367	217	202	94	60	7	0	0	0	0	367	0	73
7	0	0	0	0	0	0	0	0	4	22	117	212	312	296	193	291	349	232	99	12	0	0	0	0	349	0	89
8	0	0	0	0	0	0	0	0	4	60	142	282	357	404	411	378	302	172	66	8	0	0	0	0	411	0	108
9	0	0	0	0	0	0	0	0	3	52	167	269	345	389	397	367	298	207	94	7	0	0	0	0	397	0	108
10	0	0	0	0	0	0	0	0	2	33	83	229	321	317	440	291	284	141	71	4	0	0	0	0	440	0	92
11	0	0	0	0	0	0	0	0	2	28	123	125	150	188	196	145	71	27	8	1	0	0	0	0	196	0	44
12	0	0	0	0	0	0	0	0	1	12	43	99	191	228	290	314	258	146	73	4	0	0	0	0	314	0	69
13	0	0	0	0	0	0	0	0	1	18	64	110	188	265	346	304	282	193	60	3	0	0	0	0	346	0	76
14	0	0	0	0	0	0	0	0	1	23	104	155	201	215	209	122	150	123	24	1	0	0	0	0	215	0	55
15	0	0	0	0	0	0	0	0	1	24	134	185	145	198	193	196	110	88	21	1	0	0	0	0	198	0	54
16	0	0	0	0	0	0	0	0	1	17	71	153	176	107	142	144	87	48	13	0	0	0	0	0	176	0	40
17	0	0	0	0	0	0	0	0	0	23	70	142	210	321	364	227	110	57	11	1	0	0	0	0	364	0	64
18	0	0	0	0	0	0	0	0	1	18	64	155	173	203	196	176	107	69	20	1	0	0	0	0	203	0	49
19	0	0	0	0	0	0	0	0	0	12	97	211	284	337	339	307	239	134	20	1	0	0	0	0	339	0	83
20	0	0	0	0	0	0	0	0	0	16	97	221	258	230	286	164	118	58	14	0	0	0	0	0	286	0	61
21	0	0	0	0	0	0	0	0	0	8	52	104	175	248	144	128	117	112	18	0	0	0	0	0	248	0	46
22	0	0	0	0	0	0	0	0	0	6	37	77	146	116	273	244	238	76	15	0	0	0	0	0	273	0	51
23	0	0	0	0	0	0	0	0	0	8	46	99	127	137	126	111	93	38	12	0	0	0	0	0	137	0	33
24	0	0	0	0	0	0	0	0	0	6	45	75	129	172	131	94	72	32	5	0	0	0	0	0	172	0	32
25	0	0	0	0	0	0	0	0	0	3	23	43	37	50	42	27	21	16	3	0	0	0	0	0	50	0	11
26	0	0	0	0	0	0	0	0	0	4	22	45	67	136	109	88	60	50	4	0	0	0	0	0	136	0	24
27	0	0	0	0	0	0	0	0	0	2	28	58	117	162	91	36	32	38	5	0	0	0	0	0	162	0	24
28	0	0	0	0	0	0	0	0	0	4	27	75	99	144	161	128	67	74	8	0	0	0	0	0	161	0	33
29	0	0	0	0	0	0	0	0	0	2	18	52	79	121	87	66	43	18	2	0	0	0	0	0	121	0	20
30	0	0	0	0	0	0	0	0	0	1	12	39	77	77	83	73	61	24	3	0	0	0	0	0	83	0	19
31	0	0	0	0	0	0	0	0	0	2	27	68	142	98	150	141	103	64	6	0	0	0	0	0	150	0	33
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**99**	**171**	**285**	**364**	**404**	**440**	**378**	**349**	**245**	**99**	**23**	**0**	**0**	**0**	**0**	**440**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**12**	**30**	**37**	**50**	**35**	**27**	**21**	**16**	**2**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**20**	**71**	**134**	**178**	**203**	**219**	**186**	**158**	**93**	**31**	**4**	**0**	**0**	**0**	**0**			**54**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	2	23	46	74	54	56	66	27	9	1	0	0	0	0	0	74	0	15
2	0	0	0	0	0	0	0	0	0	1	16	50	122	185	143	109	85	18	2	0	0	0	0	0	185	0	30
3	0	0	0	0	0	0	0	0	0	2	18	39	61	105	85	62	42	18	1	0	0	0	0	0	105	0	18
4	0	0	0	0	0	0	0	0	0	1	10	27	44	58	62	44	38	16	1	0	0	0	0	0	62	0	13
5	0	0	0	0	0	0	0	0	0	1	13	52	58	99	101	100	53	19	2	0	0	0	0	0	101	0	21
6	0	0	0	0	0	0	0	0	0	1	15	38	45	50	171	191	79	28	2	0	0	0	0	0	191	0	26
7	0	0	0	0	0	0	0	0	0	1	11	41	60	88	119	66	42	10	3	0	0	0	0	0	119	0	18
8	0	0	0	0	0	0	0	0	0	0	8	25	47	40	63	78	45	41	2	0	0	0	0	0	78	0	14
9	0	0	0	0	0	0	0	0	0	1	30	121	103	115	97	110	78	15	1	0	0	0	0	0	121	0	28
10	0	0	0	0	0	0	0	0	0	0	10	73	147	115	119	106	53	30	1	0	0	0	0	0	147	0	27
11	0	0	0	0	0	0	0	0	0	1	40	93	136	200	187	124	92	13	1	0	0	0	0	0	200	0	37
12	0	0	0	0	0	0	0	0	0	0	16	42	73	90	74	75	36	9	0	0	0	0	0	0	90	0	17
13	0	0	0	0	0	0	0	0	0	0	5	23	40	33	46	37	13	7	0	0	0	0	0	0	46	0	8
14	0	0	0	0	0	0	0	0	0	0	19	64	80	91	122	75	55	14	1	0	0	0	0	0	122	0	22
15	0	0	0	0	0	0	0	0	0	0	7	58	125	135	173	175	122	29	1	0	0	0	0	0	175	0	34
16	0	0	0	0	0	0	0	0	0	0	5	43	63	64	100	49	29	13	0	0	0	0	0	0	100	0	15
17	0	0	0	0	0	0	0	0	0	0	3	36	75	100	114	110	84	21	0	0	0	0	0	0	114	0	23
18	0	0	0	0	0	0	0	0	0	0	3	20	35	77	62	58	39	8	0	0	0	0	0	0	77	0	12
19	0	0	0	0	0	0	0	0	0	0	3	16	25	45	52	44	24	5	0	0	0	0	0	0	52	0	9
20	0	0	0	0	0	0	0	0	0	0	1	11	32	63	76	55	27	7	0	0	0	0	0	0	76	0	11
21	0	0	0	0	0	0	0	0	0	0	2	13	40	56	48	50	22	4	0	0	0	0	0	0	56	0	10
22	0	0	0	0	0	0	0	0	0	0	1	9	15	32	28	48	22	2	0	0	0	0	0	0	48	0	6
23	0	0	0	0	0	0	0	0	0	0	3	28	61	145	146	65	52	21	0	0	0	0	0	0	146	0	22
24	0	0	0	0	0	0	0	0	0	0	2	19	66	67	55	55	54	8	0	0	0	0	0	0	67	0	14
25	0	0	0	0	0	0	0	0	0	0	2	35	50	83	73	55	23	3	0	0	0	0	0	0	83	0	13
26	0	0	0	0	0	0	0	0	0	0	2	15	27	69	83	68	26	4	0	0	0	0	0	0	83	0	12
27	0	0	0	0	0	0	0	0	0	0	1	13	20	27	40	29	34	13	0	0	0	0	0	0	40	0	7
28	0	0	0	0	0	0	0	0	0	0	2	22	37	36	51	37	21	3	0	0	0	0	0	0	51	0	9
29	0	0	0	0	0	0	0	0	0	0	0	16	33	54	48	25	13	1	0	0	0	0	0	0	54	0	8
30	0	0	0	0	0	0	0	0	0	0	0	7	18	30	30	20	9	1	0	0	0	0	0	0	30	0	5
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**40**	**121**	**147**	**200**	**187**	**191**	**122**	**41**	**3**	**0**	**0**	**0**	**0**	**0**	**200**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**15**	**27**	**28**	**20**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**36**	**60**	**80**	**87**	**73**	**45**	**13**	**1**	**0**	**0**	**0**	**0**	**0**			**17**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 1 Meteorological Station - Solar (Watts/m^2)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	5	25	78	118	122	95	33	3	0	0	0	0	0	0	122	0	20
2	0	0	0	0	0	0	0	0	0	0	4	31	73	116	125	95	40	4	0	0	0	0	0	0	125	0	20
3	0	0	0	0	0	0	0	0	0	0	1	21	42	100	122	96	40	4	0	0	0	0	0	0	122	0	18
4	0	0	0	0	0	0	0	0	0	0	1	11	41	45	27	25	29	7	0	0	0	0	0	0	45	0	8
5	0	0	0	0	0	0	0	0	0	0	1	8	30	52	60	32	19	2	0	0	0	0	0	0	60	0	8
6	0	0	0	0	0	0	0	0	0	0	0	4	15	26	34	37	20	3	0	0	0	0	0	0	37	0	6
7	0	0	0	0	0	0	0	0	0	0	0	5	20	33	30	20	9	2	0	0	0	0	0	0	33	0	5
8	0	0	0	0	0	0	0	0	0	0	0	8	32	32	34	26	19	2	0	0	0	0	0	0	34	0	6
9	0	0	0	0	0	0	0	0	0	0	0	7	25	38	41	27	11	1	0	0	0	0	0	0	41	0	6
10	0	0	0	0	0	0	0	0	0	0	0	7	24	24	23	17	8	1	0	0	0	0	0	0	24	0	4
11	0	0	0	0	0	0	0	0	0	0															0	0	0
12																											
13																			0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0																0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	4	15	42	71	56	24	2	0	0	0	0	0	0	71	0	9
16	0	0	0	0	0	0	0	0	0	0	0	5	33	45	39	32	11	1	0	0	0	0	0	0	45	0	7
17	0	0	0	0	0	0	0	0	0	0	0	6	27	46	57	58	37	2	0	0	0	0	0	0	58	0	10
18	0	0	0	0	0	0	0	0	0	0	0	7	26	40	46	43	28	1	0	0	0	0	0	0	46	0	8
19	0	0	0	0	0	0	0	0	0	0	0	7	25	38	45	44	27	1	0	0	0	0	0	0	45	0	8
20	0	0	0	0	0	0	0	0	0	0	0	2	11	16	18	16	7	1	0	0	0	0	0	0	18	0	3
21	0	0	0	0	0	0	0	0	0	0	0	4	19	47	32	19	8	1	0	0	0	0	0	0	47	0	5
22	0	0	0	0	0	0	0	0	0	0	0	8	24	33	34	34	22	3	0	0	0	0	0	0	34	0	7
23	0	0	0	0	0	0	0	0	0	0	0	6	44	97	100	77	30	3	0	0	0	0	0	0	100	0	15
24	0	0	0	0	0	0	0	0	0	0	0	4	18	32	31	23	10	1	0	0	0	0	0	0	32	0	5
25	0	0	0	0	0	0	0	0	0	0	0	11	56	103	119	88	36	4	0	0	0	0	0	0	119	0	17
26	0	0	0	0	0	0	0	0	0	0	0	3	20	34	41	32	13	2	0	0	0	0	0	0	41	0	6
27	0	0	0	0	0	0	0	0	0	0	0	5	19	22	24	18	8	1	0	0	0	0	0	0	24	0	4
28	0	0	0	0	0	0	0	0	0	0	0	8	49	111	130	52	24	3	0	0	0	0	0	0	130	0	16
29	0	0	0	0	0	0	0	0	0	0	0	7	33	62	80	50	18	4	0	0	0	0	0	0	80	0	11
30	0	0	0	0	0	0	0	0	0	0	0	3	16	27	30	22	9	2	0	0	0	0	0	0	30	0	4
31	0	0	0	0	0	0	0	0	0	0	0	4	20	35	49	35	17	3	0	0	0	0	0	0	49	0	7
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**31**	**78**	**118**	**130**	**96**	**40**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**130**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**11**	**16**	**18**	**16**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**31**	**52**	**58**	**43**	**21**	**2**	**0**	**0**	**0**	**0**	**0**	**0**			**9**

Total Hours in Month 744 **Hours Data Available** 673 **Data Recovery** 90.5%

HCG, Inc.

Pebble 1 Meteorological Station - Daily Total Precipitation (mm)

January2007- December 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0	12.7	1.8
2	0.0	1.5	0.5	0.0	2.0	0.8	0.0	0.0	0.0	1.8	0.5	0.0
3	0.3	1.5	1.3	0.0	0.3	0.3	4.3	0.0	9.9	0.8	0.0	1.3
4	0.0	0.0	1.0	1.0	0.0	8.1	13.5	0.0	2.0	14.0	4.8	0.8
5	0.0	0.0	1.8	2.0	0.0	2.5	0.3	0.0	0.0	22.9	2.5	0.5
6	0.0	0.0	3.3	2.3	0.0	0.3	1.8	0.0	5.1	1.8	13.0	10.7
7	0.3	0.3	2.3	5.6	0.0	1.0	1.8	0.0	11.2	2.5	3.3	2.0
8	0.0	0.3	3.0	1.8	0.0	0.5	2.5	0.5	33.0	11.7	7.1	5.3
9	0.5	0.0	0.8	9.1	4.1	0.3	0.0	0.8	9.9	0.0	0.0	1.5
10	1.3	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	1.3	0.0	3.6
11	2.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0	9.4	0.0	0.0	0.0
12	1.0	0.0	1.5	0.0	0.3	0.0	1.3	0.3	24.4	0.0	0.0	
13	0.8	0.3	0.3	0.8	2.0	1.5	8.9	0.0	21.8	1.0	17.0	0.0
14	0.3	0.3	0.8	0.0	1.3	2.3	0.0	6.4	1.3	0.3	10.9	0.0
15	2.3	0.0	2.8	0.8	0.3	0.0	0.0	2.5	0.0	0.0	0.0	3.0
16	5.1	0.0	0.3	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.5	1.8
17	2.0	0.0	0.0	1.0	0.3	6.4	0.0	0.0	1.0	0.8	1.8	2.5
18	0.0	1.3	0.0	9.1	0.0	2.0	1.8	6.4	32.8	0.3	0.8	0.0
19	0.0	0.0	0.0	0.8	0.0	0.0	0.0	2.3	17.5	0.5	3.6	0.5
20	0.0	0.3	1.3	3.8	0.0	0.0	1.5	4.6	12.7	1.5	10.2	7.1
21	0.8	1.0	6.4	0.5	0.3	0.3	0.3	2.5	0.5	0.0	4.8	1.5
22	0.3	0.3	0.0	1.8	1.5	7.1	4.3	6.9	8.4	0.0	25.1	3.6
23	0.5	0.0	0.0	0.0	0.0	18.3	9.1	2.3	9.4	1.3	0.8	0.8
24	0.3	0.5	0.0	0.8	1.5	3.0	5.1	0.5	13.2	10.9	0.8	0.0
25	2.5	1.8	0.0	0.3	3.6	0.3	0.3	0.0	4.3	12.7	7.1	0.5
26	4.3	0.3	0.3	0.0	0.8	0.0	0.0	0.3	1.8	6.4	2.3	2.3
27	6.9	0.0	0.5	0.0	0.3	0.0	3.8	1.0	1.0	3.3	3.3	8.1
28	2.5	0.3	0.0	0.0	0.3	0.5	0.0	0.0	17.0	0.0	0.8	0.3
29	4.1		0.0	0.3	0.0	0.0	0.0	0.0	8.1	5.1	4.1	1.3
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.8	8.1	3.8	3.8
31	0.5		0.0		1.3		0.0	1.8		2.8		5.1
Total	38.6	9.7	27.9	46.0	20.3	56.4	60.5	39.9	256.5	111.5	142.5	69.6

Pebble 1 Meteorological Station - Daily Total Pan Evaporation (mm)

January2007- December 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	0.0	1.4	2.6	1.2	0.0	-	-
2	-	-	-	-	0.0	0.1	3.4	0.0	1.2	0.0	-	-
3	-	-	-	-	0.6	0.2	0.0	0.7	0.0	0.3	-	-
4	-	-	-	-	1.7	0.0	0.0	0.0	0.0	0.0	-	-
5	-	-	-	-	1.7	0.0	1.1	0.0	2.3	0.0	-	-
6	-	-	-	-	2.1	3.4	0.0	2.9	0.0	0.0	-	-
7	-	-	-	-	1.2	4.0	0.0	3.4	0.0	0.0	-	-
8	-	-	-	-	1.2	2.3	0.0	2.4	0.0	0.0	-	-
9	-	-	-	-	0.0	0.0	0.4	3.6	0.0	0.7	-	-
10	-	-	-	-	1.7	5.0	4.3	4.2	0.0	0.0	-	-
11	-	-	-	-	3.7	5.5	5.4	3.4	0.0	1.9	-	-
12	-	-	-	-	3.1	0.0	0.2	2.1	0.0	3.9	-	-
13	-	-	-	-	0.0	0.0	0.0	2.2	0.0	-	-	-
14	-	-	-	-	0.0	0.0	1.4	0.0	0.0	-	-	-
15	-	-	-	-	0.9	6.1	1.6	0.0	1.5	-	-	-
16	-	-	-	-	4.0	5.5	3.0	0.0	1.8	-	-	-
17	-	-	-	-	2.6	0.0	6.5	0.9	0.0	-	-	-
18	-	-	-	-	2.7	0.0	0.0	0.0	0.0	-	-	-
19	-	-	-	-	3.6	5.4	1.2	0.5	0.0	-	-	-
20	-	-	-	-	2.2	9.2	0.0	0.0	0.0	-	-	-
21	-	-	-	-	5.9	5.8	0.9	0.0	0.0	-	-	-
22	-	-	-	-	0.7	0.0	0.0	0.0	0.0	-	-	-
23	-	-	-	-	4.6	0.0	0.0	0.0	0.0	-	-	-
24	-	-	-	-	0.0	0.0	0.0	0.0	0.0	-	-	-
25	-	-	-	-	0.0	2.6	2.7	0.0	0.0	-	-	-
26	-	-	-	-	0.2	2.8	4.2	0.2	0.0	-	-	-
27	-	-	-	-	4.2	5.4	0.0	0.0	0.0	-	-	-
28	-	-	-	-	2.7	0.4	3.8	0.9	0.0	-	-	-
29	-	-	-	-	2.1	4.1	3.8	2.7	0.0	-	-	-
30	-	-	-	-	2.9	3.9	0.1	1.9	0.0	-	-	-
31		-			0.0		3.2	0.0		-		-
Total	-	-	-	-	56.4	71.5	48.3	34.4	8.0	6.8	-	-

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2H

2008 Annual Data Report, Pebble 1 Station, for the Pebble Project Meteorological Monitoring Program

2008 Annual Data Report
Pebble 1 Station

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

April 2009

Pebble 1 Station
2008 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2009

prepared for

Pebble Limited Partnership,
care of Pebble Mines Corp.
Anchorage, Alaska

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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary 4
1.2 Measurements Method Table 5
1.3 Variations from the Quality Assurance Project Plan 5

2.0 Station Performance Summary **10**

2.1 Significant Project Events 10
2.2 Missing, Invalid, and Adjusted Data 11
2.3 Network Data Completeness 11
2.4 Precision Statistics 14
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics 14
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **20**

3.1 Air Quality Data Summary 20
3.2 Meteorological Data Summary 20
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 20
3.2.2 Temperature Climatology 32
3.3.3 Other Meteorological Parameters 37

4.0 References **43**

List of Figures

1-1. Map of the Pebble Project Area 7
1-2. Map of the Pebble 1 Station 8
1-3. Pebble 1 Meteorological Monitoring Station 9
3-1. 2008 Pebble 1 Station Wind Roses 22
3-2. Quarterly Pebble 1 Station Wind Roses (Climatronics) 23
3-3. Quarterly Pebble 1 Station Wind Roses (RM Young) 24
3-4. 2008 Wind Rose Superimposed on Site Map 31
3-5. Hourly Average 2-Meter and 10-Meter Temperatures 35

3-6. Hourly Average Vertical Temperature Difference 36
3-7. Hourly Average Relative Humidity 39
3-8. Hourly Average Barometric Pressure 40
3-9. Hourly Average Solar Radiation 41
3-10. Hourly and Cumulative Precipitation 42

List of Tables

E-1. Meteorological Data Capture – Valid Hours per Month 2
E-2. Meteorological Data Capture – Percent Data Capture 3
1-1. Meteorological Measurement Methods 6
2-1. Chronology of Significant Events 10
2-2. Percentage of Final Data Set Flagged 12
2-3. Pebble 1 Station Percent Data Capture 13
2-4. September 3 and 4, 2007 Performance Audit Summary (CR1000) 16
2-5. February 5 and 6, 2008 Performance Audit Summary 17
2-6. September 23 and 24, 2008 Performance Audit Summary 18
3-1. Average and Maximum Wind Speeds at Pebble 1 Station 20
3-2. Average and Maximum Wind Speeds at Iliamna 21
3-3. 2008 Annual Wind Rose Analysis Table (Climatronics) 25
3-4. Quarter A Wind Rose Analysis Table (Climatronics) 26
3-5. Quarter B Wind Rose Analysis Table (Climatronics) 26
3-6. Quarter C Wind Rose Analysis Table (Climatronics) 27
3-7. Quarter D Wind Rose Analysis Table (Climatronics) 27
3-8. 2008 Annual Wind Rose Analysis Table (RM Young) 28
3-9. Quarter A Wind Rose Analysis Table (RM Young) 29
3-10. Quarter B Wind Rose Analysis Table (RM Young) 29
3-11. Quarter C Wind Rose Analysis Table (RM Young) 30
3-12. Quarter D Wind Rose Analysis Table (RM Young) 30
3-13. 2-Meter Temperature Summary 33
3-14. 10-Meter Temperature Summary 34
3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary 38

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Data Summaries
E Validated Manual Particulate Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG, Inc., dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

PSD-quality meteorological monitoring for the Pebble Project began on August 1, 2005. This report provides details of the third year of meteorological measurements collected from January 1, 2008 through December 31, 2008 at the Pebble 1 station.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 1 meteorological monitoring station. The Pebble 1 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of the vertical temperature difference parameter during Monitoring Quarter A, B, and C.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	N/A[3]
February 2008	696	696	113	696	696	696	696	696	696	696	696	696	691	N/A
March 2008	744	744	1	744	744	744	744	744	744	744	744	744	744	N/A
April 2008	719	719	0	719	719	719	719	719	719	719	719	719	719	N/A
May 2008	743	743	0	743	743	743	743	743	743	743	743	743	743	453
June 2008	719	719	0	719	719	719	719	719	719	719	719	719	719	719
July 2008	744	744	0	744	744	744	744	744	744	744	744	744	744	744
August 2008	744	744	0	744	744	744	744	744	744	744	744	744	744	744
September 2008	717	717	154	718	718	717	718	718	718	720	720	720	714	718
October 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	314
November 2008	720	720	720	720	720	720	720	720	720	720	720	720	720	N/A
December 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	N/A
Monitoring Year	**8,778**	**8,778**	**3,220[4]**	**8,779**	**8,779**	**8,778**	**8,779**	**8,779**	**8,779**	**8,781**	**8,781**	**8,781**	**8,770**	**3,692**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed September 23 and 24, 2008 audit. Data invalidated from February 6, 2008, through September 24, 2008.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A[3]
February 2008	100%	100%	16.2%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	N/A
March 2008	100%	100%	0.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter A	**100%**	**100%**	**39.3%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.8%**	**N/A**
April 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	N/A
May 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.8%
June 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Quarter B	**99.9%**	**99.9%**	**0.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**98.8%**
July 2008	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	99.6%	99.6%	21.4%	99.7%	99.7%	99.6%	99.7%	99.7%	99.7%	100%	100%	100%	99.2%	99.7%
Quarter C	**99.9%**	**99.9%**	**7.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.7%**	**99.9%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**36.7%[4]**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.8%**	**99.3%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed September 23 and 24, 2008 audit. Data invalidated from February 6, 2008, through September 24, 2008.

1.0 Introduction

1.1 Project Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future air quality permitting needs for the Pebble Project. This meteorological monitoring project currently consists of seven PSD-quality meteorological monitoring stations. Four stations are located in the deposit area; Pebble 1, Pebble 4, Pebble 5, and Pebble 6. Three stations are located in the proposed Port area; Pebble Port, Williamsport, and North Head. Data from the non-PSD meteorological monitoring station, Pebble 3 and Pebble 5A, are being used for engineering and mine design purposes. This report focuses on the third year of measurements collected at the Pebble 1 station from January 1, 2008 through December 31, 2008. A separate annual data report has been prepared for each of the other PSD-quality meteorological monitoring stations.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 1 station.

The Pebble 1 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C]);
- Air temperature, ten meters above ground (degrees Celsius [°C]);
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]));
- Wind speed (meters per second [m/s]);
- Wind direction (degrees [°]);
- Wind direction standard deviation (wind sigma [σ_θ]);
- Relative humidity (percent [%]);
- Solar radiation (Watts per square meter [W/m^2]);
- Barometric Pressure (millibar [mb]);
- Precipitation (millimeters [mm]); and
- Evaporation (millimeters [mm]).

Measurements of these parameters will provide at least one year of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 1 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble 1 station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 1 PSD station.

1.3 Variations from the Quality Assurance Project Plan

During the 2008 monitoring year, no variations occurred from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 12 in	± .254 mm	N/A[3]	N/A[3]
Precipitation	Met One	Tipping bucket mechanism	0 to76.2mm/hr	± 1%	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for one second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

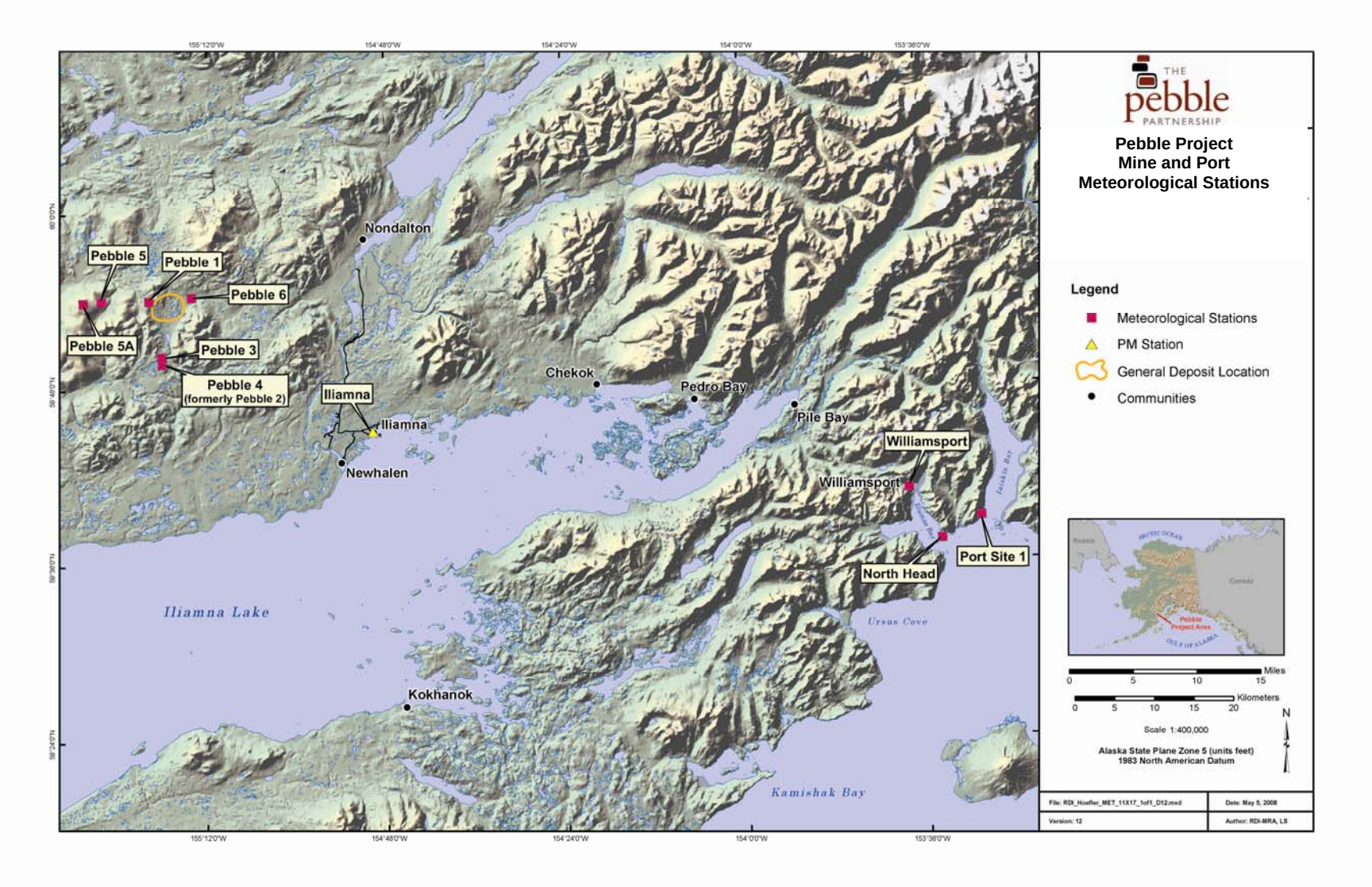


Figure 1-2. Map of the Pebble 1 Station

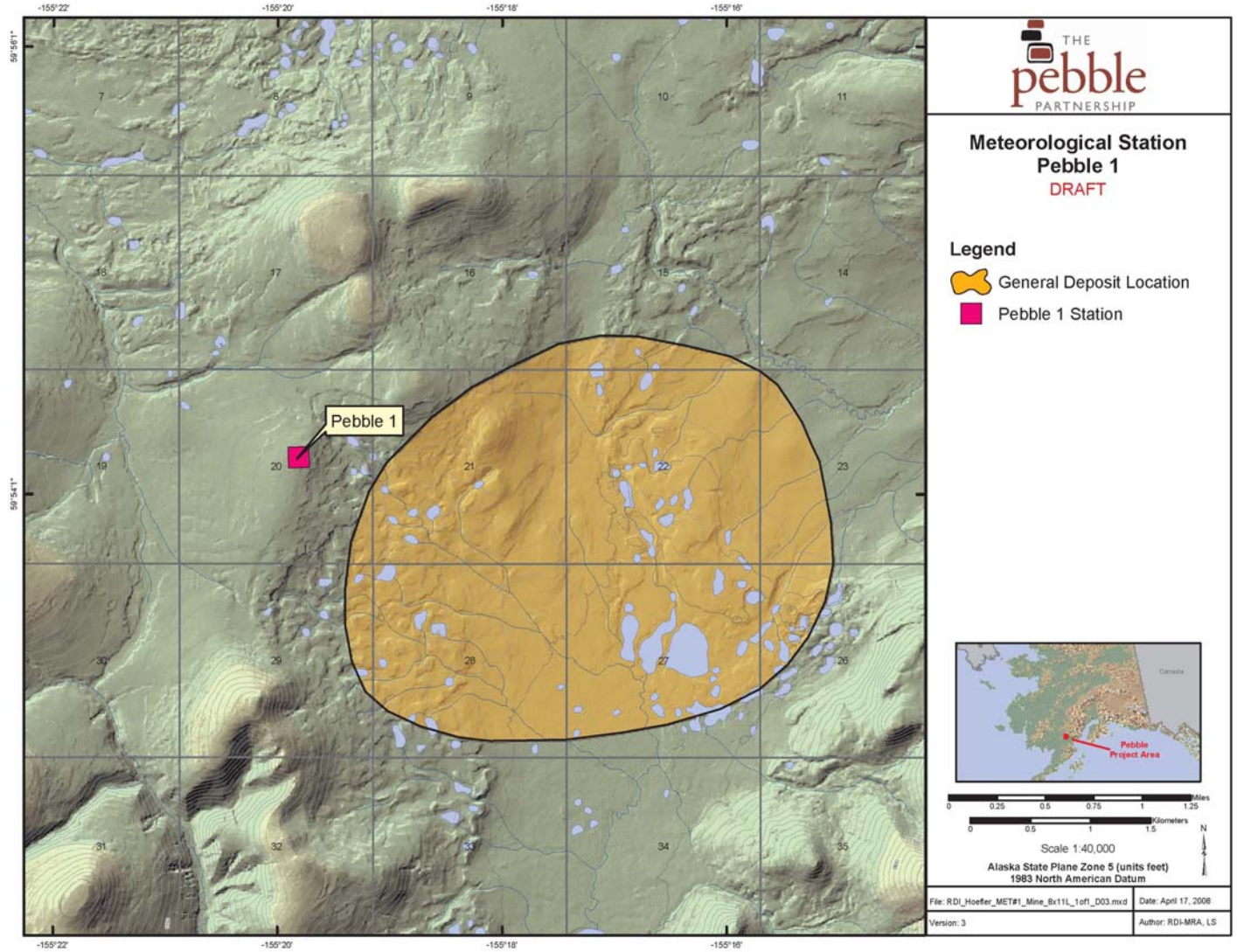


Figure 1-3. Pebble 1 Meteorological Monitoring Station

2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 1 station relevant to the 2008 meteorological monitoring year.

Table 2-1. Chronology of Significant Events

Date	Event
January 1, 2008	Beginning of 2008 monitoring year.
January 30, 2008	Site visit for precipitation gauge maintenance.
February 5 and 6, 2008	Full audit performed (all sensors passed).
April 29, 2008	Site visit for precipitation gauge maintenance.
May 12, 2008	Calibrated and refreshed precipitation gauges, calibrated and started evaporation gauge.
July 30, 2008	Site visit for precipitation gauge maintenance.
Sept. 23 and 24, 2008	Full audit performed. Vertical temperature difference parameter failed audit. Data invalidated to date of last audit. Both 2-meter and 10-meter thermistors replaced and an as-left audit conducted.
October 13, 2008	Evaporation gauge decommissioned for winter.
December 31, 2008	End of 2008 monitoring year.

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 1 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations.

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2008 monitoring year at the Pebble 1 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.8%
	< 0.1 m/s variation for 3 consecutive hours	4.9%
	<0.5 m/s variation for 12 consecutive hours	2.8%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	1.8%
	< 10° variation over 18 consecutive hours	1.9%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.6%
	< 0.1 m/s variation for 3 consecutive hours	1.0%
	< 0.5 m/s variation for 12 consecutive hours	0.3%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.0%
	< 1° variation over 3 consecutive hours	2.0%
	< 10° variation over 18 consecutive hours	2.1%
Temperature (2 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.2%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.2%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	0.8%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	0.0%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	0.2%
	< 0.5°C variation for 12 consecutive hours	1.3%
	Equals ambient temperature for 12 consecutive hours	0.5%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	0.0%
	> 6 mb variation for 3 consecutive hours	0.1%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	66.6%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 1 Station Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A[3]
February 2008	100%	100%	16.2%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	N/A
March 2008	100%	100%	0.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter A	**100%**	**100%**	**39.3%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.8%**	**N/A**
April 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	N/A
May 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.8%
June 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Quarter B	**99.9%**	**99.9%**	**0.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**98.8%**
July 2008	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	99.6%	99.6%	21.4%	99.7%	99.7%	99.6%	99.7%	99.7%	99.7%	100%	100%	100%	99.2%	99.7%
Quarter C	**99.9%**	**99.9%**	**7.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.7%**	**99.9%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**36.7%[4]**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.8%**	**99.3%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed September 23 and 24, 2008 audit. Data invalidated from February 6, 2008, through September 24, 2008.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A performance audit was performed on all station sensors on September 3 and September 4, 2007 to check sensor operation after upgrading the CR10X data logger with a CR1000 data logger. All sensors passed. The results of the performance audit are presented in Table 2-4.

The first annual performance audit for 2008 was conducted at the Pebble 1 station on February 5 and 6, all sensors passed. The results of the performance audit are presented in Table 2-5.

The second annual performance audit for 2008 was conducted at the Pebble 1 station on September 23 and 24, 2008. All sensors passed with the exception of the vertical temperature difference parameter. Both the 2-meter and 10-meter temperature thermistors were replaced and an as-left audit was conducted. Vertical temperature difference data was invalidated from the date of the last audit on February 5 and 6, 2008. The results of this performance audit are presented in Table 2-6.

The performance audit involves reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each

reading, the difference between the station value and the predicted value is compared with established PSD limits to assess the accuracy of the sensor.

During each of these audits, the power supply, DAS, communications system, and audited sensors all worked properly. A technical systems audit was performed during the September 23 and 24, 2008, audit and found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system.

Appendix C contains all of the complete technical systems and performance audit reports.

Table 2-4. September 3 and 4, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-1:00	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.2	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.1	Pass
Barometric Pressure	≤ ±3	Mbar	-0.6	Pass
Solar Radiation	≤ ±5+Res	% input	5.2[2]	Pass
Tipping Precipitation	≤ ±10	% input	-10.0[3]	Pass
Weighing Precipitation	≤ ±10	% input	7.8	Pass
Evaporation	≤ ±10	% input	3.5	Pass

[1] New DAS/sensor, no as-found value.
[2] Max percent error value of 5.2 within limit of 5% input + resolution, see audit.
[3] Single point at 10%, five other readings at 1% to 6% error.

Table 2-5. February 5 and 6, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:52	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.050	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.0	Pass
Wind Direction Linearity	≤ 3	Degree	0.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.8	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.9	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.6	Pass
Barometric Pressure	≤ ±3	Mbar	0.0	Pass
Solar Radiation	≤ ±5+Res	% input	-8.4[1]	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	Pass
Evaporation	≤ ±10	% input	8.8	Pass

[1] Max percent error value of 8.4 within limit of 5% input + resolution, see audit.

[2] Too cold to run tipping gauge drip tests.

Table 2-6. September 23 and 24, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:33	Pass
2-m Temperature Accuracy (In Situ)	≤ ±0.5	°C	0.41	Pass
10-m Temperature Accuracy (In Situ)	≤ ±0.5	°C	0.40	Pass
Air Temperature Difference (In Situ)	≤ ±0.1	°C	0.30[1]	Fail
2-m Temperature Accuracy (New)	≤ ±0.5	°C	0.26	Pass
10-m Temperature Accuracy (New)	≤ ±0.5	°C	0.26	Pass
Air Temperature Difference (New)	≤ ±0.1	°C	0.09	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.35	gm-cm	0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque (In Situ)	≤ 7.5	gm-cm	7.0	Pass
Wind Dir. Azim. Align. (In Situ)	≤ ±5	Degree	1.6	Pass
Wind Direction Accuracy (In Situ)	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity (In Situ)	≤ 3	Degree	0.5	Pass
Wind Direction Torque (New Bearings)	≤ 7.5	gm-cm	6.0	Pass
Wind Direction Accuracy (New Bearings)	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity (New Bearings)	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (Post Audit)	≤ ±5	Degree	0.8	Pass
RM Young Wind System (In Situ)				
Wind Speed Torque	≤ 0.014	oz-in	≤ 1.0	gm-cm
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	≤ ±0.2	m/s
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	≤ ±5	% input
Wind Direction Torque	≤ 11	g-cm	≤ 11.0	gm-cm
Wind Dir. Azim. Align.	≤ ±5	Degree	≤ ±5	Degree
Wind Direction Accuracy	≤ ±5	Degree	≤ ±5	Degree
Wind Direction Linearity	≤ 3	Degree	≤ 3	Degree

Table 2-6 (Cont.) September 23 and 24, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System (Replacement)				
Wind Speed Torque	≤ 1.0	gm-cm	0.6	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	5.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.9	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	1.6	Pass
Barometric Pressure	≤ ±3	Mbar	0.9	Pass
Solar Radiation	≤ ±5+Res	% input	6.5	Pass[2]
Tipping Precipitation	≤ ±10	% input	7.3	Pass
Weighing Precipitation	≤ ±10	% input	8.9	Pass
Evaporation	≤ ±10	% input	2.0	Pass

[1] Thermistors failed delta temperature criteria and were replaced.

[2] Maximum error within limit of 5% of input + resolution, see audit.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2008 year of meteorological monitoring at the Pebble 1 station. The mean hourly average wind speed during the monitoring year was 7.06 meters per second (m/s) and 7.54 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 32.93 m/s and 31.18 m/s were measured by the CLM and RMY sensors, respectively, on January 19, 2008. Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 30 kilometers (km) from the Pebble 1 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.94 m/s, while the maximum daily average wind speed was 16.99 m/s, recorded on January 19, January 21, and May 23, 2008.

Table 3-1. Average and Maximum Wind Speeds at Pebble 1 Station

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	7.87	8.76	32.82	31.05
Quarter B	7.23	7.43	29.32	27.77
Quarter C	5.84	5.82	19.98	19.21
Quarter D	7.29	8.16	32.93	31.18
Monitoring Year	**7.06**	**7.54**	**32.93**	**31.18**

Table 3-2. Average and Maximum Wind Speeds at Iliamna

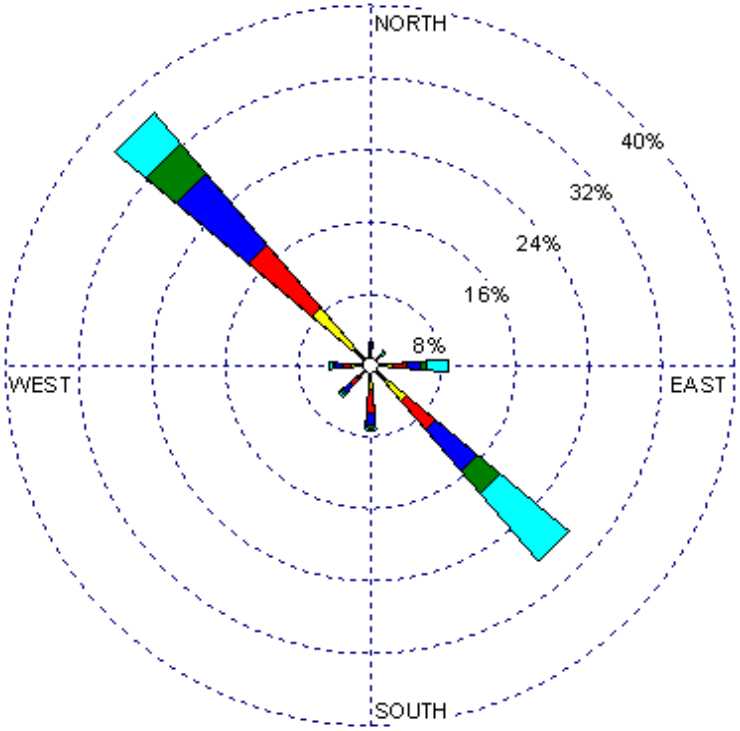
Monitoring Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
Quarter A	4.23	16.99
Quarter B	3.87	16.99
Quarter C	3.22	12.52
Quarter D	4.46	14.30
Monitoring Year	**3.94**	**16.99**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the 2008 monitoring year. Winds were predominantly from the northwest and southeast, with other minor wind components. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. All of the quarterly wind roses are characterized by major wind components from the northwest and southeast. Quarter B and C wind roses exhibited other minor wind components from the east, south, west, and southwest directions. Quarter A and D wind roses exhibited a minor wind component from the east. Tables 3-3 through 3-7 are the annual and quarterly wind analysis tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

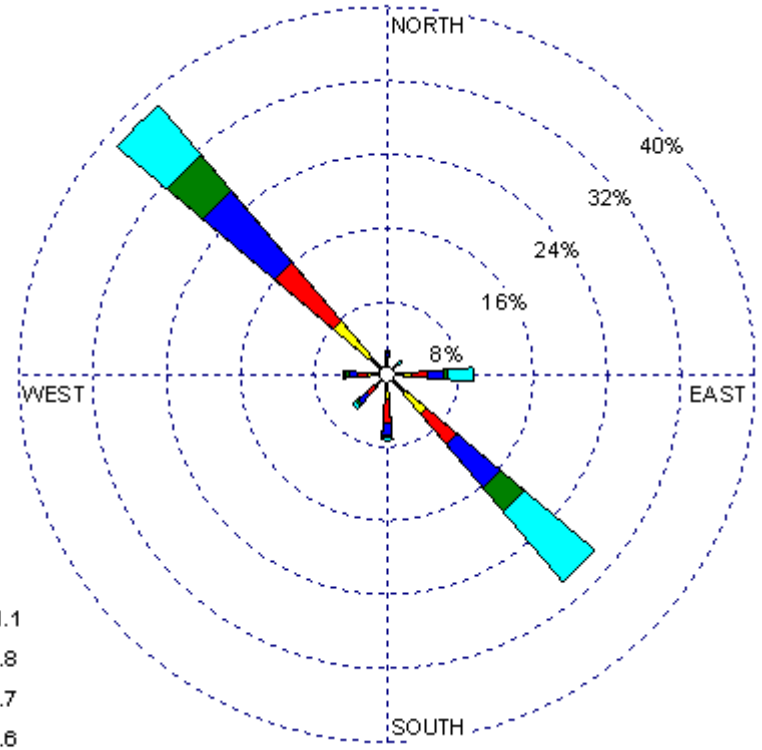
Figure 3-4 shows the 2008 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological station and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 1 station.

Figure 3-1. 2008 Pebble 1 Station Wind Roses

Climatronics



RM Young



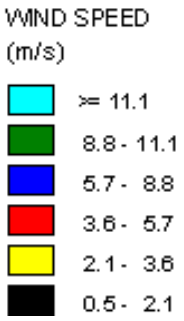
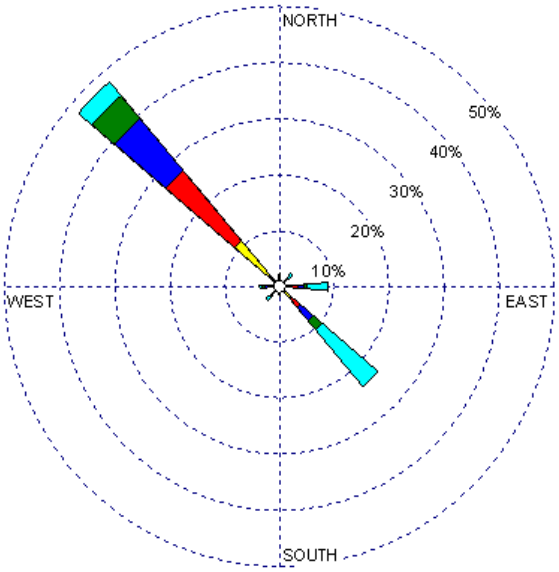
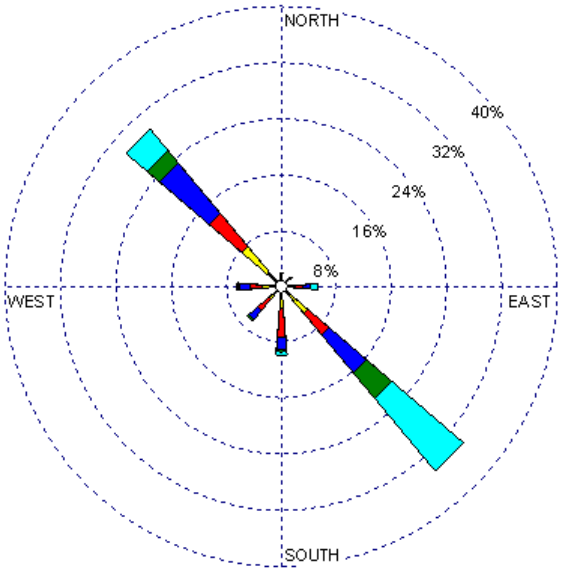


Figure 3-2. Quarterly Pebble 1 Station Wind Roses (Climatronics)

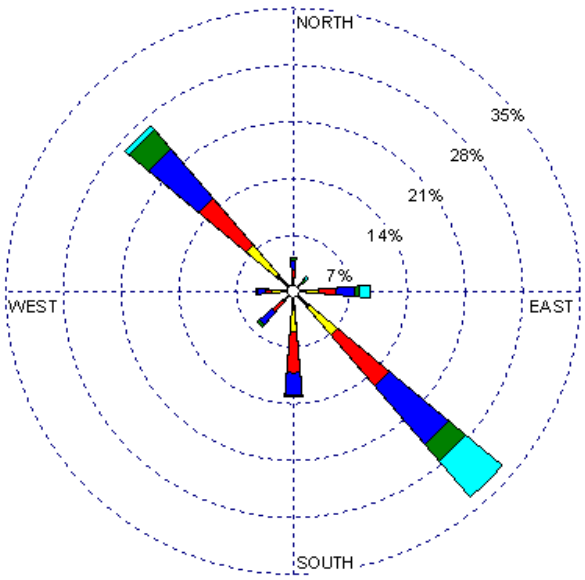
Quarter A (1/1/08 – 3/31/08)



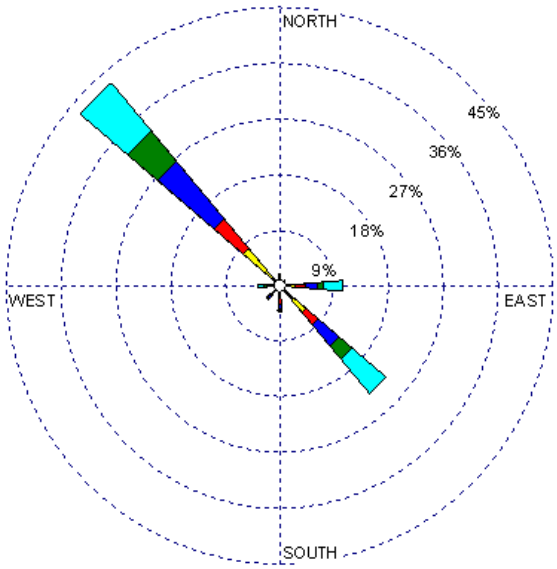
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



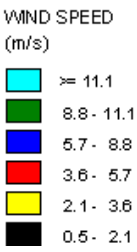
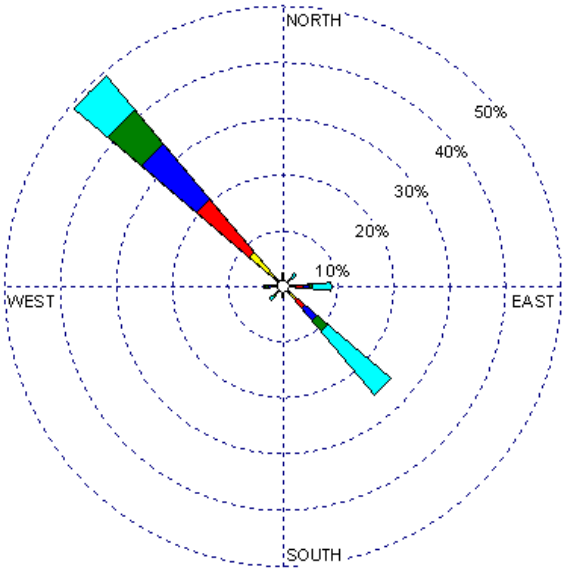
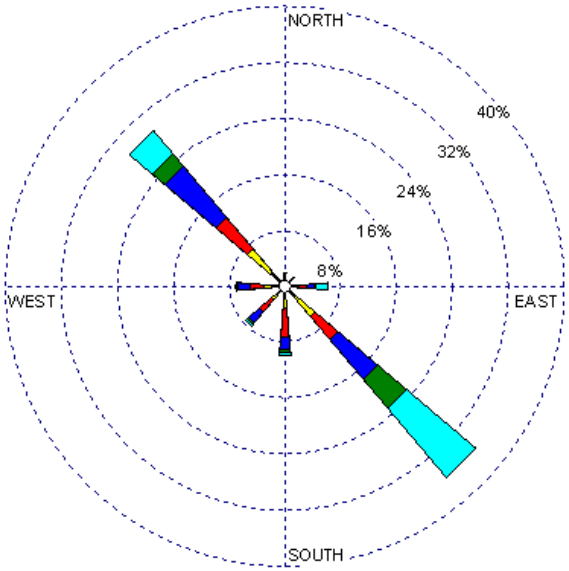


Figure 3-3. Quarterly Pebble 1 Station Wind Roses (RM Young)

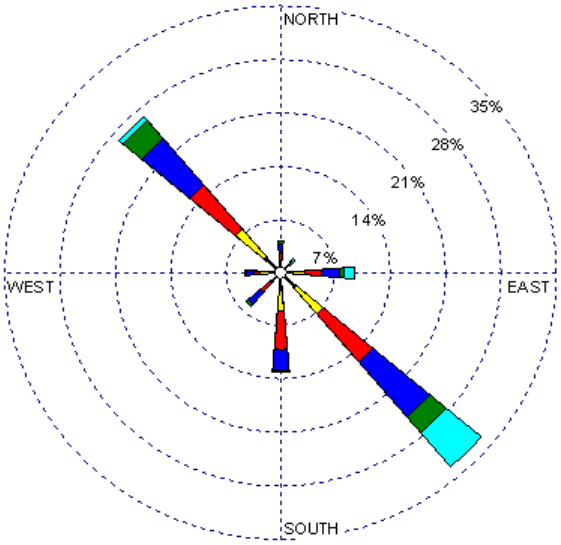
Quarter A (1/1/08 – 3/31/08)



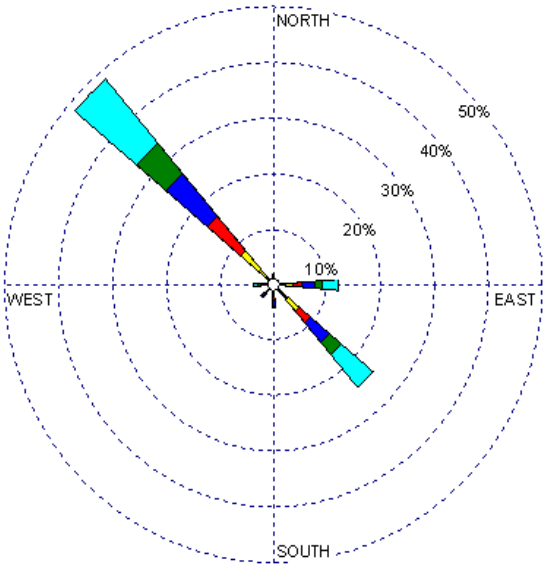
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



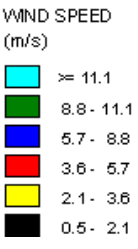


Table 3-3. 2008 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.72%	0.52%	0.54%	0.76%	0.15%	0.02%	2.71%
NE	0.35%	0.25%	0.24%	0.49%	0.47%	0.47%	2.27%
E	1.13%	1.34%	1.57%	1.59%	0.55%	2.39%	8.58%
SE	2.32%	2.95%	4.19%	6.02%	3.13%	9.96%	28.57%
S	1.28%	1.49%	2.61%	1.40%	0.23%	0.24%	7.25%
SW	0.69%	1.11%	1.21%	1.11%	0.32%	0.28%	4.72%
W	1.05%	1.08%	0.91%	0.89%	0.32%	0.36%	4.61%
NW	2.56%	5.92%	9.05%	10.39%	4.27%	4.53%	36.73%
Sub-Total:	10.10%	14.67%	20.31%	22.65%	9.43%	18.26%	95.43%
Calms (<0.5m/s):							4.57%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.55%	0.37%	0.27%	1.10%	0.09%	0.05%	2.43%
NE	0.18%	0.00%	0.32%	0.64%	0.87%	1.24%	3.25%
E	0.87%	1.10%	1.51%	0.96%	0.60%	3.94%	8.97%
SE	1.56%	1.42%	1.97%	3.11%	2.24%	13.32%	23.63%
S	0.50%	0.32%	0.18%	0.18%	0.09%	0.41%	1.69%
SW	0.55%	0.60%	0.55%	0.41%	0.37%	0.87%	3.34%
W	0.87%	0.92%	0.50%	0.55%	0.50%	0.41%	3.75%
NW	2.75%	8.01%	16.30%	12.23%	5.27%	3.25%	47.80%
Sub-Total:	7.83%	12.73%	21.61%	19.19%	10.03%	23.49%	94.87%
Calms (<0.5m/s):							5.12%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.92%	0.73%	0.14%	0.32%	0.00%	0.00%	2.11%
NE	0.55%	0.60%	0.28%	0.46%	0.18%	0.00%	2.06%
E	0.87%	1.24%	1.01%	1.10%	0.09%	1.10%	5.41%
SE	1.83%	3.30%	3.94%	7.06%	4.86%	13.53%	34.53%
S	0.92%	2.29%	4.03%	1.79%	0.37%	0.46%	9.86%
SW	0.64%	1.79%	2.16%	1.60%	0.32%	0.09%	6.60%
W	1.56%	1.42%	1.70%	1.51%	0.23%	0.05%	6.46%
NW	2.80%	4.77%	6.14%	9.35%	2.29%	4.08%	29.44%
Sub-Total:	10.09%	16.14%	19.39%	23.20%	8.34%	19.30%	96.47%
Calms (<0.5m/s):							3.52%
Total:							100.00%

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.86%	0.68%	1.27%	1.09%	0.36%	0.05%	4.31%
NE	0.54%	0.32%	0.27%	0.50%	0.45%	0.41%	2.49%
E	1.50%	1.68%	2.04%	2.36%	0.50%	1.32%	9.39%
SE	2.72%	4.44%	8.21%	9.39%	2.72%	5.81%	33.29%
S	2.40%	2.63%	5.08%	2.77%	0.27%	0.00%	13.15%
SW	0.73%	0.95%	1.72%	2.09%	0.41%	0.00%	5.90%
W	1.00%	1.63%	0.86%	1.00%	0.09%	0.00%	4.58%
NW	2.86%	4.72%	7.57%	7.94%	3.08%	0.63%	26.80%
Sub-Total:	12.61%	17.05%	27.03%	27.12%	7.89%	8.21%	99.91%
Calms (<0.5m/s):							0.09%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 1 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.54%	0.32%	0.45%	0.54%	0.14%	0.00%	1.99%
NE	0.14%	0.09%	0.09%	0.36%	0.36%	0.23%	1.27%
E	1.27%	1.36%	1.72%	1.95%	1.00%	3.22%	10.51%
SE	3.17%	2.63%	2.63%	4.48%	2.72%	7.25%	22.87%
S	1.27%	0.72%	1.13%	0.86%	0.18%	0.09%	4.26%
SW	0.86%	1.09%	0.41%	0.32%	0.18%	0.18%	3.03%
W	0.77%	0.36%	0.59%	0.50%	0.45%	1.00%	3.67%
NW	1.86%	6.20%	6.20%	12.05%	6.43%	10.14%	42.89%
Sub-Total:	9.87%	12.77%	13.22%	21.06%	11.46%	22.10%	90.49%
Calms (<0.5m/s):							9.49%
Total:							100.00%

Table 3-8. 2008 Annual Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.81%	0.50%	0.48%	0.74%	0.10%	0.03%	2.67%
NE	0.36%	0.24%	0.23%	0.42%	0.49%	0.50%	2.24%
E	1.31%	1.42%	1.65%	1.77%	0.62%	2.69%	9.46%
SE	2.61%	3.08%	4.27%	6.21%	3.41%	9.97%	29.54%
S	1.25%	1.48%	2.55%	1.41%	0.27%	0.25%	7.22%
SW	0.74%	1.07%	1.29%	1.21%	0.33%	0.35%	4.99%
W	1.11%	1.03%	1.08%	0.99%	0.34%	0.35%	4.90%
NW	2.62%	5.07%	8.37%	10.07%	5.18%	7.01%	38.32%
Sub-Total:	10.81%	13.89%	19.92%	22.82%	10.74%	21.16%	99.34%
Calms (<0.5m/s):							0.66%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.60%	0.55%	0.14%	1.14%	0.05%	0.05%	2.52%
NE	0.14%	0.05%	0.32%	0.60%	0.82%	1.33%	3.25%
E	0.96%	1.01%	1.69%	1.05%	0.55%	3.48%	8.75%
SE	1.69%	1.42%	2.11%	2.98%	2.47%	14.70%	25.37%
S	0.46%	0.41%	0.18%	0.27%	0.23%	0.50%	2.06%
SW	0.69%	0.60%	0.55%	0.41%	0.32%	0.87%	3.43%
W	0.87%	0.73%	0.64%	0.60%	0.41%	0.37%	3.62%
NW	2.47%	5.59%	12.32%	12.91%	7.83%	7.92%	49.04%
Sub-Total:	7.88%	10.35%	17.95%	19.96%	12.68%	29.21%	98.03%
Calms (<0.5m/s):							1.96%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.05%	0.55%	0.18%	0.32%	0.00%	0.00%	2.11%
NE	0.64%	0.41%	0.23%	0.41%	0.18%	0.00%	1.88%
E	1.01%	1.15%	1.01%	1.15%	0.14%	1.88%	6.33%
SE	2.25%	3.53%	4.22%	7.47%	5.36%	12.88%	35.72%
S	0.92%	2.38%	4.03%	1.79%	0.37%	0.46%	9.95%
SW	0.78%	1.83%	2.20%	2.02%	0.37%	0.37%	7.57%
W	1.65%	1.42%	1.93%	1.70%	0.37%	0.05%	7.11%
NW	2.84%	4.22%	5.96%	9.49%	2.34%	4.26%	29.12%
Sub-Total:	11.14%	15.50%	19.76%	24.35%	9.12%	19.90%	99.77%
Calms (<0.5m/s):							0.23%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 1 (RM Young) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.86%	0.63%	1.13%	0.91%	0.32%	0.05%	3.90%
NE	0.59%	0.32%	0.27%	0.41%	0.54%	0.41%	2.54%
E	1.54%	1.63%	2.04%	2.45%	0.59%	2.22%	10.48%
SE	2.86%	4.63%	8.07%	9.80%	2.72%	4.76%	32.83%
S	2.36%	2.49%	4.85%	2.54%	0.23%	0.00%	12.47%
SW	0.68%	1.04%	1.59%	2.04%	0.41%	0.00%	5.76%
W	1.09%	1.45%	1.09%	1.09%	0.18%	0.00%	4.90%
NW	3.04%	4.44%	7.26%	7.76%	3.45%	0.91%	26.85%
Sub-Total:	13.02%	16.64%	26.30%	26.98%	8.44%	8.34%	99.73%
Calms (<0.5m/s):							0.27%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

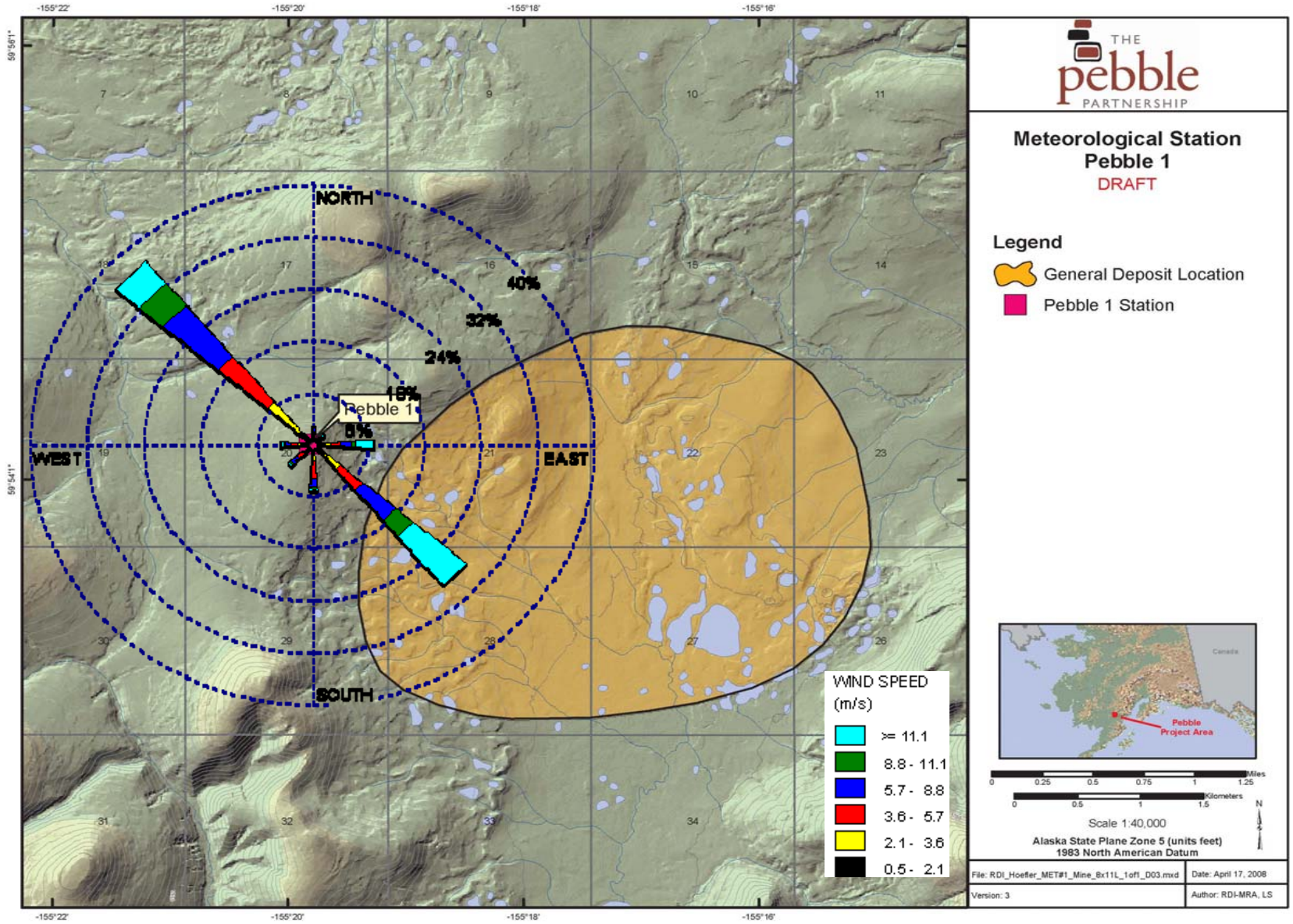
Station ID: Pebble 1 (RM Young) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.72%	0.27%	0.45%	0.59%	0.05%	0.05%	2.13%
NE	0.09%	0.18%	0.09%	0.27%	0.41%	0.27%	1.31%
E	1.72%	1.90%	1.86%	2.40%	1.18%	3.17%	12.23%
SE	3.62%	2.72%	2.67%	4.57%	3.08%	7.61%	24.28%
S	1.27%	0.63%	1.13%	1.04%	0.27%	0.05%	4.39%
SW	0.82%	0.82%	0.82%	0.36%	0.23%	0.18%	3.22%
W	0.82%	0.50%	0.68%	0.59%	0.41%	1.00%	3.99%
NW	2.13%	6.02%	7.97%	10.14%	7.11%	14.90%	48.28%
Sub-Total:	11.19%	13.04%	15.67%	19.97%	12.73%	27.22%	99.82%
Calms (<0.5m/s):							0.18%
Total:							100.00%

Figure 3-4. 2008 Wind Rose Superimposed on Site Map



3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Hourly average temperatures at the Pebble 1 station ranged from 19.4°C on July 31, 2008 to -32.2°C on January 12, 2008. The average 2-meter temperature during the monitoring year was -2.5°C, which is slightly less than the mean temperature of 0.2°C observed at the Iliamna Airport during the same period.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. Considerable monthly temperature variation existed throughout the late-autumn and winter months. The coldest temperatures were observed during January 2008. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 3.6°C measured on November 5, 2008. The greatest negative vertical temperature difference was -0.7°C measured on September 30, 2008.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	-0.3	-31.5	-15.0	0.9	-32.2
February 2008	0.3	-27.9	-12.8	1.4	-30.7
March 2008	0.6	-19.4	-7.5	1.3	-21.4
Quarter A	**0.6**	**-31.5**	**-11.8**	**1.4**	**-32.2**
April 2008	4.1	-14.8	-5.7	6.0	-18.2
May 2008	7.6	-4.1	2.8	12.0	-6.8
June 2008	12.6	2.8	7.2	16.7	0.3
Quarter B	**12.6**	**-14.8**	**1.5**	**16.7**	**-18.2**
July 2008	12.5	5.4	9.1	19.4	3.0
August 2008	13.3	8.1	9.9	17.3	4.4
September 2008	9.8	2.1	5.8	12.8	-0.9
Quarter C	**13.3**	**2.1**	**8.3**	**19.4**	**-0.9**
October 2008	3.5	-15.5	-5.3	4.7	-16.8
November 2008	-0.5	-25.9	-10.7	1.2	-27.8
December 2008	1.5	-25.8	-8.1	2.3	-29.8
Quarter D	**3.5**	**-25.9**	**-8.0**	**4.7**	**-29.8**
Monitoring Year	**13.3**	**-31.5**	**-2.5**	**19.4**	**-32.2**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	-0.1	-31.3	-14.7	1.2	-32.0
February 2008	0.5	-27.1	-12.1	1.6	-30.0
March 2008	0.6	-19.3	-7.3	1.6	-21.3
Quarter A	**0.6**	**-31.3**	**-11.4**	**1.6**	**-32.0**
April 2008	4.8	-14.0	-5.4	6.3	-16.8
May 2008	8.1	-3.9	2.9	11.7	-6.0
June 2008	12.4	2.6	7.0	16.0	0.2
Quarter B	**12.4**	**-14.0**	**1.5**	**16.0**	**-16.8**
July 2008	12.5	5.2	8.9	18.5	2.9
August 2008	13.0	7.9	9.9	16.6	5.6
September 2008	9.7	2.6	5.9	12.0	-0.6
Quarter C	**13.0**	**2.6**	**8.2**	**18.5**	**-0.6**
October 2008	3.7	-15.1	-5.0	4.4	-16.5
November 2008	-0.3	-25.3	-10.3	1.4	-27.2
December 2008	1.7	-25.4	-7.8	2.7	-29.4
Quarter D	**3.7**	**-25.4**	**-7.7**	**4.4**	**-29.4**
Monitoring Year	**13.0**	**-31.3**	**-2.3**	**18.5**	**-32.0**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

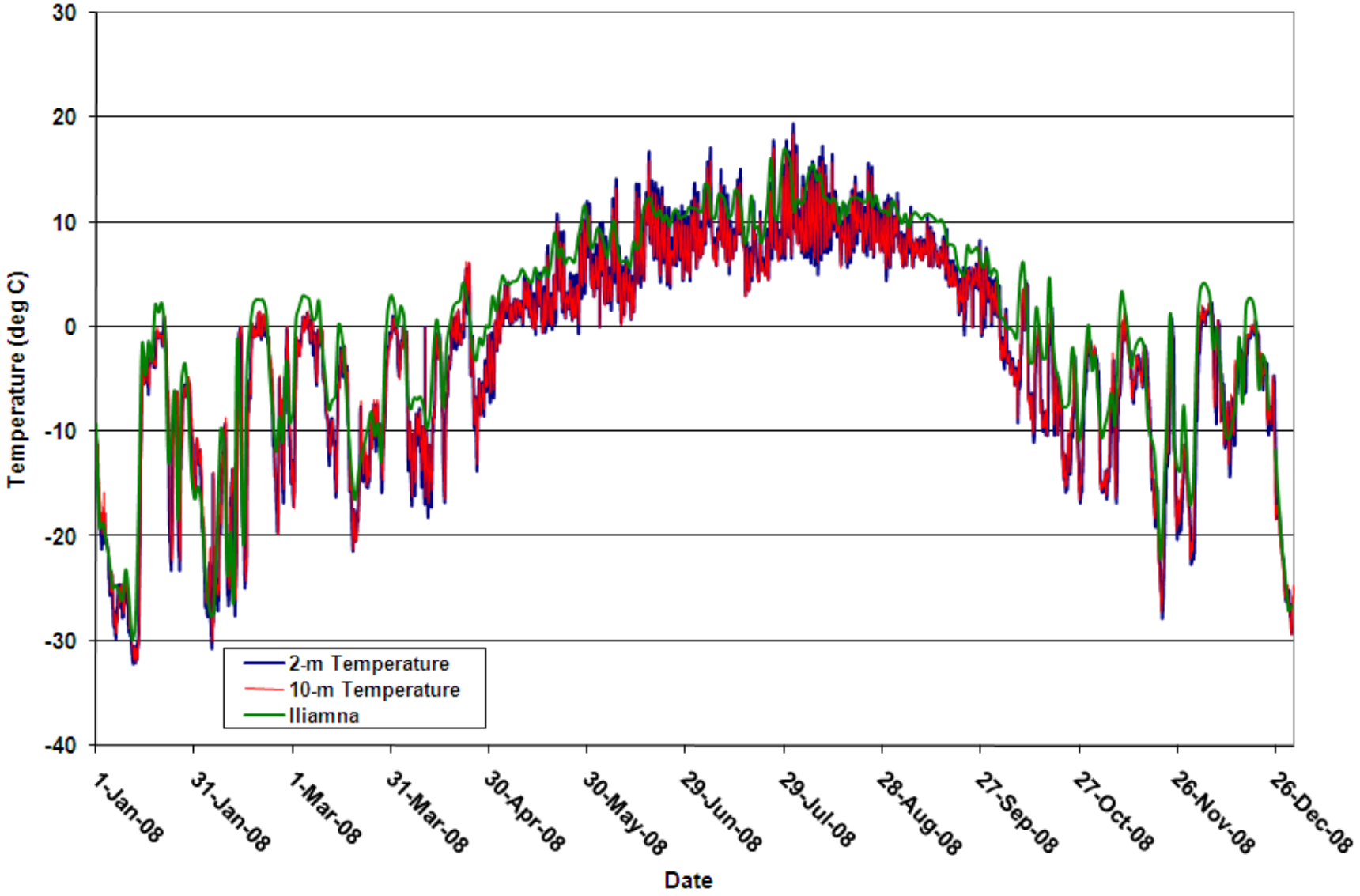
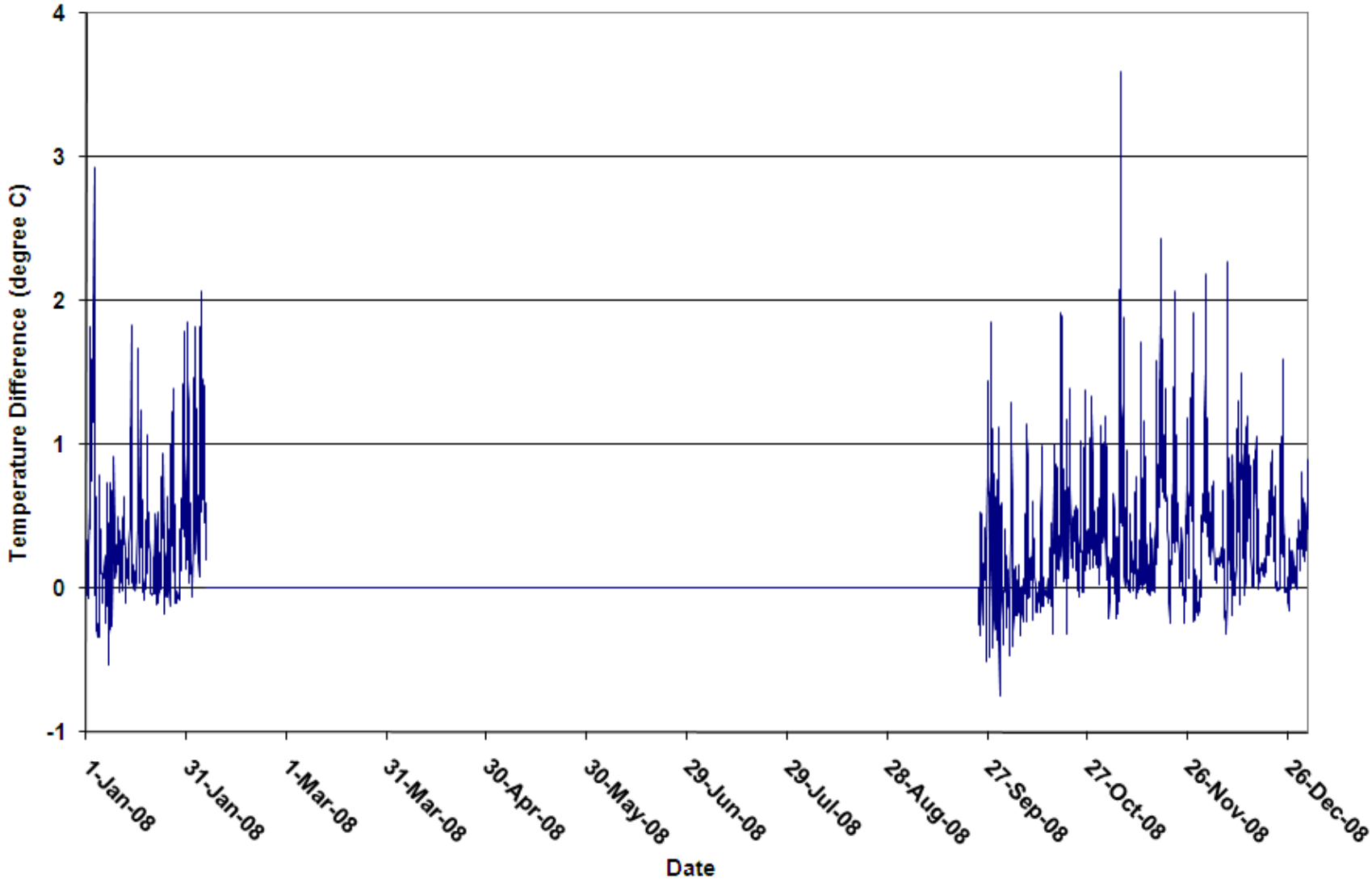


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation.

Table 3-15 provides a summary of the relative humidity, barometric pressure, and solar radiation at the Pebble 1 station during the 2008 monitoring year.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 1 station was 83.3 percent. The minimum relative humidity was 23.9 percent, measured on December 1, 2008. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 75.6 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 912 mb on February 19, 2008 to a maximum of 981 mb observed on December 13, 2008. The mean barometric pressure during the monitoring year was 949 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 1,009 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 857.0 W/m^2 recorded on June 4, 2008. The mean hourly average solar radiation for the monitoring year was 108.2 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the 2008 monitoring year. The highest total daily precipitation was 20.3 mm measured on August 21, 2008. The maximum monthly precipitation was 179.3 mm during September 2008. The cumulative precipitation during the monitoring year was 754.4 mm. Daily winter precipitation data (October through April) should be closely examined before use because snowfall adaptors may influence daily totals.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 1 station was 74.8 mm during June 2008.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, and solar radiation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mb)	Minimum Barometric Pressure (mb)	Maximum Barometric Pressure (mb)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2008	84.3	46.4	945	920	973	13.7	221.4
February 2008	77.0	25.6	940	912	958	48.7	413.2
March 2008	86.0	60.5	944	921	963	114.1	593.0
Quarter A	**82.6**	**25.6**	**943**	**912**	**973**	**59.0**	**593.0**
April 2008	81.5	35.0	955	938	980	208.0	744.4
May 2008	78.6	34.8	953	923	969	223.3	824.0
June 2008	77.8	41.9	955	939	967	207.3	857.0
Quarter B	**79.3**	**34.8**	**955**	**923**	**980**	**213.0**	**857.0**
July 2008	82.5	38.1	953	944	964	164.1	837.0
August 2008	81.2	32.0	951	937	964	160.7	737.1
September 2008	88.9	47.4	949	933	964	69.5	559.4
Quarter C	**84.2**	**32.0**	**951**	**933**	**964**	**132.1**	**837.0**
October 2008	88.1	26.6	945	927	962	54.6	401.5
November 2008	88.3	56.8	942	916	965	23.9	267.3
December 2008	84.9	23.9	953	913	981	9.7	125.8
Quarter D	**87.1**	**23.9**	**947**	**913**	**981**	**29.5**	**401.5**
Monitoring Year	**83.3**	**23.9**	**949**	**912**	**981**	**108.2**	**857.0**

Figure 3-7. Hourly Average Relative Humidity

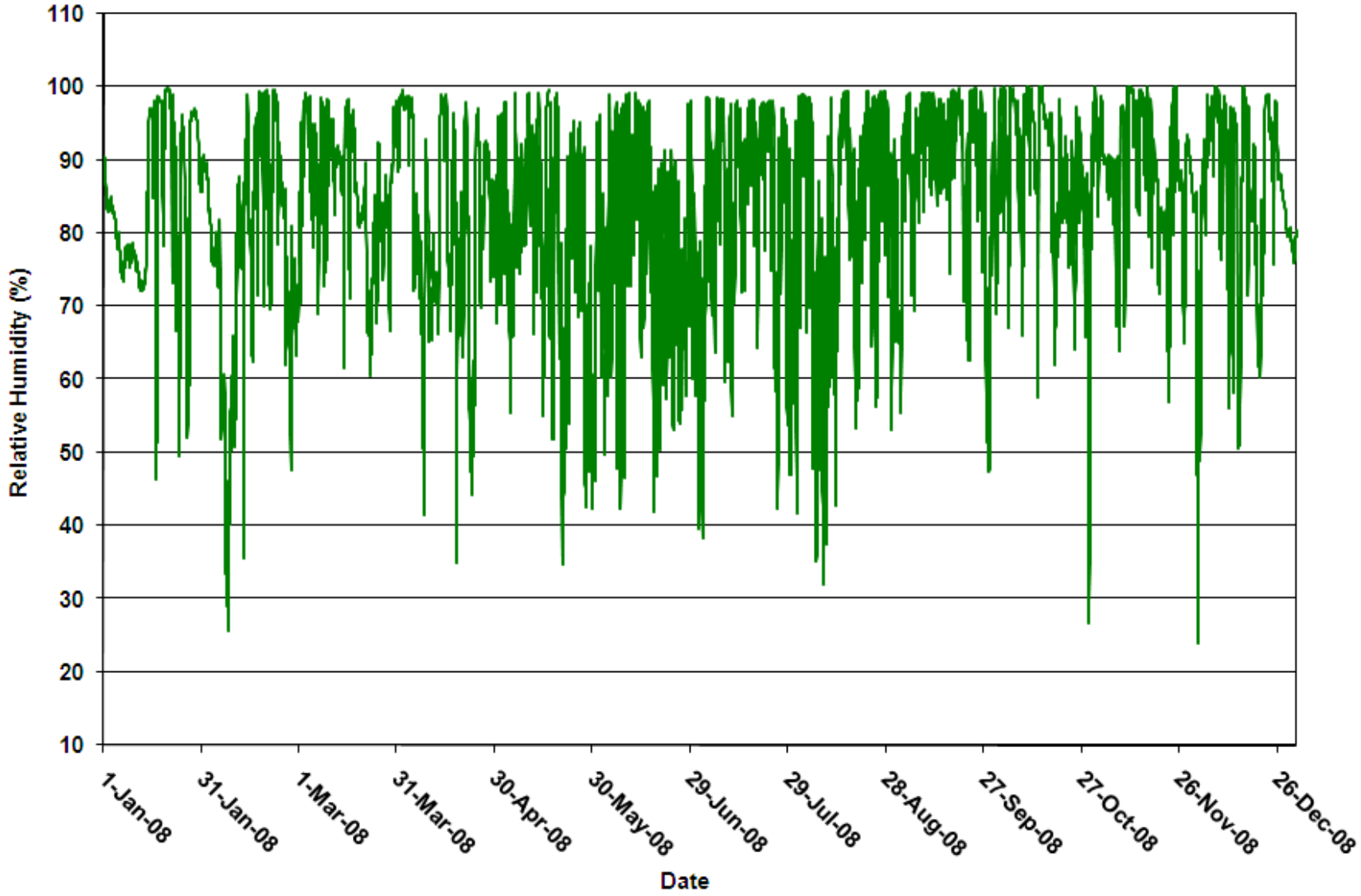


Figure 3-8. Hourly Average Barometric Pressure

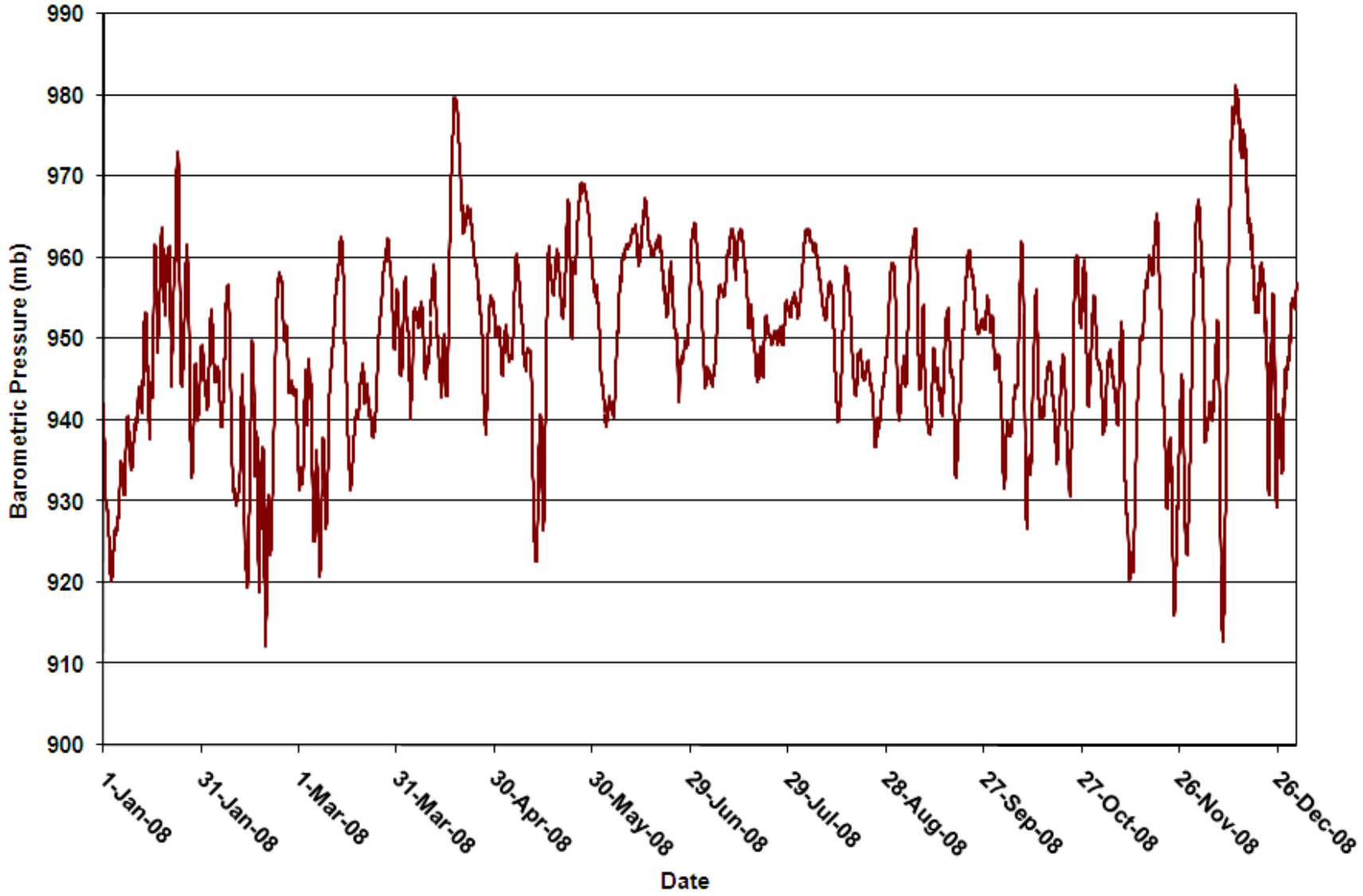


Figure 3-9. Hourly Average Solar Radiation

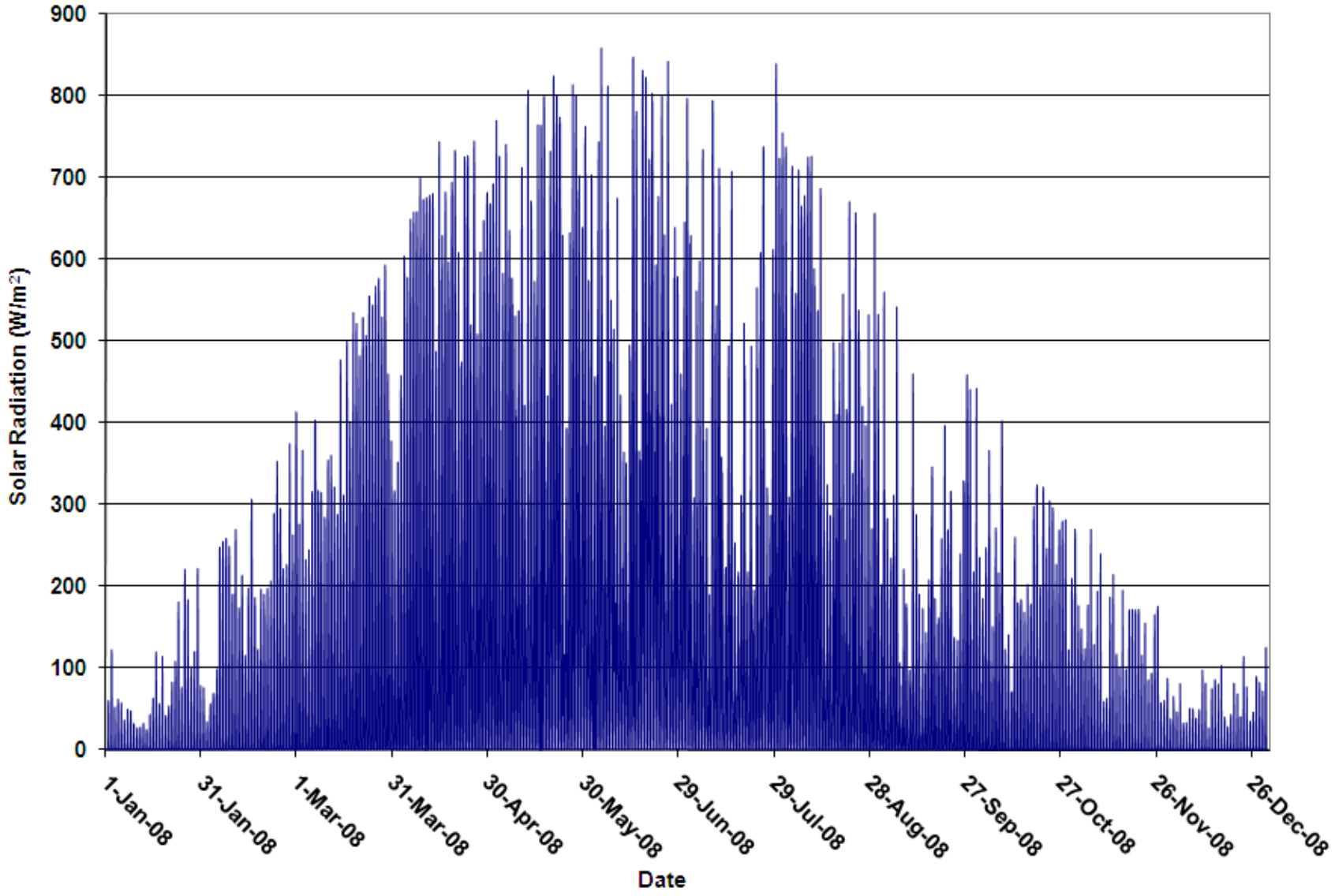
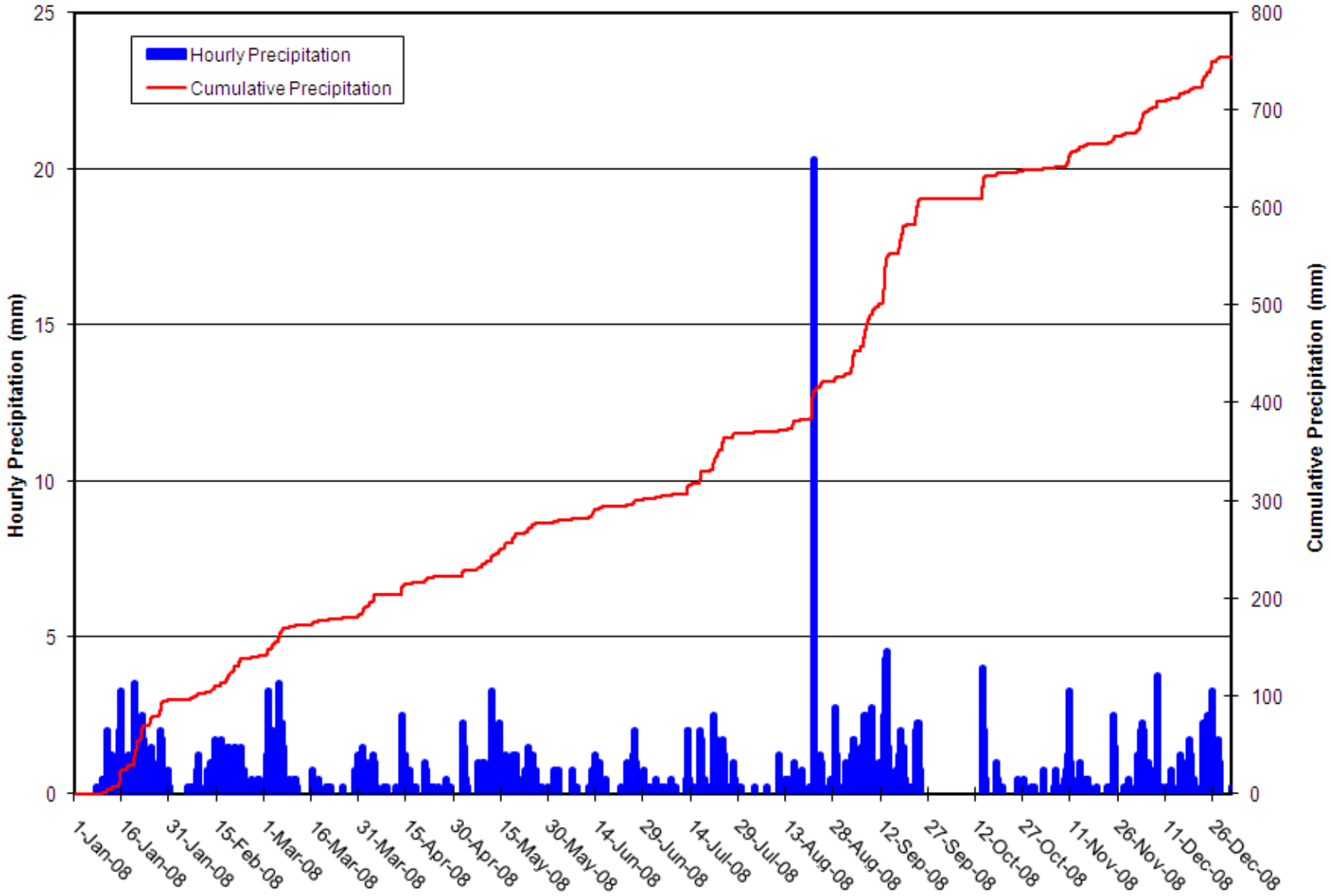


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, June 2008.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

U.S. Department of Commerce, National Climatic Data Center, Asheville, North Carolina, *http://www.ncdc.noaa.gov*.

Western Regional Climate Center, Desert Research Institute, Reno Nevada, *http://www.wrcc.dri.edu/summary/climsmak.html.*

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2008

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A[3]
February 2008	100%	100%	16.2%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%	N/A
March 2008	100%	100%	0.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter A	**100%**	**100%**	**39.3%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.8%**	**N/A**
April 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	N/A
May 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.8%
June 2008	99.9%	99.9%	0.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Quarter B	**99.9%**	**99.9%**	**0.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**98.8%**
July 2008	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	99.6%	99.6%	21.4%	99.7%	99.7%	99.6%	99.7%	99.7%	99.7%	100%	100%	100%	99.2%	99.7%
Quarter C	**99.9%**	**99.9%**	**7.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.7%**	**99.9%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**36.7%**[4]	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.8%**	**99.3%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May12 through October 13, 2008
[4] Delta T failed September 23 and 24 Audit. Data invalidated from February 6, 2008 through September 24, 2008.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

CONTENTS

1. Pebble 1 Station September 2007 Quality Assurance Systems Audit and Performance Audit

2. Pebble 1 Station February 2008 Quality Assurance Performance Audit

3. Pebble 1 Station September 2008 Quality Assurance Systems Audit and Performance Audit

Pebble 1
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 11

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 14

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 September 2, 2007 Performance Audit Summary (CR10X) 12
Table 3-3 Pebble 1 September 3-4, 2007 Performance Audit Summary (CR1000) 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

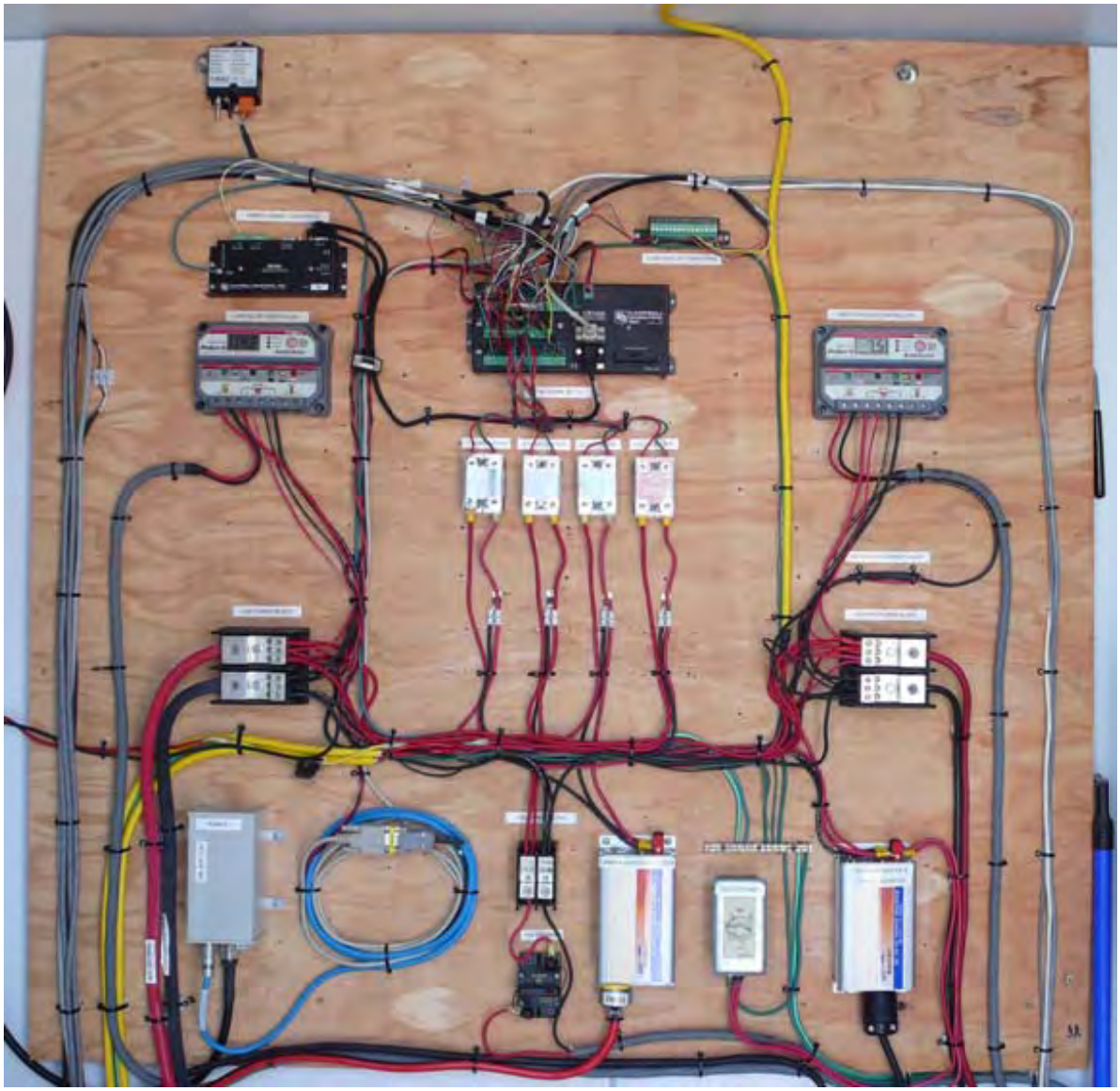
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 1 station was conducted in early September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence and all instrumentation wires from the tower,

precipitation gauges and evaporation gauge are protected in conduit These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X/CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater

radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates

a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. During the recent audit the operator upgraded the data acquisition system and added current shunts to the system in order to remotely monitor the aspirator fans. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audits were conducted at the Pebble 1 station from September 2-4, 2007, with Dominic Shallies of HCG assisting. The station was audited as found on September 2, 2007. After the initial audit the datalogger was upgraded from a Campbell Scientific CR10X to a CR1000 and the thermistors, RH sensor, Climatronics wind sensor and solar radiation sensor were also replaced. After these station modifications the station was re-audited on September 3-4, 2007. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits, except the 10-meter thermistor during the initial audit. Summary audit results are contained in Tables 3-2 and 3-3, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 September 2, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.68	Fail[1]
Air Temperature Difference	≤ ±0.1	°C	0.40	Fail[1]
Relative Humidity (dew point)	≤ ±1.5	°C	0.4	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.100	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.2	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
Barometric Pressure	≤ ±3	Mbar	-0.1	Pass
Solar Radiation	≤ ±5+Res	% input	-8.7[3]	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	N/A
Weighing Precipitation	≤ ±10	% input	7.7	Pass
Evaporation	≤ ±10	% input	5.2	Pass

1. Thermistors replaced after CR10X audit.
2. Not re-tested until after DAS/sensor change.
3. Max % error value of 8.7 within limit of 5% input + resolution, see audit.

Table 3-3 Pebble 1 September 3-4, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-1:00	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.2	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.1	Pass
Barometric Pressure	≤ ±3	Mbar	-0.6	Pass
Solar Radiation	≤ ±5+Res	% input	5.2[2]	Pass
Tipping Precipitation	≤ ±10	% input	-10.0[3]	Pass
Weighing Precipitation	≤ ±10	% input	7.8	Pass
Evaporation	≤ ±10	% input	3.5	Pass

1. New DAS/sensor, no as-found value.
2. Max % error value of 5.2 within limit of 5% input + resolution, see audit.
3. Single point at 10%, five other readings at 1% to 6% error.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 8
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

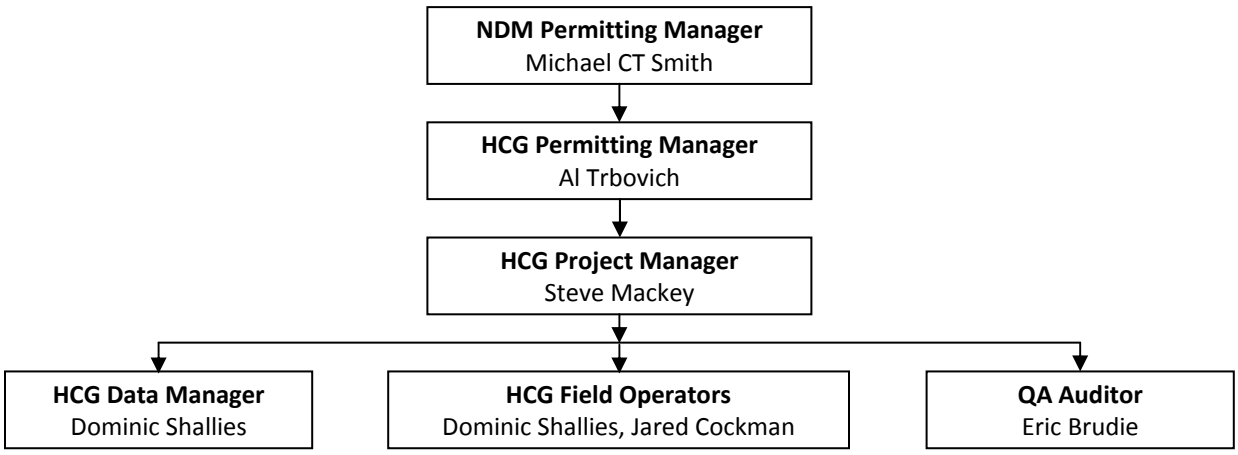
Indicated by Operator	Determined by Auditor
59° 54’ N	59° 54.180’ N
155° 20’ W	155° 19.804’ W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
Old DAS[1]	Campbell Scientific	CR10X	X43107
Old DAS Wiring Panel	Campbell Scientific	CR10X	32768
New DAS[2]	Campbell Scientific	CR1000	Unknown
New DAS Wiring Panel	Campbell Scientific	CR1000	4678
Old Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Old Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
New Temperature (2-meter)	Met One	062MP	E3361, ID #1/2
New Temperature (10-meter)	Met One	062MP	E3361, ID #2/2
Old Relative Humidity	Vaisala	HMP45AC	A1040018
New Relative Humidity	Vaisala	HMP45AC	B4850667
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Old Primary Wind Speed	Climatronics	F460-100075	5007
New Primary Wind Speed	Climatronics	F460-100075	3977
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Old Primary Wind Direction	Climatronics	F460-100076	4691
New Primary Wind Direction	Climatronics	F460-100076	4661
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	67731
Backup Wind Spd Prop	RM Young	08254	63798
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Barometric Pressure	Vaisala	PTB101B	A0710039
Old Solar Radiation	LI-COR	Li-200SX	PY49464
New Solar Radiation	LI-COR	Li-200SX	PY56427
Precipitation-Tipping	Met-One	370	D5874
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	389
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None

1. DAS and some sensors replaced after initial audit on Sep 02, 2007.
2. New DAS and sensors audited on Sep 03-04, 2007.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance? ■ Yes □ No Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.

Is the DAS rated for operation in the expected local temperature range? ■ Yes □ No Comments: -55°C to + 85°C.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	□ Yes ■ No	Comments: 10 meter thermistor failed initial audit and was replaced and re-audited.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10” range	Not Specified	N/A
Range:	2” to 10”	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material?	■ Yes □ No	Comments: None.
Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Auditor: Eric Brudie

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

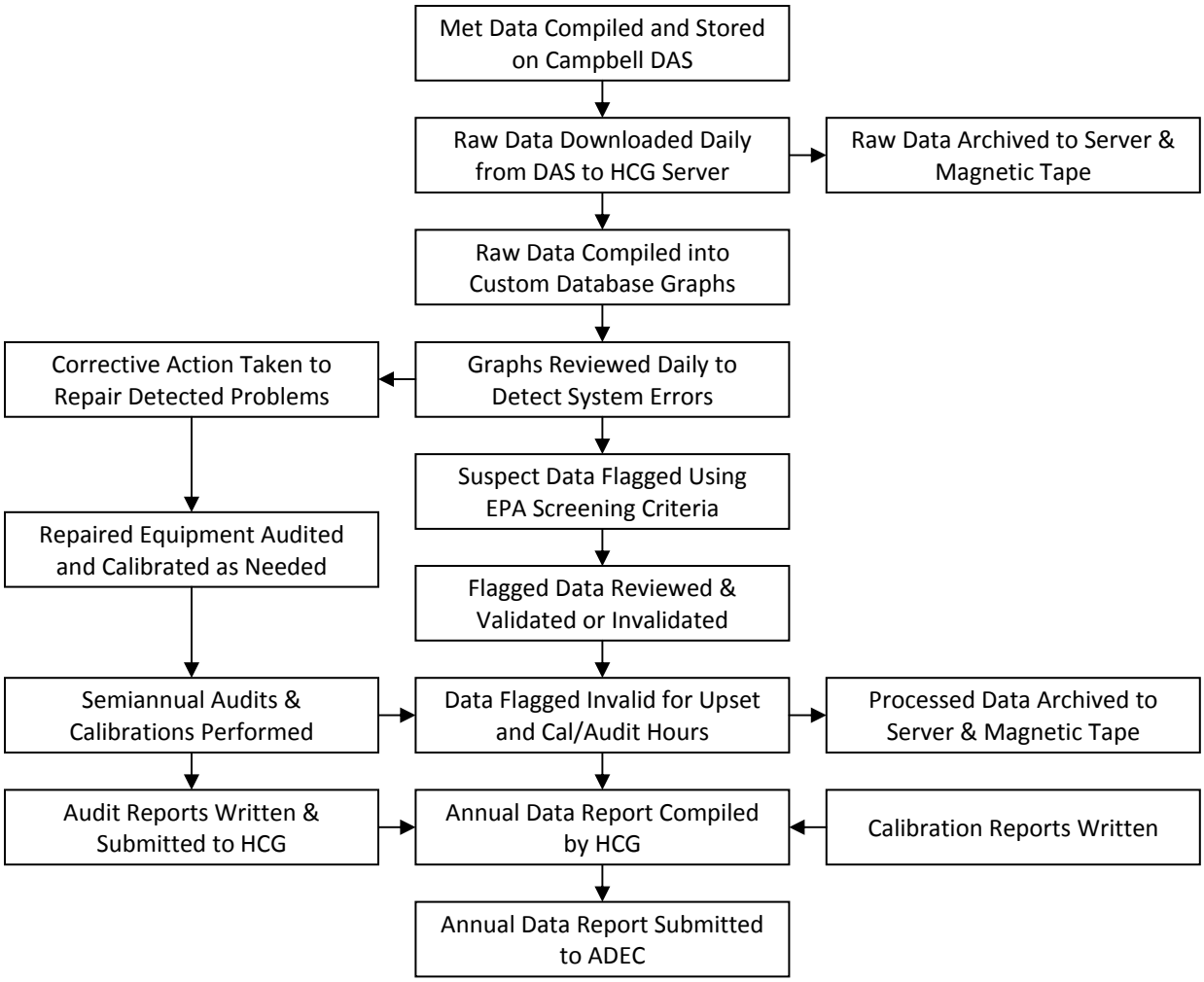
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Audit of station with CR10X datalogger.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:46:30	15:46:28	**-00:02**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1430
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target ℃	Input ℃	DAS ℃	Error ℃	Pass/ Fail?	DAS ℃	Error ℃	Pass/ Fail?	Delta T ℃	Pass/ Fail?
Hot	35 to 45	36.42	36.70	0.28	Pass	37.10	0.68	Fail	0.40	Fail
Warm	15 to 25	19.36	19.48	0.12	Pass	19.67	0.31	Pass	0.19	Fail
Ice Bath	0	0.00	0.14	0.14	Pass	0.19	0.19	Pass	0.05	Pass
Cold	-15 to -25	-15.69	-15.61	0.08	Pass	-15.61	0.08	Pass	0.00	Pass
Very Cold	-35 to -45	-38.60	-38.92	-0.32	Pass	-38.92	-0.32	Pass	0.00	Pass
		Max Abs. Error		0.32	**PASS**		0.68	**FAIL**	0.40	**FAIL**

PSD Limits: Max Absolute Error > 0.5 ℃ (Sensor Accuracy); Max Absolute Error > 0.1 ℃ (Delta Temperature).
Comments: Thermistors failed for unknown reason.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (℃)	Input DP (℃)	DAS %RH	DAS AT (℃)	DAS DP (℃)	Error DP (℃)	Pass/ Fail?
901	96.2	8.7	8.1	100.0	8.3	8.3	0.2	Pass
950	92.5	9.5	8.5	100.0	8.9	8.9	0.4	Pass
1140	87.4	10.2	8.2	88.8	9.9	8.1	-0.1	Pass
1412	69.0	12.2	6.6	70.5	12.0	6.8	0.2	Pass
						Max Abs. Error	0.4	**PASS**

PSD Limits: Max Absolute Error > 1.5℃ Dew Point.
Conversions: Td=DP(℃), Ta=AT(℃), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5007	**Cup #:**	2284	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4691	**Vane #:**	1440	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1330 End: 1333

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	293.8	1.7	Pass
Peak 1984	9.7	10.1	0.4	Pass
Pebble 5A	87.9	91.1	3.2	Pass
Cone Mtn	144.3	146.9	2.6	Pass
Compass	216.0	217.7	1.7	Pass
Compass	270.0	270.0	0.0	Pass
Max Abs. Error			**3.2**	**PASS**
Mean Abs. Error			**1.6**	**GOOD**

Time: Begin: 1200 End: 1235

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.2	0.2	Pass
West	270.0	269.5	-0.5	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.8	0.8	Pass
North	360.0	0.1	0.1	Pass
West	270.0	270.9	0.9	Pass
South	180.0	180.9	0.9	Pass
East	90.0	92.2	2.2	Pass
Max Abs. Error			**2.2**	**PASS**
Mean Abs. Error			**0.7**	**PASS**

Time: Begin: 1334 End: 1337

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.8	0.8	Pass	330.0	332.8	2.8	Pass
60.0	60.9	0.9	Pass	355.0	357.2	2.2	Pass
90.0	91.6	1.6	Pass	30.0	30.8	0.8	Pass
120.0	121.2	1.2	Pass	60.0	61.0	1.0	Pass
150.0	150.8	0.8	Pass	90.0	91.2	1.2	Pass
180.0	181.2	1.2	Pass	120.0	121.5	1.5	Pass
210.0	210.4	0.4	Pass	150.0	150.8	0.8	Pass
240.0	241.5	1.5	Pass	180.0	180.9	0.9	Pass
270.0	271.5	1.5	Pass	**Max Abs. Error**		**2.8**	**PASS**
300.0	301.1	1.1	Pass	**Mean Abs. Error**		**1.2**	**PASS**

Time: Begin: 1340 End: 1343

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.100	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
Max Abs. Error				
Mean Abs. Error				

Time: Begin: End:

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 67731 **Prop #:** 63798 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA01674
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.3 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.06	0.01	N/A	Pass
1000	5.12	5.06	N/A	-1.2	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.63	N/A	0.1	Pass
10000	51.20	51.36	N/A	0.3	Pass
	Max Abs. Error		**0.01**	**1.2**	**PASS**

Time: Begin: 1245 End: 1250
Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.0	-0.1	Pass
Peak 1984	9.7	10.8	1.1	Pass
Pebble 5A	87.9	91.6	3.7	Pass
Cone Mtn	144.3	147.3	3.0	Pass
Compass	216.0	215.9	-0.1	Pass
Compass	270.0	268.5	-1.5	Pass
Time: Begin: 1200 End: 1235		**Max Abs. Error**	**3.7**	**PASS**
		Mean Abs. Error	**1.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	150.0	150.6	0.6	Pass	270.0	268.4	-1.6	Pass
60.0	60.9	0.9	Pass	180.0	180.1	0.1	Pass	300.0	297.8	-2.2	Pass
90.0	91.2	1.2	Pass	210.0	209.7	-0.3	Pass	330.0	327.2	-2.8	Pass
120.0	120.8	0.8	Pass	240.0	239.0	-1.0	Pass	355.0	352.3	-2.7	Pass
					Time: Begin: 1250			**Max Abs. Error**		**2.8**	**PASS**
					End: 1254			**Mean Abs. Error**		**1.2**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.005	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
Time: Begin:		**Max Abs. Error**		
End:		**Mean Abs. Error**		

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1547	28.32	28.22	955.8	955.7	-0.1	Pass
			Max Abs. Error		0.1	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

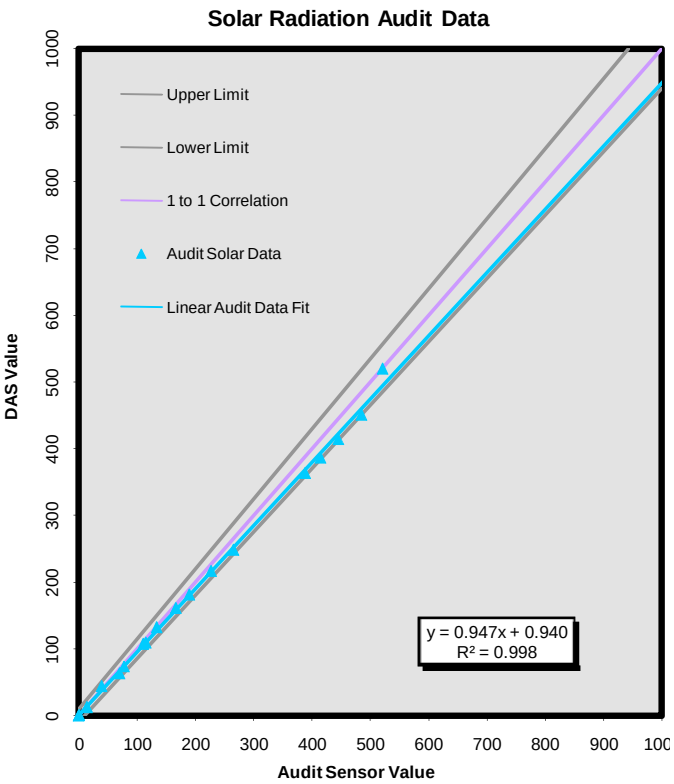
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY49464 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
905	77.1	74.3	-2.8	±13.9	-3.6%	Pass
950	132.9	132.3	-0.6	±16.6	-0.5%	Pass
1128	520.4	519.7	-0.7	±36.0	-0.1%	Pass
1540	189.4	181.2	-8.2	±19.5	-4.3%	Pass
725	13.8	13.7	0.0	±10.7	n/a	Pass
900	38.6	44.1	5.5	±11.9	n/a	Pass
1000	109.9	107.0	-2.9	±15.5	-2.6%	Pass
1100	265.0	248.1	-16.9	±23.3	-6.4%	Pass
1200	414.3	386.1	-28.2	±30.7	-6.8%	Pass
1300	484.6	450.4	-34.2	±34.2	-7.1%	Pass
1400	445.1	414.7	-30.4	±32.3	-6.8%	Pass
1500	388.6	363.6	-25.0	±29.4	-6.4%	Pass
1600	226.6	216.8	-9.8	±21.3	-4.3%	Pass
1700	166.9	160.8	-6.1	±18.3	-3.7%	Pass
1800	115.2	109.2	-6.0	±15.8	-5.2%	Pass
1900	69.3	63.3	-6.0	±13.5	-8.7%	Pass
2000	14.1	12.9	-1.2	±10.7	n/a	Pass
2100	1.1	0.9	-0.2	±10.1	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	**0.9990**	**Max Abs. Percent Error**			**8.7%**	**PASS**
R² Value	**0.9980**	**Intercept**	**0.9**	**Slope**	**0.9478**	**FAIL**



Begin Date: 09/02/07 **End Date:** 09/03/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: No test until after DAS change.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
859	4.00	1600	21.9	0.00	21.84	21.84	-0.4%	Pass	
905		1600	21.9	0.00	23.62	23.62	7.7%	Pass	
945		1600	21.9	23.62	46.99	23.37	6.6%	Pass	
955		1600	21.9	46.99	70.40	23.41	6.7%	Pass	
1025		1600	21.9	0.00	23.37	23.37	6.6%	Pass	
1120	7.75	1600	21.9	0.00	23.62	23.62	7.7%	Pass	
1142		1600	21.9	23.62	46.74	23.12	5.4%	Pass	
1256		1600	21.9	0.00	23.36	23.36	6.5%	Pass	
1305		1600	21.9	0.25	23.62	23.37	6.6%	Pass	
					Max Abs. Error		**7.7%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found with 6" in gauge.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

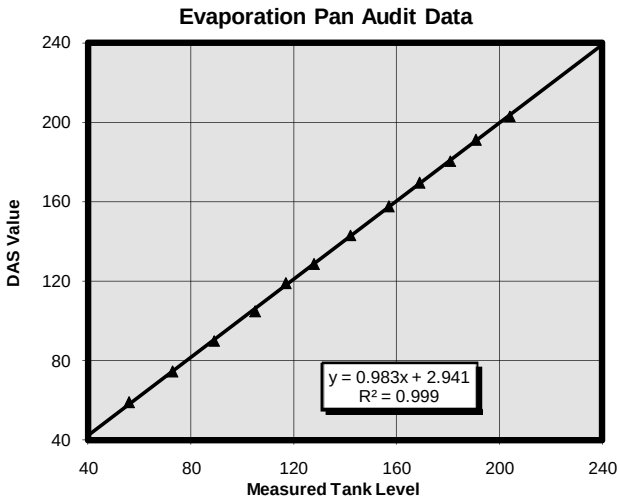
● *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	56.0	58.9	56.0	2.9	5.2%	Pass
	73.0	74.3	73.0	1.3	1.8%	Pass
	89.0	90.0	89.0	1.0	1.1%	Pass
	105.0	104.6	105.0	-0.4	-0.4%	Pass
	117.0	118.9	117.0	1.9	1.6%	Pass
	128.0	128.6	128.0	0.6	0.5%	Pass
	142.0	143.2	142.0	1.2	0.8%	Pass
	157.0	157.6	157.0	0.6	0.4%	Pass
	169.0	169.5	169.0	0.5	0.3%	Pass
	181.0	180.5	181.0	-0.5	-0.3%	Pass
	191.0	191.0	191.0	0.0	0.0%	Pass
	204.0	203.1	204.0	-0.9	-0.4%	Pass
	Max Abs. Error			**2.9**	**5.2%**	**PASS**
	Intercept	**2.9**	**Slope**	**0.9832**		**PASS**



Time: Begin: 1310 End: 1405

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Audit of station with CR1000 datalogger.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:02:30	16:01:30	**-01:00**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3361 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3361 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1315
End: 1340

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target ℃	Input ℃	DAS ℃	Error ℃	Pass/ Fail?	DAS ℃	Error ℃	Pass/ Fail?	Delta T ℃	Pass/ Fail?
Hot	35 to 45	35.33	35.43	0.10	Pass	35.43	0.10	Pass	0.00	Pass
Warm	15 to 25	21.02	21.04	0.02	Pass	21.04	0.02	Pass	0.00	Pass
Ice Bath	0	0.15	0.12	-0.03	Pass	0.12	-0.03	Pass	0.00	Pass
Cold	-15 to -25	-23.05	-23.00	0.05	Pass	-23.00	0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-33.25	-33.22	0.03	Pass	-33.22	0.03	Pass	0.00	Pass
		Max Abs. Error		0.10	**PASS**		0.10	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 ℃ (Sensor Accuracy); Max Absolute Error > 0.1 ℃ (Delta Temperature).
Comments: Replacement thermistors.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** B4850667 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (℃)	Input DP (℃)	DAS %RH	DAS AT (℃)	DAS DP (℃)	Error DP (℃)	Pass/ Fail?
1050	67.8	10.2	4.4	67.2	10.1	4.3	-0.1	Pass
1350	58.2	12.2	4.3	58.4	12.2	4.3	0.0	Pass
1713	71.4	11.1	6.2	71.6	11.3	6.4	0.2	Pass
					Max Abs. Error		0.2	**PASS**

PSD Limits: Max Absolute Error > 1.5℃ Dew Point.
Conversions: Td=DP(℃), Ta=AT(℃), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: New RH sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	3977	**Cup #:**	2284	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4661	**Vane #:**	1440	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1530 End: 1535

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.2	-0.8	Pass
West	270.0	270.9	0.9	Pass
North	360.0	0.7	0.7	Pass
East	90.0	88.9	-1.1	Pass
North	360.0	0.6	0.6	Pass
West	270.0	271.0	1.0	Pass
South	180.0	180.0	0.0	Pass
East	90.0	90.6	0.6	Pass
	Max Abs. Error		**1.1**	**PASS**
	Mean Abs. Error		**0.7**	**PASS**

Time: Begin: 1551 End: 1554

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.2	-0.8	Pass	330.0	330.8	0.8	Pass
60.0	58.4	-1.6	Pass	355.0	355.3	0.3	Pass
90.0	89.4	-0.6	Pass	30.0	29.2	-0.8	Pass
120.0	120.3	0.3	Pass	60.0	58.7	-1.3	Pass
150.0	149.8	-0.2	Pass	90.0	89.3	-0.7	Pass
180.0	179.3	-0.7	Pass	120.0	120.4	0.4	Pass
210.0	208.7	-1.3	Pass	150.0	149.8	-0.2	Pass
240.0	239.9	-0.1	Pass	180.0	178.8	-1.2	Pass
270.0	270.1	0.1	Pass	**Max Abs. Error**		**1.6**	**PASS**
300.0	300.2	0.2	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Time: Begin: 1537 End: 1540

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.1	0.0	Pass
Gnd Hog Spire 2488	216.5	215.3	-1.2	Pass
Cone Mtn	144.3	144.2	-0.1	Pass
Pebble 5A	87.9	86.9	-1.0	Pass
Peak 1984	9.7	9.9	0.2	Pass
Compass	351.0	350.1	-0.9	Pass
Time: Begin: 1600	**Max Abs. Error**		**1.2**	**PASS**
End: 1630	**Mean Abs. Error**		**0.6**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind speed sensor SN 5007 got wet during audit and was replaced by sensor SN 3977. Wind direction sensor SN 4691 was replaced by SN 4661 for routine bearing maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 67731	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.3	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1505 End: 1510

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.3	-1.7	Pass	150.0	148.4	-1.6	Pass	270.0	268.4	-1.6	Pass
60.0	58.7	-1.3	Pass	180.0	179.6	-0.4	Pass	300.0	298.5	-1.5	Pass
90.0	88.7	-1.3	Pass	210.0	209.3	-0.7	Pass	330.0	328.0	-2.0	Pass
120.0	118.8	-1.2	Pass	240.0	238.7	-1.3	Pass	355.0	353.1	-1.9	Pass
				Time: Begin:	1510	**Max Abs. Error**		**2.0**	**PASS**		
				End:	1515	**Mean Abs. Error**		**1.4**	**PASS**		

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	<0.003	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
Cone Mtn	144.3	144.7	0.4	Pass
Pebble 5A	87.9	89.0	1.1	Pass
Peak 1984	9.7	9.4	-0.3	Pass
Koktuk Mtn	292.1	289.0	-3.1	Pass
Gnd Hog Spire 2488	216.5	213.8	-2.7	Pass
Compass	351.0	349.0	-2.0	Pass
Time: Begin: 1600	**Max Abs. Error**		**3.1**	**PASS**
End: 1630	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1446	27.90	27.80	941.5	940.9	-0.6	Pass
			Max Abs. Error		0.6	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

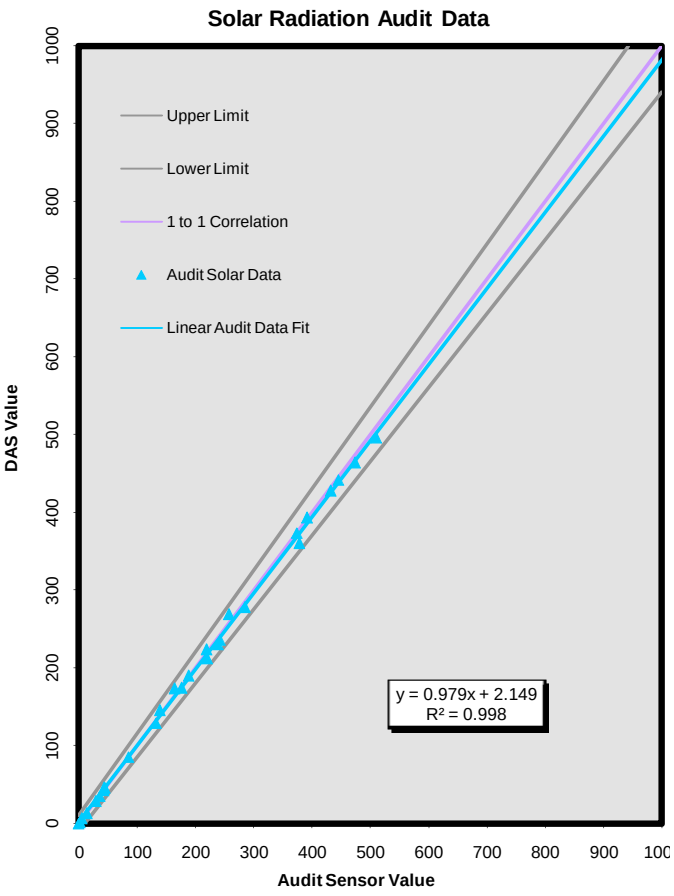
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56427 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1204	219.4	223.3	3.9	±21.0	1.8%	Pass
925	284.4	277.9	-6.5	±24.2	-2.3%	Pass
1333	391.3	392.6	1.3	±29.6	0.3%	Pass
708	188.0	189.5	1.5	±19.4	0.8%	Pass
1030	510.4	495.5	-14.9	±35.5	-2.9%	Pass
1140	377.8	359.8	-18.0	±28.9	-4.8%	Pass
1600	84.6	85.5	0.9	±14.2	1.1%	Pass
1700	42.1	42.2	0.1	±12.1	n/a	Pass
1800	44.7	46.0	1.3	±12.2	n/a	Pass
1900	28.6	28.2	-0.5	±11.4	n/a	Pass
2000	13.4	12.4	-1.0	±10.7	n/a	Pass
2100	1.3	1.0	-0.2	±10.1	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
900	176.6	173.7	-2.9	±18.8	-1.6%	Pass
1000	239.1	230.2	-8.9	±22.0	-3.7%	Pass
1100	220.4	211.8	-8.6	±21.0	-3.9%	Pass
1200	242.1	236.1	-6.0	±22.1	-2.5%	Pass
1300	374.2	373.5	-0.7	±28.7	-0.2%	Pass
1400	432.5	427.2	-5.3	±31.6	-1.2%	Pass
1500	445.7	441.9	-3.8	±32.3	-0.9%	Pass
1700	164.5	173.1	8.6	±18.2	5.2%	Pass
1800	257.9	268.4	10.5	±22.9	4.1%	Pass
1900	138.7	145.1	6.4	±16.9	4.6%	Pass
2000	35.9	35.3	-0.7	±11.8	n/a	Pass
700	5.0	6.0	1.0	±10.2	n/a	Pass
800	43.1	45.3	2.2	±12.2	n/a	Pass
900	132.0	129.2	-2.8	±16.6	-2.1%	Pass
1100	474.2	463.5	-10.7	±33.7	-2.3%	Pass
Corr. Val	**0.9994**	**Max Abs. Percent Error**			**5.2%**	**PASS**
R² Value	**0.9988**	**Intercept**	**2.1**	**Slope**	**0.9796**	**PASS**



Begin Date: 09/03/07 **End Date:** 09/05/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: New instrument.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/03/07	1340	650	20.0	0.8		20.6	1410	19.8	-1.0%	Pass	
09/03/07	1415	650	20.0	0.0		19.2	1500	19.2	-4.0%	Pass	
09/03/07	1505	650	20.0	0.0		20.4	1600	20.4	2.0%	Pass	Rain affected.
09/04/07	815	650	20.0	0.0		18.0	900	18.0	-10.0%	Pass	
09/04/07	1020	650	20.0	0.0		18.8	1100	18.8	-6.0%	Pass	
09/04/07	1330	650	20.0	0.0	16.2	3.0	1430	19.2	-4.0%	Pass	
09/04/07	1435	650	20.0	3.0	14.2	7.8	1600	19.0	-5.0%	Pass	
							Max Abs. Error	**10.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: 10% error within limits, but appears to be an aberration.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Date:	Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
09/03/07	1330	5.00	1600	21.9	0.25	22.86	22.61	3.1%	Pass	
09/03/07	1445		1600	21.9	0.00	20.83	20.83	-5.0%	Pass	
09/03/07	1500		1600	21.9	20.83	44.20	23.37	6.6%	Pass	
09/03/07	1510		1600	21.9	0.76	25.40	24.64	N/A	N/A	Rain affected, ignore.
09/04/07	759		1600	21.9	0.00	23.11	23.11	5.4%	Pass	
09/04/07	938		1600	21.9	0.76	24.39	23.63	7.8%	Pass	
09/04/07	1026	11.00	1600	21.9	0.51	23.62	23.11	5.4%	Pass	
							Max Abs. Error	**7.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found with 6" in gauge.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

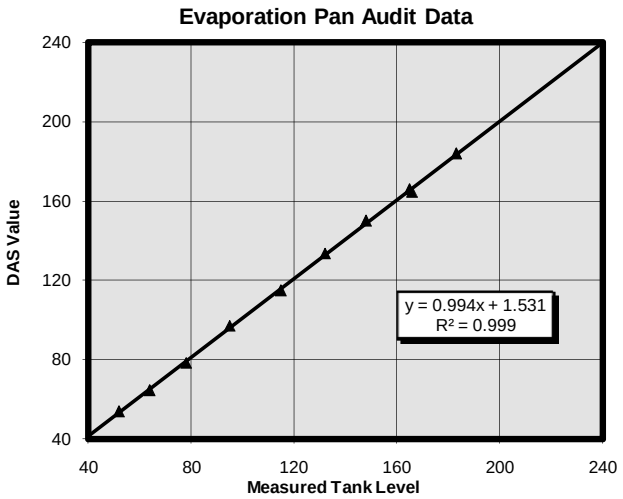
● *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

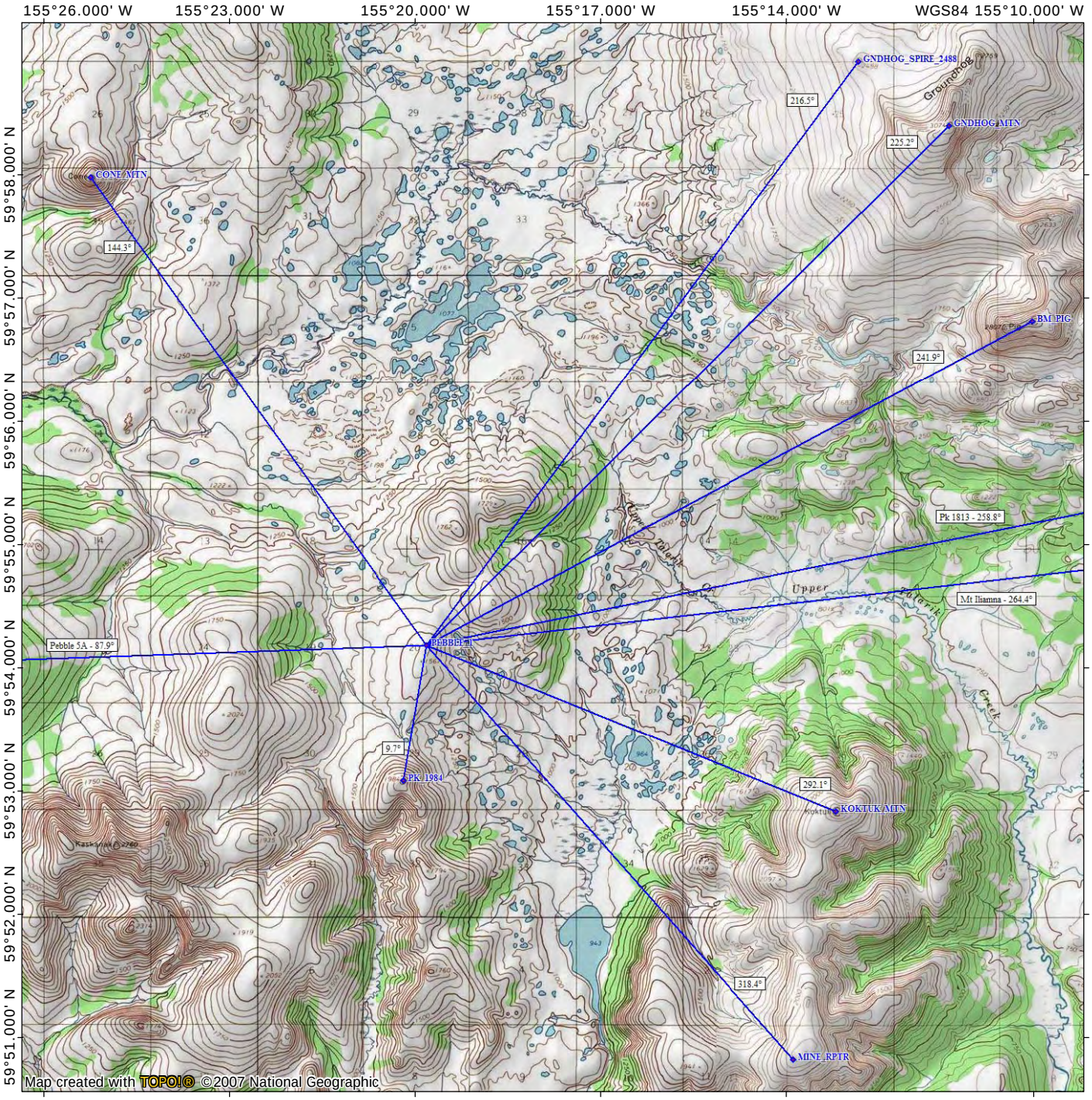
Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	165.0	165.7	165.0	0.7	0.4%	Pass
	183.0	183.9	183.0	0.9	0.5%	Pass
	166.0	164.6	166.0	-1.4	-0.8%	Pass
	148.0	150.0	148.0	2.0	1.4%	Pass
	132.0	133.6	132.0	1.6	1.2%	Pass
	115.0	114.8	115.0	-0.2	-0.2%	Pass
	95.0	97.1	95.0	2.1	2.2%	Pass
	78.0	78.4	78.0	0.4	0.5%	Pass
	64.0	64.4	64.0	0.4	0.6%	Pass
	52.0	53.8	52.0	1.8	3.5%	Pass
		Max Abs. Error		**2.1**	**3.5%**	**PASS**
		Intercept	**1.5**	**Slope**	**0.9941**	**PASS**



Time: Begin: 1514 End: 1541

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Date 9/4/07.

Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 2.5 miles

0 1 2 3 4 km

TN MN 17½°

10/20/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Block unit

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EJ

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V. Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE # 300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079319

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Lenyen
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
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Sheridan, Wyoming 82801 USA
(307) 672-7790
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THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments for Precision Measurements Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble Station 1
February 2008
Quality Assurance Performance Audit

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

Pebble 1 PSD Meteorological Monitoring Station
February 2008
Quality Assurance Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 PERFORMANCE AUDIT 2

2.1 Performance Audit Methodology 2

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 7

2.2 Performance Audit Results 7

2.3 Performance Audit Recommendations 7

3.0 REFERENCES 9

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 1 February 5 and 6, 2008 Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for The Pebble Limited Partnership, care of Pebble Mines Corporation (PMC); in support of the Pebble Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1.)

Pebble 1 is located just west of the deposit area on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PCM to serve as a quantitative review of the Pebble 1 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited by adding measured water volumes to the gauge opening using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

A performance audit was conducted at the Pebble 1 station on February 5 and 6, 2008, with Dominic Shallies of HCG assisting. All sensors except the tipping precipitation gauge were challenged with certified audit equipment and yielded errors below the PSD limits. Attempts were made to audit the tipping precipitation gauge, but the ambient temperature was too cold to operate the testing device. Table 2-2 contains summary data from the audit and complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 1 February 5 and 6, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:52	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.050	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.0	Pass
Wind Direction Linearity	≤ 3	Degree	0.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.8	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.9	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.6	Pass
Barometric Pressure	≤ ±3	Mbar	0.0	Pass
Solar Radiation	≤ ±5+Res	% input	-8.4[1]	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	Pass
Weighing Precipitation	≤ ±10	% input	8.8	Pass

1. Max % error value of 8.4 within limit of 5% input + resolution, see audit.
2. Too cold to run tipping gauge drip tests.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Meteorological Measurement Methods Validation Criteria", ADEC, November 2007.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5 & 6, 2008

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: DAS CR1000 SN: 4821. Wire panel # 4678.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:51:00	15:50:08	**-00:52**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3361 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3361 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1550
End: 1630

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	41.56	41.72	0.16	Pass	41.72	0.16	Pass	0.00	Pass
Warm	15 to 25	21.99	22.00	0.01	Pass	22.00	0.01	Pass	0.00	Pass
Ice Bath	0	0.00	0.09	0.09	Pass	0.09	0.09	Pass	0.00	Pass
Cold	-15 to -25	-21.41	-21.14	0.27	Pass	-21.14	0.27	Pass	0.00	Pass
Very Cold	-35 to -45	-36.56	-36.22	0.34	Pass	-36.22	0.34	Pass	0.00	Pass
		Max Abs. Error	0.34	**PASS**			0.34	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** B4850667 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

	RH COLLOCATED STANDARD TEST								
Date	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
02/06/08	1345	51.3	-24.6	-31.1	60.2	-25.3	-30.3	0.8	Pass
02/06/08	1350	50.5	-24.7	-31.3	58.8	-25.6	-30.9	0.4	Pass
						Max Abs. Error		0.8	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5 & 6, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	3977	**Cup #:**	2284	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4661	**Vane #:**	1440	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319		**Magnetic Declin:**	17.2	**E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
1900	44.87	44.86	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1350 End: 1352

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	93.5	91.6	-1.9	Pass
Spire 2488	216.5	212.4	-4.1	Pass
Koktuk Mtn	292.1	289.2	-2.9	Pass
Compass	14.5	14.0	-0.5	Pass
Compass	164.5	162.7	-1.8	Pass

Time: Begin: 1315 End: 1340 **Max Abs. Error** **4.1** **PASS** **Mean Abs. Error** **2.2** **GOOD**

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.5	-0.5	Pass
West	270.0	268.3	-1.7	Pass
North	360.0	0.2	0.2	Pass
East	90.0	89.2	-0.8	Pass
North	360.0	0.2	0.2	Pass
West	270.0	270.0	0.0	Pass
South	180.0	179.3	-0.7	Pass
East	90.0	90.3	0.3	Pass
	Max Abs. Error		**1.7**	**PASS**
	Mean Abs. Error		**0.5**	**PASS**

Time: Begin: 1357 End: 1400

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.6	-0.4	Pass	330.0	331.0	1.0	Pass
60.0	59.4	-0.6	Pass	355.0	355.4	0.4	Pass
90.0	89.8	-0.2	Pass	30.0	30.1	0.1	Pass
120.0	120.0	0.0	Pass	60.0	59.3	-0.7	Pass
150.0	149.9	-0.1	Pass	90.0	89.4	-0.6	Pass
180.0	179.9	-0.1	Pass	120.0	119.9	-0.1	Pass
210.0	209.9	-0.1	Pass	150.0	149.8	-0.2	Pass
240.0	240.2	0.2	Pass	180.0	179.9	-0.1	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**1.0**	**PASS**
300.0	300.5	0.5	Pass	**Mean Abs. Error**		**0.3**	**PASS**

Time: Begin: 1407 End: 1410

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.35	0.0049	<0.003	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	7.5	0.104	0.050	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.2	0.1	Pass
Compass	86.5	87.6	1.1	Pass
Compass	161.0	159.6	-1.4	Pass
Compass	5.0	7.8	2.8	Pass

Time: Begin: 1410 End: 1430 **Max Abs. Error** **2.8** **PASS** **Mean Abs. Error** **1.3** **GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Motor too cold to run at 2000 rpm.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5 & 6, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 67731	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.2	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1516 End: 1518

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	93.5	93.4	-0.1	Pass
Spire 2488	216.5	212.2	-4.3	Pass
Koktuk Mtn	292.1	290.1	-2.0	Pass
Compass	14.5	14.2	-0.3	Pass
Compass	164.5	163.2	-1.3	Pass
Time: Begin: 1315	**Max Abs. Error**		**4.3**	**PASS**
End: 1340	**Mean Abs. Error**		**1.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.4	-0.6	Pass	150.0	149.8	-0.2	Pass	270.0	266.7	-3.3	Pass
60.0	60.1	0.1	Pass	180.0	178.9	-1.1	Pass	300.0	296.7	-3.3	Pass
90.0	88.3	-1.7	Pass	210.0	209.7	-0.3	Pass	330.0	326.7	-3.3	Pass
120.0	117.5	-2.5	Pass	240.0	236.8	-3.2	Pass	355.0	352.0	-3.0	Pass
					Time: Begin: 1500			**Max Abs. Error**		**3.3**	**PASS**
					End: 1504			**Mean Abs. Error**		**1.9**	**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	1.0	0.014	0.005	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	10.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	291.2	-0.9	Pass
Compass	86.5	86.7	0.2	Pass
Compass	161.0	162.6	1.6	Pass
Compass	5.0	5.0	0.0	Pass
Time: Begin: 1410	**Max Abs. Error**		**1.6**	**PASS**
End: 1430	**Mean Abs. Error**		**0.7**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5 & 6, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1525	27.97	27.87	943.87	943.90	0.03	Pass
			Max Abs. Error		0.03	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

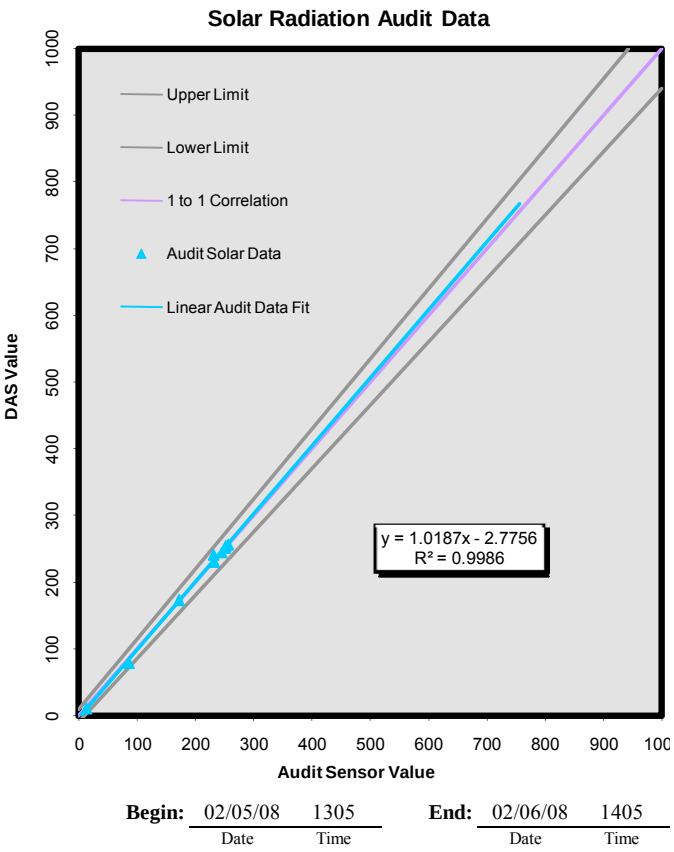
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56427 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1310	245.6	245.0	-0.6	±22.3	-0.2%	Pass
1330	256.3	257.1	0.8	±22.8	0.3%	Pass
1350	250.6	252.0	1.4	±22.5	0.6%	Pass
1435	231.4	241.5	10.1	±21.6	4.4%	Pass
900	0.0	0.0	0.0	±10.0	n/a	Pass
1000	12.6	10.6	-2.0	±10.6	n/a	Pass
1100	86.0	78.7	-7.3	±14.3	-8.4%	Pass
1200	172.0	173.5	1.5	±18.6	0.9%	Pass
1300	232.4	230.7	-1.7	±21.6	-0.7%	Pass
1400	252.3	254.8	2.5	±22.6	1.0%	Pass
Corr. Val	**0.9993**	**Max Abs. Percent Error**			**8.4%**	**PASS**
R² Value	**0.9986**	**Intercept**	**-2.8**	**Slope**	**1.0187**	**PASS**



Begin: 02/05/08 (Date) 1305 (Time) **End:** 02/06/08 (Date) 1405 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 5 & 6, 2008

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
02/06/08	1405	650	20.0	0.0		16.8	1410	16.8	-16.0%	Fail	Very cold.
02/06/08	1425	650	20.0	18.4		36.0	1500	17.6	-12.0%	Fail	Very cold.
							Max Abs. Error	**16.0%**	**FAIL**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold for drip tests; disregard.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

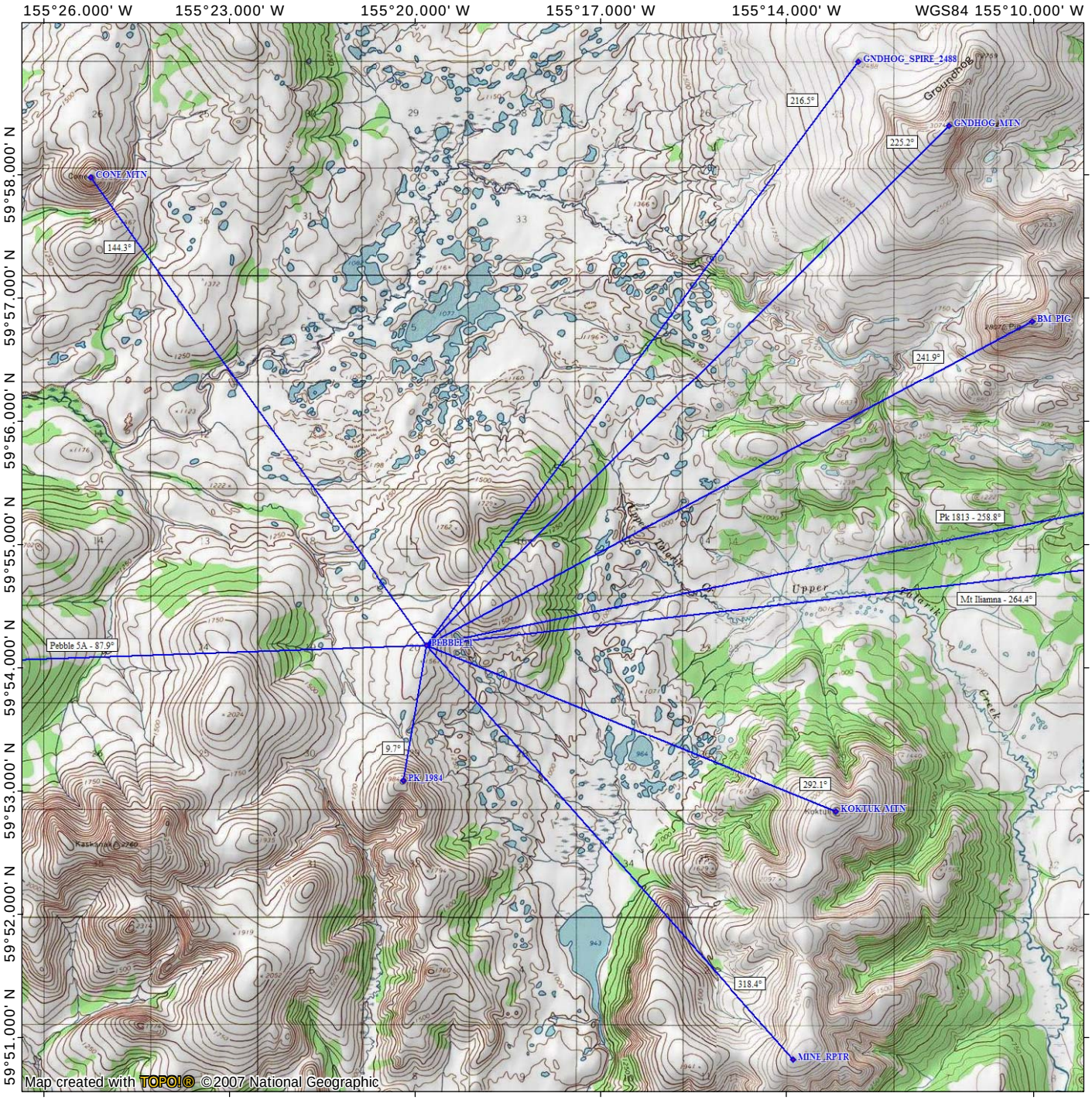
Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1135	5.00	1600	21.9	18.03	41.15	23.12	5.4%	Pass	
1159		1600	21.9	41.15	64.01	22.86	4.2%	Pass	
1218		1600	21.9	0.00	22.61	22.61	3.1%	Pass	
1235	7.50	1600	21.9	22.61	45.72	23.11	5.4%	Pass	
1309		1600	21.9	45.72	69.35	23.63	7.8%	Pass	
1340		1600	21.9	2.29	26.16	23.87	8.8%	Pass	
1407		1600	21.9	26.16	49.79	23.63	7.8%	Pass	
					Max Abs. Error		**8.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 2.5 miles

0 1 2 3 4 km

TN MN 17½°

10/20/07

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

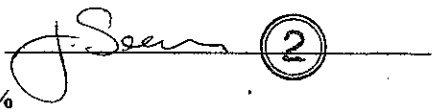
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: 

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner Name: HOEFLER Consulting Group

Address: 340 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER:

MODEL NUMBER: 5008

SERIAL NUMBER: 5080199319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: K. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Pebble 1
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 1 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 11

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 14

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 September 2, 2007 Performance Audit Summary (CR10X) 12
Table 3-3 Pebble 1 September 3-4, 2007 Performance Audit Summary (CR1000) 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

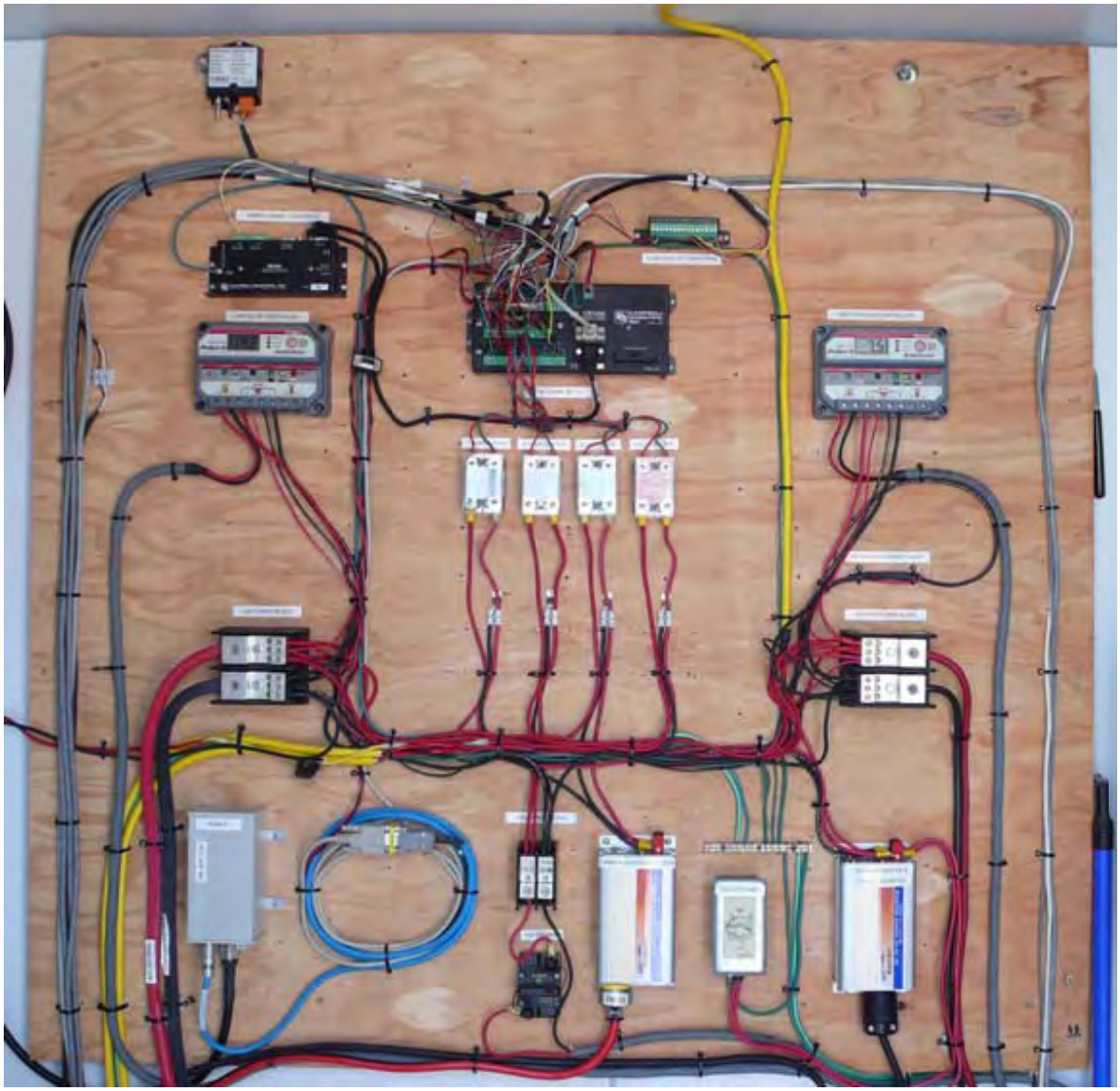
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 1 station was conducted in early September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence and all instrumentation wires from the tower,

precipitation gauges and evaporation gauge are protected in conduit These conduits all converge at a 6' by 8' insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR10X/CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater

radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through five 100 Amp-Hr deep cycle gel cell batteries. Three solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates

a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. During the recent audit the operator upgraded the data acquisition system and added current shunts to the system in order to remotely monitor the aspirator fans. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audits were conducted at the Pebble 1 station from September 2-4, 2007, with Dominic Shallies of HCG assisting. The station was audited as found on September 2, 2007. After the initial audit the datalogger was upgraded from a Campbell Scientific CR10X to a CR1000 and the thermistors, RH sensor, Climatronics wind sensor and solar radiation sensor were also replaced. After these station modifications the station was re-audited on September 3-4, 2007. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits, except the 10-meter thermistor during the initial audit. Summary audit results are contained in Tables 3-2 and 3-3, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 1 September 2, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.68	Fail[1]
Air Temperature Difference	≤ ±0.1	°C	0.40	Fail[1]
Relative Humidity (dew point)	≤ ±1.5	°C	0.4	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.100	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.01	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	1.2	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[2]	N/A
Barometric Pressure	≤ ±3	Mbar	-0.1	Pass
Solar Radiation	≤ ±5+Res	% input	-8.7[3]	Pass
Tipping Precipitation	≤ ±10	% input	N/A[2]	N/A
Weighing Precipitation	≤ ±10	% input	7.7	Pass
Evaporation	≤ ±10	% input	5.2	Pass

1. Thermistors replaced after CR10X audit.
2. Not re-tested until after DAS/sensor change.
3. Max % error value of 8.7 within limit of 5% input + resolution, see audit.

Table 3-3 Pebble 1 September 3-4, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-1:00	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.10	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.2	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.2	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.4	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.1	Pass
Barometric Pressure	≤ ±3	Mbar	-0.6	Pass
Solar Radiation	≤ ±5+Res	% input	5.2[2]	Pass
Tipping Precipitation	≤ ±10	% input	-10.0[3]	Pass
Weighing Precipitation	≤ ±10	% input	7.8	Pass
Evaporation	≤ ±10	% input	3.5	Pass

1. New DAS/sensor, no as-found value.
2. Max % error value of 5.2 within limit of 5% input + resolution, see audit.
3. Single point at 10%, five other readings at 1% to 6% error.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 8
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

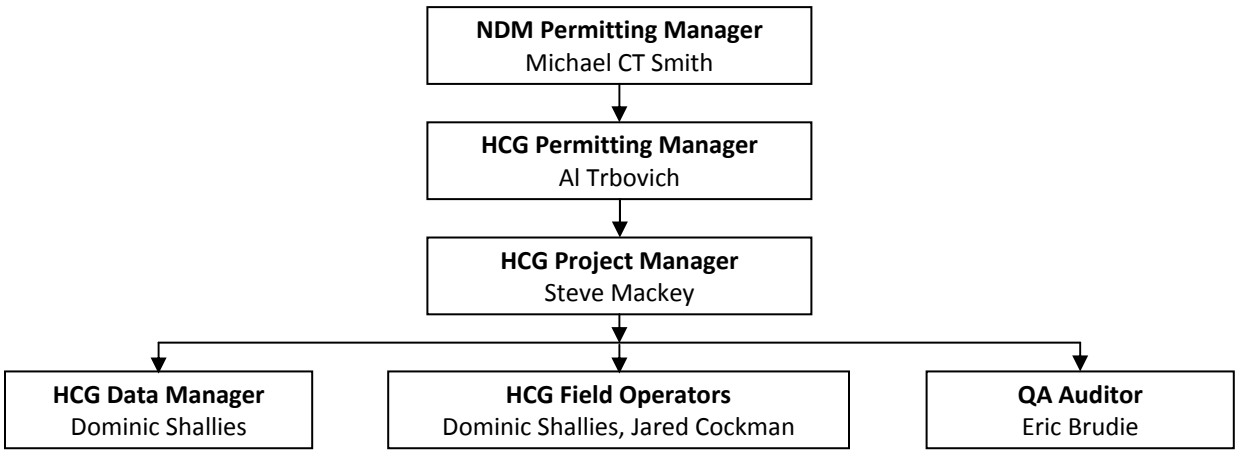
Indicated by Operator	Determined by Auditor
59° 54’ N	59° 54.180’ N
155° 20’ W	155° 19.804’ W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
Old DAS[1]	Campbell Scientific	CR10X	X43107
Old DAS Wiring Panel	Campbell Scientific	CR10X	32768
New DAS[2]	Campbell Scientific	CR1000	Unknown
New DAS Wiring Panel	Campbell Scientific	CR1000	4678
Old Temperature (2-meter)	Met One	062MP	E3383, ID #1/2
Old Temperature (10-meter)	Met One	062MP	E3383, ID #2/2
New Temperature (2-meter)	Met One	062MP	E3361, ID #1/2
New Temperature (10-meter)	Met One	062MP	E3361, ID #2/2
Old Relative Humidity	Vaisala	HMP45AC	A1040018
New Relative Humidity	Vaisala	HMP45AC	B4850667
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Old Primary Wind Speed	Climatronics	F460-100075	5007
New Primary Wind Speed	Climatronics	F460-100075	3977
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2284
Old Primary Wind Direction	Climatronics	F460-100076	4691
New Primary Wind Direction	Climatronics	F460-100076	4661
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Speed	RM Young	05305 Wind Mon-AQ	67731
Backup Wind Spd Prop	RM Young	08254	63798
Backup Wind Direction	RM Young	05305 Wind Mon-AQ	66725
Barometric Pressure	Vaisala	PTB101B	A0710039
Old Solar Radiation	LI-COR	Li-200SX	PY49464
New Solar Radiation	LI-COR	Li-200SX	PY56427
Precipitation-Tipping	Met-One	370	D5874
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	389
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None

1. DAS and some sensors replaced after initial audit on Sep 02, 2007.
2. New DAS and sensors audited on Sep 03-04, 2007.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance? ■ Yes □ No Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.

Is the DAS rated for operation in the expected local temperature range? ■ Yes □ No Comments: -55°C to + 85°C.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	□ Yes ■ No	Comments: 10 meter thermistor failed initial audit and was replaced and re-audited.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes

Pebble 1 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10” range	Not Specified	N/A
Range:	2” to 10”	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material?	■ Yes □ No	Comments: None.
Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Auditor: Eric Brudie

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

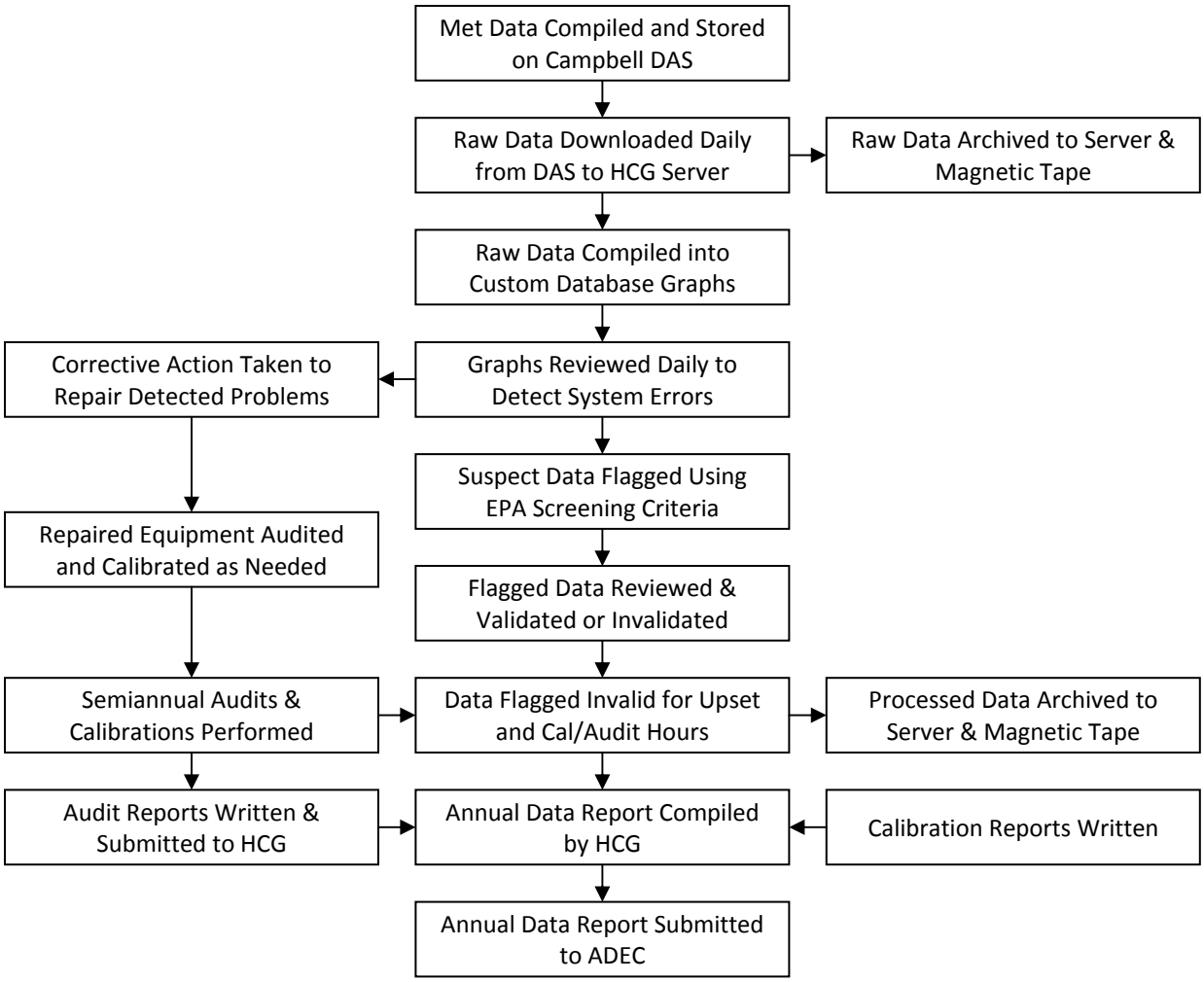
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 2-4, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Audit of station with CR10X datalogger.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
15:46:30	15:46:28	**-00:02**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 1/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3383 # 2/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1430
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target ℃	Input ℃	DAS ℃	Error ℃	Pass/ Fail?	DAS ℃	Error ℃	Pass/ Fail?	Delta T ℃	Pass/ Fail?
Hot	35 to 45	36.42	36.70	0.28	Pass	37.10	0.68	Fail	0.40	Fail
Warm	15 to 25	19.36	19.48	0.12	Pass	19.67	0.31	Pass	0.19	Fail
Ice Bath	0	0.00	0.14	0.14	Pass	0.19	0.19	Pass	0.05	Pass
Cold	-15 to -25	-15.69	-15.61	0.08	Pass	-15.61	0.08	Pass	0.00	Pass
Very Cold	-35 to -45	-38.60	-38.92	-0.32	Pass	-38.92	-0.32	Pass	0.00	Pass
		Max Abs. Error		0.32	**PASS**		0.68	**FAIL**	0.40	**FAIL**

PSD Limits: Max Absolute Error > 0.5 ℃ (Sensor Accuracy); Max Absolute Error > 0.1 ℃ (Delta Temperature).
Comments: Thermistors failed for unknown reason.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45ASP	**S.N.#:**	A1040018	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (℃)	Input DP (℃)	DAS %RH	DAS AT (℃)	DAS DP (℃)	Error DP (℃)	Pass/ Fail?
901	96.2	8.7	8.1	100.0	8.3	8.3	0.2	Pass
950	92.5	9.5	8.5	100.0	8.9	8.9	0.4	Pass
1140	87.4	10.2	8.2	88.8	9.9	8.1	-0.1	Pass
1412	69.0	12.2	6.6	70.5	12.0	6.8	0.2	Pass
						Max Abs. Error	0.4	**PASS**

PSD Limits: Max Absolute Error > 1.5℃ Dew Point.
Conversions: Td=DP(℃), Ta=AT(℃), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5007	**Cup #:**	2284	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4691	**Vane #:**	1440	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1330 End: 1333

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	293.8	1.7	Pass
Peak 1984	9.7	10.1	0.4	Pass
Pebble 5A	87.9	91.1	3.2	Pass
Cone Mtn	144.3	146.9	2.6	Pass
Compass	216.0	217.7	1.7	Pass
Compass	270.0	270.0	0.0	Pass
Max Abs. Error			**3.2**	**PASS**
Mean Abs. Error			**1.6**	**GOOD**

Time: Begin: 1200 End: 1235

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.2	0.2	Pass
West	270.0	269.5	-0.5	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.8	0.8	Pass
North	360.0	0.1	0.1	Pass
West	270.0	270.9	0.9	Pass
South	180.0	180.9	0.9	Pass
East	90.0	92.2	2.2	Pass
Max Abs. Error			**2.2**	**PASS**
Mean Abs. Error			**0.7**	**PASS**

Time: Begin: 1334 End: 1337

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.8	0.8	Pass	330.0	332.8	2.8	Pass
60.0	60.9	0.9	Pass	355.0	357.2	2.2	Pass
90.0	91.6	1.6	Pass	30.0	30.8	0.8	Pass
120.0	121.2	1.2	Pass	60.0	61.0	1.0	Pass
150.0	150.8	0.8	Pass	90.0	91.2	1.2	Pass
180.0	181.2	1.2	Pass	120.0	121.5	1.5	Pass
210.0	210.4	0.4	Pass	150.0	150.8	0.8	Pass
240.0	241.5	1.5	Pass	180.0	180.9	0.9	Pass
270.0	271.5	1.5	Pass	**Max Abs. Error**		**2.8**	**PASS**
300.0	301.1	1.1	Pass	**Mean Abs. Error**		**1.2**	**PASS**

Time: Begin: 1340 End: 1343

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.100	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
Max Abs. Error				
Mean Abs. Error				

Time: Begin: End:

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 67731 **Prop #:** 63798 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA01674
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.3 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.06	0.01	N/A	Pass
1000	5.12	5.06	N/A	-1.2	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.63	N/A	0.1	Pass
10000	51.20	51.36	N/A	0.3	Pass
	Max Abs. Error		**0.01**	**1.2**	**PASS**

Time: Begin: 1245 End: 1250
Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.0	-0.1	Pass
Peak 1984	9.7	10.8	1.1	Pass
Pebble 5A	87.9	91.6	3.7	Pass
Cone Mtn	144.3	147.3	3.0	Pass
Compass	216.0	215.9	-0.1	Pass
Compass	270.0	268.5	-1.5	Pass
Time: Begin: 1200 End: 1235		**Max Abs. Error**	**3.7**	**PASS**
		Mean Abs. Error	**1.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	150.0	150.6	0.6	Pass	270.0	268.4	-1.6	Pass
60.0	60.9	0.9	Pass	180.0	180.1	0.1	Pass	300.0	297.8	-2.2	Pass
90.0	91.2	1.2	Pass	210.0	209.7	-0.3	Pass	330.0	327.2	-2.8	Pass
120.0	120.8	0.8	Pass	240.0	239.0	-1.0	Pass	355.0	352.3	-2.7	Pass
					Time: Begin: 1250			**Max Abs. Error**		**2.8**	**PASS**
					End: 1254			**Mean Abs. Error**		**1.2**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.005	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
Time: Begin:		**Max Abs. Error**		
End:		**Mean Abs. Error**		

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1547	28.32	28.22	955.8	955.7	-0.1	Pass
			Max Abs. Error		0.1	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

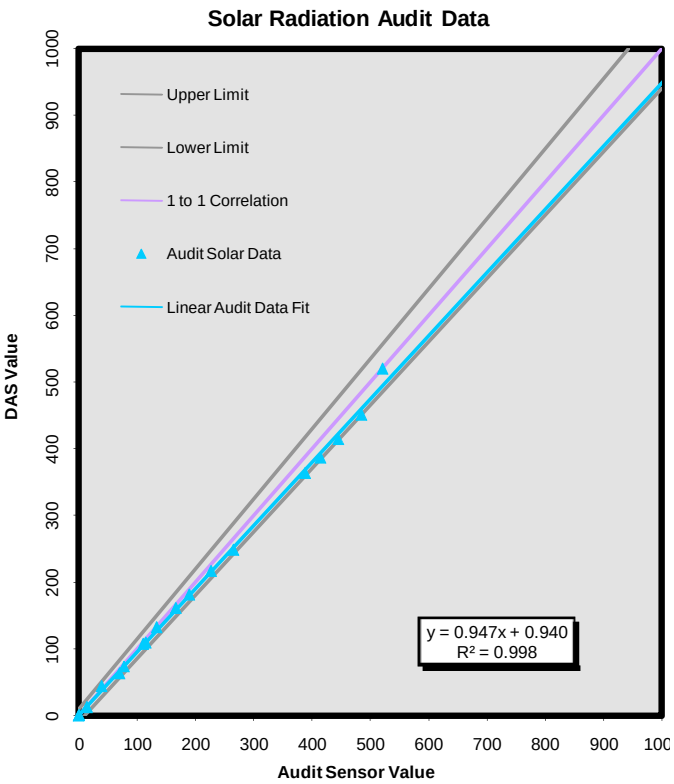
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY49464 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
905	77.1	74.3	-2.8	±13.9	-3.6%	Pass
950	132.9	132.3	-0.6	±16.6	-0.5%	Pass
1128	520.4	519.7	-0.7	±36.0	-0.1%	Pass
1540	189.4	181.2	-8.2	±19.5	-4.3%	Pass
725	13.8	13.7	0.0	±10.7	n/a	Pass
900	38.6	44.1	5.5	±11.9	n/a	Pass
1000	109.9	107.0	-2.9	±15.5	-2.6%	Pass
1100	265.0	248.1	-16.9	±23.3	-6.4%	Pass
1200	414.3	386.1	-28.2	±30.7	-6.8%	Pass
1300	484.6	450.4	-34.2	±34.2	-7.1%	Pass
1400	445.1	414.7	-30.4	±32.3	-6.8%	Pass
1500	388.6	363.6	-25.0	±29.4	-6.4%	Pass
1600	226.6	216.8	-9.8	±21.3	-4.3%	Pass
1700	166.9	160.8	-6.1	±18.3	-3.7%	Pass
1800	115.2	109.2	-6.0	±15.8	-5.2%	Pass
1900	69.3	63.3	-6.0	±13.5	-8.7%	Pass
2000	14.1	12.9	-1.2	±10.7	n/a	Pass
2100	1.1	0.9	-0.2	±10.1	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	**0.9990**	**Max Abs. Percent Error**			**8.7%**	**PASS**
R² Value	**0.9980**	**Intercept**	**0.9**	**Slope**	**0.9478**	**FAIL**



Begin Date: 09/02/07 **End Date:** 09/03/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
						Max Abs. Error				

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: No test until after DAS change.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
859	4.00	1600	21.9	0.00	21.84	21.84	-0.4%	Pass	
905		1600	21.9	0.00	23.62	23.62	7.7%	Pass	
945		1600	21.9	23.62	46.99	23.37	6.6%	Pass	
955		1600	21.9	46.99	70.40	23.41	6.7%	Pass	
1025		1600	21.9	0.00	23.37	23.37	6.6%	Pass	
1120	7.75	1600	21.9	0.00	23.62	23.62	7.7%	Pass	
1142		1600	21.9	23.62	46.74	23.12	5.4%	Pass	
1256		1600	21.9	0.00	23.36	23.36	6.5%	Pass	
1305		1600	21.9	0.25	23.62	23.37	6.6%	Pass	
					Max Abs. Error		**7.7%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found with 6" in gauge.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 2, 2007

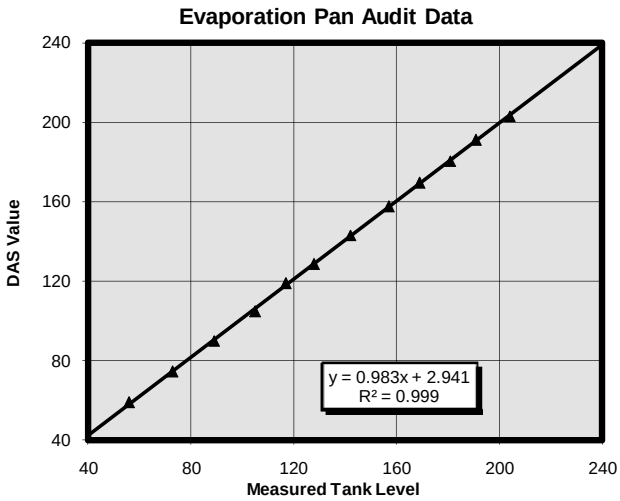
● *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	56.0	58.9	56.0	2.9	5.2%	Pass
	73.0	74.3	73.0	1.3	1.8%	Pass
	89.0	90.0	89.0	1.0	1.1%	Pass
	105.0	104.6	105.0	-0.4	-0.4%	Pass
	117.0	118.9	117.0	1.9	1.6%	Pass
	128.0	128.6	128.0	0.6	0.5%	Pass
	142.0	143.2	142.0	1.2	0.8%	Pass
	157.0	157.6	157.0	0.6	0.4%	Pass
	169.0	169.5	169.0	0.5	0.3%	Pass
	181.0	180.5	181.0	-0.5	-0.3%	Pass
	191.0	191.0	191.0	0.0	0.0%	Pass
	204.0	203.1	204.0	-0.9	-0.4%	Pass
	Max Abs. Error			**2.9**	**5.2%**	**PASS**
	Intercept	**2.9**	**Slope**	**0.9832**		**PASS**



Time: Begin: 1310 End: 1405

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Audit of station with CR1000 datalogger.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:02:30	16:01:30	**-01:00**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3361 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E3361 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1315
End: 1340

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target ℃	Input ℃	DAS ℃	Error ℃	Pass/ Fail?	DAS ℃	Error ℃	Pass/ Fail?	Delta T ℃	Pass/ Fail?
Hot	35 to 45	35.33	35.43	0.10	Pass	35.43	0.10	Pass	0.00	Pass
Warm	15 to 25	21.02	21.04	0.02	Pass	21.04	0.02	Pass	0.00	Pass
Ice Bath	0	0.15	0.12	-0.03	Pass	0.12	-0.03	Pass	0.00	Pass
Cold	-15 to -25	-23.05	-23.00	0.05	Pass	-23.00	0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-33.25	-33.22	0.03	Pass	-33.22	0.03	Pass	0.00	Pass
		Max Abs. Error		0.10	**PASS**		0.10	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 ℃ (Sensor Accuracy); Max Absolute Error > 0.1 ℃ (Delta Temperature).
Comments: Replacement thermistors.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** B4850667 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (℃)	Input DP (℃)	DAS %RH	DAS AT (℃)	DAS DP (℃)	Error DP (℃)	Pass/ Fail?
1050	67.8	10.2	4.4	67.2	10.1	4.3	-0.1	Pass
1350	58.2	12.2	4.3	58.4	12.2	4.3	0.0	Pass
1713	71.4	11.1	6.2	71.6	11.3	6.4	0.2	Pass
					Max Abs. Error		0.2	**PASS**

PSD Limits: Max Absolute Error > 1.5℃ Dew Point.
Conversions: Td=DP(℃), Ta=AT(℃), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: New RH sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	3977	**Cup #:**	2284	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4661	**Vane #:**	1440	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1530 End: 1535

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.2	-0.8	Pass
West	270.0	270.9	0.9	Pass
North	360.0	0.7	0.7	Pass
East	90.0	88.9	-1.1	Pass
North	360.0	0.6	0.6	Pass
West	270.0	271.0	1.0	Pass
South	180.0	180.0	0.0	Pass
East	90.0	90.6	0.6	Pass
	Max Abs. Error		**1.1**	**PASS**
	Mean Abs. Error		**0.7**	**PASS**

Time: Begin: 1551 End: 1554

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.2	-0.8	Pass	330.0	330.8	0.8	Pass
60.0	58.4	-1.6	Pass	355.0	355.3	0.3	Pass
90.0	89.4	-0.6	Pass	30.0	29.2	-0.8	Pass
120.0	120.3	0.3	Pass	60.0	58.7	-1.3	Pass
150.0	149.8	-0.2	Pass	90.0	89.3	-0.7	Pass
180.0	179.3	-0.7	Pass	120.0	120.4	0.4	Pass
210.0	208.7	-1.3	Pass	150.0	149.8	-0.2	Pass
240.0	239.9	-0.1	Pass	180.0	178.8	-1.2	Pass
270.0	270.1	0.1	Pass	**Max Abs. Error**		**1.6**	**PASS**
300.0	300.2	0.2	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Time: Begin: 1537 End: 1540

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.1	0.0	Pass
Gnd Hog Spire 2488	216.5	215.3	-1.2	Pass
Cone Mtn	144.3	144.2	-0.1	Pass
Pebble 5A	87.9	86.9	-1.0	Pass
Peak 1984	9.7	9.9	0.2	Pass
Compass	351.0	350.1	-0.9	Pass
Time: Begin: 1600	**Max Abs. Error**		**1.2**	**PASS**
End: 1630	**Mean Abs. Error**		**0.6**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind speed sensor SN 5007 got wet during audit and was replaced by sensor SN 3977. Wind direction sensor SN 4691 was replaced by SN 4661 for routine bearing maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 67731	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.3	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1505 End: 1510

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.3	-1.7	Pass	150.0	148.4	-1.6	Pass	270.0	268.4	-1.6	Pass
60.0	58.7	-1.3	Pass	180.0	179.6	-0.4	Pass	300.0	298.5	-1.5	Pass
90.0	88.7	-1.3	Pass	210.0	209.3	-0.7	Pass	330.0	328.0	-2.0	Pass
120.0	118.8	-1.2	Pass	240.0	238.7	-1.3	Pass	355.0	353.1	-1.9	Pass
				Time: Begin:	1510	**Max Abs. Error**		**2.0**	**PASS**		
				End:	1515	**Mean Abs. Error**		**1.4**	**PASS**		

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	<0.003	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
Cone Mtn	144.3	144.7	0.4	Pass
Pebble 5A	87.9	89.0	1.1	Pass
Peak 1984	9.7	9.4	-0.3	Pass
Koktuk Mtn	292.1	289.0	-3.1	Pass
Gnd Hog Spire 2488	216.5	213.8	-2.7	Pass
Compass	351.0	349.0	-2.0	Pass
Time: Begin: 1600	**Max Abs. Error**		**3.1**	**PASS**
End: 1630	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1446	27.90	27.80	941.5	940.9	-0.6	Pass
			Max Abs. Error		0.6	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

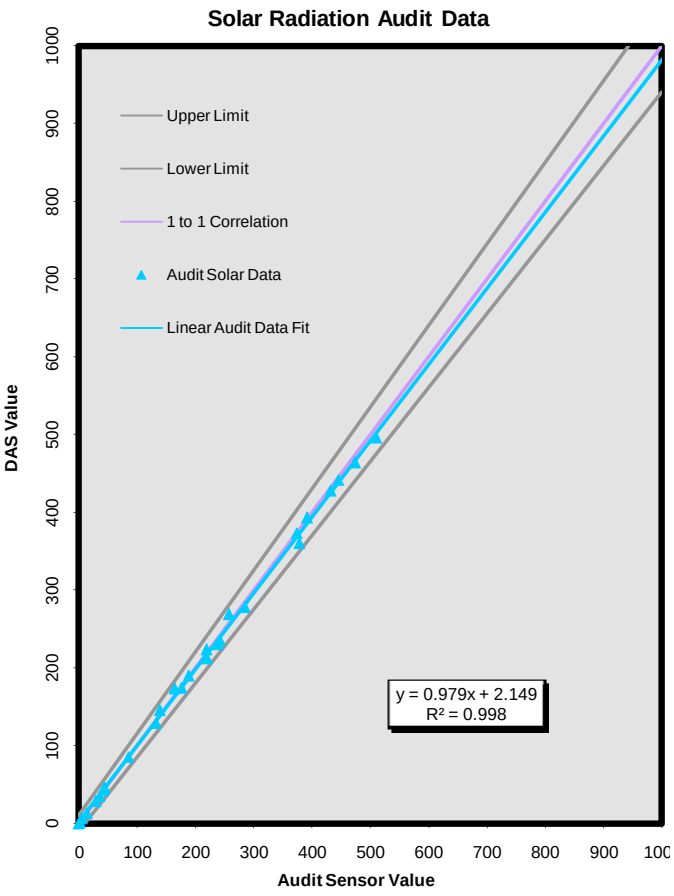
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56427 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1204	219.4	223.3	3.9	±21.0	1.8%	Pass
925	284.4	277.9	-6.5	±24.2	-2.3%	Pass
1333	391.3	392.6	1.3	±29.6	0.3%	Pass
708	188.0	189.5	1.5	±19.4	0.8%	Pass
1030	510.4	495.5	-14.9	±35.5	-2.9%	Pass
1140	377.8	359.8	-18.0	±28.9	-4.8%	Pass
1600	84.6	85.5	0.9	±14.2	1.1%	Pass
1700	42.1	42.2	0.1	±12.1	n/a	Pass
1800	44.7	46.0	1.3	±12.2	n/a	Pass
1900	28.6	28.2	-0.5	±11.4	n/a	Pass
2000	13.4	12.4	-1.0	±10.7	n/a	Pass
2100	1.3	1.0	-0.2	±10.1	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
900	176.6	173.7	-2.9	±18.8	-1.6%	Pass
1000	239.1	230.2	-8.9	±22.0	-3.7%	Pass
1100	220.4	211.8	-8.6	±21.0	-3.9%	Pass
1200	242.1	236.1	-6.0	±22.1	-2.5%	Pass
1300	374.2	373.5	-0.7	±28.7	-0.2%	Pass
1400	432.5	427.2	-5.3	±31.6	-1.2%	Pass
1500	445.7	441.9	-3.8	±32.3	-0.9%	Pass
1700	164.5	173.1	8.6	±18.2	5.2%	Pass
1800	257.9	268.4	10.5	±22.9	4.1%	Pass
1900	138.7	145.1	6.4	±16.9	4.6%	Pass
2000	35.9	35.3	-0.7	±11.8	n/a	Pass
700	5.0	6.0	1.0	±10.2	n/a	Pass
800	43.1	45.3	2.2	±12.2	n/a	Pass
900	132.0	129.2	-2.8	±16.6	-2.1%	Pass
1100	474.2	463.5	-10.7	±33.7	-2.3%	Pass
Corr. Val	**0.9994**	**Max Abs. Percent Error**			**5.2%**	**PASS**
R² Value	**0.9988**	**Intercept**	**2.1**	**Slope**	**0.9796**	**PASS**



Begin Date: 09/03/07 **End Date:** 09/05/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: New instrument.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** D5874 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/03/07	1340	650	20.0	0.8		20.6	1410	19.8	-1.0%	Pass	
09/03/07	1415	650	20.0	0.0		19.2	1500	19.2	-4.0%	Pass	
09/03/07	1505	650	20.0	0.0		20.4	1600	20.4	2.0%	Pass	Rain affected.
09/04/07	815	650	20.0	0.0		18.0	900	18.0	-10.0%	Pass	
09/04/07	1020	650	20.0	0.0		18.8	1100	18.8	-6.0%	Pass	
09/04/07	1330	650	20.0	0.0	16.2	3.0	1430	19.2	-4.0%	Pass	
09/04/07	1435	650	20.0	3.0	14.2	7.8	1600	19.0	-5.0%	Pass	
							Max Abs. Error	**10.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: 10% error within limits, but appears to be an aberration.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Date:	Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
09/03/07	1330	5.00	1600	21.9	0.25	22.86	22.61	3.1%	Pass	
09/03/07	1445		1600	21.9	0.00	20.83	20.83	-5.0%	Pass	
09/03/07	1500		1600	21.9	20.83	44.20	23.37	6.6%	Pass	
09/03/07	1510		1600	21.9	0.76	25.40	24.64	N/A	N/A	Rain affected, ignore.
09/04/07	759		1600	21.9	0.00	23.11	23.11	5.4%	Pass	
09/04/07	938		1600	21.9	0.76	24.39	23.63	7.8%	Pass	
09/04/07	1026	11.00	1600	21.9	0.51	23.62	23.11	5.4%	Pass	
							Max Abs. Error	**7.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Found with 6" in gauge.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 3-4, 2007

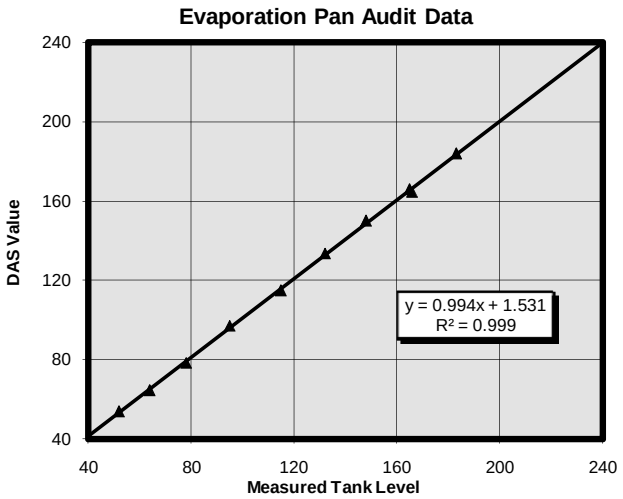
● *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

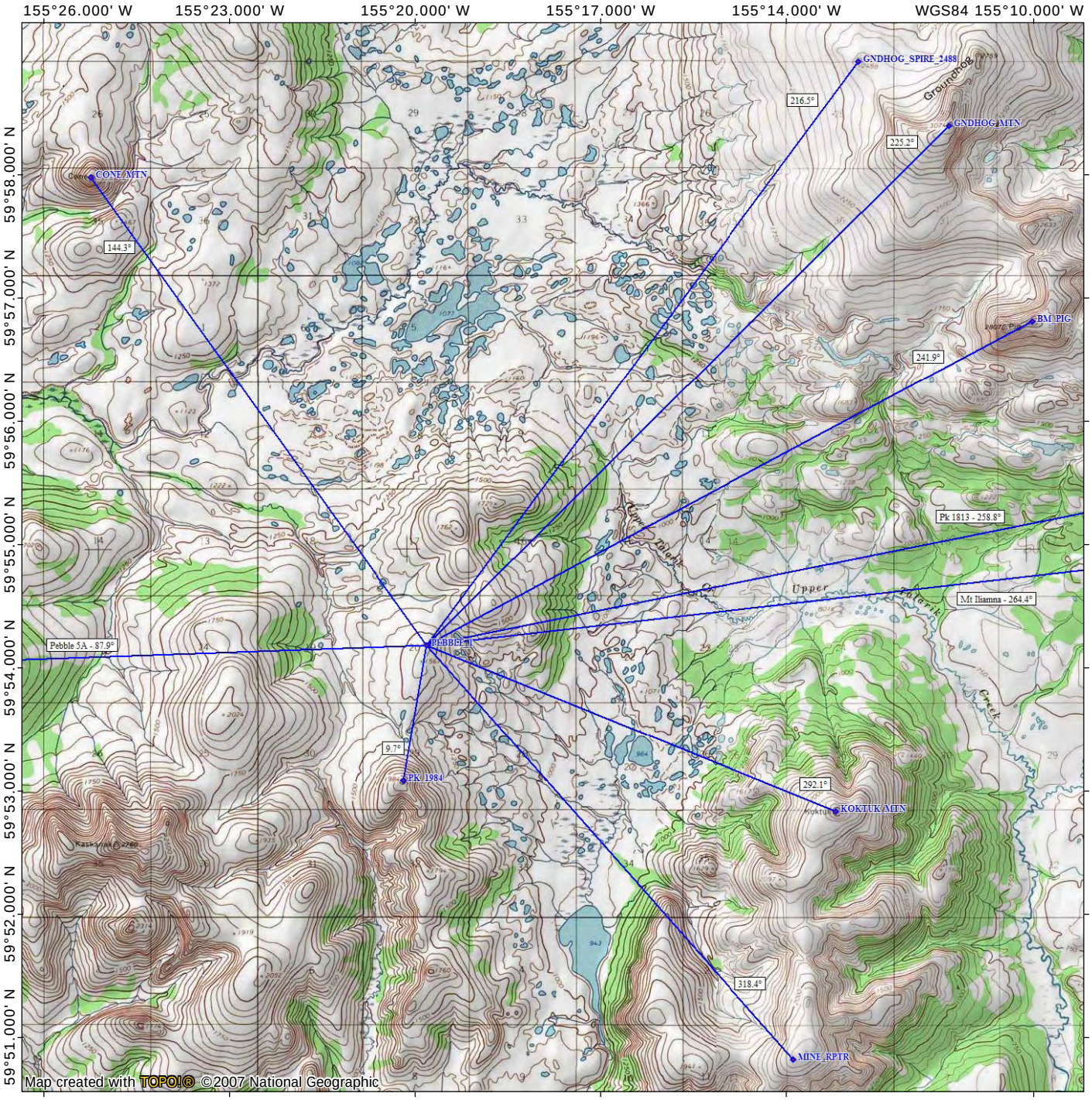
Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	165.0	165.7	165.0	0.7	0.4%	Pass
	183.0	183.9	183.0	0.9	0.5%	Pass
	166.0	164.6	166.0	-1.4	-0.8%	Pass
	148.0	150.0	148.0	2.0	1.4%	Pass
	132.0	133.6	132.0	1.6	1.2%	Pass
	115.0	114.8	115.0	-0.2	-0.2%	Pass
	95.0	97.1	95.0	2.1	2.2%	Pass
	78.0	78.4	78.0	0.4	0.5%	Pass
	64.0	64.4	64.0	0.4	0.6%	Pass
	52.0	53.8	52.0	1.8	3.5%	Pass
		Max Abs. Error		**2.1**	**3.5%**	**PASS**
		Intercept	**1.5**	**Slope**	**0.9941**	**PASS**



Time: Begin: 1514 End: 1541

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Date 9/4/07.

Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 2.5 miles

0 1 2 3 4 km

TN MN 17½°

10/20/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Block unit

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EJ

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V. Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE # 300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079319

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Lenyen
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

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Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments for Precision Measurements Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble Station 1
September 2008
Quality Assurance Systems Audit
and Performance Audit

for the:

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corporation

prepared by:

Hoefler
CONSULTING GROUP

Pebble Station 1
PSD Meteorological Monitoring Station
September 2008
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 9
3.1.7 Solar Radiation 9
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 10

3.3 Performance Audit Recommendations 12

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 1 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 1 September 23-24, 2008 Performance Audit Summary 11

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for Pebble Limited Partnership (PLP) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 1 Station (Pebble 1) located near the proposed mine site.

Pebble 1 is located just west of the mine ore body on top of a gentle, windswept knoll at about 1,550 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet west of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 125 feet south of the tower. Between the tower and the precipitation gauges is a 6' by 8' insulated building which houses the datalogger and power supply system. Pebble 1 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR1000 DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PLP to serve as an official review of the Pebble 1 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

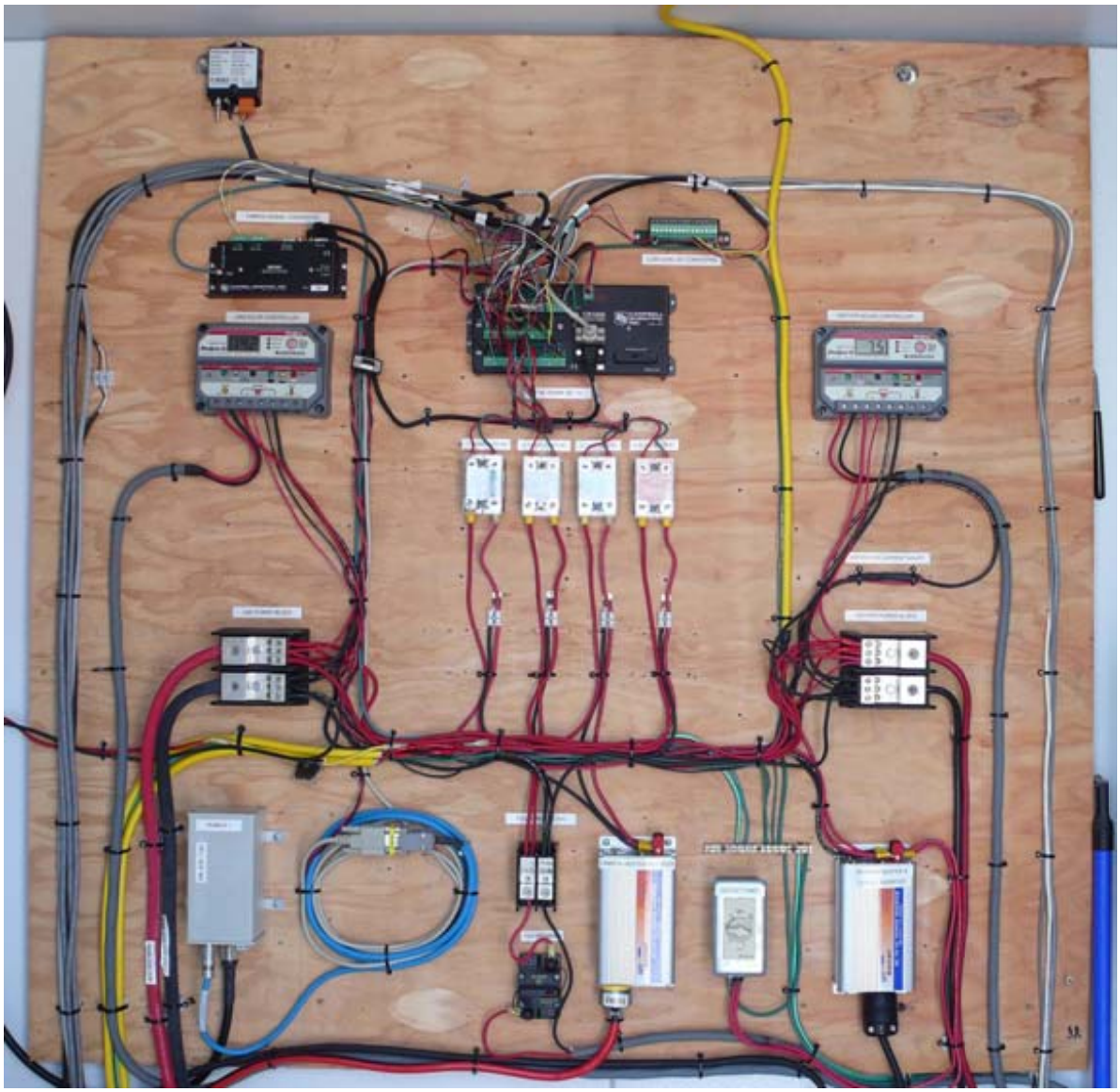
The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 1 station was conducted in September 2008. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 1 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence and all instrumentation wires from the tower, precipitation gauges and evaporation gauge are protected in conduit These conduits all converge at a 6’ by 8’ insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4’ by 4’ plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 1 Station DAS Wiring Panel



The Campbell Scientific CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of four 50-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through five 100

Amp-Hr deep cycle gel cell batteries. Three solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 1 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for

consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 1 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 1 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer or keypad to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of

discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change.

An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 1 station on September 23 and 24 , 2008, with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits, except the temperature difference system. The thermistors were replaced and re audited. The Climatronics wind system bearings and the RM Young anemometer were replaced for routine maintenance. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

Table 3-2 Pebble 1 September 23-24, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:33	Pass
2-m Temperature Accuracy (In Situ)	≤ ±0.5	°C	0.41	Pass
10-m Temperature Accuracy (In Situ)	≤ ±0.5	°C	0.40	Pass
Air Temperature Difference (In Situ)	≤ ±0.1	°C	0.30	Fail[1]
2-m Temperature Accuracy (New)	≤ ±0.5	°C	0.26	Pass
10-m Temperature Accuracy (New)	≤ ±0.5	°C	0.26	Pass
Air Temperature Difference (New)	≤ ±0.1	°C	0.09	Pass
Relative Humidity/Dew Point	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.35	gm-cm	0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque (In Situ)	≤ 7.5	gm-cm	7.0	Pass
Wind Dir. Azim. Alignment (In Situ)	≤ ±5	Degree	1.6	Pass
Wind Direction Accuracy (In Situ)	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity (In Situ)	≤ 3	Degree	0.5	Pass
Wind Direction Torque (New Bearings)	≤ 7.5	gm-cm	6.0	Pass
Wind Direction Accuracy (New Bearings)	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity (New Bearings)	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Alignment (Post Audit)	≤ ±5	Degree	0.8	Pass
RM Young Wind System (In Situ)				
Wind Speed Torque	≤ 1.0	gm-cm	0.8	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	8.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	4.9	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.7	Pass
Wind Direction Linearity	≤ 3	Degree	2.0	Pass

Table 3-2 (Cont.) Pebble 1 September 23-24, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System (Replacement)				
Wind Speed Torque	≤ 1.0	gm-cm	0.6	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	5.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.9	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	1.6	Pass
Barometric Pressure	≤ ±3	Mbar	0.9	Pass
Solar Radiation	≤ ±5+Res	% input	6.5	Pass[2]
Tipping Precipitation	≤ ±10	% input	7.3	Pass
Weighing Precipitation	≤ ±10	% input	8.9	Pass
Evaporation	≤ ±10	% input	2.0	Pass

1. Thermistors failed delta temperature criteria and were replaced.
2. Maximum error within limit of 5% of input + resolution, see audit.

3.3 Performance Audit Recommendations

- None.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 1 PSD Meteorological Station Systems Audit

Owner: PLP | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Sep 23-24, 2008
Witnesses: Dominic Shallies | Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 1 PSD Meteorological Station Systems Audit

Owner: PLP | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Sep 23-24, 2008
Witnesses: Dominic Shallies | Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 1 station is located on the crest of a gentle knoll immediately west of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

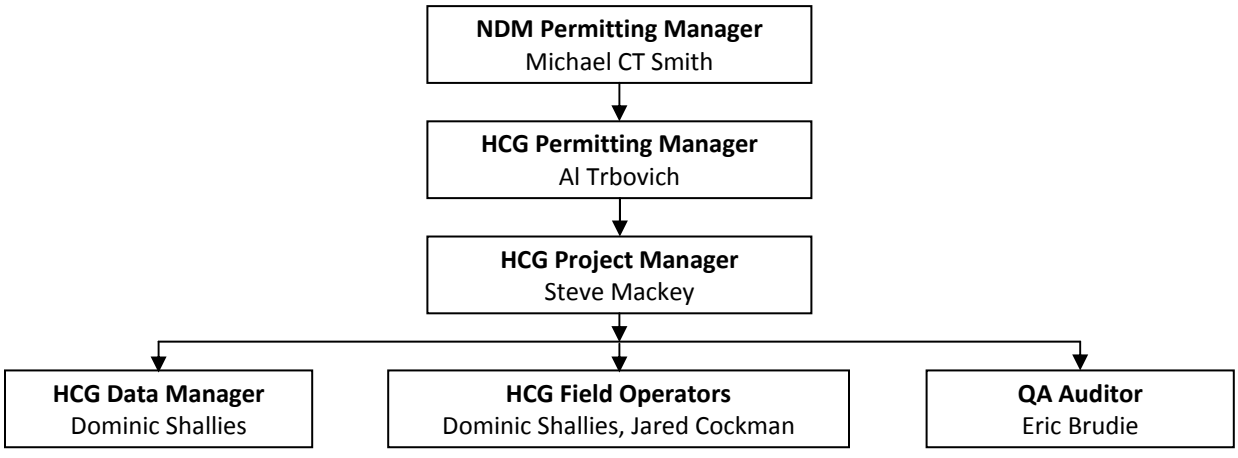
Indicated by Operator	Determined by Auditor
59° 54′ N	59° 54.180′ N
155° 20′ W	155° 19.804′ W
Elevation: 1,600 feet	Elevation: 1,550 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 23-24, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR1000	4821
DAS Wiring Panel	Campbell Scientific	CR1000	4678
Old Temperature (2-meter)	Met One	062MP	E3361, ID #1/2
Old Temperature (10-meter)	Met One	062MP	E3361, ID #2/2
New Temperature (2-meter)	Met One	062MP	H7118, ID #1/2
New Temperature (10-meter)	Met One	062MP	H7118, ID #2/2
Relative Humidity	Vaisala	HMP45AC	B4850667
Temperature Aspirators	Met One	076B-4	E3489 & E3490
Primary Wind Speed	Climatronics	F460-100075	5007
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2234
Primary Wind Direction	Climatronics	F460-100076	4661
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1440
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Old Backup Wind Speed/Dir	RM Young	05305 Wind Mon-AQ	67731
New Backup Wind Speed/Dir	RM Young	05305 Wind Mon-AQ	89370
Backup Wind Spd Prop	RM Young	08254	63798
Barometric Pressure	Vaisala	PTB101B	A0710039
Solar Radiation	LI-COR	Li-200SX	PY56427
Precipitation-Tipping	Met-One	370	G5613
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	389
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	695
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.

Are the DAS and communication equipment protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power? ■ Yes □ No Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 50-Watt solar panel, buffered through five 100 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by three 50-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained? ■ Yes □ No Comments: None.

Are all sensors operational, online and reporting data? □ Yes ■ No Comments: 10 meter thermistor failed initial audit and was replaced and re-audited.

Do all sensors meet EPA criteria for PSD quality sensors? ■ Yes □ No Comments: See table below.

Are spare parts stocked for items which are frequently worn out or broken? ■ Yes □ No Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 1 PSD Meteorological Station Systems Audit

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 23-24, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 23-24, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.

Owner: PLP | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Sep 23-24, 2008
Witnesses: Dominic Shallies | Auditor: Eric Brudie

Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.

Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

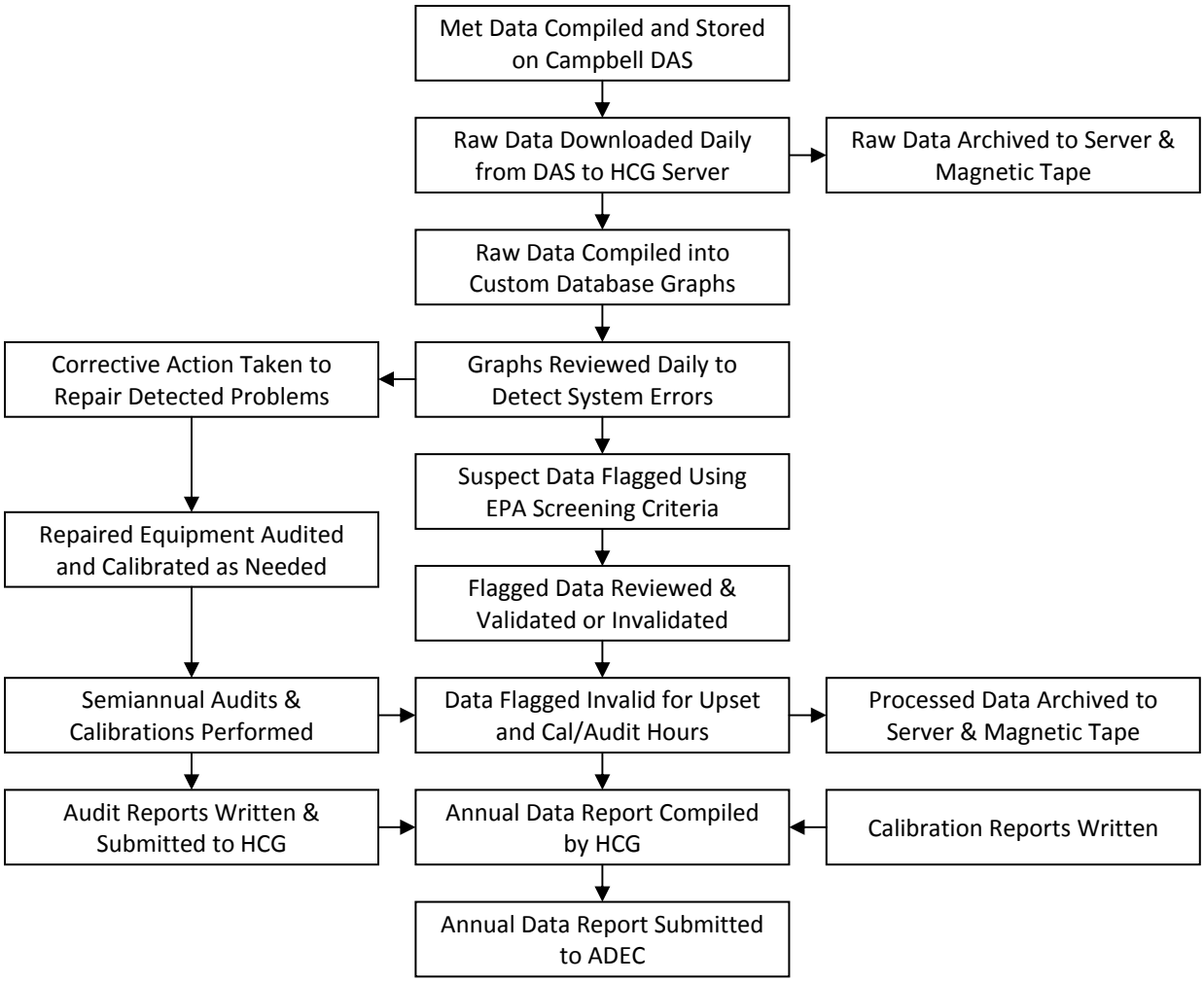
5.2 Station Monitoring Plan and Report Forms

Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type? ■ Yes □ No Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site? ■ Yes □ No Comments: None.

Are qualified staff personnel reviewing data reports prior to submittal? ■ Yes □ No Comments: None.

Is finalized data set submitted with report to ADEC? ■ Yes □ No Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures? ■ Yes □ No Comments: None.

Is a copy of the plan available to field and data processing personnel? ■ Yes □ No Comments: None.

Has the quality assurance plan been approved by the ADEC? ■ Yes □ No Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan? ■ Yes □ No Comments: None.

Does the Plan correctly document PSD accuracy limits for calibrating and auditing? ■ Yes □ No Comments: None.

Have audits been conducted on the suggested schedule of every six months? ■ Yes □ No Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
11:31:00	11:30:27	**-00:33**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.7 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3361 # 1/2	**Range:**	-50 to 50	**°C**		
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E3361 # 2/2	**Range:**	-50 to 50	**°C**		
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150	**°C**		
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150	**°C**		

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 09/24/08
Time:
Begin: 1200
End: 1225

THERMISTOR COLLOCATED STANDARD TEST (E3361)

Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	36.03	36.43	0.40	Pass	36.43	0.40	Pass	0.00	Pass
Warm	15 to 25	25.23	25.62	0.39	Pass	25.63	0.40	Pass	0.01	Pass
Ice Bath	0	-0.01	0.40	0.41	Pass	0.10	0.11	Pass	-0.30	Fail
		Max Abs. Error	0.41	**PASS**			0.40	**PASS**	0.30	**FAIL**

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 09/24/08
Time:
Begin: 1244
End: 1325

THERMISTOR COLLOCATED STANDARD TEST - REPLACEMENTS (H7118)

Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	34.74	35.00	0.26	Pass	35.00	0.26	Pass	0.00	Pass
Warm	15 to 25	13.74	13.82	0.08	Pass	13.82	0.08	Pass	0.00	Pass
Ice Bath	0	0.00	0.12	0.12	Pass	0.14	0.14	Pass	0.02	Pass
Cold	-15 to -25	-19.29	-19.24	0.05	Pass	-19.24	0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-32.10	-32.21	-0.11	Pass	-32.12	-0.02	Pass	0.09	Pass
		Max Abs. Error	0.26	**PASS**			0.26	**PASS**	0.09	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Thermistors replaced with matched pair SN# H7118 1/2 (2m) and H7118 2/2 (10m).

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45C-L	**S.N.#:**	B4850667	**Range:**	0.8 to 100	**% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100	**% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015							

RH COLLOCATED STANDARD TEST

Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
09/24/08	1020	95.0	3.7	3.1	97.9	4.0	3.7	0.6	Pass
	1027	94.9	3.9	3.2	97.5	4.1	3.7	0.5	Pass
						Max Abs. Error		0.6	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (In Situ)*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5007	**Cup #:**	2234	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4661	**Vane #:**	1440	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.1 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1250 End: 1254

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.1	0.0	Pass
BM Pig	241.9	241.7	-0.2	Pass
Compass	202.0	200.8	-1.2	Pass
Compass	96.5	94.9	-1.6	Pass
Peak El 1984	9.7	9.8	0.1	Pass
Cone Mtn	144.3	144.5	0.2	Pass
Compass	337.0	337.0	0.0	Pass
Max Abs. Error			**1.6**	**PASS**
Mean Abs. Error			**0.5**	**GOOD**

Time: Begin: 945 End: 1003

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	181.1	1.1	Pass
West	270.0	270.6	0.6	Pass
North	360.0	1.6	1.6	Pass
East	90.0	88.8	-1.2	Pass
North	360.0	0.2	0.2	Pass
West	270.0	271.8	1.8	Pass
South	180.0	181.6	1.6	Pass
East	90.0	90.4	0.4	Pass
	Max Abs. Error		**1.8**	**PASS**
	Mean Abs. Error		**1.1**	**PASS**

Time: Begin: 1200 End: 1202

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.9	-0.1	Pass	330.0	331.8	1.8	Pass
60.0	59.0	-1.0	Pass	355.0	357.1	2.1	Pass
90.0	89.6	-0.4	Pass	30.0	30.1	0.1	Pass
120.0	120.5	0.5	Pass	60.0	59.3	-0.7	Pass
150.0	150.1	0.1	Pass	90.0	90.2	0.2	Pass
180.0	179.9	-0.1	Pass	120.0	120.0	0.0	Pass
210.0	209.7	-0.3	Pass	150.0	150.0	0.0	Pass
240.0	240.7	0.7	Pass	180.0	180.0	0.0	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**2.1**	**PASS**
300.0	301.0	1.0	Pass	**Mean Abs. Error**		**0.5**	**PASS**

Time: Begin: 1210 End: 1212

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	0.2	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	7.0	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No Post-Audit				
New bearings installed				
Max Abs. Error				
Mean Abs. Error				

Time: Begin: N/A End: N/A

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind direction bearings replaced for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (Replacement Bearings)*

Height: 11.2 **Meters**

Wind Spd Sensor:	**Make:** Climatronics	**Model:** 100075	**S.N.#:** 5007	**Cup #:** 2234	**Range:** 0-60	**m/s**			
Wind Dir Sensor:	**Make:** Climatronics	**Model:** 100076	**S.N.#:** 4661	**Vane #:** 1440	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3			**S.N.#:** 4864		
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** Climatronics	**Model:** 101984	**S.N.#:** 145	**Torque:** Honeywell Mdl 366-0			**S.N.#:** 5042		
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1			**E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22			N/A	
100	2.57			N/A	
200	4.92			N/A	
400	9.62		N/A		
1000	23.72		N/A		
2000	47.22		N/A		
	Max Abs. Error				

Time: Begin: N/A End: N/A

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No In Situ Audit				
New bearings installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.9	-0.1	Pass
West	270.0	271.9	1.9	Pass
North	360.0	0.6	0.6	Pass
East	90.0	89.5	-0.5	Pass
North	360.0	0.2	0.2	Pass
West	270.0	271.5	1.5	Pass
South	180.0	179.6	-0.4	Pass
East	90.0	89.1	-0.9	Pass
	Max Abs. Error		**1.9**	**PASS**
	Mean Abs. Error		**0.8**	**PASS**

Time: Begin: 1241 End: 1245

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.9	-0.1	Pass	330.0	330.8	0.8	Pass
60.0	59.8	-0.2	Pass	355.0	353.2	-1.8	Pass
90.0	89.7	-0.3	Pass	30.0	29.3	-0.7	Pass
120.0	119.7	-0.3	Pass	60.0	59.2	-0.8	Pass
150.0	149.7	-0.3	Pass	90.0	89.2	-0.8	Pass
180.0	179.4	-0.6	Pass	120.0	119.5	-0.5	Pass
210.0	208.9	-1.1	Pass	150.0	149.5	-0.5	Pass
240.0	240.3	0.3	Pass	180.0	178.7	-1.3	Pass
270.0	270.4	0.4	Pass	**Max Abs. Error**		**1.8**	**PASS**
300.0	300.3	0.3	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Time: Begin: 1228 End: 1230

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	N/A	**N/A**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	N/A	**N/A**
New	7.5	0.104	6.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.6	0.5	Pass
Compass	189.5	189.4	-0.1	Pass
Compass	96.5	96.1	-0.4	Pass
Compass	7.5	7.1	-0.4	Pass
Compass	268.5	268.7	0.2	Pass
Cone Mtn	144.3	145.1	0.8	Pass
Time: Begin: 1430	**Max Abs. Error**		**0.8**	**PASS**
End: 1450	**Mean Abs. Error**		**0.4**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: New direction bearings.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ (In Situ)*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 67731	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1040 End: 1042

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
Koktuk Mtn	292.1	287.3	-4.8	Pass
BM Pig	241.9	237.1	-4.8	Pass
Compass	202.0	197.1	-4.9	Pass
Compass	96.5	96.2	-0.3	Pass
Mtn El 1984	9.7	10.2	0.5	Pass
Cone Mtn	144.3	145.8	1.5	Pass
Compass	337.0	336.0	-1.0	Pass
Time: Begin: 945	**Max Abs. Error**		**4.9**	**PASS**
End: 1003	**Mean Abs. Error**		**2.5**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	32.6	2.6	Pass	150.0	148.0	-2.0	Pass	270.0	267.4	-2.6	Pass
60.0	60.4	0.4	Pass	180.0	177.8	-2.2	Pass	300.0	297.6	-2.4	Pass
90.0	89.5	-0.5	Pass	210.0	207.9	-2.1	Pass	330.0	327.5	-2.5	Pass
120.0	119.1	-0.9	Pass	240.0	237.3	-2.7	Pass	355.0	352.5	-2.5	Pass
				Time: Begin:	1033	**Max Abs. Error**		**2.7**			**PASS**
				End:	1034	**Mean Abs. Error**		**2.0**			**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	0.8	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	8.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
No Post-Audit				
New instrument installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Instrument north alignment close to limits. Sensor replaced for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ (Replacement Sensor)*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 89370	**Prop #:** 63798	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1130 End: 1133

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No In Situ Audit				
New instrument installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.4	-0.6	Pass	150.0	148.7	-1.3	Pass	270.0	268.1	-1.9	Pass
60.0	59.2	-0.8	Pass	180.0	179.3	-0.7	Pass	300.0	298.2	-1.8	Pass
90.0	89.2	-0.8	Pass	210.0	208.9	-1.1	Pass	330.0	328.1	-1.9	Pass
120.0	119.3	-0.7	Pass	240.0	239.0	-1.0	Pass	355.0	353.1	-1.9	Pass
				Time: Begin:	1125	**Max Abs. Error**			**1.9**	**PASS**	
				End:	1128	**Mean Abs. Error**			**1.2**	**PASS**	

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	N/A	**N/A**
New	1.0	0.014	0.6	**PASS**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	N/A	**N/A**
New	11.0	0.153	5.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Koktuk Mtn	292.1	292.2	0.1	Pass
Compass	189.5	188.9	-0.6	Pass
Compass	96.5	97.7	1.2	Pass
Compass	7.5	7.4	-0.1	Pass
Compass	268.5	266.9	-1.6	Pass
Cone Mtn	144.3	145.8	1.5	Pass
Time: Begin: 1430	**Max Abs. Error**		**1.6**	**PASS**
End: 1450	**Mean Abs. Error**		**0.8**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Realigned north alignment key when installing new instrument.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** A0710039 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST							
Date	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
10/12/08	1450	28.30	28.23	955.97	955.10	-0.87	Pass
				Max Abs. Error		0.87	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/28/08	
Audit Inst	Offset Amount
24.09	-0.09
26.06	-0.07
28.08	-0.08
30.06	-0.06
Intercept	**-0.18**
Slope	**0.0040**

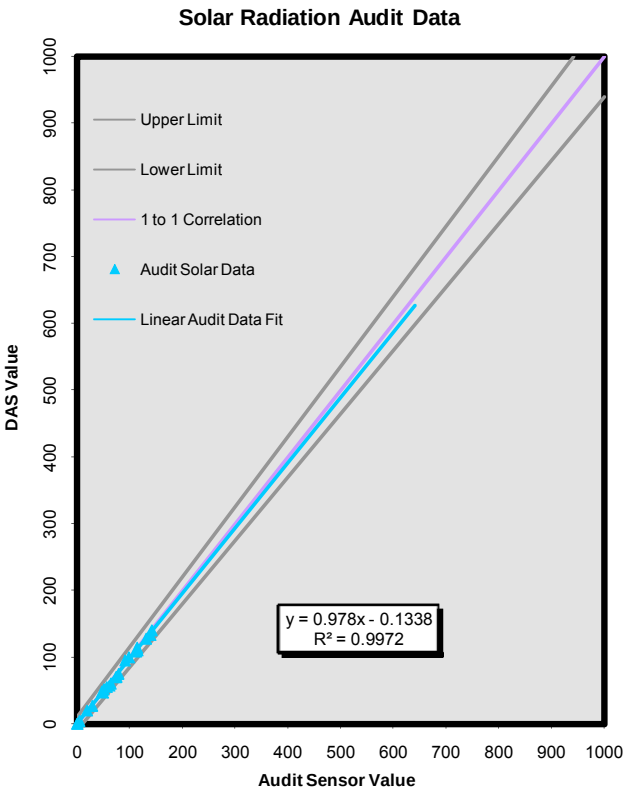
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: New audit instrument broken during September audit, audited with calibrated standard during October trip.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56427 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1515	113.2	110.8	-2.4	±15.7	-2.1%	Pass
1525	112.3	108.4	-3.9	±15.6	-3.5%	Pass
1635	56.2	55.3	-0.9	±12.8	-1.6%	Pass
937	49.3	46.9	-2.4	±12.5	n/a	Pass
1005	75.3	70.4	-4.9	±13.8	-6.5%	Pass
1010	63.9	60.3	-3.6	±13.2	-5.6%	Pass
1415	98.6	99.6	1.0	±14.9	1.0%	Pass
1420	114.1	114.2	0.1	±15.7	0.1%	Pass
1429	141.4	140.3	-1.1	±17.1	-0.8%	Pass
1451	139.6	133.0	-6.6	±17.0	-4.7%	Pass
1600	91.1	95.0	3.9	±14.6	4.3%	Pass
1700	47.5	48.5	1.0	±12.4	n/a	Pass
1800	50.9	51.7	0.8	±12.5	1.6%	Pass
1900	19.0	19.8	0.9	±10.9	n/a	Pass
2000	0.5	0.8	0.3	±10.0	n/a	Pass
700	0.3	0.1	-0.2	±10.0	n/a	Pass
800	4.7	4.3	-0.3	±10.2	n/a	Pass
900	29.2	27.1	-2.1	±11.5	n/a	Pass
1000	61.1	57.1	-4.0	±13.1	-6.5%	Pass
1100	78.9	75.0	-3.9	±13.9	-5.0%	Pass
1200	73.9	70.1	-3.8	±13.7	-5.1%	Pass
1300	114.7	110.1	-4.6	±15.7	-4.0%	Pass
1400	112.9	110.7	-2.2	±15.6	-1.9%	Pass
1500	131.1	127.6	-3.5	±16.6	-2.7%	Pass
Corr. Val	**0.9986**	**Max Abs. Percent Error**			**6.5%**	**PASS**
R² Value	**0.9972**	**Intercept**	**-0.1**	**Slope**	**0.9780**	**PASS**



Begin: 09/23/08 (Date) 1512 (Time) **End:** 09/24/08 (Date) 1501 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** G5613 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
01/23/08	1532	650	20.0	0.25		19.81	1558	19.56	-2.2%	Pass	
01/23/08	1601	650	20.0	0.00		20.57	1631	20.57	2.9%	Pass	
01/24/08	0930	650	20.0	0.00		18.54	1000	18.54	-7.3%	Pass	
01/24/08	1020	650	20.0	0.00	4.06	14.48	1200	18.54	-7.3%	Pass	
							Max Abs. Error	**7.3%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.5 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 389 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1538	4.00	1600	21.9	0.00	22.10	22.10	0.8%	Pass	
1547		1600	21.9	22.10	45.21	23.11	5.4%	Pass	
1600		1600	21.9	45.21	68.58	23.37	6.6%	Pass	
1608		1600	21.9	0.00	23.37	23.37	6.6%	Pass	
1615	8.00	1600	21.9	23.37	46.74	23.37	6.6%	Pass	
1630		1600	21.9	46.74	70.35	23.61	7.7%	Pass	
1639		1600	21.9	70.35	93.98	23.63	7.8%	Pass	
1647		1600	21.9	93.98	117.86	23.88	8.9%	Pass	
1658	12.00	1600	21.9	117.86	140.72	22.86	4.2%	Pass	
					Max Abs. Error		**8.9%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Tested on 9/23/08.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 1
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 23-24, 2008

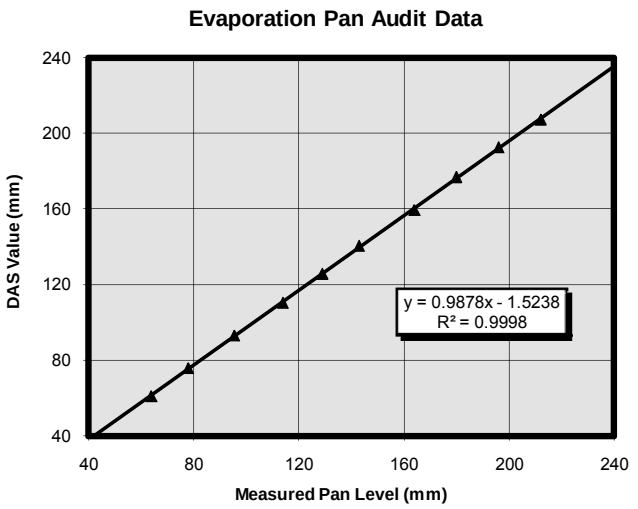
● *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 695 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

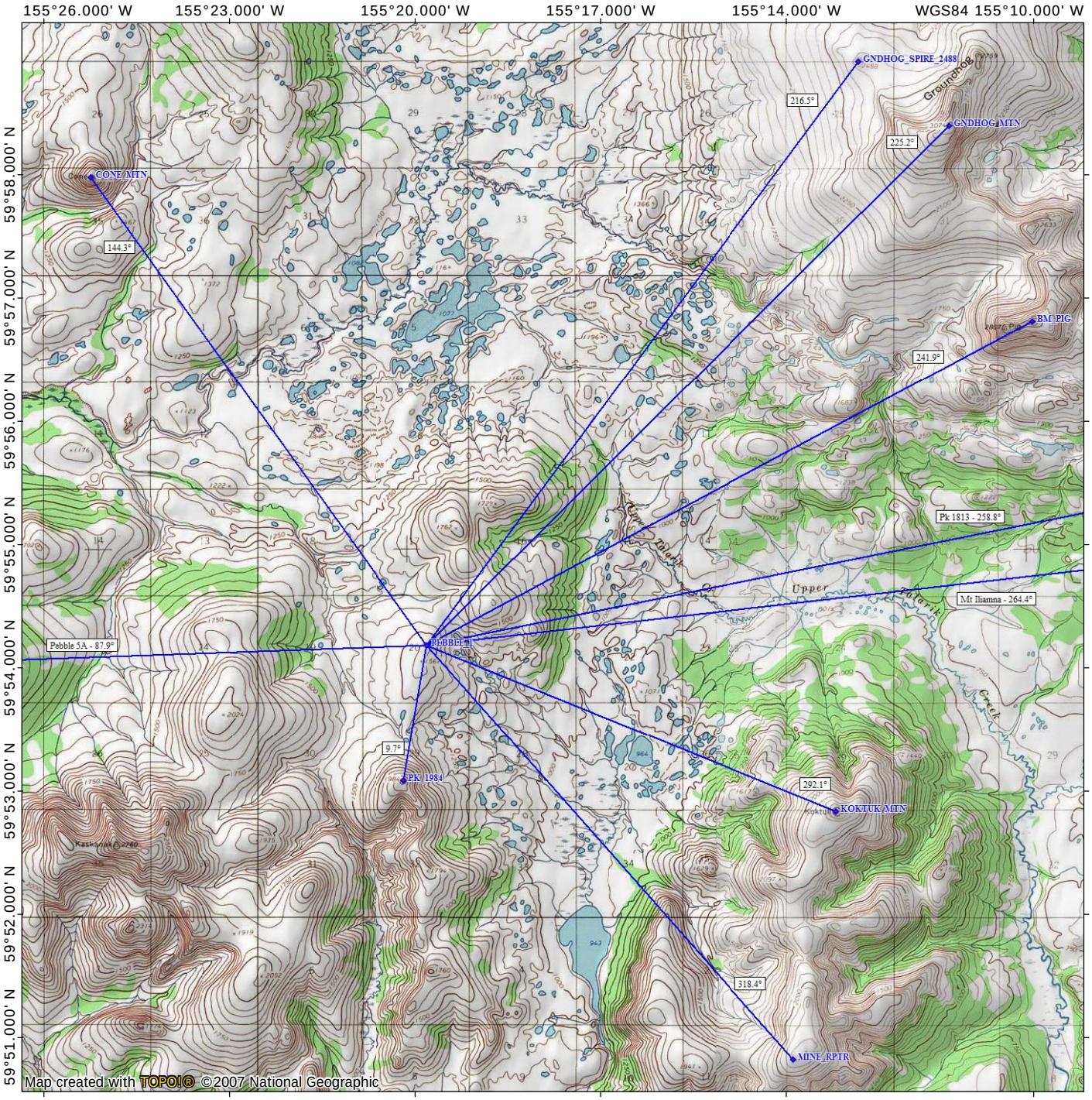
Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	212.0	207.3	210.5	-3.2	-1.5%	Pass
	196.0	192.6	194.5	-1.9	-1.0%	Pass
	180.0	176.9	178.5	-1.6	-0.9%	Pass
	164.0	159.4	162.5	-3.1	-1.9%	Pass
	143.0	140.6	141.5	-0.9	-0.6%	Pass
	129.0	125.9	127.5	-1.6	-1.2%	Pass
	114.0	110.5	112.5	-2.0	-1.8%	Pass
	95.5	93.2	94.0	-0.8	-0.8%	Pass
	78.0	75.9	76.5	-0.6	-0.8%	Pass
	64.0	61.2	62.5	-1.3	-2.0%	Pass
		Max Abs. Error		**3.2**	**2.0%**	**PASS**
		Intercept	**-1.5**	**Slope**	**0.9878**	**PASS**



Date: 09/23/08 **Time:** Begin: 1611 End: 1650

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Tubing between gauge and pan frozen upon arrival. Thawed tubing, audited system and winterized pan.

Pebble 1 TOPO Alignment Map - 59°54.179' N, 155°19.806' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 2.5 miles

0 1 2 3 4 km

TN MN 17½°

10/20/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1

ACCREDITED

Calibration Certificate No. 1750.01

Cert. No.: 4000-1974024

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Justin Mangold, Anchorage, AK 99503 U.S.A. (RMA:944729)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Calibration Bath TC191	A79341		
Thermistor Module	A27129	8/22/09	1000248949
Temperature Probe	3039	10/26/08	A7710039-4
Temperature Probe	149	3/06/09	A82225037-3
Thermistor Module	A17118	10/30/08	A7831032
Temperature Calibration Bath TC218	A73332		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 9/08/08 **Cal Due: 9/08/09**

Test Conditions: 24.5°C 45.0 %RH 1017 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.001	0.087	N	0.001	0.000	Y	-0.049	0.051	0.013	3.8:1
°C	25.001	25.076	N	25.001	25.000	Y	24.951	25.051	0.013	3.8:1
°C	60.001	60.127	N	60.001	59.999	Y	59.951	60.051	0.018	2.8:1
°C	100.001	100.333	N	100.001	100.001	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Date=MM/DD/YY

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025:2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001:2000 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

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VAISALA

Certificate of Calibration

Report #: 090408-X0740015-RH **RMA #:** 95-70314 **Calibration Date:** Sep-04-2008
Model #: HMI41/HMP45 **Serial #:** X0650080/X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%, RH Recommended Calibration Due Date: Sep-04-2009
Instrument Range: -20 to +60 °C, T

Customer: HOEFLER CONSULTING GROUP, INC.
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0% against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
22.11	22.30	0.19	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.12	11.30	0.18	2.00	0.92
33.04	32.30	-0.74	2.00	1.01
74.33	72.60	-1.73	2.00	1.02
Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.97	21.90	-0.07	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.21	11.50	0.29	2.00	0.92
32.80	33.00	0.20	2.00	1.01
74.89	74.90	0.01	2.00	1.02

Problem Noted: None
Action Taken: The Unit Was Calibrated

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN 276340-08. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 6B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900343	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7519018	Dec. 19, 2007	Jun. 19, 2009
HMK13B	P3940001	May. 16, 2008	Nov. 16, 2008
HMP233	V4210039	Jul. 17, 2008	Oct. 17, 2008
HMT333	B0920007	Jun. 17, 2008	Sep. 17, 2008
HMI41/HMP45	S0720005	May. 21, 2008	Nov. 21, 2008

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.50 %RH

Approved By

Technical Operator
Roun Roeun

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18811** (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA 02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft 27106D produces 10 pulses per revolution of the anemometer shaft

(2) Indicated on the Control Unit LCD display

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 7/31/08
Inspection Interval One Year

Tested By RP

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA 01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 10/23/08
Inspection Interval One Year

Tested By RP

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP. P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5103

Model Number: 366-3M
Part Number: 060-SQF41200-01
Order Code: TW3663M

Product Specifications

Full Scale Range: 0.2-2.0 GM CM
Calibrated At: 0.2-2.0 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW150

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/12/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-3M SERIAL NUMBER: 5103 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.01	0.00	0.00	.01
.2	0.00	.25	.37	.40
.4	.20	.47	.43	.60
.6	.40	.65	.60	.80
.8	.60	.84	.80	1.00
1.0	.80	1.02	1.05	1.20
1.2	1.00	1.25	1.28	1.40
1.4	1.20	1.46	1.49	1.60
1.6	1.40	1.68	1.70	1.80
1.8	1.60	1.91	1.94	2.00
2.0	1.80	2.14	2.17	2.20

Max pos error (% FS) = 8.5 % at .200
Max neg error (% FS) = -.2 % at .800

Torque Watch is a: PASS

Job 128274

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP.

P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5116

Model Number: 366-2M
Part Number: 060-SQF41198-01
Order Code: TQ3662M

Product Specifications

Full Scale Range: 1-7.5 GM CM
Calibrated At: 1-7.5 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW151

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/15/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-2M SERIAL NUMBER: 5116 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.05	0.00	0.00	.05
1.0	.25	.95	.95	1.75
2.0	1.25	1.85	1.88	2.75
3.0	2.25	2.77	2.82	3.75
4.0	3.25	3.73	3.77	4.75
5.0	4.25	4.62	4.76	5.75
6.0	5.25	5.61	5.77	6.75
7.0	6.25	6.50	6.72	7.75
7.5	6.75	6.96	7.14	8.25

Max pos error (% FS) = 0.0 %
Max neg error (% FS) = -7.2 % at 7.500

Torque Watch is a: PASS

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner: HOEFLER Consulting Group
Name: _____

Address: 341 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER: _____

MODEL NUMBER: 5008

SERIAL NUMBER: 508099319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072808. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/28/08 Lab temperature 72.9 °F
Lab pressure 660.0 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.09	0.09	-0.09
25.99	26.06	0.07	-0.07
28.00	28.08	0.08	-0.08
30.00	30.06	0.06	-0.06

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ NO ☒

Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R [illegible] Date: 7/28/08

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24 x 10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: R. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Appendix D

Validated Continuous Data Summaries

CONTENTS

Pebble 1 Station 2008 Hourly Data:

1. Temperature at 2 meters (deg. C)

2. Temperature at 10 meters (deg. C)

3. Temperature Difference 2 meter to 10 meter (deg. C)

4. Relative Humidity (%)

5. Solar (Watts/m^2)

6. Barometric Pressure (mbar)

7. Wind Speed – Climatronic (m/s)

8. Wind Direction – Climatronic (degrees)

9. Wind Sigma – Climatronic (σ_θ)

10. Wind Speed – RM Young (m/s)

11. Wind Direction – RM Young (degrees)

12. Wind Sigma – RM Young (σ_θ)

13. Daily Total Precipitation (mm)

14. Daily Total Evaporation (mm)

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-11.8	-11.2	-11.0	-11.3	-11.6	-11.4	-11.4	-11.3	-11.8	-11.7	-11.4	-13.0	-14.5	-14.6	-15.3	-15.4	-15.8	-15.3	-16.1	-16.7	-17.2	-17.3	-16.8	-17.8	-11.0	-17.8	-13.8
2	-17.9	-18.2	-18.5	-19.2	-19.3	-19.4	-19.3	-19.8	-19.8	-19.4	-19.4	-20.0	-19.3	-20.3	-20.7	-20.9	-21.2	-20.8	-19.5	-19.8	-19.6	-19.8	-18.8	-18.8	-17.9	-21.2	-19.6
3	-19.9	-19.8	-19.2	-19.1	-18.5	-18.5	-20.6	-20.2	-20.1	-19.0	-19.1	-20.0	-19.1	-17.8	-19.3	-19.4	-19.4	-19.5	-19.4	-19.8	-20.0	-20.0	-20.0	-20.1	-17.8	-20.6	-19.5
4	-20.4	-20.3	-20.3	-20.5	-20.5	-20.7	-20.7	-20.6	-20.8	-20.9	-20.9	-21.1	-21.1	-21.2	-21.2	-21.4	-21.5	-21.6	-22.3	-23.3	-24.0	-23.7	-23.4	-23.7	-20.3	-24.0	-21.5
5	-24.1	-24.3	-24.5	-25.4	-25.6	-24.7	-25.0	-25.3	-25.5	-25.5	-25.0	-24.3	-24.1	-23.8	-23.4	-23.3	-23.5	-23.7	-23.8	-23.7	-24.1	-25.0	-25.5	-25.6	-23.3	-25.6	-24.5
6	-26.1	-26.4	-26.9	-26.7	-26.8	-27.0	-27.7	-28.3	-28.1	-28.5	-28.6	-28.3	-27.8	-27.7	-27.5	-27.1	-27.5	-28.3	-28.8	-29.2	-29.4	-29.4	-29.0	-29.1	-26.1	-29.4	-27.9
7	-29.7	-29.4	-29.0	-28.2	-27.8	-28.1	-28.1	-28.0	-28.2	-27.6	-27.6	-27.8	-27.3	-26.4	-25.8	-25.6	-25.4	-24.9	-24.6	-24.8	-24.9	-24.7	-25.6	-26.4	-24.6	-29.7	-26.9
8	-26.7	-26.6	-26.7	-26.2	-26.1	-26.5	-25.5	-25.2	-24.7	-24.5	-24.9	-25.3	-25.5	-25.5	-25.1	-24.8	-25.0	-25.2	-25.8	-25.9	-26.3	-26.8	-27.0	-27.0	-24.5	-27.0	-25.8
9	-27.8	-27.5	-27.2	-26.7	-27.4	-27.6	-27.4	-27.7	-27.3	-27.0	-26.7	-26.3	-25.9	-25.2	-24.6	-24.5	-24.7	-24.8	-25.0	-24.9	-24.8	-24.8	-24.4	-24.5	-24.4	-27.8	-26.0
10	-24.3	-24.7	-25.1	-25.5	-25.2	-25.5	-25.7	-25.5	-25.9	-26.1	-26.4	-26.4	-26.4	-26.5	-26.3	-26.3	-26.7	-27.5	-28.4	-28.5	-28.3	-28.8	-29.1	-28.6	-24.3	-29.1	-26.6
11	-27.6	-27.0	-26.8	-26.7	-27.3	-27.9	-28.5	-28.6	-29.0	-29.5	-29.5	-29.2	-29.1	-29.1	-28.9	-29.1	-29.3	-29.8	-30.4	-30.6	-30.9	-31.0	-31.1	-31.3	-26.7	-31.3	-29.1
12	-31.2	-31.2	-31.6	-31.6	-31.9	-31.9	-31.8	-32.2	-31.5	-31.2	-31.1	-31.3	-31.5	-30.7	-30.4	-30.5	-31.2	-31.7	-31.7	-31.7	-31.7	-31.7	-31.9	-32.1	-30.4	-32.2	-31.5
13	-31.9	-31.2	-31.3	-31.4	-31.2	-31.0	-30.8	-31.0	-31.3	-31.7	-31.5	-31.7	-31.4	-30.9	-30.5	-30.1	-30.1	-30.2	-30.7	-30.4	-30.3	-30.2	-29.3	-28.8	-28.8	-31.9	-30.8
14	-29.4	-28.5	-27.3	-25.2	-24.1	-22.7	-21.8	-21.1	-20.2	-17.4	-14.6	-14.1	-13.0	-12.7	-11.9	-11.2	-10.7	-10.0	-9.1	-8.3	-8.3	-7.8	-6.6	-5.7	-5.7	-29.4	-15.9
15	-4.7	-4.3	-4.0	-3.8	-3.7	-4.6	-4.9	-5.0	-5.4	-5.3	-5.4	-5.3	-5.5	-5.2	-5.0	-5.0	-5.0	-5.2	-5.1	-5.0	-4.8	-4.6	-4.3	-4.0	-3.7	-5.5	-4.8
16	-4.0	-4.0	-3.7	-3.4	-3.4	-3.6	-4.0	-4.9	-4.7	-3.5	-4.3	-5.2	-5.1	-5.2	-5.4	-5.1	-4.9	-4.5	-4.2	-4.2	-4.6	-5.8	-5.9	-6.5	-3.4	-6.5	-4.6
17	-6.1	-5.5	-4.9	-3.1	-3.3	-3.4	-3.7	-3.6	-3.3	-3.0	-2.9	-2.7	-2.6	-2.3	-2.4	-2.0	-2.3	-2.5	-2.5	-2.6	-2.7	-2.7	-2.9	-2.8	-2.0	-6.1	-3.2
18	-2.9	-3.1	-3.2	-3.2	-3.2	-3.3	-3.4	-3.3	-3.4	-3.4	-3.5	-3.6	-3.8	-3.6	-3.3	-3.5	-3.7	-3.8	-3.8	-3.9	-3.7	-3.5	-3.1	-3.3	-2.9	-3.9	-3.4
19	-3.9	-3.3	-3.0	-2.8	-2.6	-1.8	-1.2	-0.4	-0.5	-0.9	-0.6	-0.5	-0.8	-1.0	-1.1	-1.1	-0.9	-0.8	-0.7	-0.8	-0.8	-0.8	-0.9	-0.9	-0.4	-3.9	-1.3
20	-0.9	-1.0	-1.0	-1.0	-0.8	-0.8	-0.7	-0.8	-0.7	-0.7	-0.7	-0.8	-0.7	-0.6	-0.7	-0.8	-0.7	-0.8	-0.7	-0.8	-1.1	-0.8	-1.2	-1.6	-0.6	-1.6	-0.9
21	-1.5	-1.3	-1.2	-1.9	-1.8	-1.3	-1.2	-1.0	-0.8	-0.7	-0.6	-0.5	-0.2	0.1	0.4	0.6	0.7	0.9	0.9	0.6	0.3	0.4	0.3	0.4	0.9	-1.9	-0.4
22	0.4	-0.5	-0.4	-1.1	-1.3	-1.6	-1.7	-2.3	-2.4	-2.1	-2.3	-3.3	-4.1	-4.7	-5.2	-5.9	-6.2	-6.4	-6.3	-6.3	-6.1	-6.2	-6.6	-6.8	0.4	-6.8	-3.7
23	-7.1	-8.4	-9.3	-10.6	-12.6	-14.5	-16.1	-17.3	-18.2	-19.2	-19.6	-20.5	-20.2	-20.5	-20.3	-20.6	-21.1	-22.0	-22.4	-22.6	-22.8	-22.8	-23.2	-22.3	-7.1	-23.2	-18.1
24	-21.9	-20.4	-21.2	-20.0	-18.1	-18.7	-18.4	-14.4	-13.7	-11.6	-10.7	-10.2	-10.6	-10.5	-10.1	-9.6	-9.4	-9.3	-8.9	-8.4	-8.3	-8.0	-7.8	-7.8	-7.8	-21.9	-12.8
25	-7.8	-7.5	-7.4	-7.2	-7.0	-6.9	-6.7	-6.3	-6.8	-7.1	-6.9	-6.5	-6.5	-6.9	-6.9	-6.8	-6.2	-6.4	-6.8	-8.8	-11.5	-13.7	-15.3	-16.5	-6.2	-16.5	-8.2
26	-18.8	-19.2	-19.9	-20.6	-21.4	-21.3	-21.8	-22.0	-22.0	-22.0	-21.9	-23.2	-22.4	-21.0	-19.0	-17.9	-15.9	-14.3	-13.7	-12.9	-13.6	-13.5	-12.2	-11.6	-11.6	-23.2	-18.4
27	-11.5	-11.5	-10.9	-11.1	-10.7	-10.2	-9.5	-8.4	-8.0	-7.5	-7.2	-7.1	-6.9	-6.7	-6.5	-6.4	-6.3	-6.1	-6.0	-5.6	-5.6	-5.9	-5.8	-5.6	-5.6	-11.5	-7.8
28	-5.5	-5.5	-5.6	-5.7	-5.6	-5.6	-5.9	-6.6	-6.6	-6.6	-6.6	-6.5	-6.3	-6.1	-6.1	-5.9	-5.8	-5.7	-5.6	-5.8	-5.0	-5.4	-5.5	-5.1	-5.0	-6.6	-5.9
29	-5.3	-5.2	-5.0	-5.1	-5.2	-5.6	-6.0	-6.8	-6.0	-6.2	-6.5	-6.1	-5.7	-5.9	-6.7	-6.8	-7.2	-8.3	-9.7	-9.2	-9.6	-9.9	-9.8	-9.8	-5.0	-9.9	-7.0
30	-9.6	-9.8	-10.1	-10.7	-11.1	-10.7	-11.1	-12.2	-12.4	-13.8	-14.7	-14.9	-15.0	-15.3	-14.8	-14.7	-15.4	-15.3	-15.0	-14.7	-15.1	-15.1	-15.3	-15.8	-9.6	-15.8	-13.4
31	-15.6	-15.7	-16.0	-16.3	-15.5	-15.3	-15.0	-14.3	-15.6	-14.2	-12.8	-11.1	-11.3	-11.4	-11.7	-12.0	-11.4	-10.7	-10.9	-10.8	-11.0	-11.3	-11.5	-11.9	-10.7	-16.3	-13.1
Max.	**0.4**	**-0.5**	**-0.4**	**-1.0**	**-0.8**	**-0.8**	**-0.7**	**-0.4**	**-0.5**	**-0.7**	**-0.6**	**-0.5**	**-0.2**	**0.1**	**0.4**	**0.6**	**0.7**	**0.9**	**0.9**	**0.6**	**0.3**	**0.4**	**0.3**	**0.4**	**0.9**		
Min.	**-31.9**	**-31.2**	**-31.6**	**-31.6**	**-31.9**	**-31.9**	**-31.8**	**-32.2**	**-31.5**	**-31.7**	**-31.5**	**-31.7**	**-31.5**	**-30.9**	**-30.5**	**-30.5**	**-31.2**	**-31.7**	**-31.7**	**-31.7**	**-31.7**	**-31.7**	**-31.9**	**-32.1**		**-32.2**	
Avg.	**-15.3**	**-15.2**	**-15.2**	**-15.2**	**-15.2**	**-15.2**	**-15.3**	**-15.3**	**-15.3**	**-15.1**	**-15.0**	**-15.1**	**-15.0**	**-14.8**	**-14.7**	**-14.6**	**-14.6**	**-14.7**	**-14.7**	**-14.8**	**-15.0**	**-15.2**	**-15.1**	**-15.2**			**-15.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-12.4	-12.4	-12.2	-12.7	-12.8	-12.9	-13.1	-13.1	-12.8	-12.7	-12.8	-13.2	-12.6	-12.3	-12.0	-11.9	-11.9	-11.8	-12.0	-13.0	-13.4	-14.2	-14.1	-14.5	-11.8	-14.5	-12.8
2	-14.3	-15.4	-15.9	-16.6	-16.9	-18.0	-18.7	-18.7	-19.2	-18.9	-19.1	-19.5	-19.3	-19.5	-19.1	-18.6	-18.6	-19.2	-19.5	-20.1	-20.6	-21.0	-21.3	-22.1	-14.3	-22.1	-18.8
3	-23.3	-23.1	-23.4	-23.5	-24.5	-25.3	-25.7	-26.8	-26.6	-26.5	-26.2	-26.8	-26.3	-26.5	-25.6	-25.6	-25.4	-25.6	-26.4	-26.8	-27.2	-27.5	-27.5	-27.4	-23.1	-27.5	-25.8
4	-27.7	-27.3	-27.2	-27.0	-27.1	-25.8	-24.5	-26.2	-25.5	-23.0	-23.4	-22.8	-22.6	-22.8	-22.5	-22.5	-24.8	-25.6	-26.0	-27.0	-27.7	-28.1	-28.2	-28.4	-22.5	-28.4	-25.6
5	-29.2	-29.5	-28.9	-29.2	-29.8	-30.2	-30.5	-30.7	-30.6	-30.2	-29.5	-29.4	-28.7	-28.7	-27.8	-28.5	-14.0	-23.5	-28.1	-26.8	-27.3	-27.3	-27.1	-26.5	-14.0	-30.7	-28.0
6	-27.3	-25.9	-25.8	-26.2	-23.3	-24.7	-25.1	-24.7	-26.0	-25.8	-24.9	-25.7	-24.9	-24.0	-24.8	-25.7	-25.1	-26.3	-26.4	-26.3	-25.5	-25.9	-25.6	-25.7	-23.3	-27.3	-25.5
7	-26.0	-26.0	-25.4	-27.1	-26.1	-25.9	-25.3	-25.5	-26.1	-25.6	-25.3	-22.3	-21.8	-18.4	-18.5	-18.0	-18.6	-18.7	-19.1	-19.4	-18.5	-18.8	-19.0	-18.6	-18.0	-27.1	-22.3
8	-19.7	-17.5	-13.8	-15.6	-16.9	-13.7	-13.6	-13.5	-13.1	-13.6	-13.8	-13.7	-13.9	-13.1	-12.7	-12.3	-11.9	-12.8	-12.6	-12.7	-12.3	-12.1	-10.8	-10.3	-10.3	-19.7	-13.6
9	-10.5	-10.2	-10.0	-9.8	-9.8	-9.5	-9.7	-9.4	-9.2	-9.3	-10.0	-10.3	-11.5	-11.8	-13.5	-14.5	-15.9	-16.9	-18.8	-20.4	-21.2	-21.6	-22.2	-22.8	-9.2	-22.8	-13.7
10	-23.8	-24.9	-25.6	-25.2	-25.0	-25.5	-24.1	-23.8	-26.2	-26.6	-26.4	-25.1	-25.7	-26.0	-23.8	-23.0	-25.5	-22.4	-23.3	-21.2	-24.5	-23.7	-23.0	-22.8	-21.2	-26.6	-24.5
11	-17.7	-16.3	-16.4	-17.0	-16.7	-16.2	-15.7	-15.0	-14.8	-15.3	-15.6	-15.2	-14.6	-13.6	-13.6	-13.9	-13.6	-13.9	-14.7	-16.2	-17.6	-16.7	-17.4	-19.2	-13.6	-19.2	-15.7
12	-20.1	-21.1	-22.9	-23.0	-24.6	-25.5	-25.7	-26.7	-26.8	-27.6	-27.2	-26.4	-26.4	-25.0	-24.7	-24.8	-24.0	-23.0	-23.1	-22.9	-21.8	-21.1	-19.4	-14.9	-14.9	-27.6	-23.7
13	-10.0	-9.3	-9.7	-9.5	-7.9	-8.3	-6.8	-6.1	-5.3	-3.4	-2.8	-2.2	-1.7	-1.0	-0.6	-0.7	-0.5	-0.5	-0.4	-0.3	-0.3	-0.2	-0.5	-0.3	-0.2	-10.0	-3.7
14	-0.2	-0.1	0.0	-0.3	-0.6	-0.7	-0.7	-3.2	-8.7	-11.0	-12.6	-13.7	-14.3	-15.6	-16.5	-17.5	-18.1	-18.7	-19.1	-19.2	-19.2	-18.5	-18.0	-18.3	0.0	-19.2	-11.0
15	-19.5	-20.3	-21.0	-21.3	-22.1	-22.6	-23.7	-24.1	-24.5	-24.9	-24.0	-24.1	-24.5	-23.9	-23.6	-23.5	-22.9	-22.5	-23.1	-23.3	-22.8	-22.4	-19.8	-15.7	-15.7	-24.9	-22.5
16	-15.1	-13.8	-12.8	-11.5	-11.3	-11.0	-9.6	-8.7	-8.2	-8.1	-8.2	-8.0	-7.6	-7.0	-6.2	-5.8	-5.6	-5.3	-5.0	-5.6	-5.7	-6.0	-5.8	-6.0	-5.0	-15.1	-8.3
17	-6.5	-6.8	-6.7	-6.2	-4.7	-3.7	-2.7	-2.1	-1.6	-1.9	-0.7	0.3	0.1	0.0	-0.1	-0.3	-0.5	-0.4	-0.6	-0.8	-0.6	-0.5	-0.5	-0.6	0.3	-6.8	-2.0
18	-0.4	-0.4	-0.7	-0.8	-1.0	-0.9	-0.8	-0.8	-0.5	-0.3	-0.2	-0.3	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.8	-0.6	-0.3	0.0	0.0	-1.0	-0.5
19	0.1	0.2	0.2	0.4	0.0	0.0	0.2	1.1	0.0	-0.8	-0.6	0.5	-0.8	0.2	0.6	1.3	1.4	1.3	1.4	1.1	0.5	-0.1	-0.3	-0.5	1.4	-0.8	0.3
20	-0.4	-0.4	-0.6	-0.5	-0.4	-0.6	-0.6	-0.7	-1.0	-1.2	-1.1	-1.0	-0.3	0.3	0.7	0.7	0.4	0.7	0.7	0.9	0.9	0.6	0.8	0.6	0.9	-1.2	-0.1
21	0.0	0.0	-0.1	-0.3	0.0	-0.8	0.1	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.5	0.8	0.9	0.0	-0.2	-0.2	-0.9	-0.8	-0.7	0.9	-0.9	0.2
22	-0.9	-0.7	-0.9	-1.0	-1.0	-1.1	-0.9	-1.1	-1.3	-1.5	-1.4	-1.6	-1.6	-1.6	-0.9	-1.0	-1.3	-1.7	-2.0	-2.4	-2.6	-2.9	-2.9	-3.2	-0.7	-3.2	-1.6
23	-3.1	-3.6	-3.6	-4.0	-4.1	-3.9	-3.4	-3.9	-4.6	-6.2	-5.5	-4.8	-4.8	-5.5	-5.0	-5.5	-5.5	-6.0	-6.7	-7.8	-8.3	-8.2	-9.2	-10.3	-3.1	-10.3	-5.6
24	-10.9	-11.4	-10.4	-10.0	-9.9	-10.0	-10.4	-11.7	-12.2	-12.6	-13.0	-13.6	-14.2	-14.3	-14.1	-13.9	-13.9	-14.1	-14.7	-15.1	-15.8	-15.7	-16.3	-16.8	-9.9	-16.8	-13.1
25	-16.6	-17.5	-16.9	-17.4	-17.8	-18.1	-19.2	-19.6	-19.6	-19.6	-19.3	-18.9	-18.5	-18.2	-17.9	-16.3	-14.2	-12.4	-10.7	-10.4	-8.2	-5.4	-4.9	-5.1	-4.9	-19.6	-15.1
26	-5.4	-5.7	-5.7	-6.9	-9.0	-9.2	-9.9	-9.4	-10.0	-10.3	-10.0	-9.6	-8.4	-8.9	-9.0	-7.9	-9.5	-10.7	-10.9	-11.4	-12.3	-13.1	-12.6	-13.9	-5.4	-13.9	-9.6
27	-15.2	-15.8	-16.0	-16.1	-16.8	-16.8	-16.7	-15.5	-12.8	-11.9	-13.3	-11.4	-6.2	-4.8	-5.1	-6.0	-8.3	-7.2	-5.0	-5.4	-3.7	-4.1	-2.1	-4.5	-2.1	-16.8	-10.0
28	-1.9	-1.8	-1.9	-1.3	-0.9	-0.2	-2.4	-0.4	-1.9	-2.4	-2.5	-3.7	-3.5	-4.1	-4.6	-4.9	-5.4	-6.4	-7.4	-8.3	-8.5	-9.0	-9.7	-9.7	-0.2	-9.7	-4.3
29	-10.3	-11.0	-11.4	-10.8	-11.2	-11.4	-12.9	-13.6	-13.5	-14.0	-14.9	-14.4	-14.8	-14.9	-14.7	-13.9	-13.3	-12.7	-13.4	-13.4	-13.7	-13.9	-14.4	-15.0	-10.3	-15.0	-13.2
Max.	**0.1**	**0.2**	**0.2**	**0.4**	**0.0**	**0.0**	**0.2**	**1.1**	**0.7**	**0.8**	**0.7**	**0.7**	**0.7**	**0.7**	**0.8**	**1.3**	**1.4**	**1.3**	**1.4**	**1.1**	**0.9**	**0.6**	**0.8**	**0.6**	**1.4**		
Min.	**-29.2**	**-29.5**	**-28.9**	**-29.2**	**-29.8**	**-30.2**	**-30.5**	**-30.7**	**-30.6**	**-30.2**	**-29.5**	**-29.4**	**-28.7**	**-28.7**	**-27.8**	**-28.5**	**-25.5**	**-26.3**	**-28.1**	**-27.0**	**-27.7**	**-28.1**	**-28.2**	**-28.4**		**-30.7**	
Avg.	**-12.7**	**-12.7**	**-12.6**	**-12.8**	**-12.8**	**-12.8**	**-12.8**	**-12.9**	**-13.2**	**-13.3**	**-13.2**	**-13.0**	**-12.7**	**-12.4**	**-12.2**	**-12.2**	**-11.9**	**-12.3**	**-12.7**	**-12.9**	**-13.1**	**-13.1**	**-12.9**	**-12.9**			**-12.8**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-15.7	-16.1	-16.3	-16.6	-17.1	-17.1	-17.1	-16.9	-15.9	-16.3	-15.9	-15.4	-13.9	-11.9	-11.1	-9.5	-8.2	-7.2	-7.0	-5.9	-5.9	-5.3	-4.8	-4.3	-4.3	-17.1	-12.1
2	-3.7	-3.0	-2.5	-2.3	-1.3	-1.6	-1.8	-2.1	-2.3	-2.7	-2.7	-2.6	-2.2	-1.8	-1.6	-1.3	-1.5	-1.7	-1.6	-2.2	-2.2	-2.1	-2.2	-2.2	-1.3	-3.7	-2.1
3	-2.0	-2.4	-2.7	-2.7	-2.1	-1.9	-1.8	-2.0	-1.9	-1.6	-1.4	-1.4	-1.5	-1.3	-1.0	-0.7	-0.6	-0.4	-0.3	-0.2	-0.1	0.1	0.1	0.2	0.2	-2.7	-1.2
4	0.3	0.5	0.5	1.0	0.0	-0.4	-0.2	-0.1	-0.2	-0.3	-0.3	-0.3	0.1	0.4	0.6	0.7	0.7	0.9	0.8	0.5	0.2	-0.1	0.0	0.0	1.0	-0.4	0.2
5	0.4	0.5	0.7	1.0	0.7	0.6	0.6	0.7	0.6	1.3	1.0	0.6	0.7	0.6	0.4	0.9	1.2	1.1	0.7	0.2	-0.2	-0.1	-0.1	0.0	1.3	-0.2	0.6
6	-0.2	-0.5	-0.6	-0.8	-1.0	-1.3	-1.4	-1.4	-1.5	-1.5	-1.4	-0.9	-0.1	-0.1	0.1	0.3	0.7	0.5	0.2	0.0	0.1	-0.1	0.2	0.6	0.7	-1.5	-0.4
7	0.2	-0.3	-0.4	-0.7	-1.8	-2.7	-2.4	-2.2	-1.7	-1.6	-1.6	-1.7	-1.5	-1.2	-1.1	-0.6	-1.0	-0.7	-1.1	-1.6	-2.2	-2.6	-3.3	-3.9	0.2	-3.9	-1.6
8	-4.1	-4.2	-4.6	-4.9	-5.2	-5.4	-5.6	-5.0	-4.7	-4.6	-4.5	-4.2	-3.1	-2.5	-1.4	-1.0	-0.4	-0.3	-0.6	-0.7	-0.8	-0.9	-0.5	-0.4	-0.3	-5.6	-2.9
9	-1.5	-1.9	-1.8	-1.6	-1.1	-1.1	-0.9	-1.0	-1.2	-1.0	-1.0	-0.5	-0.4	-0.8	-1.1	-0.8	-0.7	-1.0	-1.5	-1.6	-1.2	-0.8	-0.7	-0.4	-0.4	-1.9	-1.1
10	-0.8	-0.8	-1.9	-2.1	-3.4	-4.1	-4.7	-5.0	-5.0	-5.1	-5.2	-5.3	-5.0	-5.1	-5.1	-5.0	-5.2	-5.3	-5.3	-5.5	-5.6	-6.2	-6.3	-6.3	-0.8	-6.3	-4.6
11	-6.7	-7.2	-7.7	-8.0	-8.3	-8.4	-8.2	-8.4	-8.5	-8.7	-8.5	-8.5	-8.7	-8.7	-8.6	-8.7	-8.8	-9.2	-9.3	-10.5	-11.5	-10.8	-10.5	-10.9	-6.7	-11.5	-8.9
12	-12.7	-12.9	-13.2	-13.2	-11.8	-11.7	-12.2	-12.1	-11.5	-11.1	-10.5	-10.2	-10.1	-9.8	-9.5	-9.2	-8.9	-8.9	-8.9	-8.7	-8.8	-8.7	-8.7	-8.7	-8.7	-13.2	-10.5
13	-8.8	-8.9	-9.1	-9.4	-9.6	-9.7	-10.0	-10.2	-10.5	-10.8	-11.2	-11.3	-11.1	-10.8	-10.9	-11.0	-11.1	-11.2	-11.5	-12.1	-13.7	-14.6	-14.3	-14.5	-8.8	-14.6	-11.1
14	-14.3	-15.0	-15.5	-16.1	-16.2	-15.9	-15.8	-15.8	-15.4	-14.4	-13.3	-11.3	-9.8	-9.8	-9.4	-9.3	-8.9	-7.9	-6.9	-6.0	-5.5	-5.6	-5.7	-5.4	-5.4	-16.2	-11.2
15	-5.6	-5.8	-5.8	-5.4	-5.0	-4.2	-3.6	-4.0	-4.0	-3.7	-3.4	-3.0	-2.7	-2.3	-2.1	-2.0	-2.0	-2.2	-2.3	-2.5	-2.8	-2.8	-2.9	-3.0	-2.0	-5.8	-3.5
16	-3.1	-3.1	-3.3	-3.3	-3.5	-4.4	-4.8	-4.5	-4.0	-4.8	-4.7	-3.7	-3.5	-2.9	-2.6	-2.7	-2.5	-1.8	-2.3	-3.0	-3.6	-4.6	-4.5	-4.5	-1.8	-4.8	-3.6
17	-4.7	-4.7	-4.9	-5.2	-4.9	-4.7	-4.7	-5.0	-5.2	-4.6	-4.9	-4.6	-4.3	-4.1	-3.7	-4.1	-4.1	-4.8	-7.0	-8.2	-9.0	-9.4	-9.5	-9.1	-3.7	-9.5	-5.6
18	-9.2	-9.6	-11.1	-11.6	-12.3	-13.0	-13.6	-14.0	-15.2	-15.7	-15.3	-14.9	-14.9	-14.5	-14.2	-14.2	-14.6	-14.5	-15.0	-14.9	-15.5	-16.6	-16.8	-16.9	-9.2	-16.9	-14.1
19	-17.5	-18.2	-18.9	-19.4	-19.7	-20.0	-20.5	-20.9	-21.3	-21.4	-21.4	-20.5	-19.5	-18.8	-18.4	-18.1	-17.7	-17.4	-17.7	-18.4	-19.2	-19.2	-19.2	-20.0	-17.4	-21.4	-19.3
20	-20.4	-19.9	-20.0	-20.5	-20.4	-20.2	-20.1	-20.1	-20.2	-20.1	-19.9	-19.6	-19.5	-19.5	-19.2	-18.6	-18.3	-17.9	-17.8	-17.6	-17.7	-18.3	-18.5	-17.9	-17.6	-20.5	-19.3
21	-17.5	-17.0	-16.8	-16.0	-15.6	-15.2	-14.5	-14.6	-14.1	-14.7	-14.6	-13.7	-12.1	-11.6	-9.2	-8.2	-8.7	-7.6	-8.2	-9.8	-11.0	-11.9	-12.2	-11.5	-7.6	-17.5	-12.8
22	-11.7	-11.9	-12.3	-12.8	-12.1	-11.9	-13.0	-13.3	-14.4	-14.8	-13.9	-13.8	-14.2	-13.6	-12.9	-12.1	-11.6	-11.7	-11.3	-11.3	-11.9	-12.1	-12.1	-13.0	-11.3	-14.8	-12.7
23	-13.9	-13.5	-13.2	-12.6	-12.3	-13.8	-14.2	-14.5	-14.6	-14.8	-15.1	-15.3	-15.0	-14.3	-13.6	-13.1	-12.9	-12.7	-12.8	-12.7	-13.3	-14.2	-15.3	-15.3	-12.3	-15.3	-13.9
24	-14.4	-14.2	-14.5	-14.5	-14.2	-14.1	-14.0	-14.0	-14.3	-14.8	-13.6	-13.9	-12.9	-11.9	-11.3	-10.5	-10.2	-9.9	-9.4	-9.5	-10.1	-9.8	-9.4	-9.6	-9.4	-14.8	-12.3
25	-9.6	-9.6	-10.3	-11.3	-11.5	-10.7	-10.8	-10.0	-9.8	-9.9	-9.1	-8.0	-8.0	-8.7	-8.8	-8.2	-7.8	-7.4	-7.5	-8.3	-9.4	-10.0	-10.1	-10.0	-7.4	-11.5	-9.4
26	-9.5	-9.3	-9.0	-10.1	-10.5	-10.3	-10.0	-11.0	-11.9	-10.8	-10.7	-10.5	-10.0	-9.2	-8.3	-7.8	-7.4	-7.4	-7.8	-8.4	-9.4	-9.5	-10.4	-10.2	-7.4	-11.9	-9.6
27	-10.4	-10.7	-11.3	-10.7	-10.6	-11.1	-10.4	-10.8	-10.3	-10.6	-10.8	-10.7	-10.2	-10.0	-10.0	-9.5	-9.3	-9.5	-9.9	-10.8	-12.3	-12.6	-13.0	-13.6	-9.3	-13.6	-10.8
28	-14.5	-14.6	-15.0	-15.8	-15.5	-15.6	-15.7	-15.6	-15.6	-15.5	-14.6	-13.7	-12.7	-12.1	-11.6	-11.6	-11.4	-11.0	-10.3	-9.7	-9.4	-9.2	-9.4	-9.4	-9.2	-15.8	-12.9
29	-9.2	-9.7	-9.3	-9.0	-8.7	-8.4	-7.6	-7.1	-6.7	-6.4	-5.7	-4.9	-4.2	-3.8	-3.5	-3.3	-3.4	-3.7	-3.7	-3.4	-3.1	-2.9	-2.7	-2.3	-2.3	-9.7	-5.5
30	-2.0	-2.0	-1.9	-1.8	-1.8	-1.9	-2.0	-2.0	-1.9	-1.8	-1.5	-1.1	-0.8	-0.6	-0.5	-0.6	-0.7	-0.7	-0.8	-1.0	-1.1	-1.0	-1.0	-1.0	-0.5	-2.0	-1.3
31	-1.0	-0.7	-0.6	-0.5	-0.4	-0.3	-0.1	-0.1	0.0	0.1	0.3	0.8	1.0	1.1	1.0	1.0	1.0	0.9	0.9	0.8	0.4	0.3	0.0	0.0	1.1	-1.0	0.3
Max.	**0.4**	**0.5**	**0.7**	**1.0**	**0.7**	**0.6**	**0.6**	**0.7**	**0.6**	**1.3**	**1.0**	**0.8**	**1.0**	**1.1**	**1.0**	**1.0**	**1.2**	**1.1**	**0.9**	**0.8**	**0.4**	**0.3**	**0.2**	**0.6**	**1.3**		
Min.	**-20.4**	**-19.9**	**-20.0**	**-20.5**	**-20.4**	**-20.2**	**-20.5**	**-20.9**	**-21.3**	**-21.4**	**-21.4**	**-20.5**	**-19.5**	**-19.5**	**-19.2**	**-18.6**	**-18.3**	**-17.9**	**-17.8**	**-18.4**	**-19.2**	**-19.2**	**-19.2**	**-20.0**		**-21.4**	
Avg.	**-7.8**	**-8.0**	**-8.2**	**-8.3**	**-8.3**	**-8.4**	**-8.4**	**-8.5**	**-8.5**	**-8.5**	**-8.2**	**-7.9**	**-7.4**	**-7.1**	**-6.7**	**-6.4**	**-6.3**	**-6.1**	**-6.3**	**-6.6**	**-7.0**	**-7.2**	**-7.2**	**-7.2**			**-7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	-0.1	-0.2	-0.3	-0.3	-0.4	-0.5	-0.6	-0.6	-0.6	-0.5	-0.4	-0.4	-0.3	-0.1	-0.1	-0.3	-0.3	-0.3	-0.4	-0.6	-0.8	-1.4	-1.7	0.1	-1.7	-0.5
2	-1.9	-2.2	-3.6	-3.9	-2.8	-3.5	-4.3	-3.8	-4.2	-4.7	-4.6	-4.7	-4.4	-4.2	-4.1	-3.9	-3.9	-4.1	-4.0	-3.0	-2.8	-2.1	-1.9	-1.8	-1.8	-4.7	-3.5
3	-1.6	-1.4	-1.3	-1.5	-1.7	-2.0	-2.0	-1.9	-1.9	-1.8	-1.4	-1.4	-1.2	-0.9	-0.7	-0.3	0.0	0.1	-0.4	-0.4	-0.7	-0.8	-0.7	-0.7	0.1	-2.0	-1.1
4	-0.8	-0.8	-0.8	-0.9	-1.0	-0.9	-1.0	-0.9	-1.0	-1.0	-0.8	-0.7	-0.6	-0.6	-0.6	-0.4	-0.5	-0.7	-1.1	-1.4	-2.5	-3.4	-4.6	-5.3	-0.4	-5.3	-1.3
5	-6.6	-7.8	-9.5	-10.5	-11.4	-12.0	-13.2	-13.7	-13.5	-13.5	-12.8	-12.4	-11.6	-10.8	-10.2	-9.6	-9.3	-9.0	-9.5	-10.6	-11.8	-12.4	-13.3	-12.9	-6.6	-13.7	-11.2
6	-13.3	-14.5	-14.7	-15.1	-15.6	-16.6	-16.6	-17.1	-17.0	-16.2	-16.0	-14.4	-12.7	-11.9	-11.3	-10.7	-10.3	-10.2	-10.5	-11.2	-12.2	-12.6	-12.5	-13.1	-10.2	-17.1	-13.6
7	-14.0	-14.7	-15.2	-14.6	-14.8	-13.7	-15.0	-16.0	-16.1	-15.3	-15.0	-13.4	-11.6	-10.1	-9.3	-8.7	-8.3	-8.5	-9.0	-9.6	-10.7	-11.1	-11.2	-11.2	-8.3	-16.1	-12.4
8	-11.3	-10.5	-10.1	-10.0	-10.1	-10.0	-9.5	-9.5	-8.9	-9.6	-10.1	-10.3	-9.8	-9.5	-8.9	-8.1	-7.8	-7.9	-8.5	-8.7	-9.2	-9.7	-11.2	-12.0	-7.8	-12.0	-9.6
9	-12.0	-11.2	-10.9	-11.0	-11.9	-13.0	-14.3	-15.3	-14.8	-14.0	-13.7	-13.2	-12.0	-11.0	-10.3	-9.8	-9.5	-9.6	-10.4	-11.0	-12.2	-13.3	-12.7	-13.0	-9.5	-15.3	-12.1
10	-13.2	-14.0	-15.0	-15.5	-16.3	-16.3	-16.8	-16.9	-16.8		-15.0	-14.4	-13.3	-12.1	-11.1	-10.4	-10.0	-10.4	-11.0	-11.9	-12.9	-13.7	-14.5	-14.9	-10.0	-16.9	-13.8
11	-15.1	-14.8	-15.3	-15.8	-16.3	-17.4	-17.8	-18.2	-17.9	-17.1	-16.7	-15.8	-14.5	-13.1	-12.0	-11.3	-11.3	-11.3	-11.7	-12.9	-13.8	-14.2	-15.0	-15.3	-11.3	-18.2	-14.8
12	-15.3	-14.9	-15.9	-15.5	-15.9	-15.7	-16.9	-17.2	-16.5	-15.4	-15.1	-13.7	-12.3	-10.9	-9.6	-9.2	-9.0	-8.7	-8.9	-9.2	-9.9	-10.0	-9.0	-8.5	-8.5	-17.2	-12.6
13	-8.5	-8.1	-8.2	-8.6	-8.6	-8.2	-7.5	-7.4	-7.1	-6.5	-5.7	-5.2	-4.8	-3.2	-1.5	-1.0	-0.9	-0.6	-0.8	-0.8	-0.9	-0.9	-1.3	-1.6	-0.6	-8.6	-4.5
14	-1.9	-2.1	-2.3	-2.5	-2.6	-2.6	-2.7	-2.9	-3.0	-2.9	-2.5	-2.3	-2.0	-1.7	-1.7	-1.6	-1.6	-1.0	-0.6	-0.9	-1.0	-1.0	-1.3	-1.7	-0.6	-3.0	-1.9
15	-2.0	-2.7	-2.9	-2.5	-2.4	-2.5	-3.3	-3.5	-4.5	-5.6	-6.2	-6.9	-7.0	-6.6	-7.0	-8.0	-8.2	-8.4	-9.0	-10.0	-11.2	-12.4	-13.1	-13.6	-2.0	-13.6	-6.6
16	-13.9	-14.3	-14.8	-15.2	-15.9	-16.2	-16.2	-16.5	-16.8	-16.5	-15.6	-14.6	-13.6	-12.7	-11.6	-10.2	-9.2	-8.5	-8.1	-7.8	-7.6	-7.2	-7.0	-6.3	-6.3	-16.8	-12.3
17	-6.4	-6.4	-6.3	-6.2	-6.6	-6.6	-6.4	-6.3	-5.7	-4.8	-4.2	-4.2	-3.9	-3.4	-3.2	-3.0	-2.8	-2.9	-3.0	-3.2	-3.5	-4.0	-4.0	-3.5	-2.8	-6.6	-4.6
18	-3.7	-3.4	-3.2	-3.2	-3.2	-2.6	-2.7	-2.0	-1.4	-0.3	0.5	0.5	-0.3	0.4	0.6	0.8	0.8	0.9	0.7	-0.4	-0.8	-1.4	-1.3	-2.0	0.9	-3.7	-1.1
19	-1.7	-1.8	-1.5	-1.3	-1.1	-1.5	-1.6	-1.5	-1.5	-1.4	-0.4	0.2	0.5	0.7	0.9	0.8	1.0	1.0	1.0	-0.1	-0.2	-0.4	-1.9	-2.2	1.0	-2.2	-0.6
20	-1.6	-1.5	-0.9	-0.8	-1.1	-1.7	0.0	-0.6	-0.1	0.3	1.0	1.5	1.2	1.1	0.9	0.7	0.8	-0.1	-0.5	-0.7	-1.0	-1.1	-1.4	-1.5	1.5	-1.7	-0.3
21	-1.5	-1.4	-1.3	-1.1	-0.6	-0.8	-1.4	-1.7	-1.7	-1.4	-0.9	-0.6	-0.3	-0.2	0.1	0.2	0.2	0.1	0.1	0.3	0.0	-0.1	-0.3	-0.8	0.3	-1.7	-0.6
22	-0.3	0.1	1.3	1.7	1.5	-0.9	-0.3	1.1	1.6	2.4	2.7	3.1	3.9	4.0	4.2	4.4	4.5	4.8	4.6	4.9	5.0	5.6	4.4	4.0	5.6	-0.9	2.8
23	4.7	4.8	4.2	2.9	3.1	3.6	2.2	1.3	2.3	2.5	3.8	4.5	3.7	3.8	4.1	4.9	5.7	5.8	6.0	5.6	5.1	5.6	4.7	3.9	6.0	1.3	4.1
24	3.9	2.6	0.9	-0.2	-1.6	-4.0	-4.6	-4.4	-4.7	-3.7	-2.9	-2.3	-2.2	-2.0	-1.8	-1.4	-1.2	-1.2	-1.0	-0.8	-0.9	-1.0	-1.4	-2.7	3.9	-4.7	-1.6
25	-3.8	-4.3	-4.5	-5.8	-6.9	-7.4	-7.7	-8.6	-9.6	-9.5	-8.7	-8.4	-8.0	-7.5	-7.4	-7.2	-6.9	-6.9	-6.6	-6.8	-7.1	-8.5	-9.1	-10.3	-3.8	-10.3	-7.4
26	-10.7	-12.2	-12.5	-12.4	-13.1	-13.8	-13.4	-12.8	-11.9	-10.9	-10.0	-9.2	-8.2	-7.2	-6.9	-6.7	-6.3	-5.6	-5.1	-5.0	-5.2	-5.7	-6.5	-6.8	-5.0	-13.8	-9.1
27	-6.7	-6.8	-7.0	-7.3	-7.4	-7.9	-8.2	-8.3	-8.3	-8.2	-8.0	-7.8	-7.4	-6.5	-6.2	-6.2	-6.2	-6.0	-5.3	-5.4	-5.8	-6.3	-6.3	-6.4	-5.3	-8.3	-6.9
28	-6.8	-7.4	-7.9	-7.9	-7.9	-7.7	-7.8	-8.1	-8.5	-7.4	-6.2	-5.7	-5.2	-4.9	-4.0	-3.4	-3.4	-3.1	-3.5	-4.0	-4.6	-4.9	-5.2	-5.8	-3.1	-8.5	-5.9
29	-6.0	-5.6	-5.9	-6.2	-5.7	-5.6	-5.6	-5.7	-5.5	-5.2	-4.8	-4.2	-3.3	-2.3	-1.6	-1.1	-0.8	-0.8	-0.9	-1.2	-1.9	-3.0	-3.8	-4.8	-0.8	-6.2	-3.8
30	-4.9	-5.2	-5.9	-6.0	-6.7	-7.3	-7.2	-7.0	-7.1	-6.6	-5.4	-4.1	-2.5	-1.7	-0.9	-0.6	-1.2	-1.8	-2.2	-2.4	-2.9	-3.2	-3.4	-3.6	-0.6	-7.3	-4.2
Max.	**4.7**	**4.8**	**4.2**	**2.9**	**3.1**	**3.6**	**2.2**	**1.3**	**2.3**	**2.5**	**3.8**	**4.5**	**3.9**	**4.0**	**4.2**	**4.9**	**5.7**	**5.8**	**6.0**	**5.6**	**5.1**	**5.6**	**4.7**	**4.0**	**6.0**		
Min.	**-15.3**	**-14.9**	**-15.9**	**-15.8**	**-16.3**	**-17.4**	**-17.8**	**-18.2**	**-17.9**	**-17.1**	**-16.7**	**-15.8**	**-14.5**	**-13.1**	**-12.0**	**-11.3**	**-11.3**	**-11.3**	**-11.7**	**-12.9**	**-13.8**	**-14.2**	**-15.0**	**-15.3**		**-18.2**	
Avg.	**-5.9**	**-6.1**	**-6.4**	**-6.6**	**-6.8**	**-7.2**	**-7.4**	**-7.5**	**-7.4**	**-6.7**	**-6.5**	**-6.0**	**-5.5**	**-4.9**	**-4.4**	**-4.0**	**-3.9**	**-3.8**	**-4.0**	**-4.3**	**-4.8**	**-5.1**	**-5.5**	**-5.9**			**-5.7**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.7	-4.0	-4.8	-5.8	-5.8	-6.0	-6.6	-6.8	-6.6	-6.1	-5.0	-3.7	-2.2	-0.7	-0.1	0.2	0.4	0.3	0.4	-0.1	-0.7	-0.4	-0.7	-1.1	0.4	-6.8	-2.9
2	-1.5	-1.5	-1.5	-2.0	-2.1	-2.1	-2.1	-2.3	-2.1	-1.6	-0.7	-0.1	0.9	1.5	1.3	1.2	1.8	2.2	2.7	1.1	0.6	-0.1	0.0	-0.2	2.7	-2.3	-0.3
3	0.4	-0.1	-0.4	-1.1	-1.4	-1.5	-1.4	-1.0	-0.5	-0.3	-0.1	0.2	1.4	1.7	1.8	2.1	1.2	1.0	1.5	2.3	2.3	0.9	0.5	0.9	2.3	-1.5	0.4
4	0.5	0.2	0.2	0.2	0.5	0.4	0.8	0.7	1.1	1.2	1.6	1.7	2.1	2.7	3.1	3.7	3.7	4.0	3.9	3.8	3.3	1.7	1.2	1.4	4.0	0.2	1.8
5	1.1	0.9	1.0	0.9	0.9	0.8	0.9	0.9	1.6	2.2	2.6	2.4	2.5	2.8	3.2	3.4	3.8	4.3	4.0	3.7	3.0	2.6	2.5	1.9	4.3	0.8	2.2
6	1.8	1.3	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.9	1.2	1.6	1.5	1.8	1.9	2.0	2.1	2.0	1.8	1.4	0.8	0.6	0.4	0.3	2.1	0.3	1.1
7	0.4	0.5	0.7	0.6	0.6	0.4	0.5	0.7	0.9	1.7	2.2	2.4	2.3	2.5	2.6	2.7	2.5	2.5	2.5	2.2	1.9	1.9	1.3	1.1	2.7	0.4	1.6
8	1.2	1.2	1.0	1.2	1.2	0.7	0.7	0.9	1.2	1.5	1.9	2.6	2.3	2.2	1.8	2.1	2.3	2.6	2.4	2.2	2.0	1.9	2.0	2.0	2.6	0.7	1.7
9	1.7	1.6	1.5	1.2	1.3	1.2	1.0	1.0	1.5	2.0	2.4	2.4	2.1	2.1	2.0	2.5	2.5	2.2	2.1	1.8	1.7	1.5	1.4	1.4	2.5	1.0	1.7
10	1.1	0.5	0.5	0.2	0.1	0.2	0.5	0.7	0.9	1.1	1.5	2.1	2.6	3.3	4.4	4.7	4.2	4.9	4.8	4.4	3.3	2.8	3.2	2.5	4.9	0.1	2.3
11	2.5	1.9	1.9	1.9	1.8	2.3	2.1	2.2	3.0	3.2	2.6	2.0	1.9	1.9	3.5	4.2	4.3	3.7	4.3	4.0	3.8	3.5	2.7	2.1	4.3	1.8	2.8
12	2.2	1.7	1.5	1.4	1.2	1.3	0.9	1.1	1.8	2.1	2.7	3.3	4.1	3.6	3.3	2.3	1.6	1.9	1.9	1.7	1.4	0.9	0.5	0.5	4.1	0.5	1.9
13	0.5	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.1	0.3	1.2	2.0	2.9	3.0	3.2	2.7	2.6	2.1	2.0	1.6	1.3	0.8	0.4	0.1	3.2	-0.1	1.1
14	-0.3	-0.3	-0.6	-0.7	0.2	0.3	0.7	0.9	1.3	0.9	0.7	1.1	2.3	3.7	5.1	4.7	5.0	4.9	4.8	4.2	3.8	3.9	3.8	3.6	5.1	-0.7	2.2
15	3.2	3.2	3.0	2.1	2.2	2.0	2.2	2.2	2.4	2.8	3.5	4.8	5.2	5.1	5.1	4.8	3.9	2.9	2.5	2.2	1.5	1.0	0.5	0.8	5.2	0.5	2.9
16	0.8	0.7	0.5	0.1	0.0	-0.3	-0.5	-0.5	-0.5	-0.4	-0.1	0.4		2.8	3.3	3.5	3.7	3.8	3.8	3.7	3.6	2.1	1.1	1.5	3.8	-0.5	1.4
17	0.6	-0.5	-0.3	-0.1	0.2	-0.3	0.2	0.6	0.4	1.2	2.5	3.9	4.8	5.1	5.7	7.0	7.3	7.1	7.7	7.2	6.0	4.1	3.0	2.6	7.7	-0.5	3.2
18	1.9	1.8	1.8	1.3	1.4	0.6	0.1	0.3	0.9	1.4	1.1	1.5	1.8	1.7	2.0	2.6	2.5	3.0	3.2	2.9	2.2	1.4	0.2	0.2	3.2	0.1	1.6
19	0.6	0.8	0.6	0.3	0.0	-0.3	0.3	0.2	0.2	0.3	0.8	1.9	2.9	3.4	3.7	4.9	3.8	3.9	4.1	4.2	3.8	3.1	2.4	1.7	4.9	-0.3	2.0
20	1.8	1.5	0.9	0.3	0.3	0.3	0.6	0.7	1.8	3.1	4.4	6.4	8.1	9.6	10.3	10.8	10.7	10.8	10.6	10.3	9.7	8.4	7.6	7.2	10.8	0.3	5.7
21	7.3	6.8	6.4	6.5	6.5	6.0	4.9	3.7	3.6	3.8	5.5	6.9	7.5	8.6	8.6	8.7	9.0	9.0	9.0	7.3	5.0	4.2	3.7	3.7	9.0	3.6	6.3
22	3.6	3.1	2.9	2.4	2.3	2.5	1.4	1.9	2.6	3.1	3.7	4.7	6.2	8.1	9.0	9.1	8.2	7.4	6.1	5.2	4.2	3.2	2.8	2.5	9.1	1.4	4.4
23	2.1	1.5	1.0	1.0	0.8	1.3	1.4	1.4	1.8	2.2	3.2	3.1	2.8	2.5	2.5	3.1	3.2	3.3	3.2	3.2	3.2	3.1	2.8	2.4	3.3	0.8	2.3
24	2.2	2.4	2.2	2.1	1.9	1.8	1.7	1.9	2.3	2.8	2.7	3.1	3.5	3.6	4.3	4.8	5.0	5.1	4.7	2.7	3.7	3.2	2.6	2.1	5.1	1.7	3.0
25	1.1	1.2	1.5	1.5	1.2	0.9	0.7	0.6	0.9	1.6	2.7	3.2	3.0	2.3	1.8	3.2	4.9	4.4	4.2	3.7	3.3	2.8	2.0	1.9	4.9	0.6	2.3
26	1.8	1.3	1.1	0.9	1.0	1.2	1.6	1.2	1.2	1.8	2.6	2.8	3.5	3.6	5.0	3.0	3.5	4.2	3.9	3.6	3.8	3.3	2.9	2.2	5.0	0.9	2.5
27	1.6	1.5	0.8	0.7	-0.4	-0.6	0.1	0.8	1.5	2.8	3.7	4.9	5.8	6.5	7.4	8.1	8.4	8.8	8.9	8.2	6.9	6.1	4.9	4.1	8.9	-0.6	4.2
28	3.8	3.4	2.7	2.7	2.7	3.2	2.8	3.0	4.1	5.3	6.0	6.8	8.0	8.7	9.3	10.0	10.2	9.9	9.2	8.7	7.9	7.2	6.7	5.6	10.2	2.7	6.2
29	4.9	4.4	4.7	4.3	3.5	3.2	3.3	3.8	4.5	5.7	7.6	8.8	8.9	9.4	10.1	10.8	11.5	11.6	11.9	12.0	11.3	9.7	8.2	7.4	12.0	3.2	7.6
30	6.7	6.9	7.2	8.1	8.2	7.3	7.3	7.8	8.1	9.3	10.1	10.7	11.4	11.2	11.8	11.5	11.4	10.0	9.2	8.7	6.9	6.0	5.4	5.1	11.8	5.1	8.6
31	4.6	4.4	4.2	4.0	3.8	3.8	3.9	3.9	3.8	4.0	4.6	5.2	5.9	6.3	6.6	6.9	6.7	6.6	5.8	5.2	4.2	4.0	3.5	2.9	6.9	2.9	4.8
Max.	**7.3**	**6.9**	**7.2**	**8.1**	**8.2**	**7.3**	**7.3**	**7.8**	**8.1**	**9.3**	**10.1**	**10.7**	**11.4**	**11.2**	**11.8**	**11.5**	**11.5**	**11.6**	**11.9**	**12.0**	**11.3**	**9.7**	**8.2**	**7.4**	**12.0**		
Min.	**-3.7**	**-4.0**	**-4.8**	**-5.8**	**-5.8**	**-6.0**	**-6.6**	**-6.8**	**-6.6**	**-6.1**	**-5.0**	**-3.7**	**-2.2**	**-0.7**	**-0.1**	**0.2**	**0.4**	**0.3**	**0.4**	**-0.1**	**-0.7**	**-0.4**	**-0.7**	**-1.1**		**-6.8**	
Avg.	**1.8**	**1.6**	**1.4**	**1.2**	**1.1**	**1.0**	**1.0**	**1.1**	**1.4**	**1.9**	**2.6**	**3.2**	**3.9**	**4.2**	**4.6**	**4.9**	**4.9**	**4.9**	**4.8**	**4.3**	**3.7**	**3.1**	**2.6**	**2.3**			**2.8**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.1	3.5	3.3	4.0	4.4	4.5	4.7	4.9	4.7	4.7	5.6	7.1	7.9	7.3	7.7	7.5	7.0	6.1	6.0	5.7	5.6	4.9	4.6	3.7	7.9	3.1	5.4
2	3.7	4.2	4.5	4.7	4.4	4.1	3.9	4.9	5.6	6.5	6.9	7.2	7.9	9.0	9.4		9.8	9.3	8.8	8.4	8.2	7.9	6.8	5.7	9.8	3.7	6.6
3	5.5	5.7	5.6	4.9	5.3	5.5	5.7	5.8	5.6	6.0	7.4	8.6	8.5	10.0	9.8	9.1	8.3	9.5	8.5	7.6	5.6	4.6	3.6	3.3	10.0	3.3	6.7
4	3.0	2.8	2.6	2.4	2.3	2.2	2.2	2.6	4.5	4.7	5.6	6.2	6.6	6.7	8.6	8.0	8.3	8.0	8.1	7.9	6.9	5.8	4.6	3.2	8.6	2.2	5.2
5	2.7	2.4	2.3	2.4	2.4	2.4	2.7	2.9	3.1	3.6	3.9	3.8	3.9	5.0	5.6	5.3	5.7	5.5	4.9	5.1	4.8	4.4	4.1	3.1	5.7	2.3	3.8
6	2.8	2.3	2.1	2.0	1.6	2.2	2.4	2.9	3.3	4.3	5.7	6.9	8.8	10.1	10.7	11.4	12.3	11.4	11.4	10.2	9.7	10.2	8.8	6.4	12.3	1.6	6.7
7	6.4	5.7	4.9	5.1	4.2	4.5	5.2	6.2	7.7	9.1	10.0	10.5	11.4	12.3	13.4	13.6	14.1	14.1	14.1	13.5	12.6	10.3	8.6	6.7	14.1	4.2	9.3
8	5.0	4.0	3.6	3.2	2.5	2.4	2.5	3.1	4.5	5.2	6.6	7.2	7.2	7.4	7.6	7.7	7.3	7.1	6.8	6.5	6.6	6.0	3.8	2.6	7.7	2.4	5.3
9	1.9	1.6	1.3	0.9	0.5	0.5	0.3	0.5	0.7	1.1	1.9	2.7	3.5	3.9	4.5	5.5	5.8	5.6	5.5	5.7	5.7	5.3	4.3	4.2	5.8	0.3	3.1
10	4.1	3.6	2.3	1.9	1.7	1.5	1.2	1.6	1.9	2.4	3.2	3.8	4.5	5.4	6.0	6.5	6.6	6.7	6.4	5.7	5.2	4.7	4.4	4.2	6.7	1.2	4.0
11	3.9	3.7	3.6	3.4	3.1	2.7	2.7	2.7	2.8	3.5	4.1	3.8	4.1	4.4	4.6	5.0	5.4	5.7	5.5	5.5	5.2	4.3	3.9	3.4	5.7	2.7	4.0
12	2.3	2.4	2.1	1.7	1.3	0.8	0.7	1.2	1.5	2.5	3.5	4.2	4.6	4.7	4.8	4.8	4.4	4.0	3.7	2.9	2.8	2.4	2.0	1.9	4.8	0.7	2.8
13	1.6	1.5	1.4	1.8	2.4	2.9	3.2	3.5	4.0	4.5	5.2	6.1	7.9	8.8	9.5	10.4	11.3	11.7	12.8	13.7	13.0	12.3	10.2	9.8	13.7	1.4	7.1
14	9.8	9.4	7.8	5.4	5.5	5.9	5.0	4.7	4.3	6.6	7.0	8.7	10.4	11.4	12.9	13.1	13.6	13.6	13.2	10.8	8.7	8.9	8.7	8.1	13.6	4.3	8.9
15	7.5	7.2	6.4	5.9	5.2	3.8	4.9	5.9	4.8	6.7	6.6	7.9	8.3	9.3	10.4	10.6	10.0	9.6	9.8	9.6	8.1	7.1	6.7	6.5	10.6	3.8	7.5
16	6.2	5.9	5.7	5.5	4.9	4.5	4.7	5.7	6.4	7.2	7.8	8.7	9.9	10.4	11.1	11.2	10.5	11.2	12.1	12.4	12.8	11.4	10.7	10.2	12.8	4.5	8.6
17	10.2	10.2	10.1	10.0	10.2	9.9	9.8	9.9	11.3	12.0	12.0	12.8	14.0	15.3	15.9	16.4	16.7	16.7	16.7	15.8	14.8	13.1	11.0	9.2	16.7	9.2	12.7
18	8.4	8.8	9.1	8.1	8.5	8.8	8.0	8.1	9.5	10.5	10.7	10.7	12.2	13.0	13.2	13.6	13.7	14.0	13.2	13.3	12.9	12.3	10.7	8.7	14.0	8.0	10.8
19	8.3	8.0	7.7	7.1	6.6	6.4	6.6	7.3	8.8	9.8	10.3	10.0	10.4	11.4	12.3	12.9	12.7	13.5	13.8	13.5	12.8	11.5	10.6	10.0	13.8	6.4	10.1
20	8.6	7.8	7.4	6.8	6.9	6.5	6.5	7.3	7.9	9.1	9.7	10.7	11.5	12.5	12.9	13.1	12.9	12.3	11.7	10.6	9.1	8.0	6.9	5.8	13.1	5.8	9.3
21	5.4	5.1	4.8	4.9	4.7	4.3	5.2	6.0	6.7	7.5	8.1	9.1	9.5	9.7	10.2	11.3	11.7	12.5	13.3	12.8	11.6	10.0	8.5	7.5	13.3	4.3	8.3
22	7.3	7.1	6.5	6.1	6.1	6.2	6.5	7.3	8.2	8.8	9.5	10.3	10.8	11.4	11.4	10.6	10.2	10.2	9.5	8.8	7.7	7.0	6.1	5.9	11.4	5.9	8.3
23	5.8	5.6	5.4	5.3	4.9	4.0	4.7	5.2	6.2	6.6	7.0	7.7	8.7	9.4	10.3	10.9	11.2	11.4	11.3	11.0	10.0	8.6	6.9	5.4	11.4	4.0	7.7
24	4.9	4.7	4.2	4.0	3.9	3.7	4.6	5.6	6.5	7.6	7.8	8.5	8.2	7.7	7.8	7.7	7.6	7.3	7.4	7.5	7.4	7.2	7.0	6.8	8.5	3.7	6.5
25	6.7	7.1	7.3	6.7	6.4	5.9	6.2	6.9	6.6	8.1	8.9	10.0	10.6	11.1	11.1	11.1	10.9	10.5	9.8	9.3	8.5	8.1	8.0	7.2	11.1	5.9	8.5
26	6.9	6.4	5.8	6.2	6.3	6.6	6.8	7.3	7.7	8.5	9.4	10.3	11.1	9.8	9.9	10.3	10.0	10.2	10.2	10.1	10.1	10.0	9.1	8.7	11.1	5.8	8.7
27	8.2	7.9	8.0	7.8	6.8	6.4	6.6	6.8	7.0	7.8	7.7	8.7	10.0	10.7	10.6	11.2	11.1	11.6	11.3	10.2	8.8	7.7	6.7	5.9	11.6	5.9	8.6
28	4.8	4.4	4.8	4.7	4.4	5.2	6.1	6.1	6.4	7.8	7.5	8.3	8.3	9.6	11.0	10.6	8.6	9.6	10.0	10.1	10.0	8.4	7.5	6.9	11.0	4.4	7.5
29	6.3	6.2	6.4	5.7	5.4	5.5	5.4	5.4	6.0	6.7	7.2	7.7	8.7	9.2	9.9	10.5	10.4	10.5	10.1	9.6	8.3	7.1	6.5	5.7	10.5	5.4	7.5
30	5.2	5.1	5.2	5.1	5.0	4.6	4.4	5.3	6.2	7.0	7.8	8.8	9.2	9.7	10.2	11.2	10.8	11.4	12.0	11.1	10.4	10.9	10.3	9.5	12.0	4.4	8.2
Max.	**10.2**	**10.2**	**10.1**	**10.0**	**10.2**	**9.9**	**9.8**	**9.9**	**11.3**	**12.0**	**12.0**	**12.8**	**14.0**	**15.3**	**15.9**	**16.4**	**16.7**	**16.7**	**16.7**	**15.8**	**14.8**	**13.1**	**11.0**	**10.2**	**16.7**		
Min.	**1.6**	**1.5**	**1.3**	**0.9**	**0.5**	**0.5**	**0.3**	**0.5**	**0.7**	**1.1**	**1.9**	**2.7**	**3.5**	**3.9**	**4.5**	**4.8**	**4.4**	**4.0**	**3.7**	**2.9**	**2.8**	**2.4**	**2.0**	**1.9**		**0.3**	
Avg.	**5.5**	**5.3**	**5.1**	**4.8**	**4.6**	**4.5**	**4.6**	**5.1**	**5.7**	**6.5**	**7.1**	**7.9**	**8.6**	**9.2**	**9.8**	**10.0**	**10.0**	**10.0**	**9.9**	**9.5**	**8.8**	**8.0**	**7.1**	**6.2**			**7.2**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.5	9.8	9.8	9.4	8.7	8.1	7.3	7.6	8.7	10.1	11.2	11.8	12.9	13.5	13.7	13.7	13.1	12.8	11.4	11.1	9.9	9.0	8.3	7.8	13.7	7.3	10.4
2	7.1	6.7	6.3	6.0	5.7	5.6	5.7	5.9	6.1	6.9	8.6	9.2	10.6	11.0	10.9	11.8	12.3	12.8	11.5	9.5	9.6	9.1	8.2	7.4	12.8	5.6	8.5
3	7.8	6.8	7.0	8.1	9.2	8.0	8.5	8.5	8.2	7.7	6.7	7.3	8.1	8.5	9.2	10.0	9.5	9.4	9.1	8.9	8.7	8.4	8.3	8.0	10.0	6.7	8.3
4	7.4	7.1	7.0	7.0	7.5	7.8	8.2	8.5	9.1	9.7	10.3	11.1	12.2	13.1	12.8	12.3	12.9	13.6	11.9	10.0	8.9	8.7	8.4	7.9	13.6	7.0	9.7
5	8.4	9.2	9.9	10.3	10.3	9.9	9.8	10.1	10.8	11.8	12.6	13.8	15.2	15.8	15.8	14.8	13.6	14.2	14.2	14.4	13.9	13.0	12.4	11.9	15.8	8.4	12.3
6	11.5	10.4	10.0	9.9	9.6	10.6	11.2	11.8	12.5	14.9	16.4	16.7	17.1	16.2	14.0	13.6	13.4	13.0	12.0	11.4	10.5	10.1	9.5	9.0	17.1	9.0	12.3
7	8.6	8.4	8.1	7.9	7.8	7.9	8.0	8.0	7.0	6.7	6.9	6.8	6.9	7.3	6.8	7.0	7.1	7.7	8.3	8.5	8.0	7.8	7.3	6.9	8.6	6.7	7.6
8	6.5	6.4	6.2	6.7	6.6	5.9	6.0	5.8	6.1	6.7	7.2	7.5	7.4	7.9	8.6	9.2	9.4	9.3	9.3	9.4	9.0	8.7	8.6	8.5	9.4	5.8	7.6
9	8.3	8.4	8.4	8.5	8.8	8.5	8.7	9.2	10.6	11.6	11.6	12.0	13.0	14.0	14.5	15.0	14.5	13.5	12.4	11.4	10.8	10.0	9.6	8.9	15.0	8.3	10.9
10	8.2	8.2	8.1	7.8	7.7	7.9	7.7	7.8	7.9	8.6	8.9	9.8	10.5	11.7	12.3	12.4	12.7	13.4	12.8	11.8	10.7	10.2	9.3	8.8	13.4	7.7	9.8
11	8.1	7.5	6.9	6.6	6.6	6.3	6.3	6.3	6.5	8.3	8.8	9.0	9.9	10.7	11.6	12.3	12.6	12.4	11.9	11.3	10.5	9.3	8.0	7.6	12.6	6.3	9.0
12	7.4	6.7	6.2	6.2	5.7	5.0	5.6	7.2	8.5	9.1	9.8	9.7	9.4	10.1	10.2	9.8	9.7	9.5	8.3	7.4	7.1	6.9	6.7	6.7	10.2	5.0	7.9
13	6.9	6.9	6.9	6.7	6.6	6.6	6.5	6.6	6.6	6.7	6.9	7.3	7.6	8.3	8.7	9.2	9.3	9.3	9.4	9.2	9.2	8.8	8.3	8.1	9.4	6.5	7.8
14	7.7	7.6	7.7	7.5	7.3	7.6	7.6	7.9	8.3	8.8	9.6	10.4	10.9	11.7	12.8	13.4	13.1	13.5	13.9	14.1	13.1	12.3	11.4	10.4	14.1	7.3	10.4
15	9.5	9.3	9.2	9.1	9.1	8.9	8.9	9.2	9.8	11.0	11.8	12.6	13.2	14.1	14.6	15.1	14.0	12.9	12.2	10.8	10.0	9.4	9.4	9.5	15.1	8.9	11.0
16	9.4	9.3	9.3	9.1	8.9	8.8	8.6	8.7	8.8	8.5	8.0	7.8	8.4	8.9	9.5	9.5	8.2	7.8	7.8	7.6	7.4	7.4	7.2	7.1	9.5	7.1	8.4
17	7.0	7.0	5.8	4.4	3.2	3.0	3.1	3.3	3.6	4.1	3.9	4.3	5.2	6.1	6.3	6.8	7.1	8.1	7.7	7.4	6.8	6.4	5.9	5.5	8.1	3.0	5.5
18	5.2	4.9	4.4	3.9	3.8	3.6	3.5	3.9	4.4	4.7	5.0	5.3	5.6	6.4	6.6	7.0	7.5	7.4	7.5	7.6	7.2	7.1	6.8	6.6	7.6	3.5	5.7
19	6.3	5.8	5.6	5.1	4.4	5.1	5.7	6.0	6.3	6.8	7.3	9.7	9.9	10.6	12.0	11.3	12.0	10.6	10.5	9.9	9.6	9.3	8.8	8.5	12.0	4.4	8.2
20	8.1	8.3	8.1	8.2	8.0	8.2	8.5	8.8	8.5	7.6	7.3	6.5	6.2	6.2	6.4	6.3	6.1	5.6	5.2	5.1	5.0	4.9	5.0	5.1	8.8	4.9	6.8
21	5.1	4.8	4.6	4.4	4.4	4.4	4.6	4.6	4.8	5.2	5.7	6.5	7.1	8.0	8.5	8.6	9.5	11.0	9.5	9.7	10.0	9.1	8.1	7.3	11.0	4.4	6.9
22	6.5	6.3	6.0	5.7	5.4	5.4	5.6	5.9	6.0	6.2	6.4	6.6	6.1	5.9	5.9	6.1	6.1	5.9	5.8	5.8	5.8	5.5	5.3	5.2	6.6	5.2	5.9
23	5.2	5.1	5.0	5.0	5.0	5.0	5.0	5.2	5.7	6.3	6.8	7.3	7.8	7.6	7.6	8.0	9.4	9.3	9.0	8.3	7.0	6.0	5.7	5.3	9.4	5.0	6.6
24	4.8	4.7	4.9	4.9	4.5	4.5	4.9	5.7	6.2	6.5	7.0	7.7	8.8	9.8	10.9	11.9	13.3	13.7	12.4	12.7	11.7	11.7	12.4	10.8	13.7	4.5	8.6
25	9.7	8.1	7.3	7.4	7.7	6.7	6.5	7.7	8.8	10.1	11.5	13.1	14.5	15.6	16.6	17.3	17.8	17.4	17.7	17.7	17.0	16.1	14.4	12.9	17.8	6.5	12.5
26	11.2	9.4	9.3	8.9	9.0	7.8	7.6	7.5	8.3	8.4	8.6	8.4	8.2	8.5	8.6	9.0	9.4	9.5	10.4	10.5	9.8	8.7	8.1	7.8	11.2	7.5	8.9
27	7.4	7.1	6.8	6.7	6.6	6.5	6.6	6.5	6.4	6.5	6.7	6.9	7.3	8.0	8.4	8.6	8.6	8.9	9.1	9.3	8.6	8.0	7.3	7.3	9.3	6.4	7.5
28	7.3	6.8	6.5	6.5	7.1	7.3	7.6	8.2	9.1	10.4	11.2	12.3	12.6	14.0	14.5	14.6	15.0	15.5	15.3	14.5	14.1	13.3	12.2	10.1	15.5	6.5	11.1
29	8.7	8.5	7.5	6.5	6.6	7.3	6.5	6.7	8.3	9.7	11.3	12.6	13.7	15.1	16.3	17.4	17.8	17.8	16.7	16.9	16.1	14.6	12.4	10.5	17.8	6.5	11.9
30	9.6	9.4	9.6	8.9	9.0	9.0	8.9	8.5	9.2	11.0	11.6	12.6	14.0	15.4	16.1	16.7	16.2	15.7	14.9	13.8	13.1	12.1	10.6	9.5	16.7	8.5	11.9
31	8.3	8.1	8.2	7.3	6.9	6.5	7.0	7.5	8.9	10.3	12.5	14.6	15.6	16.9	17.9	18.4	18.8	19.2	19.4	19.1	18.6	16.7	14.6	13.6	19.4	6.5	13.1
Max.	**11.5**	**10.4**	**10.0**	**10.3**	**10.3**	**10.6**	**11.2**	**11.8**	**12.5**	**14.9**	**16.4**	**16.7**	**17.1**	**16.9**	**17.9**	**18.4**	**18.8**	**19.2**	**19.4**	**19.1**	**18.6**	**16.7**	**14.6**	**13.6**	**19.4**		
Min.	**4.8**	**4.7**	**4.4**	**3.9**	**3.2**	**3.0**	**3.1**	**3.3**	**3.6**	**4.1**	**3.9**	**4.3**	**5.2**	**5.9**	**5.9**	**6.1**	**6.1**	**5.6**	**5.2**	**5.1**	**5.0**	**4.9**	**5.0**	**5.1**		**3.0**	
Avg.	**7.8**	**7.5**	**7.3**	**7.1**	**7.0**	**6.9**	**7.0**	**7.3**	**7.7**	**8.4**	**9.0**	**9.6**	**10.2**	**10.9**	**11.3**	**11.5**	**11.6**	**11.6**	**11.2**	**10.8**	**10.3**	**9.6**	**9.0**	**8.4**			**9.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.6	12.1	12.8	11.6	10.6	9.9	9.4	9.6	10.4	9.2	9.4	10.1	11.8	13.5	15.3	16.7	16.7	17.3	17.2	16.6	14.0	11.8	10.3	9.4	17.3	9.2	12.4
2	9.0	8.4	8.2	8.0	8.0	8.0	8.0	8.2	8.4	8.6	8.6	9.0	9.3	9.9	10.4	10.6	10.8	11.2	10.7	10.5	10.4	10.3	10.1	9.6	11.2	8.0	9.3
3	9.7	9.3	9.1	9.3	8.9	7.6	7.1	7.1	8.2	9.7	10.8	12.2	13.1	13.1	13.6	14.4	14.3	14.3	13.6	12.5	11.2	9.8	9.0	8.2	14.4	7.1	10.7
4	7.8	7.4	6.7	6.6	6.9	7.1	7.3	7.7	7.8	8.5	9.4	9.8	10.0	10.9	11.4	11.7	12.0	12.8	12.9	11.8	10.2	8.5	7.8	7.1	12.9	6.6	9.2
5	7.1	6.6	6.9	6.9	6.9	7.4	8.0	7.7	8.3	8.8	10.1	12.4	12.9	13.9	14.2	14.6	15.0	15.2	14.8	14.6	13.7	12.3	9.7	8.7	15.2	6.6	10.7
6	7.7	7.3	6.1	6.5	6.5	7.3	7.3	7.5	8.2	9.3	10.9	12.1	13.5	14.3	15.0	15.3	15.8	15.0	14.0	13.6	13.3	12.3	10.5	9.5	15.8	6.1	10.8
7	9.2	8.9	8.4	8.1	7.1	6.7	5.9	7.1	7.9	9.2	10.3	11.4	12.6	13.7	14.2	14.0	14.2	14.9	14.6	14.5	13.4	11.4	9.8	9.0	14.9	5.9	10.7
8	8.4	7.7	7.3	7.0	6.6	5.7	5.0	5.1	6.8	8.6	10.0	11.3	12.8	13.8	14.6	15.5	16.0	16.2	16.1	15.6	15.5	13.4	10.7	9.7	16.2	5.0	10.8
9	9.0	8.9	8.4	7.0	7.1	6.8	6.5	6.4	8.5	9.7	10.8	12.5	14.0	14.8	15.8	16.6	17.3	16.2	16.3	15.7	15.0	12.8	11.4	11.5	17.3	6.4	11.6
10	11.7	10.8	10.9	11.7	11.5	9.5	8.0	7.1	8.1	10.0	11.4	12.7	14.1	14.9	15.4	14.8	13.9	14.3	13.9	12.8	11.9	10.4	9.3	8.6	15.4	7.1	11.6
11	8.1	7.4	7.1	7.5	7.4	7.2	7.0	7.6	8.8	9.4	9.9	10.2	11.1	11.6	12.1	12.4	12.7	12.3	12.2	11.7	10.3	9.4	9.5	9.6	12.7	7.0	9.7
12	10.1	9.7	8.9	7.4	7.3	7.7	7.6	8.0	8.9	10.4	11.2	12.4	13.4	14.7	15.3	15.8	16.5	15.5	13.2	12.0	12.1	12.3	11.6	10.6	16.5	7.3	11.4
13	9.8	9.3	9.2	9.4	9.4	10.4	10.3	9.9	10.0	10.3	10.7	11.0	11.5	12.2	12.9	12.1	12.6	12.6	10.5	10.0	9.7	9.0	9.1	9.4	12.9	9.0	10.5
14	9.1	8.6	8.9	9.0	8.9	8.9	9.0	9.3	9.4	9.6	9.5	9.6	9.6	9.9	10.1	11.1	11.4	11.2	10.8	10.4	9.9	9.5	9.5	9.2	11.4	8.6	9.7
15	8.5	7.9	7.7	7.3	7.0	6.7	6.2	6.0	5.9	6.4	6.8	7.4	8.0	8.3	9.0	9.6	9.7	10.0	10.1	9.5	9.4	9.0	8.9	8.7	10.1	5.9	8.1
16	8.9	8.9	8.8	8.8	8.6	8.6	8.5	8.3	8.4	8.2	8.6	8.7	9.6	10.5	11.4	11.5	11.6	11.5	10.9	10.2	9.0	7.7	7.0	6.9	11.6	6.9	9.2
17	6.1	6.6	6.8	6.2	6.4	6.1	5.7	6.0	7.1	7.7	8.4	9.4	9.6	10.1	10.5	10.7	10.3	10.1	10.0	9.1	8.5	7.9	7.5	7.5	10.7	5.7	8.1
18	7.0	6.6	6.5	6.1	6.6	6.2	6.2	6.4	7.1	8.4	9.9	11.2	11.8	12.6	13.0	13.0	13.0	12.9	13.1	12.9	11.6	10.4	10.4	10.1	13.1	6.1	9.7
19	10.6	11.0	10.5	10.1	10.0	8.4	7.7	7.1	8.3	8.7	9.4	10.4	11.9	12.9	13.8	14.2	14.4	14.1	13.8	13.1	10.2	9.8	9.9	9.9	14.4	7.1	10.9
20	10.3	9.1	8.8	8.8	8.8	8.1	7.9	8.2	8.8	9.5	9.9	9.7	10.5	11.3	11.6	11.7	12.5	12.7	12.8	12.4	11.9	10.6	9.8	9.8	12.8	7.9	10.2
21	9.8	9.6	9.7	9.8	9.7	9.5	9.4	9.2	9.4	9.6	10.1	10.0	11.0	11.0	11.4	11.9	11.9	11.9	12.9	10.7	10.0	9.6	8.8	8.0	12.9	8.0	10.2
22	7.9	7.5	7.3	7.3	7.2	7.2	7.3	7.4	7.6	8.0	8.4	8.8	9.5	10.6	10.4	11.0	11.4	10.7	11.1	11.3	10.8	9.7	8.3	7.3	11.4	7.2	8.9
23	7.3	7.6	7.3	6.9	6.8	7.1	7.1	6.8	8.2	10.0	10.6	11.2	12.2	13.4	14.7	15.3	15.6	14.9	13.4	11.2	10.4	10.1	9.7	9.5	15.6	6.8	10.3
24	9.3	9.2	9.0	9.0	8.8	9.0	8.7	7.7	7.4	7.6	8.0	9.2	10.2	11.1	12.7	13.6	14.1	15.3	14.9	14.2	13.4	12.3	11.3	10.8	15.3	7.4	10.7
25	10.7	10.3	10.3	10.3	10.4	6.6	6.8	6.8	6.8	7.2	8.0	8.4	8.8	8.5	8.7	9.1	10.8	11.8	11.6	10.7	9.8	8.8	8.4	8.4	11.8	6.6	9.1
26	8.4	8.2	8.2	8.2	8.2	8.2	8.4	8.4	8.3	8.4	8.6	8.8	8.8	9.2	10.0	10.6	11.1	11.7	10.8	10.3	9.4	9.0	8.9	8.6	11.7	8.2	9.1
27	8.2	8.2	8.0	8.0	7.9	8.0	8.0	7.6	7.3	7.6	7.6	7.7	7.8	8.6	9.6	10.3	11.1	11.0	10.7	10.8	10.2	9.2	8.8	8.5	11.1	7.3	8.8
28	8.2	7.5	7.3	7.4	7.4	7.5	7.6	7.2	7.2	7.6	8.1	8.4	9.4	10.2	11.1	11.9	11.9	10.6	10.9	9.7	9.6	8.2	6.1	6.7	11.9	6.1	8.6
29	6.1	5.7	4.8	4.4	4.9	4.8	5.4	5.9	6.5	7.8	9.4	10.5	11.3	12.2	12.2	11.9	12.0	12.6	11.6	10.3	9.2	8.4	7.0	6.5	12.6	4.4	8.4
30	6.2	6.0	6.4	6.6	6.6	6.5	6.1	5.7	6.0	6.6	7.4	8.1	8.8	9.4	10.5	11.6	11.7	12.3	11.7	11.0	9.7	9.1	9.1	8.8	12.3	5.7	8.4
31	8.3	7.9	7.8	8.2	7.9	7.6	7.6	7.2	7.4	7.3	7.2	8.0	8.6	9.5	10.1	10.1	10.5	10.5	10.4	10.4	9.9	9.2	8.7	8.8	10.5	7.2	8.7
Max.	**11.7**	**12.1**	**12.8**	**11.7**	**11.5**	**10.4**	**10.3**	**9.9**	**10.4**	**10.4**	**11.4**	**12.7**	**14.1**	**14.9**	**15.8**	**16.7**	**17.3**	**17.3**	**17.2**	**16.6**	**15.5**	**13.4**	**11.6**	**11.5**	**17.3**		
Min.	**6.1**	**5.7**	**4.8**	**4.4**	**4.9**	**4.8**	**5.0**	**5.1**	**5.9**	**6.4**	**6.8**	**7.4**	**7.8**	**8.3**	**8.7**	**9.1**	**9.7**	**10.0**	**10.0**	**9.1**	**8.5**	**7.7**	**6.1**	**6.5**		**4.4**	
Avg.	**8.7**	**8.4**	**8.2**	**8.0**	**7.9**	**7.6**	**7.4**	**7.4**	**8.0**	**8.6**	**9.3**	**10.1**	**10.9**	**11.6**	**12.3**	**12.7**	**13.0**	**13.0**	**12.6**	**11.9**	**11.1**	**10.1**	**9.3**	**8.9**			**9.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.7	8.8	8.8	8.8	8.7	8.9	8.7	8.8	9.3	10.5	11.6	12.3	12.8	12.0	11.6	12.0	11.8	10.9	10.0	9.2	8.4	7.8	7.6	7.6	12.8	7.6	9.8
2	7.8	7.8	7.5	7.5	7.3	7.3	7.6	7.2	7.3	7.4	7.3	7.2	8.2	8.7	8.7	8.7	9.0	9.1	8.9	8.6	7.8	7.2	6.9	6.7	9.1	6.7	7.8
3	6.8	6.4	6.0	6.0	5.9	5.8	5.7	5.8	6.0	6.3	6.8	7.2	7.4	7.4	7.6	8.2	8.6	8.9	8.8	8.5	7.6	7.1	7.4	7.5	8.9	5.7	7.1
4	7.2	7.2	7.1	6.8	6.6	6.4	6.2	5.9	6.0	6.5	6.7	7.4	8.2	8.9	9.3	9.5	9.6	9.9	10.2	9.9	9.2	8.7	8.0	8.4	10.2	5.9	7.9
5	8.0	7.7	7.7	7.8	7.7	7.4	7.1	7.1	7.1	7.8	8.8	8.8	10.3	10.9	11.4	10.3	10.2	9.5	9.1	8.5	8.2	8.3	8.0	7.3	11.4	7.1	8.5
6	6.8	6.5	6.4	6.3	5.8	5.8	5.9	5.7	6.0	6.5	6.9	7.7	8.0	7.4	7.1	7.3	7.3	7.4	7.5	7.6	7.3	7.0	6.9	6.7	8.0	5.7	6.8
7	6.9	7.3	7.5	8.0	8.0	8.3	8.0	7.1	7.5	7.9	7.9	7.8	7.4	7.4	7.4	7.8	8.2	8.3	8.0	7.4	7.1	7.2	7.3	7.3	8.3	6.9	7.6
8	7.4	7.3	7.3	7.4	7.4	7.1	6.8	6.8	6.8	7.2	7.5	8.0	8.6	8.6	8.3	8.2	8.0	7.2	6.8	6.5	6.4	6.7	7.0	7.3	8.6	6.4	7.4
9	7.3	7.3	7.3	6.9	6.4	6.4	6.7	6.8	6.6	6.7	6.9	7.5	7.9	8.2	8.3	8.3	8.2	7.9	8.1	8.0	7.7	7.3	7.6	7.5	8.3	6.4	7.4
10	7.3	7.0	7.1	7.1	7.1	7.0	7.0	7.0	7.0	7.1	7.5	7.7	8.7	9.2	9.8	9.8	10.3	10.5	9.8	9.4	9.0	8.8	8.5	8.4	10.5	7.0	8.3
11	8.1	7.3	6.7	6.5	6.1	5.8	6.0	6.4	6.4	6.7	7.0	7.1	7.4	7.5	7.8	8.5	9.3	9.5	9.5	9.1	8.6	7.9	7.6	7.5	9.5	5.8	7.5
12	7.4	7.6	7.8	7.4	6.9	6.3	5.9	5.8	5.9	6.3	6.8	7.5	8.3	9.0	8.5	8.1	8.2	7.9	8.1	8.0	7.9	7.8	7.9	7.9	9.0	5.8	7.5
13	7.9	7.8	7.9	7.8	7.6	7.4	7.2	7.2	7.3	7.3	7.1	6.6	6.6	6.5	6.3	6.2	6.2	6.2	6.0	5.8	6.0	6.3	6.8	6.6	7.9	5.8	6.9
14	6.7	6.4	6.1	6.1	5.9	5.9	5.9	5.9	5.8	5.7	6.0	6.0	6.2	6.6	6.8	7.3	7.6	7.6	7.6	7.3	6.9	6.9	6.7	6.7	7.6	5.7	6.5
15	6.7	6.6	6.9	7.0	6.6	6.5	6.6	6.2	6.5	6.5	7.1	7.8	8.5	8.3	8.6	8.4	8.0	8.0	7.6	7.1	6.7	6.5	6.3	6.1	8.6	6.1	7.1
16	5.9	6.0	5.9	5.7	5.5	5.4	5.3	4.8	4.6	4.7	5.9	7.3	8.1	8.5	8.8	9.3	8.0	7.7	7.3	7.1	6.1	6.3	6.4	5.5	9.3	4.6	6.5
17	5.1	5.2	5.2	5.1	4.7	4.7	4.3	4.1	3.9	4.1	4.7	5.4	6.0	6.3	6.3	6.3	6.3	6.0	5.2	4.7	4.3	4.3	4.1	4.2	6.3	3.9	5.0
18	4.4	4.4	4.7	4.7	4.7	4.4	4.0	4.0	3.9	4.1	4.6	5.6	6.3	6.1	5.8	5.7	5.9	5.7	5.3	5.3	5.1	5.1	4.7	4.4	6.3	3.9	5.0
19	4.1	4.1	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.4	4.6	4.8	5.0	5.4	5.8	5.2	4.8	4.9	4.6	4.3	4.0	4.0	3.7	3.5	5.8	3.5	4.4
20	3.4	3.2	3.2	3.0	3.0	2.2	1.5	1.1	1.2	1.8	2.4	2.5	2.0	2.8	3.9	4.5	4.5	4.6	4.5	3.3	1.9	2.0	2.1	2.2	4.6	1.1	2.8
21	1.9	2.1	2.2	2.3	2.1	2.0	2.0	1.8	1.5	1.9	2.9	3.9	4.7	5.2	5.5	5.7	5.6	5.5	4.8	3.1	1.0	-0.1	-0.4	-0.3	5.7	-0.4	2.8
22	-0.8	-0.5	0.4	0.8	0.7	0.9	0.7	0.8	1.3	1.7	2.8	4.0	4.5	5.2	5.5	5.2	4.2	3.9	3.4	3.0	2.7	2.8	2.9	3.0	5.5	-0.8	2.5
23	3.4	3.5	3.8	4.2	5.3	5.6	5.6	5.5	5.5	5.5	5.4	5.5	5.5	5.7	4.9	5.1	5.2	4.9	5.1	4.9	4.6	4.5	4.4	4.5	5.7	3.4	4.9
24	4.4	4.4	4.2	4.0	3.9	3.9	3.6	3.6	3.6	3.7	4.0		3.8			5.2	5.5	5.4	5.3	5.0	4.6	4.3	4.1	4.3	5.5	3.6	4.3
25	4.1	4.2	4.2	4.3	3.9	3.7	3.8	3.8	4.0	4.6	4.7	5.4	5.8	6.1	5.8	5.9	5.9	5.6	5.4	5.1	4.8	4.6	4.6	4.4	6.1	3.7	4.8
26	4.4	4.2	4.0	4.0	3.6	3.6	3.6	3.5	3.6	3.7	4.6	5.9	6.5	7.3	7.6	7.4	8.2	8.3	7.4	6.8	5.6	4.0	3.1	2.9	8.3	2.9	5.2
27	2.0	1.3	0.5	1.1	0.1	-0.9	-0.2	-0.3	-0.8	-0.8	0.1	1.1	3.0	4.3	4.9	5.5	5.9	5.8	5.5	4.3	2.5	1.5	2.1	2.3	5.9	-0.9	2.1
28	1.2	0.6	0.1	0.4	0.2	-0.1	0.6	1.3	1.0	1.9	3.0	4.1	5.4	6.2	7.2	7.6	7.3	6.7	6.2	5.4	4.5	4.2	4.3	4.6	7.6	-0.1	3.5
29	4.4	4.3	3.6	3.3	3.0	2.7	2.4	3.0	2.5	2.6	4.1	4.7	4.6	3.6	3.4	3.7	4.5	4.7	4.3	3.9	3.4	2.9	2.7	2.3	4.7	2.3	3.5
30	2.1	2.3	2.6	1.8	0.7	0.1	0.4	0.4	0.2	0.8	2.0	2.9	3.1	4.1	4.4	4.5	4.4	4.2	4.1	3.6	2.3	2.3	2.6	2.6	4.5	0.1	2.4
Max.	**8.7**	**8.8**	**8.8**	**8.8**	**8.7**	**8.9**	**8.7**	**8.8**	**9.3**	**10.5**	**11.6**	**12.3**	**12.8**	**12.0**	**11.6**	**12.0**	**11.8**	**10.9**	**10.2**	**9.9**	**9.2**	**8.8**	**8.5**	**8.4**	**12.8**		
Min.	**-0.8**	**-0.5**	**0.1**	**0.4**	**0.1**	**-0.9**	**-0.2**	**-0.3**	**-0.8**	**-0.8**	**0.1**	**1.1**	**2.0**	**2.8**	**3.4**	**3.7**	**4.2**	**3.9**	**3.4**	**3.0**	**1.0**	**-0.1**	**-0.4**	**-0.3**		**-0.9**	
Avg.	**5.4**	**5.3**	**5.2**	**5.2**	**5.0**	**4.8**	**4.8**	**4.7**	**4.7**	**5.0**	**5.6**	**6.2**	**6.6**	**7.0**	**7.2**	**7.2**	**7.2**	**7.1**	**6.8**	**6.4**	**5.7**	**5.5**	**5.4**	**5.3**			**5.8**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.5	2.8	2.9	2.8	2.3	1.7	1.4	1.5	1.2	1.4	2.1	2.1	3.4	4.5	4.7	4.5	3.9	3.7	3.5	3.6	3.3	2.9	2.9	2.8	4.7	1.2	2.9
2	2.5	1.9	1.4	1.2	1.1	0.9	1.3	1.3	1.3	1.4	1.9	2.5	2.9	3.3	3.5	3.9	3.9	3.9	3.4	2.5	1.9	0.0	-0.9	-0.9	3.9	-0.9	1.9
3	-1.3	-1.2	-1.9	-2.1	-1.8	-2.2	-2.2	-3.0	-3.0	-2.9	-2.6	-2.4	-2.0	-1.7	-1.5	-1.2	-1.2	-1.0	-1.3	-2.0	-2.8	-3.1	-2.9	-3.0	-1.0	-3.1	-2.1
4	-3.6	-3.7	-3.7	-3.7	-4.0	-3.7	-3.0	-2.8	-3.4	-3.4	-2.7	-1.3	-0.6	0.5	1.3	1.7	1.7	1.1	0.7	0.1	-0.6	-1.3	-1.4	-1.9	1.7	-4.0	-1.6
5	-2.5	-3.0	-3.2	-3.1	-2.8	-2.8	-3.2	-3.3	-3.4	-3.4	-3.1	-3.1	-3.0	-2.9	-2.7	-2.5	-2.4	-2.4	-2.4	-2.9	-3.3	-3.5	-3.8	-4.1	-2.4	-4.1	-3.0
6	-4.0	-4.0	-4.3	-4.6	-4.5	-4.4	-4.3	-4.4	-4.5	-4.5	-4.3	-4.1	-4.0	-3.8	-3.7	-3.6	-3.3	-3.0	-3.0	-3.3	-3.5	-3.7	-3.9	-4.2	-3.0	-4.6	-4.0
7	-4.2	-4.4	-4.5	-4.5	-4.6	-4.8	-4.9	-5.1	-5.5	-5.5	-5.2	-5.1	-4.8	-4.8	-4.4	-4.1	-3.9	-3.9	-4.1	-4.3	-4.2	-4.3	-4.6	-4.9	-3.9	-5.5	-4.6
8	-4.8	-4.8	-5.0	-5.3	-5.7	-6.4	-7.8	-9.2	-8.4	-7.9	-6.9	-6.4	-5.4	-4.1	-3.6	-3.3	-3.2	-3.5	-4.2	-5.5	-5.9	-5.3	-5.5	-5.6	-3.2	-9.2	-5.6
9	-5.6	-4.9	-4.1	-2.6	-1.7	-2.0	-2.5	-2.7	-2.5	-2.1	-1.6	-1.0	-0.2	0.5	0.8	0.9	1.6	2.0	2.2	2.4	2.8	3.1	3.2	3.4	3.4	-5.6	-0.4
10	3.6	3.5	3.5	3.5	3.3	2.9	2.2	1.7	0.6	-0.3	0.4	1.8	3.0	3.5	3.8	4.1	4.4	4.1	3.7	3.5	3.7	3.8	3.8	3.9	4.4	-0.3	3.0
11	3.8	3.6	3.6	4.1	3.9	3.7	3.7	4.0	3.6	-0.6	-3.1	-4.8	-5.6	-5.9	-6.4	-6.7	-6.9	-6.8	-7.0	-7.0	-7.0	-7.1	-7.2	-7.1	4.1	-7.2	-2.3
12	-6.8	-6.7	-6.4	-6.4	-6.9	-7.4	-7.8	-7.9	-8.1	-8.5	-8.7	-8.0	-7.3	-6.8	-6.8	-6.4	-6.3	-6.7	-7.4	-8.0	-8.4	-8.8	-9.3	-9.4	-6.3	-9.4	-7.5
13	-9.7	-10.6	-10.4	-11.0	-11.0	-10.5	-10.7	-10.5	-9.9	-9.5	-9.1	-8.8	-7.6	-6.0	-4.5	-4.4	-3.8	-3.0	-3.8	-3.6	-2.9	-2.6	-2.4	-2.3	-2.3	-11.0	-7.0
14	-1.7	-1.5	-1.4	-1.3	-1.3	-1.3	-1.3	-1.6	-1.6	-1.5	-1.2	-0.9	-0.7	-0.5	-0.4	-0.2	0.1	0.2	0.0	-0.2	-0.2	-0.2	-0.4	-0.6	0.2	-1.7	-0.8
15	-1.5	-2.8	-4.3	-5.2	-5.9	-5.8	-6.4	-7.5	-7.1	-8.0	-8.2	-7.7	-7.6	-7.6	-7.4	-7.1	-7.0	-7.5	-7.6	-8.1	-8.2	-9.0	-9.9	-9.8	-1.5	-9.9	-7.0
16	-9.8	-9.1	-8.9	-8.8	-8.8	-8.9	-8.8	-9.0	-9.3	-9.4	-9.0	-9.4	-8.8	-8.7	-8.6	-8.1	-8.2	-9.1	-9.7	-10.2	-10.3	-9.9	-9.6	-9.0	-8.1	-10.3	-9.1
17	-8.3	-8.3	-8.4	-8.7	-9.1	-9.0	-9.8	-10.2	-10.4	-10.1	-10.0	-9.3	-8.4	-6.9	-6.6	-6.0	-4.6	-3.5	-3.4	-2.4	-1.7	-1.2	-1.4	-1.7	-1.2	-10.4	-6.6
18	-1.2	-1.0	-0.9	-0.8	0.1	0.2	0.3	0.2	0.0	-0.2	-0.1	-0.1	1.1	1.7	1.8	1.7	1.9	1.4	1.2	1.0	0.7	0.5	-0.6	-0.8	1.9	-1.2	0.3
19	-2.5	-3.7	-4.8	-4.7	-5.3	-6.2	-6.4	-7.7	-9.4	-9.4	-10.0	-10.3	-9.6	-8.9	-7.6	-8.1	-7.9	-7.2	-7.4	-7.4	-7.2	-6.9	-6.8	-6.3	-2.5	-10.3	-7.2
20	-5.6	-5.1	-5.0	-4.3	-4.5	-5.1	-5.5	-7.6	-8.4	-8.1	-8.0	-10.2	-10.0	-10.0	-9.8	-9.9	-9.5	-9.5	-8.6	-8.6	-8.3	-8.1	-8.0	-7.4	-4.3	-10.2	-7.7
21	-6.8	-6.6	-5.8	-5.7	-5.9	-6.3	-6.5	-7.1	-7.3	-7.8	-9.0	-9.3	-9.2	-8.4	-7.7	-7.0	-7.3	-7.7	-8.0	-8.9	-10.0	-10.7	-11.7	-12.4	-5.7	-12.4	-8.0
22	-12.7	-12.5	-12.5	-12.9	-13.4	-13.7	-13.9	-14.0	-14.1	-14.2	-14.6	-14.4	-14.0	-13.5	-12.7	-12.6	-12.2	-12.8	-13.1	-13.8	-15.1	-15.7	-15.8	-15.1	-12.2	-15.8	-13.7
23	-14.3	-14.5	-14.1	-14.1	-14.4	-14.6	-15.0	-15.3	-15.5	-15.3	-14.8	-14.4	-13.9	-13.2	-12.4	-12.5	-12.6	-12.4	-12.9	-12.1	-10.3	-10.3	-10.6	-11.1	-10.3	-15.5	-13.4
24	-10.4	-10.8	-11.0	-10.6	-10.8	-11.7	-13.4	-14.1	-13.4	-13.1	-13.1	-12.5	-11.9	-10.6	-10.6	-9.7	-9.5	-9.5	-10.0	-9.1	-9.7	-10.1	-9.7	-10.5	-9.1	-14.1	-11.1
25	-10.2	-9.8	-8.7	-7.8	-8.0	-8.2	-8.1	-7.9	-7.5	-6.9	-6.0	-5.4	-5.0	-4.3	-3.4	-3.4	-3.1	-2.8	-3.9	-3.8	-4.0	-4.8	-5.9	-5.7	-2.8	-10.2	-6.0
26	-5.4	-5.6	-6.8	-7.8	-8.7	-8.7	-8.2	-8.7	-8.4	-8.5	-8.9	-10.0	-10.9	-11.1	-11.0	-11.5	-11.7	-12.1	-12.6	-13.0	-12.9	-13.0	-13.8	-14.6	-5.4	-14.6	-10.2
27	-14.8	-14.6	-15.7	-15.9	-15.9	-16.1	-16.7	-16.7	-16.8	-16.3	-16.4	-16.1	-16.0	-15.2	-14.8	-14.2	-14.3	-14.4	-15.1	-15.1	-15.6	-15.8	-15.3	-13.8	-13.8	-16.8	-15.5
28	-12.7	-13.8	-13.8	-13.3	-12.6	-11.2	-10.1	-9.6	-9.7	-8.9	-8.0	-7.2	-6.4	-6.3	-5.8	-5.9	-6.6	-6.4	-6.3	-6.1	-5.9	-6.0	-5.8	-5.9	-5.8	-13.8	-8.5
29	-5.7	-5.3	-4.8	-4.2	-4.2	-4.2	-3.8	-3.8	-4.2	-3.7	-4.2	-3.5	-3.5	-2.8	-2.8	-2.2	-2.2	-2.0	-2.2	-2.3	-2.3	-2.6	-2.7	-2.6	-2.0	-5.7	-3.4
30	-1.9	-1.7	-2.2	-2.5	-1.7	-1.7	-1.6	-1.5	-1.4	-1.6	-1.7	-1.3	-1.7	-1.9	-1.8	-1.8	-1.9	-1.9	-2.0	-3.0	-2.8	-3.0	-3.2	-3.3	-1.3	-3.3	-2.0
31	-3.1	-2.9	-3.3	-3.4	-3.6	-3.4	-2.9	-2.8	-3.1	-3.0	-2.6	-3.0	-3.3	-2.7	-3.5	-3.5	-3.1	-3.7	-3.2	-2.9	-2.8	-2.1	-2.6	-3.1	-2.1	-3.7	-3.1
Max.	**3.8**	**3.6**	**3.6**	**4.1**	**3.9**	**3.7**	**3.7**	**4.0**	**3.6**	**1.4**	**2.1**	**2.5**	**3.4**	**4.5**	**4.7**	**4.5**	**4.4**	**4.1**	**3.7**	**3.6**	**3.7**	**3.8**	**3.8**	**3.9**	**4.7**		
Min.	**-14.8**	**-14.6**	**-15.7**	**-15.9**	**-15.9**	**-16.1**	**-16.7**	**-16.7**	**-16.8**	**-16.3**	**-16.4**	**-16.1**	**-16.0**	**-15.2**	**-14.8**	**-14.2**	**-14.3**	**-14.4**	**-15.1**	**-15.1**	**-15.6**	**-15.8**	**-15.8**	**-15.1**		**-16.8**	
Avg.	**-5.1**	**-5.2**	**-5.3**	**-5.3**	**-5.4**	**-5.5**	**-5.7**	**-6.0**	**-6.1**	**-6.2**	**-6.1**	**-5.9**	**-5.5**	**-5.0**	**-4.7**	**-4.5**	**-4.4**	**-4.4**	**-4.7**	**-4.8**	**-5.0**	**-5.1**	**-5.3**	**-5.4**			**-5.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.2	-3.5	-3.7	-3.1	-2.7	-3.4	-3.4	-4.0	-3.8	-3.5	-3.2	-3.1	-3.4	-3.6	-3.4	-3.5	-4.3	-5.1	-5.6	-5.8	-5.4	-5.2	-4.2	-5.0	-2.7	-5.8	-4.0
2	-4.9	-5.7	-5.8	-6.3	-6.8	-7.1	-7.3	-7.7	-8.9	-12.1	-13.5	-13.9	-14.5	-14.7	-14.8	-14.9	-14.8	-14.9	-15.2	-15.6	-15.5	-15.5	-15.5	-15.6	-4.9	-15.6	-11.7
3	-15.8	-15.6	-15.5	-15.3	-14.9	-15.1	-15.1	-14.9	-14.9	-15.5	-15.6	-15.5	-15.3	-15.1	-15.2	-15.1	-14.8	-14.9	-15.3	-15.7	-15.6	-15.6	-15.4	-14.8	-14.8	-15.8	-15.3
4	-14.3	-14.3	-14.0	-13.7	-14.2	-14.8	-15.2	-15.9	-16.0	-16.4	-16.2	-16.2	-15.9	-15.7	-15.2	-14.7	-14.1	-14.2	-14.0	-13.9	-13.6	-13.5	-13.8	-14.1	-13.5	-16.4	-14.7
5	-14.6	-14.7	-14.1	-13.4	-13.3	-12.9	-12.7	-12.2	-13.1	-13.3	-13.3	-12.3	-11.9	-10.9	-10.1	-7.5	-7.1	-9.5	-8.4	-8.6	-10.0	-10.1	-7.5	-7.7	-7.1	-14.7	-11.2
6	-7.4	-6.8	-6.5	-6.3	-6.5	-7.0	-6.4	-6.1	-4.9	-4.2	-4.4	-3.1	-3.2	-4.9	-5.7	-6.9	-7.3	-7.1	-7.2	-9.3	-10.4	-10.9	-11.5	-12.7	-3.1	-12.7	-6.9
7	-13.8	-14.2	-14.6	-14.7	-14.9	-15.5	-16.3	-16.6	-16.8	-16.7	-16.1	-15.9	-15.2	-14.6	-13.6	-10.9	-9.7	-10.3	-10.9	-8.4	-7.9	-8.0	-8.4	-7.2	-7.2	-16.8	-13.0
8	-6.6	-6.6	-6.4	-6.7	-6.6	-6.3	-5.9	-6.0	-6.2	-6.3	-6.5	-6.4	-6.2	-6.0	-5.8	-5.6	-5.3	-5.1	-4.6	-3.8	-3.2	-3.1	-2.7	-2.9	-2.7	-6.7	-5.5
9	-2.7	-2.3	-2.2	-2.0	-1.1	0.2	-0.2	-0.3	-0.5	-0.4	-0.6	-0.8	-0.5	-0.2	0.1	0.6	0.2	-0.8	-1.2	-0.8	0.4	0.8	1.2	1.1	1.2	-2.7	-0.5
10	1.0	0.9	0.1	-0.7	-0.2	-0.1	-0.3	-0.2	0.2	-1.2	-0.4	-0.7	-0.8	-1.3	-1.2	-1.1	-0.9	-1.2	-1.5	-1.4	-0.9	-1.1	-1.2	-1.3	1.0	-1.5	-0.6
11	-1.5	-1.8	-2.1	-2.4	-2.6	-2.7	-2.5	-2.5	-2.4	-2.7	-3.3	-2.9	-2.5	-2.3	-2.3	-2.6	-3.0	-4.0	-4.6	-4.8	-4.4	-4.0	-4.7	-4.3	-1.5	-4.8	-3.0
12	-4.1	-4.8	-5.1	-5.3	-5.7	-6.5	-6.8	-6.5	-6.1	-6.1	-6.5	-7.2	-6.7	-6.8	-7.1	-7.3	-7.1	-5.5	-6.0	-6.2	-6.1	-5.8	-5.8	-5.3	-4.1	-7.3	-6.1
13	-5.2	-5.1	-4.9	-4.7	-5.0	-5.8	-5.9	-5.9	-5.6	-5.8	-5.7	-5.1	-3.9	-3.8	-4.2	-3.4	-3.5	-2.8	-3.2	-3.5	-3.8	-4.0	-3.8	-3.5	-2.8	-5.9	-4.5
14	-3.2	-2.7	-2.7	-2.9	-3.0	-3.3	-3.5	-3.5	-3.1	-3.1	-3.0	-3.3	-3.7	-3.9	-3.9	-4.2	-4.1	-4.2	-4.5	-4.5	-4.4	-4.4	-4.5	-4.2	-2.7	-4.5	-3.7
15	-4.2	-4.4	-5.2	-5.2	-5.0	-5.0	-4.8	-4.6	-5.1	-5.8	-5.5	-5.2	-4.8	-4.6	-4.6	-3.8	-3.1	-2.7	-2.4	-2.4	-2.4	-2.1	-1.9	-1.8	-1.8	-5.8	-4.0
16	-1.8	-1.9	-1.9	-1.9	-2.0	-2.1	-2.2	-2.6	-3.4	-5.1	-4.2	-3.2	-2.2	-2.7	-2.4	-2.5	-3.4	-3.0	-3.2	-3.6	-3.8	-5.1	-4.8	-5.0	-1.8	-5.1	-3.1
17	-5.4	-5.6	-5.6	-5.4	-6.6	-7.7	-7.5	-7.3	-6.9	-7.1	-6.9	-7.0	-7.7	-7.6	-7.9	-8.9	-8.7	-9.8	-10.5	-9.7	-10.3	-10.8	-10.9	-11.8	-5.4	-11.8	-8.1
18	-11.8	-13.0	-13.4	-13.5	-14.3	-14.9	-15.0	-14.9	-15.6	-15.2	-15.0	-14.9	-15.0	-14.8	-14.6	-14.7	-15.3	-15.8	-16.0	-16.0	-16.6	-16.8	-17.2	-17.3	-11.8	-17.3	-15.1
19	-17.3	-17.7	-17.8	-18.1	-18.4	-19.1	-18.7	-19.1	-18.3	-18.8	-18.5	-17.5	-15.3	-15.3	-15.3	-15.6	-15.5	-15.4	-16.1	-15.3	-15.6	-15.5	-16.0	-16.8	-15.3	-19.1	-17.0
20	-17.6	-17.8	-18.4	-18.9	-19.3	-19.6	-20.5	-21.1	-21.3	-21.7	-22.1	-22.2	-22.4	-22.5	-22.5	-22.7	-22.9	-23.2	-23.5	-23.9	-24.1	-24.5	-24.8	-25.2	-17.6	-25.2	-21.8
21	-25.3	-25.5	-25.9	-26.0	-26.4	-27.0	-26.9	-26.9	-27.8	-27.4	-27.7	-27.2	-27.1	-27.0	-26.4	-25.5	-26.1	-25.8	-24.7	-24.2	-24.2	-24.0	-23.3	-22.8	-22.8	-27.8	-25.9
22	-22.1	-21.1	-20.5	-19.9	-19.1	-16.4	-14.4	-15.0	-15.1	-16.2	-16.8	-16.5	-15.5	-14.9	-13.6	-13.5	-13.3	-13.1	-12.7	-12.5	-12.5	-12.5	-12.8	-13.3	-12.5	-22.1	-15.6
23	-13.0	-12.8	-12.5	-12.0	-12.0	-11.9	-11.2	-11.1	-11.4	-11.6	-12.1	-12.1	-11.8	-11.2	-10.0	-9.3	-8.5	-7.3	-6.7	-6.0	-5.1	-4.5	-4.2	-3.7	-3.7	-13.0	-9.7
24	-3.2	-2.1	-1.6	-1.1	-0.6	0.3	0.8	0.5	0.4	0.2	0.3	0.0	0.1	-0.3	-0.5	-0.8	-0.8	-0.9	-1.0	-1.1	-1.5	-3.0	-5.5	-7.6	0.8	-7.6	-1.2
25	-9.0	-10.6	-11.3	-11.5	-11.8	-11.9	-11.9	-12.0	-12.7	-13.4	-14.7	-15.9	-16.1	-16.3	-18.0	-18.2	-17.8	-18.9	-19.1	-18.9	-19.4	-20.0	-20.3	-19.5	-9.0	-20.3	-15.4
26	-19.5	-19.7	-19.7	-18.7	-18.1	-17.6	-17.0	-16.9	-16.8	-16.6	-17.1	-17.1	-17.0	-17.4	-18.0	-17.1	-17.3	-18.0	-19.0	-19.6	-19.5	-18.8	-19.3	-19.4	-16.6	-19.7	-18.1
27	-19.4	-19.1	-19.0	-19.2	-17.5	-17.4	-16.4	-16.9	-17.5	-17.7	-17.5	-16.5	-16.4	-16.4	-16.0	-15.2	-15.0	-14.6	-14.8	-15.0	-14.5	-13.9	-14.0	-13.9	-13.9	-19.4	-16.4
28	-13.1	-12.6	-12.7	-12.3	-12.2	-12.0	-11.7	-11.8	-11.2	-11.5	-11.4	-11.5	-11.8	-11.6	-11.5	-11.8	-12.0	-12.2	-12.4	-13.0	-13.4	-13.5	-13.7	-13.9	-11.2	-13.9	-12.3
29	-14.4	-14.4	-14.5	-14.9	-14.9	-15.3	-15.7	-15.9	-16.5	-16.6	-16.7	-17.1	-17.2	-17.2	-17.3	-17.2	-17.3	-17.6	-17.9	-18.3	-18.5	-18.9	-19.0	-19.4	-14.4	-19.4	-16.8
30	-19.9	-20.3	-20.8	-22.4	-22.7	-22.3	-22.3	-21.7	-21.7	-22.5	-22.2	-22.2	-21.7	-21.0	-21.0	-21.5	-21.5	-21.9	-21.9	-22.1	-21.9	-21.7	-22.2	-22.1	-19.9	-22.7	-21.7
Max.	**1.0**	**0.9**	**0.1**	**-0.7**	**-0.2**	**0.3**	**0.8**	**0.5**	**0.4**	**0.2**	**0.3**	**0.0**	**0.1**	**-0.2**	**0.1**	**0.6**	**0.2**	**-0.8**	**-1.0**	**-0.8**	**0.4**	**0.8**	**1.2**	**1.1**	**1.2**		
Min.	**-25.3**	**-25.5**	**-25.9**	**-26.0**	**-26.4**	**-27.0**	**-26.9**	**-26.9**	**-27.8**	**-27.4**	**-27.7**	**-27.2**	**-27.1**	**-27.0**	**-26.4**	**-25.5**	**-26.1**	**-25.8**	**-24.7**	**-24.2**	**-24.2**	**-24.5**	**-24.8**	**-25.2**		**-27.8**	
Avg.	**-10.4**	**-10.5**	**-10.6**	**-10.6**	**-10.6**	**-10.7**	**-10.6**	**-10.7**	**-10.8**	**-11.1**	**-11.2**	**-11.1**	**-10.9**	**-10.8**	**-10.7**	**-10.5**	**-10.5**	**-10.7**	**-10.8**	**-10.8**	**-10.8**	**-10.9**	**-10.9**	**-11.0**			**-10.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 2 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-21.2	-20.6	-20.2	-21.2	-21.6	-21.2	-18.7	-17.8	-17.3	-16.0	-14.8	-14.6	-13.3	-13.0	-11.3	-10.5	-8.2	-8.6	-9.0	-9.0	-9.0	-8.5	-8.4	-8.9	-8.2	-21.6	-14.3
2	-8.5	-8.1	-7.1	-7.4	-6.8	-5.9	-4.9	-4.1	-4.4	-4.4	-3.9	-3.5	-2.8	-2.4	-2.1	-2.1	-2.1	-2.0	-2.5	-2.3	-1.9	-1.6	-1.4	-1.0	-1.0	-8.5	-3.9
3	-0.7	-0.3	-0.3	-0.2	-0.1	0.1	0.3	0.5	0.7	0.5	0.5	0.8	0.8	0.5	0.6	0.4	0.4	0.8	1.2	1.5	1.8	1.6	1.5	1.3	1.8	-0.7	0.6
4	0.8	0.6	0.6	0.9	1.1	1.1	1.2	1.2	0.8	0.7	0.8	0.6	0.7	0.7	0.6	0.3	0.9	1.2	1.3	1.4	1.5	1.3	1.4	1.4	1.5	0.3	1.0
5	1.5	1.3	1.4	1.2	1.3	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.5	1.6	1.7	1.7	1.6	1.9	2.1	1.8	1.5	1.5	1.6	2.1	1.2	1.5
6	1.5	1.7	1.4	1.5	1.5	1.4	1.6	2.0	2.3	2.2	2.3	2.2	2.0	1.9	1.6	1.2	1.3	0.9	0.9	1.0	1.2	0.5	0.1	-0.2	2.3	-0.2	1.4
7	-0.6	-1.1	-1.5	-2.6	-3.5	-4.2	-4.8	-4.4	-4.8	-6.0	-6.9	-7.4	-7.2	-7.2	-7.0	-7.3	-7.7	-8.2	-7.0	-7.0	-6.8	-9.3	-6.9	-4.3	-0.6	-9.3	-5.6
8	-5.2	-3.5	-3.8	-3.4	-2.3	-2.1	-1.8	-0.8	-0.6	-0.7	-0.4	-0.3	0.3	0.5	-0.7	-0.6	-0.3	0.2	-2.6	-3.0	-2.9	-2.7	-2.5	-2.3	0.5	-5.2	-1.7
9	-3.0	-3.4	-3.9	-3.6	-5.3	-5.7	-7.4	-7.9	-7.9	-8.9	-7.6	-5.7	-5.9	-4.5	-4.8	-5.5	-5.6	-6.0	-6.4	-7.0	-7.1	-6.8	-5.9	-5.5	-3.0	-8.9	-5.9
10	-5.4	-6.0	-5.6	-5.5	-6.4	-8.3	-8.9	-9.3	-9.0	-10.0	-11.0	-11.3	-11.6	-11.5	-11.3	-10.8	-10.5	-9.6	-9.9	-10.1	-10.5	-11.0	-11.1	-10.4	-5.4	-11.6	-9.4
11	-10.9	-10.8	-10.1	-9.2	-8.7	-8.3	-8.8	-8.9	-8.6	-8.4	-8.1	-8.4	-7.2	-7.7	-7.7	-8.4	-9.5	-11.0	-11.6	-11.5	-12.2	-13.2	-13.9	-14.3	-7.2	-14.3	-9.9
12	-13.9	-14.1	-14.1	-13.0	-13.2	-12.3	-11.8	-11.5	-11.2	-10.3	-9.2	-8.9	-9.6	-9.0	-8.4	-7.4	-6.8	-8.1	-8.7	-8.4	-8.2	-8.5	-8.6	-7.8	-6.8	-14.1	-10.1
13	-7.8	-8.3	-8.6	-8.2	-8.7	-9.5	-10.2	-10.7	-10.9	-11.3	-11.0	-10.9	-10.9	-8.9	-10.5	-11.3	-10.0	-9.7	-5.8	-5.3	-5.4	-3.9	-3.6	-4.6	-3.6	-11.3	-8.6
14	-5.1	-5.6	-6.2	-6.4	-6.4	-6.2	-6.2	-4.7	-5.3	-5.7	-4.4	-5.3	-4.9	-3.5	-3.2	-3.8	-4.5	-4.4	-4.2	-3.9	-3.3	-3.2	-2.9	-2.7	-2.7	-6.4	-4.7
15	-2.5	-2.1	-2.0	-2.1	-2.3	-2.5	-2.4	-2.3	-2.2	-2.3	-2.7	-2.6	-2.4	-2.4	-2.4	-2.6	-2.6	-2.6	-2.5	-3.0	-4.5	-4.4	-4.3	-5.0	-2.0	-5.0	-2.8
16	-4.5	-4.6	-4.9	-5.3	-5.3	-4.9	-5.4	-6.0	-6.0	-6.4	-6.2	-6.2	-6.1	-6.0	-5.9	-6.0	-6.0	-6.1	-6.1	-5.9	-6.2	-5.9	-5.0	-3.8	-3.8	-6.4	-5.6
17	-3.1	-2.6	-2.2	-2.2	-2.4	-2.4	-2.6	-2.5	-2.1	-1.8	-1.8	-1.5	-1.2	-0.8	-0.7	-0.8	-0.9	-1.1	-1.0	-1.0	-1.0	-0.9	-1.0	-0.8	-0.7	-3.1	-1.6
18	-0.8	-0.9	-0.8	-0.9	-0.9	-0.9	-1.1	-1.0	-0.8	-0.8	-0.7	-0.6	-0.7	-0.4	-0.3	-0.1	0.0	-0.1	-0.1	-0.2	-0.3	0.1	0.1	0.1	0.1	-1.1	-0.5
19	-0.3	-0.1	0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.2	-0.2	-0.5	-0.7	-0.7	-0.8	-0.3	-0.2	-0.5	-0.4	-0.3	0.1	0.5	-0.4	0.5	-0.8	-0.3
20	-0.4	-0.2	0.4	-0.6	-0.7	-0.4	-0.5	-0.8	-1.3	-1.2	-1.3	-1.3	-1.3	-1.0	-1.1	-1.1	-0.7	-0.8	-0.8	-1.1	-1.6	-2.7	-3.1	-3.0	0.4	-3.1	-1.1
21	-3.0	-2.9	-3.0	-2.8	-2.7	-3.6	-4.0	-4.6	-4.5	-4.6	-5.1	-5.1	-4.2	-3.4	-3.0	-2.9	-2.7	-2.8	-2.8	-3.2	-3.5	-3.7	-4.3	-4.3	-2.7	-5.1	-3.6
22	-4.8	-5.1	-5.5	-6.0	-5.3	-5.6	-5.2	-4.6	-4.3	-4.3	-4.4	-4.5	-4.4	-3.8	-3.9	-4.0	-3.9	-3.7	-3.3	-3.6	-4.1	-4.3	-4.4	-4.4	-3.3	-6.0	-4.5
23	-4.1	-4.1	-4.0	-4.0	-3.9	-3.8	-3.6	-3.5	-3.5	-3.8	-4.4	-6.7	-8.1	-8.7	-8.7	-8.8	-9.5	-10.1	-9.4	-10.3	-8.7	-8.6	-8.9	-8.6	-3.5	-10.3	-6.6
24	-8.2	-8.0	-8.4	-9.0	-9.3	-8.9	-9.1	-9.5	-8.9	-8.1	-7.6	-8.2	-9.0	-9.2	-9.3	-9.8	-9.5	-8.8	-8.5	-9.0	-9.3	-9.3	-9.4	-9.1	-7.6	-9.8	-8.9
25	-8.6	-8.5	-7.6	-6.9	-6.6	-6.5	-5.9	-5.4	-5.2	-5.0	-4.8	-4.6	-4.7	-5.3	-5.5	-5.6	-5.3	-7.4	-9.0	-9.7	-10.1	-10.7	-11.4	-12.1	-4.6	-12.1	-7.2
26	-12.6	-13.9	-15.9	-16.9	-17.6	-18.0	-18.2	-18.3	-18.1	-18.1	-17.8	-17.4	-17.6	-17.7	-17.4	-17.3	-17.2	-17.2	-17.5	-17.6	-17.9	-17.9	-17.7	-17.9	-12.6	-18.3	-17.2
27	-17.9	-17.5	-17.5	-17.7	-18.2	-18.3	-18.7	-18.9	-19.0	-19.2	-19.6	-20.0	-19.7	-19.6	-20.0	-20.0	-20.2	-20.3	-20.6	-20.9	-21.1	-21.2	-21.4	-21.8	-17.5	-21.8	-19.6
28	-21.8	-21.5	-21.8	-21.9	-22.2	-22.2	-22.1	-22.1	-22.3	-22.7	-23.0	-23.1	-23.3	-23.4	-23.4	-23.5	-24.0	-24.2	-24.6	-25.0	-25.2	-25.6	-25.3	-25.7	-21.5	-25.7	-23.3
29	-26.1	-26.1	-26.0	-26.0	-26.2	-26.2	-25.8	-26.1	-26.0	-25.9	-25.8	-25.8	-25.6	-25.4	-25.5	-25.2	-25.3	-25.7	-25.6	-25.5	-25.8	-25.6	-25.7	-25.7	-25.2	-26.2	-25.8
30	-25.1	-25.1	-25.6	-26.4	-26.3	-26.6	-26.8	-26.8	-26.4	-27.2	-27.6	-27.4	-27.5	-27.4	-27.5	-27.5	-27.9	-28.0	-28.5	-29.0	-29.2	-29.5	-29.4	-29.3	-25.1	-29.5	-27.4
31	-29.3	-29.0	-29.3	-29.7	-29.8	-29.0	-28.2	-27.8	-26.9	-27.0	-26.5	-26.1	-26.4	-26.6	-26.3	-26.2	-26.1	-25.8	-25.6	-25.2	-25.6	-25.9	-25.5	-25.6	-25.2	-29.8	-27.1
Max.	**1.5**	**1.7**	**1.4**	**1.5**	**1.5**	**1.4**	**1.6**	**2.0**	**2.3**	**2.2**	**2.3**	**2.2**	**2.0**	**1.9**	**1.6**	**1.7**	**1.7**	**1.6**	**1.9**	**2.1**	**1.8**	**1.6**	**1.5**	**1.6**	**2.3**		
Min.	**-29.3**	**-29.0**	**-29.3**	**-29.7**	**-29.8**	**-29.0**	**-28.2**	**-27.8**	**-26.9**	**-27.2**	**-27.6**	**-27.4**	**-27.5**	**-27.4**	**-27.5**	**-27.5**	**-27.9**	**-28.0**	**-28.5**	**-29.0**	**-29.2**	**-29.5**	**-29.4**	**-29.3**		**-29.8**	
Avg.	**-8.1**	**-8.1**	**-8.1**	**-8.2**	**-8.4**	**-8.4**	**-8.4**	**-8.2**	**-8.2**	**-8.2**	**-8.1**	**-8.1**	**-8.1**	**-7.9**	**-7.9**	**-7.9**	**-7.8**	**-8.0**	**-8.0**	**-8.1**	**-8.2**	**-8.4**	**-8.3**	**-8.2**			**-8.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-11.3	-10.8	-10.7	-11.3	-11.5	-11.4	-11.4	-11.2	-11.8	-11.8	-11.5	-13.0	-14.3	-14.7	-15.2	-15.3	-15.5	-14.7	-15.7	-16.1	-16.6	-16.4	-16.2	-17.2	-10.7	-17.2	-13.6
2	-17.0	-16.9	-16.7	-18.2	-18.5	-18.4	-18.2	-18.9	-18.6	-18.4	-18.3	-18.8	-17.7	-19.0	-19.4	-19.8	-19.6	-19.2	-18.0	-18.2	-17.6	-18.2	-17.1	-17.2	-16.7	-19.8	-18.2
3	-18.5	-17.8	-17.3	-16.2	-15.8	-16.7	-19.1	-19.1	-18.1	-17.8	-18.4	-20.1	-18.7	-17.7	-18.6	-19.1	-18.8	-18.9	-19.6	-20.1	-20.2	-20.3	-20.3	-20.4	-15.8	-20.4	-18.7
4	-20.6	-20.6	-20.6	-20.8	-20.8	-20.9	-21.0	-20.9	-21.1	-21.2	-21.2	-21.3	-21.4	-21.5	-21.5	-21.7	-21.7	-21.6	-22.0	-22.6	-23.2	-23.0	-23.1	-23.4	-20.6	-23.4	-21.6
5	-23.7	-24.0	-24.2	-25.2	-25.3	-24.5	-24.8	-25.1	-25.4	-25.3	-24.9	-24.3	-24.1	-23.8	-23.4	-23.4	-23.5	-23.7	-23.7	-23.6	-24.0	-24.9	-25.4	-25.5	-23.4	-25.5	-24.4
6	-26.0	-26.3	-26.7	-26.6	-26.7	-26.9	-27.6	-28.1	-27.9	-28.4	-28.5	-28.4	-27.9	-27.9	-27.7	-27.3	-27.6	-28.2	-28.6	-29.0	-29.2	-29.1	-29.0	-28.9	-26.0	-29.2	-27.9
7	-29.3	-28.6	-28.6	-28.3	-28.0	-27.9	-27.8	-27.7	-27.7	-27.5	-27.7	-27.8	-27.5	-26.9	-26.4	-26.1	-25.8	-25.2	-24.8	-25.0	-25.1	-25.0	-25.4	-26.0	-24.8	-29.3	-26.9
8	-26.3	-26.2	-26.1	-25.5	-25.6	-25.8	-25.4	-25.3	-24.8	-24.5	-25.2	-25.3	-25.2	-25.2	-25.1	-25.0	-24.8	-24.9	-25.3	-25.3	-25.5	-26.2	-26.3	-26.2	-24.5	-26.3	-25.5
9	-27.0	-26.8	-26.2	-26.2	-26.8	-27.2	-27.0	-27.3	-27.0	-26.7	-26.5	-26.0	-25.8	-25.1	-24.4	-24.4	-24.5	-24.6	-24.8	-24.7	-24.6	-24.5	-24.2	-24.2	-24.2	-27.3	-25.7
10	-24.1	-24.5	-24.9	-25.2	-24.9	-25.2	-25.4	-25.3	-25.5	-25.8	-25.9	-26.0	-26.3	-26.4	-26.3	-26.3	-26.6	-27.2	-28.0	-28.1	-28.0	-28.5	-28.8	-28.2	-24.1	-28.8	-26.3
11	-27.5	-27.0	-26.8	-26.7	-27.3	-27.8	-28.2	-28.4	-28.8	-29.3	-29.3	-29.0	-29.0	-29.1	-29.0	-29.1	-29.1	-29.4	-30.0	-30.2	-30.4	-30.6	-30.6	-30.6	-26.7	-30.6	-28.9
12	-30.8	-30.7	-31.0	-31.2	-31.5	-31.5	-31.5	-31.8	-31.2	-30.9	-30.8	-31.1	-31.4	-30.7	-30.5	-30.5	-31.2	-31.5	-31.4	-31.6	-31.6	-31.5	-31.8	-32.0	-30.5	-32.0	-31.2
13	-31.7	-31.0	-31.3	-31.3	-31.1	-30.8	-30.6	-30.9	-31.2	-31.5	-31.3	-31.6	-31.3	-30.8	-30.5	-29.9	-30.0	-29.9	-30.2	-29.8	-29.6	-29.6	-28.8	-28.1	-28.1	-31.7	-30.5
14	-28.4	-27.4	-26.6	-24.6	-23.3	-20.8	-20.6	-20.2	-18.9	-16.5	-14.2	-13.8	-12.8	-12.5	-11.8	-11.1	-10.6	-9.9	-8.9	-8.2	-8.2	-7.7	-6.5	-5.6	-5.6	-28.4	-15.4
15	-4.7	-4.3	-4.0	-3.8	-3.6	-4.5	-4.8	-4.9	-5.3	-5.2	-5.3	-5.2	-5.5	-5.2	-5.0	-4.9	-5.0	-5.0	-5.0	-4.9	-4.6	-4.4	-4.1	-3.9	-3.6	-5.5	-4.7
16	-3.9	-3.8	-3.3	-3.0	-3.0	-2.7	-2.8	-3.2	-3.3	-3.0	-3.6	-4.3	-4.3	-4.4	-5.3	-5.1	-4.8	-4.5	-4.1	-4.0	-4.2	-5.0	-5.4	-5.7	-2.7	-5.7	-4.0
17	-4.8	-4.5	-3.9	-2.7	-3.0	-3.1	-3.3	-3.2	-2.7	-2.6	-2.5	-2.1	-2.3	-2.1	-2.2	-1.8	-2.1	-2.5	-2.5	-2.6	-2.7	-2.7	-2.9	-2.9	-1.8	-4.8	-2.8
18	-2.9	-3.1	-3.2	-3.3	-3.2	-3.3	-3.4	-3.3	-3.3	-3.3	-3.4	-3.4	-3.6	-3.3	-3.2	-3.5	-3.2	-3.5	-3.5	-3.5	-3.5	-3.4	-3.0	-3.2	-2.9	-3.6	-3.3
19	-3.7	-3.1	-2.4	-1.8	-1.8	-1.3	-0.9	-0.2	-0.1	-0.6	-0.3	0.0	-0.3	-0.5	-0.8	-0.8	-0.5	-0.3	-0.4	-0.6	-0.6	-0.6	-0.7	-0.8	0.0	-3.7	-1.0
20	-1.0	-1.0	-1.0	-1.0	-0.9	-0.8	-0.8	-0.8	-0.8	-0.7	-0.8	-0.8	-0.7	-0.7	-0.8	-0.8	-0.7	-0.8	-0.8	-0.7	-0.9	-0.7	-1.2	-1.5	-0.7	-1.5	-0.9
21	-1.3	-1.3	-1.2	-1.7	-1.4	-1.3	-1.1	-1.1	-0.9	-0.7	-0.6	-0.4	0.3	0.5	0.9	0.9	1.0	1.2	1.0	0.6	0.3	0.3	0.2	0.3	1.2	-1.7	-0.2
22	0.4	-0.4	0.1	-0.7	-1.1	-1.3	-1.4	-2.2	-2.4	-2.1	-2.3	-3.4	-4.2	-4.7	-5.2	-5.9	-6.2	-6.4	-6.2	-6.3	-6.1	-6.1	-6.3	-6.6	0.4	-6.6	-3.6
23	-7.0	-8.5	-9.2	-10.4	-12.3	-14.2	-15.8	-16.9	-17.6	-18.6	-18.9	-19.7	-19.5	-19.7	-19.7	-20.1	-20.7	-21.6	-22.0	-22.2	-22.3	-21.9	-22.3	-22.0	-7.0	-22.3	-17.6
24	-21.8	-20.0	-20.9	-19.8	-17.8	-18.9	-18.4	-14.1	-13.6	-11.4	-10.4	-10.0	-10.5	-10.5	-10.1	-9.7	-9.5	-9.3	-8.8	-8.4	-8.3	-8.0	-7.8	-7.8	-7.8	-21.8	-12.8
25	-7.8	-7.5	-7.3	-6.6	-6.7	-6.8	-6.6	-6.1	-6.5	-6.9	-6.6	-6.3	-6.4	-6.6	-6.5	-6.6	-6.1	-6.3	-6.8	-8.9	-11.5	-13.3	-15.0	-16.2	-6.1	-16.2	-8.0
26	-18.0	-18.3	-19.0	-19.9	-20.4	-20.3	-20.9	-21.2	-21.4	-21.4	-21.3	-22.3	-21.4	-19.8	-18.1	-17.6	-15.5	-13.7	-13.1	-12.3	-12.4	-12.1	-11.3	-10.8	-10.8	-22.3	-17.6
27	-11.1	-11.3	-10.5	-10.8	-10.6	-10.1	-9.3	-7.9	-7.4	-7.0	-7.0	-7.0	-6.7	-6.7	-6.6	-6.5	-6.4	-6.2	-6.1	-5.7	-5.7	-6.0	-5.8	-5.7	-5.7	-11.3	-7.7
28	-5.6	-5.5	-5.6	-5.8	-5.7	-5.7	-6.0	-6.6	-6.6	-6.7	-6.7	-6.5	-6.4	-6.2	-6.2	-6.0	-5.8	-5.6	-5.4	-5.4	-4.7	-5.1	-5.1	-4.9	-4.7	-6.7	-5.8
29	-5.0	-4.8	-4.7	-5.0	-5.0	-5.0	-5.5	-6.1	-5.7	-5.8	-6.1	-5.6	-5.3	-5.4	-6.3	-6.1	-6.7	-7.1	-8.5	-7.7	-8.2	-8.5	-8.8	-9.0	-4.7	-9.0	-6.3
30	-9.0	-8.9	-8.7	-9.3	-10.2	-10.3	-10.4	-10.4	-10.7	-12.9	-14.0	-14.5	-14.6	-14.8	-14.6	-14.5	-15.2	-15.1	-14.9	-14.4	-14.6	-14.8	-15.1	-15.6	-8.7	-15.6	-12.8
31	-15.3	-15.2	-15.2	-15.1	-14.2	-13.8	-13.4	-12.4	-14.1	-12.9	-11.6	-10.5	-10.7	-11.1	-11.6	-11.7	-11.1	-10.6	-10.7	-10.7	-10.7	-11.0	-11.1	-11.3	-10.5	-15.3	-12.3
Max.	**0.4**	**-0.4**	**0.1**	**-0.7**	**-0.9**	**-0.8**	**-0.8**	**-0.2**	**-0.1**	**-0.6**	**-0.3**	**0.0**	**0.3**	**0.5**	**0.9**	**0.9**	**1.0**	**1.2**	**1.0**	**0.6**	**0.3**	**0.3**	**0.2**	**0.3**	**1.2**		
Min.	**-31.7**	**-31.0**	**-31.3**	**-31.3**	**-31.5**	**-31.5**	**-31.5**	**-31.8**	**-31.2**	**-31.5**	**-31.3**	**-31.6**	**-31.4**	**-30.8**	**-30.5**	**-30.5**	**-31.2**	**-31.5**	**-31.4**	**-31.6**	**-31.6**	**-31.5**	**-31.8**	**-32.0**		**-32.0**	
Avg.	**-15.0**	**-14.8**	**-14.8**	**-14.8**	**-14.8**	**-14.8**	**-14.9**	**-14.9**	**-14.8**	**-14.8**	**-14.7**	**-14.8**	**-14.7**	**-14.6**	**-14.6**	**-14.5**	**-14.4**	**-14.4**	**-14.5**	**-14.5**	**-14.7**	**-14.8**	**-14.8**	**-14.9**			**-14.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-11.9	-11.9	-12.1	-12.5	-12.5	-12.6	-12.9	-13.0	-12.8	-12.7	-12.7	-13.0	-12.6	-12.4	-12.1	-11.9	-11.9	-11.7	-11.6	-12.2	-12.8	-13.5	-13.5	-13.8	-11.6	-13.8	-12.5
2	-13.6	-14.2	-14.6	-15.3	-15.4	-16.6	-17.2	-17.5	-17.6	-17.1	-17.3	-18.0	-18.6	-18.9	-18.6	-18.4	-18.2	-18.5	-18.6	-18.9	-19.5	-20.1	-20.3	-21.0	-13.6	-21.0	-17.7
3	-22.1	-22.2	-22.8	-22.9	-23.9	-24.7	-25.2	-26.1	-26.0	-26.0	-25.9	-26.4	-26.0	-26.3	-25.5	-25.3	-25.3	-25.0	-25.5	-25.9	-26.4	-26.4	-26.2	-25.6	-22.1	-26.4	-25.2
4	-26.0	-25.6	-25.7	-25.2	-25.2	-23.9	-23.2	-24.2	-23.7	-22.5	-22.8	-21.1	-21.2	-21.7	-21.9	-21.1	-23.4	-24.4	-25.4	-25.8	-26.8	-27.3	-27.2	-27.3	-21.1	-27.3	-24.3
5	-27.9	-28.1	-27.9	-28.5	-29.1	-29.2	-29.7	-29.7	-30.0	-29.7	-28.9	-28.8	-28.4	-28.5	-27.4	-28.1	-13.8	-25.6	-27.2	-25.8	-26.2	-25.5	-25.3	-24.7	-13.8	-30.0	-27.3
6	-25.3	-23.6	-22.8	-24.4	-20.9	-22.3	-23.0	-21.8	-23.5	-23.3	-22.0	-23.4	-23.9	-23.5	-24.2	-25.1	-24.2	-25.3	-25.3	-25.5	-24.7	-25.3	-24.7	-24.9	-20.9	-25.5	-23.9
7	-25.0	-25.0	-24.8	-25.7	-24.9	-24.8	-24.6	-24.6	-25.2	-24.7	-23.6	-21.0	-20.4	-16.9	-17.8	-17.6	-17.7	-16.8	-17.4	-17.7	-16.8	-17.1	-18.1	-17.6	-16.8	-25.7	-21.1
8	-18.8	-16.5	-13.3	-14.4	-15.5	-12.5	-12.7	-12.2	-12.6	-12.8	-13.2	-13.3	-13.4	-12.5	-11.9	-11.9	-11.3	-11.5	-11.3	-11.2	-11.4	-10.8	-9.8	-9.9	-9.8	-18.8	-12.7
9	-9.9	-9.8	-9.6	-9.5	-9.4	-9.1	-9.3	-8.9	-8.6	-8.8	-9.2	-9.7	-10.9	-11.5	-12.0	-13.6	-15.7	-16.4	-18.1	-19.3	-20.2	-20.3	-21.2	-21.8	-8.6	-21.8	-13.0
10	-22.5	-24.1	-24.4	-23.8	-23.9	-23.8	-23.0	-22.9	-24.8	-25.0	-24.9	-23.2	-24.4	-24.6	-23.3	-20.4	-23.8	-18.5	-17.2	-18.0	-23.3	-22.8	-22.1	-20.2	-17.2	-25.0	-22.7
11	-16.2	-15.2	-15.5	-15.8	-15.7	-15.4	-15.3	-14.7	-14.5	-15.1	-15.2	-14.7	-14.2	-13.4	-13.6	-13.9	-13.7	-13.9	-14.5	-15.5	-16.8	-16.2	-17.1	-18.9	-13.4	-18.9	-15.2
12	-20.1	-21.0	-22.3	-22.6	-24.0	-24.3	-24.5	-25.5	-26.0	-26.1	-26.1	-25.5	-25.7	-24.6	-24.1	-24.3	-22.5	-22.2	-21.9	-21.5	-21.0	-20.6	-18.0	-13.4	-13.4	-26.1	-22.8
13	-8.8	-9.0	-9.2	-9.0	-7.3	-7.9	-6.4	-5.8	-4.9	-2.9	-2.3	-1.9	-1.4	-0.7	-0.3	-0.5	-0.5	-0.4	-0.3	-0.1	-0.1	-0.1	-0.3	-0.1	-0.1	-9.2	-3.3
14	-0.1	0.1	0.2	-0.2	-0.6	-0.7	-0.8	-3.4	-8.9	-11.3	-12.8	-13.9	-14.5	-15.8	-16.7	-17.8	-18.4	-18.9	-19.3	-19.4	-19.4	-18.7	-18.1	-18.4	0.2	-19.4	-11.2
15	-19.7	-20.4	-21.2	-21.4	-22.2	-22.2	-23.3	-23.5	-23.6	-23.6	-23.6	-24.0	-24.3	-23.8	-23.4	-23.4	-22.5	-22.2	-22.6	-22.7	-22.1	-21.7	-19.2	-15.3	-15.3	-24.3	-22.2
16	-15.0	-13.7	-12.8	-11.4	-11.2	-11.0	-9.6	-8.7	-8.2	-8.1	-8.2	-8.0	-7.6	-7.0	-6.2	-5.9	-5.7	-5.3	-5.1	-5.6	-5.6	-5.9	-5.7	-6.0	-5.1	-15.0	-8.2
17	-5.9	-6.0	-6.4	-5.7	-4.5	-3.6	-2.5	-1.8	-1.4	-1.5	-0.4	0.4	0.5	0.2	0.0	-0.2	-0.5	-0.3	-0.6	-0.8	-0.5	-0.3	-0.2	-0.2	0.5	-6.4	-1.8
18	0.0	-0.2	-0.7	-0.9	-1.0	-0.9	-0.9	-0.8	-0.6	-0.4	-0.2	-0.2	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.4	-0.8	-0.6	-0.2	0.1	0.1	-1.0	-0.5
19	0.3	0.6	0.6	1.2	0.7	0.7	0.6	1.5	0.4	-0.5	-0.4	0.6	-0.8	0.2	0.6	1.4	1.5	1.4	1.6	1.2	0.6	-0.1	-0.3	-0.5	1.6	-0.8	0.5
20	-0.4	-0.5	-0.7	-0.5	-0.4	-0.6	-0.6	-0.7	-1.0	-1.0	-0.8	-0.7	0.2	0.9	1.3	1.2	1.0	1.0	1.0	1.3	1.3	1.1	1.2	0.9	1.3	-1.0	0.2
21	0.3	0.4	0.4	0.1	0.4	-0.3	0.6	1.3	1.2	1.3	1.0	0.9	0.9	0.9	0.9	0.6	0.9	0.9	0.2	0.0	0.1	-0.7	-0.6	-0.7	1.3	-0.7	0.5
22	-0.8	-0.7	-0.9	-1.0	-0.9	-1.0	-0.7	-1.0	-1.4	-1.5	-1.2	-1.5	-1.7	-1.7	-1.0	-1.1	-1.5	-1.8	-2.1	-2.3	-2.5	-2.7	-2.7	-2.7	-0.7	-2.7	-1.5
23	-2.6	-2.9	-3.3	-3.7	-3.5	-3.4	-3.1	-3.3	-4.0	-4.8	-4.7	-4.3	-3.9	-4.3	-4.2	-4.8	-4.9	-5.1	-5.2	-5.4	-5.9	-6.2	-7.1	-9.2	-2.6	-9.2	-4.6
24	-9.7	-10.4	-9.9	-9.8	-9.8	-9.8	-10.1	-11.1	-11.9	-12.5	-13.1	-13.7	-14.4	-14.3	-14.0	-13.6	-13.5	-13.5	-14.1	-14.6	-15.3	-15.3	-15.8	-16.1	-9.7	-16.1	-12.8
25	-16.1	-16.8	-16.7	-17.2	-17.8	-18.2	-19.1	-19.7	-19.8	-19.8	-19.5	-19.1	-18.6	-17.9	-17.4	-16.1	-13.8	-11.4	-9.4	-9.3	-7.4	-4.9	-4.5	-5.0	-4.5	-19.8	-14.8
26	-5.1	-5.2	-5.1	-6.0	-7.9	-8.3	-9.2	-8.3	-8.3	-9.0	-9.0	-9.0	-7.8	-8.3	-7.9	-6.8	-8.5	-9.9	-10.4	-10.5	-11.6	-12.5	-11.7	-13.0	-5.1	-13.0	-8.7
27	-14.2	-14.9	-15.0	-15.0	-15.4	-15.2	-14.4	-13.8	-10.7	-8.9	-9.4	-7.7	-5.2	-4.5	-4.6	-4.8	-6.6	-5.8	-4.2	-4.9	-3.0	-3.6	-1.7	-3.9	-1.7	-15.4	-8.6
28	-1.3	-1.0	-1.2	-0.7	-0.5	0.1	-1.7	-0.2	-1.2	-1.8	-1.8	-3.0	-2.8	-3.1	-3.4	-4.1	-5.1	-6.1	-6.6	-7.5	-7.8	-8.3	-9.0	-8.7	0.1	-9.0	-3.6
29	-9.3	-9.9	-10.3	-9.6	-10.1	-10.6	-12.0	-12.7	-12.3	-13.3	-14.2	-13.9	-14.7	-14.9	-14.7	-14.1	-13.5	-12.8	-13.1	-13.3	-13.8	-14.0	-14.4	-15.2	-9.3	-15.2	-12.8
Max.	**0.3**	**0.6**	**0.6**	**1.2**	**0.7**	**0.7**	**0.6**	**1.5**	**1.2**	**1.3**	**1.0**	**0.9**	**0.9**	**0.9**	**1.3**	**1.4**	**1.5**	**1.4**	**1.6**	**1.3**	**1.3**	**1.1**	**1.2**	**0.9**	**1.6**		
Min.	**-27.9**	**-28.1**	**-27.9**	**-28.5**	**-29.1**	**-29.2**	**-29.7**	**-29.7**	**-30.0**	**-29.7**	**-28.9**	**-28.8**	**-28.4**	**-28.5**	**-27.4**	**-28.1**	**-25.3**	**-25.6**	**-27.2**	**-25.9**	**-26.8**	**-27.3**	**-27.2**	**-27.3**		**-30.0**	
Avg.	**-12.0**	**-12.0**	**-12.0**	**-12.1**	**-12.2**	**-12.1**	**-12.2**	**-12.2**	**-12.5**	**-12.5**	**-12.5**	**-12.3**	**-12.3**	**-12.1**	**-11.9**	**-11.8**	**-11.5**	**-11.7**	**-11.9**	**-12.1**	**-12.4**	**-12.4**	**-12.2**	**-12.2**			**-12.1**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-15.9	-16.3	-16.5	-16.8	-17.3	-17.3	-17.2	-16.5	-15.8	-16.0	-15.6	-15.1	-13.5	-11.8	-10.8	-9.4	-8.2	-7.2	-7.0	-5.9	-5.9	-5.2	-4.7	-4.1	-4.1	-17.3	-12.1
2	-3.4	-2.8	-2.2	-1.8	-0.9	-1.3	-1.7	-2.2	-2.3	-2.7	-2.7	-2.6	-2.2	-1.8	-1.5	-1.4	-1.5	-1.7	-1.5	-2.1	-2.2	-2.1	-2.1	-2.1	-0.9	-3.4	-2.0
3	-2.0	-2.3	-2.8	-2.7	-2.0	-1.9	-1.8	-1.9	-1.9	-1.7	-1.4	-1.5	-1.5	-1.4	-1.0	-0.6	-0.4	-0.1	0.0	0.0	0.2	0.3	0.3	0.5	0.5	-2.8	-1.1
4	0.7	0.7	0.7	1.2	0.1	-0.4	-0.2	-0.1	-0.2	-0.4	-0.3	-0.5	0.1	0.4	0.5	0.5	0.6	0.8	0.8	0.5	0.2	-0.1	0.0	0.1	1.2	-0.5	0.2
5	0.6	0.7	0.9	1.1	0.7	0.6	0.7	0.9	0.9	1.6	1.5	0.7	0.8	0.7	0.4	0.8	1.1	1.0	0.6	0.1	-0.2	-0.1	-0.1	0.1	1.6	-0.2	0.7
6	0.0	-0.2	-0.4	-0.5	-0.7	-1.1	-1.4	-1.3	-1.4	-1.3	-1.3	-0.9	-0.2	-0.2	0.0	0.3	0.6	0.5	0.5	0.3	0.8	0.6	0.5	0.9	0.9	-1.4	-0.3
7	0.6	0.1	0.1	0.0	-0.6	-1.1	-0.9	-1.1	-0.8	-1.0	-1.0	-1.3	-1.6	-1.4	-1.1	-0.7	-1.0	-0.7	-1.1	-1.5	-2.1	-2.7	-3.4	-4.0	0.6	-4.0	-1.2
8	-4.2	-4.3	-4.6	-4.9	-5.3	-5.2	-5.2	-4.9	-4.8	-4.6	-4.6	-4.2	-3.1	-2.3	-1.3	-1.0	-0.3	-0.2	-0.5	-0.5	-0.6	-0.7	-0.2	-0.1	-0.1	-5.3	-2.8
9	-1.2	-1.5	-1.5	-1.3	-0.8	-0.7	-0.5	-0.6	-0.8	-0.4	-0.3	0.0	0.1	-0.7	-1.2	-0.9	-0.9	-1.0	-0.9	-1.0	-0.7	-0.5	-0.1	-0.2	0.1	-1.5	-0.7
10	-0.2	-0.4	-1.2	-1.9	-3.4	-3.9	-4.4	-4.8	-4.9	-5.2	-5.2	-5.5	-5.2	-5.3	-5.3	-5.2	-5.4	-5.5	-5.4	-5.6	-5.7	-6.1	-6.3	-6.3	-0.2	-6.3	-4.5
11	-6.6	-7.1	-7.6	-7.8	-8.2	-8.4	-8.3	-8.4	-8.5	-8.8	-8.7	-8.6	-8.8	-9.0	-9.0	-9.0	-9.0	-9.3	-9.4	-10.0	-10.5	-10.2	-10.3	-10.6	-6.6	-10.6	-8.8
12	-11.7	-11.9	-11.5	-12.0	-11.6	-11.6	-12.0	-12.1	-11.7	-11.2	-10.7	-10.5	-10.4	-10.2	-9.9	-9.6	-9.4	-9.2	-9.1	-8.9	-8.9	-8.8	-8.8	-8.8	-8.8	-12.1	-10.4
13	-8.9	-9.0	-9.3	-9.6	-9.7	-9.8	-10.1	-10.3	-10.7	-11.0	-11.4	-11.7	-11.6	-11.3	-11.3	-11.5	-11.6	-11.5	-11.7	-12.2	-12.9	-13.3	-13.5	-13.8	-8.9	-13.8	-11.2
14	-13.9	-14.4	-14.9	-15.6	-15.8	-15.0	-15.4	-15.6	-14.9	-13.9	-12.9	-10.7	-10.0	-10.0	-9.6	-9.0	-8.3	-7.5	-6.5	-5.6	-5.2	-5.3	-5.5	-5.2	-5.2	-15.8	-10.9
15	-5.2	-5.8	-5.8	-5.4	-5.0	-4.0	-3.5	-4.1	-4.1	-3.7	-3.4	-3.2	-2.9	-2.5	-2.2	-2.1	-2.1	-2.3	-2.4	-2.6	-2.8	-2.9	-2.9	-3.0	-2.1	-5.8	-3.5
16	-3.1	-3.2	-3.3	-3.3	-3.4	-3.9	-4.3	-4.0	-3.6	-4.1	-4.2	-3.7	-3.4	-3.0	-2.7	-2.7	-2.4	-1.9	-1.9	-2.0	-2.6	-3.2	-3.4	-3.5	-1.9	-4.3	-3.2
17	-3.5	-3.4	-3.9	-3.8	-3.6	-3.7	-3.8	-4.5	-4.6	-4.3	-4.6	-4.7	-4.6	-4.6	-4.3	-4.3	-4.2	-5.0	-7.2	-8.4	-9.2	-9.6	-9.6	-9.2	-3.4	-9.6	-5.3
18	-9.2	-9.6	-11.1	-11.8	-12.5	-13.0	-13.6	-14.0	-15.2	-15.6	-15.4	-15.2	-15.2	-14.9	-14.6	-14.4	-14.7	-14.7	-15.1	-15.0	-15.5	-16.3	-16.5	-16.6	-9.2	-16.6	-14.1
19	-17.2	-17.8	-18.5	-18.9	-19.4	-19.7	-20.2	-20.7	-21.0	-21.3	-21.2	-20.6	-19.5	-18.8	-18.4	-18.0	-17.7	-17.5	-17.7	-18.4	-19.0	-19.1	-19.2	-19.7	-17.2	-21.3	-19.2
20	-20.1	-20.0	-20.1	-20.3	-20.5	-20.4	-20.3	-20.3	-20.4	-20.4	-20.2	-20.1	-20.0	-19.7	-19.5	-19.3	-18.9	-18.5	-18.1	-17.8	-17.8	-18.2	-18.2	-17.7	-17.7	-20.5	-19.4
21	-17.5	-17.1	-16.8	-16.1	-15.7	-15.4	-14.6	-14.7	-14.2	-14.0	-13.2	-12.5	-11.6	-10.6	-8.3	-7.8	-8.7	-7.0	-7.6	-9.3	-10.1	-11.1	-11.3	-10.0	-7.0	-17.5	-12.3
22	-9.8	-9.6	-11.0	-12.0	-11.4	-11.0	-12.3	-12.5	-13.6	-14.0	-13.4	-13.5	-14.1	-13.5	-13.0	-12.2	-11.7	-11.4	-11.0	-11.0	-11.3	-11.2	-10.8	-11.5	-9.6	-14.1	-12.0
23	-12.4	-12.1	-12.0	-12.1	-11.9	-12.7	-13.5	-13.6	-14.1	-14.3	-14.7	-15.2	-15.0	-14.5	-13.7	-13.2	-12.9	-12.5	-12.2	-12.2	-12.7	-13.6	-14.5	-14.7	-11.9	-15.2	-13.3
24	-14.3	-14.1	-14.0	-14.1	-14.3	-14.3	-14.0	-13.8	-13.8	-14.1	-13.6	-13.9	-12.9	-12.0	-11.5	-10.7	-10.0	-9.5	-9.1	-9.0	-9.1	-8.8	-8.7	-8.8	-8.7	-14.3	-12.0
25	-9.1	-9.3	-10.1	-11.2	-11.6	-10.6	-10.3	-9.6	-9.7	-9.9	-9.0	-7.7	-8.0	-9.3	-9.3	-8.5	-8.0	-7.3	-6.9	-7.1	-7.6	-8.0	-8.1	-7.9	-6.9	-11.6	-8.9
26	-7.6	-7.6	-7.7	-7.8	-8.7	-9.2	-8.9	-9.6	-10.5	-10.1	-9.8	-9.7	-9.5	-9.1	-8.2	-7.5	-7.0	-7.0	-6.9	-7.0	-7.5	-8.3	-9.0	-8.8	-6.9	-10.5	-8.5
27	-9.1	-9.5	-9.8	-9.5	-9.8	-10.3	-10.0	-10.4	-10.1	-10.5	-11.0	-11.1	-10.6	-10.3	-10.3	-9.8	-9.3	-9.3	-9.6	-9.9	-11.3	-11.8	-12.0	-12.5	-9.1	-12.5	-10.3
28	-13.2	-13.1	-13.2	-13.8	-13.6	-13.8	-14.2	-14.6	-14.0	-14.6	-14.1	-13.4	-12.7	-12.2	-11.8	-11.5	-11.3	-10.7	-10.0	-9.5	-9.2	-8.9	-8.5	-8.6	-8.5	-14.6	-12.1
29	-8.3	-8.6	-8.3	-8.3	-8.1	-7.9	-7.2	-6.9	-6.4	-6.2	-5.7	-5.1	-4.4	-4.0	-3.7	-3.5	-3.6	-3.8	-3.7	-3.5	-3.2	-2.9	-2.8	-2.4	-2.4	-8.6	-5.4
30	-2.1	-2.1	-2.0	-1.9	-1.9	-2.0	-2.2	-2.1	-2.0	-1.9	-1.6	-1.3	-1.0	-0.8	-0.8	-0.9	-0.8	-0.9	-1.0	-1.2	-1.3	-1.1	-1.0	-1.1	-0.8	-2.2	-1.4
31	-1.0	-0.6	-0.5	-0.4	-0.3	-0.2	0.1	0.0	0.0	0.1	0.3	0.7	0.9	0.9	0.9	1.0	0.9	0.8	0.9	0.9	0.5	0.4	0.0	0.0	1.0	-1.0	0.3
Max.	**0.7**	**0.7**	**0.9**	**1.2**	**0.7**	**0.6**	**0.7**	**0.9**	**0.9**	**1.6**	**1.5**	**0.7**	**0.9**	**0.9**	**0.9**	**1.0**	**1.1**	**1.0**	**0.9**	**0.9**	**0.8**	**0.6**	**0.5**	**0.9**	**1.6**		
Min.	**-20.1**	**-20.0**	**-20.1**	**-20.3**	**-20.5**	**-20.4**	**-20.3**	**-20.7**	**-21.0**	**-21.3**	**-21.2**	**-20.6**	**-20.0**	**-19.7**	**-19.5**	**-19.3**	**-18.9**	**-18.5**	**-18.1**	**-18.4**	**-19.0**	**-19.1**	**-19.2**	**-19.7**		**-21.3**	
Avg.	**-7.4**	**-7.5**	**-7.7**	**-7.8**	**-8.0**	**-8.0**	**-8.1**	**-8.2**	**-8.2**	**-8.2**	**-8.0**	**-7.8**	**-7.5**	**-7.2**	**-6.9**	**-6.5**	**-6.3**	**-6.1**	**-6.2**	**-6.3**	**-6.6**	**-6.7**	**-6.8**	**-6.8**			**-7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	-0.1	-0.2	-0.3	-0.3	-0.4	-0.6	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5	-0.7	-0.8	-1.5	-1.7	0.2	-1.7	-0.5
2	-1.7	-2.0	-3.0	-3.4	-2.4	-3.1	-3.8	-3.7	-3.9	-4.7	-4.8	-5.0	-4.8	-4.6	-4.4	-4.3	-4.2	-4.0	-3.9	-3.1	-3.0	-2.1	-2.0	-1.8	-1.7	-5.0	-3.5
3	-1.7	-1.4	-1.4	-1.6	-1.8	-2.1	-2.1	-2.1	-2.0	-1.9	-1.5	-1.5	-1.4	-1.0	-0.6	-0.2	0.0	0.0	-0.3	-0.5	-0.8	-0.8	-0.8	-0.8	0.0	-2.1	-1.2
4	-0.8	-0.9	-0.9	-1.0	-1.1	-1.0	-1.0	-0.9	-1.0	-1.0	-0.9	-0.7	-0.6	-0.7	-0.7	-0.3	-0.4	-0.7	-1.1	-1.4	-2.6	-3.6	-4.7	-5.3	-0.3	-5.3	-1.4
5	-6.7	-7.9	-9.6	-10.4	-10.9	-11.3	-12.0	-12.4	-12.0	-12.6	-12.3	-12.4	-11.5	-11.1	-10.5	-9.8	-9.4	-9.0	-9.1	-9.8	-10.7	-11.2	-11.7	-11.8	-6.7	-12.6	-10.7
6	-12.2	-13.5	-13.8	-14.2	-14.7	-15.7	-15.8	-16.2	-16.1	-15.3	-15.5	-14.1	-12.6	-11.9	-11.2	-10.5	-10.1	-9.9	-10.0	-10.1	-10.6	-11.1	-11.3	-11.9	-9.9	-16.2	-12.8
7	-12.7	-13.1	-13.6	-13.3	-13.7	-12.8	-13.7	-14.8	-14.8	-14.0	-14.3	-13.2	-11.5	-10.1	-9.3	-8.6	-8.2	-8.3	-8.5	-8.6	-9.7	-9.7	-10.2	-10.0	-8.2	-14.8	-11.5
8	-9.7	-9.5	-9.3	-9.2	-9.4	-9.3	-9.0	-8.8	-8.6	-9.3	-10.0	-10.3	-10.0	-9.7	-9.1	-8.3	-8.0	-8.1	-8.6	-8.8	-9.2	-9.7	-10.5	-11.4	-8.0	-11.4	-9.3
9	-11.3	-10.9	-10.8	-10.9	-11.4	-12.0	-12.8	-13.7	-13.7	-13.4	-13.0	-12.9	-11.7	-10.9	-10.2	-9.8	-9.4	-9.4	-9.9	-10.1	-10.8	-12.0	-10.9	-11.3	-9.4	-13.7	-11.4
10	-12.2	-13.0	-13.7	-13.8	-14.4	-14.7	-15.1	-15.3	-16.1		-14.7	-14.2	-13.6	-12.4	-11.5	-10.8	-10.2	-10.4	-10.5	-10.8	-11.4	-12.0	-13.1	-13.2	-10.2	-16.1	-12.9
11	-13.4	-13.7	-13.9	-14.1	-14.7	-16.2	-16.1	-16.8	-16.7	-16.6	-16.5	-15.8	-14.6	-13.3	-12.3	-11.5	-11.2	-11.1	-11.3	-12.3	-13.0	-13.0	-13.5	-13.9	-11.1	-16.8	-14.0
12	-14.2	-14.3	-14.7	-13.8	-14.4	-14.8	-15.6	-15.3	-14.9	-14.5	-14.5	-13.8	-12.4	-11.1	-9.8	-9.3	-9.0	-8.6	-8.7	-8.5	-8.8	-9.2	-8.2	-8.0	-8.0	-15.6	-11.9
13	-7.8	-7.8	-7.8	-8.3	-8.5	-8.0	-7.3	-7.2	-7.0	-6.4	-5.6	-5.2	-4.9	-3.3	-1.6	-0.9	-0.9	-0.6	-0.9	-0.9	-1.0	-1.0	-1.5	-1.9	-0.6	-8.5	-4.4
14	-2.0	-2.2	-2.4	-2.6	-2.6	-2.6	-2.8	-2.9	-3.1	-2.9	-2.5	-2.4	-2.2	-2.0	-1.9	-1.8	-1.8	-1.1	-0.9	-1.0	-1.1	-1.1	-1.3	-1.7	-0.9	-3.1	-2.0
15	-1.8	-2.3	-2.5	-1.9	-2.1	-2.3	-3.0	-3.4	-4.7	-5.9	-6.6	-7.4	-7.6	-7.5	-7.9	-8.6	-8.8	-9.0	-9.3	-9.8	-10.9	-12.0	-12.5	-13.0	-1.8	-13.0	-6.7
16	-13.5	-13.9	-14.3	-14.8	-15.4	-15.7	-15.8	-16.2	-16.4	-16.4	-15.6	-14.7	-13.7	-12.9	-11.8	-10.4	-9.4	-8.7	-8.3	-7.9	-7.0	-6.7	-6.7	-6.2	-6.2	-16.4	-12.2
17	-6.1	-6.2	-6.0	-6.0	-6.1	-6.0	-5.3	-5.1	-5.0	-4.3	-3.7	-4.1	-4.2	-3.8	-3.5	-3.3	-3.1	-3.2	-3.1	-3.2	-3.3	-3.5	-3.4	-2.8	-2.8	-6.2	-4.3
18	-2.7	-2.8	-2.8	-2.7	-2.8	-2.0	-2.2	-1.4	-0.8	0.3	0.9	0.8	-0.1	0.5	0.8	1.0	1.0	1.1	1.0	-0.1	-0.1	-0.7	-0.3	-0.9	1.1	-2.8	-0.6
19	-0.5	-0.8	-0.8	-0.6	-0.5	-0.8	-0.9	-0.9	-1.2	-1.2	-0.4	0.3	0.6	0.8	1.0	1.0	1.2	1.3	1.4	0.3	0.2	0.1	-1.4	-1.5	1.4	-1.5	-0.1
20	-1.1	-1.1	-0.3	0.0	-0.4	-1.1	0.5	0.1	0.6	0.9	1.4	1.8	1.4	1.3	1.0	0.8	0.9	-0.1	-0.5	-0.7	-1.0	-1.1	-1.4	-1.5	1.8	-1.5	0.0
21	-1.6	-1.4	-1.3	-1.1	-0.5	-0.6	-1.3	-1.6	-1.6	-1.4	-0.9	-0.6	-0.3	-0.2	0.1	0.2	0.3	0.2	0.3	0.8	0.6	0.4	0.2	-0.2	0.8	-1.6	-0.5
22	0.6	1.0	2.2	2.6	2.4	0.6	1.4	2.4	2.7	3.1	3.2	3.5	4.2	4.2	4.5	5.0	5.4	5.3	5.3	5.5	6.1	6.3	5.4	4.8	6.3	0.6	3.6
23	5.4	5.7	5.4	4.4	4.1	4.7	4.0	3.1	3.4	3.0	4.2	4.6	3.6	3.9	4.2	4.9	5.6	6.1	6.2	6.1	6.3	6.2	6.0	5.1	6.3	3.0	4.9
24	4.7	3.1	1.5	0.3	-0.9	-3.1	-4.0	-4.3	-4.7	-3.9	-3.2	-2.7	-2.6	-2.3	-2.0	-1.6	-1.5	-1.3	-1.1	-1.0	-1.0	-1.0	-1.4	-2.6	4.7	-4.7	-1.5
25	-3.8	-4.4	-4.6	-5.9	-7.0	-7.5	-7.9	-8.4	-9.3	-9.2	-8.4	-8.2	-7.9	-7.6	-7.5	-7.3	-7.0	-6.9	-6.7	-6.7	-6.8	-7.8	-8.4	-9.4	-3.8	-9.4	-7.3
26	-10.1	-11.3	-11.6	-11.8	-12.4	-13.1	-12.9	-12.6	-11.9	-11.0	-10.2	-9.4	-8.4	-7.4	-7.1	-6.9	-6.4	-5.7	-5.2	-5.0	-5.2	-5.7	-6.5	-6.8	-5.0	-13.1	-8.9
27	-6.8	-6.9	-7.1	-7.3	-7.5	-8.1	-8.3	-8.5	-8.5	-8.5	-8.3	-8.0	-7.6	-6.7	-6.3	-6.4	-6.3	-6.2	-5.4	-5.4	-5.7	-6.1	-6.2	-6.2	-5.4	-8.5	-7.0
28	-6.3	-6.6	-6.7	-6.7	-7.0	-6.9	-6.9	-6.9	-7.8	-7.4	-6.6	-6.0	-5.6	-5.1	-4.6	-3.9	-3.7	-3.6	-3.7	-3.8	-4.2	-4.6	-4.8	-5.4	-3.6	-7.8	-5.6
29	-5.6	-5.3	-5.4	-5.7	-5.3	-5.3	-5.4	-5.5	-5.4	-5.2	-5.0	-4.5	-3.6	-2.7	-2.0	-1.2	-0.8	-0.6	-0.6	-0.8	-1.1	-2.0	-2.9	-3.7	-0.6	-5.7	-3.6
30	-3.8	-4.1	-4.8	-4.9	-5.3	-6.0	-6.0	-6.0	-6.3	-6.2	-5.5	-4.2	-2.9	-2.2	-1.6	-1.2	-1.4	-2.0	-2.3	-2.5	-3.0	-3.4	-3.5	-3.7	-1.2	-6.3	-3.9
Max.	**5.4**	**5.7**	**5.4**	**4.4**	**4.1**	**4.7**	**4.0**	**3.1**	**3.4**	**3.1**	**4.2**	**4.6**	**4.2**	**4.2**	**4.5**	**5.0**	**5.6**	**6.1**	**6.2**	**6.1**	**6.3**	**6.3**	**6.0**	**5.1**	**6.3**		
Min.	**-14.2**	**-14.3**	**-14.7**	**-14.8**	**-15.4**	**-16.2**	**-16.1**	**-16.8**	**-16.7**	**-16.6**	**-16.5**	**-15.8**	**-14.6**	**-13.3**	**-12.3**	**-11.5**	**-11.2**	**-11.1**	**-11.3**	**-12.3**	**-13.0**	**-13.0**	**-13.5**	**-13.9**		**-16.8**	
Avg.	**-5.3**	**-5.6**	**-5.8**	**-6.0**	**-6.2**	**-6.6**	**-6.7**	**-6.9**	**-6.9**	**-6.4**	**-6.4**	**-6.0**	**-5.6**	**-5.0**	**-4.5**	**-4.1**	**-3.9**	**-3.8**	**-3.9**	**-4.0**	**-4.3**	**-4.6**	**-5.0**	**-5.3**			**-5.4**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.7	-4.0	-4.3	-5.0	-5.2	-5.2	-5.7	-5.9	-6.0	-5.6	-4.8	-3.6	-2.1	-0.6	0.0	0.4	0.7	0.7	0.8	0.5	-0.1	0.0	-0.4	-0.5	0.8	-6.0	-2.5
2	-0.9	-0.9	-1.2	-1.9	-2.2	-2.1	-2.1	-1.9	-1.7	-1.1	-0.5	0.1	0.8	1.5	1.4	1.6	2.4	2.7	3.4	1.2	0.6	0.0	0.1	0.3	3.4	-2.2	0.0
3	0.7	0.0	-0.5	-1.3	-1.6	-1.6	-1.5	-1.0	-0.6	-0.5	-0.2	0.2	1.2	1.7	1.9	2.3	1.2	0.8	1.5	2.6	2.7	1.1	0.6	1.1	2.7	-1.6	0.5
4	0.7	0.3	0.4	0.3	0.6	0.6	0.9	0.9	1.3	1.2	1.7	1.7	2.0	2.5	3.0	3.4	3.6	3.9	4.0	4.0	3.5	2.6	2.2	2.2	4.0	0.3	2.0
5	1.9	1.6	1.8	1.9	1.9	1.8	1.7	1.5	2.2	2.7	3.0	2.6	2.4	3.0	3.3	3.4	3.9	4.3	4.3	3.7	3.5	3.2	2.9	2.1	4.3	1.5	2.7
6	2.1	1.5	0.7	0.6	0.5	0.4	0.4	0.5	0.8	1.1	1.3	1.6	1.7	1.9	2.0	2.1	2.3	2.1	1.9	1.6	1.2	0.8	0.5	0.4	2.3	0.4	1.3
7	0.5	0.7	0.8	0.8	0.8	0.6	0.7	0.8	1.0	1.5	2.0	2.2	2.2	2.4	2.6	2.6	2.5	2.6	2.7	2.4	2.2	2.3	1.6	1.4	2.7	0.5	1.6
8	1.4	1.4	1.2	1.4	1.3	0.9	0.8	1.2	1.4	1.7	2.0	2.5	2.5	2.3	2.0	2.4	2.5	2.7	2.6	2.4	2.3	2.2	2.4	2.3	2.7	0.8	1.9
9	2.0	1.9	1.8	1.5	1.5	1.4	1.2	1.1	1.6	2.2	2.5	2.4	2.0	2.1	1.9	2.3	2.4	2.2	1.9	1.7	1.6	1.6	1.7	1.9	2.5	1.1	1.8
10	1.4	1.0	1.0	0.5	0.4	0.4	0.7	0.9	1.0	1.1	1.3	1.7	2.6	3.1	3.9	4.3	3.9	4.4	4.3	3.9	3.4	3.3	3.5	2.9	4.4	0.4	2.3
11	3.0	2.4	2.3	2.2	2.1	2.7	2.5	2.5	3.3	3.4	2.7	2.0	1.9	2.0	3.8	4.5	4.6	4.0	4.6	4.3	4.1	3.8	3.1	2.4	4.6	1.9	3.1
12	2.5	1.9	1.8	1.7	1.4	1.5	1.1	1.1	1.6	1.9	2.5	3.1	3.6	3.4	3.0	2.0	1.3	1.6	1.7	1.6	1.3	0.9	0.6	0.6	3.6	0.6	1.8
13	0.6	0.2	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.3	1.1	1.8	2.4	2.6	2.8	2.5	2.4	2.0	1.9	1.5	1.2	0.9	0.5	0.2	2.8	-0.1	1.0
14	-0.1	0.0	-0.2	-0.1	0.9	0.5	1.0	1.0	1.4	0.9	0.8	1.2	2.3	3.4	4.1	3.9	4.2	4.4	4.5	3.9	3.8	4.1	4.3	4.2	4.5	-0.2	2.3
15	3.6	3.6	3.6	3.2	2.8	2.8	2.6	2.4	2.2	2.4	2.9	3.9	4.6	4.3	4.1	3.5	2.9	2.3	2.1	2.0	1.5	1.0	0.5	0.9	4.6	0.5	2.7
16	0.8	0.7	0.5	0.1	0.0	-0.3	-0.5	-0.5	-0.5	-0.5	-0.2	0.3		2.2	2.5	2.8	3.0	3.2	3.4	3.4	3.2	2.4	2.1	2.3	3.4	-0.5	1.3
17	1.1	0.2	0.5	0.8	1.2	0.9	0.7	0.9	0.7	1.2	2.2	3.3	4.0	4.7	5.2	6.4	6.6	6.6	7.0	6.6	6.0	4.5	3.5	3.1	7.0	0.2	3.2
18	2.7	2.8	2.6	2.0	1.8	0.8	0.4	0.4	0.6	1.1	0.8	1.1	1.3	1.3	1.5	2.0	2.1	2.6	3.0	2.6	2.0	1.4	0.3	0.2	3.0	0.2	1.5
19	0.7	1.0	1.1	1.0	0.7	0.4	0.6	0.5	0.3	0.3	0.8	1.4	2.3	3.0	3.3	4.1	4.2	4.5	4.9	5.2	4.9	4.4	3.7	2.9	5.2	0.3	2.3
20	2.5	2.4	1.8	1.7	1.8	2.0	1.8	1.8	2.2	3.0	4.2	5.7	7.4	8.8	9.5	9.9	9.9	10.1	10.1	9.9	9.5	9.3	9.2	8.9	10.1	1.7	6.0
21	7.9	7.6	6.8	6.8	6.7	6.2	5.4	4.6	3.9	3.5	5.0	6.3	6.7	7.5	7.5	7.6	8.0	8.2	8.2	6.7	5.6	5.0	4.8	4.8	8.2	3.5	6.3
22	4.6	3.9	3.7	3.0	2.5	2.8	1.8	2.3	2.4	2.8	3.2	4.1	5.5	7.2	7.9	8.1	7.5	7.0	5.8	5.1	4.2	3.3	2.9	2.6	8.1	1.8	4.3
23	2.2	1.6	1.1	1.1	0.9	1.4	1.4	1.4	1.8	2.1	2.6	2.8	2.5	2.4	2.5	3.0	3.1	3.2	3.1	3.1	3.1	3.1	2.9	2.5	3.2	0.9	2.3
24	2.4	2.4	2.3	2.1	1.9	1.9	1.7	1.9	2.2	2.6	2.6	2.8	3.0	3.1	3.6	4.1	4.5	4.6	4.4	2.7	3.7	3.4	2.8	2.5	4.6	1.7	2.9
25	1.6	1.6	1.7	1.7	1.4	1.1	0.9	0.7	0.9	1.4	2.3	2.8	2.3	1.7	1.2	2.3	3.8	3.5	3.4	3.1	2.9	2.7	2.1	2.0	3.8	0.7	2.0
26	1.8	1.4	1.2	1.0	1.1	1.3	1.7	1.1	1.0	1.3	1.8	2.1	2.5	2.9	4.0	2.4	2.5	3.5	3.9	3.8	4.1	4.1	3.8	3.4	4.1	1.0	2.4
27	2.6	2.4	1.6	1.5	0.5	0.3	0.8	1.1	1.3	2.3	3.2	4.3	4.9	5.9	6.8	7.6	8.1	8.6	8.9	8.6	8.1	7.5	6.0	5.3	8.9	0.3	4.5
28	5.4	5.1	4.2	4.1	4.2	4.6	4.0	4.1	4.0	4.9	5.7	6.5	7.4	7.8	8.2	9.0	9.5	10.1	10.2	9.7	9.4	9.1	8.3	7.0	10.2	4.0	6.8
29	6.5	6.0	6.2	5.7	5.1	4.7	4.3	4.3	4.9	5.7	7.1	8.1	8.6	9.0	9.7	10.2	10.8	11.1	11.4	11.7	11.4	10.5	9.6	9.1	11.7	4.3	8.0
30	8.3	7.9	8.1	8.6	8.6	8.0	7.9	7.8	7.9	8.7	9.3	9.6	10.2	10.4	10.7	10.7	10.5	9.4	8.9	8.3	6.7	6.0	5.4	5.2	10.7	5.2	8.5
31	4.7	4.5	4.4	4.1	3.9	3.9	3.9	3.9	3.7	3.9	4.5	4.8	5.3	5.6	5.7	6.1	5.9	5.9	5.2	4.7	4.0	3.9	3.4	2.9	6.1	2.9	4.5
Max.	**8.3**	**7.9**	**8.1**	**8.6**	**8.6**	**8.0**	**7.9**	**7.8**	**7.9**	**8.7**	**9.3**	**9.6**	**10.2**	**10.4**	**10.7**	**10.7**	**10.8**	**11.1**	**11.4**	**11.7**	**11.4**	**10.5**	**9.6**	**9.1**	**11.7**		
Min.	**-3.7**	**-4.0**	**-4.3**	**-5.0**	**-5.2**	**-5.2**	**-5.7**	**-5.9**	**-6.0**	**-5.6**	**-4.8**	**-3.6**	**-2.1**	**-0.6**	**0.0**	**0.4**	**0.7**	**0.7**	**0.8**	**0.5**	**-0.1**	**0.0**	**-0.4**	**-0.5**		**-6.0**	
Avg.	**2.3**	**2.0**	**1.8**	**1.6**	**1.5**	**1.4**	**1.3**	**1.3**	**1.5**	**1.9**	**2.4**	**2.9**	**3.5**	**3.8**	**4.2**	**4.4**	**4.5**	**4.6**	**4.6**	**4.3**	**3.9**	**3.5**	**3.1**	**2.8**			**2.9**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.6	3.4	4.1	4.5	4.6	4.8	5.0	4.7	4.6	5.4	6.4	6.8	6.4	6.8	6.8	6.6	5.8	5.7	5.5	5.5	4.9	4.6	3.8	6.8	3.2	5.1
2	3.9	4.4	4.7	4.9	4.7	4.4	4.1	4.7	5.3	6.0	6.3	6.7	7.2	8.1	8.6		9.1	8.6	8.3	8.1	8.0	7.8	6.9	6.3	9.1	3.9	6.4
3	6.2	6.1	6.1	5.5	5.9	6.0	5.9	5.7	5.5	5.8	6.8	8.1	7.9	9.0	8.8	8.1	7.3	8.2	7.6	7.0	5.3	4.5	3.6	3.4	9.0	3.4	6.4
4	3.0	2.8	2.6	2.3	2.3	2.2	2.1	2.4	3.9	4.3	4.9	5.4	5.7	5.8	7.1	7.0	7.2	7.1	7.2	7.2	6.6	5.9	4.9	3.7	7.2	2.1	4.7
5	3.2	2.7	2.5	2.5	2.4	2.5	2.6	2.8	2.9	3.4	3.7	3.6	3.6	4.4	4.9	4.8	5.0	4.9	4.5	4.6	4.4	4.2	4.1	3.5	5.0	2.4	3.7
6	3.1	2.9	2.6	3.0	2.6	2.7	2.8	2.9	3.2	3.9	5.1	6.3	7.8	9.1	9.7	10.4	11.4	10.4	10.5	9.6	9.6	10.1	8.9	7.3	11.4	2.6	6.5
7	7.1	6.6	6.0	5.9	5.5	5.3	5.5	6.1	7.2	8.2	9.2	9.9	10.8	11.5	12.5	12.9	13.3	13.1	13.4	12.7	12.0	10.2	8.9	7.1	13.4	5.3	9.2
8	5.1	4.1	3.7	3.3	2.5	2.5	2.5	2.8	4.1	4.8	6.1	6.5	6.5	6.6	6.7	7.0	6.8	6.7	6.5	6.1	6.3	5.8	4.0	2.8	7.0	2.5	5.0
9	1.8	1.5	1.3	0.7	0.5	0.4	0.2	0.3	0.4	0.6	1.4	2.2	2.9	3.1	3.7	4.3	4.9	4.8	5.0	5.2	5.3	5.1	4.4	4.2	5.3	0.2	2.7
10	4.1	3.8	2.6	1.9	1.9	1.5	1.0	1.4	1.7	2.2	2.9	3.4	4.0	5.0	5.4	5.7	6.0	6.1	5.8	5.3	4.9	4.5	4.4	4.4	6.1	1.0	3.7
11	4.0	4.1	3.8	3.6	3.3	2.7	2.7	2.4	2.5	3.2	3.8	3.4	3.8	4.0	4.1	4.5	4.8	5.1	5.0	5.1	5.0	4.2	3.9	3.6	5.1	2.4	3.9
12	2.7	2.5	2.4	1.8	1.4	0.9	0.8	1.0	1.2	2.2	3.1	3.9	4.1	4.2	4.3	4.4	4.1	3.7	3.3	2.7	2.6	2.2	1.9	1.8	4.4	0.8	2.6
13	1.7	1.5	1.4	1.8	2.4	2.9	3.1	3.3	3.7	4.1	4.7	5.6	7.1	8.2	8.9	9.7	10.6	11.2	12.2	13.0	12.4	12.1	10.4	10.3	13.0	1.4	6.8
14	10.3	10.2	8.4	6.1	6.1	7.2	5.6	5.1	4.1	6.0	6.2	7.8	9.5	10.4	12.0	11.9	12.4	12.4	12.1	10.6	8.7	8.9	9.1	8.6	12.4	4.1	8.7
15	8.4	7.6	7.1	6.5	6.0	5.0	5.8	6.5	5.0	6.4	6.1	7.3	7.6	8.4	9.3	9.2	8.5	8.4	9.1	9.1	7.8	6.9	6.6	6.5	9.3	5.0	7.3
16	6.3	5.9	5.6	5.4	4.8	4.4	4.6	5.5	6.2	6.8	7.2	8.1	9.4	9.9	10.5	10.7	10.1	10.9	11.8	12.0	12.2	11.3	11.0	10.8	12.2	4.4	8.4
17	10.7	10.6	10.5	10.4	10.6	10.4	10.2	9.9	11.0	11.6	11.7	12.3	13.5	14.5	14.9	15.4	15.7	15.8	16.0	15.3	14.6	13.3	11.6	9.9	16.0	9.9	12.5
18	8.9	9.3	9.7	8.8	9.1	9.3	8.7	8.0	9.1	9.9	9.9	10.2	11.3	11.7	11.8	12.3	12.7	13.0	12.5	12.6	12.3	12.0	10.8	9.4	13.0	8.0	10.5
19	8.9	8.6	8.5	7.8	7.4	7.1	6.8	7.0	8.5	9.3	9.7	9.5	9.8	10.9	11.5	11.8	11.8	12.4	12.8	12.8	12.2	11.4	10.9	10.1	12.8	6.8	9.9
20	8.6	7.9	7.8	7.4	7.2	6.8	6.7	7.0	7.5	8.5	8.9	9.6	10.3	11.0	11.6	11.7	11.6	11.3	10.8	10.0	8.8	8.0	7.1	5.9	11.7	5.9	8.8
21	5.7	5.3	5.0	5.0	5.0	5.0	5.3	5.7	6.3	7.0	7.7	8.6	9.0	9.2	9.7	10.6	11.2	11.9	12.6	12.1	11.2	9.9	8.7	7.9	12.6	5.0	8.1
22	8.2	8.0	7.4	7.1	7.2	6.9	6.6	7.1	7.7	8.2	8.8	9.4	9.7	10.2	10.4	9.9	9.6	9.3	8.7	8.3	7.5	6.9	6.0	5.8	10.4	5.8	8.1
23	5.7	5.6	5.4	5.3	5.1	4.4	4.8	5.1	5.8	6.2	6.5	7.0	7.8	8.4	9.0	9.5	10.0	10.4	10.5	10.4	9.7	8.6	7.3	6.2	10.5	4.4	7.3
24	5.7	5.4	5.2	4.7	4.4	4.1	4.5	5.2	5.9	6.7	6.8	7.3	7.4	7.2	7.3	7.4	7.3	7.1	7.2	7.4	7.3	7.1	6.9	6.8	7.4	4.1	6.3
25	6.7	7.2	7.3	6.7	6.4	5.9	6.1	6.7	6.5	7.5	8.1	8.8	9.3	9.9	10.0	10.1	10.0	9.7	9.3	9.0	8.3	8.0	8.0	7.3	10.1	5.9	8.0
26	7.0	6.8	6.2	6.5	6.7	7.1	7.0	7.5	7.7	8.5	9.2	10.0	10.6	9.4	9.4	9.9	9.7	9.9	9.8	9.8	9.9	9.9	9.4	9.1	10.6	6.2	8.6
27	8.8	8.3	8.3	8.1	7.3	6.8	6.9	6.7	6.8	7.3	7.3	8.1	9.0	9.6	9.8	10.2	10.2	10.6	10.4	9.6	8.6	7.7	7.0	6.3	10.6	6.3	8.3
28	5.6	5.0	4.9	4.8	4.6	5.4	6.1	5.9	6.0	7.1	6.8	7.5	7.7	8.6	9.8	9.7	8.3	9.3	9.7	9.8	9.8	8.3	7.5	7.1	9.8	4.6	7.3
29	6.5	6.2	6.3	5.6	5.4	5.5	5.4	5.3	5.8	6.3	6.8	7.3	8.2	8.6	9.3	9.7	9.7	9.8	9.5	9.1	8.2	7.2	6.6	5.9	9.8	5.3	7.3
30	5.4	5.4	5.4	5.4	5.3	4.9	4.8	5.2	5.9	6.7	7.4	8.3	8.8	9.2	9.6	10.6	10.4	10.7	10.9	10.5	10.1	10.7	10.4	10.2	10.9	4.8	8.0
Max.	**10.7**	**10.6**	**10.5**	**10.4**	**10.6**	**10.4**	**10.2**	**9.9**	**11.0**	**11.6**	**11.7**	**12.3**	**13.5**	**14.5**	**14.9**	**15.4**	**15.7**	**15.8**	**16.0**	**15.3**	**14.6**	**13.3**	**11.6**	**10.8**	**16.0**		
Min.	**1.7**	**1.5**	**1.3**	**0.7**	**0.5**	**0.4**	**0.2**	**0.3**	**0.4**	**0.6**	**1.4**	**2.2**	**2.9**	**3.1**	**3.7**	**4.3**	**4.1**	**3.7**	**3.3**	**2.7**	**2.6**	**2.2**	**1.9**	**1.8**		**0.2**	
Avg.	**5.9**	**5.7**	**5.4**	**5.1**	**4.9**	**4.8**	**4.8**	**5.0**	**5.4**	**6.1**	**6.6**	**7.3**	**7.9**	**8.4**	**8.9**	**9.2**	**9.2**	**9.3**	**9.3**	**9.0**	**8.5**	**7.9**	**7.2**	**6.5**			**7.0**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.2	10.1	10.0	9.5	9.0	8.5	7.7	7.3	8.2	9.5	10.3	10.8	11.5	12.1	12.3	12.5	12.1	11.9	11.0	10.6	9.7	8.9	8.3	7.8	12.5	7.3	10.0
2	7.1	6.7	6.3	6.1	5.8	5.7	5.7	5.8	6.0	6.6	8.0	8.6	9.6	10.1	10.5	11.2	11.4	11.9	11.1	9.3	9.3	9.0	8.1	7.4	11.9	5.7	8.2
3	7.9	6.8	7.1	8.2	9.4	8.2	8.7	8.6	8.2	7.6	6.5	7.1	7.9	8.4	8.8	9.5	9.3	8.9	8.6	8.6	8.5	8.3	8.3	8.1	9.5	6.5	8.2
4	7.4	7.1	6.9	7.0	7.6	8.0	8.3	8.5	9.0	9.3	9.9	10.7	11.6	12.5	12.4	11.7	12.4	13.1	11.6	9.8	8.6	8.4	8.2	8.1	13.1	6.9	9.5
5	9.0	9.7	10.3	10.7	10.8	10.6	10.4	10.3	10.6	11.4	12.1	13.2	14.5	15.3	15.3	14.1	13.1	13.7	13.7	13.9	13.7	12.9	12.5	12.2	15.3	9.0	12.3
6	11.8	10.7	10.4	10.4	10.7	11.4	11.7	12.1	12.3	14.5	15.6	15.7	15.9	15.0	13.1	12.8	12.5	12.2	11.3	10.8	10.1	9.8	9.4	8.9	15.9	8.9	12.0
7	8.5	8.3	8.1	7.9	7.8	7.9	7.9	7.9	6.9	6.5	6.7	6.5	6.6	6.8	6.5	6.6	6.7	7.2	7.7	8.0	7.7	7.6	7.2	6.9	8.5	6.5	7.3
8	6.6	6.5	6.3	7.1	6.6	5.9	6.0	5.9	5.9	6.5	7.0	7.3	7.1	7.6	8.1	8.7	9.0	9.0	9.1	9.2	8.9	8.6	8.5	8.5	9.2	5.9	7.5
9	8.3	8.4	8.4	8.6	8.9	8.7	8.8	9.1	10.4	11.0	10.7	11.0	11.9	12.6	13.1	13.7	13.3	12.5	11.6	10.9	10.4	9.8	9.5	8.9	13.7	8.3	10.4
10	8.3	8.1	8.1	7.7	7.7	7.8	7.6	7.7	7.7	8.3	8.5	9.3	9.8	10.7	11.4	11.7	12.1	12.4	12.1	11.5	10.5	10.0	9.3	8.8	12.4	7.6	9.5
11	8.1	7.5	6.9	6.6	6.5	6.3	6.2	6.2	6.2	7.5	7.9	8.2	8.9	9.6	10.4	11.1	11.5	11.4	11.0	10.8	10.3	9.4	8.4	7.8	11.5	6.2	8.5
12	7.5	7.0	6.8	6.8	6.6	5.9	5.9	7.0	8.0	8.5	9.1	9.2	8.9	9.5	9.5	9.3	9.2	9.1	8.2	7.4	7.1	6.9	6.7	6.7	9.5	5.9	7.8
13	6.8	6.8	6.8	6.6	6.6	6.5	6.5	6.5	6.5	6.6	6.7	7.1	7.3	8.0	8.4	8.7	8.9	8.8	8.9	8.8	8.8	8.5	8.2	8.1	8.9	6.5	7.6
14	7.7	7.7	7.7	7.6	7.4	7.7	7.7	7.8	8.0	8.4	9.1	9.9	10.2	11.0	12.1	12.6	12.6	13.1	13.4	13.5	12.8	12.2	11.3	10.4	13.5	7.4	10.1
15	9.5	9.4	9.2	9.1	9.2	9.0	9.0	9.1	9.5	10.6	11.3	11.9	12.3	13.1	13.4	13.9	13.2	12.3	11.7	10.5	9.9	9.3	9.4	9.4	13.9	9.0	10.6
16	9.4	9.2	9.2	9.1	8.8	8.7	8.5	8.6	8.6	8.4	8.0	7.7	8.3	8.7	9.2	9.2	8.1	7.7	7.7	7.5	7.3	7.3	7.1	7.0	9.4	7.0	8.3
17	7.0	6.9	5.7	4.2	3.1	2.9	3.0	3.1	3.4	3.8	3.5	3.9	4.9	5.6	5.8	6.3	6.7	7.7	7.4	7.2	6.7	6.3	5.8	5.4	7.7	2.9	5.3
18	5.1	4.9	4.3	3.8	3.7	3.5	3.4	3.7	4.2	4.4	4.7	5.0	5.2	5.9	6.1	6.5	6.9	7.0	7.0	7.2	6.8	7.0	6.9	6.8	7.2	3.4	5.4
19	6.6	6.1	5.9	5.5	4.9	5.3	5.8	5.9	6.1	6.4	6.9	8.7	9.2	9.9	11.2	10.7	11.1	10.2	10.2	9.6	9.4	9.3	8.9	8.8	11.2	4.9	8.0
20	8.4	8.6	8.5	8.4	8.4	8.5	8.7	8.9	8.3	7.4	7.0	6.1	5.8	5.8	5.9	5.8	5.6	5.3	4.9	4.9	4.8	4.8	4.9	5.0	8.9	4.8	6.7
21	5.0	4.7	4.5	4.3	4.3	4.3	4.5	4.5	4.7	4.9	5.3	6.1	6.6	7.4	7.9	8.2	9.0	10.4	9.2	9.4	9.8	8.9	8.1	7.2	10.4	4.3	6.6
22	6.5	6.3	6.1	5.8	5.4	5.3	5.7	5.8	5.8	5.9	6.1	6.2	5.7	5.6	5.5	5.8	5.8	5.7	5.5	5.5	5.5	5.3	5.1	5.1	6.5	5.1	5.7
23	5.1	5.0	4.9	5.0	4.9	4.9	4.9	5.0	5.4	5.9	6.2	6.5	6.9	6.8	6.9	7.3	8.5	8.7	8.5	7.8	6.6	5.8	5.7	5.2	8.7	4.9	6.2
24	4.7	4.8	5.1	4.9	4.5	4.5	4.8	5.7	6.1	6.3	6.6	7.2	8.1	9.0	10.2	11.1	12.3	13.1	12.4	12.9	11.9	12.1	12.9	11.5	13.1	4.5	8.4
25	10.4	8.7	8.2	8.7	8.6	8.0	7.6	7.8	8.5	9.6	10.8	12.2	13.4	14.5	15.5	16.1	16.7	16.9	17.1	17.2	17.0	16.3	14.9	13.6	17.2	7.6	12.4
26	11.9	11.0	11.0	10.9	10.6	9.0	8.1	7.4	8.0	8.2	8.2	8.0	7.5	8.1	8.2	8.6	8.9	9.0	9.8	10.0	9.5	8.6	8.0	7.7	11.9	7.4	9.0
27	7.3	7.0	6.7	6.6	6.5	6.4	6.5	6.4	6.3	6.3	6.4	6.7	7.0	7.6	8.1	8.3	8.2	8.5	8.7	8.7	8.3	7.8	7.4	7.6	8.7	6.3	7.3
28	7.7	7.0	7.0	7.0	7.4	7.5	7.8	8.2	8.9	9.9	10.5	11.6	12.2	13.2	13.4	13.6	14.1	14.5	14.5	14.2	14.1	13.4	12.6	10.8	14.5	7.0	10.9
29	9.5	9.4	8.6	8.3	7.6	8.4	7.3	6.9	8.0	9.1	10.5	11.6	12.5	13.7	15.0	16.2	16.7	16.9	16.4	16.6	16.0	14.7	12.6	10.7	16.9	6.9	11.8
30	9.8	9.5	9.7	9.1	9.1	9.2	9.1	8.7	9.0	10.4	10.8	11.7	12.9	14.1	14.9	15.4	15.0	14.6	13.9	13.2	12.7	12.0	10.8	9.7	15.4	8.7	11.5
31	8.9	8.7	8.7	7.8	7.3	6.9	7.4	7.7	8.6	9.7	11.7	13.6	14.5	15.7	16.7	17.2	17.8	18.3	18.5	18.5	18.3	17.0	15.1	14.3	18.5	6.9	12.9
Max.	**11.9**	**11.0**	**11.0**	**10.9**	**10.8**	**11.4**	**11.7**	**12.1**	**12.3**	**14.5**	**15.6**	**15.7**	**15.9**	**15.7**	**16.7**	**17.2**	**17.8**	**18.3**	**18.5**	**18.5**	**18.3**	**17.0**	**15.1**	**14.3**	**18.5**		
Min.	**4.7**	**4.7**	**4.3**	**3.8**	**3.1**	**2.9**	**3.0**	**3.1**	**3.4**	**3.8**	**3.5**	**3.9**	**4.9**	**5.6**	**5.5**	**5.8**	**5.6**	**5.3**	**4.9**	**4.9**	**4.8**	**4.8**	**4.9**	**5.0**		**2.9**	
Avg.	**8.0**	**7.7**	**7.5**	**7.4**	**7.3**	**7.1**	**7.1**	**7.2**	**7.5**	**8.0**	**8.5**	**9.0**	**9.5**	**10.1**	**10.5**	**10.8**	**10.9**	**11.0**	**10.7**	**10.5**	**10.0**	**9.6**	**9.0**	**8.5**			**8.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.9	12.7	13.4	12.7	12.0	12.0	10.6	9.9	10.4	8.9	9.0	9.7	11.0	12.7	14.6	15.7	15.9	16.6	16.6	16.0	13.7	11.9	10.5	9.7	16.6	8.9	12.5
2	9.2	8.3	8.1	7.9	7.9	7.9	8.0	8.1	8.2	8.4	8.4	8.7	8.9	9.5	9.9	10.0	10.3	10.5	10.1	10.1	10.2	10.2	10.1	10.0	10.5	7.9	9.1
3	10.1	9.9	9.3	9.3	9.0	8.4	7.9	7.4	7.9	9.1	10.1	11.5	12.4	12.4	12.7	13.4	13.4	13.4	12.9	12.0	11.2	10.0	9.2	8.4	13.4	7.4	10.5
4	7.9	7.6	7.1	7.3	7.2	7.2	7.4	7.5	7.6	8.1	8.8	9.2	9.4	10.1	10.6	11.0	11.3	12.0	12.2	11.4	10.0	8.5	7.9	7.4	12.2	7.1	8.9
5	7.4	7.3	7.3	7.5	7.3	7.6	8.3	7.9	8.1	8.4	9.3	11.4	12.1	12.7	12.9	13.4	13.9	14.2	13.9	13.9	13.4	12.5	10.7	9.8	14.2	7.3	10.5
6	8.9	8.6	7.7	7.9	8.0	8.1	7.9	8.0	8.0	8.7	10.1	11.1	12.3	13.2	13.8	14.3	14.8	14.3	13.8	13.4	13.1	12.4	11.1	10.1	14.8	7.7	10.8
7	9.6	9.2	8.9	8.5	7.6	7.3	6.7	7.3	7.6	8.6	9.4	10.3	11.4	12.3	13.0	13.1	13.3	13.8	13.7	13.7	13.1	11.8	10.7	9.8	13.8	6.7	10.4
8	9.2	9.0	8.9	8.6	7.8	7.6	7.0	6.2	6.8	8.0	9.1	10.3	11.6	12.6	13.5	14.4	14.9	15.3	15.4	15.3	15.2	13.7	12.0	11.5	15.4	6.2	11.0
9	11.0	10.6	9.9	8.8	8.5	8.3	7.5	7.0	8.4	9.2	10.0	11.6	12.9	13.6	14.5	15.4	15.9	15.5	15.5	15.3	14.7	13.4	12.2	12.3	15.9	7.0	11.8
10	12.4	12.1	11.7	12.0	12.2	10.8	10.3	7.5	7.8	9.4	10.8	12.0	13.4	14.2	14.7	14.4	13.3	13.9	13.6	12.6	11.9	10.6	9.8	9.2	14.7	7.5	11.7
11	8.5	7.7	7.8	8.1	8.1	8.0	7.7	7.8	8.5	9.1	9.5	9.8	10.6	11.0	11.4	11.6	11.9	11.7	11.8	11.5	10.5	10.0	9.8	10.3	11.9	7.7	9.7
12	10.6	10.4	9.7	8.8	8.8	8.5	8.8	8.9	9.0	9.8	10.6	11.7	12.6	13.7	14.3	15.0	15.8	15.0	12.8	12.2	12.4	12.7	12.3	11.1	15.8	8.5	11.5
13	10.5	10.2	10.2	10.0	10.1	10.9	10.7	10.3	10.1	10.2	10.5	10.5	11.1	11.6	12.5	11.8	12.3	12.3	10.2	9.8	9.7	9.1	9.5	10.0	12.5	9.1	10.6
14	9.8	9.2	9.2	9.3	9.2	9.1	9.4	9.5	9.4	9.5	9.3	9.4	9.4	9.7	9.8	10.7	11.0	10.9	10.5	10.2	9.8	9.4	9.5	9.2	11.0	9.1	9.7
15	8.4	7.9	7.7	7.3	7.1	6.8	6.2	5.8	5.7	6.1	6.5	7.1	7.6	8.0	8.8	9.3	9.3	9.7	9.7	9.3	9.2	8.9	8.8	8.7	9.7	5.7	7.9
16	8.8	8.8	8.7	8.7	8.5	8.6	8.5	8.2	8.2	8.1	8.5	8.5	9.2	10.0	10.7	10.9	10.9	10.8	10.3	9.8	9.1	8.1	7.5	7.4	10.9	7.4	9.0
17	6.9	7.0	7.1	6.7	6.9	7.0	6.2	6.5	6.8	7.4	8.0	8.8	9.3	9.6	9.9	9.9	9.7	9.6	9.5	8.9	8.4	8.0	7.7	7.7	9.9	6.2	8.1
18	7.4	7.0	7.0	6.8	7.1	6.7	6.8	7.1	7.1	8.0	9.3	10.5	11.2	11.9	12.3	12.5	12.6	12.6	12.8	12.7	11.7	11.0	11.0	10.9	12.8	6.7	9.8
19	11.1	11.7	11.3	10.8	10.3	9.0	8.4	7.7	8.7	8.8	9.2	10.0	11.3	12.0	12.9	13.3	13.6	13.7	13.4	13.1	10.5	10.3	10.6	10.6	13.7	7.7	10.9
20	10.9	9.6	9.5	9.4	9.5	9.0	9.0	9.0	9.3	9.4	9.6	9.4	10.1	10.9	11.2	11.3	11.8	12.2	12.3	12.2	11.8	10.8	10.3	10.3	12.3	9.0	10.4
21	10.3	10.0	10.1	10.2	10.2	10.0	9.9	9.5	9.3	9.5	9.9	9.9	10.4	10.5	10.6	11.0	11.2	11.4	12.1	10.5	10.0	9.6	9.0	8.0	12.1	8.0	10.1
22	8.0	7.7	7.6	7.4	7.3	7.2	7.3	7.3	7.5	7.9	8.2	8.5	9.2	10.2	10.1	10.6	11.0	10.3	10.7	10.9	10.7	10.2	9.5	8.7	11.0	7.2	8.9
23	8.6	9.1	8.7	8.5	8.3	8.6	8.4	7.9	8.7	9.8	10.1	10.6	11.5	12.8	14.0	14.6	15.1	14.3	12.9	11.2	10.3	10.0	9.9	9.6	15.1	7.9	10.6
24	9.4	9.4	9.2	9.5	9.0	9.4	9.1	8.0	7.5	7.6	7.8	8.5	9.4	10.5	11.9	12.8	13.6	14.5	14.6	14.3	13.7	13.1	12.2	11.9	14.6	7.5	10.7
25	11.8	11.4	11.1	11.0	11.0	7.5	7.7	7.2	6.9	7.0	7.6	7.8	8.1	7.9	8.1	8.6	10.1	11.2	11.2	10.7	9.9	9.0	8.6	8.4	11.8	6.9	9.2
26	8.3	8.1	8.1	8.2	8.2	8.2	8.4	8.3	8.2	8.2	8.4	8.6	8.6	9.1	9.8	10.3	10.7	11.1	10.6	10.1	9.4	8.9	8.8	8.5	11.1	8.1	9.0
27	8.2	8.1	8.0	7.9	7.8	7.9	7.9	7.5	7.1	7.4	7.3	7.3	7.3	8.1	9.0	9.5	10.2	10.4	10.2	10.4	10.0	9.5	9.3	9.1	10.4	7.1	8.6
28	8.7	8.1	8.0	8.0	7.9	8.0	8.0	7.4	7.3	7.4	7.8	8.1	9.1	9.8	10.6	11.5	11.5	10.6	10.8	9.7	9.9	8.9	7.0	7.4	11.5	7.0	8.8
29	6.9	6.4	5.8	5.6	6.0	5.6	6.3	6.8	7.2	7.7	8.9	10.1	10.8	11.6	11.8	11.2	11.3	12.0	11.3	10.3	9.3	8.8	7.8	6.9	12.0	5.6	8.6
30	6.7	6.7	6.9	6.7	6.8	6.8	6.4	5.9	6.1	6.5	7.1	7.8	8.5	9.0	9.9	10.8	11.1	11.7	11.4	11.0	9.9	9.2	9.3	8.9	11.7	5.9	8.4
31	8.4	8.0	7.9	8.4	7.9	7.7	7.6	7.3	7.5	7.4	7.2	8.0	8.6	9.4	9.9	10.1	10.5	10.5	10.4	10.5	10.1	9.4	9.0	9.1	10.5	7.2	8.8
Max.	**12.9**	**12.7**	**13.4**	**12.7**	**12.2**	**12.0**	**10.7**	**10.3**	**10.4**	**10.2**	**10.8**	**12.0**	**13.4**	**14.2**	**14.7**	**15.7**	**15.9**	**16.6**	**16.6**	**16.0**	**15.2**	**13.7**	**12.3**	**12.3**	**16.6**		
Min.	**6.7**	**6.4**	**5.8**	**5.6**	**6.0**	**5.6**	**6.2**	**5.8**	**5.7**	**6.1**	**6.5**	**7.1**	**7.3**	**7.9**	**8.1**	**8.6**	**9.3**	**9.6**	**9.5**	**8.9**	**8.4**	**8.0**	**7.0**	**6.9**		**5.6**	
Avg.	**9.3**	**9.0**	**8.8**	**8.6**	**8.5**	**8.2**	**8.1**	**7.8**	**8.0**	**8.4**	**8.9**	**9.6**	**10.3**	**11.0**	**11.6**	**12.0**	**12.3**	**12.4**	**12.2**	**11.7**	**11.1**	**10.3**	**9.7**	**9.4**			**9.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.9	9.1	9.0	9.0	9.0	9.2	9.0	9.1	9.5	10.1	11.1	11.9	12.0	11.4	11.3	11.6	11.3	10.5	9.8	9.2	8.5	7.8	7.7	7.8	12.0	7.7	9.8
2	8.0	7.9	7.7	7.7	7.5	7.4	7.8	7.2	7.4	7.4	7.3	7.2	7.9	8.3	8.5	8.6	8.8	8.9	9.0	8.7	7.9	7.3	6.9	6.7	9.0	6.7	7.8
3	6.8	6.5	6.0	6.1	6.0	5.8	5.8	5.7	6.0	6.3	6.6	7.0	7.1	7.2	7.2	7.8	8.1	8.5	8.6	8.4	7.5	7.1	7.4	7.4	8.6	5.7	7.0
4	7.2	7.2	7.0	6.8	6.6	6.3	6.3	5.9	5.9	6.3	6.5	7.1	7.8	8.3	8.8	9.0	9.2	9.6	9.9	9.8	9.5	9.3	8.9	8.8	9.9	5.9	7.8
5	8.7	8.3	8.0	8.2	8.3	8.1	7.7	7.7	7.6	8.3	8.7	8.5	9.8	10.4	10.9	10.0	10.1	9.4	9.2	8.8	8.6	8.8	8.7	8.0	10.9	7.6	8.8
6	7.6	7.3	7.0	6.6	6.3	6.1	6.0	5.8	6.1	6.6	7.0	7.7	8.2	7.6	7.2	7.3	7.4	7.5	7.7	7.7	7.4	7.2	7.1	6.8	8.2	5.8	7.1
7	6.9	7.4	7.7	8.3	8.3	8.6	8.3	7.3	7.7	8.1	7.8	7.7	7.3	7.3	7.3	7.5	8.0	8.2	7.9	7.3	7.1	7.1	7.3	7.3	8.6	6.9	7.6
8	7.4	7.2	7.3	7.4	7.3	7.0	6.8	6.7	6.7	6.9	7.2	7.6	8.3	8.5	8.2	8.1	8.0	7.3	6.7	6.5	6.4	6.9	7.2	7.6	8.5	6.4	7.3
9	7.6	7.6	7.6	7.1	6.5	6.4	6.9	6.9	6.6	6.6	6.8	7.3	7.7	8.0	8.2	8.1	8.1	7.8	8.0	8.0	7.7	7.5	7.7	7.5	8.2	6.4	7.4
10	7.4	7.1	7.1	7.1	7.0	7.0	6.9	7.0	6.9	6.9	7.2	7.3	8.2	8.6	9.3	9.2	9.7	10.1	9.6	9.4	9.1	8.9	8.6	8.4	10.1	6.9	8.1
11	8.0	7.3	6.6	6.5	6.1	5.8	6.1	6.3	6.2	6.5	6.8	6.9	7.1	7.2	7.4	8.1	8.9	9.2	9.4	9.2	8.6	8.0	7.7	7.6	9.4	5.8	7.4
12	7.5	7.6	7.9	7.5	7.0	6.3	5.9	5.8	5.9	6.3	6.8	7.5	8.2	8.9	8.5	8.1	8.3	7.9	8.2	8.1	7.9	7.9	7.9	8.0	8.9	5.8	7.5
13	8.0	7.9	7.9	7.8	7.5	7.3	7.2	7.2	7.3	7.3	7.1	6.6	6.5	6.3	6.2	6.2	6.1	6.2	6.2	6.0	6.2	6.5	7.1	6.8	8.0	6.0	6.9
14	7.0	6.6	6.2	6.2	6.1	6.0	6.0	6.0	5.9	5.7	6.0	5.9	6.0	6.4	6.6	7.1	7.5	7.5	7.4	7.3	7.0	7.0	6.8	6.8	7.5	5.7	6.5
15	6.8	6.8	7.1	7.0	6.6	6.6	6.7	6.2	6.6	6.5	7.0	7.7	8.2	8.0	8.4	8.1	7.8	7.8	7.5	7.1	6.8	6.6	6.4	6.1	8.4	6.1	7.1
16	6.0	6.3	6.2	5.9	5.9	5.6	5.7	5.6	5.5	5.1	5.6	6.8	7.7	7.9	8.2	8.7	7.6	7.5	7.3	7.3	6.7	6.9	6.8	6.1	8.7	5.1	6.6
17	5.8	5.8	6.0	5.4	4.8	4.6	4.4	4.3	4.1	4.2	4.4	5.1	5.6	6.0	6.0	6.0	6.1	6.0	5.2	4.6	4.2	4.2	4.0	4.3	6.1	4.0	5.0
18	4.5	4.4	4.8	4.7	4.7	4.4	3.9	4.1	3.9	4.0	4.3	5.4	6.1	5.9	5.5	5.3	5.5	5.4	5.1	5.2	5.1	5.3	4.8	4.4	6.1	3.9	4.9
19	4.1	4.1	4.0	4.0	3.9	3.9	4.0	4.0	4.0	4.2	4.3	4.4	4.5	4.9	5.3	4.7	4.4	4.5	4.3	4.1	4.0	4.0	3.7	3.5	5.3	3.5	4.2
20	3.5	3.3	3.4	3.3	3.1	2.9	2.1	2.2	1.9	1.8	2.1	2.1	1.4	2.2	3.3	3.8	4.1	4.1	4.2	3.6	2.7	2.9	3.1	2.9	4.2	1.4	2.9
21	2.6	2.8	2.9	2.9	2.6	2.7	2.5	2.5	2.4	2.6	2.7	3.5	4.2	4.7	4.9	5.2	5.1	5.1	4.5	3.3	1.9	1.2	0.5	0.3	5.2	0.3	3.1
22	0.4	1.4	1.4	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.5	3.7	4.2	4.8	5.0	4.8	4.0	3.6	3.3	2.9	2.6	2.7	2.9	2.9	5.0	0.4	2.7
23	3.3	3.4	3.8	4.1	5.3	5.6	5.6	5.5	5.4	5.4	5.3	5.3	5.3	5.4	4.6	4.9	4.9	4.7	4.9	4.8	4.5	4.4	4.3	4.5	5.6	3.3	4.8
24	4.3	4.3	4.1	3.9	3.8	3.8	3.5	3.5	3.5	3.6	3.8		3.6			5.8	5.2	5.2	5.1	5.0	4.7	4.4	4.2	4.7	5.8	3.5	4.3
25	4.4	4.6	4.4	4.7	4.4	4.0	4.2	4.3	4.5	4.8	4.7	5.2	5.6	5.8	5.5	5.7	5.6	5.4	5.2	5.1	5.0	4.8	4.6	4.5	5.8	4.0	4.9
26	4.6	4.4	4.4	4.4	4.1	3.9	3.8	3.8	4.0	4.0	4.6	5.6	6.1	6.9	7.3	7.1	7.7	7.8	7.3	7.1	6.4	5.1	4.5	4.2	7.8	3.8	5.4
27	3.4	2.7	1.9	2.3	1.1	0.0	0.5	0.4	-0.2	-0.6	0.1	0.8	2.6	3.8	4.4	5.0	5.6	5.7	5.6	4.8	3.4	2.4	2.8	3.1	5.7	-0.6	2.6
28	2.7	2.5	1.4	1.2	1.3	0.9	1.5	2.1	2.1	2.4	2.8	3.8	5.0	5.8	6.8	7.2	7.0	6.5	6.2	5.8	5.3	5.0	4.7	4.8	7.2	0.9	4.0
29	4.7	4.6	4.0	3.7	3.6	3.2	3.0	3.3	2.8	3.0	4.0	4.4	4.5	3.4	3.2	3.4	4.2	4.3	4.1	4.0	3.6	3.2	3.1	3.0	4.7	2.8	3.7
30	2.9	2.8	2.9	2.4	1.6	1.2	1.4	0.8	0.4	0.9	1.8	2.5	2.7	3.4	3.8	3.9	4.0	3.8	3.9	3.7	2.9	2.9	3.1	3.1	4.0	0.4	2.6
Max.	**8.9**	**9.1**	**9.0**	**9.0**	**9.0**	**9.2**	**9.0**	**9.1**	**9.5**	**10.1**	**11.1**	**11.9**	**12.0**	**11.4**	**11.3**	**11.6**	**11.3**	**10.5**	**9.9**	**9.8**	**9.5**	**9.3**	**8.9**	**8.8**	**12.0**		
Min.	**0.4**	**1.4**	**1.4**	**1.2**	**1.1**	**0.0**	**0.5**	**0.4**	**-0.2**	**-0.6**	**0.1**	**0.8**	**1.4**	**2.2**	**3.2**	**3.4**	**4.0**	**3.6**	**3.3**	**2.9**	**1.9**	**1.2**	**0.5**	**0.3**		**-0.6**	
Avg.	**5.7**	**5.6**	**5.5**	**5.4**	**5.3**	**5.1**	**5.0**	**5.0**	**4.9**	**5.1**	**5.4**	**5.9**	**6.3**	**6.7**	**6.8**	**6.9**	**6.9**	**6.9**	**6.7**	**6.4**	**6.0**	**5.8**	**5.7**	**5.6**			**5.9**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.1	3.3	3.2	3.0	2.6	1.9	1.6	1.7	1.5	1.5	2.1	1.9	3.2	4.1	4.4	4.3	3.7	3.5	3.4	3.6	3.2	2.9	2.9	2.8	4.4	1.5	2.9
2	2.5	2.1	1.7	1.7	1.4	1.2	1.5	1.5	1.4	1.6	1.9	2.4	2.7	3.0	3.3	3.7	3.7	3.7	3.3	2.6	2.0	0.0	-0.9	-0.8	3.7	-0.9	2.0
3	-1.1	-1.1	-1.9	-2.0	-1.7	-2.2	-2.3	-3.1	-3.2	-3.1	-2.8	-2.6	-2.4	-2.2	-1.9	-1.7	-1.6	-1.2	-1.3	-1.6	-2.2	-2.2	-1.8	-1.7	-1.1	-3.2	-2.0
4	-2.6	-3.0	-2.9	-2.7	-2.7	-2.7	-2.4	-2.2	-2.8	-2.8	-2.8	-1.7	-0.9	0.1	0.9	1.3	1.4	0.9	0.6	0.3	-0.5	-1.2	-1.4	-1.9	1.4	-3.0	-1.3
5	-2.4	-2.9	-3.2	-3.1	-2.8	-2.8	-3.1	-3.3	-3.3	-3.3	-3.2	-3.2	-3.2	-3.1	-2.9	-2.6	-2.5	-2.5	-2.5	-2.9	-3.3	-3.5	-3.7	-4.0	-2.4	-4.0	-3.1
6	-4.0	-4.0	-4.2	-4.4	-4.4	-4.4	-4.4	-4.4	-4.5	-4.5	-4.4	-4.3	-4.1	-4.0	-3.9	-3.8	-3.6	-3.2	-3.1	-3.4	-3.5	-3.7	-3.9	-4.2	-3.1	-4.5	-4.0
7	-4.2	-4.4	-4.5	-4.6	-4.7	-4.9	-5.0	-5.2	-5.6	-5.5	-5.4	-5.3	-5.0	-5.0	-4.5	-4.2	-4.0	-4.0	-4.1	-4.2	-4.2	-4.2	-4.5	-4.9	-4.0	-5.6	-4.7
8	-4.8	-4.8	-5.0	-5.4	-5.7	-6.2	-7.4	-8.7	-8.1	-7.5	-6.7	-6.5	-5.6	-4.4	-3.8	-3.4	-3.2	-3.3	-3.7	-4.4	-4.8	-4.4	-5.0	-5.0	-3.2	-8.7	-5.3
9	-4.8	-4.4	-3.8	-2.4	-1.6	-2.0	-2.5	-2.7	-2.6	-2.1	-1.7	-1.0	-0.2	0.5	1.0	1.0	1.8	2.2	2.4	2.6	3.0	3.3	3.4	3.5	3.5	-4.8	-0.3
10	3.7	3.7	3.6	3.6	3.4	3.0	2.5	2.3	1.0	-0.2	0.4	1.9	2.8	3.2	3.6	3.9	4.4	4.2	3.8	3.7	3.8	3.9	4.0	4.1	4.4	-0.2	3.1
11	4.1	4.0	4.0	4.2	4.0	3.7	3.7	4.0	3.6	-0.7	-3.2	-4.9	-5.8	-6.1	-6.5	-6.9	-7.0	-7.0	-7.2	-7.2	-7.1	-7.2	-7.4	-7.2	4.2	-7.4	-2.3
12	-6.9	-6.7	-6.4	-6.4	-6.9	-7.4	-7.8	-7.9	-8.1	-8.5	-8.7	-8.0	-7.3	-6.9	-6.9	-6.6	-6.5	-6.7	-7.2	-7.8	-8.1	-8.4	-8.9	-9.0	-6.4	-9.0	-7.5
13	-9.2	-9.8	-10.1	-10.1	-10.0	-9.9	-9.9	-9.8	-9.5	-9.4	-9.1	-8.9	-7.7	-6.1	-4.5	-4.4	-3.7	-3.0	-3.8	-3.6	-2.9	-2.6	-2.4	-2.3	-2.3	-10.1	-6.8
14	-1.7	-1.5	-1.5	-1.3	-1.3	-1.3	-1.3	-1.6	-1.6	-1.6	-1.3	-1.0	-0.8	-0.6	-0.5	-0.2	0.0	0.2	-0.1	-0.2	-0.3	-0.2	-0.3	-0.6	0.2	-1.7	-0.9
15	-1.6	-2.9	-4.4	-5.3	-5.9	-5.9	-6.5	-7.5	-7.1	-8.0	-8.2	-7.7	-7.7	-7.5	-7.4	-7.1	-6.9	-7.2	-7.6	-8.2	-8.2	-8.8	-9.5	-9.5	-1.6	-9.5	-6.9
16	-9.6	-9.2	-9.0	-8.9	-8.9	-9.0	-8.9	-9.1	-9.4	-9.4	-9.2	-9.6	-9.0	-8.9	-8.8	-8.4	-8.3	-8.8	-8.9	-9.2	-9.5	-9.4	-9.1	-8.4	-8.3	-9.6	-9.0
17	-7.8	-8.0	-8.0	-8.4	-8.9	-8.8	-9.5	-10.1	-10.3	-10.1	-10.0	-9.1	-7.8	-6.5	-5.7	-5.3	-3.9	-2.8	-2.5	-1.6	-1.3	-1.0	-1.3	-1.6	-1.0	-10.3	-6.3
18	-1.0	-0.8	-0.7	-0.5	0.3	0.3	0.4	0.5	0.3	0.2	0.3	0.2	1.3	1.9	2.0	2.3	2.2	2.1	2.1	1.7	1.5	1.1	1.3	0.7	2.3	-1.0	0.8
19	-0.6	-2.1	-3.0	-2.8	-3.6	-5.1	-5.3	-6.5	-8.2	-7.6	-8.6	-9.3	-9.3	-8.7	-7.4	-7.9	-7.8	-6.5	-7.0	-7.2	-7.1	-6.9	-6.0	-5.7	-0.6	-9.3	-6.3
20	-5.1	-5.0	-4.5	-4.0	-4.4	-4.9	-5.4	-7.4	-8.2	-7.4	-7.6	-9.9	-10.0	-10.3	-10.0	-9.8	-8.7	-9.0	-7.4	-7.8	-7.9	-7.8	-7.5	-6.8	-4.0	-10.3	-7.4
21	-6.1	-5.9	-5.6	-5.6	-5.8	-6.1	-6.4	-6.9	-7.1	-7.3	-7.6	-8.0	-8.3	-7.8	-7.3	-6.5	-6.7	-7.0	-7.3	-8.3	-9.6	-10.5	-11.4	-12.0	-5.6	-12.0	-7.5
22	-12.4	-12.3	-12.3	-12.6	-13.1	-13.4	-13.6	-13.7	-13.8	-14.0	-14.3	-14.2	-13.9	-13.3	-12.4	-12.2	-11.9	-12.3	-12.6	-13.3	-14.6	-15.1	-15.3	-14.6	-11.9	-15.3	-13.4
23	-13.9	-14.0	-13.7	-13.7	-14.0	-14.1	-14.4	-14.8	-15.1	-14.9	-14.5	-14.2	-13.7	-13.1	-12.2	-12.4	-12.5	-12.1	-12.3	-11.6	-10.1	-9.9	-10.3	-10.8	-9.9	-15.1	-13.0
24	-10.4	-10.7	-10.9	-10.6	-10.8	-11.8	-13.2	-13.8	-13.4	-13.1	-12.8	-12.2	-11.6	-10.3	-10.3	-9.4	-8.8	-8.6	-9.0	-8.8	-9.3	-9.7	-9.3	-9.9	-8.6	-13.8	-10.8
25	-9.8	-9.5	-8.5	-7.7	-8.0	-8.1	-8.1	-7.9	-7.5	-6.9	-5.9	-5.4	-4.9	-4.3	-3.4	-3.3	-3.0	-2.6	-3.1	-2.8	-3.3	-4.1	-5.1	-4.8	-2.6	-9.8	-5.8
26	-4.9	-5.1	-5.8	-6.5	-7.5	-7.6	-7.6	-8.1	-8.0	-8.3	-8.7	-9.6	-10.7	-10.9	-10.8	-11.2	-11.4	-11.7	-12.2	-12.6	-12.6	-12.8	-13.4	-14.2	-4.9	-14.2	-9.7
27	-14.5	-14.3	-15.5	-15.6	-15.6	-15.8	-16.3	-16.3	-16.5	-15.9	-16.0	-15.8	-15.7	-15.1	-14.6	-14.1	-14.0	-14.0	-14.1	-14.3	-14.7	-15.1	-14.6	-13.0	-13.0	-16.5	-15.1
28	-12.4	-13.4	-13.3	-12.8	-12.0	-10.0	-8.8	-8.4	-8.8	-7.9	-7.5	-6.8	-6.2	-6.1	-5.7	-5.6	-6.0	-6.1	-5.7	-5.6	-5.6	-5.6	-5.3	-5.6	-5.3	-13.4	-8.0
29	-5.3	-5.1	-4.4	-3.8	-3.9	-3.9	-3.4	-3.5	-3.9	-3.4	-3.9	-3.3	-3.1	-2.5	-2.6	-2.0	-2.1	-1.8	-2.0	-2.2	-2.2	-2.4	-2.5	-2.3	-1.8	-5.3	-3.1
30	-1.6	-1.5	-2.0	-1.9	-1.4	-1.5	-1.4	-1.3	-1.1	-1.1	-1.1	-0.9	-1.4	-1.9	-1.7	-1.6	-1.4	-1.6	-1.6	-2.1	-2.0	-2.3	-2.3	-2.2	-0.9	-2.3	-1.6
31	-2.1	-2.4	-2.5	-2.7	-3.3	-2.8	-2.5	-2.3	-2.3	-2.4	-2.3	-2.2	-2.3	-2.4	-3.1	-3.0	-2.8	-2.8	-2.6	-2.2	-1.8	-1.7	-2.1	-2.4	-1.7	-3.3	-2.5
Max.	**4.1**	**4.0**	**4.0**	**4.2**	**4.0**	**3.7**	**3.7**	**4.0**	**3.6**	**1.6**	**2.1**	**2.4**	**3.2**	**4.1**	**4.4**	**4.3**	**4.4**	**4.2**	**3.8**	**3.7**	**3.8**	**3.9**	**4.0**	**4.1**	**4.4**		
Min.	**-14.5**	**-14.3**	**-15.5**	**-15.6**	**-15.6**	**-15.8**	**-16.3**	**-16.3**	**-16.5**	**-15.9**	**-16.0**	**-15.8**	**-15.7**	**-15.1**	**-14.6**	**-14.1**	**-14.0**	**-14.0**	**-14.1**	**-14.3**	**-14.7**	**-15.1**	**-15.3**	**-14.6**		**-16.5**	
Avg.	**-4.8**	**-4.9**	**-5.0**	**-5.0**	**-5.1**	**-5.2**	**-5.4**	**-5.7**	**-5.9**	**-5.9**	**-5.9**	**-5.8**	**-5.4**	**-5.0**	**-4.6**	**-4.4**	**-4.2**	**-4.2**	**-4.3**	**-4.5**	**-4.6**	**-4.8**	**-5.0**	**-5.0**			**-5.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.4	-2.9	-3.0	-2.4	-2.1	-2.2	-2.6	-3.3	-2.9	-3.0	-2.8	-2.8	-3.2	-3.4	-3.3	-3.4	-3.6	-4.1	-4.7	-5.5	-5.2	-4.9	-4.1	-4.8	-2.1	-5.5	-3.5
2	-5.0	-5.8	-5.9	-6.3	-6.9	-7.2	-7.5	-7.8	-9.0	-12.3	-13.5	-14.0	-14.6	-14.7	-14.9	-15.0	-14.9	-14.9	-15.2	-15.4	-15.3	-15.3	-15.3	-15.4	-5.0	-15.4	-11.7
3	-15.6	-15.4	-15.4	-15.1	-14.8	-14.9	-15.0	-14.8	-14.8	-15.2	-15.3	-15.3	-15.1	-15.0	-15.0	-14.9	-14.6	-14.6	-14.7	-15.1	-15.0	-15.2	-15.1	-14.7	-14.6	-15.6	-15.0
4	-14.3	-14.3	-14.0	-13.7	-14.1	-14.7	-15.0	-15.8	-15.8	-16.1	-15.9	-15.8	-15.8	-15.5	-15.0	-14.8	-14.3	-14.2	-14.2	-14.0	-13.8	-13.7	-13.9	-14.0	-13.7	-16.1	-14.7
5	-14.3	-14.5	-14.2	-13.4	-13.2	-12.9	-12.8	-12.2	-12.9	-13.2	-13.0	-11.1	-10.2	-9.1	-8.1	-6.6	-6.3	-7.8	-6.8	-6.4	-6.4	-8.2	-5.8	-6.2	-5.8	-14.5	-10.2
6	-6.1	-6.1	-6.0	-5.7	-5.7	-6.2	-5.9	-5.3	-4.1	-3.3	-3.5	-2.4	-2.7	-3.8	-4.5	-6.0	-6.7	-5.2	-5.4	-7.9	-9.4	-10.0	-11.0	-12.6	-2.4	-12.6	-6.1
7	-13.8	-14.1	-14.6	-14.6	-14.7	-15.3	-16.0	-16.3	-16.2	-16.2	-15.8	-15.6	-14.8	-13.8	-13.1	-9.9	-9.1	-9.8	-10.1	-8.0	-7.8	-7.9	-8.2	-7.2	-7.2	-16.3	-12.6
8	-6.6	-6.5	-6.4	-6.7	-6.6	-6.3	-5.9	-6.0	-6.1	-6.3	-6.5	-6.4	-6.2	-6.0	-5.8	-5.6	-5.3	-5.0	-4.3	-3.3	-3.1	-2.9	-2.6	-2.8	-2.6	-6.7	-5.4
9	-2.6	-2.1	-2.0	-1.7	-0.8	0.5	0.0	-0.1	-0.3	-0.3	-0.4	-0.6	-0.3	-0.1	0.3	0.7	0.3	-0.8	-1.2	-0.7	0.7	1.1	1.4	1.3	1.4	-2.6	-0.3
10	1.2	1.1	0.4	0.0	0.2	0.0	-0.2	-0.1	0.5	-0.5	-0.3	-0.7	-0.8	-1.3	-1.3	-1.1	-1.0	-1.2	-1.6	-1.4	-0.9	-1.1	-1.2	-1.3	1.2	-1.6	-0.5
11	-1.5	-1.7	-2.0	-2.3	-2.5	-2.6	-2.5	-2.5	-2.4	-2.7	-3.0	-2.9	-2.5	-2.3	-2.3	-2.6	-2.9	-2.8	-2.9	-3.9	-3.9	-3.8	-4.6	-4.2	-1.5	-4.6	-2.8
12	-4.0	-4.5	-4.9	-5.3	-5.7	-6.5	-6.7	-6.4	-6.1	-6.0	-6.2	-6.4	-6.2	-6.4	-6.8	-6.9	-5.9	-5.1	-5.7	-6.1	-5.9	-5.7	-5.5	-5.2	-4.0	-6.9	-5.8
13	-5.2	-5.1	-4.9	-4.7	-4.8	-5.3	-5.4	-5.4	-5.2	-5.0	-4.9	-4.2	-3.6	-3.7	-4.2	-3.4	-3.5	-2.8	-3.2	-3.4	-3.6	-3.7	-3.5	-3.3	-2.8	-5.4	-4.2
14	-3.2	-2.7	-2.7	-2.9	-3.0	-3.2	-3.4	-3.4	-3.1	-3.1	-3.1	-3.3	-3.6	-3.8	-3.9	-4.0	-3.7	-4.1	-4.5	-4.5	-4.4	-4.4	-4.4	-4.2	-2.7	-4.5	-3.6
15	-4.1	-4.4	-5.2	-5.1	-4.9	-4.9	-4.7	-4.4	-4.8	-5.6	-5.5	-5.2	-4.9	-4.6	-4.5	-3.7	-3.1	-2.7	-2.3	-2.4	-2.4	-2.1	-1.9	-1.8	-1.8	-5.6	-4.0
16	-1.8	-1.9	-1.9	-1.9	-2.0	-2.1	-2.2	-2.3	-3.0	-3.5	-3.1	-2.7	-1.9	-2.4	-2.2	-2.3	-3.0	-2.7	-3.0	-3.3	-3.5	-4.5	-4.3	-4.5	-1.8	-4.5	-2.8
17	-4.9	-5.1	-5.0	-5.0	-5.7	-7.1	-6.8	-6.6	-5.6	-5.9	-6.0	-6.4	-6.2	-6.3	-7.1	-7.6	-7.3	-7.9	-8.1	-8.3	-8.9	-9.4	-9.5	-9.9	-4.9	-9.9	-6.9
18	-10.5	-12.1	-12.4	-12.7	-13.4	-13.2	-13.8	-13.9	-14.4	-14.1	-13.8	-14.1	-14.3	-14.1	-13.8	-13.9	-14.4	-14.7	-15.0	-15.4	-16.0	-16.2	-16.3	-16.3	-10.5	-16.3	-14.1
19	-16.5	-17.0	-17.2	-17.4	-17.7	-18.2	-17.9	-18.2	-17.6	-17.8	-17.2	-16.1	-14.7	-14.7	-14.7	-15.1	-15.0	-14.7	-15.6	-14.7	-15.2	-14.9	-15.6	-16.4	-14.7	-18.2	-16.3
20	-17.3	-17.4	-18.1	-18.6	-19.0	-19.3	-20.3	-20.9	-21.1	-21.6	-22.1	-22.3	-22.6	-22.7	-22.7	-22.7	-22.9	-23.1	-23.3	-23.7	-23.9	-24.3	-24.6	-25.1	-17.3	-25.1	-21.7
21	-25.1	-25.3	-25.7	-25.7	-26.1	-26.6	-26.5	-26.5	-27.2	-27.1	-26.9	-26.5	-26.4	-26.3	-25.9	-24.9	-24.7	-24.8	-24.4	-23.1	-23.3	-23.6	-23.1	-22.5	-22.5	-27.2	-25.3
22	-21.4	-20.6	-19.6	-19.2	-17.3	-14.3	-13.9	-14.4	-14.0	-15.5	-16.2	-15.9	-14.6	-14.2	-12.7	-13.0	-12.9	-12.7	-12.3	-12.1	-12.2	-12.2	-12.3	-13.0	-12.1	-21.4	-14.9
23	-12.6	-12.3	-11.9	-11.6	-11.6	-11.6	-11.0	-10.9	-11.2	-11.4	-11.9	-12.0	-11.7	-11.0	-9.8	-9.3	-8.4	-7.2	-6.7	-5.9	-5.0	-4.4	-4.2	-3.7	-3.7	-12.6	-9.5
24	-3.1	-2.0	-1.5	-0.9	-0.2	0.6	1.1	0.8	0.6	0.4	0.5	0.2	0.2	-0.3	-0.6	-0.8	-0.9	-0.9	-1.0	-1.1	-1.5	-3.1	-5.7	-7.8	1.1	-7.8	-1.1
25	-9.2	-10.7	-11.4	-11.6	-11.8	-11.9	-12.0	-12.1	-12.7	-13.4	-14.5	-15.4	-15.7	-16.0	-17.2	-17.0	-17.1	-17.9	-18.1	-18.3	-18.8	-18.8	-19.5	-19.1	-9.2	-19.5	-15.0
26	-18.9	-19.1	-19.2	-18.4	-17.9	-17.5	-16.9	-16.8	-16.6	-16.1	-16.5	-16.5	-16.3	-16.8	-17.3	-16.5	-16.8	-17.3	-18.0	-18.3	-18.8	-17.7	-18.2	-18.5	-16.1	-19.2	-17.5
27	-18.4	-18.3	-17.9	-17.9	-16.7	-16.3	-15.9	-15.4	-16.2	-16.4	-16.6	-14.6	-14.6	-16.0	-15.8	-15.1	-15.1	-14.7	-14.9	-15.2	-14.8	-14.0	-14.1	-14.1	-14.0	-18.4	-15.8
28	-13.1	-12.5	-12.6	-12.4	-12.3	-12.1	-11.7	-11.9	-11.2	-11.6	-11.6	-11.7	-12.0	-11.7	-11.6	-11.7	-11.9	-12.1	-12.4	-13.1	-13.6	-13.6	-13.8	-14.1	-11.2	-14.1	-12.3
29	-14.6	-14.6	-14.7	-15.0	-15.1	-15.5	-15.9	-16.1	-16.5	-16.7	-16.8	-17.2	-17.3	-17.3	-17.4	-17.3	-17.3	-17.5	-17.8	-18.2	-18.5	-18.9	-19.0	-19.4	-14.6	-19.4	-16.9
30	-19.9	-20.2	-20.5	-22.0	-22.1	-21.8	-21.7	-21.2	-21.3	-22.0	-21.8	-21.6	-21.3	-20.6	-20.5	-20.9	-21.1	-21.4	-21.2	-21.4	-21.3	-21.1	-21.3	-21.2	-19.9	-22.1	-21.2
Max.	**1.2**	**1.1**	**0.4**	**0.0**	**0.2**	**0.6**	**1.1**	**0.8**	**0.6**	**0.4**	**0.5**	**0.2**	**0.2**	**-0.1**	**0.3**	**0.7**	**0.3**	**-0.8**	**-1.0**	**-0.7**	**0.7**	**1.1**	**1.4**	**1.3**	**1.4**		
Min.	**-25.1**	**-25.3**	**-25.7**	**-25.7**	**-26.1**	**-26.6**	**-26.5**	**-26.5**	**-27.2**	**-27.1**	**-26.9**	**-26.5**	**-26.4**	**-26.3**	**-25.9**	**-24.9**	**-24.7**	**-24.8**	**-24.4**	**-23.7**	**-23.9**	**-24.3**	**-24.6**	**-25.1**		**-27.2**	
Avg.	**-10.2**	**-10.3**	**-10.3**	**-10.3**	**-10.3**	**-10.3**	**-10.3**	**-10.3**	**-10.4**	**-10.7**	**-10.8**	**-10.6**	**-10.5**	**-10.5**	**-10.4**	**-10.2**	**-10.1**	**-10.2**	**-10.3**	**-10.3**	**-10.4**	**-10.5**	**-10.6**	**-10.7**			**-10.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature at 10 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-20.0	-19.7	-19.0	-19.7	-20.2	-19.0	-16.6	-16.9	-16.4	-15.2	-14.2	-13.8	-12.6	-12.6	-10.1	-9.4	-7.8	-8.1	-8.6	-8.5	-8.5	-7.9	-7.8	-8.3	-7.8	-20.2	-13.4
2	-8.0	-7.4	-6.5	-7.0	-6.4	-5.3	-4.4	-3.9	-4.2	-4.1	-3.6	-3.1	-2.4	-2.0	-1.6	-1.7	-1.9	-1.7	-2.3	-2.1	-1.7	-1.4	-1.1	-0.7	-0.7	-8.0	-3.5
3	-0.4	0.1	0.1	0.1	0.3	0.4	0.6	0.8	1.2	1.2	1.3	1.5	1.3	0.9	1.3	1.1	0.8	1.4	1.7	2.0	2.1	1.9	1.6	1.4	2.1	-0.4	1.0
4	1.0	0.8	0.7	1.0	1.2	1.2	1.3	1.3	0.8	0.8	0.9	0.6	0.8	0.9	0.6	0.3	1.0	1.4	1.5	1.6	1.7	1.5	1.6	1.6	1.7	0.3	1.1
5	1.6	1.5	1.6	1.4	1.4	1.4	1.4	1.5	1.4	1.6	1.7	1.7	1.8	1.7	1.8	1.9	1.9	1.8	2.2	2.4	2.1	1.7	1.7	1.8	2.4	1.4	1.7
6	1.7	2.0	1.6	1.7	1.7	1.6	1.9	2.2	2.5	2.5	2.7	2.7	2.4	2.3	2.3	1.3	1.5	1.2	1.1	1.2	1.3	0.5	0.2	-0.2	2.7	-0.2	1.7
7	-0.6	-1.2	-1.6	-2.8	-3.8	-4.5	-5.0	-4.5	-5.0	-6.3	-7.2	-7.7	-7.5	-7.5	-7.3	-7.4	-7.5	-7.3	-6.8	-6.3	-5.9	-7.0	-4.7	-3.2	-0.6	-7.7	-5.4
8	-3.5	-2.7	-3.5	-2.9	-1.4	-1.8	-1.4	-0.2	-0.2	-0.5	-0.2	-0.1	0.6	0.7	-0.6	-0.5	-0.1	0.5	-2.4	-2.7	-2.3	-2.0	-1.9	-1.9	0.7	-3.5	-1.3
9	-2.5	-2.8	-3.3	-3.1	-5.3	-5.8	-7.6	-8.0	-7.9	-9.1	-6.6	-5.2	-5.5	-3.9	-4.7	-5.2	-5.6	-5.9	-6.4	-7.1	-7.1	-6.8	-5.8	-5.4	-2.5	-9.1	-5.7
10	-5.4	-6.0	-5.6	-5.5	-6.4	-8.4	-8.9	-9.2	-9.0	-9.9	-10.8	-11.1	-11.2	-10.9	-10.9	-10.2	-10.3	-9.3	-9.6	-8.9	-9.6	-10.2	-10.2	-9.6	-5.4	-11.2	-9.1
11	-9.8	-9.5	-9.3	-8.7	-8.1	-7.9	-8.3	-8.3	-7.9	-7.8	-7.6	-8.0	-7.1	-7.7	-7.8	-8.5	-9.5	-10.7	-10.7	-10.7	-11.4	-12.3	-13.0	-13.1	-7.1	-13.1	-9.3
12	-12.9	-12.6	-12.9	-12.0	-11.8	-11.4	-11.0	-10.9	-10.5	-9.8	-9.0	-8.6	-9.1	-8.6	-7.9	-6.9	-6.4	-7.1	-8.3	-8.1	-8.1	-8.6	-8.7	-7.5	-6.4	-12.9	-9.5
13	-7.7	-8.3	-8.5	-8.2	-8.6	-9.2	-9.7	-10.0	-10.0	-10.2	-10.3	-10.1	-10.3	-8.0	-9.4	-10.1	-9.2	-8.8	-4.9	-5.0	-4.8	-3.2	-3.1	-3.4	-3.1	-10.3	-8.0
14	-4.0	-4.9	-5.5	-5.5	-5.5	-5.7	-5.4	-3.8	-4.6	-4.9	-3.5	-4.7	-4.4	-2.9	-2.6	-3.2	-3.8	-3.6	-3.3	-3.2	-2.9	-2.9	-2.6	-2.4	-2.4	-5.7	-4.0
15	-2.3	-2.0	-1.9	-2.0	-2.2	-2.4	-2.3	-2.2	-2.1	-2.3	-2.7	-2.6	-2.4	-2.4	-2.4	-2.6	-2.6	-2.5	-2.4	-2.6	-3.6	-3.8	-3.8	-4.2	-1.9	-4.2	-2.6
16	-3.8	-3.9	-4.1	-4.7	-4.3	-3.9	-4.6	-5.1	-5.2	-5.5	-5.2	-5.4	-5.6	-5.8	-5.8	-5.9	-5.9	-5.9	-5.9	-5.7	-5.8	-5.4	-4.7	-3.4	-3.4	-5.9	-5.1
17	-2.7	-2.2	-1.9	-2.1	-2.3	-2.4	-2.6	-2.4	-2.1	-1.8	-1.7	-1.4	-1.0	-0.7	-0.6	-0.7	-0.8	-1.0	-0.9	-0.9	-0.8	-0.8	-0.9	-0.6	-0.6	-2.7	-1.5
18	-0.6	-0.7	-0.7	-0.8	-0.7	-0.8	-0.9	-0.9	-0.7	-0.7	-0.5	-0.5	-0.6	-0.3	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.2	0.2	0.2	0.2	0.2	-0.9	-0.4
19	-0.1	0.1	0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	0.0	0.0	-0.3	-0.4	-0.5	-0.4	0.0	0.0	-0.2	-0.1	0.0	0.4	0.8	0.0	0.8	-0.5	0.0
20	0.0	0.3	0.9	-0.2	-0.2	0.0	-0.2	-0.5	-1.0	-1.0	-1.0	-0.8	-0.6	-0.7	-0.4	-0.3	-0.1	-0.2	-0.3	-0.6	-1.2	-1.9	-2.2	-2.1	0.9	-2.2	-0.6
21	-2.2	-1.9	-2.4	-2.2	-2.2	-2.6	-3.2	-3.7	-3.9	-4.1	-4.4	-4.5	-3.7	-2.8	-2.7	-2.7	-2.4	-2.5	-2.4	-2.8	-2.9	-3.0	-3.8	-4.0	-1.9	-4.5	-3.0
22	-4.4	-4.7	-5.1	-5.3	-5.0	-5.5	-5.2	-4.6	-4.3	-4.3	-4.4	-4.5	-4.3	-3.8	-3.8	-4.0	-3.9	-3.7	-3.3	-3.6	-4.1	-4.3	-4.5	-4.4	-3.3	-5.5	-4.4
23	-4.1	-4.1	-4.0	-4.0	-3.9	-3.8	-3.6	-3.5	-3.5	-3.8	-4.3	-6.3	-7.4	-8.1	-8.1	-8.3	-8.8	-9.1	-8.8	-9.4	-8.3	-8.3	-8.7	-8.3	-3.5	-9.4	-6.3
24	-7.9	-7.6	-8.0	-8.4	-8.2	-8.0	-8.3	-8.8	-8.2	-7.6	-7.4	-7.6	-7.7	-7.6	-8.3	-8.8	-8.8	-8.3	-8.2	-8.7	-8.9	-9.1	-9.3	-9.0	-7.4	-9.3	-8.3
25	-8.4	-8.4	-7.6	-6.9	-6.6	-6.5	-5.9	-5.4	-5.2	-5.0	-4.8	-4.6	-4.7	-5.3	-5.5	-5.6	-5.3	-7.4	-9.1	-9.8	-10.2	-10.8	-11.4	-12.0	-4.6	-12.0	-7.2
26	-12.5	-13.9	-15.8	-17.0	-17.8	-18.1	-18.3	-18.4	-18.2	-18.1	-17.8	-17.3	-17.3	-17.3	-17.2	-17.2	-17.0	-17.0	-17.3	-17.6	-17.7	-17.8	-17.7	-17.9	-12.5	-18.4	-17.2
27	-17.9	-17.5	-17.5	-17.6	-18.0	-18.2	-18.5	-18.7	-18.8	-19.2	-19.5	-19.8	-19.5	-19.5	-19.9	-19.9	-20.1	-20.2	-20.5	-20.9	-21.0	-21.1	-21.3	-21.6	-17.5	-21.6	-19.5
28	-21.7	-21.5	-21.7	-21.8	-22.1	-22.0	-22.1	-22.0	-22.1	-22.6	-22.9	-23.1	-23.2	-23.3	-23.2	-23.3	-23.7	-24.0	-24.4	-24.8	-24.9	-25.3	-25.0	-25.3	-21.5	-25.3	-23.2
29	-25.6	-25.6	-25.6	-25.7	-25.8	-25.9	-25.4	-25.8	-25.8	-25.6	-25.5	-25.5	-25.4	-25.3	-25.4	-25.0	-24.9	-25.4	-25.3	-25.1	-25.5	-25.3	-25.3	-25.2	-24.9	-25.9	-25.4
30	-24.7	-24.6	-25.0	-25.9	-25.5	-26.0	-26.4	-26.4	-26.0	-26.5	-27.3	-26.8	-27.1	-27.2	-27.3	-27.2	-27.6	-27.7	-28.1	-28.7	-28.9	-29.0	-28.8	-28.9	-24.6	-29.0	-27.0
31	-28.8	-28.6	-29.2	-29.4	-29.4	-28.4	-27.8	-27.4	-26.6	-26.6	-26.1	-25.7	-26.1	-26.3	-26.0	-25.9	-25.7	-25.2	-24.8	-24.6	-25.1	-25.5	-24.9	-24.7	-24.6	-29.4	-26.6
Max.	**1.7**	**2.0**	**1.6**	**1.7**	**1.7**	**1.6**	**1.9**	**2.2**	**2.5**	**2.5**	**2.7**	**2.7**	**2.4**	**2.3**	**2.3**	**1.9**	**1.9**	**1.8**	**2.2**	**2.4**	**2.1**	**1.9**	**1.7**	**1.8**	**2.7**		
Min.	**-28.8**	**-28.6**	**-29.2**	**-29.4**	**-29.4**	**-28.4**	**-27.8**	**-27.4**	**-26.6**	**-26.6**	**-27.3**	**-26.8**	**-27.1**	**-27.2**	**-27.3**	**-27.2**	**-27.6**	**-27.7**	**-28.1**	**-28.7**	**-28.9**	**-29.0**	**-28.8**	**-28.9**		**-29.4**	
Avg.	**-7.7**	**-7.7**	**-7.8**	**-7.9**	**-8.0**	**-8.0**	**-8.0**	**-7.9**	**-7.9**	**-8.0**	**-7.8**	**-7.8**	**-7.7**	**-7.6**	**-7.6**	**-7.6**	**-7.6**	**-7.6**	**-7.7**	**-7.8**	**-7.9**	**-8.0**	**-7.9**	**-7.8**			**-7.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	0.34	0.27	0.00	0.07	-0.04	-0.03	0.10	0.00	-0.06	-0.05	-0.07	0.11	-0.04	0.10	0.14	0.31	0.59	0.41	0.61	0.56	0.97	0.65	0.62	0.97	-0.07	0.25
2	0.9	1.33	1.83	0.93	0.74	1.00	1.15	0.87	1.14	1.03	1.09	1.20	1.60	1.28	1.34	1.16	1.61	1.59	1.56	1.61	1.98	1.52	1.63	1.66	1.98	0.74	1.32
3	1.4	1.96	1.92	2.93	2.78	1.78	1.49	1.07	2.00	1.24	0.66	-0.05	0.39	0.02	0.64	0.24	0.55	0.59	-0.20	-0.29	-0.20	-0.27	-0.24	-0.26	2.93	-0.29	0.84
4	-0.2	-0.34	-0.28	-0.28	-0.24	-0.27	-0.26	-0.28	-0.27	-0.26	-0.26	-0.29	-0.30	-0.30	-0.34	-0.29	-0.12	-0.05	0.31	0.63	0.80	0.65	0.33	0.27	0.80	-0.34	-0.07
5	0.4	0.31	0.32	0.26	0.33	0.25	0.11	0.17	0.13	0.12	0.10	-0.02	-0.01	0.00	-0.03	-0.10	-0.02	0.05	0.07	0.01	0.07	0.13	0.14	0.11	0.42	-0.10	0.12
6	0.1	0.09	0.14	0.11	0.07	0.16	0.09	0.15	0.23	0.15	0.12	-0.06	-0.13	-0.18	-0.15	-0.24	-0.10	0.10	0.11	0.16	0.17	0.27	0.01	0.23	0.27	-0.24	0.07
7	0.5	0.74	0.40	-0.12	-0.12	0.14	0.34	0.36	0.45	0.12	-0.10	0.00	-0.19	-0.46	-0.53	-0.49	-0.43	-0.31	-0.22	-0.20	-0.13	-0.28	0.22	0.42	0.74	-0.53	0.00
8	0.4	0.37	0.64	0.73	0.51	0.68	0.13	-0.10	-0.08	-0.02	-0.26	0.02	0.24	0.29	-0.02	-0.20	0.22	0.30	0.50	0.60	0.76	0.65	0.71	0.81	0.81	-0.26	0.33
9	0.8	0.67	0.92	0.47	0.51	0.39	0.42	0.33	0.33	0.32	0.27	0.30	0.14	0.07	0.13	0.11	0.23	0.23	0.21	0.22	0.26	0.31	0.27	0.29	0.92	0.07	0.34
10	0.2	0.17	0.25	0.34	0.27	0.29	0.38	0.27	0.39	0.30	0.50	0.42	0.15	0.06	0.01	-0.02	0.12	0.33	0.40	0.32	0.25	0.31	0.36	0.40	0.50	-0.02	0.27
11	0.2	0.06	0.04	0.04	0.09	0.14	0.34	0.23	0.18	0.18	0.22	0.21	0.08	0.03	-0.02	0.01	0.19	0.35	0.39	0.41	0.45	0.49	0.51	0.64	0.64	-0.02	0.23
12	0.4	0.47	0.57	0.42	0.48	0.47	0.31	0.39	0.36	0.28	0.28	0.22	0.12	0.08	-0.10	-0.05	0.03	0.24	0.29	0.13	0.13	0.12	0.14	0.08	0.57	-0.10	0.25
13	0.2	0.21	0.07	0.11	0.13	0.15	0.11	0.15	0.16	0.18	0.17	0.15	0.13	0.05	0.03	0.10	0.10	0.32	0.42	0.55	0.71	0.59	0.47	0.69	0.71	0.03	0.25
14	1.0	1.13	0.70	0.63	0.80	1.84	1.18	0.85	1.37	0.91	0.45	0.29	0.23	0.11	0.04	0.04	0.06	0.09	0.17	0.09	0.11	0.08	0.08	0.11	1.84	0.04	0.52
15	0.0	0.01	-0.01	-0.01	0.04	0.11	0.12	0.12	0.11	0.06	0.05	0.02	0.02	0.01	-0.01	0.06	0.07	0.11	0.04	0.10	0.16	0.19	0.16	0.07	0.19	-0.01	0.07
16	0.1	0.21	0.42	0.43	0.38	0.92	1.30	1.68	1.39	0.45	0.70	0.90	0.73	0.71	0.16	0.05	0.04	0.06	0.08	0.20	0.46	0.73	0.50	0.72	1.68	0.04	0.55
17	1.2	1.05	0.96	0.35	0.29	0.35	0.36	0.44	0.56	0.44	0.43	0.62	0.28	0.24	0.18	0.19	0.14	-0.02	-0.02	-0.02	0.00	0.02	0.00	-0.08	1.25	-0.08	0.33
18	0.0	-0.01	0.01	-0.02	-0.01	-0.02	0.03	0.01	0.04	0.09	0.09	0.12	0.20	0.29	0.08	-0.01	0.48	0.36	0.32	0.34	0.15	0.11	0.11	0.11	0.48	-0.03	0.12
19	0.2	0.23	0.62	1.07	0.77	0.49	0.26	0.27	0.33	0.28	0.29	0.46	0.54	0.47	0.35	0.31	0.40	0.43	0.34	0.24	0.19	0.19	0.17	0.04	1.07	0.04	0.37
20	0.0	0.00	0.02	0.00	-0.04	-0.03	-0.03	-0.04	-0.04	-0.03	-0.04	-0.04	-0.04	-0.04	-0.03	-0.04	-0.04	-0.03	-0.02	0.13	0.22	0.06	-0.02	0.07	0.22	-0.04	0.00
21	0.2	-0.01	-0.03	0.12	0.37	0.03	0.13	-0.03	-0.04	0.00	0.01	0.11	0.45	0.46	0.52	0.36	0.38	0.30	0.10	0.00	-0.08	-0.09	-0.11	-0.05	0.52	-0.11	0.13
22	0.0	0.14	0.53	0.40	0.27	0.26	0.27	0.14	0.00	-0.05	-0.01	-0.10	-0.06	0.00	0.02	0.05	-0.02	0.01	0.07	0.02	0.04	0.10	0.25	0.15	0.53	-0.10	0.11
23	0.1	-0.01	0.09	0.22	0.28	0.32	0.35	0.47	0.60	0.59	0.72	0.78	0.73	0.80	0.62	0.51	0.47	0.43	0.39	0.35	0.50	0.92	0.95	0.31	0.95	-0.01	0.48
24	0.0	0.44	0.31	0.27	0.28	-0.18	-0.05	0.24	0.12	0.26	0.22	0.17	0.10	-0.04	-0.06	-0.06	-0.06	-0.01	0.07	0.04	0.00	-0.02	-0.03	-0.05	0.44	-0.18	0.08
25	0.0	0.00	0.12	0.65	0.24	0.14	0.14	0.24	0.33	0.21	0.24	0.23	0.15	0.30	0.41	0.24	0.04	0.12	-0.01	-0.12	-0.09	0.34	0.26	0.35	0.65	-0.12	0.19
26	0.8	0.92	0.86	0.76	1.01	1.00	0.95	0.76	0.68	0.60	0.54	0.96	0.94	1.24	0.88	0.29	0.39	0.53	0.59	0.62	1.13	1.39	0.87	0.81	1.39	0.29	0.81
27	0.5	0.25	0.35	0.37	0.12	0.11	0.16	0.54	0.59	0.56	0.29	0.18	0.15	0.04	-0.08	-0.10	-0.10	-0.08	-0.07	-0.05	-0.07	-0.08	-0.08	-0.06	0.59	-0.10	0.14
28	0.0	-0.04	-0.02	-0.05	-0.06	-0.05	-0.06	-0.07	-0.06	-0.06	-0.06	-0.06	-0.07	-0.07	-0.08	-0.07	-0.01	0.09	0.14	0.42	0.28	0.24	0.32	0.25	0.42	-0.08	0.03
29	0.3	0.44	0.27	0.12	0.21	0.61	0.55	0.63	0.31	0.36	0.40	0.49	0.42	0.59	0.42	0.73	0.50	1.14	1.22	1.40	1.36	1.43	1.03	0.86	1.43	0.12	0.66
30	0.7	0.99	1.38	1.39	0.90	0.37	0.65	1.79	1.62	0.93	0.73	0.40	0.38	0.50	0.20	0.20	0.23	0.20	0.14	0.28	0.52	0.29	0.21	0.20	1.79	0.14	0.63
31	0.3	0.58	0.85	1.18	1.29	1.45	1.61	1.85	1.45	1.30	1.12	0.62	0.54	0.27	0.04	0.33	0.26	0.19	0.19	0.10	0.28	0.28	0.42	0.60	1.85	0.04	0.71
Max.	**1.4**	**1.96**	**1.92**	**2.93**	**2.78**	**1.84**	**1.61**	**1.85**	**2.00**	**1.30**	**1.12**	**1.20**	**1.60**	**1.28**	**1.34**	**1.16**	**1.61**	**1.59**	**1.56**	**1.61**	**1.98**	**1.52**	**1.63**	**1.66**	**2.93**		
Min.	**-0.2**	**-0.34**	**-0.28**	**-0.28**	**-0.24**	**-0.27**	**-0.26**	**-0.28**	**-0.27**	**-0.26**	**-0.26**	**-0.29**	**-0.30**	**-0.46**	**-0.53**	**-0.49**	**-0.43**	**-0.31**	**-0.22**	**-0.29**	**-0.20**	**-0.28**	**-0.24**	**-0.26**		**-0.53**	
Avg.	**0.4**	**0.41**	**0.47**	**0.45**	**0.41**	**0.41**	**0.40**	**0.44**	**0.46**	**0.34**	**0.29**	**0.26**	**0.26**	**0.22**	**0.15**	**0.11**	**0.19**	**0.27**	**0.26**	**0.29**	**0.35**	**0.38**	**0.33**	**0.34**			**0.33**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	0.55	0.10	0.16	0.30	0.30	0.19	0.07	0.05	-0.04	0.08	0.11	-0.04	-0.05	-0.04	-0.06	0.00	0.04	0.35	0.84	0.65	0.62	0.56	0.67	0.84	-0.06	0.25
2	0.8	1.14	1.39	1.30	1.47	1.43	1.52	1.18	1.65	1.80	1.83	1.57	0.76	0.67	0.46	0.25	0.40	0.73	0.92	1.26	1.04	0.95	1.05	1.04	1.83	0.25	1.11
3	1.3	0.95	0.60	0.58	0.63	0.65	0.50	0.62	0.59	0.52	0.29	0.39	0.29	0.19	0.09	0.25	0.18	0.54	0.84	0.91	0.84	1.08	1.25	1.82	1.82	0.09	0.66
4	1.6	1.71	1.46	1.87	1.82	1.86	1.32	2.07	1.79	0.53	0.62	1.71	1.42	1.08	0.62	1.46	1.38	1.13	0.62	1.20	0.84	0.78	0.95	1.07	2.07	0.53	1.29
5	1.3	1.42	1.05	0.68	0.71	0.93	0.75	1.02	0.53	0.46	0.59	0.60	0.33	0.20	0.41	0.41	0.25	-2.11	0.93	1.00	1.11	1.78	1.78	1.76	1.78	-2.11	0.74
6	2.0	2.31	2.96	1.76	2.35	2.38	2.11	2.86	2.53	2.50	2.89	2.30	0.95	0.54	0.64	0.54	0.86	1.01	1.12	0.89	0.73	0.57	0.93	0.73	2.96	0.54	1.60
7	0.9	1.01	0.63	1.41	1.22	1.14	0.71	0.95	0.96	0.91	1.78	1.30	1.42	1.49	0.72	0.46	0.99	1.90	1.75	1.73	1.68	1.66	0.88	1.02	1.90	0.46	1.19
8	1.0	0.97	0.49	1.26	1.42	1.15	0.90	1.27	0.43	0.75	0.64	0.44	0.58	0.56	0.85	0.40	0.60	1.28	1.22	1.47	0.87	1.27	1.00	0.47	1.47	0.40	0.89
9	0.6	0.40	0.36	0.30	0.34	0.38	0.41	0.48	0.60	0.56	0.84	0.61	0.57	0.28	1.54	0.84	0.17	0.55	0.69	1.16	0.91	1.31	0.99	1.00	1.54	0.17	0.66
10	1.3	0.88	1.26	1.38	1.15	1.74	1.19	0.91	1.47	1.59	1.48	1.99	1.33	1.41	0.45	2.62	1.63	3.91	6.11	3.15	1.26	0.93	0.92	2.60	6.11	0.45	1.78
11	1.5	1.12	0.85	1.16	1.01	0.76	0.39	0.30	0.29	0.24	0.36	0.51	0.47	0.13	0.03	0.04	-0.08	0.00	0.25	0.67	0.80	0.50	0.34	0.28	1.52	-0.08	0.50
12	0.0	0.15	0.63	0.34	0.52	1.17	1.14	1.14	0.83	1.49	1.19	0.91	0.65	0.41	0.59	0.54	1.55	0.85	1.16	1.41	0.74	0.51	1.34	1.47	1.55	-0.02	0.86
13	1.2	0.34	0.48	0.53	0.59	0.44	0.39	0.32	0.41	0.46	0.45	0.31	0.26	0.25	0.24	0.14	0.04	0.04	0.08	0.16	0.19	0.18	0.20	0.18	1.17	0.04	0.33
14	0.1	0.18	0.20	0.12	0.00	-0.03	-0.04	-0.17	-0.17	-0.29	-0.28	-0.12	-0.16	-0.25	-0.21	-0.26	-0.24	-0.24	-0.23	-0.21	-0.19	-0.16	-0.13	-0.14	0.20	-0.29	-0.12
15	-0.2	-0.18	-0.18	-0.09	-0.02	0.41	0.38	0.55	0.91	1.28	0.42	0.14	0.25	0.03	0.21	0.12	0.35	0.22	0.50	0.57	0.75	0.69	0.65	0.36	1.28	-0.20	0.34
16	0.1	0.06	0.06	0.09	0.13	0.05	0.01	0.00	0.01	0.02	0.00	-0.02	-0.03	-0.02	-0.02	-0.05	-0.05	-0.01	-0.02	0.01	0.05	0.15	0.03	0.02	0.15	-0.05	0.02
17	0.6	0.80	0.26	0.52	0.20	0.07	0.15	0.30	0.19	0.41	0.32	0.19	0.35	0.13	0.09	0.07	0.05	0.04	0.00	-0.01	0.07	0.26	0.35	0.45	0.80	-0.01	0.24
18	0.4	0.13	0.03	-0.03	-0.06	-0.02	-0.01	-0.03	-0.05	-0.04	0.00	0.07	-0.01	-0.05	-0.10	-0.06	0.07	0.05	0.10	0.05	0.01	0.02	0.12	0.11	0.39	-0.10	0.03
19	0.2	0.31	0.46	0.80	0.69	0.67	0.40	0.37	0.36	0.26	0.20	0.07	0.01	0.01	-0.02	0.05	0.10	0.12	0.18	0.12	0.05	0.03	0.03	0.00	0.80	-0.02	0.23
20	0.0	-0.03	-0.07	-0.02	-0.01	-0.02	-0.01	-0.02	0.06	0.22	0.35	0.24	0.48	0.62	0.58	0.57	0.63	0.34	0.25	0.40	0.44	0.47	0.40	0.33	0.63	-0.07	0.26
21	0.3	0.37	0.56	0.46	0.34	0.45	0.48	0.44	0.43	0.47	0.34	0.24	0.20	0.13	0.10	0.10	0.15	0.06	0.12	0.23	0.35	0.20	0.15	0.08	0.56	0.06	0.28
22	0.0	-0.01	-0.03	0.01	0.11	0.12	0.28	0.10	-0.02	0.00	0.14	0.01	-0.06	-0.07	-0.09	-0.17	-0.15	-0.09	-0.04	0.14	0.12	0.23	0.19	0.47	0.47	-0.17	0.05
23	0.5	0.69	0.33	0.22	0.60	0.49	0.32	0.59	0.59	1.35	0.82	0.49	0.90	1.23	0.84	0.79	0.58	0.92	1.48	2.37	2.31	1.96	2.07	1.10	2.37	0.22	0.98
24	1.2	0.96	0.46	0.16	0.09	0.17	0.31	0.53	0.32	0.07	-0.08	-0.14	-0.14	0.01	0.10	0.26	0.42	0.60	0.60	0.49	0.45	0.41	0.48	0.61	1.24	-0.14	0.35
25	0.5	0.72	0.24	0.18	0.00	-0.13	0.07	-0.14	-0.20	-0.25	-0.27	-0.15	-0.10	0.26	0.55	0.16	0.35	1.02	1.36	1.12	0.85	0.56	0.36	0.10	1.36	-0.27	0.30
26	0.3	0.53	0.62	0.89	1.04	0.99	0.68	1.11	1.67	1.26	1.00	0.66	0.61	0.52	1.07	1.06	1.00	0.81	0.57	0.84	0.64	0.62	0.84	0.89	1.67	0.29	0.84
27	1.1	0.88	1.03	1.14	1.37	1.57	2.39	1.70	2.09	3.02	3.83	3.79	1.03	0.36	0.50	1.27	1.62	1.37	0.78	0.49	0.68	0.55	0.42	0.60	3.83	0.36	1.40
28	0.6	0.77	0.67	0.67	0.35	0.33	0.77	0.15	0.65	0.67	0.70	0.63	0.74	0.95	1.17	0.74	0.26	0.28	0.82	0.83	0.73	0.66	0.78	0.95	1.17	0.15	0.66
29	1.0	1.08	1.07	1.11	1.18	0.87	0.93	0.89	1.11	0.77	0.68	0.50	0.18	-0.02	-0.06	-0.26	-0.17	-0.14	0.29	0.04	-0.10	-0.12	-0.06	-0.17	1.18	-0.26	0.44
Max.	**2.0**	**2.31**	**2.96**	**1.87**	**2.35**	**2.38**	**2.39**	**2.86**	**2.53**	**3.02**	**3.83**	**3.79**	**1.42**	**1.49**	**1.54**	**2.62**	**1.63**	**3.91**	**6.11**	**3.15**	**2.31**	**1.96**	**2.07**	**2.60**	**6.11**		
Min.	**-0.2**	**-0.18**	**-0.18**	**-0.09**	**-0.06**	**-0.13**	**-0.04**	**-0.17**	**-0.20**	**-0.29**	**-0.28**	**-0.15**	**-0.16**	**-0.25**	**-0.21**	**-0.26**	**-0.24**	**-2.11**	**-0.23**	**-0.21**	**-0.19**	**-0.16**	**-0.13**	**-0.17**		**-2.11**	
Avg.	**0.7**	**0.70**	**0.62**	**0.65**	**0.67**	**0.70**	**0.64**	**0.67**	**0.69**	**0.72**	**0.73**	**0.67**	**0.46**	**0.38**	**0.39**	**0.42**	**0.45**	**0.53**	**0.79**	**0.80**	**0.65**	**0.64**	**0.65**	**0.68**			**0.63**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.2	-0.21	-0.19	-0.16	-0.17	-0.20	-0.16	0.35	0.10	0.26	0.29	0.33	0.41	0.06	0.29	0.04	0.01	0.00	0.00	0.00	0.01	0.08	0.13	0.17	0.41	-0.21	0.05
2	0.3	0.26	0.33	0.46	0.46	0.28	0.06	-0.05	-0.05	-0.05	-0.03	0.02	0.03	0.02	0.08	-0.09	0.00	-0.05	0.07	0.08	0.05	0.00	0.02	0.07	0.46	-0.09	0.09
3	0.1	0.01	-0.05	0.01	0.04	0.02	0.03	0.10	0.06	0.00	-0.03	-0.05	-0.04	-0.06	-0.02	0.11	0.18	0.32	0.29	0.20	0.25	0.23	0.24	0.29	0.32	-0.06	0.09
4	0.4	0.24	0.24	0.20	0.01	-0.01	0.00	0.03	0.02	-0.04	-0.03	-0.11	-0.05	-0.03	-0.04	-0.11	-0.09	-0.04	0.00	0.03	0.00	0.02	0.07	0.13	0.37	-0.11	0.03
5	0.2	0.15	0.17	0.13	0.06	0.03	0.07	0.17	0.24	0.22	0.53	0.13	0.08	0.11	-0.07	-0.10	-0.03	-0.06	-0.06	-0.09	0.00	0.00	0.01	0.12	0.53	-0.10	0.08
6	0.2	0.23	0.17	0.25	0.32	0.21	0.06	0.06	0.11	0.18	0.16	-0.06	-0.11	-0.13	-0.16	-0.05	-0.13	0.03	0.31	0.36	0.70	0.67	0.35	0.34	0.70	-0.16	0.17
7	0.4	0.31	0.42	0.74	1.22	1.59	1.52	1.10	0.88	0.66	0.65	0.40	-0.04	-0.18	-0.08	-0.11	-0.09	0.03	-0.02	0.16	0.12	-0.06	-0.09	-0.07	1.59	-0.18	0.39
8	-0.1	-0.07	-0.02	-0.06	-0.04	0.13	0.32	0.02	-0.02	-0.05	-0.11	-0.07	-0.06	0.17	0.10	0.02	0.10	0.09	0.10	0.15	0.18	0.17	0.25	0.29	0.32	-0.11	0.06
9	0.3	0.35	0.29	0.36	0.33	0.40	0.36	0.41	0.45	0.61	0.70	0.53	0.52	0.05	-0.10	-0.07	-0.17	0.02	0.58	0.60	0.45	0.31	0.51	0.25	0.70	-0.17	0.33
10	0.7	0.43	0.65	0.18	0.04	0.20	0.31	0.23	0.10	-0.04	-0.05	-0.17	-0.14	-0.17	-0.21	-0.23	-0.12	-0.24	-0.11	-0.12	-0.03	0.07	0.04	-0.01	0.66	-0.24	0.05
11	0.1	0.10	0.11	0.21	0.12	0.02	-0.04	-0.02	-0.07	-0.09	-0.20	-0.16	-0.16	-0.29	-0.34	-0.29	-0.21	-0.13	-0.14	0.47	1.01	0.58	0.19	0.27	1.01	-0.34	0.04
12	1.0	1.00	1.67	1.28	0.16	0.07	0.19	-0.01	-0.14	-0.18	-0.21	-0.27	-0.30	-0.40	-0.36	-0.39	-0.43	-0.34	-0.23	-0.16	-0.07	-0.08	-0.10	-0.11	1.67	-0.43	0.06
13	-0.1	-0.13	-0.13	-0.15	-0.14	-0.15	-0.15	-0.16	-0.16	-0.20	-0.26	-0.36	-0.48	-0.50	-0.38	-0.45	-0.43	-0.34	-0.21	-0.07	0.81	1.25	0.81	0.65	1.25	-0.50	-0.06
14	0.4	0.57	0.58	0.54	0.48	0.86	0.34	0.23	0.55	0.46	0.45	0.58	-0.23	-0.21	-0.25	0.34	0.67	0.41	0.42	0.40	0.31	0.32	0.22	0.23	0.86	-0.25	0.36
15	0.3	0.02	-0.07	-0.06	-0.05	0.17	0.16	-0.07	-0.08	-0.01	-0.07	-0.19	-0.18	-0.16	-0.10	-0.10	-0.14	-0.15	-0.15	-0.11	-0.06	-0.06	-0.05	-0.04	0.32	-0.19	-0.05
16	0.0	-0.04	-0.04	-0.02	0.10	0.50	0.41	0.50	0.45	0.63	0.46	0.04	0.14	-0.03	-0.06	-0.01	0.14	-0.03	0.42	1.00	0.98	1.39	1.09	1.02	1.39	-0.06	0.38
17	1.3	1.27	1.04	1.36	1.29	1.02	0.86	0.57	0.56	0.35	0.24	-0.13	-0.28	-0.48	-0.53	-0.20	-0.14	-0.21	-0.22	-0.19	-0.15	-0.15	-0.14	-0.07	1.36	-0.53	0.29
18	0.0	0.00	-0.03	-0.16	-0.17	0.01	0.03	0.03	0.07	0.12	-0.10	-0.29	-0.28	-0.40	-0.45	-0.28	-0.12	-0.13	-0.08	-0.09	0.07	0.33	0.25	0.30	0.33	-0.45	-0.06
19	0.3	0.37	0.40	0.45	0.35	0.29	0.27	0.28	0.25	0.12	0.11	-0.05	-0.05	-0.03	0.00	0.03	-0.04	-0.10	0.00	0.04	0.19	0.03	-0.01	0.29	0.45	-0.10	0.15
20	0.3	-0.08	-0.11	0.19	-0.02	-0.19	-0.18	-0.22	-0.18	-0.27	-0.39	-0.50	-0.59	-0.15	-0.33	-0.64	-0.61	-0.56	-0.30	-0.21	-0.08	0.10	0.36	0.14	0.36	-0.64	-0.19
21	0.0	-0.05	0.03	-0.12	-0.12	-0.18	-0.11	-0.13	-0.14	0.65	1.31	1.21	0.51	1.06	0.86	0.33	0.04	0.56	0.62	0.46	0.88	0.73	0.91	1.47	1.47	-0.18	0.45
22	1.9	2.27	1.37	0.83	0.76	0.85	0.72	0.86	0.75	0.76	0.52	0.34	0.14	0.09	-0.12	-0.13	-0.08	0.24	0.28	0.35	0.63	0.94	1.27	1.49	2.27	-0.13	0.71
23	1.5	1.39	1.24	0.51	0.39	1.12	0.76	0.93	0.56	0.53	0.42	0.12	-0.06	-0.13	-0.10	-0.13	-0.05	0.21	0.55	0.54	0.65	0.55	0.84	0.57	1.49	-0.13	0.54
24	0.1	0.18	0.52	0.50	-0.03	-0.13	-0.06	0.24	0.54	0.69	0.07	-0.05	0.00	-0.19	-0.13	-0.16	0.21	0.41	0.30	0.54	1.02	1.02	0.79	0.73	1.02	-0.19	0.30
25	0.5	0.31	0.21	0.09	-0.04	0.13	0.52	0.32	0.11	-0.04	0.15	0.23	0.03	-0.58	-0.48	-0.31	-0.15	0.09	0.65	1.16	1.82	1.93	1.95	2.06	2.06	-0.58	0.44
26	1.9	1.75	1.30	2.33	1.87	1.13	1.14	1.44	1.35	0.78	0.92	0.80	0.49	0.10	0.11	0.28	0.34	0.43	0.89	1.36	1.92	1.26	1.31	1.32	2.33	0.10	1.10
27	1.3	1.20	1.48	1.22	0.87	0.84	0.40	0.45	0.22	0.15	-0.18	-0.38	-0.38	-0.27	-0.28	-0.27	-0.08	0.21	0.36	0.83	0.94	0.81	0.97	1.10	1.48	-0.38	0.48
28	1.2	1.48	1.85	2.04	1.92	1.78	1.54	1.02	1.53	0.89	0.52	0.36	-0.02	-0.13	-0.14	0.03	0.07	0.32	0.36	0.17	0.19	0.27	0.90	0.78	2.04	-0.14	0.79
29	0.9	1.06	0.95	0.68	0.53	0.43	0.39	0.19	0.24	0.21	0.04	-0.12	-0.24	-0.23	-0.23	-0.23	-0.20	-0.10	-0.05	-0.04	-0.03	-0.03	-0.05	-0.06	1.06	-0.24	0.17
30	-0.1	-0.09	-0.11	-0.11	-0.11	-0.12	-0.13	-0.10	-0.03	-0.07	-0.10	-0.12	-0.19	-0.19	-0.22	-0.23	-0.18	-0.15	-0.14	-0.14	-0.14	-0.07	0.00	-0.05	0.00	-0.23	-0.12
31	0.0	0.08	0.09	0.08	0.08	0.07	0.10	0.07	0.06	0.00	-0.08	-0.08	-0.11	-0.15	-0.14	-0.07	-0.08	-0.04	0.02	0.07	0.08	0.07	0.02	0.05	0.10	-0.15	0.01
Max.	**1.9**	**2.27**	**1.85**	**2.33**	**1.92**	**1.78**	**1.54**	**1.44**	**1.53**	**0.89**	**1.31**	**1.21**	**0.52**	**1.06**	**0.86**	**0.34**	**0.67**	**0.56**	**0.89**	**1.36**	**1.92**	**1.93**	**1.95**	**2.06**	**2.33**		
Min.	**-0.2**	**-0.21**	**-0.19**	**-0.16**	**-0.17**	**-0.20**	**-0.18**	**-0.22**	**-0.18**	**-0.27**	**-0.39**	**-0.50**	**-0.59**	**-0.58**	**-0.53**	**-0.64**	**-0.61**	**-0.56**	**-0.30**	**-0.21**	**-0.15**	**-0.15**	**-0.14**	**-0.11**		**-0.64**	
Avg.	**0.5**	**0.46**	**0.46**	**0.45**	**0.34**	**0.36**	**0.31**	**0.29**	**0.27**	**0.23**	**0.18**	**0.06**	**-0.05**	**-0.11**	**-0.13**	**-0.11**	**-0.06**	**0.02**	**0.14**	**0.25**	**0.41**	**0.41**	**0.42**	**0.44**			**0.23**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.01	-0.01	-0.01	0.00	0.01	-0.01	-0.01	0.00	0.01	0.00	-0.04	-0.06	-0.06	-0.05	-0.07	-0.06	-0.05	-0.04	-0.04	-0.06	-0.06	-0.05	0.03	0.07	-0.07	-0.02
2	0.2	0.19	0.59	0.53	0.35	0.39	0.49	0.09	0.26	0.03	-0.10	-0.29	-0.39	-0.40	-0.36	-0.39	-0.29	0.06	0.07	-0.07	-0.18	0.01	-0.06	-0.05	0.59	-0.40	0.03
3	-0.1	-0.04	-0.06	-0.07	-0.08	-0.09	-0.09	-0.12	-0.09	-0.08	-0.12	-0.15	-0.16	-0.09	0.11	0.14	0.00	-0.03	0.03	-0.05	-0.06	-0.04	-0.04	-0.04	0.14	-0.16	-0.05
4	-0.1	-0.08	-0.08	-0.08	-0.06	-0.05	-0.03	0.01	-0.03	-0.06	-0.10	-0.05	-0.04	-0.07	-0.07	0.06	0.10	0.02	-0.01	-0.01	-0.16	-0.15	-0.01	-0.07	0.10	-0.16	-0.04
5	-0.1	-0.11	-0.08	0.07	0.50	0.70	1.16	1.34	1.55	0.89	0.50	0.01	0.03	-0.25	-0.29	-0.18	-0.12	0.00	0.42	0.82	1.07	1.23	1.58	1.10	1.58	-0.29	0.49
6	1.1	0.99	0.97	0.85	0.93	0.92	0.87	0.90	0.95	0.94	0.50	0.30	0.13	0.06	0.11	0.14	0.20	0.33	0.54	1.11	1.62	1.53	1.17	1.20	1.62	0.06	0.76
7	1.3	1.64	1.55	1.30	1.18	0.90	1.25	1.21	1.27	1.24	0.68	0.14	0.11	0.01	0.02	0.05	0.03	0.17	0.49	0.95	0.98	1.38	1.02	1.22	1.64	0.01	0.84
8	1.6	0.95	0.78	0.74	0.68	0.76	0.45	0.65	0.23	0.29	0.16	0.07	-0.18	-0.15	-0.21	-0.27	-0.25	-0.19	-0.16	-0.09	0.03	0.05	0.66	0.55	1.59	-0.27	0.30
9	0.7	0.30	0.16	0.09	0.51	1.03	1.45	1.59	1.13	0.66	0.62	0.30	0.31	0.11	0.03	0.05	0.06	0.24	0.45	0.86	1.38	1.37	1.80	1.63	1.80	0.03	0.70
10	1.0	1.05	1.34	1.66	1.85	1.62	1.71	1.63	0.67		0.30	0.18	-0.27	-0.29	-0.37	-0.36	-0.21	0.04	0.51	1.12	1.55	1.74	1.36	1.75	1.85	-0.37	0.85
11	1.7	1.17	1.40	1.72	1.62	1.27	1.66	1.43	1.22	0.52	0.19	-0.08	-0.17	-0.22	-0.30	-0.18	0.04	0.19	0.42	0.59	0.89	1.18	1.45	1.45	1.72	-0.30	0.80
12	1.2	0.60	1.19	1.63	1.50	0.90	1.29	1.90	1.62	0.85	0.59	-0.02	-0.10	-0.15	-0.14	-0.10	-0.02	0.06	0.20	0.68	1.08	0.79	0.81	0.53	1.90	-0.15	0.70
13	0.7	0.36	0.39	0.33	0.12	0.17	0.17	0.18	0.13	0.03	0.06	0.03	-0.03	-0.03	-0.04	0.10	-0.03	0.00	-0.12	-0.12	-0.14	-0.10	-0.24	-0.27	0.72	-0.27	0.07
14	-0.2	-0.13	-0.13	-0.07	-0.04	-0.03	-0.03	-0.04	-0.07	-0.04	-0.04	-0.14	-0.18	-0.31	-0.17	-0.21	-0.24	-0.05	-0.24	-0.16	-0.11	-0.10	0.03	0.02	0.03	-0.31	-0.11
15	0.2	0.48	0.34	0.63	0.26	0.24	0.30	0.10	-0.17	-0.26	-0.38	-0.46	-0.63	-0.97	-0.93	-0.62	-0.56	-0.62	-0.22	0.12	0.26	0.47	0.51	0.53	0.63	-0.97	-0.06
16	0.4	0.48	0.51	0.42	0.49	0.43	0.36	0.32	0.34	0.13	0.04	-0.05	-0.14	-0.16	-0.19	-0.18	-0.17	-0.23	-0.20	-0.08	0.59	0.47	0.29	0.15	0.59	-0.23	0.17
17	0.3	0.13	0.26	0.26	0.46	0.69	1.10	1.16	0.75	0.56	0.44	0.14	-0.31	-0.37	-0.31	-0.25	-0.27	-0.26	-0.13	0.08	0.22	0.45	0.57	0.76	1.16	-0.37	0.27
18	1.0	0.55	0.35	0.53	0.37	0.54	0.52	0.60	0.60	0.54	0.38	0.30	0.22	0.12	0.18	0.24	0.23	0.25	0.31	0.34	0.72	0.70	0.96	1.13	1.13	0.12	0.49
19	1.2	0.96	0.75	0.68	0.68	0.62	0.71	0.57	0.39	0.20	0.08	0.09	0.09	0.12	0.16	0.17	0.27	0.32	0.40	0.39	0.43	0.47	0.54	0.67	1.18	0.08	0.46
20	0.4	0.44	0.57	0.83	0.75	0.62	0.46	0.64	0.75	0.58	0.46	0.28	0.21	0.19	0.13	0.09	0.09	0.00	-0.02	-0.03	-0.04	0.00	0.00	0.01	0.83	-0.04	0.31
21	0.0	0.02	0.07	0.08	0.11	0.17	0.09	0.08	0.11	0.02	0.00	-0.03	-0.04	0.00	0.01	0.00	0.12	0.12	0.28	0.52	0.55	0.51	0.53	0.62	0.62	-0.04	0.16
22	0.9	0.98	0.91	0.89	0.95	1.54	1.61	1.28	1.11	0.63	0.48	0.34	0.24	0.20	0.28	0.65	0.88	0.46	0.66	0.60	1.04	0.74	1.05	0.84	1.61	0.20	0.80
23	0.7	0.89	1.22	1.43	1.07	1.09	1.79	1.85	1.05	0.54	0.46	0.19	-0.07	0.05	0.10	0.06	-0.08	0.28	0.27	0.56	1.19	0.64	1.30	1.15	1.85	-0.08	0.74
24	0.8	0.58	0.57	0.52	0.73	0.86	0.64	0.04	-0.02	-0.21	-0.36	-0.38	-0.34	-0.24	-0.23	-0.17	-0.27	-0.14	-0.14	-0.14	-0.14	-0.09	0.06	0.06	0.86	-0.38	0.08
25	-0.1	-0.10	-0.12	-0.14	-0.16	-0.12	-0.15	0.12	0.32	0.28	0.37	0.20	0.06	-0.02	-0.12	-0.15	-0.11	-0.04	-0.01	0.15	0.25	0.70	0.74	0.92	0.92	-0.16	0.12
26	0.6	0.88	0.82	0.65	0.66	0.64	0.51	0.22	0.03	-0.10	-0.17	-0.24	-0.25	-0.20	-0.20	-0.24	-0.16	-0.14	-0.10	-0.05	0.04	0.03	-0.07	-0.07	0.88	-0.25	0.13
27	-0.1	-0.11	-0.07	-0.06	-0.11	-0.14	-0.13	-0.14	-0.16	-0.25	-0.27	-0.24	-0.12	-0.17	-0.11	-0.18	-0.15	-0.16	-0.15	-0.03	0.15	0.25	0.11	0.20	0.25	-0.27	-0.09
28	0.5	0.84	1.19	1.18	0.88	0.86	0.92	1.19	0.72	0.01	-0.38	-0.34	-0.38	-0.23	-0.60	-0.57	-0.34	-0.42	-0.15	0.18	0.43	0.27	0.44	0.40	1.19	-0.60	0.27
29	0.4	0.27	0.44	0.50	0.46	0.35	0.27	0.20	0.05	-0.03	-0.18	-0.30	-0.31	-0.42	-0.39	-0.14	-0.03	0.15	0.31	0.49	0.78	1.00	0.95	1.09	1.09	-0.42	0.24
30	1.1	1.01	1.07	1.14	1.40	1.29	1.20	1.08	0.85	0.36	-0.11	-0.12	-0.44	-0.54	-0.75	-0.67	-0.20	-0.20	-0.17	-0.06	-0.07	-0.11	-0.07	-0.01	1.40	-0.75	0.29
Max.	**1.7**	**1.64**	**1.55**	**1.72**	**1.85**	**1.62**	**1.79**	**1.90**	**1.62**	**1.24**	**0.68**	**0.34**	**0.31**	**0.20**	**0.28**	**0.65**	**0.88**	**0.46**	**0.66**	**1.12**	**1.62**	**1.74**	**1.80**	**1.75**	**1.90**		
Min.	**-0.2**	**-0.13**	**-0.13**	**-0.14**	**-0.16**	**-0.14**	**-0.15**	**-0.14**	**-0.17**	**-0.26**	**-0.38**	**-0.46**	**-0.63**	**-0.97**	**-0.93**	**-0.67**	**-0.56**	**-0.62**	**-0.24**	**-0.16**	**-0.18**	**-0.15**	**-0.24**	**-0.27**		**-0.97**	
Avg.	**0.6**	**0.51**	**0.56**	**0.61**	**0.60**	**0.61**	**0.68**	**0.67**	**0.52**	**0.28**	**0.14**	**-0.01**	**-0.11**	**-0.15**	**-0.16**	**-0.11**	**-0.05**	**0.01**	**0.12**	**0.29**	**0.48**	**0.51**	**0.58**	**0.58**			**0.32**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.1	0.03	0.41	0.75	0.54	0.81	0.93	0.92	0.68	0.43	0.21	0.12	0.09	0.06	0.12	0.23	0.27	0.32	0.32	0.62	0.60	0.43	0.31	0.51	0.93	-0.05	0.40
2	0.6	0.52	0.24	0.06	0.00	0.00	0.03	0.37	0.37	0.49	0.19	0.21	-0.06	0.06	0.15	0.42	0.64	0.50	0.65	0.11	0.03	0.06	0.12	0.48	0.65	-0.06	0.26
3	0.3	0.08	-0.12	-0.21	-0.19	-0.11	-0.08	-0.02	-0.10	-0.21	-0.12	-0.02	-0.21	-0.01	0.07	0.23	0.01	-0.26	0.02	0.30	0.38	0.24	0.08	0.16	0.38	-0.26	0.01
4	0.1	0.05	0.16	0.10	0.18	0.18	0.10	0.18	0.16	0.06	0.16	-0.06	-0.10	-0.21	-0.16	-0.22	-0.14	-0.09	0.09	0.22	0.20	0.89	1.03	0.79	1.03	-0.22	0.15
5	0.8	0.78	0.84	1.00	1.01	0.92	0.75	0.61	0.62	0.44	0.37	0.17	-0.04	0.24	0.11	-0.02	0.12	-0.01	0.31	0.04	0.48	0.63	0.49	0.23	1.01	-0.04	0.45
6	0.3	0.21	0.11	0.16	0.10	0.14	0.19	0.16	0.19	0.24	0.09	0.08	0.18	0.09	0.09	0.09	0.15	0.10	0.13	0.23	0.31	0.20	0.10	0.08	0.31	0.08	0.15
7	0.1	0.11	0.15	0.12	0.18	0.17	0.15	0.11	0.05	-0.18	-0.21	-0.19	-0.12	-0.09	-0.02	-0.10	-0.01	0.04	0.16	0.25	0.30	0.40	0.26	0.23	0.40	-0.21	0.08
8	0.2	0.16	0.16	0.17	0.18	0.15	0.14	0.22	0.25	0.21	0.12	-0.05	0.17	0.16	0.23	0.23	0.18	0.13	0.17	0.22	0.26	0.33	0.37	0.37	0.37	-0.05	0.20
9	0.4	0.32	0.32	0.25	0.21	0.17	0.20	0.11	0.13	0.16	0.12	-0.07	-0.05	-0.02	-0.18	-0.17	-0.10	-0.07	-0.13	-0.08	-0.07	0.15	0.31	0.58	0.58	-0.18	0.10
10	0.3	0.48	0.45	0.31	0.29	0.24	0.17	0.18	0.06	-0.02	-0.19	-0.44	-0.01	-0.18	-0.53	-0.43	-0.31	-0.42	-0.41	-0.47	0.11	0.48	0.32	0.41	0.48	-0.53	0.02
11	0.6	0.45	0.42	0.35	0.30	0.46	0.43	0.38	0.35	0.21	0.10	0.08	0.06	0.05	0.31	0.28	0.30	0.34	0.33	0.36	0.34	0.36	0.39	0.27	0.56	0.05	0.31
12	0.3	0.28	0.29	0.36	0.25	0.18	0.11	0.01	-0.24	-0.18	-0.21	-0.24	-0.48	-0.21	-0.25	-0.28	-0.21	-0.25	-0.26	-0.12	-0.05	0.01	0.07	0.08	0.36	-0.48	-0.04
13	0.1	0.03	0.02	0.02	-0.01	-0.01	-0.02	-0.02	-0.02	0.00	-0.04	-0.21	-0.47	-0.45	-0.47	-0.22	-0.23	-0.14	-0.12	-0.07	-0.07	0.03	0.11	0.16	0.16	-0.47	-0.09
14	0.2	0.31	0.42	0.64	0.67	0.21	0.29	0.17	0.08	0.01	0.11	0.15	-0.03	-0.29	-0.98	-0.79	-0.76	-0.50	-0.28	-0.24	-0.06	0.21	0.48	0.52	0.67	-0.98	0.02
15	0.4	0.41	0.53	1.09	0.65	0.73	0.39	0.16	-0.21	-0.39	-0.61	-0.81	-0.59	-0.74	-1.00	-1.28	-1.07	-0.62	-0.41	-0.20	-0.07	-0.04	-0.01	0.05	1.09	-1.28	-0.15
16	0.0	0.00	0.02	-0.01	-0.02	-0.05	-0.01	-0.01	-0.04	-0.04	-0.05	-0.10		-0.53	-0.74	-0.76	-0.67	-0.59	-0.45	-0.30	-0.34	0.31	1.02	0.80	1.02	-0.76	-0.11
17	0.5	0.74	0.78	0.87	1.01	1.17	0.50	0.27	0.31	0.07	-0.34	-0.55	-0.75	-0.40	-0.48	-0.61	-0.67	-0.49	-0.78	-0.57	-0.03	0.40	0.51	0.49	1.17	-0.78	0.08
18	0.8	0.96	0.76	0.71	0.39	0.22	0.22	0.04	-0.22	-0.34	-0.29	-0.46	-0.49	-0.47	-0.45	-0.62	-0.40	-0.35	-0.25	-0.28	-0.13	0.00	0.02	0.03	0.96	-0.62	-0.02
19	0.1	0.20	0.49	0.71	0.70	0.62	0.35	0.28	0.08	0.04	0.02	-0.46	-0.64	-0.42	-0.35	-0.75	0.38	0.59	0.84	0.96	1.08	1.27	1.27	1.18	1.27	-0.75	0.36
20	0.7	0.94	0.90	1.41	1.50	1.71	1.23	1.12	0.45	-0.08	-0.27	-0.62	-0.71	-0.86	-0.85	-0.89	-0.83	-0.70	-0.55	-0.36	-0.20	0.93	1.66	1.65	1.71	-0.89	0.30
21	0.6	0.83	0.38	0.30	0.20	0.21	0.51	0.89	0.39	-0.26	-0.44	-0.51	-0.77	-1.02	-1.14	-1.16	-1.01	-0.84	-0.88	-0.53	0.59	0.85	1.06	1.11	1.11	-1.16	-0.03
22	1.0	0.79	0.78	0.51	0.26	0.26	0.38	0.42	-0.25	-0.30	-0.52	-0.53	-0.65	-0.93	-1.10	-1.06	-0.71	-0.45	-0.34	-0.06	0.00	0.09	0.07	0.07	1.03	-1.10	-0.09
23	0.0	0.04	0.04	0.12	0.08	0.13	0.04	-0.03	-0.08	-0.17	-0.61	-0.37	-0.31	-0.10	-0.03	-0.08	-0.09	-0.06	-0.04	-0.05	-0.06	-0.04	0.11	0.14	0.14	-0.61	-0.06
24	0.2	0.09	0.09	0.06	0.03	0.05	0.02	-0.05	-0.06	-0.22	-0.15	-0.26	-0.46	-0.52	-0.71	-0.67	-0.55	-0.58	-0.24	-0.01	0.03	0.17	0.27	0.36	0.36	-0.71	-0.13
25	0.5	0.34	0.23	0.20	0.21	0.16	0.13	0.08	0.01	-0.19	-0.43	-0.46	-0.70	-0.61	-0.65	-0.90	-1.05	-0.89	-0.81	-0.62	-0.41	-0.09	0.15	0.18	0.52	-1.05	-0.23
26	0.1	0.10	0.09	0.02	0.10	0.16	0.02	-0.13	-0.26	-0.50	-0.84	-0.74	-1.04	-0.74	-1.03	-0.62	-1.01	-0.72	-0.05	0.25	0.30	0.77	0.89	1.19	1.19	-1.04	-0.16
27	1.0	0.92	0.85	0.78	0.88	0.95	0.73	0.31	-0.23	-0.50	-0.57	-0.58	-0.90	-0.67	-0.61	-0.58	-0.29	-0.13	0.01	0.43	1.20	1.44	1.16	1.21	1.44	-0.90	0.28
28	1.5	1.71	1.49	1.38	1.50	1.33	1.17	1.09	-0.11	-0.46	-0.30	-0.32	-0.65	-0.92	-1.04	-1.00	-0.71	0.13	0.96	1.08	1.49	1.84	1.62	1.46	1.84	-1.04	0.59
29	1.6	1.63	1.46	1.38	1.57	1.47	1.01	0.48	0.38	0.00	-0.52	-0.63	-0.39	-0.37	-0.43	-0.54	-0.75	-0.52	-0.47	-0.34	0.14	0.74	1.41	1.64	1.64	-0.75	0.41
30	1.6	1.07	0.88	0.45	0.43	0.79	0.63	-0.02	-0.28	-0.59	-0.76	-1.06	-1.20	-0.84	-1.10	-0.77	-0.92	-0.54	-0.36	-0.39	-0.18	-0.01	0.07	0.11	1.62	-1.20	-0.12
31	0.1	0.17	0.24	0.08	0.04	0.04	0.00	-0.03	-0.03	-0.05	-0.15	-0.40	-0.56	-0.72	-0.82	-0.86	-0.76	-0.77	-0.59	-0.52	-0.23	-0.17	-0.12	-0.04	0.24	-0.86	-0.26
Max.	**1.6**	**1.71**	**1.49**	**1.41**	**1.57**	**1.71**	**1.23**	**1.12**	**0.68**	**0.49**	**0.37**	**0.21**	**0.18**	**0.24**	**0.31**	**0.42**	**0.64**	**0.59**	**0.96**	**1.08**	**1.49**	**1.84**	**1.66**	**1.65**	**1.84**		
Min.	**-0.1**	**0.00**	**-0.12**	**-0.21**	**-0.19**	**-0.11**	**-0.08**	**-0.13**	**-0.28**	**-0.59**	**-0.84**	**-1.06**	**-1.20**	**-1.02**	**-1.14**	**-1.28**	**-1.07**	**-0.89**	**-0.88**	**-0.62**	**-0.41**	**-0.17**	**-0.12**	**-0.04**		**-1.28**	
Avg.	**0.5**	**0.48**	**0.45**	**0.46**	**0.43**	**0.44**	**0.35**	**0.27**	**0.08**	**-0.08**	**-0.20**	**-0.30**	**-0.40**	**-0.38**	**-0.45**	**-0.45**	**-0.36**	**-0.25**	**-0.11**	**0.00**	**0.19**	**0.42**	**0.50**	**0.53**			**0.09**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.05	0.02	0.09	0.10	0.10	0.09	0.08	0.03	-0.07	-0.29	-0.67	-1.10	-0.85	-0.89	-0.69	-0.42	-0.25	-0.29	-0.20	-0.15	-0.06	-0.02	0.07	0.10	-1.10	-0.22
2	0.2	0.18	0.21	0.20	0.27	0.27	0.14	-0.17	-0.30	-0.51	-0.53	-0.51	-0.70	-0.81	-0.88		-0.76	-0.70	-0.49	-0.39	-0.23	-0.13	0.10	0.60	0.60	-0.88	-0.22
3	0.7	0.42	0.45	0.56	0.54	0.51	0.18	-0.01	-0.17	-0.28	-0.53	-0.51	-0.62	-0.96	-0.94	-1.07	-1.02	-1.28	-0.90	-0.64	-0.28	-0.13	0.01	0.03	0.75	-1.28	-0.25
4	0.0	0.00	0.00	-0.01	-0.03	-0.05	-0.10	-0.24	-0.56	-0.45	-0.66	-0.70	-0.84	-0.87	-1.50	-0.91	-1.09	-0.84	-0.94	-0.68	-0.24	0.10	0.28	0.49	0.49	-1.50	-0.41
5	0.4	0.25	0.25	0.09	0.07	0.04	-0.05	-0.08	-0.14	-0.18	-0.24	-0.21	-0.29	-0.54	-0.69	-0.54	-0.67	-0.54	-0.39	-0.46	-0.38	-0.22	0.01	0.40	0.45	-0.69	-0.17
6	0.3	0.62	0.50	0.97	0.98	0.53	0.39	0.05	-0.17	-0.36	-0.53	-0.63	-0.98	-0.99	-0.99	-1.01	-0.86	-1.00	-0.89	-0.61	-0.15	-0.13	0.09	0.87	0.98	-1.01	-0.17
7	0.7	0.90	1.07	0.83	1.28	0.78	0.38	-0.10	-0.58	-0.92	-0.74	-0.58	-0.63	-0.79	-0.93	-0.68	-0.77	-0.99	-0.73	-0.81	-0.56	-0.12	0.27	0.37	1.28	-0.99	-0.14
8	0.1	0.14	0.17	0.12	0.07	0.19	0.03	-0.30	-0.40	-0.48	-0.49	-0.67	-0.73	-0.76	-0.93	-0.76	-0.52	-0.46	-0.32	-0.37	-0.26	-0.24	0.22	0.19	0.22	-0.93	-0.27
9	-0.1	-0.07	-0.08	-0.12	-0.09	-0.10	-0.12	-0.25	-0.34	-0.44	-0.54	-0.44	-0.59	-0.78	-0.75	-1.27	-0.86	-0.80	-0.58	-0.52	-0.48	-0.23	0.11	0.03	0.11	-1.27	-0.39
10	0.0	0.14	0.26	0.06	0.16	0.00	-0.17	-0.24	-0.19	-0.21	-0.26	-0.47	-0.50	-0.41	-0.61	-0.72	-0.62	-0.53	-0.59	-0.42	-0.30	-0.15	0.07	0.22	0.26	-0.72	-0.23
11	0.1	0.40	0.16	0.18	0.14	0.08	0.00	-0.22	-0.33	-0.27	-0.35	-0.32	-0.26	-0.37	-0.44	-0.52	-0.61	-0.66	-0.48	-0.41	-0.26	-0.17	-0.04	0.22	0.40	-0.66	-0.18
12	0.4	0.16	0.31	0.17	0.06	0.19	0.13	-0.22	-0.27	-0.24	-0.39	-0.36	-0.53	-0.51	-0.50	-0.36	-0.33	-0.34	-0.34	-0.24	-0.18	-0.21	-0.16	-0.09	0.41	-0.53	-0.16
13	0.1	0.04	0.00	0.04	-0.02	-0.03	-0.09	-0.24	-0.32	-0.36	-0.47	-0.52	-0.77	-0.61	-0.61	-0.71	-0.70	-0.57	-0.62	-0.64	-0.56	-0.24	0.27	0.48	0.48	-0.77	-0.30
14	0.5	0.71	0.54	0.63	0.62	1.26	0.58	0.35	-0.20	-0.57	-0.80	-0.89	-0.87	-0.98	-0.94	-1.13	-1.23	-1.26	-1.08	-0.13	-0.02	0.03	0.31	0.49	1.26	-1.26	-0.17
15	0.9	0.39	0.68	0.67	0.80	1.22	0.88	0.57	0.22	-0.37	-0.46	-0.58	-0.66	-0.87	-1.06	-1.39	-1.48	-1.20	-0.72	-0.46	-0.32	-0.24	-0.15	-0.09	1.22	-1.48	-0.16
16	0.1	-0.02	-0.08	-0.09	-0.09	-0.12	-0.08	-0.20	-0.27	-0.42	-0.54	-0.60	-0.50	-0.56	-0.60	-0.46	-0.44	-0.31	-0.34	-0.34	-0.59	-0.06	0.30	0.68	0.68	-0.60	-0.23
17	0.5	0.44	0.37	0.37	0.36	0.48	0.35	-0.05	-0.31	-0.39	-0.31	-0.54	-0.47	-0.72	-1.02	-1.04	-1.02	-0.86	-0.75	-0.52	-0.18	0.20	0.62	0.61	0.62	-1.04	-0.16
18	0.5	0.45	0.51	0.71	0.56	0.53	0.76	-0.11	-0.38	-0.60	-0.80	-0.53	-0.90	-1.28	-1.37	-1.25	-1.08	-1.01	-0.72	-0.71	-0.52	-0.34	0.07	0.71	0.76	-1.37	-0.28
19	0.6	0.62	0.77	0.70	0.80	0.65	0.26	-0.25	-0.31	-0.48	-0.61	-0.57	-0.59	-0.59	-0.88	-1.02	-1.00	-1.11	-0.94	-0.78	-0.54	-0.10	0.25	0.12	0.80	-1.11	-0.21
20	0.0	0.11	0.46	0.68	0.27	0.28	0.19	-0.22	-0.44	-0.64	-0.78	-1.12	-1.21	-1.42	-1.27	-1.36	-1.25	-1.08	-0.88	-0.59	-0.30	0.00	0.13	0.16	0.68	-1.42	-0.43
21	0.4	0.28	0.19	0.08	0.27	0.72	0.12	-0.24	-0.41	-0.42	-0.40	-0.50	-0.53	-0.51	-0.52	-0.67	-0.51	-0.55	-0.78	-0.68	-0.45	-0.05	0.19	0.33	0.72	-0.78	-0.20
22	0.9	0.91	0.98	0.96	1.07	0.76	0.10	-0.26	-0.47	-0.54	-0.72	-0.89	-1.04	-1.19	-1.07	-0.71	-0.60	-0.85	-0.75	-0.45	-0.19	-0.13	-0.10	-0.08	1.07	-1.19	-0.18
23	-0.1	-0.03	0.02	0.06	0.20	0.41	0.07	-0.12	-0.40	-0.42	-0.51	-0.75	-0.98	-1.04	-1.29	-1.38	-1.23	-1.03	-0.82	-0.60	-0.28	0.03	0.42	0.81	0.81	-1.38	-0.37
24	0.8	0.77	0.97	0.70	0.44	0.44	-0.06	-0.37	-0.64	-0.94	-0.98	-1.20	-0.71	-0.51	-0.46	-0.36	-0.38	-0.22	-0.19	-0.16	-0.09	-0.08	-0.05	-0.04	0.97	-1.20	-0.14
25	0.0	0.01	0.01	0.05	0.06	0.00	-0.03	-0.21	-0.07	-0.55	-0.82	-1.13	-1.24	-1.22	-1.13	-0.94	-0.90	-0.73	-0.50	-0.27	-0.22	-0.10	-0.01	0.07	0.07	-1.24	-0.41
26	0.1	0.35	0.41	0.23	0.42	0.53	0.25	0.15	0.00	-0.10	-0.14	-0.31	-0.45	-0.36	-0.55	-0.44	-0.24	-0.24	-0.34	-0.26	-0.22	-0.10	0.25	0.36	0.53	-0.55	-0.03
27	0.6	0.47	0.26	0.27	0.46	0.46	0.25	-0.10	-0.25	-0.42	-0.46	-0.65	-0.94	-1.08	-0.85	-0.99	-0.82	-1.00	-0.92	-0.64	-0.15	-0.03	0.30	0.43	0.63	-1.08	-0.24
28	0.8	0.57	0.11	0.10	0.18	0.18	0.05	-0.15	-0.34	-0.67	-0.71	-0.85	-0.62	-0.98	-1.15	-0.91	-0.32	-0.38	-0.37	-0.30	-0.13	-0.07	0.00	0.15	0.78	-1.15	-0.24
29	0.1	0.07	-0.05	-0.06	0.00	0.01	-0.03	-0.13	-0.21	-0.35	-0.38	-0.37	-0.54	-0.54	-0.61	-0.77	-0.73	-0.77	-0.66	-0.52	-0.14	0.10	0.13	0.21	0.21	-0.77	-0.26
30	0.2	0.28	0.25	0.25	0.27	0.29	0.37	-0.10	-0.30	-0.32	-0.40	-0.48	-0.44	-0.54	-0.57	-0.58	-0.47	-0.68	-1.12	-0.55	-0.28	-0.20	0.15	0.70	0.70	-1.12	-0.18
Max.	**0.9**	**0.91**	**1.07**	**0.97**	**1.28**	**1.26**	**0.88**	**0.57**	**0.22**	**-0.07**	**-0.14**	**-0.21**	**-0.26**	**-0.36**	**-0.44**	**-0.36**	**-0.24**	**-0.22**	**-0.19**	**-0.13**	**-0.02**	**0.20**	**0.62**	**0.87**	**1.28**		
Min.	**-0.1**	**-0.07**	**-0.08**	**-0.12**	**-0.09**	**-0.12**	**-0.17**	**-0.37**	**-0.64**	**-0.94**	**-0.98**	**-1.20**	**-1.24**	**-1.42**	**-1.50**	**-1.39**	**-1.48**	**-1.28**	**-1.12**	**-0.81**	**-0.59**	**-0.34**	**-0.16**	**-0.09**		**-1.50**	
Avg.	**0.3**	**0.32**	**0.32**	**0.32**	**0.34**	**0.35**	**0.16**	**-0.11**	**-0.28**	**-0.43**	**-0.53**	**-0.62**	**-0.71**	**-0.79**	**-0.87**	**-0.85**	**-0.76**	**-0.74**	**-0.65**	**-0.48**	**-0.29**	**-0.10**	**0.13**	**0.32**			**-0.23**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.28	0.20	0.20	0.31	0.36	0.34	-0.27	-0.50	-0.61	-0.87	-1.05	-1.33	-1.42	-1.40	-1.21	-0.93	-0.95	-0.48	-0.47	-0.20	-0.10	0.00	0.05	0.64	-1.42	-0.39
2	0.0	0.00	0.03	0.06	0.09	0.12	0.07	-0.08	-0.13	-0.21	-0.65	-0.61	-0.94	-0.93	-0.46	-0.56	-0.85	-0.91	-0.44	-0.26	-0.30	-0.13	-0.05	-0.01	0.12	-0.94	-0.30
3	0.1	0.02	0.09	0.09	0.18	0.25	0.19	0.03	-0.05	-0.09	-0.20	-0.23	-0.23	-0.18	-0.46	-0.55	-0.23	-0.51	-0.50	-0.36	-0.24	-0.04	0.01	0.02	0.25	-0.55	-0.12
4	0.0	-0.04	-0.04	0.07	0.17	0.21	0.18	0.02	-0.16	-0.35	-0.40	-0.48	-0.64	-0.60	-0.48	-0.55	-0.52	-0.47	-0.36	-0.25	-0.30	-0.36	-0.14	0.23	0.23	-0.64	-0.22
5	0.6	0.58	0.43	0.38	0.49	0.71	0.54	0.17	-0.19	-0.39	-0.49	-0.56	-0.71	-0.49	-0.46	-0.70	-0.50	-0.52	-0.45	-0.45	-0.21	-0.08	0.09	0.33	0.71	-0.71	-0.08
6	0.3	0.28	0.33	0.52	1.14	0.75	0.51	0.32	-0.24	-0.47	-0.78	-0.97	-1.16	-1.13	-0.89	-0.85	-0.82	-0.82	-0.73	-0.56	-0.40	-0.27	-0.15	-0.09	1.14	-1.16	-0.26
7	-0.1	-0.06	-0.07	-0.07	-0.06	-0.06	-0.09	-0.10	-0.12	-0.24	-0.21	-0.29	-0.37	-0.48	-0.35	-0.35	-0.36	-0.55	-0.59	-0.46	-0.32	-0.18	-0.07	0.01	0.01	-0.59	-0.23
8	0.1	0.05	0.12	0.41	0.06	-0.02	0.07	0.00	-0.14	-0.16	-0.21	-0.23	-0.26	-0.32	-0.45	-0.47	-0.38	-0.33	-0.21	-0.16	-0.14	-0.10	-0.07	-0.05	0.41	-0.47	-0.12
9	0.0	-0.01	-0.01	0.07	0.17	0.14	0.06	-0.03	-0.21	-0.57	-0.89	-0.99	-1.13	-1.35	-1.36	-1.33	-1.24	-1.05	-0.78	-0.51	-0.33	-0.14	-0.09	-0.02	0.17	-1.36	-0.48
10	0.0	-0.04	-0.05	-0.05	-0.04	-0.04	-0.07	-0.12	-0.14	-0.27	-0.44	-0.53	-0.64	-0.93	-0.89	-0.67	-0.64	-0.99	-0.74	-0.37	-0.22	-0.15	-0.01	-0.01	0.01	-0.99	-0.33
11	0.0	-0.02	-0.05	-0.06	-0.08	-0.08	-0.09	-0.10	-0.28	-0.83	-0.85	-0.81	-0.99	-1.08	-1.17	-1.27	-1.19	-1.07	-0.90	-0.56	-0.23	0.10	0.36	0.22	0.36	-1.27	-0.46
12	0.1	0.28	0.63	0.59	0.89	0.85	0.29	-0.19	-0.45	-0.60	-0.72	-0.51	-0.51	-0.64	-0.62	-0.49	-0.49	-0.35	-0.10	-0.03	-0.04	-0.04	-0.06	-0.07	0.89	-0.72	-0.10
13	-0.1	-0.07	-0.06	-0.07	-0.05	-0.07	-0.07	-0.09	-0.12	-0.14	-0.19	-0.24	-0.25	-0.28	-0.34	-0.43	-0.46	-0.49	-0.51	-0.46	-0.38	-0.26	-0.13	-0.04	-0.04	-0.51	-0.22
14	0.0	0.03	0.04	0.07	0.10	0.12	0.08	-0.15	-0.22	-0.35	-0.46	-0.55	-0.70	-0.70	-0.74	-0.75	-0.52	-0.41	-0.44	-0.53	-0.26	-0.13	-0.05	-0.02	0.12	-0.75	-0.27
15	0.0	0.07	0.02	0.01	0.01	0.09	0.15	-0.15	-0.34	-0.40	-0.53	-0.70	-0.91	-1.07	-1.22	-1.22	-0.80	-0.62	-0.55	-0.29	-0.11	-0.08	-0.06	-0.04	0.15	-1.22	-0.36
16	-0.1	-0.07	-0.07	-0.08	-0.08	-0.08	-0.09	-0.10	-0.15	-0.12	-0.08	-0.10	-0.18	-0.20	-0.34	-0.24	-0.10	-0.14	-0.11	-0.12	-0.11	-0.10	-0.08	-0.07	-0.06	-0.34	-0.12
17	-0.1	-0.07	-0.10	-0.12	-0.13	-0.09	-0.10	-0.19	-0.19	-0.31	-0.36	-0.37	-0.36	-0.46	-0.44	-0.46	-0.40	-0.43	-0.29	-0.21	-0.15	-0.15	-0.12	-0.10	-0.07	-0.46	-0.23
18	-0.1	-0.02	-0.09	-0.11	-0.11	-0.11	-0.16	-0.16	-0.19	-0.30	-0.24	-0.28	-0.37	-0.48	-0.53	-0.50	-0.58	-0.44	-0.48	-0.40	-0.37	-0.20	0.05	0.28	0.28	-0.58	-0.24
19	0.3	0.35	0.32	0.43	0.53	0.21	0.09	-0.06	-0.20	-0.44	-0.45	-0.98	-0.70	-0.69	-0.82	-0.53	-0.81	-0.41	-0.25	-0.25	-0.15	-0.08	0.08	0.30	0.53	-0.98	-0.17
20	0.3	0.38	0.39	0.26	0.44	0.31	0.19	0.13	-0.18	-0.26	-0.27	-0.43	-0.39	-0.46	-0.48	-0.52	-0.52	-0.39	-0.28	-0.22	-0.17	-0.13	-0.11	-0.08	0.44	-0.52	-0.10
21	-0.1	-0.09	-0.09	-0.09	-0.08	-0.08	-0.09	-0.11	-0.17	-0.28	-0.46	-0.46	-0.47	-0.58	-0.58	-0.48	-0.45	-0.56	-0.37	-0.26	-0.16	-0.26	-0.03	-0.10	-0.03	-0.58	-0.27
22	0.0	0.00	0.02	0.13	-0.01	-0.08	0.06	-0.10	-0.21	-0.33	-0.32	-0.35	-0.32	-0.34	-0.42	-0.37	-0.27	-0.24	-0.24	-0.26	-0.24	-0.20	-0.17	-0.14	0.13	-0.42	-0.19
23	-0.1	-0.10	-0.09	-0.08	-0.08	-0.09	-0.11	-0.15	-0.28	-0.38	-0.61	-0.84	-0.96	-0.79	-0.74	-0.77	-0.88	-0.66	-0.51	-0.43	-0.32	-0.14	-0.06	-0.11	-0.06	-0.96	-0.39
24	-0.1	0.03	0.14	0.07	-0.05	-0.09	-0.06	-0.08	-0.15	-0.22	-0.38	-0.44	-0.67	-0.83	-0.66	-0.85	-0.96	-0.60	0.03	0.14	0.21	0.35	0.52	0.68	0.68	-0.96	-0.17
25	0.7	0.66	0.94	1.26	0.90	1.31	1.07	0.17	-0.22	-0.52	-0.69	-0.88	-1.05	-1.12	-1.17	-1.18	-1.07	-0.57	-0.54	-0.51	-0.03	0.17	0.58	0.71	1.31	-1.18	-0.05
26	0.7	1.66	1.70	1.95	1.51	1.20	0.47	-0.11	-0.22	-0.26	-0.35	-0.43	-0.64	-0.47	-0.39	-0.39	-0.40	-0.49	-0.59	-0.54	-0.37	-0.11	-0.10	-0.09	1.95	-0.64	0.14
27	-0.1	-0.10	-0.10	-0.08	-0.10	-0.09	-0.11	-0.15	-0.17	-0.19	-0.25	-0.22	-0.36	-0.36	-0.32	-0.33	-0.38	-0.44	-0.37	-0.56	-0.37	-0.20	0.16	0.26	0.26	-0.56	-0.21
28	0.4	0.24	0.47	0.53	0.30	0.20	0.20	-0.04	-0.25	-0.48	-0.67	-0.73	-0.42	-0.84	-1.12	-1.00	-0.93	-0.97	-0.77	-0.27	-0.07	0.11	0.37	0.67	0.67	-1.12	-0.21
29	0.8	0.84	1.08	1.84	1.06	1.11	0.80	0.14	-0.33	-0.61	-0.77	-1.02	-1.20	-1.38	-1.31	-1.22	-1.09	-0.85	-0.36	-0.27	-0.08	0.12	0.22	0.22	1.84	-1.38	-0.10
30	0.2	0.10	0.12	0.13	0.13	0.14	0.15	0.11	-0.17	-0.61	-0.78	-0.88	-1.11	-1.24	-1.24	-1.31	-1.21	-1.13	-0.94	-0.60	-0.45	-0.14	0.16	0.25	0.25	-1.31	-0.43
31	0.5	0.53	0.47	0.48	0.35	0.36	0.34	0.18	-0.30	-0.61	-0.78	-1.02	-1.08	-1.18	-1.22	-1.22	-1.00	-0.94	-0.85	-0.60	-0.35	0.24	0.52	0.69	0.69	-1.22	-0.27
Max.	**0.8**	**1.66**	**1.70**	**1.95**	**1.51**	**1.31**	**1.07**	**0.32**	**-0.05**	**-0.09**	**-0.08**	**-0.10**	**-0.18**	**-0.18**	**-0.32**	**-0.24**	**-0.10**	**-0.14**	**0.03**	**0.14**	**0.21**	**0.35**	**0.58**	**0.71**	**1.95**		
Min.	**-0.1**	**-0.10**	**-0.10**	**-0.12**	**-0.13**	**-0.11**	**-0.16**	**-0.27**	**-0.50**	**-0.83**	**-0.89**	**-1.05**	**-1.33**	**-1.42**	**-1.40**	**-1.33**	**-1.24**	**-1.13**	**-0.94**	**-0.60**	**-0.45**	**-0.36**	**-0.17**	**-0.14**		**-1.42**	
Avg.	**0.2**	**0.18**	**0.22**	**0.28**	**0.26**	**0.24**	**0.16**	**-0.04**	**-0.22**	**-0.37**	**-0.50**	**-0.59**	**-0.68**	**-0.74**	**-0.74**	**-0.73**	**-0.68**	**-0.62**	**-0.47**	**-0.36**	**-0.22**	**-0.09**	**0.05**	**0.13**			**-0.22**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.3	0.60	0.60	1.13	1.42	2.08	1.21	0.38	0.00	-0.28	-0.37	-0.40	-0.77	-0.76	-0.69	-0.98	-0.87	-0.71	-0.69	-0.60	-0.30	0.03	0.21	0.23	2.08	-0.98	0.07
2	0.2	0.00	-0.07	-0.08	-0.08	-0.08	-0.08	-0.11	-0.15	-0.23	-0.26	-0.32	-0.39	-0.41	-0.54	-0.59	-0.54	-0.68	-0.56	-0.43	-0.21	-0.13	0.01	0.40	0.40	-0.68	-0.22
3	0.4	0.65	0.25	0.04	0.13	0.81	0.77	0.28	-0.24	-0.57	-0.71	-0.74	-0.74	-0.76	-0.91	-1.05	-0.89	-0.88	-0.74	-0.45	-0.02	0.21	0.23	0.20	0.81	-1.05	-0.19
4	0.1	0.21	0.41	0.65	0.25	0.08	0.01	-0.16	-0.22	-0.36	-0.61	-0.58	-0.60	-0.83	-0.77	-0.64	-0.78	-0.86	-0.72	-0.47	-0.23	0.02	0.14	0.34	0.65	-0.86	-0.23
5	0.2	0.67	0.33	0.61	0.36	0.18	0.33	0.17	-0.21	-0.43	-0.77	-0.94	-0.85	-1.18	-1.24	-1.25	-1.13	-1.07	-0.88	-0.65	-0.27	0.19	0.99	1.10	1.10	-1.25	-0.24
6	1.3	1.21	1.57	1.44	1.53	0.84	0.63	0.48	-0.21	-0.59	-0.82	-0.98	-1.20	-1.12	-1.13	-1.06	-1.07	-0.63	-0.26	-0.19	-0.15	0.10	0.54	0.59	1.57	-1.20	0.03
7	0.4	0.30	0.42	0.34	0.55	0.53	0.83	0.16	-0.24	-0.59	-0.90	-1.08	-1.21	-1.36	-1.19	-0.95	-0.91	-1.03	-0.85	-0.78	-0.27	0.44	0.84	0.85	0.85	-1.36	-0.24
8	0.8	1.31	1.62	1.56	1.12	1.91	2.01	1.09	-0.04	-0.54	-0.82	-1.02	-1.20	-1.20	-1.08	-1.10	-1.11	-0.96	-0.70	-0.37	-0.22	0.33	1.33	1.81	2.01	-1.20	0.19
9	1.9	1.67	1.54	1.76	1.34	1.50	1.05	0.62	-0.11	-0.51	-0.76	-0.96	-1.12	-1.22	-1.32	-1.25	-1.34	-0.71	-0.76	-0.44	-0.22	0.57	0.87	0.85	1.91	-1.34	0.12
10	0.7	1.25	0.82	0.32	0.67	1.29	2.25	0.42	-0.27	-0.60	-0.59	-0.69	-0.75	-0.62	-0.72	-0.37	-0.62	-0.45	-0.26	-0.22	-0.02	0.19	0.45	0.53	2.25	-0.75	0.11
11	0.4	0.30	0.70	0.61	0.71	0.75	0.70	0.24	-0.29	-0.35	-0.37	-0.36	-0.53	-0.60	-0.69	-0.76	-0.81	-0.55	-0.42	-0.23	0.19	0.55	0.33	0.73	0.75	-0.81	0.01
12	0.6	0.69	0.79	1.38	1.47	0.83	1.21	0.92	0.17	-0.58	-0.62	-0.74	-0.80	-1.00	-0.92	-0.80	-0.70	-0.50	-0.42	0.14	0.28	0.40	0.64	0.48	1.47	-1.00	0.12
13	0.7	0.97	0.95	0.53	0.70	0.42	0.45	0.31	0.10	-0.12	-0.21	-0.50	-0.44	-0.58	-0.48	-0.24	-0.28	-0.28	-0.29	-0.17	-0.01	0.08	0.41	0.57	0.97	-0.58	0.11
14	0.6	0.63	0.29	0.30	0.29	0.22	0.40	0.23	-0.04	-0.12	-0.16	-0.24	-0.21	-0.21	-0.28	-0.45	-0.42	-0.38	-0.28	-0.20	-0.14	-0.07	-0.06	-0.08	0.64	-0.45	-0.01
15	-0.1	-0.05	0.03	0.01	0.07	0.06	-0.04	-0.15	-0.22	-0.30	-0.33	-0.27	-0.36	-0.31	-0.29	-0.34	-0.33	-0.36	-0.33	-0.25	-0.17	-0.11	-0.09	-0.06	0.07	-0.36	-0.18
16	-0.1	-0.05	-0.05	-0.05	-0.06	-0.05	-0.06	-0.10	-0.14	-0.13	-0.16	-0.20	-0.41	-0.60	-0.66	-0.65	-0.72	-0.67	-0.61	-0.35	0.12	0.35	0.48	0.50	0.50	-0.72	-0.18
17	0.8	0.32	0.30	0.48	0.51	0.89	0.54	0.47	-0.25	-0.33	-0.37	-0.54	-0.38	-0.49	-0.61	-0.77	-0.58	-0.52	-0.54	-0.25	-0.04	0.06	0.14	0.27	0.89	-0.77	-0.04
18	0.4	0.43	0.45	0.69	0.49	0.55	0.68	0.70	-0.03	-0.40	-0.55	-0.69	-0.58	-0.70	-0.67	-0.47	-0.45	-0.38	-0.28	-0.21	0.12	0.63	0.56	0.85	0.85	-0.70	0.05
19	0.5	0.71	0.77	0.63	0.31	0.55	0.69	0.52	0.41	0.07	-0.21	-0.44	-0.59	-0.90	-0.98	-0.84	-0.74	-0.39	-0.37	-0.09	0.27	0.46	0.71	0.71	0.77	-0.98	0.08
20	0.6	0.54	0.64	0.62	0.74	0.89	1.05	0.85	0.47	-0.10	-0.27	-0.29	-0.39	-0.41	-0.39	-0.35	-0.65	-0.57	-0.43	-0.24	-0.17	0.20	0.52	0.50	1.05	-0.65	0.14
21	0.5	0.46	0.42	0.38	0.41	0.51	0.50	0.29	-0.04	-0.17	-0.17	-0.13	-0.53	-0.48	-0.81	-0.89	-0.63	-0.54	-0.82	-0.24	-0.06	0.01	0.15	0.04	0.51	-0.89	-0.08
22	0.1	0.27	0.32	0.13	0.12	0.02	-0.03	-0.09	-0.17	-0.18	-0.20	-0.28	-0.30	-0.35	-0.30	-0.38	-0.45	-0.32	-0.34	-0.41	-0.17	0.50	1.19	1.37	1.37	-0.45	0.00
23	1.3	1.52	1.37	1.57	1.55	1.52	1.22	1.13	0.53	-0.28	-0.50	-0.64	-0.74	-0.57	-0.71	-0.74	-0.57	-0.55	-0.43	-0.02	-0.07	-0.06	0.21	0.12	1.57	-0.74	0.26
24	0.1	0.22	0.23	0.47	0.27	0.39	0.35	0.29	0.01	0.06	-0.22	-0.66	-0.80	-0.65	-0.80	-0.73	-0.55	-0.75	-0.27	0.03	0.28	0.76	0.93	1.12	1.12	-0.80	0.00
25	1.1	1.16	0.87	0.67	0.58	0.89	0.92	0.40	0.09	-0.18	-0.37	-0.57	-0.68	-0.52	-0.52	-0.50	-0.66	-0.63	-0.38	-0.04	0.05	0.14	0.14	-0.02	1.16	-0.68	0.08
26	0.0	-0.02	-0.02	-0.01	0.00	-0.02	-0.05	-0.06	-0.08	-0.14	-0.21	-0.16	-0.16	-0.14	-0.19	-0.31	-0.45	-0.60	-0.27	-0.14	-0.02	-0.04	-0.06	-0.07	0.00	-0.60	-0.14
27	-0.1	-0.06	-0.02	-0.06	-0.06	-0.03	-0.06	-0.13	-0.21	-0.28	-0.36	-0.44	-0.48	-0.47	-0.58	-0.79	-0.94	-0.64	-0.48	-0.45	-0.12	0.26	0.49	0.65	0.65	-0.94	-0.22
28	0.5	0.55	0.73	0.58	0.49	0.55	0.43	0.24	0.04	-0.19	-0.31	-0.29	-0.35	-0.41	-0.43	-0.46	-0.35	-0.05	-0.08	0.05	0.21	0.64	0.90	0.72	0.90	-0.46	0.15
29	0.8	0.74	0.98	1.21	1.11	0.87	0.98	0.88	0.65	-0.08	-0.46	-0.44	-0.52	-0.68	-0.48	-0.61	-0.65	-0.63	-0.33	-0.02	0.14	0.46	0.83	0.39	1.21	-0.68	0.22
30	0.5	0.69	0.44	0.16	0.16	0.33	0.28	0.21	0.13	-0.12	-0.22	-0.30	-0.29	-0.37	-0.52	-0.76	-0.56	-0.62	-0.25	0.03	0.16	0.17	0.17	0.13	0.69	-0.76	-0.02
31	0.1	0.05	0.13	0.15	0.06	0.07	0.03	0.05	0.12	0.11	0.07	-0.02	-0.05	-0.10	-0.16	-0.06	-0.09	-0.01	0.03	0.11	0.17	0.28	0.28	0.26	0.28	-0.16	0.07
Max.	**1.9**	**1.67**	**1.62**	**1.76**	**1.55**	**2.08**	**2.25**	**1.13**	**0.65**	**0.11**	**0.07**	**-0.02**	**-0.05**	**-0.10**	**-0.16**	**-0.06**	**-0.09**	**-0.01**	**0.03**	**0.14**	**0.28**	**0.76**	**1.33**	**1.81**	**2.25**		
Min.	**-0.1**	**-0.06**	**-0.07**	**-0.08**	**-0.08**	**-0.08**	**-0.08**	**-0.16**	**-0.29**	**-0.60**	**-0.90**	**-1.08**	**-1.21**	**-1.36**	**-1.32**	**-1.25**	**-1.34**	**-1.07**	**-0.88**	**-0.78**	**-0.30**	**-0.13**	**-0.09**	**-0.08**		**-1.36**	
Avg.	**0.5**	**0.58**	**0.57**	**0.59**	**0.56**	**0.62**	**0.62**	**0.34**	**-0.01**	**-0.27**	**-0.41**	**-0.51**	**-0.59**	**-0.65**	**-0.68**	**-0.68**	**-0.67**	**-0.58**	**-0.45**	**-0.24**	**-0.03**	**0.25**	**0.47**	**0.52**			**-0.01**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.23	0.20	0.22	0.30	0.28	0.32	0.28	0.15	-0.34	-0.50	-0.46	-0.75	-0.56	-0.35	-0.43	-0.50	-0.35	-0.17	-0.04	0.11	0.07	0.10	0.15	0.32	-0.75	-0.08
2	0.2	0.18	0.17	0.17	0.14	0.11	0.18	0.06	0.08	0.06	-0.03	-0.06	-0.30	-0.35	-0.25	-0.12	-0.28	-0.19	0.03	0.15	0.11	0.06	0.05	0.03	0.20	-0.35	0.01
3	0.1	0.06	0.04	0.06	0.11	0.06	0.04	-0.03	0.05	-0.04	-0.20	-0.20	-0.27	-0.29	-0.41	-0.42	-0.43	-0.32	-0.20	-0.08	-0.10	-0.03	-0.03	-0.06	0.11	-0.43	-0.11
4	0.0	-0.02	-0.06	-0.06	-0.07	-0.08	0.07	0.02	-0.12	-0.21	-0.25	-0.35	-0.38	-0.54	-0.46	-0.45	-0.41	-0.36	-0.28	-0.11	0.37	0.56	0.95	0.43	0.95	-0.54	-0.08
5	0.8	0.56	0.36	0.39	0.55	0.76	0.58	0.58	0.51	0.56	-0.09	-0.32	-0.51	-0.48	-0.58	-0.27	-0.16	-0.09	0.11	0.37	0.49	0.44	0.67	0.75	0.78	-0.58	0.25
6	0.9	0.74	0.58	0.33	0.46	0.33	0.14	0.08	0.06	0.07	0.11	0.04	0.19	0.19	0.15	0.08	0.04	0.11	0.16	0.09	0.16	0.16	0.19	0.10	0.85	0.04	0.23
7	0.1	0.10	0.26	0.31	0.29	0.25	0.27	0.17	0.17	0.17	-0.12	-0.15	-0.15	-0.15	-0.14	-0.26	-0.23	-0.13	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	0.31	-0.26	0.02
8	0.0	-0.05	-0.05	-0.05	-0.05	-0.06	-0.06	-0.07	-0.12	-0.23	-0.35	-0.38	-0.34	-0.12	-0.12	-0.09	-0.01	0.05	-0.05	-0.03	0.00	0.14	0.21	0.25	0.25	-0.38	-0.07
9	0.3	0.31	0.27	0.21	0.09	0.03	0.19	0.16	0.01	-0.08	-0.15	-0.26	-0.19	-0.23	-0.18	-0.17	-0.19	-0.16	-0.11	-0.03	0.02	0.17	0.12	0.06	0.31	-0.26	0.01
10	0.1	0.07	-0.02	-0.05	-0.05	-0.02	-0.03	-0.01	-0.10	-0.19	-0.28	-0.35	-0.47	-0.57	-0.58	-0.51	-0.52	-0.41	-0.21	-0.06	0.13	0.13	0.05	0.03	0.13	-0.58	-0.17
11	0.0	-0.05	-0.06	-0.04	0.00	0.04	0.03	-0.06	-0.12	-0.17	-0.23	-0.21	-0.29	-0.32	-0.37	-0.43	-0.37	-0.28	-0.13	0.05	0.09	0.11	0.11	0.11	0.11	-0.43	-0.11
12	0.1	0.07	0.09	0.05	0.03	0.01	0.01	0.02	0.01	0.03	0.02	-0.01	-0.05	-0.09	-0.05	-0.01	0.07	0.01	0.11	0.09	0.04	0.03	0.09	0.12	0.12	-0.09	0.03
13	0.1	0.04	0.06	0.02	-0.02	-0.04	-0.04	0.01	0.03	0.00	0.00	-0.08	-0.12	-0.12	-0.11	-0.08	-0.10	0.00	0.20	0.23	0.21	0.14	0.30	0.16	0.30	-0.12	0.03
14	0.3	0.21	0.13	0.12	0.17	0.15	0.14	0.15	0.12	0.02	-0.02	-0.09	-0.21	-0.21	-0.18	-0.18	-0.16	-0.13	-0.14	-0.01	0.15	0.11	0.07	0.08	0.25	-0.21	0.02
15	0.2	0.19	0.17	0.07	0.04	0.07	0.08	0.08	0.05	-0.01	-0.02	-0.15	-0.21	-0.22	-0.26	-0.23	-0.19	-0.21	-0.07	0.03	0.08	0.08	0.05	-0.01	0.19	-0.26	-0.02
16	0.1	0.25	0.34	0.25	0.47	0.20	0.33	0.80	0.90	0.46	-0.26	-0.43	-0.43	-0.52	-0.64	-0.66	-0.41	-0.18	0.03	0.26	0.59	0.55	0.38	0.64	0.90	-0.66	0.13
17	0.7	0.59	0.86	0.30	0.10	-0.03	0.06	0.19	0.22	0.06	-0.25	-0.35	-0.32	-0.30	-0.26	-0.25	-0.19	-0.06	-0.06	-0.11	-0.07	-0.07	-0.07	0.06	0.86	-0.35	0.03
18	0.1	0.01	0.04	0.00	0.04	0.01	0.00	0.03	-0.04	-0.13	-0.21	-0.26	-0.20	-0.20	-0.24	-0.35	-0.35	-0.29	-0.21	-0.17	-0.04	0.18	0.08	0.00	0.18	-0.35	-0.09
19	0.0	-0.02	-0.03	-0.05	-0.08	-0.10	-0.10	-0.11	-0.12	-0.17	-0.29	-0.35	-0.45	-0.52	-0.52	-0.53	-0.44	-0.34	-0.28	-0.13	0.00	0.00	-0.01	0.02	0.02	-0.53	-0.19
20	0.1	0.17	0.27	0.31	0.12	0.73	0.60	1.04	0.69	-0.03	-0.27	-0.40	-0.54	-0.66	-0.61	-0.71	-0.46	-0.42	-0.29	0.27	0.84	0.94	1.03	0.71	1.04	-0.71	0.14
21	0.7	0.67	0.74	0.57	0.52	0.65	0.53	0.70	0.88	0.63	-0.12	-0.36	-0.49	-0.47	-0.58	-0.53	-0.45	-0.43	-0.24	0.24	0.92	1.33	0.92	0.60	1.33	-0.58	0.29
22	1.2	1.87	1.03	0.60	0.64	0.57	0.87	0.91	0.55	0.21	-0.24	-0.28	-0.33	-0.41	-0.46	-0.39	-0.29	-0.22	-0.13	-0.11	-0.09	-0.09	-0.09	-0.09	1.87	-0.46	0.22
23	-0.1	-0.07	-0.07	-0.05	-0.02	-0.04	-0.01	-0.02	-0.04	-0.10	-0.10	-0.18	-0.25	-0.26	-0.31	-0.23	-0.24	-0.14	-0.16	-0.11	-0.10	-0.06	-0.04	-0.05	-0.01	-0.31	-0.11
24	-0.1	-0.09	-0.10	-0.10	-0.10	-0.10	-0.13	-0.11	-0.12	-0.14	-0.25		-0.16			0.53	-0.33	-0.25	-0.17	-0.03	0.07	0.10	0.09	0.37	0.53	-0.33	-0.05
25	0.3	0.44	0.25	0.36	0.52	0.26	0.39	0.47	0.49	0.21	-0.08	-0.25	-0.24	-0.23	-0.26	-0.25	-0.24	-0.22	-0.18	-0.05	0.16	0.18	0.08	0.06	0.52	-0.26	0.09
26	0.2	0.20	0.37	0.33	0.43	0.35	0.23	0.29	0.35	0.29	-0.01	-0.28	-0.44	-0.37	-0.28	-0.25	-0.51	-0.51	-0.05	0.33	0.82	1.06	1.39	1.26	1.39	-0.51	0.22
27	1.4	1.40	1.44	1.14	1.06	0.84	0.77	0.61	0.66	0.18	-0.09	-0.27	-0.35	-0.45	-0.47	-0.48	-0.32	-0.12	0.15	0.51	0.93	0.94	0.75	0.81	1.44	-0.48	0.46
28	1.5	1.85	1.24	0.88	1.07	0.98	0.90	0.77	1.11	0.46	-0.20	-0.34	-0.38	-0.41	-0.38	-0.32	-0.30	-0.21	0.03	0.39	0.80	0.77	0.42	0.22	1.85	-0.41	0.45
29	0.2	0.31	0.39	0.35	0.56	0.54	0.64	0.32	0.29	0.36	-0.04	-0.29	-0.17	-0.14	-0.23	-0.31	-0.34	-0.36	-0.16	0.06	0.21	0.35	0.43	0.68	0.68	-0.36	0.15
30	0.8	0.53	0.37	0.61	0.87	1.12	1.04	0.38	0.29	0.03	-0.20	-0.32	-0.39	-0.75	-0.61	-0.54	-0.49	-0.34	-0.18	0.11	0.58	0.54	0.54	0.56	1.12	-0.75	0.19
Max.	**1.5**	**1.87**	**1.44**	**1.14**	**1.07**	**1.12**	**1.04**	**1.04**	**1.11**	**0.63**	**0.11**	**0.04**	**0.19**	**0.19**	**0.15**	**0.53**	**0.07**	**0.11**	**0.20**	**0.51**	**0.93**	**1.33**	**1.39**	**1.26**	**1.87**		
Min.	**-0.1**	**-0.09**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.13**	**-0.11**	**-0.12**	**-0.34**	**-0.50**	**-0.46**	**-0.75**	**-0.75**	**-0.64**	**-0.71**	**-0.52**	**-0.51**	**-0.29**	**-0.17**	**-0.10**	**-0.09**	**-0.09**	**-0.09**		**-0.75**	
Avg.	**0.3**	**0.36**	**0.31**	**0.24**	**0.27**	**0.26**	**0.27**	**0.26**	**0.23**	**0.07**	**-0.16**	**-0.26**	**-0.31**	**-0.34**	**-0.34**	**-0.30**	**-0.29**	**-0.22**	**-0.09**	**0.07**	**0.25**	**0.29**	**0.29**	**0.27**			**0.06**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.41	0.25	0.19	0.32	0.17	0.17	0.21	0.29	0.03	-0.09	-0.24	-0.22	-0.39	-0.33	-0.20	-0.17	-0.20	-0.08	-0.01	-0.02	-0.03	-0.02	-0.03	0.60	-0.39	0.03
2	0.0	0.24	0.35	0.41	0.27	0.28	0.19	0.23	0.13	0.23	0.04	-0.16	-0.22	-0.23	-0.22	-0.24	-0.27	-0.21	-0.12	0.08	0.06	-0.03	-0.04	0.07	0.41	-0.27	0.03
3	0.1	0.11	0.04	0.12	0.12	-0.04	-0.10	-0.12	-0.14	-0.19	-0.20	-0.27	-0.40	-0.47	-0.43	-0.43	-0.33	-0.22	-0.02	0.35	0.66	0.82	1.05	1.29	1.29	-0.47	0.06
4	1.0	0.73	0.86	0.98	1.29	1.01	0.65	0.59	0.62	0.52	-0.03	-0.40	-0.38	-0.40	-0.34	-0.38	-0.30	-0.20	-0.04	0.13	0.12	0.10	-0.02	0.02	1.29	-0.40	0.25
5	0.1	0.04	0.03	-0.01	-0.02	0.00	0.08	0.04	0.08	0.15	-0.11	-0.14	-0.16	-0.16	-0.19	-0.19	-0.15	-0.10	-0.07	-0.02	0.03	-0.02	0.05	0.06	0.15	-0.19	-0.03
6	0.0	-0.01	0.08	0.17	0.06	0.00	-0.04	-0.05	-0.03	-0.07	-0.11	-0.14	-0.16	-0.18	-0.18	-0.23	-0.33	-0.21	-0.10	-0.05	-0.03	0.00	0.01	-0.02	0.17	-0.33	-0.07
7	0.0	0.01	-0.02	-0.06	-0.07	-0.05	-0.03	-0.12	-0.04	-0.09	-0.15	-0.18	-0.23	-0.23	-0.16	-0.16	-0.15	-0.11	-0.03	0.02	0.04	0.07	0.04	0.02	0.07	-0.23	-0.07
8	0.0	-0.04	0.01	-0.03	0.00	0.15	0.35	0.51	0.27	0.37	0.15	-0.10	-0.15	-0.24	-0.16	-0.10	-0.02	0.16	0.49	1.14	1.04	0.92	0.48	0.58	1.14	-0.24	0.24
9	0.8	0.48	0.29	0.18	0.10	-0.02	-0.04	-0.07	-0.05	-0.04	-0.06	-0.05	-0.04	0.06	0.18	0.10	0.18	0.18	0.20	0.20	0.18	0.22	0.17	0.13	0.79	-0.07	0.14
10	0.1	0.11	0.08	0.06	0.12	0.10	0.29	0.60	0.45	0.06	0.08	0.11	-0.13	-0.22	-0.23	-0.22	-0.09	0.07	0.14	0.15	0.15	0.19	0.20	0.21	0.60	-0.23	0.10
11	0.3	0.34	0.31	0.18	0.08	0.03	0.03	0.01	0.03	-0.05	-0.13	-0.16	-0.15	-0.16	-0.17	-0.16	-0.17	-0.14	-0.15	-0.14	-0.13	-0.12	-0.11	-0.11	0.34	-0.17	-0.03
12	-0.1	-0.03	-0.07	-0.06	0.02	0.03	-0.02	-0.06	0.01	0.05	-0.01	-0.02	-0.01	-0.09	-0.11	-0.17	-0.16	-0.01	0.17	0.24	0.27	0.38	0.40	0.44	0.44	-0.17	0.04
13	0.5	0.73	0.32	0.87	0.99	0.66	0.81	0.64	0.39	0.16	-0.01	-0.12	-0.12	-0.04	0.02	-0.03	0.08	0.08	0.00	-0.02	0.00	-0.01	-0.02	0.00	0.99	-0.12	0.25
14	0.0	-0.03	-0.02	-0.02	-0.01	-0.03	-0.03	-0.05	-0.04	-0.04	-0.02	-0.05	-0.05	-0.05	-0.06	-0.05	-0.02	-0.02	-0.04	-0.02	-0.02	-0.03	0.07	-0.05	0.07	-0.06	-0.03
15	-0.1	-0.09	-0.09	-0.04	-0.03	-0.10	-0.11	0.00	-0.08	-0.02	0.04	-0.02	-0.02	0.05	-0.02	0.01	0.15	0.28	0.06	-0.07	-0.06	0.29	0.45	0.32	0.45	-0.11	0.03
16	0.2	-0.12	-0.11	-0.08	-0.12	-0.11	-0.12	-0.11	-0.08	-0.05	-0.18	-0.15	-0.25	-0.22	-0.19	-0.32	-0.01	0.35	0.75	1.01	0.78	0.58	0.50	0.62	1.01	-0.32	0.11
17	0.5	0.23	0.40	0.35	0.28	0.27	0.29	0.13	0.02	0.01	0.02	0.24	0.61	0.36	0.86	0.71	0.68	0.63	0.84	0.75	0.39	0.20	0.15	0.16	0.86	0.01	0.38
18	0.1	0.16	0.20	0.26	0.19	0.12	0.12	0.23	0.26	0.34	0.36	0.30	0.18	0.19	0.23	0.60	0.31	0.65	0.89	0.73	0.81	0.63	1.92	1.51	1.92	0.12	0.47
19	1.9	1.68	1.83	1.90	1.72	1.09	1.16	1.20	1.27	1.82	1.43	0.98	0.30	0.17	0.19	0.14	0.16	0.63	0.38	0.26	0.08	0.04	0.83	0.58	1.90	0.04	0.91
20	0.5	0.11	0.45	0.30	0.07	0.20	0.16	0.19	0.27	0.68	0.42	0.32	0.03	-0.31	-0.23	0.10	0.76	0.54	1.17	0.80	0.43	0.35	0.42	0.56	1.17	-0.31	0.35
21	0.7	0.61	0.20	0.07	0.09	0.12	0.09	0.22	0.16	0.53	1.39	1.30	0.87	0.60	0.44	0.49	0.58	0.77	0.72	0.68	0.43	0.24	0.33	0.36	1.39	0.07	0.50
22	0.3	0.28	0.21	0.22	0.31	0.29	0.34	0.32	0.23	0.24	0.29	0.19	0.15	0.17	0.29	0.36	0.30	0.50	0.49	0.44	0.53	0.54	0.53	0.52	0.54	0.15	0.34
23	0.4	0.55	0.41	0.32	0.39	0.52	0.58	0.50	0.41	0.33	0.31	0.24	0.17	0.16	0.15	0.14	0.12	0.23	0.55	0.53	0.20	0.36	0.25	0.34	0.58	0.12	0.34
24	0.0	0.10	0.14	-0.02	0.01	-0.06	0.21	0.23	0.03	0.05	0.30	0.30	0.31	0.28	0.31	0.37	0.65	0.87	1.03	0.31	0.38	0.41	0.46	0.59	1.03	-0.06	0.30
25	0.5	0.25	0.26	0.10	0.01	0.04	-0.01	-0.02	-0.01	0.02	0.06	0.01	0.02	-0.01	-0.02	0.13	0.09	0.19	0.80	0.98	0.70	0.67	0.73	0.97	0.98	-0.02	0.27
26	0.5	0.47	1.03	1.38	1.20	1.09	0.61	0.56	0.37	0.12	0.23	0.35	0.22	0.17	0.24	0.27	0.34	0.40	0.36	0.39	0.33	0.24	0.36	0.38	1.38	0.12	0.48
27	0.4	0.24	0.24	0.25	0.30	0.27	0.40	0.41	0.30	0.41	0.37	0.26	0.25	0.14	0.14	0.16	0.26	0.43	1.05	0.79	0.85	0.71	0.69	0.74	1.05	0.14	0.42
28	0.3	0.43	0.46	0.48	0.58	1.20	1.34	1.21	0.89	0.95	0.51	0.38	0.22	0.25	0.15	0.26	0.56	0.31	0.55	0.53	0.28	0.40	0.46	0.37	1.34	0.15	0.54
29	0.4	0.23	0.39	0.39	0.25	0.32	0.38	0.37	0.26	0.27	0.34	0.25	0.38	0.37	0.19	0.19	0.17	0.17	0.16	0.14	0.15	0.19	0.19	0.30	0.44	0.14	0.27
30	0.2	0.18	0.23	0.57	0.33	0.22	0.23	0.17	0.24	0.47	0.63	0.46	0.29	0.03	0.14	0.17	0.43	0.37	0.36	0.85	0.79	0.71	0.82	1.14	1.14	0.03	0.42
31	1.0	0.56	0.82	0.67	0.33	0.64	0.46	0.50	0.86	0.67	0.36	0.79	1.01	0.31	0.37	0.48	0.36	0.82	0.57	0.70	1.02	0.40	0.45	0.75	1.02	0.31	0.62
Max.	**1.9**	**1.68**	**1.83**	**1.90**	**1.72**	**1.20**	**1.34**	**1.21**	**1.27**	**1.82**	**1.43**	**1.30**	**1.01**	**0.60**	**0.86**	**0.71**	**0.76**	**0.87**	**1.17**	**1.14**	**1.04**	**0.92**	**1.92**	**1.51**	**1.92**		
Min.	**-0.1**	**-0.12**	**-0.11**	**-0.08**	**-0.12**	**-0.11**	**-0.12**	**-0.12**	**-0.14**	**-0.19**	**-0.20**	**-0.40**	**-0.40**	**-0.47**	**-0.43**	**-0.43**	**-0.33**	**-0.22**	**-0.15**	**-0.14**	**-0.13**	**-0.12**	**-0.11**	**-0.11**		**-0.47**	
Avg.	**0.4**	**0.29**	**0.31**	**0.33**	**0.30**	**0.27**	**0.27**	**0.27**	**0.24**	**0.26**	**0.20**	**0.14**	**0.07**	**0.00**	**0.03**	**0.06**	**0.13**	**0.23**	**0.36**	**0.38**	**0.34**	**0.30**	**0.38**	**0.41**			**0.25**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.7	0.62	0.64	0.74	0.58	1.20	0.78	0.69	0.86	0.47	0.37	0.34	0.12	0.16	0.10	0.05	0.71	0.99	0.89	0.34	0.23	0.32	0.07	0.22	1.20	0.05	0.51
2	-0.1	-0.09	-0.08	-0.08	-0.10	-0.12	-0.12	-0.12	-0.17	-0.21	-0.07	-0.05	-0.04	-0.04	-0.06	-0.10	-0.08	0.04	0.08	0.14	0.16	0.20	0.20	0.20	0.20	-0.21	-0.02
3	0.2	0.17	0.14	0.17	0.13	0.14	0.09	0.09	0.08	0.24	0.26	0.19	0.14	0.10	0.13	0.18	0.22	0.32	0.58	0.66	0.54	0.42	0.31	0.12	0.66	0.08	0.23
4	0.0	-0.04	-0.03	0.02	0.08	0.16	0.16	0.14	0.19	0.36	0.31	0.36	0.17	0.25	0.18	-0.12	-0.21	-0.07	-0.15	-0.13	-0.17	-0.16	-0.15	0.03	0.36	-0.21	0.05
5	0.4	0.27	-0.10	0.01	0.06	-0.03	-0.10	0.03	0.13	0.19	0.23	1.25	1.75	1.75	2.08	0.97	0.75	1.72	1.56	2.21	3.59	1.90	1.74	1.45	3.59	-0.10	0.99
6	1.2	0.69	0.45	0.57	0.88	0.81	0.44	0.77	0.84	0.91	0.90	0.72	0.51	1.19	1.29	0.94	0.68	1.89	1.75	1.34	0.93	0.87	0.48	0.15	1.89	0.15	0.88
7	0.1	0.02	0.03	0.10	0.23	0.23	0.32	0.29	0.56	0.46	0.29	0.30	0.43	0.86	0.48	0.96	0.62	0.48	0.74	0.37	0.16	0.06	0.18	0.05	0.96	0.02	0.35
8	0.0	0.06	0.03	0.03	0.00	0.00	-0.01	0.03	0.05	0.01	0.00	0.06	0.03	-0.03	0.06	-0.03	0.00	0.06	0.26	0.52	0.12	0.17	0.13	0.11	0.52	-0.03	0.07
9	0.1	0.19	0.21	0.26	0.32	0.29	0.26	0.22	0.21	0.17	0.16	0.14	0.14	0.15	0.15	0.15	0.13	0.02	-0.02	0.08	0.26	0.28	0.23	0.20	0.32	-0.02	0.18
10	0.2	0.20	0.29	0.66	0.43	0.14	0.11	0.12	0.31	0.78	0.12	0.00	0.02	-0.01	-0.07	0.00	-0.04	-0.03	-0.03	-0.02	-0.01	-0.01	-0.02	-0.01	0.78	-0.07	0.13
11	0.0	0.03	0.11	0.10	0.13	0.09	0.04	0.00	-0.01	0.05	0.33	0.07	0.01	-0.01	0.00	0.02	0.13	1.21	1.72	0.98	0.51	0.18	0.03	0.04	1.72	-0.01	0.24
12	0.2	0.34	0.15	0.06	0.04	-0.01	0.11	0.07	0.02	0.05	0.30	0.77	0.44	0.34	0.34	0.42	1.16	0.34	0.36	0.14	0.23	0.17	0.22	0.11	1.16	-0.01	0.26
13	0.0	0.02	0.04	0.06	0.20	0.55	0.47	0.49	0.42	0.74	0.79	0.92	0.36	0.09	0.01	-0.03	-0.01	0.00	0.01	0.04	0.19	0.28	0.30	0.19	0.92	-0.03	0.26
14	0.0	-0.01	-0.01	0.05	0.04	0.12	0.16	0.09	0.00	-0.02	-0.03	-0.05	0.11	0.13	0.03	0.23	0.46	0.08	-0.04	-0.04	-0.02	0.00	0.07	-0.02	0.46	-0.05	0.06
15	0.0	0.00	0.04	0.12	0.09	0.05	0.11	0.16	0.35	0.16	-0.01	-0.01	-0.01	0.02	0.10	0.09	0.03	0.02	0.06	0.03	-0.02	-0.01	0.00	-0.02	0.35	-0.02	0.06
16	0.0	-0.02	-0.02	-0.01	-0.01	-0.03	-0.01	0.34	0.43	1.58	1.06	0.52	0.32	0.29	0.19	0.17	0.32	0.32	0.27	0.33	0.28	0.59	0.51	0.53	1.58	-0.03	0.33
17	0.5	0.49	0.55	0.39	0.87	0.66	0.70	0.71	1.26	1.11	0.89	0.57	1.45	1.31	0.86	1.29	1.39	1.89	2.43	1.46	1.39	1.38	1.34	1.90	2.43	0.39	1.12
18	1.2	0.93	0.97	0.76	0.90	1.74	1.20	1.04	1.20	1.04	1.22	0.81	0.75	0.67	0.80	0.79	0.90	1.07	1.02	0.63	0.63	0.66	0.91	0.93	1.74	0.63	0.95
19	0.8	0.66	0.61	0.64	0.67	0.88	0.85	0.91	0.66	0.99	1.27	1.39	0.66	0.62	0.57	0.57	0.53	0.63	0.54	0.56	0.46	0.61	0.39	0.39	1.39	0.39	0.70
20	0.4	0.31	0.31	0.33	0.31	0.29	0.16	0.11	0.17	0.11	0.02	-0.11	-0.23	-0.24	-0.20	-0.06	-0.02	0.05	0.14	0.20	0.20	0.17	0.19	0.17	0.40	-0.24	0.12
21	0.2	0.17	0.22	0.22	0.38	0.36	0.34	0.42	0.65	0.30	0.79	0.73	0.73	0.71	0.50	0.60	1.40	0.98	0.31	1.09	0.97	0.44	0.25	0.28	1.40	0.16	0.54
22	0.7	0.50	0.95	0.67	1.76	2.07	0.51	0.58	1.06	0.71	0.60	0.63	0.91	0.75	0.90	0.42	0.42	0.38	0.33	0.40	0.32	0.32	0.55	0.33	2.07	0.32	0.70
23	0.4	0.44	0.59	0.34	0.40	0.34	0.23	0.22	0.20	0.19	0.17	0.04	0.05	0.16	0.13	0.02	0.06	0.09	0.07	0.08	0.07	0.07	0.04	0.07	0.59	0.02	0.18
24	0.1	0.07	0.06	0.10	0.42	0.30	0.27	0.25	0.20	0.16	0.17	0.13	0.09	0.03	-0.01	-0.05	-0.03	-0.01	0.00	0.00	0.00	-0.07	-0.14	-0.18	0.42	-0.18	0.08
25	-0.2	-0.16	-0.09	-0.10	-0.09	-0.06	-0.05	-0.04	0.01	0.00	0.23	0.51	0.40	0.35	0.76	1.18	0.73	1.04	0.98	0.60	0.55	1.19	0.75	0.38	1.19	-0.25	0.37
26	0.6	0.52	0.53	0.37	0.20	0.17	0.07	0.10	0.21	0.48	0.53	0.64	0.69	0.65	0.72	0.59	0.58	0.65	0.92	1.33	0.74	1.13	1.06	0.94	1.33	0.07	0.60
27	1.0	0.82	1.07	1.31	0.85	1.12	0.47	1.49	1.26	1.29	0.90	1.91	1.80	0.47	0.15	0.15	-0.05	-0.06	-0.09	-0.23	-0.22	-0.07	-0.18	-0.22	1.91	-0.23	0.62
28	0.0	0.12	0.13	-0.07	-0.14	-0.04	-0.04	-0.02	0.04	-0.09	-0.16	-0.16	-0.17	-0.14	-0.08	0.05	0.09	0.05	0.02	-0.11	-0.15	-0.09	-0.15	-0.17	0.13	-0.17	-0.05
29	-0.2	-0.14	-0.15	-0.14	-0.13	-0.19	-0.18	-0.15	-0.06	-0.15	-0.11	-0.11	-0.09	-0.09	-0.11	-0.11	-0.08	0.06	0.05	0.10	0.07	-0.03	-0.04	-0.06	0.10	-0.19	-0.08
30	0.0	0.10	0.35	0.50	0.51	0.47	0.55	0.49	0.39	0.44	0.44	0.66	0.43	0.49	0.55	0.54	0.46	0.51	0.76	0.78	0.57	0.56	0.81	0.94	0.94	-0.04	0.51
Max.	**1.2**	**0.93**	**1.07**	**1.31**	**1.76**	**2.07**	**1.20**	**1.49**	**1.26**	**1.58**	**1.27**	**1.91**	**1.80**	**1.75**	**2.08**	**1.29**	**1.40**	**1.89**	**2.43**	**2.21**	**3.59**	**1.90**	**1.74**	**1.90**	**3.59**		
Min.	**-0.2**	**-0.16**	**-0.15**	**-0.14**	**-0.14**	**-0.19**	**-0.18**	**-0.15**	**-0.17**	**-0.21**	**-0.16**	**-0.16**	**-0.23**	**-0.24**	**-0.20**	**-0.12**	**-0.21**	**-0.07**	**-0.15**	**-0.23**	**-0.22**	**-0.16**	**-0.18**	**-0.22**		**-0.25**	
Avg.	**0.3**	**0.24**	**0.27**	**0.27**	**0.33**	**0.39**	**0.26**	**0.32**	**0.38**	**0.42**	**0.40**	**0.44**	**0.40**	**0.37**	**0.35**	**0.33**	**0.38**	**0.49**	**0.52**	**0.46**	**0.42**	**0.38**	**0.34**	**0.30**			**0.36**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	0.88	1.23	1.51	1.36	2.18	2.15	0.98	0.86	0.72	0.65	0.80	0.73	0.45	1.18	1.16	0.41	0.56	0.36	0.49	0.49	0.59	0.67	0.62	2.18	0.36	0.92
2	0.5	0.68	0.66	0.37	0.42	0.56	0.46	0.22	0.22	0.26	0.33	0.35	0.33	0.44	0.53	0.41	0.21	0.24	0.20	0.21	0.17	0.26	0.30	0.24	0.68	0.17	0.36
3	0.3	0.42	0.41	0.39	0.38	0.33	0.30	0.30	0.51	0.64	0.71	0.71	0.55	0.37	0.74	0.73	0.42	0.53	0.54	0.48	0.34	0.29	0.17	0.15	0.74	0.15	0.45
4	0.2	0.17	0.12	0.13	0.13	0.13	0.14	0.13	0.06	0.10	0.10	0.03	0.07	0.10	0.07	0.03	0.11	0.19	0.21	0.21	0.20	0.17	0.17	0.19	0.21	0.03	0.13
5	0.2	0.19	0.17	0.17	0.18	0.19	0.20	0.18	0.17	0.20	0.19	0.18	0.18	0.16	0.16	0.20	0.22	0.19	0.28	0.28	0.26	0.18	0.17	0.25	0.28	0.16	0.20
6	0.3	0.28	0.20	0.22	0.26	0.25	0.28	0.19	0.22	0.28	0.37	0.44	0.33	0.39	0.69	0.15	0.24	0.27	0.22	0.17	0.11	0.04	0.04	-0.05	0.69	-0.05	0.24
7	0.0	-0.07	-0.14	-0.20	-0.23	-0.24	-0.20	-0.15	-0.27	-0.24	-0.31	-0.23	-0.27	-0.26	-0.29	-0.06	0.18	0.86	0.16	0.70	0.95	2.27	2.19	1.12	2.27	-0.31	0.22
8	1.7	0.81	0.33	0.50	0.91	0.39	0.49	0.64	0.32	0.23	0.25	0.20	0.22	0.16	0.06	0.10	0.19	0.29	0.20	0.31	0.59	0.74	0.52	0.48	1.74	0.06	0.44
9	0.5	0.56	0.58	0.50	-0.01	-0.10	-0.19	-0.12	0.03	-0.14	0.93	0.50	0.43	0.62	0.16	0.25	0.08	0.02	-0.03	-0.05	0.00	0.00	0.05	0.11	0.93	-0.19	0.19
10	0.0	-0.04	-0.05	-0.04	-0.04	-0.06	0.02	0.03	0.02	0.05	0.16	0.20	0.35	0.63	0.42	0.62	0.25	0.21	0.28	1.11	0.91	0.84	0.91	0.79	1.11	-0.06	0.32
11	1.1	1.31	0.79	0.58	0.53	0.39	0.42	0.56	0.63	0.59	0.49	0.36	0.14	-0.02	-0.10	-0.12	-0.04	0.37	0.87	0.75	0.78	0.85	0.91	1.24	1.31	-0.12	0.55
12	1.1	1.50	1.28	1.02	1.43	0.93	0.81	0.63	0.69	0.48	0.20	0.32	0.53	0.45	0.45	0.48	0.42	1.00	0.40	0.29	0.04	-0.05	-0.04	0.25	1.50	-0.05	0.61
13	0.2	0.00	0.16	-0.01	0.05	0.34	0.53	0.64	0.86	1.12	0.73	0.82	0.65	0.92	1.10	1.15	0.87	0.85	0.87	0.32	0.56	0.67	0.48	1.20	1.20	-0.01	0.63
14	1.2	0.71	0.75	0.86	0.92	0.55	0.79	0.84	0.65	0.75	0.89	0.59	0.49	0.59	0.61	0.57	0.62	0.82	0.85	0.72	0.41	0.38	0.35	0.24	1.16	0.24	0.67
15	0.2	0.13	0.09	0.10	0.13	0.10	0.10	0.11	0.10	0.05	0.00	0.01	0.02	0.04	0.05	0.02	0.05	0.12	0.11	0.35	0.89	0.60	0.54	0.77	0.89	0.00	0.20
16	0.7	0.73	0.73	0.65	0.93	0.96	0.72	0.87	0.81	0.90	1.06	0.79	0.52	0.20	0.12	0.10	0.11	0.21	0.22	0.26	0.46	0.55	0.29	0.43	1.06	0.10	0.55
17	0.5	0.36	0.27	0.10	0.05	0.01	-0.01	0.02	0.04	0.06	0.10	0.14	0.13	0.11	0.10	0.11	0.11	0.12	0.13	0.12	0.16	0.14	0.13	0.12	0.47	-0.01	0.13
18	0.1	0.13	0.12	0.12	0.13	0.14	0.18	0.15	0.12	0.15	0.18	0.13	0.12	0.11	0.11	0.09	0.09	0.09	0.08	0.11	0.11	0.14	0.14	0.14	0.18	0.08	0.13
19	0.2	0.20	0.12	0.10	0.10	0.11	0.14	0.19	0.21	0.20	0.17	0.18	0.17	0.28	0.26	0.37	0.28	0.23	0.24	0.24	0.26	0.27	0.35	0.39	0.39	0.10	0.22
20	0.4	0.46	0.46	0.40	0.47	0.38	0.23	0.27	0.26	0.23	0.33	0.55	0.68	0.33	0.63	0.74	0.61	0.60	0.51	0.53	0.36	0.80	0.87	0.87	0.87	0.23	0.50
21	0.7	0.93	0.60	0.56	0.54	0.96	0.83	0.96	0.61	0.51	0.73	0.59	0.48	0.55	0.30	0.19	0.29	0.34	0.41	0.37	0.58	0.64	0.49	0.37	0.96	0.19	0.57
22	0.5	0.44	0.37	0.71	0.31	0.08	0.07	0.06	0.05	0.01	0.00	0.00	0.05	0.02	0.02	0.00	0.04	0.02	0.01	-0.01	-0.02	-0.01	-0.02	-0.02	0.71	-0.02	0.11
23	0.0	0.00	-0.01	-0.01	0.00	0.00	0.00	0.00	0.01	-0.01	0.08	0.30	0.69	0.67	0.51	0.51	0.70	1.01	0.63	0.94	0.38	0.24	0.28	0.28	1.01	-0.01	0.30
24	0.3	0.39	0.41	0.61	1.06	0.84	0.80	0.77	0.67	0.43	0.22	0.53	1.36	1.59	0.94	0.96	0.68	0.51	0.26	0.37	0.35	0.21	0.17	0.09	1.59	0.09	0.60
25	0.2	0.10	0.00	-0.01	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01	0.00	0.00	-0.02	-0.01	-0.02	0.01	-0.04	-0.09	-0.10	-0.07	-0.02	0.06	0.08	0.16	-0.10	0.00
26	0.1	0.07	0.06	-0.09	-0.15	-0.15	-0.09	-0.12	-0.05	-0.02	-0.01	0.11	0.31	0.34	0.21	0.16	0.23	0.26	0.21	0.05	0.11	0.06	0.00	0.02	0.34	-0.15	0.07
27	0.0	0.02	0.05	0.07	0.11	0.14	0.19	0.13	0.13	0.04	0.09	0.19	0.26	0.18	0.13	0.09	0.06	0.04	0.09	0.08	0.08	0.14	0.16	0.11	0.26	0.02	0.11
28	0.1	0.00	0.10	0.10	0.16	0.15	0.06	0.13	0.12	0.07	0.10	-0.01	0.15	0.18	0.22	0.24	0.24	0.22	0.21	0.23	0.26	0.35	0.31	0.42	0.42	-0.01	0.17
29	0.5	0.42	0.42	0.36	0.48	0.36	0.36	0.28	0.28	0.28	0.23	0.31	0.22	0.15	0.13	0.13	0.38	0.33	0.32	0.40	0.28	0.32	0.40	0.49	0.49	0.13	0.32
30	0.4	0.51	0.53	0.49	0.81	0.65	0.34	0.37	0.40	0.63	0.35	0.56	0.36	0.22	0.22	0.31	0.35	0.30	0.33	0.31	0.36	0.48	0.57	0.40	0.81	0.22	0.43
31	0.5	0.43	0.19	0.24	0.35	0.59	0.42	0.43	0.36	0.35	0.38	0.34	0.33	0.26	0.29	0.32	0.38	0.62	0.89	0.59	0.51	0.41	0.58	0.86	0.89	0.19	0.44
Max.	**1.7**	**1.50**	**1.28**	**1.51**	**1.43**	**2.18**	**2.15**	**0.98**	**0.86**	**1.12**	**1.06**	**0.82**	**1.36**	**1.59**	**1.18**	**1.16**	**0.87**	**1.01**	**0.89**	**1.11**	**0.95**	**2.27**	**2.19**	**1.24**	**2.27**		
Min.	**0.0**	**-0.07**	**-0.14**	**-0.20**	**-0.23**	**-0.24**	**-0.20**	**-0.15**	**-0.27**	**-0.24**	**-0.31**	**-0.23**	**-0.27**	**-0.26**	**-0.29**	**-0.12**	**-0.04**	**-0.04**	**-0.09**	**-0.10**	**-0.07**	**-0.05**	**-0.04**	**-0.05**		**-0.31**	
Avg.	**0.4**	**0.41**	**0.35**	**0.34**	**0.38**	**0.36**	**0.34**	**0.31**	**0.29**	**0.29**	**0.31**	**0.32**	**0.34**	**0.33**	**0.32**	**0.32**	**0.28**	**0.37**	**0.32**	**0.35**	**0.35**	**0.40**	**0.39**	**0.41**			**0.35**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	90.2	90.5	90.5	90.2	90.2	90.3	90.3	90.2	90.1	89.9	90.3	88.4	87.6	87.5	86.9	86.8	86.7	86.8	86.0	85.7	85.1	85.0	84.9	84.7	90.5	84.7	88.1
2	84.0	84.0	83.3	83.7	83.8	83.6	83.6	83.3	83.1	83.9	83.0	83.7	83.3	83.2	83.3	82.8	83.0	83.1	83.9	83.5	83.7	83.5	84.6	83.5	84.6	82.8	83.5
3	84.0	83.9	84.4	84.4	84.8	84.0	83.1	83.5	83.5	84.3	83.8	83.3	84.3	85.1	83.5	83.6	83.8	83.6	83.6	83.2	83.2	83.1	83.0	83.0	85.1	83.0	83.8
4	82.7	82.8	82.8	82.6	82.6	82.5	82.4	82.6	82.2	82.2	82.2	82.1	82.0	82.0	81.9	81.8	81.7	81.6	80.8	79.9	79.3	80.1	79.9	79.8	82.8	79.3	81.7
5	79.3	79.3	79.0	77.9	78.0	79.0	78.4	78.2	78.0	78.1	78.7	79.3	79.5	79.7	80.1	80.0	79.8	79.6	79.7	79.8	79.2	78.3	78.0	77.8	80.1	77.8	78.9
6	77.3	77.0	76.5	76.7	76.7	76.4	75.7	75.0	75.3	74.6	74.8	75.1	75.5	75.6	75.8	76.1	75.6	74.9	74.5	74.0	73.8	73.9	74.3	73.8	77.3	73.8	75.4
7	73.5	73.8	74.3	75.0	75.2	74.9	75.0	75.1	74.9	75.7	75.4	75.2	76.0	76.7	77.1	77.3	77.7	78.1	78.1	78.0	77.8	78.0	77.0	76.6	78.1	73.5	76.1
8	76.2	76.5	76.4	76.9	76.8	76.6	77.6	77.8	78.2	78.4	77.8	77.6	77.2	77.6	77.8	77.9	77.9	77.5	77.1	77.1	76.6	76.0	76.1	76.0	78.4	76.0	77.1
9	75.3	75.7	76.4	76.4	75.9	75.7	76.1	75.8	76.1	76.6	76.8	77.1	77.4	78.1	78.4	78.5	78.2	78.3	78.1	78.2	78.2	78.2	78.6	78.4	78.6	75.3	77.2
10	78.7	78.2	77.7	77.6	77.9	77.5	77.6	77.7	77.3	77.0	76.9	77.0	76.8	76.8	77.0	76.9	76.5	75.9	75.3	75.4	75.4	75.0	74.8	75.6	78.7	74.8	76.8
11	76.4	76.8	76.9	76.9	76.3	75.8	75.3	75.3	74.9	74.5	74.6	74.9	74.7	74.9	74.9	74.7	74.6	74.1	73.6	73.6	73.2	73.2	73.1	72.9	76.9	72.9	74.8
12	73.0	73.1	72.6	72.6	72.3	72.4	72.5	72.1	72.9	73.0	73.1	72.8	72.6	73.4	73.5	73.3	72.6	72.2	72.4	72.3	72.4	72.4	72.0	72.0	73.5	72.0	72.6
13	72.3	73.0	72.6	72.7	72.9	73.1	73.3	73.0	72.6	72.3	72.7	72.3	72.6	73.1	73.5	73.9	73.7	73.7	73.4	73.7	73.9	73.8	75.0	75.0	75.0	72.3	73.2
14	74.5	75.7	76.8	78.6	79.5	80.9	80.7	81.0	81.8	84.1	85.6	81.7	80.2	83.8	90.2	90.1	88.7	88.3	88.2	87.6	91.0	93.0	93.6	95.4	95.4	74.5	84.6
15	96.3	96.5	96.7	96.8	97.0	96.5	96.6	96.5	96.3	96.5	96.4	96.6	96.3	96.7	96.6	95.9	96.1	95.9	96.4	96.9	97.1	97.1	96.0	95.2	97.1	95.2	96.5
16	95.1	95.5	94.9	95.4	95.0	92.5	90.6	88.4	91.8	84.7	86.9	96.5	96.0	95.4	98.2	97.7	97.5	97.2	97.4	97.4	97.0	96.2	96.4	95.8	98.2	84.7	94.6
17	95.2	78.5	63.9	47.8	46.4	51.6	62.0	68.7	66.1	55.9	51.5	60.2	79.8	82.3	85.2	81.1	88.8	97.2	98.7	98.8	98.6	98.5	98.5	98.5	98.8	46.4	77.2
18	98.4	98.3	98.2	98.2	98.2	98.2	98.1	98.2	98.1	98.1	98.1	98.0	97.8	98.1	97.9	98.0	97.8	97.8	97.7	97.7	97.8	98.0	98.2	97.9	98.4	97.7	98.0
19	97.7	98.0	97.8	96.2	90.8	85.0	82.1	80.0	78.1	78.6	80.3	82.3	84.9	86.8	89.0	92.5	92.0	91.6	93.4	94.6	96.0	96.7	97.3	97.9	98.0	78.1	90.0
20	98.8	99.0	99.2	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.7	99.7	99.6	99.7	99.5	99.3	99.8	98.8	99.6
21	99.3	99.5	99.5	99.1	99.3	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.3	98.5	97.1	97.1	96.1	93.1	90.7	92.1	94.3	95.5	96.2	95.5	99.6	90.7	97.5
22	90.5	90.3	73.2	75.2	74.8	75.0	83.2	92.3	96.9	98.9	97.6	96.3	95.2	95.1	93.8	91.6	87.7	84.9	83.6	85.2	83.2	81.2	87.9	89.4	98.9	73.2	87.6
23	89.4	91.7	84.2	77.0	66.7	69.0	72.6	75.5	77.5	77.0	78.9	80.1	78.1	79.7	77.8	76.5	76.0	76.5	76.9	77.2	75.5	73.9	73.3	72.2	91.7	66.7	77.2
24	72.7	64.3	74.4	65.2	51.2	61.2	61.2	49.6	53.6	59.8	61.1	60.5	79.3	90.4	91.1	91.4	91.6	92.0	92.3	92.5	92.9	93.6	93.9	94.1	94.1	49.6	76.2
25	94.0	93.5	94.4	94.9	95.9	96.1	95.5	94.9	93.9	91.7	91.0	91.4	90.8	91.1	90.3	91.4	92.8	93.1	94.5	93.9	90.0	87.4	85.0	82.4	96.1	82.4	92.1
26	82.2	82.0	82.1	81.5	81.2	81.0	80.7	80.4	79.8	78.7	78.2	79.7	79.2	75.9	68.1	65.0	57.0	53.9	55.2	52.0	53.9	55.8	57.8	54.4	82.2	52.0	70.6
27	63.4	70.7	63.8	70.0	82.0	81.4	69.6	59.1	62.0	74.7	80.5	83.1	85.8	91.6	94.8	94.9	95.2	95.4	95.7	96.0	95.8	95.5	95.4	95.7	96.0	59.1	83.0
28	96.2	96.2	96.3	96.6	96.6	96.5	96.3	96.1	96.0	96.0	96.0	96.2	96.2	96.3	96.3	96.5	96.4	96.5	96.6	96.4	97.0	96.3	96.7	96.6	97.0	96.0	96.4
29	96.9	96.8	97.0	96.8	96.7	96.4	96.2	95.9	96.2	96.1	95.9	96.3	96.3	95.8	95.7	95.6	95.4	95.0	94.2	94.5	93.6	93.5	93.4	93.4	97.0	93.4	95.6
30	93.3	93.1	93.0	92.2	91.6	91.9	91.2	89.8	89.2	87.8	87.0	87.0	86.6	86.6	86.9	86.9	86.2	86.7	86.7	86.9	86.7	86.4	86.6	85.7	93.3	85.7	88.6
31	86.4	85.9	85.7	85.6	86.4	86.5	86.8	87.4	86.0	87.7	89.2	90.3	90.1	90.1	89.4	89.6	90.3	90.6	90.6	90.7	90.4	90.4	90.1	89.6	90.7	85.6	88.6
Max.	**99.3**	**99.5**	**99.5**	**99.4**	**99.5**	**99.6**	**99.7**	**99.7**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.7**	**99.7**	**99.7**	**99.7**	**99.6**	**99.7**	**99.5**	**99.3**	**99.8**		
Min.	**63.4**	**64.3**	**63.8**	**47.8**	**46.4**	**51.6**	**61.2**	**49.6**	**53.6**	**55.9**	**51.5**	**60.2**	**72.6**	**73.1**	**68.1**	**65.0**	**57.0**	53.9	55.2	**52.0**	**53.9**	**55.8**	**57.8**	**54.4**		**46.4**	
Avg.	**85.3**	**84.8**	**83.7**	**82.9**	**82.3**	**82.6**	**82.7**	**82.3**	**82.6**	**82.8**	**83.0**	**83.7**	**84.9**	**85.7**	**85.9**	**85.7**	**85.4**	**85.3**	**85.3**	**85.3**	**85.2**	**85.1**	**85.4**	**85.1**			**84.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	89.1	89.3	89.3	89.0	88.8	88.8	88.5	88.5	88.8	88.8	88.7	88.4	89.0	89.2	89.5	89.6	89.6	89.7	89.2	88.5	88.1	87.4	87.7	87.3	89.7	87.3	88.8
2	87.3	86.3	85.9	85.1	85.0	83.8	83.4	83.3	83.1	83.3	83.0	82.5	82.8	82.5	83.2	83.4	83.3	82.8	82.6	82.1	81.6	81.4	80.9	80.0	87.3	80.0	83.3
3	79.2	79.7	79.1	79.0	78.0	77.3	76.8	76.0	76.3	76.3	76.6	76.0	76.6	76.2	77.1	77.0	77.3	77.0	76.3	75.9	75.6	75.5	75.5	75.5	79.7	75.5	76.9
4	75.5	75.7	75.9	76.0	76.0	77.6	78.1	76.8	78.0	79.8	79.3	80.0	80.1	79.9	80.0	79.9	77.6	77.5	76.7	75.9	75.4	75.1	75.1	74.9	80.1	74.9	77.4
5	73.7	73.7	74.4	73.8	73.4	72.9	72.7	72.6	72.6	73.2	73.7	73.9	74.5	74.6	75.5	74.5	81.9	81.6	74.4	74.3	73.0	71.9	69.4	65.5	81.9	65.5	73.8
6	66.1	61.7	59.7	60.1	51.8	53.2	54.6	53.0	56.2	55.6	53.6	56.0	56.0	54.7	56.0	59.0	56.6	60.1	60.0	59.1	57.0	59.2	58.8	58.2	66.1	51.8	57.3
7	59.0	58.7	57.9	60.7	58.0	57.8	57.7	57.0	58.0	57.0	55.5	46.0	44.7	33.5	38.3	38.6	42.8	44.1	43.9	45.2	43.2	44.7	44.3	42.3	60.7	33.5	49.5
8	46.1	38.5	29.1	32.2	36.6	26.2	25.7	27.4	25.6	27.2	30.2	33.0	37.8	40.9	42.0	40.1	42.6	50.6	48.5	48.9	46.5	45.4	43.5	45.6	50.6	25.6	37.9
9	51.3	55.6	56.3	55.8	57.4	58.1	60.4	58.4	55.0	52.2	51.3	50.4	53.4	52.3	58.1	60.6	62.8	61.9	64.8	66.0	62.5	60.0	57.5	56.7	66.0	50.4	57.4
10	57.4	59.4	60.7	59.3	57.9	57.6	53.5	50.8	57.5	60.1	58.5	56.1	59.2	61.4	55.6	54.5	64.3	69.0	74.9	79.8	75.0	72.2	71.7	75.1	79.8	50.8	62.6
11	84.1	84.7	84.5	85.4	84.8	85.0	85.6	86.0	86.7	86.7	86.4	86.4	86.6	87.7	87.5	87.3	87.6	87.3	86.5	84.5	83.8	84.5	83.5	81.9	87.7	81.9	85.6
12	80.9	80.2	78.3	78.7	76.9	76.5	76.5	75.4	75.5	75.0	75.6	76.0	76.0	77.5	77.5	77.3	78.3	79.1	79.2	79.2	80.6	80.6	83.6	84.2	84.2	75.0	78.3
13	46.2	35.6	50.6	61.7	70.8	80.2	87.0	82.7	86.5	88.1	89.6	87.0	86.6	83.9	87.9	92.7	92.9	92.3	90.8	88.9	88.5	88.0	89.5	90.3	92.9	35.6	80.8
14	91.4	91.2	91.0	95.2	98.1	98.8	99.0	95.9	92.2	87.2	86.2	85.5	83.9	82.0	81.6	80.7	80.4	79.9	80.2	80.4	80.5	79.9	80.9	81.9	99.0	79.9	86.8
15	81.4	80.0	79.0	78.4	78.3	76.6	78.6	75.4	73.8	75.4	72.7	72.0	68.3	63.4	63.3	64.6	64.4	62.4	65.0	68.6	70.9	72.5	64.8	70.6	81.4	62.4	71.7
16	76.3	78.1	85.1	85.6	83.2	88.7	91.4	91.8	92.2	92.2	92.2	92.6	93.4	93.9	94.5	95.2	95.6	95.7	95.8	95.6	95.5	95.4	95.5	95.3	95.8	76.3	91.3
17	94.9	94.8	94.9	95.3	96.2	96.5	94.7	85.6	77.9	77.0	74.4	71.5	76.4	93.7	95.0	96.7	98.6	99.3	99.1	98.9	98.9	97.9	95.7	91.1	99.3	71.5	91.5
18	90.5	95.2	96.4	97.9	98.4	98.2	98.4	98.6	98.7	98.9	98.9	97.6	95.9	94.9	93.8	91.2	89.3	91.5	92.8	96.9	99.0	99.2	94.8	88.4	99.2	88.4	95.6
19	84.2	81.6	79.0	72.4	75.0	74.5	70.0	71.3	82.9	88.4	96.6	93.9	98.6	98.5	94.3	86.2	83.7	83.9	83.2	88.5	94.4	99.0	99.4	99.6	99.6	70.0	86.6
20	99.6	99.6	99.6	99.5	99.4	99.3	99.3	99.3	99.1	98.9	98.8	98.1	91.3	81.1	77.0	76.5	77.8	73.8	73.8	73.0	73.0	73.3	72.2	76.2	99.6	72.2	87.9
21	80.8	79.7	78.1	78.0	78.1	79.6	74.6	69.5	71.0	70.4	73.4	75.8	76.1	77.2	78.2	80.4	77.5	76.3	88.4	89.5	85.6	96.3	97.3	97.2	97.3	69.5	80.4
22	99.0	99.3	99.5	99.6	99.6	99.0	95.9	96.9	99.3	99.4	95.6	97.1	99.3	99.5	99.0	98.5	98.5	98.3	98.2	96.4	96.7	96.4	95.6	95.7	99.6	95.6	98.0
23	95.7	95.3	98.9	98.8	97.7	97.9	97.9	97.5	96.7	95.5	96.7	96.8	92.8	83.5	78.4	78.6	78.5	82.2	84.4	85.0	85.3	84.5	87.3	92.4	98.9	78.4	90.8
24	91.6	90.8	90.7	90.8	90.8	90.6	90.2	89.0	88.6	88.2	87.9	87.1	86.6	86.6	86.8	87.0	86.8	86.6	86.3	85.8	85.4	85.5	84.8	84.7	91.6	84.7	87.9
25	84.7	83.9	84.4	83.8	83.6	83.3	82.3	82.1	82.1	82.3	82.5	82.7	83.1	83.3	83.5	85.1	86.0	83.5	78.0	73.1	70.8	65.5	62.1	62.1	86.0	62.1	79.7
26	61.9	63.9	64.7	66.2	68.9	69.7	71.7	71.3	73.6	76.7	76.5	75.6	71.9	72.4	71.3	66.3	67.6	70.2	69.5	69.0	71.7	71.8	68.8	69.8	76.7	61.9	70.0
27	70.0	71.9	70.1	69.5	70.5	69.7	69.7	66.8	60.6	58.6	63.2	61.6	52.3	47.6	48.2	51.0	53.4	51.7	60.1	69.9	81.0	79.4	75.0	75.0	81.0	47.6	64.4
28	75.0	73.8	71.5	69.3	70.6	68.5	74.8	67.1	69.4	70.9	71.5	75.5	74.4	76.6	75.8	74.2	72.4	72.7	72.8	71.9	70.6	69.0	67.2	65.7	76.6	65.7	71.7
29	65.9	64.9	64.7	63.9	64.4	63.3	66.1	68.1	67.5	69.3	71.5	70.1	70.9	71.5	72.9	72.1	70.8	67.8	68.2	67.9	68.4	70.5	75.6	81.3	81.3	63.3	69.1
Max.	**99.6**	**99.6**	**99.6**	**99.6**	**99.6**	**99.3**	**99.3**	**99.3**	**99.3**	**99.4**	**98.9**	**98.1**	**99.3**	**99.5**	**99.0**	**98.5**	**98.6**	**99.3**	**99.1**	**98.9**	**99.0**	**99.2**	**99.4**	**99.6**	**99.6**		
Min.	**46.1**	**35.6**	**29.1**	**32.2**	**36.6**	**26.2**	**25.7**	**27.4**	**25.6**	**27.2**	**30.2**	**33.0**	**37.8**	**33.5**	**38.3**	**38.6**	**42.6**	44.1	43.9	**45.2**	**43.2**	**44.7**	**43.5**	**42.3**		**25.6**	
Avg.	**77.2**	**76.7**	**76.9**	**77.3**	**77.5**	**77.5**	**77.8**	**76.3**	**76.7**	**77.0**	**77.3**	**76.7**	**76.5**	**75.9**	**75.9**	**75.8**	**76.5**	**76.9**	**77.4**	**77.9**	**77.9**	**78.0**	**77.2**	**77.4**			**77.0**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	83.9	85.5	85.7	85.5	84.7	84.6	84.4	84.6	85.5	85.5	85.1	85.2	87.0	88.2	82.4	72.5	70.3	72.9	90.7	95.2	94.8	92.6	84.6	82.0	95.2	70.3	84.7
2	81.0	82.3	83.0	83.7	89.1	88.8	94.6	97.7	98.1	98.1	97.8	96.3	93.1	91.4	89.1	87.7	89.6	95.8	92.8	98.1	99.1	98.9	98.8	98.8	99.1	81.0	92.7
3	98.5	98.2	98.3	98.4	98.0	97.9	97.4	97.1	97.0	97.9	98.4	98.5	98.4	98.5	98.3	97.7	96.9	96.5	96.5	96.6	96.5	96.8	97.1	96.3	98.5	96.3	97.6
4	94.3	94.6	95.3	91.8	96.3	98.5	98.7	98.7	97.9	96.8	94.0	95.9	90.1	87.4	87.1	85.7	86.0	84.2	85.1	87.5	90.7	94.9	93.5	92.3	98.7	84.2	92.4
5	86.3	85.3	84.0	81.9	86.1	88.2	87.2	84.9	84.5	78.1	83.3	88.9	87.4	88.6	89.8	85.6	82.4	83.4	87.9	92.1	94.9	95.0	94.7	92.6	95.0	78.1	87.2
6	90.5	89.6	89.8	87.6	87.2	92.0	93.7	89.7	89.4	89.0	88.5	88.9	87.5	88.8	89.4	87.2	83.4	81.7	79.3	79.7	73.0	74.0	71.7	68.9	93.7	68.9	85.0
7	71.4	77.2	82.5	81.7	84.8	80.1	76.1	79.1	79.1	78.9	78.8	81.0	81.4	81.6	83.1	83.6	89.4	87.3	88.2	86.6	91.7	98.5	97.8	96.8	98.5	71.4	84.0
8	96.1	95.8	93.1	93.5	97.4	98.0	96.9	96.9	96.9	97.0	97.0	97.2	95.8	84.9	76.1	75.1	72.6	73.7	76.9	77.5	79.6	82.5	77.8	76.3	98.0	72.6	87.7
9	86.2	88.7	88.6	85.2	78.7	77.1	74.7	75.9	78.8	77.9	78.1	76.2	77.1	87.0	95.5	93.7	96.9	98.3	97.5	97.1	96.0	93.5	92.4	87.6	98.3	74.7	86.6
10	89.1	86.5	92.3	97.0	98.1	95.6	93.4	95.2	93.2	92.3	92.4	95.6	94.2	94.4	92.2	93.6	93.1	93.4	93.2	94.6	95.2	94.2	95.6	90.2	98.1	86.5	93.5
11	91.9	93.0	92.4	91.5	92.1	93.8	94.9	95.6	94.8	92.9	91.3	94.8	94.1	90.3	91.5	89.2	87.1	88.0	88.6	85.5	85.3	82.5	82.9	84.3	95.6	82.5	90.3
12	89.6	90.4	89.1	89.4	90.1	89.9	89.3	89.1	89.5	89.9	90.3	90.4	90.5	90.8	91.0	91.4	91.6	91.7	91.8	91.9	91.9	92.0	92.0	92.0	92.0	89.1	90.7
13	91.9	91.9	91.6	91.4	91.2	91.1	90.9	90.7	90.3	90.0	89.7	89.5	89.6	89.8	89.8	89.6	89.6	89.6	89.3	88.7	87.0	86.9	87.1	86.9	91.9	86.9	89.8
14	87.2	86.2	85.9	85.2	85.3	85.8	86.0	85.6	86.1	87.1	87.4	89.6	90.2	90.2	90.5	90.5	86.7	64.6	61.6	63.3	65.8	74.1	79.9	74.8	90.5	61.6	82.1
15	74.9	89.9	96.0	96.3	96.2	93.9	91.8	95.8	96.7	96.1	97.2	96.8	95.4	93.6	92.4	93.1	95.2	96.8	97.6	97.3	97.3	98.0	97.9	97.8	98.0	74.9	94.8
16	98.2	98.4	98.2	98.0	97.7	96.5	94.0	83.0	77.0	77.5	76.0	75.0	76.9	74.6	71.1	74.3	77.9	71.0	71.7	74.2	77.2	89.6	95.6	95.7	98.4	71.0	84.1
17	95.1	93.0	92.4	93.0	91.3	91.1	91.5	93.0	95.9	95.3	96.1	95.8	94.6	94.9	93.5	95.4	96.8	96.2	92.8	92.7	92.8	92.4	92.0	91.7	96.8	91.1	93.7
18	94.2	93.2	91.1	90.1	89.2	88.3	87.8	87.2	86.0	85.7	86.2	86.3	86.3	86.6	86.9	86.7	86.5	86.6	86.1	86.2	85.4	84.7	84.3	84.3	94.2	84.3	87.3
19	84.0	83.3	82.8	82.5	82.1	82.0	81.5	81.2	80.8	80.9	80.9	81.6	82.0	82.1	82.0	82.1	82.1	82.2	82.0	82.6	82.5	82.7	82.6	81.9	84.0	80.8	82.1
20	81.8	82.1	82.0	81.5	81.7	81.8	81.9	81.9	81.8	81.9	82.1	82.2	82.3	82.3	82.6	83.1	83.4	83.7	83.7	84.0	83.8	83.1	83.3	83.8	84.0	81.5	82.6
21	84.1	84.4	84.7	85.4	85.5	86.0	86.6	86.5	86.9	86.2	86.7	87.3	88.8	89.0	89.6	84.4	80.6	77.3	75.3	77.1	77.4	75.9	73.1	68.3	89.6	68.3	82.8
22	67.1	66.4	66.8	69.1	65.9	65.9	69.0	69.2	71.6	72.2	71.8	70.3	71.6	71.4	70.0	68.5	69.2	66.2	66.1	65.3	63.6	62.1	60.5	62.7	72.2	60.5	67.6
23	65.4	63.9	64.1	63.4	64.3	65.1	66.0	66.2	67.8	69.2	70.4	71.4	73.2	73.4	73.7	73.2	75.4	75.4	76.4	76.8	77.4	79.3	80.3	81.0	81.0	63.4	71.4
24	81.3	81.0	81.0	80.3	81.0	82.9	84.5	85.2	82.7	80.3	77.4	76.5	73.9	72.2	72.8	72.4	74.3	73.3	73.1	72.8	70.9	68.1	67.6	70.1	85.2	67.6	76.5
25	70.0	70.7	77.0	88.7	92.0	90.4	91.1	91.1	92.4	91.6	91.7	92.0	91.7	91.6	91.7	92.2	90.3	81.8	78.9	79.1	82.4	83.9	82.9	82.8	92.4	70.0	86.2
26	81.9	81.7	80.3	82.9	83.8	82.0	80.9	80.8	84.2	80.7	79.2	79.5	79.8	78.0	76.7	76.5	75.5	75.2	74.8	74.9	74.7	73.5	75.8	76.7	84.2	73.5	78.7
27	77.8	78.9	81.5	79.1	78.0	84.2	79.9	82.7	81.5	83.9	86.1	87.8	87.9	83.3	84.5	84.0	83.1	82.9	81.6	80.7	82.4	82.9	84.0	84.2	87.9	77.8	82.6
28	85.2	84.5	84.5	84.0	83.5	84.2	83.1	84.0	82.9	81.8	79.6	78.3	77.9	78.7	78.0	77.1	77.7	74.9	69.8	67.3	66.7	66.7	68.2	73.2	85.2	66.7	78.0
29	73.6	72.3	71.0	74.3	79.9	84.9	86.8	88.5	89.5	87.6	87.0	87.7	88.1	88.9	88.3	88.6	87.9	88.2	89.9	92.1	94.4	95.1	96.0	96.5	96.5	71.0	86.5
30	96.0	96.8	97.2	97.2	97.2	97.2	97.1	97.0	95.5	94.8	94.5	93.4	93.3	93.0	93.7	95.8	96.2	96.5	97.2	97.7	98.2	97.9	96.2	97.4	98.2	93.0	96.1
31	97.7	93.7	92.3	91.8	92.1	92.7	92.2	93.0	93.6	93.9	93.0	90.1	88.4	88.4	89.6	88.8	89.0	89.7	89.5	89.0	92.5	94.3	97.8	98.3	98.3	88.4	92.1
Max.	**98.5**	**98.4**	**98.3**	**98.4**	**98.1**	**98.5**	**98.7**	**98.7**	**98.1**	**98.1**	**98.4**	**98.5**	**98.4**	**98.5**	**98.3**	**97.7**	**96.9**	**98.3**	**97.6**	**98.1**	**99.1**	**98.9**	**98.8**	**98.8**	**99.1**		
Min.	**65.4**	**63.9**	**64.1**	**63.4**	**64.3**	**65.1**	**66.0**	**66.2**	**67.8**	**69.2**	**70.4**	**70.3**	**71.6**	**71.4**	**70.0**	**68.5**	**69.2**	64.6	61.6	**63.3**	**63.6**	**62.1**	**60.5**	**62.7**		**60.5**	
Avg.	**85.4**	**85.8**	**86.3**	**86.5**	**87.1**	**87.4**	**87.2**	**87.3**	**87.3**	**86.8**	**86.7**	**87.1**	**86.7**	**86.3**	**85.9**	**85.1**	**85.1**	**83.8**	**84.1**	**84.7**	**85.2**	**86.0**	**85.9**	**85.4**			**86.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	98.1	98.3	98.6	98.7	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	98.9	99.0	98.9	98.6	98.9	99.2	99.3	99.3	99.4	99.5	99.3	98.8	99.5	98.1	98.9
2	97.4	99.0	98.3	98.1	98.2	97.7	97.1	97.5	97.0	96.8	96.8	96.8	96.9	97.0	97.1	97.1	97.1	97.0	97.3	97.9	97.8	98.4	98.3	98.5	99.0	96.8	97.5
3	98.5	98.7	98.7	98.6	98.5	98.4	98.4	98.4	98.4	98.5	98.6	98.6	98.6	98.7	98.3	95.3	89.8	89.3	92.2	93.8	94.6	95.2	96.7	97.2	98.7	89.3	96.8
4	97.4	98.2	97.7	97.9	98.3	98.2	97.9	97.2	97.5	97.8	97.9	97.4	96.8	97.2	97.6	97.1	97.1	98.1	98.5	98.4	97.5	95.8	96.1	96.2	98.5	95.8	97.5
5	94.9	93.7	85.2	82.8	78.3	75.2	73.9	74.5	72.2	73.3	72.4	73.7	73.6	74.6	76.2	75.4	79.2	79.3	75.6	74.8	75.0	74.4	79.0	81.6	94.9	72.2	77.9
6	81.7	81.9	83.6	85.5	85.4	85.0	82.7	81.4	81.1	80.1	82.4	82.2	78.7	76.3	75.2	74.4	74.5	75.6	75.3	74.6	71.9	71.1	71.0	72.4	85.5	71.0	78.5
7	75.1	77.3	79.2	78.9	79.8	77.2	77.4	78.5	78.8	76.7	78.2	77.8	76.3	72.9	70.4	67.8	66.1	70.6	69.0	65.8	64.4	64.7	66.8	65.7	79.8	64.4	73.1
8	61.1	53.1	50.6	51.4	52.6	50.0	47.7	43.3	41.5	46.3	54.1	59.2	65.5	65.0	65.2	67.3	71.2	76.6	88.9	90.4	92.2	92.8	91.0	89.8	92.8	41.5	65.3
9	89.5	90.4	90.5	90.4	89.4	88.1	86.9	86.0	86.6	87.2	87.4	87.9	88.5	86.2	83.4	81.4	77.6	75.7	78.3	76.5	75.9	75.8	68.8	65.1	90.5	65.1	83.1
10	65.4	68.2	73.2	73.9	76.1	76.1	76.5	76.4	77.3		71.5	71.3	72.7	69.3	68.8	67.0	68.0	71.1	67.2	66.4	66.2	65.4	67.5	69.6	77.3	65.4	70.7
11	69.8	69.3	70.8	70.8	72.9	76.8	78.3	79.5	79.9	78.2	78.6	79.4	77.5	75.7	72.4	71.7	70.7	71.1	72.7	74.7	73.4	71.7	73.5	73.6	79.9	69.3	74.3
12	74.0	74.1	74.2	71.1	71.6	71.6	73.6	74.7	73.2	70.3	71.6	73.5	72.9	71.8	68.3	66.3	67.7	70.6	72.8	72.4	73.2	72.3	69.5	68.8	74.7	66.3	71.7
13	73.7	76.2	79.6	89.0	94.4	93.3	94.4	94.9	94.9	95.3	95.5	96.1	96.4	97.4	98.1	98.3	98.5	98.2	98.4	98.8	98.9	98.7	98.1	98.0	98.9	73.7	94.0
14	98.3	98.3	98.2	98.1	98.0	98.0	97.9	97.8	97.8	97.8	97.9	98.2	98.3	98.5	98.1	97.0	96.6	92.4	91.2	89.9	92.7	94.6	92.6	92.6	98.5	89.9	96.3
15	94.8	97.4	98.9	96.8	96.5	96.5	98.5	98.5	97.0	96.1	95.6	95.1	94.6	93.9	89.5	85.3	82.5	80.2	77.3	76.2	75.2	74.7	72.9	74.3	98.9	72.9	89.1
16	74.6	73.9	74.0	75.8	75.3	75.2	72.9	73.0	74.9	77.3	75.3	73.0	70.6	68.9	66.7	69.0	74.3	74.4	74.6	73.1	74.8	78.6	83.5	81.5	83.5	66.7	74.4
17	82.8	85.3	86.9	87.0	89.8	90.0	85.3	83.9	82.3	78.6	78.9	85.9	94.9	96.4	95.6	94.1	92.5	91.7	90.2	90.5	90.8	92.7	94.2	85.8	96.4	78.6	88.6
18	82.5	84.1	83.5	82.3	84.1	73.8	73.6	64.6	53.8	43.8	35.0	35.7	54.4	59.1	61.3	68.5	72.1	66.7	65.7	73.4	70.9	72.0	68.3	72.9	84.1	35.0	66.7
19	69.5	68.8	69.1	72.5	72.6	71.5	70.4	70.7	75.6	79.3	74.7	70.4	70.8	71.8	72.2	72.0	69.4	68.3	66.0	72.7	72.4	72.5	84.7	85.7	85.7	66.0	72.7
20	81.0	81.0	74.3	72.4	72.1	75.9	63.1	67.9	68.5	69.1	68.1	65.5	69.1	71.0	74.9	76.6	76.6	86.6	89.6	89.9	92.4	92.3	95.4	96.4	96.4	63.1	77.9
21	97.2	96.3	94.7	92.9	87.4	88.3	95.4	98.0	97.7	97.2	94.1	92.6	90.9	89.7	87.4	88.6	86.8	87.8	87.3	81.7	82.2	80.6	79.4	82.4	98.0	79.4	89.9
22	75.3	70.8	59.2	56.5	55.9	75.2	71.1	59.2	56.4	54.1	53.4	52.6	48.7	47.5	49.4	53.5	55.4	55.1	60.0	57.9	51.3	44.2	50.8	55.6	75.3	44.2	57.0
23	53.8	50.6	52.3	57.1	56.3	52.5	57.5	62.8	59.2	60.5	54.1	49.5	56.4	56.5	55.7	56.6	56.3	56.7	57.8	57.8	61.5	56.6	58.3	60.0	62.8	49.5	56.5
24	62.0	68.9	78.1	81.8	81.0	90.4	94.7	96.2	94.7	95.1	95.5	95.7	95.8	95.7	95.8	96.0	95.5	96.5	96.9	96.4	96.6	97.0	94.7	92.1	97.0	62.0	91.0
25	93.3	93.7	93.0	92.6	92.5	92.4	92.3	91.4	89.9	84.8	76.8	75.5	74.7	72.4	73.0	70.7	69.8	70.2	71.5	74.0	77.8	79.9	83.0	84.6	93.7	69.8	82.1
26	82.4	84.0	85.1	84.9	84.3	84.0	84.1	84.5	85.0	85.0	83.5	82.2	79.5	78.0	83.0	86.6	87.5	88.6	87.9	84.7	83.8	85.4	90.9	92.3	92.3	78.0	84.9
27	91.9	92.7	92.3	92.3	91.5	91.7	92.2	92.1	91.8	91.5	90.5	89.5	90.4	87.3	88.5	90.5	92.1	92.2	88.5	88.3	89.3	90.3	89.3	89.3	92.7	87.3	90.7
28	89.6	90.3	91.2	91.1	90.7	90.7	89.6	90.8	90.8	89.1	85.5	84.3	85.6	84.1	78.3	73.5	75.4	74.1	75.8	77.4	77.6	80.5	82.5	79.6	91.2	73.5	84.1
29	78.9	78.7	81.9	81.9	82.9	83.6	86.5	87.4	86.4	86.4	86.6	86.0	81.9	77.1	74.1	74.8	74.8	76.1	77.0	77.5	78.6	81.5	82.5	83.9	87.4	74.1	81.1
30	83.2	83.8	85.1	84.7	86.2	87.1	86.6	84.4	83.4	81.4	78.7	76.5	74.1	71.2	68.4	67.8	76.0	85.6	88.1	86.0	91.5	95.4	96.0	95.8	96.0	67.8	83.2
Max.	**98.5**	**99.0**	**98.9**	**98.7**	**98.9**	**98.9**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**98.9**	**99.0**	**98.9**	**98.6**	**98.9**	**99.2**	**99.3**	**99.3**	**99.4**	**99.5**	**99.3**	**98.8**	**99.5**		
Min.	**53.8**	**50.6**	**50.6**	**51.4**	**52.6**	**50.0**	**47.7**	**43.3**	**41.5**	**43.8**	**35.0**	**35.7**	**48.7**	**47.5**	**49.4**	**53.5**	**55.4**	55.1	57.8	**57.8**	**51.3**	**44.2**	**50.8**	**55.6**		**35.0**	
Avg.	**82.3**	**82.6**	**82.6**	**82.9**	**83.0**	**83.4**	**83.2**	**82.8**	**82.1**	**81.6**	**80.3**	**80.0**	**80.8**	**80.0**	**79.4**	**79.3**	**79.7**	**80.5**	**81.0**	**81.0**	**81.3**	**81.5**	**82.5**	**82.7**			**81.5**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	95.6	95.1	94.3	93.0	90.1	85.4	85.1	84.8	84.2	83.8	82.5	80.4	77.8	73.1	73.7	72.1	70.2	70.2	70.2	71.8	75.6	75.3	80.1	79.4	95.6	70.2	81.0
2	81.1	81.0	85.3	93.1	96.2	96.5	96.1	91.1	88.4	87.7	86.5	84.2	81.1	75.9	80.5	81.9	80.3	78.5	74.5	89.8	93.4	97.5	97.5	97.8	97.8	74.5	87.3
3	95.6	97.3	97.9	98.0	98.0	97.9	97.8	97.7	97.8	97.8	97.7	96.8	92.8	80.8	78.2	73.1	81.5	85.9	79.6	71.0	70.2	81.7	85.1	79.0	98.0	70.2	88.7
4	81.9	83.2	82.4	82.7	80.3	80.7	76.3	76.8	71.4	71.9	69.6	68.7	66.7	65.1	62.9	60.8	58.8	56.3	55.5	59.0	64.6	77.2	81.1	79.2	83.2	55.5	71.4
5	79.8	81.3	81.1	79.9	79.1	78.9	76.0	76.6	72.4	68.5	65.9	70.1	70.8	66.1	66.5	69.7	72.1	75.5	76.6	78.6	80.8	82.7	82.4	88.3	88.3	65.9	75.8
6	92.0	95.7	98.2	98.8	98.9	99.0	99.1	99.0	98.8	93.8	91.7	88.1	86.6	84.6	81.6	80.1	77.7	75.3	76.4	77.2	81.7	85.0	89.5	90.3	99.1	75.3	89.1
7	89.4	86.1	82.4	83.0	82.8	83.8	82.8	81.9	81.4	77.2	74.7	74.5	76.0	75.5	75.8	75.5	76.8	76.2	76.0	77.3	78.4	77.5	83.2	86.7	89.4	74.5	79.8
8	86.5	86.9	87.8	86.1	87.1	91.8	92.3	88.6	86.2	83.9	81.1	78.7	80.6	83.5	88.2	84.8	82.0	79.6	79.8	80.2	80.3	80.6	78.8	78.2	92.3	78.2	83.9
9	79.3	80.4	81.7	84.2	84.5	84.6	87.3	88.3	84.4	80.6	78.6	81.0	87.4	90.5	92.8	89.5	89.0	91.8	97.0	97.5	97.9	97.1	95.9	95.1	97.9	78.6	88.2
10	96.1	98.5	98.8	99.0	99.1	99.1	99.1	99.0	98.9	98.9	98.7	98.2	95.3	92.5	83.9	81.0	84.3	81.7	82.4	82.5	85.0	88.4	84.0	85.6	99.1	81.0	92.1
11	83.5	87.8	88.2	88.6	89.6	85.9	87.5	87.1	82.6	83.0	88.7	93.7	94.7	93.8	78.2	69.1	66.5	71.4	66.2	68.8	69.9	72.0	77.7	84.6	94.7	66.2	81.6
12	83.6	87.2	87.9	88.4	90.1	90.7	93.5	92.6	87.8	84.1	80.2	75.5	71.9	74.0	75.3	83.7	90.7	89.0	85.9	83.9	86.8	91.7	95.6	95.4	95.6	71.9	86.1
13	94.7	96.9	97.7	98.4	98.7	98.9	99.0	99.1	99.1	99.1	96.7	92.0	85.5	82.0	79.1	79.7	79.6	83.9	78.9	78.2	79.5	81.4	82.5	85.8	99.1	78.2	89.4
14	89.7	86.7	88.1	88.1	74.5	71.8	72.6	73.6	71.1	73.3	74.2	75.2	69.0	60.5	55.2	59.2	57.4	55.6	56.2	62.3	65.1	60.9	60.4	61.5	89.7	55.2	69.3
15	64.6	65.5	65.9	73.9	73.5	74.6	78.2	80.6	82.4	84.0	84.0	76.4	72.8	78.4	78.0	83.2	90.5	95.8	97.2	97.4	97.7	98.5	98.9	99.0	99.0	64.6	83.0
16	99.0	99.0	99.1	99.2	98.7	98.9	99.5	99.6	99.6	99.6	99.5	99.4		86.2	82.1	77.8	73.5	68.1	66.0	65.6	68.9	76.6	79.1	75.2	99.6	65.6	87.4
17	81.5	94.6	97.9	93.3	88.4	88.9	89.9	87.1	90.3	89.6	83.0	75.0	68.5	64.6	62.1	53.2	52.0	52.0	52.0	55.4	59.1	68.6	72.7	66.9	97.9	52.0	74.4
18	67.9	65.3	63.2	70.0	74.6	87.4	94.0	97.4	97.0	94.4	97.2	97.6	97.9	98.5	98.6	98.2	96.5	93.2	87.4	85.6	90.7	94.6	98.3	99.2	99.2	63.2	89.4
19	93.9	86.8	83.4	82.9	85.5	88.4	89.4	91.5	92.8	97.3	94.4	87.0	78.5	74.9	74.6	63.6	68.4	68.8	65.4	62.9	65.8	71.2	75.3	75.6	97.3	62.9	79.9
20	75.2	77.4	78.6	78.7	76.4	74.2	72.5	75.1	73.3	70.5	65.2	59.6	53.0	43.6	34.8	41.4	43.7	41.1	40.4	39.2	37.9	41.4	43.6	44.2	78.7	34.8	57.5
21	44.1	44.8	46.3	46.4	45.0	46.6	51.1	60.7	65.2	67.0	60.0	56.7	56.4	54.7	61.3	53.2	50.6	55.3	58.1	66.5	74.8	79.8	80.6	80.3	80.6	44.1	58.6
22	80.5	80.8	80.0	85.6	86.8	82.3	90.5	87.9	84.9	83.6	80.1	73.7	65.9	54.0	54.1	57.0	57.9	60.7	63.2	64.1	68.5	74.1	76.4	76.8	90.5	54.0	73.7
23	80.1	84.9	93.8	92.7	92.8	88.6	86.3	86.7	83.4	82.1	77.2	76.5	83.2	89.7	90.5	85.7	83.9	83.7	85.0	85.2	84.7	84.4	85.2	87.2	93.8	76.5	85.6
24	87.4	87.2	88.1	88.4	90.8	92.3	95.4	94.4	92.1	90.4	90.9	90.0	88.8	88.6	83.3	77.6	73.8	72.3	72.0	83.6	75.7	78.2	77.2	76.4	95.4	72.0	84.8
25	80.5	85.5	82.7	82.5	84.3	85.5	84.4	85.1	82.4	79.3	73.0	68.5	77.8	88.3	94.4	92.3	78.8	82.1	81.2	83.5	83.5	84.1	89.7	90.1	94.4	68.5	83.3
26	92.9	95.1	94.9	94.5	89.1	86.6	82.2	89.6	90.8	87.8	84.4	82.1	80.0	77.8	69.4	85.9	81.9	78.0	75.4	79.6	76.6	75.9	79.5	84.4	95.1	69.4	83.9
27	86.2	85.2	87.1	86.5	90.3	91.9	89.9	88.5	87.2	81.3	77.6	70.0	63.8	54.5	48.4	45.9	45.1	42.5	45.7	50.3	56.2	61.7	70.2	68.7	91.9	42.5	69.8
28	66.5	67.3	69.0	67.9	67.1	65.0	65.7	69.2	67.5	64.0	61.9	59.6	53.9	53.4	51.4	48.8	47.4	52.4	56.0	58.7	61.7	64.9	66.8	69.7	69.7	47.4	61.5
29	72.2	73.2	71.5	72.8	75.4	77.5	78.4	77.2	74.3	69.6	58.9	53.9	53.4	51.7	50.1	48.5	46.1	45.0	43.7	42.4	44.2	48.7	51.4	52.4	78.4	42.4	59.7
30	53.9	53.2	51.5	47.0	48.2	53.8	57.6	59.9	60.8	57.4	53.1	50.3	48.3	47.9	46.2	47.4	46.2	48.3	54.3	60.0	67.0	70.6	73.8	75.8	75.8	46.2	55.5
31	79.8	82.8	86.1	89.5	91.6	92.0	91.6	92.2	95.1	94.3	89.1	83.1	78.2	76.0	73.9	72.2	73.2	73.8	80.6	84.6	90.3	89.4	92.2	96.3	96.3	72.2	85.3
Max.	**99.0**	**99.0**	**99.1**	**99.2**	**99.1**	**99.1**	**99.5**	**99.6**	**99.6**	**99.6**	**99.5**	**99.4**	**97.9**	**98.5**	**98.6**	**98.2**	**96.5**	**95.8**	**97.2**	**97.5**	**97.9**	**98.5**	**98.9**	**99.2**	**99.6**		
Min.	**44.1**	**44.8**	**46.3**	**46.4**	**45.0**	**46.6**	**51.1**	**59.9**	**60.8**	**57.4**	**53.1**	**50.3**	**48.3**	**43.6**	**34.8**	**41.4**	**43.7**	41.1	40.4	**39.2**	**37.9**	**41.4**	**43.6**	**44.2**		**34.8**	
Avg.	**81.8**	**83.0**	**83.6**	**84.3**	**84.1**	**84.5**	**85.2**	**85.8**	**84.6**	**83.1**	**80.5**	**78.0**	**75.2**	**73.6**	**71.8**	**70.7**	**70.2**	**70.4**	**70.3**	**72.3**	**74.6**	**77.8**	**80.2**	**80.8**			**78.6**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	93.9	90.5	92.3	87.8	83.2	82.0	78.8	76.1	77.6	76.2	68.8	61.3	60.3	63.1	61.2	61.1	62.8	67.7	70.5	72.5	73.2	78.1	80.0	85.4	93.9	60.3	75.2
2	84.9	79.0	75.1	71.8	72.4	74.3	75.6	71.0	67.2	64.2	63.6	60.1	58.1	52.1	49.7		49.8	52.0	54.2	56.1	57.1	59.2	62.9	69.3	84.9	49.7	64.3
3	70.6	68.8	69.3	76.7	76.4	74.8	74.4	76.5	80.8	80.8	73.1	64.6	67.4	57.6	60.2	67.4	72.3	66.6	69.4	72.5	80.9	84.8	88.6	91.3	91.3	57.6	73.6
4	92.5	94.4	97.7	98.5	98.3	98.8	98.9	98.8	86.8	83.8	78.1	74.3	74.0	77.9	64.4	65.4	62.9	62.3	62.4	60.2	63.0	67.7	74.4	82.4	98.9	60.2	79.9
5	87.3	90.7	91.3	93.2	93.8	93.5	92.7	91.3	90.6	85.8	86.5	88.3	88.0	79.2	73.2	75.4	73.6	73.2	76.2	76.9	79.6	81.6	84.5	91.1	93.8	73.2	84.9
6	93.7	94.3	96.1	95.4	95.8	96.9	97.9	97.5	97.9	96.5	88.4	79.2	68.1	58.3	56.7	50.6	47.8	56.4	56.2	64.8	59.8	63.4	76.9	85.4	97.9	47.8	78.1
7	87.5	89.1	92.9	93.5	95.1	96.1	95.8	92.7	85.6	78.5	73.3	68.5	62.1	54.5	45.9	42.3	47.0	56.4	51.7	59.2	64.4	72.1	77.1	84.9	96.1	42.3	73.6
8	93.1	95.3	97.1	97.2	97.6	90.9	85.4	79.8	59.3	51.5	50.8	54.2	50.8	49.9	48.0	46.6	48.0	53.1	56.8	60.9	54.8	53.5	68.9	87.2	97.6	46.6	67.9
9	92.1	90.9	91.7	96.4	98.7	98.0	98.4	99.0	98.6	97.8	91.9	83.9	81.0	82.9	78.9	77.1	72.9	75.2	73.5	72.7	73.3	75.9	78.5	79.4	99.0	72.7	85.8
10	79.4	81.5	91.0	95.7	97.9	98.5	99.1	99.2	99.2	97.7	93.9	90.6	86.3	81.4	79.7	76.6	73.1	72.7	75.3	76.5	77.6	80.9	78.5	79.2	99.2	72.7	85.9
11	83.5	82.5	83.1	84.5	87.1	90.7	91.1	92.7	93.4	91.4	88.5	92.4	91.3	90.6	89.5	86.2	82.6	80.5	79.7	77.0	77.8	83.6	85.0	86.5	93.4	77.0	86.3
12	90.3	89.6	90.8	95.0	97.8	98.3	99.2	99.1	98.7	93.0	88.2	83.4	83.3	81.8	82.1	84.2	88.4	91.0	91.0	91.7	92.2	96.7	97.4	97.8	99.2	81.8	91.7
13	98.0	98.2	98.2	98.2	98.0	97.9	97.8	97.7	97.6	97.4	97.2	96.1	89.9	83.9	78.1	72.9	69.1	67.9	65.6	63.1	70.8	73.2	81.5	85.2	98.2	63.1	86.4
14	84.3	85.2	92.2	96.0	96.9	96.8	96.8	97.1	97.3	97.1	97.0	89.4	81.4	77.0	70.5	69.2	67.4	67.1	68.5	80.2	91.9	89.4	85.6	88.8	97.3	67.1	86.0
15	87.6	89.2	92.0	93.4	94.9	96.6	94.7	92.6	95.1	95.7	94.7	89.8	86.9	80.4	75.9	74.4	79.7	83.3	81.5	83.3	89.2	93.7	95.2	95.9	96.6	74.4	89.0
16	96.8	97.3	97.5	97.7	98.0	98.1	98.1	97.8	97.7	97.7	97.8	96.1	86.0	84.5	81.3	81.3	91.8	85.8	78.0	73.1	72.0	77.8	79.1	79.5	98.1	72.0	89.2
17	78.0	76.6	77.6	80.5	83.0	82.7	84.8	85.7	82.4	76.0	73.3	70.3	62.9	61.1	56.6	50.2	45.6	42.0	41.9	48.2	47.6	56.9	70.0	76.5	85.7	41.9	67.1
18	84.4	81.6	76.6	80.8	80.3	78.5	83.9	86.4	81.7	80.2	78.0	76.0	66.4	61.1	60.2	51.5	46.7	49.4	57.4	55.6	57.8	60.5	68.4	77.7	86.4	46.7	70.0
19	80.0	82.0	81.3	83.7	85.6	87.4	88.8	86.7	79.8	76.1	74.4	75.3	74.4	70.4	65.8	63.1	61.8	54.8	50.3	52.5	58.0	63.4	68.7	74.9	88.8	50.3	72.5
20	83.9	87.7	86.7	85.8	83.7	88.2	89.6	89.0	84.0	79.3	75.4	68.4	66.6	61.1	59.7	59.9	59.3	59.1	61.9	66.3	72.7	75.7	80.0	83.9	89.6	59.1	75.3
21	85.0	86.6	89.3	90.6	91.4	90.9	87.4	85.1	82.3	78.7	76.4	71.6	68.4	68.7	67.2	64.6	63.4	60.1	57.3	60.3	64.4	71.0	77.6	81.9	91.4	57.3	75.8
22	82.5	84.0	85.7	86.0	85.6	86.4	88.3	85.7	81.6	77.4	75.6	73.3	68.5	65.0	63.0	68.2	71.7	72.7	76.3	74.9	77.9	80.8	88.4	90.3	90.3	63.0	78.7
23	90.6	89.6	89.4	89.6	88.5	91.4	88.0	86.3	79.7	75.1	71.3	69.8	64.8	61.4	58.9	56.3	53.7	53.0	53.1	53.7	56.5	63.4	72.1	80.0	91.4	53.0	72.3
24	81.2	82.7	84.2	84.1	86.9	89.8	87.6	82.2	77.3	69.7	68.4	64.7	67.0	74.0	76.2	75.9	77.3	78.8	80.0	79.0	78.8	79.0	81.3	82.4	89.8	64.7	78.7
25	83.3	78.6	75.8	78.7	81.9	87.0	85.0	79.1	81.7	70.7	67.0	61.1	57.7	54.6	54.2	55.0	53.8	54.8	57.5	59.0	66.5	68.0	68.0	73.9	87.0	53.8	68.9
26	75.0	75.4	77.8	75.8	74.9	74.4	74.0	70.1	71.3	68.3	65.5	60.5	55.8	69.3	70.2	65.5	66.6	64.8	65.0	64.0	64.7	65.3	67.7	65.5	77.8	55.8	68.6
27	66.7	68.1	67.5	68.4	73.4	77.1	79.0	81.1	82.1	78.1	80.0	74.9	70.1	64.3	61.2	58.3	59.7	57.6	60.3	64.2	67.7	69.6	73.8	76.4	82.1	57.6	70.0
28	80.5	87.6	91.6	95.4	97.6	95.4	89.1	90.8	93.5	83.9	85.3	81.3	82.1	75.9	67.2	70.6	85.2	83.5	81.1	78.5	76.0	83.6	87.7	91.0	97.6	67.2	84.8
29	94.0	95.7	97.8	98.0	95.5	94.5	97.0	96.8	94.5	90.6	87.5	83.2	75.6	71.0	65.0	62.6	62.7	60.0	61.5	63.0	66.0	71.5	74.7	80.2	98.0	60.0	80.8
30	83.3	82.2	80.9	79.7	78.8	82.5	85.4	83.6	78.3	74.5	71.3	67.1	66.1	62.4	60.8	57.8	63.3	62.8	61.3	66.4	70.0	66.1	68.9	70.9	85.4	57.8	71.8
Max.	**98.0**	**98.2**	**98.2**	**98.5**	**98.7**	**98.8**	**99.2**	**99.2**	**99.2**	**97.8**	**97.8**	**96.1**	**91.3**	**90.6**	**89.5**	**86.2**	**91.8**	**91.0**	**91.0**	**91.7**	**92.2**	**96.7**	**97.4**	**97.8**	**99.2**		
Min.	**66.7**	**68.1**	**67.5**	**68.4**	**72.4**	**74.3**	**74.0**	**70.1**	**59.3**	**51.5**	**50.8**	**54.2**	**50.8**	**49.9**	**45.9**	**42.3**	**45.6**	42.0	41.9	**48.2**	**47.6**	**53.5**	**62.9**	**65.5**		**41.9**	
Avg.	**85.5**	**85.8**	**87.0**	**88.3**	**89.0**	**89.6**	**89.4**	**88.3**	**85.8**	**82.1**	**79.4**	**75.6**	**72.0**	**69.2**	**66.1**	**65.2**	**65.3**	**65.5**	**65.8**	**67.5**	**70.1**	**73.5**	**78.1**	**82.5**			**77.8**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	68.5	66.7	66.7	69.3	70.9	72.9	76.8	77.4	73.8	69.3	65.3	62.3	56.0	52.0	46.0	41.2	39.6	42.8	49.3	53.9	61.5	65.3	66.2	64.1	77.4	39.6	61.6
2	70.1	78.8	75.6	72.3	74.7	73.8	73.8	73.2	71.8	66.2	55.9	50.3	46.2	46.9	45.0	42.3	41.8	38.1	43.5	57.9	57.7	59.8	67.1	69.4	78.8	38.1	60.5
3	65.2	72.8	71.0	64.4	57.1	67.6	61.7	60.9	65.6	74.5	86.4	84.1	76.3	73.8	73.1	68.8	70.5	77.0	82.8	82.9	84.2	87.3	88.1	91.7	91.7	57.1	74.5
4	95.5	97.9	98.5	98.6	96.0	93.4	91.0	89.6	86.8	85.3	82.0	79.7	75.4	73.3	78.0	80.9	77.4	73.9	83.6	91.5	96.8	96.5	97.7	98.3	98.6	73.3	88.2
5	98.3	94.3	90.4	88.6	88.6	90.6	92.3	92.3	91.2	86.8	82.4	76.8	71.0	68.7	69.7	72.7	80.2	76.5	76.6	74.6	78.1	81.3	83.0	80.7	98.3	68.7	82.7
6	81.2	87.3	88.3	89.8	91.4	87.7	85.9	87.2	86.1	75.9	68.5	68.7	63.6	68.5	79.4	81.1	79.5	80.2	84.1	85.8	87.4	88.4	91.1	94.5	94.5	63.6	82.6
7	97.6	98.2	98.3	98.4	98.4	98.5	98.5	98.5	98.5	97.0	90.9	93.3	94.9	92.1	92.8	91.5	92.5	89.6	84.5	81.6	82.3	82.7	85.5	86.4	98.5	81.6	92.6
8	84.1	81.3	82.2	78.4	86.3	94.7	97.6	98.2	98.3	98.4	98.4	97.8	98.1	98.3	98.1	94.3	92.7	95.6	97.7	98.0	98.1	98.2	98.2	98.3	98.4	78.4	94.2
9	98.3	98.3	98.3	98.3	96.9	97.6	97.1	95.9	87.5	79.1	80.1	75.5	70.0	65.0	62.2	59.7	60.3	64.3	68.0	70.4	71.9	73.8	76.1	79.9	98.3	59.7	80.2
10	83.7	84.7	85.7	87.9	88.2	87.3	88.6	88.8	88.0	84.5	82.4	79.2	76.5	71.2	67.6	66.0	64.8	62.4	63.9	68.6	73.6	76.0	80.0	80.6	88.8	62.4	78.3
11	84.0	87.9	91.8	94.7	95.8	96.5	97.3	97.6	97.6	84.3	78.3	76.0	71.0	66.6	62.4	58.4	55.3	54.9	57.0	58.9	62.2	66.4	71.4	74.5	97.6	54.9	76.7
12	76.7	80.1	78.8	75.6	77.8	82.7	84.2	78.2	73.7	74.2	71.9	74.1	75.5	70.3	71.3	74.3	74.8	75.3	86.0	93.1	95.1	95.8	96.5	97.2	97.2	70.3	80.6
13	97.6	97.7	97.5	97.6	97.8	97.9	98.0	98.0	98.1	98.1	98.0	97.2	95.9	93.3	92.3	90.2	89.5	89.1	88.9	90.5	90.0	91.4	92.0	92.2	98.1	88.9	94.5
14	94.2	94.2	94.0	95.3	97.0	95.6	95.3	95.3	95.1	92.9	87.7	84.1	82.4	79.5	75.1	74.9	76.9	73.4	72.0	72.0	75.9	81.5	86.3	90.2	97.0	72.0	85.9
15	91.0	90.8	90.3	90.3	91.0	92.3	92.0	92.4	90.8	84.8	81.4	78.5	77.2	74.2	73.4	72.1	74.9	78.6	81.3	87.1	90.3	92.9	90.7	90.5	92.9	72.1	85.4
16	91.2	91.8	91.3	92.0	92.7	92.5	91.9	90.3	90.0	89.8	94.3	96.0	94.5	89.7	86.2	84.0	93.4	96.4	96.7	96.8	97.1	97.3	97.4	97.5	97.5	84.0	93.0
17	97.5	97.6	97.6	97.9	98.1	97.9	97.3	98.0	97.9	97.3	96.8	96.2	94.0	93.6	95.9	94.0	92.5	86.8	86.9	86.4	91.4	92.0	94.8	96.1	98.1	86.4	94.8
18	95.5	95.8	97.4	97.9	98.1	98.2	98.3	98.1	95.2	95.2	91.2	89.9	86.3	80.0	80.6	82.2	78.2	80.4	81.6	78.4	85.9	82.5	84.6	83.4	98.3	78.2	89.0
19	84.5	89.1	89.6	92.2	95.1	94.6	91.6	90.3	88.2	89.5	89.5	78.5	77.0	75.8	64.3	70.5	66.7	74.2	70.4	75.9	82.9	83.9	86.9	85.8	95.1	64.3	82.8
20	88.5	87.7	88.9	92.8	89.7	89.9	87.9	88.0	93.6	96.5	97.0	97.2	97.2	95.6	92.7	93.7	95.1	96.5	97.2	97.5	97.6	97.6	97.6	97.6	97.6	87.7	93.9
21	97.7	97.7	97.7	97.8	97.9	97.9	97.9	97.9	97.9	97.7	97.3	92.8	91.5	88.1	87.4	88.6	83.8	77.6	89.3	87.2	86.0	92.0	95.7	96.8	97.9	77.6	93.0
22	97.2	97.0	97.3	97.3	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.1	94.2	91.1	91.4	93.1	95.4	96.9	97.4	97.7	97.8	97.8	91.1	96.5
23	97.8	97.9	97.9	98.0	98.0	98.0	98.0	97.9	97.2	95.1	94.7	92.5	90.7	90.6	91.7	88.3	77.4	74.8	76.5	84.2	92.4	95.4	95.0	96.4	98.0	74.8	92.4
24	97.7	97.9	95.7	94.8	97.3	97.9	98.0	97.7	97.7	97.7	97.7	95.8	91.8	86.0	78.8	68.6	61.5	62.6	70.2	65.5	70.7	70.5	58.4	62.2	98.0	58.4	83.9
25	66.0	72.4	73.7	71.8	69.4	73.4	74.6	71.6	69.2	65.4	62.0	57.8	54.0	50.9	47.9	45.7	44.4	44.0	42.9	42.3	44.6	48.7	56.9	61.0	74.6	42.3	58.8
26	69.1	75.6	75.9	76.8	75.1	81.7	88.3	93.0	89.9	86.2	87.9	90.7	91.3	89.5	88.8	87.3	85.4	85.7	75.5	71.7	78.2	87.3	93.9	96.5	96.5	69.1	84.2
27	96.7	96.8	96.9	96.8	96.9	97.0	97.0	97.1	97.1	97.1	97.1	95.9	95.9	92.7	89.6	89.0	92.0	90.5	85.5	86.4	88.9	88.4	89.0	85.5	97.1	85.5	93.2
28	84.1	93.8	95.5	94.2	92.5	94.1	94.7	94.6	93.6	88.8	84.6	78.5	72.7	61.1	57.5	57.6	56.0	54.7	53.7	58.3	61.1	65.0	68.7	73.9	95.5	53.7	76.2
29	78.0	76.0	79.0	83.7	82.7	80.5	87.1	91.5	88.2	83.0	71.7	65.7	60.5	54.8	51.0	46.9	46.9	47.8	48.5	47.6	50.2	56.4	63.0	74.3	91.5	46.9	67.3
30	75.3	74.0	71.5	75.7	75.4	76.0	76.8	79.0	78.9	70.6	68.5	65.8	62.6	58.5	56.7	57.1	59.2	61.1	64.2	69.1	72.0	75.9	80.3	84.5	84.5	56.7	70.4
31	89.1	89.9	88.9	92.4	94.0	95.4	93.3	92.7	87.8	82.7	74.6	63.0	52.6	46.2	44.1	41.6	43.6	43.2	42.8	46.1	54.7	65.4	75.5	79.1	95.4	41.6	69.9
Max.	**98.3**	**98.3**	**98.5**	**98.6**	**98.4**	**98.5**	**98.5**	**98.5**	**98.5**	**98.4**	**98.4**	**97.8**	**98.1**	**98.3**	**98.1**	**94.3**	**95.1**	**96.5**	**97.7**	**98.0**	**98.1**	**98.2**	**98.2**	**98.3**	**98.6**		
Min.	**65.2**	**66.7**	**66.7**	**64.4**	**57.1**	**67.6**	**61.7**	**60.9**	**65.6**	**65.4**	**55.9**	**50.3**	**46.2**	**46.2**	**44.1**	**41.2**	**39.6**	38.1	42.8	**42.3**	**44.6**	**48.7**	**56.9**	**61.0**		**38.1**	
Avg.	**86.8**	**88.4**	**88.5**	**88.8**	**89.0**	**90.1**	**90.3**	**90.3**	**89.1**	**86.5**	**84.3**	**81.7**	**78.7**	**75.6**	**74.1**	**72.8**	**72.2**	**72.2**	**74.0**	**76.0**	**79.2**	**81.7**	**84.0**	**85.7**			**82.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	89.2	86.7	83.5	87.8	92.0	93.7	95.9	97.1	96.4	98.3	98.8	98.8	95.4	87.4	79.4	72.5	71.1	68.1	67.0	68.3	75.1	86.0	91.5	94.1	98.8	67.0	86.4
2	95.4	98.2	98.7	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	97.1	95.5	93.7	89.4	87.8	92.3	93.9	93.4	93.7	95.5	96.4	99.0	87.8	96.3
3	94.7	95.4	98.1	98.7	98.6	98.3	98.7	97.6	95.3	87.9	80.8	70.9	71.4	76.0	72.9	69.0	66.4	66.6	71.6	74.1	75.6	80.1	84.7	90.6	98.7	66.4	83.9
4	94.4	94.2	96.2	96.2	97.5	98.4	98.5	98.6	98.5	95.5	89.3	87.9	86.6	81.5	78.0	76.5	74.5	70.2	69.7	75.8	84.7	92.9	95.6	97.5	98.6	69.7	88.7
5	97.6	97.3	97.6	95.8	97.6	96.0	92.3	95.1	94.3	94.6	88.9	72.5	65.3	55.9	50.1	48.4	47.9	47.8	48.3	47.8	50.0	56.6	64.8	66.5	97.6	47.8	73.7
6	69.6	70.1	74.6	72.2	71.7	67.9	66.2	65.1	65.9	62.5	53.8	48.2	43.7	39.6	36.7	35.0	35.9	38.3	44.3	49.8	51.8	54.9	64.7	68.3	74.6	35.0	56.3
7	72.3	75.2	76.3	76.6	80.6	82.7	87.0	81.9	81.0	75.5	71.4	68.5	63.6	58.2	53.6	53.2	51.5	47.6	48.4	50.1	54.3	66.0	70.5	73.1	87.0	47.6	67.5
8	75.4	78.6	79.5	77.8	77.8	80.5	82.1	82.1	79.4	71.5	64.7	59.8	50.8	44.6	42.3	36.9	32.9	32.0	34.5	37.9	41.8	50.2	57.7	61.1	82.1	32.0	59.7
9	63.3	62.8	63.8	70.0	72.3	73.5	73.4	76.8	71.3	68.6	64.6	57.9	51.7	48.0	44.1	39.0	37.4	39.9	42.5	43.4	46.2	55.5	58.4	57.0	76.8	37.4	57.5
10	56.3	59.7	60.5	57.7	58.3	67.9	79.1	91.0	93.3	83.8	77.6	69.8	68.3	62.2	58.9	65.2	68.8	61.5	69.2	75.9	81.3	86.2	88.8	91.9	93.3	56.3	72.2
11	94.3	98.0	98.5	97.2	95.4	94.6	94.6	94.1	93.2	89.9	87.7	84.1	77.3	72.8	72.0	68.8	62.2	60.5	60.3	62.8	68.9	72.7	72.9	68.6	98.5	60.3	80.9
12	57.8	57.9	60.1	72.4	72.7	68.7	70.8	75.9	78.0	75.6	74.5	71.5	66.8	59.4	53.7	48.5	42.7	53.6	62.3	69.8	69.8	63.9	65.9	74.8	78.0	42.7	65.3
13	80.6	82.1	80.4	80.3	81.3	73.4	73.7	76.9	81.1	80.1	81.5	85.7	83.7	76.7	70.6	79.2	80.2	78.7	93.0	95.0	90.0	93.7	91.1	86.6	95.0	70.6	82.3
14	87.1	91.8	93.3	95.6	96.1	95.6	95.0	91.9	95.6	95.9	97.1	97.9	98.4	96.6	98.4	94.4	91.8	93.3	94.0	96.5	98.2	98.9	99.1	99.2	99.2	87.1	95.5
15	99.2	99.1	97.6	98.5	97.7	97.8	97.9	99.0	99.2	99.3	99.4	99.4	99.1	97.6	95.0	93.9	94.6	91.6	90.0	96.7	96.7	98.4	99.1	99.2	99.4	90.0	97.3
16	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.1	95.8	88.2	83.7	81.1	79.4	76.4	77.3	77.9	79.8	85.6	89.3	91.2	99.4	76.4	91.6
17	94.2	93.6	89.9	88.6	87.4	86.8	89.1	90.9	88.2	86.0	82.2	80.6	79.8	78.5	78.1	76.8	78.4	78.7	77.3	81.6	83.7	87.5	88.2	85.9	94.2	76.8	84.7
18	87.3	91.5	91.2	90.7	86.8	88.1	85.0	81.8	83.9	78.8	71.0	63.9	59.3	57.6	54.7	53.2	54.8	57.4	55.2	57.4	68.0	72.1	71.2	69.3	91.5	53.2	72.1
19	63.8	57.0	59.1	61.6	63.9	74.7	82.4	84.4	81.4	80.0	77.8	78.1	68.4	68.3	67.5	63.7	59.1	58.7	70.0	76.5	85.1	88.7	82.9	81.1	88.7	57.0	72.3
20	74.8	85.8	90.2	91.1	89.3	93.0	93.2	90.6	89.7	91.0	92.6	90.4	86.4	79.2	82.5	80.9	76.5	73.1	75.9	78.4	80.8	89.8	92.2	87.5	93.2	73.1	85.6
21	92.5	94.7	94.2	92.5	91.5	89.4	89.6	91.9	94.9	96.5	95.3	96.1	94.2	93.6	92.3	86.3	83.2	83.6	79.1	87.7	91.3	90.9	94.9	98.7	98.7	79.1	91.5
22	99.0	99.1	99.1	99.2	99.2	99.3	99.3	99.3	99.3	99.4	99.3	99.0	95.8	91.4	92.2	86.9	86.4	87.8	88.0	88.5	90.3	90.9	92.0	96.2	99.4	86.4	94.9
23	95.8	94.9	94.8	95.9	97.0	96.1	94.8	96.0	94.0	89.1	89.2	85.4	80.4	75.2	71.7	65.3	64.5	74.8	81.0	88.1	95.7	98.5	94.4	94.8	98.5	64.5	87.8
24	95.8	95.8	95.3	95.3	97.8	95.3	95.0	98.6	98.7	91.6	93.0	91.4	85.6	81.0	72.8	67.9	63.8	57.3	56.2	63.0	69.4	70.5	67.3	65.7	98.7	56.2	81.8
25	62.6	61.4	60.4	60.0	57.5	86.3	88.3	93.1	96.8	98.3	93.7	91.2	89.5	90.7	91.3	89.0	80.9	76.2	79.2	85.7	91.3	94.0	96.4	98.2	98.3	57.5	83.8
26	98.7	98.9	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.3	99.0	97.2	97.7	96.0	91.8	88.5	85.0	81.5	84.3	89.5	94.8	97.8	98.9	99.0	99.3	81.5	95.5
27	99.1	99.1	99.2	99.2	99.2	99.2	99.3	99.2	99.3	99.3	99.3	99.3	99.3	96.7	88.8	84.0	78.4	78.3	79.7	76.9	79.9	86.5	89.3	87.9	99.3	76.9	92.3
28	88.9	92.9	92.9	92.2	93.1	93.0	93.7	95.7	98.0	98.1	96.9	92.7	88.9	84.8	76.8	71.2	72.1	84.1	82.0	89.4	85.0	86.9	89.7	85.6	98.1	71.2	88.5
29	87.5	88.3	90.7	91.0	88.8	88.9	85.7	83.4	81.3	79.2	71.0	62.9	61.4	58.6	59.4	72.3	70.9	53.1	53.1	59.0	64.1	69.0	73.8	82.4	91.0	53.1	74.0
30	87.4	87.8	86.1	85.9	86.6	86.8	88.6	90.6	91.5	92.8	89.8	86.7	83.4	81.7	77.5	73.1	70.8	65.0	70.2	72.5	78.6	80.4	73.9	78.9	92.8	65.0	81.9
31	84.3	89.3	89.8	80.6	80.4	78.8	76.1	80.8	81.4	83.9	87.3	83.0	80.5	76.0	71.7	72.1	69.3	65.1	65.4	65.0	66.7	68.1	69.0	68.7	89.8	65.0	76.4
Max.	**99.3**	**99.3**	**99.3**	**99.3**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.3**	**97.6**	**98.4**	**94.4**	**94.6**	**93.3**	**94.0**	**96.7**	**98.2**	**98.9**	**99.1**	**99.2**	**99.4**		
Min.	**56.3**	**57.0**	**59.1**	**57.7**	**57.5**	**67.9**	**66.2**	**65.1**	**65.9**	**62.5**	**53.8**	**48.2**	**43.7**	**39.6**	**36.7**	**35.0**	**32.9**	32.0	34.5	**37.9**	**41.8**	**50.2**	**57.7**	**57.0**		**32.0**	
Avg.	**85.1**	**86.3**	**86.8**	**87.0**	**87.3**	**88.5**	**89.1**	**90.2**	**90.3**	**88.4**	**86.0**	**82.9**	**79.6**	**75.8**	**72.7**	**70.5**	**68.4**	**67.4**	**69.7**	**73.4**	**76.8**	**80.9**	**82.7**	**83.7**			**81.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	69.3	68.5	68.9	68.8	68.7	67.4	67.3	67.2	65.8	63.8	60.0	55.5	59.4	63.1	61.7	58.4	64.7	70.4	75.6	82.5	90.3	93.2	92.4	91.2	93.2	55.5	70.6
2	89.1	87.9	88.6	87.7	90.1	91.5	89.1	93.1	92.0	92.1	93.7	94.9	89.3	84.7	83.6	83.7	86.4	89.0	83.2	81.7	90.5	96.4	95.5	96.5	96.5	81.7	89.6
3	90.6	90.6	92.3	90.9	93.2	96.6	97.7	98.8	98.0	96.7	96.5	94.1	96.5	97.2	99.0	96.5	91.6	88.1	90.1	93.2	97.8	96.7	98.6	98.7	99.0	88.1	95.0
4	98.5	97.3	98.7	99.0	99.1	99.1	97.9	97.6	98.2	96.1	93.3	89.9	88.1	84.7	82.0	80.1	80.1	76.1	71.5	72.3	76.8	78.7	79.0	73.4	99.1	71.5	87.8
5	75.8	81.0	84.2	85.8	90.7	89.7	83.2	83.9	84.0	84.0	87.7	89.9	80.2	70.8	69.4	75.8	78.3	82.9	80.8	85.6	87.8	87.7	84.2	85.0	90.7	69.4	82.8
6	89.3	90.4	93.5	95.4	96.1	95.7	96.5	96.4	97.1	92.7	89.6	87.6	85.2	90.1	92.0	91.1	89.5	89.2	89.6	90.5	92.9	92.6	92.2	95.0	97.1	85.2	92.1
7	95.8	93.8	89.7	84.0	83.5	81.3	85.3	93.5	91.7	92.7	95.2	97.7	97.1	96.5	97.7	97.5	91.6	90.9	91.6	95.9	98.3	98.8	99.0	99.0	99.0	81.3	93.3
8	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2	96.5	94.4	94.2	86.8	82.9	83.9	93.5	96.6	96.3	97.8	95.7	92.0	88.1	99.2	82.9	95.4
9	87.8	88.5	88.0	89.7	94.1	94.7	92.0	91.9	95.2	98.3	98.9	99.0	99.1	99.1	99.1	99.1	98.3	97.3	95.9	95.1	95.5	95.2	93.0	95.2	99.1	87.8	95.0
10	96.6	98.4	98.9	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	98.8	93.6	89.2	86.3	89.3	87.3	85.1	90.0	91.7	90.0	93.3	94.9	96.9	99.2	85.1	94.7
11	98.0	98.2	98.6	98.8	98.7	98.7	98.6	98.8	99.0	99.1	99.1	99.1	99.1	99.2	99.2	97.9	89.9	88.0	87.4	88.7	90.6	90.8	90.6	91.8	99.2	87.4	95.7
12	93.1	91.7	90.0	94.4	96.7	97.0	96.7	96.9	96.9	95.5	93.4	89.7	86.7	83.7	90.5	94.3	93.9	95.9	94.8	95.2	96.4	97.0	97.1	96.9	97.1	83.7	93.9
13	96.9	97.1	96.9	97.5	97.9	98.1	98.3	98.2	98.2	98.3	97.9	98.2	98.4	98.3	98.1	97.8	97.2	96.1	94.2	92.8	91.2	88.4	85.4	87.8	98.4	85.4	95.8
14	86.0	87.5	90.5	90.2	92.5	92.1	91.9	91.1	91.3	94.2	92.3	96.2	97.7	97.0	96.9	94.5	92.0	92.8	91.0	90.3	88.1	86.2	91.5	93.8	97.7	86.0	92.0
15	92.4	92.3	90.7	90.4	94.5	95.1	92.4	95.2	95.4	95.0	92.8	90.2	86.3	89.1	86.2	86.8	87.1	84.7	84.5	86.5	89.9	91.5	94.5	98.4	98.4	84.5	90.9
16	97.9	95.5	93.5	94.8	95.9	96.6	96.7	97.0	96.7	95.9	96.5	89.6	82.0	79.4	79.6	74.4	82.9	85.7	89.4	87.3	89.7	89.6	91.4	91.9	97.9	74.4	90.4
17	94.3	95.7	93.5	95.0	98.2	99.1	99.3	99.4	99.5	99.4	98.6	97.8	95.3	89.4	91.5	92.8	92.1	92.2	95.4	98.1	99.0	99.2	99.4	95.9	99.5	89.4	96.3
18	93.3	95.0	90.6	89.8	87.5	90.5	96.2	94.3	97.6	98.3	97.5	92.7	93.4	96.5	96.2	96.6	96.0	97.7	98.7	98.9	99.1	97.1	96.9	97.0	99.1	87.5	95.3
19	97.1	98.2	99.0	99.2	99.5	99.6	99.6	99.6	99.7	99.6	99.6	99.5	99.5	99.3	98.4	96.5	95.0	96.8	96.7	93.4	95.8	96.6	98.1	97.6	99.7	93.4	98.1
20	96.9	97.4	96.2	94.9	95.9	96.4	98.1	98.2	97.1	96.2	91.6	92.2	97.9	93.0	77.2	73.9	71.8	73.1	72.9	76.5	86.5	79.8	74.8	71.5	98.2	71.5	87.5
21	73.8	70.6	72.3	72.0	73.9	74.7	74.6	76.3	78.3	78.6	80.7	80.5	77.8	72.0	68.8	66.5	67.0	65.3	67.8	72.0	81.2	83.7	88.7	91.3	91.3	65.3	75.3
22	93.6	92.9	89.0	86.9	85.9	85.2	86.1	86.9	85.5	84.6	79.0	62.6	65.5	62.5	63.7	68.6	79.0	86.9	93.5	97.0	98.1	99.0	99.4	99.5	99.5	62.5	84.6
23	99.5	99.6	99.6	99.5	99.2	99.1	99.0	98.5	98.0	98.3	96.5	96.7	94.2	92.3	94.2	96.5	95.9	94.7	96.5	96.5	97.4	96.2	96.0	97.0	99.6	92.3	97.1
24	97.4	98.9	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.8	99.0	97.7	97.1	95.8	94.0	94.8	90.7	89.4	89.3	91.3	96.4	96.8	96.0	90.6	99.8	89.3	96.3
25	88.7	87.2	85.3	81.7	84.1	86.1	85.5	83.8	86.8	85.3	84.8	83.1	83.6	84.3	92.1	86.9	90.2	92.6	94.6	95.8	96.4	96.8	96.0	95.5	96.8	81.7	88.6
26	94.1	95.0	96.1	95.0	98.4	99.3	97.5	96.8	94.2	93.7	89.1	85.3	83.0	78.0	75.9	78.5	74.7	74.5	77.6	79.4	80.8	84.6	83.3	80.1	99.3	74.5	86.9
27	82.3	86.6	90.5	88.5	91.8	96.3	93.3	92.6	93.7	94.7	92.6	90.0	81.5	73.0	67.8	62.3	57.7	54.3	51.3	55.0	62.8	69.0	65.2	63.4	96.3	51.3	77.3
28	67.0	69.2	72.0	70.7	71.4	72.4	69.1	65.4	66.7	64.8	62.5	59.1	52.6	48.9	47.4	47.8	52.5	58.3	60.5	64.1	66.9	65.1	75.9	79.4	79.4	47.4	63.7
29	76.8	75.2	80.1	82.3	80.0	81.4	85.8	82.9	84.7	84.9	77.4	74.1	77.2	87.9	92.4	89.4	80.4	82.2	81.2	82.3	85.9	89.1	87.1	82.5	92.4	74.1	82.6
30	81.7	80.8	79.6	82.5	88.4	91.0	94.2	97.3	99.1	99.8	94.9	82.4	79.3	72.6	69.7	69.2	69.4	69.4	69.0	72.1	77.7	76.0	75.4	74.9	99.8	69.0	81.1
Max.	**99.5**	**99.6**	**99.6**	**99.5**	**99.5**	**99.6**	**99.7**	**99.8**	**99.8**	**99.8**	**99.6**	**99.5**	**99.5**	**99.3**	**99.2**	**99.1**	**98.3**	**97.7**	**98.7**	**98.9**	**99.1**	**99.2**	**99.4**	**99.5**	**99.8**		
Min.	**67.0**	**68.5**	**68.9**	**68.8**	**68.7**	**67.4**	**67.3**	**65.4**	**65.8**	**63.8**	**60.0**	**55.5**	**52.6**	**48.9**	**47.4**	**47.8**	**52.5**	54.3	51.3	**55.0**	**62.8**	**65.1**	**65.2**	**63.4**		**47.4**	
Avg.	**89.8**	**90.0**	**90.2**	**90.1**	**91.5**	**92.1**	**92.0**	**92.3**	**92.6**	**92.4**	**91.0**	**88.7**	**87.0**	**85.4**	**84.6**	**84.0**	**83.6**	**84.4**	**85.0**	**86.6**	**89.6**	**90.0**	**90.1**	**89.9**			**88.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	75.0	73.3	73.1	73.9	77.2	81.4	84.7	84.3	86.6	87.4	88.0	94.5	87.8	82.7	85.5	92.6	95.9	97.8	97.3	97.5	97.0	97.8	98.2	99.0	99.0	73.1	87.9
2	98.5	96.1	96.4	97.9	99.5	99.8	98.2	99.5	99.2	99.5	97.2	95.1	93.4	88.8	90.5	88.5	89.9	82.8	87.8	90.2	92.7	91.2	88.9	82.9	99.8	82.8	93.5
3	84.7	80.2	91.8	95.9	89.1	95.3	98.2	99.4	99.9	99.4	99.1	99.1	97.8	95.5	94.0	94.8	92.1	87.0	85.9	89.5	93.2	90.7	87.6	87.4	99.9	80.2	92.8
4	89.5	91.4	91.8	90.4	90.6	90.0	85.1	83.9	85.5	85.8	86.9	83.2	80.2	77.0	73.7	67.0	67.6	73.2	75.2	75.8	88.9	98.4	99.4	99.9	99.9	67.0	84.6
5	98.9	98.8	99.2	99.5	98.8	97.1	98.3	99.6	98.9	98.9	98.9	99.2	99.1	98.8	98.4	98.8	99.3	99.6	99.7	99.2	99.1	98.8	98.6	98.6	99.7	97.1	98.9
6	98.6	98.4	98.1	98.1	98.0	98.1	98.2	98.1	98.1	98.1	98.2	98.2	98.2	98.3	98.3	98.1	95.8	94.0	96.0	95.2	93.5	93.7	93.7	96.7	98.6	93.5	97.1
7	95.6	95.1	95.1	97.4	97.6	95.1	91.8	98.2	95.3	94.5	94.3	88.9	88.2	87.5	86.1	83.5	80.3	80.7	80.2	82.5	82.7	82.0	86.1	91.2	98.2	80.2	89.6
8	92.9	94.3	90.8	93.3	90.3	87.0	88.3	91.4	90.4	89.2	85.0	83.3	81.1	76.1	70.2	67.7	68.0	68.6	71.4	74.5	73.1	66.0	67.6	71.8	94.3	66.0	80.5
9	75.6	76.8	75.4	78.9	80.4	90.7	94.2	96.8	97.0	94.7	98.0	98.9	98.9	94.7	93.5	97.0	98.2	98.5	98.7	98.9	99.0	98.8	98.7	98.9	99.0	75.4	93.0
10	99.1	99.2	99.3	99.4	99.6	99.7	99.5	96.4	97.7	100.0	100.0	100.0	99.8	99.7	99.6	99.5	95.8	93.3	94.3	94.7	93.8	92.8	91.3	88.9	100.0	88.9	97.2
11	86.8	85.2	86.0	89.3	94.4	96.5	98.8	98.7	99.1	99.8	99.4	98.0	97.5	97.3	96.8	96.6	96.5	96.6	96.4	96.4	96.5	96.3	96.1	96.3	99.8	85.2	95.5
12	96.5	96.4	96.7	96.5	96.1	95.8	95.6	95.4	95.0	94.5	94.7	93.7	91.5	90.9	89.6	88.3	86.4	86.3	86.0	85.9	85.3	85.6	86.5	86.2	96.7	85.3	91.5
13	85.7	88.1	88.2	89.6	89.8	89.4	89.9	89.5	88.2	85.3	84.0	84.2	81.2	69.3	57.5	63.5	64.8	75.0	92.8	99.1	99.5	99.4	99.5	99.5	99.5	57.5	85.5
14	99.8	99.9	99.9	99.9	99.9	100.0	100.0	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0
15	100.0	99.9	99.0	97.9	97.5	97.5	96.7	96.1	96.4	95.5	95.5	95.9	95.9	95.9	96.0	96.2	96.2	95.9	95.9	95.5	95.5	94.6	94.2	94.4	100.0	94.2	96.4
16	94.6	95.0	95.0	95.1	95.0	95.1	95.0	94.9	94.6	94.8	94.7	94.7	95.1	95.0	95.2	95.5	95.2	94.4	94.2	93.8	94.0	94.1	94.1	93.7	95.5	93.7	94.7
17	92.0	93.1	93.3	94.6	96.5	96.2	94.2	94.1	93.8	94.2	94.1	94.7	95.2	96.3	96.2	91.1	77.4	83.8	90.2	91.2	90.8	91.7	91.8	93.3	96.5	77.4	92.5
18	91.7	88.6	86.7	87.4	85.6	85.4	85.0	82.9	81.9	79.7	78.0	76.8	72.0	68.6	67.6	66.1	67.5	69.0	66.8	64.5	63.1	62.0	66.9	67.5	91.7	62.0	75.5
19	72.2	74.2	75.5	73.1	73.2	75.8	75.3	77.9	82.7	81.8	82.9	84.2	83.2	82.1	78.0	81.3	81.5	76.7	79.4	80.7	79.9	79.7	79.8	79.4	84.2	72.2	78.8
20	83.5	93.7	97.2	97.3	97.6	98.4	96.9	96.6	96.1	95.5	95.4	94.3	94.1	93.6	91.7	88.9	87.8	87.8	86.1	85.8	85.8	85.0	84.7	83.8	98.4	83.5	91.6
21	82.9	82.5	81.4	82.4	83.8	85.5	86.7	89.5	87.4	86.1	87.4	89.4	90.2	87.9	88.6	83.2	82.1	84.1	85.2	85.8	91.1	93.3	92.6	92.1	93.3	81.4	86.7
22	91.8	91.9	91.8	91.5	91.1	90.9	90.7	90.7	90.5	90.4	90.1	90.3	90.6	90.2	84.0	83.5	81.3	83.5	84.1	83.6	85.3	85.7	84.1	80.6	91.9	80.6	87.8
23	77.5	76.9	75.4	77.0	78.0	75.9	76.4	76.8	77.4	77.1	75.6	78.5	78.5	77.9	75.9	79.5	86.9	88.2	89.2	88.6	79.2	76.3	86.9	87.7	89.2	75.4	79.9
24	90.0	90.0	92.7	92.0	88.4	90.2	86.8	85.6	86.1	87.3	84.5	81.2	80.1	75.2	74.6	70.3	64.6	64.1	69.8	65.8	75.9	76.2	75.2	73.5	92.7	64.1	80.0
25	73.5	71.8	73.6	78.3	92.0	96.2	96.0	96.1	95.9	96.3	96.8	97.1	97.3	97.1	90.7	88.2	87.0	84.1	87.0	85.4	85.8	86.0	87.4	85.3	97.3	71.8	88.5
26	81.4	81.3	84.4	86.5	90.1	93.3	95.8	95.5	95.4	95.3	94.8	94.0	93.4	93.2	93.0	91.8	89.3	88.3	90.4	91.0	91.6	91.1	90.2	89.7	95.8	81.3	90.9
27	89.0	88.4	88.8	88.3	87.4	86.2	86.6	85.9	86.6	84.3	83.2	82.6	83.0	82.4	80.2	78.0	79.2	79.3	79.9	78.9	80.8	82.2	80.9	70.5	89.0	70.5	83.0
28	65.8	73.2	84.2	87.6	86.3	81.1	82.6	82.5	81.5	80.2	77.0	79.8	82.6	83.0	81.4	78.5	78.6	79.9	86.5	88.1	85.8	85.1	69.6	71.0	88.1	65.8	80.5
29	51.5	35.6	31.7	29.8	27.8	26.6	26.6	28.0	29.8	35.3	35.6	42.0	46.6	44.4	52.0	53.8	56.4	66.4	74.8	80.1	77.8	78.2	84.7	88.3	88.3	26.6	50.2
30	88.8	89.7	89.5	88.4	91.3	93.2	93.3	93.9	93.5	93.8	91.8	86.5	92.1	97.9	97.2	94.2	92.2	92.5	92.6	95.7	96.6	98.0	99.3	98.9	99.3	86.5	93.4
31	98.9	99.1	98.4	99.0	100.0	99.7	98.1	96.8	95.8	94.4	94.0	93.5	92.0	89.9	94.9	96.2	94.4	95.6	92.1	88.9	87.5	82.3	84.7	85.3	100.0	82.3	93.8
Max.	**100.0**	**99.9**	**99.9**	**99.9**	**100.0**	**100.0**	**100.0**	**99.9**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**51.5**	**35.6**	**31.7**	**29.8**	**27.8**	**26.6**	**26.6**	**28.0**	**29.8**	**35.3**	**35.6**	**42.0**	**46.6**	**44.4**	**52.0**	**53.8**	**56.4**	64.1	66.8	**64.5**	**63.1**	**62.0**	**66.9**	**67.5**		**26.6**	
Avg.	**87.2**	**87.0**	**87.8**	**88.6**	**89.1**	**89.8**	**89.8**	**90.2**	**90.2**	**90.0**	**89.5**	**89.4**	**88.9**	**87.3**	**86.2**	**85.6**	**84.8**	**85.4**	**87.3**	**87.8**	**88.4**	**88.2**	**88.4**	**88.1**			**88.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	84.3	87.4	88.2	86.3	86.0	89.3	90.0	91.3	92.3	92.3	92.4	92.7	93.5	95.4	95.2	95.7	95.5	95.9	97.4	98.6	98.8	98.5	97.0	97.2	98.8	84.3	93.0
2	97.5	98.8	98.4	97.9	97.4	96.9	96.6	96.2	94.8	92.3	91.5	91.1	90.7	90.6	90.5	90.5	90.6	90.4	90.0	89.8	89.8	89.8	89.8	89.7	98.8	89.7	93.0
3	89.5	89.6	89.7	90.0	90.2	90.0	90.0	90.3	90.0	89.5	89.6	89.7	89.7	90.0	89.8	89.9	90.0	89.4	89.1	89.3	89.2	89.0	88.6	87.3	90.3	87.3	89.6
4	85.7	87.1	85.6	84.5	86.3	88.7	90.4	90.6	89.9	89.6	89.6	89.3	89.4	89.3	89.3	89.5	89.5	88.8	89.9	90.4	89.1	88.3	89.3	90.2	90.6	84.5	88.8
5	89.9	89.2	87.4	86.1	86.6	85.1	85.5	85.0	86.0	86.4	87.8	88.4	88.3	85.3	83.4	83.7	83.5	81.1	82.7	82.4	81.9	82.9	81.6	83.5	89.9	81.1	85.2
6	85.4	88.8	89.5	88.6	89.6	90.0	88.2	87.2	80.7	74.6	73.1	69.0	67.1	73.0	74.4	76.5	76.9	74.6	73.3	79.4	79.7	80.4	81.4	85.7	90.0	67.1	80.3
7	89.2	89.8	90.5	89.5	88.4	88.8	89.3	88.7	88.7	88.9	89.1	89.2	89.4	87.4	80.1	67.7	63.9	65.9	81.6	96.6	96.9	96.0	95.4	96.2	96.9	63.9	87.0
8	96.7	96.5	96.7	96.5	96.6	96.8	97.2	96.9	96.9	96.8	96.7	96.7	96.9	97.0	97.2	97.3	97.5	97.5	96.4	88.7	80.4	77.8	75.4	75.2	97.5	75.2	93.3
9	74.5	71.3	71.0	71.8	70.8	67.2	71.8	73.8	77.3	76.5	78.6	80.6	79.9	80.8	80.4	79.4	83.6	94.5	99.0	100.0	90.5	85.2	81.1	80.7	100.0	67.2	80.0
10	81.7	81.9	82.9	82.8	77.7	81.3	85.8	83.7	75.2	82.3	87.6	98.8	96.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	75.2	91.6
11	99.9	99.6	99.8	99.8	99.7	99.4	99.5	99.7	99.7	99.6	99.1	99.5	99.6	99.7	99.6	99.3	97.5	94.8	91.8	95.2	94.9	93.3	99.3	99.1	99.9	91.8	98.3
12	98.7	98.4	97.8	97.7	97.5	97.2	96.9	97.1	97.4	97.1	96.8	96.3	96.6	96.2	93.1	85.9	87.4	83.4	86.3	90.7	98.0	98.1	98.0	97.9	98.7	83.4	95.0
13	97.8	97.9	97.9	98.1	97.7	97.3	97.3	97.4	96.9	91.5	84.2	83.1	82.4	88.8	99.1	99.5	99.5	99.6	99.2	98.9	98.5	98.4	98.2	98.5	99.6	82.4	95.7
14	99.2	99.5	99.4	99.2	99.2	99.1	99.0	99.1	99.2	99.2	99.1	99.0	98.7	98.5	98.4	97.8	96.0	97.0	98.6	98.7	98.4	98.4	98.3	98.4	99.5	96.0	98.6
15	98.4	98.1	97.4	96.2	95.3	95.2	92.3	87.9	90.5	98.1	98.6	98.2	98.1	97.8	96.7	88.9	85.9	86.6	88.7	95.0	99.4	99.9	99.7	99.9	99.9	85.9	95.1
16	99.9	99.8	99.7	99.8	99.7	99.7	99.7	99.3	97.8	93.3	90.8	87.9	80.3	86.4	88.0	86.2	85.4	79.4	80.2	81.3	80.1	83.8	86.5	88.6	99.9	79.4	90.6
17	95.4	97.7	95.8	93.9	95.8	98.3	96.2	94.0	88.6	87.5	88.5	89.4	90.6	85.8	75.3	77.7	79.3	84.7	86.6	85.5	85.6	87.0	86.9	87.7	98.3	75.3	88.9
18	88.5	91.4	92.3	92.9	92.5	90.7	90.6	90.4	89.7	90.0	90.1	90.1	90.0	90.3	90.3	90.3	89.7	89.2	89.3	89.1	88.6	88.4	88.1	88.1	92.9	88.1	90.0
19	88.0	87.6	87.5	87.2	86.9	86.3	86.7	86.5	87.3	86.4	86.9	84.6	73.8	73.4	72.9	75.4	75.5	74.1	77.5	71.8	73.2	71.6	72.4	74.5	88.0	71.6	80.3
20	81.1	82.0	81.0	80.7	80.6	82.7	82.8	83.1	83.3	83.5	83.4	83.3	83.0	82.9	82.9	82.6	82.4	82.2	82.0	81.8	81.5	81.2	80.9	80.5	83.5	80.5	82.1
21	80.4	80.2	79.8	79.7	79.3	78.8	78.8	78.7	77.9	78.3	77.9	78.6	78.5	78.7	79.4	80.0	79.4	80.1	81.1	81.5	81.3	81.7	82.3	82.9	82.9	77.9	79.8
22	83.5	84.6	85.1	85.7	86.0	76.0	64.5	65.3	63.9	63.9	71.3	71.0	72.9	67.7	61.8	63.1	67.6	67.5	65.6	61.9	60.4	56.8	63.8	67.2	86.0	56.8	69.9
23	64.5	68.5	83.8	94.5	92.8	92.6	93.0	93.1	92.8	92.8	92.2	92.4	92.6	93.2	94.1	94.6	95.3	96.2	96.5	96.9	97.5	98.0	98.0	98.4	98.4	64.5	91.8
24	98.8	99.4	99.6	99.7	97.5	86.0	79.7	82.6	86.2	87.4	85.6	88.5	88.2	94.9	98.1	99.6	100.0	100.0	100.0	100.0	100.0	98.9	97.5	95.9	100.0	79.7	94.3
25	95.0	93.8	93.6	93.2	92.8	92.7	92.8	92.7	92.0	91.5	90.2	89.3	89.6	89.8	88.4	88.2	88.2	87.8	87.2	87.1	86.4	85.8	85.9	86.4	95.0	85.8	90.0
26	86.2	86.0	86.1	86.9	87.4	87.8	88.3	88.3	88.5	88.3	88.1	87.9	87.6	86.5	86.8	87.4	87.5	86.7	86.4	84.9	84.1	80.4	79.2	79.2	88.5	79.2	86.1
27	79.6	78.4	76.6	75.9	70.0	68.2	66.1	66.1	66.8	67.9	68.9	65.0	66.1	70.0	69.4	68.9	72.2	69.9	75.9	88.3	90.5	91.4	91.3	91.4	91.4	65.0	74.8
28	92.1	92.2	92.1	92.5	92.5	92.6	92.9	92.8	93.4	93.0	92.9	93.0	92.9	92.9	93.0	92.7	92.5	92.5	92.2	91.7	91.4	91.4	91.1	90.8	93.4	90.8	92.4
29	90.6	90.5	90.4	90.1	90.1	89.8	89.4	89.2	88.7	88.7	88.6	88.1	88.1	88.1	88.1	88.1	88.0	87.7	87.5	87.0	86.9	86.6	86.5	86.1	90.6	86.1	88.5
30	85.6	85.1	84.7	82.9	83.2	83.4	83.5	84.0	83.8	83.1	83.5	83.5	84.0	84.7	84.3	84.2	83.9	83.8	83.7	83.5	83.8	83.9	83.5	83.6	85.6	82.9	83.9
Max.	**99.9**	**99.8**	**99.8**	**99.8**	**99.7**	**99.7**	**99.7**	**99.7**	**99.7**	**99.6**	**99.1**	**99.5**	**99.6**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**64.5**	**68.5**	**71.0**	**71.8**	**70.0**	**67.2**	**64.5**	**65.3**	**63.9**	**63.9**	**68.9**	**65.0**	**66.1**	**67.7**	**61.8**	**63.1**	**63.9**	65.9	65.6	**61.9**	**60.4**	**56.8**	**63.8**	**67.2**		**56.8**	
Avg.	**89.3**	**89.7**	**90.0**	**90.0**	**89.5**	**88.9**	**88.5**	**88.4**	**87.9**	**87.7**	**87.8**	**87.8**	**87.2**	**87.8**	**87.3**	**86.7**	**86.8**	**86.7**	**87.9**	**88.9**	**88.6**	**88.1**	**88.2**	**88.7**			**88.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Relative Humidity (%)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	84.7	85.0	85.3	84.3	83.9	84.6	85.7	72.8	60.7	54.3	46.8	46.6	36.0	36.6	30.5	29.7	23.9	26.1	31.6	35.5	39.6	60.3	73.7	72.7	85.7	23.9	57.1
2	69.6	68.9	69.0	74.8	70.1	61.2	55.4	48.7	50.2	52.5	55.9	58.8	59.4	70.0	76.5	80.1	82.6	78.2	86.4	84.5	81.4	84.1	84.7	84.2	86.4	48.7	70.3
3	83.9	85.9	88.0	89.3	89.9	90.0	88.8	87.3	88.1	90.2	92.6	90.2	89.2	90.4	90.9	92.9	91.2	86.0	83.9	81.4	79.7	81.8	83.8	85.4	92.9	79.7	87.5
4	88.1	90.9	92.0	89.1	87.6	88.3	88.8	88.9	92.9	92.0	92.1	94.7	94.1	95.1	96.9	99.0	95.6	93.2	92.9	91.4	90.7	91.9	91.7	91.8	99.0	87.6	92.1
5	91.4	92.4	92.1	93.2	93.3	93.8	94.8	95.2	97.0	97.3	97.2	97.2	96.6	96.8	96.6	95.2	94.3	95.4	94.2	92.6	93.8	96.8	98.3	98.4	98.4	91.4	95.2
6	98.7	97.6	98.1	96.3	95.2	95.0	94.2	91.4	88.9	88.5	87.7	88.0	90.5	91.4	93.1	95.5	96.2	98.2	98.6	97.9	96.0	98.9	100.0	100.0	100.0	87.7	94.8
7	100.0	100.0	100.0	100.0	99.4	98.8	98.4	98.7	97.9	97.4	96.5	96.4	96.7	96.6	96.6	96.3	95.9	96.0	97.0	96.8	96.0	95.2	97.1	99.0	100.0	95.2	97.6
8	96.6	99.5	98.7	98.8	95.3	87.6	86.6	83.1	80.7	82.7	81.2	80.9	77.9	81.0	92.6	89.9	83.4	76.3	87.5	85.9	82.6	81.5	81.7	81.6	99.5	76.3	86.4
9	80.0	80.3	81.8	80.1	84.0	86.4	93.0	96.9	96.3	95.8	96.1	89.1	90.8	96.2	98.1	98.8	98.3	97.9	97.1	96.6	96.8	96.8	97.4	97.3	98.8	80.0	92.6
10	97.7	97.3	97.7	97.5	96.7	95.4	95.1	94.6	94.2	92.1	83.0	79.1	79.9	77.3	75.6	72.3	74.2	82.7	81.4	91.8	94.1	94.1	93.1	89.1	97.7	72.3	88.6
11	86.8	83.9	75.9	64.5	60.3	56.1	60.6	62.2	63.3	65.6	73.7	88.8	93.9	97.2	96.4	96.4	95.3	94.0	93.0	92.9	91.7	90.9	90.9	90.9	97.2	56.1	81.9
12	90.6	88.9	87.4	83.0	78.0	71.8	65.8	63.9	62.6	58.2	59.9	68.3	90.3	94.8	95.4	96.3	96.9	97.1	96.5	96.4	96.5	95.8	95.6	95.9	97.1	58.2	84.4
13	95.9	95.6	95.4	95.7	95.2	94.6	94.2	93.9	93.7	93.3	93.6	93.6	93.6	95.0	93.4	93.3	93.6	92.4	68.3	60.9	59.8	53.0	50.5	55.4	95.9	50.5	85.2
14	61.0	64.3	67.9	69.8	69.6	69.3	66.4	54.7	60.7	65.4	55.3	63.0	61.2	51.3	50.9	56.7	62.2	67.1	66.3	68.3	76.7	84.3	82.5	83.2	84.3	50.9	65.8
15	84.1	86.8	87.6	87.5	87.9	89.1	87.5	87.0	88.6	94.3	99.7	99.9	99.9	99.9	99.8	99.7	99.6	99.5	99.5	99.2	98.2	98.5	98.3	98.0	99.9	84.1	94.6
16	98.4	97.7	97.4	97.3	97.4	93.7	90.3	95.6	98.6	97.6	97.3	96.9	97.1	97.3	97.5	97.5	97.5	97.5	97.5	97.4	96.3	92.1	86.7	76.0	98.6	76.0	95.4
17	71.3	75.9	80.6	88.1	91.3	93.0	97.2	95.0	94.6	92.6	88.8	86.2	85.6	82.3	82.7	83.7	83.7	84.9	83.8	83.2	82.6	81.8	84.8	82.3	97.2	71.3	85.7
18	82.4	82.9	82.6	82.9	83.5	83.9	84.4	84.2	83.4	82.8	81.6	82.2	83.1	81.9	82.2	83.2	84.9	86.1	86.9	89.8	92.1	88.7	90.3	88.6	92.1	81.6	84.8
19	91.8	86.5	83.1	83.9	83.4	83.1	81.0	75.6	77.7	79.4	77.9	77.8	80.6	81.0	77.9	77.7	74.2	72.6	73.4	71.2	69.3	64.8	61.8	66.5	91.8	61.8	77.2
20	66.3	65.3	61.8	68.6	68.3	65.4	64.4	66.3	70.2	68.5	67.2	65.3	63.4	62.7	65.2	63.9	62.2	62.0	60.3	60.4	63.3	69.5	72.3	76.1	76.1	60.3	65.8
21	77.6	77.8	79.9	80.2	80.0	83.4	84.5	76.4	71.4	73.7	78.4	80.9	74.9	73.3	75.0	75.5	75.1	76.1	76.9	77.5	78.5	79.8	80.5	80.3	84.5	71.4	77.8
22	80.8	81.0	82.2	84.1	87.1	96.9	97.8	98.1	98.3	98.8	98.4	98.4	98.5	98.8	98.8	98.8	98.7	98.9	99.0	98.9	98.4	98.4	98.3	98.4	99.0	80.8	95.2
23	98.6	98.5	98.6	98.6	98.7	98.8	98.9	98.9	98.9	98.6	98.2	96.2	95.1	94.6	94.5	93.8	93.8	93.3	92.8	93.1	95.0	95.1	95.1	95.5	98.9	92.8	96.4
24	95.7	95.8	95.2	95.1	94.9	94.9	94.3	94.9	94.0	91.9	91.3	90.7	89.8	87.0	88.5	91.8	89.0	84.6	75.6	84.1	87.4	87.2	88.7	84.5	95.8	75.6	90.3
25	79.5	84.5	94.7	96.5	97.0	97.3	97.6	97.8	97.8	98.0	98.1	98.2	98.0	97.6	97.6	97.5	97.6	95.8	94.9	94.5	94.1	93.7	93.0	92.6	98.2	79.5	95.2
26	92.1	90.8	89.2	88.5	87.8	87.6	87.3	87.4	87.4	87.5	87.8	88.1	87.8	87.8	88.1	88.1	88.2	88.1	87.9	87.8	87.6	87.6	87.8	87.6	92.1	87.3	88.2
27	87.6	88.0	87.9	87.7	87.2	87.1	86.8	86.6	86.5	86.3	85.9	85.6	85.9	85.9	85.6	85.6	85.5	85.3	85.0	84.7	84.5	84.5	84.2	83.9	88.0	83.9	86.0
28	83.9	84.1	83.8	83.8	83.5	83.6	83.6	83.6	83.4	83.0	82.7	82.6	82.5	82.3	82.4	82.3	81.7	81.6	81.2	80.8	80.6	80.1	80.5	80.1	84.1	80.1	82.4
29	79.7	79.8	79.8	79.7	79.6	79.6	80.0	79.7	79.7	79.9	80.0	80.0	80.2	80.3	80.3	80.6	80.4	80.0	80.2	80.2	80.0	80.1	80.1	79.9	80.6	79.6	80.0
30	80.7	80.5	80.0	79.3	79.5	79.0	78.9	79.0	79.1	78.4	78.1	78.2	78.1	78.2	78.1	78.1	77.7	77.5	77.2	76.6	76.3	76.1	76.2	76.3	80.7	76.1	78.2
31	76.3	76.7	76.1	75.9	75.8	76.6	77.5	77.8	78.7	78.6	79.2	79.6	79.2	79.1	79.4	79.4	79.5	79.8	79.9	80.3	79.9	79.6	80.0	79.9	80.3	75.8	78.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**99.4**	**98.8**	**98.9**	**98.9**	**98.9**	**98.8**	**99.7**	**99.9**	**99.9**	**99.9**	**99.8**	**99.7**	**99.6**	**99.5**	**99.5**	**99.2**	**98.4**	**98.9**	**100.0**	**100.0**	**100.0**		
Min.	**61.0**	**64.3**	**61.8**	**64.5**	**60.3**	**56.1**	**55.4**	**48.7**	**50.2**	**52.5**	**46.8**	**46.6**	**36.0**	**36.6**	**30.5**	**29.7**	**23.9**	26.1	31.6	**35.5**	**39.6**	**53.0**	**50.5**	**55.4**		**23.9**	
Avg.	**85.5**	**85.9**	**86.1**	**86.3**	**85.8**	**85.4**	**85.2**	**83.8**	**83.7**	**83.7**	**83.3**	**83.9**	**84.2**	**84.5**	**85.1**	**85.5**	**84.9**	**84.7**	**84.1**	**84.3**	**84.5**	**85.3**	**85.8**	**85.5**			**84.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	0	7	34	59	61	54	33	6	0	0	0	0	0	0	61	0	11
2	0	0	0	0	0	0	0	0	0	0	0	10	53	104	123	101	51	6	0	0	0	0	0	0	123	0	19
3	0	0	0	0	0	0	0	0	0	0	0	5	25	50	52	34	20	4	0	0	0	0	0	0	52	0	8
4	0	0	0	0	0	0	0	0	0	0	0	9	33	51	62	53	28	5	0	0	0	0	0	0	62	0	10
5	0	0	0	0	0	0	0	0	0	0	0	7	23	32	53	58	27	5	0	0	0	0	0	0	58	0	8
6	0	0	0	0	0	0	0	0	0	0	0	7	19	31	37	37	14	4	0	0	0	0	0	0	37	0	6
7	0	0	0	0	0	0	0	0	0	0	0	4	18	33	50	35	26	4	0	0	0	0	0	0	50	0	7
8	0	0	0	0	0	0	0	0	0	0	0	6	21	36	48	44	27	8	0	0	0	0	0	0	48	0	8
9	0	0	0	0	0	0	0	0	0	0	0	6	21	32	32	28	15	5	0	0	0	0	0	0	32	0	6
10	0	0	0	0	0	0	0	0	0	0	0	7	18	25	27	24	17	5	0	0	0	0	0	0	27	0	5
11	0	0	0	0	0	0	0	0	0	0	0	4	19	26	28	25	17	5	0	0	0	0	0	0	28	0	5
12	0	0	0	0	0	0	0	0	0	0	0	5	12	28	33	29	20	6	0	0	0	0	0	0	33	0	5
13	0	0	0	0	0	0	0	0	0	0	0	6	17	23	25	23	17	5	0	0	0	0	0	0	25	0	5
14	0	0	0	0	0	0	0	0	0	0	0	3	14	28	42	43	22	5	0	0	0	0	0	0	43	0	6
15	0	0	0	0	0	0	0	0	0	0	0	9	27	53	63	62	36	10	0	0	0	0	0	0	63	0	11
16	0	0	0	0	0	0	0	0	0	0	1	11	31	118	100	79	42	14	0	0	0	0	0	0	118	0	16
17	0	0	0	0	0	0	0	0	0	0	0	6	29	56	52	53	38	6	0	0	0	0	0	0	56	0	10
18	0	0	0	0	0	0	0	0	0	0	1	10	63	114	86	54	34	13	0	0	0	0	0	0	114	0	16
19	0	0	0	0	0	0	0	0	0	0	1	7	24	40	42	41	32	11	0	0	0	0	0	0	42	0	8
20	0	0	0	0	0	0	0	0	0	0	0	11	27	54	51	49	39	12	1	0	0	0	0	0	54	0	10
21	0	0	0	0	0	0	0	0	0	0	2	31	62	72	83	57	29	8	1	0	0	0	0	0	83	0	14
22	0	0	0	0	0	0	0	0	0	0	1	23	57	69	108	96	96	16	1	0	0	0	0	0	108	0	19
23	0	0	0	0	0	0	0	0	0	0	2	28	99	161	181	168	78	20	1	0	0	0	0	0	181	0	31
24	0	0	0	0	0	0	0	0	0	0	1	11	30	56	77	69	46	16	1	0	0	0	0	0	77	0	13
25	0	0	0	0	0	0	0	0	0	0	2	31	80	166	205	221	192	56	3	0	0	0	0	0	221	0	40
26	0	0	0	0	0	0	0	0	0	0	3	46	125	184	123	101	82	29	2	0	0	0	0	0	184	0	29
27	0	0	0	0	0	0	0	0	0	0	1	18	42	59	83	101	47	22	3	0	0	0	0	0	101	0	16
28	0	0	0	0	0	0	0	0	0	0	2	25	62	87	106	119	76	27	3	0	0	0	0	0	119	0	21
29	0	0	0	0	0	0	0	0	0	0	2	18	48	104	180	216	221	111	3	0	0	0	0	0	221	0	38
30	0	0	0	0	0	0	0	0	0	0	3	19	46	49	78	62	31	12	1	0	0	0	0	0	78	0	13
31	0	0	0	0	0	0	0	0	0	0	3	20	30	75	62	48	27	16	2	0	0	0	0	0	75	0	12
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**46**	**125**	**184**	**205**	**221**	**221**	**111**	**3**	**0**	**0**	**0**	**0**	**0**	**221**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**12**	**23**	**25**	**23**	**14**	**4**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**13**	**39**	**67**	**76**	**71**	**48**	**15**	**1**	**0**	**0**	**0**	**0**	**0**			**14**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	1	8	21	30	34	33	24	12	2	0	0	0	0	0	34	0	7
2	0	0	0	0	0	0	0	0	0	0	3	20	30	42	52	57	53	35	3	0	0	0	0	0	57	0	12
3	0	0	0	0	0	0	0	0	0	0	2	36	66	69	67	59	44	22	3	0	0	0	0	0	69	0	15
4	0	0	0	0	0	0	0	0	0	0	11	51	65	69	68	63	83	97	13	0	0	0	0	0	97	0	22
5	0	0	0	0	0	0	0	0	0	0	11	90	184	231	248	234	187	104	14	0	0	0	0	0	248	0	54
6	0	0	0	0	0	0	0	0	0	0	11	79	174	231	255	242	195	111	16	0	0	0	0	0	255	0	55
7	0	0	0	0	0	0	0	0	0	0	12	83	178	235	259	246	199	116	18	0	0	0	0	0	259	0	56
8	0	0	0	0	0	0	0	0	0	0	10	89	156	226	249	202	115	70	16	0	0	0	0	0	249	0	47
9	0	0	0	0	0	0	0	0	0	0	12	53	136	176	189	191	126	53	27	1	0	0	0	0	191	0	40
10	0	0	0	0	0	0	0	0	0	0	17	101	192	247	270	251	105	64	16	1	0	0	0	0	270	0	53
11	0	0	0	0	0	0	0	0	0	0	13	57	105	157	164	173	121	73	21	1	0	0	0	0	173	0	37
12	0	0	0	0	0	0	0	0	0	0	31	105	165	203	214	197	152	110	29	1	0	0	0	0	214	0	50
13	0	0	0	0	0	0	0	0	0	0	12	55	87	97	115	110	100	71	35	1	0	0	0	0	115	0	28
14	0	0	0	0	0	0	0	0	0	1	21	70	140	197	191	150	133	69	26	1	0	0	0	0	197	0	42
15	0	0	0	0	0	0	0	0	0	1	38	143	222	281	306	294	243	154	46	2	0	0	0	0	306	0	72
16	0	0	0	0	0	0	0	0	0	0	19	72	97	123	139	186	182	118	54	2	0	0	0	0	186	0	41
17	0	0	0	0	0	0	0	0	0	1	15	51	92	108	123	109	94	48	23	1	0	0	0	0	123	0	28
18	0	0	0	0	0	0	0	0	0	1	47	111	162	196	187	137	113	100	49	9	0	0	0	0	196	0	46
19	0	0	0	0	0	0	0	0	0	1	21	70	137	189	172	169	143	93	28	2	0	0	0	0	189	0	43
20	0	0	0	0	0	0	0	0	0	1	23	87	150	159	197	180	134	79	33	3	0	0	0	0	197	0	44
21	0	0	0	0	0	0	0	0	0	3	36	86	122	165	179	207	160	88	32	4	0	0	0	0	207	0	45
22	0	0	0	0	0	0	0	0	0	3	37	107	171	161	247	287	172	103	34	4	0	0	0	0	287	0	55
23	0	0	0	0	0	0	0	0	0	5	62	157	244	286	352	334	283	199	94	9	0	0	0	0	352	0	84
24	0	0	0	0	0	0	0	0	0	6	71	147	199	237	274	295	280	221	115	10	0	0	0	0	295	0	77
25	0	0	0	0	0	0	0	0	0	4	44	88	207	220	102	154	137	103	45	7	0	0	0	0	220	0	46
26	0	0	0	0	0	0	0	0	0	4	37	99	159	199	208	227	218	140	70	14	0	0	0	0	227	0	57
27	0	0	0	0	0	0	0	0	0	6	90	198	293	270	375	281	188	140	59	10	0	0	0	0	375	0	79
28	0	0	0	0	0	0	0	0	0	5	35	119	179	170	263	198	230	180	113	23	0	0	0	0	263	0	63
29	0	0	0	0	0	0	0	0	0	12	101	215	305	365	392	413	373	349	170	41	0	0	0	0	413	0	114
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**101**	**215**	**305**	**365**	**392**	**413**	**373**	**349**	**170**	**41**	**0**	**0**	**0**	**0**	**413**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**21**	**30**	**34**	**33**	**24**	**12**	**2**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**29**	**91**	**153**	**184**	**203**	**196**	**158**	**108**	**42**	**5**	**0**	**0**	**0**	**0**			**49**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	14	104	154	225	253	274	193	202	132	58	13	0	0	0	0	274	0	68
2	0	0	0	0	0	0	0	0	0	15	59	106	164	235	329	362	194	161	89	24	0	0	0	0	362	0	72
3	0	0	0	0	0	0	0	0	0	10	51	91	128	168	208	230	145	95	50	17	1	0	0	0	230	0	50
4	0	0	0	0	0	0	0	0	0	13	40	95	154	182	214	245	193	131	75	16	0	0	0	0	245	0	56
5	0	0	0	0	0	0	0	0	0	11	63	90	139	203	306	315	199	140	69	22	0	0	0	0	315	0	65
6	0	0	0	0	0	0	0	0	1	20	183	202	397	404	386	295	397	231	105	29	1	0	0	0	404	0	110
7	0	0	0	0	0	0	0	0	0	24	71	167	262	317	276	305	267	207	227	53	1	0	0	0	317	0	91
8	0	0	0	0	0	0	0	0	1	22	164	219	313	285	261	212	183	127	66	22	1	0	0	0	313	0	78
9	0	0	0	0	0	0	0	0	1	20	78	122	172	226	284	243	273	207	49	17	1	0	0	0	284	0	70
10	0	0	0	0	0	0	0	0	1	42	101	204	258	290	335	352	254	152	94	25	1	0	0	0	352	0	88
11	0	0	0	0	0	0	0	0	2	41	119	201	255	328	360	327	324	247	187	94	3	0	0	0	360	0	104
12	0	0	0	0	0	0	0	0	2	31	100	172	232	294	322	317	271	195	117	35	3	0	0	0	322	0	87
13	0	0	0	0	0	0	0	0	2	32	87	149	198	229	283	288	269	199	118	37	3	0	0	0	288	0	79
14	0	0	0	0	0	0	0	0	4	49	106	188	346	475	450	318	299	180	129	35	2	0	0	0	475	0	108
15	0	0	0	0	0	0	0	0	3	37	107	215	211	310	278	279	275	168	108	46	4	0	0	0	310	0	85
16	0	0	0	0	0	0	0	0	7	92	164	239	351	474	492	499	400	257	201	97	7	0	0	0	499	0	137
17	0	0	0	0	0	0	0	0	7	56	146	276	356	379	398	339	329	230	131	58	8	0	0	0	398	0	113
18	0	0	0	0	0	0	0	0	6	72	180	292	403	478	532	381	222	220	182	59	8	0	0	0	532	0	126
19	0	0	0	0	0	0	0	0	9	64	161	309	420	499	521	463	405	413	229	104	12	0	0	0	521	0	150
20	0	0	0	0	0	0	0	0	12	59	168	322	411	481	474	403	378	344	140	56	8	0	0	0	481	0	136
21	0	0	0	0	0	0	0	0	9	48	159	279	364	521	529	515	436	287	155	139	14	0	0	0	529	0	144
22	0	0	0	0	0	0	0	0	10	100	301	283	323	395	506	450	491	334	322	174	25	0	0	0	506	0	155
23	0	0	0	0	0	0	0	0	35	134	284	386	473	534	555	545	485	388	283	189	27	0	0	0	555	0	180
24	0	0	0	0	0	0	0	0	16	65	243	349	415	481	525	542	365	349	246	85	18	0	0	0	542	0	154
25	0	0	0	0	0	0	0	0	17	84	236	357	492	552	567	551	475	392	276	145	28	0	0	0	567	0	174
26	0	0	0	0	0	0	0	0	30	145	277	407	492	551	577	566	498	406	283	175	16	0	0	0	577	0	184
27	0	0	0	0	0	0	0	1	29	105	206	308	416	484	500	528	445	361	287	147	34	0	0	0	528	0	160
28	0	0	0	0	0	0	0	1	40	161	296	407	513	574	593	565	506	374	223	109	27	0	0	0	593	0	183
29	0	0	0	0	0	0	0	1	29	112	219	368	460	371	390	416	379	235	159	72	18	0	0	0	460	0	135
30	0	0	0	0	0	0	0	1	26	83	171	240	377	307	323	297	241	178	130	67	29	0	0	0	377	0	103
31	0	0	0	0	0	0	0	1	21	76	162	254	310	317	298	211	166	133	110	69	17	1	0	0	317	0	89
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**40**	**161**	**301**	**407**	**513**	**574**	**593**	**566**	**506**	**413**	**322**	**189**	**34**	**1**	**0**	**0**	**593**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**40**	**90**	**128**	**168**	**208**	**193**	**145**	**95**	**49**	**13**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**59**	**155**	**240**	**324**	**374**	**398**	**373**	**322**	**241**	**158**	**72**	**10**	**0**	**0**	**0**			**114**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	2	32	75	154	224	276	352	351	299	279	248	212	92	33	2	0	0	352	0	110
2	0	0	0	0	0	0	0	3	47	139	243	280	421	458	430	430	380	247	176	116	32	1	0	0	458	0	142
3	0	0	0	0	0	0	0	2	46	105	179	279	346	464	603	596	580	581	207	127	50	1	0	0	603	0	174
4	0	0	0	0	0	0	0	3	27	107	207	340	384	381	455	577	551	304	249	145	36	4	0	0	577	0	157
5	0	0	0	0	0	0	0	6	86	216	345	470	566	625	649	624	554	450	298	197	72	4	0	0	649	0	215
6	0	0	0	0	0	0	0	9	102	239	363	482	577	638	658	635	568	474	351	215	77	5	0	0	658	0	225
7	0	0	0	0	0	0	0	10	95	231	364	487	585	638	658	628	565	469	342	193	60	4	0	0	658	0	222
8	0	0	0	0	0	0	0	10	102	229	362	485	580	634	675	697	510	353	232	180	83	5	0	0	697	0	214
9	0	0	0	0	0	0	0	13	86	201	322	434	539	644	673	645	580	495	358	216	87	7	0	0	673	0	221
10	0	0	0	0	0	0	0	16	247		385	504	598	656	675	654	589	498	375	237	98	9	0	0	675	0	241
11	0	0	0	0	0	0	0	18	117	253	386	508	602	657	678	654	587	493	370	224	87	7	0	0	678	0	235
12	0	0	0	0	0	0	0	19	107	246	380	501	599	662	680	653	587	491	350	207	59	8	0	0	680	0	231
13	0	0	0	0	0	0	0	17	69	135	227	305	342	385	461	484	347	306	169	85	37	5	0	0	484	0	141
14	0	0	0	0	0	0	0	14	68	148	311	500	624	617	744	620	466	573	363	162	55	7	0	0	744	0	220
15	0	0	0	0	0	0	0	19	75	152	230	301	416	628	618	458	449	479	397	254	115	16	0	0	628	0	192
16	0	0	0	0	0	0	1	25	120	263	398	517	618	666	682	641	511	519	344	206	83	9	0	0	682	0	233
17	0	0	0	0	0	0	1	30	111	222	369	519	595	574	550	538	552	441	351	203	88	12	0	0	595	0	215
18	0	0	0	0	0	0	1	32	119	242	386	499	618	668	694	678	630	473	275	249	107	22	0	0	694	0	237
19	0	0	0	0	0	0	2	43	154	298	475	596	677	732	711	653	580	476	315	182	80	19	0	0	732	0	250
20	0	0	0	0	0	0	2	43	128	194	251	297	312	341	378	432	608	416	253	131	55	11	0	0	608	0	160
21	0	0	0	0	0	0	1	22	75	143	268	365	467	416	438	471	328	272	221	153	73	16	0	0	471	0	155
22	0	0	0	0	0	0	5	65	193	318	446	565	655	710	725	700	633	541	420	283	148	31	1	0	725	0	268
23	0	0	0	0	0	0	4	60	187	322	457	573	662	714	727	703	638	546	424	286	144	32	1	0	727	0	270
24	0	0	0	0	0	0	6	52	118	187	322	461	424	505	519	431	298	187	159	129	64	13	1	0	519	0	161
25	0	0	0	0	0	0	4	55	212	340	469	585	680	732	744	718	654	530	409	176	86	19	1	0	744	0	267
26	0	0	0	0	0	0	5	46	118	201	292	409	449	473	508	455	415	415	307	196	100	23	1	0	508	0	184
27	0	0	0	0	0	0	6	61	134	242	325	456	538	609	514	509	508	351	379	203	112	27	2	0	609	0	207
28	0	0	0	0	0	0	11	100	153	247	344	460	453	514	646	627	455	578	386	238	139	43	2	0	646	0	225
29	0	0	0	0	0	0	7	34	113	232	321	437	523	612	667	648	679	559	430	292	157	46	3	0	679	0	240
30	0	0	0	0	0	0	11	74	195	341	490	504	605	661	668	613	435	345	246	173	82	29	2	0	668	0	228
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**100**	**247**	**341**	**490**	**596**	**680**	**732**	**744**	**718**	**679**	**581**	**430**	**292**	**157**	**46**	**3**	**0**	**744**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**27**	**75**	**154**	**224**	**276**	**341**	**351**	**299**	**279**	**187**	**159**	**85**	**32**	**1**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**30**	**114**	**216**	**336**	**445**	**524**	**579**	**606**	**582**	**517**	**437**	**312**	**192**	**83**	**15**	**1**	**0**			**208**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	14	95	215	358	492	610	667	692	684	645	578	493	414	190	128	34	2	0	692	0	263
2	0	0	0	0	0	0	13	79	238	311	369	407	589	533	768	629	541	506	256	129	46	13	2	0	768	0	226
3	0	0	0	0	0	0	7	47	100	193	340	505	724	726	461	340	339	388	237	118	56	18	2	0	726	0	192
4	0	0	0	0	0	0	9	33	72	131	195	277	397	495	538	582	565	539	355	189	106	50	5	0	582	0	189
5	0	0	0	0	0	0	16	73	125	184	308	430	582	703	741	689	585	529	333	208	114	43	4	0	741	0	236
6	0	0	0	0	0	1	12	41	122	121	307	510	380	573	524	635	633	577	468	330	198	81	7	0	635	0	230
7	0	0	0	0	0	0	11	59	147	465	535	575	467	488	526	543	408	440	377	156	90	33	4	0	575	0	222
8	0	0	0	0	0	1	11	82	136	155	270	530	363	392	416	401	375	406	306	202	105	34	4	0	530	0	175
9	0	0	0	0	0	1	12	60	137	358	342	408	421	468	537	504	380	261	220	138	101	36	4	0	537	0	183
10	0	0	0	0	0	1	23	60	111	253	361	494	590	650	698	711	613	496	362	185	97	44	5	0	711	0	240
11	0	0	0	0	0	2	23	67	135	256	419	355	323	266	203	215	165	129	149	101	81	39	7	0	419	0	122
12	0	0	0	0	0	1	21	101	222	254	462	585	806	513	541	387	282	313	275	163	95	48	9	0	806	0	212
13	0	0	0	0	0	1	12	53	68	124	326	499	670	570	631	371	379	303	303	212	141	82	8	1	670	0	198
14	0	0	0	0	0	2	18	57	83	121	166	236	471	470	573	483	530	465	383	339	152	34	6	1	573	0	191
15	0	0	0	0	0	3	24	83	184	327	455	544	447	515	607	764	557	300	213	146	67	45	12	0	764	0	221
16	0	0	0	0	0	1	10	35	99	115	262	449		599	762	744	681	615	498	369	236	112	20	1	762	0	244
17	0	0	0	0	0	4	49	157	282	416	540	651	744	798	784	786	716	610	488	306	213	103	15	1	798	0	319
18	0	0	0	0	0	3	31	104	145	197	166	260	328	280	252	433	288	291	376	244	111	44	7	0	433	0	148
19	0	0	0	0	0	2	15	62	141	223	338	521	691	731	620	634	625	492	410	316	115	129	27	2	731	0	254
20	0	0	0	0	0	5	55	168	293	427	555	663	748	818	824	775	690	593	457	357	244	119	31	2	824	0	326
21	0	0	0	0	0	8	67	152	263	425	539	659	738	795	801	773	726	600	459	382	256	123	40	2	801	0	325
22	0	0	0	0	0	5	40	101	293	292	441	657	722	773	744	765	538	385	289	161	96	37	8	1	773	0	264
23	0	0	0	0	0	2	13	61	123	242	629	261	257	168	112	95	70	60	42	53	76	116	49	3	629	0	101
24	0	0	0	0	0	3	19	55	97	212	96	177	306	297	391	394	318	389	174	153	126	36	13	1	394	0	136
25	0	0	0	0	0	3	13	25	54	143	270	269	407	293	299	560	632	487	309	264	176	84	28	3	632	0	180
26	0	0	0	0	0	4	30	65	122	236	473	354	533	556	812	417	618	584	463	251	213	63	30	4	812	0	243
27	0	0	0	0	0	11	65	170	294	423	551	658	740	789	800	745	647	557	461	347	215	103	33	3	800	0	317
28	0	0	0	0	0	13	61	122	280	407	522	669	684	620	637	698	508	478	278	189	135	77	23	3	698	0	267
29	0	0	0	0	0	17	53	133	189	278	283	362	388	396	443	567	636	466	447	378	256	151	55	6	636	0	229
30	0	0	0	0	1	12	43	150	226	369	472	620	747	508	762	599	693	410	345	369	146	49	17	2	762	0	272
31	0	0	0	0	0	4	36	80	109	178	223	324	392	506	574	569	475	449	367	293	104	66	34	3	574	0	199
Max.	**0**	**0**	**0**	**0**	**1**	**17**	**67**	**170**	**294**	**465**	**629**	**669**	**806**	**818**	**824**	**786**	**726**	**615**	**498**	**382**	**256**	**151**	**55**	**6**	**824**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**25**	**54**	**115**	**96**	**177**	**257**	**168**	**112**	**95**	**70**	**60**	**42**	**53**	**46**	**13**	**2**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**4**	**27**	**85**	**165**	**264**	**378**	**468**	**544**	**548**	**583**	**563**	**509**	**439**	**339**	**233**	**139**	**66**	**16**	**1**			**223**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	4	20	28	48	113	298	533	703	597	610	421	283	165	185	124	102	49	38	3	703	0	180
2	0	0	0	0	0	3	40	106	130	223	252	287	362	421	453		435	311	201	160	95	79	21	4	453	0	156
3	0	0	0	0	0	8	38	63	137	232	502	364	419	634	488	526	501	743	424	377	97	101	24	3	743	0	237
4	0	0	0	0	0	4	21	123	280	195	285	320	385	546	857	419	636	493	580	455	291	151	51	6	857	0	254
5	0	0	0	0	1	7	37	27	56	93	198	191	219	321	359	303	396	272	184	192	135	77	38	3	396	0	130
6	0	0	0	0	1	4	17	36	95	181	359	435	697	703	689	809	548	669	564	327	193	173	81	6	809	0	274
7	0	0	0	0	1	13	106	201	327	475	342	300	292	408	550	430	502	429	393	388	306	126	34	5	550	0	235
8	0	0	0	0	1	15	69	201	196	276	382	514	307	336	401	292	165	145	96	119	151	177	34	6	514	0	162
9	0	0	0	0	0	3	15	54	80	116	267	215	285	317	348	675	347	298	165	178	142	99	39	5	675	0	152
10	0	0	0	0	1	9	39	72	82	111	166	194	256	300	407	432	326	228	196	93	67	44	12	2	432	0	126
11	0	0	0	0	0	7	40	80	155	151	222	115	114	175	178	290	363	344	240	166	89	58	32	7	363	0	118
12	0	0	0	0	1	9	55	98	138	229	351	248	238	179	207	171	146	121	123	60	46	25	16	3	351	0	102
13	0	0	0	0	0	3	19	48	86	98	161	264	495	297	295	474	385	308	398	336	292	157	22	5	495	0	173
14	1	0	0	0	1	21	100	81	203	391	480	643	751	803	846	751	731	614	498	43	62	93	30	12	846	0	298
15	1	0	0	0	2	14	62	162	228	365	360	476	556	717	781	710	709	471	232	111	54	37	12	2	781	0	252
16	0	0	0	0	0	4	23	54	107	206	313	365	364	287	336	187	217	247	198	207	352	80	35	9	365	0	150
17	0	0	0	0	1	11	44	169	303	295	122	496	389	796	831	798	728	652	546	422	296	177	75	12	831	0	298
18	1	0	0	0	1	12	59	173	330	523	411	312	651	762	822	790	703	545	309	373	281	182	64	8	822	0	305
19	1	0	0	0	1	11	37	174	312	434	372	230	283	465	563	703	722	642	541	425	301	104	24	4	722	0	265
20	0	0	0	0	1	10	60	198	282	404	455	677	721	803	700	794	727	650	546	426	300	182	84	17	803	0	335
21	1	0	0	0	1	15	86	122	180	240	363	296	262	249	360	439	343	421	593	451	312	146	65	10	593	0	206
22	1	0	0	0	1	17	93	151	310	271	464	485	587	676	547	302	264	411	315	171	65	36	14	3	676	0	216
23	0	0	0	0	1	9	39	101	234	200	220	371	508	580	745	799	728	626	538	429	303	186	81	12	799	0	280
24	1	0	0	0	1	15	105	206	323	432	488	625	302	220	197	148	180	76	76	59	30	18	7	2	625	0	146
25	0	0	0	0	3	19	73	155	193	365	492	711	810	841	759	698	500	511	277	150	113	70	42	17	841	0	283
26	1	0	0	0	0	8	21	59	116	176	207	310	352	252	423	290	193	206	209	126	109	79	22	4	423	0	132
27	0	0	0	0	1	8	33	69	110	192	205	334	575	554	453	546	448	637	606	379	146	97	27	5	637	0	226
28	1	0	0	0	1	7	26	129	239	320	375	421	207	482	577	373	151	262	252	171	96	65	34	6	577	0	175
29	0	0	0	0	0	3	12	30	96	194	182	172	294	271	332	459	377	444	378	291	142	68	39	6	459	0	158
30	0	0	0	0	1	5	29	125	206	254	271	360	275	280	383	535	178	456	642	296	101	153	60	10	642	0	193
Max.	**1**	**0**	**0**	**0**	**3**	**21**	**106**	**206**	**330**	**523**	**502**	**711**	**810**	**841**	**857**	**809**	**731**	**743**	**642**	**455**	**352**	**186**	**84**	**17**	**857**		
Min.	**0**	**0**	**0**	**0**	**0**	**3**	**12**	**27**	**48**	**93**	**122**	**115**	**114**	**175**	**178**	**148**	**146**	**76**	**76**	**43**	**30**	**18**	**7**	**2**		**0**	
Avg.	**0**	**0**	**0**	**0**	**1**	**9**	**47**	**110**	**186**	**258**	**319**	**375**	**422**	**476**	**517**	**502**	**431**	**413**	**350**	**250**	**169**	**103**	**38**	**7**			**207**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1	0	0	0	1	10	76	176	294	440	532	518	737	786	796	696	628	633	308	382	188	100	38	6	796	0	306
2	0	0	0	0	0	6	35	95	112	157	406	381	615	526	323	459	552	621	245	134	178	76	25	4	621	0	206
3	0	0	0	0	0	3	20	49	59	70	106	111	114	116	285	278	111	302	251	153	75	21	9	2	302	0	89
4	0	0	0	0	0	2	5	47	94	147	201	345	561	408	264	285	297	256	107	77	81	87	31	4	561	0	137
5	0	0	0	0	0	9	33	76	164	232	389	505	592	334	222	305	240	220	194	233	60	30	5	1	592	0	160
6	0	0	0	0	1	8	37	87	171	409	537	608	733	544	335	363	379	357	298	175	116	64	20	7	733	0	219
7	0	0	0	0	0	4	16	25	38	99	118	186	215	298	188	198	210	358	391	236	114	51	16	3	391	0	115
8	0	0	0	0	0	1	8	21	32	54	57	77	83	144	190	139	114	113	65	44	30	16	5	1	190	0	50
9	0	0	0	0	0	5	46	119	220	374	508	524	649	793	794	786	708	646	499	368	156	48	26	4	794	0	303
10	0	0	0	0	0	1	11	26	50	107	193	217	286	504	427	306	299	543	337	142	77	64	19	2	543	0	150
11	0	0	0	0	0	2	6	17	112	391	347	382	559	599	617	709	681	651	526	401	278	166	53	5	709	0	271
12	0	0	0	0	1	11	70	168	243	322	355	241	259	338	324	260	253	164	78	37	21	12	4	2	355	0	132
13	0	0	0	0	0	1	5	15	33	41	76	115	135	154	184	221	210	212	222	148	114	46	15	2	222	0	81
14	0	0	0	0	0	2	16	52	81	139	267	299	334	439	494	433	230	180	192	238	146	134	12	2	494	0	154
15	0	0	0	0	0	6	38	97	159	200	244	372	497	588	677	704	376	267	230	81	37	10	9	1	704	0	191
16	0	0	0	0	0	1	10	27	45	33	66	66	153	184	252	130	60	57	67	41	32	20	4	1	252	0	52
17	0	0	0	0	0	2	8	31	35	112	122	164	143	212	179	200	176	217	141	99	51	41	15	1	217	0	81
18	0	0	0	0	0	2	25	61	104	83	126	123	166	308	279	246	289	171	176	122	96	50	13	1	308	0	102
19	0	0	0	0	0	1	10	48	107	207	224	521	314	344	432	298	470	269	209	114	83	61	20	2	521	0	156
20	0	0	0	0	0	1	13	59	77	96	101	170	181	190	211	216	218	130	80	47	29	13	7	0	218	0	77
21	0	0	0	0	0	0	5	17	42	87	200	241	318	316	318	335	321	491	178	163	179	150	20	2	491	0	141
22	0	0	0	0	0	1	20	43	82	143	147	122	109	99	195	193	162	133	100	97	60	31	10	1	195	0	73
23	0	0	0	0	0	2	13	33	93	156	328	455	563	349	338	356	466	292	186	123	70	12	4	0	563	0	160
24	0	0	0	0	0	1	4	16	43	84	155	202	359	507	414	533	601	357	175	137	81	40	45	3	601	0	156
25	0	0	0	0	0	2	34	131	245	376	498	603	685	737	733	729	642	341	388	392	132	95	34	1	737	0	283
26	0	0	0	0	0	1	36	65	110	117	148	159	199	166	196	198	126	182	258	320	220	82	14	1	320	0	108
27	0	0	0	0	0	0	5	25	34	50	82	110	168	212	153	182	247	259	206	286	130	84	11	1	286	0	94
28	0	0	0	0	0	1	8	51	158	293	383	441	245	573	612	545	511	555	407	165	93	33	20	1	612	0	212
29	0	0	0	0	0	1	16	97	244	375	496	590	724	837	792	712	606	454	251	222	140	61	13	0	837	0	276
30	0	0	0	0	0	0	5	33	157	333	403	466	649	704	724	711	635	557	415	226	185	95	19	1	724	0	263
31	0	0	0	0	0	1	17	98	218	343	466	579	682	710	754	677	599	549	483	354	236	102	21	1	754	0	287
Max.	**1**	**0**	**0**	**0**	**1**	**11**	**76**	**176**	**294**	**440**	**537**	**608**	**737**	**837**	**796**	**786**	**708**	**651**	**526**	**401**	**278**	**166**	**53**	**7**	**837**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**15**	**32**	**33**	**57**	**66**	**83**	**99**	**153**	**130**	**60**	**57**	**65**	**37**	**21**	**10**	**4**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**21**	**62**	**118**	**196**	**267**	**319**	**388**	**420**	**410**	**400**	**368**	**340**	**247**	**186**	**112**	**61**	**18**	**2**			**164**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	1	24	121	215	268	332	414	554	719	737	716	627	592	481	383	254	99	11	1	737	0	273
2	0	0	0	0	0	0	2	19	37	82	93	141	182	237	308	300	259	285	190	160	37	21	9	0	308	0	99
3	0	0	0	0	0	1	22	104	222	355	477	584	564	416	705	714	612	523	471	333	149	84	8	0	714	0	264
4	0	0	0	0	0	0	8	57	81	169	296	225	247	382	379	302	418	558	465	339	210	59	9	0	558	0	175
5	0	0	0	0	0	0	8	36	87	205	474	555	392	658	682	707	614	570	424	340	207	97	13	0	707	0	253
6	0	0	0	0	0	0	18	104	231	350	476	583	664	633	651	609	569	347	167	133	110	42	8	0	664	0	237
7	0	0	0	0	0	0	12	64	192	322	457	568	663	677	611	425	412	576	414	369	190	54	10	0	677	0	251
8	0	0	0	0	0	0	10	89	210	335	458	568	655	708	725	707	652	572	395	238	207	83	9	0	725	0	276
9	0	0	0	0	0	0	9	84	205	329	452	560	642	695	708	688	722	358	386	266	194	62	4	0	722	0	265
10	0	0	0	0	0	0	10	80	179	345	370	454	589	428	476	352	567	352	228	231	196	55	3	0	589	0	205
11	0	0	0	0	0	0	9	69	204	204	187	212	287	344	403	472	535	380	328	242	104	38	3	0	535	0	168
12	0	0	0	0	0	0	3	32	170	328	345	390	441	686	518	459	377	239	180	64	66	33	2	0	686	0	181
13	0	0	0	0	0	0	2	27	69	125	175	307	253	401	303	253	229	267	177	90	45	14	1	0	401	0	114
14	0	0	0	0	0	0	1	22	57	61	71	102	78	111	152	321	257	207	132	86	46	16	1	0	321	0	72
15	0	0	0	0	0	0	1	19	61	111	137	160	250	266	287	252	133	192	180	73	33	9	1	0	287	0	90
16	0	0	0	0	0	0	1	17	33	31	65	92	247	324	496	434	488	409	426	297	152	40	2	0	496	0	148
17	0	0	0	0	0	0	4	60	173	199	176	259	208	278	340	404	344	336	403	127	43	14	1	0	404	0	140
18	0	0	0	0	0	0	3	54	170	285	413	427	345	439	493	318	305	299	264	152	61	16	1	0	493	0	169
19	0	0	0	0	0	0	1	23	46	62	120	211	330	494	555	401	353	167	156	73	38	7	0	0	555	0	127
20	0	0	0	0	0	0	1	18	68	132	136	175	257	253	186	242	416	289	195	128	82	12	0	0	416	0	108
21	0	0	0	0	0	0	1	11	63	129	97	100	409	359	665	544	439	297	510	75	20	6	0	0	665	0	155
22	0	0	0	0	0	0	1	12	45	60	102	154	249	281	154	336	265	282	196	232	128	29	1	0	336	0	105
23	0	0	0	0	0	0	1	32	144	283	378	494	520	609	655	542	408	325	201	24	38	19	1	0	655	0	195
24	0	0	0	0	0	0	1	40	79	95	179	460	538	461	513	468	403	481	180	75	61	21	0	0	538	0	169
25	0	0	0	0	0	0	0	12	60	130	172	309	350	104	165	147	415	368	257	93	104	13	0	0	415	0	112
26	0	0	0	0	0	0	0	3	12	44	94	71	61	73	145	233	297	394	187	93	31	4	0	0	394	0	73
27	0	0	0	0	0	0	0	9	43	81	89	148	183	321	256	370	531	265	227	214	80	7	0	0	531	0	118
28	0	0	0	0	0	0	0	6	35	57	120	152	168	207	231	268	271	146	128	50	48	10	0	0	271	0	79
29	0	0	0	0	0	0	0	20	120	219	390	441	462	655	371	319	466	354	220	106	47	5	0	0	655	0	175
30	0	0	0	0	0	0	0	12	46	106	238	255	229	351	482	527	273	415	182	81	25	4	0	0	527	0	134
31	0	0	0	0	0	0	0	3	19	37	49	73	73	139	190	175	200	105	86	113	45	4	0	0	200	0	55
Max.	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**121**	**231**	**355**	**477**	**584**	**664**	**719**	**737**	**716**	**722**	**592**	**510**	**383**	**254**	**99**	**13**	**1**	**737**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**12**	**31**	**49**	**71**	**61**	**73**	**145**	**147**	**133**	**105**	**86**	**24**	**20**	**4**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**41**	**109**	**179**	**246**	**311**	**358**	**410**	**437**	**419**	**415**	**353**	**272**	**170**	**98**	**32**	**3**	**0**			**161**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	5	58	268	312	337	559	265	234	270	317	212	97	63	11	1	0	0	559	0	125
2	0	0	0	0	0	0	0	3	18	24	43	65	278	283	202	160	196	135	70	33	6	0	0	0	283	0	63
3	0	0	0	0	0	0	0	3	20	45	104	106	129	141	198	216	234	196	99	52	18	1	0	0	234	0	65
4	0	0	0	0	0	0	0	3	25	102	129	242	225	310	284	260	238	237	210	165	65	3	0	0	310	0	104
5	0	0	0	0	0	0	0	6	30	94	183	357	538	478	446	144	142	112	54	33	27	1	0	0	538	0	110
6	0	0	0	0	0	0	0	3	17	39	45	106	70	48	50	79	47	32	25	26	9	0	0	0	106	0	25
7	0	0	0	0	0	0	0	2	17	33	100	75	98	100	50	152	221	140	69	28	6	0	0	0	221	0	45
8	0	0	0	0	0	0	0	1	25	85	150	179	166	80	172	143	72	39	36	15	4	0	0	0	179	0	49
9	0	0	0	0	0	0	0	1	8	21	46	91	70	98	95	80	76	77	68	44	14	0	0	0	98	0	33
10	0	0	0	0	0	0	0	1	16	55	98	194	292	407	456	297	285	226	106	46	13	0	0	0	456	0	104
11	0	0	0	0	0	0	0	1	11	39	56	55	102	105	159	285	250	234	173	63	8	0	0	0	285	0	64
12	0	0	0	0	0	0	0	0	5	23	44	101	133	171	189	68	78	65	40	11	2	0	0	0	189	0	39
13	0	0	0	0	0	0	0	0	4	19	23	35	52	74	114	146	173	125	44	25	5	0	0	0	173	0	35
14	0	0	0	0	0	0	0	1	5	20	39	39	92	87	89	120	144	105	107	67	12	0	0	0	144	0	39
15	0	0	0	0	0	0	0	0	19	36	53	139	177	140	208	158	174	174	80	51	8	0	0	0	208	0	59
16	0	0	0	0	0	0	0	1	12	44	244	272	255	322	339	346	296	178	98	83	8	0	0	0	346	0	104
17	0	0	0	0	0	0	0	1	30	104	149	185	174	146	113	111	97	67	34	21	2	0	0	0	185	0	51
18	0	0	0	0	0	0	0	0	8	38	99	154	94	85	107	161	152	90	50	17	3	0	0	0	161	0	44
19	0	0	0	0	0	0	0	0	6	35	84	127	181	206	258	208	156	112	77	35	3	0	0	0	258	0	62
20	0	0	0	0	0	0	0	0	17	91	122	148	192	303	375	395	252	199	137	68	5	0	0	0	395	0	96
21	0	0	0	0	0	0	0	0	18	62	135	191	245	252	269	256	220	218	127	52	5	0	0	0	269	0	85
22	0	0	0	0	0	0	0	0	27	133	245	315	296	307	287	185	151	109	49	13	1	0	0	0	315	0	88
23	0	0	0	0	0	0	0	0	5	21	37	71	113	138	127	87	95	48	52	20	1	0	0	0	138	0	34
24	0	0	0	0	0	0	0	0	4	27	57	75	70	110	111	128	133	101	67	20	1	0	0	0	133	0	38
25	0	0	0	0	0	0	0	0	5	35	87	172	240	192	169	158	121	87	66	26	1	0	0	0	240	0	57
26	0	0	0	0	0	0	0	0	12	58	101	208	327	291	170	138	324	261	64	30	2	0	0	0	327	0	83
27	0	0	0	0	0	0	0	0	15	105	223	325	405	451	459	425	350	256	158	43	2	0	0	0	459	0	134
28	0	0	0	0	0	0	0	0	13	101	216	303	363	441	381	314	181	134	74	26	1	0	0	0	441	0	106
29	0	0	0	0	0	0	0	0	9	46	90	135	104	92	118	191	217	156	67	15	0	0	0	0	217	0	52
30	0	0	0	0	0	0	0	0	10	83	179	277	221	442	276	218	173	131	96	27	1	0	0	0	442	0	89
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**58**	**268**	**312**	**357**	**559**	**478**	**459**	**425**	**350**	**261**	**210**	**165**	**65**	**3**	**0**	**0**	**559**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**19**	**23**	**35**	**52**	**48**	**50**	**68**	**47**	**32**	**25**	**11**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**16**	**63**	**116**	**169**	**209**	**219**	**217**	**197**	**185**	**142**	**83**	**41**	**8**	**0**	**0**	**0**			**69**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	10	37	67	129	152	235	197	103	74	83	31	3	0	0	0	0	235	0	47
2	0	0	0	0	0	0	0	0	4	48	59	124	161	166	185	146	141	131	76	11	0	0	0	0	185	0	52
3	0	0	0	0	0	0	0	0	3	40	62	138	217	247	227	225	118	89	49	16	0	0	0	0	247	0	60
4	0	0	0	0	0	0	0	0	6	70	186	282	328	366	296	270	159	98	91	9	0	0	0	0	366	0	90
5	0	0	0	0	0	0	0	0	1	14	33	58	76	98	103	151	123	79	49	11	0	0	0	0	151	0	33
6	0	0	0	0	0	0	0	0	2	29	87	135	173	235	227	271	254	177	59	11	0	0	0	0	271	0	69
7	0	0	0	0	0	0	0	0	3	36	83	135	216	171	126	167	151	101	36	5	0	0	0	0	216	0	51
8	0	0	0	0	0	0	0	0	3	58	166	261	341	402	393	361	295	204	93	9	0	0	0	0	402	0	108
9	0	0	0	0	0	0	0	0	1	10	34	45	81	123	78	41	44	48	20	1	0	0	0	0	123	0	22
10	0	0	0	0	0	0	0	0	2	30	104	53	64	117	118	140	141	57	15	1	0	0	0	0	141	0	35
11	0	0	0	0	0	0	0	0	0	2	8	30	69	58	61	68	61	71	57	3	0	0	0	0	71	0	20
12	0	0	0	0	0	0	0	0	1	20	132	180	203	235	201	248	259	151	65	4	0	0	0	0	259	0	71
13	0	0	0	0	0	0	0	0	1	19	48	77	140	180	179	155	82	48	15	1	0	0	0	0	180	0	39
14	0	0	0	0	0	0	0	0	0	12	62	158	129	173	184	180	116	69	21	1	0	0	0	0	184	0	46
15	0	0	0	0	0	0	0	0	0	20	78	105	121	148	169	153	135	92	34	1	0	0	0	0	169	0	44
16	0	0	0	0	0	0	0	0	0	9	35	67	109	151	158	203	143	97	38	1	0	0	0	0	203	0	42
17	0	0	0	0	0	0	0	0	0	9	43	87	115	142	168	174	178	155	45	1	0	0	0	0	178	0	47
18	0	0	0	0	0	0	0	0	0	14	58	113	207	296	282	277	223	111	22	1	0	0	0	0	296	0	67
19	0	0	0	0	0	0	0	0	0	16	103	205	278	320	324	299	234	150	48	0	0	0	0	0	324	0	82
20	0	0	0	0	0	0	0	0	0	7	25	63	97	119	174	197	117	67	16	0	0	0	0	0	197	0	37
21	0	0	0	0	0	0	0	0	0	16	82	180	261	314	321	286	217	108	15	1	0	0	0	0	321	0	75
22	0	0	0	0	0	0	0	0	0	9	55	107	157	204	239	219	244	130	24	0	0	0	0	0	244	0	58
23	0	0	0	0	0	0	0	0	0	16	75	172	260	300	304	270	194	82	16	0	0	0	0	0	304	0	70
24	0	0	0	0	0	0	0	0	0	10	78	176	245	287	295	232	137	102	16	0	0	0	0	0	295	0	66
25	0	0	0	0	0	0	0	0	0	5	32	81	98	202	178	226	129	53	14	0	0	0	0	0	226	0	42
26	0	0	0	0	0	0	0	0	0	9	58	137	206	249	269	252	190	89	10	0	0	0	0	0	269	0	61
27	0	0	0	0	0	0	0	0	0	9	95	197	250	278	280	248	184	92	8	0	0	0	0	0	280	0	68
28	0	0	0	0	0	0	0	0	0	8	68	166	210	216	282	218	118	44	8	0	0	0	0	0	282	0	56
29	0	0	0	0	0	0	0	0	0	3	24	78	105	115	123	111	77	43	6	0	0	0	0	0	123	0	29
30	0	0	0	0	0	0	0	0	0	3	29	68	177	210	191	189	159	65	6	0	0	0	0	0	210	0	46
31	0	0	0	0	0	0	0	0	0	4	42	129	219	267	270	236	171	70	5	0	0	0	0	0	270	0	59
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**70**	**186**	**282**	**341**	**402**	**393**	**361**	**295**	**204**	**93**	**16**	**0**	**0**	**0**	**0**	**402**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**8**	**30**	**64**	**58**	**61**	**41**	**44**	**43**	**5**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	**68**	**127**	**176**	**214**	**213**	**204**	**157**	**95**	**33**	**3**	**0**	**0**	**0**	**0**			**55**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	2	24	64	113	124	127	176	154	51	4	0	0	0	0	0	176	0	35
2	0	0	0	0	0	0	0	0	0	3	30	74	128	132	148	107	122	45	5	0	0	0	0	0	148	0	33
3	0	0	0	0	0	0	0	0	0	1	22	65	85	109	101	106	123	83	5	0	0	0	0	0	123	0	29
4	0	0	0	0	0	0	0	0	0	1	29	77	131	125	177	89	76	31	2	0	0	0	0	0	177	0	31
5	0	0	0	0	0	0	0	0	0	1	11	123	226	267	144	112	113	20	3	0	0	0	0	0	267	0	42
6	0	0	0	0	0	0	0	0	0	1	25	78	115	129	98	96	71	36	2	0	0	0	0	0	129	0	27
7	0	0	0	0	0	0	0	0	0	1	17	55	91	141	193	103	67	37	2	0	0	0	0	0	193	0	29
8	0	0	0	0	0	0	0	0	0	1	15	104	101	187	236	86	34	14	1	0	0	0	0	0	236	0	32
9	0	0	0	0	0	0	0	0	0	0	5	25	35	48	60	48	29	8	0	0	0	0	0	0	60	0	11
10	0	0	0	0	0	0	0	0	0	0	5	32	54	63	46	31	22	12	1	0	0	0	0	0	63	0	11
11	0	0	0	0	0	0	0	0	0	0	9	51	101	185	161	116	152	39	1	0	0	0	0	0	185	0	34
12	0	0	0	0	0	0	0	0	0	0	14	59	77	211	179	125	58	19	1	0	0	0	0	0	211	0	31
13	0	0	0	0	0	0	0	0	0	0	8	44	80	115	117	84	37	18	1	0	0	0	0	0	117	0	21
14	0	0	0	0	0	0	0	0	0	0	8	52	100	89	89	59	33	15	1	0	0	0	0	0	100	0	19
15	0	0	0	0	0	0	0	0	0	0	6	30	109	195	93	68	39	9	0	0	0	0	0	0	195	0	23
16	0	0	0	0	0	0	0	0	0	0	13	34	64	92	99	78	41	13	0	0	0	0	0	0	99	0	18
17	0	0	0	0	0	0	0	0	0	0	9	56	112	155	171	159	94	17	0	0	0	0	0	0	171	0	32
18	0	0	0	0	0	0	0	0	0	0	10	50	105	149	172	145	86	15	0	0	0	0	0	0	172	0	30
19	0	0	0	0	0	0	0	0	0	0	5	52	125	167	172	142	75	14	0	0	0	0	0	0	172	0	31
20	0	0	0	0	0	0	0	0	0	0	6	50	120	162	172	148	83	13	0	0	0	0	0	0	172	0	31
21	0	0	0	0	0	0	0	0	0	0	4	29	66	99	116	100	30	11	0	0	0	0	0	0	116	0	19
22	0	0	0	0	0	0	0	0	0	0	3	23	80	134	155	109	45	6	0	0	0	0	0	0	155	0	23
23	0	0	0	0	0	0	0	0	0	0	2	11	51	67	86	67	29	5	0	0	0	0	0	0	86	0	13
24	0	0	0	0	0	0	0	0	0	0	2	17	46	70	94	87	48	4	0	0	0	0	0	0	94	0	15
25	0	0	0	0	0	0	0	0	0	0	2	16	80	152	165	107	77	9	0	0	0	0	0	0	165	0	25
26	0	0	0	0	0	0	0	0	0	0	2	26	118	169	176	146	77	8	0	0	0	0	0	0	176	0	30
27	0	0	0	0	0	0	0	0	0	0	1	20	36	58	58	45	29	6	0	0	0	0	0	0	58	0	10
28	0	0	0	0	0	0	0	0	0	0	1	8	35	52	60	41	25	4	0	0	0	0	0	0	60	0	9
29	0	0	0	0	0	0	0	0	0	0	1	17	43	68	75	86	28	8	0	0	0	0	0	0	86	0	14
30	0	0	0	0	0	0	0	0	0	0	1	12	24	33	38	32	19	3	0	0	0	0	0	0	38	0	7
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**30**	**123**	**226**	**267**	**236**	**176**	**154**	**83**	**5**	**0**	**0**	**0**	**0**	**0**	**267**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**24**	**33**	**38**	**31**	**19**	**3**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**45**	**88**	**125**	**126**	**97**	**64**	**19**	**1**	**0**	**0**	**0**	**0**	**0**			**24**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Solar (Watts/m^2)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	1	17	65	58	53	38	20	3	0	0	0	0	0	0	65	0	11
2	0	0	0	0	0	0	0	0	0	0	0	9	30	46	42	41	24	3	0	0	0	0	0	0	46	0	8
3	0	0	0	0	0	0	0	0	0	0	0	5	9	10	80	51	24	3	0	0	0	0	0	0	80	0	8
4	0	0	0	0	0	0	0	0	0	0	0	9	13	33	28	25	29	3	0	0	0	0	0	0	33	0	6
5	0	0	0	0	0	0	0	0	0	0	0	7	23	34	27	17	11	1	0	0	0	0	0	0	34	0	5
6	0	0	0	0	0	0	0	0	0	0	0	9	18	39	51	39	23	3	0	0	0	0	0	0	51	0	8
7	0	0	0	0	0	0	0	0	0	0	1	9	14	32	39	50	39	2	0	0	0	0	0	0	50	0	8
8	0	0	0	0	0	0	0	0	0	0	0	4	27	36	39	31	15	2	0	0	0	0	0	0	39	0	6
9	0	0	0	0	0	0	0	0	0	0	0	7	39	41	49	44	12	2	0	0	0	0	0	0	49	0	8
10	0	0	0	0	0	0	0	0	0	0	0	11	32	52	97	86	33	5	0	0	0	0	0	0	97	0	13
11	0	0	0	0	0	0	0	0	0	0	0	10	34	59	82	48	19	3	0	0	0	0	0	0	82	0	11
12	0	0	0	0	0	0	0	0	0	0	0	4	13	20	27	16	6	1	0	0	0	0	0	0	27	0	4
13	0	0	0	0	0	0	0	0	0	0	0	11	44	66	75	69	32	2	0	0	0	0	0	0	75	0	12
14	0	0	0	0	0	0	0	0	0	0	1	18	55	86	84	55	21	2	0	0	0	0	0	0	86	0	13
15	0	0	0	0	0	0	0	0	0	0	0	3	18	28	81	36	15	3	0	0	0	0	0	0	81	0	8
16	0	0	0	0	0	0	0	0	0	0	0	13	63	97	103	32	8	1	0	0	0	0	0	0	103	0	13
17	0	0	0	0	0	0	0	0	0	0	0	4	16	30	39	40	12	2	0	0	0	0	0	0	40	0	6
18	0	0	0	0	0	0	0	0	0	0	0	6	24	27	28	23	9	1	0	0	0	0	0	0	28	0	5
19	0	0	0	0	0	0	0	0	0	0	0	4	19	43	44	23	20	2	0	0	0	0	0	0	44	0	6
20	0	0	0	0	0	0	0	0	0	0	0	5	21	81	56	32	15	2	0	0	0	0	0	0	81	0	9
21	0	0	0	0	0	0	0	0	0	0	0	6	24	39	49	69	38	3	0	0	0	0	0	0	69	0	10
22	0	0	0	0	0	0	0	0	0	0	0	4	26	41	39	41	14	2	0	0	0	0	0	0	41	0	7
23	0	0	0	0	0	0	0	0	0	0	0	10	47	69	114	77	33	5	0	0	0	0	0	0	114	0	15
24	0	0	0	0	0	0	0	0	0	0	0	6	34	76	59	38	21	2	0	0	0	0	0	0	76	0	10
25	0	0	0	0	0	0	0	0	0	0	0	5	18	28	32	35	18	3	0	0	0	0	0	0	35	0	6
26	0	0	0	0	0	0	0	0	0	0	0	8	30	46	46	41	26	5	0	0	0	0	0	0	46	0	8
27	0	0	0	0	0	0	0	0	0	0	0	8	46	88	90	72	27	4	0	0	0	0	0	0	90	0	14
28	0	0	0	0	0	0	0	0	0	0	0	8	40	68	83	74	41	4	0	0	0	0	0	0	83	0	13
29	0	0	0	0	0	0	0	0	0	0	0	7	36	60	72	65	40	5	0	0	0	0	0	0	72	0	12
30	0	0	0	0	0	0	0	0	0	0	0	15	70	111	125	106	58	6	0	0	0	0	0	0	125	0	20
31	0	0	0	0	0	0	0	0	0	0	0	15	71	114	126	102	50	6	0	0	0	0	0	0	126	0	20
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**71**	**114**	**126**	**106**	**58**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**126**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**	**10**	**27**	**16**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**33**	**54**	**63**	**49**	**24**	**3**	**0**	**0**	**0**	**0**	**0**	**0**			**10**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	944	942	941	940	939	938	937	936	935	935	934	933	932	932	932	931	931	931	930	930	930	930	930	930	944	930	934.3
2	929	929	929	930	929	929	929	929	928	928	928	928	928	927	926	926	926	925	924	924	923	922	922	922	930	922	926.7
3	922	921	921	921	921	921	920	920	920	920	921	921	921	921	921	921	921	922	922	922	923	923	923	923	923	920	921.4
4	924	924	924	924	925	925	925	925	925	926	926	926	927	926	927	927	926	926	926	927	927	927	927	927	927	924	925.8
5	927	927	927	927	927	927	927	927	928	928	928	928	928	928	928	929	929	929	929	929	930	931	931	932	932	927	928.3
6	932	932	932	934	935	934	934	934	935	934	935	935	935	934	934	934	933	933	933	933	933	932	933	933	935	932	933.6
7	932	932	932	932	932	932	932	932	931	932	931	932	932	932	932	933	933	934	934	935	936	937	937	938	938	931	933.2
8	938	939	939	940	940	940	940	940	940	941	940	941	940	940	940	940	939	940	939	939	939	938	938	937	941	937	939.5
9	937	937	936	936	936	936	935	934	934	935	935	935	935	934	935	935	935	935	935	934	934	934	935	936	937	934	935.1
10	937	937	937	937	937	937	938	938	938	939	939	938	939	939	939	939	940	939	939	939	939	940	940	940	940	937	938.6
11	940	939	939	940	940	940	940	942	941	940	941	942	941	942	942	942	943	943	943	944	944	944	944	944	944	939	941.8
12	944	944	944	944	944	943	943	942	942	942	942	942	942	942	942	941	941	941	941	941	941	942	944	944	944	941	942.5
13	943	945	944	945	946	947	948	949	949	950	950	951	952	952	952	953	953	953	953	953	953	953	953	953	953	943	950.1
14	953	953	952	952	950	950	949	949	948	947	946	947	947	947	946	945	946	944	945	945	943	941	940	940	953	940	946.9
15	940	939	938	938	938	939	940	942	942	942	943	943	945	944	944	944	944	945	944	944	944	944	943	944	945	938	942.1
16	945	945	946	946	947	948	949	951	952	953	955	956	957	958	959	960	960	960	961	961	962	961	961	961	962	945	954.8
17	961	960	960	960	959	958	957	956	955	954	952	951	950	950	950	949	948	949	950	950	951	951	951	952	961	948	953.4
18	953	953	953	954	955	955	956	957	958	958	959	960	961	962	962	962	962	963	964	963	962	962	963	963	964	953	959.1
19	964	964	963	962	963	961	961	961	961	961	958	957	956	957	956	955	955	954	955	953	954	954	955	958	964	953	958.2
20	959	960	960	960	960	960	959	959	958	959	958	958	957	957	957	957	957	957	958	958	959	960	960	960	960	957	958.6
21	960	961	961	961	961	960	959	959	959	958	958	957	956	954	953	951	949	948	945	945	944	944	944	944	961	944	953.9
22	945	948	949	950	950	950	951	951	952	952	953	954	956	957	959	960	960	960	960	960	959	959	959	959	960	945	954.7
23	959	960	961	962	963	963	965	966	968	969	970	971	972	973	972	972	973	973	972	973	973	973	973	972	973	959	968.6
24	972	971	969	968	966	965	963	961	959	959	957	956	955	954	952	951	949	948	947	946	945	945	944	944	972	944	956.1
25	945	945	945	945	945	945	945	946	946	947	947	948	949	949	949	949	949	950	951	952	952	953	954	956	956	945	948.3
26	957	957	958	959	959	959	959	959	960	959	961	961	961	962	961	961	961	961	961	960	959	959	958	958	962	957	959.6
27	957	956	955	954	954	953	952	950	948	947	946	945	944	943	942	940	939	938	937	935	935	934	933	934	957	933	944.6
28	933	933	934	934	934	933	934	934	934	934	935	936	936	937	938	939	939	940	941	942	943	943	944	945	945	933	937.4
29	945	946	947	947	947	947	947	947	946	946	946	946	945	944	944	943	942	942	941	941	941	940	940	940	947	940	944.1
30	940	940	941	941	941	942	942	942	942	943	943	944	944	944	945	946	946	947	947	948	948	949	948	949	949	940	944.2
31	949	949	949	949	949	949	949	949	948	948	949	949	949	948	948	947	947	946	946	946	946	945	945	945	949	945	947.6
Max.	**972**	**971**	**969**	**968**	**966**	**965**	**965**	**966**	**968**	**969**	**970**	**971**	**972**	**973**	**972**	**972**	**973**	**973**	**972**	**973**	**973**	**973**	**973**	**972**	**973**		
Min.	**922**	**921**	**921**	**921**	**921**	**921**	**920**	**920**	**920**	**920**	**921**	**921**	**921**	**921**	**921**	**921**	**921**	**922**	**922**	**922**	**923**	**922**	**922**	**922**		**920**	
Avg.	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**			**944.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	945	945	945	945	944	944	944	944	944	944	943	943	943	943	942	942	942	941	942	941	942	942	942	942	945	941	943.0
2	942	943	943	943	944	944	944	945	945	946	947	947	948	949	949	949	950	950	951	951	952	953	953	953	953	942	947.5
3	953	953	953	954	954	953	952	952	952	952	951	951	951	949	949	949	948	948	948	947	947	947	946	946	954	946	950.3
4	946	947	946	946	946	945	945	945	945	945	945	945	945	945	945	945	945	945	946	945	946	946	946	946	947	945	945.5
5	946	947	946	946	947	947	946	946	946	946	945	946	946	946	944	944	944	943	942	942	941	941	941	940	947	940	944.5
6	940	939	939	939	939	939	939	939	940	940	940	940	941	941	942	942	942	942	943	943	943	944	945	944	945	939	941.2
7	945	946	947	948	948	948	949	950	950	951	952	953	953	954	954	954	954	955	955	955	956	956	956	956	956	945	952.0
8	956	957	956	956	957	957	956	956	956	956	955	955	954	954	953	952	952	951	950	950	949	948	947	947	957	947	953.4
9	946	944	943	942	941	940	940	938	938	937	936	935	935	934	933	932	932	932	931	931	931	931	932	932	946	931	936.1
10	931	932	931	932	931	931	931	931	930	930	931	931	931	930	930	930	930	930	930	930	930	930	930	930	932	930	930.5
11	930	930	930	930	930	930	931	931	931	931	931	932	932	932	932	932	932	933	933	933	933	933	934	935	935	930	931.7
12	936	937	938	939	940	940	941	942	943	943	944	945	946	946	945	944	944	943	943	942	942	941	940	938	946	936	941.6
13	937	937	936	934	932	930	928	927	925	923	923	924	924	923	923	922	922	922	922	921	921	921	920	921	937	920	925.8
14	920	920	919	920	920	920	920	920	921	922	923	925	925	926	927	927	927	928	929	929	930	931	932	933	933	919	924.8
15	935	936	938	939	940	941	942	944	945	946	947	948	949	949	948	949	950	949	949	948	948	948	947	947	950	935	945.1
16	947	948	946	945	943	942	941	938	938	937	936	935	934	933	933	933	933	934	935	935	936	938	938	939	948	933	938.1
17	938	938	938	937	938	936	935	934	932	930	928	926	924	923	922	921	921	919	920	923	924	925	927	928	938	919	928.6
18	928	929	929	929	928	927	927	927	929	931	932	934	935	935	936	936	936	936	936	936	937	937	937	937	937	927	932.7
19	937	936	935	933	931	929	927	926	924	922	921	920	918	916	915	914	913	913	912	913	914	915	915	916	937	912	921.5
20	917	918	921	923	924	925	926	928	928	929	930	931	931	930	930	929	929	928	927	926	926	926	925	925	931	917	926.4
21	925	925	925	924	924	924	924	923	924	924	924	925	926	926	927	927	928	929	930	930	931	932	933	933	933	923	926.8
22	934	935	935	936	937	937	938	939	940	941	941	942	943	943	944	945	946	947	948	949	950	951	952	952	952	934	942.7
23	953	953	954	955	955	955	955	956	956	956	957	957	957	958	958	957	958	957	957	958	958	958	958	958	958	953	956.4
24	958	958	958	958	958	958	958	958	957	957	957	957	957	958	957	957	957	957	956	956	956	956	956	956	958	956	957.2
25	955	954	953	953	952	951	950	950	950	950	950	951	950	950	950	950	950	950	950	951	951	951	952	952	955	950	951.1
26	952	952	952	952	951	951	951	950	950	950	950	949	948	948	947	947	946	945	945	944	944	944	943	943	952	943	948.1
27	944	944	944	944	944	944	944	944	944	944	944	945	945	945	945	944	944	944	944	944	944	943	944	944	945	943	944.1
28	944	944	944	944	944	944	944	943	943	944	944	944	943	943	943	943	943	943	943	944	944	944	944	944	944	943	943.6
29	944	943	943	943	942	942	941	941	940	940	939	939	938	938	937	936	936	935	935	934	934	933	933	933	944	933	938.4
Max.	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**957**	**957**	**957**	**957**	**957**	**958**	**958**	**957**	**958**	**957**	**957**	**958**	**958**	**958**	**958**	**958**	**958**		
Min.	**917**	**918**	**919**	**920**	**920**	**920**	**920**	**920**	**921**	**922**	**921**	**920**	**918**	**916**	**915**	**914**	**913**	**913**	**912**	**913**	**914**	**915**	**915**	**916**		**912**	
Avg.	**941**	**941**	**941**	**941**	**941**	**941**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**940**			**940.3**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	933	932	932	932	932	932	932	932	932	932	933	933	933	934	934	934	934	934	934	934	933	933	933	933	934	932	932.9
2	933	933	933	932	933	933	934	935	936	936	938	939	940	941	941	941	942	941	943	943	944	944	945	946	946	932	938.5
3	946	946	946	946	945	944	944	943	943	942	941	939	940	940	941	942	943	943	944	946	945	945	946	947	947	939	943.6
4	947	947	948	947	947	945	945	945	944	944	945	944	944	945	945	945	944	944	944	944	943	944	943	942	948	942	944.8
5	939	937	937	933	932	930	931	930	927	926	925	925	927	925	926	925	926	927	928	928	929	930	930	931	939	925	929.3
6	932	934	934	935	935	936	936	936	936	936	936	936	935	935	934	934	933	932	932	932	931	930	928	927	936	927	933.7
7	926	925	925	924	923	922	921	921	921	921	921	921	922	922	922	923	923	924	925	926	927	928	929	930	930	921	923.8
8	932	933	934	935	935	936	936	937	937	937	938	938	938	937	936	935	934	933	933	933	932	931	930	930	938	930	934.6
9	930	929	929	928	928	927	927	927	927	927	927	928	929	929	930	930	931	931	932	933	934	934	935	936	936	927	929.9
10	937	938	939	939	940	941	942	943	943	944	944	945	945	945	946	946	946	946	946	946	947	947	947	948	948	937	943.7
11	948	948	949	949	949	949	949	949	950	950	950	950	951	951	951	951	951	951	951	952	952	953	953	953	953	948	950.4
12	954	954	954	955	955	955	956	956	956	957	957	957	958	958	958	957	957	957	957	958	958	958	958	958	958	954	956.6
13	958	959	959	959	959	959	959	960	960	960	961	961	961	961	962	962	962	962	962	962	962	963	962	962	963	958	960.8
14	962	962	962	962	962	961	961	961	960	960	959	959	959	959	958	958	957	956	955	955	954	953	952	951	962	951	958.2
15	949	950	949	948	947	946	945	945	945	945	945	945	945	944	944	944	943	942	941	941	941	940	939	939	950	939	944.2
16	938	938	937	937	936	936	935	935	934	935	934	934	934	933	933	933	932	932	932	931	932	932	932	932	938	931	934.0
17	932	933	933	933	934	934	934	934	934	934	935	935	935	935	935	935	935	936	936	937	938	938	938	938	938	932	935.1
18	938	939	939	939	940	940	940	940	940	940	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	938	940.4
19	940	941	941	941	941	941	941	941	942	942	943	943	944	943	943	943	944	944	944	945	945	945	945	945	945	940	942.7
20	945	945	946	946	946	946	946	946	946	946	946	947	947	947	947	947	947	946	946	946	946	946	945	945	947	945	946.0
21	944	944	943	943	943	942	942	942	942	943	943	943	944	944	944	944	944	944	943	943	944	944	944	945	945	942	943.4
22	944	944	944	943	943	942	942	942	942	941	941	941	941	941	941	941	941	940	940	941	941	941	941	941	944	940	941.6
23	941	941	941	940	940	940	940	940	939	939	938	938	939	938	938	938	939	938	938	938	938	938	938	938	941	938	939.0
24	939	938	939	939	939	939	939	939	940	940	940	941	941	941	941	941	942	942	942	943	943	944	944	945	945	938	941.0
25	946	946	947	947	948	948	949	949	950	950	950	951	951	951	951	951	951	951	952	952	952	952	953	953	953	946	950.1
26	953	954	953	953	954	954	954	955	955	955	955	956	956	956	956	957	957	957	957	957	958	958	958	958	958	953	955.7
27	959	959	959	959	959	960	960	960	960	960	960	960	960	960	960	960	960	960	960	961	961	961	961	962	962	959	960.1
28	962	962	962	962	962	962	963	962	962	962	962	962	962	962	961	961	960	960	960	960	959	959	959	959	963	959	961.2
29	959	959	958	959	958	958	958	957	957	957	956	956	956	955	955	955	954	954	953	952	952	952	951	950	959	950	955.5
30	950	950	950	949	949	949	949	950	950	950	951	951	952	952	953	953	953	953	953	952	953	955	955	955	955	949	951.5
31	955	956	956	956	956	955	955	955	954	954	954	954	953	953	953	952	951	950	950	948	947	947	947	947	956	947	952.4
Max.	**962**	**962**	**962**	**962**	**962**	**962**	**963**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**963**	**962**	**962**	**963**		
Min.	**926**	**925**	**925**	**924**	**923**	**922**	**921**	**921**	**921**	**921**	**921**	**921**	**922**	**922**	**922**	**923**	**923**	**924**	**925**	**926**	**927**	**928**	**928**	**927**		**921**	
Avg.	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**945**	**945**	**945**	**945**	**944**	**944**	**944**	**944**	**945**	**945**	**945**	**945**			**944.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	946	946	946	946	946	946	946	946	946	946	947	947	947	946	947	947	947	947	947	948	949	950	950	951	951	946	946.9
2	951	952	953	953	954	954	955	956	956	957	957	957	957	958	958	957	956	956	955	956	955	954	953	953	958	951	955.1
3	953	952	952	952	952	952	952	952	951	952	951	951	951	951	950	950	949	948	947	947	946	945	945	945	953	945	949.8
4	943	943	943	942	942	941	940	940	941	941	942	943	943	943	944	944	944	944	944	945	946	947	948	949	949	940	943.4
5	950	951	952	952	952	953	953	953	953	954	954	954	954	954	953	953	953	952	953	953	953	953	953	953	954	950	952.8
6	953	953	953	953	953	953	953	953	953	953	952	952	952	952	952	952	952	952	952	952	952	953	953	953	953	952	952.4
7	953	953	953	954	954	954	954	954	954	954	954	954	954	955	955	954	954	954	954	954	953	954	953	953	955	953	953.8
8	952	952	952	951	950	950	950	949	949	948	948	947	947	947	947	946	946	946	945	945	945	945	945	945	952	945	947.9
9	946	946	946	946	947	947	947	947	948	948	948	948	948	948	948	948	947	947	947	947	948	948	948	948	948	946	947.3
10	949	949	949	949	950	950	950	951	952		953	954	954	954	955	955	955	955	955	955	956	956	956	957	957	949	953.0
11	957	957	958	958	958	958	958	958	959	959	959	959	959	959	959	958	958	957	957	956	956	956	956	956	959	956	957.6
12	955	954	953	953	953	952	952	951	951	951	951	950	950	950	950	950	950	950	949	949	949	949	948	948	955	948	950.8
13	947	947	947	946	946	946	946	945	945	945	945	945	945	945	944	945	945	946	946	946	944	943	944	945	947	943	945.3
14	946	946	946	947	948	948	948	949	949	950	950	950	950	950	950	951	950	950	949	949	949	949	949	948	951	946	948.9
15	948	947	947	946	945	944	943	943	943	943	943	943	944	944	944	945	946	946	947	948	950	952	954	955	955	943	946.2
16	956	957	958	959	959	961	961	963	962	964	966	967	967	968	969	969	970	970	971	971	971	971	972	972	972	956	965.5
17	973	974	974	974	975	975	976	977	977	978	978	978	979	980	980	979	979	979	979	980	979	980	980	980	980	973	977.6
18	979	980	980	980	979	979	979	979	979	979	979	979	979	978	978	978	977	977	976	976	976	975	975	975	980	975	978.0
19	974	974	974	974	973	973	972	972	971	971	971	970	970	970	970	969	969	968	968	968	968	967	966	966	974	966	970.4
20	967	967	965	964	965	965	965	963	963	963	964	963	963	964	965	964	964	965	964	965	965	964	964	964	967	963	964.4
21	965	965	965	964	965	965	965	965	966	965	965	965	965	966	965	966	966	966	966	965	965	966	966	966	966	964	965.3
22	966	966	965	966	965	965	966	966	966	966	966	966	966	966	966	965	965	964	964	964	964	964	964	964	966	964	965.2
23	964	964	963	963	963	962	962	962	962	962	961	961	961	961	961	961	960	960	960	960	960	960	960	960	964	960	961.4
24	960	960	960	959	959	959	959	959	959	959	959	959	959	959	958	958	958	957	957	956	956	955	955	955	960	955	958.1
25	955	955	955	955	955	955	955	955	955	955	955	955	955	954	953	953	953	953	952	952	952	952	952	952	955	952	953.9
26	952	952	951	950	950	949	948	947	946	946	945	944	944	943	943	943	942	942	941	941	941	940	941	940	952	940	945.0
27	940	939	939	938	938	939	939	938	939	939	939	940	941	942	942	944	945	945	946	947	948	949	950	951	951	938	942.3
28	951	951	951	952	953	953	953	954	954	954	954	955	955	955	955	955	955	955	955	955	954	955	955	955	955	951	953.8
29	955	955	955	955	955	955	954	954	954	954	954	955	955	954	954	954	954	954	953	953	953	953	953	953	955	953	954.1
30	952	952	952	951	951	951	950	950	950	951	950	951	951	951	951	951	950	950	951	951	951	951	952	952	952	950	950.9
Max.	**979**	**980**	**980**	**980**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**980**	**980**	**979**	**979**	**979**	**979**	**980**	**979**	**980**	**980**	**980**	**980**		
Min.	**940**	**939**	**939**	**938**	**938**	**939**	**939**	**938**	**939**	**939**	**939**	**940**	**941**	**942**	**942**	**943**	**942**	**942**	**941**	**941**	**941**	**940**	**941**	**940**		**938**	
Avg.	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**956**	**956**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**			**955.2**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	951	952	952	951	951	951	951	951	951	951	951	951	951	951	950	950	950	949	949	948	948	948	948	947	952	947	950.1
2	947	947	946	946	946	946	945	946	946	946	947	947	947	948	948	948	948	948	949	949	950	950	950	950	950	945	947.5
3	951	951	951	951	951	952	952	952	952	951	951	952	952	951	951	950	950	950	949	949	949	949	949	949	952	949	950.6
4	949	948	947	948	947	948	947	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	949	947	947.8
5	948	948	948	948	948	948	948	948	949	949	949	950	950	951	951	952	952	953	953	954	954	955	956	956	956	948	950.7
6	957	957	958	958	959	959	959	960	959	960	960	960	960	960	960	960	960	959	959	959	959	959	959	959	960	957	959.2
7	958	958	958	958	958	958	958	957	957	957	956	957	956	955	956	956	956	954	955	954	954	954	954	954	958	954	956.1
8	952	953	953	952	952	952	952	952	951	951	951	951	951	950	950	950	949	948	948	948	948	948	947	947	953	947	950.3
9	947	947	947	947	947	947	947	947	946	946	947	947	947	948	948	948	948	948	949	949	949	949	949	949	949	946	947.6
10	949	949	949	948	949	949	949	949	949	949	949	949	949	949	949	948	948	948	948	947	947	947	947	946	949	946	948.2
11	946	945	945	944	943	941	941	940	938	938	937	936	934	933	932	932	931	929	927	927	926	926	926	926	946	926	935.0
12	925	926	925	924	924	924	924	924	924	923	923	923	923	923	923	923	924	925	925	926	926	926	927	928	928	923	924.4
13	929	929	930	931	932	933	935	935	936	937	938	938	939	939	939	940	940	939	940	941	941	941	940	939	941	929	936.7
14	939	939	939	938	937	935	934	933	932	931	930	929	928	927	927	927	926	926	927	927	928	928	929	930	939	926	931.1
15	932	933	934	935	937	938	939	940	942	943	945	946	947	948	949	950	951	952	952	953	954	955	956	957	957	932	945.3
16	958	959	959	959	960	960	961	961	961	961	961	961		961	961	960	960	960	959	959	959	959	959	959	961	958	959.9
17	959	958	958	958	958	958	957	957	957	957	957	957	957	957	956	956	956	956	955	956	955	956	956	956	959	955	956.8
18	956	956	956	957	957	957	958	958	958	959	959	959	960	960	960	960	960	960	960	960	960	960	961	961	961	956	958.9
19	961	961	961	961	961	961	960	960	960	960	960	959	959	959	958	958	957	957	957	956	956	956	956	956	961	956	958.8
20	956	956	955	955	955	954	954	954	954	954	953	953	953	953	953	953	953	953	953	953	953	953	953	954	956	953	953.6
21	954	954	954	955	955	955	956	956	957	957	957	958	958	958	959	959	960	960	960	961	961	962	963	964	964	954	958.0
22	964	964	965	966	966	966	967	967	967	967	967	967	967	966	965	965	965	964	964	963	961	961	960	960	967	960	964.8
23	959	957	954	954	952	951	951	951	950	950	950	952	951	951	954	954	955	956	958	958	959	959	958	959	959	950	954.3
24	959	959	959	958	959	959	960	959	959	959	959	959	958	959	959	959	959	959	959	960	961	961	961	962	962	958	959.5
25	962	963	963	963	963	964	964	965	965	965	965	965	966	966	966	966	967	967	967	967	968	968	968	969	969	962	965.5
26	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	968	968	969	969	969	969	968	968.8
27	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	968	967	967	967	967	968	967	969	967	968.4
28	967	967	967	967	967	967	966	966	966	966	966	966	966	966	966	965	965	964	964	964	963	963	964	963	967	963	965.6
29	963	963	963	962	962	962	962	961	961	961	961	961	960	960	960	959	959	959	958	958	958	958	958	958	963	958	960.3
30	957	957	957	957	956	957	956	956	956	956	956	956	956	956	956	955	955	956	956	956	956	956	956	956	957	955	956.2
31	957	957	956	956	956	956	955	955	955	954	955	954	954	954	954	954	954	953	953	952	952	952	951	951	957	951	954.2
Max.	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**969**	**969**	**969**	**969**		
Min.	**925**	**926**	**925**	**924**	**924**	**924**	**924**	**924**	**924**	**923**	**923**	**923**	**923**	**923**	**923**	**923**	**924**	**925**	**925**	**926**	**926**	**926**	**926**	**926**		**923**	
Avg.	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**			**953.0**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	950	951	950	949	949	948	948	947	947	946	946	946	946	945	945	946	945	945	945	944	944	944	944	944	951	944	946.5
2	944	943	943	943	943	943	943	943	943	943	942	942	942	942	941		941	940	940	940	940	940	940	940	944	940	941.8
3	940	940	940	939	939	939	939	940	940	940	940	940	940	940	941	941	941	941	941	942	942	942	942	942	942	939	940.4
4	942	943	943	943	943	942	942	942	942	942	942	942	942	942	942	942	941	941	942	942	942	942	942	942	943	941	942.0
5	942	942	942	941	941	941	941	940	941	940	940	941	941	941	941	941	941	942	943	943	944	944	945	945	945	940	941.8
6	945	946	946	947	947	947	948	949	949	949	950	950	950	951	951	951	951	951	952	952	953	953	954	954	954	945	949.8
7	955	955	955	956	956	956	956	957	957	957	957	957	958	958	958	958	958	957	957	957	957	958	958	959	959	955	957.0
8	959	960	960	960	960	960	960	960	960	960	960	960	960	960	961	960	961	960	961	960	960	960	961	961	961	959	960.2
9	961	961	961	961	961	961	961	961	961	961	962	962	962	962	962	962	962	961	961	961	961	961	961	961	962	961	961.4
10	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	963	963	963	962	962.0
11	963	963	963	963	963	963	963	963	963	964	964	963	963	963	964	963	963	964	963	963	964	964	964	964	964	963	963.5
12	964	964	964	964	964	963	963	963	963	963	963	962	962	961	961	961	960	960	960	960	960	960	960	960	964	960	961.9
13	960	959	959	959	959	959	959	959	960	960	960	960	961	961	961	961	961	962	961	961	962	962	962	962	962	959	960.5
14	963	963	963	963	964	964	964	964	965	965	965	965	966	966	966	965	965	965	966	967	966	966	967	967	967	963	965.0
15	967	967	967	967	967	967	967	967	967	967	966	966	966	966	965	965	965	965	965	965	964	964	963	963	967	963	965.8
16	963	963	963	962	962	962	962	962	962	962	962	962	961	961	961	961	961	961	961	961	960	960	960	961	963	960	961.5
17	960	960	961	961	960	960	960	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	961	961	961	960	960.6
18	961	961	961	961	961	961	961	962	962	962	962	962	962	961	961	962	961	961	961	961	961	962	962	962	962	961	961.5
19	962	962	962	963	963	963	963	963	963	963	963	963	963	962	962	962	962	961	961	961	961	961	961	961	963	961	962.0
20	961	960	960	960	959	959	959	959	959	958	958	958	958	958	957	957	956	956	956	956	956	956	956	956	961	956	957.9
21	956	956	956	955	955	955	955	955	954	954	954	953	953	953	953	953	953	953	953	953	953	954	954	954	956	953	954.1
22	954	954	955	955	955	955	956	956	956	957	957	957	957	958	958	958	958	958	958	959	959	959	959	959	959	954	957.0
23	959	959	959	959	958	958	958	957	957	956	956	956	955	955	955	954	954	954	953	953	952	952	952	952	959	952	955.6
24	952	952	952	952	951	951	951	950	951	951	950	950	950	950	950	951	950	951	950	949	949	949	949	949	952	949	950.5
25	948	948	947	945	946	946	946	946	945	944	945	944	944	942	943	945	946	946	946	946	946	946	947	947	948	942	945.6
26	947	947	948	948	948	948	948	947	947	947	947	947	947	948	948	948	948	948	948	948	948	948	948	948	948	947	947.6
27	948	949	949	949	949	949	949	949	950	950	950	950	949	949	949	949	949	949	949	949	949	949	949	949	950	948	949.2
28	950	950	950	950	950	950	950	951	951	951	952	952	952	953	953	954	954	954	955	955	956	956	957	958	958	950	952.7
29	958	959	959	960	960	960	961	961	962	962	962	963	963	963	963	963	963	963	963	963	963	964	964	964	964	958	962.0
30	964	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	962	962	962	962	962	961	962	961	964	961	963.2
Max.	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**966**	**966**	**966**	**966**	**966**	**965**	**965**	**965**	**966**	**967**	**966**	**966**	**967**	**967**	**967**		
Min.	**940**	**940**	**940**	**939**	**939**	**939**	**939**	**940**	**940**	**940**	**940**	**940**	**940**	**940**	**941**	**941**	**941**	**940**	**940**	**940**	**940**	**940**	**940**	**940**		**939**	
Avg.	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**956**	**955**	**955**	**955**	**955**	**955**	**955**	**956**	**956**			**955.4**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	961	961	961	960	960	960	959	959	959	959	958	958	957	957	957	957	957	957	957	957	957	956	956	956	961	956	958.2
2	956	957	957	956	957	956	956	956	955	955	955	954	954	953	953	952	951	951	950	949	949	949	950	949	957	949	953.5
3	949	948	948	947	946	945	945	945	945	945	945	945	944	944	944	944	944	944	945	945	945	945	945	946	949	944	945.3
4	946	947	946	946	946	946	946	946	946	946	946	946	946	946	946	946	945	945	946	945	945	945	945	945	947	945	945.9
5	945	945	945	945	945	945	944	944	945	945	945	945	945	945	945	945	945	945	944	944	944	945	945	946	946	944	944.8
6	946	946	946	946	946	946	946	946	946	946	946	947	947	947	948	948	948	948	949	949	949	950	950	951	951	946	947.4
7	951	951	952	952	952	953	953	953	954	955	955	956	956	956	956	956	956	956	956	956	956	956	957	957	957	951	954.7
8	957	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	956	956.0
9	956	956	956	956	955	955	955	955	956	955	956	956	956	957	956	957	957	957	957	957	958	958	958	958	958	955	956.4
10	959	959	960	960	960	960	960	960	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	962	962	959	960.5
11	962	963	963	962	963	962	963	963	963	963	963	964	963	963	963	963	963	963	963	963	963	963	963	963	964	962	963.0
12	963	964	963	963	962	962	961	960	960	959	959	959	959	959	959	958	958	958	958	957	958	958	958	959	964	957	959.8
13	959	959	960	960	960	960	960	961	961	961	961	962	962	962	962	962	962	962	962	962	962	963	963	963	963	959	961.3
14	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	962	962	962	962	962	962	963	962	962.9
15	962	962	962	961	961	961	961	960	960	960	960	960	960	959	959	959	959	959	959	958	958	959	958	958	962	958	959.9
16	958	958	957	957	957	956	956	955	955	955	955	954	954	953	952	953	953	951	952	951	951	951	952	952	958	951	954.1
17	952	952	952	952	953	954	953	954	954	954	954	954	954	954	954	954	953	953	953	953	952	952	952	952	954	952	953.1
18	952	952	951	951	951	950	950	950	950	949	949	949	949	950	949	949	949	949	948	948	948	948	948	948	952	948	949.4
19	947	947	947	946	946	946	945	945	945	945	945	945	945	945	945	945	945	945	946	946	946	947	947	948	948	945	945.7
20	948	948	948	948	948	948	948	948	948	948	948	948	949	949	949	949	949	948	948	948	947	947	947	946	949	946	948.1
21	946	946	946	945	945	945	946	946	947	947	948	948	949	949	950	950	950	950	951	951	951	951	952	952	952	945	948.4
22	952	953	953	953	953	952	952	952	952	952	952	952	952	952	951	952	951	951	951	951	951	951	951	951	953	951	951.8
23	951	951	950	950	950	950	950	951	950	950	950	950	950	950	950	950	950	949	949	949	949	949	949	949	951	949	950.0
24	950	950	949	949	949	949	950	950	950	950	950	950	951	951	951	951	950	950	950	950	950	950	950	950	951	949	950.1
25	950	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	950	950	950	949	950	950	950	950	951	949	950.2
26	950	950	950	950	951	951	951	951	951	951	951	951	952	952	952	951	951	951	951	951	950	950	950	950	952	950	950.8
27	950	950	950	950	949	949	949	949	950	950	950	950	950	951	951	951	951	952	952	952	953	953	953	954	954	949	950.7
28	954	954	954	954	954	954	955	955	954	955	955	955	955	955	955	955	954	954	954	954	953	954	954	954	955	953	954.2
29	954	954	954	953	954	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	954	955	955	953	953.2
30	954	955	954	955	954	954	954	954	955	955	955	955	955	955	955	954	955	955	955	955	954	955	955	956	956	954	954.8
31	956	955	955	955	955	954	954	954	954	954	954	954	954	954	954	953	953	953	953	953	952	953	953	953	956	952	953.8
Max.	**963**	**964**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**		
Min.	**945**	**945**	**945**	**945**	**945**	**945**	**944**	**944**	**945**	**945**	**945**	**945**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**945**	**945**	**945**		**944**	
Avg.	**953**	**954**	**954**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**			**953.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	953	953	953	953	953	953	953	954	954	954	954	954	955	955	955	955	955	955	955	955	955	956	956	956	956	953	954.3
2	957	957	958	958	958	958	959	959	959	959	960	960	960	960	960	961	961	961	961	961	961	962	962	962	962	957	959.7
3	962	962	962	962	962	963	963	963	963	963	963	963	964	963	963	964	963	963	963	963	963	963	963	963	964	962	963.1
4	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	962	962	962	962	962	962	962	963	962	962.9
5	962	962	962	962	962	962	962	962	962	962	962	961	962	961	961	961	961	961	961	961	961	961	961	962	962	961	961.5
6	962	961	962	962	962	962	961	961	961	962	962	961	961	961	961	960	960	960	960	960	960	960	960	960	962	960	960.9
7	960	960	959	959	958	959	958	959	958	958	958	958	958	957	957	957	957	957	956	956	956	956	956	956	960	956	957.7
8	956	956	956	955	955	955	955	955	955	954	954	954	954	954	954	953	953	953	953	953	953	953	953	953	956	953	954.2
9	953	953	953	953	952	952	953	953	952	953	953	953	952	953	953	953	953	953	953	953	954	954	955	955	955	952	953.1
10	955	955	956	956	956	956	956	956	957	957	957	957	957	957	957	957	956	957	956	956	956	957	957	957	957	955	956.4
11	957	957	957	956	956	956	956	956	956	955	955	955	955	955	954	954	953	953	952	952	951	951	951	951	957	951	954.3
12	950	950	949	949	948	948	947	947	946	946	945	945	945	944	944	943	943	942	942	942	942	942	942	942	950	942	945.1
13	941	941	941	940	940	940	940	940	940	940	940	940	940	940	940	940	941	941	942	942	942	943	943	944	944	940	940.8
14	944	944	945	945	945	945	946	946	947	948	948	949	949	950	950	951	951	951	952	952	953	954	954	954	954	944	948.9
15	955	955	956	956	957	957	957	958	958	958	958	959	959	959	959	959	959	959	959	959	959	959	959	958	959	955	957.9
16	958	958	958	958	958	958	958	957	957	957	957	957	957	956	956	956	955	955	954	954	954	954	954	954	958	954	956.3
17	953	953	953	952	951	951	951	950	950	950	949	949	949	948	948	947	947	946	946	946	945	946	946	945	953	945	948.8
18	945	945	945	944	944	944	944	944	943	944	943	943	943	943	943	943	943	943	943	943	944	944	944	945	945	943	943.7
19	945	945	945	946	946	946	947	947	947	948	948	948	948	948	948	948	948	948	948	948	948	948	949	949	949	945	947.3
20	949	948	948	948	948	948	947	947	947	947	947	947	947	947	946	946	946	945	945	945	945	945	945	945	949	945	946.7
21	945	945	945	945	945	945	945	945	945	945	945	945	946	946	946	946	946	946	946	946	946	946	947	947	947	945	945.6
22	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	946	946	946	946	946	946	946	946	945	947	945	946.6
23	945	945	945	945	945	944	944	944	944	944	944	944	945	944	944	944	944	943	943	943	943	943	943	942	945	942	944.0
24	942	941	941	941	940	939	939	938	938	937	937	937	937	937	937	937	937	937	937	937	937	937	938	938	942	937	938.1
25	938	938	938	938	938	938	939	939	939	939	940	940	940	940	940	940	940	939	939	939	939	939	940	939	940	938	939.1
26	940	940	940	940	940	941	941	941	941	942	942	942	942	943	943	943	943	943	943	943	943	944	944	944	944	940	941.9
27	944	944	944	944	945	945	945	945	945	945	945	946	946	946	946	946	946	946	946	947	947	947	948	948	948	944	945.7
28	948	948	948	949	949	949	949	950	950	950	951	951	951	952	952	952	952	953	953	953	954	954	955	955	955	948	951.1
29	955	956	956	957	957	957	958	958	958	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959	955	958.2
30	959	959	959	959	959	959	959	959	959	959	959	959	959	958	958	957	957	956	955	955	954	953	953	953	959	953	957.4
31	952	952	950	949	948	947	946	946	946	946	945	944	944	943	943	942	941	941	941	941	941	940	940	941	952	940	944.5
Max.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**	**963**	**963**	**964**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**		
Min.	**938**	**938**	**938**	**938**	**938**	**938**	**939**	**938**	**938**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**937**	**938**	**938**		**937**	
Avg.	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**			**951.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	941	941	941	941	941	941	941	942	942	942	942	943	943	944	944	944	945	945	945	945	946	946	946	946	946	941	943.1
2	947	947	946	947	947	947	947	947	947	947	948	948	948	948	948	947	947	946	945	945	944	944	944	944	948	944	946.5
3	944	944	945	945	945	945	946	946	947	948	949	949	950	951	951	952	953	953	953	954	955	955	956	956	956	944	949.7
4	957	957	958	958	958	958	959	959	959	959	960	960	960	960	960	960	960	960	960	960	960	961	961	961	961	957	959.4
5	961	961	961	961	961	961	961	961	962	962	963	963	963	963	963	963	963	963	963	963	963	964	964	963	964	961	962.4
6	964	963	963	963	963	962	961	960	959	959	958	957	956	955	954	954	953	951	950	949	948	948	947	947	964	947	956.0
7	946	946	945	945	945	944	944	944	944	944	944	944	945	945	946	946	946	947	947	948	948	949	950	950	950	944	946.0
8	952	952	952	953	953	954	954	954	954	954	953	953	952	951	950	949	948	947	947	946	945	945	944	944	954	944	950.3
9	943	943	943	942	942	942	941	941	941	941	941	941	941	940	940	940	940	939	939	939	939	939	939	939	943	939	940.7
10	939	939	939	938	938	938	938	938	938	938	938	939	939	939	939	939	939	939	940	940	941	942	942	943	943	938	939.3
11	943	944	944	945	945	946	946	946	947	947	948	948	948	949	949	949	948	948	948	948	948	948	948	947	949	943	947.0
12	947	946	946	946	946	945	945	945	946	946	946	946	946	946	946	946	945	945	944	944	944	944	944	944	947	944	945.4
13	945	944	943	943	944	943	942	943	943	942	943	944	944	944	944	944	943	943	942	942	941	941	941	941	945	941	942.8
14	941	940	941	941	942	942	942	942	943	942	943	943	944	944	945	945	945	946	946	947	948	949	949	950	950	940	944.1
15	951	951	952	952	952	952	952	952	952	953	953	953	953	953	953	953	953	953	953	953	953	954	953	953	954	951	952.7
16	953	953	953	952	952	951	950	950	950	949	949	949	948	947	947	947	946	946	946	946	946	946	946	946	953	946	948.6
17	946	946	946	946	946	945	945	945	945	945	945	944	944	944	943	943	942	941	940	940	939	938	938	937	946	937	943.0
18	936	935	934	934	933	933	933	933	933	933	933	933	934	934	934	934	935	935	936	937	937	938	938	939	939	933	934.8
19	939	940	940	940	940	940	940	940	940	941	941	941	942	942	942	942	942	942	943	943	944	945	945	946	946	939	941.7
20	946	947	947	948	948	948	948	949	949	949	950	950	951	951	951	951	952	952	952	952	953	953	953	954	954	946	950.2
21	954	955	955	955	955	955	956	956	956	956	957	957	958	958	958	958	958	958	958	959	959	959	960	960	960	954	957.1
22	960	960	961	961	960	961	961	961	961	961	961	961	961	961	960	960	959	959	959	959	959	959	959	958	961	958	959.9
23	959	959	958	958	958	958	958	958	958	958	958	958	958	958	957	957	957	957	956	956	957	956	956	956	959	956	957.4
24	956	956	955	955	955	954	954	954	954	954	953	953	953	953	953	952	952	951	951	951	951	951	951	951	956	951	953.1
25	951	951	951	951	951	951	951	951	951	951	951	952	952	952	952	952	952	952	952	952	952	952	952	952	952	951	951.3
26	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	951	951	951	951	951	952	951	952	952	951	951.9
27	951	951	951	951	951	951	951	952	952	952	953	953	953	953	952	953	953	953	954	954	955	955	955	955	955	951	952.9
28	955	955	955	955	955	955	955	955	955	954	954	954	954	954	953	953	952	952	951	951	951	951	951	951	955	951	953.5
29	951	951	951	952	952	952	952	952	952	952	952	952	953	953	953	952	951	951	951	951	950	950	950	949	953	949	951.4
30	949	949	948	947	947	947	947	946	946	946	946	946	947	947	947	947	947	947	946	947	947	947	947	947	949	946	946.8
Max.	**964**	**963**	**963**	**963**	**963**	**962**	**961**	**961**	**962**	**962**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**964**	**964**	**963**	**964**		
Min.	**936**	**935**	**934**	**934**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**933**	**934**	**934**	**934**	**934**	**935**	**935**	**936**	**937**	**937**	**938**	**938**	**937**		**933**	
Avg.	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**950**	**950**	**950**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**	**949**			**949.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	947	947	947	948	947	947	947	947	948	948	948	948	948	948	947	947	947	946	946	945	945	945	945	945	948	945	946.8
2	944	944	944	943	943	942	942	941	941	940	940	939	939	938	937	936	936	935	935	934	934	933	933	933	944	933	938.6
3	933	932	932	932	932	932	932	932	932	933	933	934	935	935	936	936	937	937	938	938	939	939	939	940	940	932	934.9
4	940	940	940	940	940	940	940	939	939	939	940	940	939	939	939	939	938	938	938	938	938	938	938	938	940	938	939.1
5	938	938	938	938	938	938	938	938	939	939	939	939	940	940	940	940	940	940	940	941	941	941	942	942	942	938	939.5
6	942	942	942	943	943	943	943	943	943	943	944	944	944	944	944	944	944	944	944	944	944	944	944	944	944	942	943.5
7	944	944	944	944	944	944	945	945	946	946	947	948	949	949	950	951	951	952	953	953	954	955	955	956	956	944	948.7
8	956	957	958	958	959	959	960	960	960	961	961	962	962	962	961	961	960	960	959	959	959	958	957	956	962	956	959.4
9	956	954	953	952	950	950	948	946	946	944	942	941	938	937	936	934	933	931	930	928	928	928	928	928	956	928	940.1
10	927	927	928	928	928	928	930	930	932	932	933	934	934	935	934	935	934	935	935	935	935	935	936	936	936	927	932.3
11	935	935	935	934	934	933	933	934	934	935	936	936	937	937	938	938	939	939	940	941	942	943	944	945	945	933	937.4
12	946	945	946	947	947	948	949	949	950	951	952	953	953	954	955	955	954	954	955	956	956	955	956	955	956	945	951.8
13	956	955	955	954	953	952	951	950	949	949	948	947	946	946	945	944	943	943	943	942	942	942	942	942	956	942	947.4
14	941	941	941	941	940	941	941	941	942	942	942	941	942	942	941	941	941	941	940	941	940	940	940	940	942	940	941.0
15	940	940	940	940	940	941	941	941	942	942	942	942	943	943	943	943	943	943	943	944	944	944	944	944	944	940	942.3
16	944	945	945	945	945	945	945	945	946	946	946	946	946	947	947	946	947	946	947	947	947	947	947	947	947	944	946.0
17	947	947	947	947	947	947	947	947	946	946	946	946	946	946	946	945	945	944	944	944	944	943	943	943	947	943	945.6
18	943	943	943	942	942	941	941	941	941	941	941	941	941	941	941	940	940	939	939	938	938	938	937	937	943	937	940.4
19	937	936	935	935	935	935	935	935	935	935	935	935	935	936	936	936	937	937	938	938	939	939	940	940	940	935	936.4
20	940	941	941	941	941	941	942	942	943	943	944	944	945	945	945	946	946	946	946	947	947	947	947	947	947	940	944.1
21	948	948	948	948	948	948	948	948	948	948	948	948	948	948	947	946	946	945	944	943	942	942	942	942	948	942	946.1
22	941	940	940	940	940	939	939	938	938	938	938	938	938	937	936	936	935	935	933	933	932	932	932	932	941	932	936.6
23	932	931	932	932	931	931	931	931	932	933	933	933	933	934	935	936	937	938	939	938	938	938	939	939	939	931	934.3
24	939	939	940	941	941	943	944	946	948	950	951	952	953	954	954	955	956	957	957	958	958	959	959	959	959	939	950.6
25	959	960	960	959	960	960	959	959	959	960	960	960	960	960	960	959	958	958	957	957	957	957	956	956	960	956	958.8
26	956	955	954	954	953	952	952	952	952	952	952	952	952	952	952	952	952	952	951	952	952	953	953	953	956	951	952.6
27	953	954	955	956	956	957	957	957	958	959	959	959	959	959	959	959	960	960	960	959	959	959	958	958	960	953	957.8
28	957	956	955	954	953	952	951	950	950	948	948	947	946	945	945	944	943	943	943	942	942	942	942	942	957	942	947.5
29	942	942	942	942	942	943	943	944	944	945	945	946	946	947	947	947	947	948	948	949	949	950	950	950	950	942	945.6
30	951	951	952	952	953	953	953	954	954	954	955	955	955	955	955	955	955	955	955	955	955	955	955	954	955	951	954.0
31	954	954	953	953	953	952	951	951	951	950	950	949	949	949	948	948	948	947	947	947	947	947	947	947	954	947	949.7
Max.	**959**	**960**	**960**	**959**	**960**	**960**	**960**	**960**	**960**	**961**	**961**	**962**	**962**	**962**	**961**	**961**	**960**	**960**	**960**	**959**	**959**	**959**	**959**	**959**	**962**		
Min.	**927**	**927**	**928**	**928**	**928**	**928**	**930**	**930**	**932**	**932**	**933**	**933**	**933**	**934**	**934**	**934**	**933**	**931**	**930**	**928**	**928**	**928**	**928**	**928**		**927**	
Avg.	**945**	**945**	**945**	**945**	**944**	**944**	**944**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**	**945**			**944.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	946	946	946	946	945	945	945	945	944	947	944	946.3
2	944	943	943	942	942	942	941	940	941	940	939	939	938	938	938	939	939	939	939	939	939	939	939	939	944	938	940.1
3	939	940	939	940	940	940	941	941	942	942	943	944	944	945	945	945	946	946	946	947	947	947	947	947	947	939	943.4
4	947	947	947	947	947	947	947	947	948	947	948	948	948	948	949	948	948	948	948	948	948	948	947	947	949	947	947.7
5	947	947	947	947	946	946	946	946	945	945	946	945	945	945	945	945	944	944	944	944	944	944	944	944	947	944	945.2
6	944	944	944	944	943	943	943	942	942	942	942	942	942	942	941	941	941	940	940	940	939	940	939	940	944	939	941.6
7	940	940	941	941	942	942	943	944	944	945	946	947	947	948	948	949	949	949	950	950	950	951	951	952	952	940	946.2
8	952	952	952	952	952	952	951	951	951	951	951	950	950	949	948	947	946	945	944	944	942	941	940	939	952	939	947.9
9	938	937	935	934	933	933	932	932	932	932	931	931	930	930	929	929	928	928	928	927	928	928	928	928	938	927	930.9
10	927	927	927	926	925	924	923	922	921	921	921	920	921	920	920	920	920	921	922	922	922	923	924	924	927	920	922.6
11	924	924	923	923	922	922	922	922	922	921	922	922	922	922	921	921	921	922	922	923	923	924	924	925	925	921	922.4
12	926	926	927	927	928	928	929	930	930	931	933	934	935	936	936	937	938	938	939	940	940	941	942	942	942	926	933.8
13	943	943	944	944	944	945	945	945	946	946	946	946	947	947	947	947	948	948	948	949	949	949	950	950	950	943	946.6
14	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	951	951	951	952	952	953	953	950	950.5
15	953	954	954	955	955	956	956	956	956	956	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	953	956.2
16	957	956	957	957	957	957	958	958	959	959	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	956	958.9
17	960	960	960	959	959	959	959	959	959	959	959	959	959	958	958	958	958	958	958	958	958	959	959	960	960	958	958.7
18	959	960	960	961	961	962	962	962	962	963	963	964	964	964	964	965	965	965	964	965	965	965	965	965	965	959	963.2
19	965	965	964	964	964	963	963	962	962	962	961	960	960	959	958	958	958	957	957	957	956	956	956	955	965	955	960.1
20	954	954	953	953	952	950	949	949	947	948	949	947	947	946	945	945	945	945	945	944	943	944	943	942	954	942	947.5
21	942	941	941	941	942	940	940	940	939	938	938	937	936	935	934	934	932	932	931	931	930	930	929	929	942	929	935.9
22	929	929	929	929	929	930	930	930	931	931	932	933	933	934	934	935	935	936	936	936	937	937	937	938	938	929	932.9
23	938	938	938	938	938	937	936	936	935	935	934	933	932	931	930	928	927	927	925	925	923	922	921	920	938	920	931.1
24	919	918	917	916	916	916	916	916	916	917	917	918	918	919	919	920	920	921	921	922	922	923	923	925	925	916	919.0
25	925	928	928	929	929	929	929	929	929	930	931	931	931	932	932	933	934	935	935	936	937	937	938	939	939	925	932.0
26	939	940	941	942	942	942	943	943	944	943	944	945	946	946	946	945	945	945	943	943	942	942	942	941	946	939	943.1
27	940	940	939	937	937	935	934	934	933	932	931	930	930	928	927	927	926	925	925	924	924	924	924	924	940	924	930.4
28	924	924	923	924	924	923	923	924	924	925	926	926	927	927	927	927	928	928	929	929	930	931	931	933	933	923	926.6
29	933	934	935	936	936	937	938	939	940	941	942	943	944	944	945	945	945	946	947	948	949	950	950	951	951	933	942.4
30	952	953	954	954	954	954	955	955	956	957	957	958	958	959	960	960	961	961	962	962	963	964	964	965	965	952	958.2
Max.	**965**	**965**	**964**	**964**	**964**	**963**	**963**	**962**	**962**	**963**	**963**	**964**	**964**	**964**	**964**	**965**	**965**	**965**	**964**	**965**	**965**	**965**	**965**	**965**	**965**		
Min.	**919**	**918**	**917**	**916**	**916**	**916**	**916**	**916**	**916**	**917**	**917**	**918**	**918**	**919**	**919**	**920**	**920**	**921**	**921**	**922**	**922**	**922**	**921**	**920**		**916**	
Avg.	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**943**			**942.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Barometric Pressure (mbar)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	965	965	965	965	965	965	965	966	966	966	966	967	967	967	967	967	966	966	966	966	966	966	966	966	967	965	965.9
2	965	965	965	965	963	963	962	963	962	962	961	961	960	959	959	958	958	958	958	958	958	958	959	958	965	958	960.9
3	957	957	956	955	955	953	952	953	951	948	947	946	945	942	938	940	940	938	937	938	937	938	938	938	957	937	945.7
4	938	938	938	939	939	939	939	939	939	939	940	940	940	940	940	940	940	940	940	941	941	941	941	941	941	938	939.7
5	941	942	942	942	942	942	942	942	942	942	942	942	942	941	941	941	940	940	940	940	941	940	941	941	942	940	941.2
6	941	941	941	941	941	942	942	942	943	943	943	944	944	944	945	945	945	946	946	946	947	947	948	948	948	941	943.9
7	949	949	949	950	950	950	951	951	951	952	952	952	952	952	952	952	951	951	951	950	950	949	949	948	952	948	950.4
8	946	945	943	942	939	938	936	934	933	931	930	927	926	924	922	921	919	919	918	917	916	915	915	914	946	914	928.0
9	914	913	913	913	913	913	913	913	914	914	915	916	916	917	918	919	920	921	922	923	925	926	928	929	929	913	917.8
10	930	932	933	934	935	938	940	941	943	944	946	948	949	950	951	952	953	954	956	957	958	959	960	961	961	930	946.9
11	962	963	963	964	964	964	965	965	966	967	967	968	969	970	971	971	972	973	974	975	975	976	977	977	977	962	969.0
12	978	978	979	978	979	978	978	978	978	978	978	978	978	978	977	977	976	977	977	978	978	979	979	980	980	976	977.9
13	981	981	981	981	981	981	981	980	980	980	981	981	981	980	981	981	980	980	980	979	979	978	978	978	981	978	980.1
14	978	978	978	977	977	976	975	975	975	975	976	976	975	974	974	973	973	973	973	973	973	973	974	973	978	973	974.9
15	974	973	974	972	974	974	973	974	975	974	974	975	976	975	975	975	975	975	975	975	975	975	974	974	976	972	974.3
16	974	973	973	973	972	972	971	971	970	970	970	969	969	968	968	967	966	966	966	965	965	965	964	964	974	964	968.8
17	965	964	963	963	963	964	964	964	964	963	964	964	964	964	964	964	964	964	963	963	963	963	961	963	965	961	963.6
18	963	963	962	961	960	961	959	960	960	959	959	959	959	958	957	956	955	955	955	955	955	955	955	955	963	955	958.2
19	954	955	954	954	953	954	954	954	953	955	954	955	954	954	954	954	954	953	954	954	954	954	953	955	955	953	954.0
20	954	955	955	955	955	955	956	956	957	957	957	958	958	958	958	958	959	958	959	959	959	959	959	959	959	954	957.3
21	959	959	959	959	959	959	958	958	958	958	958	958	958	958	958	957	957	957	957	956	956	955	955	955	959	955	957.6
22	954	954	953	953	952	951	950	949	949	948	949	949	949	949	948	947	947	946	945	944	943	942	941	940	954	940	948.0
23	938	935	934	932	932	931	931	932	934	935	937	939	940	940	940	941	942	942	943	943	943	943	944	945	945	931	938.2
24	946	948	949	950	951	951	952	954	954	954	955	955	955	955	955	955	955	954	953	953	952	950	949	948	955	946	952.4
25	946	945	943	941	940	938	937	935	934	933	931	931	930	930	930	930	929	930	932	933	934	935	935	936	946	929	935.0
26	937	937	938	939	940	939	941	940	941	940	940	940	940	939	939	939	939	938	938	937	937	935	936	936	941	935	938.6
27	936	936	935	934	933	935	934	934	934	934	936	935	935	936	937	937	938	938	940	941	942	943	943	943	943	933	936.9
28	944	944	944	945	945	946	944	945	944	945	944	945	946	946	946	946	946	946	946	946	947	947	947	947	947	944	945.4
29	948	947	948	948	948	948	948	947	947	948	948	949	949	949	949	949	949	950	950	951	951	952	952	952	952	947	948.9
30	953	953	953	954	954	954	954	954	955	954	954	955	955	955	955	955	955	955	954	954	955	954	955	955	955	953	954.3
31	955	955	955	954	954	954	954	954	954	954	955	955	955	956	955	956	956	956	956	956	957	957	957	957	957	954	955.3
Max.	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**980**	**980**	**980**	**981**	**981**	**981**	**980**	**981**	**981**	**980**	**980**	**980**	**979**	**979**	**979**	**979**	**980**	**981**		
Min.	**914**	**913**	**913**	**913**	**913**	**913**	**913**	**913**	**914**	**914**	**915**	**916**	**916**	**917**	**918**	**919**	**919**	**919**	**918**	**917**	**916**	**915**	**915**	**914**		**913**	
Avg.	**953**	**953**	**953**	**953**	**953**	**953**	**952**	**952**	**952**	**952**	**953**	**953**	**953**	**953**	**952**	**952**	**952**	**952**	**952**	**952**	**953**	**953**	**953**	**953**			**952.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	309.4	291.9	302.6	299.3	292.3	292.3	298.5	302.0	298.1	299.1	299.4	301.2	301.9	298.6	320.4	324.7	331.9	318.6	316.1	318.8	315.6	309.3	301.1	335.2
2	299.8	300.7	311.1	314.5	327.6	319.5	326.2	330.2	326.6	319.5	315.5	314.3	315.6	306.3	308.5	311.2	306.4	304.7	304.8	303.3	296.9	300.2	299.8	301.9
3	304.5	304.3	305.7	299.0	296.4	309.2	307.0	311.3	304.4	308.7	303.6	306.6	304.5	307.9	301.7	301.5	300.2	300.8	309.2	306.3	310.6	310.3	315.6	309.0
4	313.3	303.2	312.5	309.7	314.1	309.0	308.2	305.6	314.4	310.4	306.6	305.3	312.5	308.4	313.4	306.0	310.7	308.3	305.5	317.7	317.3	316.1	317.5	317.8
5	315.4	310.0	306.9	304.6	312.1	311.3	307.2	310.0	309.3	308.8	313.0	310.9	316.6	317.2	315.0	313.7	317.9	316.6	316.8	316.2	318.1	320.8	317.8	314.0
6	316.5	312.6	303.4	306.5	308.0	317.3	310.8	307.8	304.3	303.2	304.9	301.3	310.7	307.1	307.7	311.4	311.2	309.7	305.8	301.8	296.0	298.0	298.6	305.3
7	301.4	296.3	295.8	299.0	302.0	302.0	299.1	303.5	300.8	304.8	301.2	307.0	305.3	303.0	306.7	309.4	302.0	299.7	314.4	317.1	317.5	306.0	303.5	296.8
8	297.0	318.0	305.3	301.5	307.4	304.6	294.3	296.6	313.9	311.0	309.2	304.4	310.4	315.9	313.1	314.8	304.4	306.9	298.4	295.1	299.0	302.0	300.3	307.5
9	304.7	305.8	298.9	291.9	297.1	298.5	298.3	308.0	306.6	303.5	305.6	308.6	300.1	299.3	304.8	309.4	314.7	315.6	315.6	315.5	312.1	313.9	314.8	314.3
10	309.7	311.7	310.7	314.2	310.6	310.1	307.4	311.6	314.5	314.4	307.0	310.7	302.8	302.5	305.4	313.2	311.8	309.2	308.6	314.3	314.5	314.0	310.9	308.9
11	307.9	301.1	306.0	313.8	312.7	312.8	317.6	309.5	314.0	311.1	306.8	310.0	310.7	303.0	299.0	299.8	297.1	302.5	300.5	296.6	298.4	298.5	300.4	299.1
12	305.4	302.0	299.4	299.7	299.4	302.7	308.6	312.5	329.6	318.2	328.8	324.0	313.7	308.7	305.4	302.7	309.2	306.2	310.9	314.6	318.2	320.2	330.7	314.7
13	323.6	324.6	309.6	306.4	304.9	305.1	325.3	320.1	305.3	304.2	311.2	300.9	306.9	302.6	302.4	302.1	308.0	309.9	307.7	299.5	309.3	306.7	302.2	297.4
14	306.1	302.7	303.4	322.8	331.0	329.9	342.2	110.2	126.4	121.2	127.7	124.6	123.8	105.8	123.6	123.9	127.8	120.2	126.9	123.4	110.5	117.3	122.5	119.8
15	116.6	112.8	112.0	123.5	129.5	147.0	147.9	150.4	150.2	152.4	152.0	153.3	156.0	152.0	152.4	146.9	150.4	150.5	143.3	147.3	151.2	148.3	139.1	152.0
16	156.0	189.9	208.5	187.5	169.0	255.9	247.3	236.2	234.2	217.7	181.8	193.4	200.9	212.8	179.9	152.6	110.5	85.9	84.6	114.3	118.7	95.3	116.0	114.1
17	110.9	127.3	115.5	106.5	103.7	127.9	125.3	117.7	108.6	100.5	101.1	104.3	101.0	102.3	102.3	105.3	109.7	119.1	129.1	146.1	152.5	150.5	153.7	152.0
18	149.4	141.4	151.3	152.5	142.9	143.3	152.1	150.2	158.6	162.6	161.1	173.6	164.9	205.6	180.8	89.4	142.4	112.4	108.0	106.0	96.5	107.5	130.1	136.8
19	156.8	134.1	133.0	127.3	118.7	117.4	119.3	132.4	142.0	134.9	129.0	121.6	123.1	119.0	122.0	121.0	123.3	124.8	122.5	121.0	120.2	121.9	123.7	124.5
20	129.8	130.3	126.3	125.4	114.3	116.4	123.5	124.2	122.1	123.3	123.3	112.2	117.8	120.4	111.8	108.4	108.3	106.8	118.1	181.5	90.5	136.4	132.7	136.4
21	146.2	149.1	148.3	140.0	127.3	117.7	110.9	117.9	124.5	122.7	125.1	125.5	122.2	118.2	113.1	109.9	110.2	114.6	115.0	119.6	114.3	114.7	111.8	116.2
22	123.1	132.2	171.3	168.5	163.1	167.7	172.1	169.4	164.8	172.2	204.9	215.0	220.4	215.6	227.8	225.8	230.4	173.8	213.3	117.0	164.1	214.9	291.1	301.1
23	312.9	309.6	319.7	310.2	307.1	307.9	310.0	313.8	322.3	316.3	297.8	310.3	305.6	304.8	306.0	322.5	330.5	321.0	322.1	313.9	294.1	293.5	298.4	306.1
24	296.4	300.2	307.4	296.2	135.0	109.1	100.5	125.8	117.5	113.2	128.1	129.9	132.7	132.6	137.9	142.6	141.3	142.9	145.6	145.5	149.4	151.9	155.5	149.8
25	157.9	171.6	194.5	236.6	302.0	270.6	271.3	270.2	279.5	278.7	274.8	276.5	267.8	266.3	271.2	271.1	281.2	291.1	291.6	310.3	320.7	313.0	311.6	322.7
26	315.3	306.9	317.0	315.1	310.4	315.6	318.6	313.3	305.6	296.7	296.4	303.6	309.7	296.9	101.3	108.7	116.5	116.5	119.9	124.1	128.8	137.5	141.4	136.9
27	149.2	147.3	137.1	150.7	146.5	145.5	148.9	135.7	124.9	125.3	115.3	116.6	113.3	112.3	109.4	108.9	111.3	110.7	110.5	111.7	111.6	112.0	116.3	117.9
28	117.5	122.2	129.7	131.3	132.7	136.6	139.0	145.4	149.8	145.3	141.9	144.8	143.5	153.3	163.3	161.4	101.6	155.5	232.2	298.8	255.7	252.9	283.9	309.4
29	309.6	276.4	285.2	307.5	305.3	296.3	310.3	285.6	316.5	291.8	302.0	288.5	282.8	308.5	285.6	317.3	321.2	320.6	326.5	334.4	341.5	326.0	312.9	309.1
30	302.4	308.9	309.3	294.9	294.0	294.0	299.2	301.6	302.1	308.7	305.2	308.3	312.1	308.3	306.0	303.6	305.4	308.9	307.8	307.0	302.6	304.9	327.5	319.1
31	309.6	305.8	304.0	307.4	305.7	308.6	314.4	308.2	310.3	316.6	277.7	231.3	171.6	118.4	126.7	145.8	174.1	283.4	134.4	138.5	197.0	280.4	190.0	220.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.0	5.3	6.6	8.0	8.1	9.1	8.4	8.7	8.9	9.2	8.2	9.7	9.3	10.3	10.1	8.7	9.4	7.9	8.5	8.8	8.3	7.4	9.3	8.3	10.3	4.0	8.4
2	7.2	7.4	6.4	7.2	7.8	6.7	6.5	7.4	6.4	6.2	5.0	4.9	3.8	5.1	4.8	5.1	5.9	5.4	4.3	4.1	3.6	3.4	3.6	3.5	7.8	3.4	5.5
3	3.9	4.2	3.5	2.6	1.8	2.7	4.6	4.1	3.1	3.6	4.1	4.9	4.3	4.3	4.7	4.9	5.5	4.9	4.5	4.7	4.2	3.7	4.2	3.2	5.5	1.8	4.0
4	4.3	3.6	3.9	4.1	3.7	4.4	4.6	5.2	5.9	4.9	4.5	5.1	4.6	5.1	5.7	4.4	6.3	7.1	7.8	7.9	7.8	8.8	9.7	9.7	9.7	3.6	5.8
5	9.8	9.7	8.0	8.0	8.2	10.6	11.3	10.7	11.0	11.0	12.1	11.8	13.1	13.4	13.3	13.6	13.9	14.1	15.1	15.5	14.6	14.6	13.5	13.6	15.5	8.0	12.1
6	12.0	11.6	11.8	11.4	9.3	9.6	9.3	10.5	9.0	8.8	9.9	8.5	8.4	8.6	8.3	8.2	8.6	8.4	7.0	7.1	6.2	5.9	5.5	4.6	12.0	4.6	8.7
7	3.9	4.7	4.5	4.6	4.5	5.1	5.3	5.9	6.6	5.9	5.6	5.5	5.5	4.9	5.0	6.1	6.9	7.4	9.0	8.8	6.0	5.3	4.6	4.1	9.0	3.9	5.6
8	6.4	5.5	5.5	5.4	5.0	4.9	5.2	5.2	6.0	6.8	5.5	6.5	6.4	7.2	7.4	7.3	7.4	6.1	3.1	4.9	4.5	4.3	4.7	4.4	7.4	3.1	5.6
9	4.0	4.0	4.4	5.0	5.1	5.0	5.6	7.3	7.7	7.2	6.3	7.9	7.5	8.4	9.1	9.0	8.9	8.4	8.5	10.7	11.1	10.7	11.5	10.4	11.5	4.0	7.6
10	8.8	8.2	8.0	7.6	7.6	7.5	7.5	6.8	6.5	5.9	5.3	7.9	7.7	6.3	6.3	6.4	5.3	4.9	4.5	5.7	6.6	5.3	5.7	5.6	8.8	4.5	6.6
11	5.8	7.8	10.1	9.7	8.7	9.1	9.3	6.8	6.7	7.5	8.5	8.7	8.2	8.1	6.7	7.2	6.4	6.1	5.1	4.7	3.8	4.0	3.8	3.9	10.1	3.8	6.9
12	5.0	5.5	4.5	3.8	3.5	4.1	5.2	4.8	5.9	5.4	5.7	5.6	5.4	5.3	4.7	6.1	7.4	6.8	8.1	8.8	9.6	9.6	8.6	8.7	9.6	3.5	6.2
13	10.4	10.9	9.9	10.5	10.0	9.6	9.2	8.7	7.9	8.2	8.6	7.2	7.2	7.8	7.5	7.7	7.3	6.8	6.0	6.0	6.5	6.3	5.0	4.1	10.9	4.1	7.9
14	4.1	2.7	2.3	0.4	0.2	0.2	0.2	0.2	2.0	4.6	5.2	4.4	7.0	5.3	6.4	7.3	7.1	8.4	10.1	7.4	9.8	12.1	15.1	14.5	15.1	0.2	5.7
15	15.5	16.5	17.7	18.1	14.7	12.9	13.2	13.0	12.3	11.2	11.4	10.0	10.1	9.2	8.8	9.0	11.1	10.1	8.5	9.1	9.8	8.0	9.7	10.4	18.1	8.0	11.7
16	7.3	3.4	2.6	2.1	1.7	4.1	6.0	5.1	3.3	1.9	3.1	5.1	5.8	7.9	4.0	2.9	2.2	3.7	3.5	1.6	1.6	2.9	2.4	3.8	7.9	1.6	3.7
17	3.5	4.2	8.0	10.6	6.0	6.1	10.5	12.3	13.4	12.4	14.4	18.5	20.1	16.2	12.6	13.2	13.6	14.0	12.4	9.4	10.5	8.7	9.1	9.5	20.1	3.5	11.2
18	10.1	9.4	8.9	7.9	6.0	4.6	4.3	4.2	3.6	3.3	1.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.6	10.1	0.2	2.8
19	5.6	6.3	9.4	12.5	14.2	16.0	10.9	17.3	16.9	19.0	24.2	29.7	31.8	30.9	29.3	32.2	31.2	30.5	32.8	32.2	32.2	30.6	27.5	25.3	32.8	5.6	22.8
20	21.5	18.1	16.1	13.3	12.8	11.8	11.3	10.9	9.2	8.5	7.7	7.4	7.0	6.2	4.4	3.8	3.0	1.6	0.2	0.2	0.2	0.2	0.2	0.2	21.5	0.2	7.3
21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.0	16.9	20.2	21.5	20.4	23.8	26.4	27.7	28.5	28.8	26.1	23.3	28.8	0.2	11.2
22	23.3	17.4	18.9	16.8	16.0	16.4	16.9	13.4	13.7	15.7	18.8	19.7	20.1	19.9	16.9	16.0	9.5	7.2	5.6	1.6	1.5	1.7	4.3	4.7	23.3	1.5	13.2
23	7.1	9.6	13.0	16.2	15.6	14.6	14.9	13.6	10.1	6.6	11.2	10.5	11.1	10.8	12.4	12.6	15.1	15.8	14.6	11.3	7.7	8.2	7.0	6.7	16.2	6.6	11.5
24	6.0	3.3	4.0	3.0	1.6	4.1	6.3	5.6	7.3	11.5	12.8	10.7	12.6	12.4	12.3	13.4	15.6	15.2	15.3	13.9	13.4	13.1	13.7	10.9	15.6	1.6	9.9
25	8.9	6.6	2.5	1.6	3.3	7.7	8.1	9.3	9.0	10.5	13.0	15.4	14.4	13.0	13.0	13.4	15.2	14.9	14.6	11.9	10.6	10.3	11.5	9.5	15.4	1.6	10.3
26	8.1	10.1	10.6	9.8	10.6	11.3	11.7	12.0	11.6	9.6	9.5	5.9	4.1	2.1	1.7	2.8	2.5	2.9	3.5	2.8	5.2	7.1	7.7	7.8	12.0	1.7	7.1
27	10.0	10.6	10.8	14.5	15.4	12.4	10.4	15.0	17.3	21.9	22.3	22.3	23.6	23.5	22.1	23.4	23.0	23.0	24.0	23.7	24.4	24.6	23.3	21.5	24.6	10.0	19.3
28	19.9	19.8	16.3	13.3	12.9	13.6	12.3	9.8	10.7	9.4	8.9	6.6	6.1	5.4	4.0	2.6	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	19.9	0.2	7.2
29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.2	1.9	2.2	1.8	1.8	2.2	0.2	0.5
30	1.6	1.8	2.4	3.4	3.4	3.3	3.1	2.7	3.1	3.3	3.6	4.0	3.9	4.2	4.3	4.0	3.8	4.1	4.3	4.2	4.2	3.9	3.1	3.2	4.3	1.6	3.5
31	2.9	2.8	3.2	3.3	2.7	2.6	2.4	2.5	2.3	1.8	1.3	1.1	1.0	0.9	0.8	0.6	0.7	0.4	0.2	0.2	0.2	0.2	0.2	0.2	3.3	0.2	1.5
Max.	**23.3**	**19.8**	**18.9**	**18.1**	**16.0**	**16.4**	**16.9**	**17.3**	**17.3**	**21.9**	**24.2**	**29.7**	**31.8**	**30.9**	**29.3**	**32.2**	**31.2**	**30.5**	**32.8**	**32.2**	**32.2**	**30.6**	**27.5**	**25.3**	**32.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.8**	**7.5**	**7.6**	**7.6**	**7.1**	**7.4**	**7.6**	**7.7**	**7.7**	**7.8**	**8.3**	**8.6**	**8.8**	**9.0**	**8.6**	**8.8**	**8.9**	**8.7**	**8.7**	**8.3**	**8.2**	**8.1**	**8.2**	**7.7**			**8.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.3	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.2	0.3
2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	1.2	3.0	2.5	2.6	3.3	3.4	3.1	3.1	3.3	3.1	3.1	2.6	3.1	3.4	0.2	1.7
3	3.7	3.9	4.1	4.1	3.8	3.5	4.1	3.9	3.7	4.6	4.9	4.1	3.6	3.3	3.9	3.1	1.8	3.0	2.8	2.6	2.7	2.3	2.5	2.3	4.9	1.8	3.4
4	2.2	2.0	1.9	1.9	1.9	1.6	1.5	1.7	1.7	1.3	1.2	0.5	1.0	1.2	1.3	1.5	2.4	3.5	3.8	3.7	4.2	4.5	4.6	4.7	4.7	0.5	2.3
5	5.0	3.8	4.4	4.7	5.7	5.7	5.5	5.7	5.2	5.2	6.6	4.1	4.2	3.7	3.6	1.5	0.2	8.5	7.9	6.8	7.1	7.0	6.7	6.8	8.5	0.2	5.2
6	6.6	5.2	4.6	5.2	3.6	4.4	4.9	5.0	5.6	6.3	5.9	7.7	8.8	8.9	7.9	8.2	7.7	7.6	9.2	8.9	10.0	10.9	9.6	9.8	10.9	3.6	7.2
7	9.6	7.6	10.8	8.7	8.4	7.9	8.8	9.7	8.8	7.0	7.0	3.8	2.0	4.0	3.6	2.7	5.2	6.2	6.9	6.7	6.8	6.6	4.9	5.4	10.8	2.0	6.6
8	6.6	3.0	2.2	1.6	2.2	2.7	3.0	4.1	2.2	3.1	3.3	2.5	4.9	4.4	5.0	3.0	5.0	6.9	5.2	5.8	3.7	4.8	7.8	4.4	7.8	1.6	4.1
9	6.1	7.2	13.6	15.5	15.6	14.9	13.0	12.8	10.2	9.0	3.1	2.5	2.6	2.4	2.7	3.4	4.3	4.6	5.4	5.4	5.4	5.8	5.7	5.9	15.6	2.4	7.4
10	5.5	6.7	6.7	6.8	6.6	5.5	6.6	5.1	4.9	4.4	4.2	3.0	3.4	3.5	2.8	1.5	3.3	1.6	2.0	1.9	3.3	3.2	3.0	1.7	6.8	1.5	4.0
11	1.8	4.5	4.0	6.3	6.8	7.8	5.3	5.8	5.0	3.5	3.1	3.8	3.5	3.5	2.6	2.4	1.7	1.6	1.6	1.1	1.8	0.8	1.5	2.0	7.8	0.8	3.4
12	2.0	1.5	1.3	1.2	1.1	3.0	4.6	3.4	2.8	3.9	3.2	4.0	3.7	3.4	4.1	4.0	4.3	4.1	4.6	4.4	4.0	4.2	2.9	5.0	5.0	1.1	3.4
13	11.2	7.6	9.3	14.7	17.7	16.1	20.0	15.1	20.0	25.1	26.8	23.1	21.3	20.2	20.9	19.6	20.0	18.1	16.3	18.4	18.7	18.9	18.1	17.5	26.8	7.6	18.1
14	16.9	17.8	17.6	15.5	14.5	14.4	14.7	12.5	15.5	18.5	17.1	13.5	9.8	13.2	12.7	12.2	12.1	12.0	10.4	9.1	6.9	3.1	3.2	6.7	18.5	3.1	12.5
15	9.4	10.2	10.7	10.9	10.6	8.2	10.1	9.2	6.1	4.5	2.5	2.8	2.2	2.0	3.1	2.9	2.2	2.0	3.0	3.1	4.1	6.2	5.8	13.8	13.8	2.0	6.1
16	16.1	11.9	13.1	15.3	12.1	12.0	12.2	15.1	14.9	12.2	12.9	11.4	10.3	10.5	10.0	8.3	6.7	8.0	9.0	9.8	9.2	7.8	5.8	4.1	16.1	4.1	10.8
17	4.4	5.1	6.6	5.8	6.0	6.4	10.8	9.2	4.6	5.2	7.6	7.7	10.5	13.6	12.5	9.9	4.0	14.8	22.0	20.4	20.6	20.1	20.9	19.6	22.0	4.0	11.2
18	20.0	21.0	19.8	19.3	20.8	24.3	26.0	26.4	25.9	22.4	20.0	18.1	17.2	15.9	16.4	16.5	14.7	12.3	14.0	12.5	12.0	13.6	13.3	12.5	26.4	12.0	18.1
19	10.6	8.1	3.8	4.2	6.7	6.1	3.5	8.9	7.8	6.3	6.8	9.6	6.7	11.3	11.2	10.9	10.2	11.0	10.3	11.5	8.7	3.7	1.1	4.1	11.5	1.1	7.6
20	12.3	19.7	22.7	21.6	20.9	24.0	25.8	24.3	21.2	21.3	19.4	14.2	14.8	13.6	15.2	12.3	6.6	4.9	6.0	10.9	11.7	9.0	10.6	12.4	25.8	4.9	15.6
21	12.1	11.6	9.4	10.8	11.1	7.6	9.3	10.5	11.3	12.4	12.7	12.9	11.9	10.5	9.3	8.5	8.5	4.2	3.5	2.7	3.0	2.1	2.1	2.5	12.9	2.1	8.4
22	2.5	2.8	3.3	2.3	1.5	1.0	0.7	2.5	2.8	1.7	1.4	1.6	2.2	3.4	11.1	13.5	15.1	14.2	13.1	12.0	11.3	8.2	7.0	8.2	15.1	0.7	6.0
23	8.3	7.3	6.4	2.2	1.6	0.9	0.7	0.7	1.8	2.7	2.6	2.2	2.5	3.1	3.0	3.5	3.5	5.0	5.4	6.5	6.2	5.7	6.6	6.1	8.3	0.7	3.9
24	7.5	9.3	9.8	10.4	10.8	10.8	9.8	7.7	7.8	9.9	8.2	8.8	9.4	8.7	7.4	7.0	7.8	8.0	9.4	11.6	13.4	14.6	7.6	7.3	14.6	7.0	9.3
25	10.4	11.4	14.7	13.6	12.9	11.7	11.5	10.2	7.6	5.9	4.8	4.0	3.3	3.9	4.3	4.0	2.7	2.8	3.1	2.3	3.7	4.2	3.2	1.9	14.7	1.9	6.6
26	3.1	3.9	4.5	4.1	2.3	1.8	2.4	2.2	2.2	2.5	2.6	3.2	2.8	3.2	3.0	3.0	3.5	5.2	6.1	6.3	7.1	6.6	6.9	7.8	7.8	1.8	4.0
27	8.2	8.2	6.1	6.6	7.0	5.0	4.5	4.2	2.6	1.8	1.5	1.1	1.9	1.8	0.9	0.9	1.7	2.7	3.9	2.7	5.3	5.4	7.6	3.4	8.2	0.9	4.0
28	6.3	6.1	7.3	6.0	6.9	6.9	2.6	5.1	3.7	2.5	2.6	2.9	3.2	3.2	3.8	3.5	3.9	4.5	4.2	4.8	4.9	4.6	4.2	4.6	7.3	2.5	4.5
29	5.4	5.5	6.1	6.6	6.1	6.1	5.5	5.7	5.5	7.4	7.8	5.4	5.6	5.6	5.5	4.6	5.1	5.5	4.9	5.8	5.8	4.9	5.1	5.0	7.8	4.6	5.7
Max.	**20.0**	**21.0**	**22.7**	**21.6**	**20.9**	**24.3**	**26.0**	**26.4**	**25.9**	**25.1**	**26.8**	**23.1**	**21.3**	**20.2**	**20.9**	**19.6**	**20.0**	**18.1**	**22.0**	**20.4**	**20.6**	**20.1**	**20.9**	**19.6**	**26.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**		**0.2**	
Avg.	**7.4**	**7.4**	**7.8**	**7.8**	**7.8**	**7.6**	**7.9**	**7.8**	**7.3**	**7.3**	**6.9**	**6.2**	**6.1**	**6.4**	**6.6**	**6.1**	**5.8**	**6.4**	**6.8**	**6.9**	**7.1**	**6.6**	**6.3**	**6.5**			**6.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.6	5.8	4.7	4.1	4.2	3.8	2.4	1.3	2.3	2.5	2.5	2.9	6.6	6.1	5.4	5.0	4.4	3.8	5.5	7.3	8.3	9.3	7.9	6.7	9.3	1.3	4.9
2	9.4	8.2	10.7	12.2	20.4	14.9	15.6	16.1	14.2	13.5	13.3	12.0	10.6	8.7	7.5	6.5	6.3	8.7	8.2	6.1	6.3	6.3	6.0	4.4	20.4	4.4	10.3
3	4.6	5.2	5.7	6.3	11.0	13.6	18.1	19.0	21.0	20.6	24.4	25.7	27.4	26.4	25.3	24.4	24.3	23.7	22.4	22.5	19.6	21.7	22.4	19.7	27.4	4.6	19.0
4	17.7	16.8	17.9	18.7	15.2	17.2	20.2	20.3	19.4	21.3	22.0	22.7	24.3	24.1	22.8	23.2	22.3	23.2	23.4	22.4	22.8	22.4	19.9	18.5	24.3	15.2	20.8
5	20.1	23.1	19.5	21.7	23.2	26.3	24.1	15.4	16.0	24.0	30.6	27.4	21.7	19.8	22.7	23.9	24.7	23.7	22.6	26.4	26.7	24.5	24.1	24.2	30.6	15.4	23.2
6	22.6	21.0	18.3	16.6	15.7	14.1	11.4	9.5	11.3	13.0	10.8	6.1	9.3	12.3	15.2	17.7	18.5	18.8	16.0	7.3	4.7	7.5	9.3	8.5	22.6	4.7	13.1
7	7.2	7.5	7.4	5.7	4.9	4.9	4.6	5.0	4.7	4.5	4.2	3.8	3.1	3.1	2.5	1.0	1.8	3.6	4.5	8.0	7.6	6.7	8.7	10.6	10.6	1.0	5.2
8	11.5	10.9	9.0	2.7	2.4	3.6	4.2	4.5	5.9	5.3	4.9	5.3	10.7	5.7	5.5	7.4	8.7	10.9	12.1	12.1	12.9	13.8	13.0	12.3	13.8	2.4	8.1
9	8.4	7.6	8.3	7.8	8.5	8.9	8.0	8.2	8.2	7.5	6.1	4.3	3.7	4.0	4.9	3.9	5.0	5.2	4.4	3.8	3.0	2.3	2.2	1.4	8.9	1.4	5.6
10	1.4	1.7	3.4	3.8	6.2	3.6	3.5	4.1	4.8	5.3	6.3	2.2	1.1	3.2	4.0	1.6	3.4	1.7	1.3	2.4	1.7	2.9	1.4	1.8	6.3	1.1	3.0
11	1.9	4.2	4.9	3.5	1.5	2.5	3.5	4.1	3.3	2.1	2.2	2.6	4.3	3.2	3.6	4.3	4.5	2.3	2.7	3.3	4.1	4.0	4.7	4.6	4.9	1.5	3.4
12	4.7	5.1	5.0	5.2	5.4	4.3	3.1	2.2	1.6	1.4	1.3	1.2	1.2	1.3	2.0	3.1	3.7	4.2	4.1	4.4	4.9	4.1	4.0	4.4	5.4	1.2	3.4
13	4.6	4.8	5.0	5.0	4.9	4.2	4.1	3.7	3.6	3.4	3.2	2.8	2.6	2.5	2.6	2.5	2.2	2.0	1.9	2.4	2.6	1.8	1.4	0.9	5.0	0.9	3.1
14	0.7	1.1	1.0	0.6	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	2.1	3.3	4.1	5.5	7.9	9.5	9.5	11.1	11.1	0.2	2.5
15	15.3	16.2	12.1	13.6	13.4	13.7	16.0	17.7	16.1	15.5	16.9	17.0	15.9	14.7	14.4	14.5	14.6	14.7	15.0	14.9	13.4	12.8	12.5	11.5	17.7	11.5	14.7
16	8.5	5.4	5.1	6.0	5.6	6.1	3.9	4.8	4.7	2.8	1.8	2.1	1.2	0.9	0.8	0.8	1.0	1.8	2.4	3.4	3.5	4.4	3.7	4.0	8.5	0.8	3.5
17	4.0	4.0	4.2	3.9	3.9	3.5	3.1	3.1	2.6	2.4	3.0	2.6	1.4	1.7	1.2	0.5	0.6	6.8	13.9	14.3	13.1	11.0	9.4	5.3	14.3	0.5	5.0
18	3.1	5.0	5.2	6.1	5.8	5.2	4.3	6.4	7.6	8.4	8.0	8.1	8.9	8.7	9.0	9.2	8.9	10.1	11.0	11.4	11.4	11.9	10.5	13.5	13.5	3.1	8.2
19	13.1	12.5	11.5	12.5	12.0	14.0	13.3	12.4	13.1	12.4	10.5	10.0	9.9	12.0	14.1	14.9	13.4	11.3	10.3	11.3	9.4	9.9	9.8	8.7	14.9	8.7	11.8
20	8.4	8.0	7.4	6.1	6.0	5.7	5.6	5.0	4.1	3.3	2.7	1.7	1.4	0.7	0.9	1.6	2.3	3.4	5.2	6.1	5.9	5.8	6.7	6.9	8.4	0.7	4.6
21	6.1	6.0	7.0	6.2	6.4	6.4	5.9	5.1	5.4	4.7	4.3	3.9	3.3	3.8	3.3	5.2	4.7	5.2	5.8	10.5	11.6	8.6	7.0	7.2	11.6	3.3	6.0
22	6.4	5.7	6.3	7.8	7.3	8.5	9.6	10.4	9.9	10.6	11.7	11.4	10.5	9.5	9.0	8.8	8.5	8.7	9.2	7.7	7.1	4.8	3.5	2.8	11.7	2.8	8.2
23	4.8	4.4	4.4	3.2	4.0	5.5	5.8	4.3	4.2	4.9	4.3	4.5	5.5	8.0	9.1	8.1	8.1	7.5	8.6	9.4	9.8	9.8	8.6	7.7	9.8	3.2	6.4
24	7.4	6.8	6.3	5.3	5.4	4.6	3.4	3.5	3.9	4.2	5.0	5.5	6.0	6.3	6.4	6.4	5.2	5.8	7.3	6.7	5.3	4.7	5.0	4.1	7.4	3.4	5.4
25	2.9	1.5	2.1	2.8	3.6	4.3	3.8	3.6	3.2	1.3	0.7	0.8	1.6	3.3	3.9	3.9	3.3	3.4	4.7	5.3	5.5	5.8	5.7	5.7	5.8	0.7	3.4
26	5.4	5.0	4.2	5.7	5.4	4.2	4.9	5.5	4.7	3.3	5.5	5.9	5.7	6.1	7.0	8.1	7.8	6.4	7.4	7.0	5.9	5.3	4.4	6.5	8.1	3.3	5.7
27	5.5	5.1	5.5	3.9	3.5	2.6	2.4	2.1	2.1	2.5	3.0	4.0	4.9	5.8	5.8	6.4	7.7	8.3	8.3	7.5	4.7	4.8	4.2	4.3	8.3	2.1	4.8
28	3.7	5.2	5.4	6.1	5.6	5.5	4.5	3.4	3.7	3.5	2.8	1.4	1.1	1.1	0.7	0.9	0.8	1.3	1.0	1.4	1.3	2.0	3.4	3.8	6.1	0.7	2.9
29	5.4	6.1	6.1	4.7	5.9	5.1	5.0	5.1	8.2	7.7	11.2	12.7	15.1	15.5	16.1	15.5	16.2	14.9	15.4	16.0	16.8	17.5	17.6	21.8	21.8	4.7	11.7
30	22.3	22.3	22.6	23.2	23.6	23.5	23.5	22.2	20.5	20.2	19.8	20.5	19.6	17.7	16.4	15.4	14.5	15.1	15.3	18.3	19.0	16.0	14.7	15.5	23.6	14.5	19.2
31	14.1	13.8	10.9	9.9	9.2	12.3	12.8	13.9	14.8	15.5	16.5	16.3	17.7	19.1	17.5	17.7	18.8	19.9	19.9	21.2	23.7	23.8	22.4	21.6	23.8	9.2	16.8
Max.	**22.6**	**23.1**	**22.6**	**23.2**	**23.6**	**26.3**	**24.1**	**22.2**	**21.0**	**24.0**	**30.6**	**27.4**	**27.4**	**26.4**	**25.3**	**24.4**	**24.7**	**23.7**	**23.4**	**26.4**	**26.7**	**24.5**	**24.1**	**24.2**	**30.6**		
Min.	**0.7**	**1.1**	**1.0**	**0.6**	**0.5**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.5**	**0.6**	**1.3**	**1.0**	**1.4**	**1.3**	**1.8**	**1.4**	**0.9**		**0.2**	
Avg.	**8.3**	**8.3**	**8.0**	**7.8**	**8.1**	**8.2**	**8.1**	**7.8**	**7.9**	**8.0**	**8.4**	**8.0**	**8.3**	**8.2**	**8.4**	**8.5**	**8.7**	**9.0**	**9.5**	**9.9**	**9.7**	**9.5**	**9.1**	**9.0**			**8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	21.8	22.9	22.0	22.2	21.1	19.7	19.2	19.0	17.7	16.9	16.1	14.1	13.2	14.5	14.2	11.6	9.2	8.0	7.5	3.0	0.2	0.2	0.2	0.2	22.9	0.2	13.1
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.7	13.3	17.1	19.0	17.9	19.8	20.0	19.6	20.0	0.2	5.7
4	21.1	23.0	24.5	23.9	23.7	23.1	25.7	23.3	22.5	20.9	20.6	17.7	16.3	14.6	13.4	14.2	14.7	15.2	13.9	14.5	12.4	15.5	12.2	8.4	25.7	8.4	18.1
5	6.9	7.2	7.1	8.9	7.5	5.9	5.3	4.9	4.9	4.0	4.1	2.6	3.6	5.0	6.5	7.3	7.5	8.2	8.6	8.6	8.9	8.9	9.5	8.4	9.5	2.6	6.7
6	11.4	11.6	12.0	11.2	12.7	11.2	9.0	6.9	6.9	7.2	7.3	10.0	10.3	10.4	12.1	11.5	10.9	11.4	11.3	12.4	8.8	7.5	7.2	6.3	12.7	6.3	9.9
7	6.4	7.8	6.7	6.3	7.2	9.5	8.1	6.2	5.7	5.8	6.7	6.6	9.3	8.1	8.2	7.6	6.7	6.0	5.0	5.2	4.9	4.5	4.0	4.1	9.5	4.0	6.5
8	4.1	3.6	2.7	2.5	1.9	1.4	1.1	0.8	0.6	1.5	1.8	1.8	2.2	2.3	3.0	3.0	3.0	1.7	2.9	3.0	3.4	5.7	7.0	6.6	7.0	0.6	2.8
9	7.6	8.8	10.2	11.0	10.1	9.5	9.8	8.2	7.2	7.4	6.0	5.5	7.9	8.0	8.1	9.4	9.3	11.5	11.6	10.4	8.6	6.4	8.3	8.7	11.6	5.5	8.7
10	5.7	5.1	6.9	8.4	8.0	7.4	6.8	7.6	4.5		4.3	5.0	5.3	5.9	5.4	4.9	5.8	6.1	6.7	7.4	7.6	6.8	5.9	7.2	8.4	4.3	6.3
11	6.3	4.4	4.5	5.1	5.2	4.7	6.2	5.1	5.0	4.8	4.7	6.0	7.7	8.2	7.2	8.4	9.5	11.6	10.1	9.6	9.4	8.9	7.9	8.6	11.6	4.4	7.0
12	7.3	5.5	5.6	8.0	6.1	3.8	5.6	6.2	6.0	5.9	6.0	6.8	9.1	9.1	8.5	9.3	9.3	7.7	6.5	8.6	7.6	4.3	3.2	1.8	9.3	1.8	6.6
13	2.6	2.1	2.7	3.6	3.2	4.5	4.3	4.8	5.2	6.2	6.9	5.2	5.8	6.9	13.0	10.1	7.2	8.2	2.2	0.2	0.2	0.2	0.2	0.2	13.0	0.2	4.4
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.7	4.8	7.1	7.7	6.8	3.9	2.7	7.7	0.2	1.6
15	2.5	3.1	2.5	0.9	0.9	1.5	3.2	4.4	6.8	8.3	10.8	13.4	14.9	16.8	17.5	20.4	20.8	21.5	23.7	25.5	21.9	21.2	19.1	19.3	25.5	0.9	12.5
16	21.8	19.4	16.9	15.6	11.0	12.9	15.5	14.6	15.8	16.7	15.5	13.0	10.8	11.9	11.4	10.5	9.6	8.2	4.5	2.4	6.2	6.6	6.3	3.6	21.8	2.4	11.7
17	6.4	4.3	3.1	2.9	3.6	3.7	3.5	3.9	3.1	2.9	1.8	1.8	6.8	7.1	3.8	2.7	3.1	3.5	2.4	1.6	1.9	2.8	3.0	3.5	7.1	1.6	3.5
18	3.1	2.6	1.8	2.3	2.2	2.4	2.8	3.1	3.2	2.7	2.4	2.6	3.4	6.3	7.1	7.4	7.1	7.5	6.8	5.2	6.9	5.7	7.5	8.6	8.6	1.8	4.6
19	7.2	8.1	8.1	8.1	7.3	6.3	9.3	9.7	10.3	10.4	10.8	11.3	11.5	10.2	10.2	10.8	11.6	10.2	10.4	9.6	8.5	10.8	8.7	10.7	11.6	6.3	9.6
20	10.4	9.4	10.9	15.1	9.6	8.1	7.1	10.0	12.9	14.9	16.0	18.8	19.3	18.1	18.3	15.8	10.7	10.1	11.3	9.2	10.3	11.9	13.0	12.5	19.3	7.1	12.6
21	13.0	12.2	12.0	12.6	11.9	10.5	11.0	10.5	8.7	8.1	8.6	10.5	12.0	11.6	10.3	12.6	8.7	7.7	7.8	8.4	10.3	8.5	9.1	9.6	13.0	7.7	10.3
22	8.4	7.6	6.7	6.2	5.4	7.7	6.1	4.4	4.6	4.7	3.2	1.8	2.2	2.3	2.2	3.2	3.9	3.0	2.2	1.6	2.4	1.6	2.2	3.0	8.4	1.6	4.0
23	2.7	2.6	3.2	3.7	3.1	3.2	4.0	4.7	3.4	2.8	2.8	2.0	1.4	2.6	2.9	2.1	1.5	1.7	1.6	1.6	2.9	1.7	2.5	2.0	4.7	1.4	2.6
24	1.9	1.5	2.3	2.2	4.1	3.8	1.9	1.7	1.9	1.1	1.5	2.9	2.3	1.1	1.4	1.3	2.0	2.9	3.9	2.9	3.2	4.9	9.0	10.1	10.1	1.1	3.0
25	11.9	8.8	7.3	11.1	11.6	9.4	11.0	11.7	9.8	11.5	11.6	12.2	11.6	12.3	14.0	14.2	12.4	13.2	13.3	14.2	12.4	9.7	9.2	8.4	14.2	7.3	11.4
26	10.0	8.0	10.5	9.8	9.6	10.5	11.0	10.6	13.5	15.2	16.3	16.3	16.5	16.6	16.7	16.4	16.2	15.5	15.5	15.5	14.7	15.6	15.3	14.9	16.7	8.0	13.8
27	15.4	15.7	16.8	17.0	17.3	14.5	13.7	14.8	17.2	17.0	17.3	16.4	13.3	13.2	13.0	11.9	11.3	10.9	10.4	10.0	8.5	7.3	6.8	5.9	17.3	5.9	13.2
28	6.0	6.2	5.1	5.2	4.1	3.8	4.1	4.7	5.0	3.3	1.6	1.1	3.5	4.6	3.1	3.9	4.7	4.6	4.2	5.5	5.6	5.5	6.1	7.0	7.0	1.1	4.5
29	5.9	5.7	4.4	3.9	4.1	4.6	5.4	6.5	6.3	6.2	6.0	5.3	4.9	3.4	3.6	6.0	6.8	7.0	6.9	6.8	7.3	6.9	6.7	7.0	7.3	3.4	5.7
30	7.0	7.6	7.3	6.4	6.4	6.5	7.0	6.6	6.6	5.7	4.4	4.7	3.8	2.7	2.4	2.5	3.0	4.0	5.1	7.1	6.7	5.8	5.1	4.5	7.6	2.4	5.4
Max.	**21.8**	**23.0**	**24.5**	**23.9**	**23.7**	**23.1**	**25.7**	**23.3**	**22.5**	**20.9**	**20.6**	**18.8**	**19.3**	**18.1**	**18.3**	**20.4**	**20.8**	**21.5**	**23.7**	**25.5**	**21.9**	**21.2**	**20.0**	**19.6**	**25.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.8**	**7.5**	**7.5**	**7.8**	**7.3**	**7.0**	**7.3**	**7.2**	**7.2**	**7.3**	**7.2**	**7.2**	**7.7**	**7.8**	**7.9**	**8.0**	**7.8**	**8.1**	**8.0**	**7.9**	**7.6**	**7.4**	**7.3**	**7.1**			**7.5**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.7	4.9	5.0	5.1	6.1	6.6	6.6	6.7	6.8	7.0	7.4	7.6	7.7	7.4	7.7	7.4	8.0	7.5	7.3	7.9	7.8	8.1	6.6	7.6	8.1	4.7	6.9
2	6.8	6.9	6.9	6.9	6.6	7.7	8.1	9.0	8.5	8.0	6.2	5.6	4.6	2.8	4.3	5.7	5.3	5.9	4.7	2.7	1.3	2.2	2.0	0.2	9.0	0.2	5.4
3	0.6	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	2.7	3.5	4.8	7.4	5.5	8.3	5.4	3.5	2.1	4.0	6.0	4.9	2.4	6.8	8.3	0.2	3.0
4	8.3	3.3	7.8	5.7	6.1	7.3	5.0	7.7	6.5	5.4	5.5	2.2	1.7	2.4	2.8	3.8	2.4	1.4	0.8	1.8	1.4	1.5	1.6	3.0	8.3	0.8	4.0
5	4.0	3.7	3.8	3.6	3.7	3.6	3.0	3.0	2.2	2.4	1.9	1.6	0.9	1.5	1.9	2.6	2.7	2.0	2.6	2.8	5.2	4.6	3.4	2.6	5.2	0.9	2.9
6	2.3	2.1	2.6	2.5	2.5	2.9	3.1	3.5	6.9	7.8	8.3	10.3	10.7	10.8	11.7	13.5	15.1	16.3	17.1	16.7	16.9	16.1	16.0	17.2	17.2	2.1	9.7
7	17.7	18.7	18.9	18.2	17.1	15.9	16.4	16.4	16.7	17.3	17.7	18.4	19.9	20.7	20.6	18.9	17.2	17.8	19.2	16.7	18.8	16.1	17.5	18.5	20.7	15.9	18.0
8	20.3	21.1	17.8	19.0	19.4	18.0	17.2	16.6	16.1	16.3	15.9	15.5	16.1	16.6	16.0	16.5	16.1	17.0	17.7	16.7	16.4	16.5	16.5	15.8	21.1	15.5	17.1
9	14.0	12.1	8.2	8.4	10.6	5.3	4.8	7.2	12.8	15.0	14.4	13.5	11.7	10.2	8.3	8.4	7.8	6.0	4.8	3.1	2.1	2.4	1.4	1.7	15.0	1.4	8.1
10	1.9	3.0	3.2	3.9	2.4	1.9	2.0	2.2	1.6	2.0	1.2	1.0	1.0	1.9	3.0	2.0	2.5	2.7	2.8	3.8	2.8	3.8	3.8	5.7	5.7	1.0	2.6
11	8.3	9.5	9.3	10.5	11.4	13.6	14.5	15.5	17.3	19.5	20.2	18.3	20.6	24.6	24.6	25.6	23.8	22.8	26.5	25.7	25.6	23.8	15.7	15.4	26.5	8.3	18.4
12	18.2	13.3	11.4	9.8	10.9	13.4	13.1	11.1	5.6	9.6	14.5	15.2	14.2	14.8	19.0	20.7	19.4	17.2	16.3	16.5	16.9	17.9	17.2	16.6	20.7	5.6	14.7
13	15.0	13.8	14.2	13.2	11.4	11.0	9.0	7.7	8.4	8.6	10.6	11.4	12.6	13.0	13.6	14.6	15.5	16.1	18.0	16.6	16.0	16.4	16.4	19.1	19.1	7.7	13.4
14	18.1	12.1	6.9	2.7	5.5	3.6	8.9	10.8	9.7	7.6	6.7	6.1	7.2	6.9	7.8	8.0	8.4	8.8	8.4	8.2	5.9	3.5	2.7	3.1	18.1	2.7	7.4
15	2.1	2.0	4.4	6.5	6.0	5.7	4.9	5.6	4.7	4.1	4.6	6.0	6.1	6.8	7.2	6.8	6.6	5.8	5.5	5.9	6.2	6.3	6.3	5.7	7.2	2.0	5.5
16	6.2	6.4	5.1	5.2	5.2	1.7	0.2	0.9	2.4	2.3	3.0	5.5		7.8	8.5	7.9	7.6	6.7	5.4	4.1	3.4	3.6	3.3	2.1	8.5	0.2	4.5
17	2.7	3.8	3.3	3.5	3.5	3.6	2.4	2.7	3.4	4.1	3.3	2.2	1.4	1.2	1.8	2.3	2.7	2.6	3.9	4.0	4.4	6.3	6.9	6.2	6.9	1.2	3.4
18	5.5	7.5	7.4	7.3	6.9	5.1	5.8	7.7	8.6	5.8	4.9	4.9	5.3	4.9	5.2	6.3	6.3	6.1	8.2	6.6	6.9	5.0	4.3	3.6	8.6	3.6	6.1
19	4.2	4.1	0.2	0.2	1.4	2.0	2.6	1.8	1.5	3.3	3.4	3.6	3.6	3.4	4.2	3.7	6.5	7.2	6.6	6.3	6.7	7.4	7.6	6.8	7.6	0.2	4.1
20	5.7	6.6	5.7	5.5	6.2	6.1	6.1	5.5	5.0	3.8	4.0	3.3	2.6	2.8	3.2	3.1	3.4	3.2	2.8	4.1	5.2	5.4	4.7	4.3	6.6	2.6	4.5
21	3.0	3.1	2.1	0.9	1.1	1.1	1.2	1.5	2.0	2.1	1.4	2.3	3.1	4.6	5.2	5.5	5.1	4.3	5.3	6.3	8.4	8.6	8.2	8.2	8.6	0.9	3.9
22	8.3	8.6	9.3	8.2	4.6	2.1	3.3	3.1	2.7	3.3	2.5	2.0	2.2	3.6	4.0	5.9	8.3	9.5	9.1	13.9	12.2	15.3	17.8	17.9	17.9	2.0	7.4
23	19.5	22.7	24.8	23.5	26.0	26.9	28.7	27.3	27.2	27.2	29.2	26.8	28.5	28.1	26.3	29.3	27.7	25.1	22.4	22.7	20.1	20.4	21.0	18.3	29.3	18.3	25.0
24	18.2	19.0	15.9	17.0	16.6	15.9	13.7	12.8	14.9	16.6	14.1	13.3	13.8	12.9	11.9	11.6	11.9	11.0	9.9	7.0	5.1	5.7	5.5	5.2	19.0	5.1	12.5
25	4.9	5.2	5.4	5.5	5.7	5.4	4.4	4.2	4.3	5.9	7.4	8.2	6.3	7.2	7.6	7.1	8.3	6.8	7.0	6.5	5.6	5.3	5.0	5.6	8.3	4.2	6.0
26	5.1	4.1	2.7	2.5	3.3	3.9	3.4	3.2	2.1	3.1	3.4	3.7	4.5	3.5	4.0	7.3	6.6	7.2	9.2	7.7	7.2	6.5	6.9	8.1	9.2	2.1	5.0
27	7.5	8.6	7.9	7.4	6.2	5.1	3.4	2.5	2.6	3.9	4.3	4.4	4.8	4.0	4.5	4.7	4.6	4.9	4.8	5.3	5.9	5.6	7.3	6.4	8.6	2.5	5.3
28	5.3	5.0	4.9	4.9	5.6	4.9	4.9	4.7	3.6	3.7	4.5	5.5	3.7	3.5	4.2	4.4	4.9	5.7	6.7	7.1	7.5	7.0	6.0	5.9	7.5	3.5	5.2
29	5.8	6.1	5.8	6.0	5.9	6.6	6.3	6.5	6.6	5.6	5.2	5.9	6.4	6.4	6.6	7.1	6.0	5.6	5.1	5.1	5.4	5.2	5.2	5.0	7.1	5.0	5.9
30	4.8	4.1	2.4	1.0	2.3	2.9	3.0	3.3	6.6	7.2	9.0	9.8	10.5	10.5	11.3	11.8	12.8	11.4	9.1	10.9	11.3	10.8	12.0	13.2	13.2	1.0	8.0
31	12.4	11.0	10.3	10.5	11.0	12.9	13.5	14.2	16.2	16.3	17.0	17.7	17.2	16.0	16.5	16.6	15.7	15.2	13.9	14.9	12.3	10.0	8.9	10.7	17.7	8.9	13.8
Max.	**20.3**	**22.7**	**24.8**	**23.5**	**26.0**	**26.9**	**28.7**	**27.3**	**27.2**	**27.2**	**29.2**	**26.8**	**28.5**	**28.1**	**26.3**	**29.3**	**27.7**	**25.1**	**26.5**	**25.7**	**25.6**	**23.8**	**21.0**	**19.1**	**29.3**		
Min.	**0.6**	**1.0**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.7**	**1.2**	**1.0**	**0.9**	**1.2**	**1.8**	**2.0**	**2.4**	**1.4**	**0.8**	**1.8**	**1.3**	**1.5**	**1.4**	**0.2**		**0.2**	
Avg.	**8.4**	**8.2**	**7.5**	**7.3**	**7.5**	**7.2**	**7.1**	**7.3**	**7.5**	**7.9**	**8.2**	**8.2**	**8.5**	**8.7**	**9.0**	**9.6**	**9.5**	**9.1**	**9.1**	**9.1**	**8.9**	**8.8**	**8.4**	**8.6**			**8.3**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.1	8.8	6.8	13.3	13.1	12.5	13.1	15.1	14.7	17.1	20.9	18.1	16.5	15.9	16.1	14.8	14.1	11.7	9.5	9.6	10.9	6.4	7.8	4.7	20.9	4.7	12.6
2	4.8	6.5	8.5	8.6	5.8	4.6	2.0	2.4	3.4	6.0	7.5	9.1	6.7	6.0	6.6		4.6	4.8	3.5	4.5	3.7	2.6	4.1	2.9	9.1	2.0	5.2
3	2.3	2.4	1.8	2.5	3.3	5.1	3.6	2.6	1.6	1.6	1.8	2.4	4.1	6.3	6.5	8.1	8.1	8.6	8.9	9.7	9.1	9.7	10.0	12.1	12.1	1.6	5.5
4	10.8	9.1	8.1	4.3	3.9	4.3	5.3	4.8	6.5	6.8	7.3	7.6	7.3	7.3	8.9	8.9	10.5	10.7	9.7	9.6	9.4	8.8	8.3	7.4	10.8	3.9	7.7
5	8.4	9.7	9.6	10.6	10.8	9.6	11.1	12.3	12.3	12.2	14.1	14.4	13.7	13.7	14.5	14.0	12.8	11.1	7.9	5.3	4.6	3.1	2.5	6.1	14.5	2.5	10.2
6	6.1	7.2	7.7	6.9	7.2	7.1	4.8	4.6	4.4	4.2	4.3	4.4	5.0	3.9	5.3	4.2	6.0	13.0	10.8	10.6	8.0	8.4	7.7	5.6	13.0	3.9	6.6
7	3.8	6.2	5.3	4.2	5.1	5.2	6.5	7.2	8.4	6.6	6.5	7.3	6.4	5.8	4.7	3.2	4.0	8.0	6.4	8.5	9.3	8.7	7.4	3.2	9.3	3.2	6.2
8	3.7	3.7	2.6	2.9	2.5	3.2	2.6	2.9	3.3	2.8	2.4	3.1	4.4	4.7	5.7	5.6	5.1	6.4	7.0	6.6	6.7	6.2	5.3	4.6	7.0	2.4	4.3
9	4.7	3.8	3.8	4.0	3.8	3.3	2.5	6.0	4.9	4.0	3.1	2.2	2.7	4.6	4.1	6.0	4.3	5.3	4.5	3.9	4.4	4.0	3.5	3.5	6.0	2.2	4.0
10	2.9	2.0	1.4	1.5	1.5	1.4	2.0	1.8	1.1	1.5	1.4	2.1	2.1	1.8	3.7	3.6	3.5	3.3	4.5	4.3	4.7	4.2	3.4	2.6	4.7	1.1	2.6
11	1.6	1.8	1.1	1.4	1.4	1.4	1.1	1.5	1.9	1.1	1.9	2.1	1.5	2.9	3.9	4.5	4.8	4.6	3.5	3.5	3.7	4.3	4.1	4.3	4.8	1.1	2.7
12	4.9	2.9	1.7	1.4	1.1	1.6	1.1	2.0	1.5	1.1	1.6	1.3	2.5	2.7	2.6	1.8	2.8	3.6	3.0	2.4	1.3	2.3	2.4	1.5	4.9	1.1	2.1
13	2.1	2.5	4.0	5.8	6.2	5.9	4.9	4.0	6.1	3.0	3.0	3.1	2.9	2.6	3.2	3.2	3.4	2.4	2.9	3.6	5.1	3.8	2.2	2.4	6.2	2.1	3.7
14	2.6	3.2	1.0	1.5	1.7	1.1	1.4	1.6	2.5	2.5	3.5	2.7	3.0	3.2	3.2	5.7	6.5	7.2	6.7	4.7	7.0	8.2	5.3	1.8	8.2	1.0	3.7
15	2.7	1.1	1.7	1.6	1.5	1.9	1.6	0.9	1.1	2.3	1.9	3.1	3.4	4.2	5.2	7.8	8.6	8.8	6.9	5.3	6.4	8.8	8.0	4.8	8.8	0.9	4.1
16	3.2	0.8	1.4	0.9	2.5	3.2	3.2	3.3	2.4	2.8	2.6	2.4	1.6	3.0	3.0	3.5	2.6	1.3	3.0	3.7	4.8	4.6	3.5	3.2	4.8	0.8	2.8
17	2.7	2.5	2.4	2.1	1.7	1.9	2.1	2.1	1.3	1.8	2.1	2.2	1.7	2.5	4.4	5.1	5.2	5.0	5.0	6.1	6.2	5.3	6.8	6.6	6.8	1.3	3.5
18	3.9	1.6	2.2	2.0	1.6	1.6	1.0	1.5	1.4	2.0	3.1	2.2	3.6	5.7	6.1	6.0	5.1	5.2	4.7	4.2	3.5	3.2	3.0	3.6	6.1	1.0	3.2
19	2.8	3.0	3.1	3.3	2.9	1.8	1.7	1.2	1.2	2.0	2.2	2.6	2.4	2.1	3.5	5.4	5.3	5.4	5.0	4.7	5.1	4.1	3.8	2.5	5.4	1.2	3.2
20	4.0	2.6	2.6	3.2	1.8	1.0	1.6	1.2	2.7	3.7	5.1	6.2	6.5	8.1	8.9	9.3	9.9	10.7	9.7	9.2	9.2	9.7	10.5	8.1	10.7	1.0	6.1
21	6.7	8.2	8.9	6.9	5.8	5.0	4.6	4.2	4.0	2.8	1.7	1.7	2.5	2.6	2.2	2.7	2.2	2.3	4.7	5.4	5.2	4.4	3.6	3.0	8.9	1.7	4.2
22	3.9	4.2	4.1	4.2	4.8	4.0	3.5	3.4	3.4	4.5	4.1	5.6	5.9	7.1	7.4	7.4	8.1	9.2	9.9	10.3	10.3	11.8	9.4	8.1	11.8	3.4	6.4
23	7.6	7.6	7.7	7.7	9.6	7.8	9.6	8.3	10.4	9.2	9.5	9.8	10.1	8.4	8.5	8.7	7.8	6.8	7.1	7.9	7.8	6.2	4.5	5.9	10.4	4.5	8.1
24	6.3	6.9	6.5	6.8	8.7	8.0	8.3	9.9	12.5	13.1	15.3	15.5	14.6	14.4	14.8	15.2	15.3	13.9	13.6	14.7	14.4	16.2	15.2	15.6	16.2	6.3	12.3
25	16.3	17.4	18.7	21.4	21.5	19.1	18.9	20.0	22.5	23.1	22.1	23.5	25.7	27.4	26.6	22.7	17.7	16.6	14.3	14.6	12.2	13.1	8.2	7.0	27.4	7.0	18.8
26	8.2	6.2	4.1	4.0	1.9	3.8	3.5	4.5	3.8	4.5	7.1	7.3	8.4	5.0	4.0	3.7	5.0	5.8	4.5	3.1	2.4	3.0	3.6	2.1	8.4	1.9	4.6
27	3.3	2.0	1.4	1.3	1.5	0.9	3.1	4.2	5.0	5.2	5.9	6.9	8.0	9.9	9.7	8.9	7.8	8.0	7.5	7.3	6.8	5.2	5.1	5.4	9.9	0.9	5.4
28	6.4	5.4	5.1	3.4	1.9	2.0	1.9	2.2	2.2	4.3	4.5	4.9	5.1	6.9	6.3	7.0	5.3	4.4	5.3	4.7	4.8	6.6	5.8	5.3	7.0	1.9	4.7
29	5.1	5.5	4.5	4.6	5.3	4.5	3.9	3.6	3.8	3.8	3.6	3.8	4.5	6.2	7.0	8.3	8.2	8.2	8.1	8.1	8.3	6.7	6.6	6.8	8.3	3.6	5.8
30	6.1	5.5	5.8	5.5	5.7	4.4	3.5	2.6	1.9	1.0	1.5	1.6	1.5	2.2	1.8	1.9	3.9	3.2	4.6	3.3	1.7	1.0	1.0	1.2	6.1	1.0	3.0
Max.	**16.3**	**17.4**	**18.7**	**21.4**	**21.5**	**19.1**	**18.9**	**20.0**	**22.5**	**23.1**	**22.1**	**23.5**	**25.7**	**27.4**	**26.6**	**22.7**	**17.7**	**16.6**	**14.3**	**14.7**	**14.4**	**16.2**	**15.2**	**15.6**	**27.4**		
Min.	**1.6**	**0.8**	**1.0**	**0.9**	**1.1**	**0.9**	**1.0**	**0.9**	**1.1**	**1.0**	**1.4**	**1.3**	**1.5**	**1.8**	**1.8**	**1.8**	**2.2**	**1.3**	**2.9**	**2.4**	**1.3**	**1.0**	**1.0**	**1.2**		**0.8**	
Avg.	**5.3**	**5.0**	**4.8**	**4.9**	**4.9**	**4.6**	**4.5**	**4.7**	**5.1**	**5.2**	**5.7**	**6.0**	**6.2**	**6.6**	**6.9**	**7.1**	**7.0**	**7.2**	**6.8**	**6.6**	**6.6**	**6.4**	**5.8**	**5.1**			**5.8**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.4	1.0	1.2	1.1	0.9	1.3	1.6	3.0	3.3	2.8	4.5	6.2	8.0	10.1	12.0	13.0	13.3	12.0	11.7	11.2	8.8	11.0	11.9	13.1	13.3	0.9	6.8
2	13.8	13.6	11.7	11.1	10.4	10.0	11.3	10.9	11.6	13.0	13.2	14.4	13.8	12.6	14.1	14.7	14.0	12.7	11.1	10.3	8.7	8.5	5.4	3.4	14.7	3.4	11.4
3	6.2	3.8	4.7	9.6	7.4	12.4	12.2	12.5	9.1	7.2	4.7	3.7	6.4	7.7	10.7	9.6	7.2	6.4	5.3	4.3	1.9	3.5	4.1	5.7	12.5	1.9	6.9
4	3.4	3.1	3.4	1.3	1.2	2.1	1.9	1.1	1.4	2.1	2.6	2.7	2.4	2.7	3.8	4.0	2.8	2.7	3.5	4.4	4.1	4.7	3.7	1.9	4.7	1.1	2.8
5	1.7	1.3	2.0	1.1	1.8	3.4	3.4	2.4	1.7	2.7	2.2	1.7	1.7	1.4	3.5	5.9	4.2	3.3	3.5	3.7	4.2	3.7	1.4	3.3	5.9	1.1	2.7
6	3.9	4.1	1.8	1.6	2.4	1.5	1.2	0.9	1.9	1.9	3.6	5.1	6.5	7.9	6.6	6.0	7.6	6.5	7.1	7.3	7.6	7.7	8.4	7.6	8.4	0.9	4.9
7	7.3	7.7	7.9	7.9	7.4	6.7	7.4	9.0	10.3	9.5	9.9	8.7	8.4	8.5	8.0	8.0	6.9	6.4	6.6	6.0	5.7	4.9	4.0	3.6	10.3	3.6	7.4
8	3.7	3.3	2.5	2.6	2.1	1.8	2.0	2.1	2.5	2.6	3.6	3.9	4.0	3.9	4.7	4.3	4.4	4.1	3.5	3.8	3.1	2.4	3.4	3.8	4.7	1.8	3.3
9	4.1	2.8	2.8	3.1	4.7	4.0	4.2	5.7	7.1	7.6	7.1	8.4	9.2	8.5	8.2	8.5	9.5	10.5	11.0	11.0	8.9	9.2	9.6	10.8	11.0	2.8	7.4
10	10.5	10.1	8.6	5.4	5.3	4.4	5.2	6.7	7.4	8.3	8.0	8.2	7.3	6.5	6.0	5.0	6.0	7.6	7.4	6.4	5.7	8.6	8.6	5.8	10.5	4.4	7.0
11	5.7	5.6	3.1	5.4	6.4	7.0	5.9	5.7	6.7	7.5	7.4	5.9	5.7	6.2	6.3	7.5	8.5	8.0	8.2	8.3	8.3	6.6	7.1	6.6	8.5	3.1	6.7
12	6.7	4.8	3.8	3.8	4.2	4.6	7.1	10.7	12.0	13.0	14.4	13.9	14.3	13.9	14.8	15.7	15.0	13.9	12.8	14.3	12.9	12.9	12.6	11.7	15.7	3.8	11.0
13	9.9	8.5	8.4	7.0	7.1	6.7	6.3	5.6	5.2	5.3	5.4	5.6	5.2	5.0	4.6	4.8	5.3	5.0	4.7	4.2	4.1	3.6	3.4	3.4	9.9	3.4	5.6
14	3.3	3.2	2.8	2.5	2.1	2.0	1.9	2.0	2.0	3.0	2.8	3.5	4.5	4.0	3.5	4.3	3.7	3.5	4.1	4.2	4.8	4.5	4.9	4.3	4.9	1.9	3.4
15	5.4	4.7	5.6	5.9	5.2	4.7	3.9	4.4	4.5	5.0	6.2	6.9	8.0	8.4	9.1	8.8	9.2	9.0	8.3	9.3	9.7	7.8	9.0	8.2	9.7	3.9	7.0
16	11.4	11.6	12.9	13.1	13.2	14.8	14.7	14.7	15.5	15.3	15.8	17.0	18.0	20.0	19.6	19.9	17.3	17.8	18.5	18.1	17.7	16.3	14.1	11.5	20.0	11.4	15.8
17	9.7	8.3	8.9	10.6	11.0	8.3	5.8	8.5	7.5	7.5	8.7	7.9	6.6	6.2	6.9	7.6	7.0	6.7	8.0	7.9	7.0	7.7	6.2	2.8	11.0	2.8	7.6
18	5.1	7.2	3.6	4.3	3.9	4.4	4.9	1.7	1.2	1.9	1.5	2.3	4.2	3.6	3.5	3.2	3.9	2.9	3.2	2.8	4.6	3.8	3.2	2.3	7.2	1.2	3.5
19	2.7	4.5	4.5	4.7	5.4	6.4	4.7	4.7	6.9	7.2	6.7	7.1	7.7	8.9	9.9	9.3	9.9	8.9	10.1	7.4	6.8	7.0	5.1	3.9	10.1	2.7	6.7
20	3.4	2.8	3.4	3.5	4.2	2.8	3.0	4.5	7.5	8.4	5.0	8.7	7.3	8.1	7.2	8.2	8.2	8.7	8.1	10.3	9.8	9.0	6.6	6.7	10.3	2.8	6.5
21	7.7	9.5	9.0	7.5	7.1	6.7	6.4	6.3	5.6	4.6	4.2	3.3	3.0	3.8	3.5	2.5	2.6	3.7	6.1	2.3	2.9	4.1	5.8	8.3	9.5	2.3	5.3
22	6.2	2.0	3.1	2.7	1.1	1.2	1.0	1.3	2.2	2.9	2.8	3.8	4.8	4.0	4.0	3.2	1.9	1.5	1.7	2.2	2.1	2.7	2.3	1.9	6.2	1.0	2.6
23	2.2	3.4	3.6	2.6	1.2	2.0	1.4	1.6	2.2	3.6	5.4	6.3	6.1	5.5	6.0	6.1	5.2	5.0	4.6	5.3	5.5	4.4	1.9	2.1	6.3	1.2	3.9
24	2.8	1.1	1.3	1.2	3.2	4.4	5.1	5.5	7.1	7.4	6.9	5.5	6.7	8.5	8.9	9.7	8.3	7.6	7.4	9.8	7.2	5.9	11.1	10.5	11.1	1.1	6.4
25	10.2	7.5	7.2	9.9	9.9	11.1	9.4	8.5	10.2	10.2	11.3	11.8	11.1	11.0	10.0	10.3	9.9	8.2	8.1	9.4	8.4	8.3	7.5	7.5	11.8	7.2	9.4
26	7.0	6.6	6.2	5.3	2.8	2.9	1.9	0.8	1.8	1.8	2.0	2.8	4.9	3.0	2.6	2.0	2.7	3.6	3.7	3.2	4.4	4.4	4.0	3.8	7.0	0.8	3.5
27	5.1	4.7	4.0	3.8	3.0	3.3	4.2	4.5	4.3	3.5	4.3	3.8	3.1	2.5	3.5	4.2	4.5	4.8	4.6	5.1	4.7	3.8	2.8	2.9	5.1	2.5	4.0
28	2.3	3.0	4.0	4.5	4.8	5.2	5.3	5.1	6.2	6.2	6.2	8.1	8.8	10.6	10.1	8.3	8.9	9.8	10.0	8.7	8.0	7.9	8.5	8.7	10.6	2.3	7.1
29	7.0	6.7	5.2	7.7	6.7	5.9	7.1	9.1	11.5	12.0	13.0	10.8	11.9	10.4	11.0	9.6	8.8	9.3	10.6	11.0	9.8	8.3	8.7	7.4	13.0	5.2	9.1
30	7.0	7.7	9.1	8.4	8.7	8.2	8.9	8.1	8.7	8.8	8.3	9.2	9.7	10.3	11.0	11.0	10.8	12.0	11.4	9.5	10.2	8.3	7.1	6.5	12.0	6.5	9.1
31	6.2	6.8	8.5	8.7	9.4	9.3	9.5	10.4	9.1	9.5	10.3	8.2	7.3	7.6	7.5	7.2	7.7	8.2	8.6	8.0	7.5	7.1	7.4	5.8	10.4	5.8	8.2
Max.	**13.8**	**13.6**	**12.9**	**13.1**	**13.2**	**14.8**	**14.7**	**14.7**	**15.5**	**15.3**	**15.8**	**17.0**	**18.0**	**20.0**	**19.6**	**19.9**	**17.3**	**17.8**	**18.5**	**18.1**	**17.7**	**16.3**	**14.1**	**13.1**	**20.0**		
Min.	**1.4**	**1.0**	**1.2**	**1.1**	**0.9**	**1.2**	**1.0**	**0.8**	**1.2**	**1.8**	**1.5**	**1.7**	**1.7**	**1.4**	**2.6**	**2.0**	**1.9**	**1.5**	**1.7**	**2.2**	**1.9**	**2.4**	**1.4**	**1.9**		**0.8**	
Avg.	**5.9**	**5.5**	**5.3**	**5.4**	**5.3**	**5.5**	**5.4**	**5.7**	**6.3**	**6.5**	**6.7**	**7.0**	**7.3**	**7.5**	**7.8**	**7.8**	**7.6**	**7.4**	**7.5**	**7.4**	**6.9**	**6.7**	**6.4**	**6.0**			**6.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	2.0	1.4	4.0	4.3	4.4	3.2	1.5	1.0	1.6	2.1	2.0	2.8	3.2	3.8	4.6	4.2	3.3	3.4	3.4	5.1	6.0	6.7	7.0	7.0	1.0	3.5
2	7.1	6.3	6.8	6.8	6.9	6.3	5.5	5.3	5.9	7.0	7.3	6.7	6.5	6.4	6.2	6.1	5.7	5.8	4.7	3.5	1.8	1.6	1.0	2.2	7.3	1.0	5.4
3	3.3	3.6	4.5	5.9	6.1	5.9	5.2	4.3	5.7	5.0	3.9	1.7	2.7	4.7	4.4	5.3	4.9	6.3	7.3	7.7	8.0	8.1	8.9	7.8	8.9	1.7	5.5
4	8.0	7.4	6.2	5.7	6.2	6.2	5.9	5.9	5.8	5.9	5.9	5.1	5.7	6.0	5.1	4.5	5.4	5.7	6.1	7.1	6.6	5.8	5.3	5.4	8.0	4.5	6.0
5	4.9	4.5	4.3	3.7	3.5	1.7	1.2	1.9	2.9	4.2	4.2	4.7	5.9	7.4	7.7	7.0	6.5	7.2	7.7	8.2	7.9	6.2	6.3	5.7	8.2	1.2	5.2
6	4.8	5.7	6.1	4.6	5.0	5.1	4.9	5.1	7.4	7.7	6.6	6.3	8.2	8.0	9.7	9.9	9.7	12.2	10.5	9.5	8.2	7.1	5.3	4.4	12.2	4.4	7.2
7	4.8	5.0	4.4	5.9	8.2	7.6	6.5	7.6	6.1	7.2	8.5	8.2	9.0	9.9	8.7	8.0	7.8	7.6	8.7	8.6	8.3	6.7	4.7	4.1	9.9	4.1	7.2
8	4.0	4.4	4.4	5.0	4.2	5.4	6.4	6.5	6.9	7.0	7.0	7.5	7.4	6.7	5.3	5.3	5.1	4.8	5.1	6.0	7.0	7.5	6.4	7.0	7.5	4.0	5.9
9	7.5	5.9	4.7	6.6	8.4	8.5	5.6	6.3	8.5	9.1	9.1	9.8	10.6	9.7	8.7	8.0	8.2	8.0	8.5	8.3	7.3	5.6	3.5	2.6	10.6	2.6	7.5
10	2.4	3.0	2.4	1.1	0.7	1.4	1.6	2.4	3.4	4.4	3.8	3.4	3.3	3.2	3.7	3.0	4.8	3.7	5.2	5.6	3.4	4.7	4.8	5.2	5.6	0.7	3.4
11	4.8	4.3	4.4	5.0	4.4	5.1	5.0	4.5	4.4	5.2	6.3	7.0	6.5	6.7	6.9	7.8	9.0	8.1	6.7	5.4	4.4	3.5	1.2	1.3	9.0	1.2	5.3
12	1.2	1.5	2.6	4.3	4.0	2.8	4.0	3.2	3.5	3.9	3.8	3.7	4.0	4.4	4.3	3.6	4.5	5.3	6.1	4.0	2.4	2.7	2.6	2.4	6.1	1.2	3.5
13	3.0	4.7	4.0	3.5	3.3	1.9	1.8	0.6	0.2	0.5	1.2	3.1	3.6	3.4	3.0	1.9	2.6	5.9	6.8	7.0	5.5	4.6	2.6	2.6	7.0	0.2	3.2
14	2.8	2.6	1.8	3.0	2.4	1.6	2.2	2.1	3.7	4.9	5.7	5.6	5.0	4.7	5.1	5.9	5.9	6.7	6.9	6.5	6.4	6.1	4.3	3.4	6.9	1.6	4.4
15	3.0	2.4	1.9	0.9	0.7	0.7	1.4	1.3	1.4	1.5	1.6	1.3	1.8	2.1	2.0	2.2	2.7	2.8	2.8	2.3	1.4	1.6	1.4	1.7	3.0	0.7	1.8
16	1.3	1.4	1.9	2.1	4.0	5.0	5.5	5.5	4.7	4.8	4.6	5.7	5.2	5.5	6.5	7.0	7.2	7.5	6.7	8.0	7.7	6.3	5.5	5.2	8.0	1.3	5.2
17	3.8	3.6	4.4	3.7	3.8	3.8	3.7	5.2	4.9	4.3	5.2	7.3	7.6	7.5	8.1	9.6	9.7	9.8	10.3	9.3	9.0	7.8	7.4	6.6	10.3	3.6	6.5
18	5.5	7.4	5.6	6.2	3.2	2.1	2.4	2.9	3.9	4.0	3.2	3.9	3.8	3.7	3.1	2.6	2.9	2.4	1.4	1.8	1.3	2.3	2.5	3.1	7.4	1.3	3.4
19	2.1	2.8	2.6	2.2	1.4	3.3	1.9	2.5	1.5	1.1	2.0	3.4	3.1	4.5	4.7	4.9	3.9	3.7	5.7	6.4	7.4	4.2	3.5	2.9	7.4	1.1	3.4
20	2.3	2.5	3.8	4.2	4.4	4.2	4.2	4.1	4.2	4.1	4.6	3.2	2.1	2.4	3.2	3.8	4.5	4.9	4.8	5.0	4.6	3.8	2.6	2.9	5.0	2.1	3.8
21	2.8	2.2	1.9	1.9	1.7	2.2	2.5	1.1	1.8	1.3	1.3	2.2	3.4	2.9	4.9	5.1	3.7	3.6	5.2	2.7	2.1	1.2	2.6	3.4	5.2	1.1	2.6
22	1.6	1.1	1.6	1.5	1.8	2.1	2.1	2.2	2.2	1.5	1.6	1.5	1.1	1.7	3.4	2.2	3.1	2.4	3.7	4.2	4.1	3.8	5.0	4.8	5.0	1.1	2.5
23	4.8	4.9	4.6	5.4	5.2	5.5	6.0	6.8	7.2	6.3	5.4	3.9	3.6	2.3	2.4	2.7	2.5	3.7	5.3	5.2	5.3	5.0	4.7	4.3	7.2	2.3	4.7
24	3.5	1.6	1.8	2.1	1.4	1.3	1.3	2.5	4.3	6.1	3.4	5.1	5.8	4.9	5.1	5.2	5.0	4.4	4.4	3.2	1.4	3.5	3.9	4.0	6.1	1.3	3.6
25	3.8	3.9	3.1	1.7	1.2	1.7	1.4	1.4	1.4	0.8	3.4	4.3	4.0	4.1	4.2	4.3	4.6	5.4	5.6	5.7	7.3	8.2	7.3	5.7	8.2	0.8	3.9
26	5.4	4.2	3.2	3.9	5.0	4.0	4.3	5.5	5.7	6.4	6.8	7.1	6.4	5.7	5.9	7.1	6.7	6.9	6.8	7.1	6.9	4.5	3.8	4.3	7.1	3.2	5.6
27	3.2	2.0	1.5	1.1	1.5	1.2	1.2	2.1	1.9	2.2	3.6	3.9	4.0	2.8	3.9	4.9	5.7	5.3	5.8	4.9	4.3	3.7	4.0	4.3	5.8	1.1	3.3
28	4.5	3.5	3.1	3.0	2.9	3.2	2.6	1.9	2.4	2.8	3.7	5.3	4.6	3.9	3.9	4.9	5.5	4.8	4.4	6.0	7.0	7.9	7.8	8.2	8.2	1.9	4.5
29	9.1	7.8	5.1	4.9	4.0	3.8	3.8	3.2	2.7	2.0	1.8	1.8	2.6	2.9	3.0	6.2	4.1	7.4	7.8	5.3	3.7	3.8	3.8	2.5	9.1	1.8	4.3
30	3.3	2.5	1.0	0.5	0.7	1.0	1.8	1.6	1.5	0.9	1.4	1.8	1.6	2.0	2.4	4.0	4.5	5.8	5.9	6.3	5.9	6.9	11.7	11.3	11.7	0.5	3.6
31	10.0	11.9	14.4	18.8	18.8	18.0	19.4	16.2	11.8	6.4	5.3	4.8	4.1	6.5	8.5	8.0	8.9	10.5	10.8	9.9	9.9	11.7	12.9	11.1	19.4	4.1	11.2
Max.	**10.0**	**11.9**	**14.4**	**18.8**	**18.8**	**18.0**	**19.4**	**16.2**	**11.8**	**9.1**	**9.1**	**9.8**	**10.6**	**9.9**	**9.7**	**9.9**	**9.7**	**12.2**	**10.8**	**9.9**	**9.9**	**11.7**	**12.9**	**11.3**	**19.4**		
Min.	**1.2**	**1.1**	**1.0**	**0.5**	**0.7**	**0.7**	**1.2**	**0.6**	**0.2**	**0.5**	**1.2**	**1.3**	**1.1**	**1.7**	**2.0**	**1.9**	**2.5**	**2.4**	**1.4**	**1.8**	**1.3**	**1.2**	**1.0**	**1.3**		**0.2**	
Avg.	**4.2**	**4.1**	**3.9**	**4.2**	**4.2**	**4.1**	**4.0**	**4.0**	**4.2**	**4.2**	**4.3**	**4.6**	**4.7**	**4.8**	**5.1**	**5.3**	**5.5**	**5.9**	**6.2**	**5.9**	**5.5**	**5.2**	**5.0**	**4.8**			**4.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.6	11.5	11.1	10.4	10.6	11.2	10.1	8.6	7.4	7.4	8.6	8.6	5.8	6.9	7.2	8.3	6.3	7.5	5.3	4.6	4.7	9.1	8.9	9.1	11.5	4.6	8.3
2	10.4	11.5	11.1	11.7	12.6	12.2	12.8	11.9	12.6	12.1	12.3	12.5	13.2	13.0	11.4	9.6	4.6	3.0	5.9	7.4	5.5	5.5	4.3	4.0	13.2	3.0	9.6
3	7.3	8.2	6.7	8.1	6.6	6.6	6.1	5.5	4.6	2.0	1.4	2.1	3.6	5.0	5.3	4.5	4.5	4.0	4.0	4.5	5.2	5.4	5.2	7.3	8.2	1.4	5.2
4	8.4	5.7	5.0	5.7	6.6	7.6	5.6	4.0	2.5	3.4	2.7	3.1	3.4	4.3	4.0	3.3	3.5	3.1	2.7	2.4	2.5	1.6	1.9	1.7	8.4	1.6	3.9
5	2.3	1.7	1.0	0.7	0.8	0.6	1.1	1.7	1.7	1.1	1.0	2.2	2.8	2.5	3.7	3.0	2.0	3.4	1.8	3.4	2.4	1.7	2.6	3.1	3.7	0.6	2.0
6	3.2	4.0	7.0	7.6	6.2	5.4	6.9	6.6	7.1	5.8	8.7	11.7	13.8	17.1	15.0	11.8	10.7	8.3	6.9	9.0	6.7	8.0	4.6	4.8	17.1	3.2	8.2
7	5.8	4.9	7.2	4.0	3.8	4.0	6.7	6.9	6.0	5.8	6.4	8.2	10.0	8.4	5.2	6.2	8.7	8.8	7.4	6.9	6.8	5.9	7.0	8.5	10.0	3.8	6.6
8	8.3	6.5	6.3	6.6	7.3	6.4	5.9	5.1	4.4	4.3	5.3	5.2	6.2	9.3	15.3	13.5	13.8	16.5	14.0	9.8	6.9	4.9	4.5	3.2	16.5	3.2	7.9
9	3.2	5.2	5.9	6.9	6.7	2.0	1.4	2.6	2.2	1.8	3.7	4.5	6.5	7.9	10.2	11.4	11.6	11.7	10.1	8.5	8.2	7.7	5.3	4.2	11.7	1.4	6.2
10	3.7	3.7	3.9	3.4	2.8	1.5	0.6	1.4	2.8	2.9	2.8	4.3	3.3	4.2	4.3	4.2	4.3	4.2	4.1	4.1	1.9	1.7	1.8	1.8	4.3	0.6	3.1
11	4.9	6.2	6.3	3.3	3.0	1.4	2.0	2.5	2.7	2.9	4.7	4.8	4.8	4.7	5.2	4.3	5.1	5.4	4.9	4.4	5.5	6.9	7.1	10.3	10.3	1.4	4.7
12	11.2	12.6	14.3	14.3	15.9	16.6	17.9	17.4	15.9	15.4	15.3	15.9	14.8	15.7	16.7	15.0	16.6	15.7	15.8	16.3	16.0	16.6	16.8	17.1	17.9	11.2	15.7
13	16.1	16.1	18.1	18.0	18.6	19.1	19.8	19.1	18.6	19.8	19.1	18.8	18.4	17.8	17.4	17.0	15.1	15.1	15.7	15.1	13.1	12.6	14.3	12.3	19.8	12.3	16.9
14	14.0	13.8	12.7	9.2	2.9	5.9	5.3	5.4	6.3	7.5	8.7	6.6	7.6	7.4	7.4	7.5	8.4	8.1	7.3	6.1	5.6	5.4	5.3	4.6	14.0	2.9	7.5
15	4.6	3.5	4.3	3.8	3.2	2.9	3.5	6.0	7.4	7.7	8.9	10.1	10.6	10.6	10.7	11.6	11.3	12.4	11.6	10.7	9.7	8.3	7.4	5.8	12.4	2.9	7.8
16	4.7	1.2	1.8	3.0	3.6	3.8	4.0	4.6	4.4	3.6	3.9	4.9	5.9	7.7	8.0	8.8	7.9	8.6	7.4	8.5	8.2	7.2	7.0	7.1	8.8	1.2	5.7
17	7.3	7.1	4.5	1.6	1.6	5.3	4.5	3.8	2.7	0.9	2.0	2.5	2.3	4.2	5.7	6.0	6.1	8.3	9.2	6.2	3.9	3.7	3.4	5.0	9.2	0.9	4.5
18	8.1	9.4	12.9	12.0	11.2	9.5	6.1	7.0	8.6	8.6	9.1	7.9	4.6	6.3	7.2	8.8	8.6	7.2	5.9	3.2	1.2	1.8	3.2	3.0	12.9	1.2	7.1
19	3.3	2.1	2.7	3.6	5.0	6.3	6.4	6.8	7.0	6.1	4.8	4.8	4.9	5.2	4.8	9.7	8.5	8.3	10.2	9.7	8.3	7.1	6.2	5.8	10.2	2.1	6.1
20	5.9	5.1	4.7	4.7	5.8	5.1	5.2	5.2	4.4	3.9	4.0	4.6	4.7	5.0	5.6	5.3	5.1	4.3	4.0	4.1	3.3	3.2	3.3	2.9	5.9	2.9	4.6
21	2.3	2.4	2.3	2.5	2.5	2.9	2.8	3.1	3.5	3.1	2.6	2.5	2.5	3.6	4.8	5.7	6.7	7.4	8.1	7.7	6.1	6.2	5.8	4.5	8.1	2.3	4.2
22	5.5	5.7	3.5	2.9	2.9	2.6	2.4	2.5	2.0	1.7	1.5	1.1	1.8	2.7	3.5	4.2	5.4	5.3	6.0	5.5	5.9	5.9	5.9	6.3	6.3	1.1	3.8
23	5.1	5.6	5.4	5.5	6.6	9.8	9.6	7.9	7.1	6.8	6.9	8.2	6.9	7.2	8.3	8.8	10.6	7.3	9.0	10.1	8.1	9.3	7.7	7.6	10.6	5.1	7.7
24	7.5	6.1	6.1	6.0	5.7	5.1	4.6	3.4	3.2	2.3	2.0	0.7	0.2			2.9	4.7	5.1	4.1	2.7	2.6	2.9	1.6	2.1	7.5	0.2	3.7
25	2.8	4.0	5.0	4.9	2.4	1.5	1.5	2.7	3.8	3.4	2.4	2.3	1.3	1.5	2.1	2.0	1.7	2.9	2.1	1.7	1.1	1.2	1.3	0.9	5.0	0.9	2.4
26	1.3	1.6	1.8	2.2	2.4	1.8	1.7	1.6	1.1	1.5	1.5	1.3	2.3	2.1	2.2	3.1	3.0	3.4	2.2	1.8	3.4	4.2	4.5	5.3	5.3	1.1	2.4
27	5.6	5.7	6.4	6.2	6.0	7.9	7.6	7.2	6.6	7.4	6.9	7.3	8.5	8.5	11.9	12.6	11.6	12.8	10.5	8.1	9.6	7.4	7.3	7.2	12.8	5.6	8.2
28	5.3	5.3	4.4	3.9	4.6	4.2	3.9	3.5	3.6	2.7	1.8	1.8	2.1	1.6	1.7	1.9	3.5	3.3	2.7	2.8	4.1	6.2	6.5	6.6	6.6	1.6	3.7
29	8.0	9.3	7.9	6.7	4.5	3.9	6.2	5.5	3.9	4.8	7.0	7.6	6.9	7.8	5.4	6.3	5.5	4.7	5.5	2.9	2.4	3.1	3.5	2.9	9.3	2.4	5.5
30	2.5	0.9	1.1	2.2	3.1	4.2	4.3	4.2	4.0	5.3	6.3	8.3	6.7	5.5	4.1	3.6	4.2	3.6	3.5	2.5	2.1	1.5	0.9	1.4	8.3	0.9	3.6
Max.	**16.1**	**16.1**	**18.1**	**18.0**	**18.6**	**19.1**	**19.8**	**19.1**	**18.6**	**19.8**	**19.1**	**18.8**	**18.4**	**17.8**	**17.4**	**17.0**	**16.6**	**16.5**	**15.8**	**16.3**	**16.0**	**16.6**	**16.8**	**17.1**	**19.8**		
Min.	**1.3**	**0.9**	**1.0**	**0.7**	**0.8**	**0.6**	**0.6**	**1.4**	**1.1**	**0.9**	**1.0**	**0.7**	**0.2**	**1.5**	**1.7**	**1.9**	**1.7**	**2.9**	**1.8**	**1.7**	**1.1**	**1.2**	**0.9**	**0.9**		**0.2**	
Avg.	**6.3**	**6.2**	**6.4**	**6.0**	**5.9**	**5.9**	**5.9**	**5.8**	**5.6**	**5.4**	**5.7**	**6.2**	**6.2**	**7.0**	**7.4**	**7.4**	**7.3**	**7.3**	**6.9**	**6.4**	**5.7**	**5.7**	**5.5**	**5.5**			**6.2**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.3	1.2	1.1	1.5	2.1	2.7	2.9	2.4	3.2	4.0	4.5	5.9	6.9	8.0	8.1	8.2	6.7	6.4	6.2	7.1	9.0	7.8	6.0	5.7	9.0	1.1	5.0
2	5.1	3.8	3.3	2.8	2.4	2.8	1.8	1.8	1.8	1.7	1.3	1.3	1.3	1.4	0.9	1.3	2.3	3.6	4.0	2.4	4.1	7.8	9.5	7.9	9.5	0.9	3.2
3	5.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.0	8.5	9.6	9.6	10.4	10.1	9.3	8.4	7.5	8.0	8.7	6.7	5.3	4.7	5.1	10.4	0.2	5.0
4	4.9	3.5	3.8	4.0	4.5	3.9	3.2	2.8	3.4	3.0	2.3	1.8	1.7	2.0	2.6	2.6	2.8	2.8	2.1	1.0	1.8	1.2	1.1	1.9	4.9	1.0	2.7
5	2.7	3.4	2.8	2.6	2.8	2.3	1.2	0.7	0.6	0.8	0.8	1.2	2.3	2.9	2.4	3.3	3.0	2.7	4.0	5.6	5.5	5.8	6.0	5.4	6.0	0.6	3.0
6	5.8	5.7	5.2	4.5	3.7	3.8	3.7	3.3	3.4	3.4	2.8	2.7	2.6	2.7	2.8	3.5	4.1	3.7	4.7	5.5	5.9	5.9	6.1	5.8	6.1	2.6	4.2
7	6.6	7.9	9.7	9.4	10.8	12.2	13.1	11.8	12.0	12.2	12.3	13.2	11.9	11.8	12.9	13.4	11.5	12.9	12.0	10.2	10.2	9.9	8.6	10.3	13.4	6.6	11.1
8	10.4	11.1	9.5	8.5	9.0	9.1	5.6	3.7	4.8	7.7	7.4	2.6	2.8	5.3	6.2	6.2	7.4	6.2	5.0	4.9	3.6	2.8	2.9	5.2	11.1	2.6	6.2
9	7.4	9.6	10.9	12.0	13.6	15.9	16.0	16.8	17.3	18.6	20.8	20.9	21.0	24.0	24.9	23.9	23.3	23.2	23.3	22.1	20.4	19.0	16.8	14.8	24.9	7.4	18.2
10	14.7	13.1	11.4	6.7	6.3	7.1	7.5	5.7	3.0	0.6	2.2	3.6	4.9	4.8	5.0	6.7	9.1	8.5	7.6	7.3	8.7	7.4	7.2	7.0	14.7	0.6	6.9
11	6.8	6.0	8.0	10.5	10.9	11.2	9.7	10.7	5.5	3.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	11.2	0.2	3.6
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	6.7	12.5	11.5	12.5	0.2	1.5
13	10.2	6.6	2.8	4.6	4.2	3.0	3.7	3.1	1.5	3.0	3.2	4.0	6.3	6.2	6.4	6.8	9.3	10.4	9.7	9.0	8.5	8.6	8.1	7.2	10.4	1.5	6.1
14	8.8	9.0	9.2	10.2	13.3	11.8	8.6	7.0	5.0	4.7	6.1	6.0	5.1	4.2	4.7	4.0	4.1	2.0	0.2	0.2	0.2	0.2	0.2	0.2	13.3	0.2	5.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
16	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
18	0.2	0.2	0.2	0.2	1.4	10.6	12.1	12.6	11.1	10.4	8.3	7.8	9.8	6.6	4.5	4.1	4.4	5.7	7.7	8.4	6.2	3.4	6.2	4.8	12.6	0.2	6.1
19	4.5	5.0	6.5	6.9	6.8	8.2	8.0	8.2	7.4	8.4	7.1	8.1	8.7	7.3	7.0	5.8	5.2	2.9	3.7	3.5	3.2	3.2	1.6	1.2	8.7	1.2	5.8
20	1.0	1.7	1.4	0.9	0.7	0.9	1.6	1.8	1.9	1.2	1.7	2.0	2.6	2.9	2.8	3.3	2.6	3.4	2.6	2.7	2.9	2.1	1.6	1.3	3.4	0.7	2.0
21	1.7	2.0	1.8	2.0	1.7	1.7	2.3	2.6	2.7	3.9	5.1	5.2	4.4	4.5	6.9	10.5	12.6	12.8	13.2	14.1	14.6	15.3	12.3	10.3	15.3	1.7	6.8
22	9.8	12.4	13.1	12.7	10.8	10.0	10.2	10.6	11.1	11.1	10.6	10.9	10.4	9.1	11.2	9.3	11.0	12.0	12.7	13.4	12.8	12.4	6.7	6.6	13.4	6.6	10.9
23	8.6	9.0	9.2	8.6	7.8	10.0	13.3	13.7	14.1	12.7	12.5	15.4	17.0	17.6	16.2	15.3	15.4	15.0	10.8	9.3	10.9	10.8	8.9	8.0	17.6	7.8	12.1
24	12.9	14.6	15.0	15.1	14.4	16.2	17.6	15.2	14.7	13.6	11.3	11.2	9.8	10.0	9.7	11.9	10.0	7.1	4.7	2.1	2.1	2.5	2.7	3.2	17.6	2.1	10.3
25	4.3	6.3	6.5	7.0	5.9	4.9	6.3	7.0	6.2	5.2	5.6	4.8	5.9	5.7	5.3	4.3	4.6	4.5	6.2	5.0	1.4	2.1	3.2	4.5	7.0	1.4	5.1
26	3.8	3.8	5.2	6.2	7.4	8.7	9.2	9.1	8.5	8.4	9.8	8.6	9.6	10.1	10.2	8.7	12.8	12.2	14.7	15.5	17.2	18.9	17.4	18.5	18.9	3.8	10.6
27	18.3	19.3	15.4	14.4	14.2	14.3	12.5	12.4	13.8	13.4	12.2	12.9	13.7	13.2	13.1	14.1	12.3	6.8	7.1	5.7	6.2	3.7	3.0	1.4	19.3	1.4	11.4
28	2.1	3.1	3.5	3.1	2.5	3.9	5.6	7.4	5.9	9.0	9.3	7.0	6.6	6.8	6.5	4.7	3.6	2.4	3.4	2.4	1.7	1.9	1.9	1.9	9.3	1.7	4.4
29	2.0	1.6	0.9	0.9	1.2	1.4	1.6	2.1	2.4	1.7	2.4	2.3	3.7	4.5	5.7	6.5	5.8	7.3	7.5	6.3	6.2	7.4	7.8	6.4	7.8	0.9	4.0
30	7.6	7.7	6.7	5.9	7.2	5.9	6.5	5.9	5.0	4.7	6.1	6.4	4.1	2.0	0.9	1.9	2.5	2.0	2.0	3.5	3.7	3.7	3.8	4.2	7.7	0.9	4.6
31	4.8	4.4	4.1	1.8	1.8	2.2	2.0	1.0	1.0	1.3	0.5	0.6	1.8	2.0	3.2	3.5	2.7	3.0	2.9	2.4	1.6	0.8	1.0	2.1	4.8	0.5	2.2
Max.	**18.3**	**19.3**	**15.4**	**15.1**	**14.4**	**16.2**	**17.6**	**16.8**	**17.3**	**18.6**	**20.8**	**20.9**	**21.0**	**24.0**	**24.9**	**23.9**	**23.3**	**23.2**	**23.3**	**22.1**	**20.4**	**19.0**	**17.4**	**18.5**	**24.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**5.6**	**5.6**	**5.4**	**5.3**	**5.4**	**6.0**	**6.0**	**5.8**	**5.4**	**5.5**	**5.7**	**5.7**	**6.0**	**6.0**	**6.2**	**6.3**	**6.4**	**6.1**	**6.0**	**5.8**	**5.7**	**5.7**	**5.4**	**5.3**			**5.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.4	2.7	2.3	2.4	2.1	3.5	3.8	4.6	4.3	3.7	3.5	5.4	5.9	6.9	7.9	7.5	7.6	7.8	8.4	9.7	8.6	8.4	9.2	8.2	9.7	2.1	5.7
2	7.2	6.1	7.9	8.3	6.8	6.4	7.1	6.6	6.0	5.3	6.0	8.1	8.4	8.8	8.5	7.6	7.5	7.5	8.3	8.5	8.9	8.6	7.5	7.5	8.9	5.3	7.5
3	7.8	7.8	7.7	7.9	8.7	8.2	7.3	8.0	7.6	7.7	7.4	6.8	6.9	6.2	6.0	6.6	6.5	7.2	6.8	5.8	5.4	5.9	6.4	8.0	8.7	5.4	7.1
4	9.0	9.9	10.8	11.2	12.6	12.0	14.8	10.6	8.9	8.1	6.5	6.0	6.0	5.6	4.8	5.6	6.2	5.9	5.6	5.0	4.5	4.9	5.3	4.7	14.8	4.5	7.7
5	6.0	6.3	6.1	6.3	5.6	6.6	6.8	6.2	5.1	4.9	4.4	3.2	3.7	3.8	3.7	3.0	3.4	3.5	3.5	3.5	2.8	3.4	2.7	3.0	6.8	2.7	4.5
6	3.0	2.4	2.4	2.3	3.0	2.9	2.2	2.0	2.9	5.1	4.2	5.3	2.1	2.4	3.2	4.3	5.0	4.7	4.6	6.3	8.0	9.3	10.3	9.7	10.3	2.0	4.5
7	9.3	8.6	8.5	8.9	9.6	10.4	9.4	7.3	6.9	4.2	3.3	4.2	3.0	3.6	2.4	0.9	1.2	2.3	4.0	3.0	1.8	2.6	3.4	3.7	10.4	0.9	5.1
8	1.6	1.6	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.3	7.0	8.9	9.0	12.1	11.9	10.7	12.1	0.2	2.8
9	10.6	11.3	11.8	12.4	17.0	18.9	16.7	13.6	11.9	9.8	8.6	8.7	9.7	10.1	11.1	11.9	10.3	8.0	8.4	13.4	18.7	14.9	14.2	13.5	18.9	8.0	12.3
10	14.6	12.0	8.7	5.5	3.4	6.8	9.5	9.2	9.6	6.0	9.0	5.3	3.9	2.2	1.3	1.2	3.4	9.2	7.4	7.5	10.6	11.5	10.7	9.4	14.6	1.2	7.4
11	8.1	7.7	7.1	7.5	7.0	6.0	6.3	5.3	4.6	3.3	4.1	1.9	1.3	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.9	4.3	8.1	0.2	3.2
12	3.2	2.7	2.6	2.7	3.4	1.7	1.3	0.5	3.7	5.9	5.7	4.5	2.0	1.3	1.0	1.4	5.4	3.4	2.0	1.8	1.7	1.9	1.8	1.7	5.9	0.5	2.6
13	2.9	2.8	3.1	2.8	3.8	3.3	2.7	3.6	5.5	5.4	5.1	6.6	6.0	5.7	4.1	4.5	4.3	4.5	3.8	4.8	6.1	6.4	7.0	5.7	7.0	2.7	4.6
14	3.5	6.1	7.3	7.1	6.7	5.4	4.1	3.8	3.5	3.8	3.7	2.4	1.7	1.9	2.2	3.1	2.5	2.4	2.7	3.2	2.9	3.5	3.2	1.4	7.3	1.4	3.7
15	2.3	3.1	3.7	3.4	3.1	2.9	1.8	1.7	2.4	3.8	4.5	3.7	3.6	4.1	5.0	5.2	4.7	4.4	5.9	7.3	8.3	8.7	8.4	8.7	8.7	1.7	4.6
16	7.8	8.5	9.4	7.4	6.5	4.6	3.3	4.2	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.4	0.2	2.3
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.0	3.3	3.9	6.4	6.8	7.0	7.6	8.4	8.8	9.8	10.3	10.0	10.3	0.2	3.7
18	10.9	10.6	10.6	6.5	4.7	7.1	5.2	4.9	4.5	6.0	6.1	6.2	6.1	5.9	5.4	6.1	7.2	7.6	7.9	8.5	8.4	7.8	7.2	7.2	10.9	4.5	7.0
19	6.9	6.7	7.0	7.5	6.8	7.3	7.4	8.8	9.4	10.6	10.0	11.0	14.8	15.9	14.7	16.6	16.1	16.8	16.7	15.4	16.4	16.9	15.8	14.8	16.9	6.7	12.1
20	14.1	15.4	16.2	14.9	16.3	20.3	19.7	21.2	24.0	25.1	22.4	19.6	20.6	19.7	19.2	18.3	18.6	19.2	15.5	14.0	15.3	14.7	13.3	11.0	25.1	11.0	17.9
21	12.9	12.0	11.8	10.9	10.0	9.4	10.3	7.4	7.0	6.5	5.6	5.1	4.8	4.5	3.2	2.7	3.7	3.9	2.2	1.3	2.1	3.9	4.6	3.7	12.9	1.3	6.2
22	3.6	3.4	2.6	2.8	2.0	1.1	2.6	2.5	3.2	2.5	2.9	3.0	3.8	2.5	3.4	2.0	2.9	1.8	1.0	2.1	2.1	1.8	2.2	1.7	3.8	1.0	2.5
23	2.0	2.0	3.3	2.9	2.9	2.2	1.5	2.0	1.6	1.6	1.5	1.3	1.6	2.2	2.2	2.1	2.2	3.1	3.7	6.9	7.6	7.4	7.3	8.2	8.2	1.3	3.3
24	8.5	11.9	12.4	19.3	18.6	15.6	12.8	11.3	16.3	16.6	15.8	15.9	15.7	14.5	13.9	14.1	13.0	11.7	9.3	8.8	8.3	11.1	15.6	13.9	19.3	8.3	13.5
25	15.1	10.3	9.1	10.3	5.5	4.7	4.1	3.5	4.7	5.2	4.5	3.6	4.5	2.2	3.5	6.0	7.4	4.6	5.2	8.0	8.7	9.9	9.0	8.0	15.1	2.2	6.6
26	7.9	9.1	8.3	8.5	8.1	9.1	9.1	8.9	10.3	12.3	14.8	13.5	13.6	10.7	10.5	12.6	13.4	10.6	10.5	13.8	9.8	9.3	7.3	6.9	14.8	6.9	10.4
27	9.5	7.0	6.4	5.3	3.4	4.1	3.5	3.9	5.5	5.2	4.7	3.7	4.4	5.1	4.5	4.6	5.2	5.1	6.5	6.7	5.2	4.4	5.4	5.3	9.5	3.4	5.2
28	5.4	6.0	7.0	7.6	6.2	7.1	6.6	6.8	7.4	7.4	7.5	7.0	6.5	6.3	6.5	6.8	7.3	7.4	7.7	8.6	9.0	8.6	8.2	7.5	9.0	5.4	7.2
29	7.8	7.2	7.1	6.9	5.1	5.9	7.0	8.0	7.9	7.6	8.9	8.4	7.7	9.0	10.0	10.5	14.2	16.0	15.7	14.5	14.8	15.0	14.7	15.1	16.0	5.1	10.2
30	15.5	13.3	12.5	12.6	13.0	13.3	12.1	12.7	11.8	11.1	10.7	10.9	10.5	10.9	10.8	9.3	7.4	7.3	8.6	8.1	9.0	7.8	7.1	6.7	15.5	6.7	10.5
Max.	**15.5**	**15.4**	**16.2**	**19.3**	**18.6**	**20.3**	**19.7**	**21.2**	**24.0**	**25.1**	**22.4**	**19.6**	**20.6**	**19.7**	**19.2**	**18.3**	**18.6**	**19.2**	**16.7**	**15.4**	**18.7**	**16.9**	**15.8**	**15.1**	**25.1**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.3**	**7.2**	**7.1**	**7.1**	**6.7**	**6.9**	**6.6**	**6.3**	**6.6**	**6.5**	**6.4**	**6.1**	**6.1**	**5.9**	**5.8**	**6.1**	**6.5**	**6.5**	**6.6**	**7.1**	**7.5**	**7.7**	**7.7**	**7.3**			**6.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (Climatronics) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.8	7.5	6.2	5.5	5.3	4.4	4.0	3.6	3.5	3.9	3.0	3.7	2.7	3.0	1.6	1.3	1.6	2.3	2.0	2.6	2.6	2.8	2.7	4.2	7.5	1.3	3.6
2	3.9	5.0	7.8	4.9	6.4	10.2	8.5	6.5	5.9	4.1	10.2	13.8	15.6	19.2	20.6	19.7	19.3	20.5	19.2	18.5	19.6	20.5	18.5	17.4	20.6	3.9	13.2
3	17.4	20.5	21.2	21.7	21.9	23.0	23.1	22.2	23.4	25.0	28.2	30.0	28.7	27.6	32.9	30.6	27.6	25.3	25.4	24.9	23.9	25.3	22.4	21.8	32.9	17.4	24.8
4	19.4	18.5	15.7	13.7	11.4	11.5	11.8	14.7	12.1	13.7	12.6	12.1	12.8	14.9	14.7	12.0	10.8	10.3	10.8	10.9	11.7	11.8	11.9	14.0	19.4	10.3	13.1
5	15.1	15.2	13.0	12.3	12.9	12.2	11.1	11.9	10.9	12.2	12.1	10.6	9.8	9.8	10.0	9.2	8.5	5.7	6.7	7.4	6.9	5.3	4.5	5.5	15.2	4.5	9.9
6	6.8	9.0	10.7	9.2	10.6	10.6	9.0	5.1	4.5	3.5	3.5	3.3	2.0	1.0	0.8	1.6	1.3	1.7	1.1	1.0	1.5	2.2	2.7	0.5	10.7	0.5	4.3
7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	8.0	17.4	18.3	17.6	15.4	13.5	8.6	8.1	7.9	8.6	9.7	8.3	18.3	0.2	6.0
9	6.9	5.2	4.6	3.0	5.8	6.6	6.2	5.3	4.2	4.6	3.8	3.0	2.0	1.2	1.9	1.1	1.2	2.2	2.5	2.4	3.1	3.1	3.5	3.5	6.9	1.1	3.6
10	5.7	7.2	6.5	10.8	11.2	12.4	6.6	7.0	9.2	8.3	7.2	7.8	7.0	6.1	4.2	3.9	1.5	1.1	1.6	5.4	4.9	3.5	3.1	3.4	12.4	1.1	6.1
11	3.4	2.9	1.9	1.2	1.5	0.9	1.4	1.6	1.4	1.4	1.9	2.8	7.8	8.6	7.6	7.8	7.2	4.4	4.2	4.7	5.1	5.9	5.2	4.0	8.6	0.9	3.9
12	3.6	3.9	3.2	3.2	3.6	3.7	3.3	2.5	2.9	2.7	2.0	1.3	1.0	1.1	1.3	1.0	1.0	2.5	5.0	5.8	8.8	8.5	8.4	8.6	8.8	1.0	3.7
13	9.6	9.4	8.5	8.3	9.3	8.4	6.6	5.4	5.6	5.9	4.5	3.8	2.7	1.1	2.6	3.5	2.5	1.8	1.1	1.5	2.0	1.7	1.8	4.6	9.6	1.1	4.7
14	6.9	7.0	6.9	6.9	5.9	5.7	6.5	8.5	9.8	12.3	11.7	11.2	10.2	11.2	11.3	10.6	12.2	14.0	10.1	13.5	13.9	15.3	14.4	15.2	15.3	5.7	10.5
15	15.6	14.9	13.6	15.0	15.6	12.6	13.5	12.1	11.0	8.8	9.6	7.4	5.2	4.4	3.5	2.6	2.3	1.8	1.3	1.3	2.3	2.0	2.4	2.8	15.6	1.3	7.6
16	2.8	2.6	2.4	1.9	1.0	2.3	2.4	4.3	3.6	3.9	4.9	6.8	8.3	10.9	10.1	9.6	9.3	7.7	7.5	7.5	9.3	9.3	11.4	13.0	13.0	1.0	6.4
17	14.5	15.4	17.2	17.7	18.2	18.0	16.0	14.6	15.3	15.9	16.3	15.5	16.0	16.0	14.4	14.7	14.8	13.8	13.6	14.0	16.0	14.3	17.2	16.9	18.2	13.6	15.7
18	13.0	12.4	13.0	15.0	16.8	15.2	15.1	14.9	12.2	12.8	17.0	15.9	15.3	15.3	17.3	18.6	19.9	18.2	20.1	20.6	18.2	18.3	17.7	17.9	20.6	12.2	16.3
19	17.3	18.1	17.4	19.6	18.9	14.5	15.4	15.4	18.0	15.1	11.3	10.9	7.7	7.0	4.3	4.1	6.5	6.4	8.7	10.4	10.1	10.0	13.5	10.0	19.6	4.1	12.1
20	6.3	7.1	7.9	8.9	8.3	8.8	8.7	8.6	4.0	4.8	5.3	5.8	3.9	2.1	6.2	4.9	2.9	2.7	1.6	1.8	1.4	2.2	2.9	3.1	8.9	1.4	5.0
21	2.7	3.3	2.6	2.4	3.2	3.6	3.5	3.5	2.6	3.0	4.0	3.6	2.6	1.2	1.5	0.8	0.9	1.0	0.9	1.2	1.2	1.8	2.0	2.6	4.0	0.8	2.3
22	2.7	2.6	2.7	3.7	4.9	6.0	6.9	9.3	9.5	9.2	10.0	7.5	6.0	4.9	4.2	5.4	6.7	8.1	8.1	8.5	10.3	10.4	10.4	9.6	10.4	2.6	7.0
23	10.8	11.8	12.8	12.8	12.3	10.3	8.4	6.7	3.9	14.0	14.6	14.9	12.5	12.6	12.7	12.9	11.9	8.8	11.2	9.2	16.6	18.0	15.8	15.2	18.0	3.9	12.1
24	16.4	16.8	11.9	9.5	8.9	10.5	10.8	4.0	4.2	5.1	6.1	5.0	5.9	5.5	3.7	4.5	3.1	2.5	1.7	3.6	2.9	2.8	4.9	5.1	16.8	1.7	6.5
25	6.7	9.3	12.6	13.2	11.9	11.7	11.3	13.5	14.2	11.7	11.8	13.0	15.2	15.2	13.7	11.8	11.1	19.2	19.9	19.3	18.2	18.7	20.5	21.3	21.3	6.7	14.4
26	19.3	20.3	20.0	18.8	17.5	18.2	16.3	15.3	15.1	14.5	14.6	16.3	17.0	16.5	16.6	15.0	15.9	15.4	15.9	16.0	18.0	18.0	18.9	17.5	20.3	14.5	17.0
27	15.6	15.4	16.1	19.0	24.8	22.3	21.6	22.2	22.5	25.3	22.4	21.6	24.1	25.7	19.7	18.5	19.0	23.0	21.5	19.4	17.6	15.5	14.2	18.0	25.7	14.2	20.2
28	19.5	19.8	17.8	20.5	18.1	10.8	12.8	17.2	16.7	17.8	18.6	20.6	10.5	11.5	12.7	12.0	9.6	11.5	10.0	8.1	7.0	6.6	6.8	6.9	20.6	6.6	13.5
29	5.0	6.0	7.3	8.5	8.3	8.5	8.4	8.9	9.1	9.5	9.2	8.8	8.2	7.9	8.0	8.1	7.3	7.6	7.7	7.3	8.1	9.4	7.9	8.6	9.5	5.0	8.1
30	8.9	8.2	8.3	7.8	7.3	8.3	9.0	7.3	8.7	10.8	10.3	7.9	8.4	8.8	10.5	9.3	9.8	9.4	10.3	9.6	9.1	8.4	8.8	8.7	10.8	7.3	8.9
31	7.3	8.1	6.7	10.5	9.6	10.8	12.2	11.7	12.0	12.7	11.9	11.3	11.9	10.7	10.4	10.6	10.9	10.5	10.5	11.2	11.5	10.3	9.7	7.6	12.7	6.7	10.4
Max.	**19.5**	**20.5**	**21.2**	**21.7**	**24.8**	**23.0**	**23.1**	**22.2**	**23.4**	**25.3**	**28.2**	**30.0**	**28.7**	**27.6**	**32.9**	**30.6**	**27.6**	**25.3**	**25.4**	**24.9**	**23.9**	**25.3**	**22.4**	**21.8**	**32.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**9.4**	**9.8**	**9.6**	**9.9**	**10.1**	**9.8**	**9.4**	**9.2**	**8.9**	**9.5**	**9.6**	**9.6**	**9.3**	**9.6**	**9.6**	**9.1**	**8.8**	**8.8**	**8.7**	**8.9**	**9.4**	**9.4**	**9.5**	**9.5**			**9.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	313.4	49.1	102.2	121.3	123.7	111.6	98.1	96.2	101.3	99.7	99.8	106.0	110.1	113.3	120.0	117.0	117.7	92.5	50.7	32.2	299.6	307.8	322.9	318.0
2	308.1	304.7	302.9	298.1	302.3	299.9	310.1	317.5	310.8	300.0	300.8	312.3	317.4	313.2	316.7	314.6	310.2	309.9	311.3	313.1	313.0	300.9	312.8	318.1
3	320.8	317.0	312.0	309.1	312.6	317.3	321.9	316.1	309.6	306.3	317.8	328.7	321.0	302.5	302.6	314.3	295.5	314.2	303.8	298.7	301.3	308.0	303.9	306.2
4	310.8	308.3	308.3	303.8	303.8	302.7	300.5	302.3	300.9	301.0	300.5	281.4	308.3	307.4	307.6	304.0	302.4	312.1	311.2	304.9	310.9	311.8	307.1	309.6
5	317.2	302.0	312.9	316.0	325.6	318.9	319.0	311.4	313.8	326.1	326.6	302.5	321.2	320.1	289.4	266.2	181.9	301.2	300.3	306.9	307.9	308.4	310.8	310.3
6	314.8	309.8	305.5	309.6	302.8	307.8	306.7	308.1	310.2	307.4	307.3	309.6	306.5	302.0	315.7	314.9	307.8	305.6	315.2	316.7	301.7	307.2	325.1	302.8
7	303.9	312.6	295.9	312.3	312.4	303.8	289.6	302.9	308.6	305.4	309.6	310.0	296.2	310.3	309.4	297.7	304.2	304.7	310.1	309.6	304.2	304.9	296.7	295.2
8	314.3	290.5	109.6	277.5	259.3	168.1	123.3	129.5	130.6	126.8	124.6	114.5	106.3	96.4	91.1	110.4	108.2	86.2	84.1	86.6	97.3	57.1	55.7	82.3
9	70.1	89.1	49.9	51.1	50.0	49.9	48.6	50.5	57.0	50.5	237.7	262.9	291.0	315.9	304.9	306.1	305.6	307.2	312.2	309.2	306.3	309.3	318.4	318.5
10	309.7	311.7	305.5	318.9	318.4	312.9	327.7	320.5	312.6	309.9	311.9	309.5	312.8	311.4	311.1	349.1	309.9	133.5	198.9	236.6	309.5	307.3	309.7	326.1
11	119.3	136.5	136.9	143.2	138.4	148.3	137.3	133.1	138.5	139.9	134.7	141.8	140.6	147.0	143.1	140.5	130.7	113.4	116.6	150.4	314.3	285.0	136.5	111.1
12	112.9	117.4	317.5	130.5	1.8	313.6	294.1	302.7	310.7	308.4	317.4	312.4	310.0	298.0	310.2	309.1	304.6	302.9	310.7	313.3	302.4	298.2	254.9	118.3
13	124.7	129.0	139.9	128.1	110.1	105.4	107.2	106.4	107.6	108.0	111.8	114.5	113.2	112.6	111.7	111.2	111.7	110.8	111.2	113.8	111.8	109.8	112.2	111.9
14	112.8	113.0	112.7	116.0	116.3	116.7	121.6	169.8	213.0	216.6	226.2	232.6	227.0	222.5	223.9	220.3	221.1	219.1	218.5	221.0	221.2	262.1	287.9	271.3
15	275.4	279.4	266.7	265.6	265.3	296.5	298.8	291.6	278.9	268.0	291.8	310.1	296.6	303.2	314.9	316.4	242.6	332.5	322.7	330.3	213.0	117.6	123.4	124.5
16	121.9	110.3	117.3	118.1	119.2	111.6	106.0	108.1	103.0	95.7	94.7	95.7	103.5	93.7	87.1	95.6	101.6	118.4	145.4	151.1	140.3	144.6	148.8	152.6
17	144.6	144.9	151.2	126.2	121.0	123.2	104.9	105.9	100.2	76.9	70.0	68.3	31.4	58.4	50.2	57.3	85.3	113.5	111.9	116.8	118.4	121.0	126.6	125.5
18	119.3	116.1	114.6	112.2	110.5	110.6	111.7	112.2	112.2	116.8	120.0	118.8	120.0	121.2	122.3	123.0	126.4	133.4	133.5	125.3	117.5	121.7	121.4	120.4
19	123.1	123.6	78.4	39.8	358.1	5.8	329.6	34.8	3.4	11.5	20.5	42.6	358.2	42.4	57.4	72.0	53.3	51.9	49.7	52.7	84.4	101.2	100.4	106.1
20	113.1	114.1	115.4	122.8	122.9	121.0	123.6	124.4	123.2	120.5	120.9	118.3	114.4	110.5	116.5	122.6	94.1	62.6	63.1	45.9	42.4	19.6	37.1	47.6
21	49.8	50.7	22.8	36.5	41.8	8.2	26.3	27.7	32.9	35.6	42.1	47.3	48.7	54.1	56.0	49.9	50.2	105.7	132.9	83.8	82.9	69.3	57.9	74.9
22	80.6	71.7	94.7	100.8	118.7	132.2	91.3	78.0	94.5	116.5	138.0	106.2	102.4	104.4	109.1	110.6	117.5	121.1	118.9	119.2	123.0	122.6	122.5	127.6
23	129.7	140.7	144.3	115.9	119.7	110.1	95.2	326.5	315.6	307.8	304.0	307.6	307.1	306.9	307.2	312.6	305.0	301.8	306.3	310.5	309.5	310.4	314.0	319.6
24	315.5	320.3	317.0	310.8	310.2	314.4	317.0	317.1	324.9	320.2	309.9	306.9	302.9	300.1	304.7	309.1	313.2	323.9	323.0	313.6	321.9	322.6	315.6	308.6
25	315.3	323.4	327.0	327.8	324.0	332.0	326.4	322.5	316.8	302.9	296.6	306.9	310.2	312.9	305.7	303.4	291.6	341.5	357.8	334.5	14.4	50.4	69.0	105.3
26	92.4	95.1	94.8	88.0	352.1	317.5	303.6	320.6	302.8	301.6	303.2	310.0	315.9	317.1	316.9	331.4	315.3	306.6	303.2	308.2	301.2	302.4	312.6	314.9
27	307.7	334.1	316.3	302.6	304.4	311.6	305.8	306.8	313.4	272.8	255.2	78.2	103.8	99.3	20.4	283.9	300.0	336.2	30.6	9.6	25.6	16.3	47.3	354.2
28	42.0	37.9	33.5	34.2	46.4	51.3	8.4	76.3	353.1	317.7	327.7	305.0	323.4	308.0	311.6	309.3	311.4	309.3	309.1	310.8	313.9	319.5	315.5	312.2
29	324.2	325.8	326.3	332.6	329.6	328.8	316.8	318.2	326.5	339.2	339.1	316.4	319.0	319.7	310.9	309.5	310.8	331.2	318.3	304.6	299.6	309.5	306.3	303.5

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	300.7	301.0	302.4	313.5	312.9	307.1	306.9	3.9	95.8	98.4	104.2	114.9	105.5	113.1	112.0	102.4	96.3	107.4	97.9	83.8	94.8	93.6	96.2	95.3
2	92.5	98.6	101.6	109.5	113.2	104.5	110.3	116.4	125.2	135.2	132.1	129.7	129.7	133.5	139.9	133.3	143.4	131.7	136.0	141.5	133.7	131.6	125.6	113.4
3	127.9	139.3	160.2	152.8	123.8	119.4	122.6	118.5	118.3	112.9	116.1	115.5	115.8	117.4	121.0	114.5	120.1	124.8	121.1	118.7	126.2	128.9	127.2	120.2
4	121.4	120.1	119.7	123.9	116.3	111.4	113.3	112.8	110.9	113.9	112.9	110.7	110.7	111.0	111.4	112.5	115.5	116.1	113.2	113.4	110.6	112.1	112.5	114.7
5	118.7	119.9	121.0	116.5	118.4	118.8	113.2	103.9	99.9	113.4	112.5	114.1	110.3	113.9	112.5	113.1	110.5	112.5	120.0	119.4	120.8	121.5	121.4	122.9
6	123.4	126.5	127.2	129.3	130.9	111.5	100.0	103.2	119.3	123.5	125.0	126.3	124.7	130.6	126.6	124.8	129.0	121.5	122.7	91.0	23.3	8.5	36.3	30.3
7	16.2	20.5	18.1	347.4	321.5	311.8	308.7	303.8	302.3	302.7	300.9	307.7	312.7	315.4	288.2	282.4	250.1	251.3	236.1	229.3	220.2	217.7	213.8	217.9
8	214.1	203.2	201.9	141.2	144.7	145.2	142.2	133.4	117.7	104.5	112.8	124.6	108.3	93.4	80.9	45.2	30.2	45.7	50.0	48.0	46.9	47.3	40.6	33.1
9	1.4	1.8	347.7	355.3	359.6	9.2	20.1	11.8	5.0	8.1	2.1	3.8	338.0	327.0	298.8	300.6	301.2	300.6	299.8	299.5	296.0	296.7	348.8	16.7
10	232.5	205.6	203.8	212.3	219.8	229.5	216.2	226.6	204.3	203.4	222.2	286.0	23.4	216.2	233.4	332.6	218.9	308.8	226.2	306.1	199.1	243.6	244.7	259.3
11	227.5	247.1	251.3	232.0	313.1	270.7	252.4	230.9	213.1	255.1	283.2	318.6	257.4	240.3	277.2	273.7	291.3	301.8	319.0	329.3	316.5	309.8	306.1	304.1
12	316.8	302.5	299.6	300.6	294.8	302.4	310.6	289.4	298.5	301.7	330.9	342.1	355.9	345.2	347.7	343.6	329.0	332.3	328.1	332.2	331.0	325.9	321.0	320.2
13	316.7	319.2	318.1	315.2	323.8	323.8	322.6	314.8	312.8	312.8	315.5	316.1	310.8	313.7	300.8	303.5	307.8	303.3	306.2	295.9	298.8	293.2	313.6	324.9
14	319.3	308.8	318.9	308.3	307.4	26.3	82.6	100.5	101.5	97.7	108.4	113.7	103.7	102.8	102.8	105.9	114.2	129.9	139.5	145.4	144.8	145.5	142.4	126.9
15	116.5	117.3	115.8	117.5	118.5	111.1	114.7	113.7	112.0	113.7	117.5	116.5	113.0	111.7	116.8	115.8	115.8	118.4	116.3	114.8	116.8	112.2	116.9	120.6
16	115.2	106.7	112.7	112.9	108.5	110.0	113.3	115.5	113.0	122.1	158.3	149.4	180.9	44.8	134.0	262.2	249.2	312.4	320.2	322.8	316.9	318.8	308.8	307.6
17	305.0	301.6	300.2	310.3	307.8	306.6	307.6	300.5	300.8	290.7	297.9	294.2	308.2	314.4	288.1	267.8	180.4	175.6	216.2	214.0	214.1	203.5	202.6	221.4
18	307.7	297.3	300.6	301.9	316.2	329.3	307.2	306.3	301.1	302.5	301.1	307.2	310.0	310.1	305.1	304.8	309.8	308.2	307.4	325.0	321.8	322.2	314.6	318.0
19	314.1	313.2	314.1	317.4	310.2	306.4	313.4	309.3	304.7	302.7	304.4	304.3	313.3	316.3	318.2	320.9	320.4	325.0	333.0	323.7	318.5	315.2	311.5	305.6
20	303.1	300.9	300.4	297.2	299.9	300.0	301.4	304.2	303.1	303.7	308.3	305.9	295.7	326.7	287.8	297.3	310.7	306.3	302.9	305.4	302.7	306.3	299.8	303.5
21	305.6	300.9	301.8	300.2	303.7	308.0	315.2	324.4	308.1	308.6	311.1	325.0	313.4	325.5	314.0	284.7	312.9	302.5	311.1	330.2	343.0	318.5	306.8	307.5
22	310.6	309.3	307.1	304.0	300.3	303.1	312.0	329.9	315.6	317.0	306.3	300.6	297.7	309.6	303.9	307.0	307.9	333.4	335.9	340.0	335.4	305.1	313.0	332.4
23	314.9	302.5	306.9	310.6	302.1	306.3	329.6	325.7	330.9	335.6	325.6	312.3	303.9	301.8	303.7	304.4	298.8	307.7	314.0	314.6	318.0	308.3	315.4	304.6
24	305.2	304.1	300.4	296.2	295.0	297.1	304.9	312.3	309.2	300.1	304.2	299.6	301.9	300.4	309.2	297.3	298.6	293.9	295.7	299.9	300.5	303.6	302.4	308.1
25	312.3	37.8	138.4	140.0	121.6	148.5	139.5	155.5	155.3	134.7	208.1	124.3	72.1	314.3	309.9	303.8	303.9	300.6	299.8	301.9	307.3	311.6	316.4	317.9
26	304.3	309.0	311.3	316.3	313.2	305.9	308.1	311.0	315.1	312.7	300.7	301.9	305.2	297.2	300.4	299.2	297.6	285.4	285.1	282.9	280.2	295.8	308.0	292.2
27	292.6	295.7	297.4	278.0	288.8	309.1	309.2	298.7	301.3	317.1	320.2	317.9	310.8	302.2	291.9	290.9	298.0	302.4	293.7	295.0	304.6	302.7	306.4	306.4
28	314.6	307.6	313.7	307.3	308.2	307.1	305.8	309.5	298.0	311.1	313.7	290.5	110.5	105.7	9.3	8.0	331.6	287.0	216.7	117.2	138.8	140.2	136.2	138.5
29	147.4	155.1	152.9	148.5	149.8	142.5	135.6	132.4	119.6	127.3	121.6	122.9	122.4	120.7	119.9	116.5	114.8	112.1	115.2	117.1	116.8	113.0	113.3	113.7
30	113.0	113.7	112.8	112.9	113.5	113.2	112.9	111.2	110.6	112.4	111.3	110.7	111.7	112.5	113.8	115.2	116.7	119.3	122.1	123.4	122.1	127.0	129.0	130.3
31	132.1	133.3	135.9	136.1	135.1	129.9	124.9	118.7	124.4	121.2	119.3	122.6	124.5	123.4	121.0	126.3	124.1	121.5	118.9	122.4	119.2	120.9	118.5	117.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	116.5	115.2	116.1	117.7	118.8	120.1	119.6	119.9	121.2	120.7	122.2	122.6	120.1	117.8	123.3	120.8	120.3	122.5	128.9	138.3	146.6	154.5	170.4	160.6
2	175.1	102.1	321.0	326.3	322.2	329.1	205.2	158.0	130.1	131.4	200.6	148.1	147.1	166.3	157.7	134.3	139.4	150.9	137.5	142.7	146.3	144.7	153.3	146.3
3	140.2	136.8	150.1	152.2	158.6	151.5	157.3	154.7	146.9	142.7	144.8	135.3	140.7	132.6	132.4	131.6	135.8	128.7	118.0	115.9	116.3	113.8	117.4	117.3
4	116.6	116.8	115.9	116.2	113.4	115.5	118.6	117.2	118.0	117.7	119.7	122.7	126.2	129.8	133.6	138.6	150.0	152.2	156.5	163.1	192.8	225.3	252.2	279.0
5	299.6	306.7	304.0	296.8	293.4	297.4	295.9	296.6	284.3	300.3	308.1	311.4	274.9	279.5	290.0	287.2	285.9	298.9	323.7	324.5	315.8	302.5	301.0	297.1
6	299.9	307.3	313.5	312.2	316.7	316.6	312.7	315.3	317.8	307.3	309.7	324.1	326.7	323.4	321.6	318.3	322.0	326.6	324.6	327.9	323.1	317.6	325.2	308.0
7	311.5	313.6	310.5	308.3	309.7	318.0	307.4	313.0	321.8	309.0	314.0	297.4	304.7	314.4	317.4	318.3	312.6	300.6	293.6	297.4	303.7	306.7	308.2	306.9
8	310.1	297.6	294.3	299.2	299.0	281.8	265.9	245.6	116.7	120.6	121.9	112.0	96.4	142.3	149.3	148.9	166.0	200.7	219.8	228.5	285.7	301.1	300.7	306.1
9	303.8	303.0	305.5	305.3	306.7	310.5	308.1	301.0	297.2	305.5	308.4	320.7	298.5	289.9	296.2	292.8	301.7	306.7	306.7	304.6	306.5	305.1	296.9	295.4
10	302.0	306.8	305.1	303.1	306.2	305.7	303.8	305.1	302.5		296.0	301.5	305.0	298.6	301.0	287.3	294.8	292.2	290.2	295.4	297.0	297.2	301.8	297.9
11	297.7	302.1	301.8	308.3	303.3	302.2	300.1	308.8	307.0	304.4	289.7	294.7	288.9	298.4	306.5	313.6	319.9	323.7	317.3	298.3	289.6	290.6	299.5	297.7
12	295.8	296.8	298.8	296.4	300.2	301.5	300.5	306.5	307.0	301.5	308.7	319.2	307.3	310.0	306.9	304.3	303.6	311.6	299.7	290.6	300.4	307.5	295.5	158.4
13	179.4	136.3	125.8	133.2	126.5	107.6	103.4	105.8	102.4	136.9	165.1	146.4	128.4	148.6	201.0	216.9	208.1	219.1	204.3	191.9	203.0	221.1	224.5	224.7
14	224.4	226.2	226.0	226.1	226.4	226.8	227.3	226.7	226.1	226.0	225.9	226.7	242.5	258.8	270.0	309.0	257.7	215.2	240.5	246.0	243.7	233.0	204.2	201.7
15	228.8	313.8	281.9	302.9	51.9	51.9	51.8	51.8	41.8	334.2	333.7	326.0	328.6	330.3	329.9	326.1	327.4	329.8	329.5	328.3	326.7	326.4	332.0	330.0
16	331.4	331.6	335.4	327.6	318.2	320.9	312.5	314.3	318.0	304.8	308.7	306.8	305.6	311.6	308.7	302.3	303.3	308.6	308.8	313.9	269.3	274.7	272.7	293.2
17	281.0	289.0	283.6	293.0	307.0	296.2	302.9	307.0	304.9	289.3	251.0	199.1	221.2	220.6	215.3	184.7	210.2	214.6	216.9	358.1	156.7	147.0	165.0	166.1
18	182.6	147.6	113.9	115.4	107.8	102.5	104.9	108.4	104.0	109.5	107.3	118.8	138.7	154.4	156.6	152.4	154.2	158.3	163.4	152.4	160.0	160.1	155.4	148.1
19	157.2	151.4	151.0	150.8	148.4	155.1	151.1	154.1	150.7	147.7	145.9	140.6	147.8	151.3	150.8	152.7	149.9	148.5	153.7	156.0	148.5	147.3	158.0	146.3
20	146.3	136.5	145.7	124.2	134.3	152.7	129.3	127.2	125.2	124.6	124.4	128.3	128.4	127.6	124.1	126.5	155.3	142.7	153.2	162.5	160.6	156.4	160.1	162.9
21	162.8	162.6	167.0	166.8	166.3	164.3	159.5	152.3	140.0	140.1	126.6	146.5	153.6	156.8	166.4	154.9	154.4	146.4	140.0	132.2	148.2	149.7	148.7	154.4
22	150.2	151.3	125.4	132.5	142.8	147.4	144.7	147.5	138.9	138.2	124.6	161.0	137.0	112.3	122.6	134.8	139.9	133.4	132.1	191.4	177.2	198.8	311.2	305.7
23	295.8	302.1	309.1	319.0	307.8	305.6	313.2	313.7	314.6	306.7	301.8	312.1	320.2	304.4	297.3	290.8	300.1	281.2	280.8	233.1	265.3	237.8	223.5	202.1
24	146.0	309.4	125.6	75.4	187.0	259.4	120.4	127.7	302.3	289.0	253.9	289.8	338.3	89.6	54.7	254.7	319.2	255.8	240.8	204.7	178.3	177.8	227.8	223.8
25	228.5	220.3	255.7	299.4	304.3	303.4	302.7	307.7	302.3	312.8	316.9	312.7	317.5	317.5	312.3	311.6	324.1	322.1	321.8	328.0	328.1	327.4	323.2	324.1
26	327.3	323.8	329.4	328.3	319.7	322.1	331.3	320.4	326.7	330.7	330.0	332.2	330.8	333.4	335.0	336.1	334.1	337.1	336.1	331.5	331.6	332.8	333.4	334.7
27	336.4	332.3	330.7	330.0	329.6	330.4	329.2	325.9	324.6	326.8	329.0	327.5	323.1	325.1	329.7	332.6	327.3	323.2	326.5	330.2	330.2	315.0	308.2	305.4
28	302.0	300.6	304.2	300.3	306.1	301.7	304.7	307.5	306.4	304.7	306.1	294.0	294.9	270.7	295.8	298.5	298.6	298.7	302.5	296.5	297.2	302.1	301.3	294.8
29	295.2	301.8	300.1	299.3	299.9	303.2	311.0	308.5	317.8	310.5	311.6	313.9	323.1	324.7	326.0	327.5	324.3	329.4	327.8	324.2	330.6	322.8	321.8	319.0
30	312.9	311.5	305.0	298.5	304.6	303.1	302.0	300.7	299.1	301.8	302.4	295.4	307.2	318.8	313.2	314.3	346.2	329.0	330.9	332.4	327.2	333.5	322.2	315.0

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	304.9	304.9	304.2	303.6	297.9	298.6	300.8	300.4	302.7	301.8	303.0	299.7	299.0	313.5	313.7	332.6	334.9	331.4	326.5	328.7	325.3	319.9	317.5	323.1
2	312.6	325.3	324.4	318.4	320.0	319.5	315.6	320.5	318.1	326.3	320.5	317.4	313.8	291.3	213.7	253.7	288.5	295.4	275.0	163.7	192.4	248.9	297.0	268.4
3	265.7	123.8	151.7	157.3	149.8	135.4	113.1	119.6	116.9	105.2	128.4	121.4	108.7	122.4	103.9	122.6	153.1	149.5	53.3	52.1	81.4	123.3	121.5	62.7
4	56.4	88.7	64.8	81.5	86.7	69.4	86.7	66.3	74.2	84.0	73.4	110.2	93.2	62.3	68.8	57.4	86.2	87.3	48.6	10.1	19.9	249.8	290.8	305.5
5	300.3	311.2	312.4	314.4	322.3	308.4	308.4	309.0	301.8	305.8	289.6	329.4	291.9	296.2	179.6	141.3	179.6	143.3	165.0	149.8	186.1	179.9	152.0	146.8
6	176.4	135.8	115.8	138.8	123.9	119.0	126.2	125.9	122.4	122.1	128.5	132.7	131.3	127.0	128.0	125.2	125.8	120.9	119.3	119.4	122.0	119.2	119.8	118.9
7	117.3	114.7	115.7	115.9	115.0	116.0	114.9	114.6	114.7	114.9	116.8	118.3	120.2	121.3	118.4	115.9	113.9	118.5	121.9	121.5	122.7	120.2	125.3	123.6
8	122.5	125.2	123.3	120.3	119.2	119.5	119.4	115.7	116.3	117.0	116.6	118.0	120.1	120.1	121.3	120.9	122.1	120.7	120.8	120.2	119.9	121.5	117.4	121.5
9	118.9	110.7	106.8	110.5	108.6	87.9	112.0	108.4	119.1	126.7	120.2	114.5	122.2	131.7	128.3	127.7	132.7	138.2	145.5	135.4	154.5	181.6	238.9	252.0
10	280.2	307.3	309.2	305.7	310.7	311.2	306.9	294.6	313.7	303.1	294.7	321.8	159.9	173.3	174.2	175.5	183.1	171.0	176.1	182.3	140.4	138.1	141.5	122.4
11	131.4	121.4	122.2	122.4	121.9	116.5	128.7	126.1	118.0	115.5	125.0	125.2	121.9	118.8	114.2	113.5	114.8	118.2	113.5	116.6	114.9	110.7	108.7	112.3
12	118.6	119.2	119.0	119.0	116.4	115.4	113.1	98.8	95.3	107.4	122.0	122.6	122.3	131.0	128.9	130.4	119.6	113.7	111.0	113.4	111.7	108.6	105.7	111.3
13	114.4	113.6	113.8	116.2	123.1	127.1	130.2	125.9	125.9	124.5	122.8	117.2	120.9	123.2	125.5	127.0	125.1	122.6	120.8	120.5	116.6	113.7	119.0	123.5
14	123.2	115.5	106.0	65.5	41.6	34.6	45.1	54.6	51.5	11.4	344.6	330.6	350.4	7.9	38.0	54.1	54.3	57.2	69.1	71.0	75.4	82.7	57.0	101.3
15	127.7	234.0	236.8	222.2	204.6	178.5	169.2	166.4	138.7	143.8	154.7	156.1	153.7	168.5	170.3	177.9	178.7	170.7	161.9	148.9	144.1	148.0	152.8	161.5
16	176.0	175.9	176.6	173.9	193.7	142.2	114.4	105.5	95.6	119.2	106.1	115.5		133.4	132.9	134.3	135.7	140.4	143.2	146.3	185.8	205.2	214.5	254.3
17	320.9	315.5	308.5	307.1	306.6	310.5	299.4	298.1	303.7	305.4	321.4	341.1	310.0	282.3	261.7	46.0	214.1	232.6	184.6	184.2	152.4	160.5	166.2	144.0
18	153.0	122.1	128.2	142.4	140.6	144.9	150.7	159.3	159.5	142.3	136.0	128.6	140.0	146.1	157.2	168.2	140.6	131.4	137.8	129.5	148.9	143.7	159.0	163.2
19	163.4	163.4	165.3	183.7	174.7	191.2	174.5	182.7	296.9	350.5	341.2	327.3	308.5	279.5	313.7	318.1	289.0	295.9	293.9	298.4	300.5	297.4	298.3	304.3
20	315.7	308.0	313.5	309.5	312.1	309.8	319.4	312.4	310.7	317.7	321.8	349.1	2.2	55.6	67.0	163.9	171.7	168.8	170.2	169.8	186.6	181.4	174.9	177.0
21	159.1	161.5	140.3	114.1	107.0	90.5	0.0	341.3	330.1	311.8	134.9	127.0	142.0	148.1	179.7	186.9	198.8	182.3	185.1	213.3	235.7	238.6	248.8	257.6
22	257.4	261.7	265.0	263.1	243.6	277.2	320.3	289.5	321.7	330.9	327.6	301.9	331.0	76.0	102.6	140.8	131.1	127.4	125.5	124.0	116.8	122.8	110.9	107.9
23	113.9	112.8	112.6	114.9	113.2	116.5	111.0	116.0	117.9	111.7	108.2	111.6	112.9	112.7	112.9	118.6	114.8	114.5	115.4	116.6	118.4	123.6	132.3	134.9
24	135.6	136.6	134.2	133.1	131.5	129.4	120.7	127.9	131.2	132.8	130.8	126.7	125.7	122.7	119.0	117.9	117.0	120.3	130.5	199.4	141.8	147.6	174.2	166.2
25	158.2	159.2	157.4	152.0	149.4	157.8	161.1	160.0	152.2	145.6	152.7	161.9	170.6	174.0	179.5	171.8	177.5	181.2	197.4	182.4	192.5	187.4	175.1	187.1
26	199.5	201.4	186.3	157.6	184.4	197.3	209.2	219.0	227.8	227.5	238.8	244.4	245.3	262.5	244.7	267.3	264.8	265.6	281.1	271.9	261.9	260.4	268.1	264.8
27	276.7	295.6	296.6	299.1	307.2	301.2	301.9	313.9	310.9	311.1	305.0	292.2	264.1	280.3	301.5	294.2	287.7	299.0	299.5	286.1	277.7	287.4	298.7	295.2
28	291.6	291.5	294.7	306.4	301.5	285.6	296.0	304.8	320.9	315.8	285.0	292.6	287.1	244.4	247.1	252.1	254.8	273.4	291.5	297.4	291.6	292.5	304.5	314.2
29	310.4	310.5	299.0	305.2	307.2	306.6	306.5	310.9	322.6	324.9	345.7	344.4	333.9	333.3	332.4	331.8	330.3	334.8	336.4	339.0	336.3	337.5	335.2	319.4
30	305.4	295.8	300.6	148.5	145.5	113.5	137.0	132.0	121.3	127.5	124.5	124.2	130.0	135.2	135.0	135.1	138.2	137.4	129.2	119.1	118.3	114.4	110.4	115.3
31	119.2	116.2	119.4	118.0	118.0	116.7	118.8	118.3	113.6	118.4	119.4	120.6	120.3	122.5	125.2	123.6	122.8	120.4	128.3	135.8	142.5	160.0	159.0	158.3

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	145.2	139.8	121.0	131.8	122.3	119.1	114.9	114.2	122.7	120.7	117.6	118.9	125.1	126.6	127.1	128.5	131.3	137.3	133.4	132.6	114.3	116.1	111.7	100.6
2	126.1	102.8	105.8	104.9	109.4	103.5	105.0	92.4	105.7	113.3	111.3	116.8	100.1	96.9	123.1		125.0	136.2	149.5	145.5	163.0	170.6	166.1	200.0
3	252.0	318.4	335.5	322.4	41.9	49.4	80.8	86.6	130.1	184.5	266.3	88.1	148.7	145.1	149.7	157.0	163.9	158.1	156.6	150.8	152.7	146.0	136.8	130.8
4	131.6	141.2	143.8	156.4	142.3	155.8	156.9	133.2	130.1	138.1	141.5	147.1	149.9	141.0	146.7	141.3	144.5	142.2	149.4	142.8	145.6	145.5	142.5	147.3
5	149.8	147.4	150.7	139.5	133.4	133.7	122.9	114.4	116.5	114.0	115.9	118.4	111.8	111.3	112.7	113.4	119.8	123.8	132.2	132.4	148.6	144.8	262.2	301.9
6	303.6	308.8	312.7	319.7	316.9	318.6	317.5	320.7	312.5	311.8	305.8	320.2	316.2	329.4	322.2	306.8	306.8	304.4	301.1	292.2	296.5	297.7	299.6	294.8
7	286.7	296.7	303.9	304.7	303.0	302.5	304.6	306.9	336.5	351.3	320.0	318.3	327.2	355.3	345.1	350.8	276.8	231.8	231.2	235.7	245.0	235.3	234.7	148.6
8	138.5	137.4	130.8	119.3	127.4	142.4	137.8	129.9	130.0	120.4	151.5	186.5	183.4	192.5	203.9	204.8	219.7	220.4	224.7	219.6	214.3	209.2	214.5	225.2
9	227.7	227.9	228.3	233.8	241.5	234.7	196.0	229.1	227.0	229.5	211.3	236.5	272.3	265.2	293.3	265.6	287.9	267.7	256.8	256.6	259.3	257.8	248.4	255.3
10	246.6	267.2	311.9	329.2	328.6	347.6	335.6	334.7	330.5	119.7	83.9	320.4	313.7	25.4	149.1	184.9	153.2	157.4	193.6	182.9	173.8	193.1	205.0	158.0
11	123.5	235.9	2.3	131.1	130.1	116.1	108.2	332.4	323.9	20.0	126.8	330.3	324.7	249.9	227.0	213.8	216.3	222.2	221.2	225.4	232.8	223.7	224.2	219.7
12	220.1	173.4	213.9	209.1	176.1	137.4	351.1	286.3	278.3	296.9	70.3	89.9	345.6	316.3	314.4	331.9	209.2	206.1	227.9	213.5	267.2	314.9	311.5	315.0
13	305.4	314.4	309.6	304.0	304.1	300.2	307.0	309.1	310.5	313.0	317.7	314.9	311.8	339.8	338.1	329.6	326.6	311.0	283.7	293.1	238.0	244.0	248.4	226.8
14	244.0	277.3	90.0	90.8	125.2	148.3	337.7	315.7	318.4	327.2	325.3	325.8	319.0	331.4	219.4	147.6	178.3	199.9	204.7	170.4	204.0	219.4	230.4	256.5
15	222.3	61.9	317.0	202.1	335.8	321.3	227.0	216.7	310.1	116.2	18.1	116.8	137.9	147.8	190.3	209.6	215.6	223.6	238.1	215.2	212.6	222.4	220.6	206.6
16	203.1	34.9	27.3	1.2	321.2	317.1	306.7	306.0	304.8	315.6	315.1	312.7	303.5	197.2	204.0	219.1	299.7	279.9	257.8	261.9	266.8	272.3	274.4	278.7
17	287.8	287.7	289.1	292.4	298.6	298.0	306.2	308.6	31.3	345.9	322.2	312.6	214.2	169.2	147.4	155.5	152.1	146.5	164.2	153.4	147.4	149.5	168.9	162.2
18	148.7	186.9	276.3	303.5	305.2	286.8	265.9	137.4	6.2	44.1	340.4	354.9	225.7	227.1	206.8	184.9	194.5	219.7	230.2	237.0	246.7	258.5	265.1	299.2
19	318.0	312.3	303.7	318.5	304.7	313.9	311.8	311.9	75.6	126.8	45.6	331.7	331.5	342.7	180.5	163.3	153.9	180.4	183.3	186.9	181.8	190.2	187.0	154.3
20	190.6	159.3	181.9	188.4	145.7	99.9	328.0	123.4	110.6	119.6	143.1	143.5	144.0	141.6	135.9	144.0	145.9	146.4	149.9	143.1	140.8	141.0	138.0	148.4
21	157.9	155.1	146.3	146.2	139.1	140.7	139.5	140.4	152.1	141.5	113.0	31.5	357.2	13.2	33.3	38.4	74.9	134.7	147.1	161.0	166.2	163.8	162.0	144.8
22	174.8	177.4	159.5	157.2	157.6	156.8	150.3	144.7	155.6	147.2	149.0	153.1	153.8	148.2	151.7	142.2	145.0	142.6	146.9	144.6	144.7	144.1	146.8	137.8
23	148.9	139.2	131.7	132.5	130.9	126.9	125.0	129.6	128.9	131.0	126.9	127.9	118.2	126.5	132.9	146.0	150.3	142.9	143.6	150.2	158.1	160.2	158.0	155.4
24	142.2	143.2	129.5	127.4	126.6	124.5	118.8	117.9	119.2	118.9	121.1	121.2	121.5	122.2	120.9	119.4	119.0	119.0	115.5	118.6	115.0	110.7	112.0	113.1
25	111.4	114.5	117.5	118.6	116.9	118.8	117.3	116.5	112.0	114.3	114.2	111.3	114.8	114.5	116.3	118.5	120.3	122.4	124.8	126.5	129.3	126.9	90.6	90.4
26	97.3	114.7	124.7	150.8	158.4	53.6	64.3	73.2	83.0	87.3	70.6	60.2	55.5	149.3	143.6	78.2	68.8	99.0	99.6	85.1	128.6	128.0	132.8	142.8
27	117.4	115.0	120.2	108.3	141.3	103.5	132.1	126.4	129.3	130.0	141.6	131.7	134.1	130.9	121.5	122.0	125.2	143.9	146.6	154.9	153.4	156.4	159.3	155.2
28	155.7	160.5	163.5	161.2	131.9	250.8	259.7	172.2	115.6	196.4	211.3	214.6	226.9	225.8	233.9	220.6	233.8	210.2	206.0	193.0	185.6	158.9	172.9	171.3
29	163.0	161.0	166.2	162.9	163.0	159.6	154.9	189.6	169.3	161.1	167.7	173.6	151.5	147.0	139.5	130.1	126.7	136.8	126.9	131.3	138.9	148.7	156.7	148.8
30	140.3	142.0	141.1	141.1	142.7	155.9	173.0	160.8	121.1	4.7	326.8	348.1	315.5	324.8	302.1	8.8	174.9	226.1	270.6	21.7	352.5	279.8	338.5	273.5

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	244.7	175.8	170.2	147.6	141.0	118.7	307.1	328.0	342.4	25.8	103.0	111.8	127.9	125.5	125.1	121.9	122.9	122.3	112.6	116.8	121.3	120.7	122.8	127.6
2	123.0	123.2	122.2	120.0	118.6	123.9	117.1	126.2	121.8	122.6	121.4	120.6	124.1	122.3	123.1	122.9	124.8	128.1	140.2	147.1	142.4	137.1	120.0	102.5
3	122.4	99.9	98.3	116.6	99.6	116.9	116.2	121.8	120.9	138.4	136.3	126.8	121.1	129.7	114.6	117.3	112.9	139.2	143.0	130.1	147.3	98.5	117.2	120.3
4	128.0	102.2	151.9	115.5	65.9	70.0	94.4	81.7	69.7	9.3	106.0	103.9	118.5	142.9	149.5	159.3	157.9	130.2	175.1	190.2	179.4	170.4	149.7	135.9
5	138.5	160.8	107.2	140.9	132.8	157.8	159.5	134.3	127.3	128.9	118.8	131.0	84.2	45.4	161.9	162.4	178.3	182.0	169.7	157.8	163.4	171.9	146.0	178.5
6	173.3	152.9	171.1	185.6	225.0	183.4	106.2	331.7	312.8	106.6	110.6	152.0	142.8	156.6	159.5	155.9	155.1	159.9	158.2	156.5	152.1	154.6	155.3	152.0
7	158.2	153.5	148.9	161.5	151.4	145.3	148.8	143.5	138.1	128.9	130.4	139.4	143.9	142.8	141.0	136.5	140.6	152.0	146.4	145.0	156.5	162.5	160.2	156.9
8	177.5	172.4	142.1	202.6	176.1	136.9	170.3	140.9	126.0	142.8	191.8	203.3	172.9	155.1	171.5	174.2	166.5	171.6	171.0	186.3	158.3	131.9	137.3	147.1
9	163.2	154.4	103.6	116.1	119.8	117.0	125.5	128.1	131.2	130.5	141.0	136.8	141.6	144.1	143.2	137.0	142.3	133.0	140.2	144.6	144.1	130.1	132.5	140.9
10	145.5	142.8	148.0	140.1	132.7	128.1	134.6	139.1	131.7	138.5	146.1	140.9	152.5	148.9	146.3	143.3	146.5	146.4	141.4	135.4	145.9	142.2	148.8	139.8
11	121.6	143.2	162.1	166.2	162.4	160.7	156.2	153.4	150.9	145.5	153.0	151.0	152.0	145.4	147.3	138.7	140.2	148.6	148.0	145.1	146.9	152.5	159.6	150.2
12	152.3	151.7	158.8	142.5	135.2	138.9	144.7	130.2	127.3	125.6	125.8	128.8	130.0	125.3	122.9	121.7	125.5	122.5	127.7	125.9	122.0	120.8	122.8	124.8
13	126.7	126.1	129.7	134.7	132.7	131.0	133.8	131.7	130.3	132.4	134.5	132.2	133.9	143.6	152.0	151.5	156.1	160.4	159.0	166.3	164.7	172.6	171.8	171.8
14	179.7	170.1	156.8	146.6	141.9	167.4	153.9	155.2	127.6	147.6	140.1	157.6	159.7	145.2	156.0	148.2	153.7	148.6	162.6	176.1	166.8	166.2	161.6	158.3
15	159.2	154.2	164.3	165.9	161.9	161.6	158.9	155.9	133.6	135.0	131.7	136.1	149.3	144.9	142.3	146.5	148.2	149.4	147.0	145.9	137.8	145.1	134.6	124.6
16	118.4	121.0	121.2	125.1	122.4	120.4	123.2	123.7	119.9	124.4	116.3	118.9	118.8	118.5	117.8	117.9	119.2	116.7	118.3	118.0	119.1	120.5	124.7	132.1
17	143.8	148.5	198.5	214.0	219.6	225.3	218.1	223.2	223.3	215.5	222.2	226.9	234.2	229.8	228.2	231.0	237.0	235.2	241.7	238.7	226.7	230.0	226.6	177.8
18	220.9	222.0	210.8	215.0	225.4	222.5	225.3	180.9	202.1	323.7	169.1	7.7	269.6	275.2	255.6	237.0	266.8	295.3	332.7	305.1	275.5	294.2	306.7	307.1
19	311.5	305.3	306.9	302.4	303.1	300.6	292.6	302.3	308.6	315.6	315.8	327.2	322.5	314.3	332.9	328.8	333.8	332.8	341.2	325.5	320.1	312.6	306.7	297.5
20	288.8	288.3	276.8	279.8	284.3	229.5	244.3	225.9	226.4	217.0	165.6	208.4	200.5	204.0	206.6	202.3	215.0	206.4	197.8	202.2	204.1	189.4	176.9	156.2
21	164.2	176.1	173.4	173.4	167.3	172.4	173.3	185.5	200.0	211.8	217.4	215.9	221.7	266.9	289.1	270.2	312.7	246.1	265.7	255.9	289.9	248.5	221.3	225.9
22	220.3	171.6	202.0	193.6	58.7	320.6	293.5	128.2	132.7	121.3	117.4	141.1	151.8	162.0	192.5	175.3	216.0	183.4	187.5	137.3	143.3	146.9	151.1	170.7
23	149.9	153.3	125.1	195.7	174.4	223.1	226.4	233.1	275.3	273.5	233.2	219.9	217.4	216.9	208.9	193.7	188.9	166.1	187.2	200.1	215.5	226.3	211.8	317.8
24	329.8	3.7	135.6	180.6	303.2	311.7	306.6	315.1	320.3	317.7	319.7	340.8	335.5	325.7	330.3	337.9	347.3	331.3	333.5	346.6	352.2	329.4	325.5	320.4
25	310.3	303.2	315.9	319.8	317.2	324.1	318.2	314.4	322.1	321.5	320.3	323.9	329.0	325.8	338.8	334.6	333.4	333.9	324.7	316.6	310.8	301.4	300.8	294.4
26	301.5	310.7	307.0	310.0	271.0	254.9	187.0	72.4	261.1	311.9	243.7	148.3	217.5	188.4	142.1	131.9	198.8	219.9	217.3	181.4	162.3	173.1	176.1	159.9
27	174.3	183.3	183.3	167.5	155.9	139.5	145.2	134.1	138.2	132.5	128.6	103.2	122.0	124.2	116.1	119.5	133.1	138.6	150.0	163.5	174.3	179.8	192.1	211.4
28	228.6	306.5	302.3	306.3	299.4	303.7	299.6	301.8	306.9	321.3	328.7	319.5	326.2	338.1	341.7	332.7	323.5	317.8	318.0	318.7	323.2	312.0	301.6	297.2
29	304.6	304.2	313.3	326.8	318.5	313.0	309.5	312.4	316.1	326.1	336.2	328.5	325.1	318.3	320.2	323.9	323.9	321.1	311.2	320.3	319.3	322.5	335.8	340.3
30	333.4	317.8	326.3	317.6	314.2	310.9	311.7	304.2	303.4	308.5	312.6	311.3	306.9	314.2	309.3	319.8	325.6	330.2	329.8	336.0	336.4	328.5	318.3	319.0
31	312.1	298.4	299.8	307.4	307.9	313.3	311.9	314.1	315.9	313.4	313.7	318.3	310.7	307.2	309.6	306.3	289.3	296.0	299.6	297.5	288.4	279.0	266.1	280.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	301.2	270.7	289.4	309.2	307.4	308.7	322.2	335.8	50.0	134.5	120.6	114.1	123.6	121.1	133.8	139.4	150.1	145.2	150.9	167.1	164.2	166.7	162.6	170.9
2	167.9	162.8	165.7	157.3	151.7	149.6	150.3	149.0	149.6	150.1	158.5	153.3	153.9	154.6	152.9	156.4	159.2	166.7	169.2	151.4	157.6	182.8	207.5	278.8
3	286.3	304.5	303.2	312.2	317.9	317.2	303.0	304.6	309.6	303.8	328.7	327.5	166.1	162.6	154.0	151.9	155.0	158.3	150.7	150.4	149.9	151.3	153.5	159.9
4	154.9	149.0	153.9	150.8	160.2	157.7	157.3	158.5	159.8	158.8	165.7	162.0	156.0	153.1	155.4	147.2	161.7	159.3	154.7	164.8	169.3	170.6	168.1	169.9
5	178.0	172.9	174.2	161.5	181.4	191.7	189.9	308.8	315.3	330.0	351.1	0.4	338.5	333.4	332.6	339.6	339.7	338.0	340.3	337.0	335.1	337.0	336.2	332.9
6	329.2	323.4	326.2	311.9	307.1	310.9	316.2	304.5	323.8	337.2	326.6	323.1	326.4	325.2	323.4	311.0	320.0	308.6	318.9	326.9	320.2	322.0	330.6	338.3
7	315.7	313.6	303.2	300.7	302.8	304.3	304.2	309.2	323.1	320.5	333.5	327.1	321.8	327.6	332.3	324.4	331.7	317.7	315.0	324.1	321.9	320.9	306.4	300.7
8	300.0	292.8	296.3	304.8	302.8	321.0	317.6	304.4	307.8	317.7	328.6	328.3	341.0	351.4	349.7	359.3	343.2	336.9	341.9	329.1	325.9	327.0	311.9	302.4
9	310.2	314.5	312.0	309.2	295.9	300.8	303.2	311.7	306.6	318.1	320.0	324.7	325.5	331.3	341.2	341.0	340.9	333.3	341.4	337.7	327.5	311.5	307.5	315.1
10	322.9	317.0	291.1	268.7	256.0	129.9	177.3	125.9	123.0	136.0	128.5	145.3	123.0	153.1	154.6	184.5	83.5	89.3	159.2	163.6	149.8	168.4	172.8	163.1
11	175.3	182.0	163.8	154.8	152.6	150.5	153.7	153.3	139.6	131.5	117.4	129.1	123.6	125.9	133.6	129.9	128.6	124.5	124.3	131.8	157.6	164.1	163.7	177.0
12	161.9	275.0	303.0	324.9	310.8	281.0	307.1	312.8	314.7	312.2	322.5	329.6	342.8	353.7	358.3	359.2	50.4	123.2	164.6	182.5	181.5	156.4	181.0	312.1
13	314.8	306.9	313.5	354.1	329.5	348.7	74.3	155.7	161.6	141.3	39.8	318.4	323.5	329.3	49.6	93.6	128.1	111.0	144.1	150.2	134.0	128.0	131.7	131.2
14	154.1	183.2	166.0	157.5	159.1	137.1	136.9	128.3	154.7	146.6	153.5	150.7	142.6	129.5	133.6	149.0	148.1	149.8	147.3	148.6	154.6	145.6	136.8	175.1
15	185.4	216.4	277.3	11.6	327.1	351.7	327.4	319.4	327.0	327.6	334.8	64.2	115.6	131.8	134.6	129.1	140.6	167.4	156.9	159.0	169.7	126.6	113.7	101.4
16	115.7	120.3	109.4	126.4	146.3	145.6	145.7	150.5	138.3	150.0	140.2	152.6	141.4	146.9	145.1	145.7	150.9	154.1	155.5	157.7	157.3	159.2	152.7	148.8
17	134.7	113.1	124.4	128.7	119.4	124.4	115.4	109.5	105.0	106.3	100.0	111.6	120.5	123.6	123.0	110.5	119.8	128.4	132.8	138.7	125.1	117.9	118.7	142.3
18	126.1	123.2	122.3	109.2	132.6	50.9	83.7	9.2	342.1	6.3	356.5	20.0	80.2	89.2	80.9	79.4	100.9	144.3	123.8	163.7	165.7	268.7	301.9	307.4
19	305.4	24.5	56.5	81.6	117.8	146.2	102.9	310.8	166.4	284.4	312.7	312.8	311.2	309.2	303.9	314.0	322.8	315.6	317.3	319.4	2.7	322.2	298.2	298.9
20	278.6	308.4	292.7	299.3	302.0	307.3	301.9	305.0	304.5	306.9	314.7	337.1	305.0	300.1	311.6	305.2	307.9	323.0	324.7	328.2	332.2	338.8	306.5	299.1
21	295.2	308.5	305.7	283.4	265.0	268.4	280.3	250.3	209.1	134.8	62.9	275.7	251.9	247.1	203.0	229.2	226.3	216.6	227.2	349.9	273.5	196.4	217.7	221.9
22	182.5	233.6	291.2	301.1	312.5	312.5	308.4	313.2	307.9	344.0	3.1	313.6	320.2	349.9	307.7	277.8	349.8	221.8	296.4	302.4	302.4	298.1	300.1	308.7
23	312.4	306.6	312.9	310.0	310.6	314.3	306.0	308.3	312.6	313.2	331.6	342.6	325.5	355.1	329.5	308.4	289.9	188.8	162.9	176.0	168.6	156.9	148.1	164.0
24	191.8	175.2	159.5	260.2	58.4	267.7	297.1	315.3	307.5	311.9	342.0	330.3	337.2	346.0	354.0	340.2	342.9	345.7	325.0	10.8	7.3	298.5	308.5	303.4
25	302.8	298.6	292.0	220.6	263.5	96.9	183.5	161.3	63.1	103.1	190.7	201.3	179.5	161.1	145.6	139.0	146.0	147.0	154.8	144.4	152.1	151.2	150.8	142.1
26	144.2	131.4	121.2	128.4	121.2	121.1	130.3	135.5	143.4	139.0	135.9	132.4	136.8	139.3	151.1	147.8	147.5	144.4	156.1	159.6	159.4	145.2	158.5	160.6
27	161.0	143.9	115.8	108.3	109.6	160.1	188.0	322.0	335.9	330.7	327.0	317.3	313.7	330.1	295.1	278.7	269.4	278.1	286.7	284.6	280.1	280.3	284.2	283.8
28	292.8	307.3	312.6	318.2	309.6	299.4	302.3	313.7	306.8	313.0	326.9	337.2	327.2	335.1	324.9	312.3	314.3	282.2	297.0	286.3	308.6	333.6	321.9	312.3
29	306.9	311.4	322.2	316.9	320.3	312.7	296.5	300.9	290.6	295.2	309.2	335.3	295.8	250.4	234.9	219.8	217.5	233.0	234.1	243.0	245.3	246.0	241.2	290.3
30	268.9	240.5	289.5	189.7	240.3	158.1	128.8	121.5	153.4	161.4	118.2	111.4	112.1	120.3	116.2	97.1	100.2	118.8	129.2	130.4	157.7	136.6	122.2	119.6
31	116.0	116.4	113.1	112.6	110.8	110.5	118.2	118.4	113.5	96.1	88.8	77.5	86.5	93.2	76.1	78.5	61.8	57.0	52.3	47.2	43.9	50.4	54.6	49.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	42.2	49.4	51.9	55.1	53.6	52.2	47.5	44.5	49.1	58.8	55.7	80.9	122.5	105.4	90.9	83.0	112.4	102.6	97.1	85.5	106.9	98.3	102.1	104.0
2	112.7	109.5	106.8	110.9	110.8	110.1	113.1	113.5	114.5	111.8	112.9	114.1	118.8	114.3	115.9	109.0	97.8	77.6	45.2	43.8	17.0	11.2	6.9	18.0
3	44.9	54.0	52.6	43.5	12.7	358.6	358.4	360.0	9.4	333.9	351.3	107.8	109.2	137.6	129.8	171.6	183.1	165.6	152.5	157.9	158.8	166.1	199.9	212.8
4	212.0	202.1	205.1	186.9	188.0	191.2	203.0	183.7	147.2	150.6	162.4	160.1	154.4	179.4	161.5	158.4	167.0	159.6	155.0	139.6	168.5	189.9	219.1	178.3
5	191.0	171.7	167.7	249.4	160.6	240.7	315.2	308.5	316.3	344.4	163.4	118.5	139.8	174.5	190.2	284.0	350.9	46.9	107.7	71.7	110.7	134.6	150.8	133.1
6	126.6	110.9	118.9	122.7	113.3	117.4	112.3	99.2	100.3	93.9	100.0	104.1	106.8	117.4	117.3	104.8	101.9	102.2	102.9	100.6	92.0	99.4	99.4	93.3
7	105.3	107.8	106.9	82.6	78.3	85.0	103.4	93.1	83.6	84.2	87.4	117.4	122.2	122.8	113.5	114.9	124.3	118.9	128.5	135.7	126.7	136.6	134.9	136.4
8	147.2	176.2	166.9	172.4	170.2	185.8	173.8	148.2	151.2	131.4	107.9	104.8	99.5	105.1	109.5	108.2	108.0	113.3	107.3	102.3	91.5	98.4	95.0	93.8
9	116.9	117.4	113.6	104.9	104.4	104.2	152.6	98.9	105.4	107.5	101.5	100.2	102.3	106.3	116.8	116.5	112.3	116.2	125.1	124.2	124.7	129.7	135.0	148.2
10	133.8	128.4	114.6	150.7	149.1	161.5	115.5	115.3	148.4	138.6	148.9	168.6	180.8	206.7	219.1	224.4	219.4	220.8	230.4	238.6	265.8	145.2	209.5	213.5
11	245.8	240.8	227.4	185.0	210.1	146.6	207.8	183.3	140.9	130.7	177.0	174.9	161.3	171.0	155.6	153.4	142.2	143.2	142.1	133.7	127.5	114.5	107.6	112.7
12	117.2	115.0	112.4	114.3	115.9	111.6	109.9	109.9	110.6	111.6	111.1	114.1	113.1	117.4	115.0	114.0	111.0	109.3	113.0	113.9	112.1	112.7	113.3	113.5
13	111.0	105.4	109.3	114.0	115.8	114.6	112.7	114.2	115.0	111.1	112.6	117.1	118.5	119.7	113.1	113.7	116.3	116.5	118.6	117.4	117.3	120.4	117.3	113.5
14	115.8	123.1	126.8	122.9	123.7	139.2	142.2	132.4	122.9	116.3	122.3	107.2	104.8	107.5	115.4	118.1	123.8	121.9	122.4	129.1	130.9	129.5	132.8	139.1
15	121.4	139.6	137.2	118.0	114.4	119.1	120.1	109.3	115.8	108.5	115.7	117.7	126.6	119.3	126.0	117.8	123.2	119.5	120.2	119.5	120.9	126.6	139.3	144.5
16	145.8	117.5	334.5	316.1	305.5	297.6	303.4	310.8	304.6	299.7	307.9	303.9	322.5	309.6	306.4	295.6	306.1	290.4	284.1	281.4	280.1	275.4	268.6	267.8
17	271.4	265.8	267.8	200.1	135.9	221.4	235.3	222.4	209.7	325.4	335.4	77.9	97.9	100.5	99.9	97.8	101.2	107.1	111.8	98.2	86.7	93.2	78.5	53.0
18	37.6	26.1	39.0	41.0	38.5	21.2	16.0	9.5	0.3	356.5	355.1	344.9	339.6	307.4	303.4	307.0	311.4	309.8	307.8	325.7	306.4	32.4	96.2	101.7
19	96.4	94.9	91.0	82.2	92.6	101.3	91.8	94.4	91.5	97.1	138.6	142.8	138.2	143.9	184.0	273.9	286.9	291.4	293.5	289.7	291.1	293.4	295.5	287.4
20	292.8	294.7	292.2	284.5	290.8	297.1	304.5	304.2	298.6	305.0	309.0	311.1	310.7	296.5	285.4	297.5	293.2	318.2	327.7	334.3	334.5	302.0	300.0	303.3
21	309.8	299.1	301.5	295.4	303.4	292.6	302.6	305.4	304.2	316.8	309.6	332.2	318.8	336.4	315.4	315.0	310.4	314.0	311.8	300.7	297.6	302.3	300.2	305.0
22	306.6	309.2	301.0	295.6	295.8	291.8	283.2	285.4	301.5	310.1	282.2	273.9	154.4	178.4	151.6	157.9	143.2	131.8	119.7	137.2	154.0	151.8	154.2	155.9
23	156.0	159.7	159.2	162.1	198.8	212.1	212.0	216.7	214.5	209.3	206.3	212.6	211.4	193.5	195.7	192.5	208.7	209.6	203.9	206.2	199.0	204.8	186.4	182.9
24	170.5	156.6	136.3	137.0	136.6	128.3	107.3	108.2	104.9	129.3	118.2	186.4	180.4			4.4	101.5	102.7	105.1	103.8	89.5	92.5	83.9	48.6
25	31.2	39.9	59.9	58.6	22.2	354.2	8.0	69.2	45.6	28.3	68.5	82.2	98.2	101.5	106.7	77.8	91.8	93.8	105.3	92.8	352.0	316.4	340.9	341.4
26	321.2	309.6	306.4	311.1	312.3	305.5	301.5	310.2	292.1	305.4	304.9	317.5	317.6	337.7	345.2	358.1	310.5	295.0	306.2	311.7	309.1	315.1	305.5	315.1
27	326.1	319.3	312.1	300.3	308.4	314.4	315.0	301.3	305.4	314.9	319.6	331.2	335.5	327.5	335.9	327.8	339.5	332.7	329.1	327.4	327.1	317.4	318.1	325.5
28	327.3	328.5	319.2	311.8	312.2	305.8	293.3	308.4	309.2	294.0	307.7	319.1	325.5	335.7	138.5	132.2	144.6	173.8	142.8	113.4	116.7	142.4	137.9	126.6
29	127.1	121.8	136.8	141.4	150.7	139.8	122.7	128.2	132.2	127.3	126.7	121.8	119.8	119.0	118.0	124.0	136.2	103.5	102.5	103.8	121.5	138.4	144.6	143.4
30	162.0	178.6	305.3	316.6	315.4	308.6	312.6	304.2	308.9	306.5	311.9	324.5	324.9	323.6	329.1	307.1	298.2	287.3	304.1	330.0	337.4	338.7	314.9	319.3

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	249.0	163.8	119.5	129.8	124.7	110.1	105.3	110.3	111.0	116.7	121.8	124.9	130.1	133.8	138.5	143.4	168.2	147.0	143.4	129.8	138.7	137.1	131.6	144.1
2	153.7	166.8	158.1	124.7	121.9	123.4	132.3	127.2	107.4	102.7	152.7	162.9	123.1	162.0	179.0	304.3	17.7	252.2	259.7	251.7	233.8	230.2	226.6	230.6
3	219.2	217.9	322.7	194.4	280.0	295.9	299.5	301.8	319.7	318.9	314.1	306.7	311.9	322.2	319.1	319.9	323.4	328.9	325.0	321.3	314.8	316.8	315.1	306.7
4	312.5	301.4	297.4	299.5	302.1	303.2	299.2	301.0	297.2	302.2	299.6	313.4	320.3	320.8	318.8	310.0	325.6	26.2	19.0	69.6	221.7	36.9	136.8	171.3
5	207.8	217.0	211.9	224.2	229.8	221.2	150.9	115.2	261.2	253.5	313.4	335.1	319.5	307.1	305.4	309.0	317.8	328.4	317.9	352.0	333.1	323.7	323.0	315.3
6	313.7	304.4	307.8	300.1	294.8	301.4	305.5	313.1	315.2	312.8	308.8	312.7	311.1	318.3	325.4	305.8	302.6	302.0	304.6	311.6	309.3	308.9	300.4	309.3
7	311.7	316.6	315.9	311.2	312.8	316.1	323.8	313.1	320.4	313.5	318.9	332.3	326.2	328.6	319.0	315.9	316.8	316.1	318.9	324.1	322.0	322.2	318.0	307.5
8	309.3	307.3	308.0	305.9	310.0	309.3	313.8	319.8	308.3	308.7	311.3	336.4	340.6	351.0	340.9	345.6	341.1	348.4	355.7	355.3	7.3	64.5	124.1	123.9
9	115.5	113.5	111.9	109.4	111.7	113.5	112.3	114.9	115.3	115.1	114.6	114.1	113.0	112.3	112.1	112.1	112.8	112.6	112.0	111.7	112.0	113.9	116.4	117.6
10	114.8	116.7	123.2	132.8	216.0	222.0	265.1	251.6	201.5	114.3	141.2	168.4	160.3	142.5	137.1	141.8	132.1	130.7	126.3	130.8	129.9	137.5	134.1	129.6
11	133.9	120.7	113.1	116.4	117.1	113.9	111.3	121.7	104.2	315.0	325.7	336.0	320.5	327.0	326.2	326.1	327.1	323.8	324.2	325.6	323.3	322.2	325.1	327.8
12	325.8	325.0	326.7	327.0	326.6	324.4	326.4	325.8	324.1	320.6	315.4	320.0	325.1	331.4	329.1	325.5	327.2	327.7	325.2	320.1	318.4	313.7	307.9	306.3
13	313.2	317.5	301.1	311.8	304.6	307.2	304.8	308.7	240.3	112.8	123.2	111.6	108.9	111.2	106.9	102.6	109.5	108.7	106.2	111.5	115.3	119.1	117.5	115.4
14	119.9	130.6	135.9	132.4	130.3	147.2	149.2	159.6	150.6	148.2	148.6	145.9	143.4	139.5	147.3	145.0	140.9	139.1	91.8	98.3	82.9	91.6	349.9	321.2
15	312.0	326.1	333.9	333.6	331.7	315.8	313.1	314.6	312.0	314.3	320.3	309.1	311.7	320.3	305.2	307.8	314.8	326.7	327.3	332.1	337.1	319.9	314.0	301.0
16	305.8	296.6	302.3	306.6	305.7	304.7	304.9	301.9	320.5	323.3	308.6	320.1	307.8	316.5	319.2	309.7	311.9	311.3	304.5	306.8	308.8	308.6	316.6	306.1
17	304.1	304.1	297.9	137.2	116.7	115.9	112.9	105.4	103.8	104.5	111.0	115.0	134.4	147.6	122.9	110.9	124.7	124.3	124.6	120.6	123.5	124.3	117.3	112.9
18	117.4	115.4	114.9	117.4	121.7	119.6	120.5	115.1	117.1	118.3	113.2	108.9	107.7	103.4	94.9	74.4	70.2	52.3	48.3	51.1	24.8	354.2	10.9	0.5
19	335.9	309.5	314.6	319.1	305.8	301.5	304.2	306.4	313.0	309.2	309.4	311.4	305.5	308.4	306.8	309.4	312.1	305.8	310.6	310.1	311.1	306.7	309.2	77.1
20	99.9	149.3	229.2	237.6	136.5	117.1	198.8	322.0	312.1	343.8	124.2	319.2	316.4	315.8	315.6	317.2	309.6	304.5	300.0	295.9	309.6	317.7	307.4	317.5
21	297.4	275.6	252.0	304.4	328.3	340.1	339.8	320.7	310.7	323.9	330.6	329.9	317.0	308.8	318.1	326.2	326.8	324.3	325.7	321.4	320.4	319.7	317.6	318.8
22	317.2	318.9	315.0	313.4	304.9	310.2	306.1	303.0	316.1	314.1	319.1	314.4	315.1	319.7	319.4	321.7	325.5	324.0	322.7	322.0	323.3	321.2	305.8	306.7
23	300.8	295.0	296.2	303.8	311.4	314.9	323.9	320.2	311.1	317.4	314.9	319.3	312.5	309.8	315.3	311.0	306.6	305.6	299.2	293.3	286.3	277.7	289.5	299.2
24	287.5	287.0	292.1	293.6	292.3	295.3	304.7	303.9	299.9	295.7	290.3	292.6	290.6	284.9	267.3	255.8	261.6	250.8	214.7	158.3	124.1	128.7	122.1	102.0
25	110.9	110.4	125.9	139.4	128.7	110.5	97.0	95.1	96.5	101.1	114.6	104.7	96.5	102.6	110.7	123.4	120.0	122.5	106.4	99.2	356.2	307.9	306.3	320.4
26	305.7	296.1	298.5	304.3	306.6	310.5	313.2	315.7	311.9	316.0	327.9	317.9	317.3	316.3	312.1	311.9	319.8	321.1	315.3	322.1	330.3	328.0	328.5	325.7
27	324.6	330.0	312.5	321.2	315.1	313.5	309.5	310.9	314.5	323.1	308.3	308.6	319.4	313.4	307.3	306.7	314.6	309.3	312.7	307.1	301.9	319.8	305.3	324.6
28	111.4	110.9	113.0	117.4	122.3	137.9	137.5	146.8	139.2	143.9	145.1	151.2	143.4	149.6	143.9	134.9	131.5	142.3	151.3	155.8	106.6	104.9	93.7	113.7
29	103.3	112.6	92.1	84.8	92.7	126.1	111.1	119.1	104.8	118.7	111.9	146.9	147.3	148.2	146.3	144.9	133.2	144.3	144.5	134.6	130.1	136.9	138.2	139.7
30	128.3	122.9	113.8	120.2	125.3	115.0	112.4	109.9	108.3	112.0	122.0	129.4	156.7	141.2	77.6	119.3	136.5	123.6	136.6	151.2	165.7	154.4	157.4	158.7
31	165.2	169.3	170.1	152.6	191.8	184.7	178.9	200.9	235.6	208.7	231.8	237.5	268.3	293.6	310.6	309.9	313.8	308.2	297.4	293.3	312.4	123.3	303.6	304.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	305.7	311.1	298.3	318.6	293.9	312.6	309.4	308.3	304.7	297.5	296.1	297.5	301.6	313.6	317.7	316.9	309.8	319.7	312.1	314.1	304.8	305.3	319.3	314.1
2	300.8	309.4	302.5	304.7	300.8	303.1	303.1	302.9	312.4	328.5	326.4	320.2	324.4	320.0	316.4	322.5	324.7	326.2	325.4	312.5	315.1	317.1	315.0	311.5
3	311.5	315.8	318.6	319.6	320.1	317.1	315.5	314.7	313.4	310.4	312.4	313.0	309.6	310.6	306.6	300.3	299.4	305.5	308.9	308.7	314.9	315.7	317.9	309.2
4	314.8	319.8	311.0	316.7	317.3	310.7	318.6	312.9	313.8	308.0	299.8	304.4	302.8	301.5	309.9	306.0	305.1	310.1	304.6	307.5	306.3	309.1	299.1	314.1
5	301.0	300.7	302.8	306.9	310.1	306.2	304.0	307.4	318.2	310.3	316.0	299.9	308.2	307.3	305.5	311.2	306.2	303.6	300.1	309.7	309.8	311.0	312.9	303.1
6	309.8	304.5	302.6	307.8	312.5	306.0	309.3	322.4	348.3	14.0	6.9	357.0	335.6	316.0	317.3	311.0	312.4	306.2	304.4	310.8	302.7	312.5	308.1	317.7
7	313.1	305.2	309.5	298.3	301.0	304.3	309.7	303.4	312.2	316.0	324.6	327.0	329.6	311.9	304.4	163.5	126.4	136.3	160.0	150.8	93.9	93.9	148.2	167.4
8	168.4	108.6	90.1	90.8	86.2	90.3	110.5	97.8	89.7	123.0	113.4	110.3	110.4	106.4	106.9	108.0	106.2	105.0	106.2	108.2	102.6	106.6	101.3	100.5
9	98.1	98.1	100.7	101.8	105.7	109.5	106.2	107.1	103.2	98.9	94.5	97.2	94.8	92.5	101.6	110.7	104.6	102.3	102.4	112.7	111.0	111.9	110.9	118.5
10	121.3	115.8	108.5	91.4	74.3	67.0	58.9	54.5	25.2	353.8	50.1	72.0	28.2	343.8	322.5	14.2	111.4	128.5	143.7	145.0	119.8	113.0	112.0	108.1
11	109.8	108.5	101.9	101.1	105.2	111.4	108.0	108.1	106.1	108.0	112.8	119.5	136.0	120.1	146.7	264.3	280.7	253.1	262.7	263.2	274.7	278.6	306.9	263.9
12	226.6	212.9	204.0	193.2	204.4	183.0	235.7	209.0	245.0	262.0	262.3	267.9	259.7	258.6	176.1	233.5	262.3	257.6	154.4	145.3	152.2	133.2	131.4	116.4
13	85.9	90.8	81.1	88.8	89.8	104.9	120.1	126.5	110.5	112.1	115.2	112.7	113.7	117.7	111.7	107.4	106.3	148.8	169.1	182.2	168.4	172.0	180.1	174.5
14	150.8	158.3	162.1	161.8	162.5	158.7	146.3	139.0	138.7	150.2	161.0	191.5	185.8	218.1	224.5	226.3	232.7	235.9	228.1	212.7	201.0	208.4	215.5	195.4
15	211.6	228.6	238.6	239.9	228.1	213.2	191.4	168.4	140.9	103.9	121.5	115.7	102.2	103.5	115.8	131.8	135.9	104.9	121.7	117.2	116.6	119.6	117.9	114.9
16	117.6	119.9	126.0	141.9	155.0	157.9	159.1	200.0	235.9	232.4	207.8	213.0	214.2	158.9	165.1	99.7	112.5	145.0	116.1	104.9	93.1	97.1	108.1	115.7
17	119.2	110.5	108.3	78.5	322.0	304.5	304.1	305.5	212.4	278.8	309.7	300.0	309.1	310.7	297.8	302.9	309.3	308.0	311.6	306.8	305.2	309.7	307.5	313.6
18	317.1	327.7	337.7	324.9	305.4	317.0	318.6	310.6	302.7	304.6	303.4	305.7	311.8	301.2	306.9	308.1	306.3	303.7	302.1	305.6	311.7	312.1	302.6	298.5
19	300.1	295.5	298.2	304.3	299.2	304.8	306.2	317.6	318.6	329.5	326.6	321.7	326.1	326.6	321.2	320.6	310.0	317.7	315.9	305.5	303.4	308.3	303.9	315.5
20	317.0	322.2	308.3	317.4	323.7	326.1	327.5	323.6	323.9	322.9	325.8	328.2	330.0	332.4	329.8	328.1	329.0	329.2	332.7	325.8	330.1	327.0	324.4	316.1
21	317.9	316.4	316.2	309.7	307.4	309.4	306.3	303.3	309.1	302.7	309.1	301.8	310.1	310.8	305.2	305.8	304.0	311.0	287.7	292.1	312.1	308.8	310.6	300.9
22	306.8	307.6	304.6	305.3	299.9	248.8	143.8	146.7	165.6	134.5	132.4	123.9	143.1	149.0	170.2	148.0	117.1	184.4	217.9	132.7	134.4	134.5	120.5	102.2
23	153.1	149.4	161.6	160.9	138.8	131.8	144.0	154.8	141.2	146.7	117.6	121.9	115.6	113.0	118.3	109.6	109.9	123.5	109.0	101.5	108.9	111.0	108.4	107.2
24	104.4	107.0	104.7	108.8	110.7	111.6	104.0	104.5	109.2	109.8	110.3	113.1	118.1	112.9	113.0	115.1	119.7	127.2	130.6	138.7	152.2	188.5	205.7	212.7
25	220.2	198.5	215.3	213.1	193.2	186.5	182.5	179.9	204.4	206.7	205.8	199.4	191.7	154.6	309.2	301.2	307.1	308.4	302.2	296.3	306.1	301.5	302.7	298.5
26	305.4	306.4	306.8	304.1	307.7	305.4	306.8	308.1	308.9	312.8	318.7	323.9	320.8	323.7	325.3	318.3	320.2	324.2	322.8	324.2	320.5	333.4	308.4	289.1
27	302.0	294.4	307.4	311.0	306.9	307.7	299.3	309.6	311.8	311.5	308.6	313.1	309.6	314.1	305.5	309.5	313.8	308.8	311.5	306.4	308.0	309.1	311.6	310.4
28	315.1	315.7	314.3	313.0	311.3	316.8	311.7	309.2	310.8	308.3	305.9	309.0	313.2	315.4	322.6	328.1	332.5	328.5	325.4	331.3	330.5	324.2	320.3	329.1
29	336.3	333.6	317.3	304.9	309.5	304.4	302.6	302.6	310.9	305.2	313.1	308.6	319.6	312.4	319.5	316.1	309.3	311.1	308.6	312.2	310.8	310.3	310.1	310.2
30	312.4	309.7	308.5	303.1	306.4	314.0	311.7	316.1	311.1	303.9	309.2	320.4	314.3	311.1	304.9	309.3	316.0	316.9	319.4	318.5	307.4	305.6	306.3	308.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	303.6	302.6	302.5	312.7	314.1	305.7	306.9	296.5	300.3	304.8	305.0	298.7	296.8	299.9	290.6	124.1	123.7	126.0	110.3	119.1	119.4	142.4	140.4	129.3
2	133.3	123.0	147.7	168.4	134.6	97.3	114.9	141.9	149.9	122.4	129.1	118.5	112.0	112.0	109.8	109.8	111.7	115.5	116.4	115.4	113.9	114.1	110.7	111.5
3	109.3	113.8	111.6	112.8	113.4	112.7	112.7	112.8	110.7	108.0	108.8	107.8	107.5	107.5	109.8	110.1	110.0	111.1	111.0	113.6	117.8	116.2	117.3	114.8
4	117.6	118.5	122.6	132.9	136.7	135.3	137.8	138.4	137.4	138.6	136.4	120.5	115.7	117.0	117.2	116.0	120.7	120.3	124.9	129.6	130.8	132.7	133.6	136.3
5	138.8	142.6	134.2	119.5	121.1	123.4	121.2	119.0	114.5	116.4	118.4	122.2	121.9	121.2	122.3	127.5	124.5	118.5	134.0	138.1	120.6	96.5	100.9	124.0
6	127.6	131.1	127.5	118.6	121.5	120.6	120.9	116.5	104.4	93.3	108.2	110.4	87.0	307.5	1.4	283.6	178.1	206.9	287.4	286.2	296.4	304.5	307.0	303.0
7	314.0	325.8	314.7	315.6	318.8	315.3	305.4	307.5	310.5	311.4	320.0	323.6	321.8	312.1	305.6	305.7	305.7	305.7	305.7	305.8	305.7	305.7	308.7	25.6
8	65.1	80.9	121.9	108.5	54.5	126.9	35.8	58.2	69.9	80.4	80.3	80.9	54.1	61.0	49.9	48.6	44.7	40.2	5.1	1.1	6.0	3.3	8.3	14.0
9	3.0	355.4	346.0	296.8	307.7	304.5	313.1	309.2	304.3	310.7	305.4	312.9	316.4	150.1	134.7	147.4	108.7	115.2	111.3	123.2	142.7	152.7	233.0	169.5
10	164.8	171.9	176.0	191.0	197.9	208.8	205.7	194.0	205.9	226.5	242.5	256.4	268.0	278.1	289.9	297.1	131.5	203.5	198.4	267.0	272.0	301.9	301.0	293.6
11	291.4	296.1	298.8	274.3	345.6	24.8	145.8	179.7	186.2	173.7	185.2	193.1	257.6	273.0	293.1	314.5	313.4	305.8	316.9	315.2	298.4	303.4	311.8	306.8
12	307.9	318.2	297.3	297.0	307.0	302.7	299.3	292.5	300.3	305.5	286.9	306.4	102.5	148.7	115.7	52.6	343.5	316.6	315.3	308.0	309.2	317.9	319.9	325.1
13	315.6	319.5	328.3	333.7	334.7	331.7	323.1	320.4	321.6	318.1	299.7	307.5	301.9	322.6	304.8	306.0	305.0	286.1	134.9	112.2	112.3	123.0	122.9	159.1
14	171.4	167.7	160.4	167.7	153.7	152.5	137.4	154.7	156.3	150.2	141.9	146.4	144.7	139.0	138.2	145.6	141.8	143.8	143.1	131.8	127.5	121.4	125.3	127.4
15	127.9	122.4	125.7	126.9	127.6	131.2	131.4	131.3	127.4	133.2	149.5	144.0	145.1	133.2	124.2	96.7	92.7	113.8	100.5	10.0	311.9	306.2	301.4	296.1
16	312.5	314.9	306.6	308.7	163.0	130.7	120.7	148.9	140.9	143.5	142.7	150.6	154.2	156.4	149.4	146.6	146.1	157.0	155.4	153.9	151.4	151.0	140.0	127.3
17	120.9	123.7	123.5	127.1	121.8	122.8	117.5	117.6	119.1	118.8	117.5	116.5	120.6	127.5	123.3	117.4	120.7	116.3	114.9	112.8	117.2	120.6	127.5	131.8
18	122.8	119.5	121.7	120.7	118.5	115.7	117.3	114.5	112.0	111.4	115.7	112.9	111.4	114.1	116.6	118.3	114.2	116.0	115.0	112.3	109.8	111.2	112.6	112.3
19	113.6	113.4	112.1	111.2	107.2	103.2	105.7	111.2	109.4	109.9	102.6	103.5	101.2	93.7	99.3	87.6	64.2	76.6	56.4	56.9	61.1	73.3	81.0	78.4
20	78.6	80.0	72.9	64.2	66.8	64.9	80.9	69.7	93.5	86.6	91.2	81.0	73.1	20.5	69.3	75.4	92.1	137.7	133.5	188.5	182.8	306.4	309.6	310.9
21	311.4	312.3	290.9	295.0	289.7	310.0	315.0	313.7	312.2	305.2	313.1	314.2	313.3	242.7	293.7	349.9	351.0	215.5	238.9	144.1	123.3	148.5	120.4	100.5
22	102.1	103.9	100.4	121.6	142.0	119.0	120.2	123.6	120.7	140.0	151.3	155.2	163.1	167.2	160.7	153.6	166.7	167.0	152.6	149.1	158.1	153.2	149.1	143.2
23	130.7	127.0	120.6	116.0	113.4	111.0	122.4	131.6	203.8	290.4	286.4	279.1	277.8	268.7	267.8	274.3	279.1	283.1	283.8	285.1	274.0	270.8	271.3	280.1
24	282.0	280.8	290.3	295.7	298.8	298.4	297.4	279.4	281.8	282.5	272.1	287.1	290.8	293.3	309.6	315.2	307.7	309.5	323.0	154.1	146.9	117.7	119.3	119.8
25	119.6	123.7	131.3	129.0	122.5	129.1	121.1	119.8	121.3	128.0	135.2	138.6	146.1	148.1	155.7	159.0	250.3	294.5	299.8	303.6	306.1	305.1	303.4	307.2
26	306.9	306.6	307.4	310.0	308.3	304.5	306.6	305.4	301.8	297.9	299.7	300.9	301.0	302.1	303.7	303.6	303.7	300.4	298.8	300.5	298.6	301.7	305.2	311.4
27	315.8	315.9	324.4	328.0	328.8	329.6	326.5	329.1	328.1	331.1	329.9	325.1	327.8	328.0	326.7	327.4	326.2	332.2	327.9	327.2	330.4	329.6	326.3	332.7
28	331.6	335.1	328.5	325.6	321.0	319.4	297.5	314.4	332.3	337.0	335.3	336.5	319.0	319.1	329.4	333.5	328.0	323.4	319.2	316.7	311.6	308.1	318.9	312.5
29	307.5	299.6	299.5	303.3	319.2	310.2	300.1	300.1	298.2	302.0	299.8	300.3	297.6	295.4	299.6	298.2	304.5	304.5	300.9	314.0	324.6	328.7	301.8	301.1
30	296.8	301.9	310.4	308.0	305.5	304.9	300.5	308.1	322.3	336.1	330.9	308.7	310.8	314.7	338.3	328.2	332.4	327.4	323.9	316.9	320.8	316.9	317.6	318.3
31	310.0	319.1	323.3	328.9	316.8	314.8	309.2	306.9	306.1	308.6	309.2	307.7	305.3	306.2	304.9	305.1	303.3	301.2	307.2	307.0	309.3	304.0	303.2	305.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.6	6.9	6.6	6.1	6.2	7.7	7.0	8.3	6.2	4.1	5.1	3.5	5.4	3.4	7.5	7.0	6.0	8.4	7.9	4.9	7.8	9.2	7.0	13.9	13.9	3.4	7.0
2	6.1	8.0	5.1	11.6	7.8	7.1	13.2	9.3	9.1	8.6	16.3	9.9	14.9	6.2	4.2	5.8	3.2	2.8	3.9	5.8	4.0	6.9	5.5	5.5	16.3	2.8	7.5
3	2.5	3.3	4.1	5.4	10.7	6.9	2.6	3.1	6.1	4.8	4.8	4.5	3.9	5.9	4.2	4.4	4.5	5.7	3.5	4.1	8.6	6.5	4.6	6.7	10.7	2.5	5.1
4	6.1	3.8	5.4	7.2	8.0	8.5	5.6	2.9	4.4	4.7	4.3	3.3	3.4	4.2	4.6	6.9	3.6	3.9	5.2	6.8	6.1	9.7	11.3	8.5	11.3	2.9	5.8
5	9.0	3.0	4.1	4.2	5.1	3.0	4.4	3.9	4.0	2.8	2.9	3.4	3.0	2.6	2.3	2.6	2.0	2.2	2.3	2.3	2.2	2.2	2.7	3.2	9.0	2.0	3.3
6	2.7	5.0	3.4	4.3	5.5	4.5	5.6	3.4	3.7	5.1	4.7	4.6	4.0	3.0	2.9	2.9	4.5	2.5	5.1	3.2	2.6	3.4	3.4	4.5	5.6	2.5	3.9
7	5.8	2.9	3.7	4.4	4.0	3.0	3.1	5.3	4.7	6.6	6.9	13.2	4.2	7.4	6.5	8.4	3.9	6.6	4.7	4.9	3.9	4.9	5.1	4.6	13.2	2.9	5.4
8	3.4	11.7	4.0	3.8	4.0	5.3	3.8	5.5	7.6	4.8	9.1	5.0	4.4	3.4	8.8	2.9	5.5	5.9	6.6	4.5	3.2	4.0	4.3	6.7	11.7	2.9	5.3
9	11.4	9.4	8.2	6.3	4.0	4.2	4.4	6.6	2.8	4.1	7.6	3.8	4.0	7.1	3.1	3.9	2.8	2.3	2.9	2.4	2.1	2.8	2.1	2.6	11.4	2.1	4.6
10	2.7	2.9	3.2	4.3	3.6	4.7	3.7	3.1	3.6	4.5	5.2	7.6	3.2	3.8	3.5	4.6	9.2	6.7	5.4	5.0	3.7	2.6	4.0	6.7	9.2	2.6	4.5
11	5.2	4.2	4.7	2.7	3.6	3.2	1.7	5.0	3.9	3.8	2.6	3.2	4.7	3.1	4.7	2.7	3.0	3.0	3.4	4.2	5.0	5.4	6.0	5.8	6.0	1.7	3.9
12	4.0	3.3	4.0	6.5	4.0	4.9	9.7	7.5	6.2	10.1	8.8	8.6	7.7	8.4	8.2	6.4	3.4	4.0	3.7	5.5	4.5	8.4	4.3	5.5	10.1	3.3	6.2
13	4.3	7.3	4.0	6.1	4.0	4.4	4.7	7.9	3.4	3.7	5.5	6.1	5.2	3.9	2.9	4.2	3.9	4.1	5.0	3.3	4.3	5.2	4.9	6.2	7.9	2.9	4.8
14	5.6	11.3	11.7	17.0	0.6	0.1	46.2	10.4	7.9	10.5	19.4	16.3	10.2	12.6	7.3	7.9	6.5	11.1	13.7	16.9	5.2	5.6	3.9	4.6	46.2	0.1	10.9
15	3.2	3.4	3.8	4.4	4.7	6.2	5.9	4.5	4.0	6.4	5.9	4.9	7.5	8.1	8.8	6.7	6.2	7.5	8.0	4.8	6.7	6.0	4.9	10.4	10.4	3.2	6.0
16	18.4	25.0	9.1	24.5	13.3	18.4	6.2	5.0	6.3	28.6	18.8	11.7	14.7	7.2	35.9	18.7	21.1	11.6	5.9	29.2	21.7	15.4	8.7	9.9	35.9	5.0	16.1
17	12.7	6.3	6.5	11.9	14.5	16.9	9.1	5.5	5.8	3.2	3.7	4.5	3.4	3.4	4.0	3.5	5.4	3.5	4.9	5.7	2.6	3.2	3.6	3.7	16.9	2.6	6.1
18	3.7	5.3	4.3	5.7	4.0	5.2	6.9	5.1	7.0	6.2	5.8	8.9	5.0	30.7	40.9	14.7	18.6	19.2	6.0	4.7	5.0	11.6	9.7	9.3	40.9	3.7	10.1
19	9.3	9.2	6.4	4.8	6.4	6.4	14.4	5.3	6.4	4.3	5.4	3.7	3.9	3.7	4.0	3.6	4.0	3.8	4.0	3.8	3.5	3.7	4.0	4.2	14.4	3.5	5.4
20	5.1	5.0	3.7	5.4	3.7	3.7	4.2	3.2	3.2	3.1	3.9	4.8	5.1	4.9	10.4	4.0	6.5	7.7	11.0	74.2	29.5	6.2	9.3	7.7	74.2	3.1	9.4
21	5.0	3.8	4.4	4.1	8.8	9.6	7.3	13.5	4.3	4.5	4.1	4.2	4.0	3.0	3.3	4.5	5.4	5.3	3.3	4.2	3.4	3.7	3.4	5.5	13.5	3.0	5.1
22	4.3	11.7	4.5	4.6	3.7	3.5	4.8	6.4	3.5	5.5	11.9	5.3	5.7	3.9	8.4	5.9	12.3	80.2	64.7	34.0	51.8	65.0	17.9	6.9	80.2	3.5	17.8
23	4.6	4.9	5.3	5.0	2.9	3.0	3.8	4.8	10.1	9.9	5.6	3.9	2.8	5.6	7.4	5.6	3.5	4.7	6.8	5.3	14.9	8.5	8.8	7.7	14.9	2.8	6.1
24	9.9	36.7	4.8	15.5	59.5	10.1	12.4	17.2	11.9	10.7	6.7	7.8	5.7	5.8	7.1	7.8	3.5	3.6	5.2	6.1	6.8	8.0	5.2	5.5	59.5	3.5	11.4
25	6.8	6.9	18.6	47.5	6.9	8.2	14.4	16.0	5.6	6.3	3.3	3.3	4.1	3.1	2.8	3.9	6.2	5.2	8.5	9.1	4.0	6.9	8.1	10.3	47.5	2.8	9.0
26	8.6	5.6	5.1	5.1	5.8	6.4	6.3	3.9	8.3	4.2	5.1	8.0	6.2	54.0	35.2	10.9	13.3	6.6	7.4	9.6	5.4	4.4	7.3	7.2	54.0	3.9	10.0
27	4.6	7.2	10.0	3.9	2.7	2.5	4.6	8.8	3.6	4.3	2.8	2.7	3.1	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.1	3.2	3.1	3.2	10.0	2.5	4.0
28	3.2	4.3	3.8	3.5	2.9	3.7	4.4	3.8	4.6	5.5	4.5	5.3	5.9	3.8	6.8	7.1	38.2	31.5	56.4	9.1	32.8	73.1	27.2	19.0	73.1	2.9	15.0
29	7.9	13.7	11.6	6.1	6.2	4.9	7.9	32.6	53.5	10.6	6.9	30.1	8.5	17.4	21.2	19.2	22.9	24.6	11.6	9.3	15.1	15.7	11.4	11.6	53.5	4.9	15.8
30	17.8	9.6	3.6	2.4	3.6	2.9	5.2	4.0	5.3	2.7	2.6	3.8	2.8	4.4	2.9	3.6	2.9	3.5	2.6	2.4	2.4	4.8	7.8	4.7	17.8	2.4	4.5
31	8.2	5.8	3.8	5.0	3.8	3.5	3.9	2.0	4.3	9.6	25.4	33.1	39.0	13.5	10.9	24.8	35.3	65.5	22.8	11.0	26.6	37.1	21.6	46.9	65.5	2.0	19.3
Max.	**18.4**	**36.7**	**18.6**	**47.5**	**59.5**	**18.4**	**46.2**	**32.6**	**53.5**	**28.6**	**25.4**	**33.1**	**39.0**	**54.0**	**40.9**	**24.8**	**38.2**	**80.2**	**64.7**	**74.2**	**51.8**	**73.1**	**27.2**	**46.9**	**80.2**		
Min.	**2.5**	**2.9**	**3.2**	**2.4**	**0.6**	**0.1**	**1.7**	**2.0**	**2.8**	**2.7**	**2.6**	**2.7**	**2.8**	**2.6**	**2.3**	**2.6**	**2.0**	**2.2**	**2.3**	**2.3**	**2.1**	**2.2**	**2.1**	**2.6**		**0.1**	
Avg.	**6.9**	**8.0**	**5.8**	**8.0**	**7.2**	**5.9**	**7.6**	**7.2**	**7.1**	**6.6**	**7.3**	**7.7**	**6.6**	**8.1**	**9.2**	**7.1**	**8.7**	**11.5**	**9.9**	**9.6**	**9.6**	**11.4**	**7.5**	**8.3**			**8.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.6	81.7	24.1	12.0	24.3	11.7	24.3	9.6	10.3	6.0	10.0	7.3	11.8	11.3	6.6	7.1	8.9	12.0	16.4	31.7	16.0	11.3	23.7	21.0	81.7	6.0	17.1
2	4.7	5.4	3.2	4.5	4.4	4.3	8.3	3.9	5.2	2.6	4.2	7.8	3.8	4.0	6.8	2.9	3.8	3.4	5.0	5.1	7.3	8.2	5.6	5.0	8.3	2.6	5.0
3	4.0	2.6	4.8	4.7	3.5	4.0	5.0	4.0	13.4	5.9	5.4	7.2	4.6	6.2	6.0	6.4	13.1	5.2	6.3	4.0	4.1	4.9	4.8	3.7	13.4	2.6	5.6
4	3.2	2.7	2.6	2.9	2.1	3.0	3.9	2.9	4.0	5.4	7.0	40.0	12.4	9.1	5.3	4.1	3.1	8.8	6.3	5.9	9.4	6.0	3.9	4.4	40.0	2.1	6.6
5	4.8	6.7	12.7	10.9	10.9	8.3	5.5	5.7	6.2	8.2	4.9	9.5	12.9	9.3	77.4	90.5	0.5	81.7	5.2	7.6	7.0	4.3	4.1	4.3	90.5	0.5	16.6
6	2.6	6.1	4.0	3.2	5.1	2.8	2.0	3.4	2.4	4.2	7.8	5.4	5.9	6.8	6.9	5.4	5.0	6.6	8.6	9.7	5.3	17.2	6.8	8.9	17.2	2.0	5.9
7	9.2	9.1	4.0	6.0	6.0	9.1	5.8	4.9	7.0	4.6	5.5	15.5	40.0	14.8	11.0	24.6	6.5	3.9	4.2	4.0	5.7	4.3	11.5	5.8	40.0	3.9	9.3
8	13.0	79.4	16.0	75.4	36.3	10.3	13.4	5.1	10.9	8.1	8.6	11.6	9.6	8.0	17.3	10.0	8.1	5.6	10.2	6.3	12.6	14.3	9.1	16.6	79.4	5.1	17.3
9	11.6	14.6	4.6	4.3	4.6	3.9	3.6	4.1	7.9	8.5	42.3	55.2	10.6	9.9	6.9	5.7	4.4	5.4	7.0	3.5	3.8	5.5	5.3	5.6	55.2	3.5	10.0
10	5.8	3.7	5.3	8.1	9.0	9.1	7.5	7.5	5.5	4.4	6.1	4.8	9.7	3.8	8.6	77.4	6.6	82.3	22.4	49.2	5.6	6.2	6.2	76.2	82.3	3.7	18.0
11	18.9	4.7	8.3	4.5	6.9	10.6	9.3	5.5	4.6	7.1	5.4	5.3	5.5	8.4	12.0	13.3	10.4	8.8	11.1	60.8	5.8	83.5	52.9	9.8	83.5	4.5	15.6
12	7.9	8.5	55.6	46.1	72.6	15.1	7.1	8.8	10.0	7.4	3.5	4.5	12.0	12.8	7.8	5.5	9.6	6.6	4.9	4.0	6.1	5.0	75.1	9.8	75.1	3.5	16.9
13	12.0	22.3	9.5	8.5	4.7	3.9	4.9	3.8	3.0	3.4	3.3	3.4	3.3	3.3	3.2	3.4	3.5	3.6	3.5	3.3	3.9	3.6	3.2	3.3	22.3	3.0	5.2
14	3.3	2.8	2.9	3.0	2.8	2.9	3.9	39.1	4.2	3.4	10.4	8.9	9.5	7.1	7.0	7.7	8.1	8.4	7.4	6.7	4.7	28.5	20.0	10.4	39.1	2.8	8.9
15	2.4	3.2	3.3	10.6	8.5	15.5	4.2	8.5	9.5	7.9	13.3	11.8	16.0	15.2	17.4	18.0	44.0	59.9	10.3	12.9	94.6	6.9	14.0	8.5	94.6	2.4	17.3
16	7.8	12.3	9.3	3.7	4.0	5.1	3.6	2.7	3.0	5.1	4.9	4.9	7.5	8.4	6.4	5.1	6.6	9.6	9.4	5.6	3.6	4.1	4.8	9.5	12.3	2.7	6.1
17	11.2	7.2	5.0	9.6	9.6	17.4	4.7	9.0	7.6	12.3	7.7	33.5	23.2	4.0	3.3	6.3	20.7	4.7	3.1	4.2	3.5	3.8	3.3	4.0	33.5	3.1	9.1
18	3.4	4.7	3.3	4.5	3.7	3.7	3.4	3.3	3.4	4.2	3.8	3.4	3.6	4.2	3.1	4.9	3.9	5.2	4.4	7.7	2.8	4.1	2.9	2.9	7.7	2.8	3.9
19	3.0	6.4	29.1	15.9	28.7	17.9	60.2	15.8	11.5	8.4	25.7	8.1	14.7	12.9	5.7	3.9	4.5	3.9	3.6	5.2	18.2	5.4	4.9	6.7	60.2	3.0	13.3
20	3.4	3.7	4.1	4.1	3.4	4.0	3.7	4.0	4.1	3.3	3.7	3.0	4.0	3.3	5.1	3.3	24.6	16.8	24.0	3.5	4.2	7.7	11.1	4.1	24.6	3.0	6.5
21	3.9	4.0	22.8	14.3	6.5	15.4	10.4	7.7	7.7	5.0	4.4	3.8	4.3	3.6	6.2	3.9	4.1	25.6	38.0	23.4	7.2	14.6	9.8	11.6	38.0	3.6	10.8
22	5.9	8.3	5.9	4.0	8.3	14.6	19.3	7.1	10.9	10.1	17.2	7.5	5.8	5.9	2.9	2.8	4.2	3.6	2.8	2.9	3.5	3.0	3.4	3.2	19.3	2.8	6.8
23	5.8	7.4	4.9	73.6	45.8	54.2	40.0	60.1	21.6	4.1	5.2	7.4	4.4	6.7	5.8	6.6	4.0	4.6	3.2	2.3	3.1	5.2	2.7	7.4	73.6	2.3	16.1
24	4.1	4.4	4.7	3.4	3.5	3.7	4.4	8.1	4.1	4.7	4.0	6.2	3.7	3.7	3.9	4.7	4.6	5.7	6.0	6.6	4.9	3.9	7.3	7.1	8.1	3.4	4.9
25	11.2	4.7	4.3	4.3	3.3	3.0	3.4	4.6	4.3	8.1	3.3	7.5	6.6	4.2	6.3	11.1	6.2	29.7	29.3	39.3	38.6	10.3	17.9	25.9	39.3	3.0	12.0
26	12.8	12.2	6.8	30.9	57.0	31.1	7.8	33.3	32.5	12.5	13.6	18.0	25.6	13.9	12.7	24.9	18.5	8.2	3.9	5.5	5.6	9.5	5.0	3.2	57.0	3.2	16.9
27	5.0	13.0	5.2	6.0	4.5	4.0	4.5	3.4	13.1	23.3	46.2	58.5	13.8	21.8	67.4	79.2	15.7	32.8	31.0	29.2	14.7	30.9	7.2	45.6	79.2	3.4	24.0
28	8.7	4.7	23.8	33.4	21.3	14.3	51.0	33.9	42.9	27.8	20.4	14.7	9.9	9.9	4.7	5.5	5.2	4.4	5.2	6.2	7.9	7.5	6.0	6.6	51.0	4.4	15.7
29	5.7	7.9	11.3	8.3	11.6	6.2	9.3	9.0	11.1	6.4	8.0	15.7	10.9	9.2	6.9	5.7	7.1	11.6	12.4	5.4	5.7	4.5	4.8	4.9	15.7	4.5	8.3
Max.	**18.9**	**81.7**	**55.6**	**75.4**	**72.6**	**54.2**	**60.2**	**60.1**	**42.9**	**27.8**	**46.2**	**58.5**	**40.0**	**21.8**	**77.4**	**90.5**	**44.0**	**82.3**	**38.0**	**60.8**	**94.6**	**83.5**	**75.1**	**76.2**	**94.6**		
Min.	**2.4**	**2.6**	**2.6**	**2.9**	**2.1**	**2.8**	**2.0**	**2.7**	**2.4**	**2.6**	**3.3**	**3.0**	**3.3**	**3.3**	**2.9**	**2.8**	**0.5**	**3.4**	**2.8**	**2.3**	**2.8**	**3.0**	**2.7**	**2.9**		**0.5**	
Avg.	**7.1**	**12.2**	**10.4**	**14.5**	**14.2**	**10.6**	**11.5**	**11.0**	**9.7**	**7.7**	**10.5**	**13.5**	**10.5**	**8.3**	**11.7**	**15.5**	**9.2**	**16.2**	**10.5**	**12.5**	**10.9**	**11.2**	**11.6**	**11.6**			**11.4**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.8	3.4	4.8	5.6	7.3	6.1	6.6	55.6	9.2	9.2	9.6	5.1	4.4	7.6	9.8	15.1	8.7	10.4	11.8	9.8	8.2	4.9	4.0	6.0	55.6	3.4	9.5
2	4.3	3.8	3.7	4.3	3.7	5.8	4.0	3.7	6.0	3.7	3.6	5.2	3.9	3.5	4.9	7.0	7.1	3.3	3.2	5.8	6.9	5.0	4.0	9.4	9.4	3.2	4.8
3	9.5	17.9	4.2	9.7	5.9	2.9	3.0	3.4	3.5	2.9	2.8	3.0	3.0	4.0	4.0	3.3	3.6	3.7	3.9	4.6	5.2	3.5	3.1	3.4	17.9	2.8	4.7
4	2.8	3.7	3.1	4.0	3.5	3.9	3.1	3.3	3.5	3.2	4.1	3.4	3.3	3.8	3.7	3.5	3.3	3.3	3.5	3.2	3.2	3.0	2.9	2.8	4.1	2.8	3.4
5	4.8	3.7	3.7	3.5	4.3	3.8	4.9	7.3	6.6	5.7	2.9	3.1	3.0	4.5	3.5	3.4	3.3	4.2	3.4	3.4	3.8	3.4	3.6	3.5	7.3	2.9	4.1
6	3.3	3.4	3.5	4.5	4.9	11.9	4.5	7.3	4.6	4.4	4.0	7.0	5.9	4.8	3.5	2.6	3.9	4.2	3.3	47.9	13.6	7.9	14.7	10.0	47.9	2.6	7.7
7	6.8	4.2	3.3	17.3	11.8	4.1	3.5	4.9	3.6	4.0	3.8	6.4	5.8	4.6	16.3	68.9	13.8	16.9	9.4	4.3	8.0	7.7	5.7	5.8	68.9	3.3	10.0
8	7.5	4.5	7.9	32.5	16.5	7.1	3.8	9.2	6.9	6.4	13.4	10.6	3.4	12.8	9.2	6.9	5.8	6.1	4.0	3.5	3.5	3.8	4.3	4.2	32.5	3.4	8.1
9	16.2	12.5	10.2	10.8	11.8	6.2	5.5	4.8	4.4	3.1	7.2	9.2	16.3	27.7	3.8	4.7	3.9	2.8	3.3	2.9	6.9	8.1	31.0	45.1	45.1	2.8	10.8
10	44.9	16.4	18.5	24.1	8.1	17.9	26.0	11.1	29.7	26.7	8.0	29.1	39.5	46.8	24.2	48.7	25.8	29.8	48.2	19.2	39.1	12.4	71.4	15.6	71.4	8.0	28.4
11	23.1	11.6	12.2	16.2	83.6	40.5	9.5	12.5	17.1	39.0	15.1	42.1	9.3	19.1	8.7	11.8	10.4	5.9	13.4	7.8	6.7	6.6	11.3	18.5	83.6	5.9	18.8
12	9.0	3.9	2.1	3.8	3.6	7.4	7.2	4.5	5.4	10.5	18.6	18.6	16.4	22.8	8.7	12.3	12.5	10.4	8.4	9.1	7.8	14.1	11.2	8.9	22.8	2.1	9.9
13	8.4	7.0	9.4	8.6	8.5	8.0	8.7	8.7	7.5	7.6	9.3	6.8	8.6	7.7	7.1	9.7	10.5	10.3	9.9	5.4	4.1	9.7	9.9	8.8	10.5	4.1	8.3
14	10.5	8.8	8.8	11.8	21.0	68.4	17.9	12.0	12.5	12.1	6.2	14.0	8.6	7.2	8.8	5.8	13.6	10.0	12.5	9.0	7.1	6.8	4.8	4.9	68.4	4.8	12.6
15	3.4	3.7	3.7	3.5	3.3	4.1	3.5	3.0	2.9	3.9	3.2	3.2	3.2	3.3	3.2	2.9	3.3	2.8	2.6	2.6	2.7	2.9	3.1	3.9	4.1	2.6	3.2
16	3.4	4.3	4.7	4.3	3.1	3.2	6.3	6.4	8.0	13.6	17.0	15.2	22.5	81.9	42.9	71.3	40.2	9.7	7.6	6.4	7.4	4.6	5.0	6.6	81.9	3.1	16.5
17	7.3	6.3	6.6	5.7	7.3	5.8	5.6	6.9	6.5	3.3	2.1	7.7	19.4	12.3	10.3	22.5	59.1	45.7	6.0	4.3	4.0	5.7	4.7	30.9	59.1	2.1	12.3
18	14.6	5.4	6.2	7.0	5.9	8.2	5.1	4.9	4.7	2.8	3.7	2.3	3.4	3.7	4.8	3.9	5.2	2.8	7.2	3.3	4.4	4.0	3.6	3.2	14.6	2.3	5.0
19	3.8	2.7	4.5	3.4	4.4	3.6	3.4	4.1	2.5	2.9	3.1	3.7	4.2	3.2	3.1	3.2	3.1	3.5	2.8	4.6	2.8	3.2	4.7	2.8	4.7	2.5	3.5
20	2.3	3.0	2.9	2.6	2.4	2.4	2.5	2.8	2.8	3.3	6.0	12.8	9.4	68.8	53.2	9.7	5.2	4.0	4.4	4.5	2.5	4.3	4.1	3.4	68.8	2.3	9.1
21	3.7	4.4	3.9	4.5	5.0	4.0	8.5	8.4	4.4	4.5	4.6	11.4	11.4	7.5	23.6	19.4	10.6	15.7	14.0	24.0	3.9	15.3	7.2	9.9	24.0	3.7	9.6
22	6.4	8.4	4.5	6.0	7.3	3.3	16.2	4.1	5.3	6.2	3.3	3.6	3.1	4.6	3.5	5.3	8.8	5.9	3.7	7.4	8.7	9.3	16.0	9.7	16.2	3.1	6.7
23	6.7	4.3	6.0	7.0	7.6	7.5	11.2	10.2	8.0	9.2	9.7	6.1	4.9	3.2	3.6	3.3	5.3	6.7	2.8	3.2	3.3	4.8	4.8	3.2	11.2	2.8	6.0
24	4.6	4.7	3.8	3.8	3.0	6.0	7.9	5.5	7.5	4.6	4.5	3.6	4.8	4.4	6.2	4.5	5.0	5.1	2.3	3.2	2.4	3.7	3.0	5.5	7.9	2.3	4.6
25	13.5	97.8	16.8	16.8	8.3	12.3	11.7	5.0	8.5	17.6	74.9	60.3	88.0	5.4	5.7	4.7	4.5	2.8	4.2	2.9	2.0	2.7	2.2	4.3	97.8	2.0	19.7
26	3.9	3.8	4.1	2.7	5.9	5.5	4.9	3.7	5.9	14.2	2.9	2.4	4.8	2.6	3.3	2.6	3.8	3.9	3.1	5.5	2.9	6.7	6.7	7.5	14.2	2.4	4.7
27	5.8	5.3	8.0	6.9	12.0	8.0	14.2	17.4	10.1	7.4	5.4	3.8	2.6	7.4	4.6	4.7	4.1	1.8	2.9	2.5	5.2	7.1	6.5	4.8	17.4	1.8	6.6
28	10.4	7.5	3.6	3.5	2.7	3.2	5.6	6.6	7.7	3.6	5.1	46.8	18.0	37.8	69.0	40.9	57.9	15.5	84.9	13.5	13.2	5.6	4.8	8.7	84.9	2.7	19.8
29	5.6	4.0	2.7	4.8	5.0	5.3	8.7	12.7	4.5	6.0	3.7	3.2	3.3	3.1	3.4	3.3	6.0	4.1	4.1	4.0	3.8	4.6	3.9	3.1	12.7	2.7	4.7
30	3.3	3.1	3.3	3.1	3.1	3.5	3.2	3.5	3.6	3.4	3.5	3.3	3.6	3.6	3.7	3.8	3.7	3.8	3.6	3.2	4.7	4.0	3.9	3.9	4.7	3.1	3.6
31	3.8	3.1	3.6	3.9	4.1	3.7	3.6	3.1	3.8	3.2	2.8	3.6	3.5	3.1	3.7	4.3	3.7	3.9	3.7	3.3	3.7	3.4	3.1	3.0	4.3	2.8	3.5
Max.	**44.9**	**97.8**	**18.5**	**32.5**	**83.6**	**68.4**	**26.0**	**55.6**	**29.7**	**39.0**	**74.9**	**60.3**	**88.0**	**81.9**	**69.0**	**71.3**	**59.1**	**45.7**	**84.9**	**47.9**	**39.1**	**15.3**	**71.4**	**45.1**	**97.8**		
Min.	**2.3**	**2.7**	**2.1**	**2.6**	**2.4**	**2.4**	**2.5**	**2.8**	**2.5**	**2.8**	**2.1**	**2.3**	**2.6**	**2.6**	**3.1**	**2.6**	**3.1**	**1.8**	**2.3**	**2.5**	**2.0**	**2.7**	**2.2**	**2.8**		**1.8**	
Avg.	**8.3**	**8.9**	**5.9**	**7.9**	**9.2**	**9.1**	**7.4**	**8.3**	**7.0**	**8.0**	**8.5**	**11.5**	**11.0**	**14.0**	**11.7**	**13.4**	**11.5**	**8.4**	**9.6**	**7.6**	**6.5**	**6.1**	**8.7**	**8.4**			**9.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.3	2.9	2.8	3.0	3.3	3.3	3.1	2.9	2.9	3.3	3.3	3.2	3.4	3.0	3.7	2.7	2.7	2.7	4.5	4.8	5.1	3.5	15.0	29.2	29.2	2.7	4.9
2	57.2	31.0	6.5	6.0	0.4	3.1	22.9	55.9	32.7	14.2	15.8	17.8	10.4	11.5	14.4	14.9	13.5	9.7	5.9	7.6	5.1	4.1	5.1	4.9	57.2	0.4	15.4
3	5.3	3.7	4.6	4.6	2.6	4.6	5.7	4.9	7.7	11.3	13.2	6.4	4.6	6.5	3.8	4.2	4.3	8.9	3.4	3.4	3.1	3.0	2.7	2.8	13.2	2.6	5.2
4	3.0	3.2	3.2	3.0	2.8	2.9	3.0	2.8	2.7	2.7	2.9	3.3	3.8	3.5	3.2	4.5	3.2	3.0	3.4	7.6	7.2	8.3	14.2	11.1	14.2	2.7	4.5
5	4.0	4.9	10.7	1.9	5.4	4.3	4.5	5.2	5.9	6.2	11.8	9.4	5.5	5.4	3.4	5.3	4.2	6.0	8.2	3.7	8.2	3.7	2.8	4.5	11.8	1.9	5.6
6	3.0	3.5	3.6	3.1	4.6	5.8	6.2	7.2	5.6	5.4	6.7	5.3	4.5	5.8	4.6	3.4	6.2	3.5	4.4	2.8	3.1	5.2	5.3	8.3	8.3	2.8	4.9
7	6.7	5.2	5.1	5.2	5.4	3.9	4.6	5.8	8.1	4.6	4.7	6.1	4.9	5.2	7.8	2.9	4.8	5.1	4.4	2.8	6.0	5.2	4.8	5.2	8.1	2.8	5.2
8	3.0	3.2	7.9	7.2	10.4	9.5	33.2	51.6	21.4	6.1	4.7	9.4	9.7	15.8	10.3	9.3	15.3	41.5	5.5	6.0	20.9	4.7	4.7	7.6	51.6	3.0	13.3
9	4.5	5.2	2.5	3.6	4.1	4.2	2.5	3.6	4.9	9.1	6.0	11.5	3.5	4.9	5.0	2.5	3.1	2.6	2.6	1.9	2.4	4.8	1.9	2.8	11.5	1.9	4.2
10	12.1	5.7	2.8	2.2	2.3	3.3	3.5	4.0	12.6		5.0	4.3	3.9	4.5	3.8	7.8	4.5	2.7	3.3	4.3	2.4	2.5	3.0	3.8	12.6	2.2	4.5
11	6.8	5.3	5.2	6.1	4.1	6.3	2.6	6.4	9.8	6.5	9.6	10.6	6.8	3.6	6.3	5.3	4.3	2.7	5.6	2.3	7.3	7.0	3.8	3.6	10.6	2.3	5.7
12	3.4	7.8	5.0	2.2	4.9	5.6	4.5	4.2	3.5	2.2	4.0	8.9	2.4	2.8	4.1	2.9	2.6	4.4	7.0	4.0	14.0	14.9	9.9	86.2	86.2	2.2	8.8
13	39.1	25.7	16.3	16.1	12.0	10.5	9.0	9.5	9.1	26.7	3.0	12.8	9.4	27.0	13.5	4.5	7.8	5.7	11.5	16.0	9.1	4.0	2.5	1.8	39.1	1.8	12.6
14	2.0	0.5	0.8	0.6	0.4	0.4	0.3	0.4	0.5	1.1	0.9	2.5	8.9	6.9	33.1	43.3	19.4	37.3	14.1	5.1	6.3	4.2	43.5	32.2	43.5	0.3	11.0
15	16.9	21.7	28.2	67.3	0.3	0.2	0.3	0.1	24.4	5.8	8.1	4.9	4.4	3.6	3.8	3.5	3.7	4.1	3.0	2.4	3.2	3.4	3.1	3.3	67.3	0.1	9.2
16	4.1	3.5	4.6	5.0	4.2	7.9	5.6	5.2	9.4	4.1	4.6	4.0	5.1	3.4	3.2	4.3	3.9	3.8	29.6	45.1	9.0	8.7	10.1	17.9	45.1	3.2	8.6
17	6.4	10.9	12.3	10.7	11.2	5.4	7.8	6.8	7.0	11.9	24.7	57.7	7.6	6.3	19.2	26.0	51.5	25.1	30.9	43.3	40.0	26.3	36.6	25.4	57.7	5.4	21.3
18	24.8	35.2	12.0	9.8	9.2	9.1	6.8	3.9	5.1	6.1	12.2	15.0	12.5	6.7	6.1	3.4	3.4	6.3	6.7	17.1	5.8	5.8	5.3	4.2	35.2	3.4	9.7
19	5.1	6.0	5.7	5.9	8.5	9.1	6.7	6.3	5.1	6.1	8.7	6.0	6.3	5.5	6.6	6.6	5.5	5.6	5.5	6.3	9.7	7.9	8.8	6.4	9.7	5.1	6.7
20	13.0	13.1	11.2	7.2	24.2	11.8	17.3	11.7	4.3	3.3	3.5	3.6	4.0	3.7	5.9	7.2	20.0	9.0	8.2	11.5	6.4	4.7	3.9	4.3	24.2	3.3	8.9
21	3.6	3.4	6.0	4.3	6.5	6.0	4.5	3.5	6.1	6.1	6.6	8.3	4.7	4.7	8.6	6.6	8.2	7.1	6.6	9.5	7.3	6.8	5.1	4.6	9.5	3.4	6.0
22	7.1	9.7	12.3	10.1	12.7	9.3	9.0	7.6	9.5	17.1	20.6	16.5	13.2	13.0	8.1	7.1	10.4	9.9	16.2	36.1	22.3	33.1	35.9	10.0	36.1	7.1	14.9
23	5.5	4.4	5.8	8.7	7.3	6.5	2.9	5.0	5.8	6.2	3.3	12.7	17.0	6.0	5.9	8.6	10.4	13.2	20.6	48.8	8.7	37.7	10.8	48.1	48.8	2.9	12.9
24	44.0	74.4	43.9	26.9	56.6	29.4	78.3	32.7	53.7	93.2	45.8	62.0	22.4	73.9	67.2	65.6	47.8	14.2	12.8	22.1	30.2	35.7	6.4	6.6	93.2	6.4	43.6
25	4.7	5.3	27.9	5.0	3.9	4.5	2.9	2.6	5.0	3.1	3.8	4.0	6.5	5.5	4.4	6.2	5.3	6.1	5.2	5.2	5.2	4.6	2.3	3.7	27.9	2.3	5.5
26	3.4	2.8	5.2	3.8	2.5	8.9	3.0	5.1	5.3	3.6	3.2	4.0	2.8	3.6	2.3	2.5	2.3	2.5	2.6	3.0	2.7	3.3	2.5	2.7	8.9	2.3	3.5
27	2.7	2.7	2.3	2.5	3.2	2.9	3.8	3.2	2.8	3.0	2.7	2.9	4.3	4.3	4.2	3.8	5.3	3.0	4.1	3.6	6.2	3.4	4.6	4.7	6.2	2.3	3.6
28	3.0	4.3	4.3	5.0	5.8	12.8	6.0	5.6	4.2	7.0	21.0	42.4	23.1	5.9	16.0	8.5	4.7	4.4	2.7	3.0	2.6	3.3	3.8	3.9	42.4	2.6	8.5
29	5.3	3.9	4.0	5.5	3.6	2.3	4.8	3.8	4.6	5.5	5.0	10.3	4.8	7.8	7.4	4.5	3.7	4.5	3.3	2.9	4.0	3.7	3.8	5.5	10.3	2.3	4.8
30	4.4	4.3	6.0	4.9	2.7	3.3	3.5	4.1	3.3	4.2	5.8	3.3	7.7	6.1	6.6	7.9	16.7	4.7	6.0	4.3	4.3	4.6	4.9	7.5	16.7	2.7	5.5
Max.	**57.2**	**74.4**	**43.9**	**67.3**	**56.6**	**29.4**	**78.3**	**55.9**	**53.7**	**93.2**	**45.8**	**62.0**	**23.1**	**73.9**	**67.2**	**65.6**	**51.5**	**41.5**	**30.9**	**48.8**	**40.0**	**37.7**	**43.5**	**86.2**	**93.2**		
Min.	**2.0**	**0.5**	**0.8**	**0.6**	**0.3**	**0.2**	**0.3**	**0.1**	**0.5**	**1.1**	**0.9**	**2.5**	**2.4**	**2.8**	**2.3**	**2.5**	**2.3**	**2.5**	**2.6**	**1.9**	**2.4**	**2.5**	**1.9**	**1.8**		**0.1**	
Avg.	**10.3**	**10.4**	**9.0**	**8.2**	**7.5**	**6.6**	**9.0**	**9.0**	**9.4**	**9.9**	**9.0**	**12.3**	**7.6**	**8.9**	**9.7**	**9.5**	**10.0**	**8.6**	**8.3**	**11.2**	**8.9**	**8.9**	**8.9**	**12.1**			**9.3**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.3	3.1	3.5	3.9	3.2	4.3	5.9	4.7	4.5	3.0	4.3	2.7	3.8	3.5	9.0	2.2	2.1	5.2	4.9	3.5	4.6	4.7	5.6	3.4	9.0	2.1	4.1
2	4.9	4.4	4.8	4.9	4.5	4.9	5.7	3.3	6.2	4.3	4.3	7.2	5.5	8.2	39.0	18.3	18.2	11.1	27.1	54.4	93.4	82.0	14.2	21.3	93.4	3.3	18.8
3	69.9	24.2	19.0	8.1	4.4	14.6	9.2	5.4	5.0	8.8	8.3	7.9	6.7	6.6	10.4	17.6	16.1	26.3	30.3	8.9	15.4	15.6	33.8	12.9	69.9	4.4	16.1
4	9.9	13.6	15.3	21.9	10.7	17.0	22.4	9.6	18.1	28.0	18.2	14.9	13.3	9.7	9.1	11.8	18.8	45.0	79.9	29.1	55.2	33.9	45.0	8.1	79.9	8.1	23.3
5	6.5	4.5	4.2	5.5	11.3	5.6	3.6	5.3	12.9	7.5	41.8	63.7	82.9	30.7	61.3	13.3	25.1	28.4	32.5	21.2	9.1	5.7	19.1	34.4	82.9	3.6	22.3
6	16.6	23.1	11.4	15.7	6.2	6.6	9.0	8.7	6.2	6.8	3.8	3.1	4.0	4.2	4.4	3.2	3.0	4.3	2.8	2.9	3.1	2.8	2.9	3.2	23.1	2.8	6.6
7	4.0	3.0	3.0	3.0	3.0	3.8	3.4	3.4	3.2	3.3	3.7	3.6	3.2	3.3	3.6	3.5	3.2	5.6	3.3	3.7	3.1	3.4	4.3	4.0	5.6	3.0	3.5
8	4.1	3.1	3.3	3.3	3.0	3.3	3.5	3.3	3.4	3.1	3.5	3.7	3.6	3.4	3.1	3.0	3.4	3.4	3.4	3.1	3.3	3.1	4.1	4.3	4.3	3.0	3.4
9	4.1	4.1	5.7	7.6	7.8	15.2	12.7	11.6	5.5	2.7	4.4	3.6	5.2	6.7	4.6	4.3	4.7	4.4	5.3	7.3	6.7	13.0	56.2	13.5	56.2	2.7	9.0
10	33.8	5.1	4.2	3.9	7.8	9.0	12.1	8.9	11.2	3.1	9.2	17.0	69.6	33.8	11.6	15.9	26.3	11.8	11.1	7.5	19.2	6.5	11.9	5.9	69.6	3.1	14.8
11	4.4	2.8	2.9	3.6	3.4	4.8	4.2	4.4	3.7	3.9	4.0	4.5	3.3	3.4	4.4	4.1	5.1	4.9	3.8	3.7	3.6	3.9	4.1	3.8	5.1	2.8	3.9
12	4.5	4.5	4.1	6.6	6.4	5.9	5.5	13.4	11.9	8.0	4.3	3.8	4.6	4.4	3.6	4.2	5.5	3.9	4.4	4.4	3.8	3.7	3.6	4.0	13.4	3.6	5.4
13	3.8	3.2	3.3	3.5	4.5	3.5	3.5	3.4	3.6	5.0	4.5	3.8	4.9	4.2	4.2	5.9	4.0	4.1	3.6	3.6	3.8	4.0	3.6	4.5	5.9	3.2	4.0
14	5.1	9.2	9.5	33.4	13.0	34.6	7.0	3.7	5.7	27.0	17.1	9.0	8.4	9.0	13.4	4.4	4.8	5.2	10.5	6.2	7.7	10.6	25.5	18.1	34.6	3.7	12.4
15	54.6	34.3	17.8	4.0	13.1	7.6	21.7	10.4	16.3	12.0	15.0	6.6	9.8	10.0	7.6	5.1	7.3	5.7	6.6	5.5	3.9	4.6	4.4	5.1	54.6	3.9	12.0
16	6.3	6.4	7.3	13.1	9.8	27.8	6.2	9.1	8.8	33.7	12.3	5.2		4.8	4.9	4.5	5.5	5.8	6.9	6.8	14.1	6.8	6.6	42.9	42.9	4.5	11.1
17	10.4	7.7	4.7	3.6	4.6	3.7	5.7	5.4	2.6	6.0	10.3	13.8	22.6	31.4	15.5	88.5	43.0	21.3	13.3	6.6	9.9	4.8	3.1	13.0	88.5	2.6	14.6
18	10.4	6.0	11.1	5.6	6.3	7.1	9.0	3.6	3.6	13.7	7.9	5.8	7.4	10.7	11.0	12.1	14.2	7.9	5.1	8.0	9.6	12.5	5.8	7.5	14.2	3.6	8.4
19	8.9	4.1	4.1	4.9	9.5	18.5	5.4	17.6	32.6	9.4	6.6	13.7	16.4	18.5	24.3	10.2	13.8	5.7	4.4	5.1	6.1	2.5	2.4	4.6	32.6	2.4	10.4
20	5.5	8.3	4.7	2.4	3.2	3.3	4.3	2.6	4.0	6.1	9.5	8.4	31.0	27.3	25.5	50.7	12.9	24.1	11.9	14.4	4.0	4.4	2.6	6.7	50.7	2.4	11.6
21	7.4	5.0	15.5	30.9	14.4	24.7	67.2	32.8	30.9	7.2	91.7	25.5	17.4	14.9	12.8	11.3	13.2	13.5	6.7	11.6	3.6	4.4	4.8	4.6	91.7	3.6	19.7
22	4.1	5.5	4.1	4.0	39.9	65.2	6.4	18.0	10.2	22.1	15.6	11.6	19.8	37.6	24.5	13.1	9.2	7.2	6.3	4.6	6.7	4.5	4.2	5.6	65.2	4.0	14.6
23	4.2	4.2	4.2	4.4	4.6	5.4	4.4	4.6	4.6	6.0	4.7	5.1	5.4	5.0	5.5	4.4	4.5	4.2	4.7	4.0	4.5	4.8	4.6	4.7	6.0	4.0	4.7
24	4.5	4.6	5.1	5.0	4.8	5.4	4.3	5.8	4.9	5.1	4.9	5.7	5.3	5.5	5.6	5.1	5.1	4.8	7.4	22.1	18.7	15.7	14.0	6.8	22.1	4.3	7.3
25	9.2	7.3	9.0	7.9	6.2	6.4	5.5	6.3	5.2	7.8	8.5	10.9	14.0	14.0	12.5	9.9	10.9	10.1	9.3	12.5	14.3	9.6	4.2	6.6	14.3	4.2	9.1
26	6.0	14.1	22.4	23.5	30.9	13.1	14.3	7.6	14.1	8.6	10.2	15.6	10.4	6.6	14.0	12.3	7.2	9.4	10.0	6.6	3.9	5.1	5.3	2.9	30.9	2.9	11.4
27	4.3	5.1	3.0	7.3	6.9	6.1	9.5	10.3	11.5	13.1	10.3	15.3	7.4	16.1	13.7	16.2	12.0	12.6	12.2	12.8	4.3	5.0	6.3	5.0	16.2	3.0	9.4
28	8.3	5.0	4.0	5.4	6.1	11.5	6.8	5.1	8.2	11.4	14.0	14.8	22.9	8.7	6.5	6.5	7.5	12.3	6.4	5.3	2.8	3.9	7.1	4.1	22.9	2.8	8.1
29	5.4	5.2	2.9	4.2	2.4	2.4	2.1	5.1	4.9	5.3	8.8	10.1	8.2	9.2	8.4	9.6	9.7	13.2	15.1	12.2	6.3	3.5	5.2	5.0	15.1	2.1	6.9
30	7.3	5.0	9.4	62.7	17.1	9.3	13.8	9.2	6.1	6.9	7.3	5.9	8.5	10.7	8.2	6.7	7.3	7.3	9.2	7.2	5.8	5.4	5.5	4.2	62.7	4.2	10.2
31	4.0	4.3	5.3	4.5	4.1	3.6	4.0	4.8	4.1	4.1	4.8	5.2	5.1	4.9	5.4	5.1	5.1	6.4	5.6	5.9	5.9	12.5	12.5	6.2	12.5	3.6	5.6
Max.	**69.9**	**34.3**	**22.4**	**62.7**	**39.9**	**65.2**	**67.2**	**32.8**	**32.6**	**33.7**	**91.7**	**63.7**	**82.9**	**37.6**	**61.3**	**88.5**	**43.0**	**45.0**	**79.9**	**54.4**	**93.4**	**82.0**	**56.2**	**42.9**	**93.4**		
Min.	**3.3**	**2.8**	**2.9**	**2.4**	**2.4**	**2.4**	**2.1**	**2.6**	**2.6**	**2.7**	**3.5**	**2.7**	**3.2**	**3.3**	**3.1**	**2.2**	**2.1**	**3.4**	**2.8**	**2.9**	**2.8**	**2.5**	**2.4**	**2.9**		**2.1**	
Avg.	**10.8**	**7.7**	**7.4**	**10.3**	**8.8**	**11.4**	**9.6**	**8.0**	**8.8**	**9.5**	**12.1**	**10.6**	**14.3**	**11.8**	**12.5**	**12.4**	**10.6**	**10.8**	**11.7**	**10.0**	**11.5**	**9.8**	**10.7**	**8.9**			**10.4**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.9	9.2	9.2	5.8	5.0	5.2	5.3	5.8	6.1	5.5	5.3	6.3	6.3	7.2	5.4	6.6	6.8	7.4	9.1	9.2	11.8	13.5	6.4	9.3	13.5	5.0	7.4
2	10.3	11.5	9.2	6.6	7.6	5.8	25.4	17.5	8.3	8.3	9.6	10.3	22.7	16.2	13.8		10.2	20.2	10.3	8.4	10.1	27.5	6.6	23.3	27.5	5.8	13.0
3	36.1	15.3	25.8	22.2	28.7	7.2	14.6	16.0	14.8	37.0	59.2	68.1	27.1	15.1	12.2	9.0	7.1	9.7	7.9	7.4	7.3	10.0	4.9	4.5	68.1	4.5	19.5
4	4.9	4.8	8.0	6.4	15.9	10.0	5.7	13.1	8.4	9.3	12.4	9.6	9.3	9.6	8.5	12.2	6.8	8.9	6.8	8.7	7.0	5.5	4.6	4.7	15.9	4.6	8.4
5	5.6	5.2	6.6	4.3	4.8	5.6	7.6	4.4	5.1	5.8	5.0	4.7	5.9	6.1	5.8	4.8	6.7	6.8	7.4	8.5	8.3	12.5	57.1	3.6	57.1	3.6	8.3
6	6.9	2.8	4.3	5.0	3.1	4.1	8.6	7.7	4.1	12.8	12.4	15.1	16.4	20.5	22.6	24.4	16.9	8.1	7.7	6.0	5.7	5.4	3.6	3.8	24.4	2.8	9.5
7	7.1	4.2	6.9	7.5	3.2	3.8	4.5	6.5	11.0	8.1	14.0	10.2	11.2	14.7	24.0	32.9	50.5	7.1	12.1	6.1	5.4	5.8	13.3	32.9	50.5	3.2	12.6
8	19.7	9.1	10.6	11.0	10.9	13.7	18.3	11.2	10.8	14.2	45.9	20.7	11.6	14.4	12.8	13.2	9.2	10.5	10.7	7.1	7.3	6.8	5.5	10.2	45.9	5.5	13.1
9	13.2	13.8	10.6	8.9	15.4	16.5	41.7	5.1	6.2	7.7	11.3	41.7	28.6	15.8	15.8	9.0	24.4	11.3	18.3	16.9	9.5	16.8	9.3	15.1	41.7	5.1	15.9
10	18.4	62.0	39.8	21.5	31.6	13.2	8.2	13.3	79.6	25.3	92.5	23.8	26.5	95.9	19.2	23.8	20.9	25.5	23.5	13.0	7.7	16.0	20.7	53.7	95.9	7.7	32.3
11	19.2	49.2	51.9	38.3	12.9	10.0	53.1	14.3	10.8	58.9	34.0	24.9	42.1	20.8	9.0	7.8	8.4	12.1	14.0	11.7	12.1	7.5	7.2	4.9	58.9	4.9	22.3
12	3.7	45.9	35.3	37.8	59.5	72.0	71.6	18.4	36.2	94.3	48.8	74.1	22.6	15.6	12.9	29.5	13.8	10.7	11.9	15.2	30.8	11.6	4.9	5.0	94.3	3.7	32.6
13	14.7	10.4	6.0	3.6	6.4	3.5	5.5	5.9	5.7	7.2	9.3	11.6	16.3	25.7	16.8	25.1	21.1	34.2	29.8	23.1	15.5	14.7	42.1	53.0	53.0	3.5	17.0
14	55.0	14.1	69.5	48.3	16.3	48.7	87.3	40.0	7.6	11.3	10.8	16.4	22.9	19.4	80.4	17.3	19.8	14.3	11.5	18.9	23.3	5.8	15.2	92.1	92.1	5.8	31.9
15	32.3	74.2	25.2	58.2	62.4	36.0	57.9	70.2	76.9	10.6	78.8	17.4	22.0	17.6	18.8	8.2	8.0	7.6	10.3	7.7	6.0	6.6	7.2	9.9	78.8	6.0	30.4
16	37.1	34.8	11.0	38.0	5.1	3.6	7.2	5.4	6.4	9.2	12.7	17.4	26.3	38.1	21.4	22.5	11.2	50.0	22.6	10.1	8.4	7.8	5.4	5.0	50.0	3.6	17.4
17	7.6	5.7	5.7	6.0	6.4	7.6	15.2	8.6	44.6	35.9	29.5	21.6	76.3	66.0	21.9	18.6	15.6	16.1	19.2	10.6	8.4	9.9	3.4	5.7	76.3	3.4	19.4
18	26.5	54.9	43.8	20.4	15.7	33.5	68.7	74.8	74.2	55.8	18.4	31.3	41.0	15.0	16.9	14.5	18.5	22.4	16.2	14.0	17.1	20.3	22.7	10.3	74.8	10.3	31.1
19	10.6	8.2	7.4	5.9	8.9	9.1	11.3	19.0	63.3	37.2	82.7	18.9	22.7	58.8	23.5	24.3	13.3	15.9	12.8	13.3	9.1	8.9	5.3	22.5	82.7	5.3	21.4
20	31.2	24.1	19.1	14.8	13.0	86.6	11.6	57.3	15.4	20.9	11.7	11.2	12.7	13.6	10.6	9.0	9.9	8.9	8.1	9.0	7.0	7.3	5.5	5.6	86.6	5.5	17.7
21	5.8	5.2	4.5	5.8	4.1	4.0	4.6	7.8	8.9	17.5	52.3	72.7	18.5	16.5	44.3	47.1	45.2	43.0	21.0	11.8	9.9	9.1	20.6	22.4	72.7	4.0	21.0
22	8.9	11.2	3.9	4.5	6.0	6.1	14.4	21.1	20.6	15.7	13.5	12.2	10.8	11.0	10.5	8.6	8.7	8.8	7.4	7.0	5.9	5.4	6.7	6.3	21.1	3.9	9.8
23	6.9	7.5	4.8	5.3	5.4	3.3	4.5	4.5	6.5	8.2	9.5	9.2	11.9	10.7	11.2	10.9	10.6	12.8	11.4	8.9	6.2	7.1	6.7	4.6	12.8	3.3	7.9
24	9.5	10.9	11.6	5.6	4.4	4.1	6.0	5.8	5.9	7.3	6.0	6.3	6.9	6.9	6.6	6.5	6.3	6.2	5.6	5.6	5.3	5.1	5.0	5.1	11.6	4.1	6.4
25	4.4	4.7	4.8	4.7	5.1	4.9	5.0	5.0	4.7	4.9	5.0	5.8	5.6	5.2	5.2	6.0	7.0	6.2	5.7	5.9	6.1	7.9	10.4	9.9	10.4	4.4	5.8
26	15.3	12.8	8.2	15.7	47.1	12.3	18.3	17.3	24.9	27.5	18.3	7.5	6.0	44.6	15.0	33.2	13.7	22.0	12.1	13.8	17.6	9.6	11.3	21.7	47.1	6.0	18.6
27	8.4	12.9	10.7	19.3	29.4	84.0	14.3	9.2	9.7	16.4	9.5	9.9	10.1	9.7	9.5	10.5	10.9	12.1	13.7	9.4	6.9	7.6	8.8	10.4	84.0	6.9	14.7
28	5.2	7.2	11.0	32.6	15.6	79.8	48.4	85.3	23.6	22.3	9.2	12.2	14.0	11.8	11.5	12.9	9.7	16.6	10.3	9.9	8.6	5.6	7.8	6.2	85.3	5.2	19.9
29	6.4	5.5	10.2	10.8	9.1	9.9	7.3	13.7	10.7	11.3	14.0	14.3	11.4	9.1	13.5	11.0	11.2	10.7	10.7	10.6	6.2	6.2	5.4	5.5	14.3	5.4	9.8
30	7.2	6.5	8.8	7.1	7.4	11.8	9.7	12.2	23.5	84.3	41.6	72.5	63.9	36.2	54.8	58.1	57.5	32.1	9.0	90.7	22.9	62.1	40.6	31.5	90.7	6.5	35.5
Max.	**55.0**	**74.2**	**69.5**	**58.2**	**62.4**	**86.6**	**87.3**	**85.3**	**79.6**	**94.3**	**92.5**	**74.1**	**76.3**	**95.9**	**80.4**	**58.1**	**57.5**	**50.0**	**29.8**	**90.7**	**30.8**	**62.1**	**57.1**	**92.1**	**95.9**		
Min.	**3.7**	**2.8**	**3.9**	**3.6**	**3.1**	**3.3**	**4.5**	**4.4**	**4.1**	**4.9**	**5.0**	**4.7**	**5.6**	**5.2**	**5.2**	**4.8**	**6.3**	**6.2**	**5.6**	**5.6**	**5.3**	**5.1**	**3.4**	**3.6**		**2.8**	
Avg.	**15.0**	**18.1**	**16.1**	**16.1**	**15.5**	**20.5**	**22.1**	**19.9**	**21.2**	**23.0**	**26.1**	**22.6**	**21.0**	**22.3**	**18.5**	**17.8**	**16.0**	**15.9**	**12.6**	**13.3**	**10.4**	**11.5**	**12.5**	**16.6**			**17.7**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.7	26.1	26.0	31.1	85.8	76.3	47.9	19.8	8.1	31.4	14.8	16.0	11.4	10.8	9.7	9.0	8.4	8.2	7.3	7.2	7.2	5.8	6.3	4.5	85.8	4.5	20.6
2	4.9	4.9	6.2	5.4	5.5	5.6	5.4	5.4	5.6	5.7	8.2	6.4	6.8	7.9	6.5	6.4	7.5	7.1	8.8	8.4	8.1	7.6	28.2	28.0	28.2	4.9	8.4
3	16.3	21.9	16.1	10.9	13.4	5.0	7.1	6.1	7.1	17.3	11.2	25.2	9.2	10.0	7.6	7.1	7.9	19.9	13.0	9.8	32.7	17.7	12.3	7.5	32.7	5.0	13.0
4	16.3	14.3	13.7	41.3	31.2	14.9	19.9	21.4	68.1	63.6	11.3	17.6	31.7	29.7	16.6	8.6	34.3	29.0	17.6	13.9	16.2	7.0	6.7	13.2	68.1	6.7	23.3
5	22.8	41.3	15.9	22.4	34.2	14.0	27.2	12.6	17.9	11.6	29.9	37.1	92.2	77.9	33.4	8.6	16.9	12.8	11.0	12.3	7.1	10.4	24.1	5.9	92.2	5.9	25.0
6	11.5	8.3	25.3	35.7	22.8	33.1	57.4	74.9	32.9	64.7	21.9	15.3	11.8	13.7	7.6	8.3	7.3	9.3	7.0	7.6	6.2	4.7	4.9	5.9	74.9	4.7	20.8
7	5.7	5.6	4.7	4.5	5.7	5.4	4.7	6.7	5.3	5.7	6.8	6.5	5.7	6.4	6.0	5.9	8.6	7.0	6.7	8.4	7.0	5.9	4.9	6.6	8.6	4.5	6.1
8	13.5	11.4	17.8	18.4	24.4	18.3	25.9	14.1	12.7	27.6	13.0	10.3	17.4	11.8	10.7	10.6	11.0	8.9	17.1	15.0	13.7	11.3	7.9	14.1	27.6	7.9	14.9
9	4.5	13.3	9.3	12.6	14.0	10.8	10.5	4.3	7.8	10.2	8.7	7.2	8.3	8.7	10.4	12.3	9.6	9.7	8.0	6.8	8.4	7.8	6.2	5.9	14.0	4.3	9.0
10	6.2	4.8	6.2	8.3	7.9	10.0	11.4	8.8	7.6	9.3	7.3	12.7	7.2	11.1	10.8	13.5	9.5	10.4	10.1	9.4	8.1	7.0	7.2	15.5	15.5	4.8	9.2
11	16.6	12.5	12.4	7.4	6.6	5.3	5.3	6.9	9.0	9.6	9.0	9.0	10.8	12.0	12.1	13.1	13.3	10.1	10.2	7.7	7.4	7.8	4.6	5.8	16.6	4.6	9.4
12	5.0	7.5	10.8	12.6	9.4	5.8	6.6	5.0	5.8	6.1	6.3	7.4	7.2	7.7	6.6	5.6	6.0	6.3	6.3	6.0	4.8	4.9	4.8	4.9	12.6	4.8	6.6
13	5.2	5.5	5.8	6.1	6.0	5.8	6.2	6.0	7.3	7.3	6.3	6.6	7.4	10.0	9.1	6.1	6.1	7.0	8.4	8.2	6.6	7.2	6.0	7.5	10.0	5.2	6.8
14	9.7	7.2	9.2	6.3	11.3	17.2	20.1	15.2	10.8	9.9	14.0	13.5	9.3	13.9	15.3	13.5	16.1	14.9	14.0	14.8	11.2	6.8	7.5	6.8	20.1	6.3	12.0
15	5.4	6.3	6.3	4.6	5.3	5.2	8.7	7.7	10.8	10.6	8.1	10.6	6.5	6.9	8.0	8.0	7.3	6.5	7.2	6.1	5.6	7.0	8.4	6.1	10.8	4.6	7.2
16	5.5	4.6	4.7	5.1	5.2	4.8	4.8	5.6	5.3	5.7	5.1	5.3	5.5	5.6	5.8	5.7	6.3	6.0	4.9	5.4	5.1	5.1	6.5	6.0	6.5	4.6	5.4
17	6.1	7.7	16.1	7.1	6.3	8.9	19.1	7.5	5.1	8.3	7.0	9.0	8.7	8.3	8.9	7.1	8.3	7.6	6.8	8.6	6.1	6.9	10.8	49.1	49.1	5.1	10.2
18	17.2	7.1	22.6	8.5	6.6	7.5	6.8	80.2	76.0	66.9	26.1	74.2	8.7	17.0	23.4	25.2	16.2	35.1	26.5	24.7	4.9	15.2	14.8	11.5	80.2	4.9	25.9
19	14.2	9.1	5.8	5.6	5.0	4.3	5.4	5.3	5.5	5.7	8.2	10.5	7.7	7.3	7.1	15.8	11.1	12.0	7.5	8.2	5.9	4.9	6.2	11.0	15.8	4.3	7.9
20	11.3	6.5	9.7	19.2	10.2	64.8	36.3	14.5	4.2	8.7	23.1	9.2	10.1	10.2	13.3	7.7	8.7	9.1	9.9	7.2	7.2	9.7	8.0	8.9	64.8	4.2	13.7
21	7.9	8.5	7.3	8.4	7.8	6.4	7.6	8.9	8.9	9.9	6.1	8.5	12.6	26.3	21.3	23.4	26.8	42.5	17.7	52.9	84.4	48.8	5.7	5.1	84.4	5.1	19.3
22	10.1	44.3	18.4	43.6	42.0	54.5	19.3	21.2	13.0	12.7	15.0	22.5	8.5	10.7	13.6	13.8	24.6	34.5	36.3	19.0	18.2	8.9	12.1	16.8	54.5	8.5	22.2
23	8.5	4.5	12.1	20.6	17.8	7.7	7.2	27.7	16.5	13.7	13.9	7.7	6.7	8.9	13.3	10.3	15.7	15.1	12.0	12.9	6.5	7.9	33.1	68.0	68.0	4.5	15.4
24	9.3	52.8	20.9	49.1	12.0	4.7	7.1	4.7	4.1	5.1	5.4	13.0	9.6	8.9	7.4	9.1	11.6	22.8	10.5	9.7	16.5	9.7	6.5	3.9	52.8	3.9	13.1
25	5.1	5.2	9.9	4.7	3.9	5.4	5.2	6.4	6.4	5.2	6.6	7.8	7.5	10.3	11.6	11.4	11.8	11.3	9.6	10.8	8.2	5.9	5.6	4.8	11.8	3.9	7.5
26	4.6	2.6	3.1	3.7	21.3	61.2	72.8	75.7	34.5	58.8	81.9	40.5	6.9	29.8	12.8	38.3	61.8	10.8	15.1	26.1	8.1	11.3	9.7	10.2	81.9	2.6	29.2
27	10.1	8.8	14.2	11.6	15.1	7.2	5.6	7.3	8.8	6.7	9.7	12.8	9.6	18.6	24.0	8.8	11.1	13.4	6.8	8.8	10.4	10.4	12.5	7.8	24.0	5.6	10.8
28	17.3	7.9	8.7	7.5	5.5	4.8	6.4	5.1	6.2	9.3	10.1	7.4	7.8	8.2	7.0	6.9	10.0	7.8	5.8	6.2	6.1	4.4	5.8	2.6	17.3	2.6	7.3
29	5.9	10.0	8.2	5.1	6.7	11.7	4.7	7.3	5.5	5.5	6.0	8.4	6.8	7.3	7.4	9.9	10.9	11.7	6.7	6.2	4.8	6.9	10.3	4.0	11.7	4.0	7.4
30	11.6	13.2	8.3	4.9	5.5	4.8	4.2	3.4	4.4	5.6	6.8	7.8	8.8	8.6	7.5	11.9	8.8	7.5	7.6	6.4	6.0	5.9	7.1	9.5	13.2	3.4	7.3
31	10.2	9.4	4.7	5.2	5.4	4.2	3.9	3.1	3.9	4.7	5.4	11.0	8.5	11.3	13.7	12.4	8.6	10.6	6.7	9.2	6.5	6.9	4.4	20.0	20.0	3.1	7.9
Max.	**22.8**	**52.8**	**26.0**	**49.1**	**85.8**	**76.3**	**72.8**	**80.2**	**76.0**	**66.9**	**81.9**	**74.2**	**92.2**	**77.9**	**33.4**	**38.3**	**61.8**	**42.5**	**36.3**	**52.9**	**84.4**	**48.8**	**33.1**	**68.0**	**92.2**		
Min.	**4.5**	**2.6**	**3.1**	**3.7**	**3.9**	**4.2**	**3.9**	**3.1**	**3.9**	**4.7**	**5.1**	**5.3**	**5.5**	**5.6**	**5.8**	**5.6**	**6.0**	**6.0**	**4.9**	**5.4**	**4.8**	**4.4**	**4.4**	**2.6**		**2.6**	
Avg.	**10.1**	**12.7**	**11.6**	**14.1**	**14.8**	**16.0**	**15.5**	**16.1**	**13.7**	**16.9**	**13.3**	**14.7**	**12.2**	**14.0**	**11.9**	**11.4**	**13.6**	**13.7**	**11.1**	**11.7**	**11.4**	**9.3**	**9.7**	**12.2**			**13.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.2	100.2	49.9	5.9	5.7	3.2	10.5	32.4	73.3	39.6	12.6	19.5	16.4	15.2	14.1	11.3	10.9	14.3	11.5	19.7	7.5	6.3	6.3	5.1	100.2	3.2	21.0
2	4.9	5.3	4.6	6.4	4.0	4.4	5.7	5.9	5.7	7.1	4.7	5.8	7.6	6.9	8.3	5.5	9.6	6.7	11.9	14.2	37.5	47.8	55.7	15.0	55.7	4.0	12.1
3	6.6	4.9	5.4	6.2	4.9	6.2	5.0	5.1	6.5	6.4	19.0	37.2	47.7	16.8	17.8	13.9	13.2	11.3	11.2	7.4	6.2	4.4	8.1	6.8	47.7	4.4	11.6
4	6.0	4.8	5.6	8.6	3.9	4.2	5.1	5.8	5.7	7.5	8.5	8.6	9.3	9.2	9.3	12.1	7.3	11.9	10.3	9.2	5.3	5.2	5.4	4.8	12.1	3.9	7.2
5	9.4	5.6	6.3	12.3	9.4	21.6	22.5	20.3	9.7	9.8	15.5	14.8	15.1	12.2	12.8	16.0	14.5	15.1	11.7	9.1	5.9	4.7	4.1	5.9	22.5	4.1	11.8
6	5.4	6.6	4.7	3.9	4.1	9.5	13.2	10.5	5.6	5.0	13.5	11.4	10.3	10.8	9.0	8.7	12.1	7.5	5.8	5.3	6.4	7.5	3.7	8.8	13.5	3.7	7.9
7	18.9	10.1	7.8	6.2	3.9	5.7	3.9	5.7	10.9	6.4	8.6	10.7	9.6	7.9	15.1	9.3	13.5	10.7	9.9	9.3	5.8	5.1	8.2	4.5	18.9	3.9	8.7
8	5.0	3.7	8.6	5.4	8.0	7.5	7.4	3.6	3.8	6.0	9.1	9.7	10.0	15.2	17.7	18.8	24.1	24.9	16.0	10.8	8.1	7.3	12.7	3.2	24.9	3.2	10.3
9	4.9	6.0	9.6	6.4	2.8	3.1	5.9	4.8	5.0	6.8	6.3	9.1	8.7	12.3	12.8	13.8	14.7	10.8	11.1	9.9	9.5	7.7	8.8	11.5	14.7	2.8	8.4
10	14.2	8.2	18.9	19.9	47.0	20.9	41.7	7.8	8.5	8.8	9.1	17.0	23.3	23.5	30.0	33.1	17.5	8.4	28.2	6.6	12.6	14.8	10.3	4.6	47.0	4.6	18.1
11	10.5	13.4	5.2	6.3	5.0	4.8	4.6	6.5	8.5	10.3	11.1	7.4	10.5	12.1	10.1	11.6	11.0	8.4	8.0	12.9	4.3	9.0	54.9	24.3	54.9	4.3	11.3
12	20.0	29.5	6.1	6.9	11.8	15.4	2.9	5.0	4.4	6.9	9.5	17.1	11.5	14.9	14.6	21.6	21.7	49.3	7.1	16.8	31.8	10.7	38.2	18.9	49.3	2.9	16.4
13	6.4	4.6	9.6	19.2	16.6	29.2	29.5	37.8	20.7	29.8	69.8	9.4	10.3	12.8	40.3	18.4	24.3	7.8	10.0	5.6	6.8	6.6	10.5	9.3	69.8	4.6	18.6
14	7.0	25.1	18.9	8.1	7.2	20.3	16.0	20.0	6.8	5.4	5.4	5.9	8.2	7.6	8.2	7.4	7.7	6.8	7.2	5.9	6.4	6.2	5.9	50.4	50.4	5.4	11.4
15	48.5	45.4	65.4	34.0	36.5	37.7	5.7	12.9	8.6	10.2	12.7	59.5	21.5	19.1	16.9	15.0	24.8	10.8	10.2	14.5	17.8	13.2	15.9	7.7	65.4	5.7	23.5
16	10.8	8.9	9.8	14.2	7.8	4.6	6.2	4.9	7.3	9.7	13.1	7.3	11.1	8.2	9.9	8.1	8.4	8.4	9.2	6.7	4.2	4.7	4.1	3.4	14.2	3.4	8.0
17	16.5	7.1	5.2	13.9	7.2	6.8	7.9	7.1	5.8	6.9	5.8	9.7	6.5	8.4	7.9	10.3	10.8	7.8	7.3	7.1	6.2	6.6	6.4	12.7	16.5	5.2	8.3
18	14.7	8.2	8.0	9.7	14.8	22.7	15.1	15.5	31.4	7.7	12.6	26.0	18.0	23.6	36.0	23.5	18.2	36.0	73.3	23.8	59.7	24.6	7.4	4.3	73.3	4.3	22.3
19	16.9	14.1	24.7	17.1	18.1	11.9	81.6	16.9	51.8	103.6	54.2	8.9	12.3	12.1	14.9	12.9	20.6	13.5	8.4	14.0	10.7	16.6	5.7	4.9	103.6	4.9	23.6
20	27.2	12.7	7.7	4.6	3.5	2.5	2.8	2.7	2.6	5.0	10.9	12.3	17.2	14.3	11.3	9.1	12.4	9.6	8.3	7.0	11.5	6.4	10.8	3.9	27.2	2.5	9.0
21	3.2	8.2	15.7	12.4	13.8	11.7	6.7	34.0	24.8	22.3	61.8	79.6	30.6	40.4	23.7	18.0	20.1	11.5	13.9	33.0	26.3	47.6	12.8	8.9	79.6	3.2	24.2
22	34.1	48.3	37.9	13.3	9.2	6.7	11.1	4.4	7.0	33.9	25.7	13.2	25.6	61.3	16.2	23.5	54.1	44.1	16.3	6.9	4.9	4.6	6.7	3.0	61.3	3.0	21.3
23	6.1	3.2	4.6	2.5	1.9	5.0	2.6	3.1	3.5	4.2	17.0	13.2	14.0	24.2	37.0	19.6	29.5	39.6	11.0	8.8	6.8	6.0	9.9	6.2	39.6	1.9	11.7
24	22.4	48.3	58.4	57.2	92.6	81.9	15.3	10.9	5.7	3.9	18.2	11.5	12.1	16.0	16.1	15.1	22.2	28.7	9.1	29.0	67.4	4.8	6.2	3.9	92.6	3.9	27.4
25	5.2	4.2	6.7	52.5	41.8	72.8	89.2	56.2	36.5	62.6	28.3	10.7	16.6	20.5	11.5	12.3	13.4	9.7	10.2	6.4	4.8	6.4	6.8	5.3	89.2	4.2	24.6
26	5.6	9.3	6.1	6.1	4.1	5.1	6.0	7.2	5.6	5.0	6.1	4.9	5.2	7.3	7.1	7.5	8.4	13.8	7.4	5.8	4.8	7.7	7.6	5.9	13.8	4.1	6.6
27	11.5	14.7	12.3	13.9	6.5	30.4	44.9	29.8	8.6	7.7	6.0	7.9	10.4	15.1	17.9	10.8	10.1	9.2	6.2	6.9	6.0	9.5	8.7	7.9	44.9	6.0	13.0
28	18.5	8.9	4.9	7.0	8.0	3.5	8.5	14.5	11.0	4.5	8.4	5.6	8.6	11.3	14.9	13.2	17.8	13.7	16.9	7.8	10.5	4.2	8.9	4.5	18.5	3.5	9.8
29	3.0	4.9	6.6	6.3	4.7	6.0	6.0	7.6	11.4	11.8	17.4	32.6	38.5	24.7	30.5	15.9	15.7	10.8	6.0	12.8	8.9	12.1	26.6	23.2	38.5	3.0	14.3
30	14.3	9.6	71.5	87.6	79.3	21.3	14.8	14.1	26.7	74.8	21.6	15.3	19.9	28.6	22.2	19.8	20.0	10.8	9.6	11.5	5.6	14.9	5.7	5.5	87.6	5.5	26.0
31	6.1	4.8	4.4	4.6	4.7	4.8	6.1	4.6	5.1	5.4	4.6	8.4	10.0	10.7	8.2	8.6	8.2	6.7	5.8	5.9	5.7	5.2	5.1	8.1	10.7	4.4	6.3
Max.	**48.5**	**100.2**	**71.5**	**87.6**	**92.6**	**81.9**	**89.2**	**56.2**	**73.3**	**103.6**	**69.8**	**79.6**	**47.7**	**61.3**	**40.3**	**33.1**	**54.1**	**49.3**	**73.3**	**33.0**	**67.4**	**47.8**	**55.7**	**50.4**	**103.6**		
Min.	**3.0**	**3.2**	**4.4**	**2.5**	**1.9**	**2.5**	**2.6**	**2.7**	**2.6**	**3.9**	**4.6**	**4.9**	**5.2**	**6.9**	**7.1**	**5.5**	**7.3**	**6.7**	**5.8**	**5.3**	**4.2**	**4.2**	**3.7**	**3.0**		**1.9**	
Avg.	**12.8**	**15.8**	**16.5**	**15.4**	**15.8**	**15.9**	**16.3**	**13.5**	**13.8**	**17.3**	**17.0**	**16.5**	**15.4**	**16.9**	**16.8**	**14.3**	**16.7**	**15.4**	**12.6**	**11.3**	**13.4**	**10.9**	**12.5**	**9.4**			**14.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.9	5.7	5.6	7.4	4.9	4.8	5.2	5.2	6.2	10.5	8.3	9.5	30.8	11.0	9.8	7.0	24.3	13.6	6.7	6.6	7.6	6.1	5.5	5.9	30.8	4.8	8.9
2	4.8	6.9	5.6	5.2	4.4	4.7	4.4	5.0	4.6	4.5	4.6	5.0	5.8	6.0	5.9	7.9	8.9	16.3	9.8	5.8	19.6	11.8	15.4	13.0	19.6	4.4	7.7
3	10.8	6.7	6.6	6.6	10.6	9.4	10.0	9.5	9.9	29.3	47.3	20.3	11.3	10.5	12.2	16.7	9.1	13.3	6.9	9.7	7.0	5.8	23.2	6.9	47.3	5.8	12.9
4	5.4	17.6	15.5	8.6	5.7	4.7	6.3	48.5	32.2	13.9	11.0	16.1	18.3	9.7	13.5	12.9	9.4	9.9	10.5	8.1	7.5	16.7	12.2	16.8	48.5	4.7	13.8
5	16.6	32.5	58.5	56.0	17.0	41.0	13.6	8.7	15.5	24.7	88.4	16.4	29.3	25.5	33.4	29.4	15.5	8.9	36.1	10.0	15.3	13.1	8.9	5.9	88.4	5.9	25.8
6	12.7	11.9	6.0	5.0	10.8	8.0	11.2	6.4	4.6	6.1	4.6	5.2	6.0	5.3	5.3	7.3	7.6	6.1	7.3	7.9	6.6	4.6	8.6	8.5	12.7	4.6	7.2
7	19.3	15.5	7.0	79.8	15.1	17.7	14.1	9.8	7.3	4.5	6.4	16.2	8.4	6.5	9.7	6.2	6.0	6.5	6.6	6.8	5.7	4.5	5.3	4.9	79.8	4.5	12.1
8	7.3	11.9	9.7	7.5	6.1	8.3	10.9	7.6	7.8	8.5	9.6	7.6	7.3	7.4	5.4	5.7	6.0	4.6	5.3	10.9	6.1	7.3	7.1	10.4	11.9	4.6	7.8
9	15.0	8.3	6.5	5.1	5.7	54.0	82.4	13.5	13.8	18.5	6.0	5.4	5.7	4.7	6.1	5.0	5.4	6.3	4.7	5.0	5.8	4.5	8.0	7.6	82.4	4.5	12.6
10	12.1	5.5	12.0	9.4	8.3	9.9	51.0	19.4	9.5	10.2	13.5	11.7	21.5	11.3	11.9	8.8	10.1	10.4	14.8	10.1	37.7	33.1	58.7	59.0	59.0	5.5	19.2
11	13.7	9.7	6.1	42.8	43.6	29.9	39.1	20.4	14.3	27.3	7.0	8.4	15.2	11.4	7.6	13.3	8.6	6.9	9.4	5.6	7.2	7.0	5.8	6.5	43.6	5.6	15.3
12	5.1	4.5	4.5	4.6	4.4	4.6	4.3	4.5	4.5	5.5	4.9	4.9	5.0	5.5	5.4	5.1	5.1	4.4	4.6	4.6	4.5	5.5	4.6	4.7	5.5	4.3	4.8
13	5.0	4.7	4.9	4.8	5.0	4.7	5.0	4.7	4.6	4.4	4.7	4.7	4.8	5.0	5.4	5.3	5.6	5.2	5.0	5.6	5.1	5.1	5.3	4.3	5.6	4.3	5.0
14	5.1	4.8	5.1	9.5	18.0	4.8	5.3	4.8	6.6	4.9	6.3	6.3	5.5	4.9	6.6	6.9	5.1	5.1	6.9	6.7	7.1	11.1	6.9	6.8	18.0	4.8	6.7
15	12.0	13.7	9.9	13.2	14.5	12.7	15.2	5.4	6.6	4.6	4.8	5.4	6.9	6.1	7.3	5.1	5.5	5.0	4.6	4.3	4.1	5.0	7.9	5.6	15.2	4.1	7.7
16	12.9	27.9	15.3	14.5	4.3	4.1	4.1	2.7	3.8	6.2	5.5	7.7	12.4	8.8	7.9	6.8	6.9	8.1	4.4	3.7	2.7	3.8	2.3	7.4	27.9	2.3	7.7
17	3.9	4.1	44.3	61.5	51.4	10.3	6.9	7.4	34.9	82.9	65.3	13.2	21.5	9.9	6.0	6.3	5.5	9.6	6.2	5.6	9.8	11.2	13.0	13.2	82.9	3.9	21.0
18	11.9	11.1	4.9	5.9	6.7	15.0	10.4	9.0	12.7	12.3	10.0	7.8	18.5	5.5	5.0	4.5	4.8	4.2	4.8	20.2	18.0	52.5	7.8	8.0	52.5	4.2	11.3
19	8.2	9.4	8.4	5.2	5.1	6.4	6.8	5.6	5.3	12.6	7.1	8.6	8.5	7.7	20.1	5.9	5.5	6.7	4.6	3.5	3.3	4.1	5.1	6.2	20.1	3.3	7.1
20	5.7	7.1	3.6	11.1	6.9	3.1	4.8	4.4	6.9	6.3	8.0	9.9	7.7	9.0	11.1	16.0	14.5	15.1	8.3	15.4	25.3	4.6	5.2	9.2	25.3	3.1	9.1
21	9.3	11.9	5.4	2.7	9.4	7.8	4.9	5.0	11.4	7.0	13.1	11.7	15.8	24.2	13.2	10.7	20.5	7.5	6.1	5.2	3.7	2.3	2.8	6.2	24.2	2.3	9.1
22	3.4	2.0	4.0	2.8	3.3	5.9	6.2	5.1	7.6	10.7	8.8	53.4	33.7	45.0	24.2	14.2	11.0	7.7	8.0	14.1	5.9	6.2	5.2	8.4	53.4	2.0	12.4
23	6.3	7.1	5.2	6.9	17.2	6.0	5.4	7.8	6.8	9.4	14.2	10.5	9.3	9.1	11.9	7.2	6.5	8.9	7.0	10.7	7.2	8.1	7.8	5.5	17.2	5.2	8.4
24	11.0	12.9	7.9	9.2	10.2	5.5	5.5	7.7	10.5	14.0	51.3	45.9	3.0				7.1	7.7	5.9	8.1	5.3	14.4	23.5	9.4	51.3	3.0	13.1
25	26.2	8.2	7.3	6.9	42.9	42.7	38.5	15.6	7.1	12.0	21.0	14.6	49.3	34.8	18.0	14.9	18.5	12.2	11.1	14.0	35.6	12.7	47.7	55.9	55.9	6.9	23.6
26	9.7	10.6	8.8	4.9	3.1	9.6	7.3	8.5	8.1	7.9	9.5	31.2	14.0	21.9	24.9	14.9	25.3	17.1	58.5	47.3	5.8	6.2	6.2	4.0	58.5	3.1	15.2
27	5.7	4.0	5.0	5.0	3.6	3.5	5.3	5.9	5.6	6.0	6.9	10.3	11.5	9.4	6.5	5.8	7.6	7.1	4.9	6.2	4.8	9.3	6.4	6.8	11.5	3.5	6.4
28	3.8	3.2	5.2	4.7	3.6	7.2	4.7	5.7	15.4	8.1	9.1	12.2	17.0	36.1	91.2	35.1	19.7	14.9	16.8	7.6	9.6	5.0	5.7	12.9	91.2	3.2	14.8
29	11.5	6.4	10.7	5.4	7.0	16.6	6.1	5.2	9.5	6.4	7.1	6.0	10.0	6.5	9.1	6.0	8.0	12.4	5.5	5.9	10.1	4.3	7.3	4.7	16.6	4.3	7.8
30	3.5	32.1	19.1	10.3	11.4	6.3	4.2	4.5	6.5	5.7	7.9	9.5	10.7	10.8	14.5	18.7	19.6	12.2	13.7	17.3	13.9	16.2	26.0	14.2	32.1	3.5	12.9
Max.	**26.2**	**32.5**	**58.5**	**79.8**	**51.4**	**54.0**	**82.4**	**48.5**	**34.9**	**82.9**	**88.4**	**53.4**	**49.3**	**45.0**	**91.2**	**35.1**	**25.3**	**17.1**	**58.5**	**47.3**	**37.7**	**52.5**	**58.7**	**59.0**	**91.2**		
Min.	**3.4**	**2.0**	**3.6**	**2.7**	**3.1**	**3.1**	**4.1**	**2.7**	**3.8**	**4.4**	**4.6**	**4.7**	**3.0**	**4.7**	**5.0**	**4.5**	**4.8**	**4.2**	**4.4**	**3.5**	**2.7**	**2.3**	**2.3**	**4.0**		**2.0**	
Avg.	**9.5**	**10.6**	**10.6**	**14.1**	**12.0**	**12.3**	**13.3**	**9.1**	**10.0**	**12.8**	**15.7**	**13.2**	**14.2**	**12.7**	**14.1**	**10.7**	**10.4**	**9.1**	**10.2**	**9.7**	**10.3**	**10.1**	**11.9**	**11.3**			**11.6**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	44.2	37.0	25.3	9.8	20.2	11.9	10.1	9.8	5.9	6.1	14.8	6.1	6.5	7.3	6.7	5.6	11.0	6.2	8.3	6.4	6.0	6.4	8.5	12.2	44.2	5.6	12.2
2	8.0	8.8	12.1	11.5	15.7	15.4	31.2	6.1	6.4	9.2	34.7	64.6	22.6	37.4	66.4	83.8	90.7	13.6	8.3	32.7	15.8	9.3	5.1	8.8	90.7	5.1	25.8
3	14.2	23.1	46.0	31.9	42.4	9.4	8.2	3.8	10.0	4.7	5.2	4.4	5.2	5.1	5.5	5.8	6.5	6.4	5.5	3.2	5.2	6.0	6.5	8.0	46.0	3.2	11.3
4	5.9	5.6	4.4	3.6	2.8	5.7	6.8	5.1	2.4	7.8	7.8	13.0	14.1	14.4	18.2	21.1	31.5	9.1	15.7	26.0	45.8	99.1	27.2	38.3	99.1	2.4	18.0
5	32.0	10.9	13.1	10.1	15.4	11.1	75.1	34.5	21.1	57.0	18.1	10.3	11.2	4.0	5.8	6.5	7.9	9.3	15.8	7.3	7.1	4.6	5.0	3.7	75.1	3.7	16.5
6	4.6	2.5	3.5	4.5	3.3	3.4	2.4	4.9	3.9	4.0	5.1	6.3	4.6	7.3	7.4	8.8	7.3	7.2	7.1	11.1	3.9	7.8	5.6	4.0	11.1	2.4	5.4
7	4.4	3.9	3.8	4.4	5.5	5.5	3.5	4.2	6.2	5.1	6.7	4.3	5.8	4.4	6.2	4.4	4.5	5.0	4.1	4.5	3.6	4.0	5.7	2.9	6.7	2.9	4.7
8	3.0	2.9	5.0	4.3	5.8	4.1	8.9	17.9	8.7	4.9	6.0	25.2	11.5	9.9	8.6	8.6	6.0	9.2	9.9	12.9	23.8	19.2	16.2	9.1	25.2	2.9	10.1
9	3.1	3.0	4.6	7.2	6.3	4.9	4.8	4.8	5.0	4.9	4.3	4.5	4.2	4.4	4.4	4.4	4.7	4.6	4.6	4.3	4.4	4.8	5.0	4.7	7.2	3.0	4.7
10	5.2	4.5	6.5	14.5	15.7	8.0	16.2	11.6	46.1	8.5	26.3	17.6	8.9	8.1	8.3	8.9	5.8	5.2	5.0	7.7	5.5	7.0	6.6	7.6	46.1	4.5	11.1
11	7.7	9.7	5.1	4.5	4.7	4.9	5.6	6.4	39.7	12.3	11.1	9.4	3.7	6.0	5.0	4.2	3.7	3.4	3.4	3.7	3.1	3.1	3.4	3.1	39.7	3.1	6.9
12	3.1	3.2	3.0	3.4	3.3	3.1	3.2	2.9	3.1	3.6	3.0	3.9	4.4	3.6	4.3	4.1	4.1	3.3	2.8	2.4	3.4	5.9	3.5	2.8	5.9	2.4	3.5
13	7.2	6.8	15.6	7.8	11.6	10.1	6.0	7.4	61.8	15.3	11.5	6.9	6.2	6.3	9.9	7.4	4.0	3.7	3.4	4.4	3.2	3.1	4.1	4.7	61.8	3.1	9.5
14	6.2	7.0	5.2	5.4	5.4	7.3	4.8	7.3	10.0	7.3	4.6	4.5	5.7	6.7	4.1	4.4	7.6	9.9	9.3	14.9	5.3	6.1	54.4	7.5	54.4	4.1	8.8
15	4.1	8.5	4.2	5.5	3.5	8.2	10.8	4.8	4.1	5.6	7.0	7.4	5.9	7.8	3.4	3.9	8.9	3.5	4.8	5.0	6.6	11.9	6.0	6.2	11.9	3.4	6.1
16	12.1	5.0	7.5	6.2	4.8	5.9	3.9	5.7	9.8	11.3	6.3	11.1	5.0	6.8	5.5	7.9	4.3	3.9	4.0	3.6	3.2	5.0	9.0	9.1	12.1	3.2	6.6
17	0.1	0.1	52.5	9.7	7.6	7.7	9.6	6.3	4.9	6.2	6.7	5.0	9.6	14.9	19.7	10.1	16.0	15.0	11.7	7.9	6.0	6.2	7.1	4.1	52.5	0.1	10.2
18	4.6	4.9	3.8	5.1	3.5	3.7	3.7	4.3	4.1	4.3	4.5	3.4	3.1	6.9	5.7	16.0	16.9	10.3	4.5	8.5	56.5	50.9	10.6	29.1	56.5	3.1	11.2
19	12.1	7.4	10.6	5.8	5.1	4.6	4.0	4.3	4.8	3.4	4.1	2.6	3.4	5.9	4.1	4.5	6.5	5.9	2.8	3.3	4.9	7.5	24.8	98.9	98.9	2.6	10.1
20	38.8	20.0	29.0	34.4	36.7	53.9	35.8	39.7	9.9	89.6	79.4	8.5	6.0	7.7	5.1	5.6	12.4	7.6	12.8	16.9	6.1	13.1	20.2	16.0	89.6	5.1	25.2
21	20.6	24.2	13.0	30.8	19.5	25.0	21.7	8.4	11.7	20.4	6.2	2.9	12.5	5.7	5.9	4.0	2.5	2.2	2.4	2.7	2.5	2.9	4.7	4.8	30.8	2.2	10.7
22	5.3	3.7	4.5	3.9	4.3	5.1	3.5	5.4	5.1	5.2	4.1	5.0	3.9	4.6	7.5	8.5	5.8	3.6	3.5	4.7	3.9	3.5	14.5	8.1	14.5	3.5	5.3
23	5.1	3.8	4.7	5.7	6.1	5.1	4.7	4.1	3.7	5.4	6.6	5.5	3.3	3.7	3.4	3.5	4.0	2.8	3.3	2.7	4.9	3.3	4.3	5.7	6.6	2.7	4.4
24	2.8	2.9	2.7	3.4	3.2	3.6	3.4	2.6	4.3	2.5	4.0	4.5	6.0	5.0	6.6	2.7	4.7	15.3	43.1	56.9	36.5	25.2	22.2	8.7	56.9	2.5	11.4
25	8.3	7.5	13.7	6.9	17.9	9.7	7.3	6.4	7.9	10.5	14.1	15.6	6.8	9.6	11.9	10.0	7.8	7.8	2.9	6.0	61.2	16.3	15.5	10.0	61.2	2.9	12.1
26	9.5	7.5	6.4	5.3	3.9	2.9	4.1	6.6	6.5	4.3	4.6	4.9	4.8	5.9	5.5	5.3	4.2	4.7	4.7	6.8	3.9	3.3	3.6	5.3	9.5	2.9	5.2
27	3.3	6.8	7.1	7.0	9.5	6.0	4.9	6.5	3.7	4.2	6.7	6.3	3.3	4.0	7.4	5.1	4.3	7.6	6.4	5.6	6.2	18.7	9.1	84.5	84.5	3.3	9.8
28	16.4	7.1	8.7	6.4	9.9	7.7	8.3	5.5	7.9	3.7	4.6	6.6	4.7	4.0	6.7	8.7	8.6	10.3	7.9	10.5	26.6	10.4	15.7	6.3	26.6	3.7	8.9
29	6.2	7.7	42.3	21.1	13.0	14.1	8.0	8.1	5.8	16.8	9.2	13.6	11.8	5.0	4.3	4.2	7.9	3.8	4.3	9.0	10.2	7.8	6.9	9.8	42.3	3.8	10.5
30	7.7	7.4	6.6	5.7	6.1	4.4	3.5	5.3	6.5	4.9	6.9	12.1	7.6	28.0	31.1	12.3	7.5	11.2	9.3	8.0	5.9	4.9	3.7	3.7	31.1	3.5	8.8
31	6.5	6.0	8.1	44.8	32.3	18.9	11.8	33.0	21.6	40.5	57.8	10.7	24.2	11.9	7.5	8.4	7.1	5.5	7.4	10.2	26.5	40.5	72.8	9.1	72.8	5.5	21.8
Max.	**44.2**	**37.0**	**52.5**	**44.8**	**42.4**	**53.9**	**75.1**	**39.7**	**61.8**	**89.6**	**79.4**	**64.6**	**24.2**	**37.4**	**66.4**	**83.8**	**90.7**	**15.3**	**43.1**	**56.9**	**61.2**	**99.1**	**72.8**	**98.9**	**99.1**		
Min.	**0.1**	**0.1**	**2.7**	**3.4**	**2.8**	**2.9**	**2.4**	**2.6**	**2.4**	**2.5**	**3.0**	**2.6**	**3.1**	**3.6**	**3.4**	**2.7**	**2.5**	**2.2**	**2.4**	**2.4**	**2.5**	**2.9**	**3.4**	**2.8**		**0.1**	
Avg.	**10.1**	**8.4**	**12.2**	**10.7**	**11.1**	**9.4**	**10.8**	**9.1**	**11.4**	**12.6**	**12.6**	**9.9**	**7.6**	**8.5**	**9.8**	**9.6**	**10.5**	**7.0**	**7.7**	**10.0**	**13.1**	**13.5**	**13.1**	**14.1**			**10.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.3	6.1	23.6	14.8	27.6	7.0	9.1	6.2	5.6	6.0	4.4	4.2	4.1	4.7	4.6	5.3	4.0	6.1	5.5	5.6	4.0	3.4	11.7	6.0	27.6	3.4	8.0
2	5.7	7.9	3.7	4.0	4.7	5.4	3.5	3.0	13.8	4.6	7.1	5.9	2.5	4.7	4.5	6.3	4.6	3.7	3.7	5.9	5.5	3.8	5.8	4.9	13.8	2.5	5.2
3	4.8	3.7	3.6	3.2	3.1	3.5	2.7	2.9	3.6	3.6	4.6	3.1	3.2	6.0	3.0	2.2	2.8	3.5	2.4	3.7	3.8	4.8	7.0	5.6	7.0	2.2	3.8
4	4.3	5.2	4.5	8.1	6.0	3.9	3.6	3.1	3.9	4.7	4.1	4.0	3.6	3.1	4.6	5.1	3.7	4.9	4.0	7.0	6.9	6.4	3.3	10.6	10.6	3.1	4.9
5	2.7	2.4	3.2	5.1	4.9	4.9	4.9	5.8	8.2	5.4	5.9	8.5	6.2	4.0	7.8	6.0	5.5	8.0	6.4	4.7	6.0	7.4	10.1	4.6	10.1	2.4	5.8
6	5.2	9.4	7.8	11.3	7.0	12.2	21.1	27.8	32.4	27.7	23.4	57.9	38.1	22.6	9.3	3.3	4.4	4.9	7.9	6.0	6.2	3.1	3.1	6.0	57.9	3.1	14.9
7	5.0	7.3	7.4	8.8	5.9	3.2	3.0	5.8	5.8	7.1	12.5	7.5	14.0	6.8	11.0	71.0	30.4	14.8	29.9	46.4	36.9	41.7	11.9	19.3	71.0	3.0	17.2
8	33.7	26.1	22.5	12.2	7.2	5.5	17.0	18.8	9.0	24.0	11.5	6.7	5.7	9.4	4.8	5.3	3.5	3.5	4.0	5.1	5.0	4.3	5.1	5.7	33.7	3.5	10.6
9	5.9	4.7	4.3	5.5	4.6	5.0	4.4	3.7	4.4	6.5	7.2	9.5	5.8	5.5	9.0	4.0	5.5	4.9	5.7	5.9	3.6	4.9	4.1	4.8	9.5	3.6	5.4
10	4.1	8.2	5.9	20.3	18.3	20.0	4.7	6.7	17.2	17.0	43.1	7.2	33.8	11.9	14.0	54.9	9.5	8.1	6.2	5.7	10.3	4.5	4.0	4.0	54.9	4.0	14.2
11	4.3	4.7	4.3	5.0	3.8	5.2	4.7	5.4	5.6	7.4	15.0	12.8	10.6	13.8	42.8	17.4	16.1	15.2	9.3	11.7	15.7	32.9	23.8	15.7	42.8	3.8	12.6
12	9.6	16.8	16.5	20.2	10.6	41.2	79.4	69.0	30.5	3.3	5.7	5.0	16.8	27.8	62.8	30.5	7.0	39.3	16.3	16.8	20.9	25.8	9.9	17.1	79.4	3.3	24.9
13	9.0	12.6	6.8	9.5	5.6	7.6	10.3	8.2	8.4	6.6	4.2	3.0	4.3	9.3	10.5	11.5	7.2	15.4	8.6	7.7	10.0	9.7	6.4	5.6	15.4	3.0	8.3
14	18.6	10.2	6.9	5.6	3.9	5.2	8.5	7.5	5.9	7.0	6.4	14.2	34.7	9.8	7.9	7.9	15.6	8.0	7.4	8.8	8.6	10.1	4.2	28.4	34.7	3.9	10.5
15	14.5	7.7	7.2	7.7	11.9	11.3	15.7	22.7	10.0	16.2	8.8	8.3	6.6	7.3	12.4	6.0	17.2	17.9	6.3	5.3	4.4	3.6	3.3	3.8	22.7	3.3	9.8
16	3.6	3.5	4.1	8.2	6.1	5.3	8.1	23.1	36.0	11.5	19.2	30.8	21.6	40.4	43.5	27.8	17.9	9.8	14.7	46.4	26.7	14.1	23.9	9.9	46.4	3.5	19.0
17	5.8	7.3	12.3	40.7	29.5	6.9	6.2	15.5	26.6	35.7	7.3	7.0	4.7	4.9	4.0	5.0	4.4	3.0	3.0	3.2	3.9	4.7	2.8	3.7	40.7	2.8	10.3
18	6.9	5.1	3.8	15.4	13.1	3.2	8.7	5.7	4.7	3.3	3.8	5.8	10.7	4.6	5.5	5.3	3.6	2.4	2.8	4.9	4.4	3.9	6.6	4.8	15.4	2.4	5.8
19	3.8	4.5	4.3	4.0	5.0	6.2	6.9	3.8	5.2	4.8	7.6	5.2	6.1	5.5	5.3	4.9	3.2	4.2	3.0	8.1	5.2	5.1	5.9	5.5	8.1	3.0	5.1
20	6.1	5.4	4.5	5.7	4.4	2.9	3.6	4.7	3.5	3.5	4.1	3.6	2.8	3.5	2.9	3.0	2.7	2.9	3.7	3.9	5.1	3.9	5.1	5.5	6.1	2.7	4.0
21	4.2	4.6	3.8	3.8	4.8	5.0	5.8	6.2	3.6	5.6	4.8	6.2	4.2	8.9	10.9	8.2	12.0	6.4	21.8	28.5	10.4	6.5	4.3	5.6	28.5	3.6	7.7
22	7.0	6.9	5.1	4.2	11.6	57.3	8.8	18.1	21.9	15.9	9.8	12.4	21.7	31.3	11.4	20.7	6.7	68.2	77.1	26.5	30.1	16.9	12.5	12.0	77.1	4.2	21.4
23	17.6	16.5	13.9	15.4	10.4	8.3	17.2	10.7	16.1	17.0	13.2	5.0	7.1	8.6	13.5	5.9	7.0	9.6	7.3	4.8	3.9	3.9	3.5	3.4	17.6	3.4	10.0
24	3.7	5.1	6.2	4.2	3.5	4.0	6.3	7.2	4.6	3.7	4.0	3.8	4.1	3.7	3.9	3.4	5.2	4.5	4.3	7.0	4.9	24.7	4.6	6.0	24.7	3.4	5.5
25	5.7	11.6	11.5	6.2	15.2	19.5	20.4	11.3	9.7	7.6	7.8	34.5	23.0	42.9	21.2	2.8	5.1	9.5	6.2	6.4	5.3	2.3	2.7	3.1	42.9	2.3	12.1
26	3.4	3.4	3.4	2.5	3.2	5.2	4.1	3.3	3.5	4.0	3.5	3.6	2.8	3.3	4.3	3.7	3.3	2.5	4.7	2.5	6.4	4.7	10.8	10.5	10.8	2.5	4.3
27	3.7	6.4	7.0	6.7	7.9	7.8	10.0	9.2	3.7	6.1	5.1	10.4	6.7	4.9	5.6	4.7	3.9	4.8	7.2	3.6	4.6	5.2	4.4	6.8	10.4	3.6	6.1
28	4.4	4.8	2.4	4.4	4.0	3.5	4.7	5.8	5.8	6.2	5.6	4.3	5.1	5.8	4.6	7.3	5.1	5.1	5.3	3.8	4.8	3.3	4.2	9.1	9.1	2.4	5.0
29	3.8	4.5	8.7	2.4	3.5	2.8	2.5	2.9	3.1	3.0	3.1	3.9	5.5	5.8	4.1	3.4	3.6	2.5	2.2	2.7	2.6	3.0	2.7	3.4	8.7	2.2	3.6
30	2.0	2.2	2.3	3.8	6.4	2.6	2.6	2.4	6.4	3.4	4.4	4.2	4.4	5.8	2.8	4.0	4.4	10.4	6.4	8.2	4.8	4.9	3.5	3.5	10.4	2.0	4.4
Max.	**33.7**	**26.1**	**23.6**	**40.7**	**29.5**	**57.3**	**79.4**	**69.0**	**36.0**	**35.7**	**43.1**	**57.9**	**38.1**	**42.9**	**62.8**	**71.0**	**30.4**	**68.2**	**77.1**	**46.4**	**36.9**	**41.7**	**23.9**	**28.4**	**79.4**		
Min.	**2.0**	**2.2**	**2.3**	**2.4**	**3.1**	**2.6**	**2.5**	**2.4**	**3.1**	**3.0**	**3.1**	**3.0**	**2.5**	**3.1**	**2.8**	**2.2**	**2.7**	**2.4**	**2.2**	**2.5**	**2.6**	**2.3**	**2.7**	**3.1**		**2.0**	
Avg.	**7.4**	**7.5**	**7.4**	**9.0**	**8.5**	**9.4**	**10.3**	**10.9**	**10.6**	**9.3**	**8.9**	**9.9**	**10.7**	**10.9**	**11.7**	**11.6**	**7.5**	**10.1**	**9.8**	**10.2**	**9.0**	**9.1**	**7.0**	**7.8**			**9.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (Climatronics)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	3.9	6.0	4.4	3.6	4.3	6.5	10.2	10.4	10.0	14.9	15.0	8.9	10.1	76.3	88.7	26.2	9.9	16.8	11.7	12.1	8.8	7.8	12.1	88.7	2.9	15.9
2	21.2	11.6	8.2	16.3	34.0	5.5	18.3	14.1	14.1	24.7	6.1	8.4	4.6	3.5	3.4	3.5	3.6	4.3	3.6	3.4	3.4	3.5	3.6	3.7	34.0	3.4	9.4
3	3.8	3.8	3.6	3.5	3.7	3.5	3.4	3.9	4.4	4.2	4.2	3.8	3.6	3.8	4.2	4.1	4.2	4.3	3.9	4.5	4.1	3.8	3.8	3.6	4.5	3.4	3.9
4	4.0	4.1	4.8	5.2	5.4	5.2	4.7	4.9	5.4	5.0	7.1	5.4	4.2	4.4	4.3	4.1	4.2	4.2	5.4	5.0	5.1	4.6	4.4	3.9	7.1	3.9	4.8
5	4.3	3.9	7.7	4.2	3.7	4.5	3.5	3.9	3.3	3.3	4.0	3.7	3.9	4.2	3.7	3.8	4.4	10.7	6.1	4.5	18.0	7.9	8.6	8.5	18.0	3.3	5.6
6	7.7	4.2	5.6	5.0	4.4	3.9	4.3	11.8	13.1	10.2	10.2	11.3	26.2	76.9	74.5	23.4	23.2	20.2	20.0	16.2	6.4	3.8	4.0	3.6	76.9	3.6	16.3
7	10.9	8.0	9.8	7.0	4.5	3.5	3.9	3.7	5.4	4.7	4.3	4.8	11.3	4.3	0.3	0.1	0.1	0.1	0.2	0.4	0.1	0.3	7.9	70.7	70.7	0.1	6.9
8	32.3	11.3	25.0	19.3	18.6	26.3	26.3	6.7	16.0	10.7	19.1	22.1	9.3	7.4	4.4	4.5	4.8	8.1	10.5	10.2	9.3	8.0	5.6	5.3	32.3	4.4	13.4
9	10.6	12.0	12.2	33.8	8.7	5.4	5.3	5.1	3.7	3.8	5.0	5.3	16.7	55.7	16.7	51.1	24.8	9.0	7.8	29.4	23.3	29.5	40.1	26.6	55.7	3.7	18.4
10	14.0	6.0	12.7	5.7	5.8	4.5	8.0	9.5	11.7	7.0	8.0	5.5	8.0	8.6	14.5	17.5	59.3	46.0	84.5	3.6	3.8	11.6	6.5	3.7	84.5	3.6	15.2
11	3.2	4.3	16.6	33.9	45.8	64.2	14.9	34.2	41.2	48.3	31.7	24.8	7.6	9.9	4.5	10.0	3.2	6.5	6.9	6.8	6.0	3.5	4.2	3.9	64.2	3.2	18.2
12	4.9	2.8	14.7	7.2	16.1	6.2	10.6	17.8	10.7	13.8	14.2	32.2	69.7	26.0	13.1	53.3	34.7	15.9	4.0	5.3	4.8	5.5	3.9	4.8	69.7	2.8	16.3
13	7.8	7.1	3.8	4.3	4.8	3.6	4.5	6.0	3.5	6.6	6.9	7.7	6.7	77.4	11.9	5.2	6.6	26.9	13.8	13.5	14.1	30.0	25.8	11.2	77.4	3.5	12.9
14	4.3	5.0	5.0	5.9	7.3	8.8	10.8	8.6	4.2	5.3	10.3	8.1	6.8	6.1	5.4	7.2	8.0	6.0	5.0	6.7	5.7	4.4	4.8	4.1	10.8	4.1	6.4
15	4.5	4.3	5.1	5.1	4.9	4.9	5.2	4.4	4.7	5.1	5.3	4.3	4.8	7.2	13.4	11.2	9.2	9.2	19.1	54.2	5.9	20.3	11.2	9.9	54.2	4.3	9.7
16	9.3	8.0	11.9	18.9	93.8	12.9	15.7	8.0	9.7	8.1	4.8	8.7	3.8	2.9	3.6	4.3	3.5	3.4	3.7	3.3	3.3	3.0	7.9	5.7	93.8	2.9	10.8
17	6.3	5.1	4.3	4.4	3.7	3.9	4.1	4.0	3.8	4.2	4.0	4.2	4.4	4.6	6.1	4.2	4.5	3.8	4.1	4.0	4.9	5.1	7.7	6.6	7.7	3.7	4.7
18	6.5	5.7	4.6	3.8	3.6	4.3	4.5	4.2	6.4	5.8	4.5	4.1	4.0	5.0	4.3	3.8	4.0	4.1	3.8	3.8	3.9	3.8	3.9	3.9	6.5	3.6	4.4
19	3.8	4.1	4.2	4.3	4.0	5.1	4.8	3.9	3.7	4.1	5.8	5.1	7.6	4.3	5.4	8.4	9.5	12.1	5.2	4.1	4.2	5.5	4.6	6.3	12.1	3.7	5.4
20	11.4	8.5	12.8	6.2	6.8	6.9	18.3	17.8	11.6	15.0	14.9	15.3	17.3	82.1	4.5	6.2	25.0	12.8	50.8	32.0	59.0	13.2	10.7	5.7	82.1	4.5	19.4
21	8.1	6.6	10.9	6.6	4.4	7.2	4.2	4.9	5.9	8.3	3.7	5.2	11.4	65.6	23.7	64.5	45.7	63.7	48.6	22.5	16.4	7.6	7.2	9.6	65.6	3.7	19.3
22	8.4	7.7	11.5	7.5	9.1	14.8	6.4	8.9	5.5	10.0	5.8	7.2	8.1	5.5	14.1	5.9	6.4	4.4	8.3	8.9	4.4	4.4	4.9	5.2	14.8	4.4	7.6
23	6.7	4.6	4.0	3.8	3.8	4.2	6.1	9.6	52.0	5.0	4.0	2.9	4.8	2.4	3.3	3.3	3.2	5.1	4.9	4.4	4.6	3.1	3.5	4.1	52.0	2.4	6.4
24	2.9	2.9	7.6	4.2	3.4	3.3	2.5	19.5	8.6	11.4	8.6	8.8	3.8	13.6	6.8	7.6	8.3	20.9	69.8	10.9	9.6	13.9	11.8	13.6	69.8	2.5	11.4
25	19.6	9.3	4.6	4.7	6.0	5.1	8.2	5.8	4.0	6.3	4.9	4.7	4.9	4.8	6.4	5.9	41.5	4.1	3.3	3.9	2.8	2.8	2.7	2.7	41.5	2.7	7.1
26	2.8	3.0	3.1	3.3	3.2	2.8	3.3	4.3	2.9	3.3	3.8	3.0	3.2	2.3	2.5	2.8	2.5	2.4	2.9	3.6	3.2	3.3	2.7	3.8	4.3	2.3	3.1
27	3.5	4.9	4.4	4.2	3.5	3.3	3.5	3.1	3.0	2.9	3.0	3.7	3.6	2.5	4.7	3.3	4.3	3.0	3.4	3.6	3.9	3.9	4.3	3.2	4.9	2.5	3.6
28	2.8	4.6	5.6	5.1	5.4	9.2	11.4	4.6	10.3	5.8	3.4	2.8	9.4	7.4	4.3	3.4	3.9	4.7	3.6	4.5	6.5	4.9	8.8	4.7	11.4	2.8	5.7
29	4.9	5.2	5.8	5.0	5.2	6.1	3.7	3.8	2.9	5.2	3.6	4.6	4.5	4.7	3.9	3.9	3.4	3.1	5.1	10.8	8.4	8.2	6.8	4.9	10.8	2.9	5.1
30	5.4	5.2	14.3	13.4	7.0	5.6	6.4	14.0	9.4	7.0	12.5	6.4	10.8	9.9	10.0	8.0	3.8	7.2	6.7	6.6	4.5	5.1	5.6	5.7	14.3	3.8	7.9
31	5.6	12.7	17.5	9.4	7.3	4.3	3.6	3.3	3.8	2.1	4.5	5.1	2.4	2.6	4.1	4.2	2.3	2.1	2.0	2.6	3.6	3.1	4.9	7.5	17.5	2.0	5.0
Max.	**32.3**	**12.7**	**25.0**	**33.9**	**93.8**	**64.2**	**26.3**	**34.2**	**52.0**	**48.3**	**31.7**	**32.2**	**69.7**	**82.1**	**76.3**	**88.7**	**59.3**	**63.7**	**84.5**	**54.2**	**59.0**	**30.0**	**40.1**	**70.7**	**93.8**		
Min.	**2.8**	**2.8**	**3.1**	**3.3**	**3.2**	**2.8**	**2.5**	**3.1**	**2.9**	**2.1**	**3.0**	**2.8**	**2.4**	**2.3**	**0.3**	**0.1**	**0.1**	**0.1**	**0.2**	**0.4**	**0.1**	**0.3**	**2.7**	**2.7**		**0.1**	
Avg.	**7.9**	**6.1**	**8.6**	**8.6**	**11.0**	**8.2**	**7.6**	**8.5**	**9.5**	**8.6**	**7.8**	**8.2**	**9.6**	**17.0**	**11.6**	**13.8**	**12.5**	**10.9**	**14.0**	**9.8**	**8.6**	**7.6**	**7.8**	**8.7**			**9.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.1	5.6	7.2	8.7	8.7	9.5	8.7	9.0	9.2	9.5	8.5	10.0	9.5	10.5	10.4	9.0	9.7	8.2	8.8	9.1	8.6	7.7	9.6	8.4	10.5	4.1	8.7
2	7.4	7.6	6.6	7.4	8.1	6.9	6.7	7.6	6.6	6.4	5.2	5.1	3.9	5.3	5.0	5.3	6.1	5.7	4.5	4.3	3.7	3.4	3.7	3.6	8.1	3.4	5.7
3	4.0	4.4	3.6	2.7	1.7	2.8	4.7	4.2	3.1	3.6	4.2	5.0	4.5	4.4	4.8	5.1	5.7	5.1	4.7	4.9	4.4	4.0	4.5	3.4	5.7	1.7	4.1
4	4.6	3.9	4.2	4.4	4.0	4.9	5.1	5.7	6.6	5.5	5.0	5.7	5.3	5.8	6.5	5.1	7.3	8.4	9.3	9.6	9.5	10.6	12.0	12.0	12.0	3.9	6.7
5	12.4	12.2	9.8	9.9	10.3	13.5	14.5	13.8	14.2	14.3	15.9	15.6	17.5	18.0	18.0	18.5	19.1	19.5	21.1	21.9	20.6	20.8	19.2	19.2	21.9	9.8	16.2
6	17.0	16.4	16.9	16.3	13.0	13.5	13.1	14.8	12.7	12.4	14.1	12.1	11.9	12.2	12.0	11.8	12.5	12.2	10.1	10.2	8.9	8.4	7.9	6.4	17.0	6.4	12.4
7	5.5	6.6	6.4	6.6	6.6	7.4	7.7	8.8	9.8	8.7	8.4	8.3	8.2	7.2	7.4	8.5	9.5	10.3	12.6	12.4	8.2	7.2	6.1	5.5	12.6	5.5	8.1
8	8.8	7.5	7.5	7.3	6.7	6.5	6.9	6.9	8.2	9.3	7.4	8.9	8.7	10.0	10.4	10.2	10.3	8.5	4.1	6.5	6.1	5.8	6.3	5.8	10.4	4.1	7.7
9	5.3	5.2	5.8	6.6	6.7	6.7	7.6	10.1	10.8	10.0	8.7	11.3	10.6	12.0	13.5	13.5	13.5	12.6	12.8	16.4	17.3	16.8	18.1	16.4	18.1	5.2	11.2
10	13.8	12.9	12.5	11.8	11.9	11.9	12.0	10.8	10.3	9.4	8.4	13.2	12.9	10.5	10.4	10.7	8.7	8.1	7.4	9.6	11.2	8.9	9.5	9.5	13.8	7.4	10.7
11	9.9	13.6	17.9	17.2	15.5	16.3	16.9	12.0	11.9	13.4	15.2	15.7	15.0	14.5	12.0	12.9	11.3	10.9	9.0	8.1	6.4	6.9	6.5	6.8	17.9	6.4	12.3
12	8.8	9.8	7.9	6.5	6.0	7.0	9.0	8.3	10.5	9.7	10.4	10.1	9.7	9.5	8.2	11.0	13.4	12.1	14.7	16.2	17.9	17.9	16.5	16.2	17.9	6.0	11.1
13	19.8	20.8	18.3	19.3	18.3	17.6	17.7	16.5	14.4	15.0	16.0	13.2	13.2	14.3	13.9	14.3	13.4	12.5	11.1	11.0	12.1	11.6	9.0	7.2	20.8	7.2	14.6
14	7.2	4.6	3.9	1.3	1.5	1.8	2.5	4.4	7.7	8.6	9.7	7.4	11.4	7.6	9.6	11.1	10.6	12.4	14.8	10.0	13.3	16.3	20.2	18.8	20.2	1.3	9.0
15	19.7	20.9	22.4	22.8	18.5	16.2	16.6	16.2	15.3	14.0	14.3	12.4	12.6	11.3	10.9	11.0	13.5	12.2	10.3	11.0	11.9	9.8	11.8	12.4	22.8	9.8	14.5
16	8.7	4.2	3.2	2.5	2.0	4.9	7.1	5.9	3.9	2.0	3.5	5.9	6.6	8.9	4.5	3.3	2.4	4.1	4.3	2.0	2.1	3.8	3.1	5.0	8.9	2.0	4.3
17	4.6	5.1	9.1	11.1	6.2	6.2	10.5	12.3	13.2	12.3	14.2	17.9	19.4	15.9	12.5	13.0	13.4	13.8	12.3	9.4	10.5	8.8	9.1	8.1	19.4	4.6	11.2
18	7.9	8.2	8.5	7.4	6.0	4.7	4.3	4.2	3.9	3.6	2.8	2.6	1.2	1.8	0.9	1.4	1.9	1.6	1.8	3.0	4.5	6.8	8.3	10.2	10.2	0.9	4.5
19	9.3	9.8	12.7	14.9	15.6	16.7	11.0	16.9	16.1	17.7	22.0	27.0	28.9	28.6	27.5	30.3	29.5	28.8	31.1	30.5	30.6	29.1	26.3	24.2	31.1	9.3	22.3
20	20.8	17.7	16.0	13.4	12.8	11.7	11.3	10.9	9.3	8.7	7.9	8.0	7.6	6.8	4.9	4.3	3.7	2.1	1.4	0.4	1.2	3.4	4.1	4.0	20.8	0.4	8.0
21	5.6	6.3	6.9	7.1	6.4	11.2	14.3	9.6	14.6	14.6	15.7	16.9	17.7	19.7	20.2	20.6	19.7	22.7	25.1	26.3	27.1	27.3	24.8	22.2	27.3	5.6	16.8
22	22.2	16.9	18.4	16.4	15.6	16.0	16.5	13.3	13.5	15.5	18.1	19.0	19.3	19.0	16.3	15.5	9.4	7.1	5.6	1.4	1.4	1.5	4.4	4.9	22.2	1.4	12.8
23	7.3	9.8	13.2	16.2	15.6	14.6	15.0	13.7	10.3	6.7	11.3	10.7	11.3	11.0	12.6	12.7	15.1	15.7	14.7	11.5	7.9	8.4	7.2	7.0	16.2	6.7	11.6
24	6.2	3.3	4.1	3.1	1.5	4.1	6.3	5.6	7.3	11.4	12.6	10.6	12.4	12.2	12.1	13.0	14.9	14.6	14.8	13.5	13.0	12.8	13.3	10.7	14.9	1.5	9.7
25	8.9	6.7	2.5	1.6	3.4	7.7	8.1	9.5	9.3	10.7	12.9	15.0	14.2	13.0	13.0	13.4	15.1	14.9	14.6	12.0	11.1	10.7	11.9	9.8	15.1	1.6	10.4
26	8.4	10.3	10.8	10.0	10.8	11.5	12.0	12.2	11.8	9.8	9.6	6.1	4.2	2.1	1.5	2.7	2.4	2.8	3.4	2.7	5.2	7.1	7.7	7.8	12.2	1.5	7.2
27	9.9	10.5	10.7	14.2	15.0	12.2	10.4	14.6	16.8	21.0	21.3	21.4	22.5	22.4	21.1	22.2	21.9	21.9	22.9	22.6	23.3	23.4	22.1	20.4	23.4	9.9	18.5
28	18.9	18.9	15.7	13.1	12.7	13.4	12.2	9.8	10.8	9.6	9.0	6.9	6.5	5.9	4.6	2.9	0.8	0.0	0.4	2.1	1.7	1.5	1.0	1.7	18.9	0.0	7.5
29	2.1	3.3	4.9	3.8	3.1	2.6	2.4	2.1	0.9	1.6	2.1	1.0	1.2	1.7	1.6	2.2	2.3	3.2	4.6	4.9	3.3	3.8	3.0	2.9	4.9	0.9	2.7
30	2.6	3.0	4.1	5.8	5.8	6.0	6.0	5.2	6.1	6.7	7.2	8.3	8.5	9.5	10.4	9.7	9.3	10.3	10.9	10.6	10.3	9.3	7.9	8.2	10.9	2.6	7.6
31	7.1	6.8	7.9	8.3	6.7	6.4	6.1	6.1	5.7	4.3	3.2	2.9	2.8	2.1	2.0	1.4	1.9	0.9	1.4	1.3	1.2	0.6	1.1	1.0	8.3	0.6	3.7
Max.	**22.2**	**20.9**	**22.4**	**22.8**	**18.5**	**17.6**	**17.7**	**16.9**	**16.8**	**21.0**	**22.0**	**27.0**	**28.9**	**28.6**	**27.5**	**30.3**	**29.5**	**28.8**	**31.1**	**30.5**	**30.6**	**29.1**	**26.3**	**24.2**	**31.1**		
Min.	**2.1**	**3.0**	**2.5**	**1.3**	**1.5**	**1.8**	**2.4**	**2.1**	**0.9**	**1.6**	**2.1**	**1.0**	**1.2**	**1.7**	**0.9**	**1.4**	**0.8**	**0.0**	**0.4**	**0.4**	**1.2**	**0.6**	**1.0**	**1.0**		**0.0**	
Avg.	**9.6**	**9.5**	**9.7**	**9.6**	**8.9**	**9.4**	**9.8**	**9.7**	**9.8**	**9.9**	**10.5**	**10.8**	**10.9**	**10.8**	**10.3**	**10.5**	**10.6**	**10.4**	**10.5**	**10.2**	**10.1**	**10.1**	**10.2**	**9.7**			**10.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.4	0.8	0.8	0.8	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.2
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.1	5.6	10.3	10.3	9.2	9.4	9.9	9.1	8.5	7.2	8.7	10.3	0.0	3.7
3	10.7	11.1	11.2	11.0	10.1	9.4	11.4	10.6	9.9	12.3	13.5	11.7	9.8	8.4	10.2	8.0	4.6	8.2	7.5	6.8	7.2	6.2	6.7	6.2	13.5	4.6	9.3
4	5.8	5.3	4.9	5.0	5.1	4.3	3.9	4.6	4.4	3.4	3.1	1.5	2.5	3.2	3.6	4.1	6.7	7.9	8.1	7.7	8.4	8.8	8.8	8.9	8.9	1.5	5.4
5	9.1	6.7	7.7	8.2	9.7	9.4	9.1	9.5	8.6	8.6	10.7	6.4	6.4	5.5	0.9	0.0	0.6	5.0	8.1	7.0	7.4	7.2	7.0	7.1	10.7	0.0	6.9
6	6.9	5.4	4.7	5.4	3.8	4.6	5.1	5.2	5.7	6.6	6.1	8.0	9.1	9.2	8.2	8.5	8.0	7.9	9.4	9.1	10.2	11.0	9.9	10.0	11.0	3.8	7.4
7	9.8	7.8	11.0	9.0	8.7	8.1	9.0	9.9	9.1	7.3	7.3	3.9	1.9	4.2	3.7	2.7	5.3	6.4	7.2	7.0	7.1	6.8	5.0	5.5	11.0	1.9	6.8
8	6.8	2.9	2.1	1.5	2.1	2.7	2.9	4.1	2.1	3.1	3.2	2.4	4.9	4.4	5.0	3.0	4.9	6.9	5.3	5.9	3.7	4.9	8.0	4.4	8.0	1.5	4.0
9	6.2	7.3	13.7	15.5	15.6	14.9	13.2	12.9	10.4	9.1	3.0	2.5	2.7	2.4	2.8	3.4	4.4	4.8	5.6	5.7	5.6	6.0	5.9	6.2	15.6	2.4	7.5
10	5.8	7.0	6.9	7.1	6.9	5.7	6.9	5.2	5.1	4.5	4.3	3.1	3.4	3.6	2.9	1.4	3.4	1.4	1.9	1.9	3.5	3.3	3.1	1.6	7.1	1.4	4.2
11	1.6	4.7	4.2	6.5	7.1	8.2	5.6	6.2	5.3	3.7	3.2	4.6	4.4	4.4	3.2	3.1	2.1	1.9	1.7	1.1	2.2	0.7	1.6	2.2	8.2	0.7	3.7
12	2.2	1.6	1.4	1.3	1.3	3.6	5.4	3.9	3.3	4.6	3.8	4.7	4.3	4.2	5.3	5.5	5.6	5.0	5.5	5.2	4.6	4.8	3.2	5.0	5.6	1.3	4.0
13	11.1	7.5	9.2	14.4	17.2	15.6	19.2	14.8	19.3	23.9	25.4	22.0	20.4	19.5	20.1	19.0	19.5	17.7	16.0	17.9	18.1	18.3	17.6	17.0	25.4	7.5	17.5
14	16.5	17.4	17.3	15.5	14.8	14.9	15.1	12.8	15.4	18.1	16.9	13.5	9.9	13.2	12.6	12.1	12.1	12.0	10.4	9.2	7.1	3.2	3.3	7.0	18.1	3.2	12.5
15	9.8	10.6	11.0	11.2	10.8	8.6	10.6	9.6	6.4	4.7	2.6	2.9	2.2	2.0	3.2	3.0	2.2	2.0	3.1	3.2	4.2	6.3	5.9	13.6	13.6	2.0	6.2
16	15.8	11.8	12.9	15.1	12.1	12.0	12.0	14.9	14.8	12.2	12.9	11.4	10.3	10.5	10.0	8.4	6.8	7.8	8.9	9.7	10.1	9.9	7.8	5.6	15.8	5.6	11.0
17	6.1	7.4	10.6	10.2	10.4	8.3	11.9	9.7	4.6	5.2	7.7	7.7	10.5	13.8	12.8	10.6	7.7	18.7	23.5	21.8	22.0	21.2	21.7	20.1	23.5	4.6	12.7
18	20.3	21.2	20.0	19.4	20.6	24.0	25.5	25.8	25.3	22.7	20.8	18.5	17.3	16.0	16.5	16.5	14.8	12.5	14.1	12.7	12.4	13.8	13.5	12.7	25.8	12.4	18.2
19	10.8	8.3	3.8	4.3	6.7	6.0	3.5	9.1	7.1	5.9	6.5	9.8	6.6	11.6	11.4	11.0	10.5	11.2	10.6	11.7	8.9	4.7	3.1	5.8	11.7	3.1	7.9
20	14.0	19.6	21.7	20.5	19.8	22.6	24.5	23.3	20.5	20.7	18.9	14.0	14.6	13.4	14.9	12.2	6.7	5.0	6.0	11.2	12.0	9.1	10.7	12.6	24.5	5.0	15.4
21	12.2	11.8	9.2	10.9	11.4	7.2	9.4	10.8	11.6	12.7	12.9	13.1	12.1	10.7	9.5	8.7	8.7	4.1	3.5	2.7	3.0	2.1	2.3	3.0	13.1	2.1	8.5
22	3.2	3.9	4.8	3.3	2.5	1.6	1.0	3.9	4.5	2.7	2.4	2.5	3.6	5.6	15.2	17.1	16.4	15.5	14.4	13.2	12.3	9.0	7.7	9.0	17.1	1.0	7.3
23	9.0	8.0	7.0	2.3	1.6	0.8	0.7	0.9	2.0	3.1	2.9	2.7	2.8	3.3	3.2	3.9	3.8	5.4	5.8	7.0	6.7	6.1	7.0	6.3	9.0	0.7	4.3
24	7.7	9.6	10.3	11.0	11.5	11.6	10.7	8.5	8.7	11.0	9.2	10.0	10.6	9.9	8.5	8.0	8.7	8.8	10.1	12.4	14.1	15.3	8.1	7.8	15.3	7.7	10.1
25	11.2	12.5	16.1	15.0	14.3	13.1	12.9	11.5	8.6	6.6	5.4	4.5	3.6	4.3	4.7	4.3	2.8	2.8	3.1	2.1	3.6	4.4	3.1	1.7	16.1	1.7	7.2
26	3.0	3.9	4.5	4.1	2.2	1.7	2.5	2.1	2.1	2.6	2.6	3.2	2.7	3.2	3.0	2.9	3.5	5.4	6.4	6.6	7.4	6.9	7.3	8.1	8.1	1.7	4.1
27	8.6	8.5	6.4	6.9	7.2	5.2	4.7	4.3	2.7	1.8	1.4	0.7	1.8	1.6	0.8	0.8	1.7	2.6	3.8	2.4	5.4	5.4	7.8	3.3	8.6	0.7	4.0
28	6.5	6.3	7.4	6.1	7.0	7.0	2.4	5.1	3.6	2.4	2.6	2.9	3.2	3.2	3.9	3.6	4.0	4.7	4.4	5.0	5.1	4.8	4.4	4.8	7.4	2.4	4.6
29	5.6	5.8	6.3	6.8	6.4	6.3	5.8	6.0	5.8	7.7	8.1	5.7	5.8	5.9	5.7	4.8	5.3	5.8	5.1	6.0	6.0	5.1	5.4	5.3	8.1	4.8	5.9
Max.	**20.3**	**21.2**	**21.7**	**20.5**	**20.6**	**24.0**	**25.5**	**25.8**	**25.3**	**23.9**	**25.4**	**22.0**	**20.4**	**19.5**	**20.1**	**19.0**	**19.5**	**18.7**	**23.5**	**21.8**	**22.0**	**21.2**	**21.7**	**20.1**	**25.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**8.2**	**8.1**	**8.5**	**8.6**	**8.5**	**8.2**	**8.4**	**8.5**	**7.8**	**7.8**	**7.5**	**6.7**	**6.5**	**6.8**	**7.2**	**6.8**	**6.6**	**7.1**	**7.6**	**7.7**	**7.8**	**7.4**	**7.0**	**7.2**			**7.6**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.1	6.2	5.0	4.4	4.5	4.1	2.5	1.2	2.4	2.5	2.5	3.9	7.3	6.3	5.5	5.0	4.3	3.8	5.5	7.4	8.4	9.4	8.1	6.8	9.4	1.2	5.1
2	9.5	8.2	10.7	12.1	19.7	14.6	15.3	15.8	14.1	13.5	13.1	11.5	10.1	8.6	7.5	6.5	6.4	8.8	8.3	6.1	6.5	6.4	6.1	4.5	19.7	4.5	10.2
3	4.7	5.3	5.9	6.6	13.1	15.7	19.9	20.1	21.6	20.8	24.2	25.5	27.1	26.2	25.0	24.0	23.8	22.6	21.0	21.2	19.0	20.9	21.5	19.1	27.1	4.7	18.9
4	17.2	16.5	17.5	18.2	15.0	17.0	19.8	19.7	18.9	20.5	21.2	21.8	23.5	23.1	21.8	22.2	21.4	22.2	22.3	21.4	21.8	21.6	19.5	18.3	23.5	15.0	20.1
5	20.1	22.1	18.9	20.9	22.2	25.1	23.0	15.1	15.7	22.9	29.1	26.1	20.8	19.2	21.7	22.8	23.5	22.6	21.7	25.1	25.4	23.3	23.0	23.0	29.1	15.1	22.2
6	21.6	20.2	17.7	16.2	15.4	13.9	11.3	9.5	11.2	12.9	10.7	6.2	9.3	12.1	14.9	17.2	17.9	18.2	15.6	7.2	4.6	6.8	9.4	8.7	21.6	4.6	12.9
7	7.2	7.7	7.6	5.8	5.1	5.1	4.8	5.1	4.9	4.7	4.3	3.9	3.2	3.2	2.5	0.8	1.7	3.7	4.5	8.0	7.6	6.7	8.5	10.2	10.2	0.8	5.3
8	11.4	10.7	9.0	2.6	2.3	3.6	4.3	4.8	6.2	5.5	5.0	5.8	10.8	5.7	5.5	7.6	9.0	11.1	12.3	12.3	13.0	14.0	13.2	12.5	14.0	2.3	8.3
9	8.2	7.3	8.3	7.4	7.5	8.0	8.2	7.8	6.7	6.6	5.3	3.8	3.7	4.1	5.1	4.0	5.1	5.5	4.6	3.9	3.1	2.3	2.0	1.2	8.3	1.2	5.4
10	1.3	1.6	3.4	3.7	6.1	3.5	3.5	4.1	4.8	5.2	6.3	2.1	0.9	3.2	4.0	1.5	3.4	1.7	1.1	2.4	1.6	3.0	1.2	1.8	6.3	0.9	3.0
11	1.9	4.4	5.0	3.6	1.4	2.5	3.7	4.2	3.4	2.2	2.2	2.6	4.5	3.3	3.8	4.6	4.8	2.4	2.7	3.5	4.3	4.2	4.9	4.8	5.0	1.4	3.5
12	5.0	5.3	5.3	5.5	5.5	4.4	3.0	1.8	1.1	0.8	0.7	1.0	1.8	2.3	2.9	3.6	4.1	4.5	4.3	4.7	5.2	4.4	4.2	4.6	5.5	0.7	3.6
13	4.9	5.0	5.2	5.2	5.1	4.6	4.6	4.1	3.6	3.0	2.7	2.3	2.0	3.0	6.0	5.8	5.1	4.8	4.3	5.8	6.4	4.3	2.9	1.6	6.4	1.6	4.3
14	1.1	1.9	1.6	1.1	1.0	0.1	0.5	0.9	0.3	0.0	0.0	0.2	1.8	2.9	2.8	3.3	3.2	3.4	4.2	5.6	7.9	9.5	9.5	11.0	11.0	0.0	3.1
15	15.0	15.8	12.0	13.3	13.3	13.6	15.7	17.2	15.7	15.2	16.4	16.5	15.5	14.5	14.2	14.3	14.4	14.4	14.7	14.6	13.2	12.6	12.4	11.4	17.2	11.4	14.4
16	8.5	5.5	5.1	5.9	5.5	6.0	3.8	4.6	4.4	2.6	1.7	2.0	1.1	0.7	0.6	0.6	0.9	1.7	2.4	3.5	3.6	4.6	3.8	4.1	8.5	0.6	3.5
17	4.1	4.2	4.3	4.0	4.0	3.6	3.2	3.1	2.6	2.4	3.0	2.6	1.3	1.7	1.0	0.3	0.4	6.6	13.5	13.8	12.7	10.7	9.2	5.3	13.8	0.3	4.9
18	3.1	5.2	5.4	6.4	6.2	5.6	4.7	6.9	8.2	9.0	8.5	8.8	9.6	9.2	9.5	9.6	9.3	10.5	11.3	11.8	11.7	12.1	10.8	13.7	13.7	3.1	8.6
19	13.3	12.7	11.7	12.7	12.2	14.2	13.6	12.8	13.6	13.0	11.0	10.3	10.1	12.3	14.3	15.1	13.6	11.6	10.6	11.5	9.6	10.1	10.0	9.0	15.1	9.0	12.0
20	8.7	8.4	7.7	6.4	6.3	6.0	6.0	5.3	4.3	3.5	2.9	1.7	1.3	0.5	0.7	1.5	2.4	3.5	5.4	6.4	6.2	6.1	7.0	7.2	8.7	0.5	4.8
21	6.5	6.4	7.4	6.5	6.7	6.7	6.2	5.3	5.6	4.9	4.4	4.0	3.3	3.9	3.4	5.4	4.9	5.4	6.0	10.8	11.9	8.9	7.3	7.5	11.9	3.3	6.2
22	6.7	6.0	6.6	8.0	7.5	8.8	9.9	10.7	10.2	10.9	12.0	11.6	10.8	9.8	9.3	9.2	8.8	9.1	9.5	7.9	7.4	4.9	3.6	2.9	12.0	2.9	8.4
23	4.9	4.5	4.6	3.3	4.1	5.7	6.0	4.5	4.4	5.2	4.5	4.7	5.7	8.3	9.4	8.4	8.4	7.7	8.8	9.7	10.0	10.0	8.9	7.9	10.0	3.3	6.7
24	7.6	7.0	6.5	5.5	5.6	4.8	3.5	3.6	4.1	4.3	5.2	5.7	6.3	6.6	6.7	6.6	5.4	6.0	7.5	7.0	5.6	4.9	5.2	4.2	7.6	3.5	5.6
25	2.9	1.4	2.0	2.7	3.5	4.1	3.7	3.5	3.1	1.2	0.6	0.8	1.5	3.3	4.1	4.1	3.4	3.5	4.8	5.5	5.7	6.0	6.0	6.0	6.0	0.6	3.5
26	5.6	5.2	4.3	6.0	5.7	4.4	5.1	5.7	4.9	3.4	5.7	6.1	6.0	6.3	7.3	8.3	8.1	6.6	7.6	7.2	6.1	5.4	4.5	6.7	8.3	3.4	5.9
27	5.7	5.2	5.6	3.9	3.5	2.6	2.4	2.1	2.0	2.5	3.1	4.2	5.1	6.1	6.0	6.6	7.9	8.6	8.4	7.7	4.8	4.9	4.3	4.4	8.6	2.0	4.9
28	3.8	5.4	5.6	6.4	5.8	5.7	4.7	3.5	3.8	3.5	2.8	1.3	1.0	0.9	0.5	0.7	0.7	1.2	0.9	1.2	1.1	1.9	3.4	3.8	6.4	0.5	2.9
29	5.5	6.1	6.2	4.7	5.9	5.2	5.0	5.0	8.2	7.8	11.1	12.6	14.8	15.2	15.8	15.1	15.8	14.6	15.1	15.7	16.3	17.0	17.1	20.9	20.9	4.7	11.5
30	21.3	21.3	21.5	22.2	22.5	22.4	22.4	21.2	19.7	19.4	19.1	19.7	18.9	17.2	16.0	15.0	14.3	14.8	15.0	17.7	18.5	15.7	14.4	15.2	22.5	14.3	18.5
31	13.9	13.6	10.8	9.8	9.2	12.2	12.7	13.8	14.5	15.3	16.2	16.0	17.2	18.5	17.1	17.1	18.2	19.2	19.2	20.4	22.8	22.9	21.8	21.1	22.9	9.2	16.4
Max.	**21.6**	**22.1**	**21.5**	**22.2**	**22.5**	**25.1**	**23.0**	**21.2**	**21.6**	**22.9**	**29.1**	**26.1**	**27.1**	**26.2**	**25.0**	**24.0**	**23.8**	**22.6**	**22.3**	**25.1**	**25.4**	**23.3**	**23.0**	**23.0**	**29.1**		
Min.	**1.1**	**1.4**	**1.6**	**1.1**	**1.0**	**0.1**	**0.5**	**0.9**	**0.3**	**0.0**	**0.0**	**0.2**	**0.9**	**0.5**	**0.5**	**0.3**	**0.4**	**1.2**	**0.9**	**1.2**	**1.1**	**1.9**	**1.2**	**1.2**		**0.0**	
Avg.	**8.3**	**8.3**	**8.0**	**7.8**	**8.1**	**8.2**	**8.2**	**7.8**	**7.9**	**7.9**	**8.2**	**7.9**	**8.3**	**8.3**	**8.5**	**8.6**	**8.7**	**9.0**	**9.5**	**9.9**	**9.7**	**9.5**	**9.2**	**9.0**			**8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	21.7	22.7	21.7	21.9	20.8	19.5	19.2	19.1	17.9	17.2	16.3	14.5	13.6	14.7	15.1	13.8	11.8	10.5	9.9	8.4	6.9	6.2	4.5	2.7	22.7	2.7	14.6
2	1.9	0.9	0.0	0.0	0.0	0.0	4.3	2.1	1.6	2.8	3.1	3.1	3.3	2.9	2.2	2.6	3.0	3.0	2.9	4.8	5.3	6.7	8.5	9.1	9.1	0.0	3.1
3	9.6	10.4	10.6	9.9	8.3	6.8	6.7	6.7	7.3	7.2	5.8	9.8	9.8	11.1	11.2	11.6	12.1	13.2	16.7	18.5	17.5	19.2	19.3	19.0	19.3	5.8	11.6
4	20.3	22.1	23.5	22.8	22.5	22.1	24.4	22.2	21.5	20.1	19.8	17.2	16.0	14.5	13.3	14.4	14.7	14.0	12.8	14.3	12.4	15.1	12.0	8.4	24.4	8.4	17.5
5	7.2	7.5	7.4	8.7	7.5	6.1	5.7	5.3	5.3	4.3	4.3	2.7	3.7	5.1	6.5	7.3	7.4	8.1	8.5	8.4	8.7	8.7	9.2	8.2	9.2	2.7	6.7
6	11.0	11.2	11.6	10.9	12.3	10.9	8.8	6.8	6.9	7.2	7.3	9.9	10.2	10.4	12.1	11.7	11.2	11.6	11.6	12.6	9.1	7.8	7.4	6.6	12.6	6.6	9.9
7	6.7	8.0	6.9	6.5	7.4	9.8	8.3	6.4	5.9	6.0	6.9	6.8	9.6	8.3	8.5	7.9	6.9	6.2	5.1	5.4	5.0	4.6	4.1	4.2	9.8	4.1	6.7
8	4.3	3.7	2.6	2.5	1.8	1.3	0.9	0.6	0.4	1.3	1.7	1.7	2.2	2.2	2.9	3.0	3.0	1.6	2.9	3.1	3.5	5.9	7.2	6.9	7.2	0.4	2.8
9	8.1	9.3	10.7	11.6	10.8	10.3	10.5	9.0	7.9	8.0	6.4	5.8	8.1	8.2	8.3	9.6	9.5	11.7	11.8	10.6	8.8	6.5	8.6	8.9	11.8	5.8	9.1
10	5.8	5.3	7.1	8.7	8.3	7.7	7.0	7.9	4.6		4.4	5.2	5.5	6.1	5.6	5.0	6.0	6.3	6.9	7.7	7.8	7.1	6.0	7.4	8.7	4.4	6.5
11	6.4	4.5	4.6	5.2	5.4	4.8	6.4	5.3	5.1	5.0	4.8	6.2	7.9	8.4	7.5	8.7	9.8	11.9	10.4	9.8	9.6	9.1	8.1	8.8	11.9	4.5	7.2
12	7.5	5.6	5.7	8.3	6.3	3.8	5.7	6.4	6.2	6.1	6.2	7.0	9.3	9.5	8.8	9.5	9.5	8.0	6.7	8.8	7.7	4.4	3.3	1.7	9.5	1.7	6.8
13	2.5	2.0	2.6	3.6	3.2	4.5	4.3	4.9	5.3	6.2	6.9	5.2	5.8	6.9	12.5	11.3	8.7	8.2	2.4	1.4	5.9	7.7	13.5	16.6	16.6	1.4	6.3
14	12.4	10.3	12.8	12.1	9.0	8.6	9.2	8.3	8.4	7.9	6.1	7.4	6.8	7.9	4.2	3.3	4.8	2.7	5.2	7.2	7.7	6.8	3.8	2.6	12.8	2.6	7.3
15	2.4	3.4	2.5	0.7	0.7	1.3	3.5	4.8	7.1	9.1	11.1	13.6	15.3	18.0	18.8	21.7	22.0	22.7	24.7	26.2	22.5	21.8	19.6	19.8	26.2	0.7	13.1
16	22.1	19.7	17.2	16.2	11.6	13.4	16.0	15.1	16.3	17.1	16.0	13.5	11.4	12.5	12.0	11.0	10.1	8.7	4.7	2.4	6.3	6.8	6.4	3.7	22.1	2.4	12.1
17	6.6	4.5	3.2	3.0	3.7	3.9	3.6	4.1	3.2	2.9	1.7	1.7	6.8	7.1	3.9	2.6	3.1	3.5	2.4	1.5	1.8	2.7	2.9	3.4	7.1	1.5	3.5
18	3.1	2.5	1.7	2.2	2.1	2.3	2.7	3.1	3.2	2.6	2.4	2.5	3.4	6.4	7.2	7.5	7.1	7.5	6.8	5.2	7.0	5.7	7.6	8.7	8.7	1.7	4.6
19	7.3	8.1	8.1	8.1	7.3	6.3	9.2	9.7	10.2	10.3	10.7	11.2	11.3	10.2	10.1	10.7	11.5	10.2	10.3	9.5	8.5	10.7	8.7	10.7	11.5	6.3	9.5
20	10.3	9.4	10.8	14.8	9.6	8.1	7.0	9.8	12.8	14.6	15.7	18.2	18.6	17.5	17.7	15.4	10.6	10.0	11.2	9.2	10.2	11.8	12.8	12.4	18.6	7.0	12.4
21	12.8	12.1	11.9	12.4	11.8	10.5	10.9	10.5	8.8	8.1	8.6	10.5	11.9	11.5	10.3	12.4	8.7	7.7	7.9	8.4	10.2	8.5	9.1	9.6	12.8	7.7	10.2
22	8.4	7.7	6.7	6.2	5.4	7.8	6.2	4.4	4.6	4.7	3.1	1.8	2.1	2.2	2.1	3.1	3.9	2.9	2.1	1.5	2.4	1.5	2.2	3.0	8.4	1.5	4.0
23	2.7	2.7	3.3	3.8	3.1	3.3	4.2	4.9	3.5	2.8	2.8	1.9	1.2	2.6	3.0	2.0	1.3	1.6	1.5	1.5	2.9	1.7	2.4	1.9	4.9	1.2	2.6
24	1.8	1.4	2.2	2.1	4.0	3.9	1.8	1.6	1.8	1.0	1.3	2.8	2.2	0.9	1.2	1.1	1.9	2.8	3.9	2.9	3.1	5.0	9.2	10.2	10.2	0.9	2.9
25	11.8	8.9	7.5	11.4	11.9	9.7	11.3	12.1	10.1	11.8	11.9	12.5	11.9	12.6	14.2	14.4	12.7	13.5	13.5	14.4	12.7	9.9	9.5	8.6	14.4	7.5	11.6
26	10.2	8.3	10.7	10.0	9.8	10.7	11.3	10.9	13.7	15.3	16.4	16.5	16.6	16.7	16.8	16.6	16.3	15.7	15.6	15.7	14.9	15.8	15.5	15.1	16.8	8.3	14.0
27	15.5	15.9	16.9	17.1	17.4	14.7	13.9	15.0	17.3	17.1	17.3	16.5	13.5	13.5	13.2	12.2	11.6	11.2	10.7	10.3	8.8	7.6	7.0	6.1	17.4	6.1	13.4
28	6.3	6.5	5.3	5.4	4.3	3.9	4.2	4.8	5.1	3.4	1.5	0.9	3.5	4.7	3.1	4.0	4.8	4.7	4.4	5.7	5.7	5.7	6.3	7.1	7.1	0.9	4.6
29	6.0	5.9	4.6	4.0	4.2	4.7	5.6	6.8	6.6	6.5	6.2	5.5	5.1	3.5	3.7	6.3	7.1	7.3	7.2	7.0	7.5	7.1	7.0	7.3	7.5	3.5	5.9
30	7.3	7.9	7.6	6.7	6.7	6.7	7.2	6.8	6.8	5.9	4.6	4.9	4.0	2.8	2.4	2.5	3.0	4.2	5.4	7.4	7.0	6.1	5.3	4.8	7.9	2.4	5.6
Max.	**22.1**	**22.7**	**23.5**	**22.8**	**22.5**	**22.1**	**24.4**	**22.2**	**21.5**	**20.1**	**19.8**	**18.2**	**18.6**	**18.0**	**18.8**	**21.7**	**22.0**	**22.7**	**24.7**	**26.2**	**22.5**	**21.8**	**19.6**	**19.8**	**26.2**		
Min.	**1.8**	**0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.9**	**0.6**	**0.4**	**1.0**	**1.3**	**0.9**	**1.2**	**0.9**	**1.2**	**1.1**	**1.3**	**1.6**	**1.5**	**1.4**	**1.8**	**1.5**	**2.2**	**1.7**		**0.0**	
Avg.	**8.7**	**8.3**	**8.3**	**8.6**	**7.9**	**7.6**	**8.0**	**7.8**	**7.9**	**8.0**	**7.7**	**7.9**	**8.4**	**8.6**	**8.6**	**8.8**	**8.5**	**8.4**	**8.2**	**8.3**	**8.3**	**8.1**	**8.2**	**8.1**			**8.2**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.9	5.2	5.3	5.5	6.4	6.9	6.9	7.0	7.1	7.3	7.7	7.9	7.9	7.8	8.1	7.7	8.3	7.8	7.6	8.2	8.1	8.4	6.9	7.9	8.4	4.9	7.2
2	7.1	7.2	7.2	7.3	6.9	8.1	8.5	9.4	8.8	8.3	6.5	5.9	4.8	2.9	4.4	5.8	5.5	6.1	4.8	2.7	1.3	2.7	3.5	1.6	9.4	1.3	5.7
3	1.5	2.0	2.7	4.8	5.0	3.8	2.0	3.3	4.3	3.2	2.7	3.5	4.8	7.5	5.5	8.3	5.4	3.5	2.1	4.1	6.1	4.9	2.3	6.9	8.3	1.5	4.2
4	8.5	3.3	7.9	5.7	6.2	7.4	5.0	7.8	6.5	5.4	5.6	2.1	1.6	2.4	2.8	3.9	2.4	1.3	0.6	1.6	1.3	1.5	1.5	3.1	8.5	0.6	4.0
5	4.1	3.8	3.9	3.7	3.9	3.7	3.1	3.1	2.1	2.4	1.8	1.5	0.7	1.4	1.8	2.5	2.6	1.9	2.6	2.7	5.3	4.7	3.4	2.5	5.3	0.7	2.9
6	2.3	2.0	2.6	2.4	2.4	2.9	3.1	3.5	7.0	7.9	8.3	10.3	10.7	10.7	11.6	13.3	14.8	15.9	16.7	16.3	16.5	15.8	15.6	16.8	16.8	2.0	9.5
7	17.2	18.1	18.3	17.7	16.7	15.6	16.1	16.1	16.3	16.8	17.2	17.9	19.2	19.9	19.8	18.3	16.8	17.3	18.6	16.3	18.2	15.7	17.0	17.9	19.9	15.6	17.5
8	19.6	20.2	17.3	18.4	18.7	17.6	16.8	16.1	15.8	15.9	15.5	15.2	15.7	16.3	15.7	16.2	15.8	16.6	17.2	16.3	16.1	16.2	16.1	15.4	20.2	15.2	16.7
9	13.8	12.0	8.2	8.5	10.5	5.4	4.8	7.3	12.6	14.7	14.2	13.3	11.6	10.2	8.4	8.5	7.9	6.1	4.8	3.1	2.0	2.4	1.3	1.7	14.7	1.3	8.1
10	1.9	3.0	3.3	4.1	2.4	1.8	2.0	2.2	1.5	2.0	1.1	0.8	0.8	2.0	3.0	2.6	2.6	2.7	2.8	3.8	2.7	3.9	3.8	5.8	5.8	0.8	2.6
11	8.3	9.5	9.3	10.5	11.3	13.4	14.2	15.2	16.8	18.9	19.5	17.8	19.8	23.5	23.5	24.4	22.8	21.8	25.2	24.4	24.4	22.7	15.3	15.2	25.2	8.3	17.8
12	17.7	13.1	11.3	9.8	10.8	13.3	13.0	11.1	5.6	9.6	14.3	14.9	14.0	14.5	18.4	19.9	18.7	16.8	16.0	16.1	16.6	17.4	16.8	16.3	19.9	5.6	14.4
13	14.7	14.0	14.6	13.8	12.1	11.7	9.6	8.4	9.0	9.1	10.5	11.4	12.5	12.9	13.4	14.4	15.2	15.7	17.5	16.2	15.7	16.0	16.1	18.5	18.5	8.4	13.5
14	17.5	12.0	6.9	2.6	5.7	3.5	9.1	10.9	9.9	7.8	6.7	6.3	7.3	6.3	8.0	8.2	8.7	9.0	8.5	8.3	5.9	3.4	2.7	3.0	17.5	2.6	7.4
15	2.0	1.9	4.4	6.6	6.0	5.6	4.8	5.6	4.7	4.0	4.6	6.0	6.1	6.9	7.3	6.9	6.7	5.9	5.5	6.0	6.3	6.4	6.3	5.8	7.3	1.9	5.5
16	6.4	6.5	5.2	5.5	5.6	3.2	2.1	2.1	3.2	2.8	3.1	5.5		7.8	8.5	7.9	7.6	6.7	5.5	4.1	3.4	3.6	3.3	2.0	8.5	2.0	4.9
17	2.7	3.9	3.4	3.6	3.6	3.7	2.4	2.8	3.5	4.2	3.3	2.1	1.2	1.0	1.7	2.1	2.5	2.6	3.9	4.0	4.4	6.3	7.0	6.1	7.0	1.0	3.4
18	5.5	7.5	7.5	7.3	6.9	5.2	5.8	7.8	8.7	5.9	5.0	5.0	5.4	5.0	5.3	6.3	6.4	6.2	8.2	6.6	6.9	5.0	4.7	4.4	8.7	4.4	6.2
19	4.8	4.9	4.2	4.5	3.6	2.0	2.8	1.8	1.4	3.3	3.6	3.7	3.6	3.5	4.4	3.8	6.7	7.5	6.8	6.5	6.9	7.7	7.8	7.0	7.8	1.4	4.7
20	5.9	6.8	5.9	5.7	6.5	6.4	6.4	5.7	5.2	4.0	4.1	3.3	2.4	2.6	3.1	3.1	3.4	3.1	2.8	4.2	5.2	5.4	4.8	4.4	6.8	2.4	4.6
21	2.9	3.0	2.0	0.7	1.0	0.9	1.1	1.4	1.9	2.1	1.2	2.1	3.0	4.6	5.2	5.5	5.1	4.4	5.4	6.2	8.4	8.7	8.3	8.3	8.7	0.7	3.9
22	8.4	8.6	9.4	8.3	4.6	2.0	3.4	3.1	2.8	3.3	2.5	2.0	2.1	3.5	4.0	5.9	8.4	9.5	9.2	13.6	12.0	15.0	17.3	17.4	17.4	2.0	7.3
23	18.9	21.7	23.6	22.5	24.7	25.5	27.2	25.9	25.9	25.9	27.7	25.5	27.0	26.8	25.1	27.8	26.3	23.9	21.4	21.6	19.4	19.6	20.1	17.7	27.8	17.7	23.8
24	17.6	18.3	15.5	16.5	16.1	15.5	13.5	12.7	14.6	16.1	13.8	13.1	13.6	12.7	11.8	11.6	11.8	10.9	9.9	7.0	5.1	5.8	5.6	5.2	18.3	5.1	12.3
25	4.9	5.2	5.4	5.5	5.7	5.4	4.4	4.1	4.3	6.0	7.4	8.2	6.4	7.3	7.6	7.2	8.3	6.8	7.0	6.5	5.6	5.2	5.1	5.6	8.3	4.1	6.1
26	5.1	4.1	2.6	2.4	3.2	3.9	3.4	3.2	2.0	3.1	3.3	3.6	4.5	3.5	4.0	7.5	6.7	7.4	9.4	7.9	7.3	6.7	7.0	8.3	9.4	2.0	5.0
27	7.6	8.8	8.1	7.6	6.4	5.2	3.5	2.5	2.7	4.0	4.5	4.5	4.9	4.0	4.6	4.8	4.7	5.0	5.0	5.4	6.0	5.7	7.6	6.6	8.8	2.5	5.4
28	5.5	5.1	5.1	5.1	5.8	5.0	5.0	4.8	3.7	3.8	4.5	5.6	3.8	3.5	4.2	4.4	5.0	5.8	7.0	7.3	7.8	7.2	6.2	6.1	7.8	3.5	5.3
29	6.0	6.4	6.1	6.2	6.2	6.9	6.5	6.7	6.9	5.8	5.3	6.0	6.7	6.7	6.8	7.4	6.2	5.7	5.2	5.2	5.6	5.4	5.4	5.2	7.4	5.2	6.1
30	4.9	4.2	2.4	0.8	2.2	2.8	3.0	3.3	6.7	7.3	9.0	9.8	10.4	10.5	11.2	11.7	12.6	11.3	9.1	10.8	11.2	10.7	11.9	13.0	13.0	0.8	8.0
31	12.3	11.0	10.3	10.4	10.9	12.8	13.3	13.9	15.9	16.0	16.5	17.1	16.7	15.6	16.1	16.2	15.3	14.9	13.7	14.5	12.1	9.9	8.8	10.6	17.1	8.8	13.5
Max.	**19.6**	**21.7**	**23.6**	**22.5**	**24.7**	**25.5**	**27.2**	**25.9**	**25.9**	**25.9**	**27.7**	**25.5**	**27.0**	**26.8**	**25.1**	**27.8**	**26.3**	**23.9**	**25.2**	**24.4**	**24.4**	**22.7**	**20.1**	**18.5**	**27.8**		
Min.	**1.5**	**1.9**	**2.0**	**0.7**	**1.0**	**0.9**	**1.1**	**1.4**	**1.4**	**2.0**	**1.1**	**0.8**	**0.7**	**1.0**	**1.7**	**2.1**	**2.4**	**1.3**	**0.6**	**1.6**	**1.3**	**1.5**	**1.3**	**1.6**		**0.6**	
Avg.	**8.4**	**8.2**	**7.7**	**7.6**	**7.7**	**7.3**	**7.2**	**7.4**	**7.6**	**8.0**	**8.1**	**8.1**	**8.3**	**8.5**	**8.9**	**9.5**	**9.4**	**9.0**	**9.0**	**9.0**	**8.8**	**8.7**	**8.4**	**8.6**			**8.3**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.0	8.7	6.8	13.0	12.9	12.3	12.9	14.8	14.4	16.6	20.1	17.5	16.1	15.5	15.7	14.5	13.9	11.5	9.4	9.5	10.8	6.4	7.8	4.7	20.1	4.7	12.3
2	4.8	6.5	8.6	8.6	5.8	4.6	1.9	2.3	3.4	6.1	7.6	9.1	6.8	6.0	6.6		4.6	4.8	3.5	4.5	3.7	2.5	4.1	2.9	9.1	1.9	5.2
3	2.3	2.4	1.7	2.4	3.2	5.3	3.6	2.6	1.5	1.4	1.6	2.2	4.1	6.3	6.5	8.2	8.2	8.6	8.9	9.7	9.1	9.6	10.0	11.9	11.9	1.4	5.5
4	10.7	9.1	8.1	4.3	3.9	4.4	5.4	4.9	6.6	6.9	7.3	7.6	7.3	7.4	8.9	8.9	10.4	10.6	9.6	9.5	9.4	8.8	8.2	7.4	10.7	3.9	7.7
5	8.3	9.6	9.5	10.5	10.7	9.5	11.0	12.2	12.1	12.1	13.8	14.1	13.5	13.5	14.2	13.8	12.6	11.0	7.9	5.3	4.6	3.0	2.5	6.3	14.2	2.5	10.1
6	6.3	7.5	7.9	7.1	7.5	7.3	5.0	4.8	4.6	4.3	4.4	4.6	5.2	3.9	5.4	4.2	6.1	13.2	11.0	10.8	8.2	8.6	8.0	5.7	13.2	3.9	6.7
7	3.9	6.4	5.4	4.3	5.3	5.4	6.7	7.4	8.7	6.6	6.7	7.5	6.6	5.5	4.7	3.0	3.9	8.1	6.5	8.6	9.3	8.7	7.4	3.1	9.3	3.0	6.2
8	3.6	3.7	2.6	2.9	2.5	3.1	2.5	2.9	3.3	2.7	2.2	3.0	4.5	4.6	5.7	5.7	5.2	6.5	7.1	6.6	6.7	6.2	5.4	4.6	7.1	2.2	4.3
9	4.7	3.8	3.8	4.0	3.8	3.3	2.4	6.0	5.0	4.0	3.0	2.1	2.6	4.6	4.1	6.1	4.3	5.4	4.5	3.9	4.5	4.0	3.5	3.5	6.1	2.1	4.0
10	2.9	1.9	1.3	1.4	1.4	1.3	1.9	1.7	0.9	1.3	1.2	2.0	1.9	1.6	3.7	3.6	3.4	3.2	4.5	4.4	4.7	4.2	3.3	2.5	4.7	0.9	2.5
11	1.5	1.7	0.9	1.2	1.3	1.3	1.0	1.4	1.8	0.9	1.7	2.0	1.4	2.9	4.0	4.5	4.8	4.6	3.5	3.4	3.7	4.3	4.1	4.3	4.8	0.9	2.6
12	4.9	2.8	1.6	1.3	0.9	1.5	0.9	2.0	1.3	0.7	1.4	1.1	2.3	2.6	2.6	1.7	2.7	3.7	3.0	2.4	1.1	2.4	2.4	1.5	4.9	0.7	2.0
13	2.2	2.6	4.1	6.0	6.3	6.1	5.1	4.2	6.4	3.1	3.0	3.1	2.9	2.5	3.1	3.1	3.4	2.3	2.8	3.6	5.2	3.9	2.1	2.3	6.4	2.1	3.7
14	2.6	3.2	0.8	1.4	1.6	0.9	1.3	1.5	2.5	2.5	3.6	2.6	2.9	3.2	3.0	5.6	6.5	7.2	6.8	4.7	7.0	8.2	5.3	1.7	8.2	0.8	3.6
15	2.6	0.9	1.6	1.5	1.4	1.8	1.5	0.8	1.0	2.2	1.8	2.9	3.3	4.2	5.2	7.8	8.6	8.8	6.9	5.4	6.4	8.8	8.0	4.8	8.8	0.8	4.1
16	3.2	0.7	1.3	0.8	2.6	3.4	3.3	3.4	2.5	2.8	2.6	2.4	1.4	2.9	3.0	3.5	2.6	1.1	2.9	3.7	4.9	4.7	3.5	3.2	4.9	0.7	2.8
17	2.7	2.5	2.3	2.0	1.6	1.8	2.0	2.0	1.0	1.6	2.0	2.0	1.5	2.3	4.4	5.1	5.2	4.9	5.0	6.1	6.3	5.4	6.9	6.6	6.9	1.0	3.5
18	3.8	1.4	2.1	2.0	1.5	1.5	0.8	1.3	1.1	1.6	3.1	2.0	3.5	5.7	6.1	6.0	5.1	5.2	4.7	4.2	3.5	3.2	3.0	3.7	6.1	0.8	3.2
19	2.8	3.1	3.2	3.4	2.9	1.8	1.6	1.1	1.0	1.7	2.0	2.6	2.3	1.9	3.5	5.4	5.2	5.4	5.0	4.7	5.1	4.1	3.7	2.4	5.4	1.0	3.2
20	4.0	2.5	2.5	3.2	1.7	0.8	1.6	1.0	2.6	3.7	5.0	6.1	6.5	8.1	8.8	9.3	9.8	10.6	9.7	9.1	9.2	9.6	10.4	8.0	10.6	0.8	6.0
21	6.7	8.2	8.9	6.9	5.8	5.1	4.7	4.2	4.0	2.7	1.4	1.4	2.3	2.4	2.1	2.6	2.0	2.1	4.6	5.5	5.2	4.4	3.6	2.8	8.9	1.4	4.1
22	3.9	4.2	4.1	4.3	4.8	4.0	3.4	3.3	3.4	4.5	4.0	5.6	5.9	7.1	7.4	7.4	8.1	9.1	9.9	10.2	10.2	11.6	9.3	8.1	11.6	3.3	6.4
23	7.5	7.6	7.7	7.7	9.5	7.8	9.6	8.3	10.3	9.2	9.5	9.7	10.0	8.4	8.4	8.7	7.7	6.8	7.1	7.9	7.8	6.2	4.4	5.9	10.3	4.4	8.1
24	6.3	7.0	6.6	6.9	8.7	8.0	8.3	9.9	12.3	12.9	15.0	15.2	14.3	14.1	14.5	14.9	14.9	13.6	13.4	14.3	14.1	15.8	14.8	15.3	15.8	6.3	12.1
25	15.8	16.9	18.0	20.5	20.5	18.4	18.2	19.3	21.5	22.0	21.2	22.5	24.4	25.9	25.2	21.7	17.2	16.1	14.0	14.2	12.0	12.8	8.3	7.1	25.9	7.1	18.1
26	8.2	6.3	4.1	4.0	1.8	3.9	3.6	4.5	3.7	4.5	7.2	7.5	8.7	5.0	3.9	3.7	5.0	5.8	4.5	3.1	2.4	2.9	3.6	2.0	8.7	1.8	4.6
27	3.3	1.9	1.3	1.2	1.4	0.7	3.0	4.2	5.0	5.2	5.9	6.9	8.0	9.9	9.6	8.8	7.8	8.0	7.5	7.3	6.8	5.2	5.1	5.4	9.9	0.7	5.4
28	6.5	5.4	5.1	3.3	1.8	1.9	1.8	2.1	2.0	4.3	4.5	4.9	5.1	7.0	6.4	7.0	5.3	4.4	5.3	4.7	4.8	6.6	5.8	5.4	7.0	1.8	4.6
29	5.1	5.5	4.6	4.7	5.3	4.5	3.9	3.6	3.8	3.8	3.6	3.8	4.5	6.2	7.0	8.3	8.2	8.2	8.1	8.1	8.3	6.7	6.6	6.8	8.3	3.6	5.8
30	6.1	5.5	5.8	5.5	5.7	4.4	3.5	2.5	1.7	0.7	1.4	1.4	1.3	2.0	1.6	1.6	3.9	3.1	4.6	3.3	1.6	0.8	0.8	1.1	6.1	0.7	2.9
Max.	**15.8**	**16.9**	**18.0**	**20.5**	**20.5**	**18.4**	**18.2**	**19.3**	**21.5**	**22.0**	**21.2**	**22.5**	**24.4**	**25.9**	**25.2**	**21.7**	**17.2**	**16.1**	**14.0**	**14.3**	**14.1**	**15.8**	**14.8**	**15.3**	**25.9**		
Min.	**1.5**	**0.7**	**0.8**	**0.8**	**0.9**	**0.7**	**0.8**	**0.8**	**0.9**	**0.7**	**1.2**	**1.1**	**1.3**	**1.6**	**1.6**	**1.6**	**2.0**	**1.1**	**2.8**	**2.4**	**1.1**	**0.8**	**0.8**	**1.1**		**0.7**	
Avg.	**5.2**	**5.0**	**4.7**	**4.9**	**4.8**	**4.5**	**4.4**	**4.7**	**5.0**	**5.1**	**5.6**	**5.8**	**6.0**	**6.4**	**6.8**	**7.0**	**6.9**	**7.1**	**6.7**	**6.6**	**6.6**	**6.3**	**5.7**	**5.0**			**5.7**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.3	0.8	1.1	1.0	0.8	1.1	1.6	3.0	3.3	2.6	4.4	6.2	8.0	10.0	11.8	12.8	13.0	11.8	11.5	11.0	8.8	10.9	11.7	12.8	13.0	0.8	6.7
2	13.5	13.3	11.5	10.9	10.3	9.9	11.2	10.8	11.5	12.7	13.0	14.0	13.5	12.4	13.8	14.4	13.7	12.5	11.0	10.2	8.6	8.4	5.3	3.3	14.4	3.3	11.2
3	6.0	3.7	4.6	9.4	7.4	12.2	12.1	12.3	9.0	7.1	4.7	3.6	6.4	7.6	10.6	9.6	7.2	6.5	5.3	4.3	1.8	3.5	4.1	5.6	12.3	1.8	6.9
4	3.3	3.1	3.4	1.2	1.0	2.0	1.8	1.0	1.2	2.1	2.5	2.6	2.2	2.5	3.7	4.0	2.7	2.5	3.5	4.4	4.0	4.7	3.7	1.8	4.7	1.0	2.7
5	1.6	1.1	1.9	1.0	1.7	3.4	3.4	2.3	1.6	2.6	2.0	1.5	1.5	1.1	3.4	6.0	4.2	3.3	3.5	3.7	4.2	3.7	1.2	3.3	6.0	1.0	2.6
6	3.8	4.0	1.7	1.5	2.4	1.4	1.0	0.7	1.8	1.7	3.6	5.1	6.5	7.9	6.6	6.1	7.6	6.6	7.1	7.3	7.7	7.7	8.4	7.6	8.4	0.7	4.8
7	7.3	7.7	7.9	7.9	7.4	6.7	7.4	9.0	10.2	9.4	9.8	8.7	8.4	8.5	8.0	8.0	6.9	6.4	6.6	6.0	5.7	4.9	4.0	3.6	10.2	3.6	7.4
8	3.7	3.3	2.5	2.6	2.0	1.7	1.9	2.0	2.5	2.5	3.6	3.9	3.9	3.9	4.7	4.3	4.4	4.2	3.5	3.8	3.1	2.4	3.4	3.8	4.7	1.7	3.2
9	4.1	2.8	2.7	3.0	4.7	4.1	4.2	5.8	7.2	7.6	7.1	8.4	9.1	8.5	8.2	8.5	9.4	10.4	10.8	10.8	8.8	9.0	9.4	10.6	10.8	2.7	7.3
10	10.3	10.0	8.5	5.3	5.2	4.3	5.1	6.6	7.4	8.2	8.0	8.1	7.2	6.4	6.0	5.0	6.0	7.5	7.4	6.3	5.7	8.5	8.6	5.8	10.3	4.3	7.0
11	5.7	5.5	3.1	5.4	6.3	7.0	5.9	5.7	6.7	7.4	7.4	5.8	5.7	6.2	6.2	7.5	8.4	8.0	8.2	8.2	8.3	6.6	7.0	6.5	8.4	3.1	6.6
12	6.7	4.8	3.8	3.7	4.2	4.6	7.1	10.5	11.8	12.7	14.0	13.5	13.9	13.5	14.4	15.1	14.5	13.5	12.5	14.0	12.7	12.7	12.4	11.6	15.1	3.7	10.8
13	9.9	8.5	8.4	7.0	7.1	6.7	6.3	5.7	5.2	5.4	5.5	5.7	5.3	5.0	4.6	4.8	5.4	5.0	4.7	4.2	4.1	3.7	3.4	3.4	9.9	3.4	5.6
14	3.3	3.2	2.8	2.4	2.0	1.9	1.8	1.9	1.9	3.0	2.7	3.5	4.5	4.0	3.5	4.2	3.7	3.5	4.1	4.2	4.8	4.6	4.9	4.2	4.9	1.8	3.4
15	5.4	4.7	5.6	5.9	5.2	4.7	3.9	4.4	4.5	5.0	6.2	6.9	8.0	8.4	9.1	8.7	9.1	8.9	8.3	9.3	9.6	7.8	8.9	8.2	9.6	3.9	6.9
16	11.3	11.4	12.6	12.8	12.9	14.4	14.3	14.3	15.0	14.8	15.4	16.5	17.3	19.2	18.8	19.0	16.7	17.3	17.9	17.5	17.1	15.8	13.8	11.3	19.2	11.3	15.3
17	9.6	8.2	8.9	10.5	10.8	8.3	5.7	8.5	7.5	7.6	8.7	7.9	6.6	6.3	6.9	7.6	7.1	6.8	8.1	7.9	7.1	7.7	6.1	2.6	10.8	2.6	7.6
18	5.1	7.2	3.6	4.4	3.9	4.5	4.9	1.5	1.0	1.9	1.3	2.2	4.3	3.6	3.5	3.2	3.9	2.9	3.2	2.8	4.7	3.9	3.3	2.3	7.2	1.0	3.5
19	2.8	4.6	4.6	4.8	5.6	6.5	4.8	4.8	7.1	7.5	7.0	7.4	7.9	9.2	10.2	9.5	10.1	9.2	10.4	7.7	7.1	7.3	5.3	4.0	10.4	2.8	6.9
20	3.3	2.9	3.5	3.6	4.2	2.6	2.8	4.5	7.5	8.4	5.0	8.6	7.3	8.0	7.2	8.2	8.2	8.6	8.0	10.1	9.6	8.9	6.7	6.8	10.1	2.6	6.4
21	7.7	9.5	9.1	7.6	7.1	6.8	6.5	6.4	5.7	4.7	4.2	3.3	2.9	3.8	3.5	2.4	2.6	3.6	6.2	2.2	2.8	4.1	5.8	8.3	9.5	2.2	5.3
22	6.3	1.8	3.1	2.7	1.0	1.0	0.9	1.2	2.1	2.9	2.8	3.9	4.9	4.0	4.0	3.2	1.8	1.4	1.6	2.2	2.0	2.7	2.2	1.8	6.3	0.9	2.6
23	2.2	3.4	3.6	2.5	1.1	2.0	1.3	1.5	2.1	3.7	5.5	6.4	6.1	5.5	6.1	6.1	5.2	5.0	4.6	5.3	5.5	4.4	1.8	2.1	6.4	1.1	3.9
24	2.9	1.0	1.2	1.1	3.3	4.6	5.3	5.8	7.4	7.7	7.2	5.6	7.0	8.8	9.2	10.0	8.3	7.8	7.5	9.8	6.9	6.1	11.3	10.7	11.3	1.0	6.5
25	10.4	7.6	7.4	10.2	10.1	11.3	9.7	8.8	10.4	10.5	11.5	12.0	11.3	11.2	10.1	10.5	10.1	8.3	8.3	9.6	8.5	8.4	7.6	7.6	12.0	7.4	9.6
26	7.1	6.7	6.3	5.5	2.8	2.8	1.8	0.6	1.6	1.7	1.8	2.7	4.9	3.0	2.4	1.9	2.6	3.6	3.7	3.1	4.4	4.4	4.0	3.8	7.1	0.6	3.5
27	5.1	4.7	4.0	3.8	3.0	3.3	4.2	4.5	4.3	3.5	4.4	3.8	3.1	2.4	3.4	4.2	4.5	4.8	4.6	5.2	4.7	3.8	2.7	2.8	5.2	2.4	4.0
28	2.3	3.0	4.1	4.7	4.9	5.3	5.5	5.2	6.4	6.5	6.5	8.4	9.0	10.9	10.4	8.6	9.1	10.0	10.2	8.9	8.2	8.1	8.6	8.8	10.9	2.3	7.2
29	7.1	6.8	5.3	8.0	6.9	6.0	7.2	9.2	11.7	12.2	13.2	11.0	12.0	10.6	11.2	9.8	9.0	9.4	10.7	11.2	10.0	8.5	8.9	7.6	13.2	5.3	9.3
30	7.1	7.9	9.2	8.5	8.8	8.4	9.0	8.2	8.8	9.0	8.5	9.4	9.8	10.4	11.2	11.2	11.0	12.1	11.6	9.7	10.4	8.4	7.2	6.6	12.1	6.6	9.3
31	6.3	6.9	8.6	8.9	9.5	9.5	9.6	10.6	9.3	9.7	10.5	8.4	7.5	7.7	7.7	7.3	7.8	8.4	8.8	8.2	7.6	7.1	7.4	5.8	10.6	5.8	8.3
Max.	**13.5**	**13.3**	**12.6**	**12.8**	**12.9**	**14.4**	**14.3**	**14.3**	**15.0**	**14.8**	**15.4**	**16.5**	**17.3**	**19.2**	**18.8**	**19.0**	**16.7**	**17.3**	**17.9**	**17.5**	**17.1**	**15.8**	**13.8**	**12.8**	**19.2**		
Min.	**1.3**	**0.8**	**1.1**	**1.0**	**0.8**	**1.0**	**0.9**	**0.6**	**1.0**	**1.7**	**1.3**	**1.5**	**1.5**	**1.1**	**2.4**	**1.9**	**1.8**	**1.4**	**1.6**	**2.2**	**1.8**	**2.4**	**1.2**	**1.8**		**0.6**	
Avg.	**5.9**	**5.5**	**5.3**	**5.4**	**5.3**	**5.4**	**5.4**	**5.7**	**6.3**	**6.5**	**6.7**	**6.9**	**7.3**	**7.4**	**7.8**	**7.8**	**7.6**	**7.4**	**7.5**	**7.4**	**6.9**	**6.7**	**6.4**	**6.0**			**6.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	1.8	1.3	4.0	4.4	4.5	3.2	1.4	0.8	1.4	2.0	1.8	2.7	3.0	3.7	4.5	4.1	3.2	3.3	3.3	5.1	6.0	6.7	7.0	7.0	0.8	3.4
2	7.1	6.3	6.8	6.8	6.9	6.3	5.5	5.3	5.9	7.0	7.3	6.7	6.5	6.4	6.2	6.1	5.7	5.8	4.7	3.5	1.7	1.4	0.8	2.2	7.3	0.8	5.4
3	3.3	3.6	4.6	6.1	6.3	6.1	5.3	4.4	5.9	5.1	3.9	1.5	2.5	4.6	4.3	5.2	4.9	6.2	7.3	7.7	7.9	8.0	8.8	7.7	8.8	1.5	5.5
4	7.9	7.3	6.1	5.7	6.1	6.2	5.9	5.9	5.8	5.9	5.9	5.1	5.7	6.0	5.1	4.4	5.4	5.7	6.0	7.1	6.7	5.9	5.3	5.4	7.9	4.4	5.9
5	4.9	4.6	4.4	3.6	3.5	1.6	1.1	1.8	2.9	4.3	4.1	4.5	6.0	7.5	7.8	7.0	6.5	7.3	7.8	8.4	8.1	6.4	6.4	5.9	8.4	1.1	5.3
6	4.9	5.9	6.3	4.7	5.2	5.1	5.0	5.2	7.6	7.9	6.7	6.5	8.4	8.2	9.9	10.0	9.9	12.4	10.7	9.7	8.4	7.2	5.4	4.5	12.4	4.5	7.3
7	4.9	5.1	4.5	6.0	8.3	7.8	6.6	7.8	6.3	7.4	8.7	8.4	9.2	10.1	8.8	8.2	7.9	7.8	8.9	8.9	8.5	6.8	4.8	4.1	10.1	4.1	7.3
8	4.1	4.5	4.5	5.1	4.3	5.6	6.6	6.6	7.1	7.2	7.2	7.7	7.5	6.4	5.1	5.2	5.1	4.8	5.1	6.2	7.2	7.7	6.5	7.1	7.7	4.1	6.0
9	7.7	6.0	4.8	6.8	8.5	8.7	5.7	6.5	8.7	9.3	9.3	10.0	10.8	9.9	8.8	8.1	8.1	8.2	8.6	8.5	7.5	5.7	3.6	2.5	10.8	2.5	7.6
10	2.4	3.0	2.3	1.0	0.6	1.2	1.5	2.3	3.3	4.3	3.7	3.3	3.2	3.0	3.5	2.9	4.9	3.7	5.2	5.6	3.4	4.7	4.8	5.2	5.6	0.6	3.3
11	4.8	4.3	4.4	5.0	4.4	5.1	5.1	4.5	4.4	5.2	6.3	7.0	6.5	6.7	6.9	7.8	9.0	8.1	6.7	5.4	4.3	3.4	1.1	1.2	9.0	1.1	5.3
12	1.1	1.4	2.6	4.4	4.1	2.8	4.1	3.3	3.6	4.1	3.9	3.8	4.0	4.2	4.1	3.5	4.5	5.4	6.2	4.0	2.4	2.6	2.5	2.4	6.2	1.1	3.5
13	3.0	4.9	4.1	3.3	3.4	1.8	1.7	0.5	0.7	0.3	1.0	3.2	3.7	3.4	2.9	1.8	2.6	5.9	6.9	7.0	5.6	4.6	2.6	2.6	7.0	0.3	3.2
14	2.7	2.6	1.7	3.0	2.3	1.4	2.1	2.0	3.7	4.9	5.7	5.6	5.0	4.8	5.2	5.9	5.9	6.7	6.9	6.6	6.4	6.1	4.4	3.4	6.9	1.4	4.4
15	3.0	2.3	1.8	0.7	0.6	0.5	1.4	1.2	1.4	1.4	1.5	1.2	1.7	2.0	1.9	2.0	2.6	2.8	2.7	2.2	1.3	1.5	1.3	1.6	3.0	0.5	1.7
16	1.2	1.3	1.8	2.0	4.1	5.0	5.6	5.6	4.8	4.9	4.6	5.8	5.2	5.5	6.5	7.0	7.2	7.6	6.8	8.0	7.7	6.3	5.5	5.2	8.0	1.2	5.2
17	3.9	3.6	4.4	3.6	3.7	3.8	3.6	5.2	4.9	4.3	5.3	7.3	7.7	7.5	8.2	9.6	9.6	9.8	10.2	9.2	9.0	7.8	7.5	6.6	10.2	3.6	6.5
18	5.5	7.4	5.7	6.2	3.2	1.9	2.3	2.7	3.3	3.5	3.0	3.9	3.8	3.7	2.9	2.5	2.9	2.3	1.2	1.7	1.1	2.2	2.5	3.2	7.4	1.1	3.3
19	2.1	2.7	2.6	2.1	1.2	3.3	1.8	2.5	1.4	1.0	2.0	3.5	3.2	4.6	4.8	5.0	3.9	3.8	5.9	6.5	6.3	4.3	3.5	2.9	6.5	1.0	3.4
20	2.2	2.5	3.9	4.3	4.5	4.3	4.4	4.2	4.3	4.2	4.8	3.2	2.0	2.3	3.2	3.9	4.7	5.1	4.9	5.2	4.8	3.9	2.6	2.9	5.2	2.0	3.8
21	2.8	2.2	1.8	1.8	1.6	2.1	2.5	1.0	1.7	1.2	1.1	2.1	3.4	2.8	4.8	5.1	3.6	3.5	5.2	2.5	2.0	1.0	2.6	3.4	5.2	1.0	2.6
22	1.5	0.9	1.5	1.4	1.8	2.2	2.2	2.2	2.3	1.4	1.5	1.5	0.9	1.5	3.4	2.1	3.1	2.3	3.8	4.3	4.2	3.9	5.1	5.0	5.1	0.9	2.5
23	5.0	5.1	4.8	5.6	5.4	5.7	6.3	7.0	7.5	6.5	5.6	4.0	3.7	2.1	2.2	2.6	2.4	3.7	5.4	5.3	5.4	5.0	4.7	4.3	7.5	2.1	4.8
24	3.5	1.5	1.7	2.1	1.3	1.1	1.2	2.5	4.4	6.3	3.4	5.3	6.0	4.9	4.8	5.3	4.9	4.4	4.6	3.2	1.3	3.5	4.0	4.1	6.3	1.1	3.6
25	3.8	3.9	3.1	1.6	1.1	1.5	1.2	1.2	1.2	0.6	3.4	4.3	4.0	4.1	4.1	4.3	4.6	5.4	5.6	5.7	7.4	8.2	7.3	5.7	8.2	0.6	3.9
26	5.4	4.2	3.2	3.9	5.1	4.1	4.4	5.5	5.8	6.4	6.8	7.2	6.4	5.7	6.0	7.1	6.7	6.9	6.8	7.1	6.9	4.5	3.8	4.3	7.2	3.2	5.6
27	3.2	1.9	1.4	1.0	1.4	1.0	1.1	2.1	2.0	2.2	3.7	4.0	4.1	2.8	4.0	5.0	5.8	5.4	5.9	5.0	4.4	3.8	4.0	4.4	5.9	1.0	3.3
28	4.6	3.6	3.2	3.0	2.9	3.2	2.6	1.9	2.4	2.9	3.8	5.5	4.8	4.0	4.0	5.0	5.7	4.9	4.5	6.2	7.2	8.1	8.0	8.4	8.4	1.9	4.6
29	9.3	8.0	5.3	5.1	4.1	3.9	3.9	3.2	2.7	2.0	1.7	1.6	2.6	2.8	2.9	6.2	4.1	7.5	7.8	5.4	3.6	3.8	3.8	2.4	9.3	1.6	4.3
30	3.2	2.5	0.8	0.4	0.5	0.8	1.7	1.4	1.3	0.7	1.1	1.7	1.5	1.9	2.3	4.0	4.5	5.8	6.0	6.3	5.9	6.9	11.5	11.2	11.5	0.4	3.5
31	9.9	11.8	14.1	18.2	18.1	17.5	18.7	15.8	11.7	6.5	5.3	4.9	4.1	6.6	8.6	8.1	9.1	10.6	11.0	10.2	10.2	11.8	13.0	11.3	18.7	4.1	11.1
Max.	**9.9**	**11.8**	**14.1**	**18.2**	**18.1**	**17.5**	**18.7**	**15.8**	**11.7**	**9.3**	**9.3**	**10.0**	**10.8**	**10.1**	**9.9**	**10.0**	**9.9**	**12.4**	**11.0**	**10.2**	**10.2**	**11.8**	**13.0**	**11.3**	**18.7**		
Min.	**1.1**	**0.9**	**0.8**	**0.4**	**0.5**	**0.5**	**1.1**	**0.5**	**0.7**	**0.3**	**1.0**	**1.2**	**0.9**	**1.5**	**1.9**	**1.8**	**2.4**	**2.3**	**1.2**	**1.7**	**1.1**	**1.0**	**0.8**	**1.2**		**0.3**	
Avg.	**4.3**	**4.1**	**3.9**	**4.1**	**4.2**	**4.1**	**4.0**	**4.0**	**4.2**	**4.2**	**4.3**	**4.6**	**4.7**	**4.8**	**5.1**	**5.3**	**5.5**	**5.9**	**6.2**	**6.0**	**5.5**	**5.3**	**5.0**	**4.8**			**4.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.8	11.7	11.3	10.5	10.8	11.3	10.3	8.8	7.6	7.5	8.8	8.7	5.8	6.9	7.3	8.3	6.3	7.5	5.3	4.7	4.7	9.1	8.9	9.1	11.7	4.7	8.4
2	10.4	11.4	11.0	11.6	12.4	12.0	12.6	11.8	12.5	11.9	12.1	12.3	13.0	12.8	11.3	9.6	4.6	2.9	6.0	7.6	5.6	5.1	4.0	3.9	13.0	2.9	9.5
3	7.5	8.4	6.9	8.3	6.1	6.1	5.5	4.7	4.4	1.8	1.3	2.0	3.6	5.1	5.3	4.5	4.5	4.0	4.0	4.5	5.2	5.5	5.2	7.3	8.4	1.3	5.1
4	8.4	5.7	5.1	5.7	6.6	7.6	5.6	4.0	2.4	3.4	2.6	3.1	3.3	4.3	3.9	3.3	3.5	3.1	2.6	2.3	2.5	1.5	1.8	1.6	8.4	1.5	3.9
5	2.2	1.6	0.8	0.5	0.6	0.4	0.9	1.6	1.6	0.8	0.8	2.1	2.6	2.3	3.6	3.0	1.9	3.5	1.7	3.4	2.3	1.5	2.5	3.1	3.6	0.4	1.9
6	3.2	4.0	7.1	7.6	6.3	5.5	6.9	6.6	7.1	5.8	8.7	11.6	13.6	16.6	14.7	11.7	10.6	8.3	6.9	9.0	6.8	8.0	4.6	4.8	16.6	3.2	8.2
7	5.8	4.9	7.1	3.8	3.7	3.9	6.8	6.9	6.0	5.9	6.5	8.2	10.0	8.4	5.3	6.3	8.7	8.8	7.4	7.0	6.8	5.9	7.0	8.4	10.0	3.7	6.7
8	8.2	6.5	6.4	6.7	7.4	6.4	6.0	5.1	4.4	4.3	5.3	5.3	6.2	9.3	14.9	13.3	13.6	16.1	13.8	9.8	6.9	4.9	4.5	3.1	16.1	3.1	7.9
9	3.2	5.2	6.0	7.0	6.7	1.8	1.2	2.5	2.2	1.7	3.7	4.5	6.5	8.0	10.2	11.3	11.6	11.6	10.0	8.5	8.2	7.8	5.3	4.1	11.6	1.2	6.2
10	3.7	3.7	4.0	3.4	2.8	1.4	0.4	1.3	2.7	2.8	2.8	4.3	3.2	4.2	4.3	4.2	4.3	4.2	4.1	4.2	1.7	1.5	1.6	1.7	4.3	0.4	3.0
11	4.9	6.3	6.3	3.2	3.0	1.2	1.9	2.4	2.7	2.9	4.8	4.9	4.8	4.7	5.3	4.3	5.1	5.4	4.9	4.4	5.5	6.9	7.1	10.3	10.3	1.2	4.7
12	11.1	12.4	14.0	14.1	15.5	16.2	17.3	16.9	15.5	15.0	14.9	15.5	14.4	15.4	16.2	14.7	16.2	15.4	15.4	15.9	15.6	16.2	16.4	16.6	17.3	11.1	15.3
13	15.7	15.8	17.6	17.4	18.0	18.5	19.1	18.5	18.0	19.1	18.5	18.1	17.7	17.2	17.0	16.5	14.8	14.8	15.4	14.8	12.9	12.4	14.0	12.2	19.1	12.2	16.4
14	13.7	13.6	12.5	9.1	2.8	5.9	5.3	5.4	6.4	7.5	8.7	6.7	7.7	7.5	7.5	7.5	8.5	8.2	7.3	6.1	5.6	5.4	5.3	4.6	13.7	2.8	7.4
15	4.6	3.5	4.3	3.8	3.2	2.8	3.4	6.0	7.4	7.7	8.9	10.1	10.5	10.5	10.6	11.5	11.2	12.2	11.5	10.6	9.7	8.2	7.4	5.8	12.2	2.8	7.7
16	4.7	1.0	1.8	3.0	3.7	3.9	4.1	4.7	4.5	3.7	4.0	5.1	6.1	8.0	8.3	9.0	8.2	8.8	7.6	8.6	8.3	7.3	7.2	7.1	9.0	1.0	5.8
17	7.4	7.2	4.5	1.4	1.5	5.3	4.6	3.8	2.7	0.7	1.9	2.4	2.2	4.2	5.7	6.1	6.2	8.3	9.2	6.2	3.9	3.7	3.5	5.1	9.2	0.7	4.5
18	8.3	9.5	13.1	12.3	11.5	9.4	5.8	6.4	7.6	8.1	8.8	8.2	4.5	6.5	7.4	9.1	8.8	7.5	6.1	3.3	1.1	1.7	3.1	3.0	13.1	1.1	7.1
19	3.2	2.1	2.7	3.6	5.1	6.4	6.5	6.9	7.0	6.2	4.8	4.9	5.0	5.3	4.8	9.8	8.7	8.5	10.4	9.8	8.4	7.3	6.3	5.9	10.4	2.1	6.2
20	6.0	5.2	4.8	4.8	5.9	5.3	5.3	5.5	4.6	4.0	4.2	4.8	4.9	5.2	5.7	5.5	5.2	4.5	4.1	4.2	3.1	3.3	3.3	2.9	6.0	2.9	4.7
21	2.3	2.4	2.3	2.4	2.5	2.9	2.8	3.2	3.6	3.2	2.6	2.4	2.5	3.5	5.0	5.9	6.9	7.6	8.4	7.9	6.2	6.4	5.9	4.6	8.4	2.3	4.3
22	5.6	6.0	3.6	2.9	2.9	2.6	2.3	2.5	1.9	1.6	1.4	0.9	1.6	2.5	3.4	4.2	5.4	5.4	6.1	5.5	6.0	5.9	6.0	6.3	6.3	0.9	3.9
23	5.1	5.7	5.4	5.5	6.6	9.7	9.5	7.9	7.1	6.9	6.9	8.2	6.9	7.2	8.3	8.7	10.5	7.3	8.9	10.0	8.0	9.2	7.7	7.6	10.5	5.1	7.7
24	7.5	6.2	6.1	6.0	5.8	5.2	4.6	3.4	3.1	2.2	1.3			0.0	0.0	0.7	4.7	5.2	4.1	2.6	2.5	2.8	1.5	2.1	7.5	0.0	3.5
25	2.7	4.1	5.1	5.0	2.3	1.3	1.3	2.7	3.9	3.4	2.4	2.2	1.1	1.4	2.0	2.0	1.6	2.9	2.1	1.6	1.0	1.0	1.2	0.7	5.1	0.7	2.3
26	1.2	1.5	1.7	2.2	2.4	1.7	1.6	1.5	1.0	1.4	1.4	1.1	2.3	2.0	2.1	3.0	3.0	3.5	2.1	1.7	3.4	4.3	4.7	5.5	5.5	1.0	2.3
27	5.8	5.9	6.7	6.4	6.2	8.1	7.9	7.5	6.8	7.7	7.2	7.6	8.7	8.7	12.2	12.8	11.9	13.0	10.8	8.3	9.9	7.6	7.5	7.4	13.0	5.8	8.4
28	5.5	5.5	4.6	4.0	4.7	4.4	4.0	3.5	3.6	2.7	1.7	1.8	2.0	1.4	1.5	1.7	3.4	3.3	2.6	2.8	4.1	6.3	6.5	6.6	6.6	1.4	3.7
29	8.0	9.3	7.9	6.7	4.5	3.9	6.3	5.5	3.9	4.8	7.0	7.6	6.9	7.8	5.5	6.3	5.5	4.7	5.6	2.8	2.3	3.0	3.4	2.8	9.3	2.3	5.5
30	2.5	0.7	0.9	2.1	3.2	4.3	4.4	4.3	4.1	5.4	6.5	8.6	6.9	5.7	4.2	3.6	4.2	3.6	3.6	2.5	2.0	1.3	0.7	1.3	8.6	0.7	3.6
Max.	**15.7**	**15.8**	**17.6**	**17.4**	**18.0**	**18.5**	**19.1**	**18.5**	**18.0**	**19.1**	**18.5**	**18.1**	**17.7**	**17.2**	**17.0**	**16.5**	**16.2**	**16.1**	**15.4**	**15.9**	**15.6**	**16.2**	**16.4**	**16.6**	**19.1**		
Min.	**1.2**	**0.7**	**0.8**	**0.5**	**0.6**	**0.4**	**0.4**	**1.3**	**1.0**	**0.7**	**0.8**	**0.9**	**1.1**	**0.0**	**0.0**	**0.7**	**1.6**	**2.9**	**1.7**	**1.6**	**1.0**	**1.0**	**0.7**	**0.7**		**0.0**	
Avg.	**6.3**	**6.2**	**6.4**	**6.0**	**5.8**	**5.9**	**5.8**	**5.7**	**5.6**	**5.3**	**5.7**	**6.3**	**6.4**	**6.8**	**7.1**	**7.3**	**7.3**	**7.3**	**6.9**	**6.4**	**5.7**	**5.7**	**5.5**	**5.5**			**6.2**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	1.0	0.9	1.3	2.0	2.6	2.8	2.3	3.2	4.0	4.5	6.0	6.9	8.0	8.1	8.1	6.8	6.5	6.2	7.1	9.0	7.8	6.0	5.7	9.0	0.9	4.9
2	5.1	3.8	3.2	2.8	2.4	2.8	1.7	1.7	1.7	1.6	1.2	1.1	1.1	1.2	0.6	1.1	2.2	3.6	4.0	2.3	4.1	8.8	10.1	8.6	10.1	0.6	3.2
3	6.2	3.1	2.2	1.7	1.7	2.7	3.7	7.3	6.7	9.4	8.9	9.9	10.0	10.8	10.4	9.6	8.7	7.8	8.3	8.9	6.9	5.4	4.9	5.3	10.8	1.7	6.7
4	5.0	3.6	3.9	4.1	4.6	4.0	3.2	2.8	3.4	3.0	2.3	1.8	1.6	1.9	2.6	2.6	2.7	2.8	1.9	0.8	1.8	1.0	1.1	2.1	5.0	0.8	2.7
5	3.1	4.0	3.3	3.1	3.3	2.6	1.3	0.6	0.5	0.7	0.8	1.3	2.9	3.7	3.0	4.1	3.5	3.0	4.4	6.0	6.0	6.3	6.4	5.7	6.4	0.5	3.3
6	6.1	5.9	5.4	4.8	4.1	4.6	4.7	4.0	4.5	4.4	3.4	3.1	2.8	2.9	3.8	4.0	4.4	3.9	5.0	5.9	6.2	6.3	6.4	6.1	6.4	2.8	4.7
7	7.0	8.3	10.2	9.8	11.3	12.6	13.5	12.7	13.2	12.5	12.3	13.3	12.1	12.0	13.1	13.6	11.7	13.1	12.2	10.4	10.5	10.2	8.9	10.5	13.6	7.0	11.5
8	10.6	11.3	9.7	8.7	9.2	9.2	5.6	3.6	4.9	7.8	7.6	2.5	2.8	5.2	6.4	6.4	7.6	6.3	4.7	4.3	3.5	2.8	2.8	5.2	11.3	2.5	6.2
9	7.4	9.6	10.9	11.8	13.4	15.4	15.5	16.3	16.7	18.0	20.0	20.1	20.3	23.2	23.7	22.9	22.4	22.3	22.3	21.3	19.7	18.4	16.4	14.6	23.7	7.4	17.6
10	14.4	12.9	11.3	6.7	6.3	7.1	7.6	5.7	2.9	2.4	2.3	3.5	4.9	4.8	5.0	6.7	9.1	8.5	7.6	7.3	8.6	7.3	7.1	7.0	14.4	2.3	7.0
11	6.8	6.0	8.0	10.5	10.9	11.2	9.7	10.7	5.6	6.4	8.7	12.8	13.7	15.3	16.6	17.0	17.6	18.3	20.1	20.4	21.1	21.0	21.1	19.0	21.1	5.6	13.7
12	19.3	20.9	21.1	20.1	20.0	20.9	21.4	21.6	20.6	19.0	18.0	17.1	17.0	17.5	14.6	14.9	17.2	17.8	17.1	15.8	14.0	12.5	12.6	11.7	21.6	11.7	17.6
13	10.3	6.7	2.8	4.7	4.3	3.1	3.8	3.2	1.4	2.9	3.1	4.1	6.3	6.2	6.5	6.9	9.3	10.4	9.7	9.0	8.4	8.3	7.9	7.2	10.4	1.4	6.1
14	9.0	9.3	9.6	10.5	13.7	12.3	8.8	7.0	4.4	4.9	7.6	7.4	6.1	5.5	6.4	5.4	5.2	3.7	4.0	3.4	2.8	1.8	1.6	3.8	13.7	1.6	6.4
15	5.2	5.2	7.2	6.5	5.9	5.1	5.4	5.2	4.8	3.9	4.2	5.5	4.7	4.0	5.7	6.4	5.8	6.4	7.0	7.0	6.9	5.6	5.9	6.4	7.2	3.9	5.7
16	5.8	6.0	5.6	5.7	5.5	5.8	5.7	5.6	5.1	5.3	5.5	4.8	4.4	4.4	3.7	3.0	4.0	4.7	4.9	4.7	3.9	3.1	2.1	0.7	6.0	0.7	4.6
17	0.5	1.0	1.6	1.9	1.8	1.2	1.9	2.4	2.2	2.6	2.0	1.4	1.3	1.1	1.3	2.4	2.4	2.7	4.0	6.3	5.6	6.7	7.7	9.1	9.1	0.5	3.0
18	9.2	9.8	10.9	12.8	13.7	12.4	13.2	13.9	12.0	10.9	8.6	8.1	9.9	6.6	4.5	4.1	4.5	5.8	7.9	8.7	6.4	3.4	5.8	5.0	13.9	3.4	8.7
19	4.6	5.1	6.7	7.2	7.1	8.4	8.2	8.4	7.7	8.7	7.4	8.4	9.0	7.6	7.3	6.1	5.4	2.9	3.9	3.6	3.2	3.3	1.5	1.0	9.0	1.0	5.9
20	0.8	1.6	1.2	0.8	0.5	0.8	1.5	1.9	2.1	1.2	1.7	2.1	2.9	3.2	3.0	3.5	2.7	3.5	2.6	2.7	2.9	2.1	1.5	1.2	3.5	0.5	2.0
21	1.7	1.9	1.7	1.9	1.6	1.5	2.1	2.6	2.7	4.0	5.3	5.4	4.5	4.7	7.1	10.7	12.8	13.1	13.4	14.3	14.7	15.5	12.8	11.1	15.5	1.5	7.0
22	10.9	14.4	15.9	15.5	13.3	12.3	12.7	13.2	13.9	13.8	13.2	13.7	12.8	10.1	11.7	9.6	11.3	12.2	12.9	13.5	13.0	12.5	6.9	6.8	15.9	6.8	12.3
23	8.8	9.1	9.4	8.8	8.0	10.2	13.5	13.9	14.2	12.9	12.7	15.5	16.9	17.5	16.2	15.4	15.4	15.0	10.9	9.5	10.9	10.8	9.1	8.2	17.5	8.0	12.2
24	12.9	14.5	15.0	15.1	14.4	16.0	17.5	15.2	14.7	13.7	11.4	11.3	10.0	10.1	9.8	11.9	10.1	7.2	4.7	2.0	2.0	2.4	2.6	3.1	17.5	2.0	10.3
25	4.3	6.4	6.5	7.0	6.0	5.0	6.4	7.2	6.4	5.3	5.8	4.9	6.1	5.9	5.4	4.4	4.7	4.6	6.3	5.0	1.2	2.1	3.2	4.6	7.2	1.2	5.2
26	3.9	3.9	5.3	6.4	7.7	9.0	9.5	9.2	8.8	9.0	10.8	10.0	11.7	11.4	10.8	9.0	13.0	12.5	14.8	15.5	17.2	18.8	17.4	18.4	18.8	3.9	11.0
27	18.2	19.1	15.4	14.5	14.3	14.4	12.6	12.5	14.0	13.5	12.3	13.0	13.8	13.4	13.2	14.2	12.4	7.0	7.3	5.9	6.4	3.8	3.0	1.2	19.1	1.2	11.5
28	2.0	3.0	3.4	3.0	2.4	3.8	5.6	7.4	5.9	8.8	9.2	7.0	6.7	6.8	6.6	4.8	3.5	2.4	3.4	2.3	1.5	1.7	1.8	1.8	9.2	1.5	4.4
29	1.9	1.4	0.6	0.6	1.0	1.2	1.5	2.0	2.3	1.5	2.3	2.2	3.7	4.5	5.7	6.5	5.8	7.3	7.5	6.3	6.2	7.4	7.8	6.4	7.8	0.6	3.9
30	7.6	7.7	6.8	5.9	7.2	5.9	6.5	6.0	5.1	4.7	6.1	6.4	4.1	1.9	0.6	1.8	2.4	1.9	1.9	3.4	3.7	3.7	3.8	4.3	7.7	0.6	4.6
31	4.9	4.6	4.3	1.7	1.8	2.4	2.1	0.9	0.9	1.3	0.3	1.2	1.8	1.9	3.2	3.6	2.7	3.1	2.9	2.4	1.5	0.6	0.9	2.0	4.9	0.3	2.2
Max.	**19.3**	**20.9**	**21.1**	**20.1**	**20.0**	**20.9**	**21.4**	**21.6**	**20.6**	**19.0**	**20.0**	**20.1**	**20.3**	**23.2**	**23.7**	**22.9**	**22.4**	**22.3**	**22.3**	**21.3**	**21.1**	**21.0**	**21.1**	**19.0**	**23.7**		
Min.	**0.5**	**1.0**	**0.6**	**0.6**	**0.5**	**0.8**	**1.3**	**0.6**	**0.5**	**0.7**	**0.3**	**1.1**	**1.1**	**1.1**	**0.6**	**1.1**	**2.2**	**1.9**	**1.9**	**0.8**	**1.2**	**0.6**	**0.9**	**0.7**		**0.3**	
Avg.	**6.9**	**7.1**	**7.1**	**7.0**	**7.1**	**7.3**	**7.4**	**7.3**	**6.8**	**7.0**	**7.1**	**7.3**	**7.5**	**7.5**	**7.6**	**7.8**	**8.0**	**7.7**	**7.9**	**7.6**	**7.4**	**7.1**	**6.7**	**6.6**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.4	2.7	2.3	2.3	2.0	3.5	3.8	4.8	4.4	3.7	3.5	5.5	6.1	7.1	8.2	7.8	7.9	8.1	8.6	10.0	9.0	8.8	9.8	8.5	10.0	2.0	5.9
2	7.5	6.2	8.2	8.7	7.3	7.0	8.5	8.4	8.1	7.5	8.8	12.0	12.7	12.9	12.7	11.9	12.2	12.5	14.4	14.4	14.9	14.3	12.3	12.2	14.9	6.2	10.6
3	12.7	12.9	12.9	13.5	15.1	14.3	12.6	14.1	13.3	13.6	13.2	12.2	12.1	10.9	10.4	11.4	10.8	11.6	10.4	8.7	8.1	8.8	9.4	11.5	15.1	8.1	11.9
4	12.2	12.4	12.6	12.3	13.4	12.7	15.5	11.1	9.8	9.0	7.1	6.7	7.3	7.5	6.1	6.3	6.8	6.4	6.0	5.4	4.9	5.3	5.7	5.1	15.5	4.9	8.7
5	6.4	6.8	6.6	6.8	6.0	7.0	7.2	6.6	5.4	5.1	4.6	3.3	3.9	3.9	3.9	3.1	3.5	3.6	3.6	3.6	2.9	3.5	2.7	3.1	7.2	2.7	4.7
6	3.1	2.4	2.4	2.3	3.0	2.9	2.1	1.8	2.8	5.0	4.0	5.3	1.9	2.3	3.3	4.4	5.1	4.8	4.8	6.5	8.2	9.6	10.6	10.0	10.6	1.8	4.5
7	9.6	8.9	8.7	9.1	9.9	10.6	9.5	7.2	6.9	4.2	3.3	4.2	3.1	3.8	2.3	0.7	1.1	2.2	4.0	2.9	1.6	2.5	3.5	4.1	10.6	0.7	5.2
8	1.6	1.7	2.4	3.1	3.8	3.7	2.7	3.1	3.4	2.7	3.9	3.9	4.6	3.3	6.4	7.8	7.9	8.5	10.6	11.2	9.9	12.4	11.8	10.7	12.4	1.6	5.9
9	10.6	11.3	11.8	12.2	16.6	18.3	16.3	13.4	11.9	9.8	8.7	8.7	9.7	10.2	11.1	11.8	10.3	8.2	8.6	13.4	18.4	14.7	14.0	13.3	18.4	8.2	12.2
10	14.4	11.9	8.7	5.5	3.4	6.9	9.7	9.4	9.7	5.7	9.1	5.6	4.1	2.3	1.4	1.2	3.7	9.6	7.7	7.6	10.7	12.1	11.3	10.0	14.4	1.2	7.6
11	8.6	8.1	7.5	8.2	7.8	6.7	7.0	5.8	5.0	3.5	4.4	2.0	1.4	0.8	0.4	1.6	2.0	2.5	2.6	4.6	4.0	3.7	2.8	5.3	8.6	0.4	4.4
12	4.1	3.4	3.3	3.4	4.2	2.0	1.8	1.6	4.4	6.9	6.6	5.2	2.3	1.4	1.1	1.6	6.4	4.1	2.5	2.2	2.1	2.4	2.2	2.0	6.9	1.1	3.2
13	3.6	3.4	3.8	3.4	4.5	3.9	3.8	5.1	6.8	6.4	6.0	7.4	6.5	6.0	4.3	4.7	4.4	4.7	3.9	4.9	6.2	6.5	7.0	5.8	7.4	3.4	5.1
14	3.6	6.1	7.2	7.4	7.0	5.8	4.4	4.2	3.8	4.2	4.2	3.0	2.0	2.4	2.8	4.0	3.2	3.1	3.4	4.3	4.0	4.7	4.2	1.8	7.4	1.8	4.2
15	2.9	3.7	4.6	4.4	4.2	3.9	2.5	2.2	3.0	4.7	5.6	4.6	5.0	6.7	7.9	7.4	6.2	5.6	7.3	8.8	9.8	10.1	9.8	10.2	10.2	2.2	5.9
16	9.0	9.8	11.0	8.8	7.8	5.4	3.7	5.1	1.3	2.9	2.3	2.2	1.6	1.2	1.3	1.3	2.0	1.9	1.2	0.4	0.8	1.8	1.3	2.0	11.0	0.4	3.6
17	2.4	2.5	1.8	0.9	1.8	2.6	2.3	1.8	0.7	1.8	2.8	2.8	3.7	4.0	4.6	7.5	8.2	8.2	8.9	9.5	9.7	10.5	11.0	10.6	11.0	0.7	5.0
18	11.6	11.3	11.2	6.8	4.8	7.6	5.9	5.3	4.6	6.6	6.7	6.8	7.0	8.1	7.6	8.0	8.6	9.1	9.4	10.2	10.0	9.2	8.4	8.5	11.6	4.6	8.1
19	8.2	8.0	8.4	9.1	8.3	9.0	9.3	11.4	12.5	13.0	11.1	11.7	15.5	16.5	15.3	17.0	16.4	16.9	16.7	15.4	16.4	16.8	15.8	14.8	17.0	8.0	13.1
20	14.2	15.4	16.1	15.0	16.2	20.0	19.5	20.9	23.5	24.5	21.9	19.3	20.3	19.4	18.9	18.1	18.3	18.9	15.5	14.1	15.5	15.0	13.7	11.4	24.5	11.4	17.7
21	13.5	12.6	12.4	11.5	10.5	9.9	10.8	7.9	7.6	7.0	6.2	5.7	5.4	5.1	3.6	3.0	4.2	4.4	2.4	1.4	2.4	4.4	5.1	4.1	13.5	1.4	6.7
22	4.0	3.8	2.8	3.0	2.0	0.9	2.5	2.4	3.1	2.4	2.8	2.9	3.8	2.5	3.5	1.8	2.9	1.6	0.8	1.9	2.0	1.6	2.1	1.5	4.0	0.8	2.4
23	1.9	1.8	3.3	2.7	2.7	2.5	1.7	2.5	2.0	2.0	1.9	1.7	2.2	3.2	3.1	3.0	3.1	4.4	5.8	8.0	8.2	8.2	8.3	9.3	9.3	1.7	3.9
24	9.5	13.5	14.0	19.9	18.8	16.1	12.7	11.3	16.0	16.2	15.6	15.6	15.4	14.4	13.9	14.1	12.9	11.6	9.3	8.6	8.1	10.8	15.8	13.4	19.9	8.1	13.6
25	15.0	10.2	9.0	10.1	5.9	5.2	4.6	4.0	5.3	5.9	5.1	4.0	5.0	2.4	4.1	6.6	8.0	5.0	5.5	8.5	9.5	11.1	10.1	8.9	15.0	2.4	7.0
26	8.9	10.3	9.3	9.5	9.0	10.1	10.0	9.6	11.0	12.8	15.2	13.7	13.5	10.9	10.6	12.2	12.8	10.5	10.4	13.2	9.8	9.3	7.5	7.0	15.2	7.0	10.7
27	9.4	7.1	6.7	5.5	3.6	4.3	3.5	4.1	5.7	5.4	4.8	3.7	4.5	5.3	4.6	4.8	5.5	5.3	6.8	7.0	5.5	4.6	5.6	5.6	9.4	3.5	5.4
28	5.7	6.2	7.3	7.9	6.5	7.5	6.9	7.1	7.8	7.7	7.8	7.4	6.9	6.6	6.9	7.2	7.7	7.7	8.1	9.1	9.5	9.1	8.7	8.0	9.5	5.7	7.6
29	8.2	7.6	7.4	7.2	5.3	6.2	7.3	8.3	8.3	8.0	9.4	8.8	8.1	9.5	10.6	11.0	14.6	16.5	16.3	15.1	15.5	15.8	15.7	16.3	16.5	5.3	10.7
30	17.1	14.8	14.1	14.4	15.2	15.9	14.6	15.4	14.4	13.6	13.3	13.8	13.4	14.1	14.1	12.1	9.7	9.6	11.4	10.6	11.8	9.9	8.9	8.3	17.1	8.3	12.9
Max.	**17.1**	**15.4**	**16.1**	**19.9**	**18.8**	**20.0**	**19.5**	**20.9**	**23.5**	**24.5**	**21.9**	**19.3**	**20.3**	**19.4**	**18.9**	**18.1**	**18.3**	**18.9**	**16.7**	**15.4**	**18.4**	**16.8**	**15.8**	**16.3**	**24.5**		
Min.	**1.6**	**1.7**	**1.8**	**0.9**	**1.8**	**0.9**	**1.7**	**1.6**	**0.7**	**1.8**	**1.9**	**1.7**	**1.4**	**0.8**	**0.4**	**0.7**	**1.1**	**1.6**	**0.8**	**0.4**	**0.8**	**1.6**	**1.3**	**1.5**		**0.4**	
Avg.	**8.1**	**7.9**	**7.9**	**7.8**	**7.5**	**7.8**	**7.4**	**7.2**	**7.4**	**7.4**	**7.3**	**7.0**	**7.0**	**6.8**	**6.8**	**7.1**	**7.5**	**7.6**	**7.6**	**8.0**	**8.3**	**8.6**	**8.5**	**8.1**			**7.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Speed (RMYoung) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.2	8.6	7.1	6.3	6.0	4.8	4.4	3.8	3.6	4.0	3.0	3.8	2.7	3.1	1.5	1.1	1.5	2.2	1.8	2.6	2.5	2.7	2.6	4.2	8.6	1.1	3.8
2	3.8	5.0	7.8	4.8	6.4	10.2	8.5	6.4	5.9	4.0	10.1	13.6	15.2	18.5	19.8	19.0	18.6	19.8	18.5	17.9	18.9	19.8	17.9	16.9	19.8	3.8	12.8
3	17.0	19.8	20.4	20.8	21.0	22.0	22.1	21.3	22.4	23.9	26.8	28.4	27.2	26.2	31.2	29.1	26.2	24.1	24.2	23.7	22.8	24.1	21.4	20.9	31.2	17.0	23.6
4	18.8	18.0	15.4	13.5	11.3	11.4	11.6	14.3	11.9	13.4	12.4	12.0	12.7	14.7	14.5	13.0	10.9	10.3	10.7	10.8	11.6	11.6	11.7	13.7	18.8	10.3	12.9
5	14.7	14.8	12.8	12.2	12.7	12.1	11.0	11.9	10.9	12.2	12.1	10.6	9.8	9.8	10.0	9.2	8.5	5.7	6.7	7.5	6.9	5.3	4.5	5.6	14.8	4.5	9.9
6	6.9	9.0	10.6	9.2	10.5	10.5	9.0	5.1	4.5	3.5	3.5	3.3	1.9	0.8	0.6	1.5	1.2	1.6	1.0	0.9	1.4	2.2	2.9	3.4	10.6	0.6	4.4
7	3.6	3.8	4.3	5.8	5.5	5.9	4.8	4.8	5.1	4.4	4.6	4.2	3.7	3.2	3.1	3.3	3.0	2.8	1.8	0.7	0.9	0.7	0.0	0.5	5.9	0.0	3.4
8	0.8	1.1	1.1	1.1	2.7	0.9	2.3	5.7	6.8	7.4	6.6	7.4	11.4	17.4	18.2	17.6	15.5	13.7	7.3	7.2	6.9	7.2	8.2	7.8	18.2	0.8	7.6
9	6.3	4.8	4.6	3.0	6.0	6.9	6.5	5.5	4.4	4.8	3.9	3.0	1.9	1.0	1.8	0.9	1.0	2.1	2.2	2.1	2.8	2.8	3.3	3.5	6.9	0.9	3.5
10	5.8	7.3	6.5	10.3	10.6	11.7	6.4	6.9	9.1	8.2	7.3	7.9	7.1	6.2	4.3	3.9	1.3	0.9	1.4	5.5	5.0	3.5	3.2	3.4	11.7	0.9	6.0
11	3.5	2.9	1.8	1.0	1.3	0.6	1.3	1.5	1.3	1.2	1.8	2.7	8.0	8.6	7.8	8.3	8.0	5.1	4.9	6.4	7.2	8.3	7.1	5.5	8.6	0.6	4.4
12	4.8	5.2	4.1	4.0	4.3	4.1	3.4	2.5	3.0	2.7	1.9	1.1	0.8	0.9	1.2	0.8	0.8	2.5	5.3	6.2	9.4	9.3	10.0	10.5	10.5	0.8	4.1
13	12.0	12.2	11.4	11.4	13.1	12.0	9.1	7.5	7.8	8.1	6.0	5.0	3.5	1.2	3.4	4.8	3.4	2.5	1.4	1.9	2.5	1.9	2.0	5.1	13.1	1.2	6.2
14	7.3	7.2	6.9	6.9	5.9	5.6	6.4	8.5	9.7	12.1	11.5	11.0	10.0	11.0	11.2	10.5	12.0	13.7	10.0	13.2	13.6	15.0	14.1	14.8	15.0	5.6	10.3
15	15.2	14.6	13.3	14.6	15.2	12.4	13.2	12.0	10.8	8.7	9.5	7.4	5.2	4.5	3.6	2.6	2.2	1.8	1.2	1.2	2.4	2.0	2.5	2.9	15.2	1.2	7.5
16	2.9	2.7	2.5	1.9	0.9	2.3	2.4	4.3	3.7	4.3	5.4	7.1	8.5	11.6	11.4	11.2	11.0	9.7	10.4	10.5	11.2	10.0	11.5	12.9	12.9	0.9	7.1
17	14.3	15.1	16.7	17.2	17.6	17.4	15.7	14.4	15.0	15.6	15.9	15.2	15.7	15.6	14.2	14.5	14.6	13.6	13.4	13.8	15.7	14.1	16.7	16.3	17.6	13.4	15.3
18	12.9	12.3	12.9	14.7	16.3	14.9	14.8	14.6	12.1	12.7	16.6	15.6	15.0	15.1	16.9	18.0	19.2	17.7	19.3	19.9	17.8	18.0	17.5	17.7	19.9	12.1	15.9
19	17.2	17.9	17.3	19.2	18.4	14.4	15.2	15.1	17.5	14.8	11.2	10.9	7.7	7.1	4.3	4.1	6.7	6.5	8.9	10.6	10.3	10.1	13.4	10.1	19.2	4.1	12.0
20	6.4	7.2	8.1	9.0	8.4	8.9	8.8	8.6	4.0	4.7	5.3	5.8	3.9	2.0	6.3	5.0	2.8	2.6	1.5	1.7	1.2	2.2	2.9	3.2	9.0	1.2	5.0
21	2.7	3.3	2.5	2.4	3.2	3.7	3.6	3.6	2.6	3.0	4.1	3.7	2.5	1.0	1.4	0.6	0.8	0.8	0.7	1.0	1.1	1.7	1.9	2.5	4.1	0.6	2.3
22	2.6	2.5	2.6	3.7	4.9	6.0	7.0	9.3	9.5	9.1	9.9	7.5	6.1	5.0	4.4	5.6	6.9	8.3	8.2	8.6	10.3	10.3	10.3	9.6	10.3	2.5	7.0
23	10.8	11.8	12.8	12.8	12.3	10.4	8.5	6.8	4.1	14.3	14.8	14.9	12.6	12.7	12.7	12.9	12.0	8.9	11.3	9.3	16.3	17.5	15.5	15.2	17.5	4.1	12.1
24	16.6	17.2	12.6	10.2	9.6	11.4	11.3	4.0	4.4	5.3	6.2	5.1	6.1	5.7	3.8	4.6	3.2	2.4	1.6	3.5	2.8	2.7	5.0	5.1	17.2	1.6	6.7
25	6.8	9.2	12.4	12.9	11.7	11.5	11.2	13.3	14.0	11.6	11.6	12.7	14.8	14.8	13.5	11.7	11.2	18.9	19.6	19.1	18.2	18.7	20.4	21.2	21.2	6.8	14.2
26	19.3	20.3	20.0	18.9	17.5	18.1	16.4	15.5	15.3	14.8	15.0	16.9	17.5	17.1	17.0	15.5	16.5	16.1	16.5	16.5	18.4	18.4	19.1	17.9	20.3	14.8	17.3
27	16.0	15.8	16.5	19.5	25.0	22.4	21.7	22.3	22.5	25.3	22.4	21.8	24.1	25.4	19.6	18.5	18.8	22.7	21.3	19.3	17.7	15.7	14.4	18.0	25.4	14.4	20.3
28	19.4	19.7	17.8	20.3	18.1	11.1	12.8	17.1	16.7	17.7	18.4	20.2	10.7	11.7	12.9	12.2	9.8	11.7	10.1	8.2	7.1	6.7	6.9	7.0	20.3	6.7	13.5
29	5.1	6.1	7.4	8.6	8.6	8.7	8.6	9.2	9.4	9.8	9.5	9.2	8.6	8.4	8.6	8.5	7.6	7.9	7.9	7.6	8.4	9.6	8.0	8.7	9.8	5.1	8.3
30	9.0	8.3	8.5	7.9	7.5	8.5	9.2	7.5	8.9	10.9	10.5	8.1	8.6	9.1	10.7	9.5	10.1	9.6	10.4	9.8	9.3	8.6	9.0	8.9	10.9	7.5	9.1
31	7.5	8.3	6.8	10.6	9.8	11.0	12.3	11.8	12.1	12.8	12.1	11.5	12.0	10.9	10.5	10.7	11.0	10.6	10.7	11.3	11.7	10.4	9.9	7.9	12.8	6.8	10.6
Max.	**19.4**	**20.3**	**20.4**	**20.8**	**25.0**	**22.4**	**22.1**	**22.3**	**22.5**	**25.3**	**26.8**	**28.4**	**27.2**	**26.2**	**31.2**	**29.1**	**26.2**	**24.1**	**24.2**	**23.7**	**22.8**	**24.1**	**21.4**	**21.2**	**31.2**		
Min.	**0.8**	**1.1**	**1.1**	**1.0**	**0.9**	**0.6**	**1.3**	**1.5**	**1.3**	**1.2**	**1.8**	**1.1**	**0.8**	**0.8**	**0.6**	**0.6**	**0.8**	**0.8**	**0.7**	**0.7**	**0.9**	**0.7**	**0.0**	**0.5**		**0.0**	
Avg.	**9.6**	**10.1**	**9.8**	**10.2**	**10.4**	**10.1**	**9.7**	**9.5**	**9.3**	**9.8**	**10.0**	**9.9**	**9.5**	**9.7**	**9.7**	**9.3**	**8.9**	**8.9**	**8.7**	**9.0**	**9.4**	**9.4**	**9.5**	**9.7**			**9.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	313.8	295.4	305.2	301.5	294.4	294.2	300.2	303.7	299.7	300.7	301.1	302.9	303.7	300.2	322.3	326.7	334.0	320.9	318.4	321.1	317.7	311.4	302.9	337.1
2	301.7	302.8	313.3	316.9	330.0	321.6	328.0	332.1	328.8	321.1	317.3	316.2	316.6	308.7	311.1	313.9	308.9	306.8	306.3	305.5	299.4	303.0	302.2	304.1
3	306.6	306.5	308.0	301.1	296.2	311.6	309.3	314.5	307.5	311.4	306.0	309.0	306.7	310.2	303.5	303.4	302.1	303.0	311.4	308.5	313.1	312.8	318.2	311.5
4	315.8	305.5	315.1	312.2	316.7	311.5	310.8	307.9	316.6	312.9	309.2	307.8	314.9	310.8	315.4	308.2	312.8	310.4	307.4	319.6	319.1	318.0	319.5	319.6
5	317.3	312.0	308.9	306.6	314.1	313.2	309.2	312.0	311.4	310.9	314.9	312.9	318.3	319.2	317.0	315.6	319.7	318.2	318.5	317.8	319.8	322.4	319.5	315.8
6	318.4	314.5	305.4	308.5	310.1	319.3	312.8	309.9	306.4	305.3	307.0	303.5	312.8	309.4	309.9	313.6	313.3	311.8	308.0	304.1	298.6	300.6	301.1	307.9
7	304.5	299.2	298.7	301.8	304.8	304.5	301.5	305.9	303.2	307.2	303.6	309.8	307.8	305.7	309.3	311.7	304.2	301.8	316.4	319.0	319.6	308.6	306.3	299.9
8	299.5	320.1	307.6	303.9	309.9	307.2	296.9	299.3	316.1	313.1	311.6	306.8	312.4	317.9	315.0	316.9	306.9	309.3	301.9	298.1	301.9	305.0	303.4	310.3
9	307.9	309.0	302.1	295.2	300.2	301.5	301.3	310.4	309.0	306.0	308.3	311.1	302.9	302.0	307.3	311.9	317.1	318.1	318.2	317.7	314.2	316.0	316.9	316.3
10	312.1	314.2	313.3	316.8	313.4	312.8	310.3	314.4	317.5	317.3	309.9	313.7	305.8	305.5	308.5	316.2	314.9	312.2	311.8	317.6	317.6	317.2	313.9	312.3
11	311.2	304.5	308.8	316.2	315.2	315.2	320.0	311.9	316.4	313.6	309.3	312.6	313.3	305.6	301.9	302.6	300.0	305.2	303.3	299.5	301.6	301.5	303.6	302.3
12	308.1	304.8	302.4	302.8	302.7	305.6	311.4	315.0	332.4	320.9	331.6	326.7	316.0	311.2	308.0	305.3	311.6	308.5	313.0	316.7	320.4	322.6	332.9	316.5
13	325.4	326.4	311.4	308.2	306.7	306.9	327.1	321.9	307.3	306.2	313.0	303.0	309.0	304.8	304.7	304.4	310.2	312.0	309.7	301.8	311.5	308.8	304.4	300.0
14	308.5	306.7	307.6	111.1	348.4	213.5	107.6	110.8	127.3	122.1	128.9	126.2	125.6	107.5	125.6	125.8	129.7	122.4	129.3	125.4	112.7	119.7	124.7	122.6
15	119.3	115.6	114.8	125.9	131.8	149.1	150.1	152.7	152.5	154.9	154.5	155.8	158.6	154.4	155.0	149.3	152.9	153.0	145.6	149.8	153.8	150.7	141.3	154.6
16	158.6	192.5	211.4	190.0	171.6	258.1	249.3	238.3	236.4	220.4	183.9	195.4	203.0	214.9	182.0	154.8	113.2	88.6	87.0	115.8	120.5	97.9	118.6	116.6
17	112.9	129.5	118.4	109.3	106.5	130.3	127.9	120.4	111.2	102.9	103.5	106.8	103.4	104.7	104.8	107.8	112.2	121.6	131.4	148.5	155.1	152.9	156.4	155.2
18	153.3	144.1	153.8	155.4	145.9	146.5	155.7	153.7	162.6	166.8	165.4	178.5	166.6	211.1	176.9	125.1	148.4	117.0	112.5	109.6	100.0	109.9	131.6	138.3
19	159.8	136.1	134.5	128.3	119.5	118.1	120.6	133.5	143.5	136.3	130.6	123.4	125.1	121.1	124.1	123.3	125.6	127.0	124.7	123.2	122.4	124.1	125.8	126.6
20	131.7	132.2	128.1	127.4	116.3	118.5	125.7	126.3	124.2	125.6	125.6	114.5	120.2	122.8	114.4	111.4	110.7	108.7	117.7	139.3	88.7	137.6	133.9	137.5
21	148.4	151.7	150.6	143.0	130.0	119.1	112.0	119.5	125.7	123.7	126.5	127.0	123.4	119.4	114.9	112.0	112.4	116.8	117.3	121.9	116.8	117.2	114.1	118.2
22	125.0	134.0	174.0	171.2	165.5	170.3	174.6	171.9	167.3	174.7	206.8	216.9	222.2	217.3	229.4	227.5	232.5	175.9	215.5	119.6	168.3	212.6	292.9	302.8
23	315.0	311.4	321.7	311.9	308.8	309.6	311.8	315.6	324.3	318.3	299.3	312.0	307.2	306.6	307.8	324.5	332.3	322.7	323.9	315.9	295.8	295.1	299.9	308.0
24	298.2	301.7	309.5	297.7	141.5	112.7	103.2	128.2	120.0	115.6	130.3	132.1	134.9	134.8	140.2	144.9	143.6	145.2	147.7	147.7	151.6	154.1	157.7	151.9
25	160.2	174.2	197.6	238.0	304.2	272.9	273.7	272.2	281.3	280.5	276.6	278.4	269.9	268.5	273.3	273.2	283.2	292.6	293.0	312.0	322.8	314.9	313.5	324.9
26	317.6	308.8	319.2	317.3	312.5	317.6	320.8	315.5	307.3	298.4	298.2	305.6	312.1	300.4	102.9	111.6	118.9	118.4	122.1	125.7	130.5	139.4	143.4	139.0
27	151.4	149.6	139.2	153.0	148.8	147.7	151.1	137.9	127.0	127.5	117.6	119.0	115.7	114.8	111.8	111.3	113.7	113.3	113.0	114.2	114.2	114.5	118.9	120.5
28	120.1	124.6	131.9	133.4	134.9	138.8	141.2	147.7	152.2	147.6	144.2	147.1	145.8	155.6	165.8	163.9	125.3	110.7	110.7	98.4	266.5	256.2	297.3	315.7
29	313.6	280.7	288.6	310.9	309.4	300.8	315.2	293.9	327.3	298.5	307.4	307.1	291.1	312.9	290.6	319.2	324.0	323.6	328.1	336.4	343.1	327.9	315.0	312.0
30	305.3	311.7	312.1	297.3	296.7	296.3	301.2	303.8	304.3	311.1	307.1	309.7	313.6	310.1	307.8	305.3	306.7	311.3	309.8	308.8	304.4	306.5	329.3	320.2
31	311.0	307.4	305.5	308.7	307.1	310.3	316.6	310.3	312.3	319.0	281.0	233.9	172.0	119.0	126.2	142.2	174.6	293.9	130.7	135.8	190.4	291.8	191.4	220.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	318.8	40.8	98.7	119.5	115.0	106.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	319.8	0.0	0.0	0.0	315.7	316.1	315.1	317.4	314.5	310.6	311.0	312.5	314.2	314.2	302.4	314.3	319.6
3	322.4	318.5	313.7	310.8	314.3	319.1	324.1	317.9	311.8	308.4	319.8	331.6	323.0	304.3	304.4	315.9	297.8	315.7	305.5	300.5	303.2	309.9	305.8	308.1
4	313.0	310.5	310.4	306.0	305.9	304.6	302.5	304.0	303.0	303.1	302.9	293.8	312.2	309.2	308.8	306.1	304.7	314.2	313.5	307.4	313.0	313.8	309.3	311.5
5	319.2	303.6	314.7	317.8	327.3	320.7	320.7	313.0	315.3	327.4	327.9	303.9	322.8	321.8	309.6	104.0	354.2	304.5	299.1	305.9	307.1	307.6	309.8	309.4
6	314.4	309.2	304.7	309.2	301.5	307.0	306.1	307.1	309.7	306.6	306.5	308.8	305.5	300.9	315.1	314.4	307.1	304.7	314.1	315.3	300.4	305.9	324.2	301.6
7	302.8	312.0	294.7	311.3	311.8	302.9	288.5	301.8	307.5	304.4	308.8	309.5	297.1	309.6	308.7	296.7	303.6	304.2	309.4	309.0	303.2	304.0	295.7	294.1
8	313.0	287.9	110.2	277.1	261.5	169.1	123.6	129.0	130.7	126.9	124.6	115.1	106.8	96.6	91.4	111.1	108.5	86.6	84.3	86.8	97.6	57.3	55.9	83.1
9	70.4	89.3	50.5	51.9	50.7	50.6	49.3	51.3	57.5	50.9	236.3	261.6	289.6	314.9	304.0	304.9	304.7	306.3	311.4	308.5	305.3	308.6	317.8	318.0
10	309.0	311.0	304.6	318.0	317.7	311.8	326.9	319.1	311.4	308.4	311.2	308.4	312.7	310.7	309.1	343.3	308.6	138.9	203.3	239.9	307.7	305.2	307.9	311.8
11	122.8	136.1	136.7	142.8	137.7	147.8	136.6	132.4	137.8	139.0	134.2	141.5	140.7	146.8	142.5	138.7	129.1	112.6	114.2	149.7	314.1	295.8	136.1	110.2
12	111.4	114.2	321.0	126.5	2.5	313.8	293.0	302.3	310.6	308.2	317.5	312.3	310.0	297.5	309.9	308.9	303.8	301.6	309.5	312.2	300.7	296.7	254.7	118.4
13	124.5	128.8	139.6	127.9	110.2	105.3	107.1	106.4	107.6	108.1	112.0	114.5	113.2	112.5	111.6	111.1	111.5	110.7	111.1	113.8	111.7	109.6	112.1	111.8
14	112.7	112.9	112.5	115.7	116.0	116.3	121.2	169.0	212.2	216.0	225.4	231.5	226.0	221.6	222.9	219.4	220.2	218.3	217.8	220.2	220.5	261.3	287.2	270.4
15	274.8	278.6	265.8	264.7	264.4	295.7	297.7	290.6	278.1	267.2	291.0	308.7	294.7	301.0	313.5	315.3	242.0	332.8	321.3	328.5	212.9	117.8	123.8	124.6
16	121.9	110.5	117.5	118.3	119.4	111.8	106.3	108.3	103.1	96.0	95.1	96.0	103.8	94.2	87.8	96.3	102.1	118.7	145.0	151.1	140.2	144.5	148.6	152.3
17	145.6	145.9	151.1	126.4	121.0	123.3	105.2	106.3	100.8	77.7	71.0	69.4	32.0	59.3	51.2	58.6	86.3	114.2	112.7	117.4	119.0	121.1	126.4	125.4
18	119.4	116.3	114.8	112.5	110.9	111.0	112.2	112.6	112.6	117.0	120.1	118.9	120.0	121.1	122.2	122.9	126.2	133.1	133.2	125.2	117.5	121.6	121.4	120.5
19	123.3	123.9	79.2	40.4	358.0	6.0	329.2	35.4	3.1	11.6	20.6	43.6	357.9	43.2	58.3	72.9	54.2	52.9	50.7	53.6	85.0	101.8	101.5	107.0
20	113.9	114.5	115.5	122.8	123.0	121.1	123.8	124.5	123.2	120.6	120.8	118.5	114.7	110.9	116.7	122.7	94.7	63.6	64.4	47.0	43.3	20.0	37.9	48.5
21	50.8	51.6	23.1	37.2	42.7	8.2	26.7	28.3	33.6	36.3	43.0	48.3	49.7	55.1	57.1	51.0	51.2	106.0	133.4	84.5	83.5	69.9	58.4	75.4
22	81.8	72.6	95.5	101.8	119.5	132.3	93.3	79.3	95.6	117.4	138.1	107.4	103.6	105.5	109.7	111.0	117.9	121.5	119.3	119.7	123.2	122.9	122.7	127.5
23	129.7	140.8	144.3	114.7	119.2	109.7	83.7	330.5	315.1	308.0	304.9	307.5	306.4	307.0	307.0	312.8	304.7	301.0	305.4	309.6	308.7	309.6	313.5	318.4
24	314.9	319.2	315.9	309.6	308.8	313.2	316.0	315.9	323.7	318.9	308.5	305.5	301.4	298.3	303.0	307.9	312.2	322.9	321.9	312.1	320.4	321.2	314.3	307.5
25	314.1	322.0	325.7	326.6	322.8	331.0	325.1	321.5	315.9	301.7	295.3	305.7	309.2	312.2	304.4	302.2	290.5	339.4	355.5	330.6	12.6	51.0	69.9	106.2
26	93.4	96.1	95.4	88.0	347.2	314.6	302.6	317.8	300.2	299.4	301.3	308.3	313.7	315.2	315.4	329.6	313.7	305.5	302.2	307.4	300.1	301.4	312.2	314.3
27	307.1	333.3	315.9	301.8	303.8	311.3	305.4	306.1	311.8	274.8	259.6	81.3	104.9	99.4	16.8	277.5	299.1	333.8	29.9	8.4	25.5	15.7	48.1	352.7
28	42.7	38.5	33.8	34.7	47.1	52.1	7.0	77.0	351.9	316.1	325.6	303.6	322.0	307.2	311.2	308.6	310.9	308.7	308.8	310.0	313.2	319.0	314.8	311.3
29	323.6	325.1	324.8	332.0	329.1	327.7	316.1	317.6	326.0	338.3	337.9	315.6	318.4	318.8	310.3	308.9	310.1	330.5	317.5	303.4	298.1	308.4	305.1	302.2

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	299.4	299.7	301.4	312.7	312.2	306.2	305.7	359.6	96.6	99.3	106.1	115.0	105.7	113.6	112.6	103.1	97.2	108.3	98.9	84.9	95.8	94.5	96.9	96.1
2	93.2	99.3	102.2	109.9	113.2	104.6	110.4	116.6	125.2	135.0	131.8	129.4	129.7	133.3	139.6	133.0	143.2	131.5	135.7	141.3	133.5	131.5	125.7	113.8
3	128.0	139.5	160.7	153.3	123.0	118.8	122.0	118.1	118.0	112.7	115.9	115.3	115.6	116.9	120.5	114.3	119.8	124.4	120.8	118.6	125.7	128.2	126.6	119.7
4	121.1	120.1	119.6	123.7	116.3	111.4	113.4	112.9	110.9	113.9	113.1	110.9	110.9	111.2	111.5	112.6	115.6	116.1	113.3	113.4	110.7	112.1	112.2	114.5
5	118.5	119.8	120.9	116.5	118.4	118.9	113.3	104.1	100.1	113.5	113.0	114.4	110.4	114.1	112.7	113.2	110.7	112.7	120.0	119.5	120.9	121.4	121.3	122.8
6	123.3	126.2	126.8	129.0	130.6	111.5	100.3	103.6	119.4	123.3	124.9	126.3	124.6	130.3	126.2	124.5	128.4	121.2	122.3	91.3	23.7	8.3	37.1	30.9
7	16.5	20.9	18.3	347.0	321.0	310.7	307.8	302.5	301.3	301.7	299.9	307.0	312.2	314.9	287.6	278.5	249.6	250.5	235.4	228.3	219.3	216.9	213.2	217.1
8	213.2	202.4	201.3	141.3	144.4	145.0	142.4	133.6	118.0	105.3	113.6	124.9	108.7	94.0	82.0	46.2	30.9	46.7	51.1	49.1	48.1	48.3	41.5	33.8
9	1.1	1.0	346.9	354.6	359.3	9.2	20.6	11.8	4.5	7.9	1.5	3.5	337.5	326.3	297.6	299.6	300.2	299.6	298.6	298.3	295.0	295.4	348.0	16.4
10	227.1	205.6	203.4	211.4	219.0	228.8	215.5	225.7	203.3	202.6	221.3	285.0	23.8	212.3	232.5	332.7	218.1	307.1	225.1	305.0	199.6	242.5	242.0	258.0
11	226.0	245.7	249.9	230.7	309.9	269.3	251.2	229.6	212.1	253.6	281.8	317.9	256.5	239.0	276.1	272.4	290.3	300.6	318.0	328.4	315.4	308.6	304.9	303.0
12	316.0	301.5	298.6	299.6	293.9	301.5	311.3	291.5	299.8	302.5	331.7	343.3	356.6	345.1	347.1	342.5	328.2	331.4	327.2	331.3	330.1	325.0	320.2	319.5
13	316.0	318.4	317.3	314.5	323.2	323.3	322.7	315.3	313.1	312.6	315.0	315.7	309.9	312.5	300.4	303.2	307.3	302.7	306.0	295.3	297.8	292.3	313.2	326.2
14	319.8	311.2	321.3	309.6	314.2	337.3	78.3	95.5	98.7	0.0	0.0	90.2	101.1	101.8	102.9	106.3	114.7	129.1	138.9	145.2	144.6	145.3	142.2	126.9
15	116.5	117.4	116.1	117.8	118.9	111.5	114.9	113.8	112.1	114.0	117.6	116.6	113.1	111.8	117.0	116.0	116.0	118.6	116.5	115.0	117.1	112.6	117.2	121.0
16	115.7	107.3	113.5	113.8	109.5	111.0	114.2	116.4	113.6	123.3	159.3	149.4	182.1	39.1	133.5	258.6	248.8	310.2	318.7	321.5	315.3	317.7	307.5	306.3
17	303.8	300.3	298.9	309.2	306.6	305.5	306.4	299.2	300.6	289.8	296.5	293.0	307.6	314.0	287.6	265.7	149.5	174.8	215.4	213.5	213.6	203.1	202.2	220.7
18	306.5	295.9	299.3	300.7	315.2	328.4	306.1	304.9	299.8	301.2	299.8	305.9	308.4	308.8	304.1	303.7	308.8	307.1	305.9	323.7	320.5	321.0	313.4	316.6
19	312.8	311.8	312.9	316.0	308.9	304.9	312.0	308.1	303.4	301.4	303.1	303.1	312.4	315.2	317.0	319.7	319.2	324.1	332.5	322.7	317.6	314.3	310.6	304.6
20	302.0	299.9	299.3	296.1	298.8	299.1	300.4	303.3	302.2	302.8	307.6	306.3	295.6	336.8	295.9	296.8	310.3	305.7	302.0	304.4	301.6	305.4	298.7	302.5
21	304.8	299.8	300.6	299.2	302.9	307.2	314.6	323.9	307.4	308.1	310.5	323.7	311.9	324.6	312.8	283.8	312.1	301.8	310.3	329.0	342.3	317.6	306.1	306.7
22	309.9	308.9	306.7	303.0	299.2	302.2	311.0	329.1	314.8	315.9	304.9	299.2	296.3	308.5	303.0	306.2	307.1	332.7	335.2	339.0	334.4	304.4	312.3	331.9
23	314.3	301.4	306.1	310.1	301.5	305.6	328.4	324.9	330.0	334.8	325.1	311.9	303.1	300.8	302.8	303.7	297.8	306.7	313.1	313.5	316.8	307.0	314.3	303.4
24	304.0	302.9	299.2	294.8	293.8	296.0	303.9	311.6	308.2	298.7	303.3	298.5	300.7	299.4	308.2	296.3	297.6	292.6	294.2	298.6	299.3	302.7	301.4	307.3
25	311.3	11.8	138.3	140.1	121.6	148.6	139.6	155.5	155.4	134.8	213.0	124.0	76.3	314.1	309.6	303.2	303.4	299.6	298.8	300.8	306.4	310.9	315.8	317.2
26	303.3	307.9	310.0	315.2	312.0	304.9	306.6	309.9	313.9	311.9	299.6	300.8	304.5	296.2	299.4	298.3	296.6	284.5	284.2	282.2	279.6	294.8	307.6	291.4
27	291.7	294.8	296.4	276.8	288.2	308.8	307.9	298.8	301.2	316.7	319.6	317.2	310.2	301.5	291.1	290.1	297.0	301.5	292.3	293.6	303.8	301.8	305.3	305.5
28	314.1	306.7	312.8	306.4	307.5	306.4	304.7	308.9	297.3	310.5	312.9	293.3	111.7	106.8	1.9	6.5	318.3	285.6	219.3	118.4	140.2	140.8	136.7	138.3
29	147.4	155.4	153.0	148.6	149.8	142.5	135.7	132.8	120.1	127.6	121.9	123.1	122.6	120.9	120.0	116.7	115.0	112.4	115.5	117.3	117.0	113.3	113.4	113.7
30	112.9	113.7	112.8	112.8	113.4	113.1	112.7	111.1	110.5	112.4	111.3	110.7	111.7	112.5	113.8	115.2	116.7	119.3	122.0	123.4	122.2	126.9	128.9	130.1
31	131.8	133.1	135.7	136.0	134.9	129.8	124.9	118.8	124.4	121.3	119.4	122.6	124.6	123.5	121.1	126.4	124.2	121.7	119.1	122.6	119.3	121.3	119.0	117.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	116.7	115.3	116.3	117.9	118.8	120.1	119.8	120.0	121.3	120.7	122.2	122.7	120.4	118.0	123.2	120.7	120.3	122.4	128.9	138.5	146.8	154.7	170.2	161.1
2	181.2	108.3	92.3	0.0	0.0	0.0	203.1	160.2	125.1	131.4	188.8	148.4	147.4	167.4	158.8	135.4	140.1	151.7	137.4	142.0	145.6	144.3	153.3	146.0
3	139.7	136.2	149.6	152.4	159.4	152.1	158.7	155.6	147.1	142.6	144.6	134.1	140.6	131.8	131.3	130.5	135.0	128.0	117.8	115.8	116.3	113.9	117.7	117.6
4	116.8	116.8	116.1	116.3	113.5	115.5	118.8	117.3	118.1	117.9	119.9	122.7	126.1	129.8	133.6	138.4	149.7	151.8	156.6	163.2	192.2	224.9	251.7	277.9
5	297.9	305.1	302.5	294.7	291.4	295.5	294.2	295.3	283.5	299.0	306.9	310.7	274.9	279.2	289.5	286.7	285.5	298.0	322.9	323.6	314.6	300.9	299.5	295.8
6	298.5	305.9	312.1	311.0	315.3	315.3	311.6	314.5	316.9	306.1	308.4	322.8	325.5	322.1	320.3	317.2	321.0	325.5	323.3	326.3	321.8	316.6	324.2	307.1
7	310.6	312.7	309.6	307.3	308.9	317.0	306.4	312.2	321.1	308.0	312.8	296.4	303.8	313.6	316.7	317.6	312.0	299.7	292.3	296.2	302.9	305.7	307.6	306.1
8	309.6	296.3	292.4	298.0	298.3	280.3	269.1	239.1	117.6	121.1	122.0	113.2	96.8	141.6	148.6	148.3	165.9	200.4	219.5	227.8	285.1	300.2	299.6	305.4
9	302.9	302.1	304.4	304.1	305.7	309.7	307.1	300.0	295.9	304.2	307.4	320.1	297.7	289.3	295.4	292.0	300.9	305.6	305.6	303.3	305.5	304.3	295.8	294.2
10	301.0	306.1	304.2	302.1	305.4	304.9	302.6	304.1	301.3		295.0	300.8	304.4	297.9	300.3	286.8	294.2	291.3	289.1	294.3	295.9	296.2	300.9	296.9
11	296.9	301.2	300.8	307.6	302.5	301.3	299.2	308.0	306.2	303.3	288.6	293.9	288.2	297.6	305.9	313.2	319.2	322.6	316.2	297.0	288.2	289.7	298.3	296.6
12	294.7	295.9	298.1	295.4	299.3	300.7	299.7	306.0	306.2	300.4	307.8	318.5	306.7	309.3	306.3	303.7	302.9	311.1	298.8	289.6	299.3	306.5	294.7	154.3
13	179.4	135.9	126.0	132.6	126.3	108.1	103.7	106.3	102.6	137.3	165.6	146.1	128.1	148.5	200.5	216.7	208.5	220.8	206.7	193.0	204.5	221.9	226.3	226.0
14	226.8	234.1	231.1	231.2	238.7	246.6	253.9	242.5	231.3	237.8	239.4	232.6	240.3	255.4	262.6	286.8	255.0	215.3	239.0	244.1	241.8	231.6	204.2	202.3
15	228.1	310.3	278.2	294.3	56.4	35.9	320.1	324.6	341.0	334.2	333.0	323.0	324.9	327.4	327.4	322.4	324.0	327.2	328.5	327.9	326.7	325.6	332.2	329.7
16	331.4	331.6	336.2	327.6	317.6	320.6	311.6	313.4	317.2	303.7	307.7	305.8	304.8	311.0	308.1	301.6	302.5	308.2	308.1	310.3	268.3	273.8	271.6	292.2
17	280.1	288.1	282.6	292.0	306.5	295.3	302.3	306.9	304.7	288.4	249.8	199.4	220.5	219.8	214.7	184.2	209.6	214.1	216.4	356.9	156.7	147.0	164.7	165.9
18	182.0	146.7	113.8	114.9	108.0	102.6	105.3	108.2	103.9	108.7	106.8	118.5	137.6	153.7	156.1	151.6	153.4	157.8	163.2	151.7	159.6	159.7	154.8	147.7
19	156.9	150.9	150.3	150.2	147.6	154.5	150.4	153.6	150.2	147.1	145.3	139.8	147.1	150.6	150.0	152.0	149.1	147.6	153.1	155.6	147.9	146.7	157.8	145.6
20	145.8	135.6	145.1	123.5	133.7	152.1	128.6	126.6	124.5	123.8	123.5	127.3	127.3	126.6	123.2	125.6	154.6	141.8	152.6	162.1	160.1	155.8	159.8	162.7
21	162.6	162.4	167.0	166.8	166.2	164.1	159.1	151.7	139.3	139.4	125.7	145.7	153.0	156.2	166.3	154.2	153.7	145.6	139.3	131.5	147.7	149.0	148.0	154.0
22	149.8	151.0	124.7	131.8	142.2	146.7	144.3	147.3	138.7	137.9	124.6	161.4	136.3	112.1	121.9	134.4	139.3	132.2	132.5	192.2	177.8	199.4	309.3	303.9
23	294.4	300.7	307.7	317.5	306.2	304.3	311.8	312.5	313.9	305.7	300.5	311.0	320.3	303.9	296.5	290.7	299.8	280.7	280.3	231.4	264.1	236.7	222.8	202.3
24	145.8	307.1	125.7	73.4	186.0	258.0	120.4	128.3	301.4	296.8	253.6	288.5	336.7	95.2	57.0	251.2	316.4	255.1	240.1	204.2	177.8	177.0	226.6	222.7
25	227.3	219.2	254.7	297.8	302.7	302.1	301.1	306.2	300.7	311.3	315.4	311.3	316.1	316.2	310.9	310.3	322.9	320.8	320.3	326.4	326.6	326.0	321.9	322.9
26	325.7	322.4	327.8	326.7	318.2	320.5	329.6	319.0	325.2	329.2	328.5	330.7	329.3	331.8	333.4	334.4	332.5	335.5	334.5	329.9	330.1	331.3	331.8	333.1
27	334.9	330.7	329.1	328.4	328.0	329.0	327.7	324.3	322.9	325.1	327.4	325.9	321.7	323.8	328.4	331.4	326.1	322.1	325.5	329.3	329.3	313.9	307.2	304.1
28	300.6	299.2	303.1	299.0	305.0	300.8	303.4	306.4	305.2	303.6	305.9	293.1	293.9	269.7	294.9	297.5	297.5	297.6	301.4	295.0	295.6	300.6	299.7	293.2
29	293.6	300.4	298.6	298.0	298.6	301.9	310.0	307.5	316.8	309.4	310.8	312.9	322.1	323.9	325.2	326.8	323.8	328.8	327.0	323.1	329.7	321.5	320.6	317.7
30	311.9	310.5	303.6	297.1	303.4	301.7	300.5	299.1	297.3	300.4	301.0	294.1	306.1	318.1	312.6	313.6	345.2	327.9	329.9	331.4	326.0	332.5	321.1	313.9

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	303.7	303.7	303.0	302.3	296.4	297.0	299.4	299.1	301.2	300.3	301.6	298.3	297.7	312.8	312.8	331.8	334.1	330.6	325.4	327.4	324.0	318.8	316.3	321.9
2	311.5	324.0	323.2	317.3	319.0	318.4	314.7	319.3	316.8	325.0	319.4	316.1	312.7	290.3	213.5	253.0	287.7	294.7	273.9	162.9	201.2	254.3	296.1	267.1
3	269.1	124.5	150.5	156.5	149.1	134.2	111.9	119.0	116.1	104.1	127.2	120.7	107.7	121.5	103.3	121.9	152.5	149.2	52.4	51.7	80.8	122.5	121.3	62.0
4	55.9	87.8	64.2	80.9	85.7	68.9	85.9	65.9	73.5	83.4	73.1	110.1	93.3	62.1	68.3	57.1	86.0	86.7	39.0	8.5	20.7	248.1	287.7	304.7
5	299.2	310.5	311.7	313.4	321.2	307.5	307.7	308.1	301.1	305.0	288.7	325.3	289.3	291.9	178.7	139.8	178.8	142.7	164.3	149.1	185.5	179.9	151.8	145.7
6	176.0	135.1	114.8	137.4	122.7	118.6	125.2	125.1	121.4	121.1	127.6	131.7	130.3	125.9	126.8	123.9	124.5	119.7	118.2	118.4	121.1	118.5	119.1	118.2
7	116.5	113.8	114.7	115.1	114.1	115.1	114.0	113.7	113.8	114.0	115.8	117.3	119.0	120.0	117.0	114.6	112.8	117.4	120.7	120.5	121.6	119.4	124.4	122.6
8	121.3	123.8	122.4	119.3	118.2	118.7	118.6	114.9	115.5	116.2	115.6	117.1	119.2	119.1	120.3	119.9	121.0	119.7	119.8	119.3	119.1	120.6	116.3	120.4
9	117.9	109.6	105.6	109.1	107.4	86.7	110.9	107.3	118.1	125.5	119.2	113.6	121.1	130.5	127.1	126.5	131.6	137.2	144.6	134.0	154.0	181.4	242.8	250.1
10	279.6	306.3	308.0	304.3	309.7	309.5	305.4	293.1	313.0	302.0	294.1	318.7	157.7	172.3	173.5	174.5	182.4	170.2	175.6	181.8	139.6	137.3	140.6	121.7
11	130.4	120.3	121.1	121.3	120.9	115.6	127.7	125.1	117.0	114.3	123.7	124.0	120.6	117.5	112.6	112.1	113.3	116.9	112.1	115.3	113.6	109.1	107.5	111.2
12	117.4	118.3	118.1	117.9	115.4	114.3	112.0	97.7	94.7	106.4	120.8	121.3	121.1	129.8	127.5	129.0	118.3	112.4	109.8	112.2	110.5	107.3	104.5	110.1
13	113.3	112.6	112.8	115.3	122.2	126.1	129.3	124.9	124.8	123.6	121.8	116.3	119.9	122.0	124.2	125.8	123.8	121.4	119.5	119.3	115.6	112.6	118.0	122.4
14	122.1	114.6	104.8	64.2	40.8	33.1	44.7	54.1	51.0	10.5	343.3	329.2	348.7	6.8	37.7	53.6	53.9	56.6	68.4	70.3	74.7	82.2	56.3	100.3
15	127.0	233.3	235.7	221.0	203.7	177.9	168.3	165.5	137.6	142.9	154.0	155.3	152.8	167.8	169.7	177.4	178.1	170.3	161.3	148.0	142.9	146.9	152.1	160.8
16	175.7	175.6	176.3	173.3	193.1	141.2	113.1	103.2	93.9	118.3	105.0	114.7		132.1	131.6	133.0	134.5	139.1	141.9	145.1	185.3	204.8	214.0	252.1
17	319.1	313.9	306.9	305.4	305.1	309.1	297.4	296.3	301.9	303.8	319.7	339.1	308.6	279.7	259.4	47.6	213.3	231.3	183.8	183.6	151.6	160.0	166.0	143.3
18	152.5	121.1	127.3	141.7	139.6	143.8	149.8	158.6	158.7	141.2	134.9	127.5	139.0	145.0	156.4	167.6	139.5	130.4	136.6	128.3	147.9	142.7	158.0	161.9
19	162.6	161.7	163.9	183.3	173.5	191.3	173.6	182.9	296.6	349.2	339.8	326.0	307.1	278.1	312.6	317.2	287.9	294.6	292.5	296.9	298.8	295.6	296.5	302.8
20	314.8	306.7	312.6	308.4	311.0	308.7	317.8	311.1	309.4	316.3	320.4	347.4	0.9	55.4	66.6	163.6	171.2	168.0	169.5	169.1	185.9	181.3	175.4	176.9
21	158.1	161.4	139.0	113.2	106.0	90.5	357.1	338.9	327.3	310.4	138.2	126.3	140.9	147.2	179.0	186.2	198.3	181.6	184.2	212.5	234.5	237.3	247.6	256.6
22	256.4	260.7	264.1	262.2	242.7	276.6	318.8	288.3	320.1	329.3	326.0	299.9	328.7	75.3	102.0	139.8	129.9	126.2	124.3	122.7	115.7	121.4	109.5	106.6
23	112.4	111.2	111.0	113.3	111.7	114.9	109.4	114.4	116.4	110.1	106.6	109.9	111.4	111.1	111.2	117.2	113.2	112.9	113.8	114.9	116.9	121.9	130.7	133.4
24	134.2	135.2	132.9	131.7	130.0	128.0	119.4	126.6	129.8	131.3	129.4	125.3	124.3	121.4	117.7	116.6	115.7	119.1	129.2	198.6	140.9	146.6	173.7	165.8
25	157.5	158.5	156.9	151.2	148.5	157.2	160.5	159.4	151.4	144.6	151.9	161.3	170.1	173.5	179.0	171.4	177.0	180.7	196.9	181.8	191.8	186.8	175.0	186.5
26	198.9	200.7	185.7	156.8	183.5	196.6	208.5	218.5	227.0	226.7	237.8	243.3	244.5	261.6	243.9	266.3	263.9	264.6	279.8	271.0	260.9	259.5	267.2	263.9
27	275.8	294.3	295.2	297.7	306.2	299.8	300.7	313.4	309.8	309.8	303.7	291.1	263.2	279.4	300.6	293.3	286.8	297.9	298.4	285.0	276.5	285.7	297.2	293.8
28	290.1	290.2	293.1	305.4	300.2	284.4	295.1	303.4	319.4	314.5	283.9	291.6	286.3	243.3	246.0	251.1	253.6	272.3	290.2	295.8	290.1	290.9	302.9	313.0
29	309.1	309.2	297.5	303.7	306.1	305.4	305.3	309.6	321.1	323.4	344.2	343.2	332.7	332.1	331.3	330.8	329.4	333.7	335.4	338.0	335.3	336.4	333.9	317.8
30	303.8	294.3	299.1	143.7	145.1	112.5	136.5	131.2	120.3	126.5	123.5	123.0	128.7	134.1	133.6	133.7	136.9	136.2	128.1	117.9	117.1	113.4	109.5	114.3
31	118.2	115.3	118.3	117.1	117.0	115.7	117.7	117.1	112.2	117.1	118.0	119.3	119.0	121.1	123.6	122.0	121.4	118.9	126.9	134.4	141.4	159.2	158.4	157.6

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	144.1	138.5	119.9	130.4	121.0	117.9	113.7	112.9	121.4	119.3	116.0	117.3	123.6	125.2	125.6	127.0	130.0	136.1	132.4	131.5	113.3	115.1	110.7	99.7
2	125.1	102.1	105.0	104.0	108.6	102.6	104.4	92.0	105.0	112.3	110.4	115.8	99.3	96.4	122.0		124.2	135.2	148.5	144.4	162.3	169.9	165.8	200.3
3	250.6	316.6	332.7	319.7	41.0	48.9	80.1	86.0	129.0	183.9	264.4	89.2	147.8	144.2	148.8	156.3	163.4	157.3	155.7	149.7	151.9	144.9	135.6	129.4
4	130.2	139.9	142.7	155.7	141.1	155.0	156.0	132.0	129.1	136.9	140.5	146.1	149.0	139.9	145.7	140.3	143.3	141.0	148.3	141.7	144.6	144.4	141.5	146.4
5	148.8	146.6	149.9	138.5	132.1	132.5	121.8	113.4	115.5	112.8	114.6	116.9	110.5	110.0	111.3	112.1	118.6	122.5	130.8	131.1	147.5	143.6	260.5	300.3
6	302.2	307.5	311.5	318.2	315.5	317.1	316.0	319.2	311.2	310.3	304.4	318.8	315.0	327.8	321.1	305.7	305.7	303.1	299.7	290.8	295.1	296.2	298.1	292.9
7	285.5	295.3	302.8	303.4	301.8	300.9	303.2	305.4	334.8	349.4	318.8	317.2	326.1	354.0	344.1	349.7	275.6	230.8	230.4	234.5	243.8	234.1	233.6	147.6
8	137.6	136.3	129.3	118.3	125.4	140.8	136.3	128.5	129.0	119.5	151.2	186.0	183.0	192.1	203.4	204.4	219.1	219.7	224.0	218.9	213.7	208.7	214.0	224.6
9	226.9	227.1	227.5	232.8	240.6	233.8	195.1	228.2	226.2	228.6	210.8	235.2	270.8	264.1	292.0	264.5	286.4	266.5	255.7	255.5	258.2	256.8	247.4	254.0
10	245.5	266.3	310.6	329.5	323.0	346.2	334.1	333.4	340.5	119.6	83.0	318.8	312.9	18.6	148.3	184.5	152.4	156.8	193.1	182.5	173.7	192.6	204.5	157.0
11	122.1	234.0	0.9	134.4	129.3	114.2	108.8	330.6	322.7	15.5	126.3	329.2	323.7	249.2	226.2	213.4	215.8	221.5	220.6	224.6	231.9	223.1	223.4	219.1
12	219.3	172.9	213.6	209.7	184.2	138.4	348.4	285.1	276.1	273.8	70.5	90.2	344.4	315.1	313.0	330.8	208.8	205.7	227.3	213.4	266.4	313.7	310.6	314.3
13	304.5	313.3	308.6	302.9	302.8	298.5	305.6	307.9	309.4	311.7	316.4	313.9	310.6	338.6	336.7	328.2	325.5	309.7	282.7	291.8	237.0	243.0	246.9	225.4
14	242.7	276.2	98.8	90.3	123.6	145.3	316.7	314.0	316.5	325.3	324.0	324.5	317.9	330.0	218.3	146.6	177.7	199.5	204.2	170.0	203.4	218.6	229.6	244.2
15	221.4	60.2	314.1	206.7	333.6	320.2	228.2	221.5	313.1	115.3	16.3	116.2	136.9	146.9	190.0	209.1	215.0	222.7	237.0	214.8	212.2	221.6	219.9	206.2
16	204.6	37.2	27.7	358.9	320.5	316.1	305.3	304.5	303.3	314.3	313.9	311.2	302.0	197.2	203.4	218.3	298.2	281.2	256.5	260.7	265.6	271.4	273.3	277.6
17	286.5	286.3	287.7	290.7	296.5	296.4	304.6	307.2	29.9	343.9	320.7	311.5	214.4	167.7	146.4	154.6	151.1	145.3	163.3	152.3	146.4	148.6	169.3	162.0
18	147.8	186.1	275.5	302.9	305.0	286.0	252.1	138.6	4.1	43.9	338.6	353.9	224.9	226.2	206.2	184.3	193.8	218.9	229.4	236.0	245.5	257.5	263.9	298.4
19	316.7	311.6	302.6	317.4	304.1	313.3	311.0	309.5	81.9	127.1	44.2	330.3	330.3	341.7	180.0	162.5	152.8	179.8	182.7	186.2	181.1	189.8	186.6	153.9
20	190.3	158.8	181.8	188.5	145.3	96.6	326.2	125.3	109.8	118.9	141.9	142.2	142.8	140.4	134.5	142.7	144.5	145.0	148.6	141.7	139.5	139.8	136.7	147.4
21	157.4	154.2	145.2	145.1	137.8	139.6	138.4	139.2	151.3	140.7	114.2	32.2	356.3	12.5	33.3	39.0	74.8	134.2	145.9	160.1	165.5	163.2	161.6	143.6
22	174.8	177.2	159.2	156.8	157.1	156.2	149.4	143.9	154.8	146.2	148.1	152.2	153.0	147.2	150.9	141.0	143.8	141.4	145.8	143.4	143.6	142.9	145.7	136.4
23	147.9	137.9	130.2	131.1	129.4	125.3	123.5	128.2	127.5	129.6	125.6	126.5	116.8	125.1	131.4	144.7	149.2	141.5	142.3	148.9	157.2	159.4	157.2	154.9
24	141.1	142.2	128.4	126.4	125.4	123.2	117.8	116.7	118.0	117.5	119.6	119.5	119.9	120.6	119.2	117.8	117.4	117.4	113.9	117.0	113.5	109.0	110.4	111.5
25	109.8	112.8	115.6	116.8	115.0	117.0	115.7	114.7	110.1	112.4	112.3	109.3	112.9	112.6	114.4	116.6	118.4	120.6	123.0	124.8	127.6	125.2	89.7	89.5
26	96.3	113.6	123.6	150.1	160.1	53.0	63.7	72.3	82.6	86.4	70.3	59.8	55.4	148.6	142.4	77.7	68.5	98.1	98.9	84.5	127.4	126.6	131.6	142.3
27	116.0	114.1	119.5	107.6	142.0	117.4	131.1	124.9	127.8	128.7	140.1	130.2	132.9	129.5	120.2	120.7	123.9	142.6	145.3	153.8	152.4	155.5	158.6	154.4
28	155.1	160.1	162.9	161.1	129.4	250.1	258.8	172.1	115.1	195.9	211.0	214.0	226.1	225.0	232.9	219.7	232.8	209.9	205.5	192.6	185.2	158.1	172.6	171.0
29	162.3	160.4	165.9	162.3	162.4	158.8	153.9	189.3	168.9	160.6	167.4	173.3	150.7	146.1	138.3	128.7	125.4	135.5	125.7	130.0	137.5	147.7	155.9	147.8
30	139.1	140.8	139.9	139.8	141.5	155.4	173.4	160.5	120.0	1.9	326.7	348.2	314.7	323.1	300.7	8.7	174.4	225.0	269.2	22.1	351.1	275.6	338.7	271.1

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	243.3	174.7	170.7	146.7	133.5	119.3	305.9	326.0	340.5	25.1	102.4	110.9	126.7	124.1	123.5	120.2	121.3	120.7	111.2	115.5	120.0	119.3	121.4	125.9
2	121.4	121.7	120.8	118.7	117.3	122.5	115.8	124.7	120.4	121.1	120.0	119.1	122.6	120.9	121.5	121.4	123.2	126.6	138.9	146.1	141.3	135.7	119.0	101.7
3	121.5	99.5	97.6	115.4	98.5	115.5	114.8	120.3	119.6	137.4	135.0	126.1	119.9	128.4	113.3	116.1	111.7	138.1	141.8	129.0	146.6	97.8	116.0	119.0
4	126.8	101.3	151.4	115.7	64.9	69.4	93.4	80.8	65.1	7.9	105.1	103.4	117.7	142.0	148.9	158.7	157.2	129.5	174.7	190.0	178.9	170.2	148.7	135.8
5	139.8	162.2	106.2	140.7	134.0	157.3	159.0	133.6	126.0	127.9	118.1	130.8	89.4	47.1	161.7	161.9	177.9	181.6	169.1	157.0	162.8	171.5	146.5	178.5
6	173.1	151.8	170.9	187.4	224.6	184.4	106.6	324.8	311.0	106.5	109.9	151.3	141.7	155.9	158.6	155.0	154.2	159.2	157.4	155.8	151.2	153.7	154.5	151.1
7	157.4	152.7	148.0	160.8	150.4	144.1	147.9	142.4	136.9	127.5	129.0	138.0	142.6	141.6	139.6	135.1	139.4	150.9	145.2	143.8	155.5	161.7	159.2	155.8
8	176.9	171.8	140.5	202.1	175.0	135.8	168.4	139.6	124.4	141.7	191.0	202.8	172.0	154.1	170.8	173.6	165.8	171.0	170.4	185.7	157.4	130.9	136.0	145.8
9	162.6	153.8	103.5	115.7	118.9	116.4	124.7	127.3	130.2	129.5	140.1	135.8	140.5	142.9	142.1	135.8	141.1	131.8	139.0	143.4	143.1	129.1	131.4	139.8
10	144.5	141.7	147.0	139.0	131.7	127.2	133.6	138.1	130.6	137.5	145.2	140.0	151.5	147.9	145.4	142.3	145.4	145.4	140.3	134.3	144.7	141.1	147.9	138.6
11	120.6	142.1	161.5	165.7	161.7	159.9	155.1	152.5	150.1	144.7	152.2	150.1	151.3	144.4	146.4	137.8	139.2	147.5	146.9	144.1	145.9	151.6	159.0	149.3
12	151.4	150.6	158.4	141.9	134.3	137.8	144.0	129.2	126.1	124.4	124.6	127.6	128.9	124.2	121.5	120.5	124.3	121.4	126.5	124.5	120.7	119.3	121.4	123.4
13	125.5	125.0	128.4	133.4	131.3	129.7	132.5	130.5	129.1	131.0	133.2	131.1	132.7	142.4	150.9	150.4	155.1	159.4	158.0	165.5	163.9	172.1	171.3	171.4
14	179.3	169.5	156.0	144.9	140.5	166.8	152.9	154.3	126.6	146.5	139.2	156.9	158.9	144.3	155.1	147.0	152.8	147.5	161.7	175.2	165.9	165.3	160.8	157.2
15	158.2	153.1	163.6	165.4	161.0	160.8	158.1	154.9	132.7	134.0	130.9	135.1	148.3	143.9	141.2	145.3	147.1	148.4	146.0	144.9	136.7	143.9	133.6	123.7
16	117.5	120.1	120.2	124.0	121.5	119.4	122.2	122.7	118.8	123.2	115.1	117.7	117.6	117.2	116.6	116.7	117.9	115.3	116.9	116.5	117.7	119.1	123.4	130.8
17	142.6	147.3	197.8	213.1	218.6	224.4	217.3	222.3	222.5	214.8	221.4	226.1	233.4	229.0	227.4	230.2	236.2	234.5	240.8	237.8	226.0	229.2	225.7	176.0
18	220.2	221.1	210.1	214.5	224.8	221.9	224.6	180.2	202.4	322.9	169.0	6.8	268.5	274.1	254.9	236.2	265.8	294.3	331.7	304.0	274.6	293.2	305.8	306.1
19	310.6	304.5	306.0	301.4	302.2	299.2	291.0	300.9	307.6	314.6	314.7	326.1	321.5	313.3	331.8	327.8	332.9	331.7	340.0	324.4	319.0	311.6	305.4	296.2
20	287.8	287.1	275.7	278.8	283.5	229.3	241.9	225.1	225.6	216.3	164.7	207.6	199.7	203.2	205.8	201.5	214.2	205.7	197.0	201.3	203.3	188.6	176.3	155.2
21	163.5	175.5	173.0	172.9	166.6	171.9	172.8	184.8	199.3	211.2	216.8	215.5	221.1	265.9	288.1	269.3	311.6	244.6	264.6	254.1	288.1	247.5	220.5	225.0
22	219.5	171.0	201.4	194.3	58.7	317.6	293.5	127.9	131.7	120.6	116.8	140.3	150.9	161.3	192.1	174.7	215.4	182.5	187.3	136.6	142.5	146.1	150.1	170.2
23	148.8	152.3	124.4	195.2	173.2	222.7	226.8	233.1	275.0	272.5	232.4	219.2	216.8	216.2	208.1	192.9	188.1	165.3	186.5	199.5	214.8	225.6	211.4	318.3
24	329.0	2.7	134.7	180.0	302.1	310.8	305.3	313.9	319.1	316.5	318.6	339.6	334.4	324.6	329.3	336.9	346.4	330.4	332.4	345.4	351.0	328.3	324.2	319.1
25	309.1	301.9	314.6	318.3	315.8	322.5	316.8	313.2	320.5	320.1	318.9	322.7	327.7	324.8	337.8	333.7	332.4	332.9	323.9	315.8	309.8	300.3	299.6	293.1
26	300.4	310.0	306.2	309.3	269.1	253.2	187.4	73.6	262.7	309.6	247.7	147.7	217.0	188.0	141.1	131.6	197.9	219.5	216.7	180.6	161.5	172.4	175.6	158.9
27	173.6	182.7	182.8	166.8	154.9	138.2	143.9	133.1	137.3	131.6	127.7	103.0	121.3	123.8	115.8	118.9	132.2	137.7	149.1	162.7	173.6	178.9	191.5	211.1
28	228.0	305.5	301.5	305.6	298.4	302.8	298.5	300.7	305.8	320.3	327.6	318.5	325.0	336.9	340.5	331.6	322.5	316.7	317.0	317.6	322.0	310.9	300.1	295.5
29	303.3	302.7	311.7	325.3	317.1	311.4	308.3	310.9	314.6	324.4	334.7	327.1	323.8	317.3	319.3	323.0	323.0	320.4	310.3	319.2	318.4	321.6	334.6	339.0
30	332.1	316.6	325.1	316.3	313.0	309.8	310.6	302.8	302.0	307.3	311.6	310.2	306.0	313.2	308.3	318.7	324.7	329.1	328.7	335.0	335.3	327.3	317.0	317.6
31	310.6	296.9	298.3	306.0	306.6	312.2	310.6	313.0	314.7	312.4	312.5	317.2	309.9	306.2	308.8	305.5	288.5	295.0	298.6	296.5	287.3	278.2	265.4	279.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	301.3	272.0	289.1	308.6	307.0	308.1	321.2	333.1	55.7	133.7	120.0	113.8	123.1	120.4	132.8	138.2	148.9	144.1	149.7	166.0	163.3	166.2	161.9	170.7
2	167.5	162.1	165.0	156.5	150.7	148.5	149.2	147.9	148.6	149.1	157.5	152.2	152.9	153.7	152.0	155.4	158.4	166.2	168.6	150.4	157.2	182.7	210.3	277.2
3	285.6	303.7	302.4	311.3	316.7	315.9	301.5	303.1	308.5	302.4	327.5	324.2	167.0	161.8	153.1	150.8	153.9	157.3	149.6	149.2	148.8	150.2	152.6	159.2
4	154.0	148.1	153.0	150.2	159.4	156.7	156.4	157.7	159.0	158.0	165.0	161.2	155.1	152.3	154.5	146.3	160.9	158.3	153.7	164.0	168.8	170.4	167.8	169.6
5	177.7	173.0	174.1	160.9	181.2	191.5	191.3	307.8	314.3	328.8	349.8	359.3	337.5	332.4	331.6	338.8	338.9	337.2	339.3	336.1	334.1	336.0	334.7	331.4
6	327.3	321.5	324.0	310.4	305.6	309.4	314.7	302.8	322.3	336.0	325.2	321.9	325.2	324.2	322.3	310.0	318.9	307.3	317.6	325.5	318.9	320.8	329.0	336.5
7	314.1	312.0	301.5	299.2	301.2	302.9	302.8	308.0	321.8	319.1	332.1	325.9	320.7	326.5	331.3	323.2	330.8	316.8	314.1	323.2	320.8	319.5	305.0	299.4
8	298.5	291.3	294.7	303.2	301.3	319.6	316.4	303.1	306.5	316.3	327.2	327.0	339.6	350.1	348.4	358.4	342.4	336.0	341.1	327.9	324.9	325.5	310.1	300.7
9	308.8	313.1	310.7	308.1	294.1	299.2	301.5	310.1	305.1	316.7	318.5	323.1	324.1	330.1	339.8	340.0	339.9	332.2	340.2	336.6	326.4	310.1	306.0	313.0
10	320.6	315.4	288.9	268.2	246.3	128.9	176.9	124.0	121.8	134.9	127.1	144.3	122.3	152.1	153.6	183.7	83.4	89.2	158.4	162.7	148.4	167.6	172.3	162.5
11	175.0	181.7	163.3	154.0	151.7	149.6	152.9	152.3	138.5	130.5	116.6	128.0	122.5	124.9	132.5	128.6	127.3	123.3	123.2	130.7	156.6	163.5	169.6	178.0
12	163.4	273.4	301.1	322.6	309.1	278.6	305.3	311.6	313.7	311.0	321.2	328.4	341.5	352.6	357.2	358.2	50.7	122.7	163.8	181.9	181.1	155.4	181.0	310.8
13	314.0	305.9	312.1	352.4	327.5	346.4	74.1	163.3	162.4	139.4	38.8	317.1	322.4	328.1	49.6	94.1	127.3	110.3	142.9	149.1	132.8	126.8	130.8	130.3
14	153.7	183.3	166.0	156.8	158.6	136.4	136.3	128.3	153.7	145.4	152.4	149.6	141.6	128.4	132.5	148.0	147.1	148.8	146.3	147.6	153.6	144.5	135.7	174.3
15	184.7	215.2	275.8	5.6	328.1	351.3	325.8	318.3	325.7	326.3	333.2	64.4	115.4	130.8	133.5	128.3	140.0	166.8	156.0	158.3	169.3	125.6	113.1	100.9
16	115.2	119.0	108.7	125.2	145.3	144.6	144.7	149.4	137.2	149.0	139.2	151.7	140.5	146.0	144.1	144.7	149.8	153.1	154.5	156.7	156.4	158.4	151.9	148.0
17	134.3	112.8	123.7	128.0	118.5	123.1	115.2	108.9	104.5	105.9	99.5	111.0	119.6	122.7	122.2	109.9	119.0	127.4	131.6	137.7	124.1	117.3	118.1	141.3
18	125.3	122.5	121.5	108.5	131.9	50.9	83.8	7.4	340.1	4.9	354.9	19.4	80.1	89.2	81.2	79.7	100.7	143.6	124.7	162.9	169.5	267.0	300.7	306.3
19	303.1	23.6	56.0	81.4	118.0	145.1	101.2	309.4	167.0	295.0	310.2	311.8	310.1	308.1	302.7	313.0	321.4	314.4	316.2	318.3	1.1	320.5	296.6	297.7
20	276.7	306.6	291.7	298.1	300.8	306.4	300.7	304.0	303.6	305.8	313.6	335.8	304.1	298.8	310.2	303.8	306.8	321.9	323.4	326.9	330.7	337.4	304.6	297.3
21	293.8	307.4	305.5	281.9	264.1	267.3	279.7	249.1	209.0	134.0	63.3	274.6	251.1	246.0	202.5	228.4	225.2	216.0	226.1	349.3	272.8	199.4	217.3	221.4
22	183.6	232.2	290.9	300.0	311.0	312.0	307.1	312.2	306.8	342.7	2.2	313.0	318.4	345.5	306.4	276.7	348.5	220.8	295.2	301.4	301.2	296.8	298.5	308.0
23	311.5	305.4	311.7	309.3	309.6	313.4	304.9	307.2	311.6	312.1	330.2	341.1	324.2	354.1	327.7	307.1	288.4	187.9	162.0	175.4	168.0	156.0	147.2	163.3
24	191.4	174.9	158.5	258.6	55.3	263.3	295.2	314.0	306.3	310.8	340.7	328.9	335.8	344.7	352.9	339.1	341.9	344.9	323.9	10.3	7.2	296.8	307.2	301.8
25	301.3	296.9	290.7	220.5	267.6	96.2	181.3	160.4	62.4	106.0	190.1	200.8	178.9	160.3	144.6	138.2	144.9	145.9	153.9	143.3	151.0	150.2	149.8	141.0
26	143.2	130.4	120.6	127.5	120.7	120.4	129.3	134.5	142.4	137.9	134.8	131.3	135.6	138.3	150.1	146.8	146.5	143.3	155.2	158.9	158.5	144.1	157.6	159.8
27	160.3	142.9	115.1	107.6	108.8	159.6	187.6	320.7	334.5	329.6	325.9	316.3	312.7	328.9	293.9	277.6	268.3	277.0	285.7	283.6	279.3	279.4	283.0	282.6
28	291.8	306.5	312.0	317.4	308.5	298.5	301.7	312.5	305.3	312.1	325.6	335.9	326.0	334.0	323.7	311.4	313.2	281.0	295.8	285.0	307.3	332.1	320.2	311.1
29	305.5	310.3	321.2	316.2	319.3	311.7	295.0	299.4	288.3	293.7	307.6	332.1	294.9	249.4	233.5	219.0	216.8	231.9	233.2	242.1	244.3	245.0	239.8	289.7
30	267.8	239.6	282.7	172.0	220.4	160.9	130.4	123.0	151.9	160.6	118.2	110.9	111.5	119.7	115.9	96.7	99.7	118.0	128.0	129.3	156.9	135.6	121.2	118.6
31	115.3	115.5	112.1	111.4	109.5	109.2	116.9	117.2	112.5	95.3	88.3	77.2	86.0	92.7	75.9	78.0	61.8	57.2	52.5	47.4	43.9	50.6	54.7	49.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	42.2	49.5	52.1	55.3	53.7	52.3	47.5	44.6	49.3	58.9	55.9	80.6	121.6	104.7	90.5	82.7	111.4	101.9	96.5	85.1	106.0	97.5	101.2	103.3
2	111.8	108.6	105.8	109.7	109.7	109.1	112.0	112.5	113.4	110.7	111.6	113.1	117.6	113.2	114.9	108.0	97.1	77.1	45.2	43.9	16.1	10.0	5.6	17.2
3	44.9	54.3	52.8	43.7	11.6	357.1	357.1	358.7	8.2	331.5	349.8	106.9	108.2	136.4	128.6	170.9	182.5	164.7	151.4	156.9	157.9	165.4	199.1	212.0
4	211.4	201.4	204.4	186.2	187.3	190.3	202.3	182.9	146.6	149.4	161.5	159.3	153.5	178.7	160.6	157.4	166.3	158.7	153.9	138.2	168.3	191.0	219.7	178.7
5	191.0	171.5	160.8	255.6	163.2	254.1	313.8	306.9	314.2	339.2	160.0	117.6	138.8	173.3	189.3	282.8	349.5	47.2	107.2	71.4	110.3	134.0	150.0	132.2
6	125.9	110.1	118.1	121.7	112.2	116.5	111.5	98.6	99.7	93.4	99.2	103.1	105.5	115.9	115.9	103.7	100.8	101.3	102.1	99.7	91.5	98.6	98.8	92.9
7	104.6	107.2	106.2	83.7	77.9	84.7	102.6	92.5	83.1	83.8	87.0	116.2	120.9	121.6	112.5	113.9	123.0	117.7	127.1	134.4	125.4	135.2	133.5	135.0
8	145.8	175.5	166.2	171.8	169.6	185.1	173.1	147.0	150.0	130.1	107.1	104.2	99.0	104.3	108.3	107.0	106.8	111.9	105.9	101.3	90.8	97.7	94.3	93.4
9	116.0	116.4	112.6	104.0	103.7	105.4	155.4	98.5	104.9	107.0	101.0	99.7	101.6	105.4	115.7	115.4	111.2	115.2	124.0	123.2	123.7	128.6	134.0	147.2
10	133.0	127.6	114.0	149.5	148.1	160.9	127.2	113.5	147.1	137.4	147.6	167.8	180.1	206.0	218.2	223.4	218.5	219.9	229.4	237.7	264.7	145.4	206.9	212.0
11	244.6	239.7	226.5	184.2	207.0	147.0	207.1	182.3	139.5	129.8	176.5	174.3	160.4	170.2	154.5	152.3	141.0	142.1	141.0	132.6	126.5	113.6	106.9	111.8
12	116.3	114.0	111.4	113.2	114.5	110.1	108.3	108.3	109.1	110.3	109.9	112.8	111.9	116.1	113.5	112.7	109.5	107.8	111.5	112.3	110.6	111.3	111.7	111.9
13	109.5	103.8	107.7	112.4	114.2	112.9	111.1	112.5	113.4	109.3	110.8	115.4	116.9	118.0	111.4	112.1	114.8	114.9	117.1	115.8	115.9	119.1	116.0	112.3
14	114.3	121.5	125.1	121.5	122.8	137.9	140.9	131.0	121.6	115.2	121.1	106.1	103.7	106.3	114.2	117.0	122.5	120.7	121.2	127.7	129.4	128.1	131.3	137.7
15	120.2	138.6	135.9	116.9	113.5	118.0	119.0	108.4	114.8	107.4	114.7	116.5	125.2	118.0	124.6	116.5	121.8	118.1	118.9	118.3	119.7	125.4	137.9	143.1
16	144.4	119.1	333.1	314.2	304.1	295.5	301.6	309.4	303.1	298.0	306.6	302.6	321.3	308.5	305.2	294.2	304.9	288.9	283.0	280.3	278.9	274.1	267.6	266.8
17	270.3	264.8	266.1	200.4	134.9	220.5	234.3	221.6	209.0	329.5	334.4	77.7	97.8	99.7	99.0	97.1	100.3	106.1	110.7	97.4	86.0	92.4	78.0	52.8
18	37.3	25.6	38.6	40.8	38.3	20.5	15.1	8.5	358.9	354.8	353.2	343.2	338.2	306.0	301.9	305.7	310.2	308.6	306.4	324.6	306.4	31.1	95.5	101.1
19	95.9	94.5	90.7	82.1	92.1	100.6	91.2	93.8	90.9	96.6	137.0	141.3	136.8	142.5	182.9	272.7	285.4	289.9	291.8	288.3	289.6	291.8	294.0	286.1
20	291.4	293.5	290.8	283.5	289.4	295.3	303.2	302.7	297.3	303.8	307.7	309.7	309.3	295.2	284.3	296.5	292.1	317.2	326.6	332.9	332.9	300.5	298.3	301.9
21	308.2	297.6	300.0	293.3	301.6	291.2	301.3	304.5	303.0	315.4	308.1	330.8	317.5	335.2	314.3	313.9	309.1	312.9	310.6	299.0	295.7	300.5	298.3	303.8
22	305.5	307.9	299.5	293.8	294.0	290.4	280.8	283.7	299.5	309.7	282.4	271.6	154.0	177.6	150.3	156.8	141.8	130.4	118.5	135.8	152.7	150.5	152.9	154.8
23	154.9	158.7	158.0	161.1	198.2	211.4	211.3	215.9	213.9	208.8	205.6	211.9	210.8	192.8	195.0	191.6	208.1	209.0	203.3	205.5	198.3	204.3	185.7	182.2
24	169.7	155.6	135.1	135.8	135.4	127.2	106.8	107.7	104.5	128.5	115.2			0.0	147.6	106.4	101.1	102.3	104.8	103.4	89.3	92.3	84.2	48.2
25	29.9	39.5	59.7	58.4	20.7	352.6	5.7	68.6	45.3	27.8	68.3	82.1	99.0	101.6	106.2	77.4	91.6	93.3	104.7	92.3	350.9	315.6	341.3	339.3
26	321.0	309.0	306.7	311.4	312.1	305.0	301.2	309.4	293.1	305.9	305.5	317.5	317.5	337.0	344.9	357.5	310.3	295.0	306.1	311.7	308.9	314.6	305.1	314.6
27	325.6	318.9	311.6	300.0	308.0	314.1	314.6	301.2	305.0	314.3	319.1	330.7	335.0	327.3	335.6	327.6	339.3	332.5	328.9	327.2	326.8	316.9	317.8	325.2
28	327.1	328.5	319.3	311.7	312.1	305.5	293.3	308.0	308.6	294.0	307.4	319.1	325.4	336.6	134.9	131.9	144.5	174.2	142.7	113.5	116.6	142.3	137.6	126.3
29	127.0	121.6	136.5	141.3	150.7	139.7	122.5	128.2	132.4	126.9	126.4	121.5	119.5	118.8	117.9	123.6	135.9	103.4	102.5	103.7	121.4	138.5	144.4	143.8
30	162.6	184.1	304.1	316.3	315.0	308.5	312.6	304.4	309.1	306.4	311.7	324.1	324.6	323.4	328.8	306.9	298.0	287.5	304.2	329.8	336.7	336.7	312.7	317.6

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	249.0	165.9	119.0	129.7	124.6	110.1	105.4	110.2	110.9	116.5	121.4	124.3	129.7	133.5	138.2	143.1	168.3	146.7	143.2	129.6	138.5	136.8	131.3	143.7
2	153.4	167.1	158.0	124.3	121.4	123.2	132.1	126.6	106.8	102.4	152.8	162.2	122.5	161.0	182.1	308.5	16.8	252.3	259.9	252.8	234.1	230.3	226.7	230.8
3	219.5	218.0	322.8	194.3	280.9	296.3	299.8	301.7	319.5	318.7	313.9	306.6	311.7	321.8	318.8	319.6	323.2	328.6	324.7	320.9	314.3	316.1	314.6	306.2
4	312.3	301.3	297.1	299.1	301.8	303.2	298.7	300.8	297.0	302.0	300.1	313.7	320.6	320.9	319.0	310.3	325.2	25.4	18.2	68.1	222.9	3.5	135.7	170.7
5	209.7	217.5	212.2	224.5	230.3	221.7	148.8	112.1	257.1	258.6	315.8	335.6	320.1	307.9	306.1	309.4	317.8	328.3	317.8	351.1	332.7	323.4	322.9	315.2
6	313.7	304.5	307.8	300.4	295.7	303.0	307.0	314.9	316.6	313.6	309.9	313.6	312.5	319.6	325.4	306.1	302.8	302.1	304.6	311.4	309.2	308.7	300.4	309.3
7	311.5	316.3	315.6	311.0	312.6	315.9	323.5	313.1	320.3	313.4	318.7	332.1	325.8	328.4	318.7	315.6	316.6	315.8	318.6	323.8	321.7	321.9	317.7	307.5
8	309.2	307.3	307.9	305.8	309.9	309.2	313.8	320.3	308.3	308.6	311.1	336.3	340.1	350.4	340.5	345.3	341.1	347.8	354.9	354.1	6.0	64.3	124.0	123.9
9	115.6	113.6	112.0	109.6	111.8	113.7	112.4	115.0	115.4	115.1	114.7	114.1	113.1	112.3	112.0	111.8	112.8	112.4	111.9	111.5	111.9	113.7	116.3	117.2
10	114.6	116.4	122.7	132.3	216.3	222.3	265.5	251.9	201.1	113.4	140.5	167.7	160.0	142.1	136.7	141.5	131.6	130.2	125.8	130.4	129.6	137.3	133.8	129.2
11	133.7	120.5	113.0	116.2	116.8	113.6	111.0	121.3	104.0	315.0	325.7	335.9	320.4	326.8	325.9	325.7	326.6	323.2	323.6	325.0	322.6	321.7	324.4	327.1
12	325.0	324.3	325.9	326.2	325.8	323.5	325.6	325.0	323.3	319.7	314.7	319.4	324.9	331.0	328.7	325.2	327.2	327.7	325.0	319.7	318.0	313.1	307.4	305.9
13	312.7	317.3	300.6	311.5	304.3	306.8	304.5	308.5	242.2	112.5	123.0	111.2	108.5	110.9	106.5	102.3	109.3	108.6	106.1	111.4	115.2	119.1	117.5	115.3
14	120.0	130.9	136.3	132.8	130.5	147.2	149.3	160.4	151.8	149.1	148.7	145.8	143.2	138.9	147.0	145.3	140.4	138.0	90.7	97.2	82.5	91.3	328.5	321.0
15	311.7	326.3	333.9	333.9	332.3	316.8	313.8	315.7	313.4	315.9	321.8	310.3	312.8	316.6	305.8	308.4	315.6	327.0	327.2	331.7	336.9	319.9	313.9	301.0
16	305.7	296.9	302.7	307.1	306.3	305.3	305.6	302.8	321.0	323.7	309.4	320.9	308.8	317.3	320.0	310.9	312.8	312.0	304.5	306.6	308.7	308.1	315.9	329.6
17	112.8	118.9	128.2	133.7	113.6	112.4	110.7	104.1	102.6	102.3	108.8	113.9	129.5	141.9	118.2	108.0	121.4	121.0	121.3	118.3	121.5	122.2	115.6	111.1
18	115.6	113.3	113.4	116.7	121.2	119.4	120.2	114.8	116.7	118.0	112.9	108.8	107.5	103.0	94.5	74.1	70.5	52.5	48.7	51.4	24.8	353.5	10.1	0.2
19	335.4	309.6	314.6	318.7	305.6	301.6	304.4	306.6	313.2	309.5	309.7	311.7	305.8	308.7	307.3	309.8	312.5	306.6	311.2	310.4	311.5	307.2	307.7	18.8
20	99.9	148.8	231.9	237.6	134.6	114.8	200.2	322.3	312.0	343.4	123.9	319.1	316.3	315.9	316.0	317.8	310.0	304.9	301.1	297.3	309.7	318.2	308.9	319.2
21	299.5	276.9	252.3	304.8	328.4	339.4	338.9	320.9	310.4	323.7	330.2	329.6	317.2	309.0	318.1	326.0	326.6	324.1	325.3	321.0	320.2	319.5	317.5	318.9
22	317.5	319.1	315.4	313.7	305.5	310.6	306.7	303.8	316.4	314.4	319.2	314.5	315.3	319.7	319.6	321.6	325.4	323.9	322.4	321.8	323.1	321.0	305.7	306.6
23	300.8	295.1	296.3	303.9	311.4	314.7	323.7	320.1	311.0	317.3	314.8	319.3	312.4	310.0	315.3	311.2	307.0	305.8	299.2	293.4	286.6	278.1	289.8	299.4
24	287.8	287.4	292.3	293.8	292.5	295.4	305.0	304.2	300.0	295.8	290.7	292.8	291.0	285.5	268.1	256.3	262.2	251.1	214.8	158.2	123.8	128.4	121.7	102.4
25	111.1	110.4	125.7	139.2	128.5	110.8	97.5	95.4	96.9	101.6	114.7	105.0	96.6	102.5	110.8	123.1	120.1	122.7	107.0	99.5	356.5	307.5	305.7	320.5
26	306.0	296.4	298.7	304.4	306.8	310.8	313.2	315.9	312.3	316.4	328.1	318.0	317.3	316.4	312.6	312.3	319.8	321.1	315.2	321.9	330.1	327.8	328.3	325.4
27	324.4	329.9	312.4	321.1	315.0	313.6	309.5	310.8	314.4	323.0	308.3	308.5	319.4	313.4	307.5	307.0	314.7	309.2	312.4	306.9	301.9	319.5	305.4	327.8
28	111.4	111.1	113.3	117.6	121.8	137.3	137.0	146.4	139.0	143.7	144.8	151.0	143.0	149.1	143.4	134.4	131.3	142.5	151.4	156.4	106.5	105.6	93.8	113.6
29	103.6	113.1	97.6	85.3	94.1	127.4	111.2	119.6	105.4	117.6	112.5	146.4	146.9	147.8	146.0	144.8	132.9	144.2	144.4	134.5	130.1	137.0	138.2	139.7
30	128.3	122.9	114.0	120.3	125.3	115.1	112.6	110.3	108.5	112.4	121.9	129.5	156.7	141.4	78.6	119.3	136.3	123.9	136.7	151.5	166.5	154.4	157.5	159.1
31	165.8	169.9	170.7	153.2	192.3	185.9	179.7	202.0	239.1	210.3	164.4	238.7	268.5	294.5	311.7	310.6	313.7	308.7	297.7	293.7	313.7	132.1	306.0	304.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	306.3	310.9	297.1	318.1	293.9	313.0	308.9	308.2	305.3	297.8	296.2	297.6	301.6	313.6	317.8	317.0	310.1	319.7	312.0	314.4	305.5	306.3	319.6	314.3
2	301.1	309.8	303.0	305.3	301.9	304.5	304.8	304.9	314.1	330.0	328.1	321.7	326.0	321.2	317.2	323.0	324.8	325.8	324.9	312.3	314.9	316.8	314.8	311.3
3	311.5	315.6	318.5	319.5	320.0	317.0	315.5	314.6	313.3	310.4	312.3	312.9	309.7	310.5	306.8	300.8	299.9	305.7	308.6	308.5	314.7	315.5	317.7	309.0
4	314.4	319.2	310.7	316.7	317.4	310.9	318.4	312.9	314.6	309.0	301.3	306.1	304.1	302.1	310.3	306.2	305.1	309.9	304.6	307.3	306.3	309.0	299.2	314.2
5	301.2	300.9	302.9	307.2	310.5	306.5	304.3	307.7	318.4	310.6	316.5	300.9	308.1	307.4	305.3	311.2	306.3	303.2	300.0	309.5	310.6	311.6	312.6	303.3
6	309.7	304.2	303.2	308.4	312.6	305.2	308.8	319.8	346.5	13.1	5.7	356.3	334.5	315.3	317.2	311.2	312.7	306.8	305.1	310.9	303.0	312.5	308.2	317.6
7	313.2	305.3	309.4	298.5	301.2	304.5	309.8	303.9	312.8	316.4	325.1	327.2	329.8	312.0	304.4	157.8	125.7	135.2	159.2	150.4	93.8	94.3	148.0	167.9
8	168.2	108.4	90.6	92.0	87.8	92.1	111.9	99.3	91.2	124.3	115.2	112.0	112.2	108.0	108.0	108.7	106.7	105.6	106.6	108.6	102.7	106.8	101.5	100.9
9	98.5	98.5	101.1	102.2	106.2	109.9	106.7	107.4	103.6	99.2	95.0	97.6	95.1	92.8	101.9	110.9	104.9	102.8	102.8	113.0	111.3	112.2	111.2	118.6
10	121.4	116.0	108.8	91.5	74.7	67.6	59.7	55.2	25.1	353.4	50.7	72.5	27.9	343.6	322.6	13.3	111.2	128.1	143.3	144.8	120.0	113.3	112.2	108.5
11	110.4	108.9	102.5	101.7	105.7	111.8	108.3	108.6	106.7	108.7	113.9	120.1	135.1	126.0	162.5	266.6	281.7	253.6	262.4	263.3	275.4	278.8	308.0	264.5
12	227.5	214.0	204.8	193.5	205.2	182.6	230.9	205.6	245.6	262.8	262.9	268.8	261.4	260.1	174.4	233.8	262.7	258.4	153.9	144.9	150.8	132.8	130.6	116.3
13	85.2	90.4	80.4	87.7	89.3	105.9	121.2	126.9	110.3	112.2	115.2	112.7	113.8	117.7	111.9	107.6	106.6	148.9	169.4	182.5	168.8	172.3	180.3	174.9
14	150.6	158.5	162.6	162.4	163.3	159.3	146.4	139.3	139.1	150.9	161.9	192.9	186.7	219.8	226.0	227.3	233.1	236.5	228.9	213.9	202.2	209.9	217.4	196.1
15	213.9	231.2	240.7	241.2	229.2	214.2	191.8	168.1	140.7	104.1	122.8	117.3	103.4	103.8	116.7	131.5	135.2	104.5	120.9	116.4	115.9	118.8	117.1	114.0
16	116.7	119.3	125.6	142.0	155.5	158.7	159.6	201.6	236.1	233.6	209.0	213.7	215.5	156.0	163.4	99.8	112.8	145.5	115.8	113.8	100.5	98.9	102.7	115.6
17	119.0	110.5	107.8	91.9	315.4	305.9	306.0	306.8	223.7	281.6	310.4	301.1	310.0	311.3	298.6	303.3	309.7	308.4	311.6	307.1	305.4	309.7	307.6	313.8
18	317.3	327.7	337.1	324.3	305.6	317.5	320.1	314.7	307.0	307.2	306.1	308.1	313.7	302.6	307.6	308.8	306.8	304.1	302.8	306.0	311.9	312.8	303.8	299.8
19	301.5	296.9	299.8	305.8	301.0	306.2	307.6	318.2	318.7	329.2	326.4	321.9	326.2	326.9	321.6	321.0	310.4	317.9	316.0	305.9	303.8	308.6	304.3	315.5
20	316.9	322.1	308.5	317.4	323.7	326.2	327.5	323.8	324.1	323.1	325.8	328.2	330.0	332.4	329.9	328.2	329.1	329.2	332.5	325.7	329.9	326.8	324.3	316.0
21	317.9	316.5	316.2	310.0	307.6	309.7	306.7	303.9	309.5	303.1	309.7	302.6	310.9	311.6	306.5	306.9	304.4	310.9	287.8	294.0	312.5	308.5	310.5	300.5
22	305.9	307.1	303.6	305.6	302.9	256.1	143.1	145.6	164.7	133.6	131.2	123.5	142.7	148.4	170.8	147.8	116.8	184.2	218.6	133.2	133.9	133.8	120.0	102.4
23	152.6	148.2	161.7	161.5	139.1	131.4	143.2	155.0	141.5	147.2	117.9	123.1	116.8	114.1	119.1	110.9	111.0	123.8	110.1	102.7	109.9	111.5	108.8	107.6
24	104.7	107.3	104.8	109.1	111.0	111.8	104.2	104.7	109.4	110.0	110.6	113.3	118.2	112.9	113.1	115.1	119.6	127.1	130.3	138.6	152.3	189.5	206.6	214.0
25	221.5	199.5	216.4	214.2	193.7	186.8	183.0	180.1	205.5	207.9	206.9	201.0	192.0	154.7	310.2	302.2	308.2	309.4	303.5	297.8	307.6	303.2	304.2	299.9
26	306.6	307.5	308.0	305.2	308.7	306.4	307.7	308.9	309.5	313.5	319.5	324.7	321.7	324.5	326.5	319.3	321.1	324.9	323.6	324.9	321.3	333.7	308.8	289.6
27	302.6	295.3	308.1	311.7	307.3	308.1	299.7	310.6	312.7	312.5	309.3	313.9	310.7	315.0	306.3	310.5	314.5	309.5	312.1	307.1	308.7	309.9	312.2	311.0
28	315.9	316.3	315.0	313.8	312.2	317.6	312.6	310.1	311.8	309.3	306.9	310.0	314.1	316.4	323.5	328.9	333.2	329.2	326.2	331.8	331.0	325.0	321.0	329.6
29	336.8	334.2	317.8	305.8	310.3	305.6	303.8	303.7	311.7	306.2	314.1	309.5	320.6	313.4	320.5	317.0	310.2	311.9	309.5	313.0	311.6	311.2	310.9	311.2
30	313.3	310.7	309.6	304.5	307.6	314.9	312.7	317.1	312.2	305.2	310.3	321.1	315.3	312.3	306.5	310.6	317.3	318.4	320.4	319.6	308.6	306.9	307.5	309.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	305.0	303.9	304.2	314.2	315.2	306.8	307.5	297.0	299.8	304.2	304.5	299.4	295.9	299.7	292.6	124.8	124.1	126.3	110.3	119.2	119.3	142.2	140.7	129.5
2	133.8	123.2	147.8	168.8	134.7	97.5	115.2	142.1	150.2	122.8	129.2	118.9	112.5	112.6	110.4	110.4	112.2	116.1	116.9	115.9	114.4	114.6	111.2	112.1
3	109.8	114.3	112.2	113.3	114.0	113.3	113.3	113.4	111.3	108.7	109.5	108.6	108.2	108.2	110.5	110.8	110.6	111.6	111.6	114.2	118.4	116.9	117.8	115.4
4	118.1	118.9	122.8	132.9	136.7	135.4	137.8	138.5	137.4	138.7	136.4	120.4	115.8	117.1	117.5	116.2	120.5	120.2	124.7	129.4	130.5	132.5	133.4	136.2
5	138.7	142.5	134.0	119.6	121.1	123.4	121.2	119.1	114.6	116.5	118.4	122.1	121.8	121.1	122.1	127.3	124.3	118.5	134.0	138.0	120.6	96.9	101.4	124.0
6	127.5	130.8	127.2	118.6	121.3	120.6	120.7	116.5	104.6	93.6	108.3	110.5	86.4	307.9	349.3	282.9	180.1	207.9	288.9	287.3	297.2	305.4	307.8	304.5
7	316.3	326.2	315.2	316.3	319.9	317.0	308.2	310.7	313.3	314.4	322.3	326.2	324.5	314.7	314.0	312.2	316.5	307.2	299.1	300.5	348.8	262.9	0.0	101.2
8	92.1	81.1	123.7	107.6	54.9	121.7	34.5	58.4	69.7	80.4	80.3	81.2	54.5	61.7	50.7	49.3	45.2	40.6	4.5	0.8	5.2	2.4	7.2	13.5
9	2.6	354.5	345.3	296.3	307.9	304.7	313.2	309.6	304.9	310.9	306.1	313.3	316.7	150.4	133.9	145.5	109.2	115.2	111.8	122.3	142.3	152.7	233.7	169.0
10	164.6	172.2	176.1	191.4	198.7	209.6	206.5	194.4	206.4	227.0	242.8	256.7	268.6	278.8	290.7	298.2	130.9	202.0	196.0	267.4	272.4	302.8	302.0	294.0
11	292.2	297.2	299.6	274.1	338.6	24.5	145.8	179.8	187.2	174.2	184.7	192.8	258.0	273.7	293.7	314.9	313.9	306.9	318.0	315.8	299.0	303.8	311.9	306.8
12	308.1	318.1	297.2	297.3	306.7	302.6	299.3	291.9	300.6	305.4	287.1	307.1	106.6	151.4	115.3	57.8	345.0	316.2	315.3	308.7	310.3	318.7	320.8	326.0
13	316.5	320.3	329.0	334.3	335.2	332.3	323.8	321.4	322.9	319.9	302.7	310.4	305.6	335.7	307.7	308.6	307.1	288.8	132.7	111.7	112.4	122.0	122.7	159.7
14	172.4	168.2	160.5	168.2	153.5	152.2	137.0	154.7	156.4	150.1	141.9	146.4	144.5	139.0	138.2	145.3	141.7	144.0	143.2	131.9	127.6	121.7	125.3	127.6
15	128.0	122.5	125.7	126.9	127.7	131.2	131.5	131.2	127.4	133.1	149.3	143.9	145.0	133.2	124.2	96.9	93.6	114.3	101.0	10.4	312.5	306.5	302.0	296.8
16	313.0	315.4	307.4	309.6	137.1	130.8	121.0	149.3	141.4	144.3	143.5	151.2	154.7	156.7	149.1	146.5	146.0	158.1	156.2	154.5	151.3	150.8	140.1	127.3
17	121.1	123.8	123.8	127.4	122.0	123.0	117.7	117.7	119.3	119.0	117.9	116.8	120.8	127.5	123.4	117.6	120.8	116.5	115.0	113.1	117.4	120.7	127.7	132.1
18	122.9	119.6	121.8	120.8	118.7	116.0	117.6	114.8	112.3	111.7	116.0	113.2	111.7	114.4	116.9	118.6	114.6	116.3	115.5	112.8	110.3	111.6	112.9	112.6
19	113.9	113.7	112.4	111.6	107.6	103.6	106.1	111.5	109.8	110.3	102.9	103.8	101.4	94.0	99.9	87.7	64.7	76.9	56.9	57.5	61.6	73.6	81.2	78.6
20	78.9	80.3	73.2	64.6	67.2	65.3	81.4	70.3	93.9	87.3	91.7	81.2	73.4	20.4	69.3	75.5	92.3	138.2	136.5	189.5	183.3	307.1	310.2	311.6
21	312.3	313.0	291.2	295.2	290.1	310.5	315.3	314.2	312.9	305.6	312.6	314.3	314.2	243.2	294.5	350.2	351.1	212.4	236.3	143.9	123.9	148.1	120.4	100.9
22	102.7	104.6	101.2	121.3	141.5	118.8	120.1	123.6	120.6	139.8	150.8	155.0	163.1	167.5	160.5	153.2	166.9	167.6	152.6	149.3	158.4	153.4	149.2	143.5
23	131.2	127.4	121.2	116.6	114.1	111.6	123.0	132.0	204.2	291.5	287.4	280.1	278.6	269.7	268.6	275.1	279.9	283.6	284.5	285.9	274.8	271.6	272.0	280.8
24	282.9	281.7	291.1	296.5	299.6	298.9	297.8	279.6	282.8	283.4	273.0	288.1	291.5	294.1	310.3	315.3	307.8	309.1	322.7	154.0	146.5	118.2	119.3	120.0
25	119.5	123.6	131.2	129.0	122.5	129.2	121.3	120.0	121.6	128.2	135.4	138.9	146.2	148.2	155.8	159.1	250.9	295.1	300.5	304.2	306.7	305.7	304.0	307.9
26	307.6	307.3	308.1	310.6	308.9	305.2	307.2	306.0	302.5	298.8	300.6	301.9	302.1	303.2	304.8	304.6	304.7	301.5	300.0	301.6	299.8	302.8	306.3	312.4
27	316.8	316.9	325.4	328.8	329.6	330.4	327.3	329.9	328.8	331.6	330.5	325.7	328.4	328.7	327.8	328.4	327.1	333.1	328.8	328.3	331.4	330.6	327.1	333.7
28	332.5	336.1	329.4	326.5	322.0	320.0	298.5	315.3	333.1	337.8	336.0	337.2	319.5	319.7	329.9	334.0	328.5	323.9	319.7	317.4	312.5	309.2	319.9	313.6
29	308.9	300.9	300.7	304.6	320.0	311.2	301.3	301.3	299.5	303.2	301.0	301.5	299.0	296.8	301.0	299.6	305.7	305.6	301.8	314.7	325.2	329.2	302.7	302.2
30	297.8	302.8	311.2	308.8	306.6	305.9	301.3	308.8	322.7	336.3	331.2	309.4	311.3	315.1	338.3	328.5	332.6	327.4	323.8	316.7	320.8	316.8	317.5	318.3
31	310.4	319.3	322.9	328.8	316.9	315.3	309.8	307.6	306.6	309.2	309.6	308.3	305.9	306.7	305.3	305.6	303.7	301.6	307.7	307.4	309.6	304.6	303.6	306.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.4	6.7	6.6	6.0	6.0	7.6	7.0	8.7	6.2	4.1	5.1	3.4	5.4	3.3	7.3	7.1	5.7	8.3	8.0	4.6	7.8	9.5	7.1	14.6	14.6	3.3	7.0
2	6.2	8.2	5.1	11.7	7.5	7.0	13.5	9.4	9.3	8.8	16.4	9.8	15.2	6.5	4.3	6.1	3.3	2.9	3.7	6.0	3.9	6.8	5.5	5.8	16.4	2.9	7.6
3	2.4	3.3	4.1	5.4	5.9	6.5	2.7	3.0	6.3	4.9	5.0	4.5	3.8	6.2	4.0	4.5	4.5	5.6	3.6	4.1	8.7	6.6	4.4	6.6	8.7	2.4	4.9
4	6.0	3.6	5.2	7.1	7.9	8.4	5.5	2.9	4.3	4.7	4.2	3.3	3.2	4.1	4.5	6.7	3.4	3.8	5.1	6.9	6.0	9.8	11.3	8.4	11.3	2.9	5.7
5	8.9	2.8	4.0	4.3	5.0	2.9	4.3	3.8	3.8	2.7	2.8	3.3	2.9	2.4	2.1	2.5	2.0	2.2	2.2	2.3	2.2	2.2	2.6	3.0	8.9	2.0	3.2
6	2.5	4.8	3.3	4.2	5.4	4.3	5.5	3.3	3.5	5.0	4.5	4.4	3.8	2.8	2.7	2.7	4.3	2.3	5.1	2.9	2.4	3.2	3.2	4.4	5.5	2.3	3.8
7	5.9	2.7	3.5	4.2	3.7	2.8	2.9	5.1	4.5	6.5	6.9	13.7	4.2	7.3	6.4	8.3	3.8	6.4	4.5	4.7	3.7	4.7	4.8	4.4	13.7	2.7	5.2
8	3.1	11.6	3.9	3.6	3.9	5.1	3.5	5.2	7.3	4.6	8.9	4.8	4.2	3.2	8.7	2.7	5.4	5.5	6.4	4.3	3.0	3.7	4.3	6.5	11.6	2.7	5.2
9	11.2	9.3	7.9	6.1	3.8	4.1	4.2	6.3	2.7	3.9	7.5	3.6	3.8	6.7	2.9	3.8	2.5	2.0	2.6	2.3	2.1	2.8	2.2	2.6	11.2	2.0	4.5
10	2.6	2.7	3.0	4.3	3.5	4.6	3.6	2.9	3.5	4.4	5.1	7.6	3.0	3.6	3.3	4.5	8.9	6.4	5.1	5.0	3.5	2.4	3.8	6.8	8.9	2.4	4.3
11	5.0	4.2	4.4	2.8	3.6	3.1	1.6	5.0	3.7	3.8	2.5	3.1	4.6	2.9	4.4	2.5	2.7	2.9	3.3	4.0	5.0	5.2	5.8	5.5	5.8	1.6	3.8
12	3.8	3.2	3.8	6.2	3.8	4.7	9.7	7.3	6.3	10.0	8.9	8.8	7.6	8.3	8.1	6.2	3.2	3.8	3.6	5.4	4.4	8.4	4.4	5.4	10.0	3.2	6.1
13	4.3	7.3	3.8	6.1	3.8	4.3	4.7	7.9	3.2	3.5	5.3	5.8	5.1	3.7	2.7	4.0	3.7	4.1	4.9	3.1	4.2	5.2	4.7	5.9	7.9	2.7	4.6
14	5.5	11.3	11.7	73.4	66.1	85.4	10.3	10.5	8.2	10.7	19.9	16.5	10.3	12.7	6.9	7.6	6.1	11.0	13.5	16.7	4.9	5.5	3.6	4.2	85.4	3.6	18.0
15	2.9	3.2	3.5	4.2	4.5	6.1	5.8	4.4	3.9	6.4	5.9	4.9	7.5	8.2	8.8	6.7	6.3	7.6	8.0	4.8	6.8	5.9	4.9	10.5	10.5	2.9	5.9
16	18.7	25.1	9.0	24.5	13.0	18.7	6.1	4.8	6.0	27.7	18.7	11.5	14.7	7.0	35.9	18.8	21.0	11.9	5.8	29.4	21.7	15.8	8.1	9.6	35.9	4.8	16.0
17	12.3	5.8	6.2	11.8	14.1	16.7	8.9	5.2	5.7	2.9	3.5	4.3	3.2	3.2	3.8	3.2	5.3	3.2	4.6	5.6	2.3	3.0	3.4	3.4	16.7	2.3	5.9
18	3.6	5.6	4.2	5.7	3.8	5.3	7.1	5.1	7.3	6.5	6.0	9.1	19.3	30.7	36.5	15.2	21.1	18.3	5.5	4.5	4.9	11.5	9.4	9.6	36.5	3.6	10.7
19	9.4	9.5	6.6	4.6	6.2	6.2	14.2	5.3	6.5	4.2	5.3	3.4	3.7	3.5	3.8	3.5	3.8	3.7	3.9	3.8	3.4	3.7	3.9	4.0	14.2	3.4	5.3
20	4.9	4.8	3.4	5.1	3.6	3.4	3.9	3.0	2.9	3.0	3.7	4.8	5.1	5.0	10.3	4.0	6.4	7.3	9.5	3.7	27.2	6.0	9.3	7.7	27.2	2.9	6.2
21	4.9	3.8	4.2	4.5	9.3	9.8	7.5	13.8	4.3	4.3	3.8	4.0	3.8	2.9	3.1	4.3	5.2	5.1	3.2	4.0	3.3	3.6	3.4	5.2	13.8	2.9	5.1
22	4.0	11.7	4.2	4.4	3.5	3.3	4.5	6.1	3.4	5.2	11.8	4.9	5.5	3.5	8.3	5.7	12.1	79.7	64.7	32.8	50.1	59.0	17.8	7.0	79.7	3.3	17.2
23	4.5	4.9	5.1	5.0	2.7	2.7	3.7	4.9	10.1	9.9	5.5	3.9	2.6	5.7	7.6	5.4	3.3	4.5	6.6	5.1	14.8	8.3	9.0	7.8	14.8	2.6	6.0
24	9.8	36.7	4.7	15.5	59.0	10.2	12.2	17.1	11.8	10.5	6.5	7.7	5.6	5.7	7.0	7.7	3.4	3.4	5.0	5.9	6.7	7.8	5.1	5.4	59.0	3.4	11.3
25	6.8	6.6	18.2	45.1	6.8	8.1	14.1	15.8	5.4	6.1	3.0	2.9	4.0	2.8	2.6	3.7	5.8	5.0	8.3	9.2	3.7	7.0	8.1	10.2	45.1	2.6	8.7
26	8.6	5.6	5.0	5.1	6.1	6.5	6.3	3.9	8.4	4.1	5.0	8.3	6.3	51.3	37.1	10.9	13.3	6.4	7.3	9.6	5.7	4.5	7.4	7.1	51.3	3.9	10.0
27	4.6	7.2	9.9	3.9	2.5	2.3	4.3	8.7	3.3	4.0	2.6	2.5	2.9	2.9	2.9	3.0	3.1	3.1	3.1	3.0	2.9	2.9	2.9	2.8	9.9	2.3	3.8
28	3.0	4.0	3.5	3.2	2.7	3.6	4.2	3.6	4.5	5.4	4.2	5.1	5.7	3.7	7.0	7.2	14.4	0.0	0.1	86.7	27.9	74.8	21.9	17.9	86.7	0.0	13.1
29	7.4	13.6	11.3	5.7	5.7	4.9	7.8	27.3	54.6	11.3	6.9	16.2	12.8	16.6	20.5	19.8	22.4	28.7	11.7	9.3	14.8	15.8	11.0	11.1	54.6	4.9	15.3
30	17.4	9.5	3.4	2.3	3.6	2.8	5.2	4.0	5.5	2.9	2.7	4.1	3.2	4.4	2.8	3.5	3.3	3.6	2.5	2.2	2.3	4.6	8.0	4.7	17.4	2.2	4.5
31	8.1	5.6	3.7	5.0	3.8	3.4	3.7	2.4	3.9	9.6	25.2	33.7	40.0	11.8	10.8	25.0	37.7	63.7	23.7	10.8	34.4	28.7	25.9	51.3	63.7	2.4	19.7
Max.	**18.7**	**36.7**	**18.2**	**73.4**	**66.1**	**85.4**	**14.2**	**27.3**	**54.6**	**27.7**	**25.2**	**33.7**	**40.0**	**51.3**	**37.1**	**25.0**	**37.7**	**79.7**	**64.7**	**86.7**	**50.1**	**74.8**	**25.9**	**51.3**	**86.7**		
Min.	**2.4**	**2.7**	**3.0**	**2.3**	**2.5**	**2.3**	**1.6**	**2.4**	**2.7**	**2.7**	**2.5**	**2.5**	**2.6**	**2.4**	**2.1**	**2.5**	**2.0**	**0.0**	**0.1**	**2.2**	**2.1**	**2.2**	**2.2**	**2.6**		**0.0**	
Avg.	**6.8**	**7.9**	**5.7**	**9.7**	**9.1**	**8.5**	**6.4**	**7.0**	**7.1**	**6.5**	**7.2**	**7.2**	**7.2**	**7.8**	**8.9**	**7.0**	**8.0**	**10.4**	**7.9**	**9.8**	**9.5**	**10.9**	**7.3**	**8.4**			**8.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.0	75.7	21.5	11.5	23.2	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.7	0.0	6.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	4.3	2.1	6.7	2.7	3.7	3.2	4.8	5.0	7.3	8.1	5.6	5.0	8.1	0.0	2.5
3	4.2	2.5	4.6	4.4	3.4	4.0	5.3	4.0	13.4	5.8	5.5	8.0	4.7	6.1	5.8	6.4	12.9	5.1	6.2	3.8	4.0	4.7	4.7	3.6	13.4	2.5	5.5
4	3.0	2.5	2.5	2.7	2.0	2.6	3.7	2.6	3.8	5.1	7.0	22.0	9.8	8.4	4.7	3.9	3.0	8.6	6.1	6.1	9.5	6.0	3.9	4.3	22.0	2.0	5.6
5	4.6	6.7	12.6	10.9	11.0	8.1	5.2	5.8	6.2	8.3	4.8	9.6	12.8	8.9	14.0	12.8	8.1	11.2	5.2	7.7	7.3	4.4	4.0	4.4	14.0	4.0	8.1
6	2.4	6.2	4.1	3.0	5.2	2.5	1.9	3.1	2.2	4.2	8.1	5.5	5.7	6.7	6.9	5.2	5.0	6.7	8.6	9.6	5.2	17.2	6.6	9.0	17.2	1.9	5.9
7	9.4	9.1	3.8	6.0	5.8	9.2	5.5	4.8	7.0	4.6	5.6	15.7	39.6	14.6	11.3	24.2	6.6	3.9	4.1	3.9	5.7	4.2	11.4	5.7	39.6	3.8	9.2
8	12.9	76.5	15.5	72.7	33.6	10.6	13.1	5.0	10.5	7.7	8.3	11.2	9.2	7.4	17.4	9.6	7.8	5.5	10.3	6.0	12.5	14.2	8.9	16.6	76.5	5.0	16.8
9	11.5	14.5	4.2	4.0	4.2	3.5	3.2	3.6	7.6	8.3	41.7	54.9	10.1	9.6	7.0	5.9	4.3	5.4	7.1	3.3	3.8	5.4	5.2	5.2	54.9	3.2	9.7
10	5.7	3.6	5.5	8.2	9.0	9.1	7.4	7.4	5.3	4.3	6.4	4.5	9.2	3.4	7.9	74.1	6.4	84.3	23.5	49.4	5.5	5.9	5.8	58.1	84.3	3.4	17.1
11	20.1	4.6	8.1	4.4	6.8	10.8	8.9	5.3	4.4	6.9	5.0	5.2	5.4	8.4	11.9	13.0	9.7	7.9	10.5	62.1	4.9	76.0	51.9	9.3	76.0	4.4	15.0
12	7.3	7.6	55.5	46.1	67.6	15.3	7.2	9.0	10.2	7.4	3.5	4.5	12.2	13.0	7.8	5.7	11.5	6.8	5.0	3.9	5.9	5.0	73.7	9.5	73.7	3.5	16.7
13	11.8	22.0	9.4	8.3	4.6	3.6	4.6	3.5	2.8	3.3	3.2	3.3	3.0	3.0	2.9	3.1	3.3	3.2	3.1	3.0	3.7	3.4	2.9	3.0	22.0	2.8	4.9
14	3.0	2.5	2.5	2.8	2.4	2.6	3.5	38.8	4.0	3.1	10.0	8.6	9.3	6.9	6.7	7.4	7.8	8.1	7.1	6.4	4.5	28.4	20.0	10.3	38.8	2.4	8.6
15	2.2	3.0	3.2	10.6	8.4	15.7	4.1	8.3	9.3	7.8	13.0	11.9	16.1	15.1	17.4	18.1	42.6	60.8	10.1	13.0	93.4	6.9	13.8	8.2	93.4	2.2	17.2
16	7.6	12.1	9.1	3.4	3.7	4.9	3.3	2.4	2.6	4.8	4.6	4.6	7.4	8.1	6.3	4.7	6.3	9.1	9.4	5.4	3.5	4.0	4.7	9.3	12.1	2.4	5.9
17	10.5	6.7	4.8	9.3	9.3	17.2	4.4	9.0	7.2	12.4	7.5	33.3	23.3	3.7	2.9	6.0	20.5	4.2	2.8	3.8	3.1	3.4	3.0	3.7	33.3	2.8	8.8
18	3.1	4.4	3.0	4.2	3.4	3.6	3.3	3.2	3.2	4.1	3.5	3.1	3.3	3.8	2.7	4.4	3.5	5.0	4.2	7.5	2.4	3.8	2.4	2.5	7.5	2.4	3.7
19	2.5	6.1	29.1	15.9	29.1	18.8	59.2	16.2	11.6	7.9	25.8	8.1	13.9	13.1	5.4	3.5	4.2	3.5	3.2	4.9	18.0	5.1	4.6	6.6	59.2	2.5	13.2
20	3.2	3.6	3.9	3.8	3.0	3.8	3.4	3.6	3.7	2.9	3.4	2.6	3.6	3.1	4.8	2.9	24.4	16.7	23.8	3.1	4.0	7.7	11.2	3.7	24.4	2.6	6.2
21	3.5	3.6	23.1	14.6	6.4	14.9	10.6	7.6	7.7	4.8	4.2	3.4	3.9	3.1	6.1	3.4	3.6	25.3	37.8	23.4	6.9	14.5	9.3	11.6	37.8	3.1	10.6
22	5.6	8.1	5.5	3.7	7.8	14.3	19.3	7.1	10.7	9.5	16.6	7.0	5.4	5.7	2.4	2.3	4.0	3.2	2.5	2.5	3.1	2.5	3.0	3.0	19.3	2.3	6.5
23	5.7	7.1	4.7	71.7	44.1	52.6	31.2	53.6	21.8	3.7	4.9	7.3	4.1	6.5	5.9	6.6	3.8	4.5	2.9	2.0	3.0	5.2	2.6	7.4	71.7	2.0	15.1
24	3.8	4.2	4.6	3.2	3.3	3.6	4.2	8.0	3.9	4.6	3.8	6.2	3.5	3.4	3.8	4.8	4.5	5.7	5.9	6.6	4.7	3.6	7.3	7.1	8.0	3.2	4.8
25	11.1	4.6	4.1	4.2	2.9	2.9	3.1	4.4	4.1	8.1	3.0	7.5	6.3	4.2	6.3	11.0	5.7	29.5	30.5	38.9	39.8	10.0	17.8	23.9	39.8	2.9	11.8
26	12.6	12.2	6.6	31.3	55.7	27.5	7.7	32.9	31.6	12.0	13.3	17.9	25.6	13.8	12.8	24.1	18.3	8.1	3.9	5.4	5.5	9.5	4.9	2.8	55.7	2.8	16.5
27	4.9	12.8	4.8	6.1	4.5	4.0	4.6	3.5	11.8	21.9	39.3	62.0	13.1	22.0	64.6	68.6	14.4	32.6	32.7	30.8	15.5	32.2	7.0	46.5	68.6	3.5	23.3
28	9.3	4.6	24.7	34.0	21.4	14.2	51.4	33.5	43.6	27.3	20.3	14.9	9.7	9.9	4.6	5.5	5.0	4.3	5.2	6.0	7.9	7.3	5.8	6.6	51.4	4.3	15.7
29	5.4	7.7	11.5	8.3	11.7	5.9	9.2	8.8	11.1	6.2	7.5	15.8	10.7	9.3	6.9	5.7	7.1	11.7	12.5	5.5	5.7	4.4	4.8	4.9	15.8	4.4	8.3
Max.	**20.1**	**76.5**	**55.5**	**72.7**	**67.6**	**52.6**	**59.2**	**53.6**	**43.6**	**27.3**	**41.7**	**62.0**	**39.6**	**22.0**	**64.6**	**74.1**	**42.6**	**84.3**	**37.8**	**62.1**	**93.4**	**76.0**	**73.7**	**58.1**	**93.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.7**	**11.5**	**10.1**	**14.1**	**13.6**	**10.0**	**10.0**	**10.2**	**9.0**	**7.1**	**9.7**	**12.4**	**9.8**	**7.7**	**9.1**	**11.9**	**8.9**	**13.3**	**10.0**	**11.3**	**10.2**	**10.5**	**10.6**	**10.1**			**10.3**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.8	3.3	4.9	5.6	7.4	6.1	6.5	56.0	9.1	9.1	9.5	4.8	4.2	7.4	9.4	14.7	8.4	9.9	11.4	9.8	7.8	4.7	3.7	5.6	56.0	3.3	9.3
2	4.0	3.4	3.3	4.1	3.4	5.5	3.7	3.5	5.7	3.4	3.3	4.9	3.5	3.1	4.7	6.7	6.9	3.1	2.9	5.6	6.7	4.7	3.7	9.2	9.2	2.9	4.5
3	9.3	17.9	4.1	9.9	5.9	2.5	2.8	3.0	3.2	2.6	2.7	3.0	3.0	3.9	4.0	3.2	3.5	3.5	3.6	4.4	4.9	3.3	3.0	3.0	17.9	2.5	4.6
4	2.3	3.4	2.7	3.6	3.3	3.5	2.7	3.1	3.2	3.0	3.9	3.1	3.2	3.7	3.5	3.3	3.1	3.2	3.4	3.1	2.9	2.8	2.7	2.6	3.9	2.3	3.1
5	4.6	3.6	3.4	3.3	4.1	3.7	4.9	7.1	6.4	5.6	2.9	3.1	2.8	4.4	3.3	3.3	3.3	4.1	3.2	3.3	3.6	3.1	3.4	3.3	7.1	2.8	3.9
6	3.0	3.2	3.2	4.2	4.7	11.5	4.1	7.1	4.2	4.0	3.6	6.7	5.7	4.5	3.2	2.2	3.6	3.8	3.0	48.0	13.7	7.7	14.9	10.2	48.0	2.2	7.5
7	6.3	4.2	3.1	17.6	12.2	3.9	3.3	4.7	3.5	3.9	3.6	6.7	5.4	4.4	16.3	65.3	13.4	16.9	9.4	4.0	7.7	7.4	5.3	5.5	65.3	3.1	9.7
8	7.2	4.3	7.8	31.6	16.1	6.9	3.5	9.1	6.5	6.2	13.0	10.3	3.1	12.6	9.2	6.9	5.7	6.0	3.6	3.1	3.2	3.4	4.2	4.0	31.6	3.1	7.8
9	17.1	12.6	8.8	9.4	8.7	4.5	5.4	4.8	3.4	3.4	5.8	8.3	16.4	28.1	3.5	4.5	3.7	2.6	3.1	2.6	6.7	7.8	31.6	46.7	46.7	2.6	10.4
10	27.1	15.6	18.1	22.4	7.8	16.5	25.9	10.8	29.8	26.6	7.8	29.1	37.4	42.0	24.3	48.2	25.3	30.2	46.9	19.0	37.9	12.1	60.8	15.2	60.8	7.8	26.5
11	22.7	11.4	12.0	16.0	84.3	40.4	9.5	12.6	16.9	38.9	15.0	42.6	9.3	19.1	8.7	11.7	10.5	5.7	13.6	7.7	6.9	6.6	11.5	18.7	84.3	5.7	18.8
12	9.1	3.9	2.0	3.7	3.4	7.3	7.2	4.4	4.9	10.1	18.6	18.6	16.7	22.9	9.5	12.0	12.5	10.5	8.3	9.1	7.7	14.1	11.2	8.8	22.9	2.0	9.8
13	8.3	6.8	9.3	8.5	8.5	8.0	8.9	8.6	7.2	7.3	9.0	6.5	8.5	7.5	7.1	9.5	10.6	10.5	10.0	5.1	3.8	9.5	10.2	8.7	10.6	3.8	8.3
14	10.4	8.5	8.3	11.6	16.4	3.0	11.2	13.9	9.2	0.0	0.0	1.5	8.8	7.2	8.5	5.6	13.4	9.6	12.5	8.9	7.0	6.7	4.6	4.6	16.4	0.0	8.0
15	3.2	3.4	3.4	3.2	3.0	3.9	3.2	2.7	2.5	3.7	2.9	3.0	2.9	3.0	2.9	2.6	2.9	2.4	2.3	2.3	2.3	2.5	2.9	3.5	3.9	2.3	2.9
16	3.1	4.1	4.4	4.2	2.9	3.0	6.0	6.0	7.9	13.7	16.7	15.2	21.9	80.7	37.9	64.5	33.8	9.3	7.4	6.2	7.3	4.4	4.8	6.5	80.7	2.9	15.5
17	7.4	6.3	6.5	5.5	7.2	5.8	5.8	6.8	6.1	2.6	1.9	7.4	19.7	11.9	9.6	21.5	30.1	45.2	5.6	3.8	3.6	5.5	4.5	30.7	45.2	1.9	10.9
18	14.6	5.2	6.3	7.0	5.8	8.1	5.1	4.7	4.6	2.6	3.5	2.0	3.2	3.5	4.7	3.8	5.1	2.6	7.1	3.1	4.2	3.6	3.3	3.0	14.6	2.0	4.9
19	3.6	2.4	4.2	3.2	4.2	3.4	3.3	4.0	2.3	2.7	2.9	3.5	3.9	2.9	2.8	3.0	2.9	3.3	2.6	4.6	2.4	2.8	4.4	2.5	4.6	2.3	3.2
20	2.0	2.8	2.7	2.4	2.2	2.1	2.3	2.6	2.6	3.1	6.0	11.9	8.6	60.8	43.4	9.5	5.0	3.9	4.5	4.4	2.3	4.1	4.0	3.3	60.8	2.0	8.2
21	3.7	4.2	3.8	4.4	5.0	4.0	8.5	8.3	4.4	4.4	4.4	10.9	11.3	7.1	23.0	19.3	10.4	15.6	14.0	23.9	3.5	15.3	7.2	9.9	23.9	3.5	9.4
22	6.3	8.5	4.5	5.9	7.1	3.2	16.2	3.9	5.0	6.0	3.2	3.3	2.8	4.4	3.4	5.3	8.9	5.9	3.6	7.4	8.6	9.4	16.1	9.3	16.2	2.8	6.6
23	6.6	4.2	6.1	7.2	7.7	7.7	11.4	10.3	8.1	9.2	9.7	6.0	5.0	3.2	3.6	3.2	5.3	6.6	2.5	2.9	3.0	4.6	4.7	3.0	11.4	2.5	5.9
24	4.5	4.6	3.7	3.5	2.7	5.8	7.9	5.5	7.7	4.4	4.5	3.4	4.7	4.2	6.1	4.3	5.0	4.9	2.2	3.1	2.1	3.8	3.0	5.5	7.9	2.1	4.5
25	13.7	96.5	16.9	16.7	8.0	12.4	11.7	5.0	8.5	17.1	60.2	59.9	88.0	5.2	5.8	4.7	4.4	2.6	4.1	2.6	1.9	2.2	1.8	4.0	96.5	1.8	18.9
26	3.9	3.4	3.7	2.3	5.6	5.2	4.6	3.3	5.6	14.0	2.7	2.1	4.8	2.4	3.1	2.6	3.7	3.6	2.7	5.2	2.6	6.5	6.6	7.4	14.0	2.1	4.5
27	5.5	5.1	8.1	6.5	12.3	8.1	14.3	16.6	10.1	7.0	5.0	3.4	2.3	7.5	4.3	4.3	4.0	1.6	2.7	2.2	5.2	7.2	6.6	5.0	16.6	1.6	6.5
28	10.3	7.3	3.3	3.3	2.5	3.1	5.6	6.6	7.8	3.5	4.8	39.7	17.3	32.9	65.3	42.7	34.3	14.9	79.3	13.0	12.6	5.4	4.6	8.5	79.3	2.5	17.9
29	5.5	3.8	2.6	4.5	4.8	5.1	8.5	12.4	4.2	5.7	3.2	2.8	3.0	2.7	3.2	3.1	5.8	3.8	3.8	3.6	3.6	4.3	3.6	2.9	12.4	2.6	4.4
30	3.1	2.8	3.0	2.8	2.9	3.3	3.1	3.3	3.3	3.2	3.2	3.0	3.3	3.3	3.5	3.5	3.3	3.5	3.2	2.9	4.4	3.7	3.6	3.6	4.4	2.8	3.3
31	3.5	2.8	3.4	3.6	3.9	3.4	3.2	2.8	3.4	2.8	2.5	3.2	3.1	2.7	3.4	4.0	3.4	3.6	3.5	3.0	3.5	2.9	2.7	2.8	4.0	2.5	3.2
Max.	**27.1**	**96.5**	**18.1**	**31.6**	**84.3**	**40.4**	**25.9**	**56.0**	**29.8**	**38.9**	**60.2**	**59.9**	**88.0**	**80.7**	**65.3**	**65.3**	**34.3**	**45.2**	**79.3**	**48.0**	**37.9**	**15.3**	**60.8**	**46.7**	**96.5**		
Min.	**2.0**	**2.4**	**2.0**	**2.3**	**2.2**	**2.1**	**2.3**	**2.6**	**2.3**	**0.0**	**0.0**	**1.5**	**2.3**	**2.4**	**2.8**	**2.2**	**2.9**	**1.6**	**2.2**	**2.2**	**1.9**	**2.2**	**1.8**	**2.5**		**0.0**	
Avg.	**7.6**	**8.7**	**5.7**	**7.7**	**8.8**	**6.8**	**7.1**	**8.2**	**6.7**	**7.4**	**7.6**	**10.6**	**10.8**	**13.2**	**11.0**	**12.9**	**9.4**	**8.2**	**9.2**	**7.4**	**6.3**	**5.9**	**8.2**	**8.3**			**8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	2.7	2.6	2.8	3.0	2.8	2.6	2.5	2.5	2.9	2.8	2.7	3.1	2.7	3.5	2.3	2.2	2.3	4.3	4.7	4.8	3.4	14.7	26.6	26.6	2.2	4.5
2	46.7	3.8	1.8	0.0	0.0	0.0	9.5	71.6	41.6	14.2	8.9	17.9	10.5	11.5	14.5	14.7	13.4	9.7	6.0	7.6	5.1	3.9	5.0	4.8	71.6	0.0	13.4
3	5.4	3.6	4.4	4.6	2.3	4.4	5.8	5.2	8.1	11.8	13.7	6.4	4.4	6.4	3.5	4.1	4.2	8.7	3.2	3.2	3.0	2.8	2.5	2.6	13.7	2.3	5.2
4	2.7	3.1	3.1	2.9	2.7	2.8	3.0	2.7	2.5	2.5	2.6	2.9	3.5	3.2	2.9	4.4	2.8	3.0	3.4	7.6	7.1	8.2	13.7	10.6	13.7	2.5	4.3
5	3.7	4.9	10.4	1.6	5.1	3.9	4.3	5.1	5.5	6.2	11.7	9.3	5.3	5.1	2.8	4.9	3.8	5.7	8.2	3.6	8.3	3.4	2.7	4.3	11.7	1.6	5.4
6	2.8	3.4	3.5	2.9	4.5	5.6	6.3	7.2	5.4	5.3	6.6	5.2	4.4	5.7	4.4	3.2	6.0	3.3	4.3	2.6	2.9	4.9	5.1	8.2	8.2	2.6	4.7
7	6.5	5.0	5.0	5.2	5.2	3.5	4.5	5.7	8.0	4.5	4.6	6.0	4.8	5.0	7.7	2.5	4.6	5.2	4.2	2.8	5.8	5.2	4.7	5.1	8.0	2.5	5.1
8	2.9	3.3	7.5	6.8	9.7	8.9	24.4	41.2	19.4	6.0	4.4	9.3	9.4	15.4	10.2	9.1	15.5	40.9	5.2	6.0	20.8	4.7	4.7	7.7	41.2	2.9	12.2
9	4.6	5.3	2.4	3.5	4.1	4.2	2.4	3.5	4.7	9.0	5.9	11.5	3.4	4.4	4.7	1.9	2.9	2.3	2.4	1.8	2.2	4.7	1.7	2.5	11.5	1.7	4.0
10	12.2	5.6	2.6	2.0	2.2	3.2	3.2	4.0	12.7		4.7	4.2	3.7	4.3	3.6	7.5	4.2	2.3	3.0	4.2	2.2	2.3	2.8	3.9	12.7	2.0	4.4
11	6.9	5.2	5.1	6.0	3.9	6.3	2.5	6.3	9.6	6.3	9.4	10.3	6.4	3.4	6.3	5.1	4.0	2.6	5.3	2.2	6.9	6.7	3.7	3.5	10.3	2.2	5.6
12	3.1	8.0	5.0	1.9	4.9	5.6	4.5	4.2	3.5	1.9	3.8	8.8	2.2	2.6	4.0	2.6	2.4	4.2	6.8	3.6	14.2	15.2	9.7	80.7	80.7	1.9	8.5
13	39.4	25.1	15.9	15.7	11.5	10.3	8.6	9.2	8.6	26.5	2.9	13.0	9.1	26.9	13.1	4.1	7.8	5.8	11.7	16.9	9.4	3.7	3.8	3.5	39.4	2.9	12.6
14	4.7	3.6	3.4	3.8	5.4	5.7	4.5	5.8	3.6	14.6	13.1	6.1	8.6	6.0	30.3	42.3	18.2	35.5	13.3	4.7	5.8	3.8	40.5	30.2	42.3	3.4	13.1
15	15.7	22.0	27.7	57.9	30.6	70.8	8.5	7.5	7.0	5.8	9.3	4.6	3.7	2.8	3.3	2.4	2.4	3.5	3.0	2.6	3.0	3.7	3.5	3.7	70.8	2.4	12.7
16	4.6	3.9	4.7	5.5	4.2	8.4	5.8	5.2	9.9	4.2	4.6	4.1	5.1	3.4	3.2	4.5	4.0	3.8	29.1	35.5	9.2	8.7	10.0	18.1	35.5	3.2	8.3
17	6.4	10.9	12.5	10.6	11.8	5.4	8.2	7.1	7.5	12.3	24.6	57.9	7.7	6.1	19.1	25.8	51.6	25.1	30.9	42.7	38.9	26.1	36.5	25.3	57.9	5.4	21.3
18	24.4	34.7	11.6	9.5	9.1	9.0	6.9	3.9	5.2	5.9	12.3	14.7	12.5	7.0	6.3	3.3	3.3	6.5	6.9	17.5	6.0	6.1	5.5	4.1	34.7	3.3	9.7
19	5.2	6.2	5.8	5.9	8.7	9.2	6.7	6.4	5.0	6.1	8.8	6.0	6.3	5.5	6.7	6.7	5.5	5.6	5.6	6.3	9.8	8.1	9.1	6.5	9.8	5.0	6.7
20	13.1	13.1	11.4	7.1	24.3	12.0	17.3	11.7	4.2	3.1	3.3	3.5	3.9	3.5	5.8	7.1	20.1	9.0	8.2	11.7	6.5	4.8	4.1	4.4	24.3	3.1	8.9
21	3.7	3.4	6.1	4.4	6.5	6.2	4.6	3.5	6.1	6.0	6.5	8.3	4.7	4.8	8.8	6.7	8.4	7.1	6.5	9.6	7.3	6.8	5.1	4.6	9.6	3.4	6.1
22	7.2	9.7	12.1	10.1	12.8	9.5	9.2	7.5	9.7	17.1	21.1	16.1	13.6	12.7	7.9	6.9	10.3	9.6	16.3	37.6	22.5	32.0	35.4	9.6	37.6	6.9	14.9
23	5.0	4.5	5.8	8.7	6.7	6.5	2.7	4.3	5.8	6.0	2.9	13.4	16.9	6.1	5.8	8.3	10.5	13.1	20.9	48.3	9.0	37.9	10.4	42.8	48.3	2.7	12.6
24	43.8	71.5	44.3	27.2	57.4	28.8	78.4	31.5	52.0	91.4	45.4	61.4	21.9	67.9	67.4	63.6	45.3	14.1	12.7	22.0	30.3	35.4	6.2	6.3	91.4	6.2	42.8
25	4.6	5.1	27.8	5.0	3.9	4.6	2.8	2.5	4.9	2.8	3.5	3.8	6.5	5.4	4.2	6.1	5.2	6.0	5.1	5.1	5.2	4.4	2.1	3.4	27.8	2.1	5.4
26	3.1	2.5	5.0	3.6	2.2	8.8	2.9	4.9	5.1	3.5	3.1	3.9	2.6	3.5	2.2	2.3	2.1	2.1	2.4	2.8	2.4	3.2	2.3	2.5	8.8	2.1	3.3
27	2.4	2.5	2.1	2.4	3.1	2.7	3.7	3.1	2.6	2.9	2.6	2.7	4.0	4.2	4.0	3.7	5.3	2.7	4.0	3.5	6.1	3.1	4.6	4.7	6.1	2.1	3.4
28	2.9	4.2	4.3	5.1	5.8	12.9	6.1	5.6	4.3	7.1	20.3	42.2	23.2	5.7	16.1	8.5	4.7	4.4	2.5	2.8	2.5	3.1	3.7	3.9	42.2	2.5	8.4
29	5.2	3.9	4.0	5.4	3.6	2.1	4.8	3.8	4.4	5.5	4.9	10.3	4.6	7.6	7.1	4.3	3.4	4.4	3.1	2.6	3.9	3.5	3.5	5.2	10.3	2.1	4.6
30	4.3	4.1	6.0	4.8	2.6	3.3	3.4	3.9	3.2	4.1	5.8	3.0	7.7	5.8	6.6	7.9	16.5	4.5	5.9	4.2	4.2	4.5	4.7	7.4	16.5	2.6	5.3
Max.	**46.7**	**71.5**	**44.3**	**57.9**	**57.4**	**70.8**	**78.4**	**71.6**	**52.0**	**91.4**	**45.4**	**61.4**	**23.2**	**67.9**	**67.4**	**63.6**	**51.6**	**40.9**	**30.9**	**48.3**	**38.9**	**37.9**	**40.5**	**80.7**	**91.4**		
Min.	**2.4**	**2.5**	**1.8**	**0.0**	**0.0**	**0.0**	**2.4**	**2.5**	**2.5**	**1.9**	**2.6**	**2.7**	**2.2**	**2.6**	**2.2**	**1.9**	**2.1**	**2.1**	**2.4**	**1.8**	**2.2**	**2.3**	**1.7**	**2.5**		**0.0**	
Avg.	**9.9**	**9.5**	**8.8**	**7.8**	**8.6**	**8.9**	**8.6**	**9.5**	**9.1**	**10.2**	**9.1**	**12.3**	**7.5**	**8.5**	**9.5**	**9.2**	**9.7**	**8.4**	**8.1**	**10.9**	**8.8**	**8.8**	**8.7**	**11.6**			**9.3**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.0	3.4	4.0	3.1	4.2	5.8	4.7	4.5	2.8	4.2	2.5	3.6	3.5	8.8	2.1	1.8	5.2	4.8	3.4	4.5	4.4	5.3	3.1	8.8	1.8	4.0
2	4.6	4.1	4.5	4.6	4.1	4.6	5.5	2.9	6.0	4.2	4.1	7.0	5.4	8.0	39.1	18.3	18.5	11.4	27.2	54.8	89.2	79.7	14.1	23.5	89.2	2.9	18.6
3	69.4	26.0	22.0	8.6	4.7	14.8	9.2	5.1	4.6	8.7	8.3	7.7	6.6	6.4	10.0	17.4	16.2	26.1	30.6	8.7	15.2	15.5	33.6	12.7	69.4	4.6	16.2
4	9.8	13.8	14.9	21.8	10.7	16.7	22.1	9.5	18.1	28.0	18.2	14.4	12.8	9.5	8.9	11.6	18.9	41.9	71.3	29.7	55.3	32.8	38.9	8.4	71.3	8.4	22.4
5	6.5	4.3	4.0	5.2	11.5	5.6	3.4	5.0	12.6	7.3	38.1	63.2	77.7	26.5	61.8	13.3	25.4	26.6	32.6	21.3	8.7	5.2	19.6	34.6	77.7	3.4	21.7
6	16.6	23.1	11.1	16.0	5.9	6.4	8.8	8.8	6.3	6.8	3.7	2.9	3.9	4.1	4.2	2.9	2.7	4.0	2.6	2.6	2.7	2.6	2.7	3.0	23.1	2.6	6.4
7	3.9	3.0	2.9	2.9	3.0	3.8	3.3	3.3	3.0	3.2	3.6	3.4	3.0	3.1	3.5	3.4	3.1	5.4	2.9	3.4	2.8	3.2	4.1	3.8	5.4	2.8	3.4
8	3.9	2.9	2.9	3.1	2.8	2.9	3.2	3.1	3.2	3.0	3.3	3.4	3.3	3.1	2.7	2.7	3.0	3.0	3.1	2.8	3.0	2.8	3.9	4.1	4.1	2.7	3.1
9	3.9	4.0	5.6	7.7	7.7	15.2	12.6	11.4	5.4	2.5	4.2	3.5	4.9	6.6	4.4	4.1	4.6	4.3	5.2	7.3	6.6	13.0	53.1	12.8	53.1	2.5	8.8
10	33.4	5.0	4.3	3.9	7.8	8.6	12.0	9.0	11.3	3.0	7.8	9.0	50.7	34.3	11.5	15.7	26.5	11.8	11.1	7.1	19.4	6.4	12.0	5.6	50.7	3.0	13.6
11	4.2	2.5	2.7	3.2	2.9	4.6	4.1	4.2	3.4	3.7	3.8	4.3	2.9	3.3	4.5	4.0	5.1	4.9	3.9	3.7	3.6	3.8	4.0	3.6	5.1	2.5	3.8
12	4.3	4.2	3.9	6.5	6.3	5.8	5.4	13.1	11.7	7.8	4.0	3.5	4.3	4.2	3.4	4.2	5.3	3.9	4.3	4.4	3.7	3.5	3.3	3.9	13.1	3.3	5.2
13	3.7	3.0	3.3	3.3	4.3	3.4	3.4	3.3	3.4	4.8	4.1	3.6	4.6	4.0	4.0	5.8	3.8	3.8	3.3	3.4	3.7	4.0	3.4	4.3	5.8	3.0	3.8
14	4.9	9.3	9.6	33.3	13.0	34.7	6.9	3.4	5.5	27.4	17.2	9.0	7.2	9.9	13.4	4.1	4.4	4.8	10.3	6.0	7.6	10.8	25.7	18.0	34.7	3.4	12.4
15	54.3	33.7	17.6	4.0	13.0	7.2	22.0	11.0	16.3	11.9	15.2	6.6	9.8	10.0	7.4	4.6	6.9	5.6	6.7	5.4	3.8	4.5	4.3	5.1	54.3	3.8	12.0
16	6.0	6.1	7.0	13.0	9.8	28.1	6.2	9.2	8.2	33.8	12.1	4.9		4.7	4.9	4.3	5.4	5.7	6.9	6.7	14.0	6.8	6.5	42.2	42.2	4.3	11.0
17	10.1	7.4	4.7	3.2	4.5	3.6	5.6	5.3	2.4	6.0	9.9	13.1	21.6	26.6	14.9	89.7	42.4	21.0	13.3	6.2	10.1	4.9	3.0	13.2	89.7	2.4	14.3
18	10.7	6.0	11.1	5.6	6.3	7.1	9.1	3.6	3.5	13.8	7.8	5.6	7.5	10.9	11.4	12.2	14.4	7.7	4.9	7.7	9.7	12.7	6.0	7.7	14.4	3.5	8.5
19	9.1	4.4	4.4	4.9	9.8	18.9	5.6	18.0	31.8	8.9	6.3	13.5	16.3	18.3	24.2	10.1	13.7	5.6	4.1	5.2	6.2	2.3	2.2	4.7	31.8	2.2	10.4
20	5.1	8.4	4.5	2.2	2.9	3.1	3.9	2.4	3.9	5.8	9.2	8.1	31.1	27.4	25.7	50.5	12.9	24.5	12.0	14.6	3.6	3.9	2.5	6.8	50.5	2.2	11.5
21	7.4	5.1	15.8	29.2	14.0	22.4	69.9	33.6	30.9	7.1	91.4	25.4	17.3	14.9	12.6	11.1	13.2	13.4	6.3	11.4	3.4	4.1	4.7	4.3	91.4	3.4	19.5
22	3.8	5.2	3.9	3.9	39.6	65.0	6.2	17.8	10.0	22.2	15.3	11.4	19.8	37.9	24.3	13.1	9.1	7.0	6.1	4.3	6.5	4.3	4.1	5.4	65.0	3.8	14.4
23	4.2	4.2	4.1	4.4	4.6	5.3	4.3	4.6	4.6	5.9	4.7	5.1	5.4	4.9	5.5	4.4	4.4	4.1	4.7	3.9	4.3	4.6	4.5	4.6	5.9	3.9	4.6
24	4.5	4.5	4.9	4.8	4.7	5.2	3.9	5.6	4.7	5.1	4.7	5.5	5.2	5.3	5.4	4.8	4.9	4.6	7.3	21.9	18.9	15.9	14.1	6.8	21.9	3.9	7.2
25	9.5	7.3	9.0	8.0	6.2	6.5	5.6	6.5	5.1	7.7	8.6	11.0	13.9	14.0	12.4	9.9	10.8	9.9	9.2	12.3	14.0	9.3	4.0	6.3	14.0	4.0	9.0
26	5.9	13.9	22.2	23.8	30.8	12.8	14.0	7.3	13.6	8.3	9.9	15.5	10.2	6.3	13.9	12.1	7.1	9.4	9.8	6.5	3.7	4.9	5.2	2.9	30.8	2.9	11.3
27	4.1	4.9	2.9	7.3	7.0	6.1	9.6	10.3	11.4	13.0	10.2	15.0	7.1	15.8	13.7	16.2	11.9	12.5	12.0	12.7	4.1	4.6	6.2	4.9	16.2	2.9	9.3
28	8.1	4.8	3.7	5.2	6.2	11.3	6.8	4.9	7.9	11.3	13.7	14.6	22.7	8.4	6.3	6.2	7.4	12.2	6.1	5.2	2.2	3.5	7.0	3.7	22.7	2.2	7.9
29	5.3	5.1	2.7	4.2	2.3	2.3	1.9	4.9	4.5	5.0	8.6	9.0	8.1	8.9	8.3	9.5	9.7	13.2	14.9	12.0	6.3	3.3	5.2	4.4	14.9	1.9	6.6
30	7.3	4.7	9.3	53.2	17.4	9.0	13.7	9.0	5.8	6.7	6.9	5.6	8.3	10.6	8.1	6.6	7.4	7.3	8.9	6.9	5.5	5.2	5.4	4.0	53.2	4.0	9.7
31	3.6	4.1	5.1	4.2	3.8	3.4	3.8	4.6	4.0	4.0	4.7	4.9	4.9	4.6	5.2	5.0	4.9	6.2	5.5	5.9	5.9	12.8	12.8	6.2	12.8	3.4	5.4
Max.	**69.4**	**33.7**	**22.2**	**53.2**	**39.6**	**65.0**	**69.9**	**33.6**	**31.8**	**33.8**	**91.4**	**63.2**	**77.7**	**37.9**	**61.8**	**89.7**	**42.4**	**41.9**	**71.3**	**54.8**	**89.2**	**79.7**	**53.1**	**42.2**	**91.4**		
Min.	**3.2**	**2.5**	**2.7**	**2.2**	**2.3**	**2.3**	**1.9**	**2.4**	**2.4**	**2.5**	**3.3**	**2.5**	**2.9**	**3.1**	**2.7**	**2.1**	**1.8**	**3.0**	**2.6**	**2.6**	**2.2**	**2.3**	**2.2**	**2.9**		**1.8**	
Avg.	**10.7**	**7.7**	**7.3**	**9.8**	**8.7**	**11.3**	**9.6**	**7.9**	**8.6**	**9.3**	**11.7**	**10.1**	**13.3**	**11.5**	**12.4**	**12.3**	**10.5**	**10.5**	**11.3**	**9.9**	**11.2**	**9.5**	**10.4**	**8.9**			**10.2**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.0	9.3	8.7	5.7	4.7	4.9	5.1	5.7	5.9	5.3	5.2	6.2	6.1	7.0	5.2	6.5	6.7	7.3	9.1	9.1	11.6	13.4	6.2	9.1	13.4	4.7	7.3
2	10.1	11.3	8.9	6.5	7.4	5.4	24.9	17.2	8.0	8.1	9.3	10.1	22.3	15.9	13.7		9.6	20.2	10.5	8.4	10.1	27.9	6.7	23.3	27.9	5.4	12.9
3	35.4	15.1	25.2	21.7	29.4	7.1	14.6	16.0	14.7	36.7	57.2	67.5	27.3	15.2	12.3	9.1	7.2	9.9	8.0	7.3	7.3	10.2	4.7	4.2	67.5	4.2	19.3
4	4.8	4.8	8.1	6.4	16.1	10.2	5.8	12.9	8.1	9.4	12.6	9.7	9.4	9.7	8.5	12.2	6.7	9.0	6.7	8.7	7.1	5.4	4.5	4.5	16.1	4.5	8.4
5	5.6	5.2	6.6	4.2	4.7	5.4	7.4	4.2	4.8	5.6	4.8	4.4	5.7	6.0	5.7	4.7	6.4	6.6	7.2	8.5	8.4	12.7	56.5	3.5	56.5	3.5	8.1
6	6.9	2.5	4.2	4.9	2.9	3.9	8.5	7.4	3.8	12.6	12.2	14.9	16.1	20.3	22.7	24.3	16.3	8.3	7.7	5.7	5.5	5.2	3.5	3.4	24.3	2.5	9.3
7	6.6	4.0	7.1	7.5	3.1	3.7	4.4	6.4	10.7	8.8	13.7	9.9	10.9	15.0	23.8	33.3	49.8	6.7	11.8	5.6	5.3	5.3	12.9	32.9	49.8	3.1	12.5
8	20.1	9.0	10.2	10.6	10.1	14.1	18.5	11.1	10.6	13.7	45.6	20.5	11.5	14.3	12.7	13.0	8.7	10.2	10.3	6.7	6.9	6.5	5.1	10.0	45.6	5.1	12.9
9	12.9	13.5	10.3	8.6	15.4	15.8	41.3	4.8	6.0	7.4	10.9	41.0	28.3	15.6	15.7	8.9	24.2	11.1	18.0	16.6	9.3	16.6	9.1	14.9	41.3	4.8	15.7
10	18.0	61.9	41.1	20.0	24.2	13.3	7.8	12.8	74.7	24.8	92.1	24.4	26.0	96.6	19.4	23.7	21.1	25.7	23.6	12.9	7.6	15.9	20.6	54.1	96.6	7.6	31.8
11	19.1	48.9	52.4	29.9	12.9	9.7	49.5	14.0	10.3	56.1	33.9	24.6	41.1	20.5	8.6	7.3	7.9	11.7	13.6	11.3	11.8	7.2	6.8	4.5	56.1	4.5	21.4
12	3.3	45.6	35.7	34.5	51.3	71.2	71.3	18.4	31.8	90.4	47.0	70.6	22.7	15.4	12.7	29.4	13.5	10.5	11.4	15.3	30.5	11.6	4.7	4.7	90.4	3.3	31.4
13	14.7	10.2	5.8	3.6	6.5	3.4	5.5	5.9	5.7	6.9	9.0	11.4	16.1	25.6	16.5	25.4	20.9	34.2	29.7	23.3	15.2	14.6	42.3	50.6	50.6	3.4	16.8
14	54.6	13.9	52.8	48.0	15.4	49.6	77.2	34.6	7.0	10.7	10.5	16.2	22.6	19.0	79.9	17.3	19.8	14.1	11.4	18.9	23.2	5.3	14.9	87.9	87.9	5.3	30.2
15	31.4	72.7	24.8	54.2	60.5	35.6	56.6	61.2	67.7	9.9	78.9	16.9	22.2	17.6	18.9	7.9	7.5	7.3	10.0	7.2	5.5	6.2	6.8	9.7	78.9	5.5	29.0
16	34.7	33.5	11.0	38.3	4.8	3.3	7.4	5.3	6.2	9.0	12.5	17.3	26.0	35.8	21.2	22.0	11.0	43.8	22.4	10.0	8.2	7.7	5.1	4.9	43.8	3.3	16.7
17	7.3	5.3	5.0	5.5	6.1	6.9	15.3	8.2	44.8	34.8	29.8	20.6	74.6	62.8	22.1	18.8	15.9	16.2	19.3	10.7	8.4	10.1	3.2	5.9	74.6	3.2	19.1
18	26.9	50.0	44.8	20.1	15.7	33.2	64.9	73.8	75.0	56.0	18.4	32.0	40.4	14.6	16.8	14.4	18.4	22.0	15.9	13.7	17.0	20.0	22.5	10.3	75.0	10.3	30.7
19	10.4	7.5	7.3	5.4	8.7	8.2	11.2	19.0	55.6	36.2	82.7	19.0	22.7	59.6	23.4	24.2	13.5	15.9	12.7	13.3	8.7	8.6	5.0	22.5	82.7	5.0	20.9
20	31.0	24.4	19.3	14.7	13.2	75.9	11.2	47.9	14.9	20.6	12.0	11.3	12.8	13.8	10.7	9.1	10.1	9.0	8.2	9.0	7.0	7.3	5.5	5.5	75.9	5.5	16.8
21	5.9	5.2	4.4	5.9	4.1	4.0	4.7	7.8	9.1	17.6	50.8	73.2	19.0	16.8	44.7	46.5	44.0	41.8	20.9	11.9	10.0	9.4	21.2	22.8	73.2	4.0	20.9
22	8.8	11.0	4.0	4.6	6.2	6.1	14.7	21.2	20.9	16.0	13.8	12.5	10.9	11.2	10.7	8.6	8.8	8.8	7.5	7.1	6.0	5.4	6.8	6.2	21.2	4.0	9.9
23	7.0	7.5	4.7	5.2	5.3	3.1	4.2	4.4	6.4	8.1	9.4	9.1	11.6	10.5	11.2	10.9	10.9	13.0	11.5	9.0	6.2	7.1	6.7	4.5	13.0	3.1	7.8
24	9.6	11.1	11.7	5.4	4.0	3.8	5.7	5.5	5.7	7.0	5.9	6.1	6.6	6.6	6.3	6.2	6.0	5.9	5.4	5.2	5.1	5.0	4.8	4.9	11.7	3.8	6.2
25	4.3	4.6	4.7	4.5	4.9	4.8	4.8	4.8	4.6	4.8	4.8	5.7	5.5	5.1	5.2	5.8	6.7	5.9	5.4	5.6	5.8	7.6	10.1	9.6	10.1	4.3	5.6
26	15.1	12.6	7.8	16.0	46.3	12.2	18.3	17.4	25.0	26.8	17.9	7.1	5.5	44.6	15.1	32.9	13.5	21.6	11.7	13.6	17.3	9.4	11.3	22.3	46.3	5.5	18.4
27	8.4	12.2	10.2	19.0	26.7	74.0	14.4	8.9	9.6	16.3	9.6	9.8	10.1	9.6	9.3	10.3	10.6	12.2	14.0	9.5	6.9	7.6	9.3	10.7	74.0	6.9	14.1
28	5.3	7.5	11.1	32.3	15.8	80.6	47.5	84.7	23.3	22.1	8.8	11.7	13.5	11.5	11.2	12.4	9.3	16.4	10.1	9.8	8.1	5.6	7.6	6.2	84.7	5.3	19.7
29	6.5	5.5	10.3	11.1	9.3	10.2	7.4	13.7	10.8	11.4	14.1	14.2	11.5	9.2	13.5	10.9	11.1	10.7	10.6	10.5	6.2	6.1	5.3	5.5	14.2	5.3	9.8
30	7.1	6.4	8.9	7.3	7.5	12.0	10.0	12.6	20.2	78.8	39.4	73.1	60.6	35.7	54.3	57.7	57.4	31.1	8.8	91.4	23.1	56.5	42.9	31.1	91.4	6.4	34.7
Max.	**54.6**	**72.7**	**52.8**	**54.2**	**60.5**	**80.6**	**77.2**	**84.7**	**75.0**	**90.4**	**92.1**	**73.2**	**74.6**	**96.6**	**79.9**	**57.7**	**57.4**	**43.8**	**29.7**	**91.4**	**30.5**	**56.5**	**56.5**	**87.9**	**96.6**		
Min.	**3.3**	**2.5**	**4.0**	**3.6**	**2.9**	**3.1**	**4.2**	**4.2**	**3.8**	**4.8**	**4.8**	**4.4**	**5.5**	**5.1**	**5.2**	**4.7**	**6.0**	**5.9**	**5.4**	**5.2**	**5.1**	**5.0**	**3.2**	**3.4**		**2.5**	
Avg.	**14.8**	**17.7**	**15.6**	**15.4**	**14.8**	**19.7**	**21.3**	**18.9**	**20.1**	**22.4**	**25.8**	**22.4**	**20.7**	**22.0**	**18.4**	**17.7**	**15.8**	**15.6**	**12.4**	**13.2**	**10.3**	**11.2**	**12.4**	**16.3**			**17.3**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.2	26.4	26.8	32.0	79.6	75.8	43.5	19.4	8.0	32.0	14.4	15.7	11.2	10.6	9.5	8.8	8.1	7.9	7.2	7.0	6.8	5.4	5.9	4.3	79.6	4.3	20.0
2	4.7	4.6	5.9	5.0	5.2	5.3	5.1	5.2	5.2	5.4	8.1	6.2	6.5	7.7	6.2	6.2	7.2	6.7	8.9	8.5	8.1	7.6	27.7	27.6	27.7	4.6	8.1
3	16.2	21.9	15.7	10.7	13.0	4.9	6.9	5.9	6.8	17.4	11.2	25.2	9.0	9.9	7.4	6.9	7.6	20.2	13.1	9.7	33.3	17.8	12.0	7.2	33.3	4.9	12.9
4	16.1	13.9	13.9	41.8	31.0	14.9	19.9	21.6	66.0	64.2	10.8	17.1	30.9	30.1	16.1	8.8	34.4	28.7	17.6	14.0	16.2	6.9	6.8	14.8	66.0	6.8	23.2
5	23.4	40.2	15.8	22.5	31.5	14.5	27.6	12.8	17.8	11.5	29.8	35.5	91.5	76.9	32.1	8.8	16.9	12.6	11.0	12.4	7.1	10.4	23.6	5.4	91.5	5.4	24.6
6	11.5	8.5	25.8	34.6	22.0	33.6	58.7	74.7	32.5	63.2	21.5	15.5	11.7	14.1	7.6	8.3	7.3	9.4	7.0	7.7	6.2	4.6	4.7	5.8	74.7	4.6	20.7
7	5.7	5.5	4.5	4.5	5.5	5.2	4.5	6.7	5.3	5.5	6.6	6.5	5.6	6.4	6.0	5.8	8.6	6.9	6.6	8.3	7.1	5.9	4.9	6.5	8.6	4.5	6.0
8	13.5	11.5	17.9	18.4	24.7	18.2	26.3	14.2	12.5	27.6	13.0	10.1	17.3	11.8	10.7	10.5	11.1	8.8	17.1	14.9	13.7	10.8	7.5	14.0	27.6	7.5	14.8
9	4.3	13.5	8.9	12.3	13.8	10.4	10.1	3.9	7.6	10.0	8.5	7.1	8.1	8.4	10.2	12.1	9.4	9.4	7.9	6.6	8.2	7.6	5.9	5.8	13.8	3.9	8.8
10	6.0	4.6	6.0	8.0	7.5	9.7	11.2	8.6	7.2	9.2	7.1	12.7	7.0	11.1	10.8	13.4	9.4	10.3	10.0	9.1	7.9	6.9	7.1	15.5	15.5	4.6	9.0
11	16.3	12.5	12.5	7.5	6.7	5.2	5.1	6.8	9.0	9.4	8.9	9.0	10.7	11.9	12.0	12.9	13.1	9.9	10.1	7.5	7.2	7.7	4.6	5.6	16.3	4.6	9.3
12	4.8	7.5	11.1	12.8	9.2	5.7	6.4	4.8	5.5	5.8	6.1	7.2	7.1	7.5	6.3	5.4	5.7	6.1	6.2	5.7	4.5	4.6	4.5	4.5	12.8	4.5	6.5
13	4.9	5.2	5.5	5.9	5.7	5.6	6.0	5.7	7.1	7.1	6.1	6.4	7.2	9.9	9.0	5.8	6.0	7.1	8.5	8.2	6.4	7.1	5.7	7.4	9.9	4.9	6.7
14	9.5	7.2	9.2	6.1	11.5	17.4	20.6	15.5	10.5	9.8	13.6	13.4	9.3	13.8	15.2	13.4	16.0	14.9	14.1	14.7	11.2	6.8	7.4	6.8	20.6	6.1	12.0
15	5.2	6.1	6.3	4.5	5.2	5.2	8.8	7.6	10.6	10.3	7.7	10.4	6.3	6.6	7.8	7.8	7.1	6.2	7.0	5.9	5.3	6.7	8.2	5.7	10.6	4.5	7.0
16	5.3	4.3	4.4	4.7	4.8	4.6	4.5	5.3	5.1	5.5	4.9	5.0	5.3	5.3	5.5	5.5	6.0	5.8	4.8	5.2	4.8	4.9	6.2	5.8	6.2	4.3	5.1
17	6.0	7.7	16.1	6.7	5.9	8.7	19.0	7.3	4.8	8.0	6.7	8.8	8.4	8.1	8.7	6.8	7.9	7.4	6.5	8.3	5.9	6.6	10.7	47.1	47.1	4.8	9.9
18	16.9	6.8	22.5	8.2	6.3	7.2	6.6	80.0	67.8	67.2	25.1	74.7	8.6	16.8	21.9	24.9	16.1	34.8	26.2	24.7	4.7	15.1	14.7	11.6	80.0	4.7	25.4
19	14.2	9.0	5.7	5.5	4.9	4.2	5.0	5.2	5.4	5.4	8.1	10.3	7.4	7.1	7.0	15.6	10.9	11.7	7.4	8.0	5.5	4.6	6.2	10.9	15.6	4.2	7.7
20	11.1	6.0	9.5	19.2	10.1	61.7	36.5	14.1	3.9	8.5	23.0	9.2	10.0	10.1	13.2	7.5	8.4	8.9	9.8	7.1	7.1	9.4	7.8	9.0	61.7	3.9	13.4
21	7.9	8.3	7.1	8.2	7.8	6.3	7.4	8.6	8.7	9.7	5.7	8.1	12.5	25.9	21.1	23.5	26.7	41.2	17.6	52.0	80.9	48.6	5.3	4.9	80.9	4.9	18.9
22	9.9	43.8	18.4	41.9	41.1	50.6	18.3	19.4	12.6	12.2	14.5	22.4	8.5	10.9	13.6	13.7	23.9	34.8	36.0	18.8	17.9	8.8	12.2	16.6	50.6	8.5	21.7
23	8.4	4.3	11.7	20.6	18.0	7.6	7.2	27.3	16.4	13.4	13.7	7.4	6.4	8.6	13.2	10.1	15.6	15.1	11.9	12.8	6.1	7.6	32.9	64.5	64.5	4.3	15.0
24	9.0	49.8	21.0	48.7	12.1	4.6	7.2	4.3	3.7	4.7	5.0	12.8	9.2	8.6	7.2	9.0	10.8	22.8	10.2	9.8	15.7	9.4	6.3	3.3	49.8	3.3	12.7
25	4.7	5.2	9.5	4.2	3.4	5.1	4.7	6.1	6.1	4.8	6.2	7.5	7.3	10.1	11.5	11.2	11.5	11.4	9.4	10.6	8.0	5.9	5.6	4.4	11.5	3.4	7.3
26	4.5	2.3	2.9	3.5	21.3	60.9	70.9	74.2	25.0	57.9	79.8	40.2	6.5	29.8	12.5	36.1	61.2	10.4	14.8	26.2	8.1	11.2	9.5	10.2	79.8	2.3	28.3
27	9.9	8.6	14.1	11.6	15.3	7.0	5.4	7.2	8.5	6.4	9.5	12.4	9.2	18.0	23.3	8.4	10.8	13.2	6.6	8.8	10.2	10.2	12.4	7.7	23.3	5.4	10.6
28	16.5	8.1	8.6	7.5	5.3	4.7	6.4	4.9	6.2	9.1	9.7	7.2	7.4	8.2	6.6	6.8	9.8	7.6	5.4	5.8	5.7	4.0	5.7	2.2	16.5	2.2	7.1
29	5.9	10.1	8.0	5.2	6.4	11.6	4.5	7.2	5.2	5.2	5.7	8.2	6.4	6.9	7.0	9.6	10.7	11.6	6.5	5.8	4.3	6.6	10.0	3.4	11.6	3.4	7.2
30	11.5	12.9	8.1	4.3	5.1	4.4	3.8	3.0	4.2	5.5	6.5	7.6	8.6	8.5	7.5	11.8	8.6	7.4	7.5	6.2	5.8	5.7	6.7	9.1	12.9	3.0	7.1
31	10.1	9.4	4.8	5.2	5.4	3.9	3.5	3.0	3.4	4.4	5.2	10.8	8.3	11.2	13.5	12.3	8.4	10.4	6.7	9.2	6.1	6.7	4.0	20.2	20.2	3.0	7.7
Max.	**23.4**	**49.8**	**26.8**	**48.7**	**79.6**	**75.8**	**70.9**	**80.0**	**67.8**	**67.2**	**79.8**	**74.7**	**91.5**	**76.9**	**32.1**	**36.1**	**61.2**	**41.2**	**36.0**	**52.0**	**80.9**	**48.6**	**32.9**	**64.5**	**91.5**		
Min.	**4.3**	**2.3**	**2.9**	**3.5**	**3.4**	**3.9**	**3.5**	**3.0**	**3.4**	**4.4**	**4.9**	**5.0**	**5.3**	**5.3**	**5.5**	**5.4**	**5.7**	**5.8**	**4.8**	**5.2**	**4.3**	**4.0**	**4.0**	**2.2**		**2.2**	
Avg.	**9.9**	**12.4**	**11.6**	**13.9**	**14.4**	**15.6**	**15.2**	**15.8**	**12.9**	**16.7**	**13.0**	**14.5**	**11.9**	**13.9**	**11.6**	**11.2**	**13.4**	**13.5**	**11.0**	**11.6**	**11.2**	**9.1**	**9.4**	**11.9**			**12.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.1	100.2	44.9	5.6	5.7	2.6	10.4	28.3	72.6	38.6	11.8	19.0	15.8	14.7	13.7	11.0	10.7	14.2	11.2	19.7	7.5	6.4	6.3	4.9	100.2	2.6	20.4
2	4.9	5.3	4.6	6.4	3.8	4.2	5.6	5.7	5.5	7.0	4.6	5.6	7.7	6.9	8.2	5.4	9.6	6.8	12.0	14.4	35.8	46.7	44.9	14.7	46.7	3.8	11.5
3	6.3	5.1	5.4	6.1	4.6	5.9	5.0	5.0	6.4	6.3	18.4	36.4	44.4	17.0	17.6	13.7	13.2	11.2	11.2	7.3	6.0	4.1	8.2	6.8	44.4	4.1	11.3
4	6.0	4.7	5.5	8.4	3.8	4.1	5.1	5.8	5.6	7.6	8.6	8.7	9.3	9.1	9.2	12.0	7.2	11.8	10.3	9.2	5.2	5.1	5.5	4.7	12.0	3.8	7.2
5	9.1	5.5	6.2	12.7	9.2	21.7	21.5	20.8	9.6	9.7	15.4	14.7	14.7	12.3	12.7	15.6	14.2	15.1	11.4	9.0	5.8	4.4	3.7	5.7	21.7	3.7	11.7
6	5.1	6.2	4.4	3.6	4.0	9.3	13.1	10.5	5.4	4.7	13.1	11.2	10.1	10.6	8.8	8.6	12.0	7.4	5.3	5.1	6.0	7.2	3.4	8.6	13.1	3.4	7.7
7	18.8	9.8	7.7	6.0	3.6	5.6	3.8	5.5	10.6	5.9	8.5	10.5	9.2	7.6	15.1	9.1	13.2	10.6	9.7	9.2	5.5	4.5	8.1	4.3	18.8	3.6	8.4
8	4.9	3.3	8.5	5.3	8.1	7.2	7.3	3.5	3.5	5.6	9.0	9.4	10.4	15.0	17.7	19.6	24.2	24.7	15.6	10.6	7.9	7.0	12.7	3.1	24.7	3.1	10.2
9	4.7	5.7	9.5	6.3	2.4	2.9	5.7	4.4	4.9	6.4	6.0	8.8	8.4	11.6	12.8	13.0	14.4	10.6	10.6	9.7	9.2	7.8	8.6	11.1	14.4	2.4	8.1
10	13.8	8.2	19.0	18.5	41.8	21.6	42.1	7.6	8.0	8.7	8.7	17.1	22.5	23.3	30.0	32.9	17.2	8.1	28.1	6.7	12.6	15.1	10.4	4.6	42.1	4.6	17.8
11	10.6	13.4	5.4	6.3	5.0	4.6	4.5	6.4	8.4	10.1	10.8	7.0	10.4	11.9	9.9	11.5	10.8	8.1	7.7	12.7	4.2	9.3	48.0	24.0	48.0	4.2	10.9
12	18.2	28.7	5.9	6.6	12.1	15.2	2.8	4.8	4.2	6.7	9.3	16.8	11.3	14.9	14.9	22.1	21.6	49.0	7.2	17.0	32.1	11.2	38.2	18.8	49.0	2.8	16.2
13	6.3	4.7	9.5	19.7	16.9	30.3	29.9	34.4	20.3	24.4	70.6	9.1	10.1	12.7	40.8	18.2	23.6	7.5	10.0	5.4	6.7	6.3	10.5	9.5	70.6	4.7	18.2
14	7.0	25.6	19.6	8.4	7.4	20.3	16.1	19.7	6.7	5.2	5.3	5.6	8.0	7.3	8.0	7.2	7.4	6.7	7.0	5.6	6.2	6.0	5.5	50.4	50.4	5.2	11.3
15	48.6	45.2	64.9	27.7	21.4	18.6	5.2	12.0	8.1	9.6	12.2	60.2	20.6	18.7	16.7	14.7	24.3	10.9	10.1	14.7	17.8	12.9	15.5	7.4	64.9	5.2	21.6
16	10.2	8.3	9.5	13.8	7.7	4.4	6.1	4.8	7.2	9.7	13.0	7.3	10.9	8.0	9.8	7.9	8.3	8.3	9.2	6.8	4.0	4.5	3.9	3.2	13.8	3.2	7.8
17	16.3	6.9	4.9	13.8	6.9	6.7	7.5	7.0	5.6	6.7	5.4	9.3	6.0	8.0	7.6	10.0	10.5	7.4	7.0	6.9	5.8	6.1	6.1	12.6	16.3	4.9	8.0
18	14.4	7.9	7.7	9.5	14.2	22.8	15.0	16.0	31.9	6.4	11.4	26.8	17.8	23.4	35.8	23.3	17.9	35.4	72.8	23.8	51.8	23.9	7.4	4.3	72.8	4.3	21.7
19	15.9	14.6	24.8	17.0	17.6	11.8	80.6	16.5	51.7	94.0	55.5	8.8	12.1	12.0	14.8	12.8	20.6	13.4	8.1	13.9	9.1	16.0	5.6	4.9	94.0	4.9	23.0
20	27.1	13.2	7.4	4.3	3.3	2.4	2.7	2.6	2.6	4.8	10.6	12.0	17.0	14.3	11.2	9.0	12.3	9.4	8.0	6.8	11.4	6.1	10.6	3.5	27.1	2.4	8.9
21	2.9	8.1	15.9	12.1	13.8	11.6	6.5	33.6	24.8	18.6	61.3	79.4	30.2	40.0	23.5	17.6	19.9	11.2	13.5	33.8	26.2	44.5	12.3	8.5	79.4	2.9	23.7
22	33.9	48.5	36.2	13.4	9.0	6.3	11.0	4.3	6.8	33.6	26.0	13.0	22.2	59.4	16.1	23.4	54.3	43.8	16.4	7.0	4.8	4.2	6.9	2.8	59.4	2.8	21.0
23	6.0	3.4	4.6	2.2	1.5	5.0	2.5	3.0	3.2	3.9	16.6	13.2	13.8	24.7	37.2	19.3	29.4	37.4	11.0	8.7	6.7	6.0	9.8	6.2	37.4	1.5	11.5
24	22.4	48.2	58.4	56.2	92.3	80.3	15.2	11.0	5.5	3.4	17.7	11.2	11.5	15.0	14.7	14.7	21.6	29.0	8.9	29.6	68.5	4.4	6.0	3.8	92.3	3.4	27.1
25	5.2	3.9	6.4	51.3	35.7	70.6	80.8	52.7	32.7	52.0	27.8	10.6	16.6	20.5	11.3	12.1	13.4	9.6	10.2	6.2	4.5	6.3	6.7	5.1	80.8	3.9	23.0
26	5.4	8.9	5.8	5.8	3.6	4.6	5.8	7.0	5.4	4.7	5.9	4.6	5.1	7.0	7.0	7.3	8.2	13.7	7.4	5.7	4.6	7.5	7.5	5.8	13.7	3.6	6.4
27	11.6	14.6	12.1	13.0	6.3	30.4	45.0	29.7	8.4	7.4	5.6	7.8	10.3	15.0	17.6	10.7	9.9	8.9	5.9	6.5	5.8	9.3	8.3	7.6	45.0	5.6	12.8
28	18.4	8.9	4.6	6.5	7.5	3.4	8.3	14.4	10.7	4.1	8.1	5.4	8.4	11.0	14.8	13.0	17.6	13.5	16.6	7.3	10.2	4.0	8.5	4.0	18.4	3.4	9.6
29	2.6	4.7	6.2	5.9	4.4	5.9	5.9	7.4	11.3	11.5	16.8	29.2	38.4	24.6	30.0	15.7	15.2	10.4	5.6	12.6	8.6	12.1	26.8	23.0	38.4	2.6	14.0
30	14.0	9.4	59.6	69.2	72.9	21.0	15.0	13.2	26.8	72.1	21.5	14.6	19.3	28.2	21.0	19.4	19.6	10.4	9.4	11.4	5.4	14.9	5.3	5.0	72.9	5.0	24.1
31	5.9	4.6	4.2	4.4	4.5	4.7	5.9	4.2	4.8	5.0	4.2	8.3	9.8	10.4	8.0	8.4	7.9	6.3	5.4	5.7	5.7	4.8	4.6	7.9	10.4	4.2	6.1
Max.	**48.6**	**100.2**	**64.9**	**69.2**	**92.3**	**80.3**	**80.8**	**52.7**	**72.6**	**94.0**	**70.6**	**79.4**	**44.4**	**59.4**	**40.8**	**32.9**	**54.3**	**49.0**	**72.8**	**33.8**	**68.5**	**46.7**	**48.0**	**50.4**	**100.2**		
Min.	**2.6**	**3.3**	**4.2**	**2.2**	**1.5**	**2.4**	**2.5**	**2.6**	**2.6**	**3.4**	**4.2**	**4.6**	**5.1**	**6.9**	**7.0**	**5.4**	**7.2**	**6.3**	**5.3**	**5.1**	**4.0**	**4.0**	**3.4**	**2.8**		**1.5**	
Avg.	**12.6**	**15.7**	**15.8**	**14.4**	**14.6**	**15.0**	**15.9**	**13.0**	**13.5**	**16.0**	**16.8**	**16.2**	**14.9**	**16.6**	**16.7**	**14.2**	**16.5**	**15.2**	**12.4**	**11.3**	**12.9**	**10.6**	**11.8**	**9.3**			**14.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.9	5.4	5.3	7.2	4.4	4.4	4.9	5.0	5.8	10.4	8.0	9.3	30.3	10.6	9.5	6.9	23.8	13.3	6.3	6.3	7.2	5.8	5.3	5.6	30.3	4.4	8.6
2	4.7	6.7	5.3	4.9	4.2	4.5	4.1	4.9	4.4	4.4	4.4	4.8	5.5	5.8	5.6	7.7	8.5	16.1	9.5	5.8	20.0	11.4	15.5	13.3	20.0	4.1	7.6
3	11.0	6.6	6.5	6.7	9.8	9.6	9.2	8.9	10.1	29.2	47.2	20.0	11.1	10.3	12.0	16.7	8.9	13.4	6.7	9.8	7.0	5.9	23.0	6.5	47.2	5.9	12.7
4	5.0	17.5	15.4	8.4	5.5	4.4	6.3	48.3	32.1	14.0	11.1	16.1	18.3	9.6	13.6	13.0	9.3	9.8	10.6	8.1	7.6	16.1	11.8	17.2	48.3	4.4	13.7
5	16.1	33.1	55.5	53.1	13.2	22.4	12.2	8.9	14.6	24.6	75.6	15.8	29.1	24.9	33.4	29.3	15.4	8.8	34.6	10.0	14.9	13.6	9.0	5.7	75.6	5.7	23.9
6	12.6	11.8	5.7	4.7	10.6	7.8	10.9	6.0	4.3	5.7	4.2	4.8	5.7	5.1	5.1	6.9	7.3	5.9	6.9	7.5	6.3	4.3	8.4	8.2	12.6	4.2	6.9
7	19.0	15.2	6.7	79.3	15.0	17.6	13.8	9.4	7.1	4.2	6.2	15.7	8.1	6.0	9.3	6.0	5.6	6.2	6.1	6.5	5.3	4.2	5.1	4.6	79.3	4.2	11.8
8	7.2	11.7	9.7	7.4	5.9	8.0	10.8	7.3	7.8	8.3	9.4	7.3	6.9	7.0	5.2	5.5	5.8	4.5	5.0	10.4	5.8	6.9	6.8	10.3	11.7	4.5	7.5
9	14.7	8.0	6.4	4.8	5.5	51.8	82.4	13.2	13.5	18.1	5.6	5.0	5.3	4.4	5.8	4.7	5.2	6.1	4.2	4.5	5.3	4.3	7.8	7.5	82.4	4.2	12.3
10	11.9	5.2	11.7	9.5	8.3	10.2	39.5	19.0	9.5	9.9	13.3	11.6	21.4	11.0	11.6	8.5	9.6	10.0	14.5	9.7	37.6	30.9	56.1	57.8	57.8	5.2	18.3
11	13.4	9.4	5.8	42.9	40.1	28.8	39.3	20.7	14.2	27.2	6.7	8.3	15.3	11.5	7.6	13.3	8.5	6.7	9.2	5.3	6.9	6.7	5.5	6.2	42.9	5.3	15.0
12	4.8	4.2	4.3	4.3	4.2	4.5	4.1	4.4	4.3	5.3	4.8	4.7	4.9	5.3	5.3	4.9	4.9	4.2	4.5	4.4	4.3	5.3	4.5	4.6	5.3	4.1	4.6
13	4.7	4.4	4.7	4.7	4.9	4.6	4.8	4.6	4.5	4.3	4.7	4.7	4.6	4.8	5.3	5.3	5.3	5.0	4.8	5.3	4.8	4.7	5.1	4.1	5.3	4.1	4.8
14	4.9	4.4	4.9	9.1	17.8	4.8	5.2	4.5	6.2	4.6	5.8	6.0	5.4	4.6	6.4	6.5	4.8	4.6	6.5	6.4	6.9	10.7	6.6	6.6	17.8	4.4	6.4
15	11.7	13.7	9.8	12.8	13.9	12.3	14.9	5.2	6.3	4.3	4.5	5.1	6.6	5.7	6.8	4.8	5.1	4.6	4.3	4.0	3.6	4.7	7.8	5.5	14.9	3.6	7.4
16	12.9	18.4	10.6	14.0	4.2	3.8	3.9	2.3	3.8	6.0	5.4	7.7	12.3	8.9	7.9	6.6	6.8	7.6	4.0	3.3	2.3	3.4	1.8	7.4	18.4	1.8	6.9
17	3.6	3.9	44.0	56.6	51.6	10.0	6.6	7.3	34.8	76.4	65.4	13.2	21.3	9.6	5.7	6.0	5.0	9.3	6.1	5.3	9.6	11.0	12.9	12.9	76.4	3.6	20.3
18	12.0	11.1	4.8	5.8	6.8	14.9	10.3	9.2	9.5	11.2	9.7	7.9	18.1	5.5	5.0	4.3	4.6	4.0	4.7	20.4	16.3	50.7	7.3	7.7	50.7	4.0	10.9
19	7.9	9.2	8.2	4.9	4.8	6.2	6.5	5.2	5.0	12.2	6.9	8.7	8.4	7.7	20.0	5.7	5.0	6.3	4.1	2.9	2.7	3.5	4.9	5.8	20.0	2.7	6.8
20	5.3	6.9	3.2	11.0	6.5	2.9	4.8	4.5	6.8	6.1	7.9	9.8	7.8	8.7	10.9	16.0	14.4	15.1	7.9	14.8	25.3	4.4	5.0	9.5	25.3	2.9	9.0
21	9.4	12.0	5.3	2.4	9.7	7.5	5.0	4.9	11.5	7.0	13.1	11.4	15.8	24.2	13.1	10.6	20.4	7.3	5.9	5.2	3.5	2.3	2.5	6.1	24.2	2.3	9.0
22	3.2	1.6	4.0	2.5	3.2	5.5	6.3	4.9	7.7	9.5	8.5	46.4	33.1	44.9	24.3	14.5	11.1	7.4	7.7	13.9	5.8	6.2	5.1	8.6	46.4	1.6	11.9
23	6.3	7.2	5.1	7.0	17.2	5.5	4.9	7.3	6.3	9.1	14.0	10.2	9.0	9.0	11.9	6.9	6.3	8.6	6.9	10.5	7.2	7.9	7.6	5.1	17.2	4.9	8.2
24	11.1	13.1	7.7	9.1	10.2	5.1	5.3	7.5	10.1	13.8	14.1			0.0	0.0	20.5	7.2	7.8	6.0	8.1	5.3	14.5	24.0	9.5	24.0	0.0	9.5
25	27.3	8.4	7.2	6.7	43.1	42.4	39.2	15.8	7.0	12.2	21.2	14.7	45.0	30.7	17.9	15.3	18.7	12.3	11.1	14.0	35.7	11.7	46.9	44.2	46.9	6.7	22.9
26	9.6	10.5	8.7	4.9	2.9	9.3	7.2	8.2	8.3	7.2	8.9	28.8	14.1	22.3	24.3	14.7	25.1	17.2	58.5	47.3	5.8	5.7	6.0	3.9	58.5	2.9	15.0
27	5.7	4.1	4.9	5.0	3.4	3.5	5.2	5.8	5.5	5.8	6.9	10.3	11.1	9.3	6.2	5.8	7.9	7.1	4.9	6.2	4.8	9.4	6.4	6.8	11.1	3.4	6.3
28	3.8	3.1	5.1	4.6	3.6	7.1	4.5	5.5	15.6	8.3	9.0	12.2	16.8	34.3	88.2	35.2	20.0	15.3	17.1	7.7	9.5	5.1	5.8	12.8	88.2	3.1	14.6
29	11.4	6.3	10.7	5.4	7.1	16.9	6.2	5.4	9.3	6.4	7.1	6.0	9.9	6.4	8.9	6.0	8.1	12.4	5.6	5.9	9.9	4.3	7.5	4.6	16.9	4.3	7.8
30	3.8	26.8	18.8	10.5	11.1	6.3	4.1	4.5	6.4	5.7	7.8	9.5	10.9	10.8	14.2	18.8	19.5	12.2	13.8	17.2	13.8	16.9	26.6	14.4	26.8	3.8	12.7
Max.	**27.3**	**33.1**	**55.5**	**79.3**	**51.6**	**51.8**	**82.4**	**48.3**	**34.8**	**76.4**	**75.6**	**46.4**	**45.0**	**44.9**	**88.2**	**35.2**	**25.1**	**17.2**	**58.5**	**47.3**	**37.6**	**50.7**	**56.1**	**57.8**	**88.2**		
Min.	**3.2**	**1.6**	**3.2**	**2.4**	**2.9**	**2.9**	**3.9**	**2.3**	**3.8**	**4.2**	**4.2**	**4.7**	**4.6**	**0.0**	**0.0**	**4.3**	**4.6**	**4.0**	**4.0**	**2.9**	**2.3**	**2.3**	**1.8**	**3.9**		**0.0**	
Avg.	**9.4**	**10.0**	**10.2**	**13.7**	**11.6**	**11.4**	**12.7**	**9.0**	**9.8**	**12.4**	**13.9**	**11.6**	**14.2**	**12.0**	**13.4**	**10.9**	**10.3**	**9.0**	**9.9**	**9.6**	**10.0**	**9.8**	**11.6**	**10.8**			**11.1**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	43.2	38.9	25.4	9.9	20.4	12.2	10.5	10.1	5.9	6.2	14.7	6.1	6.6	7.3	6.7	5.4	11.2	6.2	8.2	6.4	6.0	6.5	8.6	12.4	43.2	5.4	12.3
2	8.2	8.8	12.5	11.6	15.9	15.3	31.5	6.1	6.5	9.5	35.1	65.6	22.5	37.9	52.5	76.4	90.3	13.8	8.4	32.9	15.7	9.3	5.1	8.8	90.3	5.1	25.0
3	14.0	23.0	46.1	32.2	42.8	9.4	8.1	3.7	9.9	4.7	5.1	4.3	5.0	5.0	5.5	5.8	6.5	6.4	5.4	3.3	5.1	6.1	6.5	8.0	46.1	3.3	11.3
4	5.7	5.5	4.3	3.6	2.9	5.7	6.8	5.0	2.4	8.0	7.9	12.8	14.0	14.3	18.4	21.0	31.1	9.5	16.1	25.0	44.2	99.6	27.5	39.1	99.6	2.4	17.9
5	30.6	10.8	13.4	10.0	15.5	11.2	76.1	32.6	19.1	49.2	17.5	9.7	10.9	3.7	5.5	6.2	7.7	9.2	15.6	8.4	7.0	4.6	5.1	3.7	76.1	3.7	16.0
6	4.7	2.5	3.4	4.4	3.5	3.3	2.5	4.9	4.0	3.9	4.8	5.9	4.6	7.2	7.2	8.5	7.2	7.2	7.1	11.0	3.7	7.5	5.6	3.9	11.0	2.5	5.3
7	4.2	3.8	3.7	4.2	5.3	5.4	3.6	4.0	6.2	5.0	6.6	4.3	5.8	4.4	6.1	4.4	4.4	4.9	4.0	4.4	3.6	4.0	5.6	2.8	6.6	2.8	4.6
8	2.8	2.8	4.9	4.2	5.6	3.9	9.0	18.1	8.5	4.9	5.9	25.2	11.0	9.7	9.0	8.2	5.5	8.7	9.8	12.7	23.9	20.0	16.3	9.1	25.2	2.8	10.0
9	3.1	3.0	4.6	7.2	6.3	4.9	4.7	4.8	4.9	4.8	4.2	4.5	4.2	4.4	4.4	4.3	4.5	4.5	4.4	4.2	4.2	4.7	4.9	4.6	7.2	3.0	4.6
10	5.1	4.4	6.4	14.7	15.8	8.0	16.3	11.8	47.0	9.9	26.5	17.8	9.2	8.1	8.3	8.7	5.8	5.3	5.0	7.9	5.6	7.0	6.6	7.5	47.0	4.4	11.2
11	7.7	9.6	5.1	4.4	4.7	4.9	5.5	6.5	39.8	12.3	11.0	9.4	3.8	6.0	5.0	4.1	3.7	3.3	3.4	3.6	3.0	3.0	3.4	3.0	39.8	3.0	6.9
12	3.0	3.1	3.0	3.5	3.3	3.1	3.2	2.8	3.1	3.5	2.9	4.0	4.4	3.6	4.2	4.1	4.2	3.3	2.9	2.3	3.4	5.8	3.3	2.7	5.8	2.3	3.4
13	7.2	6.8	15.6	7.8	11.5	9.8	5.9	7.2	61.0	15.3	11.6	6.8	6.1	6.2	10.0	7.4	3.9	3.6	3.3	4.3	3.3	3.0	4.1	4.6	61.0	3.0	9.4
14	6.2	7.1	5.3	5.5	5.5	7.1	4.8	7.6	10.5	7.4	4.7	4.7	5.8	7.0	3.8	4.7	8.3	10.3	9.2	14.2	5.3	5.9	33.7	7.9	33.7	3.8	8.0
15	4.1	8.9	4.2	5.4	3.5	8.1	10.7	4.7	4.0	5.5	7.0	7.2	5.9	9.9	3.3	3.7	8.9	3.5	4.7	5.1	6.6	11.8	5.8	6.1	11.8	3.3	6.2
16	12.0	4.9	7.3	6.0	4.8	5.7	3.8	5.6	9.7	10.9	6.1	10.8	4.8	6.7	5.6	7.7	4.3	3.8	3.9	3.4	3.1	4.7	8.7	54.2	54.2	3.1	8.3
17	17.0	9.9	10.8	9.9	7.6	7.9	9.5	6.1	4.8	6.0	6.4	7.0	8.8	16.3	18.1	10.3	16.1	15.2	12.2	7.8	5.9	6.1	6.8	4.0	18.1	4.0	9.6
18	4.6	4.7	3.5	5.2	3.3	3.7	3.6	4.2	4.1	4.2	4.5	3.3	3.0	7.0	5.8	15.9	16.9	10.2	4.5	8.5	56.5	50.4	11.1	29.3	56.5	3.0	11.2
19	11.6	7.4	10.5	5.7	4.8	4.6	4.0	4.2	4.7	3.2	3.9	2.4	3.4	5.9	4.1	4.2	6.3	5.9	2.6	3.3	4.6	7.5	22.5	95.6	95.6	2.4	9.7
20	38.8	20.9	29.4	26.7	22.2	48.4	36.9	38.5	9.7	82.5	78.9	7.8	5.9	7.4	5.0	5.2	12.7	7.6	12.6	16.3	5.9	12.7	18.7	14.5	82.5	5.0	23.5
21	21.0	25.1	12.9	30.5	19.1	25.3	22.0	8.5	11.5	20.5	6.3	2.9	12.1	5.5	5.9	4.1	2.5	2.2	2.4	2.7	2.4	2.9	4.7	4.8	30.5	2.2	10.7
22	5.3	3.7	4.3	3.7	4.2	4.9	3.4	5.2	5.0	5.1	4.1	4.8	3.8	4.7	7.4	8.4	5.8	3.7	3.5	4.6	3.9	3.5	14.6	7.9	14.6	3.4	5.2
23	5.0	3.7	4.6	5.7	6.1	4.9	4.7	4.0	3.5	5.3	6.5	5.4	3.2	3.5	3.3	3.4	3.9	2.7	3.4	2.5	4.8	3.2	4.1	5.6	6.5	2.5	4.3
24	2.7	2.8	2.6	3.3	3.0	3.5	3.3	2.6	4.3	2.4	3.8	4.3	5.8	4.9	6.6	2.7	4.9	15.3	43.5	56.2	36.7	25.2	21.8	8.8	56.2	2.4	11.3
25	8.1	7.3	13.7	6.9	17.7	9.7	7.5	6.4	8.0	10.6	13.9	15.4	6.8	9.5	11.6	10.0	7.6	7.6	2.9	6.2	58.9	15.7	15.3	9.8	58.9	2.9	12.0
26	9.5	7.5	6.3	5.2	3.8	2.8	3.9	6.6	6.4	4.3	4.6	4.8	4.7	5.7	5.4	5.2	4.2	4.7	4.6	6.7	3.8	3.3	3.6	5.3	9.5	2.8	5.1
27	3.4	6.7	7.1	7.0	9.5	5.9	4.7	6.5	3.6	4.2	6.5	6.2	3.4	4.0	7.2	5.0	4.2	7.5	6.3	5.5	6.1	18.5	8.9	82.7	82.7	3.4	9.6
28	16.4	7.0	8.7	6.5	9.4	7.6	8.5	5.6	8.0	3.6	4.5	6.8	4.6	4.0	6.6	8.7	8.7	10.4	8.1	11.0	26.7	10.4	16.2	5.9	26.7	3.6	8.9
29	6.2	7.5	39.7	21.2	13.5	13.5	7.8	8.3	5.8	15.8	8.9	13.9	12.0	5.0	4.2	4.1	8.0	3.7	4.2	8.9	10.1	7.7	7.0	9.9	39.7	3.7	10.3
30	7.6	7.3	6.3	5.7	6.1	4.3	3.5	5.2	6.4	4.9	6.8	12.1	7.9	27.9	30.1	12.6	7.5	10.7	9.4	8.3	6.2	5.1	3.9	4.1	30.1	3.5	8.7
31	6.7	6.1	8.1	45.7	33.3	19.3	12.1	36.4	21.3	42.1	51.6	10.3	24.7	12.2	7.3	8.6	6.9	5.2	7.4	10.1	26.8	32.1	51.5	8.8	51.6	5.2	20.6
Max.	**43.2**	**38.9**	**46.1**	**45.7**	**42.8**	**48.4**	**76.1**	**38.5**	**61.0**	**82.5**	**78.9**	**65.6**	**24.7**	**37.9**	**52.5**	**76.4**	**90.3**	**15.3**	**43.5**	**56.2**	**58.9**	**99.6**	**51.5**	**95.6**	**99.6**		
Min.	**2.7**	**2.5**	**2.6**	**3.3**	**2.9**	**2.8**	**2.5**	**2.6**	**2.4**	**2.4**	**2.9**	**2.4**	**3.0**	**3.5**	**3.3**	**2.7**	**2.5**	**2.2**	**2.4**	**2.3**	**2.4**	**2.9**	**3.3**	**2.7**		**2.2**	
Avg.	**10.5**	**8.8**	**10.8**	**10.4**	**10.7**	**9.2**	**10.9**	**9.1**	**11.3**	**12.1**	**12.3**	**9.9**	**7.6**	**8.5**	**9.2**	**9.3**	**10.4**	**7.0**	**7.7**	**9.9**	**13.0**	**13.2**	**11.7**	**15.3**			**10.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.2	6.3	23.7	14.9	27.8	7.1	9.0	6.0	5.8	5.9	4.4	4.1	4.2	4.7	4.7	5.3	3.9	6.1	5.4	5.7	3.9	3.5	11.4	6.0	27.8	3.5	8.0
2	5.8	7.9	3.7	4.0	4.6	5.4	3.5	3.0	13.5	4.6	7.1	5.8	2.5	4.8	4.5	6.1	4.4	3.7	3.7	5.7	5.3	3.7	5.6	4.7	13.5	2.5	5.1
3	4.6	3.5	3.5	3.2	3.1	3.4	2.7	2.8	3.5	3.4	4.4	3.1	3.1	5.8	2.8	2.2	2.8	3.3	2.3	3.6	3.7	4.7	6.9	5.4	6.9	2.2	3.7
4	4.2	5.2	4.3	8.2	6.0	3.7	3.8	3.0	3.8	4.5	4.0	3.8	3.8	3.0	4.4	4.9	3.6	4.8	4.0	6.8	6.8	6.3	3.4	10.5	10.5	3.0	4.9
5	2.6	2.5	3.3	5.0	4.7	4.9	4.9	5.8	8.0	5.3	5.9	8.5	5.8	3.9	7.5	5.9	5.3	7.6	6.2	4.3	6.0	7.5	9.8	4.6	9.8	2.5	5.7
6	5.0	9.0	7.6	11.0	6.9	12.3	20.1	27.6	32.5	27.9	24.2	58.3	38.0	23.1	9.4	3.2	4.1	4.8	7.8	5.8	6.1	3.0	3.0	5.9	58.3	3.0	14.9
7	4.8	7.3	7.2	8.8	5.9	3.1	2.9	5.8	5.7	7.0	12.5	7.4	14.5	6.4	10.5	70.7	30.2	14.9	30.6	45.8	35.1	41.6	12.1	19.8	70.7	2.9	17.1
8	34.4	25.4	22.6	12.6	7.4	5.5	16.7	18.8	9.2	23.7	11.4	6.7	5.6	9.5	4.8	5.2	3.5	3.5	3.9	5.1	5.1	4.2	5.1	5.6	34.4	3.5	10.6
9	6.0	4.8	4.3	5.5	4.5	4.9	4.3	3.6	4.4	6.6	7.1	9.5	5.8	5.4	9.0	3.9	5.4	4.9	5.7	5.8	3.6	4.8	4.0	4.7	9.5	3.6	5.4
10	3.9	8.1	5.8	20.3	18.4	20.0	4.6	6.7	17.7	17.1	43.5	7.1	34.2	11.9	13.4	55.1	9.2	8.1	6.3	5.5	10.2	4.4	3.9	3.9	55.1	3.9	14.1
11	4.0	4.7	4.4	5.0	3.8	5.1	4.6	5.3	5.6	7.3	15.0	12.7	11.0	17.0	23.8	18.5	16.3	15.5	9.5	11.7	16.2	33.1	23.9	16.1	33.1	3.8	12.1
12	9.4	17.3	17.3	21.2	11.1	42.9	79.6	70.2	31.6	3.5	5.9	5.3	17.1	28.5	64.8	31.2	7.4	40.0	16.2	16.6	21.1	25.4	9.9	16.9	79.6	3.5	25.4
13	9.0	13.2	7.0	9.8	5.9	8.3	10.3	8.3	8.4	6.7	4.1	3.0	4.2	9.3	10.4	11.5	7.3	15.5	8.7	7.8	10.1	9.8	6.1	5.3	15.5	3.0	8.3
14	18.6	10.5	7.2	5.8	4.2	5.4	8.6	7.4	5.9	7.2	6.5	14.7	35.7	9.9	7.7	7.8	15.5	7.8	7.3	8.8	9.0	10.4	4.3	30.5	35.7	4.2	10.7
15	15.0	7.6	6.8	7.4	11.7	11.4	16.1	23.0	10.2	16.7	8.8	8.1	6.8	7.3	12.3	6.1	17.3	17.9	6.2	5.2	4.3	3.5	3.2	3.7	23.0	3.2	9.9
16	3.5	3.4	4.2	8.5	6.3	5.5	8.4	23.5	34.7	11.9	20.1	31.7	20.4	39.4	43.8	27.3	17.8	10.3	14.4	9.6	16.8	13.8	10.8	9.7	43.8	3.4	16.5
17	5.6	7.1	12.5	27.3	5.6	6.7	6.2	7.3	10.9	34.7	7.1	6.9	4.5	4.6	4.1	4.8	4.2	2.8	2.8	3.0	3.7	4.6	2.7	3.6	34.7	2.7	7.6
18	6.9	4.9	3.8	15.3	13.1	3.2	8.5	5.7	4.6	3.3	3.6	5.5	10.5	4.4	5.3	4.9	3.5	2.4	2.7	4.6	3.9	3.7	6.5	4.8	15.3	2.4	5.6
19	3.8	4.5	4.3	3.8	4.9	5.8	6.6	3.6	5.0	4.9	7.6	5.2	6.0	5.4	5.2	4.8	3.0	4.1	2.9	8.0	5.0	4.8	5.8	5.4	8.0	2.9	5.0
20	6.0	5.3	4.2	5.6	4.4	2.9	3.6	4.7	3.4	3.5	4.0	3.6	2.8	3.4	2.9	2.9	2.7	2.8	3.7	3.8	5.0	3.9	5.0	5.4	6.0	2.7	4.0
21	4.2	4.5	3.7	3.7	4.7	4.9	5.6	6.0	3.4	5.5	4.7	6.1	4.0	8.7	10.7	8.1	11.8	6.1	21.1	24.0	8.5	6.6	4.3	5.6	24.0	3.4	7.4
22	6.9	6.9	5.5	4.3	9.9	54.2	8.9	18.2	22.5	15.5	9.5	11.8	22.2	31.7	12.3	20.9	6.4	69.2	78.5	22.5	30.7	16.9	12.4	12.1	78.5	4.3	21.2
23	18.1	16.5	14.4	15.6	10.2	8.1	17.6	11.0	16.1	17.1	12.8	4.8	7.1	8.6	13.0	5.7	6.8	9.5	6.9	4.8	3.7	3.7	3.3	3.4	18.1	3.3	10.0
24	3.7	4.9	6.2	4.2	3.4	4.0	6.3	7.1	4.5	3.6	3.9	3.7	3.9	3.7	3.9	3.4	5.0	4.4	4.4	7.0	5.1	25.1	4.7	6.1	25.1	3.4	5.5
25	5.7	11.4	11.4	6.2	15.8	20.1	20.9	11.5	10.0	7.7	8.0	34.9	23.8	43.3	21.3	2.8	5.0	9.4	6.3	6.4	5.1	2.3	2.6	3.1	43.3	2.3	12.3
26	3.3	3.3	3.3	2.5	3.1	5.2	4.0	3.2	3.4	3.9	3.5	3.5	2.7	3.0	4.3	3.6	3.1	2.4	4.7	2.4	6.4	4.8	10.8	10.6	10.8	2.4	4.2
27	3.7	6.4	6.9	6.5	7.5	7.4	9.9	9.1	3.7	6.1	5.2	10.3	6.6	4.8	5.7	4.7	3.7	4.6	7.0	3.5	4.4	5.1	4.2	6.8	10.3	3.5	6.0
28	4.4	4.7	2.4	4.4	3.8	3.5	4.6	5.7	5.7	6.0	5.5	4.2	5.0	5.7	4.5	7.2	5.0	4.9	5.2	3.6	4.5	3.2	4.2	9.1	9.1	2.4	4.9
29	4.0	4.6	8.5	2.3	3.3	2.7	2.4	2.8	3.0	2.9	3.1	3.8	5.4	5.7	4.1	3.4	3.5	2.4	2.0	2.5	2.5	2.9	2.5	3.3	8.5	2.0	3.5
30	2.0	2.0	2.2	3.6	6.2	2.6	2.5	2.4	6.2	3.3	4.2	4.1	4.4	5.5	2.7	3.8	4.4	10.3	6.3	8.0	4.6	4.7	3.3	3.3	10.3	2.0	4.3
Max.	**34.4**	**25.4**	**23.7**	**27.3**	**27.8**	**54.2**	**79.6**	**70.2**	**34.7**	**34.7**	**43.5**	**58.3**	**38.0**	**43.3**	**64.8**	**70.7**	**30.2**	**69.2**	**78.5**	**45.8**	**35.1**	**41.6**	**23.9**	**30.5**	**79.6**		
Min.	**2.0**	**2.0**	**2.2**	**2.3**	**3.1**	**2.6**	**2.4**	**2.4**	**3.0**	**2.9**	**3.1**	**3.0**	**2.5**	**3.0**	**2.7**	**2.2**	**2.7**	**2.4**	**2.0**	**2.4**	**2.5**	**2.3**	**2.5**	**3.1**		**2.0**	
Avg.	**7.4**	**7.5**	**7.4**	**8.6**	**7.6**	**9.3**	**10.3**	**10.6**	**10.1**	**9.2**	**8.9**	**9.9**	**10.7**	**10.9**	**11.1**	**11.5**	**7.4**	**10.1**	**9.8**	**8.6**	**8.5**	**9.1**	**6.5**	**7.9**			**9.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Northern Dynasty Mines Pebble 1 Meterological Station - Wind Sigma (RMYoung)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.8	3.7	5.9	4.3	3.7	4.1	6.4	10.2	10.2	10.1	15.2	15.1	9.2	10.0	73.4	86.1	26.4	10.0	17.1	11.5	11.8	9.1	7.7	12.1	86.1	2.8	15.7
2	21.3	11.6	8.3	16.6	34.0	5.6	18.1	14.2	14.2	24.5	6.1	8.3	4.5	3.3	3.2	3.4	3.5	4.2	3.5	3.3	3.3	3.4	3.4	3.5	34.0	3.2	9.4
3	3.6	3.6	3.5	3.4	3.6	3.4	3.4	3.8	4.2	4.0	4.1	3.7	3.5	3.7	4.0	4.0	4.1	4.2	3.8	4.4	4.0	3.7	3.7	3.6	4.4	3.4	3.8
4	3.9	3.9	4.7	5.2	5.3	5.2	4.7	4.8	5.3	5.0	7.1	5.2	4.1	4.2	4.0	4.0	4.0	4.0	5.3	4.9	5.0	4.6	4.3	3.9	7.1	3.9	4.7
5	4.3	3.9	7.6	4.1	3.6	4.4	3.4	3.8	3.2	3.1	3.8	3.5	3.7	4.0	3.6	3.9	4.4	10.5	6.2	4.4	17.8	8.1	8.9	8.3	17.8	3.1	5.5
6	7.7	4.3	5.6	4.9	4.3	3.8	4.2	11.7	13.0	10.3	10.3	11.4	26.6	74.9	67.9	22.8	23.2	19.8	19.7	12.5	6.4	3.7	4.0	4.5	74.9	3.7	15.7
7	10.6	8.1	9.7	6.8	4.4	3.5	3.7	3.5	5.2	4.6	4.3	4.8	11.3	4.7	4.1	4.3	4.1	4.3	7.9	8.5	83.3	14.9	0.0	3.6	83.3	0.0	9.2
8	58.5	10.6	25.4	18.9	18.5	41.5	28.9	6.6	16.1	10.7	19.2	22.0	9.2	7.3	4.4	4.5	4.8	8.4	11.1	12.8	10.2	10.1	5.5	5.6	58.5	4.4	15.4
9	10.5	11.6	11.1	33.6	8.6	5.4	5.3	4.8	3.5	3.7	4.9	5.3	16.0	57.3	16.6	52.1	24.4	8.7	7.7	27.3	23.9	29.7	40.2	27.0	57.3	3.5	18.3
10	14.1	5.8	12.8	5.9	6.0	4.5	8.0	9.7	11.8	7.0	7.9	5.6	8.1	8.8	14.5	17.6	56.3	46.0	79.1	3.5	3.7	11.5	6.6	3.6	79.1	3.5	14.9
11	3.2	4.5	16.8	34.3	43.8	65.5	15.3	34.8	40.0	48.7	32.2	24.9	7.7	10.0	4.4	9.9	3.1	6.1	6.8	6.7	6.0	3.4	4.1	3.8	65.5	3.1	18.2
12	4.7	2.8	14.7	7.2	16.4	6.2	10.8	18.1	10.7	13.9	14.8	27.0	67.3	26.9	13.2	50.1	34.5	16.6	3.7	4.9	4.4	5.4	3.9	4.7	67.3	2.8	16.0
13	7.5	7.0	3.7	4.2	4.7	3.5	4.4	5.8	3.4	6.2	6.7	7.6	6.5	76.0	11.4	5.0	6.1	25.5	13.8	13.5	14.4	29.7	26.2	11.9	76.0	3.4	12.7
14	4.2	5.1	5.3	6.1	7.6	9.1	10.8	8.9	4.5	5.4	10.2	8.1	6.7	6.1	5.4	7.3	8.1	5.9	4.8	6.7	5.7	4.2	4.8	4.1	10.8	4.1	6.5
15	4.5	4.1	5.0	5.1	4.9	4.9	5.2	4.4	4.7	5.1	5.2	4.2	4.6	7.2	13.2	11.2	9.5	9.2	19.3	53.9	5.5	20.5	11.0	9.6	53.9	4.1	9.7
16	9.1	7.8	11.7	19.1	91.2	12.8	15.7	8.0	9.8	8.4	4.7	8.7	3.9	3.2	3.6	4.3	3.5	3.8	4.0	3.5	3.5	3.1	7.9	5.6	91.2	3.1	10.7
17	6.2	5.1	4.2	4.4	3.6	3.8	4.0	3.8	3.7	4.1	4.0	4.0	4.2	4.6	6.0	4.1	4.4	3.7	4.0	3.9	4.8	4.9	7.8	6.7	7.8	3.6	4.6
18	6.5	5.6	4.4	3.7	3.5	4.1	4.3	4.1	6.3	5.6	4.3	4.0	3.9	4.8	4.2	3.7	3.9	4.1	3.7	3.7	3.7	3.7	3.7	3.7	6.5	3.5	4.3
19	3.7	3.9	4.0	4.1	3.9	5.0	4.7	3.8	3.7	3.9	5.8	5.0	7.6	4.3	5.5	8.5	9.4	12.1	5.1	4.0	4.1	5.3	4.6	6.2	12.1	3.7	5.3
20	11.4	8.6	12.8	6.1	6.7	6.8	18.3	17.7	11.6	14.8	14.8	15.5	17.6	82.7	4.3	6.2	25.1	12.7	50.3	32.3	59.3	12.8	10.6	5.6	82.7	4.3	19.4
21	8.2	6.7	10.8	6.6	4.3	7.0	4.1	4.7	5.8	8.1	3.6	5.2	11.6	66.0	24.1	58.2	45.3	53.1	42.6	21.7	16.2	8.0	7.1	9.6	66.0	3.6	18.3
22	8.3	7.7	11.4	7.2	9.2	14.6	6.3	8.9	5.4	9.9	5.8	7.4	8.3	5.6	14.2	6.1	6.4	4.6	8.4	9.0	4.7	4.6	4.9	5.1	14.6	4.6	7.7
23	6.6	4.7	3.9	3.7	3.7	4.1	6.1	9.6	51.9	4.9	3.9	2.9	4.7	2.3	3.2	3.2	3.2	5.1	4.8	4.3	4.6	3.0	3.5	4.0	51.9	2.3	6.3
24	2.8	2.8	7.5	4.2	3.4	3.2	2.6	19.2	8.6	11.3	8.6	8.9	3.7	13.5	6.6	7.5	8.2	21.0	69.6	11.3	9.9	13.6	11.4	13.4	69.6	2.6	11.4
25	19.4	9.4	4.6	4.7	6.0	5.2	8.1	5.7	3.8	6.3	4.9	4.6	4.8	4.7	6.6	6.1	41.7	4.1	3.3	3.9	2.7	2.7	2.7	2.6	41.7	2.6	7.0
26	2.7	2.8	3.0	3.2	3.0	2.8	3.3	4.1	2.8	3.2	3.7	3.0	3.2	2.2	2.5	2.8	2.5	2.4	2.8	3.5	3.1	3.2	2.6	3.6	4.1	2.2	3.0
27	3.5	4.8	4.2	4.1	3.4	3.2	3.3	3.1	3.0	2.8	3.0	3.6	3.4	2.5	4.7	3.3	4.3	3.0	3.3	3.6	3.9	3.9	4.4	3.3	4.8	2.5	3.6
28	2.8	4.9	5.5	5.1	5.4	9.2	11.4	4.5	9.9	5.7	3.5	2.9	9.3	7.3	4.2	3.4	3.9	4.7	3.7	4.4	6.5	4.8	8.8	4.6	11.4	2.8	5.7
29	4.9	5.3	5.8	4.8	5.2	5.9	3.7	3.8	2.9	5.2	3.6	4.6	4.6	4.7	3.9	3.9	3.3	3.0	5.1	10.7	8.3	8.1	6.8	5.1	10.7	2.9	5.1
30	5.5	5.2	14.3	13.2	6.9	5.5	6.3	13.8	9.1	7.3	12.3	6.1	10.6	9.7	9.9	8.1	3.7	7.3	6.7	6.7	4.5	5.0	5.5	5.7	14.3	3.7	7.9
31	5.5	12.9	17.8	9.4	7.2	4.2	3.3	3.2	3.6	1.9	4.4	5.0	2.3	2.5	4.0	4.1	2.3	2.1	1.9	2.5	3.4	3.2	4.9	7.5	17.8	1.9	5.0
Max.	**58.5**	**12.9**	**25.4**	**34.3**	**91.2**	**65.5**	**28.9**	**34.8**	**51.9**	**48.7**	**32.2**	**27.0**	**67.3**	**82.7**	**73.4**	**86.1**	**56.3**	**53.1**	**79.1**	**53.9**	**83.3**	**29.7**	**40.2**	**27.0**	**91.2**		
Min.	**2.7**	**2.8**	**3.0**	**3.2**	**3.0**	**2.8**	**2.6**	**3.1**	**2.8**	**1.9**	**3.0**	**2.9**	**2.3**	**2.2**	**2.5**	**2.8**	**2.3**	**2.1**	**1.9**	**2.5**	**2.7**	**2.7**	**0.0**	**2.6**		**0.0**	
Avg.	**8.7**	**6.1**	**8.6**	**8.5**	**10.8**	**8.7**	**7.7**	**8.5**	**9.4**	**8.6**	**7.8**	**8.0**	**9.4**	**16.9**	**11.3**	**13.5**	**12.5**	**10.6**	**13.8**	**9.9**	**11.2**	**8.1**	**7.5**	**6.5**			**9.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Note: Wind data was collected at 3-meters height before 6/11/2005 And was collected at 11-meters height after 6/11/2005.

Pebble 1 Meteorological Station - Daily Total Precipitation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	3.3	8.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	4.3	0.3	4.1	0.8	1.0	0.3	5.8	0.0	0.0	0.0
3	0.0	0.0	4.3	3.6	1.8	0.0	0.5	0.0	17.5	0.0	0.0	0.0
4	0.0	0.0	2.5	7.6	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.3
5	0.0	0.5	5.8	0.0	0.0	0.0	0.3	0.0	3.8	0.0	0.0	0.0
6	0.0	1.0	8.1	0.0	0.0	1.5	0.0	0.3	11.7	0.0	0.0	0.0
7	0.3	1.0	0.0	0.3	2.3	0.3	1.3	0.0	11.9	0.0	0.0	0.0
8	0.0	2.3	1.3	0.5	1.5	0.0	0.0	0.0	9.9	0.0	0.0	0.0
9	1.8	2.3	0.0	0.0	4.3	0.0	0.3	0.0	4.3	0.0	0.0	0.0
10	0.0	0.0	2.0	0.0	0.8	0.0	0.0	2.0	3.0	0.0	0.0	0.0
11	2.3	1.3	0.3	0.3	5.1	1.3	0.0	0.0	3.0	0.0	0.0	0.0
12	3.3	0.0	0.0	0.0	1.8	3.8	8.4	0.5	10.2	0.0	0.0	0.0
13	0.0	3.3	0.0	8.9	1.8	3.3	2.0	0.5	36.1	0.0	0.0	0.0
14	1.5	2.5	0.0	1.3	3.6	2.5	0.5	1.8	4.6	22.9	0.0	0.0
15	15.2	0.0	1.0	0.8	2.5	0.0	0.0	6.6	0.3	0.3	0.0	0.0
16	0.5	3.0	1.3	0.3	4.6	1.3	7.6	0.5	1.3	0.0	0.0	0.0
17	4.3	3.8	1.5	0.8	0.3	0.0	5.3	1.0	7.9	0.0	0.0	1.3
18	0.8	4.6	0.0	0.0	5.6	0.0	0.0	0.0	12.2	3.3	0.0	0.3
19	10.2	3.3	0.0	0.0	2.8	0.0	0.5	0.0	7.9	0.0	0.0	0.3
20	14.2	5.6	0.8	2.3	0.8	0.0	1.3	0.8	0.8	0.8	0.0	0.0
21	6.1	1.5	1.5	2.0	0.0	0.3	13.5	28.4	0.3	0.0	0.0	0.0
22	9.1	5.6	0.0	1.0	0.8	0.0	5.8	3.3	3.0	0.0	0.0	4.6
23	0.0	0.8	0.0	0.3	4.6	1.0	5.6	2.8	17.0	0.0	0.0	2.8
24	6.9	0.0	0.0	0.3	3.6	0.0	7.6	2.8	6.4	0.0	0.0	0.3
25	3.0	0.8	0.5	0.0	1.0	3.3	0.5	0.0	0.0	0.0	0.0	7.6
26	0.0	0.5	0.0	0.0	0.3	2.0	0.0	0.3	0.0	0.0	0.0	0.0
27	1.8	0.8	0.0	0.8	0.5	0.0	3.8	0.5	0.0	0.0	0.0	2.0
28	13.2	0.5	0.0	0.3	0.0	0.8	0.8	4.8	0.0	0.0	0.0	0.3
29	0.3	0.0	0.8	0.0	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0
30	1.8		2.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0
31	0.0		1.0		1.5		0.0	2.3		0.0		0.0
Total	96.5	242.3	42.4	39.6	55.9	23.4	67.3	59.9	179.3	27.2	0.0	19.6

Pebble 1 Meteorological Station - Daily Total Pan Evaporation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	2.6	7.7	3.6	2.3	0.0	-	-
2	-	-	-	-	-	0.0	4.0	0.8	0.0	0.0	-	-
3	-	-	-	-	-	4.2	0.0	4.1	0.0	0.0	-	-
4	-	-	-	-	-	3.7	0.6	1.9	0.0	0.0	-	-
5	-	-	-	-	-	2.5	1.7	4.8	0.0	0.0	-	-
6	-	-	-	-	-	1.1	4.3	5.0	0.0	0.0	-	-
7	-	-	-	-	-	4.1	0.0	4.2	0.0	0.0	-	-
8	-	-	-	-	-	2.9	0.3	4.5	0.0	0.0	-	-
9	-	-	-	-	-	1.3	5.8	5.3	0.0	0.5	-	-
10	-	-	-	-	-	2.0	3.9	0.0	0.0	0.0	-	-
11	-	-	-	-	-	0.0	4.5	2.5	0.0	0.0	-	-
12	-	-	-	-	-	0.0	0.0	2.0	0.0	0.0	-	-
13	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.2	-	-
14	-	-	-	-	0.0	0.0	1.8	0.0	0.0	-	-	-
15	-	-	-	-	0.0	3.3	5.3	0.0	0.0	-	-	-
16	-	-	-	-	0.0	0.0	0.0	0.1	0.0	-	-	-
17	-	-	-	-	3.4	5.4	0.0	1.4	0.0	-	-	-
18	-	-	-	-	0.0	4.4	0.5	1.4	0.0	-	-	-
19	-	-	-	-	0.0	4.2	1.4	1.8	0.0	-	-	-
20	-	-	-	-	2.0	6.1	0.0	0.0	0.0	-	-	-
21	-	-	-	-	2.0	2.0	0.0	0.0	0.0	-	-	-
22	-	-	-	-	5.1	3.8	0.0	0.0	0.0	-	-	-
23	-	-	-	-	1.0	3.5	0.0	0.0	0.0	-	-	-
24	-	-	-	-	0.0	6.0	0.0	0.0	0.0	-	-	-
25	-	-	-	-	0.0	3.4	6.2	1.5	0.0	-	-	-
26	-	-	-	-	1.3	0.0	1.6	0.5	0.0	-	-	-
27	-	-	-	-	2.1	3.3	0.0	0.0	0.0	-	-	-
28	-	-	-	-	2.9	0.5	2.8	0.0	0.0	-	-	-
29	-	-	-	-	3.1	2.8	5.8	0.0	0.0	-	-	-
30	-		-	-	7.2	1.4	6.1	1.4	0.0	-	-	-
31	-		-		1.8		5.5	0.6		-		-
Total	-	-	-	-	32.1	74.8	69.7	47.1	2.4	0.8	-	-

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2I

2007 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program

2007 Non-PSD Meteorological Data Report

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

May 2008

Pebble Project Non-PSD
2007 Meteorological Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

May 2008

prepared for

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CONTENTS

1.0 Introduction 1

2.0 Monitoring Parameters and Instrumentation 3

3.0 Station Performance Summaries 6

4.0 Meteorological Data Summary 9

4.1 Temperature 9
4.2 Horizontal Wind 12
4.3 Precipitation 16

5.0 References 18

List of Figures

1-1 Map of the Pebble Project Area 2
2-1 Pebble 3 (non-PSD) Meteorological Monitoring Station 4
4-1 Pebble 3 Hourly Average Temperature 10
4-2 Pebble 3 non-PSD Meteorological Station Wind Rose 13
4-3 Quarterly Pebble 3 Wind Roses 14
4-4 Hourly and Cumulative Precipitation 17

List of Tables

1-1 Summary of Pebble Project non-PSD Meteorological Station 1
2-1 Meteorological Measurement Methods 5
3-1 Pebble 3 Valid Hourly Data Capture 7
3-2 Pebble 3 Percent Data Capture 8
4-1 Pebble 3 Temperature Summary 11
4-2 Average and Maximum Hourly Wind Speeds 15
4-3 Cumulative and Maximum Daily Precipitation 16

List of Appendices

A Pebble 3 Validated Continuous Data Summaries
B 2007 non-PSD Meteorological Station Audit Data Sheets

1.0 Introduction

On behalf of the Pebble Limited Partnership, care of Pebble Mines Corp., HCG Inc., dba Hoefler Consulting Group, is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. The Pebble Project is located within the South Central Alaska Intrastate Air Quality Control Region. The proposed mine site is in an area designated attainment or unclassifiable for all criteria pollutants and is within a PSD Class II area. The closest Class I area is Tuxedni National Wildlife Refuge located approximately 150 kilometers to the northeast.

In October 2004, HCG installed two meteorological stations at the Pebble Project to provide data for engineering design and environmental baseline studies. The two stations were originally called “Met Station 1” and “Met Station 2”, but have since been renamed “Pebble 1” and “Pebble 2”. The Pebble 1 and Pebble 2 meteorological stations were located at proposed mill site and tailings storage facilities, respectively.

The Pebble 2 monitoring period began January 1, 2005. However, the Pebble 2 structure was relocated on November 19, 2005 to a location approximately 0.6 miles to the north. Upon relocation, Pebble 2 was renamed Pebble 3 and began collecting valid meteorological data on November 19, 2005. This report contains data collected at Pebble 3 from January 1, 2007 through December 31, 2007.

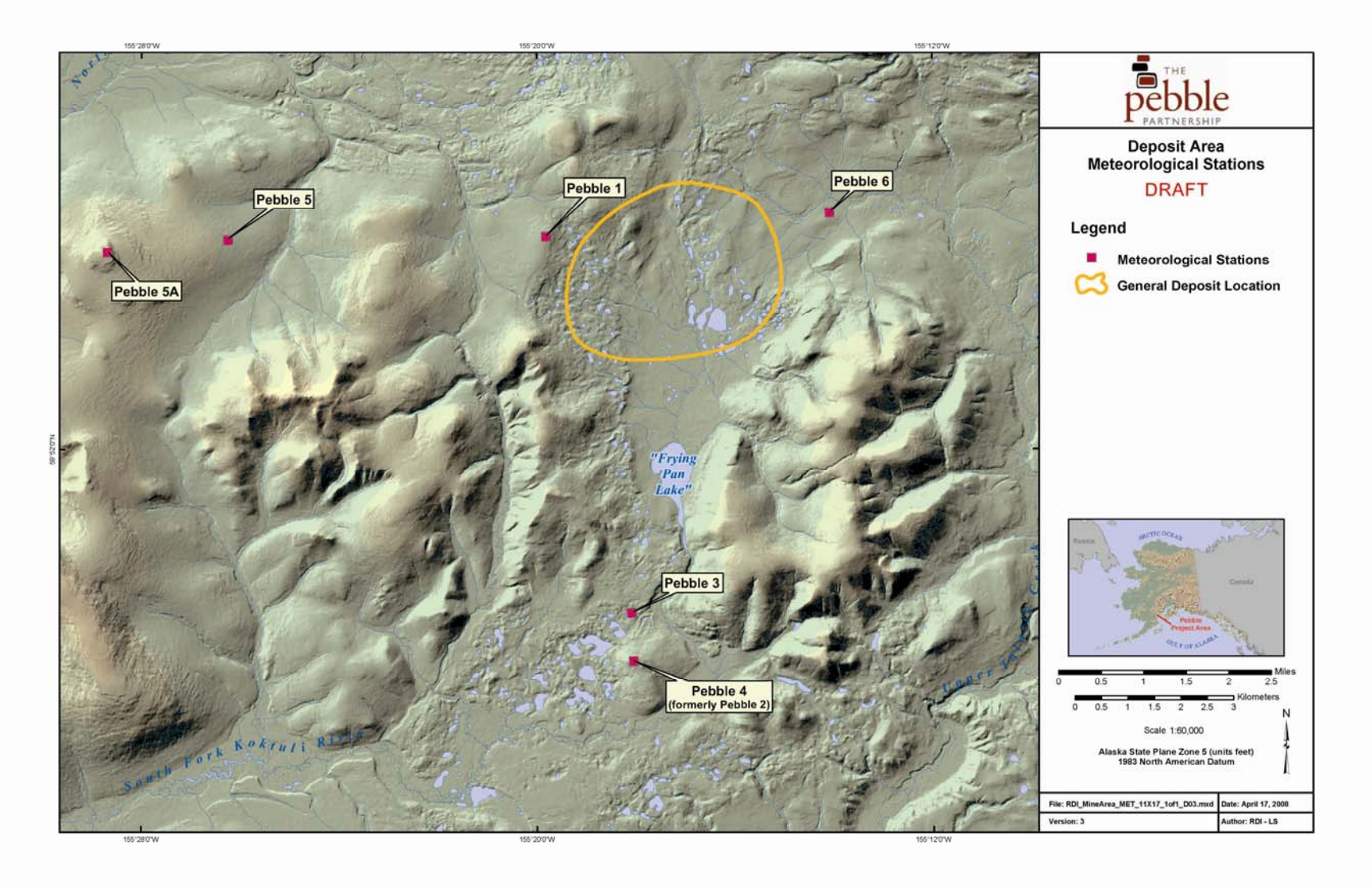
Table 1-1 gives a summary of the Pebble 3 non-PSD meteorological station deployed at the Pebble Project and includes the coordinates and elevation of the station and the period of data collection.

Table 1-1. Summary of Pebble Project non-PSD Meteorological Stations.

Station Name	Location	Coordinates	Elevation	Period of Data Collection
Pebble 3	Frying Pan Lake	59° 50’ N 155° 18’ W	1,000 feet	Nov. 19, 2005 - Present

Figure 1-1 shows a map of both the non-PSD and PSD-quality meteorological monitoring stations located near the Pebble Project ore body.

Figure 1-1. Map of the Pebble Project Area



2.0 Monitoring Parameters and Instrumentation

Figure 2-1 provides a photograph of the Pebble 3 meteorological station. The station consists of a 3-meter tower equipped with sensors to measure the following parameters:

- Air temperature, 2-meters above ground level (degrees Celsius [°C])
- Wind speed, 3-meters above ground level [m/s])
- Wind direction, 3-meters above ground level (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])

Precipitation measurements are collected at the station using a precipitation gauge coupled with a Wyoming wind screen carefully positioned to avoid interfering with the 3-meter tower measurements.

Table 2-1 lists the meteorological sensors used at the non-PSD station and includes the manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. A performance summary of the instruments and measurement parameters is provided in the subsequent section.

Figure 2-1. Pebble 3 (non-PSD) Meteorological Monitoring Station

Table 2-1. Meteorological Measurement Methods

Parameter & Measurement Height	Manufacturer/ Model	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Temperature (2 meters)	Met One, Inc. Model 062 MP	Solid state thermistor	50 to -50°C	± 0.05°C	1 second	1 hour
Wind Speed (3 meters)	Met One, Inc. Model 010C	Three-cup anemometer	0.2 to 60 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction (3 meters)	Met One, Inc. Model 020C	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Precipitation (2 meters)	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 305 mm	± 0.254 mm	N/A[1]	N/A[1]

[1] Not applicable. Instantaneous precipitation measurements are collected by the datalogger and subsequently totaled on an hourly basis.

3.0 Station Performance Summaries

Quarterly and annual data recovery goals are 90 percent or better for PSD-quality meteorological monitoring, although at remote sites the acceptable recovery rate for meteorological data is 80 percent (EPA, 1987). Percent data capture is determined by dividing the number of hours of collected valid data by the number of possible hours of valid data collection. While the stations presented in this report are not PSD quality stations, the data recovery goals at the onset of the project were 80 percent or better per monitoring quarter. Because of the modifications and location changes made to the non-PSD meteorological stations during the station monitoring periods, the performance statistics are presented on a monthly basis.

Table 3-1 summarizes the hours of valid data capture on a monthly basis for the meteorological parameters measured at Pebble 3, while Table 3-2 summarizes the percent data capture on a monthly basis.

The quarterly data capture rates for the Pebble 3 meteorological parameters were greater than 90 percent. Data capture for the month of September was below 90 percent due to site visit activities including removed audit data.

Table 3-1. Pebble 3 Valid Hourly Data Capture

Period	Meteorological Parameter				
	2-m Temp	Wind Speed	Wind Direction	Sigma-Theta	Precip
January 2007	744	744	744	744	740
February 2007	672	672	672	672	672
March 2007	744	744	744	744	744
April 2007	648	700	720	720	720
May 2007	733	741	741	741	739
June 2007	720	720	720	720	720
July 2007	744	744	744	744	744
August 2007	744	744	744	744	743
September 2007	548	548	548	548	545
October 2007	743	742	743	743	741
November 2007	720	720	720	720	720
December 2007	744	728	728	743	744
Monitoring Period	**8,504**	**8,547**	**8,568**	**8,583**	**8,572**

Table 3-2. Pebble 3 Percent Data Capture

Period	Meteorological Parameter				
	2-m Temp	Wind Speed	Wind Direction	Sigma-Theta	Precip
January 2007	100.0%	100.0%	100.0%	100.0%	99.5%
February 2007	100.0%	100.0%	100.0%	100.0%	100.0%
March 2007	100.0%	100.0%	100.0%	100.0%	100.0%
Quarter A	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**99.8%**
April 2007	90.0%	97.2%	100.0%	100.0%	100.0%
May 2007	98.5%	99.6%	99.6%	99.6%	99.3%
June 2007	100.0%	100.0%	100.0%	100.0%	100.0%
Quarter B	**96.2%**	**98.9%**	**99.9%**	**99.9%**	**99.8%**
July 2007	100.0%	100.0%	100.0%	100.0%	100.0%
August 2007	100.0%	100.0%	100.0%	100.0%	99.9%
September 2007	76.1%	76.1%	76.1%	76.1%	75.7%
Quarter C	**92.2%**	**92.2%**	**92.2%**	**92.2%**	**92.0%**
October 2007	99.9%	99.7%	99.9%	99.9%	99.6%
November 2007	100.0%	100.0%	100.0%	100.0%	100.0%
December 2007	100.0%	97.8%	97.8%	99.9%	100.0%
Quarter D	**100.0%**	**99.2%**	**99.2%**	**99.9%**	**99.9%**
Monitoring Period	**97.1%**	**97.6%**	**97.8%**	**98.0%**	**97.9%**

4.0 Meteorological Data Summary

4.1 Temperature

Figure 4-1 provides the time series of the 2-meter temperatures at Pebble 3 during the 2007 monitoring period. Table 4-1 provides temperature statistics for the Pebble 3 station for the 2007 monitoring year.

Hourly mean temperatures at Pebble 3 varied from -31.0 °C measured on January 5, 2007 to 23.5 °C measured on August 12, 2007. At the Iliamna Airport, the nearest routinely operated station located approximately 25 km east to the east of Pebble 3, temperatures varied from -28.9 °C measured on January 5, 2007 to 20.0 °C measured June 20, 2007. The minimum and maximum monthly mean temperatures at Pebble 3 were -15.0 °C and 12.0 °C for the months of March 2007 and August 2007, respectively. The mean temperature recorded at Pebble 3 during the monitoring period was 0.1 °C, while the mean temperature recorded at the Iliamna Airport during the monitoring period was 1.8 °C.

Figure 4-1. Pebble 3 Hourly Average Temperature

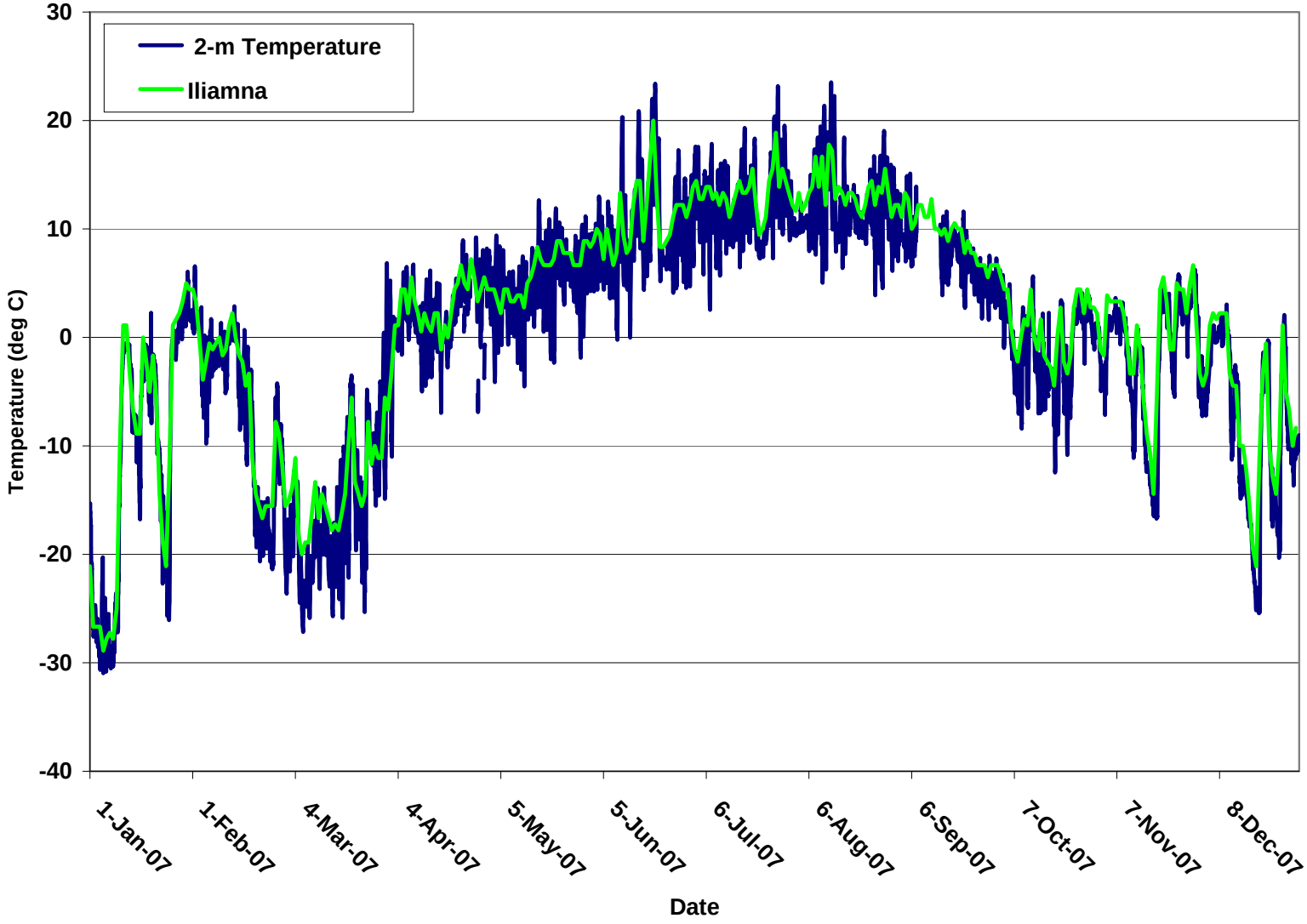


Table 4-1. Pebble 3 Temperature Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
January 2007	-11.64	3.33	-29.60	6.07	-30.98
February 2007	-7.22	2.58	-20.39	6.57	-23.64
March 2007	-15.01	-2.08	-24.75	6.85	-27.16
Quarter A	**-11.29**	**3.33**	**-29.60**	**6.85**	**-30.98**
April 2007	1.82	6.13	-0.93	9.23	-6.97
May 2007	4.83	7.57	1.89	12.65	-4.52
June 2007	9.45	18.00	6.10	23.41	-0.23
Quarter B	**5.44**	**18.00**	**-0.93**	**23.41**	**-6.97**
July 2007	11.95	17.00	7.88	23.18	2.53
August 2007	11.97	17.06	9.41	23.53	3.88
September 2007	7.66	11.02	4.59	15.65	1.62
Quarter C	**10.71**	**17.06**	**4.59**	**23.53**	**1.62**
October 2007	-0.83	4.75	-7.10	7.29	-12.47
November 2007	-1.69	5.18	-15.42	6.24	-16.71
December 2007	-7.89	1.17	-24.24	3.06	-25.43
Quarter D	**-3.49**	**5.18**	**-24.24**	**7.29**	**-25.43**
Monitoring Period	**0.13**	**18.00**	**-29.60**	**23.53**	**-30.98**

4.2 Horizontal Wind

Figures 4-2 and 4-3 provide the annual and quarterly wind roses, respectively, for the Pebble 3 station. Table 4-2 provides the average and maximum hourly wind speed for the Pebble 3 meteorological monitoring station.

The Pebble 3 wind rose shows wind components from all major directions during the monitoring period with a major component from the northwest. During this time span, the majority of winds exceeding 11 m/s came from the north. During the monitoring period, Quarter A winds were dominated by a northern component with minor components from the northeast, east, and southeast. Quarters B and C both exhibited major components from the northwest with minor components from all other directions. The Quarter D wind rose exhibits major wind components from the northwest, west, southwest and south.

The mean wind speed at Pebble 3 from January 1, 2007 through December 31, 2007 was 5.1 m/s. The maximum hourly mean wind speed was 22.7 m/s, measured on April 18, 2007. The mean wind speed recorded at the Iliamna airport during the 2007 monitoring period was 3.9 m/s with a maximum daily wind speed of 17.9 m/s recorded on December 9, 2007.

Figure 4-2. Pebble 3 non-PSD Meteorological Station Wind Rose

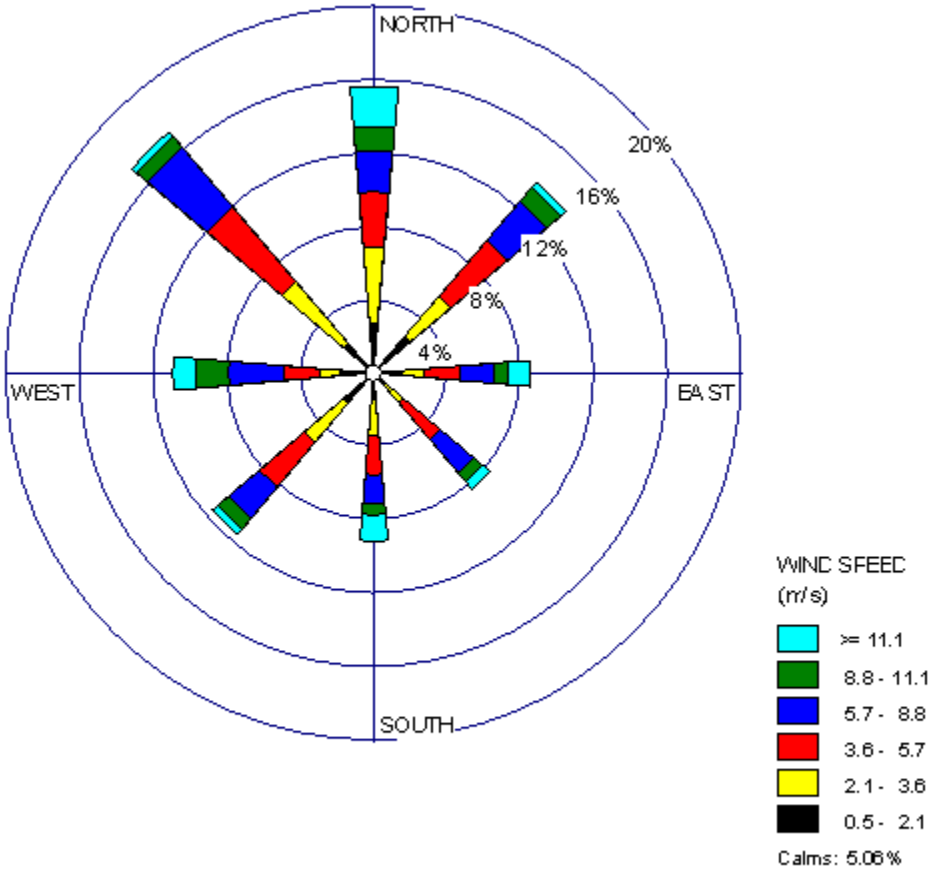
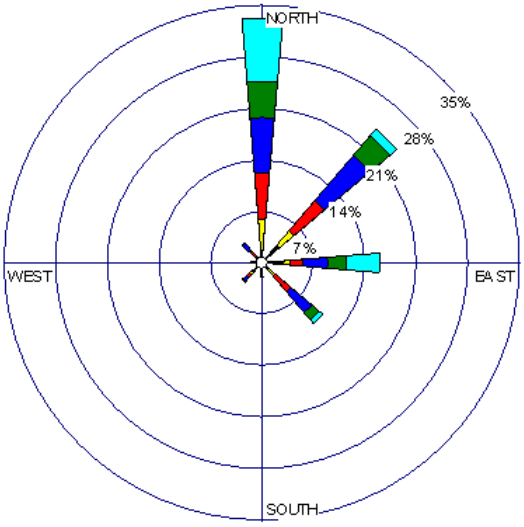
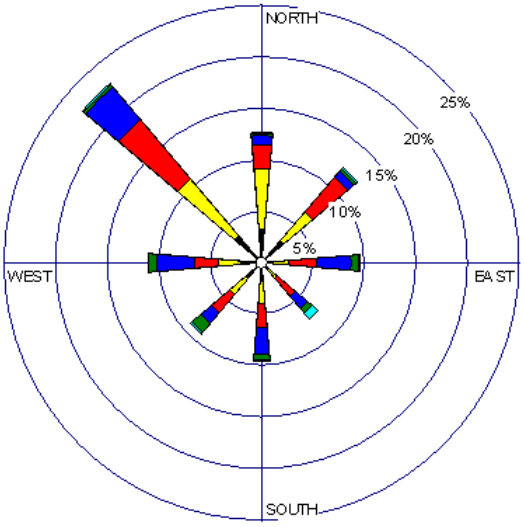


Figure 4-3. Quarterly Pebble 3 Wind Roses

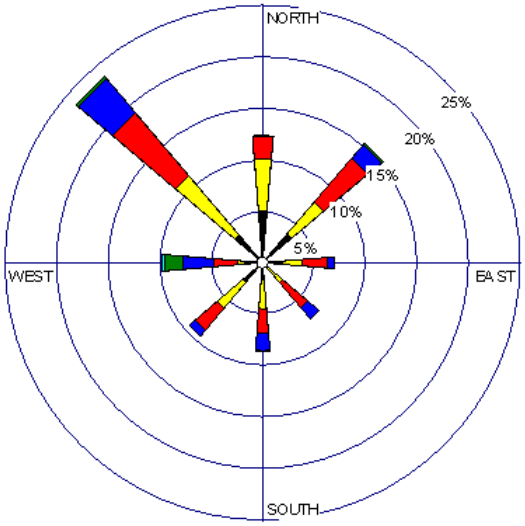
Quarter A (1/1/07 – 3/31/07)



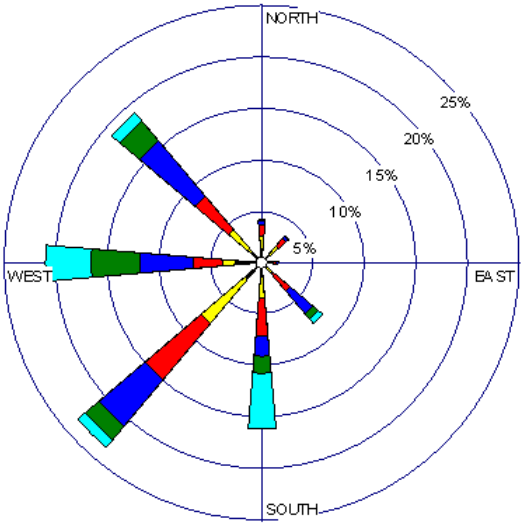
Quarter B (4/1/07 – 6/30/07)



Quarter C (7/1/07 – 9/30/07)



Quarter D (10/1/07 – 12/31/07)



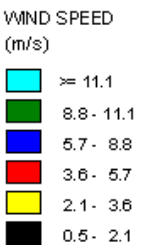


Table 4-2. Average and Maximum Wind Speeds at Pebble 3 non-PSD Station

Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
January 2007	6.7	17.2
February 2007	5.3	16.2
March 2007	7.1	22.3
Quarter A	**6.3**	**22.3**
April 2007	5.6	22.7
May 2007	3.2	9.1
June 2007	3.8	11.6
Quarter B	**4.2**	**22.7**
July 2007	2.8	7.5
August 2007	4.2	11.6
September 2007	3.9	11.4
Quarter C	**3.6**	**11.6**
October 2007	4.5	15.7
November 2007	6.7	20.3
December 2007	7.3	17.2
Quarter D	**6.2**	**20.3**
Monitoring Period	**5.1**	**22.7**

4.3 Precipitation

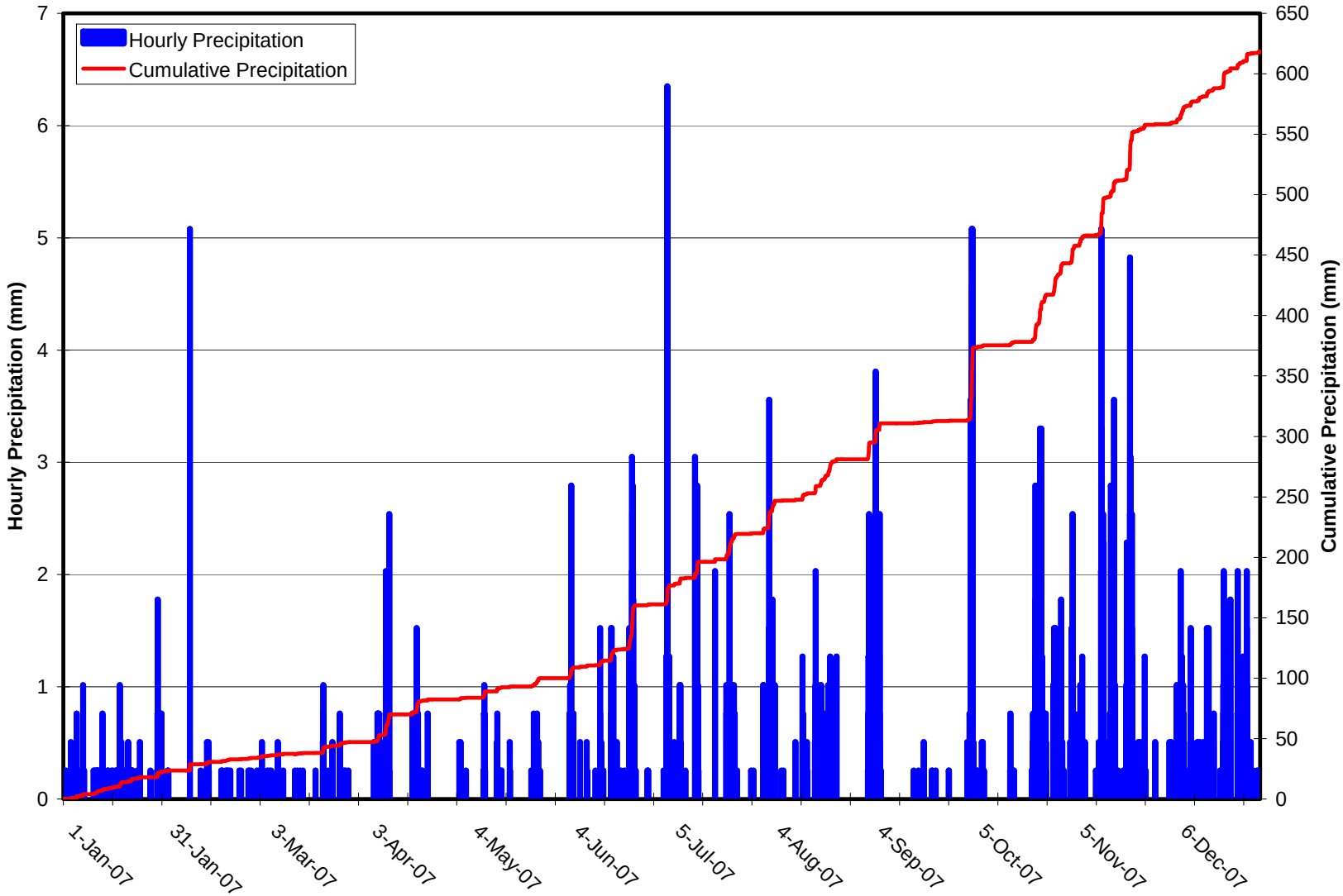
Table 4-3 provides monthly precipitation rates, which include rain and snowfall, for the Pebble 3 non-PSD station.

During the 2007 monitoring period, monthly precipitation rates at Pebble 3 were greatest during October and November 2007. November 2007 had the greatest amount of precipitation with 123.7 mm of total rain and snow. The month with the least amount of precipitation during the Pebble 3 monitoring period was March 2006, which had 11.7 mm of total rainfall. The greatest daily precipitation was 37.6 mm recorded on October 5, 2007.

Table 4-3. Cumulative and Maximum Daily Precipitation

Period	Cumulative Monthly Precipitation (mm)	Maximum Daily Precipitation (mm)
January 2007	22.9	3.6
February 2007	12.7	5.1
March 2007	11.7	4.8
April 2007	35.1	8.6
May 2007	17.8	5.3
June 2007	61.0	25.9
July 2007	58.9	13.7
August 2007	61.2	12.4
September 2007	32.0	13.7
October 2007	121.4	37.6
November 2007	123.7	30.5
December 2007	59.7	9.9
Monitoring Period	**618.0**	**37.6**

Figure 4-4. Hourly and Cumulative Precipitation



5.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2006.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Alaska State Department of Environmental Conservation (ADEC), *PSD Quality Ambient Air Quality and Meteorological Monitoring Annual Data Report Format*, Division of Air Quality, Air Monitoring & Quality Assurance Program, 2005.

Appendix A

Pebble 3 Validated Continuous Data Summaries

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-15.5	-15.3	-16.0	-16.2	-16.7	-16.8	-17.3	-17.3	-19.4	-20.9	-21.2	-21.2	-21.1	-20.8	-21.3	-22.6	-23.6	-24.3	-25.1	-25.1	-25.8	-25.5	-26.2	-26.5	-15.3	-26.5	-20.9
2	-26.9	-27.1	-27.6	-27.1	-26.8	-26.7	-26.0	-26.3	-26.0	-25.5	-25.2	-25.2	-25.0	-24.7	-24.7	-24.7	-25.1	-26.1	-26.6	-27.0	-27.0	-26.9	-28.1	-27.4	-24.7	-28.1	-26.2
3	-26.8	-26.9	-26.7	-26.8	-27.1	-26.7	-25.9	-27.0	-28.2	-27.9	-28.0	-28.6	-27.6	-27.1	-27.5	-27.9	-26.9	-26.7	-27.0	-29.5	-29.5	-28.9	-28.6	-29.3	-25.9	-29.5	-27.6
4	-29.4	-30.2	-30.7	-29.8	-29.5	-29.4	-29.3	-29.7	-29.3	-29.4	-28.6	-27.3	-27.1	-26.3	-24.5	-23.6	-22.7	-22.3	-21.7	-20.3	-20.3	-24.4	-27.7	-28.9	-20.3	-30.7	-26.8
5	-30.0	-31.0	-27.6	-26.3	-25.3	-25.8	-26.6	-24.8	-25.5	-26.2	-26.3	-25.9	-24.6	-24.0	-24.6	-25.2	-25.9	-26.5	-27.6	-29.2	-30.8	-30.7	-27.5	-27.3	-24.0	-31.0	-26.9
6	-29.0	-28.9	-28.1	-28.4	-29.0	-30.3	-30.3	-28.2	-27.3	-26.7	-27.3	-26.5	-26.2	-26.1	-25.5	-26.2	-27.2	-27.3	-27.5	-28.1	-29.1	-29.0	-29.4	-29.0	-25.5	-30.3	-27.9
7	-29.8	-30.0	-29.3	-29.1	-28.7	-29.6	-30.1	-30.5	-30.2	-30.2	-30.1	-29.9	-29.6	-28.6	-28.5	-28.9	-29.3	-29.1	-29.2	-30.3	-30.3	-29.5	-29.4	-30.1	-28.5	-30.5	-29.6
8	-30.4	-29.2	-29.9	-28.0	-27.9	-28.7	-28.3	-28.8	-29.1	-29.1	-27.5	-27.2	-25.8	-25.5	-25.3	-24.5	-25.0	-24.5	-25.2	-24.6	-23.9	-23.6	-23.7	-24.2	-23.6	-30.4	-26.6
9	-24.0	-24.5	-24.0	-25.6	-26.2	-25.4	-25.6	-26.7	-26.9	-27.2	-27.0	-26.9	-23.8	-23.6	-23.0	-21.9	-22.4	-17.3	-16.5	-15.6	-15.4	-15.6	-14.0	-12.6	-12.6	-27.2	-22.2
10	-12.8	-12.4	-11.9	-11.7	-11.6	-11.4	-11.1	-10.0	-9.0	-8.1	-7.2	-6.5	-5.6	-5.0	-4.6	-4.3	-4.0	-3.7	-3.3	-3.1	-2.9	-2.6	-2.4	-2.2	-2.2	-12.8	-7.0
11	-2.0	-1.6	-1.4	-1.4	-1.4	-1.3	-1.3	-1.3	-1.2	-1.2	-1.1	-1.0	-0.8	-0.9	-0.9	-0.9	-0.8	-0.7	-0.6	-0.5	-0.6	-0.6	-0.7	-0.9	-0.5	-2.0	-1.1
12	-1.0	-1.1	-1.2	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0	-0.9	-0.9	-0.7	-0.6	-0.8	-0.8	-0.8	-0.8	-0.8	-0.6	-0.7	-0.9	-1.9	-0.6	-1.9	-1.0
13	-2.4	-2.8	-2.8	-2.5	-2.4	-2.6	-2.7	-3.0	-3.0	-3.0	-3.2	-3.1	-3.1	-2.9	-3.2	-3.6	-5.6	-7.6	-8.7	-8.3	-7.4	-8.2	-8.5	-7.4	-2.4	-8.7	-4.5
14	-8.2	-8.1	-8.2	-8.8	-8.6	-8.2	-7.4	-7.6	-7.7	-7.5	-7.5	-7.2	-7.1	-7.3	-7.4	-7.2	-7.2	-7.3	-7.2	-7.2	-7.4	-7.4	-7.3	-7.4	-7.1	-8.8	-7.6
15	-7.8	-9.0	-10.9	-11.5	-9.3	-8.7	-8.2	-8.2	-8.6	-8.9	-8.9	-9.1	-9.3	-9.4	-9.5	-9.9	-10.1	-10.6	-11.2	-12.7	-12.8	-14.0	-14.6	-15.2	-7.8	-15.2	-10.4
16	-15.2	-16.7	-16.8	-16.3	-13.0	-13.9	-6.9	-6.7	-6.4	-5.7	-5.4	-5.4	-5.5	-5.0	-4.4	-3.9	-3.4	-3.2	-3.0	-3.1	-3.5	-3.4	-3.3	-3.1	-3.0	-16.8	-7.2
17	-2.9	-3.0	-3.5	-3.8	-3.9	-4.0	-4.1	-3.9	-3.5	-3.0	-2.7	-2.1	-1.8	-1.4	-1.3	-1.5	-1.5	-1.5	-1.0	-0.9	-0.7	-0.8	-0.9	-1.3	-0.7	-4.1	-2.3
18	-1.6	-1.9	-2.2	-2.3	-2.2	-1.9	-1.7	-2.1	-2.0	-2.2	-1.7	-2.0	-1.8	-1.7	-0.9	-1.0	-1.9	-2.8	-4.9	-6.0	-4.9	-4.6	-4.6	-4.6	-0.9	-6.0	-2.7
19	-5.2	-7.2	-7.0	-5.1	-4.6	-4.7	-4.8	-4.4	-4.6	-5.6	2.3	-6.1	-6.4	-7.9	-4.7	-4.6	-4.1	-3.2	-2.8	-2.3	-1.9	-1.9	-1.8	-1.6	2.3	-7.9	-4.2
20	-1.6	-1.6	-1.7	-1.6	-1.6	-1.7	-2.3	-2.4	-2.0	-2.5	-2.6	-2.6	-2.6	-4.3	-3.9	-3.1	-2.6	-2.5	-2.6	-3.2	-3.5	-4.2	-4.2	-4.0	-1.6	-4.3	-2.7
21	-4.2	-4.3	-5.5	-5.9	-7.1	-8.4	-9.5	-10.1	-10.8	-10.7	-10.5	-9.7	-9.4	-9.4	-9.6	-9.6	-9.6	-9.8	-10.1	-10.2	-10.3	-10.3	-10.2	-10.2	-4.2	-10.8	-9.0
22	-10.8	-10.7	-11.9	-12.1	-12.2	-11.8	-12.6	-14.1	-15.5	-17.0	-15.6	-13.8	-13.2	-13.4	-12.7	-13.1	-14.0	-15.1	-16.5	-17.7	-16.5	-20.9	-22.7	-18.0	-10.7	-22.7	-14.7
23	-17.5	-16.5	-14.6	-14.7	-15.2	-16.2	-16.5	-16.4	-16.8	-16.9	-17.5	-16.8	-16.5	-16.5	-16.2	-16.9	-17.4	-17.1	-17.0	-17.8	-17.8	-18.7	-19.3	-19.9	-14.6	-19.9	-16.9
24	-20.4	-21.0	-20.9	-21.4	-21.9	-22.1	-22.2	-24.4	-25.7	-24.8	-24.3	-24.6	-23.6	-23.2	-23.3	-23.9	-23.4	-24.3	-23.8	-23.4	-24.5	-26.1	-24.8	-24.8	-20.4	-26.1	-23.5
25	-24.4	-23.3	-20.7	-13.0	-12.3	-11.0	-9.4	-8.1	-6.2	-4.8	-4.3	-3.4	-2.9	-2.3	-2.1	-1.8	-1.3	-0.7	-0.6	-0.5	-0.4	-0.5	-0.3	-0.2	-0.2	-24.4	-6.4
26	-0.1	-0.2	-0.3	-0.5	-0.6	-0.4	-0.1	0.0	-0.2	-0.5	-0.4	0.1	0.5	0.6	0.6	0.4	0.3	-0.1	-0.6	-0.9	-0.8	-1.3	-2.1	-1.9	0.6	-2.1	-0.3
27	-1.6	-0.6	-0.1	0.0	0.4	0.5	0.5	0.4	0.2	0.3	-0.1	-0.4	-0.5	-0.3	0.0	0.4	0.8	0.5	1.0	1.7	1.9	2.1	1.9	1.5	2.1	-1.6	0.4
28	1.4	1.0	0.8	0.8	0.7	0.5	0.5	0.3	0.3	0.2	0.1	0.2	0.4	0.9	1.4	1.3	0.9	-0.1	-0.2	0.5	0.5	0.8	1.1	1.6	1.6	-0.2	0.7
29	1.8	2.1	3.0	3.4	3.2	3.3	2.6	2.3	1.7	2.0	2.1	2.7	3.2	3.4	3.3	2.9	3.0	2.7	2.3	2.0	1.4	1.1	1.0	1.1	3.4	1.0	2.4
30	1.8	2.5	2.7	2.6	2.6	2.8	3.1	3.5	3.8	4.1	4.2	5.6	6.1	5.1	5.0	5.3	3.9	2.8	2.6	2.3	2.1	1.9	1.8	1.7	6.1	1.7	3.3
31	1.8	1.9	2.0	2.0	2.2	2.1	2.3	1.6	1.6	1.7	1.5	1.5	1.6	2.1	1.8	1.9	1.8	1.7	1.6	2.1	2.5	2.4	1.8	0.9	2.5	0.9	1.8
Max.	**1.8**	**2.5**	**3.0**	**3.4**	**3.2**	**3.3**	**3.1**	**3.5**	**3.8**	**4.1**	**4.2**	**5.6**	**6.1**	**5.1**	**5.0**	**5.3**	**3.9**	**2.8**	**2.6**	**2.3**	**2.5**	**2.4**	**1.9**	**1.7**	**6.1**		
Min.	**-30.4**	**-31.0**	**-30.7**	**-29.8**	**-29.5**	**-30.3**	**-30.3**	**-30.5**	**-30.2**	**-30.2**	**-30.1**	**-29.9**	**-29.6**	**-28.6**	**-28.5**	**-28.9**	**-29.3**	**-29.1**	**-29.2**	**-30.3**	**-30.8**	**-30.7**	**-29.4**	**-30.1**		**-31.0**	
Avg.	**-12.1**	**-12.2**	**-12.0**	**-11.7**	**-11.5**	**-11.6**	**-11.4**	**-11.4**	**-11.6**	**-11.6**	**-11.1**	**-11.1**	**-10.6**	**-10.5**	**-10.3**	**-10.3**	**-10.5**	**-10.6**	**-10.8**	**-11.0**	**-11.0**	**-11.4**	**-11.5**	**-11.4**			**-11.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.8	1.4	1.6	1.8	1.1	1.3	1.2	0.8	0.6	0.8	0.3	1.5	3.3	3.8	5.2	6.5	6.6	5.1	6.1	5.0	3.7	1.3	1.3	1.0	6.6	0.3	2.6
2	1.2	1.2	1.7	1.9	2.1	2.5	2.0	1.8	1.8	1.9	2.0	2.3	2.4	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.6	1.4	1.4	1.3	2.5	1.2	1.9
3	1.0	0.7	1.0	1.1	0.8	0.7	0.5	0.6	0.6	0.3	0.7	1.3	2.1	2.5	2.7	2.8	1.8	-1.4	-4.2	-4.6	-5.4	-4.7	-3.2	-4.4	2.8	-5.4	-0.3
4	-3.7	-4.0	-4.1	-5.2	-5.1	-6.5	-5.7	-5.2	-6.4	-7.4	-5.5	-3.4	-2.7	-1.6	0.2	0.1	-1.4	-3.8	-6.0	-6.2	-6.1	-6.2	-6.4	-5.7	0.2	-7.4	-4.5
5	-5.1	-6.9	-9.8	-9.8	-7.9	-6.4	-9.0	-9.2	-7.1	-7.1	-3.3	-0.1	-0.1	0.0	-0.1	-0.1	-0.5	-1.4	-1.1	-1.7	-4.4	-5.0	-6.0	-5.7	0.0	-9.8	-4.5
6	-4.8	-2.5	-1.5	-0.8	-0.5	-0.4	0.2	0.6	0.5	0.3	0.0	0.8	1.1	1.7	1.3	0.6	0.7	-0.8	-1.7	-3.6	-2.6	-1.7	-1.0	-0.5	1.7	-4.8	-0.6
7	-0.2	-2.0	-2.5	-2.5	-2.5	-2.0	-1.9	-2.9	-3.1	-3.0	-2.8	-2.3	-1.7	-1.5	-1.4	-0.6	-0.5	-0.6	-1.8	-2.5	-2.8	-2.8	-2.8	-2.8	-0.2	-3.1	-2.1
8	-2.8	-2.7	-2.5	-2.6	-2.7	-2.4	-2.3	-2.2	-2.4	-2.3	-2.2	-2.0	-1.6	-0.9	-0.4	-0.6	-1.2	-1.7	-2.1	-2.2	-2.6	-2.7	-2.6	-2.5	-0.4	-2.8	-2.1
9	-2.3	-2.5	-2.5	-2.3	-2.2	-1.9	-1.8	-1.8	-1.9	-1.9	-1.1	0.0	0.9	1.3	1.3	0.2	-0.2	-0.9	-1.2	-1.2	-1.4	-1.5	-1.8	-2.0	1.3	-2.5	-1.2
10	-2.1	-1.7	-1.5	-1.5	-2.0	-3.0	-1.8	-1.4	-1.5	-1.2	-1.1	-1.1	-0.7	-0.5	-0.3	0.5	-0.5	-0.8	-2.1	-4.1	-4.7	-5.1	-5.2	-5.0	0.5	-5.2	-2.0
11	-4.9	-4.9	-4.3	-4.2	-4.4	-4.8	-4.2	-3.6	-3.2	-3.6	-2.8	-1.6	-0.9	-0.2	-0.1	0.3	0.5	-0.1	-0.2	-0.1	-0.1	-0.3	-0.3	-0.4	0.5	-4.9	-2.0
12	-0.4	-0.6	-0.1	0.0	0.0	0.0	0.1	0.5	0.2	0.1	0.2	0.7	0.9	1.6	1.6	1.4	1.4	1.1	0.5	0.0	-0.2	0.0	-0.3	0.0	1.6	-0.6	0.4
13	-0.2	-0.1	0.3	0.7	0.7	0.9	0.6	-0.1	-0.3	0.2	1.4	1.7	2.0	2.5	2.9	2.2	1.8	1.3	0.6	0.7	0.7	0.3	-0.1	-0.2	2.9	-0.3	0.9
14	-0.1	0.1	-0.2	-0.2	-0.3	-0.5	-0.6	-0.5	-0.5	-0.6	-0.4	-0.1	0.6	1.0	1.3	0.9	0.5	-0.3	-2.8	-4.9	-4.0	-5.6	-4.4	-4.6	1.3	-5.6	-1.1
15	-4.5	-4.6	-4.3	-6.3	-6.0	-5.6	-7.0	-8.5	-8.1	-7.1	-6.5	-5.0	-4.1	-2.2	-2.2	-3.2	-3.7	-5.3	-7.5	-8.0	-6.5	-6.0	-5.6	-5.4	-2.2	-8.5	-5.5
16	-5.5	-5.2	-4.9	-5.0	-5.5	-5.5	-5.0	-5.0	-5.1	-5.1	-3.8	-1.6	-1.4	-0.6	0.2	0.7	-0.3	-1.5	-2.6	-3.0	-3.2	-3.9	-6.1	-9.6	0.7	-9.6	-3.7
17	-9.4	-6.9	-5.3	-5.7	-6.9	-9.2	-10.2	-11.3	-10.9	-11.8	-7.9	-4.7	-3.6	-1.7	-0.9	-1.7	-2.5	-3.5	-4.5	-5.3	-6.4	-5.1	-4.6	-5.6	-0.9	-11.8	-6.1
18	-6.0	-4.9	-4.6	-4.6	-5.1	-5.1	-4.8	-5.6	-6.0	-5.9	-5.4	-4.6	-4.3	-2.9	-3.4	-4.1	-3.0	-4.8	-6.6	-5.9	-5.9	-5.9	-6.2	-6.2	-2.9	-6.6	-5.1
19	-6.5	-7.0	-7.2	-8.0	-8.6	-9.2	-9.8	-10.4	-10.7	-11.8	-12.9	-13.7	-13.7	-13.4	-13.1	-13.5	-14.7	-15.7	-16.7	-17.7	-18.3	-18.3	-17.8	-18.0	-6.5	-18.3	-12.8
20	-18.0	-16.7	-16.8	-17.1	-17.8	-18.8	-19.4	-19.1	-18.8	-18.6	-17.7	-16.6	-15.8	-14.6	-14.1	-13.8	-14.0	-14.7	-15.4	-15.6	-15.8	-16.3	-17.0	-17.1	-13.8	-19.4	-16.6
21	-17.5	-17.8	-18.1	-18.4	-18.7	-19.4	-20.1	-20.5	-20.7	-20.1	-20.1	-19.1	-17.3	-16.0	-15.4	-15.3	-15.2	-15.6	-16.7	-17.4	-18.1	-18.6	-18.6	-18.9	-15.2	-20.7	-18.1
22	-18.8	-19.2	-18.7	-19.1	-19.0	-20.1	-20.2	-19.9	-19.3	-19.6	-19.2	-18.5	-17.3	-16.2	-15.6	-15.6	-15.5	-15.2	-16.3	-17.0	-17.2	-17.4	-17.8	-18.0	-15.2	-20.2	-17.9
23	-18.2	-18.6	-18.9	-18.4	-18.7	-18.9	-19.1	-19.2	-19.5	-19.4	-19.1	-17.4	-16.6	-16.1	-15.8	-15.2	-14.8	-15.3	-17.0	-17.8	-17.6	-17.8	-18.0	-17.8	-14.8	-19.5	-17.7
24	-17.7	-18.3	-18.5	-18.0	-18.4	-18.5	-19.3	-19.8	-20.7	-20.4	-18.7	-18.4	-18.2	-18.2	-18.3	-18.4	-18.7	-19.4	-20.1	-20.6	-21.0	-21.2	-21.2	-21.2	-17.7	-21.2	-19.3
25	-21.4	-21.3	-20.7	-20.5	-20.5	-20.6	-20.8	-20.6	-21.0	-20.1	-18.9	-17.3	-15.7	-14.2	-13.2	-13.3	-13.6	-14.6	-15.5	-15.0	-13.6	-13.0	-12.3	-7.8	-7.8	-21.4	-16.9
26	-5.5	-6.5	-7.0	-7.8	-7.8	-7.7	-7.2	-6.5	-6.3	-7.1	-6.9	-6.0	-4.2	-4.3	-4.6	-4.5	-5.0	-6.0	-7.3	-9.8	-12.6	-11.2	-11.0	-10.9	-4.2	-12.6	-7.2
27	-9.9	-10.5	-10.9	-12.1	-12.9	-13.3	-13.5	-13.2	-12.5	-11.1	-10.3	-9.6	-9.3	-8.7	-8.2	-8.0	-8.3	-9.0	-9.6	-9.4	-9.8	-9.5	-9.3	-9.7	-8.0	-13.5	-10.4
28	-10.0	-10.4	-10.4	-10.8	-11.6	-11.5	-12.0	-12.6	-13.7	-14.1	-14.4	-14.2	-14.0	-13.8	-14.2	-15.1	-16.0	-16.9	-18.4	-19.1	-19.4	-20.2	-20.4	-20.8	-10.0	-20.8	-14.8
Max.	**1.2**	**1.4**	**1.7**	**1.9**	**2.1**	**2.5**	**2.0**	**1.8**	**1.8**	**1.9**	**2.0**	**2.3**	**3.3**	**3.8**	**5.2**	**6.5**	**6.6**	**5.1**	**6.1**	**5.0**	**3.7**	**1.4**	**1.4**	**1.3**	**6.6**		
Min.	**-21.4**	**-21.3**	**-20.7**	**-20.5**	**-20.5**	**-20.6**	**-20.8**	**-20.6**	**-21.0**	**-20.4**	**-20.1**	**-19.1**	**-18.2**	**-18.2**	**-18.3**	**-18.4**	**-18.7**	**-19.4**	**-20.1**	**-20.6**	**-21.0**	**-21.2**	**-21.2**	**-21.2**		**-21.4**	
Avg.	**-6.9**	**-6.9**	**-6.8**	**-7.0**	**-7.2**	**-7.3**	**-7.5**	**-7.7**	**-7.7**	**-7.7**	**-7.0**	**-6.0**	**-5.4**	**-4.7**	**-4.4**	**-4.4**	**-4.8**	**-5.7**	**-6.7**	**-7.3**	**-7.6**	**-7.8**	**-7.8**	**-7.8**			**-6.7**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

March *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-21.2	-21.4	-21.5	-21.9	-22.1	-23.1	-23.1	-23.3	-23.6	-23.1	-22.3	-21.1	-19.9	-18.6	-17.4	-16.8	-17.0	-17.1	-17.6	-18.2	-19.2	-19.7	-20.2	-20.2	-16.8	-23.6	-20.4
2	-20.2	-20.3	-20.2	-20.5	-20.2	-20.7	-21.0	-21.1	-21.6	-21.1	-20.5	-19.5	-18.1	-17.2	-16.0	-15.5	-15.4	-15.8	-16.4	-16.7	-16.8	-17.1	-17.7	-18.1	-15.4	-21.6	-18.7
3	-18.2	-18.3	-18.9	-19.4	-19.2	-19.2	-19.4	-20.2	-20.2	-19.6	-18.4	-17.0	-15.7	-14.2	-13.2	-12.6	-12.3	-12.6	-13.7	-13.4	-13.2	-13.6	-13.7	-14.5	-12.3	-20.2	-16.3
4	-15.1	-15.4	-15.4	-14.7	-15.0	-15.4	-15.8	-16.2	-16.5	-15.6	-14.6	-14.5	-14.0	-13.6	-13.3	-13.3	-13.5	-14.1	-15.1	-16.3	-17.0	-17.4	-17.9	-18.7	-13.3	-18.7	-15.4
5	-19.4	-20.4	-21.3	-22.0	-22.7	-23.3	-23.8	-24.3	-24.5	-23.9	-23.2	-22.4	-21.7	-20.8	-20.2	-20.0	-20.3	-20.9	-21.7	-22.6	-23.2	-23.6	-24.1	-24.5	-19.4	-24.5	-22.3
6	-25.0	-25.5	-25.8	-26.2	-26.4	-26.8	-26.9	-27.1	-27.2	-26.5	-25.7	-24.9	-24.1	-23.3	-22.9	-22.5	-22.4	-22.7	-23.2	-23.6	-23.6	-23.8	-24.0	-24.2	-22.4	-27.2	-24.8
7	-24.3	-24.4	-24.4	-24.6	-24.6	-24.8	-24.9	-24.8	-24.8	-24.1	-23.0	-22.2	-21.1	-20.4	-19.4	-19.1	-19.0	-19.4	-20.2	-21.0	-21.6	-22.3	-23.0	-23.7	-19.0	-24.9	-22.5
8	-24.2	-24.7	-25.0	-25.2	-25.4	-25.7	-25.8	-25.9	-25.9	-25.6	-24.9	-23.9	-22.8	-21.6	-20.8	-20.2	-20.2	-20.3	-20.8	-21.3	-21.1	-21.2	-21.3	-21.5	-20.2	-25.9	-23.1
9	-22.0	-22.2	-22.5	-22.7	-22.4	-22.5	-22.5	-22.2	-21.6	-21.0	-20.9	-20.1	-19.2	-18.3	-17.6	-17.1	-16.9	-17.7	-18.7	-19.6	-20.3	-20.3	-19.7	-19.3	-16.9	-22.7	-20.3
10	-19.0	-18.8	-18.8	-18.6	-19.1	-19.4	-19.1	-18.7	-19.0	-18.7	-18.6	-17.3	-16.5	-15.1	-14.4	-14.1	-13.9	-14.4	-15.5	-17.2	-18.2	-18.7	-19.0	-19.2	-13.9	-19.4	-17.5
11	-20.0	-20.2	-20.3	-20.9	-21.3	-21.9	-22.5	-23.1	-23.2	-22.6	-21.7	-20.9	-19.8	-19.0	-18.0	-17.6	-17.3	-17.4	-17.8	-18.0	-18.0	-18.1	-18.4	-18.9	-17.3	-23.2	-19.9
12	-19.1	-19.4	-19.2	-19.3	-19.7	-19.9	-19.7	-19.8	-20.0	-19.3	-18.3	-17.4	-18.4	-15.0	-14.3	-13.8	-13.9	-14.2	-14.5	-15.1	-15.7	-16.6	-16.9	-16.9	-13.8	-20.0	-17.4
13	-17.2	-17.7	-18.2	-18.2	-18.3	-18.7	-19.1	-19.9	-20.1	-19.5	-18.8	-18.0	-17.4	-16.6	-16.6	-16.4	-16.8	-17.2	-18.0	-19.0	-19.2	-19.4	-20.1	-21.0	-16.4	-21.0	-18.4
14	-21.6	-21.8	-22.1	-22.2	-22.4	-22.4	-22.6	-23.0	-22.8	-22.0	-20.7	-20.1	-19.5	-18.8	-18.4	-18.3	-18.3	-18.7	-19.4	-20.0	-20.6	-21.1	-21.4	-21.7	-18.3	-23.0	-20.8
15	-22.3	-22.9	-23.7	-24.3	-25.0	-25.2	-25.5	-25.7	-25.2	-24.1	-22.6	-21.4	-20.1	-19.2	-18.5	-17.7	-17.1	-17.2	-18.0	-19.1	-19.9	-20.1	-20.4	-21.5	-17.1	-25.7	-21.5
16	-21.6	-21.8	-21.7	-21.9	-22.4	-23.0	-22.9	-22.7	-21.9	-20.6	-19.4	-17.6	-16.6	-15.3	-14.3	-13.8	-13.9	-14.4	-15.6	-17.7	-18.1	-19.0	-19.4	-20.0	-13.8	-23.0	-19.0
17	-20.8	-21.3	-21.6	-22.0	-23.0	-23.8	-24.2	-23.6	-22.1	-19.5	-17.2	-16.1	-14.9	-14.0	-12.9	-11.9	-11.4	-11.3	-12.6	-14.7	-16.8	-18.3	-19.3	-20.5	-11.3	-24.2	-18.1
18	-19.5	-22.1	-23.9	-24.6	-25.0	-25.6	-25.9	-25.5	-24.2	-19.4	-14.1	-12.5	-12.4	-11.3	-10.1	-10.2	-10.6	-10.2	-11.6	-14.4	-15.0	-16.2	-17.2	-18.5	-10.1	-25.9	-17.5
19	-19.4	-19.3	-19.2	-19.3	-20.0	-20.8	-19.5	-19.7	-18.6	-15.3	-13.6	-12.2	-10.0	-8.7	-9.0	-8.5	-7.3	-7.5	-9.2	-13.1	-16.4	-16.2	-16.8	-18.1	-7.3	-20.8	-14.9
20	-20.6	-21.9	-22.2	-19.1	-18.1	-19.6	-17.3	-14.2	-10.5	-8.7	-7.8	-7.2	-6.4	-5.7	-4.8	-4.2	-4.6	-4.6	-4.5	-4.1	-3.8	-3.8	-3.5	-3.6	-3.5	-22.2	-10.0
21	-3.9	-4.9	-4.4	-4.9	-5.4	-5.1	-4.8	-4.6	-4.4	-7.4	-8.5	-8.2	-8.0	-7.5	-7.4	-7.8	-8.4	-8.9	-9.4	-10.4	-10.8	-11.4	-13.2	-13.6	-3.9	-13.6	-7.6
22	-14.4	-15.0	-15.1	-15.5	-16.1	-18.2	-19.6	-18.9	-17.5	-16.9	-15.7	-14.6	-13.1	-11.6	-10.5	-10.4	-10.4	-10.7	-11.8	-13.5	-14.5	-14.7	-15.4	-15.8	-10.4	-19.6	-14.6
23	-16.0	-16.7	-16.7	-16.4	-16.7	-17.5	-18.3	-18.6	-18.6	-17.7	-17.0	-16.2	-15.6	-15.3	-14.5	-12.9	-13.1	-13.6	-14.1	-15.1	-15.9	-16.8	-17.2	-17.9	-12.9	-18.6	-16.2
24	-18.6	-19.5	-21.1	-21.1	-21.8	-22.6	-22.5	-21.4	-21.3	-19.8	-18.2	-17.2	-16.2	-15.5	-14.7	-13.9	-13.4	-14.3	-15.4	-18.2	-19.1	-22.7	-25.3	-22.4	-13.4	-25.3	-19.0
25	-23.5	-21.0	-18.7	-18.4	-18.4	-19.2	-19.9	-21.4	-19.9	-16.7	-13.8	-12.5	-10.0	-6.0	-5.3	-4.8	-4.9	-7.0	-8.5	-8.8	-8.6	-8.5	-8.5	-8.4	-4.8	-23.5	-13.0
26	-7.9	-7.4	-6.8	-6.4	-6.1	-6.2	-6.4	-6.8	-7.9	-9.1	-9.9	-10.0	-9.6	-9.1	-9.3	-9.3	-9.5	-9.8	-9.5	-10.1	-11.0	-11.4	-11.0	-10.3	-6.1	-11.4	-8.8
27	-9.2	-9.1	-10.5	-11.2	-11.4	-11.4	-11.6	-11.8	-11.2	-10.5	-10.3	-9.6	-9.3	-9.0	-8.8	-9.0	-9.1	-8.9	-9.4	-10.1	-10.8	-11.6	-12.6	-12.9	-8.8	-12.9	-10.4
28	-13.4	-14.1	-14.0	-14.0	-14.4	-14.9	-15.3	-15.5	-14.7	-13.6	-11.9	-10.3	-8.1	-8.3	-7.8	-7.0	-6.9	-7.1	-7.8	-9.3	-9.7	-9.8	-10.0	-12.7	-6.9	-15.5	-11.3
29	-14.3	-12.4	-13.0	-13.8	-13.2	-14.3	-14.6	-12.5	-12.2	-10.6	-9.1	-7.0	-5.5	-5.0	-4.1	-4.1	-4.2	-4.1	-5.0	-6.2	-7.5	-8.8	-10.0	-10.0	-4.1	-14.6	-9.2
30	-9.7	-8.2	-9.4	-8.1	-8.4	-8.7	-9.7	-10.8	-9.2	-7.3	-5.5	-4.5	-3.2	-2.1	-0.9	-0.5	0.4	-0.7	-2.6	-5.5	-10.7	-11.9	-12.4	-14.8	0.4	-14.8	-6.8
31	-14.9	-12.8	-12.7	-14.0	-12.1	-12.0	-11.3	-10.5	-7.6	-4.9	-1.4	2.4	5.5	6.2	6.4	6.9	3.6	2.8	1.9	-2.0	-4.1	-4.8	-4.5	-4.3	6.9	-14.9	-4.1
Max.	**-3.9**	**-4.9**	**-4.4**	**-4.9**	**-5.4**	**-5.1**	**-4.8**	**-4.6**	**-4.4**	**-4.9**	**-1.4**	**2.4**	**5.5**	**6.2**	**6.4**	**6.9**	**3.6**	**2.8**	**1.9**	**-2.0**	**-3.8**	**-3.8**	**-3.5**	**-3.6**	**6.9**		
Min.	**-25.0**	**-25.5**	**-25.8**	**-26.2**	**-26.4**	**-26.8**	**-26.9**	**-27.1**	**-27.2**	**-26.5**	**-25.7**	**-24.9**	**-24.1**	**-23.3**	**-22.9**	**-22.5**	**-22.4**	**-22.7**	**-23.2**	**-23.6**	**-23.6**	**-23.8**	**-25.3**	**-24.5**		**-27.2**	
Avg.	**-18.0**	**-18.1**	**-18.3**	**-18.4**	**-18.6**	**-19.1**	**-19.2**	**-19.2**	**-18.6**	**-17.6**	**-16.4**	**-15.3**	**-14.3**	**-13.2**	**-12.5**	**-12.1**	**-12.2**	**-12.6**	**-13.4**	**-14.6**	**-15.5**	**-16.1**	**-16.6**	**-17.0**			**-16.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-3.7	-3.6	-4.7	-6.1	-5.1	-5.2	-6.5	-5.6	-4.0	-1.8	1.2	2.5	2.7	3.6	5.2	5.3	4.1	3.4	1.3	-1.0	-5.2	-8.1	-9.6	-9.0	5.3	-9.6	-2.1
2	-9.2	-10.8	-11.0	-10.7	-9.9	-9.2	-6.1	-3.9	-1.6	-0.3	0.8	1.3	1.6	1.9	1.6	1.4	1.4	0.9	0.4	-0.2	-0.4	-0.6	-0.4	-0.3	1.9	-11.0	-2.6
3	-0.5	-0.6	-0.5	-0.5	-0.6	-0.7	-0.8	-1.0	-0.7	-0.3	0.1	0.7	1.0	1.3	1.7	1.5	1.4	1.0	0.4	0.0	0.0	-0.2	-0.7	-0.8	1.7	-1.0	0.1
4	-1.2	-1.1	-1.0	-0.5	-0.6	-0.8	-0.8	-0.8	-0.1	0.6	1.2	1.6	1.8	2.3	1.7	1.7	1.7	1.2	0.7	0.6	0.3	0.5	0.4	0.0	2.3	-1.2	0.4
5	-0.1	-0.8	-1.1	-0.1	-1.6	-0.1	1.0	2.0	2.7	3.4	3.6	3.7	4.6	5.0	5.6	6.0	6.0	3.1	3.1	2.1	2.2	2.1	2.2	1.9	6.0	-1.6	2.4
6	1.8	1.8	2.2	1.9	2.3	2.2	3.2	3.4	3.6	3.7	4.4	5.2	5.5	6.3	6.5	6.5	5.9	4.2	2.3	1.5	1.6	1.9	2.1	2.7	6.5	1.5	3.4
7	2.3	1.6	0.9	0.5	0.1	-0.2	-0.1	0.1	0.3	0.7	1.0	0.9	1.4	1.7	2.3	2.9	2.8	2.8	2.1	1.5	1.8	2.0	2.3	2.5	2.9	-0.2	1.4
8	2.5	2.4	2.4	2.5	2.5	3.1	3.6	3.6	4.0	4.7	5.8	6.6	6.6	6.5	6.7	6.7	5.9	5.4	4.9	3.8	3.2	2.4	2.0	1.2	6.7	1.2	4.1
9	1.3	1.1	1.1	1.4	1.4	1.3	0.5	0.4								1.9	1.7	1.3	1.4	1.3	1.1	0.7	0.4	0.3	1.9	0.3	1.1
10	0.1	0.1	0.0	-0.2	-0.4	-0.5	-0.5	-0.4	-0.1	0.3	1.2	1.7	1.4	1.7	1.5	1.8	2.1	2.9	1.8	0.2	-0.4	-0.6	-1.3	-1.1	2.9	-1.3	0.5
11	-2.4	-2.6	-2.8	-3.0	-3.8	-5.0	-2.6	-2.0	-0.9	2.2	2.8	2.4	3.0	3.2	2.5	2.6	2.1	2.1	1.6	0.6	-1.5	-2.3	-2.1	-2.1	3.2	-5.0	-0.3
12	-1.9	-2.1	-3.9	-4.3	-3.1	-3.4	-4.5	-3.8	-1.8	0.4	2.6	3.8	4.4	5.2	5.3	5.3	5.3	4.8	4.5	2.4	0.4	-1.5	-3.7	-2.6	5.3	-4.5	0.3
13	-2.5	-3.0	-3.1	-3.3	-2.9	-2.5	-3.1	-2.8	-0.7	0.0	0.5	0.8	2.0	3.4	4.7	5.0	6.1	6.2	3.9	1.3	0.2	-0.4	-0.5	-0.6	6.2	-3.3	0.4
14	-1.2	-2.9	-3.4	-3.7	-2.3	-1.8	-1.8	-2.1	-1.3	0.0	0.2	2.1	3.1	3.1	3.5	3.1	3.3	3.2	2.5	1.0	0.1	-0.4	-0.7	-0.7	3.5	-3.7	0.1
15	-0.7	-1.0	-0.9	-0.6	-0.8	-0.5	-0.6	-0.3	0.6	1.1	2.1	2.2	2.6	3.0	3.7	3.3	4.7	5.0	3.0	1.2	0.0	-0.8	-1.4	-0.6	5.0	-1.4	1.0
16	-1.2	-1.3	-1.1	-0.2	-0.2	0.3	-0.5	-0.2	0.7	2.8	3.9	4.9	4.8	1.6	-0.4	-0.6	-0.6	-0.8	-1.4	-2.2	-3.0	-3.3	-4.5	-6.6	4.9	-6.6	-0.4
17	-7.0	-6.1	-3.7	-2.2	-0.6	-0.2	0.0	0.3	0.4	-0.2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.4	-0.3	-0.1	-0.2	-0.1	0.0	0.1	0.2	0.2	0.4	-7.0	-0.9
18	0.2	0.2	0.3	0.4	0.6	0.8	0.8	0.8	1.1	1.3	1.8	2.2	2.3	2.4	1.9	1.6	-0.4	-1.0	-1.5	-2.0	-2.4	-2.5	-2.8	-2.8	2.4	-2.8	0.1
19	-2.2	-0.8	-1.3	-1.7	-0.7	0.1	0.2	0.2	0.7	1.2	1.3	1.2	1.3	0.8	0.6	0.2	-0.1	-0.4	-0.8	-0.9	-0.8	-0.5	-0.1	-0.2	1.3	-2.2	-0.1
20	-0.1	-0.2	-0.3	0.1	0.3	0.4	1.5	1.9	2.0	2.6	2.8	3.2	3.9	3.7	3.7	3.9	3.6	2.7	2.6	2.1	1.4	1.3	1.2	1.4	3.9	-0.3	1.9
21	1.8	2.6	3.0	3.1	3.2	3.1	2.1	1.4	2.4	3.4	4.3	4.8	5.2	5.4	4.7	4.6	4.0	3.7	2.8	2.5	2.0	2.1	2.9	2.7	5.4	1.4	3.2
22	2.8	3.1	2.9	3.6	3.4	4.2	4.7	4.1	3.6	3.7	4.3	4.8	5.7	5.8	5.5	5.6	5.0	4.5	3.7	3.4	3.2	3.2	3.1	3.1	5.8	2.8	4.0
23	2.9	3.6	3.9	3.5	3.3	3.3	3.4	4.2	5.3	5.9	7.5	8.6	7.9	7.9	9.0	6.5	6.2	7.4				0.5	2.1	1.4	9.0	0.5	5.0
24	1.0	1.7	2.5	2.8		2.0		3.2	3.8	4.6	6.3	7.6	6.9			7.6	7.0	6.7	5.7	4.2	3.1	2.2	2.1	2.2	7.6	1.0	4.2
25	2.3	2.5	2.6	2.6	2.5	2.7	2.8	3.2	3.7	3.9	5.1	4.4	3.7	4.5	5.4	5.2	5.1	5.0	4.7	3.7				2.1	5.4	2.1	3.7
26					1.4				4.7																4.7	1.4	3.1
27			2.7					5.1	5.6	6.9	7.7	9.1	9.2	9.0	8.9	9.2	8.0	3.9	4.9	3.7	2.8	1.4			9.2	1.4	6.1
28		-5.3	-5.6	-6.9	-6.7	-4.0							6.3	7.2	6.8	7.2	6.7	5.7	5.2	4.1	2.0	-0.4	-0.9	-0.5	7.2	-6.9	1.2
29	0.4	0.7	0.6	0.6	0.8	0.7	1.2	2.5	3.3	3.9	4.4	5.0	6.4	7.6	7.3	8.1	7.7	7.4	7.3	6.8	4.7				8.1	0.4	4.1
30	-3.8	-3.8	-1.8	-1.0	-0.6	-0.8													8.2	7.8	2.8				8.2	-3.8	0.8
Max.	**2.9**	**3.6**	**3.9**	**3.6**	**3.4**	**4.2**	**4.7**	**5.1**	**5.6**	**6.9**	**7.7**	**9.1**	**9.2**	**9.0**	**9.0**	**9.2**	**8.0**	**7.4**	**8.2**	**7.8**	**4.7**	**3.2**	**3.1**	**3.1**	**9.2**		
Min.	**-9.2**	**-10.8**	**-11.0**	**-10.7**	**-9.9**	**-9.2**	**-6.5**	**-5.6**	**-4.0**	**-1.8**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.6**	**-0.6**	**-1.0**	**-1.5**	**-2.2**	**-5.2**	**-8.1**	**-9.6**	**-9.0**		**-11.0**	
Avg.	**-0.7**	**-0.9**	**-0.7**	**-0.8**	**-0.6**	**-0.4**	**-0.1**	**0.5**	**1.4**	**2.1**	**2.9**	**3.5**	**3.9**	**4.0**	**4.1**	**4.1**	**3.8**	**3.3**	**2.7**	**1.8**	**0.7**	**0.0**	**-0.3**	**-0.2**			**1.5**

Total Hours in Month 720 **Hours Data Available** 648 **Data Recovery** 90.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.1											13.6	8.0	7.0	7.5	6.4	6.4	6.2	4.9	3.9	3.5	2.9	2.4	1.8	13.6	1.1	5.4
2	1.8	1.3	1.2	1.4	1.7	1.6	2.0	2.9	2.2	3.2	3.9	5.4	4.3	5.3	6.4	6.1	5.7	4.8	3.9	2.8	2.3	1.6	0.7	0.1	6.4	0.1	3.0
3	0.1	-0.7	-1.5	-2.9	-3.8	-4.1	-3.4	-0.1	1.7	3.6	5.1	6.3	7.4	8.2	8.8	9.4	7.8	6.6	6.7	5.5	4.7	3.1	2.6	2.2	9.4	-4.1	3.1
4	1.3	-0.3	0.9	1.4	-0.6	-1.4	-0.4	2.2	3.5	4.5	5.4	6.0	6.5	7.4	8.1	8.3	8.4	7.6	7.0	5.6	4.8	2.4	2.6	1.2	8.4	-1.4	3.8
5	0.4	1.0	0.0	-0.1	-0.5	-0.7	0.1	0.4	0.5	1.4	2.5	3.0	4.3	5.6	6.9	7.4	8.0	8.1	8.0	7.5	6.6	6.4	5.2	4.7	8.1	-0.7	3.6
6	5.4	4.5	4.8	3.4	3.0	2.8	2.8	3.3	3.5	3.7	4.1	4.9	5.3	5.4	5.4	5.5	5.3	5.0	4.2	3.8	3.3	3.0	2.7	2.3	5.5	2.3	4.1
7	2.1	2.0	1.5	0.7	0.3	-0.7	1.3	2.4	3.1	3.8	4.0	4.4	4.8	5.5	6.0	6.0	4.8	4.4	4.5	4.2	3.7	2.9	2.3	1.8	6.0	-0.7	3.2
8	1.4	1.2	1.0	0.9	0.7	0.6	0.5	0.4	0.7	1.1	1.7	2.9	4.1	4.8	5.6	6.1	6.0	5.9	5.6	5.0	4.1	1.9	0.9	0.9	6.1	0.4	2.7
9	1.2	0.7	0.2	0.1	0.4	0.9	0.7	0.7	0.5	0.4	0.6	1.2	2.0	2.6	3.6	4.1	4.1	4.5	4.4	3.9	3.0	2.2	1.8	1.5	4.5	0.1	1.9
10	0.4	0.0	-2.0	-2.4	-1.6	-1.2	-0.7	1.2	2.5	3.6	4.3	5.1	5.4	6.0	6.6	6.5	6.2	5.7	5.6	5.2	3.5	3.0	1.8	-0.5	6.6	-2.4	2.7
11	-2.4	-2.0	-1.5	-3.0	-0.4	1.0	1.5	2.9	3.8	4.9	5.6	6.4	6.8	7.3	7.5	7.5	7.3	6.7	6.0	5.1	3.5	1.9	0.6	0.4	7.5	-3.0	3.2
12	-1.3	-3.4	-4.0	-4.5	-3.1	-0.3	0.9	2.4	3.5	4.7	5.6	5.9	6.3	6.3	6.8	7.0	6.6	5.9	5.5	4.1	3.2	2.0	1.9	1.7	7.0	-4.5	2.6
13	2.1	1.9	1.8	1.9	1.8	1.7	1.7	1.9	2.6	3.3	3.8	3.7	3.9	4.2	4.5	4.6	4.7	5.0	4.6	4.2	3.9	3.6	3.5	2.5	5.0	1.7	3.2
14	2.8	2.9	2.6	2.1	4.2	4.5	4.6	5.3	6.3	7.2	7.5	8.3	6.2	6.3	6.2	5.2	5.4	5.7	5.2	4.5	3.6	2.4	2.3	1.9	8.3	1.9	4.7
15	1.6	1.7	1.0	1.4	2.1	2.6	2.6	3.8	4.7	5.2	6.0	7.2	7.5	6.4	6.8	7.2	7.3	7.4	7.6	8.0	7.5	5.1	5.2	4.3	8.0	1.0	5.0
16	2.8	3.1	2.7	3.4	4.3	4.7	6.0	7.4	8.5	10.5	11.8	12.6	12.7	11.7	11.3	11.7	11.6	10.8	10.1	7.2	5.4	4.3	3.6	3.3	12.7	2.7	7.6
17	3.3	3.1	2.9	2.8	2.8	2.9	3.1	3.6	4.2	6.0	7.9	8.8	8.4	8.5	8.6	8.4	7.9	7.5	6.7	5.6	4.4	3.5	2.9	0.5	8.8	0.5	5.2
18	1.5	1.8	2.2	1.7	1.0	0.9	1.7	3.5	4.9	6.0	7.0	7.4	8.0	8.4	8.8	9.3	9.7	9.9	9.0	8.1	7.0	5.7	4.0	1.6	9.9	0.9	5.4
19	0.7	0.7	2.6	2.6	2.7	4.3	5.1	7.7	8.5	8.5	9.1	8.9	8.9	10.3	10.6	10.7	10.9	10.8	10.0	8.9	7.5	5.7	2.0	0.5	10.9	0.5	6.6
20	-0.5	-1.3	-1.7	-2.0	-1.5	-1.5	1.9	4.8	6.2	6.2	7.2	8.4	9.6	9.8	9.5	9.7	9.8	9.8	9.8	8.9	7.8	5.4	0.6	-0.8	9.8	-2.0	4.8
21	-1.2	-1.4	-2.3	-1.5	-1.0	-1.2	1.4	4.9	6.8	8.5	9.5	10.2	10.5	11.6	11.8	11.9	11.6	11.0	10.0	8.8	7.9	6.8	6.3	5.7	11.9	-2.3	6.1
22	5.5	5.7	5.6	5.6	5.6	5.8	6.4	6.4	7.2	5.5	5.5	7.4	9.2	7.3	8.3	9.9	10.6	10.2	8.3	6.3	5.7	5.4	5.2	5.7	10.6	5.2	6.8
23	5.8	4.8	5.0	5.3	5.3	6.5	8.0	8.8	9.0	9.5	10.1	9.2	9.5	8.0	7.3	7.4	7.7	7.4	6.5	5.7	5.3	4.6	4.3	3.7	10.1	3.7	6.9
24	3.4	3.3	3.2	3.0	3.0	3.1	3.4	4.1	5.9	6.4	6.6	7.2	8.0	8.9	8.2	6.5	6.9	8.0	9.1	8.3	7.1	6.9	6.0	5.7	9.1	3.0	5.9
25	5.6	5.3	7.5	7.3	5.5	5.4	5.9	6.3	6.6	6.5	6.4	6.2	6.4	6.9	7.1	7.3	7.6	7.6	7.7	7.7	7.4	7.0	6.8	7.0	7.7	5.3	6.7
26	7.4	7.5	5.2	4.8	4.7	4.8	5.2	5.1	5.2	6.1	6.8	6.9	7.0	6.9	6.5	6.3	6.5	6.2	5.8	5.7	5.4	4.8	4.4	4.3	7.5	4.3	5.8
27	4.0	3.5	3.4	3.3	3.3	3.4	3.9	4.3	5.6	7.1	7.7	8.2	8.7	9.4	9.1	8.9	9.0	8.9	8.4	7.5	6.2	4.3	3.1	2.8	9.4	2.8	6.0
28	2.8	2.8	3.4	3.3	2.4	2.2	3.5	4.5	5.5	7.1	7.8	7.8	8.0	8.9	8.7	8.3	7.9	6.9	6.6	6.1	5.1	3.9	2.0	0.8	8.9	0.8	5.3
29	-1.2	-1.2	-1.5	-1.9	-0.5	1.1	3.4	5.4	7.6	8.8	9.3	9.7	10.2	10.4	10.1	10.2	9.9	10.4	9.5	8.9	7.4	4.6	1.7	0.0	10.4	-1.9	5.5
30	1.4	2.0	2.9	3.1	3.5	3.9	5.1	6.3	7.4	8.7	9.2	10.1	10.2	10.6	11.2	10.9	9.9	8.8	7.7	7.1	6.5	5.5	4.9	4.4	11.2	1.4	6.7
31	4.4	4.0	4.3	6.2	6.0	6.1	6.3	5.9	5.0	5.8	7.7	8.0	8.1	8.4	8.4	9.0	9.5	9.1	8.2	7.4	7.0	6.4	6.1	5.9	9.5	4.0	6.8
Max.	**7.4**	**7.5**	**7.5**	**7.3**	**6.0**	**6.5**	**8.0**	**8.8**	**9.0**	**10.5**	**11.8**	**13.6**	**12.7**	**11.7**	**11.8**	**11.9**	**11.6**	**11.0**	**10.1**	**8.9**	**7.9**	**7.0**	**6.8**	**7.0**	**13.6**		
Min.	**-2.4**	**-3.4**	**-4.0**	**-4.5**	**-3.8**	**-4.1**	**-3.4**	**-0.1**	**0.5**	**0.4**	**0.6**	**1.2**	**2.0**	**2.6**	**3.6**	**4.1**	**4.1**	**4.4**	**3.9**	**2.8**	**2.3**	**1.6**	**0.6**	**-0.8**		**-4.5**	
Avg.	**2.1**	**1.8**	**1.7**	**1.6**	**1.7**	**2.0**	**2.8**	**3.9**	**4.8**	**5.6**	**6.3**	**7.1**	**7.3**	**7.6**	**7.8**	**7.9**	**7.8**	**7.5**	**7.0**	**6.2**	**5.3**	**4.2**	**3.2**	**2.5**			**4.8**

Total Hours in Month 744 **Hours Data Available** 734 **Data Recovery** 98.7%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.2	4.3	4.4	4.3	4.6	4.8	5.3	6.5	7.5	8.0	8.2	8.5	9.2	8.4	9.6	9.2	8.3	7.1	6.5	6.5	5.9	5.1	4.9	5.0	9.6	4.3	6.6
2	4.8	4.8	4.7	4.3	4.2	4.5	4.8	5.0	5.2	5.8	6.5	7.5	8.4	9.1	9.6	10.0	10.1	10.5	10.4	9.7	8.9	7.5	6.2	5.6	10.5	4.2	7.0
3	5.1	4.8	4.7	4.5	4.4	5.0	5.6	6.3	7.3	7.9	8.4	9.6	10.3	10.7	11.4	12.7	13.0	12.5	12.8	11.7	11.6	8.6	5.2	6.1	13.0	4.4	8.3
4	5.2	6.5	7.0	7.4	7.3	7.9	8.1	8.1	8.4	9.0	9.2	9.6	10.7	11.1	11.1	10.0	10.5	9.0	7.1	6.4	6.0	5.6	5.1	5.0	11.1	5.0	8.0
5	4.8	4.7	4.5	4.4	4.4	4.7	5.5	5.5	5.7	6.1	6.8	8.0	8.6	8.1	8.2	9.2	8.8	8.2	7.6	8.0	7.2	6.5	6.2	5.7	9.2	4.4	6.6
6	5.3	5.1	5.5	5.3	5.0	5.4	5.9	7.4	9.1	10.9	12.6	11.8	11.9	11.3	10.8	10.4	9.7	9.3	9.2	7.3	6.1	5.0	4.5	4.7	12.6	4.5	7.9
7	3.6	4.5	3.9	4.4	4.9	6.1	7.0	8.2	10.0	11.2	10.8	10.2	10.4	9.6	10.0	8.7	7.7	7.4	6.8	6.7	6.1	5.0	4.1	3.8	11.2	3.6	7.1
8	3.8	3.6	3.7	4.3	4.2	4.8	5.2	5.8	6.0	6.9	8.1	9.1	9.9	8.7	8.0	8.2	8.9	7.4	7.0	6.5	5.5	4.6	3.8	2.5	9.9	2.5	6.1
9	1.3	0.6	1.8	0.3	-0.2	0.2	2.2	4.4	5.8	7.3	8.4	9.3	9.4	9.0	9.3	9.9	9.8	9.7	10.2	10.3	9.5	8.6	8.4	7.4	10.3	-0.2	6.4
10	8.0	7.8	7.0	7.4	7.6	8.1	8.4	9.7	10.6	12.3	14.5	16.4	17.4	18.3	19.4	20.1	20.3	20.0	20.3	17.9	14.5	9.8	8.0	7.1	20.3	7.0	12.9
11	6.2	5.8	5.2	4.9	4.8	4.8	5.0	5.8	6.9	7.8	8.8	10.5	12.2	13.1	13.1	12.3	10.8	9.6	8.9	7.6	6.1	5.5	5.2	4.9	13.1	4.8	7.7
12	4.6	4.6	4.7	4.6	4.6	4.4	4.6	5.1	5.5	5.8	5.7	5.9	6.4	6.6	7.0	7.9	8.6	9.0	8.9	8.8	8.3	6.7	5.1	3.3	9.0	3.3	6.1
13	2.1	0.1	0.0	1.6	3.1	4.6	6.4	7.7	8.5	8.9	9.5	9.9	9.9	10.2	10.6	11.7	10.2	9.9	10.5	10.3	10.0	9.3	8.5	8.1	11.7	0.0	7.6
14	7.5	7.5	7.5	7.1	7.1	7.5	8.3	9.4	10.8	11.6	12.8	13.5	13.6	13.7	12.6	12.7	12.7	13.2	13.6	13.6	13.2	12.6	12.6	10.8	13.7	7.1	11.1
15	10.8	10.0	9.7	9.4	10.3	10.0	10.7	11.8	13.0	15.0	16.6	17.9	18.8	19.7	20.2	20.5	20.9	20.7	20.1	19.3	18.0	16.2	14.5	12.9	20.9	9.4	15.3
16	10.0	9.4	8.2	8.2	9.2	9.7	10.5	11.8	13.2	14.6	15.4	16.0	16.2	16.5	16.3	16.3	15.8	15.2	13.9	12.8	11.9	10.9	9.8	8.1	16.5	8.1	12.5
17	7.0	6.0	5.1	4.7	4.6	4.4	4.7	4.9	5.4	6.1	6.8	7.0	7.7	8.7	9.5	10.8	11.3	9.8	9.3	9.8	9.8	9.4	8.9	8.5	11.3	4.4	7.5
18	8.0	7.8	8.0	6.4	6.1	5.6	7.5	8.8	9.8	10.3	10.5	10.9	12.0	13.3	14.3	14.4	13.9	13.9	12.3	12.0	10.5	9.7	8.0	8.0	14.4	5.6	10.1
19	7.4	7.7	7.1	8.4	8.5	9.3	10.1	11.5	13.3	14.5	16.2	17.8	18.8	19.8	20.8	21.4	21.8	22.0	21.8	21.3	20.2	18.7	17.4	16.5	22.0	7.1	15.5
20	15.3	14.7	12.6	12.2	12.3	12.9	14.0	15.4	16.8	18.6	20.2	21.5	22.3	22.8	23.3	23.4	23.1	22.8	21.9	20.3	19.0	16.9	15.3	14.6	23.4	12.2	18.0
21	14.3	13.7	12.7	12.7	12.3	12.0	12.2	13.1	14.1	15.3	16.1	16.3	17.2	17.5	17.6	18.1	18.4	18.1	16.9	15.7	13.5	12.0	10.2	8.1	18.4	8.1	14.5
22	7.1	6.6	6.1	5.6	5.2	5.2	5.4	5.9	6.2	6.7	7.0	7.1	7.2	7.7	8.2	8.1	8.2	8.2	8.0	7.9	7.6	7.4	7.2	7.1	8.2	5.2	6.9
23	6.9	6.8	7.0	6.9	6.8	6.7	6.8	6.9	7.1	7.1	7.1	7.2	7.3	7.2	7.4	7.4	7.1	6.9	6.8	6.7	6.8	7.0	6.6	6.4	7.4	6.4	7.0
24	6.3	6.3	6.3	6.3	6.5	6.8	7.2	7.6	7.7	8.1	8.5	8.3	8.2	8.8	8.3	8.4	8.2	8.5	8.3	7.9	7.6	7.2	7.0	6.8	8.8	6.3	7.5
25	6.6	6.4	6.4	6.4	6.2	6.5	6.9	7.4	8.3	9.0	8.9	8.7	8.7	9.2	9.9	9.5	9.7	9.5	9.0	9.1	8.1	6.7	5.8	5.3	9.9	5.3	7.8
26	5.2	4.2	4.1	5.9	5.6	6.6	7.6	8.7	9.6	10.6	11.0	11.3	12.1	13.0	13.8	14.3	14.3	14.6	14.8	14.3	13.2	11.1	7.3	4.5	14.8	4.1	9.9
27	4.6	5.3	4.9	4.8	5.2	6.9	9.5	11.2	12.7	13.5	14.4	14.5	15.5	16.1	16.2	17.3	17.2	17.2	16.5	15.3	13.3	11.4	10.5	9.6	17.3	4.6	11.8
28	8.9	8.4	8.2	7.8	7.6	7.6	7.8	8.0	8.4	9.3	9.8	9.5	9.8	10.8	11.8	11.6	11.4	11.7	12.5	12.3	11.6	10.7	9.2	9.2	12.5	7.6	9.7
29	8.5	7.0	8.2	7.5	6.0	5.1	8.5	10.2	11.4	12.7	13.3	14.0	14.0	14.7	14.4	14.7	14.2	14.0	13.5	12.4	11.5	10.0	7.7	4.5	14.7	4.5	10.7
30	6.1	7.1	7.8	8.7	8.6	8.7	8.6	8.2	8.2	8.3	8.5	9.8	10.8	11.2	12.3	12.8	12.7	12.5	12.5	11.9	9.9	9.7	7.4	5.0	12.8	5.0	9.5
Max.	**15.3**	**14.7**	**12.7**	**12.7**	**12.3**	**12.9**	**14.0**	**15.4**	**16.8**	**18.6**	**20.2**	**21.5**	**22.3**	**22.8**	**23.3**	**23.4**	**23.1**	**22.8**	**21.9**	**21.3**	**20.2**	**18.7**	**17.4**	**16.5**	**23.4**		
Min.	**1.3**	**0.1**	**0.0**	**0.3**	**-0.2**	**0.2**	**2.2**	**4.4**	**5.2**	**5.8**	**5.7**	**5.9**	**6.4**	**6.6**	**7.0**	**7.4**	**7.1**	**6.9**	**6.5**	**6.4**	**5.5**	**4.6**	**3.8**	**2.5**		**-0.2**	
Avg.	**6.7**	**6.4**	**6.2**	**6.2**	**6.2**	**6.6**	**7.3**	**8.2**	**9.1**	**10.0**	**10.7**	**11.2**	**11.8**	**12.2**	**12.5**	**12.7**	**12.6**	**12.3**	**11.9**	**11.3**	**10.4**	**9.2**	**8.0**	**7.2**			**9.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.6	7.4	5.6	4.7	6.7	8.0	9.4	10.4	11.5	13.2	13.3	13.7	14.5	14.7	14.9	15.0	14.8	14.8	14.5	14.0	12.9	11.1	10.4	10.1	15.0	4.7	11.3
2	9.8	9.5	8.4	7.8	6.6	7.1	8.1	10.8	12.6	14.2	15.0	15.6	16.0	16.1	16.9	16.5	17.1	17.6	17.6	17.3	16.5	15.5	14.2	14.0	17.6	6.6	13.4
3	12.9	12.6	11.9	11.4	10.9	11.0	11.3	11.8	12.6	13.2	14.4	15.1	15.8	16.4	17.1	17.6	17.1	16.2	13.8	12.9	12.4	11.5	11.2	10.7	17.6	10.7	13.4
4	9.9	9.3	9.0	8.9	8.8	8.9	9.3	9.9	10.6	11.2	12.0	12.6	12.3	12.5	13.5	13.9	12.9	12.1	12.1	12.6	12.5	11.6	10.5	10.0	13.9	8.8	11.1
5	9.4	9.0	8.3	8.2	5.8	7.2	9.2	11.0	12.3	13.5	14.2	15.1	15.0	15.2	15.4	14.9	13.7	13.7	10.5	9.5	9.3	9.0	8.9	9.0	15.4	5.8	11.1
6	9.4	9.4	9.3	9.2	9.1	9.4	9.5	9.8	9.9	10.1	10.2	10.6	11.6	12.1	13.3	14.0	14.6	14.8	14.8	14.8	14.2	12.3	10.0	7.3	14.8	7.3	11.2
7	5.8	4.2	2.9	2.5	3.1	3.5	7.8	11.3	14.1	15.3	16.1	16.2	16.4	16.8	17.4	17.5	17.9	17.6	15.4	14.4	13.4	12.2	11.4	10.6	17.9	2.5	11.8
8	10.0	10.1	9.8	9.7	9.8	9.9	10.0	10.2	10.7	10.9	11.0	11.3	11.8	12.3	12.5	12.6	12.6	13.2	12.6	12.2	10.7	9.6	9.0	8.6	13.2	8.6	10.9
9	7.5	6.8	6.4	7.0	7.4	7.8	8.3	9.1	9.7	10.5	11.7	12.5	13.7	13.8	15.4	15.0	14.1	14.8	14.0	14.0	13.2	11.6	9.0	8.1	15.4	6.4	10.9
10	6.6	7.6	7.9	6.7	5.7	7.9	10.0	12.2	13.9	15.1	15.2	16.1	15.3	14.8	15.7	15.9	14.1	13.1	12.2	11.5	11.0	10.4	9.8	9.6	16.1	5.7	11.6
11	9.4	9.3	9.7	9.5	9.5	9.2	9.2	9.9	11.4	12.5	14.0	14.8	15.6	15.9	16.0	16.1	16.3	16.1	15.5	14.9	13.7	11.1	10.8	10.1	16.3	9.2	12.5
12	9.5	9.2	8.5	7.7	8.4	9.8	10.7	12.2	13.4	13.9	14.1	14.8	15.8	15.2	12.9	13.2	11.2	11.0	11.1	11.1	11.0	10.4	10.2	9.9	15.8	7.7	11.5
13	9.4	9.0	8.7	8.5	8.6	8.6	8.6	8.6	8.8	9.2	9.4	9.5	9.8	9.9	10.3	10.5	10.5	11.0	10.8	10.6	10.6	10.3	9.8	9.3	11.0	8.5	9.6
14	9.1	9.0	8.7	8.3	8.7	8.7	8.7	9.2	9.6	10.4	11.5	12.1	12.4	12.8	12.0	11.7	11.8	11.6	11.2	10.8	10.7	10.4	10.0	9.4	12.8	8.3	10.4
15	9.4	9.2	9.3	9.0	9.1	9.1	9.3	9.9	10.3	10.8	12.2	12.8	13.3	14.0	14.1	13.9	13.8	13.8	13.3	12.8	11.9	11.2	10.7	9.6	14.1	9.0	11.4
16	9.0	8.9	8.7	8.2	7.9	6.5	8.5	9.8	10.5	11.8	13.3	14.7	15.3	15.7	15.8	16.3	16.7	17.1	17.3	17.0	15.6	14.0	11.6	11.0	17.3	6.5	12.5
17	9.5	9.2	9.0	7.9	8.1	8.4	10.7	12.3	14.1	15.6	16.5	17.4	17.6	18.2	18.9	19.3	19.2	16.4	14.4	13.0	12.0	10.6	10.2	10.3	19.3	7.9	13.3
18	10.2	10.0	9.9	9.7	9.7	9.7	10.0	10.8	11.4	12.1	12.6	13.8	14.8	14.8	12.5	13.3	12.7	11.8	11.8	12.2	12.3	11.0	10.5	9.6	14.8	9.6	11.5
19	9.5	8.8	9.6	9.9	8.9	8.7	8.8	10.0	11.8	12.8	13.7	14.8	15.9	15.7	15.6	15.3	15.7	15.2	15.4	15.2	14.7	13.8	12.1	11.5	15.9	8.7	12.6
20	11.4	10.9	10.5	10.6	10.3	10.9	12.9	13.4	14.2	15.4	15.6	15.7	16.9	17.6	17.9	18.3	17.7	17.6	16.8	16.4	14.6	13.3	12.3	11.1	18.3	10.3	14.3
21	10.3	10.0	9.7	9.1	8.7	8.3	8.1	8.2	8.3	8.5	9.4	9.5	9.6	10.3	10.6	10.7	10.6	9.6	9.2	8.8	8.3	7.9	7.5	7.5	10.7	7.5	9.1
22	7.5	7.5	7.5	7.4	7.3	7.3	7.3	7.5	7.6	7.6	7.8	8.0	8.1	8.4	8.5	8.6	8.9	8.5	8.3	8.0	8.0	7.9	7.8	7.8	8.9	7.3	7.9
23	7.9	7.9	7.5	7.5	7.4	7.4	7.7	8.1	8.5	8.9	9.1	9.5	9.5	9.7	9.7	9.6	9.4	9.6	9.4	9.4	8.8	8.8	8.8	8.6	9.7	7.4	8.7
24	8.6	9.0	9.3	9.2	9.0	9.0	9.2	9.4	9.8	10.7	10.9	10.8	11.0	11.3	11.5	11.9	12.5	11.9	12.0	11.9	11.4	11.2	10.6	10.3	12.5	8.6	10.5
25	10.5	11.1	12.1	12.1	11.9	12.1	12.4	13.3	14.5	15.4	15.4	16.3	16.6	17.1	16.8	16.4	15.9	15.6	15.4	15.7	15.2	14.3	13.0	10.7	17.1	10.5	14.1
26	10.0	9.4	8.2	7.3	7.3	9.0	11.1	12.9	13.5	14.2	16.4	18.3	19.2	20.3	19.7	18.4	19.9	20.4	19.6	18.9	18.0	15.7	14.6	14.0	20.4	7.3	14.8
27	12.5	12.1	11.9	11.7	11.6	11.1	13.9	15.6	15.7	18.0	19.3	19.3	20.4	21.1	22.0	22.6	23.2	21.8	21.2	19.7	17.8	16.3	16.0	13.2	23.2	11.1	17.0
28	12.0	12.3	11.5	10.9	10.2	10.1	10.5	10.6	10.7	11.4	12.0	14.1	16.2	17.4	18.2	18.3	18.0	18.0	17.7	16.0	13.9	12.5	11.7	11.2	18.3	10.1	13.6
29	11.1	11.0	10.7	9.5	10.0	9.9	11.5	11.7	12.5	13.5	15.0	16.5	17.5	17.6	18.8	19.5	19.5	19.1	18.7	17.5	17.3	15.8	14.3	13.8	19.5	9.5	14.7
30	14.1	13.5	12.9	11.7	11.4	11.2	11.4	11.8	12.2	11.8	11.6	12.0	12.9	13.4	14.8	15.2	15.4	14.9	14.0	13.5	12.8	12.2	11.3	10.8	15.4	10.8	12.8
31	10.5	10.2	9.9	9.8	9.2	9.0	9.0	9.4	9.9	10.4	11.1	11.6	12.4	13.5	14.2	14.4	14.2	13.4	12.0	11.4	10.8	10.1	10.0	9.9	14.4	9.0	11.1
Max.	**14.1**	**13.5**	**12.9**	**12.1**	**11.9**	**12.1**	**13.9**	**15.6**	**15.7**	**18.0**	**19.3**	**19.3**	**20.4**	**21.1**	**22.0**	**22.6**	**23.2**	**21.8**	**21.2**	**19.7**	**18.0**	**16.3**	**16.0**	**14.0**	**23.2**		
Min.	**5.6**	**4.2**	**2.9**	**2.5**	**3.1**	**3.5**	**7.3**	**7.5**	**7.6**	**7.6**	**7.8**	**8.0**	**8.1**	**8.4**	**8.5**	**8.6**	**8.9**	**8.5**	**8.3**	**8.0**	**8.0**	**7.9**	**7.5**	**7.3**		**2.5**	
Avg.	**9.6**	**9.5**	**9.1**	**8.8**	**8.6**	**8.9**	**9.8**	**10.7**	**11.5**	**12.3**	**13.0**	**13.7**	**14.3**	**14.7**	**14.9**	**15.0**	**14.9**	**14.6**	**13.9**	**13.5**	**12.8**	**11.7**	**10.9**	**10.2**			**12.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.8	9.7	9.8	9.8	9.8	9.6	9.5	9.4	9.6	9.8	10.4	11.0	10.5	10.8	10.9	11.0	10.6	10.1	10.1	10.0	9.8	9.5	9.4	9.5	11.0	9.4	10.0
2	9.4	9.5	9.4	9.4	9.4	9.5	9.6	9.4	9.7	10.0	9.8	9.8	9.8	10.1	10.2	10.3	10.0	10.2	10.3	10.6	10.5	10.1	10.1	10.0	10.6	9.4	9.9
3	9.9	9.8	9.9	9.7	9.6	9.6	9.7	10.0	10.3	10.7	10.9	11.1	11.7	11.7	12.4	12.5	12.2	11.8	11.1	10.5	10.2	10.0	9.8	9.9	12.5	9.6	10.6
4	9.9	9.8	9.9	9.8	9.7	9.8	9.8	9.9	10.0	10.0	10.2	10.3	10.6	10.6	10.7	10.7	10.9	11.0	11.0	10.9	10.8	10.7	10.7	10.9	11.0	9.7	10.4
5	10.9	10.9	10.9	10.3	10.2	10.2	10.4	10.9	11.3	11.0	10.9	11.0	10.4	10.1	10.0	10.4	10.5	10.7	11.0	11.2	11.1	10.7	10.2	9.6	11.3	9.6	10.6
6	8.9	8.4	8.1	7.9	8.4	9.5	10.4	11.0	11.4	12.5	12.5	13.2	14.1	14.8	15.0	13.6	13.2	14.0	13.4	13.3	12.0	10.8	10.0	9.3	15.0	7.9	11.5
7	9.4	9.0	9.3	9.8	9.1	8.2	9.1	10.4	11.8	12.9	13.7	13.9	14.6	15.8	16.6	17.0	17.3	17.0	16.3	15.6	14.4	13.3	12.3	7.9	17.3	7.9	12.7
8	8.1	7.9	7.6	8.8	8.9	9.1	10.0	10.3	11.0	12.8	15.3	16.0	17.1	17.2	18.0	18.2	18.3	18.4	18.0	16.7	15.1	13.7	13.5	12.4	18.4	7.6	13.4
9	11.1	11.1	10.8	11.0	10.2	9.6	10.8	13.4	14.1	15.4	16.7	17.7	18.4	19.5	18.8	19.3	19.1	18.8	18.8	17.9	16.0	12.6	8.5	8.8	19.5	8.5	14.5
10	10.6	7.4	6.0	5.0	5.8	5.8	7.6	11.9	15.2	17.4	18.6	19.5	20.0	20.7	21.2	21.3	21.4	21.1	20.6	19.2	16.8	13.4	9.9	9.7	21.4	5.0	14.4
11	9.6	7.9	8.2	8.2	6.8	6.2	8.7	11.9	14.3	15.4	16.2	17.6	18.3	18.6	18.2	18.8	18.9	18.2	17.8	17.1	16.4	15.6	15.4	14.7	18.9	6.2	14.1
12	14.8	14.4	14.6	14.3	13.9	13.8	13.9	13.6	13.8	14.1	14.6	15.7	17.4	19.6	20.2	21.8	22.9	23.5	23.4	22.2	20.4	17.4	15.3	13.7	23.5	13.6	17.1
13	11.4	10.7	10.0	9.9	10.1	10.2	11.4	14.9	17.3	18.6	19.1	20.5	21.0	21.9	21.6	21.9	22.3	22.1	20.6	19.8	18.2	16.4	14.4	13.2	22.3	9.9	16.6
14	12.0	10.1	9.0	8.2	7.9	8.0	8.4	8.8	8.9	8.7	8.8	9.1	9.4	10.1	10.4	10.5	10.3	10.3	10.0	10.3	10.0	9.1	8.9	8.8	12.0	7.9	9.4
15	8.8	8.9	9.0	9.1	9.5	9.8	10.0	10.1	10.5	11.1	12.0	12.0	12.2	12.9	13.0	12.7	12.7	12.3	12.0	12.1	11.5	11.0	10.3	9.6	13.0	8.8	11.0
16	9.3	9.4	9.1	7.4	6.4	7.2	8.0	8.4	10.8	12.2	12.1	14.5	15.9	17.1	17.5	18.4	18.1	16.3	16.0	14.8	12.8	12.2	11.9	11.4	18.4	6.4	12.4
17	10.6	7.7	8.7	10.0	10.1	9.8	9.9	10.2	11.1	12.5	12.8	12.9	13.1	13.9	13.6	13.7	13.1	13.0	12.1	11.5	10.8	10.7	10.2	9.8	13.9	7.7	11.3
18	10.3	10.3	9.9	9.5	9.5	9.6	9.6	9.4	9.8	10.1	10.1	10.0	10.1	10.7	11.4	12.0	12.3	12.0	11.7	11.7	11.7	11.6	11.8	11.8	12.3	9.4	10.7
19	11.8	11.8	11.5	11.5	11.4	11.3	11.8	11.9	12.5	12.7	13.2	13.8	13.6	13.5	14.1	14.1	13.3	12.9	12.0	11.3	11.0	10.9	10.6	10.6	14.1	10.6	12.2
20	10.2	9.7	9.7	9.9	9.9	10.0	10.0	9.7	9.7	10.3	10.6	11.3	11.6	12.0	12.4	12.9	13.0	12.9	12.2	11.6	10.2	9.6	9.5	9.7	13.0	9.5	10.8
21	9.7	10.0	9.4	9.2	9.2	9.3	9.2	9.2	9.3	9.6	9.7	10.0	9.9	10.3	11.0	11.4	11.3	11.6	11.4	10.9	10.3	10.0	9.7	9.2	11.6	9.2	10.0
22	9.5	9.5	9.7	9.5	9.2	9.1	9.2	9.3	9.4	9.7	10.3	10.6	10.7	10.5	10.2	10.4	10.4	10.3	10.1	9.7	9.5	9.4	9.4	9.4	10.7	9.1	9.8
23	9.4	9.1	8.9	8.8	8.6	8.9	8.7	8.6	9.1	10.1	11.3	11.9	12.5	13.0	13.3	13.3	13.3	13.1	12.9	12.4	12.1	12.1	12.2	12.3	13.3	8.6	11.1
24	12.4	12.1	11.9	11.7	11.2	10.6	10.7	11.1	11.5	12.3	13.0	13.9	15.3	15.5	14.6	14.3	15.4	15.1	13.0	12.5	10.4	10.3	10.4	10.8	15.5	10.3	12.5
25	11.1	11.0	11.0	10.6	10.1	9.9	9.5	9.5	9.6	10.0	10.6	11.1	12.4	13.8	15.3	16.1	16.7	16.2	15.1	13.4	10.5	8.1	9.1	8.8	16.7	8.1	11.6
26	5.1	3.9	6.1	8.0	6.9	7.2	7.3	9.1	10.8	11.9	13.2	13.6	13.8	14.0	15.0	14.7	14.5	14.3	13.5	12.4	11.5	11.2	10.9	11.3	15.0	3.9	10.8
27	10.4	10.9	9.3	8.7	7.5	6.8	7.2	9.9	12.8	13.8	15.2	16.2	16.1	16.2	16.5	16.8	16.7	16.4	16.1	15.4	10.3	8.9	7.5	6.2	16.8	6.2	12.2
28	5.3	7.2	5.8	6.4	5.3	4.5	5.1	7.2	10.6	14.2	15.5	16.3	17.1	18.0	18.5	18.5	18.6	19.0	17.4	15.6	14.4	13.2	11.4	12.3	19.0	4.5	12.4
29	11.5	11.3	12.1	11.7	11.3	11.1	11.1	11.1	11.3	11.5	12.5	13.4	14.7	16.1	16.3	16.6	16.6	16.3	15.7	14.4	13.5	12.8	12.1	11.4	16.6	11.1	13.2
30	10.4	10.1	10.0	9.2	9.0	9.1	9.2	9.4	10.7	12.6	13.2	13.5	13.9	14.3	15.0	15.5	15.6	15.9	15.5	14.1	10.7	9.9	10.0	9.2	15.9	9.0	11.9
31	8.6	8.2	7.4	6.8	6.2	6.1	6.4	7.4	9.0	11.1	11.5	13.3	15.2	15.3	15.7	14.6	13.9	14.1	13.5	10.6	9.9	8.8	8.5	9.2	15.7	6.1	10.5
Max.	**14.8**	**14.4**	**14.6**	**14.3**	**13.9**	**13.8**	**13.9**	**14.9**	**17.3**	**18.6**	**19.1**	**20.5**	**21.0**	**21.9**	**21.6**	**21.9**	**22.9**	**23.5**	**23.4**	**22.2**	**20.4**	**17.4**	**15.4**	**14.7**	**23.5**		
Min.	**5.1**	**3.9**	**5.8**	**5.0**	**5.3**	**4.5**	**5.1**	**7.2**	**8.9**	**8.7**	**8.8**	**9.1**	**9.4**	**10.1**	**10.0**	**10.3**	**10.0**	**10.1**	**10.0**	**9.7**	**9.5**	**8.1**	**7.5**	**6.2**		**3.9**	
Avg.	**10.0**	**9.6**	**9.4**	**9.4**	**9.1**	**9.0**	**9.4**	**10.2**	**11.2**	**12.1**	**12.7**	**13.4**	**13.9**	**14.5**	**14.8**	**14.9**	**15.0**	**14.8**	**14.3**	**13.5**	**12.3**	**11.4**	**10.8**	**10.4**			**11.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Temperature at 2 meters (deg. C)

September 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.8	7.5	9.5	9.5	9.0	9.0	8.7	8.7	8.9	9.1	9.4	9.8	10.7	11.3	12.3	12.9	13.5	13.3	11.8	10.0	8.1	7.8	7.0	7.8	13.5	7.0	9.8
2	8.7	8.7	8.8	8.7	8.5	8.6	8.7	8.9	9.5	10.3	11.0	11.6	12.0	12.9	13.2	12.6	12.0	11.4	10.9	10.2	9.7	9.4	9.2	9.0	13.2	8.5	10.2
3	9.2	9.0	9.1	9.2	9.2	9.2	9.2	9.1	8.9	9.2	9.5	9.5	9.5	9.2	9.2	8.9	8.7	8.5	8.4	8.4	8.4	8.3	8.4	8.2	9.5	8.2	8.9
4	8.5	8.7	8.9	9.0	8.9	8.1	7.0	7.6	9.6	11.3	11.7	12.5	13.5	14.7	14.6	14.9	13.5	13.4	13.1	11.5	11.4	11.2	10.9	10.2	14.9	7.0	11.0
5	9.0	9.4	10.1	9.5	9.5	8.4	7.4	8.7	9.3	10.9	12.3	12.3	14.0	14.5	15.1	13.2	9.6	8.7	8.8	8.9	9.0	8.5	7.7	6.5	15.1	6.5	10.1
6	7.6	8.3	6.6	6.9	7.1	6.6	7.2	7.7	8.3	9.1	9.4	9.8	10.2	10.9	10.8	11.1	11.1	10.7	10.1	9.6	8.1	7.7	7.5	7.7	11.1	6.6	8.7
7	8.1	8.3	8.4	8.5	8.8	8.9	8.9	8.9	9.2	9.3	13.9	9.7													13.9	8.1	9.2
Max.	**9.2**	**9.4**	**10.1**	**9.5**	**9.5**	**9.2**	**9.2**	**9.1**	**9.6**	**11.3**	**13.9**	**12.5**	**14.0**	**14.7**	**15.1**	**14.9**	**13.5**	**13.4**	**13.1**	**11.5**	**11.4**	**11.2**	**10.9**	**10.2**	**15.1**		
Min.	**7.6**	**7.5**	**6.6**	**6.9**	**7.1**	**6.6**	**7.0**	**7.6**	**8.3**	**9.1**	**9.4**	**9.5**	**9.5**	**9.2**	**9.2**	**8.9**	**8.7**	**8.5**	**8.4**	**8.4**	**8.1**	**7.7**	**7.0**	**6.5**		**6.5**	
Avg.	**8.6**	**8.5**	**8.8**	**8.7**	**8.7**	**8.4**	**8.1**	**8.5**	**9.1**	**9.9**	**11.0**	**10.7**	**11.6**	**12.3**	**12.5**	**12.3**	**11.4**	**11.0**	**10.5**	**9.8**	**9.1**	**8.8**	**8.4**	**8.2**			**9.7**

Total Hours in Month 720 **Hours Data Available** 156 **Data Recovery** 21.7%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
14																		10.4	9.9	9.4	8.1	7.4	7.1	6.6	10.4	6.6	8.4
15	6.3	6.3	6.1	5.5	5.5	5.2	4.9	4.7	3.9	5.6	7.0	8.4	8.7	9.9	10.7	11.2	10.5	9.5	10.4	9.6	8.2	6.3	6.8	7.4	11.2	3.9	7.4
16	7.1	6.6	6.4	6.4	6.0	6.2	6.3	5.4	5.1	5.5	7.7	9.6	10.0	10.2	11.3	11.6	11.6	10.8	10.7	9.7	7.9	7.8	7.4	6.9	11.6	5.1	8.1
17	6.3	5.6	4.8	5.1	5.5	5.5	5.4	5.5	5.7	6.3	6.7	7.2	7.4	7.7	8.5	9.1	9.2	9.5	9.8	9.0	7.8	6.6	7.2	8.4	9.8	4.8	7.1
18	8.7	8.4	7.4	7.4	7.6	7.7	8.0	8.7	9.0	8.9	9.3	9.7	10.2	10.0	9.9	9.5	9.8	9.7	9.5	9.4	9.1	8.9	9.0	9.5	10.2	7.4	9.0
19	9.7	9.8	9.8	9.6	8.9	8.5	8.6	8.7	8.4	8.7	8.8	9.1	9.0	9.2	9.1	9.5	8.9	8.1	8.0	7.8	7.4	7.4	7.4	7.2	9.8	7.2	8.6
20	7.1	7.1	7.1	7.0	7.1	7.1	7.1	7.0	7.0	7.0	6.9	7.2	7.3	7.7	8.1	8.5	9.0	9.7	8.8	8.0	7.4	8.1	7.4	6.6	9.7	6.6	7.6
21	6.8	5.9	4.7	5.1	5.2	6.8	7.3	7.1	7.6	7.8	8.7	9.4	10.0	10.0	10.3	11.0	10.8	11.6	10.7	9.8	8.2	5.9	3.7	4.0	11.6	3.7	7.8
22	3.3	2.9	3.4	3.2	2.7	3.2	3.3	2.9	4.3	5.1	6.3	8.1	8.6	9.5	9.9	9.5	9.4	9.0	8.0	7.0	6.7	6.5	6.3	6.2	9.9	2.7	6.1
23	6.2	6.3	6.0	6.1	6.2	6.4	6.3	6.1	6.2	7.2	7.1	7.6	8.0	8.4	8.5	8.2	7.6	7.1	6.9	6.7	6.7	6.6	6.7	6.7	8.5	6.0	6.9
24	6.8	6.3	6.0	6.3	6.2	5.6	5.1	5.4	5.5	5.7	6.1	6.8	7.4	7.6	7.9	8.2	6.4	7.5	5.5	5.3	5.4	5.5	5.0	4.6	8.2	4.6	6.2
25	4.0	3.9	4.1	4.2	4.4	5.2	5.5	5.6	5.5	5.4	5.8	6.4	6.9	7.3	6.9	7.1	6.8	6.5	6.4	5.8	5.8	5.8	5.6	5.3	7.3	3.9	5.7
26	5.1	4.7	4.4	4.1	3.9	3.7	3.6	3.6	3.4	3.3	4.3	5.8	5.9	6.1	6.4	6.5	7.0	7.0	7.3	6.9	5.7	5.2	4.9	5.3	7.3	3.3	5.2
27	5.5	5.4	5.3	4.7	3.6	3.4	2.9	2.2	1.7	2.9	3.3	4.4	5.3	5.6	6.5	6.4	6.0	6.5	6.4	6.4	6.4	6.3	5.9	5.6	6.5	1.7	4.9
28	5.6	5.3	4.6	4.0	3.8	3.8	3.8	4.0	4.0	4.1	4.3	5.0	5.2	5.3	5.4	5.6	6.0	6.4	6.2	5.6	5.4	5.0	4.7	3.9	6.4	3.8	4.9
29	4.2	4.4	3.7	3.0	2.6	3.5	2.8	2.9	1.6	2.0	4.8	5.7	6.9	7.1	7.6	7.2	6.9	6.6	6.4	6.0	5.9	6.0	5.7	5.2	7.6	1.6	4.9
30	4.9	4.4	3.5	3.2	3.6	3.7	3.8	3.8	3.7	3.8	4.0	5.5	5.7	6.0	5.6	5.9	5.6	5.8	5.2	4.6	4.3	4.7	4.7	4.6	6.0	3.2	4.6
Max.	**9.7**	**9.8**	**9.8**	**9.6**	**8.9**	**8.5**	**8.6**	**8.7**	**9.0**	**8.9**	**9.3**	**9.7**	**10.2**	**10.2**	**11.3**	**11.6**	**11.6**	**11.6**	**10.7**	**9.8**	**9.1**	**8.9**	**9.0**	**9.5**	**11.6**		
Min.	**3.3**	**2.9**	**3.4**	**3.0**	**2.6**	**3.2**	**2.8**	**2.2**	**1.6**	**2.0**	**3.3**	**4.4**	**5.2**	**5.3**	**5.4**	**5.6**	**5.6**	**5.8**	**5.2**	**4.6**	**4.3**	**4.7**	**3.7**	**3.9**		**1.6**	
Avg.	**6.1**	**5.8**	**5.5**	**5.3**	**5.2**	**5.3**	**5.3**	**5.2**	**5.2**	**5.6**	**6.3**	**7.2**	**7.6**	**8.0**	**8.3**	**8.4**	**8.2**	**8.3**	**8.0**	**7.5**	**6.8**	**6.5**	**6.2**	**6.1**			**6.7**

Total Hours in Month 720 **Hours Data Available** 391 **Data Recovery** 54.3%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	4.3	3.9	3.5	3.3	3.3	3.3	3.2	2.7	3.2	4.5	5.5	6.2	6.5	6.7	7.3	7.3	6.9	5.5	5.6	4.9	4.6	4.2	4.0	7.3	2.7	4.8
2	3.7	3.5	3.0	3.3	3.4	3.1	3.0	3.3	3.2	3.0	3.1	3.2	4.1	4.9	5.1	5.7	6.1	6.2	5.5	4.5	4.2	3.7	3.2	2.5	6.2	2.5	3.9
3	1.8	1.8	1.9	1.9	1.8	1.8	2.0	2.0	1.8	2.0	2.7	4.0	4.9	5.6	5.8	5.6	5.3	5.0	4.7	3.8	2.4	-0.3	-0.8	-1.0	5.8	-1.0	2.8
4	-0.2	-0.2	-0.7	0.1	1.5	1.8	2.1	2.3	2.8	2.7	2.6	2.6	2.8	3.1	3.2	3.3	3.3	3.0	2.2	2.1	1.9	1.8	2.4	2.4	3.3	-0.7	2.0
5	2.1	2.1	1.8	2.0	2.2	2.3	2.0	1.6	1.4	2.0	2.5	2.7	2.9	3.4	4.5	4.9	4.6	4.4	3.3	2.8	2.2	1.8	1.2	0.9	4.9	0.9	2.6
6	0.4	-0.1	-0.3	-0.5	-0.7	-0.7	-0.8	-1.1	-1.5	-1.9	-2.0	-1.6	-0.7	0.0	0.5	0.6	0.0	0.2	-0.5	-1.2	-1.6	-1.6	-2.6	-2.7	0.6	-2.7	-0.9
7	-3.2	-3.7	-4.3	-4.8	-5.2	-5.2	-5.1	-4.7	-4.5	-4.5	-4.2	-3.3	-2.3	-1.6	-2.0	-1.5	-1.4	-1.3	-2.2	-3.4	-4.2	-4.7	-5.1	-5.4	-1.3	-5.4	-3.7
8	-5.3	-5.2	-5.2	-5.5	-6.0	-6.0	-6.2	-6.6	-7.0	-6.9	-6.5	-5.2	-3.9	-2.9	-2.3	-1.7	-1.4	-1.9	-2.7	-4.0	-4.3	-3.9	-3.5	-5.1	-1.4	-7.0	-4.5
9	-5.4	-4.9	-5.5	-6.3	-6.9	-8.1	-8.4	-7.9	-8.0	-7.5	-5.2	-2.2	0.1	1.5	2.1	2.5	2.8	1.9	0.6	-1.4	-2.5	-1.0	0.4	0.1	2.8	-8.4	-2.9
10	0.2	-0.7	-0.3	0.0	-1.4	0.5	0.1	-0.6	-1.5	-1.7	-0.5	0.6	1.7	1.7	2.0	1.9	1.5	1.7	0.4	-1.7	-2.9	-4.2	-6.3	-6.1	2.0	-6.3	-0.6
11	-5.4	-5.2	-6.2	-6.0	-6.5	-5.7	-5.5	-5.7	-4.7	-3.1	-2.5	-1.2	1.0	1.5	2.1	2.7	2.6	1.9	1.8	1.9	1.9	2.0	2.2	2.2	2.7	-6.5	-1.4
12	2.4	2.6	2.5	2.7	2.8	2.8	2.3	1.6	1.5	0.7	0.7	2.3	3.5	4.2	5.1	5.4	5.7	5.3	5.0	2.1	2.5	1.1	1.0	0.4	5.7	0.4	2.8
13	0.1	0.1	0.3	0.1	-0.4	-0.9	-1.7	-2.3	-2.5	-3.0	-3.2	-3.1	-2.5	-1.8	-0.8	0.0	0.0	-0.9	-2.0	-3.0	-2.7	-2.6	-2.7	-2.7	0.3	-3.2	-1.6
14	-3.2	-3.6	-3.8	-3.9	-4.0	-4.2	-4.5	-4.7	-5.4	-7.0	-5.2	-3.7	-3.0	-2.1	-1.8	-1.8	-1.6	-2.2	-2.9	-2.5	-4.7	-6.1	-7.0	-6.2	-1.6	-7.0	-4.0
15	-6.2	-5.5	-5.5	-4.9	-5.1	-5.9	-6.4	-6.8	-6.6	-5.1	-3.3	-1.6	-0.3	1.5	1.5	1.9	2.2	1.5	0.9	-1.4	-1.0	-0.5	-0.7	-1.1	2.2	-6.8	-2.4
16	-1.9	-3.1	-4.0	-4.2	-4.2	-4.4	-5.6	-5.9	-6.7	-6.5	-5.9	-4.5	-3.8	-3.8	-3.4	-2.8	-2.8	-3.1	-3.9	-4.5	-4.5	-4.8	-5.0	-5.0	-1.9	-6.7	-4.3
17	-5.0	-5.1	-5.1	-5.1	-5.1	-5.3	-5.4	-5.4	-5.4	-5.3		2.3	-4.8	-4.6	-4.0	-3.4	-3.3	-3.5	-3.7	-3.6	-3.6	-3.9	-4.3	-4.1	2.3	-5.4	-4.2
18	-4.1	-4.0	-4.3	-4.5	-4.3	-4.4	-4.3	-4.4	-4.6	-4.4	-4.4	-4.0	-3.9	-3.4	-3.0	-2.9	-3.2	-3.7	-3.8	-3.9	-4.1	-4.2	-4.8	-7.4	-2.9	-7.4	-4.2
19	-8.1	-7.9	-8.0	-7.4	-7.9	-7.8	-7.8	-10.2	-12.0	-12.5	-11.9	-10.3	-7.9	-5.3	-3.9	-3.4	-3.8	-5.2	-5.2	-6.6	-5.9	-4.4	-4.1	-4.5	-3.4	-12.5	-7.2
20	-6.6	-6.6	-7.0	-7.8	-8.3	-9.0	-8.8	-8.7	-7.8	-7.8	-7.0	-5.4	-1.4	-0.4	0.3	0.5	0.8	1.1	1.2	1.4	1.7	1.9	2.0	2.2	2.2	-9.0	-3.3
21	2.6	2.9	3.2	3.2	3.4	3.4	3.1	3.0	3.1	2.9	3.1	2.5	2.5	3.2	3.0	2.6	2.3	1.8	0.1	-0.9	-1.9	-3.3	-3.6	-4.2	3.4	-4.2	1.6
22	-3.6	-4.1	-4.9	-5.6	-7.0	-6.2	-6.7	-7.1	-6.7	-6.5	-6.6	-6.5	-5.7	-4.1	-3.8	-1.4	-0.7	-1.0	-2.7	-3.9	-4.5	-5.1	-6.9	-8.9	-0.7	-8.9	-5.0
23	-10.0	-10.8	-9.6	-9.8	-8.7	-7.9	-6.4	-6.6	-6.3	-6.3	-6.0	-5.8	-4.4	-3.6	-3.1	-2.8	-2.7	-2.6	-3.4	-4.4	-5.4	-6.5	-6.2	-7.5	-2.6	-10.8	-6.1
24	-7.0	-6.2	-5.2	-5.0	-5.4	-5.2	-4.7	-4.7	-4.5	-4.2	-3.7	-3.0	-1.2	0.0	0.5	0.2	0.1	0.2	0.6	0.8	1.0	1.5	1.6	2.0	2.0	-7.0	-2.1
25	2.0	2.3	2.2	2.7	2.6	2.7	1.9	2.2	2.5	2.2	2.1	2.2	2.5	2.6	2.6	2.4	2.0	1.8	1.8	1.8	1.2	1.6	1.4	1.5	2.7	1.2	2.1
26	1.7	2.0	2.1	1.9	1.8	2.1	1.8	2.1	1.9	2.1	2.3	2.5	2.9	3.5	3.8	4.0	4.1	3.7	3.5	3.4	3.5	3.5	3.5	3.3	4.1	1.7	2.8
27	3.4	3.4	3.1	2.8	2.9	2.8	3.0	2.7	1.7	1.4	2.1	2.7	3.4	4.1	3.6	2.8	2.8	3.2	2.8	2.3	1.9	1.3	1.0	0.8	4.1	0.8	2.6
28	1.1	2.1	1.6	0.4	-0.4	-2.4	-2.4	-2.4	-1.1	-0.4	1.2	1.5	1.9	2.5	2.6	2.4	2.3	2.4	2.0	1.7	1.8	1.5	1.7	2.0	2.6	-2.4	1.0
29	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.4	2.7	3.2	3.5	3.6	3.9	3.2	3.3	3.4	3.4	3.7	3.3	3.1	2.4	1.7	1.8	3.9	1.7	2.7
30	2.5	2.7	2.3	1.4	1.5	1.9	2.0	1.3	1.8	2.1	1.7	0.9	0.7	0.4	0.2	0.2	0.1	-0.1	-0.4	-0.5	-0.5	-0.5	-0.4	-0.4	2.7	-0.5	0.9
31	-0.5	-0.6	-0.6	-0.6	-0.8	-1.1	-0.8	-0.2	0.1	0.2	0.3	0.5	0.9	1.1	1.2	1.3	1.3	0.8	0.0	0.6	1.1	1.2	0.4	0.5	1.3	-1.1	0.3
Max.	**4.5**	**4.3**	**3.9**	**3.5**	**3.4**	**3.4**	**3.3**	**3.3**	**3.2**	**3.2**	**4.5**	**5.5**	**6.2**	**6.5**	**6.7**	**7.3**	**7.3**	**6.9**	**5.5**	**5.6**	**4.9**	**4.6**	**4.2**	**4.0**	**7.3**		
Min.	**-10.0**	**-10.8**	**-9.6**	**-9.8**	**-8.7**	**-9.0**	**-8.8**	**-10.2**	**-12.0**	**-12.5**	**-11.9**	**-10.3**	**-7.9**	**-5.3**	**-4.0**	**-3.4**	**-3.8**	**-5.2**	**-5.2**	**-6.6**	**-5.9**	**-6.5**	**-7.0**	**-8.9**		**-12.5**	
Avg.	**-1.5**	**-1.5**	**-1.6**	**-1.7**	**-1.9**	**-1.9**	**-2.0**	**-2.2**	**-2.3**	**-2.2**	**-1.5**	**-0.7**	**0.0**	**0.7**	**1.0**	**1.3**	**1.3**	**1.0**	**0.4**	**-0.3**	**-0.6**	**-0.9**	**-1.2**	**-1.5**			**-0.8**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	1.1	0.9	0.9	1.3	1.4	1.4	1.0	1.2	1.2	1.1	0.9	0.8	0.9	0.9	0.9	0.4	-0.1	0.0	-1.0	-1.2	-1.4	-1.6	-1.8	1.4	-1.8	0.4
2	-2.1	-2.3	-2.2	-2.2	-2.9	-3.8	-5.0	-4.5	-3.4	-2.7	-2.8	-2.5	-2.6	-3.0	-3.4	-3.6	-3.4	-2.7	-2.9	-3.5	-3.3	-3.4	-3.4	-3.4	-2.1	-5.0	-3.1
3	-3.5	-3.6	-3.6	-3.7	-3.6	-3.7	-3.6	-3.8	-4.5	-6.9	-7.1	-5.5	-4.0	-3.0	-2.7	-2.2	-2.4	-3.5	-5.3	-2.8	-2.2	-2.0	-1.6	-1.0	-1.0	-7.1	-3.6
4	-1.0	-1.0	-0.3	0.1	0.3	0.4	0.6	0.8	1.2	1.3	1.8	2.0	1.9	1.9	1.7	1.5	1.6	1.7	1.9	1.4	1.7	2.0	1.9	1.3	2.0	-1.0	1.1
5	1.3	1.2	1.2	1.2	1.0	0.8	0.6	0.6	0.7	0.7	0.8	0.9	1.1	1.1	1.2	1.4	1.5	1.4	1.6	1.7	1.8	1.7	1.8	1.8	1.8	0.6	1.2
6	1.7	1.7	1.7	1.6	1.8	2.0	2.3	2.5	2.3	2.4	2.6	2.5	2.6	2.9	3.4	3.6	3.3	2.9	2.4	2.0	1.8	1.5	1.0	0.4	3.6	0.4	2.2
7	0.5	0.9	1.0	1.2	1.5	1.7	1.6	1.9	2.2	2.0	2.1	2.2	2.5	2.6	1.7	2.1	2.0	1.6	0.7	0.7	0.7	0.6	0.7	0.3	2.6	0.3	1.5
8	0.1	-0.6	-0.6	0.2	0.6	1.1	1.9	2.0	1.9	1.0	1.2	1.8	1.7	1.9	2.8	2.9	3.2	3.2	3.0	3.2	2.7	1.9	1.5	1.6	3.2	-0.6	1.7
9	1.4	0.9	0.9	1.1	1.1	0.9	0.7	0.7	0.6	0.5	0.7	1.0	1.2	1.5	1.8	1.8	1.4	0.5	0.3	0.8	0.9	0.9	-1.4	-1.7	1.8	-1.7	0.8
10	-1.4	-1.1	-1.1	-1.2	-1.3	-2.1	-2.4	-3.0	-3.5	-4.0	-4.4	-3.7	-1.7	-1.0	-0.9	-1.0	-1.0	-1.4	-1.7	-2.2	-2.5	-2.7	-3.0	-3.7	-0.9	-4.4	-2.2
11	-4.1	-4.7	-5.1	-4.7	-4.9	-4.6	-4.9	-5.0	-5.5	-5.9	-5.9	-5.4	-5.0	-4.9	-5.0	-5.2	-5.5	-6.4	-6.7	-7.0	-7.6	-8.2	-8.8	-10.0	-4.1	-10.0	-5.9
12	-10.5	-10.1	-11.1	-9.8	-9.1	-8.8	-8.2	-8.3	-9.2	-10.3	-10.5	-9.2	-7.7	-6.8	-6.1	-5.3	-4.7	-3.8	-3.5	-3.6	-3.4	-2.8	-2.6	-2.3	-2.3	-11.1	-7.0
13	-2.0	-1.7	-1.3	-1.1	-0.8	-0.7	-0.3	-0.6	-0.6	-0.2	0.5	0.8	-0.4	-0.8	-1.0	-1.7	-1.9	-1.6	-0.9	-0.8	-0.8	-0.7	-0.9	-0.7	0.8	-2.0	-0.8
14	-1.1	-1.1	-1.2	-1.1	-1.2	-1.2	-1.6	-2.0	-2.9	-2.9	-3.2	-3.0	-0.9	-0.9	-1.0	-1.0	-1.0	-1.6	-1.8	-2.1	-4.7	-4.4	-6.2	-7.5	-0.9	-7.5	-2.3
15	-7.3	-6.9	-7.5	-6.5	-6.1	-6.7	-6.6	-6.7	-7.8	-8.9	-9.8	-9.8	-9.9	-10.0	-9.9	-10.3	-10.8	-11.2	-10.8	-11.6	-11.5	-11.7	-12.4	-12.2	-6.1	-12.4	-9.3
16	-11.6	-11.5	-11.5	-11.6	-11.6	-11.7	-11.9	-12.2	-12.3	-12.4	-12.4	-12.2	-12.0	-12.1	-11.9	-12.0	-12.0	-11.9	-11.8	-11.8	-12.1	-12.5	-12.6	-13.0	-11.5	-13.0	-12.0
17	-13.4	-13.6	-13.7	-13.5	-13.7	-13.7	-13.8	-13.7	-13.8	-13.8	-14.0	-14.5	-14.0	-13.9	-13.8	-13.7	-14.1	-14.1	-14.8	-15.4	-15.5	-15.2	-15.2	-15.1	-13.4	-15.5	-14.2
18	-15.3	-15.8	-16.4	-15.6	-15.9	-16.5	-16.1	-16.3	-16.5	-16.0	-15.6	-15.3	-14.7	-13.7	-13.3	-13.1	-13.2	-13.8	-14.9	-15.9	-16.2	-16.2	-16.2	-16.3	-13.1	-16.5	-15.4
19	-16.7	-16.1	-16.1	-16.5	-16.5	-16.6	-15.8	-14.7	-13.6	-12.8	-10.2	-6.8	-4.2	-3.4	-2.9	-3.1	-2.9	-2.2	-1.6	-2.0	-1.8	-2.0	-0.9	-0.3	-0.3	-16.7	-8.3
20	0.2	0.7	1.6	2.1	2.7	3.3	3.5	3.4	3.8	4.0	3.9	3.7	3.5	3.7	3.3	3.6	3.8	4.0	4.5	3.5	2.7	2.3	3.4	3.8	4.5	0.2	3.1
21	3.3	3.1	2.7	2.4	2.5	2.3	2.6	2.6	2.5	3.2	3.5	3.2	3.1	3.3	3.4	3.8	3.7	3.8	3.4	3.4	3.5	3.6	3.6	3.5	3.8	2.3	3.2
22	3.6	3.6	3.2	2.9	1.9	1.1	0.8	0.9	1.8	2.7	2.1	2.0	1.4	1.9	2.5	3.0	3.5	3.8	4.1	3.5	3.3	3.2	2.1	0.3	4.1	0.3	2.5
23	0.0	0.1	0.4	0.4	0.3	0.0	-0.1	-0.3	-0.6	-0.9	-1.1	-1.4	-1.9	-2.1	-2.3	-2.9	-2.5	-2.8	-3.2	-2.1	-2.5	-3.7	-4.5	-4.8	0.4	-4.8	-1.6
24	-4.6	-4.7	-4.8	-4.9	-5.1	-5.0	-5.1	-5.2	-5.2	-5.1	-5.5	-4.1	-2.4	-1.1	-0.8	-0.7	-0.2	0.0	0.3	0.5	0.6	0.7	0.9	1.4	1.4	-5.5	-2.5
25	1.2	1.0	1.2	1.4	2.3	3.1	3.9	4.1	4.0	5.2	5.3	4.7	4.8	5.1	5.6	5.8	5.6	5.5	5.6	5.4	5.3	5.7	5.4	4.3	5.8	1.0	4.2
26	4.3	3.9	2.9	3.1	3.2	4.1	3.9	3.9	3.0	2.2	2.2	2.1	2.1	2.2	2.5	2.6	2.3	2.0	1.9	1.7	1.3	1.2	1.9	2.3	4.3	1.2	2.6
27	2.6	2.8	2.7	2.6	2.9	2.8	2.9	2.8	2.8	3.0	3.1	3.3	3.5	3.2	3.1	3.3	3.3	3.0	3.0	2.9	2.5	2.3	2.3	2.3	3.5	2.3	2.9
28	2.3	2.4	2.3	1.8	1.6	1.1	-0.2	-0.7	-1.0	-1.8	0.5	0.9	1.1	1.2	1.5	2.0	2.3	2.4	2.8	2.8	2.9	2.9	3.0	3.1	3.1	-1.8	1.5
29	2.9	2.9	2.8	2.7	2.8	3.0	2.7	2.9	2.8	3.1	3.1	3.2	3.6	3.6	3.9	3.8	3.7	3.5	3.3	3.3	3.6	3.6	3.7	3.7	3.9	2.7	3.3
30	3.9	4.1	4.3	4.5	4.6	4.9	5.1	5.3	5.5	5.5	5.4	5.8	5.9	6.0	6.2	6.1	5.9	5.3	5.0	5.2	5.8	5.8	5.6	3.5	6.2	3.5	5.2
Max.	**4.3**	**4.1**	**4.3**	**4.5**	**4.6**	**4.9**	**5.1**	**5.3**	**5.5**	**5.5**	**5.4**	**5.8**	**5.9**	**6.0**	**6.2**	**6.1**	**5.9**	**5.5**	**5.6**	**5.4**	**5.8**	**5.8**	**5.6**	**4.3**	**6.2**		
Min.	**-16.7**	**-16.1**	**-16.4**	**-16.5**	**-16.5**	**-16.6**	**-16.1**	**-16.3**	**-16.5**	**-16.0**	**-15.6**	**-15.3**	**-14.7**	**-13.9**	**-13.8**	**-13.7**	**-14.1**	**-14.1**	**-14.9**	**-15.9**	**-16.2**	**-16.2**	**-16.2**	**-16.3**		**-16.7**	
Avg.	**-2.1**	**-2.1**	**-2.2**	**-2.1**	**-2.0**	**-2.0**	**-2.0**	**-2.1**	**-2.1**	**-2.2**	**-2.1**	**-1.8**	**-1.4**	**-1.1**	**-1.0**	**-0.9**	**-0.9**	**-1.1**	**-1.2**	**-1.3**	**-1.5**	**-1.6**	**-1.7**	**-2.0**			**-1.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.8	3.0	2.8	2.4	2.2	2.8	2.3	1.7	1.6	1.5	1.3	0.9	1.3	1.8	1.9	1.5	0.6	-2.1	-4.3	-5.5	-4.2	-2.8	-4.4	-3.4	3.0	-5.5	0.2
2	-2.6	-2.5	-3.2	-3.7	-4.0	-4.5	-5.0	-4.7	-5.4	-6.3	-6.5	-5.6	-5.2	-4.6	-3.4	-1.8	-1.7	-5.0	-5.9	-7.3	-6.0	-4.6	-3.0	-4.5	-1.7	-7.3	-4.5
3	-3.3	-3.0	-2.8	-3.1	-3.5	-3.9	-4.2	-4.4	-4.6	-4.6	-4.3	-4.2	-4.0	-3.8	-4.0	-4.3	-4.9	-6.4	-6.9	-6.6	-6.7	-6.8	-7.2	-7.1	-2.8	-7.2	-4.8
4	-7.0	-6.6	-6.1	-5.4	-4.8	-5.2	-6.0	-5.7	-5.2	-4.9	-5.1	-5.1	-4.8	-4.5	-4.2	-4.2	-4.1	-4.0	-3.6	-3.4	-3.2	-3.1	-3.0	-2.8	-2.8	-7.0	-4.7
5	-2.6	-2.6	-2.5	-2.3	-2.1	-2.1	-2.2	-2.5	-2.6	-2.6	-2.2	-1.6	-0.7	-0.3	0.1	0.3	0.2	0.4	0.5	0.7	1.0	0.9	1.0	0.9	1.0	-2.6	-1.0
6	0.8	1.1	1.0	1.0	1.1	1.0	1.0	1.1	1.1	0.9	0.7	0.3	0.3	0.1	0.0	-0.3	-0.5	-0.5	-0.4	-0.5	-0.4	-0.2	-0.1	0.0	1.1	-0.5	0.4
7	-0.1	-0.1	-0.4	-0.4	-0.3	-0.4	-0.4	-0.1	-0.1	0.1	0.4	0.4	0.0	-0.1	0.1	0.2	0.3	0.3	0.5	0.9	1.0	0.9	0.9	0.9	1.0	-0.4	0.2
8	0.7	0.6	0.5	0.4	0.1	0.5	0.6	0.6	1.0	1.1	1.1	1.5	1.9	1.4	0.7	0.3	0.2	-0.1	-0.5	-0.8	-0.7	-0.6	-0.4	-0.5	1.9	-0.8	0.4
9	-0.7	-0.5	-0.2	-0.3	-0.1	0.1	0.4	0.3	0.2	0.5	0.8	1.3	1.5	1.8	2.1	2.3	2.2	1.9	2.2	2.0	2.0	1.9	1.8	1.9	2.3	-0.7	1.1
10	1.9	2.0	1.9	2.4	3.1	2.3	1.3	0.9	0.6	0.6	0.8	0.9	0.6	0.7	-0.1	-0.1	0.1	-0.4	-0.1	-0.1	0.1	0.2	0.1	-0.5	3.1	-0.5	0.8
11	-1.0	-1.2	-1.4	-1.9	-1.6	-1.6	-2.1	-3.4	-2.9	-5.5	-7.5	-7.5	-8.1	-9.8	-8.4	-8.9	-8.4	-9.1	-11.3	-10.9	-11.0	-10.5	-10.9	-9.4	-1.0	-11.3	-6.4
12	-8.1	-9.2	-8.4	-9.5	-8.9	-8.3	-7.7	-7.1	-7.2	-7.5	-6.0	-5.5	-4.1	-4.2	-3.6	-2.8	-3.2	-2.7	-2.8	-2.6	-2.8	-2.9	-4.1	-3.8	-2.6	-9.5	-5.5
13	-3.6	-3.4	-3.3	-3.4	-3.7	-3.4	-3.8	-4.0	-4.1	-4.3	-4.2	-4.4	-4.2	-4.1	-4.3	-4.8	-5.2	-6.2	-6.7	-6.9	-7.4	-9.2	-9.3	-10.4	-3.3	-10.4	-5.2
14	-11.5	-12.6	-13.5	-12.8	-13.0	-12.7	-13.1	-13.4	-13.9	-14.9	-13.8	-14.3	-14.2	-14.0	-13.5	-13.7	-14.5	-14.3	-13.9	-14.0	-13.6	-14.5	-14.1	-13.6	-11.5	-14.9	-13.6
15	-13.5	-14.2	-13.5	-11.9	-11.9	-11.9	-12.3	-12.3	-12.3	-12.0	-12.3	-12.6	-12.3	-12.3	-12.4	-12.5	-12.4	-12.4	-12.5	-12.5	-12.6	-12.4	-12.2	-12.3	-11.9	-14.2	-12.5
16	-12.7	-13.5	-14.0	-14.3	-14.5	-14.7	-14.6	-14.6	-14.7	-14.9	-15.3	-15.5	-15.6	-15.8	-15.9	-16.2	-16.6	-16.7	-16.7	-16.5	-16.5	-16.6	-16.8	-17.1	-12.7	-17.1	-15.4
17	-17.2	-17.4	-17.4	-17.5	-17.4	-17.4	-17.5	-17.4	-17.4	-17.4	-17.3	-17.3	-17.3	-17.2	-17.2	-17.4	-17.8	-18.2	-18.7	-19.1	-18.9	-19.7	-20.0	-20.4	-17.2	-20.4	-17.9
18	-20.6	-20.8	-21.3	-21.3	-21.5	-21.3	-21.4	-21.5	-21.7	-21.7	-22.0	-22.3	-22.6	-22.6	-22.5	-22.5	-22.5	-22.8	-23.2	-23.6	-23.3	-23.8	-24.3	-24.3	-20.6	-24.3	-22.3
19	-24.9	-25.2	-25.0	-24.9	-24.6	-24.0	-23.1	-23.9	-24.4	-23.5	-24.4	-23.4	-23.2	-23.1	-23.3	-23.8	-24.2	-24.6	-25.1	-24.7	-25.1	-25.4	-24.4	-23.8	-23.1	-25.4	-24.2
20	-24.7	-25.2	-25.4	-25.2	-24.7	-23.6	-19.0	-13.1	-11.8	-11.8	-11.4	-10.8	-9.9	-9.1	-8.2	-7.3	-6.7	-6.4	-6.5	-5.2	-5.3	-5.3	-5.1	-4.5	-4.5	-25.4	-12.8
21	-3.3	-2.6	-2.2	-1.9	-1.6	-1.4	-1.5	-2.6	-2.9	-3.5	-3.8	-3.7	-4.7	-5.0	-3.3	-3.7	-4.4	-3.7	-3.5	-3.5	-3.3	-3.3	-2.9	-2.3	-1.4	-5.0	-3.1
22	-2.0	-1.8	-1.7	-1.8	-1.6	-1.4	-1.1	-1.4	-1.8	-1.5	-0.9	-0.7	-0.6	-0.5	-0.4	-0.3	-0.3	-1.0	-0.9	-0.7	-0.4	-2.6	-3.9	-4.2	-0.3	-4.2	-1.4
23	-5.4	-7.6	-8.7	-9.1	-9.5	-9.6	-10.2	-10.8	-11.8	-11.8	-11.9	-12.0	-12.1	-12.6	-13.6	-13.8	-15.6	-16.3	-16.9	-15.8	-14.5	-12.0	-12.7	-16.3	-5.4	-16.9	-12.1
24	-17.5	-17.4	-17.0	-15.6	-15.2	-13.8	-12.9	-14.1	-14.2	-14.0	-13.8	-13.6	-13.5	-13.4	-13.6	-13.7	-13.7	-13.6	-14.0	-14.5	-14.3	-13.8	-13.8	-14.0	-12.9	-17.5	-14.4
25	-14.8	-15.5	-15.5	-15.7	-15.8	-16.4	-16.6	-16.8	-17.0	-17.5	-18.0	-18.0	-17.9	-17.5	-17.7	-18.3	-18.1	-17.9	-17.5	-17.6	-17.8	-17.8	-18.8	-19.7	-14.8	-19.7	-17.2
26	-20.3	-19.3	-19.4	-18.8	-19.7	-19.8	-19.6	-17.6	-16.9	-11.0	-10.8	-10.2	-9.6	-7.8	-6.7	-5.3	-4.2	-3.3	-3.4	-4.0	-4.1	-3.5	-3.0	-2.4	-2.4	-20.3	-10.9
27	-2.1	-1.9	-1.5	-1.0	-0.8	-0.5	0.1	0.6	0.9	1.1	1.4	1.7	1.9	2.1	2.1	1.7	1.4	1.0	0.9	0.4	0.1	-0.6	-0.8	-1.0	2.1	-2.1	0.3
28	-0.9	-2.9	-4.7	-4.9	-5.3	-5.9	-6.2	-6.7	-6.0	-5.7	-6.7	-8.1	-6.9	-7.8	-8.6	-8.7	-9.7	-9.3	-9.7	-10.3	-9.3	-8.8	-8.3	-7.9	-0.9	-10.3	-7.0
29	-7.7	-7.9	-8.0	-8.7	-9.1	-8.8	-9.3	-9.5	-9.1	-9.1	-9.5	-9.8	-9.4	-9.2	-9.5	-11.6	-10.8	-9.7	-9.7	-9.2	-9.3	-9.3	-8.9	-8.9	-7.7	-11.6	-9.2
30	-9.0	-9.1	-9.4	-9.5	-9.7	-10.4	-12.3	-12.4	-12.1	-13.7	-13.4	-12.5	-11.7	-11.3	-11.1	-10.7	-10.6	-10.3	-10.7	-10.8	-11.3	-10.8	-10.7	-10.6	-9.0	-13.7	-11.0
31	-10.1	-10.0	-9.2	-9.6	-9.4	-9.7	-10.2	-10.5	-10.3	-10.8	-10.6	-10.4	-10.5	-10.3	-10.5	-10.5	-10.4	-10.3	-10.2	-10.2	-9.9	-10.0	-10.3	-9.4	-9.2	-10.8	-10.1
Max.	**2.8**	**3.0**	**2.8**	**2.4**	**3.1**	**2.8**	**2.3**	**1.7**	**1.6**	**1.5**	**1.4**	**1.7**	**1.9**	**2.1**	**2.1**	**2.3**	**2.2**	**1.9**	**2.2**	**2.0**	**2.0**	**1.9**	**1.8**	**1.9**	**3.1**		
Min.	**-24.9**	**-25.2**	**-25.4**	**-25.2**	**-24.7**	**-24.0**	**-23.1**	**-23.9**	**-24.4**	**-23.5**	**-24.4**	**-23.4**	**-23.2**	**-23.1**	**-23.3**	**-23.8**	**-24.2**	**-24.6**	**-25.1**	**-24.7**	**-25.1**	**-25.4**	**-24.4**	**-24.3**		**-25.4**	
Avg.	**-7.8**	**-8.0**	**-8.1**	**-8.0**	**-8.0**	**-7.9**	**-8.0**	**-7.9**	**-7.9**	**-7.9**	**-7.9**	**-7.8**	**-7.6**	**-7.5**	**-7.4**	**-7.5**	**-7.6**	**-7.9**	**-8.1**	**-8.1**	**-8.0**	**-8.0**	**-8.1**	**-8.1**			**-7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.1	8.8	9.7	10.0	10.8	11.2	8.9	6.4	8.1	6.9	8.3	9.2	8.6	7.4	7.2	5.9	6.5	6.3	4.3	6.6	5.8	4.8	5.1	5.1	11.2	4.3	7.5
2	5.2	5.6	4.7	5.4	5.2	5.6	5.7	3.3	5.9	6.8	7.2	6.5	6.4	6.1	7.1	6.8	5.2	4.9	4.3	5.5	5.6	5.0	5.8	5.1	7.2	3.3	5.6
3	6.0	6.1	6.1	6.1	6.4	6.4	8.7	5.3	5.8	7.0	6.3	7.4	8.0	8.6	5.5	4.8	7.9	8.0	5.7	2.2	3.2	4.7	4.1	3.0	8.7	2.2	6.0
4	5.0	5.3	5.3	5.4	6.1	5.2	5.4	5.4	5.4	5.5	6.4	5.0	2.9	2.7	2.5	2.8	2.5	3.3	2.5	2.0	1.1	1.5	0.3	0.5	6.4	0.3	3.8
5	0.1	0.2	2.7	2.1	3.7	2.1	2.5	4.6	4.8	5.1	4.1	4.7	3.2	3.3	4.3	3.9	3.2	2.4	1.5	0.6	0.3	0.9	2.0	1.2	5.1	0.1	2.6
6	1.8	2.1	1.9	1.5	1.2	0.5	2.7	3.4	4.2	5.9	6.1	5.3	6.1	3.9	2.2	3.6	5.6	5.0	4.9	6.2	6.7	7.9	7.8	9.0	9.0	0.5	4.4
7	8.4	7.6	10.0	11.3	13.3	13.3	12.0	9.7	11.7	10.2	11.0	11.2	10.1	8.8	7.6	6.8	7.3	9.2	9.2	8.9	9.2	9.3	8.2	5.8	13.3	5.8	9.6
8	5.2	6.6	6.8	8.6	6.9	5.1	6.9	6.4	4.7	5.2	6.8	8.4	8.1	8.5	7.9	8.6	8.9	7.4	7.8	8.9	9.0	6.2	4.4	5.0	9.0	4.4	7.0
9	6.9	3.9	3.7	1.9	3.6	2.3	2.4	1.6	2.7	0.8	3.1	1.4	1.3	2.6	1.2	0.9	0.5	2.5	2.5	3.0	3.2	2.6	3.4	3.6	6.9	0.5	2.6
10	2.7	3.0	3.7	2.7	2.2	2.4	2.7	6.3	9.0	9.9	9.0	9.4	9.3	8.4	9.8	9.7	9.2	8.9	8.5	8.1	8.8	7.9	7.7	7.5	9.9	2.2	6.9
11	6.8	7.5	7.4	8.2	8.7	8.4	8.8	8.6	8.9	9.0	8.4	11.1	11.4	10.2	11.5	11.6	11.7	11.3	11.5	12.0	12.6	13.2	13.6	12.7	13.6	6.8	10.2
12	13.5	13.0	12.2	11.2	11.0	11.6	10.9	8.6	8.3	8.0	7.5	6.7	6.3	7.8	8.6	9.8	9.9	11.0	8.6	8.8	7.6	6.7	7.9	12.8	13.5	6.3	9.5
13	10.6	9.9	7.7	6.8	7.3	6.0	6.3	4.7	4.5	5.7	3.8	2.8	2.6	0.8	0.5	2.7	3.2	3.2	4.3	5.2	5.8	5.5	6.3	7.5	10.6	0.5	5.1
14	6.9	7.8	9.2	8.5	9.1	10.6	12.5	13.4	14.0	12.6	12.3	12.0	12.2	9.6	9.5	9.2	9.2	5.5	3.4	3.9	3.4	4.4	4.3	4.4	14.0	3.4	8.7
15	3.9	5.2	4.0	4.7	6.4	6.8	5.5	6.6	5.4	5.3	6.7	7.7	7.1	7.6	6.8	5.8	5.2	7.7	5.7	2.9	5.2	2.6	5.4	3.9	7.7	2.6	5.6
16	2.6	2.3	2.5	5.6	7.4	5.0	7.6	9.0	10.9	11.6	14.0	15.0	15.3	15.6	14.4	14.0	13.6	14.1	13.0	12.0	9.2	8.6	7.8	8.2	15.6	2.3	10.0
17	7.8	6.2	6.3	6.3	6.0	4.8	4.1	5.4	7.5	8.6	7.4	7.6	6.2	8.0	8.3	8.5	7.6	7.3	6.3	6.7	6.5	4.7	5.4	6.4	8.6	4.1	6.7
18	4.0	2.8	3.0	2.9	1.6	2.9	4.7	4.8	5.3	3.9	3.6	2.7	3.0	2.9	0.4	0.6	0.0	0.8	0.1	0.0	2.4	2.0	1.6	1.4	5.3	0.0	2.4
19	0.9	0.5	0.1	0.4	0.3	0.0	0.0	0.0	0.2	2.2	2.7	1.2	1.0	0.4	2.0	2.2	1.4	4.0	6.2	5.8	6.3	5.0	5.3	6.6	6.6	0.0	2.3
20	5.5	5.8	5.5	6.7	7.3	7.8	8.1	7.3	7.0	7.6	5.8	5.1	5.5	5.2	5.8	6.3	5.9	6.1	6.5	7.3	6.8	5.3	4.5	4.5	8.1	4.5	6.2
21	3.9	4.0	4.2	2.3	2.2	2.0	1.7	3.8	2.9	3.1	4.9	5.4	4.6	5.4	5.4	4.5	4.4	3.9	5.1	4.2	3.4	3.9	3.6	2.2	5.4	1.7	3.8
22	0.8	1.7	0.3	0.8	1.2	0.8	0.9	0.3	0.6	0.7	1.3	1.3	1.2	1.5	2.0	3.3	2.1	1.9	1.4	1.8	1.2	0.0	0.3	3.6	3.6	0.0	1.3
23	1.3	3.0	3.5	3.9	4.2	5.0	3.3	3.6	4.9	4.3	4.3	4.8	5.7	5.6	6.1	7.7	8.1	7.4	8.2	7.6	8.5	7.5	6.5	6.1	8.5	1.3	5.5
24	5.5	5.1	6.2	5.6	5.1	5.4	6.5	5.5	3.2	5.2	5.7	6.5	5.6	2.8	4.7	5.1	5.8	6.2	6.8	5.8	3.1	3.1	4.1	4.8	6.8	2.8	5.1
25	7.8	7.6	6.0	9.8	10.0	11.2	11.4	12.8	12.4	14.0	11.5	13.8	11.3	14.6	15.7	14.2	13.1	15.2	15.0	13.5	14.1	15.5	15.8	11.7	15.8	6.0	12.4
26	13.2	13.7	13.4	13.6	13.4	13.4	12.5	11.2	11.5	12.9	9.9	7.8	7.5	7.7	7.1	6.5	5.5	6.1	5.5	5.8	5.6	4.4	4.4	5.3	13.7	4.4	9.1
27	5.1	9.0	10.5	10.7	12.6	11.7	11.4	10.7	9.2	11.1	9.8	11.6	12.5	14.1	9.7	9.9	11.4	11.5	11.0	11.7	12.5	14.3	13.0	11.9	14.3	5.1	11.1
28	11.4	10.9	10.2	9.8	10.2	9.6	9.3	9.1	7.7	6.0	3.3	2.6	2.3	4.3	4.1	4.4	4.7	3.7	5.2	6.6	6.7	6.3	7.7	6.1	11.4	2.3	6.7
29	6.6	9.2	10.1	9.8	10.0	13.3	14.3	13.4	13.8	12.5	8.9	9.0	11.1	13.0	10.5	8.5	8.2	8.3	8.3	12.0	12.0	11.8	10.5	8.4	14.3	6.6	10.6
30	10.8	10.8	10.7	10.2	8.6	12.0	13.0	12.3	12.5	12.5	11.1	13.0	17.2	15.3	15.0	12.9	11.9	10.6	9.3	9.0	9.8	11.7	7.0	5.9	17.2	5.9	11.4
31	6.5	6.6	7.6	8.4	8.5	8.1	8.3	8.0	8.7	6.7	7.4	7.1	5.1	6.0	7.3	5.1	6.7	7.6	5.2	3.4	5.2	4.9	4.0	2.8	8.7	2.8	6.5
Max.	**13.5**	**13.7**	**13.4**	**13.6**	**13.4**	**13.4**	**14.3**	**13.4**	**14.0**	**14.0**	**14.0**	**15.0**	**17.2**	**15.6**	**15.7**	**14.2**	**13.6**	**15.2**	**15.0**	**13.5**	**14.1**	**15.5**	**15.8**	**12.8**	**17.2**		
Min.	**0.1**	**0.2**	**0.1**	**0.4**	**0.3**	**0.0**	**0.0**	**0.0**	**0.2**	**0.7**	**1.3**	**1.2**	**1.0**	**0.4**	**0.4**	**0.6**	**0.0**	**0.8**	**0.1**	**0.0**	**0.3**	**0.0**	**0.3**	**0.5**		**0.0**	
Avg.	**6.0**	**6.2**	**6.3**	**6.5**	**6.8**	**6.8**	**7.1**	**6.8**	**7.1**	**7.3**	**7.0**	**7.2**	**7.1**	**7.0**	**6.8**	**6.7**	**6.7**	**6.8**	**6.4**	**6.4**	**6.5**	**6.2**	**6.1**	**5.9**			**6.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.3	5.4	4.8	4.2	3.5	5.2	5.9	5.1	2.1	3.5	4.6	4.0	5.0	6.0	9.8	11.0	14.3	12.9	13.5	9.9	11.4	9.2	11.4	11.3	14.3	2.1	7.3
2	13.5	11.6	9.5	9.9	10.5	9.8	9.4	10.0	10.9	12.2	12.0	11.6	11.3	11.5	11.2	10.8	8.6	8.3	11.4	10.6	8.4	8.2	8.5	9.1	13.5	8.2	10.4
3	7.9	7.4	7.7	5.9	5.7	7.4	5.7	5.2	4.8	4.0	4.3	4.3	3.6	3.2	1.9	1.2	0.1	0.0	0.1	0.7	0.7	2.3	3.1	1.5	7.9	0.0	3.7
4	3.2	3.9	3.6	1.7	0.8	1.9	3.0	1.7	0.9	0.8	1.8	3.3	4.4	3.1	1.1	1.9	1.6	1.4	1.7	2.0	1.9	1.7	1.7	1.6	4.4	0.8	2.1
5	1.5	0.3	0.1	0.6	0.5	0.1	0.0	0.2	0.4	0.7	1.7	1.5	1.7	2.1	1.6	1.0	1.2	3.4	3.8	3.6	1.9	1.5	1.0	0.8	3.8	0.0	1.3
6	1.9	4.7	4.8	5.6	5.9	6.3	6.8	6.9	5.5	4.7	4.0	4.4	4.5	4.0	1.9	0.8	0.2	0.2	0.5	0.5	0.2	2.0	3.0	3.2	6.9	0.2	3.4
7	2.7	1.9	1.7	0.9	0.4	0.5	1.7	1.6	0.7	1.1	0.0	0.4	0.5	1.2	0.9	0.4	2.2	2.7	1.6	1.3	0.4	0.0	0.5	1.0	2.7	0.0	1.1
8	0.9	0.2	0.0	0.6	0.5	1.6	1.5	1.8	0.9	2.1	2.6	2.4	2.5	3.4	2.7	2.7	1.7	1.8	2.0	2.1	1.5	1.7	1.6	1.4	3.4	0.0	1.7
9	1.2	1.5	1.2	0.7	1.3	1.5	1.1	0.5	1.4	0.9	0.6	0.4	2.4	2.7	2.7	1.3	0.8	0.7	0.3	0.8	0.6	0.0	0.0	0.0	2.7	0.0	1.0
10	1.0	1.2	0.3	1.2	0.0	1.1	1.7	2.4	2.2	2.8	2.7	2.3	1.9	2.9	3.7	4.0	1.2	1.8	2.1	3.4	4.1	3.0	4.0	3.0	4.1	0.0	2.3
11	2.3	0.8	0.6	1.3	1.7	1.4	2.3	3.7	4.5	2.4	3.5	5.2	4.7	4.2	4.4	4.5	5.1	5.6	5.7	5.9	7.6	8.7	8.0	7.3	8.7	0.6	4.2
12	7.2	5.4	6.9	6.1	5.9	6.3	6.4	6.9	6.3	6.6	7.0	6.0	5.6	5.7	6.4	5.2	5.0	5.5	4.7	5.8	7.7	8.5	7.5	7.8	8.5	4.7	6.4
13	7.6	6.1	7.4	8.6	8.5	7.9	7.3	4.5	3.8	4.1	6.0	5.5	5.0	5.2	5.2	5.2	3.7	4.4	6.3	8.6	5.6	4.5	4.2	3.9	8.6	3.7	5.8
14	4.6	6.2	6.1	6.0	5.3	4.5	4.1	4.7	5.1	4.6	5.3	5.7	4.2	4.0	3.3	3.4	3.0	2.8	0.9	0.9	0.9	0.3	2.5	1.4	6.2	0.3	3.7
15	0.8	1.8	0.4	1.3	1.4	1.2	1.2	0.3	1.8	0.7	1.0	0.7	0.3	1.2	0.9	4.3	3.9	3.1	2.1	1.4	1.9	2.8	3.7	3.2	4.3	0.3	1.7
16	4.7	3.1	0.7	1.7	1.5	1.7	1.7	1.8	1.8	1.2	1.0	2.5	2.5	2.3	1.3	0.1	0.0	0.0	0.0	1.2	0.3	0.0	0.0	0.0	4.7	0.0	1.3
17	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.2	0.4	1.0	0.9	3.7	3.2	2.6	2.7	1.9	2.1	0.9	0.2	0.4	1.5	0.1	0.3	3.7	0.0	0.9
18	0.0	0.0	0.4	2.3	2.9	3.2	3.0	3.2	2.7	1.5	2.1	2.0	2.3	2.7	2.8	2.2	1.5	1.9	2.5	3.2	3.4	3.4	3.1	3.6	3.6	0.0	2.3
19	5.1	4.7	5.8	7.4	7.9	6.6	6.8	7.0	6.4	5.6	5.5	5.6	7.1	7.1	9.1	10.5	10.1	8.8	11.6	14.2	14.1	13.8	13.4	11.8	14.2	4.7	8.6
20	12.8	12.1	12.0	12.9	14.4	11.7	11.9	11.9	12.0	10.7	10.2	10.1	11.8	13.4	13.5	13.4	12.3	13.7	13.7	15.4	15.3	11.0	9.7	7.1	15.4	7.1	12.2
21	7.2	8.9	12.6	13.7	16.2	14.3	10.7	10.7	11.1	10.9	10.2	9.7	8.9	7.2	5.9	5.6	4.7	5.8	6.3	9.6	7.2	6.5	6.9	6.3	16.2	4.7	9.0
22	5.2	5.4	5.4	6.6	5.5	4.5	5.0	5.8	5.7	5.4	3.9	3.6	4.1	4.7	5.6	4.6	5.2	4.9	5.4	6.4	7.3	7.0	6.4	5.8	7.3	3.6	5.4
23	5.9	5.4	6.3	7.3	8.8	8.2	8.5	9.7	8.9	7.3	8.9	6.5	8.6	7.9	8.3	8.8	6.5	5.3	6.9	7.4	7.2	7.6	6.2	6.1	9.7	5.3	7.4
24	7.0	8.5	7.5	8.0	4.7	4.0	3.0	5.7	5.1	6.7	9.6	11.0	13.1	12.0	13.9	13.9	12.4	11.1	12.5	12.4	12.1	11.1	11.6	12.7	13.9	3.0	9.6
25	12.2	9.7	11.6	11.9	11.9	9.2	5.2	5.9	2.5	3.0	3.9	4.9	5.7	5.7	5.7	5.9	5.4	5.3	4.0	3.4	3.5	3.1	3.7	3.1	12.2	2.5	6.1
26	7.0	7.4	8.4	9.9	8.5	7.6	6.5	5.8	5.6	3.8	3.0	1.3	1.2	3.6	4.0	4.2	3.7	4.8	4.1	0.7	1.2	3.1	4.3	4.3	9.9	0.7	4.8
27	5.2	5.5	5.5	4.7	5.5	7.3	7.1	4.9	4.2	6.7	6.2	6.6	5.7	5.7	5.3	4.9	4.5	4.1	5.9	4.0	2.3	3.1	2.5	2.5	7.3	2.3	5.0
28	2.4	2.3	3.3	4.7	5.6	5.8	6.0	6.1	5.8	7.8	7.4	8.5	8.7	9.8	10.1	9.8	9.5	10.2	8.4	9.3	8.7	10.0	10.2	9.5	10.2	2.3	7.5
Max.	**13.5**	**12.1**	**12.6**	**13.7**	**16.2**	**14.3**	**11.9**	**11.9**	**12.0**	**12.2**	**12.0**	**11.6**	**13.1**	**13.4**	**13.9**	**13.9**	**14.3**	**13.7**	**13.7**	**15.4**	**15.3**	**13.8**	**13.4**	**12.7**	**16.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.4**	**0.0**	**0.4**	**0.3**	**1.2**	**0.9**	**0.1**	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**4.8**	**4.7**	**4.8**	**5.2**	**5.2**	**5.0**	**4.8**	**4.8**	**4.4**	**4.4**	**4.6**	**4.7**	**5.0**	**5.2**	**5.2**	**5.1**	**4.6**	**4.7**	**5.0**	**5.2**	**4.9**	**4.8**	**5.0**	**4.6**			**4.9**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.8	10.1	10.6	10.5	11.4	8.8	11.2	10.6	10.8	10.2	10.7	9.9	8.9	8.7	8.5	9.2	11.2	10.3	10.9	9.8	8.2	10.2	9.3	9.7	11.4	8.2	10.0
2	11.5	10.9	12.3	11.8	11.4	10.9	10.4	11.7	11.5	10.2	10.2	11.6	9.6	10.1	10.9	11.0	10.5	11.0	9.6	11.3	13.4	13.3	13.9	10.1	13.9	9.6	11.2
3	9.2	12.6	6.7	5.8	8.7	9.0	8.3	6.0	7.9	8.5	9.6	9.7	9.2	6.1	5.9	7.4	7.1	6.6	8.2	8.0	7.1	10.7	14.2	12.9	14.2	5.8	8.6
4	13.2	12.9	11.4	13.0	9.8	11.2	13.0	12.2	12.6	13.2	12.7	13.7	12.0	12.8	11.6	12.7	12.4	14.1	12.0	10.2	11.6	13.3	15.4	14.6	15.4	9.8	12.6
5	15.3	14.7	12.3	13.2	15.8	13.6	13.2	13.4	12.4	11.8	12.6	14.5	13.2	10.0	8.1	6.5	11.2	9.6	10.0	10.1	13.6	13.8	12.3	12.7	15.8	6.5	12.2
6	13.0	13.0	13.7	10.7	10.8	10.9	12.2	12.2	10.6	14.4	15.7	15.0	14.5	17.0	18.3	18.8	17.0	18.7	18.6	19.1	19.7	18.8	20.8	20.3	20.8	10.6	15.6
7	20.3	20.3	20.1	16.7	19.0	22.3	20.2	19.3	10.3	15.0	17.1	17.9	15.4	15.7	12.6	16.0	16.1	15.3	13.8	14.4	13.7	14.9	16.2	16.4	22.3	10.3	16.6
8	15.1	13.0	14.0	12.7	13.2	13.2	12.3	11.1	10.7	10.8	9.9	9.8	9.0	7.8	7.4	8.0	10.0	10.1	11.0	14.0	13.8	14.2	11.3	11.6	15.1	7.4	11.4
9	8.5	7.2	7.3	7.9	9.3	10.1	9.6	9.5	8.3	8.3	8.0	7.8	8.4	7.7	6.8	7.3	6.5	6.4	5.8	6.1	6.1	6.2	5.8	5.0	10.1	5.0	7.5
10	5.2	5.5	5.2	5.5	5.8	6.1	6.8	8.3	9.8	10.2	6.1	7.6	7.1	6.8	6.2	6.3	6.6	5.7	4.4	5.3	5.6	6.0	5.1	6.1	10.2	4.4	6.4
11	6.3	7.3	8.1	8.6	9.2	12.0	10.5	10.1	11.6	11.5	9.6	10.4	9.8	9.7	9.5	10.2	9.1	10.1	11.6	10.4	12.9	12.8	12.4	11.2	12.9	6.3	10.2
12	10.6	13.8	15.6	15.5	15.0	16.8	15.9	15.1	14.0	13.8	14.2	12.9	17.8	9.1	7.6	6.6	6.5	6.1	5.4	6.6	2.8	3.8	6.6	7.1	17.8	2.8	10.8
13	4.8	4.6	4.6	8.4	9.5	7.4	9.8	8.4	3.6	5.6	5.5	5.1	7.0	6.0	8.4	7.9	9.2	7.6	6.3	9.3	12.7	14.0	10.5	12.3	14.0	3.6	7.9
14	13.9	13.8	13.3	11.4	9.1	13.6	15.8	12.9	11.7	11.1	6.1	9.1	9.6	9.2	10.1	12.0	11.7	11.0	12.5	8.8	10.2	11.3	12.6	12.1	15.8	6.1	11.4
15	9.4	8.1	6.7	6.6	5.7	7.7	7.9	6.5	6.6	6.8	6.6	6.8	7.1	6.2	6.6	6.6	6.9	6.4	6.6	7.4	9.4	10.1	8.4	6.7	10.1	5.7	7.2
16	6.3	4.8	5.7	5.4	5.0	3.2	5.5	6.0	4.8	6.5	7.2	5.5	6.5	6.7	6.2	5.9	5.7	5.0	2.9	4.2	5.0	5.9	5.4	3.2	7.2	2.9	5.4
17	2.9	2.3	2.8	2.7	1.0	0.7	1.1	1.2	1.3	3.1	3.6	4.0	3.7	3.6	3.4	2.9	2.9	2.9	3.5	4.2	3.3	2.9	0.9	1.2	4.2	0.7	2.6
18	0.9	0.0	0.4	0.1	0.0	0.1	0.0	0.1	0.2	0.1	0.7	1.6	2.2	2.2	1.7	2.4	3.0	1.7	2.6	4.4	4.6	4.0	3.7	2.5	4.6	0.0	1.6
19	2.0	2.1	2.9	1.4	1.1	2.1	3.5	2.9	2.1	3.2	3.0	2.6	1.6	2.0	3.0	3.0	1.9	2.0	1.8	0.5	1.2	1.3	1.1	0.2	3.5	0.2	2.0
20	0.0	0.0	0.3	1.2	1.1	0.5	1.6	2.1	5.8	8.6	10.8	11.2	11.7	12.8	12.0	12.2	10.4	9.6	8.4	8.1	6.7	5.9	5.8	5.8	12.8	0.0	6.4
21	4.8	4.0	3.5	1.7	1.1	3.0	4.4	5.2	6.9	8.6	9.9	10.3	8.0	5.8	6.6	5.4	7.2	8.3	6.2	4.8	7.3	6.7	7.1	8.5	10.3	1.1	6.1
22	6.2	6.0	5.6	7.0	5.8	5.1	2.0	5.3	8.6	9.2	8.9	7.9	6.1	5.2	5.1	5.8	6.4	6.7	4.6	4.7	6.2	6.6	7.9	8.7	9.2	2.0	6.3
23	8.6	6.2	8.5	11.5	10.0	7.3	8.3	10.3	9.4	9.7	9.6	8.7	9.0	11.0	7.6	4.2	5.3	7.4	8.1	6.9	8.3	7.6	7.3	7.6	11.5	4.2	8.3
24	7.6	7.4	5.7	5.6	4.8	4.6	5.2	7.4	5.8	6.3	5.9	5.0	4.6	5.2	4.1	2.7	2.5	3.2	2.3	0.4	1.3	0.0	0.7	1.5	7.6	0.0	4.2
25	0.2	1.0	0.6	1.2	1.3	0.4	0.8	0.6	0.7	0.5	1.5	2.4	0.9	0.6	0.6	0.7	0.8	1.1	2.4	3.5	4.5	4.5	5.9	7.5	7.5	0.2	1.8
26	9.3	11.1	9.8	9.8	10.0	7.0	5.5	7.4	6.6	7.0	8.2	6.9	5.4	4.8	5.1	4.8	4.8	3.8	2.6	3.5	2.9	3.3	4.4	6.1	11.1	2.6	6.3
27	8.0	6.7	6.7	6.9	6.7	8.4	9.2	9.7	10.0	11.1	12.1	11.7	12.1	11.1	12.9	12.2	10.2	10.0	8.9	8.6	6.2	8.3	9.6	9.5	12.9	6.2	9.4
28	7.6	8.0	7.5	6.3	6.8	2.1	1.9	6.1	9.3	9.9	5.3	4.8	3.7	5.4	5.6	5.6	5.7	4.4	4.7	4.0	4.9	6.2	4.4	1.1	9.9	1.1	5.5
29	0.6	4.8	3.5	3.1	4.0	2.6	3.7	4.1	4.3	4.2	4.9	4.6	5.8	4.7	6.2	6.3	5.1	4.5	4.9	6.2	6.6	3.0	1.9	4.6	6.6	0.6	4.3
30	5.6	8.6	8.2	7.7	6.3	5.5	4.6	4.3	2.9	2.9	3.0	3.6	3.9	3.6	2.9	3.2	2.2	2.5	1.2	0.3	0.2	0.7	0.2	0.0	8.6	0.0	3.5
31	0.0	0.8	0.6	0.3	1.0	0.7	0.2	0.4	0.4	0.2	0.3	0.0	0.5	0.7	1.3	1.1	2.6	2.1	1.3	2.7	4.3	3.4	2.5	3.4	4.3	0.0	1.3
Max.	**20.3**	**20.3**	**20.1**	**16.7**	**19.0**	**22.3**	**20.2**	**19.3**	**14.0**	**15.0**	**17.1**	**17.9**	**17.8**	**17.0**	**18.3**	**18.8**	**17.0**	**18.7**	**18.6**	**19.1**	**19.7**	**18.8**	**20.8**	**20.3**	**22.3**		
Min.	**0.0**	**0.0**	**0.3**	**0.1**	**0.0**	**0.1**	**0.0**	**0.1**	**0.2**	**0.1**	**0.3**	**0.0**	**0.5**	**0.6**	**0.6**	**0.7**	**0.8**	**1.1**	**1.2**	**0.3**	**0.2**	**0.0**	**0.2**	**0.0**		**0.0**	
Avg.	**7.6**	**7.8**	**7.6**	**7.4**	**7.4**	**7.3**	**7.6**	**7.7**	**7.5**	**8.1**	**8.1**	**8.1**	**7.9**	**7.4**	**7.2**	**7.2**	**7.4**	**7.2**	**6.9**	**7.0**	**7.6**	**7.9**	**7.9**	**7.7**			**7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.6	3.4	2.8	2.6	1.8	1.8	3.2	3.5	3.1	2.1	1.7	1.8	3.1	2.6	1.6	1.7	1.4	1.3	1.4	0.3	0.0	0.0	0.4	0.6	3.6	0.0	1.9
2	0.3	0.2	0.0	0.3	0.1	1.2	1.0	3.1	4.7	6.2	6.8	7.3	7.2	7.6	7.7	7.0	6.6	6.4	6.1	6.2	7.7	8.1	8.6	8.3	8.6	0.0	4.9
3	7.1	6.9	6.3	6.2	5.4	6.0	5.8	3.7	5.0	5.6	6.8	7.0	6.2	6.2	6.7	6.5	6.7	6.5	5.9	6.6	6.6	6.4	6.1	5.8	7.1	3.7	6.2
4	5.8	6.5	6.5	7.8	6.1	5.4	5.5	5.6	6.7	7.4	7.8	7.4	7.1	8.2	7.2	7.3	6.6	6.8	5.6	5.4	4.0	3.8	2.9	2.1	8.2	2.1	6.1
5	1.8	1.1	2.1	3.0	2.5	5.7	8.8	8.6	8.6	10.5	12.7	11.8	12.9	11.5	10.8	9.3	9.9	14.6	12.8	10.8	10.5	10.6	10.1	8.4	14.6	1.1	8.7
6	10.2	9.0	10.7	8.1	8.3	6.1	10.2	9.0	5.8	6.4	7.9	8.5	11.0	11.4	9.1	6.0	5.9	6.9	5.7	4.4	5.0	4.3	3.9	3.3	11.4	3.3	7.4
7	0.6	1.0	0.0	2.5	6.6	9.3	9.7	10.0	10.2	9.3	8.6	8.6	9.2	8.6	8.5	9.4	7.4	6.2	4.4	4.8	5.2	4.8	7.2	9.1	10.2	0.0	6.7
8	10.2	10.6	11.2	11.2	9.0	9.1	9.0	7.8	7.7	7.9	8.4	7.5	8.2	7.2	8.2	5.2	3.6	2.3	1.9	2.9	2.4	1.3	2.3	1.3	11.2	1.3	6.5
9	3.2	4.1	5.5	6.3	4.6	2.4	1.6	0.1	2.1	4.3	4.1	6.4	6.4	6.6	4.7	6.6	4.6	3.3	5.1	5.9	5.4	6.3	4.7	3.8	6.6	0.1	4.5
10	2.8	2.5	3.1	2.7	2.5	1.7	2.2	2.2	2.4	3.4	3.6	5.1	5.4	4.7	4.4	4.2	4.2	4.8	4.8	3.5	2.7	4.0	3.2	2.5	5.4	1.7	3.4
11	2.9	2.8	2.8	2.7	1.2	0.9	1.7	2.0	1.7	1.4	2.6	4.3	4.1	4.3	4.2	4.5	5.1	4.9	4.7	2.3	1.1	2.5	2.9	2.8	5.1	0.9	2.9
12	3.7	3.9	4.0	3.6	3.7	3.8	4.1	3.7	3.6	1.9	2.5	2.2	2.7	2.1	1.8	2.7	3.2	2.8	2.2	2.9	1.5	0.5	1.0	3.1	4.1	0.5	2.8
13	3.5	3.6	3.4	4.0	4.1	4.3	4.1	2.3	3.1	2.3	3.8	4.7	4.0	3.0	1.9	1.9	1.8	2.2	3.5	3.3	4.7	4.3	3.1	3.0	4.7	1.8	3.3
14	1.2	0.1	0.6	0.0	0.7	1.4	1.4	1.6	0.7	1.4	1.9	1.9	2.5	3.9	4.9	4.6	4.3	4.3	3.6	3.2	3.4	5.1	5.1	6.3	6.3	0.0	2.7
15	6.9	6.2	6.6	7.1	6.5	6.6	6.3	5.6	6.9	5.7	5.8	6.6	6.8	5.3	3.8	3.2	2.0	2.2	2.2	0.4	0.3	0.4	0.6	0.9	7.1	0.3	4.4
16	0.5	0.5	0.7	3.4	4.3	3.8	2.7	2.4	2.5	2.7	2.9	3.6	3.8	7.5	8.3	7.5	7.0	6.2	6.3	5.8	4.5	1.4	0.7	0.0	8.3	0.0	3.7
17	0.2	0.8	2.7	3.8	7.7	9.3	9.2	10.4	10.9	11.2	12.3	14.6	14.5	14.9	16.0	16.2	16.3	14.9	14.5	13.5	15.3	14.3	13.8	14.8	16.3	0.2	11.3
18	14.6	13.4	12.1	12.6	12.8	11.5	10.9	8.8	10.6	10.9	10.7	9.0	9.5	8.6	7.7	6.1	3.9	2.8	2.2	1.8	1.5	7.3	18.1	22.7	22.7	1.5	9.6
19	10.0	2.6	1.3	0.0	3.6	5.6	4.6	4.1	5.1	7.2	6.8	7.9	7.1	9.9	9.8	8.0	7.5	7.2	6.9	7.3	8.0	8.9	8.9	8.9	10.0	0.0	6.5
20	8.7	7.6	8.0	7.7	7.9	5.4	8.0	9.9	10.7	11.1	11.4	8.9	10.4	10.5	10.5	10.5	11.1	9.5	8.4	6.7	4.5	3.9	3.0	2.2	11.4	2.2	8.2
21	2.0	5.4	5.2	4.9	5.9	5.2	2.2	1.1	2.4	2.8	6.0	6.9	7.4	9.9	9.2	10.6	9.0	7.9	8.3	8.7	5.2	6.8	9.4	9.2	10.6	1.1	6.3
22	8.5	10.3	11.6	11.8	10.1	11.0	11.3	11.4	9.5	9.1	8.5	9.5	10.7	8.8	9.7	9.3	10.6	8.6	7.6	6.0	6.0	6.1	5.5	4.8	11.8	4.8	9.0
23	5.2	10.3	9.2	9.0	9.0	7.7	6.7	7.1	6.3	6.3	4.6	4.2	4.9	4.0	4.0	5.5	2.4	3.8	3.2	0.8	2.4	1.7	2.1	2.4	10.3	0.8	5.1
24	2.4	3.9	5.5	3.4	0.6	1.1	3.2	4.2	5.2	4.4	4.7	5.5	4.1	2.7	2.4	2.9	2.6	2.1	3.5	2.9	3.6	2.5	5.0	6.3	6.3	0.6	3.5
25	6.4	6.9	6.7	8.3	8.8	8.7	7.9	7.8	9.0	8.7	11.2	11.2	9.9	9.2	9.2	7.6	7.2	6.6	5.0	3.7	1.0	0.3	0.8	1.3	11.2	0.3	6.8
26	2.7	4.5	4.3	4.8	5.3	3.9	4.0	4.7	5.8	5.3	5.3	4.5	3.4	3.8	4.7	4.7	5.4	6.1	5.3	5.5	3.6	5.0	3.3	2.7	6.1	2.7	4.5
27	2.0	1.3	2.9	1.2	2.9	1.1	1.3	3.4	2.9	2.2	3.9	3.3	7.5												7.5	1.1	2.8
28								1.1	2.0	0.5	0.7	1.7	2.9	3.6	4.6	5.2	5.6	5.5	5.7	4.7	3.4	2.2	2.8	5.0	5.7	0.5	3.4
29	7.0	7.0	5.9	6.8	7.1	6.3	6.7	6.2	7.5	7.6	8.7	8.5	9.1	8.3	8.3	8.4	7.4	5.3	4.9	3.7	2.4	3.2	0.5	0.0	9.1	0.0	6.1
30	0.2	0.1	0.0	0.4	1.2	2.7	2.8	4.3	4.4	3.8	3.3	3.1	3.6	2.9	2.7	3.1	7.8	4.5	9.2			0.2	0.4	0.9	9.2	0.0	2.8
Max.	**14.6**	**13.4**	**12.1**	**12.6**	**12.8**	**11.5**	**11.3**	**11.4**	**10.9**	**11.2**	**12.7**	**14.6**	**14.5**	**14.9**	**16.0**	**16.2**	**16.3**	**14.9**	**14.5**	**13.5**	**15.3**	**14.3**	**18.1**	**22.7**	**22.7**		
Min.	**0.2**	**0.1**	**0.0**	**0.0**	**0.1**	**0.9**	**1.0**	**0.1**	**0.7**	**0.5**	**0.7**	**1.7**	**2.5**	**2.1**	**1.6**	**1.7**	**1.4**	**1.3**	**1.4**	**0.3**	**0.0**	**0.0**	**0.4**	**0.0**		**0.0**	
Avg.	**4.6**	**4.7**	**4.9**	**5.1**	**5.2**	**5.1**	**5.4**	**5.2**	**5.6**	**5.6**	**6.2**	**6.4**	**6.9**	**6.8**	**6.6**	**6.4**	**6.1**	**5.7**	**5.5**	**4.8**	**4.4**	**4.4**	**4.7**	**4.9**			**5.5**

Total Hours in Month 720 **Hours Data Available** 700 **Data Recovery** 97.2%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.8	1.5	1.1	0.9	1.2	0.5	0.8	0.5				1.3	1.5	1.7	1.8	2.8	2.2	2.4	2.2	0.9	0.9	1.5	1.6	0.2	2.8	0.2	1.4
2	0.0	0.0	0.4	0.8	2.6	2.8	3.8	4.1	1.8	0.7	1.8	2.0	5.6	4.5	4.4	5.7	7.3	7.1	7.7	6.3	4.5	3.3	3.4	2.3	7.7	0.0	3.4
3	3.2	2.6	1.1	0.0	0.2	0.0	0.0	0.3	0.9	1.8	2.1	2.4	2.2	1.9	2.4	2.2	4.0	4.1	3.1	3.6	2.6	0.7	0.8	0.6	4.1	0.0	1.8
4	1.1	1.4	1.8	1.1	0.5	0.2	0.7	0.0	1.4	1.3	2.5	3.8	4.6	4.8	4.2	4.5	4.2	4.0	2.9	2.0	0.9	0.3	2.8	1.8	4.8	0.0	2.2
5	0.9	2.0	3.2	2.5	1.4	1.4	3.8	2.0	2.5	3.0	3.3	3.7	3.7	4.0	4.8	4.9	5.3	5.2	3.9	3.4	3.1	3.4	2.9	2.5	5.3	0.9	3.2
6	2.5	1.2	3.8	3.5	3.7	5.4	5.3	3.5	3.8	4.3	4.6	4.7	4.9	5.2	5.7	5.7	5.7	6.0	5.9	5.7	5.1	5.1	5.0	5.0	6.0	1.2	4.6
7	5.9	5.7	5.6	4.6	4.1	2.7	2.9	3.1	3.4	3.0	3.1	3.3	4.2	3.7	2.6	3.1	5.0	4.1	4.2	3.8	3.5	3.6	4.3	3.4	5.9	2.6	3.9
8	4.2	4.3	4.1	4.1	3.9	3.7	4.1	4.5	4.3	4.4	3.9	3.0	1.7	2.3	3.3	3.4	3.1	3.4	3.0	2.6	1.7	2.5	2.3	1.7	4.5	1.7	3.3
9	0.9	0.5	0.6	0.7	0.8	1.0	1.3	1.5	1.2	1.6	1.9	2.1	2.2	2.7	3.7	3.6	3.5	3.5	3.1	2.4	2.3	1.3	0.2	0.0	3.7	0.0	1.8
10	0.0	0.0	0.0	0.3	0.1	0.6	0.0	0.0	0.3	1.2	1.7	2.5	2.7	2.7	2.9	3.5	3.3	3.0	2.7	2.5	1.3	1.2	1.0	0.6	3.5	0.0	1.4
11	0.0	0.0	0.9	0.0	2.5	3.9	3.5	4.4	5.5	6.2	6.6	5.9	5.7	5.1	5.4	4.9	4.9	4.5	4.6	5.0	3.1	1.4	1.2	1.7	6.6	0.0	3.6
12	0.9	0.0	0.1	0.0	0.5	0.8	2.6	3.8	5.4	5.7	5.6	5.5	5.8	6.2	6.6	6.2	6.3	6.0	6.3	6.2	5.1	3.2	3.1	3.3	6.6	0.0	4.0
13	3.7	3.4	3.2	3.5	4.1	4.1	3.5	3.5	3.7	5.4	5.8	5.2	5.1	5.2	5.6	6.4	6.3	5.2	4.4	3.9	3.7	3.9	4.8	4.0	6.4	3.2	4.5
14	2.9	1.7	2.3	3.4	7.4	8.3	6.9	5.9	6.0	5.3	4.2	5.2	3.4	3.3	5.2	5.1	6.2	5.7	5.2	4.3	3.7	2.5	3.3	3.7	8.3	1.7	4.6
15	3.5	2.3	0.7	2.4	2.5	2.4	2.5	3.9	3.2	4.8	5.5	6.4	5.4	4.3	3.1	2.7	2.5	2.5	1.6	1.2	1.0	2.1	3.5	3.6	6.4	0.7	3.1
16	3.6	3.5	3.2	4.0	4.2	4.2	4.9	4.5	4.3	3.4	2.8	2.7	2.8	2.6	2.2	2.7	3.9	3.1	3.6	5.0	4.5	4.4	3.3	3.3	5.0	2.2	3.6
17	4.4	2.9	2.5	2.5	2.4	2.1	1.3	1.5	1.9	2.5	5.0	5.5	5.2	5.2	6.7	7.0	6.8	6.5	6.0	4.2	3.9	1.5	1.3	0.1	7.0	0.1	3.7
18	0.7	0.8	0.6	0.8	1.7	0.9	0.9	1.9	2.9	3.8	3.5	3.0	3.0	3.2	2.9	2.7	2.3	2.7	2.4	1.2	1.9	0.7	0.1	0.2	3.8	0.1	1.9
19	0.3	0.1	1.8	0.8	1.5	1.3	0.6	1.9	2.1	2.5	3.5	4.9	3.4	3.9	5.1	5.7	5.3	5.7	6.0	4.6	1.8	1.7	0.2	0.1	6.0	0.1	2.7
20	0.0	0.0	0.0	0.4	0.0	0.0	0.3	3.0	3.8	4.2	3.9	2.4	2.9	3.7	3.2	3.5	3.9	3.6	4.1	4.8	4.2	2.2	0.3	0.0	4.8	0.0	2.3
21	0.2	0.3	0.0	0.4	0.1	0.1	0.3	1.0	1.3	1.5	1.8	2.3	2.4	3.5	4.1	4.6	5.5	5.7	7.1	7.6	7.6	7.4	6.4	5.3	7.6	0.0	3.2
22	5.2	6.3	5.6	3.9	3.5	3.5	6.4	8.3	9.0	6.0	3.1	7.0	7.5	6.0	5.5	5.5	6.4	6.1	4.7	2.9	0.9	0.6	1.2	2.6	9.0	0.6	4.9
23	1.7	2.2	2.4	2.7	2.3	0.9	4.4	6.3	5.3	6.6	8.1	7.9	7.6	6.5	6.1	6.0	7.9	9.1	8.2	5.9	5.7	5.4	6.1	4.5	9.1	0.9	5.4
24	6.6	5.3	5.9	5.0	4.7	4.5	3.9	4.3	6.0	6.9	7.2	8.2	6.7	6.2	5.1	3.7	2.7	3.1	5.1	2.4	1.0	0.8	0.5	0.3	8.2	0.3	4.4
25	0.7	0.9	3.6	2.9	1.7	1.2	1.0	0.0	0.2	0.9	2.1	2.8	2.5	2.5	2.8	2.1	1.9	1.7	1.2	1.1	1.3	0.1	0.5	1.8	3.6	0.0	1.6
26	2.2	4.3	3.9	2.1	1.6	1.0	1.8	2.3	3.7	2.5	2.2	4.0	5.1	4.5	4.5	6.4	6.7	4.9	4.4	3.7	2.7	2.4	0.8	1.4	6.7	0.8	3.3
27	1.6	0.7	1.7	1.2	1.5	2.4	3.0	3.2	4.1	4.9	5.1	4.7	4.7	6.0	6.0	5.6	5.4	6.3	5.9	5.2	4.4	3.1	2.2	2.6	6.3	0.7	3.8
28	1.8	2.7	3.5	2.7	1.0	0.9	1.4	1.9	2.6	4.0	5.0	5.1	5.6	6.6	6.4	7.3	7.0	5.6	4.5	5.4	5.6	3.3	1.6	0.2	7.3	0.2	3.8
29	0.0	0.4	0.3	0.2	2.4	4.5	5.6	5.6	5.1	3.9	3.0	3.2	2.4	2.0	3.2	4.0	3.0	2.7	3.2	3.3	2.9	1.5	0.3	0.0	5.6	0.0	2.6
30	0.0	0.0	0.0	0.6	1.9	2.0	2.5	2.8	1.5	1.6	1.9	4.3	4.3	4.6	5.7	5.5	5.4	4.8	4.5	4.0	3.6	1.7	0.6	0.7	5.7	0.0	2.7
31	0.1	0.9	2.7	3.1	3.7	5.8	6.6	6.6	5.1	3.6	4.4	3.3	4.3	4.3	3.4	3.1	3.5	2.8	3.4	4.3	3.4	1.9	2.8	2.4	6.6	0.1	3.6
Max.	**6.6**	**6.3**	**5.9**	**5.0**	**7.4**	**8.3**	**6.9**	**8.3**	**9.0**	**6.9**	**8.1**	**8.2**	**7.6**	**6.6**	**6.7**	**7.3**	**7.9**	**9.1**	**8.2**	**7.6**	**7.6**	**7.4**	**6.4**	**5.3**	**9.1**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.7**	**1.7**	**1.3**	**1.5**	**1.7**	**1.8**	**2.1**	**1.9**	**1.7**	**1.2**	**0.9**	**0.9**	**0.1**	**0.1**	**0.0**		**0.0**	
Avg.	**2.0**	**1.9**	**2.1**	**2.0**	**2.2**	**2.4**	**2.8**	**3.1**	**3.4**	**3.6**	**3.8**	**4.1**	**4.2**	**4.2**	**4.3**	**4.5**	**4.7**	**4.5**	**4.3**	**3.9**	**3.1**	**2.4**	**2.2**	**1.9**			**3.2**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.4	1.5	1.8	2.4	3.7	2.8	2.7	4.2	4.6	4.3	4.2	4.8	5.9	5.8	7.4	6.4	7.1	5.7	4.1	4.4	3.8	2.7	3.1	3.5	7.4	1.4	4.1
2	3.2	2.8	2.4	1.7	0.9	2.0	3.6	3.0	2.0	2.8	2.8	4.0	4.2	3.4	3.4	2.9	2.7	3.0	2.8	3.0	3.0	2.1	1.9	0.4	4.2	0.4	2.7
3	0.1	1.0	1.6	1.3	0.4	0.7	0.6	0.0	1.1	1.8	2.0	2.1	2.4	2.0	2.0	3.0	2.7	2.3	2.5	1.2	1.6	1.2	0.6	2.3	3.0	0.0	1.5
4	2.8	4.0	4.8	5.2	5.5	6.2	6.6	6.7	5.1	5.4	6.3	6.3	6.8	4.8	3.2	2.3	1.6	4.8	4.9	5.0	5.6	4.3	3.8	3.3	6.8	1.6	4.8
5	4.1	3.3	2.3	2.1	1.7	2.0	3.4	3.3	3.5	4.1	4.9	7.6	9.3	11.6	9.8	10.0	9.6	7.6	5.9	7.1	7.0	6.0	6.0	7.5	11.6	1.7	5.8
6	6.8	5.5	7.5	5.3	3.3	1.8	3.8	3.0	2.7	4.1	4.5	4.3	4.5	4.6	4.8	5.1	3.5	2.9	3.4	4.5	2.6	1.0	0.9	0.6	7.5	0.6	3.8
7	1.4	1.1	1.0	2.3	3.4	3.9	3.1	1.0	4.0	5.7	6.0	5.8	7.0	9.0	10.6	11.0	10.0	9.8	9.0	8.3	9.8	7.7	4.6	3.1	11.0	1.0	5.8
8	3.1	3.0	3.1	4.4	4.6	6.1	5.1	5.3	3.8	3.4	2.9	4.3	4.5	5.4	4.0	3.4	4.7	6.2	6.8	6.6	5.4	4.2	2.8	1.7	6.8	1.7	4.4
9	0.4	0.1	2.1	0.7	0.0	0.5	0.5	1.5	2.9	2.5	3.4	3.0	2.9	2.5	1.3	0.9	1.4	0.5	2.0	3.5	2.5	1.6	3.5	2.4	3.5	0.0	1.8
10	3.1	4.0	3.9	5.4	5.9	5.3	5.4	7.7	7.8	6.8	6.1	5.1	4.1	3.8	3.5	3.2	3.0	2.7	2.9	4.1	5.7	5.5	6.5	5.2	7.8	2.7	4.9
11	4.0	2.8	3.4	3.7	2.6	1.8	1.5	0.7	1.8	2.8	1.9	2.4	3.6	4.7	5.4	6.3	6.7	6.1	5.3	5.3	4.7	4.4	3.3	2.9	6.7	0.7	3.7
12	3.5	3.5	2.7	1.9	1.0	1.1	0.0	0.8	1.9	2.7	3.1	2.9	3.5	3.4	3.5	3.0	3.2	3.0	2.8	2.2	2.1	2.5	0.7	0.0	3.5	0.0	2.3
13	0.0	0.0	0.0	0.2	0.4	1.0	2.3	2.2	0.8	1.7	2.6	2.9	4.1	3.8	2.6	3.3	3.8	3.4	4.1	2.8	2.5	0.6	0.5	0.0	4.1	0.0	1.9
14	0.3	0.9	1.9	1.5	1.9	2.1	2.0	1.7	1.9	3.3	3.3	3.2	2.3	2.8	1.8	2.0	2.5	2.8	3.5	3.5	3.4	2.8	3.2	2.8	3.5	0.3	2.4
15	4.1	4.4	3.8	5.4	7.2	6.8	6.9	7.6	7.0	7.4	6.8	6.3	5.3	5.2	5.6	6.0	6.1	6.1	5.7	5.4	4.7	4.5	4.9	4.6	7.6	3.8	5.7
16	3.8	3.9	3.5	4.2	5.2	5.5	5.1	6.0	5.4	4.5	3.9	4.9	5.7	4.9	5.0	5.1	4.8	5.7	6.8	6.1	5.0	4.6	5.2	5.3	6.8	3.5	5.0
17	5.3	4.7	4.5	4.0	4.3	3.3	2.9	3.1	2.9	2.1	1.5	2.0	2.4	2.5	2.0	2.7	2.5	2.5	2.1	2.7	2.1	1.6	2.5	3.2	5.3	1.5	2.9
18	1.9	0.3	0.4	0.6	2.4	2.4	3.6	2.3	1.5	1.0	1.7	1.7	1.7	1.5	2.3	1.9	2.9	2.1	2.4	2.5	2.6	0.5	0.0	0.2	3.6	0.0	1.7
19	0.6	1.2	2.5	3.8	3.9	4.6	5.6	4.9	5.2	5.9	5.4	6.4	6.9	7.4	7.6	7.2	7.0	6.5	6.4	6.2	6.2	6.1	6.5	7.0	7.6	0.6	5.5
20	6.1	6.1	4.9	5.5	6.0	7.1	7.6	7.6	7.2	7.7	7.7	7.9	7.4	6.4	6.5	6.8	7.1	6.6	6.7	6.7	6.8	7.9	8.1	6.8	8.1	4.9	6.9
21	6.1	6.3	4.8	6.0	6.0	5.6	4.7	5.1	5.6	5.3	4.5	5.1	5.1	4.9	5.6	5.0	5.1	5.2	7.6	7.7	5.4	3.3	4.9	4.6	7.7	3.3	5.4
22	4.5	6.1	3.9	4.5	3.6	1.9	2.5	2.5	3.9	3.8	3.1	3.4	2.9	2.7	3.0	3.0	2.3	2.8	2.5	2.5	2.4	2.3	3.3	3.3	6.1	1.9	3.2
23	4.5	4.1	4.0	4.6	5.4	5.6	5.4	6.9	7.3	6.3	7.1	7.3	6.6	6.7	6.8	7.7	8.5	8.5	8.2	8.5	8.1	8.3	7.5	7.1	8.5	4.0	6.7
24	7.2	7.1	5.9	5.9	5.7	6.3	5.5	5.5	5.2	5.7	6.3	5.3	5.4	5.8	5.2	6.0	5.7	6.1	6.0	5.9	5.4	4.4	4.5	4.9	7.2	4.4	5.7
25	4.2	3.2	3.2	3.4	3.2	3.5	2.9	3.1	4.8	5.9	5.5	5.4	5.6	6.1	6.3	6.6	6.6	6.5	5.5	6.0	4.6	3.0	2.4	2.1	6.6	2.1	4.6
26	1.2	0.7	0.9	2.3	0.5	1.8	2.5	3.2	4.1	3.8	3.7	2.9	3.1	2.9	2.8	2.5	1.8	2.4	3.4	4.6	4.5	3.3	0.5	0.0	4.6	0.0	2.5
27	0.2	1.5	1.2	1.4	0.8	2.2	1.7	2.0	2.3	1.8	2.3	2.7	3.1	3.4	3.6	4.0	4.1	4.0	4.7	4.3	5.1	5.1	4.3	4.2	5.1	0.2	2.9
28	2.8	1.0	1.8	1.4	1.0	2.7	2.5	1.7	0.4	1.1	1.8	2.5	1.9	3.0	3.6	2.7	2.1	1.7	3.2	3.5	3.6	1.8	1.1	2.3	3.6	0.4	2.1
29	1.3	0.0	0.2	0.8	0.5	0.1	0.9	2.3	2.6	2.9	3.1	3.1	3.1	3.0	3.3	4.9	6.2	5.3	4.8	4.5	4.3	2.6	1.4	0.3	6.2	0.0	2.6
30	0.3	0.1	0.2	1.7	1.7	2.5	3.1	3.9	3.4	3.5	3.6	2.8	3.2	2.4	2.2	3.0	2.9	3.2	3.0	3.8	2.9	1.9	0.4	0.0	3.9	0.0	2.3
Max.	**7.2**	**7.1**	**7.5**	**6.0**	**7.2**	**7.1**	**7.6**	**7.7**	**7.8**	**7.7**	**7.7**	**7.9**	**9.3**	**11.6**	**10.6**	**11.0**	**10.0**	**9.8**	**9.0**	**8.5**	**9.8**	**8.3**	**8.1**	**7.5**	**11.6**		
Min.	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.1**	**0.0**	**0.0**	**0.4**	**1.0**	**1.5**	**1.7**	**1.7**	**1.5**	**1.3**	**0.9**	**1.4**	**0.5**	**2.0**	**1.2**	**1.6**	**0.5**	**0.0**	**0.0**		**0.0**	
Avg.	**2.9**	**2.8**	**2.8**	**3.1**	**3.1**	**3.3**	**3.5**	**3.6**	**3.8**	**4.0**	**4.1**	**4.3**	**4.5**	**4.5**	**4.5**	**4.6**	**4.6**	**4.5**	**4.6**	**4.8**	**4.4**	**3.6**	**3.3**	**3.1**			**3.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.1	0.0	0.0	0.3	0.2	2.2	4.0	4.1	3.1	2.9	2.7	2.0	3.1	3.1	2.8	2.6	2.8	2.9	3.0	2.4	2.7	2.1	0.9	4.1	0.0	2.1
2	1.3	1.3	1.5	0.7	0.0	0.1	0.0	0.6	1.5	2.9	2.9	2.6	3.5	2.8	2.7	3.1	2.9	3.8	4.1	3.8	3.4	3.5	2.9	3.3	4.1	0.0	2.3
3	1.4	1.9	2.9	2.1	1.3	1.4	1.2	1.8	2.6	1.8	1.9	2.4	2.6	2.2	2.4	3.1	4.3	4.3	2.7	2.4	1.0	1.1	0.9	3.0	4.3	0.9	2.2
4	3.1	3.2	3.1	3.7	2.6	2.2	2.3	2.3	2.2	3.4	3.9	4.5	4.4	3.3	4.6	4.7	4.1	2.0	1.9	1.4	1.8	2.1	2.8	2.2	4.7	1.4	3.0
5	1.3	1.2	0.9	1.2	0.0	0.1	0.2	0.4	1.1	1.6	2.6	2.6	2.7	2.9	3.0	3.5	2.9	2.1	5.4	5.0	4.2	3.9	3.5	2.6	5.4	0.0	2.3
6	2.8	2.3	1.2	1.4	2.0	2.1	1.8	2.1	1.7	1.9	1.9	0.6	1.7	1.4	2.0	2.1	2.4	1.8	1.7	1.6	1.3	0.4	1.5	0.1	2.8	0.1	1.6
7	0.0	0.1	0.0	0.0	0.0	0.1	0.7	1.0	0.8	1.6	1.8	2.0	1.5	1.7	2.2	2.3	2.5	2.5	3.8	3.2	2.6	2.0	1.4	0.1	3.8	0.0	1.4
8	0.3	0.0	0.0	0.0	0.0	0.0	0.8	1.1	1.7	2.9	2.5	2.5	2.3	3.3	3.8	3.8	4.5	5.1	4.9	4.1	4.1	2.8	2.1	1.6	5.1	0.0	2.3
9	2.8	2.2	1.0	0.9	0.3	0.7	0.1	1.5	2.3	2.2	2.2	3.4	3.9	3.1	2.9	3.1	2.2	2.5	3.3	1.6	2.3	0.8	0.4	0.7	3.9	0.1	1.9
10	0.9	2.3	1.9	0.4	0.5	0.5	1.7	0.7	1.5	2.1	2.7	1.9	3.4	3.5	2.8	4.0	5.4	4.7	4.4	4.3	3.4	2.9	3.2	3.0	5.4	0.4	2.6
11	2.0	1.6	1.9	2.0	3.1	3.1	3.9	4.0	3.5	3.6	4.2	4.5	4.5	4.5	4.7	4.1	3.9	4.3	4.8	4.5	3.8	2.5	2.2	2.0	4.8	1.6	3.5
12	1.6	1.0	0.6	0.4	1.4	1.7	2.5	2.4	2.6	2.0	1.6	2.0	2.3	2.5	4.0	4.2	3.6	3.3	3.1	2.3	2.2	2.2	2.4	2.9	4.2	0.4	2.3
13	2.3	2.0	2.4	2.7	2.0	1.7	1.9	1.8	1.5	2.7	2.9	3.3	3.4	3.0	3.1	3.3	2.7	2.7	2.4	1.9	1.3	0.6	1.2	1.2	3.4	0.6	2.2
14	1.2	0.4	0.3	0.0	0.5	1.4	0.7	1.8	1.5	1.6	2.4	3.5	3.7	3.7	3.7	3.9	4.6	4.1	3.5	3.1	2.5	2.7	2.0	0.7	4.6	0.0	2.2
15	0.7	0.1	0.9	0.5	0.6	0.0	0.5	0.4	2.2	2.4	2.9	3.6	4.0	4.5	5.0	5.0	5.0	4.9	4.2	4.0	3.8	3.0	3.8	3.4	5.0	0.0	2.7
16	3.0	2.0	2.1	2.2	1.5	0.1	1.7	3.1	2.0	2.6	3.6	3.4	3.4	3.9	3.4	4.1	4.0	3.7	4.2	4.7	5.5	5.4	3.3	3.9	5.5	0.1	3.2
17	3.1	2.0	3.0	1.9	2.0	1.2	1.5	3.8	3.5	3.1	2.5	1.6	2.0	3.2	2.8	3.9	4.7	5.5	5.4	4.1	3.7	3.2	0.9	2.2	5.5	0.9	3.0
18	4.3	5.1	4.2	3.5	3.9	1.9	1.5	1.2	1.5	0.7	1.4	1.7	1.9	2.6	3.4	2.7	3.2	1.8	1.0	0.3	0.6	0.2	0.3	0.0	5.1	0.0	2.0
19	0.1	0.7	2.7	1.6	0.9	1.0	0.2	0.2	1.5	2.5	2.8	2.0	1.5	1.4	2.0	2.2	2.0	3.4	2.3	2.0	2.1	1.0	0.0	0.0	3.4	0.0	1.5
20	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.5	1.9	3.1	4.5	4.4	3.7	4.6	5.0	5.2	4.2	4.0	4.0	4.3	5.1	4.5	5.2	5.6	5.6	0.0	3.0
21	5.7	5.2	4.9	4.6	5.4	5.3	5.4	5.4	5.7	6.0	5.7	5.5	5.2	4.7	4.5	4.9	5.3	5.1	4.6	4.3	4.1	4.0	2.9	3.0	6.0	2.9	4.9
22	2.9	3.5	3.5	3.7	4.2	4.1	4.1	4.0	3.9	3.9	3.8	3.9	3.9	3.6	3.7	3.3	3.4	2.8	3.0	2.8	3.0	2.9	2.7	2.6	4.2	2.6	3.5
23	2.8	2.1	1.4	1.5	0.0	0.5	0.2	1.4	1.5	2.1	2.7	3.2	3.0	3.8	3.6	3.7	4.7	5.1	4.2	4.1	3.4	3.2	3.1	2.8	5.1	0.0	2.7
24	2.1	4.7	6.1	6.6	6.4	5.9	6.1	6.6	5.5	5.6	4.7	4.1	4.3	5.2	5.4	4.9	5.1	4.1	4.1	3.7	2.4	3.7	3.1	2.1	6.6	2.1	4.7
25	2.8	5.4	7.2	6.9	6.6	6.6	7.0	5.9	7.5	6.9	5.0	4.8	5.0	5.7	6.4	5.6	5.7	5.5	5.0	3.6	2.0	0.7	0.3	0.0	7.5	0.0	4.9
26	0.0	0.0	0.0	0.1	0.2	1.3	1.9	2.9	3.2	3.0	3.1	2.9	2.6	2.4	3.1	3.8	2.7	4.3	5.0	3.9	2.2	0.8	0.8	1.5	5.0	0.0	2.1
27	0.3	0.3	0.0	0.5	1.0	0.0	1.1	0.8	2.0	3.7	3.7	3.3	2.8	3.6	4.3	3.9	4.0	5.2	3.7	4.1	2.9	4.2	1.8	0.1	5.2	0.0	2.4
28	0.4	1.1	2.0	2.3	2.3	3.0	3.4	3.6	4.0	4.8	5.3	5.4	6.5	6.8	6.6	6.9	6.7	6.3	5.8	6.6	6.3	4.0	3.4	3.7	6.9	0.4	4.5
29	4.3	2.8	2.1	0.4	1.1	1.6	3.3	3.0	3.0	3.3	3.3	3.7	4.1	4.0	4.6	4.2	4.0	3.9	4.0	3.4	3.4	2.8	3.0	1.6	4.6	0.4	3.1
30	2.1	2.3	1.0	2.4	1.4	0.5	0.5	1.8	2.4	2.6	3.6	3.9	4.0	4.2	4.2	4.3	4.8	4.7	4.0	3.3	2.9	2.4	3.0	2.5	4.8	0.5	2.9
31	2.0	2.1	2.2	2.4	2.3	1.7	1.2	1.6	2.3	3.5	4.0	4.0	3.8	4.5	4.8	5.7	5.9	6.6	6.3	5.2	5.6	5.8	5.9	5.4	6.6	1.2	4.0
Max.	**5.7**	**5.4**	**7.2**	**6.9**	**6.6**	**6.6**	**7.0**	**6.6**	**7.5**	**6.9**	**5.7**	**5.5**	**6.5**	**6.8**	**6.6**	**6.9**	**6.7**	**6.6**	**6.3**	**6.6**	**6.3**	**5.8**	**5.9**	**5.6**	**7.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.8**	**0.7**	**1.4**	**0.6**	**1.5**	**1.4**	**2.0**	**2.1**	**2.0**	**1.8**	**1.0**	**0.3**	**0.6**	**0.2**	**0.0**	**0.0**		**0.0**	
Avg.	**1.9**	**1.9**	**2.0**	**1.8**	**1.7**	**1.6**	**1.9**	**2.3**	**2.6**	**3.0**	**3.2**	**3.2**	**3.3**	**3.5**	**3.8**	**3.9**	**4.0**	**4.0**	**3.9**	**3.4**	**3.1**	**2.6**	**2.3**	**2.1**			**2.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

August 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.9	5.9	6.2	5.5	5.6	5.7	5.9	6.4	6.6	6.6	7.3	7.1	6.9	6.7	7.4	7.6	7.3	7.3	6.7	6.1	7.0	7.0	6.4	7.4	7.6	5.5	6.6
2	6.3	7.0	6.8	8.3	8.5	8.0	7.8	7.4	7.3	7.8	7.6	7.5	7.4	7.3	7.3	7.9	7.2	6.0	5.8	5.8	6.0	5.4	4.5	5.2	8.5	4.5	6.9
3	5.2	5.0	5.5	5.0	4.3	3.9	3.9	4.5	4.9	5.2	4.9	4.9	5.3	6.2	6.8	7.2	6.4	6.5	6.4	6.2	5.3	4.4	4.5	5.5	7.2	3.9	5.3
4	4.7	5.7	6.7	7.3	5.5	6.1	6.4	6.3	6.5	6.8	6.8	6.6	6.8	6.5	6.4	6.2	5.4	4.9	5.0	4.8	5.0	5.3	5.4	6.1	7.3	4.7	6.0
5	7.4	5.6	5.9	5.4	5.7	5.4	5.8	5.0	6.7	6.2	6.0	7.9	6.2	5.7	5.2	5.5	6.3	6.0	5.7	6.2	7.8	8.8	6.6	6.1	8.8	5.0	6.2
6	5.0	6.1	6.1	6.2	4.0	4.6	7.3	7.9	7.9	7.3	6.3	7.4	7.5	7.9	8.2	7.4	7.3	7.1	6.2	5.8	5.4	4.5	5.9	5.8	8.2	4.0	6.5
7	6.6	5.6	6.4	5.9	2.4	2.7	5.3	6.1	8.1	7.5	7.2	6.6	6.9	7.7	8.4	7.6	7.3	7.7	6.3	5.7	5.2	4.8	3.9	0.8	8.4	0.8	5.9
8	2.2	2.6	2.6	4.3	3.7	4.0	4.4	4.7	4.6	5.8	6.2	5.4	5.3	4.6	4.0	3.9	4.2	4.6	4.3	3.0	2.8	3.5	4.3	3.8	6.2	2.2	4.1
9	3.5	3.9	3.8	3.8	4.0	3.9	4.7	4.8	3.3	3.1	3.1	2.1	2.1	2.6	3.4	3.6	3.5	3.2	3.3	2.6	2.1	0.3	0.0	0.3	4.8	0.0	3.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.1	1.9	2.3	2.5	2.5	2.5	2.7	2.9	3.1	2.9	3.2	2.7	2.4	0.9	0.3	0.4	3.2	0.0	1.5
11	1.0	0.1	0.8	0.7	0.3	0.0	0.7	0.8	1.2	2.2	2.1	1.8	2.1	2.5	3.0	2.9	3.6	3.8	2.8	2.6	1.6	0.8	1.5	0.6	3.8	0.0	1.6
12	0.2	0.0	1.0	1.2	1.5	1.4	2.2	2.1	2.5	2.5	1.7	2.9	4.8	3.4	2.4	2.7	4.3	4.1	4.3	4.0	3.0	1.0	0.7	0.4	4.8	0.0	2.3
13	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	1.9	1.7	2.4	2.5	2.9	3.4	3.2	2.8	3.7	3.6	3.3	3.2	4.6	5.3	4.6	6.7	6.7	0.0	2.4
14	6.7	6.3	5.9	5.1	2.2	1.5	1.4	3.4	3.3	3.9	3.7	3.5	3.6	3.6	3.0	2.8	3.9	3.7	2.0	2.5	2.2	2.5	2.5	3.2	6.7	1.4	3.4
15	4.2	4.9	5.4	5.2	5.0	4.9	5.0	5.7	7.4	7.6	6.2	5.3	7.4	4.1	5.4	4.8	3.9	4.0	3.7	3.4	3.1	2.5	2.1	2.7	7.6	2.1	4.7
16	2.8	3.0	1.8	1.5	1.6	1.9	2.1	1.2	1.9	2.5	1.9	1.1	1.7	1.6	1.6	1.4	2.5	3.6	3.3	3.3	2.4	1.9	0.2	0.0	3.6	0.0	2.0
17	0.8	0.1	0.8	2.4	4.1	2.6	1.1	0.8	1.6	4.2	5.0	4.6	4.9	5.9	5.9	6.3	6.6	6.4	5.9	4.9	4.0	5.2	5.4	4.7	6.6	0.1	3.9
18	7.2	7.2	5.4	6.1	8.1	6.8	7.4	7.3	7.3	7.9	9.0	8.9	9.8	11.5	11.5	10.6	11.4	11.6	10.0	9.5	9.6	8.9	10.6	10.2	11.6	5.4	8.9
19	9.6	8.7	8.9	8.2	7.8	8.7	9.1	9.2	9.5	8.7	5.7	5.9	5.8	5.5	7.3	7.9	7.4	6.1	4.8	4.7	4.9	5.4	4.6	4.1	9.6	4.1	7.0
20	3.1	2.1	2.8	3.8	4.7	4.9	4.4	2.8	3.3	4.6	4.3	4.4	4.2	4.7	5.3	6.1	5.9	6.2	5.3	4.8	2.8	3.0	4.1	3.5	6.2	2.1	4.2
21	2.8	4.5	3.3	2.9	3.3	5.7	5.9	5.8	5.6	5.0	4.0	4.2	3.9	4.4	4.5	5.2	5.3	5.2	4.6	4.6	3.7	3.5	3.6	2.7	5.9	2.7	4.3
22	2.9	3.7	4.3	4.7	3.5	3.4	3.5	3.9	4.1	4.5	5.0	5.2	5.0	4.6	4.4	4.4	4.4	4.3	5.0	5.2	4.6	4.0	4.2	3.5	5.2	2.9	4.3
23	3.0	2.6	1.7	1.7	1.4	2.0	1.1	1.3	2.1	2.1	2.9	3.6	3.8	4.2	5.0	4.5	4.8	4.4	4.1	3.2	3.2	4.2	4.6	4.6	5.0	1.1	3.2
24	4.6	4.9	5.4	6.6	4.4	4.0	4.2	4.3	5.0	5.0	5.1	5.0	4.3	3.0	1.5	3.0	2.2	3.1	2.1	1.4	0.0	0.1	1.5	1.3	6.6	0.0	3.4
25	1.4	1.4	0.8	2.9	2.9	1.7	1.7	1.1	0.9	0.7	2.0	1.8	2.0	2.6	3.2	3.7	4.5	4.7	5.0	3.7	1.7	0.1	1.7	2.0	5.0	0.1	2.3
26	0.0	0.0	0.7	0.9	0.4	0.5	0.0	0.8	2.0	2.4	3.0	3.1	3.5	3.1	4.3	3.9	3.9	3.6	3.1	2.5	0.8	2.6	3.0	5.2	5.2	0.0	2.2
27	5.3	4.5	4.3	4.0	3.1	2.3	1.7	1.4	2.1	3.0	4.3	4.8	4.0	3.2	2.4	3.3	2.5	2.3	1.9	0.6	0.1	1.2	0.9	0.4	5.3	0.1	2.6
28	0.5	1.2	0.7	1.5	0.9	0.9	0.6	1.2	0.9	3.0	2.7	2.0	2.4	3.2	3.0	2.5	2.0	3.1	4.5	3.0	3.7	3.6	2.5	4.7	4.7	0.5	2.3
29	4.8	4.2	6.1	5.6	4.7	5.1	6.5	7.3	7.6	9.9	9.7	8.2	6.8	6.9	5.9	6.2	6.5	5.7	5.0	4.6	5.8	6.3	6.2	6.1	9.9	4.2	6.3
30	5.9	6.8	6.8	6.3	6.8	6.3	5.7	6.3	5.3	5.3	3.9	3.8	2.9	2.8	3.5	2.9	2.9	1.6	1.6	1.4	2.3	2.5	2.9	1.8	6.8	1.4	4.1
31	2.0	2.6	0.8	0.5	1.2	0.5	0.9	2.3	2.9	2.8	3.6	3.1	2.1	1.6	2.6	2.5	1.6	1.7	1.3	0.4	0.4	2.4	0.8	0.4	3.6	0.4	1.7
Max.	**9.6**	**8.7**	**8.9**	**8.3**	**8.5**	**8.7**	**9.1**	**9.2**	**9.5**	**9.9**	**9.7**	**8.9**	**9.8**	**11.5**	**11.5**	**10.6**	**11.4**	**11.6**	**10.0**	**9.5**	**9.6**	**8.9**	**10.6**	**10.2**	**11.6**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**0.9**	**0.7**	**1.7**	**1.1**	**1.7**	**1.6**	**1.5**	**1.4**	**1.6**	**1.6**	**1.3**	**0.4**	**0.0**	**0.1**	**0.0**	**0.0**		**0.0**	
Avg.	**3.7**	**3.7**	**3.8**	**4.0**	**3.6**	**3.5**	**3.8**	**4.0**	**4.4**	**4.8**	**4.7**	**4.6**	**4.7**	**4.6**	**4.8**	**4.8**	**4.9**	**4.8**	**4.4**	**4.0**	**3.7**	**3.6**	**3.6**	**3.6**			**4.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Speed (m/s)

September 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	0.1	0.1	0.3	2.1	1.8	2.0	2.1	3.0	2.6	2.2	2.5	2.7	2.6	2.6	3.1	3.6	3.7	2.9	2.0	2.0	1.5	0.9	3.7	0.0	1.9
2	1.6	0.9	1.6	2.9	2.3	2.5	2.5	2.5	2.3	3.4	3.6	3.6	3.2	3.6	3.6	4.2	4.2	4.0	4.4	3.9	2.9	3.1	3.1	2.9	4.4	0.9	3.0
3	3.7	3.7	4.9	5.9	6.3	6.9	7.5	8.6	8.7	8.6	8.4	8.2	9.3	9.0	9.0	9.3	9.1	8.8	8.9	9.2	10.4	9.8	9.4	9.7	10.4	3.7	8.0
4	8.9	8.7	8.4	6.6	4.8	3.1	1.1	3.0	4.5	5.1	5.2	5.0	4.3	4.0	2.1	2.1	4.0	4.1	5.0	5.5	5.2	5.8	6.1	3.5	8.9	1.1	4.8
5	1.3	1.5	1.1	1.5	2.3	1.5	0.8	0.6	2.3	3.8	5.4	5.2	5.1	5.0	4.4	4.0	1.7	1.1	1.3	0.3	0.3	0.1	0.0	0.1	5.4	0.0	2.1
6	1.4	2.8	0.6	0.4	0.5	0.5	1.2	1.0	0.4	3.2	3.3	3.8	3.6	4.0	3.7	3.2	3.6	3.1	2.0	1.7	2.1	1.8	0.7	1.0	4.0	0.4	2.1
7	2.9	3.7	4.4	3.2	4.0	5.6	7.3	7.5	8.0	8.4	6.6	6.9													8.4	2.9	5.7
Max.	**8.9**	**8.7**	**8.4**	**6.6**	**6.3**	**6.9**	**7.5**	**8.6**	**8.7**	**8.6**	**8.4**	**8.2**	**9.3**	**9.0**	**9.0**	**9.3**	**9.1**	**8.8**	**8.9**	**9.2**	**10.4**	**9.8**	**9.4**	**9.7**	**10.4**		
Min.	**0.0**	**0.0**	**0.1**	**0.1**	**0.3**	**0.5**	**0.8**	**0.6**	**0.4**	**3.0**	**2.6**	**2.2**	**2.5**	**2.7**	**2.1**	**2.1**	**1.7**	**1.1**	**1.3**	**0.3**	**0.3**	**0.1**	**0.0**	**0.1**		**0.0**	
Avg.	**2.8**	**3.0**	**3.0**	**2.9**	**2.9**	**3.2**	**3.2**	**3.6**	**4.0**	**5.0**	**5.0**	**5.0**	**4.7**	**4.7**	**4.2**	**4.2**	**4.3**	**4.1**	**4.2**	**3.9**	**3.8**	**3.8**	**3.5**	**3.0**			**3.8**

Total Hours in Month 720 **Hours Data Available** 156 **Data Recovery** 21.7%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climtrncs) (m/s)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
14																		2.9	3.0	3.6	3.9	3.7	4.9	4.7	4.9	2.9	3.8
15	4.5	5.1	5.1	3.9	3.4	4.3	4.1	4.7	3.3	5.1	6.4	7.2	7.3	6.7	7.3	7.6	6.5	4.9	5.1	3.6	3.1	2.3	3.3	4.5	7.6	2.3	5.0
16	4.2	3.8	3.1	3.7	3.0	0.4	0.5	0.1	0.5	2.1	3.7	3.1	3.5	3.6	3.6	4.4	4.9	4.1	4.0	4.5	3.5	4.0	5.4	4.9	5.4	0.1	3.3
17	4.5	2.1	2.6	3.4	1.6	1.2	2.8	1.0	0.2	2.5	3.3	2.9	2.6	2.0	2.4	2.6	2.4	1.6	2.0	1.7	1.8	0.4	0.5	2.2	4.5	0.2	2.1
18	3.0	3.8	3.9	4.1	5.2	6.4	8.6	9.1	11.4	10.7	9.7	10.1	11.3	11.3	10.3	8.5	9.5	9.1	7.2	7.2	7.4	6.1	4.5	3.6	11.4	3.0	7.6
19	3.3	3.6	3.5	4.8	3.6	2.3	2.7	3.9	2.3	3.7	4.4	4.9	6.1	6.7	7.9	7.7	9.7	8.6	9.3	7.7	7.2	7.1	7.1	7.2	9.7	2.3	5.6
20	7.5	7.0	7.4	8.0	6.2	5.9	6.4	7.2	6.9	5.6	5.5	5.0	6.6	5.5	5.1	4.0	4.1	4.6	3.8	1.4	1.2	3.0	1.4	2.3	8.0	1.2	5.1
21	2.4	1.0	1.1	0.7	0.8	3.6	3.3	2.1	4.9	5.6	6.0	6.8	6.1	5.0	4.7	5.2	4.2	4.8	4.4	3.3	3.3	1.8	0.7	2.2	6.8	0.7	3.5
22	1.9	2.5	2.9	1.4	2.0	2.6	2.5	0.8	2.3	2.3	3.0	3.5	3.7	4.7	6.8	6.5	6.4	7.4	7.7	8.2	8.7	8.7	9.6	9.0	9.6	0.8	4.8
23	6.6	4.6	4.6	5.1	5.1	5.5	3.4	1.0	0.4	1.1	2.2	2.4	3.3	3.9	4.9	4.7	4.7	4.4	4.6	5.5	4.2	3.1	2.6	1.5	6.6	0.4	3.7
24	3.3	2.2	1.2	4.0	4.8	5.1	3.2	2.9	2.7	2.8	3.4	4.7	4.4	4.1	6.0	4.7	3.1	2.8	3.3	1.0	1.8	2.7	2.9	4.0	6.0	1.0	3.4
25	3.8	3.6	5.1	3.7	1.5	3.4	4.9	5.1	5.1	5.5	4.8	5.1	5.4	5.1	4.7	4.8	4.3	5.1	5.5	4.1	4.9	4.2	4.9	4.2	5.5	1.5	4.5
26	3.9	5.0	5.0	4.1	4.1	2.7	2.5	1.8	1.6	1.6	1.1	3.5	2.7	2.9	1.8	0.8	0.8	2.0	2.3	2.1	0.4	0.6	0.5	0.9	5.0	0.4	2.3
27	2.0	1.7	1.8	2.3	1.3	1.8	2.5	1.3	0.9	2.0	2.6	1.5	3.3	3.3	3.1	3.1	3.8	3.5	4.7	4.7	6.6	7.0	7.2	8.1	8.1	0.9	3.3
28	8.0	7.7	9.7	11.0	9.7	10.0	7.4	6.5	5.4	3.6	2.9	3.5	3.7	3.5	3.3	2.4	1.9	3.2	3.0	3.4	2.7	1.7	0.6	0.2	11.0	0.2	4.8
29	2.1	1.9	2.4	2.0	2.3	2.1	1.4	1.9	0.9	1.1	1.2	1.2	2.1	2.7	3.6	4.1	3.2	2.5	2.4	2.6	3.3	3.7	4.9	5.6	5.6	0.9	2.6
30	4.4	4.2	4.0	1.9	2.7	3.1	4.3	3.5	4.2	4.6	4.9	5.9	6.0	5.0	3.3	3.2	2.8	4.0	4.2	2.1	0.4	2.3	3.1	3.4	6.0	0.4	3.6
Max.	**8.0**	**7.7**	**9.7**	**11.0**	**9.7**	**10.0**	**8.6**	**9.1**	**11.4**	**10.7**	**9.7**	**10.1**	**11.3**	**11.3**	**10.3**	**8.5**	**9.7**	**9.1**	**9.3**	**8.2**	**8.7**	**8.7**	**9.6**	**9.0**	**11.4**		
Min.	**1.9**	**1.0**	**1.1**	**0.7**	**0.8**	**0.4**	**0.5**	**0.1**	**0.2**	**1.1**	**1.1**	**1.2**	**2.1**	**2.0**	**1.8**	**0.8**	**0.8**	**1.6**	**2.0**	**1.0**	**0.4**	**0.4**	**0.5**	**0.2**		**0.1**	
Avg.	**4.1**	**3.7**	**4.0**	**4.0**	**3.6**	**3.8**	**3.8**	**3.3**	**3.3**	**3.7**	**4.1**	**4.5**	**4.9**	**4.7**	**4.9**	**4.6**	**4.5**	**4.4**	**4.5**	**3.9**	**3.8**	**3.7**	**3.8**	**4.0**			**4.1**

Total Hours in Month 720 **Hours Data Available** 391 **Data Recovery** 54.3%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climtrncs) (m/s)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.3	3.7	4.2	2.7	1.7	1.2	0.7	0.9	0.2	0.6	1.8	2.0	2.3	2.9	3.9	5.3	5.4	5.3	5.9	7.0	6.6	4.8	3.8	5.0	7.0	0.2	3.4
2	4.8	5.6	4.9	6.6	8.0	8.3	9.0	9.1	9.7	9.5	9.1	8.4	7.5	7.6	7.3	7.5	7.7	7.5	6.2	7.0	8.8	8.0	7.9	7.4	9.7	4.8	7.6
3	5.5	5.7	5.7	5.0	6.5	7.3	7.2	6.8	6.5	7.6	7.0	7.3	8.5	8.0	8.1	8.1	6.2	2.3	3.9	1.9	1.3	0.6	0.7	1.1	8.5	0.6	5.4
4	2.3	0.4	0.6	0.9	1.3	2.0	3.1	2.9	3.5	5.0	6.8	6.8	6.2	6.8	7.2	7.6	7.5	7.1	6.9	7.6	8.9	7.4	7.8	6.7	8.9	0.4	5.1
5	6.3	6.9	7.3	8.0	8.1	7.2	7.3	6.9	6.9	7.3	7.7	6.1	2.7	3.2	6.5	5.8	6.9	7.4	9.8	7.8	5.8	5.5	4.9	6.5	9.8	2.7	6.6
6	6.6	7.4	7.5	7.2	7.8	7.6	7.0	7.0	6.6	6.9	6.6	8.8	9.5	9.4	8.5	8.0	6.0	6.1	5.1	4.2	3.1	4.0	3.7	4.2	9.5	3.1	6.6
7	4.9	5.3	5.3	5.8	5.8	7.4	6.5	6.5	7.5	7.9	7.9	8.5	7.8	8.2	8.4	9.8	8.7	9.2	8.7	10.4	10.1	10.8	10.3	9.8	10.8	4.9	8.0
8	12.5	9.9	7.7	8.7	7.0	9.9	10.4	9.1	9.2	11.2	7.4	3.6	5.2	5.7	5.0	4.8	5.3	4.9	3.5	3.1	3.9	3.5	5.5	5.3	12.5	3.1	6.8
9	4.3	4.7	3.2	2.6	3.6	1.6	1.6	2.7	3.0	3.1	3.1	3.6	2.5	1.5	1.5	1.4	3.2	3.7	2.5	2.9	2.9	2.1	2.8	2.3	4.7	1.4	2.8
10	3.4	3.5	3.9	4.6	3.1	5.0	6.1	5.7	4.5	4.5	5.9	5.0	5.2	5.7	5.1	4.3	3.6	4.2	3.1	2.6	1.6	1.6	0.4	1.9	6.1	0.4	3.9
11	2.9	2.7	0.6	1.8	1.8	1.6	3.9	3.5	3.0	4.3	3.5	2.2	3.2	4.1	3.9	4.8	5.3	5.8	5.1	4.4	4.1	3.6	3.8	3.5	5.8	0.6	3.5
12	3.8	3.4	2.7	3.5	3.1	2.6	1.4	0.8	1.3	2.2	0.6	0.5	0.8	1.0	1.6	2.2	2.7	2.1	1.9	2.1	3.6	3.6	3.7	2.3	3.8	0.5	2.2
13	3.4	3.9	4.2	3.0	2.3	4.0	4.8	5.6	4.8	5.4	5.3	5.5	5.2	5.2	4.2	3.7	4.1	4.2	3.9	3.0	3.6	3.8	3.7	3.4	5.6	2.3	4.2
14	3.7	5.1	3.3	3.0	2.8	3.6	4.2	4.5	3.4	1.5	3.3	4.8	4.5	4.4	3.7	3.1	3.8	3.6	2.8	3.2	1.7	2.7	2.8	3.0	5.1	1.5	3.4
15	3.4	3.6	3.0	3.0	3.3	2.7	1.6	2.0	2.1	3.0	3.5	3.6	2.8	3.7	3.4	3.1	2.7	2.3	2.4	2.8	3.3	3.5	3.3	3.8	3.8	1.6	3.0
16	3.8	4.1	4.5	4.4	4.7	5.5	3.7	5.0	5.2	5.1	5.7	5.7	6.1	5.1	6.2	7.3	6.1	5.6	5.6	5.9	5.7	8.1	7.6	7.1	8.1	3.7	5.6
17	5.5	5.8	5.5	4.6	4.9	4.3	4.6	4.5	4.8	4.5		5.0	4.5	999.0	4.8	5.1	4.0	3.7	3.1	2.4	2.7	2.7	2.5	3.8	999.0	2.4	351.8
18	3.1	3.0	3.5	3.4	4.0	3.3	4.2	3.5	2.6	2.5	2.6	2.2	1.8	2.7	2.1	0.8	1.9	1.5	1.7	1.7	2.2	2.1	2.6	0.5	4.2	0.5	2.5
19	0.2	0.9	2.1	1.3	2.7	3.6	2.5	1.0	0.6	1.1	0.1	0.0	0.7	0.9	0.7	0.5	0.3	0.1	1.3	1.7	2.1	2.4	2.0	1.5	3.6	0.0	1.3
20	0.8	1.3	1.7	1.4	1.9	2.1	2.3	1.7	2.5	2.2	2.3	3.4	4.6	6.5	7.0	7.8	8.3	7.8	8.5	8.8	10.1	9.2	8.5	8.8	10.1	0.8	5.0
21	9.4	11.0	8.9	9.8	9.7	9.2	8.4	7.4	7.6	5.2	5.1	4.9	6.1	6.7	6.8	6.0	6.2	4.7	4.1	3.0	1.8	2.3	1.2	2.8	11.0	1.2	6.2
22	3.9	3.6	2.2	2.2	2.1	4.5	3.5	3.7	2.0	2.3	2.6	3.4	3.1	2.4	2.0	1.5	2.1	2.2	0.9	0.9	0.8	1.2	0.3	0.0	4.5	0.0	2.2
23	0.0	0.0	0.9	0.5	0.0	0.0	1.4	0.6	0.0	0.5	0.7	0.3	1.2	1.1	1.9	1.6	0.5	2.5	5.1	4.3	2.4	0.4	0.8	0.1	5.1	0.0	1.1
24	0.3	0.1	0.0	2.1	1.9	0.0	0.5	0.0	0.2	1.9	2.8	2.4	3.0	2.3	2.8	2.0	3.2	4.2	4.4	4.2	4.1	3.7	2.4	4.2	4.4	0.0	2.2
25	5.5	6.9	8.1	9.6	8.9	11.8	13.3	11.2	11.4	14.2	15.7	15.5	14.0	13.2	12.9	13.8	14.7	13.9	12.7	10.0	6.0	5.1	3.8	2.6	15.7	2.6	10.6
26	2.9	3.1	2.9	2.2	1.4	1.9	2.1	2.9	2.5	2.5	2.1	1.8	2.6	2.8	2.9	2.7	2.4	3.4	3.9	5.2	6.4	6.5	6.5	5.9	6.5	1.4	3.3
27	6.5	6.6	6.9	7.4	6.6	6.3	5.1	5.4	4.3	3.5	5.0	4.2	3.1	4.2	7.0	6.0	5.3	3.4	2.1	1.8	0.3	0.2	0.0	0.4	7.4	0.0	4.2
28	0.2	1.7	0.8	0.4	0.5	0.0	0.1	0.0	0.0	0.5	1.2	0.7	0.8	2.1	2.5	2.7	3.1	3.3	3.4	2.7	4.5	4.7	6.0	7.7	7.7	0.0	2.1
29	8.0	9.1	8.8	9.7	10.0	9.8	11.0	11.5	11.8	12.6	12.7	14.2	13.3	11.4	10.5	10.1	9.1	9.5	10.4	9.6	10.7	10.5	9.2	10.0	14.2	8.0	10.6
30	6.1	5.8	7.4	7.7	9.2	9.7	7.5	4.8	5.3	4.9	4.8	4.4	1.3	1.5	2.2	3.2	3.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0	3.7
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	6.0	7.0	5.2	4.9	4.5	4.1	4.1	4.3	2.4	2.4	6.6	8.4	7.4	6.6	8.1	8.4	0.0	3.6
Max.	**12.5**	**11.0**	**8.9**	**9.8**	**10.0**	**11.8**	**13.3**	**11.5**	**11.8**	**14.2**	**15.7**	**15.5**	**14.0**	**999.0**	**12.9**	**13.8**	**14.7**	**13.9**	**12.7**	**10.4**	**10.7**	**10.8**	**10.3**	**10.0**	**999.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**0.1**	**0.0**	**0.7**	**0.9**	**0.7**	**0.5**	**0.3**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**4.1**	**4.3**	**4.1**	**4.3**	**4.4**	**4.7**	**4.7**	**4.4**	**4.4**	**4.8**	**5.0**	**4.8**	**4.7**	**262.7**	**5.0**	**5.0**	**5.0**	**4.6**	**4.6**	**4.5**	**4.4**	**4.3**	**4.0**	**4.2**			**15.3**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climtrncs) (m/s)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.2	5.9	6.1	6.1	5.7	4.9	4.6	4.4	3.9	4.3	4.5	3.7	3.4	3.1	1.8	0.6	2.5	2.9	3.7	5.2	4.9	5.0	5.4	6.5	7.2	0.6	4.4
2	5.1	3.0	1.9	1.6	0.8	0.8	0.1	1.7	3.7	3.0	3.1	3.8	3.7	3.2	4.2	4.7	4.8	3.0	3.6	4.8	4.2	4.0	5.2	5.7	5.7	0.1	3.3
3	6.7	6.1	4.9	5.2	5.1	5.3	4.7	3.8	1.5	0.5	0.1	0.4	0.1	0.4	1.3	2.1	2.6	1.0	0.2	2.9	4.3	6.6	7.0	7.6	7.6	0.1	3.3
4	7.3	7.7	9.6	10.6	9.8	8.0	10.9	9.1	9.0	7.2	8.7	8.4	8.7	9.0	10.3	9.9	9.2	8.1	8.2	4.4	4.1	4.9	4.9	5.0	10.9	4.1	8.0
5	5.5	5.6	4.7	4.5	4.5	4.5	4.8	4.2	4.4	4.7	4.3	4.4	3.7	3.7	4.1	3.0	3.2	5.1	5.9	7.0	7.6	8.1	8.9	8.0	8.9	3.0	5.2
6	8.1	8.6	8.4	8.9	8.0	9.4	9.9	10.9	11.0	11.3	12.3	12.2	12.7	13.9	14.1	12.8	12.6	11.4	10.2	8.7	9.7	8.1	6.5	6.0	14.1	6.0	10.2
7	4.5	4.3	5.4	7.3	7.4	8.3	7.3	6.1	7.5	7.8	7.5	7.2	7.1	6.6	6.7	6.6	4.9	4.1	4.9	4.3	4.7	4.3	4.2	3.4	8.3	3.4	5.9
8	2.5	1.7	2.0	5.4	7.2	9.9	12.7	11.3	12.2	12.1	14.2	15.2	12.8	7.8	8.5	6.8	7.8	6.3	5.8	7.0	6.6	7.3	6.2	5.6	15.2	1.7	8.1
9	5.8	5.6	6.0	5.2	6.0	6.2	5.9	7.2	7.3	5.1	5.7	5.4	5.6	5.4	5.7	6.3	5.0	3.5	3.3	4.3	4.6	3.7	2.6	3.0	7.3	2.6	5.2
10	2.9	3.9	3.4	3.9	4.3	4.2	4.6	4.7	4.5	3.4	2.3	4.1	4.3	5.2	5.0	5.4	5.0	4.6	3.2	3.1	3.0	2.5	3.4	4.0	5.4	2.3	4.0
11	3.4	3.4	3.8	2.1	2.8	6.0	5.8	4.8	5.2	5.9	4.6	3.6	5.0	4.6	4.9	4.9	5.1	3.5	4.0	4.0	4.5	4.2	2.4	0.5	6.0	0.5	4.1
12	1.6	1.6	0.3	0.9	2.6	1.5	0.9	1.5	1.4	1.1	1.4	1.7	1.7	2.2	2.2	1.9	0.9	2.4	4.6	5.3	6.9	7.7	8.0	7.6	8.0	0.3	2.8
13	7.3	8.6	8.1	7.9	8.5	9.3	9.6	9.1	8.4	9.1	8.6	7.5	4.3	2.8	3.0	1.3	1.9	2.0	5.3	5.6	6.2	5.2	4.3	5.0	9.6	1.3	6.2
14	5.3	5.6	5.6	5.9	5.3	5.0	5.3	2.9	0.9	1.6	2.3	1.4	3.9	4.2	3.4	3.8	4.4	3.9	4.1	4.8	3.7	4.4	3.9	4.3	5.9	0.9	4.0
15	5.0	5.1	5.1	4.8	4.9	5.7	7.4	7.9	7.5	9.1	9.2	9.4	8.5	8.7	9.5	9.6	11.5	11.3	12.1	12.3	12.1	13.0	13.4	13.4	13.4	4.8	9.0
16	13.8	15.9	17.4	19.0	18.9	17.9	20.0	19.4	16.8	16.9	16.7	14.8	13.9	16.8	15.1	14.9	15.2	15.9	12.0	15.7	14.3	11.2	14.9	15.7	20.0	11.2	16.0
17	14.1	14.1	12.8	15.3	16.1	16.9	16.8	20.3	17.5	16.4	12.5	10.6	12.4	12.9	13.3	12.2	9.3	9.6	7.5	8.6	8.2	12.1	13.8	10.9	20.3	7.5	13.1
18	7.0	7.0	2.7	7.2	7.9	7.6	2.3	3.8	3.7	4.0	5.0	4.3	4.4	4.2	5.8	3.7	4.2	1.4	2.8	0.6	1.3	2.1	1.3	1.9	7.9	0.6	4.0
19	1.5	1.9	1.7	1.7	1.3	1.5	1.4	1.5	1.5	0.7	1.5	2.9	5.0	7.3	7.5	7.7	6.8	7.1	6.9	7.1	5.9	6.4	7.0	7.4	7.7	0.7	4.2
20	7.8	8.1	8.8	9.1	11.5	12.0	11.8	12.2	13.1	13.8	14.0	13.0	13.7	15.3	11.5	10.8	9.5	11.2	10.2	8.7	9.4	8.1	7.5	6.1	15.3	6.1	10.7
21	8.1	8.9	11.0	9.2	7.5	11.0	7.1	4.5	3.4	4.7	7.9	6.6	5.7	4.7	6.7	6.1	5.8	8.2	8.4	8.0	7.5	7.4	7.4	7.2	11.0	3.4	7.2
22	7.1	5.9	5.0	7.3	5.3	6.9	5.9	6.4	8.1	10.2	12.4	12.6	12.1	12.6	12.9	15.0	14.6	12.3	14.1	9.7	5.7	6.5	6.8	3.8	15.0	3.8	9.1
23	3.5	3.2	3.8	3.8	3.5	4.1	4.8	4.7	3.7	3.4	3.2	2.8	2.5	2.6	2.6	2.4	2.5	2.7	0.8	3.7	3.8	5.2	4.2	3.8	5.2	0.8	3.4
24	3.1	2.9	1.7	0.5	0.0	1.6	1.7	1.5	2.2	2.9	2.7	6.7	8.1	9.5	9.6	10.9	11.4	10.4	12.9	11.6	9.2	10.9	11.4	11.7	12.9	0.0	6.5
25	11.6	11.9	11.1	10.5	10.3	9.8	11.7	9.3	10.2	15.0	15.5	10.6	11.6	13.5	15.0	16.0	13.8	12.5	11.5	6.5	5.4	6.6	5.6	6.1	16.0	5.4	10.9
26	8.3	9.0	5.9	5.4	3.7	3.4	2.6	2.4	1.0	0.1	0.9	1.4	1.7	1.1	1.1	2.2	1.9	2.7	3.9	3.7	3.1	1.9	3.0	4.5	9.0	0.1	3.1
27	3.9	4.4	7.6	8.1	6.9	6.9	10.2	10.9	10.8	10.6	10.9	9.3	9.2	10.6	9.6	9.4	8.0	6.7	7.9	9.5	8.0	5.2	5.2	4.6	10.9	3.9	8.1
28	3.1	3.6	2.4	3.5	2.5	1.6	1.2	0.8	0.8	0.6	1.7	2.3	3.4	3.2	3.8	4.1	4.0	4.1	4.7	4.7	5.1	5.5	4.5	5.4	5.5	0.6	3.2
29	4.8	5.3	5.8	7.0	8.3	7.7	6.6	7.9	7.3	8.1	8.0	6.9	7.3	8.9	8.9	9.2	8.7	9.3	9.2	9.4	10.2	10.2	10.2	9.5	10.2	4.8	8.1
30	11.6	10.4	9.6	11.3	10.5	10.8	11.6	11.4	10.4	11.8	10.9	10.4	10.5	9.1	11.2	10.1	8.0	6.2	8.1	10.5	11.2	8.8	9.6	6.5	11.8	6.2	10.0
Max.	**14.1**	**15.9**	**17.4**	**19.0**	**18.9**	**17.9**	**20.0**	**20.3**	**17.5**	**16.9**	**16.7**	**15.2**	**13.9**	**16.8**	**15.1**	**16.0**	**15.2**	**15.9**	**14.1**	**15.7**	**14.3**	**13.0**	**14.9**	**15.7**	**20.3**		
Min.	**1.5**	**1.6**	**0.3**	**0.5**	**0.0**	**0.8**	**0.1**	**0.8**	**0.8**	**0.1**	**0.1**	**0.4**	**0.1**	**0.4**	**1.1**	**0.6**	**0.9**	**1.0**	**0.2**	**0.6**	**1.3**	**1.9**	**1.3**	**0.5**		**0.0**	
Avg.	**6.3**	**6.3**	**6.1**	**6.6**	**6.6**	**7.0**	**7.0**	**6.9**	**6.6**	**6.8**	**7.1**	**6.8**	**6.9**	**7.1**	**7.3**	**7.2**	**6.8**	**6.4**	**6.7**	**6.7**	**6.5**	**6.6**	**6.6**	**6.4**			**6.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climtrncs) (m/s)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.9	6.2	5.8	3.4	4.9	6.2	4.4	2.6	3.3	3.9	4.6	2.8	3.3	3.0	4.7	2.6	2.0	0.2	0.1	0.1	1.4	0.9	0.6	3.0	6.2	0.1	3.2
2	3.6	2.9	2.2	3.0	2.6	3.0	2.9	3.5	2.5	2.6	2.2	2.3	2.2	2.7	0.7	1.7	0.8	1.2	3.5	4.0	4.5	6.5	5.0	2.4	6.5	0.7	2.9
3	6.4	6.1	8.3	8.4	8.5	8.4	8.9	9.6	8.8	8.2	10.0	8.8	6.8	7.3	5.2	5.0	5.4	3.9	4.0	5.2	5.4	5.9	6.0	6.5	10.0	3.9	7.0
4	7.6	5.0	5.8	5.3	5.6	5.3	4.0	3.2	4.4	6.1	6.1	5.3	4.8	3.6	3.2	4.5	4.8	5.8	6.4	5.8	7.1	7.4	6.7	7.0	7.6	3.2	5.5
5	6.8	6.5	6.5	6.3	5.9	5.6	5.6	5.2	5.4	6.0	6.5	6.7	6.6	7.4	8.4	8.3	8.3	8.8	8.9	8.7	10.4	11.3	10.9	10.8	11.3	5.2	7.6
6	12.6	13.4	13.9	13.0	12.0	11.9	12.2	11.6	11.0	10.0	10.0	7.4	6.7	7.0	6.4	6.5	3.5	1.7	0.8	1.1	0.7	2.0	1.8	2.5	13.9	0.7	7.5
7	2.1	1.9	1.3	1.5	2.3	2.1	2.3	2.8	3.9	5.2	6.0	6.5	6.7	9.8	10.4	10.6	10.9	10.7	11.1	13.9	14.6	14.1	12.4	11.7	14.6	1.3	7.3
8	10.5	7.6	6.2	5.1	4.3	3.9	3.3	2.2	2.7	1.9	0.6	2.6	3.9	2.6	5.3	2.8	1.2	2.3	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.0	2.9
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	7.7	8.9	11.0	12.9	12.7	13.3	11.6	9.1	10.8	10.6	11.7	11.2	9.5	8.6	13.3	0.0	6.4
10	9.2	8.7	4.9	9.6	11.1	10.2	7.2	7.9	7.4	7.8	9.5	7.5	5.6	6.7	7.7	7.8	8.2	6.3	5.1	3.1	2.0	2.7	4.7	6.0	11.1	2.0	7.0
11	8.6	9.2	10.3	11.1	8.2	5.7	4.4	3.5	3.1	2.1	2.4	1.9	0.3	0.1	0.6	0.4	1.9	0.7	0.0	0.3	0.4	1.4	1.5	1.7	11.1	0.0	3.3
12	3.8	3.8	4.2	4.9	4.0	3.7	3.5	4.3	5.8	5.4	5.3	5.2	3.7	3.9	3.7	3.5	5.0	4.6	4.5	3.6	3.9	3.5	3.7	2.9	5.8	2.9	4.2
13	3.1	2.7	3.3	3.6	4.0	3.5	4.0	4.2	4.2	4.3	3.9	4.3	3.7	4.4	4.9	5.2	6.5	7.6	8.3	7.2	8.6	8.1	8.2	9.0	9.0	2.7	5.3
14	9.4	9.5	8.6	9.2	8.2	8.5	8.3	9.5	8.7	9.2	10.2	9.2	9.8	7.0	7.4	8.2	10.9	10.4	9.7	10.1	13.1	11.2	12.2	13.4	13.4	7.0	9.7
15	13.0	10.2	8.2	11.2	11.5	12.0	11.1	9.7	9.4	10.0	11.4	11.4	11.6	12.7	13.4	14.0	13.9	14.2	15.1	14.0	12.6	15.3	17.0	15.3	17.0	8.2	12.4
16	13.3	13.3	14.5	14.7	13.1	16.5	13.3	12.0	13.0	13.9	13.5	12.8	14.0	13.8	14.1	13.3	12.7	14.2	13.9	13.8	13.0	13.1	15.8	15.0	16.5	12.0	13.8
17	12.2	15.7	17.1	17.0	15.3	17.2	15.9	11.6	9.9	11.3	14.3	13.0	14.0	14.6	13.2	14.4	12.1	10.9	9.8	8.4	8.6	5.7	5.6	5.6	17.2	5.6	12.2
18	4.2	4.4	5.2	4.7	4.9	6.7	7.4	4.9	5.3	7.0	7.1	7.9	7.1	7.1	7.5	8.0	7.0	6.9	6.7	6.6	7.4	6.2	6.7	9.1	9.1	4.2	6.5
19	6.6	5.2	5.1	8.6	11.7	11.8	12.5	13.9	12.1	12.8	11.5	11.0	10.0	10.6	10.7	12.5	14.4	11.8	8.7	7.9	9.9	4.6	6.1	5.9	14.4	4.6	9.8
20	4.8	4.9	5.2	4.3	3.1	4.5	4.6	6.4	8.1	9.3	8.5	8.4	11.2	10.7	9.8	8.8	6.8	4.1	2.1	3.2	2.2	1.3	0.2	0.0	11.2	0.0	5.5
21	3.1	4.6	5.0	5.8	5.5	5.9	5.0	4.9	5.3	3.0	3.7	3.7	2.3	2.0	2.4	3.0	2.7	2.6	4.3	4.6	7.2	7.0	7.8	6.5	7.8	2.0	4.5
22	6.4	9.6	9.7	9.0	9.5	10.2	8.6	9.8	8.8	8.7	9.2	8.9	7.1	7.5	6.5	7.5	6.9	5.9	5.3	5.3	5.4	4.8	4.7	4.9	10.2	4.7	7.5
23	7.4	9.6	8.6	6.9	5.0	4.7	4.8	3.3	1.6	1.8	1.7	1.7	2.8	3.0	2.7	2.2	1.0	0.8	1.4	0.9	0.0	0.8	1.5	0.7	9.6	0.0	3.1
24	2.2	2.2	2.5	3.4	3.8	4.3	6.8	10.3	11.4	10.5	9.2	12.6	14.3	15.2	16.5	16.8	15.4	17.1	17.2	16.6	16.6	16.0	15.7	15.7	17.2	2.2	11.3
25	16.6	17.2	16.8	14.8	10.2	10.8	11.1	11.6	12.0	10.4	9.7	10.6	10.4	9.0	7.4	7.7	7.4	7.7	9.0	8.1	6.7	8.1	9.9	9.0	17.2	6.7	10.5
26	4.7	4.6	7.8	7.2	4.4	2.7	4.5	3.6	3.0	4.1	3.0	3.6	5.9	7.6	10.1	8.6	7.0	8.9	10.1	12.0	12.7	13.0	12.8	13.6	13.6	2.7	7.3
27	13.9	13.7	14.7	13.7	12.6	11.6	12.6	13.5	12.7	12.0	11.0	10.7	11.4	12.4	10.4	7.3	5.2	4.0	3.8	1.9	2.4	1.6	2.8	4.2	14.7	1.6	9.2
28	7.0	9.4	9.2	7.3	6.9	6.3	6.0	4.6	5.8	8.9	7.8	6.3	7.1	6.0	5.5	5.3	4.2	6.3	8.1	6.9	10.6	12.7	12.9	12.4	12.9	4.2	7.6
29	13.1	11.2	9.2	5.2	3.8	5.6	2.1	3.4	5.7	5.6	6.4	7.5	9.8	9.2	7.9	5.9	7.3	7.3	7.6	7.0	6.4	4.7	5.7	6.4	13.1	2.1	6.8
30	7.4	6.6	6.0	5.4	5.0	2.8	2.0	2.6	4.4	4.0	4.7	5.9	6.3	7.6	6.4	5.8	6.5	6.2	7.7	8.4	8.4	8.4	8.4	8.0	8.4	2.0	6.0
31	7.0	5.8	4.5	4.7	4.9	5.0	5.1	5.7	6.2	6.6	7.1	6.3	6.9	6.6	6.8	6.6	7.2	7.9	7.6	8.0	9.0	8.8	8.9	9.3	9.3	4.5	6.8
Max.	**16.6**	**17.2**	**17.1**	**17.0**	**15.3**	**17.2**	**15.9**	**13.9**	**13.0**	**13.9**	**14.3**	**13.0**	**14.3**	**15.2**	**16.5**	**16.8**	**15.4**	**17.1**	**17.2**	**16.6**	**16.6**	**16.0**	**17.0**	**15.7**	**17.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.8**	**0.6**	**1.7**	**0.3**	**0.1**	**0.6**	**0.4**	**0.8**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.5**	**7.5**	**7.4**	**7.4**	**6.9**	**7.0**	**6.6**	**6.5**	**6.6**	**7.0**	**7.3**	**7.1**	**7.3**	**7.5**	**7.5**	**7.4**	**7.0**	**6.8**	**6.8**	**6.7**	**7.2**	**7.0**	**7.3**	**7.3**			**7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	27.1	33.8	27.9	34.2	33.6	36.7	29.4	28.7	32.1	28.2	24.4	23.2	24.6	30.2	28.3	20.4	16.7	19.4	5.3	23.6	13.6	10.9	15.1	9.6
2	18.7	18.5	6.8	14.1	11.7	22.4	29.4	339.6	16.6	27.6	29.3	27.9	32.3	21.5	36.4	32.3	26.1	11.5	10.7	22.2	17.0	16.5	23.7	14.5
3	17.5	12.3	20.2	14.6	4.8	10.1	354.9	3.2	355.1	355.7	340.7	350.2	344.0	326.3	355.4	8.9	348.5	346.6	3.9	5.2	18.2	4.1	19.5	14.6
4	357.6	30.4	12.0	17.3	17.7	17.2	21.7	19.2	18.0	20.3	14.3	28.7	71.0	84.4	90.1	71.4	76.8	69.1	95.4	76.6	131.4	234.1	249.6	248.8
5	233.7	76.1	41.5	62.9	3.0	261.3	0.8	35.3	16.5	10.0	26.6	33.2	25.0	31.8	15.1	11.6	20.3	291.2	299.1	108.5	45.3	79.0	25.2	31.1
6	49.7	81.6	99.3	73.4	84.5	59.1	43.0	10.6	12.9	14.0	28.1	31.3	21.9	12.6	356.0	36.5	10.6	357.8	10.1	13.9	22.7	33.3	16.6	25.7
7	33.3	33.6	13.1	12.0	354.4	5.7	14.9	7.3	32.7	6.7	31.6	6.9	29.1	38.4	36.1	30.8	27.8	7.9	10.0	15.7	9.3	7.9	22.8	13.7
8	12.7	6.0	11.1	357.9	2.8	27.3	30.3	16.4	7.0	12.4	19.5	22.5	32.4	33.4	31.6	17.4	35.9	30.0	28.9	30.3	30.1	45.3	26.4	1.3
9	17.8	14.2	350.8	261.8	13.6	21.2	58.3	71.3	71.7	93.5	72.1	83.6	61.3	77.7	79.3	86.7	242.8	207.7	223.4	187.3	167.6	226.9	162.9	149.8
10	179.4	134.0	137.7	159.0	158.5	132.0	129.5	120.5	115.6	116.2	116.1	111.8	125.9	130.0	127.1	127.3	125.4	118.5	124.3	124.3	120.7	123.3	127.6	120.7
11	117.8	114.7	114.8	118.9	121.9	122.3	120.7	115.7	117.4	120.4	112.3	104.1	102.9	104.8	102.5	102.2	102.3	101.8	101.4	102.0	103.0	102.9	102.6	102.4
12	102.8	103.0	102.4	101.8	102.8	102.7	104.3	113.8	121.1	118.9	118.4	116.7	114.7	110.7	116.8	106.4	104.8	103.6	108.4	108.8	115.2	122.0	177.1	236.5
13	230.0	232.3	230.9	230.8	219.5	203.9	201.7	199.1	174.9	207.4	203.3	186.5	215.3	196.5	32.8	13.6	13.2	17.4	14.6	27.9	28.7	24.7	27.9	35.1
14	26.6	20.0	17.8	22.6	25.5	9.2	353.7	356.4	358.6	1.9	0.6	3.2	2.0	4.8	3.2	11.6	14.0	359.5	344.4	346.5	344.0	300.6	306.4	317.5
15	337.2	341.7	3.4	10.8	346.1	334.9	326.2	323.2	320.8	314.7	325.9	339.3	332.8	329.9	338.3	350.6	332.1	346.5	334.4	30.6	28.0	6.7	29.5	14.6
16	44.6	78.9	63.9	29.5	27.8	26.2	99.0	102.5	98.1	99.4	100.9	100.5	95.5	94.2	97.0	96.2	98.1	100.3	100.8	103.0	105.0	106.8	114.0	107.8
17	114.9	138.2	147.0	144.9	140.6	136.0	138.8	136.0	129.3	118.4	123.5	108.7	130.8	136.2	122.0	124.4	123.8	125.1	110.1	121.3	121.8	128.9	126.8	117.2
18	110.9	112.2	110.3	82.2	45.7	29.8	45.6	33.6	47.3	16.7	26.7	19.4	22.1	27.5	29.7	261.6	258.7	248.5	347.2	253.3	7.0	339.1	8.3	249.1
19	201.2	264.6	233.7	237.2	237.1	0.0	0.0	0.0	295.6	16.2	37.2	92.2	64.1	81.7	33.2	267.5	118.4	104.7	107.9	106.7	108.5	112.4	108.8	104.5
20	111.9	110.5	110.7	105.6	101.9	101.0	99.2	98.4	94.2	93.2	89.0	73.1	60.3	33.4	21.2	34.3	24.3	4.4	6.6	35.2	23.6	32.6	30.9	26.6
21	25.1	19.7	0.6	6.0	279.1	209.6	244.0	250.6	284.7	287.6	254.5	252.8	255.4	247.5	244.4	249.2	249.3	251.8	249.7	241.9	233.0	227.6	236.6	231.6
22	169.9	196.6	89.6	330.4	134.6	226.8	86.5	76.9	60.2	60.7	75.2	75.2	70.2	81.1	17.8	13.5	347.8	17.9	64.7	65.3	92.7	0.0	86.2	19.5
23	59.5	29.0	16.4	12.7	12.1	18.8	359.7	2.0	26.5	10.8	20.8	24.0	14.4	23.4	2.0	342.0	342.2	5.6	18.2	17.3	16.5	344.2	346.9	343.0
24	338.3	333.2	334.3	333.8	328.4	325.9	340.2	9.7	338.7	344.0	5.6	11.0	8.3	18.9	25.9	2.7	29.8	23.8	36.1	35.4	10.6	26.3	18.4	30.4
25	19.9	23.1	50.1	95.8	88.4	89.2	78.0	80.9	89.6	98.5	98.5	98.7	98.8	99.1	97.1	96.9	95.0	94.5	97.5	100.1	100.8	100.7	103.1	104.1
26	103.3	103.1	103.8	105.2	104.9	102.8	104.2	106.8	109.6	104.1	106.9	110.8	124.8	124.6	135.7	139.9	132.3	124.1	123.9	124.7	129.8	136.6	116.0	112.3
27	114.9	105.5	103.2	103.3	103.6	103.6	102.3	106.9	108.1	125.7	120.3	106.3	106.1	98.7	104.2	108.5	101.3	94.6	96.7	95.9	96.2	95.1	94.7	94.5
28	98.5	97.7	102.6	103.0	102.0	103.7	103.2	104.5	107.9	117.6	133.8	153.4	174.5	144.2	137.1	124.2	125.2	120.6	113.0	120.1	122.2	115.4	119.1	110.2
29	109.9	96.8	91.2	93.3	98.2	96.9	94.1	98.8	97.3	101.5	101.6	98.5	101.2	101.0	100.8	102.1	101.8	103.1	105.4	103.0	104.4	106.1	112.7	115.7
30	101.7	102.3	103.1	104.5	110.4	107.3	102.7	102.8	103.2	104.7	111.4	115.1	122.6	120.6	112.9	132.2	138.7	137.6	139.3	140.1	141.2	141.4	135.4	142.8
31	141.0	145.4	150.1	145.2	150.7	136.4	133.4	148.6	141.3	133.4	143.4	153.2	139.2	146.6	155.5	117.3	105.6	106.3	102.5	129.3	117.3	98.5	134.6	114.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	115.4	119.0	129.0	122.5	134.1	116.1	105.4	133.7	139.2	164.9	138.0	142.2	116.8	90.3	102.7	96.6	88.9	85.2	88.9	125.3	125.2	130.1	116.0	113.1
2	98.7	101.0	103.8	111.6	113.7	118.0	116.9	117.8	118.0	122.1	122.2	120.5	119.6	118.7	114.6	104.9	111.1	106.4	101.7	103.6	108.7	116.4	120.0	119.0
3	112.2	117.7	119.3	119.2	112.3	107.3	109.4	122.0	123.4	126.6	116.9	123.3	126.5	131.5	164.9	200.5	236.9	106.0	59.2	43.1	28.6	28.6	16.0	21.5
4	13.7	15.5	15.3	14.0	268.9	21.5	19.6	45.2	33.0	20.0	54.7	34.8	24.5	30.3	24.4	22.9	31.8	60.5	80.5	81.9	76.5	77.1	73.8	57.9
5	44.4	257.1	35.9	69.9	44.2	145.3	85.5	162.2	242.4	39.3	163.9	153.1	178.5	149.1	189.4	225.1	239.8	132.3	117.1	139.6	166.1	160.5	257.4	238.7
6	115.7	105.7	99.0	93.6	98.7	95.8	104.8	106.2	105.3	101.7	116.6	112.9	107.6	106.0	152.7	226.5	14.6	249.7	37.3	147.4	26.3	23.8	35.6	29.8
7	90.6	212.7	194.2	256.6	231.5	29.3	192.0	217.5	224.1	235.2	0.0	206.4	193.4	210.7	231.5	237.3	29.3	68.5	161.8	167.4	198.9	0.0	256.3	135.5
8	144.5	337.4	183.1	218.7	226.6	143.5	152.5	141.2	200.1	166.8	164.8	156.9	168.5	155.6	164.8	158.9	177.3	199.7	229.6	217.3	221.0	229.5	218.2	226.0
9	218.0	241.0	219.6	262.1	226.5	256.2	254.7	205.0	227.6	253.4	239.8	156.1	112.5	122.3	155.2	198.0	188.8	147.5	155.3	214.4	220.4	0.0	0.0	0.0
10	55.3	72.8	83.5	234.9	213.4	43.6	9.8	45.0	42.0	17.6	20.2	358.5	52.9	25.7	29.0	30.5	23.2	339.3	347.1	34.8	24.5	20.9	23.7	25.4
11	23.3	17.3	108.1	162.1	152.2	239.2	158.8	133.1	132.6	149.8	125.9	116.6	118.1	118.8	129.7	124.2	113.9	114.3	113.1	107.3	98.7	101.5	102.2	101.9
12	102.0	104.4	102.2	103.3	101.8	101.9	101.2	99.0	101.5	102.4	99.5	102.0	102.6	110.8	106.1	104.3	98.6	94.6	67.0	55.8	53.2	54.7	53.8	54.1
13	41.7	47.8	51.5	50.2	58.4	58.2	57.9	52.2	64.9	51.1	52.5	49.6	51.5	64.6	85.7	98.1	103.9	107.8	103.8	99.6	110.0	126.0	120.7	129.3
14	110.7	127.0	123.3	117.4	109.9	115.7	116.2	114.5	115.4	114.1	103.6	105.6	115.3	123.1	133.8	111.1	105.7	120.9	319.0	347.2	5.4	67.7	46.2	86.1
15	93.5	48.4	88.5	99.1	71.3	72.3	64.7	46.3	91.2	79.7	87.7	79.7	235.5	54.6	9.5	15.7	18.9	32.1	39.6	101.6	78.4	53.4	22.1	36.6
16	20.0	50.8	65.6	28.0	75.3	94.9	92.6	83.2	77.5	64.4	134.9	132.8	147.7	150.4	222.4	251.2	0.0	0.0	136.2	150.0	253.1	0.0	0.0	0.0
17	44.2	0.0	235.3	219.7	0.0	0.0	59.9	0.0	33.8	82.2	88.5	75.2	28.3	65.2	109.0	115.7	166.3	128.5	147.4	353.2	215.3	137.7	110.3	131.2
18	0.0	0.0	27.4	15.2	24.8	14.2	22.3	20.4	30.2	77.2	53.1	44.6	25.8	28.9	14.7	17.4	27.7	24.7	14.8	14.6	11.5	8.7	11.3	15.2
19	28.2	36.9	17.5	11.0	12.8	28.9	25.3	12.9	356.0	337.7	348.8	19.7	17.4	14.1	34.9	30.4	26.1	27.8	12.4	10.3	7.4	11.7	10.7	53.1
20	54.9	27.4	17.7	3.9	356.1	15.7	11.2	7.3	3.8	11.4	7.9	13.4	356.0	349.1	349.8	347.7	342.5	345.5	346.7	348.2	354.2	6.5	23.8	353.5
21	18.3	24.9	7.4	5.2	358.4	7.5	4.3	26.6	38.1	14.6	33.7	31.5	31.1	12.4	18.2	38.4	47.2	53.7	38.8	35.5	51.2	46.8	41.6	47.4
22	43.1	30.3	30.5	34.8	22.8	13.8	21.2	31.8	33.4	27.1	38.8	14.3	5.1	23.6	36.5	45.9	40.7	37.1	30.1	40.2	32.9	43.5	41.0	38.2
23	48.3	37.4	27.4	33.3	26.6	29.0	29.5	27.6	30.9	32.2	35.6	39.5	31.0	30.9	12.9	22.2	39.3	27.5	30.2	32.0	26.4	15.3	359.0	315.7
24	352.7	16.4	16.4	29.3	26.3	16.2	356.9	345.6	13.4	6.4	359.0	8.3	350.6	346.0	3.4	359.1	359.8	353.8	4.5	18.8	22.8	11.7	9.1	6.5
25	15.9	9.3	353.9	6.0	352.7	355.0	25.7	20.9	58.0	46.5	43.4	42.7	22.3	17.8	11.3	21.5	22.4	15.5	16.6	355.6	338.8	34.9	33.4	297.1
26	315.4	333.7	327.7	325.6	330.5	329.2	330.2	333.6	332.9	341.5	344.3	41.1	129.2	322.3	301.8	307.6	309.5	322.2	346.9	75.1	32.4	31.8	19.0	16.8
27	356.4	345.3	359.7	19.8	26.2	27.7	26.2	40.1	65.5	35.2	32.7	29.9	36.7	34.7	27.1	30.0	42.5	57.1	42.0	35.3	40.9	17.2	11.0	8.6
28	27.0	8.0	19.9	34.3	28.6	25.8	27.9	32.7	30.6	28.9	27.4	29.0	20.9	9.6	12.2	21.4	23.3	19.9	20.0	26.1	18.3	28.7	38.3	36.5

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

March *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	38.3	40.5	40.8	36.0	29.9	38.2	43.0	37.5	44.4	42.5	35.4	41.4	36.8	30.8	42.4	35.9	28.7	26.8	18.1	20.2	26.5	32.5	24.1	34.4
2	28.7	26.7	21.2	28.3	24.3	29.8	24.0	26.3	24.4	24.8	25.9	25.0	22.5	13.9	18.4	16.5	24.5	21.8	26.2	14.8	0.2	9.5	21.2	25.0
3	25.5	19.3	26.4	20.5	11.7	14.7	23.7	30.9	25.2	27.6	28.3	30.5	34.5	24.3	19.1	25.1	32.6	37.2	33.7	18.1	18.8	8.7	347.8	352.0
4	357.4	0.3	9.7	7.0	26.3	50.4	58.5	44.3	43.1	40.1	26.2	7.7	4.0	1.5	3.4	3.6	6.4	9.2	355.1	356.2	12.3	3.9	355.6	4.4
5	5.0	7.8	16.0	12.8	11.5	19.0	12.3	9.2	18.3	25.5	14.4	7.3	10.2	14.8	13.1	16.8	14.1	7.2	2.5	1.9	359.2	0.1	7.7	2.0
6	1.7	3.8	6.6	19.0	11.6	14.9	15.7	14.7	7.3	3.7	13.1	19.8	23.8	7.2	2.8	14.7	32.9	37.9	8.0	5.8	9.9	9.9	3.3	3.9
7	6.0	8.0	14.1	32.6	4.6	358.0	4.3	5.7	18.3	3.3	5.5	7.0	13.6	4.4	11.9	9.0	359.6	354.6	355.9	349.6	354.4	0.6	3.0	6.1
8	5.6	0.8	357.3	358.6	357.3	358.1	359.6	2.8	2.1	1.7	4.3	7.0	6.2	7.2	353.5	350.7	355.0	2.0	359.5	6.1	358.7	359.9	6.3	12.6
9	18.5	16.9	20.0	17.0	9.3	16.6	14.9	6.9	6.3	3.5	7.2	354.9	354.8	3.3	359.8	2.3	0.9	356.4	25.2	28.0	33.0	38.1	34.3	26.2
10	27.6	26.1	28.1	29.7	45.1	34.0	36.7	35.6	36.0	28.3	26.6	25.7	26.9	33.8	35.4	22.1	27.6	23.3	23.3	25.4	31.9	33.2	32.2	22.7
11	23.6	22.3	21.4	20.8	17.9	11.7	19.0	18.0	11.6	8.4	3.6	1.7	5.5	4.1	4.4	7.4	2.1	2.2	12.0	17.9	9.8	5.3	10.4	7.0
12	10.3	13.1	355.1	7.3	3.3	2.5	1.8	6.4	13.7	15.8	10.8	1.4	332.6	351.1	351.3	336.4	345.1	346.8	336.1	346.1	316.9	2.5	359.3	357.5
13	335.1	334.6	344.5	343.3	343.9	332.9	339.7	338.6	33.6	6.3	351.6	338.0	330.0	326.9	327.4	349.9	341.1	345.1	350.3	354.0	352.2	355.6	2.9	5.3
14	4.0	355.3	358.2	6.5	6.2	0.2	356.4	8.9	4.2	12.2	10.1	351.5	5.3	359.0	2.8	356.3	353.2	351.1	358.7	358.5	0.1	6.6	2.4	356.7
15	6.6	5.2	1.1	1.8	31.2	29.0	28.7	33.4	31.5	34.3	24.2	18.4	19.3	16.0	9.6	1.2	358.5	351.1	359.3	1.6	9.5	10.3	16.2	31.2
16	34.8	35.5	29.2	32.9	29.7	11.5	27.0	32.1	30.5	30.2	27.9	24.1	20.9	6.4	359.4	354.4	355.0	4.9	11.5	22.4	21.8	36.2	36.4	11.9
17	7.9	5.9	10.2	13.9	358.3	76.5	57.8	84.5	71.0	23.4	26.9	34.8	29.1	21.9	23.3	16.8	351.8	326.8	329.2	350.6	23.5	11.3	106.7	85.8
18	88.4	57.1	52.6	49.8	82.1	67.5	76.0	78.3	105.5	94.7	74.6	213.6	224.8	221.0	257.9	252.6	272.0	310.1	318.6	317.6	332.8	21.0	19.9	12.7
19	17.9	10.9	13.4	348.8	24.8	17.4	11.7	17.4	59.1	22.8	27.6	18.7	24.5	354.7	17.6	11.7	356.2	6.2	22.1	31.8	62.6	80.3	81.3	75.4
20	0.0	85.4	77.8	74.4	42.9	148.1	27.1	143.6	108.4	102.3	101.5	99.2	97.7	97.1	94.9	92.7	86.4	80.9	71.3	77.7	88.5	86.3	88.3	85.7
21	55.6	27.5	40.9	146.8	159.9	141.2	148.0	148.8	152.9	208.6	228.9	236.5	243.6	243.5	240.4	237.5	234.3	230.4	237.9	318.6	331.8	349.9	358.6	352.0
22	9.8	346.9	340.1	4.6	17.8	35.0	339.7	24.7	29.8	29.4	28.8	31.7	30.8	31.3	17.4	23.4	21.2	32.0	31.9	16.8	23.3	27.8	25.2	31.8
23	19.1	20.3	19.0	42.7	41.6	39.6	46.9	44.6	31.3	25.0	12.7	0.2	347.8	349.0	7.1	8.1	356.8	346.9	332.1	323.5	325.7	330.0	332.9	338.7
24	355.3	4.0	4.1	0.4	7.3	15.9	16.4	15.6	32.2	36.7	46.5	49.9	30.6	23.3	9.8	356.2	339.1	332.9	348.9	292.3	341.0	245.1	59.6	75.7
25	59.5	59.2	54.7	76.6	92.9	9.8	88.2	70.6	67.5	63.8	62.2	35.0	28.6	159.4	210.0	148.0	73.6	88.3	123.2	110.4	101.7	103.7	103.0	105.4
26	103.9	97.0	95.9	98.0	100.1	114.4	145.1	178.4	213.5	226.1	230.5	221.4	217.5	225.2	234.3	246.2	250.7	249.7	290.1	355.0	13.0	1.5	24.8	28.9
27	35.5	35.4	28.4	24.0	25.7	28.3	25.2	29.7	17.7	7.3	6.8	1.8	1.8	2.0	4.8	355.5	354.9	0.6	350.6	351.7	3.1	12.4	17.6	14.1
28	20.1	17.1	15.4	32.5	39.8	53.8	75.1	31.8	18.1	34.6	28.8	360.0	324.9	339.4	345.6	322.3	324.6	326.6	321.4	328.6	331.4	322.5	339.7	323.0
29	60.1	357.0	359.5	357.8	16.3	11.9	8.4	353.5	7.8	8.1	25.7	351.7	326.5	341.6	307.3	322.3	333.9	316.3	329.8	338.1	9.0	20.8	340.3	20.4
30	26.9	23.5	30.8	30.0	36.5	44.5	25.8	9.2	23.8	11.8	1.7	20.9	26.1	16.8	23.2	24.6	30.6	358.7	20.4	348.4	57.2	39.2	13.6	81.4
31	73.4	60.3	49.9	71.4	79.6	65.0	55.1	71.5	43.9	66.2	50.7	72.9	213.1	217.1	258.2	12.1	18.9	1.0	337.7	4.9	5.6	3.9	346.2	355.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	354.4	353.7	26.1	19.8	13.3	12.2	16.9	10.6	6.6	350.2	3.2	233.3	23.0	38.0	48.9	223.8	229.2	220.8	153.4	285.6	0.0	0.0	26.1	9.9
2	44.7	32.8	0.0	35.7	155.5	133.2	115.5	109.1	106.6	103.8	102.1	111.5	114.4	123.9	125.7	122.9	123.5	119.8	122.2	119.1	111.0	108.5	107.2	101.4
3	101.6	98.9	96.9	100.5	102.7	103.2	106.2	111.3	107.9	101.0	94.6	98.7	107.0	100.3	102.7	106.6	104.2	104.7	97.5	84.9	92.2	95.7	86.8	85.6
4	92.1	91.7	77.3	78.2	69.3	61.4	68.3	82.1	90.9	97.6	102.8	104.0	101.9	101.1	104.2	108.0	103.4	98.2	93.4	81.0	61.8	70.8	83.8	106.0
5	54.9	56.0	25.4	60.5	40.2	39.3	53.9	53.6	56.8	52.0	53.2	60.1	59.0	53.7	55.6	54.3	87.9	90.1	92.2	94.8	92.1	91.5	93.9	93.9
6	95.9	91.8	95.6	99.6	97.0	96.2	89.5	86.1	77.0	40.2	57.8	49.1	52.2	53.5	52.2	52.8	50.6	18.3	30.8	27.4	32.4	24.1	29.7	29.7
7	39.6	146.6	148.9	147.2	119.0	119.3	153.5	115.0	153.0	160.1	178.3	163.4	159.6	158.6	156.4	151.8	151.7	154.4	162.1	152.8	146.4	120.7	100.4	111.7
8	109.8	110.1	108.1	105.6	109.7	111.9	111.4	101.1	99.9	104.4	100.2	103.9	101.0	105.4	103.2	114.2	142.6	168.6	182.1	185.7	171.4	133.2	185.1	158.6
9	154.3	150.2	146.4	135.6	138.8	138.3	124.9	4.0	39.3	26.3	17.6	19.6	11.9	12.7	17.7	354.9	358.7	312.3	287.8	196.4	218.2	285.1	311.0	306.1
10	300.2	315.2	294.9	353.9	323.0	349.3	303.4	328.6	287.0	302.9	326.7	346.9	346.3	357.0	267.8	224.6	171.7	187.3	180.3	191.4	181.2	181.3	178.9	189.0
11	210.7	199.1	214.4	181.1	178.3	181.1	180.7	180.1	190.9	264.0	162.7	160.8	164.1	168.4	169.5	175.2	169.8	180.1	183.6	162.9	172.2	140.0	150.8	146.4
12	137.2	115.8	70.9	52.2	53.0	61.1	52.6	48.7	54.9	31.2	26.9	32.3	21.6	14.9	301.1	282.3	305.7	313.1	320.9	224.5	238.3	308.0	25.4	12.9
13	18.5	19.0	19.8	17.4	20.4	23.5	30.7	350.8	21.4	39.8	24.3	22.0	15.2	9.2	2.8	329.4	329.8	303.8	324.7	13.6	25.3	48.7	57.8	43.1
14	39.0	87.6	95.9	0.0	77.9	91.9	148.9	160.3	142.7	199.2	184.3	145.0	143.5	142.6	144.0	152.0	152.3	149.3	142.3	152.7	114.8	107.5	102.5	103.9
15	104.7	100.6	95.5	104.2	106.1	101.3	103.5	95.6	110.1	108.6	114.4	106.2	111.4	119.3	126.5	114.9	199.9	266.3	230.6	279.8	311.2	14.4	20.2	28.3
16	116.0	41.9	31.8	20.5	28.5	25.8	16.0	15.6	16.4	20.5	13.9	345.6	320.4	278.6	283.5	290.8	296.0	281.7	275.9	295.0	297.7	337.8	306.2	100.8
17	101.0	116.8	128.7	163.9	139.8	138.2	139.9	147.6	153.6	167.4	179.1	175.7	147.3	139.0	144.5	126.3	126.2	128.4	139.0	133.6	126.5	126.0	123.6	120.8
18	120.2	120.9	120.2	131.5	146.1	166.2	162.5	191.0	216.6	211.3	201.9	219.6	238.8	234.6	232.2	273.8	7.9	19.3	34.1	4.4	329.4	0.0	0.0	0.0
19	39.4	195.5	224.0	222.2	204.9	196.7	200.6	219.0	217.9	227.1	234.5	232.5	247.0	260.8	260.1	255.0	245.6	241.6	248.9	222.9	199.2	199.4	201.0	204.9
20	194.4	199.7	194.3	191.6	207.1	168.6	174.4	184.9	190.3	201.1	217.2	218.0	221.6	237.0	241.5	242.1	238.7	235.7	237.4	247.8	258.7	248.6	254.7	239.9
21	228.4	212.8	220.7	202.7	209.8	215.5	235.6	193.0	254.5	286.6	262.3	257.8	252.5	263.2	265.3	261.2	259.8	261.7	263.7	254.6	263.6	249.7	236.6	234.7
22	232.2	237.2	233.3	243.1	238.9	228.1	230.7	236.7	246.7	247.3	245.4	256.6	224.4	245.8	223.4	221.3	220.7	199.2	182.7	153.0	166.1	164.1	157.5	145.4
23	136.2	185.4	145.6	134.2	133.9	147.2	154.6	159.5	160.8	147.2	165.9	240.7	347.9	339.0	348.0	358.5	334.1	7.1	355.7	277.0	52.2	339.9	297.5	285.8
24	295.8	278.5	228.9	205.7	180.6	188.9	249.7	278.2	282.7	274.5	319.5	344.7	329.6	105.8	353.5	354.4	0.6	19.7	341.1	358.9	331.5	330.2	311.3	285.4
25	279.2	282.6	279.7	274.7	269.4	271.9	284.0	281.3	283.9	302.4	314.8	317.3	314.9	345.5	356.4	8.5	8.8	356.2	351.2	333.1	296.5	359.2	27.1	202.9
26	142.2	64.2	83.0	93.5	139.7	72.3	57.2	100.8	84.4	65.7	47.6	88.4	44.7	77.3	48.5	38.6	36.6	38.7	39.6	47.7	47.9	33.2	61.6	44.6
27	48.0	270.6	19.9	8.0	0.0	311.6	310.8	18.1	21.1	25.7	1.2	18.6	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.9
28	35.3	0.0	0.0	0.0	0.0	0.0	36.2	6.8	27.8	110.1	26.5	18.0	11.0	14.3	9.4	19.9	13.7	19.4	14.4	19.3	18.8	17.8	332.7	287.0
29	296.8	287.1	281.2	290.2	293.0	291.8	269.1	252.4	281.9	329.3	334.7	323.1	346.4	355.7	339.9	341.5	0.6	13.6	11.9	0.2	346.5	24.9	5.5	294.4
30	285.5	284.2	282.7	234.1	78.0	55.2	60.6	104.3	108.7	205.6	245.7	313.0	78.3	99.3	345.5	308.3	26.9	22.0	0.0	0.0	31.1	8.7	355.3	299.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	306.1	32.3	11.8	29.4	108.6	349.4	75.7	352.2				284.1	278.5	277.6	280.5	270.5	274.8	267.9	264.6	264.4	264.4	264.3	264.3	264.4
2	264.6	0.0	264.8	265.1	265.3	265.5	266.0	267.0	267.3	270.5	273.5	291.9	269.5	235.3	292.7	310.3	301.0	301.9	298.7	296.5	295.1	295.1	296.2	304.3
3	308.1	296.8	230.8	297.3	272.3	0.0	228.7	277.0	22.1	213.6	203.1	207.5	210.5	174.5	90.4	45.7	149.0	133.3	62.6	62.6	55.1	52.4	140.5	267.7
4	261.5	227.4	209.0	317.7	205.1	246.1	249.6	0.0	24.5	7.9	43.9	62.8	67.6	59.7	49.4	57.3	52.7	40.2	344.1	337.1	67.1	91.8	58.4	40.3
5	230.8	68.9	48.1	47.7	30.0	245.4	204.1	190.7	53.2	66.5	75.8	58.8	55.3	66.8	111.7	107.1	104.8	94.2	93.2	96.0	98.8	105.4	66.2	61.3
6	110.5	241.7	210.0	175.9	168.4	149.8	145.8	138.8	117.9	71.3	73.3	87.1	114.3	128.0	131.0	129.5	126.4	117.9	128.4	137.4	128.1	129.3	128.5	132.2
7	131.6	133.2	133.4	139.4	145.1	187.6	161.9	157.4	153.8	157.6	145.1	149.0	137.2	135.0	145.7	103.7	65.9	55.7	67.9	83.9	77.2	76.0	73.5	65.2
8	61.0	62.1	66.2	65.9	69.6	62.7	61.4	66.6	64.9	64.7	65.2	56.6	36.5	30.2	54.4	53.9	39.7	52.2	41.1	35.2	27.0	332.3	341.8	332.4
9	30.2	86.1	80.6	240.8	216.9	300.8	315.3	318.5	341.7	319.5	320.6	308.2	324.0	307.0	316.1	321.3	327.7	332.9	343.5	351.4	7.4	47.3	28.7	0.0
10	0.0	0.0	0.0	227.8	275.6	262.0	196.4	14.2	32.7	338.6	331.8	6.2	13.6	357.5	356.8	359.4	0.0	339.0	326.2	319.3	320.1	317.7	324.6	315.8
11	252.8	311.9	310.1	0.0	287.7	280.4	282.3	287.6	287.9	301.8	291.5	299.5	300.2	311.5	309.3	312.2	319.9	321.2	329.2	335.8	342.3	348.9	23.6	7.2
12	35.5	157.8	204.8	0.0	231.2	250.3	296.9	296.2	292.4	300.0	302.6	315.1	317.4	318.0	312.2	317.1	310.8	313.3	313.8	307.6	312.0	327.0	313.8	307.4
13	300.4	303.7	305.7	294.5	294.9	296.9	296.0	288.7	294.8	288.6	287.7	295.7	293.1	295.0	297.9	288.3	281.0	277.7	267.0	251.0	245.7	236.5	230.4	216.9
14	234.6	210.8	225.6	207.8	237.5	236.8	225.8	222.3	257.7	279.7	268.8	274.8	321.0	291.8	293.1	302.5	297.0	303.2	299.6	299.5	303.9	305.2	305.3	302.3
15	300.8	300.7	280.2	297.5	294.7	266.1	217.3	236.1	235.0	285.7	289.1	295.8	311.3	340.6	330.9	340.7	2.6	355.5	55.2	72.3	163.8	199.5	202.0	212.9
16	200.6	196.2	189.5	201.8	210.0	208.8	215.4	218.3	219.2	234.1	270.3	280.1	322.8	345.6	337.1	341.8	338.6	348.0	347.9	340.2	338.6	331.6	335.7	342.0
17	331.7	345.5	351.1	331.4	339.1	348.4	7.1	345.2	328.2	321.5	317.5	317.9	335.6	338.7	337.8	337.6	336.4	336.5	338.6	339.6	339.9	351.6	334.9	359.7
18	25.4	335.0	290.9	320.7	315.1	56.0	328.5	339.4	323.0	313.9	317.6	320.9	344.5	350.4	334.7	347.5	37.7	359.6	10.3	14.2	0.5	29.7	184.9	259.3
19	259.2	303.3	222.4	230.4	212.7	163.5	262.6	135.2	103.4	90.9	79.3	72.2	42.7	54.9	56.0	60.7	62.3	51.7	55.4	63.7	51.8	56.3	119.9	182.5
20	0.0	0.0	0.0	187.8	196.0	0.0	32.2	52.9	52.4	51.0	55.3	42.7	28.2	52.6	38.8	39.3	26.1	37.3	46.5	45.5	47.6	77.4	200.5	0.0
21	217.0	190.3	286.7	206.1	241.1	224.7	262.3	25.8	15.4	272.5	295.7	317.7	335.9	322.9	326.3	317.6	325.4	312.6	298.3	294.6	285.5	280.4	280.7	282.4
22	290.9	280.3	276.1	278.6	290.9	276.0	281.2	265.5	282.7	287.9	308.6	288.5	291.6	328.0	320.0	310.1	303.9	319.9	331.4	337.7	67.5	338.0	334.4	278.7
23	285.8	199.8	230.7	210.3	212.2	219.7	241.7	276.0	287.6	291.9	292.5	294.2	299.0	316.7	329.0	304.8	297.5	297.5	298.2	312.4	319.1	308.6	312.3	301.2
24	305.6	309.4	308.5	297.9	305.3	307.3	304.1	305.7	309.8	312.0	309.1	302.8	310.1	311.6	310.6	321.5	308.9	283.1	286.4	309.4	346.2	330.8	38.4	236.6
25	266.0	71.3	267.2	289.9	62.6	61.5	51.4	0.0	335.8	338.1	1.8	339.3	334.0	330.0	335.7	330.1	333.1	337.0	358.4	25.7	44.9	72.2	202.9	188.8
26	198.7	237.8	330.2	359.6	2.2	331.1	356.1	323.0	314.3	313.9	345.7	337.2	338.8	340.1	325.9	329.5	326.9	317.9	316.4	314.7	317.0	312.1	339.4	15.3
27	347.2	347.9	352.9	345.4	343.1	329.8	327.6	332.8	321.4	332.0	330.1	327.2	331.0	332.2	333.8	336.7	333.2	336.4	330.9	321.6	334.7	324.2	320.7	315.4
28	307.7	298.4	283.6	287.9	271.5	236.0	270.0	310.2	323.6	294.5	301.9	318.9	315.9	318.4	336.7	338.8	333.5	337.1	332.2	332.9	327.0	328.4	327.7	103.7
29	0.0	206.4	208.9	238.9	193.8	200.8	219.0	213.1	205.1	209.1	195.5	200.7	353.7	299.7	29.0	338.4	350.2	22.1	339.4	340.0	336.4	337.0	329.2	0.0
30	0.0	0.0	0.0	221.4	211.5	219.5	208.2	204.8	209.4	290.6	305.8	295.4	299.1	305.0	307.3	341.5	328.3	329.4	324.4	319.8	324.4	322.4	325.7	322.4
31	41.6	205.7	204.1	254.2	273.3	277.6	280.7	294.0	310.1	306.0	311.9	316.1	305.7	264.2	201.2	227.0	252.2	260.1	305.8	290.0	292.2	268.2	276.7	285.0

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	311.2	307.3	289.8	301.2	298.5	302.0	282.6	287.8	296.3	293.8	301.6	303.9	302.7	303.3	299.9	312.9	309.3	316.1	317.4	309.4	318.9	318.6	298.5	291.7
2	296.2	301.6	278.7	271.3	280.8	283.6	281.1	285.4	299.8	294.8	298.4	294.1	299.9	291.5	289.4	313.5	311.1	320.8	327.8	332.3	312.5	338.4	346.0	23.1
3	330.8	268.2	250.0	338.3	337.9	341.4	96.5	37.1	314.7	327.4	325.1	321.6	315.4	295.5	296.7	319.2	324.3	331.4	358.9	4.1	118.4	154.3	221.7	192.4
4	206.4	216.8	219.9	208.4	212.0	207.4	211.9	218.1	203.3	212.7	197.5	195.9	201.7	208.1	298.2	354.2	28.2	343.8	343.8	342.3	334.7	329.5	327.6	332.8
5	337.0	333.2	333.3	337.6	313.9	304.0	296.2	292.8	299.5	310.4	310.4	304.5	297.1	288.1	293.0	294.3	291.2	302.7	313.3	305.7	293.6	281.7	280.8	289.7
6	291.0	300.1	288.4	297.7	304.7	270.2	277.1	261.2	217.6	221.2	266.9	320.8	327.6	335.4	336.8	336.9	340.0	350.4	340.7	340.6	345.3	357.3	44.1	100.1
7	203.7	200.6	220.1	207.3	198.9	218.4	325.0	11.8	253.7	252.6	254.4	275.1	290.8	287.4	291.7	296.7	295.2	290.8	289.0	286.1	281.3	280.5	288.0	297.3
8	295.8	287.8	282.4	266.1	267.5	276.1	280.1	276.9	292.2	300.4	307.0	299.7	297.5	302.3	297.3	294.9	301.0	303.2	299.7	300.2	298.5	319.9	303.4	295.5
9	293.0	343.9	335.0	2.6	0.0	202.5	263.8	207.0	211.3	208.3	223.2	202.1	187.0	213.2	339.6	348.5	211.9	214.0	179.5	189.1	171.2	189.7	180.5	204.1
10	201.8	195.5	196.5	203.3	204.9	202.7	193.1	179.4	184.9	192.8	187.8	182.5	146.3	150.6	160.8	148.8	149.6	134.6	137.2	27.0	50.1	63.1	62.2	64.1
11	69.8	54.3	27.7	60.9	51.7	62.8	56.1	33.9	338.6	349.8	20.8	8.3	345.3	342.6	344.2	343.3	338.9	334.0	319.9	336.9	334.7	337.4	337.1	349.0
12	348.2	349.8	353.3	308.8	13.8	77.1	312.2	331.7	336.2	332.1	339.6	353.4	356.3	355.2	357.1	1.2	351.4	358.8	357.3	0.5	346.2	342.8	359.4	333.2
13	0.0	0.0	0.0	231.9	262.0	229.9	202.3	208.8	208.6	93.2	67.3	77.7	67.6	62.8	89.3	58.8	24.8	59.8	81.5	89.5	86.7	124.1	162.6	0.0
14	205.6	134.7	184.2	200.8	189.7	199.0	191.0	193.8	185.9	200.9	201.8	222.2	290.0	210.5	344.8	34.7	84.1	81.2	68.9	65.8	80.3	99.1	130.2	189.5
15	201.2	213.7	205.2	208.0	211.9	205.2	211.3	193.5	187.6	191.2	191.4	194.3	187.1	186.3	165.2	169.4	150.0	153.8	166.8	160.6	156.1	157.2	154.7	178.4
16	197.7	194.9	204.3	201.8	190.2	190.8	198.3	197.8	205.4	146.7	153.7	103.6	102.4	103.0	105.3	103.0	95.0	77.1	64.8	59.0	55.3	64.3	65.1	69.9
17	61.6	63.2	60.0	57.4	58.7	66.3	53.2	68.4	52.1	63.9	55.6	74.6	76.5	165.2	177.6	202.8	214.4	320.2	218.8	175.1	185.3	185.1	143.0	169.6
18	198.6	153.1	347.8	174.6	193.7	199.2	214.2	223.0	187.5	203.8	41.4	41.4	22.1	343.0	50.5	44.6	167.2	148.4	78.3	17.6	334.5	98.1	250.6	154.4
19	192.8	175.0	197.7	201.2	204.0	209.1	201.2	216.6	199.1	183.4	191.2	182.1	190.1	186.3	183.0	183.3	183.7	174.5	154.7	159.6	163.0	162.2	162.1	162.9
20	179.7	183.5	209.6	207.7	210.7	217.3	214.3	210.9	196.4	185.0	184.8	178.0	175.6	166.5	155.6	150.4	147.6	158.0	136.7	135.6	131.6	142.6	153.1	159.0
21	170.9	170.5	188.6	186.2	173.8	182.1	185.2	186.6	180.4	162.3	134.4	104.1	107.5	128.2	105.8	107.9	104.3	89.8	65.7	71.0	71.8	60.2	60.0	63.6
22	58.6	54.2	58.8	62.4	55.0	53.9	57.4	41.7	46.5	37.4	17.1	14.6	5.9	355.3	5.5	12.0	22.0	18.8	358.9	354.8	357.5	337.3	339.7	315.9
23	308.1	308.8	301.0	311.4	306.1	305.7	298.5	289.3	291.3	301.3	305.0	306.1	305.5	296.2	290.4	287.7	287.8	286.9	285.1	283.0	283.4	284.2	284.8	285.0
24	278.8	277.7	279.3	284.8	284.4	285.9	290.2	291.4	287.5	285.2	287.8	296.1	300.0	310.2	316.5	313.3	310.6	313.2	314.0	308.2	310.0	313.3	305.8	304.4
25	314.4	318.6	321.8	319.8	314.7	319.9	326.0	330.9	331.5	316.3	310.2	311.8	315.1	304.1	310.2	313.8	314.8	312.5	318.0	314.3	311.4	304.9	316.2	305.8
26	332.7	346.4	306.8	302.9	322.1	310.1	325.4	316.7	312.1	311.8	326.7	314.4	303.5	302.8	335.1	4.2	47.3	41.6	65.8	65.8	73.7	80.5	122.6	244.7
27	248.0	258.7	256.1	251.7	268.1	215.9	204.5	224.6	239.2	246.2	323.2	343.3	341.1	343.1	355.6	16.5	358.7	359.0	12.6	39.4	70.2	68.4	63.7	65.9
28	66.3	80.0	55.6	60.3	76.9	74.1	68.3	57.0	19.8	351.8	334.1	337.3	320.5	300.3	317.3	328.8	331.8	301.1	303.3	317.0	290.0	289.4	314.2	303.1
29	304.4	55.5	177.2	24.2	59.8	260.1	268.0	297.9	316.5	310.5	336.8	330.1	341.1	350.8	40.1	63.1	69.3	65.3	61.8	64.7	69.3	68.7	78.5	84.9
30	204.8	187.9	55.4	55.3	74.2	48.1	53.4	66.2	63.4	80.6	66.1	52.8	68.4	53.6	18.4	0.0	350.7	341.5	331.3	330.0	353.1	359.3	354.7	350.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	213.7	224.9	0.0	219.5	243.1	210.5	205.5	220.7	207.2	199.6	191.5	189.6	171.1	152.6	132.3	130.5	84.1	82.2	97.1	101.9	77.9	317.4	310.5	15.3
2	43.4	24.4	34.5	57.1	0.0	40.5	0.0	19.5	27.3	162.8	145.0	145.0	139.5	149.6	143.8	165.3	138.4	149.3	158.1	174.0	148.1	157.9	196.7	204.5
3	202.3	231.1	315.4	332.8	22.7	41.9	15.9	347.4	331.1	341.4	333.2	334.9	336.2	322.2	328.8	337.7	341.5	334.6	330.6	338.1	17.3	88.3	12.1	331.7
4	321.2	319.1	323.3	316.8	324.3	338.4	324.8	330.1	342.5	323.4	317.0	312.4	309.4	315.0	299.5	306.0	306.3	299.9	314.9	317.5	345.8	352.3	324.3	349.6
5	1.7	35.2	28.5	15.6	0.0	253.3	252.2	11.3	28.8	100.9	116.8	112.6	133.3	192.7	97.6	71.2	221.1	308.8	317.3	318.9	317.1	321.3	318.1	317.4
6	306.5	314.4	325.6	323.9	334.2	333.9	347.0	331.5	314.7	319.3	334.4	2.9	337.3	349.7	345.1	338.0	353.7	343.6	355.6	45.7	77.4	162.6	225.9	139.3
7	275.9	220.0	0.0	0.0	262.5	213.7	265.1	275.0	16.7	45.5	313.2	220.5	230.3	56.1	58.6	117.0	105.3	90.1	330.0	332.4	327.3	334.1	65.1	80.8
8	75.6	0.0	0.0	270.5	267.6	0.0	278.6	299.3	310.4	313.3	323.7	348.2	343.1	332.8	338.0	335.3	320.6	315.8	304.0	314.2	335.3	336.1	2.3	32.7
9	339.8	9.9	326.3	290.5	21.4	70.8	21.3	322.6	299.2	306.5	280.8	277.3	301.1	278.2	309.2	326.6	52.9	343.6	347.1	0.3	48.4	108.9	249.7	275.3
10	221.2	208.7	172.0	183.7	200.3	297.7	188.9	355.1	283.9	207.8	201.9	212.8	326.7	353.7	8.0	330.9	328.4	327.4	330.0	335.8	329.4	326.0	315.1	315.2
11	332.7	346.6	356.5	350.6	333.9	328.0	326.1	328.6	332.7	327.3	320.2	340.1	333.3	334.1	349.4	333.9	341.2	346.4	341.6	340.6	336.8	331.1	323.4	339.5
12	358.2	19.3	140.2	247.8	246.7	206.6	215.2	216.4	238.0	303.1	80.9	97.0	198.6	107.0	357.1	345.9	320.4	332.1	333.9	330.4	347.3	323.5	328.7	317.2
13	343.9	353.2	348.3	338.1	331.2	342.7	345.8	358.3	341.4	317.9	337.6	337.8	341.3	332.8	333.7	338.0	346.5	341.8	347.5	350.7	341.2	1.8	10.1	18.7
14	26.2	39.7	19.4	0.0	5.0	29.0	5.7	320.6	338.5	351.9	332.7	332.9	334.1	344.7	337.1	327.5	346.1	351.9	342.6	335.3	319.2	318.2	344.4	350.7
15	24.8	60.7	4.9	347.9	15.9	71.8	101.8	48.5	60.7	58.1	55.9	61.9	64.5	73.6	74.5	74.8	76.7	66.5	68.3	69.9	69.1	69.1	75.6	79.2
16	72.9	67.7	81.4	77.3	65.8	136.8	120.8	186.7	88.8	190.5	189.5	188.5	176.3	170.0	153.0	141.0	147.7	151.2	151.4	140.1	141.5	159.5	202.3	203.5
17	201.7	190.5	194.0	201.4	178.8	157.1	204.0	216.4	223.3	222.3	232.3	190.2	339.2	333.1	339.0	335.8	335.9	342.3	329.3	319.8	327.8	343.8	345.7	310.6
18	313.8	314.4	308.2	317.0	306.4	305.1	289.9	298.0	299.7	249.8	30.7	224.2	203.7	284.0	338.3	332.6	317.6	333.4	35.3	242.0	30.1	222.3	195.8	276.5
19	267.5	203.9	197.6	190.5	213.6	13.7	119.6	339.3	207.1	215.8	217.7	142.7	176.9	347.7	338.4	302.8	5.6	77.6	99.0	67.6	79.2	48.3	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	287.4	302.9	49.5	37.5	50.7	64.2	60.2	56.9	61.2	72.3	67.2	80.9	68.3	57.5	63.4	74.2	76.1	73.0	69.1
21	66.4	68.3	66.3	70.4	67.7	69.9	68.2	68.8	67.2	66.8	64.2	64.4	71.9	69.3	57.5	49.4	47.6	50.8	41.7	46.2	39.4	35.3	20.7	14.0
22	3.4	0.8	2.6	1.1	0.5	5.4	2.0	6.0	8.5	10.3	12.8	9.8	2.6	5.0	356.4	349.8	334.7	330.3	329.8	324.9	319.8	314.8	316.7	315.5
23	316.3	323.6	34.9	72.3	0.0	304.4	297.9	308.1	309.7	360.0	339.7	327.2	319.1	315.4	311.9	313.3	301.7	302.8	315.7	309.4	309.4	302.3	302.5	299.7
24	294.9	291.9	286.1	284.4	284.2	285.8	282.6	280.9	273.0	276.8	266.5	251.0	239.2	238.9	239.0	246.2	246.0	248.0	233.8	244.3	236.5	225.2	231.6	242.3
25	232.4	230.0	242.4	242.2	238.7	235.7	243.5	240.4	239.8	232.1	248.4	251.7	254.0	229.3	226.5	230.2	239.5	244.2	252.6	267.8	286.0	316.8	45.8	226.7
26	350.1	0.0	0.0	191.6	227.8	190.9	173.7	201.6	209.4	213.0	224.5	220.5	238.5	208.2	270.4	328.0	358.2	61.5	66.7	66.4	49.5	69.8	317.7	309.0
27	265.7	197.6	0.0	86.4	66.7	158.5	189.3	242.3	64.9	214.1	209.7	211.7	175.4	173.0	164.3	135.7	143.4	159.8	170.9	176.4	205.7	208.2	186.1	153.3
28	63.2	76.5	66.3	69.9	79.5	70.2	73.7	72.9	63.4	61.7	60.0	54.0	61.9	62.3	68.3	70.3	64.5	70.1	78.3	84.3	84.7	65.4	65.3	64.1
29	70.8	68.7	63.5	153.8	114.6	150.4	177.3	162.5	177.3	180.4	182.2	149.5	156.9	148.8	153.9	168.1	162.3	147.1	129.8	112.0	137.3	120.7	75.3	122.7
30	137.8	189.5	80.5	36.0	57.7	30.5	37.4	67.6	56.3	51.7	61.7	60.6	63.8	70.2	67.4	61.0	65.6	64.5	64.0	53.7	45.2	42.4	40.4	55.2
31	62.8	75.9	31.3	18.7	39.7	57.5	34.8	18.6	335.7	338.8	332.2	335.1	330.8	338.1	323.7	317.6	320.4	318.0	303.4	304.7	309.3	313.8	307.3	304.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	305.1	293.0	289.6	297.4	303.6	306.8	295.9	289.8	293.6	295.0	310.8	314.4	315.8	309.4	305.1	307.9	311.7	312.0	310.1	299.8	304.6	295.1	300.2	296.5
2	294.3	306.1	294.2	289.9	288.9	290.8	293.1	291.1	295.0	298.4	304.9	296.5	294.2	289.5	293.5	304.4	306.8	300.9	296.4	299.9	294.8	303.0	306.2	303.0
3	305.1	303.0	314.0	318.9	321.3	319.6	315.2	308.9	308.8	307.6	301.4	310.5	309.9	309.7	316.1	314.1	313.1	318.6	320.2	308.4	310.5	312.1	296.0	306.3
4	303.8	297.0	291.1	288.0	295.0	296.1	296.8	301.9	305.8	309.3	312.6	319.5	323.4	319.9	318.6	322.8	324.3	331.4	324.4	319.6	322.8	323.3	326.3	320.3
5	316.8	317.2	326.6	338.0	328.9	331.3	326.8	345.7	19.9	24.5	24.7	30.5	36.0	36.2	43.8	41.3	36.1	49.5	45.0	47.9	52.8	53.2	74.2	75.6
6	79.2	86.3	90.9	80.6	100.8	107.2	127.7	141.1	147.5	142.8	144.7	139.0	136.4	138.7	133.9	140.5	147.6	151.6	138.7	131.8	141.5	146.1	144.2	142.3
7	150.2	164.1	144.7	148.3	183.4	188.3	179.6	179.0	173.5	182.8	173.4	181.7	179.9	180.3	174.6	175.1	177.2	176.7	172.6	163.4	153.3	153.3	160.0	203.2
8	210.1	200.2	204.2	228.9	209.9	201.1	178.3	194.7	194.4	173.8	170.9	157.1	171.6	143.2	155.5	154.6	141.6	135.0	138.6	144.3	147.4	156.3	168.5	188.3
9	203.2	203.2	211.8	206.5	206.0	209.5	205.9	204.5	239.5	236.4	216.3	216.1	337.1	354.1	342.4	339.6	343.9	338.0	337.5	340.5	338.3	326.9	0.0	6.7
10	41.0	0.0	0.0	0.0	200.5	0.0	211.2	267.5	310.0	305.2	305.1	338.2	342.2	332.1	331.4	356.3	333.1	335.3	339.6	342.3	339.9	324.3	45.9	229.8
11	245.1	211.9	241.2	270.3	202.0	0.0	255.2	293.8	294.9	22.1	327.2	18.3	353.6	332.8	333.2	10.5	71.1	67.9	62.4	62.9	59.8	50.6	27.9	3.9
12	338.4	0.0	50.4	348.3	6.3	7.1	23.1	57.6	59.5	60.1	28.1	53.3	63.5	55.1	339.0	36.1	54.8	41.1	62.9	70.2	79.5	96.7	99.1	82.9
13	0.0	0.0	0.0	0.0	37.7	87.6	38.2	262.2	39.7	16.3	37.4	33.1	10.4	31.1	43.6	32.9	25.9	47.2	349.9	24.2	61.3	65.7	54.9	57.4
14	62.1	72.4	74.3	61.0	59.7	72.4	316.6	49.2	38.7	47.5	46.6	41.7	29.0	32.0	13.8	2.7	53.3	50.9	58.6	63.0	92.2	194.0	198.0	183.9
15	160.4	149.5	154.4	147.4	136.5	147.6	144.5	160.3	179.7	186.2	178.3	177.2	187.1	178.1	183.5	174.9	168.1	186.9	202.0	203.0	209.3	221.5	221.1	222.8
16	225.8	211.5	232.0	268.0	280.2	264.2	238.4	218.3	262.4	325.3	39.5	10.6	306.2	46.9	264.8	14.6	338.1	348.1	326.2	322.5	324.1	345.0	61.3	0.0
17	40.1	215.3	351.5	339.9	312.8	327.8	40.3	43.1	288.7	289.7	300.1	313.8	315.7	303.8	297.4	305.5	298.6	300.7	299.6	308.0	303.8	281.2	284.6	284.5
18	279.3	275.7	286.1	284.4	286.0	288.1	284.1	284.9	286.8	282.9	280.0	282.3	278.3	278.1	278.6	281.8	284.0	284.2	283.7	284.1	281.7	279.9	277.6	279.6
19	279.0	279.0	282.0	277.4	273.3	274.4	273.3	275.1	275.7	282.4	287.6	283.5	295.7	288.6	282.7	283.0	287.1	293.4	296.7	290.8	302.7	291.6	298.3	290.5
20	289.7	289.2	288.4	282.8	280.0	277.3	284.2	304.5	286.2	284.9	291.4	296.4	304.6	309.6	304.6	300.6	310.6	307.3	304.9	310.0	318.7	308.0	302.3	299.5
21	298.2	291.2	303.7	306.1	292.8	287.5	286.8	284.7	285.8	290.1	296.2	303.6	303.7	308.4	307.4	306.8	308.0	313.0	310.7	308.9	305.3	302.0	302.5	303.5
22	294.4	304.4	295.7	295.7	305.0	302.9	299.7	300.1	291.3	290.5	303.3	305.9	306.4	304.3	306.7	304.0	306.3	296.0	288.8	289.0	288.4	285.7	284.4	277.9
23	266.4	232.8	214.3	202.0	217.1	192.7	240.7	219.6	204.3	204.1	198.2	176.6	177.0	175.2	178.2	180.7	182.8	182.3	173.2	157.0	141.4	145.5	146.1	144.6
24	144.0	138.4	142.1	152.4	187.0	206.7	214.6	207.3	224.2	202.3	206.4	197.9	171.7	173.5	250.6	146.7	52.2	314.0	321.3	307.2	273.2	309.9	8.3	338.5
25	338.5	325.8	335.3	42.6	43.1	62.8	76.0	80.2	42.8	41.2	347.9	339.6	313.2	287.9	298.0	327.5	311.4	315.5	322.9	327.8	340.8	307.5	314.8	20.7
26	0.0	0.0	322.0	293.3	207.0	203.9	0.0	300.2	307.0	295.2	300.7	314.2	296.0	306.5	337.0	317.5	302.9	333.9	347.9	3.7	97.6	250.4	236.0	240.1
27	228.3	241.3	217.2	217.9	207.0	199.0	222.3	177.8	241.1	201.6	218.3	251.3	277.5	295.6	308.3	332.0	321.6	341.8	338.2	345.1	167.3	249.9	239.9	221.8
28	233.0	272.2	255.6	252.3	250.6	245.8	251.2	251.0	269.2	221.0	206.5	198.0	222.4	231.3	238.7	202.9	214.1	127.0	74.0	92.1	134.3	171.8	198.0	208.9
29	204.8	212.6	205.8	197.0	205.9	225.4	202.7	199.2	201.2	193.4	195.0	195.0	207.8	194.6	183.7	182.7	183.1	176.5	174.4	177.4	175.2	181.1	181.0	185.1
30	211.5	214.8	207.0	201.8	196.6	199.0	209.3	214.5	210.6	187.0	191.3	184.3	192.1	196.2	202.0	201.4	194.0	194.0	166.0	28.3	202.0	202.5	204.1	173.9
31	193.6	191.5	241.8	315.1	230.4	297.8	223.2	200.1	203.7	220.5	218.1	234.3	222.4	290.1	305.8	308.4	22.6	352.1	10.0	41.9	270.3	207.9	226.4	268.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Resultant Wind Direction (Degrees)

September 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	0.0	0.0	122.6	284.0	53.0	346.1	349.6	354.5	345.1	327.9	332.4	350.9	334.4	335.7	320.7	320.3	326.5	334.9	348.9	352.0	350.8	338.3	5.0	28.7
2	338.5	4.6	345.7	314.4	325.8	321.0	325.2	330.5	358.3	36.2	52.3	29.1	3.6	358.8	350.6	337.6	332.6	325.7	327.4	324.8	323.9	324.0	326.2	312.5
3	300.0	297.9	292.0	289.9	287.3	286.5	283.0	282.6	283.7	283.8	286.0	285.6	285.5	284.9	284.4	283.7	283.4	283.9	282.5	281.1	279.3	277.4	281.1	285.1
4	282.1	279.8	279.4	280.6	267.8	238.2	226.4	203.2	210.3	221.2	237.2	232.0	236.3	213.1	203.0	184.1	121.6	112.6	92.8	121.1	139.8	157.9	149.0	188.4
5	144.6	63.8	160.6	91.9	66.9	30.5	122.7	4.5	50.2	67.7	69.0	60.2	65.8	64.1	56.2	75.9	353.5	73.8	55.1	47.4	91.8	163.3	117.0	209.8
6	75.0	56.8	72.9	75.3	3.4	63.8	49.7	57.5	20.2	20.7	12.1	27.7	48.5	44.8	22.1	10.0	356.5	344.4	332.6	350.2	317.7	312.0	303.6	310.1
7	306.9	308.3	300.2	296.1	290.2	285.6	285.1	287.9	285.0	284.8	287.2	353.2												

Total Hours in Month 720 **Hours Data Available** 156 **Data Recovery** 21.7%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
14																		125.3	120.6	145.5	153.3	149.4	147.7	149.3
15	149.5	155.3	147.0	137.4	149.3	147.6	154.3	151.7	182.8	165.6	157.5	157.0	153.6	150.1	134.0	145.0	119.4	120.4	108.5	112.5	137.7	121.2	116.6	113.9
16	104.3	107.3	100.6	78.9	129.7	185.9	255.2	187.8	210.2	195.6	218.4	163.3	154.7	161.0	131.5	120.6	89.7	85.2	72.7	75.2	80.0	70.8	75.6	78.3
17	74.3	25.5	51.0	68.8	53.8	47.6	59.4	14.7	348.1	51.3	51.8	45.8	33.3	357.9	351.1	356.3	351.0	335.0	309.3	315.5	313.4	240.6	243.9	294.2
18	305.7	310.5	314.3	318.6	305.9	302.5	291.0	301.8	287.9	290.5	296.2	292.4	292.3	290.1	294.7	311.9	314.5	307.9	305.1	304.3	300.8	307.7	338.2	346.7
19	10.2	45.7	40.6	35.2	60.4	34.4	17.0	33.3	1.3	352.7	4.6	23.2	32.7	33.7	45.8	41.8	52.4	54.5	45.1	45.7	38.2	35.1	38.2	35.5
20	35.2	51.9	44.1	51.1	44.8	40.7	47.4	52.6	52.2	49.3	50.5	43.3	54.0	57.1	65.7	58.9	58.4	60.1	55.1	117.7	171.7	98.3	136.3	78.1
21	92.5	134.8	108.2	145.5	68.9	119.7	149.0	103.9	139.5	145.5	146.6	144.6	140.7	140.2	137.5	119.2	143.2	145.3	155.3	149.7	145.6	185.3	197.8	193.2
22	205.3	204.3	210.5	208.6	196.3	197.5	204.5	312.0	229.2	211.6	210.9	278.2	287.9	291.8	287.5	281.1	285.2	278.3	279.2	272.3	275.1	281.3	281.8	282.6
23	278.3	251.7	230.7	235.6	226.5	225.7	229.4	258.0	240.3	303.7	335.0	337.1	336.5	339.2	348.0	331.6	343.7	338.8	342.0	348.2	20.6	20.3	15.6	12.1
24	24.6	32.1	11.0	46.1	61.6	63.8	58.0	48.3	59.8	74.3	78.1	64.7	60.2	53.0	51.5	33.0	14.2	19.1	58.8	285.9	289.9	320.3	354.9	13.6
25	58.5	65.5	68.3	61.8	65.9	64.5	64.4	65.4	61.3	66.7	61.6	51.7	57.5	61.9	38.0	32.7	43.5	58.0	56.6	47.7	56.3	59.7	53.9	59.8
26	62.0	60.8	57.2	55.8	66.3	70.7	75.0	72.6	72.5	58.1	350.1	50.1	63.0	56.3	66.2	94.3	73.9	55.3	50.6	70.2	114.9	108.7	324.0	23.7
27	10.3	29.6	72.7	90.8	11.6	57.2	65.1	42.8	27.0	55.7	70.4	354.4	343.5	354.0	343.3	342.6	304.1	303.1	297.4	314.8	308.9	306.6	306.7	293.3
28	293.1	304.0	292.6	289.3	288.6	286.8	294.7	316.9	316.8	328.3	347.8	330.7	321.0	313.7	319.7	308.2	271.7	240.2	245.7	223.8	211.7	204.4	202.7	269.7
29	197.9	216.2	207.5	195.1	194.5	178.4	186.3	163.1	187.2	284.7	273.4	13.5	15.4	358.3	39.4	50.2	44.2	36.3	351.3	332.4	42.0	47.5	49.5	62.7
30	68.2	66.9	58.1	39.6	15.0	1.5	5.2	353.2	335.9	328.3	324.1	33.8	52.1	33.1	36.1	7.2	358.5	3.5	358.6	20.7	357.6	7.3	57.5	56.8

Total Hours in Month 720 **Hours Data Available** 391 **Data Recovery** 54.3%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	60.9	70.0	68.1	62.6	43.4	48.3	5.7	11.3	29.2	137.2	201.2	230.0	230.2	177.2	153.9	136.5	118.7	108.3	113.4	134.4	123.1	125.2	113.5	112.5
2	109.1	103.0	100.4	113.6	123.2	126.5	130.3	134.9	137.8	141.4	140.2	139.3	138.9	141.3	142.1	151.0	146.5	141.4	142.0	134.4	139.1	142.0	144.4	144.3
3	142.5	146.4	141.4	142.3	147.5	153.5	155.4	149.4	149.1	153.8	154.9	165.4	175.4	162.9	175.6	176.7	187.0	202.5	147.3	152.3	203.1	231.5	260.6	216.0
4	225.1	223.1	221.5	208.7	204.2	274.9	304.1	312.4	309.8	318.8	301.6	311.1	303.7	294.1	307.7	307.6	312.8	314.3	315.0	322.6	316.8	320.7	333.2	332.8
5	335.0	337.2	325.9	337.5	337.2	335.7	335.6	333.7	317.7	298.5	293.5	296.4	338.2	92.0	123.8	128.6	129.3	125.2	127.6	134.6	139.1	137.9	135.7	144.3
6	149.1	145.1	144.3	142.9	142.7	141.3	148.7	154.6	159.6	175.7	171.7	170.5	161.7	161.8	174.4	166.4	158.9	145.3	146.7	147.6	146.1	159.0	145.7	136.0
7	140.9	145.2	152.1	166.9	168.7	158.3	170.3	148.7	158.3	157.3	152.9	155.7	169.0	169.1	176.2	172.4	178.3	182.2	177.7	177.6	177.3	181.4	187.3	183.8
8	176.2	183.4	178.8	178.7	183.6	174.6	168.8	155.5	165.4	174.9	178.7	181.5	179.7	176.1	179.4	167.9	164.2	171.8	169.9	166.0	165.8	241.5	197.7	201.3
9	211.8	199.0	206.7	221.7	210.8	252.7	249.8	245.2	234.4	219.2	230.3	211.9	223.9	10.2	6.0	81.4	183.1	194.3	177.1	197.7	198.8	163.5	133.8	146.2
10	140.6	145.0	153.9	157.0	182.6	139.3	140.1	149.1	167.8	158.5	148.5	147.0	174.6	179.0	156.3	146.7	152.7	166.8	158.6	178.3	170.5	196.2	225.3	194.3
11	201.2	197.2	197.8	183.6	186.1	211.4	208.4	212.8	215.4	205.1	201.6	208.9	286.2	291.7	291.3	289.3	297.0	297.2	303.7	305.6	310.5	308.8	310.9	306.9
12	309.5	308.7	307.8	306.3	289.2	279.1	313.3	210.7	222.0	220.7	231.1	238.3	24.5	39.9	211.0	199.3	171.0	164.3	185.1	187.1	206.6	207.5	224.5	210.0
13	215.4	203.8	212.0	189.0	158.2	203.6	211.3	213.1	209.4	214.6	215.6	213.2	219.4	210.2	212.7	192.4	137.3	147.7	143.8	141.5	143.8	173.6	159.6	155.8
14	163.8	167.5	153.3	184.3	193.3	210.0	195.1	189.7	198.1	194.4	172.0	149.6	163.1	161.9	176.6	181.7	185.7	156.5	150.3	171.5	189.5	200.5	211.5	213.3
15	204.1	214.2	207.2	215.9	213.1	215.2	232.6	241.2	229.2	201.1	205.2	203.9	204.5	231.5	200.5	203.6	209.9	211.4	207.0	200.5	204.0	202.5	198.3	201.0
16	206.1	210.5	204.7	203.3	205.1	200.2	189.6	202.8	204.6	198.7	205.6	205.9	215.4	213.5	213.1	211.4	210.5	213.4	209.2	213.1	210.6	217.0	215.3	214.2
17	218.9	219.2	213.9	202.6	198.7	209.5	215.3	214.4	223.4	223.2		220.4	208.5	220.3	214.2	194.5	195.6	212.4	209.8	202.6	210.3	214.8	212.1	221.5
18	221.8	224.5	216.3	216.4	216.1	208.0	217.0	215.8	208.5	211.7	191.9	206.6	174.6	219.4	193.2	52.8	135.1	165.8	131.5	130.9	113.1	119.7	118.9	162.8
19	234.3	196.1	180.3	182.8	205.2	207.3	202.6	254.9	237.2	255.3	248.3	0.0	249.3	247.9	227.6	220.4	221.6	201.1	258.7	241.2	246.1	251.9	239.4	243.4
20	254.2	271.0	271.9	252.6	250.3	282.1	257.7	267.8	250.0	216.0	227.4	211.9	270.7	270.1	261.6	273.6	271.0	271.2	263.1	261.9	265.8	261.2	258.2	256.8
21	270.1	267.3	273.7	270.4	270.6	273.6	277.7	283.7	282.4	270.7	261.0	243.7	238.6	237.0	241.0	232.5	236.1	207.4	203.1	204.3	186.2	248.0	300.9	229.1
22	193.0	189.5	170.1	161.9	198.4	198.8	210.0	214.3	257.0	246.6	226.7	210.1	217.0	238.5	216.6	282.1	316.5	344.9	337.9	262.0	261.4	245.4	262.0	0.0
23	0.0	0.0	267.5	265.7	0.0	262.7	229.5	277.2	0.0	39.0	43.5	51.4	51.0	20.5	3.1	315.7	310.0	177.8	163.8	141.2	129.8	234.6	220.1	206.7
24	242.6	322.8	0.0	210.6	236.1	0.0	81.4	279.2	37.0	47.9	40.6	40.2	6.7	1.8	356.0	335.1	331.7	311.5	301.2	301.2	299.2	270.4	255.1	295.7
25	299.9	296.5	293.2	294.6	298.8	288.7	288.8	299.2	293.2	290.5	287.8	286.5	286.3	286.8	286.9	287.6	288.3	288.8	289.5	294.0	326.5	317.0	342.4	9.0
26	328.8	322.5	325.3	302.6	307.8	302.1	301.2	312.5	347.8	334.3	332.7	340.6	311.6	310.1	315.2	309.5	302.6	279.6	286.6	285.1	284.4	277.2	277.2	280.8
27	286.0	285.0	285.6	284.5	283.3	287.9	279.0	288.2	249.5	225.0	229.0	236.3	251.7	276.8	282.9	278.6	276.1	291.9	301.4	303.7	308.7	1.9	72.7	92.2
28	334.4	297.9	306.5	323.3	74.6	251.0	259.4	80.0	56.3	2.1	5.2	348.4	356.1	0.1	327.5	327.5	306.9	303.0	299.6	303.0	295.7	300.3	291.5	288.1
29	289.5	287.8	289.4	289.2	289.0	285.4	286.8	287.0	282.6	281.9	281.5	280.9	280.8	281.5	284.7	283.4	286.1	285.1	281.6	285.5	283.0	282.1	283.6	282.5
30	267.2	241.7	224.7	225.0	227.8	228.9	227.5	214.0	198.8	186.8	177.8	216.2	205.0	36.8	51.2	59.8	48.3	56.2	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.9	51.5	49.7	38.7	42.3	33.9	20.6	8.2	0.7	338.9	274.6	265.1	270.1	272.4	255.0	243.4

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	248.4	227.8	232.8	237.4	230.7	220.9	215.2	203.0	197.1	213.3	218.9	214.7	208.7	202.9	74.4	13.6	39.1	53.3	94.0	90.0	79.8	88.8	96.5	97.9
2	101.3	79.3	158.6	143.5	215.2	145.2	14.5	153.6	162.9	160.2	164.6	154.7	158.0	151.4	162.4	210.2	175.8	117.1	121.4	134.1	140.6	133.3	157.8	148.2
3	157.1	145.3	142.1	138.0	137.9	139.6	144.7	176.6	179.6	213.2	204.8	212.0	253.3	200.0	241.4	336.8	37.5	31.6	310.6	305.5	309.1	298.8	299.2	297.8
4	296.5	296.6	291.8	290.9	291.7	293.8	290.6	295.0	303.1	305.1	313.3	313.9	314.0	314.5	311.4	312.6	312.3	311.8	311.7	332.5	331.8	318.0	312.3	298.0
5	293.7	295.2	297.8	295.2	303.7	300.8	299.7	296.3	293.7	292.6	300.0	297.2	290.8	278.6	276.2	275.8	276.9	282.3	284.9	291.1	290.5	290.4	288.2	287.4
6	285.0	284.1	285.5	284.8	287.0	284.3	277.0	273.4	272.7	271.1	278.9	276.4	276.7	279.2	279.9	280.0	281.4	282.5	282.9	281.3	284.3	290.6	325.4	350.9
7	338.5	318.7	302.3	292.6	292.0	291.9	294.3	305.7	317.0	316.5	312.8	315.4	315.8	338.3	357.7	355.4	4.1	354.0	7.8	36.0	27.5	35.9	29.4	355.4
8	338.8	323.2	304.6	282.5	284.7	281.7	284.0	284.3	287.4	284.2	286.0	285.8	290.6	299.0	296.0	300.6	296.1	300.6	296.9	308.9	291.8	285.9	292.5	292.4
9	291.9	295.7	294.2	298.9	295.4	293.7	291.1	289.8	286.2	295.0	290.7	295.6	288.5	283.5	287.6	290.1	301.1	304.9	295.1	280.8	275.6	276.2	214.7	204.2
10	206.1	202.1	208.9	211.4	212.6	198.0	203.1	205.5	204.3	190.9	206.8	201.0	208.5	220.5	199.6	194.5	214.3	225.9	190.5	199.7	203.4	200.7	205.2	203.5
11	202.5	208.6	212.2	181.0	206.9	222.1	220.9	218.1	223.5	225.0	215.9	210.9	214.7	212.8	220.8	213.1	207.5	208.0	229.5	216.5	207.2	201.7	218.4	182.8
12	273.1	264.4	275.7	246.3	232.7	248.6	31.3	218.1	248.0	250.0	251.5	249.4	247.2	226.8	220.9	201.1	131.2	301.1	297.7	303.0	300.9	301.6	301.3	299.5
13	296.8	293.3	292.3	292.3	288.3	287.7	288.3	287.7	286.4	282.7	275.9	275.4	279.6	325.2	356.6	115.7	210.0	233.3	289.5	291.0	289.9	292.7	302.6	311.1
14	336.3	347.6	355.2	341.2	345.5	349.9	330.0	336.2	339.7	197.1	208.5	173.7	278.6	283.1	277.0	271.9	260.0	245.8	252.9	241.6	213.1	198.8	202.8	205.8
15	198.0	202.1	200.8	196.8	200.0	212.0	220.2	215.2	218.6	220.6	214.3	215.4	229.9	223.1	221.4	220.5	207.1	204.3	205.6	237.3	205.2	214.4	224.6	228.4
16	196.7	184.4	183.3	181.7	181.5	187.7	178.5	181.3	189.8	185.5	188.8	202.3	207.2	188.5	186.9	186.9	183.7	181.2	196.6	186.1	192.6	201.9	187.2	188.8
17	189.4	180.4	191.5	188.8	181.7	175.3	180.4	176.5	181.9	184.0	199.1	204.9	192.8	198.0	198.2	196.3	189.3	186.6	202.4	187.5	189.4	178.8	187.5	186.2
18	216.0	225.5	193.9	206.9	208.8	217.2	35.1	192.1	181.3	205.4	200.0	192.8	199.3	207.2	200.8	186.0	195.4	238.8	249.0	282.7	264.8	263.4	246.6	266.5
19	253.8	275.1	267.3	282.5	241.2	257.9	266.7	262.0	259.1	250.4	247.9	243.1	283.4	274.2	274.7	283.7	283.8	278.1	262.9	252.3	250.5	237.5	252.2	252.8
20	258.0	259.8	264.7	269.6	269.0	276.2	282.0	279.0	281.0	280.0	281.0	280.0	280.0	284.0	283.0	278.0	278.0	276.0	268.0	249.0	240.0	226.0	249.0	256.0
21	240.0	243.0	255.0	257.0	267.0	282.0	308.0	332.0	0.0	322.0	311.0	309.0	307.0	298.0	300.0	311.0	322.0	313.0	309.0	308.0	309.0	309.0	308.0	311.0
22	316.0	325.0	284.0	279.0	267.0	232.0	231.0	236.0	269.0	280.0	282.0	283.0	280.0	280.0	276.0	269.0	264.0	274.0	284.0	300.0	315.0	320.0	342.0	350.0
23	349.0	354.0	3.0	7.0	23.0	48.0	43.0	33.0	33.0	36.0	43.0	45.0	55.0	53.0	48.0	59.0	67.0	73.0	72.0	56.0	62.0	65.0	75.0	69.0
24	56.0	70.0	68.0	63.0	307.0	358.0	2.0	320.0	287.0	281.0	273.0	286.0	278.0	281.0	286.0	285.0	287.0	285.0	287.0	285.0	276.0	283.0	286.0	281.0
25	285.0	286.0	281.0	283.0	284.0	280.0	278.0	263.0	263.0	281.0	280.0	281.0	278.0	279.0	274.0	279.0	274.0	272.0	269.0	258.0	259.0	266.0	259.0	238.0
26	242.0	243.0	219.0	215.0	222.0	228.0	245.0	259.0	338.0	186.0	336.0	337.0	325.0	333.0	326.0	354.0	332.0	349.0	353.0	355.0	354.0	325.0	324.0	310.0
27	324.0	310.0	291.0	294.0	294.0	301.0	290.0	288.0	290.0	292.0	292.0	302.0	286.0	293.0	292.0	288.0	302.0	314.0	287.0	279.0	285.0	293.0	290.0	295.0
28	299.0	299.0	286.0	307.0	326.0	4.0	84.0	55.0	40.0	26.0	336.0	317.0	332.0	335.0	324.0	324.0	328.0	328.0	319.0	312.0	315.0	318.0	329.0	321.0
29	313.0	313.0	310.0	309.0	300.0	289.0	298.0	296.0	304.0	302.0	307.0	305.0	310.0	307.0	304.0	299.0	296.0	292.0	292.0	298.0	302.0	304.0	306.0	299.0
30	295.0	299.0	295.0	294.0	302.0	300.0	305.0	302.0	300.0	307.0	304.0	296.0	291.0	297.0	307.0	307.0	311.0	318.0	320.0	305.0	296.0	301.0	295.0	298.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	312.0	309.0	325.0	352.0	331.0	324.0	342.0	15.0	9.0	329.0	310.0	332.0	324.0	326.0	317.0	328.0	16.0	39.0	321.0	151.0	253.0	202.0	249.0	224.0
2	194.0	191.0	248.0	234.0	212.0	209.0	215.0	215.0	254.0	244.0	275.0	263.0	262.0	241.0	295.0	49.0	55.0	267.0	224.0	214.0	219.0	235.0	255.0	294.0
3	280.0	280.0	279.0	282.0	284.0	284.0	283.0	280.3	279.2	278.0	280.0	272.9	277.9	282.7	269.3	272.6	268.7	247.6	252.3	261.9	261.0	266.7	255.3	250.9
4	251.1	263.6	272.9	265.4	270.2	276.2	221.7	228.0	262.0	269.0	263.0	272.0	270.0	282.0	312.0	325.0	325.0	313.0	317.0	316.0	318.0	319.0	325.0	320.0
5	322.0	321.0	317.0	318.0	319.0	320.0	321.0	321.0	317.0	302.0	299.0	298.0	296.0	299.0	308.0	309.0	305.0	299.0	296.0	300.0	298.0	292.0	311.0	304.0
6	303.0	304.0	307.0	309.0	307.0	307.0	310.0	312.0	308.0	304.0	305.0	303.0	299.0	295.0	311.0	315.0	327.0	351.0	332.0	59.0	43.0	41.0	31.0	29.0
7	19.0	353.0	337.0	330.0	316.0	320.0	307.0	298.0	290.0	283.0	275.0	282.0	298.0	285.0	284.0	284.0	285.0	286.0	285.0	284.0	280.0	283.0	284.0	289.0
8	295.0	315.0	341.0	352.0	350.0	350.0	9.0	10.0	356.0	2.0	3.0	316.0	320.0	345.0	335.0	341.0	40.0	63.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	293.0	296.0	297.0	296.0	295.0	294.0	293.0	295.0	303.0	295.0	297.0	304.0	309.0	307.0	310.0
10	309.0	310.0	291.0	278.0	280.0	264.0	234.0	239.0	233.6	225.4	224.5	214.4	208.4	215.3	223.8	214.8	190.9	218.4	214.1	217.2	206.0	187.3	155.5	151.2
11	151.8	155.3	153.7	145.9	133.2	124.8	136.3	106.0	126.0	211.0	207.0	210.0	272.0	205.0	258.0	262.0	274.0	264.0	205.0	219.0	269.0	260.0	261.0	247.0
12	199.0	209.0	221.0	216.0	211.0	205.0	212.0	196.0	194.0	202.0	197.0	198.0	202.0	201.0	201.0	208.0	204.0	197.0	206.0	215.0	216.0	223.0	215.0	221.0
13	212.0	215.0	214.0	216.0	213.0	210.0	214.0	209.0	209.0	210.0	211.0	206.0	208.0	204.0	204.0	206.0	214.0	215.0	220.0	216.0	216.0	209.0	211.0	215.0
14	220.0	218.0	210.0	217.0	218.0	221.0	220.0	222.0	206.0	216.0	213.0	225.0	210.0	226.0	214.0	217.0	225.0	209.0	202.0	211.0	191.0	203.0	184.0	168.0
15	169.0	207.0	207.0	176.0	163.0	170.0	167.0	160.0	153.0	152.0	150.0	153.0	153.0	153.0	154.0	157.0	155.0	154.0	154.0	159.0	163.0	166.0	165.0	157.0
16	160.0	161.0	162.0	167.0	168.0	164.0	179.0	181.0	173.0	180.0	183.0	187.0	176.0	177.0	185.0	182.0	179.0	190.0	183.0	187.0	192.0	184.0	185.0	190.0
17	185.0	186.0	188.0	186.0	191.0	189.0	189.0	178.0	180.0	181.0	183.0	178.0	177.0	186.0	186.0	183.0	187.0	190.0	197.0	205.0	202.0	216.0	203.0	217.0
18	211.0	219.0	217.0	225.0	210.0	227.0	225.0	220.0	214.0	214.0	221.0	221.0	221.0	223.0	224.0	221.0	214.0	213.0	216.0	218.0	221.0	222.0	217.0	214.0
19	210.0	204.0	209.0	198.0	209.0	212.0	201.0	225.0	219.0	187.0	223.0	198.0	194.0	197.0	203.0	204.0	202.0	200.0	217.0	220.0	218.0	220.0	237.0	211.0
20	211.0	217.0	222.0	232.0	256.0	222.0	232.0	275.0	283.0	286.0	288.0	293.0	295.0	294.0	299.0	303.0	310.0	327.0	354.0	327.0	359.0	11.0	31.0	252.0
21	300.0	305.0	301.0	307.0	315.0	309.0	337.0	7.0	1.0	331.0	346.0	343.0	345.0	348.0	322.0	312.0	315.0	305.0	299.0	303.0	295.0	293.0	290.0	302.0
22	303.0	290.0	290.0	287.0	288.0	290.0	293.0	294.0	296.0	295.0	294.0	292.0	301.0	310.0	309.0	312.0	314.0	309.0	304.0	307.0	321.0	57.0	72.0	58.0
23	63.0	54.0	50.0	49.0	41.0	42.0	40.0	44.0	60.0	113.0	115.0	131.0	102.0	87.0	98.0	109.0	84.0	276.0	275.0	277.0	0.0	292.0	236.0	244.0
24	224.0	242.0	234.0	212.0	205.0	218.0	210.0	214.0	218.0	208.0	205.0	178.0	183.0	182.0	180.0	181.0	188.0	181.0	171.0	172.0	175.0	176.0	171.0	168.0
25	164.0	165.0	168.0	167.0	158.0	154.0	154.0	159.0	162.0	165.0	173.0	172.0	158.0	148.0	137.0	137.0	141.0	159.0	155.0	164.0	204.0	209.0	202.0	214.0
26	211.0	226.0	223.0	222.0	224.0	224.0	240.0	217.0	234.0	308.0	307.0	305.0	283.0	273.0	272.0	281.0	279.0	282.0	289.0	282.0	277.0	279.0	279.0	277.0
27	277.0	276.0	280.0	279.0	279.0	275.0	271.0	268.0	267.0	272.0	275.0	278.0	277.0	278.0	274.0	263.0	263.0	268.0	262.0	272.0	297.0	6.0	26.0	7.0
28	2.0	14.0	26.0	31.0	46.0	80.0	79.0	91.0	90.0	163.0	180.0	206.0	216.0	211.0	207.0	214.0	218.0	211.0	213.0	206.0	191.0	187.0	192.0	205.0
29	237.0	222.0	207.0	225.0	233.0	211.0	184.0	197.0	213.0	207.0	193.0	202.0	188.0	178.0	161.0	194.0	176.0	140.0	139.0	137.0	133.0	146.0	137.0	135.0
30	138.0	146.0	153.0	153.0	160.0	197.0	204.0	210.0	209.0	232.0	225.0	220.0	214.0	219.0	215.0	224.0	227.0	218.0	219.0	218.0	220.0	220.0	218.0	216.0
31	213.0	207.0	197.0	198.0	199.0	202.0	203.0	203.0	207.0	209.0	213.0	211.0	217.0	211.0	212.0	205.0	204.0	210.0	205.0	209.0	210.0	209.0	207.0	207.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.7	4.7	4.5	4.4	5.0	5.1	5.8	7.9	5.8	6.2	6.3	6.2	6.4	7.3	5.6	5.8	5.8	7.0	13.6	7.6	10.7	12.8	9.3	9.8	13.6	4.4	7.1
2	5.4	5.1	11.4	6.0	9.5	7.6	7.5	29.4	11.3	7.2	7.2	6.2	5.9	7.2	4.8	5.5	7.7	7.1	11.9	6.5	6.1	6.7	6.1	12.0	29.4	4.8	8.4
3	7.1	10.1	11.1	13.1	12.2	14.5	13.7	12.4	12.0	12.4	5.6	7.8	6.0	6.3	12.1	11.7	8.3	5.4	11.5	32.3	9.6	13.1	16.5	18.8	32.3	5.4	11.8
4	11.6	10.0	8.8	5.9	4.4	6.4	6.3	5.7	7.0	6.5	5.3	15.7	16.7	19.6	18.1	20.9	16.0	16.4	15.9	42.2	47.5	58.2	18.8	15.4	58.2	4.4	16.6
5	10.5	6.6	23.6	35.8	23.9	22.6	29.3	9.5	9.6	9.4	10.6	8.1	16.3	17.2	8.7	12.8	34.7	23.8	63.6	47.7	24.8	25.7	41.2	62.0	63.6	6.6	24.1
6	25.4	20.3	23.4	46.8	25.2	35.4	18.6	11.8	4.0	3.8	4.8	5.8	5.0	15.7	27.8	13.1	12.3	14.6	17.3	9.5	9.3	9.3	10.7	10.9	46.8	3.8	15.8
7	8.9	11.4	8.4	11.6	10.8	11.6	6.8	11.5	8.9	12.5	6.7	13.4	9.3	6.7	6.2	10.4	10.2	10.4	8.7	5.8	7.6	10.1	8.7	10.1	13.4	5.8	9.4
8	9.6	12.1	10.2	13.8	11.9	10.4	7.0	9.4	13.6	9.4	10.8	6.3	7.0	7.4	6.6	11.7	5.9	8.4	6.6	7.2	8.4	8.1	12.0	13.4	13.8	5.9	9.5
9	8.5	48.8	14.5	46.3	12.6	16.4	31.6	28.1	18.4	39.8	26.6	23.0	25.1	19.3	35.0	33.3	62.5	15.1	17.6	12.9	9.4	16.3	16.8	10.8	62.5	8.5	24.5
10	21.0	13.8	13.1	15.0	17.4	18.9	14.1	10.6	8.7	8.2	8.8	8.4	9.1	10.6	9.7	9.8	9.4	8.8	8.7	8.8	8.1	9.1	9.8	9.2	21.0	8.1	11.2
11	9.5	9.4	9.5	8.6	7.6	7.9	8.3	9.4	9.2	8.7	10.0	7.2	6.7	8.3	6.5	5.6	5.5	5.2	5.3	5.3	5.1	5.0	4.9	4.9	10.0	4.9	7.2
12	4.9	5.0	5.3	5.6	5.1	4.9	5.6	9.3	8.7	9.2	9.0	9.2	9.2	8.7	8.8	6.8	6.3	5.6	9.1	8.6	9.7	10.6	11.4	5.5	11.4	4.9	7.6
13	5.6	5.6	5.6	5.8	5.7	6.3	6.3	7.3	13.1	6.1	6.5	7.8	26.7	10.6	15.4	10.0	9.6	7.2	5.4	6.2	4.8	5.6	6.9	5.2	26.7	4.8	8.1
14	5.9	8.8	10.9	8.8	8.7	11.5	12.6	13.9	15.1	13.1	11.5	11.5	11.4	10.4	10.4	8.1	8.5	12.5	26.1	22.6	21.3	20.1	8.7	5.7	26.1	5.7	12.4
15	9.1	7.0	10.5	9.5	9.3	4.7	6.4	6.1	7.3	6.9	6.5	6.5	5.8	5.8	7.8	14.0	7.7	7.8	16.6	32.9	39.3	49.5	8.0	10.3	49.5	4.7	12.3
16	31.4	26.5	20.2	11.1	10.1	29.7	7.5	6.4	7.1	6.0	5.5	5.8	6.3	6.3	6.3	6.3	6.3	6.0	6.1	5.8	6.6	6.8	8.3	7.3	31.4	5.5	10.2
17	7.9	8.7	8.8	10.3	10.5	11.1	13.0	10.8	10.3	10.0	9.2	8.2	11.2	10.8	9.3	8.8	8.2	9.3	9.4	9.4	8.4	10.5	9.5	8.1	13.0	7.9	9.6
18	9.0	9.0	9.9	14.6	19.1	9.8	6.1	8.0	6.4	7.7	14.4	6.9	5.4	4.6	3.0	8.3	3.5	12.5	4.2	8.5	18.5	39.3	16.9	30.9	39.3	3.0	11.5
19	29.1	13.3	2.6	8.7	8.4	0.0	0.0	0.0	19.8	10.5	24.4	55.2	26.6	32.8	21.9	19.5	35.2	8.8	7.2	7.1	7.6	8.0	7.3	6.3	55.2	0.0	15.0
20	8.5	8.1	7.8	6.2	5.3	5.3	5.4	5.7	6.6	6.0	6.4	6.5	6.0	7.4	8.4	6.6	11.5	10.7	12.1	9.8	10.7	7.4	6.9	8.2	12.1	5.3	7.6
21	9.0	11.4	12.8	37.6	35.4	40.4	43.1	29.5	40.4	21.1	11.2	5.1	5.6	5.0	5.1	5.9	6.0	5.8	5.5	6.6	7.2	7.4	7.6	15.4	43.1	5.0	15.8
22	19.8	20.1	26.2	58.0	13.9	25.2	23.3	10.3	11.2	14.8	18.9	19.6	14.3	22.1	13.1	8.2	26.5	53.9	34.1	26.6	18.4	0.0	35.1	13.9	58.0	0.0	22.0
23	44.3	23.0	6.6	9.1	8.0	6.2	13.4	12.4	8.3	7.6	12.6	7.2	11.3	7.3	11.9	5.7	10.6	12.3	17.9	15.1	16.5	7.2	8.8	8.8	44.3	5.7	12.2
24	10.1	10.0	6.1	5.7	6.3	5.7	7.4	10.5	18.6	13.0	13.2	12.0	15.2	33.8	12.3	13.6	6.1	6.7	5.9	57.3	25.8	18.1	21.9	15.3	57.3	5.7	14.6
25	9.7	7.9	16.0	7.1	7.3	6.9	7.0	7.1	7.4	6.3	6.7	6.3	7.0	6.5	6.5	6.7	6.6	6.2	5.8	5.7	5.9	5.7	4.8	6.2	16.0	4.8	7.1
26	5.3	5.4	6.1	6.4	6.6	5.5	6.6	8.1	8.8	6.1	7.7	9.2	9.3	8.4	11.2	11.0	10.5	7.8	7.9	7.8	9.8	12.4	8.2	7.9	12.4	5.3	8.1
27	7.8	6.2	5.2	5.4	5.1	6.0	6.6	7.8	8.9	10.4	10.9	8.0	7.0	5.7	7.9	7.0	5.3	6.4	6.4	6.6	6.5	6.2	6.1	6.4	10.9	5.1	6.9
28	5.7	5.9	5.8	5.9	5.7	5.1	5.6	6.3	7.4	8.7	10.5	13.1	10.0	11.5	10.2	8.5	8.9	9.5	9.4	8.6	7.9	8.2	7.0	8.6	13.1	5.1	8.1
29	8.6	6.8	6.7	5.7	6.1	5.9	6.0	6.1	6.1	6.3	8.0	8.0	7.7	5.7	6.5	7.4	7.0	8.1	8.0	7.2	7.6	7.9	9.9	11.0	11.0	5.7	7.3
30	6.6	6.7	5.7	7.1	9.6	7.4	6.1	6.2	7.7	8.1	9.8	10.2	9.7	9.8	9.7	11.9	12.5	12.5	12.7	11.8	12.0	12.2	13.3	12.6	13.3	5.7	9.7
31	12.7	11.9	10.9	11.3	10.0	11.7	11.9	10.7	11.5	11.8	11.7	9.4	12.0	11.9	9.6	13.3	9.9	8.0	8.8	19.4	12.3	12.8	18.6	18.0	19.4	8.0	12.1
Max.	**44.3**	**48.8**	**26.2**	**58.0**	**35.4**	**40.4**	**43.1**	**29.5**	**40.4**	**39.8**	**26.6**	**55.2**	**26.7**	**33.8**	**35.0**	**33.3**	**62.5**	**53.9**	**63.6**	**57.3**	**47.5**	**58.2**	**41.2**	**62.0**	**63.6**		
Min.	**4.9**	**4.7**	**2.6**	**4.4**	**4.4**	**0.0**	**0.0**	**0.0**	**4.0**	**3.8**	**4.8**	**5.1**	**5.0**	**4.6**	**3.0**	**5.5**	**3.5**	**5.2**	**4.2**	**5.3**	**4.8**	**0.0**	**4.8**	**4.9**		**0.0**	
Avg.	**12.1**	**11.6**	**10.6**	**14.4**	**10.9**	**11.8**	**11.3**	**10.6**	**10.9**	**10.1**	**10.2**	**10.8**	**10.7**	**11.3**	**10.9**	**10.6**	**12.4**	**11.0**	**12.9**	**15.1**	**13.0**	**13.9**	**12.3**	**12.5**			**11.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	36.7	11.4	14.1	22.8	15.0	11.0	9.3	13.4	19.7	25.4	14.7	41.5	22.0	15.9	15.3	7.8	8.1	9.4	8.9	11.4	11.1	11.9	10.2	9.5	41.5	7.8	15.7
2	7.2	7.4	10.0	9.9	10.4	9.5	9.9	9.8	9.5	9.2	9.5	9.5	9.8	9.7	10.1	8.0	10.4	9.3	6.8	7.1	9.0	9.6	8.6	9.0	10.4	6.8	9.1
3	9.6	9.2	9.6	9.9	9.8	8.4	9.1	8.9	9.1	9.7	9.1	9.0	9.9	12.1	12.0	8.5	3.9	0.0	4.9	13.4	15.0	14.5	7.2	8.0	15.0	0.0	9.2
4	6.8	5.3	7.2	12.3	16.5	5.8	10.1	17.7	22.2	9.5	24.9	9.0	6.9	8.2	17.9	10.0	31.0	23.0	22.1	21.4	20.9	26.5	21.2	29.6	31.0	5.3	16.1
5	25.1	20.6	19.5	32.0	58.8	15.3	6.4	38.9	22.0	46.6	43.7	31.9	25.6	14.9	12.4	17.3	36.5	13.0	12.1	14.6	17.3	41.9	22.6	25.4	58.8	6.4	25.6
6	38.0	9.8	9.0	9.1	8.6	8.3	8.4	8.5	9.5	10.1	10.6	10.5	10.2	11.0	18.2	27.8	14.4	11.2	22.6	34.2	21.3	18.0	14.2	7.6	38.0	7.6	14.6
7	21.3	26.4	28.0	34.5	18.2	11.8	27.1	17.4	10.4	7.7	0.0	4.4	32.3	14.0	16.4	6.0	9.3	27.3	25.6	18.3	11.1	0.0	14.0	10.9	34.5	0.0	16.4
8	11.9	11.3	4.6	6.8	9.6	12.6	20.3	13.5	14.7	15.5	11.8	11.3	10.6	13.5	13.3	11.1	14.5	12.4	10.0	8.5	5.1	10.9	12.9	11.1	20.3	4.6	11.6
9	12.8	10.8	15.9	6.7	16.3	14.3	15.4	9.8	11.2	26.0	15.7	7.1	13.5	13.6	11.7	11.7	9.1	6.8	3.3	8.4	13.3	0.0	0.0	0.0	26.0	0.0	10.6
10	10.3	16.3	14.1	7.5	2.8	10.2	11.3	8.2	9.5	9.9	11.7	14.7	17.8	11.6	8.6	8.3	11.6	20.9	21.8	7.9	5.7	7.9	6.0	6.9	21.8	2.8	10.9
11	9.0	12.1	16.1	10.6	11.9	31.6	18.7	12.8	11.5	15.9	13.7	8.8	9.0	10.2	11.0	10.3	9.7	10.2	9.6	8.8	7.7	6.7	6.9	7.3	31.6	6.7	11.7
12	7.6	8.3	6.6	7.3	7.2	7.3	7.4	7.3	7.8	7.0	7.6	7.3	7.2	9.0	8.6	8.4	8.7	7.6	8.9	8.1	5.9	6.2	6.3	6.2	9.0	5.9	7.5
13	5.8	6.2	5.9	5.9	6.0	7.1	6.0	7.9	7.9	7.1	6.4	6.9	7.1	7.7	9.9	8.6	9.8	9.1	9.0	7.1	8.8	11.3	10.9	11.5	11.5	5.8	7.9
14	10.1	10.0	8.9	8.5	8.7	8.9	9.6	9.1	8.5	8.9	6.4	6.9	8.5	10.3	11.4	8.6	7.7	9.0	29.3	25.7	15.7	21.7	17.1	20.6	29.3	6.4	12.1
15	15.5	25.2	9.5	27.3	18.7	23.2	19.4	9.2	18.7	15.9	17.1	16.3	4.7	16.6	29.6	4.8	5.6	15.5	36.0	32.6	26.9	19.7	10.2	23.4	36.0	4.7	18.4
16	7.3	26.1	16.2	25.0	13.8	12.1	13.1	11.7	16.5	16.9	7.9	11.1	10.1	10.3	18.5	2.6	0.0	0.0	2.9	10.6	11.2	0.0	0.0	0.0	26.1	0.0	10.2
17	1.6	0.0	21.6	3.3	0.0	0.0	3.7	0.0	7.7	14.1	19.5	23.4	11.3	12.1	8.3	9.7	19.2	19.2	41.4	16.7	26.2	19.9	4.6	11.4	41.4	0.0	12.3
18	0.0	0.0	7.1	11.5	6.0	12.2	12.6	9.7	10.6	21.7	21.1	25.0	6.5	5.5	6.3	5.5	7.2	10.0	15.5	5.5	6.5	8.8	6.8	9.1	25.0	0.0	9.6
19	6.9	8.0	15.0	13.3	7.0	10.7	7.4	9.4	12.8	10.2	11.3	11.7	12.3	11.4	7.3	6.8	6.5	9.3	10.1	9.4	11.7	9.2	10.7	12.2	15.0	6.5	10.0
20	7.4	11.7	9.9	11.1	12.1	11.1	7.3	11.7	12.0	9.6	12.8	9.8	12.4	10.1	9.9	9.5	8.4	8.4	9.1	11.1	12.8	11.4	9.5	12.4	12.8	7.3	10.5
21	20.0	12.1	11.4	11.8	15.0	10.7	12.6	7.6	5.9	7.7	6.7	7.3	8.0	12.6	11.2	9.2	9.7	8.2	10.3	7.2	8.6	6.9	7.3	8.1	20.0	5.9	9.8
22	7.8	7.2	7.7	6.2	8.5	8.5	8.4	8.0	8.5	8.2	29.5	11.9	12.3	10.3	6.4	6.7	6.8	6.8	7.5	6.9	7.0	7.2	8.1	8.6	29.5	6.2	9.0
23	7.5	8.3	7.4	7.1	6.6	6.3	7.1	6.0	5.7	7.7	6.0	12.5	6.8	8.0	10.7	7.0	12.8	20.4	11.6	8.3	18.3	13.5	14.3	14.7	20.4	5.7	9.8
24	17.0	9.6	7.6	7.6	18.1	19.2	33.3	14.7	12.5	11.7	14.3	12.2	12.0	10.0	11.0	14.3	13.6	13.4	12.0	10.1	9.3	10.1	9.8	11.5	33.3	7.6	13.1
25	6.4	11.3	13.2	11.2	12.8	14.5	9.3	11.7	33.4	23.9	10.1	9.1	7.7	9.3	11.8	11.7	9.2	8.1	10.2	13.6	32.8	27.8	18.3	54.7	54.7	6.4	15.9
26	7.8	8.0	6.3	5.7	5.9	5.7	6.4	7.9	8.6	18.1	18.5	20.4	42.8	22.9	9.3	9.5	9.5	9.5	27.9	31.0	26.3	9.8	6.1	5.7	42.8	5.7	13.7
27	10.8	9.3	14.8	8.1	5.8	4.8	4.3	7.3	7.2	7.7	7.7	6.9	7.1	7.8	5.8	5.8	10.7	9.5	6.0	6.9	40.0	5.2	8.8	10.6	40.0	4.3	9.1
28	16.8	13.1	7.1	6.7	6.9	6.4	5.8	7.0	7.0	7.0	7.6	6.0	7.6	8.3	9.2	7.7	7.5	6.8	9.2	8.5	7.8	5.9	5.3	6.7	16.8	5.3	7.8
Max.	**38.0**	**26.4**	**28.0**	**34.5**	**58.8**	**31.6**	**33.3**	**38.9**	**33.4**	**46.6**	**43.7**	**41.5**	**42.8**	**22.9**	**29.6**	**27.8**	**36.5**	**27.3**	**41.4**	**34.2**	**40.0**	**41.9**	**22.6**	**54.7**	**58.8**		
Min.	**0.0**	**0.0**	**4.6**	**3.3**	**0.0**	**0.0**	**3.7**	**0.0**	**5.7**	**7.0**	**0.0**	**4.4**	**4.7**	**5.5**	**5.8**	**2.6**	**0.0**	**0.0**	**2.9**	**5.5**	**5.1**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**12.3**	**11.2**	**11.6**	**12.1**	**12.0**	**11.0**	**11.4**	**10.9**	**12.2**	**13.9**	**13.4**	**12.9**	**12.6**	**11.3**	**11.9**	**9.4**	**11.1**	**11.2**	**14.4**	**13.3**	**14.8**	**12.2**	**9.9**	**12.6**			**12.1**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.5	5.9	6.4	6.6	6.0	9.4	6.2	6.4	5.5	6.1	5.7	8.7	7.0	7.4	7.6	7.6	6.2	6.9	8.0	8.4	7.4	7.7	8.6	8.1	9.4	5.5	7.0
2	7.4	7.1	6.1	7.0	8.5	6.5	8.8	7.5	6.1	7.6	7.0	6.9	8.2	9.8	7.8	8.6	8.6	11.1	9.5	9.4	14.5	8.5	7.1	8.5	14.5	6.1	8.3
3	8.6	8.5	11.0	10.3	10.8	10.0	7.7	10.9	9.1	7.7	6.9	7.2	6.1	9.5	8.7	7.2	6.7	8.4	7.3	11.9	13.8	12.1	8.5	12.0	13.8	6.1	9.2
4	14.0	14.7	8.0	11.5	9.9	7.2	6.0	6.8	6.9	7.0	8.3	10.9	12.2	14.2	12.5	13.7	10.9	11.0	13.4	11.6	9.4	12.9	13.0	13.3	14.7	6.0	10.8
5	12.4	10.3	9.3	10.6	10.3	8.1	10.7	9.8	9.1	8.0	9.2	11.0	11.6	10.2	12.3	18.1	10.6	11.5	13.4	13.5	13.5	14.7	10.2	12.4	18.1	8.0	11.3
6	12.9	12.4	9.9	10.6	10.8	10.8	9.7	9.8	12.7	11.8	8.6	8.2	8.2	11.6	15.1	11.0	7.7	9.0	11.4	10.7	7.9	9.6	13.2	11.9	15.1	7.7	10.6
7	11.9	9.7	9.3	11.3	12.2	13.3	11.4	12.3	12.2	12.7	12.2	11.5	11.2	14.1	12.2	11.0	14.4	12.2	13.2	12.5	13.6	13.4	12.1	12.9	14.4	9.3	12.2
8	11.3	13.6	13.4	12.9	15.5	14.0	14.6	12.4	12.5	12.5	13.5	11.6	12.3	12.3	12.9	11.1	13.8	14.7	13.1	10.7	13.5	13.3	10.5	9.6	15.5	9.6	12.7
9	8.8	12.7	10.9	9.4	10.2	7.0	7.2	12.5	13.3	13.9	13.1	13.1	11.4	12.7	15.2	13.5	13.6	11.7	11.0	7.8	7.0	6.1	6.4	6.3	15.2	6.1	10.6
10	6.1	6.0	8.0	7.0	7.9	7.1	7.4	6.8	6.5	7.3	15.3	11.3	8.5	7.8	7.7	7.8	7.5	7.1	8.4	7.6	7.4	7.4	8.4	9.1	15.3	6.0	8.0
11	8.1	8.0	10.5	9.6	8.9	8.0	7.2	8.0	9.2	10.1	13.5	12.2	12.0	13.1	14.0	11.9	12.9	16.8	9.7	10.5	9.6	12.5	10.0	11.4	16.8	7.2	10.7
12	13.3	11.4	13.2	11.7	12.2	13.9	12.2	10.9	8.6	9.0	10.3	13.4	4.3	12.4	14.7	15.7	14.8	15.7	38.5	16.6	50.6	25.3	14.6	15.2	50.6	4.3	15.8
13	35.1	24.6	17.5	11.4	11.3	14.1	11.5	12.6	42.8	19.2	15.3	17.4	10.0	14.4	9.7	13.0	12.4	13.4	18.1	13.7	14.2	14.3	13.5	12.7	42.8	9.7	16.3
14	14.2	14.1	14.2	13.5	14.6	16.3	14.3	10.5	13.2	12.6	20.1	16.5	14.4	14.9	13.8	12.2	13.7	13.3	14.5	14.6	14.3	10.6	14.1	12.3	20.1	10.5	14.0
15	13.7	13.2	12.9	13.3	10.0	9.5	6.6	6.2	6.5	6.9	8.2	9.4	8.4	9.2	11.1	13.9	14.3	13.0	13.6	14.4	11.3	11.6	9.2	7.4	14.4	6.2	10.6
16	8.2	8.5	6.8	6.4	8.0	12.3	7.3	7.1	8.8	7.4	7.9	10.0	10.2	12.2	13.4	13.6	12.9	11.2	11.5	9.6	9.0	6.4	6.7	13.0	13.6	6.4	9.5
17	11.6	17.0	11.1	17.5	37.4	43.8	40.7	47.0	23.5	7.6	7.8	8.3	11.9	11.9	11.1	20.0	14.9	9.3	6.1	7.6	8.0	10.5	35.1	15.0	47.0	6.1	18.1
18	24.8	5.6	20.6	9.6	4.6	3.6	17.4	10.1	8.9	11.2	42.8	43.3	18.1	20.5	40.2	20.9	21.6	18.7	6.5	6.5	15.6	13.6	7.2	8.3	43.3	3.6	16.7
19	11.4	25.8	18.7	59.6	28.1	32.0	6.9	18.1	20.0	7.3	9.4	11.9	24.8	39.3	12.4	14.6	18.4	17.3	15.0	41.8	22.3	20.2	33.2	17.8	59.6	6.9	21.9
20	0.0	19.5	13.6	29.9	36.4	47.1	27.7	35.8	9.6	7.5	6.9	6.9	6.7	6.7	7.4	8.0	7.9	7.4	8.3	8.0	8.2	9.0	8.5	8.4	47.1	0.0	14.0
21	12.3	12.8	16.8	35.2	11.8	12.1	9.6	8.8	13.0	7.0	6.1	5.8	5.4	5.6	5.8	5.6	7.0	5.4	10.5	7.8	5.2	10.4	10.8	7.9	35.2	5.2	9.9
22	10.6	8.1	10.1	10.8	9.7	8.1	46.8	13.2	6.9	5.8	6.0	6.2	7.2	12.4	8.4	6.7	8.4	8.3	9.3	8.1	6.5	7.3	7.2	6.4	46.8	5.8	9.9
23	13.0	29.7	11.2	7.4	8.9	10.4	7.8	6.3	8.0	6.5	9.0	11.0	9.2	7.8	12.6	14.7	12.0	8.5	6.2	6.6	5.6	5.4	5.8	6.2	29.7	5.4	9.6
24	9.5	9.6	8.4	9.0	11.5	10.5	12.2	9.3	9.6	7.8	6.9	9.7	7.9	6.2	8.6	13.8	11.7	9.6	24.3	30.0	33.4	2.2	16.4	22.0	33.4	2.2	12.5
25	10.7	16.5	17.5	20.4	16.7	21.9	26.2	42.1	18.2	19.8	19.9	11.7	7.2	20.3	33.6	26.9	36.2	31.0	12.4	13.6	13.3	8.8	7.5	7.1	42.1	7.1	19.1
26	6.3	7.3	7.4	7.1	6.3	7.9	8.7	6.3	7.1	6.0	5.0	5.4	5.7	5.7	5.6	5.5	5.5	8.1	24.1	12.8	14.8	20.9	10.0	6.9	24.1	5.0	8.6
27	5.9	7.1	6.0	6.2	7.6	9.5	5.8	7.4	8.3	8.8	8.2	9.9	8.1	10.0	8.4	8.5	9.8	10.7	9.1	9.9	12.9	8.6	8.6	6.4	12.9	5.8	8.4
28	7.1	11.4	8.8	7.4	8.9	63.6	60.5	10.3	7.8	6.3	11.0	15.7	30.6	13.1	11.0	10.6	7.8	10.1	8.3	9.6	14.2	8.2	29.5	73.8	73.8	6.3	18.6
29	40.4	18.1	12.2	13.7	10.2	20.5	14.4	12.5	12.1	12.5	9.5	10.9	8.5	16.9	20.6	12.5	6.2	9.4	10.2	11.4	8.4	24.7	38.9	10.8	40.4	6.2	15.2
30	10.0	6.3	8.5	13.5	6.2	6.6	5.9	8.5	11.4	15.1	16.0	6.8	6.4	10.5	5.5	5.1	5.4	6.5	28.6	40.8	10.4	41.1	5.0	5.4	41.1	5.0	11.9
31	0.0	43.6	46.4	37.9	22.5	24.7	15.5	15.1	18.7	11.3	18.7	7.8	21.7	7.5	25.9	7.2	8.8	15.3	24.4	10.6	10.1	10.4	16.7	10.6	46.4	0.0	18.0
Max.	**40.4**	**43.6**	**46.4**	**59.6**	**37.4**	**63.6**	**60.5**	**47.0**	**42.8**	**19.8**	**42.8**	**43.3**	**30.6**	**39.3**	**40.2**	**26.9**	**36.2**	**31.0**	**38.5**	**41.8**	**50.6**	**41.1**	**38.9**	**73.8**	**73.8**		
Min.	**0.0**	**5.6**	**6.0**	**6.2**	**4.6**	**3.6**	**5.8**	**6.2**	**5.5**	**5.8**	**5.0**	**5.4**	**4.3**	**5.6**	**5.5**	**5.1**	**5.4**	**5.4**	**6.1**	**6.5**	**5.2**	**2.2**	**5.0**	**5.4**		**0.0**	
Avg.	**11.8**	**13.5**	**12.4**	**14.5**	**12.7**	**15.8**	**14.7**	**12.9**	**11.8**	**9.7**	**11.6**	**11.3**	**10.8**	**12.3**	**13.1**	**12.0**	**11.7**	**11.7**	**13.5**	**13.2**	**13.1**	**12.5**	**13.1**	**12.5**			**12.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	13.8	10.7	25.9	25.1	57.6	44.3	15.1	7.5	7.8	25.9	18.9	34.2	7.0	12.9	18.9	29.6	5.5	8.5	12.2	27.4	0.0	0.0	41.9	70.0	70.0	0.0	21.7
2	52.8	39.2	0.0	24.0	15.0	15.4	24.0	9.8	8.0	7.6	6.8	9.8	8.8	9.8	10.5	10.0	10.2	9.1	8.8	8.6	8.3	7.9	7.8	7.0	52.8	0.0	13.3
3	6.6	6.5	7.0	6.7	7.7	9.7	7.9	8.3	8.4	7.0	7.5	7.1	9.1	8.3	8.6	9.5	8.1	9.3	7.8	7.7	6.4	6.7	7.6	7.8	9.7	6.4	7.8
4	7.3	7.5	8.3	7.1	8.0	8.1	7.9	9.2	7.2	7.6	7.9	8.7	8.5	8.2	8.6	8.8	8.8	7.8	7.7	9.6	10.4	10.0	9.2	15.8	15.8	7.1	8.7
5	38.0	44.4	20.0	19.2	16.7	8.9	5.5	6.0	5.4	5.8	5.9	6.7	6.4	6.6	6.0	6.1	9.9	8.0	7.5	7.7	7.7	7.5	7.6	8.6	44.4	5.4	11.3
6	7.1	7.7	7.3	7.6	7.3	7.2	6.9	7.1	9.3	7.5	6.5	6.2	6.5	6.6	6.3	6.6	11.5	10.0	7.0	10.8	8.3	7.9	7.4	11.5	11.5	6.2	7.8
7	17.1	14.2	0.2	14.9	11.6	9.3	11.3	29.5	27.2	17.8	21.7	8.8	27.0	9.7	10.6	7.5	9.0	8.3	9.2	9.1	8.5	7.5	5.9	5.7	29.5	0.2	12.6
8	6.1	5.9	6.0	6.5	6.7	6.5	6.5	7.6	6.1	6.3	6.7	6.8	6.3	6.5	6.9	9.5	9.5	11.7	36.0	14.8	12.5	28.6	12.6	36.6	36.6	5.9	11.2
9	16.2	9.8	9.4	9.7	9.2	17.6	17.6	20.0	58.0	80.6	84.7	47.7	30.1	68.3	102.8	82.8	74.2	37.1	38.1	12.2	12.3	15.8	16.2	14.5	102.8	9.2	36.9
10	12.4	15.3	12.8	18.3	12.5	16.7	14.0	17.3	16.1	14.9	15.0	17.5	20.3	18.5	17.0	16.9	9.1	9.8	9.6	8.9	9.9	9.8	9.6	10.8	20.3	8.9	13.9
11	8.1	7.3	7.7	8.4	10.2	6.8	8.0	7.6	7.7	8.6	32.8	7.8	10.2	9.8	10.4	12.5	10.3	11.3	10.6	15.0	37.8	10.1	8.0	9.3	37.8	6.8	11.5
12	9.1	7.6	3.9	2.9	6.1	5.8	3.9	5.5	5.1	32.8	10.2	12.1	11.7	20.2	17.8	12.6	11.0	8.0	7.1	38.9	22.7	51.6	27.7	6.3	51.6	2.9	14.2
13	7.4	4.7	4.8	5.0	5.7	5.6	6.6	16.7	11.9	15.1	9.5	11.3	9.9	14.9	21.7	24.2	22.1	20.5	9.5	10.1	9.9	10.6	7.1	8.9	24.2	4.7	11.4
14	52.8	5.1	26.2	0.0	12.0	14.9	16.1	14.3	21.0	11.3	22.1	27.7	26.1	17.4	14.4	13.4	13.5	13.3	14.4	12.4	9.5	9.3	8.6	8.0	52.8	0.0	16.0
15	8.2	9.9	9.1	8.0	8.0	8.5	8.8	9.6	8.2	10.9	10.9	10.1	9.6	11.9	23.1	13.4	27.9	18.0	15.5	14.4	22.7	36.1	27.2	25.5	36.1	8.0	14.8
16	31.7	45.3	22.7	30.7	14.1	14.8	22.7	36.1	37.1	26.2	42.1	23.3	17.0	9.2	8.6	8.8	9.6	9.7	8.6	8.6	8.1	30.8	15.4	0.0	45.3	0.0	20.1
17	0.1	9.6	8.0	12.5	9.6	9.0	10.3	11.2	10.7	13.0	13.6	9.4	13.2	17.3	20.8	7.6	8.0	9.4	12.2	10.9	8.5	8.2	8.2	8.3	20.8	0.1	10.4
18	8.5	8.5	9.0	22.2	9.7	11.6	13.4	16.1	15.7	14.2	14.0	17.8	19.0	19.6	17.8	29.8	28.6	37.5	94.7	30.1	45.1	0.0	0.0	0.0	94.7	0.0	20.1
19	39.7	16.5	0.4	0.0	13.1	14.9	15.0	15.9	16.6	15.8	15.7	16.7	19.2	21.4	19.8	19.0	17.8	19.0	21.1	16.8	13.3	12.6	12.2	11.4	39.7	0.0	16.0
20	13.7	13.6	13.2	14.0	13.2	17.6	15.7	16.7	13.8	14.2	15.4	19.3	19.2	18.9	19.3	17.9	18.5	17.5	17.0	19.6	20.0	20.6	21.5	37.5	37.5	13.2	17.8
21	49.8	20.2	20.2	21.5	16.3	15.0	30.6	55.9	56.4	38.6	21.8	20.3	21.0	20.8	19.7	19.9	18.7	19.6	20.0	18.8	21.6	22.5	18.2	19.4	56.4	15.0	25.3
22	19.1	19.6	19.3	17.6	18.4	21.0	19.4	18.4	19.9	20.0	23.0	21.8	23.1	23.1	25.3	22.6	21.8	23.1	21.9	21.8	21.9	22.1	21.8	20.1	25.3	17.6	21.1
23	24.4	17.3	21.8	17.1	15.1	15.2	15.1	15.3	18.1	20.4	29.2	45.9	51.8	51.0	58.3	82.2	54.9	86.1	51.7	89.7	82.5	74.8	45.3	43.6	89.7	15.1	42.8
24	40.6	32.7	25.1	36.5	35.8	41.7	33.8	26.4	23.0	28.3	36.5	39.4	49.6	65.2	65.0	48.0	51.0	95.8	42.4	69.4	87.7	62.4	34.8	23.3	95.8	23.0	45.6
25	24.4	23.0	21.3	22.6	22.7	23.4	23.1	23.9	24.4	27.4	30.5	27.3	30.3	36.5	41.8	56.7	62.8	42.9	41.4	34.1	52.3	20.9	45.5	63.1	63.1	20.9	34.3
26	28.9	24.6	29.2	27.3	35.3	32.3	18.3	21.8	20.1	36.8	32.2	36.5	50.5	57.9	43.2	25.3	25.5	50.0	66.9	99.2	78.9	35.3	38.0	37.0	99.2	18.3	39.6
27	44.6	57.1	75.0	75.3	0.0	48.5	81.7	61.8	97.0	102.5	103.8	102.3	73.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.9	103.8	0.0	42.3
28	90.5	0.0	0.0	0.0	0.0	0.0	90.3	19.8	85.4	75.1	58.3	97.1	97.0	97.9	86.6	87.8	85.4	88.0	73.3	89.1	84.3	90.6	43.7	24.0	97.9	0.0	61.0
29	23.3	24.3	27.9	24.3	21.9	23.0	24.7	27.1	26.4	31.5	40.2	30.0	47.7	55.9	37.0	49.8	55.7	73.4	61.3	47.4	94.4	100.4	52.2	3.8	100.4	3.8	41.8
30	0.1	0.0	0.0	32.5	1.6	19.9	22.5	31.5	27.7	45.6	55.2	87.0	51.9	46.1	68.2	85.2	91.3	89.9	0.0	0.0	93.1	29.2	46.0	51.7	93.1	0.0	40.7
Max.	**90.5**	**57.1**	**75.0**	**75.3**	**57.6**	**48.5**	**90.3**	**61.8**	**97.0**	**102.5**	**103.8**	**102.3**	**97.0**	**97.9**	**102.8**	**87.8**	**91.3**	**95.8**	**94.7**	**99.2**	**94.4**	**100.4**	**52.2**	**92.9**	**103.8**		
Min.	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**3.9**	**5.5**	**5.1**	**5.8**	**5.9**	**6.2**	**6.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**23.4**	**16.9**	**14.7**	**17.3**	**14.0**	**16.4**	**19.9**	**19.1**	**23.3**	**25.6**	**26.6**	**27.2**	**26.0**	**25.7**	**27.2**	**27.5**	**26.3**	**28.4**	**24.4**	**25.4**	**30.0**	**25.0**	**20.2**	**22.7**			**23.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	71.2	98.9	86.8	88.6	86.4	60.7	51.6	39.6				25.0	2.6	0.7	2.3	1.3	2.9	0.4	0.6	0.1	0.1	0.1	0.1	0.0	98.9	0.0	29.5
2	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.3	0.1	21.6	44.6	11.5	16.5	15.1	16.9	12.2	11.6	11.0	9.7	10.8	22.9	10.0	14.7	44.6	0.0	9.6
3	11.6	10.0	17.3	6.5	32.2	0.0	2.3	9.6	24.8	48.3	39.0	33.8	43.4	63.9	47.8	35.2	31.8	17.5	13.7	7.6	7.6	8.2	26.8	24.1	63.9	0.0	23.5
4	24.8	16.4	23.2	44.0	24.9	11.2	24.8	0.0	13.8	27.2	18.6	13.2	12.5	13.2	17.4	14.3	15.5	12.1	16.8	16.1	35.7	25.2	10.3	19.1	44.0	0.0	18.8
5	56.1	25.0	7.3	8.1	13.0	42.5	9.2	33.9	8.1	11.8	13.1	10.9	12.8	20.5	13.3	11.5	14.2	10.0	12.3	10.6	9.9	9.3	21.5	24.2	56.1	7.3	17.0
6	41.1	47.4	27.8	16.3	26.3	8.2	8.0	15.2	12.2	17.4	11.8	15.1	15.0	13.5	10.6	11.9	11.2	11.1	9.4	8.0	8.1	8.3	8.4	8.7	47.4	8.0	15.5
7	8.6	8.8	8.2	8.1	8.7	10.5	16.3	14.3	10.7	15.5	13.1	14.6	10.5	13.5	26.7	23.2	8.5	8.5	9.5	8.3	8.5	7.4	7.3	8.6	26.7	7.3	11.6
8	7.4	7.3	6.9	6.7	7.0	8.0	7.4	8.4	8.3	8.0	7.9	13.1	19.6	18.6	18.5	18.9	15.6	13.7	12.2	11.1	9.7	12.1	9.3	13.1	19.6	6.7	11.2
9	17.0	5.8	5.4	13.5	15.8	15.0	13.4	13.7	12.8	14.1	18.3	12.0	16.1	15.9	12.8	14.2	14.0	14.1	11.7	13.7	8.9	15.1	8.9	0.0	18.3	0.0	12.6
10	0.0	0.0	0.0	8.8	4.9	13.9	0.2	10.1	14.6	30.1	30.5	22.2	22.3	22.5	23.2	19.0	15.0	18.2	16.8	15.5	10.6	10.7	12.9	7.6	30.5	0.0	13.7
11	14.1	6.1	12.1	0.0	12.8	8.1	9.7	10.2	10.0	13.2	12.9	15.5	16.4	18.1	17.8	18.4	17.4	17.4	13.3	11.1	9.9	23.5	18.9	10.9	23.5	0.0	13.2
12	17.1	0.0	29.3	0.0	35.6	30.2	12.1	11.6	10.2	13.0	14.0	16.2	15.8	14.0	15.9	15.8	15.0	15.0	12.6	11.7	11.7	13.0	12.4	11.4	35.6	0.0	14.7
13	11.2	10.0	10.3	10.2	9.8	9.7	10.3	9.6	11.4	9.6	9.4	11.0	11.0	12.3	11.1	9.4	9.5	12.4	10.4	10.5	10.9	9.0	7.4	9.1	12.4	7.4	10.2
14	13.4	40.0	14.9	8.8	7.3	7.2	9.8	8.1	9.6	13.7	16.4	12.3	14.3	14.7	11.3	13.2	10.9	12.3	11.6	11.8	11.4	11.9	11.5	11.1	40.0	7.2	12.8
15	9.8	16.4	30.2	18.6	12.2	17.7	14.7	9.3	16.4	11.7	11.2	14.4	17.4	14.2	19.1	23.1	31.1	21.6	33.2	27.6	20.9	14.9	10.6	8.3	33.2	8.3	17.7
16	7.0	6.7	5.6	8.0	6.6	6.5	6.6	6.6	7.5	22.9	31.3	32.8	29.7	15.8	17.6	15.4	14.0	12.1	13.3	10.4	11.1	11.6	14.2	11.4	32.8	5.6	13.5
17	11.7	13.1	13.6	14.1	10.3	8.5	12.7	18.9	17.7	20.1	16.8	16.2	17.7	17.1	13.5	12.3	13.3	12.7	12.6	12.9	10.2	11.5	16.4	13.2	20.1	8.5	14.0
18	5.9	35.5	33.2	11.2	47.1	37.6	45.4	20.2	20.7	19.3	23.0	32.3	28.4	38.0	36.5	37.6	50.5	29.7	17.3	16.4	9.8	27.2	7.2	38.6	50.5	5.9	27.8
19	6.4	8.6	17.8	44.8	31.3	22.9	19.8	17.9	28.4	19.0	16.4	11.9	26.3	29.2	15.4	13.4	13.5	14.8	10.0	9.3	11.6	16.3	19.9	3.7	44.8	3.7	17.9
20	0.0	0.0	0.0	28.0	3.8	0.0	4.2	9.7	9.3	7.9	10.6	33.3	28.1	22.6	20.9	24.0	15.9	18.1	14.6	8.5	7.1	23.2	5.3	0.0	33.3	0.0	12.3
21	11.1	32.1	3.2	17.6	9.8	6.8	16.4	13.7	40.7	65.2	75.2	57.2	37.5	28.6	23.5	20.0	17.3	17.2	11.9	10.5	9.6	7.8	7.6	8.5	75.2	3.2	22.9
22	10.1	8.2	9.3	11.3	11.5	12.9	11.9	10.2	10.8	13.3	17.9	11.1	11.8	15.5	14.8	16.2	14.4	15.4	13.0	12.7	35.0	17.6	30.3	15.3	35.0	8.2	14.6
23	45.7	16.5	24.1	9.1	20.7	18.3	11.2	9.6	11.0	11.2	12.5	11.9	12.7	15.2	12.6	12.4	11.1	11.0	11.4	13.1	13.1	11.4	12.1	12.6	45.7	9.1	14.6
24	10.6	11.1	10.9	11.3	11.2	11.6	12.5	13.2	12.5	12.1	12.5	11.2	12.7	12.9	12.9	12.5	12.9	15.1	9.2	21.1	14.9	19.8	12.0	15.6	21.1	9.2	13.0
25	14.6	17.8	14.0	19.5	11.9	14.3	9.6	0.0	4.9	11.9	10.9	11.4	13.8	14.2	12.9	15.5	16.8	12.7	17.1	12.9	9.1	2.2	6.0	7.5	19.5	0.0	11.7
26	19.5	17.5	11.8	13.4	11.1	11.3	20.8	15.2	12.1	14.6	15.7	13.1	11.2	12.1	13.9	11.7	12.5	13.3	13.1	13.4	15.3	14.6	18.3	14.7	20.8	11.1	14.2
27	13.9	14.1	12.1	14.5	12.8	13.9	14.3	14.0	14.2	14.5	14.5	16.4	17.1	15.2	14.8	13.9	14.3	13.4	13.0	13.8	12.2	12.9	12.7	12.2	17.1	12.1	13.9
28	12.1	12.3	11.5	12.6	38.3	15.5	21.3	17.6	16.7	19.1	14.5	14.6	16.4	16.1	14.3	11.7	13.5	13.0	15.8	12.4	12.1	11.5	24.1	10.3	38.3	10.3	15.7
29	0.0	10.9	6.7	14.9	32.1	7.5	6.7	8.2	11.2	19.7	28.1	28.3	52.5	30.0	17.0	15.7	28.7	30.3	16.7	12.8	11.8	6.9	9.5	0.0	52.5	0.0	16.9
30	0.0	0.0	0.0	12.1	12.8	12.4	10.3	9.6	26.6	31.3	39.0	13.0	16.9	15.2	14.2	13.0	14.8	15.2	15.5	13.7	14.1	25.0	22.9	13.9	39.0	0.0	15.1
31	7.2	8.1	13.0	13.4	10.0	9.4	8.6	11.4	11.5	14.3	18.9	20.7	15.7	20.5	12.6	12.1	17.6	13.8	11.1	10.3	11.6	20.3	13.5	14.1	20.7	7.2	13.3
Max.	**71.2**	**98.9**	**86.8**	**88.6**	**86.4**	**60.7**	**51.6**	**39.6**	**40.7**	**65.2**	**75.2**	**57.2**	**52.5**	**63.9**	**47.8**	**37.6**	**50.5**	**30.3**	**33.2**	**27.6**	**35.7**	**27.2**	**30.3**	**38.6**	**98.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.2**	**0.0**	**0.3**	**0.1**	**7.9**	**10.9**	**2.6**	**0.7**	**2.3**	**1.3**	**2.9**	**0.4**	**0.6**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**		**0.0**	
Avg.	**15.5**	**16.3**	**15.0**	**15.9**	**18.6**	**14.6**	**13.6**	**12.6**	**14.0**	**18.3**	**19.9**	**19.6**	**19.0**	**19.0**	**17.1**	**16.2**	**16.3**	**14.6**	**13.2**	**12.2**	**12.4**	**13.9**	**13.2**	**11.7**			**15.5**

Total Hours in Month 744 **Hours Data Available** 741 **Data Recovery** 99.6%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	16.9	20.0	20.6	15.4	10.8	12.3	12.0	10.6	11.7	11.8	13.2	13.9	13.0	11.9	12.8	13.5	12.0	13.1	14.3	12.3	13.5	13.8	12.1	12.5	20.6	10.6	13.5
2	11.4	10.1	13.1	15.1	11.2	10.9	8.3	9.3	15.5	14.8	15.6	12.8	13.3	19.5	16.1	23.6	19.6	23.2	18.2	13.6	11.9	11.8	11.0	23.6	23.6	8.3	14.7
3	3.4	13.8	19.1	16.4	7.4	12.5	9.1	7.2	18.0	23.4	24.6	44.8	36.5	41.4	44.2	28.3	47.6	22.9	44.0	20.0	11.3	13.5	61.8	15.5	61.8	3.4	24.4
4	10.9	9.2	8.4	9.4	8.2	8.7	7.9	7.0	11.9	9.1	9.8	8.7	9.5	10.5	20.7	14.3	23.1	10.9	13.1	10.9	11.4	13.8	14.5	16.0	23.1	7.0	11.6
5	12.5	14.4	15.0	15.1	17.8	14.6	12.1	11.8	13.3	13.0	13.4	11.7	11.5	10.3	11.1	12.5	11.7	12.0	13.0	12.3	10.5	9.7	9.7	10.0	17.8	9.7	12.5
6	10.6	11.1	9.4	11.9	10.9	41.3	11.9	19.6	26.1	18.8	21.2	16.1	16.9	17.0	14.6	15.4	18.0	20.3	14.9	12.0	9.7	9.5	18.0	20.6	41.3	9.4	16.5
7	17.3	29.5	32.1	7.3	11.6	9.4	31.3	36.6	18.4	11.6	11.4	11.5	12.6	11.3	12.7	12.4	12.1	12.3	12.0	11.1	7.7	7.6	11.1	16.2	36.6	7.3	15.3
8	15.6	10.7	17.4	14.6	11.2	10.8	10.1	11.0	14.2	18.9	22.7	21.2	22.6	20.0	17.2	16.0	17.8	13.8	13.7	13.3	11.3	13.0	13.5	15.1	22.7	10.1	15.2
9	12.8	3.4	9.4	29.5	0.0	6.7	12.0	11.3	15.1	22.4	17.8	29.5	28.3	23.6	43.9	45.8	41.8	29.1	26.6	9.6	11.3	14.6	12.8	10.9	45.8	0.0	19.5
10	10.3	9.7	11.9	9.1	9.4	12.1	9.9	8.3	8.7	10.5	14.3	19.7	25.3	29.5	37.8	37.3	31.0	20.5	18.6	42.7	11.8	12.6	9.4	9.2	42.7	8.3	17.5
11	10.2	13.8	10.0	10.0	11.5	11.3	14.7	25.3	21.2	15.0	28.8	33.0	23.0	14.4	13.0	12.9	12.9	13.3	14.2	12.9	13.7	11.7	11.0	10.2	33.0	10.0	15.3
12	8.1	8.6	8.3	12.2	21.1	12.1	1.0	13.2	14.6	15.1	13.4	13.6	11.6	11.6	10.8	13.2	15.6	13.4	14.9	15.8	10.1	6.4	24.5	3.9	24.5	1.0	12.2
13	0.0	0.0	0.0	11.4	19.6	28.3	10.2	13.2	44.5	23.6	24.2	15.1	11.6	13.0	21.0	20.7	19.2	9.8	9.9	11.0	13.2	8.6	18.1	0.0	44.5	0.0	14.4
14	7.4	8.2	20.2	18.1	11.8	12.9	11.0	12.6	40.3	17.3	20.2	26.7	23.2	47.8	43.6	27.1	12.1	12.2	9.0	8.1	8.0	15.7	15.3	17.1	47.8	7.4	18.6
15	10.0	7.1	8.8	9.2	9.3	9.4	8.4	8.6	8.9	11.6	11.8	14.8	17.9	19.7	20.1	16.9	15.3	17.9	13.1	11.9	9.6	8.3	8.5	10.1	20.1	7.1	12.0
16	7.6	8.3	7.7	8.0	8.2	10.8	10.8	9.3	10.7	14.2	21.4	15.7	15.8	17.1	14.8	15.5	12.7	13.5	8.8	8.6	8.0	9.3	9.0	8.1	21.4	7.6	11.4
17	8.7	9.9	8.4	9.6	9.1	9.0	10.5	9.9	11.8	22.2	38.4	23.6	26.8	26.9	45.3	25.8	30.2	25.7	21.5	14.1	10.3	16.2	9.9	19.7	45.3	8.4	18.5
18	9.8	15.1	11.3	14.7	8.9	10.1	8.7	13.5	36.8	50.2	29.7	17.6	28.0	72.6	44.0	32.1	49.3	36.7	16.7	23.8	31.9	12.0	1.1	24.7	72.6	1.1	25.0
19	16.9	21.0	7.8	8.2	8.1	8.2	8.1	10.2	12.0	11.1	15.5	13.4	13.8	12.3	13.2	15.0	12.6	11.7	12.4	10.9	9.7	9.3	9.1	9.5	21.0	7.8	11.6
20	11.2	8.6	7.7	9.0	9.7	8.7	7.2	8.6	10.6	10.0	11.1	13.0	15.1	14.7	17.2	16.1	14.4	12.8	12.9	10.8	10.1	9.8	9.4	9.3	17.2	7.2	11.2
21	8.6	8.6	9.8	11.1	10.2	9.1	9.2	9.7	9.8	13.1	17.2	14.5	16.7	17.8	15.9	15.4	17.8	11.3	9.3	9.1	9.5	13.9	13.3	13.3	17.8	8.6	12.3
22	15.4	11.0	26.0	10.3	11.9	17.4	12.8	21.9	13.1	9.8	12.8	11.1	11.3	12.2	11.5	11.0	12.4	10.6	10.1	8.5	8.1	12.2	11.0	13.1	26.0	8.1	12.7
23	10.7	11.2	12.5	12.2	10.7	11.1	12.5	10.0	11.3	13.3	11.9	11.8	12.2	12.2	10.9	9.6	8.8	9.1	8.8	8.7	8.3	8.5	8.6	9.0	13.3	8.3	10.6
24	9.5	9.4	9.5	8.5	8.2	8.3	9.7	10.3	9.5	8.8	10.7	11.9	11.1	12.0	12.6	12.9	13.3	13.0	13.1	12.2	11.9	11.8	11.0	10.9	13.3	8.2	10.8
25	11.7	13.7	13.6	14.1	12.5	13.1	14.1	15.4	14.8	15.1	13.1	13.2	13.4	14.2	14.8	14.3	14.8	13.7	13.6	13.2	12.3	11.7	13.2	14.5	15.4	11.7	13.7
26	21.5	17.5	24.0	14.0	28.6	16.2	14.8	17.5	15.6	17.0	17.9	20.0	24.8	32.4	39.9	42.2	46.3	38.5	22.4	10.8	9.3	8.8	55.9	5.3	55.9	5.3	23.4
27	2.9	23.2	16.6	19.0	40.6	8.0	11.1	14.3	20.3	45.9	42.8	27.5	27.0	22.1	17.9	19.5	15.9	17.8	12.5	14.8	8.7	8.7	8.3	9.9	45.9	2.9	19.0
28	15.8	25.8	14.4	12.2	15.3	9.0	11.7	12.2	13.0	23.4	24.5	13.7	19.1	16.3	16.6	16.9	16.8	23.0	17.7	13.9	10.9	11.8	49.5	13.2	49.5	9.0	17.4
29	9.7	1.3	19.0	13.6	36.9	2.5	19.3	16.2	21.5	25.0	22.3	20.9	27.7	27.8	26.2	16.8	10.8	11.4	10.4	9.5	8.6	8.4	25.2	13.7	36.9	1.3	16.9
30	35.7	2.7	7.4	11.8	10.4	10.0	10.7	9.2	9.6	11.7	11.1	17.1	16.1	21.8	21.9	17.6	19.4	14.8	17.0	14.8	11.3	11.9	20.2	2.2	35.7	2.2	14.0
Max.	**35.7**	**29.5**	**32.1**	**29.5**	**40.6**	**41.3**	**31.3**	**36.6**	**44.5**	**50.2**	**42.8**	**44.8**	**36.5**	**72.6**	**45.3**	**45.8**	**49.3**	**38.5**	**44.0**	**42.7**	**31.9**	**16.2**	**61.8**	**24.7**	**72.6**		
Min.	**0.0**	**0.0**	**0.0**	**7.3**	**0.0**	**2.5**	**1.0**	**7.0**	**8.7**	**8.8**	**9.8**	**8.7**	**9.5**	**10.3**	**10.8**	**9.6**	**8.8**	**9.1**	**8.8**	**8.1**	**7.7**	**6.4**	**1.1**	**0.0**		**0.0**	
Avg.	**11.8**	**11.9**	**13.3**	**12.7**	**13.4**	**12.2**	**11.4**	**13.1**	**16.8**	**17.6**	**18.8**	**17.9**	**18.5**	**21.1**	**22.1**	**19.7**	**20.2**	**16.9**	**15.2**	**13.4**	**11.1**	**11.2**	**16.9**	**12.2**			**15.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.1	4.6	0.0	1.8	13.7	4.6	9.8	9.1	13.1	20.9	28.1	23.1	49.1	23.8	19.3	24.4	21.5	13.1	10.9	8.8	46.1	13.5	16.2	14.7	49.1	0.0	16.3
2	15.3	12.5	10.2	31.6	0.0	1.4	0.0	22.8	43.6	36.6	22.2	27.1	17.8	18.4	23.5	14.1	22.6	20.0	13.5	13.0	11.1	12.2	14.3	10.2	43.6	0.0	17.2
3	7.3	19.2	11.8	18.2	12.5	14.3	16.4	22.4	15.8	25.9	31.8	26.9	22.3	30.1	30.6	29.5	14.1	14.9	13.7	11.2	13.9	8.4	10.7	12.8	31.8	7.3	18.1
4	13.1	13.0	13.3	12.0	12.5	14.0	13.6	13.9	13.4	14.0	13.8	13.3	12.0	14.7	13.9	13.7	11.6	18.0	15.5	15.3	10.4	10.7	13.4	16.2	18.0	10.4	13.5
5	15.7	20.5	14.8	11.0	0.0	7.5	11.3	10.3	44.3	41.5	31.4	36.9	20.2	20.8	22.0	11.5	23.6	17.5	12.3	13.0	12.8	12.3	13.2	15.2	44.3	0.0	18.3
6	11.5	13.2	19.3	14.2	13.4	15.2	15.9	16.4	15.5	16.7	14.5	38.5	31.3	31.7	31.4	28.2	26.8	31.2	26.4	18.8	9.5	25.1	14.2	20.4	38.5	9.5	20.8
7	2.3	4.0	0.0	0.0	3.4	1.3	11.5	17.6	42.3	40.8	36.7	28.2	48.7	37.0	28.3	22.3	20.8	26.8	21.4	12.9	13.4	28.9	18.2	6.4	48.7	0.0	19.7
8	6.7	0.0	0.0	1.0	0.0	0.0	12.5	15.2	11.9	14.4	14.0	13.2	15.8	13.9	12.4	14.1	13.1	13.3	12.1	14.1	12.6	12.4	13.0	31.3	31.3	0.0	11.1
9	14.3	21.4	31.5	20.1	13.9	12.0	1.8	11.3	14.9	18.1	25.3	17.4	18.7	18.8	30.6	24.5	29.5	23.9	15.2	27.6	18.5	11.4	16.8	23.3	31.5	1.8	19.2
10	20.1	11.6	24.9	14.3	27.9	22.3	20.6	41.5	42.3	31.8	38.9	48.2	32.1	10.4	19.9	16.0	13.7	13.6	12.5	11.6	13.6	13.5	12.6	11.8	48.2	10.4	21.9
11	18.7	14.4	15.5	12.3	12.5	12.5	13.4	13.1	16.2	20.7	16.5	18.3	16.1	19.6	14.5	17.9	20.3	16.1	13.8	10.9	10.3	10.4	13.1	11.2	20.7	10.3	14.9
12	9.3	12.5	23.0	19.9	25.2	17.4	14.4	13.0	18.6	27.3	37.2	36.3	51.4	25.5	9.2	11.7	13.8	14.2	11.8	12.4	9.7	12.9	12.1	12.5	51.4	9.2	18.8
13	11.5	10.0	10.2	10.3	12.5	13.7	11.1	10.9	12.8	11.6	11.9	11.9	10.9	13.3	12.7	12.0	12.9	13.3	10.8	9.5	13.3	5.7	8.9	10.2	13.7	5.7	11.3
14	14.4	11.2	7.3	0.0	5.8	9.5	12.7	14.8	16.9	20.7	18.8	16.8	14.6	13.7	13.4	13.8	10.8	9.4	10.9	12.0	13.9	11.7	9.9	6.1	20.7	0.0	12.0
15	6.9	2.5	6.7	5.3	7.6	3.1	9.6	8.4	12.0	12.5	16.0	13.4	13.9	13.1	12.5	10.6	11.5	11.4	11.6	9.2	8.5	8.5	9.2	10.1	16.0	2.5	9.8
16	10.0	11.7	14.0	10.4	13.0	15.1	24.9	12.9	25.8	37.6	18.7	23.7	22.8	18.1	15.3	15.2	14.1	13.5	13.1	12.1	10.2	9.9	10.6	8.8	37.6	8.8	15.9
17	8.5	16.0	7.6	18.7	19.9	12.9	14.5	9.1	11.8	18.1	33.7	66.5	32.6	20.8	29.0	19.8	15.2	10.8	12.7	14.3	14.1	11.2	15.5	36.3	66.5	7.6	19.6
18	11.9	11.6	12.6	14.0	11.4	14.8	18.0	16.1	21.3	21.9	44.0	31.2	29.3	26.3	18.1	19.7	14.6	15.2	24.8	27.4	19.3	20.8	6.7	2.8	44.0	2.8	18.9
19	8.7	7.6	8.2	29.4	12.5	22.6	5.9	24.1	50.6	11.2	12.0	34.2	58.7	52.3	18.7	18.4	24.7	11.3	11.0	12.7	9.5	6.2	0.0	0.0	58.7	0.0	18.8
20	0.0	0.0	0.0	0.0	0.0	3.8	8.9	16.1	18.3	14.0	10.7	10.7	15.6	13.7	15.1	13.4	12.1	14.5	9.3	9.1	9.0	9.1	9.4	8.5	18.3	0.0	9.2
21	9.1	9.5	9.6	8.9	8.6	9.1	8.8	9.2	9.2	8.9	9.8	10.5	10.8	11.0	12.1	11.1	10.0	8.9	9.9	10.6	10.6	9.4	10.7	9.8	12.1	8.6	9.8
22	9.0	7.6	8.5	8.7	7.4	8.1	7.6	8.5	9.3	9.5	10.6	10.3	10.8	12.0	9.8	11.8	13.1	13.7	12.9	13.2	13.0	12.2	12.1	11.5	13.7	7.4	10.5
23	11.8	16.3	12.1	10.5	0.0	9.7	6.8	10.5	18.4	14.5	16.1	14.0	14.6	14.7	12.8	14.1	12.4	11.8	12.3	11.3	12.8	13.1	12.3	13.4	18.4	0.0	12.3
24	18.0	10.2	9.4	8.2	8.1	7.8	8.2	8.7	10.3	10.6	12.5	10.9	10.8	9.8	8.9	11.2	10.3	10.7	8.7	9.3	10.5	7.3	12.9	12.0	18.0	7.3	10.2
25	12.0	8.1	6.9	7.4	9.4	7.7	6.9	7.6	7.6	8.6	12.7	13.0	13.5	11.8	9.5	10.7	8.7	7.9	10.4	15.7	15.3	6.2	6.7	0.4	15.7	0.4	9.4
26	0.0	0.0	0.0	21.9	3.7	6.6	21.3	8.7	10.4	11.5	16.5	19.2	31.9	32.3	29.9	14.2	25.3	13.1	9.5	9.3	12.4	43.2	34.8	43.5	43.5	0.0	17.5
27	30.6	35.3	0.0	16.6	14.5	10.2	14.8	36.1	20.4	11.5	14.6	14.0	23.6	24.9	18.2	19.7	16.6	15.5	13.9	13.5	13.5	15.7	37.8	6.0	37.8	0.0	18.2
28	15.5	33.3	20.2	13.2	11.1	7.8	9.5	8.8	7.8	8.7	8.4	9.3	10.0	11.6	11.1	10.7	9.7	11.1	10.6	8.8	8.2	12.2	16.4	9.0	33.3	7.8	11.8
29	9.5	8.0	26.0	11.6	17.4	19.1	14.6	14.4	12.3	14.5	19.1	21.5	19.6	17.8	17.0	18.3	18.2	18.5	17.4	11.1	11.0	12.8	10.5	22.1	26.0	8.0	15.9
30	15.5	12.3	54.4	14.8	16.7	9.8	7.2	17.1	15.4	10.4	8.8	9.3	10.6	10.9	12.6	11.6	12.8	10.6	10.3	10.6	11.2	11.8	10.8	11.8	54.4	7.2	13.6
31	9.8	11.4	12.6	10.0	11.1	10.8	15.8	12.6	13.6	11.9	14.0	13.1	14.1	13.1	14.2	13.4	14.5	13.2	11.6	13.5	13.4	13.1	11.0	12.2	15.8	9.8	12.7
Max.	**30.6**	**35.3**	**54.4**	**31.6**	**27.9**	**22.6**	**24.9**	**41.5**	**50.6**	**41.5**	**44.0**	**66.5**	**58.7**	**52.3**	**31.4**	**29.5**	**29.5**	**31.2**	**26.4**	**27.6**	**46.1**	**43.2**	**37.8**	**43.5**	**66.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**7.6**	**7.6**	**8.6**	**8.4**	**9.3**	**10.0**	**9.8**	**8.9**	**10.6**	**8.7**	**7.9**	**8.7**	**8.8**	**8.2**	**5.7**	**0.0**	**0.0**		**0.0**	
Avg.	**11.2**	**11.9**	**12.6**	**12.1**	**10.5**	**10.5**	**11.9**	**14.9**	**19.2**	**18.6**	**20.0**	**22.0**	**22.7**	**19.5**	**17.6**	**16.0**	**16.1**	**14.7**	**13.2**	**13.0**	**13.3**	**13.3**	**13.3**	**13.6**			**15.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.4	11.8	10.6	12.2	12.3	11.7	11.7	10.4	12.1	11.6	12.7	13.0	12.6	12.8	12.2	12.0	11.8	11.7	12.6	12.7	12.1	11.1	12.2	11.4	13.0	10.4	11.9
2	11.7	11.3	12.0	10.2	9.4	10.9	11.4	10.8	12.2	11.7	12.2	12.1	12.6	10.5	11.9	11.6	11.9	12.2	12.6	12.2	11.9	11.5	12.3	11.7	12.6	9.4	11.6
3	11.4	11.6	11.6	12.8	13.2	12.6	12.0	10.5	11.1	11.6	13.0	12.6	12.8	12.3	13.7	13.2	13.3	13.8	13.6	11.4	12.7	12.3	12.4	12.3	13.8	10.5	12.4
4	12.5	11.9	10.6	9.1	13.1	12.7	12.6	12.7	12.9	12.4	12.5	13.3	14.2	14.0	13.1	13.4	13.6	14.0	13.9	13.2	13.5	13.7	14.1	13.1	14.2	9.1	12.9
5	12.6	13.0	13.7	13.9	13.3	13.2	12.7	11.1	10.6	11.2	10.9	10.7	11.3	12.3	13.6	12.4	10.9	10.8	8.5	7.7	8.7	8.7	10.1	9.6	13.9	7.7	11.3
6	10.5	9.4	9.2	9.0	13.7	13.4	11.0	11.7	12.6	12.9	14.2	13.1	12.9	12.8	12.9	11.6	11.1	14.4	11.9	11.1	10.9	10.7	10.1	9.4	14.4	9.0	11.7
7	8.8	11.3	9.9	10.9	33.1	14.9	10.0	10.3	10.5	11.9	13.9	13.5	13.4	12.8	12.1	14.0	12.8	12.2	11.4	10.9	10.0	10.1	20.9	16.0	33.1	8.8	13.1
8	13.3	11.5	9.7	10.3	13.3	10.0	11.9	12.1	12.4	11.5	14.9	17.0	14.4	19.4	24.4	17.7	15.2	14.5	12.3	10.8	8.8	8.5	12.3	10.3	24.4	8.5	13.2
9	9.2	11.5	8.1	9.0	8.1	7.5	8.5	9.4	18.5	17.0	19.4	36.6	32.1	37.8	18.7	16.1	15.0	13.7	11.9	8.8	7.4	16.4	0.0	9.7	37.8	0.0	14.6
10	5.0	0.0	0.0	0.0	1.5	0.0	3.9	14.0	24.0	28.4	27.4	26.0	26.8	25.6	27.4	25.7	18.9	18.2	12.6	7.7	5.2	33.1	31.0	41.2	41.2	0.0	16.8
11	24.8	5.9	41.7	45.8	40.0	0.0	21.0	20.4	52.1	17.5	22.8	35.1	23.1	21.3	13.5	21.6	11.2	9.2	8.9	8.4	10.4	7.8	13.5	18.9	52.1	0.0	20.6
12	8.6	0.0	24.6	17.1	20.1	13.4	15.6	17.4	16.4	15.5	19.4	21.6	8.8	14.9	25.8	28.8	14.4	15.2	12.5	9.7	11.3	24.8	36.4	42.1	42.1	0.0	18.1
13	0.0	0.0	0.0	0.0	5.0	30.1	16.2	15.2	14.9	27.1	21.1	23.8	24.1	16.9	15.9	16.8	15.5	18.9	9.5	11.0	9.4	10.1	10.3	9.0	30.1	0.0	13.4
14	9.2	10.4	9.7	10.9	33.6	34.2	56.3	10.0	11.3	10.6	9.1	9.6	11.6	12.7	12.1	19.8	11.1	10.4	20.1	12.7	18.5	8.4	10.2	11.8	56.3	8.4	15.6
15	9.8	9.3	10.1	10.4	11.7	11.4	10.7	10.5	8.6	8.4	10.0	10.7	9.2	17.8	11.2	9.8	12.5	9.3	9.8	10.0	9.5	9.3	9.6	9.2	17.8	8.4	10.4
16	9.4	7.8	19.6	19.6	16.3	24.8	21.4	14.9	21.1	20.5	17.6	28.6	31.0	44.0	40.4	58.0	43.3	12.7	12.3	12.8	12.3	9.3	6.8	0.0	58.0	0.0	21.0
17	23.4	10.6	6.8	13.2	10.9	11.3	19.7	18.9	37.1	15.8	13.4	14.3	14.4	14.1	12.5	13.2	11.9	12.7	12.7	12.6	12.4	9.7	11.7	10.6	37.1	6.8	14.3
18	9.7	9.3	11.8	9.6	8.4	9.6	8.9	8.9	8.8	9.5	8.3	9.0	9.1	8.8	8.5	9.2	9.2	8.8	9.1	10.0	8.9	9.8	8.6	8.4	11.8	8.3	9.2
19	8.5	8.7	8.4	8.7	10.7	9.4	9.6	8.8	8.6	8.2	12.2	13.4	13.1	13.3	10.4	9.5	10.9	11.9	12.5	11.0	11.9	10.9	12.1	11.5	13.4	8.2	10.6
20	13.1	14.2	12.3	9.4	10.0	9.9	9.5	14.0	12.6	9.7	11.0	12.9	14.8	14.5	13.7	14.2	12.9	13.6	13.4	11.4	13.9	11.8	11.2	12.2	14.8	9.4	12.3
21	14.1	12.2	11.3	11.5	11.4	8.4	8.7	8.8	9.1	11.2	12.1	12.0	12.7	11.0	11.7	11.3	10.7	11.7	11.1	10.0	11.1	12.5	12.7	12.0	14.1	8.4	11.2
22	14.2	12.5	11.9	11.1	11.7	12.2	12.9	12.1	11.7	10.9	11.7	11.9	12.1	12.3	11.5	11.8	12.8	12.4	9.2	8.8	9.5	8.4	8.4	10.2	14.2	8.4	11.3
23	10.1	12.7	13.1	12.7	43.2	25.0	15.2	15.9	8.6	13.6	12.3	13.2	14.2	15.3	12.4	11.2	11.7	10.7	8.9	10.3	10.2	9.5	9.0	10.0	43.2	8.6	13.7
24	9.5	10.6	10.2	9.1	13.7	10.6	11.7	11.9	10.2	10.9	10.1	10.9	16.1	24.7	13.5	20.2	24.3	17.0	13.0	14.0	0.9	19.5	15.0	13.8	24.7	0.9	13.4
25	12.5	12.2	9.7	10.6	9.5	14.8	10.8	12.5	13.6	25.7	16.4	20.0	26.6	17.5	20.7	14.5	16.9	14.7	13.8	11.6	8.3	6.4	14.6	18.9	26.6	6.4	14.7
26	0.0	0.0	11.6	16.0	24.6	17.8	0.0	21.5	13.4	13.6	18.2	24.4	17.7	22.6	15.9	18.0	13.1	15.8	10.7	13.2	24.4	14.1	12.5	10.5	24.6	0.0	14.6
27	10.0	11.6	12.0	10.0	15.8	14.2	23.3	34.5	32.4	14.1	10.4	14.0	11.9	12.8	21.1	22.6	25.5	20.8	15.7	26.3	12.4	17.5	21.1	19.9	34.5	10.0	17.9
28	23.4	23.1	38.2	17.0	13.8	12.9	19.0	18.2	19.3	13.0	20.7	44.3	36.8	31.7	35.2	33.3	38.3	21.3	9.7	11.1	9.3	11.1	11.0	10.4	44.3	9.3	21.7
29	9.8	12.4	12.5	12.0	13.5	16.2	12.4	9.3	9.6	8.7	9.6	9.9	11.4	12.9	15.9	12.2	12.0	12.1	11.0	8.7	8.6	8.2	8.4	8.5	16.2	8.2	11.1
30	9.8	11.0	10.5	9.8	8.5	8.9	9.5	8.3	10.1	11.4	17.2	12.4	23.1	22.1	16.4	19.7	20.3	35.3	24.4	16.6	13.8	11.1	9.3	22.3	35.3	8.3	15.1
31	23.9	11.5	20.6	22.1	20.5	18.4	24.0	14.5	9.9	13.3	12.5	16.6	54.6	37.2	22.5	14.5	12.2	26.8	18.3	35.7	9.9	16.7	15.1	5.7	54.6	5.7	19.9
Max.	**24.8**	**23.1**	**41.7**	**45.8**	**43.2**	**34.2**	**56.3**	**34.5**	**52.1**	**28.4**	**27.4**	**44.3**	**54.6**	**44.0**	**40.4**	**58.0**	**43.3**	**35.3**	**24.4**	**35.7**	**24.4**	**33.1**	**36.4**	**42.1**	**58.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**1.5**	**0.0**	**0.0**	**8.3**	**8.6**	**8.2**	**8.3**	**9.0**	**8.8**	**8.8**	**8.5**	**9.2**	**9.2**	**8.8**	**8.5**	**7.7**	**0.9**	**6.4**	**0.0**	**0.0**		**0.0**	
Avg.	**11.6**	**10.0**	**13.0**	**12.4**	**15.6**	**13.6**	**14.3**	**13.5**	**15.4**	**13.8**	**14.4**	**17.3**	**18.0**	**18.3**	**16.8**	**17.3**	**15.6**	**14.7**	**12.5**	**12.3**	**10.9**	**12.3**	**13.0**	**13.6**			**14.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Wind Sigma

September 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.0	0.0	3.5	4.3	9.3	11.1	14.5	10.0	13.1	13.3	15.2	13.9	16.3	14.8	23.6	23.8	21.3	13.9	8.9	6.6	11.6	11.4	17.5	14.5	23.8	0.0	12.2
2	15.3	12.7	12.7	10.6	13.1	12.1	12.0	11.9	12.7	9.7	13.9	15.9	17.6	14.1	16.2	13.5	13.0	13.3	13.5	13.0	13.7	13.0	13.3	12.3	17.6	9.7	13.3
3	11.8	11.8	11.3	10.6	8.7	9.4	9.6	9.2	8.4	8.6	8.4	8.9	8.6	9.3	8.7	8.6	8.9	9.0	9.6	8.7	8.6	8.8	8.3	8.5	11.8	8.3	9.3
4	7.8	8.0	7.9	9.6	11.4	11.2	20.1	11.0	10.4	8.4	8.6	8.7	13.1	17.5	35.3	28.8	15.0	16.7	13.0	10.5	10.5	11.6	9.9	45.0	45.0	7.8	14.6
5	28.4	56.2	47.3	42.2	44.4	61.8	46.4	10.2	13.6	13.2	9.5	9.9	14.8	12.5	14.8	29.3	24.3	26.6	19.2	7.4	6.5	2.4	3.9	15.7	61.8	2.4	23.4
6	13.3	9.0	15.4	10.5	15.0	5.1	25.4	8.8	12.2	10.2	11.6	14.1	14.2	15.2	12.2	16.3	10.1	10.1	11.8	8.6	12.1	16.6	8.1	9.9	25.4	5.1	12.3
7	10.8	10.1	10.4	12.4	11.1	9.0	8.3	9.5	8.8	8.4	21.5	61.5													61.5	8.3	15.1
Max.	**28.4**	**56.2**	**47.3**	**42.2**	**44.4**	**61.8**	**46.4**	**11.9**	**13.6**	**13.3**	**21.5**	**61.5**	**17.6**	**17.5**	**35.3**	**29.3**	**24.3**	**26.6**	**19.2**	**13.0**	**13.7**	**16.6**	**17.5**	**45.0**	**61.8**		
Min.	**0.0**	**0.0**	**3.5**	**4.3**	**8.7**	**5.1**	**8.3**	**8.8**	**8.4**	**8.4**	**8.4**	**8.7**	**8.6**	**9.3**	**8.7**	**8.6**	**8.9**	**9.0**	**8.9**	**6.6**	**6.5**	**2.4**	**3.9**	**8.5**		**0.0**	
Avg.	**12.5**	**15.4**	**15.5**	**14.3**	**16.1**	**17.1**	**19.5**	**10.1**	**11.3**	**10.3**	**12.7**	**19.0**	**14.1**	**13.9**	**18.5**	**20.1**	**15.4**	**14.9**	**12.7**	**9.1**	**10.5**	**10.6**	**10.2**	**17.6**			**14.2**

Total Hours in Month 720 **Hours Data Available** 156 **Data Recovery** 21.7%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climtrncs)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
14																		14.7	16.6	12.3	9.4	10.3	9.4	9.9	16.6	9.4	11.8
15	9.7	9.4	8.9	9.7	9.8	9.7	12.1	10.3	19.6	11.7	10.6	11.8	10.7	13.9	13.7	15.2	11.5	11.7	11.0	10.7	9.1	10.9	8.9	9.4	19.6	8.9	11.3
16	11.1	10.5	14.1	10.7	14.4	18.8	35.0	7.1	35.0	14.4	12.0	19.5	17.4	20.9	24.2	30.8	11.6	13.4	13.0	10.4	9.4	10.3	9.3	8.1	35.0	7.1	15.9
17	8.6	42.1	13.9	10.4	10.0	11.7	14.9	23.1	14.8	8.8	8.2	10.1	11.4	13.9	14.0	12.6	14.8	24.3	14.9	16.9	12.1	13.0	47.6	16.4	47.6	8.2	16.2
18	14.6	13.4	12.8	14.3	12.2	12.3	10.1	12.0	9.0	9.4	11.7	11.0	11.2	9.9	11.2	12.1	12.3	12.2	11.7	15.3	13.3	13.9	12.7	11.0	15.3	9.0	12.1
19	9.5	11.6	9.9	10.2	9.1	16.3	15.7	12.4	11.4	11.3	9.7	10.4	9.8	10.6	11.4	11.1	9.1	9.1	9.7	9.6	10.4	9.9	10.4	9.7	16.3	9.1	10.8
20	9.6	10.5	10.5	9.1	9.3	9.4	9.4	8.5	8.9	8.4	8.3	10.7	8.3	9.6	9.4	13.8	11.6	9.9	9.3	34.4	44.1	11.0	34.9	9.5	44.1	8.3	13.3
21	15.5	49.6	35.3	40.6	21.4	9.5	10.6	35.0	18.1	10.6	11.5	12.0	13.2	13.6	14.4	15.6	15.5	12.8	10.5	10.5	10.4	22.5	18.2	10.7	49.6	9.5	18.2
22	15.4	8.7	8.3	10.0	8.8	7.2	15.8	25.8	34.5	34.8	15.0	23.7	10.6	10.9	9.1	9.4	9.1	10.3	8.3	9.6	10.2	8.6	9.0	8.2	34.8	7.2	13.4
23	9.9	13.5	7.9	10.2	8.2	7.5	12.6	29.0	24.5	8.2	13.2	15.7	14.1	14.5	11.4	13.4	10.1	11.7	11.3	11.4	11.7	10.5	10.6	16.3	29.0	7.5	12.8
24	11.2	11.0	11.6	11.5	9.5	10.4	14.6	11.3	14.0	12.2	11.2	9.8	9.6	10.6	13.6	16.1	12.1	11.4	16.1	25.4	18.2	13.7	11.7	11.3	25.4	9.5	12.8
25	8.8	8.8	9.2	11.8	13.4	13.1	8.5	8.6	8.1	8.6	9.9	11.2	11.4	10.0	12.0	13.7	14.3	10.5	8.7	10.3	8.7	9.8	8.4	8.9	14.3	8.1	10.3
26	9.2	8.3	8.4	10.1	9.1	10.2	11.1	17.3	36.6	22.6	42.5	15.2	13.3	11.7	26.5	34.7	29.5	19.7	11.5	11.4	16.9	35.9	33.8	29.0	42.5	8.3	19.8
27	18.2	50.4	26.3	39.9	55.6	28.8	10.4	32.6	34.3	13.4	17.4	33.0	14.6	11.7	15.1	14.2	12.1	12.3	11.2	12.7	11.3	11.6	12.6	10.6	55.6	10.4	21.3
28	10.2	12.6	10.8	8.3	9.0	8.7	10.8	11.6	11.7	13.2	12.3	14.8	14.1	13.6	14.4	12.9	18.6	9.3	9.7	10.5	11.2	10.9	9.1	20.4	20.4	8.3	12.0
29	9.9	17.2	12.2	15.7	18.2	25.9	19.8	11.3	26.8	25.0	21.9	19.9	17.2	17.5	13.5	12.2	11.1	13.4	10.8	12.4	15.6	13.7	8.6	9.1	26.8	8.6	15.8
30	9.9	10.3	8.7	10.7	11.7	9.2	5.6	9.3	12.8	12.8	14.4	11.8	8.5	10.5	10.9	10.3	11.5	7.8	10.5	10.3	14.4	15.2	9.2	8.8	15.2	5.6	10.6
Max.	**18.2**	**50.4**	**35.3**	**40.6**	**55.6**	**28.8**	**35.0**	**35.0**	**36.6**	**34.8**	**42.5**	**33.0**	**17.4**	**20.9**	**26.5**	**34.7**	**29.5**	**24.3**	**16.6**	**34.4**	**44.1**	**35.9**	**47.6**	**29.0**	**55.6**		
Min.	**8.6**	**8.3**	**7.9**	**8.3**	**8.2**	**7.2**	**5.6**	**7.1**	**8.1**	**8.2**	**8.2**	**9.8**	**8.3**	**9.6**	**9.1**	**9.4**	**9.1**	**7.8**	**8.3**	**9.6**	**8.7**	**8.6**	**8.4**	**8.1**		**5.6**	
Avg.	**11.3**	**18.0**	**13.0**	**14.6**	**14.4**	**13.0**	**13.6**	**16.6**	**20.0**	**14.1**	**14.4**	**15.0**	**12.2**	**12.7**	**14.1**	**15.5**	**13.4**	**12.6**	**11.4**	**13.8**	**13.9**	**13.6**	**15.6**	**12.2**			**14.1**

Total Hours in Month 720 **Hours Data Available** 391 **Data Recovery** 54.3%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climtrncs)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.5	9.2	7.9	15.1	16.3	18.4	51.4	15.7	35.9	36.0	38.7	17.2	15.7	18.6	14.5	12.9	12.8	10.2	9.9	10.4	10.4	11.4	11.6	10.9	51.4	7.9	17.5
2	10.4	10.0	11.1	12.0	10.8	10.7	10.3	10.1	10.4	10.1	11.1	11.4	11.3	11.3	11.9	11.9	11.0	11.3	11.1	10.6	10.4	10.3	10.1	10.1	12.0	10.0	10.8
3	11.3	11.9	11.8	13.5	10.5	9.5	9.7	9.6	10.2	9.4	10.5	11.4	10.3	12.0	11.0	10.1	14.1	53.7	9.9	11.0	26.1	35.0	25.6	28.8	53.7	9.4	15.7
4	17.9	36.1	21.2	56.5	41.5	19.3	12.9	12.0	19.1	14.4	12.3	12.3	13.2	11.8	11.8	11.4	10.5	11.4	11.5	13.3	12.0	12.1	13.5	13.6	56.5	10.5	17.6
5	13.5	12.8	13.3	12.6	12.6	12.5	12.5	13.0	11.8	11.0	9.3	10.5	19.2	17.9	11.5	14.3	11.5	11.7	10.9	11.0	11.7	10.2	9.8	10.3	19.2	9.3	12.3
6	10.0	9.7	10.2	10.8	9.9	9.7	10.2	11.0	10.8	9.9	9.6	8.6	9.9	10.2	9.7	10.1	11.0	11.0	10.2	10.3	8.6	9.0	8.9	11.2	11.2	8.6	10.0
7	10.4	10.6	10.4	9.7	11.9	12.1	9.2	9.6	9.3	9.3	9.8	8.9	10.2	10.8	10.8	10.4	10.4	10.2	10.2	9.3	8.9	9.2	9.2	9.5	12.1	8.9	10.0
8	8.2	9.1	12.2	9.2	11.5	10.0	9.3	9.4	9.4	8.3	16.9	24.7	15.8	14.5	15.4	15.9	12.9	11.5	11.0	10.7	14.0	20.2	19.1	9.3	24.7	8.2	12.8
9	8.6	7.6	12.7	15.8	11.1	27.5	35.0	22.0	16.1	11.5	16.9	9.6	24.3	57.7	44.1	54.0	15.5	11.6	9.1	10.8	8.5	15.1	9.6	23.0	57.7	7.6	19.9
10	9.3	8.9	10.6	10.2	11.8	9.9	9.7	9.2	9.2	11.5	9.6	11.4	13.5	12.9	13.3	13.4	15.0	13.8	9.0	11.6	22.4	20.9	24.6	26.0	26.0	8.9	13.2
11	7.4	7.5	4.0	12.9	11.8	27.0	8.6	9.3	28.3	13.1	14.0	25.9	15.0	12.0	12.5	11.5	12.9	10.3	10.6	12.0	11.2	12.0	11.4	14.4	28.3	4.0	13.1
12	11.4	12.6	11.9	11.1	11.5	12.2	18.2	18.4	21.3	18.1	16.8	20.0	16.4	43.5	35.0	44.1	18.6	14.1	11.4	11.5	12.8	9.0	8.3	10.2	44.1	8.3	17.4
13	7.2	13.1	9.1	19.5	25.0	9.8	10.4	8.2	10.5	8.3	9.2	9.4	8.5	10.5	14.1	23.5	16.4	25.0	11.4	11.3	10.7	15.4	9.8	12.0	25.0	7.2	12.8
14	10.9	9.5	16.7	13.4	11.8	9.9	10.3	10.6	10.0	33.6	21.6	11.1	13.4	15.1	15.4	17.8	11.7	11.8	10.3	13.3	16.9	7.4	8.5	9.9	33.6	7.4	13.4
15	7.7	13.6	11.1	14.8	9.8	16.5	26.2	23.2	20.0	8.6	10.0	11.4	14.3	27.9	10.9	12.0	10.5	10.8	9.2	6.0	7.2	6.7	6.6	6.2	27.9	6.0	12.6
16	7.3	7.1	7.4	7.0	7.4	6.3	10.5	7.4	7.8	8.7	9.3	9.8	9.0	9.6	10.2	9.4	9.6	9.5	9.3	7.9	9.1	7.4	7.2	7.4	10.5	6.3	8.4
17	8.5	7.5	8.1	9.7	7.6	7.9	6.7	7.4	6.5	6.8		30.4	7.8	10.2	7.9	8.3	8.0	6.7	6.8	9.5	9.3	6.2	6.8	6.4	30.4	6.2	8.7
18	9.2	7.7	8.0	7.3	5.6	8.7	6.5	7.1	10.1	9.1	6.9	8.7	28.3	9.0	37.1	11.3	12.0	32.3	30.0	38.9	23.2	15.9	13.2	15.2	38.9	5.6	15.0
19	28.3	43.1	12.4	22.9	30.3	9.1	22.6	25.1	19.0	16.0	3.9	0.0	16.0	19.8	7.7	16.5	18.1	8.2	42.1	21.6	23.4	20.1	25.8	17.8	43.1	0.0	19.6
20	23.7	19.7	18.2	19.8	18.9	15.7	24.6	19.9	26.6	18.9	33.8	13.0	16.3	8.2	9.7	8.2	7.7	7.9	8.9	8.9	8.5	9.4	9.2	9.3	33.8	7.7	15.2
21	9.4	8.4	9.2	8.0	8.5	9.3	8.2	7.8	8.1	9.9	9.5	10.6	5.9	7.6	5.8	6.6	8.8	13.7	9.6	33.0	36.4	26.8	40.1	43.8	43.8	5.8	14.4
22	7.1	9.1	36.4	16.3	33.8	7.8	22.4	11.1	34.2	23.4	17.1	10.5	8.4	22.0	14.5	46.9	18.3	13.7	30.7	26.8	16.1	18.1	9.8	0.0	46.9	0.0	18.9
23	0.0	0.0	32.8	19.9	0.0	3.2	26.9	15.5	0.0	11.6	12.3	3.2	12.4	16.5	11.6	13.3	10.4	11.6	9.0	8.2	23.0	12.6	23.5	3.7	32.8	0.0	11.7
24	15.0	16.8	0.0	10.8	14.7	0.0	5.9	3.1	5.7	13.5	7.7	13.8	16.7	21.8	10.5	10.5	10.9	7.0	8.9	8.3	9.9	20.0	26.5	11.0	26.5	0.0	11.2
25	9.9	9.2	8.1	8.5	9.2	6.7	7.1	10.2	10.0	9.0	7.4	7.4	7.3	8.5	8.1	8.0	7.8	8.2	8.2	10.2	13.1	10.6	15.7	15.4	15.7	6.7	9.3
26	12.8	12.1	12.7	12.8	14.5	12.1	13.2	16.0	15.3	13.0	11.8	15.3	10.6	12.3	11.3	10.4	11.3	9.2	9.2	8.5	8.3	8.6	9.5	9.8	16.0	8.3	11.7
27	8.2	7.9	8.1	8.3	8.1	8.5	10.5	8.3	8.8	8.3	6.4	8.8	10.2	11.2	8.4	8.5	8.3	10.0	12.9	13.9	9.2	3.8	0.0	28.0	28.0	0.0	9.4
28	8.3	10.1	9.0	4.0	29.0	2.5	5.6	0.5	1.0	2.9	12.7	10.1	10.2	14.0	13.6	13.1	10.7	11.6	11.1	11.9	10.6	11.7	10.1	7.9	29.0	0.5	9.7
29	8.3	9.1	8.2	8.1	8.6	8.5	9.2	8.7	8.6	9.1	8.8	8.4	9.0	9.7	9.3	9.7	9.9	8.6	8.8	9.0	8.7	8.5	8.6	9.0	9.9	8.1	8.8
30	10.3	8.6	6.6	6.6	6.9	7.1	8.5	9.5	8.5	10.1	17.1	8.7	19.8	12.5	11.7	7.1	7.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0	19.8	0.0	7.1
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	7.6	7.2	7.1	7.2	8.5	8.5	7.5	6.2	13.9	10.8	9.3	8.2	7.9	8.5	6.4	13.9	0.0	5.5
Max.	**28.3**	**43.1**	**36.4**	**56.5**	**41.5**	**27.5**	**51.4**	**25.1**	**35.9**	**36.0**	**38.7**	**30.4**	**28.3**	**57.7**	**44.1**	**54.0**	**18.6**	**53.7**	**42.1**	**38.9**	**36.4**	**35.0**	**40.1**	**43.8**	**57.7**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.9**	**3.9**	**0.0**	**5.9**	**7.6**	**5.8**	**6.6**	**6.2**	**3.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**10.3**	**11.6**	**11.6**	**13.1**	**13.6**	**10.6**	**13.9**	**11.2**	**13.2**	**12.6**	**12.9**	**11.9**	**13.1**	**15.7**	**13.8**	**15.1**	**11.6**	**13.0**	**12.0**	**12.5**	**13.2**	**12.6**	**12.9**	**12.8**			**12.7**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climtrncs)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.2	5.8	7.3	8.5	9.3	7.1	6.7	7.6	8.1	7.1	7.2	6.1	7.3	7.6	24.3	6.5	11.9	11.4	11.5	9.8	8.4	10.3	9.2	6.6	24.3	5.8	8.9
2	9.5	12.9	21.6	36.1	37.4	15.3	12.8	12.7	6.4	7.3	6.7	8.7	9.2	7.2	9.8	11.9	11.7	40.0	20.5	9.1	10.2	10.4	8.2	7.1	40.0	6.4	14.3
3	6.6	7.4	8.1	8.4	8.0	7.7	7.3	12.4	36.0	36.2	2.0	11.8	5.3	7.9	30.5	10.9	14.7	8.3	6.5	11.3	10.0	8.9	8.9	8.9	36.2	2.0	11.8
4	8.9	9.1	7.4	6.6	7.0	8.7	6.7	8.2	9.3	10.1	8.4	8.9	9.7	10.2	8.8	9.1	9.0	8.6	8.6	12.9	12.7	10.7	9.6	10.7	12.9	6.6	9.2
5	8.5	9.4	9.9	9.5	10.5	10.1	9.5	9.3	8.8	8.2	9.6	9.1	8.7	9.9	8.1	9.9	11.7	8.3	7.9	7.5	7.3	7.3	7.2	6.6	11.7	6.6	8.9
6	7.9	7.4	7.1	6.8	6.9	7.4	8.6	9.0	9.0	8.8	8.2	8.8	9.0	8.2	7.9	7.9	7.8	8.1	8.3	8.9	8.3	9.2	12.4	7.7	12.4	6.8	8.3
7	10.8	10.9	9.7	8.3	8.0	7.6	8.8	10.8	10.8	10.2	9.1	9.9	10.6	11.4	8.2	8.2	6.5	8.0	10.6	7.8	9.4	8.8	7.4	9.7	11.4	6.5	9.2
8	11.0	13.7	17.7	8.7	8.4	8.4	7.0	7.8	7.6	7.5	8.1	7.3	8.9	12.5	9.8	10.2	9.3	10.3	10.4	10.5	9.5	8.4	9.1	9.4	17.7	7.0	9.6
9	9.2	10.4	9.7	11.0	9.4	9.9	8.6	7.9	7.7	10.5	9.2	10.1	8.2	8.9	7.6	9.1	9.2	12.5	11.4	9.4	9.8	24.5	25.7	11.8	25.7	7.6	10.9
10	8.2	6.8	8.0	7.5	7.8	6.5	7.0	7.1	6.7	9.6	19.3	6.4	8.3	7.8	7.8	9.6	12.0	9.4	10.5	9.6	8.6	8.1	8.0	7.1	19.3	6.4	8.6
11	9.2	8.5	7.2	42.9	11.3	6.5	6.5	8.1	6.6	7.0	9.3	13.9	8.0	8.3	8.7	8.8	8.1	12.7	11.3	9.9	8.0	7.4	56.6	43.7	56.6	6.5	13.7
12	21.5	20.0	8.5	20.8	25.9	36.1	24.6	21.6	14.5	19.1	19.3	19.4	18.2	9.8	11.2	12.7	40.0	14.7	12.3	11.2	9.9	9.7	9.9	10.6	40.0	8.5	17.6
13	10.0	8.6	8.0	8.1	7.0	6.7	6.7	6.7	7.0	7.3	7.5	8.2	7.6	12.0	19.6	21.2	12.4	21.0	6.4	7.0	7.1	7.8	9.8	9.9	21.2	6.4	9.7
14	12.3	8.1	6.5	10.5	10.5	10.2	11.3	10.4	9.4	12.8	19.8	28.3	8.6	6.9	8.2	8.5	7.3	7.2	5.5	6.8	8.0	7.7	5.2	5.4	28.3	5.2	9.8
15	4.5	4.8	3.6	4.6	5.9	8.2	5.5	5.6	5.9	5.5	6.1	6.4	7.4	8.4	9.9	10.3	7.9	7.9	11.8	9.1	9.1	8.6	6.6	7.4	11.8	3.6	7.1
16	8.4	7.1	7.2	6.8	7.2	7.6	6.8	6.9	7.9	7.7	7.5	8.6	8.1	7.0	7.3	7.5	7.2	7.2	10.6	7.4	7.4	8.5	7.4	8.1	10.6	6.8	7.7
17	7.2	7.6	8.2	7.3	6.9	6.3	6.6	6.2	6.4	6.4	8.3	8.2	7.2	6.9	7.2	7.0	9.2	6.9	7.7	6.9	8.5	9.0	6.1	7.5	9.2	6.1	7.3
18	13.0	12.7	26.6	11.1	7.6	11.8	68.6	19.4	10.9	10.4	6.7	7.0	8.7	8.7	5.4	12.2	11.3	50.7	21.4	16.4	45.8	13.3	19.9	18.5	68.6	5.4	18.3
19	23.2	18.0	21.2	19.0	26.2	23.8	33.1	22.0	22.5	37.6	29.3	25.7	9.1	7.9	7.5	7.3	7.7	7.9	8.1	6.4	8.0	8.1	7.3	6.8	37.6	6.4	16.4
20	6.6	7.2	7.6	7.2	7.0	7.5	7.5	8.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0	8.0	9.0	8.0	8.0	7.0	8.0	6.0	8.0	9.0	9.0	6.0	7.5
21	7.0	8.0	7.0	8.0	9.0	8.0	12.0	12.0	7.0	12.0	10.0	11.0	10.0	11.0	10.0	11.0	13.0	10.0	10.0	10.0	9.0	10.0	10.0	10.0	13.0	7.0	9.8
22	11.0	12.0	13.0	8.0	9.0	6.0	6.0	7.0	10.0	8.0	7.0	8.0	8.0	8.0	9.0	8.0	9.0	10.0	8.0	10.0	11.0	13.0	11.0	7.0	13.0	6.0	9.0
23	6.0	6.0	5.0	7.0	8.0	8.0	8.0	8.0	8.0	9.0	9.0	10.0	8.0	8.0	7.0	9.0	8.0	6.0	17.0	8.0	7.0	6.0	7.0	8.0	17.0	5.0	8.0
24	8.0	7.0	9.0	8.0	1.0	10.0	16.0	21.0	13.0	10.0	14.0	7.0	8.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	8.0	7.0	8.0	21.0	1.0	8.9
25	7.0	7.0	8.0	7.0	7.0	7.0	7.0	10.0	11.0	8.0	8.0	8.0	9.0	8.0	10.0	8.0	9.0	9.0	9.0	10.0	9.0	10.0	10.0	6.0	11.0	6.0	8.4
26	5.0	6.0	8.0	8.0	16.0	10.0	11.0	18.0	22.0	13.0	20.0	10.0	11.0	13.0	13.0	9.0	13.0	10.0	7.0	7.0	6.0	13.0	13.0	10.0	22.0	5.0	11.3
27	13.0	12.0	8.0	9.0	9.0	11.0	8.0	7.0	7.0	9.0	9.0	11.0	9.0	11.0	10.0	10.0	11.0	12.0	11.0	8.0	8.0	10.0	11.0	10.0	13.0	7.0	9.8
28	15.0	13.0	12.0	11.0	13.0	38.0	25.0	39.0	38.0	27.0	17.0	12.0	13.0	14.0	12.0	13.0	12.0	12.0	12.0	10.0	11.0	11.0	13.0	12.0	39.0	10.0	16.9
29	10.0	10.0	10.0	10.0	10.0	8.0	11.0	11.0	11.0	11.0	10.0	11.0	10.0	10.0	11.0	11.0	10.0	9.0	9.0	10.0	11.0	10.0	11.0	11.0	11.0	8.0	10.3
30	10.0	10.0	10.0	9.0	11.0	11.0	10.0	11.0	11.0	11.0	11.0	10.0	9.0	11.0	10.0	10.0	11.0	12.0	13.0	10.0	9.0	12.0	11.0	12.0	13.0	9.0	10.6
Max.	**23.2**	**20.0**	**26.6**	**42.9**	**37.4**	**38.0**	**68.6**	**39.0**	**38.0**	**37.6**	**29.3**	**28.3**	**18.2**	**14.0**	**30.5**	**21.2**	**40.0**	**50.7**	**21.4**	**16.4**	**45.8**	**24.5**	**56.6**	**43.7**	**68.6**		
Min.	**4.5**	**4.8**	**3.6**	**4.6**	**1.0**	**6.0**	**5.5**	**5.6**	**5.9**	**5.5**	**2.0**	**6.1**	**5.3**	**6.9**	**5.4**	**6.5**	**6.5**	**6.0**	**5.5**	**6.4**	**6.0**	**6.0**	**5.2**	**5.4**		**1.0**	
Avg.	**9.9**	**9.6**	**10.0**	**11.2**	**10.7**	**11.0**	**12.5**	**11.7**	**11.5**	**11.8**	**10.8**	**10.6**	**9.0**	**9.2**	**10.5**	**9.8**	**10.9**	**12.2**	**10.4**	**9.2**	**10.2**	**9.9**	**11.6**	**10.2**			**10.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climtrncs)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.0	11.0	13.0	15.0	13.0	13.0	33.0	26.0	32.0	34.0	14.0	23.0	19.0	23.0	12.0	18.0	17.0	9.0	25.0	6.0	36.0	39.0	12.0	12.0	39.0	6.0	19.4
2	8.0	16.0	37.0	15.0	19.0	20.0	17.0	23.0	19.0	34.0	17.0	31.0	25.0	30.0	12.0	11.0	15.0	25.0	24.0	9.0	18.0	11.0	8.0	21.0	37.0	8.0	19.4
3	9.0	9.0	8.0	8.0	8.0	8.0	8.0	7.8	8.3	8.7	8.2	9.7	9.4	8.3	10.3	9.5	8.6	9.5	12.1	9.0	7.9	7.9	7.7	7.1	12.1	7.1	8.7
4	7.5	10.5	8.6	10.3	10.1	9.4	12.5	20.0	11.0	8.0	7.0	7.0	7.0	10.0	11.0	13.0	12.0	9.0	10.0	10.0	11.0	11.0	12.0	11.0	20.0	7.0	10.4
5	11.0	11.0	10.0	11.0	11.0	11.0	11.0	11.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	10.0	8.0	8.0	9.0	10.0	11.0	8.0	9.7
6	10.0	10.0	9.0	9.0	10.0	10.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	9.0	7.0	7.0	11.0	13.0	29.0	14.0	6.0	9.0	12.0	10.0	29.0	6.0	10.5
7	8.0	9.0	11.0	12.0	10.0	10.0	8.0	8.0	7.0	7.0	7.0	7.0	9.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	12.0	6.0	7.5
8	8.0	10.0	10.0	8.0	8.0	7.0	7.0	13.0	11.0	8.0	20.0	27.0	11.0	11.0	11.0	12.0	21.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	8.7
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	9.0	9.0	8.0	7.0	7.0	6.0	8.0	9.0	8.0	9.0	10.0	9.0	9.0	9.0	10.0	0.0	5.1
10	10.0	10.0	10.0	6.0	7.0	9.0	5.0	5.3	5.8	6.1	5.7	5.5	7.5	9.7	8.7	10.2	12.4	8.8	8.6	7.7	11.7	9.5	6.8	5.8	12.4	5.0	8.0
11	5.7	6.2	6.6	6.3	6.5	8.2	15.5	11.0	21.0	37.0	12.0	26.0	17.0	2.0	26.0	16.0	20.0	19.0	8.0	9.0	12.0	23.0	28.0	22.0	37.0	2.0	15.2
12	6.0	12.0	18.0	7.0	8.0	10.0	13.0	17.0	11.0	4.0	5.0	5.0	6.0	5.0	6.0	7.0	12.0	11.0	9.0	12.0	10.0	8.0	8.0	12.0	18.0	4.0	9.3
13	8.0	16.0	7.0	7.0	7.0	7.0	6.0	6.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	6.0	4.0	5.0	5.0	6.0	16.0	4.0	5.7
14	5.0	5.0	5.0	5.0	6.0	5.0	6.0	6.0	8.0	6.0	6.0	10.0	10.0	13.0	12.0	16.0	7.0	9.0	6.0	7.0	5.0	5.0	6.0	6.0	16.0	5.0	7.3
15	6.0	7.0	8.0	6.0	6.0	6.0	5.0	6.0	6.0	7.0	6.0	6.0	6.0	5.0	6.0	6.0	6.0	5.0	5.0	5.0	6.0	5.0	6.0	5.0	8.0	5.0	5.9
16	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	7.0	6.0	7.0	7.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0	7.0	6.0	6.3
17	7.0	6.0	5.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	5.0	6.0	5.0	5.0	5.0	6.0	8.0	7.0	10.0	9.0	7.0	10.0	5.0	6.4
18	9.0	19.0	6.0	6.0	7.0	5.0	6.0	7.0	7.0	6.0	5.0	5.0	6.0	5.0	5.0	7.0	7.0	7.0	6.0	5.0	6.0	10.0	8.0	6.0	19.0	5.0	6.9
19	7.0	9.0	17.0	9.0	6.0	9.0	8.0	8.0	9.0	12.0	9.0	6.0	11.0	9.0	12.0	7.0	8.0	6.0	5.0	7.0	7.0	12.0	9.0	9.0	17.0	5.0	8.8
20	13.0	24.0	25.0	21.0	26.0	20.0	20.0	16.0	7.0	7.0	7.0	7.0	6.0	6.0	8.0	8.0	8.0	9.0	18.0	11.0	8.0	7.0	4.0	15.0	26.0	4.0	12.5
21	10.0	8.0	9.0	8.0	8.0	8.0	9.0	5.0	5.0	11.0	8.0	9.0	10.0	10.0	14.0	8.0	10.0	10.0	11.0	9.0	7.0	7.0	6.0	8.0	14.0	5.0	8.7
22	9.0	5.0	5.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0	9.0	8.0	9.0	8.0	8.0	8.0	9.0	8.0	12.0	11.0	7.0	8.0	12.0	5.0	7.5
23	5.0	7.0	7.0	7.0	7.0	6.0	6.0	10.0	37.0	15.0	10.0	14.0	10.0	5.0	6.0	8.0	38.0	25.0	42.0	30.0	0.0	9.0	33.0	22.0	42.0	0.0	15.0
24	19.0	18.0	14.0	10.0	4.0	6.0	9.0	10.0	7.0	7.0	10.0	8.0	5.0	5.0	5.0	5.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	19.0	4.0	7.9
25	6.0	6.0	5.0	6.0	7.0	6.0	5.0	5.0	5.0	7.0	6.0	6.0	6.0	7.0	8.0	7.0	7.0	8.0	7.0	7.0	11.0	9.0	6.0	5.0	11.0	5.0	6.6
26	21.0	15.0	5.0	7.0	38.0	47.0	22.0	29.0	44.0	9.0	23.0	39.0	9.0	8.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	7.0	7.0	8.0	47.0	5.0	16.0
27	7.0	7.0	6.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	7.0	7.0	7.0	6.0	7.0	8.0	7.0	7.0	9.0	17.0	11.0	10.0	8.0	6.0	17.0	6.0	7.7
28	4.0	7.0	6.0	5.0	6.0	9.0	6.0	8.0	13.0	5.0	6.0	7.0	7.0	6.0	8.0	7.0	12.0	12.0	6.0	7.0	6.0	6.0	7.0	10.0	13.0	4.0	7.3
29	9.0	13.0	14.0	13.0	24.0	16.0	37.0	22.0	13.0	12.0	7.0	6.0	5.0	6.0	7.0	7.0	7.0	6.0	5.0	5.0	5.0	16.0	5.0	5.0	37.0	5.0	11.0
30	5.0	5.0	5.0	5.0	5.0	10.0	11.0	11.0	11.0	7.0	6.0	5.0	7.0	5.0	5.0	6.0	6.0	6.0	5.0	6.0	6.0	4.0	4.0	4.0	11.0	4.0	6.3
31	4.0	5.0	7.0	5.0	7.0	4.0	4.0	5.0	4.0	5.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	7.0	4.0	4.8
Max.	**21.0**	**24.0**	**37.0**	**21.0**	**38.0**	**47.0**	**37.0**	**29.0**	**44.0**	**37.0**	**23.0**	**39.0**	**25.0**	**30.0**	**26.0**	**18.0**	**38.0**	**25.0**	**42.0**	**30.0**	**36.0**	**39.0**	**33.0**	**22.0**	**47.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**4.0**	**4.0**	**4.0**	**2.0**	**4.0**	**5.0**	**4.0**	**4.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**8.2**	**9.8**	**9.8**	**8.1**	**9.7**	**9.8**	**10.5**	**10.6**	**11.4**	**10.3**	**8.6**	**10.7**	**8.8**	**8.2**	**8.6**	**8.4**	**10.2**	**9.2**	**10.2**	**8.5**	**8.4**	**9.4**	**8.5**	**8.8**			**9.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	6.4	6.60
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.51
5	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	1.27
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.27
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	1.02
11	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.8	0.0	0.0	1.02
13	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
16	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.76
17	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
18	0.0	0.0	0.0	0.0	0.5	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.5	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.9	66.0	48.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.21
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.51
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	1.78
22	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.51
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8	1.8	0.0	0.5	0.0	0.0	0.0	3.30
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.27
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 185.17

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.76
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.08
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.25
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.76
14	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.76
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.51
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
24	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.51
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 11.18

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

March *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.02
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.51
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
8	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.03
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
14	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
15	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.25
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.5	0.8	0.8	1.0	0.5	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.83
22	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
23	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
24	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.51
28	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.51
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 13.18

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.5	0.0	0.0	0.0	2.03
7	0.0	0.5	0.3	0.8	0.8	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.05
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.76
9	0.0	0.0	0.3	0.0	0.0	0.0	0.8	1.3	2.0	1.3	0.8	0.3	0.0	0.5	0.0	0.5	0.3	0.5	0.3	0.0	0.0	0.0	0.0	0.0	8.64
10	1.0	0.8	0.8	1.0	0.8	0.5	0.0	0.3	2.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.87
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.78
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.3	0.8	0.8	1.0	0.5	0.3	6.10
19	0.3	0.5	0.5	0.8	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	3.05
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 35.05

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.51
2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.3	0.3	0.3	0.8	0.8	0.5	1.0	0.8	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.33
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
13	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.8	0.3	0.3	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.54
14	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
24	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.3	2.03
25	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.8	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.5	0.5	0.0	0.3	0.3	0.3	0.3	4.06
26	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 17.78

Total Hours in Month 744 **Hours Data Available** 739 **Data Recovery** 99.3%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.0	1.0	0.0	0.0	0.3	0.0	0.0	0.0	0.8	0.0	0.0	2.8	0.5	0.3	6.86
5	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.02
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	0.0	0.0	0.0	0.0	0.0	0.5	2.79
14	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.8	1.5	1.3	0.3	1.5	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.3	0.3	0.0	0.0	0.0	0.0	8.13
18	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	1.02
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
21	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.51
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.5	1.0	0.8	0.8	1.3	0.3	0.8	0.3	0.3	0.5	0.8	8.38
23	0.5	0.3	0.3	0.5	0.3	0.8	0.5	0.8	0.8	2.0	3.0	2.5	1.8	2.3	2.8	1.0	2.0	1.5	1.8	0.5	0.0	0.0	0.0	0.0	25.91
24	0.0	0.0	1.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 60.96

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	0.0	0.0	2.03
4	0.0	0.3	0.3	1.3	6.4	2.8	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	1.3	0.5	0.0	0.0	0.3	0.0	0.0	13.72
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.02
8	0.5	0.3	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.30
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.81
13	0.0	0.0	0.0	0.3	0.5	0.5	0.3	2.8	2.0	1.0	0.5	1.0	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.65
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
22	0.0	0.0	0.0	1.0	0.8	0.5	0.5	0.3	0.0	0.3	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.3	4.83
23	0.5	0.8	2.5	1.0	0.3	0.3	1.0	0.5	0.5	0.3	0.5	0.3	0.0	0.8	0.0	0.0	0.3	0.0	0.0	0.0	0.8	0.0	0.3	1.0	11.43
24	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.3	0.0	0.3	0.8	0.3	0.3	0.0	0.0	0.0	0.3	4.57
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.25
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 58.93

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meterological Station - Total Precipitation (mm)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.0	0.3	0.5	0.0	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	4.06
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.8	1.52
4	0.8	1.0	0.8	0.8	1.5	3.6	1.0	0.5	1.0	0.3	0.0	0.8	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.45
5	0.0	0.0	0.0	0.8	0.8	1.8	0.5	0.5	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.5	1.0	0.0	1.0	0.0	8.64
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
7	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.25
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
12	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	0.5	0.8	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	4.32
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.3	0.0	0.0	0.0	0.0	1.02
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
18	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.3	0.3	1.0	2.0	1.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.10
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	0.3	0.0	0.0	1.52
20	0.0	1.0	0.3	0.5	0.5	0.3	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
21	0.0	0.0	0.5	0.3	0.3	0.3	0.5	0.3	0.3	0.0	0.8	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.56
22	0.0	0.0	0.0	0.0	0.3	1.0	0.5	0.8	0.5	0.0	0.3	0.0	0.0	0.0	0.8	0.5	0.3	0.8	0.5	0.8	1.3	0.3	0.5	0.5	9.40
23	0.3	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	2.29
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.78
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Total Precipitation (mm) = 61.21

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

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Pebble 3 Meterological Station - Total Precipitation (mm)

September 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DailyTotal
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.3	0.8	0.8	1.3	1.3	2.0	2.5	1.8	1.8	0.3	0.3	0.0	0.0	0.0	13.72
4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.8	2.5	0.3	0.3	0.0	0.0	0.0	10.16
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	0.8	0.5	5.08
7	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	16.5	115.8	68.8													)1.65

Total Precipitation (mm) = 230.86

Total Hours in Month 720 **Hours Data Available** 156 **Data Recovery** 21.7%

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Appendix B

2007 non-PSD Meteorological Station Audit Data Sheets

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 19-Jan-07

• *DAS TIME AUDIT*

Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
10:48:00	10:47:57	**-00:03**	**PASS**

• *TEMPERATURE SENSOR AUDIT*

Height: 2.0 **Meters**

Thermistor	**Make:**	Met-One	**Model:**	060A-2	**S.N.#:**	D6463	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Fisher Scientific	**Model:**	15-077-8	**S.N.#:**	21164797	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Fisher Scientific	**Model:**	15-077-7	**S.N.#:**	22136783	**Range:**	-40 to 150 **°C**

Time: Begin: 1030 End: 1130

COLLOCATED THERMISTOR TEST					
Thermal Input			Station Response		
Temp Range	Target Deg C	Input Deg C	DAS Deg C	Error Deg C	Pass/ Fail?
Hot	35 to 45	46.24	46.35	0.11	Pass
Warm	15 to 25	25.28	25.31	0.03	Pass
Ice Bath	0	-0.03	0.11	0.14	Pass
Very Cold	-35 to -45	-31.06	-30.86	0.20	Pass
		Max Abs. Error		**0.20**	**PASS**

Limits: Max Absolute Error > 0.5 Deg C (accuracy).
Comments: None.

• *HORIZONTAL WIND SPEED SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Spd Sensor:	**Make:**	Met-One	**Model:**	010C-1	**S.N.#:**	D6648	**Cup #:**	N/A	**Range:**	0-60 **m/s**
Audit Equipment:	**Low Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Audit Equipment:	**High Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136				

Begin: 1200
End: 1205

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.00625	0.005	**PASS**
New	0.00625	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
100	2.94	2.95	0.01	N/A	Pass
200	5.60	5.60	N/A	0.0	Pass
400	10.93	10.94	N/A	0.1	Pass
1000	26.92	26.92	N/A	0.0	Pass
2000	53.57	53.55	N/A	0.0	Pass
	Max Abs. Error		**0.01**	**0.1**	**PASS**

Limits: Threshold Torque >0.45 gm-cm (0.00625oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Al & Lexan Cups: m/s=rpm/37.522569+0.27. gm-cm=72*oz-in.
Comments: Instrument not removed from crossarm for speed tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 19-Jan-07

● *HORIZONTAL WIND DIRECTION SENSOR AUDIT*

Height: 3.0 **Meters**

Wind Dir Sensor: **Make:** Met-One **Model:** 020C-1 **S.N.#:** D5541 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Align:** Met-One **Model:** 40 **S.N.#:** N/A **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 5008 **S.N.#:** 5080896571 **Magnetic Declin:** 17.5 **E of N**

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0986	0.055	**PASS**
New	0.0986	N/A	N/A

IN SITU AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	175.5	175.5	0.0	Pass
Compass	111.5	110.3	-1.2	Pass
Peak_1952	47.9	46.0	-1.9	Pass
Pk_1952_Shoulder	45.1	44.7	-0.4	Pass
Compass	8.0	8.2	0.2	Pass
Hill_1166	97.1	95.8	-1.3	Pass
Compass	290.5	288.9	-1.6	Pass
		Max Abs. Error	**1.9**	**PASS**
		Mean Abs. Error	**0.9**	**GOOD**

Time: Begin: 1055 End: 1105

VANE ACCURACY & LINEARITY TEST				
Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.5	0.5	Pass
West	270.0	271.6	1.6	Pass
North	360.0	0.5	0.5	Pass
East	90.0	90.7	0.7	Pass
North	360.0	0.5	0.5	Pass
West	270.0	271.6	1.6	Pass
South	180.0	180.6	0.6	Pass
East	90.0	90.7	0.7	Pass
	Max Abs. Error		**1.6**	**PASS**
	Mean Abs. Error		**0.8**	**PASS**

Time: Begin: 1122 End: 1127

BENCH STAND ACCURACY & LINEARITY TEST							
Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.4	0.4	Pass	330.0	330.8	0.8	Pass
60.0	59.4	-0.6	Pass	355.0	356.5	1.5	Pass
90.0	89.3	-0.7	Pass	30.0	29.6	-0.4	Pass
120.0	118.8	-1.2	Pass	60.0	59.6	-0.4	Pass
150.0	148.9	-1.1	Pass	90.0	89.4	-0.6	Pass
180.0	179.0	-1.0	Pass	120.0	119.2	-0.8	Pass
210.0	209.1	-0.9	Pass	150.0	148.7	-1.3	Pass
240.0	239.6	-0.4	Pass	180.0	179.0	-1.0	Pass
270.0	269.8	-0.2	Pass	**Max Abs. Error**		**1.5**	**PASS**
300.0	300.6	0.6	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1115 End: 1120

POST-AUDIT AZIMUTH ALIGNMENT TEST				
Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak_1952	47.9	45.9	-2.0	Pass
		Max Abs. Error	**2.0**	**PASS**
		Mean Abs. Error	**2.0**	**GOOD**

Time: Begin: 1130 End: 1133

Limits: Threshold Torque >7.1 gm-cm (.0986 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment).
Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Conversions: Torque(Al Vane) = 28.4*m/s^2 for 10° deflection.

Comments: Instrument not removed from crossarm for linearity tests, no post audit required.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (3-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Station 3
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 19-Jan-07

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.0 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 333 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1025		1600	21.9	1.02	24.13	23.11	5.4%	Pass	
1056		1600	21.9	24.13	41.91	17.78	N/A	N/A	Improper pour.
1113		1600	21.9	0.00	21.38	21.38	-2.5%	Pass	
1127		1600	21.9	21.38	42.42	21.04	-4.1%	Pass	
1150	9-7/8	1600	21.9	42.42	66.06	23.64	7.8%	Pass	
1205	10-3/4	1600	21.9	0.00	23.37	23.37	6.6%	Pass	
1215		1600	21.9	23.37	46.99	23.62	7.7%	Pass	
					Max Abs. Error		**7.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

APPENDIX 2J

2008 Non-PSD Meteorological Data Report for the Pebble Project Meteorological Monitoring Program

2008 Non-PSD Meteorological Data Report

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

May 2009

Pebble Project Non-PSD
2008 Meteorological Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2009

prepared for

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CONTENTS

Executive Summary **1**
1.0 Introduction **2**
2.0 Monitoring Parameters and Instrumentation **5**
3.0 Station Performance Summaries **8**
4.0 Meteorological Data Summary **13**
4.1 Temperature 13
4.2 Horizontal Wind 19
4.2.1 Wind Speed (WS) Climatology 19
4.2.2 Wind Direction (WD) Climatology 22
4.3 Precipitation 29
5.0 References **31**

List of Figures

1-1. Map of the Pebble Project Area 4
2-1. Pebble 3 (non-PSD) Meteorological Monitoring Station 6
2-2. Pebble 5A (non-PSD) Meteorological Monitoring Station 6
4-1. Pebble 3 Hourly Average Temperatures 14
4-2. Pebble 5A Hourly Average Temperatures 15
4-3. 2008 Pebble 3 non-PSD Meteorological Station Wind Rose 23
4-4. Quarterly Pebble 3 Wind Roses (Climatronics or RMY) 24
4-5. 2008 Pebble 5A non-PSD Meteorological Station Wind Roses 25
4-6. Quarterly Pebble 5A Wind Roses (Climatronics) 26
4-7. Quarterly Pebble 5A Wind Roses (RM Young-AQ) 27
4-8. Quarterly Pebble 5A Wind Roses (RM Young-AP) 28
4-9. Pebble 3 Hourly and Cumulative Precipitation 30

List of Tables

1-1. Summary of Pebble Project non-PSD Meteorological Stations. 3
2-1. Meteorological Measurement Methods 7
3-1. Pebble 3 Valid Hourly Data Capture 9

3-2. Pebble 3 Percent Data Capture 10
3-3. Pebble 5A Valid Hourly Data Capture 11
3-4. Pebble 5A Percent Data Capture 12
4-1. Pebble 3 Temperature Summary 16
4-2. Pebble 5A Temperature (2-m) Summary 17
4-3. Pebble 5A Temperature (10-m) Summary 18
4-4. Average and Maximum Wind Speeds at Pebble 3 non-PSD Station 20
4-5. Average and Maximum Wind Speeds at Pebble 5A Station 21
4-6. Average and Maximum Wind Speeds at Iliamna 22
4-7. Pebble 3 Cumulative and Maximum Daily Precipitation 29

List of Appendices

A Pebble 3 Validated Continuous Data Summaries
B Pebble 5A Validated Continuous Data Summaries
C 2008 non-PSD Meteorological Station Audit Data Sheets
D Wind Rose Analysis Tables (Climatronics, RM Young-AQ, and RM Young-AP) and Map

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG, Inc., dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

PSD-quality meteorological monitoring for the Pebble Project began on August 1, 2005. This report provides details for two non-PSD meteorological stations included in the Pebble Project. Included in this report are the details of the third year of meteorological measurements at the Pebble 3 station, and the first year of meteorological measurements at Pebble 5A station, collected from January 1, 2008 through December 31, 2008.

1.0 Introduction

On behalf of the Pebble Limited Partnership, care of Pebble Mines Corp., HCG Inc., dba Hoefler Consulting Group, is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. The Pebble Project is located within the South Central Alaska Intrastate Air Quality Control Region. The proposed mine site is in an area designated attainment or unclassifiable for all criteria pollutants and is within a PSD Class II area. The closest Class I area is Tuxedni National Wildlife Refuge located approximately 150 kilometers to the northeast. This meteorological monitoring project currently consists of seven PSD-quality meteorological monitoring stations. Four stations are located in the deposit area; Pebble 1, Pebble 4, Pebble 5, and Pebble 6. Three stations are located in the proposed Port area; Pebble Port, Williamsport, and North Head. An additional, two non-PSD meteorological monitoring station; Pebble 3, and Pebble 5A, are being used for engineering and mine design purposes.

In October 2004, HCG installed two meteorological stations at the Pebble Project to provide data for engineering design and environmental baseline studies. The two stations were originally called “Met Station 1” and “Met Station 2”, but have since been renamed “Pebble 1” and “Pebble 2”. The Pebble 1 and Pebble 2 meteorological stations were located at proposed mill site and tailings storage facilities, respectively.

The Pebble 2 monitoring period began January 1, 2005. However, the Pebble 2 structure was relocated on November 19, 2005 to a location approximately 0.6 miles to the north. Upon relocation, Pebble 2 was renamed Pebble 3 and began collecting valid meteorological data on November 19, 2005. In June, 2007, Pebble 5A monitoring station, located approximately 4.5 km to the northwest of Kashanak Mountain, was installed and began collecting valid meteorological data on July 1, 2007. This report contains data collected at Pebble 3 and 5A from January 1, 2008 through December 31, 2008.

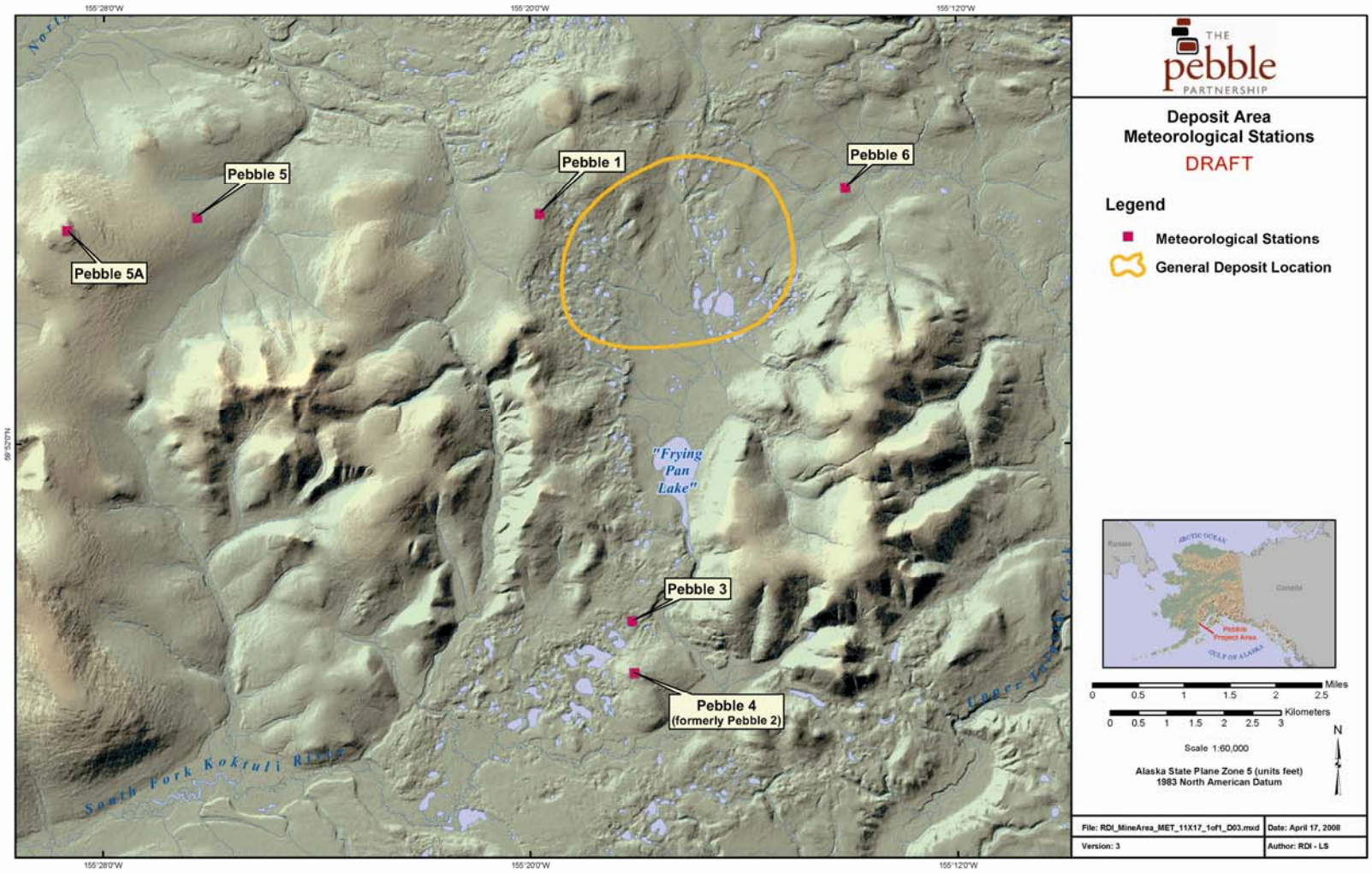
Table 1-1 gives a summary of the Pebble 3 and 5A non-PSD meteorological stations deployed at the Pebble Project and includes the coordinates and elevation of the station and the period of data collection.

Table 1-1. Summary of Pebble Project non-PSD Meteorological Stations.

Station Name	Location	Coordinates	Elevation	Period of Data Collection
Pebble 3	Frying Pan Lake	59° 50' N 155° 18' W	1,000 feet	Nov. 19, 2005 - Present
Pebble 5A	NW of Kashanak Mountain	59° 53' N 155° 29' W	2,350 feet	July 1, 2007 - Present

Figure 1-1 shows a map of both the non-PSD and PSD-quality meteorological monitoring stations located near the Pebble Project ore body.

Figure 1-1. Map of the Pebble Project Area



2.0 Monitoring Parameters and Instrumentation

Figure 2-1 provides a photograph of the Pebble 3 meteorological station. The station consists of a 3-meter tower equipped with sensors to measure the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Wind speed, 3-meters above ground level (meters per second [m/s])
- Wind direction, 3-meters above ground level (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])
- Precipitation (millimeters [mm])

Precipitation measurements are collected at the station using a precipitation gauge coupled with a Wyoming wind screen carefully positioned to avoid interfering with the 3-meter tower measurements.

Figure 2-2 provides a photograph of the Pebble 5A meteorological station. The station consists of a 10-meter tower equipped with sensors to measure the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Air temperature, ten meters above ground (degrees Celsius [°C])
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]))
- Wind speed (meters per second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])

Table 2-1 lists the meteorological sensors used at the non-PSD station and includes the manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. A performance summary of the instruments and measurement parameters is provided in the subsequent section.

Figure 2-1. Pebble 3 (non-PSD) Meteorological Monitoring Station

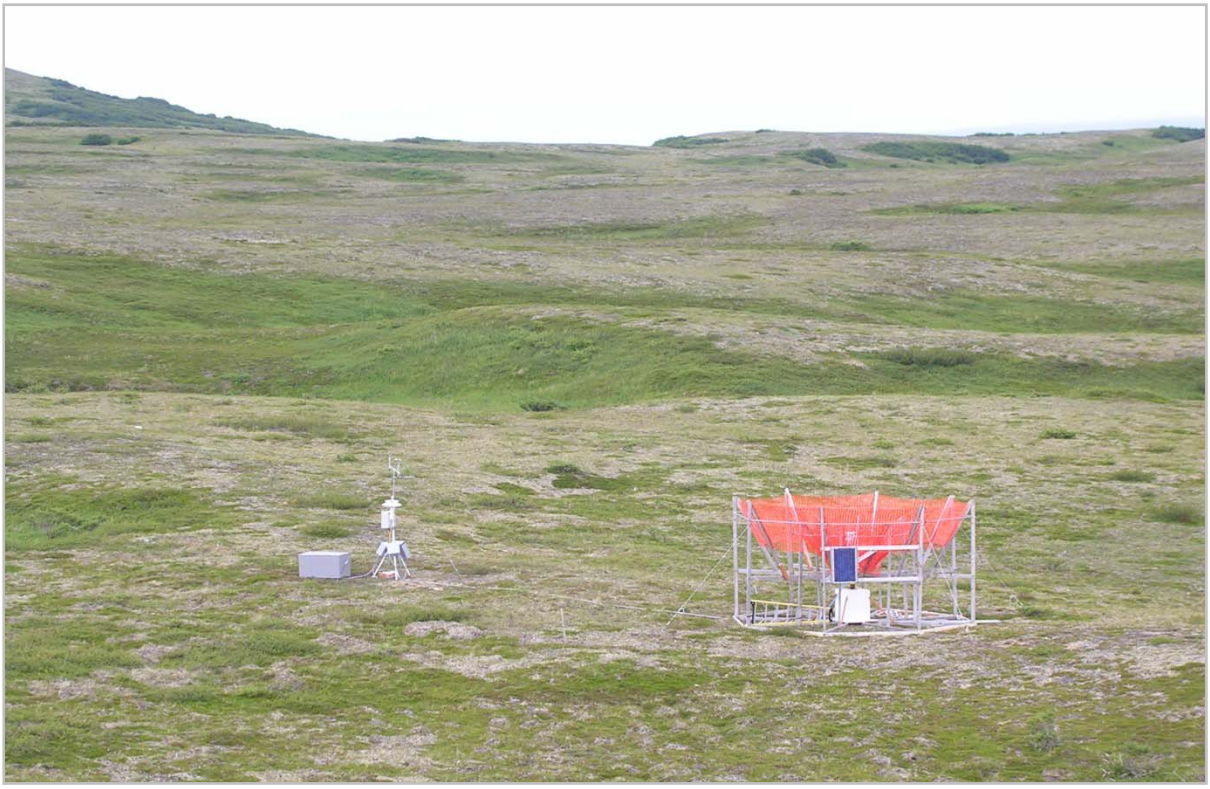


Figure 2-2. Pebble 5A (non-PSD) Meteorological Monitoring Station

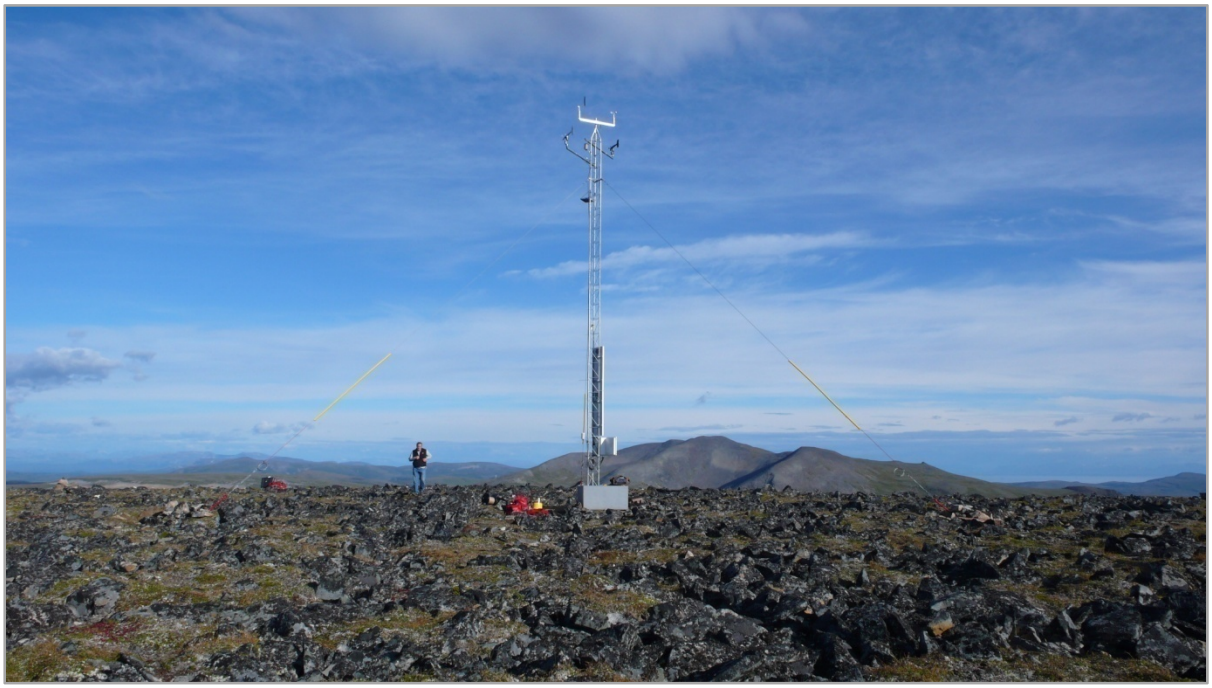


Table 2-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Wind Speed[1]	RM Young Co. ?????-AP	??	??	??	??	??
Wind Direction[1]	RM Young Co. ?????-AP	??	??	??	??	??
Wind Speed (3 meters)[3]	Met One, Inc. Model 010C	Three-cup anemometer	0.2 to 60 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction (3 meters)[3]	Met One, Inc. Model 020C	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 305 mm	± 0.254 mm	N/A[2]	N/A[2]

[1] Wind speed and wind direction measurements are collected using three different types of PSD-quality sensors at Pebble 5A.
[2] Not applicable. Instantaneous precipitation measurements are collected by the datalogger and subsequently totaled on an hourly basis.
[3] Wind speed and wind direction measurements collected using only one sensor at Pebble 3.

3.0 Station Performance Summaries

Quarterly and annual data recovery goals are 90 percent or better for PSD-quality meteorological monitoring, although at remote sites the acceptable recovery rate for meteorological data is 80 percent (EPA, 1987). Percent data capture is determined by dividing the number of hours of collected valid data by the number of possible hours of valid data collection. While the stations presented in this report are not PSD quality stations, the data recovery goals at the onset of the project were 80 percent or better per monitoring quarter. Because of the modifications and location changes made to the non-PSD meteorological stations during the station monitoring periods, the performance statistics are presented on a monthly basis.

Table 3-1 summarizes the hours of valid data capture on a monthly basis for the meteorological parameters measured at Pebble 3, while Table 3-2 summarizes the percent data capture on a monthly basis.

The quarterly data capture rates for the Pebble 3 meteorological parameters were greater than 90 percent. Data capture for the month of January was below 90 percent due to low voltages from the station battery bank resulted in a lost of data for approximately five days.

Table 3-3 summarizes the hours of valid data capture on a monthly basis for the meteorological parameters measured at Pebble 5A, while Table 3-4 summarizes the percent data capture on a monthly basis.

The quarterly data capture rates for the Pebble 5A meteorological parameters were greater than 90 percent except for wind speed (Climatronic and RM Young AQ) and wind direction (RM Young AQ) in Monitoring Quarter A and B due to storm damage. However the wind speed and wind direction for the RM Young AP captured greater than 90 percent of the data for this time period. Therefore, measurements from the secondary instruments can be used to supplement data requirements for possible future modeling and permitting needs.

Table 3-1. Pebble 3 Valid Hourly Data Capture

Period	Meteorological Parameter				
	2-m Temp	Wind Speed	Wind Direction	Sigma-Theta	Precip
January 2008	602	605	605	605	603
February 2008	696	696	696	696	696
March 2008	744	744	744	744	741
April 2008	**2,042**	**2,045**	**2,045**	**2,045**	**2,040**
May 2008	720	709	709	709	720
June 2008	744	744	744	744	744
July 2008	720	720	720	720	720
August 2008	**2,184**	**2,173**	**2,173**	**2,173**	**2,184**
September 2008	743	744	743	742	744
October 2008	744	744	744	744	744
November 2008	720	720	720	720	718
December 2008	**2,207**	**2,208**	**2,207**	**2,206**	**2,206**
Monitoring Period	**8,641**	**8,634**	**8,633**	**8,632**	**8,638**

Table 3-2. Pebble 3 Percent Data Capture

Period	Meteorological Parameter				
	2-m Temp	Wind Speed	Wind Direction	Sigma-Theta	Precip
January 2008	80.9%	81.3%	81.3%	81.3%	81.0%
February 2008	100%	100%	100%	100%	100%
March 2008	100%	100%	100%	100%	99.6%
Quarter A	**93.5%**	**93.6%**	**93.6%**	**93.6%**	**93.4%**
April 2008	100%	98.5%	98.5%	98.5%	100%
May 2008	100%	100%	100%	100%	100%
June 2008	100%	100%	100%	100%	100%
Quarter B	**100%**	**99.5%**	**99.5%**	**99.5%**	**100%**
July 2008	99.9%	100%	99.9%	99.7%	100%
August 2008	100%	100%	100%	100%	100%
September 2008	100%	100%	100%	100%	99.7%
Quarter C	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
October 2008	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%
December 2008	100%	100%	100%	100%	100%
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Period	**98.4%**	**98.3%**	**98.3%**	**98.3%**	**98.3%**

Table 3-3. Pebble 5A Valid Hourly Data Capture

Period	Meteorological Parameter											
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY-AQ)[2]	WD (RMY-AQ)	Sigma (RMY-AQ)	WS (RMY-AP)[3]	WD (RMY-AP)	Sigma (RMY-AP)
January 2008	744	744	744	492	744	744	0	0	0	744	744	744
February 2008	696	696	696	510	696	696	377	377	377	696	696	696
March 2008	744	744	744	687	744	744	602	602	602	744	744	744
April 2008	720	720	720	442	720	720	38	38	38	673	673	673
May 2008	744	744	744	604	744	744	744	744	744	744	744	744
June 2008	713	713	713	680	713	713	713	713	713	713	713	713
July 2008	744	744	744	744	744	744	744	744	744	744	744	744
August 2008	744	744	744	744	744	744	744	744	744	744	744	744
September 2008	720	720	720	720	720	720	720	720	720	720	720	720
October 2008	744	744	744	649	744	744	693	693	693	681	681	681
November 2008	720	720	720	450	720	720	603	603	603	646	646	646
December 2008	744	744	744	674	744	744	744	744	744	744	744	744
Monitoring Period	**8,777**	**8,777**	**8,777**	**7,396**	**8,777**	**8,777**	**6,722**	**6,722**	**6,722**	**8,593**	**8,593**	**8,593**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY-AQ = R.M. Young AQ wind speed and wind direction sensor.
[3] RMY-AP = R.M. Young AP wind speed and wind direction sensor.

Table 3-4. Pebble 5A Percent Data Capture

Period	Meteorological Parameter											
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY-AQ)[2]	WD (RMY-AQ)	Sigma (RMY-AQ)	WS (RMY-AP)[3]	WD (RMY-AP)	Sigma (RMY-AP)
January 2008	100%	100%	100%	66.1%	100%	100%	0.0%	0.0%	0.0%	100%	100%	100%
February 2008	100%	100%	100%	73.3%	100%	100%	54.2%	54.2%	54.2%	100%	100%	100%
March 2008	100%	100%	100%	92.3%	100%	100%	80.9%	80.9%	80.9%	100%	100%	1003%
Quarter A	**100%**	**100%**	**100%**	**77.3%**	**100%**	**100%**	**44.8%**	**44.8%**	**44.8%**	**100%**	**100%**	**100%**
April 2008	100%	100%	100%	61.4%	100%	100%	5.3%	5.3%	5.3%	93.5%	93.5%	93.5%
May 2008	100%	100%	100%	81.2%	100%	100%	100%	100%	100%	100%	100%	100%
June 2008	99.0%	99.0%	99.0%	94.4%	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%
Quarter B	**99.7%**	**99.7%**	**99.7%**	**79.0%**	**99.7%**	**99.7%**	**68.5%**	**68.5%**	**68.5%**	**97.5%**	**97.5%**	**97.5%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter C	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
October 2008	100%	100%	100%	87.2%	100%	100%	93.1%	93.1%	93.1%	91.5%	91.5%	91.5%
November 2008	100%	100%	100%	62.5%	100%	100%	83.8%	83.8%	83.8%	89.7%	89.7%	89.7%
December 2008	100%	100%	100%	90.6%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter D	**100%**	**100%**	**100%**	**80.3%**	**100%**	**100%**	**92.4%**	**92.4%**	**92.4%**	**93.8%**	**93.8%**	**93.8%**
Monitoring Period	**99.9%**	**99.9%**	**99.9%**	**84.2%**	**99.9%**	**99.9%**	**76.5%**	**76.5%**	**76.5%**	**97.8%**	**97.8%**	**97.8%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY-AQ = R.M. Young AQ wind speed and wind direction sensor.
[3] RMY-AP = R.M. Young AP wind speed and wind direction sensor.

4.0 Meteorological Data Summary

4.1 Temperature

Figure 4-1 provides the time series of the 2-meter temperatures at Pebble 3 during the 2008 monitoring period. Table 4-1 provides temperature statistics for the Pebble 3 station for the 2008 monitoring year.

Hourly mean temperatures at Pebble 3 varied from -31.8 °C measured on February 12, 2008 to 21.0 °C measured on July 31, 2008. The minimum and maximum monthly mean temperatures at Pebble 3 were -12.0 °C and 10.7 °C for the months of February 2008 and August 2008, respectively. The mean temperature recorded at Pebble 3 during the monitoring period was -1.1 °C.

Figure 4-2 provides the time series of the 2-meter and 10-meter temperatures at Pebble 5A during the 2008 monitoring period. Table 4-2 and 4-3 provides temperature statistics for the Pebble 5A station for the 2008 monitoring year.

Hourly mean temperatures at Pebble 5A varied from -33.5 °C measured on January 12, 2008 to 17.6 °C measured on July 31, 2008. The minimum and maximum monthly mean temperatures at Pebble 5A were -15.3 °C and 8.8 °C for the months of January 2008 and August 2008, respectively. The mean temperature recorded at Pebble 5A during the monitoring period was -3.2 °C.

At the Iliamna Airport, the nearest routinely operated station located approximately 25 km east to the east of Pebble 3, temperatures varied from -29.9 °C measured on January 12, 2008 to 17.0 °C measured July 29, 2008 with a mean temperature of 0.2 °C

Figure 4-1. Pebble 3 Hourly Average Temperatures

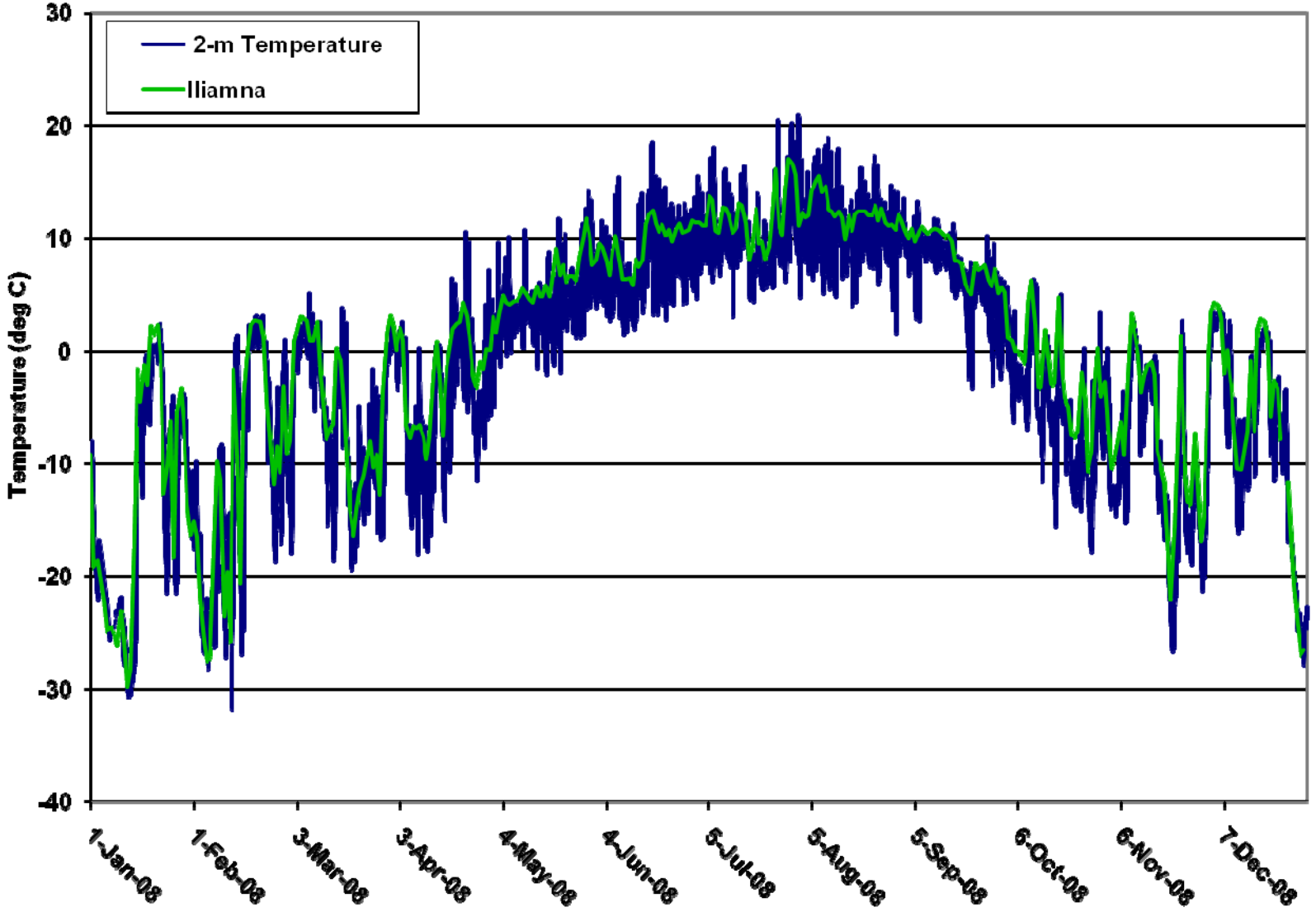


Figure 4-2. Pebble 5A Hourly Average Temperatures

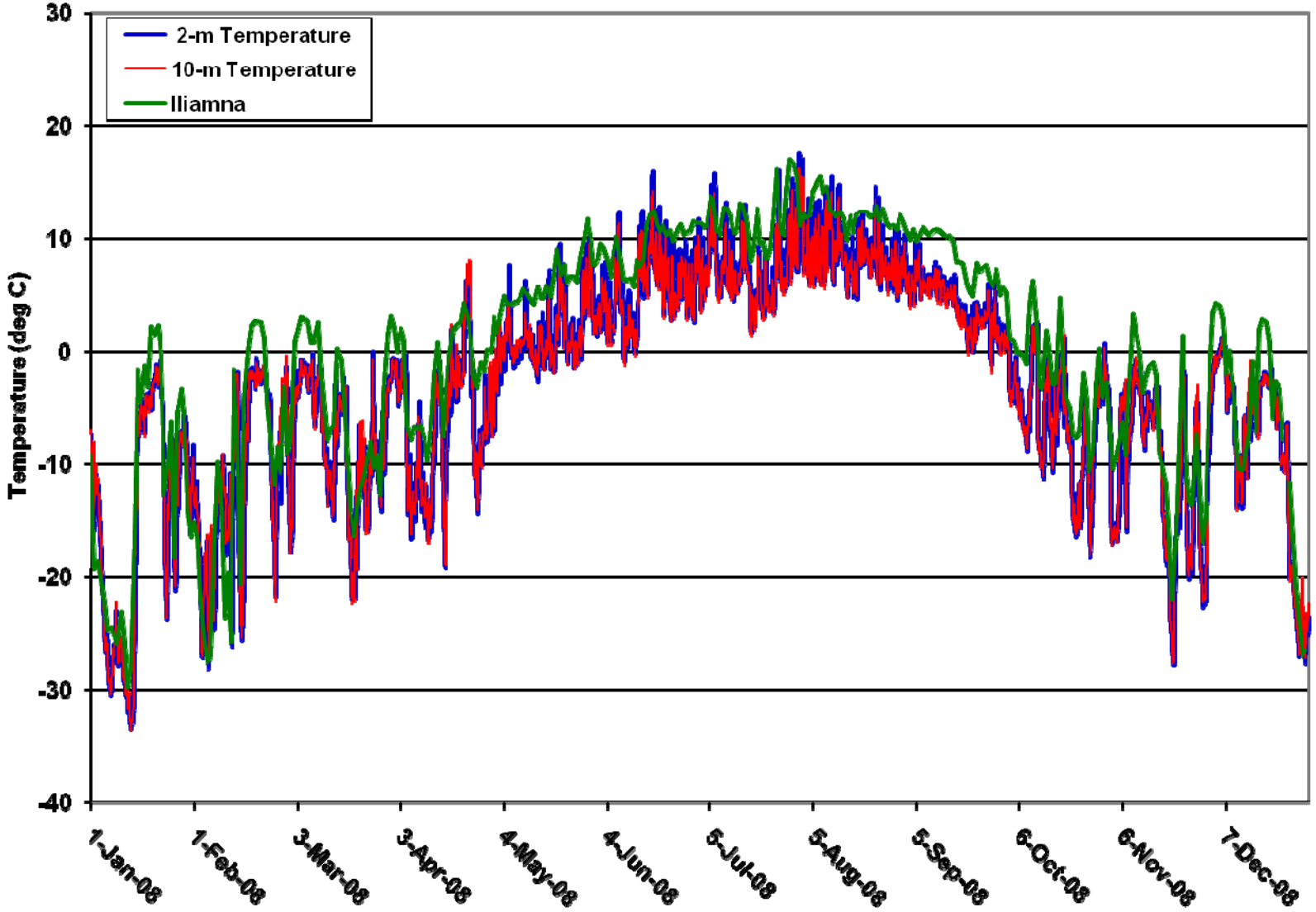


Table 4-1. Pebble 3 Temperature Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
January 2008	-11.8	1.0	-29.9	2.4	-30.7
February 2008	-12.0	2.0	-26.4	3.1	-31.8
March 2008	-6.1	1.9	-17.4	5.0	-19.4
Quarter A	**-9.8**	**2.0**	**-29.9**	**5.0**	**-31.8**
April 2008	-4.3	2.6	-13.0	10.5	-18.0
May 2008	4.0	9.3	-1.5	14.1	-4.9
June 2008	8.1	13.3	3.9	18.5	1.5
Quarter B	**2.6**	**13.3**	**-13.0**	**18.5**	**-18.0**
July 2008	10.3	13.2	6.7	21.0	3.1
August 2008	10.7	15.0	8.2	18.9	1.7
September 2008	7.0	11.0	2.4	13.5	-3.3
Quarter C	**9.4**	**15.0**	**2.4**	**21.0**	**-3.3**
October 2008	-4.3	4.2	-13.8	6.3	-17.7
November 2008	-9.7	1.5	-25.0	2.6	-26.6
December 2008	-7.6	3.1	-26.1	3.7	-27.8
Quarter D	**-7.2**	**4.2**	**-26.1**	**6.3**	**-27.8**
Monitoring Period	**-1.1**	**15.0**	**-29.9**	**21.0**	**-31.8**

Table 4-2. Pebble 5A Temperature (2-m) Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
January 2008	-15.3	-1.8	-31.9	-0.9	-33.5
February 2008	-12.0	-1.7	-25.4	-0.6	-28.1
March 2008	-8.1	-1.5	-20.5	-0.1	-22.2
Quarter A	**-11.8**	**-1.5**	**-31.9**	**-0.1**	**-33.5**
April 2008	-6.5	4.7	-15.2	6.2	-19.1
May 2008	1.4	6.5	-3.7	10.2	-6.9
June 2008	5.8	11.8	0.8	16.0	-0.9
Quarter B	**0.2**	**11.8**	**-15.2**	**16.0**	**-19.1**
July 2008	7.6	12.1	3.6	17.6	1.7
August 2008	8.8	14.1	6.7	17.0	4.6
September 2008	4.4	7.8	1.0	10.3	-1.2
Quarter C	**7.0**	**14.1**	**1.0**	**17.6**	**-1.2**
October 2008	-5.9	1.6	-15.9	2.5	-18.2
November 2008	-10.8	-2.2	-23.7	-0.8	-27.8
December 2008	-8.9	0.4	-25.9	1.1	-27.6
Quarter D	**-8.5**	**1.6**	**-25.9**	**2.5**	**-27.8**
Monitoring Period	**-3.3**	**14.1**	**-31.9**	**17.6**	**-33.5**

Table 4-3. Pebble 5A Temperature (10-m) Summary

Period	Monthly Mean Temperature (°C)	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Maximum Hourly Temperature (°C)	Minimum Hourly Temperature (°C)
January 2008	-15.1	-1.9	-31.8	-1.0	-33.5
February 2008	-11.5	-1.8	-24.9	-0.4	-27.5
March 2008	-8.0	-1.6	-20.8	-0.7	-22.3
Quarter A	**-11.6**	**-1.6**	**-31.8**	**-0.4**	**-33.5**
April 2008	-6.4	7.0	-14.8	8.2	-19.0
May 2008	1.3	6.3	-3.3	9.5	-6.8
June 2008	5.2	11.0	0.4	14.2	-1.2
Quarter B	**0.1**	**11.0**	**-14.8**	**14.2**	**-19.0**
July 2008	7.2	11.5	3.3	16.2	1.4
August 2008	8.4	13.5	6.3	15.5	4.8
September 2008	4.1	7.6	0.8	9.6	-1.8
Quarter C	**6.6**	**13.5**	**0.8**	**16.2**	**-1.8**
October 2008	-5.9	1.5	-15.9	2.7	-18.2
November 2008	-10.6	-2.1	-23.3	-0.5	-27.7
December 2008	-8.7	0.2	-25.5	1.1	-27.3
Quarter D	**-8.4**	**1.5**	**-25.5**	**2.7**	**-27.7**
Monitoring Period	**-3.3**	**13.5**	**-31.8**	**16.2**	**-33.5**

4.2 Horizontal Wind

4.2.1 Wind Speed (WS) Climatology

Table 4-4 provides a statistical summary of the wind speed measurements during the 2008 year of meteorological monitoring at the Pebble 3 station. The mean hourly average wind speed from January 1, 2008 through December 31, 2008 was 4.87 m/s for the wind sensor. A maximum hourly average wind speed of 18.71 m/s was measured by the wind sensor on November 20, 2008.

Table 4-5 provides a statistical summary of the Climatronics, RM Young (AQ) and RM Young (AP) wind speed measurements during the 2008 year of meteorological monitoring at the Pebble 5A station. The mean hourly average wind speed from January 1, 2008 through December 31, 2008 was 6.92 m/s, 8.34 m/s and 8.24 m/s for the for the Climatronics, RM Young (AQ) and RM Young (AP) sensors, respectively. A maximum hourly average wind speed of 40.70 m/s was measured by the Climatronics sensor on December 3, 2008. This extreme observation was also collaborated by the RM Young sensors.

Table 4-6 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 25 km east from the Pebble 3 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.94 m/s, while the maximum daily average wind speed was 16.99 m/s, recorded on January 19, January 21, and May 23, 2008.

Table 4-4. Average and Maximum Wind Speeds at Pebble 3 non-PSD Station

Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
January 2008	6.44	17.82
February 2008	6.22	14.73
March 2008	5.41	15.03
Quarter A	**5.99**	**17.82**
April 2008	5.01	17.17
May 2008	4.52	15.33
June 2008	3.50	12.38
Quarter B	**4.34**	**17.17**
July 2008	3.87	10.53
August 2008	2.80	9.57
September 2008	3.84	11.44
Quarter C	**3.50**	**11.44**
October 2008	5.09	16.22
November 2008	5.85	18.71
December 2008	6.23	17.05
Quarter D	**5.72**	**18.71**
Monitoring Period	**4.87**	**18.71**

Table 4-5. Average and Maximum Wind Speeds at Pebble 5A Station

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY-AQ)	Mean Hourly Average Wind Speed (m/s) (RMY-AP)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY-AQ)	Maximum Hourly Average Wind Speeds (m/s) (RMY-AP)
January 2008	3.81	N/A[1]	6.75	27.85	N/A[1]	34.30
February 2008	6.04	10.76	8.39	31.58	31.49	29.76
March 2008	7.47	9.03	9.64	31.78	34.93	33.47
Quarter A	**5.97**	**9.70**	**8.26**	**31.78**	**34.93**	**34.30**
April 2008	4.90	5.65	8.45	24.85	8.07	28.35
May 2008	11.05	10.98	10.59	39.35	38.99	36.77
June 2008	7.14	7.16	7.39	29.34	27.79	27.42
Quarter B	**7.94**	**9.02**	**8.84**	**39.35**	**38.99**	**36.77**
July 2008	8.54	7.88	8.22	25.42	23.68	23.85
August 2008	5.83	5.43	5.64	22.53	21.57	21.28
September 2008	8.82	8.42	8.50	29.23	27.74	27.44
Quarter C	**7.72**	**7.23**	**7.44**	**29.23**	**27.74**	**27.44**
October 2008	4.99	7.27	7.46	32.21	29.38	29.02
November 2008	3.01	6.78	6.30	23.94	25.01	23.79
December 2008	8.51	10.75	11.28	40.70	38.63	38.06
Quarter D	**5.83**	**8.39**	**8.47**	**40.70**	**38.63**	**38.06**
Monitoring Year	**6.92**	**8.34**	**8.24**	**40.70**	**38.99**	**38.06**

[1] Sensor damaged ??? Data invalidated January 1, 2008 through February 11, 2008

Table 4-6. Average and Maximum Wind Speeds at Iliamna

Monitoring Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
Quarter A	4.23	16.99
Quarter B	3.87	16.99
Quarter C	3.22	12.52
Quarter D	4.46	14.30
Monitoring Year	**3.94**	**16.99**

4.2.2 Wind Direction (WD) Climatology

Figures 4-3 and 4-4 provide the annual and quarterly wind roses, respectively, for the Pebble 3 station. Winds were predominantly from the north, east, southeast and southwest directions. During the monitoring year, the majority of winds exceeding 11 m/s came from the north and east directions. Quarter A winds were dominated by a southwestern component with minor components from the north, south, west and northwest. Quarters B and C both exhibited major components from the north, east, southeast, and somewhat for the southwest with minor components from all other directions. The Quarter D wind rose exhibits major wind components from the north, east and northeast directions with other minor wind components from the southeast, southwest and northwest directions.

Figures 4-5, 4-6, 4-7and 4-8 provide the annual and quarterly wind roses, respectively, for the Pebble 5A station. Winds were predominantly from the north and southeast directions. During the monitoring year, the majority of winds exceeding 11 m/s came from the southeast direction. Quarter A and D winds were dominated by northern and southeastern components with minor components from the all other directions. Quarters B and C both exhibited a major component from the southeast with minor components from all other directions.

The annual and quarterly wind analysis tables for the Climatronics, RM Young-AQ and RM Young-AP wind measurements at Pebble 3 and 5A are provided in Appendix C.

Appendix C also shows the 2008 monitoring year wind roses (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological stations and vicinity. The wind roses are centered over the location of the Pebble stations.

Figure 4-3. 2008 Pebble 3 non-PSD Meteorological Station Wind Rose

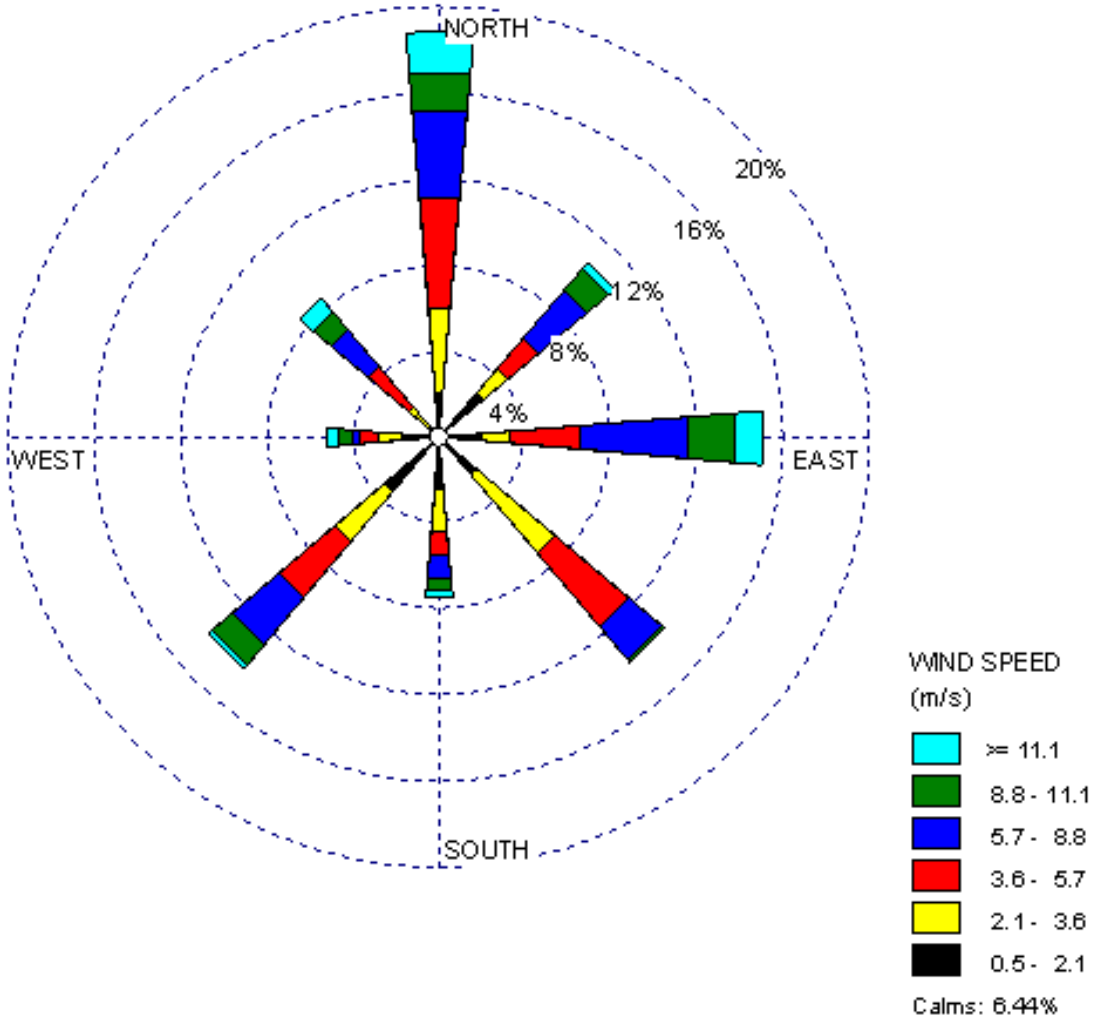
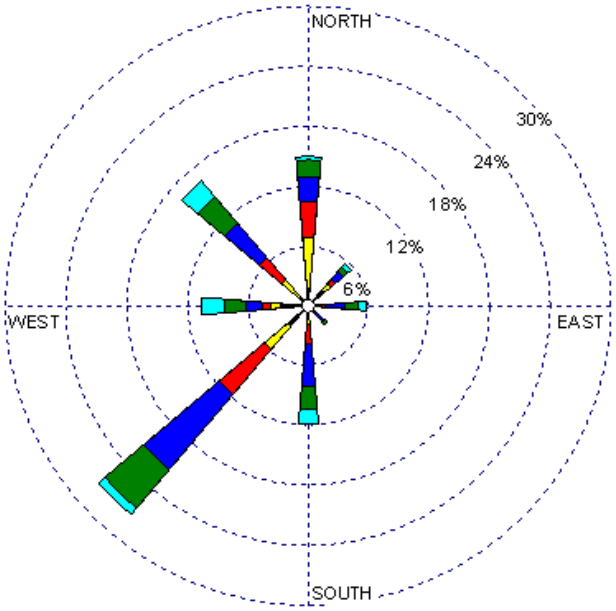
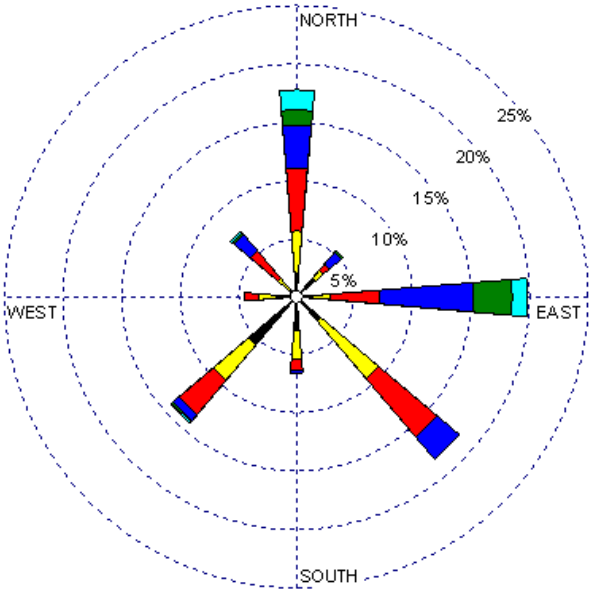


Figure 4-4. Quarterly Pebble 3 Wind Roses

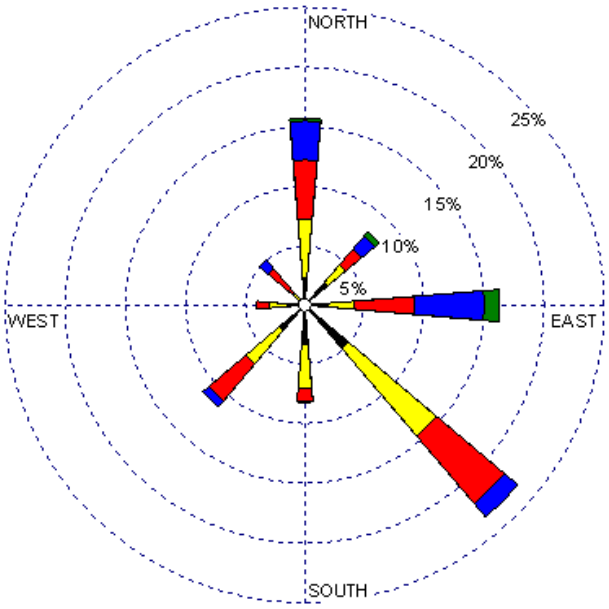
Quarter A (1/1/08 – 3/31/08)



Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)

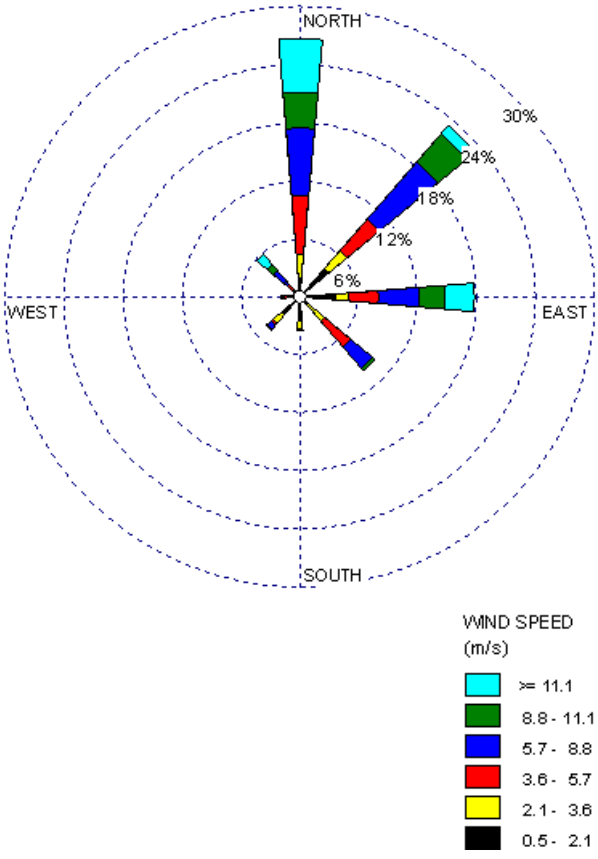


Figure 4-5. 2008 Pebble 5A non-PSD Meteorological Station Wind Roses

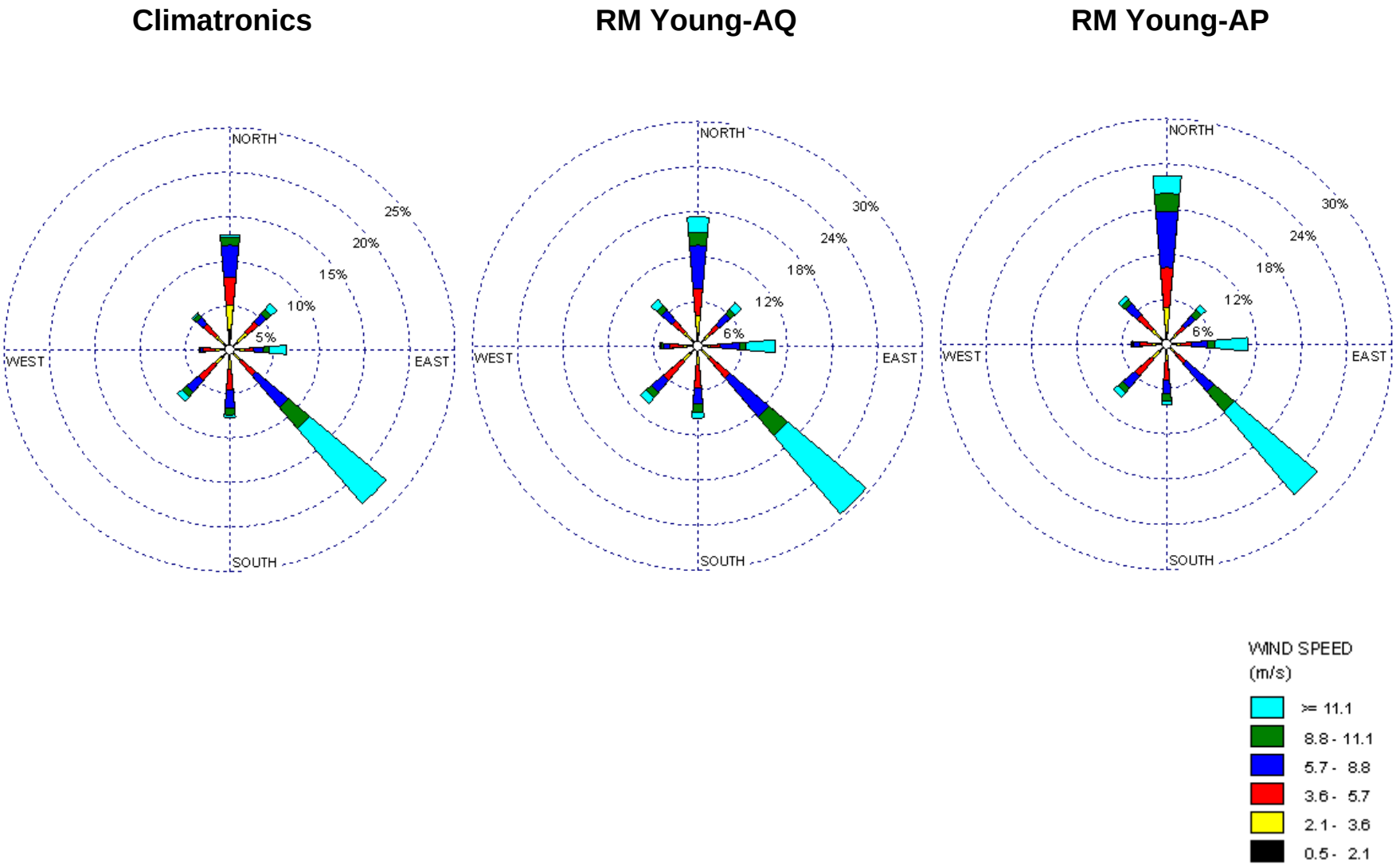
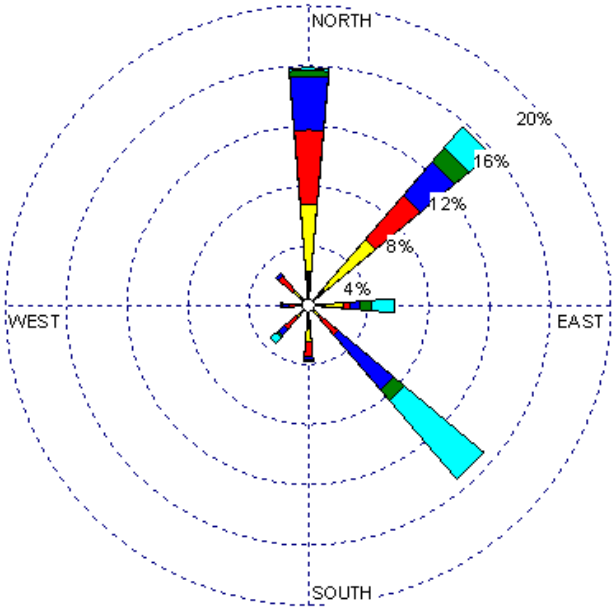
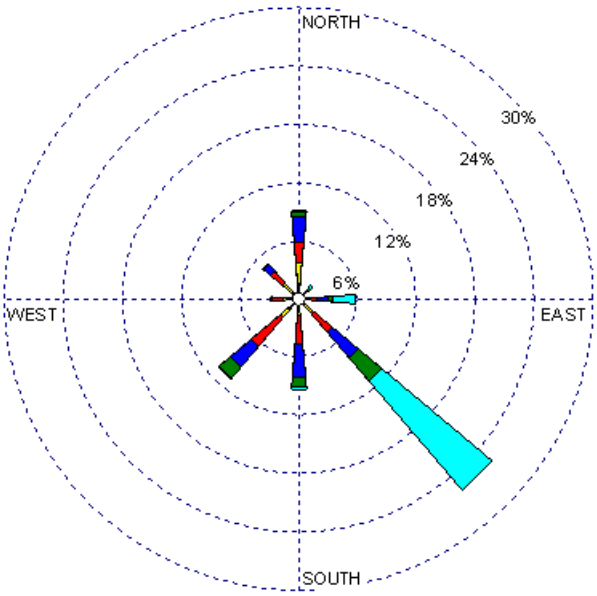


Figure 4-6. Quarterly Pebble 5A Wind Roses (Climatronics)

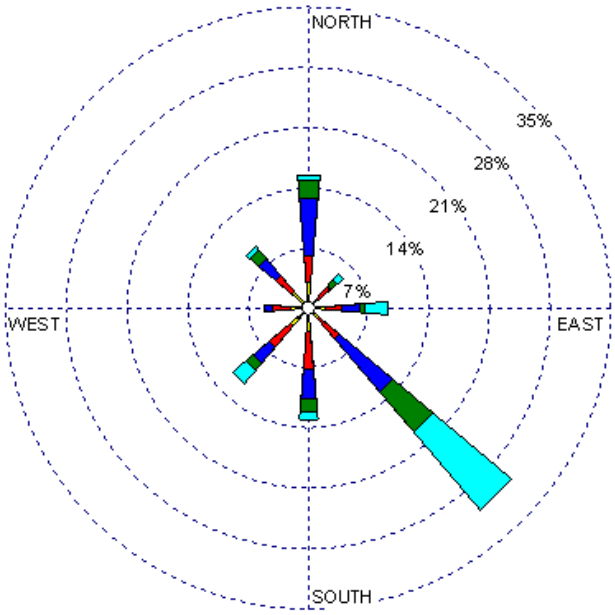
Quarter A (1/1/08 – 3/31/08)



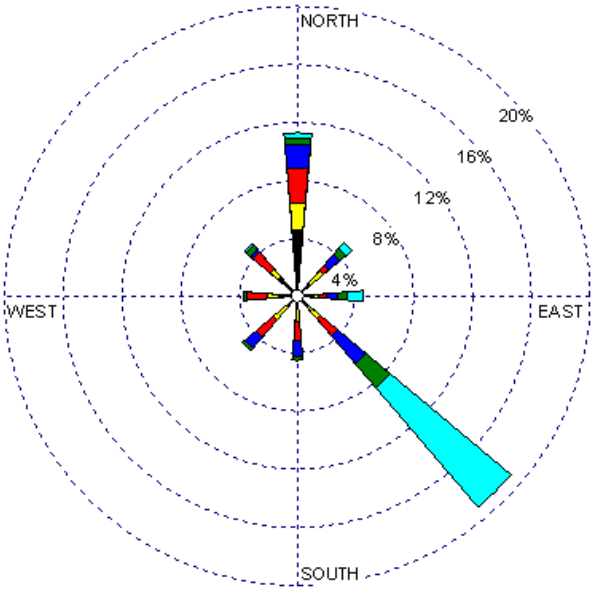
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



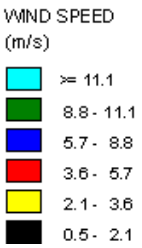
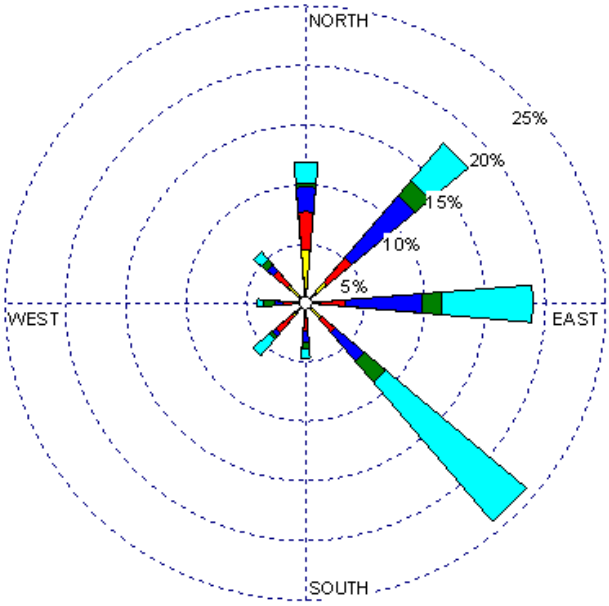
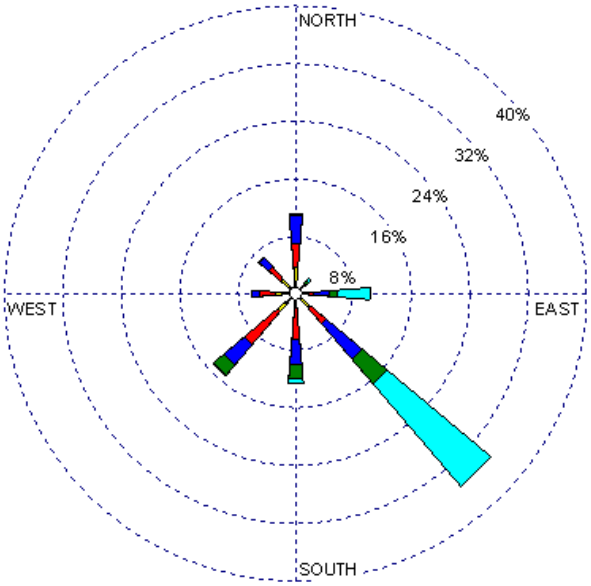


Figure 4-7. Quarterly Pebble 5A Wind Roses (RM Young-AQ)

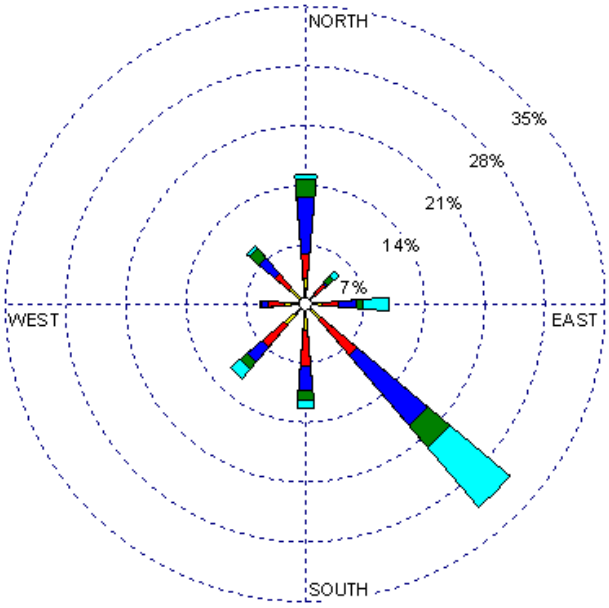
Quarter A (1/1/08 – 3/31/08)



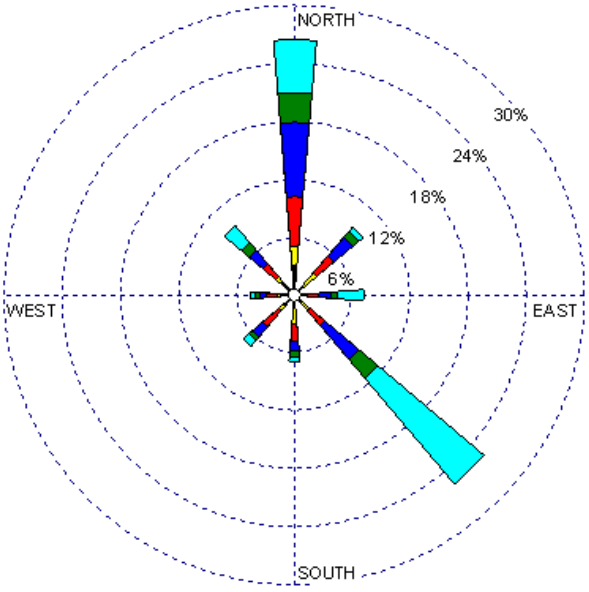
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



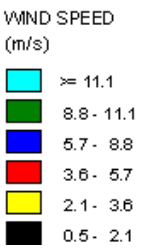
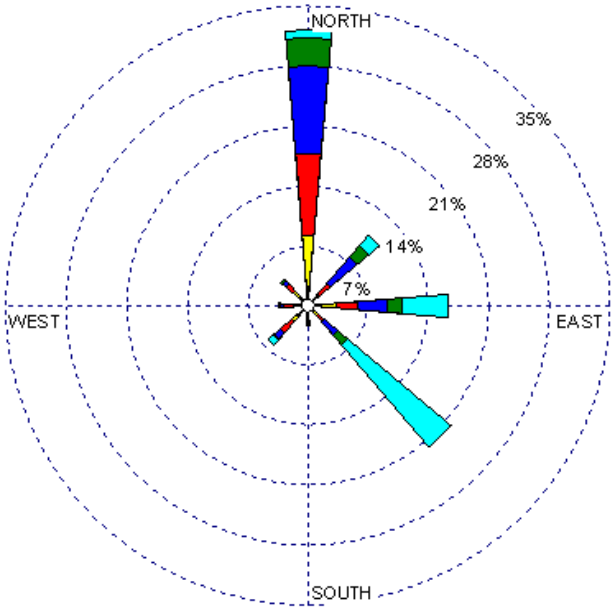
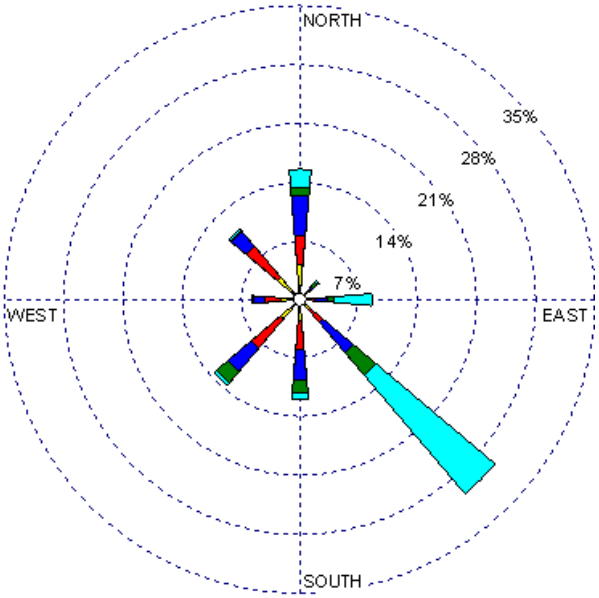


Figure 4-8. Quarterly Pebble 5A Wind Roses (RM Young-AP)

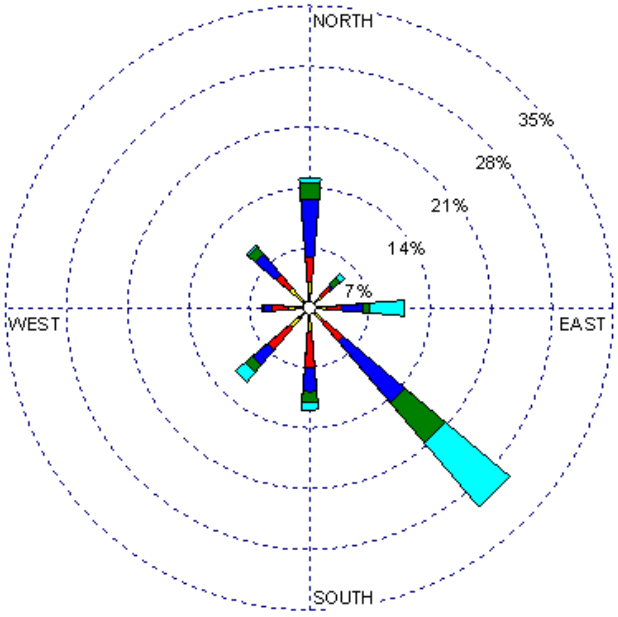
Quarter A (1/1/08 – 3/31/08)



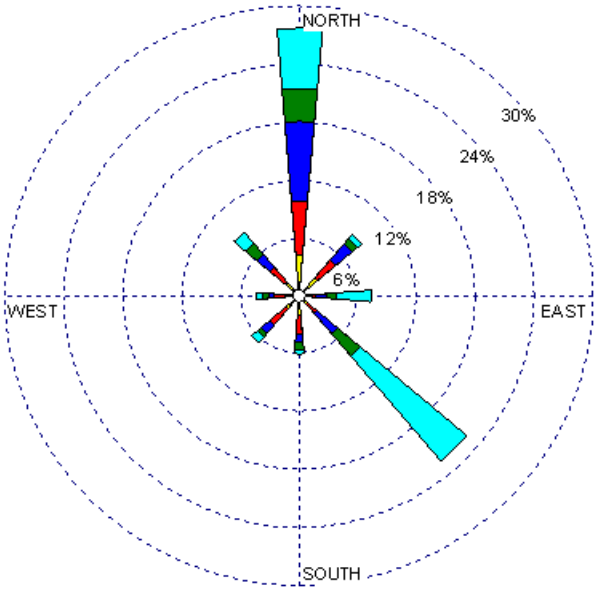
Quarter B (4/1/08 – 6/30/08)

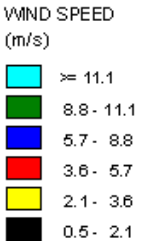


Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)





4.3 Precipitation

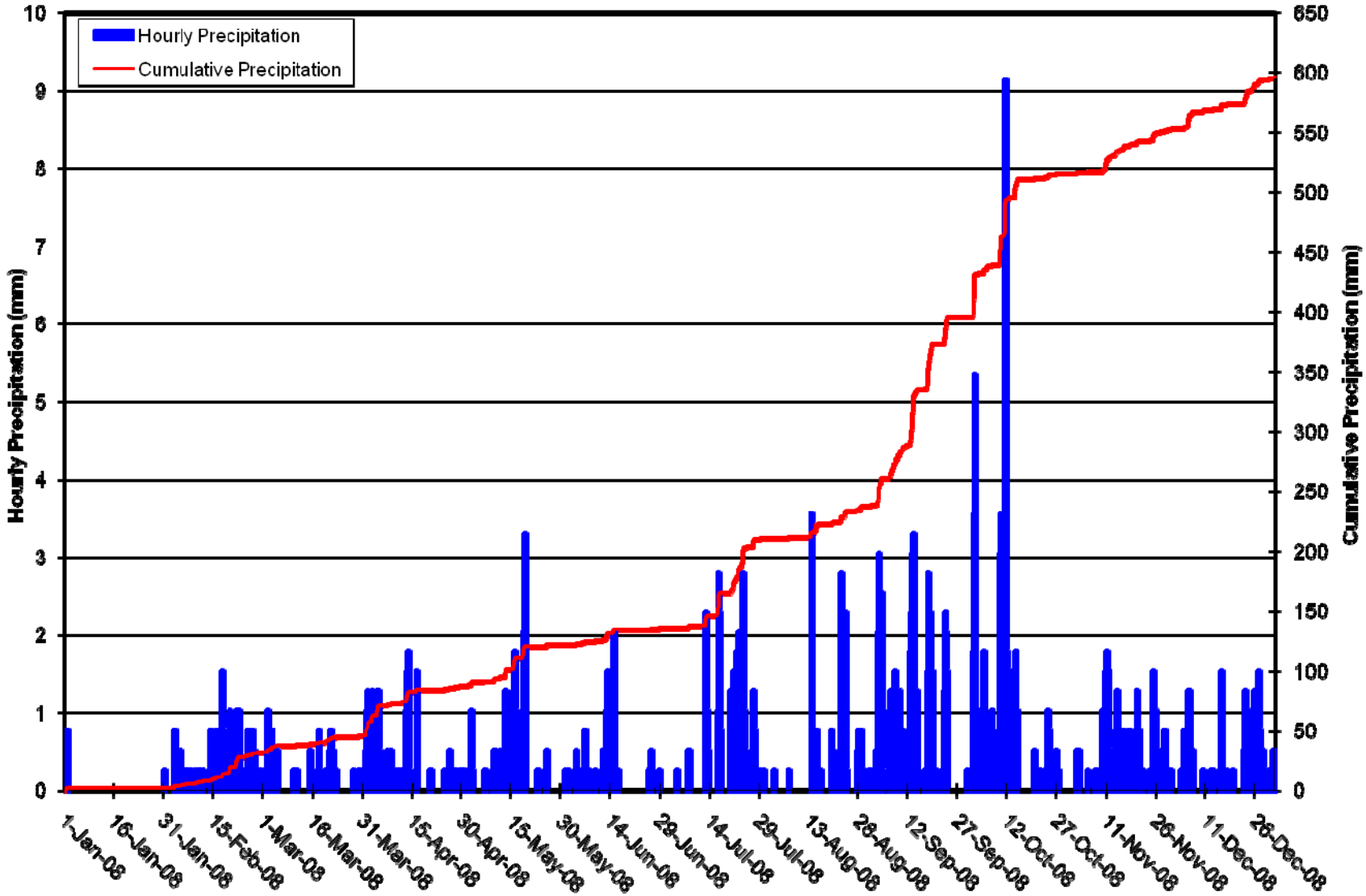
Table 4-7 provides monthly precipitation rates, which include rain and snowfall, for the Pebble 3 non-PSD station.

During the 2008 monitoring period, monthly precipitation rates at Pebble 3 were greatest during September and October 2008. September 2008 had the greatest amount of precipitation with 157.5 mm of total rain and snow. The month with the least amount of precipitation during the Pebble 3 monitoring period was January 2008, which had 1.8 mm of total rainfall. The greatest daily precipitation was 32.5 mm recorded on September 13, 2008.

Table 4-7. Pebble 3 Cumulative and Maximum Daily Precipitation

Period	Cumulative Monthly Precipitation (mm)	Maximum Daily Precipitation (mm)
January 2008	1.8	1.3
February 2008	29.7	6.4
March 2008	14.7	2.3
April 2008	40.9	10.4
May 2008	34.5	9.9
June 2008	13.7	3.0
July 2008	74.9	13.2
August 2008	27.9	5.1
September 2008	157.5	32.5
October 2008	120.1	30.5
November 2008	36.8	8.1
December 2008	43.4	8.6
Monitoring Period	**596.2**	**32.5**

Figure 4-9. Pebble 3 Hourly and Cumulative Precipitation



5.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2008.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Alaska State Department of Environmental Conservation (ADEC), *PSD Quality Ambient Air Quality and Meteorological Monitoring Annual Data Report Format*, Division of Air Quality, Air Monitoring & Quality Assurance Program, 2005.

Appendix A

Pebble 3 Validated Continuous Data Summaries

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-9.0	-8.6	-8.3	-8.3	-8.3	-8.4	-8.5	-8.0	-9.2	-9.0	-9.1	-9.9	-11.6	-12.0	-13.0	-12.9	-13.6	-12.9	-13.3	-14.4	-15.1	-15.3	-14.6	-16.0	-8.0	-16.0	-11.2
2	0.0												-18.9	-18.8	-18.9	-19.4	-19.6	-19.4	-18.5	-20.5	-21.4	-20.7	-21.2	-21.1	0.0	-21.4	-18.3
3	-21.3	-21.5	-21.1	-21.5	-22.0	-21.6	-21.9	-20.7	-19.8	-18.4	-17.7	-18.0	-18.2	-17.0	-16.9	-17.5									-16.9	-22.0	-19.7
4															-19.7	-20.0									-19.7	-20.0	-19.9
5													-22.3	-22.2	-21.9	-22.0									-21.9	-22.3	-22.1
6																-25.6									-25.6	-25.6	-25.6
7																											
8													-24.0		-23.4	-23.1									-23.1	-24.0	-23.5
9														-23.1	-22.6	-22.5	-22.6	-22.8	-23.0	-22.8	-22.5	-22.3	-22.0	-22.0	-22.0	-23.1	-22.6
10	-21.8	-22.2	-22.5	-22.9	-23.1	-23.3	-23.4	-23.5	-23.5	-24.0	-24.0	-23.6	-23.4	-23.5	-24.0	-24.4	-25.0	-25.5	-26.0	-26.2	-26.5	-27.2	-27.8	-26.9	-21.8	-27.8	-24.3
11	-25.7	-24.8	-24.6	-24.6	-25.3	-26.2	-26.4	-26.5	-27.3	-27.7	-26.9	-27.2	-27.1	-26.7	-26.9	-26.4	-26.8	-27.6	-28.0	-28.3	-28.7	-28.9	-29.7	-29.6	-24.6	-29.7	-27.0
12	-29.9	-30.1	-30.0	-30.2	-30.4	-30.4	-30.3	-30.5	-30.7	-30.3	-30.1	-30.1	-29.9	-29.1	-29.0	-29.0	-29.1	-29.3	-29.8	-30.1	-29.7	-30.0	-30.3	-30.4	-29.0	-30.7	-29.9
13	-30.2	-29.4	-29.1	-29.2	-28.7	-28.0	-28.6	-28.6	-28.6	-28.6	-29.2	-28.8	-29.1	-28.2	-27.2	-26.7	-27.3	-27.8	-28.4	-27.6	-27.4	-27.1	-27.9	-27.7	-26.7	-30.2	-28.3
14	-26.9	-26.9	-26.7	-26.5	-27.1	-25.9	-25.6	-25.5	-24.2	-15.7	-13.3	-12.1	-11.2	-10.9	-10.5	-9.8	-9.4	-8.7	-7.9	-7.1	-6.7	-6.6	-6.1	-5.8	-5.8	-27.1	-15.7
15	-4.0	-3.5	-3.2	-3.0	-2.9	-4.1	-4.6	-4.3	-4.6	-4.3	-4.3	-4.3	-4.3	-4.0	-4.0	-4.1	-4.1	-4.3	-4.3	-4.2	-4.1	-4.1	-3.7	-3.4	-2.9	-4.6	-4.0
16	-3.5	-3.6	-3.8	-4.3	-5.6	-5.9	-6.8	-7.9	-11.1	-12.4	-12.9	-9.2	-6.9	-4.5	-3.1	-3.0	-3.3	-3.7	-3.8	-4.8	-7.3	-6.8	-5.1	-5.6	-3.0	-12.9	-6.0
17	-6.3	-6.1	-5.5	-3.4	-2.5	-2.3	-2.4	-2.2	-1.8	-1.3	-1.2	-1.0	-1.2	-0.6	-0.6	-0.3	-0.6	-1.2	-1.5	-1.6	-1.6	-1.6	-1.7	-1.8	-0.3	-6.3	-2.1
18	-1.9	-1.9	-2.1	-2.2	-2.4	-2.3	-2.5	-2.3	-2.5	-2.6	-2.5	-2.4	-2.3	-1.7	-1.4	-2.3	-2.2	-4.9	-6.4	-5.6	-2.6	-2.2	-2.6	-3.0	-1.4	-6.4	-2.7
19	-3.3	-3.4	-2.8	-2.1	-2.2	-1.9	-0.9	-0.3	-0.6	-0.8	0.0	0.5	0.4	0.3	0.2	0.0	0.1	0.4	0.3	0.1	0.2	0.2	0.3	0.2	0.5	-3.4	-0.6
20	0.1	0.0	-0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.1	0.2	0.0	0.0	0.5	-0.2	0.2
21	-0.4	0.0	-0.1	-0.3	-1.0	-0.3	-0.1	0.2	0.3	0.4	0.7	1.2	1.5	1.8	2.1	2.2	2.3	2.3	2.4	2.0	1.5	1.4	1.4	1.9	2.4	-1.0	1.0
22	1.8	0.9	1.5	0.8	0.5	0.3	0.2	-0.3	-0.5	-0.6	-1.1	-2.1	-2.7	-3.2	-3.9	-4.1	-4.4	-4.6	-4.6	-4.9	-5.2	-5.7	-5.3	-4.9	1.8	-5.7	-2.2
23	-5.5	-6.9	-7.9	-9.0	-11.2	-12.9	-14.2	-15.3	-15.9	-16.4	-17.0	-17.2	-17.1	-17.4	-17.8	-18.4	-19.2	-20.1	-20.6	-20.9	-21.1	-21.4	-21.2	-20.8	-5.5	-21.4	-16.1
24	-20.0	-19.4	-19.4	-18.9	-18.5	-18.1	-17.2	-14.5	-10.9	-10.0	-9.3	-9.0	-9.2	-9.2	-8.8	-8.3	-8.0	-8.1	-8.0	-7.8	-7.6	-7.0	-6.6	-6.6	-6.6	-20.0	-11.7
25	-6.6	-6.6	-6.4	-7.2	-7.1	-6.3	-6.6	-6.2	-6.3	-4.7	-4.9	-4.8	-4.6	-4.0	-4.1	-4.2	-4.4	-4.0	-4.4	-6.8	-9.3	-11.5	-13.2	-15.1	-4.0	-15.1	-6.6
26	-17.1	-17.2	-17.1	-17.9	-18.6	-19.2	-19.5	-19.8	-19.6	-20.6	-20.3	-21.1	-21.4	-20.4	-21.0	-21.2	-20.2	-20.0	-19.8	-20.4	-20.4	-20.5	-17.6	-12.3	-12.3	-21.4	-19.3
27	-11.5	-11.0	-10.6	-10.3	-9.6	-9.1	-8.7	-8.3	-7.3	-6.6	-6.0	-5.8	-5.5	-5.6	-5.4	-5.3	-5.2	-5.1	-5.0	-4.6	-4.6	-4.8	-4.6	-4.5	-4.5	-11.5	-6.9
28	-4.4	-4.5	-4.5	-4.6	-4.5	-4.5	-4.9	-5.4	-5.4	-5.5	-5.4	-5.2	-4.9	-4.8	-4.4	-4.2	-3.9	-3.8	-5.2	-7.5	-6.9	-6.6	-5.7	-5.4	-3.8	-7.5	-5.1
29	-5.4	-4.9	-4.2	-4.0	-4.1	-5.3	-6.0	-7.0	-8.0	-7.8	-7.8	-7.0	-7.0	-6.3	-6.1	-6.3	-7.3	-8.8	-9.6	-8.6	-9.0	-11.0	-12.4	-11.4	-4.0	-12.4	-7.3
30	-12.1	-14.1	-13.2	-12.3	-11.6	-10.6	-10.5	-11.6	-11.9	-11.7	-12.5	-13.3	-13.2	-12.1	-12.6	-12.2	-12.9	-13.1	-12.6	-12.2	-11.8	-11.8	-13.2	-13.6	-10.5	-14.1	-12.4
31	-13.4	-14.2	-14.3	-14.1	-15.2	-14.5	-14.5	-13.5	-13.4	-15.0	-15.6	-16.6	-14.7	-12.4	-10.7	-11.8	-11.5	-12.0	-13.3	-14.0	-15.2	-15.5	-17.0	-17.5	-10.7	-17.5	-14.2
Max.	**1.8**	**0.9**	**1.5**	**0.8**	**0.5**	**0.3**	**0.2**	**0.2**	**0.3**	**0.4**	**0.7**	**1.2**	**1.5**	**1.8**	**2.1**	**2.2**	**2.3**	**2.3**	**2.4**	**2.0**	**1.5**	**1.4**	**1.4**	**1.9**	**2.4**		
Min.	**-30.2**	**-30.1**	**-30.0**	**-30.2**	**-30.4**	**-30.4**	**-30.3**	**-30.5**	**-30.7**	**-30.3**	**-30.1**	**-30.1**	**-29.9**	**-29.1**	**-29.0**	**-29.0**	**-29.1**	**-29.3**	**-29.8**	**-30.1**	**-29.7**	**-30.0**	**-30.3**	**-30.4**		**-30.7**	
Avg.	**-11.1**	**-11.7**	**-11.5**	**-11.5**	**-11.7**	**-11.7**	**-11.8**	**-11.7**	**-11.8**	**-11.4**	**-11.3**	**-11.1**	**-12.2**	**-11.7**	**-12.2**	**-12.7**	**-11.1**	**-11.4**	**-11.6**	**-11.9**	**-12.1**	**-12.3**	**-12.3**	**-12.1**			**-13.5**

Total Hours in Month 744 **Hours Data Available** 602 **Data Recovery** 80.9%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-17.1	-17.0	-16.5	-17.0	-16.2	-16.4	-16.2	-15.2	-14.7	-14.1	-13.9	-13.5	-12.6	-12.1	-10.3	-9.8	-10.3	-12.0	-12.9	-15.2	-17.8	-18.8	-18.6	-18.9	-9.8	-18.9	-14.9
2	-19.4	-19.1	-17.8	-17.3	-17.4	-17.7	-18.0	-18.3	-17.4	-17.2	-17.4	-17.8	-16.3	-16.5	-16.2	-16.3	-16.8	-16.4	-16.5	-17.2	-17.8	-18.6	-20.2	-19.9	-16.2	-20.2	-17.6
3	-20.4	-20.8	-21.3	-21.4	-22.6	-23.9	-24.4	-25.0	-25.3	-24.9	-25.2	-25.1	-24.3	-23.7	-23.6	-23.5	-23.3	-23.2	-24.3	-25.2	-25.6	-26.7	-26.1	-26.5	-20.4	-26.7	-24.0
4	-26.8	-25.6	-26.6	-26.5	-25.1	-25.0	-24.4	-25.4	-25.5	-24.9	-25.1	-25.7	-24.6	-22.7	-22.0	-22.1	-22.8	-22.9	-23.4	-24.1	-24.6	-25.4	-26.0	-25.7	-22.0	-26.8	-24.7
5	-26.3	-26.0	-26.1	-27.5	-28.0	-28.0	-27.9	-28.0	-27.9	-28.1	-27.7	-26.6	-25.7	-25.9	-24.9	-24.5	-24.8	-24.8	-25.8	-26.2	-26.1	-26.1	-26.0	-25.8	-24.5	-28.1	-26.4
6	-25.9	-25.1	-25.7	-26.1	-24.3	-24.7	-24.4	-24.2	-23.1	-23.5	-24.6	-22.9	-22.2	-21.8	-21.4	-22.8	-23.3	-23.9	-23.9	-24.6	-24.5	-24.7	-24.6	-24.7	-21.4	-26.1	-24.0
7	-26.1	-25.5	-26.2	-25.6	-24.8	-25.5	-25.1	-26.1	-24.9	-24.6	-25.8	-24.3	-23.3	-22.0	-19.9	-19.9	-17.1	-17.8	-18.8	-19.2	-19.0	-19.1	-19.5	-19.0	-17.1	-26.2	-22.5
8	-17.5	-18.9	-20.4	-20.1	-20.3	-21.2	-20.7	-19.7	-20.7	-18.7	-17.0	-14.2	-13.1	-10.1	-13.5	-12.3	-8.7	-9.0	-12.0	-11.8	-11.6	-12.8	-10.3	-9.1	-8.7	-21.2	-15.2
9	-9.2	-8.9	-8.5	-8.3	-8.5	-8.4	-8.7	-9.3	-9.1	-8.8	-8.9	-8.5	-8.8	-10.0	-11.0	-12.8	-13.5	-14.9	-17.4	-18.9	-20.7	-20.8	-21.7	-22.3	-8.3	-22.3	-12.4
10	-22.6	-24.0	-24.6	-24.0	-24.7	-24.1	-24.4	-24.2	-24.6	-26.6	-27.2	-25.2	-24.5	-23.8	-22.1	-23.0	-23.3	-22.4	-23.0	-22.8	-23.1	-23.7	-23.1	-22.6	-22.1	-27.2	-23.9
11	-22.2	-23.0	-24.0	-22.0	-16.8	-17.9	-17.9	-16.9	-18.1	-19.3	-17.2	-16.0	-14.6	-16.7	-17.0	-16.4	-14.4	-16.3	-17.6	-18.1	-17.7	-18.5	-19.3	-20.7	-14.4	-24.0	-18.3
12	-20.3	-22.3	-23.4	-24.4	-25.3	-31.2	-31.8	-28.5	-27.2	-27.3	-26.9	-24.7	-24.5	-23.1	-22.1	-21.7	-22.9	-22.1	-23.6	-23.4	-22.7	-22.4	-21.7	-21.5	-20.3	-31.8	-24.4
13	-12.1	-9.3	-9.8	-8.6	-6.1	-5.4	-4.4	-3.5	-2.5	-1.7	-1.3	-0.8	-0.2	0.5	0.6	0.7	0.7	0.6	0.8	1.1	1.1	0.9	0.9	0.9	1.1	-12.1	-2.4
14	1.1	1.4	1.4	1.0	0.5	0.4	0.3	-3.9	-8.6	-10.5	-12.0	-13.3	-14.1	-15.0	-15.7	-16.5	-17.1	-17.6	-18.0	-18.1	-18.0	-17.6	-17.5	-17.2	1.4	-18.1	-10.2
15	-18.1	-19.1	-19.8	-19.8	-20.8	-22.2	-23.1	-22.3	-25.0	-25.7	-26.9	-25.4	-23.5	-21.9	-21.2	-21.6	-20.0	-21.5	-23.3	-24.8	-24.4	-22.6	-17.9	-15.7	-15.7	-26.9	-21.9
16	-14.1	-12.7	-11.6	-10.3	-9.3	-8.3	-7.9	-6.8	-6.3	-6.2	-6.2	-5.3	-5.3	-5.3	-4.4	-3.8	-3.4	-3.6	-3.9	-4.6	-4.7	-5.1	-4.7	-5.4	-3.4	-14.1	-6.6
17	-6.8	-6.7	-5.5	-5.9	-5.1	-2.3	-0.6	-0.3	0.3	0.1	0.2	1.1	2.3	1.5	1.2	0.9	0.9	0.7	0.5	0.3	0.5	0.8	0.9	1.0	2.3	-6.8	-0.8
18	1.3	1.1	0.7	0.5	0.3	0.4	0.3	0.3	0.8	1.1	1.1	1.2	1.2	1.4	1.8	1.6	1.4	1.4	1.3	1.0	0.5	0.6	0.8	1.0	1.8	0.3	1.0
19	1.6	2.0	2.3	1.0	0.7	2.0	2.9	3.0	1.7	0.9	1.7	1.8	1.9	2.0	2.1	2.5	2.8	3.0	3.1	2.6	1.9	1.8	1.6	1.4	3.1	0.7	2.0
20	0.8	0.5	0.4	0.4	0.5	0.6	0.7	0.6	0.5	0.4	0.6	0.7	1.5	2.3	2.8	2.4	2.7	2.2	2.4	2.4	2.4	2.5	2.6	2.1	2.8	0.4	1.5
21	1.9	1.4	2.0	1.8	1.7	1.9	2.3	2.5	2.4	2.1	2.2	2.2	2.4	3.0	3.1	2.8	2.6	2.5	1.2	0.6	0.5	0.4	0.4	0.4	3.1	0.4	1.8
22	0.4	0.4	0.4	0.4	0.3	0.1	0.2	-0.1	0.1	0.1	0.2	0.3	0.7	0.5	0.5	0.3	-0.7	-0.8	-0.7	-1.1	-1.4	-1.6	-1.8	-2.7	0.7	-2.7	-0.2
23	-3.3	-3.5	-2.5	-2.4	-4.6	-8.4	-8.9	-8.6	-8.9	-9.8	-6.9	-5.2	-5.9	-4.7	-3.0	-2.8	-3.8	-5.2	-6.0	-7.4	-7.3	-8.2	-8.2	-7.8	-2.4	-9.8	-6.0
24	-8.1	-9.1	-9.0	-8.6	-8.9	-8.9	-9.1	-9.4	-10.5	-11.3	-11.7	-11.8	-11.9	-11.8	-11.4	-11.2	-11.2	-11.8	-12.9	-13.6	-14.0	-14.3	-14.5	-14.5	-8.1	-14.5	-11.2
25	-14.8	-15.6	-15.6	-16.1	-16.7	-17.3	-18.0	-18.6	-18.2	-18.2	-17.7	-16.8	-16.1	-15.8	-15.6	-13.6	-12.0	-9.7	-8.5	-7.1	-5.9	-4.9	-4.0	-3.3	-3.3	-18.6	-13.3
26	-4.0	-3.4	-4.0	-4.4	-6.1	-7.6	-8.2	-9.5	-10.8	-10.7	-10.2	-8.3	-6.8	-5.6	-5.1	-5.1	-5.3	-7.3	-8.3	-9.2	-10.1	-10.7	-11.3	-11.6	-3.4	-11.6	-7.6
27	-13.4	-14.5	-14.9	-15.5	-16.0	-16.3	-16.8	-17.1	-16.5	-16.3	-14.6	-13.2	-11.2	-10.5	-8.7	-8.4	-9.0	-7.8	-6.1	-3.9	-3.1	-2.2	-2.0	-1.4	-1.4	-17.1	-10.8
28	-0.9	-1.6	-2.4	-0.6	-0.6	-0.5	-0.1	0.0	0.3	0.9	0.2	-0.3	-0.2	-0.6	-1.4	-2.1	-3.1	-4.2	-5.6	-6.9	-7.6	-7.5	-8.5	-9.0	0.9	-9.0	-2.6
29	-9.6	-10.4	-10.9	-10.2	-10.0	-11.1	-11.5	-12.8	-13.3	-13.2	-12.8	-12.5	-12.5	-12.5	-12.0	-11.6	-10.9	-10.1	-10.3	-11.1	-11.5	-12.0	-12.7	-13.3	-9.6	-13.3	-11.6
Max.	**1.9**	**2.0**	**2.3**	**1.8**	**1.7**	**2.0**	**2.9**	**3.0**	**2.4**	**2.1**	**2.2**	**2.2**	**2.4**	**3.0**	**3.1**	**2.8**	**2.8**	**3.0**	**3.1**	**2.6**	**2.4**	**2.5**	**2.6**	**2.1**	**3.1**		
Min.	**-26.8**	**-26.0**	**-26.6**	**-27.5**	**-28.0**	**-31.2**	**-31.8**	**-28.5**	**-27.9**	**-28.1**	**-27.7**	**-26.6**	**-25.7**	**-25.9**	**-24.9**	**-24.5**	**-24.8**	**-24.8**	**-25.8**	**-26.2**	**-26.1**	**-26.7**	**-26.1**	**-26.5**		**-31.8**	
Avg.	**-12.1**	**-12.3**	**-12.4**	**-12.3**	**-12.2**	**-12.6**	**-12.6**	**-12.7**	**-12.9**	**-13.0**	**-12.8**	**-12.1**	**-11.5**	**-11.1**	**-10.7**	**-10.7**	**-10.6**	**-10.9**	**-11.5**	**-11.9**	**-12.1**	**-12.3**	**-12.2**	**-12.1**			**-12.0**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

March *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-13.9	-14.5	-14.9	-14.9	-15.0	-15.1	-15.6	-15.9	-16.3	-17.9	-15.3	-13.3	-9.7	-7.9	-7.1	-6.5	-5.3	-4.7	-5.7	-5.5	-4.0	-3.4	-3.3	-2.4	-2.4	-17.9	-10.3
2	-0.8	0.1	0.7	0.6	0.1	-0.1	-0.7	-1.1	-1.2	-1.5	-1.5	-1.1	-0.4	0.4	1.1	1.0	1.2	0.8	0.5	-0.5	-0.9	-0.9	-0.8	-0.7	1.2	-1.5	-0.2
3	-1.2	-1.5	-1.7	-1.9	-1.1	-0.4	-0.3	-0.6	-0.6	-0.5	-0.3	-0.4	-0.5	-0.4	0.1	0.2	0.4	0.6	0.7	0.7	0.9	1.2	1.2	1.7	1.7	-1.9	-0.2
4	2.0	2.0	2.2	2.0	0.9	0.5	0.5	0.7	0.7	0.7	0.7	0.7	1.2	1.5	1.8	1.9	2.0	2.0	2.0	1.9	1.4	1.4	1.2	1.2	2.2	0.5	1.4
5	1.5	1.5	2.0	2.2	2.1	2.0	2.1	2.4	2.5	2.3	2.2	1.6	1.7	1.8	1.7	2.4	2.6	2.4	2.0	1.5	1.2	1.3	1.4	1.2	2.6	1.2	1.9
6	1.2	0.9	0.8	0.6	0.2	-0.1	-0.2	-0.3	-0.5	-0.3	-0.5	0.2	2.4	2.0	2.1	2.2	3.3	5.0	1.5	1.5	0.9	0.7	1.7	1.9	5.0	-0.5	1.1
7	1.3	0.5	0.2	0.2	-0.4	-2.3	-3.1	-2.6	-1.4	-0.8	-0.7	0.2	1.3	3.3	2.9	3.3	1.3	1.2	1.2	-0.4	-1.0	-1.5	-2.2	-2.7	3.3	-3.1	-0.1
8	-2.9	-3.0	-3.2	-4.0	-5.0	-5.2	-4.6	-3.7	-3.5	-3.2	-2.1	-1.5	0.0	0.4	0.5	0.7	1.0	1.1	0.9	0.7	0.3	0.3	0.2	0.3	1.1	-5.2	-1.5
9	0.4	0.4	0.6	0.4	0.4	0.2	-0.1	0.0	0.1	0.2	0.3	0.9	1.6	1.8	2.0	2.3	2.5	2.4	0.8	-1.4	-0.8	-0.3	-0.5	-0.2	2.5	-1.4	0.6
10	-0.9	-2.0	-3.2	-2.1	-2.9	-4.1	-4.3	-4.5	-4.8	-4.7	-4.5	-3.8	-3.1	-3.0	-2.9	-2.9	-2.4	-3.2	-3.5	-4.0	-4.6	-5.2	-5.9	-5.9	-0.9	-5.9	-3.7
11	-6.0	-6.4	-6.8	-7.6	-7.8	-7.3	-7.0	-7.2	-7.6	-7.4	-6.5	-6.3	-6.1	-5.2	-5.0	-5.3	-5.6	-6.1	-6.7	-8.7	-11.6	-10.7	-9.5	-9.8	-5.0	-11.6	-7.3
12	-10.2	-13.0	-13.5	-13.7	-15.4	-12.9	-13.1	-13.5	-13.1	-11.5	-9.4	-7.9	-6.9	-6.4	-6.2	-6.3	-6.6	-6.8	-7.2	-7.4	-7.6	-7.5	-7.5	-7.5	-6.2	-15.4	-9.6
13	-7.6	-7.6	-7.9	-8.2	-8.5	-8.7	-8.9	-9.2	-9.5	-9.7	-9.9	-9.8	-9.6	-8.4	-8.5	-7.9	-8.2	-9.2	-9.5	-10.6	-13.9	-16.3	-16.4	-17.0	-7.6	-17.0	-10.0
14	-18.5	-18.0	-16.3	-16.6	-16.6	-15.5	-16.6	-16.9	-17.5	-15.3	-15.5	-14.8	-13.7	-11.9	-7.7	-8.6	-6.5	-6.6	-4.8	-4.9	-4.7	-4.8	-4.8	-4.7	-4.7	-18.5	-11.7
15	-4.4	-4.7	-4.6	-4.4	-3.8	-2.6	-2.4	-3.1	-2.9	-2.5	-2.3	-1.9	-1.5	-1.0	-0.4	-0.4	-0.5	-0.9	-1.0	-1.3	-1.5	-1.6	-1.7	-1.6	-0.4	-4.7	-2.2
16	-1.6	-1.5	-1.7	-2.0	-2.0	-2.0	-2.9	-3.9	-5.0	-4.3	-2.5	0.0	2.9	3.0	3.8	3.5	3.0	1.7	0.6	-3.1	-8.5	-5.8	-5.7	-5.5	3.8	-8.5	-1.6
17	-5.2	-5.2	-6.2	-6.9	-6.3	-5.5	-5.4	-5.0	-5.7	-4.9	-3.4	-0.6	1.4	1.0	1.5	1.8	2.4	-2.5	-6.0	-7.3	-8.1	-8.5	-8.6	-8.5	2.4	-8.6	-4.2
18	-9.0	-9.6	-9.5	-9.5	-10.3	-11.2	-12.0	-12.3	-13.3	-13.6	-13.2	-12.8	-12.6	-12.4	-11.6	-11.8	-12.3	-12.3	-12.8	-13.1	-13.8	-15.0	-14.9	-15.2	-9.0	-15.2	-12.2
19	-15.6	-16.1	-16.9	-17.3	-17.7	-18.1	-18.6	-19.2	-19.1	-19.4	-19.2	-18.5	-17.4	-16.8	-16.3	-16.0	-15.4	-15.5	-16.0	-17.0	-17.5	-17.5	-17.9	-18.4	-15.4	-19.4	-17.4
20	-18.3	-18.2	-18.4	-18.4	-18.6	-18.5	-18.5	-18.5	-18.7	-18.5	-17.8	-16.2	-13.5	-12.4	-11.8	-12.0	-12.1	-14.6	-15.1	-15.5	-15.9	-16.5	-17.2	-16.6	-11.8	-18.7	-16.3
21	-16.0	-15.7	-15.6	-15.0	-14.5	-14.3	-14.8	-14.8	-14.1	-14.2	-14.8	-14.0	-12.5	-6.0	-5.1	-4.9	-5.4	-5.7	-5.9	-7.7	-9.3	-10.4	-10.3	-9.7	-4.9	-16.0	-11.3
22	-10.5	-10.9	-11.1	-10.8	-10.2	-9.9	-10.7	-11.4	-12.1	-12.1	-11.2	-11.2	-11.9	-10.9	-10.0	-9.6	-9.2	-9.2	-8.5	-9.3	-10.7	-12.0	-12.8	-14.1	-8.5	-14.1	-10.8
23	-15.2	-14.0	-13.7	-12.5	-11.8	-13.1	-13.4	-14.0	-13.4	-12.4	-12.5	-12.0	-11.5	-10.9	-10.8	-10.9	-10.1	-10.1	-10.2	-10.4	-11.3	-12.0	-12.7	-13.4	-10.1	-15.2	-12.2
24	-12.8	-13.0	-12.6	-12.8	-12.4	-12.5	-12.6	-12.8	-13.2	-14.3	-11.8	-10.5	-9.7	-8.7	-7.7	-7.5	-6.2	-4.7	-5.2	-6.8	-9.0	-9.9	-9.3	-9.3	-4.7	-14.3	-10.2
25	-9.8	-10.2	-10.1	-10.5	-10.6	-10.4	-10.7	-11.1	-10.3	-8.6	-6.6	-5.6	-3.8	-1.6	-4.1	-4.0	-4.3	-3.6	-4.1	-6.8	-8.2	-9.3	-9.5	-9.3	-1.6	-11.1	-7.6
26	-10.1	-10.4	-11.5	-11.4	-10.4	-11.6	-11.4	-11.2	-12.1	-10.9	-9.2	-7.0	-6.8	-5.0	-4.4	-3.6	-3.7	-3.3	-3.9	-4.9	-7.8	-9.5	-10.1	-10.0	-3.3	-12.1	-8.3
27	-10.0	-9.8	-12.6	-14.9	-15.4	-16.0	-14.5	-13.4	-11.6	-9.6	-7.4	-6.2	-6.0	-4.0	-4.4	-5.9	-6.3	-6.1	-6.2	-8.2	-9.7	-10.4	-11.7	-12.7	-4.0	-16.0	-9.7
28	-13.5	-13.4	-13.7	-13.9	-15.0	-15.0	-16.0	-16.7	-16.4	-15.1	-13.0	-10.5	-7.9	-8.1	-5.6	-7.2	-8.2	-7.4	-7.0	-9.8	-13.3	-16.0	-15.7	-16.5	-5.6	-16.7	-12.3
29	-13.0	-11.8	-11.8	-10.2	-9.4	-9.3	-9.1	-7.4	-6.4	-5.4	-4.4	-3.2	-2.1	-1.7	-1.3	-1.2	-1.4	-2.0	-2.1	-2.1	-2.1	-1.9	-1.9	-1.3	-1.2	-13.0	-5.1
30	-1.0	-0.9	-0.8	-0.7	-0.8	-0.9	-1.1	-1.0	-0.9	-0.6	-0.4	0.0	0.2	0.4	0.6	0.4	0.4	0.2	0.1	0.0	-0.1	0.0	0.1	-0.1	0.6	-1.1	-0.3
31	0.0	0.2	0.2	0.4	0.4	0.6	0.8	0.8	1.0	1.3	1.6	2.2	2.4	2.4	2.4	2.3	2.1	2.1	2.0	1.8	1.4	1.2	0.8	0.9	2.4	0.0	1.3
Max.	**2.0**	**2.0**	**2.2**	**2.2**	**2.1**	**2.0**	**2.1**	**2.4**	**2.5**	**2.3**	**2.2**	**2.2**	**2.9**	**3.3**	**3.8**	**3.5**	**3.3**	**5.0**	**2.0**	**1.9**	**1.4**	**1.4**	**1.7**	**1.9**	**5.0**		
Min.	**-18.5**	**-18.2**	**-18.4**	**-18.4**	**-18.6**	**-18.5**	**-18.6**	**-19.2**	**-19.1**	**-19.4**	**-19.2**	**-18.5**	**-17.4**	**-16.8**	**-16.3**	**-16.0**	**-15.4**	**-15.5**	**-16.0**	**-17.0**	**-17.5**	**-17.5**	**-17.9**	**-18.4**		**-19.4**	
Avg.	**-7.1**	**-7.3**	**-7.5**	**-7.5**	**-7.7**	**-7.7**	**-7.9**	**-8.0**	**-8.0**	**-7.6**	**-6.8**	**-5.9**	**-4.9**	**-4.0**	**-3.6**	**-3.6**	**-3.5**	**-3.7**	**-4.2**	**-5.1**	**-6.1**	**-6.5**	**-6.6**	**-6.6**			**-6.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	0.8	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.4	0.6	0.8	1.1	1.2	1.1	1.1	1.1	0.9	0.8	0.4	0.1	-0.1	-0.9	1.2	-0.9	0.5
2	-2.5	-2.8	-3.0	-2.7	-3.3	-2.6	-2.7	-2.6	-2.6	-2.6	-2.6	-1.3	-1.0	-1.2	-0.6	1.1	1.9	0.9	0.0	0.1	-0.5	-0.8	-0.9	-0.8	1.9	-3.3	-1.4
3	-0.8	-0.5	-0.5	-0.7	-0.9	-1.0	-1.1	-1.0	-0.8	-0.7	-0.1	0.5	1.6	2.0	2.4	2.6	2.4	2.1	1.5	0.9	0.6	0.5	0.5	0.4	2.6	-1.1	0.4
4	0.5	0.4	0.3	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.4	0.6	0.9	1.1	0.6	0.3	0.1	-0.1	-1.3	-2.4	-3.7	-4.8	1.1	-4.8	-0.2
5	-5.6	-6.4	-7.9	-9.1	-9.7	-10.3	-11.5	-12.3	-12.5	-11.4	-8.5	-8.4	-7.7	-7.8	-6.8	-7.5	-6.7	-6.6	-7.0	-8.2	-9.5	-10.9	-10.8	-10.9	-5.6	-12.5	-8.9
6	-11.1	-11.8	-12.4	-12.5	-13.4	-13.6	-13.8	-15.6	-15.6	-13.2	-12.8	-11.6	-10.0	-9.6	-8.5	-7.8	-7.5	-6.9	-8.1	-9.2	-9.8	-10.6	-11.8	-11.9	-6.9	-15.6	-11.2
7	-11.8	-11.8	-11.6	-11.5	-11.8	-12.6	-12.3	-13.3	-14.6	-12.7	-10.9	-10.3	-9.2	-7.7	-5.7	-5.6	-5.0	-4.9	-5.9	-7.1	-9.1	-10.3	-10.1	-11.6	-4.9	-14.6	-9.9
8	-12.1	-12.3	-12.1	-14.2	-16.2	-16.4	-15.9	-18.0	-17.1	-12.4	-9.3	-5.9	-3.9	-1.7	0.1	0.3	-1.3	-1.6	-4.6	-5.7	-6.9	-9.2	-8.8	-9.8	0.3	-18.0	-9.0
9	-10.3	-10.1	-10.0	-9.9	-10.7	-11.5	-11.7	-12.5	-11.9	-11.2	-10.8	-9.2	-6.8	-6.9	-6.2	-5.9	-6.3	-6.6	-7.0	-8.1	-9.8	-10.7	-11.0	-11.2	-5.9	-12.5	-9.4
10	-12.1	-12.4	-12.9	-13.6	-14.7	-14.4	-15.1	-17.2	-15.9	-14.4	-12.6	-11.1	-10.0	-9.0	-7.4	-7.0	-6.7	-6.9	-7.9	-9.2	-10.8	-12.3	-12.3	-13.2	-6.7	-17.2	-11.6
11	-13.6	-15.0	-15.8	-15.8	-16.9	-16.6	-17.2	-17.6	-16.9	-14.8	-13.7	-13.1	-11.7	-10.5	-9.3	-8.7	-8.5	-8.5	-8.8	-9.9	-11.1	-12.4	-12.9	-13.4	-8.5	-17.6	-13.0
12	-14.3	-13.4	-13.9	-14.8	-14.5	-15.0	-16.0	-16.3	-14.7	-13.1	-11.5	-9.9	-9.1	-8.6	-6.8	-6.4	-6.3	-6.1	-6.2	-6.7	-7.1	-7.5	-9.3	-9.9	-6.1	-16.3	-10.7
13	-11.5	-12.4	-9.7	-9.0	-8.6	-8.4	-8.0	-7.3	-6.5	-4.5	-3.9	-2.9	-2.4	-0.9	-0.3	0.1	0.4	0.4	0.3	0.1	0.1	0.0	-0.4	-0.6	0.4	-12.4	-4.0
14	-0.8	-1.1	-1.3	-1.5	-1.5	-1.6	-1.7	-1.8	-1.9	-1.8	-1.4	-1.1	-0.9	-0.6	-0.3	-0.2	-0.2	0.2	0.5	0.5	0.2	0.0	-0.5	-0.9	0.5	-1.9	-0.8
15	-0.9	-2.5	-3.1	-4.1	-3.7	-3.0	-2.8	-2.0	-2.5	-3.7	-4.5	-5.2	-5.3	-5.2	-5.3	-6.5	-6.9	-7.2	-7.8	-8.7	-9.8	-10.7	-11.4	-11.8	-0.9	-11.8	-5.6
16	-12.2	-12.5	-12.9	-13.2	-13.6	-13.8	-14.0	-14.3	-14.9	-14.3	-13.4	-12.4	-11.4	-10.4	-9.1	-7.9	-7.4	-6.2	-5.4	-5.4	-5.8	-6.3	-6.4	-6.0	-5.4	-14.9	-10.4
17	-6.1	-5.8	-5.8	-5.6	-5.5	-5.3	-6.0	-5.6	-4.4	-2.6	-3.2	-2.4	-1.7	-0.8	-0.9	-0.3	-0.3	-0.3	-0.6	0.0	-1.9	-4.5	-5.8	-7.7	0.0	-7.7	-3.5
18	-9.2	-10.6	-8.7	-7.6	-7.9	-8.1	-9.3	-8.5	-7.6	-5.8	-2.9	1.1	3.5	5.5	5.6	6.5	4.8	4.0	2.4	2.7	1.3	-1.1	-3.3	-4.8	6.5	-10.6	-2.4
19	-4.8	-4.9	-4.1	-2.7	-2.0	-1.6	-2.4	-1.9	-0.7	0.6	2.5	4.0	4.1	4.7	6.0	5.2	4.0	3.5	2.6	1.8	0.6	-0.6	-1.5	-2.8	6.0	-4.9	0.4
20	-2.6	-2.5	-2.1	-2.9	-2.3	-2.6	-2.6	0.3	0.6	0.7	2.1	2.2	2.3	2.8	2.4	2.8	3.2	3.3	1.3	1.0	0.6	0.2	0.0	-0.1	3.3	-2.9	0.3
21	-0.2	-0.2	-0.1	-0.1	-0.4	-0.3	-0.6	-0.5	-0.2	0.3	1.2	1.6	2.0	1.9	2.2	3.2	3.5	2.3	2.1	2.0	0.5	-0.6	-1.3	-2.1	3.5	-2.1	0.7
22	-2.8	-3.3	-3.2	-3.8	-4.1	-4.3	-3.8	-3.4	-2.1	1.7	3.2	6.3	8.2	9.4	10.3	10.5	10.0	9.0	8.5	6.4	4.4	1.5	-0.4	-0.4	10.5	-4.3	2.4
23	0.2	-2.4	-4.0	-4.2	-3.3	-3.2	-5.4	-2.2	1.6	3.6	6.1	7.6	7.7	9.3	9.5	9.1	9.6	8.6	7.8	6.4	4.5	0.7	-2.8	-3.4	9.6	-5.4	2.6
24	-1.4	0.3	-0.7	-1.1	-3.8	-3.3	-2.6	-2.5	-2.3	-2.0	-1.1	-0.6	-0.2	0.6	1.2	1.1	1.1	2.5	2.8	1.6	1.0	0.3	0.1	-1.1	2.8	-3.8	-0.4
25	-2.3	-3.1	-3.4	-4.1	-5.3	-5.8	-6.2	-6.9	-7.2	-7.1	-6.2	-5.9	-5.4	-4.9	-4.6	-4.6	-4.7	-4.8	-4.8	-4.8	-5.3	-6.3	-6.6	-7.2	-2.3	-7.2	-5.3
26	-8.1	-9.0	-9.6	-10.1	-10.5	-10.9	-11.5	-11.0	-10.4	-9.2	-8.4	-7.6	-6.7	-5.7	-5.3	-5.2	-5.1	-4.3	-3.8	-3.7	-3.8	-4.2	-5.0	-5.3	-3.7	-11.5	-7.3
27	-5.3	-5.3	-5.6	-5.8	-5.8	-6.5	-6.7	-6.9	-6.8	-6.7	-6.5	-6.1	-5.6	-4.8	-4.5	-4.4	-4.2	-3.9	-3.6	-3.5	-3.7	-4.1	-4.4	-4.6	-3.5	-6.9	-5.2
28	-5.2	-6.5	-7.3	-7.5	-6.4	-7.2	-7.8	-8.5	-6.2	-4.5	-2.5	0.9	-1.1	-0.6	2.1	4.1	2.8	0.4	-0.5	-1.0	-1.8	-2.7	-3.6	-4.1	4.1	-8.5	-3.1
29	-4.6	-4.3	-4.4	-5.2	-6.0	-4.9	-3.9	-3.9	-3.6	-3.0	-2.3	-1.5	-0.1	0.9	3.2	7.1	3.1	1.9	1.5	1.1	0.6	-0.2	-1.3	-2.1	7.1	-6.0	-1.3
30	-2.5	-2.7	-3.2	-4.2	-4.5	-5.6	-5.5	-5.3	-4.7	-3.9	-3.0	-1.0	1.5	3.0	4.4	4.5	3.6	1.4	0.1	-0.6	-1.1	-1.5	-1.7	-2.2	4.5	-5.6	-1.5
Max.	**1.0**	**0.8**	**0.5**	**0.3**	**0.3**	**0.3**	**0.1**	**0.3**	**1.6**	**3.6**	**6.1**	**7.6**	**8.2**	**9.4**	**10.3**	**10.5**	**10.0**	**9.0**	**8.5**	**6.4**	**4.5**	**1.5**	**0.5**	**0.4**	**10.5**		
Min.	**-14.3**	**-15.0**	**-15.8**	**-15.8**	**-16.9**	**-16.6**	**-17.2**	**-18.0**	**-17.1**	**-14.8**	**-13.7**	**-13.1**	**-11.7**	**-10.5**	**-9.3**	**-8.7**	**-8.5**	**-8.5**	**-8.8**	**-9.9**	**-11.1**	**-12.4**	**-12.9**	**-13.4**		**-18.0**	
Avg.	**-5.8**	**-6.1**	**-6.3**	**-6.6**	**-6.9**	**-7.0**	**-7.3**	**-7.3**	**-6.7**	**-5.6**	**-4.5**	**-3.4**	**-2.6**	**-1.8**	**-1.0**	**-0.6**	**-0.8**	**-1.1**	**-1.7**	**-2.2**	**-3.2**	**-4.2**	**-4.9**	**-5.5**			**-4.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.8	-3.0	-3.1	-3.9	-4.3	-4.7	-4.9	-4.9	-4.3	-3.5	-2.4	-1.0	0.6	2.2	2.7	3.2	3.2	2.9	2.9	2.1	1.6	1.4	1.2	0.8	3.2	-4.9	-0.8
2	0.7	0.5	0.3	-0.1	-0.4	-0.4	-0.3	0.1	0.4	0.9	1.8	3.1	3.6	6.5	4.0	6.7	9.5	6.3	5.2	2.2	2.0	1.0	0.6	-0.1	9.5	-0.4	2.3
3	-0.1	0.3	-0.1	-0.5	-0.6	-0.7	-1.3	-0.1	1.1	2.0	3.7	4.2	4.3	4.0	4.0	3.7	3.8	4.5	2.5	1.7	2.1	1.8	1.2	1.2	4.5	-1.3	1.8
4	1.7	1.3	1.2	1.4	1.4	1.5	1.8	1.8	2.1	2.1	2.9	3.8	4.9	6.8	5.4	5.7	6.9	8.3	7.6	5.9	3.2	1.8	0.9	-0.2	8.3	-0.2	3.3
5	-0.3	0.9	1.2	1.1	1.2	1.1	1.9	1.7	2.8	3.4	5.0	5.7	7.6	8.8	8.9	10.1	10.0	8.9	7.1	5.2	3.7	3.0	2.6	1.7	10.1	-0.3	4.3
6	0.5	0.6	0.8	0.9	0.6	0.2	-0.1	0.8	2.6	3.1	3.0	3.7	4.8	4.2	4.2	4.3	4.4	4.1	3.6	3.1	2.4	1.7	1.3	1.3	4.8	-0.1	2.3
7	1.3	1.3	1.5	1.7	1.6	1.3	1.5	1.8	2.1	2.6	3.2	3.5	3.6	3.9	4.3	3.9	4.0	4.2	3.8	3.2	2.8	2.7	2.4	2.0	4.3	1.3	2.7
8	2.1	1.9	1.9	2.1	2.0	1.9	2.0	2.0	2.3	2.8	3.3	3.8	3.9	3.8	3.6	3.9	3.9	3.8	3.6	3.3	3.3	3.1	2.9	2.6	3.9	1.9	2.9
9	2.9	3.0	2.6	2.3	2.5	2.4	2.2	2.3	2.9	3.4	3.9	4.3	4.4	4.1	4.4	4.8	4.6	4.6	4.0	3.4	3.0	2.2	1.4	1.0	4.8	1.0	3.2
10	0.8	0.4	0.2	0.5	0.7	0.4	0.4	1.2	2.2	3.7	5.5	7.5	8.5	10.0	10.7	10.1	9.7	9.8	8.6	6.4	5.3	3.6	2.6	3.7	10.7	0.2	4.7
11	3.1	3.0	3.1	3.2	3.3	3.4	3.2	2.9	3.9	4.2	3.4	3.3	3.0	2.9	3.8	4.6	4.3	4.1	4.9	4.8	4.7	4.4	4.0	3.2	4.9	2.9	3.7
12	3.2	2.9	2.8	2.7	2.6	2.4	2.2	2.7	3.1	3.3	4.4	4.8	5.0	5.0	5.3	3.8	2.7	3.0	3.1	2.9	2.4	2.0	1.7	1.7	5.3	1.7	3.2
13	1.7	1.4	0.8	0.7	0.7	0.8	0.6	0.8	1.2	1.8	3.1	3.8	4.7	4.9	5.2	4.9	4.7	3.6	3.6	3.7	2.9	2.1	1.5	1.5	5.2	0.6	2.5
14	1.1	0.2	0.0	-0.2	-1.5	0.0	1.6	2.2	2.6	2.9	3.0	2.9	3.9	5.0	5.5	5.2	5.9	6.1	5.9	5.1	4.5	4.3	3.0	3.3	6.1	-1.5	3.0
15	2.3	1.9	2.2	2.5	2.6	2.3	1.7	2.6	3.2	3.6	4.2	5.3	5.7	5.4	5.0	4.0	3.7	3.7	3.5	3.5	2.7	2.1	1.8	1.9	5.7	1.7	3.2
16	2.0	2.0	1.5	1.3	1.0	0.5	0.4	0.3	0.4	1.0	1.6	2.9	4.0	4.7	4.8	4.9	5.3	5.1	5.1	5.0	4.5	3.4	0.5	-1.4	5.3	-1.4	2.5
17	-1.7	-0.9	-0.7	-1.1	-0.8	-2.1	-1.3	0.4	2.4	3.4	4.5	5.8	6.6	7.1	7.9	8.2	8.7	8.2	7.6	8.1	7.2	5.2	3.7	3.0	8.7	-2.1	3.7
18	1.6	1.4	1.8	1.8	1.6	1.5	0.9	1.4	2.1	2.7	2.8	3.2	2.8	3.0	3.1	3.6	4.1	4.8	4.8	4.3	3.3	2.6	1.6	1.5	4.8	0.9	2.6
19	1.7	1.5	1.5	0.8	-0.9	-1.2	-0.7	0.4	1.5	2.5	3.1	4.0	4.9	4.9	5.7	6.2	6.4	6.4	6.3	6.1	5.8	5.1	4.2	3.6	6.4	-1.2	3.3
20	2.5	2.9	2.6	1.5	1.0	0.5	0.9	2.6	3.9	5.4	7.0	8.4	9.6	10.4	11.7	11.0	11.0	11.2	11.6	11.3	10.2	8.9	3.9	1.0	11.7	0.5	6.3
21	0.7	0.6	-0.5	0.1	-1.6	-1.7	-1.9	0.9	3.1	4.3	5.3	7.1	8.5	8.7	8.5	9.2	9.2	9.5	9.0	8.0	7.1	5.3	4.4	3.2	9.5	-1.9	4.4
22	4.8	5.1	4.6	3.8	2.7	2.0	2.1	3.1	3.8	5.6	6.4	7.6	8.7	9.4	9.7	10.4	9.8	8.6	7.8	7.0	5.8	4.6	4.0	3.9	10.4	2.0	5.9
23	3.5	3.0	2.3	2.1	1.9	2.5	2.4	2.5	2.9	3.4	3.7	3.9	3.8	4.1	4.3	4.4	4.5	4.5	4.6	4.4	4.5	4.4	4.3	3.8	4.6	1.9	3.6
24	3.7	3.7	3.4	3.2	3.1	3.0	3.0	3.6	3.9	4.2	4.1	4.6	5.1	5.7	6.7	7.1	7.3	6.8	6.3	5.5	5.5	4.8	4.0	3.2	7.3	3.0	4.7
25	2.3	2.2	2.2	2.1	2.0	1.9	1.8	1.9	2.3	3.3	4.1	4.3	4.6	3.3	3.0	4.5	5.7	4.7	4.8	4.6	4.3	3.9	3.5	3.3	5.7	1.8	3.4
26	2.9	2.2	1.6	1.2	1.5	1.6	1.9	2.1	2.5	3.1	3.6	4.2	5.0	5.5	6.4	5.6	6.1	6.4	5.3	5.6	5.9	5.0	3.8	3.5	6.4	1.2	3.8
27	1.4	3.2	3.6	3.4	1.4	1.2	1.2	1.8	3.5	5.0	6.2	6.7	7.6	8.3	9.4	10.2	10.7	11.0	11.3	11.2	10.4	8.6	7.2	6.2	11.3	1.2	6.3
28	4.9	3.1	2.6	2.3	1.5	2.7	3.9	4.7	6.3	7.6	8.3	9.1	9.8	10.3	10.8	11.6	12.3	12.6	12.1	11.3	10.4	9.8	8.7	5.9	12.6	1.5	7.6
29	5.6	4.9	5.9	5.6	4.0	3.8	5.0	5.7	6.7	8.2	9.5	11.0	11.4	11.6	12.4	13.7	13.9	14.0	14.1	14.1	13.1	12.0	9.6	7.2	14.1	3.8	9.3
30	5.9	5.6	5.1	4.3	4.0	4.4	5.7	9.0	9.8	10.9	11.6	12.3	12.8	13.0	13.3	13.3	13.0	11.8	11.2	9.9	8.1	7.5	6.8	6.5	13.3	4.0	9.0
31	6.2	6.0	5.6	5.0	5.1	5.2	5.3	5.3	5.2	5.7	6.4	7.1	7.7	8.3	8.4	8.6	8.4	8.0	7.0	6.0	5.3	5.0	4.6	4.3	8.6	4.3	6.2
Max.	**6.2**	**6.0**	**5.9**	**5.6**	**5.1**	**5.2**	**5.7**	**9.0**	**9.8**	**10.9**	**11.6**	**12.3**	**12.8**	**13.0**	**13.3**	**13.7**	**13.9**	**14.0**	**14.1**	**14.1**	**13.1**	**12.0**	**9.6**	**7.2**	**14.1**		
Min.	**-2.8**	**-3.0**	**-3.1**	**-3.9**	**-4.3**	**-4.7**	**-4.9**	**-4.9**	**-4.3**	**-3.5**	**-2.4**	**-1.0**	**0.6**	**2.2**	**2.7**	**3.2**	**2.7**	**2.9**	**2.5**	**1.7**	**1.6**	**1.0**	**0.5**	**-1.4**		**-4.9**	
Avg.	**2.1**	**2.0**	**1.9**	**1.7**	**1.3**	**1.2**	**1.4**	**2.0**	**2.9**	**3.6**	**4.4**	**5.2**	**5.8**	**6.3**	**6.6**	**6.8**	**7.0**	**6.8**	**6.4**	**5.8**	**5.1**	**4.3**	**3.4**	**2.7**			**4.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.1	3.9	3.9	4.7	5.6	5.5	5.8	5.7	5.5	5.9	7.2	8.5	8.7	8.8	9.4	9.2	8.9	7.6	7.3	6.7	6.6	5.7	5.6	4.5	9.4	3.9	6.5
2	4.7	5.8	5.7	6.0	5.8	5.7	6.0	6.4	7.2	7.6	8.3	8.9	9.5	10.2	10.9	10.8	11.5	10.4	10.2	10.1	9.9	9.4	8.1	7.1	11.5	4.7	8.2
3	5.9	5.3	4.9	4.5	4.5	4.2	5.7	6.3	6.7	7.1	8.6	9.4	9.2	10.7	10.9	9.8	10.2	11.0	9.6	9.3	6.9	6.1	5.0	4.7	11.0	4.2	7.3
4	4.4	4.1	3.9	3.4	3.2	3.4	3.5	4.2	4.8	5.6	7.4	7.3	7.7	8.5	9.0	9.9	10.2	9.5	9.7	9.4	8.6	7.5	6.0	4.6	10.2	3.2	6.5
5	3.3	2.8	3.1	3.1	3.5	3.7	3.9	4.3	4.6	5.5	5.4	5.1	5.2	6.0	6.9	6.9	6.8	6.6	6.2	6.2	5.7	5.3	5.0	4.2	6.9	2.8	5.0
6	4.4	3.9	3.1	3.9	3.5	4.2	4.4	4.4	4.8	5.8	6.9	8.5	10.0	11.3	12.1	13.0	13.7	12.7	12.5	12.1	11.3	11.9	10.5	8.8	13.7	3.1	8.2
7	7.7	6.1	6.4	5.5	5.5	5.1	6.5	7.4	9.1	10.7	12.0	12.3	13.2	13.0	14.7	14.3	14.7	15.4	14.9	14.6	13.2	12.1	9.8	7.3	15.4	5.1	10.5
8	5.4	4.5	4.4	3.5	3.0	3.1	3.8	3.9	4.9	6.0	6.6	7.4	8.3	8.7	9.3	9.4	9.7	9.0	8.8	8.4	8.1	7.4	5.5	4.1	9.7	3.0	6.4
9	3.5	3.3	3.0	2.4	1.9	1.7	1.5	1.6	1.8	2.2	3.0	4.1	4.5	4.8	5.3	5.6	6.7	7.2	7.2	6.5	6.4	6.0	4.7	4.6	7.2	1.5	4.1
10	4.2	3.1	2.6	2.2	2.0	1.9	1.8	2.2	2.6	2.9	3.8	4.5	5.8	6.3	6.7	6.8	7.7	7.7	7.1	6.9	6.3	5.9	5.5	4.7	7.7	1.8	4.6
11	4.3	4.2	3.1	3.1	3.2	2.9	3.2	3.9	4.4	4.7	5.3	5.9	6.4	5.5	5.5	5.9	6.0	6.2	6.4	6.4	6.4	5.7	5.2	4.5	6.4	2.9	4.9
12	3.5	3.0	2.7	2.6	2.3	2.2	2.1	2.0	2.4	3.3	4.8	5.4	5.8	6.2	6.1	5.8	5.7	5.1	4.7	4.4	4.0	3.9	3.4	3.1	6.2	2.0	3.9
13	2.9	2.7	2.7	2.9	3.2	3.4	3.5	4.1	5.2	5.9	6.4	7.4	8.7	10.1	10.7	11.4	12.2	12.7	13.0	12.9	12.9	12.1	9.2	6.3	13.0	2.7	7.6
14	6.4	5.5	6.8	5.9	5.5	4.9	4.9	4.8	4.9	5.8	6.7	8.2	10.5	12.1	12.6	13.5	13.8	14.0	14.0	11.8	9.8	9.9	9.3	8.5	14.0	4.8	8.7
15	7.7	6.4	5.9	4.9	3.9	3.4	4.6	4.6	4.2	5.0	5.7	6.6	8.1	9.2	9.8	10.7	10.5	9.8	11.2	10.8	9.6	8.4	8.0	7.3	11.2	3.4	7.3
16	6.7	6.3	5.9	5.8	5.8	5.9	6.1	6.8	7.4	8.4	9.8	10.6	11.1	11.1	12.6	13.2	13.4	13.6	13.8	14.3	13.6	13.1	12.8	11.4	14.3	5.8	10.0
17	10.1	9.5	8.7	9.0	8.7	8.3	8.2	10.3	11.9	13.1	13.5	14.2	15.5	16.5	17.3	17.8	18.2	18.5	18.4	17.6	16.6	14.8	12.6	10.0	18.5	8.2	13.3
18	8.7	5.7	4.1	3.3	4.2	5.6	7.0	8.4	9.2	9.9	11.2	12.5	13.5	13.8	14.1	14.9	15.4	15.4	14.9	14.8	14.4	13.9	11.8	8.0	15.4	3.3	10.6
19	6.7	8.1	6.9	6.8	4.7	3.3	5.5	7.9	9.2	10.4	11.0	11.5	12.3	12.7	14.1	14.0	13.8	14.6	15.2	14.9	14.2	13.3	12.2	10.7	15.2	3.3	10.6
20	9.7	7.8	7.1	4.3	4.3	4.7	4.4	6.9	8.4	9.3	9.6	11.1	12.2	13.5	14.0	14.3	14.0	13.6	12.9	11.9	10.7	9.8	8.4	6.8	14.3	4.3	9.6
21	5.9	5.9	4.8	5.6	5.5	4.5	4.2	7.6	8.6	9.0	9.8	10.1	10.8	11.4	12.0	12.8	13.5	14.3	14.5	13.7	13.0	11.5	9.8	8.5	14.5	4.2	9.5
22	4.6	3.5	2.8	3.1	3.7	5.4	6.7	8.4	9.2	9.5	10.5	11.0	11.8	12.4	12.6	12.3	11.5	11.7	11.3	10.4	9.1	8.3	7.5	7.2	12.6	2.8	8.5
23	7.0	6.8	6.5	6.3	5.2	4.3	5.8	6.5	7.8	8.5	9.2	9.8	10.8	10.9	11.6	12.2	12.6	12.9	13.1	12.7	11.8	10.6	8.9	6.6	13.1	4.3	9.1
24	5.2	4.4	4.2	5.2	5.4	5.1	5.8	6.5	7.9	8.4	9.3	10.1	9.7	9.4	9.5	9.5	9.2	8.9	8.9	8.9	8.8	8.5	8.3	7.9	10.1	4.2	7.7
25	7.9	8.2	8.2	7.8	7.2	6.8	7.1	7.6	7.9	8.8	9.1	9.9	10.9	11.4	11.5	12.3	12.9	12.5	11.2	10.7	9.8	9.4	9.1	8.5	12.9	6.8	9.4
26	7.9	7.8	7.8	7.7	7.6	6.8	6.6	7.7	8.7	9.1	10.3	11.2	11.6	10.1	10.4	11.0	11.7	11.7	11.5	11.6	11.7	11.4	10.3	8.6	11.7	6.6	9.6
27	6.9	6.4	6.4	4.9	4.3	4.6	5.3	7.5	8.5	8.8	9.0	10.1	11.0	12.1	12.3	13.1	12.5	12.9	12.3	11.5	10.8	9.2	7.7	6.2	13.1	4.3	8.9
28	5.6	5.7	6.1	6.2	5.5	4.4	4.8	6.2	7.4	8.1	8.0	8.2	9.2	9.9	11.8	11.0	10.5	11.5	11.9	12.1	11.6	9.9	8.9	8.1	12.1	4.4	8.4
29	7.8	7.5	7.2	6.8	6.7	6.7	6.6	6.6	7.1	7.9	8.8	9.7	10.6	10.8	11.7	12.2	12.4	12.5	12.6	11.3	9.9	8.5	7.6	6.7	12.6	6.6	9.0
30	6.2	6.0	5.9	5.8	5.7	5.7	5.4	6.1	7.6	8.5	9.6	10.4	11.0	11.4	12.3	13.2	12.6	12.7	13.6	13.5	12.2	11.6	10.3	7.7	13.6	5.4	9.4
Max.	**10.1**	**9.5**	**8.7**	**9.0**	**8.7**	**8.3**	**8.2**	**10.3**	**11.9**	**13.1**	**13.5**	**14.2**	**15.5**	**16.5**	**17.3**	**17.8**	**18.2**	**18.5**	**18.4**	**17.6**	**16.6**	**14.8**	**12.8**	**11.4**	**18.5**		
Min.	**2.9**	**2.7**	**2.6**	**2.2**	**1.9**	**1.7**	**1.5**	**1.6**	**1.8**	**2.2**	**3.0**	**4.1**	**4.5**	**4.8**	**5.3**	**5.6**	**5.7**	**5.1**	**4.7**	**4.4**	**4.0**	**3.9**	**3.4**	**3.1**		**1.5**	
Avg.	**6.0**	**5.5**	**5.2**	**4.9**	**4.7**	**4.6**	**5.0**	**5.9**	**6.7**	**7.4**	**8.2**	**9.0**	**9.8**	**10.3**	**10.9**	**11.2**	**11.4**	**11.4**	**11.3**	**10.9**	**10.1**	**9.4**	**8.2**	**6.9**			**8.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.1	6.4	7.1	7.6	6.9	4.7	4.8	7.7	10.1	11.4	12.6	13.0	13.9	14.3	15.3	15.5	15.3	14.4	13.1	12.9	11.5	10.5	9.9	9.2	15.5	4.7	10.6
2	8.5	8.0	7.5	7.1	6.9	6.9	6.9	7.1	7.6	8.2	9.6	10.6	11.3	12.6	12.8	14.0	13.3	13.8	12.4	10.5	10.7	10.3	9.4	8.6	14.0	6.9	9.8
3	8.7	8.0	8.4	9.4	10.6	9.5	9.8	9.3	9.7	8.5	7.8	8.7	9.4	10.2	11.1	12.0	11.6	10.4	10.1	9.9	9.6	10.0	9.2	8.2	12.0	7.8	9.6
4	8.1	8.1	7.9	7.9	9.2	9.7	9.0	9.4	9.7	10.5	11.5	12.2	13.0	13.7	13.6	13.1	13.9	13.6	11.0	9.9	9.9	9.8	9.5	9.1	13.9	7.9	10.5
5	8.9	8.7	7.9	7.9	8.0	7.0	7.4	8.2	10.5	11.9	13.7	15.1	15.9	17.1	17.1	15.6	14.8	15.2	15.2	15.6	15.3	14.4	13.5	12.6	17.1	7.0	12.4
6	12.1	11.0	9.9	9.0	8.2	6.2	7.5	10.9	12.7	15.5	16.9	16.9	18.0	15.9	14.6	14.7	14.2	13.8	13.0	12.5	11.9	11.5	11.0	10.3	18.0	6.2	12.4
7	9.8	9.4	9.1	8.8	8.7	8.7	8.8	8.9	8.0	8.4	8.3	8.2	8.2	8.5	8.1	8.3	8.5	9.1	9.5	9.8	9.5	9.3	8.8	8.2	9.8	8.0	8.8
8	7.8	7.5	7.5	7.5	7.3	7.2	6.8	7.1	7.5	7.8	8.3	8.5	8.8	9.2	10.1	10.6	10.8	10.6	10.5	10.6	10.2	10.0	9.7	9.5	10.8	6.8	8.8
9	9.5	9.9	9.9	10.1	10.3	10.5	10.6	10.8	11.4	11.9	11.8	13.2	14.2	14.9	15.8	16.1	16.1	15.0	13.7	12.8	11.9	11.4	10.8	10.1	16.1	9.5	12.2
10	9.6	9.4	9.2	8.8	8.8	8.8	8.4	8.7	9.9	10.4	11.1	11.6	11.9	13.5	14.4	14.6	14.7	14.8	14.2	13.5	12.3	11.5	10.2	9.2	14.8	8.4	11.2
11	8.7	8.3	8.0	7.8	7.8	7.6	7.5	7.5	7.9	9.4	9.7	10.2	11.3	12.2	12.7	13.6	13.9	13.8	13.5	13.2	12.5	11.3	9.9	9.1	13.9	7.5	10.3
12	8.6	8.0	6.3	5.5	4.0	3.1	5.7	7.8	9.4	10.4	11.2	11.2	11.2	12.0	12.2	11.7	11.3	11.1	9.7	8.9	8.6	8.3	8.0	7.9	12.2	3.1	8.8
13	8.1	8.0	8.0	7.8	7.6	7.6	7.5	7.6	7.8	8.1	8.5	8.8	9.4	10.0	10.4	10.6	10.6	10.5	10.5	10.4	10.2	9.9	9.6	9.0	10.6	7.5	9.0
14	8.7	8.6	8.5	8.5	8.4	8.2	8.5	8.9	9.4	9.7	10.7	11.5	12.1	13.4	14.3	15.0	15.2	15.6	15.6	15.3	14.4	13.7	12.7	11.8	15.6	8.2	11.6
15	10.6	10.6	10.4	10.1	10.1	9.5	9.2	9.5	10.2	11.4	12.6	13.1	14.1	15.1	15.7	16.4	15.4	14.3	13.3	12.2	11.4	10.7	10.6	10.8	16.4	9.2	12.0
16	10.8	10.7	10.6	10.3	9.8	9.9	9.9	10.1	10.3	10.1	9.6	9.4	10.1	10.9	11.4	10.9	9.6	9.1	9.1	8.7	8.5	8.5	8.3	8.1	11.4	8.1	9.8
17	8.0	8.0	6.9	5.6	4.8	4.6	4.6	4.8	5.2	5.6	5.2	5.7	6.7	7.2	7.6	7.8	8.4	9.0	8.8	8.5	7.9	7.6	7.1	6.7	9.0	4.6	6.8
18	6.3	5.8	5.3	5.0	4.7	4.5	4.5	4.5	5.0	5.5	6.5	7.6	7.8	8.2	7.7	7.7	8.5	8.3	8.5	8.1	8.3	8.5	8.3	8.1	8.5	4.5	6.8
19	7.5	7.7	7.2	6.8	6.7	7.5	7.7	7.9	8.5	9.3	10.5	12.3	12.3	12.5	13.9	13.6	13.2	12.7	12.8	11.7	11.3	11.0	10.6	9.1	13.9	6.7	10.2
20	8.8	9.6	9.3	9.3	9.2	8.4	9.4	9.4	9.0	8.8	7.6	7.3	7.6	7.5	7.4	7.6	7.3	6.6	6.3	6.1	6.1	6.2	6.2	6.1	9.6	6.1	7.8
21	6.2	6.1	5.8	5.6	5.5	5.5	5.7	5.8	6.0	6.3	6.8	7.5	8.4	9.2	9.7	10.1	11.4	11.6	11.3	10.6	11.3	9.6	8.9	8.2	11.6	5.5	8.0
22	7.3	6.9	6.6	6.1	5.8	5.7	6.1	6.1	6.3	6.8	7.4	7.3	7.0	7.1	6.9	7.4	7.3	6.9	7.0	7.0	7.0	6.8	6.6	6.3	7.4	5.7	6.7
23	6.2	6.2	6.1	6.1	6.2	6.2	6.1	6.4	6.9	7.1	7.3	8.3	8.5	8.8	8.8	9.6	10.7	11.0	10.7	9.7	8.0	7.0	6.5	6.2	11.0	6.1	7.7
24	6.0	5.7	6.0	6.0	5.7	5.9	6.4	6.8	7.6	8.2	9.1	9.6	10.8	11.8	13.2	14.1	15.5	16.0	13.9	15.0	13.6	13.7	14.4	13.5	16.0	5.7	10.3
25	12.6	11.5	10.8	10.1	9.4	9.3	8.6	9.7	10.8	12.2	14.0	15.6	17.1	18.2	19.2	19.8	20.4	20.3	20.0	20.2	19.3	18.0	17.0	15.8	20.4	8.6	15.0
26	14.4	12.5	11.4	10.3	7.9	8.1	8.0	7.8	7.7	8.0	8.0	7.9	8.1	8.6	9.6	10.5	10.9	11.4	11.8	11.7	11.3	10.2	9.1	8.8	14.4	7.7	9.7
27	8.4	8.2	8.0	7.7	7.6	7.5	7.5	7.5	7.6	7.7	8.2	8.5	8.9	9.7	10.1	9.8	9.9	10.3	10.7	10.1	10.0	9.3	7.9	6.6	10.7	6.6	8.6
28	6.7	7.3	7.1	6.3	8.2	8.6	9.1	10.0	11.4	12.2	13.3	14.4	14.6	15.5	15.6	16.2	17.2	16.5	17.2	16.4	16.0	15.2	13.9	12.8	17.2	6.3	12.6
29	11.7	10.6	8.3	9.2	8.6	8.0	9.5	9.2	9.7	11.5	13.5	15.0	16.0	17.4	18.3	19.6	20.1	20.1	19.0	19.0	17.9	16.6	14.6	12.8	20.1	8.0	14.0
30	11.6	11.3	11.3	11.5	11.6	11.6	11.3	11.3	11.2	12.3	13.7	14.5	16.1		18.3	18.5	18.5	18.2	16.6	15.9	15.2	13.9	12.3	11.0	18.5	11.0	13.8
31	10.2	10.4	10.3	9.7	9.7	9.3	8.7	9.6	11.0	12.4	15.2	16.6	17.8	19.2	19.8	20.3	20.7	20.9	21.0	20.5	19.9	18.1	14.9	12.8	21.0	8.7	15.0
Max.	**14.4**	**12.5**	**11.4**	**11.5**	**11.6**	**11.6**	**11.3**	**11.3**	**12.7**	**15.5**	**16.9**	**16.9**	**18.0**	**19.2**	**19.8**	**20.3**	**20.7**	**20.9**	**21.0**	**20.5**	**19.9**	**18.1**	**17.0**	**15.8**	**21.0**		
Min.	**6.0**	**5.7**	**5.3**	**5.0**	**4.0**	**3.1**	**4.5**	**4.5**	**5.0**	**5.5**	**5.2**	**5.7**	**6.7**	**7.1**	**6.9**	**7.4**	**7.3**	**6.6**	**6.3**	**6.1**	**6.1**	**6.2**	**6.2**	**6.1**		**3.1**	
Avg.	**8.9**	**8.7**	**8.3**	**8.0**	**7.9**	**7.6**	**7.8**	**8.3**	**8.9**	**9.6**	**10.3**	**11.0**	**11.6**	**12.1**	**12.8**	**13.1**	**13.2**	**13.1**	**12.6**	**12.2**	**11.7**	**11.0**	**10.3**	**9.6**			**10.4**

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.2	10.2	7.8	8.5	7.7	7.0	4.8	5.5	7.1	8.6	9.7	10.1	11.2	13.1	15.5	16.3	16.3	16.7	17.0	16.3	14.7	12.9	10.1	9.1	17.0	4.8	11.1
2	8.4	8.8	8.9	8.9	8.9	8.9	9.0	9.2	9.3	9.7	9.9	10.5	11.2	11.7	11.7	12.4	12.5	12.1	11.4	11.5	11.5	11.2	11.0	10.0	12.5	8.4	10.4
3	9.1	7.9	9.3	10.9	10.8	9.8	8.3	8.7	10.1	11.5	12.9	13.4	13.5	13.9	14.9	15.1	15.8	15.5	15.0	14.1	13.0	11.5	9.9	9.0	15.8	7.9	11.8
4	8.4	7.7	6.9	7.2	7.5	8.1	8.5	9.0	9.3	10.0	10.8	11.2	11.7	12.1	12.9	13.0	13.3	14.1	14.2	13.2	11.6	9.8	8.7	8.8	14.2	6.9	10.3
5	8.0	8.1	7.9	7.7	7.2	6.4	6.7	8.0	9.6	10.5	11.7	14.4	15.3	15.5	16.3	16.6	17.1	17.2	16.8	16.4	15.2	13.6	11.8	9.2	17.2	6.4	12.0
6	8.4	9.0	7.3	7.3	8.0	8.1	8.1	7.9	9.6	11.0	12.9	14.4	15.7	17.0	16.7	17.1	17.9	17.1	16.1	15.3	14.9	14.1	12.9	11.4	17.9	7.3	12.4
7	10.9	11.1	10.2	10.2	9.8	8.6	8.9	9.3	9.7	11.7	12.1	13.7	14.5	15.3	15.8	16.1	15.9	16.0	16.4	16.1	15.0	13.4	11.9	10.3	16.4	8.6	12.6
8	7.4	7.5	6.9	7.2	7.4	6.7	5.2	7.2	9.2	10.6	12.2	13.5	14.9	15.9	16.7	17.6	17.8	18.2	18.2	17.8	17.1	15.0	12.6	11.7	18.2	5.2	12.3
9	9.1	8.2	7.4	6.9	9.0	8.2	7.0	8.0	10.6	11.9	13.0	14.6	16.2	17.1	17.7	18.5	18.9	17.7	18.0	17.7	16.4	14.3	11.3	7.7	18.9	6.9	12.7
10	7.1	7.3	6.4	7.4	7.2	6.5	5.5	7.4	8.8	10.6	12.0	13.4	14.8	16.6	17.0	16.8	17.6	17.3	15.3	14.4	13.9	11.0	9.3	8.3	17.6	5.5	11.3
11	7.8	8.6	8.7	8.2	7.5	6.5	7.7	8.3	10.0	10.7	11.1	11.8	12.9	13.5	13.5	14.3	14.3	14.2	14.1	13.2	11.9	9.5	5.7	6.5	14.3	5.7	10.4
12	5.5	5.1	4.9	5.5	6.2	6.5	6.3	7.4	9.6	12.4	13.6	14.4	15.4	16.7	17.3	17.5	17.9	15.6	14.4	14.1	13.9	13.3	11.4	9.8	17.9	4.9	11.4
13	9.8	10.3	10.0	9.9	9.7	9.9	9.7	9.5	10.1	11.2	11.8	12.8	13.3	14.1	14.6	14.0	13.9	13.4	11.1	11.4	11.1	10.4	9.9	9.1	14.6	9.1	11.3
14	8.0	6.5	7.0	7.9	8.4	8.3	8.6	8.9	10.2	11.0	10.9	10.9	11.0	11.2	11.7	12.6	12.5	12.5	12.0	11.7	11.2	10.8	10.7	9.8	12.6	6.5	10.2
15	9.1	8.2	7.7	7.6	7.5	7.6	7.2	6.8	6.8	7.3	7.9	8.4	9.1	9.9	10.0	10.5	11.0	11.2	10.8	10.3	9.9	9.8	9.8	9.6	11.2	6.8	8.9
16	9.6	9.7	9.7	9.6	9.5	9.6	9.4	9.4	9.6	9.8	10.1	10.4	11.1	12.4	12.9	13.0	13.3	12.8	12.4	11.8	10.8	9.1	7.5	6.9	13.3	6.9	10.4
17	4.1	5.5	5.9	5.7	6.6	6.6	6.4	7.5	8.8	9.7	10.3	11.2	11.4	11.8	12.3	12.1	12.4	12.1	11.3	10.9	10.3	9.6	9.3	9.0	12.4	4.1	9.2
18	8.3	8.2	8.3	8.0	6.3	5.3	5.1	4.4	7.3	9.7	11.7	12.8	13.2	13.7	14.0	14.0	14.0	14.0	14.2	13.6	12.3	10.7	7.4	7.4	14.2	4.4	10.2
19	7.4	8.5	8.4	6.9	7.9	8.1	8.3	7.7	9.1	9.6	10.1	11.3	13.0	14.3	15.5	16.2	16.2	15.9	15.7	15.0	11.9	11.0	10.3	10.0	16.2	6.9	11.2
20	9.5	8.2	8.2	8.7	8.9	8.8	8.6	8.8	9.9	10.8	11.9	11.2	12.0	12.7	13.7	13.7	14.1	15.1	14.3	14.4	13.4	12.1	11.1	10.6	15.1	8.2	11.3
21	9.5	9.1	9.6	9.2	9.1	8.9	8.9	9.7	10.2	10.4	10.5	10.6	10.9	11.1	11.1	11.9	12.4	13.4	13.9	13.0	11.4	10.4	9.7	8.9	13.9	8.9	10.6
22	8.6	8.5	8.0	7.7	7.7	7.5	7.6	8.5	9.0	9.2	9.6	10.0	10.8	11.6	12.3	11.6	12.3	12.2	13.1	13.3	12.7	10.4	8.6	7.8	13.3	7.5	9.9
23	7.4	7.8	7.7	8.1	8.0	7.9	7.9	8.0	10.1	11.9	12.8	13.8	14.6	15.6	16.2	17.3	16.6	15.4	14.2	12.7	11.8	11.3	10.9	10.6	17.3	7.4	11.6
24	10.4	10.0	9.4	9.2	9.0	8.7	7.4	7.5	8.7	9.8	9.9	11.3	12.5	13.5	14.4	15.0	15.5	16.4	16.5	14.9	13.6	10.7	9.4	9.2	16.5	7.4	11.4
25	8.7	9.5	7.2	6.1	6.5	8.0	8.5	8.4	8.3	8.4	8.8	9.3	9.7	9.3	10.3	10.9	12.5	13.4	13.1	12.7	11.5	10.4	9.4	9.6	13.4	6.1	9.6
26	9.6	9.5	9.6	9.8	9.8	9.7	9.6	9.6	9.7	9.8	10.2	10.1	10.4	11.2	11.9	12.5	12.9	13.2	12.5	12.3	11.2	10.4	10.1	9.6	13.2	9.5	10.6
27	9.3	9.2	9.1	8.8	9.0	9.0	8.4	8.0	8.3	8.0	8.0	8.5	9.2	9.9	10.8	11.3	12.1	12.3	12.3	12.2	11.4	10.3	9.7	8.8	12.3	8.0	9.7
28	7.9	7.7	7.8	7.9	8.5	8.1	7.8	7.7	8.7	9.4	9.7	10.2	10.8	12.1	13.1	13.5	14.6	13.1	12.6	11.5	11.4	9.8	7.8	7.2	14.6	7.2	10.0
29	6.3	5.5	5.2	4.8	4.9	4.4	3.8	4.7	6.9	8.7	10.7	12.4	13.4	14.2	14.1	13.1	12.2	13.8	13.1	12.2	10.9	9.0	6.3	4.5	14.2	3.8	9.0
30	3.1	1.7	3.0	4.1	4.9	3.4	2.3	1.9	4.5	6.9	8.7	9.8	10.4	11.1	12.3	13.4	13.6	14.0	13.7	12.6	11.1	10.2	10.2	10.3	14.0	1.7	8.2
31	9.8	9.4	9.2	9.7	9.4	8.9	8.7	8.6	8.9	9.4	9.9	10.6	11.1	11.8	11.9	11.1	11.8	11.9	12.2	12.1	11.8	10.7	10.2	10.4	12.2	8.6	10.4
Max.	**10.9**	**11.1**	**10.2**	**10.9**	**10.8**	**9.9**	**9.7**	**9.7**	**10.6**	**12.4**	**13.6**	**14.6**	**16.2**	**17.1**	**17.7**	**18.5**	**18.9**	**18.2**	**18.2**	**17.8**	**17.1**	**15.0**	**12.9**	**11.7**	**18.9**		
Min.	**3.1**	**1.7**	**3.0**	**4.1**	**4.9**	**3.4**	**2.3**	**1.9**	**4.5**	**6.9**	**7.9**	**8.4**	**9.1**	**9.3**	**10.0**	**10.5**	**11.0**	**11.2**	**10.8**	**10.3**	**9.9**	**9.0**	**5.7**	**4.5**		**1.7**	
Avg.	**8.3**	**8.1**	**7.9**	**7.9**	**8.0**	**7.7**	**7.4**	**7.8**	**9.0**	**10.0**	**10.8**	**11.6**	**12.4**	**13.2**	**13.8**	**14.1**	**14.5**	**14.4**	**14.1**	**13.5**	**12.5**	**11.2**	**9.8**	**9.1**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.6	10.5	10.5	10.4	10.0	10.4	9.7	10.1	10.6	11.4	12.2	13.1	12.6	12.5	13.5	13.4	11.9	11.6	11.3	10.9	10.0	9.2	9.2	9.2	13.5	9.2	11.0
2	9.3	9.3	9.1	8.9	8.8	8.8	9.0	8.5	8.7	8.5	8.6	8.5	8.9	9.6	10.1	10.4	10.4	10.4	10.3	9.7	9.3	8.4	8.4	8.2	10.4	8.2	9.2
3	8.0	7.6	7.1	6.8	6.9	7.0	6.9	7.0	7.1	7.5	8.4	8.8	9.1	8.6	9.1	9.7	10.3	10.5	10.6	10.0	8.9	8.3	8.8	8.8	10.6	6.8	8.4
4	8.7	8.5	8.1	7.9	7.7	7.7	7.2	7.2	7.6	7.9	8.2	9.2	10.1	10.5	10.8	10.8	11.3	11.5	11.9	11.8	10.2	6.6	4.3	3.6	11.9	3.6	8.7
5	4.1	3.8	5.2	5.1	4.5	3.1	2.9	3.5	4.5	6.9	8.8	10.4	11.1	12.3	12.8	12.9	13.3	12.1	10.5	10.2	8.1	5.6	6.0	5.3	13.3	2.9	7.6
6	2.7	3.6	6.8	7.0	6.9	7.3	7.9	8.6	8.8	9.3	9.6	9.9	9.6	9.1	8.9	9.1	9.1	9.4	9.6	9.6	9.8	9.6	9.5	9.4	9.9	2.7	8.4
7	9.8	10.2	10.2	10.5	10.5	9.8	9.5	9.1	9.7	10.1	10.1	8.7	8.9	8.9	8.9	9.2	9.8	10.1	9.5	8.7	8.5	8.5	8.6	8.5	10.5	8.5	9.4
8	8.5	8.6	8.7	8.7	8.6	8.4	8.2	8.0	8.1	8.7	9.2	9.9	10.3	10.4	10.0	9.9	9.6	8.8	8.3	8.3	8.8	9.2	9.3	9.3	10.4	8.0	9.0
9	9.2	8.9	8.6	8.6	8.4	8.4	8.8	9.2	9.0	9.4	9.7	10.1	9.9	9.8	9.9	10.0	10.0	9.4	9.6	9.6	9.0	8.8	8.9	8.8	10.1	8.4	9.3
10	8.7	8.4	8.4	8.3	8.2	8.1	8.1	8.1	8.0	8.2	8.8	9.3	9.7	10.7	10.6	11.2	11.3	11.7	10.9	10.7	9.6	9.7	9.6	9.4	11.7	8.0	9.4
11	8.5	7.9	7.6	7.3	7.0	7.1	7.1	7.2	7.4	7.7	7.9	8.3	8.7	8.8	9.4	10.6	11.2	11.7	11.5	10.9	10.1	9.5	9.4	9.3	11.7	7.0	8.8
12	9.1	9.1	9.2	8.9	8.4	8.0	7.5	7.3	7.4	7.9	8.3	9.0	9.8	10.3	9.8	9.8	9.7	9.4	9.7	9.5	9.5	9.3	9.4	9.4	10.3	7.3	9.0
13	9.6	9.7	9.5	9.2	9.0	8.8	8.7	8.8	8.8	9.0	8.9	8.5	8.5	8.3	8.0	7.7	8.1	8.0	7.9	7.8	7.9	8.2	8.6	8.4	9.7	7.7	8.6
14	8.3	8.1	7.8	7.5	7.5	7.3	7.3	7.3	7.5	7.5	7.6	7.7	8.4	8.8	8.6	9.4	9.5	9.6	9.4	8.8	8.0	8.2	8.2	8.1	9.6	7.3	8.2
15	8.0	8.2	8.3	8.5	8.2	7.9	8.3	8.3	8.5	8.7	8.9	9.5	10.1	10.2	10.4	10.0	10.0	9.9	9.5	9.0	8.5	8.2	7.9	7.6	10.4	7.6	8.9
16	6.8	6.1	6.4	6.4	6.5	6.7	6.5	5.5	5.4	6.1	7.5	9.5	10.8	11.2	10.5	11.0	10.3	9.8	10.3	9.3	8.1	8.6	8.2	6.7	11.2	5.4	8.1
17	5.1	4.8	5.9	6.0	5.9	5.8	5.8	5.6	5.3	4.9	5.9	6.8	7.6	8.1	8.1	8.3	8.4	7.9	6.8	6.4	6.0	5.8	5.7	5.5	8.4	4.8	6.3
18	5.8	6.0	6.1	6.0	5.9	5.8	5.9	5.9	5.5	5.8	6.2	7.4	7.7	8.1	8.2	7.9	8.1	7.9	7.5	7.0	6.6	6.1	5.9	5.8	8.2	5.5	6.6
19	5.9	5.8	6.1	5.9	5.7	5.6	5.5	5.6	5.7	5.7	5.7	6.0	6.5	7.1	7.2	6.9	7.0	7.2	7.1	6.3	6.0	6.0	5.4	5.0	7.2	5.0	6.1
20	5.0	5.3	5.0	4.5	4.7	4.0	3.9	2.3	1.8	3.5	4.4	4.4	4.2	5.0	5.5	6.1	6.7	6.8	6.9	5.9	2.5	0.5	1.0	1.1	6.9	0.5	4.2
21	0.1	0.1	-0.7	-2.4	-1.0	0.3	0.8	2.2	2.7	2.9	4.6	5.8	6.9	7.6	7.6	7.8	7.7	7.2	6.9	5.3	3.5	2.5	1.3	0.7	7.8	-2.4	3.3
22	0.1	-0.6	-0.3	-1.3	-1.9	-1.5	-2.8	-3.3	-2.6	-0.7	2.7	5.5	6.5	7.0	7.3	7.0	6.1	5.7	5.1	4.5	4.1	4.1	4.1	4.0	7.3	-3.3	2.4
23	4.3	4.4	4.8	5.1	6.9	7.2	7.1	7.0	6.9	6.9	6.9	6.9	7.0	7.1	6.3	6.7	6.7	6.6	6.5	6.3	5.9	5.9	5.9	6.0	7.2	4.3	6.3
24	5.9	5.8	5.7	5.6	5.3	5.3	5.2	5.4	5.3	5.5	5.9	6.6	6.6	6.8	7.1	7.2	7.3	7.3	7.1	6.8	6.3	5.9	5.5	5.1	7.3	5.1	6.1
25	5.1	4.5	4.7	4.7	4.8	4.8	5.2	4.9	4.3	4.7	5.8	6.5	7.1	7.2	7.1	7.4	7.5	7.1	7.2	6.8	5.9	5.7	5.6	5.4	7.5	4.3	5.8
26	5.0	5.0	4.8	4.6	4.4	4.6	4.3	4.3	3.6	4.4	5.6	7.4	8.6	9.9	10.2	9.2	9.1	8.9	8.5	7.8	4.8	3.4	3.9	3.3	10.2	3.3	6.1
27	3.2	2.6	2.4	1.9	2.3	1.5	1.5	1.1	0.9	1.3	2.3	3.5	4.9	6.6	7.4	7.8	8.2	8.1	7.4	6.0	4.9	4.6	4.3	2.1	8.2	0.9	4.0
28	1.8	1.8	1.2	0.4	-0.8	0.2	-0.6	-1.7	-3.0	0.4	3.8	6.1	7.7	8.5	9.1	9.5	8.6	8.3	7.8	5.6	2.9	5.0	5.7	5.9	9.5	-3.0	3.9
29	5.8	5.1	4.1	3.4	3.7	3.9	4.2	4.4	4.4	4.0	5.6	6.5	6.7	5.5	5.5	5.6	6.3	6.9	6.4	5.7	4.3	3.6	3.6	1.0	6.9	1.0	4.8
30	-0.4	-0.4	0.8	0.4	-1.4	-1.4	-0.9	0.7	1.7	1.6	3.9	5.0	5.7	6.2	6.3	6.2	6.4	6.2	6.0	3.5	-0.5	-0.7	-2.4	-1.1	6.4	-2.4	2.1
Max.	**10.6**	**10.5**	**10.5**	**10.5**	**10.5**	**10.4**	**9.7**	**10.1**	**10.6**	**11.4**	**12.2**	**13.1**	**12.6**	**12.5**	**13.5**	**13.4**	**13.3**	**12.1**	**11.9**	**11.8**	**10.2**	**9.7**	**9.6**	**9.4**	**13.5**		
Min.	**-0.4**	**-0.6**	**-0.7**	**-2.4**	**-1.9**	**-1.5**	**-2.8**	**-3.3**	**-3.0**	**-0.7**	**2.3**	**3.5**	**4.2**	**5.0**	**5.5**	**5.6**	**6.1**	**5.7**	**5.1**	**3.5**	**-0.5**	**-0.7**	**-2.4**	**-1.1**		**-3.3**	
Avg.	**6.1**	**5.9**	**6.1**	**5.8**	**5.7**	**5.7**	**5.6**	**5.6**	**5.6**	**6.2**	**7.1**	**7.8**	**8.3**	**8.7**	**8.8**	**9.0**	**9.0**	**8.9**	**8.6**	**8.0**	**6.9**	**6.5**	**6.3**	**6.0**			**7.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.9	-1.0	-0.4	0.5	1.0	0.9	1.0	0.8	0.5	2.4	3.2	4.0	4.9	5.8	6.1	5.9	5.4	5.2	5.0	5.2	4.7	4.4	4.4	4.3	6.1	-1.0	3.1
2	3.9	3.4	2.7	2.6	2.3	2.3	2.2	1.5	0.8	1.2	2.2	3.3	4.6	4.7	5.1	5.7	5.6	4.8	4.6	3.6	2.9	0.6	0.0	-0.8	5.7	-0.8	2.9
3	-1.2	-1.4	-1.5	-1.5	-1.5	-1.2	-0.8	-1.1	-1.6	-1.4	-0.9	-0.5	-0.2	0.3	0.4	0.4	0.7	1.0	0.3	-0.8	-1.6	-1.7	-1.7	-2.3	1.0	-2.3	-0.8
4	-3.4	-4.0	-4.4	-3.9	-4.0	-4.4	-5.0	-6.2	-6.0	-4.4	-2.1	0.2	1.6	2.5	2.9	3.5	3.4	2.4	2.0	1.1	0.0	-0.2	-0.9	-1.3	3.5	-6.2	-1.3
5	-1.8	-2.0	-2.1	-1.8	-2.0	-2.0	-2.4	-2.7	-2.7	-2.7	-2.6	-2.4	-2.1	-1.9	-1.6	-1.4	-1.2	-1.1	-1.1	-1.4	-1.7	-1.8	-2.1	-2.5	-1.1	-2.7	-2.0
6	-2.6	-2.4	-2.9	-3.8	-4.3	-3.6	-3.4	-3.2	-3.1	-3.0	-2.8	-2.7	-2.4	-2.1	-1.7	-1.5	-1.3	-1.3	-1.6	-1.7	-1.9	-2.0	-2.1	-2.5	-1.3	-4.3	-2.5
7	-2.6	-2.7	-3.0	-2.9	-3.0	-3.2	-3.4	-3.5	-3.9	-4.0	-3.7	-3.6	-3.2	-3.0	-2.7	-2.4	-2.3	-2.4	-2.6	-2.7	-2.8	-2.9	-3.1	-3.5	-2.3	-4.0	-3.0
8	-3.6	-3.4	-3.6	-3.8	-4.1	-4.6	-4.9	-5.3	-5.4	-5.4	-6.2	-4.4	-3.4	-2.6	-2.1	-1.7	-1.6	-1.9	-3.1	-5.4	-6.9	-5.5	-4.9	-3.4	-1.6	-6.9	-4.0
9	-2.4	-1.7	-1.4	-0.4	0.1	-0.6	-1.0	-1.3	-1.3	-0.8	-0.4	0.2	0.9	1.4	1.9	2.2	3.0	3.5	3.7	3.9	4.3	4.7	4.9	4.7	4.9	-2.4	1.2
10	4.9	5.0	4.9	4.8	4.3	3.9	2.8	1.1	0.6	0.0	0.5	2.8	4.1	4.8	5.3	6.0	6.3	5.8	5.4	5.3	5.4	5.5	5.4	5.3	6.3	0.0	4.2
11	5.5	5.6	5.9	5.8	5.5	5.6	5.6	5.6	5.4	3.8	-0.4	-3.1	-4.0	-4.5	-4.9	-5.4	-5.5	-5.5	-5.7	-5.8	-5.7	-5.8	-6.0	-5.8	5.9	-6.0	-0.6
12	-5.5	-5.4	-5.1	-5.1	-5.6	-6.1	-6.5	-6.6	-6.8	-7.2	-7.2	-6.7	-5.9	-5.5	-5.4	-5.3	-5.5	-5.4	-5.7	-6.2	-6.6	-6.7	-6.9	-7.1	-5.1	-7.2	-6.1
13	-7.2	-9.1	-9.2	-9.4	-10.1	-10.1	-11.6	-10.9	-10.8	-10.4	-8.6	-7.5	-5.8	-3.3	-2.8	-2.0	-1.5	-1.3	-1.4	-1.3	-0.9	-0.7	-0.6	-0.4	-0.4	-11.6	-5.7
14	-0.4	-0.4	-0.4	-0.3	-0.3	-0.4	-0.3	-0.7	-0.9	-0.7	-0.2	0.0	0.1	0.2	0.4	0.7	1.0	1.2	1.3	1.0	0.9	0.4	0.3	0.4	1.3	-0.9	0.1
15	0.3	-0.7	-2.2	-3.1	-4.0	-4.5	-5.3	-5.7	-5.8	-6.1	-5.9	-5.5	-4.7	-4.5	-4.7	-4.6	-4.5	-5.0	-5.6	-6.1	-6.4	-7.1	-8.1	-8.2	0.3	-8.2	-4.9
16	-8.2	-7.5	-7.2	-7.1	-7.1	-7.3	-7.3	-7.4	-7.8	-7.9	-7.1	-7.2	-6.5	-5.7	-5.6	-4.6	-4.6	-5.6	-7.1	-8.8	-9.7	-10.3	-11.1	-11.9	-4.6	-11.9	-7.5
17	-12.6	-12.7	-13.4	-14.6	-15.5	-13.9	-13.0	-13.2	-12.2	-11.7	-10.9	-8.9	-7.7	-5.9	-6.1	-5.2	-4.2	-3.9	-5.8	-4.8	-1.4	-0.8	0.6	1.0	1.0	-15.5	-8.2
18	1.3	1.6	1.7	1.9	2.0	2.0	2.1	1.9	1.9	2.1	2.2	3.3	4.0	4.4	4.9	4.9	4.0	3.2	2.0	1.0	1.1	0.3	-0.8	-1.8	4.9	-1.8	2.1
19	-2.1	-2.0	-3.0	-2.8	-3.1	-3.6	-4.3	-4.7	-5.9	-6.2	-6.0	-6.3	-6.0	-5.9	-4.5	-4.5	-4.6	-4.8	-4.6	-5.3	-5.5	-5.4	-5.4	-5.5	-2.0	-6.3	-4.7
20	-5.3	-5.1	-5.0	-5.2	-5.5	-5.5	-6.8	-6.9	-8.4	-9.8	-10.9	-8.7	-6.7	-6.3	-6.1	-5.8	-7.0	-6.9	-7.2	-7.3	-7.6	-7.4	-7.1	-7.0	-5.0	-10.9	-6.9
21	-7.2	-7.1	-6.5	-6.1	-5.5	-5.7	-5.7	-5.9	-6.1	-6.8	-7.8	-6.8	-5.6	-4.8	-4.8	-4.4	-4.9	-5.4	-6.1	-6.7	-7.4	-8.7	-9.5	-10.3	-4.4	-10.3	-6.5
22	-10.7	-11.0	-10.8	-11.0	-11.5	-11.8	-11.9	-12.1	-12.1	-12.3	-12.5	-12.3	-11.5	-10.9	-10.4	-10.1	-9.9	-10.6	-11.6	-12.1	-13.2	-13.6	-13.5	-13.0	-9.9	-13.6	-11.7
23	-12.4	-12.2	-11.9	-12.2	-12.2	-12.7	-13.7	-13.5	-12.9	-13.0	-12.5	-12.4	-11.6	-10.4	-10.2	-10.4	-10.5	-10.0	-9.8	-8.8	-8.4	-8.9	-8.7	-9.1	-8.4	-13.7	-11.2
24	-8.9	-9.0	-8.9	-8.8	-9.3	-10.1	-11.3	-12.1	-11.9	-10.6	-9.8	-9.4	-8.7	-8.2	-7.8	-7.5	-7.7	-7.5	-8.8	-9.3	-11.2	-13.1	-13.9	-14.1	-7.5	-14.1	-9.9
25	-11.3	-7.4	-6.6	-6.5	-6.8	-6.3	-5.8	-5.3	-4.9	-4.3	-3.6	-2.7	-2.1	-1.3	-0.9	0.2	-0.2	-0.5	-0.9	-1.0	-2.6	-5.2	-5.8	-6.1	0.2	-11.3	-4.1
26	-6.3	-6.1	-6.0	-5.5	-6.0	-6.5	-7.0	-7.3	-7.4	-7.6	-7.5	-7.5	-8.3	-8.4	-8.4	-9.0	-9.4	-10.0	-10.7	-11.1	-11.5	-11.6	-11.8	-12.2	-5.5	-12.2	-8.5
27	-12.4	-12.6	-13.5	-14.1	-14.4	-14.6	-14.3	-14.7	-14.8	-15.0	-14.6	-14.6	-13.6	-13.2	-12.2	-11.4	-11.8	-12.4	-13.2	-13.5	-13.7	-14.8	-15.3	-16.5	-11.4	-16.5	-13.8
28	-17.2	-17.1	-17.5	-17.7	-17.6	-17.5	-17.4	-17.6	-12.6	-8.6	-7.3	-6.1	-5.0	-4.9	-2.7	-2.6	-4.5	-7.3	-10.0	-11.4	-10.6	-11.8	-12.9	-11.6	-2.6	-17.7	-11.2
29	-11.3	-11.2	-10.4	-9.6	-10.0	-10.1	-8.8	-8.4	-7.4	-8.0	-7.5	-6.1	-4.5	-2.5	-0.8	-0.7	-0.7	-0.6	-0.9	-1.1	-0.9	-1.3	-1.5	-1.3	-0.6	-11.3	-5.2
30	-0.9	-0.6	-0.3	-0.7	-0.4	-0.2	0.0	-0.2	0.0	-0.3	-0.5	-0.5	1.1	2.0	3.4	1.2	2.8	-0.2	-3.9	-6.5	-5.8	-6.4	-7.0	-6.0	3.4	-7.0	-1.3
31	-6.0	-4.0	-4.8	-4.8	-6.0	-5.6	-7.4	-8.3	-8.2	-9.1	-9.4	-6.4	-3.9	-2.9	-1.6	-1.5	-2.0	-3.0	-5.2	-6.3	-7.4	-8.9	-7.8	-7.1	-1.5	-9.4	-5.7
Max.	**5.5**	**5.6**	**5.9**	**5.8**	**5.5**	**5.6**	**5.6**	**5.6**	**5.4**	**3.8**	**3.2**	**4.0**	**4.9**	**5.8**	**6.1**	**6.0**	**6.3**	**5.8**	**5.4**	**5.3**	**5.4**	**5.5**	**5.4**	**5.3**	**6.3**		
Min.	**-17.2**	**-17.1**	**-17.5**	**-17.7**	**-17.6**	**-17.5**	**-17.4**	**-17.6**	**-14.8**	**-15.0**	**-14.6**	**-14.6**	**-13.6**	**-13.2**	**-12.2**	**-11.4**	**-11.8**	**-12.4**	**-13.2**	**-13.5**	**-13.7**	**-14.8**	**-15.3**	**-16.5**		**-17.7**	
Avg.	**-4.8**	**-4.6**	**-4.7**	**-4.7**	**-5.0**	**-5.1**	**-5.3**	**-5.6**	**-5.5**	**-5.4**	**-5.2**	**-4.5**	**-3.6**	**-3.0**	**-2.5**	**-2.3**	**-2.4**	**-2.8**	**-3.5**	**-4.0**	**-4.3**	**-4.7**	**-4.9**	**-5.0**			**-4.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-6.8	-6.0	-5.8	-6.2	-7.0	-6.9	-4.0	-4.6	-3.8	-3.3	-3.1	-2.3	-1.1	-1.2	-0.6	0.2	0.2	-1.6	-3.0	-3.0	-3.2	-3.3	-2.4	-2.5	0.2	-7.0	-3.4
2	-3.1	-3.5	-4.1	-4.5	-4.8	-4.7	-5.4	-5.6	-6.8	-9.9	-11.7	-12.3	-13.1	-12.9	-12.8	-13.1	-13.0	-13.3	-13.6	-13.8	-13.7	-13.8	-13.8	-13.9	-3.1	-13.9	-9.9
3	-14.0	-13.7	-13.7	-13.5	-13.2	-13.4	-13.5	-13.5	-13.3	-13.4	-13.5	-13.1	-12.7	-12.6	-12.2	-12.2	-12.0	-12.2	-13.1	-13.5	-13.2	-13.0	-12.7	-12.8	-12.0	-14.0	-13.1
4	-12.4	-12.5	-12.1	-12.2	-12.2	-12.9	-13.2	-13.9	-14.1	-14.4	-14.6	-14.2	-13.6	-12.9	-12.7	-12.4	-12.1	-12.3	-12.6	-12.5	-12.3	-12.2	-12.1	-12.7	-12.1	-14.6	-12.9
5	-13.5	-13.4	-12.8	-12.4	-12.3	-11.9	-11.7	-11.9	-12.3	-13.0	-11.8	-11.0	-8.6	-9.2	-9.1	-8.2	-7.1	-7.6	-9.0	-8.9	-9.3	-10.2	-9.5	-8.5	-7.1	-13.5	-10.5
6	-9.2	-8.2	-7.4	-6.6	-7.0	-6.9	-6.3	-6.7	-5.8	-5.6	-6.6	-5.7	-3.9	-4.4	-3.6	-4.2	-5.2	-6.1	-6.0	-6.8	-7.6	-7.8	-8.3	-9.6	-3.6	-9.6	-6.5
7	-11.1	-11.8	-12.3	-12.8	-13.3	-13.5	-14.1	-14.7	-15.2	-15.1	-14.9	-14.4	-13.8	-12.2	-11.0	-12.7	-13.1	-12.4	-14.1	-12.7	-11.8	-10.8	-7.2	-6.0	-6.0	-15.2	-12.5
8	-5.6	-5.8	-6.7	-6.2	-5.7	-4.5	-4.3	-4.3	-4.0	-4.0	-4.2	-4.0	-4.0	-2.7	-2.2	-2.2	-2.0	-1.8	-1.4	-1.1	-0.8	-0.6	-0.2	0.0	0.0	-6.7	-3.3
9	0.0	0.2	0.8	0.7	0.9	1.5	2.0	2.1	2.0	2.1	1.6	1.7	2.1	2.4	2.5	2.0	1.8	1.1	0.7	0.8	1.4	1.7	2.3	2.2	2.5	0.0	1.5
10	1.7	1.7	2.1	1.8	1.2	0.9	0.8	0.9	1.4	1.2	1.2	0.4	0.7	1.1	0.7	0.6	0.4	-0.1	-0.5	-0.6	-0.1	0.1	-0.1	-0.2	2.1	-0.6	0.7
11	-0.1	-0.2	-0.4	-0.5	-0.9	-0.8	-0.7	-0.8	-0.8	-1.0	-1.3	-1.1	-0.4	0.4	-0.3	-0.1	-0.7	-4.0	-8.3	-7.5	-9.1	-8.1	-4.7	-3.9	0.4	-9.1	-2.3
12	-3.6	-3.3	-4.2	-4.5	-5.4	-5.9	-6.1	-6.0	-5.8	-5.6	-6.0	-6.0	-5.4	-4.5	-5.6	-7.7	-8.3	-8.2	-7.3	-6.3	-6.1	-5.8	-5.2	-5.6	-3.3	-8.3	-5.8
13	-4.6	-3.3	-3.0	-2.9	-4.5	-5.5	-4.5	-4.1	-3.6	-3.4	-2.8	-2.0	-1.6	-1.8	-1.4	-1.3	-1.4	-1.4	-2.0	-2.4	-2.4	-2.5	-2.3	-2.4	-1.3	-5.5	-2.8
14	-2.1	-1.6	-1.7	-1.7	-1.8	-2.2	-2.3	-2.2	-2.1	-2.0	-2.0	-2.0	-1.6	-1.9	-1.6	-1.9	-2.2	-2.9	-3.4	-3.4	-3.5	-3.5	-3.4	-3.2	-1.6	-3.5	-2.3
15	-3.0	-3.2	-3.6	-4.3	-4.2	-3.8	-4.1	-4.5	-4.2	-4.0	-4.0	-3.4	-2.9	-2.4	-2.3	-1.9	-1.5	-1.1	-0.8	-0.8	-0.8	-0.6	-0.5	-0.4	-0.4	-4.5	-2.6
16	-0.5	-0.6	-0.6	-0.7	-0.8	-1.0	-1.0	-1.1	-3.0	-8.2	-10.8	-6.8	-3.8	-2.9	-2.4	-2.1	-5.5	-8.3	-9.7	-9.2	-10.3	-9.3	-6.7	-10.0	-0.5	-10.8	-4.8
17	-12.7	-13.1	-10.2	-10.4	-10.5	-10.1	-10.4	-10.9	-11.8	-14.2	-12.3	-11.7	-10.0	-9.2	-8.5	-8.5	-8.4	-8.5	-8.9	-8.3	-8.0	-8.8	-9.1	-8.8	-8.0	-14.2	-10.1
18	-9.4	-11.1	-11.6	-12.0	-13.0	-13.0	-13.6	-13.4	-13.2	-13.2	-13.2	-12.8	-12.8	-12.4	-12.0	-12.1	-12.6	-13.3	-14.2	-14.7	-14.9	-15.4	-15.6	-15.5	-9.4	-15.6	-13.1
19	-15.5	-15.6	-16.0	-16.1	-16.5	-16.6	-16.5	-16.6	-16.6	-16.7	-16.5	-16.0	-14.5	-13.6	-13.9	-13.8	-13.5	-12.9	-13.8	-12.8	-13.7	-13.4	-13.9	-14.3	-12.8	-16.7	-15.0
20	-15.8	-15.8	-15.7	-16.6	-17.6	-17.9	-18.5	-19.2	-19.4	-19.7	-20.7	-21.0	-21.1	-21.2	-21.1	-21.2	-21.5	-22.0	-22.1	-22.2	-22.4	-23.0	-23.1	-23.3	-15.7	-23.3	-20.1
21	-23.6	-24.0	-24.6	-25.0	-24.7	-25.5	-25.7	-25.7	-26.2	-26.6	-26.2	-26.2	-25.2	-24.1	-24.5	-24.1	-24.9	-25.8	-25.4	-25.6	-26.3	-24.5	-22.8	-22.2	-22.2	-26.6	-25.0
22	-21.9	-21.6	-20.4	-19.5	-19.6	-19.3	-20.0	-20.7	-20.7	-21.5	-21.7	-21.1	-18.5	-16.1	-14.8	-14.7	-15.3	-15.4	-15.5	-15.3	-14.9	-15.4	-16.9	-18.5	-14.7	-21.9	-18.3
23	-18.4	-18.3	-17.2	-15.5	-13.9	-12.6	-11.9	-12.2	-11.3	-11.0	-11.5	-11.2	-11.0	-10.4	-8.4	-7.4	-7.6	-5.9	-3.9	-2.8	-2.5	-2.1	-1.8	-0.9	-0.9	-18.4	-9.6
24	-0.4	-0.1	0.6	1.3	1.4	1.6	2.2	2.6	1.9	1.5	1.6	1.5	1.6	1.2	0.7	0.5	0.4	0.3	0.3	0.0	-0.3	-2.2	-4.4	-6.4	2.6	-6.4	0.3
25	-7.7	-9.4	-10.0	-10.2	-10.5	-10.5	-10.6	-10.9	-11.4	-12.2	-13.0	-13.8	-14.2	-14.6	-16.1	-16.7	-15.9	-16.4	-16.9	-17.1	-16.8	-17.0	-17.1	-17.1	-7.7	-17.1	-13.6
26	-17.8	-16.7	-16.2	-16.3	-15.9	-15.7	-15.0	-14.8	-14.6	-15.2	-15.4	-15.6	-15.7	-15.2	-15.5	-15.6	-14.8	-15.3	-16.2	-17.2	-17.1	-16.9	-17.1	-16.7	-14.6	-17.8	-15.9
27	-17.4	-17.5	-17.6	-18.6	-18.9	-18.5	-17.4	-17.1	-17.0	-16.2	-16.2	-15.8	-14.6	-13.7	-14.3	-13.9	-13.5	-13.8	-13.4	-13.3	-13.2	-13.0	-12.0	-11.7	-11.7	-18.9	-15.3
28	-11.3	-10.7	-10.3	-10.3	-10.6	-10.6	-10.3	-10.1	-10.0	-9.9	-9.7	-10.1	-10.1	-10.2	-10.0	-9.8	-10.3	-10.5	-10.5	-11.0	-11.6	-11.5	-11.8	-12.2	-9.7	-12.2	-10.6
29	-13.0	-13.1	-13.4	-13.5	-13.5	-13.8	-13.9	-14.3	-14.8	-14.9	-15.1	-15.3	-15.5	-15.6	-15.7	-15.7	-15.8	-16.2	-16.3	-16.6	-16.7	-17.1	-17.1	-17.3	-13.0	-17.3	-15.2
30	-17.8	-18.3	-18.7	-18.9	-19.5	-20.0	-20.8	-21.3	-19.5	-19.3	-18.9	-18.9	-19.1	-18.8	-18.2	-18.8	-19.4	-19.4	-19.7	-19.6	-19.2	-19.4	-19.9	-20.0	-17.8	-21.3	-19.3
Max.	**1.7**	**1.7**	**2.1**	**1.8**	**1.4**	**1.6**	**2.2**	**2.6**	**2.0**	**2.1**	**1.6**	**1.7**	**2.1**	**2.4**	**2.5**	**2.0**	**1.8**	**1.1**	**0.7**	**0.8**	**1.4**	**1.7**	**2.3**	**2.2**	**2.6**		
Min.	**-23.6**	**-24.0**	**-24.6**	**-25.0**	**-24.7**	**-25.5**	**-25.7**	**-25.7**	**-26.2**	**-26.6**	**-26.2**	**-26.2**	**-25.2**	**-24.1**	**-24.5**	**-24.1**	**-24.9**	**-25.8**	**-25.4**	**-25.6**	**-26.3**	**-24.5**	**-23.1**	**-23.3**		**-26.6**	
Avg.	**-9.7**	**-9.7**	**-9.6**	**-9.6**	**-9.8**	**-9.8**	**-9.7**	**-9.8**	**-9.9**	**-10.3**	**-10.4**	**-10.1**	**-9.5**	**-9.1**	**-8.9**	**-9.0**	**-9.2**	**-9.6**	**-10.0**	**-9.9**	**-10.0**	**-10.0**	**-9.6**	**-9.8**			**-9.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Temperature at 2 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-19.7	-18.5	-18.2	-18.8	-19.4	-19.8	-19.3	-19.5	-18.3	-17.0	-16.1	-16.3	-15.0	-13.9	-13.7	-13.8	-12.9	-13.0	-13.2	-13.6	-12.9	-13.6	-13.3	-11.6	-11.6	-19.8	-15.9
2	-9.5	-10.3	-10.2	-8.1	-7.3	-6.0	-4.4	-4.5	-3.7	-3.3	-2.8	-1.9	-1.0	-0.8	-0.5	-0.6	-0.6	-0.4	-0.8	-0.4	-0.3	0.1	0.4	0.9	0.9	-10.3	-3.2
3	1.2	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.3	2.6	2.8	2.8	2.2	2.4	1.9	2.0	2.3	2.6	3.0	3.4	3.1	3.0	2.7	3.4	1.2	2.3
4	2.3	2.2	2.1	2.2	2.4	2.4	2.3	2.3	2.0	2.1	2.1	2.0	2.4	2.6	2.3	2.0	2.5	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9	2.0	2.4
5	2.9	2.9	2.7	2.8	2.7	2.7	2.7	2.8	2.6	3.1	3.0	3.5	3.7	3.2	3.4	3.4	3.2	3.3	3.2	3.1	2.9	3.3	3.5	3.1	3.7	2.6	3.1
6	3.0	2.9	2.9	3.2	3.2	3.2	3.1	3.2	3.3	3.3	3.1	3.2	2.8	2.4	2.7	2.5	2.4	2.4	1.6	1.3	1.3	1.3	1.2	1.1	3.3	1.1	2.5
7	0.8	0.4	0.3	-0.5	-1.4	-2.3	-3.0	-2.3	-2.2	-3.1	-4.0	-4.9	-5.2	-5.4	-5.1	-5.4	-5.9	-6.6	-7.3	-7.3	-8.0	-8.1	-8.4	-8.1	0.8	-8.4	-4.3
8	-7.8	-8.1	-8.4	-6.8	-6.6	-1.1	-0.5	-1.0	1.2	1.4	1.3	1.7	2.5	2.7	1.2	1.3	1.4	1.6	2.3	0.6	0.4	1.5	0.3	0.7	2.7	-8.4	-0.8
9	-0.9	-0.4	-0.5	-0.6	-1.3	-3.4	-4.3	-5.4	-5.4	-5.9	-6.5	-6.6	-6.0	-4.4	-5.6	-5.0	-4.9	-6.2	-6.7	-6.8	-7.0	-6.4	-5.7	-5.0	-0.4	-7.0	-4.6
10	-5.3	-5.4	-4.4	-4.3	-5.2	-6.9	-7.5	-7.6	-7.1	-8.4	-9.6	-10.6	-11.0	-10.7	-9.0	-9.3	-10.2	-10.1	-10.1	-10.4	-13.0	-14.9	-15.4	-14.5	-4.3	-15.4	-9.2
11	-15.4	-13.6	-14.1	-14.6	-13.8	-13.0	-12.7	-13.8	-14.9	-16.1	-15.6	-11.8	-8.5	-6.9	-6.2	-6.4	-7.6	-9.4	-10.2	-10.1	-10.6	-11.9	-12.8	-12.9	-6.2	-16.1	-11.8
12	-14.0	-14.7	-15.2	-14.6	-13.7	-13.1	-13.7	-15.7	-14.3	-12.0	-11.4	-10.7	-10.2	-9.9	-9.5	-9.7	-9.2	-10.2	-7.6	-6.4	-6.1	-6.8	-7.3	-6.1	-6.1	-15.7	-10.9
13	-6.3	-6.7	-7.3	-7.2	-7.4	-7.8	-8.6	-9.2	-9.3	-9.0	-9.2	-9.8	-10.1	-9.3	-9.8	-9.4	-9.6	-10.7	-11.7	-11.9	-11.3	-11.3	-11.6	-12.3	-6.3	-12.3	-9.4
14	-8.9	-8.7	-10.1	-12.1	-12.0	-9.1	-11.7	-11.4	-6.9	-6.3	-6.6	-6.1	-5.9	-4.2	-4.1	-3.8	-3.9	-3.9	-3.7	-3.4	-2.1	-1.8	-1.8	-1.7	-1.7	-12.1	-6.3
15	-1.1	-0.5	-0.4	-0.9	-0.9	-1.2	-0.9	-0.8	-0.7	-0.7	-1.4	-1.4	-1.1	-0.9	-1.0	-0.9	-1.2	-2.1	-4.1	-5.8	-5.9	-7.2	-6.1	-5.7	-0.4	-7.2	-2.2
16	-6.7	-6.8	-7.2	-7.6	-6.3	-8.2	-11.0	-10.4	-10.8	-10.1	-9.6	-7.6	-6.3	-5.5	-4.8	-5.1	-5.0	-5.5	-5.8	-5.8	-6.4	-5.8	-4.5	-3.8	-3.8	-11.0	-6.9
17	-2.9	-1.8	-1.1	-0.9	-0.9	-1.0	-1.3	-1.1	-0.8	-0.5	-0.2	-0.1	0.3	0.7	0.9	0.9	0.7	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.9	-2.9	-0.2
18	0.7	0.7	0.7	0.6	0.6	0.4	0.3	0.5	0.8	0.8	1.0	1.0	1.0	1.3	1.5	1.6	1.6	1.6	1.6	1.5	1.6	1.9	1.8	1.8	1.9	0.3	1.1
19	1.3	1.5	1.7	1.6	1.5	1.4	1.5	1.5	1.2	1.2	1.4	1.4	1.5	1.8	2.1	1.6	1.7	1.5	1.0	1.0	1.4	1.5	1.3	1.5	2.1	1.0	1.5
20	1.2	1.3	1.6	1.2	0.3	0.6	0.6	0.3	0.7	0.7	0.2	-0.3	-0.5	0.1	0.8	0.6	0.4	-0.2	-1.9	-5.4	-6.4	-7.5	-5.5	-5.3	1.6	-7.5	-0.9
21	-4.9	-6.0	-9.2	-8.4	-7.5	-7.1	-5.3	-5.2	-5.3	-4.9	-4.2	-3.9	-3.5	-3.7	-3.7	-3.0	-4.2	-7.3	-8.4	-11.0	-10.5	-10.5	-10.4	-10.9	-3.0	-11.0	-6.6
22	-11.3	-11.5	-11.1	-9.8	-6.6	-4.3	-3.4	-3.4	-3.8	-3.6	-3.4	-3.4	-3.3	-2.8	-2.9	-2.8	-2.9	-2.7	-2.7	-2.8	-3.1	-3.3	-3.3	-3.2	-2.7	-11.5	-4.6
23	-3.0	-3.1	-2.9	-2.9	-2.8	-2.6	-2.4	-2.3	-2.3	-2.3	-2.9	-4.8	-5.9	-6.4	-6.6	-7.0	-7.2	-7.2	-7.5	-7.5	-7.2	-6.9	-7.3	-7.4	-2.3	-7.5	-4.9
24	-6.5	-6.6	-6.0	-5.6	-6.5	-6.2	-7.6	-9.2	-9.8	-9.8	-8.0	-7.3	-8.8	-8.4	-8.0	-8.1	-8.4	-9.5	-10.7	-10.3	-9.4	-9.4	-8.3	-7.5	-5.6	-10.7	-8.2
25	-7.3	-7.0	-6.3	-6.0	-5.3	-5.4	-4.8	-4.4	-4.2	-3.9	-3.7	-3.5	-3.8	-4.4	-4.6	-4.5	-4.1	-5.7	-7.6	-8.4	-8.8	-9.4	-10.1	-10.8	-3.5	-10.8	-6.0
26	-11.3	-12.5	-14.4	-15.4	-16.2	-16.7	-16.8	-16.8	-16.4	-15.9	-15.9	-15.9	-15.8	-15.7	-15.6	-15.3	-15.5	-15.3	-15.5	-15.9	-16.0	-16.2	-16.4	-16.5	-11.3	-16.8	-15.6
27	-16.7	-16.4	-16.2	-16.4	-16.8	-17.0	-17.3	-17.6	-17.7	-18.0	-18.3	-18.5	-18.3	-18.1	-18.4	-18.5	-18.6	-18.9	-19.2	-19.4	-19.6	-19.6	-19.7	-20.2	-16.2	-20.2	-18.1
28	-20.3	-20.4	-20.6	-20.6	-20.8	-21.0	-20.9	-20.9	-21.0	-21.5	-21.5	-21.9	-21.8	-21.3	-21.5	-21.8	-22.3	-22.5	-22.7	-23.1	-23.5	-23.6	-24.1	-24.1	-20.3	-24.1	-21.8
29	-24.6	-24.7	-24.7	-24.6	-24.6	-24.6	-24.6	-24.4	-24.7	-24.6	-24.5	-24.3	-24.1	-23.4	-23.5	-23.3	-23.6	-24.2	-24.2	-24.1	-24.1	-24.0	-24.0	-24.4	-23.3	-24.7	-24.2
30	-25.1	-24.7	-25.4	-25.5	-26.0	-26.0	-26.2	-25.9	-25.6	-25.7	-26.2	-26.3	-25.9	-25.5	-25.4	-25.8	-26.0	-26.6	-27.1	-26.9	-27.4	-27.5	-27.6	-27.4	-24.7	-27.6	-26.1
31	-27.3	-27.2	-27.3	-27.8	-27.8	-27.0	-26.3	-26.6	-26.4	-25.7	-25.6	-24.1	-24.5	-24.0	-24.8	-24.6	-24.1	-23.9	-23.7	-23.6	-23.7	-23.4	-23.0	-22.8	-22.8	-27.8	-25.2
Max.	**3.0**	**2.9**	**2.9**	**3.2**	**3.2**	**3.2**	**3.1**	**3.2**	**3.3**	**3.3**	**3.1**	**3.5**	**3.7**	**3.2**	**3.4**	**3.4**	**3.2**	**3.3**	**3.2**	**3.1**	**3.4**	**3.3**	**3.5**	**3.1**	**3.7**		
Min.	**-27.3**	**-27.2**	**-27.3**	**-27.8**	**-27.8**	**-27.0**	**-26.3**	**-26.6**	**-26.4**	**-25.7**	**-26.2**	**-26.3**	**-25.9**	**-25.5**	**-25.4**	**-25.8**	**-26.0**	**-26.6**	**-27.1**	**-26.9**	**-27.4**	**-27.5**	**-27.6**	**-27.4**		**-27.8**	
Avg.	**-7.9**	**-7.8**	**-8.0**	**-8.0**	**-7.9**	**-7.7**	**-7.8**	**-7.9**	**-7.7**	**-7.5**	**-7.5**	**-7.3**	**-7.1**	**-6.7**	**-6.7**	**-6.7**	**-6.8**	**-7.3**	**-7.6**	**-8.0**	**-8.0**	**-8.1**	**-8.1**	**-8.0**			**-7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	217.0	221.0	223.0	223.0	223.0	221.0	219.0	214.0	216.0	218.0	212.0	216.0	210.0	216.0	215.0	215.0	218.0	216.0	217.0	216.0	210.0	208.0	208.0	221.0
2	199.0												199.0	214.0	200.0	203.0	199.0	204.0	214.0	240.0	258.0	250.0	257.0	249.0
3	270.0	258.0	273.0	257.0	251.0	251.0	261.0	244.0	265.0	209.0	198.0	209.0	198.0	195.0	186.0	199.0								
4														219.0	214.0	214.0								
5													186.0	185.0	176.0	174.0								
6																180.0								
7																								
8													213.0	219.0	224.0	223.0								
9													175.0	187.0	187.0	172.0	163.0	156.0	160.0	150.0	136.0	148.0	151.0	153.0
10	151.0	145.0	167.0	178.0	170.0	170.0	177.0	180.0	182.0	184.0	191.0	189.0	184.0	194.0	194.0	203.0	214.0	221.0	229.0	196.0	211.0	219.0	200.0	184.0
11	172.0	170.0	170.0	178.0	182.0	205.0	197.0	187.0	208.0	200.0	172.0	189.0	243.0	206.0	212.0	184.0	190.0	207.0	206.0	195.0	212.0	224.0	230.0	221.0
12	226.0	221.0	208.0	212.0	228.0	220.0	224.0	217.0	209.0	212.0	213.0	217.0	217.0	216.0	226.0	227.0	206.0	200.0	195.0	189.0	188.0	197.0	188.0	194.0
13	189.0	182.0	170.0	185.0	193.0	177.0	185.0	183.0	180.0	177.0	190.0	209.0	205.0	196.0	186.0	180.0	183.0	195.0	228.0	206.0	204.0	210.0	199.0	220.0
14	221.0	193.0	224.0	244.0	207.0	254.0	216.0	233.0	329.0	329.0	308.0	300.0	295.0	302.0	301.0	301.0	304.0	299.0	298.0	299.0	293.0	306.0	325.0	320.0
15	310.0	300.0	307.0	314.0	329.0	338.0	335.0	333.0	327.0	320.0	322.0	319.0	331.0	324.0	319.0	323.0	327.0	327.0	320.0	319.0	2.0	40.0	330.0	351.0
16	343.0	96.0	340.0	25.0	0.0	345.0	332.0	0.0	340.0	0.0	150.0	42.0	180.0	76.0	47.0	253.0	331.0	290.0	232.0	1.0	76.0	216.0	207.0	302.0
17	280.0	182.0	309.0	289.0	293.0	293.0	289.0	285.0	274.0	278.0	272.0	272.0	268.0	278.0	278.0	282.0	286.0	293.0	324.0	355.0	337.0	329.0	340.0	342.0
18	346.0	320.0	330.0	359.0	330.0	315.0	311.0	313.0	314.0	318.0	322.0	341.0	7.0	40.0	203.0	205.0	88.0	265.0	270.0	251.0	310.0	322.0	346.0	337.0
19	4.0	21.0	337.0	323.0	321.0	314.0	309.0	314.0	331.0	321.0	317.0	313.0	315.0	314.0	313.0	309.0	316.0	319.0	313.0	309.0	309.0	314.0	317.0	318.0
20	321.0	321.0	316.0	312.0	310.0	316.0	312.0	310.0	312.0	314.0	306.0	293.0	296.0	302.0	302.0	302.0	296.0	242.0	0.0	0.0	0.0	319.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	312.3	315.3	309.0	313.5	300.4	295.1	288.4	291.5	296.2	302.3	300.9	311.9	305.5	306.1	297.2	312.3
22	323.4	345.0	7.3	3.6	0.8	4.1	5.0	3.7	1.0	3.7	39.6	49.7	56.5	47.7	48.6	58.7	59.5	48.6	34.9	19.8	305.9	201.7	180.2	166.4
23	160.7	149.3	169.0	155.8	154.2	164.8	161.1	162.7	163.9	167.8	159.8	164.0	157.9	154.5	170.6	179.3	186.4	187.4	184.5	225.2	218.2	217.0	217.6	226.0
24	214.2	200.1	203.8	202.2	211.9	230.3	92.7	330.9	294.4	299.5	304.0	309.5	313.5	309.7	310.1	313.9	317.7	312.8	313.8	313.1	319.7	319.0	328.4	334.1
25	338.6	33.0	131.7	198.9	92.7	72.3	85.7	88.0	91.4	116.1	115.1	118.1	116.6	116.2	116.6	116.1	118.3	129.8	144.1	168.2	190.1	181.6	201.1	195.6
26	223.2	213.0	193.7	196.8	207.6	228.2	202.4	215.9	211.1	219.2	231.1	214.3	201.7	219.2	219.1	227.0	246.4	268.2	262.1	266.3	278.6	287.0	17.8	348.0
27	336.1	335.2	340.2	331.6	335.0	330.4	338.5	340.9	306.5	304.5	299.3	304.7	296.7	292.2	292.2	292.9	293.5	292.8	292.9	293.6	295.0	297.3	308.2	309.3
28	311.2	316.1	320.8	327.4	328.0	337.8	344.8	336.6	324.4	320.0	318.0	320.8	316.7	312.8	315.7	308.9	59.2	129.6	0.0	0.0	51.9	43.5	211.6	276.9
29	211.3	98.5	49.7	58.2	134.9	20.3	59.3	84.4	189.0	251.1	244.9	40.8	83.3	60.4	320.9	271.7	247.0	193.4	208.2	221.7	266.5	236.8	197.3	205.3
30	252.2	279.4	215.2	115.2	147.9	204.0	209.3	205.9	207.1	213.5	212.4	199.2	218.9	202.0	229.8	241.5	229.6	208.1	203.0	191.7	222.7	194.6	186.4	183.9
31	192.3	208.7	214.3	215.8	206.3	211.7	179.3	190.0	219.0	196.0	262.0	91.0	263.0	226.0	209.0	216.0	244.0	237.0	259.0	230.0	260.0	258.0	252.0	251.0

Total Hours in Month 744 **Hours Data Available** 605 **Data Recovery** 81.3%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	250.0	260.0	254.0	239.0	0.0	270.0	260.0	255.0	219.0	280.0	265.0	248.0	220.0	225.0	257.0	241.0	208.0	208.0	208.0	199.0	203.0	201.0	225.0	249.0
2	235.0	225.0	208.0	204.0	194.0	204.0	203.0	207.0	209.0	215.0	206.0	210.0	206.0	197.0	178.0	194.0	197.0	174.0	166.0	167.0	176.0	190.0	201.0	188.0
3	174.0	189.0	180.0	192.0	217.0	201.0	205.0	205.0	203.0	213.0	213.0	215.0	235.0	229.0	238.0	221.0	236.0	225.0	228.0	220.0	214.0	206.0	208.0	203.0
4	200.0	198.0	207.0	207.0	202.0	203.0	203.0	203.0	205.0	211.0	209.0	213.0	211.0	208.0	202.0	203.0	197.0	208.0	210.0	207.0	213.0	212.0	204.0	203.0
5	203.0	212.0	213.0	211.0	222.0	225.0	226.0	226.0	229.0	220.0	225.0	218.0	218.0	212.0	214.0	217.0	222.0	229.0	225.0	212.0	189.0	196.0	205.0	203.0
6	205.0	203.0	214.0	208.0	211.0	211.0	208.0	206.0	199.0	204.0	197.0	193.0	214.0	215.0	207.0	206.0	190.0	214.0	213.0	213.0	190.0	210.0	202.0	205.0
7	204.0	204.0	200.0	213.0	217.0	200.0	202.0	186.0	201.0	142.0	160.0	199.0	255.0	255.0	22.0	165.0	236.0	199.0	211.0	199.0	201.0	197.0	197.0	202.0
8	222.0	204.0	219.0	218.0	264.0	264.0	287.0	254.0	246.0	221.0	198.0	160.0	250.0	259.0	218.0	229.0	260.0	258.0	243.0	247.0	235.0	221.0	230.0	225.0
9	229.0	227.0	228.0	233.0	228.0	235.0	233.0	233.0	237.0	246.0	203.0	214.0	210.0	193.0	191.0	165.0	200.0	193.0	195.0	195.0	197.0	198.0	201.0	200.0
10	199.0	200.0	197.0	197.0	198.0	196.0	199.0	199.0	195.0	200.0	228.0	251.0	248.0	209.0	205.0	205.0	206.0	210.0	206.0	207.0	208.0	206.0	207.0	208.0
11	239.0	262.0	258.0	47.0	340.0	27.0	47.0	53.0	59.0	57.0	60.0	50.0	45.0	52.0	65.0	45.0	56.0	55.0	40.0	0.0	33.0	24.0	33.0	28.0
12	34.0	34.0	54.0	47.0	37.0	163.0	271.0	197.0	199.0	208.0	149.0	206.0	221.0	185.0	212.0	207.0	196.0	199.0	227.0	194.0	200.0	209.0	209.0	206.0
13	300.0	296.0	319.0	292.0	275.0	277.0	279.0	275.0	280.0	281.0	284.0	287.0	289.0	286.0	287.0	292.0	293.0	292.0	289.0	289.0	290.0	285.0	290.0	291.0
14	289.0	288.0	288.0	293.0	300.0	306.0	308.0	51.0	62.0	69.0	61.0	67.0	62.0	58.0	56.0	57.0	60.0	54.0	54.0	63.0	63.0	74.0	74.0	83.0
15	92.0	80.0	63.0	110.0	72.0	76.0	100.0	105.0	80.0	53.0	86.0	195.0	199.0	207.0	213.0	214.0	152.0	201.0	220.0	215.0	218.0	236.0	294.0	311.0
16	296.0	295.0	294.0	289.0	290.0	286.0	283.0	277.0	265.0	255.0	256.0	261.0	251.0	245.0	259.0	266.0	267.0	297.0	352.0	336.0	327.0	335.0	338.0	357.0
17	112.0	352.0	319.0	337.0	314.0	292.0	287.0	280.0	275.0	249.0	242.0	248.0	250.0	248.0	240.0	241.0	266.0	291.0	293.0	302.0	305.0	311.0	313.0	313.0
18	298.0	291.0	292.0	287.0	289.0	290.0	290.0	291.0	299.0	309.0	305.0	304.0	306.0	305.0	305.0	298.0	311.0	311.0	312.0	302.0	300.0	315.0	304.0	300.0
19	287.0	296.0	267.0	217.0	211.0	226.0	227.0	232.0	221.0	226.0	238.0	236.0	232.0	239.0	234.0	237.0	227.0	228.0	231.0	242.0	263.0	280.0	271.0	283.0
20	292.0	300.0	298.0	301.0	304.0	306.0	312.0	313.0	311.0	294.0	291.0	289.0	281.0	274.0	289.0	292.0	272.0	236.0	239.0	242.0	239.0	244.0	241.0	242.0
21	245.0	245.0	241.0	246.0	246.0	239.0	235.0	231.0	239.0	233.0	235.0	241.0	241.0	238.0	237.0	235.0	242.0	295.0	113.0	195.0	201.0	205.0	220.0	222.0
22	222.0	223.0	274.0	278.0	288.0	294.0	286.0	226.0	242.0	250.0	267.0	248.0	268.0	285.0	290.0	301.0	325.0	306.0	304.0	308.0	306.0	310.0	304.0	322.0
23	323.0	330.0	317.0	236.0	205.0	243.0	278.0	253.0	276.0	221.0	206.0	245.0	67.0	246.0	227.0	235.0	187.0	199.0	200.0	204.0	209.0	203.0	203.0	222.0
24	224.0	213.0	214.0	208.0	213.0	212.0	215.0	211.0	225.0	219.0	218.0	207.0	213.0	221.0	226.0	225.0	223.0	206.0	210.0	203.0	190.0	204.0	216.0	214.0
25	202.0	205.0	209.0	188.0	194.0	208.0	211.0	217.0	217.0	227.0	225.0	225.0	214.0	212.0	214.0	214.0	217.0	223.0	220.0	218.0	230.0	239.0	245.0	258.0
26	258.0	259.0	253.0	254.0	205.0	193.0	201.0	201.0	201.0	198.0	202.0	208.0	208.0	215.0	217.0	216.0	210.0	209.0	209.0	212.0	217.0	208.0	206.0	205.0
27	204.0	212.0	200.0	193.0	196.0	202.0	206.0	216.0	252.0	245.0	204.0	228.0	262.0	260.0	253.0	237.0	209.0	220.0	210.0	224.0	225.0	230.0	232.0	245.0
28	237.0	230.0	224.0	239.0	237.0	238.0	236.0	244.0	231.0	208.0	216.0	214.0	214.0	211.0	193.0	196.0	190.0	195.0	192.0	197.0	197.0	199.0	201.0	194.0
29	196.0	203.0	206.0	213.0	209.0	201.0	200.0	206.0	199.0	214.0	216.0	210.0	204.0	212.0	213.0	217.0	220.0	219.0	209.0	223.0	192.0	210.0	228.0	226.0

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

March *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	225.0	224.0	221.0	198.0	203.0	216.0	208.0	208.0	215.0	246.0	215.0	196.0	285.0	280.0	277.0	282.0	281.0	259.0	237.0	235.0	252.0	248.0	242.0	248.0
2	267.0	270.0	275.0	280.0	278.0	281.0	290.0	306.0	318.0	328.0	330.0	336.0	328.0	329.0	327.0	343.0	354.0	324.0	325.0	339.0	307.0	303.0	292.0	300.0
3	344.0	330.0	318.0	315.0	301.0	305.0	309.0	306.0	300.0	304.0	301.0	294.0	299.0	307.0	306.0	310.0	315.0	316.0	316.0	315.0	307.0	313.0	307.0	292.0
4	294.0	295.0	293.0	304.0	293.0	293.0	296.0	294.0	301.0	298.0	291.0	291.0	293.0	304.0	307.0	308.0	304.0	302.0	291.0	289.0	287.0	287.0	286.0	284.0
5	283.0	276.0	286.0	288.0	278.0	280.0	280.0	283.0	283.0	281.0	279.0	282.0	283.0	285.0	288.0	289.0	289.0	293.0	307.0	308.0	304.0	310.0	310.0	306.0
6	309.0	312.0	314.0	313.0	314.0	301.0	299.0	301.0	299.0	302.0	305.0	308.0	306.0	306.0	300.0	289.0	257.0	174.0	87.0	84.0	25.0	26.0	41.0	32.0
7	21.0	14.0	16.0	11.0	25.0	10.0	3.0	355.0	320.0	344.0	353.0	360.0	5.0	3.0	301.0	220.0	247.0	235.0	239.0	245.0	221.0	217.0	214.0	229.0
8	217.0	194.0	197.0	159.0	141.0	137.0	114.0	110.0	101.0	89.0	80.0	84.0	77.0	64.0	40.0	33.0	32.0	42.0	38.0	42.0	38.0	40.0	36.0	32.0
9	37.0	40.0	17.0	7.0	358.0	5.0	7.0	11.0	6.0	12.0	13.0	15.0	24.0	359.0	8.0	21.0	8.0	1.0	9.0	358.0	357.0	3.0	3.0	36.0
10	236.0	215.0	0.0	226.0	245.0	237.0	239.0	242.0	229.0	231.0	241.0	227.0	220.0	237.0	239.0	243.0	249.0	237.0	237.0	225.0	242.0	240.0	214.0	212.0
11	242.0	249.0	241.0	237.0	234.0	239.0	240.0	248.0	248.0	0.0	230.0	243.0	246.0	233.0	265.0	251.0	282.0	342.0	0.0	343.0	2.0	1.0	339.0	323.0
12	351.0	0.0	359.0	2.0	4.0	18.0	0.0	22.0	7.0	2.0	19.0	43.0	10.0	14.0	16.0	6.0	356.0	354.0	349.0	343.0	354.0	336.0	321.0	320.0
13	327.0	334.0	348.0	339.0	333.0	331.0	340.0	348.0	341.0	344.0	351.0	358.0	2.0	0.0	337.0	354.0	347.0	351.0	347.0	347.0	10.0	9.0	6.0	10.0
14	61.0	40.0	11.0	41.0	27.0	15.0	13.0	39.0	16.0	23.0	17.0	7.0	30.0	56.0	49.0	34.0	236.0	192.0	100.0	106.0	104.0	112.0	114.0	112.0
15	107.0	105.0	98.0	94.0	93.0	88.0	92.0	95.0	98.0	108.0	108.0	106.0	106.0	96.0	103.0	106.0	102.0	98.0	97.0	94.0	94.0	93.0	90.0	91.0
16	89.0	86.0	88.0	88.0	69.0	63.0	20.0	91.0	35.0	146.0	128.0	209.0	240.0	193.0	195.0	0.0	222.0	232.0	0.0	0.0	8.0	8.0	5.0	4.0
17	4.0	2.0	4.0	4.0	2.0	2.0	303.0	3.0	4.0	50.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	222.0	230.0	226.0	211.0	199.0	203.0	214.0
18	231.0	220.0	7.0	340.0	347.0	8.0	26.0	11.0	356.0	343.0	357.0	354.0	358.0	9.0	3.0	345.0	341.0	352.0	352.0	3.0	2.0	5.0	4.0	3.0
19	3.0	2.0	358.0	6.0	2.0	0.0	5.0	5.0	354.0	353.0	356.0	354.0	358.0	358.0	356.0	358.0	355.0	356.0	1.0	356.0	347.0	342.0	337.0	339.0
20	344.0	342.0	338.0	349.0	350.0	359.0	10.0	19.0	17.0	8.0	9.0	19.0	200.0	224.0	227.0	251.0	288.0	10.0	359.0	342.0	5.0	20.0	18.0	29.0
21	16.0	18.0	26.0	30.0	13.0	322.0	140.0	44.0	341.0	342.0	256.0	243.0	239.0	10.0	22.0	19.0	17.0	17.0	14.0	22.0	21.0	24.0	23.0	17.0
22	8.0	7.0	7.0	18.0	14.0	12.0	14.0	11.0	13.0	8.0	14.0	20.0	16.0	26.0	26.0	27.0	25.0	24.0	23.0	22.0	27.0	5.0	14.0	78.0
23	34.0	2.0	26.0	1.0	6.0	31.0	7.0	1.0	6.0	9.0	7.0	8.0	11.0	7.0	347.0	331.0	324.0	326.0	328.0	333.0	332.0	335.0	351.0	357.0
24	358.0	5.0	355.0	20.0	27.0	23.0	11.0	359.0	10.0	8.0	5.0	14.0	22.0	17.0	23.0	352.0	271.0	224.0	340.0	18.0	6.0	0.0	5.0	324.0
25	276.0	97.0	123.0	164.0	154.0	252.0	266.0	88.0	212.0	209.0	10.0	27.0	251.0	11.0	357.0	9.0	19.0	345.0	322.0	350.0	0.0	4.0	2.0	2.0
26	7.2	334.7	307.3	302.0	355.3	354.9	345.6	355.2	354.9	5.2	0.9	12.1	230.9	243.1	207.3	353.2	314.2	282.9	274.0	228.1	21.2	347.5	348.4	0.4
27	357.8	354.0	352.4	62.8	19.3	350.2	256.2	47.6	226.9	263.8	316.0	333.5	5.0	292.3	23.0	330.1	325.0	312.0	323.9	337.2	345.1	356.3	9.7	7.7
28	3.6	5.7	4.5	357.0	7.5	356.4	0.6	359.5	16.7	65.5	56.7	38.4	26.3	36.4	4.8	13.1	7.9	3.9	331.4	255.7	0.0	54.5	41.0	226.5
29	225.7	217.6	236.3	155.4	188.8	203.1	189.8	165.0	126.3	125.5	107.7	105.2	108.6	108.5	108.9	108.8	102.4	95.2	103.3	99.9	98.9	99.1	104.1	94.6
30	94.1	94.2	95.4	95.2	99.1	99.7	95.1	97.5	100.7	102.5	107.8	108.6	108.5	109.7	109.7	109.5	109.6	107.4	111.1	104.7	108.0	112.9	116.1	119.1
31	117.1	121.2	122.9	120.2	116.7	106.6	113.4	108.8	114.0	114.3	107.7	112.4	111.4	110.5	110.6	113.3	110.4	109.0	107.7	108.2	98.6	105.3	102.1	97.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	98.4	96.7	101.9	105.2	104.6	112.7	112.0	108.5	109.5	112.4	112.3	113.9	112.7	109.9	107.9	105.5	103.7	103.8	106.6	128.4	135.6	137.2	166.4	260.7
2	258.8	199.7	248.8	252.6	233.8	233.5	231.9	249.3	223.0	169.2	216.6	195.2	178.1	185.2	195.8	151.9	134.9	149.6	171.8	214.6	188.7	131.3	145.6	138.6
3	140.5	131.8	144.9	140.6	146.3	149.5	145.7	138.8	128.0	143.8	126.3	141.1	125.2	115.2	114.2	113.2	112.4	111.4	108.7	101.6	104.3	97.1	102.9	104.5
4	105.6	97.3	104.4	103.3	94.4	94.6	93.8	99.4	104.4	106.5	111.6	116.5	116.8	122.9	126.0	132.0	145.4	149.0	148.5	161.8	193.7	221.7	231.6	234.1
5	244.6	314.9	333.5	322.8	328.2	318.3	308.8	301.1	326.3	346.3	20.1	1.8	300.3	258.2	258.2	279.3	290.2	322.2	325.5	331.8	326.5	328.8	323.3	325.9
6	323.5	313.7	321.7	331.9	331.3	346.8	352.2	4.6	14.8	25.6	24.3	28.4	9.7	350.3	338.3	354.1	348.4	347.7	354.3	356.8	358.5	351.5	4.3	1.5
7	349.2	347.2	350.6	349.2	345.4	3.7	9.3	14.2	9.5	8.6	349.7	358.1	350.8	345.0	339.6	338.7	311.8	304.9	307.3	316.1	317.2	350.4	359.4	8.8
8	4.2	348.1	307.7	35.7	63.4	43.3	47.3	45.6	38.5	59.1	51.5	60.0	75.6	215.5	242.1	233.3	266.2	277.7	267.7	249.0	253.8	305.1	314.0	347.8
9	332.8	334.0	333.0	335.3	345.3	13.7	16.6	14.2	348.6	351.2	7.3	343.7	3.0	275.6	282.2	310.1	304.4	317.1	315.6	320.6	311.6	326.7	322.7	314.7
10	321.0	330.8	328.3	2.4	8.2	5.9	5.6	9.5	18.7	12.4	20.4	11.0	23.6	21.2	9.9	339.9	339.1	319.6	314.3	320.4	324.0	327.7	330.3	355.4
11	8.8	3.6	7.0	3.7	11.2	5.0	359.7	1.1	3.2	17.9	21.1	17.1	13.3	356.6	351.8	337.5	337.3	346.1	329.3	329.1	324.3	332.1	330.6	343.8
12	5.7	338.3	355.2	0.0	350.8	1.4	10.5	348.2	1.7	4.8	344.8	338.5	325.2	338.6	332.1	322.0	322.9	334.1	328.1	320.4	322.3	1.3	354.3	189.2
13	158.2	50.9	53.7	59.5	23.8	11.8	26.1	210.6	222.5	153.8	146.8	139.1	142.8	151.0	204.5	219.3	217.1	210.5	202.6	200.4	199.7	225.2	230.2	232.1
14	235.4	236.5	244.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	245.6	257.5	265.1	255.3	265.1	240.2	239.3	248.6	237.6	243.0
15	242.4	344.2	32.2	37.7	27.8	10.5	10.5	22.2	20.0	24.9	25.5	7.9	10.2	5.0	9.0	1.1	357.7	355.4	358.5	355.6	346.0	349.1	345.7	339.9
16	332.7	330.1	348.0	348.1	347.4	347.4	336.7	327.7	313.4	313.1	306.7	296.1	301.1	313.0	309.1	307.2	302.9	298.6	267.9	310.5	179.6	229.1	186.4	267.9
17	237.1	251.0	227.6	219.1	278.2	332.8	358.2	356.0	311.4	234.0	248.6	252.2	244.6	233.7	238.9	234.0	234.9	239.2	253.9	213.5	206.5	198.5	335.8	256.9
18	91.6	76.0	45.3	65.4	72.2	52.8	60.9	54.7	38.6	59.7	63.3	112.4	211.3	218.4	218.2	194.7	170.3	178.3	206.8	240.8	199.8	192.7	231.9	227.5
19	234.9	211.1	176.9	130.7	116.6	113.6	119.0	123.7	122.3	117.4	122.9	124.5	138.1	142.3	131.8	137.7	135.5	132.3	156.8	153.1	150.2	128.6	132.3	153.1
20	124.8	144.0	108.9	205.2	150.1	126.7	119.9	102.9	102.9	111.5	112.9	138.2	124.2	127.1	112.5	109.1	138.2	148.8	116.0	124.1	124.9	133.3	133.1	123.0
21	145.6	130.7	125.9	124.7	123.3	133.4	143.4	133.2	127.9	120.4	119.0	129.2	130.1	129.4	125.4	138.7	158.3	119.9	126.2	164.4	182.0	160.0	169.6	140.5
22	196.5	218.1	220.5	232.1	215.1	206.2	228.1	213.7	242.0	226.5	215.1	219.3	310.3	50.6	320.5	151.3	16.4	20.0	40.4	32.9	44.9	20.7	57.9	26.7
23	49.9	162.1	322.0	30.6	67.2	112.7	59.8	26.9	99.1	34.7	286.6	217.0	246.8	286.3	254.2	277.2	291.0	32.3	316.4	69.6	0.0	105.9	106.7	62.0
24	210.7	228.8	214.1	215.6	234.3	238.9	226.7	232.1	231.3	237.9	242.0	244.9	242.9	242.1	242.6	233.9	238.7	237.4	201.4	175.6	128.9	185.9	218.1	222.5
25	219.5	216.1	231.5	310.6	316.8	324.5	338.9	330.2	328.4	328.8	333.3	336.6	327.7	324.2	320.2	317.3	330.8	339.4	349.5	348.3	346.3	347.0	340.7	344.4
26	347.1	342.1	348.0	352.4	352.0	348.3	15.4	8.7	8.3	358.5	348.1	351.7	355.6	356.8	1.6	0.7	357.0	2.2	0.4	352.4	352.6	350.1	349.6	349.0
27	351.4	350.2	352.2	351.4	349.1	353.1	350.8	347.7	354.9	358.3	0.9	356.5	349.3	351.6	357.1	0.6	355.2	359.4	3.3	2.6	7.6	17.2	13.4	15.4
28	25.5	15.2	8.0	5.9	8.2	0.8	327.4	351.0	356.7	2.7	248.8	230.5	265.1	264.1	240.0	225.5	333.8	330.7	332.8	314.3	309.4	313.2	326.4	318.0
29	321.3	325.5	329.3	10.4	10.7	5.2	359.7	5.6	3.8	1.6	9.0	358.3	357.0	346.3	12.7	64.3	338.4	339.7	339.2	339.6	342.6	342.9	341.4	345.3
30	4.2	7.9	7.4	15.3	17.1	20.2	24.5	24.2	24.8	26.3	28.0	29.8	22.9	21.0	21.9	27.6	26.7	6.4	0.5	2.4	342.6	16.3	18.6	19.9

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	21.5	22.1	19.5	19.4	23.9	24.1	25.0	17.8	22.4	23.2	24.9	21.8	14.1	7.8	357.0	4.1	2.3	3.8	356.5	352.1	346.6	343.0	331.9	330.3
2	342.1	4.4	356.9	10.1	22.7	17.5	26.3	13.7	11.5	11.1	10.8	9.1	17.2	71.5	152.4	266.6	210.7	212.5	148.0	75.7	309.4	327.6	113.7	98.5
3	75.0	107.7	124.8	115.6	119.5	126.9	0.0	0.0	97.5	33.4	58.4	80.5	89.6	101.6	82.2	106.0	149.8	138.7	16.5	13.1	93.9	106.5	96.6	29.8
4	45.0	56.2	44.4	44.4	46.6	42.6	43.3	49.5	53.0	54.1	65.1	73.4	77.7	4.1	12.6	6.4	68.1	230.1	281.1	228.2	196.4	229.0	91.9	11.1
5	336.5	3.3	4.1	0.8	1.5	323.2	351.1	4.7	126.1	85.8	210.2	226.0	227.0	204.6	348.7	8.3	210.5	187.8	158.9	148.4	224.1	136.7	149.7	193.4
6	39.9	119.7	121.7	45.1	15.7	20.4	0.0	88.6	100.3	101.0	102.9	105.9	116.0	111.5	106.2	96.0	104.1	98.8	100.7	102.3	103.2	104.7	98.2	98.4
7	99.8	100.1	96.1	94.9	97.6	97.1	95.0	92.6	92.4	91.0	90.9	94.7	97.4	95.5	100.7	104.3	92.6	87.6	97.5	98.8	97.0	93.9	80.5	81.9
8	86.4	91.2	92.0	85.8	86.2	86.5	87.8	88.5	90.6	89.6	89.0	87.5	90.8	90.6	90.7	91.9	94.6	102.5	102.0	98.5	90.4	87.1	87.2	95.5
9	85.7	84.5	92.5	92.2	89.5	87.6	96.3	92.4	93.2	104.4	98.0	89.6	94.8	109.4	101.2	109.8	121.2	179.0	185.9	224.0	257.3	270.2	228.7	48.5
10	227.3	0.0	0.0	0.0	354.4	17.2	58.1	311.0	0.0	7.3	0.0	0.0	212.3	205.1	225.1	199.0	0.0	0.0	0.0	256.5	157.6	141.8	87.8	97.1
11	113.9	95.9	94.0	99.7	87.7	78.5	90.9	91.3	82.3	86.6	94.3	84.9	86.4	87.4	82.0	84.1	86.7	85.4	86.5	84.7	84.2	81.5	83.6	84.3
12	82.3	87.1	86.8	85.3	84.9	83.1	89.0	84.6	89.6	90.0	95.8	94.8	95.9	104.2	97.3	103.6	88.0	90.2	89.5	88.9	86.2	85.7	84.5	92.3
13	92.6	92.5	93.0	97.6	109.2	106.4	110.0	108.3	105.8	102.0	97.4	94.0	103.3	104.0	106.5	105.7	114.8	109.8	103.3	107.9	97.6	93.2	94.4	79.2
14	80.6	101.6	91.1	64.2	10.6	41.7	46.1	40.3	37.7	37.7	17.6	11.5	10.2	21.0	40.1	39.2	43.5	48.4	46.0	44.8	45.3	47.3	29.8	335.2
15	236.2	214.9	219.4	230.2	163.9	175.3	143.8	155.6	137.2	146.4	139.5	143.6	151.0	169.1	177.0	185.6	182.5	170.0	142.1	120.6	125.4	133.4	128.7	144.9
16	165.6	171.2	164.9	158.9	193.9	136.2	96.7	22.0	33.0	33.0	59.0	92.0	112.0	109.0	117.0	120.0	121.0	137.0	138.0	145.0	157.0	193.0	293.0	0.0
17	5.0	3.0	357.0	347.0	351.0	39.0	8.0	15.0	13.0	21.0	15.0	10.0	15.0	18.0	35.0	102.0	16.0	176.0	212.0	175.0	133.0	148.0	169.0	155.0
18	131.0	255.0	132.0	124.0	122.0	126.0	143.0	151.0	150.0	139.0	104.0	106.0	140.0	149.0	158.0	172.0	130.0	109.0	104.0	112.0	132.0	155.0	139.0	113.0
19	124.0	139.0	210.0	227.0	248.0	31.0	0.0	15.0	13.0	12.0	340.0	344.0	336.0	293.0	309.0	314.0	293.0	313.0	310.0	305.0	312.0	323.0	332.0	339.0
20	5.0	358.0	6.0	11.0	9.0	3.0	11.0	21.0	20.0	21.0	29.0	10.0	34.0	68.0	34.0	165.0	207.0	225.0	197.0	161.0	218.0	221.0	162.0	102.0
21	43.0	350.0	62.0	56.0	75.0	214.0	0.0	86.0	177.0	211.0	218.0	199.0	151.0	171.0	182.0	196.0	208.0	196.0	192.0	213.0	235.0	221.0	206.0	70.0
22	232.0	248.0	256.0	242.0	234.0	253.0	12.0	294.0	275.0	19.0	15.0	8.0	9.0	37.0	121.0	106.0	113.0	127.0	114.0	104.0	83.0	87.0	86.0	85.0
23	87.0	88.0	85.0	89.0	82.0	82.0	94.0	84.0	87.0	86.0	85.0	82.0	88.0	91.0	93.0	99.0	95.0	104.0	108.0	108.0	105.0	109.0	112.0	115.0
24	121.0	120.0	125.0	119.0	115.0	111.0	108.0	113.0	116.0	117.0	118.0	121.0	110.0	114.0	112.0	107.0	112.0	112.0	121.0	162.0	141.0	141.0	171.0	146.0
25	150.0	137.0	142.0	145.0	140.0	122.0	130.0	132.0	134.0	141.0	147.0	164.0	163.0	190.0	201.0	170.0	194.0	181.0	213.0	181.0	174.0	157.0	135.0	141.0
26	189.0	357.0	192.0	249.0	215.0	339.0	291.0	245.0	252.0	240.0	241.0	242.0	250.0	264.0	270.0	267.0	281.0	266.0	226.0	230.0	248.0	243.0	70.0	248.0
27	290.0	298.0	322.0	307.0	4.0	353.0	343.0	71.0	205.0	284.0	351.0	307.0	290.0	276.0	297.0	310.0	305.0	264.0	265.0	266.0	282.0	279.0	305.0	317.0
28	5.0	18.0	358.0	1.0	13.0	37.0	1.0	1.0	6.0	17.0	253.0	282.0	282.0	266.0	273.0	263.0	264.0	263.0	290.0	298.0	300.0	313.0	323.0	11.0
29	10.0	4.0	348.0	10.0	5.0	6.0	3.0	9.0	7.0	2.0	359.0	355.0	347.0	345.0	344.0	344.0	341.0	337.0	340.0	340.0	331.0	336.0	7.0	13.0
30	4.0	6.0	46.0	61.0	354.0	10.0	108.0	92.0	102.0	103.0	108.0	117.0	116.0	132.0	134.0	134.0	122.0	122.0	124.0	119.0	124.0	107.0	93.0	89.0
31	88.0	88.0	98.0	109.0	101.0	94.0	89.0	84.0	90.0	91.0	98.0	106.0	112.0	111.0	109.0	110.0	111.0	112.0	116.0	117.0	111.0	115.0	104.0	103.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	101.0	111.0	105.0	100.0	88.0	84.0	84.0	87.0	92.0	89.0	92.0	97.0	100.0	100.0	98.0	93.0	103.0	105.0	104.0	109.0	114.0	113.0	106.0	99.0
2	91.0	87.0	94.0	89.0	96.0	75.0	66.0	77.0	88.0	91.0	87.0	97.0	91.0	98.0	103.0	104.0	107.0	109.0	111.0	105.0	137.0	119.0	120.0	127.0
3	280.0	24.0	3.0	8.0	5.0	8.0	12.0	224.0	228.0	282.0	100.0	207.0	40.0	135.0	147.0	159.0	152.0	147.0	135.0	140.0	142.0	136.0	132.0	133.0
4	118.0	135.0	119.0	111.0	144.0	118.0	122.0	111.0	143.0	161.0	137.0	141.0	140.0	131.0	129.0	136.0	141.0	138.0	139.0	142.0	141.0	146.0	135.0	128.0
5	153.0	143.0	171.0	122.0	112.0	107.0	96.0	97.0	109.0	104.0	102.0	89.0	86.0	85.0	90.0	89.0	93.0	105.0	110.0	107.0	133.0	189.0	220.0	356.0
6	2.0	1.0	8.0	8.0	359.0	17.0	21.0	13.0	32.0	1.0	356.0	315.0	330.0	346.0	321.0	334.0	288.0	306.0	310.0	298.0	325.0	307.0	290.0	310.0
7	280.0	287.0	1.0	4.0	6.0	3.0	5.0	14.0	8.0	359.0	337.0	317.0	324.0	338.0	359.0	261.0	230.0	219.0	223.0	231.0	230.0	225.0	225.0	172.0
8	161.0	169.0	154.0	111.0	144.0	193.0	177.0	175.0	211.0	206.0	206.0	220.0	191.0	188.0	214.0	207.0	218.0	219.0	219.0	213.0	213.0	214.0	222.0	233.0
9	236.0	232.0	228.0	233.0	237.0	239.0	241.0	240.0	242.0	239.0	244.0	224.0	240.0	237.0	239.0	245.0	240.0	255.0	251.0	244.0	232.0	236.0	252.0	250.0
10	240.0	249.0	251.0	243.0	246.0	242.0	252.0	247.0	222.0	214.0	222.0	230.0	214.0	213.0	167.0	228.0	198.0	203.0	214.0	156.0	179.0	228.0	204.0	295.0
11	0.0	261.0	247.0	220.0	211.0	183.0	202.0	220.0	211.0	211.0	220.0	152.0	156.0	188.0	208.0	217.0	218.0	224.0	220.0	198.0	231.0	234.0	230.0	235.0
12	236.0	233.0	238.0	236.0	232.0	240.0	240.0	240.0	234.0	234.0	220.0	232.0	221.0	234.0	229.0	229.0	200.0	217.0	211.0	189.0	212.0	249.0	247.0	240.0
13	257.0	266.0	321.0	329.0	194.0	123.0	82.0	238.0	331.0	15.0	304.0	24.0	226.0	209.0	20.0	42.0	140.0	136.0	158.0	148.0	145.0	140.0	144.0	148.0
14	211.0	237.0	231.0	227.0	215.0	225.0	258.0	216.0	231.0	206.0	206.0	211.0	220.0	137.0	126.0	134.0	163.0	182.0	180.0	148.0	217.0	254.0	242.0	234.0
15	190.0	223.0	187.0	210.0	188.0	207.0	162.0	188.0	197.0	197.0	226.0	224.0	214.0	236.0	235.0	227.0	233.0	237.0	226.0	225.0	234.0	247.0	238.0	241.0
16	246.0	236.0	238.0	194.0	215.0	248.0	8.0	25.0	22.0	14.0	22.0	271.0	132.0	156.0	188.0	251.0	263.0	250.0	246.0	238.0	236.0	250.0	235.0	218.0
17	40.0	45.0	27.0	62.0	0.0	0.0	0.0	97.0	192.0	91.0	127.0	130.0	133.0	131.0	140.0	146.0	146.0	167.0	155.0	145.0	135.0	126.0	146.0	126.0
18	200.0	0.0	69.0	51.0	27.0	208.0	199.0	224.0	220.0	226.0	231.0	229.0	234.0	221.0	206.0	196.0	199.0	221.0	228.0	229.0	229.0	246.0	253.0	265.0
19	47.0	359.0	36.0	93.0	347.0	0.0	0.0	224.0	214.0	219.0	227.0	221.0	231.0	227.0	180.0	161.0	155.0	182.0	181.0	169.0	166.0	178.0	166.0	138.0
20	138.0	131.0	221.0	186.0	35.0	262.0	83.0	77.0	175.0	129.0	118.0	135.0	135.0	138.0	126.0	139.0	131.0	133.0	141.0	130.0	129.0	126.0	126.0	132.0
21	158.0	189.0	174.0	230.0	151.0	111.0	95.0	116.0	128.0	134.0	137.0	138.0	58.0	10.0	28.0	105.0	123.0	113.0	150.0	148.0	150.0	146.0	128.0	154.0
22	68.0	0.0	0.0	142.0	120.0	146.0	148.0	105.0	117.0	136.0	137.0	132.0	131.0	127.0	128.0	121.0	122.0	124.0	121.0	122.0	115.0	122.0	126.0	124.0
23	122.0	121.0	128.0	125.0	120.0	117.0	105.0	104.0	110.0	120.0	118.0	110.0	113.0	119.0	126.0	139.0	146.0	130.0	121.0	128.0	136.0	144.0	158.0	146.0
24	165.0	168.0	153.0	72.0	103.0	105.0	97.0	96.0	106.0	100.0	104.0	105.0	109.0	111.0	111.0	110.0	105.0	105.0	101.0	100.0	93.0	87.0	85.0	84.0
25	79.0	79.0	82.0	85.0	90.0	88.0	87.0	82.0	83.0	86.0	87.0	86.0	91.0	88.0	91.0	97.0	97.0	94.0	91.0	95.0	98.0	94.0	90.0	94.0
26	88.0	70.0	85.0	112.0	179.0	10.0	14.0	37.0	72.0	90.0	54.0	64.0	108.0	123.0	106.0	118.0	125.0	100.0	58.0	49.0	73.0	82.0	137.0	97.0
27	116.0	289.0	13.0	241.0	0.0	0.0	23.0	70.0	88.0	101.0	111.0	114.0	111.0	104.0	115.0	137.0	114.0	135.0	146.0	148.0	142.0	132.0	178.0	157.0
28	142.0	129.0	132.0	148.0	171.0	0.0	0.0	193.0	218.0	231.0	239.0	232.0	222.0	236.0	226.0	223.0	240.0	192.0	193.0	195.0	170.0	148.0	152.0	122.0
29	122.0	125.0	127.0	129.0	233.0	194.0	118.0	175.0	250.0	223.0	173.0	161.0	144.0	134.0	129.0	121.0	124.0	128.0	113.0	119.0	122.0	122.0	119.0	119.0
30	117.0	121.0	143.0	146.0	127.0	140.0	192.0	224.0	79.0	138.0	141.0	80.0	84.0	320.0	349.0	80.0	211.0	268.0	229.0	238.0	14.0	8.0	13.0	27.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	16.0	0.0	96.0	235.0	255.0	9.0	63.0	32.0	39.0	89.0	101.0	103.0	116.0	105.0	117.0	108.0	113.0	115.0	104.0	106.0	110.0	111.0	93.0	94.0
2	94.0	101.0	109.0	101.0	96.0	89.0	90.0	97.0	97.0	112.0	116.0	108.0	104.0	110.0	104.0	107.0	128.0	118.0	123.0	114.0	123.0	132.0	120.0	104.0
3	89.0	88.0	87.0	83.0	82.0	74.0	90.0	105.0	105.0	121.0	120.0	122.0	130.0	102.0	95.0	105.0	124.0	136.0	121.0	135.0	178.0	115.0	128.0	153.0
4	136.0	109.0	106.0	340.0	74.0	74.0	24.0	12.0	214.0	348.0	136.0	154.0	136.0	126.0	121.0	131.0	121.0	142.0	168.0	170.0	148.0	149.0	168.0	157.0
5	225.0	264.0	49.0	72.0	61.0	59.0	6.0	81.0	195.0	224.0	155.0	105.0	184.0	134.0	145.0	155.0	161.0	154.0	158.0	151.0	144.0	156.0	166.0	154.0
6	160.0	139.0	132.0	26.0	71.0	0.0	21.0	56.0	16.0	50.0	132.0	138.0	129.0	146.0	153.0	154.0	153.0	155.0	154.0	138.0	145.0	129.0	144.0	144.0
7	130.0	136.0	143.0	138.0	138.0	133.0	128.0	125.0	122.0	121.0	119.0	125.0	128.0	129.0	124.0	125.0	123.0	125.0	130.0	130.0	138.0	155.0	155.0	150.0
8	180.0	182.0	213.0	265.0	97.0	138.0	125.0	144.0	159.0	233.0	263.0	233.0	159.0	152.0	161.0	159.0	150.0	160.0	181.0	171.0	144.0	140.0	138.0	140.0
9	135.0	113.0	110.0	114.0	113.0	106.0	109.0	127.0	125.0	130.0	147.0	137.0	142.0	138.0	130.0	122.0	118.0	106.0	106.0	105.0	111.0	115.0	110.0	105.0
10	104.0	119.0	118.0	147.0	120.0	122.0	113.0	126.0	117.0	122.0	120.0	120.0	135.0	135.0	126.0	127.0	128.0	132.0	117.0	116.0	132.0	135.0	132.0	129.0
11	123.0	130.0	149.0	146.0	156.0	150.0	155.0	149.0	140.0	151.0	146.0	149.0	137.0	139.0	137.0	138.0	136.0	143.0	136.0	130.0	132.0	129.0	125.0	124.0
12	113.0	122.0	201.0	214.0	145.0	88.0	122.0	111.0	111.0	121.0	121.0	120.0	114.0	123.0	123.0	116.0	113.0	112.0	115.0	111.0	109.0	108.0	110.0	110.0
13	112.0	110.0	113.0	111.0	110.0	110.0	110.0	111.0	111.0	112.0	112.0	117.0	113.0	126.0	142.0	147.0	148.0	151.0	154.0	154.0	152.0	151.0	158.0	193.0
14	211.0	171.0	174.0	0.0	153.0	0.0	207.0	263.0	174.0	131.0	151.0	145.0	140.0	144.0	138.0	168.0	158.0	162.0	160.0	164.0	168.0	163.0	142.0	140.0
15	130.0	119.0	125.0	133.0	189.0	148.0	185.0	149.0	149.0	160.0	132.0	136.0	140.0	143.0	142.0	141.0	137.0	126.0	121.0	134.0	134.0	128.0	133.0	118.0
16	97.0	94.0	102.0	107.0	105.0	104.0	110.0	111.0	108.0	115.0	108.0	106.0	102.0	104.0	102.0	106.0	111.0	101.0	102.0	103.0	110.0	113.0	116.0	121.0
17	143.0	150.0	222.0	228.0	222.0	218.0	217.0	221.0	221.0	221.0	226.0	227.0	218.0	221.0	226.0	230.0	233.0	224.0	239.0	231.0	223.0	223.0	221.0	225.0
18	225.0	226.0	225.0	230.0	240.0	229.0	244.0	250.0	242.0	242.0	234.0	223.0	242.0	248.0	231.0	225.0	224.0	242.0	229.0	240.0	246.0	261.0	270.0	342.0
19	17.0	250.0	337.0	3.0	357.0	331.0	341.0	318.0	314.0	332.0	355.0	345.0	336.0	319.0	348.0	337.0	355.0	335.0	349.0	338.0	341.0	324.0	325.0	344.0
20	318.0	322.0	299.0	262.0	246.0	256.0	230.0	243.0	253.0	233.0	190.0	223.0	217.0	210.0	212.0	210.0	212.0	217.0	210.0	200.0	210.0	195.0	170.0	150.0
21	163.0	176.0	173.0	174.0	168.0	167.0	176.0	187.0	194.0	204.0	215.0	218.0	234.0	239.0	239.0	205.0	248.0	219.0	242.0	226.0	219.0	234.0	234.0	237.0
22	237.0	235.0	238.0	240.0	240.0	44.0	37.0	207.0	234.0	219.0	177.0	137.0	163.0	183.0	225.0	211.0	239.0	236.0	226.0	141.0	169.0	162.0	143.0	144.0
23	132.0	115.0	150.0	161.0	210.0	223.0	232.0	234.0	239.0	236.0	228.0	220.0	225.0	218.0	218.0	218.0	187.0	191.0	198.0	209.0	223.0	243.0	254.0	242.0
24	213.0	26.0	346.0	276.0	6.0	10.0	20.0	23.0	17.0	27.0	12.0	5.0	1.0	359.0	341.0	352.0	352.0	343.0	350.0	355.0	348.0	331.0	330.0	327.0
25	318.0	319.0	326.0	351.0	354.0	34.0	27.0	6.0	7.0	12.0	357.0	344.0	339.0	342.0	354.0	349.0	347.0	340.0	332.0	322.0	309.0	307.0	303.0	315.0
26	334.0	12.0	8.0	326.0	241.0	244.0	238.0	237.0	239.0	241.0	239.0	241.0	237.0	236.0	230.0	219.0	236.0	232.0	210.0	165.0	171.0	184.0	165.0	166.0
27	176.0	173.0	190.0	189.0	198.0	165.0	175.0	111.0	105.0	109.0	113.0	102.0	108.0	104.0	102.0	102.0	108.0	119.0	127.0	156.0	141.0	159.0	170.0	0.0
28	0.0	0.0	243.0	335.0	352.0	339.0	347.0	7.0	3.0	1.0	352.0	341.0	337.0	347.0	342.0	345.0	338.0	314.0	311.0	318.0	320.0	316.0	314.0	314.0
29	317.0	338.0	9.0	358.0	349.0	3.0	341.0	333.0	356.0	354.0	357.0	355.0	340.0	341.0	325.0	329.0	330.0	320.0	316.0	322.0	328.0	320.0	338.0	352.0
30	347.0	358.0	351.0	353.0	351.0	348.0	344.0	320.0	317.0	314.0	320.0	312.0	313.0		346.0	320.0	332.0	341.0	346.0	342.0	350.0	347.0	359.0	359.0
31	3.0	12.0	340.0	19.0	14.0	20.0	8.0	24.0	21.0	35.0	355.0	327.0	329.0	318.0	309.0	296.0	279.0	280.0	278.0	272.0	278.0	269.0	262.0	286.0

Total Hours in Month 744 **Hours Data Available** 743 **Data Recovery** 99.9%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	18.0	197.0	20.0	87.0	247.0	238.0	6.0	64.0	96.0	87.0	118.0	126.0	147.0	152.0	150.0	154.0	151.0	142.0	146.0	143.0	150.0	167.0	176.0	206.0
2	207.0	206.0	197.0	172.0	155.0	164.0	157.0	149.0	151.0	131.0	146.0	148.0	148.0	151.0	158.0	151.0	150.0	156.0	155.0	158.0	155.0	162.0	173.0	308.0
3	2.0	52.0	68.0	13.0	20.0	12.0	22.0	342.0	36.0	38.0	40.0	134.0	141.0	141.0	145.0	135.0	152.0	142.0	150.0	137.0	139.0	133.0	130.0	132.0
4	155.0	189.0	185.0	186.0	175.0	140.0	139.0	135.0	135.0	131.0	150.0	150.0	148.0	143.0	142.0	130.0	139.0	152.0	152.0	155.0	166.0	173.0	205.0	194.0
5	222.0	199.0	227.0	214.0	232.0	125.0	63.0	129.0	37.0	32.0	27.0	24.0	11.0	353.0	354.0	0.0	3.0	357.0	358.0	351.0	347.0	346.0	0.0	21.0
6	21.0	21.0	17.0	15.0	18.0	18.0	36.0	50.0	27.0	15.0	8.0	6.0	352.0	350.0	330.0	329.0	324.0	315.0	323.0	325.0	328.0	334.0	345.0	13.0
7	9.0	349.0	7.0	340.0	336.0	3.0	338.0	355.0	20.0	3.0	12.0	3.0	339.0	347.0	356.0	333.0	336.0	330.0	316.0	317.0	335.0	346.0	342.0	357.0
8	9.0	15.0	23.0	13.0	13.0	13.0	15.0	21.0	12.0	1.0	0.0	7.0	15.0	9.0	7.0	10.0	11.0	6.0	357.0	358.0	336.0	333.0	340.0	351.0
9	15.0	29.0	22.0	11.0	15.0	20.0	24.0	15.0	350.0	9.0	10.0	7.0	6.0	9.0	0.0	2.0	346.0	341.0	351.0	350.0	347.0	330.0	349.0	15.0
10	21.0	81.0	39.0	82.0	202.0	245.0	232.0	244.0	227.0	172.0	159.0	178.0	184.0	156.0	173.0	222.0	163.0	148.0	180.0	154.0	147.0	157.0	191.0	181.0
11	202.0	203.0	196.0	243.0	223.0	247.0	144.0	141.0	132.0	122.0	119.0	111.0	112.0	118.0	136.0	123.0	126.0	131.0	132.0	147.0	138.0	163.0	5.0	92.0
12	68.0	54.0	76.0	18.0	17.0	15.0	10.0	13.0	18.0	30.0	33.0	28.0	42.0	40.0	43.0	14.0	75.0	144.0	147.0	190.0	270.0	167.0	200.0	63.0
13	79.0	6.0	16.0	23.0	27.0	37.0	265.0	253.0	240.0	304.0	35.0	26.0	8.0	8.0	20.0	27.0	185.0	143.0	134.0	130.0	120.0	113.0	0.0	0.0
14	0.0	0.0	38.0	0.0	32.0	58.0	35.0	96.0	132.0	141.0	151.0	152.0	150.0	152.0	131.0	143.0	136.0	143.0	148.0	153.0	157.0	143.0	133.0	240.0
15	239.0	256.0	248.0	242.0	273.0	216.0	228.0	243.0	238.0	232.0	231.0	232.0	223.0	219.0	223.0	204.0	166.0	157.0	155.0	161.0	173.0	204.0	203.0	256.0
16	290.0	91.0	134.0	165.0	160.0	130.0	137.0	141.0	136.0	140.0	148.0	145.0	142.0	143.0	139.0	142.0	148.0	153.0	141.0	138.0	144.0	152.0	146.0	17.0
17	0.0	98.0	161.0	199.0	179.0	248.0	209.0	111.0	96.0	97.0	95.0	107.0	112.0	123.0	117.0	115.0	119.0	118.0	116.0	123.0	120.0	109.0	113.0	110.0
18	115.0	109.0	105.0	97.0	142.0	335.0	6.0	20.0	29.0	29.0	23.0	29.0	80.0	139.0	147.0	168.0	182.0	197.0	183.0	167.0	172.0	225.0	333.0	38.0
19	103.0	35.0	88.0	63.0	176.0	132.0	164.0	50.0	43.0	121.0	15.0	286.0	269.0	227.0	308.0	319.0	23.0	352.0	346.0	326.0	24.0	23.0	2.0	207.0
20	265.0	79.0	11.0	64.0	20.0	3.0	0.0	231.0	341.0	210.0	24.0	32.0	45.0	233.0	247.0	341.0	293.0	13.0	13.0	354.0	12.0	75.0	265.0	283.0
21	0.0	0.0	56.0	0.0	0.0	0.0	220.0	256.0	253.0	246.0	238.0	245.0	242.0	238.0	239.0	238.0	237.0	228.0	235.0	231.0	243.0	255.0	248.0	247.0
22	248.0	252.0	278.0	292.0	274.0	357.0	307.0	24.0	27.0	25.0	26.0	35.0	232.0	214.0	182.0	298.0	227.0	277.0	230.0	257.0	297.0	351.0	14.0	19.0
23	22.0	359.0	7.0	9.0	10.0	10.0	13.0	13.0	27.0	37.0	38.0	28.0	27.0	37.0	183.0	43.0	141.0	143.0	136.0	135.0	145.0	129.0	132.0	157.0
24	253.0	282.0	299.0	48.0	319.0	66.0	292.0	0.0	73.0	21.0	23.0	20.0	12.0	15.0	16.0	23.0	25.0	26.0	34.0	131.0	124.0	311.0	12.0	10.0
25	9.0	27.0	178.0	97.0	209.0	251.0	245.0	241.0	239.0	243.0	247.0	217.0	187.0	193.0	179.0	177.0	178.0	123.0	136.0	145.0	149.0	147.0	160.0	133.0
26	141.0	115.0	131.0	112.0	139.0	152.0	138.0	133.0	133.0	134.0	130.0	135.0	140.0	145.0	147.0	151.0	159.0	163.0	156.0	158.0	146.0	130.0	142.0	143.0
27	127.0	117.0	131.0	98.0	0.0	256.0	256.0	245.0	244.0	250.0	245.0	244.0	246.0	235.0	238.0	243.0	253.0	254.0	251.0	252.0	248.0	250.0	262.0	0.0
28	350.0	3.0	6.0	7.0	356.0	348.0	234.0	103.0	24.0	15.0	30.0	15.0	25.0	357.0	354.0	297.0	274.0	343.0	313.0	320.0	338.0	346.0	6.0	14.0
29	7.0	357.0	6.0	7.0	20.0	12.0	12.0	16.0	16.0	219.0	47.0	41.0	218.0	231.0	233.0	263.0	6.0	243.0	246.0	246.0	248.0	250.0	215.0	3.0
30	5.0	86.0	53.0	80.0	72.0	49.0	23.0	98.0	66.0	89.0	239.0	244.0	181.0	129.0	120.0	118.0	116.0	124.0	130.0	147.0	132.0	100.0	108.0	109.0
31	107.0	111.0	102.0	94.0	96.0	90.0	87.0	92.0	89.0	86.0	82.0	79.0	74.0	75.0	67.0	81.0	67.0	59.0	59.0	50.0	51.0	54.0	60.0	56.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	53.0	49.0	52.0	51.0	62.0	58.0	60.0	63.0	55.0	53.0	63.0	108.0	134.0	123.0	95.0	109.0	113.0	99.0	87.0	67.0	89.0	97.0	99.0	96.0
2	94.0	92.0	87.0	93.0	94.0	92.0	90.0	90.0	91.0	94.0	100.0	100.0	96.0	99.0	103.0	97.0	101.0	75.0	45.0	39.0	49.0	38.0	42.0	46.0
3	45.0	48.0	32.0	22.0	22.0	30.0	31.0	27.0	27.0	21.0	15.0	30.0	119.0	141.0	165.0	197.0	195.0	156.0	162.0	157.0	140.0	136.0	215.0	237.0
4	235.0	219.0	213.0	199.0	196.0	225.0	214.0	210.0	193.0	233.0	241.0	203.0	190.0	196.0	175.0	189.0	165.0	192.0	161.0	150.0	164.0	0.0	0.0	35.0
5	87.0	77.0	79.0	71.0	64.0	3.0	63.0	50.0	62.0	112.0	147.0	146.0	153.0	154.0	188.0	248.0	262.0	14.0	17.0	20.0	39.0	6.0	31.0	49.0
6	39.0	349.0	130.0	110.0	108.0	105.0	93.0	83.0	88.0	87.0	89.0	91.0	92.0	93.0	94.0	95.0	98.0	100.0	98.0	94.0	88.0	84.0	91.0	87.0
7	87.0	87.0	95.0	96.0	69.0	53.0	66.0	56.0	56.0	58.0	78.0	120.0	98.0	96.0	136.0	112.0	117.0	111.0	123.0	123.0	119.0	130.0	132.0	141.0
8	155.0	187.0	172.0	170.0	172.0	183.0	180.0	168.0	151.0	119.0	101.0	100.0	97.0	97.0	97.0	94.0	94.0	93.0	93.0	90.0	81.0	87.0	94.0	98.0
9	102.0	118.0	110.0	100.0	69.0	53.0	68.0	85.0	86.0	83.0	78.0	79.0	87.0	94.0	103.0	101.0	101.0	99.0	106.0	108.0	115.0	104.0	113.0	115.0
10	91.0	126.0	124.0	136.0	148.0	202.0	169.0	169.0	133.0	155.0	190.0	191.0	199.0	219.0	247.0	240.0	243.0	238.0	236.0	238.0	245.0	242.0	250.0	246.0
11	235.0	253.0	255.0	240.0	240.0	246.0	257.0	137.0	140.0	159.0	171.0	179.0	174.0	189.0	184.0	186.0	150.0	147.0	134.0	121.0	117.0	105.0	103.0	101.0
12	101.0	95.0	100.0	101.0	102.0	99.0	100.0	98.0	99.0	98.0	100.0	102.0	101.0	106.0	100.0	98.0	98.0	97.0	97.0	99.0	97.0	100.0	101.0	101.0
13	100.0	95.0	97.0	101.0	112.0	101.0	102.0	100.0	100.0	99.0	101.0	108.0	121.0	122.0	109.0	105.0	104.0	99.0	96.0	96.0	96.0	93.0	92.0	93.0
14	94.0	97.0	104.0	111.0	125.0	118.0	138.0	123.0	110.0	105.0	102.0	96.0	98.0	108.0	112.0	107.0	123.0	120.0	116.0	120.0	129.0	123.0	123.0	124.0
15	124.0	128.0	109.0	107.0	109.0	122.0	103.0	100.0	100.0	101.0	103.0	115.0	125.0	118.0	124.0	110.0	119.0	108.0	107.0	112.0	109.0	119.0	128.0	134.0
16	140.0	38.0	23.0	10.0	3.0	19.0	19.0	20.0	25.0	19.0	22.0	355.0	339.0	326.0	321.0	288.0	313.0	299.0	294.0	292.0	296.0	284.0	255.0	257.0
17	151.0	113.0	226.0	242.0	244.0	253.0	247.0	252.0	269.0	47.0	83.0	48.0	89.0	122.0	111.0	94.0	95.0	98.0	98.0	88.0	82.0	79.0	72.0	40.0
18	43.0	40.0	45.0	44.0	47.0	44.0	44.0	42.0	18.0	29.0	20.0	10.0	23.0	31.0	336.0	330.0	339.0	348.0	15.0	47.0	350.0	100.0	72.0	51.0
19	74.0	57.0	65.0	79.0	88.0	88.0	90.0	100.0	110.0	142.0	152.0	164.0	154.0	170.0	239.0	282.0	281.0	280.0	287.0	278.0	284.0	290.0	283.0	278.0
20	269.0	279.0	272.0	270.0	301.0	340.0	323.0	356.0	149.0	6.0	246.0	231.0	343.0	314.0	283.0	267.0	269.0	285.0	325.0	343.0	14.0	20.0	13.0	3.0
21	70.0	74.0	0.0	0.0	0.0	0.0	96.0	5.0	294.0	53.0	19.0	31.0	22.0	341.0	344.0	334.0	314.0	326.0	332.0	318.0	328.0	331.0	352.0	22.0
22	21.0	17.0	16.0	8.0	77.0	67.0	265.0	80.0	64.0	77.0	94.0	216.0	198.0	160.0	158.0	174.0	161.0	130.0	132.0	149.0	140.0	131.0	119.0	123.0
23	124.0	136.0	139.0	143.0	205.0	224.0	221.0	222.0	229.0	215.0	204.0	216.0	216.0	204.0	201.0	202.0	217.0	211.0	206.0	211.0	200.0	204.0	183.0	166.0
24	145.0	141.0	137.0	129.0	128.0	128.0	129.0	122.0	2.0	6.0	38.0	95.0	94.0	108.0	107.0	97.0	95.0	89.0	98.0	63.0	63.0	61.0	30.0	14.0
25	20.0	29.0	17.0	17.0	17.0	15.0	19.0	25.0	34.0	32.0	11.0	89.0	127.0	138.0	136.0	115.0	113.0	134.0	67.0	29.0	27.0	47.0	89.0	62.0
26	16.0	26.0	53.0	100.0	72.0	27.0	86.0	88.0	44.0	57.0	69.0	16.0	29.0	59.0	133.0	108.0	319.0	225.0	181.0	342.0	339.0	23.0	15.0	15.0
27	23.0	22.0	25.0	27.0	17.0	12.0	20.0	26.0	27.0	21.0	24.0	24.0	17.0	20.0	12.0	6.0	3.0	7.0	19.0	11.0	3.0	2.0	1.0	13.0
28	14.0	18.0	31.0	24.0	353.0	276.0	354.0	4.0	47.0	28.0	49.0	39.0	32.0	85.0	226.0	197.0	153.0	155.0	141.0	65.0	325.0	151.0	140.0	113.0
29	119.0	127.0	171.0	173.0	179.0	155.0	146.0	135.0	140.0	134.0	123.0	114.0	129.0	113.0	115.0	116.0	138.0	140.0	137.0	132.0	159.0	161.0	344.0	350.0
30	43.0	74.0	84.0	69.0	68.0	359.0	340.0	333.0	325.0	12.0	9.0	4.0	6.0	353.0	348.0	334.0	314.0	343.0	339.0	350.0	24.0	90.0	0.0	0.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	0.0	0.0	84.0	0.0	81.0	101.0	84.0	76.0	94.0	160.0	187.0	117.0	123.0	134.0	152.0	159.0	180.0	146.0	141.0	128.0	147.0	131.0	129.0	142.0
2	141.0	283.0	354.0	24.0	60.0	13.0	72.0	55.0	59.0	95.0	78.0	45.0	9.0	212.0	210.0	227.0	247.0	249.0	256.0	250.0	247.0	254.0	253.0	227.0
3	233.0	230.0	239.0	271.0	10.0	7.0	5.0	357.0	2.0	14.0	4.0	355.0	3.0	9.0	17.0	0.0	334.0	352.0	358.0	344.0	7.0	11.0	17.0	13.0
4	3.0	343.0	1.0	4.0	268.0	347.0	43.0	40.0	73.0	38.0	56.0	30.0	44.0	204.0	242.0	239.0	235.0	222.0	205.0	202.0	211.0	136.0	136.0	176.0
5	249.0	247.0	231.0	243.0	257.0	238.0	242.0	253.0	239.0	226.0	246.0	240.0	245.0	0.0	0.0	252.0	354.0	20.0	18.0	14.0	16.0	11.0	10.0	10.0
6	20.0	16.0	14.0	13.0	17.0	17.0	357.0	358.0	358.0	9.0	12.0	22.0	16.0	16.0	0.0	346.0	329.0	320.0	330.0	336.0	334.0	341.0	329.0	331.0
7	330.0	327.0	309.0	318.0	322.0	333.0	342.0	333.0	347.0	335.0	335.0	352.0	348.0	355.0	341.0	335.0	331.0	327.0	334.0	344.0	337.0	339.0	337.0	328.0
8	333.0	330.0	330.0	325.0	321.0	328.0	326.0	326.0	335.0	345.0	19.0	13.0	4.0	5.0	358.0	1.0	0.0	10.0	24.0	25.0	36.0	17.0	30.0	73.0
9	93.0	92.0	98.0	104.0	104.0	102.0	102.0	102.0	102.0	101.0	101.0	100.0	99.0	99.0	99.0	100.0	100.0	100.0	100.0	99.0	99.0	102.0	107.0	112.0
10	109.0	106.0	122.0	146.0	228.0	227.0	251.0	201.0	179.0	191.0	202.0	117.0	161.0	139.0	130.0	130.0	126.0	129.0	135.0	132.0	136.0	140.0	135.0	119.0
11	110.0	109.0	104.0	107.0	106.0	98.0	107.0	124.0	109.0	73.0	24.0	29.0	19.0	13.0	13.0	4.0	4.0	2.0	359.0	0.0	357.0	356.0	358.0	2.0
12	359.0	357.0	356.0	356.0	355.0	354.0	352.0	350.0	345.0	340.0	335.0	345.0	349.0	356.0	356.0	353.0	355.0	357.0	350.0	350.0	335.0	346.0	326.0	351.0
13	359.0	11.0	29.0	22.0	354.0	355.0	23.0	22.0	103.0	38.0	48.0	27.0	51.0	136.0	107.0	98.0	89.0	94.0	93.0	92.0	95.0	101.0	106.0	114.0
14	121.0	128.0	133.0	135.0	142.0	147.0	159.0	169.0	154.0	145.0	138.0	134.0	136.0	137.0	138.0	132.0	120.0	109.0	105.0	117.0	94.0	25.0	24.0	20.0
15	31.0	28.0	27.0	23.0	30.0	34.0	37.0	32.0	28.0	28.0	36.0	39.0	35.0	33.0	29.0	31.0	31.0	30.0	29.0	34.0	31.0	37.0	36.0	27.0
16	23.0	25.0	28.0	30.0	30.0	29.0	31.0	25.0	29.0	28.0	33.0	27.0	20.0	24.0	21.0	17.0	18.0	17.0	20.0	12.0	12.0	21.0	46.0	50.0
17	31.0	31.0	0.0	0.0	32.0	65.0	82.0	74.0	58.0	42.0	85.0	43.0	40.0	36.0	31.0	12.0	21.0	255.0	257.0	199.0	128.0	126.0	101.0	99.0
18	104.0	102.0	101.0	101.0	104.0	104.0	102.0	101.0	101.0	99.0	86.0	80.0	81.0	86.0	80.0	49.0	45.0	52.0	39.0	19.0	9.0	21.0	26.0	25.0
19	7.0	21.0	25.0	29.0	28.0	29.0	28.0	27.0	21.0	21.0	26.0	26.0	26.0	20.0	20.0	16.0	16.0	19.0	13.0	15.0	16.0	17.0	20.0	18.0
20	27.0	87.0	26.0	32.0	222.0	232.0	249.0	247.0	234.0	235.0	244.0	31.0	13.0	18.0	20.0	17.0	3.0	252.0	21.0	281.0	52.0	97.0	63.0	25.0
21	53.0	52.0	52.0	43.0	12.0	48.0	13.0	11.0	348.0	7.0	8.0	27.0	31.0	22.0	350.0	358.0	359.0	5.0	7.0	9.0	9.0	20.0	3.0	4.0
22	2.0	8.0	14.0	2.0	357.0	354.0	354.0	356.0	357.0	14.0	22.0	24.0	2.0	24.0	13.0	13.0	20.0	11.0	20.0	18.0	18.0	35.0	29.0	34.0
23	36.0	35.0	34.0	31.0	26.0	27.0	28.0	21.0	4.0	11.0	359.0	18.0	20.0	12.0	8.0	341.0	332.0	327.0	322.0	308.0	297.0	286.0	293.0	292.0
24	298.0	308.0	310.0	309.0	308.0	311.0	321.0	323.0	315.0	317.0	322.0	322.0	313.0	285.0	267.0	262.0	257.0	264.0	176.0	169.0	69.0	44.0	79.0	49.0
25	88.0	105.0	117.0	119.0	112.0	108.0	105.0	102.0	102.0	103.0	113.0	113.0	111.0	110.0	107.0	88.0	63.0	77.0	82.0	86.0	27.0	16.0	15.0	14.0
26	17.0	18.0	25.0	32.0	34.0	29.0	31.0	32.0	26.0	28.0	29.0	28.0	28.0	25.0	18.0	18.0	21.0	18.0	355.0	6.0	8.0	10.0	9.0	1.0
27	3.0	5.0	13.0	9.0	12.0	14.0	13.0	20.0	19.0	24.0	29.0	42.0	22.0	6.0	17.0	22.0	15.0	18.0	25.0	33.0	32.0	19.0	16.0	47.0
28	84.0	85.0	44.0	74.0	58.0	56.0	57.0	3.0	148.0	171.0	171.0	166.0	158.0	179.0	149.0	135.0	23.0	24.0	63.0	59.0	91.0	53.0	77.0	62.0
29	76.0	88.0	94.0	90.0	87.0	69.0	64.0	63.0	63.0	84.0	66.0	69.0	85.0	234.0	163.0	181.0	127.0	126.0	134.0	118.0	116.0	114.0	107.0	109.0
30	116.0	118.0	109.0	77.0	103.0	86.0	65.0	93.0	54.0	39.0	59.0	132.0	164.0	140.0	16.0	18.0	0.0	38.0	26.0	250.0	357.0	88.0	33.0	42.0
31	0.0	292.0	171.0	150.0	85.0	78.0	77.0	81.0	71.0	65.0	58.0	90.0	0.0	0.0	67.0	1.0	312.0	1.0	81.0	65.0	59.0	50.0	68.0	68.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	87.0	86.0	79.0	41.0	58.0	45.0	10.0	14.0	2.0	334.0	18.0	356.0	10.0	15.0	7.0	349.0	5.0	348.0	3.0	37.0	48.0	31.0	1.0	359.0
2	346.0	345.0	337.0	337.0	337.0	339.0	335.0	342.0	351.0	12.0	13.0	24.0	21.0	16.0	15.0	10.0	7.0	4.0	4.0	6.0	6.0	7.0	5.0	3.0
3	358.0	1.0	4.0	4.0	2.0	357.0	353.0	348.0	344.0	360.0	354.0	345.0	345.0	355.0	350.0	319.0	327.0	338.0	18.0	7.0	353.0	1.0	359.0	22.0
4	39.0	33.0	37.0	27.0	3.0	10.0	11.0	16.0	23.0	27.0	23.0	35.0	29.0	35.0	37.0	25.0	29.0	27.0	32.0	36.0	35.0	38.0	39.0	35.0
5	22.0	17.0	26.0	19.0	6.0	11.0	17.0	13.0	19.0	10.0	37.0	16.0	33.0	16.0	14.0	17.0	17.0	15.0	17.0	24.0	29.0	28.0	24.0	23.0
6	21.0	17.0	27.0	24.0	19.0	15.0	14.0	21.0	24.0	21.0	17.0	22.0	22.0	349.0	17.0	18.0	15.0	14.0	27.0	14.0	16.0	25.0	37.0	25.0
7	22.0	31.0	30.0	25.0	35.0	32.0	25.0	23.0	18.0	17.0	12.0	18.0	7.0	323.0	23.0	25.0	54.0	58.0	56.0	38.0	49.0	37.0	168.0	176.0
8	170.0	80.0	37.0	44.0	252.0	124.0	123.0	113.0	114.0	107.0	107.0	106.0	105.0	95.0	91.0	93.0	84.0	86.0	95.0	98.0	92.0	90.0	86.0	82.0
9	85.0	83.0	88.0	95.0	88.0	93.0	96.0	96.0	96.0	96.0	85.0	80.0	88.0	94.0	101.0	103.0	102.0	94.0	84.0	97.0	100.0	98.0	95.0	102.0
10	118.0	118.0	101.0	87.0	54.0	48.0	52.0	47.0	28.0	34.0	63.0	255.0	261.0	34.0	26.0	17.0	84.0	123.0	129.0	139.0	119.0	103.0	102.0	100.0
11	95.0	92.0	82.0	82.0	87.0	86.0	95.0	97.0	86.0	98.0	103.0	141.0	126.0	1.0	0.0	0.0	344.0	197.0	197.0	0.0	0.0	156.0	236.0	245.0
12	0.0	241.0	246.0	249.0	239.0	228.0	242.0	242.0	242.0	237.0	237.0	226.0	221.0	98.0	26.0	34.0	213.0	58.0	351.0	36.0	36.0	92.0	41.0	26.0
13	68.0	131.0	119.0	128.0	130.0	126.0	110.0	109.0	103.0	99.0	91.0	94.0	102.0	108.0	124.0	125.0	124.0	176.0	168.0	177.0	176.0	163.0	161.0	191.0
14	184.0	182.0	182.0	177.0	164.0	156.0	164.0	158.0	165.0	161.0	169.0	166.0	173.0	215.0	229.0	236.0	233.0	257.0	239.0	205.0	203.0	199.0	223.0	156.0
15	239.0	241.0	235.0	250.0	227.0	208.0	184.0	145.0	138.0	134.0	106.0	105.0	105.0	104.0	104.0	108.0	106.0	107.0	108.0	111.0	106.0	104.0	105.0	110.0
16	118.0	118.0	127.0	151.0	157.0	159.0	156.0	197.0	239.0	30.0	81.0	73.0	7.0	40.0	52.0	28.0	36.0	25.0	61.0	55.0	77.0	35.0	28.0	232.0
17	53.0	55.0	85.0	87.0	80.0	93.0	81.0	87.0	77.0	72.0	78.0	78.0	71.0	62.0	17.0	15.0	12.0	19.0	29.0	28.0	20.0	26.0	22.0	26.0
18	35.0	32.0	37.0	35.0	46.0	30.0	19.0	30.0	31.0	33.0	34.0	39.0	38.0	38.0	40.0	40.0	32.0	33.0	34.0	31.0	30.0	38.0	41.0	33.0
19	34.0	30.0	33.0	35.0	32.0	39.0	33.0	38.0	38.0	38.0	39.0	34.0	30.0	31.0	21.0	28.0	36.0	15.0	11.0	13.0	20.0	15.0	19.0	13.0
20	10.0	13.0	6.0	29.0	30.0	13.0	36.0	16.0	9.0	2.0	11.0	21.0	24.0	22.0	14.0	19.0	12.0	21.0	19.0	12.0	8.0	19.0	16.0	8.0
21	359.0	14.0	29.0	31.0	21.0	30.0	29.0	20.0	28.0	33.0	16.0	14.0	26.0	35.0	19.0	21.0	13.0	29.0	24.0	49.0	53.0	34.0	15.0	12.0
22	38.0	49.0	62.0	32.0	34.0	76.0	58.0	85.0	89.0	77.0	85.0	80.0	67.0	74.0	73.0	74.0	67.0	228.0	255.0	74.0	84.0	80.0	66.0	73.0
23	69.0	75.0	78.0	85.0	197.0	271.0	195.0	319.0	211.0	216.0	190.0	14.0	37.0	13.0	169.0	212.0	239.0	142.0	116.0	105.0	91.0	97.0	92.0	92.0
24	97.0	97.0	97.0	95.0	95.0	96.0	96.0	93.0	98.0	103.0	102.0	101.0	102.0	103.0	111.0	105.0	106.0	109.0	120.0	151.0	151.0	214.0	227.0	236.0
25	241.0	232.0	234.0	233.0	232.0	227.0	233.0	234.0	238.0	244.0	253.0	253.0	236.0	219.0	191.0	14.0	2.0	3.0	336.0	322.0	342.0	355.0	353.0	352.0
26	9.0	349.0	343.0	338.0	326.0	321.0	314.0	331.0	317.0	341.0	348.0	11.0	11.0	17.0	17.0	15.0	6.0	5.0	23.0	19.0	42.0	34.0	33.0	32.0
27	50.0	37.0	33.0	25.0	13.0	14.0	19.0	22.0	20.0	20.0	16.0	25.0	30.0	17.0	17.0	7.0	16.0	18.0	15.0	19.0	21.0	19.0	20.0	19.0
28	17.0	18.0	20.0	19.0	23.0	18.0	20.0	20.0	22.0	25.0	24.0	18.0	17.0	18.0	27.0	28.0	30.0	29.0	29.0	35.0	37.0	32.0	32.0	32.0
29	31.0	32.0	33.0	24.0	18.0	21.0	356.0	353.0	1.0	351.0	4.0	7.0	11.0	4.0	6.0	356.0	342.0	333.0	329.0	340.0	346.0	350.0	354.0	338.0
30	332.0	344.0	350.0	341.0	337.0	7.0	355.0	39.0	1.0	356.0	6.0	4.0	9.0	16.0	24.0	24.0	4.0	5.0	12.0	12.0	356.0	17.0	13.0	26.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	24.0	25.0	23.0	355.0	14.0	16.0	43.0	61.0	19.0	22.0	19.0	48.0	36.0	40.0	40.0	63.0	66.0	62.0	53.0	69.0	72.0	73.0	61.0	51.0
2	53.0	41.0	1.0	165.0	259.0	116.0	116.0	105.0	99.0	99.0	108.0	95.0	97.0	96.0	95.0	95.0	96.0	101.0	101.0	100.0	98.0	99.0	101.0	99.0
3	97.0	100.0	101.0	101.0	100.0	101.0	101.0	94.0	95.0	89.0	92.0	91.0	92.0	94.0	95.0	95.0	98.0	95.0	92.0	92.0	101.0	103.0	101.0	101.0
4	108.0	98.0	115.0	127.0	138.0	137.0	138.0	138.0	140.0	126.0	124.0	119.0	107.0	103.0	105.0	105.0	107.0	116.0	128.0	131.0	133.0	129.0	121.0	120.0
5	124.0	126.0	121.0	115.0	115.0	116.0	117.0	119.0	114.0	108.0	114.0	108.0	110.0	117.0	106.0	106.0	106.0	102.0	97.0	104.0	89.0	93.0	98.0	93.0
6	100.0	106.0	104.0	102.0	100.0	106.0	114.0	107.0	113.0	120.0	109.0	123.0	40.0	19.0	9.0	34.0	315.0	337.0	357.0	35.0	18.0	23.0	15.0	16.0
7	15.0	20.0	19.0	27.0	28.0	26.0	25.0	28.0	29.0	20.0	27.0	21.0	18.0	19.0	20.0	17.0	16.0	14.0	26.0	28.0	34.0	23.0	22.0	28.0
8	23.0	13.0	20.0	27.0	24.0	51.0	43.0	37.0	57.0	50.0	54.0	51.0	52.0	54.0	46.0	45.0	46.0	45.0	44.0	33.0	32.0	36.0	21.0	29.0
9	33.0	47.0	32.0	30.0	29.0	26.0	22.0	19.0	7.0	14.0	350.0	230.0	156.0	213.0	236.0	205.0	216.0	196.0	233.0	233.0	237.0	218.0	226.0	144.0
10	146.0	149.0	186.0	210.0	217.0	222.0	217.0	217.0	226.0	227.0	246.0	257.0	317.0	300.0	312.0	51.0	64.0	74.0	78.0	0.0	0.0	305.0	37.0	351.0
11	74.0	52.0	79.0	69.0	61.0	78.0	85.0	74.0	100.0	74.0	101.0	211.0	159.0	118.0	310.0	7.0	24.0	31.0	14.0	2.0	341.0	343.0	7.0	359.0
12	11.0	14.0	341.0	344.0	25.0	29.0	21.0	68.0	38.0	75.0	73.0	41.0	69.0	27.0	25.0	34.0	35.0	81.0	21.0	11.0	17.0	357.0	9.0	14.0
13	2.0	359.0	2.0	4.0	2.0	358.0	77.0	48.0	12.0	12.0	37.0	36.0	26.0	53.0	27.0	15.0	15.0	37.0	60.0	82.0	77.0	67.0	82.0	17.0
14	221.0	183.0	218.0	239.0	223.0	231.0	17.0	187.0	186.0	184.0	191.0	192.0	182.0	184.0	178.0	136.0	132.0	139.0	170.0	146.0	130.0	119.0	128.0	125.0
15	124.0	123.0	129.0	127.0	131.0	137.0	132.0	135.0	114.0	137.0	152.0	187.0	203.0	119.0	123.0	161.0	0.0	17.0	50.0	32.0	41.0	93.0	44.0	18.0
16	20.0	17.0	15.0	20.0	38.0	254.0	229.0	20.0	0.0	107.0	266.0	176.0	173.0	149.0	160.0	149.0	147.0	187.0	193.0	194.0	187.0	163.0	151.0	142.0
17	124.0	113.0	121.0	126.0	115.0	120.0	110.0	108.0	113.0	109.0	105.0	114.0	115.0	121.0	124.0	123.0	119.0	113.0	111.0	111.0	116.0	121.0	114.0	119.0
18	123.0	122.0	122.0	115.0	111.0	110.0	109.0	114.0	109.0	106.0	103.0	103.0	104.0	105.0	106.0	107.0	103.0	102.0	103.0	101.0	100.0	102.0	104.0	102.0
19	100.0	100.0	97.0	98.0	95.0	97.0	98.0	96.0	90.0	83.0	91.0	87.0	83.0	77.0	69.0	63.0	54.0	50.0	43.0	42.0	53.0	51.0	54.0	55.0
20	43.0	57.0	61.0	57.0	44.0	49.0	40.0	46.0	51.0	55.0	51.0	56.0	36.0	32.0	63.0	63.0	42.0	41.0	127.0	59.0	325.0	51.0	82.0	74.0
21	86.0	92.0	0.0	0.0	0.0	103.0	65.0	42.0	85.0	351.0	37.0	23.0	113.0	280.0	42.0	60.0	60.0	56.0	59.0	65.0	79.0	43.0	68.0	96.0
22	46.0	71.0	63.0	0.0	187.0	122.0	117.0	120.0	124.0	134.0	151.0	140.0	127.0	130.0	143.0	147.0	145.0	138.0	129.0	137.0	138.0	138.0	134.0	130.0
23	115.0	107.0	108.0	105.0	105.0	104.0	108.0	125.0	282.0	301.0	292.0	301.0	293.0	294.0	297.0	296.0	296.0	296.0	295.0	287.0	288.0	291.0	291.0	293.0
24	292.0	294.0	311.0	321.0	330.0	340.0	203.0	282.0	317.0	268.0	261.0	233.0	303.0	357.0	5.0	0.0	6.0	340.0	241.0	183.0	23.0	34.0	111.0	139.0
25	146.0	110.0	121.0	125.0	115.0	107.0	110.0	108.0	116.0	122.0	127.0	137.0	141.0	136.0	141.0	135.0	241.0	308.0	323.0	320.0	323.0	294.0	249.0	321.0
26	324.0	322.0	325.0	322.0	321.0	314.0	322.0	319.0	315.0	317.0	316.0	314.0	312.0	310.0	312.0	320.0	324.0	319.0	318.0	318.0	316.0	318.0	319.0	331.0
27	326.0	332.0	347.0	355.0	355.0	358.0	0.0	359.0	0.0	356.0	351.0	359.0	4.0	0.0	4.0	358.0	360.0	7.0	8.0	4.0	1.0	4.0	5.0	3.0
28	9.0	12.0	14.0	10.0	14.0	13.0	12.0	11.0	9.0	10.0	11.0	28.0	6.0	25.0	33.0	28.0	26.0	11.0	0.0	22.0	23.0	33.0	30.0	28.0
29	39.0	37.0	34.0	31.0	32.0	37.0	38.0	35.0	37.0	30.0	37.0	35.0	33.0	25.0	31.0	28.0	20.0	17.0	23.0	31.0	34.0	35.0	30.0	14.0
30	16.0	17.0	16.0	18.0	12.0	13.0	20.0	23.0	26.0	28.0	28.0	16.0	17.0	26.0	29.0	33.0	33.0	34.0	28.0	27.0	32.0	39.0	29.0	37.0
31	38.0	34.0	16.0	22.0	35.0	41.0	27.0	33.0	31.0	34.0	34.0	24.0	35.0	23.0	26.0	22.0	28.0	30.0	27.0	22.0	52.0	49.0	47.0	44.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.5	9.3	9.7	10.1	10.2	10.1	9.7	9.1	10.1	9.9	9.3	10.0	10.7	11.2	11.9	10.9	11.7	10.7	9.5	9.7	9.9	9.2	7.7	8.3	11.9	7.7	9.9
2	6.6												4.2	3.8	5.9	3.4	5.6	5.2	4.1	3.6	2.8	1.2	1.2	1.5	6.6	1.2	3.8
3	1.8	2.7	2.4	1.6	1.4	2.3	1.6	3.2	2.1	4.0	3.4	5.1	5.1	5.0	3.9	4.4									5.1	1.4	3.1
4														6.2	6.4	5.9									6.4	5.9	6.2
5													13.1	13.3	14.3	15.0									15.0	13.1	13.9
6																10.4									10.4	10.4	10.4
7																											
8													6.0	5.7	5.7	6.6									6.6	5.7	6.0
9													8.6	9.8	8.3	10.7	8.5	9.4	7.5	7.7	7.6	8.6	7.4	6.6	10.7	6.6	8.4
10	8.2	6.6	9.3	8.9	7.5	7.9	7.1	8.2	9.9	10.7	10.7	10.7	11.4	10.3	11.0	9.6	9.1	9.2	8.0	8.6	6.3	6.1	3.5	6.0	11.4	3.5	8.5
11	9.0	10.5	10.0	9.8	7.8	7.9	7.3	12.2	12.2	10.5	11.2	9.1	3.3	5.7	8.0	7.7	8.8	9.5	9.2	7.8	7.4	6.0	7.0	7.3	12.2	3.3	8.5
12	6.8	7.1	7.9	6.6	5.2	5.7	6.2	5.6	6.8	6.8	7.5	8.7	9.6	9.9	9.9	9.4	10.2	10.0	12.3	14.0	15.3	12.1	15.6	13.2	15.6	5.2	9.3
13	14.2	16.0	14.3	14.6	10.2	15.0	17.8	16.4	15.3	16.7	10.5	9.2	8.5	10.8	11.4	11.8	11.2	11.4	9.5	11.3	11.4	5.6	4.5	5.7	17.8	4.5	11.8
14	4.4	5.2	3.6	1.1	5.5	2.9	5.0	3.3	1.9	4.2	7.1	7.8	7.4	10.2	10.9	10.8	11.2	10.2	10.2	11.0	9.0	6.2	5.8	6.4	11.2	1.1	6.7
15	9.0	9.8	12.2	9.7	8.2	8.1	6.6	7.8	8.4	7.8	6.8	7.1	6.2	6.6	7.4	6.2	6.8	6.5	6.0	4.7	2.6	1.3	2.9	3.3	12.2	1.3	6.8
16	3.6	1.8	0.1	0.1	0.0	0.4	0.6	0.0	0.0	0.0	0.2	0.9	0.3	1.7	1.2	0.5	1.4	1.4	1.0	1.2	0.1	2.9	3.5	1.4	3.6	0.0	1.0
17	1.9	2.2	2.3	7.5	7.2	6.4	6.9	6.7	7.7	9.4	9.8	11.6	13.2	12.7	10.7	9.8	9.3	8.3	4.2	2.4	2.9	3.6	5.1	4.9	13.2	1.9	7.0
18	3.4	3.6	3.1	3.3	3.4	4.5	4.5	3.6	3.3	2.8	2.4	2.1	1.0	0.3	0.9	2.3	0.2	0.3	0.1	0.2	2.2	3.0	3.2	3.0	4.5	0.1	2.4
19	2.2	1.8	4.0	5.6	4.8	6.0	8.9	6.9	7.2	7.1	9.2	12.0	10.7	12.4	12.9	14.5	12.9	11.7	13.8	14.8	15.0	12.8	11.0	10.1	15.0	1.8	9.5
20	9.6	7.0	5.7	5.8	6.7	4.7	4.1	2.9	1.9	1.4	2.3	3.9	3.4	3.4	3.1	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	2.8
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.2	7.7	8.0	10.6	11.6	11.5	10.3	9.7	10.7	12.2	12.5	11.4	10.7	10.0	12.5	0.0	6.1
22	9.9	8.1	11.0	9.3	8.5	9.3	8.7	9.9	8.3	8.5	11.7	12.5	11.3	11.6	12.2	9.2	7.1	6.7	3.8	1.6	1.0	1.9	2.4	4.0	12.5	1.0	7.9
23	5.1	6.8	8.8	9.0	10.4	10.2	11.3	9.5	11.0	9.5	7.8	8.0	6.7	6.5	7.1	8.5	8.5	10.0	12.4	5.3	3.1	5.3	7.3	7.4	12.4	3.1	8.1
24	4.9	5.0	4.1	4.6	4.3	2.9	2.3	3.2	5.0	7.5	9.2	8.8	7.6	7.8	9.1	7.7	5.8	5.8	5.8	5.6	6.4	6.1	4.9	4.3	9.2	2.3	5.8
25	4.8	2.0	0.4	0.2	1.1	6.4	7.5	5.6	6.6	8.3	8.1	9.0	8.5	8.0	7.7	8.5	9.1	10.3	10.3	9.3	8.3	8.8	9.0	9.3	10.3	0.2	7.0
26	10.0	9.7	10.7	10.1	10.2	12.4	12.0	12.7	13.1	11.2	8.1	7.1	6.0	3.3	3.8	3.6	1.8	1.9	1.9	2.0	1.3	0.4	1.1	2.4	13.1	0.4	6.5
27	2.8	2.7	3.2	3.3	3.3	2.9	2.3	2.2	5.3	6.5	8.6	8.4	10.0	12.1	13.7	14.4	14.3	13.1	13.3	12.8	12.4	10.9	9.8	9.8	14.4	2.2	8.3
28	10.7	8.9	7.3	6.1	5.1	5.4	5.7	6.0	5.9	6.5	5.5	5.5	5.0	4.2	3.7	2.9	1.4	0.1	0.0	0.0	0.5	0.1	1.8	1.1	10.7	0.0	4.1
29	1.3	1.1	1.5	2.4	2.0	0.9	1.7	0.4	0.2	0.2	1.0	0.8	0.5	0.7	0.3	0.7	1.5	3.7	4.5	4.8	2.8	1.9	3.2	3.9	4.8	0.2	1.7
30	2.2	0.7	3.0	1.9	2.8	4.9	4.4	3.2	5.0	7.2	7.1	8.2	9.2	9.7	10.7	11.9	10.8	9.9	9.8	10.4	9.9	9.8	8.5	7.6	11.9	0.7	7.0
31	8.4	8.0	7.9	7.2	5.7	5.4	2.1	2.2	2.7	3.3	1.4	0.8	0.5	0.4	0.2	2.2	0.8	2.2	0.7	0.2	0.2	0.5	0.1	1.2	8.4	0.1	2.7
Max.	**14.2**	**16.0**	**14.3**	**14.6**	**10.4**	**15.0**	**17.8**	**16.4**	**15.3**	**16.7**	**11.7**	**12.5**	**13.2**	**13.3**	**14.3**	**15.0**	**14.3**	**13.1**	**13.8**	**14.8**	**15.3**	**12.8**	**15.6**	**13.2**	**17.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.8**	**0.3**	**0.3**	**0.2**	**0.5**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.0**	**5.7**	**5.9**	**5.8**	**5.5**	**5.9**	**6.0**	**5.9**	**6.2**	**6.8**	**6.9**	**7.3**	**7.0**	**7.4**	**7.7**	**7.7**	**7.1**	**7.1**	**6.7**	**6.5**	**6.0**	**5.4**	**5.5**	**5.5**			**6.4**

Total Hours in Month 744 **Hours Data Available** 605 **Data Recovery** 81.3%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	1.2	0.6	0.3	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.6	1.0	1.0	0.0	0.8	1.5	2.3	2.1	2.3	1.8	2.0	1.5	1.1	2.3	0.0	0.9
2	1.2	1.7	3.0	3.5	3.5	3.4	4.5	4.6	5.5	5.6	6.0	4.5	8.3	8.8	7.9	8.1	8.2	8.3	8.7	8.5	7.8	8.3	8.5	9.0	9.0	1.2	6.1
3	10.5	9.8	10.7	10.8	10.3	10.4	10.7	9.3	3.3	8.1	10.3	9.4	7.0	7.4	7.9	7.8	6.8	8.0	6.3	6.8	6.5	6.8	7.2	6.8	10.8	3.3	8.3
4	6.9	6.4	5.9	6.1	5.6	5.9	6.0	6.1	6.5	5.5	5.9	5.6	5.7	5.7	6.1	6.0	5.6	8.3	9.5	9.0	9.9	10.0	9.2	8.5	10.0	5.5	6.9
5	8.3	8.8	7.5	8.7	9.1	7.8	9.9	7.1	5.8	5.5	6.6	4.0	5.1	6.3	4.3	5.7	7.2	7.6	8.2	7.1	5.5	6.3	7.2	7.3	9.9	4.0	7.0
6	7.4	6.5	5.5	6.7	5.8	5.9	6.3	6.3	6.9	7.2	6.0	6.4	8.8	8.7	8.0	7.7	5.6	9.2	10.0	9.8	5.1	4.7	6.3	6.7	10.0	4.7	7.0
7	8.2	7.0	6.9	8.5	6.5	6.8	6.0	4.6	3.9	3.4	3.1	3.2	3.3	2.9	1.3	1.4	2.2	4.5	4.1	3.2	4.6	5.6	4.3	5.2	8.5	1.3	4.6
8	7.4	5.5	5.4	4.9	2.7	2.0	1.9	1.1	2.2	2.9	3.7	1.6	3.6	8.4	7.4	6.6	8.7	7.3	3.8	4.6	4.9	7.2	8.6	8.7	8.7	1.1	5.0
9	8.7	9.5	10.6	11.7	11.2	9.9	9.9	8.9	9.9	9.1	6.0	5.5	3.9	1.7	2.9	2.7	4.1	4.2	6.0	6.5	7.0	7.0	7.4	7.7	11.7	1.7	7.2
10	7.7	8.5	8.3	8.2	8.3	7.2	8.1	6.6	7.0	6.4	3.9	1.8	2.8	5.1	4.7	4.4	6.0	4.6	4.5	4.6	5.5	5.6	5.9	5.7	8.5	1.8	5.9
11	3.7	2.4	0.9	1.9	3.6	2.8	2.2	1.9	0.9	1.6	1.9	2.1	1.8	2.9	1.7	1.8	0.7	1.9	2.0	1.1	1.1	1.5	2.6	3.0	3.7	0.7	2.0
12	2.7	2.9	2.6	2.0	2.0	0.1	0.9	3.1	3.5	3.5	2.1	2.7	4.8	3.7	5.1	4.8	5.8	3.4	2.8	5.5	5.3	5.8	6.4	6.2	6.4	0.1	3.7
13	5.8	6.9	3.8	6.8	11.4	12.3	13.3	10.8	14.3	13.9	12.3	11.4	11.0	11.2	11.7	11.6	11.5	12.3	11.4	10.9	11.1	11.5	11.1	10.5	14.3	3.8	10.8
14	9.2	9.5	9.9	9.7	8.2	7.6	5.8	7.7	10.5	8.3	9.5	8.6	7.8	8.2	7.8	7.2	7.4	7.4	6.1	5.8	4.8	4.4	3.5	3.2	10.5	3.2	7.4
15	4.3	5.4	5.6	3.9	4.0	2.3	1.8	3.2	3.9	1.7	0.7	2.1	3.4	2.8	3.3	3.7	1.8	1.8	3.0	5.6	2.4	2.6	3.9	6.5	6.5	0.7	3.3
16	10.9	12.7	9.1	8.6	10.2	9.9	8.3	9.9	10.7	10.3	11.2	11.3	10.4	9.9	6.6	5.8	5.6	4.3	3.5	2.9	3.1	4.1	4.4	1.4	12.7	1.4	7.7
17	0.3	1.4	3.8	0.9	4.8	9.1	9.9	7.3	7.4	7.8	8.3	7.5	9.9	9.9	10.3	8.4	5.7	11.6	12.8	9.7	8.8	10.1	10.9	10.8	12.8	0.3	7.8
18	11.9	12.8	11.0	10.5	11.1	14.1	14.7	13.9	12.3	11.1	9.8	8.6	9.0	8.7	7.1	7.9	7.1	6.8	6.1	6.6	5.3	4.0	4.1	4.0	14.7	4.0	9.1
19	4.2	5.0	4.5	4.2	6.3	8.5	8.4	10.4	7.2	7.2	9.9	10.4	10.1	10.0	10.3	8.8	7.6	8.1	7.5	7.0	5.3	5.7	4.3	6.2	10.4	4.2	7.4
20	7.8	7.8	10.8	8.4	7.9	9.7	9.6	11.8	10.4	9.1	8.7	7.5	6.3	7.6	7.0	3.5	4.1	6.4	6.4	7.5	10.3	9.5	10.7	9.6	11.8	3.5	8.3
21	9.5	8.5	9.8	11.1	11.4	11.3	10.9	10.7	12.0	10.7	10.6	11.1	10.0	7.2	6.6	6.3	6.6	2.8	1.1	1.0	0.8	2.2	3.1	3.0	12.0	0.8	7.4
22	3.0	2.5	1.8	0.7	0.1	0.9	1.5	1.8	1.8	1.5	1.6	1.7	1.4	3.8	9.0	8.3	3.7	6.2	5.6	4.7	4.5	4.2	4.1	2.5	9.0	0.1	3.2
23	2.7	2.2	1.4	0.4	1.0	0.8	0.9	1.2	1.0	1.7	3.7	1.2	1.1	0.6	2.1	2.2	3.0	3.0	4.9	4.8	4.7	4.5	5.6	7.6	7.6	0.4	2.6
24	7.9	8.3	9.4	9.6	9.6	9.4	9.1	9.2	9.1	8.1	7.2	7.1	6.5	5.7	6.5	5.9	5.4	6.1	6.2	5.9	8.8	8.1	7.7	8.3	9.6	5.4	7.7
25	7.4	9.2	9.4	11.4	11.2	9.1	9.8	9.6	8.2	6.8	5.8	5.5	5.2	7.6	7.1	5.5	6.6	6.9	7.5	7.6	7.3	7.3	8.0	6.8	11.4	5.2	7.8
26	6.6	7.0	5.5	4.9	5.2	6.1	6.3	5.9	6.0	5.4	6.8	6.8	6.6	7.1	6.8	6.9	7.5	7.6	7.6	8.1	9.1	8.1	6.0	7.1	9.1	4.9	6.7
27	8.5	9.1	8.4	7.5	7.5	6.3	4.8	4.5	3.2	4.0	5.6	4.3	2.7	2.7	3.2	2.6	4.7	3.7	4.4	6.6	7.0	6.7	8.1	8.3	9.1	2.6	5.6
28	7.4	7.2	7.6	9.2	9.5	8.6	8.7	8.4	7.0	6.3	5.9	6.3	6.3	6.4	4.2	4.0	3.7	4.1	5.6	6.3	6.6	6.8	6.6	6.1	9.5	3.7	6.6
29	6.6	7.3	6.8	7.4	6.8	6.6	6.5	7.4	7.2	7.2	7.7	6.8	7.0	6.9	6.6	6.8	6.0	5.1	4.5	5.1	4.2	4.9	5.1	5.3	7.7	4.2	6.3
Max.	**11.9**	**12.8**	**11.0**	**11.7**	**11.4**	**14.1**	**14.7**	**13.9**	**14.3**	**13.9**	**12.3**	**11.4**	**11.0**	**11.2**	**11.7**	**11.6**	**11.5**	**12.3**	**12.8**	**10.9**	**11.1**	**11.5**	**11.1**	**10.8**	**14.7**		
Min.	**0.3**	**1.2**	**0.6**	**0.3**	**0.0**	**0.1**	**0.2**	**0.0**	**0.0**	**0.1**	**0.2**	**0.6**	**1.0**	**0.6**	**0.0**	**0.8**	**0.7**	**1.8**	**1.1**	**1.0**	**0.8**	**1.5**	**1.5**	**1.1**		**0.0**	
Avg.	**6.5**	**6.7**	**6.4**	**6.5**	**6.7**	**6.7**	**6.8**	**6.7**	**6.5**	**6.2**	**6.2**	**5.7**	**5.9**	**6.2**	**6.0**	**5.6**	**5.5**	**6.0**	**5.9**	**6.0**	**5.8**	**6.1**	**6.3**	**6.3**			**6.2**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	6.0	5.4	3.6	3.3	4.2	3.7	2.7	1.7	2.0	2.2	3.0	5.2	7.8	8.8	9.1	8.7	7.0	6.8	8.3	9.6	8.8	9.2	10.4	10.4	1.7	6.0
2	10.3	9.6	9.9	11.5	10.4	11.1	8.7	7.9	6.5	5.8	4.9	4.1	4.2	4.2	3.8	3.4	2.3	1.2	1.1	0.2	2.9	3.5	3.9	2.9	11.5	0.2	5.6
3	1.7	2.3	3.1	2.9	5.5	7.4	8.9	10.0	10.3	10.1	10.9	13.0	13.4	11.8	11.6	11.9	10.9	10.6	9.3	8.5	8.1	8.9	7.9	10.8	13.4	1.7	8.7
4	9.4	9.4	10.5	8.3	8.6	10.0	8.7	10.0	9.1	10.0	11.4	13.1	13.0	12.3	12.2	12.4	11.9	11.4	11.6	10.8	11.8	10.8	9.9	9.4	13.1	8.3	10.7
5	9.8	10.1	11.8	11.8	13.0	15.0	12.7	11.4	11.1	12.1	15.0	13.8	13.6	12.0	12.0	13.1	12.1	11.8	8.8	11.7	12.2	10.8	10.1	9.4	15.0	8.8	11.9
6	9.4	9.4	8.9	7.8	7.1	8.1	7.6	6.2	6.3	6.7	5.0	3.7	3.9	6.3	6.5	7.6	5.8	6.4	6.2	5.0	4.7	6.7	8.9	8.6	9.4	3.7	6.8
7	7.3	5.8	5.7	4.1	3.7	1.5	4.5	2.5	1.6	1.9	2.3	2.5	3.1	2.3	1.6	1.9	3.5	3.5	2.7	3.9	3.8	5.2	5.7	5.1	7.3	1.5	3.6
8	4.4	5.0	5.6	2.7	2.9	2.9	3.0	4.1	3.9	3.8	6.3	7.0	6.9	6.2	6.9	7.7	9.3	10.2	9.5	10.1	11.0	12.4	11.6	12.0	12.4	2.7	6.9
9	11.4	9.7	8.7	7.7	7.8	7.3	6.8	6.2	6.3	6.0	5.0	4.2	3.6	3.4	4.6	2.8	2.6	2.6	3.0	3.0	3.0	3.8	3.5	2.4	11.4	2.4	5.2
10	0.7	1.2	0.0	1.8	5.6	5.1	5.1	4.2	3.5	3.5	3.8	2.9	2.7	3.8	4.1	4.3	3.2	3.6	2.1	2.4	4.2	2.7	1.9	1.9	5.6	0.0	3.1
11	3.7	4.0	3.8	2.2	1.1	3.2	2.6	3.2	1.4	0.0	2.8	3.4	3.9	2.5	2.4	4.1	2.6	2.2	2.8	3.1	3.8	3.6	2.6	1.2	4.1	0.0	2.7
12	2.8	3.7	3.4	3.2	2.0	3.0	2.9	2.7	2.4	2.6	1.3	1.2	1.6	2.1	2.5	2.7	2.9	3.1	3.3	3.0	3.2	2.8	2.5	2.7	3.7	1.2	2.7
13	3.3	3.4	3.5	3.4	3.7	3.8	4.0	4.1	3.8	4.2	4.1	4.0	4.0	2.6	3.7	3.2	2.6	3.2	2.5	2.0	3.1	2.3	3.2	2.9	4.2	2.0	3.4
14	1.8	2.4	2.7	1.3	2.1	1.1	0.8	0.4	0.7	0.9	0.4	0.4	0.3	0.2	0.1	0.2	0.5	1.0	4.8	5.3	5.4	4.1	4.0	3.6	5.4	0.1	1.9
15	5.6	7.5	10.5	11.0	10.4	10.8	9.4	10.2	9.2	8.0	6.8	7.4	8.5	8.5	7.2	7.6	7.3	7.6	8.2	9.4	8.9	8.3	8.6	8.5	11.0	5.6	8.5
16	6.7	6.3	6.0	3.5	4.3	3.4	3.2	1.9	1.0	2.0	2.3	1.0	0.9	1.2	0.0	0.0	0.7	0.6	0.0	0.0	1.0	4.5	4.5	4.8	6.7	0.0	2.5
17	4.4	4.6	4.0	3.1	1.8	3.0	1.5	2.7	3.4	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.3	8.5	7.5	6.4	7.1	6.7	6.1	8.5	0.0	3.3
18	4.2	2.8	1.7	4.1	6.0	6.6	5.5	5.5	6.4	7.1	6.4	5.9	6.1	7.2	5.2	6.5	7.0	6.3	6.3	6.4	9.9	9.9	10.9	10.7	10.9	1.7	6.4
19	10.7	8.8	10.4	10.5	10.3	9.9	9.9	9.8	10.9	11.4	10.6	9.2	8.8	9.8	10.2	9.1	8.8	8.0	6.6	5.9	7.1	7.0	6.1	6.3	11.4	5.9	9.0
20	6.4	6.3	6.4	4.9	4.4	3.6	3.7	3.5	3.8	3.7	3.2	2.3	0.7	0.6	0.5	0.8	1.2	2.3	3.5	4.0	3.9	5.2	5.4	5.6	6.4	0.5	3.6
21	4.6	3.5	3.0	3.7	2.8	1.7	1.3	2.1	1.6	2.0	1.6	1.6	2.0	2.3	6.1	8.3	9.0	7.8	8.5	11.0	11.1	11.8	10.4	10.3	11.8	1.3	5.3
22	9.2	9.4	8.2	9.0	9.5	10.3	11.2	11.5	10.4	10.7	11.2	12.0	12.3	9.3	9.5	8.7	7.7	6.0	5.4	5.5	6.0	4.5	3.0	1.4	12.3	1.4	8.4
23	1.7	4.5	2.1	4.4	1.8	1.5	4.9	4.4	4.3	5.2	5.3	4.4	4.9	4.8	5.8	6.5	4.9	4.7	4.6	5.8	6.4	7.4	6.8	6.5	7.4	1.5	4.7
24	6.0	5.5	4.5	4.5	4.1	4.0	3.7	2.6	2.7	2.5	2.0	3.6	4.7	4.1	4.2	3.7	1.7	0.8	2.8	3.3	2.8	3.3	2.1	0.7	6.0	0.7	3.3
25	0.5	0.9	0.8	1.2	1.1	1.6	1.1	0.2	0.4	0.8	1.4	2.1	1.3	0.4	2.9	3.0	3.1	1.6	1.9	3.1	4.3	4.6	5.3	5.4	5.4	0.2	2.0
26	3.8	1.9	0.6	2.0	3.1	3.0	3.1	2.8	3.3	4.1	3.4	2.7	2.1	1.5	1.9	2.5	3.7	2.3	2.1	0.6	1.8	2.6	2.5	3.3	4.1	0.6	2.5
27	3.3	2.0	0.3	0.4	0.3	0.3	0.2	0.2	0.0	1.0	0.7	1.9	1.5	1.4	2.7	3.5	4.2	3.3	3.2	4.6	5.1	5.0	5.0	6.0	6.0	0.0	2.3
28	6.1	5.9	5.7	4.3	2.0	3.3	4.0	3.7	2.5	2.1	1.3	1.1	1.2	1.7	1.1	2.7	2.5	1.6	0.3	0.1	0.0	0.3	0.2	0.4	6.1	0.0	2.3
29	1.6	1.5	0.8	2.2	1.7	1.5	1.4	2.2	2.7	3.1	4.3	5.7	6.3	8.0	8.3	8.4	9.5	10.9	8.9	9.6	9.4	9.8	10.5	11.9	11.9	0.8	5.8
30	13.2	13.9	13.2	12.9	11.3	11.6	12.6	12.3	11.5	11.6	12.1	12.6	11.9	11.7	11.6	10.6	9.9	9.8	9.2	8.0	9.3	8.1	6.5	6.7	13.9	6.5	10.9
31	6.1	5.1	5.0	5.8	5.8	6.4	5.4	6.7	7.0	6.5	7.0	7.0	7.2	8.5	8.4	8.1	9.0	8.9	9.0	8.6	10.3	10.3	9.5	9.6	10.3	5.0	7.5
Max.	**13.2**	**13.9**	**13.2**	**12.9**	**13.0**	**15.0**	**12.7**	**12.3**	**11.5**	**12.1**	**15.0**	**13.8**	**13.6**	**12.3**	**12.2**	**13.1**	**12.1**	**11.8**	**11.6**	**11.7**	**12.2**	**12.4**	**11.6**	**12.0**	**15.0**		
Min.	**0.5**	**0.9**	**0.0**	**0.4**	**0.3**	**0.3**	**0.2**	**0.2**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.6**	**0.0**	**0.0**	**0.0**	**0.3**	**0.2**	**0.4**		**0.0**	
Avg.	**5.7**	**5.6**	**5.4**	**5.2**	**5.1**	**5.4**	**5.2**	**5.1**	**4.8**	**4.9**	**5.0**	**5.1**	**5.2**	**5.1**	**5.4**	**5.6**	**5.5**	**5.4**	**5.3**	**5.5**	**6.1**	**6.3**	**6.1**	**6.1**			**5.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.9	11.0	9.7	9.0	8.1	8.2	6.6	7.6	7.2	5.9	6.6	5.7	6.2	6.0	6.2	5.5	5.5	4.1	3.6	2.0	1.3	1.8	1.0	0.0	11.0	0.0	5.8
2	0.9	1.7	1.1	0.4	0.6	2.1	1.2	0.9	1.1	1.7	1.5	1.2	2.1	2.8	2.2	1.8	1.0	1.3	0.1	1.1	0.7	2.3	3.4	3.7	3.7	0.1	1.5
3	3.3	4.2	4.4	3.8	3.8	4.1	4.3	3.6	3.9	4.1	4.4	4.0	4.1	5.8	6.7	7.1	7.6	7.7	8.2	9.5	10.0	11.0	9.1	9.4	11.0	3.3	6.0
4	9.7	11.7	10.8	10.8	11.8	11.8	12.9	11.1	9.5	8.8	8.3	6.5	6.3	5.5	5.2	5.0	6.2	6.4	5.2	6.7	7.2	10.0	9.3	8.0	12.9	5.0	8.5
5	5.6	3.7	5.2	5.8	5.7	5.5	3.7	2.5	3.2	2.4	0.6	2.5	2.5	2.9	3.2	4.9	3.7	5.0	4.8	5.8	5.2	5.7	6.1	6.1	6.1	0.6	4.2
6	7.5	8.1	6.7	5.7	5.5	6.7	6.7	5.1	6.2	6.5	6.3	4.7	4.9	7.5	5.0	4.6	4.2	3.1	4.9	8.2	9.2	8.5	8.4	8.9	9.2	3.1	6.4
7	9.1	9.2	9.1	9.4	9.0	8.4	8.4	7.7	7.6	4.9	5.2	6.6	6.5	5.9	3.5	4.0	3.7	3.3	3.3	3.2	4.0	3.6	3.7	2.1	9.4	2.1	5.9
8	3.7	2.3	2.4	1.3	0.8	1.2	1.2	0.7	0.4	0.8	0.2	0.7	0.5	0.3	0.6	1.2	1.2	1.2	1.8	1.3	1.6	1.7	4.5	5.0	5.0	0.2	1.5
9	6.9	6.6	6.8	6.8	6.3	5.9	5.5	5.9	6.5	7.1	5.2	4.9	3.1	4.7	4.1	4.8	5.8	5.5	4.9	4.2	4.4	5.3	6.3	5.8	7.1	3.1	5.6
10	5.6	5.5	5.0	5.6	5.9	6.8	6.2	5.7	6.3	5.5	5.3	4.6	5.4	5.5	4.1	3.8	3.7	4.4	4.6	5.2	5.7	6.1	6.9	5.6	6.9	3.7	5.4
11	4.6	4.5	4.8	4.9	4.8	5.5	5.9	6.0	4.9	6.1	6.0	7.2	6.2	6.0	4.7	5.2	4.9	4.3	3.7	4.1	4.5	5.4	5.9	4.8	7.2	3.7	5.2
12	3.8	4.7	4.5	4.0	3.7	4.0	3.7	1.7	3.4	1.6	4.4	5.4	6.1	6.2	4.8	6.3	5.9	5.2	6.1	5.3	4.1	2.9	3.1	1.7	6.3	1.6	4.3
13	0.6	1.0	1.1	0.7	0.8	2.0	1.5	1.1	2.5	4.0	4.4	3.9	4.6	4.6	7.3	8.4	5.6	5.7	6.6	6.7	6.2	11.3	16.3	14.6	16.3	0.6	5.1
14	10.2	8.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.5	3.7	2.7	3.6	2.8	3.1	2.0	2.1	10.2	0.0	1.8
15	2.6	2.0	2.0	2.0	1.7	3.1	3.9	5.4	6.6	8.4	10.2	9.6	10.2	11.2	12.2	14.2	14.9	15.0	15.9	14.5	13.1	14.0	14.2	15.3	15.9	1.7	9.2
16	16.0	17.2	16.4	17.1	16.9	15.7	13.5	12.7	6.2	6.5	8.7	6.6	7.2	5.6	5.5	4.5	4.6	2.9	3.1	2.7	1.0	3.1	2.4	4.2	17.2	1.0	8.3
17	3.5	1.9	1.5	3.0	1.2	2.2	3.5	3.3	2.3	2.1	3.9	4.9	4.2	4.0	4.8	4.3	4.8	3.9	3.4	1.9	0.9	1.0	0.9	0.5	4.9	0.5	2.8
18	0.0	0.5	1.3	1.5	1.4	1.1	0.8	1.7	1.1	1.4	0.9	1.0	1.6	1.7	1.2	1.9	2.3	2.6	2.3	1.7	1.7	2.2	1.8	1.8	2.6	0.0	1.5
19	2.1	2.4	2.5	3.8	4.6	4.7	4.2	4.1	4.3	3.8	3.5	3.1	3.4	3.2	2.4	3.5	4.0	4.4	2.4	2.7	2.4	2.2	2.7	1.8	4.7	1.8	3.3
20	4.3	3.3	4.8	1.8	4.0	3.1	5.0	7.5	5.7	3.9	7.0	4.2	3.7	4.7	7.0	4.5	4.0	4.5	5.7	4.2	3.9	3.0	4.4	4.5	7.5	1.8	4.5
21	5.2	4.6	4.9	4.2	3.9	3.6	3.0	3.4	4.3	4.6	4.4	6.7	8.4	7.8	7.8	4.5	2.6	4.1	2.8	1.0	2.2	2.0	2.4	2.0	8.4	1.0	4.2
22	1.6	1.5	2.5	1.9	1.7	1.4	1.9	1.9	1.1	1.8	1.7	1.4	0.9	1.0	0.7	0.6	0.5	0.7	0.8	0.8	0.6	0.6	1.8	2.2	2.5	0.5	1.3
23	0.8	0.1	0.2	0.1	0.4	0.5	0.3	2.6	1.0	0.2	0.3	0.8	1.4	0.6	0.6	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.3	2.6	0.0	0.5
24	1.6	4.5	2.8	2.3	1.9	4.4	3.8	3.3	4.0	4.3	3.7	4.3	3.9	3.0	2.5	3.2	2.8	0.3	0.1	1.1	1.4	5.0	6.3	7.3	7.3	0.1	3.2
25	6.4	5.9	4.2	8.0	10.5	9.1	8.9	10.2	9.4	8.4	7.7	8.7	7.1	7.2	6.9	7.5	8.1	8.3	8.3	7.6	8.1	7.2	8.4	9.4	10.5	4.2	8.0
26	11.4	10.7	10.8	10.5	9.8	9.7	8.9	9.0	7.0	8.1	9.3	12.7	12.7	11.8	11.8	12.1	11.5	11.4	12.1	11.9	12.0	12.8	12.9	13.2	13.2	7.0	11.0
27	12.7	13.0	12.7	13.3	13.6	12.0	9.1	10.3	13.1	12.3	11.7	10.4	9.8	9.7	9.5	10.1	9.4	8.6	7.9	7.6	6.8	6.7	5.5	5.0	13.6	5.0	10.0
28	4.9	3.6	4.3	4.2	5.0	2.8	1.4	1.7	3.2	2.8	1.2	0.4	3.1	3.1	2.1	0.4	1.8	2.9	2.9	2.9	3.2	3.1	3.4	5.3	5.3	0.4	2.9
29	5.5	5.2	4.6	4.6	3.6	3.3	3.7	5.0	4.9	5.3	5.6	4.1	4.4	3.8	1.9	0.5	4.1	5.1	6.1	6.2	6.7	6.7	7.4	7.1	7.4	0.5	4.8
30	6.8	6.7	6.3	5.3	6.1	6.0	6.0	5.9	6.6	6.7	6.0	4.2	3.0	2.6	2.3	2.3	2.9	3.8	4.9	5.5	6.2	5.5	4.9	5.2	6.8	2.3	5.1
Max.	**16.0**	**17.2**	**16.4**	**17.1**	**16.9**	**15.7**	**13.5**	**12.7**	**13.1**	**12.3**	**11.7**	**12.7**	**12.7**	**11.8**	**12.2**	**14.2**	**14.9**	**15.0**	**15.9**	**14.5**	**13.1**	**14.0**	**16.3**	**15.3**	**17.2**		
Min.	**0.0**	**0.1**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.2**	**0.1**	**0.0**	**0.0**	**0.2**	**0.2**	**0.0**		**0.0**	
Avg.	**5.6**	**5.5**	**5.1**	**5.1**	**5.1**	**5.2**	**4.9**	**4.9**	**4.8**	**4.7**	**4.8**	**4.7**	**4.8**	**4.8**	**4.6**	**4.6**	**4.7**	**4.7**	**4.7**	**4.6**	**4.6**	**5.1**	**5.5**	**5.4**			**4.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.1	5.1	5.3	6.1	6.5	7.0	7.7	7.4	8.3	7.4	7.7	7.1	6.3	4.7	5.2	4.6	4.2	4.9	4.7	5.1	6.3	6.8	5.5	6.0	8.3	4.2	6.0
2	6.1	5.6	6.2	6.4	6.5	6.2	8.1	9.1	9.1	8.5	7.4	4.1	4.3	2.1	3.2	0.8	0.9	1.8	2.2	1.7	1.1	2.6	1.5	1.0	9.1	0.8	4.4
3	1.7	2.7	3.3	2.4	1.4	0.6	0.0	0.0	1.6	2.8	1.9	4.0	4.3	4.1	3.9	4.2	2.7	1.7	3.6	3.1	2.1	3.9	3.3	4.2	4.3	0.0	2.6
4	7.1	5.2	6.7	7.2	6.8	7.9	6.7	5.8	5.9	4.6	4.0	3.7	2.5	1.5	2.4	2.2	2.8	1.0	0.7	0.7	2.1	0.8	0.3	0.4	7.9	0.3	3.7
5	0.3	3.3	3.3	3.4	3.9	1.8	2.5	1.4	0.1	1.1	0.7	0.6	0.7	0.6	0.0	0.3	0.4	0.1	1.3	2.5	0.9	2.0	2.9	1.3	3.9	0.0	1.5
6	0.0	1.9	2.2	0.9	1.9	0.7	0.0	0.0	1.4	4.4	4.4	4.3	5.5	6.3	6.6	7.1	6.5	7.9	7.2	6.5	7.0	6.2	6.7	7.0	7.9	0.0	4.3
7	7.6	6.8	6.9	7.5	7.0	7.5	8.7	9.8	10.0	9.9	10.7	11.2	10.2	9.6	10.1	9.7	9.5	8.6	7.4	7.3	6.9	7.6	8.2	6.4	11.2	6.4	8.5
8	7.5	7.9	8.4	9.3	8.7	8.7	7.8	8.4	5.8	6.3	6.6	9.2	8.1	8.9	7.9	8.4	7.0	6.9	7.1	6.6	8.5	8.0	6.8	5.1	9.3	5.1	7.7
9	6.8	7.0	5.1	4.5	6.4	6.6	4.3	4.8	5.7	3.8	5.2	5.7	5.5	4.7	4.7	4.7	3.8	2.1	1.7	1.3	1.2	1.6	1.1	0.2	7.0	0.2	4.1
10	0.9	0.0	0.0	0.0	1.0	0.5	0.1	0.5	0.0	0.4	0.0	0.0	0.4	0.5	0.1	0.8	0.0	0.0	0.0	1.5	0.5	0.6	0.7	3.2	3.2	0.0	0.5
11	2.0	3.2	4.0	5.0	5.4	7.0	4.9	4.6	7.7	7.8	6.3	7.0	7.3	9.4	8.4	10.9	8.4	7.8	10.4	10.7	12.1	12.3	12.1	10.8	12.3	2.0	7.7
12	9.5	8.7	7.9	8.5	9.8	10.7	8.8	11.4	9.2	10.4	8.6	9.2	9.8	8.1	9.1	8.3	10.1	10.0	9.5	9.6	9.2	9.7	10.7	8.4	11.4	7.9	9.4
13	7.7	8.1	8.4	6.5	5.8	5.7	4.1	3.9	4.1	4.4	5.8	7.3	7.2	7.5	7.8	8.0	7.3	6.9	8.2	7.7	6.8	7.7	5.7	6.7	8.4	3.9	6.6
14	6.1	3.8	2.6	2.4	2.8	5.4	6.8	9.0	9.0	10.3	7.8	6.5	6.9	6.4	8.4	7.4	7.9	9.3	7.6	6.1	5.8	4.2	2.2	1.8	10.3	1.8	6.1
15	0.6	0.9	0.9	1.5	1.0	1.1	0.8	2.2	3.0	3.5	4.0	4.4	4.2	4.6	4.2	3.5	3.5	3.7	3.5	3.5	3.3	3.7	3.3	3.4	4.6	0.6	2.9
16	3.5	3.4	2.5	2.7	1.1	1.0	1.6	2.2	2.4	1.2	2.3	3.6	4.2	4.6	4.8	4.9	5.0	4.1	3.3	2.7	2.4	1.7	0.3	0.0	5.0	0.0	2.7
17	1.0	2.8	3.0	1.8	0.1	0.9	1.9	0.7	3.3	4.3	3.9	3.9	2.4	1.4	1.1	1.4	1.6	2.9	2.3	1.4	3.1	2.7	2.0	2.2	4.3	0.1	2.2
18	1.6	0.9	2.8	2.9	2.8	2.6	2.1	1.6	2.0	2.6	3.1	3.1	3.2	3.4	2.6	3.6	3.9	4.2	4.7	4.7	3.8	2.5	2.3	2.9	4.7	0.9	2.9
19	1.9	1.1	0.4	1.1	0.0	0.1	0.0	0.3	1.2	2.6	2.9	3.0	3.1	2.4	3.3	3.8	4.3	4.6	4.3	3.9	3.8	4.2	5.1	5.0	5.1	0.0	2.6
20	4.2	4.2	4.3	4.5	4.2	3.7	4.6	5.7	5.5	4.7	2.8	3.0	2.7	2.7	2.4	2.8	2.4	2.0	1.6	2.8	1.6	1.2	0.3	0.1	5.7	0.1	3.1
21	0.2	0.5	0.3	0.5	0.1	0.3	0.0	0.3	1.2	1.7	1.6	1.4	1.9	3.2	2.6	3.3	3.5	3.2	4.3	4.4	4.0	1.6	1.5	0.4	4.4	0.0	1.7
22	1.1	3.8	4.6	4.1	3.0	1.9	1.8	2.0	1.5	2.6	2.7	2.5	2.6	3.3	3.1	4.2	4.9	5.6	5.8	5.3	6.3	7.9	7.7	9.3	9.3	1.1	4.1
23	9.9	10.8	10.9	11.8	12.9	10.0	11.5	11.1	11.1	12.9	15.3	14.1	13.5	14.1	13.4	10.9	8.5	9.3	8.8	9.1	9.1	8.2	7.7	8.0	15.3	7.7	11.0
24	7.7	8.0	8.6	7.7	8.2	7.6	6.1	7.5	7.7	7.7	6.3	6.5	7.5	7.3	7.2	7.1	6.4	6.1	5.3	3.6	2.9	2.6	2.3	3.0	8.6	2.3	6.3
25	3.2	2.7	2.2	1.6	2.4	3.0	2.9	2.9	2.9	3.9	4.2	4.9	3.9	4.2	3.7	3.6	4.8	3.8	4.2	2.2	3.8	2.7	1.8	2.1	4.9	1.6	3.2
26	1.7	0.4	0.9	2.0	1.4	0.7	1.0	2.2	2.2	3.2	3.4	3.8	4.1	4.0	3.1	5.0	4.4	3.7	3.0	2.3	4.4	3.9	1.2	1.5	5.0	0.4	2.6
27	0.3	3.3	2.8	5.0	2.6	2.3	1.4	0.8	0.4	1.6	2.0	2.9	3.5	3.2	3.0	3.0	3.1	3.0	3.5	3.3	2.8	2.1	4.6	4.7	5.0	0.3	2.7
28	3.1	1.8	2.7	2.6	3.0	1.1	2.5	3.1	3.4	2.8	3.4	3.0	3.4	3.2	3.1	3.2	3.3	3.0	3.9	3.9	3.8	3.6	4.1	3.3	4.1	1.1	3.1
29	4.1	3.8	4.2	3.9	3.5	3.6	4.0	6.0	6.4	6.6	6.3	6.1	5.6	5.1	4.8	5.5	5.0	4.5	4.3	3.9	3.7	4.0	3.0	3.6	6.6	3.0	4.6
30	4.3	3.8	1.6	1.0	0.7	0.1	0.1	1.7	3.2	4.3	4.7	4.9	5.6	6.5	6.7	7.1	7.1	6.9	6.3	5.5	4.6	5.4	6.1	7.0	7.1	0.1	4.4
31	6.8	5.9	6.3	5.4	5.3	5.0	7.2	7.0	6.6	7.2	8.0	7.2	7.3	8.6	9.1	7.8	7.9	7.6	6.6	5.8	5.5	5.7	4.6	5.0	9.1	4.6	6.6
Max.	**9.9**	**10.8**	**10.9**	**11.8**	**12.9**	**10.7**	**11.5**	**11.4**	**11.1**	**12.9**	**15.3**	**14.1**	**13.5**	**14.1**	**13.4**	**10.9**	**10.1**	**10.0**	**10.4**	**10.7**	**12.1**	**12.3**	**12.1**	**10.8**	**15.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.4**	**0.0**	**0.0**	**0.4**	**0.5**	**0.0**	**0.3**	**0.0**	**0.0**	**0.0**	**0.7**	**0.5**	**0.6**	**0.3**	**0.0**		**0.0**	
Avg.	**4.0**	**4.1**	**4.2**	**4.2**	**4.1**	**3.9**	**3.9**	**4.3**	**4.6**	**5.0**	**5.0**	**5.1**	**5.1**	**5.0**	**5.0**	**5.1**	**4.9**	**4.7**	**4.8**	**4.5**	**4.5**	**4.4**	**4.1**	**4.0**			**4.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.8	4.3	4.5	5.8	8.1	8.0	9.5	8.6	6.9	6.8	9.1	10.7	10.9	10.2	10.5	12.0	10.8	8.8	8.7	7.2	6.3	4.7	4.1	2.5	12.0	2.5	7.6
2	2.4	5.2	5.0	5.6	3.6	3.6	4.1	3.7	3.5	6.1	6.8	7.0	6.1	5.3	5.3	4.9	4.7	4.2	3.6	3.7	2.2	2.5	2.4	2.0	7.0	2.0	4.3
3	1.3	1.4	2.7	3.1	2.8	3.2	2.8	1.1	0.5	0.8	0.6	1.9	1.8	4.1	4.0	4.9	5.1	5.6	5.3	6.2	6.5	4.4	4.1	3.8	6.5	0.5	3.2
4	3.3	2.7	2.6	3.2	1.3	2.6	2.7	2.9	2.6	2.6	4.6	4.4	4.5	5.1	5.3	5.7	6.1	6.0	6.4	6.5	6.3	5.0	3.3	3.1	6.5	1.3	4.1
5	2.5	1.8	2.2	3.3	4.1	3.2	4.1	5.3	5.0	7.1	6.9	8.1	8.3	8.3	8.4	8.7	8.1	6.8	4.8	3.8	2.5	1.4	1.3	1.3	8.7	1.3	4.9
6	2.6	3.3	2.7	4.0	3.3	4.2	3.8	2.5	3.3	2.7	1.7	3.2	3.2	2.5	3.2	3.8	3.5	8.1	6.6	6.4	4.4	4.5	2.5	2.6	8.1	1.7	3.7
7	1.1	1.0	2.8	3.5	3.6	3.5	2.9	4.8	5.9	5.3	4.7	4.3	4.5	3.2	3.4	4.2	5.9	7.0	6.9	7.1	6.2	6.1	4.1	3.2	7.1	1.0	4.4
8	2.4	1.7	0.8	2.2	1.4	1.1	1.2	1.8	1.6	1.8	1.9	1.9	2.7	3.4	4.4	4.0	4.4	5.3	5.3	5.1	5.6	5.5	4.7	3.8	5.6	0.8	3.1
9	4.2	4.2	4.4	4.7	3.6	3.8	3.8	4.0	3.7	3.2	2.9	1.6	4.1	4.1	5.0	4.7	4.1	4.5	5.1	5.2	4.6	4.4	3.6	3.8	5.2	1.6	4.1
10	4.3	5.0	4.8	4.5	2.7	2.1	2.9	1.9	1.8	2.0	2.0	3.7	2.4	1.5	2.2	2.5	2.4	2.2	2.9	2.9	2.4	1.8	1.2	0.2	5.0	0.2	2.6
11	0.0	0.6	0.5	0.3	0.4	0.0	0.4	1.0	2.0	2.0	1.8	2.0	2.7	1.8	2.3	2.8	2.4	2.6	2.2	1.7	2.9	2.9	1.8	2.0	2.9	0.0	1.6
12	1.8	3.3	3.2	3.2	4.0	3.6	4.3	4.2	3.5	3.2	2.2	2.6	2.6	2.5	2.3	2.5	1.8	3.0	1.6	1.2	2.4	2.0	2.2	1.7	4.3	1.2	2.7
13	0.8	0.3	0.1	0.7	0.1	0.1	0.2	1.0	0.7	2.3	1.2	1.1	1.2	0.9	1.5	1.8	2.8	2.2	2.8	3.3	3.5	2.9	0.9	0.0	3.5	0.0	1.4
14	0.1	1.0	2.4	2.3	1.4	1.2	1.1	1.9	1.6	2.3	2.8	2.7	2.0	2.8	3.9	4.2	4.8	3.8	4.1	3.6	2.9	4.2	2.5	1.6	4.8	0.1	2.5
15	2.1	2.3	1.6	2.7	2.4	0.6	0.4	2.6	2.8	2.1	3.2	2.7	2.3	4.5	5.2	4.5	5.7	5.4	4.4	3.8	4.2	3.4	3.7	3.7	5.7	0.4	3.2
16	3.7	3.1	2.1	0.8	0.9	0.4	0.9	2.8	2.3	1.3	1.0	0.7	2.4	3.0	2.0	3.2	4.1	2.5	4.2	4.1	3.3	2.5	1.5	0.8	4.2	0.4	2.2
17	0.0	0.4	0.3	0.1	0.0	0.0	0.0	0.0	1.1	1.2	3.1	3.1	2.9	2.7	3.4	3.4	3.3	3.1	3.9	4.3	4.5	3.5	2.4	2.0	4.5	0.0	2.0
18	1.6	0.4	0.0	0.1	0.3	0.5	0.6	2.2	3.5	4.2	4.5	4.9	4.7	4.1	4.5	4.5	4.7	4.6	4.0	3.5	3.0	3.3	2.3	0.3	4.9	0.0	2.8
19	0.8	1.9	0.8	0.7	0.1	0.0	0.0	1.2	2.1	2.7	2.7	1.9	2.5	2.6	3.6	3.8	3.4	3.0	3.1	3.6	2.9	2.6	1.7	2.5	3.8	0.0	2.1
20	2.3	1.1	0.8	0.1	0.6	0.9	0.4	0.6	1.3	2.9	2.8	2.9	3.4	4.3	5.0	5.2	5.7	5.6	5.9	5.9	5.9	6.7	5.6	3.1	6.7	0.1	3.3
21	3.0	1.9	1.3	0.7	1.0	1.0	0.4	2.6	2.4	1.8	2.1	1.2	1.4	1.8	2.3	1.8	2.1	2.2	2.9	3.4	3.5	3.0	1.8	1.7	3.5	0.4	2.0
22	0.1	0.0	0.0	0.4	0.3	1.8	1.8	3.0	2.8	2.9	2.7	3.9	4.1	4.6	4.8	5.0	5.6	6.4	6.8	6.9	6.5	5.8	5.5	4.4	6.9	0.0	3.6
23	4.5	3.3	2.5	3.0	2.1	0.4	1.8	2.9	5.1	5.4	5.5	5.5	5.5	5.2	5.1	4.6	4.1	4.1	4.3	5.2	4.9	4.5	2.5	2.2	5.5	0.4	3.9
24	1.7	1.2	1.0	1.7	3.4	3.5	4.9	5.3	6.6	7.5	7.5	8.3	7.8	7.6	7.5	8.0	7.1	6.5	7.2	6.8	6.9	7.8	8.0	8.0	8.3	1.0	5.9
25	7.8	7.1	7.0	7.8	8.1	8.2	9.1	8.9	11.7	11.0	10.7	12.0	11.6	12.4	10.6	11.6	12.1	11.2	9.5	7.2	6.9	6.3	6.6	4.9	12.4	4.9	9.2
26	4.9	5.8	5.6	3.4	1.3	0.8	3.4	3.9	4.1	3.5	4.8	4.8	4.4	4.2	3.6	2.0	2.4	3.0	2.9	2.7	1.9	1.7	0.8	0.3	5.8	0.3	3.2
27	1.2	0.4	0.4	0.6	0.0	0.0	0.1	2.1	4.2	4.4	4.4	5.0	5.2	5.8	5.3	5.0	4.4	5.0	4.6	4.5	5.1	3.4	2.2	1.6	5.8	0.0	3.1
28	2.5	2.5	2.0	1.5	1.0	0.0	0.0	1.9	3.2	3.9	4.5	4.3	4.3	4.8	4.2	4.4	3.5	4.4	4.2	3.5	4.1	4.7	3.6	2.6	4.8	0.0	3.1
29	2.2	2.3	2.8	2.6	1.1	1.1	1.7	0.9	1.7	1.9	2.2	3.1	3.6	4.0	4.4	5.0	5.1	5.4	5.5	5.6	5.0	3.9	3.0	2.8	5.6	0.9	3.2
30	3.0	2.6	2.4	2.8	2.7	2.1	1.6	0.6	1.3	0.9	1.7	1.7	1.3	1.6	2.1	3.1	2.9	1.6	2.9	3.3	2.6	1.7	1.0	0.9	3.3	0.6	2.0
Max.	**7.8**	**7.1**	**7.0**	**7.8**	**8.1**	**8.2**	**9.5**	**8.9**	**11.7**	**11.0**	**10.7**	**12.0**	**11.6**	**12.4**	**10.6**	**12.0**	**12.1**	**11.2**	**9.5**	**7.2**	**6.9**	**7.8**	**8.0**	**8.0**	**12.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**0.8**	**0.6**	**0.7**	**1.2**	**0.9**	**1.5**	**1.8**	**1.8**	**1.6**	**1.6**	**1.2**	**1.9**	**1.4**	**0.8**	**0.0**		**0.0**	
Avg.	**2.4**	**2.4**	**2.3**	**2.5**	**2.2**	**2.0**	**2.4**	**2.9**	**3.3**	**3.5**	**3.7**	**4.0**	**4.2**	**4.3**	**4.5**	**4.7**	**4.8**	**4.8**	**4.8**	**4.6**	**4.3**	**3.9**	**3.0**	**2.4**			**3.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.0	0.0	1.1	0.7	0.1	1.0	3.3	3.4	2.3	3.2	4.2	4.5	6.1	7.0	7.3	7.4	7.8	7.7	7.6	7.0	5.9	6.0	5.2	7.8	0.0	4.1
2	5.3	4.9	5.3	4.5	4.4	5.4	6.9	5.8	6.3	6.7	5.9	8.3	6.9	6.9	7.0	7.6	5.0	5.6	4.7	4.4	4.6	4.4	4.0	3.1	8.3	3.1	5.6
3	3.2	3.9	4.1	5.9	6.7	6.7	5.9	5.3	6.7	5.0	3.4	3.2	3.5	4.1	5.3	5.9	5.3	4.0	3.0	1.8	1.7	1.6	0.4	0.9	6.7	0.4	4.1
4	0.7	1.4	0.3	0.7	1.8	2.2	1.0	0.5	0.8	1.2	1.3	2.2	2.2	2.4	3.0	2.7	2.7	3.2	3.3	2.5	2.8	1.8	1.0	0.2	3.3	0.2	1.7
5	0.3	0.6	1.0	0.3	0.5	0.2	0.1	0.5	0.7	0.4	2.2	1.6	1.8	2.1	4.2	4.0	2.6	2.2	1.8	2.1	2.9	1.8	0.8	0.8	4.2	0.1	1.5
6	1.9	1.4	0.8	0.3	0.2	0.0	0.4	1.6	2.5	2.6	2.9	3.1	3.8	5.1	4.1	4.6	4.4	4.5	4.7	4.6	4.6	4.3	3.7	3.1	5.1	0.0	2.9
7	2.9	2.4	3.9	2.9	2.2	1.6	1.7	2.9	4.9	4.7	5.7	5.9	4.4	3.9	3.8	3.9	3.9	3.6	3.6	3.7	3.4	2.9	2.1	1.6	5.9	1.6	3.4
8	1.6	0.6	0.0	0.6	0.2	0.0	0.6	0.5	0.9	0.6	0.9	2.3	2.8	2.5	3.2	3.3	2.9	2.8	3.0	3.5	3.4	2.9	2.8	3.0	3.5	0.0	1.9
9	2.8	3.2	2.4	2.3	2.2	2.3	2.2	2.2	3.2	4.3	4.0	5.2	5.3	5.5	5.6	5.9	6.4	7.7	8.5	7.9	7.3	6.0	7.2	5.8	8.5	2.2	4.8
10	5.3	4.3	3.9	1.9	1.9	3.4	4.0	3.4	4.5	5.3	4.9	5.4	4.4	4.4	4.2	3.8	4.5	5.0	5.0	5.1	4.4	4.4	4.3	4.4	5.4	1.9	4.2
11	3.5	1.3	0.5	1.3	1.6	1.1	1.6	1.6	2.8	3.8	4.0	3.6	3.3	3.6	3.6	4.4	4.6	4.6	4.8	4.5	4.6	4.4	3.6	2.4	4.8	0.5	3.1
12	3.1	2.1	1.2	0.4	0.1	0.0	1.4	2.7	4.8	6.3	7.0	7.4	7.8	8.4	8.5	7.9	8.2	8.1	6.6	5.9	5.8	5.2	5.5	4.7	8.5	0.0	5.0
13	5.4	4.7	4.3	4.5	4.4	4.6	4.1	3.3	3.4	4.4	4.2	3.7	3.7	3.6	3.3	2.9	3.5	3.1	3.0	2.7	2.2	1.7	1.2	0.6	5.4	0.6	3.4
14	0.6	0.1	0.0	0.0	0.1	0.0	0.8	0.5	0.8	1.2	1.8	2.3	2.3	2.6	2.5	3.2	2.5	2.8	3.1	3.4	3.0	2.8	2.9	2.5	3.4	0.0	1.7
15	2.5	3.0	2.9	2.3	0.4	0.9	1.7	1.3	1.6	2.3	3.2	3.8	4.2	4.6	5.4	6.3	6.0	5.2	5.3	4.0	4.0	4.0	2.8	4.6	6.3	0.4	3.4
16	5.7	6.3	5.2	5.1	4.6	5.8	5.8	6.6	6.8	7.2	7.6	8.0	8.6	9.1	10.5	9.5	9.2	8.6	7.9	7.8	7.9	7.3	7.0	6.0	10.5	4.6	7.3
17	5.0	4.6	5.7	6.3	6.4	6.6	4.8	4.8	4.5	5.2	5.9	4.7	5.1	5.0	5.2	4.5	4.7	4.6	6.5	4.9	5.3	5.1	6.2	7.0	7.0	4.5	5.4
18	5.0	4.4	3.8	3.0	3.5	3.5	2.7	2.9	2.6	2.2	2.9	4.1	3.6	3.2	3.5	2.7	2.8	4.3	3.2	4.0	3.4	2.9	0.6	1.1	5.0	0.6	3.2
19	1.2	0.1	1.4	2.4	3.2	4.8	4.0	3.2	4.3	4.4	4.8	6.2	5.6	4.9	6.2	5.6	5.3	5.5	6.3	5.3	5.3	4.1	3.2	0.1	6.3	0.1	4.1
20	1.6	1.8	0.2	0.7	1.2	0.5	2.5	3.3	4.7	3.9	4.0	5.0	6.1	6.3	6.7	6.3	6.1	7.0	5.6	3.9	4.4	3.0	2.6	3.8	7.0	0.2	3.8
21	5.1	5.6	6.2	5.7	5.3	5.0	4.3	4.7	4.0	4.1	3.7	3.4	3.0	3.0	2.6	2.8	2.7	3.4	4.0	2.3	3.0	4.9	5.3	5.1	6.2	2.3	4.1
22	4.8	4.6	4.6	4.4	3.0	0.4	1.9	1.4	1.8	0.6	1.3	2.5	2.2	2.2	2.7	2.8	1.9	1.3	0.2	0.3	2.1	1.2	1.1	0.7	4.8	0.2	2.1
23	1.3	1.8	2.7	1.6	1.9	1.5	1.6	2.3	3.6	4.6	4.8	4.6	4.6	4.6	4.5	4.3	3.5	3.5	3.9	4.1	3.8	3.0	2.6	1.6	4.8	1.3	3.2
24	1.0	1.4	0.8	0.7	1.9	2.7	2.9	3.2	3.7	5.2	4.6	5.0	5.8	5.5	5.7	6.7	5.9	5.0	4.2	5.0	5.0	5.0	7.3	7.9	7.9	0.7	4.2
25	7.9	7.5	6.9	6.2	6.8	4.7	2.2	5.4	6.7	7.7	6.9	7.6	7.8	7.9	7.2	7.2	6.2	5.3	4.9	5.2	4.8	4.3	4.3	4.6	7.9	2.2	6.1
26	6.1	4.7	3.7	2.9	2.2	3.5	5.4	5.5	5.4	4.6	4.1	4.5	4.4	3.8	2.4	2.4	3.0	2.7	2.5	2.5	2.9	2.9	2.7	2.7	6.1	2.2	3.7
27	3.0	2.6	2.2	2.3	2.0	1.4	1.5	2.3	3.0	2.2	2.4	1.7	1.7	2.2	2.3	2.6	3.0	3.3	3.3	3.4	3.4	2.3	0.3	0.0	3.4	0.0	2.3
28	0.0	0.0	0.1	0.0	0.7	0.4	1.2	2.2	4.0	5.0	5.2	5.0	5.3	6.0	5.5	5.5	5.8	5.8	5.8	5.4	4.0	4.0	4.0	5.1	6.0	0.0	3.6
29	4.9	3.9	3.3	3.1	4.1	3.0	6.2	5.8	5.9	8.7	9.0	8.6	8.6	7.9	7.3	7.2	6.4	6.9	7.1	6.7	5.1	5.0	5.9	5.6	9.0	3.0	6.1
30	5.2	6.6	5.9	6.6	7.4	6.1	5.3	5.1	4.6	4.8	5.0	4.7	5.4	5.7	6.9	6.3	6.2	6.8	5.9	5.2	4.9	3.1	4.4	3.7	7.4	3.1	5.5
31	4.9	4.8	3.2	5.6	6.9	5.8	3.1	3.6	3.9	4.6	4.9	4.6	4.7	4.2	4.2	4.6	4.6	4.5	4.9	5.0	4.4	4.2	5.4	2.2	6.9	2.2	4.5
Max.	**7.9**	**7.5**	**6.9**	**6.6**	**7.4**	**6.7**	**6.9**	**6.6**	**6.8**	**8.7**	**9.0**	**8.6**	**8.6**	**9.1**	**10.5**	**9.5**	**9.2**	**8.6**	**8.5**	**7.9**	**7.9**	**7.3**	**7.3**	**7.9**	**10.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.5**	**0.7**	**0.4**	**0.9**	**1.6**	**1.7**	**2.1**	**2.3**	**2.4**	**1.9**	**1.3**	**0.2**	**0.3**	**1.7**	**1.2**	**0.3**	**0.0**		**0.0**	
Avg.	**3.3**	**3.0**	**2.8**	**2.8**	**2.9**	**2.7**	**2.9**	**3.2**	**3.8**	**4.1**	**4.3**	**4.6**	**4.6**	**4.8**	**5.0**	**5.0**	**4.7**	**4.8**	**4.6**	**4.3**	**4.2**	**3.8**	**3.6**	**3.2**			**3.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.4	1.7	0.5	0.2	0.5	0.3	0.2	0.1	1.4	1.0	1.6	1.3	1.8	2.2	2.7	3.5	3.2	3.5	3.7	4.2	3.9	3.0	2.2	1.8	4.2	0.1	1.9
2	1.9	1.7	2.0	2.6	2.1	2.2	3.1	3.2	2.2	2.2	3.2	3.6	3.9	3.6	3.6	4.1	4.2	3.5	2.8	2.4	1.9	0.9	0.2	0.8	4.2	0.2	2.6
3	0.1	0.2	1.0	2.6	4.3	4.7	3.6	1.7	4.1	4.5	3.7	3.3	4.1	3.9	3.3	3.6	4.1	4.3	4.9	4.3	4.8	4.0	3.7	3.0	4.9	0.1	3.4
4	2.6	2.5	1.5	2.2	2.1	1.9	2.1	2.7	3.3	3.6	3.6	3.7	3.9	3.7	3.4	3.3	3.5	3.4	4.0	5.0	3.7	2.5	1.4	1.3	5.0	1.3	3.0
5	1.4	1.0	0.8	0.9	0.5	0.1	0.0	0.0	0.0	1.9	3.8	4.1	4.2	4.8	4.6	4.5	4.5	4.5	5.1	4.7	4.3	3.8	3.7	2.9	5.1	0.0	2.8
6	3.5	4.6	3.1	3.5	3.9	2.9	2.8	3.1	4.1	5.0	5.8	5.7	6.4	6.5	6.3	6.3	5.9	6.5	5.3	3.0	4.1	4.2	4.0	3.6	6.5	2.8	4.6
7	3.5	4.8	3.5	4.6	4.2	1.9	4.2	6.3	6.5	6.9	7.2	6.0	5.2	4.7	4.9	5.2	5.1	5.1	5.6	5.4	4.2	4.8	4.8	4.5	7.2	1.9	5.0
8	3.0	3.2	2.6	3.7	4.4	4.7	4.3	5.5	6.7	6.6	6.1	6.6	5.8	5.0	4.0	3.9	3.7	3.5	3.6	3.8	3.8	4.3	4.3	4.2	6.7	2.6	4.5
9	3.4	4.0	3.9	3.4	3.8	2.4	2.5	3.8	5.3	6.3	6.8	7.2	7.0	6.8	6.4	5.6	5.8	5.1	5.3	4.9	4.1	3.5	2.8	2.4	7.2	2.4	4.7
10	2.4	1.0	0.1	1.1	1.4	1.1	0.8	1.3	1.4	1.8	1.9	2.2	1.9	2.6	3.3	3.2	2.8	3.7	3.8	3.6	3.4	3.1	1.6	1.7	3.8	0.1	2.1
11	2.0	1.4	1.0	1.2	1.3	0.8	1.9	2.0	2.7	3.9	4.6	5.1	5.0	4.7	4.4	4.7	5.2	4.6	4.3	3.4	1.3	0.3	0.2	0.6	5.2	0.2	2.8
12	0.2	0.5	0.8	3.2	3.2	3.3	4.1	3.7	3.1	4.4	4.2	3.4	2.9	3.4	4.1	2.6	4.0	4.6	3.6	1.6	0.9	1.0	0.6	0.1	4.6	0.1	2.7
13	0.6	1.2	2.7	3.9	2.1	1.2	0.4	0.5	1.2	0.1	0.7	2.3	2.6	2.6	2.2	3.5	2.8	3.3	3.1	1.9	1.9	0.7	0.0	0.0	3.9	0.0	1.7
14	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.4	2.2	2.9	2.8	2.7	2.4	3.0	3.3	3.6	4.0	4.0	3.4	3.2	2.5	2.0	3.4	4.0	0.0	1.9
15	3.8	3.9	3.3	1.7	0.6	0.8	2.1	2.7	2.6	2.0	2.2	2.0	1.6	1.5	1.4	1.6	1.9	1.7	1.9	1.4	0.6	0.2	0.6	0.6	3.9	0.2	1.8
16	0.2	0.2	1.2	1.2	1.3	2.2	2.6	3.1	3.2	3.2	3.0	3.3	3.6	3.6	4.5	4.7	4.8	5.0	4.6	4.5	4.2	3.2	0.4	0.2	5.0	0.2	2.8
17	0.0	0.9	0.7	0.6	0.5	0.5	0.4	2.7	3.9	4.4	4.0	4.9	5.0	4.6	5.2	5.9	6.9	6.7	5.9	5.4	4.4	4.8	5.9	4.9	6.9	0.0	3.7
18	3.6	2.2	3.4	3.2	0.3	1.4	1.6	3.2	3.5	3.0	4.1	3.9	3.0	2.5	2.1	2.1	2.5	1.9	1.5	2.4	1.5	0.5	0.1	0.4	4.1	0.1	2.2
19	0.5	1.6	0.2	0.4	0.7	0.4	1.2	0.4	0.6	0.6	1.6	0.9	1.5	2.2	2.7	2.6	3.2	2.0	2.9	2.9	3.8	2.6	0.4	0.0	3.8	0.0	1.5
20	0.2	0.1	0.1	0.7	0.3	2.1	1.8	0.1	0.5	1.4	2.6	3.2	1.4	1.4	2.4	1.8	2.5	3.3	3.4	3.5	2.1	1.1	0.9	0.0	3.5	0.0	1.5
21	0.0	0.0	0.1	0.0	0.0	0.0	0.8	1.3	3.0	3.3	3.3	3.7	3.6	3.8	4.0	4.4	3.6	3.4	4.6	4.8	4.1	3.9	3.9	3.8	4.8	0.0	2.6
22	2.7	2.3	0.1	0.4	0.2	0.0	0.0	1.0	1.7	2.1	2.0	0.9	0.8	1.2	2.0	1.5	1.1	1.6	1.4	2.9	1.6	0.8	1.1	2.5	2.9	0.0	1.3
23	2.1	1.8	2.4	3.0	3.5	3.1	2.7	3.2	3.9	5.0	3.3	3.4	3.4	2.1	2.7	1.7	3.2	3.7	4.0	2.8	2.5	2.8	2.2	1.4	5.0	1.4	2.9
24	1.2	0.7	0.2	0.0	0.3	0.1	0.1	0.2	0.8	3.5	3.7	3.6	4.7	3.9	3.6	3.6	2.8	2.2	1.5	2.1	0.5	0.2	1.3	2.5	4.7	0.0	1.8
25	2.6	1.5	0.8	0.4	2.4	3.4	4.4	4.3	3.9	3.6	3.0	2.4	2.3	2.3	2.4	1.7	2.0	3.2	3.4	4.0	3.7	2.8	1.7	1.3	4.4	0.4	2.6
26	1.0	0.4	0.2	0.0	1.3	1.1	1.6	2.7	2.3	2.4	3.4	3.3	3.3	3.9	4.3	4.6	4.8	4.1	3.9	4.3	3.5	2.3	2.1	2.5	4.8	0.0	2.6
27	1.5	0.8	0.4	0.0	0.0	0.7	2.3	2.4	2.2	3.1	3.9	3.7	3.3	2.8	3.6	4.2	4.4	4.5	4.7	3.7	3.3	2.4	1.1	0.0	4.7	0.0	2.5
28	0.1	0.4	1.5	1.5	1.7	0.4	0.1	0.3	1.0	2.3	2.6	3.2	3.2	2.2	3.4	3.7	3.9	4.0	2.5	3.6	4.3	4.2	3.9	3.7	4.3	0.1	2.4
29	3.0	2.4	2.7	2.7	3.1	3.2	1.7	3.3	1.7	0.1	1.4	1.7	2.9	3.4	3.1	4.2	1.3	5.4	5.3	5.1	3.0	2.0	0.3	0.4	5.4	0.1	2.6
30	0.2	0.1	0.3	0.4	0.6	0.2	0.1	0.1	0.0	0.5	0.5	1.1	1.0	1.6	2.2	2.7	3.3	3.5	3.2	2.8	2.1	1.8	3.7	5.0	5.0	0.0	1.5
31	5.1	4.5	4.4	8.0	7.7	8.7	8.7	8.8	7.8	6.0	6.7	5.6	4.5	5.1	5.3	4.1	4.9	7.2	7.1	6.8	8.1	8.2	9.5	9.6	9.6	4.1	6.8
Max.	**5.1**	**4.8**	**4.4**	**8.0**	**7.7**	**8.7**	**8.7**	**8.8**	**7.8**	**6.9**	**7.2**	**7.2**	**7.0**	**6.8**	**6.4**	**6.3**	**6.9**	**7.2**	**7.1**	**6.8**	**8.1**	**8.2**	**9.5**	**9.6**	**9.6**		
Min.	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.5**	**0.9**	**0.8**	**1.2**	**1.4**	**1.5**	**1.1**	**1.6**	**1.4**	**1.4**	**0.5**	**0.2**	**0.0**	**0.0**		**0.0**	
Avg.	**1.7**	**1.7**	**1.5**	**1.8**	**1.9**	**1.8**	**2.0**	**2.4**	**2.7**	**3.1**	**3.5**	**3.5**	**3.4**	**3.4**	**3.6**	**3.6**	**3.7**	**4.0**	**3.9**	**3.7**	**3.2**	**2.7**	**2.3**	**2.2**			**2.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.2	9.3	8.7	7.4	6.7	8.3	5.9	6.7	5.4	5.8	4.3	4.1	3.4	3.1	5.1	5.1	3.8	4.2	3.6	3.7	4.9	5.9	6.3	5.9	9.3	3.1	5.7
2	7.5	7.5	7.3	7.4	7.4	6.7	7.0	6.9	7.5	6.0	5.4	5.5	6.2	6.2	5.7	5.7	4.5	3.2	4.3	4.2	7.7	5.2	8.2	8.0	8.2	3.2	6.3
3	8.0	6.7	5.9	5.7	5.8	6.1	5.4	4.6	4.5	3.6	2.5	2.4	2.6	3.3	3.3	3.1	2.7	2.6	3.2	3.4	2.9	2.9	3.2	4.2	8.0	2.4	4.1
4	3.5	3.2	3.4	2.9	2.6	2.6	0.3	1.1	1.5	1.4	1.4	1.3	2.6	2.4	2.1	1.8	1.4	1.2	1.5	2.0	1.8	0.0	0.0	0.1	3.5	0.0	1.8
5	0.1	0.8	0.3	0.8	0.7	0.1	0.5	0.5	0.6	0.2	0.6	1.9	2.1	2.0	2.6	3.2	2.4	3.7	3.4	2.8	0.7	0.2	0.3	0.0	3.7	0.0	1.3
6	0.2	0.5	2.5	2.0	1.3	3.5	5.2	5.8	6.3	6.6	7.6	7.7	8.8	8.5	8.6	8.1	8.6	8.2	7.1	9.6	7.7	5.4	6.6	6.4	9.6	0.2	5.9
7	7.7	6.7	7.6	8.8	4.8	6.6	6.1	7.7	6.7	5.9	5.9	6.1	4.4	2.8	2.4	2.7	4.3	4.1	3.3	2.4	2.4	2.7	3.8	4.5	8.8	2.4	5.0
8	4.7	3.2	3.9	4.3	5.1	4.2	3.3	3.3	2.2	2.7	2.4	2.6	4.3	6.9	9.0	8.7	9.2	8.6	8.4	8.7	7.3	5.9	5.2	6.6	9.2	2.2	5.4
9	4.1	3.7	3.5	2.5	3.5	2.8	2.6	5.1	4.6	4.1	4.9	4.7	4.9	5.1	5.4	6.2	6.7	5.9	4.5	4.1	3.1	3.2	3.6	2.8	6.7	2.5	4.2
10	1.1	0.6	1.7	1.4	0.2	0.0	0.1	1.4	1.8	0.7	1.4	2.5	2.4	3.1	2.9	3.0	3.2	3.3	3.1	2.9	0.9	2.9	3.4	3.1	3.4	0.0	1.9
11	4.0	4.0	3.8	3.6	3.7	2.5	0.7	1.3	1.9	2.8	3.0	3.5	3.3	3.2	3.7	2.8	2.8	3.2	2.6	2.6	2.8	4.5	5.2	6.4	6.4	0.7	3.3
12	7.0	6.5	7.2	7.1	7.1	8.7	9.7	9.5	8.9	8.2	8.2	8.8	9.6	8.7	9.9	8.8	9.2	9.5	8.5	8.2	8.6	8.3	9.0	9.1	9.9	6.5	8.5
13	9.3	11.4	10.5	9.4	6.6	8.5	9.0	9.8	9.4	9.9	8.0	6.6	7.5	8.2	6.7	7.2	6.8	7.4	7.4	7.5	7.9	6.9	8.6	8.7	11.4	6.6	8.3
14	7.7	5.9	4.9	2.4	1.8	1.4	0.8	0.8	3.6	4.6	5.3	5.4	5.7	4.3	3.9	4.6	4.0	4.3	3.6	3.3	2.8	3.8	3.1	2.7	7.7	0.8	3.8
15	2.2	2.3	3.1	4.0	3.1	2.2	4.2	4.4	4.8	5.3	5.2	4.8	5.0	5.0	5.4	5.8	5.5	5.9	4.8	2.9	2.7	2.2	2.2	1.3	5.9	1.3	3.9
16	0.1	0.2	1.5	1.4	0.6	2.6	2.6	2.8	2.1	3.5	2.8	3.0	4.4	4.7	4.7	4.9	4.4	4.2	4.8	3.5	2.8	2.4	3.1	2.5	4.9	0.1	2.9
17	0.2	0.2	2.1	2.9	4.2	2.8	3.0	3.2	1.6	0.3	0.6	1.4	0.5	2.3	2.9	4.3	5.2	5.4	4.7	6.1	4.9	3.8	3.9	5.0	6.1	0.2	3.0
18	6.9	8.0	9.8	10.4	10.9	9.0	8.8	7.8	6.0	6.2	6.4	5.7	3.4	1.4	4.0	5.3	5.9	4.3	2.6	1.4	0.6	0.6	0.5	1.4	10.9	0.5	5.3
19	3.0	2.7	4.5	4.3	4.8	4.8	4.8	4.9	3.5	2.6	3.0	3.2	3.0	3.5	3.9	5.7	5.4	4.8	5.1	4.4	3.3	2.6	1.6	2.1	5.7	1.6	3.8
20	1.8	1.7	1.2	1.3	2.1	1.1	1.2	2.0	0.1	0.7	0.9	2.1	2.4	2.7	3.6	3.5	3.5	3.1	2.8	2.7	2.9	1.4	2.6	2.2	3.6	0.1	2.1
21	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.9	0.4	0.0	1.7	3.7	2.7	2.6	3.0	3.2	3.9	4.2	4.8	4.7	3.7	3.6	3.3	3.1	4.8	0.0	2.1
22	2.8	2.6	2.9	2.2	1.0	0.8	0.2	0.1	1.1	0.7	0.1	1.1	1.3	2.2	2.1	2.8	2.4	2.6	3.0	2.6	2.6	3.5	4.1	5.2	5.2	0.1	2.1
23	4.9	4.2	4.2	4.0	4.9	5.3	5.0	5.0	5.2	3.8	4.2	4.7	4.6	4.5	4.5	5.6	5.5	5.4	4.2	5.2	4.3	4.3	3.0	3.4	5.6	3.0	4.6
24	3.6	4.2	4.2	3.6	3.5	2.7	1.8	1.4	0.9	2.0	2.6	3.6	4.1	4.4	4.2	3.9	4.1	3.6	3.2	2.4	3.2	2.6	1.8	2.7	4.4	0.9	3.1
25	2.7	3.0	3.4	3.2	3.7	2.3	3.6	2.9	1.8	2.2	1.9	1.2	0.7	1.4	0.8	1.7	2.0	0.9	1.4	2.1	1.4	0.1	0.2	0.1	3.7	0.1	1.9
26	0.4	1.7	1.1	0.9	1.0	2.0	0.9	0.6	1.0	1.6	1.0	1.8	2.4	1.5	1.8	2.2	1.2	2.2	0.8	1.0	0.9	2.0	3.6	3.6	3.6	0.4	1.5
27	4.4	4.7	5.1	4.6	6.3	6.1	6.9	6.0	5.8	6.6	7.8	8.8	9.1	8.2	8.1	9.7	8.9	7.6	6.6	6.6	7.6	7.4	6.4	4.6	9.7	4.4	6.8
28	5.4	4.9	4.9	2.6	2.0	1.1	2.4	0.5	0.2	1.4	1.7	2.5	2.3	1.4	1.7	1.5	3.1	2.1	0.8	0.2	0.4	1.5	2.0	4.1	5.4	0.2	2.1
29	4.4	4.0	2.6	2.7	2.1	1.5	1.7	1.6	1.5	1.1	3.0	3.7	4.2	4.0	3.2	3.2	2.6	3.7	3.1	1.2	0.5	0.1	0.4	0.1	4.4	0.1	2.3
30	0.4	0.8	1.2	0.7	0.5	0.9	1.1	1.5	3.3	4.0	4.7	5.2	4.8	4.1	2.9	3.3	2.7	2.9	2.6	2.6	1.4	0.4	0.0	0.0	5.2	0.0	2.2
Max.	**9.3**	**11.4**	**10.5**	**10.4**	**10.9**	**9.0**	**9.7**	**9.8**	**9.4**	**9.9**	**8.2**	**8.8**	**9.6**	**8.7**	**9.9**	**9.7**	**9.2**	**9.5**	**8.5**	**9.6**	**8.6**	**8.3**	**9.0**	**9.1**	**11.4**		
Min.	**0.1**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**1.1**	**0.5**	**1.4**	**0.8**	**1.5**	**1.2**	**0.9**	**0.8**	**0.2**	**0.4**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**3.9**	**3.8**	**4.1**	**3.8**	**3.6**	**3.6**	**3.5**	**3.7**	**3.5**	**3.5**	**3.6**	**4.0**	**4.1**	**4.1**	**4.3**	**4.6**	**4.5**	**4.4**	**4.0**	**3.8**	**3.5**	**3.2**	**3.5**	**3.7**			**3.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.2	0.1	0.6	1.9	2.5	3.5	4.0	4.2	4.3	3.8	2.8	1.9	3.4	3.6	3.9	3.7	3.9	4.3	0.0	2.0
2	2.4	0.8	1.0	1.3	1.7	1.9	1.2	0.5	0.8	1.3	0.2	0.5	0.8	0.7	0.5	2.4	3.2	4.2	3.2	2.1	4.6	4.4	3.7	1.6	4.6	0.2	1.9
3	1.4	2.0	2.0	0.4	0.7	1.2	0.8	3.8	5.1	4.2	6.0	5.8	5.7	6.3	4.6	3.8	5.0	4.6	3.7	2.3	2.3	3.9	4.0	2.8	6.3	0.4	3.4
4	0.9	1.2	0.8	2.3	0.7	1.1	1.3	1.4	1.3	1.5	1.7	3.0	1.2	1.5	1.2	2.9	3.1	3.0	1.8	1.8	1.5	0.5	1.1	1.1	3.1	0.5	1.6
5	1.9	1.7	1.5	1.5	1.5	2.3	2.4	2.1	1.3	0.1	1.3	1.1	0.3	0.0	0.0	0.2	0.6	1.5	1.7	3.4	4.3	4.8	4.9	4.8	4.9	0.0	1.9
6	3.9	4.3	3.7	2.9	2.5	2.5	2.3	2.7	2.7	2.1	2.3	2.8	2.9	2.9	2.5	3.0	2.5	2.6	3.5	4.9	5.2	4.7	4.8	5.1	5.2	2.1	3.3
7	4.4	4.4	4.5	5.4	5.8	6.1	5.7	6.5	8.1	8.0	7.4	7.7	8.0	8.0	8.7	8.7	7.7	7.6	7.3	5.6	5.7	5.6	5.2	5.9	8.7	4.4	6.6
8	6.3	6.0	5.6	5.6	5.1	5.5	5.1	5.5	6.3	4.9	1.7	4.7	5.5	5.0	4.4	4.2	5.1	4.9	2.8	2.8	2.3	4.3	3.8	2.3	6.3	1.7	4.6
9	3.9	6.4	6.6	8.3	9.8	10.1	10.4	11.8	10.9	11.8	11.6	12.0	12.2	13.5	13.8	13.2	12.4	12.2	12.2	12.5	11.6	9.7	7.2	5.0	13.8	3.9	10.4
10	5.4	6.4	4.6	3.5	3.4	3.4	3.7	1.8	1.4	0.5	0.1	0.4	1.5	3.2	3.3	3.2	4.8	3.7	2.7	3.4	3.7	3.8	3.4	3.5	6.4	0.1	3.1
11	4.2	3.9	5.9	4.9	4.0	6.6	5.2	4.3	3.0	4.2	7.6	10.4	10.1	11.1	11.2	12.2	12.0	13.2	14.4	14.7	15.3	14.9	14.3	12.3	15.3	3.0	9.2
12	12.8	12.9	12.4	11.6	12.9	13.7	13.2	12.7	11.4	11.2	9.2	10.0	12.0	12.5	12.6	12.4	11.5	8.5	8.4	6.7	6.5	5.8	6.1	6.4	13.7	5.8	10.5
13	4.3	4.7	4.3	4.9	1.9	0.9	1.4	3.7	1.7	3.2	2.3	3.1	1.9	2.5	5.5	5.0	6.0	5.7	5.6	5.8	4.9	5.3	6.4	5.9	6.4	0.9	4.0
14	5.3	5.9	6.8	7.9	8.6	7.6	5.2	4.0	3.2	4.0	3.8	4.0	4.4	4.2	3.7	3.8	4.6	4.1	3.8	3.4	2.3	1.8	2.6	3.1	8.6	1.8	4.5
15	4.9	7.4	8.7	8.8	9.2	6.8	6.8	6.0	6.5	4.0	5.1	6.8	7.5	7.4	7.4	9.0	8.1	7.2	8.1	9.1	8.7	7.5	6.1	5.6	9.2	4.0	7.2
16	5.1	6.6	7.4	7.4	7.5	7.9	7.3	7.3	8.1	7.1	7.2	7.2	6.8	6.6	5.8	4.9	4.9	5.2	4.6	4.0	4.2	4.1	2.0	0.5	8.1	0.5	5.8
17	1.1	0.4	0.0	0.0	0.2	1.1	1.4	0.9	0.3	0.4	0.0	0.4	0.2	0.6	3.1	2.1	1.5	0.2	0.6	0.8	2.3	1.3	6.0	8.2	8.2	0.0	1.4
18	8.0	9.2	9.3	8.0	8.2	8.3	7.5	8.4	8.7	7.3	6.0	6.9	7.4	6.9	5.7	5.1	5.1	4.9	5.0	5.9	5.6	5.3	5.5	5.3	9.3	4.9	6.8
19	4.9	6.0	5.7	6.5	7.5	9.1	9.4	10.0	9.6	9.2	10.0	8.9	8.9	7.1	6.2	6.6	5.8	4.3	4.1	4.3	4.4	4.5	2.7	2.9	10.0	2.7	6.6
20	1.7	0.0	1.0	0.9	1.4	1.0	1.3	0.9	1.4	1.2	1.2	1.2	3.1	4.1	3.2	3.1	2.5	0.5	2.2	1.1	1.7	0.1	0.2	1.9	4.1	0.0	1.5
21	0.4	0.0	1.2	1.6	0.9	1.3	2.4	1.6	1.9	3.1	3.1	4.6	5.1	4.1	5.4	6.9	8.5	7.9	8.1	9.6	10.4	10.3	12.1	12.3	12.3	0.0	5.1
22	10.6	7.9	4.6	8.5	8.4	10.9	11.5	12.5	12.3	10.2	9.1	10.2	11.8	10.3	9.8	8.9	9.8	9.1	9.3	9.3	9.6	9.3	9.9	10.1	12.5	4.6	9.7
23	9.7	9.4	9.7	9.5	7.4	8.7	10.1	10.9	9.6	11.2	13.5	12.9	13.1	12.6	12.0	12.2	10.2	10.3	8.4	7.7	6.3	5.3	5.0	5.7	13.5	5.0	9.6
24	8.6	10.8	11.7	11.8	10.8	11.1	12.7	11.0	10.0	11.2	10.3	8.7	8.4	6.0	5.4	5.5	4.1	2.8	1.7	2.4	1.2	1.4	1.7	1.5	12.7	1.2	7.1
25	2.0	3.2	5.0	5.7	5.4	6.2	5.2	5.3	6.3	6.0	5.6	5.6	5.4	5.5	4.9	3.2	3.5	4.0	3.9	4.5	4.1	4.6	5.7	6.1	6.3	2.0	4.9
26	6.0	6.1	6.8	7.7	9.0	8.9	8.5	9.1	9.5	9.2	10.6	10.9	10.4	10.1	11.3	11.6	11.2	8.1	5.8	7.7	7.4	12.2	14.1	15.0	15.0	5.8	9.5
27	15.0	16.2	12.0	11.9	14.0	13.4	13.5	11.1	11.5	12.5	12.7	11.3	7.4	7.4	11.0	10.2	7.3	6.0	4.9	4.5	5.3	5.7	4.3	2.2	16.2	2.2	9.6
28	1.9	2.0	1.5	1.0	1.2	1.2	1.0	0.1	1.7	3.3	3.2	3.1	3.3	2.2	1.7	1.4	0.2	0.3	0.2	1.0	1.8	0.5	0.7	1.7	3.3	0.1	1.5
29	1.7	2.1	2.5	2.2	1.8	1.2	2.3	1.8	1.8	2.0	1.4	1.1	0.8	0.5	1.6	2.0	2.7	2.6	2.3	2.7	5.5	6.1	6.1	3.3	6.1	0.5	2.4
30	3.6	4.9	3.4	1.7	2.1	2.0	2.2	1.6	1.0	1.3	2.0	0.4	1.1	0.3	1.2	1.5	0.0	0.0	0.3	0.1	0.4	0.1	0.3	0.2	4.9	0.0	1.3
31	0.0	0.0	0.0	0.5	0.8	1.3	1.0	0.4	0.6	0.0	0.1	0.1	0.0	0.0	0.2	1.2	0.8	0.9	1.1	1.2	0.9	0.0	1.0	0.9	1.3	0.0	0.5
Max.	**15.0**	**16.2**	**12.4**	**11.9**	**14.0**	**13.7**	**13.5**	**12.7**	**12.3**	**12.5**	**13.5**	**12.9**	**13.1**	**13.5**	**13.8**	**13.2**	**12.4**	**13.2**	**14.4**	**14.7**	**15.3**	**14.9**	**14.3**	**15.0**	**16.2**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.3**	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**0.2**	**0.1**	**0.4**	**0.0**	**0.2**	**0.2**		**0.0**	
Avg.	**4.6**	**4.9**	**4.8**	**5.0**	**5.0**	**5.3**	**5.2**	**5.1**	**5.1**	**5.1**	**5.1**	**5.4**	**5.5**	**5.4**	**5.6**	**5.6**	**5.4**	**4.9**	**4.6**	**4.8**	**5.0**	**4.9**	**5.0**	**4.7**			**5.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.3	1.4	0.9	0.9	0.6	2.8	1.6	1.0	2.7	2.0	2.4	1.8	3.6	5.3	4.0	3.6	3.7	2.2	3.3	8.9	10.8	8.2	9.4	8.4	10.8	0.6	3.8
2	8.9	7.9	8.2	8.7	6.9	6.4	6.8	7.5	8.8	11.2	12.1	11.9	12.2	10.9	9.3	10.3	11.8	11.5	11.3	11.0	12.6	12.8	12.5	13.6	13.6	6.4	10.2
3	13.7	13.1	12.5	11.6	12.3	10.0	8.4	8.5	9.6	9.6	8.8	7.9	7.9	6.8	6.9	5.0	5.3	6.3	4.3	4.8	8.1	9.5	9.9	10.5	13.7	4.3	8.8
4	11.1	11.1	11.4	12.1	12.9	10.7	8.3	8.3	10.2	9.7	7.3	6.5	5.4	6.2	4.8	4.6	5.0	5.1	4.9	4.7	4.5	4.9	4.8	4.8	12.9	4.5	7.5
5	4.7	4.5	5.3	5.4	4.0	5.2	6.3	6.1	7.1	5.5	3.5	5.6	4.1	4.3	5.1	5.7	5.9	6.2	6.2	4.4	3.8	5.4	5.2	5.2	7.1	3.5	5.2
6	5.8	5.9	5.5	4.9	5.8	5.9	6.7	5.2	5.3	4.9	5.4	4.9	5.1	3.0	4.0	5.4	5.5	5.7	3.4	5.4	6.0	6.8	8.0	9.1	9.1	3.0	5.6
7	8.7	8.6	7.9	7.4	7.9	7.4	8.7	8.4	5.7	5.1	5.2	5.9	4.4	1.6	4.2	3.8	2.5	1.4	1.6	3.6	2.3	1.3	3.2	2.6	8.7	1.3	5.0
8	1.5	2.9	2.8	0.9	0.9	1.9	3.3	3.8	4.1	4.3	3.9	3.0	3.9	7.2	7.0	6.0	6.4	7.3	10.5	11.4	9.6	10.5	10.8	10.5	11.4	0.9	5.6
9	10.4	11.4	12.6	13.7	12.1	12.7	13.4	10.8	9.2	6.7	6.2	6.6	6.2	7.1	7.1	5.7	5.2	5.0	5.0	8.8	10.1	6.7	9.3	4.9	13.7	4.9	8.6
10	3.0	3.7	6.5	6.2	5.7	5.7	6.6	9.2	7.8	7.2	10.0	1.7	1.0	1.0	2.2	1.4	3.8	4.6	3.5	2.5	4.9	7.1	6.9	6.6	10.0	1.0	4.9
11	6.1	5.9	6.1	6.3	5.7	5.4	5.1	4.9	3.9	3.9	2.6	1.1	0.5	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1.9	1.5	6.3	0.0	2.6
12	0.0	0.4	2.0	3.0	2.5	2.6	2.9	2.3	2.2	2.6	3.2	1.8	0.5	0.5	0.0	0.1	0.5	0.1	0.2	1.1	0.6	0.7	1.9	1.4	3.2	0.0	1.4
13	1.0	2.2	2.2	2.7	2.1	1.6	3.0	3.7	4.1	4.8	4.8	5.0	4.5	3.6	2.9	3.4	3.8	2.7	2.9	3.0	2.3	2.1	2.0	1.2	5.0	1.0	3.0
14	2.0	3.3	3.3	3.0	1.9	1.1	1.3	1.3	1.1	1.4	1.6	1.4	1.0	0.6	1.2	1.5	0.7	0.8	0.7	0.3	0.3	0.5	0.8	0.1	3.3	0.1	1.3
15	1.9	3.1	2.2	0.0	1.3	2.2	0.5	0.9	2.1	2.0	3.1	3.1	4.5	4.4	5.9	6.6	7.3	7.0	6.5	5.6	6.3	6.0	5.5	4.9	7.3	0.0	3.9
16	3.8	4.7	5.4	4.7	5.2	3.8	2.6	2.8	1.5	0.1	0.2	0.1	0.5	0.2	1.2	1.3	0.6	0.1	0.6	0.6	1.2	2.0	1.9	0.5	5.4	0.1	1.9
17	0.1	0.8	1.3	1.4	1.3	1.0	1.1	1.2	0.5	0.6	0.8	0.3	0.8	0.9	0.7	2.3	4.7	4.5	4.9	6.3	7.5	7.1	7.4	7.7	7.7	0.1	2.7
18	6.7	8.1	7.5	6.0	4.6	6.4	7.5	8.4	9.0	9.0	9.0	8.9	9.9	9.5	8.8	8.7	7.9	8.8	8.2	8.2	8.9	8.6	7.4	8.2	9.9	4.6	8.1
19	8.3	9.6	8.9	8.2	10.0	10.2	10.4	10.3	11.2	11.7	12.4	13.0	12.0	12.2	13.1	11.7	11.6	10.1	14.1	13.8	12.5	12.9	11.5	13.4	14.1	8.2	11.4
20	14.1	13.9	15.9	14.6	14.4	13.5	16.2	16.2	18.1	18.7	17.7	15.6	12.5	12.6	13.2	13.8	14.1	13.3	10.8	10.1	10.7	10.0	10.4	11.5	18.7	10.0	13.8
21	8.4	9.4	7.4	6.9	7.6	6.7	6.3	4.5	5.7	5.4	5.1	4.8	5.4	5.1	5.1	3.8	5.1	4.1	4.0	3.0	3.2	3.7	6.1	5.7	9.4	3.0	5.5
22	3.5	2.6	2.9	2.9	3.3	1.6	0.1	1.7	0.1	0.8	0.5	1.6	0.4	0.2	0.0	0.9	0.4	0.4	0.4	0.4	0.4	1.3	0.7	1.3	3.5	0.0	1.2
23	1.0	0.9	0.6	0.7	0.5	0.8	0.5	0.2	0.0	1.3	1.1	0.8	1.9	0.4	1.5	1.6	1.6	2.4	6.1	8.0	8.2	7.6	6.9	9.1	9.1	0.0	2.7
24	9.7	10.1	10.7	12.8	11.9	9.7	9.0	11.0	11.0	9.5	8.2	9.1	8.4	9.0	6.6	8.2	8.2	6.6	5.2	3.2	3.4	7.0	5.9	6.0	12.8	3.2	8.3
25	6.5	9.3	9.6	6.3	5.6	3.4	3.0	1.3	3.7	3.3	3.4	2.3	2.1	0.9	1.1	3.2	2.7	3.0	4.0	4.1	3.7	6.3	7.4	6.9	9.6	0.9	4.3
26	6.1	6.6	8.7	6.4	5.8	5.3	5.3	4.2	4.7	3.9	5.0	3.9	7.2	8.8	9.1	9.3	10.0	10.3	7.7	7.6	7.0	7.6	7.6	7.2	10.3	3.9	6.9
27	6.2	8.9	6.6	5.2	7.7	7.9	7.0	6.7	6.8	7.1	7.9	6.0	4.1	6.3	7.9	5.0	6.2	7.3	6.8	6.1	7.8	7.9	7.4	7.9	8.9	4.1	6.9
28	7.7	8.6	9.4	9.7	9.9	9.6	9.8	9.9	9.9	9.9	8.1	8.2	8.7	9.3	9.8	9.6	9.6	9.6	9.0	9.6	9.5	7.9	7.8	7.9	9.9	7.7	9.1
29	7.4	7.2	7.3	6.2	6.0	5.6	4.8	6.0	6.8	6.7	7.1	7.6	6.7	7.2	9.0	9.6	7.9	8.5	8.7	9.3	9.8	8.4	9.2	8.1	9.8	4.8	7.5
30	6.0	6.3	9.9	9.4	7.9	6.0	3.3	2.7	7.5	9.1	9.7	10.5	11.2	8.3	4.2	10.9	8.6	9.6	11.1	10.8	6.0	5.7	8.0	9.9	11.2	2.7	8.0
Max.	**14.1**	**13.9**	**15.9**	**14.6**	**14.4**	**13.5**	**16.2**	**16.2**	**18.1**	**18.7**	**17.7**	**15.6**	**12.5**	**12.6**	**13.2**	**13.8**	**14.1**	**13.3**	**14.1**	**13.8**	**12.6**	**12.9**	**12.5**	**13.6**	**18.7**		
Min.	**0.0**	**0.4**	**0.6**	**0.0**	**0.5**	**0.8**	**0.1**	**0.2**	**0.0**	**0.1**	**0.2**	**0.1**	**0.4**	**0.1**	**0.0**	**0.0**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**0.1**		**0.0**	
Avg.	**5.9**	**6.4**	**6.7**	**6.3**	**6.1**	**5.8**	**5.7**	**5.6**	**6.0**	**5.9**	**5.9**	**5.4**	**5.2**	**5.1**	**5.2**	**5.4**	**5.6**	**5.5**	**5.5**	**5.9**	**6.1**	**6.2**	**6.6**	**6.6**			**5.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Speed (Climatronics) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.2	6.2	6.9	4.9	5.7	7.3	3.8	3.4	5.4	5.2	5.1	3.9	4.5	4.0	4.0	3.3	3.2	3.1	3.0	2.7	1.9	1.2	1.3	1.7	9.2	1.2	4.2
2	1.7	1.5	0.6	1.5	0.6	3.0	3.1	3.5	4.6	5.3	5.9	9.7	11.1	12.1	12.4	11.6	10.7	10.3	9.9	9.7	10.2	11.5	11.6	11.4	12.4	0.6	7.2
3	10.6	10.6	11.8	11.9	12.0	12.1	12.4	11.1	13.0	14.0	16.3	16.5	16.6	15.9	17.1	14.8	15.5	14.1	13.6	12.4	11.5	11.0	12.0	10.0	17.1	10.0	13.2
4	8.6	9.6	6.9	4.7	5.5	6.8	6.5	6.2	6.9	6.8	7.1	6.7	8.2	9.3	8.0	8.1	6.3	5.3	5.0	4.2	5.1	5.4	5.6	5.8	9.6	4.2	6.6
5	6.2	6.4	5.4	5.5	4.3	3.6	4.7	6.1	5.1	6.5	5.7	6.8	6.8	5.8	6.0	4.8	3.5	4.3	3.1	1.7	1.2	5.1	5.5	3.4	6.8	1.2	4.9
6	2.5	2.5	5.3	5.7	4.2	5.0	4.8	4.6	4.7	4.1	2.7	1.4	2.3	2.1	1.1	0.2	0.1	0.4	0.3	0.3	1.2	0.8	1.3	2.5	5.7	0.1	2.5
7	2.9	4.3	4.2	5.6	5.8	5.7	6.1	5.6	5.2	5.3	5.8	5.3	6.4	6.3	6.2	5.1	4.6	5.3	3.1	3.7	3.9	4.9	5.0	4.4	6.4	2.9	5.0
8	4.1	4.9	5.6	5.6	5.7	6.5	5.2	6.2	9.4	8.7	8.6	7.9	7.9	11.9	14.7	14.7	12.9	10.5	9.2	6.3	6.7	8.3	6.1	6.6	14.7	4.1	8.1
9	5.0	5.0	4.7	5.0	4.9	4.2	6.9	6.0	4.5	4.4	2.9	1.2	0.7	0.6	1.0	1.6	1.4	0.5	2.6	3.2	3.0	1.6	2.6	1.8	6.9	0.5	3.1
10	3.4	3.4	4.9	6.0	7.0	6.9	8.0	6.5	8.3	7.7	5.7	2.9	1.0	2.1	1.7	2.2	1.0	0.5	1.0	0.0	0.0	0.1	0.4	0.4	8.3	0.0	3.4
11	0.3	1.7	1.3	1.3	2.2	0.3	1.3	0.4	0.1	0.2	0.1	0.1	1.0	0.3	1.9	3.3	5.6	6.5	5.9	6.3	4.2	3.1	4.1	4.4	6.5	0.1	2.3
12	4.4	4.4	2.1	1.3	1.4	1.9	1.7	0.9	2.7	0.9	1.7	2.4	2.3	3.0	3.7	3.7	3.0	2.3	3.6	4.2	6.1	7.8	8.4	9.1	9.1	0.9	3.5
13	8.0	7.8	8.9	9.3	9.1	8.3	3.3	3.4	5.1	5.2	7.4	5.7	3.3	2.3	3.3	5.9	6.2	4.7	3.2	2.8	2.2	2.4	1.7	0.5	9.3	0.5	5.0
14	0.2	0.8	0.2	0.3	0.6	0.8	0.1	0.7	2.1	2.0	2.1	2.4	2.0	1.8	2.1	4.1	3.9	4.4	3.2	4.9	7.9	8.0	6.6	6.3	8.0	0.1	2.8
15	7.1	7.5	6.3	6.2	7.1	6.2	6.2	4.9	4.6	4.4	4.0	1.6	1.4	2.3	3.2	1.3	1.8	1.7	0.4	1.8	0.9	1.2	2.7	4.2	7.5	0.4	3.7
16	3.7	3.6	3.4	3.4	3.1	1.3	0.4	0.1	0.0	0.2	0.2	1.9	1.9	2.2	1.9	2.6	2.6	1.1	1.3	1.5	1.1	1.7	2.5	3.1	3.7	0.0	1.9
17	5.8	6.9	6.6	6.6	7.1	8.4	9.3	8.8	8.2	8.2	9.8	8.4	7.7	8.7	9.0	9.4	8.3	7.8	7.9	7.6	7.5	7.7	5.4	6.1	9.8	5.4	7.8
18	8.0	8.5	8.0	6.2	6.2	7.0	8.1	9.2	8.9	11.2	11.4	10.0	9.1	8.8	9.6	8.1	11.9	10.9	12.2	12.1	11.3	11.4	10.4	10.4	12.2	6.2	9.5
19	11.6	11.6	11.8	12.8	13.2	13.6	12.4	12.1	11.3	9.9	11.5	9.7	9.2	7.6	6.2	5.4	5.9	5.9	6.0	7.2	8.2	7.6	8.0	7.4	13.6	5.4	9.4
20	5.8	6.8	5.8	5.2	5.2	5.6	5.6	6.3	6.8	7.1	7.4	6.2	4.8	5.5	6.1	5.4	4.2	2.1	0.8	0.4	0.2	0.9	1.6	1.4	7.4	0.2	4.5
21	1.4	0.3	0.0	0.0	0.0	0.6	1.6	2.3	0.8	0.6	2.8	3.0	1.2	0.5	1.8	0.4	1.1	0.7	0.9	0.1	1.0	0.4	0.7	0.4	3.0	0.0	0.9
22	0.3	0.2	0.3	0.0	1.9	4.5	5.4	5.1	5.4	4.8	5.4	6.0	4.3	3.3	3.1	4.7	4.5	4.1	5.0	6.0	6.6	6.9	6.5	6.9	6.9	0.0	4.2
23	7.8	8.0	7.9	8.3	8.1	7.8	7.1	3.8	1.3	7.9	7.6	7.7	7.1	7.4	8.3	7.2	8.2	8.0	7.5	7.7	9.5	10.8	9.9	8.4	10.8	1.3	7.6
24	9.7	9.5	9.5	9.2	7.8	5.6	3.0	2.5	0.7	0.1	1.2	1.1	0.5	2.8	3.4	3.0	3.3	1.6	0.4	0.4	0.6	0.6	2.1	1.7	9.7	0.1	3.3
25	2.9	4.9	6.2	5.2	8.4	9.5	9.2	9.8	9.8	9.0	7.3	7.6	9.6	10.3	8.8	7.2	6.4	11.6	14.0	15.4	13.9	11.2	12.8	14.5	15.4	2.9	9.4
26	13.1	14.9	14.5	13.8	12.2	11.5	12.2	12.0	13.8	13.5	11.5	11.2	10.4	9.7	10.5	11.6	11.2	12.4	13.1	12.7	12.6	12.5	10.6	11.4	14.9	9.7	12.2
27	9.9	9.2	13.2	14.8	14.6	15.7	12.5	13.0	14.5	13.6	14.1	13.9	15.7	13.8	11.8	12.9	13.0	10.3	11.0	14.1	16.5	15.2	12.3	12.8	16.5	9.2	13.3
28	13.8	14.4	14.2	14.4	14.0	12.1	12.7	12.2	12.1	11.3	9.4	9.5	12.5	7.2	7.2	7.9	8.5	10.3	8.6	7.9	6.2	7.3	6.2	6.4	14.4	6.2	10.3
29	5.8	4.5	5.2	6.4	8.8	8.5	5.9	6.7	5.9	6.3	7.3	7.6	7.8	7.0	8.4	6.6	6.2	7.2	7.9	8.9	8.9	8.3	6.1	4.1	8.9	4.1	6.9
30	5.4	7.4	8.6	7.8	5.9	6.5	7.7	8.0	9.5	10.2	9.1	7.1	6.9	7.6	8.6	9.1	7.9	7.7	7.7	6.3	7.6	8.9	8.6	8.0	10.2	5.4	7.8
31	6.8	8.3	5.0	7.5	7.0	7.0	8.1	9.2	8.7	9.1	9.5	11.3	11.0	9.7	9.5	9.7	11.2	8.6	6.9	6.5	8.3	9.9	8.5	7.9	11.3	5.0	8.5
Max.	**13.8**	**14.9**	**14.5**	**14.8**	**14.6**	**15.7**	**12.7**	**13.0**	**14.5**	**14.0**	**16.3**	**16.5**	**16.6**	**15.9**	**17.1**	**14.8**	**15.5**	**14.1**	**14.0**	**15.4**	**16.5**	**15.2**	**12.8**	**14.5**	**17.1**		
Min.	**0.2**	**0.2**	**0.0**	**0.0**	**0.0**	**0.3**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.5**	**0.3**	**1.0**	**0.2**	**0.1**	**0.4**	**0.3**	**0.0**	**0.0**	**0.1**	**0.4**	**0.4**		**0.0**	
Avg.	**6.0**	**6.3**	**6.3**	**6.3**	**6.4**	**6.6**	**6.3**	**6.1**	**6.4**	**6.6**	**6.7**	**6.3**	**6.3**	**6.2**	**6.5**	**6.3**	**6.3**	**5.9**	**5.7**	**5.8**	**6.0**	**6.2**	**6.0**	**5.9**			**6.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	4.0	3.0	4.0	4.0	4.0	4.0	5.0	4.0	6.0	4.0	4.0	5.0	5.0	4.0	5.0	4.0	5.0	7.0	4.0	5.0	6.0	7.0	5.0	7.0	3.0	4.7
2	11.0												9.0	24.0	4.0	9.0	6.0	5.0	12.0	13.0	16.0	32.0	16.0	14.0	32.0	4.0	13.2
3	27.0	12.0	18.0	30.0	22.0	24.0	30.0	27.0	27.0	6.0	34.0	6.0	6.0	5.0	10.0	6.0									34.0	5.0	18.1
4														15.0	6.0	8.0									15.0	6.0	9.7
5													6.0	6.0	6.0	5.0									6.0	5.0	5.8
6																6.0									6.0	6.0	6.0
7																											
8													2.0	6.0	7.0	8.0									8.0	2.0	5.8
9													7.0	7.0	9.0	6.0	6.0	5.0	6.0	9.0	9.0	6.0	9.0	9.0	9.0	5.0	7.3
10	6.0	7.0	5.0	6.0	6.0	5.0	7.0	6.0	5.0	5.0	5.0	6.0	5.0	6.0	7.0	6.0	7.0	8.0	11.0	8.0	11.0	26.0	29.0	12.0	29.0	5.0	8.5
11	6.0	6.0	7.0	8.0	10.0	8.0	12.0	8.0	6.0	9.0	7.0	15.0	60.0	12.0	11.0	9.0	9.0	6.0	6.0	9.0	10.0	7.0	6.0	5.0	60.0	5.0	10.5
12	6.0	6.0	5.0	8.0	8.0	8.0	7.0	9.0	8.0	7.0	7.0	6.0	6.0	5.0	5.0	5.0	9.0	7.0	5.0	6.0	6.0	9.0	5.0	6.0	9.0	5.0	6.6
13	5.0	6.0	6.0	6.0	12.0	6.0	5.0	6.0	5.0	5.0	9.0	8.0	12.0	6.0	6.0	6.0	6.0	9.0	6.0	7.0	7.0	12.0	26.0	9.0	26.0	5.0	8.0
14	14.0	6.0	18.0	39.0	8.0	23.0	11.0	19.0	33.0	16.0	8.0	7.0	7.0	6.0	7.0	7.0	6.0	6.0	7.0	6.0	6.0	7.0	10.0	11.0	39.0	6.0	12.0
15	7.0	7.0	7.0	9.0	10.0	10.0	10.0	11.0	11.0	10.0	12.0	11.0	13.0	10.0	10.0	11.0	11.0	11.0	10.0	10.0	18.0	44.0	14.0	17.0	44.0	7.0	12.3
16	9.0	32.0	6.0	5.0	0.0	31.0	36.0	0.0	12.0	0.0	36.0	20.0	32.0	30.0	25.0	20.0	15.0	22.0	28.0	14.0	8.0	13.0	14.0	40.0	40.0	0.0	18.7
17	28.0	43.0	52.0	7.0	6.0	6.0	6.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0	7.0	6.0	6.0	6.0	9.0	7.0	11.0	11.0	8.0	8.0	52.0	6.0	11.4
18	7.0	10.0	12.0	7.0	11.0	9.0	8.0	10.0	9.0	10.0	10.0	12.0	12.0	19.0	14.0	10.0	25.0	14.0	3.0	17.0	18.0	14.0	19.0	15.0	25.0	3.0	12.3
19	15.0	14.0	11.0	11.0	12.0	10.0	8.0	11.0	12.0	11.0	10.0	8.0	9.0	9.0	9.0	8.0	10.0	11.0	8.0	7.0	7.0	9.0	10.0	10.0	15.0	7.0	10.0
20	11.0	11.0	9.0	7.0	7.0	9.0	8.0	8.0	9.0	10.0	8.0	6.0	7.0	7.0	7.0	10.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	5.8
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	6.7	7.6	8.8	7.8	6.6	6.3	6.7	8.7	8.5	8.6	8.4	7.4	7.7	7.7	9.4	9.4	0.0	4.9
22	11.9	10.7	6.7	6.3	5.5	4.9	5.2	5.3	6.0	6.3	8.3	5.6	5.5	5.3	5.4	5.8	6.9	9.0	8.1	28.0	59.4	10.3	15.0	8.1	59.4	4.9	10.4
23	6.3	6.2	6.3	6.9	6.6	6.8	6.4	7.0	5.7	5.5	6.5	6.8	6.2	8.0	9.4	7.0	8.2	9.1	6.2	19.7	38.1	14.0	11.6	8.3	38.1	5.5	9.3
24	13.4	9.0	9.0	7.6	7.5	16.5	40.3	47.8	8.8	8.2	6.8	6.9	8.7	7.6	6.9	8.7	10.7	9.4	9.4	9.9	10.6	10.7	12.6	11.7	47.8	6.8	12.4
25	9.8	25.0	20.5	29.5	25.1	5.5	5.6	7.1	9.3	5.7	6.4	5.8	6.0	6.0	5.7	5.8	6.2	5.9	7.8	6.7	7.1	9.9	15.2	8.6	29.5	5.5	10.2
26	6.5	6.7	6.8	7.0	8.3	5.6	5.6	6.4	5.5	7.6	10.0	8.6	7.2	34.5	14.0	29.3	47.1	21.6	21.7	17.5	32.4	43.0	47.6	16.5	47.6	5.5	17.4
27	12.9	15.4	14.6	14.1	12.0	12.6	12.9	17.7	7.4	7.4	7.5	7.4	7.0	6.0	6.4	6.1	6.3	6.2	6.1	6.1	6.6	7.1	7.6	7.3	17.7	6.0	9.2
28	7.1	9.5	10.8	10.8	10.9	10.4	9.9	10.2	11.5	11.0	10.2	10.9	9.2	8.7	8.9	9.4	12.3	2.1	0.0	0.0	4.7	2.5	7.9	20.9	20.9	0.0	8.7
29	17.8	18.9	18.4	11.6	28.1	19.6	18.6	11.6	9.7	13.4	9.6	19.7	4.4	8.0	20.4	34.2	15.8	5.0	5.7	6.7	17.9	21.6	6.6	7.5	34.2	4.4	14.6
30	30.9	58.6	18.8	47.5	17.7	11.8	8.8	26.5	8.8	12.9	8.3	7.1	11.3	10.4	7.2	8.6	7.9	10.3	11.4	9.4	14.8	11.8	9.0	7.3	58.6	7.1	15.7
31	8.6	8.5	7.2	7.7	8.0	7.4	23.4	69.0	24.0	8.0	49.0	40.0	24.0	9.0	1.0	7.0	9.0	12.0	14.0	13.0	12.0	17.0	5.0	17.0	69.0	1.0	16.7
Max.	**30.9**	**58.6**	**52.0**	**47.5**	**28.1**	**31.0**	**40.3**	**69.0**	**33.0**	**16.0**	**49.0**	**40.0**	**60.0**	**34.5**	**25.0**	**34.2**	**47.1**	**22.0**	**28.0**	**28.0**	**59.4**	**44.0**	**47.6**	**40.0**	**69.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**0.0**	**4.0**	**4.0**	**2.0**	**5.0**	**1.0**	**5.0**	**4.0**	**2.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**11.3**	**13.9**	**11.6**	**12.3**	**10.2**	**10.6**	**12.0**	**14.0**	**10.2**	**8.1**	**12.0**	**10.2**	**10.8**	**10.1**	**8.5**	**9.3**	**10.5**	**8.6**	**8.7**	**9.7**	**13.7**	**14.1**	**12.8**	**11.3**			**11.0**

Total Hours in Month 744 **Hours Data Available** 605 **Data Recovery** 81.3%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	15.0	20.0	16.0	13.0	0.0	11.0	11.0	3.0	0.0	7.0	9.0	29.0	15.0	23.0	8.0	15.0	15.0	6.0	5.0	5.0	20.0	12.0	32.0	46.0	46.0	0.0	14.0
2	36.0	22.0	12.0	4.0	5.0	6.0	6.0	6.0	6.0	6.0	7.0	9.0	11.0	12.0	14.0	7.0	9.0	11.0	6.0	6.0	6.0	7.0	8.0	8.0	36.0	4.0	9.6
3	6.0	8.0	6.0	7.0	7.0	5.0	6.0	6.0	30.0	6.0	7.0	9.0	11.0	8.0	9.0	7.0	10.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	30.0	5.0	8.0
4	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0	6.0	8.0	7.0	6.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0	7.0	5.0	6.0	8.0	4.0	5.8
5	7.0	6.0	8.0	7.0	7.0	7.0	7.0	13.0	27.0	16.0	9.0	13.0	9.0	11.0	11.0	9.0	7.0	8.0	6.0	7.0	13.0	8.0	6.0	5.0	27.0	5.0	9.5
6	5.0	7.0	10.0	8.0	12.0	10.0	7.0	6.0	5.0	6.0	7.0	6.0	6.0	5.0	6.0	6.0	20.0	7.0	7.0	7.0	12.0	15.0	12.0	8.0	20.0	5.0	8.3
7	8.0	6.0	6.0	6.0	8.0	9.0	10.0	15.0	20.0	24.0	34.0	34.0	25.0	24.0	46.0	34.0	58.0	6.0	16.0	15.0	5.0	5.0	9.0	10.0	58.0	5.0	18.0
8	13.0	7.0	13.0	11.0	22.0	26.0	28.0	44.0	28.0	33.0	10.0	56.0	23.0	9.0	10.0	7.0	7.0	6.0	10.0	6.0	8.0	6.0	5.0	4.0	56.0	4.0	16.3
9	4.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	7.0	16.0	14.0	12.0	56.0	43.0	20.0	14.0	8.0	6.0	5.0	5.0	4.0	5.0	5.0	56.0	4.0	11.0
10	5.0	5.0	5.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0	21.0	46.0	18.0	7.0	6.0	7.0	6.0	9.0	5.0	6.0	6.0	6.0	6.0	8.0	46.0	5.0	8.8
11	22.0	26.0	20.0	24.0	10.0	17.0	11.0	20.0	10.0	15.0	12.0	13.0	30.0	7.0	23.0	17.0	11.0	10.0	10.0	28.0	27.0	20.0	6.0	7.0	30.0	6.0	16.5
12	14.0	8.0	16.0	27.0	30.0	15.0	48.0	19.0	9.0	12.0	34.0	50.0	7.0	12.0	10.0	8.0	7.0	16.0	39.0	5.0	10.0	12.0	6.0	10.0	50.0	5.0	17.7
13	25.0	7.0	12.0	8.0	6.0	7.0	7.0	8.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	25.0	6.0	7.5
14	6.0	6.0	6.0	6.0	6.0	6.0	6.0	10.0	6.0	7.0	6.0	6.0	6.0	5.0	5.0	6.0	6.0	5.0	5.0	6.0	7.0	5.0	5.0	10.0	10.0	5.0	6.2
15	6.0	6.0	6.0	12.0	11.0	43.0	57.0	33.0	29.0	39.0	46.0	4.0	7.0	7.0	5.0	36.0	36.0	26.0	28.0	5.0	35.0	31.0	30.0	9.0	57.0	4.0	22.8
16	6.0	5.0	7.0	6.0	5.0	6.0	7.0	7.0	7.0	7.0	6.0	7.0	6.0	5.0	6.0	7.0	9.0	8.0	8.0	10.0	12.0	10.0	9.0	7.0	12.0	5.0	7.2
17	17.0	9.0	11.0	21.0	20.0	6.0	5.0	7.0	6.0	5.0	4.0	4.0	7.0	5.0	4.0	4.0	9.0	6.0	5.0	7.0	6.0	6.0	6.0	6.0	21.0	4.0	7.8
18	6.0	5.0	5.0	6.0	6.0	5.0	5.0	5.0	6.0	8.0	7.0	7.0	7.0	7.0	7.0	8.0	9.0	8.0	8.0	8.0	7.0	11.0	8.0	8.0	11.0	5.0	7.0
19	8.0	7.0	9.0	8.0	8.0	6.0	10.0	6.0	8.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	7.0	8.0	9.0	9.0	10.0	4.0	6.4
20	6.0	7.0	6.0	6.0	7.0	6.0	7.0	7.0	8.0	6.0	5.0	6.0	7.0	7.0	5.0	9.0	9.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	9.0	4.0	6.1
21	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	6.0	5.0	5.0	5.0	4.0	4.0	4.0	17.0	30.0	46.0	21.0	12.0	9.0	6.0	46.0	4.0	9.2
22	6.0	10.0	8.0	6.0	8.0	10.0	8.0	10.0	9.0	11.0	10.0	7.0	11.0	7.0	5.0	11.0	14.0	7.0	7.0	6.0	5.0	6.0	8.0	12.0	14.0	5.0	8.4
23	10.0	14.0	15.0	14.0	24.0	34.0	44.0	24.0	19.0	56.0	5.0	22.0	26.0	30.0	41.0	29.0	10.0	25.0	4.0	4.0	11.0	9.0	5.0	6.0	56.0	4.0	20.0
24	6.0	5.0	6.0	6.0	7.0	9.0	8.0	10.0	7.0	7.0	7.0	9.0	8.0	8.0	7.0	6.0	6.0	8.0	7.0	11.0	6.0	8.0	9.0	8.0	11.0	5.0	7.5
25	8.0	8.0	7.0	8.0	8.0	9.0	8.0	7.0	6.0	5.0	5.0	4.0	4.0	4.0	6.0	5.0	6.0	5.0	4.0	5.0	4.0	5.0	5.0	5.0	9.0	4.0	5.9
26	5.0	6.0	6.0	7.0	9.0	8.0	7.0	7.0	4.0	4.0	4.0	5.0	4.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	5.0	21.0	6.0	21.0	3.0	6.0
27	5.0	5.0	5.0	4.0	5.0	5.0	10.0	14.0	24.0	22.0	6.0	19.0	21.0	21.0	17.0	25.0	12.0	27.0	11.0	9.0	5.0	6.0	7.0	4.0	27.0	4.0	12.0
28	6.0	5.0	8.0	3.0	6.0	5.0	5.0	3.0	9.0	7.0	8.0	7.0	4.0	4.0	7.0	6.0	9.0	12.0	4.0	4.0	4.0	4.0	5.0	5.0	12.0	3.0	5.8
29	4.0	5.0	4.0	8.0	5.0	5.0	5.0	7.0	5.0	5.0	6.0	7.0	6.0	5.0	5.0	5.0	5.0	6.0	7.0	9.0	11.0	7.0	6.0	6.0	11.0	4.0	6.0
Max.	**36.0**	**26.0**	**20.0**	**27.0**	**30.0**	**43.0**	**57.0**	**44.0**	**30.0**	**56.0**	**46.0**	**56.0**	**30.0**	**56.0**	**46.0**	**36.0**	**58.0**	**27.0**	**39.0**	**46.0**	**35.0**	**31.0**	**32.0**	**46.0**	**58.0**		
Min.	**4.0**	**5.0**	**4.0**	**3.0**	**0.0**	**5.0**	**4.0**	**3.0**	**0.0**	**4.0**	**4.0**	**4.0**	**4.0**	**3.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**5.0**	**4.0**		**0.0**	
Avg.	**9.4**	**8.3**	**8.5**	**8.8**	**9.0**	**10.2**	**12.2**	**11.0**	**10.9**	**12.0**	**10.9**	**14.4**	**10.8**	**10.8**	**11.3**	**11.0**	**11.4**	**9.7**	**9.3**	**8.8**	**9.7**	**8.7**	**8.9**	**8.3**			**10.2**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	5.0	5.0	9.0	7.0	6.0	6.0	10.0	20.0	32.0	21.0	17.0	28.0	7.0	6.0	6.0	7.0	6.0	6.0	6.0	5.0	6.0	5.0	6.0	32.0	5.0	9.9
2	7.0	7.0	8.0	6.0	6.0	6.0	5.0	6.0	10.0	11.0	11.0	10.0	11.0	11.0	11.0	7.0	6.0	13.0	14.0	3.0	8.0	6.0	5.0	7.0	14.0	3.0	8.1
3	12.0	12.0	10.0	9.0	8.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0	7.0	7.0	7.0	9.0	10.0	10.0	10.0	8.0	8.0	7.0	5.0	12.0	5.0	7.9
4	5.0	6.0	5.0	7.0	5.0	5.0	6.0	6.0	7.0	7.0	5.0	5.0	5.0	7.0	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	5.0	6.0
5	6.0	7.0	6.0	6.0	6.0	6.0	8.0	7.0	6.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	8.0	7.0	7.0	8.0	7.0	7.0	8.0	6.0	6.5
6	8.0	8.0	9.0	9.0	10.0	7.0	6.0	7.0	7.0	7.0	7.0	8.0	8.0	9.0	7.0	6.0	56.0	35.0	5.0	7.0	9.0	6.0	5.0	5.0	56.0	5.0	10.5
7	6.0	5.0	5.0	6.0	9.0	7.0	5.0	8.0	46.0	31.0	9.0	8.0	5.0	6.0	31.0	14.0	5.0	6.0	8.0	6.0	7.0	5.0	6.0	5.0	46.0	5.0	10.4
8	7.0	9.0	6.0	9.0	6.0	9.0	8.0	6.0	6.0	7.0	7.0	6.0	6.0	8.0	5.0	4.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	9.0	4.0	5.9
9	4.0	5.0	7.0	6.0	6.0	6.0	5.0	6.0	4.0	5.0	6.0	7.0	8.0	8.0	13.0	12.0	17.0	20.0	9.0	6.0	8.0	4.0	5.0	10.0	20.0	4.0	7.8
10	14.0	7.0	0.0	6.0	6.0	6.0	5.0	7.0	7.0	6.0	6.0	8.0	7.0	5.0	5.0	7.0	6.0	5.0	8.0	7.0	6.0	6.0	8.0	14.0	14.0	0.0	6.8
11	9.0	5.0	5.0	7.0	8.0	5.0	6.0	5.0	4.0	0.0	9.0	7.0	6.0	13.0	10.0	14.0	9.0	10.0	6.0	14.0	5.0	5.0	30.0	42.0	42.0	0.0	9.8
12	12.0	4.0	6.0	21.0	43.0	11.0	7.0	24.0	6.0	4.0	11.0	15.0	19.0	15.0	12.0	10.0	13.0	10.0	10.0	11.0	11.0	11.0	7.0	10.0	43.0	4.0	12.6
13	10.0	14.0	10.0	10.0	10.0	13.0	11.0	12.0	11.0	8.0	8.0	8.0	6.0	18.0	19.0	18.0	28.0	9.0	13.0	24.0	8.0	40.0	4.0	5.0	40.0	4.0	13.2
14	18.0	19.0	7.0	18.0	8.0	6.0	10.0	10.0	13.0	8.0	7.0	6.0	10.0	13.0	9.0	12.0	19.0	35.0	8.0	7.0	7.0	10.0	9.0	10.0	35.0	6.0	11.6
15	9.0	7.0	6.0	6.0	6.0	6.0	5.0	5.0	6.0	6.0	6.0	7.0	6.0	6.0	7.0	6.0	7.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	9.0	5.0	6.0
16	6.0	6.0	6.0	7.0	10.0	16.0	30.0	52.0	33.0	37.0	23.0	39.0	7.0	16.0	0.0	0.0	8.0	4.0	0.0	0.0	5.0	5.0	4.0	5.0	52.0	0.0	13.3
17	4.0	5.0	3.0	5.0	3.0	37.0	29.0	9.0	4.0	23.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	6.0	6.0	9.0	7.0	8.0	5.0	37.0	0.0	7.2
18	4.0	10.0	11.0	11.0	10.0	9.0	9.0	8.0	8.0	6.0	5.0	6.0	7.0	6.0	10.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0	5.0	6.0	11.0	4.0	7.3
19	7.0	6.0	5.0	7.0	7.0	5.0	6.0	7.0	6.0	5.0	5.0	5.0	6.0	6.0	6.0	5.0	6.0	5.0	4.0	5.0	5.0	5.0	6.0	5.0	7.0	4.0	5.6
20	5.0	5.0	6.0	7.0	7.0	8.0	6.0	7.0	6.0	4.0	4.0	25.0	25.0	4.0	7.0	16.0	14.0	7.0	13.0	10.0	8.0	6.0	6.0	6.0	25.0	4.0	8.8
21	6.0	7.0	8.0	7.0	8.0	47.0	39.0	32.0	48.0	32.0	56.0	16.0	25.0	65.0	7.0	4.0	4.0	4.0	5.0	5.0	6.0	5.0	5.0	5.0	65.0	4.0	18.6
22	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	6.0	4.0	5.0	5.0	5.0	6.0	5.0	6.0	6.0	8.0	8.0	7.0	6.0	7.0	22.0	34.0	34.0	4.0	7.5
23	42.0	5.0	27.0	7.0	40.0	12.0	6.0	4.0	5.0	4.0	5.0	6.0	5.0	7.0	10.0	6.0	7.0	6.0	6.0	5.0	5.0	6.0	6.0	6.0	42.0	4.0	9.9
24	6.0	7.0	11.0	5.0	6.0	8.0	6.0	23.0	11.0	20.0	32.0	7.0	8.0	6.0	7.0	19.0	45.0	20.0	20.0	13.0	7.0	4.0	22.0	53.0	53.0	4.0	15.3
25	23.0	25.0	16.0	27.0	23.0	21.0	27.0	24.0	7.0	11.0	9.0	12.0	10.0	6.0	19.0	10.0	6.0	15.0	19.0	9.0	4.0	4.0	4.0	4.0	27.0	4.0	14.0
26	6.4	52.3	36.4	16.4	7.1	5.9	6.7	7.9	23.9	7.0	5.4	8.5	37.9	47.3	43.6	10.5	6.4	30.5	35.6	34.9	36.2	10.7	47.8	9.6	52.3	5.4	22.3
27	10.5	29.1	34.9	48.1	57.9	32.8	22.4	10.4	0.7	26.1	36.0	44.1	20.9	44.9	23.6	18.9	7.0	15.5	12.7	5.8	6.9	9.5	10.0	4.6	57.9	0.7	22.2
28	3.6	5.0	5.0	8.4	32.0	40.4	5.7	7.2	41.7	19.5	29.5	16.1	21.5	30.0	19.5	8.0	5.5	36.7	38.3	9.8	0.0	13.9	12.7	25.1	41.7	0.0	18.1
29	18.0	28.6	32.7	16.6	18.4	25.4	13.1	10.4	12.4	15.6	8.1	6.4	7.4	7.5	7.9	7.4	7.3	5.7	7.1	6.5	6.9	6.9	6.8	5.7	32.7	5.7	12.0
30	5.7	5.5	6.0	6.1	6.7	6.7	6.1	6.7	6.8	6.5	6.6	6.4	6.6	6.9	6.7	6.6	6.5	6.2	6.9	6.8	7.2	8.2	9.7	11.0	11.0	5.5	6.9
31	9.9	11.4	12.0	11.1	9.5	6.3	8.7	7.1	8.6	8.8	6.6	7.9	7.5	7.2	7.5	8.7	7.9	7.9	7.6	8.2	7.7	7.9	8.0	7.1	12.0	6.3	8.4
Max.	**42.0**	**52.3**	**36.4**	**48.1**	**57.9**	**47.0**	**39.0**	**52.0**	**48.0**	**37.0**	**56.0**	**44.1**	**37.9**	**65.0**	**43.6**	**19.0**	**56.0**	**36.7**	**38.3**	**34.9**	**36.2**	**40.0**	**47.8**	**53.0**	**65.0**		
Min.	**3.6**	**4.0**	**0.0**	**5.0**	**3.0**	**5.0**	**5.0**	**4.0**	**0.7**	**0.0**	**3.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**0.0**	**0.0**	**0.0**	**4.0**	**4.0**	**4.0**		**0.0**	
Avg.	**9.5**	**10.7**	**10.3**	**10.6**	**12.7**	**12.6**	**10.5**	**11.1**	**12.5**	**12.1**	**11.8**	**10.8**	**10.9**	**13.1**	**10.8**	**8.7**	**11.0**	**11.8**	**10.2**	**8.5**	**7.4**	**7.8**	**9.5**	**10.7**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.5	6.9	7.6	7.5	7.2	7.2	6.9	6.4	6.0	7.1	7.8	8.8	7.9	7.7	6.6	7.2	6.7	7.2	7.3	12.7	11.2	11.7	7.3	0.2	12.7	0.2	7.5
2	25.8	21.6	17.1	8.4	5.9	11.2	17.5	4.4	15.5	20.4	14.9	19.7	15.7	8.6	9.5	16.5	13.8	9.1	3.5	14.5	13.9	12.3	11.1	11.3	25.8	3.5	13.4
3	10.0	11.6	8.3	10.1	7.7	8.1	9.4	10.6	11.0	8.3	11.4	9.9	12.5	9.0	8.2	7.3	7.0	6.6	6.1	5.9	6.5	5.6	6.4	6.2	12.5	5.6	8.5
4	7.1	6.2	7.0	6.6	5.6	5.5	5.3	6.0	6.5	6.4	7.5	10.0	9.9	11.5	11.6	10.9	8.0	6.7	6.9	7.9	7.4	6.3	5.6	6.3	11.6	5.3	7.5
5	15.6	20.1	8.2	6.3	9.7	8.3	13.2	13.2	7.7	13.1	10.5	8.8	16.9	8.2	13.6	7.3	10.3	7.2	7.6	5.4	4.9	4.8	5.3	5.2	20.1	4.8	9.6
6	5.4	6.1	6.0	6.1	6.4	6.3	6.0	5.5	11.3	10.0	10.0	13.3	7.8	5.9	8.2	6.9	9.1	10.6	6.9	5.1	6.1	5.1	5.2	6.8	13.3	5.1	7.3
7	6.6	6.4	6.6	6.0	6.6	5.9	7.1	7.3	5.1	6.4	11.4	6.8	6.9	10.4	9.9	7.0	7.3	7.0	5.8	8.8	6.2	13.1	14.0	51.6	51.6	5.1	9.6
8	4.2	50.9	23.8	34.6	37.2	29.1	52.0	33.5	21.5	23.7	9.9	23.0	18.5	11.1	22.5	17.6	18.1	14.1	8.5	8.5	14.5	45.6	11.4	14.3	52.0	4.2	22.8
9	6.7	5.1	5.2	5.9	7.2	10.1	10.3	10.2	8.4	5.8	6.5	11.0	22.8	8.2	10.3	8.9	6.1	11.6	15.7	14.9	6.3	5.6	4.7	4.6	22.8	4.6	8.8
10	4.2	3.9	4.5	9.9	6.1	4.6	4.8	4.6	6.1	6.1	6.6	6.0	5.8	7.8	9.0	11.4	6.2	5.2	5.6	5.2	5.4	4.5	5.0	11.0	11.4	3.9	6.2
11	7.5	5.0	3.9	4.5	5.2	7.1	4.1	4.5	5.9	6.4	7.0	5.9	7.5	5.5	9.7	7.2	7.0	6.9	8.4	6.8	8.6	10.5	4.8	10.4	10.5	3.9	6.7
12	8.4	8.4	7.6	9.0	15.6	40.0	7.6	43.7	11.0	40.2	14.2	7.7	6.5	6.3	8.5	6.2	5.8	7.3	6.1	7.1	21.0	24.3	10.1	31.0	43.7	5.8	14.7
13	21.0	24.7	17.1	29.9	18.0	11.4	12.0	19.2	15.9	9.3	13.2	14.2	10.1	9.6	7.8	5.5	7.9	7.4	7.7	7.8	13.2	6.5	5.0	5.2	29.9	5.0	12.5
14	5.9	6.4	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	6.2	15.9	41.1	12.2	14.5	7.4	42.9	8.4	42.9	0.0	6.9
15	9.6	22.2	32.9	28.9	21.9	8.5	5.0	9.3	12.3	10.8	7.5	6.6	6.1	6.2	5.5	6.0	4.5	5.3	5.2	5.7	5.6	5.3	6.2	5.5	32.9	4.5	10.1
16	6.2	5.9	4.8	4.7	4.5	4.8	5.8	6.2	48.4	31.4	7.3	9.4	7.1	8.0	9.4	12.4	8.5	13.6	10.1	36.7	45.8	19.4	44.2	9.6	48.4	4.5	15.2
17	8.8	40.3	45.8	14.6	46.9	23.1	5.3	7.5	27.0	38.0	13.9	8.2	7.7	6.6	5.3	7.2	6.3	8.0	10.9	16.9	30.2	17.5	32.9	41.6	46.9	5.3	19.6
18	2.3	40.2	30.0	35.9	27.5	16.8	19.2	18.5	18.4	16.5	13.9	15.5	24.2	15.2	12.1	22.5	8.7	10.4	9.2	14.2	10.6	10.2	12.8	13.2	40.2	2.3	17.4
19	13.7	14.7	16.6	12.1	9.8	9.4	11.7	12.3	11.8	11.3	13.4	13.9	11.3	11.5	21.8	16.8	10.5	10.6	15.6	19.9	18.1	24.9	32.9	26.2	32.9	9.4	15.4
20	11.5	22.9	7.0	50.3	36.3	12.2	11.6	5.6	6.0	12.7	9.1	15.4	13.7	14.0	11.3	11.3	27.0	18.5	10.2	11.1	13.7	12.8	11.0	11.3	50.3	5.6	15.3
21	7.9	11.6	12.1	12.5	11.7	12.7	10.8	12.5	12.3	11.4	12.7	11.4	11.0	10.5	11.5	12.3	20.8	12.0	21.1	43.7	17.6	18.2	13.4	13.0	43.7	7.9	14.4
22	16.5	20.2	14.8	28.5	22.8	59.6	25.3	18.5	24.8	35.2	29.0	19.0	16.3	59.5	59.2	51.4	47.4	37.6	48.1	24.7	33.6	44.6	38.0	33.9	59.6	14.8	33.7
23	58.1	19.1	35.1	15.0	19.2	57.6	13.5	39.9	65.5	29.4	27.6	17.2	11.3	37.4	26.1	21.9	40.7	34.9	37.7	12.7	0.0	21.5	26.3	46.7	65.5	0.0	29.8
24	36.4	10.6	19.5	15.5	38.0	10.5	7.2	6.4	6.8	6.7	7.6	6.3	6.2	7.2	6.8	6.2	5.0	4.8	1.9	13.6	12.3	13.1	5.2	5.8	38.0	1.9	10.8
25	6.4	6.6	6.5	17.6	5.8	5.6	6.2	5.8	4.9	4.9	5.5	5.9	5.9	6.9	7.5	7.5	6.4	7.4	5.6	5.3	5.2	4.8	4.6	4.6	17.6	4.6	6.4
26	4.3	4.3	4.4	5.2	5.1	6.6	9.7	10.8	8.1	7.6	6.9	4.9	4.7	5.2	5.1	6.0	5.7	5.5	5.8	5.0	5.4	5.0	4.8	4.8	10.8	4.3	5.9
27	5.1	4.9	4.9	5.0	4.9	5.2	6.0	6.0	5.1	5.1	5.4	5.6	5.6	5.6	5.2	5.0	5.1	5.1	5.8	5.6	8.7	10.3	7.7	7.8	10.3	4.9	5.9
28	5.9	10.9	6.8	4.0	5.5	41.1	46.3	13.7	5.3	9.0	11.7	7.3	9.9	10.0	13.3	8.9	10.6	10.3	7.1	6.3	4.4	5.3	5.1	4.2	46.3	4.0	11.0
29	4.4	4.2	4.4	7.6	6.1	10.3	11.5	7.1	6.5	7.0	9.3	14.1	9.5	9.6	13.0	16.7	9.3	6.5	5.3	5.1	5.5	4.7	4.4	8.1	16.7	4.2	7.9
30	10.4	10.8	13.1	8.2	7.5	5.5	5.6	6.2	5.8	5.1	5.1	6.6	8.3	7.6	9.5	7.7	10.5	7.1	5.2	6.2	6.6	11.5	10.5	6.3	13.1	5.1	7.8
Max.	**58.1**	**50.9**	**45.8**	**50.3**	**46.9**	**59.6**	**52.0**	**43.7**	**65.5**	**40.2**	**29.0**	**23.0**	**24.2**	**59.5**	**59.2**	**51.4**	**47.4**	**37.6**	**48.1**	**43.7**	**45.8**	**45.6**	**44.2**	**51.6**	**65.5**		
Min.	**2.3**	**3.9**	**2.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.1**	**4.5**	**4.8**	**1.9**	**5.0**	**0.0**	**4.5**	**4.4**	**0.2**		**0.0**	
Avg.	**11.4**	**14.4**	**12.8**	**13.7**	**13.7**	**14.8**	**11.9**	**11.8**	**13.4**	**13.5**	**10.6**	**10.4**	**10.3**	**11.0**	**11.9**	**11.4**	**11.6**	**10.7**	**11.4**	**11.8**	**12.1**	**13.1**	**13.3**	**13.8**			**12.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.1	6.0	6.7	6.5	5.0	4.2	4.6	5.2	5.0	4.8	5.7	6.4	10.1	10.6	6.8	6.3	4.9	4.4	4.6	4.7	4.4	4.8	6.1	5.3	10.6	4.2	5.8
2	6.0	6.9	4.9	7.1	7.9	11.3	9.3	8.4	5.8	6.3	8.1	9.8	8.7	17.7	24.0	42.1	13.5	17.7	40.4	27.3	21.9	24.5	29.8	27.6	42.1	4.9	16.1
3	21.0	23.7	13.3	10.8	9.8	8.2	0.0	0.0	17.2	15.1	14.2	8.6	8.0	6.2	11.6	8.9	8.0	31.1	10.1	6.8	19.3	8.9	34.3	11.8	34.3	0.0	12.8
4	5.0	5.5	5.4	4.8	4.7	4.7	4.8	5.0	5.5	8.9	10.0	5.6	6.0	20.8	7.5	18.6	8.7	38.3	14.4	23.5	13.3	16.8	9.9	23.6	38.3	4.7	11.3
5	12.7	5.4	5.6	5.3	4.5	36.4	9.1	35.0	9.6	30.3	22.3	21.6	12.5	20.0	1.8	24.7	5.9	8.8	49.7	16.0	34.5	18.7	6.9	12.4	49.7	1.8	17.1
6	0.2	10.5	12.1	19.9	13.7	8.0	0.0	6.5	9.3	6.4	7.9	9.5	10.4	8.5	8.3	7.0	7.6	8.3	7.8	7.6	7.3	7.2	6.9	7.0	19.9	0.0	8.3
7	7.7	7.3	6.8	6.5	6.9	7.1	6.6	6.3	6.6	6.6	6.0	6.5	7.3	7.2	7.3	7.6	6.8	7.1	6.9	6.9	7.7	7.7	7.3	6.7	7.7	6.0	7.0
8	6.1	6.7	7.0	6.3	6.7	6.4	6.7	6.4	7.3	8.2	7.2	7.0	6.8	6.3	6.4	6.5	6.6	7.4	7.4	7.0	6.2	6.6	7.0	7.7	8.2	6.1	6.8
9	7.5	6.8	8.4	8.9	7.2	6.6	8.4	8.9	7.9	8.7	8.5	7.9	7.8	9.7	8.2	9.4	12.0	10.7	10.9	10.4	11.3	6.5	12.8	15.5	15.5	6.5	9.2
10	11.6	0.0	0.0	0.0	6.7	9.4	4.4	17.2	0.0	5.1	0.0	0.0	3.8	4.2	2.0	3.1	0.0	0.0	0.0	16.3	4.9	8.3	6.6	8.2	17.2	0.0	4.7
11	16.8	8.4	8.3	8.1	7.0	6.9	8.2	9.3	6.7	7.8	8.9	7.9	7.5	8.0	7.6	7.3	7.6	7.8	8.1	8.3	7.7	7.0	7.5	7.6	16.8	6.7	8.2
12	7.8	8.3	8.0	7.4	7.7	7.3	8.7	7.0	8.6	6.6	8.5	7.6	8.4	8.1	9.3	9.4	6.9	7.4	7.6	7.9	7.7	7.3	7.0	7.3	9.4	6.6	7.8
13	7.1	7.2	7.0	8.0	8.9	8.4	8.8	8.5	8.5	8.3	8.8	7.9	8.8	9.0	10.4	9.5	11.5	10.1	9.6	10.4	9.1	8.4	8.9	8.3	11.5	7.0	8.8
14	7.8	9.0	16.7	23.9	10.4	12.0	6.1	5.7	5.8	6.2	12.5	6.4	6.6	7.6	6.6	6.5	7.6	6.4	6.4	9.1	6.8	6.5	21.5	38.5	38.5	5.7	10.5
15	23.2	6.1	22.5	12.1	32.2	30.9	4.9	7.4	11.3	8.5	9.4	10.1	12.1	11.2	9.9	9.2	8.9	7.7	9.9	11.1	12.7	11.8	11.5	9.9	32.2	4.9	12.7
16	9.3	9.8	9.0	10.1	11.5	14.5	20.3	10.0	10.0	19.0	22.0	12.0	13.0	13.0	13.0	13.0	11.0	13.0	13.0	10.0	8.0	18.0	20.0	0.0	22.0	0.0	12.6
17	4.0	4.0	5.0	12.0	16.0	7.0	6.0	15.0	7.0	6.0	7.0	9.0	14.0	43.0	50.0	40.0	58.0	23.0	14.0	23.0	11.0	6.0	9.0	13.0	58.0	4.0	16.8
18	17.0	29.0	11.0	11.0	11.0	11.0	8.0	10.0	10.0	14.0	10.0	11.0	11.0	11.0	14.0	13.0	15.0	13.0	9.0	11.0	13.0	10.0	13.0	12.0	29.0	8.0	12.4
19	13.0	6.0	7.0	18.0	0.0	6.0	0.0	15.0	7.0	10.0	9.0	11.0	19.0	17.0	15.0	11.0	13.0	8.0	7.0	7.0	6.0	7.0	6.0	10.0	19.0	0.0	9.5
20	5.0	9.0	9.0	6.0	5.0	4.0	6.0	6.0	7.0	8.0	19.0	16.0	22.0	17.0	30.0	25.0	17.0	11.0	31.0	12.0	12.0	26.0	21.0	1.0	31.0	1.0	13.5
21	9.0	45.0	13.0	9.0	33.0	16.0	0.0	17.0	32.0	9.0	11.0	27.0	34.0	17.0	20.0	15.0	11.0	12.0	9.0	8.0	7.0	17.0	52.0	46.0	52.0	0.0	19.5
22	36.0	11.0	8.0	12.0	10.0	24.0	7.0	29.0	17.0	14.0	12.0	15.0	16.0	20.0	18.0	15.0	16.0	14.0	10.0	9.0	9.0	8.0	7.0	8.0	36.0	7.0	14.4
23	7.0	7.0	7.0	7.0	7.0	10.0	9.0	8.0	9.0	8.0	7.0	9.0	8.0	8.0	10.0	10.0	10.0	10.0	10.0	9.0	8.0	10.0	10.0	11.0	11.0	7.0	8.7
24	12.0	12.0	12.0	12.0	11.0	9.0	9.0	11.0	11.0	12.0	12.0	12.0	9.0	11.0	11.0	11.0	10.0	11.0	12.0	17.0	14.0	12.0	16.0	12.0	17.0	9.0	11.7
25	6.0	11.0	14.0	10.0	10.0	10.0	11.0	11.0	11.0	10.0	11.0	12.0	13.0	14.0	10.0	15.0	11.0	14.0	9.0	13.0	11.0	13.0	18.0	18.0	18.0	6.0	11.9
26	19.0	29.0	15.0	8.0	36.0	18.0	20.0	8.0	14.0	9.0	11.0	9.0	13.0	11.0	27.0	11.0	14.0	15.0	11.0	21.0	8.0	46.0	30.0	34.0	46.0	8.0	18.2
27	7.0	14.0	33.0	15.0	17.0	30.0	37.0	16.0	9.0	51.0	33.0	21.0	22.0	26.0	35.0	23.0	24.0	21.0	13.0	10.0	8.0	8.0	8.0	8.0	51.0	7.0	20.4
28	13.0	26.0	12.0	7.0	34.0	44.0	7.0	12.0	6.0	11.0	36.0	26.0	18.0	20.0	21.0	20.0	21.0	22.0	10.0	7.0	6.0	8.0	8.0	11.0	44.0	6.0	16.9
29	7.0	5.0	10.0	8.0	6.0	7.0	8.0	7.0	7.0	7.0	7.0	8.0	9.0	10.0	11.0	11.0	12.0	12.0	11.0	9.0	8.0	9.0	9.0	8.0	12.0	5.0	8.6
30	6.0	7.0	35.0	36.0	44.0	24.0	9.0	24.0	12.0	12.0	13.0	14.0	18.0	14.0	14.0	13.0	13.0	12.0	14.0	13.0	13.0	11.0	8.0	8.0	44.0	6.0	16.1
31	8.0	8.0	8.0	9.0	9.0	9.0	7.0	8.0	8.0	8.0	10.0	11.0	12.0	11.0	11.0	12.0	11.0	12.0	12.0	12.0	11.0	10.0	12.0	11.0	12.0	7.0	10.0
Max.	**36.0**	**45.0**	**35.0**	**36.0**	**44.0**	**44.0**	**37.0**	**35.0**	**32.0**	**51.0**	**36.0**	**27.0**	**34.0**	**43.0**	**50.0**	**42.1**	**58.0**	**38.3**	**49.7**	**27.3**	**34.5**	**46.0**	**52.0**	**46.0**	**58.0**		
Min.	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**0.0**	**0.0**	**0.0**	**4.8**	**0.0**	**0.0**	**3.8**	**4.2**	**1.8**	**3.1**	**0.0**	**0.0**	**0.0**	**4.7**	**4.4**	**4.8**	**6.0**	**0.0**		**0.0**	
Avg.	**10.5**	**11.3**	**11.0**	**10.5**	**12.9**	**13.3**	**8.2**	**11.1**	**9.4**	**11.2**	**11.9**	**11.2**	**12.1**	**13.5**	**14.1**	**14.0**	**12.4**	**12.8**	**12.5**	**11.7**	**10.6**	**11.9**	**13.9**	**13.2**			**11.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.0	11.0	9.0	9.0	8.0	7.0	7.0	7.0	9.0	11.0	11.0	11.0	10.0	10.0	11.0	8.0	10.0	9.0	9.0	9.0	11.0	11.0	11.0	14.0	14.0	7.0	9.8
2	20.0	8.0	9.0	8.0	11.0	18.0	10.0	9.0	11.0	10.0	11.0	11.0	12.0	13.0	13.0	14.0	17.0	16.0	14.0	11.0	13.0	12.0	12.0	37.0	37.0	8.0	13.3
3	27.0	30.0	15.0	8.0	7.0	8.0	27.0	16.0	24.0	23.0	35.0	42.0	37.0	21.0	20.0	14.0	17.0	16.0	14.0	13.0	10.0	11.0	12.0	13.0	42.0	7.0	19.2
4	13.0	13.0	13.0	10.0	28.0	12.0	13.0	12.0	13.0	19.0	14.0	14.0	14.0	15.0	13.0	15.0	14.0	14.0	14.0	12.0	10.0	9.0	11.0	12.0	28.0	9.0	13.6
5	13.0	10.0	14.0	12.0	9.0	10.0	9.0	9.0	11.0	10.0	10.0	8.0	8.0	8.0	10.0	9.0	11.0	11.0	11.0	13.0	19.0	21.0	11.0	15.0	21.0	8.0	11.3
6	12.0	10.0	11.0	9.0	10.0	10.0	7.0	9.0	10.0	17.0	41.0	21.0	26.0	51.0	28.0	27.0	29.0	10.0	11.0	11.0	10.0	9.0	18.0	25.0	51.0	7.0	17.6
7	62.0	39.0	13.0	9.0	8.0	11.0	12.0	8.0	8.0	9.0	14.0	13.0	15.0	43.0	23.0	16.0	11.0	9.0	9.0	8.0	8.0	8.0	11.0	19.0	62.0	8.0	16.1
8	11.0	15.0	31.0	15.0	11.0	30.0	23.0	13.0	18.0	22.0	24.0	21.0	25.0	21.0	12.0	14.0	15.0	11.0	10.0	9.0	9.0	9.0	8.0	8.0	31.0	8.0	16.0
9	8.0	9.0	9.0	7.0	8.0	8.0	7.0	8.0	8.0	10.0	12.0	23.0	14.0	10.0	10.0	12.0	18.0	19.0	12.0	9.0	8.0	8.0	8.0	8.0	23.0	7.0	10.5
10	8.0	7.0	7.0	7.0	9.0	13.0	9.0	13.0	13.0	14.0	16.0	10.0	22.0	30.0	27.0	27.0	20.0	26.0	13.0	12.0	14.0	14.0	14.0	6.0	30.0	6.0	14.6
11	0.0	12.0	7.0	30.0	8.0	1.0	14.0	25.0	15.0	18.0	23.0	20.0	22.0	17.0	36.0	19.0	16.0	16.0	13.0	21.0	11.0	10.0	11.0	12.0	36.0	0.0	15.7
12	12.0	8.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	12.0	19.0	20.0	19.0	19.0	14.0	15.0	17.0	12.0	16.0	13.0	10.0	11.0	8.0	7.0	20.0	7.0	12.1
13	11.0	5.0	7.0	27.0	8.0	19.0	8.0	15.0	11.0	8.0	27.0	17.0	21.0	25.0	36.0	40.0	21.0	31.0	21.0	14.0	13.0	12.0	15.0	4.0	40.0	4.0	17.3
14	15.0	23.0	28.0	11.0	18.0	17.0	21.0	11.0	15.0	13.0	13.0	14.0	30.0	43.0	20.0	17.0	16.0	20.0	15.0	18.0	26.0	10.0	10.0	39.0	43.0	10.0	19.3
15	17.0	31.0	29.0	22.0	14.0	28.0	5.0	11.0	11.0	19.0	11.0	17.0	29.0	12.0	11.0	15.0	11.0	10.0	10.0	10.0	10.0	9.0	8.0	9.0	31.0	5.0	15.0
16	8.0	8.0	7.0	12.0	9.0	8.0	6.0	9.0	9.0	14.0	31.0	30.0	25.0	15.0	33.0	17.0	14.0	19.0	11.0	10.0	10.0	8.0	17.0	30.0	33.0	6.0	15.0
17	1.0	18.0	6.0	3.0	0.0	0.0	0.0	3.0	44.0	32.0	17.0	17.0	26.0	25.0	26.0	23.0	23.0	25.0	18.0	15.0	13.0	13.0	14.0	26.0	44.0	0.0	16.2
18	23.0	46.0	5.0	9.0	12.0	39.0	6.0	15.0	12.0	9.0	9.0	9.0	13.0	22.0	20.0	18.0	16.0	15.0	13.0	17.0	15.0	12.0	8.0	28.0	46.0	5.0	16.3
19	24.0	12.0	29.0	24.0	10.0	0.0	0.0	17.0	16.0	15.0	23.0	38.0	31.0	22.0	27.0	23.0	21.0	22.0	29.0	17.0	17.0	11.0	8.0	9.0	38.0	0.0	18.5
20	29.0	35.0	47.0	20.0	16.0	41.0	10.0	8.0	22.0	15.0	24.0	23.0	20.0	20.0	17.0	16.0	17.0	16.0	13.0	14.0	13.0	12.0	12.0	13.0	47.0	8.0	19.7
21	18.0	35.0	30.0	37.0	25.0	11.0	9.0	11.0	18.0	40.0	36.0	48.0	66.0	31.0	38.0	55.0	34.0	37.0	32.0	17.0	16.0	11.0	11.0	10.0	66.0	9.0	28.2
22	8.0	0.0	0.0	5.0	11.0	14.0	26.0	10.0	16.0	14.0	19.0	15.0	17.0	17.0	16.0	16.0	14.0	14.0	13.0	13.0	12.0	13.0	12.0	12.0	26.0	0.0	12.8
23	12.0	13.0	13.0	13.0	12.0	18.0	18.0	14.0	13.0	13.0	14.0	16.0	17.0	17.0	19.0	18.0	21.0	19.0	20.0	15.0	13.0	11.0	10.0	13.0	21.0	10.0	15.1
24	17.0	33.0	35.0	27.0	11.0	10.0	10.0	11.0	12.0	11.0	13.0	12.0	13.0	13.0	13.0	11.0	12.0	13.0	12.0	12.0	11.0	9.0	9.0	9.0	35.0	9.0	14.1
25	9.0	9.0	9.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0	8.0	8.0	10.0	9.0	10.0	10.0	11.0	10.0	9.0	11.0	11.0	10.0	8.0	10.0	11.0	7.0	9.0
26	10.0	11.0	9.0	13.0	35.0	26.0	9.0	8.0	9.0	11.0	9.0	10.0	13.0	13.0	12.0	15.0	17.0	14.0	11.0	9.0	14.0	10.0	12.0	8.0	35.0	8.0	12.8
27	16.0	20.0	14.0	15.0	0.0	0.0	4.0	17.0	8.0	11.0	12.0	14.0	16.0	16.0	17.0	19.0	16.0	18.0	16.0	12.0	13.0	15.0	13.0	24.0	24.0	0.0	13.6
28	13.0	13.0	15.0	18.0	11.0	0.0	0.0	22.0	12.0	10.0	10.0	14.0	11.0	11.0	14.0	10.0	15.0	12.0	16.0	14.0	12.0	9.0	9.0	12.0	22.0	0.0	11.8
29	12.0	12.0	12.0	13.0	22.0	22.0	12.0	9.0	13.0	18.0	24.0	18.0	19.0	17.0	18.0	16.0	19.0	16.0	14.0	12.0	12.0	12.0	12.0	12.0	24.0	9.0	15.3
30	12.0	14.0	15.0	11.0	14.0	11.0	10.0	32.0	26.0	40.0	29.0	32.0	36.0	46.0	49.0	31.0	21.0	49.0	46.0	24.0	21.0	9.0	14.0	11.0	49.0	9.0	25.1
Max.	**62.0**	**46.0**	**47.0**	**37.0**	**35.0**	**41.0**	**27.0**	**32.0**	**44.0**	**40.0**	**41.0**	**48.0**	**66.0**	**51.0**	**49.0**	**55.0**	**34.0**	**49.0**	**46.0**	**24.0**	**26.0**	**21.0**	**18.0**	**39.0**	**66.0**		
Min.	**0.0**	**0.0**	**0.0**	**3.0**	**0.0**	**0.0**	**0.0**	**3.0**	**7.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**10.0**	**8.0**	**10.0**	**9.0**	**9.0**	**8.0**	**8.0**	**8.0**	**8.0**	**4.0**		**0.0**	
Avg.	**15.1**	**17.0**	**15.2**	**14.0**	**12.0**	**13.6**	**10.2**	**12.3**	**14.1**	**15.9**	**18.6**	**18.9**	**21.2**	**21.1**	**20.4**	**18.7**	**17.1**	**17.6**	**15.5**	**13.2**	**12.8**	**11.0**	**11.2**	**15.2**			**15.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	0.0	2.0	25.0	27.0	4.0	19.0	10.0	10.0	29.0	16.0	17.0	18.0	18.0	14.0	15.0	15.0	14.0	12.0	12.0	11.0	11.0	10.0	9.0	29.0	0.0	13.4
2	11.0	12.0	13.0	12.0	12.0	11.0	9.0	12.0	11.0	11.0	13.0	11.0	14.0	15.0	15.0	15.0	15.0	15.0	13.0	12.0	15.0	13.0	12.0	11.0	15.0	9.0	12.6
3	11.0	10.0	10.0	9.0	8.0	9.0	10.0	10.0	11.0	13.0	13.0	15.0	14.0	12.0	13.0	16.0	15.0	13.0	15.0	20.0	14.0	29.0	10.0	9.0	29.0	8.0	12.9
4	15.0	14.0	9.0	9.0	24.0	13.0	22.0	9.0	34.0	23.0	39.0	46.0	30.0	24.0	16.0	14.0	17.0	15.0	13.0	12.0	13.0	15.0	11.0	5.0	46.0	5.0	18.4
5	11.0	9.0	17.0	11.0	22.0	19.0	20.0	39.0	19.0	31.0	28.0	61.0	37.0	46.0	18.0	13.0	21.0	21.0	26.0	22.0	11.0	10.0	7.0	7.0	61.0	7.0	21.9
6	7.0	10.0	9.0	13.0	13.0	0.0	15.0	25.0	14.0	31.0	17.0	17.0	22.0	14.0	13.0	15.0	14.0	11.0	10.0	13.0	10.0	14.0	12.0	11.0	31.0	0.0	13.8
7	13.0	15.0	10.0	13.0	12.0	15.0	14.0	14.0	13.0	13.0	12.0	13.0	13.0	13.0	13.0	13.0	13.0	14.0	15.0	14.0	13.0	10.0	9.0	11.0	15.0	9.0	12.8
8	13.0	8.0	1.0	12.0	5.0	2.0	11.0	12.0	20.0	26.0	23.0	12.0	13.0	13.0	12.0	12.0	12.0	11.0	11.0	12.0	10.0	10.0	11.0	10.0	26.0	1.0	11.8
9	12.0	9.0	10.0	10.0	11.0	12.0	14.0	14.0	18.0	15.0	15.0	14.0	14.0	16.0	16.0	15.0	15.0	13.0	11.0	12.0	11.0	12.0	10.0	11.0	18.0	9.0	12.9
10	12.0	13.0	12.0	13.0	16.0	14.0	11.0	13.0	13.0	13.0	14.0	13.0	14.0	18.0	20.0	19.0	16.0	16.0	16.0	13.0	15.0	12.0	12.0	12.0	20.0	11.0	14.2
11	13.0	12.0	20.0	15.0	13.0	12.0	11.0	11.0	12.0	14.0	13.0	16.0	20.0	22.0	21.0	18.0	19.0	18.0	15.0	16.0	14.0	13.0	12.0	13.0	22.0	11.0	15.1
12	10.0	12.0	16.0	42.0	7.0	0.0	25.0	13.0	13.0	13.0	14.0	13.0	12.0	14.0	14.0	14.0	12.0	12.0	11.0	10.0	10.0	11.0	10.0	10.0	42.0	0.0	13.3
13	11.0	11.0	10.0	10.0	10.0	9.0	10.0	11.0	10.0	9.0	9.0	12.0	12.0	15.0	14.0	14.0	12.0	14.0	13.0	14.0	13.0	14.0	11.0	7.0	15.0	7.0	11.5
14	18.0	3.0	1.0	0.0	3.0	0.0	7.0	8.0	17.0	17.0	21.0	20.0	21.0	23.0	25.0	23.0	26.0	22.0	18.0	14.0	11.0	10.0	10.0	12.0	26.0	0.0	13.8
15	13.0	13.0	12.0	13.0	10.0	10.0	12.0	11.0	14.0	29.0	16.0	14.0	16.0	15.0	15.0	14.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	29.0	10.0	13.6
16	11.0	10.0	12.0	11.0	13.0	12.0	11.0	11.0	12.0	12.0	11.0	11.0	13.0	12.0	12.0	12.0	11.0	12.0	12.0	12.0	11.0	10.0	12.0	13.0	13.0	10.0	11.6
17	11.0	12.0	10.0	9.0	8.0	9.0	10.0	9.0	9.0	9.0	9.0	11.0	14.0	11.0	10.0	10.0	10.0	12.0	8.0	9.0	8.0	8.0	7.0	8.0	14.0	7.0	9.6
18	8.0	8.0	9.0	11.0	8.0	9.0	9.0	12.0	11.0	14.0	13.0	11.0	17.0	17.0	11.0	14.0	16.0	11.0	10.0	10.0	9.0	10.0	6.0	9.0	17.0	6.0	11.0
19	11.0	18.0	14.0	8.0	11.0	9.0	12.0	10.0	11.0	11.0	13.0	12.0	13.0	15.0	12.0	13.0	17.0	11.0	9.0	10.0	9.0	10.0	12.0	6.0	18.0	6.0	11.5
20	8.0	7.0	14.0	9.0	11.0	7.0	13.0	9.0	10.0	13.0	13.0	14.0	10.0	9.0	10.0	10.0	10.0	8.0	10.0	12.0	11.0	13.0	10.0	10.0	14.0	7.0	10.5
21	9.0	10.0	10.0	10.0	8.0	9.0	10.0	11.0	10.0	9.0	10.0	12.0	14.0	14.0	19.0	16.0	26.0	16.0	10.0	18.0	14.0	9.0	9.0	8.0	26.0	8.0	12.1
22	9.0	8.0	9.0	8.0	8.0	6.0	22.0	18.0	13.0	27.0	29.0	18.0	15.0	13.0	11.0	13.0	22.0	13.0	14.0	14.0	15.0	12.0	11.0	7.0	29.0	6.0	14.0
23	13.0	11.0	11.0	11.0	10.0	10.0	10.0	10.0	8.0	9.0	9.0	10.0	10.0	9.0	10.0	11.0	19.0	17.0	14.0	10.0	11.0	8.0	9.0	9.0	19.0	8.0	10.8
24	14.0	19.0	20.0	16.0	17.0	8.0	9.0	9.0	10.0	9.0	9.0	7.0	8.0	9.0	13.0	11.0	12.0	19.0	13.0	12.0	13.0	9.0	9.0	9.0	20.0	7.0	11.8
25	9.0	9.0	10.0	8.0	8.0	18.0	20.0	9.0	9.0	8.0	10.0	11.0	11.0	13.0	13.0	12.0	15.0	15.0	13.0	13.0	11.0	10.0	10.0	9.0	20.0	8.0	11.4
26	10.0	12.0	8.0	22.0	17.0	10.0	8.0	8.0	8.0	8.0	9.0	9.0	9.0	9.0	17.0	17.0	15.0	17.0	17.0	18.0	15.0	12.0	10.0	10.0	22.0	8.0	12.3
27	11.0	11.0	13.0	9.0	9.0	10.0	12.0	10.0	10.0	12.0	13.0	15.0	15.0	14.0	17.0	12.0	12.0	18.0	15.0	12.0	14.0	11.0	3.0	0.0	18.0	0.0	11.6
28	0.0	0.0	4.0	1.0	8.0	11.0	18.0	15.0	9.0	10.0	10.0	15.0	12.0	10.0	12.0	13.0	15.0	12.0	13.0	10.0	10.0	10.0	9.0	9.0	18.0	0.0	9.8
29	9.0	13.0	13.0	23.0	10.0	38.0	9.0	9.0	9.0	8.0	8.0	9.0	10.0	12.0	14.0	12.0	16.0	12.0	10.0	10.0	10.0	10.0	9.0	7.0	38.0	7.0	12.1
30	7.0	8.0	7.0	8.0	7.0	8.0	8.0	9.0	9.0	10.0	13.0	13.0	13.0			15.0	17.0	14.0	12.0	14.0	12.0	10.0	8.0	10.0	17.0	7.0	10.5
31	10.0	10.0	34.0	10.0	8.0	10.0	14.0	11.0	11.0	11.0	12.0	17.0	14.0	19.0	21.0	18.0	15.0	16.0	14.0	12.0	10.0	8.0	8.0	40.0	40.0	8.0	14.7
Max.	**18.0**	**19.0**	**34.0**	**42.0**	**27.0**	**38.0**	**25.0**	**39.0**	**34.0**	**31.0**	**39.0**	**61.0**	**37.0**	**46.0**	**25.0**	**23.0**	**26.0**	**22.0**	**26.0**	**22.0**	**15.0**	**29.0**	**12.0**	**40.0**	**61.0**		
Min.	**0.0**	**0.0**	**1.0**	**0.0**	**3.0**	**0.0**	**7.0**	**8.0**	**8.0**	**8.0**	**8.0**	**7.0**	**8.0**	**9.0**	**10.0**	**10.0**	**10.0**	**8.0**	**8.0**	**9.0**	**8.0**	**8.0**	**3.0**	**0.0**		**0.0**	
Avg.	**10.4**	**10.2**	**11.3**	**12.3**	**11.4**	**10.1**	**13.1**	**12.3**	**12.5**	**15.1**	**14.6**	**15.8**	**15.1**	**15.5**	**14.7**	**14.2**	**15.6**	**14.4**	**13.1**	**13.1**	**11.8**	**11.5**	**9.7**	**10.1**			**12.8**

Total Hours in Month 744 **Hours Data Available** 742 **Data Recovery** 99.7%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.0	33.0	31.0	13.0	22.0	7.0	4.0	5.0	13.0	39.0	22.0	30.0	25.0	26.0	22.0	17.0	16.0	16.0	14.0	13.0	12.0	8.0	8.0	11.0	39.0	4.0	17.3
2	9.0	15.0	15.0	10.0	11.0	11.0	10.0	12.0	14.0	14.0	13.0	12.0	12.0	13.0	11.0	13.0	14.0	13.0	12.0	16.0	14.0	10.0	8.0	16.0	16.0	8.0	12.4
3	2.0	9.0	26.0	23.0	10.0	6.0	7.0	31.0	8.0	11.0	12.0	23.0	15.0	16.0	22.0	17.0	18.0	18.0	14.0	13.0	13.0	11.0	11.0	12.0	31.0	2.0	14.5
4	13.0	14.0	13.0	8.0	11.0	14.0	13.0	12.0	13.0	12.0	13.0	13.0	15.0	14.0	16.0	16.0	15.0	17.0	15.0	12.0	12.0	8.0	16.0	14.0	17.0	8.0	13.3
5	25.0	10.0	16.0	17.0	8.0	2.0	0.0	1.0	3.0	17.0	14.0	15.0	20.0	18.0	21.0	20.0	21.0	16.0	12.0	11.0	8.0	8.0	12.0	13.0	25.0	0.0	12.8
6	8.0	11.0	15.0	13.0	10.0	15.0	17.0	11.0	11.0	10.0	11.0	12.0	14.0	14.0	15.0	13.0	16.0	12.0	12.0	17.0	12.0	9.0	8.0	9.0	17.0	8.0	12.3
7	11.0	8.0	9.0	9.0	9.0	31.0	14.0	9.0	9.0	9.0	9.0	12.0	18.0	19.0	18.0	19.0	16.0	15.0	13.0	13.0	12.0	8.0	8.0	9.0	31.0	8.0	12.8
8	10.0	7.0	11.0	10.0	10.0	8.0	7.0	7.0	9.0	8.0	10.0	11.0	13.0	15.0	22.0	19.0	21.0	22.0	14.0	12.0	11.0	9.0	8.0	9.0	22.0	7.0	11.8
9	8.0	8.0	8.0	9.0	14.0	20.0	21.0	13.0	12.0	10.0	9.0	10.0	13.0	13.0	13.0	17.0	17.0	18.0	12.0	12.0	10.0	8.0	11.0	8.0	21.0	8.0	12.3
10	8.0	40.0	3.0	20.0	50.0	43.0	46.0	16.0	15.0	21.0	22.0	21.0	37.0	27.0	19.0	30.0	33.0	18.0	13.0	13.0	13.0	12.0	15.0	15.0	50.0	3.0	22.9
11	10.0	21.0	18.0	8.0	15.0	22.0	13.0	13.0	13.0	13.0	12.0	11.0	13.0	17.0	17.0	17.0	17.0	15.0	14.0	14.0	15.0	9.0	23.0	14.0	23.0	8.0	14.8
12	7.0	19.0	19.0	12.0	6.0	6.0	5.0	6.0	8.0	7.0	9.0	14.0	17.0	16.0	13.0	26.0	21.0	13.0	12.0	22.0	11.0	14.0	34.0	27.0	34.0	5.0	14.3
13	14.0	16.0	8.0	7.0	10.0	14.0	30.0	31.0	9.0	10.0	9.0	14.0	12.0	22.0	26.0	29.0	14.0	18.0	13.0	14.0	12.0	8.0	0.0	0.0	31.0	0.0	14.2
14	0.0	0.0	4.0	0.0	4.0	4.0	4.0	6.0	8.0	14.0	11.0	11.0	11.0	13.0	15.0	14.0	13.0	13.0	12.0	11.0	11.0	11.0	12.0	30.0	30.0	0.0	9.7
15	8.0	9.0	9.0	14.0	13.0	8.0	7.0	8.0	8.0	12.0	11.0	15.0	17.0	28.0	23.0	23.0	15.0	19.0	15.0	13.0	11.0	4.0	10.0	12.0	28.0	4.0	13.0
16	5.0	7.0	15.0	14.0	13.0	13.0	13.0	12.0	13.0	13.0	13.0	13.0	14.0	16.0	15.0	15.0	14.0	13.0	15.0	14.0	11.0	10.0	33.0	24.0	33.0	5.0	14.1
17	0.0	13.0	13.0	12.0	17.0	18.0	33.0	11.0	8.0	9.0	12.0	11.0	13.0	15.0	14.0	12.0	12.0	13.0	13.0	11.0	11.0	9.0	10.0	11.0	33.0	0.0	12.5
18	11.0	16.0	13.0	15.0	12.0	21.0	24.0	9.0	8.0	10.0	11.0	12.0	22.0	31.0	24.0	24.0	23.0	19.0	38.0	14.0	11.0	17.0	3.0	6.0	38.0	3.0	16.4
19	9.0	25.0	31.0	8.0	18.0	13.0	13.0	22.0	10.0	14.0	7.0	14.0	37.0	23.0	30.0	27.0	21.0	22.0	12.0	11.0	13.0	8.0	11.0	0.0	37.0	0.0	16.6
20	19.0	12.0	1.0	9.0	7.0	6.0	7.0	5.0	6.0	12.0	21.0	8.0	16.0	20.0	36.0	39.0	23.0	15.0	10.0	12.0	9.0	10.0	6.0	2.0	39.0	1.0	13.0
21	0.0	0.0	7.0	0.0	0.0	0.0	6.0	10.0	9.0	9.0	8.0	8.0	9.0	8.0	9.0	9.0	10.0	14.0	12.0	8.0	8.0	8.0	8.0	7.0	14.0	0.0	7.0
22	8.0	8.0	3.0	5.0	2.0	0.0	0.0	13.0	9.0	10.0	8.0	20.0	25.0	28.0	18.0	23.0	26.0	15.0	22.0	14.0	13.0	12.0	24.0	8.0	28.0	0.0	13.1
23	15.0	12.0	8.0	7.0	6.0	9.0	11.0	7.0	9.0	9.0	12.0	15.0	16.0	29.0	37.0	47.0	20.0	14.0	13.0	13.0	16.0	11.0	13.0	17.0	47.0	6.0	15.3
24	21.0	12.0	42.0	2.0	36.0	10.0	9.0	29.0	23.0	11.0	10.0	18.0	12.0	19.0	20.0	16.0	21.0	28.0	35.0	15.0	27.0	7.0	10.0	11.0	42.0	2.0	18.5
25	7.0	42.0	42.0	14.0	10.0	10.0	8.0	8.0	9.0	10.0	12.0	17.0	20.0	17.0	20.0	29.0	32.0	17.0	14.0	13.0	12.0	13.0	16.0	17.0	42.0	7.0	17.0
26	13.0	10.0	7.0	2.0	13.0	14.0	13.0	13.0	13.0	14.0	12.0	13.0	14.0	13.0	13.0	13.0	13.0	13.0	11.0	11.0	12.0	11.0	12.0	12.0	14.0	2.0	11.9
27	10.0	8.0	9.0	1.0	0.0	6.0	10.0	8.0	9.0	8.0	7.0	7.0	9.0	10.0	11.0	10.0	11.0	12.0	10.0	9.0	8.0	9.0	7.0	0.0	12.0	0.0	7.9
28	10.0	11.0	7.0	7.0	7.0	27.0	3.0	37.0	6.0	8.0	9.0	10.0	11.0	20.0	18.0	14.0	16.0	17.0	12.0	10.0	9.0	8.0	8.0	10.0	37.0	3.0	12.3
29	8.0	10.0	9.0	9.0	9.0	8.0	15.0	8.0	15.0	2.0	11.0	60.0	24.0	23.0	18.0	13.0	41.0	9.0	9.0	7.0	9.0	37.0	28.0	48.0	60.0	2.0	17.9
30	16.0	8.0	9.0	12.0	21.0	21.0	10.0	12.0	0.0	16.0	21.0	26.0	39.0	36.0	29.0	24.0	16.0	19.0	15.0	14.0	12.0	13.0	11.0	12.0	39.0	0.0	17.2
31	11.0	12.0	12.0	8.0	8.0	9.0	9.0	8.0	9.0	9.0	10.0	11.0	11.0	11.0	11.0	10.0	12.0	8.0	9.0	8.0	7.0	7.0	7.0	9.0	12.0	7.0	9.4
Max.	**25.0**	**42.0**	**42.0**	**23.0**	**50.0**	**43.0**	**46.0**	**37.0**	**23.0**	**39.0**	**22.0**	**60.0**	**39.0**	**36.0**	**37.0**	**47.0**	**41.0**	**28.0**	**38.0**	**22.0**	**27.0**	**37.0**	**34.0**	**48.0**	**60.0**		
Min.	**0.0**	**0.0**	**1.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**0.0**	**2.0**	**7.0**	**7.0**	**9.0**	**8.0**	**9.0**	**9.0**	**10.0**	**8.0**	**9.0**	**7.0**	**7.0**	**4.0**	**0.0**	**0.0**		**0.0**	
Avg.	**9.8**	**13.7**	**14.0**	**9.6**	**12.3**	**12.8**	**12.3**	**12.7**	**10.0**	**12.0**	**12.0**	**15.7**	**17.5**	**19.0**	**19.2**	**19.8**	**18.6**	**15.8**	**14.4**	**12.6**	**11.8**	**10.5**	**12.6**	**12.7**			**13.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	9.0	15.0	16.0	13.0	12.0	12.0	12.0	9.0	9.0	9.0	9.0	8.0	9.0	9.0	16.0	6.0	9.0
2	8.0	9.0	8.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0	9.0	10.0	8.0	9.0	11.0	9.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	6.0	11.0	6.0	8.3
3	7.0	6.0	7.0	8.0	9.0	9.0	7.0	9.0	7.0	7.0	14.0	14.0	18.0	12.0	13.0	13.0	17.0	14.0	11.0	10.0	12.0	12.0	16.0	8.0	18.0	6.0	10.8
4	8.0	10.0	10.0	11.0	11.0	13.0	29.0	16.0	13.0	17.0	16.0	37.0	18.0	16.0	26.0	18.0	35.0	28.0	28.0	13.0	29.0	0.0	0.0	6.0	37.0	0.0	17.0
5	7.0	18.0	8.0	21.0	41.0	4.0	16.0	11.0	8.0	4.0	19.0	18.0	21.0	24.0	22.0	18.0	21.0	32.0	8.0	14.0	23.0	5.0	24.0	1.0	41.0	1.0	16.2
6	11.0	39.0	25.0	15.0	17.0	13.0	9.0	9.0	9.0	9.0	10.0	8.0	8.0	8.0	8.0	9.0	8.0	9.0	8.0	8.0	9.0	11.0	10.0	10.0	39.0	8.0	11.7
7	9.0	9.0	11.0	7.0	9.0	8.0	10.0	6.0	11.0	10.0	12.0	11.0	15.0	12.0	13.0	14.0	12.0	12.0	12.0	11.0	12.0	12.0	12.0	13.0	15.0	6.0	11.0
8	11.0	10.0	10.0	10.0	9.0	10.0	10.0	10.0	11.0	12.0	18.0	11.0	9.0	9.0	8.0	8.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	18.0	8.0	9.8
9	9.0	11.0	11.0	15.0	12.0	13.0	14.0	9.0	10.0	11.0	11.0	12.0	10.0	9.0	10.0	8.0	8.0	8.0	11.0	11.0	12.0	10.0	12.0	12.0	15.0	8.0	10.8
10	12.0	7.0	11.0	12.0	5.0	0.0	5.0	18.0	12.0	11.0	13.0	12.0	13.0	14.0	16.0	17.0	14.0	12.0	10.0	8.0	13.0	8.0	9.0	10.0	18.0	0.0	10.9
11	9.0	9.0	9.0	10.0	7.0	9.0	7.0	11.0	12.0	11.0	11.0	11.0	13.0	12.0	12.0	16.0	16.0	14.0	14.0	10.0	11.0	10.0	9.0	8.0	16.0	7.0	10.9
12	9.0	9.0	8.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0	9.0	8.0	11.0	8.0	8.0	8.0	7.0	8.0	8.0	8.0	9.0	9.0	8.0	11.0	7.0	8.4
13	8.0	8.0	8.0	9.0	12.0	9.0	9.0	8.0	8.0	8.0	9.0	12.0	12.0	11.0	11.0	10.0	11.0	8.0	8.0	8.0	7.0	8.0	8.0	8.0	12.0	7.0	9.1
14	9.0	9.0	10.0	18.0	15.0	20.0	37.0	25.0	12.0	10.0	9.0	8.0	8.0	10.0	12.0	11.0	12.0	11.0	11.0	10.0	12.0	9.0	10.0	11.0	37.0	8.0	12.9
15	12.0	13.0	11.0	10.0	11.0	11.0	9.0	8.0	8.0	8.0	10.0	13.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	14.0	13.0	12.0	13.0	12.0	14.0	8.0	11.3
16	3.0	6.0	10.0	9.0	7.0	8.0	8.0	9.0	10.0	8.0	10.0	15.0	13.0	14.0	11.0	13.0	14.0	11.0	14.0	9.0	8.0	13.0	11.0	11.0	15.0	3.0	10.2
17	8.0	12.0	35.0	11.0	8.0	9.0	9.0	8.0	9.0	8.0	10.0	19.0	23.0	14.0	13.0	9.0	8.0	10.0	10.0	9.0	9.0	9.0	12.0	9.0	35.0	8.0	11.7
18	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	9.0	11.0	9.0	11.0	12.0	22.0	10.0	10.0	10.0	16.0	33.0	20.0	6.0	23.0	17.0	17.0	33.0	6.0	12.2
19	12.0	18.0	10.0	12.0	9.0	8.0	8.0	7.0	10.0	12.0	11.0	10.0	12.0	15.0	14.0	10.0	9.0	12.0	10.0	9.0	10.0	11.0	11.0	8.0	18.0	7.0	10.8
20	10.0	16.0	11.0	14.0	14.0	8.0	23.0	10.0	3.0	13.0	34.0	13.0	27.0	16.0	14.0	11.0	15.0	12.0	17.0	10.0	8.0	14.0	15.0	13.0	34.0	3.0	14.2
21	19.0	12.0	0.0	0.0	0.0	0.0	6.0	20.0	16.0	5.0	11.0	8.0	18.0	28.0	18.0	16.0	13.0	14.0	11.0	11.0	9.0	8.0	9.0	10.0	28.0	0.0	10.9
22	10.0	8.0	7.0	8.0	22.0	23.0	16.0	7.0	18.0	10.0	6.0	16.0	35.0	20.0	26.0	21.0	19.0	12.0	13.0	16.0	16.0	13.0	11.0	10.0	35.0	6.0	15.1
23	11.0	13.0	11.0	11.0	11.0	8.0	8.0	8.0	7.0	9.0	10.0	9.0	9.0	9.0	12.0	10.0	9.0	10.0	10.0	11.0	10.0	10.0	12.0	16.0	16.0	7.0	10.2
24	17.0	13.0	12.0	11.0	11.0	11.0	15.0	10.0	7.0	9.0	14.0	10.0	10.0	10.0	11.0	8.0	11.0	11.0	12.0	16.0	7.0	12.0	9.0	11.0	17.0	7.0	11.2
25	8.0	10.0	8.0	8.0	8.0	9.0	9.0	11.0	10.0	7.0	9.0	23.0	17.0	15.0	14.0	14.0	12.0	14.0	15.0	7.0	11.0	7.0	10.0	5.0	23.0	5.0	10.9
26	5.0	9.0	10.0	12.0	15.0	9.0	20.0	20.0	15.0	30.0	20.0	12.0	15.0	42.0	28.0	16.0	21.0	34.0	21.0	19.0	11.0	11.0	7.0	7.0	42.0	5.0	17.0
27	11.0	7.0	9.0	8.0	8.0	7.0	7.0	7.0	7.0	7.0	8.0	8.0	8.0	9.0	10.0	8.0	8.0	8.0	8.0	9.0	7.0	7.0	8.0	8.0	11.0	7.0	8.0
28	5.0	7.0	7.0	7.0	8.0	24.0	10.0	21.0	2.0	23.0	17.0	10.0	17.0	51.0	53.0	39.0	14.0	13.0	11.0	11.0	25.0	17.0	18.0	12.0	53.0	2.0	17.6
29	12.0	11.0	9.0	5.0	9.0	10.0	12.0	14.0	12.0	12.0	10.0	12.0	13.0	13.0	13.0	14.0	16.0	14.0	13.0	14.0	3.0	8.0	35.0	7.0	35.0	3.0	12.1
30	32.0	20.0	18.0	13.0	10.0	8.0	20.0	27.0	11.0	8.0	9.0	10.0	11.0	19.0	19.0	16.0	25.0	16.0	16.0	10.0	21.0	10.0	0.0	0.0	32.0	0.0	14.5
Max.	**32.0**	**39.0**	**35.0**	**21.0**	**41.0**	**24.0**	**37.0**	**27.0**	**18.0**	**30.0**	**34.0**	**37.0**	**35.0**	**51.0**	**53.0**	**39.0**	**35.0**	**34.0**	**33.0**	**20.0**	**29.0**	**23.0**	**35.0**	**17.0**	**53.0**		
Min.	**3.0**	**6.0**	**0.0**	**0.0**	**0.0**	**0.0**	**5.0**	**6.0**	**2.0**	**4.0**	**6.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**7.0**	**7.0**	**7.0**	**3.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**10.2**	**11.4**	**10.6**	**10.2**	**10.9**	**9.7**	**12.1**	**11.6**	**9.7**	**10.4**	**12.2**	**12.9**	**14.3**	**16.0**	**15.3**	**13.3**	**13.6**	**13.4**	**12.6**	**11.0**	**11.6**	**10.1**	**11.4**	**9.1**			**11.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	3.0	0.0	0.0	5.0	12.0	6.0	2.0	8.0	24.0	12.0	11.0	13.0	12.0	11.0	15.0	12.0	25.0	12.0	13.0	12.0	12.0	14.0	25.0	0.0	9.8
2	13.0	25.0	34.0	10.0	18.0	30.0	30.0	10.0	18.0	17.0	13.0	12.0	21.0	10.0	12.0	16.0	12.0	8.0	9.0	11.0	9.0	9.0	9.0	19.0	34.0	8.0	15.6
3	12.0	17.0	10.0	29.0	8.0	10.0	28.0	9.0	7.0	9.0	9.0	9.0	10.0	9.0	12.0	17.0	12.0	12.0	11.0	13.0	11.0	8.0	9.0	6.0	29.0	6.0	12.0
4	12.0	13.0	6.0	9.0	45.0	18.0	18.0	21.0	16.0	26.0	23.0	9.0	22.0	31.0	12.0	16.0	12.0	9.0	9.0	10.0	10.0	7.0	16.0	22.0	45.0	6.0	16.3
5	9.0	12.0	15.0	10.0	10.0	9.0	11.0	8.0	10.0	3.0	8.0	7.0	3.0	0.0	0.0	4.0	10.0	8.0	7.0	7.0	7.0	5.0	6.0	5.0	15.0	0.0	7.3
6	7.0	8.0	7.0	7.0	6.0	10.0	9.0	9.0	7.0	9.0	8.0	6.0	8.0	11.0	13.0	22.0	14.0	10.0	8.0	7.0	7.0	7.0	7.0	7.0	22.0	6.0	8.9
7	8.0	8.0	10.0	10.0	9.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	9.0	8.0	8.0	8.0	8.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	8.4
8	8.0	9.0	9.0	8.0	10.0	8.0	8.0	8.0	7.0	13.0	16.0	7.0	6.0	7.0	9.0	11.0	8.0	7.0	9.0	19.0	22.0	11.0	11.0	20.0	22.0	6.0	10.5
9	12.0	9.0	8.0	9.0	9.0	8.0	8.0	8.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	8.0	8.0	8.0	8.0	8.0	8.0	9.0	11.0	12.0	12.0	6.0	8.3
10	12.0	10.0	11.0	13.0	9.0	9.0	10.0	10.0	12.0	24.0	4.0	11.0	16.0	13.0	11.0	13.0	11.0	12.0	13.0	13.0	13.0	13.0	12.0	10.0	24.0	4.0	11.9
11	10.0	10.0	9.0	11.0	11.0	8.0	10.0	12.0	13.0	22.0	8.0	7.0	9.0	7.0	7.0	6.0	6.0	6.0	6.0	7.0	5.0	6.0	5.0	6.0	22.0	5.0	8.6
12	5.0	7.0	6.0	7.0	6.0	6.0	7.0	7.0	7.0	8.0	9.0	8.0	7.0	5.0	6.0	6.0	7.0	8.0	8.0	9.0	9.0	15.0	8.0	9.0	15.0	5.0	7.5
13	12.0	9.0	11.0	8.0	30.0	42.0	22.0	8.0	20.0	13.0	18.0	8.0	30.0	30.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	8.0	9.0	42.0	8.0	14.4
14	9.0	9.0	11.0	11.0	11.0	11.0	8.0	9.0	9.0	10.0	10.0	10.0	11.0	11.0	11.0	10.0	8.0	8.0	7.0	8.0	17.0	20.0	4.0	7.0	20.0	4.0	10.0
15	6.0	5.0	4.0	5.0	5.0	7.0	6.0	6.0	7.0	12.0	10.0	6.0	5.0	6.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	6.0	7.0	5.0	12.0	4.0	5.9
16	7.0	6.0	5.0	5.0	6.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	25.0	12.0	25.0	4.0	6.4
17	0.0	0.0	0.0	0.0	0.0	15.0	16.0	23.0	19.0	11.0	1.0	9.0	7.0	2.0	6.0	8.0	11.0	9.0	25.0	21.0	12.0	15.0	8.0	6.0	25.0	0.0	9.3
18	8.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	8.0	7.0	7.0	7.0	7.0	7.0	4.0	4.0	6.0	5.0	7.0	7.0	7.0	7.0	8.0	4.0	6.5
19	5.0	5.0	6.0	6.0	6.0	5.0	4.0	5.0	5.0	4.0	4.0	5.0	5.0	7.0	6.0	4.0	5.0	5.0	6.0	5.0	5.0	5.0	8.0	6.0	8.0	4.0	5.3
20	13.0	0.0	5.0	4.0	16.0	4.0	10.0	16.0	47.0	49.0	13.0	30.0	7.0	5.0	4.0	6.0	62.0	27.0	7.0	34.0	17.0	9.0	3.0	8.0	62.0	0.0	16.5
21	17.0	3.0	24.0	25.0	31.0	16.0	8.0	10.0	14.0	4.0	4.0	5.0	6.0	10.0	7.0	6.0	4.0	4.0	5.0	5.0	6.0	8.0	5.0	5.0	31.0	3.0	9.7
22	5.0	8.0	31.0	9.0	7.0	6.0	5.0	6.0	5.0	8.0	7.0	6.0	5.0	6.0	6.0	6.0	6.0	6.0	7.0	5.0	5.0	7.0	5.0	4.0	31.0	4.0	7.1
23	4.0	4.0	4.0	5.0	7.0	6.0	6.0	7.0	10.0	8.0	6.0	8.0	6.0	7.0	7.0	6.0	6.0	6.0	7.0	6.0	7.0	6.0	6.0	6.0	10.0	4.0	6.3
24	6.0	6.0	6.0	6.0	6.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	5.0	5.0	5.0	33.0	38.0	35.0	34.0	22.0	20.0	39.0	39.0	5.0	13.4
25	45.0	11.0	9.0	8.0	9.0	8.0	8.0	9.0	6.0	7.0	10.0	9.0	9.0	9.0	8.0	13.0	14.0	8.0	12.0	7.0	11.0	7.0	3.0	3.0	45.0	3.0	10.1
26	5.0	4.0	5.0	4.0	4.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	6.0	8.0	7.0	6.0	6.0	25.0	18.0	8.0	11.0	6.0	7.0	7.0	25.0	4.0	7.2
27	8.0	6.0	7.0	6.0	5.0	5.0	5.0	7.0	7.0	6.0	5.0	6.0	7.0	5.0	6.0	7.0	6.0	10.0	8.0	11.0	10.0	6.0	10.0	28.0	28.0	5.0	7.8
28	26.0	23.0	31.0	22.0	19.0	31.0	22.0	24.0	12.0	10.0	7.0	8.0	8.0	10.0	13.0	33.0	30.0	26.0	20.0	31.0	23.0	26.0	19.0	19.0	33.0	7.0	20.5
29	24.0	17.0	15.0	19.0	18.0	32.0	18.0	19.0	16.0	15.0	15.0	22.0	15.0	34.0	41.0	16.0	10.0	12.0	12.0	15.0	9.0	9.0	8.0	10.0	41.0	8.0	17.5
30	9.0	8.0	11.0	15.0	16.0	13.0	20.0	17.0	13.0	17.0	37.0	7.0	13.0	5.0	4.0	18.0	0.0	0.0	12.0	4.0	42.0	11.0	33.0	25.0	42.0	0.0	14.6
31	0.0	3.0	2.0	23.0	22.0	15.0	14.0	14.0	14.0	1.0	2.0	6.0	0.0	0.0	4.0	22.0	26.0	8.0	13.0	22.0	26.0	2.0	14.0	16.0	26.0	0.0	11.2
Max.	**45.0**	**25.0**	**34.0**	**29.0**	**45.0**	**42.0**	**30.0**	**24.0**	**47.0**	**49.0**	**37.0**	**30.0**	**30.0**	**34.0**	**41.0**	**33.0**	**62.0**	**33.0**	**38.0**	**35.0**	**42.0**	**26.0**	**33.0**	**39.0**	**62.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**4.0**	**5.0**	**2.0**	**1.0**	**1.0**	**5.0**	**0.0**	**0.0**	**0.0**	**4.0**	**0.0**	**0.0**	**5.0**	**4.0**	**5.0**	**2.0**	**3.0**	**3.0**		**0.0**	
Avg.	**10.2**	**8.4**	**10.4**	**10.0**	**11.8**	**11.9**	**11.4**	**10.3**	**11.0**	**11.3**	**10.0**	**8.7**	**9.2**	**9.5**	**8.7**	**10.6**	**11.2**	**10.3**	**11.1**	**11.7**	**12.4**	**9.5**	**10.1**	**11.6**			**10.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	22.0	22.0	27.0	33.0	16.0	24.0	39.0	17.0	7.0	19.0	27.0	23.0	20.0	6.0	20.0	19.0	17.0	28.0	29.0	11.0	8.0	11.0	5.0	5.0	39.0	5.0	19.0
2	5.0	5.0	5.0	5.0	6.0	5.0	6.0	6.0	5.0	4.0	5.0	7.0	7.0	6.0	7.0	5.0	4.0	4.0	5.0	6.0	6.0	5.0	5.0	5.0	7.0	4.0	5.4
3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	6.0	6.0	6.0	5.0	9.0	8.0	7.0	12.0	11.0	6.0	4.0	5.0	8.0	12.0	4.0	6.2
4	6.0	6.0	8.0	5.0	5.0	5.0	7.0	7.0	5.0	8.0	7.0	7.0	6.0	5.0	6.0	5.0	6.0	7.0	5.0	4.0	5.0	5.0	6.0	5.0	8.0	4.0	5.9
5	5.0	8.0	6.0	5.0	5.0	4.0	4.0	4.0	5.0	6.0	28.0	6.0	18.0	31.0	5.0	5.0	4.0	4.0	4.0	8.0	12.0	6.0	7.0	5.0	31.0	4.0	8.1
6	5.0	4.0	6.0	7.0	4.0	3.0	4.0	4.0	5.0	9.0	4.0	5.0	5.0	28.0	5.0	5.0	4.0	4.0	41.0	9.0	7.0	11.0	10.0	7.0	41.0	3.0	8.2
7	6.0	6.0	10.0	8.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	5.0	4.0	25.0	6.0	5.0	17.0	16.0	19.0	10.0	16.0	19.0	10.0	13.0	25.0	4.0	9.8
8	24.0	16.0	13.0	15.0	30.0	25.0	11.0	10.0	11.0	9.0	10.0	10.0	9.0	6.0	7.0	8.0	8.0	7.0	6.0	5.0	7.0	8.0	7.0	7.0	30.0	5.0	11.2
9	8.0	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	10.0	11.0	7.0	9.0	8.0	8.0	8.0	8.0	8.0	7.0	8.0	6.0	9.0	6.0	9.0	11.0	6.0	7.6
10	12.0	16.0	7.0	8.0	10.0	4.0	5.0	5.0	8.0	8.0	8.0	26.0	38.0	15.0	6.0	11.0	8.0	9.0	9.0	12.0	11.0	7.0	7.0	6.0	38.0	4.0	10.7
11	6.0	7.0	7.0	6.0	7.0	7.0	6.0	6.0	8.0	7.0	10.0	20.0	8.0	3.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	15.0	9.0	16.0	20.0	0.0	6.5
12	0.0	7.0	8.0	6.0	5.0	14.0	6.0	8.0	10.0	9.0	5.0	12.0	17.0	19.0	0.0	27.0	9.0	17.0	8.0	14.0	6.0	24.0	11.0	17.0	27.0	0.0	10.8
13	18.0	9.0	10.0	28.0	11.0	13.0	11.0	9.0	7.0	7.0	8.0	7.0	7.0	11.0	11.0	8.0	8.0	11.0	7.0	10.0	7.0	10.0	8.0	14.0	28.0	7.0	10.4
14	10.0	7.0	7.0	7.0	10.0	10.0	7.0	9.0	9.0	10.0	7.0	10.0	23.0	4.0	18.0	11.0	10.0	23.0	12.0	10.0	4.0	7.0	10.0	4.0	23.0	4.0	10.0
15	9.0	5.0	8.0	1.0	12.0	17.0	16.0	13.0	11.0	10.0	9.0	10.0	8.0	8.0	7.0	9.0	8.0	9.0	9.0	9.0	8.0	8.0	8.0	9.0	17.0	1.0	9.2
16	9.0	8.0	8.0	9.0	7.0	6.0	8.0	13.0	15.0	10.0	11.0	3.0	25.0	9.0	15.0	59.0	22.0	8.0	18.0	13.0	22.0	50.0	33.0	66.0	66.0	3.0	18.6
17	35.0	30.0	16.0	14.0	20.0	17.0	18.0	16.0	14.0	22.0	21.0	27.0	21.0	12.0	15.0	8.0	6.0	7.0	8.0	6.0	7.0	9.0	6.0	5.0	35.0	5.0	15.0
18	6.0	5.0	7.0	7.0	7.0	5.0	4.0	5.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	5.0	7.0	5.0	7.0	4.0	5.1
19	5.0	5.0	5.0	6.0	6.0	5.0	5.0	8.0	6.0	6.0	7.0	6.0	6.0	6.0	7.0	8.0	8.0	8.0	7.0	6.0	7.0	7.0	8.0	9.0	9.0	5.0	6.5
20	7.0	8.0	6.0	11.0	9.0	8.0	11.0	7.0	7.0	8.0	6.0	6.0	7.0	8.0	7.0	6.0	7.0	5.0	7.0	6.0	6.0	6.0	7.0	6.0	11.0	5.0	7.2
21	6.0	6.0	7.0	7.0	7.0	6.0	6.0	9.0	6.0	8.0	9.0	5.0	6.0	9.0	7.0	11.0	5.0	12.0	11.0	22.0	15.0	19.0	5.0	5.0	22.0	5.0	8.7
22	36.0	31.0	23.0	13.0	10.0	28.0	4.0	16.0	5.0	15.0	9.0	23.0	8.0	11.0	0.0	20.0	40.0	36.0	18.0	14.0	11.0	21.0	22.0	21.0	40.0	0.0	18.1
23	22.0	16.0	14.0	22.0	16.0	19.0	41.0	28.0	2.0	17.0	12.0	3.0	9.0	17.0	29.0	28.0	21.0	22.0	9.0	7.0	8.0	7.0	8.0	8.0	41.0	2.0	16.0
24	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0	5.0	6.0	6.0	6.0	9.0	6.0	7.0	8.0	9.0	9.0	10.0	12.0	8.0	8.0	12.0	5.0	7.1
25	8.0	8.0	5.0	5.0	5.0	10.0	8.0	18.0	6.0	7.0	7.0	7.0	12.0	20.0	0.0	37.0	25.0	21.0	6.0	9.0	12.0	10.0	7.0	6.0	37.0	0.0	10.8
26	6.0	9.0	5.0	11.0	7.0	9.0	7.0	15.0	9.0	16.0	25.0	14.0	6.0	6.0	6.0	5.0	8.0	7.0	8.0	7.0	10.0	7.0	5.0	8.0	25.0	5.0	9.0
27	9.0	5.0	8.0	7.0	4.0	4.0	5.0	9.0	4.0	4.0	3.0	27.0	30.0	6.0	5.0	6.0	6.0	5.0	4.0	7.0	4.0	4.0	4.0	4.0	30.0	3.0	7.3
28	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	5.0	5.0	6.0	3.0	4.3
29	4.0	4.0	4.0	5.0	6.0	5.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	5.0	6.0	5.0	7.0	6.0	6.0	6.0	6.0	6.0	5.0	7.0	7.0	4.0	5.7
30	9.0	9.0	6.0	6.0	6.0	7.0	31.0	54.0	6.0	5.0	5.0	5.0	6.0	8.0	14.0	7.0	6.0	6.0	5.0	24.0	17.0	13.0	6.0	4.0	54.0	4.0	11.0
Max.	**36.0**	**31.0**	**27.0**	**33.0**	**30.0**	**28.0**	**41.0**	**54.0**	**15.0**	**22.0**	**28.0**	**27.0**	**38.0**	**31.0**	**29.0**	**59.0**	**40.0**	**36.0**	**41.0**	**24.0**	**22.0**	**50.0**	**33.0**	**66.0**	**66.0**		
Min.	**0.0**	**4.0**	**3.0**	**1.0**	**4.0**	**3.0**	**4.0**	**4.0**	**2.0**	**4.0**	**3.0**	**3.0**	**4.0**	**3.0**	**0.0**	**0.0**	**4.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**4.0**	**4.0**		**0.0**	
Avg.	**10.4**	**9.5**	**8.6**	**9.3**	**8.6**	**9.6**	**10.1**	**11.0**	**7.0**	**8.9**	**9.4**	**10.2**	**11.4**	**10.4**	**8.0**	**11.6**	**10.2**	**10.5**	**10.0**	**9.1**	**8.5**	**11.0**	**8.3**	**9.9**			**9.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 3 Meteorological Station - Wind Sigma (Climatronics)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	13.0	6.0	14.0	8.0	5.0	19.0	32.0	4.0	8.0	21.0	22.0	24.0	20.0	14.0	17.0	31.0	31.0	23.0	32.0	35.0	34.0	33.0	36.0	36.0	4.0	20.3
2	31.0	37.0	40.0	28.0	26.0	25.0	14.0	10.0	7.0	7.0	8.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	40.0	6.0	13.0
3	7.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	8.0	7.0	7.0	6.0	6.0	6.0	7.0	7.0	7.0	8.0	7.0	6.0	7.0	6.0	7.0	8.0	6.0	6.6
4	8.0	6.0	10.0	10.0	12.0	12.0	11.0	12.0	11.0	9.0	8.0	9.0	7.0	6.0	7.0	7.0	8.0	9.0	10.0	12.0	12.0	10.0	9.0	8.0	12.0	6.0	9.3
5	10.0	9.0	9.0	9.0	11.0	12.0	10.0	8.0	10.0	9.0	10.0	8.0	9.0	9.0	8.0	8.0	9.0	7.0	10.0	14.0	18.0	9.0	7.0	7.0	18.0	7.0	9.6
6	12.0	14.0	7.0	8.0	8.0	9.0	10.0	9.0	10.0	9.0	10.0	13.0	17.0	9.0	6.0	14.0	9.0	5.0	13.0	4.0	7.0	5.0	4.0	5.0	17.0	4.0	9.0
7	5.0	5.0	6.0	6.0	6.0	7.0	6.0	6.0	7.0	6.0	7.0	7.0	6.0	5.0	5.0	6.0	6.0	6.0	19.0	20.0	21.0	8.0	7.0	11.0	21.0	5.0	8.1
8	10.0	6.0	9.0	9.0	7.0	8.0	6.0	6.0	6.0	7.0	6.0	6.0	8.0	7.0	6.0	6.0	6.0	6.0	8.0	10.0	7.0	7.0	10.0	7.0	10.0	6.0	7.3
9	7.0	7.0	7.0	5.0	6.0	15.0	7.0	5.0	6.0	7.0	12.0	7.0	40.0	9.0	5.0	11.0	11.0	11.0	9.0	10.0	14.0	16.0	16.0	19.0	40.0	5.0	10.9
10	9.0	9.0	9.0	8.0	6.0	6.0	6.0	5.0	6.0	5.0	7.0	9.0	19.0	11.0	31.0	20.0	14.0	21.0	21.0	0.0	0.0	5.0	23.0	31.0	31.0	0.0	11.7
11	31.0	27.0	29.0	25.0	30.0	22.0	21.0	12.0	14.0	7.0	12.0	4.0	33.0	30.0	16.0	33.0	7.0	10.0	7.0	5.0	9.0	17.0	8.0	5.0	33.0	4.0	17.3
12	6.0	7.0	37.0	43.0	53.0	40.0	30.0	59.0	54.0	31.0	16.0	22.0	15.0	5.0	5.0	15.0	13.0	25.0	24.0	8.0	12.0	7.0	6.0	7.0	59.0	5.0	22.5
13	6.0	6.0	5.0	5.0	5.0	7.0	28.0	13.0	11.0	10.0	6.0	8.0	19.0	37.0	18.0	6.0	5.0	14.0	31.0	25.0	18.0	20.0	17.0	35.0	37.0	5.0	14.8
14	20.0	22.0	16.0	29.0	23.0	15.0	33.0	30.0	10.0	18.0	21.0	22.0	14.0	19.0	20.0	12.0	11.0	12.0	17.0	17.0	10.0	9.0	10.0	9.0	33.0	9.0	17.5
15	8.0	8.0	11.0	10.0	11.0	12.0	11.0	11.0	8.0	12.0	9.0	25.0	33.0	14.0	8.0	23.0	24.0	7.0	16.0	20.0	25.0	23.0	23.0	5.0	33.0	5.0	14.9
16	5.0	5.0	5.0	7.0	23.0	48.0	17.0	23.0	0.0	28.0	13.0	19.0	12.0	11.0	13.0	14.0	13.0	21.0	20.0	21.0	19.0	18.0	14.0	13.0	48.0	0.0	15.9
17	8.0	9.0	8.0	9.0	9.0	8.0	9.0	8.0	10.0	9.0	7.0	9.0	10.0	8.0	8.0	8.0	9.0	9.0	10.0	9.0	9.0	9.0	12.0	9.0	12.0	7.0	8.9
18	8.0	8.0	7.0	9.0	10.0	9.0	9.0	9.0	8.0	7.0	6.0	6.0	6.0	8.0	8.0	9.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	10.0	6.0	7.3
19	5.0	6.0	6.0	5.0	6.0	5.0	6.0	6.0	7.0	8.0	6.0	7.0	7.0	7.0	9.0	11.0	7.0	9.0	5.0	5.0	6.0	7.0	6.0	7.0	11.0	5.0	6.6
20	9.0	8.0	6.0	6.0	7.0	7.0	6.0	5.0	4.0	4.0	4.0	4.0	8.0	12.0	6.0	5.0	8.0	40.0	43.0	31.0	6.0	16.0	19.0	49.0	49.0	4.0	13.0
21	22.0	9.0	0.0	0.0	0.0	11.0	25.0	13.0	16.0	40.0	17.0	22.0	36.0	9.0	33.0	18.0	28.0	22.0	13.0	5.0	16.0	13.0	17.0	22.0	40.0	0.0	17.0
22	11.0	6.0	16.0	0.0	13.0	8.0	10.0	9.0	8.0	9.0	8.0	11.0	9.0	9.0	11.0	9.0	8.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	16.0	0.0	9.3
23	8.0	9.0	9.0	8.0	9.0	8.0	9.0	13.0	10.0	11.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	6.0	6.0	6.0	13.0	5.0	7.2
24	6.0	6.0	6.0	6.0	7.0	12.0	47.0	15.0	8.0	0.0	20.0	30.0	21.0	26.0	7.0	44.0	23.0	47.0	31.0	16.0	25.0	15.0	12.0	12.0	47.0	0.0	18.4
25	25.0	11.0	8.0	9.0	8.0	8.0	9.0	8.0	8.0	7.0	9.0	11.0	11.0	10.0	11.0	10.0	23.0	9.0	7.0	6.0	6.0	22.0	31.0	6.0	31.0	6.0	11.4
26	7.0	6.0	7.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0	7.0	6.0	6.0	7.0	7.0	7.0	8.0	7.0	8.0	6.0	6.9
27	7.0	9.0	7.0	6.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	7.0	6.0	5.0	7.0	6.0	9.0	7.0	5.0	6.0	6.0	6.0	7.0	9.0	5.0	6.5
28	6.0	7.0	6.0	6.0	7.0	6.0	6.0	6.0	6.0	6.0	7.0	10.0	8.0	11.0	9.0	5.0	8.0	5.0	6.0	14.0	11.0	12.0	8.0	8.0	14.0	5.0	7.7
29	6.0	8.0	7.0	6.0	6.0	6.0	8.0	7.0	7.0	6.0	6.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0	7.0	8.0	15.0	15.0	5.0	6.5
30	9.0	6.0	5.0	6.0	6.0	7.0	6.0	5.0	5.0	5.0	6.0	6.0	7.0	8.0	6.0	5.0	6.0	7.0	7.0	11.0	10.0	6.0	6.0	6.0	11.0	5.0	6.5
31	7.0	6.0	13.0	8.0	7.0	8.0	9.0	7.0	7.0	5.0	6.0	6.0	7.0	6.0	5.0	5.0	5.0	6.0	6.0	9.0	7.0	6.0	7.0	7.0	13.0	5.0	6.9
Max.	**31.0**	**37.0**	**40.0**	**43.0**	**53.0**	**48.0**	**47.0**	**59.0**	**54.0**	**40.0**	**21.0**	**30.0**	**40.0**	**37.0**	**33.0**	**44.0**	**31.0**	**47.0**	**43.0**	**32.0**	**35.0**	**34.0**	**33.0**	**49.0**	**59.0**		
Min.	**5.0**	**5.0**	**0.0**	**0.0**	**0.0**	**5.0**	**6.0**	**5.0**	**0.0**	**0.0**	**4.0**	**4.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**0.0**	**0.0**	**5.0**	**4.0**	**5.0**		**0.0**	
Avg.	**10.5**	**9.7**	**10.4**	**10.1**	**11.3**	**11.8**	**13.2**	**12.0**	**9.3**	**10.0**	**9.5**	**11.0**	**13.6**	**11.0**	**10.0**	**11.6**	**10.8**	**12.7**	**13.2**	**11.5**	**11.5**	**11.3**	**11.6**	**12.5**			**11.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Appendix B

Pebble 5A Validated Continuous Data Summaries

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-7.5	-9.8	-10.0	-10.9	-10.8	-10.6	-10.7	-10.1	-10.8	-11.4	-11.3	-11.5	-13.1	-14.4	-13.0	-12.0	-11.2	-11.2	-10.2	-10.5	-10.2	-10.5	-13.1	-13.8	-7.5	-14.4	-11.2
2	-15.9	-15.6	-14.4	-12.3	-12.6	-12.3	-12.8	-13.7	-13.9	-13.4	-13.1	-11.7	-11.0	-12.2	-11.6	-12.5	-13.3	-13.1	-12.5	-11.9	-12.4	-12.7	-12.7	-12.5	-11.0	-15.9	-12.9
3	-12.1	-12.2	-11.9	-13.2	-13.7	-13.0	-13.2	-13.3	-13.8	-13.5	-13.4	-13.9	-15.1	-14.0	-14.9	-16.2	-16.8	-15.7	-15.2	-15.1	-15.6	-16.9	-17.7	-17.6	-11.9	-17.7	-14.5
4	-18.6	-18.6	-18.7	-19.3	-19.0	-20.2	-20.2	-20.0	-20.7	-20.6	-20.0	-21.2	-21.9	-22.1	-21.9	-22.3	-22.4	-22.3	-22.8	-23.2	-23.4	-23.7	-24.0	-24.5	-18.6	-24.5	-21.3
5	-24.8	-25.1	-25.4	-25.9	-26.0	-25.6	-25.9	-26.7	-26.6	-26.5	-26.2	-25.8	-25.6	-25.3	-25.1	-25.4	-25.6	-25.9	-25.8	-25.7	-26.1	-26.8	-27.4	-27.7	-24.8	-27.7	-25.9
6	-27.9	-28.3	-28.5	-28.7	-28.8	-28.8	-29.1	-29.4	-29.5	-30.0	-29.7	-29.8	-29.6	-29.3	-29.2	-29.0	-29.2	-29.7	-29.9	-30.4	-30.4	-30.1	-30.0	-30.1	-27.9	-30.4	-29.4
7	-30.0	-29.8	-29.9	-29.6	-29.2	-29.1	-28.8	-28.8	-28.7	-27.7	-28.3	-27.1	-27.7	-27.3	-27.1	-26.1	-26.9	-26.4	-26.5	-26.6	-26.6	-26.7	-27.2	-27.5	-26.1	-30.0	-27.9
8	-27.3	-26.5	-26.3	-26.1	-25.7	-26.1	-26.1	-26.1	-25.3	-25.2	-25.5	-25.1	-24.7	-24.1	-23.5	-23.1	-23.3	-23.8	-24.5	-25.5	-26.0	-26.4	-25.8	-25.5	-23.1	-27.3	-25.3
9	-25.9	-25.0	-25.3	-26.3	-27.2	-27.3	-27.5	-27.9	-27.7	-27.5	-27.4	-27.3	-27.1	-26.5	-26.0	-25.6	-25.7	-25.8	-25.9	-25.9	-25.7	-25.6	-25.6	-25.5	-25.0	-27.9	-26.4
10	-25.5	-25.7	-25.9	-26.2	-26.5	-26.3	-26.3	-26.5	-26.9	-27.3	-27.1	-27.2	-27.2	-27.6	-27.7	-27.9	-28.2	-28.5	-29.0	-29.2	-29.0	-28.9	-29.5	-29.4	-25.5	-29.5	-27.5
11	-28.4	-29.0	-28.6	-28.4	-29.1	-29.4	-29.5	-29.9	-29.9	-30.4	-30.5	-30.0	-30.6	-30.3	-30.5	-30.3	-30.1	-30.4	-30.7	-30.6	-30.4	-30.6	-31.0	-31.4	-28.4	-31.4	-30.0
12	-31.6	-31.6	-32.0	-31.6	-32.0	-31.9	-31.9	-31.4	-31.5	-31.0	-31.0	-31.0	-31.1	-30.9	-30.6	-31.1	-32.1	-32.9	-33.0	-33.3	-33.1	-33.3	-33.4	-33.5	-30.6	-33.5	-31.9
13	-33.3	-32.9	-33.0	-33.0	-32.7	-32.7	-32.6	-32.8	-32.6	-33.0	-32.8	-32.6	-32.6	-32.1	-32.1	-31.7	-30.6	-30.5	-30.6	-29.8	-29.4	-28.4	-27.5	-25.5	-25.5	-33.3	-31.4
14	-25.3	-22.7	-20.7	-20.0	-19.0	-17.4	-16.7	-16.1	-18.7	-18.8	-17.5	-16.5	-14.6	-13.7	-13.6	-13.0	-12.6	-11.8	-11.3	-10.4	-9.4	-8.8	-8.4	-7.8	-7.8	-25.3	-15.2
15	-6.7	-6.0	-5.7	-5.7	-5.7	-6.7	-7.2	-7.2	-7.5	-7.4	-7.4	-7.2	-7.2	-7.0	-6.8	-6.8	-6.8	-6.9	-6.8	-6.7	-6.4	-6.1	-5.8	-5.8	-5.7	-7.5	-6.6
16	-5.6	-5.4	-5.1	-4.5	-4.2	-4.4	-5.0	-5.4	-5.7	-5.7	-5.8	-5.7	-5.5	-5.5	-5.1	-5.1	-4.9	-5.3	-5.7	-5.5	-5.7	-6.2	-6.4	-6.5	-4.2	-6.5	-5.4
17	-6.4	-6.7	-7.3	-6.8	-5.7	-5.3	-5.1	-4.5	-4.7	-4.7	-4.7	-4.8	-4.8	-4.4	-4.3	-4.0	-3.9	-3.8	-3.9	-4.1	-4.2	-4.1	-4.2	-4.2	-3.8	-7.3	-4.9
18	-4.3	-4.5	-4.5	-4.7	-4.6	-4.9	-5.1	-5.2	-5.2	-5.0	-5.0	-5.0	-4.8	-4.1	-3.7	-4.4	-4.7	-4.7	-4.6	-4.3	-4.3	-4.2	-4.6	-5.2	-3.7	-5.2	-4.6
19	-5.2	-5.0	-5.1	-5.1	-5.0	-4.9	-4.0	-3.4	-3.6	-3.6	-3.3	-2.9	-2.9	-3.0	-3.0	-2.9	-2.8	-2.8	-2.7	-2.6	-2.5	-2.5	-2.5	-2.6	-2.5	-5.2	-3.5
20	-2.5	-2.6	-2.7	-2.5	-2.2	-2.1	-2.1	-2.1	-1.9	-2.0	-1.8	-1.6	-1.3	-1.3	-1.3	-1.4	-1.5	-1.9	-1.7	-2.0	-2.1	-2.0	-2.7	-2.9	-1.3	-2.9	-2.0
21	-3.0	-3.1	-2.7	-2.9	-3.0	-2.7	-2.5	-2.1	-2.1	-1.9	-1.8	-1.7	-1.5	-1.3	-1.1	-0.9	-0.9	-0.9	-1.1	-1.3	-1.3	-1.3	-1.2	-1.2	-0.9	-3.1	-1.8
22	-1.7	-2.5	-3.5	-4.0	-4.2	-4.4	-4.0	-4.0	-3.8	-3.4	-3.9	-5.0	-6.0	-6.3	-7.1	-7.7	-8.1	-8.4	-8.3	-8.5	-8.4	-8.2	-8.2	-8.6	-1.7	-8.6	-5.8
23	-8.9	-10.4	-11.2	-13.4	-15.2	-16.3	-17.6	-18.5	-18.9	-19.6	-20.2	-20.3	-20.5	-21.0	-21.4	-21.7	-22.3	-23.0	-23.4	-23.5	-23.7	-23.4	-22.2	-22.7	-8.9	-23.7	-19.1
24	-19.3	-18.5	-17.6	-17.3	-15.9	-14.0	-15.1	-15.0	-13.9	-13.8	-13.4	-13.2	-13.1	-12.6	-11.9	-11.5	-11.3	-11.1	-11.0	-10.8	-10.7	-10.1	-9.7	-9.5	-9.5	-19.3	-13.3
25	-9.6	-9.5	-8.0	-7.1	-7.1	-8.5	-8.5	-7.7	-8.2	-8.4	-8.5	-8.4	-8.5	-8.4	-8.1	-8.2	-7.9	-8.2	-8.2	-9.9	-12.0	-14.2	-16.3	-17.5	-7.1	-17.5	-9.4
26	-18.4	-19.2	-19.2	-19.8	-20.2	-20.2	-20.1	-20.3	-21.2	-21.1	-20.5	-19.8	-18.7	-15.9	-15.1	-15.2	-14.8	-14.3	-14.4	-14.4	-14.1	-13.6	-13.6	-13.9	-13.6	-21.2	-17.4
27	-13.9	-13.9	-13.7	-13.5	-12.8	-12.1	-12.0	-11.5	-10.8	-9.9	-9.1	-9.0	-8.8	-8.4	-8.0	-7.9	-7.6	-7.6	-7.4	-7.1	-7.1	-7.4	-7.4	-7.3	-7.1	-13.9	-9.8
28	-7.1	-7.2	-7.3	-7.4	-7.4	-7.4	-7.8	-8.2	-8.2	-8.3	-8.3	-8.0	-7.8	-7.5	-7.1	-6.5	-5.8	-5.9	-6.2	-6.1	-5.8	-6.1	-5.6	-5.5	-5.5	-8.3	-7.0
29	-5.5	-5.9	-5.8	-5.9	-5.8	-5.8	-6.5	-6.9	-6.9	-6.8	-6.5	-6.4	-6.3	-6.5	-6.8	-7.2	-7.4	-7.7	-8.5	-8.7	-9.0	-9.4	-9.6	-9.8	-5.5	-9.8	-7.1
30	-9.7	-9.6	-9.5	-10.1	-10.9	-10.8	-10.7	-10.6	-11.1	-12.8	-13.8	-14.0	-13.7	-14.5	-14.9	-15.1	-15.3	-15.4	-15.1	-15.0	-15.2	-15.3	-15.5	-16.2	-9.5	-16.2	-13.1
31	-15.2	-14.6	-14.4	-13.7	-13.3	-12.9	-12.4	-11.9	-12.3	-12.0	-11.9	-12.6	-12.0	-10.8	-9.7	-8.3	-9.3	-11.1	-11.6	-12.3	-12.5	-12.7	-13.3	-13.2	-8.3	-15.2	-12.3
Max.	**-1.7**	**-2.5**	**-2.7**	**-2.5**	**-2.2**	**-2.1**	**-2.1**	**-2.1**	**-1.9**	**-1.9**	**-1.8**	**-1.6**	**-1.3**	**-1.3**	**-1.1**	**-0.9**	**-0.9**	**-0.9**	**-1.1**	**-1.3**	**-1.3**	**-1.3**	**-1.2**	**-1.2**	**-0.9**		
Min.	**-33.3**	**-32.9**	**-33.0**	**-33.0**	**-32.7**	**-32.7**	**-32.6**	**-32.8**	**-32.6**	**-33.0**	**-32.8**	**-32.6**	**-32.6**	**-32.1**	**-32.1**	**-31.7**	**-32.1**	**-32.9**	**-33.0**	**-33.3**	**-33.1**	**-33.3**	**-33.4**	**-33.5**		**-33.5**	
Avg.	**-15.4**	**-15.4**	**-15.3**	**-15.4**	**-15.3**	**-15.3**	**-15.4**	**-15.4**	**-15.6**	**-15.6**	**-15.5**	**-15.4**	**-15.3**	**-15.1**	**-14.9**	**-14.9**	**-14.9**	**-15.0**	**-15.1**	**-15.2**	**-15.2**	**-15.4**	**-15.5**	**-15.6**			**-15.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-13.1	-13.7	-13.5	-13.7	-14.1	-14.6	-14.4	-13.8	-14.0	-14.1	-13.9	-13.7	-13.0	-12.3	-11.8	-11.5	-12.1	-12.4	-13.1	-13.7	-14.3	-14.5	-14.8	-14.9	-11.5	-14.9	-13.5
2	-14.7	-14.6	-14.5	-15.4	-16.1	-16.2	-16.7	-16.8	-17.1	-17.2	-17.6	-17.9	-19.0	-19.3	-18.4	-18.5	-18.6	-18.3	-18.8	-19.3	-19.4	-20.2	-20.9	-21.6	-14.5	-21.6	-17.8
3	-22.5	-23.3	-23.6	-24.1	-24.8	-25.8	-26.2	-27.0	-26.7	-26.3	-27.1	-26.7	-26.6	-27.0	-26.8	-25.8	-25.8	-26.2	-25.9	-27.0	-24.9	-23.0	-22.9	-22.6	-22.5	-27.1	-25.4
4	-20.6	-19.1	-19.5	-19.7	-19.7	-19.0	-19.0	-18.9	-19.0	-19.3	-19.2	-18.9	-18.5	-18.2	-17.5	-16.9	-17.2	-18.3	-19.7	-22.0	-22.6	-23.0	-23.0	-23.5	-16.9	-23.5	-19.7
5	-23.9	-23.8	-24.1	-26.2	-26.2	-25.5	-25.3	-25.6	-27.6	-28.1	-27.5	-26.0	-25.9	-26.2	-24.7	-24.8	-24.8	-25.2	-25.4	-23.0	-21.1	-19.9	-19.6	-18.6	-18.6	-28.1	-24.5
6	-18.3	-18.2	-17.4	-17.5	-17.4	-17.4	-17.5	-17.5	-16.9	-18.4	-20.5	-18.0	-22.2	-21.4	-19.8	-20.2	-20.3	-21.9	-23.1	-22.6	-24.0	-24.7	-22.1	-22.7	-16.9	-24.7	-20.0
7	-24.6	-22.8	-24.4	-24.6	-23.3	-23.7	-23.5	-22.2	-22.4	-22.9	-22.7	-21.4	-18.0	-16.9	-16.1	-15.4	-14.7	-15.1	-14.7	-14.7	-13.6	-14.4	-15.1	-15.4	-13.6	-24.6	-19.3
8	-15.9	-15.2	-14.1	-14.5	-14.3	-14.3	-13.9	-13.8	-14.3	-13.9	-14.5	-13.9	-13.5	-13.6	-13.2	-12.8	-12.8	-13.4	-13.4	-13.3	-13.1	-13.1	-13.0	-12.6	-12.6	-15.9	-13.8
9	-12.6	-12.6	-12.2	-12.1	-11.8	-11.8	-11.9	-12.0	-11.9	-11.8	-11.8	-11.8	-11.5	-10.3	-10.5	-9.2	-9.9	-10.6	-12.5	-12.4	-11.8	-11.5	-11.8	-12.3	-9.2	-12.6	-11.6
10	-13.2	-13.0	-12.9	-12.7	-13.0	-13.8	-13.2	-13.4	-14.3	-16.4	-18.0	-16.7	-16.7	-16.0	-15.2	-15.9	-16.5	-16.1	-16.4	-16.5	-16.4	-16.3	-16.2	-16.6	-12.7	-18.0	-15.2
11	-16.7	-16.8	-16.8	-17.1	-17.0	-17.3	-16.6	-16.3	-15.9	-16.2	-15.8	-15.0	-14.0	-13.1	-12.7	-11.3	-11.7	-11.8	-10.9	-11.7	-13.6	-14.7	-14.8	-16.4	-10.9	-17.3	-14.8
12	-18.6	-20.4	-22.0	-22.8	-24.2	-25.7	-26.2	-25.7	-26.1	-25.8	-25.0	-24.4	-24.9	-23.7	-23.4	-21.4	-18.7	-15.6	-13.8	-13.6	-10.9	-10.4	-10.9	-11.6	-10.4	-26.2	-20.2
13	-11.2	-10.6	-10.4	-10.4	-9.6	-9.3	-8.4	-7.3	-6.5	-5.3	-4.6	-4.0	-3.4	-3.0	-2.8	-2.6	-2.4	-2.3	-2.4	-2.3	-2.3	-2.2	-2.0	-2.0	-2.0	-11.2	-5.3
14	-2.0	-1.9	-1.9	-1.9	-1.9	-2.0	-2.1	-5.8	-10.7	-13.0	-14.9	-16.3	-17.2	-17.9	-18.7	-19.7	-20.3	-20.8	-21.1	-21.2	-21.0	-20.5	-20.2	-20.7	-1.9	-21.2	-13.1
15	-21.9	-22.7	-23.5	-24.1	-24.7	-24.0	-24.8	-25.1	-25.6	-25.4	-24.9	-23.9	-24.4	-24.2	-23.6	-24.2	-20.9	-21.2	-20.9	-22.1	-21.9	-19.7	-17.6	-17.8	-17.6	-25.6	-22.9
16	-16.6	-15.1	-13.9	-13.1	-12.2	-11.0	-10.5	-9.7	-9.5	-9.4	-9.7	-9.4	-8.9	-8.6	-8.0	-7.5	-7.1	-6.4	-6.4	-7.1	-7.4	-7.5	-7.3	-7.4	-6.4	-16.6	-9.6
17	-7.3	-7.3	-7.9	-7.7	-5.4	-4.5	-3.5	-3.4	-3.5	-4.3	-3.9	-2.8	-2.4	-2.1	-1.8	-1.8	-1.8	-1.7	-2.0	-2.2	-2.0	-2.1	-2.2	-2.4	-1.7	-7.9	-3.6
18	-2.4	-2.0	-2.2	-2.2	-2.4	-2.3	-2.2	-2.1	-1.8	-1.5	-1.6	-1.7	-1.8	-1.8	-1.8	-1.9	-2.1	-2.0	-1.9	-1.8	-1.9	-2.0	-1.9	-1.9	-1.5	-2.4	-2.0
19	-2.1	-2.0	-2.0	-2.5	-2.7	-2.7	-2.9	-2.6	-2.4	-3.3	-2.8	-1.9	-1.2	-0.7	-0.6	-0.7	-0.9	-0.9	-1.0	-1.1	-1.0	-1.1	-1.2	-1.4	-0.6	-3.3	-1.7
20	-1.4	-1.6	-2.0	-1.9	-1.9	-2.0	-2.1	-2.2	-2.5	-2.7	-2.6	-2.3	-2.1	-1.9	-1.7	-1.8	-1.8	-2.1	-2.2	-2.2	-2.2	-2.4	-2.3	-2.4	-1.4	-2.7	-2.1
21	-2.5	-2.9	-2.8	-2.8	-2.7	-2.7	-2.8	-2.6	-2.6	-2.5	-2.5	-2.4	-2.2	-2.0	-1.7	-1.7	-1.8	-1.6	-1.8	-2.0	-2.1	-2.2	-2.1	-2.2	-1.6	-2.9	-2.3
22	-2.1	-2.1	-2.1	-2.1	-2.2	-2.5	-2.7	-2.7	-2.6	-2.7	-2.8	-2.7	-2.4	-2.3	-2.0	-2.1	-2.6	-3.0	-3.3	-3.5	-3.7	-3.8	-3.9	-4.2	-2.0	-4.2	-2.8
23	-4.2	-4.2	-4.4	-4.6	-4.8	-5.0	-5.0	-5.0	-5.2	-5.4	-5.3	-5.1	-4.9	-4.5	-4.0	-3.8	-4.0	-4.5	-5.4	-6.6	-7.4	-7.5	-7.7	-8.7	-3.8	-8.7	-5.3
24	-9.5	-10.4	-10.8	-10.9	-11.0	-10.9	-11.1	-11.5	-12.1	-13.5	-14.2	-14.4	-14.7	-14.8	-14.5	-14.2	-13.7	-12.6	-13.2	-15.3	-16.6	-16.7	-16.9	-17.0	-9.5	-17.0	-13.3
25	-17.2	-17.9	-18.2	-18.8	-19.5	-19.9	-20.6	-21.3	-21.7	-21.7	-20.9	-19.2	-17.2	-15.6	-15.5	-14.5	-12.9	-11.6	-10.7	-10.7	-10.4	-10.2	-10.1	-9.5	-9.5	-21.7	-16.1
26	-9.2	-9.0	-8.6	-8.5	-8.5	-8.6	-8.8	-8.7	-8.8	-8.7	-8.8	-8.9	-8.4	-8.0	-7.9	-7.6	-7.2	-7.7	-9.0	-9.9	-11.1	-11.7	-8.0	-8.5	-7.2	-11.7	-8.8
27	-11.6	-13.4	-11.7	-12.5	-10.7	-7.7	-8.1	-8.9	-8.4	-7.8	-6.5	-5.2	-5.0	-3.6	-4.3	-5.6	-6.0	-6.5	-6.4	-6.6	-5.5	-6.1	-6.1	-5.7	-3.6	-13.4	-7.5
28	-5.0	-5.1	-5.2	-4.6	-4.7	-4.7	-4.6	-4.5	-4.1	-3.6	-3.9	-3.6	-3.5	-3.2	-2.8	-2.3	-1.7	-1.4	-2.7	-3.9	-4.6	-3.4	-3.7	-3.3	-1.4	-5.2	-3.8
29	-4.2	-8.8	-8.2	-8.0	-7.6	-6.9	-7.4	-11.1	-12.1	-10.9	-11.7	-11.2	-13.9	-14.3	-14.9	-15.2	-14.9	-14.8	-14.9	-15.5	-15.9	-16.1	-16.7	-17.3	-4.2	-17.3	-12.2
Max.	**-1.4**	**-1.6**	**-1.9**	**-1.9**	**-1.9**	**-2.0**	**-2.1**	**-2.1**	**-1.8**	**-1.5**	**-1.6**	**-1.7**	**-1.2**	**-0.7**	**-0.6**	**-0.7**	**-0.9**	**-0.9**	**-1.0**	**-1.1**	**-1.0**	**-1.1**	**-1.2**	**-1.4**	**-0.6**		
Min.	**-24.6**	**-23.8**	**-24.4**	**-26.2**	**-26.2**	**-25.8**	**-26.2**	**-27.0**	**-27.6**	**-28.1**	**-27.5**	**-26.7**	**-26.6**	**-27.0**	**-26.8**	**-25.8**	**-25.8**	**-26.2**	**-25.9**	**-27.0**	**-24.9**	**-24.7**	**-23.0**	**-23.5**		**-28.1**	
Avg.	**-11.9**	**-12.1**	**-12.1**	**-12.3**	**-12.2**	**-12.1**	**-12.1**	**-12.3**	**-12.6**	**-12.8**	**-12.9**	**-12.4**	**-12.3**	**-11.9**	**-11.6**	**-11.4**	**-11.2**	**-11.2**	**-11.5**	**-11.9**	**-11.8**	**-11.8**	**-11.5**	**-11.8**			**-12.0**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-17.7	-17.8	-16.5	-15.1	-15.4	-16.7	-16.2	-16.6	-16.7	-17.0	-16.0	-14.9	-13.9	-12.6	-11.8	-11.2	-10.0	-9.4	-8.9	-8.6	-7.7	-7.3	-6.9	-6.3	-6.3	-17.8	-13.0
2	-5.9	-5.2	-4.8	-3.7	-3.5	-3.5	-3.5	-3.5	-3.7	-4.2	-4.3	-4.0	-3.5	-3.2	-2.6	-1.8	-2.2	-2.7	-3.0	-3.4	-3.7	-3.5	-3.3	-3.1	-1.8	-5.9	-3.6
3	-3.1	-3.4	-4.0	-3.4	-3.2	-3.2	-3.3	-3.5	-3.5	-3.1	-2.8	-2.9	-2.9	-2.9	-2.6	-2.4	-2.4	-2.0	-1.7	-1.7	-1.5	-1.5	-1.4	-1.2	-1.2	-4.0	-2.6
4	-1.1	-1.0	-0.8	-0.8	-1.1	-1.5	-1.4	-1.4	-1.6	-1.8	-2.0	-1.8	-1.7	-1.7	-1.5	-1.6	-1.5	-1.5	-1.5	-1.6	-1.7	-1.7	-1.8	-1.8	-0.8	-2.0	-1.5
5	-1.8	-1.7	-1.5	-1.4	-1.3	-1.1	-1.1	-1.2	-1.3	-1.4	-1.4	-1.5	-1.5	-1.4	-1.5	-1.4	-1.3	-1.3	-1.4	-1.6	-1.8	-1.8	-1.7	-1.9	-1.1	-1.9	-1.5
6	-2.1	-2.4	-2.4	-2.8	-3.0	-3.1	-2.9	-3.2	-3.5	-3.5	-3.3	-2.9	-2.3	-2.0	-1.8	-1.7	-1.5	-1.9	-2.0	-2.2	-2.3	-2.1	-2.1	-1.8	-1.5	-3.5	-2.5
7	-1.5	-1.9	-2.1	-1.7	-2.0	-2.2	-2.2	-2.2	-2.2	-2.2	-2.1	-1.4	-1.3	-0.2	-0.2	-1.8	-2.7	-2.6	-3.1	-4.0	-3.8	-4.0	-4.6	-5.2	-0.2	-5.2	-2.4
8	-5.5	-5.6	-6.2	-6.4	-6.7	-6.6	-6.6	-6.4	-6.2	-5.9	-5.5	-5.0	-4.5	-4.4	-4.3	-4.0	-3.0	-2.6	-2.8	-3.0	-3.0	-3.1	-2.7	-3.2	-2.6	-6.7	-4.7
9	-3.1	-2.8	-2.7	-2.6	-2.3	-2.6	-2.5	-2.4	-2.4	-2.3	-1.9	-1.6	-1.3	-1.8	-1.9	-1.5	-1.0	-0.4	-1.5	-2.0	-2.0	-1.5	-1.7	-1.9	-0.4	-3.1	-2.0
10	-1.9	-2.8	-3.1	-3.2	-4.5	-6.2	-6.4	-6.3	-7.0	-7.1	-6.8	-6.8	-6.4	-6.0	-5.4	-5.7	-5.6	-6.5	-6.7	-7.0	-7.4	-7.8	-8.1	-8.3	-1.9	-8.3	-5.9
11	-8.5	-8.7	-9.4	-9.7	-9.8	-9.6	-9.7	-9.7	-10.0	-10.0	-9.5	-9.4	-8.9	-8.6	-9.0	-10.1	-10.2	-10.1	-10.3	-11.1	-12.0	-12.1	-12.0	-12.3	-8.5	-12.3	-10.0
12	-12.5	-12.8	-12.8	-12.7	-13.1	-13.6	-12.3	-12.2	-12.4	-12.1	-12.0	-11.7	-11.0	-10.4	-10.3	-10.0	-9.9	-9.9	-10.1	-10.2	-10.3	-10.4	-10.4	-10.5	-9.9	-13.6	-11.4
13	-10.5	-10.6	-10.8	-11.2	-11.5	-11.6	-11.8	-12.1	-12.4	-12.7	-12.8	-12.8	-12.4	-12.3	-12.5	-12.6	-12.9	-12.9	-13.3	-14.1	-14.6	-14.9	-14.1	-10.9	-10.5	-14.9	-12.4
14	-11.4	-12.7	-12.4	-11.6	-11.6	-11.3	-11.6	-11.7	-11.2	-9.7	-6.3	-3.0	-2.9	-2.5	-3.8	-6.2	-7.3	-8.5	-8.3	-8.3	-8.1	-7.8	-7.8	-7.7	-2.5	-12.7	-8.5
15	-7.2	-7.5	-7.1	-6.6	-6.3	-5.8	-5.5	-5.7	-5.5	-5.3	-5.1	-4.9	-4.6	-4.3	-4.1	-3.9	-3.8	-3.8	-3.9	-3.9	-4.1	-4.2	-4.2	-4.2	-3.8	-7.5	-5.1
16	-4.3	-4.3	-4.2	-4.3	-4.4	-4.8	-5.1	-5.3	-5.3	-5.3	-5.5	-5.3	-4.2	-4.4	-4.0	-3.9	-2.6	-2.3	-2.8	-3.2	-3.9	-4.5	-4.4	-4.7	-2.3	-5.5	-4.3
17	-5.0	-5.0	-5.1	-5.0	-5.3	-5.2	-5.1	-5.2	-5.2	-4.8	-4.4	-4.3	-4.1	-4.1	-3.9	-4.2	-3.2	-4.1	-8.4	-9.7	-10.5	-10.6	-10.7	-10.6	-3.2	-10.7	-6.0
18	-10.3	-11.4	-12.4	-13.0	-13.5	-14.0	-14.5	-15.1	-15.9	-16.6	-16.4	-15.6	-15.7	-15.2	-15.1	-14.8	-15.1	-15.6	-16.4	-16.5	-17.1	-17.8	-18.1	-18.5	-10.3	-18.5	-15.2
19	-18.9	-19.6	-20.1	-20.5	-20.9	-21.1	-21.5	-21.8	-22.1	-22.2	-21.6	-21.0	-20.7	-20.3	-19.8	-19.4	-18.7	-18.5	-19.3	-19.9	-20.7	-21.0	-21.3	-21.4	-18.5	-22.2	-20.5
20	-21.4	-21.5	-21.7	-21.7	-21.9	-21.9	-21.9	-21.9	-21.7	-20.4	-18.8	-19.4	-17.0	-14.5	-13.2	-14.0	-12.9	-17.4	-17.4	-19.0	-18.9	-19.2	-19.2	-18.6	-12.9	-21.9	-19.0
21	-18.1	-17.3	-17.1	-16.4	-14.1	-12.6	-14.4	-12.7	-11.5	-10.8	-10.6	-9.9	-9.7	-8.4	-8.2	-6.7	-6.6	-8.2	-7.7	-9.8	-10.8	-12.5	-12.3	-9.0	-6.6	-18.1	-11.5
22	-9.0	-10.1	-10.1	-10.7	-9.8	-11.5	-11.1	-11.3	-12.3	-11.7	-11.8	-11.1	-11.4	-11.1	-10.8	-9.1	-8.8	-10.7	-9.8	-9.7	-10.8	-12.2	-11.9	-10.3	-8.8	-12.3	-10.7
23	-9.6	-8.4	-10.7	-11.4	-12.0	-12.9	-12.1	-11.9	-12.6	-12.7	-13.3	-13.8	-15.3	-15.8	-15.2	-15.2	-14.7	-14.1	-14.0	-14.1	-14.7	-15.3	-15.7	-16.0	-8.4	-16.0	-13.4
24	-15.7	-15.7	-15.8	-15.8	-15.9	-15.5	-14.6	-13.8	-13.9	-15.0	-13.3	-13.7	-12.7	-11.6	-11.2	-11.4	-10.8	-10.6	-10.5	-10.1	-10.2	-9.5	-9.6	-9.7	-9.5	-15.9	-12.8
25	-9.9	-9.3	-9.4	-10.0	-10.3	-11.0	-10.5	-10.5	-9.9	-8.1	-7.2	-5.2	-3.9	-2.4	-1.1	-0.1	-3.1	-4.1	-5.1	-5.7	-7.0	-7.4	-7.3	-7.5	-0.1	-11.0	-6.9
26	-7.8	-7.8	-7.8	-8.3	-9.3	-9.3	-9.5	-9.8	-10.4	-9.7	-8.5	-8.2	-9.0	-9.2	-9.3	-8.7	-8.0	-8.3	-8.3	-8.8	-9.7	-9.6	-10.4	-10.8	-7.8	-10.8	-9.0
27	-10.4	-10.3	-10.5	-10.7	-11.1	-10.9	-11.3	-11.5	-11.6	-11.6	-11.6	-11.5	-11.3	-11.1	-10.8	-10.5	-10.5	-10.6	-10.9	-11.6	-12.3	-12.7	-12.7	-12.8	-10.3	-12.8	-11.3
28	-13.2	-13.3	-13.3	-13.7	-13.9	-14.2	-13.9	-13.9	-12.7	-11.7	-8.3	-7.3	-6.5	-5.5	-5.7	-8.2	-9.6	-10.5	-10.8	-9.9	-9.5	-9.6	-10.0	-10.3	-5.5	-14.2	-10.6
29	-10.6	-10.9	-10.6	-10.2	-10.0	-10.1	-9.3	-8.6	-8.1	-7.8	-7.3	-6.9	-6.2	-5.9	-5.7	-5.4	-5.5	-5.7	-5.6	-5.2	-4.8	-4.4	-4.1	-3.7	-3.7	-10.9	-7.2
30	-3.3	-3.2	-3.1	-3.1	-3.1	-3.2	-3.4	-3.3	-3.4	-3.3	-3.1	-2.9	-2.7	-2.6	-2.4	-2.3	-2.2	-2.3	-2.3	-2.3	-2.4	-2.5	-2.5	-2.6	-2.2	-3.4	-2.8
31	-2.5	-2.4	-2.4	-2.4	-2.4	-2.0	-1.8	-1.8	-1.7	-1.4	-1.2	-0.9	-0.8	-0.8	-0.6	-0.9	-1.0	-1.1	-1.1	-1.2	-1.3	-1.3	-1.3	-1.2	-0.6	-2.5	-1.5
Max.	**-1.1**	**-1.0**	**-0.8**	**-0.8**	**-1.1**	**-1.1**	**-1.1**	**-1.2**	**-1.3**	**-1.4**	**-1.2**	**-0.9**	**-0.8**	**-0.2**	**-0.2**	**-0.1**	**-1.0**	**-0.4**	**-1.1**	**-1.2**	**-1.3**	**-1.3**	**-1.3**	**-1.2**	**-0.1**		
Min.	**-21.4**	**-21.5**	**-21.7**	**-21.7**	**-21.9**	**-21.9**	**-21.9**	**-21.9**	**-22.1**	**-22.2**	**-21.6**	**-21.0**	**-20.7**	**-20.3**	**-19.8**	**-19.4**	**-18.7**	**-18.5**	**-19.3**	**-19.9**	**-20.7**	**-21.0**	**-21.3**	**-21.4**		**-22.2**	
Avg.	**-8.5**	**-8.6**	**-8.7**	**-8.7**	**-8.8**	**-9.0**	**-8.9**	**-8.9**	**-9.0**	**-8.8**	**-8.2**	**-7.8**	**-7.4**	**-7.0**	**-6.8**	**-6.8**	**-6.7**	**-7.1**	**-7.4**	**-7.7**	**-8.0**	**-8.2**	**-8.2**	**-8.0**			**-8.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-1.2	-1.2	-1.4	-1.6	-1.7	-1.8	-2.0	-2.1	-2.1	-1.9	-1.7	-1.5	-1.3	-1.0	-0.9	-0.9	-0.8	-0.9	-0.8	-1.1	-1.6	-1.8	-2.4	-2.9	-0.8	-2.9	-1.5
2	-3.1	-3.2	-3.5	-3.7	-3.7	-4.1	-4.3	-4.7	-4.6	-3.6	-3.0	-2.4	-2.8	-3.0	-2.6	-1.9	-2.3	-3.1	-3.7	-3.7	-4.1	-4.1	-3.8	-3.2	-1.9	-4.7	-3.4
3	-3.0	-2.8	-2.8	-3.1	-3.3	-3.4	-3.4	-3.4	-3.2	-2.9	-2.2	-1.7	-1.2	-0.9	-0.9	-1.2	-1.0	-0.8	-1.5	-1.9	-2.1	-2.4	-2.2	-2.2	-0.8	-3.4	-2.2
4	-2.2	-2.1	-2.2	-2.4	-2.3	-2.3	-2.3	-2.4	-2.4	-2.3	-2.1	-1.9	-1.8	-1.5	-1.0	-0.3	-0.3	-1.0	-1.5	-2.2	-3.3	-5.3	-6.0	-7.0	-0.3	-7.0	-2.4
5	-8.5	-9.8	-10.9	-12.2	-12.9	-13.5	-14.0	-14.5	-14.1	-13.2	-12.1	-11.1	-10.1	-11.0	-11.1	-10.7	-9.6	-9.2	-9.2	-10.5	-12.0	-13.1	-13.3	-13.4	-8.5	-14.5	-11.7
6	-14.2	-14.9	-14.5	-15.1	-16.0	-16.4	-16.6	-16.5	-15.4	-14.8	-14.7	-14.6	-13.7	-13.0	-12.5	-12.3	-11.9	-11.7	-12.0	-12.6	-12.9	-13.6	-13.8	-14.0	-11.7	-16.6	-14.1
7	-14.5	-14.5	-14.6	-14.6	-14.6	-14.6	-14.8	-15.0	-14.6	-14.0	-13.6	-13.1	-12.8	-12.1	-11.4	-11.0	-10.5	-10.0	-10.1	-10.2	-11.1	-11.8	-11.8	-11.6	-10.0	-15.0	-12.8
8	-11.6	-11.6	-11.7	-12.0	-12.1	-12.6	-12.9	-11.9	-9.1	-6.5	-6.5	-6.5	-5.7	-4.9	-5.3	-5.0	-4.5	-5.2	-7.4	-8.5	-10.4	-11.1	-11.9	-12.0	-4.5	-12.9	-9.0
9	-12.0	-12.1	-12.7	-12.8	-12.9	-13.3	-14.0	-14.2	-13.4	-12.3	-12.2	-11.7	-10.9	-11.7	-11.3	-10.8	-10.8	-11.4	-11.7	-12.1	-12.5	-13.1	-13.6	-14.0	-10.8	-14.2	-12.4
10	-14.0	-13.8	-14.4	-15.0	-14.8	-15.0	-14.7	-15.5	-15.3	-14.9	-14.5	-13.8	-13.2	-13.0	-12.6	-12.3	-12.0	-12.0	-12.2	-12.8	-13.7	-14.4	-14.7	-14.8	-12.0	-15.5	-13.9
11	-14.7	-14.7	-15.2	-15.1	-15.5	-15.8	-16.5	-16.4	-16.3	-16.4	-16.7	-16.5	-15.7	-15.0	-14.3	-13.8	-13.4	-13.3	-13.5	-14.0	-14.6	-15.3	-15.6	-16.0	-13.3	-16.7	-15.2
12	-15.8	-15.9	-16.0	-15.9	-15.7	-15.8	-16.0	-15.7	-15.2	-14.8	-14.4	-14.5	-14.3	-12.8	-12.2	-11.8	-11.1	-10.4	-10.1	-10.2	-10.2	-9.6	-9.1	-9.3	-9.1	-16.0	-13.2
13	-9.9	-9.0	-8.5	-9.1	-9.1	-7.5	-7.2	-7.6	-7.3	-7.1	-6.7	-3.8	-2.6	-2.2	-1.8	-2.2	-2.2	-2.1	-2.1	-2.1	-2.4	-2.6	-2.9	-3.1	-1.8	-9.9	-5.0
14	-3.3	-3.4	-3.6	-3.8	-3.9	-4.1	-4.2	-4.4	-4.4	-4.1	-3.6	-2.9	-2.5	-2.0	-1.7	-1.5	-1.1	-1.0	-1.6	-2.2	-2.3	-2.6	-3.2	-3.2	-1.0	-4.4	-2.9
15	-3.3	-3.4	-3.4	-3.4	-3.5	-3.6	-3.9	-4.4	-6.0	-6.6	-8.0	-8.7	-8.9	-9.0	-9.8	-10.5	-10.9	-11.2	-11.8	-12.4	-13.3	-14.5	-15.0	-15.3	-3.3	-15.3	-8.4
16	-15.8	-16.1	-16.4	-16.7	-17.3	-17.6	-18.2	-19.0	-19.1	-18.7	-17.8	-16.7	-15.9	-14.9	-13.6	-12.4	-11.6	-10.7	-9.5	-9.4	-9.6	-9.3	-8.9	-8.4	-8.4	-19.1	-14.3
17	-8.5	-8.1	-7.3	-7.2	-7.1	-7.2	-7.0	-6.7	-6.0	-5.0	-3.2	-1.3	-3.5	-3.7	-3.3	-2.8	-2.7	-1.6	-2.6	-3.6	-4.0	-5.4	-5.6	-5.6	-1.3	-8.5	-5.0
18	-5.4	-5.1	-4.8	-5.2	-5.4	-4.9	-4.3	-4.2	-2.3	-0.1	1.9	2.1	1.7	1.3	0.8	0.9	1.3	0.8	0.2	0.5	-1.0	-3.1	-4.0	-4.0	2.1	-5.4	-1.7
19	-4.2	-3.9	-4.1	-4.2	-3.9	-3.9	-3.9	-3.7	-3.2	-3.0	-2.1	-1.4	-0.2	-0.1	0.0	0.0	-0.2	-0.3	-0.9	-1.5	-2.4	-3.0	-3.9	-4.4	0.0	-4.4	-2.4
20	-4.3	-4.0	-3.1	-3.3	-3.7	-3.8	-2.8	-2.0	-1.7	-1.6	-1.2	-1.4	-1.5	-1.2	-1.1	-1.3	-0.8	-1.7	-2.3	-2.6	-2.7	-3.0	-3.0	-3.0	-0.8	-4.3	-2.4
21	-3.0	-3.0	-2.9	-2.9	-2.8	-2.8	-2.9	-2.8	-2.7	-2.6	-2.3	-1.9	-1.6	-1.5	-1.2	-0.9	-1.1	-1.5	-1.5	-1.7	-1.8	-1.1	-1.2	0.3	0.3	-3.0	-2.0
22	1.4	1.9	2.7	2.0	2.4	1.8	1.3	2.5	3.2	3.8	3.4	3.9	4.4	5.1	5.6	5.8	6.2	6.0	4.3	5.5	5.1	5.1	4.0	3.9	6.2	1.3	3.8
23	4.6	4.8	4.6	4.4	3.9	4.1	3.9	4.6	4.8	4.8	5.5	5.8	5.9	6.1	5.1	5.2	5.6	5.6	5.3	5.1	4.2	3.9	3.0	2.5	6.1	2.5	4.7
24	1.9	-0.4	-1.4	-1.8	-2.0	-3.9	-3.9	-3.1	-3.6	-3.8	-3.1	-1.9	-3.2	-1.9	-1.9	-1.8	-2.2	-2.2	-2.0	-1.7	-1.6	-1.9	-3.3	-4.6	1.9	-4.6	-2.3
25	-5.3	-5.9	-6.4	-7.8	-8.5	-8.9	-9.5	-10.1	-10.7	-10.9	-10.6	-10.4	-10.3	-10.0	-9.7	-9.5	-9.2	-8.8	-8.6	-8.7	-8.7	-9.3	-10.3	-11.2	-5.3	-11.2	-9.1
26	-12.0	-12.8	-13.0	-13.3	-13.8	-14.2	-14.4	-14.1	-13.5	-12.5	-11.8	-11.2	-10.3	-9.5	-8.7	-8.6	-8.1	-7.4	-7.0	-7.2	-7.4	-7.9	-8.4	-8.5	-7.0	-14.4	-10.6
27	-8.4	-8.5	-8.6	-8.9	-9.4	-9.8	-10.0	-10.0	-10.0	-9.9	-9.4	-9.1	-8.5	-7.6	-7.2	-7.2	-7.2	-6.9	-6.9	-6.7	-7.0	-7.4	-7.9	-7.9	-6.7	-10.0	-8.3
28	-7.8	-8.0	-8.0	-8.1	-7.7	-7.7	-7.3	-6.8	-5.7	-5.1	-2.1	-3.6	-4.4	-4.4	-4.5	-4.4	-4.8	-4.7	-5.3	-5.8	-6.4	-6.8	-7.3	-7.7	-2.1	-8.1	-6.0
29	-8.0	-7.4	-7.4	-7.1	-7.0	-7.1	-7.2	-7.3	-6.8	-6.2	-6.1	-5.2	-4.0	-3.0	-2.8	-2.7	-2.3	-2.2	-2.2	-2.3	-2.7	-3.5	-4.4	-4.9	-2.2	-8.0	-5.0
30	-5.4	-5.8	-6.1	-6.3	-6.9	-7.1	-7.4	-7.1	-7.3	-6.7	-5.9	-4.4	-3.3	-2.6	-2.0	-1.4	-1.5	-2.6	-3.8	-4.5	-4.6	-4.7	-4.9	-5.0	-1.4	-7.4	-4.9
Max.	**4.6**	**4.8**	**4.6**	**4.4**	**3.9**	**4.1**	**3.9**	**4.6**	**4.8**	**4.8**	**5.5**	**5.8**	**5.9**	**6.1**	**5.6**	**5.8**	**6.2**	**6.0**	**5.3**	**5.5**	**5.1**	**5.1**	**4.0**	**3.9**	**6.2**		
Min.	**-15.8**	**-16.1**	**-16.4**	**-16.7**	**-17.3**	**-17.6**	**-18.2**	**-19.0**	**-19.1**	**-18.7**	**-17.8**	**-16.7**	**-15.9**	**-15.0**	**-14.3**	**-13.8**	**-13.4**	**-13.3**	**-13.5**	**-14.0**	**-14.6**	**-15.3**	**-15.6**	**-16.0**		**-19.1**	
Avg.	**-7.0**	**-7.1**	**-7.2**	**-7.5**	**-7.7**	**-7.9**	**-8.0**	**-7.9**	**-7.6**	**-7.1**	**-6.6**	**-6.0**	**-5.7**	**-5.4**	**-5.1**	**-4.9**	**-4.7**	**-4.7**	**-5.1**	**-5.4**	**-5.9**	**-6.4**	**-6.8**	**-7.0**			**-6.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-5.1	-5.3	-5.6	-6.4	-6.5	-6.7	-6.9	-6.4	-6.0	-5.2	-4.2	-3.7	-3.2	-2.6	-1.9	-1.1	-0.7	-0.8	-0.9	-1.1	-1.7	-2.0	-2.2	-2.5	-0.7	-6.9	-3.7
2	-2.7	-2.8	-3.0	-3.5	-3.3	-3.4	-3.5	-3.7	-3.5	-2.8	-2.0	-1.1	-0.2	1.2	2.0	1.2	1.7	1.7	1.6	1.1	0.1	-0.1	-0.4	-0.6	2.0	-3.7	-1.1
3	-0.8	-1.0	-1.5	-2.3	-2.8	-2.6	-1.8	-1.5	-1.2	-0.9	-1.0	-0.7	-0.3	0.1	0.0	0.2	-0.1	-0.5	-0.3	0.3	0.4	-0.5	-1.4	-1.1	0.4	-2.8	-0.9
4	-1.4	-1.6	-1.5	-1.7	-1.2	-1.4	-1.5	-1.6	-1.2	-1.0	-0.5	0.0	0.5	1.2	1.4	1.8	1.9	1.8	2.4	2.5	1.5	1.8	1.5	1.1	2.5	-1.7	0.2
5	0.4	0.7	1.1	1.0	0.9	1.4	1.6	2.0	2.9	4.3	3.2	3.8	4.3	3.7	4.0	4.1	7.6	6.1	4.9	3.5	2.1	1.3	0.9	0.4	7.6	0.4	2.8
6	0.5	0.4	0.1	-0.2	0.0	-0.6	-0.4	-0.2	-0.4	0.0	-0.1	0.3	0.4	0.4	0.2	0.1	0.2	0.1	-0.2	-0.5	-1.0	-1.2	-1.4	-1.4	0.5	-1.4	-0.2
7	-1.4	-1.3	-1.3	-1.2	-1.0	-1.2	-1.2	-1.2	-1.0	-0.6	-0.4	0.0	-0.1	0.2	0.1	0.2	0.2	0.3	0.4	0.5	0.4	0.2	-0.4	-0.4	0.5	-1.4	-0.4
8	-0.3	-0.1	-0.3	-0.5	-0.8	-0.9	-0.9	-0.6	-0.4	-0.3	-0.1	0.2	0.1	0.0	-0.1	0.1	0.2	0.5	0.3	0.2	0.3	0.1	0.0	0.1	0.5	-0.9	-0.1
9	0.2	0.0	-0.2	-0.1	-0.2	-0.6	-0.6	-0.5	0.0	0.5	0.8	0.7	0.6	0.7	0.8	1.1	0.9	0.9	0.5	0.2	0.1	0.2	0.4	0.3	1.1	-0.6	0.3
10	0.6	0.6	0.5	0.4	0.3	0.3	0.1	0.3	0.7	1.1	1.7	2.6	5.6	6.2	5.5	5.7	5.3	4.4	3.1	2.0	1.6	1.3	1.5	1.4	6.2	0.1	2.2
11	1.3	0.8	0.8	0.8	0.7	0.6	0.7	0.9	1.1	1.1	0.6	0.3	0.3	0.3	1.3	1.7	1.7	1.6	2.0	1.8	1.6	1.3	0.9	0.4	2.0	0.3	1.0
12	0.4	0.0	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.6	-0.3	0.6	1.3	1.5	1.3	1.1	0.3	-0.3	-0.3	-0.5	-0.6	-0.8	-0.9	-1.0	-0.9	1.5	-1.0	-0.1
13	-0.9	-0.9	-1.1	-1.0	-1.1	-1.0	-1.3	-1.2	-0.6	-0.4	-0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.1	-0.4	-0.8	-1.1	-1.6	-2.0	-2.1	0.3	-2.1	-0.7
14	-2.1	-2.0	-2.4	-2.5	-2.4	-2.3	-2.0	-1.7	-1.4	-1.3	-0.8	-0.3	0.8	2.0	2.5	2.2	2.3	2.2	1.9	1.1	0.9	1.8	2.0	1.9	2.5	-2.5	0.0
15	2.0	1.1	1.2	1.0	0.6	0.2	0.1	0.4	0.3	1.0	1.3	2.1	2.5	3.0	2.9	3.3	1.8	1.0	0.7	0.6	0.1	-0.3	-0.6	-0.5	3.3	-0.6	1.1
16	-0.4	-0.6	-0.8	-1.3	-1.5	-1.4	-1.5	-1.3	-0.7	-0.2	-0.6	-0.6	0.5	0.7	1.0	1.4	1.9	2.1	2.3	2.6	2.5	1.8	0.4	0.4	2.6	-1.5	0.3
17	0.0	-0.1	-0.3	-0.2	0.0	-0.3	0.4	0.9	0.8	1.0	1.6	3.0	3.8	4.9	5.3	6.3	6.6	7.1	6.3	5.5	5.1	3.0	1.5	0.8	7.1	-0.3	2.6
18	0.3	0.7	0.2	-1.0	-1.1	-1.5	-1.3	-0.9	-0.6	-0.2	0.0	0.4	0.7	1.1	1.2	0.9	1.2	1.4	1.1	0.3	0.1	0.0	-0.5	-0.6	1.4	-1.5	0.1
19	-0.9	-1.2	-1.5	-1.7	-1.8	-1.6	-1.4	-1.0	-0.6	-0.6	-0.3	0.9	2.2	2.8	3.2	3.9	3.8	3.9	3.7	4.0	3.6	2.9	2.1	1.6	4.0	-1.8	1.1
20	1.5	1.3	1.4	1.1	0.9	0.7	0.9	1.2	1.7	2.4	3.3	4.6	6.1	7.4	7.6	8.0	9.2	9.5	9.0	8.7	8.1	7.7	6.7	6.1	9.5	0.7	4.8
21	5.7	5.5	5.1	5.3	4.9	5.1	5.0	4.6	4.3	4.4	4.6	5.5	5.9	6.3	6.1	6.3	7.5	7.6	7.4	5.8	4.8	3.7	3.0	2.6	7.6	2.6	5.3
22	2.6	2.2	1.5	1.0	0.4	0.4	1.5	1.2	1.7	3.1	3.4	4.6	5.0	5.8	6.3	6.5	5.5	4.8	3.5	2.8	2.1	1.3	0.8	0.4	6.5	0.4	2.9
23	0.1	-0.5	-0.8	-0.9	-1.0	-0.7	-0.6	-0.7	-0.3	-0.1	0.1	0.2	0.1	0.1	0.2	0.4	0.6	0.7	0.8	0.7	0.7	0.7	0.8	0.4	0.8	-1.0	0.1
24	0.4	0.4	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.9	1.0	1.5	2.0	2.4	2.9	2.9	1.8	1.1	1.8	1.4	0.8	0.4	2.9	0.1	1.0
25	0.0	-0.4	-0.7	-0.9	-1.0	-1.3	-1.4	-1.4	-1.1	-0.9	0.0	0.5	0.8	0.2	0.3	0.8	1.2	1.6	1.1	1.2	1.2	0.8	0.5	0.3	1.6	-1.4	0.1
26	0.2	-0.1	-0.3	-0.8	-1.1	-0.9	-0.9	-0.8	-0.6	-0.3	0.2	0.7	1.2	1.8	2.4	1.3	1.7	2.6	2.7	2.5	2.7	2.1	1.7	1.4	2.7	-1.1	0.8
27	0.9	0.4	0.1	-0.3	-0.7	-0.5	0.1	1.4	0.7	0.8	2.2	3.4	4.7	5.6	6.5	7.2	7.7	8.1	8.2	8.0	7.2	6.0	4.3	3.6	8.2	-0.7	3.6
28	3.5	3.0	3.2	3.1	3.0	3.2	3.4	3.8	4.5	4.6	4.7	5.9	7.0	7.5	8.2	8.9	9.5	9.3	8.4	7.9	7.7	7.3	6.4	5.8	9.5	3.0	5.8
29	5.3	4.9	4.5	4.3	3.8	3.7	3.5	3.4	3.5	4.0	5.0	6.1	6.5	7.3	8.1	8.7	9.5	9.6	10.0	10.2	9.7	9.1	8.2	7.6	10.2	3.4	6.5
30	6.8	6.1	7.2	7.0	6.1	6.2	6.0	6.1	5.7	6.5	7.1	7.5	7.9	7.8	8.4	8.5	8.3	7.0	6.7	5.8	4.3	3.6	3.1	3.0	8.5	3.0	6.4
31	2.8	2.6	2.3	2.0	1.9	1.8	1.9	1.8	1.7	1.7	2.2	2.6	3.2	3.1	3.3	3.4	3.3	3.2	2.8	2.4	2.0	2.1	1.6	1.4	3.4	1.4	2.4
Max.	**6.8**	**6.1**	**7.2**	**7.0**	**6.1**	**6.2**	**6.0**	**6.1**	**5.7**	**6.5**	**7.1**	**7.5**	**7.9**	**7.8**	**8.4**	**8.9**	**9.5**	**9.6**	**10.0**	**10.2**	**9.7**	**9.1**	**8.2**	**7.6**	**10.2**		
Min.	**-5.1**	**-5.3**	**-5.6**	**-6.4**	**-6.5**	**-6.7**	**-6.9**	**-6.4**	**-6.0**	**-5.2**	**-4.2**	**-3.7**	**-3.2**	**-2.6**	**-1.9**	**-1.1**	**-0.7**	**-0.8**	**-0.9**	**-1.1**	**-1.7**	**-2.0**	**-2.2**	**-2.5**		**-6.9**	
Avg.	**0.6**	**0.4**	**0.3**	**0.0**	**-0.1**	**-0.2**	**-0.1**	**0.1**	**0.3**	**0.7**	**1.1**	**1.7**	**2.2**	**2.6**	**2.9**	**3.1**	**3.3**	**3.2**	**2.9**	**2.6**	**2.2**	**1.8**	**1.3**	**1.0**			**1.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.1	2.1	1.9	2.3	2.5	2.4	2.3	2.2	2.3	2.3	2.8	4.2	4.6	4.0	4.5	4.9	4.7	3.7	3.5	3.1	3.2	2.4	2.3	1.8	4.9	1.8	3.0
2	1.9	2.0	2.2	2.2	2.4	2.1	2.0	2.5	2.9	3.5	3.9	4.3	5.1	6.3	7.2	7.5	7.5	7.2	7.0	6.7	6.3	6.2	5.5	4.6	7.5	1.9	4.5
3	5.0	5.0	4.6	4.1	3.9	3.9	3.8	3.6	3.7	4.6	6.2	7.0	6.4	7.3	7.9	7.3	6.0	6.7	5.7	4.6	3.4	2.3	1.8	1.5	7.9	1.5	4.8
4	1.4	1.2	1.2	1.0	0.8	0.8	0.8	1.2	2.5	2.2	3.0	4.4	4.2	5.0	5.4	6.0	6.2	5.9	5.9	5.6	4.9	4.1	2.9	1.7	6.2	0.8	3.3
5	1.1	0.9	0.8	0.8	0.7	0.8	0.8	0.9								2.6	2.8	2.9	2.6	2.7	2.7	2.7	2.6	1.7	2.9	0.7	1.8
6	1.9	1.7	1.7	2.3	2.2	2.0	2.1	2.1	2.0	2.6	4.0	5.4	6.7	7.8	8.0	9.2	9.3	8.2	8.6	7.0	8.3	7.8	6.8	5.7	9.3	1.7	5.1
7	5.6	5.0	4.7	4.5	4.4	4.5	4.6	4.7	5.8	6.8	7.7	8.9	9.0	10.1	10.8	12.1	12.4	12.2	12.0	11.0	10.5	8.7	7.0	6.1	12.4	4.4	7.9
8	5.9	5.6	5.3	5.4	4.8	3.5	4.0	4.0	3.8	4.3	4.3	4.9	5.3	5.3	5.9	6.0	5.8	5.5	5.3	5.2	5.4	4.2	2.1	0.8	6.0	0.8	4.7
9	0.2	-0.3	-0.4	-0.5	-0.7	-0.9	-0.8	-0.7	-0.7	-0.5	0.2	0.5	0.7	1.0	1.6	1.9	2.6	2.5	2.7	2.8	2.8	2.6	2.0	1.6	2.8	-0.9	0.8
10	1.4	1.2	1.0	0.8	0.7	0.9	0.4	0.8	0.9	1.2	1.6	1.6	2.3	3.4	3.6	4.3	5.3	5.2	4.7	4.2	3.2	2.8	2.8	2.6	5.3	0.4	2.4
11	2.4	2.3	2.8	2.1	2.0	1.9	1.5	1.8	1.7	2.0	1.8	2.9	2.2	2.4	2.5	2.9	3.2	3.2	3.4	3.4	3.1	2.6	2.2	1.3	3.4	1.3	2.4
12	0.8	1.0	0.3	0.2	1.0	0.9	-0.2	0.1	0.6	1.2	2.2	2.2	2.0	1.6	2.5	2.4	2.3	2.0	1.2	1.0	0.8	0.8	0.6	0.5	2.5	-0.2	1.2
13	0.7	0.8	0.8	1.3	1.7	2.1	2.1	2.2	2.7	3.6	4.2	5.0	5.9	6.5	6.9	7.8	8.7	9.5	10.3	11.0	10.6	10.2	9.2	8.5	11.0	0.7	5.5
14	8.3	8.1	7.9	7.3	7.2	7.1	6.7	6.9	6.8	7.3	7.2	7.4	9.0	10.1	10.8	12.2	11.6	12.5	12.1	10.3	7.9	8.1	6.5	6.7	12.5	6.5	8.6
15	7.5	7.0	6.7	5.8	4.8	4.9	6.2	7.4	8.6	11.3	10.2	9.0	9.1	9.3	9.0	8.5	7.4	6.7	7.7	7.4	6.4	5.7	5.4	5.2	11.3	4.8	7.4
16	5.1	5.3	6.0	5.9	5.8	5.3	5.1	5.3	5.8	6.1	7.0	7.9	7.8	8.8	9.6	8.9	9.3	10.1	10.2	10.6	10.1	9.7	9.5	9.0	10.6	5.1	7.7
17	8.8	8.7	8.6	8.7	8.8	8.7	8.9	11.2	11.0	11.7	11.2	11.4	13.4	14.0	14.2	15.0	15.5	15.9	16.0	15.0	13.9	12.5	10.7	8.5	16.0	8.5	11.8
18	7.8	8.1	7.5	7.7	8.0	7.7	7.5	7.1	7.0	7.5	8.2	9.0	9.7	10.9	11.5	12.2	12.6	12.3	11.4	11.2	10.9	10.3	8.7	8.0	12.6	7.0	9.3
19	7.9	7.6	7.2	6.4	6.0	6.0	6.0	6.0	8.2	7.7	6.7	7.2	8.4	9.5	10.6	11.4	12.3	12.6	12.8	12.5	12.0	10.8	9.3	8.9	12.8	6.0	8.9
20	7.8	6.8	6.5	5.8	5.9	5.6	5.8	6.1	6.9	7.7	8.4	9.1	9.8	10.4	10.8	10.9	10.9	10.5	10.0	8.9	7.7	6.6	5.5	4.5	10.9	4.5	7.9
21	4.3	3.6	3.2	3.4	3.5	3.5	4.0	4.3	4.6	5.5	6.4	7.6	7.8	7.9	8.3	9.5	10.2	11.1	11.5	11.5	11.1	9.5	7.4	6.5	11.5	3.2	6.9
22	6.2	6.1	5.6	5.3	5.2	5.4	5.7	6.6	7.0	7.9	8.6	9.5	9.7	10.0	10.2	9.4	8.7	8.4	7.6	7.1	5.9	5.1	4.3	4.0	10.2	4.0	7.1
23	3.9	3.7	3.5	3.3	3.2	2.8	3.0	3.4	3.8	4.4	4.9	5.1	6.0	7.2	7.8	8.8	9.6	10.0	10.2	9.8	9.0	7.9	6.6	5.0	10.2	2.8	6.0
24	3.8	3.3	3.8	3.3	3.2	3.1	3.3	3.4	4.0	5.0	5.6	6.3	6.2	5.8	5.8	5.7	5.6	5.5	5.3	5.3	5.2	5.0	4.9	4.6	6.3	3.1	4.7
25	4.5	4.7	4.6	4.4	4.0	3.8	4.0	4.6	4.9	5.5	5.9	7.0	7.9	8.4	8.9	9.0	8.7	8.4	7.7	7.3	6.7	6.5	6.4	5.6	9.0	3.8	6.2
26	5.1	4.9	4.8	4.9	5.0	4.9	4.7	5.1	5.7	6.3	7.2	8.1	8.9	8.3	8.3	8.8	8.2	7.9	7.7	7.8	7.9	7.9	7.5	7.0	8.9	4.7	6.8
27	6.8	6.5	6.6	6.4	5.7	5.6	5.3	5.2	5.5	6.1	5.8	6.5	7.2	8.3	8.4	8.6	9.2	9.8	9.3	8.7	7.6	6.9	5.4	4.7	9.8	4.7	6.9
28	3.9	3.2	3.0	4.0	4.6	4.0	4.0	4.1	4.5	5.3	5.0	5.2	6.1	6.8	7.9	7.4	7.2	8.1	8.3	8.2	7.8	7.0	6.1	5.7	8.3	3.0	5.7
29	5.3	4.8	4.9	4.8	4.5	4.3	4.1	3.6	3.5	3.9	4.3	5.2	6.0	6.5	7.3	8.0	8.7	8.9	8.9	8.0	6.7	5.7	4.7	3.9	8.9	3.5	5.7
30	3.2	3.0	3.0	2.9	2.8	2.7	2.8	4.3	5.7	6.1	6.3	7.4	8.3	7.8	8.7	10.1	9.6	8.7	9.1	9.0	9.0	9.6	9.7	8.6	10.1	2.7	6.6
Max.	**8.8**	**8.7**	**8.6**	**8.7**	**8.8**	**8.7**	**8.9**	**11.2**	**11.0**	**11.7**	**11.2**	**11.4**	**13.4**	**14.0**	**14.2**	**15.0**	**15.5**	**15.9**	**16.0**	**15.0**	**13.9**	**12.5**	**10.7**	**9.0**	**16.0**		
Min.	**0.2**	**-0.3**	**-0.4**	**-0.5**	**-0.7**	**-0.9**	**-0.8**	**-0.7**	**-0.7**	**-0.5**	**0.2**	**0.5**	**0.7**	**1.0**	**1.6**	**1.9**	**2.3**	**2.0**	**1.2**	**1.0**	**0.8**	**0.8**	**0.6**	**0.5**		**-0.9**	
Avg.	**4.3**	**4.1**	**4.0**	**3.9**	**3.8**	**3.7**	**3.7**	**4.0**	**4.5**	**5.2**	**5.5**	**6.2**	**6.7**	**7.3**	**7.8**	**8.0**	**8.1**	**8.1**	**8.0**	**7.6**	**7.0**	**6.4**	**5.5**	**4.8**			**5.7**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.4	8.2	8.3	7.6	7.3	6.9	7.5	7.8	7.7	8.5	9.3	9.9	10.6	10.9	11.4	11.7	11.5	11.0	10.4	9.5	8.4	7.4	6.8	6.3	11.7	6.3	8.9
2	5.7	5.3	4.7	4.2	4.0	3.8	3.7	4.0	4.0	4.3	5.5	7.0	8.1	8.7	8.6	9.1	9.7	10.1	9.5	7.9	7.2	6.9	6.5	5.4	10.1	3.7	6.4
3	6.0	5.3	5.8	6.9	7.2	6.3	6.6	6.5	6.3	5.8	5.0	5.5	5.9	6.7	7.3	7.8	8.4	7.6	7.1	7.1	7.1	6.8	6.5	6.5	8.4	5.0	6.6
4	6.4	6.1	5.9	6.0	6.2	6.2	6.2	6.4	6.8	7.6	8.5	9.4	10.8	11.6	11.6	10.8	11.4	12.1	11.0	8.8	7.8	7.4	7.9	9.1	12.1	5.9	8.4
5	8.9	9.2	8.9	9.4	9.9	9.5	9.6	9.8	10.1	10.1	11.1	12.6	13.6	14.7	14.6	14.1	12.7	12.7	12.9	13.1	12.3	11.4	11.4	10.7	14.7	8.9	11.4
6	10.3	9.5	8.9	9.7	10.2	10.7	11.0	11.3	11.9	13.6	15.2	15.4	15.7	15.2	14.2	12.4	11.7	12.0	10.5	9.7	9.0	8.5	8.0	7.7	15.7	7.7	11.3
7	7.5	7.4	7.1	6.8	6.7	6.8	6.9	6.8	5.8	5.2	5.1	5.0	5.0	5.2	5.1	5.0	5.2	5.7	6.2	6.3	6.0	5.7	5.5	5.1	7.5	5.0	6.0
8	5.0	4.9	5.0	4.9	5.5	6.0	6.0	6.3	6.3	6.4	6.1	6.1	6.8	7.5	7.7	7.9	8.0	8.2	8.4	8.2	8.2	8.1	7.9	7.8	8.4	4.9	6.8
9	7.2	7.0	7.3	7.4	7.4	7.2	7.4	7.7	8.0	8.8	8.4	9.6	10.8	11.9	12.5	13.1	13.0	12.3	11.0	9.9	8.9	8.1	7.7	7.3	13.1	7.0	9.2
10	6.7	6.1	5.9	5.9	5.8	5.9	5.7	5.7	6.1	6.3	6.6	8.2	8.6	9.1	9.6	10.7	10.7	10.7	10.2	9.7	8.9	8.2	7.0	6.1	10.7	5.7	7.7
11	5.5	5.3	5.2	5.3	5.3	5.1	5.1	5.0	4.9	5.3	6.0	6.8	8.1	9.3	9.8	10.3	10.7	10.7	10.4	9.9	9.6	8.7	7.2	6.3	10.7	4.9	7.3
12	5.6	5.2	5.0	5.1	4.9	4.5	4.8	5.6	6.0	6.5	6.9	7.2	7.3	7.7	7.9	7.9	7.7	7.3	6.4	5.8	5.6	5.4	5.3	5.4	7.9	4.5	6.1
13	5.5	5.5	5.5	5.4	5.4	5.3	5.3	5.3	5.5	5.5	5.7	5.9	6.1	6.3	6.8	7.1	7.3	7.3	7.4	7.4	7.3	7.0	6.7	6.4	7.4	5.3	6.2
14	6.3	6.2	6.2	6.5	6.5	6.4	6.6	6.6	7.1	7.4	7.9	8.7	9.1	10.1	11.6	11.8	11.8	12.2	12.5	12.4	11.7	10.7	9.7	8.9	12.5	6.2	8.9
15	8.2	7.9	7.5	7.3	7.3	7.4	7.3	7.5	7.8	8.6	9.0	9.9	10.6	11.7	12.6	12.9	12.5	11.4	10.5	9.1	8.4	7.9	7.7	7.6	12.9	7.3	9.1
16	7.8	7.7	7.6	7.4	7.3	7.2	7.0	6.9	6.8	6.5	6.5	6.5	6.7	7.0	7.5	7.2	6.7	6.5	6.4	6.3	6.2	6.1	5.9	5.9	7.8	5.9	6.8
17	5.7	5.7	4.3	2.8	2.0	1.7	1.8	2.0	2.2	2.5	2.2	2.6	3.4	4.1	4.5	4.6	5.0	5.3	5.0	5.0	4.9	4.6	4.4	4.0	5.7	1.7	3.8
18	3.8	3.5	3.0	2.7	2.5	2.3	2.3	2.3	2.5	2.8	3.1	3.0	3.3	3.6	4.1	4.3	4.7	4.9	5.4	4.8	4.6	4.8	4.7	4.7	5.4	2.3	3.6
19	4.7	4.5	4.5	4.3	4.1	4.1	4.0	4.1	4.2	4.9	5.8	6.3	7.3	7.8	9.2	8.8	8.8	8.7	8.4	7.5	7.5	7.3	7.3	7.0	9.2	4.0	6.3
20	7.0	6.9	6.9	6.7	6.9	6.7	6.7	7.0	6.7	6.4	6.2	5.2	5.0	4.7	4.6	4.7	4.6	4.3	3.9	3.8	3.7	3.7	3.8	3.9	7.0	3.7	5.4
21	3.7	3.2	3.0	3.1	3.1	3.2	3.3	3.4	3.5	3.7	4.2	4.7	5.2	5.7	6.4	7.2	8.1	8.5	7.7	8.8	8.4	7.8	6.9	6.2	8.8	3.0	5.4
22	5.7	5.2	5.1	4.5	4.3	5.1	5.5	5.4	5.1	5.5	5.7	5.8	5.4	4.7	4.7	4.3	4.1	4.4	4.4	4.4	4.3	4.1	4.0	4.1	5.8	4.0	4.8
23	4.0	4.0	3.9	3.8	3.9	3.9	3.8	4.0	4.3	4.4	4.5	5.0	5.5	5.6	5.8	5.9	6.6	7.4	7.1	6.4	5.3	4.5	4.0	4.1	7.4	3.8	4.9
24	4.1	3.9	3.5	3.4	3.7	4.0	4.4	4.8	5.0	5.1	5.4	6.0	6.5	7.1	8.5	9.4	10.9	11.2	10.8	11.0	10.5	11.0	10.9	9.8	11.2	3.4	7.1
25	8.9	8.0	7.5	7.4	6.9	6.6	6.5	6.7	7.3	8.1	9.2	10.5	11.9	13.2	14.2	14.8	15.4	15.8	16.0	16.0	15.7	14.7	13.7	12.2	16.0	6.5	11.1
26	10.9	11.0	10.8	10.4	8.6	7.5	7.2	6.2	6.1	6.1	6.2	6.5	6.4	6.5	6.7	6.9	7.2	7.7	8.5	9.0	8.2	7.3	7.0	6.8	11.0	6.1	7.7
27	6.4	6.0	5.7	5.6	5.4	5.4	5.3	5.4	5.4	5.6	5.7	5.5	5.7	6.2	6.7	6.8	7.2	7.1	7.2	7.3	6.7	6.4	5.9	6.3	7.3	5.3	6.1
28	6.4	6.0	6.1	6.3	6.2	6.6	6.7	6.9	7.6	8.5	9.2	10.1	10.8	11.3	11.7	12.6	12.2	12.3	12.5	12.5	12.1	11.6	10.9	9.5	12.6	6.0	9.4
29	9.1	8.7	8.2	7.5	7.0	7.0	6.6	6.4	6.8	7.5	8.9	10.2	11.2	11.7	12.6	14.1	15.1	15.3	14.8	15.0	14.1	12.6	10.9	9.8	15.3	6.4	10.5
30	8.7	8.1	7.8	7.7	7.6	7.9	8.0	8.1	8.1	9.2	9.1	10.2	11.6	12.7	13.5	14.1	14.0	13.8	13.3	12.7	12.1	11.2	9.9	9.0	14.1	7.6	10.3
31	8.5	8.0	8.1	7.9	7.1	7.6	7.2	8.0	8.5	9.5	10.7	12.3	13.5	14.4	15.4	16.1	16.6	17.1	17.6	17.3	16.9	16.0	13.9	13.1	17.6	7.1	12.1
Max.	**10.9**	**11.0**	**10.8**	**10.4**	**10.2**	**10.7**	**11.0**	**11.3**	**11.9**	**13.6**	**15.2**	**15.4**	**15.7**	**15.2**	**15.4**	**16.1**	**16.6**	**17.1**	**17.6**	**17.3**	**16.9**	**16.0**	**13.9**	**13.1**	**17.6**		
Min.	**3.7**	**3.2**	**3.0**	**2.7**	**2.0**	**1.7**	**1.8**	**2.0**	**2.2**	**2.5**	**2.2**	**2.6**	**3.3**	**3.6**	**4.1**	**4.3**	**4.1**	**4.3**	**3.9**	**3.8**	**3.7**	**3.7**	**3.8**	**3.9**		**1.7**	
Avg.	**6.7**	**6.4**	**6.2**	**6.1**	**6.0**	**6.0**	**6.0**	**6.1**	**6.3**	**6.6**	**7.1**	**7.6**	**8.3**	**8.8**	**9.3**	**9.5**	**9.7**	**9.7**	**9.5**	**9.1**	**8.6**	**8.1**	**7.6**	**7.2**			**7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.9	12.6	12.1	11.6	11.7	13.5	14.2	14.7	16.2	15.3	14.9	15.5	16.1	16.4	16.2	16.1	16.0	16.1	16.6	17.0	14.5	11.7	9.4	8.3	17.0	8.3	14.1
2	7.9	7.5	7.1	7.1	7.1	7.0	7.1	7.2	7.3	7.4	7.6	7.8	8.1	8.4	8.7	8.6	8.8	8.8	9.1	9.1	8.8	8.8	8.6	8.6	9.1	7.0	8.0
3	8.6	8.7	8.5	8.2	7.9	7.6	7.1	7.1	7.1	7.7	8.6	10.3	12.2	11.5	12.9	12.8	13.6	13.2	12.7	11.5	10.3	8.5	7.3	6.7	13.6	6.7	9.6
4	6.5	6.3	6.2	6.0	6.1	6.3	6.3	6.4	6.4	6.7	7.1	7.6	7.7	8.2	9.4	10.0	10.5	11.6	11.8	10.8	9.5	7.7	6.9	6.5	11.8	6.0	7.8
5	6.3	6.1	5.9	6.0	5.9	6.5	6.9	7.0	7.0	7.2	8.8	10.4	11.0	11.6	11.7	12.4	12.8	13.1	12.7	12.7	12.1	11.2	9.7	8.6	13.1	5.9	9.3
6	8.2	7.6	7.1	7.0	6.9	6.9	6.8	6.9	7.0	7.8	9.1	10.1	11.0	11.8	11.8	12.9	13.3	12.9	12.2	11.6	11.3	10.7	9.8	8.9	13.3	6.8	9.6
7	8.3	8.0	7.6	7.1	6.5	6.2	6.1	6.4	6.6	7.2	8.2	9.2	10.2	11.0	11.4	11.9	12.4	12.3	11.7	11.9	11.8	10.6	9.7	9.0	12.4	6.1	9.2
8	8.5	8.3	7.6	7.4	7.2	6.5	6.1	6.1	6.2	6.8	7.8	8.8	10.6	11.6	12.6	13.3	14.1	14.3	14.1	14.5	13.9	12.4	10.9	10.2	14.5	6.1	10.0
9	9.7	9.0	8.5	8.2	7.8	7.7	7.4	7.3	7.6	7.9	8.8	10.2	11.6	12.4	13.3	14.2	14.3	14.4	14.0	13.6	13.3	12.0	11.2	10.7	14.4	7.3	10.6
10	10.7	10.6	10.7	10.6	10.6	10.7	10.5	12.8	14.0	12.5	12.8	12.1	12.8	13.3	12.9	13.5	15.5	14.5	12.8	12.1	12.0	9.9	8.1	7.4	15.5	7.4	11.8
11	6.9	6.5	6.4	6.7	6.7	6.3	6.1	6.4	7.5	8.6	8.9	8.9	10.0	10.2	10.8	11.1	11.2	10.9	10.7	10.2	9.4	8.6	8.6	8.6	11.2	6.1	8.6
12	8.6	9.2	9.0	8.6	7.8	8.0	7.9	7.8	8.5	9.2	10.1	11.1	11.9	12.5	13.9	14.4	14.8	14.5	12.2	11.1	11.0	10.8	10.4	10.8	14.8	7.8	10.6
13	10.4	9.5	9.6	9.0	8.9	9.4	9.1	8.7	8.9	9.0	9.4	9.6	9.9	10.2	11.2	10.4	11.1	10.5	9.2	8.5	8.3	8.0	8.0	8.0	11.2	8.0	9.4
14	7.7	7.4	7.6	7.7	7.7	7.7	7.7	7.8	7.9	8.1	8.1	8.1	8.2	8.4	8.7	8.9	9.4	9.4	9.1	8.7	8.5	8.3	8.5	8.0	9.4	7.4	8.2
15	6.6	6.3	5.6	5.3	5.0	5.0	4.9	5.0	5.3	5.5	6.4	6.6	7.3	7.8	8.0	8.6	8.3	8.4	9.0	8.7	8.1	8.0	7.9	7.8	9.0	4.9	6.9
16	7.8	7.7	7.7	7.6	7.5	7.5	7.4	7.3	7.1	7.1	7.2	7.4	7.7	8.5	9.0	9.4	9.6	10.1	9.4	8.9	8.1	6.6	5.8	5.6	10.1	5.6	7.8
17	5.3	5.7	5.4	4.9	4.9	5.3	5.1	5.3	5.7	6.6	6.8	7.2	7.7	8.1	8.9	9.0	8.8	8.9	7.8	7.2	6.7	6.4	6.3	6.1	9.0	4.9	6.7
18	5.9	5.5	5.6	5.3	5.0	4.7	4.9	5.4	6.1	7.3	8.3	9.8	10.5	10.7	11.0	11.4	11.6	11.5	11.7	11.1	10.7	9.9	9.5	9.6	11.7	4.7	8.4
19	9.7	9.8	9.3	8.8	8.8	8.8	7.7	7.5	7.8	7.8	9.0	8.6	9.6	10.6	11.5	11.8	12.2	12.3	11.8	11.4	9.4	9.3	9.6	9.5	12.3	7.5	9.7
20	9.1	7.9	7.8	7.9	8.1	8.1	7.9	7.8	8.1	8.5	8.7	8.5	9.3	9.8	9.9	9.6	10.3	10.8	10.5	10.2	10.3	9.4	8.9	8.7	10.8	7.8	9.0
21	8.7	8.6	8.6	8.3	8.3	8.2	8.0	7.9	8.0	8.1	8.3	8.3	8.6	8.9	9.1	8.2	8.9	9.8	9.5	8.6	7.9	7.8	7.5	7.1	9.8	7.1	8.4
22	6.8	6.7	7.1	6.9	7.1	7.0	6.9	6.8	6.8	7.1	7.3	7.7	8.3	8.4	8.5	9.1	10.1	9.7	9.3	9.2	9.4	9.0	8.3	8.2	10.1	6.7	8.0
23	8.0	8.6	8.4	8.5	8.5	8.5	8.4	8.5	8.4	9.2	9.5	9.8	10.4	11.6	12.6	13.5	13.9	14.6	13.4	10.3	9.1	9.1	8.4	8.2	14.6	8.0	10.0
24	8.1	8.9	8.8	8.5	8.0	7.9	7.5	7.3	6.9	6.6	7.6	7.9	8.8	9.9	11.2	11.9	12.7	13.6	13.1	12.5	12.4	11.7	10.9	10.5	13.6	6.6	9.7
25	10.4	10.1	9.6	8.9	7.7	7.5	7.2	6.2	5.5	6.7	7.2	7.7	8.0	7.6	7.3	7.9	9.3	10.8	11.1	10.5	8.9	7.7	7.4	7.2	11.1	5.5	8.3
26	7.1	7.0	7.0	7.2	7.2	7.2	7.2	7.3	7.1	7.1	7.1	7.2	7.4	7.6	8.1	8.5	9.1	9.2	8.9	8.5	8.2	7.9	7.7	7.6	9.2	7.0	7.7
27	7.5	7.3	7.2	7.1	7.0	7.0	6.6	6.2	5.8	5.8	5.5	5.8	6.3	6.7	6.8	7.3	7.7	8.0	8.2	8.2	8.1	7.4	7.5	7.2	8.2	5.5	7.0
28	6.9	6.8	6.9	6.8	6.8	6.8	6.7	6.6	6.7	6.7	6.9	7.1	7.5	8.5	9.2	9.6	9.9	9.4	8.5	8.6	8.5	7.3	6.5	6.1	9.9	6.1	7.6
29	5.7	5.6	5.6	5.5	5.4	5.5	5.7	6.1	6.8	7.9	9.2	9.3	9.4	10.1	10.3	10.5	10.9	10.7	9.8	8.6	7.8	7.1	6.3	5.3	10.9	5.3	7.7
30	4.9	4.8	4.8	4.9	4.8	4.6	4.8	4.9	5.0	6.2	7.7	7.6	7.6	7.8	9.0	10.6	10.3	10.4	9.8	9.2	8.2	8.1	7.7	7.1	10.6	4.6	7.1
31	6.7	6.4	6.2	6.2	5.9	5.5	5.4	5.6	5.4	5.4	5.6	6.1	6.5	7.3	7.8	7.8	8.4	8.4	8.3	8.6	8.0	6.9	6.6	6.7	8.6	5.4	6.7
Max.	**12.9**	**12.6**	**12.1**	**11.6**	**11.7**	**13.5**	**14.2**	**14.7**	**16.2**	**15.3**	**14.9**	**15.5**	**16.1**	**16.4**	**16.2**	**16.1**	**16.0**	**16.1**	**16.6**	**17.0**	**14.5**	**12.4**	**11.2**	**10.8**	**17.0**		
Min.	**4.9**	**4.8**	**4.8**	**4.9**	**4.8**	**4.6**	**4.8**	**4.9**	**5.0**	**5.4**	**5.5**	**5.8**	**6.3**	**6.7**	**6.8**	**7.3**	**7.7**	**8.0**	**7.8**	**7.2**	**6.7**	**6.4**	**5.8**	**5.3**		**4.6**	
Avg.	**7.9**	**7.8**	**7.6**	**7.4**	**7.2**	**7.3**	**7.2**	**7.2**	**7.4**	**7.8**	**8.3**	**8.8**	**9.4**	**9.9**	**10.4**	**10.8**	**11.3**	**11.4**	**10.9**	**10.4**	**9.8**	**9.0**	**8.4**	**8.0**			**8.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.9	7.1	7.1	6.9	6.8	6.7	6.4	6.4	6.7	7.5	9.2	9.7	10.3	10.2	9.7	10.1	9.8	9.0	8.3	7.7	6.8	6.3	6.0	6.2	10.3	6.0	7.8
2	6.0	6.0	5.7	5.6	5.5	5.5	5.5	5.4	5.5	5.5	5.5	5.6	6.0	6.3	7.2	7.4	7.3	7.4	7.2	6.7	6.1	5.7	5.6	5.3	7.4	5.3	6.1
3	5.1	4.7	4.3	4.2	4.3	4.4	4.4	4.5	4.5	4.7	4.9	5.4	5.8	6.2	6.6	6.9	7.0	7.4	7.3	6.9	6.4	6.0	6.4	6.2	7.4	4.2	5.6
4	5.8	5.8	5.8	5.6	5.4	5.2	4.8	4.4	4.3	4.5	4.9	5.7	5.9	6.7	7.2	7.6	8.6	9.6	9.1	8.5	7.8	6.9	6.7	6.6	9.6	4.3	6.4
5	6.5	6.6	6.2	6.4	6.4	6.5	6.1	6.0	6.3	6.7	7.5	8.6	9.3	9.3	8.0	8.7	8.6	9.5	8.0	6.9	6.9	6.6	6.6	6.4	9.5	6.0	7.3
6	6.0	5.9	5.4	5.0	5.0	4.7	5.0	5.2	5.0	5.1	5.7	6.3	6.1	5.7	5.6	5.7	5.5	5.5	5.8	6.1	5.7	5.4	5.9	5.6	6.3	4.7	5.5
7	5.5	5.6	6.7	7.3	6.7	6.3	6.1	5.7	6.0	6.2	6.3	6.3	5.9	5.9	5.8	6.0	6.3	6.5	6.2	5.8	5.9	5.9	6.0	6.1	7.3	5.5	6.1
8	6.1	5.9	6.1	6.0	6.0	5.7	5.6	5.4	5.3	5.5	6.1	6.4	6.8	6.8	6.3	6.2	6.0	5.5	5.3	5.1	5.0	5.2	5.4	5.8	6.8	5.0	5.8
9	6.2	6.5	6.2	5.7	4.9	4.9	5.0	5.6	5.4	5.8	6.0	6.3	6.6	6.8	6.7	6.7	6.6	6.4	6.3	6.3	6.2	5.9	5.8	5.9	6.8	4.9	6.0
10	5.9	6.1	6.0	5.9	5.9	5.9	5.9	5.9	5.8	5.9	6.1	6.1	6.9	7.5	7.4	7.5	7.9	8.0	7.7	7.5	7.4	7.4	7.4	7.4	8.0	5.8	6.7
11	6.8	5.9	5.5	5.1	4.7	4.8	5.2	5.4	5.3	5.6	5.8	6.0	6.1	6.2	6.6	6.9	7.3	7.4	7.4	7.2	6.8	6.4	6.0	5.9	7.4	4.7	6.1
12	5.9	5.8	5.9	5.9	5.3	4.8	4.6	4.5	4.6	4.8	5.1	5.5	6.0	6.7	6.5	6.4	6.4	6.3	6.4	6.4	6.5	6.5	6.5	6.5	6.7	4.5	5.8
13	6.6	6.6	6.6	6.5	6.3	6.1	6.0	6.0	6.0	5.9	5.7	5.2	5.2	5.0	4.8	4.6	4.7	4.6	4.5	4.4	4.4	4.7	5.0	4.9	6.6	4.4	5.4
14	4.9	4.8	4.8	4.7	4.7	4.5	4.4	4.4	4.3	4.3	4.6	4.6	4.8	5.4	5.6	5.7	6.2	6.0	5.8	5.7	5.2	4.9	5.0	5.3	6.2	4.3	5.0
15	5.2	5.0	5.0	5.1	5.2	5.1	5.0	5.0	5.1	5.2	5.4	5.7	6.1	6.3	6.4	6.3	6.1	6.0	5.7	5.3	5.1	5.0	5.0	4.9	6.4	4.9	5.4
16	4.7	4.8	5.2	4.8	4.7	4.3	4.4	4.2	4.2	4.7	5.4	6.0	6.3	6.4	6.6	6.8	6.4	5.9	6.4	5.9	5.5	5.5	5.0	4.6	6.8	4.2	5.4
17	4.7	4.6	4.5	4.2	4.0	3.7	3.4	3.4	3.1	3.2	3.8	4.1	4.1	4.5	4.5	4.5	4.5	4.3	3.6	3.3	2.9	3.0	2.7	2.8	4.7	2.7	3.8
18	2.9	2.8	2.9	2.8	2.8	2.6	2.6	2.5	2.4	2.7	3.0	3.5	4.0	4.2	3.8	3.7	4.1	4.0	3.9	4.0	3.9	3.5	3.4	2.9	4.2	2.4	3.3
19	2.7	2.8	2.9	2.8	2.8	2.7	2.8	3.0	3.0	3.4	3.4	3.5	3.6	4.1	4.1	3.1	3.0	3.2	2.9	2.6	2.7	2.6	2.5	2.3	4.1	2.3	3.0
20	2.1	2.1	2.1	2.0	1.5	1.4	1.0	0.6	0.5	0.4	0.8	0.4	0.3	0.7	1.7	2.2	3.1	2.9	2.8	2.1	1.3	1.4	1.7	1.5	3.1	0.3	1.5
21	1.4	1.4	1.4	1.2	1.2	1.2	1.2	1.1	1.1	1.4	1.9	2.6	3.2	3.1	3.6	4.0	3.5	3.2	2.7	1.4	0.7	0.3	0.0	0.0	4.0	0.0	1.8
22	0.1	0.2	0.0	0.1	0.0	0.0	0.2	0.3	0.5	1.0	1.6	2.6	3.5	4.2	4.1	3.3	2.5	2.3	1.8	1.3	1.1	1.2	1.3	1.2	4.2	0.0	1.4
23	1.4	1.6	2.5	4.2	4.4	4.4	4.3	4.2	4.1	4.1	3.8	3.8	3.6	3.4	3.1	3.5	3.5	3.4	3.5	3.4	3.2	2.9	2.8	3.0	4.4	1.4	3.4
24	3.0	2.8	3.0	2.9	2.8	2.7	2.5	2.7	2.7	2.6	2.6	2.8	3.1	3.3	3.6	3.6	3.5	3.6	3.5	3.2	3.1	2.9	2.8	2.6	3.6	2.5	3.0
25	2.7	2.6	2.3	2.3	2.3	2.2	2.5	2.3	2.4	2.7	3.2	3.3	3.7	4.2	4.2	4.1	4.2	4.0	3.7	3.6	3.3	3.3	3.2	3.0	4.2	2.2	3.1
26	2.9	3.0	3.3	3.3	3.1	2.7	2.9	2.9	2.9	3.5	3.8	4.5	4.9	5.1	5.7	5.4	5.9	5.7	5.8	5.6	4.9	3.9	3.5	3.2	5.9	2.7	4.1
27	2.6	2.2	1.3	1.2	0.4	0.0	-0.5	-0.9	-1.1	-1.1	-1.2	-0.5	0.5	1.6	2.7	3.3	3.7	3.7	3.5	2.8	1.9	1.5	1.1	1.2	3.7	-1.2	1.2
28	1.6	1.4	1.3	1.2	1.4	1.2	1.0	1.1	1.0	2.0	3.1	4.5	4.5	5.3	6.0	5.9	6.0	5.6	4.9	4.4	4.1	3.1	2.5	2.5	6.0	1.0	3.1
29	2.2	1.9	1.3	1.0	1.0	1.2	1.5	1.5	1.2	1.5	2.3	2.8	2.9	2.1	1.8	1.9	2.2	2.8	2.5	2.1	1.8	1.6	1.2	0.7	2.9	0.7	1.8
30	0.4	0.7	0.8	1.1	0.3	0.1	0.1	0.0	0.0	0.0	0.2	0.9	1.2	1.6	1.9	2.1	2.1	2.3	2.4	1.7	1.1	1.0	1.1	1.2	2.4	0.0	1.0
Max.	**6.9**	**7.1**	**7.1**	**7.3**	**6.8**	**6.7**	**6.4**	**6.4**	**6.7**	**7.5**	**9.2**	**9.7**	**10.3**	**10.2**	**9.7**	**10.1**	**9.8**	**9.6**	**9.1**	**8.5**	**7.8**	**7.4**	**7.4**	**7.4**	**10.3**		
Min.	**0.1**	**0.2**	**0.0**	**0.1**	**0.0**	**0.0**	**-0.5**	**-0.9**	**-1.1**	**-1.1**	**-1.2**	**-0.5**	**0.3**	**0.7**	**1.7**	**1.9**	**2.1**	**2.3**	**1.8**	**1.3**	**0.7**	**0.3**	**0.0**	**0.0**		**-1.2**	
Avg.	**4.2**	**4.1**	**4.1**	**4.0**	**3.9**	**3.7**	**3.7**	**3.6**	**3.6**	**3.8**	**4.2**	**4.6**	**4.9**	**5.2**	**5.3**	**5.3**	**5.4**	**5.4**	**5.2**	**4.8**	**4.5**	**4.2**	**4.1**	**4.1**			**4.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.9	1.1	1.1	1.2	1.1	0.8	0.5	0.4	0.5	0.6	0.3	0.6	1.6	2.1	2.2	2.3	2.1	2.2	2.0	1.6	1.3	1.4	1.2	1.2	2.3	0.3	1.3
2	1.2	0.6	0.7	0.7	0.6	0.3	0.5	0.2	0.3	0.7	0.6	0.7	1.2	1.5	1.9	2.0	1.7	1.4	1.0	0.5	0.0	-2.1	-2.8	-3.1	2.0	-3.1	0.4
3	-3.2	-3.5	-3.6	-3.6	-3.6	-3.4	-3.7	-4.3	-4.3	-4.2	-4.1	-3.9	-3.5	-3.1	-3.1	-3.1	-3.0	-3.2	-3.1	-3.5	-4.0	-4.1	-4.3	-4.1	-3.0	-4.3	-3.6
4	-4.2	-4.4	-4.4	-4.3	-4.3	-4.3	-4.0	-3.7	-4.0	-3.2	-2.7	-1.7	-1.1	-1.1	-1.2	-0.8	-0.5	-1.2	-1.1	-2.1	-2.4	-2.8	-2.7	-2.6	-0.5	-4.4	-2.7
5	-3.3	-3.6	-3.7	-3.9	-3.9	-4.0	-4.3	-4.7	-4.8	-4.6	-4.1	-3.5	-3.6	-2.9	-2.4	-2.8	-3.0	-3.2	-3.6	-4.0	-4.6	-4.8	-4.9	-5.0	-2.4	-5.0	-3.9
6	-5.2	-5.3	-5.4	-5.6	-5.7	-5.6	-5.7	-5.8	-5.9	-5.7	-5.3	-5.0	-4.1	-3.5	-3.5	-3.5	-3.6	-3.7	-4.4	-4.9	-5.3	-5.5	-5.6	-5.6	-3.5	-5.9	-5.0
7	-5.8	-5.9	-6.0	-6.0	-6.2	-6.3	-6.4	-6.6	-7.1	-7.1	-6.9	-6.8	-6.6	-6.6	-6.5	-6.4	-6.2	-6.3	-6.5	-6.5	-6.5	-6.6	-6.7	-6.7	-5.8	-7.1	-6.5
8	-6.6	-6.5	-6.9	-7.3	-8.0	-8.2	-8.3	-8.5	-8.8	-8.1	-7.2	-6.8	-6.8	-6.0	-6.0	-6.0	-5.7	-6.0	-6.5	-6.8	-7.0	-7.1	-6.7	-5.9	-5.7	-8.8	-7.0
9	-5.5	-4.6	-4.0	-3.5	-3.3	-3.7	-4.0	-4.1	-4.0	-3.7	-3.2	-2.5	-1.8	-1.3	-0.9	-0.5	0.1	0.2	0.4	0.8	1.3	1.5	1.8	2.0	2.0	-5.5	-1.8
10	2.1	2.2	2.2	2.2	2.0	1.5	0.4	0.2	0.0	0.1	0.7	1.8	1.8	1.8	2.2	2.4	2.4	2.0	1.7	1.7	1.8	1.9	1.9	1.8	2.4	0.0	1.6
11	2.1	2.4	2.5	2.5	2.2	2.1	2.5	2.4	1.0	-2.9	-4.2	-6.2	-7.1	-7.3	-7.8	-8.2	-8.3	-8.3	-8.5	-8.5	-8.5	-8.6	-8.6	-8.5	2.5	-8.6	-3.8
12	-8.2	-8.1	-7.8	-7.9	-8.4	-8.8	-9.3	-9.6	-9.8	-10.1	-10.0	-9.6	-8.9	-8.3	-8.5	-8.2	-8.0	-8.3	-8.7	-9.5	-10.0	-10.3	-10.3	-10.5	-7.8	-10.5	-9.0
13	-10.6	-10.8	-11.0	-11.2	-11.2	-11.3	-11.3	-11.2	-10.8	-10.6	-9.8	-8.9	-8.4	-8.2	-7.2	-6.5	-5.2	-4.5	-4.2	-3.8	-3.4	-3.2	-3.0	-2.8	-2.8	-11.3	-7.9
14	-2.7	-2.8	-2.8	-2.7	-2.7	-2.4	-3.0	-3.4	-3.5	-2.9	-2.6	-2.3	-2.1	-1.8	-1.5	-1.2	-0.9	-0.7	-0.8	-0.9	-1.0	-1.0	-0.7	-1.5	-0.7	-3.5	-2.0
15	-2.4	-3.4	-4.5	-4.3	-4.6	-6.9	-6.6	-6.5	-7.5	-7.0	-7.2	-6.9	-6.9	-7.1	-7.5	-7.5	-6.8	-7.4	-8.6	-9.0	-9.5	-9.8	-10.2	-10.6	-2.4	-10.6	-7.0
16	-10.0	-9.1	-9.5	-9.9	-9.8	-9.6	-9.1	-8.3	-8.2	-7.9	-7.7	-7.2	-6.1	-4.9	-3.5	-3.2	-2.1	-2.9	-4.8	-6.2	-6.4	-7.1	-7.0	-7.7	-2.1	-10.0	-7.0
17	-7.3	-7.3	-6.7	-7.6	-8.2	-7.7	-7.6	-7.5	-6.7	-4.9	-3.5	-1.5	-2.1	-2.1	-2.5	-2.8	-3.3	-3.4	-3.2	-2.7	-2.4	-2.1	-1.7	-1.7	-1.5	-8.2	-4.4
18	-1.8	-1.7	-1.7	-1.4	-1.3	-1.3	-1.2	-1.5	-1.3	-1.1	-0.9	-0.8	-0.4	-0.2	-0.3	-0.6	-0.2	-0.3	-0.7	-0.8	-1.1	-1.0	-0.8	-0.9	-0.2	-1.8	-1.0
19	-1.5	-2.9	-3.9	-3.7	-5.1	-5.2	-5.6	-6.1	-5.8	-6.6	-5.1	-5.9	-6.4	-6.2	-2.3	1.1	0.5	0.1	-0.8	-2.6	-3.1	-2.0	-3.0	-3.8	1.1	-6.6	-3.6
20	-4.0	-4.0	-4.8	-5.4	-6.0	-6.5	-6.9	-7.5	-7.1	-7.1	-7.5	-7.5	-8.0	-6.6	-6.8	-7.3	-7.6	-7.9	-7.4	-7.3	-6.6	-6.7	-7.2	-7.3	-4.0	-8.0	-6.7
21	-7.4	-7.4	-7.6	-7.6	-7.7	-7.8	-8.3	-8.6	-8.7	-8.5	-8.8	-8.7	-8.7	-8.8	-8.6	-8.0	-8.0	-8.4	-9.0	-10.2	-11.1	-12.0	-12.7	-13.1	-7.4	-13.1	-9.0
22	-13.2	-13.5	-13.6	-14.0	-14.5	-14.8	-15.0	-15.0	-15.0	-15.3	-14.9	-15.0	-15.1	-14.4	-14.1	-13.5	-12.7	-13.6	-14.4	-15.3	-16.0	-16.2	-16.4	-16.1	-12.7	-16.4	-14.6
23	-15.1	-15.2	-15.2	-15.2	-15.6	-15.9	-16.1	-16.0	-16.1	-16.3	-15.7	-15.6	-15.3	-15.0	-14.6	-14.1	-13.6	-12.9	-13.1	-12.8	-12.3	-12.0	-11.8	-12.1	-11.8	-16.3	-14.5
24	-12.5	-12.6	-12.6	-12.4	-12.8	-13.8	-15.3	-15.6	-15.1	-14.9	-14.5	-14.1	-13.6	-12.7	-12.4	-11.6	-11.0	-10.7	-11.0	-11.0	-10.7	-11.0	-10.8	-11.2	-10.7	-15.6	-12.7
25	-10.4	-9.9	-10.1	-10.1	-9.9	-9.3	-8.6	-8.0	-7.7	-7.3	-6.8	-6.0	-5.2	-4.7	-4.4	-4.0	-4.1	-4.1	-4.7	-5.0	-5.0	-4.7	-5.3	-5.4	-4.0	-10.4	-6.7
26	-6.5	-7.0	-7.2	-7.5	-8.4	-8.3	-8.4	-8.5	-8.8	-9.1	-9.3	-9.9	-11.1	-11.7	-12.1	-12.8	-12.6	-12.8	-13.5	-13.8	-13.9	-14.2	-15.0	-15.5	-6.5	-15.5	-10.7
27	-16.1	-16.6	-17.1	-17.3	-17.3	-17.6	-17.4	-17.6	-17.8	-18.2	-17.0	-16.5	-16.4	-16.2	-15.0	-14.6	-13.5	-14.2	-15.1	-15.4	-14.9	-14.9	-11.8	-12.4	-11.8	-18.2	-15.9
28	-13.6	-13.1	-13.1	-12.1	-10.3	-10.0	-10.3	-9.9	-10.2	-10.1	-8.8	-8.2	-8.0	-7.5	-7.2	-7.2	-6.8	-7.5	-7.9	-7.6	-6.0	-5.4	-5.5	-5.9	-5.4	-13.6	-8.9
29	-6.2	-3.8	-2.9	-3.0	-3.1	-3.0	-2.9	-2.8	-2.7	-3.0	-3.5	-4.1	-3.9	-4.1	-4.5	-4.1	-4.2	-4.3	-4.6	-4.6	-4.5	-4.7	-4.9	-4.3	-2.7	-6.2	-3.9
30	-3.8	-3.4	-3.1	-3.0	-2.8	-2.6	-2.5	-2.4	-2.5	-2.3	-2.3	-2.4	-2.0	-3.0	-2.6	-2.6	-2.4	-3.2	-3.4	-3.6	-3.7	-3.4	-3.9	-4.2	-2.0	-4.2	-3.0
31	-4.2	-4.0	-4.4	-4.4	-4.6	-4.6	-4.2	-2.9	-2.6	-2.8	-2.2	-1.7	-0.8	0.7	-0.7	-1.0	-1.4	-1.6	-2.5	-2.6	-2.0	-1.9	-1.8	-1.9	0.7	-4.6	-2.5
Max.	**2.1**	**2.4**	**2.5**	**2.5**	**2.2**	**2.1**	**2.5**	**2.4**	**1.0**	**0.7**	**0.7**	**1.8**	**1.8**	**2.1**	**2.2**	**2.4**	**2.4**	**2.2**	**2.0**	**1.7**	**1.8**	**1.9**	**1.9**	**2.0**	**2.5**		
Min.	**-16.1**	**-16.6**	**-17.1**	**-17.3**	**-17.3**	**-17.6**	**-17.4**	**-17.6**	**-17.8**	**-18.2**	**-17.0**	**-16.5**	**-16.4**	**-16.2**	**-15.0**	**-14.6**	**-13.6**	**-14.2**	**-15.1**	**-15.4**	**-16.0**	**-16.2**	**-16.4**	**-16.1**		**-18.2**	
Avg.	**-6.0**	**-5.9**	**-6.0**	**-6.1**	**-6.2**	**-6.4**	**-6.5**	**-6.5**	**-6.6**	**-6.6**	**-6.3**	**-6.0**	**-5.8**	**-5.5**	**-5.2**	**-5.0**	**-4.8**	**-5.0**	**-5.4**	**-5.7**	**-5.7**	**-5.8**	**-5.9**	**-6.0**			**-5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.3	-2.5	-2.6	-2.6	-2.5	-2.2	-2.6	-3.4	-3.7	-3.5	-3.1	-3.3	-3.5	-3.7	-3.4	-3.6	-4.2	-4.9	-5.2	-6.2	-5.8	-5.2	-5.1	-5.7	-2.2	-6.2	-3.8
2	-5.8	-6.3	-6.9	-7.9	-7.2	-7.6	-8.1	-8.2	-10.2	-12.5	-14.2	-15.3	-15.9	-16.0	-16.3	-16.2	-16.2	-16.5	-16.9	-17.0	-17.0	-16.9	-16.9	-16.9	-5.8	-17.0	-12.9
3	-17.0	-16.7	-16.6	-16.5	-16.4	-16.3	-16.2	-16.1	-16.3	-16.6	-16.8	-15.9	-16.2	-16.2	-16.1	-16.1	-15.6	-15.3	-16.2	-16.4	-16.6	-16.5	-16.5	-16.5	-15.3	-17.0	-16.3
4	-16.2	-16.2	-16.3	-15.7	-16.2	-16.0	-16.1	-16.6	-16.8	-16.8	-16.5	-16.4	-16.7	-16.6	-16.1	-15.8	-15.4	-15.7	-15.7	-15.5	-15.2	-15.3	-14.4	-12.6	-12.6	-16.8	-15.9
5	-12.8	-13.9	-14.5	-13.4	-10.6	-9.9	-11.6	-7.6	-7.2	-6.8	-6.5	-6.6	-5.2	-4.8	-4.3	-4.2	-3.9	-4.7	-5.5	-5.3	-5.4	-4.9	-4.9	-4.8	-3.9	-14.5	-7.5
6	-4.7	-4.6	-4.8	-4.9	-4.6	-5.0	-5.2	-5.4	-5.4	-5.2	-4.5	-4.4	-4.4	-4.0	-3.6	-3.5	-4.0	-3.7	-2.8	-3.8	-7.5	-6.4	-6.7	-7.6	-2.8	-7.6	-4.9
7	-12.3	-14.2	-14.6	-15.1	-15.2	-15.9	-15.8	-16.0	-13.1	-9.5	-9.8	-9.4	-8.6	-8.1	-9.0	-9.4	-9.1	-8.9	-9.6	-8.9	-8.5	-8.9	-8.7	-8.5	-8.1	-16.0	-11.1
8	-7.3	-6.6	-6.7	-7.3	-7.2	-7.0	-7.0	-7.0	-7.0	-7.0	-6.8	-6.7	-6.5	-6.5	-6.4	-5.9	-5.8	-6.0	-5.4	-5.0	-4.7	-4.6	-4.3	-4.7	-4.3	-7.3	-6.2
9	-4.4	-4.2	-3.7	-3.3	-2.6	-2.1	-1.9	-1.5	-1.7	-2.7	-2.9	-3.2	-2.6	-2.2	-1.4	-1.2	-1.5	-2.2	-2.5	-2.0	-1.7	-1.5	-1.3	-1.1	-1.1	-4.4	-2.3
10	-1.0	-0.8	-1.1	-1.9	-2.6	-2.5	-2.5	-2.4	-1.9	-2.1	-1.9	-2.2	-2.2	-2.2	-2.2	-2.2	-2.1	-2.5	-2.9	-3.0	-2.3	-2.2	-2.4	-2.5	-0.8	-3.0	-2.2
11	-2.6	-2.9	-3.1	-3.3	-3.6	-3.7	-3.6	-3.6	-3.6	-3.6	-3.5	-3.2	-2.9	-2.0	-1.5	-2.8	-3.8	-4.5	-5.3	-5.2	-5.5	-5.5	-5.4	-5.5	-1.5	-5.5	-3.8
12	-5.0	-5.3	-6.1	-6.5	-6.6	-7.5	-7.8	-8.0	-7.8	-7.6	-7.7	-7.6	-7.6	-7.6	-8.3	-8.7	-8.2	-7.6	-6.8	-6.1	-6.1	-5.8	-6.3	-6.3	-5.0	-8.7	-7.0
13	-6.3	-6.1	-5.9	-5.6	-5.5	-6.1	-6.6	-6.9	-7.0	-6.9	-6.4	-5.9	-5.0	-4.5	-3.9	-3.7	-3.8	-4.0	-4.6	-4.9	-4.9	-5.0	-5.0	-4.9	-3.7	-7.0	-5.4
14	-5.1	-4.8	-4.6	-4.9	-4.5	-4.5	-4.5	-4.6	-4.5	-4.4	-4.7	-5.3	-5.0	-4.9	-5.0	-5.3	-5.4	-5.5	-5.7	-5.8	-5.8	-5.7	-5.7	-5.6	-4.4	-5.8	-5.1
15	-5.6	-5.8	-6.5	-6.7	-6.6	-6.6	-6.6	-6.5	-6.3	-6.3	-6.3	-5.9	-5.6	-5.3	-5.7	-5.3	-5.0	-4.7	-4.4	-3.8	-3.4	-3.2	-3.1	-3.0	-3.0	-6.7	-5.3
16	-3.0	-3.1	-3.2	-3.2	-3.3	-3.4	-3.4	-3.7	-4.1	-5.1	-5.3	-4.7	-4.2	-3.8	-3.4	-3.2	-3.6	-4.2	-4.8	-5.7	-6.6	-6.5	-6.7	-6.8	-3.0	-6.8	-4.4
17	-6.7	-6.6	-6.8	-7.0	-7.1	-7.2	-7.1	-7.8	-7.7	-7.5	-7.7	-7.1	-7.3	-7.7	-8.1	-8.5	-9.0	-9.0	-9.3	-9.6	-10.1	-10.1	-10.1	-10.3	-6.6	-10.3	-8.1
18	-11.3	-12.2	-12.9	-13.2	-13.6	-13.8	-14.1	-14.4	-14.7	-14.9	-14.7	-15.0	-15.0	-14.8	-14.7	-14.9	-15.1	-15.7	-16.1	-16.8	-17.2	-17.2	-17.5	-17.7	-11.3	-17.7	-14.9
19	-17.7	-18.0	-18.3	-18.4	-18.3	-18.6	-18.6	-18.6	-18.5	-18.9	-18.5	-17.7	-17.3	-17.4	-17.1	-17.1	-16.7	-17.0	-17.0	-17.0	-16.9	-17.9	-17.9	-18.6	-16.7	-18.9	-17.8
20	-18.8	-19.2	-19.4	-19.9	-20.3	-20.9	-22.1	-22.7	-22.8	-23.5	-23.8	-24.0	-24.1	-24.4	-24.5	-24.5	-24.7	-24.9	-25.0	-25.2	-25.4	-25.8	-26.2	-26.5	-18.8	-26.5	-23.3
21	-26.7	-26.8	-27.1	-27.3	-27.5	-27.7	-27.8	-27.5	-27.5	-27.7	-27.1	-25.7	-26.0	-24.9	-24.5	-22.1	-20.2	-19.9	-18.5	-18.0	-17.6	-16.9	-16.6	-16.3	-16.3	-27.8	-23.7
22	-16.0	-16.2	-15.4	-14.7	-15.0	-15.0	-15.1	-15.0	-15.4	-15.9	-16.0	-16.2	-15.4	-14.2	-14.0	-13.9	-13.5	-14.4	-14.8	-14.5	-14.2	-15.1	-15.3	-15.5	-13.5	-16.2	-15.0
23	-15.6	-14.8	-14.4	-13.8	-12.6	-12.2	-11.9	-12.2	-12.5	-12.5	-13.0	-12.4	-10.8	-10.2	-9.8	-8.9	-8.4	-7.5	-6.3	-5.6	-5.6	-5.2	-4.7	-4.5	-4.5	-15.6	-10.2
24	-3.6	-3.1	-2.8	-2.6	-2.4	-2.2	-2.0	-1.9	-1.8	-1.9	-1.9	-2.0	-1.9	-1.8	-1.8	-1.9	-2.0	-2.1	-2.3	-2.5	-2.7	-4.0	-6.7	-9.2	-1.8	-9.2	-2.8
25	-10.8	-12.4	-13.1	-13.4	-13.6	-13.8	-13.9	-13.9	-14.3	-15.1	-15.9	-16.6	-17.0	-16.8	-17.3	-17.8	-18.0	-18.6	-18.7	-19.5	-19.7	-19.6	-20.2	-19.9	-10.8	-20.2	-16.2
26	-19.6	-19.6	-19.8	-18.9	-18.3	-18.0	-17.6	-17.3	-17.6	-17.4	-17.3	-17.5	-17.7	-17.7	-17.8	-17.7	-18.2	-18.3	-19.1	-19.3	-19.4	-18.9	-18.8	-19.0	-17.3	-19.8	-18.4
27	-19.6	-19.6	-19.6	-18.3	-16.8	-16.1	-15.6	-14.6	-13.9	-13.8	-13.5	-12.8	-11.6	-10.9	-10.7	-10.6	-9.6	-9.4	-10.7	-9.4	-8.1	-7.4	-6.8	-5.2	-5.2	-19.6	-12.7
28	-5.1	-5.4	-4.6	-4.8	-8.4	-6.4	-5.9	-6.7	-9.8	-10.4	-7.1	-4.9	-4.8	-4.6	-5.1	-8.7	-8.8	-9.1	-10.0	-9.8	-10.3	-12.1	-12.9	-13.2	-4.6	-13.2	-7.9
29	-13.6	-14.7	-16.1	-16.4	-16.2	-16.3	-17.3	-17.6	-18.1	-18.2	-18.5	-18.8	-19.0	-19.2	-19.0	-19.0	-19.4	-19.6	-20.1	-20.4	-20.4	-20.8	-20.7	-21.1	-13.6	-21.1	-18.3
30	-21.7	-22.2	-22.2	-22.7	-22.7	-22.6	-22.6	-22.3	-22.3	-22.4	-22.3	-21.9	-22.0	-21.9	-21.7	-21.9	-22.3	-22.5	-22.3	-22.0	-22.2	-22.2	-21.9	-21.3	-21.3	-22.7	-22.2
Max.	**-1.0**	**-0.8**	**-1.1**	**-1.9**	**-2.4**	**-2.1**	**-1.9**	**-1.5**	**-1.7**	**-1.9**	**-1.9**	**-2.0**	**-1.9**	**-1.8**	**-1.4**	**-1.2**	**-1.5**	**-2.1**	**-2.3**	**-2.0**	**-1.7**	**-1.5**	**-1.3**	**-1.1**	**-0.8**		
Min.	**-26.7**	**-26.8**	**-27.1**	**-27.3**	**-27.5**	**-27.7**	**-27.8**	**-27.5**	**-27.5**	**-27.7**	**-27.1**	**-25.7**	**-26.0**	**-24.9**	**-24.5**	**-24.5**	**-24.7**	**-24.9**	**-25.0**	**-25.2**	**-25.4**	**-25.8**	**-26.2**	**-26.5**		**-27.8**	
Avg.	**-10.6**	**-10.8**	**-11.0**	**-11.0**	**-10.9**	**-10.9**	**-11.0**	**-11.0**	**-11.1**	**-11.2**	**-11.1**	**-10.9**	**-10.7**	**-10.5**	**-10.4**	**-10.5**	**-10.4**	**-10.6**	**-10.8**	**-10.8**	**-10.9**	**-10.9**	**-11.0**	**-11.1**			**-10.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 2 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-20.5	-20.0	-20.0	-18.3	-16.5	-15.9	-15.4	-15.1	-14.5	-13.9	-13.2	-12.9	-11.8	-11.0	-10.5	-10.6	-10.7	-10.2	-10.3	-10.4	-10.3	-9.8	-9.5	-8.7	-8.7	-20.5	-13.3
2	-7.9	-7.3	-8.2	-8.9	-8.7	-7.6	-7.1	-7.6	-7.2	-6.7	-6.0	-5.0	-5.0	-4.6	-4.4	-4.6	-4.5	-4.3	-4.5	-4.3	-4.0	-3.6	-3.3	-2.9	-2.9	-8.9	-5.8
3	-2.5	-2.2	-2.1	-1.9	-1.8	-1.8	-1.7	-1.6	-1.5	-1.6	-1.4	-1.3	-1.3	-1.6	-1.5	-1.8	-1.7	-1.3	-1.1	-0.7	-0.5	-0.5	-0.5	-0.6	-0.5	-2.5	-1.4
4	-0.7	-0.8	-0.9	-1.0	-0.8	-0.9	-0.9	-1.1	-1.1	-1.2	-1.1	-0.8	-0.7	-0.7	-0.6	-0.6	-0.3	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.2	-1.2	-0.7
5	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.6	0.7	0.8	1.0	1.1	1.0	0.7	0.5	0.4	1.1	-0.3	0.4
6	0.5	0.6	0.4	0.5	0.6	0.6	0.5	0.4	0.4	0.3	0.5	0.6	0.6	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	-0.1	-0.3	-0.2	-0.7	0.6	-0.7	0.3
7	-0.6	-0.5	-1.1	-2.0	-3.8	-4.0	-4.6	-4.3	-4.4	-4.4	-5.4	-4.3	-3.7	-3.0	-2.9	-2.8	-2.2	-3.5	-3.8	-3.6	-4.4	-4.2	-3.6	-4.0	-0.5	-5.4	-3.4
8	-3.8	-3.9	-3.9	-3.9	-4.2	-4.2	-3.8	-3.7	-3.4	-2.6	-3.1	-3.0	-2.6	-2.7	-2.3	-2.7	-2.6	-2.4	-3.1	-2.6	-2.5	-2.8	-3.1	-3.5	-2.3	-4.2	-3.2
9	-3.9	-3.6	-3.1	-2.9	-3.2	-4.5	-4.4	-3.8	-3.6	-3.7	-3.2	-3.4	-3.8	-3.8	-4.7	-5.2	-5.6	-6.4	-7.0	-8.2	-8.2	-7.9	-7.3	-6.3	-2.9	-8.2	-4.9
10	-6.3	-6.9	-6.9	-7.1	-8.3	-9.8	-10.6	-10.9	-10.9	-12.0	-13.4	-13.9	-13.6	-13.2	-12.5	-11.5	-11.0	-10.7	-10.5	-10.6	-11.0	-11.3	-11.5	-11.6	-6.3	-13.9	-10.7
11	-11.8	-11.6	-11.4	-11.2	-10.3	-9.9	-9.9	-10.1	-10.0	-9.7	-9.4	-9.3	-9.4	-9.2	-9.4	-9.8	-10.9	-11.7	-12.0	-12.7	-13.4	-13.8	-13.6	-13.6	-9.2	-13.8	-11.0
12	-13.9	-13.8	-13.5	-13.1	-12.7	-12.2	-12.1	-11.5	-10.8	-8.9	-8.6	-7.8	-8.1	-7.4	-7.1	-6.0	-5.8	-6.2	-6.6	-7.6	-8.6	-9.2	-9.3	-8.8	-5.8	-13.9	-9.6
13	-8.9	-9.2	-9.4	-9.5	-9.8	-10.4	-10.6	-10.8	-11.1	-9.6	-9.9	-10.2	-8.4	-7.3	-6.9	-6.6	-5.6	-5.0	-5.8	-5.9	-5.9	-5.6	-3.7	-6.1	-3.7	-11.1	-8.0
14	-6.9	-7.5	-7.5	-7.7	-5.8	-5.1	-2.9	-2.7	-5.3	-7.9	-6.5	-7.3	-6.8	-6.2	-5.4	-6.0	-6.0	-5.8	-5.6	-6.0	-5.1	-4.7	-4.7	-4.5	-2.7	-7.9	-5.8
15	-4.3	-3.9	-3.9	-4.2	-4.3	-4.4	-4.4	-4.3	-4.2	-4.0	-4.0	-4.0	-3.8	-3.7	-3.5	-3.6	-3.5	-3.4	-3.2	-3.6	-4.1	-4.3	-4.2	-4.4	-3.2	-4.4	-4.0
16	-4.4	-4.4	-5.0	-5.1	-5.9	-5.5	-5.8	-6.5	-5.7	-6.4	-5.8	-5.6	-7.0	-7.4	-7.2	-7.1	-7.1	-7.2	-7.1	-6.9	-7.4	-7.5	-7.1	-6.7	-4.4	-7.5	-6.3
17	-5.9	-4.3	-3.8	-4.0	-3.9	-3.9	-3.8	-3.8	-3.6	-3.5	-3.5	-3.2	-3.0	-2.7	-2.6	-2.7	-2.8	-2.9	-2.8	-2.8	-2.7	-2.7	-2.8	-2.7	-2.6	-5.9	-3.3
18	-2.7	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.7	-2.6	-2.4	-2.3	-2.5	-2.5	-2.2	-2.0	-1.9	-2.0	-1.9	-2.2	-2.3	-2.1	-1.9	-1.8	-1.8	-1.8	-2.8	-2.4
19	-2.1	-2.1	-2.0	-2.0	-2.1	-2.1	-2.3	-2.3	-2.5	-2.5	-2.3	-2.2	-2.1	-2.5	-2.4	-2.5	-2.5	-2.4	-2.6	-2.6	-2.5	-3.0	-3.1	-2.8	-2.0	-3.1	-2.4
20	-3.2	-2.8	-3.0	-2.9	-3.0	-3.0	-2.9	-2.8	-2.7	-2.6	-2.5	-2.8	-3.0	-3.1	-3.0	-2.3	-1.7	-1.6	-2.0	-2.5	-2.9	-2.6	-2.8	-2.7	-1.6	-3.2	-2.7
21	-2.5	-3.0	-3.4	-3.5	-3.5	-3.6	-3.5	-3.4	-3.1	-3.5	-3.5	-3.2	-3.1	-3.9	-3.8	-3.9	-3.8	-3.8	-4.3	-3.8	-3.4	-3.5	-3.4	-4.0	-2.5	-4.3	-3.5
22	-5.0	-4.7	-5.7	-6.3	-6.7	-6.5	-5.8	-5.7	-6.1	-6.2	-6.1	-6.1	-5.8	-4.6	-3.8	-3.9	-4.1	-4.4	-4.8	-5.3	-5.4	-5.7	-5.9	-5.9	-3.8	-6.7	-5.4
23	-5.6	-5.4	-5.3	-5.3	-5.2	-5.0	-4.9	-5.0	-4.8	-5.2	-5.9	-8.1	-8.8	-9.6	-9.6	-9.6	-9.8	-10.1	-10.3	-10.2	-9.8	-9.9	-10.0	-9.7	-4.8	-10.3	-7.6
24	-9.5	-9.4	-9.5	-9.8	-9.9	-9.5	-9.5	-9.5	-9.1	-9.3	-9.3	-9.4	-9.6	-9.6	-9.7	-9.9	-10.0	-10.2	-10.6	-10.6	-10.5	-10.4	-10.4	-10.6	-9.1	-10.6	-9.8
25	-10.5	-10.2	-9.3	-8.8	-8.1	-7.9	-7.4	-6.8	-6.7	-6.5	-6.4	-6.4	-6.6	-7.1	-6.8	-6.6	-6.6	-9.1	-10.8	-11.5	-12.0	-12.6	-13.2	-14.0	-6.4	-14.0	-8.8
26	-14.5	-16.0	-17.9	-18.9	-19.7	-20.1	-20.1	-20.2	-19.9	-19.8	-19.6	-19.2	-19.1	-19.2	-19.0	-19.0	-19.0	-18.8	-19.2	-19.6	-19.8	-20.1	-19.8	-19.8	-14.5	-20.2	-19.1
27	-20.0	-19.5	-19.3	-19.2	-19.7	-20.0	-20.2	-20.5	-20.8	-21.2	-21.3	-21.4	-21.3	-21.4	-21.7	-21.6	-21.9	-22.1	-22.2	-22.5	-22.7	-22.8	-23.0	-23.5	-19.2	-23.5	-21.2
28	-23.4	-23.3	-23.4	-23.5	-23.7	-23.7	-23.7	-23.8	-24.0	-24.1	-24.4	-24.7	-24.6	-24.6	-24.6	-24.9	-25.2	-25.4	-25.6	-25.9	-26.2	-26.4	-26.3	-26.7	-23.3	-26.7	-24.7
29	-27.0	-27.0	-26.9	-26.9	-26.4	-26.2	-26.4	-27.0	-26.9	-26.5	-26.3	-26.1	-26.0	-25.7	-25.8	-25.6	-24.4	-22.1	-24.3	-25.8	-25.5	-25.2	-25.4	-25.8	-22.1	-27.0	-25.9
30	-26.3	-25.8	-25.6	-25.8	-25.1	-24.2	-26.1	-25.5	-24.9	-23.7	-23.9	-24.4	-25.7	-26.1	-25.4	-24.5	-25.6	-25.9	-26.2	-26.4	-27.1	-27.0	-27.0	-27.6	-23.7	-27.6	-25.7
31	-26.6	-27.0	-26.9	-26.9	-27.0	-27.0	-26.3	-26.2	-25.4	-24.7	-25.2	-24.7	-24.3	-24.5	-24.2	-25.3	-25.3	-24.8	-24.7	-25.0	-24.9	-24.7	-23.7	-24.0	-23.7	-27.0	-25.4
Max.	**0.5**	**0.6**	**0.4**	**0.5**	**0.6**	**0.6**	**0.5**	**0.4**	**0.4**	**0.3**	**0.5**	**0.6**	**0.6**	**0.5**	**0.4**	**0.6**	**0.7**	**0.8**	**1.0**	**1.1**	**1.0**	**0.7**	**0.5**	**0.4**	**1.1**		
Min.	**-27.0**	**-27.0**	**-26.9**	**-26.9**	**-27.0**	**-27.0**	**-26.4**	**-27.0**	**-26.9**	**-26.5**	**-26.3**	**-26.1**	**-26.0**	**-26.1**	**-25.8**	**-25.6**	**-25.6**	**-25.9**	**-26.2**	**-26.4**	**-27.1**	**-27.0**	**-27.0**	**-27.6**		**-27.6**	
Avg.	**-9.1**	**-9.0**	**-9.1**	**-9.1**	**-9.1**	**-9.1**	**-9.0**	**-9.0**	**-8.9**	**-8.8**	**-8.8**	**-8.8**	**-8.7**	**-8.6**	**-8.5**	**-8.4**	**-8.4**	**-8.5**	**-8.8**	**-9.0**	**-9.1**	**-9.1**	**-9.0**	**-9.1**			**-8.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-7.0	-7.9	-8.9	-10.1	-10.1	-9.9	-10.1	-9.1	-10.1	-11.1	-11.1	-10.6	-11.6	-13.7	-12.4	-10.9	-10.0	-10.0	-8.4	-8.1	-8.3	-8.8	-12.2	-12.4	-7.0	-13.7	-10.1
2	-14.8	-14.3	-13.0	-11.0	-11.5	-10.2	-11.5	-12.4	-12.6	-12.7	-12.1	-10.6	-10.0	-10.9	-10.7	-11.8	-12.7	-12.1	-11.8	-11.2	-11.5	-12.0	-12.0	-11.7	-10.0	-14.8	-11.9
3	-11.5	-11.4	-11.2	-12.0	-12.6	-12.3	-12.5	-12.8	-13.2	-13.2	-13.1	-13.2	-14.4	-13.6	-14.2	-15.8	-16.4	-15.5	-15.0	-14.8	-15.4	-15.9	-16.9	-17.6	-11.2	-17.6	-13.9
4	-18.5	-18.2	-18.6	-18.9	-18.9	-20.1	-20.2	-19.8	-19.9	-20.1	-19.5	-20.9	-22.1	-22.0	-21.5	-22.1	-22.3	-21.9	-22.5	-22.9	-23.3	-23.6	-23.8	-24.3	-18.2	-24.3	-21.1
5	-24.7	-25.0	-25.3	-25.7	-25.9	-25.6	-25.9	-26.6	-26.5	-26.5	-26.3	-26.0	-25.7	-25.5	-25.4	-25.5	-25.5	-25.9	-26.0	-25.9	-26.2	-26.9	-27.4	-27.7	-24.7	-27.7	-26.0
6	-27.9	-28.3	-28.4	-28.6	-28.8	-28.8	-29.0	-29.4	-29.4	-29.9	-29.6	-29.7	-29.8	-29.2	-29.3	-29.1	-29.3	-29.6	-29.9	-30.4	-30.3	-30.1	-30.0	-30.0	-27.9	-30.4	-29.4
7	-29.7	-29.7	-29.8	-29.6	-29.1	-28.9	-28.8	-28.7	-28.6	-27.5	-27.8	-26.4	-27.8	-27.3	-26.7	-26.4	-27.1	-26.5	-26.8	-26.8	-26.7	-26.9	-27.1	-27.0	-26.4	-29.8	-27.8
8	-27.1	-26.3	-26.2	-25.9	-25.4	-25.6	-25.5	-25.5	-25.1	-25.1	-25.3	-24.4	-24.4	-23.7	-23.0	-22.2	-22.5	-23.3	-24.3	-24.9	-25.6	-25.9	-24.9	-24.9	-22.2	-27.1	-24.9
9	-25.4	-24.5	-24.5	-26.1	-26.9	-26.9	-27.4	-27.6	-27.7	-27.6	-27.4	-27.3	-27.0	-26.3	-25.6	-25.5	-25.6	-25.7	-25.8	-25.8	-25.6	-25.5	-25.5	-25.4	-24.5	-27.7	-26.2
10	-25.4	-25.6	-25.8	-26.1	-26.2	-26.1	-26.1	-26.4	-26.6	-27.1	-26.9	-26.9	-27.1	-27.5	-27.3	-27.7	-28.0	-28.4	-28.9	-29.1	-28.9	-28.8	-29.4	-29.1	-25.4	-29.4	-27.3
11	-28.3	-28.8	-28.4	-28.3	-29.0	-29.4	-29.3	-29.9	-29.8	-30.4	-30.3	-29.9	-30.5	-30.2	-30.3	-30.2	-30.0	-30.0	-30.2	-30.2	-30.0	-30.2	-30.8	-31.4	-28.3	-31.4	-29.8
12	-31.6	-31.4	-31.7	-31.4	-31.8	-31.5	-31.7	-31.3	-31.4	-30.7	-30.8	-30.9	-30.8	-30.6	-30.3	-30.8	-32.0	-32.8	-32.9	-33.3	-33.1	-33.3	-33.3	-33.5	-30.3	-33.5	-31.8
13	-33.1	-32.9	-32.9	-33.1	-32.7	-32.8	-32.7	-32.7	-32.4	-32.8	-32.7	-32.5	-32.5	-32.0	-32.0	-31.5	-30.3	-30.6	-30.1	-29.2	-28.5	-27.5	-26.5	-24.9	-24.9	-33.1	-31.2
14	-23.1	-20.5	-19.7	-19.4	-17.6	-15.9	-15.2	-14.8	-18.2	-18.1	-17.0	-16.0	-14.3	-13.7	-13.7	-13.1	-12.5	-11.7	-11.1	-10.3	-9.4	-8.8	-8.4	-7.7	-7.7	-23.1	-14.6
15	-6.8	-6.0	-5.8	-5.6	-5.7	-6.7	-7.2	-7.2	-7.6	-7.5	-7.4	-7.2	-7.3	-7.1	-6.9	-6.9	-6.9	-6.9	-6.9	-6.8	-6.5	-6.1	-5.9	-5.9	-5.6	-7.6	-6.7
16	-5.7	-5.4	-4.9	-4.2	-4.0	-4.2	-4.6	-5.0	-5.2	-5.2	-5.1	-5.2	-5.4	-5.6	-5.2	-5.0	-4.9	-5.1	-5.7	-5.4	-5.5	-5.7	-6.0	-6.1	-4.0	-6.1	-5.2
17	-6.1	-6.7	-7.5	-7.2	-6.4	-5.9	-5.8	-5.3	-5.8	-5.0	-4.0	-4.0	-4.6	-4.2	-4.2	-3.9	-4.0	-3.9	-3.9	-4.1	-4.2	-4.1	-4.2	-4.3	-3.9	-7.5	-5.0
18	-4.4	-4.6	-4.6	-4.8	-4.7	-5.0	-5.2	-5.3	-5.3	-5.1	-5.1	-5.1	-4.8	-4.2	-3.9	-4.3	-4.6	-4.4	-4.1	-4.1	-4.2	-4.0	-4.5	-5.1	-3.9	-5.3	-4.6
19	-5.2	-5.0	-5.0	-5.0	-4.9	-4.7	-3.8	-3.2	-3.5	-3.6	-3.5	-3.2	-3.3	-3.2	-3.2	-3.0	-2.9	-2.8	-2.7	-2.7	-2.6	-2.6	-2.6	-2.6	-2.6	-5.2	-3.5
20	-2.6	-2.7	-2.7	-2.6	-2.3	-2.2	-2.2	-2.2	-2.0	-2.1	-2.0	-1.7	-1.4	-1.4	-1.4	-1.4	-1.6	-1.8	-1.8	-2.0	-2.1	-2.1	-2.5	-2.9	-1.4	-2.9	-2.1
21	-3.0	-3.1	-2.9	-2.9	-3.0	-2.9	-2.6	-2.3	-2.2	-2.0	-2.0	-1.8	-1.6	-1.4	-1.2	-1.0	-1.0	-1.0	-1.2	-1.4	-1.5	-1.4	-1.3	-1.2	-1.0	-3.1	-1.9
22	-1.7	-2.5	-3.5	-4.1	-4.3	-4.5	-4.1	-4.1	-3.9	-3.5	-4.1	-5.2	-6.2	-6.5	-7.2	-7.8	-8.2	-8.5	-8.5	-8.5	-8.5	-8.4	-8.4	-8.7	-1.7	-8.7	-5.9
23	-9.1	-10.7	-11.4	-13.7	-15.3	-16.4	-17.6	-18.4	-18.8	-19.4	-19.8	-19.9	-20.3	-20.9	-21.4	-21.7	-22.1	-22.9	-23.3	-23.5	-23.6	-23.3	-20.9	-21.9	-9.1	-23.6	-19.0
24	-18.8	-18.5	-17.3	-16.8	-15.3	-13.8	-13.6	-14.9	-13.9	-13.8	-13.4	-13.3	-13.2	-12.7	-12.1	-11.6	-11.4	-11.2	-11.1	-10.9	-10.7	-10.1	-9.8	-9.6	-9.6	-18.8	-13.2
25	-9.7	-9.6	-7.9	-6.9	-7.0	-8.4	-8.4	-7.6	-8.2	-8.4	-8.5	-8.5	-8.4	-8.3	-8.0	-8.1	-7.9	-8.1	-8.3	-10.3	-12.4	-14.5	-16.3	-17.5	-6.9	-17.5	-9.5
26	-18.4	-19.1	-19.0	-19.6	-19.9	-19.6	-19.8	-20.1	-20.9	-19.9	-19.1	-17.9	-16.9	-15.2	-13.9	-14.0	-13.8	-13.0	-13.0	-12.7	-13.2	-13.0	-13.3	-13.4	-12.7	-20.9	-16.6
27	-13.7	-13.8	-13.5	-13.3	-12.7	-12.1	-12.0	-11.1	-10.3	-9.5	-9.0	-8.9	-8.8	-8.5	-8.2	-8.0	-7.7	-7.7	-7.5	-7.2	-7.3	-7.5	-7.5	-7.4	-7.2	-13.8	-9.7
28	-7.2	-7.3	-7.4	-7.5	-7.5	-7.5	-8.0	-8.3	-8.3	-8.4	-8.4	-8.2	-8.0	-7.8	-7.4	-6.7	-5.9	-6.0	-6.1	-6.0	-5.7	-5.9	-5.5	-5.5	-5.5	-8.4	-7.1
29	-5.5	-5.9	-6.0	-6.0	-5.8	-5.8	-6.4	-6.7	-6.7	-6.4	-6.3	-6.4	-6.4	-6.6	-6.7	-7.1	-7.3	-7.5	-8.2	-8.4	-8.7	-9.0	-9.2	-9.3	-5.5	-9.3	-7.0
30	-9.4	-9.3	-9.3	-9.6	-10.0	-10.3	-10.4	-10.4	-10.8	-12.5	-13.7	-13.9	-13.4	-14.1	-15.0	-15.3	-15.3	-15.4	-15.0	-15.0	-15.1	-15.2	-15.4	-15.9	-9.3	-15.9	-12.9
31	-14.9	-14.4	-14.0	-13.4	-13.0	-12.6	-12.0	-11.6	-11.7	-11.7	-11.5	-12.2	-11.7	-10.7	-10.1	-9.5	-10.8	-11.3	-11.5	-11.9	-12.2	-12.5	-12.6	-12.7	-9.5	-14.9	-12.1
Max.	**-1.7**	**-2.5**	**-2.7**	**-2.6**	**-2.3**	**-2.2**	**-2.2**	**-2.2**	**-2.0**	**-2.0**	**-2.0**	**-1.7**	**-1.4**	**-1.4**	**-1.2**	**-1.0**	**-1.0**	**-1.0**	**-1.2**	**-1.4**	**-1.5**	**-1.4**	**-1.3**	**-1.2**	**-1.0**		
Min.	**-33.1**	**-32.9**	**-32.9**	**-33.1**	**-32.7**	**-32.8**	**-32.7**	**-32.7**	**-32.4**	**-32.8**	**-32.7**	**-32.5**	**-32.5**	**-32.0**	**-32.0**	**-31.5**	**-32.0**	**-32.8**	**-32.9**	**-33.3**	**-33.1**	**-33.3**	**-33.3**	**-33.5**		**-33.5**	
Avg.	**-15.2**	**-15.1**	**-15.1**	**-15.1**	**-15.1**	**-15.0**	**-15.1**	**-15.2**	**-15.4**	**-15.4**	**-15.2**	**-15.1**	**-15.2**	**-15.0**	**-14.8**	**-14.8**	**-14.8**	**-14.9**	**-14.9**	**-15.0**	**-15.1**	**-15.1**	**-15.3**	**-15.4**			**-15.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-12.8	-13.2	-13.1	-13.3	-13.5	-14.0	-13.9	-13.6	-14.0	-13.7	-13.7	-13.4	-13.1	-12.4	-12.2	-12.1	-12.3	-12.7	-13.2	-13.7	-14.0	-14.2	-14.4	-14.5	-12.1	-14.5	-13.4
2	-14.4	-14.3	-14.2	-15.0	-15.4	-15.9	-16.5	-16.4	-16.7	-16.7	-17.3	-17.7	-18.9	-19.0	-18.3	-18.4	-18.4	-18.4	-18.9	-19.1	-19.0	-20.0	-20.8	-21.6	-14.2	-21.6	-17.5
3	-22.4	-23.2	-23.4	-24.0	-24.9	-25.6	-26.0	-26.8	-26.4	-26.1	-27.1	-26.4	-26.5	-27.0	-26.7	-24.9	-24.6	-25.9	-25.1	-26.5	-23.0	-22.1	-22.0	-21.1	-21.1	-27.1	-24.9
4	-18.5	-17.9	-18.5	-18.7	-18.4	-18.2	-18.1	-18.1	-18.3	-18.5	-18.4	-18.2	-17.7	-17.7	-16.9	-16.3	-17.2	-18.5	-19.3	-21.5	-21.9	-22.4	-21.9	-22.3	-16.3	-22.4	-18.9
5	-22.2	-22.5	-23.2	-24.8	-25.1	-24.8	-24.3	-25.4	-27.5	-27.4	-27.1	-25.9	-25.9	-26.1	-24.4	-24.9	-24.0	-24.3	-24.3	-20.7	-19.6	-18.5	-17.2	-16.8	-16.8	-27.5	-23.6
6	-16.4	-16.4	-15.7	-15.9	-15.8	-16.0	-16.1	-16.0	-15.4	-15.8	-17.6	-16.1	-20.0	-19.5	-18.7	-19.0	-19.1	-19.7	-22.3	-21.3	-23.2	-23.8	-20.7	-21.6	-15.4	-23.8	-18.4
7	-23.9	-22.1	-23.6	-23.9	-22.4	-23.1	-19.4	-18.2	-20.4	-20.6	-21.0	-19.4	-15.0	-14.9	-14.5	-13.7	-13.1	-13.3	-13.1	-13.0	-12.4	-13.0	-13.4	-14.0	-12.4	-23.9	-17.6
8	-14.6	-14.1	-12.8	-12.9	-13.1	-13.2	-13.0	-13.2	-13.0	-12.9	-13.4	-12.7	-12.9	-13.0	-12.7	-12.2	-12.2	-12.6	-12.8	-12.8	-12.5	-12.5	-12.6	-12.4	-12.2	-14.6	-12.9
9	-12.5	-12.5	-12.0	-11.9	-11.7	-11.6	-11.6	-11.7	-11.4	-11.4	-11.5	-11.5	-11.2	-10.0	-10.2	-9.1	-9.8	-10.4	-12.3	-11.9	-11.2	-11.2	-11.5	-11.8	-9.1	-12.5	-11.3
10	-12.1	-12.7	-12.6	-12.1	-12.3	-12.9	-12.2	-12.6	-13.2	-15.7	-17.1	-16.4	-16.7	-16.6	-15.8	-16.3	-16.7	-16.2	-16.4	-16.4	-16.4	-16.1	-16.0	-16.4	-12.1	-17.1	-14.9
11	-16.5	-16.5	-16.6	-16.8	-16.6	-16.8	-16.3	-16.0	-15.7	-15.9	-15.6	-14.7	-14.0	-13.2	-12.8	-11.1	-11.8	-11.7	-10.9	-11.2	-13.1	-14.5	-14.3	-16.1	-10.9	-16.8	-14.5
12	-17.9	-19.7	-21.3	-22.1	-22.9	-25.1	-25.7	-25.2	-25.8	-25.3	-24.8	-23.9	-24.4	-23.2	-22.3	-19.9	-16.7	-14.1	-12.5	-10.8	-9.3	-9.1	-9.6	-11.1	-9.1	-25.8	-19.3
13	-10.4	-9.8	-9.7	-9.8	-9.3	-9.1	-8.3	-7.2	-6.4	-5.2	-4.5	-3.8	-3.2	-2.9	-2.9	-2.7	-2.5	-2.4	-2.4	-2.4	-2.4	-2.3	-2.0	-2.0	-2.0	-10.4	-5.1
14	-2.1	-2.0	-2.0	-2.0	-2.0	-2.1	-2.2	-6.0	-10.9	-13.3	-15.2	-16.6	-17.6	-18.4	-19.1	-20.2	-20.8	-21.2	-21.5	-21.5	-21.3	-20.8	-20.3	-20.9	-2.0	-21.5	-13.3
15	-22.2	-23.0	-23.7	-24.2	-24.4	-23.5	-24.7	-24.9	-25.4	-25.2	-24.7	-24.1	-24.4	-24.1	-23.0	-24.1	-21.4	-21.2	-20.5	-20.7	-20.2	-18.8	-17.3	-17.7	-17.3	-25.4	-22.6
16	-16.5	-15.1	-13.9	-13.2	-12.3	-11.0	-10.5	-9.7	-9.5	-9.4	-9.7	-9.4	-8.9	-8.6	-8.0	-7.5	-7.1	-6.4	-6.5	-7.2	-7.4	-7.5	-7.4	-7.5	-6.4	-16.5	-9.6
17	-7.2	-7.1	-8.0	-7.5	-5.3	-4.4	-3.5	-3.4	-3.4	-4.1	-3.9	-3.1	-2.7	-2.2	-1.9	-1.9	-1.7	-1.8	-2.1	-2.4	-2.2	-2.2	-2.2	-2.4	-1.7	-8.0	-3.6
18	-2.5	-2.1	-2.3	-2.3	-2.5	-2.4	-2.4	-2.3	-2.0	-1.7	-1.7	-1.8	-1.9	-1.9	-2.0	-2.1	-2.3	-2.2	-2.1	-1.9	-2.1	-2.1	-2.1	-2.1	-1.7	-2.5	-2.1
19	-2.1	-2.0	-2.0	-2.5	-2.7	-2.7	-2.8	-2.5	-2.7	-3.3	-2.6	-1.8	-1.4	-0.9	-1.0	-1.1	-1.1	-1.1	-1.1	-1.2	-1.2	-1.3	-1.4	-1.5	-0.9	-3.3	-1.8
20	-1.6	-1.8	-2.1	-2.0	-2.0	-2.2	-2.3	-2.3	-2.7	-2.9	-2.7	-2.3	-2.0	-1.8	-1.6	-1.7	-1.9	-2.2	-2.3	-2.4	-2.4	-2.4	-2.4	-2.4	-1.6	-2.9	-2.2
21	-2.5	-2.8	-2.6	-2.7	-2.6	-2.6	-2.5	-2.3	-2.2	-2.2	-2.1	-2.0	-1.8	-1.8	-1.5	-1.6	-1.4	-1.3	-1.9	-2.1	-2.0	-2.3	-2.2	-2.3	-1.3	-2.8	-2.1
22	-2.3	-2.2	-2.3	-2.2	-2.3	-2.6	-2.8	-2.6	-2.7	-2.9	-2.9	-3.0	-2.9	-2.9	-2.4	-2.4	-3.0	-3.3	-3.5	-3.7	-3.9	-3.9	-4.0	-4.2	-2.2	-4.2	-3.0
23	-4.1	-4.3	-4.5	-4.6	-4.7	-4.6	-4.5	-4.4	-4.8	-5.0	-5.3	-5.6	-5.3	-4.9	-4.7	-4.5	-4.8	-5.4	-5.9	-6.4	-6.7	-6.9	-7.1	-8.6	-4.1	-8.6	-5.3
24	-9.5	-10.5	-11.0	-11.0	-11.1	-11.1	-11.2	-11.7	-12.5	-14.1	-14.5	-15.1	-15.2	-15.1	-14.8	-14.4	-13.8	-13.3	-13.4	-15.7	-16.6	-16.7	-16.9	-17.0	-9.5	-17.0	-13.6
25	-17.4	-18.1	-18.4	-19.3	-19.8	-20.3	-21.1	-21.7	-22.1	-21.9	-20.0	-18.3	-16.6	-15.0	-14.7	-13.6	-12.0	-10.9	-10.4	-10.6	-10.1	-9.9	-9.8	-9.1	-9.1	-22.1	-15.9
26	-9.0	-8.7	-8.5	-8.3	-8.3	-8.5	-8.5	-8.3	-8.1	-8.0	-8.3	-8.4	-7.9	-7.4	-7.0	-6.3	-5.8	-6.0	-6.8	-7.8	-9.5	-8.4	-5.3	-5.1	-5.1	-9.5	-7.7
27	-9.3	-9.9	-6.8	-6.6	-5.9	-5.5	-6.2	-5.8	-5.7	-5.4	-4.8	-4.4	-3.9	-2.4	-3.6	-4.0	-4.7	-4.8	-4.9	-5.3	-5.0	-5.3	-5.4	-4.8	-2.4	-9.9	-5.4
28	-3.9	-3.7	-4.0	-3.4	-3.8	-3.8	-3.7	-3.3	-2.8	-2.3	-2.9	-2.7	-2.7	-2.3	-1.9	-1.2	-0.4	-0.4	-0.9	-2.5	-3.0	-2.0	-2.0	-1.9	-0.4	-4.0	-2.6
29	-2.4	-5.8	-6.6	-6.3	-6.1	-5.2	-5.8	-9.0	-10.9	-10.0	-10.7	-8.8	-12.1	-13.2	-13.8	-15.2	-14.9	-14.7	-14.7	-15.2	-15.8	-16.2	-16.8	-17.5	-2.4	-17.5	-11.2
Max.	**-1.6**	**-1.8**	**-2.0**	**-2.0**	**-2.0**	**-2.1**	**-2.2**	**-2.3**	**-2.0**	**-1.7**	**-1.7**	**-1.8**	**-1.4**	**-0.9**	**-1.0**	**-1.1**	**-0.4**	**-0.4**	**-0.9**	**-1.2**	**-1.2**	**-1.3**	**-1.4**	**-1.5**	**-0.4**		
Min.	**-23.9**	**-23.2**	**-23.7**	**-24.8**	**-25.1**	**-25.6**	**-26.0**	**-26.8**	**-27.5**	**-27.4**	**-27.1**	**-26.4**	**-26.5**	**-27.0**	**-26.7**	**-24.9**	**-24.6**	**-25.9**	**-25.1**	**-26.5**	**-23.2**	**-23.8**	**-22.0**	**-22.3**		**-27.5**	
Avg.	**-11.3**	**-11.5**	**-11.6**	**-11.7**	**-11.6**	**-11.7**	**-11.6**	**-11.8**	**-12.2**	**-12.3**	**-12.4**	**-12.0**	**-12.0**	**-11.7**	**-11.4**	**-11.1**	**-10.9**	**-10.9**	**-11.1**	**-11.3**	**-11.3**	**-11.2**	**-11.0**	**-11.3**			**-11.5**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-17.9	-17.7	-15.2	-14.9	-15.4	-16.0	-15.9	-16.6	-16.3	-16.1	-15.6	-14.4	-13.7	-12.6	-12.0	-11.3	-10.1	-9.4	-9.0	-8.7	-7.8	-7.2	-6.8	-6.0	-6.0	-17.9	-12.8
2	-5.8	-5.0	-4.6	-3.5	-3.4	-3.5	-3.6	-3.7	-3.8	-4.3	-4.6	-4.5	-4.1	-3.8	-3.5	-3.2	-3.4	-3.3	-3.2	-3.6	-3.7	-3.6	-3.4	-3.2	-3.2	-5.8	-3.8
3	-3.2	-3.5	-4.1	-3.4	-3.3	-3.4	-3.5	-3.7	-3.7	-3.3	-3.0	-3.1	-3.1	-3.1	-2.8	-2.5	-2.5	-2.2	-1.8	-1.8	-1.7	-1.6	-1.5	-1.3	-1.3	-4.1	-2.8
4	-1.1	-1.0	-0.9	-0.9	-1.2	-1.7	-1.6	-1.5	-1.8	-2.0	-2.2	-2.0	-1.9	-1.9	-1.7	-1.8	-1.7	-1.7	-1.7	-1.7	-1.8	-1.9	-1.9	-2.0	-0.9	-2.2	-1.7
5	-2.0	-1.9	-1.6	-1.6	-1.5	-1.3	-1.4	-1.4	-1.5	-1.4	-1.4	-1.6	-1.7	-1.6	-1.7	-1.5	-1.4	-1.3	-1.5	-1.8	-2.0	-1.9	-1.9	-2.1	-1.3	-2.1	-1.6
6	-2.3	-2.4	-2.5	-2.8	-2.9	-3.0	-3.0	-3.2	-3.5	-3.5	-3.3	-3.0	-2.4	-2.3	-2.1	-1.8	-1.7	-1.9	-1.5	-1.5	-1.3	-1.4	-1.6	-1.4	-1.3	-3.5	-2.4
7	-1.2	-1.8	-1.8	-1.5	-1.8	-2.0	-1.9	-1.9	-1.9	-2.2	-1.9	-1.6	-1.5	-0.7	-0.8	-2.0	-3.0	-2.9	-3.4	-4.1	-3.9	-4.2	-4.8	-5.5	-0.7	-5.5	-2.4
8	-5.8	-5.8	-6.4	-6.5	-6.7	-6.7	-6.7	-6.5	-6.4	-6.1	-5.7	-5.1	-4.6	-4.6	-4.3	-3.8	-2.7	-2.5	-2.9	-3.0	-3.1	-3.1	-2.7	-3.2	-2.5	-6.7	-4.8
9	-3.0	-2.7	-2.7	-2.6	-2.2	-2.4	-2.3	-2.2	-2.3	-2.2	-1.8	-1.5	-1.5	-2.2	-2.4	-2.0	-1.7	-1.6	-2.0	-1.9	-1.9	-1.6	-1.6	-1.6	-1.5	-3.0	-2.1
10	-1.7	-2.6	-2.8	-3.1	-4.7	-6.4	-6.5	-6.3	-6.8	-7.2	-6.9	-7.0	-6.6	-6.4	-6.0	-6.3	-6.2	-6.8	-7.0	-7.2	-7.6	-8.1	-8.3	-8.5	-1.7	-8.5	-6.1
11	-8.7	-8.9	-9.6	-9.9	-10.0	-9.9	-9.9	-10.0	-10.3	-10.2	-9.6	-9.4	-9.1	-9.1	-9.1	-10.2	-10.1	-10.0	-10.3	-10.9	-11.6	-11.7	-11.9	-12.1	-8.7	-12.1	-10.1
12	-11.9	-12.3	-12.4	-12.8	-13.2	-13.7	-11.5	-12.1	-12.5	-12.3	-12.3	-12.1	-11.8	-11.4	-11.2	-10.9	-10.6	-10.5	-10.5	-10.5	-10.5	-10.6	-10.6	-10.6	-10.5	-13.7	-11.6
13	-10.7	-10.8	-11.0	-11.4	-11.7	-11.8	-12.0	-12.3	-12.6	-13.0	-13.2	-13.2	-12.5	-12.3	-12.4	-12.5	-13.0	-13.0	-13.5	-14.2	-14.7	-14.2	-12.2	-10.0	-10.0	-14.7	-12.4
14	-11.2	-12.1	-10.9	-10.6	-10.6	-10.7	-11.1	-11.0	-10.4	-8.0	-4.4	-3.5	-4.3	-3.6	-4.2	-5.9	-7.0	-8.4	-8.0	-7.7	-7.6	-7.6	-7.8	-7.7	-3.5	-12.1	-8.1
15	-7.0	-7.6	-7.2	-6.7	-6.4	-5.9	-5.6	-5.8	-5.6	-5.4	-5.2	-5.0	-4.8	-4.5	-4.3	-4.1	-4.0	-4.0	-4.0	-4.0	-4.2	-4.3	-4.4	-4.3	-4.0	-7.6	-5.2
16	-4.4	-4.4	-4.3	-4.4	-4.5	-4.7	-5.0	-5.3	-5.3	-5.2	-5.4	-5.4	-4.5	-4.7	-4.4	-4.5	-4.1	-4.0	-4.0	-3.9	-4.2	-4.2	-4.3	-4.6	-3.9	-5.4	-4.6
17	-4.8	-4.9	-5.0	-4.9	-5.0	-5.1	-4.9	-5.1	-5.1	-4.9	-4.7	-4.5	-4.1	-3.8	-3.3	-3.5	-3.2	-5.1	-8.8	-10.0	-10.8	-10.8	-10.9	-10.6	-3.2	-10.9	-6.0
18	-10.4	-11.4	-12.1	-13.1	-13.5	-14.0	-14.5	-15.1	-15.9	-16.7	-16.6	-16.4	-16.4	-16.0	-15.8	-15.5	-15.9	-16.1	-16.7	-16.9	-17.3	-17.8	-18.1	-18.4	-10.4	-18.4	-15.4
19	-18.8	-19.5	-20.0	-20.4	-20.8	-21.0	-21.4	-21.7	-22.0	-22.3	-22.0	-21.7	-21.4	-21.0	-20.6	-20.2	-19.8	-19.6	-19.7	-20.1	-20.6	-21.0	-21.3	-21.3	-18.8	-22.3	-20.8
20	-21.5	-21.7	-21.9	-22.0	-22.1	-22.0	-22.0	-22.0	-21.7	-20.7	-19.6	-18.6	-17.8	-18.4	-13.9	-12.4	-13.9	-18.7	-18.3	-19.4	-19.0	-19.2	-19.1	-18.5	-12.4	-22.1	-19.3
21	-17.6	-16.6	-16.1	-15.5	-12.6	-11.6	-12.9	-11.4	-10.8	-10.5	-10.4	-9.8	-9.6	-8.2	-8.3	-7.0	-6.7	-7.6	-6.4	-9.7	-10.7	-12.4	-10.8	-6.2	-6.2	-17.6	-10.8
22	-6.5	-7.0	-8.7	-9.7	-9.0	-10.9	-10.4	-10.6	-11.7	-10.4	-10.9	-10.5	-10.6	-10.2	-9.8	-7.1	-6.1	-8.7	-8.3	-9.0	-10.6	-11.7	-9.8	-9.1	-6.1	-11.7	-9.5
23	-8.6	-7.7	-9.2	-8.9	-10.4	-12.5	-11.7	-11.3	-12.4	-12.5	-13.2	-14.1	-15.5	-16.1	-15.5	-15.4	-14.9	-14.2	-13.9	-14.1	-14.5	-15.1	-15.6	-16.0	-7.7	-16.1	-13.0
24	-15.8	-15.8	-15.8	-15.9	-16.0	-15.2	-14.4	-13.6	-13.6	-14.6	-13.0	-13.9	-12.7	-11.6	-10.8	-11.8	-11.0	-10.6	-10.4	-10.1	-9.9	-9.1	-9.3	-9.3	-9.1	-16.0	-12.7
25	-9.1	-8.3	-9.0	-9.8	-10.4	-10.9	-10.4	-10.5	-9.2	-7.6	-7.6	-6.7	-5.8	-4.9	-3.4	-0.8	-3.2	-4.8	-5.1	-5.4	-6.7	-6.8	-6.7	-7.2	-0.8	-10.9	-7.1
26	-7.5	-7.5	-7.4	-8.0	-9.0	-8.9	-9.3	-9.6	-10.3	-9.7	-8.1	-7.9	-8.9	-9.5	-9.4	-8.8	-8.1	-8.4	-8.3	-8.8	-9.2	-9.0	-9.8	-10.3	-7.4	-10.3	-8.8
27	-9.6	-9.7	-9.9	-10.1	-10.4	-10.2	-10.9	-11.2	-11.5	-11.6	-11.8	-11.6	-11.4	-11.4	-11.2	-11.1	-10.8	-10.8	-11.0	-11.5	-12.0	-12.3	-12.3	-12.5	-9.6	-12.5	-11.1
28	-12.8	-13.0	-12.9	-13.1	-13.5	-13.8	-13.2	-13.2	-12.5	-11.9	-9.3	-8.2	-6.2	-7.2	-7.7	-9.1	-9.8	-10.1	-10.3	-9.5	-9.2	-9.1	-9.5	-9.9	-6.2	-13.8	-10.6
29	-10.2	-10.5	-10.0	-9.7	-9.7	-10.0	-9.1	-8.5	-8.1	-7.8	-7.5	-7.2	-6.6	-6.2	-5.8	-5.5	-5.6	-5.8	-5.6	-5.3	-4.8	-4.5	-4.2	-3.8	-3.8	-10.5	-7.2
30	-3.4	-3.2	-3.2	-3.2	-3.2	-3.4	-3.5	-3.4	-3.5	-3.4	-3.3	-3.1	-3.0	-2.8	-2.7	-2.6	-2.5	-2.4	-2.5	-2.4	-2.5	-2.6	-2.6	-2.7	-2.4	-3.5	-3.0
31	-2.6	-2.5	-2.5	-2.5	-2.4	-2.1	-1.9	-1.9	-1.8	-1.5	-1.2	-1.0	-0.9	-0.9	-0.8	-1.0	-1.1	-1.1	-1.2	-1.3	-1.5	-1.5	-1.4	-1.3	-0.8	-2.6	-1.6
Max.	**-1.1**	**-1.0**	**-0.9**	**-0.9**	**-1.2**	**-1.3**	**-1.4**	**-1.4**	**-1.5**	**-1.4**	**-1.2**	**-1.0**	**-0.9**	**-0.7**	**-0.8**	**-0.8**	**-1.1**	**-1.1**	**-1.2**	**-1.3**	**-1.3**	**-1.4**	**-1.4**	**-1.3**	**-0.7**		
Min.	**-21.5**	**-21.7**	**-21.9**	**-22.0**	**-22.1**	**-22.0**	**-22.0**	**-22.0**	**-22.0**	**-22.3**	**-22.0**	**-21.7**	**-21.4**	**-21.0**	**-20.6**	**-20.2**	**-19.8**	**-19.6**	**-19.7**	**-20.1**	**-20.6**	**-21.0**	**-21.3**	**-21.3**		**-22.3**	
Avg.	**-8.3**	**-8.4**	**-8.4**	**-8.5**	**-8.6**	**-8.9**	**-8.8**	**-8.8**	**-8.9**	**-8.7**	**-8.3**	**-8.0**	**-7.7**	**-7.5**	**-7.2**	**-7.0**	**-7.0**	**-7.3**	**-7.4**	**-7.7**	**-8.0**	**-8.1**	**-8.0**	**-7.8**			**-8.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-1.3	-1.4	-1.5	-1.7	-1.8	-1.9	-2.2	-2.2	-2.2	-2.0	-1.8	-1.6	-1.5	-1.2	-0.9	-0.9	-0.8	-0.9	-0.9	-1.2	-1.7	-1.9	-2.4	-2.9	-0.8	-2.9	-1.6
2	-3.0	-3.0	-3.2	-3.5	-3.4	-3.6	-3.9	-4.5	-4.4	-3.8	-3.2	-3.1	-3.5	-3.8	-3.4	-2.5	-2.6	-3.2	-4.0	-3.9	-4.2	-4.2	-3.9	-3.3	-2.5	-4.5	-3.5
3	-3.1	-2.9	-2.9	-3.2	-3.4	-3.5	-3.5	-3.6	-3.4	-3.0	-2.5	-2.1	-1.7	-1.1	-1.1	-1.2	-1.1	-0.8	-1.1	-1.8	-2.3	-2.5	-2.3	-2.3	-0.8	-3.6	-2.4
4	-2.4	-2.3	-2.4	-2.5	-2.5	-2.4	-2.5	-2.5	-2.6	-2.4	-2.2	-1.9	-1.9	-1.8	-1.6	-1.4	-1.5	-1.8	-2.1	-2.7	-3.6	-5.5	-6.3	-7.4	-1.4	-7.4	-2.8
5	-8.8	-10.2	-11.3	-12.6	-13.1	-13.4	-13.8	-14.2	-14.2	-13.9	-13.5	-12.8	-11.9	-11.9	-12.2	-11.6	-10.2	-10.1	-10.7	-11.5	-12.3	-12.8	-12.8	-13.0	-8.8	-14.2	-12.2
6	-13.9	-14.7	-14.2	-14.8	-15.7	-16.0	-16.3	-16.3	-15.7	-15.6	-15.8	-15.4	-14.6	-14.1	-13.6	-13.1	-12.7	-12.4	-12.4	-12.6	-12.8	-13.4	-13.6	-13.8	-12.4	-16.3	-14.3
7	-14.2	-14.3	-14.3	-14.4	-14.3	-14.3	-14.4	-14.5	-14.3	-13.9	-13.9	-13.5	-13.2	-12.4	-11.6	-11.3	-10.8	-10.4	-10.2	-10.3	-10.7	-11.2	-11.1	-10.7	-10.2	-14.5	-12.7
8	-10.3	-10.2	-9.7	-10.7	-10.3	-10.7	-11.2	-10.1	-8.0	-5.8	-7.0	-7.7	-7.1	-7.1	-6.8	-6.6	-6.6	-7.4	-9.1	-9.7	-11.1	-11.3	-11.9	-12.1	-5.8	-12.1	-9.1
9	-12.2	-12.2	-12.9	-12.9	-13.0	-13.4	-13.8	-13.8	-13.6	-13.2	-13.2	-12.7	-12.5	-12.6	-12.1	-11.5	-11.7	-11.8	-11.8	-11.7	-11.9	-12.4	-12.8	-13.1	-11.5	-13.8	-12.6
10	-13.1	-13.0	-13.8	-14.4	-13.7	-13.7	-13.6	-14.8	-14.8	-14.4	-14.6	-14.1	-13.9	-13.5	-12.7	-12.1	-11.8	-11.7	-11.9	-12.3	-13.1	-13.8	-14.0	-14.2	-11.7	-14.8	-13.4
11	-13.9	-14.0	-14.7	-14.3	-14.5	-14.8	-15.4	-15.8	-16.1	-16.3	-16.9	-16.9	-15.9	-15.1	-14.3	-13.7	-13.2	-13.1	-13.2	-13.7	-14.2	-14.9	-15.3	-15.5	-13.1	-16.9	-14.8
12	-15.4	-15.7	-15.5	-15.3	-15.2	-15.1	-15.5	-15.3	-14.7	-14.2	-14.1	-14.2	-14.0	-12.8	-12.0	-11.6	-10.8	-10.0	-9.8	-9.9	-9.7	-8.8	-8.4	-8.5	-8.4	-15.7	-12.8
13	-9.0	-8.5	-8.4	-9.2	-8.7	-7.2	-7.0	-7.0	-7.0	-7.2	-6.8	-4.0	-3.1	-2.8	-2.2	-2.1	-2.2	-2.0	-2.3	-2.4	-2.6	-2.8	-3.2	-3.4	-2.0	-9.2	-5.0
14	-3.5	-3.7	-3.8	-4.0	-4.1	-4.2	-4.4	-4.6	-4.6	-4.3	-3.8	-3.2	-2.7	-2.5	-2.3	-2.1	-1.9	-1.6	-2.0	-2.4	-2.4	-2.8	-3.1	-3.3	-1.6	-4.6	-3.2
15	-3.4	-3.2	-3.3	-3.3	-3.4	-3.7	-4.0	-4.8	-6.3	-7.0	-8.3	-9.1	-9.4	-9.6	-10.3	-11.0	-11.2	-11.4	-11.8	-12.3	-13.1	-14.3	-14.7	-15.0	-3.2	-15.0	-8.5
16	-15.5	-15.8	-16.2	-16.4	-17.2	-17.4	-18.0	-18.8	-19.0	-18.7	-17.7	-16.9	-16.1	-15.1	-13.7	-12.5	-11.8	-10.7	-9.6	-9.2	-9.1	-9.0	-8.8	-8.1	-8.1	-19.0	-14.2
17	-8.3	-7.9	-6.9	-7.1	-6.8	-6.5	-6.1	-5.8	-5.3	-4.6	-2.8	-0.8	-4.0	-4.1	-4.3	-4.3	-4.3	-2.9	-3.9	-4.2	-4.1	-4.8	-4.9	-4.5	-0.8	-8.3	-5.0
18	-4.4	-3.9	-3.5	-3.9	-3.9	-3.4	-3.0	-2.0	0.6	1.8	2.4	1.6	0.0	-0.3	-0.7	-0.4	-0.2	-1.0	-1.4	-0.7	-1.2	-2.3	-2.0	-2.4	2.4	-4.4	-1.4
19	-2.7	-2.5	-2.7	-3.2	-2.9	-2.9	-2.5	-2.9	-2.2	-3.3	-2.6	-1.8	-1.9	-1.9	-1.8	-1.7	-1.6	0.5	0.6	0.2	-1.3	-1.8	-3.7	-4.1	0.6	-4.1	-2.1
20	-3.9	-3.1	-2.0	-2.1	-2.7	-2.5	-1.3	-0.4	-0.5	-0.6	-0.5	-1.0	-1.3	-0.9	-1.1	-1.6	-1.4	-2.5	-2.8	-3.0	-2.9	-3.1	-3.1	-3.1	-0.4	-3.9	-2.0
21	-3.1	-3.1	-3.1	-3.0	-2.9	-2.9	-3.0	-3.0	-3.0	-2.9	-2.6	-2.6	-2.4	-2.3	-2.1	-2.0	-2.0	-2.0	-1.9	-2.0	-2.0	-1.8	-1.7	0.6	0.6	-3.1	-2.4
22	2.1	2.4	3.0	2.5	3.4	2.6	2.1	3.0	3.6	4.1	3.7	3.4	3.7	4.4	4.8	4.8	4.9	7.0	7.1	7.5	7.6	7.7	6.2	6.1	7.7	2.1	4.5
23	6.6	6.8	6.7	6.7	6.1	6.4	5.9	6.5	6.7	6.8	7.5	7.7	8.0	8.2	7.3	7.4	7.8	8.1	7.8	7.4	6.8	6.5	6.0	5.5	8.2	5.5	7.0
24	4.8	2.2	1.1	1.0	0.5	-2.1	-2.1	-1.8	-2.5	-3.4	-2.7	-1.7	-1.8	-0.8	-0.7	-0.6	-0.9	-2.3	-2.1	-1.7	-1.6	-1.8	-3.3	-4.7	4.8	-4.7	-1.2
25	-5.5	-6.0	-6.6	-8.1	-8.8	-9.1	-9.7	-10.3	-10.9	-11.2	-11.0	-10.9	-10.7	-10.4	-10.1	-9.9	-9.6	-9.3	-9.0	-8.9	-8.9	-9.4	-10.1	-10.9	-5.5	-11.2	-9.4
26	-11.8	-12.6	-12.8	-13.1	-13.6	-14.0	-14.2	-14.1	-13.6	-12.7	-12.1	-11.5	-10.7	-10.0	-9.4	-9.2	-8.7	-8.0	-7.5	-7.4	-7.4	-8.0	-8.5	-8.6	-7.4	-14.2	-10.8
27	-8.5	-8.6	-8.7	-9.0	-9.5	-9.9	-10.2	-10.1	-10.3	-10.2	-9.9	-9.7	-9.4	-8.7	-8.1	-7.9	-7.8	-7.6	-7.4	-7.2	-7.3	-7.5	-7.8	-7.8	-7.2	-10.3	-8.7
28	-7.7	-7.8	-7.5	-7.8	-7.4	-7.4	-6.8	-6.8	-6.2	-6.0	-3.2	-4.9	-5.7	-5.7	-5.7	-5.5	-5.7	-5.6	-5.8	-6.0	-6.3	-6.7	-7.1	-7.5	-3.2	-7.8	-6.4
29	-7.8	-7.4	-7.3	-7.0	-6.9	-7.2	-7.2	-7.3	-7.0	-6.3	-6.1	-5.2	-4.0	-3.4	-3.3	-2.8	-1.5	-1.2	-1.1	-1.0	-2.5	-3.2	-4.0	-4.6	-1.0	-7.8	-4.8
30	-5.2	-5.6	-6.0	-6.2	-6.7	-6.9	-7.3	-7.1	-7.5	-7.2	-6.3	-5.0	-3.9	-2.3	-1.4	-0.8	-0.8	-1.6	-2.9	-4.8	-4.8	-4.8	-5.0	-5.1	-0.8	-7.5	-4.8
Max.	**6.6**	**6.8**	**6.7**	**6.7**	**6.1**	**6.4**	**5.9**	**6.5**	**6.7**	**6.8**	**7.5**	**7.7**	**8.0**	**8.2**	**7.3**	**7.4**	**7.8**	**8.1**	**7.8**	**7.5**	**7.6**	**7.7**	**6.2**	**6.1**	**8.2**		
Min.	**-15.5**	**-15.8**	**-16.2**	**-16.4**	**-17.2**	**-17.4**	**-18.0**	**-18.8**	**-19.0**	**-18.7**	**-17.7**	**-16.9**	**-16.1**	**-15.1**	**-14.3**	**-13.7**	**-13.2**	**-13.1**	**-13.2**	**-13.7**	**-14.2**	**-14.9**	**-15.3**	**-15.5**		**-19.0**	
Avg.	**-6.6**	**-6.7**	**-6.8**	**-7.1**	**-7.2**	**-7.4**	**-7.5**	**-7.5**	**-7.3**	**-7.0**	**-6.7**	**-6.4**	**-6.2**	**-5.8**	**-5.6**	**-5.3**	**-5.1**	**-4.9**	**-5.1**	**-5.3**	**-5.7**	**-6.1**	**-6.5**	**-6.6**			**-6.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-5.2	-5.4	-5.7	-6.3	-6.4	-6.5	-6.8	-6.3	-6.3	-5.7	-4.5	-4.1	-2.6	-1.4	-0.7	0.0	0.2	0.1	0.0	-0.1	-0.4	-0.9	-1.4	-2.3	0.2	-6.8	-3.3
2	-2.5	-2.6	-3.0	-3.5	-3.3	-3.4	-3.5	-3.7	-3.5	-2.9	-2.2	-0.6	0.6	1.9	2.6	1.8	2.8	2.7	2.9	2.2	1.0	0.8	0.7	0.4	2.9	-3.7	-0.6
3	0.3	0.0	-0.3	-1.2	-1.9	-1.3	-0.8	-0.7	-0.4	-0.3	-0.1	0.3	0.6	0.9	0.9	1.1	0.2	-0.1	0.6	1.3	1.3	0.4	-0.7	-0.3	1.3	-1.9	0.0
4	-0.6	-0.8	-0.7	-0.9	-0.4	-0.6	-0.7	-0.8	-0.4	-0.3	0.2	0.7	1.0	1.5	1.8	2.1	2.4	2.5	2.8	2.9	1.8	2.2	2.0	1.5	2.9	-0.9	0.8
5	0.9	1.1	1.5	1.4	1.5	1.9	2.0	2.2	2.9	4.1	3.4	3.6	4.0	3.5	3.9	3.8	4.2	3.8	3.3	2.8	1.9	1.5	1.4	1.0	4.2	0.9	2.6
6	1.2	0.9	0.8	0.1	0.3	-0.3	-0.2	-0.2	-0.2	-0.3	-0.4	-0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.1	-0.1	-0.6	-0.8	-1.0	-1.0	1.2	-1.0	0.0
7	-1.1	-0.9	-0.9	-0.8	-0.6	-0.7	-0.7	-0.8	-0.6	-0.3	0.0	0.3	0.3	0.4	0.5	0.5	0.5	0.7	0.8	0.9	0.8	0.6	0.0	0.0	0.9	-1.1	0.0
8	0.1	0.3	0.1	-0.1	-0.4	-0.6	-0.5	-0.2	0.0	0.1	0.3	0.6	0.6	0.5	0.4	0.6	0.7	1.0	0.9	1.0	0.9	0.8	0.8	0.8	1.0	-0.6	0.4
9	1.0	0.9	0.6	0.6	0.4	-0.1	-0.1	0.1	0.7	0.9	1.0	0.8	0.4	0.5	0.5	0.8	0.8	0.7	0.6	0.5	0.5	0.6	0.7	0.6	1.0	-0.1	0.6
10	1.0	1.0	1.0	0.8	0.8	0.8	0.6	0.7	1.0	1.2	1.8	2.4	3.4	3.2	2.8	2.8	2.6	2.7	2.3	1.7	2.0	1.7	2.0	2.0	3.4	0.6	1.8
11	1.8	1.2	1.1	1.0	1.0	1.0	1.1	1.3	1.4	1.4	0.7	0.4	0.3	0.4	1.6	2.1	2.1	2.0	2.4	2.1	2.0	1.7	1.2	0.6	2.4	0.3	1.3
12	0.5	0.1	0.0	-0.2	-0.3	-0.5	-0.6	-0.7	-0.7	-0.3	0.5	1.3	1.5	1.3	1.0	0.1	-0.5	-0.5	-0.7	-0.8	-1.0	-1.0	-1.0	-0.9	1.5	-1.0	-0.1
13	-1.0	-1.0	-1.1	-1.0	-1.1	-1.0	-1.4	-1.3	-0.8	-0.6	-0.1	0.1	0.1	0.2	0.2	0.2	-0.1	-0.2	-0.6	-0.9	-1.1	-1.6	-2.0	-1.9	0.2	-2.0	-0.8
14	-1.9	-1.7	-2.1	-2.1	-1.7	-1.6	-1.3	-1.2	-1.1	-1.0	-0.5	-0.2	0.8	1.8	2.3	1.8	2.1	1.9	2.0	1.3	1.1	2.2	2.4	2.4	2.4	-2.1	0.2
15	2.4	1.7	1.9	1.5	1.2	0.7	0.6	0.8	0.1	0.0	0.4	1.1	1.7	2.3	1.8	1.4	0.7	0.4	0.3	0.4	-0.1	-0.4	-0.6	-0.5	2.4	-0.6	0.8
16	-0.4	-0.6	-0.9	-1.3	-1.6	-1.5	-1.6	-1.4	-0.7	-0.5	-0.8	-0.6	-0.2	0.1	0.1	0.1	0.1	0.2	0.5	0.9	0.9	0.7	-0.3	-0.3	0.9	-1.6	-0.4
17	-0.4	-0.3	-0.2	-0.1	0.1	-0.1	0.3	0.5	0.3	0.1	0.6	1.5	2.3	3.3	4.0	4.4	4.7	5.0	5.1	4.3	4.2	2.8	1.6	1.0	5.1	-0.4	1.9
18	0.7	1.2	0.5	-0.7	-1.0	-1.4	-1.3	-1.1	-0.8	-0.7	-0.5	-0.3	-0.1	0.2	0.3	0.3	0.5	0.6	0.6	-0.1	-0.1	-0.3	-0.7	-0.7	1.2	-1.4	-0.2
19	-1.1	-1.3	-1.7	-1.8	-1.7	-1.7	-1.6	-1.4	-1.2	-1.3	-1.1	-0.4	0.6	1.4	1.9	2.1	1.9	2.2	2.7	3.2	3.1	2.7	2.1	1.7	3.2	-1.8	0.4
20	1.7	1.6	1.8	1.6	1.3	1.1	1.0	0.9	1.4	1.7	2.5	3.7	5.0	6.0	6.5	7.2	7.3	7.5	7.6	7.7	7.4	7.4	7.1	6.8	7.7	0.9	4.3
21	6.6	6.4	6.0	6.0	5.8	5.6	5.1	4.5	3.7	3.7	3.8	4.7	4.6	4.8	4.4	4.7	5.4	5.8	6.0	5.4	4.4	3.5	3.1	2.8	6.6	2.8	4.9
22	2.8	2.2	1.6	0.8	0.3	0.8	1.5	1.1	1.4	2.2	2.6	3.5	4.0	4.4	4.9	5.1	4.9	4.5	3.3	2.8	2.0	1.2	0.6	0.3	5.1	0.3	2.5
23	0.0	-0.6	-1.0	-1.0	-1.1	-0.8	-0.7	-0.7	-0.4	-0.2	-0.1	0.1	0.0	0.2	0.4	0.5	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.4	0.8	-1.1	0.0
24	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.8	1.0	1.3	1.9	2.5	2.4	1.6	0.7	1.6	1.4	0.9	0.7	2.5	0.1	0.8
25	0.5	-0.2	-0.7	-1.0	-1.0	-1.4	-1.4	-1.5	-1.3	-1.3	-0.6	-0.1	-0.4	-0.5	-0.4	-0.1	0.3	0.7	0.5	0.8	0.8	0.6	0.4	0.3	0.8	-1.5	-0.3
26	0.1	-0.1	-0.4	-0.9	-1.2	-1.0	-1.1	-1.0	-0.8	-0.6	-0.1	0.3	0.6	0.9	1.2	0.4	0.7	1.6	1.9	1.9	2.3	2.1	1.7	1.6	2.3	-1.2	0.4
27	1.2	0.6	0.3	-0.1	-0.4	-0.2	0.4	1.5	0.5	0.3	1.3	2.6	3.7	4.3	5.1	5.8	6.4	6.9	7.1	7.1	6.9	6.1	4.3	3.6	7.1	-0.4	3.1
28	3.7	3.2	3.5	3.4	3.4	3.7	3.9	4.1	4.3	3.8	3.9	4.7	5.9	6.4	6.9	7.7	8.2	8.4	8.0	7.7	7.6	7.3	6.5	6.0	8.4	3.2	5.5
29	5.6	5.2	4.8	4.5	4.2	4.0	3.6	3.3	3.2	3.6	4.8	5.6	6.1	6.7	7.4	7.8	8.4	8.7	9.2	9.5	9.4	9.0	8.3	8.0	9.5	3.2	6.3
30	7.1	6.4	7.9	7.5	6.8	6.7	6.1	5.8	5.6	5.9	6.6	6.9	7.3	7.3	7.6	7.7	7.4	6.4	6.1	5.5	4.1	3.4	3.1	3.0	7.9	3.0	6.2
31	2.9	2.7	2.3	2.0	1.9	1.8	1.8	1.7	1.6	1.6	2.1	2.3	2.7	2.9	3.1	3.2	3.1	3.0	2.6	2.3	1.9	2.0	1.6	1.4	3.2	1.4	2.3
Max.	**7.1**	**6.4**	**7.9**	**7.5**	**6.8**	**6.7**	**6.1**	**5.8**	**5.6**	**5.9**	**6.6**	**6.9**	**7.3**	**7.3**	**7.6**	**7.8**	**8.4**	**8.7**	**9.2**	**9.5**	**9.4**	**9.0**	**8.3**	**8.0**	**9.5**		
Min.	**-5.2**	**-5.4**	**-5.7**	**-6.3**	**-6.4**	**-6.5**	**-6.8**	**-6.3**	**-6.3**	**-5.7**	**-4.5**	**-4.1**	**-2.6**	**-1.4**	**-0.7**	**-0.1**	**-0.5**	**-0.5**	**-0.7**	**-0.9**	**-1.1**	**-1.6**	**-2.0**	**-2.3**		**-6.8**	
Avg.	**0.9**	**0.7**	**0.6**	**0.3**	**0.2**	**0.1**	**0.1**	**0.2**	**0.3**	**0.5**	**0.8**	**1.3**	**1.8**	**2.1**	**2.4**	**2.5**	**2.6**	**2.7**	**2.6**	**2.4**	**2.2**	**1.9**	**1.5**	**1.3**			**1.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.1	2.3	1.9	2.4	2.6	2.5	2.4	2.3	2.4	2.3	2.7	3.6	3.8	3.5	3.9	4.3	4.2	3.4	3.3	2.9	3.0	2.2	2.2	1.8	4.3	1.8	2.8
2	1.9	2.0	2.3	2.3	2.5	2.2	2.2	2.6	2.9	3.3	3.6	4.0	4.5	5.5	6.2	6.3	6.5	6.3	6.0	5.8	5.7	5.8	5.1	4.5	6.5	1.9	4.2
3	5.1	5.0	4.6	4.1	4.0	4.2	4.1	3.6	3.5	4.1	5.4	6.0	5.4	6.0	6.3	5.7	4.8	5.3	4.7	4.0	2.9	2.0	1.6	1.4	6.3	1.4	4.3
4	1.2	1.0	1.1	0.9	0.7	0.6	0.6	0.9	1.7	1.6	2.2	3.1	3.1	3.7	4.1	4.5	4.7	4.6	4.7	4.6	4.1	3.5	2.7	1.7	4.7	0.6	2.6
5	1.0	0.8	0.7	0.6	0.6	0.7	0.7	0.7								2.2	2.3	2.3	2.1	2.2	2.2	2.4	2.4	1.6	2.4	0.6	1.5
6	1.8	1.6	1.8	2.4	2.4	2.1	2.2	2.0	1.7	2.1	3.3	4.5	5.5	6.6	7.1	8.3	8.3	7.2	7.6	6.4	7.8	7.6	6.7	5.8	8.3	1.6	4.7
7	5.7	5.0	4.6	4.5	4.4	4.5	4.6	4.5	5.2	5.9	6.7	7.7	8.3	9.2	10.0	11.2	10.9	11.0	11.4	10.5	9.8	8.3	6.8	6.0	11.4	4.4	7.4
8	6.1	5.9	5.7	5.6	5.1	3.9	4.1	3.5	3.3	3.7	3.5	3.8	4.1	3.7	4.2	4.5	4.6	4.5	4.3	4.2	4.4	3.5	1.6	0.4	6.1	0.4	4.1
9	-0.2	-0.7	-0.7	-0.8	-1.0	-1.2	-1.2	-1.1	-1.1	-0.8	-0.1	0.1	0.3	0.7	0.9	1.2	1.9	1.9	2.1	2.2	2.2	2.2	1.7	1.4	2.2	-1.2	0.4
10	1.2	1.0	0.8	0.7	0.6	0.8	0.5	0.7	0.7	0.9	1.3	1.2	1.8	2.7	3.1	3.4	4.1	4.1	3.7	3.4	2.7	2.4	2.7	2.5	4.1	0.5	2.0
11	2.2	2.5	2.9	2.2	2.0	1.8	1.4	1.6	1.3	1.3	1.4	2.2	1.7	1.8	1.8	2.0	2.3	2.4	2.7	2.8	2.6	2.2	1.9	1.1	2.9	1.1	2.0
12	0.6	1.0	0.5	0.4	1.4	1.5	-0.2	-0.3	0.0	0.3	1.0	1.2	1.3	1.1	1.9	2.0	1.8	1.4	0.8	0.6	0.5	0.5	0.4	0.4	2.0	-0.3	0.8
13	0.6	0.8	0.8	1.2	1.7	2.1	2.1	2.2	2.6	3.5	3.9	4.5	5.3	5.9	6.3	7.1	8.1	9.0	9.9	10.4	10.1	9.8	9.2	8.8	10.4	0.6	5.2
14	8.7	8.6	8.6	7.8	7.5	7.4	6.9	7.0	6.6	6.7	6.3	6.5	8.2	9.4	10.0	10.7	10.2	10.6	10.3	9.3	7.3	7.6	6.2	6.6	10.7	6.2	8.1
15	7.9	7.2	7.0	6.0	5.4	5.3	7.0	7.8	8.4	10.5	8.4	6.7	6.9	7.4	7.1	6.7	5.9	5.9	6.9	6.7	5.9	5.4	5.1	5.1	10.5	5.1	6.8
16	5.1	5.8	5.8	5.9	5.7	5.2	4.9	5.0	5.5	5.8	6.6	7.4	7.4	8.1	8.7	8.2	8.5	9.1	9.1	9.6	9.5	9.2	9.3	9.1	9.6	4.9	7.3
17	9.1	8.9	8.8	8.8	8.9	8.7	8.9	10.4	10.1	10.8	10.6	10.8	12.5	12.6	12.5	13.3	13.6	14.0	14.2	13.5	12.6	11.5	10.1	8.4	14.2	8.4	11.0
18	8.0	8.1	7.6	7.8	8.0	7.7	7.7	6.8	6.5	6.6	7.1	7.7	8.2	9.1	9.4	10.1	10.6	10.6	10.2	10.1	10.0	9.6	8.3	7.7	10.6	6.5	8.5
19	7.6	7.3	6.8	6.2	6.0	6.1	6.1	5.6	6.7	6.4	5.9	6.4	7.4	8.2	9.0	9.7	10.3	10.6	10.9	10.9	10.6	9.7	9.0	8.7	10.9	5.6	8.0
20	7.4	6.7	6.4	5.7	5.9	5.8	5.5	5.6	6.1	6.7	6.9	7.2	7.9	8.4	9.0	9.1	9.0	8.8	8.4	7.6	6.6	5.8	4.9	4.2	9.1	4.2	6.9
21	4.2	3.5	3.1	3.3	3.5	3.4	3.5	3.7	3.9	4.6	5.6	6.8	7.0	7.1	7.5	8.4	9.1	10.0	10.3	10.1	9.6	8.5	7.1	6.4	10.3	3.1	6.3
22	6.4	6.4	5.8	5.6	5.6	5.8	5.3	5.6	5.8	6.5	7.2	7.7	7.8	8.1	8.4	8.0	7.5	7.1	6.5	6.2	5.3	4.7	3.9	3.8	8.4	3.8	6.3
23	3.7	3.5	3.4	3.2	3.0	2.8	2.9	3.1	3.4	3.9	4.3	4.5	5.3	5.9	6.2	7.0	7.7	8.3	8.5	8.4	7.7	6.9	5.8	4.8	8.5	2.8	5.2
24	3.8	3.3	3.8	3.4	3.3	3.1	3.0	3.0	3.5	4.2	4.5	5.0	5.2	4.9	5.0	5.1	5.0	4.9	4.9	4.9	4.9	4.7	4.7	4.4	5.2	3.0	4.3
25	4.3	4.6	4.6	4.4	3.9	3.6	3.9	4.3	4.5	5.1	5.4	6.2	6.9	7.5	7.8	7.8	7.5	7.5	7.0	6.8	6.2	6.2	6.2	5.3	7.8	3.6	5.7
26	4.9	4.8	4.8	4.8	5.2	4.9	4.8	5.1	5.7	6.3	7.1	7.8	8.4	7.7	7.5	8.0	7.6	7.5	7.3	7.5	7.6	7.7	7.4	7.1	8.4	4.8	6.6
27	6.9	6.6	6.8	6.5	5.8	5.7	5.1	4.9	5.0	5.5	5.1	5.8	6.4	7.3	7.5	7.7	7.9	8.2	7.8	7.5	6.7	6.0	5.0	4.4	8.2	4.4	6.3
28	3.8	3.2	2.9	4.1	4.4	3.9	3.8	3.9	4.1	4.5	4.2	4.6	5.2	5.8	6.8	6.6	6.6	7.5	7.7	7.7	7.5	6.7	5.9	5.7	7.7	2.9	5.3
29	5.2	4.7	4.8	4.7	4.3	4.1	3.8	3.3	3.2	3.5	4.0	4.6	5.3	5.9	6.6	7.2	7.6	7.7	7.6	7.0	6.1	5.2	4.4	3.7	7.7	3.2	5.2
30	3.1	2.9	3.0	2.9	2.8	2.7	2.9	3.6	4.8	5.4	5.7	6.6	7.4	7.1	7.8	9.1	8.8	8.1	8.3	8.5	8.6	9.2	9.3	8.5	9.3	2.7	6.1
Max.	**9.1**	**8.9**	**8.8**	**8.8**	**8.9**	**8.7**	**8.9**	**10.4**	**10.1**	**10.8**	**10.6**	**10.8**	**12.5**	**12.6**	**12.5**	**13.3**	**13.6**	**14.0**	**14.2**	**13.5**	**12.6**	**11.5**	**10.1**	**9.1**	**14.2**		
Min.	**-0.2**	**-0.7**	**-0.7**	**-0.8**	**-1.0**	**-1.2**	**-1.2**	**-1.1**	**-1.1**	**-0.8**	**-0.1**	**0.1**	**0.3**	**0.7**	**0.9**	**1.2**	**1.8**	**1.4**	**0.8**	**0.6**	**0.5**	**0.5**	**0.4**	**0.4**		**-1.2**	
Avg.	**4.3**	**4.1**	**4.0**	**3.9**	**3.9**	**3.7**	**3.6**	**3.7**	**4.1**	**4.5**	**4.8**	**5.3**	**5.8**	**6.2**	**6.6**	**6.8**	**6.9**	**7.0**	**7.0**	**6.7**	**6.4**	**5.9**	**5.2**	**4.7**			**5.2**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.4	8.3	8.3	7.8	7.5	7.1	7.4	7.2	7.0	7.6	8.3	8.7	9.1	9.4	9.9	10.3	10.0	9.7	9.3	8.6	7.7	6.9	6.4	6.0	10.3	6.0	8.2
2	5.5	5.1	4.5	4.0	3.8	3.7	3.5	3.7	3.7	4.0	5.1	6.3	7.1	7.5	7.9	8.5	8.8	9.2	8.9	7.5	6.9	6.6	6.4	5.2	9.2	3.5	6.0
3	5.9	5.1	5.7	7.0	7.4	6.4	6.7	6.4	6.1	5.5	4.5	4.9	5.4	6.1	6.6	7.3	7.6	6.8	6.6	6.7	6.8	6.5	6.3	6.3	7.6	4.5	6.3
4	6.3	6.0	5.8	6.0	6.1	6.1	6.2	6.3	6.6	7.2	8.0	8.7	10.0	10.8	10.7	9.9	10.5	11.4	10.0	8.2	7.3	7.1	7.9	9.2	11.4	5.8	8.0
5	9.2	9.4	9.4	9.8	10.3	9.8	9.8	9.9	9.8	9.4	10.2	11.6	12.7	13.8	13.8	12.6	11.3	11.4	11.7	11.9	11.6	10.9	11.3	10.5	13.8	9.2	10.9
6	10.2	9.4	9.2	10.3	10.5	11.2	11.3	11.3	11.7	12.9	14.0	13.7	13.7	13.3	11.9	10.7	10.4	10.4	9.1	8.6	8.1	7.8	7.6	7.4	14.0	7.4	10.6
7	7.3	7.2	6.9	6.6	6.5	6.6	6.7	6.6	5.5	4.8	4.7	4.5	4.5	4.7	4.5	4.5	4.5	4.9	5.3	5.6	5.4	5.3	5.2	4.9	7.3	4.5	5.6
8	4.9	4.9	5.3	5.0	5.6	5.9	5.9	6.1	6.2	6.1	5.8	5.8	6.3	6.9	7.1	7.4	7.6	7.8	8.0	8.0	8.0	7.9	7.8	7.7	8.0	4.9	6.6
9	7.1	6.9	7.2	7.3	7.3	7.2	7.4	7.5	7.7	8.4	7.7	8.4	9.4	10.3	10.8	11.4	11.2	10.7	9.6	8.8	8.1	7.6	7.3	7.0	11.4	6.9	8.4
10	6.4	5.8	5.6	5.6	5.6	5.7	5.5	5.4	5.7	5.9	6.1	7.2	7.4	8.0	8.8	9.5	9.7	9.8	9.4	9.1	8.3	7.7	6.6	5.8	9.8	5.4	7.1
11	5.2	5.1	5.0	5.1	5.1	4.9	4.9	4.8	4.6	4.7	5.3	5.8	6.7	7.6	8.0	8.7	9.0	9.0	8.8	8.7	8.4	7.6	6.6	6.0	9.0	4.6	6.5
12	5.4	5.0	5.1	5.1	5.1	4.7	4.6	5.2	5.5	5.8	6.3	6.6	6.7	6.9	7.1	7.2	7.1	6.8	6.0	5.5	5.3	5.2	5.1	5.2	7.2	4.6	5.8
13	5.4	5.4	5.4	5.3	5.3	5.2	5.2	5.2	5.2	5.2	5.4	5.6	5.7	6.0	6.3	6.5	6.7	6.7	6.8	6.9	6.8	6.6	6.5	6.2	6.9	5.2	5.9
14	6.1	6.0	6.2	6.9	6.9	6.9	7.1	6.6	7.2	7.0	7.2	7.8	8.1	9.0	10.3	10.5	10.6	11.3	11.5	11.4	10.9	10.1	9.3	8.6	11.5	6.0	8.5
15	8.0	7.7	7.2	7.1	7.1	7.3	7.2	7.3	7.5	8.1	8.4	9.0	9.5	10.5	11.1	11.4	11.0	10.3	9.4	8.5	8.1	7.6	7.4	7.4	11.4	7.1	8.5
16	7.6	7.5	7.4	7.3	7.2	7.1	6.9	6.7	6.6	6.3	6.2	6.2	6.4	6.6	7.0	6.8	6.5	6.3	6.2	6.1	6.0	5.9	5.8	5.7	7.6	5.7	6.6
17	5.6	5.5	4.1	2.5	1.7	1.4	1.5	1.7	1.9	2.1	1.9	2.3	3.0	3.7	4.2	4.4	4.7	5.1	4.8	4.8	4.7	4.4	4.2	3.8	5.6	1.4	3.5
18	3.6	3.3	2.8	2.5	2.3	2.1	2.0	2.0	2.1	2.3	2.5	2.6	2.8	3.1	3.5	3.7	4.3	4.5	5.0	4.4	4.2	4.5	4.5	4.8	5.0	2.0	3.3
19	4.6	4.5	4.5	4.3	4.1	4.1	3.9	4.0	3.9	4.5	5.3	5.8	6.7	7.2	8.5	8.1	8.1	8.2	8.0	7.1	7.2	7.1	7.3	7.1	8.5	3.9	6.0
20	7.2	7.1	6.9	6.8	7.0	6.7	6.7	6.9	6.5	6.0	5.6	4.6	4.3	4.1	4.0	4.1	4.0	3.7	3.5	3.5	3.5	3.4	3.6	3.7	7.2	3.4	5.1
21	3.6	3.0	2.8	2.9	2.9	3.0	3.1	3.2	3.3	3.4	3.7	4.1	4.6	5.0	5.6	6.4	7.5	7.9	7.2	8.2	8.0	7.5	6.6	5.9	8.2	2.8	5.0
22	5.4	4.9	4.8	4.2	4.2	5.1	5.4	5.2	4.8	5.0	5.2	5.2	4.7	4.2	4.0	3.7	3.6	3.7	3.8	3.9	3.8	3.6	3.7	3.8	5.4	3.6	4.4
23	3.8	3.8	3.7	3.6	3.7	3.7	3.6	3.7	3.9	4.0	4.0	4.2	4.6	4.8	5.0	5.0	5.8	6.4	6.3	5.7	4.8	4.1	3.7	3.9	6.4	3.6	4.4
24	3.9	3.6	3.3	3.2	3.6	3.9	4.3	4.6	4.8	4.8	5.0	5.4	5.9	6.4	7.6	8.7	9.9	10.5	10.8	11.0	10.6	11.3	11.1	10.2	11.3	3.2	6.9
25	9.2	8.2	7.8	7.7	7.3	6.8	6.6	6.5	6.8	7.3	8.4	9.6	11.0	12.3	13.0	13.6	14.2	14.6	14.9	15.0	14.8	14.2	13.3	12.1	15.0	6.5	10.6
26	10.9	11.2	11.0	10.5	8.8	8.0	7.1	5.8	5.7	5.6	5.7	5.9	5.8	5.9	6.1	6.3	6.6	6.9	7.4	8.0	7.5	6.8	6.7	6.5	11.2	5.6	7.4
27	6.1	5.8	5.5	5.3	5.1	5.2	5.1	5.1	5.1	5.1	5.2	5.2	5.3	5.7	6.1	6.4	6.5	6.4	6.5	6.5	6.2	6.0	5.6	6.4	6.5	5.1	5.7
28	6.3	6.0	6.1	6.2	6.2	6.5	6.6	6.8	7.3	7.9	8.3	9.1	10.1	10.6	10.9	11.6	11.5	11.7	11.9	12.1	11.9	11.5	10.8	9.5	12.1	6.0	9.1
29	9.3	8.8	8.3	7.7	7.2	7.2	6.6	6.1	6.3	6.8	8.1	9.1	9.9	10.9	11.8	13.2	13.9	14.2	14.1	14.3	13.6	12.2	10.7	9.5	14.3	6.1	10.0
30	8.4	7.8	7.5	7.5	7.5	7.8	7.9	8.0	7.7	8.4	8.3	9.3	10.4	11.5	12.3	12.7	12.5	12.4	11.9	11.4	11.1	10.4	9.5	8.7	12.7	7.5	9.6
31	8.3	7.9	8.2	7.9	7.4	7.7	7.3	8.0	8.3	9.0	9.8	11.3	12.2	13.0	13.9	14.6	15.2	15.7	16.2	16.2	16.0	15.4	13.5	13.1	16.2	7.3	11.5
Max.	**10.9**	**11.2**	**11.0**	**10.5**	**10.5**	**11.2**	**11.3**	**11.3**	**11.7**	**12.9**	**14.0**	**13.7**	**13.7**	**13.8**	**13.9**	**14.6**	**15.2**	**15.7**	**16.2**	**16.2**	**16.0**	**15.4**	**13.5**	**13.1**	**16.2**		
Min.	**3.6**	**3.0**	**2.8**	**2.5**	**1.7**	**1.4**	**1.5**	**1.7**	**1.9**	**2.1**	**1.9**	**2.3**	**2.8**	**3.1**	**3.5**	**3.7**	**3.6**	**3.7**	**3.5**	**3.5**	**3.5**	**3.4**	**3.6**	**3.7**		**1.4**	
Avg.	**6.6**	**6.3**	**6.2**	**6.1**	**6.0**	**6.0**	**5.9**	**5.9**	**6.0**	**6.2**	**6.5**	**6.9**	**7.4**	**7.9**	**8.3**	**8.6**	**8.7**	**8.8**	**8.7**	**8.4**	**8.1**	**7.7**	**7.4**	**7.0**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.2	12.9	12.3	11.8	12.5	14.1	14.4	14.5	15.2	13.7	13.8	14.1	15.0	15.5	14.7	14.9	14.6	14.8	15.4	15.3	13.0	10.6	8.9	8.0	15.5	8.0	13.5
2	7.6	7.2	6.8	6.8	6.8	6.8	6.8	6.9	7.0	7.0	7.2	7.3	7.5	7.7	8.0	8.0	8.1	8.3	8.6	8.5	8.5	8.5	8.4	8.4	8.6	6.8	7.6
3	8.6	8.6	8.4	8.0	7.8	7.6	7.2	6.9	6.6	7.0	8.0	9.6	11.2	10.4	11.1	11.2	11.6	11.4	11.0	10.1	9.3	8.0	7.0	6.4	11.6	6.4	8.9
4	6.2	6.1	6.0	5.8	6.0	6.1	6.1	6.2	6.1	6.3	6.6	7.0	7.1	7.4	8.2	8.9	9.0	9.8	10.2	9.4	8.3	7.1	6.6	6.3	10.2	5.8	7.2
5	6.1	5.9	5.7	6.2	6.4	6.8	6.9	6.9	6.7	6.8	7.9	9.1	9.7	10.2	10.4	10.9	11.3	11.7	11.5	11.6	11.3	10.7	9.6	8.7	11.7	5.7	8.7
6	8.3	7.8	7.5	7.4	7.2	7.0	6.9	6.7	6.3	6.8	7.9	8.8	9.8	10.6	11.0	11.7	12.1	11.9	11.5	11.1	10.8	10.4	9.7	8.8	12.1	6.3	9.1
7	8.1	7.8	7.4	6.9	6.4	6.1	6.0	6.1	5.9	6.3	7.1	7.9	8.8	9.7	10.3	10.7	11.1	11.1	10.9	11.0	11.0	10.2	9.5	9.1	11.1	5.9	8.6
8	8.6	8.4	7.7	7.7	7.4	6.7	6.2	5.8	5.6	6.0	6.8	7.6	9.2	10.2	11.3	11.9	12.6	13.1	13.1	13.4	13.0	11.9	10.8	10.3	13.4	5.6	9.4
9	9.8	9.2	8.7	8.5	8.0	7.9	7.6	7.2	7.2	7.2	7.7	9.1	10.5	11.2	12.1	12.8	13.1	13.3	13.2	13.0	12.6	11.7	11.3	11.0	13.3	7.2	10.2
10	11.0	11.0	11.2	11.0	11.0	10.9	10.9	12.7	12.6	11.4	11.3	11.2	11.9	12.4	12.2	12.5	14.1	13.1	11.8	11.1	10.7	9.3	7.9	7.4	14.1	7.4	11.3
11	6.9	6.5	6.5	6.7	6.7	6.4	6.1	6.3	6.8	7.5	7.9	7.9	8.8	9.0	9.2	9.5	9.8	9.7	9.8	9.4	8.7	8.3	8.7	8.9	9.8	6.1	8.0
12	9.3	9.6	9.4	9.0	8.3	8.4	8.2	7.9	8.4	8.8	9.4	10.2	10.9	11.3	12.5	13.2	13.6	13.6	11.0	10.4	10.9	10.8	10.5	10.9	13.6	7.9	10.3
13	10.5	9.6	9.7	9.0	8.9	9.6	9.2	8.8	8.8	8.8	9.0	9.0	9.1	9.5	10.3	9.9	10.5	10.0	8.6	8.1	8.2	7.8	8.0	8.0	10.5	7.8	9.1
14	7.7	7.4	7.5	7.6	7.6	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.9	8.1	8.3	8.5	8.8	8.8	8.7	8.4	8.3	8.1	8.4	7.8	8.8	7.4	8.0
15	6.4	6.1	5.4	5.1	4.9	4.9	4.8	5.1	5.3	5.5	5.8	5.8	6.5	6.7	7.0	7.7	7.6	7.6	8.1	8.0	7.7	7.7	7.7	7.6	8.1	4.8	6.5
16	7.6	7.5	7.5	7.4	7.3	7.3	7.3	7.1	6.9	6.8	6.9	7.0	7.2	7.9	8.3	8.6	8.6	8.8	8.1	7.8	7.3	6.3	5.7	5.7	8.8	5.7	7.4
17	5.5	5.9	5.5	5.1	5.2	5.5	5.2	5.2	5.5	6.1	6.4	6.6	7.1	7.4	8.0	7.9	7.8	7.6	7.0	6.7	6.3	6.1	6.1	6.0	8.0	5.1	6.3
18	5.9	5.6	5.7	5.3	5.2	4.9	5.2	5.6	5.8	6.6	7.3	8.5	9.2	9.7	10.1	10.5	10.8	10.8	10.9	10.6	10.4	9.8	9.6	9.7	10.9	4.9	8.1
19	10.0	10.1	9.6	9.2	9.2	9.2	8.5	7.6	7.9	7.6	8.7	8.2	8.9	9.6	10.6	10.9	11.4	11.6	11.1	10.9	9.1	9.5	9.8	9.8	11.6	7.6	9.5
20	9.3	7.9	7.8	8.0	8.3	8.4	8.1	8.1	8.2	8.2	8.2	7.9	8.5	9.2	9.3	9.0	9.7	10.0	9.9	9.7	9.8	9.0	8.7	8.6	10.0	7.8	8.8
21	8.7	8.6	8.5	8.4	8.4	8.2	8.0	7.9	7.8	7.8	7.9	7.9	8.1	8.3	8.4	7.7	8.2	9.1	8.9	8.2	7.6	7.6	7.3	6.9	9.1	6.9	8.1
22	6.7	7.0	7.2	6.9	7.0	6.9	6.8	6.7	6.6	6.8	6.9	7.3	7.8	7.9	8.0	8.7	9.5	9.1	8.9	8.8	9.0	8.8	8.4	8.4	9.5	6.6	7.8
23	8.3	8.9	8.8	8.9	8.9	9.0	8.9	8.9	8.6	9.1	9.0	8.9	9.6	10.8	11.7	12.6	13.0	13.5	11.9	9.9	8.7	8.8	8.1	7.9	13.5	7.9	9.7
24	7.9	9.1	9.0	8.5	7.9	7.9	7.6	7.3	6.6	6.1	6.7	6.8	7.6	8.7	10.0	10.8	11.6	12.4	12.5	12.2	12.1	11.7	11.2	11.0	12.5	6.1	9.3
25	10.9	10.6	10.3	9.7	8.3	7.7	7.4	6.6	5.9	6.7	6.7	6.7	6.6	6.2	6.2	6.6	7.7	9.1	9.6	9.1	8.1	7.3	7.1	6.9	10.9	5.9	7.8
26	6.8	6.8	6.9	7.0	7.0	7.1	7.1	7.1	7.0	6.9	6.8	7.0	7.1	7.3	7.6	7.9	8.3	8.5	8.3	8.1	7.9	7.7	7.5	7.4	8.5	6.8	7.4
27	7.3	7.1	7.1	6.9	6.8	6.8	6.4	6.1	5.6	5.5	5.1	5.4	5.9	6.2	6.4	6.8	7.2	7.5	7.6	7.8	7.7	7.2	7.4	7.1	7.8	5.1	6.7
28	6.9	6.9	7.0	6.9	6.8	6.8	6.8	6.7	6.6	6.4	6.4	6.4	6.8	7.7	8.5	8.8	9.1	8.8	8.3	8.3	8.2	7.2	6.7	6.4	9.1	6.4	7.3
29	6.1	5.9	5.9	5.9	5.7	5.9	6.2	6.5	6.7	7.3	8.4	8.6	8.7	9.2	9.3	9.2	9.7	9.7	8.9	8.0	7.3	6.8	6.1	5.2	9.7	5.2	7.4
30	4.9	4.9	4.8	4.8	4.8	4.8	5.1	5.1	5.2	6.0	6.8	7.0	7.0	7.2	8.1	9.2	9.3	9.5	9.2	8.7	7.8	7.9	7.5	7.0	9.5	4.8	6.8
31	6.5	6.2	6.1	6.1	5.7	5.3	5.3	5.5	5.4	5.4	5.5	6.0	6.4	7.1	7.5	7.6	8.1	8.3	8.2	8.4	8.0	7.0	6.8	6.9	8.4	5.3	6.6
Max.	**13.2**	**12.9**	**12.3**	**11.8**	**12.5**	**14.1**	**14.4**	**14.5**	**15.2**	**13.7**	**13.8**	**14.1**	**15.0**	**15.5**	**14.7**	**14.9**	**14.6**	**14.8**	**15.4**	**15.3**	**13.0**	**11.9**	**11.3**	**11.0**	**15.5**		
Min.	**4.9**	**4.9**	**4.8**	**4.8**	**4.8**	**4.8**	**4.8**	**5.1**	**5.2**	**5.4**	**5.1**	**5.4**	**5.9**	**6.2**	**6.2**	**6.6**	**7.2**	**7.5**	**7.0**	**6.7**	**6.3**	**6.1**	**5.7**	**5.2**		**4.8**	
Avg.	**8.0**	**7.8**	**7.7**	**7.5**	**7.4**	**7.4**	**7.3**	**7.2**	**7.2**	**7.3**	**7.7**	**8.0**	**8.6**	**9.0**	**9.5**	**9.8**	**10.3**	**10.4**	**10.1**	**9.7**	**9.3**	**8.7**	**8.3**	**8.0**			**8.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.0	7.2	7.2	7.0	6.9	6.9	6.6	6.6	6.8	7.2	8.6	9.1	9.6	9.5	9.1	9.4	9.1	8.4	7.7	7.3	6.5	6.0	5.8	6.1	9.6	5.8	7.6
2	5.9	5.9	5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.6	5.9	6.6	6.8	6.7	7.0	6.9	6.6	5.9	5.5	5.4	5.1	7.0	5.1	5.8
3	4.9	4.5	4.1	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.7	5.1	5.3	5.7	6.0	6.1	6.3	6.7	6.8	6.5	6.1	5.8	6.2	6.1	6.8	4.0	5.3
4	5.6	5.7	5.6	5.4	5.3	5.0	4.6	4.2	4.1	4.2	4.5	5.0	5.3	6.0	6.4	6.8	7.3	7.9	8.1	7.9	7.6	7.2	7.3	7.1	8.1	4.1	6.0
5	7.0	6.9	6.8	6.6	6.6	6.5	6.7	6.3	6.5	6.6	7.0	7.5	7.9	8.1	7.4	8.1	8.2	9.0	7.6	6.6	6.9	7.1	6.9	6.6	9.0	6.3	7.1
6	6.3	6.1	5.4	4.9	5.0	4.7	4.9	5.1	4.9	5.0	5.7	6.1	5.7	5.2	5.2	5.2	5.1	5.3	5.6	5.8	5.6	5.2	5.7	5.4	6.3	4.7	5.4
7	5.4	5.6	6.6	7.5	6.9	6.5	6.3	5.8	6.1	6.2	6.1	6.1	5.5	5.5	5.5	5.7	6.0	6.2	5.9	5.6	5.7	5.8	5.9	5.9	7.5	5.4	6.0
8	6.0	5.8	5.9	5.8	5.8	5.6	5.4	5.2	5.1	5.1	5.7	5.9	6.4	6.5	6.0	5.9	5.7	5.3	5.0	4.8	4.9	5.2	5.5	5.9	6.5	4.8	5.6
9	6.4	6.6	6.3	5.6	4.8	4.8	5.1	5.6	5.3	5.7	5.9	6.1	6.4	6.5	6.5	6.4	6.4	6.2	6.1	6.1	6.0	5.8	5.7	5.8	6.6	4.8	5.9
10	5.8	6.1	5.8	5.7	5.7	5.7	5.8	5.7	5.6	5.6	5.6	5.7	6.2	6.7	6.7	6.9	7.2	7.3	7.3	7.1	7.1	7.2	7.2	7.2	7.3	5.6	6.4
11	6.6	5.6	5.2	4.8	4.4	4.6	5.0	5.2	5.1	5.3	5.5	5.7	5.7	5.8	6.1	6.3	6.6	7.1	7.1	7.1	6.7	6.3	5.9	5.8	7.1	4.4	5.8
12	5.7	5.6	5.8	5.7	5.0	4.6	4.4	4.3	4.4	4.6	4.9	5.2	5.8	6.2	6.1	6.1	6.1	6.0	6.1	6.2	6.3	6.3	6.3	6.3	6.3	4.3	5.6
13	6.4	6.4	6.4	6.2	6.1	5.8	5.7	5.7	5.8	5.7	5.4	4.8	4.9	4.7	4.5	4.3	4.2	4.2	4.0	4.1	4.3	4.4	5.1	4.8	6.4	4.0	5.2
14	4.9	4.4	4.5	4.7	4.7	4.4	4.3	4.3	4.2	4.0	4.3	4.3	4.5	4.9	5.0	5.1	5.5	5.5	5.4	5.2	5.0	4.8	4.7	5.1	5.5	4.0	4.7
15	5.0	4.8	4.8	4.9	4.9	4.9	4.8	4.7	4.8	4.9	5.1	5.3	5.6	5.8	5.9	5.9	5.6	5.6	5.3	5.0	4.9	4.8	4.7	4.7	5.9	4.7	5.1
16	4.6	4.9	5.3	4.8	4.8	4.1	4.3	4.2	4.3	4.5	4.6	5.1	5.5	5.5	5.7	5.9	5.8	5.3	5.8	5.5	5.3	5.3	4.8	4.4	5.9	4.1	5.0
17	4.4	4.4	4.5	4.0	3.7	3.4	3.1	3.1	2.8	3.0	3.4	3.5	3.6	3.9	4.0	4.1	4.1	4.0	3.3	2.9	2.6	2.6	2.4	2.5	4.5	2.4	3.5
18	2.6	2.5	2.6	2.6	2.5	2.3	2.3	2.2	2.2	2.4	2.7	3.1	3.6	3.8	3.4	3.2	3.6	3.6	3.6	3.7	3.6	3.4	3.1	2.5	3.8	2.2	2.9
19	2.4	2.5	2.6	2.5	2.5	2.4	2.5	2.7	2.7	3.0	2.9	2.9	3.0	3.4	3.3	2.5	2.3	2.6	2.4	2.2	2.3	2.3	2.1	1.9	3.4	1.9	2.6
20	1.8	1.9	2.1	1.7	1.2	1.2	0.7	0.4	0.3	0.1	0.3	0.1	-0.2	-0.1	0.9	1.4	2.1	2.2	2.2	1.6	1.3	1.6	1.8	1.7	2.2	-0.2	1.2
21	1.6	1.5	1.6	1.5	1.4	1.3	1.3	1.1	1.2	1.2	1.4	2.0	2.5	2.2	2.7	2.9	2.7	2.5	2.1	1.1	0.5	0.2	0.0	0.0	2.9	0.0	1.5
22	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.6	0.8	1.0	1.3	1.8	2.4	2.9	2.9	2.3	1.7	1.5	1.2	0.8	0.7	0.9	1.0	0.9	2.9	0.2	1.1
23	1.1	1.4	2.4	4.1	4.2	4.2	4.1	4.0	3.9	3.8	3.5	3.5	3.2	3.1	2.7	3.2	3.1	3.0	3.2	3.1	2.9	2.6	2.6	2.8	4.2	1.1	3.1
24	2.7	2.6	2.7	2.6	2.5	2.4	2.2	2.5	2.5	2.4	2.3	2.5	2.6	2.8	3.1	3.0	2.9	3.1	3.0	2.8	2.8	2.6	2.5	2.5	3.1	2.2	2.7
25	2.5	2.6	2.2	2.3	2.3	2.3	2.5	2.3	2.4	2.6	2.9	2.9	3.1	3.5	3.6	3.5	3.5	3.4	3.2	3.2	2.9	3.3	3.0	2.8	3.6	2.2	2.9
26	2.7	3.0	3.3	3.4	3.2	2.8	3.1	3.1	3.0	3.4	3.5	3.8	4.3	4.6	5.0	4.8	5.3	5.2	5.4	5.4	4.9	3.9	3.6	3.3	5.4	2.7	3.9
27	2.8	2.3	1.4	1.2	0.4	0.3	-0.6	-1.0	-1.3	-1.5	-1.8	-1.2	-0.1	1.0	2.1	2.7	3.1	3.4	3.3	2.7	2.0	1.6	1.3	1.5	3.4	-1.8	1.1
28	1.9	1.7	1.9	1.8	1.9	1.6	1.4	1.3	1.1	1.9	2.6	4.1	4.0	4.7	5.3	5.3	5.2	4.7	4.4	4.2	4.2	2.9	2.3	2.3	5.3	1.1	3.0
29	2.1	1.9	1.2	0.9	1.1	1.4	1.7	1.7	1.3	1.4	1.9	2.2	2.3	1.5	1.2	1.2	1.7	2.3	2.1	1.9	1.6	1.5	1.1	0.9	2.3	0.9	1.6
30	0.7	0.9	1.1	1.3	0.6	0.4	0.2	-0.1	-0.1	-0.2	-0.2	0.1	0.4	0.8	1.1	1.3	1.4	1.5	1.7	1.4	1.2	1.1	1.1	1.2	1.7	-0.2	0.8
Max.	**7.0**	**7.2**	**7.2**	**7.5**	**6.9**	**6.9**	**6.7**	**6.6**	**6.8**	**7.2**	**8.6**	**9.1**	**9.6**	**9.5**	**9.1**	**9.4**	**9.1**	**9.0**	**8.1**	**7.9**	**7.6**	**7.2**	**7.3**	**7.2**	**9.6**		
Min.	**0.2**	**0.4**	**0.3**	**0.3**	**0.3**	**0.3**	**-0.6**	**-1.0**	**-1.3**	**-1.5**	**-1.8**	**-1.2**	**-0.2**	**-0.1**	**0.9**	**1.2**	**1.4**	**1.5**	**1.2**	**0.8**	**0.5**	**0.2**	**0.0**	**0.0**		**-1.8**	
Avg.	**4.1**	**4.0**	**4.0**	**4.0**	**3.8**	**3.7**	**3.6**	**3.5**	**3.5**	**3.6**	**3.9**	**4.1**	**4.3**	**4.6**	**4.7**	**4.7**	**4.8**	**4.9**	**4.7**	**4.5**	**4.3**	**4.1**	**4.0**	**4.0**			**4.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	1.4	1.4	1.5	1.2	0.9	0.5	0.6	0.6	0.4	0.0	0.2	0.9	1.4	1.6	1.9	1.6	1.8	1.7	1.4	1.3	1.3	1.1	1.1	1.9	0.0	1.1
2	1.1	0.5	0.7	0.6	0.5	0.3	0.5	0.5	0.8	0.7	0.4	0.3	0.8	1.1	1.5	1.4	1.2	0.9	0.6	0.2	-0.4	-2.6	-3.3	-3.4	1.5	-3.4	0.2
3	-3.5	-3.8	-4.0	-3.9	-3.9	-3.7	-4.0	-4.7	-4.7	-4.6	-4.4	-4.3	-4.0	-3.7	-3.7	-3.6	-3.5	-3.7	-3.5	-3.6	-3.8	-4.0	-4.1	-3.9	-3.5	-4.7	-3.9
4	-4.0	-4.2	-4.0	-3.8	-3.8	-3.9	-3.2	-2.7	-2.9	-2.7	-2.6	-1.7	-1.4	-1.5	-1.3	-1.1	-0.9	-1.4	-1.4	-2.1	-2.6	-3.0	-2.9	-2.8	-0.9	-4.2	-2.6
5	-3.3	-3.6	-3.7	-4.1	-4.2	-4.3	-4.6	-4.9	-5.0	-4.7	-4.1	-3.6	-3.8	-3.3	-2.8	-3.6	-3.7	-3.7	-3.9	-4.3	-4.8	-5.0	-5.1	-5.3	-2.8	-5.3	-4.1
6	-5.4	-5.6	-5.7	-5.8	-5.8	-5.8	-5.9	-5.9	-6.0	-5.9	-5.5	-5.1	-4.3	-3.6	-3.8	-3.8	-3.7	-4.1	-4.8	-5.1	-5.5	-5.8	-5.8	-5.8	-3.6	-6.0	-5.2
7	-6.0	-6.1	-6.2	-6.2	-6.5	-6.6	-6.7	-6.8	-7.3	-7.4	-7.2	-7.1	-7.0	-7.0	-6.8	-6.7	-6.6	-6.7	-6.8	-6.8	-6.7	-6.8	-6.9	-6.8	-6.0	-7.4	-6.7
8	-6.7	-6.7	-7.0	-7.4	-8.1	-8.2	-8.1	-8.3	-8.6	-8.0	-7.5	-7.3	-7.4	-6.9	-6.7	-6.5	-6.2	-5.9	-5.8	-6.1	-6.4	-6.5	-6.0	-5.6	-5.6	-8.6	-7.0
9	-5.3	-4.5	-4.0	-3.5	-3.3	-3.8	-4.1	-4.2	-4.2	-3.8	-3.3	-2.7	-1.9	-1.5	-1.0	-0.6	0.0	0.1	0.4	0.8	1.3	1.5	1.8	2.0	2.0	-5.3	-1.8
10	2.1	2.3	2.2	2.3	2.0	1.4	0.3	0.1	-0.1	0.0	0.7	1.4	1.4	1.4	1.8	2.0	2.1	1.9	1.7	1.6	1.7	1.8	1.8	1.9	2.3	-0.1	1.5
11	2.3	2.6	2.7	2.5	2.1	1.9	2.4	2.2	0.8	-3.3	-4.7	-6.6	-7.6	-7.7	-8.2	-8.6	-8.7	-8.7	-8.9	-8.8	-8.8	-8.9	-8.9	-8.7	2.7	-8.9	-4.1
12	-8.4	-8.3	-8.0	-8.2	-8.7	-9.1	-9.6	-9.8	-10.1	-10.3	-10.4	-10.0	-9.5	-9.0	-9.1	-9.0	-8.8	-8.9	-9.1	-9.7	-10.1	-10.2	-10.2	-10.4	-8.0	-10.4	-9.4
13	-10.5	-10.7	-10.8	-11.0	-11.0	-11.1	-11.0	-10.9	-10.4	-10.2	-9.4	-8.8	-8.1	-7.5	-6.6	-5.5	-4.5	-4.4	-4.3	-3.9	-3.6	-3.4	-3.1	-2.9	-2.9	-11.1	-7.7
14	-2.8	-2.9	-3.0	-2.9	-2.8	-2.5	-3.1	-3.5	-3.6	-3.1	-2.8	-2.6	-2.4	-2.1	-1.8	-1.4	-1.1	-1.0	-1.0	-1.1	-1.2	-1.1	-0.8	-1.5	-0.8	-3.6	-2.2
15	-2.6	-3.5	-4.5	-4.2	-4.5	-6.5	-6.3	-6.3	-6.8	-6.4	-6.9	-6.0	-5.5	-6.7	-7.6	-8.2	-7.8	-8.2	-8.8	-9.0	-9.7	-9.9	-10.2	-10.4	-2.6	-10.4	-6.9
16	-8.6	-7.7	-8.8	-9.4	-9.4	-8.0	-8.1	-6.6	-6.9	-6.0	-7.4	-7.2	-6.0	-4.9	-3.0	-2.5	-2.0	-2.8	-3.9	-5.8	-5.8	-6.6	-6.4	-7.2	-2.0	-9.4	-6.3
17	-6.4	-6.6	-6.5	-6.9	-7.5	-7.3	-7.3	-7.0	-6.6	-5.0	-4.2	-3.5	-3.6	-3.3	-3.3	-3.3	-3.9	-3.1	-2.8	-2.9	-2.5	-2.3	-2.0	-1.9	-1.9	-7.5	-4.6
18	-2.0	-2.1	-2.0	-1.8	-1.8	-1.7	-1.6	-1.8	-1.7	-1.6	-1.4	-1.3	-0.9	-0.6	-0.4	-0.5	0.0	0.0	-0.3	-0.4	-0.8	-0.6	-0.3	-0.3	0.0	-2.1	-1.1
19	-0.8	-2.1	-3.3	-3.3	-4.6	-4.8	-5.3	-5.6	-4.6	-5.5	-3.9	-3.4	-4.7	-4.1	-0.9	1.4	0.0	0.0	-1.0	-2.3	-2.9	-1.4	-1.5	-3.0	1.4	-5.6	-2.8
20	-3.2	-3.8	-4.8	-5.4	-5.7	-6.5	-7.0	-7.2	-6.4	-6.3	-7.0	-7.4	-7.9	-6.7	-7.0	-7.3	-7.8	-8.0	-7.5	-7.3	-6.6	-6.7	-7.2	-7.4	-3.2	-8.0	-6.6
21	-7.6	-7.6	-7.8	-7.9	-8.0	-8.1	-8.5	-8.8	-8.8	-8.7	-9.0	-8.8	-8.7	-8.9	-8.8	-8.4	-8.4	-8.6	-9.2	-10.3	-11.1	-12.1	-12.8	-13.1	-7.6	-13.1	-9.2
22	-13.2	-13.6	-13.7	-14.2	-14.6	-14.8	-15.0	-14.9	-15.0	-15.2	-14.8	-14.8	-15.1	-14.3	-14.0	-13.8	-13.5	-13.9	-14.5	-15.2	-15.9	-16.1	-16.3	-15.8	-13.2	-16.3	-14.7
23	-14.6	-14.9	-15.1	-15.2	-15.6	-15.8	-16.0	-15.8	-15.9	-16.1	-15.7	-15.7	-15.3	-15.1	-14.6	-14.4	-13.9	-13.2	-12.9	-12.6	-12.2	-11.7	-11.8	-12.1	-11.7	-16.1	-14.4
24	-12.5	-12.6	-12.7	-12.5	-12.9	-14.0	-15.2	-15.6	-15.2	-14.9	-14.4	-13.8	-13.4	-12.3	-12.2	-11.7	-11.0	-10.5	-10.4	-10.4	-10.2	-10.1	-9.9	-10.3	-9.9	-15.6	-12.5
25	-10.1	-9.8	-10.0	-10.1	-9.9	-9.3	-8.7	-8.1	-7.7	-7.4	-6.9	-6.2	-5.5	-5.0	-4.7	-4.3	-4.2	-4.2	-4.7	-4.9	-4.9	-4.6	-5.4	-5.2	-4.2	-10.1	-6.7
26	-6.0	-6.4	-6.6	-7.0	-8.3	-8.2	-8.3	-8.5	-8.9	-9.2	-9.6	-10.3	-11.1	-12.1	-12.5	-13.2	-13.3	-13.2	-13.5	-13.8	-13.9	-14.3	-14.9	-15.4	-6.0	-15.4	-10.8
27	-16.0	-16.5	-17.0	-17.3	-17.3	-17.5	-17.2	-17.5	-17.7	-18.2	-17.3	-16.7	-16.5	-16.3	-15.1	-14.7	-14.3	-14.9	-15.2	-15.0	-14.6	-14.1	-12.3	-12.5	-12.3	-18.2	-15.9
28	-13.5	-12.9	-12.6	-11.4	-10.1	-9.7	-9.5	-9.5	-9.8	-9.7	-9.1	-8.7	-8.5	-8.1	-7.9	-7.7	-7.3	-7.4	-7.4	-6.5	-4.8	-4.6	-4.9	-4.9	-4.6	-13.5	-8.6
29	-5.1	-3.4	-2.9	-2.9	-2.9	-2.9	-2.8	-2.7	-2.5	-2.7	-3.1	-4.0	-4.1	-4.3	-4.9	-4.5	-4.3	-4.5	-4.7	-4.5	-4.4	-4.6	-4.7	-4.2	-2.5	-5.1	-3.8
30	-3.8	-3.5	-3.2	-3.1	-2.9	-2.7	-2.6	-2.5	-2.6	-2.4	-2.3	-2.5	-2.6	-3.4	-3.0	-3.1	-3.0	-2.8	-2.7	-2.9	-3.0	-2.7	-3.3	-3.7	-2.3	-3.8	-2.9
31	-3.9	-4.0	-4.2	-3.9	-3.7	-3.9	-3.6	-3.1	-2.6	-2.7	-1.9	-1.5	-0.9	0.3	-0.5	-0.8	-1.5	-2.0	-2.3	-2.3	-1.8	-1.8	-1.8	-1.9	0.3	-4.2	-2.3
Max.	**2.3**	**2.6**	**2.7**	**2.5**	**2.1**	**1.9**	**2.4**	**2.2**	**0.8**	**0.7**	**0.7**	**1.4**	**1.4**	**1.4**	**1.8**	**2.0**	**2.1**	**1.9**	**1.7**	**1.6**	**1.7**	**1.8**	**1.8**	**2.0**	**2.7**		
Min.	**-16.0**	**-16.5**	**-17.0**	**-17.3**	**-17.3**	**-17.5**	**-17.2**	**-17.5**	**-17.7**	**-18.2**	**-17.3**	**-16.7**	**-16.5**	**-16.3**	**-15.1**	**-14.7**	**-14.3**	**-14.9**	**-15.2**	**-15.2**	**-15.9**	**-16.1**	**-16.3**	**-15.8**		**-18.2**	
Avg.	**-5.8**	**-5.8**	**-6.0**	**-6.0**	**-6.2**	**-6.3**	**-6.4**	**-6.4**	**-6.5**	**-6.5**	**-6.3**	**-6.1**	**-6.0**	**-5.7**	**-5.4**	**-5.2**	**-5.1**	**-5.2**	**-5.4**	**-5.6**	**-5.6**	**-5.7**	**-5.7**	**-5.9**			**-5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.1	-2.2	-2.5	-2.5	-2.2	-1.9	-2.3	-3.3	-3.6	-3.4	-2.7	-3.2	-3.5	-3.5	-3.5	-3.8	-4.0	-4.8	-4.9	-6.2	-5.9	-5.3	-5.2	-5.8	-1.9	-6.2	-3.7
2	-5.9	-6.5	-7.0	-8.0	-7.1	-7.6	-8.1	-8.3	-10.4	-12.8	-14.5	-15.5	-16.1	-16.2	-16.5	-16.5	-16.5	-16.7	-16.9	-17.1	-17.0	-17.0	-16.9	-16.9	-5.9	-17.1	-13.0
3	-17.1	-16.8	-16.7	-16.5	-16.4	-16.3	-16.3	-16.1	-16.3	-16.5	-16.8	-16.2	-16.3	-16.3	-16.0	-16.1	-15.6	-15.5	-16.0	-16.2	-16.4	-16.3	-16.4	-16.4	-15.5	-17.1	-16.3
4	-16.2	-16.2	-16.2	-15.8	-16.1	-15.9	-16.0	-16.5	-16.7	-16.7	-16.4	-16.5	-16.8	-16.6	-16.2	-16.1	-15.9	-16.0	-15.7	-15.5	-15.2	-15.2	-13.8	-12.0	-12.0	-16.8	-15.9
5	-12.0	-12.6	-13.7	-10.8	-7.8	-7.7	-7.7	-6.8	-6.6	-6.4	-6.6	-6.4	-4.9	-4.4	-4.1	-4.3	-4.1	-4.9	-5.5	-5.4	-5.1	-4.7	-4.5	-4.3	-4.1	-13.7	-6.7
6	-4.2	-4.0	-4.3	-4.6	-4.3	-4.5	-4.8	-5.1	-5.2	-4.8	-4.1	-4.1	-4.1	-3.8	-3.4	-3.3	-3.4	-3.2	-2.4	-2.9	-6.6	-5.5	-6.3	-7.1	-2.4	-7.1	-4.4
7	-11.2	-14.0	-14.5	-14.9	-15.1	-15.4	-15.4	-15.6	-11.7	-8.6	-8.8	-8.1	-8.0	-7.6	-8.5	-8.6	-8.4	-8.6	-9.0	-8.9	-8.5	-8.9	-8.7	-8.4	-7.6	-15.6	-10.6
8	-7.5	-6.8	-6.8	-7.3	-7.3	-7.1	-7.2	-7.1	-7.1	-7.1	-7.0	-6.8	-6.6	-6.5	-6.3	-6.1	-6.2	-6.3	-5.7	-5.1	-4.8	-4.6	-4.3	-4.7	-4.3	-7.5	-6.3
9	-4.4	-4.1	-3.5	-3.2	-2.5	-1.9	-1.7	-1.5	-1.7	-2.7	-2.9	-3.2	-2.6	-2.2	-1.3	-1.2	-1.6	-2.4	-2.6	-2.1	-1.8	-1.7	-1.2	-0.9	-0.9	-4.4	-2.3
10	-0.6	-0.5	-0.9	-1.5	-2.0	-2.4	-2.6	-2.5	-1.8	-1.9	-1.9	-2.3	-2.3	-2.4	-2.3	-2.3	-2.2	-2.7	-3.0	-3.1	-2.5	-2.4	-2.6	-2.7	-0.5	-3.1	-2.1
11	-2.8	-3.0	-3.2	-3.5	-3.7	-3.8	-3.7	-3.7	-3.7	-3.7	-3.7	-3.5	-3.2	-2.5	-2.2	-3.6	-3.8	-4.4	-5.0	-5.3	-5.5	-5.6	-5.5	-5.7	-2.2	-5.7	-3.9
12	-5.1	-5.4	-6.1	-6.6	-6.7	-7.6	-7.9	-8.1	-7.9	-7.7	-7.8	-7.8	-7.8	-7.9	-8.3	-8.5	-8.2	-7.7	-6.9	-6.3	-6.3	-5.9	-6.3	-6.3	-5.1	-8.5	-7.1
13	-6.3	-6.2	-6.0	-5.7	-5.6	-6.0	-6.3	-6.6	-6.7	-6.7	-6.1	-5.7	-5.0	-4.7	-4.1	-3.9	-4.0	-4.2	-4.6	-5.0	-5.1	-5.1	-5.1	-5.0	-3.9	-6.7	-5.4
14	-5.1	-4.9	-4.7	-4.9	-4.6	-4.6	-4.7	-4.7	-4.6	-4.6	-4.8	-5.1	-4.9	-5.0	-5.2	-5.5	-5.6	-5.7	-5.8	-6.0	-5.9	-5.9	-5.9	-5.8	-4.6	-6.0	-5.2
15	-5.8	-6.1	-6.7	-6.9	-6.8	-6.8	-6.7	-6.6	-6.4	-6.4	-6.4	-6.0	-5.7	-5.3	-5.6	-5.5	-5.2	-4.9	-4.6	-4.0	-3.6	-3.3	-3.2	-3.2	-3.2	-6.9	-5.5
16	-3.2	-3.2	-3.4	-3.4	-3.5	-3.6	-3.5	-3.8	-4.4	-4.7	-4.8	-4.5	-4.3	-3.8	-3.5	-3.3	-3.5	-4.1	-4.7	-5.4	-5.9	-6.1	-6.3	-6.3	-3.2	-6.3	-4.3
17	-6.3	-6.3	-6.5	-6.6	-6.7	-6.8	-6.7	-7.5	-7.3	-7.2	-7.3	-7.2	-7.4	-7.5	-7.4	-7.7	-8.6	-8.6	-8.9	-9.3	-9.7	-9.3	-9.4	-9.9	-6.3	-9.9	-7.7
18	-11.1	-11.7	-12.9	-13.1	-13.5	-13.6	-13.8	-14.2	-14.4	-14.7	-14.6	-15.1	-15.1	-14.9	-14.7	-15.0	-15.1	-15.7	-16.1	-16.8	-17.2	-17.1	-17.4	-17.6	-11.1	-17.6	-14.8
19	-17.4	-17.8	-18.0	-18.3	-18.1	-18.4	-18.4	-18.3	-18.3	-18.6	-18.2	-17.2	-16.8	-16.9	-16.6	-16.6	-16.1	-16.5	-16.5	-16.3	-16.1	-17.5	-17.5	-18.4	-16.1	-18.6	-17.4
20	-18.7	-19.1	-19.2	-19.8	-20.1	-20.7	-22.2	-22.6	-22.7	-23.4	-23.8	-24.0	-24.2	-24.5	-24.6	-24.6	-24.7	-24.9	-25.0	-25.2	-25.5	-25.8	-26.2	-26.5	-18.7	-26.5	-23.3
21	-26.7	-26.8	-27.1	-27.2	-27.4	-27.6	-27.7	-27.3	-27.4	-27.5	-26.3	-25.0	-25.6	-23.8	-23.9	-20.5	-19.1	-18.2	-18.0	-17.4	-17.0	-16.4	-16.2	-15.7	-15.7	-27.7	-23.2
22	-15.4	-15.5	-14.7	-14.4	-14.6	-14.5	-14.3	-14.3	-14.9	-15.0	-15.0	-15.2	-14.5	-13.8	-13.8	-13.6	-13.5	-14.6	-14.7	-14.2	-13.7	-14.3	-13.8	-13.9	-13.5	-15.5	-14.4
23	-14.2	-13.6	-13.4	-13.2	-12.2	-11.9	-11.8	-12.4	-12.5	-12.5	-12.8	-11.5	-10.0	-10.3	-9.8	-8.8	-8.1	-7.3	-6.2	-5.7	-5.7	-5.2	-4.8	-4.5	-4.5	-14.2	-9.9
24	-3.6	-3.2	-2.9	-2.6	-2.4	-2.2	-2.1	-1.9	-2.0	-2.0	-2.0	-2.1	-2.1	-2.0	-2.0	-2.1	-2.2	-2.3	-2.4	-2.7	-3.0	-5.0	-7.4	-9.9	-1.9	-9.9	-3.0
25	-11.3	-12.8	-13.5	-13.8	-13.9	-14.1	-14.0	-14.1	-14.8	-15.6	-16.4	-17.0	-17.1	-16.8	-17.4	-17.8	-18.0	-18.4	-18.4	-19.3	-19.5	-19.4	-19.9	-19.6	-11.3	-19.9	-16.4
26	-19.3	-19.2	-19.4	-18.6	-18.1	-18.0	-17.6	-17.4	-17.7	-17.2	-17.2	-17.4	-17.7	-17.6	-17.6	-17.5	-17.8	-18.1	-18.8	-19.0	-19.0	-18.4	-18.4	-18.7	-17.2	-19.4	-18.1
27	-19.1	-19.4	-18.8	-16.2	-15.6	-14.8	-14.6	-13.1	-12.5	-12.5	-11.7	-11.1	-9.3	-8.6	-8.1	-8.2	-6.7	-6.6	-8.2	-8.0	-7.4	-6.7	-5.7	-4.4	-4.4	-19.4	-11.1
28	-4.9	-5.0	-3.9	-4.0	-5.0	-4.8	-4.4	-4.4	-7.6	-6.0	-4.2	-4.1	-3.9	-3.0	-4.0	-7.7	-6.3	-8.5	-9.7	-9.4	-10.3	-12.0	-12.7	-12.9	-3.0	-12.9	-6.6
29	-13.6	-14.8	-16.3	-16.4	-15.9	-16.5	-17.6	-17.8	-18.1	-18.4	-18.7	-19.0	-19.3	-19.5	-19.4	-19.3	-19.7	-19.9	-20.3	-20.6	-20.5	-20.9	-20.8	-21.1	-13.6	-21.1	-18.5
30	-21.8	-22.0	-21.8	-22.2	-22.3	-22.2	-22.1	-22.0	-22.1	-22.1	-21.9	-21.8	-21.9	-21.8	-21.6	-21.9	-22.0	-22.1	-22.0	-21.7	-22.0	-21.9	-21.2	-20.8	-20.8	-22.3	-21.9
Max.	**-0.6**	**-0.5**	**-0.9**	**-1.5**	**-2.0**	**-1.9**	**-1.7**	**-1.5**	**-1.7**	**-1.9**	**-1.9**	**-2.1**	**-2.1**	**-2.0**	**-1.3**	**-1.2**	**-1.6**	**-2.3**	**-2.4**	**-2.1**	**-1.8**	**-1.7**	**-1.2**	**-0.9**	**-0.5**		
Min.	**-26.7**	**-26.8**	**-27.1**	**-27.2**	**-27.4**	**-27.6**	**-27.7**	**-27.3**	**-27.4**	**-27.5**	**-26.3**	**-25.0**	**-25.6**	**-24.5**	**-24.6**	**-24.6**	**-24.7**	**-24.9**	**-25.0**	**-25.2**	**-25.5**	**-25.8**	**-26.2**	**-26.5**		**-27.7**	
Avg.	**-10.4**	**-10.7**	**-10.8**	**-10.7**	**-10.6**	**-10.6**	**-10.7**	**-10.8**	**-10.9**	**-10.9**	**-10.8**	**-10.8**	**-10.6**	**-10.3**	**-10.3**	**-10.3**	**-10.2**	**-10.4**	**-10.6**	**-10.7**	**-10.8**	**-10.8**	**-10.8**	**-10.8**			**-10.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature at 10 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-19.3	-19.2	-18.6	-16.4	-15.5	-15.2	-14.7	-14.4	-13.9	-13.5	-12.8	-12.3	-10.3	-10.1	-9.6	-9.8	-10.0	-9.4	-9.7	-9.6	-9.7	-9.2	-9.0	-8.2	-8.2	-19.3	-12.5
2	-7.5	-6.9	-7.6	-8.6	-8.1	-6.7	-5.8	-5.7	-5.4	-4.9	-4.6	-4.3	-4.5	-4.1	-4.1	-4.4	-4.4	-4.0	-4.5	-4.1	-3.9	-3.6	-3.3	-2.8	-2.8	-8.6	-5.2
3	-2.5	-2.2	-2.1	-2.0	-1.9	-1.9	-1.7	-1.6	-1.5	-1.7	-1.5	-1.2	-1.3	-1.7	-1.5	-1.8	-1.8	-1.3	-1.0	-0.5	-0.3	-0.3	-0.5	-0.6	-0.3	-2.5	-1.4
4	-0.7	-0.9	-1.0	-1.0	-0.9	-1.0	-1.1	-1.2	-1.3	-1.4	-1.2	-1.0	-0.9	-0.9	-0.8	-0.8	-0.6	-0.4	-0.4	-0.4	-0.5	-0.5	-0.4	-0.4	-0.4	-1.4	-0.8
5	-0.3	-0.5	-0.4	-0.3	-0.2	-0.3	-0.1	-0.1	0.0	0.1	0.2	0.3	0.4	0.3	0.3	0.4	0.6	0.7	0.9	1.1	0.9	0.6	0.3	0.2	1.1	-0.5	0.2
6	0.3	0.4	0.2	0.3	0.5	0.5	0.3	0.2	0.2	0.2	0.3	0.6	0.4	0.5	0.3	0.3	-0.1	-0.1	-0.3	-0.1	-0.3	-0.4	-0.2	-0.7	0.6	-0.7	0.1
7	-0.7	-0.6	-1.0	-1.7	-3.3	-3.6	-4.5	-4.0	-4.4	-4.1	-5.4	-4.0	-3.1	-2.5	-2.5	-2.5	-2.0	-2.7	-3.1	-3.3	-4.0	-3.7	-3.3	-3.7	-0.6	-5.4	-3.1
8	-3.3	-3.5	-3.6	-3.5	-3.4	-3.3	-3.0	-3.5	-3.2	-2.6	-3.1	-3.0	-2.7	-2.8	-2.6	-2.9	-2.8	-2.5	-3.1	-2.6	-2.5	-2.8	-3.2	-3.5	-2.5	-3.6	-3.0
9	-3.9	-3.4	-2.9	-2.7	-3.0	-4.3	-4.1	-3.7	-3.5	-3.5	-3.4	-3.5	-3.8	-4.0	-4.8	-5.1	-5.7	-6.4	-6.7	-7.7	-8.1	-8.1	-7.5	-6.5	-2.7	-8.1	-4.8
10	-6.6	-7.2	-7.1	-7.4	-8.6	-10.1	-10.9	-11.1	-11.2	-12.2	-13.6	-14.1	-13.5	-13.2	-12.6	-11.5	-11.0	-10.7	-10.7	-10.8	-11.0	-11.0	-11.1	-11.2	-6.6	-14.1	-10.8
11	-11.1	-11.0	-10.7	-10.4	-9.7	-9.6	-9.9	-10.2	-10.2	-9.4	-9.3	-9.4	-9.5	-9.4	-9.6	-10.2	-11.1	-11.7	-12.0	-12.6	-13.3	-13.6	-13.5	-13.4	-9.3	-13.6	-10.9
12	-13.5	-13.0	-12.8	-12.3	-12.1	-11.8	-11.7	-11.1	-10.2	-8.3	-8.2	-7.4	-7.7	-7.3	-7.0	-5.9	-5.7	-6.2	-6.7	-7.7	-8.8	-9.0	-9.3	-8.8	-5.7	-13.5	-9.3
13	-9.1	-9.3	-9.6	-9.7	-10.0	-10.6	-10.7	-10.9	-11.2	-8.8	-9.0	-9.6	-7.6	-6.5	-6.5	-5.6	-4.4	-3.7	-3.7	-4.4	-4.1	-3.7	-2.4	-4.5	-2.4	-11.2	-7.3
14	-5.5	-6.3	-6.3	-6.6	-3.6	-2.1	-0.8	-1.0	-4.7	-7.1	-5.2	-6.7	-6.4	-5.7	-4.7	-5.5	-5.5	-5.3	-5.1	-5.6	-4.9	-4.6	-4.6	-4.5	-0.8	-7.1	-4.9
15	-4.3	-4.0	-4.1	-4.4	-4.5	-4.6	-4.6	-4.5	-4.4	-4.2	-4.2	-4.2	-4.0	-3.9	-3.7	-3.8	-3.7	-3.4	-3.3	-3.5	-3.9	-4.0	-4.0	-4.2	-3.3	-4.6	-4.0
16	-4.3	-4.2	-4.8	-4.8	-5.1	-5.1	-5.3	-5.9	-5.2	-6.1	-5.3	-5.3	-6.8	-7.4	-7.4	-7.3	-7.3	-7.4	-7.3	-7.1	-7.5	-7.7	-7.4	-7.0	-4.2	-7.7	-6.2
17	-6.2	-4.8	-4.0	-4.1	-4.0	-4.1	-4.0	-4.0	-3.8	-3.6	-3.8	-3.3	-3.1	-2.7	-2.7	-2.8	-2.9	-3.0	-2.9	-2.9	-2.9	-2.8	-2.9	-2.8	-2.7	-6.2	-3.5
18	-2.9	-2.9	-2.9	-2.9	-2.9	-2.8	-2.9	-2.8	-2.7	-2.5	-2.4	-2.6	-2.7	-2.4	-2.2	-2.0	-2.1	-2.1	-2.4	-2.5	-2.3	-2.1	-2.0	-2.0	-2.0	-2.9	-2.5
19	-2.3	-2.2	-2.1	-2.1	-2.3	-2.3	-2.5	-2.5	-2.6	-2.7	-2.4	-2.3	-2.2	-2.6	-2.4	-2.5	-2.6	-2.4	-2.7	-2.7	-2.6	-3.0	-3.1	-2.7	-2.1	-3.1	-2.5
20	-3.1	-2.6	-2.9	-2.7	-2.9	-2.9	-2.8	-2.7	-2.6	-2.5	-2.3	-2.3	-2.4	-2.3	-2.6	-2.1	-1.3	-1.3	-1.6	-2.0	-2.5	-2.5	-2.6	-2.5	-1.3	-3.1	-2.4
21	-2.4	-2.6	-2.9	-3.0	-3.0	-3.2	-3.1	-3.2	-3.0	-3.2	-3.3	-3.1	-3.1	-3.8	-3.7	-3.8	-3.5	-3.5	-3.8	-3.4	-3.1	-3.3	-3.1	-3.2	-2.4	-3.8	-3.2
22	-4.0	-3.6	-5.2	-6.2	-6.8	-6.6	-5.9	-5.9	-6.2	-6.3	-6.2	-6.3	-5.8	-4.7	-4.0	-4.1	-4.3	-4.6	-5.0	-5.4	-5.6	-5.9	-6.1	-6.1	-3.6	-6.8	-5.5
23	-5.8	-5.6	-5.5	-5.5	-5.5	-5.2	-5.1	-5.2	-5.0	-5.4	-6.0	-8.0	-8.7	-9.5	-9.5	-9.5	-9.7	-9.9	-10.2	-10.1	-9.9	-10.0	-10.0	-9.8	-5.0	-10.2	-7.7
24	-9.6	-9.4	-9.3	-9.5	-9.8	-9.4	-9.4	-9.3	-9.0	-9.2	-9.5	-9.5	-9.4	-9.4	-9.5	-9.9	-10.0	-10.2	-10.6	-10.6	-10.6	-10.5	-10.5	-10.7	-9.0	-10.7	-9.8
25	-10.6	-10.4	-9.4	-9.0	-8.2	-8.0	-7.5	-7.0	-6.8	-6.7	-6.6	-6.5	-6.7	-7.3	-6.9	-6.9	-6.6	-9.4	-11.0	-11.8	-12.2	-12.8	-13.5	-14.2	-6.5	-14.2	-9.0
26	-14.8	-16.3	-18.2	-19.2	-20.0	-20.4	-20.3	-20.3	-20.0	-19.8	-19.6	-19.3	-19.3	-19.4	-19.2	-19.1	-19.0	-19.0	-19.3	-19.8	-20.0	-20.1	-19.9	-20.0	-14.8	-20.4	-19.3
27	-20.1	-19.6	-19.4	-19.4	-19.9	-20.2	-20.4	-20.7	-21.0	-21.3	-21.5	-21.5	-21.5	-21.6	-21.8	-21.8	-22.0	-22.1	-22.3	-22.5	-22.7	-22.9	-23.0	-23.5	-19.4	-23.5	-21.4
28	-23.4	-23.3	-23.4	-23.5	-23.7	-23.6	-23.6	-23.8	-24.0	-24.2	-24.4	-24.6	-24.6	-24.6	-24.7	-24.9	-25.2	-25.4	-25.6	-25.9	-26.2	-26.4	-26.3	-26.6	-23.3	-26.6	-24.7
29	-27.0	-26.9	-26.7	-26.8	-26.2	-26.2	-26.3	-26.9	-26.8	-26.2	-26.2	-25.9	-25.7	-25.1	-25.3	-25.2	-22.6	-20.1	-22.8	-25.6	-25.4	-25.0	-25.1	-25.4	-20.1	-27.0	-25.5
30	-26.0	-25.2	-25.0	-25.0	-23.4	-21.0	-25.3	-24.7	-24.3	-22.7	-23.0	-23.5	-25.0	-25.8	-24.9	-23.7	-25.3	-25.4	-26.0	-25.8	-26.8	-26.6	-26.4	-27.3	-21.0	-27.3	-24.9
31	-26.3	-26.6	-26.0	-26.0	-26.4	-25.8	-25.7	-25.6	-24.6	-24.1	-24.6	-24.2	-23.2	-23.7	-23.2	-24.7	-24.8	-24.5	-24.2	-24.5	-23.5	-23.2	-22.4	-23.3	-22.4	-26.6	-24.6
Max.	**0.3**	**0.4**	**0.2**	**0.3**	**0.5**	**0.5**	**0.3**	**0.2**	**0.2**	**0.2**	**0.3**	**0.6**	**0.4**	**0.5**	**0.3**	**0.4**	**0.6**	**0.7**	**0.9**	**1.1**	**0.9**	**0.6**	**0.3**	**0.2**	**1.1**		
Min.	**-27.0**	**-26.9**	**-26.7**	**-26.8**	**-26.4**	**-26.2**	**-26.3**	**-26.9**	**-26.8**	**-26.2**	**-26.2**	**-25.9**	**-25.7**	**-25.8**	**-25.3**	**-25.2**	**-25.3**	**-25.4**	**-26.0**	**-25.9**	**-26.8**	**-26.6**	**-26.4**	**-27.3**		**-27.3**	
Avg.	**-8.9**	**-8.8**	**-8.9**	**-8.9**	**-8.8**	**-8.7**	**-8.8**	**-8.8**	**-8.8**	**-8.6**	**-8.6**	**-8.6**	**-8.5**	**-8.5**	**-8.4**	**-8.4**	**-8.3**	**-8.3**	**-8.6**	**-8.8**	**-9.0**	**-9.0**	**-8.9**	**-9.0**			**-8.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	1.82	1.12	0.82	0.73	0.73	0.63	0.99	0.65	0.30	0.26	0.87	1.47	0.70	0.64	1.12	1.24	1.17	1.84	2.42	1.86	1.72	0.91	1.40	2.42	0.26	1.08
2	1.1	1.29	1.45	1.35	1.10	2.14	1.26	1.24	1.22	0.77	1.03	1.12	0.95	1.36	0.91	0.67	0.61	1.01	0.71	0.75	0.89	0.74	0.71	0.73	2.14	0.61	1.05
3	0.7	0.86	0.69	1.15	1.05	0.68	0.69	0.48	0.58	0.31	0.36	0.70	0.68	0.43	0.66	0.34	0.40	0.24	0.24	0.36	0.16	1.00	0.77	0.00	1.15	0.00	0.56
4	0.1	0.39	0.08	0.41	0.13	0.06	0.02	0.11	0.80	0.54	0.45	0.39	-0.11	0.13	0.34	0.14	0.17	0.34	0.31	0.25	0.14	0.11	0.15	0.17	0.80	-0.11	0.23
5	0.1	0.07	0.12	0.22	0.06	0.02	0.05	0.10	0.04	0.02	-0.11	-0.18	-0.12	-0.19	-0.22	-0.12	0.10	-0.07	-0.16	-0.21	-0.08	-0.01	0.01	0.02	0.22	-0.22	-0.02
6	0.0	0.03	0.08	0.05	0.03	0.05	0.07	0.09	0.06	0.04	0.12	0.14	-0.12	0.02	-0.09	-0.12	-0.11	0.05	0.09	0.03	0.09	0.07	0.02	0.03	0.14	-0.12	0.03
7	0.3	0.10	0.11	0.03	0.06	0.19	0.06	0.04	0.09	0.26	0.48	0.73	-0.06	0.07	0.32	-0.31	-0.13	-0.13	-0.28	-0.18	-0.17	-0.17	0.05	0.50	0.73	-0.31	0.08
8	0.2	0.24	0.08	0.16	0.34	0.50	0.66	0.62	0.19	0.18	0.21	0.70	0.21	0.49	0.50	0.88	0.85	0.55	0.22	0.64	0.32	0.46	0.90	0.66	0.90	0.08	0.45
9	0.5	0.56	0.81	0.22	0.27	0.48	0.14	0.21	0.08	-0.03	0.07	0.06	0.10	0.16	0.38	0.09	0.13	0.10	0.12	0.11	0.08	0.10	0.13	0.16	0.81	-0.03	0.21
10	0.1	0.07	0.13	0.16	0.24	0.17	0.22	0.15	0.23	0.28	0.12	0.22	0.14	0.13	0.35	0.19	0.15	0.15	0.12	0.15	0.12	0.07	0.10	0.22	0.35	0.07	0.16
11	0.0	0.23	0.18	0.05	0.05	0.06	0.17	0.05	0.06	0.07	0.17	0.10	0.08	0.13	0.21	0.11	0.13	0.36	0.48	0.40	0.41	0.40	0.22	0.07	0.48	0.03	0.18
12	0.1	0.20	0.26	0.24	0.22	0.36	0.18	0.15	0.15	0.33	0.19	0.11	0.25	0.33	0.30	0.22	0.17	0.16	0.01	-0.02	-0.01	-0.01	0.03	-0.04	0.36	-0.04	0.16
13	0.2	0.06	0.09	-0.05	0.02	-0.01	-0.03	0.10	0.12	0.15	0.15	0.14	0.09	0.12	0.09	0.24	0.30	-0.15	0.52	0.62	0.87	0.86	1.03	0.64	1.03	-0.15	0.25
14	2.2	2.22	0.95	0.58	1.42	1.43	1.45	1.35	0.50	0.68	0.57	0.50	0.31	0.01	-0.02	-0.10	0.04	0.02	0.14	0.09	-0.04	-0.05	-0.05	0.02	2.22	-0.10	0.59
15	0.0	-0.03	-0.03	0.02	0.01	-0.02	-0.02	-0.02	-0.05	-0.02	-0.04	-0.04	-0.10	-0.10	-0.12	-0.12	-0.11	-0.09	-0.08	-0.07	-0.06	-0.01	-0.05	-0.05	0.02	-0.12	-0.05
16	0.0	0.09	0.21	0.27	0.20	0.15	0.38	0.44	0.45	0.47	0.69	0.55	0.09	-0.13	-0.08	0.12	0.03	0.21	0.00	0.06	0.21	0.53	0.40	0.33	0.69	-0.13	0.24
17	0.3	0.00	-0.20	-0.44	-0.69	-0.55	-0.65	-0.72	-1.07	-0.35	0.64	0.81	0.27	0.15	0.06	0.12	-0.03	-0.10	-0.08	-0.04	-0.05	0.00	-0.08	-0.09	0.81	-1.07	-0.12
18	-0.1	-0.11	-0.10	-0.10	-0.10	-0.11	-0.14	-0.12	-0.12	-0.11	-0.08	-0.04	0.02	-0.04	-0.28	0.13	0.09	0.29	0.49	0.19	0.16	0.14	0.08	0.13	0.49	-0.28	0.01
19	0.0	0.03	0.10	0.12	0.12	0.20	0.20	0.15	0.14	-0.09	-0.23	-0.36	-0.37	-0.24	-0.14	-0.10	-0.05	-0.06	-0.01	-0.04	-0.06	-0.08	-0.07	-0.07	0.20	-0.37	-0.04
20	-0.1	-0.06	-0.08	-0.09	-0.12	-0.10	-0.11	-0.11	-0.13	-0.11	-0.13	-0.14	-0.14	-0.11	-0.09	-0.08	-0.04	0.11	-0.09	-0.01	0.07	-0.01	0.16	0.01	0.16	-0.14	-0.06
21	0.0	0.07	-0.15	0.03	-0.03	-0.11	-0.13	-0.16	-0.16	-0.16	-0.13	-0.12	-0.08	-0.10	-0.10	-0.11	-0.13	-0.14	-0.10	-0.13	-0.13	-0.10	-0.10	-0.08	0.07	-0.16	-0.10
22	-0.1	0.06	-0.03	-0.09	-0.12	-0.12	-0.07	-0.09	-0.10	-0.09	-0.17	-0.17	-0.18	-0.17	-0.07	-0.13	-0.13	-0.18	-0.18	-0.04	-0.08	-0.16	-0.15	-0.16	0.06	-0.18	-0.11
23	-0.2	-0.25	-0.25	-0.34	-0.11	-0.05	0.03	0.11	0.14	0.26	0.35	0.43	0.25	0.10	-0.04	0.04	0.16	0.09	0.12	0.03	0.05	0.14	1.30	0.83	1.30	-0.34	0.13
24	0.5	0.01	0.31	0.51	0.54	0.24	1.47	0.04	-0.06	0.00	0.03	-0.02	-0.06	-0.11	-0.17	-0.15	-0.13	-0.07	-0.08	-0.08	-0.06	-0.05	-0.09	-0.10	1.47	-0.17	0.10
25	-0.1	-0.11	0.09	0.15	0.06	0.10	0.12	0.10	-0.04	-0.01	0.04	0.00	0.03	0.10	0.08	0.09	0.00	0.03	-0.07	-0.38	-0.36	-0.25	-0.05	0.03	0.15	-0.38	-0.02
26	0.0	0.12	0.19	0.20	0.32	0.65	0.33	0.20	0.33	1.18	1.41	1.84	1.74	0.66	1.17	1.21	0.99	1.32	1.38	1.68	0.93	0.58	0.33	0.47	1.84	-0.04	0.80
27	0.2	0.13	0.25	0.19	0.07	0.01	-0.02	0.43	0.44	0.36	0.11	0.03	-0.04	-0.11	-0.12	-0.14	-0.11	-0.11	-0.09	-0.09	-0.11	-0.12	-0.10	-0.08	0.44	-0.14	0.04
28	-0.1	-0.09	-0.09	-0.09	-0.08	-0.10	-0.14	-0.12	-0.11	-0.12	-0.10	-0.16	-0.22	-0.24	-0.34	-0.19	-0.10	-0.11	0.16	0.08	0.07	0.16	0.04	-0.02	0.16	-0.34	-0.08
29	0.0	0.02	-0.11	-0.03	0.07	0.06	0.07	0.22	0.16	0.36	0.20	0.02	-0.09	-0.07	0.12	0.11	0.13	0.22	0.27	0.33	0.30	0.40	0.40	0.42	0.42	-0.11	0.15
30	0.3	0.26	0.23	0.54	0.88	0.50	0.28	0.19	0.30	0.27	0.16	0.12	0.24	0.39	-0.02	-0.21	-0.08	0.02	0.14	0.04	0.12	0.05	0.05	0.30	0.88	-0.21	0.21
31	0.3	0.24	0.33	0.36	0.30	0.36	0.36	0.36	0.55	0.37	0.40	0.34	0.32	0.15	-0.35	-1.13	-1.59	-0.22	0.06	0.41	0.37	0.25	0.61	0.44	0.61	-1.59	0.15
Max.	**2.2**	**2.22**	**1.45**	**1.35**	**1.42**	**2.14**	**1.47**	**1.35**	**1.22**	**1.18**	**1.41**	**1.84**	**1.74**	**1.36**	**1.17**	**1.21**	**1.24**	**1.32**	**1.84**	**2.42**	**1.86**	**1.72**	**1.30**	**1.40**	**2.42**		
Min.	**-0.2**	**-0.25**	**-0.25**	**-0.44**	**-0.69**	**-0.55**	**-0.65**	**-0.72**	**-1.07**	**-0.35**	**-0.23**	**-0.36**	**-0.37**	**-0.24**	**-0.35**	**-1.13**	**-1.59**	**-0.22**	**-0.28**	**-0.38**	**-0.36**	**-0.25**	**-0.15**	**-0.16**		**-1.59**	
Avg.	**0.2**	**0.27**	**0.22**	**0.21**	**0.23**	**0.26**	**0.24**	**0.21**	**0.18**	**0.20**	**0.23**	**0.28**	**0.18**	**0.13**	**0.12**	**0.09**	**0.10**	**0.16**	**0.20**	**0.24**	**0.19**	**0.22**	**0.25**	**0.22**			**0.20**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.53	0.41	0.39	0.55	0.61	0.52	0.17	0.06	0.38	0.25	0.33	-0.09	-0.15	-0.37	-0.56	-0.24	-0.23	-0.09	-0.02	0.29	0.36	0.37	0.36	0.61	-0.56	0.17
2	0.3	0.31	0.35	0.40	0.72	0.30	0.24	0.35	0.42	0.43	0.26	0.29	0.04	0.22	0.14	0.15	0.20	-0.04	-0.05	0.22	0.32	0.17	0.11	0.04	0.72	-0.05	0.24
3	0.1	0.13	0.23	0.14	-0.04	0.15	0.26	0.22	0.34	0.24	0.02	0.29	0.06	0.03	0.07	0.96	1.19	0.28	0.79	0.57	1.91	0.95	0.88	1.53	1.91	-0.04	0.47
4	2.1	1.16	0.95	1.04	1.30	0.83	0.90	0.82	0.69	0.82	0.71	0.72	0.75	0.43	0.59	0.63	0.04	-0.21	0.43	0.50	0.66	0.62	1.17	1.19	2.08	-0.21	0.78
5	1.7	1.35	0.90	1.39	1.10	0.68	1.08	0.15	0.06	0.72	0.42	0.19	-0.06	0.07	0.26	-0.09	0.83	0.83	1.13	2.27	1.53	1.43	2.33	1.79	2.33	-0.09	0.92
6	1.9	1.81	1.78	1.59	1.56	1.41	1.44	1.46	1.54	2.59	2.89	1.96	2.21	1.96	1.06	1.22	1.14	2.13	0.78	1.30	0.85	0.88	1.45	1.15	2.89	0.78	1.59
7	0.7	0.69	0.83	0.61	0.89	0.63	4.09	4.01	2.01	2.22	1.66	1.99	2.97	2.02	1.56	1.70	1.62	1.85	1.62	1.77	1.28	1.50	1.71	1.47	4.09	0.61	1.72
8	1.4	1.11	1.32	1.58	1.16	1.04	0.91	0.59	1.27	1.05	1.07	1.18	0.61	0.61	0.50	0.55	0.67	0.77	0.55	0.51	0.59	0.61	0.37	0.25	1.58	0.25	0.84
9	0.2	0.15	0.21	0.17	0.17	0.20	0.22	0.34	0.44	0.38	0.32	0.25	0.30	0.33	0.30	0.11	0.08	0.18	0.25	0.53	0.62	0.31	0.25	0.48	0.62	0.08	0.28
10	1.1	0.35	0.30	0.59	0.77	0.93	0.92	0.85	1.03	0.73	0.98	0.38	0.06	-0.57	-0.63	-0.38	-0.24	-0.10	0.02	0.04	0.03	0.12	0.12	0.13	1.06	-0.63	0.31
11	0.2	0.29	0.29	0.35	0.38	0.46	0.32	0.31	0.23	0.31	0.26	0.21	0.08	-0.11	-0.12	0.14	-0.15	0.04	-0.01	0.49	0.55	0.24	0.49	0.34	0.55	-0.15	0.23
12	0.7	0.78	0.71	0.67	1.32	0.59	0.50	0.48	0.27	0.50	0.21	0.46	0.54	0.55	1.13	1.52	2.05	1.48	1.32	2.82	1.58	1.27	1.31	0.47	2.82	0.21	0.97
13	0.7	0.79	0.71	0.52	0.33	0.17	0.10	0.09	0.13	0.13	0.12	0.14	0.14	0.10	-0.02	-0.07	-0.09	-0.09	-0.08	-0.08	-0.10	-0.06	0.02	-0.04	0.79	-0.10	0.15
14	-0.1	-0.10	-0.10	-0.10	-0.10	-0.09	-0.10	-0.24	-0.24	-0.28	-0.31	-0.34	-0.39	-0.43	-0.42	-0.49	-0.46	-0.39	-0.34	-0.28	-0.27	-0.25	-0.18	-0.25	-0.09	-0.49	-0.26
15	-0.3	-0.26	-0.26	-0.14	0.33	0.49	0.03	0.16	0.16	0.19	0.12	-0.20	0.02	0.13	0.58	0.18	-0.50	0.06	0.39	1.34	1.67	0.89	0.28	0.05	1.67	-0.50	0.23
16	0.1	0.02	-0.01	-0.03	-0.03	-0.02	0.00	-0.02	-0.01	-0.01	-0.02	0.01	0.01	-0.02	-0.03	0.01	0.03	-0.08	-0.15	-0.11	-0.07	-0.08	-0.08	-0.09	0.07	-0.15	-0.03
17	0.1	0.17	-0.08	0.15	0.08	0.04	-0.05	-0.01	0.04	0.20	-0.02	-0.35	-0.28	-0.07	-0.09	-0.06	0.05	-0.07	-0.11	-0.13	-0.13	-0.11	-0.07	-0.01	0.20	-0.35	-0.03
18	-0.1	-0.10	-0.11	-0.12	-0.12	-0.15	-0.14	-0.16	-0.18	-0.20	-0.14	-0.12	-0.11	-0.14	-0.19	-0.20	-0.17	-0.15	-0.15	-0.10	-0.15	-0.13	-0.11	-0.11	-0.08	-0.20	-0.14
19	-0.1	-0.02	0.01	0.03	0.01	-0.01	0.05	0.12	-0.24	0.01	0.18	0.09	-0.21	-0.21	-0.36	-0.33	-0.27	-0.24	-0.15	-0.13	-0.11	-0.14	-0.13	-0.13	0.18	-0.36	-0.09
20	-0.1	-0.15	-0.17	-0.11	-0.14	-0.19	-0.16	-0.17	-0.20	-0.17	-0.10	-0.07	0.06	0.09	0.10	0.03	-0.07	-0.10	-0.13	-0.14	-0.13	-0.09	-0.08	-0.03	0.10	-0.20	-0.09
21	0.0	0.09	0.17	0.14	0.12	0.14	0.27	0.28	0.35	0.35	0.42	0.40	0.41	0.20	0.19	0.10	0.38	0.35	-0.05	-0.04	0.12	-0.04	-0.10	-0.10	0.42	-0.10	0.17
22	-0.1	-0.08	-0.16	-0.12	-0.15	-0.07	-0.09	0.08	-0.13	-0.16	-0.09	-0.31	-0.50	-0.57	-0.42	-0.37	-0.44	-0.28	-0.24	-0.20	-0.14	-0.06	-0.10	-0.01	0.08	-0.57	-0.20
23	0.1	-0.08	-0.12	-0.03	0.12	0.36	0.52	0.63	0.36	0.36	0.10	-0.52	-0.42	-0.38	-0.72	-0.64	-0.84	-0.97	-0.48	0.21	0.72	0.63	0.55	0.02	0.72	-0.97	-0.02
24	0.0	-0.08	-0.16	-0.15	-0.18	-0.16	-0.17	-0.20	-0.39	-0.57	-0.31	-0.67	-0.50	-0.35	-0.29	-0.17	-0.09	-0.64	-0.20	-0.40	-0.06	0.03	0.02	-0.01	0.03	-0.67	-0.24
25	-0.2	-0.21	-0.20	-0.46	-0.36	-0.43	-0.52	-0.44	-0.37	-0.17	0.87	0.87	0.66	0.62	0.73	0.89	0.85	0.63	0.33	0.13	0.24	0.26	0.30	0.36	0.89	-0.52	0.18
26	0.2	0.30	0.15	0.27	0.23	0.12	0.32	0.41	0.71	0.75	0.57	0.50	0.49	0.60	0.95	1.26	1.38	1.68	2.21	2.11	1.66	3.29	2.75	3.39	3.39	0.12	1.09
27	2.4	3.53	4.87	5.92	4.76	2.15	1.93	3.07	2.72	2.33	1.77	0.81	1.04	1.26	0.71	1.63	1.34	1.67	1.46	1.30	0.54	0.76	0.65	0.89	5.92	0.54	2.06
28	1.1	1.38	1.28	1.18	0.92	0.89	0.93	1.14	1.25	1.29	1.02	0.88	0.85	0.89	0.91	1.07	1.30	1.04	1.81	1.42	1.52	1.39	1.71	1.36	1.81	0.85	1.19
29	1.9	2.95	1.67	1.73	1.46	1.64	1.63	2.04	1.23	0.90	1.03	2.39	1.87	1.17	1.05	-0.04	-0.03	0.07	0.15	0.23	0.07	-0.05	-0.11	-0.16	2.95	-0.16	1.03
Max.	**2.4**	**3.53**	**4.87**	**5.92**	**4.76**	**2.15**	**4.09**	**4.01**	**2.72**	**2.59**	**2.89**	**2.39**	**2.97**	**2.02**	**1.56**	**1.70**	**2.05**	**2.13**	**2.21**	**2.82**	**1.91**	**3.29**	**2.75**	**3.39**	**5.92**		
Min.	**-0.3**	**-0.26**	**-0.26**	**-0.46**	**-0.36**	**-0.43**	**-0.52**	**-0.44**	**-0.39**	**-0.57**	**-0.31**	**-0.67**	**-0.50**	**-0.57**	**-0.72**	**-0.64**	**-0.84**	**-0.97**	**-0.48**	**-0.40**	**-0.27**	**-0.25**	**-0.18**	**-0.25**		**-0.97**	
Avg.	**0.6**	**0.58**	**0.54**	**0.61**	**0.59**	**0.44**	**0.55**	**0.57**	**0.47**	**0.53**	**0.49**	**0.41**	**0.37**	**0.29**	**0.25**	**0.30**	**0.33**	**0.33**	**0.38**	**0.56**	**0.54**	**0.51**	**0.55**	**0.49**			**0.47**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.1	0.14	1.29	0.17	-0.03	0.62	0.36	-0.02	0.43	0.90	0.37	0.48	0.18	0.01	-0.20	-0.13	-0.12	-0.01	-0.09	-0.10	-0.02	0.07	0.02	0.24	1.29	-0.20	0.18
2	0.1	0.12	0.20	0.24	0.18	0.01	-0.10	-0.12	-0.12	-0.17	-0.29	-0.45	-0.57	-0.62	-0.84	-1.36	-1.20	-0.56	-0.22	-0.19	0.00	-0.02	-0.07	-0.09	0.24	-1.36	-0.26
3	-0.1	-0.10	-0.06	0.00	-0.12	-0.17	-0.16	-0.16	-0.16	-0.16	-0.18	-0.19	-0.20	-0.21	-0.19	-0.17	-0.17	-0.16	-0.17	-0.16	-0.14	-0.14	-0.12	-0.14	0.00	-0.21	-0.15
4	-0.1	-0.09	-0.11	-0.16	-0.17	-0.18	-0.16	-0.17	-0.19	-0.19	-0.18	-0.18	-0.19	-0.19	-0.18	-0.18	-0.19	-0.20	-0.19	-0.16	-0.16	-0.17	-0.18	-0.18	-0.08	-0.20	-0.17
5	-0.2	-0.17	-0.18	-0.18	-0.18	-0.22	-0.21	-0.19	-0.16	-0.08	-0.02	-0.17	-0.20	-0.18	-0.16	-0.11	-0.10	-0.10	-0.15	-0.18	-0.16	-0.15	-0.17	-0.14	-0.02	-0.22	-0.15
6	-0.1	-0.06	-0.08	-0.04	0.04	0.05	-0.04	-0.07	-0.01	0.01	-0.07	-0.13	-0.06	-0.35	-0.31	-0.07	-0.15	0.02	0.45	0.77	0.92	0.69	0.49	0.41	0.92	-0.35	0.10
7	0.3	0.15	0.23	0.20	0.23	0.23	0.29	0.36	0.28	-0.03	0.14	-0.17	-0.25	-0.50	-0.55	-0.13	-0.28	-0.27	-0.32	-0.19	-0.12	-0.19	-0.22	-0.22	0.36	-0.55	-0.04
8	-0.2	-0.22	-0.19	-0.13	-0.04	-0.13	-0.12	-0.11	-0.18	-0.19	-0.13	-0.06	-0.12	-0.16	-0.04	0.18	0.25	0.07	-0.06	-0.06	-0.03	-0.02	0.07	0.05	0.25	-0.23	-0.07
9	0.1	0.08	0.02	0.02	0.13	0.14	0.19	0.19	0.07	0.07	0.09	0.05	-0.15	-0.37	-0.47	-0.51	-0.67	-1.26	-0.52	0.10	0.13	-0.05	0.10	0.26	0.26	-1.26	-0.10
10	0.2	0.19	0.28	0.06	-0.14	-0.13	-0.09	-0.09	0.18	-0.05	-0.11	-0.19	-0.29	-0.42	-0.60	-0.63	-0.66	-0.35	-0.31	-0.24	-0.24	-0.23	-0.23	-0.18	0.28	-0.66	-0.18
11	-0.2	-0.25	-0.25	-0.23	-0.20	-0.24	-0.26	-0.27	-0.27	-0.20	-0.07	-0.06	-0.23	-0.43	-0.12	-0.10	0.06	0.10	0.01	0.21	0.47	0.42	0.13	0.19	0.47	-0.43	-0.07
12	0.5	0.53	0.34	-0.09	-0.15	-0.06	0.79	0.18	-0.10	-0.21	-0.31	-0.48	-0.81	-1.01	-0.93	-0.97	-0.79	-0.63	-0.44	-0.29	-0.20	-0.18	-0.17	-0.18	0.79	-1.01	-0.23
13	-0.2	-0.18	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.21	-0.25	-0.33	-0.32	-0.09	-0.03	0.06	0.15	-0.05	-0.05	-0.12	-0.11	-0.09	0.72	1.88	0.90	1.88	-0.33	0.02
14	0.2	0.60	1.52	1.01	1.00	0.54	0.46	0.71	0.79	1.69	1.93	-0.50	-1.36	-1.11	-0.40	0.23	0.33	0.13	0.27	0.61	0.50	0.21	-0.02	-0.01	1.93	-1.36	0.39
15	0.1	-0.13	-0.11	-0.12	-0.11	-0.11	-0.13	-0.13	-0.09	-0.12	-0.16	-0.16	-0.14	-0.17	-0.20	-0.18	-0.14	-0.13	-0.11	-0.11	-0.12	-0.15	-0.16	-0.15	0.13	-0.20	-0.12
16	-0.2	-0.15	-0.13	-0.11	-0.07	0.09	0.09	0.06	-0.02	0.11	0.07	-0.11	-0.29	-0.30	-0.35	-0.65	-1.56	-1.75	-1.18	-0.74	-0.24	0.23	0.17	0.13	0.23	-1.75	-0.29
17	0.1	0.13	0.12	0.18	0.22	0.13	0.14	0.13	0.09	-0.07	-0.27	-0.26	0.03	0.37	0.56	0.72	0.05	-1.01	-0.38	-0.31	-0.23	-0.18	-0.13	-0.04	0.72	-1.01	0.00
18	-0.1	0.01	0.21	-0.13	-0.06	-0.08	0.01	0.06	0.00	-0.08	-0.21	-0.84	-0.62	-0.80	-0.76	-0.74	-0.81	-0.55	-0.35	-0.41	-0.14	0.02	0.02	0.05	0.21	-0.84	-0.26
19	0.1	0.12	0.10	0.12	0.10	0.07	0.10	0.10	0.08	-0.08	-0.41	-0.70	-0.67	-0.74	-0.75	-0.74	-1.09	-1.10	-0.45	-0.19	0.13	-0.01	0.06	0.09	0.13	-1.10	-0.24
20	-0.1	-0.16	-0.19	-0.24	-0.14	-0.10	-0.12	-0.17	0.03	-0.32	-0.78	0.88	-0.76	-3.85	-0.69	1.61	-1.00	-1.36	-0.94	-0.41	-0.04	0.00	0.12	0.09	1.61	-3.85	-0.36
21	0.5	0.70	1.01	0.89	1.49	1.00	1.50	1.38	0.68	0.35	0.20	0.10	0.05	0.18	-0.15	-0.31	-0.10	0.53	1.33	0.06	0.09	0.16	1.43	2.77	2.77	-0.31	0.66
22	2.5	3.15	1.46	1.07	0.80	0.66	0.62	0.71	0.55	1.22	0.92	0.62	0.78	0.93	0.95	2.02	2.63	1.95	1.50	0.62	0.23	0.54	2.13	1.26	3.15	0.23	1.24
23	1.0	0.69	1.43	2.48	1.52	0.40	0.49	0.56	0.15	0.24	0.07	-0.28	-0.18	-0.32	-0.23	-0.19	-0.23	-0.06	0.09	0.06	0.19	0.19	0.12	0.04	2.48	-0.32	0.34
24	-0.1	-0.10	-0.06	-0.09	-0.10	0.31	0.20	0.20	0.36	0.41	0.26	-0.16	0.00	0.03	0.38	-0.35	-0.22	0.03	0.09	-0.07	0.28	0.41	0.33	0.36	0.41	-0.35	0.10
25	0.8	0.94	0.43	0.18	-0.03	0.11	0.04	0.01	0.77	0.54	-0.46	-1.54	-1.84	-2.49	-2.36	-0.68	-0.10	-0.64	-0.03	0.31	0.35	0.70	0.57	0.35	0.94	-2.49	-0.17
26	0.3	0.36	0.41	0.28	0.26	0.43	0.21	0.26	0.13	-0.02	0.38	0.34	0.12	-0.28	-0.09	-0.06	-0.13	-0.10	-0.03	0.04	0.52	0.67	0.60	0.53	0.67	-0.28	0.21
27	0.8	0.66	0.64	0.61	0.69	0.62	0.44	0.27	0.03	-0.02	-0.18	-0.11	-0.05	-0.31	-0.44	-0.60	-0.31	-0.18	-0.03	0.10	0.34	0.44	0.34	0.33	0.84	-0.60	0.17
28	0.4	0.34	0.37	0.58	0.36	0.36	0.72	0.64	0.20	-0.23	-1.06	-0.89	0.23	-1.68	-1.96	-0.90	-0.13	0.38	0.50	0.40	0.29	0.52	0.45	0.44	0.72	-1.96	0.01
29	0.3	0.37	0.63	0.49	0.22	0.14	0.26	0.08	0.05	-0.06	-0.21	-0.31	-0.40	-0.31	-0.13	-0.07	-0.04	-0.12	-0.06	-0.08	-0.07	-0.06	-0.06	-0.06	0.63	-0.40	0.02
30	-0.1	-0.07	-0.10	-0.13	-0.14	-0.13	-0.10	-0.09	-0.10	-0.12	-0.15	-0.20	-0.23	-0.23	-0.29	-0.30	-0.24	-0.16	-0.18	-0.09	-0.03	-0.07	-0.10	-0.10	-0.03	-0.30	-0.14
31	-0.1	-0.12	-0.11	-0.08	-0.09	-0.12	-0.10	-0.10	-0.11	-0.11	-0.06	-0.11	-0.10	-0.09	-0.11	-0.07	-0.06	-0.05	-0.10	-0.12	-0.13	-0.13	-0.14	-0.13	-0.05	-0.14	-0.10
Max.	**2.5**	**3.15**	**1.52**	**2.48**	**1.52**	**1.00**	**1.50**	**1.38**	**0.79**	**1.69**	**1.93**	**0.88**	**0.78**	**0.93**	**0.95**	**2.02**	**2.63**	**1.95**	**1.50**	**0.77**	**0.92**	**0.72**	**2.13**	**2.77**	**3.15**		
Min.	**-0.2**	**-0.25**	**-0.25**	**-0.24**	**-0.20**	**-0.24**	**-0.26**	**-0.27**	**-0.27**	**-0.32**	**-1.06**	**-1.54**	**-1.84**	**-3.85**	**-2.36**	**-1.36**	**-1.56**	**-1.75**	**-1.18**	**-0.74**	**-0.24**	**-0.23**	**-0.23**	**-0.22**		**-3.85**	
Avg.	**0.2**	**0.24**	**0.29**	**0.21**	**0.17**	**0.13**	**0.16**	**0.13**	**0.10**	**0.09**	**-0.04**	**-0.20**	**-0.27**	**-0.50**	**-0.37**	**-0.17**	**-0.23**	**-0.24**	**-0.07**	**-0.03**	**0.07**	**0.14**	**0.23**	**0.22**			**0.01**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.1	-0.14	-0.14	-0.15	-0.15	-0.13	-0.13	-0.14	-0.13	-0.12	-0.11	-0.16	-0.21	-0.15	-0.06	-0.04	0.01	-0.03	-0.05	-0.08	-0.10	-0.13	-0.05	-0.01	0.01	-0.21	-0.10
2	0.1	0.16	0.31	0.22	0.26	0.48	0.44	0.25	0.17	-0.16	-0.23	-0.73	-0.69	-0.78	-0.76	-0.59	-0.32	-0.10	-0.26	-0.22	-0.12	-0.10	-0.11	-0.13	0.48	-0.78	-0.12
3	-0.1	-0.12	-0.12	-0.11	-0.13	-0.13	-0.14	-0.19	-0.20	-0.19	-0.30	-0.43	-0.49	-0.20	-0.19	0.05	-0.18	0.00	0.41	0.11	-0.21	-0.15	-0.14	-0.17	0.41	-0.49	-0.14
4	-0.1	-0.17	-0.19	-0.15	-0.14	-0.13	-0.14	-0.14	-0.14	-0.06	-0.02	-0.02	-0.08	-0.36	-0.64	-1.04	-1.23	-0.87	-0.61	-0.50	-0.27	-0.26	-0.29	-0.36	-0.02	-1.23	-0.33
5	-0.3	-0.41	-0.37	-0.39	-0.17	0.12	0.19	0.25	-0.13	-0.69	-1.32	-1.76	-1.87	-0.94	-1.10	-0.86	-0.61	-0.91	-1.45	-0.98	-0.25	0.34	0.45	0.43	0.45	-1.87	-0.53
6	0.3	0.20	0.32	0.32	0.32	0.33	0.28	0.27	-0.30	-0.80	-1.03	-0.83	-0.97	-1.10	-1.07	-0.87	-0.87	-0.72	-0.43	-0.01	0.11	0.22	0.29	0.23	0.33	-1.10	-0.24
7	0.2	0.19	0.26	0.20	0.35	0.29	0.44	0.51	0.27	0.08	-0.27	-0.42	-0.43	-0.27	-0.23	-0.28	-0.29	-0.42	-0.19	-0.10	0.42	0.60	0.77	0.92	0.92	-0.43	0.11
8	1.3	1.42	1.92	1.34	1.80	1.91	1.75	1.81	1.04	0.68	-0.53	-1.20	-1.39	-2.14	-1.43	-1.64	-2.13	-2.16	-1.71	-1.18	-0.72	-0.17	-0.08	-0.07	1.92	-2.16	-0.07
9	-0.1	-0.16	-0.21	-0.10	-0.16	-0.06	0.19	0.42	-0.21	-0.96	-0.96	-0.97	-1.65	-0.83	-0.76	-0.65	-0.89	-0.46	-0.01	0.44	0.59	0.66	0.82	0.86	0.86	-1.65	-0.22
10	0.9	0.79	0.63	0.62	1.12	1.22	1.17	0.76	0.59	0.53	-0.04	-0.25	-0.72	-0.48	-0.09	0.18	0.21	0.26	0.35	0.53	0.61	0.61	0.68	0.63	1.22	-0.72	0.45
11	0.8	0.74	0.57	0.78	0.99	1.00	1.11	0.54	0.24	0.10	-0.22	-0.43	-0.23	-0.08	0.01	0.11	0.21	0.21	0.28	0.25	0.37	0.45	0.37	0.43	1.11	-0.43	0.36
12	0.4	0.30	0.46	0.56	0.49	0.71	0.46	0.48	0.54	0.58	0.37	0.27	0.30	0.02	0.14	0.17	0.26	0.42	0.36	0.31	0.59	0.83	0.72	0.78	0.83	0.02	0.44
13	0.9	0.49	0.08	-0.04	0.41	0.34	0.23	0.53	0.38	-0.08	-0.10	-0.20	-0.52	-0.64	-0.41	0.01	0.03	0.03	-0.16	-0.32	-0.22	-0.15	-0.27	-0.28	0.89	-0.64	0.00
14	-0.2	-0.25	-0.24	-0.19	-0.17	-0.15	-0.17	-0.20	-0.22	-0.24	-0.23	-0.28	-0.27	-0.53	-0.60	-0.60	-0.80	-0.66	-0.37	-0.16	-0.17	-0.20	0.09	-0.03	0.09	-0.80	-0.29
15	-0.2	0.20	0.12	0.13	0.14	-0.07	-0.16	-0.36	-0.34	-0.41	-0.37	-0.37	-0.48	-0.56	-0.58	-0.54	-0.32	-0.21	-0.02	0.18	0.13	0.20	0.30	0.30	0.30	-0.58	-0.13
16	0.2	0.24	0.20	0.25	0.15	0.20	0.17	0.22	0.10	0.05	0.04	-0.11	-0.19	-0.21	-0.10	-0.14	-0.11	-0.03	-0.06	0.14	0.47	0.29	0.13	0.28	0.47	-0.21	0.09
17	0.2	0.15	0.41	0.14	0.29	0.63	0.89	0.82	0.74	0.46	0.40	0.55	-0.46	-0.48	-0.98	-1.52	-1.60	-1.27	-1.25	-0.63	-0.07	0.56	0.71	1.10	1.10	-1.60	-0.01
18	1.0	1.16	1.33	1.30	1.44	1.51	1.28	2.23	2.83	1.89	0.51	-0.54	-1.72	-1.58	-1.52	-1.30	-1.58	-1.78	-1.61	-1.20	-0.20	0.81	2.04	1.61	2.83	-1.78	0.33
19	1.6	1.42	1.34	0.94	0.99	1.03	1.40	0.87	0.98	-0.29	-0.49	-0.33	-1.71	-1.80	-1.78	-1.70	-1.42	0.83	1.51	1.70	1.11	1.20	0.16	0.27	1.70	-1.80	0.32
20	0.4	0.83	1.08	1.21	0.98	1.27	1.44	1.62	1.15	0.95	0.71	0.36	0.14	0.33	-0.07	-0.36	-0.65	-0.80	-0.56	-0.40	-0.29	-0.10	-0.09	-0.10	1.62	-0.80	0.38
21	-0.1	-0.13	-0.13	-0.13	-0.08	-0.08	-0.12	-0.16	-0.24	-0.26	-0.32	-0.62	-0.78	-0.82	-0.94	-1.08	-0.88	-0.49	-0.46	-0.26	-0.23	-0.69	-0.59	0.30	0.30	-1.08	-0.39
22	0.7	0.51	0.33	0.48	0.95	0.74	0.77	0.49	0.40	0.27	0.31	-0.52	-0.65	-0.72	-0.78	-0.97	-1.30	1.05	2.84	2.07	2.54	2.58	2.22	2.17	2.84	-1.30	0.68
23	2.0	2.02	2.08	2.31	2.21	2.28	2.03	1.94	1.90	2.06	1.94	1.94	2.07	2.06	2.20	2.22	2.23	2.45	2.51	2.35	2.62	2.60	3.03	3.00	3.03	1.90	2.25
24	2.9	2.51	2.54	2.77	2.58	1.87	1.80	1.36	1.15	0.39	0.42	0.18	1.43	1.16	1.16	1.16	1.30	-0.06	-0.10	-0.01	-0.05	0.09	0.01	-0.08	2.90	-0.10	1.10
25	-0.2	-0.18	-0.20	-0.23	-0.22	-0.17	-0.22	-0.20	-0.19	-0.30	-0.43	-0.46	-0.40	-0.40	-0.47	-0.42	-0.48	-0.47	-0.36	-0.27	-0.17	-0.06	0.18	0.26	0.26	-0.48	-0.25
26	0.2	0.21	0.22	0.21	0.17	0.21	0.20	0.00	-0.10	-0.26	-0.29	-0.38	-0.47	-0.52	-0.69	-0.64	-0.61	-0.58	-0.49	-0.26	-0.05	-0.09	-0.11	-0.11	0.22	-0.69	-0.18
27	-0.1	-0.11	-0.10	-0.11	-0.14	-0.15	-0.17	-0.18	-0.24	-0.34	-0.51	-0.64	-0.88	-1.03	-0.92	-0.78	-0.66	-0.67	-0.56	-0.46	-0.31	-0.16	0.06	0.11	0.11	-1.03	-0.38
28	0.1	0.13	0.43	0.36	0.29	0.30	0.45	0.02	-0.46	-0.91	-1.05	-1.34	-1.28	-1.23	-1.21	-1.09	-0.94	-0.90	-0.52	-0.17	0.11	0.14	0.16	0.16	0.45	-1.34	-0.35
29	0.1	0.03	0.10	0.15	0.03	-0.06	-0.08	-0.08	-0.18	-0.09	-0.02	-0.01	0.00	-0.39	-0.55	-0.11	0.78	1.00	1.14	1.35	0.22	0.25	0.32	0.24	1.35	-0.55	0.17
30	0.2	0.19	0.11	0.12	0.23	0.15	0.11	-0.02	-0.12	-0.42	-0.45	-0.57	-0.57	0.29	0.65	0.63	0.73	0.94	0.91	-0.23	-0.17	-0.12	-0.09	-0.09	0.94	-0.57	0.10
Max.	**2.9**	**2.51**	**2.54**	**2.77**	**2.58**	**2.28**	**2.03**	**2.23**	**2.83**	**2.06**	**1.94**	**1.94**	**2.07**	**2.06**	**2.20**	**2.22**	**2.23**	**2.45**	**2.84**	**2.35**	**2.62**	**2.60**	**3.03**	**3.00**	**3.03**		
Min.	**-0.3**	**-0.41**	**-0.37**	**-0.39**	**-0.22**	**-0.17**	**-0.22**	**-0.36**	**-0.46**	**-0.96**	**-1.32**	**-1.76**	**-1.87**	**-2.14**	**-1.78**	**-1.70**	**-2.13**	**-2.16**	**-1.71**	**-1.20**	**-0.72**	**-0.69**	**-0.59**	**-0.36**		**-2.16**	
Avg.	**0.4**	**0.41**	**0.44**	**0.43**	**0.49**	**0.52**	**0.52**	**0.46**	**0.31**	**0.05**	**-0.15**	**-0.34**	**-0.50**	**-0.48**	**-0.46**	**-0.42**	**-0.40**	**-0.21**	**-0.03**	**0.07**	**0.21**	**0.34**	**0.39**	**0.42**			**0.10**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.1	-0.09	-0.08	0.05	0.17	0.22	0.16	0.13	-0.33	-0.51	-0.32	-0.40	0.59	1.29	1.19	1.08	0.92	0.90	0.96	0.97	1.23	1.14	0.72	0.22	1.29	-0.51	0.42
2	0.2	0.18	0.04	-0.01	0.03	0.00	-0.04	0.00	-0.02	-0.11	-0.20	0.55	0.83	0.80	0.54	0.62	1.15	1.02	1.23	1.18	0.87	0.96	1.13	1.06	1.23	-0.20	0.50
3	1.1	1.01	1.19	1.08	0.92	1.29	1.03	0.77	0.79	0.65	0.90	0.96	0.89	0.80	0.91	0.96	0.28	0.45	0.92	0.99	0.94	0.83	0.74	0.82	1.29	0.28	0.88
4	0.8	0.72	0.79	0.80	0.82	0.80	0.79	0.72	0.79	0.74	0.75	0.65	0.53	0.32	0.44	0.32	0.50	0.67	0.45	0.36	0.33	0.42	0.53	0.43	0.82	0.32	0.60
5	0.5	0.41	0.42	0.41	0.57	0.52	0.38	0.24	-0.08	-0.17	0.20	-0.17	-0.29	-0.13	-0.08	-0.29	-3.35	-2.30	-1.58	-0.73	-0.23	0.21	0.52	0.55	0.57	-3.35	-0.19
6	0.7	0.49	0.75	0.25	0.30	0.24	0.23	0.09	0.15	-0.22	-0.31	-0.42	-0.38	-0.27	-0.12	0.10	0.13	0.23	0.31	0.40	0.42	0.38	0.36	0.34	0.75	-0.42	0.17
7	0.3	0.33	0.40	0.40	0.40	0.42	0.42	0.43	0.42	0.31	0.33	0.32	0.32	0.18	0.40	0.30	0.34	0.38	0.46	0.46	0.48	0.49	0.41	0.39	0.49	0.18	0.38
8	0.4	0.42	0.39	0.37	0.42	0.36	0.40	0.42	0.34	0.37	0.36	0.36	0.48	0.45	0.44	0.48	0.50	0.54	0.59	0.72	0.70	0.73	0.73	0.78	0.78	0.34	0.49
9	0.8	0.84	0.74	0.74	0.63	0.54	0.54	0.60	0.66	0.33	0.13	0.09	-0.13	-0.17	-0.31	-0.29	-0.09	-0.18	0.14	0.35	0.37	0.32	0.32	0.36	0.84	-0.31	0.31
10	0.4	0.41	0.45	0.45	0.49	0.56	0.54	0.31	0.27	0.11	0.07	-0.20	-2.25	-2.96	-2.75	-2.92	-2.77	-1.71	-0.79	-0.24	0.38	0.42	0.58	0.56	0.58	-2.96	-0.44
11	0.5	0.39	0.38	0.29	0.36	0.39	0.37	0.37	0.35	0.29	0.11	0.05	0.06	0.06	0.32	0.37	0.38	0.33	0.42	0.37	0.36	0.35	0.32	0.18	0.48	0.05	0.31
12	0.2	0.11	0.09	0.14	0.07	0.02	-0.02	-0.02	-0.10	-0.01	-0.06	-0.06	0.01	0.01	-0.05	-0.15	-0.20	-0.22	-0.21	-0.17	-0.12	-0.09	-0.06	-0.05	0.19	-0.22	-0.04
13	0.0	-0.04	-0.03	-0.03	-0.03	-0.03	-0.13	-0.13	-0.22	-0.21	0.03	0.01	0.02	-0.01	-0.17	-0.19	-0.24	-0.25	-0.15	-0.12	-0.09	-0.06	0.05	0.16	0.16	-0.25	-0.08
14	0.2	0.27	0.26	0.44	0.66	0.74	0.73	0.52	0.37	0.25	0.30	0.12	-0.01	-0.13	-0.25	-0.39	-0.26	-0.24	0.01	0.21	0.20	0.45	0.49	0.48	0.74	-0.39	0.22
15	0.4	0.57	0.68	0.48	0.62	0.55	0.51	0.36	-0.18	-0.93	-0.86	-1.01	-0.82	-0.76	-1.15	-1.89	-1.11	-0.62	-0.43	-0.25	-0.12	-0.08	-0.02	0.01	0.68	-1.89	-0.25
16	0.0	-0.06	-0.07	-0.07	-0.08	-0.08	-0.09	-0.05	-0.04	-0.31	-0.17	-0.04	-0.70	-0.69	-0.88	-1.22	-1.77	-1.93	-1.75	-1.71	-1.60	-1.18	-0.69	-0.72	-0.04	-1.93	-0.66
17	-0.4	-0.21	0.07	0.09	0.12	0.21	-0.05	-0.36	-0.54	-0.82	-1.03	-1.50	-1.53	-1.62	-1.30	-1.89	-1.94	-2.16	-1.20	-1.22	-0.82	-0.25	0.16	0.19	0.21	-2.16	-0.75
18	0.5	0.46	0.35	0.31	0.15	0.08	0.04	-0.19	-0.23	-0.46	-0.52	-0.74	-0.79	-0.88	-0.89	-0.66	-0.70	-0.79	-0.50	-0.39	-0.24	-0.23	-0.19	-0.14	0.46	-0.89	-0.28
19	-0.2	-0.17	-0.18	-0.12	0.04	-0.04	-0.15	-0.42	-0.59	-0.63	-0.75	-1.35	-1.59	-1.39	-1.32	-1.72	-1.90	-1.64	-1.00	-0.86	-0.43	-0.22	0.01	0.14	0.14	-1.90	-0.69
20	0.1	0.23	0.38	0.45	0.42	0.41	0.14	-0.23	-0.28	-0.67	-0.83	-0.89	-1.07	-1.34	-1.08	-0.81	-1.90	-2.04	-1.46	-0.95	-0.64	-0.35	0.36	0.75	0.75	-2.04	-0.47
21	0.9	0.92	0.93	0.67	0.92	0.44	0.06	-0.06	-0.56	-0.68	-0.82	-0.86	-1.27	-1.47	-1.65	-1.65	-2.08	-1.87	-1.39	-0.44	-0.43	-0.19	0.09	0.18	0.93	-2.08	-0.43
22	0.1	0.00	0.09	-0.11	-0.14	0.41	0.02	-0.13	-0.39	-0.94	-0.83	-1.08	-1.01	-1.42	-1.41	-1.42	-0.61	-0.29	-0.17	-0.06	-0.02	-0.08	-0.11	-0.09	0.41	-1.42	-0.40
23	-0.1	-0.12	-0.15	-0.12	-0.09	-0.03	-0.06	-0.07	-0.11	-0.12	-0.20	-0.10	-0.13	0.09	0.18	0.08	0.08	0.01	0.01	-0.02	0.01	-0.03	-0.01	0.01	0.18	-0.20	-0.04
24	0.0	-0.03	-0.05	-0.07	-0.07	-0.07	-0.08	-0.08	-0.09	-0.10	-0.15	-0.18	-0.22	-0.43	-0.71	-0.48	-0.41	-0.48	-0.16	-0.45	-0.15	0.03	0.14	0.27	0.27	-0.71	-0.17
25	0.4	0.17	0.00	-0.08	0.00	-0.09	-0.02	-0.11	-0.27	-0.38	-0.58	-0.64	-1.20	-0.76	-0.74	-0.87	-0.91	-0.81	-0.54	-0.42	-0.38	-0.20	-0.06	-0.02	0.42	-1.20	-0.35
26	-0.1	-0.09	-0.10	-0.14	-0.12	-0.12	-0.17	-0.17	-0.20	-0.29	-0.31	-0.46	-0.56	-0.96	-1.21	-0.97	-0.98	-0.95	-0.88	-0.53	-0.45	-0.05	0.00	0.22	0.22	-1.21	-0.40
27	0.2	0.27	0.20	0.19	0.29	0.24	0.31	0.03	-0.21	-0.55	-0.93	-0.80	-0.97	-1.32	-1.32	-1.38	-1.32	-1.23	-1.06	-0.86	-0.34	0.09	0.00	0.02	0.31	-1.38	-0.44
28	0.2	0.23	0.26	0.28	0.44	0.56	0.54	0.35	-0.23	-0.73	-0.83	-1.21	-1.16	-1.12	-1.28	-1.24	-1.30	-0.92	-0.41	-0.18	-0.08	0.01	0.13	0.23	0.56	-1.30	-0.31
29	0.3	0.26	0.27	0.25	0.37	0.33	0.12	-0.15	-0.33	-0.40	-0.25	-0.42	-0.47	-0.57	-0.73	-0.88	-1.13	-0.87	-0.87	-0.69	-0.32	-0.07	0.12	0.36	0.37	-1.13	-0.24
30	0.3	0.35	0.61	0.55	0.68	0.58	0.15	-0.27	-0.13	-0.60	-0.52	-0.60	-0.67	-0.58	-0.84	-0.86	-0.92	-0.59	-0.59	-0.29	-0.26	-0.17	-0.07	0.04	0.68	-0.92	-0.19
31	0.0	0.08	0.10	0.02	0.00	0.01	-0.03	-0.05	-0.04	-0.08	-0.08	-0.26	-0.41	-0.28	-0.24	-0.20	-0.18	-0.21	-0.20	-0.19	-0.11	-0.14	-0.04	0.00	0.10	-0.41	-0.10
Max.	**1.1**	**1.01**	**1.19**	**1.08**	**0.92**	**1.29**	**1.03**	**0.77**	**0.79**	**0.74**	**0.90**	**0.96**	**0.89**	**1.29**	**1.19**	**1.08**	**1.15**	**1.02**	**1.23**	**1.18**	**1.23**	**1.14**	**1.13**	**1.06**	**1.29**		
Min.	**-0.4**	**-0.21**	**-0.18**	**-0.14**	**-0.14**	**-0.12**	**-0.17**	**-0.42**	**-0.59**	**-0.94**	**-1.03**	**-1.50**	**-2.25**	**-2.96**	**-2.75**	**-2.92**	**-3.35**	**-2.30**	**-1.75**	**-1.71**	**-1.60**	**-1.18**	**-0.69**	**-0.72**		**-3.35**	
Avg.	**0.3**	**0.27**	**0.30**	**0.26**	**0.30**	**0.30**	**0.21**	**0.09**	**-0.03**	**-0.22**	**-0.24**	**-0.33**	**-0.45**	**-0.49**	**-0.52**	**-0.58**	**-0.70**	**-0.57**	**-0.32**	**-0.15**	**-0.02**	**0.11**	**0.21**	**0.25**			**-0.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.11	0.03	0.08	0.14	0.14	0.10	0.06	0.05	0.00	-0.11	-0.60	-0.79	-0.57	-0.55	-0.65	-0.49	-0.32	-0.24	-0.23	-0.16	-0.21	-0.11	-0.06	0.14	-0.79	-0.18
2	0.0	0.06	0.08	0.11	0.12	0.11	0.17	0.06	0.03	-0.19	-0.23	-0.29	-0.56	-0.80	-1.01	-1.13	-1.02	-0.90	-0.99	-0.86	-0.62	-0.44	-0.32	-0.15	0.17	-1.13	-0.37
3	0.1	0.01	-0.02	0.01	0.15	0.27	0.26	0.01	-0.22	-0.55	-0.80	-0.95	-1.06	-1.31	-1.63	-1.59	-1.19	-1.35	-1.00	-0.54	-0.52	-0.34	-0.24	-0.12	0.27	-1.63	-0.53
4	-0.1	-0.11	-0.10	-0.10	-0.12	-0.13	-0.22	-0.30	-0.80	-0.67	-0.80	-1.38	-1.14	-1.28	-1.34	-1.44	-1.50	-1.32	-1.21	-1.02	-0.76	-0.57	-0.28	-0.04	-0.04	-1.50	-0.70
5	0.0	-0.11	-0.11	-0.12	-0.11	-0.11	-0.13	-0.14								-0.43	-0.52	-0.55	-0.47	-0.51	-0.55	-0.30	-0.21	-0.08	-0.03	-0.55	-0.26
6	-0.1	-0.07	0.07	0.19	0.21	0.14	0.09	-0.12	-0.26	-0.51	-0.66	-0.95	-1.21	-1.22	-0.99	-0.88	-1.02	-1.03	-0.96	-0.64	-0.50	-0.23	-0.13	0.07	0.21	-1.22	-0.44
7	0.1	-0.01	-0.04	0.06	0.01	0.03	-0.07	-0.19	-0.61	-0.89	-0.95	-1.21	-0.67	-0.88	-0.80	-0.92	-1.46	-1.23	-0.62	-0.52	-0.70	-0.43	-0.26	-0.14	0.11	-1.46	-0.52
8	0.2	0.29	0.45	0.25	0.26	0.41	0.10	-0.51	-0.49	-0.57	-0.83	-1.07	-1.22	-1.56	-1.72	-1.43	-1.24	-1.00	-1.03	-1.03	-0.97	-0.71	-0.48	-0.42	0.45	-1.72	-0.60
9	-0.4	-0.36	-0.31	-0.26	-0.28	-0.31	-0.35	-0.38	-0.41	-0.39	-0.24	-0.40	-0.38	-0.38	-0.66	-0.68	-0.76	-0.65	-0.62	-0.62	-0.54	-0.39	-0.30	-0.26	-0.24	-0.76	-0.43
10	-0.2	-0.13	-0.13	-0.10	-0.07	-0.08	0.08	-0.11	-0.29	-0.30	-0.35	-0.41	-0.53	-0.71	-0.54	-0.91	-1.20	-1.08	-0.96	-0.85	-0.56	-0.32	-0.07	-0.02	0.08	-1.20	-0.41
11	-0.2	0.13	0.11	0.00	-0.02	-0.06	-0.10	-0.23	-0.43	-0.66	-0.45	-0.64	-0.46	-0.66	-0.73	-0.83	-0.93	-0.75	-0.69	-0.60	-0.49	-0.40	-0.29	-0.25	0.13	-0.93	-0.40
12	-0.3	0.07	0.30	0.16	0.41	0.57	0.00	-0.37	-0.55	-0.86	-1.17	-0.98	-0.74	-0.51	-0.59	-0.44	-0.50	-0.58	-0.39	-0.38	-0.28	-0.29	-0.27	-0.15	0.57	-1.17	-0.32
13	-0.1	-0.05	0.00	-0.01	0.03	0.02	-0.03	-0.04	-0.07	-0.13	-0.31	-0.50	-0.56	-0.59	-0.57	-0.68	-0.62	-0.53	-0.43	-0.64	-0.53	-0.38	0.01	0.28	0.28	-0.68	-0.27
14	0.4	0.49	0.65	0.52	0.32	0.30	0.23	0.14	-0.14	-0.62	-0.90	-0.88	-0.82	-0.69	-0.86	-1.45	-1.37	-1.82	-1.82	-1.00	-0.60	-0.51	-0.33	-0.10	0.65	-1.82	-0.45
15	0.4	0.19	0.25	0.20	0.69	0.45	0.77	0.38	-0.22	-0.78	-1.81	-2.34	-2.11	-1.90	-1.90	-1.86	-1.48	-0.90	-0.86	-0.68	-0.48	-0.35	-0.30	-0.13	0.77	-2.34	-0.62
16	0.0	0.42	-0.16	0.01	-0.06	-0.11	-0.19	-0.29	-0.30	-0.29	-0.39	-0.47	-0.42	-0.65	-0.95	-0.71	-0.87	-1.00	-1.09	-1.02	-0.63	-0.47	-0.17	0.17	0.42	-1.09	-0.40
17	0.3	0.25	0.21	0.13	0.09	0.06	-0.03	-0.77	-0.88	-0.92	-0.64	-0.63	-0.92	-1.37	-1.70	-1.74	-1.93	-1.89	-1.76	-1.53	-1.29	-1.05	-0.58	-0.13	0.25	-1.93	-0.78
18	0.2	0.06	0.14	0.10	-0.01	0.07	0.19	-0.32	-0.55	-0.94	-1.17	-1.35	-1.48	-1.81	-2.18	-2.09	-1.94	-1.70	-1.20	-1.04	-0.87	-0.65	-0.39	-0.34	0.23	-2.18	-0.80
19	-0.3	-0.33	-0.33	-0.23	0.01	0.10	0.06	-0.44	-1.52	-1.22	-0.80	-0.74	-0.97	-1.24	-1.65	-1.74	-2.07	-1.98	-1.88	-1.61	-1.44	-1.03	-0.29	-0.26	0.10	-2.07	-0.91
20	-0.4	-0.10	-0.09	-0.07	-0.04	0.16	-0.25	-0.53	-0.80	-1.04	-1.49	-1.85	-1.95	-1.96	-1.83	-1.83	-1.89	-1.68	-1.59	-1.30	-1.16	-0.80	-0.61	-0.28	0.16	-1.96	-0.97
21	-0.1	-0.09	-0.12	-0.14	-0.08	-0.10	-0.49	-0.61	-0.65	-0.91	-0.72	-0.82	-0.74	-0.75	-0.86	-1.03	-1.07	-1.12	-1.22	-1.41	-1.51	-1.07	-0.35	-0.15	-0.08	-1.51	-0.67
22	0.2	0.26	0.24	0.35	0.44	0.44	-0.33	-0.95	-1.24	-1.40	-1.49	-1.74	-1.93	-1.90	-1.85	-1.37	-1.14	-1.33	-1.15	-0.92	-0.64	-0.47	-0.41	-0.26	0.44	-1.93	-0.77
23	-0.2	-0.19	-0.18	-0.17	-0.16	-0.06	-0.14	-0.26	-0.44	-0.48	-0.58	-0.57	-0.68	-1.34	-1.56	-1.78	-1.85	-1.76	-1.72	-1.41	-1.30	-1.04	-0.72	-0.25	-0.06	-1.85	-0.79
24	0.0	0.04	0.05	0.04	0.04	-0.06	-0.30	-0.44	-0.55	-0.88	-1.14	-1.29	-1.02	-0.91	-0.73	-0.67	-0.65	-0.59	-0.46	-0.36	-0.29	-0.24	-0.21	-0.21	0.05	-1.29	-0.45
25	-0.2	-0.09	0.00	-0.01	-0.09	-0.14	-0.14	-0.28	-0.41	-0.45	-0.48	-0.73	-1.00	-0.97	-1.14	-1.17	-1.22	-0.89	-0.64	-0.47	-0.43	-0.30	-0.24	-0.25	0.00	-1.22	-0.49
26	-0.2	-0.10	-0.07	-0.06	0.15	0.09	0.10	0.02	-0.02	-0.06	-0.10	-0.37	-0.53	-0.62	-0.82	-0.77	-0.56	-0.35	-0.39	-0.28	-0.28	-0.23	-0.05	0.05	0.15	-0.82	-0.23
27	0.1	0.08	0.17	0.11	0.16	0.09	-0.11	-0.22	-0.48	-0.61	-0.71	-0.72	-0.80	-1.00	-0.96	-0.98	-1.25	-1.59	-1.44	-1.18	-0.98	-0.88	-0.43	-0.22	0.17	-1.59	-0.58
28	-0.1	0.03	-0.08	0.04	-0.16	-0.10	-0.18	-0.27	-0.42	-0.89	-0.78	-0.63	-0.89	-0.93	-1.08	-0.80	-0.70	-0.64	-0.54	-0.47	-0.29	-0.31	-0.19	-0.02	0.04	-1.08	-0.43
29	0.0	-0.15	-0.14	-0.17	-0.18	-0.18	-0.24	-0.27	-0.28	-0.35	-0.25	-0.52	-0.64	-0.57	-0.67	-0.88	-1.08	-1.24	-1.30	-0.96	-0.59	-0.46	-0.31	-0.18	-0.04	-1.30	-0.48
30	-0.1	-0.03	0.02	0.00	0.02	0.04	0.16	-0.61	-0.86	-0.63	-0.58	-0.83	-0.85	-0.65	-0.93	-0.93	-0.82	-0.63	-0.77	-0.54	-0.39	-0.40	-0.44	-0.03	0.16	-0.93	-0.45
Max.	**0.4**	**0.49**	**0.65**	**0.52**	**0.69**	**0.57**	**0.77**	**0.38**	**0.05**	**0.00**	**-0.10**	**-0.29**	**-0.38**	**-0.38**	**-0.54**	**-0.43**	**-0.49**	**-0.32**	**-0.24**	**-0.23**	**-0.16**	**-0.21**	**0.01**	**0.28**	**0.77**		
Min.	**-0.4**	**-0.36**	**-0.33**	**-0.26**	**-0.28**	**-0.31**	**-0.49**	**-0.95**	**-1.52**	**-1.40**	**-1.81**	**-2.34**	**-2.11**	**-1.96**	**-2.18**	**-2.09**	**-2.07**	**-1.98**	**-1.88**	**-1.61**	**-1.51**	**-1.07**	**-0.72**	**-0.42**		**-2.34**	
Avg.	**0.0**	**0.02**	**0.03**	**0.03**	**0.06**	**0.07**	**-0.03**	**-0.27**	**-0.48**	**-0.63**	**-0.72**	**-0.89**	**-0.93**	**-1.02**	**-1.13**	**-1.13**	**-1.14**	**-1.08**	**-0.98**	**-0.82**	**-0.68**	**-0.51**	**-0.30**	**-0.13**			**-0.52**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.09	0.06	0.19	0.13	0.22	-0.12	-0.66	-0.66	-0.91	-1.07	-1.18	-1.54	-1.45	-1.52	-1.45	-1.49	-1.30	-1.12	-0.97	-0.70	-0.53	-0.40	-0.27	0.22	-1.54	-0.69
2	-0.2	-0.24	-0.24	-0.22	-0.19	-0.16	-0.18	-0.23	-0.28	-0.31	-0.41	-0.70	-0.97	-1.13	-0.70	-0.61	-0.97	-0.95	-0.61	-0.46	-0.37	-0.26	-0.11	-0.17	-0.11	-1.13	-0.45
3	0.0	-0.19	-0.08	0.05	0.11	0.18	0.14	-0.03	-0.15	-0.31	-0.41	-0.57	-0.50	-0.52	-0.63	-0.53	-0.77	-0.77	-0.51	-0.40	-0.30	-0.28	-0.19	-0.17	0.18	-0.77	-0.29
4	-0.1	-0.12	-0.13	-0.07	-0.07	-0.07	-0.06	-0.12	-0.23	-0.44	-0.47	-0.66	-0.82	-0.78	-0.88	-0.98	-0.89	-0.72	-1.01	-0.60	-0.52	-0.33	0.07	0.14	0.14	-1.01	-0.41
5	0.3	0.26	0.46	0.40	0.36	0.25	0.22	0.03	-0.25	-0.73	-0.86	-1.09	-0.93	-0.97	-0.82	-1.47	-1.38	-1.22	-1.20	-1.19	-0.71	-0.49	-0.11	-0.20	0.46	-1.47	-0.47
6	-0.1	-0.07	0.28	0.55	0.29	0.52	0.26	0.00	-0.19	-0.71	-1.22	-1.69	-2.00	-1.91	-2.33	-1.66	-1.34	-1.56	-1.32	-1.05	-0.82	-0.66	-0.40	-0.25	0.55	-2.33	-0.73
7	-0.2	-0.23	-0.22	-0.20	-0.19	-0.17	-0.21	-0.19	-0.29	-0.33	-0.37	-0.45	-0.50	-0.54	-0.58	-0.55	-0.62	-0.84	-0.84	-0.76	-0.55	-0.39	-0.30	-0.25	-0.17	-0.84	-0.41
8	-0.1	-0.08	0.30	0.12	0.03	-0.06	-0.10	-0.12	-0.16	-0.25	-0.28	-0.33	-0.50	-0.59	-0.57	-0.48	-0.34	-0.36	-0.33	-0.26	-0.19	-0.17	-0.12	-0.09	0.30	-0.59	-0.21
9	-0.1	-0.12	-0.07	-0.09	-0.09	-0.05	0.02	-0.21	-0.28	-0.42	-0.68	-1.19	-1.48	-1.68	-1.74	-1.77	-1.81	-1.54	-1.38	-1.15	-0.80	-0.55	-0.37	-0.31	0.02	-1.81	-0.75
10	-0.3	-0.34	-0.28	-0.26	-0.24	-0.22	-0.25	-0.23	-0.34	-0.39	-0.46	-0.99	-1.19	-1.11	-0.86	-1.16	-1.00	-0.90	-0.74	-0.63	-0.61	-0.48	-0.41	-0.32	-0.22	-1.19	-0.57
11	-0.2	-0.22	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.28	-0.58	-0.63	-0.93	-1.37	-1.64	-1.76	-1.59	-1.73	-1.71	-1.54	-1.25	-1.20	-1.09	-0.54	-0.28	-0.19	-1.76	-0.82
12	-0.3	-0.18	0.07	0.07	0.21	0.20	-0.17	-0.39	-0.52	-0.70	-0.59	-0.60	-0.53	-0.77	-0.83	-0.71	-0.62	-0.48	-0.40	-0.30	-0.28	-0.22	-0.18	-0.15	0.21	-0.83	-0.35
13	-0.1	-0.13	-0.13	-0.13	-0.13	-0.12	-0.14	-0.17	-0.23	-0.26	-0.32	-0.34	-0.40	-0.38	-0.52	-0.59	-0.55	-0.60	-0.64	-0.53	-0.48	-0.34	-0.27	-0.19	-0.12	-0.64	-0.32
14	-0.2	-0.15	-0.01	0.42	0.41	0.56	0.46	0.07	0.07	-0.37	-0.63	-0.86	-0.92	-1.13	-1.29	-1.27	-1.12	-0.95	-0.95	-0.97	-0.81	-0.54	-0.40	-0.30	0.56	-1.29	-0.45
15	-0.3	-0.24	-0.23	-0.17	-0.15	-0.13	-0.16	-0.20	-0.25	-0.46	-0.58	-0.90	-1.09	-1.23	-1.55	-1.57	-1.50	-1.16	-1.05	-0.59	-0.34	-0.27	-0.23	-0.20	-0.13	-1.57	-0.60
16	-0.2	-0.16	-0.16	-0.14	-0.14	-0.15	-0.16	-0.16	-0.19	-0.20	-0.23	-0.25	-0.31	-0.37	-0.52	-0.36	-0.25	-0.22	-0.22	-0.20	-0.20	-0.16	-0.15	-0.14	-0.14	-0.52	-0.22
17	-0.1	-0.14	-0.25	-0.33	-0.31	-0.28	-0.26	-0.27	-0.33	-0.39	-0.32	-0.36	-0.43	-0.42	-0.29	-0.28	-0.27	-0.29	-0.23	-0.21	-0.19	-0.19	-0.19	-0.19	-0.13	-0.43	-0.27
18	-0.2	-0.19	-0.22	-0.22	-0.23	-0.23	-0.25	-0.33	-0.39	-0.52	-0.53	-0.49	-0.45	-0.50	-0.56	-0.56	-0.47	-0.43	-0.42	-0.37	-0.34	-0.29	-0.20	0.06	0.06	-0.56	-0.35
19	0.0	0.00	0.02	-0.03	-0.01	-0.02	-0.10	-0.12	-0.25	-0.41	-0.48	-0.49	-0.58	-0.64	-0.68	-0.62	-0.67	-0.55	-0.39	-0.36	-0.34	-0.25	-0.01	0.08	0.08	-0.68	-0.29
20	0.2	0.14	0.02	0.04	0.11	0.03	0.02	-0.14	-0.27	-0.44	-0.53	-0.55	-0.63	-0.62	-0.60	-0.62	-0.52	-0.56	-0.42	-0.30	-0.27	-0.23	-0.19	-0.16	0.17	-0.63	-0.27
21	-0.2	-0.19	-0.18	-0.17	-0.16	-0.15	-0.15	-0.18	-0.24	-0.31	-0.46	-0.56	-0.63	-0.68	-0.71	-0.73	-0.67	-0.58	-0.52	-0.63	-0.37	-0.30	-0.29	-0.29	-0.15	-0.73	-0.39
22	-0.3	-0.27	-0.23	-0.27	-0.13	-0.04	-0.05	-0.19	-0.31	-0.47	-0.49	-0.56	-0.66	-0.58	-0.72	-0.63	-0.52	-0.62	-0.59	-0.54	-0.49	-0.43	-0.32	-0.26	-0.04	-0.72	-0.40
23	-0.2	-0.23	-0.24	-0.23	-0.22	-0.21	-0.23	-0.28	-0.42	-0.42	-0.54	-0.72	-0.88	-0.82	-0.85	-0.87	-0.82	-1.03	-0.78	-0.67	-0.50	-0.40	-0.33	-0.20	-0.20	-1.03	-0.51
24	-0.2	-0.30	-0.26	-0.17	-0.11	-0.12	-0.14	-0.16	-0.20	-0.28	-0.36	-0.52	-0.57	-0.70	-0.82	-0.72	-1.00	-0.66	-0.06	0.01	0.11	0.27	0.26	0.40	0.40	-1.00	-0.26
25	0.3	0.21	0.31	0.32	0.32	0.23	0.07	-0.22	-0.50	-0.72	-0.82	-0.85	-0.88	-0.99	-1.21	-1.16	-1.28	-1.18	-1.13	-1.05	-0.88	-0.53	-0.35	-0.08	0.32	-1.28	-0.50
26	0.0	0.13	0.18	0.11	0.12	0.51	-0.10	-0.43	-0.47	-0.46	-0.50	-0.57	-0.61	-0.53	-0.54	-0.61	-0.61	-0.78	-1.02	-1.05	-0.72	-0.48	-0.38	-0.31	0.51	-1.05	-0.38
27	-0.3	-0.29	-0.28	-0.27	-0.27	-0.21	-0.22	-0.25	-0.30	-0.45	-0.46	-0.37	-0.40	-0.47	-0.57	-0.42	-0.73	-0.71	-0.78	-0.77	-0.56	-0.43	-0.22	0.07	0.07	-0.78	-0.40
28	-0.1	-0.07	-0.01	-0.09	-0.06	-0.04	-0.07	-0.04	-0.27	-0.62	-0.91	-1.08	-0.70	-0.69	-0.85	-0.98	-0.74	-0.61	-0.65	-0.44	-0.19	-0.08	-0.11	0.06	0.06	-1.08	-0.39
29	0.2	0.15	0.16	0.18	0.23	0.20	0.05	-0.28	-0.50	-0.76	-0.89	-1.12	-1.37	-0.80	-0.78	-0.92	-1.15	-1.12	-0.64	-0.69	-0.42	-0.32	-0.25	-0.27	0.23	-1.37	-0.46
30	-0.3	-0.29	-0.27	-0.14	-0.11	-0.10	-0.09	-0.08	-0.43	-0.72	-0.84	-0.91	-1.14	-1.17	-1.25	-1.34	-1.47	-1.42	-1.35	-1.25	-1.08	-0.85	-0.44	-0.28	-0.08	-1.47	-0.72
31	-0.2	-0.04	0.12	0.02	0.26	0.09	0.12	0.00	-0.22	-0.51	-0.90	-1.02	-1.25	-1.43	-1.53	-1.47	-1.44	-1.45	-1.31	-1.11	-0.94	-0.58	-0.34	0.03	0.26	-1.53	-0.63
Max.	**0.3**	**0.26**	**0.46**	**0.55**	**0.41**	**0.56**	**0.46**	**0.07**	**0.07**	**-0.20**	**-0.23**	**-0.25**	**-0.31**	**-0.37**	**-0.29**	**-0.28**	**-0.25**	**-0.22**	**-0.06**	**0.01**	**0.11**	**0.27**	**0.26**	**0.40**	**0.56**		
Min.	**-0.3**	**-0.34**	**-0.28**	**-0.33**	**-0.31**	**-0.28**	**-0.26**	**-0.66**	**-0.66**	**-0.91**	**-1.22**	**-1.69**	**-2.00**	**-1.91**	**-2.33**	**-1.77**	**-1.81**	**-1.71**	**-1.54**	**-1.25**	**-1.20**	**-1.09**	**-0.54**	**-0.32**		**-2.33**	
Avg.	**-0.1**	**-0.11**	**-0.06**	**-0.03**	**-0.01**	**0.01**	**-0.07**	**-0.19**	**-0.30**	**-0.48**	**-0.59**	**-0.74**	**-0.85**	**-0.88**	**-0.94**	**-0.92**	**-0.93**	**-0.88**	**-0.78**	**-0.67**	**-0.52**	**-0.38**	**-0.24**	**-0.14**			**-0.45**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.24	0.19	0.25	0.86	0.52	0.24	-0.20	-0.98	-1.61	-1.15	-1.40	-1.01	-0.81	-1.43	-1.19	-1.38	-1.22	-1.21	-1.71	-1.49	-1.06	-0.52	-0.35	0.86	-1.71	-0.67
2	-0.3	-0.33	-0.32	-0.28	-0.26	-0.24	-0.24	-0.27	-0.28	-0.32	-0.43	-0.54	-0.56	-0.67	-0.65	-0.57	-0.62	-0.52	-0.56	-0.59	-0.32	-0.28	-0.20	-0.16	-0.16	-0.67	-0.40
3	0.0	-0.02	-0.14	-0.17	-0.15	-0.04	0.09	-0.15	-0.48	-0.63	-0.62	-0.69	-1.07	-1.09	-1.75	-1.53	-1.92	-1.85	-1.71	-1.44	-0.93	-0.52	-0.28	-0.26	0.09	-1.92	-0.72
4	-0.2	-0.23	-0.19	-0.15	-0.17	-0.17	-0.18	-0.24	-0.29	-0.39	-0.47	-0.60	-0.61	-0.76	-1.12	-1.04	-1.49	-1.81	-1.61	-1.45	-1.22	-0.57	-0.32	-0.24	-0.15	-1.81	-0.65
5	-0.2	-0.20	-0.15	0.21	0.46	0.27	0.06	-0.11	-0.29	-0.46	-0.88	-1.35	-1.29	-1.33	-1.32	-1.44	-1.52	-1.38	-1.18	-1.03	-0.78	-0.51	-0.14	0.06	0.46	-1.52	-0.61
6	0.1	0.20	0.31	0.34	0.32	0.13	0.07	-0.21	-0.65	-0.94	-1.22	-1.25	-1.25	-1.17	-0.82	-1.18	-1.22	-0.96	-0.69	-0.53	-0.46	-0.32	-0.11	-0.11	0.34	-1.25	-0.48
7	-0.2	-0.20	-0.17	-0.18	-0.11	-0.15	-0.07	-0.31	-0.68	-0.94	-1.18	-1.34	-1.33	-1.28	-1.13	-1.18	-1.37	-1.15	-0.87	-0.94	-0.81	-0.36	-0.13	0.09	0.09	-1.37	-0.67
8	0.1	0.15	0.15	0.23	0.27	0.23	0.09	-0.27	-0.61	-0.86	-1.05	-1.26	-1.39	-1.36	-1.37	-1.33	-1.45	-1.25	-1.02	-1.10	-0.82	-0.48	-0.11	0.11	0.27	-1.45	-0.60
9	0.2	0.23	0.19	0.26	0.25	0.26	0.16	-0.13	-0.42	-0.78	-1.05	-1.12	-1.09	-1.23	-1.25	-1.35	-1.21	-1.14	-0.85	-0.64	-0.70	-0.25	0.10	0.24	0.26	-1.35	-0.47
10	0.3	0.40	0.55	0.49	0.41	0.15	0.34	-0.14	-1.44	-1.14	-1.47	-0.87	-0.84	-0.94	-0.74	-1.00	-1.40	-1.41	-0.95	-1.00	-1.29	-0.57	-0.20	-0.04	0.55	-1.47	-0.53
11	-0.1	-0.03	0.06	-0.02	0.06	0.10	0.01	-0.06	-0.69	-1.11	-1.06	-1.03	-1.20	-1.16	-1.58	-1.61	-1.39	-1.17	-0.96	-0.82	-0.71	-0.26	0.16	0.30	0.30	-1.61	-0.59
12	0.7	0.46	0.34	0.40	0.44	0.40	0.27	0.13	-0.15	-0.43	-0.68	-0.84	-1.00	-1.18	-1.39	-1.26	-1.18	-0.85	-1.22	-0.66	-0.09	0.04	0.15	0.11	0.70	-1.39	-0.31
13	0.1	0.08	0.09	0.00	0.05	0.20	0.11	0.02	-0.05	-0.25	-0.42	-0.61	-0.73	-0.75	-0.84	-0.55	-0.56	-0.56	-0.57	-0.41	-0.16	-0.17	-0.02	-0.02	0.20	-0.84	-0.25
14	0.0	-0.02	-0.04	-0.07	-0.10	-0.10	-0.07	-0.10	-0.22	-0.26	-0.33	-0.34	-0.34	-0.38	-0.43	-0.46	-0.60	-0.55	-0.39	-0.31	-0.23	-0.18	-0.13	-0.19	0.00	-0.60	-0.24
15	-0.3	-0.22	-0.21	-0.22	-0.17	-0.09	-0.05	0.13	-0.03	0.01	-0.53	-0.76	-0.84	-1.07	-0.92	-0.91	-0.76	-0.79	-0.89	-0.66	-0.38	-0.29	-0.22	-0.21	0.13	-1.07	-0.43
16	-0.2	-0.17	-0.16	-0.17	-0.16	-0.14	-0.15	-0.20	-0.21	-0.28	-0.35	-0.41	-0.55	-0.61	-0.70	-0.88	-1.02	-1.38	-1.23	-1.08	-0.80	-0.31	-0.05	0.11	0.11	-1.38	-0.46
17	0.2	0.19	0.05	0.18	0.27	0.22	0.12	-0.07	-0.25	-0.48	-0.43	-0.55	-0.56	-0.73	-0.95	-1.02	-1.04	-1.31	-0.76	-0.59	-0.40	-0.32	-0.21	-0.11	0.27	-1.31	-0.36
18	0.0	0.04	0.04	0.06	0.19	0.24	0.25	0.24	-0.23	-0.71	-0.95	-1.23	-1.25	-1.03	-0.84	-0.86	-0.79	-0.76	-0.74	-0.47	-0.26	0.00	0.10	0.19	0.25	-1.25	-0.37
19	0.3	0.25	0.26	0.34	0.33	0.33	0.72	0.10	0.12	-0.16	-0.29	-0.42	-0.67	-0.99	-0.93	-0.88	-0.82	-0.73	-0.69	-0.53	-0.33	0.13	0.28	0.29	0.72	-0.99	-0.16
20	0.2	-0.01	0.04	0.09	0.18	0.34	0.21	0.30	0.02	-0.26	-0.51	-0.56	-0.74	-0.59	-0.58	-0.58	-0.67	-0.82	-0.64	-0.44	-0.49	-0.33	-0.20	-0.10	0.34	-0.82	-0.25
21	0.0	-0.06	-0.07	0.05	0.10	0.03	0.04	-0.02	-0.17	-0.31	-0.37	-0.38	-0.51	-0.62	-0.75	-0.53	-0.67	-0.72	-0.63	-0.37	-0.28	-0.22	-0.27	-0.25	0.10	-0.75	-0.29
22	-0.1	0.24	0.15	-0.01	-0.10	-0.14	-0.13	-0.11	-0.21	-0.27	-0.39	-0.42	-0.42	-0.45	-0.45	-0.46	-0.57	-0.57	-0.40	-0.43	-0.37	-0.20	0.14	0.17	0.24	-0.57	-0.23
23	0.3	0.37	0.45	0.47	0.37	0.47	0.46	0.42	0.18	-0.11	-0.59	-0.92	-0.87	-0.76	-0.88	-0.92	-0.88	-1.10	-1.52	-0.39	-0.46	-0.35	-0.33	-0.26	0.47	-1.52	-0.29
24	-0.2	0.10	0.16	0.05	-0.09	-0.01	0.08	0.01	-0.23	-0.54	-0.89	-1.10	-1.18	-1.20	-1.16	-1.09	-1.11	-1.14	-0.62	-0.35	-0.29	0.02	0.31	0.45	0.45	-1.20	-0.42
25	0.5	0.51	0.72	0.76	0.58	0.23	0.28	0.40	0.44	0.08	-0.57	-1.04	-1.40	-1.37	-1.09	-1.28	-1.52	-1.64	-1.57	-1.42	-0.81	-0.33	-0.25	-0.25	0.76	-1.64	-0.42
26	-0.2	-0.22	-0.19	-0.18	-0.17	-0.15	-0.16	-0.17	-0.18	-0.20	-0.26	-0.24	-0.26	-0.33	-0.48	-0.58	-0.74	-0.64	-0.58	-0.41	-0.28	-0.23	-0.20	-0.19	-0.15	-0.74	-0.30
27	-0.2	-0.20	-0.16	-0.15	-0.19	-0.17	-0.20	-0.09	-0.20	-0.29	-0.42	-0.42	-0.42	-0.42	-0.46	-0.50	-0.53	-0.55	-0.56	-0.40	-0.34	-0.21	-0.08	-0.09	-0.08	-0.56	-0.30
28	-0.1	0.08	0.08	0.03	-0.02	-0.02	0.08	0.04	-0.07	-0.32	-0.50	-0.64	-0.71	-0.81	-0.71	-0.80	-0.80	-0.60	-0.25	-0.33	-0.31	-0.04	0.15	0.25	0.25	-0.81	-0.26
29	0.3	0.32	0.34	0.40	0.37	0.42	0.48	0.40	-0.13	-0.54	-0.72	-0.73	-0.66	-0.91	-1.00	-1.34	-1.27	-0.96	-0.87	-0.60	-0.49	-0.29	-0.15	-0.14	0.48	-1.34	-0.32
30	0.0	0.06	-0.06	-0.09	0.04	0.23	0.28	0.19	0.17	-0.29	-0.88	-0.67	-0.54	-0.63	-0.87	-1.41	-0.94	-0.95	-0.65	-0.50	-0.38	-0.16	-0.14	-0.17	0.28	-1.41	-0.35
31	-0.2	-0.20	-0.10	-0.08	-0.15	-0.16	-0.12	-0.10	-0.02	-0.03	-0.03	-0.08	-0.12	-0.21	-0.24	-0.22	-0.27	-0.07	-0.05	-0.11	0.01	0.10	0.17	0.20	0.20	-0.27	-0.09
Max.	**0.7**	**0.51**	**0.72**	**0.76**	**0.86**	**0.52**	**0.72**	**0.42**	**0.44**	**0.08**	**-0.03**	**-0.08**	**-0.12**	**-0.21**	**-0.24**	**-0.22**	**-0.27**	**-0.07**	**-0.05**	**-0.11**	**0.01**	**0.13**	**0.31**	**0.45**	**0.86**		
Min.	**-0.3**	**-0.33**	**-0.32**	**-0.28**	**-0.26**	**-0.24**	**-0.24**	**-0.31**	**-1.44**	**-1.61**	**-1.47**	**-1.40**	**-1.40**	**-1.37**	**-1.75**	**-1.61**	**-1.92**	**-1.85**	**-1.71**	**-1.71**	**-1.49**	**-1.06**	**-0.52**	**-0.35**		**-1.92**	
Avg.	**0.0**	**0.06**	**0.07**	**0.09**	**0.12**	**0.10**	**0.10**	**-0.02**	**-0.27**	**-0.48**	**-0.67**	**-0.77**	**-0.82**	**-0.87**	**-0.93**	**-0.97**	**-1.02**	**-0.98**	**-0.85**	**-0.70**	**-0.54**	**-0.27**	**-0.09**	**-0.02**			**-0.40**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.15	0.14	0.12	0.14	0.18	0.17	0.16	0.04	-0.31	-0.52	-0.52	-0.70	-0.74	-0.64	-0.70	-0.65	-0.62	-0.54	-0.42	-0.30	-0.28	-0.21	-0.10	0.18	-0.74	-0.25
2	-0.1	-0.16	-0.21	-0.25	-0.16	-0.15	-0.15	-0.15	-0.16	-0.17	-0.19	-0.19	-0.33	-0.39	-0.62	-0.62	-0.57	-0.39	-0.23	-0.12	-0.24	-0.22	-0.20	-0.21	-0.09	-0.62	-0.26
3	-0.2	-0.22	-0.22	-0.20	-0.18	-0.18	-0.17	-0.14	-0.16	-0.19	-0.26	-0.33	-0.45	-0.53	-0.62	-0.77	-0.69	-0.67	-0.44	-0.37	-0.29	-0.21	-0.14	-0.16	-0.14	-0.77	-0.32
4	-0.2	-0.15	-0.16	-0.17	-0.17	-0.18	-0.18	-0.15	-0.22	-0.28	-0.40	-0.64	-0.61	-0.69	-0.80	-0.85	-1.25	-1.66	-1.01	-0.63	-0.18	0.33	0.59	0.52	0.59	-1.66	-0.38
5	0.5	0.30	0.57	0.16	0.16	0.08	0.57	0.23	0.22	-0.09	-0.45	-1.13	-1.41	-1.20	-0.53	-0.52	-0.41	-0.52	-0.43	-0.25	-0.03	0.45	0.30	0.20	0.57	-1.41	-0.13
6	0.3	0.21	0.03	-0.04	0.00	-0.01	-0.10	-0.11	-0.11	-0.11	-0.01	-0.16	-0.41	-0.48	-0.42	-0.46	-0.41	-0.22	-0.16	-0.31	-0.17	-0.13	-0.28	-0.17	0.30	-0.48	-0.16
7	-0.1	-0.03	0.00	0.23	0.22	0.20	0.20	0.01	0.12	-0.02	-0.25	-0.25	-0.42	-0.39	-0.29	-0.29	-0.37	-0.35	-0.31	-0.26	-0.19	-0.16	-0.14	-0.13	0.23	-0.42	-0.12
8	-0.1	-0.14	-0.12	-0.14	-0.14	-0.16	-0.16	-0.17	-0.21	-0.31	-0.40	-0.46	-0.40	-0.27	-0.32	-0.32	-0.26	-0.24	-0.23	-0.30	-0.18	-0.07	0.05	0.15	0.15	-0.46	-0.21
9	0.2	0.11	0.04	-0.03	-0.15	-0.13	0.04	0.05	-0.09	-0.10	-0.14	-0.18	-0.18	-0.22	-0.24	-0.23	-0.24	-0.26	-0.18	-0.17	-0.19	-0.17	-0.09	-0.14	0.17	-0.26	-0.11
10	-0.1	0.01	-0.15	-0.16	-0.14	-0.16	-0.15	-0.16	-0.21	-0.32	-0.47	-0.45	-0.71	-0.77	-0.71	-0.59	-0.62	-0.62	-0.44	-0.39	-0.23	-0.22	-0.20	-0.19	0.01	-0.77	-0.34
11	-0.2	-0.30	-0.30	-0.30	-0.28	-0.24	-0.20	-0.18	-0.22	-0.28	-0.28	-0.33	-0.40	-0.41	-0.55	-0.61	-0.61	-0.35	-0.28	-0.14	-0.07	-0.06	-0.08	-0.13	-0.06	-0.61	-0.28
12	-0.2	-0.21	-0.19	-0.21	-0.24	-0.24	-0.24	-0.23	-0.21	-0.23	-0.23	-0.23	-0.25	-0.45	-0.38	-0.31	-0.30	-0.29	-0.27	-0.24	-0.21	-0.20	-0.20	-0.20	-0.19	-0.45	-0.25
13	-0.2	-0.20	-0.20	-0.21	-0.22	-0.23	-0.23	-0.22	-0.22	-0.25	-0.29	-0.33	-0.31	-0.33	-0.36	-0.36	-0.55	-0.46	-0.45	-0.26	-0.14	-0.28	0.08	-0.15	0.08	-0.55	-0.27
14	-0.1	-0.37	-0.26	-0.04	-0.05	-0.07	-0.12	-0.10	-0.16	-0.25	-0.31	-0.36	-0.36	-0.46	-0.59	-0.55	-0.65	-0.50	-0.48	-0.46	-0.27	-0.16	-0.21	-0.21	-0.04	-0.65	-0.29
15	-0.2	-0.23	-0.22	-0.23	-0.23	-0.24	-0.23	-0.23	-0.24	-0.25	-0.26	-0.39	-0.51	-0.51	-0.48	-0.46	-0.44	-0.44	-0.41	-0.34	-0.27	-0.24	-0.26	-0.27	-0.22	-0.51	-0.32
16	-0.2	0.11	0.12	0.05	0.05	-0.19	-0.15	-0.05	0.13	-0.20	-0.74	-0.92	-0.78	-0.84	-0.82	-0.82	-0.57	-0.63	-0.57	-0.43	-0.21	-0.20	-0.18	-0.19	0.13	-0.92	-0.34
17	-0.2	-0.19	0.02	-0.15	-0.24	-0.31	-0.33	-0.32	-0.30	-0.22	-0.36	-0.58	-0.55	-0.56	-0.49	-0.42	-0.37	-0.32	-0.34	-0.40	-0.37	-0.35	-0.34	-0.33	0.02	-0.58	-0.34
18	-0.3	-0.32	-0.30	-0.30	-0.30	-0.30	-0.30	-0.29	-0.29	-0.30	-0.39	-0.44	-0.42	-0.38	-0.41	-0.49	-0.50	-0.43	-0.37	-0.36	-0.32	-0.16	-0.29	-0.33	-0.16	-0.50	-0.35
19	-0.3	-0.31	-0.30	-0.30	-0.30	-0.30	-0.29	-0.27	-0.29	-0.39	-0.55	-0.63	-0.64	-0.74	-0.80	-0.61	-0.69	-0.59	-0.50	-0.43	-0.37	-0.35	-0.34	-0.37	-0.27	-0.80	-0.44
20	-0.3	-0.21	-0.04	-0.28	-0.30	-0.12	-0.29	-0.16	-0.18	-0.37	-0.50	-0.37	-0.53	-0.82	-0.87	-0.78	-0.97	-0.70	-0.60	-0.51	0.00	0.15	0.08	0.21	0.21	-0.97	-0.35
21	0.2	0.12	0.18	0.25	0.16	0.15	0.10	0.04	0.03	-0.19	-0.44	-0.64	-0.75	-0.83	-0.92	-1.10	-0.79	-0.66	-0.56	-0.31	-0.14	-0.08	-0.04	0.03	0.25	-1.10	-0.26
22	0.0	0.12	0.22	0.26	0.28	0.35	0.11	0.34	0.36	0.02	-0.36	-0.79	-1.14	-1.30	-1.21	-0.98	-0.81	-0.74	-0.58	-0.44	-0.37	-0.31	-0.30	-0.29	0.36	-1.30	-0.31
23	-0.3	-0.26	-0.08	-0.09	-0.15	-0.19	-0.20	-0.23	-0.24	-0.28	-0.33	-0.36	-0.47	-0.30	-0.43	-0.38	-0.38	-0.36	-0.31	-0.29	-0.28	-0.30	-0.25	-0.20	-0.08	-0.47	-0.28
24	-0.3	-0.27	-0.27	-0.27	-0.28	-0.28	-0.29	-0.25	-0.26	-0.18	-0.27	-0.35	-0.43	-0.43	-0.50	-0.60	-0.55	-0.50	-0.45	-0.40	-0.33	-0.32	-0.31	-0.15	-0.15	-0.60	-0.34
25	-0.1	-0.09	-0.11	-0.04	-0.07	0.02	-0.01	0.04	0.02	-0.12	-0.31	-0.43	-0.60	-0.61	-0.63	-0.62	-0.64	-0.56	-0.51	-0.43	-0.34	-0.04	-0.19	-0.26	0.04	-0.64	-0.28
26	-0.2	-0.04	0.05	0.07	0.05	0.04	0.12	0.16	0.06	-0.12	-0.22	-0.68	-0.58	-0.55	-0.70	-0.62	-0.62	-0.47	-0.44	-0.23	-0.01	0.02	0.10	0.12	0.16	-0.70	-0.20
27	0.1	0.11	0.06	-0.01	0.02	0.27	-0.06	-0.14	-0.16	-0.35	-0.64	-0.72	-0.65	-0.61	-0.62	-0.63	-0.53	-0.34	-0.22	-0.03	0.12	0.11	0.20	0.30	0.30	-0.72	-0.18
28	0.3	0.35	0.51	0.53	0.49	0.39	0.40	0.25	0.15	-0.10	-0.50	-0.38	-0.50	-0.61	-0.65	-0.61	-0.77	-0.91	-0.50	-0.18	0.11	-0.15	-0.20	-0.19	0.53	-0.91	-0.12
29	-0.1	-0.05	-0.09	-0.08	0.07	0.23	0.18	0.18	0.11	-0.09	-0.43	-0.63	-0.62	-0.62	-0.66	-0.69	-0.53	-0.56	-0.40	-0.28	-0.18	-0.18	-0.09	0.19	0.23	-0.69	-0.22
30	0.3	0.24	0.30	0.16	0.32	0.22	0.10	-0.07	-0.13	-0.22	-0.41	-0.78	-0.83	-0.88	-0.80	-0.80	-0.78	-0.78	-0.68	-0.30	0.06	0.07	0.01	-0.05	0.32	-0.88	-0.24
Max.	**0.5**	**0.35**	**0.57**	**0.53**	**0.49**	**0.39**	**0.57**	**0.34**	**0.36**	**0.02**	**-0.01**	**-0.16**	**-0.18**	**-0.22**	**-0.24**	**-0.23**	**-0.24**	**-0.22**	**-0.16**	**-0.03**	**0.12**	**0.45**	**0.59**	**0.52**	**0.59**		
Min.	**-0.3**	**-0.37**	**-0.30**	**-0.30**	**-0.30**	**-0.31**	**-0.33**	**-0.32**	**-0.30**	**-0.39**	**-0.74**	**-1.13**	**-1.41**	**-1.30**	**-1.21**	**-1.10**	**-1.25**	**-1.66**	**-1.01**	**-0.63**	**-0.37**	**-0.35**	**-0.34**	**-0.37**		**-1.66**	
Avg.	**-0.1**	**-0.06**	**-0.03**	**-0.05**	**-0.05**	**-0.05**	**-0.06**	**-0.07**	**-0.09**	**-0.21**	**-0.36**	**-0.49**	**-0.56**	**-0.60**	**-0.60**	**-0.59**	**-0.58**	**-0.54**	**-0.43**	**-0.32**	**-0.19**	**-0.12**	**-0.10**	**-0.09**			**-0.26**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.35	0.29	0.26	0.16	0.08	0.05	0.12	0.09	-0.18	-0.37	-0.49	-0.69	-0.72	-0.61	-0.42	-0.51	-0.44	-0.28	-0.21	-0.03	-0.12	-0.06	-0.10	0.35	-0.72	-0.15
2	-0.1	-0.11	0.03	-0.11	-0.12	-0.07	0.00	0.30	0.47	0.08	-0.22	-0.44	-0.44	-0.39	-0.48	-0.61	-0.51	-0.49	-0.45	-0.35	-0.33	-0.49	-0.47	-0.30	0.47	-0.61	-0.23
3	-0.3	-0.29	-0.36	-0.27	-0.28	-0.30	-0.36	-0.40	-0.40	-0.37	-0.35	-0.38	-0.47	-0.59	-0.54	-0.48	-0.47	-0.46	-0.40	-0.14	0.12	0.09	0.15	0.22	0.22	-0.59	-0.29
4	0.2	0.23	0.34	0.51	0.50	0.47	0.80	0.98	1.05	0.49	0.14	-0.04	-0.31	-0.44	-0.08	-0.22	-0.36	-0.21	-0.23	0.00	-0.23	-0.20	-0.21	-0.19	1.05	-0.44	0.12
5	0.0	0.07	-0.06	-0.19	-0.27	-0.28	-0.26	-0.25	-0.22	-0.09	0.00	-0.02	-0.26	-0.36	-0.47	-0.78	-0.62	-0.49	-0.35	-0.28	-0.27	-0.25	-0.23	-0.22	0.07	-0.78	-0.26
6	-0.2	-0.22	-0.22	-0.19	-0.18	-0.22	-0.20	-0.13	-0.15	-0.21	-0.20	-0.11	-0.21	-0.06	-0.34	-0.23	-0.19	-0.31	-0.34	-0.24	-0.19	-0.22	-0.21	-0.23	-0.06	-0.34	-0.21
7	-0.2	-0.25	-0.23	-0.24	-0.25	-0.26	-0.27	-0.27	-0.28	-0.29	-0.29	-0.33	-0.36	-0.33	-0.31	-0.34	-0.34	-0.32	-0.30	-0.28	-0.24	-0.24	-0.15	-0.16	-0.15	-0.36	-0.27
8	-0.2	-0.20	-0.08	-0.07	-0.10	0.02	0.16	0.17	0.19	0.05	-0.30	-0.52	-0.59	-0.84	-0.71	-0.54	-0.44	0.16	0.67	0.72	0.66	0.57	0.69	0.36	0.72	-0.84	-0.01
9	0.2	0.10	0.03	-0.02	-0.05	-0.15	-0.17	-0.16	-0.15	-0.14	-0.13	-0.11	-0.11	-0.12	-0.10	-0.09	-0.09	-0.12	0.06	0.02	0.00	0.01	0.05	0.07	0.19	-0.17	-0.05
10	0.0	0.05	0.01	0.04	-0.02	-0.07	-0.15	-0.11	-0.13	-0.14	-0.08	-0.34	-0.37	-0.42	-0.40	-0.34	-0.34	-0.05	-0.05	-0.09	-0.12	-0.10	-0.10	0.07	0.07	-0.42	-0.13
11	0.2	0.18	0.15	0.04	-0.08	-0.21	-0.12	-0.13	-0.25	-0.42	-0.52	-0.48	-0.42	-0.36	-0.39	-0.41	-0.39	-0.40	-0.36	-0.30	-0.31	-0.33	-0.29	-0.23	0.18	-0.52	-0.24
12	-0.2	-0.23	-0.25	-0.28	-0.28	-0.30	-0.30	-0.25	-0.26	-0.18	-0.33	-0.43	-0.61	-0.75	-0.66	-0.78	-0.84	-0.59	-0.41	-0.19	-0.03	0.09	0.15	0.15	0.15	-0.84	-0.32
13	0.2	0.15	0.21	0.21	0.14	0.24	0.35	0.31	0.37	0.44	0.37	0.15	0.34	0.76	0.51	0.96	0.70	0.09	-0.15	-0.14	-0.15	-0.15	-0.14	-0.14	0.96	-0.15	0.23
14	-0.1	-0.14	-0.13	-0.14	-0.13	-0.14	-0.06	-0.09	-0.10	-0.14	-0.20	-0.23	-0.27	-0.28	-0.27	-0.27	-0.25	-0.22	-0.23	-0.19	-0.14	-0.10	-0.11	-0.01	-0.01	-0.28	-0.17
15	-0.2	-0.11	-0.01	0.13	0.09	0.41	0.29	0.21	0.66	0.63	0.35	0.89	1.42	0.45	-0.03	-0.77	-0.97	-0.77	-0.25	0.05	-0.20	-0.12	0.02	0.20	1.42	-0.97	0.10
16	1.4	1.34	0.67	0.49	0.43	1.53	0.93	1.71	1.34	1.99	0.37	-0.02	0.13	0.05	0.51	0.72	0.07	0.09	0.86	0.32	0.57	0.50	0.62	0.50	1.99	-0.02	0.71
17	0.9	0.62	0.28	0.65	0.77	0.45	0.30	0.43	0.10	-0.16	-0.73	-2.06	-1.51	-1.25	-0.90	-0.47	-0.54	0.23	0.38	-0.13	-0.15	-0.19	-0.24	-0.17	0.93	-2.06	-0.14
18	-0.1	-0.37	-0.40	-0.39	-0.43	-0.39	-0.41	-0.32	-0.39	-0.46	-0.43	-0.47	-0.52	-0.34	-0.08	0.02	0.16	0.25	0.45	0.40	0.37	0.43	0.44	0.64	0.64	-0.52	-0.10
19	0.6	0.76	0.69	0.42	0.49	0.46	0.22	0.46	1.26	1.10	1.20	2.46	1.66	2.03	1.40	0.26	-0.50	-0.14	-0.16	0.38	0.20	0.65	1.46	0.79	2.46	-0.50	0.76
20	0.8	0.22	-0.03	0.03	0.28	-0.08	-0.08	0.25	0.69	0.83	0.42	0.10	0.12	-0.14	-0.13	-0.07	-0.15	-0.15	-0.13	-0.02	0.01	0.02	-0.06	-0.12	0.83	-0.15	0.11
21	-0.1	-0.19	-0.22	-0.23	-0.24	-0.24	-0.25	-0.23	-0.20	-0.17	-0.17	-0.06	-0.06	-0.13	-0.12	-0.32	-0.44	-0.29	-0.16	-0.01	-0.01	-0.10	-0.10	-0.05	-0.01	-0.44	-0.17
22	0.0	-0.10	-0.10	-0.15	-0.12	-0.05	0.01	0.05	0.05	0.05	0.06	0.20	0.00	0.17	0.09	-0.21	-0.80	-0.33	-0.05	0.12	0.11	0.13	0.18	0.29	0.29	-0.80	-0.02
23	0.5	0.34	0.11	0.00	0.01	0.09	0.17	0.23	0.25	0.13	-0.01	-0.14	0.03	-0.04	-0.02	-0.27	-0.34	-0.33	0.18	0.21	0.10	0.24	0.09	-0.02	0.54	-0.34	0.06
24	0.0	-0.03	-0.06	-0.13	-0.14	-0.21	0.01	0.03	-0.09	-0.05	0.16	0.25	0.23	0.38	0.22	-0.16	0.04	0.22	0.60	0.57	0.49	0.91	0.88	0.91	0.91	-0.21	0.21
25	0.3	0.11	0.06	-0.04	-0.03	-0.01	-0.06	-0.04	-0.07	-0.09	-0.11	-0.19	-0.28	-0.34	-0.29	-0.24	-0.02	-0.10	0.02	0.09	0.07	0.15	-0.02	0.21	0.28	-0.34	-0.04
26	0.5	0.54	0.64	0.52	0.13	0.12	0.03	-0.05	-0.10	-0.14	-0.30	-0.35	-0.03	-0.44	-0.45	-0.39	-0.64	-0.41	-0.03	0.06	0.01	-0.03	0.08	0.09	0.64	-0.64	-0.03
27	0.1	0.12	0.01	0.03	0.04	0.10	0.15	0.16	0.13	0.03	-0.33	-0.25	-0.15	-0.12	-0.06	-0.20	-0.83	-0.72	-0.11	0.37	0.25	0.82	-0.47	-0.15	0.82	-0.83	-0.05
28	0.1	0.18	0.53	0.66	0.25	0.37	0.77	0.47	0.47	0.44	-0.27	-0.49	-0.48	-0.60	-0.67	-0.47	-0.53	0.10	0.52	1.15	1.21	0.78	0.68	1.06	1.21	-0.67	0.26
29	1.1	0.41	0.02	0.05	0.17	0.09	0.02	0.09	0.20	0.34	0.43	0.16	-0.19	-0.29	-0.44	-0.37	-0.13	-0.14	-0.11	0.05	0.09	0.17	0.18	0.11	1.11	-0.44	0.08
30	0.0	-0.09	-0.11	-0.07	-0.10	-0.07	-0.14	-0.10	-0.11	-0.07	0.04	-0.17	-0.60	-0.39	-0.38	-0.46	-0.62	0.42	0.60	0.71	0.72	0.71	0.60	0.45	0.72	-0.62	0.03
31	0.3	0.03	0.16	0.51	0.83	0.65	0.62	-0.14	-0.02	0.05	0.34	0.21	-0.04	-0.35	0.27	0.13	-0.08	-0.37	0.16	0.27	0.17	0.13	0.06	0.05	0.83	-0.37	0.17
Max.	**1.4**	**1.34**	**0.69**	**0.66**	**0.83**	**1.53**	**0.93**	**1.71**	**1.34**	**1.99**	**1.20**	**2.46**	**1.66**	**2.03**	**1.40**	**0.96**	**0.70**	**0.42**	**0.86**	**1.15**	**1.21**	**0.91**	**1.46**	**1.06**	**2.46**		
Min.	**-0.3**	**-0.37**	**-0.40**	**-0.39**	**-0.43**	**-0.39**	**-0.41**	**-0.40**	**-0.40**	**-0.46**	**-0.73**	**-2.06**	**-1.51**	**-1.25**	**-0.90**	**-0.78**	**-0.97**	**-0.77**	**-0.45**	**-0.35**	**-0.33**	**-0.49**	**-0.47**	**-0.30**		**-2.06**	
Avg.	**0.2**	**0.11**	**0.06**	**0.07**	**0.05**	**0.07**	**0.07**	**0.11**	**0.14**	**0.11**	**-0.05**	**-0.12**	**-0.16**	**-0.20**	**-0.19**	**-0.25**	**-0.35**	**-0.20**	**0.00**	**0.09**	**0.09**	**0.12**	**0.11**	**0.13**			**0.00**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.24	0.14	0.11	0.31	0.27	0.31	0.13	0.12	0.15	0.37	0.12	-0.02	0.17	-0.11	-0.15	0.26	0.18	0.28	-0.02	-0.12	-0.12	-0.12	-0.08	0.37	-0.15	0.10
2	-0.2	-0.17	-0.16	-0.12	0.03	-0.01	-0.03	-0.15	-0.25	-0.25	-0.24	-0.25	-0.24	-0.18	-0.24	-0.32	-0.32	-0.17	-0.09	-0.04	-0.04	-0.13	-0.01	-0.05	0.03	-0.32	-0.15
3	0.0	-0.10	-0.07	-0.04	-0.04	-0.01	-0.05	-0.06	-0.03	0.10	-0.02	-0.24	-0.08	-0.03	0.14	0.05	-0.05	-0.20	0.17	0.25	0.19	0.23	0.12	0.08	0.25	-0.24	0.01
4	0.0	0.06	0.05	-0.02	0.08	0.06	0.13	0.03	0.09	0.06	0.05	-0.14	-0.14	-0.07	-0.07	-0.32	-0.46	-0.29	-0.09	-0.06	-0.05	0.02	0.58	0.60	0.60	-0.46	0.01
5	0.8	1.25	0.84	2.67	2.77	2.24	3.92	0.78	0.56	0.43	-0.11	0.16	0.36	0.40	0.25	-0.08	-0.28	-0.16	0.03	-0.13	0.30	0.23	0.39	0.53	3.92	-0.28	0.76
6	0.5	0.56	0.54	0.36	0.38	0.51	0.39	0.26	0.20	0.37	0.37	0.28	0.21	0.15	0.17	0.17	0.57	0.41	0.39	0.84	0.97	0.88	0.42	0.51	0.97	0.15	0.43
7	1.0	0.21	0.10	0.25	0.18	0.46	0.44	0.38	1.44	0.85	1.04	1.23	0.59	0.47	0.52	0.82	0.72	0.26	0.59	0.04	-0.03	-0.04	-0.03	0.02	1.44	-0.04	0.48
8	-0.2	-0.15	-0.08	0.05	-0.06	-0.08	-0.12	-0.09	-0.12	-0.05	-0.11	-0.04	-0.07	-0.01	0.08	-0.15	-0.37	-0.39	-0.34	-0.17	-0.07	-0.02	0.05	0.04	0.08	-0.39	-0.10
9	0.1	0.12	0.15	0.14	0.12	0.11	0.11	0.05	0.05	0.03	0.02	0.00	0.04	0.03	0.02	-0.02	-0.02	-0.15	-0.14	-0.13	-0.14	-0.13	0.05	0.24	0.24	-0.15	0.03
10	0.3	0.26	0.16	0.38	0.60	0.04	-0.08	-0.07	0.06	0.22	0.04	-0.15	-0.16	-0.17	-0.12	-0.04	-0.11	-0.17	-0.09	-0.07	-0.12	-0.14	-0.14	-0.15	0.60	-0.17	0.01
11	-0.2	-0.14	-0.15	-0.16	-0.06	-0.10	-0.14	-0.13	-0.13	-0.14	-0.15	-0.23	-0.33	-0.52	-0.70	-0.82	-0.01	0.07	0.26	-0.04	0.04	-0.11	-0.14	-0.16	0.26	-0.82	-0.17
12	-0.1	-0.10	-0.01	-0.04	-0.11	-0.14	-0.18	-0.14	-0.13	-0.13	-0.14	-0.18	-0.22	-0.28	-0.01	0.17	-0.04	-0.09	-0.11	-0.12	-0.18	-0.12	0.04	-0.02	0.17	-0.28	-0.10
13	0.0	-0.10	-0.13	-0.12	-0.12	0.13	0.29	0.32	0.31	0.27	0.25	0.21	-0.02	-0.14	-0.20	-0.26	-0.18	-0.12	-0.02	-0.11	-0.14	-0.11	-0.13	-0.07	0.32	-0.26	-0.01
14	0.0	-0.14	-0.14	-0.04	-0.14	-0.14	-0.13	-0.14	-0.13	-0.16	-0.04	0.13	0.12	-0.10	-0.18	-0.23	-0.22	-0.20	-0.15	-0.18	-0.19	-0.19	-0.17	-0.19	0.13	-0.23	-0.12
15	-0.2	-0.27	-0.24	-0.17	-0.16	-0.17	-0.12	-0.14	-0.12	-0.09	-0.13	-0.07	-0.14	0.00	0.03	-0.23	-0.20	-0.16	-0.16	-0.19	-0.18	-0.16	-0.14	-0.16	0.03	-0.27	-0.15
16	-0.1	-0.13	-0.13	-0.15	-0.17	-0.16	-0.12	-0.16	-0.29	0.42	0.56	0.21	-0.06	-0.07	-0.08	-0.10	0.03	0.08	0.10	0.29	0.64	0.41	0.40	0.52	0.64	-0.29	0.08
17	0.4	0.33	0.35	0.34	0.34	0.38	0.43	0.37	0.48	0.28	0.36	-0.13	-0.04	0.26	0.77	0.78	0.40	0.40	0.36	0.34	0.40	0.82	0.72	0.46	0.82	-0.13	0.40
18	0.2	0.50	0.05	0.13	0.10	0.22	0.34	0.22	0.32	0.20	0.13	-0.10	-0.13	-0.12	-0.01	-0.12	-0.04	0.02	0.07	0.03	0.03	0.08	0.14	0.13	0.50	-0.13	0.10
19	0.3	0.20	0.28	0.06	0.20	0.18	0.15	0.26	0.20	0.32	0.35	0.52	0.55	0.49	0.49	0.46	0.60	0.53	0.51	0.66	0.77	0.44	0.43	0.18	0.77	0.06	0.38
20	0.2	0.13	0.16	0.09	0.14	0.13	-0.05	0.04	0.02	0.06	0.01	-0.05	-0.10	-0.11	-0.11	-0.10	-0.06	0.01	0.00	0.01	-0.01	-0.01	0.01	0.02	0.18	-0.11	0.02
21	0.0	-0.01	0.00	0.05	0.04	0.08	0.04	0.20	0.14	0.23	0.83	0.62	0.31	1.08	0.60	1.62	1.06	1.67	0.54	0.60	0.62	0.58	0.42	0.66	1.67	-0.01	0.50
22	0.6	0.65	0.76	0.36	0.36	0.51	0.85	0.67	0.50	0.91	1.01	1.02	0.96	0.39	0.19	0.36	-0.05	-0.21	0.16	0.32	0.45	0.77	1.50	1.59	1.59	-0.21	0.61
23	1.4	1.21	1.01	0.60	0.43	0.35	0.05	-0.16	-0.08	-0.01	0.20	0.90	0.80	-0.11	0.06	0.08	0.26	0.20	0.01	-0.06	-0.10	-0.01	-0.07	0.02	1.45	-0.16	0.29
24	0.0	-0.07	-0.07	-0.06	-0.02	-0.07	-0.06	-0.04	-0.12	-0.13	-0.11	-0.14	-0.14	-0.17	-0.19	-0.20	-0.20	-0.20	-0.19	-0.23	-0.24	-0.95	-0.74	-0.64	-0.01	-0.95	-0.21
25	-0.4	-0.45	-0.36	-0.34	-0.31	-0.31	-0.15	-0.22	-0.43	-0.46	-0.48	-0.37	-0.12	0.01	-0.06	-0.03	-0.05	0.20	0.30	0.19	0.25	0.22	0.25	0.31	0.31	-0.48	-0.12
26	0.3	0.50	0.40	0.29	0.19	0.09	0.06	-0.06	-0.01	0.16	0.08	0.11	0.05	0.11	0.20	0.16	0.35	0.17	0.29	0.27	0.38	0.49	0.35	0.29	0.50	-0.06	0.22
27	0.4	0.27	0.77	2.09	1.19	1.24	1.06	1.49	1.44	1.36	1.82	1.66	2.28	2.31	2.67	2.44	2.87	2.79	2.52	1.44	0.72	0.70	1.09	0.83	2.87	0.27	1.56
28	0.2	0.40	0.78	0.78	3.36	1.61	1.57	2.30	2.17	4.37	2.92	0.77	0.84	1.62	1.08	0.98	2.57	0.63	0.21	0.38	-0.02	0.09	0.17	0.27	4.37	-0.02	1.25
29	-0.1	-0.06	-0.19	-0.02	0.30	-0.20	-0.28	-0.23	-0.08	-0.20	-0.18	-0.18	-0.25	-0.30	-0.34	-0.29	-0.26	-0.23	-0.22	-0.16	-0.14	-0.10	-0.12	-0.05	0.30	-0.34	-0.16
30	-0.1	0.18	0.32	0.47	0.37	0.39	0.43	0.33	0.23	0.36	0.37	0.16	0.11	0.06	0.06	0.03	0.31	0.43	0.27	0.27	0.25	0.34	0.75	0.55	0.75	-0.09	0.29
Max.	**1.4**	**1.25**	**1.01**	**2.67**	**3.36**	**2.24**	**3.92**	**2.30**	**2.17**	**4.37**	**2.92**	**1.66**	**2.28**	**2.31**	**2.67**	**2.44**	**2.87**	**2.79**	**2.52**	**1.44**	**0.97**	**0.88**	**1.50**	**1.59**	**4.37**		
Min.	**-0.4**	**-0.45**	**-0.36**	**-0.34**	**-0.31**	**-0.31**	**-0.28**	**-0.23**	**-0.43**	**-0.46**	**-0.48**	**-0.37**	**-0.33**	**-0.52**	**-0.70**	**-0.82**	**-0.46**	**-0.39**	**-0.34**	**-0.23**	**-0.24**	**-0.95**	**-0.74**	**-0.64**		**-0.95**	
Avg.	**0.2**	**0.17**	**0.17**	**0.26**	**0.34**	**0.25**	**0.30**	**0.20**	**0.21**	**0.32**	**0.30**	**0.19**	**0.16**	**0.17**	**0.16**	**0.16**	**0.24**	**0.18**	**0.18**	**0.14**	**0.14**	**0.13**	**0.20**	**0.21**			**0.21**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	0.77	1.35	1.91	1.01	0.74	0.64	0.71	0.58	0.39	0.39	0.59	1.52	0.97	0.93	0.74	0.70	0.85	0.56	0.76	0.61	0.64	0.47	0.48	1.91	0.39	0.81
2	0.3	0.49	0.62	0.32	0.66	0.91	1.29	1.87	1.82	1.76	1.36	0.72	0.56	0.50	0.28	0.13	0.08	0.23	0.02	0.15	0.07	0.00	0.03	0.09	1.87	0.00	0.60
3	0.0	0.04	0.03	-0.05	-0.08	-0.08	-0.04	-0.04	-0.06	-0.07	-0.05	0.02	0.00	-0.08	-0.03	-0.07	-0.14	0.08	0.12	0.21	0.24	0.15	0.00	-0.01	0.24	-0.14	0.00
4	0.0	-0.06	-0.11	-0.09	-0.08	-0.10	-0.12	-0.14	-0.19	-0.18	-0.14	-0.19	-0.21	-0.22	-0.21	-0.20	-0.21	-0.20	-0.17	-0.17	-0.20	-0.20	-0.19	-0.16	-0.03	-0.22	-0.16
5	-0.1	-0.18	-0.18	-0.18	-0.18	-0.18	-0.17	-0.21	-0.20	-0.14	-0.19	-0.17	-0.09	-0.15	-0.15	-0.14	-0.16	-0.13	-0.08	-0.03	-0.05	-0.13	-0.16	-0.20	-0.03	-0.21	-0.15
6	-0.2	-0.18	-0.21	-0.19	-0.14	-0.16	-0.20	-0.20	-0.18	-0.13	-0.14	-0.05	-0.13	0.07	-0.09	-0.07	-0.17	-0.16	-0.20	-0.17	-0.25	-0.12	0.05	-0.05	0.07	-0.25	-0.13
7	-0.1	-0.08	0.12	0.28	0.52	0.50	0.16	0.23	-0.01	0.27	0.00	0.31	0.61	0.50	0.36	0.23	0.25	0.77	0.66	0.32	0.42	0.52	0.28	0.35	0.77	-0.08	0.31
8	0.5	0.41	0.36	0.40	0.79	0.86	0.80	0.21	0.19	-0.01	0.01	0.01	-0.06	-0.12	-0.20	-0.22	-0.17	-0.11	0.03	-0.02	-0.02	-0.04	-0.07	-0.02	0.86	-0.22	0.15
9	0.1	0.21	0.24	0.25	0.17	0.20	0.24	0.14	0.07	0.14	-0.14	-0.16	-0.04	-0.24	-0.18	0.10	-0.10	-0.07	0.34	0.49	0.06	-0.19	-0.20	-0.23	0.49	-0.24	0.05
10	-0.2	-0.27	-0.23	-0.28	-0.30	-0.30	-0.25	-0.19	-0.23	-0.23	-0.17	-0.14	0.07	0.00	-0.08	0.04	-0.03	-0.05	-0.15	-0.17	0.08	0.33	0.47	0.46	0.47	-0.30	-0.08
11	0.7	0.64	0.70	0.75	0.59	0.39	0.02	-0.09	-0.16	0.21	0.12	-0.07	-0.12	-0.16	-0.22	-0.32	-0.26	0.02	0.06	0.11	0.17	0.19	0.14	0.17	0.75	-0.32	0.15
12	0.4	0.73	0.73	0.80	0.59	0.45	0.43	0.49	0.63	0.60	0.39	0.36	0.40	0.10	0.07	0.09	0.10	0.07	-0.10	-0.16	-0.17	0.14	0.00	-0.03	0.80	-0.17	0.30
13	-0.1	-0.13	-0.15	-0.20	-0.20	-0.15	-0.14	-0.11	-0.09	0.75	0.92	0.66	0.79	0.78	0.38	1.03	1.21	1.23	2.08	1.50	1.80	1.91	1.38	1.59	2.08	-0.20	0.70
14	1.5	1.26	1.19	1.11	2.26	3.02	2.03	1.73	0.54	0.75	1.27	0.56	0.42	0.44	0.61	0.50	0.49	0.51	0.45	0.42	0.21	0.10	0.08	0.03	3.02	0.03	0.89
15	0.0	-0.12	-0.14	-0.13	-0.16	-0.17	-0.19	-0.18	-0.17	-0.19	-0.19	-0.16	-0.18	-0.20	-0.26	-0.25	-0.17	-0.05	-0.03	0.13	0.17	0.28	0.24	0.25	0.28	-0.26	-0.08
16	0.1	0.20	0.19	0.36	0.77	0.40	0.52	0.63	0.54	0.30	0.46	0.25	0.20	-0.03	-0.20	-0.24	-0.21	-0.19	-0.17	-0.16	-0.13	-0.14	-0.23	-0.22	0.77	-0.24	0.13
17	-0.3	-0.48	-0.20	-0.16	-0.17	-0.17	-0.17	-0.16	-0.16	-0.16	-0.24	-0.16	-0.10	-0.04	-0.06	-0.12	-0.10	-0.12	-0.11	-0.12	-0.13	-0.10	-0.15	-0.12	-0.04	-0.48	-0.16
18	-0.1	-0.10	-0.08	-0.13	-0.12	-0.09	-0.09	-0.10	-0.10	-0.10	-0.12	-0.16	-0.19	-0.18	-0.17	-0.17	-0.19	-0.18	-0.21	-0.21	-0.22	-0.16	-0.17	-0.13	-0.08	-0.22	-0.15
19	-0.2	-0.07	-0.04	-0.07	-0.18	-0.17	-0.17	-0.14	-0.14	-0.14	-0.13	-0.12	-0.11	-0.10	-0.01	-0.03	-0.03	-0.03	-0.05	-0.04	-0.05	-0.03	0.02	0.10	0.10	-0.20	-0.08
20	0.1	0.18	0.09	0.13	0.11	0.08	0.05	0.07	0.04	0.12	0.18	0.49	0.61	0.79	0.43	0.20	0.33	0.31	0.42	0.49	0.40	0.09	0.27	0.19	0.79	0.04	0.25
21	0.1	0.43	0.50	0.51	0.53	0.43	0.38	0.24	0.15	0.32	0.14	0.08	0.04	0.11	0.11	0.11	0.25	0.37	0.52	0.43	0.27	0.26	0.21	0.84	0.84	0.04	0.31
22	1.0	1.11	0.44	0.14	-0.04	-0.05	-0.12	-0.14	-0.10	-0.12	-0.19	-0.21	-0.04	-0.08	-0.24	-0.24	-0.18	-0.16	-0.17	-0.18	-0.20	-0.20	-0.21	-0.20	1.11	-0.24	-0.01
23	-0.2	-0.19	-0.20	-0.21	-0.22	-0.22	-0.20	-0.20	-0.20	-0.17	-0.09	0.05	0.08	0.08	0.10	0.11	0.18	0.17	0.13	0.11	-0.10	-0.11	-0.05	-0.02	0.18	-0.22	-0.06
24	0.0	0.01	0.16	0.28	0.18	0.10	0.12	0.21	0.12	0.09	-0.11	-0.05	0.16	0.23	0.18	-0.01	-0.01	0.02	-0.01	-0.07	-0.03	-0.13	-0.12	-0.13	0.28	-0.13	0.05
25	-0.1	-0.20	-0.18	-0.13	-0.15	-0.16	-0.18	-0.15	-0.15	-0.14	-0.15	-0.14	-0.16	-0.21	-0.18	-0.23	-0.04	-0.24	-0.24	-0.24	-0.26	-0.25	-0.28	-0.25	-0.04	-0.28	-0.18
26	-0.3	-0.34	-0.30	-0.30	-0.27	-0.28	-0.19	-0.12	-0.11	-0.05	-0.04	-0.08	-0.20	-0.18	-0.17	-0.12	-0.07	-0.15	-0.15	-0.19	-0.17	-0.07	-0.12	-0.13	-0.04	-0.34	-0.17
27	-0.1	-0.16	-0.19	-0.20	-0.16	-0.15	-0.19	-0.17	-0.17	-0.14	-0.16	-0.14	-0.19	-0.21	-0.17	-0.21	-0.15	-0.10	-0.08	-0.04	-0.04	-0.02	0.01	-0.01	0.01	-0.21	-0.13
28	0.0	0.01	0.03	0.03	0.05	0.03	0.03	0.06	0.04	-0.02	0.00	0.02	-0.01	-0.07	-0.08	-0.04	-0.01	0.04	0.03	0.02	0.01	0.01	0.04	0.02	0.06	-0.08	0.01
29	0.0	0.17	0.19	0.10	0.19	0.06	0.13	0.06	0.07	0.32	0.14	0.20	0.25	0.59	0.49	0.39	1.79	1.93	1.49	0.21	0.19	0.24	0.30	0.39	1.93	0.03	0.41
30	0.3	0.55	0.60	0.74	1.62	3.20	0.86	0.80	0.59	1.08	0.91	0.82	0.65	0.28	0.58	0.75	0.35	0.52	0.26	0.62	0.27	0.40	0.57	0.33	3.20	0.26	0.74
31	0.3	0.39	0.89	0.90	0.55	1.20	0.64	0.65	0.88	0.55	0.59	0.53	1.08	0.75	0.96	0.57	0.56	0.32	0.49	0.53	1.40	1.47	1.26	0.71	1.47	0.32	0.76
Max.	**1.5**	**1.26**	**1.35**	**1.91**	**2.26**	**3.20**	**2.03**	**1.87**	**1.82**	**1.76**	**1.36**	**0.82**	**1.52**	**0.97**	**0.96**	**1.03**	**1.79**	**1.93**	**2.08**	**1.50**	**1.80**	**1.91**	**1.38**	**1.59**	**3.20**		
Min.	**-0.3**	**-0.48**	**-0.30**	**-0.30**	**-0.30**	**-0.30**	**-0.25**	**-0.21**	**-0.23**	**-0.23**	**-0.24**	**-0.21**	**-0.21**	**-0.24**	**-0.26**	**-0.32**	**-0.26**	**-0.24**	**-0.24**	**-0.24**	**-0.26**	**-0.25**	**-0.28**	**-0.25**		**-0.48**	
Avg.	**0.2**	**0.16**	**0.20**	**0.22**	**0.26**	**0.33**	**0.19**	**0.19**	**0.12**	**0.18**	**0.15**	**0.12**	**0.18**	**0.13**	**0.09**	**0.07**	**0.13**	**0.18**	**0.18**	**0.15**	**0.14**	**0.16**	**0.12**	**0.13**			**0.16**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	193.9	193.8	193.7	193.7	193.8	193.8	193.8	193.8	193.7	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8
2	193.7	193.7	193.7	193.7	193.8	193.8	193.8	193.7	193.7	193.7	193.7	193.7	193.8	193.8	193.7	193.7	193.7	193.8	193.8	193.8	193.8	193.7	193.7	193.7
3	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.8	193.8
4	193.8	193.8	193.8	193.8	193.8	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.8	193.8	193.8	193.8	193.8	193.8	193.8	193.8	29.1	26.4	29.1
5	28.1	27.5	20.1	20.4	27.8	26.9	23.4	26.8	22.0	22.2	24.5	21.9	17.3	17.9	15.5	6.4	11.7	7.8	6.8	11.9	18.8	19.0	18.2	18.5
6	22.7	11.9	8.2	9.1	17.4	27.4	26.7	14.7	21.1	35.2	31.6	28.2	28.1	30.5	26.9	22.9	28.6	28.8	27.9	19.5	17.0	28.9	33.7	42.9
7	50.8	48.9	56.0	54.8	56.0	52.7	57.2	57.8	55.0	48.4	39.2	20.0	29.6	41.7	44.4	35.5	52.2	40.9	37.5	46.4	36.5	40.6	54.6	53.1
8	43.8	75.2	75.9	62.9	57.7	47.3	35.2	54.1	56.7	64.9	46.7	66.5	69.7	72.6	57.8	41.9	44.2	36.2	48.3	39.4	9.2	45.7	52.0	40.7
9	43.3	29.4	39.2	39.0	42.1	39.5	35.7	25.8	25.7	27.8	30.8	27.4	17.6	13.2	7.2	5.4	13.1	8.8	7.9	4.1	5.7	10.0	10.3	4.6
10	7.0	7.1	14.0	15.5	8.7	14.0	13.0	15.1	2.4	10.2	19.2	29.6	22.6	19.0	19.6	17.7	358.3	9.1	16.9	25.3	24.9	26.2	29.1	359.1
11	341.3	326.5	344.5	24.3	26.5	28.4	31.3	11.2	26.7	4.9	0.3	358.3	3.8	28.1	4.5	356.6	0.3	31.5	26.7	30.2	26.7	19.7	30.3	43.3
12	57.2	51.4	38.5	43.3	38.7	41.7	46.3	48.2	81.9	76.4	76.9	81.6	76.7	73.7	61.9	66.6	41.0	46.2	37.4	96.9	100.1	101.8	107.1	102.8
13	87.4	86.4	88.5	97.7	84.5	86.8	85.8	85.1	84.5	82.8	85.8	82.3	78.0	77.8	75.2	73.5	60.4	76.7	77.7	69.0	108.8	94.9	117.9	98.3
14	119.4	319.4	326.5	291.1	236.3	245.7	256.9	294.8	334.8	343.2	338.0	327.0	320.0	312.2	319.7	322.0	321.6	288.2	251.2	242.0	230.9	229.1	231.7	219.3
15	18.0	14.6	18.1	25.1	25.1	25.1	25.1	25.0	25.0	25.0	25.0	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
16	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.0	25.0	25.0	25.0	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.2
17	25.2	25.2	25.2	25.2	25.2	25.1	24.9	25.0	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
18	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
19	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.2	25.5	25.5	25.7	25.8	25.8	26.0	26.1	26.3	26.4	26.5	26.6	26.6
20	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.7	26.7	26.7	26.7	26.7
21	26.7	26.7	26.7	26.7	26.6	26.6	26.6	26.6	26.6	26.4	26.4	26.6	26.7	27.0	27.6	28.3	28.9	28.6	26.4	25.9	25.7	25.2	25.1	25.1
22	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
23	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
24	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
25	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1
26	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1	25.1	25.1	25.0	25.0	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
27	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.0	25.0	25.1	25.2	25.1	25.1	25.1	25.1	25.2	25.1	25.1	25.2	25.1	25.2	25.2
28	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
29	25.0	25.0	25.0	25.1	25.0	25.0	25.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	26.5	29.0	39.0	35.8	24.9	27.8	37.1	39.5	37.2	42.6
30	52.8	39.7	33.8	5.2	0.2	3.4	11.1	4.4	359.6	354.2	349.4	5.6	7.3	8.3	355.5	353.8	354.1	349.2	339.0	350.1	349.7	355.3	346.7	345.4
31	339.7	350.6	346.5	338.9	340.6	343.7	339.1	313.1	300.3	307.0	280.5	227.3	221.6	228.1	205.7	148.8	191.1	231.1	227.5	208.7	212.1	205.4	210.9	223.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	224.3	137.5	109.1	150.0	160.9	126.4	100.8	110.0	106.5	136.1	118.3	119.3	137.0	130.2	140.1	131.8	132.0	114.5	91.9	64.5	55.8	51.4	45.3	32.0
2	24.4	14.9	19.6	8.4	8.4	359.3	18.2	7.4	3.9	2.8	1.0	358.0	352.9	344.8	343.0	342.0	339.1	340.9	338.7	330.1	331.5	341.7	345.8	350.2
3	351.3	354.9	347.1	352.3	355.9	2.5	3.3	15.5	8.7	359.0	9.8	8.7	3.5	12.8	18.0	18.9	18.5	25.3	26.0	20.2	44.4	45.9	57.0	68.2
4	124.9	131.1	122.8	108.2	116.9	111.8	103.3	104.8	92.4	90.0	90.6	110.2	115.5	111.6	111.8	61.5	18.1	7.4	6.0	18.8	14.9	4.2	355.5	345.1
5	351.3	352.7	17.6	8.2	8.9	9.2	12.8	29.7	6.7	9.3	6.7	4.0	4.1	8.3	11.3	13.0	16.0	19.4	23.9	30.2	44.7	55.6	51.6	52.9
6	74.6	95.3	135.4	137.7	128.5	130.2	133.0	131.8	107.5	35.2	357.4	356.3	359.4	10.7	355.1	357.9	355.1	14.2	16.3	8.5	7.8	17.1	14.5	1.6
7	10.0	12.0	0.0	3.5	4.9	12.7	19.6	4.6	19.1	14.2	9.9	15.9	21.7	27.7	28.0	21.0	25.9	24.8	28.3	27.9	24.5	18.0	22.4	22.4
8	26.6	50.8	93.9	104.8	126.5	136.4	120.9	123.6	108.2	107.7	105.8	106.2	101.7	94.4	91.4	91.7	100.1	94.1	89.9	97.4	90.2	72.8	67.8	70.4
9	65.1	70.6	69.7	66.4	69.3	64.0	66.3	66.3	57.3	59.1	52.0	53.6	63.4	105.0	117.7	101.0	327.3	259.5	12.7	31.7	12.2	325.7	333.1	238.9
10	196.0	231.1	273.2	241.4	238.6	237.6	245.7	235.2	221.3	188.4	180.7	174.8	174.3	165.2	152.7	150.3	143.5	141.2	147.3	145.7	139.7	135.3	129.0	129.9
11	140.4	138.0	136.2	147.3	153.6	158.6	158.9	147.1	153.2	159.0	161.5	159.7	156.7	159.4	155.0	166.0	173.4	177.4	209.4	213.9	217.2	208.7	199.0	204.4
12	194.3	176.3	205.5	214.2	232.5	260.0	288.0	307.2	306.1	320.9	1.1	4.8	13.2	8.1	34.8	35.5	44.0	49.1	55.0	63.9	90.5	94.5	110.0	119.0
13	122.3	132.8	134.3	126.2	114.4	112.5	111.1	109.8	111.5	114.3	118.0	120.6	119.4	119.6	119.5	118.9	120.4	122.1	121.2	122.8	120.1	119.1	122.8	121.6
14	120.1	120.0	120.4	123.8	126.4	127.5	132.3	177.5	201.8	222.6	225.4	223.3	219.3	214.2	211.6	212.0	211.0	212.2	210.4	211.3	220.3	230.5	250.1	257.1
15	255.8	271.4	261.2	260.9	267.8	284.6	304.2	287.9	274.2	281.6	302.7	329.8	1.9	32.4	30.1	52.4	73.5	80.8	80.5	74.2	95.4	134.4	131.5	135.1
16	133.8	136.0	130.5	127.4	123.5	118.0	117.2	115.8	110.1	100.0	99.9	97.3	101.4	102.8	104.3	98.1	97.5	122.9	146.7	150.2	154.3	153.3	157.4	152.0
17	138.8	136.8	146.7	142.4	130.8	125.8	119.4	115.5	108.9	92.0	76.9	57.8	46.6	54.2	49.0	56.2	75.3	115.4	123.7	128.9	131.5	131.3	134.0	133.0
18	128.1	123.6	120.5	118.5	115.9	117.6	117.7	121.3	122.5	125.0	129.5	127.7	126.8	126.9	127.2	129.0	131.7	134.8	135.6	134.3	128.3	129.4	126.0	125.6
19	123.1	121.7	104.1	66.7	27.1	29.4	24.1	41.8	26.3	25.2	28.5	40.8	43.6	49.2	55.0	60.8	53.2	51.5	52.8	59.9	77.6	93.8	89.5	101.8
20	113.8	120.4	127.6	133.0	131.2	128.9	133.0	132.4	132.0	127.5	127.6	120.6	114.7	113.8	114.5	109.5	96.8	64.8	60.5	54.9	46.4	35.0	36.3	55.4
21	58.3	58.3	47.2	47.8	52.9	51.0	44.7	46.4	45.1	45.4	45.7	50.3	50.4	54.4	67.1	54.8	48.6	66.9	94.1	82.7	83.1	71.0	70.5	67.2
22	68.9	64.9	81.5	88.7	103.7	105.5	99.9	70.7	78.7	85.8	92.9	84.4	83.9	100.6	115.0	124.0	132.2	128.2	129.4	131.5	134.9	133.2	135.7	135.7
23	137.8	147.7	141.0	143.5	125.5	115.5	115.0	103.4	38.6	14.9	14.9	17.7	20.9	4.4	1.7	3.0	11.8	6.7	9.3	1.0	353.8	357.8	352.3	6.2
24	8.4	3.2	5.8	1.5	2.5	8.5	356.1	356.2	3.3	3.6	4.1	354.3	3.1	359.2	358.9	360.0	2.5	5.4	356.6	357.5	351.6	351.6	348.8	359.3
25	358.4	4.0	352.9	351.6	347.7	349.3	346.1	352.3	7.4	19.1	36.6	47.7	66.8	61.8	52.0	57.6	67.8	64.6	62.1	60.5	60.8	64.6	67.0	84.6
26	69.8	70.0	88.6	95.5	97.3	82.4	77.8	74.4	75.8	59.8	54.2	59.9	57.8	57.2	54.5	45.3	43.5	29.9	24.1	24.0	12.5	15.4	30.4	32.8
27	14.2	23.1	33.4	18.4	45.3	91.5	142.2	143.4	97.2	103.5	116.5	128.1	140.0	153.5	78.2	73.0	87.2	57.9	67.4	69.1	69.3	63.0	54.0	57.1
28	60.5	52.5	53.7	60.6	58.1	57.1	55.2	67.0	59.0	62.3	50.9	55.1	52.3	46.7	50.0	57.1	56.8	358.9	22.0	341.4	340.3	309.5	353.3	44.5
29	39.6	25.2	359.1	346.2	343.0	322.5	339.3	13.3	15.5	16.2	17.0	14.3	36.0	4.8	358.4	9.7	20.1	28.3	18.9	353.5	2.6	13.9	21.9	21.4

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	6.3	2.6	56.3	121.2	145.1	99.8	109.3	107.3	117.0	113.6	111.2	105.8	105.7	114.8	112.3	118.2	118.7	111.6	91.9	71.7	85.6	97.9	91.6	91.4
2	96.1	101.7	104.6	108.9	115.0	114.0	113.8	126.3	137.8	145.4	148.4	151.3	144.0	143.2	143.7	145.1	147.2	132.4	127.0	138.7	134.9	131.5	125.3	128.4
3	128.0	134.6	141.4	134.5	129.4	127.1	128.3	131.0	129.3	125.5	124.6	124.6	126.4	128.5	129.3	125.0	127.5	130.8	136.7	132.2	131.8	136.3	137.5	132.6
4	132.9	132.2	128.9	130.2	127.7	121.9	127.1	125.2	123.2	124.4	125.5	124.8	124.5	126.2	125.0	127.7	128.3	128.8	127.8	124.2	119.3	121.1	122.3	121.3
5	117.9	112.5	113.8	110.1	108.4	111.3	105.4	107.3	104.0	105.4	112.8	111.1	111.7	116.8	120.3	123.1	121.1	119.9	125.4	125.7	126.5	129.6	130.7	133.5
6	133.8	134.9	135.7	135.0	137.1	133.7	128.6	130.2	132.7	136.1	138.2	133.6	129.6	134.2	134.4	128.8	130.3	124.4	118.4	100.6	61.4	40.7	45.5	47.2
7	43.3	45.4	42.7	21.2	7.9	8.9	16.9	19.5	7.7	347.9	350.7	342.5	311.9	328.1	293.6	260.8	238.7	228.6	223.5	218.0	214.5	217.4	208.1	218.4
8	220.9	215.9	206.4	198.0	192.3	169.9	161.7	155.1	135.8	114.4	108.1	120.3	112.7	102.4	84.7	67.3	41.7	50.6	61.3	57.7	50.8	49.0	52.9	43.2
9	39.7	38.3	34.0	37.1	43.0	30.6	38.3	42.3	37.9	35.2	41.1	48.3	34.4	23.3	2.0	8.4	353.7	360.0	1.9	357.3	9.7	229.6	313.4	122.1
10	233.9	225.9	206.3	207.3	221.7	227.8	219.1	217.9	217.4	226.9	227.2	225.5	225.1	222.8	220.1	218.6	217.7	219.5	223.6	224.5	229.5	227.9	219.5	222.9
11	226.0	229.3	230.1	224.6	228.5	233.2	231.1	224.4	217.7	235.3	240.8	250.1	226.7	227.7	239.5	254.2	252.9	251.2	260.8	264.8	275.4	265.3	247.8	241.2
12	243.0	263.8	273.4	283.5	292.3	325.3	40.2	53.0	57.7	44.7	34.0	28.7	12.3	2.6	347.3	346.5	335.0	344.6	350.7	353.0	357.1	344.0	333.4	326.0
13	324.5	327.1	329.5	329.6	339.3	334.6	333.7	331.7	323.5	313.9	310.7	309.0	308.3	308.4	306.5	304.5	317.9	318.1	314.9	289.6	287.0	310.0	323.4	342.8
14	286.4	279.2	276.0	275.4	274.8	274.3	274.1	273.8	272.1	258.5	247.0	219.1	210.8	190.8	168.9	163.7	159.9	160.2	157.3	147.8	142.4	139.7	134.9	129.1
15	129.8	132.9	134.8	129.5	128.3	122.5	121.2	122.8	128.0	130.7	129.6	129.3	126.9	129.3	132.5	130.1	127.9	129.1	128.6	130.1	129.9	126.4	126.6	127.6
16	124.3	123.9	128.2	128.6	120.2	111.4	99.5	115.8	121.8	123.1	117.9	118.5	117.7	111.3	103.0	93.8	40.5	13.8	19.8	9.6	5.3	6.4	4.6	3.4
17	4.3	8.0	2.3	6.8	7.2	4.1	357.4	351.6	335.3	318.8	299.0	280.1	263.8	247.9	243.6	235.2	219.4	202.6	213.4	210.9	205.3	189.1	158.4	201.7
18	342.1	329.0	353.9	345.8	354.7	352.1	350.4	340.5	342.0	335.2	332.8	344.7	334.0	336.5	337.4	330.2	324.8	328.4	334.3	337.6	344.6	346.0	347.3	347.8
19	347.0	346.2	352.8	353.0	347.6	344.6	349.0	346.0	346.8	346.7	344.8	344.0	344.9	344.4	343.7	341.1	343.1	343.8	333.0	336.5	340.2	344.6	346.0	345.7
20	350.2	347.6	353.1	352.2	354.4	351.4	343.6	343.2	357.0	359.4	33.8	87.8	137.2	161.3	114.0	0.1	13.1	8.1	355.5	357.0	14.9	13.5	6.0	6.0
21	12.2	13.2	16.9	24.3	35.0	31.6	31.3	35.9	40.5	43.8	49.2	56.0	57.5	65.0	56.6	45.1	42.0	34.4	32.3	12.0	16.0	15.5	22.4	30.7
22	29.2	23.2	12.5	15.8	21.8	12.7	15.8	15.1	8.0	7.2	1.3	2.8	11.6	19.5	14.9	16.8	17.6	11.2	11.4	26.3	23.8	353.6	26.9	122.9
23	224.4	270.2	331.5	336.2	359.8	11.3	352.8	327.3	346.5	332.9	321.5	345.4	356.1	344.7	334.4	333.1	325.7	337.0	338.1	342.1	350.5	351.4	1.0	6.5
24	3.4	3.0	5.2	4.5	354.8	12.4	38.2	47.5	42.0	4.3	352.7	359.5	4.1	5.3	8.1	350.3	340.5	328.2	314.7	335.8	12.6	18.4	8.3	25.5
25	2.9	70.8	98.7	125.1	124.8	134.5	137.6	143.1	146.4	150.7	157.1	158.6	171.2	164.0	170.1	184.7	346.7	6.4	352.6	345.0	345.9	349.9	359.2	6.0
26	14.5	18.8	16.2	2.9	7.3	5.4	16.9	14.0	16.7	0.4	0.8	358.4	350.0	349.8	346.9	344.2	322.1	292.0	285.6	272.3	262.6	288.0	276.6	271.7
27	285.0	284.8	282.2	276.1	291.4	306.6	285.2	268.7	264.5	244.8	252.7	249.0	250.1	272.6	283.3	297.6	311.1	311.5	312.4	314.4	322.1	326.2	325.1	331.6
28	344.6	360.0	359.1	353.5	4.9	356.8	355.0	359.1	332.5	10.8	23.5	45.3	329.2	41.5	61.7	54.4	71.5	85.4	106.2	131.5	146.5	139.3	144.9	145.5
29	152.1	160.8	153.4	150.8	145.4	150.0	143.8	143.1	136.3	135.1	135.7	135.1	137.1	135.7	131.5	129.8	128.5	132.2	130.2	136.0	134.2	132.9	128.3	128.9
30	127.9	128.1	127.1	126.2	126.7	125.6	127.8	130.0	128.6	128.7	129.0	127.9	126.8	128.7	133.8	136.0	135.5	135.0	142.8	142.7	138.5	143.5	145.8	148.0
31	148.0	148.6	145.3	143.1	139.8	140.8	148.2	136.1	138.0	135.4	131.8	138.3	137.9	137.3	137.9	133.5	130.6	128.0	129.4	133.7	132.4	131.6	130.2	130.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	129.0	128.4	128.6	128.9	131.1	135.0	133.4	134.3	134.7	133.6	135.1	136.8	137.1	134.2	134.9	133.3	131.8	132.7	134.8	137.4	138.7	138.8	138.9	138.9
2	138.9	138.9	139.0	139.0	139.0	139.0	138.9	139.1	138.9	138.9	139.1	139.1	139.2	139.4	139.3	139.1	139.1	139.2	139.2	139.3	139.4	139.2	139.3	139.2
3	139.2	139.3	139.6	139.7	139.6	139.4	139.4	139.4	139.4	139.4	139.4	148.1	149.5	141.4	142.6	138.5	140.9	137.1	125.7	126.0	131.4	128.9	129.4	131.2
4	132.0	127.1	125.6	127.0	127.1	128.0	127.7	126.5	127.6	126.8	131.5	133.0	134.4	138.6	142.4	147.2	150.4	155.0	155.8	168.6	217.2	232.4	267.1	292.5
5	293.9	309.4	338.3	339.2	325.8	329.1	1.7	293.4	313.9	320.2	335.4	345.8	301.0	278.1	280.3	291.7	294.0	310.8	331.1	327.9	323.6	317.6	315.9	317.4
6	314.4	323.0	336.1	339.1	340.8	350.0	348.6	348.6	347.6	355.3	352.1	353.2	349.3	343.4	336.9	334.4	337.7	342.5	354.0	4.5	4.9	357.4	3.7	3.6
7	10.2	14.7	8.3	5.5	0.0	4.8	7.2	4.8	5.4	355.7	358.8	354.1	338.9	337.0	328.9	323.0	318.6	314.7	312.5	308.3	311.8	315.2	319.3	330.3
8	354.8	349.8	352.6	23.8	29.4	36.1	40.4	295.8	216.2	183.7	185.1	184.7	195.1	192.0	204.4	202.4	195.6	215.7	220.1	227.3	256.1	292.7	299.9	312.2
9	322.9	321.0	303.8	312.4	329.0	330.8	331.5	338.6	339.7	346.8	352.4	343.8	300.2	296.3	291.5	293.6	304.8	313.9	313.1	316.0	322.2	315.0	310.5	311.4
10	324.1	340.2	341.5	346.0	345.6	345.9	350.9	349.4	354.7	2.4	3.5	346.8	354.3	348.8	325.6	306.0	309.8	310.3	300.9	309.4	315.2	310.6	317.8	320.4
11	327.8	355.0	13.6	4.8	354.4	354.3	348.9	351.9	347.3	354.2	4.5	357.9	334.4	333.5	328.5	328.3	327.9	319.0	318.4	308.8	307.7	308.0	304.4	304.5
12	309.8	311.1	312.0	308.0	327.9	324.4	317.0	322.5	323.4	329.2	322.4	317.2	323.8	316.0	316.0	312.2	311.2	324.8	323.3	292.1	282.7	292.3	295.1	267.4
13	202.9	207.1	184.9	173.5	186.2	193.5	197.7	193.8	193.9	187.2	186.0	195.6	199.2	207.0	210.8	214.9	215.1	220.1	222.2	219.9	217.4	216.9	217.3	217.4
14	217.2	217.3	217.3	217.4	217.6	217.5	217.3	217.2	217.2	217.0	216.9	216.9	217.3	218.4	219.1	226.1	234.6	233.4	230.3	221.6	218.0	217.3	223.7	220.8
15	221.1	296.2	338.7	13.0	13.2	13.9	13.8	14.9	11.1	8.5	352.8	357.3	356.1	350.6	342.0	352.1	354.2	349.8	344.6	344.9	335.0	327.0	343.0	339.0
16	348.8	352.6	345.0	343.2	335.8	352.0	347.7	308.6	304.7	301.3	304.7	297.7	299.2	296.7	290.7	291.2	293.0	288.0	267.0	258.7	247.6	250.7	252.1	260.1
17	261.0	266.3	271.8	266.3	274.2	286.1	288.8	295.0	315.9	323.7	279.2	218.8	213.0	211.8	217.9	217.8	213.2	210.1	211.8	220.1	209.4	212.4	198.3	199.3
18	214.7	219.7	224.5	226.9	226.8	222.1	215.6	183.6	159.1	161.6	155.4	158.5	158.7	166.0	161.2	160.2	162.2	161.6	157.9	154.7	160.2	159.7	159.7	157.1
19	157.0	149.4	147.3	139.6	136.2	141.1	140.0	143.6	136.1	139.7	130.3	139.7	148.4	142.9	144.7	149.2	145.5	140.0	135.0	131.7	130.0	130.5	131.7	144.4
20	144.8	144.8	141.1	136.4	142.8	146.6	143.3	124.2	133.5	132.3	133.8	134.1	134.5	129.2	136.0	137.7	141.6	150.8	152.1	157.6	145.4	147.1	153.1	155.7
21	153.7	152.2	149.9	151.0	147.4	145.2	147.9	150.0	149.6	139.4	136.0	151.1	151.8	150.9	156.9	162.3	149.7	136.3	138.3	134.2	135.9	121.2	126.2	128.2
22	123.6	124.1	126.6	134.8	135.4	134.9	143.3	139.3	133.8	120.4	123.1	136.0	144.4	146.9	143.5	142.2	142.2	132.7	125.6	125.7	129.1	121.1	25.1	8.2
23	1.6	348.1	336.2	1.5	4.3	318.5	313.2	340.4	340.0	340.1	344.1	347.5	342.3	332.5	316.8	304.6	294.9	274.6	243.8	236.8	241.6	227.3	220.2	219.9
24	219.5	218.2	215.9	218.3	208.8	205.8	246.2	246.9	237.4	246.2	230.9	213.9	225.6	212.8	209.8	215.2	229.5	235.0	233.7	224.0	209.2	217.4	219.1	222.5
25	219.3	220.6	267.5	306.1	322.8	314.6	321.1	326.9	319.3	324.1	327.5	325.5	324.4	325.3	322.7	322.7	329.9	333.6	335.9	334.4	338.8	341.1	345.1	344.8
26	349.4	349.4	355.6	2.7	4.3	0.3	0.4	0.4	359.5	0.8	356.6	359.0	4.3	3.0	5.2	5.2	3.9	5.7	4.9	2.8	3.2	2.3	7.1	9.1
27	5.8	4.1	0.3	357.8	349.2	354.6	354.1	352.7	353.5	357.9	357.7	355.8	354.4	351.7	354.6	355.0	355.9	357.5	354.7	355.4	4.6	5.3	354.8	7.0
28	3.6	9.3	10.3	9.3	17.1	347.0	333.5	342.4	341.0	356.2	291.1	260.5	262.4	266.5	302.6	308.4	315.9	310.9	314.4	312.0	309.0	315.1	312.5	306.4
29	313.0	326.6	334.3	340.4	335.2	342.9	354.9	356.2	3.6	352.1	343.2	350.7	354.2	359.4	352.4	344.0	342.3	346.5	348.9	351.8	357.4	357.5	2.9	9.9
30	8.4	11.5	13.5	6.6	2.4	5.5	7.2	8.0	4.5	15.3	14.6	352.6	0.4	0.4	349.4	351.4	351.9	20.3	4.6	358.8	358.7	2.7	5.2	13.9

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	18.0	15.2	12.7	16.7	11.9	3.7	9.6	5.1	1.8	5.8	6.7	349.2	335.2	332.7	332.2	328.7	340.6	346.2	355.1	357.3	360.0	358.4	352.9	346.8
2	347.4	4.5	12.9	13.1	13.5	8.2	359.3	1.7	1.1	2.5	3.6	7.0	7.3	5.6	259.9	230.3	277.5	274.2	257.6	290.5	35.6	116.8	262.2	254.5
3	251.2	156.8	151.2	142.6	147.9	152.1	146.5	142.3	131.8	103.8	111.1	111.6	111.9	113.7	95.6	112.9	133.2	119.7	86.2	71.6	76.7	116.0	102.5	65.0
4	72.7	78.7	71.9	69.1	68.0	70.7	70.3	71.1	69.2	68.5	74.9	71.7	74.5	70.4	72.9	64.8	73.8	79.1	75.1	43.7	289.9	16.1	4.3	316.3
5	280.6	294.7	330.8	308.8	337.6	334.5	358.8	349.3	352.7	323.3	267.5	274.1	304.3	288.1	258.5	226.9	197.2	190.0	170.3	181.4	171.0	165.8	167.4	180.6
6	191.0	193.4	168.2	168.8	155.5	150.5	156.3	139.8	126.4	134.6	133.2	134.2	134.6	133.4	130.4	125.5	125.7	120.7	117.9	119.2	117.8	120.3	121.8	122.3
7	120.4	116.4	122.4	123.7	124.4	127.1	126.8	126.0	124.0	125.5	126.5	127.0	127.4	129.1	127.9	127.2	124.9	122.2	125.2	122.7	120.6	123.2	120.3	118.0
8	120.9	120.8	118.7	118.7	121.7	123.2	120.3	117.1	119.1	122.9	120.7	122.1	123.0	124.2	123.6	120.6	121.6	120.3	120.0	117.6	117.1	113.6	111.2	113.2
9	112.5	108.3	104.7	109.0	109.1	99.5	110.3	114.3	118.7	125.4	122.0	118.1	120.5	126.9	123.6	124.9	128.8	136.6	135.2	126.9	121.3	122.7	77.2	78.6
10	47.9	343.2	353.5	358.5	351.3	329.3	333.5	356.1	38.2	75.4	93.2	118.7	147.9	155.5	160.5	161.1	143.5	150.1	149.8	151.5	131.1	143.2	132.5	123.0
11	129.6	125.0	122.0	121.7	118.0	111.4	118.4	118.2	112.4	114.0	117.1	115.1	116.1	113.5	109.0	110.2	109.0	111.2	109.5	111.0	109.0	102.5	99.4	104.1
12	105.3	104.0	102.7	96.1	103.1	99.5	99.3	93.8	96.1	100.3	107.2	112.8	113.9	118.9	122.9	122.3	113.2	112.5	108.4	108.4	109.3	109.6	108.2	115.0
13	119.1	119.7	121.6	126.6	133.1	139.5	151.4	145.6	138.5	137.7	129.8	124.8	131.2	132.6	127.4	130.0	129.9	128.4	125.5	126.6	124.5	124.0	126.3	126.1
14	123.5	112.3	106.6	85.7	51.4	55.2	57.7	56.0	52.1	42.5	38.4	26.3	25.9	30.8	42.2	64.0	62.1	68.4	68.5	77.3	78.7	75.7	77.0	94.3
15	134.0	225.1	212.7	196.9	200.1	172.5	167.6	170.3	166.2	170.1	175.2	170.5	168.5	177.4	180.3	195.7	182.1	172.3	168.1	160.2	162.6	163.8	167.0	173.9
16	193.1	197.1	194.3	192.2	203.0	198.2	182.4	161.9	176.2	153.7	131.7	126.1	146.8	137.5	137.5	142.2	151.5	151.3	162.1	162.7	169.1	163.6	186.4	273.3
17	328.8	322.4	338.0	359.7	355.3	4.2	7.3	4.2	5.0	5.0	9.6	27.7	31.0	35.6	106.0	137.7	136.0	140.0	137.6	161.4	160.3	157.3	158.1	161.9
18	151.6	129.6	132.2	149.4	152.4	158.7	152.1	154.9	158.1	149.8	144.3	152.9	160.7	161.1	162.5	159.1	163.0	144.5	139.5	147.1	139.6	141.3	159.4	154.6
19	156.1	162.7	162.0	160.6	162.4	163.3	178.6	208.8	329.4	345.2	20.0	9.3	352.5	326.2	348.5	299.0	301.5	316.1	317.7	315.5	301.0	313.3	318.4	321.7
20	326.2	334.1	337.8	341.4	354.9	357.1	6.3	11.8	17.4	24.9	22.2	22.4	26.9	55.5	102.5	113.6	143.0	145.9	150.1	156.5	157.9	160.2	161.0	164.2
21	165.9	161.8	148.7	136.9	151.8	113.5	71.0	90.0	66.2	99.8	127.3	129.5	137.3	151.0	160.7	178.4	198.2	201.3	211.3	222.4	232.0	230.8	231.0	234.4
22	239.4	243.9	237.4	235.9	236.0	237.5	271.4	261.5	280.5	38.0	55.9	42.2	69.3	83.0	97.6	136.6	131.8	128.8	126.3	125.2	118.6	114.5	113.3	111.7
23	116.8	116.0	111.1	115.1	116.5	118.8	120.3	120.2	122.9	120.0	110.7	116.0	116.5	116.4	119.7	121.2	122.9	124.5	123.5	124.9	125.0	128.4	132.7	136.3
24	137.4	137.0	136.2	138.0	137.3	135.4	133.7	135.1	135.8	138.5	137.1	135.6	133.7	135.7	134.7	130.2	133.9	137.1	155.2	177.1	169.5	173.0	196.5	195.1
25	196.7	167.8	163.8	152.1	150.5	159.9	167.0	170.1	172.4	170.9	167.9	170.3	162.9	167.5	165.7	167.1	185.9	203.4	205.0	197.3	193.5	189.4	195.4	198.0
26	207.0	208.3	216.4	221.2	230.1	231.7	229.9	225.9	220.6	214.7	215.1	217.0	231.8	226.1	241.7	243.3	252.8	250.5	269.5	254.8	245.2	242.2	241.3	250.6
27	262.1	270.3	272.0	283.4	300.2	319.7	314.4	304.1	245.2	256.1	297.8	277.6	280.4	292.1	302.3	300.6	302.3	299.8	287.5	282.8	283.8	290.4	297.8	302.6
28	281.2	274.9	275.2	292.9	294.3	297.6	309.1	312.6	300.6	284.0	257.5	285.2	301.3	279.0	281.9	277.0	289.3	301.5	299.3	313.2	310.9	312.0	322.8	339.1
29	347.2	352.8	352.1	358.2	357.3	356.3	355.2	0.7	6.3	8.7	13.8	11.3	4.6	2.7	357.6	0.5	358.5	356.9	2.7	8.4	358.7	1.1	5.4	6.3
30	9.4	12.0	56.9	106.8	154.6	147.0	138.0	149.6	143.3	141.0	131.1	129.4	128.7	135.9	139.5	138.4	138.8	139.2	137.0	127.7	123.9	117.7	113.7	122.7
31	129.0	132.9	132.0	128.9	131.2	132.1	130.0	127.1	125.2	124.2	124.0	123.3	118.8	121.5	122.6	125.2	123.6	123.2	124.5	117.7	126.6	128.1	131.3	133.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	125.0	123.7	123.4	119.8	113.4	112.5	109.6	108.6	114.5	113.0	113.0	112.2	114.9	117.1	117.6	118.7	120.7	122.1	123.1	121.1	118.4	104.3	116.7	119.1
2	111.5	103.8	97.4	93.7	98.6	93.2	97.4	93.4	101.1	96.1	98.8	106.2	101.4	77.6	115.3	116.2	116.9	129.6	154.3	161.1	166.1	153.4	156.6	162.5
3	17.9	8.1	39.2	47.5	57.7	69.6	77.9	90.9	110.6	117.5	68.4	38.1	161.5	158.4	164.5	158.0	160.6	153.7	155.3	154.0	153.3	151.7	149.2	142.9
4	144.1	146.4	147.9	144.6	149.4	149.8	147.8	141.0	138.0	134.3	137.2	141.3	141.0	133.8	138.4	142.5	144.7	145.8	150.5	149.6	146.8	153.6	147.8	154.4
5	147.2	148.3	146.5	147.9	137.2	137.1	128.9	125.4								112.9	113.4	115.0	122.7	126.2	132.5	108.6	2.3	306.1
6	317.7	323.3	347.2	339.9	330.4	344.3	346.7	345.1	5.9	349.1	329.4	330.2	321.1	350.1	339.0	338.5	301.9	303.4	300.7	298.8	287.4	306.3	317.9	310.8
7	304.2	294.4	319.6	325.3	328.3	328.2	339.5	347.0	357.8	355.9	334.8	338.0	328.8	347.2	332.0	331.2	210.5	213.5	256.6	238.6	236.7	228.6	228.8	228.2
8	221.6	217.5	211.9	211.4	207.9	202.6	208.1	207.3	223.0	250.2	224.4	213.5	205.8	193.8	204.6	212.1	212.2	214.5	215.3	213.6	214.4	214.1	214.2	225.7
9	225.9	226.8	222.1	224.1	227.7	218.3	216.0	217.1	218.1	218.8	225.3	237.1	256.3	249.5	246.1	241.9	239.1	239.1	232.5	229.4	240.2	238.3	241.3	235.1
10	234.7	236.3	242.1	249.0	247.5	246.4	261.9	270.0	262.2	254.2	284.3	253.7	244.6	204.4	255.4	216.3	172.4	158.0	203.5	184.8	173.3	184.2	191.8	215.6
11	234.6	198.2	185.3	185.4	131.2	130.2	247.2	103.1	101.8	176.3	218.5	194.5	244.9	218.0	221.5	220.0	221.4	224.2	220.7	225.7	226.9	225.0	225.4	225.2
12	227.8	223.1	229.6	229.9	224.9	203.9	230.8	232.3	221.4	210.3	197.5	217.0	220.9	242.6	224.3	258.5	227.9	217.8	226.1	217.3	245.2	254.5	244.8	258.6
13	329.3	334.6	312.1	309.5	315.7	322.8	316.1	305.6	308.8	340.6	336.3	341.0	337.3	300.1	319.1	339.8	283.7	279.6	290.0	279.3	250.9	239.9	247.2	238.9
14	242.5	241.3	244.5	253.0	252.4	257.9	266.5	274.5	290.1	300.8	293.1	300.6	263.0	306.6	257.2	222.5	232.9	205.5	206.3	173.7	173.2	220.3	225.7	226.5
15	230.9	234.2	233.2	231.6	237.6	235.6	238.3	273.5	285.6	239.5	149.3	158.9	159.5	183.9	208.1	215.7	219.7	227.5	228.0	203.8	205.7	207.9	216.1	209.6
16	196.4	209.2	196.5	214.5	277.9	323.1	14.3	20.5	358.7	330.1	339.1	335.0	338.4	237.7	220.7	247.5	247.7	237.8	226.9	229.8	245.5	259.5	277.3	288.8
17	295.4	297.1	301.8	317.6	349.9	336.9	12.6	7.0	11.4	357.5	343.5	315.7	46.1	156.9	187.4	172.1	172.9	188.2	180.6	151.2	150.3	153.2	160.1	159.9
18	197.3	233.8	239.8	254.0	258.5	251.0	241.9	221.7	223.7	218.2	221.9	225.8	226.5	213.7	196.9	190.2	193.6	210.0	227.3	239.0	232.5	238.5	262.6	247.1
19	242.8	246.8	254.9	244.2	237.4	226.1	213.6	217.4	181.1	209.8	230.9	231.6	225.7	221.1	209.1	200.8	170.3	177.5	192.8	190.0	192.6	192.9	176.8	177.7
20	178.9	178.8	183.3	166.9	148.7	120.1	58.9	66.9	87.1	132.3	134.6	139.4	145.9	143.6	142.5	140.3	143.0	142.1	147.0	142.8	145.2	140.4	142.9	140.3
21	140.1	155.8	154.8	141.5	139.8	137.7	146.4	158.0	148.3	152.3	110.0	63.9	11.9	18.9	29.8	51.3	74.6	124.2	139.0	160.5	157.1	148.3	130.3	152.7
22	147.6	148.8	159.8	158.8	155.2	152.2	167.2	158.8	162.5	165.1	168.7	161.9	159.0	153.0	155.9	148.5	149.0	152.8	151.8	148.5	148.4	148.7	153.4	151.0
23	148.5	149.9	144.6	140.2	137.5	138.9	137.7	134.2	135.3	135.0	130.4	132.2	130.1	135.3	137.0	144.9	146.9	143.1	148.5	145.8	152.2	160.4	160.8	149.4
24	157.8	154.6	140.5	140.0	133.8	132.4	130.9	126.2	117.1	123.9	125.8	129.6	127.4	128.5	125.5	126.0	128.0	124.9	119.2	119.5	116.9	114.0	113.3	112.4
25	117.6	119.5	122.9	121.6	120.3	120.0	117.6	115.5	113.4	113.8	113.7	111.1	113.4	108.7	110.8	111.0	115.3	113.6	112.9	116.2	121.1	117.3	102.7	103.4
26	99.9	110.4	116.0	113.8	90.6	70.2	73.2	69.1	81.2	81.3	68.6	62.8	57.3	104.5	108.0	78.5	72.6	82.3	99.8	83.7	105.4	115.1	126.8	118.6
27	120.9	109.1	85.7	86.8	97.1	120.1	123.1	115.1	116.7	121.8	128.6	125.1	128.1	127.4	126.4	127.7	134.4	144.2	149.6	145.9	149.5	157.9	151.9	149.4
28	152.9	168.2	175.5	215.6	230.6	234.6	233.4	234.0	226.2	214.2	220.4	226.6	225.1	233.8	231.3	217.1	214.1	215.9	215.3	200.9	194.3	177.9	177.2	188.3
29	184.4	167.4	170.6	165.5	166.4	171.8	188.8	196.3	207.5	202.5	199.6	160.4	163.2	149.5	144.5	141.6	141.1	138.8	140.5	143.0	142.2	148.9	151.0	153.6
30	156.1	155.5	155.7	157.4	157.0	161.4	164.7	171.4	186.8	337.4	327.9	5.4	53.6	358.4	79.1	91.4	328.6	231.4	216.2	216.4	264.4	294.4	287.8	270.1

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	246.3	233.2	225.0	200.3	238.8	241.1	5.2	38.6	54.5	59.2	86.2	118.1	131.2	124.2	128.0	126.5	137.0	137.4	130.0	133.8	130.4	128.2	127.2	133.5
2	134.4	130.8	130.8	120.0	121.6	118.0	113.9	125.1	126.9	127.0	122.0	124.1	129.0	126.7	123.3	123.4	128.2	126.8	130.1	134.3	135.4	133.9	130.2	128.4
3	117.3	123.0	114.3	113.4	108.6	114.3	110.7	119.5	119.3	125.7	128.6	121.8	111.6	118.2	110.6	113.7	115.1	131.1	117.9	104.0	116.4	103.3	113.6	120.7
4	124.0	125.3	120.1	108.3	102.1	91.7	87.6	85.6	86.8	77.2	111.1	99.1	91.6	76.2	139.0	159.0	121.6	67.3	167.2	164.0	162.5	159.9	137.1	99.2
5	94.0	113.4	103.9	118.8	122.7	131.4	129.5	141.3	142.3	148.3	129.2	122.0	10.7	38.2	287.5	170.8	161.0	160.1	162.2	165.6	154.0	146.3	155.8	167.7
6	150.2	142.9	139.7	105.0	72.9	98.2	102.0	94.7	91.9	93.0	125.7	141.7	142.7	147.5	152.7	158.4	159.7	155.5	157.9	155.6	157.5	162.0	158.8	159.7
7	160.5	153.9	156.6	158.6	155.2	145.3	140.7	140.1	141.4	146.2	144.9	149.8	152.5	151.4	152.1	148.7	154.6	155.3	158.0	156.9	158.0	163.6	163.7	168.8
8	175.5	178.1	179.9	195.5	223.0	232.2	228.0	227.5	222.2	217.1	228.2	223.0	199.9	192.2	183.9	188.4	189.2	189.1	203.3	200.1	193.4	195.7	188.9	193.6
9	170.4	156.9	150.7	145.8	140.5	148.2	143.0	144.6	143.2	141.8	136.0	144.2	150.9	151.2	145.6	148.7	145.2	137.4	140.7	143.6	145.7	148.0	145.9	147.6
10	148.1	151.6	150.1	156.1	145.0	133.3	135.7	140.0	139.3	141.1	137.0	149.2	154.0	152.9	144.9	151.1	144.0	142.3	141.4	141.5	148.9	149.1	164.2	135.3
11	141.3	141.8	144.0	143.9	135.6	149.3	154.4	161.4	145.5	149.4	153.7	151.4	156.3	150.9	143.8	135.0	139.4	143.1	144.9	142.6	148.6	152.8	154.8	152.5
12	151.2	153.7	157.9	156.7	152.5	143.3	138.2	133.8	133.0	136.1	134.1	137.7	134.2	136.2	134.7	135.5	138.3	135.5	134.9	132.6	130.6	129.2	129.3	131.3
13	135.3	135.6	138.2	143.8	143.7	148.4	149.6	147.7	148.9	149.3	149.0	149.5	143.8	145.0	149.5	148.3	152.8	160.6	161.2	162.3	164.6	166.0	163.9	168.0
14	169.7	173.3	179.8	160.0	164.5	90.6	145.9	186.3	168.1	172.2	170.5	160.8	164.6	165.3	167.4	160.5	156.9	170.2	189.5	186.8	176.6	157.8	160.4	158.1
15	155.2	159.2	166.7	165.5	159.5	152.6	155.1	156.9	149.7	148.7	145.0	141.3	143.4	141.5	152.6	152.2	150.5	149.0	149.5	150.0	144.8	148.8	149.1	141.7
16	131.1	133.1	135.0	137.8	135.8	128.6	129.5	129.6	128.3	136.7	131.4	131.7	127.2	132.4	131.7	131.3	135.2	130.2	128.7	130.8	135.4	141.5	146.6	152.6
17	159.2	178.2	213.6	222.3	219.8	223.4	226.2	225.7	215.9	216.0	218.6	231.6	235.6	226.2	222.1	225.5	232.3	233.9	234.3	234.2	225.0	221.0	223.9	234.7
18	223.4	222.6	220.1	220.6	221.5	219.1	224.6	229.5	237.6	227.3	231.2	234.1	253.9	261.3	236.3	247.2	247.5	255.1	278.5	243.9	253.5	262.7	258.9	300.8
19	265.7	277.3	295.2	303.7	305.6	308.6	312.5	316.3	320.2	335.7	344.0	320.5	327.3	324.3	339.9	333.5	347.4	345.0	358.8	341.0	338.3	336.1	348.8	311.2
20	294.9	274.4	268.2	265.6	257.5	233.6	231.1	223.6	217.6	199.2	168.9	213.8	219.1	215.5	214.9	205.8	210.4	208.3	214.7	219.0	210.2	209.0	195.2	179.2
21	186.4	191.0	189.8	188.4	185.9	191.1	194.1	203.1	208.8	215.4	219.5	224.0	234.4	256.5	281.4	287.0	270.0	233.2	251.3	261.3	272.4	231.6	225.0	222.4
22	221.6	222.5	218.8	230.5	239.1	29.7	72.7	88.9	121.1	127.7	103.8	135.0	157.2	176.1	190.4	208.5	220.3	204.2	187.8	184.2	186.2	168.4	190.7	185.9
23	181.0	167.8	161.9	212.5	219.7	223.1	240.9	237.4	237.3	242.5	229.5	220.1	210.6	212.7	210.6	203.0	196.5	195.2	192.5	181.8	215.0	221.1	221.6	75.1
24	31.7	81.9	108.9	104.8	23.6	342.9	355.9	357.9	354.2	358.7	353.7	3.1	352.2	345.4	345.4	353.2	357.7	344.5	356.9	355.0	359.3	347.5	342.0	339.2
25	334.4	334.5	339.9	346.6	344.2	351.1	348.4	351.1	352.6	349.0	342.5	335.4	332.3	340.4	343.5	349.6	337.9	329.3	326.7	322.2	317.7	315.5	316.3	310.5
26	317.8	331.4	6.4	12.9	276.1	240.8	237.4	230.4	232.0	231.9	238.9	232.8	226.0	229.2	230.6	222.1	217.6	217.8	212.2	190.1	173.7	182.9	194.8	179.7
27	170.0	173.2	186.7	181.7	177.2	170.9	159.4	153.9	141.4	143.6	140.3	130.9	136.6	115.1	146.5	127.1	139.9	144.5	156.0	161.3	163.2	168.2	196.9	253.2
28	265.7	266.5	264.2	277.5	291.7	301.9	305.3	323.5	341.2	339.2	349.0	344.8	337.8	353.2	346.1	337.2	328.6	323.8	328.7	326.1	327.5	321.5	320.0	324.3
29	336.2	341.1	349.2	352.0	353.2	352.8	344.1	342.9	346.4	349.9	348.4	350.5	339.8	334.1	333.0	328.9	328.8	325.2	326.7	332.8	331.5	324.0	333.4	343.7
30	342.6	346.0	345.2	348.1	347.6	347.0	340.4	337.0	323.0	332.1	323.0	316.1	314.6	316.1	319.0	323.0	332.1	336.6	332.3	333.3	343.2	343.5	352.1	347.4
31	343.7	345.4	352.9	355.3	351.6	0.2	4.1	343.0	346.8	335.0	340.6	327.9	306.3	295.2	297.4	297.1	291.9	294.7	295.0	290.1	282.0	271.4	244.3	254.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	267.9	259.2	252.1	256.6	288.6	325.3	311.5	358.2	108.6	204.1	196.7	154.0	106.8	228.6	213.9	220.1	226.3	232.9	227.1	196.0	177.6	171.4	170.3	170.9
2	170.2	165.8	165.1	164.9	162.6	165.6	169.0	163.5	159.0	157.1	152.1	151.8	145.0	154.4	151.2	150.4	152.4	150.3	162.9	173.5	184.5	204.2	216.6	256.8
3	279.4	279.6	314.0	3.6	11.4	18.8	8.7	3.0	356.7	357.7	358.5	42.0	199.7	172.7	163.3	164.0	154.5	151.3	158.2	153.6	151.3	152.1	153.7	149.2
4	146.1	148.5	153.7	156.9	155.4	157.4	159.3	158.2	155.5	157.0	161.4	160.5	159.1	151.1	148.9	154.9	154.0	156.2	152.4	161.9	163.7	168.7	167.1	166.5
5	166.3	169.4	168.6	166.2	192.6	308.1	334.5	342.3	336.2	0.6	19.7	3.3	342.4	342.7	349.0	344.2	343.1	351.4	349.6	346.5	344.6	347.8	350.8	352.1
6	357.2	4.5	14.3	13.2	4.3	357.5	1.3	352.6	356.4	358.5	353.7	343.2	336.0	331.2	328.2	329.3	326.2	324.6	331.6	337.2	339.4	332.5	350.9	8.2
7	356.6	1.2	353.7	344.8	341.3	336.4	335.4	343.2	345.7	348.8	347.1	345.5	335.3	338.5	343.1	341.2	334.8	326.0	326.2	332.9	335.5	337.2	339.9	342.0
8	338.5	339.6	342.8	341.0	340.4	347.5	355.2	354.6	351.3	344.3	351.9	352.4	355.9	353.6	357.6	344.8	347.0	346.6	354.4	331.3	332.3	341.8	343.1	343.7
9	1.2	358.4	353.3	343.1	342.1	334.8	340.3	347.2	343.6	343.9	343.8	341.7	341.4	344.6	353.9	345.2	346.6	340.3	342.5	346.4	344.0	339.3	344.2	2.4
10	25.1	13.5	343.1	1.2	5.8	359.8	72.5	81.8	161.8	173.2	172.2	218.4	257.0	224.8	228.1	204.8	186.6	182.1	185.2	155.2	161.3	177.3	172.8	167.4
11	168.7	171.9	165.3	162.1	164.6	166.2	157.5	151.3	155.3	154.9	138.7	127.4	118.2	114.7	131.7	134.5	130.0	128.2	122.8	136.4	146.7	145.8	131.8	124.5
12	145.0	74.6	18.7	12.0	0.5	4.8	16.0	22.6	27.1	35.2	35.1	44.3	8.5	19.2	24.4	30.0	44.4	47.3	158.3	148.5	92.2	126.1	136.3	69.9
13	322.9	299.5	347.4	27.8	38.1	53.0	67.8	65.5	96.3	102.0	54.7	358.5	5.8	4.0	39.5	70.5	92.6	130.9	137.7	139.8	133.8	124.9	132.7	118.2
14	133.4	144.1	137.9	141.1	128.1	131.3	129.6	132.6	157.7	150.7	147.7	146.5	143.7	146.0	149.2	146.7	147.9	147.0	146.6	151.2	150.5	158.9	163.8	211.9
15	226.5	223.3	220.7	219.8	220.5	222.4	224.7	215.5	186.0	175.8	163.5	146.5	153.5	157.7	185.1	148.7	150.5	157.3	174.2	172.0	149.3	142.8	144.5	152.7
16	139.3	140.6	146.8	147.8	145.5	150.2	153.4	151.0	133.0	145.3	145.1	145.8	146.1	142.0	143.8	146.8	148.5	152.1	147.6	160.1	158.9	145.4	144.5	148.0
17	141.3	122.6	121.4	128.1	137.0	141.9	131.9	123.5	121.7	121.9	110.5	115.8	113.7	123.7	127.3	129.8	132.9	136.3	137.3	142.2	142.9	129.1	127.6	132.2
18	133.0	132.4	129.3	115.9	116.8	96.0	80.8	52.1	31.4	50.4	48.6	39.4	51.1	58.7	61.2	36.7	71.3	32.3	5.1	302.2	2.0	326.6	321.7	355.3
19	29.9	58.6	72.4	79.7	87.7	104.8	163.9	239.5	241.7	235.7	307.4	260.0	258.2	280.1	297.6	293.4	334.1	333.6	308.5	315.6	41.7	2.6	2.6	339.4
20	293.8	242.2	247.9	258.6	278.4	299.0	297.0	288.9	308.2	307.0	316.0	9.2	13.5	344.3	330.0	259.4	305.8	310.5	324.8	351.3	4.0	4.5	3.2	353.3
21	321.9	276.7	276.3	270.8	281.8	267.1	258.0	247.9	234.6	236.8	234.1	229.6	231.1	223.9	215.7	240.4	221.7	222.0	241.2	266.1	243.3	223.6	217.2	225.3
22	224.3	156.1	110.1	244.7	70.4	62.6	40.4	26.8	57.7	78.7	75.4	65.7	42.4	351.9	304.9	267.9	287.8	225.1	293.3	261.7	270.1	296.8	318.8	324.7
23	324.5	341.6	325.7	328.2	334.0	337.9	340.9	349.7	0.0	351.8	350.9	0.5	352.3	351.1	347.5	336.9	325.2	316.1	169.7	180.6	167.7	170.1	160.3	162.0
24	175.8	279.3	250.4	255.8	243.2	257.3	272.0	291.2	310.2	316.7	0.7	355.4	349.6	343.4	346.8	346.3	352.0	345.1	337.7	7.4	350.7	339.8	339.1	344.2
25	334.0	317.6	284.1	265.6	242.4	241.9	239.1	234.7	236.2	180.5	123.6	177.0	154.8	160.8	176.4	156.8	143.4	148.2	153.2	150.9	151.0	138.5	149.8	140.3
26	141.5	140.8	141.5	140.6	141.5	129.5	143.6	134.8	137.2	137.4	135.4	136.7	139.1	147.3	153.5	158.5	159.0	162.2	156.9	161.6	156.4	157.2	174.1	182.4
27	169.9	245.4	234.2	252.2	234.6	221.7	232.9	241.2	237.0	235.9	234.3	247.5	241.5	247.1	246.9	243.3	253.1	258.6	266.6	247.7	240.7	248.8	277.2	269.3
28	264.4	295.1	306.1	311.8	306.2	299.5	295.6	295.1	309.6	0.1	12.3	20.0	354.8	346.8	333.2	303.4	293.0	323.4	338.5	340.4	328.1	344.1	352.5	348.8
29	343.5	342.1	345.4	343.6	342.5	345.3	351.9	3.2	8.4	10.9	328.6	274.4	245.3	223.7	222.6	213.2	216.0	231.9	236.9	235.3	233.5	235.6	237.3	237.8
30	239.3	229.6	240.3	250.6	215.2	212.7	213.5	218.3	186.3	155.2	174.7	115.3	90.7	82.9	107.5	138.4	113.7	124.3	134.9	134.5	141.5	125.9	118.0	118.3
31	120.3	122.9	119.0	114.3	115.4	111.4	111.1	109.6	104.9	91.9	86.3	84.5	76.0	78.5	70.7	69.9	65.7	61.5	55.8	52.8	58.8	59.9	62.3	62.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	59.7	58.8	64.9	65.0	60.5	56.3	53.9	55.4	52.6	54.2	57.3	62.2	86.7	95.2	80.9	76.4	95.6	103.2	88.9	86.9	104.4	101.1	103.7	108.0
2	106.6	107.1	109.0	110.8	114.2	111.3	112.5	112.8	113.4	114.1	116.3	113.7	117.3	114.9	109.4	103.2	88.4	68.8	56.0	46.3	33.1	37.4	42.9	44.8
3	50.5	56.9	58.6	50.6	38.5	26.9	31.2	35.6	48.3	63.3	75.8	101.2	132.1	151.2	168.2	198.0	192.1	175.7	165.8	168.2	164.4	172.1	216.4	212.6
4	209.3	208.2	213.7	217.3	218.1	210.3	198.2	186.1	178.3	177.6	173.8	165.5	171.5	175.2	162.4	151.5	148.7	168.9	180.3	173.2	165.6	167.1	174.7	180.2
5	197.1	201.4	193.4	65.8	50.8	108.5	192.6	181.0	103.4	92.7	124.3	156.7	167.1	172.6	216.8	243.4	236.7	304.9	94.9	108.9	117.2	157.7	140.5	143.4
6	140.3	114.6	119.3	119.2	113.6	112.7	110.1	107.8	102.0	95.0	99.3	103.8	105.0	107.8	107.8	103.8	99.3	92.6	101.0	104.4	96.9	104.0	113.2	106.4
7	106.3	112.6	117.6	113.4	97.1	76.7	99.3	94.7	83.4	83.5	92.6	120.9	125.5	126.6	127.1	125.8	123.7	123.0	129.4	128.7	133.1	140.4	143.1	146.4
8	165.1	188.8	177.9	185.2	184.2	188.7	180.4	174.4	160.3	148.9	122.0	112.0	106.0	109.6	112.8	110.1	103.7	111.9	106.5	105.9	91.1	91.0	94.9	112.4
9	114.7	113.0	105.6	99.5	101.2	87.0	92.0	96.5	90.4	99.3	100.2	100.3	102.7	111.0	121.4	123.1	124.6	127.3	127.5	131.1	131.9	126.5	129.6	125.4
10	126.2	137.5	139.5	136.3	138.7	138.5	135.6	150.7	142.9	154.2	155.0	178.0	182.9	198.2	227.4	228.3	226.2	228.9	233.5	224.5	233.2	231.0	233.1	239.6
11	242.2	224.9	219.2	222.1	219.2	217.2	214.0	212.3	175.1	177.1	188.6	187.8	175.4	175.3	174.0	168.6	166.5	162.2	151.7	137.9	139.1	126.9	121.3	121.7
12	124.2	120.2	115.3	121.3	125.6	120.8	122.1	122.5	121.8	121.6	122.7	125.2	126.5	126.3	121.9	119.7	116.4	115.3	119.5	120.3	118.7	119.2	120.0	121.8
13	120.6	116.3	116.8	119.5	124.6	119.8	122.5	120.7	121.2	118.7	123.9	125.9	127.5	128.4	122.0	117.2	122.7	118.3	115.3	115.1	116.3	116.3	114.3	113.8
14	115.4	118.4	121.9	122.9	124.3	131.1	134.7	134.5	127.1	123.3	120.3	115.6	119.9	126.9	124.8	127.1	128.1	128.9	131.8	136.4	149.5	149.5	156.2	150.8
15	149.5	147.2	141.8	141.8	138.0	130.0	117.6	120.1	120.6	118.5	124.4	128.3	132.5	132.7	132.7	124.8	128.3	125.8	122.0	130.9	132.1	137.3	136.3	138.8
16	140.5	132.2	111.0	55.1	4.4	358.5	23.8	1.2	339.8	347.3	351.0	344.8	324.4	320.5	307.9	284.8	308.6	284.1	281.4	279.0	278.6	271.1	261.8	254.6
17	265.3	253.4	252.0	238.1	227.9	201.6	214.7	221.1	219.7	232.0	174.6	82.6	77.8	90.9	101.3	106.7	103.3	105.1	110.5	99.3	91.8	90.7	80.4	52.6
18	46.4	38.4	40.6	43.4	44.1	40.7	41.3	39.6	31.6	26.4	21.9	12.6	17.3	343.1	315.1	314.2	330.2	326.9	324.0	341.3	88.5	101.2	88.6	92.7
19	96.9	94.4	94.3	85.4	86.7	95.7	91.3	98.5	106.1	124.1	143.4	152.4	148.2	161.7	232.7	277.1	288.0	289.8	290.0	285.6	294.1	291.9	294.9	296.0
20	279.6	278.1	291.2	277.4	290.6	294.1	312.2	334.0	317.8	330.1	352.8	322.8	308.3	283.8	269.0	279.0	291.4	291.7	303.4	339.5	349.3	338.0	330.1	319.7
21	336.7	339.0	324.4	312.8	303.1	297.5	300.2	320.0	334.2	2.6	14.7	1.8	347.0	346.1	321.8	302.9	303.5	308.5	313.0	308.4	307.4	318.9	336.6	337.0
22	327.7	342.1	344.2	338.5	340.1	349.8	320.6	286.9	278.4	266.3	235.9	215.7	201.4	186.2	183.8	167.8	156.7	158.0	155.7	162.6	163.1	161.4	164.5	164.2
23	166.7	167.0	182.7	204.9	212.8	210.6	211.3	219.2	216.8	216.6	215.2	218.2	213.6	201.4	201.4	202.8	209.7	212.0	208.5	207.9	204.5	205.0	203.7	195.9
24	176.5	173.2	168.0	156.9	161.7	159.3	153.4	136.3	145.9	136.8	121.1	117.7	114.2	112.3	111.7	110.1	107.9	109.9	108.2	95.3	89.1	87.5	91.5	74.6
25	61.3	65.2	60.2	61.4	52.3	58.9	64.0	73.5	80.0	66.0	73.8	62.3	52.8	59.4	55.4	78.9	59.5	78.9	91.2	95.4	74.4	65.7	53.1	68.9
26	70.2	80.9	83.0	75.1	39.5	57.2	80.3	66.3	81.8	132.3	120.9	129.2	356.6	322.1	357.7	358.3	349.3	312.2	301.0	309.9	336.2	0.5	6.0	3.4
27	14.5	8.5	6.3	1.3	357.0	359.9	2.5	7.9	4.8	3.3	10.7	12.4	6.6	357.2	350.0	349.5	346.4	356.2	353.6	350.4	353.9	354.3	353.8	359.5
28	10.7	9.7	6.9	1.8	359.5	356.5	2.7	4.4	3.9	16.2	58.8	104.4	100.5	273.4	345.3	266.3	161.2	156.1	124.9	141.9	134.3	139.4	136.2	139.9
29	145.7	149.6	154.0	142.2	139.8	137.9	135.9	140.3	142.7	143.1	140.5	137.5	144.0	137.3	143.5	142.6	135.9	132.4	127.1	137.4	130.1	135.9	144.3	145.9
30	157.5	163.7	338.3	15.2	2.4	358.1	350.3	335.9	341.6	345.3	351.8	354.9	349.2	335.8	325.4	312.3	318.9	322.4	340.1	330.6	17.3	51.0	56.7	37.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	186.1	190.1	183.7	177.9	166.9	162.6	161.7	156.5	155.6	152.9	156.5	156.4	154.0	152.0	145.3	152.9	162.1	154.4	158.8	158.4	149.5	153.1	154.6	164.6
2	167.2	163.6	167.1	167.2	182.5	183.9	200.7	199.7	219.2	230.6	193.8	140.0	142.6	228.9	235.2	228.4	238.9	233.3	234.3	226.1	232.1	223.6	218.2	218.5
3	218.7	223.5	229.3	231.6	231.6	231.8	278.2	331.9	336.9	338.2	336.5	335.1	336.0	337.7	337.0	335.7	335.3	335.3	335.5	335.5	335.6	335.8	336.1	336.1
4	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.0	331.1	203.3	220.4	236.0	240.9	252.6	235.2	313.6	19.4	92.9	70.1	110.7	169.7
5	195.6	218.4	257.4	214.6	212.5	220.0	225.5	226.9	228.5	236.5	238.0	237.7	268.8	303.6	317.6	345.7	339.1	323.5	333.2	5.8	7.6	7.5	2.8	355.4
6	350.8	344.9	355.8	356.8	353.2	346.4	331.4	318.5	319.2	311.2	324.3	315.1	330.8	317.5	337.4	317.3	324.2	342.2	334.1	333.5	326.8	317.3	323.2	331.4
7	331.1	336.0	330.5	328.3	324.7	330.4	329.5	318.2	336.7	326.3	328.6	331.2	326.8	326.7	320.6	319.8	321.0	319.6	322.6	325.4	324.8	327.3	325.7	323.5
8	323.2	321.8	318.0	319.4	328.2	334.8	337.2	333.0	338.1	334.7	339.6	343.4	355.2	0.3	5.1	9.6	8.2	10.2	24.2	36.3	47.9	76.1	111.7	124.2
9	115.9	122.0	125.4	128.7	127.3	126.3	126.2	128.1	126.1	124.4	126.1	123.4	120.5	118.9	120.3	120.8	122.8	122.1	123.1	122.9	122.5	122.6	127.5	130.6
10	134.1	130.7	140.3	163.4	220.0	222.2	235.4	227.7	230.8	229.9	207.8	201.0	173.6	166.5	157.9	152.4	139.6	138.2	140.8	155.7	163.2	155.2	145.5	143.1
11	139.4	134.8	127.1	126.0	126.0	126.3	128.7	136.1	76.3	357.4	357.3	357.3	357.3	357.3	357.3	357.3	357.3	357.2	357.3	357.2	357.1	357.0	356.9	357.0
12	357.0	356.9	357.0	357.0	357.1	357.1	357.2	357.2	357.2	357.2	357.2	357.2	357.1	357.0	356.9	356.7	356.8	356.8	356.9	356.9	356.9	356.9	356.9	356.9
13	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	356.9	357.0	357.0	13.7	0.1	0.1	0.3	79.4	130.1	137.9	138.5
14	138.9	148.1	151.4	147.8	146.3	162.6	162.1	169.4	169.9	165.2	161.7	161.0	164.6	160.4	161.8	162.7	159.4	157.8	155.9	156.6	152.7	149.8	143.9	143.7
15	143.6	143.2	142.8	142.0	141.1	140.6	140.1	139.8	139.5	139.3	139.2	139.1	139.0	138.9	138.8	138.8	138.8	138.8	138.8	138.8	138.8	138.8	138.9	138.8
16	138.9	138.9	138.8	138.8	138.9	138.9	138.9	138.8	138.8	138.8	138.8	138.8	138.8	138.8	137.3	289.0	246.7	290.6	281.6	252.8	244.6	234.4	216.6	216.4
17	233.6	247.0	208.9	210.0	197.0	218.8	222.8	225.8	224.5	247.7	215.3	164.4	165.5	158.7	144.4	140.7	140.7	140.1	134.5	131.9	131.4	130.8	126.2	123.3
18	123.0	124.5	123.8	124.0	122.9	125.9	125.2	119.3	123.4	124.1	119.7	112.4	106.0	89.0	81.8	60.1	75.2	69.9	57.7	57.1	50.7	55.0	49.8	35.9
19	19.9	16.0	15.2	18.3	13.8	9.5	5.0	9.3	11.3	6.7	6.5	6.9	2.4	3.0	1.8	40.6	20.8	69.1	132.2	169.6	165.7	198.1	190.2	200.2
20	212.4	218.6	237.2	238.5	222.9	209.6	218.3	238.4	267.1	253.1	235.1	233.3	244.9	286.9	307.8	319.7	344.1	323.3	321.3	250.2	225.2	229.0	228.4	230.1
21	242.0	261.1	265.3	316.6	8.8	9.9	353.4	343.3	354.8	351.5	359.6	5.8	351.5	354.7	355.3	1.1	359.1	359.3	359.3	355.9	356.0	352.2	357.0	354.7
22	352.1	344.6	344.5	342.6	343.4	343.4	340.2	337.6	346.2	348.6	345.1	346.7	347.4	347.8	355.7	358.4	12.0	16.4	9.6	2.2	13.5	13.3	23.6	33.4
23	14.6	11.3	12.3	13.2	9.6	6.0	1.9	358.3	0.2	359.6	350.0	348.6	350.2	343.3	341.1	322.6	322.6	319.2	303.6	298.5	291.3	280.9	280.3	285.9
24	289.4	297.6	299.8	299.1	298.6	303.0	316.4	316.7	312.9	306.4	303.3	304.9	290.0	251.7	237.4	232.4	234.2	231.8	224.1	227.6	225.9	189.9	179.6	154.8
25	147.7	142.6	151.2	155.8	158.1	153.3	152.0	154.5	156.7	155.8	154.8	151.3	149.3	152.6	145.7	145.9	125.4	131.0	104.3	97.2	93.1	78.1	49.7	41.0
26	10.0	8.0	11.1	7.8	11.9	12.1	9.6	10.4	3.3	4.2	8.3	4.5	2.0	9.3	3.6	343.5	349.1	350.8	351.2	352.0	352.8	351.0	348.1	350.8
27	352.6	356.5	359.8	356.5	353.1	352.9	351.3	345.1	354.0	356.5	8.8	8.5	349.2	346.7	357.8	357.1	356.6	7.7	8.8	12.1	9.3	38.1	85.3	155.3
28	173.5	158.9	162.1	152.6	149.6	149.8	145.5	150.9	150.6	148.8	155.3	157.5	157.7	159.7	156.4	143.6	156.1	152.6	159.6	155.0	124.1	107.6	123.3	138.0
29	139.8	297.4	281.7	277.6	282.9	278.7	279.3	272.3	224.8	178.4	165.8	167.2	161.8	158.8	158.7	157.6	155.3	153.1	155.8	152.6	150.5	147.9	142.8	144.2
30	133.3	126.5	133.6	140.7	136.7	144.8	139.6	134.8	125.5	131.6	135.5	153.0	148.4	135.6	128.4	134.4	141.9	127.3	123.4	136.7	136.4	140.7	150.5	154.1
31	162.7	165.8	169.5	162.5	148.6	166.1	126.4	89.6	71.5	56.1	57.2	45.4	57.2	31.8	296.1	269.5	298.1	355.9	9.7	37.6	30.6	42.0	21.8	25.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	28.1	37.8	48.1	44.8	9.7	4.8	11.7	352.2	357.2	350.4	337.4	327.1	323.9	336.6	312.5	303.3	311.6	298.1	335.5	353.9	342.9	337.9	354.7	349.8
2	339.8	335.0	332.6	316.6	324.5	325.8	323.1	327.8	320.0	342.9	338.8	340.0	339.0	346.7	350.6	348.5	346.3	346.2	350.0	357.4	352.8	2.8	350.8	350.6
3	345.6	343.7	344.9	345.9	344.6	341.8	335.9	335.6	335.2	342.7	345.7	344.5	339.9	332.4	326.4	315.5	316.9	326.3	334.5	346.0	347.5	358.6	358.4	0.8
4	356.0	0.5	8.5	1.3	0.3	356.3	358.4	0.3	356.2	1.0	3.4	7.4	12.0	15.2	19.9	11.3	0.7	4.8	8.9	16.5	11.0	14.5	38.6	40.9
5	25.6	2.3	7.9	23.2	47.7	23.4	10.9	41.9	45.6	51.6	58.7	87.1	73.2	85.2	91.2	81.4	59.6	48.8	52.6	51.7	68.9	78.5	86.3	79.9
6	82.2	70.7	75.7	78.9	69.1	60.6	63.0	55.5	59.4	61.2	56.6	59.7	62.2	53.6	44.9	36.6	28.1	18.6	10.2	339.9	359.1	324.0	322.6	314.7
7	345.6	353.1	344.1	338.0	354.3	352.6	352.5	0.4	333.1	309.3	306.5	304.9	296.7	289.8	260.1	244.3	235.7	217.9	206.1	190.8	209.7	169.2	162.5	205.5
8	204.6	200.5	191.7	178.7	165.0	165.8	165.0	159.9	154.6	140.1	124.6	127.9	132.8	126.5	119.6	118.0	109.6	104.3	107.9	111.5	106.9	106.6	98.7	94.0
9	97.7	94.9	95.7	100.9	105.8	106.4	107.9	109.8	107.6	92.1	85.2	83.7	91.9	90.0	106.9	109.4	110.2	104.2	102.6	114.9	119.0	119.5	116.0	118.8
10	123.5	116.3	112.1	104.9	87.8	79.5	74.0	63.9	46.4	32.2	56.9	67.4	58.4	50.0	62.5	76.7	99.4	134.7	146.5	147.3	133.1	127.3	125.9	121.1
11	120.9	120.3	113.2	116.1	120.6	115.5	114.9	116.9	116.3	118.4	124.9	138.0	151.8	161.9	182.3	212.8	252.8	235.6	233.9	240.8	253.5	261.5	266.2	243.2
12	225.6	205.6	177.8	177.6	186.6	219.0	231.8	240.4	249.9	251.5	249.8	247.6	242.5	238.5	236.1	239.1	239.4	235.5	220.9	224.0	214.3	197.1	166.3	168.3
13	163.7	163.5	162.8	154.2	139.9	134.2	130.0	129.6	131.3	133.3	112.2	106.7	119.2	127.2	145.9	135.3	162.3	173.5	179.2	178.5	170.2	182.4	175.2	170.8
14	176.7	176.1	167.2	164.4	159.5	155.8	157.2	154.5	152.0	154.5	179.6	192.4	209.8	209.8	221.8	231.6	225.7	213.7	213.8	217.3	213.7	213.4	210.6	214.8
15	216.3	229.8	231.9	227.8	222.5	217.9	217.4	201.0	177.9	175.5	174.0	173.0	173.2	172.6	143.5	138.3	137.7	132.4	128.8	125.7	124.0	126.3	122.3	125.5
16	126.0	122.2	131.5	147.6	156.4	182.3	202.2	221.6	238.3	231.0	220.0	229.9	215.6	213.6	214.0	214.0	213.9	214.0	213.9	213.9	214.0	214.0	213.5	213.3
17	165.1	93.6	91.1	103.4	81.3	58.0	45.3	52.6	66.9	61.1	39.2	43.1	35.6	36.0	21.2	21.1	20.5	16.8	15.8	17.9	14.1	16.1	16.3	21.4
18	16.1	9.9	12.3	9.6	17.2	25.2	31.4	28.4	35.4	24.3	23.7	20.8	23.5	25.1	27.1	25.0	17.8	18.6	20.2	21.2	22.0	16.7	21.8	19.9
19	19.1	9.4	13.3	18.7	8.3	16.4	14.7	17.5	7.9	7.1	17.3	8.9	6.9	14.1	15.9	13.9	9.4	12.3	11.7	11.7	11.3	13.4	10.2	12.2
20	6.4	14.3	16.0	9.6	2.6	353.5	8.0	3.2	356.2	347.5	347.3	349.8	350.2	353.1	351.6	0.4	354.3	357.7	354.2	349.3	354.5	355.8	349.8	357.0
21	349.3	355.8	357.0	349.9	347.5	346.9	355.6	359.3	11.5	24.8	26.3	3.2	15.9	9.9	32.8	40.2	337.9	27.7	19.0	9.2	15.6	3.5	36.2	49.0
22	91.5	132.5	155.1	177.1	181.5	188.8	203.1	212.2	207.4	208.2	193.1	189.7	195.4	208.8	195.2	201.9	210.1	221.2	229.4	216.3	213.0	192.6	190.1	179.6
23	172.2	169.0	165.1	165.8	173.9	172.6	172.7	184.7	186.7	161.3	164.4	162.5	148.1	146.0	143.2	141.2	137.2	137.1	129.3	123.9	117.0	120.8	117.4	113.9
24	112.8	112.4	111.2	112.9	114.2	113.7	109.0	106.5	112.4	115.8	117.4	119.2	121.7	116.4	122.3	127.3	132.9	147.5	153.2	159.7	165.6	199.1	218.2	224.9
25	228.9	228.8	219.5	217.7	213.9	210.0	202.2	193.5	205.5	213.1	230.5	213.7	206.4	246.9	279.5	311.5	312.6	311.4	308.2	294.9	311.4	319.6	317.4	326.9
26	336.6	336.3	323.7	325.2	328.4	321.9	328.6	331.3	333.3	336.9	337.2	342.5	346.6	354.2	355.3	350.9	355.8	6.7	10.5	15.5	17.4	27.3	22.0	14.5
27	16.0	9.0	25.1	49.1	59.4	57.3	64.9	70.4	55.9	60.1	55.8	72.5	61.4	53.1	60.9	61.7	59.1	48.6	39.4	46.8	52.1	70.8	73.0	65.9
28	49.6	47.6	41.6	35.6	32.7	40.9	45.9	35.3	21.5	42.1	45.0	48.2	50.6	39.9	29.6	26.6	20.8	10.3	2.8	345.0	353.2	7.3	23.8	355.2
29	345.6	357.8	0.0	353.0	339.9	333.6	330.9	318.8	329.4	330.0	329.7	331.8	327.9	334.4	340.9	330.1	317.8	319.7	321.8	325.5	330.1	334.9	331.7	328.9
30	326.0	325.4	333.6	326.8	332.1	339.4	339.0	341.7	342.5	343.5	350.6	350.0	356.2	346.4	337.6	350.3	350.2	359.6	17.5	18.8	7.1	12.1	8.8	17.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	15.8	19.1	5.1	15.6	24.1	41.3	39.0	50.5	56.1	57.2	52.6	60.8	92.2	94.7	114.7	128.6	139.5	136.7	119.8	121.4	116.0	121.5	122.0	122.0
2	131.1	119.4	138.4	150.5	141.5	118.9	124.7	123.7	125.9	123.6	124.7	119.3	114.9	117.5	116.4	114.2	119.1	124.1	126.7	126.3	123.9	121.9	122.8	127.5
3	124.2	123.3	124.1	120.2	117.1	117.8	123.2	122.6	115.0	109.6	113.2	116.1	114.8	110.7	109.7	113.1	114.3	116.8	119.0	121.5	123.8	125.7	126.6	128.2
4	127.7	126.9	132.3	142.6	141.3	140.5	141.5	146.7	143.3	143.9	146.1	137.7	128.0	127.8	128.4	130.6	131.4	131.2	137.3	138.8	135.6	136.9	137.0	143.4
5	145.0	149.9	143.8	137.7	136.5	135.0	132.8	132.6	128.4	128.1	129.7	130.6	131.3	132.3	129.4	128.2	124.7	121.3	125.7	126.2	123.0	113.7	113.1	115.9
6	118.1	125.5	119.8	122.6	125.3	125.9	123.9	117.0	115.1	112.3	110.7	106.6	87.6	81.7	65.4	74.8	112.8	101.9	67.1	63.0	68.0	87.3	273.8	322.3
7	324.1	345.0	354.0	13.3	12.2	356.6	359.9	3.2	358.6	350.8	4.5	8.3	35.1	64.9	72.2	77.7	77.8	57.5	74.5	106.3	85.7	122.0	119.6	108.3
8	93.5	91.8	94.1	95.8	76.4	83.1	72.2	66.7	71.5	67.9	66.4	65.5	54.9	50.5	59.4	49.4	48.8	45.0	31.1	30.9	37.8	39.9	40.3	37.4
9	43.9	45.4	45.2	37.2	26.3	5.0	11.7	17.1	27.2	35.2	55.6	238.8	241.7	222.2	223.7	225.4	234.1	247.2	232.1	218.4	220.9	218.0	218.9	201.3
10	197.3	177.2	186.0	197.7	213.3	213.1	212.8	210.5	211.6	219.3	232.7	244.1	251.8	255.2	263.4	258.6	249.9	249.3	256.3	252.6	264.8	279.5	290.1	286.2
11	298.9	303.0	292.2	267.2	288.5	271.6	248.1	223.2	231.8	226.0	228.2	234.4	240.8	255.8	277.1	315.4	349.8	356.1	347.7	337.1	332.8	336.0	351.9	354.8
12	355.0	1.0	6.6	7.7	14.6	5.8	16.8	3.3	6.6	316.6	285.4	257.5	235.4	233.5	240.2	259.3	269.7	271.5	285.5	303.7	328.8	342.2	354.3	358.0
13	339.9	350.7	352.3	357.7	354.9	351.3	359.5	11.1	16.9	24.2	25.2	34.3	52.1	87.3	116.8	65.3	114.1	125.6	158.1	163.7	159.3	146.0	129.5	159.3
14	158.5	156.2	152.5	142.1	136.5	136.0	136.3	136.9	136.3	153.3	148.4	151.2	150.1	145.7	145.0	145.7	145.9	146.9	145.5	145.3	144.6	139.4	142.9	144.8
15	141.2	132.6	137.1	131.8	132.0	136.8	135.6	140.0	140.6	140.2	150.9	149.1	139.8	157.1	158.6	167.0	110.6	48.7	19.9	21.2	33.3	49.8	45.0	42.4
16	46.9	52.6	54.4	57.3	80.0	101.0	114.1	147.6	140.2	139.2	136.4	139.8	143.2	138.2	133.3	146.3	143.3	147.4	148.0	147.9	145.1	145.3	142.8	143.2
17	135.6	132.4	127.4	133.7	133.4	131.7	131.3	134.2	135.3	134.5	134.5	131.8	133.2	135.6	136.7	133.2	135.3	134.2	131.2	130.3	127.7	134.4	134.9	137.6
18	141.5	137.5	137.3	134.2	133.4	134.9	131.4	132.1	132.1	129.5	128.9	126.1	123.2	124.8	127.7	127.4	125.3	127.2	122.4	121.1	121.4	119.3	119.7	121.6
19	121.8	119.9	117.9	118.4	115.2	114.9	113.5	112.9	112.9	117.3	106.0	104.2	101.3	81.0	75.2	72.5	65.7	74.9	66.0	62.5	65.6	61.0	63.0	61.2
20	56.6	76.2	68.5	73.7	74.2	65.7	60.9	50.5	69.6	74.9	76.1	71.1	78.3	86.0	98.4	89.5	94.6	111.1	141.2	176.9	212.7	242.6	259.9	278.9
21	256.8	257.4	266.0	264.3	265.0	271.9	298.9	318.8	322.6	294.3	306.1	313.7	300.2	261.8	252.1	249.6	269.3	265.9	240.3	237.6	241.4	224.9	222.6	177.9
22	139.8	136.2	143.2	151.8	152.9	143.1	144.8	150.9	148.5	153.3	161.5	167.0	178.6	190.9	199.0	201.0	191.3	175.4	163.6	163.0	164.5	161.5	157.8	152.2
23	146.4	141.0	135.7	131.3	131.8	131.7	137.7	153.5	227.9	292.0	284.1	282.0	277.0	269.7	277.1	281.3	279.2	274.9	273.7	272.2	269.1	275.3	280.5	285.5
24	289.6	290.9	297.7	302.6	302.9	300.4	300.7	290.3	291.4	264.3	263.7	273.0	283.2	291.5	300.5	341.8	9.4	41.3	95.6	124.8	146.7	133.5	135.2	141.9
25	145.1	136.7	142.9	144.3	143.2	141.5	140.2	139.9	140.1	143.6	148.3	151.2	153.4	155.4	164.3	168.5	265.4	292.3	294.4	309.0	315.5	313.9	312.8	315.6
26	316.0	314.4	314.4	315.8	311.4	306.6	314.6	312.8	310.9	307.5	307.7	312.8	314.1	314.2	313.8	313.6	314.1	310.7	305.9	312.5	314.5	312.0	320.2	326.2
27	330.2	331.3	337.1	346.3	348.8	349.1	347.4	346.8	346.2	346.5	345.3	346.7	347.5	350.9	356.8	351.9	350.0	349.9	357.5	355.9	355.0	356.2	351.5	358.2
28	359.0	1.5	356.4	0.5	3.3	0.0	3.2	356.9	359.3	3.6	0.4	4.0	357.7	2.7	6.2	7.7	13.2	10.9	10.7	14.3	18.6	21.0	14.1	14.1
29	15.4	15.7	14.5	16.5	21.1	18.3	13.0	7.5	3.1	16.4	14.1	15.1	6.2	4.5	0.9	4.7	26.9	24.2	6.7	12.6	18.9	19.2	6.6	19.0
30	11.8	5.1	18.1	13.5	10.5	8.3	3.5	14.0	22.7	26.3	21.0	23.8	22.3	22.9	27.6	16.3	14.3	22.7	22.8	10.0	4.5	19.8	17.6	19.8
31	24.1	15.1	10.9	9.7	359.2	1.9	353.3	2.3	8.3	0.3	358.2	358.0	3.7	2.4	359.8	1.0	357.9	2.5	0.8	3.2	3.5	7.4	4.3	358.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.5	171.5	202.9	207.4	211.2	202.2	192.5	197.9
12	187.4	170.4	199.5	207.8	225.1	253.5	282.2	301.8	300.7	315.6	358.3	0.8	8.0	2.7	29.1	30.5	39.3	44.4	50.4	59.1	85.5	89.5	104.9	113.9
13	117.1	127.6	129.0	120.7	109.0	107.3	106.0	104.8	106.4	109.1	112.6	115.0	114.0	114.1	114.2	113.6	115.0	116.7	115.9	117.3	114.4	113.5	117.2	116.2
14	114.7	114.5	114.9	118.4	121.1	122.5	127.6	171.7	195.4	216.2	218.8	216.8	212.8	207.7	205.1	205.4	204.4	205.6	203.9	204.8	213.9	224.1	243.1	250.4
15	249.0	265.5	254.8	254.3	261.7	278.7	298.7	282.0	268.0	275.4	293.8	311.6	321.7	348.4	9.7	9.7	9.5	9.5	9.4	9.8	64.1	129.3	126.2	129.9
16	128.6	131.0	125.6	122.4	118.3	112.6	111.8	110.4	104.8	94.7	94.6	91.7	96.0	97.4	99.3	92.9	92.8	119.4	143.1	147.9	151.8	151.6	153.5	149.7
17	136.6	133.7	143.3	140.3	129.0	120.5	112.0	107.6	101.0	87.1	73.3	55.5	45.1	52.5	47.4	53.3	71.2	109.4	117.1	122.8	126.1	126.0	129.1	128.2
18	122.8	117.8	114.4	112.5	110.6	112.4	112.4	116.3	118.1	120.8	127.2	125.1	124.3	125.0	125.8	127.9	130.8	133.7	134.6	133.4	127.3	128.4	124.3	123.5
19	119.4	117.0	95.8	61.5	30.8	34.1	25.3	42.3	26.7	25.4	29.5	42.7	47.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	124.8	127.1	127.1	126.5	121.2	121.2	113.8	107.6	107.2	107.4	103.0	92.5	60.7	56.5	50.0	41.9	32.6	34.4	50.8
21	54.7	54.8	43.3	44.1	50.0	48.8	43.6	45.2	45.2	47.2	49.1	54.8	55.2	59.0	70.1	59.4	53.9	69.4	92.0	82.5	82.7	73.1	72.6	70.2
22	71.8	68.8	81.7	89.8	102.2	103.9	99.1	75.7	82.3	87.4	91.0	87.1	86.2	100.0	112.4	121.2	129.9	126.5	127.9	129.5	131.9	130.7	132.0	131.8
23	132.1	136.7	132.8	142.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	349.4	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.9	85.5
26	70.3	71.1	89.2	95.1	97.1	83.5	79.5	76.3	77.7	62.0	55.9	61.0	59.0	58.1	56.5	48.5	47.5	33.2	25.0	24.7	13.7	15.9	32.4	34.8
27	13.4	22.4	32.8	16.8	42.6	91.3	136.5	168.8	101.3	103.4	113.8	123.5	133.6	145.8	78.9	74.3	87.3	59.3	68.2	69.7	69.9	64.1	55.4	58.3
28	61.3	53.4	54.6	61.2	58.7	57.7	56.0	67.2	59.6	62.6	51.5	55.6	52.9	47.0	50.0	52.9	52.4	352.5	3.2	330.0	336.1	305.2	350.0	40.1
29	33.3	19.1	355.6	342.6	339.3	319.7	337.3	10.7	11.6	12.0	12.6	16.2	27.3	1.0	355.3	5.8	16.4	24.7	15.6	350.1	359.1	9.8	17.9	17.2

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	2.6	358.9	49.2	115.5	140.7	93.3	104.5	102.7	112.3	108.8	106.9	102.0	100.6	109.6	107.5	113.2	113.9	107.0	87.5	67.5	81.4	93.1	86.9	87.1
2	91.4	96.7	99.8	104.0	110.1	109.5	109.3	122.0	133.6	140.5	143.7	146.5	139.0	138.0	138.5	140.0	141.8	127.7	121.8	133.6	130.9	127.5	120.6	124.5
3	124.3	131.4	138.4	131.6	124.8	121.6	123.2	126.0	123.9	119.5	117.8	117.4	119.6	122.5	123.5	118.5	121.6	125.5	131.7	127.1	127.5	133.1	134.5	129.4
4	130.3	129.4	125.1	126.9	123.5	116.6	125.2	122.7	120.1	121.2	122.5	121.6	120.4	122.2	120.8	124.1	124.7	125.0	123.7	119.4	113.8	114.9	116.1	115.2
5	111.6	106.7	107.7	104.7	103.1	105.7	100.1	102.0	98.5	99.9	107.5	105.7	106.3	111.1	116.5	258.9	248.4	336.1	341.4	326.4	240.2	207.1	306.4	353.4
6	28.7	30.6	109.1	163.9	141.9	108.8	56.7	49.9	76.0	64.3	33.8	35.9	20.1	28.2	52.6	49.4	48.4	94.7	345.8	288.6	7.2	21.3	113.5	164.8
7	148.1	108.3	43.3	31.0	108.0	58.3	170.9	132.6	102.1	0.0	0.0	0.0	20.3	20.4	0.0	0.0	0.0	195.6	178.7	142.6	123.9	8.1	53.8	191.6
8	178.7	173.1	121.8	80.1	227.5	140.9	151.0	169.5	109.4	57.3	38.5	163.7	116.8	131.6	119.7	12.5	57.7	66.8	89.3	83.5	80.9	66.3	71.2	58.4
9	46.6	17.9	250.5	239.5	257.6	11.9	27.4	269.6	277.2	59.1	45.8	47.5	15.8	308.2	181.5	0.0	0.0	0.0	187.1	0.0	0.0	0.0	0.0	0.0
10	0.0	18.7	67.1	91.7	194.3	206.2	44.3	350.8	353.6	357.2	283.1	275.9	80.5	146.4	141.4	0.0	0.0	0.0	0.0	0.0	82.0	0.0	0.0	0.0
11	86.7	0.0	0.0	0.0	0.0	0.0	211.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	237.0	24.8	223.9	0.0	0.0
13	0.0	273.8	180.2	328.6	225.1	316.8	45.6	180.3	344.8	0.0	0.0	333.6	99.6	239.8	279.6	68.1	59.3	211.6	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	327.6	0.0	0.0	0.0	159.4	346.2	309.9	40.7	59.5	359.4	336.9	309.2	309.7	258.8
15	62.1	72.8	137.6	44.3	11.6	349.1	171.6	353.7	3.2	0.3	296.8	348.9	2.9	352.4	306.3	327.9	329.0	345.3	355.9	357.8	8.1	129.9	127.9	104.6
16	25.7	35.6	292.6	206.6	322.2	143.5	146.4	158.4	54.2	344.8	335.0	222.7	91.9	129.1	95.5	16.3	97.4	0.0	154.1	141.4	7.6	12.5	15.2	1.0
17	0.0	346.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	146.1	216.4	212.5	174.4	158.5	206.1	24.3
18	0.0	211.1	210.8	85.9	92.2	0.0	0.0	88.7	121.3	63.0	55.3	19.4	17.5	274.1	244.9	293.7	8.1	14.1	336.0	323.1	93.2	95.9	50.0	72.3
19	70.4	125.8	305.1	93.0	90.2	11.2	49.4	14.3	65.7	84.7	64.3	57.1	51.9	70.6	82.2	93.0	121.3	123.6	112.3	86.1	29.3	21.0	27.6	85.5
20	307.1	224.9	255.8	145.3	108.4	125.7	56.7	138.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	294.3	342.7	283.2	203.3	228.1	206.5
21	161.0	89.5	308.1	319.9	47.7	91.9	125.0	123.3	120.9	71.1	129.5	136.2	70.7	198.3	104.0	72.7	89.7	80.7	86.7	100.2	98.2	123.4	111.8	96.9
22	120.3	160.4	154.8	113.4	113.0	116.6	101.8	92.7	60.3	58.6	352.9	352.4	96.8	110.6	166.8	9.0	141.8	22.6	231.7	338.2	17.9	281.8	39.6	0.0
23	0.0	0.0	96.4	283.7	219.3	339.4	184.5	218.1	169.3	203.9	229.6	254.3	157.7	10.5	249.2	4.7	16.2	359.3	343.5	210.8	175.3	167.1	148.4	36.6
24	56.8	261.6	215.0	151.8	53.7	120.5	185.1	353.1	0.0	341.7	344.8	263.8	303.4	325.5	275.6	266.7	188.9	261.6	39.4	174.8	69.5	152.2	51.1	279.0
25	59.5	0.0	37.5	336.3	125.9	166.7	210.5	19.6	317.7	88.7	327.0	240.7	243.6	210.5	0.0	0.0	0.0	0.0	0.0	99.7	38.3	213.4	18.3	307.6
26	319.1	13.3	30.3	305.2	304.8	318.5	329.9	318.2	323.4	243.1	340.5	15.1	330.4	326.0	50.7	19.0	66.0	105.1	28.7	175.0	6.4	23.4	143.5	156.5
27	237.1	262.2	255.2	228.3	101.2	274.8	241.0	237.2	225.7	0.0	199.6	172.2	0.0	186.3	152.5	61.9	205.8	194.7	110.1	82.9	139.3	129.5	131.4	135.0
28	343.3	48.1	334.3	346.8	359.9	355.8	30.8	333.3	103.6	357.2	337.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	299.0	228.7	321.4	348.5	341.1	39.6
29	38.0	67.3	81.8	59.2	26.7	29.5	1.2	351.3	39.9	301.2	292.4	289.2	292.8	257.1	146.3	145.8	132.5	145.4	143.5	109.1	59.6	175.0	204.0	183.0
30	119.7	53.1	37.1	38.4	42.6	98.2	28.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	348.6	350.7	354.3	0.0	352.6	344.4	344.1	348.8	351.3	354.1	358.6	358.2	3.4	10.7
30	9.0	12.3	14.4	7.4	2.8	5.9	7.6	8.5	4.7	15.2	14.8	352.3	1.0	1.5	351.4	353.5	353.7	21.2	5.8	359.5	359.3	3.9	6.6	15.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	19.7	17.0	14.5	18.5	13.5	5.0	11.1	6.1	1.9	6.0	6.7	348.3	335.4	334.7	334.5	331.2	343.1	348.8	357.5	359.1	1.5	0.1	354.3	346.9
2	347.4	5.5	13.9	14.1	14.4	9.0	0.1	2.4	1.4	2.7	4.3	7.7	7.8	6.2	259.7	229.6	276.9	274.1	257.0	290.6	36.5	124.8	258.3	252.8
3	251.2	165.7	152.9	143.8	148.0	152.0	147.2	143.4	133.3	104.5	111.8	111.8	111.8	113.7	95.6	113.2	134.1	120.2	86.9	72.3	77.3	116.5	103.0	65.6
4	73.3	79.4	72.6	69.7	68.5	71.3	71.0	72.0	69.9	69.4	75.7	72.6	75.5	71.2	73.8	65.6	74.6	80.1	76.3	44.5	281.1	18.0	4.9	316.6
5	280.3	294.7	332.4	309.5	339.2	336.0	358.7	349.8	353.4	318.7	267.6	274.7	305.9	289.3	258.7	227.9	197.1	189.9	170.9	181.7	171.9	166.7	168.6	180.5
6	190.7	193.4	169.0	169.7	155.6	151.1	156.9	140.5	126.5	135.5	134.2	135.2	135.5	134.1	130.8	125.4	125.6	120.5	117.7	119.0	117.6	120.1	121.5	121.8
7	120.1	116.0	121.8	123.1	123.8	126.4	126.1	125.5	123.5	125.2	125.9	126.3	126.7	128.1	127.2	126.4	124.2	121.5	124.5	122.1	120.0	122.5	119.7	117.5
8	120.2	120.1	118.2	118.1	121.2	122.7	119.8	116.7	118.8	122.5	120.3	121.5	122.5	123.7	122.9	120.2	120.9	119.4	119.4	116.9	116.4	113.0	110.7	112.6
9	112.0	108.0	104.3	108.6	108.7	99.0	109.9	113.8	118.0	124.9	121.3	117.5	119.8	126.2	122.8	124.1	128.4	136.6	135.1	126.5	120.8	122.5	80.8	79.5
10	51.4	341.8	352.1	359.0	350.6	327.7	332.4	356.0	38.6	75.9	93.5	119.0	147.8	154.9	159.7	160.2	142.9	149.8	149.0	150.8	130.7	142.8	132.4	122.4
11	129.1	124.4	121.1	120.9	117.3	111.0	117.6	117.5	112.1	113.5	116.4	114.5	115.5	113.0	108.7	109.9	108.8	110.9	109.2	110.6	108.6	102.4	99.2	103.9
12	105.2	103.7	102.4	95.6	102.8	99.1	98.9	93.5	95.8	100.0	107.0	112.2	113.2	118.1	122.0	121.5	112.7	112.1	108.2	108.2	109.1	109.5	108.0	114.6
13	118.4	119.1	121.1	126.6	133.8	140.2	152.7	146.6	139.7	138.8	128.7	123.6	132.0	133.0	127.5	130.1	129.7	128.0	124.9	126.0	123.8	123.4	125.5	125.2
14	122.6	111.7	106.2	85.8	52.0	55.9	58.3	56.5	52.7	43.3	39.3	27.1	26.6	31.4	42.8	64.5	62.5	68.9	68.9	77.7	79.3	76.2	77.6	94.4
15	133.4	222.8	210.6	194.8	198.0	171.6	166.9	169.7	165.4	170.0	175.1	170.4	167.9	176.7	179.0	193.4	180.5	171.7	167.4	159.2	161.6	163.8	168.2	175.8
16	191.9	195.8	193.1	191.0	201.6	197.2	181.0	161.1	175.2	152.7	131.3	125.7	146.4	137.8	138.5	141.6	150.2	149.8	160.1	160.9	167.5	162.6	185.6	261.8
17	327.3	320.3	337.5	0.4	355.9	4.9	7.7	4.6	5.1	5.1	9.8	28.2	31.5	36.3	105.7	136.3	135.1	139.0	136.4	160.1	159.0	156.5	157.5	161.3
18	151.3	129.5	131.9	149.0	151.9	157.9	151.4	154.2	157.3	148.4	142.8	151.8	160.1	160.1	161.5	158.5	162.5	144.1	139.4	146.6	139.5	141.1	159.0	154.1
19	155.5	162.3	161.5	160.1	162.0	162.9	178.6	207.2	329.3	344.6	21.0	10.0	352.8	325.6	348.6	297.2	299.8	315.6	317.0	314.8	299.2	312.1	317.4	321.0
20	325.7	333.8	337.4	341.0	355.2	357.4	6.8	12.1	17.6	25.2	22.4	22.8	27.3	55.9	101.9	112.6	141.7	144.6	148.7	155.1	156.3	158.6	159.7	163.3
21	165.2	160.8	148.1	136.1	151.0	114.2	71.7	91.7	67.1	100.0	127.7	129.2	136.7	150.1	159.3	176.8	195.6	198.7	208.6	219.8	229.1	228.0	228.3	231.8
22	236.8	241.4	234.7	233.3	233.5	234.5	268.3	258.5	277.6	38.4	56.9	43.0	69.8	83.2	97.2	135.5	131.3	128.2	125.7	124.7	118.1	114.2	112.9	111.4
23	116.2	115.4	110.8	114.8	116.3	118.3	119.8	119.6	122.0	119.3	110.4	115.4	115.7	115.6	119.0	120.5	122.2	123.9	122.9	124.3	124.4	128.0	132.3	136.2
24	137.5	137.0	136.3	138.2	137.4	135.2	133.5	135.2	136.1	138.6	137.2	135.7	133.6	135.7	134.4	129.6	133.7	136.9	154.5	176.1	168.4	171.9	194.0	192.6
25	194.1	166.4	162.7	151.1	149.5	158.6	165.7	168.9	171.2	170.0	167.1	169.3	161.7	166.4	164.7	166.1	184.2	200.8	202.5	194.6	190.5	187.0	192.8	195.4
26	204.5	205.8	213.9	218.7	227.8	229.2	227.4	223.5	218.3	212.3	212.7	214.6	229.3	223.8	239.2	240.6	250.0	247.6	267.1	251.9	242.4	239.5	238.4	247.6
27	259.3	267.6	269.4	280.6	297.8	317.9	311.1	301.6	242.8	253.5	295.0	275.1	278.2	290.1	300.9	299.1	300.8	298.2	285.1	280.2	281.0	287.5	295.4	300.6
28	278.5	272.1	272.6	290.3	291.6	295.0	306.8	311.0	297.9	280.6	255.2	282.8	299.2	276.5	279.5	274.7	287.2	299.7	297.0	311.7	309.4	310.4	321.9	338.6
29	347.2	352.9	352.1	358.7	357.8	356.6	355.4	1.4	6.9	9.4	14.5	12.1	5.4	3.3	358.3	1.2	359.5	357.5	3.9	10.0	359.7	2.2	6.2	7.2
30	10.1	12.5	57.4	106.5	153.7	146.3	137.8	149.3	142.9	141.0	130.8	128.8	128.0	135.4	138.9	137.7	138.1	138.6	136.3	127.0	123.4	117.2	113.2	122.0
31	128.5	132.6	131.8	128.4	130.8	131.9	129.6	126.2	124.1	123.1	123.1	122.6	118.0	120.7	121.8	124.5	122.9	122.4	123.7	117.1	126.0	127.5	130.8	133.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	124.2	122.9	122.5	119.1	112.9	112.2	109.4	108.4	114.0	112.6	112.5	111.7	114.3	116.4	116.8	117.7	119.7	121.3	122.3	120.3	117.7	104.1	116.4	118.5
2	111.1	103.5	97.2	93.6	98.3	93.1	97.1	93.3	100.9	96.0	98.6	106.0	101.2	78.1	114.9	115.5	116.4	129.0	153.3	160.2	165.3	151.0	155.7	162.0
3	15.7	8.6	40.1	48.4	58.6	70.4	78.6	91.2	110.4	117.6	69.3	38.6	160.6	157.4	163.4	157.1	159.8	152.6	154.6	153.5	152.9	151.3	148.6	142.4
4	143.6	145.8	147.1	144.0	148.7	149.1	147.2	141.3	138.3	134.2	136.9	141.1	140.6	133.2	137.9	141.6	143.5	144.6	149.2	148.5	145.8	152.7	147.1	153.7
5	146.7	147.6	146.0	147.3	137.1	137.1	128.5	124.6								112.4	113.0	114.6	122.0	125.6	132.3	108.3	0.8	304.3
6	316.7	322.7	346.8	339.7	330.2	343.9	346.6	345.0	6.6	349.0	329.0	329.9	320.3	350.3	338.8	338.4	300.3	302.2	299.0	296.7	284.9	304.6	316.9	309.3
7	301.9	291.8	318.6	324.4	327.6	327.5	338.8	346.7	357.9	355.6	334.3	337.7	328.4	347.3	331.3	332.5	208.1	211.3	253.9	236.0	233.8	226.2	226.2	225.8
8	219.4	215.2	209.6	209.3	205.8	200.3	205.9	205.1	220.6	247.4	222.2	211.4	203.6	191.6	202.4	210.0	210.0	212.3	213.0	211.2	211.8	211.6	212.0	223.1
9	223.3	224.2	219.9	222.6	226.8	219.6	218.4	228.8	232.6	237.5	224.1	234.3	254.9	246.9	243.2	239.3	236.5	236.4	230.0	226.8	237.5	235.6	238.7	232.5
10	232.1	233.7	239.1	245.9	244.5	243.4	258.3	266.2	259.0	250.5	280.7	250.7	242.1	203.1	252.4	214.1	170.7	156.9	201.3	182.9	171.9	182.5	189.7	213.3
11	232.1	194.9	185.5	190.5	155.1	96.5	220.1	110.0	101.2	175.6	216.7	194.4	242.2	215.6	219.3	217.6	219.0	221.8	218.3	223.3	224.4	222.6	222.8	222.7
12	225.3	220.9	227.3	227.9	222.3	208.3	229.1	229.7	219.2	208.3	195.8	214.8	218.6	239.8	222.1	255.6	225.4	215.2	223.6	215.2	243.3	252.0	242.0	254.8
13	327.3	333.1	309.8	307.5	314.2	321.6	314.6	303.4	306.7	340.0	335.7	340.7	337.0	297.1	317.6	339.7	280.7	277.0	287.4	276.6	247.8	236.9	244.5	235.8
14	239.5	238.4	241.5	249.8	249.4	254.5	263.0	270.8	286.5	297.8	290.1	297.7	261.1	301.9	254.8	220.0	230.2	202.8	203.4	172.2	171.9	217.6	223.1	223.9
15	228.6	231.7	230.7	229.2	234.9	232.9	234.8	269.9	283.3	237.4	149.3	158.4	158.7	182.5	206.1	213.3	217.3	225.0	225.5	201.4	203.4	205.8	213.7	207.2
16	194.8	207.3	205.1	232.8	273.5	320.9	14.7	21.6	359.3	329.4	337.5	334.0	337.3	230.8	218.7	244.6	244.8	235.0	224.1	227.0	242.6	256.7	274.5	285.9
17	292.5	294.3	299.3	315.6	344.9	335.5	14.3	9.3	11.3	356.6	341.8	313.5	40.4	156.4	185.7	170.4	171.0	185.7	178.3	149.7	149.0	152.0	158.9	158.9
18	195.6	231.3	237.0	251.0	255.6	248.1	239.0	219.5	221.6	216.8	220.1	224.1	224.6	211.8	194.8	187.7	191.0	207.6	224.6	235.9	229.6	235.6	259.6	244.2
19	240.2	244.2	252.1	241.4	234.7	223.9	212.2	215.8	181.2	208.3	228.3	228.9	223.2	218.8	207.1	198.6	168.2	175.2	190.0	187.1	189.8	190.6	175.7	176.7
20	177.7	177.6	181.0	166.6	147.5	121.3	59.7	67.8	87.4	132.1	134.3	138.9	145.2	142.8	141.6	139.2	141.8	141.0	145.8	141.9	144.1	139.7	142.3	140.1
21	140.0	155.2	154.1	141.3	139.6	137.6	146.3	157.7	147.5	151.4	110.0	64.3	12.5	19.3	30.8	52.1	75.2	123.1	138.0	158.8	155.5	147.0	130.0	151.9
22	147.0	148.3	158.9	157.9	154.5	151.6	167.1	158.8	162.5	164.5	168.1	161.0	158.2	152.0	154.7	147.7	148.1	151.8	151.1	147.8	147.8	148.2	153.0	150.3
23	147.8	149.3	144.2	139.8	137.2	138.5	137.6	133.9	135.1	134.7	129.8	131.7	129.6	134.6	136.2	143.7	145.5	141.6	147.0	144.4	150.9	158.9	159.6	148.7
24	157.0	154.0	140.1	139.6	133.5	132.2	130.9	125.7	116.7	123.6	125.3	129.2	126.9	127.9	124.8	125.4	127.3	124.2	118.6	119.1	116.5	113.6	113.0	112.2
25	117.1	118.9	122.0	121.1	119.6	119.3	117.3	115.5	113.4	113.7	113.6	111.0	113.0	108.5	110.5	110.5	114.7	113.2	112.6	115.9	120.6	116.7	102.4	103.1
26	99.7	110.2	115.7	113.3	91.1	71.0	74.0	69.9	81.7	81.6	69.3	63.4	58.1	104.5	107.7	79.2	73.4	82.8	99.6	84.1	105.1	114.7	126.3	118.3
27	120.5	109.0	86.7	87.1	97.1	119.8	122.7	114.6	116.5	121.6	128.3	124.8	127.7	127.0	126.0	127.2	133.7	143.1	148.3	144.7	148.6	156.8	151.1	148.6
28	152.3	167.5	175.0	213.4	228.3	232.1	231.1	231.6	224.0	212.2	218.2	224.2	222.8	231.4	229.0	215.0	211.9	213.8	213.2	198.7	192.0	176.5	176.0	186.3
29	182.8	166.4	169.6	164.5	165.6	171.0	187.0	194.1	205.4	200.4	197.4	159.2	162.0	148.7	143.9	141.0	140.3	138.0	139.6	142.4	141.7	148.2	150.3	152.8
30	155.4	154.9	155.0	156.6	156.3	160.5	164.2	170.8	185.9	335.7	326.9	4.9	48.8	357.8	79.8	87.7	329.4	229.2	213.8	214.2	261.8	292.0	285.7	268.5

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	234.7	235.7	227.2	201.1	226.7	228.1	0.1	39.7	55.4	60.3	86.6	117.5	130.6	123.4	127.2	125.5	136.0	136.5	129.1	133.0	129.9	127.8	126.6	133.3
2	134.3	130.4	130.4	119.6	121.0	117.5	113.7	124.6	126.2	126.5	121.5	123.5	128.6	126.1	122.7	122.7	127.5	126.0	129.7	133.9	135.1	133.5	129.6	127.9
3	116.8	122.5	113.9	113.0	108.5	113.8	110.3	118.9	118.6	125.1	128.2	121.4	111.2	117.7	110.3	113.3	114.5	130.5	117.5	103.5	115.8	102.9	113.2	120.2
4	123.4	124.7	119.6	107.8	101.4	91.5	87.6	85.8	86.9	77.7	110.7	99.1	92.1	77.0	138.0	158.2	120.7	68.5	166.2	162.9	161.3	159.3	137.4	99.2
5	94.6	113.2	103.9	118.5	122.2	131.2	129.2	140.8	141.7	147.4	128.9	122.0	10.6	38.6	281.5	169.5	159.9	158.9	161.2	164.5	153.1	145.5	155.0	167.0
6	149.3	142.7	139.5	105.9	74.1	98.7	102.3	95.4	92.7	93.5	125.6	141.3	142.1	146.7	151.6	157.5	158.8	154.5	157.0	154.8	156.7	160.9	157.9	158.7
7	159.6	153.1	155.8	157.7	154.4	144.6	140.4	139.8	141.0	145.6	144.5	149.2	151.9	150.8	151.4	148.0	153.8	154.4	156.9	155.9	157.0	162.4	162.5	167.9
8	174.7	177.3	178.8	192.9	220.7	229.5	225.6	225.1	220.0	214.8	225.7	220.8	197.7	190.2	182.2	186.4	187.2	187.2	201.2	198.0	191.2	193.6	186.9	191.5
9	169.5	155.9	150.1	145.2	140.0	147.5	142.4	144.2	143.0	141.7	135.9	143.8	150.3	150.5	144.6	147.5	144.0	136.5	139.8	142.8	145.3	147.5	145.6	146.9
10	147.6	150.9	149.4	155.4	144.5	133.2	135.5	139.7	139.2	140.6	136.7	148.6	153.2	152.0	144.1	150.1	143.3	141.7	140.9	141.1	148.2	148.5	163.3	134.5
11	140.3	140.7	143.2	142.9	135.0	148.8	153.6	160.5	144.8	149.0	152.9	150.4	155.2	149.8	142.8	133.9	138.3	141.7	143.5	141.8	147.5	151.7	154.1	151.9
12	150.6	153.1	157.3	155.9	152.0	143.1	138.5	133.9	132.9	136.1	133.9	137.5	133.8	136.0	134.4	135.3	138.0	135.3	134.6	132.1	130.1	128.7	128.7	130.9
13	135.1	135.4	137.9	143.2	143.2	147.8	148.7	147.0	148.1	148.4	148.3	148.8	143.2	144.4	148.7	147.6	151.9	159.6	160.0	161.1	163.6	165.1	162.8	167.4
14	168.8	172.6	179.1	160.9	163.9	117.8	144.8	185.1	168.1	171.0	169.5	159.7	163.3	164.2	165.9	159.2	155.7	168.8	187.5	184.8	175.2	156.6	159.3	157.2
15	154.3	158.2	165.7	164.3	158.4	151.9	154.3	156.3	149.1	147.9	144.4	140.8	142.8	140.8	151.8	151.1	149.6	148.3	148.8	149.4	144.2	148.0	148.3	141.3
16	130.7	132.9	134.7	137.6	135.5	128.2	129.1	129.2	127.8	136.5	131.0	131.4	126.6	132.0	131.1	130.7	134.9	129.7	128.2	130.3	135.1	141.2	146.2	151.9
17	158.4	177.1	211.6	219.9	217.4	221.1	223.9	223.4	213.5	213.9	216.3	229.2	233.1	223.8	219.9	223.2	229.9	231.5	231.7	231.7	222.5	218.6	221.6	232.2
18	220.9	220.4	217.8	218.1	219.1	216.9	222.2	227.1	235.0	225.0	228.9	231.6	251.4	258.6	233.3	244.7	244.6	252.1	276.3	241.3	250.6	259.6	255.8	297.9
19	262.2	274.2	292.6	301.6	303.7	306.7	311.0	315.0	319.3	335.3	343.8	319.6	326.9	323.7	339.7	333.3	347.4	344.9	359.6	340.8	338.0	335.8	348.8	309.4
20	292.3	271.7	265.5	262.7	254.9	230.9	228.4	221.1	215.3	196.8	167.7	211.4	216.4	213.0	212.4	203.3	208.0	205.7	212.2	216.4	207.8	206.6	192.8	177.8
21	184.3	188.7	187.2	186.0	183.8	188.6	191.6	200.6	206.5	213.0	217.2	221.5	231.8	253.8	278.6	284.6	267.4	230.6	248.5	258.5	270.2	229.1	222.4	219.9
22	219.0	219.9	216.2	227.8	225.9	32.3	73.0	89.2	121.1	126.8	103.6	134.2	155.9	174.6	188.4	206.3	218.0	202.0	185.9	182.5	184.3	167.2	188.3	183.8
23	179.3	166.8	160.8	210.1	217.1	220.5	238.3	234.7	234.7	239.8	226.8	217.7	208.2	210.2	208.1	200.5	194.0	192.7	190.3	180.1	212.5	218.6	219.1	52.3
24	31.6	82.3	108.5	105.1	24.5	342.4	356.6	358.6	354.7	359.7	354.4	4.1	352.5	345.4	345.3	353.8	359.0	344.8	357.2	355.4	359.6	347.5	341.9	339.1
25	334.3	334.4	339.7	346.6	344.1	351.1	348.1	350.9	352.2	348.5	342.1	335.2	332.3	340.5	343.7	350.3	338.4	329.7	326.9	322.0	317.1	314.5	315.2	309.0
26	316.8	330.4	6.9	13.8	273.2	237.3	235.1	227.7	229.3	229.2	236.1	230.2	223.5	226.7	228.2	219.8	215.3	215.5	209.8	188.1	172.2	181.2	192.6	178.5
27	168.6	172.0	184.8	180.1	176.1	169.8	158.1	153.0	140.7	142.9	139.7	130.4	135.8	114.9	144.3	122.3	134.7	138.7	149.2	154.0	156.1	160.9	186.6	241.9
28	254.6	255.5	253.2	266.5	280.9	292.2	296.2	316.8	337.7	335.2	346.9	342.5	334.6	352.6	344.9	335.7	326.9	322.0	327.1	324.2	325.6	319.3	317.8	322.3
29	335.0	339.8	348.1	351.2	352.3	351.6	342.1	340.7	344.3	348.2	346.8	349.5	338.6	332.7	331.8	327.9	328.1	324.4	325.4	332.1	330.6	322.6	332.3	342.9
30	341.6	345.1	343.9	346.8	346.2	345.4	338.9	335.3	320.6	330.3	321.2	314.0	312.4	313.5	315.7	319.3	328.4	334.1	330.9	332.6	343.1	343.3	351.9	346.4
31	342.8	344.3	352.2	355.0	350.2	0.4	4.5	342.3	346.1	334.0	339.9	327.2	304.7	293.3	295.7	295.4	290.1	292.8	293.1	287.9	279.6	268.7	241.1	251.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	264.4	255.4	248.0	252.0	283.5	324.7	308.8	353.6	127.5	202.3	195.2	150.8	107.6	225.1	211.3	217.4	223.5	229.8	223.9	192.8	175.3	169.4	167.0	167.2
2	165.8	163.2	159.3	160.4	159.5	163.2	167.0	161.6	157.3	155.3	150.3	149.9	142.7	151.9	148.6	147.8	150.2	147.9	159.8	170.6	180.9	200.0	212.2	251.6
3	273.2	274.2	307.9	3.6	11.8	19.2	9.0	3.2	355.9	357.1	357.8	40.4	192.9	170.5	161.2	161.7	151.8	148.2	154.9	150.5	148.7	149.8	151.2	147.2
4	144.3	146.2	149.9	152.7	151.5	154.1	156.4	155.8	153.5	154.9	159.1	157.8	156.3	149.4	147.3	153.1	151.9	153.6	149.4	158.6	160.7	166.4	165.2	164.7
5	164.7	167.4	163.7	163.2	186.6	303.1	332.9	341.2	335.3	0.9	20.2	3.6	342.1	342.2	349.0	344.3	343.3	352.5	350.6	347.2	344.9	348.0	350.6	352.0
6	357.6	5.2	14.9	13.8	5.0	358.1	1.9	352.1	356.5	358.7	353.2	343.0	335.9	331.2	328.0	329.5	326.1	324.3	331.5	337.0	339.3	332.3	351.0	8.7
7	357.0	1.9	353.7	344.3	340.5	335.2	334.1	342.5	344.8	348.1	346.8	345.2	335.2	338.6	343.4	341.5	335.2	326.1	326.0	333.4	335.9	337.0	339.8	341.8
8	338.2	339.3	342.5	340.5	340.0	347.1	355.2	354.4	350.5	343.4	351.6	352.2	356.2	354.0	358.2	345.5	347.7	347.8	355.4	331.8	332.7	342.0	343.1	343.6
9	1.9	358.9	353.6	342.8	341.8	334.5	340.1	346.8	343.1	343.3	343.4	341.5	341.5	344.8	354.4	345.7	347.3	340.8	342.9	346.8	344.5	339.1	343.8	3.0
10	25.7	13.9	342.9	2.0	5.1	359.5	71.5	147.4	162.4	172.6	171.7	216.9	254.9	222.0	225.8	202.9	186.5	180.6	183.6	153.7	159.4	175.0	168.9	162.9
11	165.1	169.5	164.0	160.2	162.5	164.7	156.0	150.3	154.0	152.4	135.8	123.6	114.5	111.3	128.4	131.9	128.3	127.1	121.9	135.5	145.4	143.9	130.4	122.8
12	144.2	75.3	19.3	12.6	1.2	5.4	16.5	23.1	27.3	35.6	35.5	44.9	8.5	19.8	25.0	30.8	45.3	48.2	156.9	147.5	92.1	125.6	135.8	70.2
13	320.4	295.2	346.7	28.6	39.1	53.4	67.9	65.6	95.9	101.2	54.3	355.8	5.3	4.4	40.1	69.5	92.3	128.2	135.6	137.3	132.9	123.3	130.5	117.0
14	131.6	141.9	135.5	138.4	125.7	128.8	127.5	130.5	155.0	148.2	144.7	140.0	138.8	140.8	143.9	141.1	143.2	144.0	141.9	147.7	147.7	156.0	160.5	207.9
15	222.5	219.6	217.0	216.3	216.9	218.6	221.0	212.5	183.6	173.7	161.4	145.0	151.6	155.9	182.3	146.7	148.8	155.3	172.1	169.9	148.0	142.0	143.5	151.4
16	138.6	139.9	145.4	145.7	143.9	148.5	151.7	149.4	131.8	143.6	143.6	144.2	144.5	140.5	142.6	145.3	146.9	149.7	145.3	157.3	156.2	142.8	141.6	144.9
17	138.9	120.6	119.5	126.4	135.5	140.4	130.4	121.9	120.0	120.7	109.3	114.5	112.1	122.1	125.9	128.7	131.8	135.3	136.7	141.1	141.5	127.0	125.3	130.0
18	130.7	129.4	126.0	112.7	113.5	93.8	80.1	53.0	31.9	50.7	48.9	39.9	51.7	59.5	62.0	37.6	72.1	33.3	6.2	299.4	1.6	323.7	319.8	355.7
19	30.6	59.3	73.5	80.6	88.7	105.3	164.4	235.2	237.3	231.7	304.5	256.4	255.3	277.7	295.5	290.9	333.7	333.2	306.1	314.3	40.9	0.6	2.4	334.3
20	282.6	230.2	235.5	246.9	267.6	288.0	285.8	276.3	298.4	296.9	305.6	6.8	13.4	342.1	326.2	245.4	299.6	308.2	320.6	346.8	4.2	3.8	3.2	349.9
21	313.8	266.4	265.8	260.2	271.3	257.3	247.7	237.3	224.3	227.2	225.3	223.9	225.5	218.2	210.1	234.6	216.3	216.5	235.6	260.1	237.1	219.4	213.7	221.5
22	221.3	149.5	113.7	228.5	71.9	60.6	36.9	26.1	58.7	79.8	76.4	66.6	43.2	351.7	302.2	264.1	285.3	221.0	289.7	258.1	266.7	293.4	316.0	322.7
23	322.0	340.1	323.4	326.2	332.3	336.3	339.1	348.9	0.1	350.9	350.0	0.1	351.2	350.0	346.4	336.4	324.5	314.8	167.2	171.1	161.8	163.9	154.6	156.5
24	170.0	269.1	242.2	248.6	237.0	251.1	265.3	285.0	306.3	313.6	0.5	354.9	349.4	343.5	347.2	346.9	352.8	345.8	337.6	7.9	350.7	339.6	338.8	343.8
25	333.6	316.2	280.8	262.3	239.4	239.4	236.3	230.5	218.5	165.5	117.7	170.7	150.2	156.7	171.5	153.5	141.4	146.4	151.7	149.4	147.6	133.2	143.6	133.4
26	135.5	136.4	137.3	137.5	138.8	126.7	140.9	132.5	135.5	135.7	133.8	134.9	137.2	145.2	151.2	155.8	156.2	159.7	154.6	158.9	153.5	153.3	169.0	176.1
27	165.9	240.1	229.1	241.5	229.7	216.9	228.3	235.8	232.4	231.5	230.1	243.4	237.2	242.9	243.1	239.9	250.0	255.5	263.9	244.8	237.7	245.4	273.4	265.7
28	260.6	291.3	303.1	309.3	303.1	295.6	291.4	290.7	306.2	359.8	12.7	20.7	354.7	346.6	332.6	301.6	290.7	319.2	336.7	339.4	327.4	343.3	352.3	348.3
29	342.8	341.5	344.8	342.9	341.6	344.5	351.1	3.4	8.5	10.7	325.4	272.4	243.4	221.9	220.2	210.7	213.6	229.2	234.3	232.7	230.8	233.0	234.4	233.4
30	233.0	222.2	232.9	242.7	208.2	205.4	207.1	207.1	179.9	153.0	171.4	112.2	90.1	82.3	105.3	135.2	112.0	123.1	134.2	133.4	138.9	124.2	117.1	116.7
31	117.7	119.7	115.2	111.7	112.8	109.1	110.0	109.0	102.6	89.7	84.3	83.1	75.4	78.0	70.5	68.8	65.6	62.2	56.5	53.8	59.5	60.6	63.0	63.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	60.4	59.5	65.8	65.7	61.4	57.1	54.7	56.2	53.3	54.9	57.9	63.0	87.0	95.3	81.4	77.1	95.6	102.8	89.1	86.8	101.8	97.8	100.1	104.5
2	103.0	103.3	104.6	105.6	108.6	106.2	106.2	106.4	106.1	109.4	112.8	111.0	114.5	112.2	106.4	100.8	87.0	67.8	55.5	46.2	33.3	38.0	43.6	45.5
3	51.2	57.6	59.3	51.4	39.5	27.9	32.2	36.5	48.9	64.1	76.9	100.8	130.9	149.5	166.5	194.7	189.1	173.8	164.2	167.0	162.3	169.8	213.4	209.9
4	206.7	205.5	211.3	214.7	215.5	207.6	195.4	183.7	176.5	175.9	172.1	163.9	169.9	173.7	160.9	149.8	146.6	166.9	178.3	171.5	164.3	165.8	173.1	178.5
5	194.4	198.9	184.1	84.6	70.8	100.1	187.8	184.4	103.9	92.4	123.0	154.5	165.4	170.7	210.7	238.3	232.6	306.6	95.0	107.8	116.2	155.4	139.0	141.4
6	138.6	113.5	118.1	117.9	112.4	111.9	109.1	106.7	100.9	94.1	98.5	103.2	103.7	105.4	106.8	102.6	98.1	91.8	99.9	103.4	95.9	103.0	112.2	105.5
7	105.5	111.6	116.4	112.5	96.9	76.9	98.5	93.9	83.3	83.5	92.1	119.8	124.2	125.4	126.1	124.8	122.4	121.9	128.7	127.8	132.0	139.2	142.1	145.4
8	163.8	186.5	176.5	183.3	182.3	186.4	178.9	173.4	159.1	147.9	121.3	111.2	105.4	109.1	112.3	109.6	103.3	110.9	105.5	105.0	90.6	90.7	94.3	111.6
9	114.0	112.4	105.0	98.6	100.3	87.0	91.8	95.7	90.0	98.5	99.5	99.6	102.0	110.4	120.3	121.9	123.3	126.1	126.2	130.1	130.7	125.2	128.7	124.3
10	125.1	136.7	138.6	135.3	137.6	137.7	134.6	149.5	142.0	152.9	153.6	176.0	180.9	195.6	224.3	224.8	222.9	226.0	230.3	221.1	229.7	227.6	229.8	236.7
11	239.4	222.1	216.5	219.3	216.5	214.5	211.4	210.0	173.7	175.7	186.3	185.4	173.9	173.9	172.7	167.1	164.9	160.8	150.5	137.1	138.5	126.1	120.5	120.7
12	123.1	119.5	114.7	120.2	124.1	119.5	120.9	121.4	120.6	120.6	121.4	124.0	125.2	125.3	120.8	118.6	115.3	114.2	118.4	119.1	117.7	118.1	118.8	120.5
13	119.5	115.4	115.9	118.5	123.5	118.8	121.5	119.7	120.3	117.8	122.8	125.1	126.6	127.5	121.0	116.2	121.4	117.2	114.4	114.3	115.4	115.4	113.5	113.1
14	114.7	117.5	120.9	121.8	123.3	130.5	134.4	134.1	126.4	122.4	119.3	114.9	119.1	126.1	123.9	126.4	127.3	128.4	131.3	135.9	148.6	148.6	155.2	149.5
15	148.0	145.7	140.7	140.9	137.3	129.3	116.6	118.9	119.4	117.4	123.3	127.6	131.9	132.2	132.3	124.0	127.5	124.9	120.9	130.1	131.4	136.6	135.4	137.4
16	138.8	130.8	109.8	55.0	4.8	358.6	24.2	1.2	338.8	346.8	350.2	344.4	323.7	319.8	306.3	282.5	306.8	281.4	279.0	276.6	275.9	268.6	258.8	251.2
17	261.9	249.1	247.6	234.3	224.6	198.9	211.9	218.4	216.8	228.8	174.6	83.1	78.2	90.6	100.5	106.0	102.4	104.1	109.5	98.3	91.3	90.3	80.5	53.0
18	46.8	38.7	41.0	43.6	44.3	40.8	41.6	39.9	31.8	26.5	22.2	12.8	17.8	343.0	313.6	312.7	329.6	326.3	323.1	341.1	88.6	101.5	88.6	92.4
19	96.3	94.0	94.0	85.7	86.8	95.2	91.0	98.0	105.4	123.4	142.5	151.2	147.1	160.1	230.1	274.4	285.1	287.1	287.3	282.7	291.4	289.3	292.2	293.2
20	276.7	275.2	288.3	274.6	287.8	291.3	310.5	333.3	316.5	329.4	352.6	321.6	306.5	281.4	266.9	276.6	289.9	289.3	301.7	339.4	349.2	337.5	329.4	318.4
21	336.1	338.3	323.4	310.8	300.8	294.8	297.7	318.6	333.6	3.2	15.8	2.5	346.8	346.2	321.2	301.6	301.8	307.2	311.8	306.8	305.6	317.9	336.2	336.4
22	327.0	341.5	343.3	337.6	339.2	349.2	318.9	283.7	275.2	265.5	234.4	213.5	199.4	184.2	181.9	166.3	155.3	156.2	153.1	159.7	159.7	159.3	162.8	162.7
23	165.4	165.5	180.9	202.4	210.5	207.9	208.7	216.6	214.1	213.9	212.7	215.1	210.4	198.4	197.9	199.8	207.0	209.2	205.7	205.1	201.5	202.1	201.1	193.1
24	174.9	171.7	166.6	155.6	160.1	157.5	152.0	135.5	144.7	136.1	120.2	116.6	113.1	111.3	110.6	109.1	107.0	108.9	107.2	94.6	88.9	87.3	91.2	75.1
25	61.8	65.7	60.7	62.1	52.8	59.4	64.4	74.0	80.3	66.4	74.1	62.7	53.3	60.1	56.0	79.0	59.8	79.0	91.0	94.8	74.8	66.3	53.5	69.6
26	70.7	81.0	83.7	75.2	39.6	57.7	81.4	67.5	81.9	131.6	120.2	128.1	352.3	318.9	358.2	0.5	350.1	310.6	298.9	308.3	335.8	0.8	6.9	4.2
27	15.4	9.4	7.0	1.7	357.2	0.2	3.2	8.4	5.3	3.5	10.8	12.8	7.1	357.3	350.2	350.1	346.7	357.0	354.2	350.6	354.0	354.3	353.7	359.9
28	11.3	10.2	7.3	2.1	0.4	356.7	3.3	5.1	4.3	16.1	59.5	99.4	95.7	270.5	345.2	264.1	159.6	154.8	123.9	141.0	133.7	138.8	135.4	138.3
29	143.6	147.7	151.0	139.1	137.4	135.8	134.3	138.6	140.8	141.5	139.5	136.9	143.1	136.3	141.5	140.6	134.1	131.0	126.1	136.6	128.4	134.3	142.1	143.0
30	153.9	161.0	350.9	15.7	2.9	357.6	348.1	333.9	340.2	344.2	350.7	355.0	349.3	335.4	324.7	310.6	317.5	320.9	340.1	329.8	18.2	52.1	58.2	43.8

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	175.3	186.9	181.7	176.0	165.5	160.9	160.0	154.7	154.0	151.1	154.2	153.3	151.5	149.9	142.7	148.0	157.0	151.3	156.5	156.5	148.2	151.6	153.2	163.0
2	165.6	162.1	165.4	165.9	181.3	182.0	197.8	196.7	216.9	227.9	192.0	138.9	140.3	227.3	230.9	224.8	235.6	229.9	230.8	222.4	229.1	221.5	216.2	216.6
3	216.8	221.3	229.0	230.8	251.7	268.2	297.2	335.3	343.6	340.0	332.2	333.1	340.3	339.4	329.8	329.8	330.8	336.3	329.7	333.8	342.9	2.5	14.5	20.5
4	3.8	6.2	25.4	18.5	18.8	21.9	25.0	30.8	35.0	44.7	45.2	118.9	201.7	218.4	234.1	239.0	250.5	233.3	290.7	21.3	93.5	71.9	110.4	168.9
5	193.8	215.8	254.0	212.9	211.4	219.2	224.5	225.9	227.5	234.2	235.8	235.9	266.4	304.3	320.8	352.1	344.7	328.6	338.1	10.4	11.7	11.8	7.1	0.4
6	356.5	349.5	0.6	0.7	355.9	348.5	329.0	312.8	314.3	306.9	318.6	308.3	323.7	306.1	335.0	307.2	0.0	348.8	336.7	335.9	328.4	317.3	324.6	334.0
7	332.9	337.7	331.2	328.6	327.3	332.8	331.1	318.0	339.2	327.6	329.4	331.5	326.4	326.2	319.5	319.0	320.8	318.8	322.0	325.6	324.9	327.4	325.7	323.4
8	323.4	321.8	317.7	319.2	329.0	335.8	338.0	333.7	338.9	335.2	340.2	344.5	356.5	1.6	6.5	10.7	9.4	11.1	25.1	36.9	48.5	76.5	111.6	123.7
9	115.5	121.3	124.6	128.0	126.6	125.7	125.7	127.8	125.9	124.1	125.9	122.9	119.8	118.2	119.6	120.0	121.8	121.0	122.3	122.0	121.7	121.9	126.9	130.0
10	133.7	130.1	140.0	162.4	217.9	220.0	233.1	225.3	228.6	227.4	205.6	198.1	171.8	165.2	156.6	151.0	138.3	137.3	139.7	153.8	161.4	153.9	144.3	142.0
11	138.5	134.1	126.1	124.8	124.5	124.9	127.8	135.6	75.1	7.4	7.6	356.6	352.7	354.9	354.1	357.9	357.3	346.6	343.1	344.3	342.2	342.6	343.4	343.3
12	342.4	342.6	338.7	333.9	335.5	335.7	336.0	339.2	336.9	337.7	334.5	337.8	342.1	339.5	324.2	339.8	350.1	351.5	342.8	341.9	337.9	354.7	348.0	348.0
13	355.4	358.5	1.3	13.8	22.5	41.4	49.9	62.2	73.6	74.8	97.4	141.5	149.0	138.5	144.1	124.9	117.5	117.7	117.1	120.2	122.2	129.4	136.8	136.9
14	137.3	146.3	150.4	147.0	145.5	162.9	162.1	170.4	172.1	167.7	163.8	162.5	166.9	161.9	163.8	164.4	161.4	162.8	162.6	162.6	162.6	162.6	0.0	0.0
15	162.6	162.6	162.6	162.6	162.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	228.6	230.7	233.8	232.7	255.0	244.4	0.0	182.6	176.6	166.0	142.8	143.7	143.9	138.8	134.2	133.8	132.9	127.4	123.9
18	123.5	124.1	123.5	124.0	122.7	126.1	125.4	119.1	123.5	124.1	119.5	112.2	105.3	88.9	81.7	60.7	75.8	70.7	58.7	58.0	51.5	55.8	50.6	36.9
19	20.7	16.6	15.8	19.0	14.6	10.4	5.7	10.1	11.7	6.5	6.6	7.5	2.5	3.4	3.4	39.5	20.7	68.3	130.7	169.3	165.2	196.2	187.3	197.4
20	210.4	217.1	234.9	236.3	221.0	207.7	216.3	235.9	264.5	251.0	232.8	231.0	242.1	284.5	306.8	319.4	344.3	321.9	320.1	249.1	222.5	226.5	226.0	227.8
21	239.9	258.8	263.2	316.3	11.3	10.4	353.4	343.4	354.9	351.6	0.2	6.5	351.6	354.8	355.9	1.9	359.8	0.2	360.0	356.3	356.6	352.5	358.3	356.8
22	353.5	347.2	345.9	343.6	343.9	344.2	340.6	338.3	346.3	348.9	345.5	347.4	348.2	348.5	356.1	357.4	11.2	16.3	10.1	2.9	13.9	13.7	24.0	33.5
23	14.5	11.6	12.7	13.7	10.3	6.5	2.5	358.9	1.0	0.2	349.9	348.5	350.0	343.2	341.2	322.7	322.6	318.8	301.8	296.1	288.9	278.8	278.3	283.7
24	286.9	295.6	297.8	296.7	296.1	300.9	315.5	315.7	311.5	304.9	301.5	303.4	287.5	248.8	233.6	229.1	231.9	229.5	221.8	225.1	223.6	188.0	178.4	154.1
25	147.1	142.2	150.7	155.2	157.4	152.8	151.4	154.3	156.5	156.1	156.0	152.8	150.3	153.0	146.0	146.5	126.4	131.6	103.9	96.7	92.6	78.7	50.4	41.5
26	10.5	8.1	10.9	7.6	11.7	11.7	9.4	10.7	4.3	6.4	11.2	6.7	3.9	11.4	6.1	345.2	350.1	352.1	352.2	354.3	354.4	352.9	352.2	354.3
27	357.4	2.1	4.4	359.2	355.6	355.8	354.6	347.9	357.5	0.7	12.4	12.1	353.3	349.5	0.4	359.0	359.0	9.3	9.9	12.7	10.4	38.1	85.9	123.3
28	134.1	151.0	161.2	151.9	149.6	150.2	146.2	150.9	150.7	148.8	154.7	156.7	156.5	158.1	154.6	142.4	155.0	151.7	159.1	155.0	124.4	108.3	122.4	138.9
29	137.6	290.2	279.3	275.4	280.8	276.4	275.4	284.0	224.5	177.9	165.1	166.7	161.0	157.8	157.7	156.8	154.7	152.3	155.1	151.8	149.8	147.4	142.3	143.5
30	132.8	125.8	133.2	140.1	136.3	144.3	139.2	134.5	124.9	131.1	135.2	152.4	147.5	134.9	127.4	133.3	140.8	126.7	123.0	136.8	136.5	140.7	150.2	153.9
31	162.6	165.6	170.0	163.7	152.8	167.7	147.3	92.0	74.6	57.6	58.8	45.8	53.0	14.2	297.4	268.3	295.1	357.7	10.4	38.8	28.8	43.7	26.7	31.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	27.9	38.7	49.2	46.1	10.3	5.5	12.4	352.5	357.7	350.8	337.1	326.7	323.3	336.6	311.2	302.0	310.7	296.0	334.9	354.4	343.4	338.1	355.4	349.2
2	339.6	335.0	332.8	316.5	324.1	324.7	322.0	327.5	319.1	344.7	340.7	341.4	342.2	351.4	356.5	355.1	352.1	351.9	355.7	3.8	359.8	8.0	353.4	353.1
3	346.7	343.3	347.1	350.0	348.5	345.2	336.6	337.4	336.8	346.1	348.9	347.3	342.2	334.7	327.8	312.1	314.0	327.2	336.1	347.6	348.2	0.6	0.1	2.6
4	357.4	2.3	10.4	3.2	0.7	1.8	356.1	359.7	355.7	359.5	5.3	9.3	19.8	18.3	21.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.2	79.9	86.8	81.0
6	83.2	72.1	76.8	80.0	70.3	62.0	64.3	56.8	60.6	62.3	57.6	60.5	63.0	54.4	46.0	37.4	28.8	19.5	11.0	339.8	359.5	323.1	322.0	313.5
7	346.8	353.6	344.0	337.8	354.8	353.1	353.1	1.1	333.7	307.7	304.3	302.8	294.1	287.7	258.2	242.4	233.4	215.7	204.2	189.5	208.7	169.5	163.9	204.5
8	203.5	200.5	197.0	194.2	190.8	175.6	175.0	174.3	174.1	161.8	123.9	127.5	130.2	121.4	115.7	114.3	106.0	101.2	104.4	108.1	104.9	105.0	98.3	94.4
9	97.8	95.5	96.6	102.2	107.4	108.0	108.3	109.9	107.7	92.1	85.4	83.9	91.9	89.9	106.7	109.3	110.1	104.0	102.4	114.5	118.6	119.0	115.0	117.9
10	122.7	115.5	111.7	104.6	87.9	80.1	74.6	64.7	47.3	33.3	57.7	68.1	59.5	51.4	63.1	72.1	96.3	135.4	146.7	147.1	133.5	128.3	127.2	122.3
11	121.9	121.6	116.5	116.2	120.2	114.4	113.9	116.2	115.0	118.2	125.9	137.2	139.6	139.7	139.7	139.7	140.0	139.9	139.6	139.8	139.9	139.9	139.9	139.8
12	139.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	139.5	137.1	132.5	130.0	127.7	126.9	128.6	125.9	128.5
16	129.0	126.6	133.6	151.8	162.2	192.6	206.0	218.0	228.4	223.3	223.8	225.5	211.0	180.3	186.6	174.1	173.1	169.6	169.7	169.7	169.6	169.3	168.6	168.5
17	168.4	168.4	168.4	168.4	168.4	168.4	168.3	156.7	72.1	66.7	39.0	43.3	34.1	34.2	18.7	18.9	18.4	14.7	13.6	15.9	11.9	14.0	14.4	20.1
18	14.7	8.0	11.4	9.0	16.7	25.1	32.5	29.9	36.5	24.3	23.9	19.4	23.3	23.3	25.3	24.8	18.1	18.4	20.0	21.8	23.6	18.0	22.9	21.0
19	20.0	10.3	14.0	20.5	8.3	16.2	14.3	17.1	9.1	9.9	18.3	10.0	7.0	13.0	15.0	13.0	8.7	11.5	11.1	11.5	11.6	13.9	10.1	12.4
20	6.8	14.7	16.6	9.8	2.7	356.1	7.5	3.6	358.9	350.2	350.0	352.3	352.7	355.7	354.1	2.8	357.4	0.2	356.7	351.8	357.0	358.9	352.3	359.5
21	352.1	359.0	0.4	352.7	350.4	350.1	359.7	3.0	15.2	28.0	29.2	6.9	19.3	12.9	35.7	43.4	338.0	30.1	17.3	12.9	19.0	6.9	38.9	79.6
22	97.7	141.9	159.9	182.2	185.0	190.5	202.6	211.1	206.3	206.6	192.5	189.4	195.1	207.1	194.8	200.2	208.0	218.3	225.0	213.2	210.5	191.7	189.4	180.3
23	173.7	170.4	166.2	167.3	175.5	175.1	175.8	187.4	190.3	165.8	167.5	165.2	143.5	139.4	138.2	134.9	131.6	133.4	125.0	118.9	113.4	116.5	113.6	110.4
24	109.2	109.0	108.8	110.6	111.9	111.3	106.4	104.5	110.0	113.0	114.5	115.9	117.9	113.7	119.2	124.4	129.5	140.2	142.1	149.7	160.0	197.6	215.9	222.2
25	225.8	226.1	218.1	216.2	212.3	208.7	201.7	194.4	204.5	211.8	227.7	213.1	205.6	239.4	273.6	310.0	312.7	310.7	307.1	291.4	310.7	321.7	314.2	0.0
26	0.0	0.0	325.8	328.2	332.0	324.5	332.5	335.9	338.4	342.4	343.4	347.7	351.4	358.8	0.1	356.1	0.9	10.0	13.5	18.5	20.2	29.6	24.2	16.7
27	18.2	11.5	27.1	48.9	59.9	57.6	65.0	70.7	55.9	60.3	55.6	74.4	62.0	53.5	60.6	62.5	60.0	49.7	40.8	48.2	53.7	72.0	75.1	68.1
28	51.5	49.6	43.7	37.9	34.6	42.7	47.6	36.8	23.2	43.0	46.9	49.0	50.9	41.2	31.9	28.6	22.6	13.3	6.8	349.4	358.1	11.2	27.6	0.3
29	351.2	2.9	4.8	358.9	345.5	338.9	336.1	321.1	334.2	335.3	334.6	337.2	332.9	340.5	347.4	334.9	320.0	322.7	325.9	331.1	337.8	343.6	339.3	333.9
30	330.4	327.1	337.5	330.6	336.3	343.5	343.0	345.2	345.9	346.6	354.5	355.1	0.9	350.9	342.4	355.0	355.0	3.6	20.7	22.2	10.5	15.3	11.5	20.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AQ) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	17.9	22.1	7.8	18.7	24.9	43.1	42.2	53.3	58.0	58.3	55.1	63.7	93.5	95.8	112.5	123.8	132.7	132.4	117.5	119.6	114.6	120.1	120.9	120.9
2	131.3	120.3	140.2	151.8	142.4	117.8	123.5	122.2	124.7	122.5	123.8	118.5	114.5	116.5	115.7	113.7	118.0	122.6	125.0	124.6	122.3	120.5	121.3	125.8
3	122.6	121.9	122.5	118.8	116.2	116.9	122.0	121.6	114.3	109.3	112.5	115.4	114.2	110.3	109.3	112.6	113.7	116.1	118.2	120.8	123.0	124.9	125.8	127.3
4	126.7	126.0	131.7	142.4	141.2	140.4	141.4	146.2	143.0	143.5	145.5	137.6	127.3	127.2	127.7	130.0	130.9	130.5	137.0	138.6	135.2	136.6	136.6	143.0
5	144.5	149.2	143.4	137.3	136.2	134.4	132.1	131.7	127.3	126.7	128.5	129.7	130.3	131.2	128.2	126.9	123.4	120.0	124.2	124.7	121.4	112.6	112.1	114.8
6	117.1	124.2	118.7	121.4	123.9	124.6	122.6	116.0	114.1	111.4	109.8	105.6	87.4	81.9	66.0	75.2	112.3	103.0	67.8	63.8	69.1	83.4	285.4	325.7
7	323.8	346.2	356.0	15.1	13.7	359.2	1.9	5.3	0.9	352.7	6.1	9.2	31.9	43.0	43.3	44.0	75.8	59.8	76.0	107.6	87.7	122.6	120.1	108.4
8	95.5	94.2	95.9	97.0	77.9	84.4	73.5	67.9	72.3	68.7	67.4	66.3	55.7	51.3	59.5	49.8	49.2	45.6	31.8	31.6	38.4	40.5	40.8	38.1
9	44.6	46.1	45.9	37.6	26.7	5.6	12.7	18.3	28.4	35.8	41.0	234.6	239.8	220.3	222.0	224.0	232.4	245.3	230.5	217.4	219.7	216.7	217.8	199.6
10	195.5	175.7	184.2	195.6	211.0	210.9	210.4	208.0	209.2	217.1	230.6	241.6	248.6	251.8	259.8	255.3	246.9	246.4	253.4	249.8	261.8	276.5	287.7	282.2
11	295.5	300.5	289.3	263.7	285.6	267.6	246.5	221.8	227.7	223.3	225.8	232.1	239.0	252.8	274.1	315.5	352.8	358.9	349.0	337.7	333.4	336.9	354.2	357.0
12	356.8	3.0	8.4	9.2	15.8	7.2	18.3	5.8	10.3	316.5	282.6	255.0	232.9	230.9	237.8	256.4	266.9	268.9	283.1	302.5	330.5	345.7	358.5	1.6
13	342.6	353.5	356.4	1.3	358.7	354.4	2.6	14.9	20.0	24.9	25.0	34.4	52.0	87.9	118.5	64.5	111.8	125.8	159.0	164.5	159.3	146.9	131.0	157.7
14	157.3	156.0	152.2	141.9	136.1	135.8	136.1	136.7	135.5	152.8	148.0	150.6	149.4	144.9	144.4	145.0	145.3	146.4	144.9	144.8	144.4	139.3	142.6	144.3
15	140.8	132.1	136.8	131.2	131.5	136.6	135.3	139.7	140.1	139.8	149.8	148.2	139.5	156.5	157.8	166.3	161.5	157.6	156.5	29.7	36.2	52.2	47.5	44.9
16	49.2	54.7	56.4	59.0	80.7	101.4	114.4	148.3	141.1	139.9	137.1	140.3	143.6	138.4	133.4	146.7	143.6	148.4	149.8	148.9	146.0	145.9	143.8	144.3
17	135.0	131.6	125.7	132.7	132.5	130.7	130.5	133.6	134.7	133.8	133.5	131.6	134.1	136.0	137.3	133.7	136.0	134.8	131.6	130.6	127.7	134.8	135.3	138.3
18	141.9	138.3	138.2	134.9	134.1	135.7	131.9	132.6	132.6	130.0	129.2	126.2	123.1	124.6	127.4	126.8	124.5	126.6	121.6	120.3	120.7	118.5	118.9	120.7
19	120.9	118.9	117.0	117.6	114.6	114.3	113.1	112.5	112.5	116.7	105.7	103.9	101.2	81.2	75.7	73.2	66.3	75.3	66.4	62.8	66.0	61.2	63.4	61.6
20	57.1	76.8	69.0	74.2	74.7	66.2	61.3	51.2	70.5	75.6	76.8	71.7	78.9	86.2	98.4	89.7	94.9	111.3	140.4	176.2	210.5	239.1	256.5	275.9
21	254.6	255.0	263.3	261.8	262.5	269.1	296.4	317.7	322.1	291.6	304.1	312.5	298.1	259.0	249.4	246.9	267.1	263.0	237.5	234.9	238.3	221.8	219.8	178.4
22	140.7	136.3	142.8	151.0	152.2	142.7	144.1	150.0	147.8	152.9	160.8	166.6	178.2	190.4	198.0	200.1	190.5	174.9	163.0	162.4	163.8	161.0	157.3	152.2
23	146.7	141.3	136.4	132.3	133.0	132.9	138.6	153.6	224.2	289.9	281.4	278.9	273.8	266.6	274.6	278.4	276.2	271.9	271.4	270.0	266.8	271.7	277.1	281.5
24	286.3	287.9	295.2	300.5	301.5	298.6	298.8	286.5	288.0	263.4	259.5	268.4	278.5	287.5	298.0	343.3	9.4	40.4	70.0	74.3	80.2	117.8	138.5	144.0
25	146.2	138.8	145.1	146.2	145.6	144.4	143.1	142.7	143.0	145.8	148.9	150.3	151.8	152.9	162.7	166.5	260.0	288.6	290.9	307.6	314.9	312.6	311.1	314.0
26	314.4	312.5	311.1	312.3	307.6	302.7	310.8	308.9	306.8	303.6	303.9	309.0	310.4	310.3	309.9	309.6	310.2	306.8	302.1	308.7	310.5	307.8	316.6	323.3
27	327.6	328.7	335.1	344.8	347.1	347.6	345.2	344.2	343.8	344.0	342.8	344.1	345.3	348.3	355.8	350.6	347.3	347.4	356.8	354.4	353.3	355.6	349.8	357.8
28	358.6	2.0	355.6	0.3	3.8	359.1	3.5	355.8	358.5	4.2	0.1	4.4	357.1	3.6	7.2	9.5	14.2	12.2	11.6	15.1	19.0	21.2	14.8	15.1
29	16.5	16.6	15.5	17.3	22.1	19.4	14.3	9.0	4.5	17.6	15.2	15.9	7.7	6.1	1.6	6.3	28.2	24.9	7.7	14.2	19.9	20.1	7.9	19.9
30	13.2	5.8	19.4	14.9	7.7	5.5	3.1	14.8	23.6	27.6	21.9	25.2	23.7	23.8	29.2	17.5	15.4	23.6	23.2	11.0	5.1	20.3	17.7	20.1
31	24.0	15.4	11.0	9.6	358.5	1.7	351.6	1.7	8.3	0.5	0.2	359.6	5.8	4.6	2.0	2.9	359.9	4.7	3.5	5.7	5.7	8.8	5.6	360.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	32.3	22.0	16.8	10.6	14.9	19.3	22.9	14.3	9.0	2.2	5.8	3.0	12.7	5.7	10.2	6.1	8.1	16.5	11.9	6.2	2.9	11.0	19.7	25.5
2	11.7	357.2	1.2	359.1	342.7	335.6	355.0	346.8	339.0	0.7	341.5	343.3	333.9	296.6	309.9	278.6	289.2	263.2	258.1	253.0	264.2	279.3	288.9	304.9
3	349.3	25.2	32.4	153.0	252.9	284.4	325.9	331.8	314.9	337.1	342.5	310.6	340.3	356.3	354.7	342.8	343.7	349.6	335.0	310.9	290.2	283.4	317.2	332.9
4	349.7	358.9	348.7	354.9	343.8	341.8	359.7	352.2	359.2	356.3	332.3	351.8	5.2	1.7	359.1	8.7	7.0	6.3	3.1	10.7	6.0	2.6	1.8	4.8
5	3.8	3.4	354.6	353.6	1.2	359.9	356.3	359.8	354.3	354.1	356.1	352.7	348.3	349.2	347.5	342.3	345.4	342.5	341.3	344.6	347.4	347.2	344.9	343.8
6	347.2	339.4	337.1	341.2	346.1	351.9	350.6	344.4	346.9	357.3	353.8	350.4	351.0	353.3	350.7	348.7	351.8	352.2	351.8	347.6	346.3	348.5	352.2	1.5
7	5.8	3.8	6.8	6.4	7.1	5.7	7.4	9.0	8.1	5.0	358.9	345.9	352.3	359.5	1.2	354.2	5.5	357.1	351.4	1.2	353.1	356.8	4.8	3.9
8	359.8	23.0	23.8	13.0	8.1	1.4	353.3	5.2	7.8	12.3	1.1	13.6	17.0	19.1	8.2	358.5	359.2	354.6	2.7	356.4	341.5	359.2	4.1	357.7
9	359.7	351.8	356.2	355.8	359.3	358.9	2.4	356.5	358.1	358.8	0.8	0.3	352.9	350.2	345.9	344.7	349.9	347.0	345.4	341.5	342.3	344.5	345.1	340.8
10	342.1	343.0	347.7	349.1	342.6	346.0	345.9	348.9	344.0	348.0	352.4	0.6	354.7	354.1	357.6	356.4	347.5	350.1	353.7	358.3	358.1	356.6	357.4	346.3
11	340.8	335.3	341.6	355.6	1.0	357.5	356.2	349.4	357.3	348.0	346.7	346.8	348.4	356.5	349.2	348.4	350.8	0.5	4.7	7.2	6.8	5.1	6.5	10.6
12	13.6	10.4	7.0	8.9	6.3	7.8	9.3	9.6	22.6	19.7	18.8	20.3	21.0	17.7	13.3	15.2	3.4	5.6	357.1	359.0	352.0	355.3	6.3	5.7
13	353.3	352.8	355.2	3.7	351.8	355.6	356.6	358.1	1.0	0.8	5.0	2.6	355.9	358.1	358.5	355.7	351.1	358.1	359.5	7.0	14.6	9.2	24.3	7.9
14	19.4	15.8	32.2	51.9	0.0	0.0	106.8	129.9	148.1	153.9	149.9	145.0	139.4	134.3	140.8	146.2	146.4	143.6	146.7	139.3	126.6	124.0	124.6	127.1
15	125.9	122.1	123.9	134.3	141.0	148.6	151.5	158.0	150.7	155.5	154.4	150.4	151.5	147.4	147.5	147.1	149.9	147.5	150.9	147.7	152.0	152.8	153.7	158.2
16	164.7	172.3	190.0	226.9	246.3	246.8	239.1	237.5	239.6	237.8	229.2	223.1	224.3	223.6	218.4	209.0	205.2	180.7	160.4	158.4	152.4	150.5	149.4	132.9
17	122.9	116.4	136.6	140.8	128.0	123.7	118.8	117.3	109.5	104.2	102.2	100.9	98.3	98.6	101.3	106.3	112.6	122.4	136.1	148.2	153.3	152.1	153.2	150.0
18	157.4	152.6	151.5	159.1	157.6	163.6	171.1	176.4	170.6	169.8	164.1	168.6	179.5	213.6	222.6	0.0	0.0	0.0	0.0	0.0	164.4	123.3	140.2	146.8
19	151.2	149.0	146.6	154.3	152.4	144.5	141.0	139.0	145.4	140.4	135.5	127.7	129.1	124.2	115.8	111.6	113.1	113.0	111.9	108.2	104.7	104.7	104.8	104.8
20	104.6	104.3	103.8	103.1	102.5	102.7	102.6	102.5	102.1	101.9	101.5	100.5	100.8	100.9	100.7	100.2	100.1	100.1	100.1	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	100.2	0.0	0.0	0.0	0.0	100.2	100.2	100.2	100.1	99.8	99.2	99.7	100.2	99.1	101.5	100.3	100.6	101.4	103.1
22	103.1	103.0	103.2	102.8	102.9	103.4	103.8	103.7	103.5	103.6	103.7	103.5	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3
23	103.3	103.3	103.3	103.3	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1
24	103.1	103.1	103.2	103.1	103.1	103.1	103.1	103.1	100.7	100.6	100.7	101.1	101.4	101.5	101.5	101.7	101.7	101.6	101.5	101.5	101.4	101.2	101.2	101.2
25	100.9	100.6	100.3	100.1	100.0	99.9	100.0	99.8	102.8	212.9	220.1	219.6	261.6	213.4	203.2	217.8	236.6	274.1	293.3	359.7	4.9	6.3	6.6	3.2
26	1.8	5.7	1.6	2.7	3.4	11.8	12.3	10.9	7.5	8.7	5.2	10.2	32.7	69.1	93.1	93.1	94.1	95.3	99.3	99.5	99.9	100.3	100.3	100.6
27	101.4	101.8	102.1	102.2	103.0	103.0	102.7	102.6	103.9	103.8	104.4	104.3	104.4	104.4	104.1	104.1	104.2	104.1	104.0	104.1	103.9	103.9	104.5	105.4
28	105.7	105.4	104.7	104.6	104.4	104.4	104.1	104.7	104.9	103.7	103.5	103.5	103.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	27.3	28.9	28.9	26.3	26.3	35.4	37.9	35.6	40.7
30	50.5	38.0	32.0	11.5	7.3	3.6	10.7	4.6	0.8	355.9	351.0	5.9	7.1	8.5	355.9	354.1	350.1	348.8	339.8	350.2	349.1	354.3	347.1	346.7
31	341.4	351.1	347.4	341.3	343.0	345.7	342.5	316.9	300.5	308.0	281.9	229.4	224.2	230.2	212.9	0.0	218.6	232.4	229.5	211.8	214.9	204.6	0.0	0.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	151.3	0.0	136.3	130.5	146.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	57.8	0.0	357.8	1.8	1.7	358.4	354.4	346.2	345.2	344.2	341.9	343.6	341.2	334.2	335.7	343.5	347.0	350.8
3	351.8	355.7	348.5	353.6	356.8	3.2	3.5	14.9	8.8	359.9	9.3	7.7	2.7	11.6	16.5	17.2	16.8	23.2	23.8	18.2	40.2	41.6	51.5	61.4
4	120.8	128.4	119.0	103.9	113.0	108.3	99.9	101.6	89.3	87.1	87.6	108.1	113.6	109.7	109.5	57.8	15.9	5.1	3.7	15.2	11.2	1.2	353.5	343.9
5	349.6	351.3	14.6	5.3	6.5	6.5	9.9	26.9	4.1	6.4	4.3	1.1	1.3	5.2	8.4	10.2	13.2	16.8	21.2	27.3	41.7	52.0	48.1	48.7
6	69.6	90.8	132.5	135.0	125.3	127.1	130.2	128.7	104.3	32.1	354.9	353.9	357.0	8.1	353.5	356.1	353.9	12.1	13.9	6.0	5.1	14.4	11.9	359.2
7	7.3	9.2	357.7	0.9	2.3	9.9	16.6	2.2	16.2	11.4	7.2	12.6	18.6	24.6	25.0	18.4	23.4	22.5	25.7	25.2	21.8	15.4	19.7	19.7
8	24.0	47.7	90.3	101.0	123.5	134.0	117.5	120.3	105.0	104.3	102.5	102.7	98.1	90.5	87.6	88.0	96.4	90.7	86.5	94.0	86.9	69.3	64.2	66.8
9	61.6	67.1	66.2	63.1	66.0	60.7	62.8	62.9	54.0	55.9	49.0	50.4	60.0	101.4	114.4	93.6	323.4	257.7	10.5	28.4	9.8	327.0	310.2	233.1
10	195.3	230.8	272.0	240.2	237.8	237.1	244.9	233.6	219.9	186.7	179.5	173.7	173.7	164.2	150.6	148.0	141.2	139.0	145.6	143.9	138.5	133.5	126.8	128.0
11	138.4	135.9	133.9	144.6	151.4	156.6	157.1	144.8	150.5	155.5	157.4	157.9	157.4	157.9	148.0	168.6	173.9	176.3	208.5	213.3	217.0	208.0	198.2	203.6
12	192.3	174.8	204.3	213.0	231.0	258.7	286.1	306.6	305.0	320.4	359.8	2.6	10.3	5.3	31.3	32.5	41.0	46.2	52.1	60.7	87.3	91.2	106.8	115.9
13	118.4	129.7	131.3	122.4	110.2	108.4	107.2	106.0	107.5	110.2	113.9	116.5	115.2	115.6	115.6	115.0	116.6	118.2	117.4	119.0	116.1	115.1	119.1	117.9
14	116.2	116.1	116.6	120.2	122.9	124.2	129.3	175.1	199.4	220.7	223.4	221.4	217.1	211.8	209.0	209.5	208.5	209.8	208.0	208.9	218.2	228.5	247.2	255.0
15	253.6	269.3	259.0	258.5	265.6	282.1	302.2	285.4	272.1	279.2	297.6	304.4	310.0	310.1	310.4	311.1	248.4	195.2	105.4	58.8	107.7	131.2	127.8	132.0
16	130.5	133.2	127.1	123.6	119.2	113.5	112.7	111.4	105.9	96.0	95.9	93.1	97.2	98.8	100.8	94.5	94.1	120.4	145.1	149.1	153.7	153.3	156.1	152.0
17	149.8	149.7	149.5	149.4	145.3	120.1	112.2	108.3	102.4	86.7	72.3	54.0	43.5	50.4	46.4	53.0	71.9	108.9	117.0	123.0	126.2	125.9	129.0	128.1
18	122.7	117.7	114.2	112.8	110.5	112.0	111.7	115.5	116.8	120.3	126.9	124.2	123.1	123.7	123.5	126.2	129.8	133.9	134.8	132.7	124.5	125.9	120.5	120.0
19	116.4	114.8	97.2	65.0	35.8	33.3	25.0	42.0	26.2	24.6	28.8	40.8	43.4	46.7	48.6	56.5	51.2	0.0	0.0	0.0	80.0	91.5	86.3	99.7
20	109.3	115.7	123.7	130.1	127.6	124.3	129.4	129.3	129.6	122.7	122.6	114.4	107.4	107.5	108.2	103.8	92.3	58.4	54.2	48.0	40.3	31.6	32.8	47.6
21	51.3	51.6	40.3	40.6	45.7	44.5	39.4	40.8	40.9	43.0	44.7	50.4	50.8	55.1	66.8	55.7	50.1	66.6	90.9	80.7	80.9	70.5	70.0	67.2
22	69.1	65.7	81.9	87.3	100.4	102.0	97.0	82.8	80.7	85.4	91.5	84.8	84.0	96.3	108.8	118.7	129.3	125.0	126.7	129.5	133.7	131.8	135.0	134.8
23	136.6	146.9	140.2	143.4	121.7	109.4	108.3	98.4	79.6	79.4	79.2	78.9	79.0	0.0	0.0	0.0	20.0	10.6	11.9	5.9	359.5	3.1	357.7	9.4
24	11.0	8.2	9.6	7.5	8.1	12.8	3.0	3.7	7.6	8.3	10.8	2.6	7.7	4.5	2.8	4.6	2.9	5.8	1.0	1.7	354.3	354.8	351.9	3.2
25	3.2	7.7	357.1	356.2	351.9	353.8	350.5	357.7	11.9	22.6	36.8	45.8	61.1	56.4	49.0	51.6	62.0	63.1	60.8	58.8	58.6	60.3	63.4	82.0
26	67.0	67.6	86.1	92.3	93.3	78.7	74.0	70.7	72.2	56.6	50.7	56.4	55.5	55.7	54.1	46.7	44.6	29.2	21.3	21.4	12.3	14.2	28.9	31.2
27	12.8	21.4	31.9	16.9	43.8	90.9	139.6	150.7	99.4	102.3	113.4	125.0	137.1	150.8	77.1	72.4	86.5	57.2	66.5	68.0	68.2	62.2	53.5	56.3
28	59.9	52.3	53.6	60.0	57.7	56.8	55.1	66.4	58.6	61.6	50.7	54.7	52.0	46.2	49.4	53.5	53.3	355.7	13.0	333.5	338.7	308.9	351.7	40.9
29	35.3	21.0	356.4	344.1	341.3	322.2	338.8	10.9	12.4	13.0	13.7	16.1	30.1	2.5	356.2	7.0	17.4	25.6	16.6	351.2	0.1	10.8	18.8	18.1

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	3.4	359.9	51.4	117.3	142.7	95.4	105.4	103.6	113.1	109.4	107.3	102.3	101.1	110.2	108.3	114.2	114.8	107.7	88.3	68.1	82.4	94.5	88.4	88.4
2	92.7	98.3	101.1	105.4	111.4	110.6	110.4	123.1	135.5	142.9	146.0	149.3	141.6	140.4	140.4	141.9	144.5	128.3	122.3	135.4	131.4	127.8	121.0	124.6
3	124.0	132.0	139.6	132.3	125.8	122.7	124.2	127.3	125.4	121.0	119.9	119.6	121.8	124.4	125.3	120.1	123.3	127.4	134.1	128.9	128.5	134.2	136.1	129.2
4	129.9	129.1	124.4	126.2	122.5	115.2	121.4	118.7	116.7	118.1	119.6	119.0	118.4	120.3	119.0	122.7	123.4	124.0	122.7	117.8	112.0	114.2	115.5	114.3
5	110.6	106.2	108.7	105.8	104.6	107.2	101.8	103.6	100.4	101.7	108.9	107.2	107.7	112.8	116.2	119.0	116.9	115.8	121.7	121.9	122.7	125.9	126.9	130.8
6	131.2	132.4	133.0	132.1	134.2	130.5	124.6	126.7	129.5	133.2	135.7	130.9	126.2	131.0	131.0	124.7	126.6	120.3	114.2	96.2	57.4	37.3	42.0	43.6
7	39.4	41.5	38.9	17.8	5.1	6.0	13.5	16.0	4.9	346.0	348.3	341.1	310.5	326.7	295.4	258.8	237.3	226.8	221.7	216.3	212.7	215.9	206.8	217.0
8	219.4	214.1	204.3	195.6	190.1	168.1	160.0	153.7	133.1	110.7	105.2	116.8	108.3	98.1	80.6	63.1	38.1	46.4	57.4	53.9	47.3	45.4	49.2	39.7
9	36.4	34.9	31.0	33.9	39.6	27.5	35.0	38.9	34.6	32.1	37.7	44.9	31.4	20.4	359.6	6.0	351.8	358.3	359.8	357.2	7.7	238.1	312.5	117.0
10	232.0	224.4	204.3	205.3	220.3	226.8	217.9	217.1	216.9	226.6	226.8	225.1	224.6	222.4	219.0	216.6	215.4	217.0	221.8	223.4	229.1	227.9	219.2	221.8
11	225.9	230.2	230.9	223.6	228.3	233.0	229.9	221.8	217.5	235.7	241.3	248.2	231.1	227.5	238.0	250.7	249.5	248.4	256.7	259.6	269.0	260.2	245.6	239.1
12	241.0	258.8	266.4	275.1	282.2	293.8	43.2	45.3	50.7	36.2	25.3	20.6	0.0	13.7	0.0	0.0	347.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	340.5	341.1	340.4	347.6	344.1	342.5	341.6	0.0	311.9	298.7	282.7	296.0	298.5	299.2	295.3	314.2	314.9	309.1	275.2	271.5	273.1	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	259.1	268.6	266.5	253.9	243.8	217.5	210.5	190.0	166.4	161.0	158.5	159.4	156.1	145.4	140.0	137.5	132.3	126.1
15	127.1	130.5	132.7	126.9	125.5	118.9	117.5	119.3	125.0	128.0	126.8	126.5	123.7	126.2	129.9	127.1	124.8	126.3	125.5	127.3	127.0	123.0	123.3	124.3
16	120.4	119.9	125.0	125.4	115.6	106.1	93.9	110.7	117.0	118.6	112.6	113.4	112.5	105.5	96.8	89.3	37.6	14.4	16.0	7.1	5.6	2.9	1.3	0.4
17	359.7	5.3	359.4	3.4	4.4	359.9	357.1	341.4	354.4	348.0	335.2	303.6	262.6	248.0	244.6	240.6	228.4	208.5	212.0	209.5	204.2	189.3	160.3	159.2
18	159.2	218.4	347.1	345.7	348.8	352.2	352.3	343.9	340.3	334.5	332.3	343.6	334.2	335.7	337.3	330.2	324.6	327.4	332.4	335.3	342.0	343.1	344.5	345.0
19	344.5	344.0	350.2	350.9	346.1	343.0	347.3	344.9	345.8	345.8	344.3	343.6	344.5	344.5	344.0	342.1	344.5	345.0	334.6	337.5	341.1	345.0	346.1	346.1
20	350.8	349.3	352.2	350.3	350.7	349.0	342.1	342.2	342.2	342.2	342.2	342.4	342.4	342.2	342.1	0.0	342.3	342.6	350.3	355.9	12.4	11.5	4.4	4.5
21	9.9	10.5	14.1	20.7	32.3	29.3	28.8	33.4	37.7	41.0	47.0	53.2	54.5	61.2	52.8	41.7	38.7	31.2	29.1	9.2	13.1	12.6	19.2	27.3
22	25.3	19.4	9.0	12.2	18.4	9.2	12.4	11.7	4.8	3.9	358.6	359.6	8.2	16.0	11.3	13.5	14.4	8.4	9.3	23.4	20.5	350.8	22.0	120.3
23	235.9	268.9	330.5	336.3	357.9	8.2	350.3	325.4	344.1	331.8	321.2	343.0	353.1	342.9	333.4	332.8	326.0	336.4	337.3	340.7	348.1	348.7	358.0	3.4
24	0.4	0.0	2.5	1.6	351.9	9.1	34.5	43.2	37.1	1.1	349.9	356.1	0.6	1.9	5.1	348.3	339.2	328.5	314.7	334.7	9.4	14.9	5.0	22.1
25	359.8	66.3	95.2	121.3	120.9	131.5	134.8	140.5	143.9	148.3	154.7	156.7	169.8	162.0	167.7	175.0	342.9	4.4	350.7	343.4	343.5	346.8	355.9	3.1
26	11.1	15.3	12.9	0.1	4.4	2.5	13.3	10.6	13.0	356.7	357.4	355.0	347.0	347.0	344.6	342.5	321.9	290.0	282.9	269.9	260.0	284.7	273.7	269.2
27	281.8	281.6	279.1	273.3	288.5	304.2	282.1	265.9	261.9	242.1	250.3	246.9	248.2	270.4	280.9	295.6	310.3	310.7	312.0	314.1	322.0	325.3	324.3	330.5
28	342.3	357.4	356.4	350.7	2.1	353.9	352.0	356.0	330.8	6.8	12.3	42.6	339.6	40.6	53.4	49.9	66.7	81.0	101.9	127.5	143.8	136.4	141.9	142.6
29	149.4	158.4	150.5	147.8	142.3	147.0	140.8	140.1	133.4	132.4	133.0	132.3	134.3	132.9	128.7	126.7	125.2	129.4	127.3	133.5	131.7	130.2	125.1	125.7
30	124.5	125.0	123.9	122.6	123.0	121.5	124.0	126.8	125.0	125.6	125.6	124.1	122.7	125.0	131.3	134.0	133.4	132.6	141.3	141.1	136.9	142.6	145.7	147.9
31	146.9	146.9	143.0	140.5	137.2	138.4	146.2	133.1	135.6	132.8	127.9	134.8	134.4	133.9	135.2	129.9	126.4	123.2	124.8	130.2	128.4	127.4	125.9	126.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	124.7	123.7	124.1	124.4	127.5	132.2	129.7	130.6	131.0	129.7	131.7	134.0	134.6	130.8	131.7	130.1	128.0	129.7	132.5	134.1	140.9	145.9	172.6	178.0
2	191.8	193.4	198.3	198.7	198.8	198.8	199.0	199.3	199.3	194.8	186.7	188.0	186.2	197.4	180.1	176.7	177.8	166.6	153.6	155.9	157.5	147.1	154.4	147.0
3	147.1	149.0	161.9	165.7	172.3	171.9	167.7	170.0	166.4	174.1	170.8	163.7	156.3	140.0	138.0	134.3	137.8	132.6	118.7	119.7	127.6	124.4	124.7	126.7
4	127.3	120.8	119.1	120.8	120.4	121.7	121.4	119.9	120.8	119.2	127.0	129.4	132.0	137.8	143.3	149.9	153.8	158.6	160.0	170.0	215.6	229.3	259.4	287.6
5	289.2	310.5	337.7	343.2	331.9	334.2	349.6	287.7	315.7	324.3	338.5	347.9	305.6	269.8	272.8	287.1	289.4	313.7	336.6	335.0	330.6	324.5	321.6	323.7
6	318.7	329.5	338.7	342.1	343.7	355.1	353.1	352.9	350.5	356.9	353.5	354.7	351.7	346.1	339.4	337.6	340.5	346.0	356.1	3.0	3.2	358.1	2.1	1.8
7	6.9	10.4	5.2	3.4	360.0	2.3	3.4	1.8	1.8	355.7	357.6	353.9	340.2	339.6	334.3	331.7	327.4	320.3	316.1	308.6	313.7	318.8	320.7	333.8
8	356.4	351.1	354.7	21.1	26.0	32.4	45.2	297.5	199.2	182.0	183.4	182.9	192.7	189.5	203.6	200.7	193.1	214.9	219.4	225.6	249.0	287.4	296.8	314.9
9	328.6	325.4	302.3	314.2	333.0	334.7	335.2	342.1	344.5	351.1	352.2	343.4	297.5	292.9	286.5	289.6	305.2	319.5	317.7	322.7	330.5	319.2	312.3	313.8
10	327.9	340.8	342.0	346.2	345.9	346.4	351.6	349.0	353.7	0.9	1.3	345.4	352.8	348.5	328.0	306.4	312.2	312.5	299.2	310.7	318.8	311.3	320.1	323.7
11	329.7	355.2	10.8	3.8	355.0	355.9	349.3	352.2	346.0	353.1	1.9	355.7	336.1	335.7	333.6	333.9	333.5	325.8	325.2	309.6	307.4	307.8	302.9	302.8
12	310.3	312.2	313.6	307.6	332.7	329.4	320.8	327.5	326.9	332.7	326.1	320.8	329.2	319.7	319.7	313.7	312.4	331.0	329.0	288.5	278.5	287.6	290.4	263.3
13	199.7	203.4	182.3	173.0	184.8	191.5	195.2	191.3	191.2	184.4	183.6	193.7	197.4	206.3	210.7	215.3	214.5	0.0	0.0	0.0	0.0	207.8	220.4	224.6
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	357.4	350.2	347.5	350.6	349.9
16	352.6	354.0	351.6	351.9	352.8	353.8	352.0	41.4	40.2	58.5	28.2	103.4	104.4	105.0	117.7	129.8	97.0	261.3	256.7	254.3	244.3	247.2	248.5	255.8
17	256.5	261.3	266.2	261.3	268.1	242.3	165.9	277.8	12.4	339.4	236.4	219.1	213.2	212.1	217.9	217.5	213.6	210.0	211.5	219.2	208.9	211.9	198.5	199.8
18	214.3	219.5	224.4	226.9	226.5	221.7	215.4	183.4	161.9	165.6	159.5	162.5	162.6	169.1	164.1	162.9	164.8	164.4	161.2	157.8	163.4	163.3	163.3	161.0
19	161.0	153.8	151.8	143.3	139.5	141.9	138.7	142.5	134.6	138.1	127.7	138.0	147.2	141.0	142.7	147.5	143.5	137.8	132.6	129.0	127.0	127.7	128.6	142.7
20	143.4	143.2	138.8	133.8	140.4	144.1	140.8	120.5	130.6	129.4	131.0	131.3	131.8	126.0	133.3	134.8	138.7	148.0	149.3	155.2	142.7	144.4	150.6	153.4
21	151.6	149.7	147.4	148.9	144.6	141.7	145.2	148.2	147.8	135.6	130.6	147.6	148.4	147.1	155.0	161.9	146.9	131.5	133.7	129.2	131.2	116.5	122.4	124.6
22	119.8	120.3	122.8	131.5	132.3	131.7	140.2	136.4	130.8	116.6	119.3	133.1	141.9	144.3	140.8	139.3	139.2	129.6	122.0	122.6	126.1	118.0	21.3	4.8
23	359.6	347.2	336.8	358.8	1.6	319.7	314.7	340.0	339.5	339.5	343.1	346.7	342.1	333.5	319.7	306.0	296.2	274.9	243.4	236.1	240.7	226.9	219.8	219.4
24	219.0	217.5	215.2	217.6	207.7	203.8	242.8	244.5	234.9	244.4	229.4	213.0	226.2	212.8	209.5	215.7	230.8	233.9	232.6	222.4	206.8	215.4	217.0	220.6
25	217.8	219.6	267.0	303.8	323.5	313.8	321.4	328.1	319.8	324.9	328.8	327.2	326.5	327.3	323.8	324.1	331.2	334.0	335.5	333.3	337.8	339.8	343.2	343.3
26	347.8	347.7	352.8	359.2	0.9	357.3	357.5	358.3	356.0	357.8	353.5	355.5	1.0	359.9	1.3	1.0	0.0	1.6	0.9	359.3	359.5	358.4	2.8	4.6
27	1.8	0.6	357.7	355.7	347.9	351.5	351.4	350.4	351.1	356.3	355.5	352.9	350.7	347.7	350.2	350.6	353.9	358.3	352.1	353.1	4.6	6.2	355.2	8.0
28	4.7	10.3	11.7	10.5	18.1	7.3	331.3	342.2	339.9	353.0	295.5	259.7	259.8	259.9	300.0	306.7	315.4	309.8	314.0	311.9	306.0	313.8	309.4	301.4
29	310.0	323.2	331.0	335.5	329.7	338.9	349.7	351.8	359.5	345.8	338.6	347.8	351.4	356.7	350.1	342.4	342.3	346.6	348.8	351.4	355.6	354.9	0.1	6.8
30	5.5	8.3	10.4	4.0	360.0	2.9	4.6	5.0	1.6	11.4	10.7	349.9	357.8	358.3	348.9	350.8	351.2	17.1	2.4	356.4	356.3	0.8	3.6	11.9

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	15.9	12.8	10.4	14.1	9.5	2.0	7.3	3.2	358.7	2.8	3.4	346.4	334.4	333.8	333.6	330.5	341.5	346.6	354.3	355.8	358.1	356.9	351.5	344.7
2	345.2	2.1	9.8	10.1	10.6	5.6	357.5	0.0	358.1	359.6	1.1	4.1	4.3	2.9	260.4	230.0	277.2	274.4	257.5	290.1	32.9	119.2	260.0	254.8
3	252.5	158.2	149.7	141.1	146.5	150.7	145.4	141.1	129.4	98.7	106.6	107.3	108.0	109.8	91.5	109.6	130.8	116.4	82.4	67.7	72.9	112.7	98.8	61.2
4	69.0	75.2	68.2	65.3	64.1	66.9	66.4	67.4	65.4	64.7	71.1	67.9	70.7	66.4	69.0	60.8	69.8	75.4	71.3	40.0	286.3	14.0	2.2	316.5
5	280.4	295.0	332.0	310.0	338.2	335.5	356.9	348.5	352.1	328.0	268.6	275.0	306.4	289.3	259.7	228.2	196.3	188.8	169.5	180.6	170.5	165.3	167.0	179.5
6	189.6	192.3	167.7	168.3	153.9	149.0	155.1	137.7	123.2	132.5	131.1	132.2	132.7	131.3	127.9	122.4	122.7	117.2	114.4	115.6	114.3	116.8	118.4	118.7
7	116.9	112.7	118.7	120.1	120.9	123.7	123.4	122.6	120.5	122.2	123.1	123.7	124.0	125.5	124.5	123.6	121.3	118.4	121.6	118.9	116.7	119.3	116.4	114.1
8	116.8	116.7	114.7	114.8	117.9	119.5	116.4	113.0	115.3	119.3	116.8	118.3	119.2	120.7	119.7	116.4	117.9	117.1	116.2	113.5	113.0	109.5	107.2	109.0
9	108.4	104.2	100.4	104.6	105.0	95.2	106.1	110.1	114.5	121.6	117.8	113.7	116.1	122.9	119.3	120.6	124.9	133.1	131.6	122.7	116.6	118.3	77.7	74.2
10	44.0	341.9	351.2	355.9	348.6	328.2	332.3	353.5	34.3	70.8	88.7	114.6	144.5	152.3	157.6	158.2	139.9	146.9	146.3	148.1	127.1	139.8	128.8	118.7
11	125.8	121.0	117.6	117.4	113.6	107.2	114.1	114.0	108.5	110.0	113.0	110.9	111.9	109.5	105.3	106.5	105.3	107.3	105.6	107.1	105.2	98.9	95.7	100.4
12	101.9	100.1	98.6	91.6	98.9	95.1	95.3	89.5	91.8	96.1	103.3	108.5	109.5	114.5	118.8	118.3	109.1	108.3	104.3	104.4	105.3	105.5	104.2	111.3
13	115.5	116.4	118.3	123.9	131.2	138.2	151.4	144.6	136.3	134.7	125.0	120.1	128.2	128.9	123.5	126.5	126.5	124.8	121.4	122.6	120.5	120.0	122.6	122.3
14	119.5	108.1	102.5	81.6	47.5	51.3	53.8	52.1	48.3	38.8	34.9	23.1	22.7	27.4	38.4	59.9	58.0	64.2	64.4	73.3	74.8	71.6	72.9	90.1
15	130.0	222.9	210.1	193.9	197.1	170.4	165.6	168.3	164.2	168.6	173.8	169.0	166.7	175.6	178.0	192.5	179.5	170.3	165.9	157.4	159.9	162.6	168.8	173.1
16	191.7	195.6	192.8	190.4	201.4	196.6	179.6	158.0	172.8	149.4	126.9	120.8	142.7	133.3	133.9	138.5	148.0	147.8	159.0	159.7	166.5	161.1	184.2	271.6
17	329.1	322.9	336.8	357.2	352.4	1.5	4.4	0.9	1.8	1.8	6.0	23.5	26.8	31.5	101.8	133.7	132.2	136.3	133.8	158.9	157.6	154.8	155.6	159.6
18	148.8	126.3	128.9	146.4	149.5	156.3	149.3	152.2	155.7	146.1	140.4	150.0	159.0	158.7	160.2	156.6	160.6	141.4	136.5	144.2	136.6	138.4	157.1	152.0
19	153.6	160.6	159.9	158.4	160.4	161.2	176.4	189.3	330.1	343.5	16.8	6.3	349.9	324.9	346.5	297.0	299.5	315.8	317.6	314.9	298.9	312.4	317.9	321.1
20	325.3	332.9	336.3	339.5	352.4	354.2	3.2	7.9	13.3	20.7	18.2	18.4	22.9	51.4	97.9	108.9	139.3	142.4	146.7	153.4	154.9	157.4	158.6	162.0
21	163.7	159.4	145.9	133.4	148.8	109.8	67.2	86.4	62.2	95.7	124.0	125.8	133.9	148.1	157.9	175.6	194.8	197.9	208.3	219.8	229.6	228.5	228.7	232.3
22	237.3	241.7	235.2	233.7	233.9	235.3	268.9	259.1	278.3	33.5	51.2	37.9	65.1	78.6	93.1	132.9	128.3	125.2	122.6	121.6	114.9	110.8	109.7	108.3
23	113.0	112.1	107.5	111.5	112.8	115.0	116.6	116.5	119.3	116.2	107.2	112.3	112.5	112.5	116.1	117.5	119.1	120.9	119.8	121.3	121.5	125.1	129.7	133.3
24	134.8	134.3	133.5	135.3	134.6	132.5	130.8	132.5	133.2	135.9	134.3	132.5	130.5	132.6	131.4	126.5	130.6	133.8	152.2	174.9	167.0	170.5	193.4	192.2
25	193.8	165.2	161.4	149.1	147.5	157.3	164.6	167.8	170.2	168.9	165.9	168.2	160.7	165.3	163.6	164.8	183.7	200.6	202.2	194.3	190.4	186.6	192.5	195.1
26	204.2	205.6	214.0	218.9	228.1	229.6	227.9	224.0	218.5	212.4	212.8	214.8	229.9	224.4	239.7	241.2	250.6	248.4	267.5	252.7	243.1	240.0	239.1	248.4
27	260.0	268.4	270.0	281.0	298.0	318.7	312.3	302.1	243.4	254.2	295.4	275.6	278.6	290.2	300.9	299.2	300.8	298.4	285.3	280.5	281.3	287.8	295.7	300.7
28	278.9	272.8	273.0	290.5	291.9	295.2	307.1	311.2	297.9	281.2	255.7	283.0	299.2	276.8	279.9	275.2	287.3	299.7	297.1	312.2	309.7	310.8	321.9	337.6
29	345.6	350.4	349.8	355.8	354.8	353.7	352.6	358.2	3.4	5.7	10.6	8.3	1.8	0.3	355.3	358.3	356.4	354.7	0.9	6.6	356.8	359.1	2.8	3.7
30	6.3	8.8	52.9	102.7	152.0	144.1	134.8	146.9	140.3	138.1	127.7	125.8	124.9	132.6	136.2	134.9	135.4	135.9	133.6	123.8	119.9	113.6	109.6	118.8
31	125.7	129.9	129.0	125.4	128.0	129.0	126.6	123.4	121.4	120.3	120.1	119.5	114.7	117.5	118.7	121.6	119.9	119.4	120.8	113.7	122.9	124.6	128.1	130.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	121.4	120.0	119.6	116.0	109.5	108.7	106.0	105.1	110.7	109.3	109.3	108.4	111.0	113.0	113.4	114.5	116.5	118.2	119.3	117.1	114.3	100.3	112.5	114.7
2	107.4	99.7	93.4	89.7	94.5	89.1	93.1	89.2	97.0	92.0	94.8	102.2	97.3	73.5	110.8	111.9	112.8	125.9	151.3	158.6	163.8	150.0	153.8	159.9
3	16.3	5.1	35.4	43.7	54.0	65.6	74.0	86.8	106.6	114.1	64.3	34.6	158.7	155.7	161.8	155.4	158.1	150.7	152.6	151.3	150.6	149.0	146.3	139.9
4	141.1	143.4	144.9	141.4	146.4	146.8	144.9	138.4	135.4	131.2	134.0	138.2	137.8	130.1	135.0	139.0	141.1	142.2	147.1	146.2	143.4	150.6	144.6	151.6
5	144.1	145.1	143.3	144.8	134.2	134.2	125.6	121.6								108.7	109.3	110.9	118.5	122.2	128.9	104.2	359.8	303.8
6	316.6	322.7	344.9	338.1	329.2	342.1	344.7	343.3	3.2	346.8	327.9	328.9	319.5	347.9	337.2	336.9	299.9	301.6	298.6	296.5	284.9	304.2	316.9	309.3
7	302.0	292.1	318.6	324.4	327.3	327.0	337.5	344.5	354.7	352.8	332.9	336.1	327.5	345.1	330.3	329.3	207.8	210.8	254.3	236.3	234.3	226.5	226.6	226.1
8	219.4	215.2	209.4	208.9	205.3	199.6	205.5	204.7	220.8	248.0	222.4	211.2	203.2	191.1	201.9	209.7	209.7	212.0	212.9	210.9	211.6	211.6	211.9	223.4
9	223.4	224.3	220.0	222.8	227.1	218.0	216.3	226.3	223.5	223.1	224.8	235.0	254.8	247.5	243.8	239.7	236.9	236.9	230.4	227.3	238.1	236.1	239.2	233.1
10	232.7	234.2	239.8	246.7	245.2	244.1	259.3	267.2	259.8	251.3	281.5	251.5	242.1	199.6	252.8	213.9	169.6	154.7	200.8	182.1	171.1	181.7	188.9	213.2
11	232.5	196.2	182.6	183.8	132.1	129.1	244.3	99.9	98.3	172.9	215.3	190.8	242.7	215.6	219.4	217.8	219.1	222.1	218.5	223.6	224.8	223.0	223.2	223.1
12	225.7	221.2	227.8	228.2	223.3	203.7	229.0	230.4	219.6	208.2	195.2	214.7	218.9	240.5	221.7	256.2	225.4	215.3	224.1	215.2	243.6	252.7	242.9	256.6
13	328.1	333.1	310.5	307.8	315.1	322.2	315.1	303.7	307.2	339.0	335.2	339.6	336.1	297.7	317.4	338.3	281.2	277.2	287.6	277.0	248.6	237.7	245.2	236.7
14	240.4	239.2	242.3	250.8	250.3	255.6	264.1	271.7	287.1	298.3	290.6	298.2	260.3	303.0	254.6	220.5	230.8	202.8	203.2	171.1	171.0	217.9	223.6	224.4
15	229.0	232.2	231.2	229.7	235.4	233.5	235.9	270.7	283.2	236.5	147.0	156.8	157.1	181.7	205.9	213.4	217.5	225.4	225.8	201.1	203.1	205.6	213.7	206.8
16	193.9	207.0	189.9	211.8	276.8	322.6	11.5	17.7	356.9	330.3	337.9	332.9	336.4	234.1	218.1	245.4	245.5	235.6	224.6	227.6	243.3	257.4	274.9	286.1
17	293.1	294.7	299.9	317.3	347.7	336.2	10.9	3.6	7.5	354.6	341.2	313.3	43.1	153.7	185.0	169.2	170.0	185.1	177.6	147.8	146.9	150.1	157.7	157.6
18	195.1	231.7	237.6	251.7	256.3	248.8	239.7	219.9	222.1	217.0	220.5	224.3	225.0	211.6	194.2	187.2	190.6	207.4	224.9	236.5	229.9	236.2	260.1	244.9
19	240.6	244.6	252.8	242.0	235.2	224.1	211.8	215.8	179.6	208.1	228.8	229.4	223.5	219.0	206.8	198.1	167.1	174.3	189.4	186.6	189.3	189.9	174.7	175.8
20	176.7	176.5	181.6	164.8	145.4	119.0	55.3	63.1	83.3	129.1	131.3	136.3	142.8	140.3	139.1	136.7	139.4	138.5	143.5	139.3	141.8	137.1	139.7	137.2
21	137.3	153.2	152.2	138.6	136.7	134.7	143.7	155.7	145.2	149.3	106.4	60.2	9.0	15.7	26.1	47.8	70.9	120.2	135.4	157.2	153.8	145.1	126.6	149.7
22	144.5	145.9	157.3	156.3	152.5	149.2	165.4	156.8	160.8	163.0	166.6	159.4	156.3	150.0	152.9	145.3	145.7	149.7	148.8	145.3	145.3	145.7	150.6	148.0
23	145.2	146.8	141.5	137.1	134.5	135.8	134.7	131.0	132.1	131.6	126.9	128.6	126.4	131.7	133.3	141.2	143.3	139.3	144.8	142.3	148.8	157.6	158.2	146.4
24	155.3	151.9	137.3	136.8	130.5	129.2	127.9	122.6	113.1	120.3	122.2	126.2	123.8	125.1	121.8	122.4	124.7	121.3	115.2	115.4	113.0	110.1	109.4	108.6
25	113.8	115.7	119.2	118.0	116.7	116.3	113.8	111.8	110.0	110.5	110.3	107.6	109.6	105.0	107.0	107.1	111.2	109.9	109.1	112.4	117.2	113.4	98.6	99.3
26	95.7	106.1	111.6	109.2	86.2	66.1	69.2	65.0	77.2	77.1	64.5	58.7	53.3	100.6	103.7	74.5	68.6	78.2	95.6	79.5	101.1	110.7	122.9	114.5
27	116.7	104.8	81.9	82.7	92.7	116.0	119.0	110.7	112.3	117.7	124.6	121.1	124.2	123.5	122.5	123.8	130.6	140.6	146.1	142.3	146.1	155.0	148.8	146.1
28	149.7	165.8	173.3	212.9	228.2	232.1	231.1	231.6	223.9	211.8	218.2	224.4	222.9	231.6	229.2	214.8	211.6	213.5	213.0	198.0	191.1	175.4	175.1	185.5
29	181.8	165.3	168.4	163.4	164.4	170.0	186.2	193.5	205.1	199.8	196.8	157.7	160.8	146.6	141.4	138.5	137.7	135.4	137.2	140.0	139.2	146.0	148.1	150.8
30	153.6	153.0	153.2	154.9	154.6	159.1	162.7	169.1	182.2	335.3	325.9	2.4	49.0	354.7	75.3	86.9	326.0	228.8	213.6	214.0	261.7	292.3	285.8	268.7

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	243.7	231.2	222.8	198.2	229.9	240.4	2.7	34.7	50.2	55.0	82.0	114.1	127.6	119.9	123.9	122.2	133.2	133.6	126.0	130.0	126.6	124.3	123.3	130.5
2	131.5	127.6	127.4	116.0	117.7	113.9	109.9	121.5	123.1	123.4	118.1	120.4	125.7	122.9	119.5	119.5	124.5	122.9	126.6	131.0	132.1	130.6	126.5	124.6
3	113.1	118.9	110.3	109.5	104.8	110.2	106.6	115.6	115.3	121.9	124.6	117.6	107.2	113.8	106.3	109.3	110.7	127.2	113.8	99.5	111.8	98.9	109.1	116.3
4	119.7	121.1	115.5	103.8	97.5	87.1	83.0	80.9	82.2	72.8	106.6	94.8	87.8	72.2	135.3	155.9	117.9	63.2	164.3	161.3	159.7	156.9	133.4	94.6
5	89.6	108.8	99.4	114.4	118.3	127.6	125.5	137.8	138.8	144.9	125.4	118.1	7.4	33.5	283.0	168.0	158.1	157.1	159.2	162.7	150.8	142.9	152.7	165.2
6	146.9	139.7	136.2	101.3	68.8	93.8	97.7	90.5	87.8	88.9	122.1	138.4	139.2	144.1	149.3	155.6	157.0	152.4	155.0	152.7	154.8	159.5	156.1	157.0
7	157.8	150.8	153.6	155.8	152.2	141.9	137.4	136.9	138.1	142.8	141.6	146.6	149.4	148.3	148.9	145.5	151.6	152.3	155.1	153.9	155.2	160.9	161.0	166.4
8	173.1	175.8	177.4	192.1	220.5	229.6	225.5	225.0	219.7	214.5	225.7	220.7	197.3	189.4	181.4	185.6	186.3	186.2	200.4	197.0	190.3	192.8	185.9	190.6
9	168.4	153.9	147.6	142.5	137.1	144.9	139.7	141.2	140.1	138.7	132.7	141.0	147.9	148.1	142.0	145.1	141.6	133.7	137.1	140.1	142.6	144.8	142.8	144.4
10	144.9	148.7	147.1	153.3	141.8	129.9	132.4	136.8	136.2	137.8	133.6	146.4	151.2	149.9	141.6	147.9	140.6	139.0	138.2	138.3	145.8	145.9	161.9	131.6
11	137.8	138.2	140.5	140.3	131.8	146.3	151.5	158.9	142.3	146.4	150.7	148.2	153.3	147.7	140.3	131.0	135.6	139.2	141.2	139.0	145.2	149.5	151.9	149.6
12	148.1	150.8	155.4	153.9	149.6	140.3	135.4	130.8	130.0	133.3	131.0	134.7	131.0	133.2	131.6	132.4	135.3	132.6	131.8	129.4	127.1	125.8	125.9	128.0
13	132.2	132.5	134.9	140.5	140.4	145.0	146.3	144.5	145.5	145.9	145.6	146.1	140.3	141.6	146.2	144.8	149.6	157.9	158.3	159.5	162.0	163.5	161.3	165.6
14	167.2	170.8	177.2	157.4	161.8	90.3	142.4	183.3	165.5	169.4	167.7	157.8	161.7	162.5	164.3	157.5	153.7	167.2	186.4	183.6	173.9	154.7	157.6	155.3
15	152.2	156.3	164.2	162.9	156.8	149.4	152.2	154.1	146.6	145.5	141.7	138.0	140.0	138.0	149.3	148.7	147.2	145.8	146.2	146.8	141.4	145.4	145.7	138.3
16	127.5	129.7	131.7	134.7	132.6	125.1	126.0	126.0	124.8	133.7	128.2	128.6	123.6	129.3	128.6	128.2	132.2	126.8	125.3	127.4	132.3	138.5	143.5	149.4
17	156.4	175.6	211.0	220.0	217.4	221.2	224.0	223.4	213.5	213.7	216.4	229.3	233.3	224.0	219.9	223.3	230.0	231.7	232.0	232.0	222.8	218.6	221.6	232.4
18	221.0	220.5	217.9	218.3	219.2	216.9	222.6	227.6	235.7	225.4	229.1	232.1	251.9	259.2	234.1	245.1	245.2	252.6	276.2	241.8	251.2	260.3	256.3	298.2
19	262.9	274.4	292.4	301.4	303.4	306.5	310.9	314.9	319.2	333.9	341.8	319.2	326.1	323.2	338.0	332.0	345.1	343.0	356.0	339.0	336.7	334.4	346.3	309.5
20	292.2	271.9	265.8	263.1	255.2	231.3	228.7	221.4	215.1	195.9	166.2	211.3	216.8	213.1	212.4	202.9	207.6	205.5	212.1	216.3	207.6	206.3	192.2	176.9
21	183.6	188.1	186.6	185.4	183.0	188.0	191.0	200.2	206.1	212.7	217.2	221.8	232.1	254.3	278.5	284.4	267.6	231.0	248.9	258.9	270.3	229.4	222.6	219.8
22	219.2	220.1	216.6	228.4	241.0	27.2	67.6	83.9	116.5	122.9	99.2	131.2	154.0	173.5	187.5	205.9	217.9	201.5	185.0	181.4	183.3	165.8	187.4	182.6
23	178.1	165.1	158.8	210.2	217.4	220.9	239.0	235.4	235.1	240.2	227.1	217.7	208.0	210.1	207.9	200.2	193.4	192.0	189.4	179.1	212.3	218.7	219.7	67.8
24	27.7	77.5	104.3	100.1	20.2	340.9	353.4	355.6	351.4	356.0	351.3	0.6	349.7	343.3	343.5	350.7	355.4	342.7	354.1	352.1	356.5	345.2	339.9	337.3
25	333.1	333.0	338.1	344.3	342.1	348.5	345.6	348.2	349.4	346.0	340.2	333.9	331.0	338.7	341.8	347.5	336.9	328.6	326.2	321.6	317.0	314.4	315.2	308.7
26	316.9	329.8	3.7	9.9	274.4	238.4	235.5	228.5	229.7	229.5	236.7	230.6	223.8	227.1	228.5	219.9	215.4	215.5	209.6	187.2	171.0	180.3	191.8	177.3
27	167.5	170.9	183.8	179.1	175.0	168.5	156.4	150.9	138.1	140.3	136.9	127.2	132.8	110.8	143.0	122.8	136.1	140.9	152.7	158.3	160.5	165.6	193.5	250.1
28	263.1	263.7	261.5	274.9	289.1	299.6	303.1	322.4	339.0	337.2	346.6	342.5	336.0	350.6	344.1	335.8	327.4	322.8	327.4	325.2	326.3	320.5	319.3	323.4
29	334.7	339.2	346.7	349.4	350.4	350.0	341.9	340.5	343.7	347.0	345.6	347.6	338.1	332.8	332.0	328.1	328.1	324.3	325.5	331.5	330.0	323.1	331.8	341.4
30	340.4	343.6	342.7	345.5	345.0	344.4	338.5	335.4	322.0	330.4	322.2	314.9	313.4	315.2	318.3	322.1	331.2	335.5	331.4	332.3	341.3	341.8	349.6	344.8
31	341.4	342.9	350.0	352.6	348.7	357.4	1.0	340.5	343.8	332.9	338.2	326.4	304.5	293.2	295.3	295.1	289.9	292.6	292.6	287.8	279.5	269.1	241.9	252.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	265.2	256.6	249.6	254.1	285.8	325.3	309.4	358.2	108.1	201.5	194.5	150.1	102.5	222.3	211.8	217.8	224.0	230.6	224.6	192.7	174.9	169.0	168.2	168.8
2	168.1	163.7	162.9	162.7	160.2	163.4	166.9	161.0	156.2	154.3	148.8	148.6	141.7	151.5	147.8	147.2	149.0	147.0	160.0	170.7	181.4	201.1	214.1	254.1
3	275.9	276.4	311.8	0.5	8.1	15.0	5.3	359.8	353.2	354.0	354.8	37.4	193.6	170.1	160.4	161.2	151.0	147.8	155.0	150.1	147.9	149.0	150.9	146.2
4	142.9	145.4	150.8	154.2	152.6	154.7	156.6	155.7	152.7	154.2	158.9	157.8	156.4	148.0	145.7	151.8	150.6	152.7	148.6	158.8	160.9	166.5	165.0	164.1
5	163.9	167.2	166.4	164.0	187.5	306.8	333.5	340.4	334.9	357.9	16.0	0.1	340.8	341.1	347.0	342.8	341.7	349.5	348.0	344.9	342.9	345.7	348.2	349.3
6	354.1	1.6	10.6	9.7	1.4	354.6	358.3	349.5	353.3	355.0	350.4	340.8	334.5	330.1	327.1	328.6	325.5	323.7	330.2	335.6	337.8	331.1	348.4	5.0
7	353.9	358.3	351.0	342.5	339.4	334.9	333.6	340.8	342.7	345.7	344.2	343.2	333.8	337.0	341.5	339.7	333.8	325.3	325.1	332.2	334.5	335.8	338.2	340.0
8	336.9	337.9	340.8	339.1	338.6	345.1	352.2	351.3	347.9	341.5	348.9	349.4	353.1	351.0	355.3	343.3	345.4	345.5	352.4	330.9	331.7	340.2	341.1	341.7
9	358.6	355.5	350.9	341.0	340.1	333.3	338.3	344.4	340.9	341.3	341.3	339.5	339.4	342.7	351.4	343.7	344.9	338.9	341.1	344.6	342.6	337.6	342.0	359.5
10	21.4	10.1	341.2	358.8	2.5	358.1	68.4	114.9	159.1	171.3	170.4	216.3	255.0	222.9	226.4	202.6	183.9	179.6	182.5	151.8	158.0	175.0	170.7	165.1
11	166.6	169.7	163.0	159.5	162.0	163.9	154.6	148.2	152.7	152.4	135.2	123.5	113.7	110.2	127.7	130.5	125.9	124.2	118.6	132.7	143.2	142.4	128.0	120.2
12	142.0	70.9	14.9	8.2	357.9	1.9	12.3	18.8	23.0	30.8	30.8	39.9	4.9	15.5	20.5	26.3	40.4	43.5	155.3	145.2	88.3	122.7	133.4	66.3
13	321.6	296.5	344.7	24.0	34.5	49.1	63.7	61.4	92.5	98.1	51.2	355.5	2.7	1.1	35.3	66.6	88.6	127.4	134.4	136.6	130.3	120.9	129.1	113.9
14	129.4	140.7	134.2	137.4	123.8	127.1	125.4	128.6	154.7	147.2	144.3	143.1	140.4	142.7	145.8	143.2	144.3	143.5	143.2	147.8	147.0	155.9	160.8	209.3
15	223.9	220.8	218.1	217.3	218.0	219.8	222.4	213.3	183.2	173.1	160.6	143.0	149.8	154.5	182.0	145.3	147.4	154.1	171.5	169.0	145.8	139.4	141.0	149.2
16	135.6	137.1	143.1	144.3	141.9	146.6	150.0	147.5	129.0	141.6	141.5	142.3	142.6	138.3	140.2	143.2	145.0	148.3	143.8	156.8	155.7	142.0	141.3	144.8
17	137.9	118.4	117.3	124.4	133.7	138.7	128.3	119.5	117.6	117.9	106.3	111.7	109.4	119.6	123.4	125.9	129.1	132.4	133.9	138.8	139.5	125.3	123.7	128.6
18	129.4	128.8	125.6	111.6	112.5	91.7	76.8	48.4	27.1	45.7	43.9	34.8	46.7	54.7	57.2	32.9	67.4	29.0	2.1	299.3	358.5	323.6	320.5	352.7
19	26.1	54.5	68.5	75.8	83.9	101.2	161.9	237.2	238.9	233.3	305.3	257.2	255.6	277.5	295.1	290.6	332.2	331.9	306.5	314.5	37.8	359.4	359.7	337.4
20	291.1	239.8	245.4	256.1	275.6	296.3	294.3	285.7	306.0	304.7	314.4	6.1	10.1	342.0	328.3	257.1	303.9	308.7	323.5	349.1	1.5	1.4	0.5	351.2
21	320.4	274.8	274.6	268.3	279.2	264.9	255.7	245.7	232.4	234.5	231.8	227.4	228.9	221.7	213.4	238.0	219.3	219.7	238.9	263.6	240.9	221.3	214.8	223.1
22	228.2	146.0	104.0	260.6	63.0	57.3	35.7	23.5	53.5	74.5	71.5	62.0	38.8	349.8	302.9	265.7	286.6	222.7	290.5	259.5	267.7	294.2	318.1	323.9
23	323.5	339.8	325.0	327.2	332.7	336.3	338.9	347.1	357.3	348.3	347.7	357.0	349.4	348.5	345.2	335.6	324.1	315.3	167.0	178.1	165.5	167.9	157.5	159.3
24	173.0	277.7	248.1	253.4	240.8	254.9	269.3	288.2	308.3	314.8	357.4	352.3	347.2	341.6	345.0	344.5	350.0	343.7	336.1	4.5	348.7	338.1	337.3	341.9
25	332.7	315.9	280.9	262.8	240.0	239.8	236.9	232.6	234.2	178.1	120.0	174.2	151.8	158.1	173.8	153.9	139.7	144.3	149.9	147.4	147.8	135.3	146.6	137.2
26	138.4	137.7	138.3	137.3	138.4	125.7	140.4	131.4	134.1	134.3	132.1	133.6	136.0	144.2	150.4	155.8	156.1	159.5	153.9	158.9	153.6	153.9	171.1	179.2
27	167.2	243.4	232.5	254.8	233.1	219.8	230.8	239.7	235.4	233.9	231.9	245.1	239.2	244.6	244.4	240.9	250.9	256.1	264.2	245.3	238.3	246.5	274.4	266.8
28	261.6	292.0	303.8	310.2	304.0	296.9	292.8	292.5	308.1	357.5	8.6	16.2	352.2	344.5	331.2	301.4	290.7	322.2	336.5	338.6	327.3	341.9	349.7	346.2
29	341.2	339.9	343.0	341.4	340.5	343.1	349.1	359.9	4.6	6.8	326.6	272.0	243.7	221.6	220.5	210.6	213.5	229.5	234.6	233.1	231.3	233.4	235.1	235.6
30	237.2	227.4	238.2	248.5	213.1	210.2	211.5	215.7	183.0	151.1	171.6	111.7	87.0	79.3	103.4	134.6	109.5	120.1	131.4	130.9	138.1	122.2	114.2	114.3
31	116.4	119.2	115.3	110.6	111.7	107.8	107.4	106.0	101.3	87.8	82.5	80.8	72.2	74.7	66.9	66.0	61.7	57.6	51.9	49.2	54.9	56.0	58.4	58.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	55.8	54.9	61.1	61.1	56.6	52.4	49.9	51.5	48.6	50.1	53.1	58.1	82.6	91.1	76.9	72.5	91.5	98.9	84.7	82.7	100.0	96.9	99.6	104.0
2	102.6	103.3	105.1	106.8	110.2	107.3	108.4	108.6	109.3	109.8	112.1	109.5	113.2	110.8	105.1	99.0	84.3	64.8	52.1	42.3	29.2	33.5	38.9	40.8
3	46.6	53.1	54.8	46.7	34.8	23.4	27.5	31.6	44.0	59.1	72.1	96.9	128.3	148.2	165.5	195.2	189.5	173.2	163.4	166.0	161.8	169.5	214.0	210.1
4	206.8	205.6	211.3	215.0	215.7	207.6	195.3	183.4	176.1	175.3	171.3	162.9	169.1	172.8	159.8	148.4	145.0	165.9	177.4	170.6	163.2	164.8	172.4	177.7
5	194.3	198.8	188.6	55.2	48.3	103.1	189.3	172.1	99.3	88.2	120.2	153.8	164.6	169.5	214.5	241.3	234.6	305.3	91.2	104.9	113.5	155.3	137.6	140.3
6	137.3	110.4	115.2	115.1	109.4	108.6	106.2	104.1	98.1	91.1	95.4	100.2	101.3	103.8	103.9	100.0	95.3	88.5	96.9	100.4	92.9	100.0	109.1	102.3
7	102.2	108.4	113.4	109.3	93.1	72.7	95.1	90.6	79.8	79.8	88.6	117.1	121.6	122.6	123.2	121.8	119.4	118.8	125.7	124.9	129.7	137.1	139.8	143.2
8	162.4	185.8	175.6	182.7	181.6	186.0	178.0	172.5	157.7	145.6	118.0	107.7	101.8	105.4	108.8	106.0	99.6	107.8	102.3	101.8	87.1	86.9	90.7	108.1
9	110.4	108.7	101.3	95.1	96.8	83.0	88.0	92.3	86.1	94.9	95.7	95.8	98.4	106.7	117.2	119.0	120.4	123.3	123.6	127.5	128.2	122.3	125.8	121.2
10	122.2	134.2	136.3	132.7	135.1	134.8	131.4	147.1	139.3	150.7	151.8	175.3	180.2	195.4	225.0	225.8	223.7	226.4	231.1	222.0	230.7	228.5	230.4	237.2
11	239.7	222.4	216.9	219.7	216.6	214.6	211.2	209.6	172.5	174.5	185.3	184.6	173.0	172.9	171.7	166.1	163.9	159.4	148.4	134.3	135.6	122.9	117.0	117.5
12	120.1	116.1	111.1	117.4	121.8	116.9	118.3	118.6	117.8	117.6	118.6	121.3	122.8	122.5	117.9	115.7	112.3	111.2	115.3	116.3	114.7	115.0	115.8	117.7
13	116.6	112.2	112.6	115.4	120.8	115.7	118.6	116.8	117.2	114.7	120.1	122.4	123.9	124.9	118.0	113.1	118.5	114.1	111.1	111.1	112.2	112.2	110.3	109.7
14	111.3	114.2	117.9	118.8	120.3	127.7	131.5	131.3	123.3	119.2	116.1	111.4	115.7	123.1	120.8	123.3	124.2	125.2	128.2	133.0	146.4	146.4	153.4	147.6
15	146.4	143.9	138.6	138.5	134.7	126.3	113.2	115.8	116.2	114.2	120.3	124.7	129.1	129.3	129.2	120.8	124.6	121.9	117.7	127.3	128.5	133.9	133.0	135.5
16	137.3	128.5	106.5	50.7	1.7	355.8	19.9	358.2	338.1	344.9	347.8	342.3	323.2	319.3	306.1	282.4	306.5	281.6	278.9	276.5	276.2	269.0	259.6	252.5
17	263.2	251.2	249.8	236.2	225.9	199.0	211.9	218.6	217.4	230.2	171.9	78.6	73.5	86.7	96.8	102.3	98.8	100.6	106.2	95.0	87.6	86.6	76.3	48.6
18	42.4	34.2	36.5	39.2	39.8	36.4	37.2	35.5	27.5	22.5	18.1	8.9	13.9	341.5	314.1	313.1	329.1	325.9	323.3	340.2	83.8	97.1	84.2	88.3
19	92.6	90.2	90.2	81.4	82.8	91.7	87.2	94.5	102.0	120.2	139.9	149.0	144.9	158.7	229.9	274.7	285.3	287.1	287.3	282.8	291.5	289.2	292.3	293.4
20	277.3	275.7	288.5	275.0	287.9	291.4	310.7	332.8	316.7	329.4	351.7	321.9	306.5	281.5	267.3	276.7	289.6	289.1	301.2	337.9	346.9	336.4	328.7	318.2
21	334.7	337.1	323.4	310.9	300.3	294.7	297.5	318.1	332.5	359.9	11.7	359.1	344.8	344.0	320.2	301.1	301.3	306.6	311.5	306.2	305.1	317.6	334.9	335.3
22	326.4	340.0	341.8	336.8	338.1	347.3	319.6	284.4	275.8	264.6	234.5	213.5	198.9	183.0	180.8	164.8	153.3	154.7	152.3	159.7	160.1	158.4	161.8	161.6
23	164.2	164.5	180.0	202.3	210.5	208.0	208.8	216.9	214.4	214.4	212.8	215.9	211.2	198.6	198.5	199.9	207.1	209.5	205.9	205.2	201.7	202.1	200.9	192.9
24	174.1	171.0	165.6	153.9	159.0	156.4	150.1	132.6	142.4	133.2	116.8	113.2	109.6	107.8	107.2	105.5	103.4	105.3	103.7	90.8	84.8	83.1	87.2	70.3
25	57.1	60.9	56.2	57.3	48.3	54.8	59.7	69.2	75.7	61.8	69.6	58.1	48.7	55.6	51.4	74.6	55.3	74.7	86.9	90.8	69.9	61.2	49.0	64.4
26	65.6	76.2	78.7	70.4	35.4	52.7	75.8	61.9	77.1	128.4	116.7	124.8	354.8	321.6	355.5	356.5	348.0	311.1	298.9	308.1	334.7	357.8	3.3	0.7
27	11.3	5.7	3.5	358.4	354.2	357.1	359.9	4.8	1.6	360.0	6.8	8.7	3.3	354.4	347.8	347.5	344.8	354.2	351.6	348.1	351.3	351.6	351.0	356.7
28	7.5	6.5	3.9	359.6	356.9	353.4	0.3	1.6	0.9	12.2	54.3	98.5	94.3	272.6	344.1	264.4	158.2	153.1	120.9	138.7	130.9	135.9	132.4	136.2
29	142.2	146.3	151.0	138.5	136.3	134.4	132.3	136.8	139.3	139.7	137.1	133.9	140.5	133.8	140.1	139.1	132.1	128.4	123.0	133.9	126.0	132.2	140.8	142.3
30	154.4	161.1	338.0	11.9	0.2	355.5	347.7	334.7	340.1	343.3	349.2	352.2	347.0	334.5	324.3	310.7	317.5	321.1	339.0	329.5	14.4	47.7	53.8	36.4

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	181.8	187.2	181.7	175.9	165.2	160.5	159.7	154.1	153.0	149.8	153.5	153.3	150.8	148.7	141.9	149.7	159.3	151.1	155.8	155.4	146.1	149.8	151.4	161.7
2	164.3	160.8	164.4	164.5	179.7	181.0	197.5	196.3	217.0	229.0	191.2	135.6	135.6	227.1	233.1	226.1	236.7	231.1	232.0	223.8	230.1	221.6	216.1	216.3
3	216.3	221.2	229.3	231.0	252.0	268.2	296.8	333.8	341.4	338.1	331.1	332.1	338.5	337.1	328.6	328.4	329.1	333.4	327.2	330.9	339.1	358.4	11.1	16.5
4	1.3	2.9	21.0	14.1	14.8	17.6	21.0	26.2	30.3	39.4	39.3	116.9	201.8	218.8	235.0	239.6	251.0	234.0	317.7	17.0	88.7	65.8	106.1	167.6
5	193.9	216.8	256.8	213.7	211.8	219.8	225.3	227.1	229.4	236.8	238.3	238.1	267.6	302.3	316.3	348.8	342.5	327.5	336.9	5.9	6.6	6.4	2.4	356.4
6	352.4	347.4	356.5	355.9	350.3	344.6	325.2	306.4	309.6	303.8	316.7	301.7	316.2	310.1	337.6	295.7	328.3	320.7	0.0	0.0	0.0	0.0	0.0	332.5
7	334.3	339.1	333.4	331.7	329.3	332.5	331.2	318.8	336.6	328.2	329.5	331.6	327.9	325.8	320.3	319.8	321.2	320.9	324.8	328.5	328.4	330.9	330.2	328.4
8	328.1	325.9	320.6	322.0	330.7	335.5	337.7	334.6	338.3	335.3	338.7	341.5	352.0	357.6	2.1	5.8	4.7	7.0	20.9	32.4	43.9	71.9	107.8	120.3
9	111.8	117.9	121.5	125.0	123.7	122.7	122.6	124.7	122.6	120.8	122.6	119.6	116.3	114.6	116.2	116.8	119.1	118.2	119.4	119.5	118.9	119.1	124.4	127.7
10	131.5	127.8	137.8	161.0	218.4	220.5	233.7	226.0	229.4	228.2	205.6	198.5	171.6	164.4	155.2	149.5	136.5	135.2	137.8	153.0	160.7	152.6	142.4	140.1
11	136.3	131.7	123.5	122.5	122.5	122.9	125.5	133.3	73.1	4.1	4.2	353.8	350.4	351.8	351.1	354.9	353.8	344.7	341.3	342.2	339.7	339.7	340.4	340.4
12	339.7	339.4	335.6	331.7	333.1	333.9	334.6	337.9	334.3	334.9	331.8	334.4	340.2	338.6	326.5	338.9	348.7	349.1	340.5	339.5	335.7	352.0	345.7	346.0
13	353.0	356.0	359.4	11.3	19.1	36.8	41.2	43.6	45.4	45.7	46.0	46.7	47.7	50.5	120.0	121.2	113.3	113.3	112.7	115.6	117.7	125.3	134.1	134.5
14	135.0	145.6	149.2	144.9	143.1	162.2	162.7	172.1	172.5	168.3	163.5	161.5	165.7	162.5	163.9	165.0	161.8	161.0	158.7	157.8	156.7	162.4	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	201.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	133.1	137.6	139.3	136.9	131.0	128.4	127.8	127.0	121.8	118.4
18	118.0	119.3	118.5	118.9	117.8	121.1	120.2	114.0	118.3	119.0	114.5	107.3	100.8	83.7	76.4	55.0	70.1	65.2	53.4	52.8	46.3	50.6	45.4	31.8
19	16.1	12.1	11.2	14.3	10.0	5.9	1.8	5.6	7.5	2.9	2.5	2.9	359.0	359.7	359.1	35.6	16.9	64.0	127.5	167.1	163.3	194.8	186.4	196.7
20	209.6	216.2	234.6	235.9	220.4	206.6	215.6	235.8	264.5	250.6	232.6	230.8	242.1	283.9	306.2	319.2	342.0	321.9	319.0	248.1	222.4	226.3	225.9	227.5
21	239.4	258.6	262.9	315.4	6.0	7.4	350.8	341.1	352.0	348.7	356.3	2.1	348.3	351.5	352.3	358.4	356.1	356.6	356.4	352.6	353.0	349.4	354.2	352.0
22	349.7	343.4	343.0	340.9	341.2	341.8	338.7	336.5	345.3	347.5	344.4	345.8	347.3	346.7	354.2	357.1	11.6	15.1	7.9	0.9	11.2	10.3	20.7	30.0
23	10.4	6.8	7.9	8.9	5.7	2.5	358.6	354.9	357.2	356.6	346.7	345.1	346.8	340.5	338.7	322.0	321.7	317.6	300.8	295.3	288.2	277.8	277.2	282.7
24	285.9	294.7	296.8	296.0	295.6	300.4	315.0	315.2	311.0	305.0	301.9	303.5	287.7	249.8	234.4	229.4	231.3	229.1	221.5	224.9	223.3	186.6	176.9	151.7
25	144.5	139.4	148.1	152.9	155.4	150.5	149.4	152.0	154.4	153.9	152.6	149.1	147.2	151.1	142.5	143.2	120.4	124.9	97.0	89.9	85.5	70.6	42.8	34.4
26	4.8	2.4	5.1	2.5	6.3	6.5	5.1	6.2	0.6	2.2	6.2	2.3	0.6	7.3	2.1	342.9	347.4	349.7	349.0	351.8	351.0	349.6	347.3	349.4
27	352.5	356.4	359.3	355.7	352.3	352.1	350.9	345.2	353.7	356.5	7.3	7.0	348.7	345.2	355.7	354.2	354.0	4.3	5.2	7.6	4.7	31.9	80.1	155.0
28	171.4	156.1	159.2	149.0	145.7	146.4	142.5	147.9	147.6	145.7	152.8	154.8	154.3	156.1	152.5	139.1	152.2	149.0	156.5	152.2	120.3	104.0	119.5	135.3
29	136.2	296.2	279.4	275.2	280.4	276.3	276.8	271.2	222.8	176.1	163.4	164.9	159.3	156.0	155.8	154.7	152.2	149.9	152.8	149.4	147.2	144.6	139.5	140.8
30	129.8	122.6	130.1	137.3	133.2	141.6	136.3	131.4	121.5	127.9	131.9	149.9	144.9	131.7	123.9	130.0	137.9	122.9	119.1	133.3	133.0	137.4	147.3	151.1
31	160.6	163.7	167.7	160.9	145.8	164.3	124.7	85.7	66.5	66.1	54.7	40.7	53.8	27.8	296.2	268.7	297.5	354.4	6.5	34.1	26.5	38.4	19.2	22.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	24.3	33.9	44.3	41.3	6.9	2.0	8.3	349.6	354.3	348.0	335.9	326.2	322.5	335.1	310.4	301.6	310.6	295.7	333.3	351.5	341.2	336.6	351.6	346.9
2	337.9	333.4	331.0	318.1	324.7	325.8	323.9	327.6	320.7	343.1	339.1	340.5	340.7	348.5	352.9	351.1	348.9	347.2	350.1	359.3	354.7	5.4	350.9	350.6
3	344.4	340.8	344.9	348.0	346.3	342.9	334.8	334.8	335.0	344.0	345.3	344.6	339.9	332.9	326.1	309.3	310.9	325.4	334.8	346.2	346.4	358.0	357.7	359.7
4	354.8	356.2	5.9	0.4	359.5	356.5	359.3	359.2	355.7	1.2	5.0	8.3	13.5	15.9	17.7	8.7	355.9	289.8	288.1	293.6	286.2	286.2	304.8	307.4
5	281.8	274.0	283.1	295.4	259.9	238.9	269.2	45.3	50.5	49.4	48.0	88.2	62.5	96.2	120.5	86.1	54.0	46.1	49.7	47.8	63.8	73.5	78.5	76.3
6	74.8	67.0	71.0	74.1	64.3	56.1	58.7	51.6	55.6	57.3	52.7	55.4	57.8	49.4	40.9	32.5	24.3	15.0	7.0	338.3	356.1	322.5	321.4	313.1
7	344.0	350.6	341.9	336.5	351.7	350.0	349.9	357.7	331.3	307.6	304.5	302.5	294.2	287.6	258.4	242.6	233.8	215.6	203.4	188.4	208.1	168.3	162.9	204.9
8	203.8	200.3	197.0	194.1	193.4	190.2	190.2	190.0	190.0	190.0	189.7	189.1	139.1	120.6	113.6	112.0	103.6	98.7	102.9	106.4	102.7	103.0	95.4	90.7
9	94.2	91.5	92.3	99.0	103.7	103.4	103.5	105.1	103.0	87.4	80.7	79.2	87.4	85.5	102.6	105.4	105.8	99.8	98.7	110.9	115.0	115.4	111.6	114.4
10	119.3	112.4	108.1	100.7	83.7	75.7	70.0	59.7	42.5	28.5	52.9	63.5	54.8	46.7	59.1	70.3	94.1	132.6	143.6	144.3	130.2	124.0	122.2	116.8
11	116.5	115.5	108.1	110.7	115.2	110.0	109.4	111.4	110.5	113.1	119.4	128.8	130.4	130.5	130.5	130.5	130.7	130.6	130.5	130.6	130.6	130.6	130.6	130.5
12	130.5	130.4	130.5	130.5	130.5	130.5	130.5	130.5	130.5	130.5	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.3
13	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.2	130.2	130.2	130.1	130.1	130.2	130.2	130.2	130.2	130.2	130.2	130.3	130.3	130.3	130.4	130.4	130.4
14	130.4	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9
18	11.3	6.1	7.9	6.0	11.0	18.4	24.0	21.4	25.7	16.7	17.0	14.8	17.8	18.2	21.8	22.0	16.6	17.5	17.8	20.8	21.3	17.1	20.4	17.9
19	16.5	9.8	12.7	18.0	8.8	15.4	14.4	16.1	8.8	7.5	15.3	9.9	6.7	10.9	10.9	9.5	6.0	8.2	8.4	8.1	7.8	10.1	6.8	8.8
20	4.1	10.7	12.7	6.6	0.9	355.8	4.4	1.9	358.1	351.7	352.0	353.4	353.6	356.3	354.6	1.2	357.3	359.1	357.0	352.9	357.0	357.9	353.1	358.7
21	352.6	358.2	359.3	354.2	352.3	352.0	359.3	1.8	11.7	22.9	23.2	5.5	14.8	10.2	27.1	32.3	357.7	22.5	15.9	10.1	15.1	8.1	29.3	29.0
22	61.9	54.1	135.6	175.4	179.5	187.1	202.6	213.1	207.0	207.7	191.2	187.9	194.2	207.8	193.8	200.3	209.1	220.7	228.3	214.8	211.5	190.9	188.6	178.8
23	171.7	168.7	164.8	165.7	173.3	172.1	172.7	186.0	188.4	163.4	165.2	162.6	147.1	144.2	142.8	140.2	137.9	138.2	127.7	119.7	111.1	115.7	111.3	107.1
24	105.5	105.3	104.0	106.2	107.9	107.6	101.8	99.0	106.3	110.5	112.3	114.4	117.4	110.8	118.1	124.3	131.7	147.7	154.3	159.7	164.9	198.9	217.3	223.3
25	227.8	227.8	218.4	217.0	213.0	208.9	201.1	192.9	204.4	212.4	229.6	213.6	207.3	196.1	276.4	312.3	314.0	310.7	307.5	292.4	312.4	326.8	323.5	336.8
26	345.0	344.5	334.2	336.0	338.2	331.5	338.3	340.5	342.0	345.5	345.7	349.6	352.7	359.2	360.0	356.6	359.9	5.6	8.1	12.1	13.6	21.4	16.8	10.4
27	11.8	6.9	18.9	37.0	47.7	46.5	53.9	58.7	44.8	50.0	45.8	63.9	51.4	43.8	49.8	52.1	49.9	40.5	33.2	39.3	43.8	61.9	64.7	57.8
28	42.5	40.7	36.1	31.3	28.8	35.5	39.5	31.0	19.2	35.4	38.2	40.7	43.8	34.9	26.0	23.4	17.9	9.3	3.7	348.4	356.0	7.6	21.5	358.3
29	350.5	0.6	2.5	357.3	346.4	341.7	339.6	322.6	336.6	337.7	336.5	340.3	337.2	342.5	347.6	337.3	321.9	325.6	330.3	335.8	339.7	343.9	343.6	340.8
30	338.2	336.3	344.2	338.7	343.3	347.9	347.4	348.6	348.8	349.2	354.3	354.0	359.1	351.5	345.8	355.8	355.9	2.3	15.8	16.8	7.5	11.4	8.7	15.8

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Resultant Wind Direction (RMYoung AP) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	13.6	17.0	6.9	14.7	18.4	29.7	30.2	40.3	46.3	48.4	44.7	52.7	83.7	86.6	107.8	124.5	138.7	135.8	115.0	116.2	109.8	116.5	117.4	117.7
2	129.0	114.9	137.1	149.4	139.2	113.9	120.1	118.9	121.5	119.1	120.1	114.4	110.0	112.6	111.9	109.8	114.4	119.2	122.0	121.6	119.1	117.2	118.1	123.1
3	119.5	118.7	119.4	115.4	112.3	112.9	118.5	118.0	110.1	104.8	108.4	111.6	110.3	106.4	105.4	109.1	110.0	112.5	114.7	117.4	119.8	121.8	122.8	124.5
4	124.0	123.2	129.1	139.7	138.5	137.6	138.6	143.8	140.5	141.1	143.3	134.7	124.3	124.1	124.8	127.2	128.0	127.8	134.5	136.1	132.6	133.9	134.0	140.8
5	142.5	147.3	141.1	134.8	133.5	131.8	129.5	129.3	124.5	124.2	126.1	127.0	127.9	129.0	125.6	124.2	120.3	116.9	121.6	122.1	118.7	109.2	108.5	111.2
6	113.6	121.2	115.3	118.2	121.1	121.6	119.4	112.3	110.3	107.6	106.0	101.8	82.8	77.0	60.9	70.1	108.2	98.0	62.2	58.3	63.6	81.9	287.7	323.8
7	324.2	343.5	352.0	9.9	8.8	354.5	357.6	0.7	356.5	348.8	1.1	4.4	30.3	59.6	68.3	73.9	74.3	53.7	70.5	102.7	82.3	118.3	115.6	104.3
8	89.3	87.8	89.9	91.3	71.8	78.6	67.4	61.7	66.7	63.2	61.7	60.8	50.4	46.0	54.4	44.6	44.0	40.1	26.6	26.4	33.1	35.1	35.4	32.7
9	39.1	40.5	40.3	32.3	21.7	1.6	8.1	13.5	23.3	31.0	51.0	236.7	239.5	220.0	221.6	223.6	232.2	245.1	230.2	216.6	219.0	216.0	217.0	198.3
10	194.2	174.4	183.2	194.8	209.8	209.9	209.4	206.9	208.1	216.3	229.9	241.0	248.4	251.5	259.5	254.9	246.3	246.0	253.0	249.9	261.9	276.6	287.3	282.5
11	294.9	300.3	288.9	262.9	285.0	267.6	245.0	220.1	228.7	222.8	225.0	231.3	238.1	252.9	274.6	316.4	351.3	355.8	347.3	337.3	333.0	336.5	351.1	353.6
12	354.0	359.5	3.8	4.3	10.8	3.1	13.7	1.7	5.4	316.3	282.9	255.0	232.8	230.9	237.5	256.3	267.0	268.7	282.5	300.8	328.8	343.5	354.3	357.8
13	340.7	350.2	350.4	355.3	352.7	350.0	357.6	8.5	14.8	20.4	20.4	29.3	45.5	81.5	116.7	59.2	111.3	121.9	156.8	162.8	158.3	144.1	126.4	158.4
14	157.7	154.9	149.9	138.7	132.7	132.3	132.6	133.2	132.1	149.8	144.8	147.5	146.3	141.8	141.2	141.9	142.1	143.2	141.8	141.4	140.6	135.6	139.1	140.9
15	137.4	128.6	133.3	127.8	128.0	133.2	131.8	136.4	136.9	136.7	147.5	145.7	136.5	154.1	155.8	165.3	156.5	150.4	99.6	19.0	30.5	45.9	41.1	38.6
16	43.0	48.6	50.3	53.1	75.5	96.1	108.9	144.3	136.7	135.6	132.5	136.1	139.5	134.3	128.7	143.1	139.4	144.0	144.9	145.1	142.7	142.4	139.0	138.3
17	129.5	126.4	120.7	127.9	127.5	125.6	125.5	128.7	129.7	128.7	128.5	126.6	129.3	131.3	132.6	129.3	131.9	130.7	127.4	126.4	123.5	130.8	131.4	134.3
18	138.2	134.1	134.1	130.8	129.9	131.6	127.7	128.4	128.4	125.6	125.0	122.0	118.8	120.7	124.0	123.8	121.6	123.7	118.3	117.0	117.2	115.1	115.5	117.5
19	117.4	115.6	113.7	114.2	110.8	110.4	109.2	108.5	108.3	112.6	101.6	99.7	96.6	76.2	70.4	67.7	60.8	70.1	61.1	57.5	60.7	56.1	58.1	56.3
20	51.8	71.6	63.6	69.0	69.5	60.8	56.1	45.8	64.9	70.3	71.5	66.2	73.5	81.1	93.7	84.8	89.9	106.5	137.1	173.7	205.9	239.7	257.0	275.8
21	254.3	254.8	263.2	261.7	262.3	268.8	295.9	316.7	320.8	291.0	303.4	311.6	297.3	258.9	249.3	247.0	266.9	263.0	237.4	234.8	238.4	222.0	219.7	175.1
22	136.6	132.4	139.4	148.0	149.4	139.7	141.8	147.8	145.4	150.6	159.2	165.0	176.6	188.7	196.5	198.6	188.6	172.5	160.7	160.5	161.9	158.8	154.4	148.4
23	142.6	136.7	131.0	126.4	126.9	126.9	133.4	150.3	214.4	289.0	281.0	278.6	273.9	267.3	274.9	278.4	275.8	271.5	270.4	269.1	265.7	271.4	276.4	281.1
24	286.7	287.7	295.4	300.9	301.8	298.6	298.9	286.1	287.4	260.7	260.2	269.4	280.8	289.5	299.3	344.4	0.9	7.0	7.2	7.3	7.9	95.8	135.0	143.4
25	146.4	135.1	142.2	143.5	142.0	140.0	138.3	138.0	138.4	142.7	148.5	151.4	153.8	155.9	166.0	169.7	262.4	288.2	290.0	305.2	312.7	311.0	309.7	312.8
26	313.3	311.2	311.3	313.1	308.0	302.3	311.5	309.5	307.3	303.6	303.7	309.5	310.9	311.0	310.5	310.2	310.9	307.1	301.9	309.4	311.4	308.5	317.9	324.6
27	328.6	329.8	335.8	345.0	347.2	347.4	345.1	344.2	343.5	343.8	342.9	344.1	345.4	348.9	354.9	349.4	347.2	346.9	355.8	354.1	352.6	354.3	349.5	356.5
28	357.6	0.4	355.1	359.3	2.3	358.2	2.0	355.9	357.7	1.1	358.0	1.0	354.8	0.7	3.6	4.8	8.9	7.2	7.2	10.0	13.2	15.3	9.9	10.1
29	10.9	11.1	10.1	11.8	16.0	13.8	9.0	5.0	1.2	12.1	10.2	10.8	3.5	1.8	357.7	1.6	19.1	16.7	3.0	7.9	13.4	13.5	2.9	13.2
30	7.4	2.3	12.0	8.2	3.9	1.8	358.8	8.6	16.2	19.6	14.4	17.2	15.9	16.6	21.4	10.6	9.3	17.0	17.4	6.2	1.1	14.7	12.2	14.6
31	18.4	10.2	6.0	4.4	354.9	357.4	349.5	358.4	3.4	356.9	356.7	356.2	1.6	0.5	358.1	358.8	356.3	0.5	359.5	1.1	1.1	3.7	1.8	356.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.5	0.2	0.4
2	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.2	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.2	0.4
3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.1	0.5	0.4	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.1	0.4
4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.1	0.3	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	47.0	6.8	6.3	47.0	0.1	2.9
5	7.6	5.9	6.3	4.6	3.5	4.4	5.7	4.3	5.1	5.5	4.4	4.6	5.8	5.3	6.8	10.3	6.3	9.4	11.9	8.7	4.9	5.3	5.8	6.1	11.9	3.5	6.2
6	5.5	6.4	7.1	10.2	12.3	10.9	8.8	15.5	15.2	10.0	7.4	5.5	6.8	7.0	6.0	7.6	6.6	4.6	6.8	8.8	9.8	9.5	5.7	9.1	15.5	4.6	8.5
7	12.2	11.2	8.5	10.0	9.6	10.2	8.4	10.4	12.3	13.3	10.5	22.7	16.3	15.3	10.6	12.3	15.9	8.8	5.4	10.9	6.1	6.4	10.6	13.5	22.7	5.4	11.3
8	9.2	11.0	9.5	14.1	12.0	11.1	11.1	11.1	12.3	9.2	11.3	10.4	10.1	10.4	11.5	10.4	11.6	16.9	15.4	10.0	18.5	24.1	11.6	8.8	24.1	8.8	12.1
9	11.5	20.1	19.3	9.5	10.2	14.5	9.0	13.3	16.5	12.6	10.0	12.3	11.1	10.6	15.6	15.8	11.6	16.4	15.8	11.1	11.9	9.7	10.9	11.2	20.1	9.0	12.9
10	9.7	10.4	8.8	6.4	6.9	6.4	7.1	7.0	14.6	14.5	10.1	7.5	11.1	11.3	10.6	15.9	17.0	19.4	16.9	9.8	11.6	11.6	9.0	19.6	19.6	6.4	11.4
11	19.1	17.3	21.1	13.2	11.9	12.2	8.6	21.4	15.2	24.6	22.8	22.0	24.8	18.6	24.7	23.6	28.9	16.2	19.0	24.6	21.6	14.8	24.8	30.3	30.3	8.6	20.0
12	29.6	30.1	26.0	28.1	25.2	27.1	28.2	28.3	22.0	21.3	21.2	23.0	28.1	24.5	28.3	28.0	21.6	25.6	12.2	65.0	11.2	26.3	16.3	15.4	65.0	11.2	25.5
13	8.5	5.9	5.3	14.0	6.0	6.5	5.4	4.3	4.8	4.2	24.3	14.8	4.5	5.9	12.8	7.4	51.7	14.4	21.6	55.3	10.1	15.8	4.8	18.6	55.3	4.2	13.6
14	5.1	10.5	9.8	39.2	13.9	9.7	4.2	22.8	5.9	8.3	9.8	8.4	9.7	7.6	10.3	13.5	12.3	27.5	5.6	7.8	5.9	5.6	6.4	80.2	80.2	4.2	14.2
15	4.3	5.1	7.6	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.4	0.4	0.4	0.4	0.1	0.0	0.2	0.2	0.0	0.2	0.2	0.3	0.3	0.3	7.6	0.0	0.9
16	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.3
17	0.4	0.2	0.4	0.4	0.5	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.5	0.1	0.1	0.1	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.5	0.1	0.3
20	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.3	0.1	0.2
21	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.4	0.2	0.4	0.3	0.8	0.4	0.2	0.1	0.1	0.1	0.1	0.8	0.1	0.3
22	0.1	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.1	0.3
23	0.4	0.4	0.4	0.4	0.1	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.1	0.4
24	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.3	0.4	0.4	0.4	0.5	0.3	0.4
25	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.4	0.4	0.5	0.2	0.4
26	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.2	0.5	0.2	0.4	0.3	0.5	0.5	0.4	0.4	0.3	0.5	0.5	0.4	0.5	0.5	0.5	0.2	0.4
27	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.3	0.2	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.2	0.4
28	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.3	0.4
29	0.4	0.4	0.1	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.2	16.7	5.3	3.6	6.4	3.6	4.8	4.1	3.9	2.8	3.0	16.7	0.1	2.5
30	4.8	10.1	5.0	9.7	7.9	7.9	10.0	13.0	11.6	8.6	7.3	17.3	13.4	7.5	10.3	9.0	12.3	8.7	6.0	10.5	10.3	14.0	8.4	9.2	17.3	4.8	9.7
31	9.0	12.5	6.8	5.2	4.5	4.8	8.6	9.2	9.3	5.0	28.1	10.0	6.5	4.9	17.3	14.7	23.6	4.0	3.7	7.8	7.4	6.7	4.4	3.3	28.1	3.3	9.1
Max.	**29.6**	**30.1**	**26.0**	**39.2**	**25.2**	**27.1**	**28.2**	**28.3**	**22.0**	**24.6**	**28.1**	**23.0**	**28.1**	**24.5**	**28.3**	**28.0**	**51.7**	**27.5**	**21.6**	**65.0**	**21.6**	**47.0**	**24.8**	**80.2**	**80.2**		
Min.	**0.1**	**0.2**	**0.1**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.1**	**0.2**	**0.1**	**0.0**	**0.1**	**0.2**	**0.0**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**		**0.0**	
Avg.	**4.6**	**5.2**	**4.8**	**5.5**	**4.2**	**4.2**	**3.9**	**5.4**	**4.9**	**4.6**	**5.6**	**5.3**	**5.0**	**4.4**	**6.0**	**5.8**	**7.4**	**6.0**	**4.8**	**7.8**	**4.5**	**6.6**	**4.3**	**7.7**			**5.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.4	21.4	9.4	6.3	0.9	22.1	12.7	14.7	19.8	5.8	10.5	8.5	4.9	5.4	5.8	9.3	5.8	5.4	10.9	6.8	4.1	4.1	5.0	5.6	22.1	0.9	8.9
2	8.8	3.2	4.1	8.4	8.5	13.2	7.8	10.4	10.4	10.7	14.9	12.4	7.5	6.0	5.3	5.1	2.9	4.4	8.1	7.4	5.7	7.9	10.3	10.7	14.9	2.9	8.1
3	8.1	12.8	10.7	11.2	11.2	13.8	9.4	6.6	9.0	14.6	10.5	8.9	10.5	6.9	8.0	6.8	4.4	9.7	6.5	6.7	6.2	4.4	7.2	23.1	23.1	4.4	9.5
4	13.4	10.3	5.1	7.0	4.8	6.2	3.0	4.1	5.1	2.7	3.1	7.0	3.3	4.0	6.9	20.6	5.3	9.2	10.9	7.2	7.3	10.5	9.1	5.2	20.6	2.7	7.1
5	4.9	11.2	10.0	8.6	9.9	6.0	8.6	12.3	9.8	5.3	10.0	8.8	12.2	8.5	9.6	11.5	7.0	7.1	7.6	6.4	9.2	9.5	6.6	21.9	21.9	4.9	9.3
6	12.3	16.4	10.0	4.6	4.3	4.1	5.9	5.0	24.6	26.9	8.1	10.1	11.8	5.6	12.5	9.8	10.3	11.1	10.2	6.1	10.4	8.4	10.4	11.7	26.9	4.1	10.4
7	9.4	9.7	12.4	10.7	10.5	5.9	8.5	8.3	4.7	6.5	8.1	4.8	4.6	2.5	2.7	4.1	2.8	2.8	2.5	2.9	4.1	2.8	5.2	3.7	12.4	2.5	5.8
8	3.2	15.6	10.2	4.6	10.5	5.6	5.4	3.6	4.5	2.8	2.0	2.3	5.2	4.4	4.1	4.5	3.9	10.6	5.8	6.2	6.2	4.6	4.5	3.2	15.6	2.0	5.6
9	5.2	5.4	4.9	6.2	3.3	4.0	4.4	4.5	9.1	6.6	6.4	6.0	12.1	9.0	8.9	48.0	57.4	73.1	15.9	14.7	19.3	33.3	69.0	49.6	73.1	3.3	19.9
10	27.5	21.3	11.4	20.0	5.5	4.0	8.7	6.5	7.1	16.4	7.4	8.1	4.0	6.5	3.9	4.4	5.3	4.1	3.6	3.4	4.6	8.0	6.3	5.3	27.5	3.4	8.5
11	5.9	4.4	3.7	3.7	3.7	3.0	3.8	5.3	5.4	3.0	3.7	3.6	2.5	4.1	6.1	3.7	6.8	12.9	12.0	5.3	3.3	5.9	9.3	8.0	12.9	2.5	5.4
12	6.5	11.5	14.7	4.8	14.6	16.3	4.4	6.4	4.8	15.9	7.4	7.2	4.1	7.8	4.9	3.3	3.8	3.6	3.6	3.9	8.8	6.1	11.3	9.0	16.3	3.3	7.7
13	6.6	4.9	3.3	6.4	4.2	2.8	3.3	2.9	3.5	3.1	3.9	3.6	3.7	3.6	3.5	3.4	4.2	3.8	3.7	3.7	4.1	4.1	3.5	3.5	6.6	2.8	3.9
14	3.4	3.1	3.1	3.1	2.6	2.5	3.4	24.8	6.8	5.1	3.3	2.8	4.3	3.6	3.8	3.2	3.4	2.9	3.6	3.0	6.3	4.3	9.8	6.3	24.8	2.5	5.0
15	4.0	8.6	7.6	3.6	4.0	10.4	6.7	6.8	8.4	5.8	16.9	26.1	13.0	19.3	33.3	14.1	12.9	0.4	0.3	5.5	15.3	6.9	9.9	5.1	33.3	0.3	10.2
16	4.4	3.2	3.5	3.3	3.7	4.1	2.6	2.9	3.0	3.1	2.1	2.0	3.2	1.9	1.9	2.9	2.9	13.5	2.5	2.4	2.9	3.0	3.8	2.5	13.5	1.9	3.4
17	5.7	6.1	2.9	5.9	4.1	5.3	4.0	3.8	3.9	9.4	5.6	9.2	5.4	4.9	3.7	5.6	13.8	5.3	3.9	4.1	3.3	3.2	3.1	2.9	13.8	2.9	5.2
18	3.7	4.4	4.4	5.5	4.5	5.3	4.8	5.1	4.1	5.7	3.8	3.5	3.5	3.4	3.5	4.3	4.0	3.9	3.6	3.7	3.2	3.3	3.4	3.8	5.7	3.2	4.1
19	3.6	4.9	12.7	19.0	9.5	9.1	9.4	8.1	7.9	3.2	6.4	6.4	4.2	4.4	5.5	3.6	7.7	4.1	4.2	5.8	9.0	4.1	3.9	7.3	19.0	3.2	6.8
20	4.1	4.6	3.9	3.5	4.3	4.1	3.8	3.2	3.5	3.9	4.1	6.9	3.7	3.5	4.2	3.9	11.7	5.1	5.9	5.5	6.2	6.2	8.9	5.5	11.7	3.2	5.0
21	5.1	5.2	6.2	6.3	5.6	4.6	6.1	5.0	5.3	5.3	5.6	5.1	5.1	7.4	8.1	7.3	5.5	13.1	6.9	10.8	6.3	5.4	4.1	4.3	13.1	4.1	6.2
22	3.2	2.9	7.8	3.8	6.0	3.4	7.2	6.0	3.0	3.6	2.8	2.6	4.3	7.2	4.2	4.2	3.3	3.4	3.9	3.8	3.5	3.4	2.6	2.3	7.8	2.3	4.1
23	3.8	4.8	4.2	10.3	7.7	6.6	4.4	9.7	27.8	10.7	8.1	6.9	7.3	7.7	8.3	13.8	8.4	10.4	11.4	10.5	8.1	10.2	7.8	11.8	27.8	3.8	9.2
24	10.3	12.2	11.9	14.3	15.1	13.6	13.6	12.0	14.5	12.1	12.2	8.4	11.4	12.8	12.1	10.7	11.2	9.0	13.5	16.2	7.6	9.5	8.9	12.6	16.2	7.6	11.9
25	13.3	12.5	10.4	6.9	7.4	9.5	8.8	8.6	10.4	4.6	6.4	12.4	7.6	11.2	5.8	7.9	4.6	4.4	4.6	5.3	6.0	6.2	6.3	7.7	13.3	4.4	7.9
26	17.6	18.0	6.7	5.9	6.1	7.6	6.5	5.1	5.6	7.0	6.2	5.9	6.0	6.1	5.9	6.4	6.9	5.8	5.5	6.1	7.4	10.5	3.9	3.9	18.0	3.9	7.2
27	9.8	15.0	12.9	16.8	14.8	15.0	21.1	92.2	20.6	7.3	7.0	6.3	15.1	22.5	13.0	5.9	8.9	5.7	3.3	3.2	6.1	3.9	6.0	4.4	92.2	3.2	14.0
28	5.0	6.2	9.3	6.6	6.2	5.6	5.0	5.2	4.7	6.0	5.7	5.0	5.7	9.1	6.4	6.1	4.1	43.6	47.2	37.3	5.7	22.0	16.9	8.7	47.2	4.1	11.8
29	10.3	12.3	9.9	5.5	6.4	22.6	22.5	8.8	10.1	5.9	12.6	49.5	46.8	6.5	8.4	6.3	4.7	6.3	6.9	7.5	8.4	6.4	3.3	6.4	49.5	3.3	12.3
Max.	**27.5**	**21.4**	**14.7**	**20.0**	**15.1**	**22.6**	**22.5**	**92.2**	**27.8**	**26.9**	**16.9**	**49.5**	**46.8**	**22.5**	**33.3**	**48.0**	**57.4**	**73.1**	**47.2**	**37.3**	**19.3**	**33.3**	**69.0**	**49.6**	**92.2**		
Min.	**3.2**	**2.9**	**2.9**	**3.1**	**0.9**	**2.5**	**2.6**	**2.9**	**3.0**	**2.7**	**2.0**	**2.0**	**2.5**	**1.9**	**1.9**	**2.9**	**2.8**	**0.4**	**0.3**	**2.4**	**2.9**	**2.8**	**2.6**	**2.3**		**0.3**	
Avg.	**7.8**	**9.4**	**7.8**	**7.7**	**6.9**	**8.2**	**7.4**	**10.3**	**8.9**	**7.5**	**7.1**	**8.6**	**8.0**	**7.1**	**7.3**	**8.3**	**8.1**	**10.2**	**7.9**	**7.3**	**6.8**	**7.5**	**9.0**	**8.8**			**8.1**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	8.0	28.3	22.2	19.7	12.8	2.5	3.4	4.8	4.8	4.4	3.0	3.8	3.3	3.1	3.6	3.2	3.0	10.6	2.6	9.6	2.6	3.6	2.0	28.3	2.0	7.1
2	3.6	2.3	3.6	3.2	3.4	3.1	4.2	4.4	4.7	3.5	4.2	3.7	4.5	3.8	3.3	6.5	4.2	5.1	3.3	7.7	4.0	3.3	2.3	2.6	7.7	2.3	3.9
3	2.8	8.1	3.1	3.2	4.0	3.0	3.3	3.9	3.4	2.6	2.2	2.6	2.7	3.2	4.0	3.4	3.7	3.8	7.2	5.5	4.1	3.3	3.3	3.3	8.1	2.2	3.7
4	3.0	3.3	3.0	3.4	4.3	3.6	3.3	3.1	3.7	3.2	2.9	3.7	3.3	3.2	3.7	3.2	3.2	2.9	3.0	4.0	4.0	4.1	3.6	3.6	4.3	2.9	3.4
5	3.8	4.3	3.8	5.0	4.2	3.7	3.7	3.7	3.2	3.5	3.6	3.2	3.3	3.6	3.7	4.0	3.9	3.9	3.6	3.5	2.6	3.7	3.6	3.0	5.0	2.6	3.7
6	3.5	2.7	2.8	2.9	2.7	3.7	2.9	3.0	3.0	4.1	2.9	4.9	3.5	4.2	3.3	3.3	2.9	4.0	3.6	11.0	22.4	9.0	3.5	3.3	22.4	2.7	4.7
7	3.9	4.4	5.2	9.9	5.3	5.2	4.0	5.9	8.7	9.0	7.6	10.8	16.2	25.3	42.2	9.9	4.0	6.5	4.7	3.2	4.2	4.1	3.3	5.6	42.2	3.2	8.7
8	2.6	2.9	10.2	7.0	5.8	6.9	3.4	6.6	8.8	6.9	6.8	4.2	3.8	7.1	6.8	7.3	3.4	6.5	4.4	5.6	3.2	3.4	3.9	3.3	10.2	2.6	5.4
9	3.3	3.7	3.6	3.7	2.6	8.3	5.2	3.0	3.2	4.1	4.4	4.8	10.8	10.7	9.5	8.8	9.8	6.0	8.7	29.1	98.9	77.5	41.7	53.2	98.9	2.6	17.3
10	17.5	5.0	17.2	6.6	9.5	4.2	3.2	9.7	5.1	4.3	5.9	5.2	3.0	3.5	5.3	3.5	4.8	5.2	4.0	3.5	2.6	3.0	4.6	4.4	17.5	2.6	5.9
11	2.4	2.4	2.9	2.0	5.5	3.4	4.2	3.8	9.8	7.1	12.0	7.5	12.7	7.1	11.3	6.4	4.1	3.2	6.0	2.5	4.8	5.2	7.9	4.0	12.7	2.0	5.8
12	1.5	7.7	6.4	6.2	6.2	22.1	14.3	7.2	5.1	8.0	8.7	9.9	14.4	14.8	11.5	12.2	10.1	11.1	11.2	13.0	13.7	11.8	11.2	7.0	22.1	1.5	10.2
13	6.5	7.1	7.8	7.3	7.8	7.6	5.9	7.7	6.3	10.3	7.2	7.1	5.8	7.1	7.3	8.1	7.5	10.0	12.4	5.9	7.1	45.8	28.2	15.6	45.8	5.8	10.4
14	12.9	4.5	0.3	0.3	0.4	0.3	1.2	8.1	8.7	10.7	10.8	3.1	7.9	11.3	8.3	4.1	3.7	3.7	3.6	5.5	3.9	3.9	5.8	5.6	12.9	0.3	5.4
15	3.4	4.1	2.6	3.0	2.6	3.8	3.4	3.5	2.6	2.7	3.1	3.1	3.0	2.9	3.2	3.0	2.3	2.3	2.1	2.5	2.2	2.5	2.5	2.2	4.1	2.1	2.9
16	3.0	2.5	2.6	2.7	4.5	4.0	4.2	6.5	4.7	5.1	3.9	5.3	6.2	5.5	10.7	10.8	15.4	8.5	5.7	3.4	5.6	5.8	9.0	8.2	15.4	2.5	6.0
17	11.8	8.9	10.3	9.5	4.7	8.6	12.2	9.4	13.4	3.1	5.6	9.9	8.0	4.1	5.1	3.8	9.7	12.8	3.1	2.5	4.3	11.5	6.3	64.4	64.4	2.5	10.1
18	20.2	16.1	6.9	4.2	7.8	7.6	17.1	17.3	7.3	4.8	4.6	2.6	10.3	6.5	7.0	7.6	3.7	4.4	3.0	3.6	5.0	5.4	3.8	2.7	20.2	2.6	7.5
19	3.7	3.0	7.8	7.9	4.7	3.5	4.1	3.0	4.3	2.7	3.9	4.8	3.3	3.1	3.8	3.6	3.0	4.0	3.0	4.4	3.4	3.2	2.6	2.8	7.9	2.6	3.9
20	4.3	4.4	7.1	4.5	7.0	7.9	3.7	5.1	10.0	12.9	22.3	20.2	17.6	6.8	76.8	68.5	21.8	15.8	9.0	9.3	5.3	3.3	6.7	8.8	76.8	3.3	15.0
21	3.3	4.0	4.5	5.1	5.9	6.0	6.3	3.5	3.9	4.1	4.2	6.0	4.4	3.8	3.9	5.5	5.9	5.3	10.6	7.2	8.2	8.3	7.1	7.6	10.6	3.3	5.6
22	9.8	7.1	9.3	5.2	6.5	7.0	5.2	3.3	5.8	5.1	11.7	11.4	6.5	5.4	7.3	11.5	8.6	10.9	6.4	7.6	6.3	9.2	43.8	35.5	43.8	3.3	10.3
23	73.6	22.7	38.3	34.1	14.8	9.4	16.5	23.4	11.9	11.5	5.3	10.5	10.5	15.4	17.6	4.0	4.4	5.2	5.3	2.8	3.2	5.1	9.9	7.0	73.6	2.8	15.1
24	9.3	10.7	5.5	8.6	8.3	9.0	9.3	7.1	16.0	9.7	13.4	11.3	11.1	9.9	8.8	7.6	3.4	6.8	3.8	13.8	8.5	5.5	4.2	3.2	16.0	3.2	8.5
25	17.6	51.9	40.8	10.1	7.7	3.9	6.2	5.7	4.9	3.2	4.1	3.6	6.2	7.6	22.1	39.5	31.9	8.9	4.6	9.8	3.3	3.4	9.8	6.4	51.9	3.2	13.1
26	6.4	7.5	6.5	9.1	8.1	9.0	5.8	6.0	4.8	7.9	7.6	6.7	10.6	6.0	3.8	5.2	12.7	7.2	5.8	5.3	6.2	9.0	10.7	3.9	12.7	3.8	7.1
27	3.9	4.0	3.2	4.7	10.5	3.8	18.6	5.3	8.3	6.4	5.5	4.3	2.9	13.0	7.4	8.5	4.0	4.7	3.9	4.1	4.6	6.4	5.9	5.7	18.6	2.9	6.2
28	8.2	8.0	10.5	8.0	8.7	11.4	5.4	9.5	14.3	12.1	23.4	19.1	86.4	27.0	57.2	5.8	9.2	3.8	9.4	8.2	10.6	4.2	4.8	3.1	86.4	3.1	15.4
29	6.0	4.2	3.0	2.5	4.4	5.4	4.0	6.4	5.7	3.3	4.1	3.7	4.3	3.8	3.1	3.2	3.4	3.4	3.6	3.4	3.6	3.4	3.6	3.1	6.4	2.5	3.9
30	2.8	2.9	3.0	3.2	3.1	3.5	3.0	3.2	3.1	2.8	2.6	2.6	2.8	3.5	4.2	3.4	3.7	4.2	3.6	3.5	4.4	3.2	3.3	5.3	5.3	2.6	3.4
31	3.8	4.7	3.2	3.7	2.9	4.8	5.1	4.8	3.2	3.9	3.9	3.1	3.7	3.6	3.4	3.6	3.3	3.0	3.2	3.4	3.3	3.1	2.3	2.3	5.1	2.3	3.6
Max.	**73.6**	**51.9**	**40.8**	**34.1**	**19.7**	**22.1**	**18.6**	**23.4**	**16.0**	**12.9**	**23.4**	**20.2**	**86.4**	**27.0**	**76.8**	**68.5**	**31.9**	**15.8**	**12.4**	**29.1**	**98.9**	**77.5**	**43.8**	**64.4**	**98.9**		
Min.	**1.5**	**2.3**	**0.3**	**0.3**	**0.4**	**0.3**	**1.2**	**3.0**	**2.6**	**2.6**	**2.2**	**2.6**	**2.7**	**2.9**	**3.1**	**3.0**	**2.3**	**2.3**	**2.1**	**2.5**	**2.2**	**2.5**	**2.3**	**2.0**		**0.3**	
Avg.	**8.5**	**7.5**	**8.5**	**6.8**	**6.2**	**6.3**	**6.2**	**6.3**	**6.5**	**5.9**	**6.9**	**6.5**	**9.5**	**7.6**	**11.9**	**9.0**	**6.9**	**6.0**	**5.6**	**6.4**	**8.8**	**8.8**	**8.5**	**9.3**			**7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.3	2.1	2.3	2.5	3.2	3.1	3.3	3.6	3.5	3.5	3.2	2.6	2.3	2.7	3.0	3.2	3.1	2.9	3.3	1.4	0.2	0.3	0.2	0.2	3.6	0.2	2.4
2	0.2	0.2	0.2	0.3	0.3	0.3	0.0	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.1	0.1	0.2	0.4	0.1	0.2	0.2	0.4	0.0	0.2
3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	5.5	2.0	3.0	2.5	3.5	2.6	6.1	4.4	4.6	3.8	2.8	3.6	3.0	6.1	0.1	2.1
4	3.7	3.3	3.1	3.1	2.7	2.6	2.7	2.7	2.5	2.9	3.2	2.6	3.5	2.9	3.9	3.0	2.9	3.7	3.7	13.0	9.5	5.1	12.4	6.0	13.0	2.5	4.4
5	3.3	9.6	12.1	9.6	8.0	6.6	19.1	9.2	7.2	5.9	7.9	9.2	22.4	6.9	3.7	6.9	4.7	6.4	7.7	2.9	4.6	2.4	3.0	3.7	22.4	2.4	7.6
6	3.7	3.8	4.6	2.5	4.2	4.4	7.4	9.2	9.1	12.4	11.5	7.6	3.7	5.7	3.6	3.7	2.8	4.0	11.2	8.8	8.3	12.9	11.6	10.2	12.9	2.5	7.0
7	10.1	7.1	10.0	9.9	11.3	10.1	4.5	5.7	6.5	11.3	10.7	13.1	4.6	5.6	4.0	3.2	3.2	2.5	2.7	3.4	7.4	5.2	11.7	7.9	13.1	2.5	7.2
8	5.3	7.0	11.2	13.6	11.6	17.3	41.8	35.3	48.2	10.0	6.9	5.9	7.0	8.9	4.3	4.6	8.3	8.3	5.9	7.2	8.9	10.4	5.0	9.9	48.2	4.3	12.6
9	6.0	10.6	5.8	6.9	8.8	5.4	5.1	4.3	5.8	12.0	11.2	18.1	9.6	6.7	5.7	7.2	4.4	3.2	2.4	4.1	2.9	6.2	4.0	3.3	18.1	2.4	6.7
10	10.2	4.5	5.3	5.9	8.4	3.5	2.6	4.7	10.2	7.1	8.2	8.9	8.8	9.3	13.0	5.4	3.9	3.7	4.0	4.5	3.7	4.9	7.8	7.4	13.0	2.6	6.5
11	12.3	11.5	9.8	11.4	9.5	6.8	4.0	6.8	8.6	8.8	14.6	14.4	7.2	4.4	3.1	3.7	4.5	4.0	3.6	5.3	3.8	4.4	6.6	5.3	14.6	3.1	7.3
12	6.0	4.1	5.8	10.7	4.8	5.6	5.0	4.3	7.6	4.9	7.0	5.0	5.3	7.4	3.7	2.9	4.1	3.6	5.2	13.8	15.5	6.3	3.4	23.5	23.5	2.9	6.9
13	12.6	4.7	9.5	4.6	6.1	5.5	7.5	4.7	5.4	4.6	5.3	5.7	5.9	4.4	4.5	3.1	3.4	4.4	2.8	2.4	0.2	0.1	0.3	0.2	12.6	0.1	4.5
14	0.3	0.3	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.4	0.5	0.8	3.7	5.4	5.2	3.1	4.3	3.9	4.4	3.4	4.9	5.4	0.1	1.8
15	8.1	55.1	28.5	0.5	0.5	0.2	0.3	2.6	5.9	8.3	12.2	16.5	17.2	15.5	8.1	13.4	13.2	11.6	8.3	7.9	7.1	4.7	10.0	8.2	55.1	0.2	11.0
16	15.7	16.5	10.9	15.9	14.6	14.3	12.6	10.7	5.9	4.3	5.4	5.3	4.0	4.6	6.3	5.8	4.3	6.0	9.3	2.4	3.9	5.9	3.3	5.2	16.5	2.4	8.0
17	3.7	6.4	4.3	4.8	3.6	3.1	3.3	4.8	14.7	29.9	48.2	17.1	4.6	6.1	5.3	5.6	5.9	14.0	8.9	7.8	15.8	11.4	17.3	20.2	48.2	3.1	11.1
18	3.2	3.5	3.1	4.7	4.6	8.2	5.7	28.7	14.2	5.0	6.1	5.0	2.8	8.2	8.7	7.7	7.2	5.7	5.2	5.4	3.2	3.3	3.7	5.0	28.7	2.8	6.6
19	5.2	5.0	6.6	3.0	4.7	4.1	4.3	4.8	3.6	9.2	5.9	7.4	6.1	6.2	5.6	5.0	5.8	4.9	6.7	7.0	5.6	6.3	6.9	5.5	9.2	3.0	5.6
20	5.7	7.5	6.9	5.2	10.4	5.2	14.6	2.6	5.8	5.1	4.0	5.2	6.0	3.9	5.9	6.0	5.8	3.8	6.4	9.0	5.5	2.8	2.8	3.0	14.6	2.6	5.8
21	2.4	2.7	2.5	2.4	3.6	3.5	2.7	2.9	3.7	5.3	5.0	5.1	3.1	2.7	7.6	5.1	7.2	5.0	6.1	6.6	8.4	5.4	5.2	8.4	8.4	2.4	4.7
22	7.4	7.5	11.0	8.9	4.3	7.3	5.5	6.7	7.3	12.2	8.0	6.9	2.4	2.9	4.0	5.0	5.3	11.5	5.5	8.8	5.3	10.5	21.5	9.4	21.5	2.4	7.7
23	9.4	17.8	11.7	8.6	10.1	23.0	7.4	6.4	6.3	3.6	3.8	8.0	7.2	10.8	7.5	3.3	3.2	10.9	12.0	4.1	3.4	5.0	6.8	3.1	23.0	3.1	8.1
24	1.6	3.7	3.1	5.1	10.4	10.3	23.2	12.9	20.7	15.4	9.0	14.9	6.5	8.0	4.7	8.1	3.2	3.1	3.2	4.4	5.0	7.0	4.8	4.0	23.2	1.6	8.0
25	3.3	3.2	44.2	4.5	9.9	10.0	6.4	5.4	7.3	4.8	2.7	2.6	3.0	4.3	5.0	4.7	4.5	5.6	3.9	3.3	3.9	2.5	2.0	2.9	44.2	2.0	6.2
26	2.9	2.4	11.5	9.8	7.2	11.3	11.2	12.4	14.1	11.6	13.3	12.7	7.2	10.1	7.3	7.0	7.6	6.2	7.6	10.5	8.8	11.0	4.8	3.6	14.1	2.4	8.8
27	6.0	8.0	11.3	12.3	6.0	9.7	7.0	6.2	8.0	13.0	12.1	12.1	7.9	5.3	9.8	8.2	9.2	10.2	8.2	9.1	7.5	4.5	8.4	8.4	13.0	4.5	8.7
28	12.4	13.3	6.3	13.5	13.0	43.8	47.7	9.8	18.6	13.8	18.4	9.8	5.6	13.5	8.0	10.1	11.0	9.5	8.6	4.5	3.4	4.0	7.4	3.6	47.7	3.4	12.9
29	7.0	5.8	6.5	7.2	5.6	6.9	9.9	9.0	7.7	8.9	7.1	7.1	7.3	7.4	8.4	5.8	5.6	3.8	8.4	7.6	12.2	11.1	8.3	5.8	12.2	3.8	7.5
30	6.9	5.4	6.9	8.1	8.9	8.1	6.7	5.9	4.1	8.8	6.6	8.6	10.7	8.5	8.0	7.6	10.3	14.8	11.0	9.0	8.8	6.3	4.4	3.9	14.8	3.9	7.8
Max.	**15.7**	**55.1**	**44.2**	**15.9**	**14.6**	**43.8**	**47.7**	**35.3**	**48.2**	**29.9**	**48.2**	**18.1**	**22.4**	**15.5**	**13.0**	**13.4**	**13.2**	**14.8**	**12.0**	**13.8**	**15.8**	**12.9**	**21.5**	**23.5**	**55.1**		
Min.	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	**0.0**	**0.2**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**	**0.4**	**0.3**	**0.3**	**0.1**	**0.1**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**		**0.0**	
Avg.	**5.9**	**7.8**	**8.5**	**6.5**	**6.6**	**8.0**	**9.1**	**7.4**	**8.8**	**8.1**	**8.6**	**8.1**	**6.1**	**6.2**	**5.5**	**5.4**	**5.4**	**6.2**	**6.0**	**6.1**	**6.0**	**5.6**	**6.4**	**6.2**			**6.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.3	6.0	6.6	4.2	7.2	7.9	5.1	7.3	11.2	11.0	6.9	12.3	5.1	3.3	5.4	3.5	7.0	4.5	9.4	11.6	10.4	11.2	11.4	3.3	12.3	3.3	7.4
2	6.1	6.9	2.8	3.7	4.6	6.2	9.5	7.5	8.7	8.5	8.5	5.7	4.4	10.4	58.3	25.8	7.5	6.7	10.1	48.0	29.1	24.1	16.2	8.2	58.3	2.8	13.6
3	7.4	31.2	28.6	17.1	7.8	5.1	3.7	4.7	5.8	7.3	3.7	3.7	3.3	4.1	7.4	13.1	5.1	11.4	15.6	4.1	10.2	15.3	13.5	8.4	31.2	3.3	9.9
4	3.8	6.6	4.9	7.3	3.4	3.4	4.5	6.2	5.8	5.3	5.0	6.9	4.2	3.8	3.5	5.8	6.9	5.0	11.3	29.1	87.0	45.3	19.2	32.5	87.0	3.4	13.2
5	9.1	19.8	11.2	8.4	13.9	10.2	15.7	15.0	14.4	14.6	24.9	26.0	18.2	8.9	15.4	8.7	7.0	9.2	8.8	11.9	6.9	3.2	3.0	7.2	26.0	3.0	12.1
6	5.0	7.9	5.3	4.4	6.3	5.6	6.8	3.9	4.0	4.6	2.9	3.3	2.9	2.8	3.9	2.7	3.3	5.1	3.7	3.1	3.9	3.4	3.1	2.9	7.9	2.7	4.2
7	3.8	4.2	3.1	3.1	3.1	2.6	2.9	3.3	3.3	3.0	2.9	2.7	2.8	2.8	2.6	3.1	3.2	4.1	2.8	3.6	3.6	3.3	3.7	3.8	4.2	2.6	3.2
8	3.1	3.4	3.5	3.3	3.1	2.9	3.9	3.7	3.4	3.4	2.8	3.5	3.3	3.2	3.5	3.5	3.4	3.6	3.6	3.9	3.4	3.2	3.3	3.9	3.9	2.8	3.4
9	3.9	2.9	5.3	6.5	3.8	5.5	2.9	3.4	4.2	3.3	3.9	3.3	3.3	3.5	3.6	3.2	4.0	4.0	4.0	4.6	4.8	5.7	56.1	10.2	56.1	2.9	6.5
10	25.3	10.6	10.6	7.1	6.3	10.7	12.6	8.3	13.6	8.0	9.8	10.8	11.2	7.0	6.2	6.3	5.3	10.6	2.6	2.7	8.4	4.1	5.4	2.8	25.3	2.6	8.6
11	4.0	4.0	2.7	3.7	4.4	2.9	4.0	4.0	3.4	3.6	3.6	3.7	3.8	3.8	4.4	4.4	4.5	3.8	4.3	3.6	3.8	4.5	2.8	3.0	4.5	2.7	3.8
12	3.0	3.1	3.9	3.5	4.2	4.4	3.3	3.8	3.5	6.1	3.2	3.6	4.6	3.8	3.2	3.9	4.2	4.2	3.6	3.4	3.5	3.7	3.3	4.1	6.1	3.0	3.8
13	3.9	3.5	4.6	3.0	4.1	4.2	2.8	2.7	2.6	4.1	3.6	4.7	3.7	3.4	3.3	3.5	3.4	5.7	3.9	3.2	3.7	4.4	3.2	3.1	5.7	2.6	3.7
14	3.3	4.0	3.6	15.0	3.7	4.8	3.7	3.8	5.4	3.5	3.1	5.8	2.7	5.4	6.1	7.1	7.1	2.6	3.8	3.3	4.0	4.6	4.4	7.7	15.0	2.6	4.9
15	44.5	4.9	3.1	11.3	6.3	6.1	4.5	3.9	1.6	2.9	3.0	2.7	3.9	3.1	5.9	5.4	8.9	3.0	2.9	3.6	2.7	3.0	3.7	7.9	44.5	1.6	6.2
16	4.3	3.9	5.0	7.0	5.4	5.2	16.3	6.9	9.8	7.7	8.8	5.0	5.6	5.9	4.4	4.9	4.7	4.9	4.5	4.7	5.8	15.4	21.1	45.9	45.9	3.9	8.9
17	6.1	4.3	8.9	7.5	4.7	6.7	4.2	4.8	3.7	5.9	6.8	7.0	6.7	9.4	27.4	10.9	18.3	13.0	19.1	2.5	5.5	4.1	5.0	7.1	27.4	2.5	8.3
18	5.3	11.7	9.9	3.4	3.2	2.9	5.7	5.9	3.0	6.4	4.2	5.8	3.9	2.9	4.1	4.9	9.4	6.5	4.4	5.8	5.0	3.9	7.5	3.9	11.7	2.9	5.4
19	5.0	4.7	3.5	3.7	4.5	4.3	11.5	56.6	7.1	17.1	6.8	9.6	22.1	18.2	14.8	18.4	14.0	7.2	5.8	7.3	4.2	4.2	4.2	6.3	56.6	3.5	10.9
20	7.5	6.9	4.9	5.4	10.6	9.6	6.0	4.4	4.5	7.1	4.4	5.2	9.6	25.3	6.4	7.1	8.8	4.2	3.8	2.8	4.6	3.3	2.2	4.3	25.3	2.2	6.6
21	3.8	3.8	15.7	10.7	7.8	24.8	17.4	20.6	9.5	11.4	6.1	6.7	5.6	11.4	6.7	13.4	4.1	5.0	11.3	6.7	3.1	3.5	3.4	2.1	24.8	2.1	8.9
22	3.0	3.7	2.9	2.7	7.5	8.6	10.6	14.3	34.3	14.5	11.5	11.4	21.6	10.3	9.3	9.8	4.4	3.2	3.3	4.0	6.6	4.3	3.8	4.1	34.3	2.7	8.7
23	3.8	4.4	3.7	4.1	3.9	5.0	4.4	3.9	4.8	5.8	5.5	4.8	4.5	4.4	5.3	4.8	4.5	5.0	4.7	4.2	4.3	4.7	3.1	3.7	5.8	3.1	4.5
24	3.4	4.2	4.3	3.8	4.1	3.9	4.1	3.9	3.5	3.8	4.1	4.4	4.8	4.7	5.5	4.3	5.8	5.1	25.6	6.8	11.5	10.8	6.6	3.6	25.6	3.4	5.9
25	3.3	12.9	5.1	6.3	6.5	4.3	5.4	6.9	6.5	4.3	3.4	5.9	3.5	5.8	3.8	4.8	17.6	4.6	5.2	5.3	5.5	7.7	4.5	6.1	17.6	3.3	6.1
26	5.2	3.8	6.3	3.3	5.0	4.1	4.2	4.5	5.6	4.9	7.9	9.0	5.7	5.5	25.2	11.6	7.9	9.3	9.0	6.7	4.0	4.4	6.3	5.4	25.2	3.3	6.9
27	5.0	5.0	5.1	5.7	7.3	12.7	20.1	16.8	7.6	10.5	8.0	16.2	20.1	11.5	15.6	13.5	12.6	16.8	10.0	10.0	5.7	4.0	4.5	10.4	20.1	4.0	10.6
28	10.3	5.4	4.8	6.6	6.5	7.1	4.2	7.8	7.0	5.2	10.1	8.2	17.1	11.5	13.8	16.4	14.6	17.0	7.8	4.2	4.9	4.6	9.0	9.8	17.1	4.2	8.9
29	11.1	7.6	6.3	11.0	8.9	7.9	9.7	10.7	7.1	3.8	5.0	7.6	10.0	11.3	14.0	13.1	16.3	12.9	12.7	10.5	10.0	9.0	9.6	5.9	16.3	3.8	9.7
30	6.2	6.4	14.5	15.2	7.4	11.6	9.1	7.4	2.9	4.1	4.3	4.3	5.9	5.0	4.3	4.8	4.6	4.7	5.3	6.4	5.8	4.8	4.0	4.2	15.2	2.9	6.4
31	3.6	3.8	3.5	4.2	4.0	3.9	4.4	3.2	3.7	4.0	3.9	4.1	4.5	4.9	5.0	3.9	4.7	5.5	4.5	5.7	4.8	4.4	4.0	4.5	5.7	3.2	4.3
Max.	**44.5**	**31.2**	**28.6**	**17.1**	**13.9**	**24.8**	**20.1**	**56.6**	**34.3**	**17.1**	**24.9**	**26.0**	**22.1**	**25.3**	**58.3**	**25.8**	**18.3**	**17.0**	**25.6**	**48.0**	**87.0**	**45.3**	**56.1**	**45.9**	**87.0**		
Min.	**3.0**	**2.9**	**2.7**	**2.7**	**3.1**	**2.6**	**2.8**	**2.7**	**1.6**	**2.9**	**2.8**	**2.7**	**2.7**	**2.8**	**2.6**	**2.7**	**3.2**	**2.6**	**2.6**	**2.5**	**2.7**	**3.0**	**2.2**	**2.1**		**1.6**	
Avg.	**7.0**	**6.8**	**6.6**	**6.5**	**5.8**	**6.6**	**7.2**	**8.4**	**6.8**	**6.6**	**6.1**	**6.9**	**7.4**	**7.0**	**9.6**	**8.0**	**7.5**	**6.7**	**7.3**	**7.5**	**8.9**	**7.5**	**8.1**	**7.6**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	4.1	3.9	4.9	3.7	3.4	3.7	3.9	4.6	4.5	5.6	4.4	4.5	4.1	4.5	5.1	4.2	4.3	3.8	4.0	4.9	7.2	6.3	3.7	7.2	3.4	4.5
2	7.0	5.2	6.0	5.6	3.7	5.1	3.5	3.4	3.8	4.5	5.2	6.8	8.7	11.6	10.2	7.0	11.2	13.9	7.1	6.5	8.1	22.3	6.9	12.8	22.3	3.4	7.8
3	62.2	13.1	9.7	8.7	12.6	6.5	4.8	9.8	13.9	28.2	17.7	27.3	21.8	13.1	15.3	7.4	7.7	6.9	5.4	3.9	3.7	5.0	3.3	3.9	62.2	3.3	13.0
4	5.6	3.4	3.6	4.8	3.9	2.7	3.5	3.8	6.1	4.7	5.3	6.9	5.8	7.0	5.5	5.4	5.0	5.2	6.1	5.7	3.8	4.2	3.8	4.6	7.0	2.7	4.8
5	4.0	3.2	3.4	3.7	3.8	3.9	5.5	3.5								4.3	4.5	6.1	4.8	4.8	8.0	8.8	59.7	6.9	59.7	3.2	8.2
6	6.9	6.1	5.3	7.8	6.5	5.8	12.7	17.0	10.5	11.0	14.7	10.9	16.7	14.9	22.8	23.9	16.5	7.1	6.8	9.6	12.2	5.6	6.3	10.9	23.9	5.3	11.2
7	8.1	17.0	9.7	6.5	6.8	6.2	6.6	5.3	10.0	11.2	12.6	11.6	12.1	14.9	21.5	41.8	17.0	13.9	16.6	12.4	4.9	6.2	3.8	5.4	41.8	3.8	11.8
8	3.6	4.2	3.2	3.8	4.4	6.0	5.0	4.1	9.0	6.9	10.2	7.3	8.4	9.6	8.5	6.1	6.8	5.2	6.0	4.7	5.5	3.8	3.7	5.0	10.2	3.2	5.9
9	4.9	8.2	4.6	3.8	3.0	4.7	3.5	0.4	0.3	0.1	13.5	15.0	10.3	10.0	9.0	7.7	11.5	11.3	7.8	7.0	8.6	4.9	4.9	3.3	15.0	0.1	6.6
10	3.6	3.1	3.6	4.0	5.0	5.6	5.2	13.4	12.9	27.6	27.0	11.1	20.4	61.4	35.8	16.8	30.2	27.9	16.0	10.2	9.7	6.5	7.2	16.3	61.4	3.1	15.9
11	6.2	24.2	35.6	43.9	66.0	96.4	58.5	38.5	27.5	31.5	26.2	52.3	23.5	14.6	7.4	7.5	7.8	7.5	7.3	7.5	5.7	4.4	3.8	3.5	96.4	3.5	25.3
12	4.4	4.4	5.1	4.7	3.9	26.2	17.5	6.0	5.7	13.9	27.2	16.8	18.8	8.9	24.9	18.0	38.0	17.8	9.6	15.9	13.6	9.1	6.3	26.8	38.0	3.9	14.3
13	19.4	8.4	7.3	4.7	5.2	6.9	7.7	5.3	7.1	6.6	5.1	13.6	10.9	21.2	19.0	16.6	11.6	12.5	12.3	13.5	18.2	5.1	6.7	4.1	21.2	4.1	10.4
14	4.3	4.4	3.1	4.2	6.5	6.2	7.1	6.1	12.2	10.5	7.0	10.2	56.4	53.8	39.0	17.7	8.4	17.5	10.2	23.9	10.3	6.6	2.8	3.5	56.4	2.8	13.8
15	8.4	3.7	3.5	4.0	2.9	3.9	6.7	13.5	13.7	58.1	29.4	9.4	11.0	16.0	14.6	7.0	5.7	4.5	5.5	9.9	5.3	6.8	5.7	6.3	58.1	2.9	10.6
16	22.0	13.2	23.7	44.5	19.8	21.3	10.6	7.5	11.4	7.7	22.0	40.3	20.8	66.3	28.5	9.3	8.7	10.7	10.9	11.2	8.9	6.7	5.5	7.0	66.3	5.5	18.3
17	9.2	6.5	7.1	5.9	11.0	11.3	12.2	17.9	20.0	29.1	46.0	28.2	66.5	39.5	15.4	15.7	14.4	14.1	13.3	12.8	4.7	4.2	2.3	3.9	66.5	2.3	17.1
18	25.5	4.8	4.7	4.3	6.5	6.2	6.6	5.9	6.5	7.2	6.6	8.3	9.4	15.2	10.0	10.0	13.1	14.4	13.6	14.5	12.8	7.4	21.4	4.6	25.5	4.3	10.0
19	4.2	3.8	3.9	3.7	2.7	10.9	13.3	5.4	21.3	16.9	6.4	7.8	10.7	11.2	15.2	16.7	15.0	19.7	10.4	7.2	7.6	5.3	5.6	3.8	21.3	2.7	9.5
20	8.0	15.0	43.8	14.1	27.7	41.1	15.4	9.7	11.7	15.0	11.5	9.7	9.9	6.9	7.2	7.5	6.8	5.7	5.4	4.8	4.3	5.9	6.1	5.2	43.8	4.3	12.4
21	3.8	6.1	6.1	3.4	3.7	3.8	5.0	5.2	5.3	7.9	34.0	62.1	31.3	22.8	13.3	22.3	26.9	30.7	24.8	12.2	9.3	24.6	7.5	5.2	62.1	3.4	15.7
22	3.8	10.3	3.5	3.2	5.6	2.2	4.5	6.9	5.0	6.6	7.4	8.5	10.9	9.0	8.3	6.9	5.3	5.3	4.9	5.3	3.9	4.0	4.1	5.3	10.9	2.2	5.9
23	4.5	4.1	4.2	5.2	4.5	6.2	4.2	5.3	4.9	6.5	6.3	7.4	9.1	7.4	8.4	8.0	11.8	10.8	9.5	9.9	5.5	3.6	4.0	7.4	11.8	3.6	6.6
24	7.3	5.2	9.7	7.5	5.1	4.0	4.2	4.2	6.1	7.5	5.2	7.4	6.3	6.0	5.5	4.3	4.5	5.9	5.3	6.1	5.4	4.8	4.9	5.2	9.7	4.0	5.7
25	4.6	4.1	4.8	5.0	5.3	4.8	4.5	4.1	4.1	5.0	4.8	5.1	5.4	5.8	5.4	5.8	5.1	4.8	4.8	6.1	4.7	6.7	5.9	4.8	6.7	4.1	5.1
26	4.9	5.1	6.5	7.2	9.9	6.2	6.6	7.8	8.0	12.3	7.4	5.7	7.1	31.6	15.3	10.8	6.2	15.2	8.8	9.7	8.0	6.0	5.9	11.4	31.6	4.9	9.3
27	7.3	13.1	18.1	11.6	8.2	9.1	6.6	5.8	6.0	8.9	9.2	6.7	4.9	6.2	7.4	7.9	10.1	10.5	9.6	7.4	6.5	4.1	7.9	5.0	18.1	4.1	8.2
28	4.4	5.4	4.9	15.2	4.0	2.8	3.4	4.5	11.7	8.7	5.5	4.8	4.6	6.9	12.1	7.8	5.9	8.3	6.4	7.7	6.0	8.4	4.8	6.2	15.2	2.8	6.7
29	10.0	4.2	3.8	4.5	4.8	3.7	11.0	7.1	10.0	6.5	9.6	11.8	8.1	11.0	6.4	6.7	8.9	9.1	8.2	6.8	4.6	4.8	5.4	3.9	11.8	3.7	7.1
30	2.8	3.4	3.6	4.3	4.0	4.0	5.2	8.9	74.0	27.3	20.0	32.7	83.0	47.3	27.6	50.7	89.9	39.3	17.7	10.2	26.5	18.3	11.1	11.1	89.9	2.8	25.9
Max.	**62.2**	**24.2**	**43.8**	**44.5**	**66.0**	**96.4**	**58.5**	**38.5**	**74.0**	**58.1**	**46.0**	**62.1**	**83.0**	**66.3**	**39.0**	**50.7**	**89.9**	**39.3**	**24.8**	**23.9**	**26.5**	**24.6**	**59.7**	**26.8**	**96.4**		
Min.	**2.8**	**3.1**	**3.1**	**3.2**	**2.7**	**2.2**	**3.4**	**0.4**	**0.3**	**0.1**	**4.8**	**4.4**	**4.5**	**4.1**	**4.5**	**4.3**	**4.2**	**4.3**	**3.8**	**3.9**	**3.7**	**3.6**	**2.3**	**3.3**		**0.1**	
Avg.	**9.2**	**7.2**	**8.5**	**8.5**	**8.7**	**10.9**	**8.8**	**8.0**	**11.8**	**13.5**	**14.1**	**15.5**	**17.8**	**19.1**	**14.6**	**12.8**	**14.0**	**12.2**	**9.3**	**9.0**	**8.0**	**7.4**	**7.8**	**6.9**			**11.0**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.7	9.7	17.2	12.5	48.1	80.7	43.9	12.7	8.3	14.1	18.9	12.8	11.7	9.3	8.8	9.7	7.5	7.7	7.8	6.8	6.3	5.8	5.8	3.9	80.7	3.9	16.1
2	5.2	4.2	4.6	5.6	4.2	4.8	6.8	5.4	5.5	5.1	5.8	5.5	4.8	8.3	6.3	6.4	6.6	5.4	5.7	8.5	7.2	5.3	5.1	6.2	8.5	4.2	5.8
3	6.1	5.8	8.5	7.0	4.1	5.7	5.2	5.3	4.4	6.5	5.8	8.0	7.9	5.9	5.7	7.3	8.2	9.4	18.6	6.4	6.3	6.9	6.0	5.7	18.6	4.1	6.9
4	4.4	6.3	5.4	6.8	4.1	6.2	8.0	8.2	11.9	10.2	11.2	14.8	23.3	24.0	34.4	11.1	48.3	40.3	8.7	4.5	6.0	11.1	16.0	7.6	48.3	4.1	13.9
5	7.1	7.1	4.9	8.3	7.3	10.5	8.2	12.1	8.0	8.6	12.1	29.0	45.6	43.2	89.4	16.2	10.6	9.8	8.8	10.6	6.2	5.9	8.8	9.6	89.4	4.9	16.2
6	5.1	2.5	7.4	22.5	8.3	7.3	4.3	5.1	11.7	12.1	20.7	10.3	9.5	7.2	7.1	5.4	5.0	6.4	4.7	5.6	3.8	4.0	4.5	4.6	22.5	2.5	7.7
7	3.7	4.3	3.9	4.3	4.8	5.2	4.0	3.4	4.6	5.2	4.4	4.6	4.1	4.1	4.6	4.8	4.4	4.1	5.1	4.6	3.8	4.7	5.1	5.9	5.9	3.4	4.5
8	6.3	5.7	7.5	9.1	6.8	4.8	6.6	4.8	3.4	4.2	5.1	5.8	9.1	8.9	6.5	5.4	5.2	7.3	5.4	4.9	6.2	8.1	5.6	7.6	9.1	3.4	6.3
9	3.5	3.6	6.1	9.3	7.2	5.6	4.3	3.5	5.0	4.9	5.5	7.0	7.2	7.6	7.4	8.3	7.7	7.3	7.0	6.2	6.7	5.5	4.7	4.6	9.3	3.5	6.1
10	6.2	5.1	7.7	6.1	8.0	4.0	5.9	6.2	5.8	9.8	6.3	8.9	7.0	7.6	9.3	7.8	7.7	6.5	4.7	5.1	6.4	5.3	6.0	17.3	17.3	4.0	7.1
11	8.4	9.5	8.5	9.1	6.4	7.7	3.7	6.1	7.8	5.6	5.6	7.2	10.5	11.7	9.3	12.0	10.2	8.9	7.5	8.4	7.2	3.9	3.9	4.2	12.0	3.7	7.6
12	3.4	3.5	4.1	5.4	4.8	6.0	3.5	4.3	5.1	4.7	5.2	5.3	6.0	5.1	5.2	5.5	6.3	5.0	5.1	5.4	4.9	3.9	4.4	5.6	6.3	3.4	4.9
13	4.8	4.7	4.0	5.9	4.4	4.2	3.7	4.2	4.3	4.4	5.3	8.5	6.3	7.0	5.1	6.4	6.1	5.4	4.9	5.3	5.8	4.4	4.1	5.9	8.5	3.7	5.2
14	5.1	7.1	10.7	8.2	9.3	58.3	34.4	8.4	7.4	11.3	10.4	6.6	7.2	8.5	13.8	10.2	11.6	13.3	9.7	11.6	11.1	6.6	4.9	5.9	58.3	4.9	12.2
15	5.8	7.6	4.7	7.1	3.8	5.0	5.9	7.0	5.6	4.7	4.2	4.8	5.8	7.3	5.5	5.8	4.4	4.9	4.8	4.0	4.6	7.3	5.7	6.3	7.6	3.8	5.5
16	4.6	4.7	4.4	5.1	5.3	4.6	6.1	6.5	5.8	5.7	5.3	4.9	4.7	6.1	4.7	5.5	4.6	5.3	4.2	5.4	6.1	5.3	6.5	5.8	6.5	4.2	5.3
17	5.6	12.9	6.0	4.9	5.1	4.5	4.9	5.5	10.2	4.7	6.0	8.1	5.7	7.0	6.8	7.4	6.1	5.0	4.7	4.8	5.5	4.2	5.5	3.4	12.9	3.4	6.0
18	9.3	4.3	4.2	5.5	5.9	3.8	5.0	4.4	4.5	6.2	12.9	10.9	16.6	31.2	10.9	12.2	9.7	17.7	34.4	11.2	9.6	10.4	20.1	17.6	34.4	3.8	11.6
19	11.9	13.9	9.7	7.9	6.8	6.0	6.9	6.3	7.0	7.5	8.4	9.5	10.4	8.4	8.5	7.2	8.4	10.7	11.7	9.0	4.7	6.7	8.4	7.8	13.9	4.7	8.5
20	6.5	10.1	9.5	7.3	12.6	2.6	4.4	4.3	4.5	9.0	10.8	13.7	7.2	7.0	4.8	6.0	5.1	5.6	4.0	4.5	6.4	4.1	5.8	5.5	13.7	2.6	6.7
21	6.1	5.4	4.1	3.9	4.4	4.6	4.9	5.2	4.5	5.6	6.1	7.0	8.9	12.5	13.7	14.6	18.2	16.2	9.1	16.2	26.5	19.3	9.8	7.4	26.5	3.9	9.8
22	4.5	6.5	4.5	5.6	89.3	24.1	19.3	11.6	9.4	13.2	15.6	28.7	8.3	10.1	12.4	18.6	9.7	14.4	11.6	12.6	17.5	9.0	6.6	4.3	89.3	4.3	15.3
23	9.0	3.5	11.1	12.8	3.9	6.3	3.3	4.0	7.8	10.1	7.9	7.1	8.1	7.6	6.8	7.1	8.2	7.3	8.8	10.0	6.7	4.5	10.2	89.7	89.7	3.3	10.9
24	14.0	10.4	6.3	10.9	24.9	7.4	9.2	8.2	7.0	12.2	9.7	10.2	10.2	8.7	8.2	10.2	11.4	12.2	14.0	11.4	13.9	9.3	3.8	4.8	24.9	3.8	10.4
25	3.9	5.8	5.4	4.7	5.4	7.1	6.4	11.5	9.6	6.5	8.0	6.9	10.3	10.8	11.2	12.0	11.9	9.1	7.6	9.7	5.7	5.1	4.7	7.6	12.0	3.9	7.8
26	7.3	15.4	8.4	10.1	53.7	10.7	4.4	3.5	4.5	3.9	6.6	14.0	6.8	8.5	9.1	13.4	14.2	12.7	11.1	22.9	10.6	6.1	6.4	5.8	53.7	3.5	11.3
27	8.6	7.6	9.3	6.1	3.6	4.4	5.5	4.3	4.8	6.6	8.1	10.1	14.1	12.9	11.6	10.7	12.0	11.5	8.7	5.4	7.4	7.7	19.9	30.5	30.5	3.6	9.6
28	9.3	10.1	6.7	9.8	6.9	5.9	6.6	7.2	7.5	8.0	9.4	10.3	9.7	10.5	10.6	9.7	7.8	7.3	5.7	8.3	5.3	5.5	4.9	5.7	10.6	4.9	7.9
29	5.5	5.4	7.2	8.6	7.6	9.9	4.8	3.5	5.2	6.1	8.1	10.5	10.1	8.4	8.5	7.7	6.9	6.9	5.4	5.0	4.9	4.8	8.2	4.0	10.5	3.5	6.8
30	6.1	7.1	3.3	5.0	5.1	5.8	4.9	4.7	6.8	7.3	5.0	8.1	7.4	8.1	8.5	10.8	8.1	7.9	7.0	7.5	8.0	6.5	9.7	6.5	10.8	3.3	6.9
31	6.2	6.6	8.1	11.6	4.9	12.3	9.1	9.4	7.3	5.5	5.6	8.0	9.1	7.8	9.3	10.3	10.6	10.2	10.7	12.9	9.7	9.2	4.5	11.0	12.9	4.5	8.7
Max.	**16.7**	**15.4**	**17.2**	**22.5**	**89.3**	**80.7**	**43.9**	**12.7**	**11.9**	**14.1**	**20.7**	**29.0**	**45.6**	**43.2**	**89.4**	**18.6**	**48.3**	**40.3**	**34.4**	**22.9**	**26.5**	**19.3**	**20.1**	**89.7**	**89.7**		
Min.	**3.4**	**2.5**	**3.3**	**3.9**	**3.6**	**2.6**	**3.3**	**3.4**	**3.4**	**3.9**	**4.2**	**4.6**	**4.1**	**4.1**	**4.6**	**4.8**	**4.4**	**4.1**	**4.0**	**4.0**	**3.8**	**3.9**	**3.8**	**3.4**		**2.5**	
Avg.	**6.8**	**7.0**	**6.9**	**8.0**	**12.2**	**10.8**	**8.2**	**6.3**	**6.6**	**7.4**	**8.4**	**9.9**	**10.1**	**10.7**	**11.7**	**9.2**	**9.8**	**9.7**	**8.6**	**8.2**	**7.8**	**6.7**	**7.3**	**10.3**			**8.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.2	6.5	8.0	5.1	23.9	12.3	12.9	66.9	69.0	14.6	36.5	39.4	81.3	61.3	14.9	16.7	13.2	11.1	11.2	11.7	5.5	4.9	3.7	4.4	81.3	3.7	22.7
2	4.5	4.0	3.6	4.4	3.7	4.5	3.6	3.9	4.3	4.1	4.5	5.6	5.6	5.7	4.7	5.1	5.7	6.1	10.0	10.5	15.4	19.5	17.8	7.0	19.5	3.6	6.8
3	15.1	8.7	17.1	9.5	7.8	4.7	7.6	9.5	6.7	9.5	13.6	39.1	90.3	15.6	13.5	11.2	15.8	10.4	7.1	6.4	5.8	4.0	5.3	4.9	90.3	4.0	14.1
4	4.6	5.0	5.5	6.2	6.3	4.7	6.4	6.0	4.1	4.5	5.9	5.8	6.5	8.5	10.0	11.4	7.6	9.0	7.1	6.5	5.2	6.0	5.4	5.1	11.4	4.1	6.4
5	5.1	5.7	6.1	9.5	29.1	12.5	11.6	11.6	4.5	10.1	8.6	12.9	11.8	13.3	13.7	14.8	13.0	11.5	10.9	9.1	6.9	5.6	6.7	6.4	29.1	4.5	10.5
6	11.1	9.6	3.2	6.5	7.9	12.5	11.5	10.3	10.3	10.6	12.8	12.9	9.9	7.6	10.7	9.8	9.9	7.2	5.0	4.8	4.6	3.8	10.9	7.3	12.9	3.2	8.8
7	11.4	10.6	9.3	5.9	3.2	4.8	7.9	6.0	5.7	7.0	10.5	9.8	9.5	9.7	12.5	12.3	8.0	9.4	8.9	6.6	7.0	4.9	5.6	4.6	12.5	3.2	8.0
8	5.7	6.8	7.4	5.0	4.7	8.0	10.9	10.1	6.5	6.8	9.3	9.8	13.4	11.9	16.9	14.3	12.4	18.4	14.6	9.8	6.1	5.0	4.9	6.5	18.4	4.7	9.4
9	10.4	9.1	11.5	4.3	4.9	5.5	5.0	4.4	6.2	5.8	8.7	10.6	10.9	14.3	12.4	14.9	13.8	17.9	9.3	8.3	8.1	5.4	6.9	9.4	17.9	4.3	9.1
10	5.5	9.0	8.8	8.9	12.7	41.4	81.3	53.7	15.5	8.5	10.2	24.6	31.3	32.0	11.5	19.5	38.1	16.0	19.0	5.9	7.0	4.5	5.6	5.0	81.3	4.5	19.8
11	4.2	8.6	7.5	6.4	6.8	5.6	6.6	5.7	6.2	8.0	12.1	8.7	9.2	8.5	9.8	8.3	10.4	9.9	7.6	7.7	6.7	6.8	8.4	3.9	12.1	3.9	7.6
12	8.1	41.6	8.5	3.3	6.1	9.0	4.1	8.5	5.1	6.3	9.5	13.3	16.7	11.6	17.0	19.0	19.8	25.4	6.6	7.4	18.7	17.1	22.4	48.8	48.8	3.3	14.7
13	14.4	9.1	23.7	10.4	5.7	3.8	4.4	4.8	11.1	10.5	40.5	14.5	14.4	13.6	21.6	13.9	11.6	25.8	8.1	4.6	5.3	4.9	6.3	12.3	40.5	3.8	12.3
14	11.9	9.1	8.2	9.0	16.7	11.0	18.4	17.8	3.6	5.3	4.4	4.8	5.1	4.8	6.4	4.9	5.3	5.0	5.5	5.5	5.1	5.5	5.5	19.2	19.2	3.6	8.3
15	5.5	6.5	3.8	3.8	3.9	4.0	5.6	5.9	10.8	13.9	8.0	13.8	20.2	13.1	22.4	11.3	9.3	14.6	10.4	13.1	11.2	6.6	8.8	6.8	22.4	3.8	9.7
16	8.0	4.1	4.4	10.5	5.8	4.5	3.3	4.4	8.2	7.2	4.3	4.8	6.3	7.0	5.9	5.7	6.1	7.3	7.5	7.6	5.7	6.6	5.9	3.6	10.5	3.3	6.0
17	10.9	4.1	4.0	4.8	6.2	6.9	6.0	4.0	4.3	6.4	6.3	7.6	6.6	8.2	9.2	10.2	6.7	4.3	4.4	5.3	4.3	6.9	4.7	4.1	10.9	4.0	6.1
18	3.7	4.4	5.1	4.6	4.0	7.9	6.4	10.0	7.5	16.5	15.9	9.8	12.1	13.6	19.2	16.3	10.1	30.4	38.9	46.4	31.7	28.3	10.1	9.0	46.4	3.7	15.1
19	16.2	4.6	7.1	6.5	7.7	31.2	35.4	6.7	6.6	7.9	23.7	13.0	10.6	16.5	12.2	12.8	21.1	17.9	6.7	7.6	35.5	13.9	8.4	9.3	35.5	4.6	14.1
20	26.1	4.4	2.8	5.6	5.9	10.5	7.3	8.1	4.4	5.5	9.5	19.3	15.5	17.3	19.1	12.6	21.9	16.3	13.7	10.5	10.8	12.7	7.0	8.4	26.1	2.8	11.5
21	26.9	16.7	19.9	11.2	10.9	5.2	2.9	6.1	3.1	4.2	5.7	6.3	8.8	13.0	10.6	8.8	11.9	9.0	19.0	15.1	12.3	17.0	5.6	6.6	26.9	2.9	10.7
22	77.3	51.3	37.1	84.0	21.4	24.2	23.9	15.5	16.2	7.3	7.1	16.7	52.6	23.4	14.7	19.2	54.1	34.6	13.0	7.3	6.8	8.7	6.0	4.2	84.0	4.2	26.1
23	10.4	8.1	4.7	5.1	5.0	6.4	5.8	5.7	8.2	6.9	7.4	11.7	14.6	18.9	23.6	24.8	22.3	70.5	11.4	26.1	5.8	6.6	5.6	6.1	70.5	4.7	13.4
24	17.4	19.0	6.2	4.8	3.8	9.5	11.0	5.5	9.7	13.6	13.8	12.4	11.2	11.4	12.7	9.7	12.6	14.0	8.9	21.4	22.4	5.7	5.5	4.7	22.4	3.8	11.1
25	5.2	11.3	9.5	11.8	6.6	3.2	7.0	3.6	3.9	69.7	40.7	17.0	12.6	9.8	11.5	18.3	9.2	9.3	7.7	6.5	5.3	6.4	6.6	5.9	69.7	3.2	12.4
26	4.7	4.5	5.1	4.4	5.8	10.2	4.9	4.6	4.3	4.2	5.0	4.8	4.9	4.5	6.6	6.3	6.9	5.1	5.8	5.6	8.1	5.9	12.2	9.2	12.2	4.2	6.0
27	12.0	10.3	4.8	24.5	9.8	14.7	11.7	9.3	7.4	6.1	4.9	8.9	12.7	11.8	12.2	10.1	9.7	13.6	7.8	7.5	5.1	4.0	12.8	6.6	24.5	4.0	9.9
28	10.0	7.5	5.7	5.9	9.4	7.9	3.5	5.6	9.4	20.3	7.8	10.7	11.8	17.6	19.4	8.9	7.2	12.8	27.0	13.4	6.0	5.5	8.4	3.5	27.0	3.5	10.2
29	2.6	3.1	3.6	3.8	4.4	6.6	4.8	8.4	8.6	10.8	13.7	22.7	16.7	19.9	10.7	10.8	14.7	8.6	6.2	5.5	3.8	3.8	4.7	5.9	22.7	2.6	8.5
30	7.9	6.6	10.1	10.4	6.2	2.7	5.8	44.2	29.2	31.6	17.5	35.5	25.1	27.2	20.5	18.9	18.3	14.6	8.2	7.1	6.0	5.3	6.0	5.2	44.2	2.7	15.4
31	5.3	4.7	5.2	4.6	4.7	4.5	4.4	4.6	3.9	4.7	2.9	3.4	4.5	8.7	8.1	4.9	4.9	4.3	4.5	4.2	4.1	3.5	3.9	3.5	8.7	2.9	4.7
Max.	**77.3**	**51.3**	**37.1**	**84.0**	**29.1**	**41.4**	**81.3**	**66.9**	**69.0**	**69.7**	**40.7**	**39.4**	**90.3**	**61.3**	**23.6**	**24.8**	**54.1**	**70.5**	**38.9**	**46.4**	**35.5**	**28.3**	**22.4**	**48.8**	**90.3**		
Min.	**2.6**	**3.1**	**2.8**	**3.3**	**3.2**	**2.7**	**2.9**	**3.6**	**3.1**	**4.1**	**2.9**	**3.4**	**4.5**	**4.5**	**4.7**	**4.9**	**4.9**	**4.3**	**4.4**	**4.2**	**3.8**	**3.5**	**3.7**	**3.5**		**2.6**	
Avg.	**12.0**	**10.2**	**8.6**	**9.7**	**8.4**	**9.7**	**11.0**	**12.0**	**9.8**	**11.2**	**12.3**	**13.9**	**18.2**	**14.8**	**13.4**	**12.4**	**13.9**	**15.2**	**10.7**	**10.2**	**9.4**	**7.9**	**7.7**	**8.0**			**11.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.8	4.5	6.3	4.9	6.8	4.9	4.5	4.3	3.7	4.3	5.7	5.6	21.0	11.3	6.9	6.4	10.9	7.9	5.4	4.5	7.4	4.4	5.5	5.7	21.0	3.7	6.5
2	4.2	4.4	4.0	3.9	4.3	4.1	3.6	3.6	4.0	4.8	6.0	4.7	5.1	5.4	6.0	6.1	7.3	6.9	6.7	7.5	3.2	6.2	4.3	3.7	7.5	3.2	5.0
3	4.2	6.9	5.7	5.2	5.9	4.9	5.8	5.5	4.9	5.1	5.4	12.2	14.8	9.0	16.1	7.8	19.6	11.2	5.9	5.3	7.5	11.8	8.4	4.6	19.6	4.2	8.1
4	5.4	5.6	3.9	4.4	4.5	7.0	5.6	7.2	6.9	5.6	10.7	10.2	10.1	11.5	8.5	8.1	9.9	11.2	11.5	10.8	5.6	6.7	5.9	3.1	11.5	3.1	7.5
5	11.2	17.8	42.2	39.7	15.0	25.7	32.0	32.7	16.0	4.5	16.2	10.0	15.3	23.9	19.4	14.5	12.3	72.5	8.8	7.2	21.9	9.0	4.5	5.5	72.5	4.5	19.9
6	7.0	3.8	4.1	5.7	8.7	4.8	4.7	4.0	6.1	5.6	4.5	4.1	4.1	3.9	4.3	6.0	5.1	3.6	6.3	4.4	5.2	4.8	3.7	3.2	8.7	3.2	4.9
7	5.7	3.7	4.0	6.4	10.8	5.7	8.0	5.7	4.4	4.6	4.6	11.0	4.8	4.9	5.1	7.2	4.5	6.0	5.4	4.4	6.1	5.1	4.3	4.8	11.0	3.7	5.7
8	11.6	5.0	8.6	5.9	4.7	4.5	7.1	3.8	8.7	5.7	13.0	7.6	5.8	5.1	6.2	7.0	6.1	4.1	4.2	5.1	4.5	4.1	5.9	5.5	13.0	3.8	6.2
9	4.3	5.1	6.3	3.9	3.2	5.0	6.2	5.6	9.5	3.0	3.9	4.9	6.1	5.8	5.0	4.8	5.2	4.7	4.8	5.4	5.2	4.5	4.0	4.0	9.5	3.0	5.0
10	3.8	5.6	6.3	6.9	10.2	5.4	5.6	8.6	7.5	5.4	6.8	9.1	7.9	16.7	12.2	8.7	8.2	7.1	13.1	5.1	3.8	5.2	3.6	10.0	16.7	3.6	7.6
11	8.2	5.8	4.9	4.7	6.1	7.2	6.1	7.1	6.0	4.9	5.7	6.0	6.8	5.3	5.7	9.7	6.5	6.5	6.0	6.4	4.5	5.0	4.4	4.4	9.7	4.4	6.0
12	4.5	5.3	4.4	5.7	4.9	5.5	6.2	5.7	4.6	4.2	4.9	5.3	5.3	5.2	4.8	4.4	5.1	4.6	4.6	5.0	4.5	5.2	4.6	5.0	6.2	4.2	5.0
13	4.7	5.1	4.6	4.9	4.1	5.0	5.1	5.1	5.6	5.8	5.3	4.6	5.1	5.3	5.2	5.7	5.6	4.9	4.6	4.4	4.2	4.2	4.2	4.2	5.8	4.1	4.9
14	4.1	4.7	4.7	4.7	4.9	5.5	4.6	4.9	5.2	3.8	4.6	4.7	5.8	3.9	4.9	4.2	6.0	4.7	6.7	5.8	5.2	5.0	7.3	4.4	7.3	3.8	5.0
15	3.5	4.2	4.6	5.8	5.4	5.2	5.9	5.1	4.2	5.5	4.2	5.0	4.7	4.8	5.8	5.7	5.5	5.3	4.0	6.1	4.8	4.4	4.1	5.4	6.1	3.5	5.0
16	3.7	11.0	25.0	19.3	13.1	10.4	4.5	15.5	3.9	9.0	9.5	10.5	10.6	9.6	9.6	9.5	11.6	8.6	7.1	4.5	4.2	7.1	5.6	9.3	25.0	3.7	9.7
17	7.5	9.6	7.1	5.8	22.0	17.8	5.0	5.2	6.2	8.2	60.1	8.3	10.4	7.3	7.4	5.8	5.6	6.5	5.9	4.3	8.5	7.2	9.7	7.6	60.1	4.3	10.4
18	7.0	3.5	3.9	3.9	3.9	4.3	4.3	4.2	5.3	5.0	8.0	5.1	6.1	18.9	6.3	4.8	9.0	6.6	10.5	18.8	41.8	28.8	6.7	6.9	41.8	3.5	9.3
19	4.5	7.6	6.1	6.2	6.5	5.1	5.5	5.7	4.1	10.0	7.5	7.9	8.2	14.6	46.8	7.8	6.5	6.5	7.5	5.4	5.5	7.3	4.5	7.8	46.8	4.1	8.6
20	10.5	9.0	7.8	8.1	6.5	5.1	5.8	14.3	13.1	11.3	31.6	46.5	12.4	9.1	10.2	12.9	20.6	8.3	7.8	15.4	10.3	4.9	10.6	8.0	46.5	4.9	12.5
21	10.5	4.9	5.9	7.6	5.0	4.5	5.6	20.2	20.7	10.6	11.1	11.8	13.4	13.6	21.0	8.7	9.2	8.1	5.0	4.8	5.7	6.3	6.8	6.3	21.0	4.5	9.5
22	6.6	4.9	4.5	4.4	6.0	5.9	17.2	4.5	4.3	8.7	8.4	15.4	16.4	18.6	17.6	9.9	5.5	5.6	4.0	3.7	4.8	4.3	5.6	4.0	18.6	3.7	8.0
23	4.5	4.1	13.6	6.3	3.7	3.6	4.1	5.6	5.1	5.2	5.3	4.9	4.6	7.7	6.1	5.8	7.2	4.3	4.4	5.3	5.3	5.3	5.2	9.9	13.6	3.6	5.7
24	4.9	5.1	8.4	7.4	7.4	4.6	7.9	4.4	4.6	6.1	8.8	4.2	4.7	5.2	5.4	6.1	4.5	5.1	5.1	6.1	3.9	5.2	6.6	5.6	8.8	3.9	5.7
25	6.6	5.6	4.1	5.1	4.0	4.7	4.4	4.8	6.1	5.1	8.8	15.1	14.4	17.5	14.9	10.4	9.2	11.9	4.9	3.8	9.4	3.8	6.2	4.1	17.5	3.8	7.7
26	7.6	8.1	2.5	9.7	16.5	10.9	14.1	5.3	26.3	5.2	14.7	30.2	69.2	28.4	16.1	22.1	29.4	8.6	10.2	13.7	5.1	13.0	8.6	8.7	69.2	2.5	16.0
27	6.0	7.2	7.8	10.1	10.1	10.9	9.2	7.5	9.4	9.8	5.9	7.3	10.4	11.0	11.6	10.1	6.5	10.1	8.3	8.3	9.3	10.0	9.1	10.4	11.6	5.9	9.0
28	6.4	5.1	4.0	6.1	9.0	9.3	8.7	8.5	8.8	14.8	14.6	49.1	56.6	67.1	50.8	38.2	67.1	13.1	11.2	5.1	4.9	4.2	7.5	8.6	67.1	4.0	19.9
29	6.0	3.2	5.5	10.5	4.9	3.5	4.1	4.3	2.4	2.9	4.4	4.6	7.2	4.2	4.7	4.3	7.1	9.4	6.3	3.6	6.3	6.1	4.5	4.4	10.5	2.4	5.2
30	5.3	5.2	83.2	11.4	5.2	8.3	6.6	4.3	3.7	6.6	8.6	9.8	13.3	13.6	12.1	18.2	15.4	16.7	20.0	14.5	9.7	6.5	12.1	36.6	83.2	3.7	14.5
Max.	**11.6**	**17.8**	**83.2**	**39.7**	**22.0**	**25.7**	**32.0**	**32.7**	**26.3**	**14.8**	**60.1**	**49.1**	**69.2**	**67.1**	**50.8**	**38.2**	**67.1**	**72.5**	**20.0**	**18.8**	**41.8**	**28.8**	**12.1**	**36.6**	**83.2**		
Min.	**3.5**	**3.2**	**2.5**	**3.9**	**3.2**	**3.5**	**3.6**	**3.6**	**2.4**	**2.9**	**3.9**	**4.1**	**4.1**	**3.9**	**4.3**	**4.2**	**4.5**	**3.6**	**4.0**	**3.6**	**3.2**	**3.8**	**3.6**	**3.1**		**2.4**	
Avg.	**6.1**	**6.0**	**10.1**	**7.8**	**7.5**	**7.0**	**7.3**	**7.4**	**7.4**	**6.4**	**10.3**	**11.2**	**12.7**	**12.3**	**11.9**	**9.4**	**11.1**	**9.7**	**7.2**	**6.8**	**7.6**	**6.8**	**6.1**	**7.1**			**8.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	44.6	6.8	12.0	8.6	3.2	5.6	4.2	4.2	3.9	5.2	4.0	5.6	5.8	5.9	4.7	7.7	6.4	5.7	7.3	6.7	6.8	16.6	5.3	5.8	44.6	3.2	8.0
2	7.9	6.1	4.6	2.9	10.8	6.4	9.1	6.5	9.3	12.8	22.4	13.5	27.8	22.9	12.6	11.5	9.2	6.1	6.0	4.2	10.5	4.1	3.7	4.4	27.8	2.9	9.8
3	3.3	3.7	2.3	0.0	0.1	0.4	15.6	13.8	0.6	0.3	0.6	0.5	0.8	0.2	0.6	0.3	0.4	0.5	0.4	0.4	0.2	0.2	0.2	0.3	15.6	0.0	1.9
4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.5	45.1	22.4	30.8	10.5	14.6	19.6	7.6	74.9	16.2	20.4	7.8	20.9	15.6	74.9	0.2	12.9
5	6.7	29.3	35.6	10.0	5.2	3.6	5.0	3.4	5.5	6.0	4.1	7.0	11.6	8.4	16.5	9.4	14.3	5.5	8.4	10.8	4.9	7.8	9.8	10.0	35.6	3.4	9.9
6	6.3	5.3	8.6	8.5	7.9	6.0	7.2	15.7	13.6	7.1	14.0	8.3	15.1	20.2	21.5	10.8	10.8	11.6	7.8	6.5	6.1	6.4	7.8	5.1	21.5	5.1	9.9
7	4.4	4.1	4.7	6.2	4.0	4.6	4.8	4.8	7.8	4.2	4.9	6.5	5.2	5.9	5.0	5.3	6.3	5.8	5.1	4.9	4.2	3.3	3.1	3.2	7.8	3.1	4.9
8	2.9	3.5	3.9	4.8	3.6	4.3	3.8	3.8	3.5	3.7	5.3	5.9	11.4	10.7	9.0	6.0	5.9	7.7	3.6	3.1	8.3	13.2	8.5	4.5	13.2	2.9	5.9
9	6.1	4.2	4.9	5.7	3.9	4.7	4.6	4.0	4.8	4.8	3.9	4.1	4.0	3.9	4.2	4.2	4.2	4.1	4.5	4.4	4.3	4.6	4.1	3.9	6.1	3.9	4.4
10	4.2	3.7	5.0	21.5	3.9	5.7	7.7	4.7	4.4	5.3	6.2	6.2	8.7	5.0	7.4	4.9	4.0	3.9	4.5	8.1	9.5	7.7	5.6	6.3	21.5	3.7	6.4
11	5.5	4.1	4.4	3.8	4.2	4.9	5.3	5.1	73.4	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.2	0.4	0.3	0.2	0.5	73.4	0.0	4.8
12	0.3	0.3	0.5	0.6	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.5	0.4	0.3	0.1	0.3	0.2	0.2	0.3	0.6	0.1	0.3
13	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.4	0.3	0.2	26.8	0.1	0.1	0.1	65.3	5.1	3.4	2.9	65.3	0.1	4.5
14	3.5	5.2	3.4	4.9	4.6	9.9	3.9	6.4	4.8	3.0	3.7	3.0	4.0	3.2	3.0	4.3	4.5	5.9	4.1	4.3	5.2	6.4	0.3	0.2	9.9	0.2	4.2
15	0.2	0.3	0.3	0.4	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.1	0.3	0.4	0.4	0.1	0.2	0.3	0.4	0.3	0.4	0.1	0.2
16	0.4	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	28.8	16.0	41.5	13.5	7.0	16.8	6.9	3.5	10.5	4.0	41.5	0.2	6.4
17	9.8	24.3	9.8	7.3	17.5	5.0	6.5	3.6	3.0	18.0	16.5	10.9	7.5	6.7	8.2	2.9	4.8	2.8	3.9	4.2	3.6	3.8	4.5	3.6	24.3	2.8	7.9
18	3.5	2.9	3.4	3.5	3.6	3.5	3.2	5.0	3.6	3.4	4.7	4.1	7.0	6.8	8.2	10.5	5.8	5.0	4.0	3.8	6.1	6.3	3.8	8.3	10.5	2.9	5.0
19	5.8	3.9	4.8	5.8	4.7	6.1	7.9	4.2	6.5	7.1	8.1	6.7	8.1	8.5	8.8	20.0	13.0	16.5	26.6	10.6	5.7	12.8	5.6	11.6	26.6	3.9	9.1
20	6.3	6.6	4.7	2.9	12.4	5.9	7.5	16.5	7.9	9.2	3.8	2.9	9.0	12.6	10.1	7.7	11.6	10.2	36.1	26.1	19.0	5.2	5.5	11.1	36.1	2.9	10.5
21	14.6	17.1	18.7	34.0	37.2	27.9	12.2	10.4	10.9	8.9	10.5	10.1	9.2	8.3	9.4	9.4	9.8	10.5	10.5	12.8	13.7	6.3	11.3	10.5	37.2	6.3	13.9
22	10.0	4.2	7.0	5.3	5.7	7.4	10.3	7.7	9.6	8.6	5.4	6.9	5.2	7.6	10.0	13.9	9.1	9.9	7.4	10.5	4.3	3.8	6.4	6.4	13.9	3.8	7.6
23	4.9	6.6	7.9	7.6	5.6	8.2	12.5	14.5	12.4	11.9	6.8	6.1	5.6	4.3	4.1	5.6	3.8	8.1	4.1	3.4	3.5	4.7	4.1	5.0	14.5	3.4	6.7
24	4.0	3.7	3.3	3.5	3.9	6.1	4.1	2.8	3.8	3.7	3.3	4.5	8.7	19.5	3.5	3.0	3.3	6.4	3.2	4.8	9.3	6.6	9.4	8.0	19.5	2.8	5.5
25	5.7	5.3	6.0	3.3	3.9	3.5	4.4	5.2	4.6	4.3	4.3	3.8	4.4	4.0	6.1	6.0	12.3	6.7	6.8	3.7	11.5	7.8	6.5	5.6	12.3	3.3	5.7
26	13.7	7.2	8.1	6.1	7.8	7.4	5.6	5.8	11.1	10.1	7.9	6.3	11.0	8.3	12.8	6.7	5.6	6.3	8.1	12.4	12.9	8.9	5.7	7.7	13.7	5.6	8.5
27	12.4	14.7	13.8	12.4	12.8	10.0	10.2	5.1	10.1	12.1	10.8	9.8	10.7	7.6	12.6	10.7	10.3	11.2	12.2	7.9	10.9	21.8	30.5	56.7	56.7	5.1	14.0
28	19.5	12.4	7.1	3.9	3.9	3.4	3.3	4.5	3.5	3.5	4.2	4.9	5.4	6.9	6.8	9.6	4.9	4.2	6.7	17.0	10.0	4.9	16.6	11.6	19.5	3.3	7.4
29	49.2	41.9	7.0	6.1	6.9	6.2	11.3	31.3	15.4	12.9	5.0	5.6	4.2	2.5	2.3	2.8	2.6	3.7	4.9	5.3	4.1	3.3	6.4	6.3	49.2	2.3	10.3
30	7.3	8.2	5.3	6.7	8.3	6.6	7.3	6.6	5.4	7.0	6.1	13.7	22.7	5.4	5.0	4.0	6.7	5.9	4.4	6.1	7.1	8.3	5.0	5.5	22.7	4.0	7.3
31	5.4	3.9	4.9	7.1	30.7	9.0	34.0	13.5	7.8	6.6	4.9	4.3	10.7	26.4	13.6	18.6	22.1	9.2	11.9	13.6	8.1	3.8	8.7	27.7	34.0	3.8	12.8
Max.	**49.2**	**41.9**	**35.6**	**34.0**	**37.2**	**27.9**	**34.0**	**31.3**	**73.4**	**18.0**	**22.4**	**45.1**	**27.8**	**30.8**	**28.8**	**20.0**	**41.5**	**16.5**	**74.9**	**26.1**	**65.3**	**21.8**	**30.5**	**56.7**	**74.9**		
Min.	**0.2**	**0.2**	**0.3**	**0.0**	**0.1**	**0.1**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**	**0.3**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**		**0.0**	
Avg.	**8.7**	**7.7**	**6.5**	**6.3**	**7.0**	**5.6**	**6.9**	**6.8**	**8.0**	**5.9**	**5.6**	**6.7**	**8.0**	**8.2**	**8.0**	**7.3**	**9.0**	**6.3**	**9.2**	**7.4**	**9.1**	**6.3**	**6.9**	**8.2**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.2	4.2	10.0	9.0	40.3	14.2	8.1	10.5	8.2	9.5	4.6	9.2	10.8	7.1	15.5	14.1	9.4	7.5	18.7	7.8	10.5	6.3	12.8	11.2	40.3	4.2	11.2
2	6.7	5.1	4.9	3.5	4.9	6.3	7.0	5.2	7.8	6.7	5.3	6.0	6.4	6.3	7.5	10.3	10.0	7.6	6.1	14.8	11.8	14.9	10.3	8.4	14.9	3.5	7.7
3	4.6	4.7	3.5	3.9	3.0	4.9	5.3	5.0	5.5	3.9	4.0	3.1	4.8	4.5	9.1	6.4	4.7	8.6	6.1	4.8	3.4	13.9	13.7	14.0	14.0	3.0	6.1
4	12.3	12.1	7.1	14.3	11.4	14.3	15.1	12.4	14.9	10.9	8.1	8.0	6.3	4.9	5.6	4.9	9.0	5.7	8.8	3.9	4.8	5.0	6.9	5.0	15.1	3.9	8.8
5	11.8	10.7	7.8	16.9	10.5	40.2	15.5	4.1	7.4	7.1	4.6	8.8	13.3	13.0	6.3	8.9	10.5	8.0	4.1	6.7	9.6	6.5	7.1	4.5	40.2	4.1	10.2
6	5.4	5.0	5.8	5.0	7.7	4.9	5.6	5.8	5.2	4.7	4.3	5.5	5.0	6.4	4.9	5.0	6.6	5.9	15.0	9.6	13.0	16.2	9.5	12.7	16.2	4.3	7.3
7	18.0	12.3	5.9	8.2	9.9	9.2	10.2	9.8	28.8	5.8	6.9	4.9	4.8	6.3	19.9	3.4	6.3	8.6	4.4	12.1	6.1	13.1	6.4	9.7	28.8	3.4	9.6
8	3.6	6.0	9.1	6.9	3.6	4.2	4.8	4.8	7.9	5.5	7.8	6.3	4.7	4.7	4.0	4.9	4.4	2.7	4.2	3.9	3.9	4.3	3.2	3.0	9.1	2.7	4.9
9	3.9	2.7	4.1	4.5	3.8	4.0	4.3	3.4	6.6	3.2	6.9	4.6	4.9	6.2	5.1	3.1	3.4	3.1	4.3	4.9	3.8	3.9	3.1	4.1	6.9	2.7	4.2
10	3.8	3.6	4.9	3.9	8.4	4.2	3.4	6.4	8.6	6.3	11.6	4.3	7.8	3.8	6.1	5.1	11.0	6.9	3.5	2.5	10.4	3.2	3.3	3.6	11.6	2.5	5.7
11	4.6	5.5	3.2	4.0	3.6	6.3	5.3	4.9	3.7	4.5	9.8	7.7	5.4	9.8	16.3	17.1	9.8	9.8	8.0	5.8	3.4	5.5	6.0	9.4	17.1	3.2	7.1
12	6.8	19.9	0.4	0.3	9.8	5.7	3.2	5.0	5.8	4.8	4.2	6.9	4.8	4.5	3.1	3.1	3.6	10.0	4.7	3.6	6.2	15.7	7.0	6.4	19.9	0.3	6.1
13	6.5	6.2	6.5	7.3	6.5	6.9	5.2	5.3	6.3	9.4	6.0	7.5	4.9	6.2	10.1	6.6	8.9	4.8	7.9	5.3	7.0	3.3	4.5	12.0	12.0	3.3	6.7
14	5.7	6.6	6.0	4.2	3.5	3.4	2.9	3.1	3.1	4.4	12.9	8.3	6.5	7.4	4.5	6.6	8.6	5.0	7.0	4.8	5.3	5.4	6.6	6.6	12.9	2.9	5.8
15	7.5	6.6	5.2	5.4	5.1	4.5	6.0	8.7	1.6	1.1	0.6	0.6	0.4	0.6	19.4	4.2	5.2	5.3	5.8	4.6	4.6	4.4	4.3	4.7	19.4	0.4	4.8
16	4.8	4.2	5.4	4.5	6.4	8.7	5.8	11.2	8.4	3.5	5.7	13.7	0.4	7.0	0.3	0.1	0.3	0.1	0.3	0.2	0.3	0.3	0.6	0.5	13.7	0.1	3.9
17	69.1	6.6	7.3	20.1	6.4	10.0	4.2	4.1	7.0	10.0	4.9	5.0	3.7	6.2	2.2	5.3	3.7	5.4	3.8	6.2	3.8	3.6	4.9	5.6	69.1	2.2	8.7
18	3.5	6.9	7.2	9.1	8.0	6.1	7.4	5.9	6.4	4.6	4.9	4.6	5.3	5.4	4.0	4.5	6.0	5.1	5.4	5.8	7.0	8.1	5.5	5.1	9.1	3.5	5.9
19	4.6	8.3	6.9	6.5	10.3	6.4	7.0	6.5	12.2	10.3	5.7	12.1	10.8	5.4	5.5	5.3	9.0	3.6	5.5	5.3	5.7	3.9	9.2	8.8	12.2	3.6	7.3
20	15.4	6.4	7.3	11.9	16.4	17.3	6.3	14.6	16.8	7.2	9.8	10.5	7.0	13.6	9.9	13.0	11.0	13.9	10.0	3.9	11.7	12.8	7.9	10.7	17.3	3.9	11.1
21	4.4	10.5	11.4	7.6	5.6	4.1	8.6	10.6	7.3	7.6	11.5	10.3	9.7	13.1	7.4	21.5	36.4	10.1	17.9	12.9	19.8	11.1	9.9	46.3	46.3	4.1	13.2
22	15.2	37.6	14.5	5.4	4.5	3.8	9.0	5.4	5.1	4.9	8.9	7.9	3.6	5.0	5.6	4.9	6.4	4.0	5.6	11.4	5.5	10.7	5.5	8.6	37.6	3.6	8.3
23	4.0	3.5	3.9	3.9	8.2	2.6	3.5	4.8	6.3	6.4	2.0	4.6	7.1	4.4	5.1	4.1	4.3	6.0	4.4	3.8	4.1	4.1	3.8	3.5	8.2	2.0	4.5
24	3.3	3.4	2.9	2.9	3.3	3.3	4.7	4.4	3.6	3.7	3.6	3.5	3.3	3.6	5.0	3.0	4.7	11.0	5.4	5.1	5.2	14.5	3.3	3.9	14.5	2.9	4.6
25	3.8	4.2	6.6	4.7	5.8	5.4	6.6	8.0	5.5	4.2	6.3	10.8	21.9	55.1	20.4	4.7	4.5	3.3	5.8	4.6	7.1	5.6	4.9	3.6	55.1	3.3	8.9
26	3.6	4.3	3.9	3.2	3.4	4.4	5.5	3.5	3.0	4.4	3.2	4.1	6.2	9.7	11.1	6.3	12.5	9.7	4.7	3.8	3.9	7.1	7.1	5.5	12.5	3.0	5.6
27	5.4	7.1	8.6	3.7	5.8	6.3	9.3	7.1	9.6	8.2	6.5	6.8	6.0	12.5	6.7	6.2	8.6	9.8	8.0	5.9	4.3	6.0	3.3	8.4	12.5	3.3	7.1
28	6.5	4.9	3.8	5.5	5.6	3.3	4.1	8.5	9.2	5.7	4.4	6.4	9.4	11.5	8.4	7.2	6.8	8.9	8.1	9.1	12.4	11.8	10.0	12.1	12.4	3.3	7.7
29	7.8	10.0	9.6	8.9	8.8	5.4	5.3	6.1	8.0	7.5	9.1	5.9	3.0	4.1	3.3	8.9	3.1	2.5	2.7	3.0	4.1	4.9	3.8	4.1	10.0	2.5	5.8
30	4.5	7.3	7.5	5.3	4.0	2.9	2.8	4.9	4.1	3.5	7.3	7.7	13.3	11.7	6.4	9.5	9.2	10.7	8.7	5.4	11.8	12.2	9.9	7.8	13.3	2.8	7.4
Max.	**69.1**	**37.6**	**14.5**	**20.1**	**40.3**	**40.2**	**15.5**	**14.6**	**28.8**	**10.9**	**12.9**	**13.7**	**21.9**	**55.1**	**20.4**	**21.5**	**36.4**	**13.9**	**18.7**	**14.8**	**19.8**	**16.2**	**13.7**	**46.3**	**69.1**		
Min.	**3.3**	**2.7**	**0.4**	**0.3**	**3.0**	**2.6**	**2.8**	**3.1**	**1.6**	**1.1**	**0.6**	**0.6**	**0.4**	**0.6**	**0.3**	**0.1**	**0.3**	**0.1**	**0.3**	**0.2**	**0.3**	**0.3**	**0.6**	**0.5**		**0.1**	
Avg.	**8.9**	**7.9**	**6.4**	**6.7**	**7.8**	**7.4**	**6.4**	**6.7**	**7.8**	**6.0**	**6.4**	**6.8**	**6.7**	**8.7**	**8.0**	**6.9**	**7.9**	**6.8**	**6.8**	**6.0**	**7.0**	**7.9**	**6.5**	**8.3**			**7.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (Climatronics)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	5.3	9.1	5.4	6.1	5.3	5.3	4.7	4.1	4.1	5.6	11.7	6.0	10.5	6.3	11.3	5.8	5.6	16.6	6.9	8.7	5.6	8.3	9.6	16.6	2.9	7.1
2	13.0	7.6	5.4	9.3	13.4	7.6	6.6	4.0	3.8	3.6	3.2	5.5	3.7	3.8	3.7	4.0	4.1	4.2	2.9	3.3	4.2	3.9	4.1	3.3	13.4	2.9	5.3
3	4.0	4.0	3.7	4.2	4.2	4.3	3.8	3.7	3.8	4.4	4.0	3.6	3.5	4.1	4.2	3.5	3.7	3.5	4.1	4.0	3.9	4.0	3.9	3.4	4.4	3.4	3.9
4	3.3	3.4	5.3	4.6	4.1	3.6	3.9	3.5	5.1	4.9	3.7	4.4	3.7	3.4	3.3	3.5	3.7	4.4	3.7	4.0	4.0	4.0	4.4	3.4	5.3	3.3	4.0
5	3.1	4.0	3.6	4.2	3.4	3.3	3.7	3.4	3.1	3.0	3.2	3.0	3.2	3.7	4.1	3.5	3.7	3.5	3.3	3.7	3.9	4.1	4.4	3.8	4.4	3.0	3.6
6	4.1	3.7	3.8	3.6	3.6	3.6	4.7	4.1	4.3	5.4	3.9	5.7	8.3	5.3	10.2	9.1	12.6	19.0	5.7	7.3	10.8	24.2	58.4	10.6	58.4	3.6	9.7
7	11.4	7.4	9.4	6.3	10.4	14.1	9.4	7.4	8.1	5.2	12.0	10.8	11.5	7.7	6.3	13.7	20.8	5.2	22.3	9.8	8.8	11.2	6.9	2.8	22.3	2.8	10.0
8	5.8	3.2	4.2	5.8	7.3	5.0	6.5	6.2	4.7	5.4	3.8	4.9	3.6	6.6	3.9	4.3	3.5	5.0	7.4	8.2	5.1	4.0	5.5	6.2	8.2	3.2	5.3
9	4.5	3.8	4.9	5.8	10.0	7.6	4.4	6.0	4.2	8.1	56.4	6.4	4.2	4.4	3.2	3.0	7.7	9.5	8.0	5.3	3.5	5.1	5.0	6.7	56.4	3.0	7.8
10	5.3	6.8	11.1	8.3	3.3	3.0	3.0	3.2	4.2	4.5	7.2	4.5	4.3	7.2	6.1	5.2	6.0	5.7	5.6	5.0	10.3	3.2	8.3	4.7	11.1	3.0	5.7
11	2.3	6.2	7.8	4.8	13.8	9.7	13.2	18.4	7.7	6.6	3.6	3.7	4.4	7.2	9.9	18.8	16.0	15.4	11.8	5.2	4.3	5.8	12.4	11.9	18.8	2.3	9.2
12	9.7	10.2	9.7	4.7	5.8	9.1	4.6	9.9	12.0	11.7	20.1	8.4	6.6	3.5	3.8	7.7	4.0	3.6	6.5	5.3	15.1	3.8	13.1	14.7	20.1	3.5	8.5
13	10.1	11.5	12.9	14.4	12.4	9.1	9.1	5.4	9.3	5.1	4.7	7.1	7.1	20.8	22.6	11.5	11.3	16.7	9.9	8.9	5.3	13.3	9.9	3.7	22.6	3.7	10.5
14	3.3	3.9	5.2	4.8	5.6	3.4	3.8	4.3	14.1	3.8	5.6	3.0	2.8	3.4	3.4	2.8	3.1	5.6	4.6	4.7	3.8	3.3	3.8	4.1	14.1	2.8	4.4
15	4.7	4.3	4.3	4.9	5.1	3.9	4.3	4.1	5.5	4.6	3.3	3.9	6.3	3.9	4.0	6.1	61.1	16.2	4.6	9.2	8.8	5.6	2.7	4.6	61.1	2.7	7.7
16	5.9	5.7	5.5	9.5	6.1	8.0	8.9	6.0	5.0	3.5	4.1	5.6	4.7	4.4	4.8	5.0	4.2	4.2	3.5	3.8	4.3	3.9	3.6	4.0	9.5	3.5	5.2
17	3.3	4.1	4.3	3.7	3.5	3.3	4.0	3.7	3.7	3.8	3.6	3.4	3.9	3.6	3.6	3.6	3.5	3.5	3.6	3.7	5.2	4.1	4.0	4.2	5.2	3.3	3.8
18	4.2	3.0	3.0	3.9	3.4	3.5	4.2	3.8	3.7	4.2	3.4	4.5	4.3	4.0	3.6	3.6	4.5	4.3	4.0	3.8	3.7	3.8	3.8	3.9	4.5	3.0	3.8
19	3.9	3.6	3.9	3.8	3.8	3.6	3.4	3.7	3.5	3.8	5.3	3.3	4.7	6.1	4.2	5.1	3.6	6.8	3.3	4.1	3.5	4.6	6.3	7.2	7.2	3.3	4.4
20	11.5	3.0	4.3	2.8	3.4	9.7	11.2	14.1	6.7	4.9	6.1	5.4	8.6	2.9	7.7	14.1	8.7	11.0	13.3	13.4	32.4	16.5	12.8	9.4	32.4	2.8	9.7
21	5.1	5.2	4.0	3.2	2.5	7.8	12.2	8.4	10.3	8.2	7.0	7.6	16.4	9.1	4.9	4.8	4.8	4.7	6.7	4.2	9.6	4.3	7.2	33.0	33.0	2.5	8.0
22	12.9	6.2	6.5	2.3	4.2	4.2	4.0	3.4	4.5	5.5	3.5	4.6	8.6	9.5	5.6	5.4	12.1	3.9	5.5	3.7	3.2	3.0	3.2	4.0	12.9	2.3	5.4
23	9.3	3.7	3.4	3.4	3.1	3.3	5.0	10.5	50.1	9.0	4.6	2.9	7.6	4.2	5.1	2.8	5.1	3.4	3.9	3.2	3.6	5.9	4.0	2.9	50.1	2.8	6.7
24	2.7	3.1	6.5	3.3	5.3	8.7	8.1	6.1	5.6	13.4	7.4	6.8	7.8	7.6	9.7	10.5	14.7	10.4	27.4	11.4	4.8	6.9	5.7	5.2	27.4	2.7	8.3
25	6.0	3.7	2.6	3.5	3.0	2.8	3.7	3.1	2.8	3.3	5.4	4.7	3.5	3.6	5.7	22.6	12.0	7.0	6.4	6.1	3.7	3.4	3.3	3.5	22.6	2.6	5.2
26	4.2	3.7	5.0	5.3	4.2	4.4	3.4	3.2	2.9	2.9	3.8	3.6	3.9	3.2	3.6	2.9	3.0	3.9	4.8	4.9	3.4	3.6	5.0	3.7	5.3	2.9	3.9
27	3.4	4.1	6.6	8.8	6.7	7.5	4.1	4.4	3.3	5.0	6.7	3.6	5.2	7.2	13.9	11.0	8.7	7.6	16.0	13.7	13.9	15.5	9.5	14.6	16.0	3.3	8.4
28	16.4	14.2	16.3	13.2	10.9	14.9	13.3	14.0	13.1	13.9	12.4	14.9	13.5	8.6	9.2	4.9	5.5	6.3	8.8	6.4	5.9	6.3	8.1	9.0	16.4	4.9	10.8
29	7.6	6.4	6.6	6.5	7.0	9.6	9.5	10.8	10.7	8.2	9.5	10.2	9.3	9.2	10.9	8.1	8.0	8.1	10.8	7.4	8.2	7.2	9.4	8.0	10.9	6.4	8.6
30	8.7	12.0	8.3	10.3	15.7	15.2	13.7	8.3	9.4	7.3	8.9	9.8	11.9	6.0	5.3	6.9	8.4	5.2	7.9	9.3	11.5	7.9	5.6	10.0	15.7	5.2	9.3
31	9.5	8.9	9.0	8.3	11.7	12.0	10.4	12.0	6.9	12.3	14.1	11.2	8.5	15.3	14.7	11.7	13.2	12.5	11.0	10.0	11.6	6.2	8.9	15.3	15.3	6.2	11.0
Max.	**16.4**	**14.2**	**16.3**	**14.4**	**15.7**	**15.2**	**13.7**	**18.4**	**50.1**	**13.9**	**56.4**	**14.9**	**16.4**	**20.8**	**22.6**	**22.6**	**61.1**	**19.0**	**27.4**	**13.7**	**32.4**	**24.2**	**58.4**	**33.0**	**61.1**		
Min.	**2.3**	**3.0**	**2.6**	**2.3**	**2.5**	**2.8**	**3.0**	**3.1**	**2.8**	**2.9**	**3.2**	**2.9**	**2.8**	**2.9**	**3.2**	**2.8**	**3.0**	**3.4**	**2.9**	**3.2**	**3.2**	**3.0**	**2.7**	**2.8**		**2.3**	
Avg.	**6.5**	**5.7**	**6.3**	**5.9**	**6.5**	**6.8**	**6.6**	**6.6**	**7.6**	**6.1**	**7.9**	**6.1**	**6.5**	**6.4**	**6.7**	**7.5**	**9.3**	**7.3**	**8.2**	**6.4**	**7.4**	**6.6**	**8.1**	**7.5**			**6.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**			**0.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	12.7	12.1	5.3	3.2	6.1	9.3	8.3	17.4	0.0	3.1
12	6.3	10.9	14.6	4.7	13.6	17.0	4.4	6.5	4.7	16.5	5.3	6.4	4.1	7.9	4.7	3.4	3.6	3.5	3.8	4.0	8.3	6.2	11.2	9.1	17.0	3.4	7.5
13	6.7	5.0	3.5	6.6	4.2	2.8	3.3	2.9	3.4	3.0	3.9	3.6	3.6	3.6	3.5	3.5	4.3	3.8	3.7	3.8	4.1	4.2	3.8	3.6	6.7	2.8	3.9
14	3.5	3.2	3.2	3.4	2.9	3.0	3.5	24.2	6.9	5.1	3.4	2.9	4.4	3.7	4.0	3.4	3.7	3.1	3.8	3.2	6.2	4.2	9.7	6.4	24.2	2.9	5.0
15	4.0	8.9	7.9	3.6	4.2	10.6	6.9	6.7	8.6	5.6	10.3	15.7	0.4	23.0	0.3	0.4	0.2	0.4	0.3	0.2	63.4	6.8	9.9	4.9	63.4	0.2	8.5
16	4.2	3.0	3.6	3.6	4.0	4.3	2.7	3.0	2.9	3.3	2.2	2.1	3.3	1.9	2.1	3.1	3.8	13.6	2.9	2.8	2.7	2.7	3.6	2.4	13.6	1.9	3.5
17	5.9	6.2	2.9	5.2	4.1	6.6	4.5	4.1	3.4	8.1	5.3	8.4	5.3	4.6	3.4	5.3	12.3	5.0	4.2	5.0	4.0	3.9	3.7	3.5	12.3	2.9	5.2
18	4.3	4.7	4.4	5.4	4.3	5.3	4.8	5.3	4.6	6.4	4.3	4.2	4.6	4.7	4.6	5.3	4.5	3.8	3.3	3.5	4.0	3.9	4.3	5.1	6.4	3.3	4.6
19	4.9	6.7	13.2	15.2	9.3	6.6	9.7	5.4	7.7	2.3	5.6	4.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0	3.8
20	0.0	0.0	0.0	0.0	0.0	2.9	3.4	3.1	3.3	4.3	4.5	7.4	3.0	2.8	3.6	3.1	9.7	4.5	4.9	4.4	4.2	4.1	6.9	4.0	9.7	0.0	3.5
21	3.7	3.6	4.1	4.0	4.2	2.9	3.4	2.9	2.9	3.2	3.5	3.2	3.0	6.1	6.1	6.0	3.4	10.8	5.7	8.9	5.1	4.4	3.2	3.2	10.8	2.9	4.5
22	2.6	2.0	9.1	2.7	5.3	3.0	6.1	5.4	2.3	2.1	0.7	1.8	3.5	5.8	3.7	4.6	3.1	3.5	3.9	3.4	2.4	2.6	1.9	1.8	9.1	0.7	3.5
23	2.2	5.4	2.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.6
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	6.5	6.5	0.0	0.4
26	16.2	16.8	5.5	5.1	5.4	6.4	5.6	4.7	5.2	6.5	4.8	5.0	5.1	5.2	4.7	4.4	5.1	5.1	5.3	5.9	5.7	9.4	3.5	3.8	16.8	3.5	6.3
27	8.9	15.7	14.2	17.1	14.9	13.8	19.6	9.9	11.7	6.1	5.9	5.6	13.3	20.2	12.2	5.6	8.3	5.4	3.0	3.0	5.6	3.8	5.8	4.1	20.2	3.0	9.7
28	4.7	5.6	8.7	6.1	6.0	5.3	4.7	5.2	4.4	5.8	5.4	4.7	5.5	9.0	5.7	6.3	4.2	44.8	31.7	17.7	5.6	22.4	16.6	8.4	44.8	4.2	10.2
29	11.0	11.4	8.8	5.3	6.6	21.7	21.9	7.9	9.5	6.1	12.2	11.6	39.0	6.3	8.4	5.4	4.9	6.2	6.9	6.2	7.1	6.9	3.4	6.5	39.0	3.4	10.1
Max.	**16.2**	**16.8**	**14.6**	**17.1**	**14.9**	**21.7**	**21.9**	**24.2**	**11.7**	**16.5**	**12.2**	**15.7**	**39.0**	**23.0**	**12.2**	**6.3**	**17.4**	**44.8**	**31.7**	**17.7**	**63.4**	**22.4**	**16.6**	**9.1**	**63.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**3.1**	**3.8**	**3.7**	**3.2**	**3.1**	**3.9**	**3.6**	**3.3**	**2.8**	**2.9**	**2.7**	**3.0**	**3.4**	**3.6**	**2.3**	**2.1**	**3.0**	**4.4**	**3.3**	**2.7**	**4.5**	**3.1**	**3.5**	**2.8**			**3.2**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	7.6	29.6	22.5	19.8	13.9	2.4	3.5	4.7	4.7	4.3	2.9	3.7	3.4	3.1	3.6	3.3	2.9	10.4	2.8	9.3	2.6	3.4	1.8	29.6	1.8	7.1
2	3.4	2.4	3.7	3.1	3.2	3.0	4.0	4.8	4.2	3.7	4.6	4.0	4.5	3.7	3.2	6.5	4.3	5.6	3.8	7.6	4.0	3.6	2.7	2.9	7.6	2.4	4.0
3	3.0	8.5	2.9	3.7	5.4	4.0	4.1	4.8	4.1	3.5	2.9	3.2	3.3	3.9	4.8	4.1	4.5	4.3	7.4	6.2	4.8	3.4	3.2	4.1	8.5	2.9	4.3
4	3.5	3.9	4.0	4.3	5.5	5.2	3.8	3.7	4.3	3.8	3.5	4.2	3.7	3.6	4.2	3.6	3.6	3.2	3.4	4.4	4.0	4.3	3.8	3.8	5.5	3.2	4.0
5	3.6	3.6	3.2	4.4	3.6	3.5	3.7	3.7	3.2	3.5	3.5	3.1	3.1	3.5	18.7	91.5	86.4	95.7	93.3	76.7	92.5	100.4	100.6	95.1	100.6	3.1	37.5
6	90.1	82.2	95.3	96.6	83.1	48.7	72.9	85.5	93.1	89.1	84.6	79.7	101.3	96.0	89.3	89.3	75.9	98.6	99.2	81.1	73.5	81.1	97.7	101.0	101.3	48.7	86.9
7	78.7	96.6	41.8	66.9	3.6	2.9	24.8	3.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.8	50.0	86.0	88.5	73.4	84.7	72.4	96.6	0.0	35.2
8	66.0	76.5	87.2	75.6	51.9	58.7	0.4	1.0	53.0	77.7	58.3	92.5	93.8	90.8	83.2	48.2	90.4	29.2	16.6	19.9	15.2	15.6	19.2	17.4	93.8	0.4	51.6
9	23.8	70.8	96.0	78.2	77.9	78.1	95.9	71.0	86.1	56.5	13.6	45.4	73.9	75.7	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.0	0.0	39.5
10	0.0	48.0	50.9	82.8	89.7	96.1	66.2	1.5	0.1	0.3	0.2	30.5	47.4	32.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.1	0.0	22.9
11	3.7	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.2
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.8	7.1	3.6	0.0	0.0	24.8	0.0	1.5
13	0.0	1.6	4.6	0.3	1.4	11.5	1.2	1.1	1.9	0.0	0.0	0.9	2.9	11.9	11.9	49.6	4.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	49.6	0.0	4.4
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.5	48.7	80.5	77.7	54.6	87.4	88.6	90.6	93.2	88.2	93.2	0.0	30.4
15	95.9	97.1	90.5	99.7	99.8	100.1	97.4	98.6	95.0	92.5	101.0	100.6	96.5	95.1	99.1	101.6	101.2	97.5	96.0	85.8	91.4	103.4	97.2	94.8	103.4	85.8	97.0
16	98.7	89.3	94.8	88.6	99.1	67.9	48.6	93.8	99.4	90.8	89.8	89.5	77.1	79.3	74.4	70.3	30.3	0.0	0.4	0.0	41.7	60.5	14.1	0.0	99.4	0.0	62.4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.6	85.6	80.3	75.1	90.8	72.3	1.7	90.8	0.0	19.5
18	0.0	2.3	28.8	0.8	1.2	0.0	0.0	0.2	53.4	47.5	42.9	73.1	93.8	68.7	82.2	75.8	21.7	37.9	17.4	13.8	82.4	86.3	35.8	64.7	93.8	0.0	38.8
19	45.4	56.5	101.1	72.3	81.6	92.8	84.3	74.9	76.0	85.1	70.7	65.4	73.1	75.5	52.6	69.2	71.8	72.3	59.5	54.7	65.3	67.1	54.3	84.0	101.1	45.4	71.1
20	59.6	60.0	58.4	95.5	96.7	86.0	82.6	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.9	72.5	91.8	80.4	77.0	37.2	96.7	0.0	40.1
21	88.0	95.6	4.8	0.9	70.2	39.5	32.9	23.4	26.2	74.2	59.0	95.4	90.3	69.6	86.5	87.3	89.6	61.8	65.0	36.6	42.5	66.4	39.7	37.5	95.6	0.9	57.6
22	63.3	72.9	66.6	26.4	34.5	49.5	24.8	22.6	56.5	56.8	25.1	33.1	33.1	27.6	73.9	92.7	78.2	92.2	88.9	56.9	54.5	98.0	44.9	0.0	98.0	0.0	53.0
23	0.0	0.0	41.0	0.0	41.7	94.8	69.3	62.2	78.5	60.3	75.8	101.9	99.5	94.1	99.3	22.9	24.7	22.5	25.1	73.0	85.9	62.2	71.1	77.7	101.9	0.0	57.6
24	65.9	95.8	96.7	81.3	93.3	96.8	97.0	64.5	0.0	79.1	71.8	91.5	85.9	93.5	101.4	91.9	84.8	89.9	102.6	77.4	58.3	84.7	27.8	88.3	102.6	0.0	80.0
25	51.0	0.0	53.6	81.2	54.0	47.9	94.4	94.6	73.5	94.8	75.0	98.6	65.1	0.0	0.0	0.0	0.0	0.0	0.0	9.1	74.1	98.8	47.9	64.5	98.8	0.0	49.1
26	61.4	69.1	64.0	79.0	66.9	64.5	54.9	77.6	89.1	93.4	86.0	76.7	92.2	93.5	95.4	98.1	78.8	89.7	95.8	77.0	83.2	56.6	96.9	92.1	98.1	54.9	80.5
27	42.3	7.3	25.3	43.1	84.3	90.3	16.2	8.8	15.4	0.0	13.4	67.5	0.0	69.6	66.1	78.8	46.1	64.5	77.8	99.4	82.6	91.5	28.6	57.8	99.4	0.0	49.0
28	84.8	84.2	59.9	78.3	72.4	79.4	97.7	71.6	78.3	24.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.1	93.2	78.8	85.8	65.9	59.8	97.7	0.0	48.7
29	64.7	37.8	50.9	54.0	84.8	51.6	70.8	83.5	97.9	86.0	89.5	86.9	85.0	92.9	89.3	92.7	93.6	95.8	96.3	102.2	86.2	95.0	95.7	89.9	102.2	37.8	82.2
30	81.1	57.4	43.8	42.0	58.2	84.8	65.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.8	0.0	18.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**98.7**	**97.1**	**101.1**	**99.7**	**99.8**	**100.1**	**97.7**	**98.6**	**99.4**	**94.8**	**101.0**	**101.9**	**101.3**	**96.0**	**101.4**	**101.6**	**101.2**	**98.6**	**102.6**	**102.2**	**92.5**	**103.4**	**100.6**	**101.0**	**103.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**38.2**	**39.6**	**41.9**	**41.3**	**44.6**	**44.2**	**39.3**	**31.5**	**35.3**	**36.4**	**31.5**	**40.2**	**39.7**	**38.2**	**37.6**	**39.6**	**34.7**	**37.9**	**40.5**	**42.9**	**47.8**	**51.8**	**41.2**	**39.9**			**39.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	8.5	9.1	9.2	9.4	6.4	6.0	5.9	9.1	10.0	11.0	11.0	6.8	5.3	12.5	0.0	5.0
30	6.6	5.4	6.9	8.2	7.4	7.4	6.8	6.5	4.4	9.1	6.6	8.9	7.3	6.3	7.8	7.4	9.4	14.8	10.7	8.6	6.5	6.7	4.3	3.9	14.8	3.9	7.4
Max.	**6.6**	**5.4**	**6.9**	**8.2**	**7.4**	**7.4**	**6.8**	**6.5**	**4.4**	**9.1**	**12.5**	**8.9**	**9.1**	**9.2**	**9.4**	**7.4**	**9.4**	**14.8**	**10.7**	**10.0**	**11.0**	**11.0**	**6.8**	**5.3**	**14.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.2**	**0.2**	**0.2**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**	**0.3**	**0.6**	**0.6**	**0.5**	**0.5**	**0.6**	**0.5**	**0.5**	**0.7**	**0.7**	**0.6**	**0.6**	**0.6**	**0.4**	**0.3**			**0.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.2	5.7	6.5	4.2	7.0	6.8	5.3	7.3	9.4	9.5	8.0	12.3	4.8	3.3	5.3	3.6	7.4	5.4	8.4	10.6	9.0	10.3	10.6	4.6	12.3	3.3	7.1
2	6.4	5.9	2.9	4.1	4.7	6.8	7.6	6.0	5.7	7.9	6.5	4.9	4.6	10.0	58.7	25.8	8.0	6.7	10.2	49.3	28.7	9.6	6.9	7.7	58.7	2.9	12.3
3	5.5	22.9	28.1	16.1	7.5	4.7	3.6	4.4	5.9	7.3	3.8	3.7	3.4	4.1	7.1	12.9	5.4	11.6	15.4	4.2	10.2	15.5	13.4	8.4	28.1	3.4	9.4
4	3.9	6.6	5.0	7.3	3.5	3.5	4.5	6.3	5.9	5.4	5.2	6.9	4.3	3.9	3.6	5.7	7.0	5.1	11.4	29.2	83.5	45.5	19.5	33.2	83.5	3.5	13.2
5	9.0	20.5	11.7	8.7	14.8	10.7	14.7	13.9	14.7	6.1	25.5	27.2	19.1	9.0	16.0	8.8	7.1	8.5	8.6	11.5	6.8	3.4	3.2	6.6	27.2	3.2	11.9
6	4.6	7.6	5.5	4.6	6.4	6.1	7.3	3.8	4.3	5.1	3.2	3.5	3.2	3.2	4.3	2.9	3.6	5.2	3.6	3.1	3.9	3.5	3.2	3.1	7.6	2.9	4.4
7	3.9	4.1	3.0	3.1	3.2	2.8	3.1	3.4	3.3	3.2	3.1	3.0	3.0	3.0	2.9	3.3	3.3	4.1	2.9	3.6	3.6	3.4	3.7	3.7	4.1	2.8	3.3
8	3.1	3.4	3.4	3.3	3.1	3.0	3.9	3.7	3.4	3.4	2.8	3.5	3.3	3.2	3.5	3.5	3.3	3.6	3.6	3.9	3.3	3.1	3.2	3.9	3.9	2.8	3.4
9	3.9	2.9	5.4	6.6	3.9	5.6	2.8	3.4	4.1	3.4	3.9	3.2	3.3	3.7	3.7	3.4	4.3	4.1	4.1	4.7	4.7	5.7	52.2	9.8	52.2	2.8	6.4
10	24.7	10.2	10.7	8.1	7.4	11.1	13.1	8.3	14.5	8.1	9.4	10.2	10.8	6.3	5.8	6.1	4.7	10.2	2.5	2.8	8.5	3.8	5.7	2.8	24.7	2.5	8.6
11	4.2	4.2	2.8	3.8	4.3	2.8	3.9	3.9	3.3	3.4	3.5	3.5	3.7	3.6	4.3	4.2	4.3	3.5	4.1	3.5	3.6	4.4	2.8	3.1	4.4	2.8	3.7
12	3.0	3.2	4.0	3.6	4.3	4.5	3.4	3.6	3.4	6.2	3.3	3.5	4.5	3.8	3.3	3.9	4.1	4.0	3.6	3.3	3.4	3.7	3.3	4.0	6.2	3.0	3.8
13	3.8	3.7	4.8	3.5	4.4	4.3	3.1	2.6	2.3	4.1	4.3	6.5	4.2	3.6	3.6	3.8	3.7	5.8	4.1	3.4	3.8	4.5	3.4	3.2	6.5	2.3	3.9
14	3.4	3.9	3.7	14.5	3.7	4.9	3.7	3.8	5.3	3.6	3.1	5.9	2.8	5.5	6.0	7.2	7.1	2.7	3.9	3.3	4.1	4.5	4.4	7.3	14.5	2.7	4.9
15	43.4	4.8	3.2	11.2	6.4	6.1	4.9	4.1	1.7	3.2	2.8	3.0	4.2	2.8	5.2	5.4	8.3	3.2	3.1	3.5	3.0	3.2	3.9	7.1	43.4	1.7	6.2
16	4.2	3.7	4.8	6.9	5.5	5.1	16.5	6.5	9.9	7.3	8.7	5.4	5.7	5.8	3.9	4.5	4.7	5.0	4.7	4.8	5.9	12.6	20.9	52.9	52.9	3.7	9.0
17	5.3	4.0	9.0	6.1	4.5	6.8	4.5	6.5	3.3	5.7	7.1	6.8	6.6	9.3	26.2	9.7	17.8	12.6	18.5	2.5	5.3	4.0	4.9	7.1	26.2	2.5	8.1
18	5.3	11.9	10.0	3.6	3.4	2.7	5.6	6.1	3.2	6.5	4.3	6.1	3.8	2.8	4.0	4.6	9.2	6.4	4.3	5.6	4.7	3.6	7.6	4.2	11.9	2.7	5.4
19	5.3	5.0	3.8	3.9	4.8	4.5	10.5	56.8	5.7	17.8	6.7	9.2	22.6	18.7	14.7	18.7	14.7	7.5	6.4	8.0	4.4	4.4	4.8	6.8	56.8	3.8	11.1
20	7.8	7.1	5.1	5.5	12.1	9.3	5.1	4.4	4.6	7.2	4.6	5.3	9.6	25.0	6.0	6.7	8.6	3.8	3.8	2.6	4.4	3.1	2.2	4.4	25.0	2.2	6.6
21	3.8	3.8	15.5	10.3	7.4	23.2	17.6	21.1	9.7	10.9	5.6	6.2	5.2	11.1	6.7	12.9	4.4	5.1	11.4	6.6	3.2	3.5	3.5	2.2	23.2	2.2	8.8
22	3.2	3.9	3.1	2.8	7.5	8.3	10.5	14.3	34.6	14.7	10.3	11.2	21.5	10.2	9.0	9.7	4.7	3.4	3.5	4.1	6.4	4.2	3.8	3.8	34.6	2.8	8.7
23	3.7	4.3	3.6	3.9	3.7	4.8	4.6	3.9	4.7	5.6	5.4	4.7	4.3	4.2	5.4	4.8	4.5	5.2	4.9	4.3	4.5	5.1	3.6	4.2	5.6	3.6	4.5
24	3.8	4.5	4.6	4.1	4.4	4.2	4.5	4.2	3.8	3.9	4.3	4.6	5.1	4.9	5.6	4.6	5.9	5.2	24.8	6.4	11.2	10.4	6.8	3.7	24.8	3.7	6.1
25	3.5	12.4	5.3	6.1	6.4	4.2	5.5	6.8	6.4	4.3	3.7	6.0	3.7	6.0	4.0	5.0	16.9	4.7	5.4	5.3	5.5	7.2	4.5	6.2	16.9	3.5	6.0
26	5.3	3.9	6.5	3.3	5.3	4.3	4.2	4.5	5.8	5.1	8.0	9.2	5.9	5.5	25.1	11.6	8.0	9.4	9.1	6.9	4.2	4.7	6.4	5.4	25.1	3.3	7.0
27	5.1	5.1	5.2	5.7	7.5	13.0	21.0	17.8	6.4	10.4	8.4	16.0	20.0	11.9	16.3	14.1	13.1	17.6	10.2	10.1	5.6	4.2	4.8	10.9	21.0	4.2	10.9
28	10.3	5.4	4.8	6.9	6.9	7.6	4.5	8.4	7.3	5.0	10.1	8.3	17.7	11.6	13.9	16.6	15.2	17.4	8.3	4.5	5.2	4.9	9.6	10.4	17.7	4.5	9.2
29	11.5	9.3	8.5	9.9	8.3	7.4	11.2	8.4	6.7	3.8	4.6	7.6	9.1	11.8	14.7	14.1	16.4	14.1	12.8	10.3	11.1	7.9	7.7	5.6	16.4	3.8	9.7
30	5.5	6.2	14.5	14.9	7.3	11.5	8.9	7.3	2.6	3.9	4.6	4.7	6.2	5.3	4.3	4.7	4.6	4.9	5.3	6.7	5.9	4.7	3.9	4.2	14.9	2.6	6.4
31	4.0	4.3	3.9	4.6	4.4	4.4	4.6	3.5	3.8	4.0	4.0	4.2	4.4	4.9	4.9	4.1	4.7	5.5	4.6	5.6	5.1	4.7	4.4	4.9	5.6	3.5	4.5
Max.	**43.4**	**22.9**	**28.1**	**16.1**	**14.8**	**23.2**	**21.0**	**56.8**	**34.6**	**17.8**	**25.5**	**27.2**	**22.6**	**25.0**	**58.7**	**25.8**	**17.8**	**17.6**	**24.8**	**49.3**	**83.5**	**45.5**	**52.2**	**52.9**	**83.5**		
Min.	**3.0**	**2.9**	**2.8**	**2.8**	**3.1**	**2.7**	**2.8**	**2.6**	**1.7**	**3.2**	**2.8**	**3.0**	**2.8**	**2.8**	**2.9**	**2.9**	**3.3**	**2.7**	**2.5**	**2.5**	**3.0**	**3.1**	**2.2**	**2.2**		**1.7**	
Avg.	**6.9**	**6.6**	**6.7**	**6.5**	**5.9**	**6.6**	**7.2**	**8.4**	**6.6**	**6.3**	**6.1**	**7.0**	**7.4**	**7.0**	**9.6**	**8.0**	**7.6**	**6.8**	**7.3**	**7.6**	**8.8**	**6.9**	**7.7**	**7.9**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.8	4.2	4.0	4.9	3.6	3.3	3.6	3.8	4.5	4.3	5.3	4.1	4.4	4.0	4.4	4.9	4.3	4.2	4.0	4.1	4.8	7.2	6.2	3.7	7.2	3.3	4.5
2	6.9	5.4	6.0	5.6	3.8	5.0	3.5	3.2	3.7	4.4	5.3	6.8	8.6	11.4	10.1	7.0	11.1	13.9	7.1	6.7	8.1	22.2	7.0	12.8	22.2	3.2	7.7
3	60.5	13.6	9.5	8.7	12.5	6.6	4.8	9.5	13.8	27.4	17.6	27.2	21.3	13.0	15.3	7.5	7.9	7.0	5.4	4.0	4.0	5.3	3.8	3.8	60.5	3.8	12.9
4	5.7	3.5	3.7	4.6	4.1	3.0	3.5	3.4	6.1	5.0	5.3	6.7	5.8	7.2	5.6	5.4	5.0	5.1	6.2	5.7	4.0	4.3	4.0	4.6	7.2	3.0	4.9
5	4.2	3.6	3.6	4.0	3.9	4.1	5.9	3.8								4.3	4.5	6.1	4.8	5.1	8.0	8.4	61.3	7.2	61.3	3.6	8.4
6	7.4	6.4	6.0	8.0	6.7	5.9	13.0	17.9	10.4	11.8	15.5	11.3	17.6	15.3	23.9	25.0	17.0	7.5	7.3	10.2	12.4	5.9	6.8	11.6	25.0	5.9	11.7
7	8.3	17.4	10.1	6.8	7.1	6.5	6.7	7.3	11.4	11.6	12.9	12.4	12.6	15.1	22.3	40.7	16.9	14.0	16.7	12.6	5.0	6.1	3.8	5.4	40.7	3.8	12.1
8	3.7	4.2	3.4	3.9	4.6	6.2	5.2	4.1	8.9	7.0	10.1	7.5	8.7	9.5	8.7	6.1	7.0	5.3	6.0	4.9	5.7	4.1	3.9	5.0	10.1	3.4	6.0
9	4.9	8.3	4.8	4.1	3.4	4.9	5.1	6.5	6.6	8.1	15.5	15.5	11.1	10.5	9.0	7.7	11.3	11.1	7.8	7.0	8.6	5.0	5.0	3.5	15.5	3.4	7.7
10	3.8	3.1	3.4	4.0	5.0	5.2	4.9	13.0	12.3	25.9	26.6	10.7	20.5	54.6	35.1	16.6	29.7	26.2	15.8	9.7	9.6	6.0	6.9	16.4	54.6	3.1	15.2
11	6.1	21.4	32.2	25.8	62.6	73.8	30.5	36.3	24.2	29.7	18.8	44.0	23.3	14.6	7.4	7.5	7.8	7.4	7.2	7.4	5.6	4.3	3.7	3.4	73.8	3.4	21.0
12	4.4	4.2	4.8	4.3	3.3	22.9	14.9	5.9	5.7	13.6	26.4	16.7	18.1	8.8	21.6	17.0	36.2	17.5	9.2	14.7	10.9	8.7	6.1	25.3	36.2	3.3	13.4
13	20.3	8.7	7.7	4.7	5.7	7.2	8.4	5.5	7.4	7.2	5.2	13.9	11.1	21.2	19.6	17.3	12.1	12.5	12.7	13.7	18.4	5.2	6.6	4.1	21.2	4.1	10.7
14	4.2	4.4	3.1	4.4	6.6	6.0	7.0	6.1	12.5	11.1	7.2	10.9	53.6	49.8	36.9	18.0	8.5	17.3	10.5	23.2	9.9	6.7	2.9	3.5	53.6	2.9	13.5
15	8.2	3.8	3.6	4.2	2.9	3.8	6.4	13.4	10.6	54.3	27.5	9.5	11.0	15.5	14.6	7.1	5.8	4.7	5.5	10.0	5.4	6.9	5.6	6.4	54.3	2.9	10.3
16	21.9	13.9	6.2	4.0	19.8	22.3	11.2	7.6	11.0	7.2	19.9	37.4	20.3	52.2	28.3	9.4	8.8	10.7	11.2	11.4	9.0	6.8	5.2	6.9	52.2	4.0	15.1
17	9.4	6.8	7.2	5.8	10.2	6.9	11.1	16.0	19.4	29.4	46.3	28.6	60.8	39.2	15.1	15.4	14.2	13.9	13.2	12.5	4.8	4.4	2.2	3.8	60.8	2.2	16.5
18	24.8	4.8	4.7	4.2	6.6	6.0	6.4	6.0	6.5	7.1	6.6	8.4	9.5	15.3	10.2	10.0	13.1	14.5	13.5	14.5	12.7	7.4	20.3	4.5	24.8	4.2	9.9
19	4.0	3.8	4.1	3.7	2.8	10.5	12.7	4.8	20.0	15.7	6.4	7.8	10.8	11.2	15.2	16.5	14.8	19.5	10.5	7.2	7.5	5.1	5.4	3.6	20.0	2.8	9.3
20	7.5	14.2	41.2	13.7	24.0	37.5	14.7	9.5	11.4	14.8	11.5	9.7	9.9	6.8	7.3	7.5	6.8	5.7	5.4	4.6	4.3	5.8	6.1	5.2	41.2	4.3	11.9
21	3.8	6.1	6.1	3.3	3.6	3.9	5.1	5.2	5.4	7.8	32.8	52.2	31.9	23.0	13.7	21.4	26.0	29.3	24.4	12.0	9.2	24.1	7.6	5.2	52.2	3.3	15.1
22	3.8	9.9	3.4	3.0	5.6	2.4	4.9	7.1	5.1	6.5	7.5	8.6	11.0	8.9	8.3	6.9	5.5	5.4	5.0	5.4	4.2	4.4	4.3	5.4	11.0	2.4	5.9
23	4.8	4.4	4.2	5.1	4.5	6.2	4.3	5.5	5.0	6.8	6.5	7.6	9.3	7.5	8.5	8.0	11.6	10.6	9.6	9.8	5.5	3.7	4.0	7.3	11.6	3.7	6.7
24	7.2	5.2	9.7	7.4	5.4	4.3	4.6	4.5	6.0	7.7	5.6	7.6	6.6	6.4	5.8	4.6	4.9	6.1	5.4	6.1	5.3	4.6	4.7	5.2	9.7	4.3	5.9
25	4.5	4.0	4.8	4.9	5.1	4.7	4.4	4.0	4.0	4.8	4.7	5.0	5.2	5.7	5.3	5.7	5.0	4.7	4.7	6.0	4.7	6.6	6.0	5.0	6.6	4.0	5.0
26	5.1	5.3	6.4	7.2	9.4	6.3	6.6	7.8	7.9	12.0	7.4	5.9	7.2	31.1	15.2	10.9	6.3	14.7	8.7	9.4	7.8	5.8	6.1	11.4	31.1	5.1	9.3
27	7.2	12.7	17.6	11.5	7.9	9.1	6.6	5.8	5.9	8.9	9.3	6.9	5.2	6.5	7.5	8.0	10.2	10.4	9.4	7.2	6.5	4.1	7.9	5.1	17.6	4.1	8.2
28	4.6	5.7	4.8	15.2	4.1	2.9	3.6	4.5	11.4	8.8	5.6	4.9	4.6	6.9	12.0	7.9	6.1	8.4	6.3	7.9	6.1	8.0	4.5	6.1	15.2	2.9	6.7
29	9.4	4.5	4.0	4.7	5.0	3.9	10.5	7.0	10.0	6.6	9.4	11.7	8.1	10.8	6.4	6.6	8.9	9.0	8.1	6.7	4.5	4.9	5.6	4.0	11.7	3.9	7.1
30	2.9	3.5	3.7	4.3	3.8	4.1	5.5	7.7	69.7	22.1	20.6	32.8	80.6	47.3	26.5	42.8	91.6	36.3	17.6	10.1	26.3	18.4	6.5	9.0	91.6	2.9	24.7
Max.	**60.5**	**21.4**	**41.2**	**25.8**	**62.6**	**73.8**	**30.5**	**36.3**	**69.7**	**54.3**	**46.3**	**52.2**	**80.6**	**54.6**	**36.9**	**42.8**	**91.6**	**36.3**	**24.4**	**23.2**	**26.3**	**24.1**	**61.3**	**25.3**	**91.6**		
Min.	**2.9**	**3.1**	**3.1**	**3.0**	**2.8**	**2.4**	**3.5**	**3.2**	**3.7**	**4.3**	**4.7**	**4.1**	**4.4**	**4.0**	**4.4**	**4.3**	**4.3**	**4.2**	**4.0**	**4.0**	**4.0**	**3.7**	**2.2**	**3.4**		**2.2**	
Avg.	**9.2**	**7.2**	**7.8**	**6.5**	**8.4**	**9.9**	**7.9**	**8.1**	**11.6**	**13.4**	**13.8**	**14.9**	**17.5**	**18.3**	**14.5**	**12.5**	**14.0**	**12.0**	**9.3**	**9.0**	**8.0**	**7.4**	**7.7**	**6.8**			**10.6**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	4.2	16.8	13.2	14.4	77.6	41.1	12.1	8.2	14.4	18.7	12.9	11.8	9.5	9.0	9.8	7.6	7.8	8.0	7.1	6.5	6.0	6.0	4.2	77.6	4.2	13.8
2	5.5	4.6	5.0	5.5	4.2	4.7	6.7	5.6	5.7	5.4	5.9	5.6	5.1	8.4	6.3	6.4	6.7	5.8	6.0	8.7	7.2	5.7	5.4	6.4	8.7	4.2	5.9
3	5.9	5.8	8.4	6.7	4.1	5.6	5.1	5.2	4.3	6.6	6.1	8.1	7.9	5.8	5.7	7.3	8.1	9.4	18.3	6.4	6.3	6.9	6.0	5.7	18.3	4.1	6.9
4	4.6	6.5	5.4	6.8	4.3	5.7	7.7	7.8	11.4	10.0	11.1	14.5	22.5	23.2	33.6	10.8	47.1	39.9	8.6	4.7	6.2	10.2	15.8	7.4	47.1	4.3	13.6
5	6.6	7.0	4.8	8.1	7.2	10.5	8.4	12.0	7.8	8.5	11.9	27.4	46.9	39.6	90.6	16.1	10.7	9.9	8.9	10.6	6.2	5.7	8.5	9.4	90.6	4.8	16.0
6	5.1	2.2	7.3	22.2	8.5	7.0	4.2	4.8	11.4	11.8	20.5	10.2	9.5	7.2	7.1	5.3	5.1	6.6	4.7	5.5	3.7	4.1	4.3	4.6	22.2	2.2	7.6
7	3.7	4.6	3.9	4.4	4.9	5.1	3.7	3.4	4.5	5.2	4.4	4.9	4.3	4.3	4.9	5.0	4.6	4.3	5.2	4.6	3.7	4.9	5.3	6.3	6.3	3.4	4.6
8	6.2	5.4	6.8	8.8	6.8	4.8	6.5	4.7	3.5	4.2	5.1	5.7	9.2	8.7	6.2	5.2	5.1	7.0	5.5	5.1	6.1	8.1	5.4	7.4	9.2	3.5	6.1
9	3.7	3.5	6.2	9.1	6.9	5.4	4.2	3.5	4.7	4.9	5.7	7.0	7.3	7.7	7.4	8.4	7.6	7.3	7.0	6.1	6.8	5.7	4.9	4.8	9.1	3.5	6.1
10	6.2	5.1	7.7	6.0	7.8	4.3	6.0	6.1	5.9	9.8	6.4	8.9	7.0	7.6	9.3	7.8	7.6	6.4	4.7	5.0	6.5	5.3	6.2	17.3	17.3	4.3	7.1
11	8.4	9.5	8.4	9.1	6.6	7.6	3.7	6.2	7.7	5.8	5.8	7.2	10.5	11.8	9.2	12.0	10.3	8.9	7.4	8.3	7.2	4.1	4.0	4.3	12.0	3.7	7.7
12	3.5	3.7	4.1	5.3	4.8	5.7	3.7	4.5	5.5	4.9	5.6	5.6	6.3	5.4	5.6	5.9	6.5	5.3	5.4	5.7	5.1	4.3	4.6	5.9	6.5	3.5	5.1
13	5.1	4.9	4.2	5.8	4.5	4.4	3.9	4.3	4.5	4.4	5.5	8.4	6.2	6.8	5.2	6.4	6.1	5.6	5.1	5.5	6.1	4.6	4.3	6.2	8.4	3.9	5.3
14	5.3	7.1	9.9	7.5	9.3	47.5	34.7	7.8	6.7	10.9	10.3	6.7	7.5	8.7	13.8	10.3	11.5	13.1	9.5	11.4	10.8	6.6	5.0	5.9	47.5	5.0	11.6
15	5.8	7.8	4.9	7.2	3.6	5.0	5.9	7.1	5.5	4.7	4.1	4.7	5.7	7.3	5.7	6.0	4.6	5.0	4.9	4.3	4.6	7.2	5.9	6.3	7.8	3.6	5.6
16	4.9	5.0	4.8	5.3	5.6	5.0	6.3	6.8	6.1	6.0	5.7	5.2	4.9	6.4	5.1	5.9	5.0	5.5	4.6	5.7	6.3	5.3	6.4	6.0	6.8	4.6	5.6
17	5.8	12.4	6.0	5.0	5.2	4.8	4.9	5.5	10.2	4.9	6.1	8.2	5.8	7.0	6.7	7.5	6.3	5.3	5.1	5.2	5.5	4.5	5.5	3.8	12.4	3.8	6.1
18	9.3	4.4	4.3	5.6	6.0	4.1	5.0	4.4	4.7	6.2	13.0	10.8	16.5	31.1	10.6	12.3	9.9	17.7	35.1	11.4	9.3	10.1	19.5	17.8	35.1	4.1	11.6
19	11.8	13.7	10.3	8.5	7.1	6.3	7.3	7.0	7.6	7.8	10.2	10.0	10.9	8.9	9.8	7.4	9.4	11.7	13.3	9.9	4.8	7.2	11.5	8.3	13.7	4.8	9.2
20	6.8	10.0	9.7	7.6	12.6	2.9	4.4	4.3	4.5	8.8	10.8	13.6	7.3	7.0	4.8	6.2	5.4	5.8	4.2	4.6	6.4	4.4	6.0	5.1	13.6	2.9	6.8
21	5.7	5.4	4.0	3.8	4.1	4.7	5.0	5.5	4.7	5.7	6.2	6.9	9.1	12.7	13.5	15.1	18.4	16.0	9.2	16.2	26.9	19.1	10.1	7.4	26.9	3.8	9.8
22	4.6	6.5	4.6	5.6	84.8	24.2	19.4	11.1	9.2	12.6	15.1	28.2	8.5	9.8	11.9	18.2	9.5	14.0	11.3	12.1	17.0	8.9	6.2	3.8	84.8	3.8	14.9
23	8.3	3.6	10.9	12.7	3.8	6.2	3.3	4.2	7.8	10.3	7.8	7.1	8.2	7.7	6.9	7.4	8.3	7.4	8.7	9.5	6.7	4.5	9.7	78.3	78.3	3.3	10.4
24	14.1	10.1	6.2	10.2	25.1	7.5	10.2	12.1	10.7	11.2	11.9	10.3	10.4	10.6	8.8	12.2	14.4	13.4	15.6	13.1	15.1	9.7	4.3	4.9	25.1	4.3	11.3
25	4.2	6.0	5.7	5.3	6.3	8.5	9.8	11.1	10.8	7.5	7.9	7.0	10.7	11.6	11.9	13.1	12.0	9.6	8.2	10.5	6.4	5.8	5.4	8.3	13.1	4.2	8.5
26	8.0	16.0	9.4	10.3	54.7	8.9	4.6	3.6	4.6	4.1	6.5	12.8	6.8	8.4	9.2	13.2	14.0	12.8	11.1	22.9	10.4	5.6	6.5	5.4	54.7	3.6	11.2
27	8.6	7.4	9.0	5.6	3.3	4.6	5.4	4.3	4.6	6.5	8.1	10.1	13.8	12.6	11.9	10.1	11.3	10.9	8.2	5.4	7.3	7.5	16.4	30.5	30.5	3.3	9.3
28	9.3	10.1	6.8	9.9	7.4	6.4	7.1	7.9	8.0	8.7	11.9	11.4	10.7	13.2	11.0	10.6	8.4	8.0	6.1	9.1	5.7	6.2	5.4	6.4	13.2	5.4	8.6
29	5.9	6.3	8.6	10.1	12.4	12.3	6.3	3.8	5.2	8.8	8.8	12.0	10.7	9.0	8.9	8.0	7.4	7.5	5.8	5.3	5.2	5.3	8.4	4.2	12.4	3.8	7.8
30	7.0	8.8	3.5	6.3	6.3	6.8	5.6	4.8	7.3	7.7	5.4	8.7	8.1	8.9	9.4	11.4	8.8	8.9	7.6	8.3	8.6	7.7	10.8	7.9	11.4	3.5	7.7
31	6.4	8.1	9.9	11.1	7.2	12.2	8.1	10.1	8.1	5.9	5.4	8.3	9.8	8.2	9.9	10.8	11.0	10.8	11.2	13.3	9.9	9.3	4.7	11.1	13.3	4.7	9.2
Max.	**14.1**	**16.0**	**16.8**	**22.2**	**84.8**	**77.6**	**41.1**	**12.1**	**11.4**	**14.4**	**20.5**	**28.2**	**46.9**	**39.6**	**90.6**	**18.2**	**47.1**	**39.9**	**35.1**	**22.9**	**26.9**	**19.1**	**19.5**	**78.3**	**90.6**		
Min.	**3.5**	**2.2**	**3.5**	**3.8**	**3.3**	**2.9**	**3.3**	**3.4**	**3.5**	**4.1**	**4.1**	**4.7**	**4.3**	**4.3**	**4.8**	**5.0**	**4.6**	**4.3**	**4.2**	**4.3**	**3.7**	**4.1**	**4.0**	**3.8**		**2.2**	
Avg.	**6.5**	**7.0**	**7.0**	**8.0**	**11.3**	**10.5**	**8.3**	**6.5**	**6.8**	**7.5**	**8.6**	**10.0**	**10.3**	**10.8**	**11.9**	**9.4**	**10.0**	**9.9**	**8.9**	**8.4**	**7.9**	**6.8**	**7.4**	**10.0**			**8.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.5	6.8	8.1	5.2	25.0	12.6	14.1	58.6	56.8	13.7	36.1	36.2	73.0	55.6	15.1	16.9	13.5	11.3	11.4	11.6	5.2	5.2	4.0	4.6	73.0	4.0	21.2
2	4.5	4.2	5.3	4.5	3.9	4.8	3.7	4.1	4.5	4.1	4.7	5.7	5.5	5.8	4.8	5.1	5.9	6.0	9.9	10.5	13.8	18.7	17.5	7.0	18.7	3.7	6.9
3	15.0	8.8	19.5	9.9	7.6	4.7	7.8	10.2	9.0	10.0	14.5	36.2	85.8	15.6	13.6	11.4	15.6	10.3	7.0	6.3	5.7	4.2	5.3	4.9	85.8	4.2	14.1
4	4.7	4.9	5.1	6.1	6.4	4.9	6.4	6.1	4.2	4.5	6.0	6.0	6.6	8.3	9.8	11.3	7.5	8.9	7.1	6.5	5.4	6.2	5.6	5.3	11.3	4.2	6.4
5	5.4	5.9	6.2	9.5	23.1	13.9	12.4	12.7	4.6	11.0	8.6	13.0	12.6	14.7	14.9	16.3	14.0	12.6	12.8	11.2	8.7	5.9	8.4	11.3	23.1	4.6	11.2
6	13.4	7.2	3.3	5.5	6.9	13.3	11.4	10.5	11.3	11.7	14.0	14.3	10.2	7.9	11.2	10.2	10.5	7.8	5.2	5.0	4.8	4.1	12.4	6.7	14.3	3.3	9.1
7	12.6	10.9	11.1	6.9	3.4	5.1	8.4	6.2	7.3	7.9	10.4	10.2	10.0	10.1	13.2	12.3	8.3	9.9	9.4	7.0	7.3	5.3	5.7	5.4	13.2	3.4	8.5
8	6.3	7.6	8.6	5.2	5.1	8.9	11.9	10.5	7.4	7.0	12.1	12.3	14.0	12.9	17.8	15.3	12.7	18.8	15.4	10.0	6.4	5.9	5.9	6.8	18.8	5.1	10.2
9	11.4	11.7	11.9	4.4	5.2	5.6	5.2	6.2	6.6	6.3	10.0	11.2	11.3	14.5	13.1	15.4	14.7	19.1	9.8	7.8	8.0	5.8	7.9	11.1	19.1	4.4	9.8
10	5.7	9.2	9.2	8.9	12.1	42.0	61.8	0.2	14.6	8.1	9.8	23.5	29.8	31.2	11.2	19.3	33.2	16.0	18.8	6.0	7.1	4.7	5.6	5.4	61.8	0.2	16.4
11	4.6	8.3	7.9	6.7	7.3	6.0	6.6	6.0	6.2	7.8	11.8	8.7	9.0	8.3	9.6	8.2	10.3	9.9	7.4	7.8	6.4	6.6	8.6	4.0	11.8	4.0	7.7
12	7.5	41.6	8.6	3.3	8.6	9.6	4.4	8.6	5.5	6.2	9.7	13.7	16.8	11.9	16.9	19.4	19.9	25.3	6.8	7.2	18.4	16.7	21.6	49.3	49.3	3.3	14.9
13	14.7	9.7	25.1	10.5	5.6	3.5	4.2	4.9	10.6	9.5	40.6	16.2	16.5	13.7	21.9	13.5	11.2	24.8	8.0	4.4	5.4	5.1	6.4	12.1	40.6	3.5	12.4
14	11.4	9.0	8.0	8.8	15.9	10.7	17.9	17.4	3.5	5.5	4.4	4.5	4.9	4.8	6.4	4.7	5.1	5.0	5.4	5.5	5.2	5.4	5.5	18.9	18.9	3.5	8.1
15	5.5	6.4	3.7	3.8	3.9	4.1	5.6	6.0	10.0	13.7	7.8	13.4	19.6	13.0	21.9	11.0	9.0	14.5	10.3	12.5	10.8	6.3	8.6	6.5	21.9	3.7	9.5
16	7.8	3.8	4.2	10.2	5.6	4.6	3.6	4.6	8.1	7.1	4.2	4.7	6.2	6.9	5.8	5.7	6.1	7.3	7.2	7.4	5.6	6.3	5.7	3.7	10.2	3.6	5.9
17	10.6	4.2	4.0	5.1	6.1	6.6	6.2	4.0	4.2	6.3	6.3	7.5	6.7	8.1	9.4	10.3	7.0	4.5	4.5	5.3	4.3	7.1	5.0	4.4	10.6	4.0	6.1
18	3.9	4.6	5.3	4.5	3.9	7.3	6.1	9.7	7.9	16.4	16.1	10.2	12.3	13.6	19.0	16.6	10.2	30.5	39.3	47.5	31.9	29.6	10.5	9.7	47.5	3.9	15.3
19	16.3	4.7	7.2	6.4	7.0	30.6	33.5	6.4	5.9	7.7	24.8	13.1	10.4	17.0	13.0	13.4	22.0	18.7	7.5	8.3	35.9	15.9	8.8	10.3	35.9	4.7	14.4
20	29.3	4.7	2.7	6.0	5.5	11.4	8.1	8.8	4.8	6.1	9.7	23.0	15.9	19.0	21.4	13.8	25.7	17.7	14.0	14.9	11.0	14.7	7.1	10.1	29.3	2.7	12.7
21	29.6	17.3	20.8	11.1	11.0	5.3	3.1	5.5	3.3	4.3	5.5	6.1	8.6	12.8	10.3	8.9	11.6	9.1	18.9	15.0	12.1	16.4	5.7	6.5	29.6	3.1	10.8
22	62.0	42.6	34.4	75.3	19.3	17.6	18.8	14.8	16.6	7.1	6.9	16.7	38.9	24.2	15.6	19.3	50.2	33.6	13.4	7.5	6.9	9.1	6.6	4.6	75.3	4.6	23.4
23	10.9	9.2	5.0	5.4	5.1	6.6	6.0	7.0	9.7	8.9	8.5	12.8	15.9	19.3	25.3	25.9	23.2	69.2	11.8	22.7	5.8	6.7	5.6	6.0	69.2	5.0	13.9
24	15.3	18.3	6.0	4.8	4.0	9.6	10.8	5.7	10.5	14.2	13.6	13.6	11.0	12.4	13.3	11.2	12.6	13.8	9.2	21.9	23.1	5.8	5.9	5.5	23.1	4.0	11.3
25	5.4	12.1	9.8	11.7	6.4	3.4	7.1	3.6	9.5	56.3	38.1	16.3	12.2	9.6	11.2	17.7	9.1	9.3	7.7	6.5	5.3	6.2	6.4	4.8	56.3	3.4	11.9
26	4.1	4.3	4.6	4.1	5.6	10.0	4.6	4.6	4.2	4.1	5.1	4.9	4.9	4.6	6.5	6.2	6.9	5.4	5.8	5.6	7.8	6.1	11.3	8.5	11.3	4.1	5.8
27	11.9	10.2	4.4	17.3	9.3	14.3	11.6	7.7	7.4	5.6	5.2	9.0	12.6	11.7	12.2	10.2	10.0	13.6	8.1	7.6	5.3	4.1	13.2	6.4	17.3	4.1	9.5
28	10.1	7.9	5.9	6.0	9.8	8.5	3.6	5.6	9.9	21.1	7.5	11.2	12.5	18.6	20.6	9.4	7.5	13.9	29.5	14.8	6.4	5.8	9.9	5.4	29.5	3.6	10.9
29	2.9	3.5	4.0	4.1	4.7	7.8	8.0	8.7	8.6	11.2	12.9	22.5	16.6	19.3	10.7	10.8	14.7	8.8	6.4	5.7	4.1	4.1	4.9	6.2	22.5	2.9	8.8
30	7.7	6.3	10.1	10.3	5.9	2.6	5.1	38.6	27.0	30.2	16.4	33.3	23.8	26.0	19.4	18.4	17.8	14.5	8.2	7.1	5.9	5.2	5.9	5.0	38.6	2.6	14.6
31	5.1	4.8	4.9	4.5	4.5	4.2	4.4	4.5	3.9	4.5	2.8	3.3	4.4	8.4	8.0	4.7	4.9	4.5	4.7	4.3	4.3	3.8	4.2	3.7	8.4	2.8	4.6
Max.	**62.0**	**42.6**	**34.4**	**75.3**	**25.0**	**42.0**	**61.8**	**58.6**	**56.8**	**56.3**	**40.6**	**36.2**	**85.8**	**55.6**	**25.3**	**25.9**	**50.2**	**69.2**	**39.3**	**47.5**	**35.9**	**29.6**	**21.6**	**49.3**	**85.8**		
Min.	**2.9**	**3.5**	**2.7**	**3.3**	**3.4**	**2.6**	**3.1**	**0.2**	**3.3**	**4.1**	**2.8**	**3.3**	**4.4**	**4.6**	**4.8**	**4.7**	**4.9**	**4.5**	**4.5**	**4.3**	**4.1**	**3.8**	**4.0**	**3.7**		**0.2**	
Avg.	**11.8**	**10.0**	**8.9**	**9.2**	**8.2**	**9.7**	**10.4**	**9.9**	**9.8**	**10.9**	**12.4**	**14.0**	**17.4**	**14.8**	**13.6**	**12.7**	**13.9**	**15.3**	**11.0**	**10.4**	**9.5**	**8.1**	**7.9**	**8.4**			**11.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.1	4.6	6.5	5.1	7.0	4.9	4.5	4.4	3.8	4.4	5.7	5.9	20.6	11.0	6.8	6.4	10.7	7.9	5.2	4.1	7.0	4.4	5.3	5.5	20.6	3.8	6.5
2	4.2	4.3	4.0	3.8	4.1	4.1	3.4	3.5	4.6	4.5	5.6	4.7	4.9	5.2	6.1	5.8	6.9	6.8	6.6	7.2	3.3	6.2	4.4	3.8	7.2	3.3	4.9
3	4.3	6.9	5.7	5.2	6.0	5.2	6.0	5.5	4.9	5.2	5.5	11.6	14.5	8.9	15.9	7.8	19.1	10.9	6.1	5.6	7.7	11.4	8.4	4.7	19.1	4.3	8.0
4	5.6	5.7	4.1	4.5	4.6	7.2	5.8	6.7	6.3	5.3	10.5	10.2	10.0	11.3	8.8	8.1	9.9	11.2	11.3	10.7	5.7	6.9	5.7	2.7	11.3	2.7	7.5
5	10.7	17.5	30.4	10.6	6.4	28.1	33.9	22.5	15.4	3.8	15.7	10.0	15.0	23.4	17.6	14.3	12.4	68.7	8.1	6.9	21.0	8.8	4.2	5.2	68.7	3.8	17.1
6	6.8	3.7	4.0	5.6	8.6	4.9	4.8	4.1	6.2	5.5	4.7	4.2	4.0	3.9	4.4	6.1	5.1	3.5	6.4	4.6	5.2	4.9	3.8	3.3	8.6	3.3	4.9
7	5.8	3.7	3.8	6.3	10.4	5.5	7.6	5.4	4.2	4.5	4.4	11.0	4.9	5.0	5.4	7.4	4.5	6.1	5.7	4.6	6.2	5.1	4.2	4.8	11.0	3.7	5.7
8	11.3	4.8	8.1	5.4	4.3	4.5	6.5	3.8	8.8	5.7	13.0	7.6	5.9	5.1	6.1	6.9	6.1	4.2	4.4	5.1	4.3	3.9	5.8	5.5	13.0	3.8	6.1
9	4.3	5.2	6.4	4.0	3.3	4.7	5.6	5.3	9.2	3.0	4.0	4.8	6.2	5.8	5.0	4.9	5.2	4.9	5.1	5.6	5.6	4.6	4.4	4.3	9.2	3.0	5.1
10	3.9	5.7	6.1	6.8	10.1	5.3	5.5	8.4	7.2	5.4	6.7	8.8	7.7	16.5	12.0	8.7	8.2	7.2	13.0	5.1	4.0	5.2	3.7	10.2	16.5	3.7	7.6
11	8.3	5.9	5.0	4.7	6.1	7.2	6.1	7.2	5.9	4.6	5.5	5.8	6.7	5.3	5.7	9.6	6.7	6.6	6.0	6.3	4.6	5.2	4.3	4.4	9.6	4.3	6.0
12	4.6	5.2	4.3	5.6	5.0	5.4	6.2	5.9	4.6	4.3	5.0	5.5	5.4	5.5	4.7	4.3	5.1	4.5	4.6	5.0	4.6	5.2	4.6	5.0	6.2	4.3	5.0
13	4.7	5.0	4.6	4.9	4.4	5.0	5.1	5.0	5.7	5.8	5.4	4.9	5.4	5.6	5.2	5.5	5.5	4.8	4.5	4.3	4.2	4.1	4.1	4.2	5.8	4.1	4.9
14	4.1	4.6	4.7	4.8	5.0	5.9	4.9	5.2	5.6	3.9	4.6	4.8	5.8	4.2	5.0	4.6	6.3	5.1	6.9	6.0	5.2	5.0	7.2	4.5	7.2	3.9	5.2
15	3.7	4.2	4.4	5.5	5.2	5.5	6.0	5.0	4.2	5.4	4.5	5.3	5.1	5.2	6.1	6.0	5.9	5.5	4.0	6.4	5.1	4.5	4.4	5.3	6.4	3.7	5.1
16	3.4	10.8	24.8	18.9	13.6	10.1	4.7	16.4	4.0	9.7	9.0	11.9	11.3	10.2	10.3	9.5	12.4	8.7	7.1	4.5	4.2	7.2	5.9	9.5	24.8	3.4	9.9
17	7.8	9.7	7.0	6.0	21.6	17.6	5.0	5.1	6.1	7.9	57.8	8.0	10.2	7.0	7.2	5.9	5.6	6.5	5.9	4.3	8.0	7.0	9.6	7.7	57.8	4.3	10.2
18	7.1	3.6	3.9	4.1	4.0	4.4	4.4	4.2	5.4	5.2	7.8	5.5	6.1	19.6	6.9	5.3	9.3	7.2	11.1	19.6	41.0	28.3	6.3	6.6	41.0	3.6	9.4
19	4.5	7.3	5.8	6.1	6.3	5.0	5.3	5.7	4.3	10.1	7.3	7.8	8.0	14.4	46.5	7.9	6.8	6.8	7.9	5.5	6.0	7.7	4.9	8.1	46.5	4.3	8.6
20	10.4	8.9	8.0	8.1	6.7	5.5	6.4	14.9	13.9	12.1	32.3	48.7	13.2	9.2	10.5	13.2	21.2	8.7	8.4	16.3	10.6	4.9	10.9	8.7	48.7	4.9	13.0
21	10.9	4.9	6.2	8.0	5.2	4.7	5.8	21.2	21.7	10.8	10.6	12.0	14.1	14.4	22.2	9.2	9.7	8.7	5.5	5.1	6.0	6.9	7.0	6.5	22.2	4.7	9.9
22	7.0	5.0	4.8	4.5	5.9	6.8	17.5	4.4	3.9	8.2	8.3	15.3	16.2	18.3	17.5	10.1	5.6	5.8	4.0	3.8	5.0	4.4	5.9	4.3	18.3	3.8	8.0
23	4.8	4.4	13.1	6.4	4.0	3.9	4.5	5.7	5.2	5.5	5.5	5.1	4.9	7.8	6.2	6.2	7.4	4.5	4.7	5.5	5.5	5.6	5.5	10.0	13.1	3.9	5.9
24	4.7	5.2	8.4	7.5	7.5	4.6	7.8	4.4	4.4	6.1	8.8	4.2	4.7	5.2	5.5	6.1	4.6	5.3	5.1	5.8	3.6	4.9	6.1	5.5	8.8	3.6	5.7
25	6.6	5.7	4.4	5.2	4.1	4.8	4.5	4.7	6.1	5.1	8.8	15.0	14.5	17.6	15.0	10.1	9.2	11.8	4.6	3.6	9.3	3.8	6.2	4.2	17.6	3.6	7.7
26	7.6	8.1	2.4	9.8	16.3	10.9	14.3	5.2	25.4	5.5	14.6	29.1	67.0	25.5	16.0	20.6	30.3	9.0	10.8	14.5	5.3	14.1	8.8	8.4	67.0	2.4	15.8
27	6.0	7.6	8.4	10.7	10.8	10.1	8.7	7.5	11.1	10.8	5.4	6.7	10.0	11.7	12.3	11.4	9.9	11.7	12.5	10.2	12.3	12.9	11.2	11.9	12.9	5.4	10.1
28	7.0	4.8	4.2	4.3	8.1	13.6	7.5	8.7	9.3	15.4	14.7	41.6	48.0	61.3	46.7	38.6	65.2	13.1	11.2	4.8	5.1	4.1	7.5	8.4	65.2	4.1	18.9
29	6.1	3.5	5.3	10.4	4.7	3.6	4.1	4.2	2.3	2.7	4.2	4.8	7.3	4.4	4.6	4.2	7.1	9.4	6.5	3.7	6.7	6.1	4.3	4.3	10.4	2.3	5.2
30	5.3	5.0	75.5	11.7	4.3	7.7	9.0	4.5	3.9	7.0	12.0	11.2	14.3	14.5	12.7	19.1	16.6	17.2	21.0	15.2	9.7	6.4	11.7	32.5	75.5	3.9	14.5
Max.	**11.3**	**17.5**	**75.5**	**18.9**	**21.6**	**28.1**	**33.9**	**22.5**	**25.4**	**15.4**	**57.8**	**48.7**	**67.0**	**61.3**	**46.7**	**38.6**	**65.2**	**68.7**	**21.0**	**19.6**	**41.0**	**28.3**	**11.7**	**32.5**	**75.5**		
Min.	**3.4**	**3.5**	**2.4**	**3.8**	**3.3**	**3.6**	**3.4**	**3.5**	**2.3**	**2.7**	**4.0**	**4.2**	**4.0**	**3.9**	**4.4**	**4.2**	**4.5**	**3.5**	**4.0**	**3.6**	**3.3**	**3.8**	**3.7**	**2.7**		**2.3**	
Avg.	**6.2**	**6.0**	**9.5**	**6.8**	**7.1**	**7.2**	**7.4**	**7.2**	**7.4**	**6.4**	**10.3**	**11.1**	**12.4**	**12.1**	**11.8**	**9.5**	**11.3**	**9.7**	**7.5**	**7.0**	**7.7**	**7.0**	**6.2**	**7.0**			**8.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	28.2	6.2	11.1	8.1	3.5	5.8	4.3	4.0	3.8	5.3	4.0	5.5	5.9	5.9	4.7	6.8	5.9	5.6	7.3	6.7	6.8	16.2	5.3	6.0	28.2	3.5	7.2
2	8.0	6.2	5.0	3.2	10.7	6.0	9.2	6.7	9.4	12.5	21.7	13.3	25.0	17.4	12.4	11.6	9.2	6.3	6.1	4.1	10.8	4.5	4.1	4.6	25.0	3.2	9.5
3	3.5	3.7	4.7	3.6	11.0	7.0	16.6	6.3	6.7	7.5	7.3	5.8	6.2	6.4	6.7	6.2	6.4	6.7	4.6	5.9	10.0	20.2	6.4	7.1	20.2	3.5	7.4
4	6.9	4.0	5.5	5.2	3.9	4.2	4.1	4.9	4.5	2.2	5.7	46.8	20.1	30.2	9.7	14.4	18.9	7.3	60.1	16.2	20.1	6.9	20.5	14.6	60.1	2.2	14.0
5	6.6	28.1	32.6	9.8	5.3	3.6	5.0	3.2	4.6	5.2	3.1	6.1	12.1	9.1	18.2	11.7	17.5	6.1	9.4	12.1	4.0	6.6	8.4	10.3	32.6	3.1	9.9
6	11.5	8.3	8.1	8.4	9.8	7.4	7.5	16.0	13.7	6.7	11.3	8.3	14.2	16.4	25.1	7.2	0.0	6.8	9.0	7.5	7.2	7.8	9.3	6.0	25.1	0.0	9.7
7	5.4	4.9	5.6	7.3	4.3	5.2	5.2	6.1	9.9	5.1	5.5	7.4	5.9	6.8	5.6	6.0	7.0	6.3	5.6	5.3	4.7	3.7	3.5	3.6	9.9	3.5	5.7
8	3.3	4.0	4.4	5.4	3.9	4.7	4.2	4.1	3.7	4.0	5.5	7.9	12.9	13.5	9.5	5.9	4.6	6.7	3.7	3.3	8.4	13.0	8.6	4.5	13.5	3.3	6.2
9	6.1	4.1	5.0	5.9	4.1	4.9	4.7	4.2	5.0	5.0	4.0	4.2	4.0	3.9	4.2	4.2	4.4	4.0	4.5	4.4	4.3	4.6	4.3	4.3	6.1	3.9	4.5
10	4.4	4.1	4.9	21.0	4.0	5.7	7.8	4.8	4.6	5.5	6.3	6.5	8.3	5.3	7.4	5.0	4.0	4.0	4.5	8.0	9.6	7.6	5.6	6.0	21.0	4.0	6.5
11	5.4	4.4	4.6	4.0	4.4	5.1	5.6	5.2	77.9	14.7	7.5	13.3	13.5	16.2	17.8	22.4	21.1	10.1	5.4	6.3	4.0	5.4	4.7	4.3	77.9	4.0	11.8
12	4.2	4.0	4.3	4.1	4.4	3.9	3.7	4.2	4.1	4.4	4.2	4.1	6.3	7.6	6.8	8.6	11.3	12.9	5.7	6.3	10.2	14.1	9.0	11.2	14.1	3.7	6.7
13	14.6	17.0	10.5	10.0	4.9	5.8	6.1	6.1	0.4	0.6	31.2	4.5	6.2	5.8	4.3	8.9	4.3	4.6	5.2	3.6	3.8	5.1	3.1	2.5	31.2	0.4	7.0
14	3.0	5.6	3.4	4.9	4.7	11.0	4.1	8.6	5.6	3.7	4.4	4.0	4.9	4.0	3.9	5.5	3.7	0.5	0.2	0.4	0.4	0.2	0.0	0.0	11.0	0.0	3.6
15	0.1	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	3.4	5.2	3.2	2.5	14.7	4.0	0.0	3.6	6.2	11.3	4.0	5.1	3.0	5.2	5.3	4.6	4.8	5.6	4.4	14.7	0.0	4.0
18	4.2	3.5	3.8	3.9	4.0	4.0	3.7	5.3	4.1	3.9	4.9	4.3	7.4	6.6	8.1	10.5	5.9	5.1	4.2	4.0	6.1	6.4	3.9	8.4	10.5	3.5	5.3
19	6.0	4.0	5.1	5.8	5.0	6.0	7.9	4.5	6.1	6.2	9.1	7.3	6.7	9.1	9.3	20.3	12.5	17.3	26.5	10.6	6.0	13.0	5.2	11.7	26.5	4.0	9.2
20	6.8	6.4	4.8	3.1	12.2	6.1	7.5	16.1	7.5	9.1	3.9	2.9	8.8	13.0	10.8	8.4	12.0	10.7	37.1	24.5	17.9	5.0	4.9	11.0	37.1	2.9	10.4
21	14.5	16.9	18.3	33.8	33.1	24.3	12.7	10.9	11.2	9.9	10.4	10.3	10.5	10.2	11.1	7.7	10.6	11.0	11.7	14.0	12.6	10.3	13.7	15.0	33.8	7.7	14.4
22	13.3	6.0	7.5	5.4	7.0	10.8	13.1	7.9	12.1	10.7	6.4	10.4	10.2	8.8	12.1	12.4	8.0	9.2	6.4	9.5	4.5	3.3	6.4	6.6	13.3	3.3	8.7
23	4.7	6.3	7.0	7.9	5.5	7.5	12.5	13.4	11.4	12.1	7.8	8.0	7.5	4.5	4.6	5.9	4.2	8.7	4.5	3.7	3.6	4.6	3.9	4.9	13.4	3.6	6.9
24	4.1	4.0	3.6	3.7	4.2	6.7	4.6	3.4	4.2	4.2	3.5	5.0	9.3	19.2	3.6	3.1	3.4	6.3	3.1	4.6	8.9	6.4	8.8	7.9	19.2	3.1	5.7
25	5.6	5.3	5.9	3.2	3.9	3.7	4.6	5.4	4.7	4.3	3.7	3.8	4.4	3.7	5.9	5.5	12.8	7.5	6.9	3.7	11.1	7.2	6.8	5.7	12.8	3.2	5.6
26	13.9	5.7	5.7	6.3	7.5	6.2	5.2	5.2	16.9	14.8	8.0	5.3	8.8	6.8	10.7	9.0	9.8	12.4	11.6	12.1	13.8	10.8	11.7	13.7	16.9	5.2	9.7
27	11.6	12.7	13.7	15.2	16.5	15.2	14.3	11.3	19.2	16.4	10.2	10.2	13.4	12.5	17.7	10.1	13.6	10.6	10.8	6.5	10.2	22.4	26.2	32.4	32.4	6.5	14.7
28	0.0	15.1	7.6	3.1	3.5	2.9	2.9	3.9	3.2	3.2	3.9	4.5	5.2	6.9	6.4	9.6	5.0	4.4	6.7	16.8	9.9	4.8	15.6	11.1	16.8	0.0	6.5
29	22.3	35.8	6.0	6.0	6.3	5.0	9.6	0.2	12.8	12.3	5.3	5.7	4.4	2.3	2.2	2.6	2.6	3.7	4.9	5.3	4.2	3.4	6.3	6.4	35.8	0.2	7.3
30	7.5	8.2	5.4	6.8	8.5	6.5	7.3	6.8	5.7	7.1	6.3	13.4	22.6	5.3	5.2	4.2	6.4	6.0	4.6	6.1	7.1	8.1	4.9	5.4	22.6	4.2	7.3
31	5.3	4.2	5.1	7.3	16.5	7.8	15.6	12.4	7.9	6.5	4.8	3.9	4.6	10.6	16.0	17.5	22.1	9.5	12.3	13.0	6.1	3.1	8.5	25.8	25.8	3.1	10.3
Max.	**28.2**	**35.8**	**32.6**	**33.8**	**33.1**	**24.3**	**16.6**	**16.1**	**77.9**	**16.4**	**31.2**	**46.8**	**25.0**	**30.2**	**25.1**	**22.4**	**22.1**	**17.3**	**60.1**	**24.5**	**20.1**	**22.4**	**26.2**	**32.4**	**77.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.4**	**7.7**	**6.8**	**6.9**	**6.9**	**6.3**	**6.9**	**6.3**	**9.1**	**7.0**	**6.9**	**7.5**	**8.8**	**8.8**	**8.8**	**8.2**	**8.1**	**6.9**	**9.3**	**7.4**	**7.4**	**7.4**	**7.3**	**8.2**			**7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.8	4.1	10.0	8.9	42.7	15.0	7.6	10.5	8.8	10.8	4.6	9.5	11.4	7.3	16.3	14.4	9.9	7.7	19.4	8.9	12.5	6.6	13.2	20.3	42.7	4.1	12.2
2	6.9	5.3	5.0	3.8	5.0	6.7	7.4	5.6	8.4	9.6	6.1	7.2	11.2	15.0	15.4	14.8	15.4	16.9	22.2	16.8	21.8	13.6	17.9	17.2	22.2	3.8	11.5
3	9.4	6.8	6.7	10.6	5.5	7.1	6.0	5.5	6.2	5.7	9.2	4.9	5.5	4.6	10.4	8.2	6.3	10.0	6.4	7.7	5.7	10.3	12.9	10.9	12.9	4.6	7.6
4	12.1	11.8	5.7	9.3	12.2	5.3	3.3	1.9	1.2	1.9	0.7	1.1	0.4	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	2.8
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	6.2	6.7	4.4	6.7	0.0	1.0
6	5.3	4.9	5.9	5.0	7.5	4.9	5.6	5.8	5.2	4.8	4.4	5.7	5.0	6.5	5.1	5.1	6.8	6.3	16.3	9.9	13.9	17.7	9.9	13.7	17.7	4.4	7.6
7	18.3	12.5	7.0	8.6	10.7	9.6	11.5	10.7	30.8	6.3	7.4	5.4	5.3	6.3	19.7	3.3	6.5	8.4	4.5	11.7	6.1	13.0	7.6	9.0	30.8	3.3	10.0
8	3.7	4.1	4.1	0.5	6.7	1.0	1.0	0.9	1.4	12.2	9.1	7.9	7.5	4.9	4.0	4.9	4.3	2.7	4.0	4.0	3.6	3.9	2.9	2.5	12.2	0.5	4.2
9	3.4	2.4	3.7	4.6	3.7	3.9	4.6	3.5	6.8	3.1	6.7	4.5	4.7	6.0	5.2	3.2	3.4	3.2	4.2	5.0	4.1	4.3	3.2	4.2	6.8	2.4	4.2
10	4.0	3.6	4.8	3.9	8.1	4.1	3.4	6.3	8.7	6.3	11.6	4.2	7.6	3.6	4.2	3.2	14.9	6.6	3.6	3.2	10.1	3.6	3.6	3.6	14.9	3.2	5.7
11	3.9	4.5	1.3	3.9	4.2	6.5	5.8	5.7	4.3	5.5	10.3	3.7	0.2	0.2	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.3	10.3	0.0	2.6
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	6.4	5.2	5.1	4.0	3.9	4.0	3.8	3.9	6.4	0.0	1.7
16	4.2	3.7	5.8	8.6	9.6	9.8	4.2	7.1	5.6	2.0	3.8	8.2	15.2	11.2	19.6	0.0	1.5	0.5	0.0	0.1	0.2	0.2	0.1	0.1	19.6	0.0	5.0
17	0.4	0.4	0.3	0.5	0.0	0.3	0.1	39.1	7.6	11.2	5.4	5.2	3.6	6.4	2.1	5.0	4.0	5.7	4.2	6.7	4.1	3.9	5.5	5.9	39.1	0.0	5.3
18	3.9	5.1	6.8	7.0	7.1	6.5	7.2	6.1	6.3	4.9	5.3	5.0	6.1	6.3	4.3	5.1	5.6	5.3	5.7	6.4	7.7	8.3	6.4	5.8	8.3	3.9	6.0
19	5.2	7.4	7.3	8.3	8.7	6.6	7.4	7.3	7.7	5.3	5.5	6.6	6.7	4.8	5.1	5.4	6.4	3.6	5.0	5.1	4.9	3.8	6.8	7.5	8.7	3.6	6.2
20	12.0	6.5	7.7	9.8	9.6	13.2	4.3	8.4	14.2	9.2	12.3	14.1	13.1	11.3	11.5	10.5	16.3	12.5	13.6	8.8	13.7	12.2	10.9	11.5	16.3	4.3	11.1
21	9.9	12.7	13.1	14.7	13.2	10.3	14.3	7.2	7.1	6.9	10.4	9.9	8.3	12.8	7.1	23.8	38.5	9.9	15.6	13.1	19.5	10.7	10.1	12.6	38.5	6.9	13.0
22	14.5	4.1	17.2	5.0	3.7	3.1	8.4	5.0	4.8	4.8	7.9	6.8	3.0	4.6	4.6	4.3	6.0	3.7	4.6	10.3	5.2	9.5	4.4	7.6	17.2	3.0	6.4
23	4.3	3.9	4.7	4.8	8.7	3.0	3.6	4.7	5.7	7.7	2.6	5.9	13.0	9.2	9.0	7.3	5.3	8.1	5.2	3.6	3.7	3.8	3.5	3.5	13.0	2.6	5.6
24	3.4	3.3	3.1	3.1	3.4	3.4	4.5	4.0	3.5	3.5	3.5	3.2	3.2	3.3	5.0	3.5	4.4	13.3	9.7	10.0	8.9	14.9	3.1	3.3	14.9	3.1	5.2
25	3.1	3.6	6.0	4.7	5.6	5.1	5.7	6.6	5.1	4.4	5.1	9.9	23.7	32.7	21.4	6.1	6.2	4.4	6.3	5.6	8.6	5.2	0.9	0.0	32.7	0.0	7.7
26	0.0	0.0	3.7	4.2	4.5	5.3	7.2	5.0	4.4	5.9	3.1	5.8	12.2	12.3	10.7	20.7	15.1	5.1	4.2	3.6	3.9	6.4	6.3	5.0	20.7	0.0	6.4
27	5.4	6.6	7.9	3.6	6.1	6.2	9.0	7.4	9.1	8.4	6.5	7.5	6.1	12.6	6.9	6.5	8.6	9.2	8.4	5.6	4.0	6.1	3.1	8.4	12.6	3.1	7.1
28	6.4	4.9	3.5	5.2	5.6	3.3	3.9	8.3	8.9	5.8	4.5	5.9	9.6	8.9	8.9	6.7	6.6	7.2	6.0	10.4	13.0	10.6	10.2	13.3	13.3	3.3	7.4
29	10.0	8.8	6.7	9.1	8.7	6.0	6.1	7.6	9.8	9.3	11.2	7.4	3.5	4.6	3.7	10.7	3.9	3.2	3.4	3.7	4.7	6.2	4.7	4.0	11.2	3.2	6.5
30	4.6	6.0	7.8	5.7	4.3	2.8	2.6	5.5	5.2	4.7	15.0	15.4	14.1	12.2	7.4	13.9	15.9	12.1	8.8	6.6	13.0	12.6	9.7	8.6	15.9	2.6	8.9
Max.	**18.3**	**12.7**	**17.2**	**14.7**	**42.7**	**15.0**	**14.3**	**39.1**	**30.8**	**12.2**	**15.0**	**15.4**	**23.7**	**32.7**	**21.4**	**23.8**	**38.5**	**16.9**	**22.2**	**16.8**	**21.8**	**17.7**	**17.9**	**20.3**	**42.7**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.5**	**4.6**	**5.2**	**5.1**	**6.8**	**5.0**	**4.8**	**6.2**	**6.2**	**5.3**	**5.7**	**5.7**	**6.7**	**6.9**	**7.0**	**6.4**	**7.3**	**5.7**	**6.2**	**5.7**	**6.8**	**6.6**	**5.6**	**6.2**			**6.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AQ)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.0	6.5	9.2	5.8	5.3	1.9	4.9	4.2	4.0	4.1	5.1	11.9	4.5	8.6	5.7	9.4	6.5	5.7	15.6	6.8	8.5	5.4	8.5	9.7	15.6	1.9	6.8
2	13.7	8.3	5.8	9.1	14.3	7.7	6.9	4.0	4.1	3.6	3.2	5.1	3.2	3.4	3.4	3.6	3.7	4.0	3.0	3.2	4.0	3.7	3.9	3.3	14.3	3.0	5.3
3	3.9	3.9	3.7	4.1	4.0	4.1	3.7	3.6	3.5	4.2	3.9	3.4	3.3	4.1	4.1	3.3	3.6	3.3	3.9	3.9	3.9	4.1	4.0	3.7	4.2	3.3	3.8
4	3.6	3.6	5.8	4.4	4.2	3.8	3.9	3.6	4.9	4.8	3.7	4.5	3.9	3.5	3.5	3.8	4.0	4.7	3.9	4.0	4.3	4.2	4.7	3.3	5.8	3.3	4.1
5	2.9	4.0	3.4	4.3	3.7	3.7	4.0	3.8	3.3	3.1	3.4	3.1	3.6	4.0	4.4	3.6	3.9	3.4	3.4	3.7	3.8	3.9	4.4	3.8	4.4	2.9	3.7
6	4.1	3.7	3.7	3.6	3.7	3.9	4.8	4.0	4.3	5.3	4.0	5.7	8.0	5.0	10.2	9.0	12.3	19.3	5.6	7.1	10.9	19.2	43.0	9.1	43.0	3.6	8.7
7	11.7	8.2	8.1	6.7	10.2	10.0	7.8	5.8	7.6	7.8	11.8	11.5	7.3	0.3	0.3	0.1	20.8	5.4	22.0	10.0	8.4	11.5	7.4	2.9	22.0	0.1	8.5
8	5.2	3.0	3.8	5.6	7.3	4.9	6.5	6.1	4.7	5.4	3.8	5.0	3.6	6.4	4.0	4.2	3.5	5.0	7.4	8.1	5.1	4.0	5.6	6.1	8.1	3.0	5.2
9	4.6	3.8	5.0	5.9	10.1	7.4	5.3	6.1	4.3	8.4	50.2	5.5	4.1	4.2	3.2	2.9	7.6	9.4	7.8	5.2	3.4	5.2	4.9	6.7	50.2	2.9	7.5
10	5.2	6.6	10.9	8.2	3.4	3.2	3.1	3.3	4.3	4.5	7.3	4.2	3.9	6.9	6.1	5.1	5.7	5.4	5.3	4.6	10.0	2.9	8.6	4.6	10.9	2.9	5.6
11	2.3	6.5	8.1	4.5	14.8	9.2	12.6	17.2	8.2	6.3	3.4	3.7	4.3	6.9	10.0	20.3	15.3	13.4	11.1	5.0	4.4	6.0	11.0	11.8	20.3	2.3	9.0
12	8.8	5.0	6.9	4.5	5.7	7.2	4.4	9.1	11.3	13.4	20.9	8.4	6.4	3.5	4.0	7.4	3.9	3.6	6.7	5.7	16.8	4.8	17.7	8.6	20.9	3.5	8.1
13	10.7	15.6	19.5	17.7	10.8	12.6	10.7	4.3	7.6	4.9	4.5	7.1	6.9	22.3	23.4	10.0	12.1	17.4	10.1	9.3	5.9	12.0	9.9	3.8	23.4	3.8	11.2
14	3.0	3.5	5.1	4.9	5.7	3.5	4.0	4.5	14.2	3.7	5.6	3.2	3.0	3.2	3.3	2.7	3.1	5.5	4.5	4.5	3.7	3.5	3.6	4.0	14.2	2.7	4.4
15	4.7	4.7	4.5	5.2	5.4	4.1	4.5	4.0	5.4	4.5	3.3	3.7	5.8	3.8	4.0	6.3	4.7	0.1	0.5	33.8	8.4	5.2	2.6	4.3	33.8	0.1	5.6
16	5.6	5.3	5.0	9.1	6.0	7.8	9.1	5.9	4.8	3.2	4.2	5.7	4.7	4.4	5.0	5.2	3.9	4.3	3.6	4.0	4.6	4.2	3.7	4.2	9.1	3.2	5.2
17	3.8	4.6	4.8	4.1	3.8	3.7	4.2	3.8	3.6	4.0	3.7	3.6	4.0	3.7	3.5	3.9	3.6	3.7	4.0	4.1	5.5	4.3	4.3	4.2	5.5	3.5	4.0
18	3.9	3.2	3.1	4.3	3.8	3.8	4.5	4.1	4.1	4.6	3.8	4.7	4.3	4.0	3.8	3.8	4.6	4.5	4.1	3.8	3.7	3.7	3.8	3.9	4.7	3.1	4.0
19	3.9	3.6	3.9	3.8	3.8	3.6	3.3	3.6	3.5	3.7	5.2	3.4	4.7	6.0	4.4	5.2	3.7	6.8	3.5	4.3	3.7	4.8	6.4	7.2	7.2	3.3	4.4
20	11.4	3.1	4.5	3.0	3.6	9.6	11.1	14.0	6.9	5.0	6.2	5.4	8.6	2.9	7.6	13.8	8.6	10.7	12.9	12.3	28.5	16.0	12.9	9.3	28.5	2.9	9.5
21	5.0	5.2	4.1	3.3	2.6	7.4	13.1	9.2	11.1	8.7	7.5	8.2	17.4	9.1	4.9	5.0	4.8	4.8	6.7	4.2	9.3	4.0	6.6	32.1	32.1	2.6	8.1
22	13.1	6.4	6.3	2.4	4.2	4.0	3.9	3.7	4.5	5.7	3.5	4.6	8.3	9.4	5.6	5.5	12.1	4.0	5.4	3.8	3.4	3.1	3.1	3.9	13.1	2.4	5.4
23	8.8	3.6	3.2	3.6	3.3	3.6	4.6	10.2	47.3	9.6	4.9	2.9	7.6	4.4	5.2	3.0	5.3	3.6	3.9	3.4	4.3	6.2	4.0	3.1	47.3	2.9	6.6
24	3.3	3.3	6.8	3.7	5.8	9.9	9.0	7.1	6.5	10.0	6.2	6.9	8.2	8.8	10.7	11.2	13.4	9.5	8.0	0.2	2.0	27.9	6.5	4.3	27.9	0.2	7.9
25	6.2	4.6	3.0	3.1	3.1	3.1	3.7	3.4	3.1	3.1	4.2	3.8	3.3	3.6	7.0	22.7	12.2	7.8	7.1	7.0	4.3	3.8	3.6	3.8	22.7	3.0	5.4
26	4.6	3.9	5.5	5.7	4.3	4.5	3.7	3.3	3.0	2.9	3.6	3.6	4.0	3.4	3.8	3.0	3.1	3.9	4.6	4.8	3.5	3.6	5.5	4.0	5.7	2.9	4.0
27	3.7	4.4	7.2	13.3	12.9	12.4	8.3	6.3	4.6	7.2	8.3	4.9	8.5	20.4	27.7	16.2	17.0	16.0	24.0	24.9	26.3	18.0	11.3	16.1	27.7	3.7	13.3
28	18.8	14.9	16.3	13.4	12.7	16.4	14.3	14.5	14.1	14.8	12.2	15.2	14.1	8.8	9.2	3.9	4.5	6.2	8.4	6.1	5.1	5.4	7.3	8.8	18.8	3.9	11.1
29	6.6	5.8	5.9	5.5	6.2	8.4	9.8	10.7	10.4	7.5	8.2	9.2	9.6	7.6	11.1	8.8	8.0	8.2	11.6	6.2	7.5	6.5	10.9	7.7	11.6	5.5	8.3
30	8.1	12.6	8.1	10.0	15.1	15.8	15.6	8.0	9.2	6.9	8.6	9.7	12.0	6.2	5.1	7.0	9.2	5.2	7.3	9.5	12.4	7.4	5.5	9.7	15.8	5.1	9.4
31	8.9	8.8	7.3	6.5	15.7	13.2	12.4	13.3	8.5	13.1	12.5	13.5	7.9	12.3	8.7	11.1	14.0	10.4	10.0	5.2	4.4	5.5	6.0	12.3	15.7	4.4	10.0
Max.	**18.8**	**15.6**	**19.5**	**17.7**	**15.7**	**16.4**	**15.6**	**17.2**	**47.3**	**14.8**	**50.2**	**15.2**	**17.4**	**22.3**	**27.7**	**22.7**	**20.8**	**19.3**	**24.0**	**33.8**	**28.5**	**27.9**	**43.0**	**32.1**	**50.2**		
Min.	**2.3**	**3.0**	**3.0**	**2.4**	**2.6**	**1.9**	**3.1**	**3.3**	**3.0**	**2.9**	**3.2**	**2.9**	**3.0**	**0.3**	**0.3**	**0.1**	**3.1**	**0.1**	**0.5**	**0.2**	**2.0**	**2.9**	**2.6**	**2.9**		**0.1**	
Avg.	**6.6**	**5.8**	**6.4**	**6.1**	**6.9**	**6.9**	**7.0**	**6.6**	**7.6**	**6.3**	**7.6**	**6.2**	**6.4**	**6.5**	**6.9**	**7.1**	**7.7**	**6.9**	**7.6**	**7.1**	**7.4**	**7.1**	**7.8**	**7.1**			**6.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.9	5.4	4.5	7.1	6.2	6.6	8.2	7.6	9.2	14.0	12.0	9.7	6.4	8.4	7.1	9.0	9.6	8.3	7.4	4.9	7.8	8.1	8.1	6.1	14.0	4.5	7.9
2	17.7	10.7	9.0	11.3	7.6	4.7	9.4	7.1	10.5	13.9	10.5	7.4	24.6	19.2	8.0	8.6	11.1	10.6	5.7	3.8	10.6	3.0	4.3	10.7	24.6	3.0	10.0
3	14.5	8.8	19.1	50.9	19.0	3.1	13.2	25.7	27.1	11.0	11.3	13.9	11.2	8.1	13.1	6.2	8.5	15.1	5.5	22.2	14.7	23.1	13.4	9.6	50.9	3.1	15.3
4	8.2	12.3	12.7	18.9	9.2	11.4	14.8	8.0	9.7	12.8	12.1	26.7	9.7	11.1	9.7	8.2	8.4	5.4	10.2	7.4	9.4	12.0	11.8	9.4	26.7	5.4	11.2
5	11.8	10.1	11.9	10.7	8.8	10.9	13.4	13.5	13.8	12.2	13.5	10.5	5.7	6.9	4.3	3.1	2.8	2.7	2.5	3.5	3.8	4.2	3.6	3.5	13.8	2.5	7.8
6	3.9	3.9	3.6	4.1	11.3	16.1	16.4	11.0	14.8	20.9	24.1	11.4	16.4	20.8	10.8	9.0	20.5	20.1	19.8	7.4	7.4	13.3	24.5	14.0	24.5	3.6	13.6
7	11.9	11.3	5.0	5.4	6.0	5.4	3.8	6.7	8.6	15.1	17.6	15.0	16.6	16.8	17.3	15.1	17.2	20.5	15.7	15.3	13.4	18.2	10.4	12.2	20.5	3.8	12.5
8	16.3	8.9	7.6	11.4	10.0	15.4	12.8	10.2	9.5	7.0	16.3	7.9	7.6	8.4	9.5	21.7	16.1	14.9	15.1	16.1	3.4	15.1	10.3	18.0	21.7	3.4	12.1
9	16.2	15.6	12.9	16.2	16.8	16.6	13.6	19.9	14.3	13.1	11.2	13.7	12.0	9.7	5.3	4.2	8.4	5.3	4.8	3.8	5.2	3.7	4.3	3.4	19.9	3.4	10.4
10	5.3	6.1	13.2	10.8	4.0	7.2	6.7	9.4	5.8	13.4	14.1	18.5	24.6	28.9	33.9	25.8	13.9	25.7	28.9	25.5	25.9	17.6	21.5	6.6	33.9	4.0	16.4
11	5.8	7.8	6.8	17.5	17.2	20.5	22.7	11.9	19.5	14.7	7.6	7.1	9.2	16.0	7.0	6.2	11.1	9.0	7.7	5.9	6.3	7.9	9.0	8.1	22.7	5.8	10.9
12	8.0	9.5	6.5	7.0	7.7	5.8	7.1	9.5	7.2	7.4	7.4	9.0	9.1	7.5	9.0	8.4	8.5	7.4	13.8	13.6	10.0	15.5	11.9	16.0	16.0	5.8	9.3
13	24.7	25.3	29.3	24.1	22.2	24.6	30.2	31.9	28.5	28.7	14.6	14.6	14.6	14.3	11.1	12.2	11.4	11.2	11.7	5.3	5.1	6.5	5.3	10.6	31.9	5.1	17.4
14	4.4	4.9	6.7	11.4	0.0	0.0	3.4	7.1	4.2	4.4	4.6	4.7	7.1	4.9	4.9	4.3	4.3	3.9	3.8	5.9	4.9	4.6	4.8	4.1	11.4	0.0	4.7
15	3.8	3.4	3.8	4.6	5.1	2.8	5.3	4.6	4.7	3.9	3.6	3.9	4.0	4.4	3.6	4.6	6.0	5.9	6.3	6.1	7.5	3.9	4.0	4.0	7.5	2.8	4.6
16	6.8	6.2	9.1	14.7	3.6	5.2	3.7	4.0	2.9	3.8	3.2	2.6	2.8	4.5	4.1	4.6	4.5	18.2	4.1	4.9	3.1	0.8	0.2	16.9	18.2	0.2	5.6
17	5.2	9.3	4.1	4.4	4.8	5.3	3.9	3.7	3.2	2.6	3.7	3.1	2.6	2.9	3.5	2.9	3.9	4.7	5.2	3.3	2.5	3.5	3.7	3.7	9.3	2.5	4.0
18	4.5	3.9	4.9	4.4	5.8	3.5	4.2	5.1	7.0	5.0	6.1	5.4	9.5	18.6	8.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.7	18.6	0.0	4.1
19	4.9	4.9	5.9	5.4	4.5	4.4	4.4	5.8	6.0	5.5	4.6	3.9	4.4	4.3	4.9	2.5	1.4	1.0	1.1	2.3	0.7	0.4	0.3	0.3	6.0	0.3	3.5
20	0.3	0.3	0.2	0.7	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.1	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.2
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.2	3.4	3.1	2.9	3.6	2.9	3.3	3.2	2.2	0.8	3.6	0.0	1.3
22	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.3	0.2	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.1	0.3
23	0.2	0.2	0.5	0.3	0.4	0.2	0.2	0.4	0.4	0.3	0.3	0.1	0.3	0.4	0.1	0.2	0.2	0.4	0.5	0.2	0.4	0.4	0.5	0.3	0.5	0.1	0.3
24	0.2	0.3	0.4	0.4	0.2	0.1	0.1	0.5	1.0	0.1	0.3	0.3	0.0	0.2	0.2	0.2	0.0	0.1	0.1	0.3	0.2	0.3	0.3	0.2	1.0	0.0	0.2
25	0.1	0.3	0.3	0.4	0.5	0.5	0.3	0.1	24.1	12.1	10.0	20.3	44.0	18.0	14.1	14.4	11.6	17.7	19.8	23.2	6.1	8.4	6.1	6.0	44.0	0.1	10.8
26	5.9	6.0	6.3	8.6	7.7	3.4	3.7	3.5	4.2	2.5	3.4	4.2	10.6	18.0	1.0	2.4	0.3	1.3	0.1	0.2	0.2	0.3	0.2	0.1	18.0	0.1	3.9
27	0.1	0.1	0.3	0.0	0.3	0.2	0.2	0.3	1.1	0.8	0.9	0.7	0.9	0.6	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.8	0.7	1.1	0.0	0.5
28	0.6	0.5	0.2	0.4	0.5	0.3	0.6	0.7	0.6	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.2
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	3.9	0.1	0.3	3.1	4.1	3.7	3.6	2.6	2.6	10.7	0.0	1.4
30	4.6	9.6	1.6	3.6	6.0	5.1	7.6	9.0	8.0	6.2	7.3	15.6	9.2	4.7	8.1	6.0	6.6	6.3	4.6	8.7	9.0	11.3	9.9	11.4	15.6	1.6	7.5
31	10.7	16.8	12.4	4.4	3.9	4.5	7.1	12.3	10.9	6.5	29.6	9.2	6.2	4.4	11.0	0.0	4.7	3.7	3.2	7.2	6.9	3.7	0.0	0.0	29.6	0.0	7.5
Max.	**24.7**	**25.3**	**29.3**	**50.9**	**22.2**	**24.6**	**30.2**	**31.9**	**28.5**	**28.7**	**29.6**	**26.7**	**44.0**	**28.9**	**33.9**	**25.8**	**20.5**	**25.7**	**28.9**	**25.5**	**25.9**	**23.1**	**24.5**	**18.0**	**50.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.6**	**6.5**	**6.4**	**8.4**	**6.1**	**5.9**	**7.0**	**7.4**	**8.3**	**7.7**	**8.1**	**7.7**	**8.7**	**8.6**	**7.3**	**6.1**	**6.3**	**7.2**	**6.6**	**6.6**	**5.6**	**6.2**	**5.7**	**5.8**			**7.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	4.8	6.2	3.0	2.2	1.0	5.4	5.6	2.6	5.3	11.2	7.0	5.1	8.0	14.2	15.1	15.1	0.0	4.1
3	15.2	24.8	13.4	21.9	21.5	17.9	10.2	6.4	12.7	24.0	12.8	7.4	7.1	6.8	7.5	6.3	4.3	9.0	6.2	6.4	5.7	4.1	6.9	21.8	24.8	4.1	11.7
4	14.9	11.4	5.6	7.3	5.0	6.3	3.0	4.2	5.3	2.8	3.2	7.4	3.3	3.9	6.9	20.4	5.5	5.9	8.4	7.4	7.6	9.7	9.1	5.0	20.4	2.8	7.1
5	4.8	10.2	9.8	8.0	9.5	6.0	8.0	12.3	10.6	5.2	10.5	10.2	12.6	8.0	9.6	11.1	7.2	7.2	7.8	6.4	9.0	9.3	6.6	21.1	21.1	4.8	9.2
6	12.3	16.2	10.5	4.7	4.7	4.5	6.3	5.4	24.8	26.2	7.4	9.4	11.1	6.5	10.5	9.6	8.4	10.5	10.1	5.8	9.2	8.5	10.4	12.2	26.2	4.5	10.2
7	9.6	9.9	12.2	11.1	12.2	6.5	8.6	7.3	5.0	6.7	8.3	4.5	4.7	2.5	2.7	4.1	2.8	2.8	2.6	3.0	3.7	3.0	5.3	4.2	12.2	2.5	6.0
8	3.3	15.6	10.2	4.7	11.1	5.8	5.8	3.9	4.4	2.7	2.1	2.3	5.4	4.3	4.1	4.4	4.0	10.6	5.8	6.4	6.1	4.7	4.5	3.3	15.6	2.1	5.6
9	5.1	5.5	4.9	6.2	3.4	3.9	4.4	4.4	9.0	6.4	6.5	6.0	12.0	8.9	8.9	34.8	55.5	71.4	15.9	15.0	18.6	29.9	27.1	20.5	71.4	3.4	16.0
10	8.0	21.4	11.1	19.6	5.6	4.0	8.8	6.3	7.4	16.5	6.7	7.7	4.0	7.0	4.2	4.6	5.2	4.1	3.8	3.6	4.8	8.6	6.7	5.7	21.4	3.6	7.7
11	5.9	4.4	3.7	3.9	4.0	3.3	4.0	5.7	5.8	1.1	0.9	1.4	0.8	0.5	0.3	0.4	6.5	12.9	12.5	5.6	3.5	6.2	9.8	8.7	12.9	0.3	4.7
12	6.6	11.2	15.1	5.0	14.1	16.4	4.6	7.5	5.5	16.1	6.9	9.2	4.2	7.9	4.6	3.4	3.7	3.6	3.6	3.9	8.6	6.3	11.4	9.3	16.4	3.4	7.9
13	7.0	5.3	3.6	6.9	4.2	2.9	3.3	2.8	3.4	3.2	4.0	3.8	3.8	3.8	3.7	3.6	4.4	4.0	3.7	3.8	4.3	4.3	3.8	3.7	7.0	2.8	4.1
14	3.6	3.3	3.3	3.5	3.0	3.0	3.7	24.9	7.0	5.2	3.3	2.9	4.5	3.8	4.0	3.4	3.6	3.1	3.8	3.1	6.4	4.2	9.6	6.1	24.9	2.9	5.1
15	3.8	8.3	7.5	3.5	4.0	10.4	7.1	6.7	8.3	5.5	9.8	10.1	0.2	0.0	0.1	0.1	56.5	0.2	87.5	10.7	25.1	7.4	10.7	5.5	87.5	0.0	12.0
16	4.8	3.4	3.9	3.7	4.1	4.4	2.7	3.0	2.8	3.2	2.2	2.1	3.3	1.9	2.1	3.1	3.7	13.8	2.7	2.7	3.1	2.4	4.0	2.2	13.8	1.9	3.6
17	0.3	0.4	0.2	0.1	7.2	6.3	4.2	3.7	3.6	8.9	5.5	8.4	4.9	4.4	3.1	5.1	13.5	4.8	4.2	4.8	3.8	3.7	3.8	3.5	13.5	0.1	4.5
18	4.2	4.9	4.6	5.5	4.5	5.3	4.8	5.6	4.7	6.5	4.8	4.7	5.1	5.0	4.9	5.9	5.3	4.9	4.4	4.5	4.6	4.7	4.9	5.5	6.5	4.2	5.0
19	4.7	6.1	10.9	12.6	10.4	5.9	9.1	5.4	8.0	2.2	5.6	4.6	2.7	3.7	2.0	3.3	6.8	0.0	0.0	0.0	0.8	2.2	5.1	6.4	12.6	0.0	4.9
20	3.8	4.8	4.6	4.1	5.2	4.9	5.0	4.5	5.0	5.2	5.3	7.6	3.0	2.9	3.4	3.1	10.5	4.6	5.0	4.2	4.0	3.7	6.1	3.9	10.5	2.9	4.8
21	3.7	3.7	3.9	3.8	4.2	3.0	3.2	2.8	2.9	3.1	3.4	3.3	3.1	6.3	6.8	6.1	3.5	11.4	6.3	9.7	5.6	4.7	3.4	3.5	11.4	2.8	4.6
22	2.7	2.3	7.7	3.0	5.4	3.1	6.2	1.0	1.3	2.9	2.1	1.7	2.6	6.0	3.7	5.2	4.2	4.4	5.0	4.9	4.1	4.1	2.8	2.5	7.7	1.0	3.7
23	4.2	5.1	4.7	11.4	9.9	6.3	3.7	8.4	0.4	0.2	0.4	0.1	0.2	0.0	0.0	0.0	1.5	5.1	6.7	5.4	9.1	6.3	10.0	6.5	11.4	0.0	4.4
24	5.1	3.7	5.2	7.0	6.7	6.5	10.1	8.6	4.8	4.1	7.5	17.5	6.9	3.4	8.7	5.4	2.0	6.0	8.7	7.7	13.3	10.1	11.6	11.4	17.5	2.0	7.6
25	9.4	9.8	12.0	13.4	13.5	13.0	13.6	15.5	7.3	4.2	4.5	9.8	6.7	8.4	3.4	5.4	3.1	3.5	4.3	4.3	3.9	4.3	5.1	7.4	15.5	3.1	7.7
26	16.1	16.6	6.3	5.4	5.5	7.0	6.0	4.9	5.3	6.5	5.0	5.2	5.1	5.3	4.7	4.5	5.7	4.9	4.7	5.0	5.0	7.9	3.4	3.8	16.6	3.4	6.2
27	8.8	15.3	13.1	16.6	14.7	14.4	20.8	59.2	14.5	6.4	6.7	6.8	15.4	21.9	12.8	5.9	8.9	5.4	3.1	3.1	5.9	3.7	5.6	4.1	59.2	3.1	12.2
28	4.8	5.5	8.6	6.0	5.8	5.1	4.5	5.1	4.2	5.7	5.3	4.5	5.3	8.9	5.6	6.2	3.9	43.6	40.1	16.8	4.9	23.0	16.5	8.5	43.6	3.9	10.4
29	10.7	12.2	10.6	5.1	6.2	22.1	21.6	8.9	10.0	6.0	12.6	20.8	42.4	8.7	9.3	5.4	4.7	6.1	6.8	6.9	9.5	7.3	3.3	6.4	42.4	3.3	11.0
Max.	**16.1**	**24.8**	**15.1**	**21.9**	**21.5**	**22.1**	**21.6**	**59.2**	**24.8**	**26.2**	**12.8**	**20.8**	**42.4**	**21.9**	**12.8**	**34.8**	**56.5**	**71.4**	**87.5**	**16.8**	**25.1**	**29.9**	**27.1**	**21.8**	**87.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.3**	**8.3**	**7.1**	**7.0**	**7.1**	**6.8**	**6.7**	**8.1**	**6.4**	**6.6**	**5.5**	**6.3**	**6.3**	**5.2**	**4.9**	**6.1**	**8.5**	**9.3**	**9.8**	**5.8**	**6.7**	**7.0**	**7.7**	**7.5**			**7.0**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.8	8.0	28.5	23.2	20.9	13.4	2.4	3.5	4.9	4.9	4.4	3.0	3.7	3.4	3.1	3.7	3.3	2.9	10.6	2.8	9.6	2.7	3.6	2.0	28.5	2.0	7.3
2	3.6	2.4	3.6	3.1	3.3	3.0	4.0	4.8	4.7	3.5	4.4	4.2	5.0	4.2	3.6	7.3	4.5	5.5	3.5	8.5	4.5	3.5	2.5	2.8	8.5	2.4	4.2
3	3.1	9.6	3.3	3.9	4.7	3.7	3.9	4.6	4.0	3.4	2.9	3.3	3.4	3.9	4.8	4.1	4.5	4.4	8.3	6.5	5.0	4.2	4.2	4.7	9.6	2.9	4.5
4	4.1	4.5	4.1	4.6	5.9	4.5	4.6	4.1	4.7	4.2	4.1	4.9	4.4	4.2	4.7	4.4	4.2	3.9	4.0	4.9	4.3	4.6	4.2	4.1	5.9	3.9	4.4
5	3.8	3.8	3.3	4.3	3.6	3.6	3.6	3.6	3.1	3.5	3.6	3.2	3.4	3.7	3.9	4.4	4.2	4.1	4.1	3.9	2.9	3.9	4.0	3.5	4.4	2.9	3.7
6	3.9	3.1	3.1	3.3	3.0	4.2	3.5	3.4	3.4	4.4	3.0	5.4	3.9	4.7	3.6	3.8	3.3	4.3	3.6	11.0	22.0	8.8	3.6	3.4	22.0	3.0	5.0
7	4.0	4.4	5.2	9.7	6.6	4.8	4.2	6.0	7.9	8.8	7.7	9.7	16.6	25.2	45.7	9.8	4.0	6.7	4.7	3.4	4.3	4.1	3.6	5.6	45.7	3.4	8.9
8	2.9	3.1	10.5	7.1	5.6	7.0	3.5	6.9	9.5	6.8	7.0	4.4	3.9	7.1	6.8	7.2	3.4	6.3	4.6	5.8	3.2	3.3	3.8	3.3	10.5	2.9	5.5
9	3.2	3.5	3.5	3.6	2.6	8.1	5.1	3.0	3.1	4.0	4.3	4.8	10.5	10.4	9.6	9.0	10.7	7.6	7.9	24.3	83.7	71.0	41.8	54.3	83.7	2.6	16.2
10	18.1	5.1	17.6	6.9	9.9	4.6	3.8	10.1	5.3	4.4	5.9	5.3	3.0	3.5	5.2	3.7	5.0	5.5	4.6	4.1	2.9	3.3	5.0	5.2	18.1	2.9	6.2
11	3.0	2.8	3.6	2.5	6.0	3.9	6.1	5.4	9.4	7.3	12.2	6.3	6.1	4.7	10.5	5.7	3.5	2.9	5.0	2.2	4.3	4.6	7.0	4.3	12.2	2.2	5.4
12	1.6	6.4	5.5	4.9	5.4	2.8	3.7	7.9	5.5	8.2	8.3	7.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	2.8
13	0.0	4.5	7.1	8.4	9.5	6.4	4.1	5.6	0.0	20.6	19.8	17.8	10.1	9.2	10.5	11.2	11.9	14.2	18.0	6.9	5.4	5.0	0.0	0.0	20.6	0.0	8.6
14	0.0	0.0	0.0	0.0	0.0	0.0	4.1	7.6	7.7	9.8	9.1	3.8	7.7	12.2	9.0	4.1	4.0	3.9	3.9	5.8	3.9	4.1	6.3	6.2	12.2	0.0	4.7
15	3.8	4.6	2.7	3.3	3.0	4.2	3.6	3.9	3.0	3.1	3.5	3.5	3.5	3.4	3.7	3.5	2.8	2.8	2.6	3.0	2.6	3.1	3.0	2.7	4.6	2.6	3.3
16	3.6	3.0	3.1	3.2	5.0	4.0	4.3	6.7	5.3	5.9	4.3	5.7	6.5	5.6	9.2	10.8	14.4	5.4	3.7	2.3	6.7	3.8	5.5	4.6	14.4	2.3	5.5
17	13.3	5.0	8.2	7.4	3.7	5.9	7.1	2.5	0.4	9.0	0.2	32.7	4.6	4.1	1.3	1.9	8.1	8.6	3.1	2.4	3.9	9.7	3.6	0.2	32.7	0.2	6.1
18	0.3	99.3	0.5	2.7	3.7	0.3	0.1	14.2	6.0	3.7	3.9	2.2	9.6	5.9	6.2	7.0	2.3	3.4	2.0	3.0	4.2	4.2	2.3	1.6	99.3	0.1	7.9
19	1.9	1.9	4.3	4.6	3.2	2.3	1.8	2.0	2.1	1.4	2.7	3.7	2.2	2.2	3.0	2.8	2.2	3.1	2.9	4.1	2.7	2.6	2.0	2.2	4.6	1.4	2.7
20	5.2	2.4	1.3	0.3	0.9	4.5	0.3	0.2	0.3	0.2	0.1	0.1	0.2	0.4	0.0	0.0	0.1	0.3	7.9	11.7	3.9	2.5	5.1	5.0	11.7	0.0	2.2
21	2.4	2.8	3.3	4.1	5.1	5.3	5.7	2.8	2.8	2.3	2.8	4.3	2.7	3.0	2.8	4.9	5.6	5.3	10.2	7.8	8.6	8.4	7.3	7.5	10.2	2.3	4.9
22	9.6	7.2	10.3	5.0	7.1	7.6	5.2	3.5	6.7	8.1	19.2	16.7	7.8	5.8	8.6	11.7	8.3	10.4	5.8	7.3	6.5	9.2	43.6	33.4	43.6	3.5	11.0
23	49.8	18.5	37.7	33.6	14.1	10.1	16.2	23.2	10.7	10.3	4.9	10.4	10.7	14.9	17.3	3.9	3.9	4.9	4.8	2.5	3.5	5.1	12.3	9.2	49.8	2.5	13.9
24	12.2	11.9	7.1	7.9	11.1	9.1	9.1	6.7	14.7	10.8	12.7	12.3	10.4	10.9	10.3	9.6	2.9	6.0	4.6	12.7	8.8	5.6	4.9	3.1	14.7	2.9	9.0
25	16.9	52.3	41.1	10.8	8.2	4.0	6.4	5.9	5.4	3.6	4.4	3.9	6.2	8.0	22.8	27.6	18.0	9.2	5.1	9.3	3.1	3.6	12.6	8.5	52.3	3.1	12.4
26	6.2	7.5	6.8	11.5	10.9	11.0	5.8	7.3	5.1	8.8	9.5	10.9	11.7	6.4	3.4	4.6	13.1	7.8	5.8	5.3	6.2	9.3	10.4	3.9	13.1	3.4	7.9
27	3.9	3.9	3.1	4.5	10.6	4.4	19.0	5.1	8.4	6.5	5.5	4.4	3.0	12.6	7.3	9.0	4.9	5.8	4.7	5.0	4.4	6.1	5.9	5.7	19.0	3.0	6.4
28	7.7	10.6	10.4	9.3	11.3	11.2	5.8	9.1	13.8	11.9	14.8	18.1	62.5	22.8	55.8	5.3	9.2	3.6	9.4	8.8	11.0	4.4	4.9	3.2	62.5	3.2	13.9
29	6.2	4.5	3.3	2.8	4.5	5.7	4.0	6.5	5.8	3.5	4.3	4.0	4.4	3.9	3.5	3.6	3.8	3.8	4.0	3.6	3.9	3.8	4.0	3.6	6.5	2.8	4.2
30	3.3	3.3	3.4	3.7	3.7	4.2	3.7	3.9	4.0	3.7	3.4	3.5	3.7	4.6	5.2	4.2	4.6	5.0	3.8	3.7	4.9	3.6	3.9	6.1	6.1	3.3	4.1
31	4.1	5.2	3.3	3.8	3.1	5.2	5.8	5.3	3.4	4.6	4.7	3.4	4.2	4.1	3.8	4.5	4.2	3.9	4.2	4.1	4.1	3.8	2.9	2.9	5.8	2.9	4.1
Max.	**49.8**	**99.3**	**41.1**	**33.6**	**20.9**	**13.4**	**19.0**	**23.2**	**14.7**	**20.6**	**19.8**	**32.7**	**62.5**	**25.2**	**55.8**	**27.6**	**18.0**	**14.2**	**18.0**	**24.3**	**83.7**	**71.0**	**43.6**	**54.3**	**99.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.2**	**0.0**	**0.2**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.7**	**9.8**	**8.0**	**6.6**	**6.3**	**5.5**	**5.2**	**6.0**	**5.5**	**6.2**	**6.4**	**7.2**	**7.6**	**6.9**	**9.2**	**6.2**	**5.7**	**5.2**	**5.4**	**6.0**	**7.9**	**6.8**	**7.2**	**6.5**			**6.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	2.7	2.9	3.1	4.2	3.8	4.1	4.6	4.5	4.6	4.1	3.3	2.9	3.6	3.8	3.9	3.9	3.7	4.2	3.4	3.7	9.2	4.6	4.3	9.2	2.7	4.0
2	2.5	1.3	0.6	0.5	0.4	0.5	0.3	0.2	0.2	6.9	9.4	8.9	11.1	3.9	18.7	13.6	7.5	11.2	2.3	3.7	4.0	5.2	7.6	5.0	18.7	0.2	5.2
3	4.0	4.0	7.2	4.6	2.4	4.3	5.0	4.9	6.8	8.1	6.0	5.7	3.4	5.9	3.4	4.5	3.3	7.6	4.8	5.6	4.6	3.5	4.6	4.0	8.1	2.4	4.9
4	4.7	3.8	4.0	4.8	4.3	4.2	4.4	4.2	4.1	4.6	5.1	4.0	5.1	4.4	5.2	3.9	3.5	3.6	3.1	10.8	9.2	4.4	11.0	8.4	11.0	3.1	5.2
5	5.1	12.4	7.4	5.7	8.9	6.8	6.7	12.6	9.7	6.8	7.6	7.8	32.8	7.1	4.1	9.0	6.4	10.4	7.0	2.3	4.4	4.7	6.0	6.3	32.8	2.3	8.2
6	6.6	4.9	4.0	3.1	8.0	19.0	13.7	13.9	14.5	19.7	20.0	23.1	16.9	9.0	3.1	2.6	2.9	4.7	22.2	5.5	8.0	15.1	10.7	10.3	23.1	2.6	10.9
7	11.1	7.0	7.8	11.7	14.5	7.2	4.4	6.4	5.4	15.7	14.3	12.9	3.9	4.2	2.0	2.5	5.0	5.2	4.6	5.7	11.8	9.0	14.2	6.7	15.7	2.0	8.1
8	6.1	7.4	9.3	11.9	10.7	15.0	31.7	28.1	21.1	5.7	5.8	5.3	7.5	8.5	5.0	5.6	9.0	8.2	5.3	5.8	7.7	12.7	6.9	14.2	31.7	5.0	10.6
9	7.6	13.7	8.0	9.5	7.3	3.7	3.8	4.0	7.1	11.0	11.6	16.2	12.6	8.7	7.8	9.6	6.4	6.1	4.3	7.5	3.5	10.0	6.6	5.6	16.2	3.5	8.0
10	9.8	3.8	5.0	5.2	8.1	3.8	2.5	4.6	9.5	6.5	8.8	9.1	7.4	9.2	13.6	7.9	6.1	5.3	5.4	6.3	5.9	7.1	9.7	8.4	13.6	2.5	7.0
11	11.7	10.5	7.8	9.7	8.0	8.1	6.3	6.0	8.1	8.7	13.1	12.8	5.1	2.7	1.9	2.1	3.5	5.8	5.8	7.8	5.5	6.2	8.6	7.6	13.1	1.9	7.2
12	8.9	6.3	9.0	14.9	3.6	6.4	7.8	5.3	8.0	3.5	8.1	7.2	4.9	10.9	6.0	4.3	6.6	2.9	6.3	14.7	15.9	6.6	3.6	22.7	22.7	2.9	8.1
13	12.9	4.8	8.6	4.3	5.6	5.1	7.4	4.5	5.2	4.2	4.8	5.9	6.1	4.6	4.7	3.3	3.3	0.0	0.0	0.0	0.0	3.6	4.3	1.1	12.9	0.0	4.3
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	13.7	18.5	6.8	10.5	18.5	0.0	2.2
16	15.2	19.2	12.8	15.1	21.4	14.0	8.4	51.2	49.3	42.8	42.0	63.4	36.3	64.7	87.4	91.1	84.8	77.1	35.0	2.3	3.7	5.5	3.0	4.8	91.1	2.3	35.4
17	3.5	5.9	3.9	4.5	3.1	85.9	88.7	69.1	41.4	51.7	20.8	16.6	4.7	6.2	5.3	5.2	5.5	13.6	8.3	7.4	15.2	11.0	16.7	19.1	88.7	3.1	21.4
18	3.2	3.5	3.0	4.5	4.6	7.7	5.4	29.4	15.2	4.8	5.8	4.7	2.5	7.4	8.0	7.1	6.6	5.1	4.9	5.3	2.9	3.0	3.4	4.6	29.4	2.5	6.4
19	4.9	5.2	6.9	3.4	5.5	5.7	4.6	5.2	4.0	10.2	6.8	8.0	6.8	6.8	6.1	5.6	6.2	5.2	7.2	7.7	6.4	7.2	7.7	5.9	10.2	3.4	6.2
20	6.1	8.1	7.2	5.4	10.9	5.4	15.3	2.9	6.2	5.5	4.3	5.5	6.4	4.5	6.1	6.2	5.7	4.1	6.9	9.5	5.5	2.9	3.0	3.3	15.3	2.9	6.1
21	2.8	3.2	2.9	2.8	4.2	4.1	3.4	3.7	4.6	6.6	5.9	6.4	4.0	3.5	8.8	5.8	8.5	5.5	6.7	7.3	9.1	5.8	5.6	8.8	9.1	2.8	5.4
22	7.8	7.8	11.5	9.3	4.5	7.5	5.6	6.9	7.7	12.7	8.4	7.3	2.5	3.0	4.1	5.1	5.4	12.1	6.0	9.3	6.0	10.6	20.7	8.5	20.7	2.5	7.9
23	7.8	15.3	10.0	7.6	9.6	23.4	8.2	5.3	5.5	3.2	3.5	6.7	6.5	10.0	8.4	3.7	3.3	11.1	12.3	3.9	3.5	5.0	7.1	3.2	23.4	3.2	7.7
24	1.7	3.9	3.3	5.4	10.9	10.4	21.5	13.1	20.5	14.7	8.5	15.2	6.5	8.4	4.9	8.8	3.2	3.2	3.2	4.7	5.4	7.3	5.1	4.1	21.5	1.7	8.1
25	3.5	3.4	44.5	5.2	11.4	11.4	7.5	6.3	8.4	5.6	3.1	2.8	3.5	4.7	6.3	5.7	4.4	5.6	4.2	3.8	4.1	2.4	1.8	2.7	44.5	1.8	6.8
26	1.9	2.1	9.1	9.3	7.7	12.4	10.4	11.3	17.1	17.6	12.8	17.0	12.2	14.2	10.9	11.0	12.7	7.6	10.2	14.9	12.8	16.3	7.5	4.5	17.6	1.9	11.0
27	6.3	9.8	14.7	12.4	6.7	6.9	6.5	5.9	8.6	9.8	11.4	11.8	5.0	2.9	7.5	5.1	10.0	9.6	8.2	9.8	6.9	3.8	9.3	7.9	14.7	2.9	8.2
28	13.1	13.4	6.5	13.2	12.4	24.5	7.5	9.6	18.0	18.1	4.1	0.1	0.2	2.2	8.9	11.2	12.4	10.8	9.1	6.1	4.8	4.7	9.3	4.5	24.5	0.1	9.4
29	8.0	3.6	5.7	7.3	3.5	5.4	4.9	6.9	6.3	8.6	7.7	5.2	7.2	8.3	7.9	5.3	4.9	3.6	6.3	7.5	11.3	11.8	9.4	5.5	11.8	3.5	6.8
30	7.4	5.6	6.9	8.9	9.7	7.7	7.8	7.2	6.3	8.7	6.3	8.5	8.8	7.3	7.6	7.0	9.4	14.9	11.4	10.7	9.3	6.9	4.6	3.9	14.9	3.9	8.0
Max.	**15.2**	**19.2**	**44.5**	**15.1**	**21.4**	**85.9**	**88.7**	**69.1**	**49.3**	**51.7**	**42.0**	**63.4**	**36.3**	**64.7**	**87.4**	**91.1**	**84.8**	**77.1**	**35.0**	**14.9**	**15.9**	**18.5**	**20.7**	**22.7**	**91.1**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.2**	**6.4**	**7.7**	**6.8**	**7.1**	**10.7**	**10.1**	**11.1**	**10.8**	**10.9**	**9.0**	**10.0**	**7.7**	**7.9**	**8.9**	**8.6**	**8.3**	**8.8**	**7.2**	**6.5**	**6.8**	**7.3**	**7.3**	**6.9**			**8.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.2	5.5	5.9	4.0	6.5	7.6	5.0	11.8	11.8	10.1	7.9	11.5	4.5	3.2	5.1	3.8	6.3	3.9	9.5	11.3	11.4	10.7	9.3	3.3	11.8	3.2	7.3
2	5.5	8.9	2.9	4.0	4.6	7.3	11.0	12.9	21.6	8.0	9.6	5.7	5.3	9.2	59.1	26.4	7.5	6.5	10.3	48.1	28.5	12.3	7.0	7.8	59.1	2.9	13.7
3	6.4	36.6	30.9	18.7	8.4	5.5	3.9	5.0	6.6	7.7	3.8	3.7	3.3	4.2	7.3	13.4	5.4	11.9	15.8	4.3	10.4	15.8	13.6	8.5	36.6	3.3	10.5
4	4.0	6.8	5.2	7.5	3.5	3.6	4.6	6.4	6.0	5.4	5.3	7.0	4.4	4.0	3.8	5.7	7.1	5.2	11.4	28.5	81.8	43.4	18.2	32.3	81.8	3.5	13.0
5	8.9	20.5	11.1	9.3	13.4	9.6	13.8	13.2	12.7	12.2	25.6	26.3	18.8	8.9	15.3	9.0	7.3	8.9	8.8	11.7	7.0	3.5	3.4	6.8	26.3	3.4	11.9
6	5.0	7.9	5.6	4.7	6.9	6.6	7.8	4.1	4.5	5.1	3.2	3.6	3.1	3.1	4.3	3.1	3.6	5.4	3.9	3.2	4.0	3.7	3.4	3.2	7.9	3.1	4.5
7	4.1	4.2	3.4	3.4	3.4	2.9	3.3	3.6	3.6	3.4	3.3	3.1	3.2	3.1	3.0	3.5	3.6	4.4	3.2	3.9	3.8	3.6	3.9	3.9	4.4	2.9	3.5
8	3.4	3.7	3.6	3.5	3.4	3.3	4.1	3.8	3.5	3.7	2.9	3.7	3.5	3.5	3.8	3.7	3.6	3.9	3.8	4.0	3.4	3.2	3.3	3.9	4.1	2.9	3.6
9	3.9	2.9	5.4	6.5	3.8	5.7	2.7	3.4	4.3	3.5	4.1	3.3	3.4	3.8	3.8	3.6	4.3	4.2	4.3	5.0	4.9	6.1	49.3	10.1	49.3	2.7	6.4
10	24.0	9.7	9.5	7.7	5.8	10.5	11.9	6.7	13.3	8.1	9.8	10.9	11.3	7.3	6.5	6.8	5.2	10.9	2.7	2.9	8.8	4.2	5.9	3.0	24.0	2.7	8.5
11	4.3	4.3	2.9	3.9	4.5	2.8	4.0	4.0	3.3	3.6	3.7	3.7	3.8	3.7	4.4	4.3	4.3	3.7	4.2	3.6	3.8	4.5	2.9	3.2	4.5	2.8	3.8
12	3.0	3.3	4.1	3.5	4.3	4.6	3.5	3.7	3.6	6.3	3.2	3.6	4.5	4.0	3.6	4.2	4.1	4.1	3.5	3.2	3.4	3.6	3.4	4.3	6.3	3.0	3.9
13	4.1	4.0	5.2	3.6	4.5	4.7	3.3	2.6	2.9	4.5	4.2	6.1	4.4	4.0	3.7	3.9	3.8	6.2	4.3	3.6	4.0	4.8	3.5	3.4	6.2	2.6	4.1
14	3.6	3.9	3.6	14.9	3.8	4.8	3.6	3.7	5.4	3.5	2.9	5.8	2.7	5.3	5.9	7.1	6.9	2.7	3.9	3.5	4.1	4.7	4.5	7.7	14.9	2.7	4.9
15	45.3	5.0	3.3	11.4	6.4	6.2	4.7	4.0	1.6	3.1	3.0	3.0	4.0	3.1	5.4	5.4	8.6	3.2	3.1	3.8	2.9	2.9	2.4	7.8	45.3	1.6	6.2
16	4.3	3.8	5.0	7.2	5.6	5.4	17.3	7.1	10.4	8.0	9.2	5.4	5.9	6.1	4.7	5.0	5.0	5.2	4.8	5.0	6.0	15.1	21.6	47.8	47.8	3.8	9.2
17	5.7	4.1	8.0	7.6	4.8	7.1	4.0	5.9	5.8	6.0	7.9	6.8	6.5	9.4	27.2	11.3	19.0	13.3	19.8	2.8	5.7	4.4	5.3	7.5	27.2	2.8	8.6
18	5.6	12.3	10.3	3.5	3.5	3.1	6.0	6.4	3.3	7.0	4.6	6.7	4.4	3.2	4.4	5.2	9.8	6.7	4.6	6.0	5.1	4.0	7.9	4.3	12.3	3.1	5.7
19	5.5	5.1	3.8	4.0	5.0	4.7	11.6	12.2	4.2	16.5	6.7	9.1	21.2	18.2	14.5	18.8	14.6	7.5	6.4	8.1	4.2	5.0	5.0	6.8	21.2	3.8	9.1
20	7.6	6.7	4.6	5.1	10.1	9.7	6.4	4.6	4.7	7.1	4.5	5.2	9.6	25.1	6.5	7.1	9.1	4.2	4.0	3.1	5.0	3.5	2.4	4.6	25.1	2.4	6.7
21	4.0	4.0	16.4	11.2	8.1	24.9	17.4	21.0	9.8	11.5	6.4	7.1	5.8	11.9	7.1	13.1	4.4	5.2	11.9	6.8	3.1	3.6	3.5	2.1	24.9	2.1	9.2
22	3.1	3.9	3.0	2.8	7.6	8.5	10.4	14.3	34.3	14.4	11.6	11.7	21.8	10.6	9.3	10.2	4.8	3.6	3.6	4.3	6.6	4.3	3.8	3.8	34.3	2.8	8.9
23	3.9	4.3	3.7	4.2	4.0	5.1	4.8	4.3	5.2	6.1	5.4	4.9	4.5	4.4	5.6	5.1	4.8	5.5	5.2	4.7	4.8	5.3	3.6	3.9	6.1	3.6	4.7
24	3.6	4.4	4.5	4.0	4.3	4.1	4.5	4.3	3.8	4.0	4.4	4.6	5.1	4.9	5.7	4.7	6.0	5.3	25.9	6.5	11.6	10.7	6.8	3.6	25.9	3.6	6.1
25	3.3	12.9	5.4	6.6	6.8	4.5	5.5	7.0	6.5	4.4	3.6	6.1	3.7	6.0	4.1	5.1	17.3	4.8	5.5	5.3	5.5	7.4	4.5	6.2	17.3	3.3	6.2
26	5.5	4.1	6.7	3.5	5.3	4.3	4.4	4.8	6.1	5.3	8.4	9.5	5.8	5.5	25.0	11.5	8.2	9.4	9.0	6.8	4.3	4.7	6.4	5.4	25.0	3.5	7.1
27	5.1	5.0	5.0	5.6	7.4	13.0	20.6	17.5	7.3	10.4	8.5	16.0	20.1	12.0	16.3	14.1	13.0	17.6	10.1	10.0	5.6	4.3	4.8	11.2	20.6	4.3	10.9
28	10.2	5.1	4.7	6.9	6.9	7.4	5.1	8.6	7.2	5.0	10.1	8.1	17.5	11.5	13.7	16.5	14.9	17.4	8.2	5.1	5.7	5.5	9.5	9.2	17.5	4.7	9.2
29	10.8	7.9	6.6	9.5	9.3	10.1	9.2	9.8	7.2	4.2	4.9	7.6	10.0	12.0	14.2	14.1	16.1	12.5	12.6	10.5	10.6	11.0	9.0	6.7	16.1	4.2	9.8
30	5.5	6.7	14.3	15.3	7.9	12.2	9.6	7.8	2.9	4.2	4.6	4.7	6.3	5.2	4.4	4.9	4.7	4.9	5.4	6.8	6.2	4.9	3.9	4.5	15.3	2.9	6.6
31	4.0	4.2	3.9	4.6	4.4	4.3	4.8	3.7	4.0	4.4	4.3	4.4	4.6	5.1	5.3	4.3	5.0	5.8	4.9	5.8	5.2	4.8	4.4	4.9	5.8	3.7	4.6
Max.	**45.3**	**36.6**	**30.9**	**18.7**	**13.4**	**24.9**	**20.6**	**21.0**	**34.3**	**16.5**	**25.6**	**26.3**	**21.8**	**25.1**	**59.1**	**26.4**	**19.0**	**17.6**	**25.9**	**48.1**	**81.8**	**43.4**	**49.3**	**47.8**	**81.8**		
Min.	**3.0**	**2.9**	**2.9**	**2.8**	**3.4**	**2.8**	**2.7**	**2.6**	**1.6**	**3.1**	**2.9**	**3.0**	**2.7**	**3.1**	**3.0**	**3.1**	**3.6**	**2.7**	**2.7**	**2.8**	**2.9**	**2.9**	**2.4**	**2.1**		**1.6**	
Avg.	**7.0**	**7.2**	**6.7**	**6.7**	**5.9**	**6.9**	**7.4**	**7.4**	**7.3**	**6.7**	**6.4**	**7.1**	**7.5**	**7.1**	**9.8**	**8.2**	**7.7**	**6.9**	**7.6**	**7.7**	**9.0**	**7.3**	**7.6**	**7.8**			**7.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.0	4.4	4.3	5.1	3.6	3.4	3.6	3.7	4.5	4.4	5.4	4.3	4.6	4.2	4.6	5.2	4.5	4.6	4.2	4.3	5.0	7.3	6.2	3.9	7.3	3.4	4.6
2	7.0	5.3	6.1	5.6	3.8	5.1	3.7	3.4	3.9	4.6	5.4	6.8	8.8	11.7	10.3	7.1	11.5	14.5	7.6	7.0	8.4	22.8	7.5	13.3	22.8	3.4	8.0
3	62.8	13.0	9.7	8.8	12.5	6.7	4.9	9.8	14.3	28.7	18.2	27.1	22.3	13.6	15.8	7.8	8.1	7.4	5.8	4.3	4.0	5.4	3.5	4.0	62.8	3.5	13.3
4	5.8	3.4	3.7	4.8	4.2	2.9	3.5	3.8	6.3	5.0	5.5	7.0	6.0	7.4	5.6	5.5	5.1	5.2	6.4	6.0	4.0	4.6	4.0	5.0	7.4	2.9	5.0
5	4.1	3.5	3.5	3.8	3.9	4.0	6.0	3.9								4.2	4.4	6.1	5.1	5.3	8.5	8.8	58.6	7.5	58.6	3.5	8.3
6	7.5	6.2	6.1	7.0	6.5	5.3	12.1	16.4	9.7	10.9	14.6	10.8	16.8	14.3	22.5	23.9	16.9	7.4	7.1	10.1	12.1	6.2	6.9	11.7	23.9	5.3	11.2
7	8.7	17.4	10.0	6.5	6.7	6.3	6.1	4.7	10.4	11.5	12.1	11.2	12.0	14.1	21.6	42.0	17.3	14.5	16.7	12.5	5.0	6.2	3.9	5.5	42.0	3.9	11.8
8	3.7	4.3	3.5	4.1	4.7	6.3	5.4	4.3	9.1	7.1	10.3	7.6	8.8	9.7	8.8	6.5	7.1	5.4	6.2	5.0	5.7	4.1	3.9	5.1	10.3	3.5	6.1
9	5.0	8.5	4.9	4.0	3.7	5.5	4.2	5.2	1.4	0.2	12.8	14.9	10.3	10.2	9.0	7.8	11.5	11.3	7.8	7.1	8.6	5.0	5.0	3.3	14.9	0.2	7.0
10	3.6	3.1	3.5	4.2	5.2	5.6	5.1	13.0	12.6	26.9	27.1	11.1	20.1	61.0	35.7	17.1	30.8	28.4	16.3	9.9	9.7	6.1	7.0	16.8	61.0	3.1	15.8
11	6.1	24.5	36.0	42.9	66.3	88.3	54.9	38.2	26.7	32.1	28.0	51.5	23.6	14.9	7.5	7.6	8.0	7.6	7.5	7.6	5.7	4.5	3.9	3.5	88.3	3.5	24.9
12	4.5	4.5	5.0	4.6	4.1	25.7	17.0	6.0	5.9	14.2	27.4	17.1	18.8	8.9	24.6	17.4	38.3	18.2	9.8	16.2	13.3	9.2	6.3	26.5	38.3	4.1	14.3
13	18.9	8.2	8.0	5.4	6.1	6.9	8.5	5.9	7.8	6.3	5.0	13.1	10.3	21.8	19.2	16.2	11.7	12.5	12.7	13.3	18.2	5.1	6.7	4.1	21.8	4.1	10.5
14	4.3	4.4	3.1	4.3	6.6	6.1	7.0	5.9	12.2	11.0	7.2	10.9	56.3	53.5	38.6	18.3	8.6	17.7	10.7	23.9	10.1	7.0	2.9	3.6	56.3	2.9	13.9
15	8.4	3.7	3.6	4.2	3.0	4.0	6.5	13.4	12.1	57.1	29.5	10.0	11.6	16.0	15.0	7.3	6.0	4.7	5.6	10.3	5.6	7.3	5.9	6.5	57.1	3.0	10.7
16	22.6	14.1	32.4	49.3	19.5	20.7	10.8	7.3	10.8	7.0	20.8	38.6	20.2	66.2	28.6	9.5	8.9	10.7	11.3	11.4	9.0	6.8	5.2	7.1	66.2	5.2	18.7
17	9.7	6.9	7.8	6.5	9.9	9.1	10.1	17.4	20.0	28.3	45.4	28.5	64.6	40.2	15.6	15.9	14.5	14.1	13.3	13.0	5.0	4.5	2.5	4.2	64.6	2.5	17.0
18	25.4	4.8	4.8	4.3	6.7	6.2	6.4	6.1	6.7	7.4	6.9	8.5	9.7	15.8	10.3	10.1	13.3	14.9	13.8	14.7	12.9	7.4	21.3	4.8	25.4	4.3	10.1
19	4.3	4.0	4.0	3.8	2.8	12.1	13.5	5.4	21.1	16.9	6.6	7.8	11.1	11.4	15.7	17.0	15.2	19.9	10.6	7.2	7.7	5.3	5.5	3.8	21.1	2.8	9.7
20	7.8	15.0	44.9	14.3	27.1	40.2	15.0	9.8	11.9	15.4	12.1	10.1	10.3	7.1	7.4	7.8	7.0	5.8	5.5	4.8	4.4	6.1	6.2	5.3	44.9	4.4	12.6
21	3.9	6.5	6.5	3.4	3.8	4.0	5.2	5.6	5.6	8.4	33.8	61.9	30.4	22.3	13.2	22.2	26.6	30.8	25.4	12.5	9.9	25.0	8.0	5.5	61.9	3.4	15.8
22	4.0	10.7	3.8	3.5	6.0	2.5	4.9	7.5	5.4	6.9	7.7	9.0	11.5	9.4	8.8	7.2	5.7	5.6	5.2	5.5	4.1	4.2	4.5	5.6	11.5	2.5	6.2
23	4.8	4.3	4.3	5.4	4.8	6.3	4.4	5.7	5.1	6.8	6.7	7.9	9.6	7.8	8.8	8.3	12.3	11.1	10.0	10.2	5.8	3.9	4.3	7.7	12.3	3.9	6.9
24	7.8	5.6	10.0	7.8	5.6	4.3	4.6	4.6	6.2	8.0	5.7	7.8	6.8	6.6	6.0	4.8	5.1	6.4	5.6	6.4	5.5	4.7	4.9	5.2	10.0	4.3	6.1
25	4.7	4.3	5.2	5.3	5.5	5.0	4.5	4.2	4.1	5.0	4.8	5.1	5.4	5.8	5.4	5.9	5.1	4.8	4.8	6.3	5.0	6.8	6.1	5.0	6.8	4.1	5.2
26	5.1	5.2	6.7	7.4	9.9	6.4	6.8	7.9	8.0	12.2	7.5	5.8	7.2	31.9	15.7	10.9	6.4	15.1	8.9	9.7	8.0	6.1	6.5	11.7	31.9	5.1	9.5
27	7.5	13.2	18.0	11.6	8.2	9.4	7.0	5.9	6.2	9.3	9.7	7.2	5.3	6.7	7.8	8.3	10.6	10.8	10.0	7.5	6.7	4.5	8.3	5.3	18.0	4.5	8.5
28	4.7	5.7	5.0	15.6	4.1	2.9	3.5	4.5	11.7	9.1	5.7	5.0	4.7	7.0	12.2	8.1	6.2	8.7	6.6	8.0	6.1	8.1	4.7	6.0	15.6	2.9	6.8
29	9.6	4.5	4.0	4.8	5.0	3.9	10.7	7.1	10.3	6.9	9.8	12.3	8.5	11.3	6.6	6.9	9.2	9.4	8.5	6.9	4.7	5.0	5.7	4.2	12.3	3.9	7.3
30	3.2	3.8	4.0	4.8	4.3	4.3	5.7	9.8	70.0	27.4	20.2	32.2	82.1	46.1	27.7	51.0	89.5	39.7	18.1	10.5	26.4	18.8	9.5	10.6	89.5	3.2	25.8
Max.	**62.8**	**24.5**	**44.9**	**49.3**	**66.3**	**88.3**	**54.9**	**38.2**	**70.0**	**57.1**	**45.4**	**61.9**	**82.1**	**66.2**	**38.6**	**51.0**	**89.5**	**39.7**	**25.4**	**23.9**	**26.4**	**25.0**	**58.6**	**26.5**	**89.5**		
Min.	**3.2**	**3.1**	**3.1**	**3.4**	**2.8**	**2.5**	**3.5**	**3.4**	**1.4**	**0.2**	**4.8**	**4.3**	**4.6**	**4.2**	**4.6**	**4.2**	**4.4**	**4.6**	**4.2**	**4.3**	**4.0**	**3.9**	**2.5**	**3.3**		**0.2**	
Avg.	**9.4**	**7.4**	**9.1**	**8.8**	**8.8**	**10.6**	**8.7**	**8.2**	**11.7**	**13.6**	**14.2**	**15.5**	**17.8**	**19.2**	**14.8**	**12.9**	**14.2**	**12.4**	**9.6**	**9.2**	**8.2**	**7.6**	**7.9**	**7.1**			**11.1**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.0	10.1	17.3	12.9	48.5	79.8	43.1	12.8	8.5	14.5	19.1	13.2	12.3	9.8	9.3	10.2	7.8	7.9	8.2	7.2	6.8	6.3	6.2	4.3	79.8	4.3	16.3
2	5.5	4.6	5.0	5.8	4.5	4.9	6.9	5.8	5.9	5.5	6.1	5.8	5.2	8.8	6.6	6.7	7.0	5.8	6.1	8.7	7.4	5.7	5.5	6.6	8.8	4.5	6.1
3	6.1	6.1	8.6	7.0	4.1	5.8	5.2	5.6	4.6	6.9	6.3	8.3	7.9	6.0	5.6	7.4	8.2	9.9	19.0	6.5	6.5	7.1	6.0	6.0	19.0	4.1	7.1
4	4.8	6.8	5.6	6.7	4.2	6.2	8.1	8.2	11.9	10.4	11.4	14.9	23.5	23.7	34.6	11.5	48.6	40.6	9.0	4.8	6.4	11.3	16.6	7.7	48.6	4.2	14.1
5	7.0	7.3	4.9	8.5	7.7	11.0	8.7	12.5	8.3	9.0	12.5	29.2	44.9	42.8	88.5	16.5	11.1	10.3	9.2	11.0	6.6	6.0	9.2	9.8	88.5	4.9	16.4
6	5.3	2.5	7.7	22.8	8.5	7.3	4.5	5.2	11.7	12.2	21.3	10.7	10.0	7.5	7.4	5.8	5.4	6.8	5.1	6.0	4.1	4.3	4.8	4.9	22.8	2.5	8.0
7	3.9	4.7	4.3	4.6	5.3	5.3	4.0	3.5	4.6	5.3	4.5	4.8	4.4	4.4	5.0	5.1	4.8	4.5	5.5	5.0	4.1	5.0	5.4	6.3	6.3	3.5	4.8
8	6.3	5.5	7.1	9.2	6.8	4.8	6.5	4.9	3.6	4.3	5.2	6.0	9.3	8.8	6.3	5.2	5.2	7.1	5.5	5.1	6.2	8.2	5.5	7.5	9.3	3.6	6.3
9	3.8	3.9	6.4	9.7	7.4	5.7	4.4	3.6	5.1	5.1	5.8	7.2	7.6	8.1	7.7	8.7	8.0	7.5	7.2	6.2	6.9	5.8	4.9	4.8	9.7	3.6	6.3
10	6.4	5.4	8.0	6.5	8.2	4.3	6.2	6.3	6.0	10.2	6.6	9.2	7.5	8.0	9.7	8.2	8.0	6.7	4.9	5.2	6.7	5.4	6.4	18.1	18.1	4.3	7.4
11	8.7	9.8	8.8	9.4	6.9	8.1	3.9	6.5	8.0	6.0	6.0	7.6	10.9	12.3	9.6	12.4	10.6	9.2	7.6	8.7	7.5	4.2	4.3	4.5	12.4	3.9	8.0
12	3.6	3.9	4.6	5.8	5.1	6.0	3.7	4.5	5.5	5.0	5.6	5.6	6.4	5.4	5.6	5.9	6.6	5.3	5.3	5.8	5.3	4.3	4.7	6.0	6.6	3.6	5.2
13	5.1	5.0	4.2	6.0	4.5	4.3	3.9	4.3	4.5	4.6	5.5	8.7	6.4	7.1	5.3	6.6	6.5	5.9	5.3	5.7	6.2	4.8	4.4	6.2	8.7	3.9	5.5
14	5.3	7.3	10.5	8.4	9.6	59.4	35.5	8.2	7.1	11.1	10.5	7.1	7.6	8.9	14.2	10.7	12.1	13.4	9.7	11.5	11.0	7.0	5.3	6.3	59.4	5.3	12.4
15	6.2	8.1	4.9	7.3	4.2	5.4	6.3	7.6	5.8	4.8	4.3	5.0	6.0	7.6	5.9	6.1	4.7	5.1	4.9	4.3	4.7	7.6	6.0	6.5	8.1	4.2	5.8
16	5.1	5.1	4.7	5.4	5.7	5.0	6.6	7.0	6.2	6.1	5.7	5.3	5.1	6.6	5.2	5.9	4.9	5.7	4.7	5.7	6.4	5.4	6.5	6.1	7.0	4.7	5.7
17	6.1	12.6	6.2	5.1	5.2	4.6	5.0	5.6	10.5	4.9	6.2	8.1	5.8	7.2	7.0	7.6	6.2	5.1	5.0	5.0	5.7	4.4	5.6	3.6	12.6	3.6	6.2
18	9.5	4.5	4.5	5.7	6.1	4.1	5.2	4.4	4.7	6.2	13.2	11.1	16.6	31.3	11.1	12.1	9.8	17.7	34.6	11.4	9.6	10.2	19.7	18.1	34.6	4.1	11.7
19	11.6	13.6	10.2	8.5	7.3	6.7	7.8	7.1	7.4	7.4	8.1	9.8	10.1	8.4	7.8	7.1	5.9	8.9	11.3	8.9	4.5	6.6	9.0	8.8	13.6	4.5	8.4
20	6.7	9.9	9.4	7.5	12.6	2.7	4.4	4.4	4.7	9.1	11.1	14.0	7.4	7.2	4.9	6.3	5.4	5.9	4.2	4.7	6.7	4.4	5.9	5.2	14.0	2.7	6.9
21	5.8	5.3	4.0	3.8	4.2	4.7	5.0	5.5	4.9	5.9	6.3	7.1	9.0	12.5	13.0	14.7	18.1	16.3	9.2	16.3	26.8	19.6	10.1	7.6	26.8	3.8	9.8
22	4.8	6.7	4.8	5.7	87.1	22.2	19.1	11.5	9.6	13.2	15.6	29.4	8.8	9.9	12.1	18.8	9.9	14.6	11.6	12.5	17.4	9.2	6.4	4.0	87.1	4.0	15.2
23	8.5	3.7	11.6	13.3	4.1	6.5	3.4	4.1	7.8	10.3	7.9	7.2	8.4	7.9	7.1	7.5	8.3	7.3	8.8	9.7	7.1	4.6	10.5	88.4	88.4	3.4	11.0
24	13.8	10.4	6.4	10.7	23.9	6.6	8.5	9.4	7.4	10.9	9.2	10.3	10.3	9.0	8.0	9.6	12.2	11.6	14.1	12.9	14.5	9.5	3.5	4.5	23.9	3.5	10.3
25	4.1	5.7	5.1	4.1	5.4	6.2	6.9	8.6	10.0	4.9	7.1	6.9	10.0	10.7	10.7	12.3	11.2	9.3	7.9	9.9	6.3	5.9	5.6	8.5	12.3	4.1	7.6
26	8.0	15.0	9.5	9.9	53.8	9.8	4.5	3.5	4.5	4.0	6.7	13.5	6.9	8.6	9.2	13.7	14.5	13.0	11.5	23.3	10.7	5.7	6.6	5.6	53.8	3.5	11.3
27	8.6	7.4	9.1	5.8	3.4	4.5	5.9	4.7	5.0	6.9	8.5	10.6	14.4	13.0	12.0	11.2	12.5	11.9	9.0	5.8	7.8	7.9	19.5	30.4	30.4	3.4	9.8
28	9.2	9.9	6.7	9.7	7.1	6.1	7.1	7.3	7.3	7.6	9.5	10.9	9.2	9.8	8.8	9.5	7.7	7.4	5.8	8.2	5.4	5.7	5.3	6.0	10.9	5.3	7.8
29	5.4	5.5	6.5	6.0	7.3	8.7	4.7	3.3	3.9	4.7	7.0	8.4	8.9	8.2	8.2	7.5	7.0	7.0	5.4	5.2	5.3	4.8	7.8	3.6	8.9	3.3	6.3
30	5.7	7.2	3.4	4.9	4.6	4.8	4.5	4.6	6.7	7.1	4.9	8.6	8.2	8.8	9.0	11.2	7.8	7.6	6.7	7.5	7.2	6.1	9.3	6.1	11.2	3.4	6.8
31	4.9	5.9	7.6	9.6	5.1	13.0	9.1	8.5	6.8	5.5	5.0	7.8	9.6	8.1	9.6	10.5	10.7	10.6	10.9	13.0	9.6	9.0	4.8	11.0	13.0	4.8	8.6
Max.	**16.0**	**15.0**	**17.3**	**22.8**	**87.1**	**79.8**	**43.1**	**12.8**	**11.9**	**14.5**	**21.3**	**29.4**	**44.9**	**42.8**	**88.5**	**18.8**	**48.6**	**40.6**	**34.6**	**23.3**	**26.8**	**19.6**	**19.7**	**88.4**	**88.5**		
Min.	**3.6**	**2.5**	**3.4**	**3.8**	**3.4**	**2.7**	**3.4**	**3.3**	**3.6**	**4.0**	**4.3**	**4.8**	**4.4**	**4.4**	**4.9**	**5.1**	**4.7**	**4.5**	**4.2**	**4.3**	**4.1**	**4.2**	**3.5**	**3.6**		**2.5**	
Avg.	**6.8**	**7.1**	**7.0**	**7.9**	**12.2**	**10.8**	**8.3**	**6.4**	**6.7**	**7.4**	**8.5**	**10.1**	**10.3**	**10.8**	**11.8**	**9.4**	**9.9**	**9.9**	**8.8**	**8.4**	**8.0**	**6.8**	**7.5**	**10.4**			**8.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.1	6.7	8.1	5.1	24.7	12.1	13.3	70.0	66.3	14.6	37.3	39.4	80.4	59.2	15.3	17.1	13.5	11.3	11.5	12.0	5.4	5.1	4.0	4.8	80.4	4.0	22.8
2	4.8	4.3	3.9	4.7	4.0	4.8	3.7	4.2	4.8	4.6	4.8	5.8	5.7	6.1	4.9	5.4	6.1	6.3	10.3	10.7	14.8	19.6	18.1	7.0	19.6	3.7	7.1
3	14.9	8.6	17.7	9.3	8.0	4.7	7.9	9.6	8.0	9.9	13.7	38.2	88.8	15.9	14.1	11.7	16.4	10.9	7.6	6.8	6.1	4.3	5.7	5.2	88.8	4.3	14.3
4	4.7	5.2	5.8	6.7	6.7	5.1	6.8	6.5	4.6	4.9	6.3	6.3	7.0	8.9	10.4	11.8	7.9	9.4	7.5	6.9	5.6	6.2	5.6	5.3	11.8	4.6	6.8
5	5.4	6.0	6.2	10.0	28.7	13.6	11.1	11.5	4.3	10.7	8.9	12.9	11.6	13.7	13.8	14.1	12.6	11.4	12.1	9.3	6.5	4.6	4.6	5.8	28.7	4.3	10.4
6	12.0	9.4	3.3	5.7	8.0	11.9	12.2	9.6	12.7	11.4	12.7	12.8	9.7	7.6	10.5	9.9	9.9	7.3	5.3	4.8	4.4	4.3	9.8	7.6	12.8	3.3	8.9
7	11.0	12.2	9.6	5.4	3.0	4.7	7.7	5.2	5.8	5.6	9.9	8.7	9.1	9.0	11.6	11.8	8.0	9.5	9.1	6.6	6.9	4.9	5.1	4.3	12.2	3.0	7.7
8	5.6	6.6	7.5	5.0	4.4	7.8	9.7	10.2	6.4	6.7	10.2	10.5	13.0	11.3	17.0	13.4	12.1	17.3	13.6	9.5	6.2	4.8	5.0	5.8	17.3	4.4	9.1
9	12.1	11.5	11.1	4.3	4.6	5.6	5.1	4.2	5.6	5.3	8.9	10.1	9.8	13.4	12.5	14.0	13.5	17.1	8.4	7.4	6.7	5.4	6.8	10.7	17.1	4.2	8.9
10	5.6	9.1	8.8	8.4	11.8	39.8	73.5	17.1	15.2	8.4	10.4	25.4	30.8	32.5	11.6	19.9	37.0	16.2	19.2	6.3	7.4	4.2	5.9	5.3	73.5	4.2	17.9
11	4.6	8.8	8.1	6.9	7.2	6.0	7.0	6.2	6.7	8.4	12.7	9.2	9.5	8.7	10.2	8.7	10.7	10.3	7.9	8.0	6.8	7.0	9.0	4.3	12.7	4.3	8.0
12	8.2	42.4	8.4	3.4	7.1	9.3	4.3	8.5	5.2	6.4	9.6	13.5	16.1	11.6	16.6	19.0	19.5	25.4	7.1	7.6	18.8	17.5	22.8	48.3	48.3	3.4	14.9
13	14.6	9.6	22.7	10.4	5.6	3.6	4.5	4.9	11.1	10.2	40.1	13.6	14.5	12.6	21.8	14.0	11.6	26.3	8.4	4.7	5.7	5.3	6.8	12.7	40.1	3.6	12.3
14	12.3	9.6	8.6	9.4	17.1	11.4	19.0	18.4	4.0	5.6	4.6	4.9	5.2	4.9	6.6	5.0	5.4	5.1	5.7	5.7	5.3	6.0	5.9	19.4	19.4	4.0	8.5
15	5.6	6.6	3.9	3.9	4.0	4.2	5.8	6.2	10.5	14.1	8.4	14.3	20.5	13.5	22.8	11.6	9.6	15.0	10.4	13.1	11.5	6.7	9.0	7.1	22.8	3.9	9.9
16	8.2	4.2	4.3	10.9	5.8	4.6	3.6	4.7	8.6	7.3	4.4	4.8	6.5	7.2	6.0	5.8	6.2	7.7	7.7	8.0	6.2	6.8	6.0	3.8	10.9	3.6	6.2
17	11.3	4.5	4.2	5.3	6.4	7.0	6.5	4.3	4.6	6.7	6.4	7.8	6.8	8.5	9.6	10.7	7.1	4.5	4.6	5.4	4.3	7.2	5.0	4.5	11.3	4.2	6.4
18	4.0	4.7	5.6	4.8	4.1	7.9	6.5	10.0	7.8	16.6	16.1	10.1	12.3	13.7	19.3	16.3	10.4	29.8	38.1	46.5	30.9	28.6	10.3	10.7	46.5	4.0	15.2
19	16.0	4.6	7.3	6.5	7.4	31.6	35.8	6.5	6.2	7.8	24.5	12.9	10.6	16.5	12.8	13.2	20.9	17.8	7.5	8.5	34.5	14.1	8.4	8.9	35.8	4.6	14.2
20	26.7	4.4	2.9	5.6	5.5	11.0	7.6	8.4	5.1	6.1	10.2	18.4	14.9	16.7	19.3	12.6	22.7	17.0	14.0	10.8	10.5	12.5	8.0	7.5	26.7	2.9	11.6
21	27.4	17.4	20.0	10.9	10.8	5.3	2.9	6.1	3.2	4.3	5.7	6.3	8.9	13.1	10.7	8.9	12.0	9.2	19.2	14.9	12.2	17.2	5.9	6.8	27.4	2.9	10.8
22	76.2	56.1	36.3	89.8	18.0	20.3	19.5	14.1	16.0	7.2	7.2	16.7	52.4	22.4	15.4	19.0	51.1	34.8	13.5	7.4	6.8	9.2	6.2	4.3	89.8	4.3	25.8
23	10.2	7.6	4.6	5.2	5.1	6.0	5.3	5.7	10.1	7.2	7.3	11.0	14.6	17.5	23.2	24.5	22.4	70.9	12.1	26.3	6.1	6.9	6.0	6.5	70.9	4.6	13.4
24	16.8	19.7	6.4	4.8	3.9	9.6	10.8	5.6	10.5	13.7	13.4	12.8	10.1	11.0	12.6	9.4	12.2	13.0	8.3	20.7	21.9	5.4	5.2	4.5	21.9	3.9	10.9
25	5.3	12.0	9.6	11.6	6.6	3.4	7.0	3.6	4.0	71.0	40.4	17.2	13.1	10.2	11.6	18.7	9.5	9.6	8.0	6.7	5.5	6.7	6.9	6.0	71.0	3.4	12.7
26	4.9	4.6	5.1	4.5	6.0	10.7	5.0	5.0	4.5	4.5	5.3	5.0	5.1	4.6	7.0	6.8	7.3	5.5	6.2	5.9	8.4	6.3	12.1	9.1	12.1	4.5	6.2
27	12.2	10.5	4.7	31.7	10.2	15.5	11.9	9.5	8.0	6.1	5.0	9.1	12.7	11.9	12.3	10.2	9.9	13.5	8.0	7.7	5.3	4.2	12.7	6.4	31.7	4.2	10.4
28	9.9	7.8	6.4	6.8	10.2	8.5	3.8	5.8	10.2	19.3	8.3	10.7	10.5	17.7	19.3	9.3	7.4	13.0	26.9	13.3	6.0	5.2	7.7	3.0	26.9	3.0	10.3
29	3.0	2.9	3.5	3.5	4.2	5.8	6.0	10.3	8.7	10.4	13.4	22.7	16.6	20.2	10.8	11.0	15.0	8.8	6.3	5.6	4.1	4.0	4.9	6.0	22.7	2.9	8.7
30	8.0	6.6	10.2	10.3	6.4	2.9	5.8	45.3	29.1	32.1	17.4	35.2	24.9	27.3	20.4	19.3	18.6	15.2	8.6	7.4	6.3	5.6	6.2	5.4	45.3	2.9	15.6
31	5.5	5.1	5.4	4.6	4.8	4.5	4.4	4.6	4.0	4.7	2.9	3.5	4.7	8.7	8.2	5.1	5.0	4.4	4.5	4.2	4.2	3.6	3.9	3.5	8.7	2.9	4.8
Max.	**76.2**	**56.1**	**36.3**	**89.8**	**28.7**	**39.8**	**73.5**	**70.0**	**66.3**	**71.0**	**40.4**	**39.4**	**88.8**	**59.2**	**23.2**	**24.5**	**51.1**	**70.9**	**38.1**	**46.5**	**34.5**	**28.6**	**22.8**	**48.3**	**89.8**		
Min.	**3.0**	**2.9**	**2.9**	**3.4**	**3.0**	**2.9**	**2.9**	**3.6**	**3.2**	**4.3**	**2.9**	**3.5**	**4.7**	**4.6**	**4.9**	**5.0**	**5.0**	**4.4**	**4.5**	**4.2**	**4.1**	**3.6**	**3.9**	**3.0**		**2.9**	
Avg.	**12.1**	**10.6**	**8.7**	**10.2**	**8.4**	**9.7**	**10.8**	**11.0**	**10.1**	**11.4**	**12.5**	**13.9**	**17.9**	**14.7**	**13.5**	**12.5**	**13.9**	**15.3**	**10.9**	**10.3**	**9.4**	**8.0**	**7.7**	**8.1**			**11.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.9	4.5	6.5	5.1	7.0	4.9	4.6	4.3	3.8	4.4	5.8	5.8	20.9	11.1	7.0	6.6	10.8	7.9	5.4	4.4	7.4	4.5	5.5	5.8	20.9	3.8	6.6
2	4.3	4.4	3.9	3.9	4.3	4.1	3.6	3.6	4.0	4.8	6.1	4.6	5.2	5.4	6.1	6.1	7.3	6.9	6.8	7.4	3.3	6.1	4.4	3.9	7.4	3.3	5.0
3	4.3	7.0	5.8	5.2	5.9	5.0	5.8	5.5	5.0	5.2	5.6	12.1	15.3	9.3	16.5	8.0	19.8	11.2	6.2	5.6	8.0	11.8	8.6	4.9	19.8	4.3	8.2
4	5.8	5.9	4.1	4.6	4.7	7.4	5.8	6.9	6.6	5.4	10.9	10.6	10.2	11.5	8.9	8.5	10.3	11.5	11.4	10.9	5.9	7.0	5.8	2.9	11.5	2.9	7.6
5	11.3	18.0	41.1	45.1	12.7	25.4	33.7	28.1	15.9	4.3	16.6	10.5	15.4	24.2	19.6	14.6	12.3	73.0	8.7	7.4	22.3	9.4	4.6	5.6	73.0	4.3	20.0
6	7.3	3.9	4.2	5.9	8.8	4.9	4.7	4.1	6.3	5.6	4.7	4.3	4.1	4.0	4.4	6.0	5.0	3.5	6.3	4.5	5.2	4.9	3.7	3.3	8.8	3.3	5.0
7	5.7	3.7	4.1	6.4	10.6	5.7	7.9	5.5	4.4	4.5	4.5	11.3	5.2	5.2	5.5	7.7	4.7	6.2	5.8	4.9	6.5	5.2	4.3	4.8	11.3	3.7	5.9
8	11.8	4.9	8.4	5.6	4.5	4.5	6.7	3.9	9.2	5.9	13.4	7.8	5.8	5.1	6.3	7.1	6.2	4.2	4.3	5.1	4.4	3.9	5.9	5.4	13.4	3.9	6.3
9	4.3	5.1	6.3	4.0	3.3	4.9	6.0	5.6	9.4	3.1	4.0	5.0	6.2	5.8	5.3	5.1	5.5	5.0	5.2	5.8	5.6	4.9	4.4	4.4	9.4	3.1	5.2
10	4.1	5.8	6.5	7.3	10.7	5.8	6.1	9.0	7.7	5.8	7.2	8.9	7.8	17.0	12.4	8.7	8.3	7.2	13.2	5.2	4.0	5.3	3.7	10.2	17.0	3.7	7.8
11	8.3	5.9	5.1	4.8	6.3	7.3	6.3	7.4	5.9	4.7	5.7	5.9	6.7	5.4	5.8	9.7	6.8	7.0	6.2	6.6	4.7	5.4	4.6	4.7	9.7	4.6	6.1
12	4.9	5.5	4.4	6.0	5.4	5.8	6.6	6.1	4.8	4.6	5.2	5.7	5.7	5.7	5.0	4.5	5.2	4.6	4.8	5.3	4.7	5.3	4.8	5.3	6.6	4.4	5.2
13	5.0	5.1	4.7	5.2	4.6	5.3	5.5	5.4	6.0	6.1	5.9	5.1	5.6	5.8	5.6	5.8	5.9	5.0	4.7	4.5	4.3	4.3	4.2	4.2	6.1	4.2	5.2
14	4.1	4.8	4.9	5.0	5.3	6.0	5.0	5.3	5.8	4.1	4.8	4.8	6.0	4.3	5.3	4.7	6.5	5.2	7.2	6.1	5.5	5.2	7.7	4.8	7.7	4.1	5.4
15	3.7	4.3	4.7	5.9	5.6	5.6	6.1	5.4	4.4	5.6	4.6	5.4	5.1	5.1	6.2	6.1	6.0	5.7	4.2	6.5	5.2	4.6	4.3	5.6	6.5	3.7	5.3
16	3.8	11.4	25.5	18.9	13.0	9.8	4.6	15.3	3.6	8.4	7.9	9.9	11.1	10.1	10.4	9.4	12.2	8.5	6.9	4.3	4.1	7.0	5.9	9.4	25.5	3.6	9.6
17	7.6	9.7	7.1	5.9	22.2	17.9	5.2	5.4	6.5	8.2	61.8	8.3	10.5	7.3	7.4	5.9	5.7	6.6	5.9	4.4	8.3	7.2	9.8	7.6	61.8	4.4	10.5
18	7.1	3.6	3.9	4.0	4.0	4.3	4.2	4.2	5.2	5.0	7.7	5.3	6.0	18.2	7.1	5.7	8.8	6.8	10.6	18.1	41.2	29.0	6.6	6.8	41.2	3.6	9.3
19	4.6	7.7	6.1	6.2	6.6	5.2	5.5	5.8	4.2	10.4	7.7	8.2	8.4	14.8	47.0	7.7	6.6	6.7	7.7	5.5	6.0	7.6	5.0	8.2	47.0	4.2	8.7
20	10.4	8.8	8.0	7.9	6.7	5.5	6.7	13.6	13.7	10.8	30.3	45.6	13.1	9.1	10.2	12.8	21.0	8.5	8.4	14.7	10.0	4.5	10.3	8.6	45.6	4.5	12.5
21	10.2	4.6	5.9	8.5	5.1	4.6	5.8	20.5	20.4	10.2	10.5	11.8	12.7	13.1	21.0	9.0	9.6	8.8	5.8	5.4	6.3	6.8	6.6	6.0	21.0	4.6	9.5
22	6.7	4.8	4.5	4.2	5.5	5.8	17.1	4.4	4.0	8.4	8.4	15.8	16.7	18.7	17.8	10.3	5.9	6.0	4.3	4.0	5.2	4.7	6.0	4.4	18.7	4.0	8.1
23	4.8	4.4	13.4	6.6	4.0	3.9	4.4	5.9	5.3	5.5	5.6	5.1	5.0	8.0	6.3	6.1	7.5	4.6	4.8	5.6	5.6	5.6	5.5	10.0	13.4	3.9	6.0
24	4.8	5.2	8.7	7.9	7.8	5.0	8.2	4.6	4.6	6.4	9.1	4.3	4.8	5.2	5.4	6.1	4.5	5.2	5.1	6.1	3.8	5.1	6.6	5.6	9.1	3.8	5.8
25	6.4	5.6	4.2	5.0	4.1	4.6	4.4	4.8	6.2	5.1	9.0	15.1	14.6	17.7	14.9	10.4	9.3	11.9	4.9	3.8	9.6	3.7	6.2	4.2	17.7	3.7	7.7
26	7.7	8.3	2.5	9.8	15.8	10.5	14.1	5.1	25.8	5.6	15.1	30.5	66.4	28.5	15.0	21.5	28.7	9.5	10.9	14.3	5.0	12.5	9.4	8.2	66.4	2.5	15.9
27	5.9	7.5	9.3	10.8	9.1	10.4	10.7	9.1	11.4	11.0	6.3	7.0	10.5	12.5	11.0	9.6	6.7	11.0	8.8	7.1	9.8	10.8	8.3	11.1	12.5	5.9	9.4
28	7.0	4.4	5.9	7.2	10.6	9.0	8.7	9.0	9.7	14.8	14.5	47.3	56.1	65.5	47.6	38.3	67.9	13.5	11.7	5.2	5.3	4.3	7.8	9.0	67.9	4.3	20.0
29	6.1	3.4	5.9	11.1	5.1	3.7	4.3	4.4	2.4	2.9	4.4	4.9	7.4	4.4	4.7	4.4	7.5	9.9	6.7	3.8	6.8	6.4	4.6	4.6	11.1	2.4	5.4
30	5.8	5.4	84.7	11.3	7.9	8.8	7.0	4.3	3.4	6.2	8.0	10.0	13.6	13.3	12.4	18.7	15.9	16.8	19.4	14.2	9.6	6.5	11.6	33.5	84.7	3.4	14.5
Max.	**11.8**	**18.0**	**84.7**	**45.1**	**22.2**	**25.4**	**33.7**	**28.1**	**25.8**	**14.8**	**61.8**	**47.3**	**66.4**	**65.5**	**47.6**	**38.3**	**67.9**	**73.0**	**19.4**	**18.1**	**41.2**	**29.0**	**11.6**	**33.5**	**84.7**		
Min.	**3.7**	**3.4**	**2.5**	**3.9**	**3.3**	**3.7**	**3.6**	**3.6**	**2.4**	**2.9**	**4.0**	**4.3**	**4.1**	**4.0**	**4.4**	**4.4**	**4.5**	**3.5**	**4.2**	**3.8**	**3.3**	**3.7**	**3.7**	**2.9**		**2.4**	
Avg.	**6.3**	**6.1**	**10.3**	**8.2**	**7.6**	**7.1**	**7.5**	**7.4**	**7.5**	**6.4**	**10.4**	**11.2**	**12.7**	**12.4**	**11.9**	**9.5**	**11.3**	**9.9**	**7.4**	**6.9**	**7.8**	**7.0**	**6.2**	**7.1**			**8.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	39.6	6.3	11.5	8.3	3.4	6.0	4.5	4.6	4.2	5.6	4.5	6.0	6.3	6.2	4.7	8.1	7.0	6.1	7.8	7.1	7.0	16.8	5.6	6.2	39.6	3.4	8.1
2	8.2	6.5	4.9	3.2	10.8	6.1	9.7	6.9	9.8	13.1	23.1	14.2	27.5	23.0	12.7	11.8	9.4	6.2	6.0	4.2	10.8	4.4	4.1	4.7	27.5	3.2	10.1
3	3.6	4.0	4.6	3.4	11.0	6.9	16.7	6.2	5.5	6.7	6.7	5.5	5.6	6.3	5.9	5.4	5.6	6.2	4.1	5.4	9.1	15.1	7.3	7.1	16.7	3.4	6.8
4	16.4	8.4	5.3	5.2	3.9	4.1	3.9	4.8	4.4	2.1	5.4	50.1	22.4	30.1	10.2	14.3	19.1	7.4	74.3	15.5	20.1	7.5	21.4	15.8	74.3	2.1	15.5
5	6.8	29.4	35.5	10.2	5.6	3.7	5.1	3.3	4.9	5.5	3.6	6.3	11.5	8.7	19.3	9.6	13.8	6.0	8.6	12.3	4.9	7.7	11.1	12.4	35.5	3.3	10.3
6	9.1	6.5	8.1	8.4	7.6	5.9	10.0	16.2	14.3	8.0	14.2	10.2	18.3	11.7	19.9	9.3	5.0	0.3	0.0	0.0	0.0	0.0	0.0	2.4	19.9	0.0	7.7
7	4.4	4.0	4.5	5.6	4.4	4.4	4.7	8.0	6.7	5.0	5.2	6.2	6.0	6.6	7.2	8.1	8.4	8.1	6.6	5.5	4.8	3.0	3.2	4.2	8.4	3.0	5.6
8	3.9	4.9	6.5	6.7	2.9	3.6	3.3	3.1	2.9	3.0	4.3	4.8	9.5	10.5	10.4	7.6	6.4	7.7	3.5	3.1	8.3	13.3	8.7	4.9	13.3	2.9	6.0
9	6.2	4.4	5.3	6.1	4.3	5.1	5.0	4.4	5.2	5.2	4.2	4.5	4.2	4.2	4.5	4.5	4.6	4.5	4.9	4.7	4.6	5.0	4.5	4.3	6.2	4.2	4.8
10	4.5	4.1	5.1	21.7	4.2	5.8	7.9	4.9	4.7	5.5	6.6	6.4	8.5	5.3	7.9	5.2	4.1	4.1	4.6	8.5	9.9	8.1	5.8	6.4	21.7	4.1	6.7
11	5.7	4.4	4.7	4.1	4.5	5.3	5.7	5.4	76.5	14.9	11.8	15.9	11.9	16.8	14.1	19.6	17.5	7.5	4.6	4.4	3.8	4.1	3.6	3.6	76.5	3.6	11.3
12	3.5	3.5	3.9	3.9	4.2	3.8	3.8	4.4	4.3	4.7	4.4	4.5	6.6	7.3	5.6	8.1	10.8	12.6	5.4	6.3	10.7	14.3	10.3	11.0	14.3	3.5	6.6
13	17.0	21.6	17.2	13.5	5.2	4.2	2.1	0.9	0.1	0.2	0.1	0.3	0.6	1.2	41.0	9.6	4.1	4.5	5.2	3.6	3.9	5.8	3.8	3.3	41.0	0.1	7.0
14	3.9	6.2	4.1	5.6	5.4	11.1	4.7	7.0	5.1	3.2	3.9	3.6	4.9	3.9	3.6	5.2	5.7	7.2	4.5	4.3	6.3	2.7	0.0	0.0	11.1	0.0	4.7
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.9	2.9	3.0	4.4	4.8	4.1	4.3	5.1	4.0	5.1	0.0	1.5
18	3.9	3.4	3.8	3.9	4.0	3.8	3.6	5.2	4.0	3.9	4.9	4.2	7.2	6.8	8.3	10.4	6.0	5.2	4.1	3.8	6.1	6.4	3.9	8.2	10.4	3.4	5.2
19	5.9	3.9	4.9	6.3	4.9	7.3	9.9	4.8	6.8	6.4	8.7	7.0	10.2	9.4	9.7	19.7	12.4	16.4	27.3	10.7	5.8	13.1	5.3	12.0	27.3	3.9	9.5
20	6.8	6.7	4.7	3.1	12.5	6.3	7.8	16.4	7.6	9.2	3.7	2.9	8.9	12.8	10.9	8.2	11.3	10.4	35.9	26.1	18.9	5.1	5.2	11.1	35.9	2.9	10.5
21	14.4	16.8	18.6	32.7	35.0	25.7	11.7	9.9	11.2	8.6	10.5	10.9	8.7	7.1	9.0	9.9	10.9	12.0	13.2	7.6	10.8	4.9	9.9	9.5	35.0	4.9	13.3
22	11.1	4.9	7.3	5.3	6.0	7.8	9.9	8.1	11.6	10.2	6.7	9.7	8.9	7.5	13.4	19.3	8.3	9.8	6.9	10.3	4.8	3.7	6.5	6.3	19.3	3.7	8.5
23	5.3	7.2	8.3	7.8	6.1	10.5	11.6	12.2	13.9	11.2	5.4	4.4	5.1	4.3	3.7	5.3	3.8	8.3	4.2	3.7	3.7	4.6	4.0	5.0	13.9	3.7	6.7
24	4.3	3.9	3.5	3.7	4.2	6.8	4.6	3.6	4.1	4.0	3.7	4.9	9.1	18.7	3.4	2.9	3.4	6.4	3.3	4.8	9.4	6.4	9.0	8.3	18.7	2.9	5.7
25	5.8	5.4	6.2	3.6	4.2	3.8	4.7	5.5	4.8	4.5	4.4	4.2	4.6	4.8	6.7	6.1	13.3	7.5	7.1	3.9	11.7	7.7	6.2	5.3	13.3	3.6	5.9
26	13.8	8.5	6.9	8.5	7.8	7.0	6.8	5.6	15.1	14.8	7.8	6.8	16.0	9.1	14.0	7.0	7.5	8.5	7.4	10.8	12.0	8.5	6.1	7.1	16.0	5.6	9.3
27	11.0	14.8	14.2	14.0	14.0	10.5	12.9	5.4	12.6	16.0	13.7	12.6	17.4	8.0	15.0	12.4	10.8	12.5	11.7	7.7	10.6	22.2	32.3	54.3	54.3	5.4	15.3
28	18.4	12.7	7.8	4.3	4.1	3.4	3.1	4.5	3.5	3.5	4.4	5.1	5.6	7.2	7.0	10.1	5.1	4.3	6.9	17.2	10.5	4.9	16.9	11.7	18.4	3.1	7.6
29	44.8	43.3	6.7	5.9	6.6	5.9	11.2	31.3	15.2	12.7	5.2	5.6	4.6	2.7	2.6	3.0	2.9	4.0	5.4	5.7	4.3	3.3	6.5	6.4	44.8	2.6	10.2
30	7.7	8.5	5.6	7.1	8.7	6.7	7.6	7.0	5.9	7.4	6.4	14.2	23.5	5.6	5.4	4.3	6.8	6.2	4.8	6.4	7.4	8.5	5.2	5.9	23.5	4.3	7.6
31	5.7	4.1	5.0	7.6	26.3	8.9	31.0	11.4	0.3	0.4	7.0	4.0	11.6	23.2	15.6	18.8	23.5	9.3	12.0	13.3	7.5	3.7	8.4	26.8	31.0	0.3	11.9
Max.	**44.8**	**43.3**	**35.5**	**32.7**	**35.0**	**25.7**	**31.0**	**31.3**	**76.5**	**16.0**	**23.1**	**50.1**	**27.5**	**30.1**	**41.0**	**19.7**	**23.5**	**16.4**	**74.3**	**26.1**	**20.1**	**22.2**	**32.3**	**54.3**	**76.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**9.4**	**8.3**	**7.3**	**7.1**	**7.2**	**6.1**	**7.2**	**6.8**	**8.6**	**6.3**	**6.1**	**7.6**	**9.2**	**8.7**	**9.4**	**8.6**	**8.1**	**6.8**	**9.5**	**7.1**	**7.5**	**6.9**	**7.1**	**8.6**			**7.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.2	4.2	10.0	9.0	40.0	14.0	7.3	10.2	9.7	9.6	4.2	9.0	11.0	6.6	16.0	14.6	10.2	7.7	18.9	10.6	13.5	6.3	22.5	18.7	40.0	4.2	12.3
2	7.4	5.2	4.8	4.5	4.2	5.6	6.4	4.7	7.2	9.0	5.7	6.8	8.3	10.3	12.2	15.2	14.9	16.3	25.1	21.7	28.6	20.4	21.3	12.9	28.6	4.2	11.6
3	6.7	5.7	5.2	6.3	4.1	6.0	6.5	6.5	6.6	4.7	5.2	4.5	5.7	5.3	11.1	10.0	8.0	10.6	6.3	6.9	5.3	14.3	15.8	14.9	15.8	4.1	7.6
4	6.4	4.1	2.9	10.6	8.5	12.5	11.9	10.9	12.4	10.4	6.0	4.4	2.4	1.9	2.8	2.8	6.3	4.2	4.1	1.4	2.4	2.4	0.9	1.5	12.5	0.9	5.6
5	5.2	4.4	4.2	8.8	45.9	28.1	4.9	0.5	3.1	0.6	0.1	0.5	3.0	11.2	17.6	5.5	3.6	4.1	1.1	1.3	1.5	1.1	0.9	0.2	45.9	0.1	6.6
6	0.7	5.0	6.0	5.1	7.7	5.1	5.6	5.8	5.2	4.8	4.3	5.5	5.0	6.6	5.2	5.0	6.5	6.1	15.0	8.6	12.5	16.2	9.8	13.2	16.2	0.7	7.1
7	17.7	12.6	5.8	7.8	9.0	9.8	10.6	10.8	28.7	6.6	7.7	5.4	5.3	6.3	19.6	3.4	6.4	8.8	4.6	11.9	6.4	12.9	7.9	9.3	28.7	3.4	9.8
8	3.9	4.1	4.2	0.2	1.3	0.2	0.3	0.2	0.4	0.3	0.1	0.1	20.9	5.2	4.1	5.0	4.5	2.8	4.1	3.9	3.6	4.2	3.1	2.8	20.9	0.1	3.3
9	3.7	2.6	3.9	4.6	3.7	3.8	4.5	3.5	6.6	3.2	6.9	4.7	4.8	6.1	5.3	3.1	3.3	3.2	4.3	5.0	4.1	4.2	3.2	4.2	6.9	2.6	4.3
10	4.0	3.7	5.1	3.9	8.4	4.3	3.5	6.4	8.6	6.2	11.6	4.3	7.7	3.8	5.0	3.6	13.3	7.2	3.5	3.1	10.4	3.4	3.4	3.6	13.3	3.1	5.8
11	4.9	5.6	3.2	3.9	3.9	6.2	5.3	5.2	3.9	5.0	9.1	2.9	0.2	0.1	0.2	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	9.1	0.0	2.6
12	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.4	0.4	0.1	0.2
13	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.4	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.5	0.1	0.3
14	0.3	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.0	0.0	0.0	0.3	0.0	0.2
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	3.9	0.0	0.2
18	3.4	4.0	5.7	6.7	5.7	5.2	5.7	5.0	5.6	4.3	4.2	4.4	4.9	5.1	4.3	5.3	6.5	5.7	5.6	6.0	6.9	7.1	6.3	5.8	7.1	3.4	5.4
19	5.2	6.1	5.9	7.2	6.6	6.8	7.3	7.0	8.2	5.8	5.4	6.8	6.0	4.4	4.3	4.1	4.6	3.2	4.3	4.3	5.4	3.6	5.9	6.9	8.2	3.2	5.6
20	13.2	6.5	7.7	9.0	9.4	13.6	4.8	8.6	15.2	10.6	13.3	14.1	15.2	14.3	10.4	13.8	18.1	13.2	16.9	10.0	14.7	12.5	11.2	10.8	18.1	4.8	12.0
21	8.8	11.7	10.9	9.9	9.2	8.3	10.7	8.6	5.9	6.0	8.3	7.1	7.1	10.3	4.9	14.8	38.2	6.9	8.9	9.1	11.8	7.4	7.1	21.7	38.2	4.9	10.6
22	7.4	35.3	30.0	6.1	4.5	4.1	10.2	6.2	5.9	5.8	8.9	7.6	3.6	5.2	5.5	5.1	7.0	4.2	5.3	11.7	5.8	10.3	5.2	8.1	35.3	3.6	8.7
23	4.0	3.4	3.8	3.7	8.2	2.4	3.4	4.9	5.8	6.6	1.7	4.4	8.3	5.1	5.3	5.0	5.4	7.5	5.6	5.0	4.8	5.2	4.6	4.3	8.3	1.7	4.9
24	4.0	4.0	3.4	3.6	4.0	4.1	5.4	4.8	4.2	4.3	4.3	4.1	4.1	4.3	6.2	3.9	6.1	11.0	5.3	4.3	3.8	14.8	3.2	3.9	14.8	3.2	5.0
25	3.4	4.1	6.6	4.8	6.0	5.6	6.3	7.3	5.7	4.5	5.6	10.7	20.5	51.9	20.0	8.6	9.2	7.6	8.5	5.7	11.7	10.0	10.2	4.0	51.9	3.4	9.9
26	3.6	4.2	5.3	4.0	2.9	7.5	5.6	3.2	2.9	4.2	3.0	5.1	11.1	11.7	10.9	15.3	11.0	3.2	3.0	3.1	3.4	5.1	5.2	3.8	15.3	2.9	5.8
27	4.1	5.5	6.6	3.1	5.9	5.7	9.1	7.3	7.9	8.4	6.0	7.6	6.1	11.3	6.2	6.3	8.1	7.9	6.9	4.9	3.7	6.2	3.3	8.2	11.3	3.1	6.5
28	5.8	4.3	3.0	4.4	4.7	2.8	3.3	6.9	7.7	4.5	3.7	5.4	8.4	9.6	7.8	6.3	6.4	6.7	5.7	9.9	11.8	10.4	8.8	13.1	13.1	2.8	6.7
29	8.5	8.9	6.7	10.5	7.3	4.9	5.5	10.1	9.3	8.6	10.6	5.0	3.1	3.2	2.6	10.0	6.1	5.3	5.5	3.6	3.0	3.9	3.4	3.3	10.6	2.6	6.2
30	5.0	8.7	5.8	5.9	2.9	2.0	1.9	5.6	3.9	2.6	11.7	11.9	13.2	11.1	6.0	12.6	13.3	11.5	6.7	5.0	10.2	8.6	6.6	6.1	13.3	1.9	7.4
Max.	**17.7**	**35.3**	**30.0**	**10.6**	**45.9**	**28.1**	**11.9**	**10.9**	**28.7**	**10.6**	**13.3**	**14.1**	**20.9**	**51.9**	**20.0**	**15.3**	**38.2**	**16.3**	**25.1**	**21.7**	**28.6**	**20.4**	**22.5**	**21.7**	**51.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**4.9**	**5.5**	**5.2**	**4.8**	**7.2**	**5.7**	**4.9**	**5.0**	**6.0**	**4.6**	**4.9**	**4.8**	**6.2**	**7.1**	**6.5**	**6.0**	**7.3**	**5.5**	**5.9**	**5.3**	**6.2**	**6.4**	**5.7**	**6.2**			**5.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Sigma (RMYoung AP)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	4.6	5.9	4.1	3.9	4.2	4.0	4.4	3.9	4.0	4.9	11.5	5.6	10.7	7.4	14.0	7.0	7.0	20.3	8.8	10.5	6.9	10.6	11.9	20.3	2.9	7.5
2	15.7	9.1	6.1	9.6	14.7	8.2	7.3	4.5	4.3	3.9	3.5	5.7	3.6	3.7	3.5	3.8	3.9	4.4	3.2	3.6	4.4	4.0	4.3	3.7	15.7	3.2	5.8
3	4.3	4.4	4.1	4.5	4.4	4.5	4.1	4.0	3.8	4.4	4.0	3.6	3.5	4.1	4.2	3.4	3.7	3.4	4.2	4.2	4.2	4.3	4.4	3.8	4.5	3.4	4.1
4	3.8	3.8	5.8	4.5	4.2	3.7	4.0	3.6	5.2	5.0	3.9	4.7	4.0	3.7	3.7	4.0	4.2	4.9	4.0	4.2	4.3	4.2	4.7	3.6	5.8	3.6	4.2
5	3.2	4.1	3.6	4.4	3.7	3.7	4.1	3.9	3.5	3.4	3.5	3.3	3.6	4.0	4.5	3.8	4.0	3.7	3.6	4.0	4.0	4.1	4.5	3.8	4.5	3.2	3.8
6	4.2	4.0	3.9	3.9	3.9	4.0	5.0	4.2	4.4	5.4	3.9	5.8	8.3	5.2	10.2	9.2	12.8	19.5	5.7	7.2	11.0	23.0	51.4	9.8	51.4	3.9	9.4
7	10.8	7.4	9.2	6.2	9.8	7.5	8.2	7.7	6.7	5.5	10.8	10.5	11.4	7.9	6.6	13.5	21.3	5.5	22.1	9.8	8.8	11.5	7.1	2.9	22.1	2.9	9.5
8	5.7	3.2	4.2	5.9	7.4	5.0	6.9	6.2	4.9	5.6	3.9	5.0	3.6	6.5	3.9	4.4	3.7	5.0	7.3	8.0	5.0	4.0	5.5	6.1	8.0	3.2	5.3
9	4.6	3.9	5.1	5.9	9.8	6.9	4.6	6.0	4.2	7.9	54.5	6.4	4.2	4.5	3.3	3.0	7.6	9.5	8.0	5.5	3.7	5.3	5.1	6.8	54.5	3.0	7.8
10	5.2	6.7	10.9	8.3	3.5	3.2	3.3	3.6	4.4	4.7	7.2	4.3	4.2	7.1	6.2	5.1	5.9	5.7	5.4	4.9	10.0	3.2	8.3	4.5	10.9	3.2	5.7
11	2.5	6.8	8.1	4.8	14.6	9.6	12.7	18.8	7.6	6.6	3.5	3.8	4.4	7.2	10.0	20.6	15.3	23.6	14.3	4.8	4.4	5.7	10.7	9.6	23.6	2.5	9.6
12	9.7	10.7	8.4	4.9	6.3	9.2	4.8	9.5	11.1	13.5	21.1	8.5	6.5	3.4	3.8	7.6	4.1	3.6	6.3	5.7	16.6	3.9	25.6	12.0	25.6	3.4	9.0
13	9.2	24.0	26.8	25.7	21.1	10.7	11.1	5.0	7.8	4.7	4.4	6.4	6.3	24.0	25.5	12.5	11.9	17.8	10.7	9.3	5.8	14.2	10.9	3.9	26.8	3.9	12.9
14	3.4	4.3	5.9	4.9	5.9	3.6	4.1	4.6	14.8	3.9	5.7	3.2	3.0	3.4	3.4	2.8	3.2	5.7	4.6	4.8	3.7	3.4	3.8	4.0	14.8	2.8	4.6
15	4.7	4.7	4.6	5.4	5.4	4.1	4.6	4.2	5.6	4.7	3.5	3.8	6.5	4.2	4.2	6.5	8.7	0.2	73.1	8.8	8.0	5.4	2.4	4.2	73.1	0.2	7.8
16	5.6	5.5	5.2	9.4	6.0	7.9	9.1	6.2	5.3	3.8	4.5	6.0	4.9	4.7	5.4	5.4	4.5	4.8	4.1	4.3	4.9	4.5	4.1	4.8	9.4	3.8	5.5
17	3.8	4.7	5.0	4.2	4.1	3.7	4.4	4.0	3.9	4.2	4.0	3.7	4.1	3.9	3.9	3.9	3.7	3.7	4.0	4.1	5.6	4.3	4.3	4.3	5.6	3.7	4.1
18	4.1	3.1	3.1	4.2	3.7	3.8	4.6	4.1	4.1	4.6	3.8	4.9	4.6	4.3	3.9	4.0	4.9	4.8	4.3	4.0	3.9	3.9	3.9	4.1	4.9	3.1	4.1
19	4.1	3.7	4.0	3.9	3.8	3.6	3.4	3.6	3.5	3.7	5.3	3.5	4.8	6.2	4.5	5.4	3.6	7.1	3.4	4.2	3.5	4.7	6.3	7.2	7.2	3.4	4.5
20	11.5	3.2	4.5	3.1	3.6	9.7	11.2	13.9	6.9	5.1	6.4	5.5	8.8	2.9	7.8	14.2	8.7	11.1	13.8	13.1	34.3	16.6	12.8	9.1	34.3	2.9	9.9
21	5.0	5.1	4.1	3.4	2.7	7.4	13.0	8.9	10.9	8.6	7.8	8.6	17.2	9.0	4.9	5.0	4.8	4.9	6.7	4.1	9.4	4.4	7.3	33.3	33.3	2.7	8.2
22	13.7	6.7	6.6	2.4	4.4	4.2	4.2	3.8	4.7	5.9	3.6	4.7	8.6	9.5	5.7	5.6	12.4	3.8	5.9	4.0	3.5	3.5	3.6	4.5	13.7	2.4	5.6
23	9.9	3.9	3.7	3.6	3.3	3.5	5.3	11.0	40.8	9.0	4.6	2.7	7.3	4.2	4.9	2.7	4.9	3.2	3.7	3.1	3.9	5.8	3.9	3.2	40.8	2.7	6.3
24	3.3	3.6	7.5	4.3	6.1	9.9	9.2	7.2	6.4	12.8	7.3	6.9	8.5	9.1	10.5	12.0	7.6	0.4	0.3	0.2	0.5	68.0	7.7	6.5	68.0	0.2	9.0
25	7.6	4.7	3.2	4.3	3.7	3.6	4.9	4.2	3.6	4.1	6.5	5.8	4.3	4.4	6.2	22.5	11.2	7.1	6.5	7.0	4.7	4.1	3.9	4.4	22.5	3.2	5.9
26	5.2	4.4	6.1	6.4	4.9	5.1	4.2	3.9	3.3	3.2	4.2	4.1	4.6	3.9	4.3	3.5	3.8	4.5	5.0	5.5	4.1	4.0	6.0	4.4	6.4	3.2	4.5
27	3.7	4.3	6.6	8.8	8.0	5.7	5.1	4.2	3.4	5.7	7.0	3.2	5.6	8.7	13.7	9.7	8.6	8.0	13.3	15.9	14.1	14.5	9.2	13.6	15.9	3.2	8.4
28	15.5	12.3	15.5	11.2	10.6	13.5	13.8	14.2	12.9	23.7	19.4	21.2	17.3	15.0	12.4	4.1	4.4	6.3	10.7	5.6	4.7	5.3	6.7	8.8	23.7	4.1	11.9
29	6.0	5.1	5.5	5.3	6.0	8.2	10.4	14.3	14.8	7.8	8.9	9.1	11.8	14.6	15.1	10.7	7.7	7.4	12.9	7.0	7.9	7.2	17.7	7.1	17.7	5.1	9.5
30	10.6	22.7	7.8	10.9	13.9	14.1	15.0	8.4	8.6	6.5	8.0	8.9	11.5	5.6	4.6	6.5	9.4	4.8	7.0	10.5	14.2	6.9	5.1	9.0	22.7	4.6	9.6
31	8.5	9.0	8.0	7.8	11.9	11.0	9.1	13.6	8.4	11.0	14.6	11.5	9.8	15.2	14.8	11.8	13.8	12.1	12.2	7.2	9.0	6.6	6.9	13.2	15.2	6.6	10.7
Max.	**15.7**	**24.0**	**26.8**	**25.7**	**21.1**	**14.1**	**15.0**	**18.8**	**40.8**	**23.7**	**54.5**	**21.2**	**17.3**	**24.0**	**25.5**	**22.5**	**21.3**	**23.6**	**73.1**	**15.9**	**34.3**	**68.0**	**51.4**	**33.3**	**73.1**		
Min.	**2.5**	**3.1**	**3.1**	**2.4**	**2.7**	**3.2**	**3.3**	**3.6**	**3.3**	**3.2**	**3.5**	**2.7**	**3.0**	**2.9**	**3.3**	**2.7**	**3.2**	**0.2**	**0.3**	**0.2**	**0.5**	**3.2**	**2.4**	**2.9**		**0.2**	
Avg.	**6.7**	**6.6**	**6.7**	**6.3**	**6.9**	**6.5**	**7.0**	**6.9**	**7.5**	**6.5**	**8.2**	**6.3**	**6.9**	**7.1**	**7.2**	**7.8**	**7.5**	**6.9**	**9.9**	**6.2**	**7.5**	**8.6**	**8.7**	**7.4**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.3	1.7	1.7	0.2	0.3
3	1.6	1.5	1.3	1.1	1.9	2.1	1.7	1.8	1.0	1.6	1.7	2.0	2.3	2.1	2.8	3.1	3.0	2.6	2.3	2.0	1.5	1.9	2.0	2.1	3.1	1.0	2.0
4	2.9	2.4	1.6	1.7	2.3	2.9	2.0	2.1	2.6	2.1	1.8	2.0	2.6	3.3	3.8	4.2	4.9	4.8	4.7	3.9	5.0	6.3	6.2	6.1	6.3	1.6	3.4
5	5.6	5.6	6.4	7.4	6.7	6.8	7.1	6.5	7.0	7.1	6.7	7.2	7.7	7.1	7.2	6.9	7.3	7.3	7.5	7.8	7.9	7.7	7.8	7.9	7.9	5.6	7.1
6	7.1	5.6	5.6	5.9	5.8	5.8	5.6	4.5	5.1	5.0	5.5	5.8	4.8	4.6	4.7	4.6	5.0	4.9	4.9	4.0	3.5	3.3	3.4	3.4	7.1	3.3	4.9
7	2.9	2.5	2.5	2.5	2.6	2.7	3.0	3.4	3.3	3.1	3.0	1.6	2.6	2.9	2.9	2.7	3.3	4.1	5.0	5.1	4.3	3.5	3.7	3.2	5.1	1.6	3.2
8	3.5	3.0	2.9	3.1	3.2	3.3	2.9	3.4	3.4	3.2	3.4	3.5	2.6	2.8	3.5	3.6	3.8	3.2	3.0	3.1	1.4	2.8	3.7	3.4	3.8	1.4	3.2
9	3.3	2.4	2.9	3.1	3.4	3.6	4.4	4.1	4.3	4.9	5.4	4.2	3.7	4.0	2.6	2.1	4.2	3.2	2.5	2.8	2.9	2.9	3.2	3.3	5.4	2.1	3.5
10	3.0	3.2	3.9	3.9	2.9	2.7	2.8	3.0	3.0	2.6	3.0	4.8	3.9	3.6	3.9	4.0	2.3	3.0	3.6	4.1	4.0	4.4	4.1	2.8	4.8	2.3	3.4
11	4.2	4.4	3.7	3.1	3.9	3.4	3.7	2.8	2.9	3.4	4.2	4.0	3.4	2.1	3.1	3.3	2.9	2.0	2.3	2.5	2.5	2.6	2.5	2.0	4.4	2.0	3.1
12	2.1	2.1	2.5	2.5	2.3	2.4	2.2	2.1	1.7	1.8	2.0	2.1	2.5	2.7	2.7	2.8	2.7	2.5	2.3	2.4	3.7	2.9	2.3	2.3	3.7	1.7	2.4
13	1.7	1.0	0.4	0.6	0.6	0.5	0.6	0.7	0.9	1.6	1.7	1.5	1.3	1.3	1.1	0.8	0.9	0.9	0.4	0.3	0.3	0.3	0.9	0.9	1.7	0.3	0.9
14	0.9	0.9	0.7	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.8	0.5	0.4	0.3	0.3	0.4	0.4	3.0	3.0	0.2	0.5
15	18.2	22.3	25.8	27.5	24.7	23.4	20.2	18.6	19.1	16.5	14.4	13.9	11.7	10.6	10.7	9.6	8.5	6.4	5.2	4.7	4.0	4.5	4.3	3.7	27.5	3.7	13.7
16	2.3	1.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	1.1	5.2	4.9	5.2	4.9	4.7	3.9	3.8	1.9	0.2	0.2	0.2	0.2	0.2	0.2	5.2	0.2	1.8
17	0.2	1.0	0.3	0.3	0.3	0.3	0.4	0.5	12.2	14.1	19.3	25.5	27.9	24.1	21.1	22.3	23.7	25.1	21.9	17.2	13.8	11.7	9.8	9.2	27.9	0.2	12.6
18	7.8	7.8	7.3	5.1	0.5	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.8	0.2	1.4
19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.2	0.3
20	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3
22	0.2	0.3	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3
23	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
26	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
27	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	6.5	8.5	8.2	7.6	8.2	8.9	9.0	8.7	8.4	8.4	7.8	8.0	7.2	7.0	9.0	0.2	4.8
28	6.9	6.6	6.1	5.9	5.4	4.9	3.9	3.8	3.7	3.4	2.9	2.2	1.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	6.9	0.2	2.5
29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.1	5.1	4.8	5.4	6.1	5.8	6.3	5.4	4.1	3.3	6.3	0.2	2.1
30	2.8	2.1	1.7	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.2	2.2	2.8	0.2	0.7
31	2.1	2.4	2.9	2.2	1.8	1.5	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.9	0.2	0.7
Max.	**18.2**	**22.3**	**25.8**	**27.5**	**24.7**	**23.4**	**20.2**	**18.6**	**19.1**	**16.5**	**19.3**	**25.5**	**27.9**	**24.1**	**21.1**	**22.3**	**23.7**	**25.1**	**21.9**	**17.2**	**13.8**	**11.7**	**9.8**	**9.2**	**27.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**2.6**	**2.6**	**2.6**	**2.6**	**2.3**	**2.3**	**2.1**	**2.0**	**2.4**	**2.4**	**2.9**	**3.1**	**3.1**	**2.8**	**2.9**	**3.0**	**3.0**	**2.9**	**2.7**	**2.5**	**2.3**	**2.3**	**2.3**	**2.3**			**2.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.9	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.9	0.2	0.4
3	0.7	0.5	0.5	0.6	0.6	0.4	0.3	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.7	0.2	0.4
4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2
5	0.2	0.2	0.2	0.3	0.3	0.3	1.6	3.6	6.0	7.2	7.9	8.6	7.2	8.2	7.4	7.2	6.7	6.8	6.6	6.2	6.4	6.4	6.6	2.7	8.6	0.2	4.8
6	2.2	3.2	5.0	5.1	5.8	6.3	5.5	4.3	2.6	2.2	3.6	4.1	4.9	5.4	5.8	5.5	4.1	6.1	8.0	8.1	8.5	7.8	5.3	6.6	8.5	2.2	5.3
7	7.9	8.7	7.2	7.9	7.2	7.2	5.4	5.5	7.2	7.1	8.2	9.6	11.7	11.8	12.0	10.7	10.3	9.5	10.1	10.0	10.1	8.7	8.4	8.5	12.0	5.4	8.8
8	9.7	8.5	7.0	6.5	7.4	9.1	9.3	11.2	10.1	9.1	9.8	11.0	10.2	11.7	11.1	11.2	12.1	10.2	8.0	8.7	8.2	8.8	10.2	11.1	12.1	6.5	9.6
9	10.7	13.2	14.7	15.8	18.0	15.3	13.6	12.4	10.9	9.3	7.2	5.9	4.1	3.7	3.3	1.6	1.3	1.4	2.4	2.9	1.9	1.3	0.6	1.0	18.0	0.6	7.2
10	1.4	2.0	2.5	2.3	3.6	3.9	3.7	3.7	3.1	3.6	4.3	4.4	5.0	4.4	5.1	7.0	7.8	8.2	7.8	6.8	5.7	6.0	6.8	7.3	8.2	1.4	4.9
11	6.6	6.3	6.7	6.9	6.4	5.6	5.6	6.7	6.5	5.9	5.2	3.8	3.6	2.7	2.4	3.2	4.6	5.8	4.5	4.4	5.0	5.3	4.1	5.1	6.9	2.4	5.1
12	4.3	3.3	3.4	4.0	3.5	4.5	4.9	4.8	4.4	3.2	3.6	4.5	5.0	4.3	5.2	6.7	6.0	5.9	5.4	4.5	5.7	6.5	7.8	9.9	9.9	3.2	5.1
13	17.6	22.8	24.3	26.6	26.4	26.4	23.8	24.9	27.4	31.2	31.6	30.2	28.0	25.9	24.9	25.0	22.4	21.4	20.2	21.4	22.9	22.0	23.1	22.8	31.6	17.6	24.7
14	22.4	23.5	23.7	23.4	24.9	23.7	20.0	13.3	14.2	15.7	18.7	18.5	17.1	16.8	16.2	17.4	16.5	16.9	14.1	10.6	6.8	4.8	3.9	6.9	24.9	3.9	16.2
15	7.2	4.9	6.9	9.2	11.5	8.6	8.5	6.4	4.7	4.1	2.9	1.7	1.7	1.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5.9	16.3	16.2	16.3	0.2	5.0
16	19.7	27.9	28.8	25.0	25.4	26.6	27.2	28.1	25.1	22.0	21.7	21.2	20.4	17.5	15.4	11.4	9.4	9.7	8.0	6.6	6.6	6.1	5.3	4.7	28.8	4.7	17.5
17	3.4	2.7	4.5	4.5	5.7	5.3	3.5	2.1	0.9	2.3	2.3	1.4	0.9	1.3	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5.7	0.2	1.8
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
20	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
22	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
23	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.2
26	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3
27	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	2.0	3.1	2.7	2.1	2.6	3.7	4.9	5.9	6.2	6.1	6.4	5.9	5.6	6.4	0.2	2.5
28	5.4	4.4	5.1	5.6	6.0	6.4	6.9	6.7	5.6	5.2	5.4	5.5	5.1	4.4	4.5	4.5	3.3	1.7	1.3	1.8	3.0	1.9	2.5	3.1	6.9	1.3	4.4
29	2.3	2.5	3.6	3.2	3.2	2.8	2.4	3.1	4.6	4.0	3.5	2.3	3.2	3.5	3.6	4.6	4.5	4.8	4.6	5.3	6.2	5.6	4.3	3.9	6.2	2.3	3.8
Max.	**22.4**	**27.9**	**28.8**	**26.6**	**26.4**	**26.6**	**27.2**	**28.1**	**27.4**	**31.2**	**31.6**	**30.2**	**28.0**	**25.9**	**24.9**	**25.0**	**22.4**	**21.4**	**20.2**	**21.4**	**22.9**	**22.0**	**23.1**	**22.8**	**31.6**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**4.3**	**4.8**	**5.1**	**5.2**	**5.5**	**5.4**	**5.0**	**4.8**	**4.7**	**4.7**	**4.8**	**4.8**	**4.6**	**4.4**	**4.3**	**4.2**	**4.0**	**4.0**	**3.8**	**3.7**	**3.7**	**3.7**	**4.0**	**4.1**			**4.5**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.4	3.0	2.5	2.6	2.1	2.4	3.5	4.3	4.6	5.3	5.3	6.9	7.3	11.2	10.5	10.1	11.1	11.9	9.6	10.6	11.4	11.5	11.0	13.2	13.2	2.1	7.3
2	13.1	13.8	15.2	19.2	25.3	21.7	19.5	22.3	20.3	18.5	14.1	10.5	9.9	7.9	6.8	4.9	5.3	5.8	5.7	5.0	5.6	6.4	6.0	5.8	25.3	4.9	12.0
3	5.3	6.2	6.4	7.7	8.0	9.4	9.6	11.5	11.6	11.4	12.1	12.6	14.0	13.1	11.3	10.1	10.2	10.7	9.3	8.6	8.5	8.4	7.6	7.1	14.0	5.3	9.6
4	7.3	6.8	7.0	6.8	6.3	6.4	8.1	8.5	8.0	8.0	8.8	8.4	8.5	8.5	7.9	7.8	7.8	7.9	7.9	7.3	6.5	7.2	7.1	6.6	8.8	6.3	7.6
5	6.2	6.0	6.7	6.4	7.4	8.3	10.9	10.9	18.6	22.3	31.8	30.1	27.6	27.6	28.5	26.4	28.1	26.9	26.8	27.1	27.5	22.5	20.8	21.6	31.8	6.0	19.9
6	21.5	21.4	20.4	19.1	18.7	17.7	17.2	15.8	16.0	16.5	15.7	14.5	15.7	17.0	18.6	20.7	22.2	19.4	21.1	15.0	8.1	8.4	10.9	10.8	22.2	8.1	16.8
7	10.6	10.1	8.2	6.0	5.2	4.8	5.4	4.8	3.8	2.7	2.3	2.4	2.5	1.7	1.7	3.4	4.2	5.0	7.0	8.4	8.5	8.3	7.5	9.6	10.6	1.7	5.6
8	9.6	8.6	8.0	6.9	5.8	3.0	2.8	3.1	2.8	2.9	3.3	6.2	6.1	4.7	4.4	3.8	5.3	8.6	10.1	10.0	11.2	11.7	11.8	11.4	11.8	2.8	6.8
9	11.5	10.7	11.5	12.3	13.8	10.6	10.6	11.3	10.8	9.1	7.7	6.6	5.2	4.3	3.9	3.1	2.6	3.0	1.9	1.3	1.0	1.1	1.1	1.3	13.8	1.0	6.5
10	2.6	4.3	3.9	4.9	7.6	6.5	6.0	5.5	5.1	4.9	4.8	5.1	3.9	3.7	3.4	3.5	3.1	2.8	2.4	2.0	1.8	1.6	0.5	0.2	7.6	0.2	3.8
11	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7	4.7	5.8	8.5	10.6	13.4	11.9	11.9	13.4	0.2	3.0
15	17.1	19.7	20.3	20.7	22.2	22.5	21.5	25.1	27.9	26.4	20.8	21.8	20.9	19.6	18.3	18.1	18.4	18.4	18.3	17.5	16.8	15.6	15.0	14.7	27.9	14.7	19.9
16	13.2	12.5	12.3	10.3	7.8	6.2	5.4	6.3	5.7	6.2	6.8	6.1	4.8	4.3	2.7	3.2	2.6	2.7	3.7	4.6	5.6	5.8	4.8	2.8	13.2	2.6	6.1
17	1.8	2.1	2.4	2.4	3.0	2.7	2.4	2.0	1.6	1.8	1.7	2.0	1.8	2.4	2.2	2.4	2.4	7.4	14.2	14.3	11.5	8.0	4.7	1.8	14.3	1.6	4.1
18	1.6	3.2	3.8	3.9	3.0	2.4	2.2	2.6	3.8	4.2	4.5	3.9	3.5	3.2	3.6	4.0	4.5	4.9	5.0	6.0	6.1	5.9	5.3	5.5	6.1	1.6	4.0
19	4.9	4.8	3.9	3.5	3.8	3.9	3.7	3.6	3.4	3.7	3.4	3.2	3.3	3.4	3.4	3.5	4.2	4.8	4.3	4.2	3.9	4.1	4.1	3.6	4.9	3.2	3.9
20	3.2	2.9	2.4	1.8	1.7	1.8	1.5	1.2	1.0	0.9	0.6	1.3	1.1	1.2	0.3	0.2	0.5	1.4	1.8	2.2	2.1	2.3	2.6	2.5	3.2	0.2	1.6
21	2.3	2.3	2.4	2.2	2.8	3.0	2.6	2.6	2.6	2.5	2.2	2.5	2.4	3.1	3.6	4.9	8.3	7.5	7.3	8.0	8.6	7.6	7.9	7.8	8.6	2.2	4.5
22	7.6	6.8	7.1	7.8	7.6	7.7	8.5	9.2	8.2	9.5	8.2	8.6	8.4	8.1	6.4	4.7	5.0	4.8	4.7	4.3	4.4	4.6	2.6	1.4	9.5	1.4	6.5
23	1.0	2.1	2.6	2.0	2.8	3.9	3.9	3.9	3.6	3.5	4.1	3.5	4.4	5.1	5.4	8.6	8.1	8.6	9.0	10.4	11.0	9.1	9.1	7.5	11.0	1.0	5.5
24	6.8	6.2	6.2	3.9	4.5	4.1	3.4	2.8	1.8	3.9	3.6	5.0	4.7	5.1	4.5	5.3	5.7	5.1	5.0	4.3	4.3	4.0	4.0	3.9	6.8	1.8	4.5
25	2.8	2.2	3.3	8.1	8.8	8.7	6.4	5.0	4.6	4.3	3.3	2.6	1.7	1.4	1.2	0.7	0.8	1.7	2.4	3.3	4.0	4.6	5.3	4.6	8.8	0.7	3.8
26	4.5	5.1	4.2	4.8	5.3	5.3	5.8	6.1	5.1	3.9	4.3	4.8	4.1	4.8	6.5	6.5	5.3	5.0	4.8	5.5	4.5	3.4	5.3	5.4	6.5	3.4	5.0
27	6.3	6.9	7.2	6.6	5.5	4.4	3.2	3.8	3.5	2.7	3.1	3.6	3.9	4.4	4.6	5.1	5.9	5.4	5.7	5.2	5.5	4.6	3.9	4.1	7.2	2.7	4.8
28	4.4	3.7	4.0	4.5	4.5	3.9	4.2	3.3	3.2	2.6	1.1	1.0	0.6	0.8	0.9	1.7	2.2	2.5	3.1	3.4	4.4	6.0	6.8	6.7	6.8	0.6	3.3
29	6.8	6.8	7.7	8.2	8.1	7.9	8.4	7.7	10.5	11.5	12.8	13.4	13.6	17.2	20.3	20.6	19.5	20.6	21.2	23.0	23.4	25.3	23.4	22.6	25.3	6.8	15.0
30	22.7	21.8	20.9	19.4	19.9	20.2	21.2	20.2	20.1	20.0	19.1	18.4	17.4	16.9	15.3	14.4	12.9	11.6	11.5	9.6	9.5	7.4	7.0	6.8	22.7	6.8	16.0
31	5.8	5.0	5.5	4.5	4.8	4.9	4.3	5.0	5.0	4.6	5.3	5.9	6.3	7.1	7.3	7.0	7.8	8.3	8.7	8.2	8.0	8.5	7.5	7.2	8.7	4.3	6.3
Max.	**22.7**	**21.8**	**20.9**	**20.7**	**25.3**	**22.5**	**21.5**	**25.1**	**27.9**	**26.4**	**31.8**	**30.1**	**27.6**	**27.6**	**28.5**	**26.4**	**28.1**	**26.9**	**26.8**	**27.1**	**27.5**	**25.3**	**23.4**	**22.6**	**31.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.6**	**6.6**	**6.7**	**6.7**	**7.0**	**6.6**	**6.6**	**6.7**	**6.9**	**6.9**	**6.8**	**6.8**	**6.6**	**6.7**	**6.6**	**6.6**	**7.0**	**7.4**	**7.7**	**7.7**	**7.6**	**7.4**	**7.0**	**6.7**			**6.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	5.4	6.6	4.7	4.0	4.3	4.2	4.3	5.0	5.0	5.2	5.5	5.4	4.9	3.9	3.3	3.2	2.9	2.5	1.9	0.8	0.3	0.2	0.2	6.6	0.2	3.7
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3
11	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
12	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
16	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	3.2	8.9	7.7	6.2	5.2	4.6	2.4	3.1	3.9	2.6	3.7	3.6	3.0	8.9	0.2	2.5
18	5.5	6.2	6.7	7.2	6.0	4.9	3.4	2.0	2.3	3.7	4.2	5.7	6.3	7.3	8.5	8.5	8.2	8.3	6.9	7.1	8.4	9.2	9.9	9.8	9.9	2.0	6.5
19	9.4	9.5	10.3	10.1	12.0	13.1	13.8	14.7	16.2	14.4	12.8	15.4	12.8	12.4	11.8	11.9	12.5	15.8	16.8	15.2	13.2	12.9	9.7	14.6	16.8	9.4	13.0
20	19.4	17.6	18.1	20.5	21.2	19.9	19.5	24.6	22.8	23.2	23.2	23.6	22.6	24.8	23.7	23.4	21.7	17.5	21.2	15.0	17.5	20.0	17.7	14.6	24.8	14.6	20.6
21	13.1	11.5	12.1	10.7	9.8	10.0	9.8	8.6	7.2	6.7	6.8	7.5	8.6	8.4	7.4	5.5	5.8	5.7	4.6	4.3	4.1	6.9	10.2	14.1	14.1	4.1	8.3
22	15.5	14.9	12.9	10.0	12.5	12.0	9.5	9.9	2.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	15.5	0.2	4.3
23	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
24	0.2	0.2	0.2	0.2	0.2	3.2	3.3	3.9	2.7	3.1	2.6	0.9	0.2	0.7	4.9	5.4	3.7	4.4	5.5	6.5	5.5	8.4	9.1	9.7	9.7	0.2	3.5
25	8.1	6.5	4.1	4.1	3.0	3.1	3.5	2.9	3.3	4.0	4.3	4.8	5.0	5.0	5.2	5.9	6.3	7.0	7.2	7.8	8.5	8.6	8.5	8.2	8.6	2.9	5.6
26	8.3	7.5	7.1	7.1	6.6	6.3	5.9	5.0	5.7	6.0	5.9	6.5	7.6	8.4	9.9	10.6	10.9	11.7	11.0	11.1	10.9	10.8	10.6	10.5	11.7	5.0	8.4
27	10.0	9.3	7.6	6.0	5.8	5.8	5.0	4.8	4.7	4.2	4.2	4.0	3.9	4.1	4.4	4.5	3.9	3.6	3.3	3.1	2.5	2.0	1.9	1.5	10.0	1.5	4.6
28	1.3	1.2	1.1	1.0	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.6	1.7	1.9	1.8	1.9	0.2	0.6
29	1.5	1.6	1.2	1.2	1.2	1.1	1.6	1.4	1.4	1.1	1.3	4.6	4.3	5.4	6.1	3.5	0.2	0.2	0.2	0.4	7.1	7.5	7.7	7.6	7.7	0.2	2.9
30	6.3	6.1	5.3	5.6	5.8	5.4	5.2	5.5	5.3	5.0	1.4	2.0	4.4	2.9	3.3	3.3	3.8	5.0	6.5	6.2	5.6	4.8	4.0	3.1	6.5	1.4	4.7
Max.	**19.4**	**17.6**	**18.1**	**20.5**	**21.2**	**19.9**	**19.5**	**24.6**	**22.8**	**23.2**	**23.2**	**23.6**	**22.6**	**24.8**	**23.7**	**23.4**	**21.7**	**17.5**	**21.2**	**15.2**	**17.5**	**20.0**	**17.7**	**14.6**	**24.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**3.6**	**3.4**	**3.2**	**3.1**	**3.1**	**3.1**	**3.0**	**3.1**	**2.8**	**2.7**	**2.6**	**2.9**	**3.1**	**3.2**	**3.3**	**3.2**	**3.0**	**2.9**	**3.1**	**2.9**	**3.0**	**3.4**	**3.3**	**3.4**			**3.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.8	2.7	2.6	2.5	2.9	3.0	3.0	3.3	3.3	3.3	3.9	3.7	4.4	5.7	6.8	6.5	6.8	6.6	6.8	6.5	8.0	7.7	6.7	7.5	8.0	2.5	4.9
2	7.9	8.6	7.0	6.1	6.1	6.1	6.3	7.3	6.5	5.4	5.1	4.9	4.6	3.6	2.6	3.9	4.1	4.8	4.3	3.9	1.9	1.3	2.2	2.1	8.6	1.3	4.9
3	1.7	1.1	1.3	1.9	3.4	3.4	3.7	3.8	3.8	3.1	3.9	4.6	5.0	10.8	9.1	11.7	9.3	7.1	6.7	7.4	8.4	6.8	4.9	8.2	11.7	1.1	5.5
4	11.9	9.8	11.0	10.6	12.9	12.1	10.3	8.1	9.5	8.1	7.8	7.1	5.7	5.2	5.8	6.8	6.1	5.7	4.3	3.4	2.3	1.5	1.6	2.4	12.9	1.5	7.1
5	3.6	3.3	3.4	2.9	2.6	2.4	2.0	2.0	1.5	0.8	1.8	2.0	1.9	2.6	2.2	2.8	3.4	3.1	3.5	3.8	4.1	4.4	4.0	3.9	4.4	0.8	2.8
6	3.3	3.6	3.6	4.1	5.0	5.4	5.7	9.5	8.8	10.9	13.3	15.5	16.2	17.6	18.7	18.9	18.0	18.5	19.8	21.0	20.2	20.6	23.5	25.8	25.8	3.3	13.7
7	24.3	22.7	28.3	27.5	27.7	28.5	28.0	27.5	27.2	28.5	29.5	30.0	29.8	29.3	28.9	29.0	24.9	25.1	27.5	27.2	25.4	27.8	25.8	25.0	30.0	22.7	27.3
8	29.7	29.2	26.2	25.5	27.1	27.0	23.9	20.8	21.3	23.6	22.8	22.9	25.0	26.8	26.2	25.5	26.2	25.2	24.2	25.0	25.2	24.2	21.2	19.3	29.7	19.3	24.7
9	19.2	16.9	14.8	14.6	16.4	13.2	15.1	18.6	19.4	19.5	17.7	17.1	16.5	16.4	14.4	13.4	12.8	8.7	7.7	5.3	4.4	4.1	1.7	1.9	19.5	1.7	12.9
10	1.6	1.7	1.9	3.4	3.2	2.9	3.0	2.5	2.4	2.9	2.8	2.2	1.5	2.5	2.9	2.9	3.0	3.3	4.5	5.6	6.6	7.9	10.0	11.9	11.9	1.5	3.9
11	13.9	15.0	15.7	16.1	16.1	18.7	20.2	21.3	22.4	22.7	25.1	25.1	24.7	27.9	28.0	28.9	27.4	27.5	30.5	30.1	27.9	25.7	23.2	21.0	30.5	13.9	23.1
12	25.7	19.8	17.4	13.7	13.4	14.7	17.4	17.4	15.0	16.9	18.6	22.2	20.9	22.6	23.9	24.9	24.3	20.6	19.2	19.6	19.5	19.7	18.8	18.4	25.7	13.4	19.4
13	17.9	16.2	15.4	14.9	13.7	12.9	7.8	6.9	8.3	8.4	7.9	7.4	8.9	9.9	14.7	18.9	20.3	18.8	22.8	23.9	21.8	24.1	24.7	27.2	27.2	6.9	15.6
14	24.9	19.6	11.1	6.9	6.4	9.0	11.2	12.7	12.2	11.2	10.9	10.0	11.9	12.3	10.4	8.1	9.6	10.2	9.9	9.0	7.4	6.7	5.9	4.2	24.9	4.2	10.5
15	3.0	5.4	7.1	5.5	7.9	7.9	8.2	7.6	8.9	8.4	9.2	10.3	10.0	9.6	8.2	8.7	9.4	9.1	7.5	8.8	9.8	8.6	8.2	8.3	10.3	3.0	8.2
16	9.8	8.4	7.9	7.5	6.1	5.9	4.5	2.9	2.2	2.3	3.4	4.4	5.6	6.4	8.9	9.8	9.0	8.3	6.2	4.9	3.9	3.4	1.9	1.4	9.8	1.4	5.6
17	1.9	2.4	2.8	2.8	2.5	2.6	2.6	2.9	3.2	3.5	3.7	3.3	3.8	3.1	1.8	1.8	1.6	1.5	1.3	4.0	4.8	7.6	8.3	7.1	8.3	1.3	3.4
18	9.0	7.2	8.8	12.3	9.1	8.1	9.4	7.7	8.9	5.3	6.9	5.5	5.0	5.4	5.3	6.8	7.4	8.2	9.9	9.2	9.9	8.8	5.9	6.4	12.3	5.0	7.8
19	6.2	4.6	4.5	4.7	4.4	4.1	1.7	0.3	0.2	0.2	0.2	2.7	2.3	2.8	2.2	2.8	5.2	5.4	5.4	5.4	6.4	6.4	6.1	5.4	6.4	0.2	3.7
20	5.3	5.2	5.0	5.5	5.4	5.4	6.1	5.8	6.0	5.4	5.2	5.7	5.1	3.8	3.3	3.4	3.9	4.3	5.1	5.7	6.2	5.4	5.7	5.1	6.2	3.3	5.1
21	5.4	5.0	3.6	2.4	3.0	0.2	1.8	1.9	2.8	2.6	2.6	3.1	3.8	4.4	6.5	6.3	6.2	6.0	4.9	7.6	10.6	10.4	9.2	7.8	10.6	0.2	4.9
22	7.8	8.9	8.8	8.5	6.0	4.6	3.6	3.7	2.8	1.9	1.8	1.9	2.0	3.4	4.6	5.7	9.5	11.5	13.6	15.1	18.5	18.3	21.2	23.9	23.9	1.8	8.6
23	28.8	30.8	28.7	31.1	34.3	36.4	39.0	39.4	35.8	36.3	31.2	33.3	33.4	36.5	33.4	30.3	28.8	26.6	27.5	26.1	25.1	24.9	27.5	28.7	39.4	24.9	31.4
24	29.1	27.7	26.5	27.3	26.3	24.0	23.6	25.9	25.3	22.8	18.6	17.9	14.6	13.6	12.8	11.5	12.2	13.0	11.9	12.2	9.0	7.5	12.4	13.7	29.1	7.5	18.3
25	13.2	7.6	6.3	6.3	6.8	6.7	6.5	6.5	8.3	7.8	7.9	7.4	6.6	8.9	7.7	0.3	1.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	13.2	0.2	4.9
26	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
27	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
28	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
30	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
31	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Max.	**29.7**	**30.8**	**28.7**	**31.1**	**34.3**	**36.4**	**39.0**	**39.4**	**35.8**	**36.3**	**31.2**	**33.3**	**33.4**	**36.5**	**33.4**	**30.3**	**28.8**	**27.5**	**30.5**	**30.1**	**27.9**	**27.8**	**27.5**	**28.7**	**39.4**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**10.0**	**9.2**	**8.7**	**8.6**	**8.7**	**8.6**	**8.6**	**8.6**	**8.6**	**8.5**	**8.5**	**8.8**	**8.7**	**9.4**	**9.4**	**9.4**	**9.4**	**9.1**	**9.2**	**9.4**	**9.3**	**9.2**	**9.1**	**9.3**			**9.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.2	7.2	5.5	5.4	4.2	5.1	3.7	1.7	3.9	3.0	7.2	0.2	1.9
3	1.8	3.8	3.5	4.8	5.7	6.8	7.7	5.4	3.9	2.7	2.3	2.2	3.3	5.0	5.8	8.1	8.8	11.0	12.6	13.3	15.1	15.4	16.2	14.7	16.2	1.8	7.5
4	13.1	16.4	15.1	12.7	10.5	11.6	12.4	11.8	8.8	10.1	10.3	11.8	12.1	11.1	12.4	14.4	13.8	14.6	14.6	13.9	14.5	13.5	10.8	10.0	16.4	8.8	12.5
5	12.7	13.5	15.0	15.6	15.6	16.6	18.5	19.4								14.8	15.0	13.3	11.4	8.7	6.3	4.7	2.5	4.6	19.4	2.5	12.2
6	6.2	6.0	6.7	6.8	7.2	5.6	4.5	3.5	3.5	3.2	3.7	4.5	4.8	4.3	4.7	2.4	6.1	12.5	9.5	8.2	6.5	6.5	6.2	5.1	12.5	2.4	5.7
7	3.5	3.5	4.1	4.7	5.0	5.9	6.4	7.9	8.2	6.3	6.3	6.4	7.1	6.4	3.5	2.1	4.4	4.9	4.0	8.4	10.3	9.9	9.2	8.9	10.3	2.1	6.1
8	9.0	9.2	8.7	8.1	7.5	7.2	7.5	5.7	4.7	4.1	5.8	7.1	7.7	7.3	8.5	9.0	9.3	10.9	10.8	11.1	11.1	10.6	10.5	10.5	11.1	4.1	8.4
9	10.0	9.1	8.9	9.1	7.5	5.8	4.5	1.9	0.2	0.2	0.2	0.2	2.0	3.4	3.9	4.0	4.6	4.7	5.0	5.4	5.5	5.9	5.3	6.1	10.0	0.2	4.7
10	5.7	5.2	4.8	5.1	4.2	3.5	3.5	2.7	2.3	1.5	1.6	2.3	2.0	1.6	2.2	3.8	3.2	2.6	3.1	3.7	5.5	5.1	4.5	4.3	5.7	1.5	3.5
11	3.8	1.9	1.6	0.9	0.9	1.0	0.9	1.0	1.4	1.4	1.4	1.2	2.5	4.7	5.5	5.8	5.5	5.3	5.3	4.9	5.4	5.3	5.4	6.0	6.0	0.9	3.3
12	5.4	4.0	3.7	3.0	2.5	1.6	3.3	5.4	4.5	4.4	2.9	3.3	2.7	3.4	1.5	1.7	1.7	3.1	2.8	2.0	2.0	2.4	3.0	1.7	5.4	1.5	3.0
13	2.0	3.1	3.8	5.1	5.7	5.3	5.7	6.1	4.8	4.9	4.2	3.4	2.6	2.4	2.3	3.0	3.1	3.2	4.1	4.7	5.2	4.9	5.3	5.1	6.1	2.0	4.2
14	6.1	5.6	5.4	6.5	5.2	4.4	4.4	4.8	5.0	4.1	4.0	4.1	2.2	1.5	2.3	3.5	6.2	5.7	8.6	7.5	6.5	9.0	10.4	8.0	10.4	1.5	5.5
15	5.5	5.8	5.1	5.0	5.7	5.3	3.9	3.9	1.9	1.2	2.2	3.6	4.3	4.1	5.7	8.2	9.8	10.7	7.7	6.3	6.0	5.8	6.8	4.9	10.7	1.2	5.4
16	2.4	1.8	1.0	1.0	1.6	2.0	2.5	2.5	1.8	1.9	1.3	1.2	1.3	1.4	2.8	4.3	4.0	4.8	4.8	4.8	5.1	3.8	3.2	3.0	5.1	1.0	2.7
17	2.6	2.5	2.5	2.2	1.5	1.5	1.0	1.0	1.2	1.5	1.6	1.4	1.6	2.8	4.0	5.7	5.7	5.2	5.2	7.1	8.4	7.8	8.1	7.8	8.4	1.0	3.7
18	7.3	6.6	5.9	4.7	3.7	3.5	3.3	3.4	3.6	3.5	4.7	6.2	6.7	6.4	6.7	6.3	6.5	7.5	6.3	5.7	4.6	4.6	2.7	3.4	7.5	2.7	5.2
19	3.6	4.4	4.6	4.7	3.9	2.4	2.3	2.3	1.8	2.6	3.9	4.2	4.2	4.8	5.5	4.9	5.4	5.2	5.3	5.7	5.1	5.0	4.9	5.0	5.7	1.8	4.2
20	4.1	2.8	1.8	2.4	1.5	1.2	1.7	2.8	4.2	4.7	5.4	6.5	7.7	10.4	11.3	11.1	11.5	13.4	13.1	13.0	13.5	12.3	12.8	13.5	13.5	1.2	7.6
21	16.4	14.3	12.9	14.6	11.9	10.7	8.7	8.3	6.0	3.8	2.0	1.5	2.1	2.7	3.0	3.1	3.2	2.5	4.8	5.6	5.7	5.1	6.1	7.0	16.4	1.5	6.7
22	6.0	6.4	7.7	8.0	8.5	9.7	7.4	5.1	5.2	4.2	3.6	5.0	6.4	8.0	8.8	9.6	10.3	11.9	12.4	13.4	15.2	16.6	15.5	12.6	16.6	3.6	9.1
23	12.8	13.0	12.9	10.8	10.5	12.7	12.0	11.0	12.3	13.2	12.3	11.9	11.1	11.3	11.1	10.2	8.7	7.5	6.8	8.5	9.5	9.1	8.8	8.6	13.2	6.8	10.7
24	9.7	8.8	8.7	8.0	11.3	12.7	13.4	13.5	13.4	13.1	15.9	15.3	16.3	17.3	17.0	20.0	22.1	19.4	16.9	15.7	17.4	19.3	18.7	18.8	22.1	8.0	15.1
25	21.9	26.0	27.8	26.5	25.6	24.9	25.9	26.3	27.8	28.6	28.1	27.9	29.3	28.4	27.5	23.2	24.2	26.0	21.1	18.5	17.2	18.4	15.1	13.1	29.3	13.1	24.1
26	11.8	10.4	7.0	5.7	4.7	6.9	6.8	6.7	8.3	8.3	8.7	9.8	10.1	7.5	6.3	7.0	7.9	7.7	4.6	5.0	4.1	3.4	4.7	3.7	11.8	3.4	7.0
27	5.6	4.9	3.2	3.3	3.7	4.2	4.9	7.1	7.7	8.4	8.7	10.5	11.3	12.5	12.6	11.4	9.0	9.3	9.4	8.7	9.0	7.3	6.5	7.2	12.6	3.2	7.8
28	7.3	5.1	5.3	5.6	6.5	6.7	5.8	4.9	4.1	5.5	8.0	8.8	10.0	8.8	6.2	7.9	7.3	8.3	8.3	7.0	7.9	9.4	9.7	10.0	10.0	4.1	7.3
29	8.3	7.4	6.8	7.2	7.4	6.2	6.1	5.2	4.8	5.2	3.8	3.6	5.2	6.4	7.9	8.7	8.5	8.9	8.8	9.8	10.1	9.9	8.6	9.1	10.1	3.6	7.2
30	9.1	9.1	8.5	7.5	6.8	5.9	4.2	3.0	1.5	1.3	1.6	1.9	1.8	1.7	2.3	1.9	2.8	2.3	2.8	3.2	2.4	1.5	1.2	1.3	9.1	1.2	3.6
Max.	**21.9**	**26.0**	**27.8**	**26.5**	**25.6**	**24.9**	**25.9**	**26.3**	**27.8**	**28.6**	**28.1**	**27.9**	**29.3**	**28.4**	**27.5**	**23.2**	**24.2**	**26.0**	**21.1**	**18.5**	**17.4**	**19.3**	**18.7**	**18.8**	**29.3**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.1**	**7.0**	**6.8**	**6.7**	**6.4**	**6.4**	**6.3**	**6.1**	**5.3**	**5.2**	**5.3**	**5.7**	**6.2**	**6.4**	**6.7**	**7.4**	**7.8**	**8.3**	**7.8**	**7.8**	**8.0**	**7.8**	**7.6**	**7.2**			**6.8**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.3	1.5	1.5	1.5	1.4	1.7	1.3	2.1	2.3	2.8	5.0	7.8	9.0	10.8	13.8	15.1	15.9	15.3	13.1	13.4	13.1	12.1	13.9	19.2	19.2	1.3	8.1
2	19.6	18.9	16.3	14.3	17.2	15.2	13.8	17.0	14.5	16.1	15.3	17.2	19.2	16.5	17.0	16.6	16.6	17.6	16.0	15.7	14.6	14.8	14.7	14.5	19.6	13.8	16.2
3	14.6	13.7	15.7	20.3	18.4	18.2	18.0	19.7	18.4	15.1	11.5	11.5	10.9	13.4	14.0	11.6	12.4	8.0	5.7	7.2	7.5	7.0	8.5	8.8	20.3	5.7	12.9
4	11.0	9.5	6.6	7.7	7.4	5.5	5.1	4.5	3.8	3.7	4.9	3.7	2.3	2.8	3.0	3.1	2.4	2.5	3.0	5.0	5.4	4.2	4.3	5.3	11.0	2.3	4.9
5	4.6	4.3	4.9	5.4	6.7	7.1	7.5	6.0	6.1	5.9	4.1	2.8	2.2	2.3	2.8	5.6	5.2	4.1	3.3	4.2	5.1	6.1	3.3	3.2	7.5	2.2	4.7
6	6.0	8.6	5.4	3.3	4.0	3.9	4.8	4.2	3.6	3.7	5.0	5.8	7.4	8.9	8.6	9.7	9.7	8.1	8.8	10.1	10.9	9.3	8.9	9.8	10.9	3.3	7.0
7	10.0	9.4	11.3	11.2	8.9	7.9	9.0	11.8	14.4	13.7	15.1	15.0	13.7	12.2	11.9	10.9	10.3	9.1	8.3	7.9	7.7	6.0	5.4	5.1	15.1	5.1	10.3
8	4.3	4.8	3.7	3.6	5.3	6.7	7.0	7.2	8.3	8.9	8.9	7.4	6.2	7.0	7.2	8.1	7.8	7.2	9.0	8.7	8.8	8.6	7.5	7.8	9.0	3.6	7.1
9	7.0	6.2	7.6	5.4	6.4	7.5	8.4	8.6	9.9	10.6	9.6	9.3	10.9	11.7	10.8	10.4	10.5	11.7	12.4	12.9	11.8	11.8	14.6	12.2	14.6	5.4	9.9
10	9.6	9.2	7.3	8.4	9.5	10.7	10.9	10.5	13.0	10.1	9.1	10.2	8.8	6.5	6.1	5.8	7.6	9.4	10.3	9.4	9.7	10.3	10.5	9.6	13.0	5.8	9.3
11	7.8	6.5	7.6	8.7	7.0	8.8	9.3	7.8	9.1	10.7	9.5	7.6	6.2	6.6	7.6	8.1	9.3	8.5	10.2	9.5	9.2	8.7	9.4	9.1	10.7	6.2	8.5
12	9.0	9.1	8.7	7.8	7.5	9.0	13.9	14.9	16.7	17.4	17.7	18.0	18.4	19.9	18.7	18.5	16.6	20.0	16.9	16.0	15.0	16.7	18.0	16.3	20.0	7.5	15.0
13	15.3	14.2	13.0	10.9	11.4	11.1	10.5	8.8	8.5	8.1	7.8	6.8	5.9	5.7	6.6	6.4	6.6	6.0	5.5	4.5	3.9	3.6	3.7	3.2	15.3	3.2	7.8
14	3.4	3.1	2.2	1.7	1.8	0.9	1.7	2.2	1.7	2.7	2.7	4.0	4.4	4.4	4.1	4.3	4.2	4.7	4.8	5.1	6.2	6.6	6.4	6.2	6.6	0.9	3.7
15	6.9	5.6	5.6	5.8	5.6	6.2	6.8	6.7	7.3	6.7	8.6	9.0	10.3	10.6	12.4	14.5	12.5	11.1	10.3	11.5	12.1	11.7	12.0	11.4	14.5	5.6	9.2
16	12.3	13.4	15.5	15.3	16.2	18.3	16.9	16.4	18.9	21.7	20.9	21.5	20.5	23.2	25.4	24.9	24.5	24.4	24.6	21.1	18.4	16.8	16.0	13.4	25.4	12.3	19.2
17	13.4	11.7	13.0	15.4	14.7	15.8	15.4	11.8	9.7	11.6	11.3	10.8	12.1	11.3	9.9	10.2	9.7	10.7	11.4	10.0	11.0	11.6	12.1	13.5	15.8	9.7	12.0
18	11.7	10.3	8.2	7.5	7.1	5.8	5.0	5.1	4.5	4.7	3.4	2.7	2.3	2.6	3.0	3.1	3.0	2.8	2.6	3.7	2.8	2.7	2.2	2.1	11.7	2.1	4.5
19	2.5	3.3	4.2	4.4	4.8	4.9	4.4	5.5	5.4	5.9	6.2	6.0	7.1	8.7	8.9	9.0	9.6	9.5	9.9	6.2	5.9	5.7	5.8	4.4	9.9	2.5	6.2
20	4.3	3.7	4.7	4.5	5.3	5.8	5.7	5.1	7.5	7.1	7.9	11.4	13.6	14.6	15.1	14.1	15.1	14.4	15.6	12.6	11.9	12.3	13.0	12.9	15.6	3.7	9.9
21	13.3	16.7	16.5	14.4	13.3	12.7	11.4	10.2	8.1	6.7	5.3	4.7	4.8	4.7	3.7	3.9	3.8	4.6	5.3	3.6	3.2	4.5	6.6	7.1	16.7	3.2	7.9
22	6.6	5.9	4.4	4.6	2.4	1.4	2.2	2.7	3.2	3.2	2.8	2.7	4.3	5.0	4.9	5.1	3.1	3.4	3.5	3.9	3.6	4.2	4.1	3.2	6.6	1.4	3.8
23	3.7	3.9	3.5	3.1	4.5	4.4	3.6	4.4	5.0	5.8	5.9	6.5	6.7	7.3	8.6	8.4	6.8	6.5	5.8	5.4	6.3	6.1	3.0	1.1	8.6	1.1	5.3
24	2.4	3.2	3.8	2.7	2.7	4.3	5.5	5.6	7.0	6.8	6.8	6.2	7.1	6.9	9.4	10.4	8.6	7.8	12.0	12.6	11.0	13.2	15.1	13.8	15.1	2.4	7.7
25	12.2	11.9	11.6	10.8	9.4	10.4	9.7	9.1	8.6	9.1	10.2	11.2	11.7	11.6	11.4	10.3	10.1	9.7	9.4	8.8	8.7	8.6	7.8	7.0	12.2	7.0	10.0
26	5.9	4.1	4.1	3.2	2.8	3.3	5.3	7.1	6.5	5.7	4.5	4.2	5.3	3.6	3.2	3.8	3.2	3.7	4.5	4.2	4.2	5.4	6.4	6.9	7.1	2.8	4.6
27	6.4	5.8	5.3	6.3	6.7	6.8	5.7	6.2	6.5	5.6	4.9	5.4	4.0	3.2	3.4	3.9	5.2	5.6	5.5	6.0	4.8	3.8	2.0	2.0	6.8	2.0	5.0
28	3.1	4.1	4.5	5.7	5.2	4.9	5.1	5.5	6.7	7.1	7.1	7.7	10.0	10.4	8.7	9.8	10.4	9.6	9.5	10.0	9.7	9.6	10.0	9.5	10.4	3.1	7.7
29	9.8	8.5	8.7	8.6	9.9	8.9	9.3	12.3	12.3	14.2	12.9	10.6	9.6	9.2	9.9	10.5	10.3	10.7	11.1	11.6	10.6	11.4	11.8	9.2	14.2	8.5	10.5
30	7.3	7.0	8.2	8.4	8.6	7.7	8.6	7.6	8.4	8.5	8.2	8.2	9.2	10.6	11.4	10.5	10.7	12.1	10.6	9.5	9.3	8.0	6.7	6.1	12.1	6.1	8.8
31	8.5	6.6	6.2	7.0	6.3	7.9	6.2	7.5	8.0	8.1	8.4	7.0	6.3	7.4	6.7	6.7	7.6	7.8	7.9	7.4	7.0	6.8	6.2	5.2	8.5	5.2	7.1
Max.	**19.6**	**18.9**	**16.5**	**20.3**	**18.4**	**18.3**	**18.0**	**19.7**	**18.9**	**21.7**	**20.9**	**21.5**	**20.5**	**23.2**	**25.4**	**24.9**	**24.5**	**24.4**	**24.6**	**21.1**	**18.4**	**16.8**	**18.0**	**19.2**	**25.4**		
Min.	**1.3**	**1.5**	**1.5**	**1.5**	**1.4**	**0.9**	**1.3**	**2.1**	**1.7**	**2.7**	**2.7**	**2.7**	**2.2**	**2.3**	**2.8**	**3.1**	**2.4**	**2.5**	**2.6**	**3.6**	**2.8**	**2.7**	**2.0**	**1.1**		**0.9**	
Avg.	**8.2**	**7.9**	**7.7**	**7.7**	**7.7**	**7.9**	**8.0**	**8.2**	**8.5**	**8.6**	**8.4**	**8.5**	**8.7**	**9.0**	**9.3**	**9.5**	**9.3**	**9.2**	**9.2**	**9.0**	**8.7**	**8.7**	**8.7**	**8.3**			**8.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.4	5.3	5.4	4.6	2.8	1.8	1.8	1.1	1.0	1.6	1.8	1.7	1.5	1.6	2.7	3.3	4.0	4.4	4.3	4.2	4.8	4.8	5.9	5.9	5.9	1.0	3.4
2	6.6	7.8	9.4	10.4	9.9	10.2	10.4	10.7	9.9	9.3	8.9	8.6	7.9	8.2	8.2	7.8	7.7	6.0	4.4	3.8	2.3	1.8	2.2	2.7	10.7	1.8	7.3
3	3.0	3.8	4.1	4.6	5.6	4.5	4.3	4.0	4.2	3.5	2.8	1.9	1.8	3.8	4.5	5.4	6.1	8.0	8.8	9.6	9.5	9.5	9.2	10.5	10.5	1.8	5.5
4	11.1	10.8	10.6	9.0	8.5	8.7	7.6	8.0	8.5	7.8	6.1	5.4	6.0	6.7	6.1	5.6	6.8	6.8	7.9	7.8	7.1	5.3	5.0	4.8	11.1	4.8	7.4
5	5.0	4.6	4.1	3.3	1.8	2.5	2.8	3.7	4.6	5.7	5.7	6.3	6.0	6.7	7.3	7.1	7.9	8.1	8.6	9.2	8.7	9.0	8.9	8.6	9.2	1.8	6.1
6	7.9	8.1	8.7	8.2	8.6	8.8	9.0	7.7	8.3	8.5	5.1	4.5	8.1	9.3	9.2	8.5	9.9	11.7	10.0	8.7	8.6	8.2	6.9	6.5	11.7	4.5	8.3
7	7.0	7.2	7.8	7.4	8.0	7.6	7.2	7.7	7.6	8.4	7.4	7.2	7.6	8.9	7.8	7.9	8.0	7.3	8.1	8.0	8.1	7.2	7.8	7.8	8.9	7.0	7.7
8	7.8	7.3	6.6	7.0	7.7	6.3	6.2	5.3	4.8	5.4	6.3	6.2	5.6	7.2	6.9	6.5	6.2	6.0	6.2	7.7	8.2	8.8	7.9	6.3	8.8	4.8	6.7
9	6.0	7.0	6.5	7.3	7.4	8.3	10.3	9.5	8.5	8.3	6.5	6.8	9.4	9.2	10.8	9.2	8.9	8.4	8.3	8.3	7.6	6.8	6.0	5.0	10.8	5.0	7.9
10	4.0	3.5	3.3	2.9	2.2	1.3	0.8	0.4	1.1	2.2	2.5	2.3	2.4	2.1	3.3	3.4	2.5	4.3	5.4	7.1	5.0	4.7	3.9	5.0	7.1	0.4	3.1
11	4.8	3.7	4.7	5.4	5.4	5.1	6.5	6.6	6.2	6.1	6.3	8.6	9.0	8.8	9.3	10.6	11.0	10.5	10.1	8.7	6.5	5.1	5.4	4.9	11.0	3.7	7.1
12	2.7	2.3	2.9	4.2	4.7	5.4	5.4	4.3	3.3	2.7	2.2	2.2	3.0	4.3	4.2	3.7	4.5	4.2	6.7	5.9	4.4	4.7	2.9	1.7	6.7	1.7	3.9
13	2.2	3.6	3.9	4.1	5.0	4.1	4.7	3.9	2.7	1.9	1.5	1.6	2.8	3.0	3.0	3.9	4.7	3.1	8.9	10.5	11.6	9.7	6.0	4.5	11.6	1.5	4.6
14	3.8	3.5	4.1	5.0	3.9	4.4	3.8	4.3	6.9	9.3	10.4	8.8	8.3	8.3	8.7	7.7	8.1	9.1	9.0	8.8	8.5	6.4	4.3	4.7	10.4	3.5	6.7
15	5.3	4.6	6.7	6.4	5.7	5.2	4.0	3.4	2.7	3.0	2.5	2.9	2.3	2.7	2.5	3.1	3.3	3.1	2.7	2.3	2.5	3.4	3.5	2.8	6.7	2.3	3.6
16	2.9	4.2	4.4	4.3	5.2	5.9	6.8	6.6	5.0	7.9	8.8	8.5	7.1	6.1	7.6	8.7	9.4	9.2	8.4	9.1	8.4	9.1	9.5	8.4	9.5	2.9	7.2
17	7.5	8.6	9.0	8.1	7.5	7.3	7.1	7.4	7.5	8.3	7.1	8.8	8.8	9.0	9.1	10.6	11.5	13.4	13.4	12.6	12.9	11.7	12.2	11.4	13.4	7.1	9.6
18	11.4	10.4	10.9	9.7	8.7	6.2	4.9	4.7	3.8	4.0	4.1	4.7	5.4	4.9	5.0	4.8	5.0	4.0	3.6	1.9	2.3	1.7	2.0	3.3	11.4	1.7	5.3
19	3.6	4.0	4.1	4.0	3.4	4.0	2.7	3.5	3.2	2.7	1.7	3.1	3.7	4.2	3.9	3.7	3.1	3.2	4.7	4.8	5.0	3.6	3.4	2.4	5.0	1.7	3.6
20	2.3	3.9	4.0	3.8	3.4	2.8	2.8	3.2	3.7	3.7	3.4	3.5	2.9	1.7	2.1	3.4	2.7	3.5	3.6	4.0	3.6	3.8	2.8	1.5	4.0	1.5	3.2
21	1.4	1.7	1.4	2.1	2.5	3.2	3.7	3.7	3.5	4.2	4.6	4.7	4.4	4.1	5.1	4.2	3.8	5.1	6.0	3.1	3.0	4.5	6.0	4.4	6.0	1.4	3.8
22	2.0	1.0	1.5	1.0	1.0	1.0	1.0	1.3	1.7	1.9	2.1	1.9	1.4	2.4	2.3	2.4	2.3	2.3	2.9	3.5	3.3	3.6	3.1	4.0	4.0	1.0	2.1
23	4.0	4.1	3.5	4.0	4.7	5.0	5.9	6.7	5.3	5.4	5.6	4.0	2.9	2.1	2.1	2.3	2.6	2.6	5.0	4.6	5.6	5.3	6.5	5.5	6.7	2.1	4.4
24	2.9	2.5	4.5	4.7	5.4	5.3	5.4	6.1	6.7	5.3	4.4	5.1	5.6	5.5	5.7	6.8	5.9	5.9	5.3	4.8	3.6	6.3	6.5	5.9	6.8	2.5	5.3
25	4.9	4.0	4.2	4.9	4.9	5.3	4.7	5.6	5.0	2.3	1.6	2.6	3.7	4.3	4.5	5.2	6.7	7.0	6.8	7.8	8.1	8.4	8.2	8.9	8.9	1.6	5.4
26	10.5	9.1	7.8	8.0	7.6	4.9	7.5	7.3	8.9	9.3	9.6	9.9	10.7	10.6	9.9	8.6	7.7	7.5	7.1	7.4	7.3	5.8	4.2	4.1	10.7	4.1	8.0
27	3.9	2.8	2.1	1.4	1.8	1.8	2.7	1.8	2.1	2.7	3.6	3.5	2.7	2.6	3.1	3.6	4.3	4.1	4.6	3.8	4.0	3.7	3.3	3.6	4.6	1.4	3.1
28	3.7	3.2	3.0	3.0	2.6	2.8	2.9	2.3	2.3	2.2	3.2	3.1	3.6	3.1	4.5	5.2	5.1	4.8	3.5	4.9	7.9	7.2	7.7	7.6	7.9	2.2	4.1
29	8.6	8.6	8.1	7.6	6.7	6.3	5.4	4.9	3.9	2.2	1.3	2.0	2.9	3.1	4.8	5.8	6.7	8.9	10.3	9.7	8.2	8.1	7.8	4.6	10.3	1.3	6.1
30	3.1	4.1	3.8	3.1	2.4	4.0	2.6	1.7	1.5	1.1	1.4	1.6	1.9	2.7	3.1	4.1	5.3	6.0	6.5	6.2	7.4	14.0	16.9	16.7	16.9	1.1	5.1
31	16.1	18.5	18.9	21.7	21.7	22.3	22.5	21.9	18.0	11.8	12.2	10.9	8.2	10.0	11.9	11.0	12.1	12.3	12.8	13.1	14.5	13.7	13.5	14.7	22.5	8.2	15.2
Max.	**16.1**	**18.5**	**18.9**	**21.7**	**21.7**	**22.3**	**22.5**	**21.9**	**18.0**	**11.8**	**12.2**	**10.9**	**10.7**	**10.6**	**11.9**	**11.0**	**12.1**	**13.4**	**13.4**	**13.1**	**14.5**	**14.0**	**16.9**	**16.7**	**22.5**		
Min.	**1.4**	**1.0**	**1.4**	**1.0**	**1.0**	**1.0**	**0.8**	**0.4**	**1.0**	**1.1**	**1.3**	**1.6**	**1.4**	**1.6**	**2.1**	**2.3**	**2.3**	**2.3**	**2.7**	**1.9**	**2.3**	**1.7**	**2.0**	**1.5**		**0.4**	
Avg.	**5.5**	**5.6**	**5.8**	**5.8**	**5.7**	**5.6**	**5.6**	**5.5**	**5.2**	**5.1**	**4.9**	**4.9**	**5.1**	**5.4**	**5.8**	**5.9**	**6.3**	**6.5**	**6.9**	**6.8**	**6.7**	**6.6**	**6.4**	**6.1**			**5.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.8	14.5	13.5	11.4	9.9	11.1	9.8	10.9	10.2	9.9	11.2	10.4	8.0	7.8	8.4	9.6	8.0	7.4	7.3	7.8	7.4	11.1	12.1	14.1	14.8	7.3	10.3
2	14.2	15.7	17.0	16.7	16.0	15.8	16.9	17.1	17.6	14.9	15.0	15.9	17.9	16.5	15.6	15.0	8.2	7.1	8.2	9.7	8.6	9.7	9.6	9.6	17.9	7.1	13.7
3	9.6	10.7	9.3	9.1	8.3	7.3	6.5	5.8	5.0	4.7	4.1	4.3	4.7	6.8	6.5	6.0	5.5	5.2	5.5	6.4	7.0	7.1	9.8	10.4	10.7	4.1	6.9
4	9.7	8.9	9.3	9.3	9.3	8.5	6.4	5.8	6.8	5.4	4.5	3.9	4.2	4.8	5.2	4.4	4.4	4.4	4.1	3.6	3.4	2.9	3.2	2.8	9.7	2.8	5.6
5	2.8	1.8	1.2	0.7	0.9	1.1	1.3	0.8	1.4	1.9	2.1	3.1	3.4	2.7	3.5	3.7	3.4	1.9	3.4	3.5	2.9	3.1	4.8	5.5	5.5	0.7	2.5
6	6.2	7.8	10.0	11.3	9.9	10.8	13.1	16.2	13.7	13.1	15.3	19.5	22.3	23.4	24.6	19.4	17.6	14.7	14.4	19.7	15.5	15.7	19.0	15.3	24.6	6.2	15.3
7	15.8	15.6	19.6	16.1	11.5	7.9	9.9	11.3	12.5	12.3	12.2	14.5	18.2	15.1	11.7	11.9	12.9	12.4	10.6	11.0	10.9	11.6	12.1	14.1	19.6	7.9	13.0
8	12.1	12.3	11.0	13.1	11.9	12.0	9.7	9.5	8.2	5.7	5.5	6.6	8.8	14.5	19.1	19.1	18.1	20.7	20.1	18.8	13.9	12.1	11.9	14.2	20.7	5.5	12.9
9	13.1	12.8	11.1	10.6	11.2	7.4	6.6	8.2	7.5	9.7	9.7	9.5	9.5	12.2	15.8	15.4	14.8	15.3	14.9	13.6	13.3	12.8	11.8	10.9	15.8	6.6	11.6
10	11.4	13.2	8.4	5.6	5.6	4.2	3.3	4.4	5.3	4.9	5.7	6.8	5.3	4.7	4.7	4.5	4.8	4.9	4.3	6.0	6.0	6.4	6.7	5.5	13.2	3.3	5.9
11	6.9	6.3	6.3	5.8	6.8	6.4	7.0	6.7	5.5	6.1	7.7	7.5	7.0	7.3	7.9	6.4	6.5	7.3	7.1	7.0	8.8	10.3	10.5	13.9	13.9	5.5	7.5
12	15.7	15.8	16.5	20.6	24.3	23.3	22.6	21.9	20.2	20.0	17.6	18.8	21.1	18.9	20.6	19.8	20.3	21.1	21.3	21.5	20.2	20.3	21.9	22.6	24.3	15.7	20.3
13	23.3	21.4	22.7	24.3	23.4	22.7	24.2	23.8	22.6	24.4	26.5	29.2	28.7	25.9	21.0	20.6	20.8	20.5	22.4	21.5	21.6	19.5	20.4	19.4	29.2	19.4	23.0
14	18.5	18.1	17.3	15.1	13.5	14.2	12.5	11.4	11.3	12.7	14.0	13.4	11.4	12.1	12.1	11.2	10.6	9.9	8.2	8.5	8.7	8.7	8.0	8.3	18.5	8.0	12.1
15	8.7	7.2	7.8	7.6	7.4	7.7	7.8	8.5	9.8	10.1	13.5	15.1	14.2	12.4	12.0	12.8	14.9	15.5	15.1	13.8	12.6	13.4	12.6	9.8	15.5	7.2	11.3
16	8.3	5.4	3.3	2.0	2.0	2.5	3.9	3.3	3.3	3.1	3.0	4.3	4.9	6.9	7.3	7.1	6.7	8.3	8.2	8.5	7.8	6.8	6.3	6.2	8.5	2.0	5.4
17	6.1	5.1	4.4	4.1	3.2	5.8	7.6	5.7	3.9	2.3	1.5	3.4	3.6	5.1	6.3	7.7	7.9	10.6	13.4	12.0	10.0	8.6	7.4	9.4	13.4	1.5	6.5
18	11.0	11.4	11.4	12.3	11.8	11.2	10.6	11.0	11.3	12.0	10.8	9.5	6.8	5.0	4.8	5.8	6.0	5.0	3.6	2.8	2.5	3.0	5.0	6.3	12.3	2.5	8.0
19	6.3	5.8	7.0	6.5	6.6	7.9	7.3	7.7	8.3	7.6	5.5	4.9	5.2	5.4	6.1	9.0	8.4	9.4	9.5	8.1	7.1	6.3	5.6	4.2	9.5	4.2	6.9
20	4.4	5.4	5.3	5.8	5.7	5.8	5.1	3.6	3.8	3.0	1.7	1.7	3.8	3.9	5.2	5.3	5.5	5.6	5.0	4.1	3.6	4.1	4.5	3.9	5.8	1.7	4.4
21	3.7	3.5	3.3	3.3	3.4	3.7	3.6	2.8	2.3	2.6	2.2	2.4	2.2	3.2	4.6	6.3	6.3	7.6	8.4	7.6	6.5	6.2	6.3	5.3	8.4	2.2	4.5
22	5.3	5.1	4.2	3.5	3.1	2.8	1.9	2.2	2.5	2.3	2.1	1.9	2.7	2.9	4.3	5.6	7.1	7.8	9.8	9.7	9.3	9.4	9.7	10.4	10.4	1.9	5.2
23	10.0	9.1	8.9	11.8	12.6	14.2	13.8	12.0	11.7	11.2	12.2	12.4	11.1	11.2	12.9	13.6	14.2	12.7	13.9	14.8	13.8	14.0	12.2	10.8	14.8	8.9	12.3
24	9.3	9.7	9.4	10.5	10.2	8.9	7.1	6.4	5.9	5.7	5.9	6.4	7.2	8.0	7.8	7.7	7.6	7.9	7.4	5.9	5.1	4.7	4.8	4.5	10.5	4.5	7.2
25	4.1	5.1	5.3	4.5	4.3	4.7	5.7	5.3	6.1	5.6	4.8	3.7	2.7	2.4	2.8	4.0	4.9	5.5	5.2	4.5	3.4	4.0	3.3	3.1	6.1	2.4	4.4
26	2.5	2.6	3.5	2.8	1.8	1.8	1.6	2.1	2.0	3.2	3.2	1.9	1.5	1.4	2.5	1.6	1.3	2.5	2.9	3.4	4.6	5.2	4.8	4.5	5.2	1.3	2.7
27	5.2	5.6	5.5	4.6	7.2	7.6	7.5	7.2	8.3	8.3	8.8	9.1	9.4	9.1	7.3	8.5	10.9	10.3	8.9	7.7	8.6	7.8	8.0	7.7	10.9	4.6	7.9
28	6.7	7.0	7.1	7.0	6.1	6.1	5.1	3.9	3.2	2.7	1.8	1.1	1.4	1.4	1.1	2.0	1.7	3.6	3.8	4.0	5.7	7.6	8.0	9.3	9.3	1.1	4.5
29	12.1	14.4	12.0	6.1	6.2	8.3	9.2	10.1	11.3	11.2	10.8	10.7	10.4	10.9	11.3	10.5	7.8	7.5	8.6	6.9	5.8	6.2	6.4	5.2	14.4	5.2	9.2
30	4.4	2.5	1.1	2.3	3.5	4.3	4.6	5.6	5.5	5.4	5.7	5.8	5.8	4.7	4.5	3.9	3.4	2.6	2.4	3.1	2.6	2.2	1.3	1.1	5.8	1.1	3.7
Max.	**23.3**	**21.4**	**22.7**	**24.3**	**24.3**	**23.3**	**24.2**	**23.8**	**22.6**	**24.4**	**26.5**	**29.2**	**28.7**	**25.9**	**24.6**	**20.6**	**20.8**	**21.1**	**22.4**	**21.5**	**21.6**	**20.3**	**21.9**	**22.6**	**29.2**		
Min.	**2.5**	**1.8**	**1.1**	**0.7**	**0.9**	**1.1**	**1.3**	**0.8**	**1.4**	**1.9**	**1.5**	**1.1**	**1.4**	**1.4**	**1.1**	**1.6**	**1.3**	**1.9**	**2.4**	**2.8**	**2.5**	**2.2**	**1.3**	**1.1**		**0.7**	
Avg.	**9.4**	**9.3**	**9.1**	**8.8**	**8.6**	**8.5**	**8.4**	**8.4**	**8.2**	**8.1**	**8.2**	**8.6**	**8.8**	**8.9**	**9.3**	**9.3**	**9.0**	**9.2**	**9.3**	**9.2**	**8.6**	**8.7**	**8.9**	**8.9**			**8.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	2.4	2.6	3.1	3.6	3.9	4.6	5.6	6.6	6.9	8.4	7.9	9.9	12.1	12.3	11.4	9.4	9.7	9.0	8.5	11.0	9.2	8.9	5.4	12.3	1.2	7.2
2	4.3	5.5	4.6	4.7	2.9	3.5	2.7	3.8	3.5	2.1	2.0	1.9	1.2	1.1	2.0	3.4	4.0	4.5	4.7	5.1	6.9	10.4	9.3	9.0	10.4	1.1	4.3
3	8.1	7.5	6.1	5.0	3.8	4.6	4.8	5.1	5.4	5.1	4.7	5.0	4.8	4.4	4.2	3.7	3.6	3.5	2.6	2.8	3.2	2.7	1.9	1.6	8.1	1.6	4.3
4	2.2	1.9	1.5	1.8	1.7	1.7	1.3	1.3	1.3	1.4	1.3	0.7	0.8	1.0	1.1	1.4	1.2	1.5	0.7	0.9	1.0	1.3	1.6	1.4	2.2	0.7	1.3
5	1.8	1.5	1.3	2.4	3.6	3.9	3.4	2.5	1.3	1.1	1.0	1.0	1.1	0.9	0.8	1.1	1.1	1.4	1.3	1.5	1.3	1.2	1.0	0.5	3.9	0.5	1.6
6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.2
7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.9	3.3	4.2	5.4	6.4	7.2	8.5	7.7	6.3	9.4	9.5	9.5	0.3	3.0
9	9.6	14.2	16.1	18.9	21.0	22.6	23.7	25.6	24.1	26.5	28.7	30.3	28.7	29.5	32.2	31.2	27.4	28.0	29.5	29.3	26.7	25.0	23.8	23.6	32.2	9.6	24.8
10	19.7	19.9	16.2	10.3	10.7	9.8	8.4	8.1	7.8	6.1	7.9	8.3	8.1	6.8	8.4	10.0	13.0	13.3	12.4	9.3	10.0	11.1	10.6	10.1	19.9	6.1	10.7
11	11.1	12.3	14.4	16.4	16.2	17.8	16.9	16.7	6.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	17.8	0.2	5.5
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
16	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
18	0.4	0.5	0.4	0.4	0.4	0.6	0.5	6.0	13.2	14.2	14.3	10.9	8.4	6.8	5.4	5.5	6.5	7.6	7.9	9.2	7.8	8.1	6.1	5.8	14.3	0.4	6.1
19	7.0	8.3	9.4	9.8	9.3	8.3	7.4	6.1	6.1	5.6	5.4	5.5	4.7	4.1	2.8	2.5	2.1	1.8	1.6	2.7	3.2	3.2	4.0	3.7	9.8	1.6	5.2
20	4.4	4.4	4.7	5.7	5.3	4.4	4.8	3.6	4.3	5.2	5.6	5.6	4.7	4.6	3.8	3.8	3.8	3.1	2.3	1.6	1.7	2.8	2.8	2.3	5.7	1.6	4.0
21	2.3	2.1	2.2	1.4	1.0	1.1	2.3	3.5	3.0	3.2	4.2	4.3	5.0	5.7	8.6	11.3	10.6	11.0	11.6	12.9	12.6	10.0	7.9	7.4	12.9	1.0	6.1
22	5.9	5.2	5.5	4.5	5.8	6.5	6.4	7.5	7.7	7.4	7.5	7.2	6.6	6.8	6.4	5.3	4.5	4.6	4.8	5.8	5.9	5.7	5.9	4.1	7.7	4.1	6.0
23	3.9	4.3	4.1	5.0	5.7	6.7	7.7	8.1	9.1	10.0	11.8	13.6	15.0	15.5	15.2	12.1	13.0	12.6	10.2	9.7	10.0	10.7	10.7	11.3	15.5	3.9	9.8
24	12.7	13.3	10.5	9.6	9.2	9.4	10.6	10.3	9.5	8.2	7.3	6.3	4.8	2.7	4.2	6.5	7.7	8.3	8.0	7.6	4.7	3.7	5.3	5.8	13.3	2.7	7.8
25	8.1	9.8	10.6	11.4	9.0	9.3	8.4	7.2	6.3	5.3	5.6	4.7	4.1	4.1	3.7	3.2	2.0	2.8	1.9	1.6	1.5	1.1	1.0	1.0	11.4	1.0	5.1
26	1.5	1.6	1.6	1.9	2.1	2.1	2.0	1.8	2.0	1.4	0.6	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.4	0.3	2.6	2.8	3.0	2.8	3.0	0.2	1.3
27	2.6	2.2	1.7	2.1	2.0	2.1	2.0	2.0	2.3	1.9	1.0	0.6	1.8	1.8	1.3	1.5	1.5	1.4	1.3	1.3	1.3	0.6	0.3	0.6	2.6	0.3	1.5
28	0.9	1.2	1.4	1.7	2.7	4.6	5.7	6.1	6.1	6.8	7.5	6.8	6.0	5.2	5.7	5.0	5.0	4.2	3.2	2.7	3.4	2.4	2.1	1.5	7.5	0.9	4.1
29	0.8	1.1	1.8	2.3	2.7	2.4	2.0	1.1	1.4	2.0	3.4	4.4	5.6	7.2	7.4	8.0	8.4	8.5	8.6	9.0	10.4	12.0	10.8	10.5	12.0	0.8	5.5
30	9.8	9.8	9.6	9.6	8.2	10.2	8.8	8.7	6.8	7.3	9.8	7.3	3.4	4.4	5.3	6.5	6.7	6.4	6.9	5.9	5.5	5.3	4.9	4.3	10.2	3.4	7.1
31	3.8	3.8	3.0	2.8	1.7	1.7	0.2	0.2	0.2	0.2	0.2	1.8	1.1	0.9	1.3	1.7	2.0	1.8	2.3	1.8	1.8	1.9	1.5	1.2	3.8	0.2	1.6
Max.	**19.7**	**19.9**	**16.2**	**18.9**	**21.0**	**22.6**	**23.7**	**25.6**	**24.1**	**26.5**	**28.7**	**30.3**	**28.7**	**29.5**	**32.2**	**31.2**	**27.4**	**28.0**	**29.5**	**29.3**	**26.7**	**25.0**	**23.8**	**23.6**	**32.2**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**4.0**	**4.3**	**4.2**	**4.3**	**4.2**	**4.5**	**4.4**	**4.6**	**4.4**	**4.2**	**4.5**	**4.4**	**4.1**	**4.1**	**4.4**	**4.6**	**4.6**	**4.7**	**4.5**	**4.5**	**4.6**	**4.5**	**4.4**	**4.1**			**4.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.9	2.9	2.9	2.4	1.6	2.5	3.3	3.1	3.5	4.3	4.6	3.9	5.4	4.7	4.3	5.3	4.9	5.2	4.8	5.5	5.1	5.4	6.7	6.2	6.7	1.6	4.2
2	5.9	5.1	5.0	3.9	4.1	3.7	3.3	3.8	3.4	3.3	3.3	3.5	4.5	4.8	5.3	4.8	4.9	5.0	3.6	3.4	3.8	3.1	4.1	4.2	5.9	3.1	4.2
3	4.1	3.9	4.2	4.2	3.4	0.7	0.5	0.6	0.6	2.0	3.0	3.0	1.9	0.5	0.5	0.6	0.4	0.7	0.3	1.3	2.5	2.7	2.5	2.4	4.2	0.3	1.9
4	2.1	2.0	2.2	2.6	2.8	2.6	3.2	2.7	2.7	2.4	2.0	1.8	1.5	1.4	1.3	1.2	1.1	1.0	1.0	1.2	1.2	1.2	1.3	1.3	3.2	1.0	1.8
5	1.1	1.2	1.2	1.1	0.8	0.4	1.0	1.5	1.3	2.2	2.2	2.2	1.8	1.4	1.1	1.4	1.6	1.5	1.7	1.7	1.6	1.8	1.8	1.8	2.2	0.4	1.5
6	1.8	1.7	1.8	1.7	1.7	1.8	2.3	2.5	2.7	3.1	3.1	3.1	2.7	3.5	4.2	3.8	4.3	3.9	3.7	4.0	4.9	4.3	5.4	5.4	5.4	1.7	3.2
7	5.2	6.6	7.4	7.6	5.8	6.0	6.1	5.8	3.9	5.3	6.1	5.8	4.5	4.2	4.7	5.4	5.1	5.1	6.3	5.8	6.1	4.6	3.6	5.0	7.6	3.6	5.5
8	4.6	3.8	3.7	3.1	0.4	0.5	0.3	0.2	0.2	0.2	0.4	0.5	0.6	0.7	0.6	0.5	0.3	0.3	0.8	0.3	0.2	0.2	0.2	0.4	4.6	0.2	1.0
9	0.5	0.3	6.2	10.0	15.2	20.3	23.9	23.2	21.4	14.4	12.4	11.5	13.5	13.0	17.4	19.3	17.6	14.0	13.1	17.1	18.7	18.2	18.9	21.2	23.9	0.3	15.1
10	23.7	22.4	15.9	10.8	10.7	12.2	12.4	11.2	10.9	7.7	11.3	7.7	6.2	4.6	3.6	2.9	6.5	10.4	9.7	7.2	8.1	9.5	8.0	7.5	23.7	2.9	10.1
11	6.2	5.9	5.8	5.5	5.7	4.3	3.8	4.0	3.6	3.2	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	6.2	0.2	2.2
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
16	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
20	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.9	0.8	1.1	1.0	0.8	0.6	0.2	0.4	0.2	1.1	0.2	0.4
21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
22	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.7	3.5	4.0	3.2	2.6	3.5	3.0	4.0	0.2	1.1
23	3.8	4.4	4.7	3.1	2.7	2.6	2.2	1.4	1.0	2.5	3.2	2.8	2.9	3.0	3.6	3.5	3.3	2.9	3.1	3.4	3.1	3.0	3.5	3.3	4.7	1.0	3.0
24	3.3	1.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.3	0.2	0.5
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
26	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
27	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
28	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
30	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Max.	**23.7**	**22.4**	**15.9**	**10.8**	**15.2**	**20.3**	**23.9**	**23.2**	**21.4**	**14.4**	**12.4**	**11.5**	**13.5**	**13.0**	**17.4**	**19.3**	**17.6**	**14.0**	**13.1**	**17.1**	**18.7**	**18.2**	**18.9**	**21.2**	**23.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**2.3**	**2.2**	**2.2**	**2.0**	**2.0**	**2.1**	**2.2**	**2.1**	**2.0**	**1.8**	**1.9**	**1.7**	**1.7**	**1.5**	**1.7**	**1.8**	**1.8**	**1.9**	**1.9**	**2.0**	**2.1**	**2.0**	**2.1**	**2.2**			**2.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (Climatronics) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.7	3.9	5.5	5.5	0.2	0.7
2	6.1	7.4	9.5	7.5	6.8	7.9	8.8	12.4	13.2	17.0	22.2	26.0	24.0	25.4	24.2	24.5	26.1	29.1	30.1	29.5	26.8	23.3	24.9	26.9	30.1	6.1	19.2
3	25.3	24.9	28.0	24.2	24.3	26.7	28.7	29.8	26.8	28.6	32.5	35.7	35.2	35.5	36.5	40.7	36.1	35.9	33.7	33.5	34.4	33.5	31.0	31.2	40.7	24.2	31.4
4	28.7	27.3	25.8	23.1	22.9	24.8	23.0	21.8	19.9	21.3	22.1	23.1	22.2	21.7	23.4	23.2	21.8	20.6	21.5	19.2	17.6	18.5	18.9	22.1	28.7	17.6	22.3
5	23.5	21.0	20.4	19.0	18.5	18.7	19.0	21.4	19.6	21.9	21.4	21.6	21.6	21.7	19.2	17.3	15.7	16.3	16.4	17.5	16.4	14.2	12.4	12.4	23.5	12.4	18.6
6	12.3	15.2	15.6	14.7	16.2	15.0	11.8	9.8	9.2	8.9	8.3	7.6	4.8	4.4	4.1	3.1	2.7	2.3	2.5	2.5	1.9	1.3	0.7	1.4	16.2	0.7	7.3
7	1.8	1.5	1.9	2.1	2.6	3.0	2.3	2.1	2.1	1.9	2.0	1.4	1.1	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	3.0	0.2	1.2
8	0.3	0.2	0.3	3.0	4.2	5.0	5.0	5.7	11.1	14.3	15.0	12.9	14.3	15.3	21.5	18.4	18.1	13.9	10.3	10.8	11.3	10.5	10.3	8.7	21.5	0.2	10.0
9	8.6	7.5	7.3	5.8	4.6	4.1	3.9	3.7	3.5	2.3	1.0	2.0	3.1	3.1	3.8	4.0	3.5	3.1	3.9	3.4	4.9	5.5	6.3	6.0	8.6	1.0	4.4
10	5.7	4.5	5.2	6.5	7.5	7.5	7.6	7.4	7.0	6.4	5.0	3.6	3.0	2.6	2.4	2.3	2.3	2.2	2.0	1.6	1.6	1.6	1.6	1.7	7.6	1.6	4.1
11	1.6	1.4	1.5	2.1	1.6	1.6	1.3	1.0	1.3	2.3	3.5	3.9	3.5	2.5	1.2	0.2	0.2	0.2	0.3	0.4	0.2	0.5	0.2	0.2	3.9	0.2	1.4
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2
13	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
14	0.3	5.0	8.7	12.0	12.8	15.6	14.9	16.9	13.1	17.7	19.4	18.8	18.1	15.1	17.0	19.0	20.5	19.7	18.4	20.1	25.2	24.2	20.9	21.2	25.2	0.3	16.4
15	21.5	20.0	20.0	19.9	19.8	19.0	18.4	16.7	13.5	14.7	15.0	10.2	6.5	5.7	5.8	3.0	0.8	0.2	0.2	0.2	2.5	3.2	3.5	3.5	21.5	0.2	10.2
16	3.2	2.8	3.0	4.0	4.4	4.5	4.8	6.3	7.5	9.8	10.7	10.2	9.6	9.1	7.5	8.1	7.7	6.1	5.9	6.3	5.4	5.9	6.0	6.6	10.7	2.8	6.5
17	9.7	12.3	12.0	14.1	15.9	17.4	16.6	17.0	17.1	17.3	17.5	16.7	16.8	18.2	19.6	19.6	21.8	22.2	22.0	22.1	20.8	22.5	21.1	21.3	22.5	9.7	18.0
18	21.8	23.0	23.4	20.9	23.3	26.2	23.5	23.5	24.7	24.4	24.1	20.2	19.6	22.8	24.6	25.4	25.4	25.1	22.3	25.3	25.3	24.2	23.3	25.7	26.2	19.6	23.7
19	24.9	24.6	22.4	22.2	20.9	21.7	21.2	20.7	21.5	22.7	18.6	18.0	15.9	10.9	8.9	7.9	8.7	10.5	9.9	10.7	12.5	9.8	9.9	9.9	24.9	7.9	16.0
20	8.0	10.6	9.5	11.5	10.2	8.5	7.9	7.4	7.0	7.8	7.4	6.4	6.9	8.4	8.3	5.5	4.8	3.2	3.2	1.8	1.8	1.8	2.4	1.9	11.5	1.8	6.3
21	2.6	3.4	4.0	5.0	5.5	4.7	3.4	3.6	4.2	4.4	4.1	3.9	3.6	4.6	5.0	5.0	4.6	3.7	3.9	3.5	2.9	2.5	1.8	1.4	5.5	1.4	3.8
22	2.5	3.8	5.7	8.5	9.2	10.7	12.1	12.5	11.2	11.6	10.8	8.5	5.5	6.5	7.8	7.3	7.0	6.3	6.1	6.8	7.0	6.8	7.0	7.7	12.5	2.5	7.9
23	8.6	9.6	9.8	9.1	9.2	8.6	7.2	5.0	2.8	5.7	5.4	5.2	4.2	3.8	4.4	4.7	4.6	4.8	4.7	5.3	5.9	5.5	5.0	5.0	9.8	2.8	6.0
24	4.6	3.9	2.8	2.1	1.7	1.5	1.4	1.8	1.7	1.0	1.2	1.5	1.1	0.9	0.8	1.0	1.2	0.8	0.3	0.2	0.2	0.3	0.3	0.3	4.6	0.2	1.4
25	0.4	0.9	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.9	0.2	0.3
26	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
27	0.3	0.4	0.2	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.2	0.3
28	0.4	0.7	0.5	0.7	1.0	0.8	0.9	0.8	0.8	0.5	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	1.0	0.3	0.5
29	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
30	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
31	0.3	0.3	0.3	0.3	0.6	0.3	0.8	0.5	0.3	0.6	1.1	0.8	0.4	0.5	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	1.1	0.3	0.5
Max.	**28.7**	**27.3**	**28.0**	**24.2**	**24.3**	**26.7**	**28.7**	**29.8**	**26.8**	**28.6**	**32.5**	**35.7**	**35.2**	**35.5**	**36.5**	**40.7**	**36.1**	**35.9**	**33.7**	**33.5**	**34.4**	**33.5**	**31.0**	**31.2**	**40.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.2**	**7.6**	**7.7**	**7.8**	**7.9**	**8.3**	**8.0**	**8.1**	**7.8**	**8.6**	**8.7**	**8.4**	**7.9**	**7.8**	**8.1**	**7.9**	**7.6**	**7.4**	**7.1**	**7.2**	**7.3**	**7.1**	**6.9**	**7.2**			**7.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**
Avg.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**			**0.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	6.5	4.9	4.7	5.4	5.7	4.4	5.5	6.5	0.0	1.7
12	4.4	3.2	3.2	4.1	3.5	4.5	5.0	4.9	4.4	3.2	3.6	4.7	5.1	4.3	5.5	7.1	6.3	6.1	5.5	4.5	5.7	6.5	7.9	10.0	10.0	3.2	5.1
13	17.7	22.2	23.7	26.4	26.3	26.3	23.7	24.8	27.3	31.0	31.5	30.1	28.0	25.9	25.0	25.1	22.5	21.6	21.3	22.7	23.1	22.2	23.2	22.9	31.5	17.7	24.8
14	22.5	23.8	24.1	23.7	24.3	22.7	19.7	13.4	14.5	15.9	19.2	19.1	17.5	17.1	16.4	17.7	17.0	17.5	14.5	11.3	7.6	5.4	4.4	7.6	24.3	4.4	16.5
15	7.9	5.5	7.6	9.8	12.3	9.3	9.3	7.2	5.4	4.7	3.3	1.6	1.1	0.9	1.9	2.3	0.8	0.9	1.5	2.4	3.3	9.0	15.8	15.6	15.8	0.8	5.8
16	19.0	25.3	27.0	24.0	24.4	25.2	25.6	26.3	23.8	21.0	20.6	20.1	19.4	17.5	15.8	12.4	11.3	11.9	9.2	8.2	8.6	7.1	9.9	7.7	27.0	7.1	17.5
17	6.1	6.4	7.4	7.8	16.8	21.2	21.0	20.0	18.8	15.2	10.9	11.2	12.9	14.5	13.0	11.9	9.4	21.7	26.6	25.6	25.8	26.4	27.0	26.4	27.0	6.1	16.8
18	24.2	25.8	23.4	23.8	23.7	24.5	25.6	26.3	24.3	25.8	22.8	22.3	20.6	19.1	19.8	17.6	17.0	14.9	13.1	12.8	13.7	14.0	14.9	15.8	26.3	12.8	20.2
19	14.8	15.4	10.9	6.0	6.9	7.6	7.6	12.1	10.1	8.5	7.6	7.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4	0.0	4.8
20	0.0	0.0	0.0	0.0	0.0	12.4	22.9	25.1	27.3	24.9	22.6	20.7	21.5	24.2	22.6	18.6	14.5	9.1	8.6	9.5	10.6	8.4	9.0	12.1	27.3	0.0	13.5
21	11.9	10.5	9.3	11.4	13.6	12.4	11.0	11.8	12.4	12.1	13.5	14.1	12.8	10.7	11.0	8.3	8.3	7.4	6.6	6.0	5.3	6.0	6.5	6.2	14.1	5.3	9.9
22	6.4	6.1	7.8	7.7	8.3	7.7	7.4	5.3	7.6	8.7	7.3	6.8	6.5	8.4	16.1	21.1	21.3	19.3	19.9	18.5	16.8	16.5	14.3	13.8	21.3	5.3	11.7
23	11.1	5.3	5.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.9
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	8.1	8.1	0.0	0.6
26	5.6	5.9	6.5	8.3	7.1	5.1	5.9	6.4	6.4	5.6	7.1	6.3	7.3	7.8	8.0	7.5	7.3	6.8	5.7	5.0	4.7	5.0	6.7	5.9	8.3	4.7	6.4
27	4.4	3.0	2.3	2.5	1.4	1.6	1.2	0.3	1.2	2.5	3.8	3.8	3.1	2.1	2.5	3.4	4.4	6.2	7.6	7.8	7.7	7.9	7.1	6.8	7.9	0.3	3.9
28	6.8	5.3	6.2	6.9	7.3	7.7	8.2	8.2	6.8	6.2	6.2	6.4	5.9	5.0	5.1	4.6	3.2	1.5	1.0	1.6	2.8	1.6	2.3	3.0	8.2	1.0	5.0
29	2.2	2.4	3.5	3.1	3.0	2.7	2.1	3.0	4.5	3.8	3.4	2.2	3.0	3.4	3.5	4.5	4.4	4.8	4.5	5.3	6.3	5.6	4.2	3.8	6.3	2.1	3.7
Max.	**24.2**	**25.8**	**27.0**	**26.4**	**26.3**	**26.3**	**25.6**	**26.3**	**27.3**	**31.0**	**31.5**	**30.1**	**28.0**	**25.9**	**25.0**	**25.1**	**22.5**	**21.7**	**26.6**	**25.6**	**25.8**	**26.4**	**27.0**	**26.4**	**31.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**5.7**	**5.7**	**5.8**	**5.7**	**6.2**	**6.6**	**6.8**	**6.7**	**6.7**	**6.5**	**6.3**	**6.1**	**5.7**	**5.5**	**5.7**	**5.6**	**5.2**	**5.4**	**5.2**	**5.0**	**5.1**	**5.1**	**5.6**	**5.9**			**5.8**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.3	2.9	2.4	2.4	1.8	2.2	3.7	4.5	5.1	6.0	6.1	8.6	10.9	13.1	11.6	10.9	11.9	12.3	9.8	10.6	11.7	12.9	13.6	16.3	16.3	1.8	8.1
2	15.3	15.6	16.6	19.7	25.4	21.8	19.7	21.8	17.5	14.6	12.3	10.6	10.3	8.2	7.0	5.3	5.7	8.6	9.3	6.5	7.8	10.5	10.2	9.6	25.4	5.3	12.9
3	8.8	9.9	8.7	15.0	18.7	23.9	24.1	27.4	28.8	29.6	31.5	32.9	34.9	33.4	30.9	31.1	30.4	30.0	23.1	22.8	23.4	20.7	19.8	21.5	34.9	8.7	24.2
4	21.9	21.0	22.8	21.7	19.7	19.6	24.9	26.1	25.6	26.0	30.0	29.3	30.9	32.3	30.5	29.9	30.2	30.2	29.8	28.2	26.6	29.4	29.2	28.4	32.3	19.6	26.8
5	27.5	28.4	30.2	29.9	29.6	32.6	29.5	27.8	24.6	25.4	34.7	32.2	29.8	29.5	29.1	9.6	15.0	21.9	22.1	23.4	28.5	25.5	25.6	26.1	34.7	9.6	26.6
6	24.7	23.4	21.0	19.6	18.6	18.4	18.5	16.7	16.6	16.0	14.2	13.8	15.7	16.7	18.5	20.2	20.6	18.5	19.1	13.3	6.7	6.7	9.4	9.5	24.7	6.7	16.5
7	8.8	8.0	7.0	3.4	0.2	0.0	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	5.7	7.3	7.2	6.6	6.0	9.7	9.7	0.0	3.1
8	11.4	10.1	9.5	7.6	6.4	1.4	0.1	0.0	1.5	4.3	5.5	13.6	13.3	10.7	9.7	7.7	8.3	10.2	10.8	10.3	11.3	11.6	11.5	10.7	13.6	0.0	8.2
9	10.7	9.8	10.4	11.2	12.5	9.5	9.5	10.3	10.0	7.9	6.7	5.9	4.6	3.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	5.1
10	0.0	3.4	3.3	4.2	6.3	4.9	2.8	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	1.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	2.5	6.1	5.9	5.2	6.5	9.1	9.0	9.5	9.5	0.0	2.3
15	14.4	16.6	17.2	18.2	19.4	19.6	18.7	20.8	22.7	21.6	18.0	19.0	19.3	18.8	17.0	17.1	18.0	18.4	18.8	18.9	18.3	16.7	16.7	16.5	22.7	14.4	18.4
16	14.3	13.4	13.1	10.9	8.5	6.1	5.2	6.3	5.7	6.7	7.4	6.5	4.6	3.5	2.3	3.0	0.3	0.0	0.0	0.0	1.7	3.6	1.2	0.0	14.3	0.0	5.2
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	12.1	12.1	9.6	6.9	3.3	0.1	12.1	0.0	2.0
18	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	3.0	4.4	5.1	4.1	4.5	4.4	5.2	5.6	6.6	7.1	7.0	0.4	6.7	9.4	8.8	9.3	9.4	0.0	3.8
19	8.8	8.9	7.5	6.7	7.5	7.5	7.1	7.3	7.0	8.3	7.3	6.9	7.1	7.7	8.2	9.0	9.7	9.7	9.5	9.3	8.2	8.2	8.0	6.9	9.7	6.7	8.0
20	5.8	5.1	4.1	2.9	2.8	2.9	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	3.9	4.2	5.1	5.5	5.4	5.8	0.0	2.2
21	5.0	4.3	0.1	0.0	5.4	7.4	6.4	6.7	6.6	6.2	5.4	6.8	6.5	7.7	8.3	8.6	8.9	6.9	6.6	7.1	7.7	6.9	7.1	7.2	8.9	0.0	6.2
22	7.0	6.2	6.4	7.0	6.8	6.9	7.6	8.2	7.4	8.5	7.6	7.9	7.4	7.2	5.7	3.7	4.0	4.1	3.5	3.1	3.3	3.9	0.9	0.0	8.5	0.0	5.6
23	0.0	0.0	0.7	0.0	0.6	2.9	2.0	2.6	2.5	1.0	2.3	2.5	3.6	4.5	4.8	7.9	7.5	7.9	8.3	9.3	9.6	8.2	8.3	6.9	9.6	0.0	4.3
24	6.2	5.7	5.5	3.0	3.6	3.4	2.7	1.7	0.0	2.8	2.9	4.3	4.1	4.3	3.7	4.8	5.3	4.3	4.0	3.5	3.7	3.5	3.4	3.4	6.2	0.0	3.7
25	1.7	0.0	1.6	7.1	7.7	7.3	4.6	2.7	1.9	2.7	3.4	2.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.6	3.8	4.7	3.8	7.7	0.0	2.6
26	3.7	4.4	3.4	4.1	4.7	4.7	5.3	5.6	4.5	3.1	3.5	3.9	3.0	4.1	6.1	6.1	4.7	4.1	4.0	4.7	3.6	1.9	4.4	4.4	6.1	1.9	4.3
27	5.7	6.3	6.5	5.9	4.7	3.4	1.4	2.6	2.1	0.0	0.9	1.8	0.0	3.0	3.5	4.3	5.3	4.7	5.0	4.5	5.0	3.8	3.1	3.3	6.5	0.0	3.6
28	3.7	3.0	3.3	3.7	3.8	3.1	3.4	2.5	2.2	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.9	1.8	3.5	4.4	3.9	4.4	0.0	2.0
29	4.8	5.8	6.0	5.9	5.4	5.8	5.8	5.7	8.6	10.0	11.0	11.1	10.8	13.8	17.3	17.6	16.7	17.3	18.0	18.1	18.8	20.5	20.2	20.7	20.7	4.8	12.3
30	21.0	20.7	21.8	21.5	22.5	18.0	18.6	17.7	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5	0.0	7.2
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max.	**27.5**	**28.4**	**30.2**	**29.9**	**29.6**	**32.6**	**29.5**	**27.8**	**28.8**	**29.6**	**34.7**	**32.9**	**34.9**	**33.4**	**30.9**	**31.1**	**30.4**	**30.2**	**29.8**	**28.2**	**28.5**	**29.4**	**29.2**	**28.4**	**34.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.6**	**7.5**	**7.4**	**7.5**	**7.8**	**7.5**	**7.3**	**7.3**	**6.9**	**6.7**	**7.0**	**7.2**	**7.2**	**7.3**	**7.1**	**6.6**	**6.8**	**7.4**	**7.6**	**7.3**	**7.6**	**7.7**	**7.6**	**7.5**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.1	4.6	5.8	6.6	7.2	7.4	8.1	7.7	6.9	7.5	7.9	8.0	7.9	8.1	0.0	3.8
30	6.6	6.3	5.5	5.7	6.0	5.6	5.4	5.6	5.5	5.3	5.0	4.8	4.6	4.2	3.3	3.4	3.9	5.2	6.8	6.5	5.8	4.9	4.1	3.4	6.8	3.3	5.1
Max.	**6.6**	**6.3**	**5.5**	**5.7**	**6.0**	**5.6**	**5.4**	**5.6**	**5.5**	**5.3**	**5.0**	**5.1**	**4.6**	**5.8**	**6.6**	**7.2**	**7.4**	**8.1**	**7.7**	**6.9**	**7.5**	**7.9**	**8.0**	**7.9**	**8.1**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**	**0.4**	**0.5**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**			**0.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.3	3.3	3.1	2.9	3.4	3.6	3.8	4.6	5.1	4.9	5.6	4.7	5.0	6.1	7.1	6.8	7.1	6.9	7.1	6.8	8.4	8.0	7.0	7.8	8.4	2.9	5.5
2	8.2	9.0	7.4	6.4	6.4	6.3	6.5	8.3	7.4	6.3	5.7	5.2	4.8	3.7	2.6	3.9	4.1	4.9	4.3	4.0	2.0	1.3	3.1	3.1	9.0	1.3	5.2
3	2.5	1.8	2.2	2.9	5.0	4.9	5.0	5.5	8.5	7.7	10.5	11.1	11.6	11.3	9.4	12.1	9.2	7.2	6.9	7.6	8.7	6.8	5.1	8.6	12.1	1.8	7.2
4	12.3	10.1	11.4	10.9	13.3	12.5	10.7	8.4	9.8	8.4	8.1	7.4	5.9	5.4	6.0	7.1	6.3	5.9	4.4	3.5	2.2	1.3	1.4	2.3	13.3	1.3	7.3
5	3.7	3.3	3.4	2.9	2.5	2.3	1.9	1.9	1.3	0.6	1.7	1.9	1.9	2.6	2.1	2.8	3.4	3.2	3.6	3.9	4.2	4.5	4.1	4.0	4.5	0.6	2.8
6	3.3	3.7	3.7	4.2	4.4	4.5	5.2	7.9	9.3	10.4	13.4	15.2	15.8	17.5	18.7	19.2	18.3	18.8	20.0	21.1	20.4	20.8	23.6	25.7	25.7	3.3	13.6
7	24.4	22.8	28.2	27.4	27.6	28.5	27.9	27.5	27.1	28.4	29.4	29.9	29.7	29.2	28.8	28.9	24.9	25.1	27.4	27.2	25.4	27.8	25.8	25.0	29.9	22.8	27.3
8	29.6	29.1	26.2	25.5	27.1	26.9	23.9	21.0	21.5	23.6	22.9	23.0	25.1	26.9	27.1	25.5	26.2	25.2	24.2	25.0	25.2	24.2	21.4	19.5	29.6	19.5	24.8
9	19.4	17.2	15.1	15.0	16.8	13.5	15.5	18.9	19.7	19.8	18.1	17.5	16.8	16.8	14.8	13.8	13.2	8.2	7.5	5.5	4.5	4.3	1.6	1.8	19.8	1.6	13.1
10	1.5	1.7	1.8	3.5	3.3	2.9	3.0	2.5	2.4	2.9	2.8	2.1	1.2	2.1	2.7	2.7	2.3	2.8	3.4	4.6	6.4	6.0	10.1	12.3	12.3	1.2	3.6
11	14.3	15.3	16.1	16.5	16.4	18.9	20.4	21.5	22.4	22.7	25.1	25.1	24.6	27.8	27.9	28.8	27.3	27.4	30.3	29.9	27.8	25.6	23.3	21.2	30.3	14.3	23.2
12	25.6	20.0	17.7	14.1	13.8	15.1	17.4	17.5	15.3	17.0	18.9	22.3	21.1	22.7	23.9	24.9	24.4	20.8	19.5	19.9	19.8	19.7	19.0	20.1	25.6	13.8	19.6
13	20.1	18.3	18.0	17.9	16.0	13.9	9.7	7.5	10.5	12.4	14.2	14.2	14.7	15.1	16.1	18.6	20.0	18.4	22.8	23.8	21.9	24.1	24.6	27.0	27.0	7.5	17.5
14	24.9	19.8	11.4	7.2	6.7	9.4	11.6	13.2	12.7	11.7	11.4	10.5	12.4	12.9	10.9	8.4	10.0	10.6	10.3	9.3	7.7	6.9	6.1	4.3	24.9	4.3	10.8
15	3.0	5.5	7.3	5.6	8.2	8.3	8.4	7.9	9.3	8.8	9.8	10.7	10.4	10.2	8.5	9.1	9.7	9.5	7.8	8.4	9.8	7.3	4.6	4.0	10.7	3.0	8.0
16	13.8	12.5	11.9	11.0	9.3	8.8	6.3	3.9	3.3	3.1	5.1	7.8	6.5	7.4	7.8	7.2	7.0	7.1	6.0	4.8	4.0	3.4	1.8	1.2	13.8	1.2	6.7
17	1.8	2.3	2.9	2.8	2.5	2.7	2.6	2.9	3.3	3.6	3.8	3.4	3.9	3.1	1.7	1.7	2.2	2.1	2.7	4.0	4.6	7.0	7.8	6.9	7.8	1.7	3.4
18	7.6	7.0	8.2	9.5	7.7	7.6	7.6	6.8	8.0	4.5	5.6	5.1	5.5	5.9	5.2	6.5	7.3	6.5	8.3	7.4	8.9	7.4	5.8	5.9	9.5	4.5	6.9
19	6.0	4.9	4.8	4.9	4.8	4.6	1.9	0.9	1.3	1.9	2.7	2.9	2.3	2.8	2.1	2.7	5.4	5.6	5.7	5.6	6.7	6.6	6.3	5.5	6.7	0.9	4.1
20	5.5	5.4	5.2	5.7	5.6	5.6	6.4	6.0	6.2	5.6	5.5	6.0	5.3	4.0	3.4	3.6	3.2	3.2	4.0	5.3	5.8	5.2	5.6	5.3	6.4	3.2	5.1
21	5.6	5.0	3.5	2.4	2.7	1.5	1.9	2.2	2.8	2.6	2.6	3.1	3.5	4.1	6.3	6.5	6.4	6.2	5.0	7.7	10.7	10.6	9.4	8.1	10.7	1.5	5.0
22	8.0	9.1	9.0	8.7	6.1	4.7	3.6	3.7	2.7	1.8	1.6	1.8	1.9	3.4	4.8	5.1	9.7	11.9	14.0	15.5	18.7	18.6	21.3	23.9	23.9	1.6	8.7
23	28.6	30.6	28.6	31.4	34.6	36.0	38.1	39.0	35.8	36.0	30.9	33.1	33.3	37.1	33.1	30.1	28.7	26.5	27.4	26.0	25.1	24.8	27.2	26.8	39.0	24.8	31.2
24	26.3	25.2	24.3	24.0	23.6	23.4	23.6	24.3	23.5	19.5	16.6	16.6	14.3	13.0	12.4	11.9	11.9	12.0	11.9	12.8	9.2	7.8	12.8	14.1	26.3	7.8	17.3
25	13.5	7.7	6.6	5.8	6.1	7.1	7.3	7.5	9.8	9.6	9.8	10.7	9.1	10.3	11.0	11.2	12.5	13.0	12.7	11.6	11.7	10.0	9.6	8.9	13.5	5.8	9.7
26	8.5	8.3	8.2	8.6	9.1	9.4	7.9	6.7	5.5	5.0	4.6	4.9	6.1	5.2	5.8	7.2	6.5	7.9	8.2	7.9	7.7	7.8	7.2	6.9	9.4	4.6	7.1
27	6.7	6.4	7.5	7.5	5.0	3.5	2.3	2.1	2.9	3.9	3.1	2.9	3.0	4.0	3.9	4.8	5.6	5.4	5.4	6.3	6.9	7.2	6.9	4.3	7.5	2.1	4.9
28	4.3	6.1	6.6	6.1	5.6	6.1	4.9	4.2	4.0	3.8	4.7	3.7	2.8	3.4	4.1	4.4	4.8	6.0	6.5	6.5	5.9	5.8	5.8	4.6	6.6	2.8	5.0
29	4.8	4.9	4.8	4.4	4.7	5.2	6.1	6.6	7.1	7.9	8.5	8.7	8.8	7.9	7.4	7.4	6.8	6.0	5.6	5.4	6.5	6.6	6.3	6.2	8.8	4.4	6.5
30	5.9	3.9	3.2	4.0	4.0	6.0	4.9	5.1	5.9	6.5	9.2	11.2	10.7	12.8	12.2	12.8	13.3	13.0	12.3	13.2	11.6	12.6	15.4	17.8	17.8	3.2	9.5
31	19.3	20.3	19.5	17.8	18.2	17.8	17.8	21.6	22.2	21.1	21.2	20.3	19.4	18.1	19.8	22.8	21.0	20.1	20.6	17.5	16.2	19.8	20.6	20.2	22.8	16.2	19.7
Max.	**29.6**	**30.6**	**28.6**	**31.4**	**34.6**	**36.0**	**38.1**	**39.0**	**35.8**	**36.0**	**30.9**	**33.1**	**33.3**	**37.1**	**33.1**	**30.1**	**28.7**	**27.4**	**30.3**	**29.9**	**27.8**	**27.8**	**27.2**	**27.0**	**39.0**		
Min.	**1.5**	**1.7**	**1.8**	**2.4**	**2.5**	**1.5**	**1.9**	**0.9**	**1.3**	**0.6**	**1.6**	**1.8**	**1.2**	**2.1**	**1.7**	**1.7**	**2.2**	**2.1**	**2.7**	**3.5**	**2.0**	**1.3**	**1.4**	**1.2**		**0.6**	
Avg.	**11.7**	**11.0**	**10.6**	**10.2**	**10.3**	**10.4**	**10.1**	**10.3**	**10.5**	**10.4**	**10.7**	**11.1**	**10.9**	**11.4**	**11.2**	**11.6**	**11.6**	**11.2**	**11.5**	**11.6**	**11.4**	**11.3**	**11.3**	**11.4**			**11.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	21.0	22.1	21.2	21.8	21.0	21.0	22.0	21.8	22.9	25.0	24.3	25.0	24.2	26.2	24.8	22.9	21.5	24.8	21.9	20.0	15.9	11.8	11.0	10.3	26.2	10.3	21.0
2	9.0	10.9	11.5	12.6	12.3	10.0	8.0	8.1	7.0	8.2	9.7	11.3	9.3	7.5	7.6	7.4	5.6	5.0	3.6	4.9	3.7	1.4	3.5	2.7	12.6	1.4	7.5
3	1.7	3.9	3.5	5.0	5.9	7.0	7.9	5.6	4.0	2.4	2.2	2.1	3.1	4.7	5.5	7.4	8.4	9.5	11.1	11.6	13.0	12.7	12.3	11.0	13.0	1.7	6.7
4	9.9	11.7	11.0	9.6	8.2	8.9	9.1	9.3	8.0	9.9	9.5	10.0	10.2	10.6	11.1	11.8	10.7	11.2	11.9	11.1	10.7	11.6	8.2	8.7	11.9	8.0	10.1
5	9.5	10.1	10.8	11.6	14.2	15.1	18.3	19.4								14.4	14.6	13.0	11.3	8.6	5.9	4.7	2.3	4.6	19.4	2.3	11.1
6	6.1	5.9	6.6	6.7	7.1	5.5	4.5	3.4	3.4	3.1	3.5	4.4	4.6	4.2	4.6	2.1	6.0	12.3	9.3	8.1	6.4	6.4	6.1	5.0	12.3	2.1	5.6
7	3.3	3.4	4.0	4.7	4.9	5.8	6.4	7.9	8.2	6.2	6.2	6.4	7.0	6.4	3.3	1.8	4.3	4.8	3.8	8.2	10.0	9.6	9.0	8.7	10.0	1.8	6.0
8	8.8	9.0	8.5	7.9	7.3	7.1	7.4	5.5	4.5	4.0	5.7	7.0	7.5	7.2	8.3	8.8	9.1	10.7	10.5	10.9	10.8	10.3	10.2	10.2	10.9	4.0	8.2
9	9.7	8.9	8.4	6.8	4.3	2.5	1.3	0.7	0.6	0.6	2.7	3.4	3.5	3.8	3.8	3.9	4.5	4.6	4.9	5.3	5.3	5.7	5.1	6.0	9.7	0.6	4.4
10	5.6	5.1	4.8	5.0	4.1	3.3	3.3	2.5	2.1	1.3	1.3	2.1	1.7	1.2	2.0	3.7	2.8	2.2	3.0	3.6	5.3	5.1	4.4	4.2	5.6	1.2	3.3
11	3.7	1.6	1.3	0.4	0.5	0.7	0.5	0.6	1.0	1.1	1.2	0.8	2.4	4.6	5.5	5.8	5.5	5.2	5.2	4.8	5.3	5.3	5.3	5.9	5.9	0.4	3.1
12	5.3	3.9	3.6	2.9	2.4	1.3	3.2	5.3	4.4	4.3	2.7	3.2	2.6	3.3	1.2	1.5	1.4	3.0	2.7	1.8	1.8	2.3	2.8	1.5	5.3	1.2	2.9
13	1.8	2.9	3.7	5.0	5.6	5.2	5.6	6.0	4.7	4.8	4.1	3.3	2.4	2.2	2.1	2.9	2.9	3.0	4.0	4.5	5.1	4.8	5.1	5.1	6.0	1.8	4.0
14	6.0	5.5	5.3	6.4	5.1	4.3	4.2	4.6	4.9	4.0	3.8	3.9	1.9	1.0	2.0	3.3	6.1	5.6	8.5	7.0	6.4	8.8	10.2	7.9	10.2	1.0	5.3
15	5.3	5.7	5.0	4.9	5.5	5.1	3.8	3.8	1.6	0.8	1.7	3.1	3.8	4.0	5.6	8.1	9.6	10.3	7.5	6.2	5.9	5.7	6.7	4.8	10.3	0.8	5.2
16	2.3	1.6	0.7	0.5	1.4	1.8	2.4	2.4	1.6	1.7	0.9	0.8	0.9	1.0	2.6	4.1	3.9	4.7	4.7	4.7	5.0	3.6	3.1	2.9	5.0	0.5	2.5
17	2.4	2.4	2.4	2.0	1.2	1.2	0.6	0.6	0.9	1.1	1.2	1.1	1.1	2.4	3.9	5.4	5.4	5.1	5.0	5.8	6.5	6.3	7.4	7.1	7.4	0.6	3.3
18	7.2	6.4	5.7	4.6	3.5	3.4	3.1	3.2	3.5	3.4	4.6	6.1	6.6	6.3	6.6	6.2	6.4	7.3	6.2	5.6	4.5	4.5	2.5	3.3	7.3	2.5	5.0
19	3.5	4.2	4.5	4.6	3.8	2.1	2.2	2.1	1.6	2.4	3.8	4.0	4.1	4.7	5.4	4.7	5.1	4.9	5.2	5.6	5.0	4.9	4.8	5.0	5.6	1.6	4.1
20	4.1	2.6	1.4	2.1	1.0	0.9	1.5	2.7	4.1	4.2	4.9	5.7	6.5	8.3	9.1	9.3	9.2	10.6	9.8	9.9	9.7	9.8	9.6	11.0	11.0	0.9	6.2
21	13.3	11.9	10.8	11.1	9.7	9.5	6.3	7.4	4.5	3.1	1.6	1.2	1.8	2.5	2.8	2.9	3.0	2.1	4.3	5.0	5.0	4.6	5.9	5.6	13.3	1.2	5.7
22	4.2	5.4	6.9	7.1	7.1	7.8	7.2	4.5	4.9	4.0	3.5	4.6	5.6	6.7	7.6	7.4	7.8	9.6	9.8	9.9	11.1	12.2	12.6	10.0	12.6	3.5	7.4
23	9.4	9.8	9.3	8.8	9.2	10.9	10.5	10.3	11.3	11.9	11.8	11.0	10.4	10.2	9.6	8.2	7.5	6.5	5.6	7.0	7.6	8.3	8.1	6.9	11.9	5.6	9.2
24	8.5	7.4	7.2	6.6	10.6	12.2	13.0	13.2	13.1	12.7	15.4	14.3	15.6	16.6	16.4	19.2	21.0	18.6	16.4	15.3	16.9	18.6	18.1	18.1	21.0	6.6	14.4
25	21.0	24.7	26.4	25.2	24.3	23.7	24.6	24.9	26.4	27.1	26.6	26.4	27.8	27.0	26.1	22.2	23.1	24.8	20.2	17.9	16.7	17.7	14.7	12.8	27.8	12.8	23.0
26	11.6	10.2	6.9	5.6	4.6	6.9	6.7	6.6	8.2	8.2	8.7	9.8	10.1	7.1	6.1	6.9	7.9	7.7	4.6	5.0	4.0	3.3	4.6	3.5	11.6	3.3	6.9
27	5.5	4.8	3.0	3.2	3.6	4.1	4.8	7.1	7.7	8.3	8.3	10.3	11.0	12.1	12.3	10.9	8.1	7.8	7.7	6.9	7.2	6.5	5.4	5.5	12.3	3.0	7.2
28	5.9	4.9	5.3	5.5	6.4	6.6	5.7	4.8	4.0	5.4	7.9	8.6	9.8	8.6	6.1	7.7	7.2	8.1	8.1	6.9	7.8	9.3	9.7	9.7	9.8	4.0	7.1
29	8.1	7.2	6.8	7.0	7.2	6.2	6.1	5.2	4.7	5.1	3.7	3.2	4.8	5.2	6.1	7.1	7.0	7.7	7.3	7.7	7.7	7.5	6.9	7.6	8.1	3.2	6.4
30	7.9	7.8	7.4	6.5	5.9	5.4	3.8	2.8	1.2	1.0	1.3	1.6	1.4	1.4	2.1	1.5	2.6	2.1	2.7	3.0	2.3	1.3	0.9	1.0	7.9	0.9	3.1
Max.	**21.0**	**24.7**	**26.4**	**25.2**	**24.3**	**23.7**	**24.6**	**24.9**	**26.4**	**27.1**	**26.6**	**26.4**	**27.8**	**27.0**	**26.1**	**22.9**	**23.1**	**24.8**	**21.9**	**20.0**	**16.9**	**18.6**	**18.1**	**18.1**	**27.8**		
Min.	**1.7**	**1.6**	**0.7**	**0.4**	**0.5**	**0.7**	**0.5**	**0.6**	**0.6**	**0.6**	**0.9**	**0.8**	**0.9**	**1.0**	**1.2**	**1.5**	**1.4**	**2.1**	**2.7**	**1.8**	**1.8**	**1.3**	**0.9**	**1.0**		**0.4**	
Avg.	**7.4**	**7.4**	**7.1**	**7.1**	**6.9**	**6.9**	**6.8**	**6.7**	**6.0**	**6.0**	**6.3**	**6.7**	**7.0**	**7.1**	**7.2**	**7.7**	**7.9**	**8.4**	**7.9**	**7.8**	**7.6**	**7.5**	**7.2**	**6.9**			**7.2**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.9	1.2	1.2	1.2	1.1	1.5	1.0	1.9	2.2	2.6	4.9	7.6	8.2	10.4	13.1	14.3	13.7	13.2	12.4	12.2	12.6	11.8	13.5	18.0	18.0	0.9	7.5
2	17.9	18.1	15.6	14.0	16.7	14.9	13.5	16.4	14.0	15.6	14.9	16.6	18.4	15.6	16.5	16.1	15.9	17.0	15.4	14.0	12.8	13.7	14.2	14.0	18.4	12.8	15.5
3	14.3	13.4	15.2	19.6	17.8	17.6	17.4	19.0	17.8	14.7	11.2	11.3	10.8	13.2	13.8	11.4	12.2	7.5	5.4	7.1	7.4	6.9	8.4	8.7	19.6	5.4	12.6
4	10.9	9.3	6.6	7.6	7.3	5.4	5.0	4.4	3.7	3.6	4.9	3.5	2.0	2.6	2.6	2.7	2.2	2.3	2.8	4.8	5.0	3.9	3.8	5.1	10.9	2.0	4.7
5	4.5	4.2	4.9	5.3	6.6	6.5	7.2	5.3	5.1	4.7	3.8	2.5	2.0	2.0	2.5	5.3	4.7	3.6	2.9	3.8	4.2	4.5	2.7	3.0	7.2	2.0	4.2
6	4.2	5.9	4.3	3.2	3.9	3.8	4.7	4.0	3.4	3.6	4.4	4.9	6.2	7.1	7.1	8.6	8.7	7.0	7.8	8.7	9.6	8.7	8.0	8.8	9.6	3.2	6.1
7	9.1	7.8	9.7	9.8	7.5	5.9	7.0	9.4	11.0	10.0	10.8	11.3	11.1	9.7	9.6	8.3	8.7	7.8	7.4	7.0	6.8	5.7	5.1	4.9	11.3	4.9	8.4
8	4.2	4.8	3.6	3.5	5.2	6.6	6.8	7.1	8.1	8.7	8.7	7.3	6.1	6.9	7.2	8.0	7.7	7.1	8.8	8.5	8.6	8.4	7.4	7.6	8.8	3.5	7.0
9	7.0	5.5	6.1	4.5	5.4	5.7	6.2	6.0	7.5	8.1	8.6	7.4	8.8	9.4	8.6	8.5	8.4	10.4	10.4	10.0	9.2	9.0	10.6	9.0	10.6	4.5	7.9
10	7.4	7.4	5.8	7.3	7.7	10.2	9.9	8.8	10.8	8.2	8.0	8.4	7.4	5.4	5.0	4.8	6.2	7.5	8.2	7.5	7.8	8.0	9.9	8.6	10.8	4.8	7.8
11	6.1	5.1	5.8	6.8	6.3	7.0	7.8	7.1	7.1	8.2	7.9	6.2	5.3	5.6	6.4	7.0	7.8	7.1	8.1	7.9	7.3	7.1	8.0	7.4	8.2	5.1	6.9
12	7.1	7.6	7.7	6.7	6.0	7.1	11.9	14.0	15.6	15.6	16.2	15.4	16.6	17.6	17.0	16.5	14.1	17.9	15.4	15.0	14.4	16.1	17.1	15.3	17.9	6.0	13.5
13	13.7	12.7	11.0	8.4	8.4	8.1	7.8	6.4	6.3	6.2	6.0	5.6	4.5	4.4	5.1	5.0	5.4	5.6	5.1	4.2	3.7	3.5	3.6	3.1	13.7	3.1	6.4
14	3.3	3.0	2.0	1.4	1.6	0.5	1.5	2.1	1.5	2.5	2.5	3.6	4.1	4.1	3.8	3.8	3.7	4.5	4.7	5.0	6.2	5.7	5.8	5.5	6.2	0.5	3.4
15	5.8	5.0	5.5	5.5	5.1	5.0	5.7	5.8	5.7	5.0	6.2	7.1	8.0	8.7	10.1	11.5	9.7	8.3	7.8	8.7	8.7	9.1	9.2	9.1	11.5	5.0	7.3
16	11.9	12.6	14.2	13.0	14.3	17.4	16.0	15.4	17.8	18.5	19.5	19.9	19.5	21.1	23.7	23.2	21.9	22.6	23.2	19.6	16.1	12.9	12.0	10.7	23.7	10.7	17.4
17	11.7	11.3	12.4	14.5	13.9	14.9	14.5	11.2	9.4	11.1	10.8	10.4	11.6	10.9	9.6	9.9	9.4	10.3	11.0	9.6	10.7	11.2	11.6	12.8	14.9	9.4	11.5
18	11.2	9.9	8.0	7.3	6.9	5.7	5.0	5.1	4.4	4.6	3.3	2.6	2.1	2.4	2.8	2.9	2.8	2.6	2.4	3.6	2.6	2.5	2.0	1.9	11.2	1.9	4.4
19	2.2	3.2	4.1	4.3	4.7	4.7	4.3	5.4	5.3	5.9	6.2	5.9	7.0	8.6	8.8	8.8	9.5	9.4	9.8	6.1	5.9	5.7	5.8	4.3	9.8	2.2	6.1
20	4.2	3.6	4.6	4.4	5.2	5.7	5.6	5.0	7.3	7.0	7.5	11.0	13.0	14.0	14.4	13.5	14.3	13.7	14.8	12.0	11.4	11.8	12.4	12.5	14.8	3.6	9.5
21	12.8	16.0	15.7	13.8	12.8	12.2	11.0	9.9	7.8	6.6	5.2	4.6	4.7	4.6	3.5	3.7	3.6	4.4	5.1	3.4	3.0	4.3	6.5	6.9	16.0	3.0	7.6
22	6.5	5.9	4.4	4.5	2.2	1.1	2.1	2.5	3.1	3.0	2.6	2.4	3.7	4.9	4.9	5.0	3.0	3.3	3.4	3.8	3.5	4.0	4.0	3.1	6.5	1.1	3.6
23	3.6	3.8	3.0	3.0	4.4	4.3	3.5	4.3	4.9	5.7	5.8	6.4	6.6	7.2	8.4	8.3	6.7	6.5	5.7	5.4	6.2	6.0	2.9	0.7	8.4	0.7	5.1
24	2.2	3.1	3.7	2.6	2.6	4.1	5.5	5.6	7.0	6.8	6.8	6.2	7.0	6.9	9.2	10.2	8.6	7.7	11.8	12.4	10.8	12.9	14.7	13.5	14.7	2.2	7.6
25	12.0	11.6	11.4	10.6	9.3	10.3	9.6	9.0	8.5	9.0	10.1	11.0	11.5	11.4	11.2	10.2	9.9	9.5	9.3	8.6	8.6	8.4	7.6	6.8	12.0	6.8	9.8
26	5.7	4.0	4.0	3.1	2.6	3.2	5.2	7.0	6.5	5.6	4.4	4.0	5.2	3.5	3.1	3.7	3.1	3.6	4.4	4.0	4.1	5.4	6.4	6.9	7.0	2.6	4.5
27	6.2	5.7	5.2	6.2	6.8	6.7	5.2	5.2	5.1	4.3	4.0	5.0	3.5	3.1	2.8	3.7	4.3	4.6	4.8	5.6	4.4	3.7	1.8	1.8	6.8	1.8	4.6
28	2.9	3.9	4.3	5.5	5.1	4.8	5.0	5.4	6.6	7.0	7.0	7.7	9.8	10.2	8.6	9.6	10.3	9.4	9.3	9.8	9.5	9.4	9.7	9.2	10.3	2.9	7.5
29	9.6	8.4	8.6	8.5	9.7	8.9	9.2	12.1	12.1	14.0	12.7	10.4	9.5	9.1	9.8	10.3	10.1	10.4	10.9	11.4	10.3	11.2	11.6	9.0	14.0	8.4	10.3
30	7.2	6.9	8.1	8.3	8.5	7.7	8.5	7.6	8.4	8.4	8.1	8.0	9.1	10.4	11.2	10.3	10.5	11.8	10.5	9.4	9.2	7.9	6.6	6.0	11.8	6.0	8.7
31	8.4	6.4	6.1	6.9	6.2	7.8	6.1	7.4	7.8	8.0	8.3	6.9	6.2	7.3	6.5	6.6	7.4	7.6	7.7	7.3	6.9	6.7	6.1	5.1	8.4	5.1	7.0
Max.	**17.9**	**18.1**	**15.7**	**19.6**	**17.8**	**17.6**	**17.4**	**19.0**	**17.8**	**18.5**	**19.5**	**19.9**	**19.5**	**21.1**	**23.7**	**23.2**	**21.9**	**22.6**	**23.2**	**19.6**	**16.1**	**16.1**	**17.1**	**18.0**	**23.7**		
Min.	**0.9**	**1.2**	**1.2**	**1.2**	**1.1**	**0.5**	**1.0**	**1.9**	**1.5**	**2.5**	**2.5**	**2.4**	**2.0**	**2.0**	**2.5**	**2.7**	**2.2**	**2.3**	**2.4**	**3.4**	**2.6**	**2.5**	**1.8**	**0.7**		**0.5**	
Avg.	**7.6**	**7.3**	**7.2**	**7.1**	**7.1**	**7.3**	**7.4**	**7.6**	**7.8**	**7.8**	**7.8**	**7.8**	**8.0**	**8.3**	**8.6**	**8.8**	**8.5**	**8.5**	**8.6**	**8.3**	**8.0**	**7.9**	**8.0**	**7.7**			**7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.2	5.1	5.3	4.5	2.7	1.5	1.5	0.8	0.6	1.3	1.6	1.2	1.0	1.2	2.5	3.1	3.9	4.3	4.1	4.1	4.8	4.7	5.8	5.9	5.9	0.6	3.2
2	6.5	7.5	9.0	9.9	9.2	9.7	10.2	10.0	8.7	8.1	7.2	7.1	6.0	6.9	6.5	6.2	6.2	4.7	4.0	3.6	2.2	1.6	2.1	2.5	10.2	1.6	6.5
3	2.8	3.7	4.0	4.6	5.6	4.5	4.3	4.0	4.1	3.4	2.6	1.6	1.4	3.6	4.1	5.0	5.4	6.7	7.8	8.0	7.6	7.6	7.7	7.9	8.0	1.4	4.9
4	8.0	8.1	8.8	7.8	7.2	7.6	6.8	7.0	7.3	6.8	5.6	4.9	5.4	5.4	5.1	4.9	5.6	5.9	6.5	7.2	6.7	5.2	4.8	4.7	8.8	4.7	6.4
5	4.8	4.5	3.9	3.0	1.6	2.3	2.7	3.6	4.5	5.7	5.7	6.3	5.9	6.6	7.2	7.0	7.8	8.0	8.5	9.1	8.6	8.8	8.8	8.4	9.1	1.6	6.0
6	7.9	8.1	8.6	8.1	8.5	8.7	8.9	7.6	8.2	8.5	5.0	4.4	8.0	9.1	9.0	8.3	9.8	11.4	9.9	8.5	8.5	8.1	6.8	6.5	11.4	4.4	8.2
7	7.0	7.1	7.7	7.3	8.0	7.5	7.1	7.7	7.6	8.3	7.3	7.1	7.5	8.8	7.6	7.7	7.9	7.2	7.9	7.9	8.0	7.1	7.6	7.7	8.8	7.0	7.6
8	7.7	7.2	6.5	6.9	7.6	6.2	6.2	5.2	4.8	5.3	6.3	6.2	5.5	7.1	6.7	6.4	6.1	5.9	6.2	7.6	8.1	8.6	7.8	6.2	8.6	4.8	6.6
9	5.9	6.9	6.4	7.2	7.3	8.2	10.1	9.3	8.4	8.2	6.4	6.7	9.2	9.1	10.7	9.0	8.8	8.3	8.2	8.2	7.5	6.7	5.9	4.9	10.7	4.9	7.8
10	3.9	3.4	3.1	2.8	2.0	1.1	0.4	0.0	0.7	2.1	2.4	2.0	2.1	1.8	3.1	3.3	2.1	4.1	5.2	6.0	4.5	4.7	3.8	4.8	6.0	0.0	2.9
11	4.6	3.6	4.3	4.9	5.1	4.9	5.7	5.3	5.3	5.2	5.5	8.2	8.9	8.7	8.6	9.6	10.2	9.9	10.0	7.7	5.1	3.9	5.0	4.8	10.2	3.6	6.5
12	2.0	2.0	2.9	4.2	4.6	5.3	5.3	4.2	3.3	2.6	2.0	2.1	2.8	4.2	4.1	3.6	4.4	4.1	5.9	4.7	4.3	4.2	2.4	1.5	5.9	1.5	3.6
13	2.0	3.4	3.8	4.0	5.0	4.0	4.6	3.8	2.5	1.7	1.2	1.3	2.7	2.9	2.9	3.8	4.6	2.8	7.5	8.5	10.9	9.5	5.7	4.4	10.9	1.2	4.3
14	3.3	2.8	3.7	4.3	3.5	4.0	3.2	4.0	6.1	7.1	7.5	6.4	6.3	6.1	6.8	5.7	6.1	6.7	6.7	6.9	6.6	5.7	4.1	4.6	7.5	2.8	5.3
15	5.3	4.5	6.6	6.3	5.6	5.1	3.8	3.2	2.6	2.8	2.2	2.5	2.0	2.3	2.3	2.6	2.8	2.5	2.5	2.1	1.9	2.7	2.9	2.2	6.6	1.9	3.3
16	2.5	3.3	3.1	3.6	4.0	4.6	5.7	5.2	4.6	6.2	6.3	6.2	5.4	4.9	5.9	6.6	7.2	7.6	6.6	8.2	7.5	7.1	7.4	6.0	8.2	2.5	5.7
17	6.0	8.5	8.9	8.0	6.8	6.1	6.7	7.3	7.5	8.2	7.0	8.7	8.8	8.9	8.7	9.9	10.7	12.2	11.9	9.9	9.6	11.2	12.0	11.1	12.2	6.0	8.9
18	11.0	10.0	10.7	9.6	8.6	6.1	4.8	4.6	3.7	4.0	4.0	4.7	5.4	4.8	4.9	4.7	4.9	4.0	3.5	1.6	2.1	1.4	1.8	3.2	11.0	1.4	5.2
19	3.5	3.9	4.0	3.9	3.3	3.7	2.4	3.3	3.0	2.6	1.5	2.9	3.6	4.1	3.8	3.6	2.9	3.1	4.6	4.7	4.9	3.5	3.3	2.2	4.9	1.5	3.4
20	2.2	3.8	3.9	3.6	3.3	2.6	2.6	3.1	3.6	3.6	3.3	3.5	2.7	1.4	1.9	3.2	2.5	3.3	3.5	4.0	3.6	3.8	2.7	1.4	4.0	1.4	3.0
21	1.1	1.5	1.2	1.9	2.4	3.1	3.6	3.6	3.4	4.1	4.6	4.6	4.3	4.0	5.0	4.1	3.7	5.0	5.9	2.9	2.9	4.4	5.9	4.3	5.9	1.1	3.7
22	1.7	0.7	1.3	0.6	0.7	0.7	0.6	1.1	1.5	1.7	2.0	1.8	1.1	2.2	2.1	2.1	2.0	2.0	2.8	3.4	3.2	3.4	3.0	3.9	3.9	0.6	1.9
23	3.9	4.0	3.4	3.9	4.6	4.9	5.8	6.7	5.2	5.4	5.6	3.9	2.7	1.8	1.9	2.1	2.3	2.3	4.9	4.3	5.4	5.2	6.0	5.1	6.7	1.8	4.2
24	2.7	2.3	4.3	4.6	5.3	5.1	5.3	6.0	6.6	5.2	4.3	5.1	5.6	5.4	5.6	6.7	5.9	5.8	5.2	4.8	3.5	6.2	6.4	5.8	6.7	2.3	5.2
25	4.8	3.9	4.1	4.7	4.8	5.2	4.5	5.5	5.0	2.0	1.3	2.3	3.2	3.9	4.4	4.8	5.6	5.7	5.7	6.1	6.4	7.2	6.5	7.3	7.3	1.3	4.8
26	7.9	7.1	6.2	6.4	5.9	4.5	5.6	6.8	7.8	8.1	8.7	8.8	8.8	7.7	8.1	7.7	6.9	7.1	6.2	6.9	6.4	5.1	4.0	4.1	8.8	4.0	6.8
27	3.7	2.6	2.0	1.1	1.6	1.6	2.6	1.6	1.9	2.5	3.5	3.3	2.5	2.4	2.9	3.5	4.1	4.0	4.5	3.7	3.9	3.6	3.2	3.5	4.5	1.1	2.9
28	3.6	3.1	2.9	2.8	2.5	2.7	2.8	2.2	2.1	2.1	3.1	3.0	3.5	3.0	4.4	5.2	5.0	4.7	3.4	4.8	7.7	7.1	7.7	7.6	7.7	2.1	4.0
29	8.5	8.5	8.0	7.5	6.6	6.1	5.3	4.9	3.8	2.0	1.0	1.7	2.7	2.9	4.7	5.7	6.6	8.7	10.0	9.4	8.1	7.9	7.6	4.5	10.0	1.0	5.9
30	2.9	4.0	3.7	3.0	2.2	3.9	2.5	1.4	1.3	0.8	1.1	1.3	1.7	2.5	2.9	3.5	5.1	5.7	5.9	5.6	5.7	13.6	16.4	16.2	16.4	0.8	4.7
31	15.6	17.9	18.2	20.8	20.8	21.3	21.6	21.0	17.4	11.6	12.0	10.7	8.1	9.9	11.7	10.9	12.0	12.1	12.7	13.0	14.2	13.5	13.2	14.4	21.6	8.1	14.8
Max.	**15.6**	**17.9**	**18.2**	**20.8**	**20.8**	**21.3**	**21.6**	**21.0**	**17.4**	**11.6**	**12.0**	**10.7**	**9.2**	**9.9**	**11.7**	**10.9**	**12.0**	**12.2**	**12.7**	**13.0**	**14.2**	**13.6**	**16.4**	**16.2**	**21.6**		
Min.	**1.1**	**0.7**	**1.2**	**0.6**	**0.7**	**0.7**	**0.4**	**0.0**	**0.6**	**0.8**	**1.0**	**1.2**	**1.0**	**1.2**	**1.9**	**2.1**	**2.0**	**2.0**	**2.5**	**1.6**	**1.9**	**1.4**	**1.8**	**1.4**		**0.0**	
Avg.	**5.1**	**5.3**	**5.5**	**5.5**	**5.4**	**5.3**	**5.3**	**5.2**	**4.9**	**4.7**	**4.4**	**4.5**	**4.7**	**5.0**	**5.4**	**5.5**	**5.8**	**6.0**	**6.4**	**6.2**	**6.1**	**6.2**	**6.1**	**5.7**			**5.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.5	14.3	13.2	11.3	9.8	11.0	9.7	10.8	10.2	9.8	11.1	10.3	7.9	7.7	8.3	9.5	7.9	7.3	7.3	7.7	7.3	10.9	11.9	13.8	14.5	7.3	10.2
2	13.8	15.3	16.5	16.2	15.6	15.4	16.4	16.5	17.0	14.5	14.6	15.4	17.3	16.1	15.3	14.6	8.1	7.1	8.2	9.7	8.6	9.7	9.5	9.5	17.3	7.1	13.4
3	9.5	10.6	9.2	9.0	8.3	7.3	6.5	5.8	4.9	4.6	4.0	4.2	4.2	5.5	6.0	5.9	5.4	5.1	5.4	6.3	6.6	6.9	9.4	10.0	10.6	4.0	6.7
4	9.4	8.7	9.0	9.0	9.0	8.2	6.3	5.7	6.8	5.4	4.4	3.7	4.0	4.7	4.8	3.5	3.7	4.1	4.0	3.5	3.2	2.7	3.1	2.8	9.4	2.7	5.4
5	2.6	1.6	0.9	0.2	0.4	0.7	1.0	0.2	1.2	1.7	1.9	2.6	3.1	2.4	3.4	3.6	3.3	1.6	3.3	3.4	2.6	2.6	3.7	4.1	4.1	0.2	2.2
6	4.6	7.7	9.9	11.1	9.7	10.6	12.7	15.7	13.3	12.8	14.8	18.7	21.3	22.3	23.5	18.7	17.1	14.3	14.0	19.0	15.1	15.3	18.4	14.9	23.5	4.6	14.8
7	15.3	15.2	18.9	15.7	11.3	7.8	9.7	11.1	12.2	12.0	12.0	14.0	17.6	14.7	11.5	11.6	12.6	12.1	10.4	10.7	10.1	9.2	8.8	9.9	18.9	7.8	12.3
8	10.9	11.8	10.7	12.7	11.5	11.5	9.5	9.4	7.4	4.3	5.3	6.6	8.7	14.2	18.4	18.5	17.5	19.8	19.1	18.2	13.5	11.8	11.7	13.9	19.8	4.3	12.4
9	12.9	12.6	10.9	10.5	11.0	7.3	6.5	8.1	7.4	9.6	9.6	9.3	9.3	11.9	15.3	15.0	14.4	14.9	14.5	13.1	12.6	12.5	11.5	10.7	15.3	6.5	11.3
10	11.2	11.7	7.0	4.9	4.6	3.4	2.9	3.6	4.2	4.2	4.9	6.8	5.3	4.6	4.6	4.4	4.7	4.9	4.3	5.9	5.9	6.3	6.5	5.4	11.7	2.9	5.5
11	6.7	6.2	6.1	5.7	6.7	6.3	6.9	6.6	5.4	6.1	7.6	7.4	7.0	7.3	7.9	6.2	6.3	6.8	5.8	6.1	7.3	10.1	10.4	13.6	13.6	5.4	7.2
12	15.3	15.4	16.0	19.8	23.2	22.3	21.5	20.9	19.2	19.2	17.0	18.1	20.2	18.3	19.8	19.1	19.6	20.2	20.5	20.6	19.5	19.5	21.0	21.6	23.2	15.3	19.5
13	22.3	20.5	21.7	23.1	22.3	21.5	22.9	22.6	21.5	23.2	25.2	27.7	27.2	24.5	20.1	19.7	20.0	19.8	21.5	20.7	20.7	18.8	19.6	18.8	27.7	18.8	21.9
14	17.9	17.5	16.8	14.7	13.2	13.5	11.6	10.6	11.0	12.5	13.7	13.1	11.2	12.0	11.9	11.0	10.3	9.7	7.8	7.6	6.9	6.7	6.9	6.6	17.9	6.6	11.5
15	6.6	5.3	6.0	6.0	6.4	7.5	7.8	8.4	9.7	9.9	13.2	14.6	13.5	11.8	11.3	12.5	14.4	15.0	14.8	13.2	12.1	11.8	11.4	8.1	15.0	5.3	10.5
16	6.5	4.8	3.2	1.8	1.9	2.4	3.8	3.2	3.2	3.0	2.9	4.2	4.8	6.8	7.2	6.9	6.6	8.1	8.0	8.3	7.6	6.7	6.2	6.0	8.3	1.8	5.2
17	6.0	5.0	4.3	4.0	3.1	5.7	7.4	5.6	3.8	2.1	1.2	3.3	3.6	5.0	6.2	7.6	7.8	10.5	13.1	11.8	9.8	8.5	7.3	9.3	13.1	1.2	6.3
18	10.9	11.3	11.2	12.1	11.7	11.1	10.6	10.9	11.2	11.9	10.7	9.5	6.8	4.9	4.7	5.7	6.0	4.9	3.5	2.7	2.3	2.8	4.9	6.2	12.1	2.3	7.9
19	6.2	5.7	6.9	6.4	6.5	7.8	7.2	7.5	8.1	7.3	4.5	4.1	4.2	4.9	5.9	8.7	8.2	9.1	9.3	8.0	7.0	6.1	5.5	4.1	9.3	4.1	6.6
20	4.2	5.3	5.1	5.6	5.6	5.7	5.0	3.5	3.7	2.9	1.5	1.5	3.8	3.8	5.0	5.1	5.3	5.5	4.9	4.0	3.5	4.0	4.5	3.8	5.7	1.5	4.3
21	3.6	3.4	3.1	3.2	3.3	3.6	3.5	2.6	2.1	2.5	2.0	2.3	2.0	3.1	4.4	6.1	6.1	7.4	8.2	7.4	6.4	6.0	6.1	5.2	8.2	2.0	4.3
22	5.2	5.0	4.0	3.4	3.0	2.6	1.6	2.1	2.4	2.2	1.9	1.7	2.6	2.6	4.2	5.4	6.3	7.0	8.5	9.1	8.7	8.6	9.0	9.8	9.8	1.6	4.9
23	9.6	8.7	8.7	11.4	12.0	13.5	13.1	11.5	11.2	10.8	11.8	11.9	10.8	11.0	12.5	13.1	13.6	12.3	13.3	14.2	13.2	13.5	11.9	10.6	14.2	8.7	11.8
24	9.3	9.6	8.9	9.0	9.2	7.9	6.1	5.8	4.3	5.0	5.8	6.4	7.2	7.9	7.8	7.7	7.5	7.8	7.4	5.8	5.1	4.6	4.7	4.3	9.6	4.3	6.9
25	4.0	5.0	5.2	4.4	4.2	4.6	5.7	5.2	6.0	5.5	4.7	3.6	2.6	2.3	2.7	3.9	4.8	5.5	5.2	4.4	3.3	3.9	3.2	3.0	6.0	2.3	4.3
26	2.4	2.5	3.4	2.7	1.6	1.6	1.4	1.9	1.8	3.0	3.1	1.5	1.1	1.1	2.4	1.3	1.0	2.3	2.7	3.3	4.5	5.2	4.7	4.4	5.2	1.0	2.5
27	5.1	5.6	5.5	4.5	7.1	7.5	7.5	7.2	8.2	8.2	8.8	9.1	9.4	9.0	7.2	8.4	10.7	10.2	8.8	7.6	8.4	7.7	8.0	7.7	10.7	4.5	7.8
28	6.6	7.0	7.1	7.0	6.1	6.0	5.1	3.8	3.1	2.6	1.6	0.8	1.1	1.0	0.7	1.7	1.4	3.0	3.6	3.0	5.3	6.4	7.0	7.3	7.3	0.7	4.1
29	9.4	10.6	9.7	5.1	5.2	7.2	8.5	8.1	7.9	7.9	8.7	9.5	8.4	9.7	8.4	7.9	6.9	6.9	8.5	6.2	5.5	5.6	4.7	3.7	10.6	3.7	7.5
30	3.8	2.3	0.8	2.1	3.4	4.3	4.6	5.5	5.4	5.4	5.9	5.8	5.7	4.6	4.4	3.7	3.3	2.4	2.3	3.0	2.5	2.0	1.1	0.8	5.9	0.8	3.5
Max.	**22.3**	**20.5**	**21.7**	**23.1**	**23.2**	**22.3**	**22.9**	**22.6**	**21.5**	**23.2**	**25.2**	**27.7**	**27.2**	**24.5**	**23.5**	**19.7**	**20.0**	**20.2**	**21.5**	**20.7**	**20.7**	**19.5**	**21.0**	**21.6**	**27.7**		
Min.	**2.4**	**1.6**	**0.8**	**0.2**	**0.4**	**0.7**	**1.0**	**0.2**	**1.2**	**1.7**	**1.2**	**0.8**	**1.1**	**1.0**	**0.7**	**1.3**	**1.0**	**1.6**	**2.3**	**2.7**	**2.3**	**2.0**	**1.1**	**0.8**		**0.2**	
Avg.	**8.9**	**8.9**	**8.7**	**8.4**	**8.2**	**8.2**	**8.1**	**8.0**	**7.8**	**7.7**	**7.8**	**8.3**	**8.4**	**8.5**	**8.9**	**8.9**	**8.7**	**8.9**	**8.9**	**8.8**	**8.2**	**8.2**	**8.4**	**8.3**			**8.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.9	2.2	2.5	3.0	3.5	3.6	4.2	4.8	5.7	5.5	7.4	6.8	8.2	9.7	9.0	9.4	8.7	8.1	7.9	7.5	8.4	7.3	7.4	5.2	9.7	0.9	6.1
2	4.1	5.2	4.5	4.6	2.8	3.4	2.5	3.7	3.3	1.8	1.8	1.4	0.8	0.7	1.7	3.3	3.8	4.4	4.6	5.0	7.2	10.3	9.4	9.0	10.3	0.7	4.1
3	8.1	7.5	6.2	5.1	4.0	4.8	4.8	5.1	5.9	6.6	6.2	6.7	6.9	6.7	8.0	6.8	6.5	6.0	4.4	4.7	5.6	5.4	4.5	3.7	8.1	3.7	5.9
4	5.0	4.3	3.5	4.1	3.9	3.7	2.9	2.8	2.8	2.8	2.4	1.1	1.1	1.4	1.5	1.9	1.6	2.0	0.6	1.0	1.2	1.4	1.9	1.7	5.0	0.6	2.4
5	2.3	1.9	1.5	3.2	4.8	5.3	4.7	3.4	1.6	1.3	1.0	1.0	1.1	0.8	0.9	2.2	3.2	4.2	4.0	5.5	5.0	4.4	3.9	3.7	5.5	0.8	2.9
6	2.8	2.6	1.9	1.5	1.2	1.3	1.0	0.8	0.8	1.0	0.9	0.8	0.7	0.6	0.7	0.3	0.0	0.9	1.6	1.4	1.1	1.1	1.1	1.1	2.8	0.0	1.1
7	1.1	0.8	0.7	1.6	7.5	7.4	7.2	7.6	7.3	6.6	6.5	6.2	5.9	5.5	5.5	5.9	6.1	9.0	9.6	10.3	10.1	10.1	10.3	10.4	10.4	0.7	6.6
8	9.8	9.7	10.1	9.0	8.6	9.4	9.2	9.5	8.1	7.1	7.2	6.9	6.9	5.7	6.6	7.2	7.7	8.1	8.1	8.8	7.8	6.3	9.4	9.5	10.1	5.7	8.2
9	9.5	13.9	15.7	18.2	20.2	21.7	22.9	24.7	23.2	25.3	27.4	28.4	26.8	27.6	29.4	28.1	28.0	29.3	28.8	27.9	25.5	23.9	22.7	22.3	29.4	9.5	23.8
10	18.0	18.8	12.8	8.6	10.3	9.4	8.1	7.8	7.3	6.5	8.0	8.1	7.9	6.6	7.3	8.0	10.8	11.5	9.9	7.9	9.1	9.3	8.0	8.0	18.8	6.5	9.5
11	9.3	11.5	14.1	16.0	15.8	17.2	16.3	14.9	7.0	5.4	6.6	8.3	9.4	10.8	11.7	10.8	11.3	13.1	14.7	15.4	16.2	17.1	16.2	17.3	17.3	5.4	12.8
12	17.7	17.5	13.8	14.1	15.0	15.5	14.8	14.6	14.2	12.9	10.8	8.5	6.4	4.9	5.1	5.1	5.3	7.1	9.6	8.3	8.4	8.5	9.5	8.4	17.7	4.9	10.7
13	7.4	6.8	5.8	5.7	4.3	4.0	3.1	3.5	2.1	2.2	2.2	4.0	5.3	7.0	7.7	11.8	13.4	12.0	11.7	13.5	13.7	13.0	13.0	13.5	13.7	2.1	7.8
14	14.4	14.2	14.2	13.1	13.6	11.7	8.8	8.6	7.8	5.7	5.4	4.8	4.1	3.0	2.8	2.4	1.4	0.7	0.6	0.6	0.4	0.1	0.0	0.0	14.4	0.0	5.8
15	0.2	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.5	0.4	0.2	0.1	0.0	0.1	0.5	0.3	3.1	4.2	5.1	8.7	10.2	11.8	13.3	14.9	17.0	17.0	0.0	3.8
18	19.2	20.5	21.2	20.9	19.1	19.8	20.2	17.9	20.5	20.0	18.2	13.2	10.0	6.9	5.8	6.3	6.6	7.4	7.8	9.2	7.7	8.1	6.1	5.8	21.2	5.8	13.3
19	6.9	8.2	9.3	9.6	9.1	8.2	7.3	6.0	6.0	5.5	5.3	5.5	4.7	4.0	2.7	2.4	2.0	1.5	1.2	2.4	3.0	3.0	3.9	3.6	9.6	1.2	5.1
20	4.2	4.2	4.6	5.5	5.1	4.2	4.7	3.5	4.2	5.1	5.4	5.5	4.6	4.4	3.7	3.6	3.7	2.9	2.1	1.4	1.4	2.6	2.6	2.1	5.5	1.4	3.8
21	2.0	1.9	2.0	1.1	0.7	0.8	2.1	3.4	2.9	3.1	4.1	4.2	4.9	5.7	8.6	11.2	10.5	10.9	11.5	12.7	12.7	11.5	9.8	9.7	12.7	0.7	6.2
22	9.1	7.0	8.5	4.2	5.0	7.1	7.3	9.2	10.9	10.3	9.9	9.3	8.7	11.1	10.8	9.5	8.5	8.5	8.8	9.8	9.5	9.1	9.2	6.3	11.1	4.2	8.6
23	6.3	6.4	5.9	7.5	8.7	10.7	12.0	11.6	11.8	12.4	14.1	15.2	16.1	16.1	15.6	12.5	13.2	12.9	10.6	10.1	10.4	10.8	10.7	11.2	16.1	5.9	11.4
24	12.6	13.5	12.8	12.8	12.1	12.7	14.5	14.1	12.6	10.0	8.3	7.0	5.4	4.0	6.5	9.2	9.2	8.5	8.2	7.7	4.8	3.7	5.4	4.9	14.5	3.7	9.2
25	6.3	7.7	8.8	9.9	8.1	7.8	7.0	6.7	7.6	6.4	6.8	5.2	4.3	5.7	4.6	4.2	4.7	7.0	6.6	5.8	5.6	5.2	5.0	5.2	9.9	4.2	6.3
26	5.1	5.7	6.0	6.7	8.1	8.6	7.6	7.0	7.5	5.5	4.8	7.0	7.3	5.9	7.0	7.1	10.5	11.5	12.6	11.9	13.3	11.9	11.3	11.9	13.3	4.8	8.4
27	10.2	8.3	6.6	8.8	7.1	7.2	6.9	6.9	7.9	6.6	6.3	6.4	6.5	7.0	6.5	7.9	9.2	8.1	7.7	7.2	6.4	4.0	2.4	1.2	10.2	1.2	6.8
28	1.8	3.6	5.2	6.9	8.4	8.6	8.5	10.2	9.5	9.4	11.7	10.5	9.0	7.9	8.3	6.5	6.6	5.0	4.3	3.8	4.7	3.1	2.3	1.3	11.7	1.3	6.5
29	0.4	0.9	1.7	2.3	2.6	2.3	1.8	0.6	1.1	1.9	3.2	4.2	5.2	6.4	6.6	7.1	7.3	7.0	7.5	7.2	7.9	8.4	8.2	7.8	8.4	0.4	4.6
30	9.1	9.6	9.2	7.6	7.0	7.9	7.3	8.1	6.8	7.1	8.9	6.1	3.1	4.0	5.3	6.3	5.3	6.3	6.9	5.3	4.8	4.4	3.8	3.6	9.6	3.1	6.4
31	3.7	3.9	3.3	2.7	1.5	1.7	0.6	1.4	1.1	1.1	1.9	1.8	0.8	0.3	1.1	1.6	1.8	1.6	2.1	1.6	1.6	1.7	1.2	0.8	3.9	0.3	1.7
Max.	**19.2**	**20.5**	**21.2**	**20.9**	**20.2**	**21.7**	**22.9**	**24.7**	**23.2**	**25.3**	**27.4**	**28.4**	**26.8**	**27.6**	**29.4**	**28.1**	**28.0**	**29.3**	**28.8**	**27.9**	**25.5**	**23.9**	**22.7**	**22.3**	**29.4**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.7**	**7.1**	**6.9**	**6.9**	**7.0**	**7.3**	**7.1**	**7.1**	**6.7**	**6.3**	**6.5**	**6.3**	**5.9**	**5.8**	**6.2**	**6.5**	**6.8**	**7.1**	**7.2**	**7.2**	**7.3**	**7.1**	**6.9**	**6.7**			**6.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.7	2.8	2.7	2.1	1.3	2.4	3.1	2.9	3.3	4.2	4.5	3.8	5.3	4.6	4.2	5.2	4.8	5.1	4.8	5.9	5.7	6.5	8.3	7.5	8.3	1.3	4.3
2	7.1	6.1	6.3	5.1	6.8	6.4	5.9	6.5	6.1	5.6	5.6	7.8	7.6	7.1	7.8	6.7	7.6	8.4	8.0	6.3	6.6	4.9	8.5	8.7	8.7	4.9	6.8
3	7.0	8.4	10.0	5.8	3.6	2.8	2.1	3.8	3.0	2.9	3.4	3.1	2.4	1.6	1.2	1.0	0.8	0.9	0.8	0.7	0.5	0.4	0.5	0.5	10.0	0.4	2.8
4	0.4	0.4	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.1
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.4	4.5	4.4	4.5	0.0	0.7
6	4.7	4.5	4.7	4.4	4.7	5.0	6.4	7.0	7.3	8.5	7.8	6.9	4.9	5.0	4.8	4.1	4.6	4.1	3.7	3.9	4.8	4.3	5.3	5.2	8.5	3.7	5.3
7	5.1	6.5	7.3	7.4	5.7	6.0	5.9	5.5	3.7	5.1	5.8	5.5	4.3	4.1	4.5	5.3	5.0	4.9	6.2	6.0	6.6	5.4	5.0	9.9	9.9	3.7	5.7
8	8.9	7.0	6.1	5.4	4.5	2.7	2.3	2.0	1.5	1.4	1.8	2.0	6.1	13.1	12.6	12.2	11.1	11.6	15.4	17.8	17.9	19.6	19.1	18.6	19.6	1.4	9.2
9	20.3	20.3	22.3	22.8	24.6	24.2	22.9	22.3	20.6	14.2	12.2	11.4	13.3	12.8	17.0	18.8	17.2	13.7	12.8	18.1	21.1	19.9	20.1	21.4	24.6	11.4	18.5
10	23.0	21.5	15.4	10.6	10.5	11.8	11.9	10.8	10.5	7.5	10.7	7.5	6.1	4.5	3.5	2.9	6.3	11.3	10.2	8.3	11.0	15.2	12.5	12.3	23.0	2.9	10.7
11	10.4	9.7	8.8	9.1	10.9	8.2	7.2	7.2	6.0	5.1	3.9	2.7	1.9	1.3	0.8	0.2	0.4	0.3	0.5	1.1	2.4	2.8	2.3	0.8	10.9	0.2	4.3
12	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	10.2	12.0	11.4	13.5	15.5	14.5	15.6	15.6	15.6	0.0	4.7
16	14.7	15.9	16.3	3.8	3.3	8.6	6.9	4.5	2.7	2.9	2.7	2.1	1.8	1.5	0.7	0.6	0.5	0.5	0.3	0.4	0.9	0.5	0.3	0.1	16.3	0.1	3.9
17	0.3	0.5	0.3	0.4	0.1	0.3	0.9	2.0	3.1	2.6	2.9	2.2	4.8	5.3	7.1	6.4	6.5	6.5	6.3	6.6	6.8	7.3	6.9	6.4	7.3	0.1	3.9
18	7.4	8.1	8.1	7.3	6.8	6.9	4.8	4.0	3.3	2.9	1.9	1.9	3.3	2.8	6.7	7.1	6.1	6.3	5.7	6.0	6.1	4.3	1.9	2.0	8.1	1.9	5.1
19	1.7	1.5	0.9	0.5	0.6	0.8	0.6	0.6	4.1	10.5	11.8	13.7	12.9	15.2	16.1	15.8	13.9	15.8	15.8	17.1	18.6	16.2	14.3	14.0	18.6	0.5	9.7
20	14.9	11.8	10.7	11.9	13.7	17.2	15.8	15.5	15.8	14.9	17.1	16.4	16.7	16.5	14.9	16.2	15.9	14.5	15.3	14.1	14.4	12.8	12.7	10.3	17.2	10.3	14.6
21	11.2	9.4	8.8	6.9	6.7	6.3	5.5	4.4	3.8	4.0	2.7	2.5	3.3	2.3	2.0	1.4	1.8	1.9	1.2	1.7	1.3	1.3	1.8	0.5	11.2	0.5	3.9
22	1.2	0.3	1.4	3.2	3.4	3.2	3.7	3.9	4.8	5.0	4.1	4.5	6.3	5.9	5.3	4.8	4.3	5.3	5.3	5.9	4.6	3.6	4.7	4.3	6.3	0.3	4.1
23	5.1	4.9	3.5	3.2	6.4	7.5	6.1	4.6	4.0	2.5	4.7	3.4	2.2	2.5	3.6	4.7	7.4	6.8	14.5	16.8	14.9	15.6	15.6	14.2	16.8	2.2	7.3
24	16.1	18.6	20.6	25.0	24.8	22.8	19.5	17.4	21.9	22.8	21.6	22.4	23.6	19.9	19.8	18.8	14.7	7.6	3.1	3.3	5.5	14.5	15.7	16.3	25.0	3.1	17.4
25	15.8	14.9	11.0	14.1	13.8	13.7	12.6	12.2	13.4	11.9	7.9	7.2	4.7	2.3	3.1	3.8	2.4	1.2	0.2	0.5	0.3	0.1	0.0	0.0	15.8	0.0	7.0
26	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.8	1.1	1.2	3.1	9.6	9.9	10.1	8.7	7.8	7.2	7.1	5.9	7.5	10.1	0.0	3.4
27	6.6	6.4	5.6	6.5	6.4	5.9	5.3	4.3	5.0	4.3	5.1	5.6	5.0	4.4	5.4	5.5	5.9	5.9	5.9	7.2	6.4	6.0	5.6	4.8	7.2	4.3	5.6
28	5.3	5.8	6.7	6.7	5.9	6.1	6.5	6.3	4.7	4.0	3.9	3.0	1.8	2.3	2.7	3.0	2.8	3.5	3.7	3.5	3.9	3.7	3.1	3.8	6.7	1.8	4.3
29	3.8	3.8	4.4	4.2	4.2	4.6	4.7	5.6	5.4	6.3	6.7	6.6	7.9	8.5	7.4	9.4	10.3	9.8	10.3	10.3	8.6	6.0	3.6	1.6	10.3	1.6	6.4
30	0.9	0.1	0.4	0.7	1.1	1.3	1.5	1.5	1.6	1.5	1.4	1.3	1.2	0.9	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5	1.6	0.1	0.9
Max.	**23.0**	**21.5**	**22.3**	**25.0**	**24.8**	**24.2**	**22.9**	**22.3**	**21.9**	**22.8**	**21.6**	**22.4**	**23.6**	**19.9**	**19.8**	**18.8**	**17.2**	**15.8**	**15.8**	**18.1**	**21.1**	**19.9**	**20.1**	**21.4**	**25.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.5**	**6.3**	**6.1**	**5.6**	**5.7**	**5.8**	**5.4**	**5.2**	**5.2**	**5.0**	**5.0**	**4.8**	**4.9**	**4.9**	**5.2**	**5.6**	**5.7**	**5.6**	**5.7**	**6.1**	**6.5**	**6.6**	**6.5**	**6.4**			**5.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AQ) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	0.4	0.4	0.4	0.2	0.1	1.4	2.3	2.8	3.6	3.4	4.0	3.4	5.3	5.9	4.8	4.1	5.2	5.6	6.9	7.8	7.6	7.5	10.0	10.0	0.1	3.9
2	9.3	14.0	10.6	7.6	7.3	10.5	11.2	15.3	15.5	17.6	21.8	25.0	23.1	24.4	23.3	23.5	25.1	27.8	28.8	28.2	25.7	22.4	23.9	25.8	28.8	7.3	19.5
3	24.3	23.9	26.8	23.2	23.2	25.5	27.3	28.4	25.6	27.2	30.9	34.0	33.5	33.7	34.6	38.6	34.2	34.2	32.0	32.0	32.7	31.9	29.5	29.7	38.6	23.2	29.9
4	27.3	26.1	23.9	17.2	17.6	19.4	17.5	15.2	15.0	15.7	15.3	19.3	21.0	20.6	21.9	21.5	19.9	18.9	18.4	16.1	16.1	16.5	16.8	15.8	27.3	15.0	18.9
5	16.1	16.1	14.5	16.5	16.7	17.5	18.1	19.7	18.6	20.9	20.8	21.3	20.8	20.7	18.6	17.0	15.5	16.0	16.2	17.1	16.1	14.0	12.2	12.3	21.3	12.2	17.2
6	12.1	15.0	15.3	14.5	15.9	14.8	11.6	9.7	9.2	8.9	8.2	7.5	4.7	4.4	4.0	3.0	2.6	2.2	2.4	2.5	1.9	1.2	0.3	1.4	15.9	0.3	7.2
7	1.9	1.6	2.2	2.4	3.1	3.6	2.6	2.3	2.3	2.1	1.9	1.3	1.0	0.7	0.9	0.7	1.1	1.6	1.3	1.9	2.1	2.2	2.5	3.8	3.8	0.7	2.0
8	7.4	6.9	8.4	11.2	10.3	9.7	8.5	8.4	12.8	14.2	14.6	12.7	14.0	15.1	20.8	18.1	17.9	13.8	10.3	10.7	11.2	10.5	10.3	8.8	20.8	6.9	11.9
9	8.6	7.5	7.2	5.7	4.5	4.1	3.9	3.8	3.6	2.3	0.8	2.1	3.4	3.4	4.1	4.5	4.1	3.7	4.6	4.1	5.9	6.8	8.1	9.1	9.1	0.8	4.8
10	9.2	9.3	9.9	11.9	16.1	15.7	15.8	15.5	14.7	13.7	11.3	8.3	7.0	6.0	5.7	5.2	4.9	4.6	4.1	3.2	3.1	3.2	3.1	4.2	16.1	3.1	8.6
11	4.1	3.2	3.1	4.3	3.3	3.1	2.4	1.6	2.2	4.1	6.7	7.6	7.0	6.2	4.1	3.0	4.1	6.0	7.0	7.7	8.3	7.1	5.5	6.1	8.3	1.6	4.9
12	6.4	6.6	6.0	4.7	4.6	4.2	3.9	2.9	2.3	2.2	2.7	4.4	5.1	5.4	6.1	6.0	6.3	7.7	7.4	7.3	5.6	6.5	7.5	9.3	9.3	2.2	5.5
13	7.8	9.0	8.1	8.0	8.7	8.8	7.0	6.7	5.8	6.5	7.9	7.0	6.5	4.3	2.2	2.0	2.3	2.4	2.0	2.7	2.7	2.6	3.8	4.9	9.0	2.0	5.4
14	6.2	6.6	8.2	10.4	11.8	14.5	13.5	14.9	11.6	14.4	14.5	14.4	13.2	10.3	11.7	12.4	13.7	14.9	13.2	14.4	17.5	19.8	15.1	14.9	19.8	6.2	13.0
15	16.8	18.8	17.6	18.8	18.6	17.0	16.9	13.6	10.8	11.8	11.5	7.9	5.6	5.5	6.1	3.5	0.7	0.4	1.5	2.7	4.2	4.3	4.7	4.7	18.8	0.4	9.3
16	4.2	3.6	3.8	5.0	5.3	5.4	5.7	6.0	7.2	9.9	12.9	10.4	8.4	9.4	8.8	8.3	8.4	7.0	6.4	6.4	5.2	5.7	6.7	8.1	12.9	3.6	7.0
17	18.5	21.4	18.3	19.1	21.4	23.4	22.2	22.6	22.6	23.0	23.3	22.9	21.5	21.1	20.3	20.6	21.7	21.9	21.4	21.0	19.5	20.1	18.7	17.6	23.4	17.6	21.0
18	16.1	19.3	19.8	19.0	21.6	23.7	22.2	22.2	23.3	23.3	23.1	19.6	19.0	21.9	23.6	24.3	24.4	24.1	21.4	24.3	24.3	23.2	22.4	24.9	24.9	16.1	22.1
19	24.1	23.9	21.9	21.6	20.4	21.2	20.6	20.1	20.8	21.9	18.1	17.5	15.5	10.7	8.8	7.8	8.6	10.4	9.8	10.6	12.4	9.7	9.8	9.9	24.1	7.8	15.7
20	8.0	10.4	9.4	11.3	10.0	8.4	7.8	7.4	6.9	7.7	7.3	6.3	6.9	8.3	8.2	5.4	4.7	3.1	2.9	1.6	1.5	1.6	2.2	1.7	11.3	1.5	6.2
21	2.4	3.3	3.9	4.9	5.4	4.7	3.3	3.5	4.1	4.3	4.0	3.8	3.5	4.5	4.9	4.9	4.5	3.6	3.8	3.4	2.8	2.4	1.6	1.1	5.4	1.1	3.7
22	2.0	3.3	4.4	6.7	7.6	8.0	9.2	11.2	10.7	11.8	11.9	9.7	6.4	7.9	11.1	11.5	11.4	10.4	9.0	10.0	10.4	9.7	9.5	9.8	11.9	2.0	8.9
23	10.9	11.7	13.7	14.4	14.5	13.7	9.8	6.5	4.9	10.7	11.5	11.7	9.4	8.4	9.3	9.4	8.6	8.6	7.8	7.4	8.5	11.7	9.7	12.2	14.5	4.9	10.2
24	12.7	10.6	8.3	6.5	4.9	3.6	3.2	3.4	3.1	1.9	2.1	2.5	1.9	1.9	1.9	1.7	1.8	1.6	1.0	0.2	0.2	1.8	2.8	2.2	12.7	0.2	3.4
25	2.9	7.7	8.0	8.1	8.2	8.5	9.8	9.8	9.6	8.1	9.3	11.2	12.6	12.7	13.0	9.7	10.7	11.2	12.6	13.6	13.8	14.9	15.8	15.6	15.8	2.9	10.7
26	14.5	15.0	17.2	14.7	16.2	17.7	17.0	17.4	18.7	17.8	16.2	15.2	15.2	15.8	15.5	15.9	15.0	13.9	14.8	15.6	15.8	16.0	16.8	18.8	18.8	13.9	16.1
27	17.7	18.3	16.7	19.6	20.5	19.4	19.3	19.3	18.7	20.3	17.3	18.2	15.3	16.2	15.8	13.9	15.6	15.8	14.7	16.1	16.0	13.7	12.3	13.2	20.5	12.3	16.8
28	14.0	14.8	12.8	11.2	11.9	12.3	11.2	12.1	12.4	14.5	12.3	13.6	10.7	9.4	9.5	10.0	8.7	8.0	7.3	6.4	5.6	4.9	4.6	4.4	14.8	4.4	10.1
29	3.6	3.8	3.7	4.3	5.5	5.1	4.0	4.6	4.1	5.2	4.7	4.2	3.8	3.6	3.3	3.2	2.3	2.1	4.2	4.6	5.2	5.2	5.2	5.3	5.5	2.1	4.2
30	5.0	4.9	4.3	4.0	2.3	2.6	5.0	4.9	4.3	4.3	3.7	4.1	4.2	5.5	4.9	4.4	4.9	5.8	6.1	6.4	6.5	6.6	8.0	6.9	8.0	2.3	5.0
31	7.9	9.2	10.2	10.0	9.2	10.0	9.4	8.7	9.9	9.6	10.0	10.0	10.9	11.2	12.1	11.7	11.2	9.6	9.3	9.8	10.4	11.4	11.9	10.6	12.1	7.9	10.2
Max.	**27.3**	**26.1**	**26.8**	**23.2**	**23.2**	**25.5**	**27.3**	**28.4**	**25.6**	**27.2**	**30.9**	**34.0**	**33.5**	**33.7**	**34.6**	**38.6**	**34.2**	**34.2**	**32.0**	**32.0**	**32.7**	**31.9**	**29.5**	**29.7**	**38.6**		
Min.	**0.5**	**0.4**	**0.4**	**0.4**	**0.2**	**0.1**	**1.4**	**1.6**	**2.2**	**1.9**	**0.8**	**1.3**	**1.0**	**0.7**	**0.9**	**0.7**	**0.7**	**0.4**	**1.0**	**0.2**	**0.2**	**1.2**	**0.3**	**1.1**		**0.1**	
Avg.	**10.4**	**11.2**	**10.9**	**10.9**	**11.2**	**11.5**	**11.0**	**11.0**	**10.8**	**11.6**	**11.6**	**11.5**	**10.8**	**10.8**	**11.0**	**10.5**	**10.3**	**10.2**	**9.9**	**10.2**	**10.3**	**10.2**	**10.0**	**10.4**			**10.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.5	1.6	2.2	1.9	2.0	2.3	2.8	3.1	4.4	4.7	4.9	4.6	5.5	6.5	7.3	7.1	6.8	6.8	6.7	6.1	6.4	5.4	6.7	6.9	7.3	1.5	4.8
2	5.8	4.9	5.8	4.4	3.8	3.7	3.3	3.2	3.5	3.8	4.6	4.1	2.3	1.8	2.3	2.6	3.5	3.5	3.7	3.4	3.2	2.6	2.6	1.4	5.8	1.4	3.5
3	1.3	1.2	1.0	0.7	1.7	1.9	1.3	1.5	0.7	1.2	1.4	1.7	2.1	2.0	2.7	3.1	3.0	2.5	2.2	1.7	1.2	1.6	1.6	1.8	3.1	0.7	1.7
4	2.8	2.4	1.4	1.6	2.2	2.8	1.9	2.1	2.7	2.2	1.6	2.0	2.8	3.6	4.3	4.9	6.1	6.1	6.0	5.0	6.5	8.6	8.5	8.5	8.6	1.4	4.0
5	7.7	7.9	8.8	10.1	9.5	9.5	9.7	8.9	9.3	9.8	9.3	9.7	10.5	9.8	10.3	10.4	10.7	11.1	12.3	13.9	14.1	13.7	13.9	14.3	14.3	7.7	10.6
6	12.4	10.4	10.6	10.4	9.4	9.3	9.0	7.9	8.9	8.0	8.9	9.6	8.0	7.7	8.1	8.3	8.7	8.2	8.1	7.6	7.1	5.9	5.4	4.7	12.4	4.7	8.4
7	3.8	3.2	3.1	3.1	3.1	3.2	3.4	3.9	3.8	3.7	3.8	3.1	4.2	3.9	3.7	4.4	4.9	6.9	9.7	9.0	8.0	6.0	6.0	5.2	9.7	3.1	4.7
8	5.8	5.1	4.9	4.8	4.9	5.1	4.9	4.9	4.9	4.5	5.1	4.9	3.7	4.1	4.9	5.6	6.1	5.9	4.6	4.9	5.3	4.6	5.0	4.8	6.1	3.7	5.0
9	4.5	4.1	4.4	4.7	4.6	5.2	6.3	6.5	7.1	7.7	7.9	6.0	6.3	8.0	8.1	7.5	6.6	7.2	7.5	6.6	6.7	7.6	7.8	11.3	11.3	4.1	6.7
10	11.0	10.8	10.4	9.7	9.2	8.9	8.5	8.1	6.4	5.8	6.3	6.2	6.6	6.1	6.1	6.4	5.5	5.0	5.8	5.7	5.8	6.8	6.4	6.6	11.0	5.0	7.3
11	6.0	4.3	5.2	6.4	6.3	6.3	6.5	5.9	5.3	5.3	5.7	5.1	4.2	3.5	3.6	3.3	2.6	2.4	2.3	2.3	2.3	2.4	2.2	1.6	6.5	1.6	4.2
12	1.8	2.1	2.4	2.4	2.2	2.2	2.2	2.1	2.0	2.0	2.3	2.3	2.4	2.5	2.4	2.5	2.7	2.5	3.1	3.4	3.7	4.6	6.3	5.2	6.3	1.8	2.8
13	6.0	6.1	6.9	5.4	6.1	4.7	5.2	5.1	5.0	4.8	4.2	3.5	3.1	2.6	2.3	2.2	2.7	2.5	2.2	2.2	2.3	2.4	2.1	1.9	6.9	1.9	3.8
14	2.0	2.3	2.1	1.0	0.0	0.0	1.0	4.5	8.3	10.6	12.3	13.3	13.1	14.6	15.8	17.9	18.7	17.9	18.0	16.7	17.8	19.8	24.8	26.9	26.9	0.0	11.6
15	24.3	27.8	30.7	31.3	27.9	26.5	23.2	21.5	22.0	18.9	16.6	16.8	14.4	13.6	14.8	14.4	13.6	10.8	9.2	10.5	9.1	12.4	12.9	11.7	31.3	9.1	18.1
16	7.1	3.9	2.3	3.3	4.0	4.5	4.2	4.2	4.3	4.6	7.0	6.8	7.9	8.4	8.1	7.4	8.0	5.5	3.7	3.0	2.4	2.3	1.4	4.6	8.4	1.4	5.0
17	8.3	7.4	12.0	14.1	15.4	16.3	19.0	20.9	19.9	18.3	19.2	23.9	25.8	22.5	19.8	20.9	22.3	23.8	20.9	16.3	12.8	13.2	11.7	10.4	25.8	7.4	17.3
18	9.9	11.1	10.6	8.6	9.1	5.4	2.3	1.9	1.5	1.3	0.8	0.6	0.5	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	2.7
19	1.3	1.3	1.3	1.5	1.6	1.7	8.1	23.7	23.3	23.0	28.0	31.1	32.4	34.3	31.4	31.5	30.8	31.0	31.9	31.5	29.4	26.2	23.4	21.6	34.3	1.3	20.9
20	17.9	15.8	12.9	12.2	12.6	11.6	10.7	11.5	10.2	8.4	10.5	12.1	12.7	10.3	9.1	6.6	5.0	5.3	4.0	0.0	0.0	0.0	0.0	0.0	17.9	0.0	8.3
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.9	0.7	0.8	0.9	1.1	1.1	0.9	13.2	17.0	17.0	0.0	1.6
22	15.3	6.4	2.7	3.2	4.6	2.8	4.2	1.8	1.5	4.6	11.3	11.7	11.9	9.8	11.8	10.1	10.2	7.3	5.1	4.2	2.7	3.5	2.3	1.9	15.3	1.5	6.3
23	3.8	5.4	4.9	7.5	9.0	7.8	6.3	6.5	6.4	5.7	6.3	6.9	6.3	4.9	3.7	4.5	6.2	5.6	5.8	3.5	2.8	0.8	2.6	0.7	9.0	0.7	5.2
24	0.4	0.7	1.6	1.7	2.5	2.8	4.1	6.3	8.9	7.6	7.8	8.2	8.4	8.1	8.5	8.6	7.7	7.7	6.8	5.6	5.0	4.8	3.7	3.1	8.9	0.4	5.4
25	2.0	1.0	0.9	1.9	2.5	4.7	4.8	4.4	4.5	2.9	3.6	3.5	3.8	2.1	1.3	2.9	6.4	5.2	3.0	5.2	6.0	6.5	8.2	8.0	8.2	0.9	4.0
26	6.7	6.8	6.8	6.9	7.6	7.3	7.5	7.7	7.8	8.4	7.9	5.7	3.3	1.9	0.8	1.7	1.9	2.3	2.8	3.2	5.1	5.9	6.6	5.0	8.4	0.8	5.3
27	5.6	7.0	7.9	8.5	9.4	8.8	8.5	11.7	15.6	17.7	20.0	20.6	20.6	20.6	22.6	24.8	24.7	24.7	24.2	23.6	22.6	23.0	20.1	18.8	24.8	5.6	17.2
28	18.4	15.6	12.5	10.8	9.2	9.7	6.9	6.4	6.3	4.6	3.5	2.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	0.0	4.4
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.4	5.0	5.7	6.7	6.6	7.6	6.7	5.1	4.2	7.6	0.0	2.3
30	3.5	2.8	2.4	2.0	2.5	3.2	4.2	4.5	4.6	4.0	4.7	2.4	3.3	3.1	1.2	0.6	2.1	4.0	4.8	4.2	3.9	3.6	7.6	6.8	7.6	0.6	3.6
31	5.9	5.5	6.2	4.8	3.9	3.6	3.1	2.3	3.1	3.1	2.7	4.2	3.8	2.5	1.3	0.0	0.6	1.5	1.3	0.8	0.5	0.1	0.0	0.0	6.2	0.0	2.5
Max.	**24.3**	**27.8**	**30.7**	**31.3**	**27.9**	**26.5**	**23.2**	**23.7**	**23.3**	**23.0**	**28.0**	**31.1**	**32.4**	**34.3**	**31.4**	**31.5**	**30.8**	**31.0**	**31.9**	**31.5**	**29.4**	**26.2**	**24.8**	**26.9**	**34.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.5**	**6.0**	**6.0**	**6.0**	**6.0**	**5.9**	**5.9**	**6.5**	**6.8**	**6.7**	**7.4**	**7.5**	**7.4**	**7.1**	**7.1**	**7.3**	**7.5**	**7.4**	**7.2**	**6.7**	**6.5**	**6.5**	**7.0**	**6.9**			**6.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	11.3	9.3	6.8	6.3	5.9	6.7	7.4	7.4	8.0	11.3	0.0	3.3
3	9.4	6.4	6.3	7.0	7.9	7.1	8.7	7.2	6.6	6.8	7.9	8.7	9.8	7.9	7.5	6.8	6.5	5.3	6.0	5.3	3.9	3.6	2.8	1.8	9.8	1.8	6.6
4	2.2	2.8	2.7	2.6	3.1	3.7	4.2	4.2	4.3	4.5	4.9	7.0	6.6	4.9	3.1	2.5	4.4	5.1	6.2	6.5	6.5	5.9	6.3	5.4	7.0	2.2	4.6
5	4.8	4.3	4.5	5.8	6.7	6.1	7.2	7.0	10.6	11.4	11.7	11.8	9.2	10.0	8.7	7.9	7.1	7.0	6.7	6.4	6.4	6.3	6.6	2.7	11.8	2.7	7.4
6	2.1	3.2	4.9	5.0	5.8	6.2	5.4	4.2	2.5	2.2	3.7	4.1	5.0	5.4	5.9	5.6	4.2	6.1	7.9	8.2	8.6	7.8	5.3	6.6	8.6	2.1	5.2
7	7.9	8.6	7.2	7.9	7.2	7.2	5.4	5.6	7.3	7.2	8.3	9.7	11.7	11.8	11.9	10.8	10.3	9.6	10.1	10.0	10.1	8.8	8.5	8.5	11.9	5.4	8.8
8	9.7	8.5	6.8	6.4	7.3	8.9	9.2	10.9	9.9	8.9	9.5	10.7	10.0	11.4	10.9	10.9	11.8	10.0	7.8	8.5	8.0	8.7	10.0	11.0	11.8	6.4	9.4
9	10.6	13.0	14.4	15.4	17.4	14.9	13.3	12.1	10.8	9.2	7.2	5.9	4.1	3.6	3.2	1.3	1.0	1.0	2.3	2.8	1.7	0.9	0.3	0.7	17.4	0.3	7.0
10	1.1	1.8	2.3	2.2	3.5	3.9	3.6	3.6	3.0	3.5	4.3	4.3	4.9	4.3	5.0	6.9	7.8	8.6	8.6	7.9	5.4	3.9	3.0	2.7	8.6	1.1	4.4
11	2.0	1.6	1.5	1.2	0.8	0.3	0.7	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	6.1	4.7	4.6	5.2	5.5	4.3	5.3	6.1	0.0	2.1
12	4.4	3.3	3.4	4.1	3.6	4.6	5.0	4.6	4.3	3.0	3.7	4.7	5.3	4.4	5.4	7.0	6.2	5.9	5.4	4.5	5.6	6.4	7.7	9.6	9.6	3.0	5.1
13	16.9	21.7	23.0	25.1	24.9	24.9	22.5	23.5	25.9	29.3	29.8	28.5	26.5	24.5	23.6	23.7	21.3	20.4	20.1	21.7	21.9	21.0	21.9	21.7	29.8	16.9	23.5
14	21.3	22.4	22.7	22.4	23.0	21.5	19.0	13.0	13.6	15.0	18.1	18.0	16.4	16.0	15.3	16.5	15.8	16.3	13.6	10.6	7.1	5.1	4.3	7.3	23.0	4.3	15.6
15	7.6	5.3	7.3	9.5	11.9	9.0	8.7	7.0	5.3	4.6	3.2	1.5	0.9	0.2	0.7	0.7	0.7	1.3	2.3	5.5	5.7	9.3	15.6	15.5	15.6	0.2	5.8
16	18.4	24.9	25.6	22.7	23.1	23.9	24.2	24.9	22.5	19.8	19.4	18.9	18.3	16.5	14.9	11.8	10.7	12.9	11.7	10.6	11.5	11.5	11.8	10.9	25.6	10.6	17.6
17	8.4	6.6	12.2	12.4	16.3	21.1	20.1	19.2	17.8	14.1	10.1	10.6	12.4	13.7	12.3	9.8	7.9	20.4	25.1	24.5	24.8	25.3	26.8	25.7	26.8	6.6	16.6
18	22.9	24.1	21.8	22.2	21.8	23.2	24.7	25.6	25.7	23.6	18.8	18.9	15.5	13.1	17.3	17.1	18.2	18.1	16.4	17.9	16.2	15.7	16.5	16.6	25.7	13.1	19.7
19	15.0	15.3	10.7	6.1	7.4	8.1	8.3	12.5	10.8	9.2	8.2	10.1	7.7	1.1	0.1	0.2	0.3	0.0	0.0	0.0	0.0	1.5	5.6	8.9	15.3	0.0	6.1
20	18.9	21.4	21.9	21.2	20.0	22.8	23.2	25.2	26.5	22.4	20.4	18.1	19.4	21.7	20.2	16.6	13.1	8.6	8.2	9.2	10.4	8.5	9.0	11.6	26.5	8.2	17.4
21	11.3	9.9	9.0	11.1	13.0	11.9	10.7	11.5	12.2	11.7	13.1	13.5	12.2	10.1	10.2	7.8	7.9	6.9	6.1	5.5	4.9	5.6	6.0	5.8	13.5	4.9	9.5
22	6.0	5.7	6.8	7.3	7.9	7.4	7.0	5.0	7.1	7.2	6.1	5.6	5.8	9.2	14.9	19.3	21.8	18.5	19.3	18.8	18.4	17.6	16.3	15.2	21.8	5.0	11.4
23	12.4	8.5	7.1	5.2	5.2	3.9	3.8	3.0	1.2	0.6	0.4	0.6	0.6	0.0	0.0	0.0	0.6	3.9	4.7	5.1	5.8	6.0	5.3	6.7	12.4	0.0	3.8
24	6.9	7.1	7.2	7.3	7.5	7.7	7.8	8.5	8.0	7.5	6.0	5.0	3.9	2.1	0.4	0.2	0.0	0.1	0.1	12.2	12.4	11.6	11.7	9.3	12.4	0.0	6.3
25	9.1	10.0	9.2	10.7	10.0	10.8	8.8	7.9	6.3	4.3	4.4	4.2	4.1	4.4	6.2	6.8	7.0	7.9	7.8	7.7	8.1	7.4	7.5	7.3	10.8	4.1	7.4
26	5.3	5.5	6.0	7.4	6.4	4.7	5.5	6.0	6.0	5.5	7.0	6.1	7.2	7.7	7.9	7.6	7.4	7.1	6.2	5.4	5.2	5.5	7.0	6.1	7.9	4.7	6.3
27	4.8	3.3	2.6	2.8	1.5	1.7	1.5	0.3	1.3	2.5	3.7	3.7	3.5	2.4	2.4	3.2	4.3	6.1	7.3	7.5	7.4	7.7	7.0	6.7	7.7	0.3	4.0
28	6.7	5.2	6.1	6.8	7.1	7.4	8.0	7.9	6.6	6.1	6.1	6.3	5.8	4.9	5.0	4.5	3.2	1.5	1.0	1.4	2.9	1.5	2.4	3.0	8.0	1.0	4.9
29	2.2	2.4	3.6	3.2	3.1	2.6	2.2	3.1	4.6	4.0	3.5	2.2	3.0	3.5	3.6	4.6	4.5	4.8	4.6	5.4	6.3	5.7	4.3	4.0	6.3	2.2	3.8
Max.	**22.9**	**24.9**	**25.6**	**25.1**	**24.9**	**24.9**	**24.7**	**25.6**	**26.5**	**29.3**	**29.8**	**28.5**	**26.5**	**24.5**	**23.6**	**23.7**	**21.8**	**20.4**	**25.1**	**24.5**	**24.8**	**25.3**	**26.8**	**25.7**	**29.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**8.6**	**8.7**	**8.9**	**9.0**	**9.4**	**9.5**	**9.3**	**9.1**	**9.0**	**8.4**	**8.3**	**8.2**	**7.9**	**7.4**	**7.8**	**7.6**	**7.5**	**7.8**	**7.8**	**8.3**	**8.2**	**8.0**	**8.3**	**8.4**			**8.4**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.5	3.1	2.5	2.6	2.1	2.3	3.7	4.5	5.0	5.8	6.0	8.3	10.4	12.4	11.0	10.4	11.3	11.7	9.4	10.2	11.2	12.7	12.7	15.2	15.2	2.1	7.8
2	14.5	14.8	15.6	18.6	23.9	20.6	18.6	20.5	18.7	18.1	15.0	11.7	11.5	10.0	9.9	7.2	8.1	9.0	8.8	7.7	8.6	10.4	9.6	9.2	23.9	7.2	13.3
3	8.5	10.9	12.2	16.4	19.0	23.6	23.7	27.6	28.3	28.6	30.6	31.6	33.5	31.7	29.1	29.0	28.5	28.8	24.8	22.8	23.2	24.0	24.0	21.9	33.5	8.5	24.3
4	22.7	21.3	21.7	21.2	18.8	18.2	22.9	24.1	23.7	24.0	28.0	27.5	29.1	30.4	28.8	28.4	28.8	28.7	28.2	26.5	24.9	27.6	27.4	26.6	30.4	18.2	25.4
5	25.8	26.5	28.3	28.0	27.7	30.5	27.6	26.1	23.0	23.8	32.5	30.1	27.9	27.6	28.2	26.3	27.8	26.3	26.1	26.2	30.4	27.5	28.1	29.1	32.5	23.0	27.6
6	28.0	27.3	25.4	23.5	22.5	20.8	20.1	18.3	18.4	18.7	17.5	15.9	17.2	18.6	20.4	22.6	23.6	20.2	21.0	14.4	7.8	8.2	10.3	10.2	28.0	7.8	18.8
7	10.0	9.5	7.8	5.8	5.1	4.8	5.4	4.8	3.8	2.6	2.2	2.2	2.2	1.4	1.4	3.3	4.1	4.9	6.9	8.3	8.3	8.3	8.1	11.7	11.7	1.4	5.5
8	13.2	12.0	11.4	9.8	8.4	4.7	4.5	4.7	5.1	6.3	7.4	13.1	13.7	10.9	10.0	8.6	9.3	11.1	11.8	11.3	12.3	12.6	12.4	11.7	13.7	4.5	9.8
9	11.7	10.7	11.3	12.1	13.5	10.5	10.6	11.2	10.8	9.1	7.7	6.6	5.2	4.4	4.2	3.2	2.8	3.3	1.9	1.2	0.8	0.9	0.8	1.1	13.5	0.8	6.5
10	2.5	4.4	4.1	5.2	7.6	6.6	6.4	6.0	5.5	5.5	5.4	5.9	4.4	4.4	5.1	6.2	5.3	4.9	4.1	3.4	3.6	3.3	2.9	3.5	7.6	2.5	4.8
11	4.1	4.8	4.1	3.1	2.5	2.6	2.2	1.9	1.6	1.2	1.1	4.4	3.9	3.7	3.3	4.7	4.1	3.7	3.1	3.4	3.4	3.3	3.3	3.6	4.8	1.1	3.2
12	3.5	2.8	2.2	1.6	1.0	0.1	0.2	0.5	0.3	0.4	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.6
13	0.0	0.6	2.5	2.1	2.3	1.7	1.2	0.5	0.0	0.2	0.3	0.7	1.6	2.4	3.1	2.8	1.6	1.5	1.5	2.3	1.3	0.1	0.0	0.0	3.1	0.0	1.3
14	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.9	3.4	2.9	2.2	2.1	2.6	2.0	2.6	4.1	5.9	7.2	7.2	8.8	10.6	13.1	11.6	11.6	13.1	0.0	4.2
15	16.4	18.6	19.2	19.6	21.0	21.3	20.3	23.8	26.5	25.2	20.0	21.2	21.2	21.3	19.8	19.4	20.0	20.3	21.1	20.8	20.1	18.6	18.0	18.7	26.5	16.4	20.5
16	16.6	15.6	15.4	12.9	9.6	7.7	7.0	7.7	6.8	7.3	7.8	6.8	5.2	4.5	2.7	3.1	2.6	2.7	3.8	4.7	5.6	5.9	5.2	3.2	16.6	2.6	7.1
17	2.1	2.4	2.8	3.0	3.6	3.0	2.4	1.9	1.2	0.9	0.8	1.3	1.6	2.2	2.0	2.2	2.2	7.0	13.7	13.8	11.1	7.8	4.7	1.5	13.8	0.8	4.0
18	1.2	2.9	4.2	4.4	4.0	3.5	2.9	3.5	5.7	6.2	6.4	6.1	5.1	5.2	5.8	5.5	5.2	6.8	8.8	10.8	11.2	11.1	10.2	11.0	11.2	1.2	6.2
19	10.3	10.4	8.9	8.0	8.8	9.7	9.1	9.1	8.5	9.1	7.9	7.3	7.2	7.1	6.7	6.6	7.0	6.9	6.7	7.2	6.7	6.8	7.1	6.4	10.4	6.4	7.9
20	5.8	5.0	4.0	2.8	2.8	2.9	2.5	1.9	1.4	1.2	0.2	0.3	1.2	1.7	0.2	0.0	0.5	1.9	2.9	3.9	4.0	4.7	5.1	5.0	5.8	0.0	2.6
21	4.8	4.8	5.1	4.8	6.5	6.8	5.8	6.0	5.9	5.7	4.7	5.4	5.1	7.0	8.8	9.3	9.7	7.5	7.3	7.9	8.5	7.6	7.9	7.8	9.7	4.7	6.7
22	7.7	6.8	7.1	7.8	7.5	7.7	8.5	9.2	8.3	9.5	8.3	8.7	8.3	8.1	6.5	4.7	5.0	4.9	4.8	4.3	4.4	4.7	2.5	1.1	9.5	1.1	6.5
23	0.8	1.9	2.5	1.8	2.7	3.9	3.9	3.7	3.5	3.1	3.2	3.5	4.4	5.0	5.1	8.6	7.1	8.6	9.1	10.4	11.0	9.2	9.2	7.5	11.0	0.8	5.4
24	6.6	6.1	5.9	3.7	4.5	4.2	3.4	2.7	1.6	3.9	3.7	5.1	4.8	5.1	4.5	5.4	5.8	4.5	4.3	4.1	4.4	4.1	4.0	3.9	6.6	1.6	4.4
25	2.8	2.1	3.1	7.9	8.6	8.6	6.5	5.4	5.8	5.8	4.8	4.1	2.7	2.2	1.7	0.7	0.8	1.9	2.7	3.6	4.1	4.6	5.3	4.6	8.6	0.7	4.2
26	4.5	5.0	4.1	4.8	5.3	5.3	5.7	6.0	5.1	3.9	4.3	4.8	4.0	4.9	6.6	6.6	5.0	4.9	4.8	5.5	4.5	3.3	5.3	5.4	6.6	3.3	5.0
27	6.3	7.0	7.3	6.6	5.4	4.3	3.0	3.7	3.4	2.5	3.0	3.5	3.7	4.3	4.6	5.0	5.5	4.9	5.2	4.4	4.4	3.9	3.3	3.8	7.3	2.5	4.5
28	4.4	3.6	3.9	4.5	4.5	3.8	4.2	3.3	2.9	2.5	0.8	0.7	0.3	0.5	0.6	1.5	2.0	2.3	2.9	3.3	4.2	5.8	6.6	6.5	6.6	0.3	3.2
29	6.6	6.6	7.4	8.0	7.8	7.7	8.3	7.7	10.5	11.7	13.2	13.1	13.3	16.4	19.1	19.4	18.5	19.4	20.0	21.5	22.1	24.6	23.9	24.5	24.6	6.6	14.6
30	25.7	25.8	25.9	26.0	27.2	27.8	29.6	29.4	29.3	29.6	28.6	27.6	25.9	24.2	21.9	20.8	18.1	17.2	19.1	16.8	17.3	15.2	15.1	14.9	29.6	14.9	23.3
31	14.1	13.8	15.1	12.0	12.5	13.8	13.8	14.0	14.9	15.4	17.8	21.5	20.8	23.1	23.9	21.1	22.4	23.1	24.4	24.8	25.8	27.8	27.2	28.0	28.0	12.0	19.6
Max.	**28.0**	**27.3**	**28.3**	**28.0**	**27.7**	**30.5**	**29.6**	**29.4**	**29.3**	**29.6**	**32.5**	**31.6**	**33.5**	**31.7**	**29.1**	**29.0**	**28.8**	**28.8**	**28.2**	**26.5**	**30.4**	**27.8**	**28.1**	**29.1**	**33.5**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.5**	**0.0**	**0.2**	**0.2**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**9.2**	**9.3**	**9.4**	**9.3**	**9.6**	**9.3**	**9.2**	**9.4**	**9.3**	**9.4**	**9.4**	**9.7**	**9.6**	**9.8**	**9.6**	**9.6**	**9.6**	**9.9**	**10.2**	**10.1**	**10.2**	**10.2**	**10.1**	**10.0**			**9.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	27.4	27.1	27.6	25.9	23.6	21.9	20.6	18.8	18.3	17.3	18.5	18.3	19.1	18.2	16.9	15.7	15.5	14.5	13.5	12.0	8.8	7.8	4.5	4.2	27.6	4.2	17.3
2	3.2	3.3	3.5	3.0	2.8	2.9	3.0	3.1	2.9	3.1	4.7	4.9	6.2	7.6	6.2	5.1	5.9	7.3	7.6	7.7	8.2	7.0	8.9	10.6	10.6	2.8	5.4
3	12.5	12.9	9.7	9.5	7.1	5.4	5.4	4.2	6.6	6.5	7.1	10.5	12.7	14.0	14.7	15.3	16.0	16.4	15.9	19.9	23.7	22.2	20.4	24.8	24.8	4.2	13.1
4	26.0	27.8	28.3	26.0	26.6	25.4	23.9	22.8	21.7	21.6	21.7	21.0	20.4	20.6	19.6	19.7	20.0	16.1	15.5	14.4	11.9	14.2	8.7	6.2	28.3	6.2	20.0
5	4.3	2.6	2.0	2.8	2.4	2.0	1.7	2.3	2.0	2.2	2.7	2.5	1.8	3.1	4.5	3.9	3.8	3.6	6.1	7.4	7.5	6.6	6.6	7.0	7.5	1.7	3.8
6	6.9	7.2	9.7	8.4	7.9	7.2	6.0	6.1	5.3	5.6	6.1	7.8	9.5	7.6	8.0	7.8	9.5	10.2	9.7	9.1	7.5	8.8	8.9	8.8	10.2	5.3	7.9
7	7.2	6.6	6.7	6.7	8.0	7.9	8.2	8.0	9.0	8.8	6.7	6.7	7.5	7.6	6.2	5.6	5.5	4.2	5.2	4.6	4.7	3.0	2.7	2.6	9.0	2.6	6.2
8	2.8	2.2	2.3	1.4	1.4	1.2	0.5	0.5	0.6	1.1	2.2	3.7	3.9	3.3	4.7	4.9	4.0	3.0	3.6	3.5	2.9	4.5	5.8	4.9	5.8	0.5	2.9
9	4.4	4.5	5.3	5.0	4.8	6.1	6.4	5.4	5.0	4.2	5.7	5.0	4.1	6.4	6.2	5.9	7.5	6.8	6.4	5.7	5.4	5.2	6.3	6.0	7.5	4.1	5.6
10	5.0	7.0	7.0	6.2	6.8	7.4	7.8	6.0	6.0	6.4	5.4	3.5	4.1	4.0	3.8	4.2	4.6	3.5	4.7	4.4	4.4	4.3	3.5	3.0	7.8	3.0	5.1
11	3.7	4.8	4.0	5.3	5.8	5.8	5.5	6.4	6.5	6.5	5.8	4.9	4.7	6.0	6.4	7.5	7.0	5.2	4.6	5.3	6.2	5.3	4.9	4.9	7.5	3.7	5.5
12	4.1	4.1	4.1	4.2	4.6	3.7	3.4	4.0	4.4	6.1	4.8	5.0	6.0	5.2	6.7	8.7	9.5	7.6	6.2	6.2	4.5	5.8	4.7	3.5	9.5	3.4	5.3
13	4.4	7.2	5.8	5.4	6.3	7.9	7.6	7.8	8.0	9.9	11.1	16.6	19.7	18.1	13.2	4.9	0.2	0.0	0.0	0.0	0.0	6.5	9.3	1.5	19.7	0.0	7.1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	22.2	17.6	20.7	21.0	22.2	0.0	3.4
16	24.4	21.7	20.5	15.1	10.7	14.8	14.6	1.9	1.1	1.3	1.3	0.5	0.5	0.4	0.7	0.9	0.3	1.6	6.6	10.9	11.4	10.4	9.3	9.5	24.4	0.3	7.9
17	9.8	8.6	8.6	8.0	8.5	2.7	0.7	0.4	1.4	2.9	1.0	3.2	9.0	9.3	8.6	7.5	6.6	3.5	5.3	7.0	4.7	6.5	6.3	5.1	9.8	0.4	5.6
18	8.8	8.9	8.0	7.7	6.1	4.8	3.3	1.6	1.9	3.1	3.5	4.8	5.3	6.2	7.2	7.2	7.0	7.0	5.8	6.0	7.1	7.8	8.3	8.2	8.9	1.6	6.1
19	7.9	8.0	8.7	8.7	10.4	11.6	12.3	13.1	14.5	12.9	11.7	13.9	11.5	11.3	10.7	10.8	11.4	14.4	15.4	14.0	12.3	12.0	9.0	13.5	15.4	7.9	11.7
20	18.0	16.1	16.9	19.2	19.9	18.8	18.4	23.0	21.4	21.8	21.8	22.2	21.3	23.3	22.3	22.2	20.6	16.8	20.2	14.5	16.9	19.0	17.8	15.9	23.3	14.5	19.5
21	15.6	15.1	17.2	16.0	15.6	16.6	16.7	15.3	12.7	11.9	12.3	13.7	16.0	15.7	14.0	10.8	11.4	12.5	11.0	10.2	9.5	11.2	12.5	13.8	17.2	9.5	13.6
22	14.9	14.4	12.4	9.7	12.2	11.7	9.3	9.7	8.6	8.4	8.7	8.3	8.4	7.2	6.9	5.8	5.4	4.4	5.9	4.0	5.4	3.1	2.1	2.2	14.9	2.1	7.9
23	1.7	1.5	1.7	2.2	2.5	1.3	2.3	2.6	3.5	3.9	3.9	3.7	3.1	2.8	2.7	3.6	3.8	3.7	3.3	3.3	4.3	3.8	5.6	8.1	8.1	1.3	3.3
24	8.5	11.0	10.4	10.9	8.1	6.3	3.2	3.8	2.5	3.0	2.5	3.5	5.7	5.4	7.6	7.9	6.7	5.1	6.6	8.3	7.0	11.5	12.6	13.5	13.5	2.5	7.1
25	11.0	8.8	5.7	8.8	5.2	5.6	5.7	5.0	5.4	6.5	8.1	8.0	7.7	8.2	8.1	8.8	11.0	12.1	11.8	12.0	12.6	12.3	12.0	11.9	12.6	5.0	8.8
26	12.1	11.1	10.5	10.5	9.7	9.3	8.9	7.7	9.8	10.9	11.8	14.2	15.3	15.2	15.3	15.3	15.7	16.5	15.5	15.5	14.9	14.6	14.4	14.7	16.5	7.7	12.9
27	14.3	13.2	12.1	10.8	12.3	13.4	11.8	11.1	12.2	11.5	11.6	11.4	11.8	12.8	13.5	12.5	9.3	7.7	8.5	8.0	6.9	5.3	4.2	3.8	14.3	3.8	10.4
28	3.4	3.0	2.7	2.4	1.9	1.0	0.7	1.7	1.3	1.5	0.3	1.2	2.9	3.8	4.5	3.7	3.3	3.4	3.8	4.0	5.6	4.1	5.0	5.2	5.6	0.3	2.9
29	3.5	3.3	3.2	3.6	3.4	3.4	4.9	4.4	4.2	3.3	3.3	4.9	4.4	5.6	6.3	7.0	7.2	7.8	7.4	6.7	7.2	7.6	7.8	7.7	7.8	3.2	5.3
30	6.4	6.1	5.3	5.6	5.8	5.4	5.3	5.5	5.3	5.2	4.9	4.6	4.4	4.0	3.2	3.3	3.8	5.0	6.6	6.3	5.6	4.7	3.9	3.2	6.6	3.2	5.0
Max.	**27.4**	**27.8**	**28.3**	**26.0**	**26.6**	**25.4**	**23.9**	**23.0**	**21.7**	**21.8**	**21.8**	**22.2**	**21.3**	**23.3**	**22.3**	**22.2**	**20.6**	**16.8**	**20.2**	**19.9**	**23.7**	**22.2**	**20.7**	**24.8**	**28.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**9.1**	**8.9**	**8.7**	**8.3**	**8.0**	**7.7**	**7.3**	**6.7**	**6.7**	**6.9**	**7.0**	**7.6**	**8.2**	**8.4**	**8.3**	**7.9**	**7.8**	**7.3**	**7.8**	**7.7**	**8.3**	**8.4**	**8.2**	**8.2**			**7.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	3.0	2.9	2.8	3.3	3.4	3.6	4.0	4.2	4.2	5.4	4.6	4.7	5.9	6.7	6.3	6.9	6.6	6.9	6.6	8.1	7.8	6.8	7.6	8.1	2.8	5.2
2	8.0	8.7	7.1	6.2	6.1	6.1	6.3	7.3	7.1	6.1	5.5	5.0	4.6	3.6	2.4	3.8	4.0	4.8	4.2	3.8	1.9	1.2	2.9	3.0	8.7	1.2	5.0
3	2.4	1.4	2.2	3.4	6.1	5.9	7.7	7.8	8.7	7.2	9.8	10.4	10.9	10.6	8.9	11.4	9.2	7.0	6.5	7.3	8.2	6.7	4.8	8.2	11.4	1.4	7.2
4	11.7	9.6	10.8	10.4	12.6	11.9	10.2	8.0	9.3	8.0	7.7	7.0	5.6	5.1	5.7	6.8	6.0	5.6	4.2	3.3	2.1	1.2	1.3	2.1	12.6	1.2	6.9
5	3.6	3.0	3.1	2.5	2.3	2.1	1.8	1.8	1.3	0.5	1.6	1.8	1.6	2.5	2.0	2.7	3.2	3.0	3.4	3.7	4.0	4.2	3.9	3.7	4.2	0.5	2.6
6	3.1	3.5	3.5	4.0	4.9	5.3	5.7	9.3	8.7	10.7	13.0	15.0	15.6	16.9	17.9	18.1	17.3	17.8	18.9	20.0	19.3	19.6	22.2	24.3	24.3	3.1	13.1
7	23.1	21.5	26.6	25.9	26.1	26.9	26.3	25.9	25.6	26.8	27.8	28.2	28.0	27.5	27.1	27.3	23.5	23.7	25.8	25.6	24.0	26.2	24.3	23.6	28.2	21.5	25.7
8	27.9	27.4	24.7	24.0	25.5	25.4	22.6	19.9	20.3	22.3	21.6	21.7	23.7	25.3	25.4	24.0	24.6	23.7	22.9	23.6	23.7	22.9	20.2	18.4	27.9	18.4	23.4
9	18.3	16.2	14.3	14.2	15.8	12.8	14.7	17.8	18.6	18.7	17.1	16.5	15.9	15.8	13.9	13.0	12.5	8.5	7.6	5.2	4.3	4.0	1.5	1.7	18.7	1.5	12.5
10	1.4	1.6	1.7	3.3	3.2	2.6	2.7	2.4	2.3	2.8	2.7	2.0	1.3	2.3	2.7	2.7	2.9	3.1	4.4	5.5	6.5	7.7	9.8	11.6	11.6	1.3	3.7
11	13.5	14.5	15.2	15.5	15.5	17.9	19.3	20.3	21.2	21.4	23.7	23.6	23.2	26.2	26.3	27.1	25.8	25.8	28.6	28.2	26.2	24.2	22.0	20.0	28.6	13.5	21.9
12	24.2	18.9	16.8	13.3	13.0	14.2	16.4	16.5	14.5	16.1	17.8	21.1	19.9	21.5	22.6	23.5	23.0	19.7	18.4	18.8	18.7	18.6	17.9	19.2	24.2	13.0	18.5
13	18.9	17.2	17.0	17.0	16.7	16.2	9.5	9.4	12.4	13.9	13.8	13.5	14.6	15.3	15.3	18.0	19.2	18.0	21.5	22.5	20.6	22.7	23.2	25.5	25.5	9.4	17.2
14	23.4	18.6	10.8	6.8	6.4	8.9	11.0	12.5	12.0	11.1	10.8	10.0	11.9	12.3	10.4	8.0	9.5	10.1	9.8	8.8	7.3	6.6	5.8	4.1	23.4	4.1	10.3
15	2.9	5.3	7.1	5.4	7.8	7.9	8.1	7.5	8.8	8.3	9.3	10.1	9.9	9.6	8.1	8.6	9.2	9.0	7.4	8.6	9.7	6.5	3.6	3.7	10.1	2.9	7.6
16	13.1	11.8	11.2	10.5	8.9	8.4	6.1	3.9	3.1	3.3	5.3	7.5	8.1	8.4	9.3	9.5	8.8	8.2	6.0	4.8	3.9	3.3	1.7	1.1	13.1	1.1	6.9
17	1.6	1.8	2.7	2.7	2.4	2.5	2.5	2.9	3.2	3.5	3.7	3.2	3.7	2.9	1.6	1.7	2.3	2.3	2.6	4.0	4.8	7.5	8.2	7.0	8.2	1.6	3.4
18	8.8	7.0	8.6	11.9	8.9	7.9	9.2	7.6	7.8	5.2	6.8	5.6	5.5	6.0	5.2	6.7	7.3	8.1	9.7	9.2	10.2	9.0	6.0	6.6	11.9	5.2	7.7
19	6.5	4.8	4.8	5.0	4.7	4.4	1.8	0.7	1.1	1.7	2.5	2.8	2.1	2.5	2.0	2.5	5.0	4.6	4.5	4.7	6.4	5.7	4.8	4.4	6.5	0.7	3.7
20	4.6	5.0	5.0	5.5	5.4	5.5	6.2	5.8	6.0	5.4	5.3	5.7	5.1	3.7	3.2	3.3	3.9	4.3	5.0	5.7	6.1	5.3	5.7	5.1	6.2	3.2	5.1
21	5.3	5.0	3.7	2.7	3.1	1.5	1.8	2.1	2.7	2.4	2.5	2.9	3.7	4.3	6.4	6.2	6.2	5.9	4.8	7.4	10.4	10.3	9.1	7.8	10.4	1.5	4.9
22	7.7	8.8	8.7	8.4	5.9	4.5	3.5	3.6	2.6	1.7	1.5	1.7	1.8	3.2	4.5	5.6	9.3	11.3	13.2	14.6	17.7	17.5	20.1	22.6	22.6	1.5	8.3
23	27.0	28.9	27.0	29.7	32.6	34.0	35.9	36.8	33.8	34.0	29.2	31.2	31.4	35.1	31.3	28.4	27.0	25.0	25.8	24.5	23.7	23.5	25.9	27.1	36.8	23.5	29.5
24	27.4	26.1	24.9	25.7	24.9	23.4	22.9	24.3	23.7	21.4	17.6	17.0	14.1	13.2	12.5	11.3	11.9	12.7	11.7	12.2	9.0	7.5	12.2	13.4	27.4	7.5	17.5
25	12.9	7.7	6.5	6.8	7.3	7.2	7.0	7.2	9.3	9.1	9.3	10.2	9.1	9.9	10.6	10.8	11.9	12.5	12.2	11.0	11.1	9.5	9.2	8.5	12.9	6.5	9.5
26	8.1	7.9	7.8	8.2	8.7	9.1	7.6	6.4	5.2	4.8	4.4	4.6	5.9	4.9	5.6	7.0	6.2	7.7	7.9	7.7	7.5	7.6	7.0	6.7	9.1	4.4	6.9
27	6.5	6.3	7.2	7.3	4.8	3.1	2.1	1.9	2.8	3.8	3.0	2.7	2.8	3.8	3.5	4.4	5.1	4.9	5.3	6.1	6.7	7.0	6.7	3.9	7.3	1.9	4.7
28	4.2	5.9	6.4	5.9	5.4	5.9	4.5	3.8	3.8	3.7	4.5	3.6	2.5	3.3	3.9	4.2	4.6	5.5	6.2	5.6	5.3	5.1	5.0	4.3	6.4	2.5	4.7
29	4.7	4.8	4.7	4.2	4.6	5.1	5.9	6.4	6.9	7.6	8.2	8.4	8.5	7.6	7.2	7.1	6.6	5.8	5.4	5.2	6.2	6.4	6.1	6.0	8.5	4.2	6.2
30	5.7	3.8	3.1	3.8	4.5	6.4	5.4	5.9	8.2	7.9	8.9	10.7	10.2	13.2	13.9	14.1	14.7	14.7	13.0	12.7	11.0	11.9	14.6	16.8	16.8	3.1	9.8
31	18.2	19.5	18.6	16.9	17.4	17.1	16.9	20.4	20.9	19.9	20.0	19.2	18.3	17.1	18.7	21.5	19.8	18.9	19.5	16.5	15.3	18.8	19.7	19.8	21.5	15.3	18.7
Max.	**27.9**	**28.9**	**27.0**	**29.7**	**32.6**	**34.0**	**35.9**	**36.8**	**33.8**	**34.0**	**29.2**	**31.2**	**31.4**	**35.1**	**31.3**	**28.4**	**27.0**	**25.8**	**28.6**	**28.2**	**26.2**	**26.2**	**25.9**	**27.1**	**36.8**		
Min.	**1.4**	**1.4**	**1.7**	**2.5**	**2.3**	**1.5**	**1.8**	**0.7**	**1.1**	**0.5**	**1.5**	**1.7**	**1.3**	**2.3**	**1.6**	**1.7**	**2.3**	**2.3**	**2.6**	**3.3**	**1.9**	**1.2**	**1.3**	**1.1**		**0.5**	
Avg.	**11.2**	**10.5**	**10.2**	**10.0**	**10.2**	**10.1**	**9.8**	**10.0**	**10.2**	**10.1**	**10.3**	**10.6**	**10.5**	**11.0**	**10.8**	**11.2**	**11.2**	**10.9**	**11.1**	**11.1**	**11.0**	**10.8**	**10.7**	**10.9**			**10.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	19.9	20.9	20.1	20.6	19.9	19.8	20.8	20.6	21.6	23.6	23.0	23.6	22.8	24.7	23.4	21.6	20.3	23.4	20.7	18.9	15.1	11.2	10.4	9.7	24.7	9.7	19.9
2	8.5	10.3	10.9	12.0	11.6	9.5	7.6	7.7	6.7	7.8	9.2	10.6	8.8	7.2	7.4	7.0	5.3	5.2	4.0	5.0	3.6	1.4	3.7	2.8	12.0	1.4	7.2
3	1.6	3.7	3.4	4.8	5.6	6.6	7.5	5.3	3.8	2.4	2.0	2.0	3.1	4.9	5.7	7.9	8.7	10.7	12.3	12.9	14.6	14.8	15.4	13.9	15.4	1.6	7.2
4	12.5	15.5	14.3	12.2	10.2	11.1	11.9	11.4	8.6	9.8	10.0	11.5	11.8	10.8	12.1	14.0	13.4	14.1	14.1	13.4	14.1	13.1	10.6	9.7	15.5	8.6	12.1
5	12.3	13.1	14.4	14.8	14.8	15.7	17.5	18.4								14.2	14.4	12.8	11.1	8.5	6.2	4.6	2.2	4.4	18.4	2.2	11.7
6	5.2	4.9	6.7	6.7	6.6	5.6	4.5	3.3	3.4	3.1	3.1	4.1	4.3	4.2	4.4	2.0	5.6	12.1	9.3	8.1	6.4	6.3	5.2	4.4	12.1	2.0	5.4
7	3.2	3.3	3.4	4.0	4.4	5.2	6.4	8.0	8.3	6.3	5.9	6.2	6.3	6.3	3.1	1.8	4.3	4.8	3.8	8.2	10.1	9.7	9.1	8.7	10.1	1.8	5.9
8	8.8	9.0	8.5	7.9	7.4	7.1	7.4	5.5	4.5	4.0	5.7	7.0	7.5	7.1	8.3	8.8	9.1	10.7	10.5	10.9	10.9	10.4	10.3	10.3	10.9	4.0	8.2
9	9.7	8.9	8.4	6.8	3.8	2.7	1.8	1.0	0.9	0.8	2.8	3.4	3.7	3.9	3.8	3.9	4.5	4.6	4.9	5.3	5.4	5.8	5.1	6.0	9.7	0.8	4.5
10	5.6	5.1	4.8	5.0	4.1	3.3	3.4	2.5	2.1	1.2	1.2	2.1	1.7	1.2	1.9	3.7	3.0	2.3	2.9	3.5	5.3	5.0	4.3	4.2	5.6	1.2	3.3
11	3.7	1.6	1.3	0.5	0.5	0.7	0.5	0.5	0.9	1.1	1.1	0.8	2.3	4.6	5.4	5.7	5.4	5.2	5.2	4.8	5.3	5.3	5.3	5.9	5.9	0.5	3.1
12	5.3	3.9	3.5	2.9	2.3	1.2	3.2	5.3	4.4	4.3	2.7	3.1	2.5	3.3	1.2	1.5	1.4	3.0	2.6	1.8	1.8	2.3	2.8	1.4	5.3	1.2	2.8
13	1.7	2.8	3.5	4.7	4.7	4.4	4.9	5.8	4.5	4.9	4.1	3.2	2.3	2.1	2.0	2.8	2.9	3.0	4.0	4.5	5.1	4.8	5.2	5.1	5.8	1.7	3.9
14	6.0	5.5	5.4	6.4	5.2	4.3	4.3	4.7	4.9	3.9	3.9	3.8	1.8	1.0	2.0	3.2	6.1	5.5	8.4	7.4	6.4	8.9	10.2	7.9	10.2	1.0	5.3
15	5.4	5.7	5.0	4.9	5.6	5.2	3.8	3.9	1.6	0.8	1.9	3.4	4.1	4.0	5.6	8.1	9.6	10.4	7.5	6.2	5.9	5.7	6.7	4.8	10.4	0.8	5.2
16	2.3	1.6	0.7	0.7	1.4	1.7	2.4	2.4	1.6	1.6	0.8	0.7	0.9	1.0	2.6	4.1	3.9	4.7	4.7	4.7	5.0	3.7	3.1	2.9	5.0	0.7	2.5
17	2.4	2.4	2.3	1.7	1.2	1.2	0.6	0.6	0.9	1.1	1.1	1.0	1.0	2.5	3.9	5.6	5.6	5.1	5.0	7.0	8.2	7.7	8.0	7.6	8.2	0.6	3.5
18	7.2	6.5	5.8	4.6	3.5	3.4	3.1	3.3	3.5	3.4	4.6	6.1	6.6	6.3	6.6	6.2	6.4	7.3	6.2	5.6	4.5	4.5	2.5	3.3	7.3	2.5	5.0
19	3.5	4.3	4.5	4.6	3.9	2.2	2.2	2.1	1.6	2.4	3.8	4.0	4.1	4.7	5.3	4.7	5.3	5.1	5.2	5.5	5.0	4.9	4.8	4.9	5.5	1.6	4.1
20	4.1	2.6	1.5	2.2	1.1	0.9	1.5	2.7	4.0	4.5	5.3	6.3	7.5	10.1	11.0	10.8	11.2	13.0	12.7	12.7	13.1	11.9	12.4	13.0	13.1	0.9	7.3
21	15.8	13.8	12.5	14.1	11.6	10.4	8.5	8.1	5.8	3.6	1.7	1.2	1.8	2.5	2.8	2.9	2.9	2.2	4.6	5.5	5.6	5.0	6.0	6.8	15.8	1.2	6.5
22	5.8	6.3	7.5	7.8	8.3	9.4	7.2	4.9	5.1	4.1	3.5	4.9	6.2	7.8	8.6	9.3	10.0	11.6	12.0	12.9	14.7	15.9	14.9	12.2	15.9	3.5	8.8
23	12.3	12.5	12.4	10.5	10.2	12.3	11.6	10.7	11.9	12.8	12.0	11.5	10.8	11.0	10.8	9.9	8.5	7.4	6.6	8.3	9.3	8.9	8.7	8.4	12.8	6.6	10.4
24	9.5	8.6	8.4	7.8	10.9	12.3	13.0	13.1	12.9	12.6	15.2	14.7	15.6	16.6	16.2	19.0	20.9	18.4	16.2	15.1	16.7	18.4	17.9	17.9	20.9	7.8	14.5
25	20.7	24.4	26.0	24.8	24.0	23.4	24.3	24.6	26.0	26.8	26.3	26.1	27.4	26.6	25.8	21.9	22.8	24.4	20.0	17.7	16.5	17.5	14.5	12.7	27.4	12.7	22.7
26	11.4	10.1	6.8	5.5	4.6	6.8	6.7	6.6	8.2	8.1	8.6	9.7	10.0	7.4	6.1	6.8	7.8	7.6	4.5	4.9	4.0	3.2	4.6	3.5	11.4	3.2	6.8
27	5.5	4.7	3.0	3.1	3.5	4.0	4.8	7.0	7.6	8.2	8.5	10.2	10.9	12.1	12.2	11.1	8.8	9.0	9.1	8.5	8.8	7.1	6.4	7.1	12.2	3.0	7.6
28	7.1	4.9	5.2	5.5	6.4	6.7	5.8	4.8	4.0	5.4	7.9	8.7	9.8	8.7	6.1	7.8	7.2	8.1	8.2	6.9	7.8	9.3	9.6	9.7	9.8	4.0	7.1
29	8.1	7.2	6.7	7.1	7.2	6.1	6.0	5.1	4.7	5.1	3.7	3.4	5.1	6.3	7.7	8.5	8.3	8.7	8.5	9.6	9.8	9.6	8.4	8.9	9.8	3.4	7.1
30	8.9	8.9	8.3	7.3	6.6	5.7	4.0	2.8	1.2	0.9	1.1	1.6	1.4	1.4	2.0	1.5	2.6	2.1	2.6	3.0	2.3	1.3	0.9	1.0	8.9	0.9	3.3
Max.	**20.7**	**24.4**	**26.0**	**24.8**	**24.0**	**23.4**	**24.3**	**24.6**	**26.0**	**26.8**	**26.3**	**26.1**	**27.4**	**26.6**	**25.8**	**21.9**	**22.8**	**24.4**	**20.7**	**18.9**	**16.7**	**18.4**	**17.9**	**17.9**	**27.4**		
Min.	**1.6**	**1.6**	**0.7**	**0.5**	**0.5**	**0.7**	**0.5**	**0.5**	**0.9**	**0.8**	**0.8**	**0.7**	**0.9**	**1.0**	**1.2**	**1.5**	**1.4**	**2.1**	**2.6**	**1.8**	**1.8**	**1.3**	**0.9**	**1.0**		**0.5**	
Avg.	**7.8**	**7.8**	**7.5**	**7.4**	**7.0**	**7.0**	**6.9**	**6.7**	**6.0**	**6.0**	**6.2**	**6.7**	**7.0**	**7.2**	**7.4**	**7.9**	**8.2**	**8.8**	**8.3**	**8.2**	**8.2**	**7.9**	**7.6**	**7.3**			**7.4**

Total Hours in Month 720 **Hours Data Available** 713 **Data Recovery** 99.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	1.2	1.2	1.2	1.1	1.5	0.9	1.9	2.1	2.6	4.8	7.6	8.8	10.5	13.3	14.5	15.3	14.7	12.6	12.9	12.7	11.7	13.4	18.3	18.3	0.9	7.7
2	18.6	18.0	15.6	13.8	16.4	14.7	13.3	16.3	13.9	15.4	14.7	16.4	18.3	15.8	16.3	16.0	15.9	16.8	15.4	15.1	14.0	14.2	14.1	14.0	18.6	13.3	15.5
3	14.1	13.2	15.1	19.3	17.6	17.3	17.2	18.8	17.6	14.5	11.2	11.2	10.7	13.0	13.6	11.3	12.0	7.8	5.5	7.1	7.4	6.8	8.3	8.6	19.3	5.5	12.5
4	10.7	9.3	6.5	7.6	7.2	5.4	5.0	4.3	3.7	3.6	4.8	3.5	2.0	2.6	2.8	2.9	2.2	2.3	2.8	4.9	5.3	4.1	4.1	5.1	10.7	2.0	4.7
5	4.4	4.2	4.8	5.2	6.5	6.9	7.3	5.9	6.0	5.7	3.9	2.5	1.9	2.0	2.4	5.5	5.1	4.0	3.1	4.0	4.9	6.0	3.2	3.1	7.3	1.9	4.5
6	5.9	8.4	5.3	3.1	3.9	3.7	4.6	4.0	3.4	3.6	4.8	5.6	7.2	8.7	8.4	9.5	9.5	7.9	8.6	9.9	10.6	9.1	8.7	9.5	10.6	3.1	6.8
7	9.7	9.1	10.8	10.7	8.6	7.7	8.7	11.3	13.7	13.1	14.4	14.3	13.2	11.8	11.6	10.6	10.0	8.9	8.2	7.8	7.5	5.9	5.3	5.0	14.4	5.0	9.9
8	4.2	4.8	3.6	3.5	5.2	6.6	6.9	7.1	8.1	8.7	8.7	7.3	6.1	6.8	7.1	7.9	7.6	7.0	8.8	8.5	8.6	8.4	7.3	7.6	8.8	3.5	6.9
9	6.9	6.1	7.5	5.3	6.3	7.3	8.2	8.4	9.6	10.4	9.3	9.1	10.6	11.4	10.5	10.1	10.2	11.4	12.0	12.5	11.5	11.5	14.1	11.8	14.1	5.3	9.7
10	9.3	9.0	7.1	8.2	9.2	10.4	10.6	10.2	12.5	9.8	8.9	9.9	8.6	6.4	5.9	5.7	7.4	9.2	10.0	9.2	9.5	10.0	10.2	9.2	12.5	5.7	9.0
11	7.6	6.3	7.3	8.5	6.8	8.5	9.0	7.6	8.8	10.3	9.3	7.4	6.0	6.4	7.3	7.8	9.0	8.3	9.9	9.3	9.0	8.5	9.2	8.8	10.3	6.0	8.2
12	8.8	8.9	8.4	7.6	7.3	8.7	13.4	14.3	15.9	16.6	16.9	17.2	17.5	18.9	17.8	17.6	15.9	19.0	16.2	15.4	14.4	15.9	17.0	15.5	19.0	7.3	14.4
13	14.5	13.5	12.4	10.5	11.0	10.7	10.1	8.6	8.2	7.9	7.6	6.7	5.8	5.5	6.5	6.3	6.4	5.9	5.4	4.4	3.8	3.5	3.7	3.1	14.5	3.1	7.6
14	3.3	2.9	2.0	1.5	1.6	0.5	1.5	2.0	1.5	2.5	2.5	3.9	4.3	4.3	4.0	4.1	4.0	4.6	4.7	5.0	6.1	6.4	6.2	6.1	6.4	0.5	3.6
15	6.7	5.5	5.5	5.7	5.5	6.1	6.6	6.5	7.1	6.5	8.4	8.8	10.0	10.3	12.0	14.0	12.1	10.8	10.1	11.1	11.7	11.3	11.6	11.1	14.0	5.5	9.0
16	11.9	12.9	14.8	14.6	15.4	17.3	16.1	15.6	17.8	20.5	19.7	20.1	19.3	21.8	23.8	23.4	22.9	22.7	23.0	19.7	17.3	15.8	15.1	12.7	23.8	11.9	18.1
17	12.7	11.3	12.4	14.6	14.0	14.9	14.6	11.3	9.4	11.1	10.9	10.5	11.7	10.9	9.6	9.9	9.4	10.4	11.0	9.8	10.7	11.3	11.7	12.9	14.9	9.4	11.5
18	11.2	9.9	8.0	7.3	6.9	5.7	5.0	5.1	4.4	4.6	3.3	2.6	2.1	2.4	2.8	2.9	2.8	2.6	2.3	3.6	2.6	2.5	2.0	1.8	11.2	1.8	4.4
19	2.3	3.2	4.1	4.1	4.5	4.5	3.9	4.6	4.5	5.8	6.2	5.1	6.3	7.4	8.7	8.6	9.6	9.5	9.9	6.1	5.9	5.6	5.8	3.9	9.9	2.3	5.8
20	4.2	3.6	4.6	4.4	5.2	5.7	5.6	5.1	7.3	7.0	7.7	11.0	13.0	14.0	14.4	13.5	14.3	13.7	14.8	12.1	11.4	11.8	12.4	12.4	14.8	3.6	9.6
21	12.7	15.8	15.6	13.7	12.7	12.1	10.9	9.8	7.8	6.6	5.2	4.6	4.7	4.6	3.5	3.7	3.6	4.5	5.1	3.4	3.0	4.4	6.5	6.9	15.8	3.0	7.6
22	6.5	5.8	4.3	4.5	2.3	1.1	2.1	2.5	3.0	3.0	2.6	2.5	4.2	4.9	4.8	5.0	3.0	3.3	3.4	3.8	3.5	4.1	4.0	3.0	6.5	1.1	3.6
23	3.6	3.8	3.3	3.0	4.4	4.3	3.5	4.3	4.9	5.7	5.8	6.4	6.6	7.2	8.5	8.2	6.7	6.4	5.7	5.3	6.2	6.0	2.8	0.7	8.5	0.7	5.1
24	2.2	3.1	3.7	2.5	2.6	4.2	5.5	5.6	7.1	6.9	6.9	6.2	7.1	6.9	9.4	10.4	8.6	7.7	11.9	12.5	10.9	13.1	15.0	13.6	15.0	2.2	7.6
25	12.0	11.5	11.5	10.8	9.4	10.5	9.7	9.1	8.6	9.2	10.1	10.8	10.8	11.3	11.2	10.3	9.6	8.8	8.3	7.6	7.2	7.3	6.4	6.3	12.0	6.3	9.5
26	4.9	3.8	4.0	3.1	2.6	3.2	5.2	7.1	6.5	5.6	4.4	4.0	5.2	3.5	3.1	3.7	3.1	3.6	4.4	4.0	4.1	5.4	6.3	6.8	7.1	2.6	4.5
27	6.3	5.7	5.2	6.1	6.7	6.7	5.6	6.0	6.4	5.5	4.8	5.3	3.8	3.0	3.3	3.7	5.0	5.5	5.4	5.9	4.7	3.7	1.8	1.7	6.7	1.7	4.9
28	3.0	3.9	4.3	5.6	5.2	4.8	4.8	4.7	6.6	7.0	7.1	7.7	9.6	10.4	8.7	9.3	9.3	8.1	8.6	8.7	8.4	7.8	7.8	7.8	10.4	3.0	7.0
29	9.7	8.5	8.7	8.6	9.8	9.0	9.3	12.3	12.3	14.2	12.9	10.6	9.5	8.7	9.3	9.4	9.2	9.2	9.6	11.1	10.0	9.2	11.0	9.2	14.2	8.5	10.0
30	7.3	7.0	8.3	8.4	8.6	7.8	8.6	7.6	6.9	7.9	6.7	7.2	8.1	9.2	9.7	9.3	9.9	11.6	10.0	9.0	9.3	8.0	6.7	6.1	11.6	6.1	8.3
31	8.5	6.6	6.2	7.0	6.3	7.9	6.2	7.5	8.0	7.9	8.5	6.2	5.9	7.3	6.5	6.6	7.5	7.6	7.7	7.3	7.0	6.8	6.1	5.1	8.5	5.1	7.0
Max.	**18.6**	**18.0**	**15.6**	**19.3**	**17.6**	**17.3**	**17.2**	**18.8**	**17.8**	**20.5**	**19.7**	**20.1**	**19.3**	**21.8**	**23.8**	**23.4**	**22.9**	**22.7**	**23.0**	**19.7**	**17.3**	**15.9**	**17.0**	**18.3**	**23.8**		
Min.	**1.0**	**1.2**	**1.2**	**1.2**	**1.1**	**0.5**	**0.9**	**1.9**	**1.5**	**2.5**	**2.5**	**2.5**	**1.9**	**2.0**	**2.4**	**2.9**	**2.2**	**2.3**	**2.3**	**3.4**	**2.6**	**2.5**	**1.8**	**0.7**		**0.5**	
Avg.	**7.9**	**7.6**	**7.5**	**7.4**	**7.4**	**7.6**	**7.7**	**7.9**	**8.2**	**8.4**	**8.2**	**8.1**	**8.3**	**8.6**	**8.9**	**9.1**	**9.0**	**8.8**	**8.9**	**8.6**	**8.4**	**8.3**	**8.3**	**8.0**			**8.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.2	5.2	5.3	4.5	2.7	1.4	1.5	0.8	0.6	1.3	1.5	1.3	1.0	1.1	2.5	3.1	3.9	4.3	4.1	4.0	4.7	4.7	5.8	5.8	5.8	0.6	3.2
2	6.5	7.6	9.1	10.1	9.5	9.8	10.1	10.3	9.5	9.0	8.7	8.4	7.8	8.0	8.0	7.7	7.5	5.9	4.3	3.7	2.1	1.6	2.1	2.6	10.3	1.6	7.1
3	2.8	3.7	3.8	4.6	5.6	4.5	4.3	4.0	4.2	3.4	2.7	1.6	1.4	3.7	4.3	5.3	5.9	7.8	8.6	9.4	9.2	9.3	9.0	10.2	10.2	1.4	5.4
4	10.7	10.5	10.3	8.8	8.2	8.4	7.4	7.8	8.2	7.7	6.0	5.3	5.9	6.5	6.0	5.5	6.6	6.6	7.7	7.7	7.0	5.2	4.9	4.7	10.7	4.7	7.2
5	4.9	4.5	4.0	3.1	1.6	2.1	2.6	3.5	4.6	5.7	5.7	6.3	5.9	6.5	7.2	6.9	7.6	8.1	8.6	9.2	8.7	9.0	8.9	8.6	9.2	1.6	6.0
6	8.0	8.2	8.7	8.2	8.6	8.8	9.0	7.7	8.3	8.6	5.0	4.3	7.7	8.7	8.3	7.7	8.8	9.9	9.5	8.6	8.6	8.0	6.9	6.6	9.9	4.3	8.0
7	7.1	7.2	7.8	7.4	8.1	7.5	6.9	7.7	7.7	8.4	7.4	7.2	7.2	8.7	7.6	7.6	7.6	6.4	7.5	7.6	7.9	7.1	7.7	7.8	8.7	6.4	7.5
8	7.7	7.2	6.6	7.0	7.7	6.3	6.2	5.2	4.8	5.4	6.4	6.2	5.5	7.2	6.8	6.3	6.1	5.8	6.2	7.1	7.8	8.7	7.9	6.3	8.7	4.8	6.6
9	6.0	7.0	6.5	7.3	7.4	8.1	10.2	9.5	8.5	8.3	6.5	6.6	9.2	8.9	10.8	8.9	8.8	7.8	8.3	8.3	7.6	6.7	6.0	4.9	10.8	4.9	7.8
10	3.9	3.4	3.2	2.9	2.0	1.0	0.4	0.2	0.8	2.0	2.3	2.0	2.1	1.8	3.1	3.3	2.2	4.2	5.3	6.9	4.8	4.7	3.7	4.8	6.9	0.2	3.0
11	4.6	3.6	4.5	5.2	5.3	4.9	6.4	6.5	6.0	5.9	6.1	8.4	8.7	8.6	9.0	10.3	10.7	10.2	9.9	8.5	6.4	5.0	5.3	4.8	10.7	3.6	6.9
12	2.5	2.1	2.9	4.2	4.7	5.4	5.4	4.2	3.3	2.6	2.0	2.0	2.9	4.2	4.1	3.6	4.3	4.1	6.6	5.8	4.3	4.6	2.6	1.5	6.6	1.5	3.7
13	1.8	3.4	3.8	4.0	5.0	4.0	4.6	3.8	2.5	1.7	1.2	1.3	2.7	2.9	2.8	3.8	4.6	3.0	8.7	10.2	11.2	9.4	5.9	4.3	11.2	1.2	4.4
14	3.6	3.4	4.0	4.9	3.7	4.3	3.6	4.2	6.8	9.0	10.0	8.6	8.1	8.1	8.5	7.6	8.0	8.9	8.8	8.5	8.3	6.2	4.2	4.7	10.0	3.4	6.5
15	5.3	4.5	6.6	6.3	5.6	5.1	3.8	3.3	2.6	2.9	2.3	2.8	2.1	2.5	2.3	2.9	3.2	2.9	2.5	2.1	2.3	3.3	3.4	2.6	6.6	2.1	3.5
16	2.7	4.1	4.3	4.2	5.0	5.8	6.7	6.4	4.9	7.7	8.5	8.3	6.9	6.0	7.4	8.5	9.2	9.0	8.2	8.9	8.2	8.9	9.3	8.2	9.3	2.7	7.0
17	7.3	8.4	8.8	7.9	7.3	7.1	6.9	7.2	7.4	8.1	6.9	8.6	8.6	8.8	8.8	10.3	11.1	13.0	13.0	12.2	12.4	11.4	11.9	11.1	13.0	6.9	9.4
18	11.0	10.1	10.6	9.5	8.5	6.0	4.7	4.6	3.7	3.9	4.0	4.6	5.3	4.8	4.9	4.7	4.9	3.9	3.5	1.5	2.0	1.4	1.6	3.3	11.0	1.4	5.1
19	3.5	3.9	4.0	3.9	3.3	3.9	2.5	3.4	3.0	2.6	1.4	3.0	3.6	4.1	3.7	3.6	2.8	2.9	4.4	4.0	4.7	3.6	3.4	2.2	4.7	1.4	3.4
20	2.1	3.8	3.9	3.7	3.3	2.6	2.6	3.1	3.4	3.4	3.0	3.5	2.7	1.4	1.8	3.2	2.4	3.1	3.1	4.0	3.6	3.8	2.8	1.4	4.0	1.4	3.0
21	1.1	1.5	1.2	1.9	2.4	3.1	3.7	3.6	3.4	4.1	4.6	4.6	4.3	4.0	5.0	4.2	3.7	5.0	5.9	2.9	2.9	4.4	5.9	4.3	5.9	1.1	3.7
22	1.7	0.7	1.2	0.6	0.6	0.6	0.6	1.1	1.4	1.7	1.9	1.7	1.1	2.2	2.0	2.1	1.9	2.0	2.7	3.4	3.2	3.4	2.5	3.2	3.4	0.6	1.8
23	3.5	4.0	2.9	3.5	4.6	4.9	5.9	6.8	5.3	5.4	5.7	4.0	2.7	1.8	1.8	1.9	2.2	2.3	4.9	4.4	5.5	5.2	6.4	5.4	6.8	1.8	4.2
24	2.8	2.3	4.4	4.6	5.3	5.2	5.4	6.1	6.0	4.9	4.3	5.1	5.6	5.4	5.6	6.8	5.9	5.8	5.1	4.8	3.4	6.3	6.5	5.9	6.8	2.3	5.1
25	4.7	3.6	4.2	4.8	4.8	5.2	4.6	5.5	5.0	2.0	1.3	2.4	3.6	4.2	4.4	5.1	6.5	6.8	6.6	7.7	7.9	8.2	7.9	8.7	8.7	1.3	5.2
26	10.2	8.8	7.6	7.9	7.4	4.8	7.3	7.1	8.6	9.0	9.3	9.6	10.3	10.3	9.7	8.5	7.5	7.4	7.0	7.3	7.1	5.7	4.1	4.0	10.3	4.0	7.8
27	3.8	2.6	2.0	1.1	1.6	1.6	2.6	1.6	1.9	2.5	3.5	3.4	2.5	2.4	3.0	3.5	4.2	4.0	4.5	3.7	3.9	3.6	3.3	3.5	4.5	1.1	2.9
28	3.6	3.1	2.8	2.6	2.3	2.6	2.8	2.2	1.9	2.0	3.1	3.0	3.5	2.9	4.3	5.0	5.0	4.2	3.3	4.6	7.0	7.2	7.8	7.7	7.8	1.9	3.9
29	8.6	8.7	8.1	7.7	6.7	6.3	5.4	4.9	3.9	2.0	0.9	1.7	2.7	2.8	4.7	5.7	6.6	8.8	10.1	9.5	8.1	8.0	7.7	4.5	10.1	0.9	6.0
30	2.9	4.0	3.7	3.0	2.2	3.9	2.5	1.4	1.2	0.8	1.1	1.3	1.6	2.5	2.9	3.9	5.2	5.9	6.4	6.1	7.2	13.5	16.2	16.0	16.2	0.8	4.8
31	15.4	17.6	18.0	20.6	20.5	21.0	21.3	20.7	17.2	11.5	11.9	10.6	8.0	9.8	11.6	10.8	11.9	12.1	12.6	12.9	14.2	13.4	13.1	14.3	21.3	8.0	14.6
Max.	**15.4**	**17.6**	**18.0**	**20.6**	**20.5**	**21.0**	**21.3**	**20.7**	**17.2**	**11.5**	**11.9**	**10.6**	**10.3**	**10.3**	**11.6**	**10.8**	**11.9**	**13.0**	**13.0**	**12.9**	**14.2**	**13.5**	**16.2**	**16.0**	**21.3**		
Min.	**1.1**	**0.7**	**1.2**	**0.6**	**0.6**	**0.6**	**0.4**	**0.2**	**0.6**	**0.8**	**0.9**	**1.3**	**1.0**	**1.1**	**1.8**	**1.9**	**1.9**	**2.0**	**2.5**	**1.5**	**2.0**	**1.4**	**1.6**	**1.4**		**0.2**	
Avg.	**5.3**	**5.4**	**5.6**	**5.7**	**5.5**	**5.4**	**5.4**	**5.3**	**5.1**	**5.0**	**4.7**	**4.8**	**4.9**	**5.2**	**5.6**	**5.7**	**6.0**	**6.2**	**6.7**	**6.6**	**6.5**	**6.5**	**6.3**	**5.9**			**5.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.4	14.2	13.2	11.2	9.8	10.9	9.7	10.7	10.1	9.8	11.0	10.3	7.9	7.6	8.2	9.5	7.8	7.2	7.2	7.7	7.3	10.7	11.8	13.6	14.4	7.2	10.1
2	13.7	15.1	16.3	16.0	15.4	15.2	16.2	16.3	16.7	14.3	14.4	15.2	17.1	15.9	15.0	14.4	8.0	7.0	8.1	9.7	8.5	9.7	9.5	9.5	17.1	7.0	13.2
3	9.5	10.5	9.1	9.0	8.2	7.3	6.5	5.8	4.9	4.6	4.0	4.2	4.6	6.6	6.4	5.9	5.4	5.1	5.4	6.3	6.9	7.0	9.5	10.0	10.5	4.0	6.8
4	9.4	8.6	9.0	9.0	9.0	8.2	6.3	5.7	6.7	5.3	4.4	3.8	4.1	4.7	5.1	4.2	4.3	4.2	4.0	3.5	3.3	2.8	3.1	2.7	9.4	2.7	5.5
5	2.6	1.6	0.8	0.4	0.5	0.8	1.0	0.3	1.2	1.6	1.9	2.9	3.3	2.5	3.4	3.6	3.3	1.6	3.2	3.3	2.7	3.0	4.7	5.3	5.3	0.3	2.3
6	6.1	7.6	9.8	10.9	9.6	10.4	12.6	15.5	13.2	12.6	14.7	18.5	21.0	22.1	23.2	18.5	16.9	14.2	13.9	18.8	15.0	15.1	18.2	14.8	23.2	6.1	14.7
7	15.2	15.0	18.6	15.5	11.2	7.8	9.6	11.0	12.2	11.9	11.9	13.8	17.4	14.5	11.4	11.5	12.5	12.0	10.4	10.6	10.5	11.2	11.5	13.4	18.6	7.8	12.5
8	11.5	11.7	10.6	12.5	11.4	11.4	9.4	9.3	8.0	5.6	5.4	6.5	8.6	14.0	18.2	18.3	17.3	19.6	18.9	18.0	13.3	11.8	11.6	13.7	19.6	5.4	12.4
9	12.7	12.4	10.8	10.4	10.9	7.2	6.4	8.0	7.4	9.4	9.4	9.2	9.2	11.7	15.1	14.8	14.2	14.7	14.4	13.2	12.8	12.3	11.4	10.6	15.1	6.4	11.2
10	11.0	12.8	8.2	5.5	5.5	4.1	3.1	4.3	5.2	4.8	5.6	6.7	5.2	4.6	4.6	4.4	4.7	4.9	4.3	5.9	5.9	6.3	6.6	5.4	12.8	3.1	5.8
11	6.8	6.2	6.1	5.7	6.7	6.3	6.9	6.6	5.4	6.0	7.5	7.4	7.0	7.3	7.8	6.3	6.4	7.2	6.9	6.9	8.6	10.0	10.3	13.4	13.4	5.4	7.3
12	15.1	15.1	15.8	19.5	22.9	22.0	21.3	20.7	19.0	19.0	16.7	17.9	19.9	18.0	19.5	18.8	19.3	20.0	20.2	20.3	19.2	19.3	20.7	21.3	22.9	15.1	19.2
13	22.0	20.2	21.4	22.8	22.0	21.2	22.6	22.3	21.2	22.9	24.9	27.4	26.9	24.3	19.9	19.5	19.8	19.5	21.2	20.4	20.5	18.6	19.4	18.6	27.4	18.6	21.6
14	17.7	17.3	16.6	14.5	13.1	13.7	12.2	11.1	11.0	12.4	13.5	13.0	11.0	11.8	11.7	10.9	10.3	9.7	8.0	8.3	8.5	8.5	7.8	8.1	17.7	7.8	11.7
15	8.5	7.1	7.6	7.4	7.3	7.5	7.7	8.3	9.5	9.8	13.0	14.5	13.7	12.0	11.6	12.4	14.3	14.9	14.6	13.4	12.2	12.9	12.1	9.5	14.9	7.1	10.9
16	8.1	5.2	3.2	1.8	1.9	2.4	3.8	3.3	3.2	3.0	2.9	4.2	4.4	6.1	6.7	7.0	6.3	8.2	8.1	8.5	7.8	6.8	6.2	6.1	8.5	1.8	5.2
17	6.0	5.0	4.3	4.0	3.1	5.7	7.4	5.6	3.8	2.1	1.1	3.2	3.5	5.0	6.1	7.5	7.7	10.3	13.0	11.6	9.7	8.4	7.2	9.3	13.0	1.1	6.3
18	10.8	11.3	11.2	12.0	11.6	11.0	10.5	10.9	11.2	11.9	10.7	9.5	6.9	4.7	4.1	5.0	5.6	4.3	3.0	2.5	2.3	2.8	4.9	6.2	12.0	2.3	7.7
19	6.2	5.6	6.8	6.4	6.5	7.7	7.1	7.4	8.0	7.3	5.4	4.8	5.1	5.3	6.0	8.8	8.3	9.3	9.4	8.1	7.1	6.2	5.6	4.1	9.4	4.1	6.8
20	4.3	5.3	5.2	5.7	5.7	5.8	4.5	3.3	3.3	2.6	1.4	1.4	3.6	3.8	5.1	5.2	5.2	5.6	4.8	3.9	3.6	4.0	4.2	3.3	5.8	1.4	4.2
21	3.4	3.4	2.6	2.9	3.2	3.7	3.5	2.5	2.1	2.5	2.0	2.2	2.0	3.0	4.1	6.0	6.0	7.0	7.4	7.2	6.2	5.1	6.1	5.2	7.4	2.0	4.1
22	4.7	5.1	4.1	3.4	3.0	2.7	1.5	2.1	2.4	2.2	1.9	1.7	2.6	2.7	4.2	5.5	7.0	7.7	9.6	9.5	9.0	9.1	9.3	10.0	10.0	1.5	5.0
23	9.6	8.7	8.6	11.4	12.0	13.5	13.1	11.6	11.2	10.8	11.8	11.9	10.8	10.9	12.5	13.1	13.6	12.3	13.3	14.1	13.2	13.5	11.8	10.5	14.1	8.6	11.8
24	9.2	9.6	9.1	10.2	9.9	8.6	6.9	6.2	5.8	5.5	5.8	6.3	7.1	7.8	7.7	7.5	7.4	7.7	7.3	5.7	5.0	4.5	4.6	4.3	10.2	4.3	7.1
25	4.0	5.0	5.2	4.4	4.2	4.6	5.6	5.2	6.0	5.5	4.6	3.6	2.5	2.2	2.6	3.9	4.8	5.4	5.1	4.4	3.2	3.9	3.2	3.0	6.0	2.2	4.3
26	2.4	2.4	3.3	2.7	1.6	1.6	1.3	1.9	1.8	3.1	3.1	1.5	1.0	1.0	2.4	1.3	1.0	2.1	2.7	3.1	4.5	5.2	4.7	4.5	5.2	1.0	2.5
27	5.2	5.6	5.5	4.6	7.2	7.6	7.5	7.3	8.3	8.3	8.8	9.2	9.5	9.1	7.3	8.5	10.9	10.3	8.9	7.7	8.6	7.8	8.1	7.8	10.9	4.6	7.9
28	6.7	7.1	7.2	7.1	6.2	6.2	5.2	3.8	3.1	2.6	1.6	0.7	1.0	1.0	0.7	1.7	1.3	3.5	3.7	3.8	5.5	7.5	7.8	9.0	9.0	0.7	4.3
29	11.7	13.9	11.7	5.8	6.0	8.0	8.9	9.8	11.0	10.9	10.5	10.4	10.2	10.6	11.0	10.3	7.6	7.3	8.4	6.8	5.7	6.1	6.3	5.1	13.9	5.1	8.9
30	4.3	2.3	0.8	2.1	3.5	4.3	4.6	5.6	5.4	5.5	5.8	5.8	5.7	4.4	4.0	3.6	3.1	2.2	2.2	2.6	2.5	2.0	1.0	0.7	5.8	0.7	3.5
Max.	**22.0**	**20.2**	**21.4**	**22.8**	**22.9**	**22.0**	**22.6**	**22.3**	**21.2**	**22.9**	**24.9**	**27.4**	**26.9**	**24.3**	**23.2**	**19.5**	**19.8**	**20.0**	**21.2**	**20.4**	**20.5**	**19.3**	**20.7**	**21.3**	**27.4**		
Min.	**2.4**	**1.6**	**0.8**	**0.4**	**0.5**	**0.8**	**1.0**	**0.3**	**1.2**	**1.6**	**1.1**	**0.7**	**1.0**	**1.0**	**0.7**	**1.3**	**1.0**	**1.6**	**2.2**	**2.5**	**2.3**	**2.0**	**1.0**	**0.7**		**0.3**	
Avg.	**9.1**	**9.0**	**8.8**	**8.5**	**8.3**	**8.2**	**8.1**	**8.1**	**7.9**	**7.8**	**7.9**	**8.3**	**8.4**	**8.5**	**8.9**	**8.9**	**8.7**	**8.8**	**8.9**	**8.9**	**8.3**	**8.4**	**8.6**	**8.6**			**8.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.9	2.2	2.4	3.0	3.5	3.8	4.5	5.4	6.5	6.7	8.2	7.7	9.6	11.8	11.9	11.1	9.2	9.5	8.7	8.3	10.6	8.9	8.7	5.4	11.9	0.9	7.0
2	4.2	5.4	4.5	4.6	2.8	3.4	2.5	3.7	3.3	1.8	1.8	1.7	0.8	0.7	1.8	3.3	3.9	4.4	4.6	5.1	7.2	10.3	9.3	8.9	10.3	0.7	4.2
3	8.1	7.5	6.2	5.2	4.1	4.9	4.7	5.1	6.0	6.6	5.6	5.9	6.1	6.1	7.8	6.7	6.4	6.2	4.3	4.8	6.0	5.5	4.1	3.4	8.1	3.4	5.7
4	4.6	4.0	3.2	3.8	3.7	3.6	2.8	2.8	2.7	2.8	2.4	1.0	1.1	1.3	1.5	1.9	1.6	2.0	0.6	1.0	1.1	1.4	1.9	1.8	4.6	0.6	2.3
5	2.3	1.8	1.5	3.2	4.8	5.3	4.7	3.4	1.6	1.3	1.1	1.1	1.2	0.8	0.7	2.0	3.0	3.3	3.7	5.4	5.1	4.5	4.0	3.8	5.4	0.7	2.9
6	2.8	2.5	1.8	1.4	1.0	1.1	0.6	0.4	0.5	0.7	0.6	0.5	0.5	0.1	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.6
7	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.9	6.4	6.6	8.1	7.7	8.5	8.1	7.4	8.5	0.1	2.3
8	6.9	6.3	5.7	5.6	8.1	10.2	9.7	9.6	8.5	7.3	7.6	7.2	7.2	5.8	6.8	7.4	7.8	8.1	8.1	8.8	7.8	6.3	9.3	9.3	10.2	5.6	7.7
9	9.4	13.7	15.5	18.0	19.9	21.4	22.6	24.4	22.8	25.0	27.0	28.1	26.5	27.2	29.0	27.8	27.7	28.9	28.4	27.5	25.1	23.5	22.4	22.1	29.0	9.4	23.5
10	18.5	18.6	15.2	9.8	10.3	9.4	8.2	7.9	7.3	6.5	8.0	8.1	7.9	6.7	8.1	9.7	12.6	12.9	12.1	9.0	9.7	10.7	10.3	9.9	18.6	6.5	10.3
11	10.7	11.9	13.9	15.8	15.6	17.0	16.2	16.0	7.2	5.4	6.7	8.5	9.7	10.8	11.7	10.9	11.5	13.8	15.2	15.8	16.9	16.9	15.9	17.2	17.2	5.4	13.0
12	17.6	17.3	14.7	14.4	15.1	16.0	14.6	15.8	15.8	15.3	12.3	11.9	11.1	8.5	6.5	10.1	11.5	11.7	12.4	10.0	9.1	9.7	10.8	9.5	17.6	6.5	12.6
13	8.4	7.7	6.6	6.4	4.8	4.5	3.4	3.7	0.8	0.6	1.0	1.7	2.7	1.5	8.0	11.7	13.0	11.6	11.3	13.1	13.3	13.2	14.7	15.4	15.4	0.6	7.5
14	17.2	17.0	17.2	17.3	19.0	13.9	9.8	8.0	5.5	3.4	4.9	6.4	5.9	4.3	4.0	3.2	2.3	2.0	1.9	1.8	1.3	0.3	0.0	0.0	19.0	0.0	6.9
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.7	9.0	10.6	10.6	11.9	13.2	14.1	15.7	15.7	0.0	3.7
18	17.7	19.5	20.3	20.0	18.3	19.2	19.5	17.2	19.9	19.5	17.7	12.8	9.7	6.7	5.7	6.2	6.6	7.4	7.8	9.1	7.7	8.1	6.1	5.8	20.3	5.7	12.9
19	7.0	8.3	9.4	9.7	9.3	8.3	7.4	6.1	6.2	5.6	5.4	5.6	4.8	4.2	2.8	2.4	2.0	1.5	1.4	2.5	3.1	3.1	3.9	3.6	9.7	1.4	5.1
20	4.3	4.3	4.7	5.6	5.2	4.3	4.8	3.5	4.3	5.2	5.5	5.6	4.7	4.5	3.4	3.2	3.7	2.7	2.1	1.4	1.5	2.7	2.7	2.1	5.6	1.4	3.8
21	2.1	2.0	2.1	1.1	0.6	0.8	2.2	3.5	3.0	3.2	4.2	4.3	5.0	5.8	8.7	11.4	10.6	11.0	11.6	12.9	12.8	11.7	9.9	10.2	12.9	0.6	6.3
22	10.0	9.1	9.8	6.4	8.1	8.6	7.5	8.9	9.8	9.5	9.2	8.6	7.8	9.2	8.1	6.6	5.6	6.9	8.2	9.3	9.0	8.8	8.9	6.0	10.0	5.6	8.3
23	6.1	6.5	6.1	7.7	9.0	11.0	12.2	11.8	11.9	12.5	14.3	15.4	16.3	16.3	15.8	10.1	10.3	11.5	10.7	10.3	10.6	11.0	10.9	11.4	16.3	6.1	11.2
24	12.8	13.7	12.9	13.1	12.4	13.0	11.4	10.5	11.2	11.0	9.6	8.1	6.5	4.7	7.5	9.3	9.2	8.6	8.3	7.7	4.8	3.7	5.4	5.8	13.7	3.7	9.2
25	8.0	9.6	10.4	11.2	8.9	9.1	8.2	7.8	8.3	7.3	9.4	7.7	6.4	6.4	5.6	4.4	5.1	7.6	6.2	5.5	5.4	5.0	4.9	5.1	11.2	4.4	7.2
26	5.1	5.7	6.0	6.8	8.1	8.6	7.7	7.2	7.2	5.2	5.6	8.0	7.1	5.7	6.8	6.7	9.8	10.0	11.9	10.9	13.4	12.0	12.5	12.3	13.4	5.1	8.3
27	10.6	9.2	7.2	9.5	7.9	7.9	7.5	7.8	9.0	7.5	7.1	7.2	7.0	6.7	5.4	7.6	9.2	8.0	7.8	7.2	6.6	4.0	2.3	1.8	10.6	1.8	7.2
28	2.8	4.1	5.5	7.7	9.9	10.4	11.9	12.2	11.6	12.3	12.9	11.4	9.9	8.5	9.2	7.8	7.7	6.3	4.7	4.0	4.7	3.0	2.4	1.5	12.9	1.5	7.6
29	0.5	1.0	1.8	2.3	2.7	2.3	1.8	0.7	1.1	1.8	3.3	4.3	5.5	7.1	7.3	7.9	8.3	8.3	8.5	8.8	10.1	11.6	10.5	10.2	11.6	0.5	5.3
30	9.6	9.6	9.4	9.3	8.0	10.0	8.6	8.6	6.7	7.2	9.7	7.2	3.2	4.3	5.2	6.4	6.7	6.3	6.8	5.8	5.4	5.1	4.8	4.2	10.0	3.2	7.0
31	3.8	4.0	3.2	2.9	1.7	1.8	0.6	1.4	1.0	1.0	1.8	1.8	0.8	0.6	1.0	1.5	1.8	1.6	2.2	1.7	1.6	1.7	1.2	0.9	4.0	0.6	1.7
Max.	**18.5**	**19.5**	**20.3**	**20.0**	**19.9**	**21.4**	**22.6**	**24.4**	**22.8**	**25.0**	**27.0**	**28.1**	**26.5**	**27.2**	**29.0**	**27.8**	**27.7**	**28.9**	**28.4**	**27.5**	**25.1**	**23.5**	**22.4**	**22.1**	**29.0**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.8**	**7.2**	**7.0**	**7.2**	**7.2**	**7.4**	**7.0**	**6.9**	**6.5**	**6.2**	**6.5**	**6.4**	**6.0**	**5.7**	**6.2**	**6.4**	**6.9**	**7.3**	**7.3**	**7.3**	**7.4**	**7.2**	**7.1**	**6.8**			**6.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.7	2.8	2.7	2.2	1.3	2.4	3.2	3.0	3.4	4.3	4.6	3.5	4.8	4.6	4.1	4.9	4.4	5.1	4.7	6.0	5.9	6.5	8.6	7.6	8.6	1.3	4.3
2	7.2	6.1	6.1	4.5	4.8	4.3	3.8	5.7	5.2	5.9	7.3	7.8	8.1	7.9	8.1	6.9	7.0	8.7	9.9	7.8	8.1	5.7	8.6	8.6	9.9	3.8	6.8
3	7.2	6.6	5.8	2.8	1.9	1.6	1.6	1.5	1.2	1.2	1.2	1.1	0.9	0.5	0.3	0.3	0.2	0.4	0.3	0.5	0.4	0.4	0.3	0.3	7.2	0.2	1.6
4	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
5	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
6	0.0	3.7	4.4	4.3	4.6	4.9	6.4	7.0	7.2	8.4	7.7	6.8	4.9	5.0	4.8	4.1	4.6	4.1	3.8	4.0	4.9	3.9	4.7	4.8	8.4	0.0	5.0
7	4.9	6.6	7.4	7.5	5.8	6.1	6.1	5.8	3.7	4.8	5.7	5.6	4.3	4.2	4.6	5.4	5.0	4.9	6.2	5.9	6.6	5.7	5.3	9.6	9.6	3.7	5.7
8	8.5	7.2	6.2	5.5	4.8	4.5	3.7	3.0	1.9	1.1	0.1	0.0	5.6	11.6	11.0	10.9	10.2	10.6	14.2	16.2	16.2	18.2	17.9	17.6	18.2	0.0	8.6
9	19.2	19.3	21.2	22.2	23.8	23.5	22.3	21.8	20.2	13.9	12.0	11.3	13.1	12.6	16.7	18.5	17.0	13.6	12.6	17.8	20.6	19.5	19.8	21.1	23.8	11.3	18.1
10	22.6	21.2	15.1	10.5	10.4	11.7	11.8	10.8	10.4	7.5	10.7	7.5	6.1	4.5	3.5	2.9	6.3	11.0	12.9	9.8	10.8	14.6	12.1	11.8	22.6	2.9	10.7
11	11.1	10.8	10.5	10.4	11.6	8.9	7.9	8.0	6.7	6.8	6.2	5.3	3.9	1.9	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	11.6	0.1	4.6
12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5	0.0	0.1
18	7.6	8.5	8.4	7.4	7.0	7.1	5.2	5.0	3.9	3.3	2.8	3.0	2.4	2.7	5.4	5.9	5.0	5.2	4.5	5.4	5.4	4.8	3.9	3.6	8.5	2.4	5.1
19	2.8	2.8	2.6	2.4	2.8	7.3	7.9	8.3	10.1	12.8	13.2	14.7	13.7	16.0	16.9	16.7	14.8	16.7	16.7	18.1	19.7	17.1	15.2	14.9	19.7	2.4	11.8
20	16.0	12.5	11.2	12.6	14.8	18.7	16.9	16.7	17.1	16.1	18.5	17.9	18.1	17.9	16.3	17.7	17.5	16.0	16.9	15.7	16.0	14.4	14.6	12.1	18.7	11.2	15.9
21	13.4	11.4	10.7	8.6	8.4	8.1	7.1	5.8	4.7	4.7	3.3	3.3	4.3	3.1	2.5	1.7	2.0	2.4	1.5	2.2	1.6	1.6	2.2	0.7	13.4	0.7	4.8
22	0.9	0.3	1.7	3.3	3.3	2.9	3.4	3.6	4.3	4.6	3.7	4.1	5.7	5.5	4.7	4.4	4.0	5.1	5.2	5.7	4.3	3.3	4.3	3.9	5.7	0.3	3.8
23	4.9	5.3	5.2	4.3	5.9	5.6	4.6	3.6	2.8	3.7	4.8	4.3	4.6	4.7	9.1	8.7	9.1	9.3	12.8	14.4	13.3	13.3	13.4	12.1	14.4	2.8	7.5
24	14.6	16.3	17.8	21.6	21.9	20.3	17.5	15.7	19.6	20.3	19.2	19.9	20.9	17.7	17.5	16.8	14.0	11.8	10.1	10.7	9.3	11.3	14.3	17.2	21.9	9.3	16.5
25	16.7	16.9	12.0	14.2	12.7	12.5	11.2	10.8	12.0	10.8	7.5	6.6	4.4	1.6	3.5	2.4	2.9	2.7	3.7	7.6	4.5	4.3	4.1	7.2	16.9	1.6	8.0
26	8.0	9.4	6.6	6.7	7.1	5.2	6.8	7.3	7.2	8.3	10.3	10.3	10.5	10.8	11.3	11.6	12.2	12.3	10.6	9.4	8.8	8.5	6.8	8.4	12.3	5.2	8.9
27	7.2	7.0	5.9	6.4	6.2	5.9	5.3	4.1	4.9	4.2	5.1	5.3	4.9	4.4	5.3	5.3	5.8	5.9	6.0	7.3	6.4	5.7	5.3	4.6	7.3	4.1	5.6
28	5.3	5.9	6.8	6.9	6.2	6.2	6.6	6.5	5.0	4.1	3.9	3.0	1.8	2.3	2.8	3.2	2.9	3.8	4.0	3.9	4.3	4.0	3.3	4.2	6.9	1.8	4.5
29	4.1	4.2	4.8	4.6	4.7	5.0	4.9	3.8	5.2	6.2	6.5	7.0	8.4	9.4	8.1	9.0	6.2	6.4	7.9	10.4	10.8	8.5	6.9	5.3	10.8	3.8	6.6
30	4.2	3.9	4.8	4.6	5.2	5.0	4.4	4.0	3.8	3.4	2.8	2.0	1.7	1.1	6.6	7.9	7.5	6.7	6.2	5.8	5.0	4.5	4.5	4.4	7.9	1.1	4.6
Max.	**22.6**	**21.2**	**21.2**	**22.2**	**23.8**	**23.5**	**22.3**	**21.8**	**20.2**	**20.3**	**19.2**	**19.9**	**20.9**	**17.9**	**17.5**	**18.5**	**17.5**	**16.7**	**16.9**	**18.1**	**20.6**	**19.5**	**19.8**	**21.1**	**23.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**6.3**	**6.3**	**5.9**	**5.8**	**5.9**	**5.9**	**5.6**	**5.4**	**5.4**	**5.2**	**5.2**	**5.0**	**5.1**	**5.0**	**5.5**	**5.5**	**5.3**	**5.4**	**5.7**	**6.2**	**6.1**	**5.9**	**5.9**	**6.1**			**5.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5A Meteorological Station - Wind Speed (RMYoung AP) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.3	3.4	3.2	3.8	4.1	4.4	4.1	3.9	4.0	4.4	3.8	4.1	3.2	4.8	5.3	5.4	5.9	6.4	5.9	6.3	7.1	6.9	7.0	9.4	9.4	3.2	5.0
2	11.2	13.3	15.2	11.1	9.6	10.3	11.1	15.0	15.2	17.3	21.4	24.7	22.8	24.0	23.0	23.2	24.7	27.4	28.3	27.7	25.3	22.1	23.6	25.4	28.3	9.6	19.7
3	23.8	23.5	26.4	22.9	22.9	25.1	26.9	28.0	25.2	26.9	30.5	33.5	33.0	33.2	34.1	38.1	33.7	33.7	31.6	31.5	32.2	31.4	29.1	29.3	38.1	22.9	29.4
4	26.9	25.7	24.4	21.9	21.8	23.5	21.9	20.8	19.1	20.4	20.8	21.5	20.7	20.3	21.5	21.2	19.8	18.9	19.9	18.2	16.9	17.7	18.2	21.1	26.9	16.9	21.0
5	22.2	19.9	19.3	18.1	17.7	17.9	18.2	19.7	18.3	20.6	20.6	21.0	20.6	20.7	18.5	16.7	15.3	15.8	15.9	16.8	15.9	13.8	12.1	12.1	22.2	12.1	17.8
6	12.0	14.8	15.1	14.3	15.7	14.5	11.5	9.6	9.0	8.8	8.1	7.4	4.7	4.3	3.9	3.0	2.6	2.1	2.4	2.5	1.8	1.1	0.3	1.0	15.7	0.3	7.1
7	1.7	1.6	2.2	2.4	3.1	3.7	2.7	2.5	2.5	2.2	2.0	1.4	1.0	0.7	1.1	1.0	1.1	1.7	1.4	1.9	2.3	2.5	2.7	3.6	3.7	0.7	2.0
8	7.2	6.7	8.4	11.0	10.1	9.6	8.4	8.4	12.7	14.0	14.6	12.6	14.0	15.0	20.6	18.0	17.8	13.8	10.3	10.7	11.2	10.5	10.2	8.7	20.6	6.7	11.8
9	8.5	7.5	7.2	5.7	4.6	4.1	4.0	3.8	3.6	2.2	0.8	2.0	3.4	3.4	4.1	4.4	4.0	3.6	4.5	4.0	5.8	6.6	7.9	8.7	8.7	0.8	4.8
10	8.7	9.1	9.8	11.7	16.0	15.7	15.8	15.4	14.6	13.7	11.4	8.4	7.1	6.2	5.8	5.3	5.0	4.7	4.2	3.3	3.4	3.9	3.8	4.6	16.0	3.3	8.7
11	4.3	3.4	3.3	4.5	3.4	3.2	2.4	1.6	2.2	4.2	6.8	7.7	7.3	6.3	4.4	2.4	3.9	5.2	5.3	5.6	7.9	7.1	5.8	6.3	7.9	1.6	4.8
12	6.7	6.9	6.2	4.9	4.7	4.4	4.0	3.0	2.4	1.9	2.8	4.5	5.2	5.5	6.2	6.2	6.6	8.0	7.7	7.4	5.0	6.9	7.5	9.7	9.7	1.9	5.6
13	8.3	8.8	9.1	8.6	9.0	8.8	8.1	7.5	6.0	5.4	5.5	5.0	4.6	2.9	1.7	1.3	1.4	2.1	2.6	3.0	3.5	3.6	4.0	5.9	9.1	1.3	5.3
14	7.3	7.8	10.6	13.2	13.0	15.3	14.4	16.3	12.5	16.9	18.5	17.9	17.3	14.6	16.3	18.1	19.5	18.8	17.6	19.1	23.8	22.8	19.9	20.2	23.8	7.3	16.3
15	20.4	19.0	19.0	19.0	18.8	18.1	17.6	16.1	13.1	14.2	14.0	10.2	6.7	6.0	6.1	3.3	0.7	0.3	1.9	2.8	4.1	4.1	4.5	4.4	20.4	0.3	10.2
16	3.9	3.3	3.5	4.6	4.7	4.7	5.6	7.9	9.6	12.7	13.7	11.9	10.8	10.5	10.1	11.5	12.1	9.7	10.0	10.9	9.2	10.3	11.1	14.2	14.2	3.3	9.0
17	20.6	21.5	18.0	19.1	21.4	23.2	22.1	22.9	23.4	23.5	23.4	22.7	21.8	22.0	21.8	20.9	22.7	22.4	21.4	20.9	19.3	20.8	19.5	19.7	23.5	18.0	21.5
18	20.1	21.2	21.7	19.6	21.8	24.6	22.3	22.2	23.4	23.1	22.8	19.3	18.8	21.6	23.3	24.0	24.0	23.7	21.1	23.9	24.0	22.9	22.1	24.5	24.6	18.8	22.3
19	23.7	23.5	21.6	21.3	20.1	20.9	20.4	19.8	20.5	21.6	17.8	17.2	15.3	10.7	8.7	7.8	8.6	10.3	9.8	10.6	12.3	9.7	9.7	9.8	23.7	7.8	15.5
20	7.9	10.4	9.3	11.2	10.0	8.4	7.7	7.3	6.8	7.6	7.3	6.3	6.9	8.2	8.1	5.3	4.6	3.0	3.1	1.6	1.6	1.6	2.2	1.8	11.2	1.6	6.2
21	2.5	3.3	4.0	5.0	5.5	4.7	3.2	3.0	3.6	4.3	3.8	3.4	3.4	4.5	5.0	4.9	4.6	3.6	3.8	3.4	2.8	2.4	1.6	1.2	5.5	1.2	3.6
22	2.4	3.7	5.5	8.4	9.0	10.3	11.8	13.3	12.2	12.8	12.1	9.7	6.5	9.0	11.6	11.3	11.2	10.2	9.2	10.2	10.5	10.1	10.4	11.5	13.3	2.4	9.7
23	13.2	15.5	16.9	16.1	16.3	15.4	12.6	8.1	5.1	11.6	12.1	12.6	10.2	9.2	10.4	10.7	10.7	11.3	10.8	10.8	12.1	12.6	10.7	13.4	16.9	5.1	12.0
24	13.8	12.0	10.3	8.1	6.0	4.3	3.9	4.3	4.1	2.3	2.4	3.0	2.2	2.3	2.2	2.0	2.2	1.7	0.6	0.4	2.6	2.8	4.8	4.8	13.8	0.4	4.3
25	6.2	11.1	16.3	15.8	16.9	17.7	18.4	18.6	18.9	16.1	16.3	18.1	19.3	18.0	14.0	11.3	11.5	12.3	14.2	12.7	9.4	10.8	12.2	10.0	19.3	6.2	14.4
26	9.1	10.3	11.9	9.1	12.0	16.1	10.5	12.1	14.7	16.4	14.6	10.5	9.5	9.7	9.9	10.2	9.1	10.8	13.4	10.9	9.7	11.7	9.9	12.5	16.4	9.1	11.4
27	13.6	14.8	15.5	19.7	20.9	19.9	19.8	19.8	19.2	21.0	18.4	19.5	16.4	17.0	15.9	13.9	15.5	15.7	14.6	16.2	16.5	14.1	12.7	13.7	21.0	12.7	16.9
28	14.6	15.2	13.1	11.5	12.2	12.4	11.3	12.1	12.3	15.7	13.6	15.0	11.9	10.5	10.7	11.2	9.8	9.2	8.4	7.4	6.6	5.8	5.5	5.2	15.7	5.2	10.9
29	4.4	4.7	4.6	5.3	6.3	5.9	4.7	5.4	5.0	6.3	5.8	5.1	4.8	4.5	4.2	4.0	2.7	2.4	4.9	5.5	6.1	6.0	6.1	6.2	6.3	2.4	5.0
30	5.9	5.8	5.1	4.8	2.6	3.1	5.8	5.6	4.9	4.8	4.2	4.5	4.6	6.1	5.6	5.2	5.9	7.0	7.3	7.8	7.9	7.9	9.6	8.2	9.6	2.6	5.8
31	9.3	10.9	12.1	11.7	10.8	11.6	10.8	10.0	11.4	11.0	11.5	11.4	12.5	12.8	13.7	13.1	12.5	10.6	10.2	10.8	11.5	12.4	12.9	11.5	13.7	9.3	11.5
Max.	**26.9**	**25.7**	**26.4**	**22.9**	**22.9**	**25.1**	**26.9**	**28.0**	**25.2**	**26.9**	**30.5**	**33.5**	**33.0**	**33.2**	**34.1**	**38.1**	**33.7**	**33.7**	**31.6**	**31.5**	**32.2**	**31.4**	**29.1**	**29.3**	**38.1**		
Min.	**1.7**	**1.6**	**2.2**	**2.4**	**2.6**	**3.1**	**2.4**	**1.6**	**2.2**	**1.9**	**0.8**	**1.4**	**1.0**	**0.7**	**1.1**	**1.0**	**0.7**	**0.3**	**0.6**	**0.4**	**1.6**	**1.1**	**0.3**	**1.0**		**0.3**	
Avg.	**11.1**	**11.6**	**11.9**	**11.8**	**12.0**	**12.3**	**11.7**	**11.7**	**11.5**	**12.4**	**12.3**	**12.0**	**11.2**	**11.1**	**11.2**	**10.8**	**10.6**	**10.5**	**10.4**	**10.5**	**10.6**	**10.4**	**10.2**	**10.9**			**11.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Appendix C

2008 non-PSD Meteorological Station Wind Rose Analysis Tables (Climatronics, RM Young-AQ and RM Young-AP) and Map

2008 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 3 (Climatronics) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.08%	3.98%	5.02%	4.10%	1.70%	1.93%	18.81%
NE	2.72%	1.52%	1.85%	2.90%	1.31%	0.40%	10.70%
E	1.99%	1.33%	3.31%	4.97%	2.16%	1.28%	15.05%
SE	2.31%	4.78%	4.49%	1.99%	0.17%	0.00%	13.74%
S	2.42%	2.06%	1.08%	1.05%	0.52%	0.36%	7.49%
SW	3.40%	2.93%	3.46%	2.80%	1.24%	0.23%	14.06%
W	1.72%	1.09%	0.87%	0.40%	0.57%	0.56%	5.21%
NW	0.69%	1.17%	2.45%	2.24%	1.06%	0.88%	8.50%
Sub-Total:	17.34%	18.85%	22.52%	20.47%	8.73%	5.65%	93.56%
Calms (<0.5m/s):							6.34%
Total:							100.00%

Station ID: Pebble 5A (Climatronics) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.30%	2.72%	3.12%	3.63%	0.85%	0.31%	12.94%
NE	1.01%	1.66%	1.55%	1.11%	0.72%	0.89%	6.94%
E	0.92%	0.81%	0.91%	1.20%	0.60%	1.90%	6.35%
SE	0.63%	1.06%	2.19%	4.73%	3.08%	11.02%	22.70%
S	0.90%	1.34%	2.37%	2.05%	0.72%	0.30%	7.68%
SW	0.73%	1.42%	2.44%	1.69%	0.73%	0.66%	7.67%
W	0.65%	0.97%	1.38%	0.34%	0.08%	0.03%	3.45%
NW	1.07%	1.11%	1.70%	0.98%	0.46%	0.18%	5.49%
Sub-Total:	8.21%	11.10%	15.65%	15.72%	7.23%	15.29%	73.21%
Calms (<0.5m/s):							26.76%
Total:							100.00%

Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 3 (Climatronics) — Run ID: Quarter A
Start Date: January 1, 2008 — End Date: March 31, 2008

Frequency Distribution (Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.86%	5.09%	3.57%	2.45%	1.66%	0.34%	14.96%
NE	2.20%	0.73%	0.59%	1.03%	0.64%	0.49%	5.67%
E	0.54%	0.34%	0.93%	1.86%	1.37%	0.78%	5.82%
SE	0.44%	0.44%	0.20%	1.17%	0.34%	0.00%	2.59%
S	0.78%	1.17%	2.00%	4.21%	2.20%	1.52%	11.88%
SW	2.74%	2.98%	5.87%	9.83%	4.99%	0.83%	27.24%
W	2.74%	1.12%	0.73%	1.56%	2.20%	2.30%	10.66%
NW	1.22%	2.30%	2.84%	4.55%	3.47%	2.00%	16.38%
Sub-Total:	12.52%	14.18%	16.72%	26.65%	16.87%	8.26%	95.21%
Calms (<0.5m/s):							4.49%
Total:							100.00%

Station ID: Pebble 5A (Climatronics) — Run ID: Quarter A
Start Date: January 1, 2008 — End Date: March 31, 2008

Frequency Distribution (Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.29%	4.44%	4.99%	3.53%	0.41%	0.18%	15.84%
NE	1.56%	4.26%	3.85%	2.98%	1.24%	1.79%	15.66%
E	1.14%	1.19%	0.46%	0.69%	0.69%	1.51%	5.68%
SE	0.37%	0.64%	1.65%	4.72%	0.92%	6.87%	15.16%
S	1.60%	0.92%	0.92%	0.27%	0.00%	0.09%	3.80%
SW	0.37%	0.73%	1.01%	0.55%	0.14%	0.60%	3.39%
W	0.23%	0.37%	0.78%	0.41%	0.05%	0.05%	1.88%
NW	0.87%	0.50%	1.24%	0.23%	0.00%	0.00%	2.84%
Sub-Total:	8.42%	13.05%	14.88%	13.37%	3.43%	11.08%	64.24%
Calms (<0.5m/s):							35.65%
Total:							100.00%

Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 3 (Climatronics) — Run ID: Quarter B
Start Date: April 1, 2008 — End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.01%	3.66%	5.36%	3.66%	1.33%	1.74%	17.77%
NE	2.20%	0.87%	0.64%	1.37%	0.23%	0.00%	5.31%
E	1.51%	1.47%	4.17%	7.97%	3.34%	1.28%	19.73%
SE	2.79%	6.46%	6.55%	2.47%	0.00%	0.00%	18.27%
S	2.88%	2.52%	1.01%	0.18%	0.00%	0.00%	6.59%
SW	5.45%	3.89%	3.89%	0.69%	0.14%	0.14%	14.19%
W	1.83%	1.47%	1.19%	0.00%	0.00%	0.00%	4.49%
NW	0.69%	1.47%	3.11%	1.79%	0.18%	0.18%	7.42%
Sub-Total:	19.37%	21.79%	25.92%	18.13%	5.22%	3.34%	93.77%
Calms (<0.5m/s):							5.85%
Total:							100.00%

Station ID: Pebble 5A (Climatronics) — Run ID: Quarter B
Start Date: April 1, 2008 — End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.65%	2.07%	2.20%	2.66%	0.46%	0.09%	9.14%
NE	0.41%	0.46%	0.28%	0.18%	0.32%	0.28%	1.93%
E	0.46%	0.51%	0.92%	1.19%	0.46%	2.34%	5.88%
SE	0.78%	1.15%	2.57%	3.49%	3.12%	14.65%	25.77%
S	0.60%	1.19%	2.94%	3.40%	1.01%	0.23%	9.37%
SW	0.74%	1.75%	4.00%	2.76%	1.47%	0.09%	10.79%
W	0.64%	1.10%	1.10%	0.09%	0.00%	0.00%	2.94%
NW	1.01%	1.24%	1.56%	0.96%	0.05%	0.05%	4.87%
Sub-Total:	6.29%	9.46%	15.57%	14.75%	6.89%	17.73%	70.69%
Calms (<0.5m/s):							29.21%
Total:							100.00%

Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 3 (Climatronics) — Run ID: Quarter C
Start Date: July 1, 2008 — End Date: September 30, 2008

Frequency Distribution (Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.36%	4.85%	4.98%	3.26%	0.18%	0.00%	15.63%
NE	2.54%	1.99%	1.72%	1.40%	0.45%	0.00%	8.11%
E	2.04%	2.13%	5.03%	5.75%	1.27%	0.05%	16.27%
SE	4.85%	9.61%	7.43%	1.40%	0.00%	0.00%	23.29%
S	3.40%	3.67%	1.09%	0.05%	0.00%	0.00%	8.20%
SW	2.90%	3.62%	4.08%	0.59%	0.00%	0.00%	11.19%
W	1.50%	1.45%	1.13%	0.00%	0.00%	0.00%	4.08%
NW	0.50%	0.86%	2.72%	0.95%	0.00%	0.00%	5.03%
Sub-Total:	20.07%	28.18%	28.18%	13.41%	1.90%	0.05%	91.80%
Calms (<0.5m/s):							7.71%
Total:							100.00%

Station ID: Pebble 5A (Climatronics) — Run ID: Quarter C
Start Date: July 1, 2008 — End Date: September 30, 2008

Frequency Distribution (Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.68%	2.49%	2.94%	6.66%	2.17%	0.54%	15.49%
NE	0.86%	0.77%	1.63%	0.27%	0.82%	0.95%	5.30%
E	0.86%	1.22%	1.81%	2.08%	0.68%	2.58%	9.24%
SE	0.36%	1.31%	3.03%	8.11%	6.11%	11.82%	30.75%
S	0.77%	2.04%	4.39%	3.40%	1.59%	0.86%	13.04%
SW	0.86%	1.99%	3.22%	2.40%	1.09%	1.95%	11.50%
W	0.36%	1.72%	2.17%	0.82%	0.14%	0.00%	5.21%
NW	0.63%	1.99%	2.45%	2.49%	1.36%	0.50%	9.42%
Sub-Total:	5.39%	13.54%	21.65%	26.22%	13.95%	19.20%	99.95%
Calms (<0.5m/s):							0.05%
Total:							100.00%

Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 3 (Climatronics) — Run ID: Quarter D
Start Date: October 1, 2008 — End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.08%	2.40%	6.07%	6.88%	3.62%	5.53%	26.59%
NE	3.89%	2.40%	4.35%	7.65%	3.85%	1.13%	23.28%
E	3.76%	1.31%	2.94%	4.12%	2.63%	2.99%	17.75%
SE	1.04%	2.31%	3.49%	2.85%	0.36%	0.00%	10.05%
S	2.49%	0.82%	0.27%	0.00%	0.00%	0.00%	3.58%
SW	2.49%	1.22%	0.18%	0.59%	0.09%	0.00%	4.57%
W	0.91%	0.32%	0.41%	0.14%	0.18%	0.05%	1.99%
NW	0.41%	0.14%	1.18%	1.86%	0.77%	1.40%	5.75%
Sub-Total:	17.07%	10.91%	18.89%	24.09%	11.50%	11.10%	93.57%
Calms (<0.5m/s):							6.05%
Total:							100.00%

Station ID: Pebble 5A(Climatronics) — Run ID: Quarter D
Start Date: October 1, 2008 — End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	4.57%	1.90%	2.36%	1.68%	0.36%	0.41%	11.28%
NE	1.22%	1.18%	0.45%	1.00%	0.50%	0.54%	4.89%
E	1.22%	0.32%	0.45%	0.82%	0.59%	1.18%	4.57%
SE	1.00%	1.13%	1.49%	2.58%	2.13%	10.73%	19.07%
S	0.63%	1.22%	1.22%	1.13%	0.27%	0.00%	4.48%
SW	0.95%	1.22%	1.54%	1.04%	0.23%	0.00%	4.98%
W	1.36%	0.68%	1.45%	0.05%	0.14%	0.09%	3.76%
NW	1.77%	0.68%	1.54%	0.23%	0.41%	0.18%	4.80%
Sub-Total:	12.73%	8.33%	10.51%	8.51%	4.62%	13.13%	57.84%
Calms (<0.5m/s):							42.03%
Total:							100.00%

2008 Annual Wind Rose Analysis Table (RM Young-AQ)

Station ID: Pebble 5A (RM Young-AQ) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.81%	2.23%	3.70%	5.75%	1.68%	2.11%	17.29%
NE	0.99%	1.12%	1.65%	1.93%	0.87%	1.11%	7.67%
E	0.75%	0.93%	1.42%	2.52%	0.93%	3.87%	10.41%
SE	0.78%	1.56%	3.30%	6.80%	3.27%	13.66%	29.36%
S	1.00%	1.60%	3.10%	2.14%	1.08%	0.75%	9.68%
SW	1.12%	1.57%	3.42%	2.07%	0.94%	1.00%	10.13%
W	0.72%	1.35%	1.66%	0.82%	0.31%	0.21%	5.08%
NW	1.26%	1.26%	1.99%	1.83%	0.90%	0.99%	8.22%
Sub-Total:	8.43%	11.63%	20.24%	23.87%	9.98%	23.70%	97.84%
Calms (<0.5m/s):							1.64%
Total:							100.00%

Quarter A Wind Rose Analysis Table (RM Young-AQ)

Station ID: Pebble 5A (RM Young-AQ) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.29%	3.22%	3.22%	2.04%	0.32%	1.82%	11.91%
NE	0.64%	1.72%	2.68%	6.87%	1.61%	4.18%	17.70%
E	0.54%	0.86%	1.93%	6.44%	1.61%	7.51%	18.88%
SE	0.54%	1.29%	1.50%	3.11%	2.36%	15.24%	24.03%
S	0.43%	0.86%	1.18%	0.86%	0.54%	0.86%	4.72%
SW	0.54%	0.97%	1.82%	0.43%	0.21%	1.82%	5.79%
W	0.00%	0.32%	1.61%	0.64%	0.97%	0.54%	4.08%
NW	0.86%	1.18%	1.50%	0.75%	0.54%	0.86%	5.69%
Sub-Total:	4.83%	10.41%	15.45%	21.14%	8.15%	32.83%	92.81%
Calms (<0.5m/s):							2.20%
Total:							100.00%

Quarter B Wind Rose Analysis Table (RM Young-AQ)

Station ID: Pebble 5A (RM Young-AQ) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.54%	2.21%	3.21%	4.08%	0.13%	0.00%	11.17%
NE	0.67%	0.60%	0.33%	0.40%	0.40%	0.47%	2.88%
E	0.74%	0.80%	1.00%	2.27%	1.00%	4.48%	10.30%
SE	0.87%	1.74%	2.94%	6.42%	4.48%	18.60%	35.05%
S	0.74%	1.34%	4.35%	3.61%	1.81%	0.80%	12.64%
SW	1.47%	1.94%	5.95%	3.68%	1.87%	0.07%	14.98%
W	1.20%	1.74%	2.01%	1.14%	0.00%	0.00%	6.09%
NW	1.20%	1.54%	2.27%	1.67%	0.07%	0.07%	6.82%
Sub-Total:	8.43%	11.91%	22.07%	23.28%	9.77%	24.48%	99.93%
Calms (<0.5m/s):							0.03%
Total:							100.00%

Quarter C Wind Rose Analysis Table (RM Young-AQ)

Station ID: Pebble 5A (RM Young-AQ) — Run ID: Quarter C
Start Date: July 1, 2008 — End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.04%	2.08%	2.85%	6.70%	2.04%	0.54%	15.26%
NE	1.00%	0.63%	1.54%	0.27%	0.95%	0.82%	5.21%
E	0.82%	1.27%	1.77%	2.13%	0.86%	3.03%	9.87%
SE	0.59%	1.90%	5.53%	10.64%	3.49%	9.10%	31.25%
S	1.09%	2.08%	4.26%	2.76%	1.22%	0.91%	12.32%
SW	1.04%	2.22%	3.44%	2.31%	1.04%	1.49%	11.55%
W	0.54%	1.90%	1.90%	0.86%	0.09%	0.00%	5.30%
NW	0.86%	1.72%	2.17%	2.40%	1.45%	0.41%	9.01%
Sub-Total:	6.97%	13.81%	23.46%	28.08%	11.14%	16.30%	99.77%
Calms (<0.5m/s):							0.12%
Total:							100.00%

Quarter D Wind Rose Analysis Table (RM Young-AQ)

Station ID: Pebble 5A (RM Young-AQ) — Run ID: Quarter D
Start Date: October 1, 2008 — End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	3.09%	1.96%	5.20%	7.65%	3.04%	5.49%	26.42%
NE	1.37%	1.76%	2.25%	2.60%	0.78%	0.49%	9.26%
E	0.78%	0.69%	1.13%	1.32%	0.64%	2.65%	7.21%
SE	1.03%	1.18%	1.96%	4.61%	2.55%	14.26%	25.59%
S	1.37%	1.62%	1.81%	0.98%	0.64%	0.49%	6.91%
SW	1.23%	0.88%	2.25%	1.37%	0.49%	0.78%	7.01%
W	0.88%	0.93%	1.18%	0.64%	0.49%	0.44%	4.56%
NW	1.91%	0.59%	1.81%	1.81%	1.08%	2.35%	9.56%
Sub-Total:	11.67%	9.61%	17.60%	20.98%	9.71%	26.96%	96.52%
Calms (<0.5m/s):							1.71%
Total:							100.00%

2008 Annual Wind Rose Analysis Table (RM Young-AP)

Station ID: Pebble 5A (RM Young-AP) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.65%	3.25%	5.35%	7.41%	2.38%	2.41%	22.44%
NE	1.08%	0.82%	1.44%	1.71%	1.02%	0.84%	6.91%
E	0.93%	0.97%	1.46%	2.08%	1.06%	4.33%	10.83%
SE	0.67%	0.89%	1.92%	4.80%	3.49%	14.44%	26.21%
S	0.81%	1.35%	2.63%	1.87%	0.91%	0.59%	8.16%
SW	0.94%	1.66%	2.99%	2.06%	0.84%	0.87%	9.36%
W	0.72%	1.33%	1.57%	0.77%	0.24%	0.18%	4.79%
NW	1.21%	1.51%	2.52%	1.93%	0.77%	0.48%	8.42%
Sub-Total:	8.02%	11.79%	19.86%	22.63%	10.69%	24.14%	97.13%
Calms (<0.5m/s):							2.78%
Total:							100.00%

Quarter A Wind Rose Analysis Table (RM Young-AP)

Station ID: Pebble 5A (RM Young-AP) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.40%	5.81%	9.50%	10.22%	3.26%	0.91%	32.10%
NE	0.91%	1.01%	1.58%	3.93%	1.78%	1.63%	10.84%
E	1.68%	1.63%	2.54%	3.45%	1.63%	5.37%	16.31%
SE	0.96%	0.62%	1.01%	2.06%	1.39%	15.60%	21.64%
S	0.62%	0.38%	0.72%	0.38%	0.10%	0.19%	2.40%
SW	0.91%	1.63%	1.73%	1.01%	0.05%	0.82%	6.14%
W	0.62%	1.20%	1.10%	0.38%	0.10%	0.05%	3.45%
NW	1.39%	0.91%	1.10%	0.58%	0.19%	0.00%	4.17%
Sub-Total:	9.50%	13.20%	19.29%	22.03%	8.49%	24.57%	97.07%
Calms (<0.5m/s):							2.57%
Total:							100.00%

Quarter B Wind Rose Analysis Table (RM Young-AP)

Station ID: Pebble 5A (RM Young-AP) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.64%	2.54%	3.47%	4.79%	0.99%	2.11%	15.54%
NE	0.94%	0.47%	0.28%	0.47%	0.61%	0.33%	3.10%
E	0.56%	0.52%	0.85%	1.46%	0.75%	4.51%	8.64%
SE	0.56%	1.03%	2.02%	4.79%	3.43%	18.45%	30.28%
S	0.89%	1.78%	3.43%	3.62%	1.50%	0.75%	11.97%
SW	0.94%	2.07%	4.65%	3.66%	1.74%	0.38%	13.43%
W	0.99%	1.41%	1.88%	1.31%	0.19%	0.00%	5.77%
NW	1.46%	2.11%	4.74%	2.30%	0.23%	0.19%	11.03%
Sub-Total:	7.98%	11.92%	21.31%	22.39%	9.44%	26.71%	99.77%
Calms (<0.5m/s):							0.21%
Total:							100.00%

Quarter C Wind Rose Analysis Table (RM Young-AP)

Station ID: Pebble 5A (RM Young-AP) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.04%	2.04%	2.94%	6.57%	1.95%	0.54%	15.08%
NE	1.13%	0.68%	1.49%	0.32%	1.00%	0.82%	5.43%
E	0.91%	1.18%	1.72%	2.36%	0.86%	3.94%	10.96%
SE	0.41%	1.49%	3.31%	9.28%	5.98%	9.69%	30.16%
S	1.04%	1.81%	4.21%	2.67%	1.22%	0.91%	11.87%
SW	0.91%	2.08%	3.40%	2.26%	1.09%	1.49%	11.23%
W	0.72%	1.77%	1.99%	0.86%	0.14%	0.00%	5.48%
NW	0.95%	2.17%	2.08%	3.03%	1.13%	0.23%	9.60%
Sub-Total:	7.11%	13.22%	21.15%	27.36%	13.36%	17.62%	99.82%
Calms (<0.5m/s):							0.16%
Total:							100.00%

Quarter D Wind Rose Analysis Table (RM Young-AP)

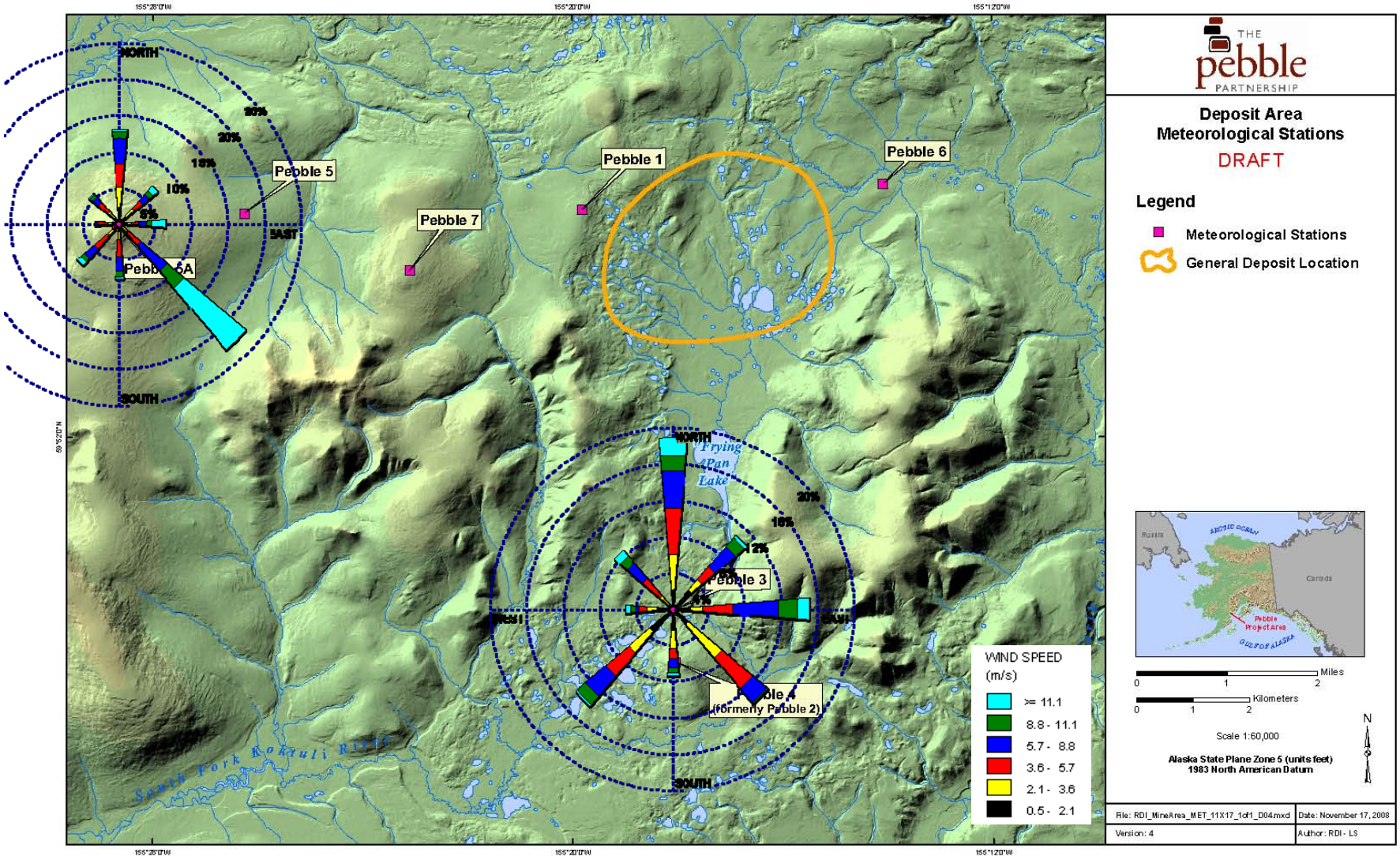
Station ID: Pebble 5A (RM Young-AP) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.55%	2.70%	5.65%	8.16%	3.38%	6.23%	27.67%
NE	1.35%	1.16%	2.41%	2.22%	0.72%	0.58%	8.45%
E	0.58%	0.53%	0.72%	1.06%	1.01%	3.52%	7.44%
SE	0.77%	0.39%	1.26%	2.80%	2.99%	14.20%	22.40%
S	0.68%	1.40%	2.03%	0.72%	0.77%	0.48%	6.08%
SW	1.01%	0.82%	2.12%	1.26%	0.43%	0.77%	6.42%
W	0.53%	0.92%	1.26%	0.48%	0.53%	0.68%	4.39%
NW	1.06%	0.77%	2.12%	1.74%	1.50%	1.55%	8.74%
Sub-Total:	7.53%	8.69%	17.58%	18.45%	11.35%	28.01%	91.60%
Calms (<0.5m/s):							7.37%
Total:							100.00%

2008 Wind Roses Superimposed on Site Map



APPENDIX 2K

2007 Annual Data Report, Pebble 4 Station, for the Pebble Project Meteorological Monitoring Program

2007 Annual Data Report
Pebble 4 Station

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

April 2008

Pebble 4 Station
2007 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2008

prepared for

The Pebble Partnership
Anchorage, Alaska

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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary 4
1.2 Measurements Method Table 5
1.3 Variations from the Quality Assurance Project Plan 5

2.0 Station Performance Summary **10**

2.1 Significant Project Events 10
2.2 Missing, Invalid, and Adjusted Data 11
2.3 Network Data Completeness 11
2.4 Precision Statistics 14
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics 14
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **21**

3.1 Air Quality Data Summary 21
3.2 Meteorological Data Summary 21
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 21
3.2.2 Temperature Climatology 33
3.3.3 Other Meteorological Parameters 38

4.0 References **44**

List of Figures

1-1 Map of the Pebble Project Area 7
1-2 Map of the Pebble 4 Station 8
1-3 Pebble 4 Meteorological Monitoring Station 9
3-1 2007 Pebble 4 Station Wind Roses 23
3-2 Quarterly Pebble 4 Station Wind Roses (Climatronics) 24
3-3 Quarterly Pebble 4 Station Wind Roses (RM Young) 25
3-4 2007 Wind Rose Superimposed on Site Map 32
3-5 Hourly Average 2-meter and 10-meter Temperatures 36
3-6 Hourly Average Vertical Temperature Difference 37
3-7 Hourly Average Relative Humidity 40

3-8 Barometric Pressure 41
3-9 Hourly Average Solar Radiation 42
3-10 Daily and Cumulative Precipitation 43

List of Tables

E-1 Meteorological Data Capture – Valid Hours per Month 2
E-2 Meteorological Data Capture – Percent Data Capture 3
1-1 Meteorological Measurement Methods 6
2-1 Chronology of Significant Events 10
2-2 Percentage of Final Data Set Flagged 12
2-3 Pebble 4 Station Percent Data Capture 13
2-4 July 12, 2006 Performance Audit Summary 16
2-5 October 11, 2006 Performance Audit Summary. 17
2-6 January 18, 2007 Performance Audit Summary 17
2-7 September 5-6, 2007 Performance Audit Summary 18
2-8 September 6-7, 2007 Performance Audit Summary 19
2-9 February 12-13, 2008 Performance Audit Summary 20
3-1 Average and Maximum Wind Speeds at Pebble 4 Station 21
3-2 Average and Maximum Wind Speeds at Iliamna 22
3-3 2007 Annual Wind Rose Analysis Table (Climatronics) 26
3-4 Quarter A Wind Rose Analysis Table (Climatronics) 27
3-5 Quarter B Wind Rose Analysis Table (Climatronics) 27
3-6 Quarter C Wind Rose Analysis Table (Climatronics) 28
3-7 Quarter D Wind Rose Analysis Table (Climatronics) 28
3-8 2007 Annual Wind Rose Analysis Table (RM Young) 29
3-9 Quarter A Wind Rose Analysis Table (RM Young) 30
3-10 Quarter B Wind Rose Analysis Table (RM Young) 30
3-11 Quarter C Wind Rose Analysis Table (RM Young) 32
3-12 Quarter D Wind Rose Analysis Table (RM Young) 32
3-13 2-Meter Temperature Summary 34
3-14 10-Meter Temperature Summary 35
3-15 Relative Humidity, Barometric Pressure, and Solar Radiation Summary 39

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Data Summaries
E Validated Manual Particulate Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG, Inc., dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

PSD-quality meteorological monitoring for the Pebble Project began on August 1, 2005. This report provides details of the first year of meteorological measurements collected from January 1, 2007 through December 31, 2007 at the Pebble 4 station.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 4 meteorological monitoring station. The Pebble 4 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of the vertical temperature difference parameter during Quarters C and D.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2007	738	738	738	738	738	738	738	738	738	744	744	744	740	0
February 2007	672	672	672	672	672	672	672	672	672	672	672	672	670	0
March 2007	744	744	744	744	744	744	744	744	744	744	744	744	744	0
April 2007	720	720	720	720	720	720	720	720	720	720	720	720	720	0
May 2007	744	744	744	744	744	744	744	744	744	744	744	744	741	709
June 2007	720	720	720	720	720	720	720	720	720	720	720	720	720	720
July 2007	744	744	744	744	744	744	744	744	744	744	744	744	744	744
August 2007	744	744	744	744	744	744	744	744	744	744	744	744	744	744
September 2007	717	717	157	717	717	717	717	717	717	717	717	717	709	717
October 2007	744	744	0	744	744	744	744	744	744	744	744	744	741	120
November 2007	720	720	0	700	720	720	719	719	719	720	720	720	720	0
December 2007	744	744	0	707	744	744	744	744	744	744	744	744	744	0
Monitoring Year	**8,751**	**8,751**	**5,983**	**8,694**	**8,751**	**8,751**	**8,750**	**8,750**	**8,750**	**8,757**	**8,757**	**8,757**	**8,740**	**3,754**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 2 through October 5, 2007.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2007	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	100%	100%	100%	99.5%	0%
February 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	0%
March 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Quarter A	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**100%**	**100%**	**100%**	**99.7%**	**0%**
April 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
May 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	95.3%
June 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**65.4%**
July 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2007	99.6%	99.6%	21.8%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	98.5%	99.6%
Quarter C	**99.9%**	**99.9%**	**74.5%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.5%**	**99.9%**
October 2007	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	16%
November 2007	100%	100%	0%	97.2%	100%	100%	99.9%	99.9%	99.9%	100%	100%	100%	100%	0%
December 2007	100%	100%	0%	95.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Quarter D	**100%**	**100%**	**0%**	**97.4%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**5%**
Monitoring Year	**99.9%**	**99.9%**	**68.3%**	**99.2%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.8%**	**99.9%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 2 through October 5, 2007
[4] The Climatronics wind speed sensor was affected by icing during Quarter D. The R.M. Young wind speed sensor will be used to achieve the required data capture requirement of 90 percent or greater per monitoring quarter.

1.0 Introduction

1.1 Project Summary

On behalf of the Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG, Inc., dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project, an initiative to develop and operate an open-pit gold, copper, molybdenum, and silver mine in the Bristol Bay region of southwest Alaska. This project currently consists of three PSD-quality meteorological monitoring stations located at the proposed mill site (Pebble 1), the tailings storage facility (Pebble 4), and possible shipping site (Pebble Port). An additional, non-PSD meteorological monitoring station (Pebble 3) is being used for engineering and mine design purposes. This report focuses on the first year of measurements collected at the Pebble 4 station from January 1, 2007 through December 31, 2007. A separate annual data report has been prepared for each of the Pebble Port and Pebble 1 stations.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 4 station.

The Pebble 4 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C])
- Air temperature, ten meters above ground (degrees Celsius [°C])
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]))
- Wind speed (meters per second [m/s])
- Wind direction (degrees [°])
- Wind direction standard deviation (wind sigma [σ_θ])
- Relative humidity (percent [%])
- Solar radiation (Watts per square meter [W/m^2])
- Barometric Pressure (millibar [mb]).
- Precipitation (millimeters [mm])
- Evaporation (millimeters [mm])

Measurements of these parameters will provide at least one year of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 4 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble 4 station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 4 PSD station.

1.3 Variations from the Quality Assurance Project Plan

During the first monitoring year, there were no variations from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	Met One	Tipping bucket mechanism	0 to76.2mm/hr	± 1%	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for 1 second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

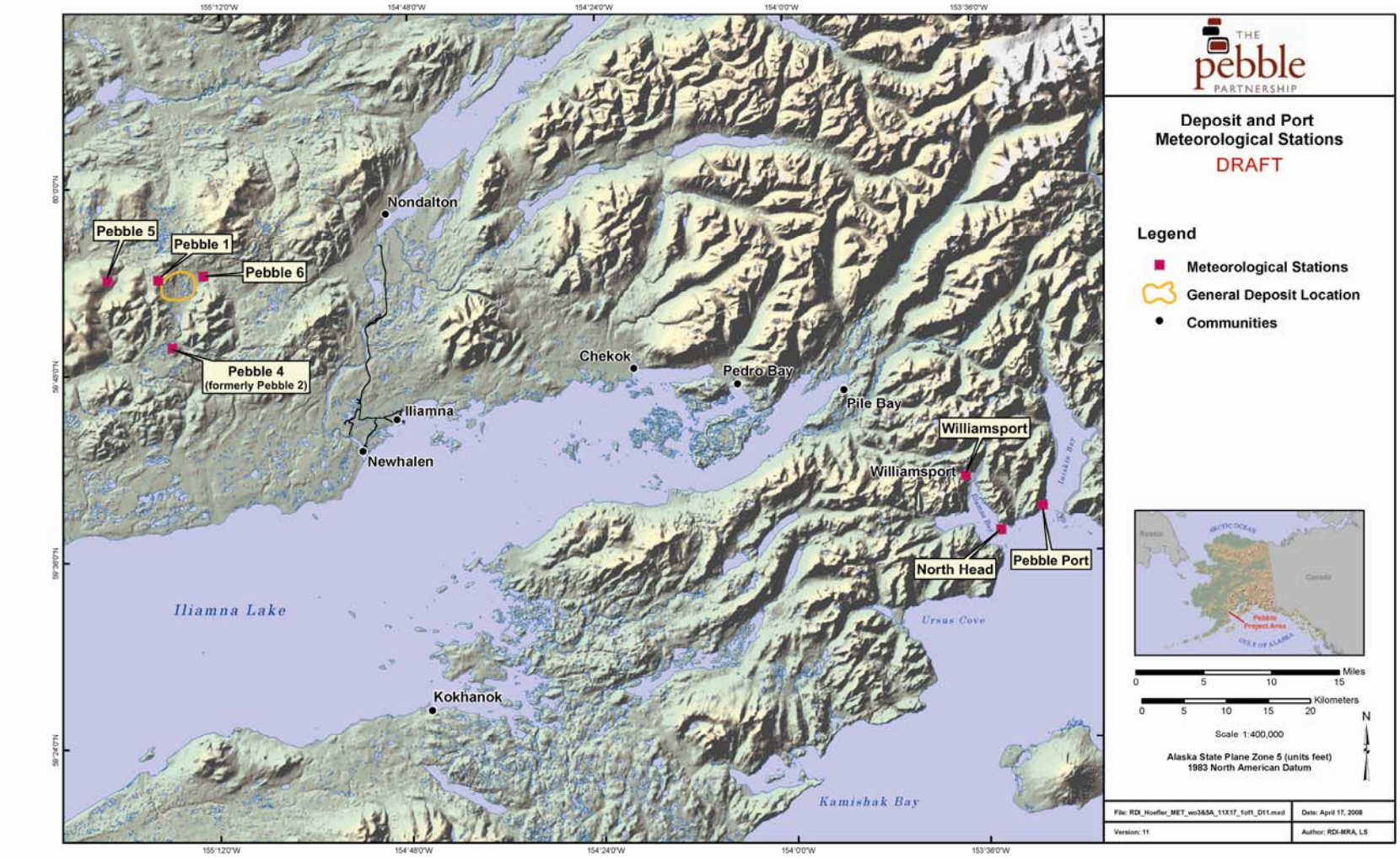


Figure 1-2. Map of the Pebble 4 Station

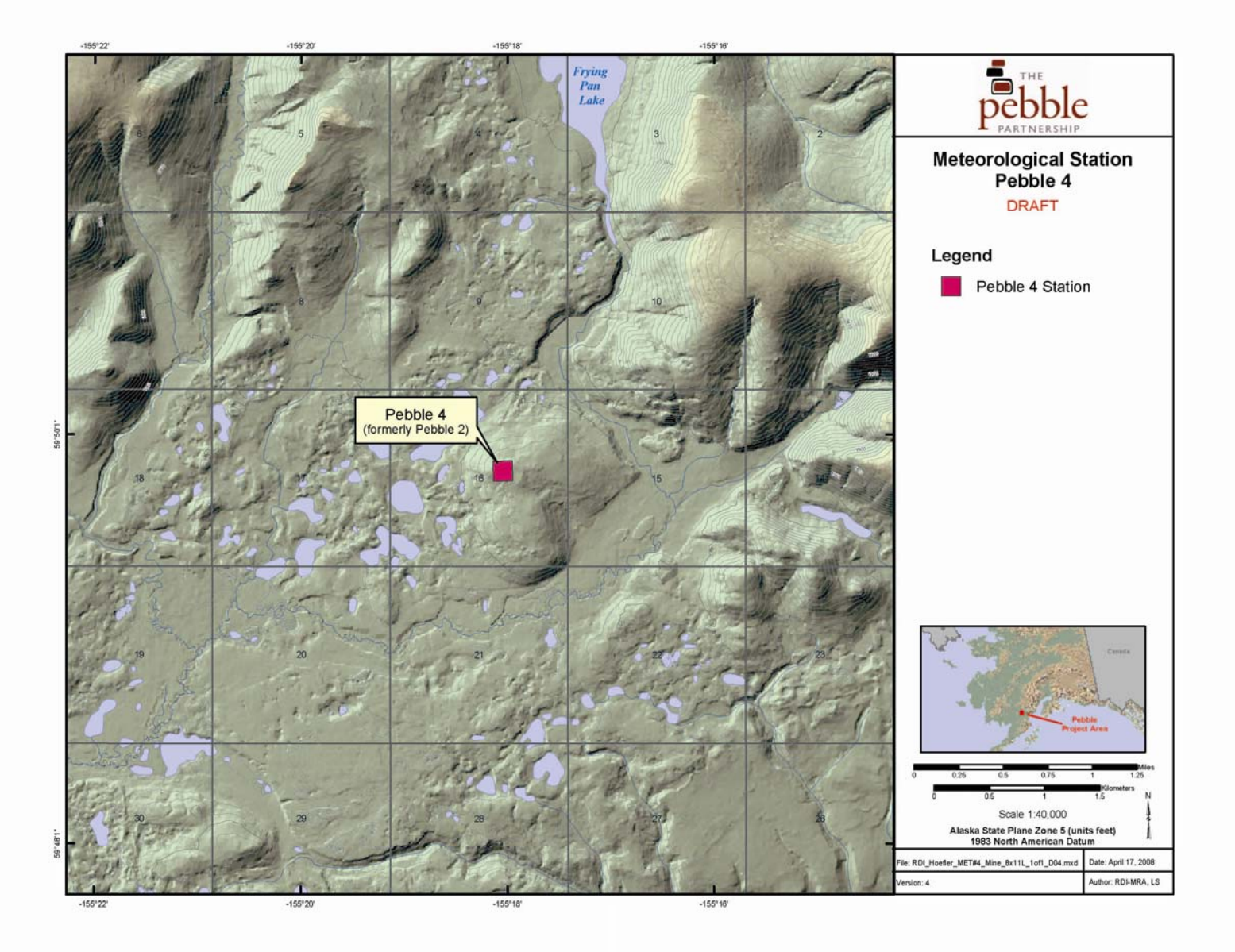
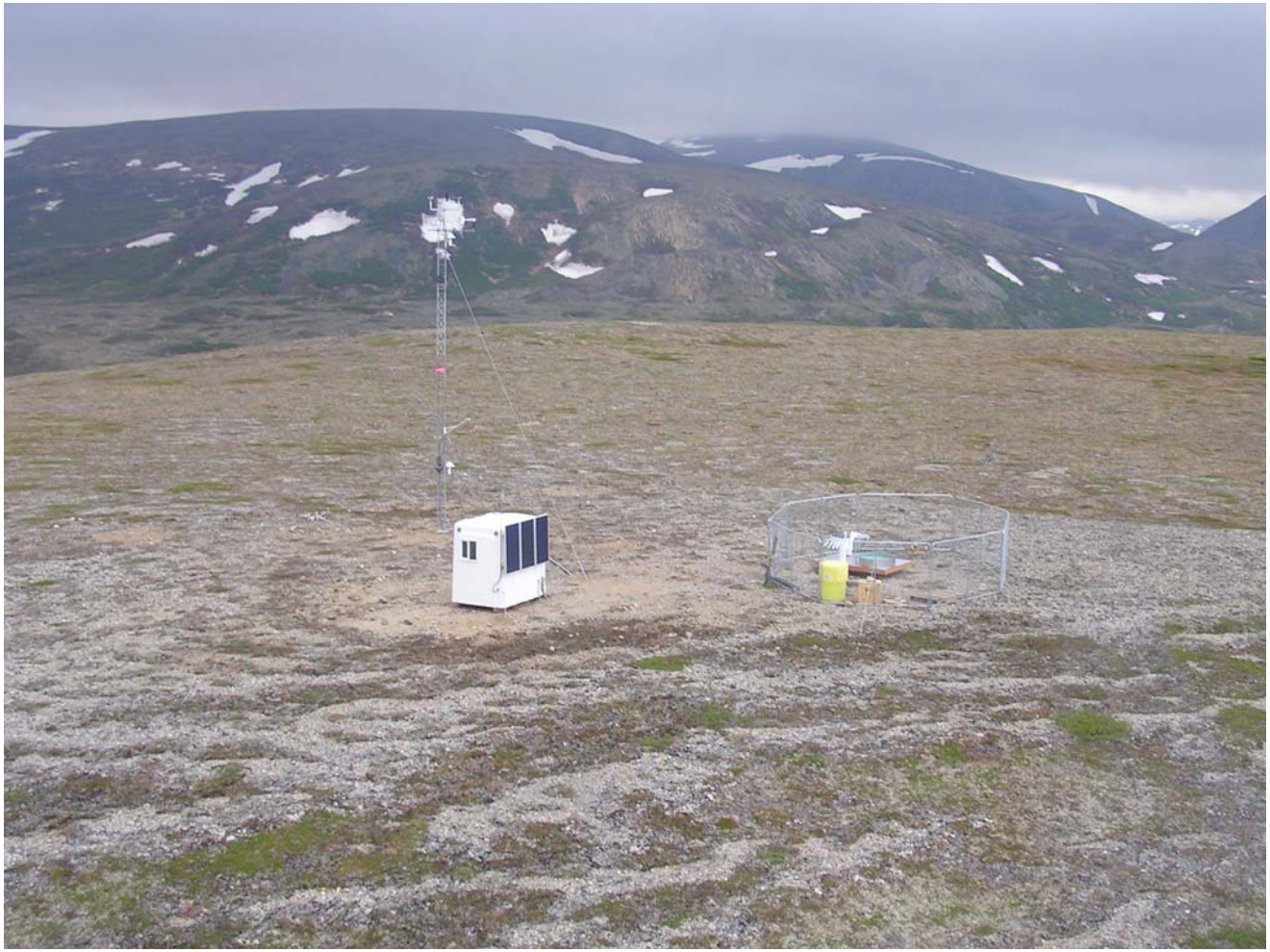


Figure 1-3. Pebble 4 Meteorological Monitoring Station



2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 4 station relevant to the 2007 meteorological monitoring year.

Table 2-1. Chronology of Significant Events

Date	Event
January 1, 2007	Beginning of 2007 monitoring year.
January 18, 2007	Full audit performed (all sensors passed), refreshed Metone precipitation gauge snowfall adapter.
March 22, 2007	Replaced aspirator control relay, uploaded new datalogger program, temporary repair of fence.
May 2, 2007	Calibrated and refreshed precipitation gauge, calibrated and started evaporation gauge, repaired evaporation fence, cleaned station and tightened guy wires.
Sept. 5-7, 2007	Station audit performed. Upgraded DAS to CR1000. Climatronics and RM Young wind instruments replaced.
October 18, 2007	Evaporation gauge decommissioned for winter. Valid evaporation data ends October 5, 2007.
November 7, 2007	Started Thermo-Electric Generator.
November 23-24, 2007	Climatronics wind speed sensor frozen. 20 Hours of wind speed data invalidated.
December 6-8, 2007	Climatronics wind speed sensor frozen. 39 Hours of wind speed data invalidated.
December 31, 2007	End of 2007 monitoring year.
February 12-13, 2008	Annual Performance audit conducted. Vertical temperature difference parameter failed audit. Data invalidated to date of last audit. Both 2-meter and 10-meter thermistors replaced and an as-left audit conducted.

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 4 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations.

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2007 monitoring year at the Pebble 4 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	1.3%
	< 0.1 m/s variation for 3 consecutive hours	0.7%
	<0.5 m/s variation for 12 consecutive hours	0.0%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	1.8%
	< 10° variation over 18 consecutive hours	0.7%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.5%
	< 0.1 m/s variation for 3 consecutive hours	0.6%
	<0.5 m/s variation for 12 consecutive hours	0.0%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	1.8%
	< 10° variation over 18 consecutive hours	0.7%
Temperature (2 meters)	> 5°C variation from previous hour	0.0%
	< 0.5°C variation for 12 consecutive hours	1.3%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.0%
	< 0.5°C variation for 12 consecutive hours	1.3%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	0.3%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	0.0%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	0.0%
	< 0.5°C variation for 12 consecutive hours	1.3%
	Equals ambient temperature for 12 consecutive hours	1.9%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	3.7%
	> 6 mb variation for 3 consecutive hours	0.1%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	49.4%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 4 Station Percent Data Capture.

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2007	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	100%	100%	100%	99.5%	0%
February 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	0%
March 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Quarter A	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**100%**	**100%**	**100%**	**99.7%**	**0%**
April 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
May 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	95.3%
June 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**65.4%**
July 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2007	99.6%	99.6%	21.8%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	98.5%	99.6%
Quarter C	**99.9%**	**99.9%**	**74.5%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.5%**	**99.9%**
October 2007	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	16%
November 2007	100%	100%	0%	97.2%	100%	100%	99.9%	99.9%	99.9%	100%	100%	100%	100%	0%
December 2007	100%	100%	0%	95.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Quarter D	**100%**	**100%**	**0%**	**97.4%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**5%**
Monitoring Year	**99.9%**	**99.9%**	**68.3%**	**99.2%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.8%**	**99.9%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evporation gauge decommissioned for winter. Gauge operational from May 2 through October 5, 2007.
[4] The Climatronics wind speed sensor was affected by icing during Quarter D. The R.M. Young wind speed sensor will be used to achieve the required data capture requirement of 90 percent or greater per monitoring quarter.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A preliminary systems and performance audit was conducted at the Pebble 4 station on July 12, 2006, all sensors passed. The results of the initial systems and performance audit are presented in Table 2-4.

A semiannual performance audit was conducted at the Pebble 4 station primarily on January 18, 2007. The evaporation pan and tipping bucket precipitation gauge were audited prior to winterization on October 11, 2006. The results of these performance audits are presented in Table 2-5 and Table 2-6.

An annual performance audit was conducted at the Pebble 4 station September 5 through September 6, 2007, all sensors passed. A second audit was performed on all station sensors from September 6 through September 7, 2007 to check sensor operation after replacing the CR10X data logger with a CR1000 data logger, all sensors passed. The results of these performance audits are presented in Table 2-7 and Table 2.8.

On February 12 through 13, 2008 an annual performance audit was conducted at Pebble 4. All sensors passed with the exception of the vertical temperature difference parameter. Both the 2-meter and 10-meter temperature thermistors were replaced and an as-left audit was conducted. Vertical temperature difference data was invalidated

from the date of the last audit on September 7, 2007. The results of this performance audit are presented in Table 2-9.

The performance audit involves reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with established PSD limits to assess the accuracy of the sensor.

During each of these audits, the power supply, DAS, communications system, and audited sensors all worked properly. A technical systems audit was performed during the September 5 and 6, 2007, audit and found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system.

Appendix C contains all of the complete technical systems and performance audit reports.

Table 2-4. July 12, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.3	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.030	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.7	Pass
Wind Direction Linearity	≤ 3	Degree	2.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	4.0	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.010	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	4.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.4	Pass
Barometric Pressure	≤ ±3	Mbar	1.3	Pass
Solar Radiation	≤ ±5+Res	% input	-3.9	Pass
Tipping Precipitation	≤ ±10	% input	3.6	Pass
Evaporation	≤ ±10	% input	2.4	Pass

Table 2-5. October 11, 2006 Supplemental Performance Audit Summary[1]

Parameter	Limit	Units	Max Err	Status
Tipping Precipitation	≤ ±10	% input	2.0	Pass
Evaporation	≤ ±10	% input	2.5	Pass

[1]Gauges audited prior to winterizing.

Table 2-6. January 18, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.29	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.29	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.4	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.040	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.2	Pass
Wind Direction Linearity	≤ 3	Degree	1.0	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.6	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	8.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.9	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.5	Pass
Barometric Pressure	≤ ±3	Mbar	1.3	Pass
Solar Radiation	≤ ±5+Res	% input	-6.8[1]	Pass
Tipping Precipitation	≤ ±10	% input	-8.5	Pass

[1]Max percent error value of 6.8 within limit of 5% input + resolution, see audit.

Table 2-7. September 5-6, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:24	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.12	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.12	Pass
Air Temperature Difference	≤ ±0.1	°C	0.05	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.4	Pass
Wind Direction Linearity	≤ 3	Degree	1.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[1]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.008	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.5	Pass
Wind Direction Linearity	≤ 3	Degree	1.5	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[1]	N/A
Barometric Pressure	≤ ±3	Mbar	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-10.0[2]	Pass
Tipping Precipitation	≤ ±10	% input	-4.0	Pass
Evaporation	≤ ±10	% input	2.0	Pass

[1]Not re-tested until after DAS/sensor change.

[2]Max percent error value of 10.0 within limit of 5% input + resolution, see audit.

Table 2-8. September 6-7, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:22	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
Air Temperature Difference	≤ ±0.1	°C	0.03	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.7	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-4.3	Pass
Barometric Pressure	≤ ±3	Mbar	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-8.1[2]	Pass
Tipping Precipitation	≤ ±10	% input	3.0	Pass
Evaporation	≤ ±10	% input	2.4	Pass

[1]New DAS/sensor, no as-found value.

[2]Max percent error value of 8.1 within limit of 5% input + resolution, see audit.

Table 2-9. February 12-13, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:36	Pass
2-m Temperature Accuracy (old)	≤ ±0.5	°C	0.40	Pass
10-m Temperature Accuracy (old)	≤ ±0.5	°C	0.20	Pass
Air Temperature Difference (old)	≤ ±0.1	°C	0.25	Fail
2-m Temperature Accuracy (new)[1]	≤ ±0.5	°C	0.15	Pass
10-m Temperature Accuracy (new) [1]	≤ ±0.5	°C	0.15	Pass
Air Temperature Difference (new) [1]	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.8	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.4	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.4	Pass
Barometric Pressure	≤ ±3	Mbar	0.4	Pass
Solar Radiation	≤ ±5+Res	% input	-6.5[2]	Pass
Tipping Precipitation	≤ ±10	% input	-5.0	Pass

[1] As left audit after thermistor replacement.

[2] Max percent error value of 6.5 within limit of 5% input + resolution, see audit.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2007 year of meteorological monitoring at the Pebble 4 station. The mean hourly average wind speed during the monitoring year was 8.29 m/s and 7.99 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 37.57 m/s and 32.14 m/s were measured by the CLM and RMY sensors, respectively, on March 6, 2007. Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 20 km from the Pebble 4 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.95 m/s, while the maximum daily average wind speed was 17.88 m/s, recorded on December 9, 2007.

Table 3-1. Average and Maximum Wind Speeds at Pebble 4 Station

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	10.29	9.55	37.57	32.14
Quarter B	6.74	6.64	29.98	27.20
Quarter C	6.32	6.20	25.26	23.87
Quarter D	9.90	9.58	33.32	31.82
Monitoring Year	**8.29**	**7.99**	**37.57**	**32.14**

Table 3-2. Average and Maximum Wind Speeds at Iliamna

Monitoring Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
Quarter A	4.15	17.43
Quarter B	2.98	16.99
Quarter C	3.20	15.20
Quarter D	5.49	17.88
Monitoring Year	**3.95**	**17.88**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the 2007 monitoring year. Winds were predominantly from the north, east, and southeast, with other minor wind components. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. Quarters A and D are characterized by a major wind component from the north, with Quarter D also exhibiting a component from the east. Quarters B and C are characterized with a major component from the southeast and minor wind components the east and other directions. The Quarter A and Quarter D wind roses indicate a lack of southwesterly winds during this period. Tables 3-3 through 3-7 are the annual and quarterly wind analysis tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Figure 3-4 shows the 2007 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological station and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 4 station.

Figure 3-1. 2007 Pebble 4 Station Wind Roses

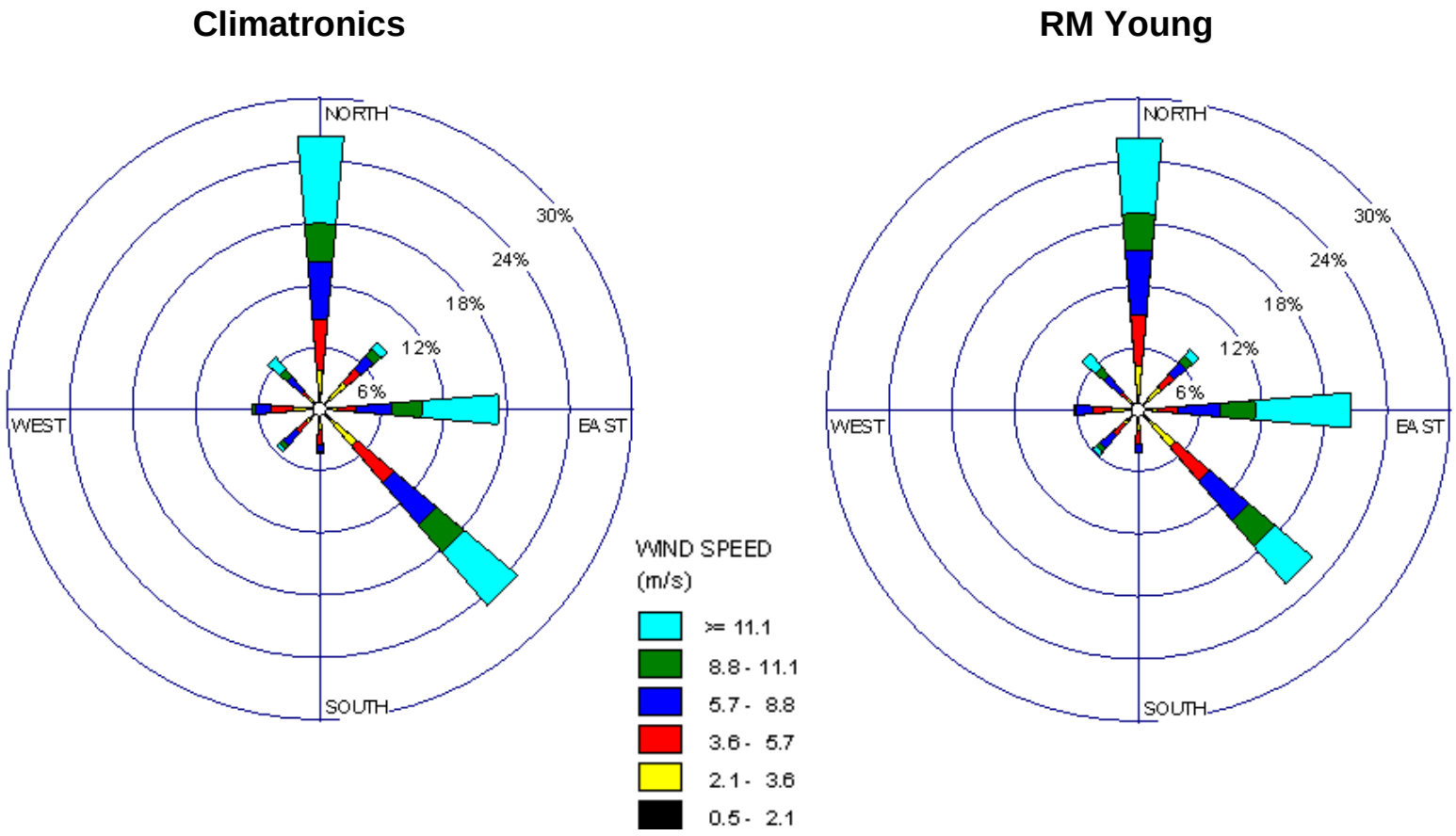
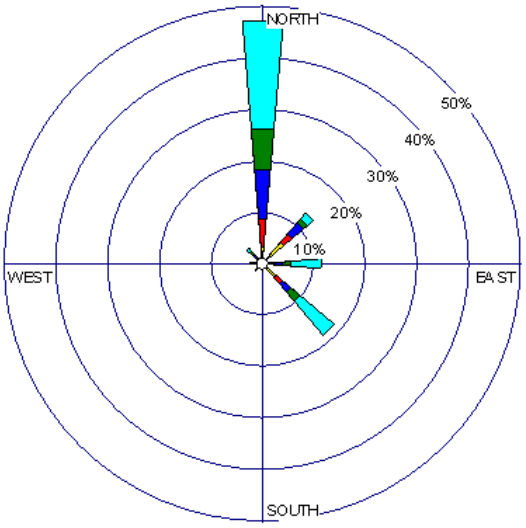
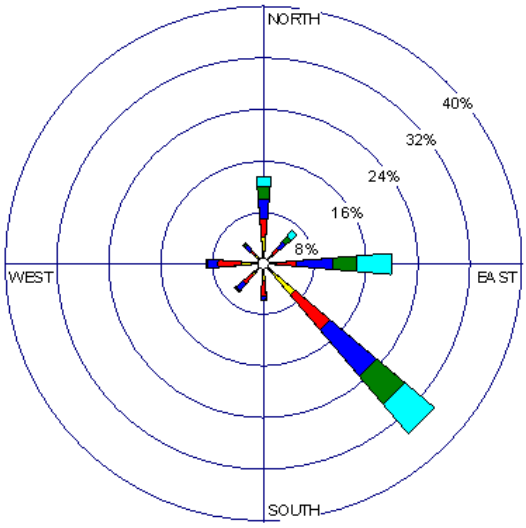


Figure 3-2. Quarterly Pebble 4 Station Wind Roses (Climatronics)

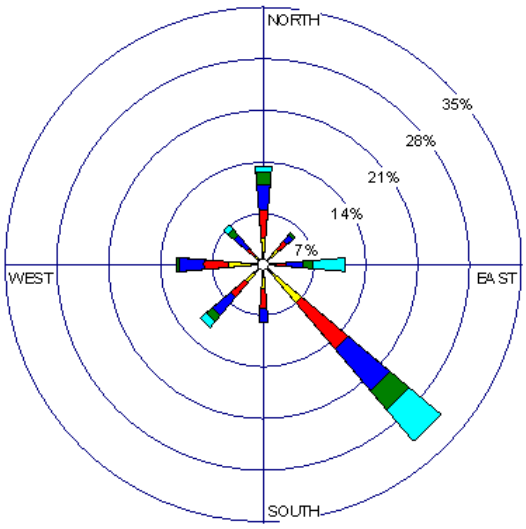
Quarter A (1/1/07 – 3/31/07)



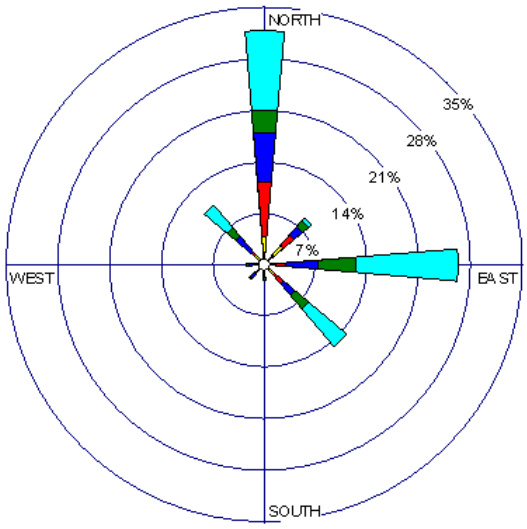
Quarter B (4/1/07 – 6/30/07)



Quarter C (7/1/07 – 9/30/07)



Quarter D (10/1/07 – 12/31/07)



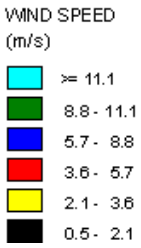
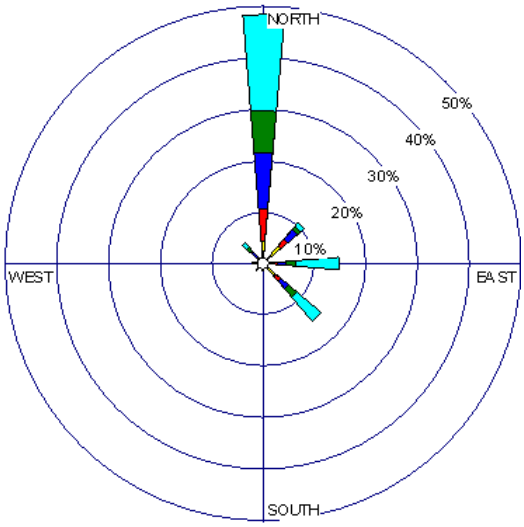
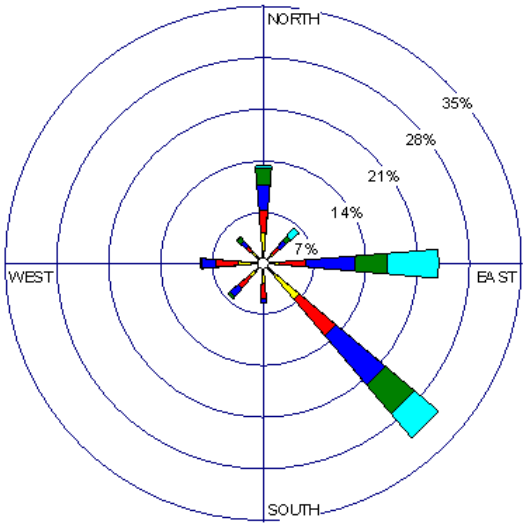


Figure 3-3. Quarterly Pebble 4 Station Wind Roses (RM Young)

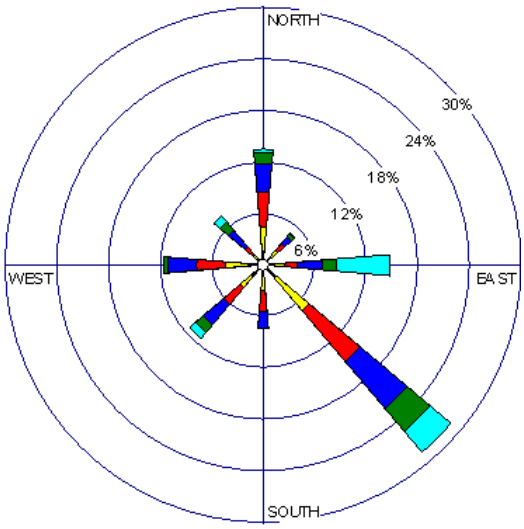
Quarter A (1/1/07 – 3/31/07)



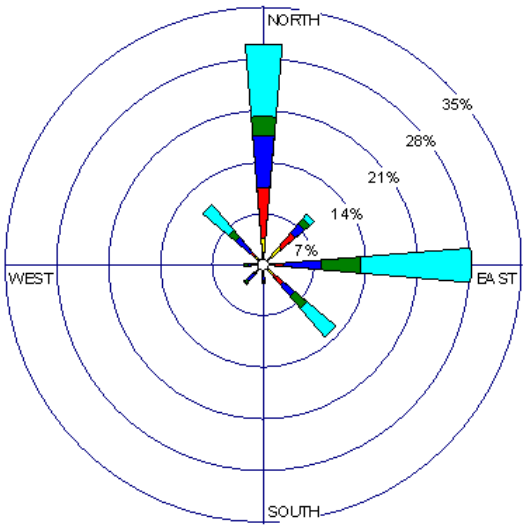
Quarter B (4/1/07 – 6/30/07)



Quarter C (7/1/07 – 9/30/07)



Quarter D (10/1/07 – 12/31/07)



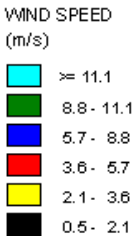


Table 3-3. 2007 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: 2007
Start Date: January 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.13%	2.63%	4.88%	5.61%	3.67%	8.42%	26.34%
NE	1.08%	2.36%	1.68%	1.69%	0.84%	0.84%	8.49%
E	0.78%	0.98%	1.77%	3.39%	2.90%	7.36%	17.18%
SE	1.68%	3.08%	4.64%	5.31%	3.45%	6.71%	24.87%
S	0.95%	1.10%	1.48%	0.74%	0.07%	0.06%	4.41%
SW	1.09%	0.77%	1.27%	1.53%	0.47%	0.43%	5.56%
W	1.21%	1.51%	2.04%	1.45%	0.29%	0.02%	6.51%
NW	0.90%	0.60%	0.83%	1.87%	0.94%	1.40%	6.54%
Sub-Total:	8.82%	13.03%	18.58%	21.60%	12.63%	25.24%	99.90%
Calms (<0.5m/s):							0.10%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2007 End Date: March 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.84%	2.46%	5.43%	9.52%	7.90%	21.04%	47.19%
NE	1.86%	3.58%	2.14%	2.97%	0.98%	1.44%	12.96%
E	0.79%	0.88%	0.98%	1.25%	1.77%	5.81%	11.47%
SE	1.67%	2.00%	1.49%	2.23%	2.37%	8.55%	18.30%
S	1.07%	0.14%	0.19%	0.00%	0.00%	0.09%	1.49%
SW	0.79%	0.05%	0.05%	0.46%	0.28%	0.46%	2.09%
W	1.07%	0.37%	0.60%	0.42%	0.05%	0.00%	2.51%
NW	0.51%	0.19%	0.33%	1.39%	0.84%	0.74%	3.99%
Sub-Total:	8.59%	9.66%	11.19%	18.25%	14.17%	38.13%	100.00%
Calms (<0.5m/s):							0.00%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2007 End Date: June 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.33%	2.84%	2.88%	2.98%	2.11%	1.37%	13.51%
NE	1.01%	1.10%	1.14%	1.37%	0.96%	1.28%	6.87%
E	0.78%	1.37%	3.02%	5.68%	3.62%	5.45%	19.92%
SE	2.24%	4.21%	7.05%	9.48%	5.68%	6.00%	34.66%
S	0.92%	1.83%	2.47%	0.50%	0.05%	0.00%	5.77%
SW	1.42%	1.05%	1.74%	1.37%	0.27%	0.05%	5.91%
W	1.33%	2.20%	3.57%	1.56%	0.23%	0.05%	8.93%
NW	1.14%	0.78%	0.96%	1.01%	0.37%	0.14%	4.40%
Sub-Total:	10.16%	15.38%	22.85%	23.95%	13.28%	14.33%	99.95%
Calms (<0.5m/s):							0.04%
Total:							100.00%

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2007 End Date: September 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.22%	2.40%	3.85%	3.40%	1.72%	0.82%	13.42%
NE	0.77%	2.04%	1.50%	1.00%	0.41%	0.00%	5.71%
E	0.73%	1.22%	1.27%	2.27%	1.27%	4.44%	11.20%
SE	1.86%	5.12%	8.20%	7.34%	3.40%	5.53%	31.46%
S	1.41%	1.95%	2.63%	1.95%	0.00%	0.00%	7.93%
SW	1.63%	1.68%	2.54%	3.26%	1.09%	1.04%	11.24%
W	1.72%	2.99%	3.40%	3.26%	0.45%	0.05%	11.88%
NW	1.00%	0.63%	1.36%	2.31%	1.04%	0.77%	7.12%
Sub-Total:	10.34%	18.04%	24.75%	24.80%	9.38%	12.65%	99.95%
Calms (<0.5m/s):							0.04%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.12%	2.84%	7.39%	6.65%	3.02%	10.74%	31.75%
NE	0.70%	2.74%	1.95%	1.44%	1.02%	0.65%	8.51%
E	0.84%	0.42%	1.81%	4.37%	4.97%	13.85%	26.27%
SE	0.93%	0.93%	1.67%	2.09%	2.32%	6.79%	14.74%
S	0.42%	0.46%	0.60%	0.46%	0.23%	0.14%	2.32%
SW	0.51%	0.28%	0.70%	0.98%	0.23%	0.14%	2.84%
W	0.70%	0.42%	0.51%	0.51%	0.42%	0.00%	2.56%
NW	0.93%	0.79%	0.65%	2.79%	1.53%	4.00%	10.69%
Sub-Total:	6.14%	8.88%	15.30%	19.29%	13.76%	36.31%	99.67%
Calms (<0.5m/s):							0.32%
Total:							100.00%

Table 3-8. 2007 Annual Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: 2007
Start Date: January 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.26%	2.99%	4.97%	6.16%	3.53%	7.25%	26.16%
NE	1.02%	2.01%	1.53%	1.57%	0.79%	0.82%	7.74%
E	0.91%	1.04%	1.94%	4.06%	3.34%	9.13%	20.42%
SE	1.66%	3.05%	4.35%	4.96%	3.17%	4.73%	21.92%
S	0.99%	1.03%	1.33%	0.79%	0.08%	0.07%	4.29%
SW	1.20%	0.74%	1.38%	1.59%	0.53%	0.43%	5.87%
W	1.25%	1.33%	1.86%	1.55%	0.26%	0.03%	6.29%
NW	1.03%	0.55%	0.80%	1.99%	1.14%	1.63%	7.14%
Sub-Total:	9.31%	12.74%	18.17%	22.66%	12.83%	24.10%	99.83%
Calms (<0.5m/s):							0.17%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: Quarter A
Start Date: January 1, 2007 End Date: March 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.88%	3.62%	6.13%	10.96%	8.04%	18.63%	48.26%
NE	1.86%	2.79%	1.58%	2.51%	0.84%	1.02%	10.59%
E	1.11%	0.84%	0.93%	1.58%	2.04%	8.31%	14.82%
SE	1.49%	1.90%	1.35%	1.95%	2.00%	6.27%	14.96%
S	1.02%	0.14%	0.09%	0.14%	0.05%	0.09%	1.53%
SW	0.79%	0.00%	0.09%	0.37%	0.28%	0.56%	2.09%
W	0.88%	0.33%	0.56%	0.42%	0.00%	0.00%	2.18%
NW	0.65%	0.19%	0.42%	1.77%	1.25%	1.11%	5.39%
Sub-Total:	8.69%	9.80%	11.15%	19.69%	14.49%	36.00%	99.81%
Calms (<0.5m/s):							0.18%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: Quarter B
Start Date: April 1, 2007 End Date: June 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.33%	2.98%	2.93%	3.48%	2.24%	0.37%	13.32%
NE	0.96%	0.96%	1.01%	1.14%	0.87%	1.47%	6.41%
E	0.87%	1.37%	3.57%	6.59%	4.44%	6.91%	23.76%
SE	2.15%	4.30%	6.46%	8.75%	5.13%	4.30%	31.09%
S	1.05%	1.74%	2.20%	0.41%	0.00%	0.00%	5.40%
SW	1.47%	1.01%	2.01%	1.51%	0.37%	0.05%	6.41%
W	1.47%	2.01%	3.02%	1.88%	0.14%	0.05%	8.56%
NW	1.42%	0.82%	0.92%	0.92%	0.69%	0.14%	4.90%
Sub-Total:	10.71%	15.20%	22.12%	24.68%	13.87%	13.28%	99.86%
Calms (<0.5m/s):							0.14%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: Quarter C
Start Date: July 1, 2007 End Date: September 30, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.72%	2.72%	4.08%	3.26%	1.31%	0.41%	13.51%
NE	0.50%	1.72%	1.09%	1.09%	0.45%	0.05%	4.90%
E	0.95%	1.54%	1.54%	2.90%	1.59%	6.30%	14.82%
SE	2.09%	4.94%	7.84%	7.12%	3.40%	3.17%	28.56%
S	1.36%	1.72%	2.40%	1.99%	0.00%	0.05%	7.52%
SW	1.90%	1.63%	2.54%	3.13%	1.13%	0.95%	11.29%
W	1.90%	2.54%	3.31%	3.35%	0.45%	0.09%	11.65%
NW	1.00%	0.63%	1.13%	2.58%	1.31%	0.82%	7.48%
Sub-Total:	11.42%	17.45%	23.93%	25.43%	9.66%	11.83%	99.73%
Calms (<0.5m/s):							0.27%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

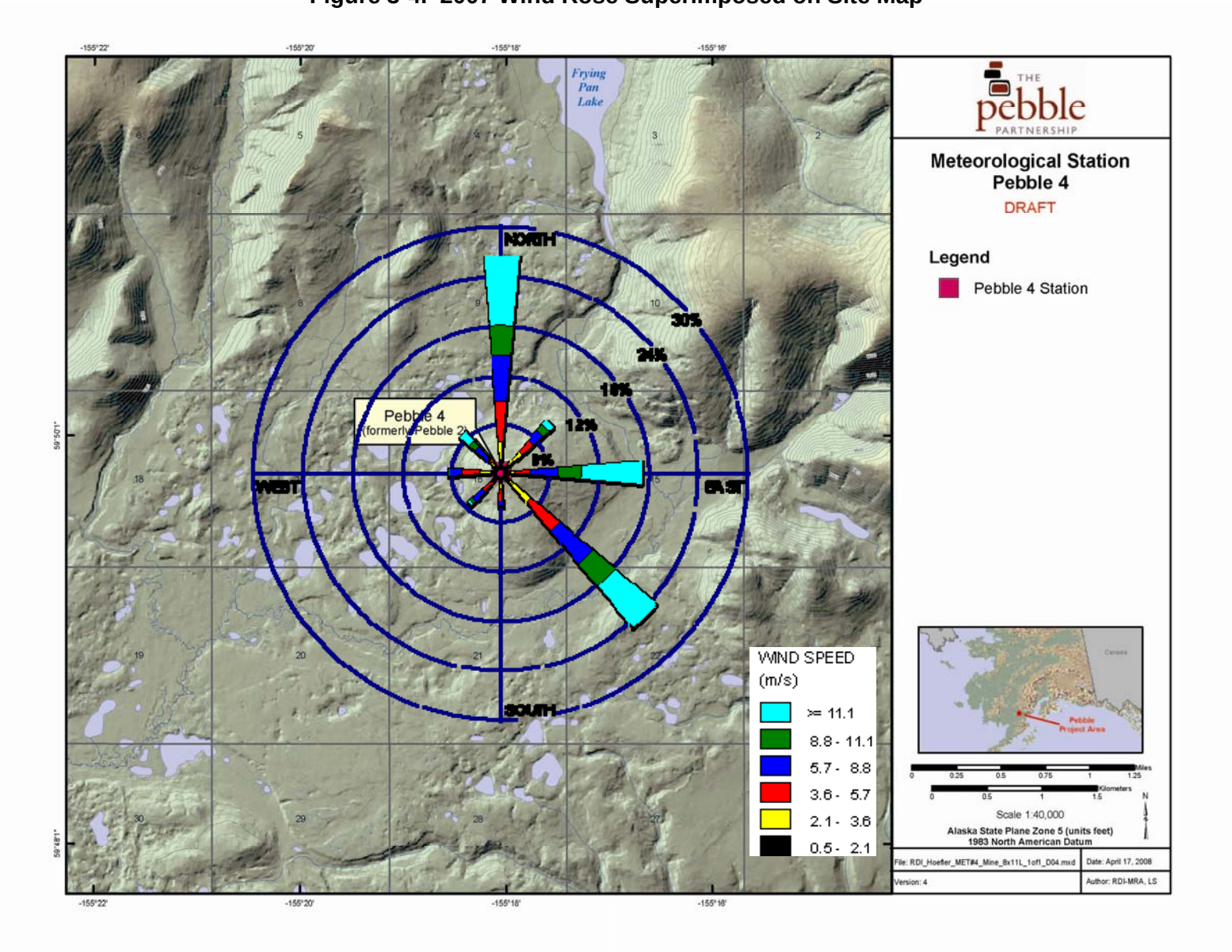
Station ID: Pebble 4 (RM Young) Run ID: Quarter D
Start Date: October 1, 2007 End Date: December 31, 2007

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.09%	2.67%	6.75%	7.02%	2.63%	9.79%	29.95%
NE	0.77%	2.58%	2.45%	1.54%	1.00%	0.77%	9.11%
E	0.73%	0.41%	1.72%	5.12%	5.26%	14.95%	28.18%
SE	0.91%	1.04%	1.72%	1.99%	2.13%	5.21%	13.00%
S	0.54%	0.50%	0.59%	0.59%	0.27%	0.14%	2.63%
SW	0.63%	0.32%	0.86%	1.31%	0.32%	0.18%	3.62%
W	0.73%	0.41%	0.54%	0.54%	0.45%	0.00%	2.67%
NW	1.04%	0.54%	0.73%	2.67%	1.31%	4.44%	10.74%
Sub-Total:	6.43%	8.47%	15.36%	20.80%	13.37%	35.48%	99.91%
Calms (<0.5m/s):							0.09%
Total:							100.00%

Figure 3-4. 2007 Wind Rose Superimposed on Site Map



3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Hourly average temperatures at the Pebble 4 station ranged from 23.0°C on August 12, 2007 to -31.1°C on January 7, 2007. January 7, 2007 was also the coldest day at the Pebble 1 meteorological station. The average 2-meter temperature during the monitoring year was 0.0°C, which is slightly less than the mean temperature of 1.78°C observed at the Iliamna airport during the same time span.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. There was considerable monthly temperature variation throughout the late-autumn and winter months. The coldest temperatures were observed during January 2007. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 2.8°C measured on January 4, 2007. The greatest negative vertical temperature difference was -1.7°C measured on July 28, 2007.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2007	2.8	-30.1	-11.7	5.4	-31.1
February 2007	1.9	-21.2	-7.5	5.5	-24.3
March 2007	-1.3	-25.4	-15.2	1.7	-27.9
Quarter A	**2.8**	**-30.1**	**-11.4**	**5.5**	**-31.1**
April 2007	5.8	-1.1	1.3	9.9	-4.3
May 2007	7.1	1.2	4.6	11.7	-0.8
June 2007	17.4	5.4	9.0	22.5	1.7
Quarter B	**17.4**	**-1.1**	**5.0**	**22.5**	**-4.3**
July 2007	17.5	7.2	11.6	22.6	6.4
August 2007	17.7	8.7	11.8	23.0	7.2
September 2007	10.8	3.9	7.5	14.7	2.2
Quarter C	**17.7**	**3.9**	**10.3**	**23.0**	**2.2**
October 2007	4.2	-5.1	-1.0	6.4	-7.5
November 2007	4.5	-14.7	-2.0	5.5	-16.5
December 2007	0.7	-24.7	-8.0	2.3	-25.9
Quarter D	**4.5**	**-24.7**	**-3.7**	**6.4**	**-25.9**
Monitoring Year	**17.7**	**-30.1**	**0.0**	**23.0**	**-31.1**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2007	3.0	-30.0	-11.3	5.9	-30.9
February 2007	2.1	-21.1	-7.3	6.1	-24.2
March 2007	-0.8	-25.7	-15.1	1.2	-27.9
Quarter A	**3.0**	**-30.0**	**-11.2**	**6.1**	**-30.9**
April 2007	6.1	-1.1	1.4	9.7	-4.2
May 2007	7.0	1.1	4.4	11.1	-0.9
June 2007	17.0	5.1	8.7	21.3	2.3
Quarter B	**17.0**	**-1.1**	**4.9**	**21.3**	**-4.2**
July 2007	17.5	7.0	11.4	21.7	6.6
August 2007	17.5	8.5	11.7	22.2	7.0
September 2007	10.9	3.8	7.5	14.2	2.2
Quarter C	**17.5**	**3.8**	**10.2**	**22.2**	**2.2**
October 2007	4.1	-5.2	-0.8	6.1	-7.5
November 2007	4.5	-14.7	-2.0	5.5	-16.4
December 2007	1.1	-24.4	-7.8	2.4	-25.6
Quarter D	**4.5**	**-24.4**	**-3.6**	**6.1**	**-25.6**
Monitoring Year	**17.5**	**-30.0**	**0.0**	**22.2**	**-30.9**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

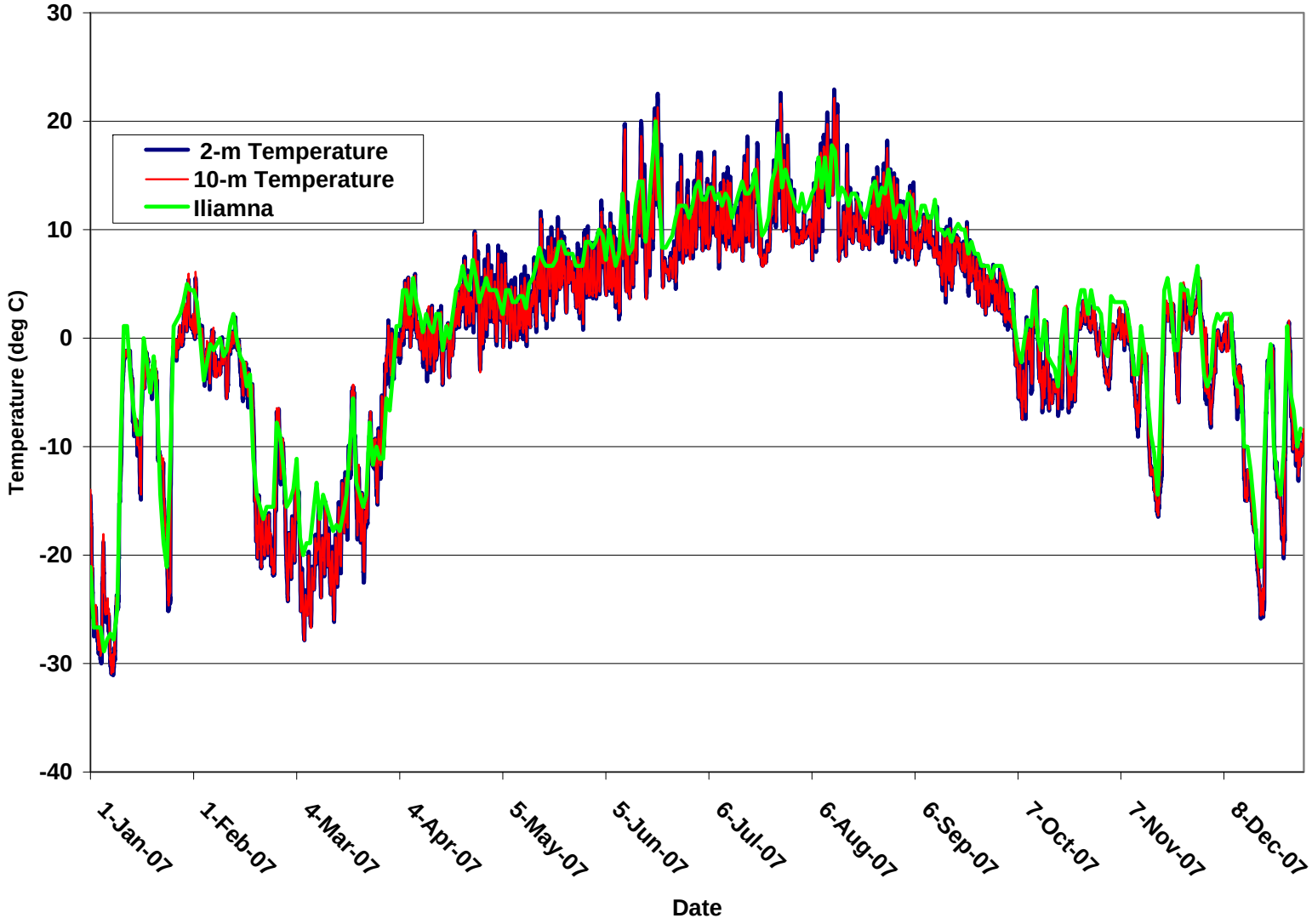
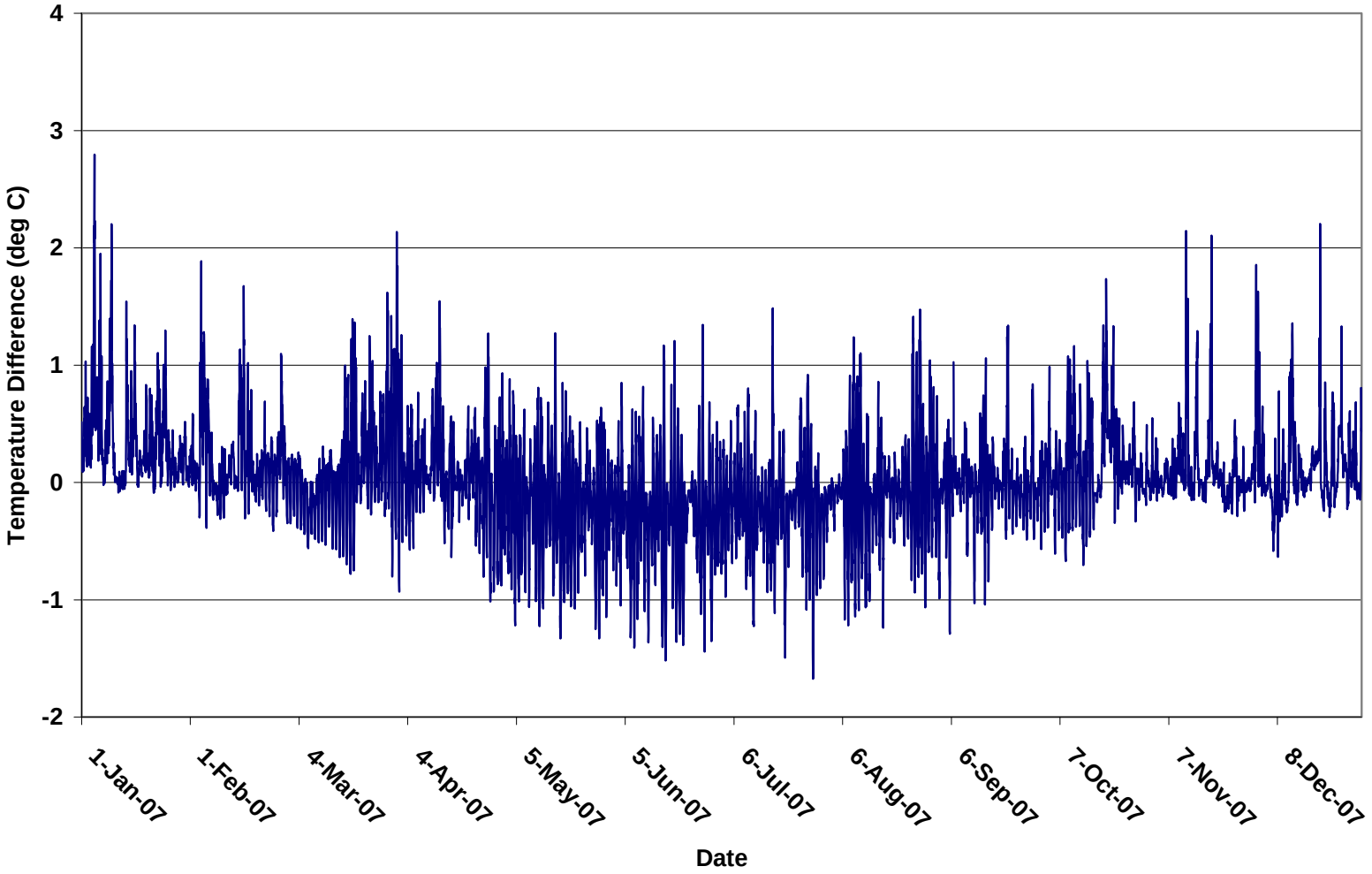


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation.

Table 3-15 provides a summary of the relative humidity, barometric pressure, and solar radiation at the Pebble 4 station during the 2007 monitoring year.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 4 station was 82.8 percent. The minimum relative humidity was 27.1 percent, measured on March 31, 2007. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 75.5 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 923 mb on October 30, 2007 to a maximum of 987 mb observed on March 31, 2007. The mean barometric pressure during the monitoring year was 961 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 1,007 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 910 W/m^2 recorded on June 18, 2007. The mean hourly average solar radiation for the monitoring year was 98 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the 2007 monitoring year. The highest total daily precipitation was 42.8 mm measured on September 18, 2007. The maximum monthly precipitation was 310.2 mm during September 2007. The cumulative precipitation during the monitoring year was 877.2 mm. Daily winter precipitation data (October through April) should be closely examined before use because snowfall adaptors may influence daily totals.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 4 station was 89.8 mm during June 2007.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, and solar radiation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mb)	Minimum Barometric Pressure (mb)	Maximum Barometric Pressure (mb)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2007	86.2	45.9	957	929	985	17.1	188.0
February 2007	79.9	41.8	963	944	983	54.4	398.6
March 2007	66.2	27.1	962	928	987	138.4	595.8
Quarter A	**77.4**	**27.1**	**960**	**928**	**987**	**70.5**	**595.8**
April 2007	79.7	35.3	956	927	985	151.3	733.0
May 2007	78.5	40.6	967	957	976	182.2	841.0
June 2007	78.6	31.1	968	954	981	196.6	910.0
Quarter B	**79.0**	**31.1**	**964**	**927**	**985**	**176.8**	**910.0**
July 2007	82.9	44.0	969	961	977	157.3	796.0
August 2007	84.4	36.9	970	950	983	129.4	796.0
September 2007	91.6	51.3	963	943	975	65.8	614.4
Quarter C	**86.2**	**36.9**	**967**	**943**	**983**	**118.1**	**796.0**
October 2007	87.2	50.9	954	923	974	51.2	398.8
November 2007	90.7	49.3	952	928	983	18.6	256.0
December 2007	88.0	38.4	955	935	975	10.8	130.5
Quarter D	**88.6**	**38.4**	**954**	**923**	**983**	**26.9**	**398.8**
Monitoring Year	**82.8**	**27.1**	**961**	**923**	**987**	**98.0**	**910.0**

Figure 3-7. Hourly Average Relative Humidity

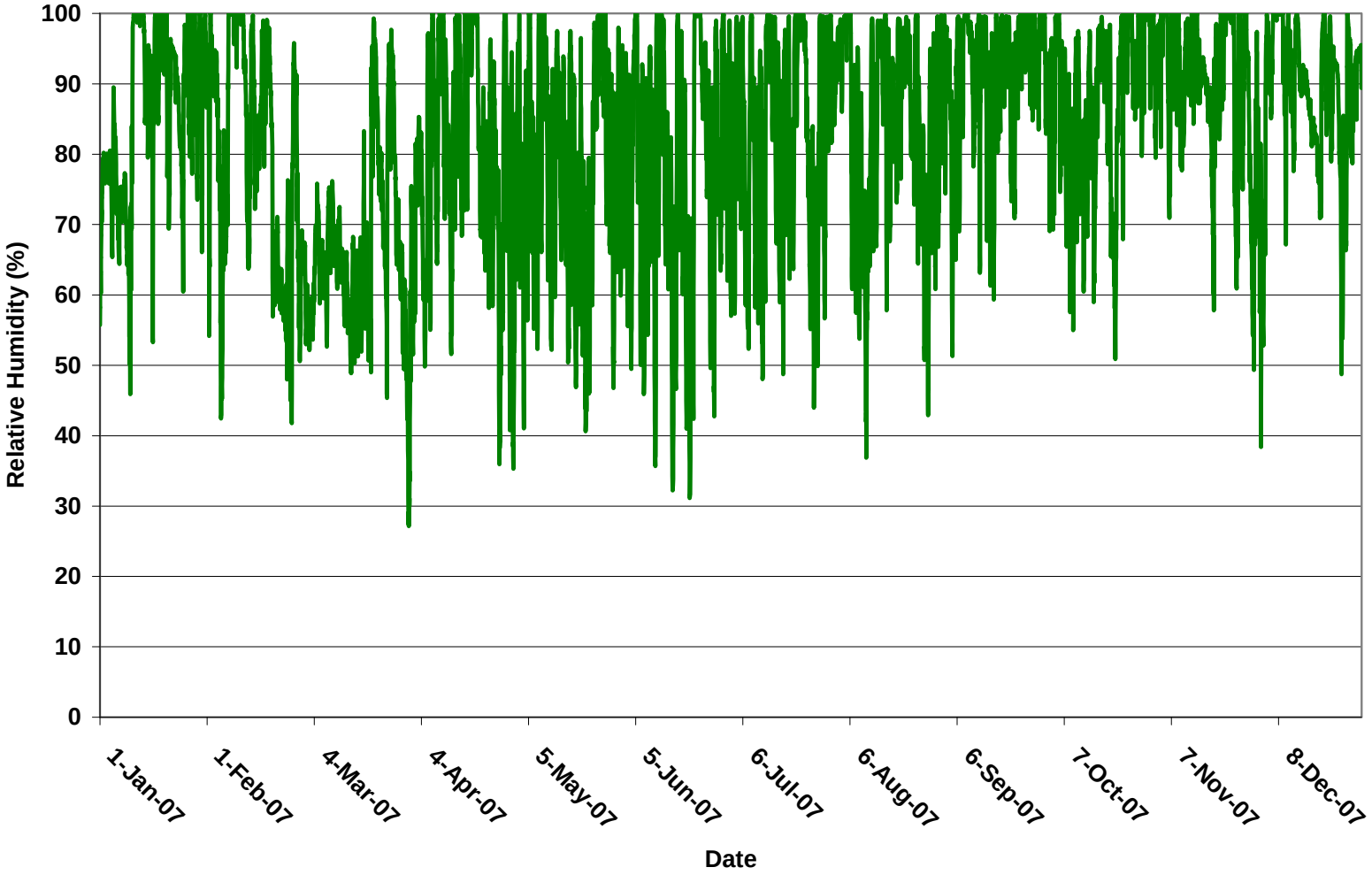


Figure 3-8. Barometric Pressure

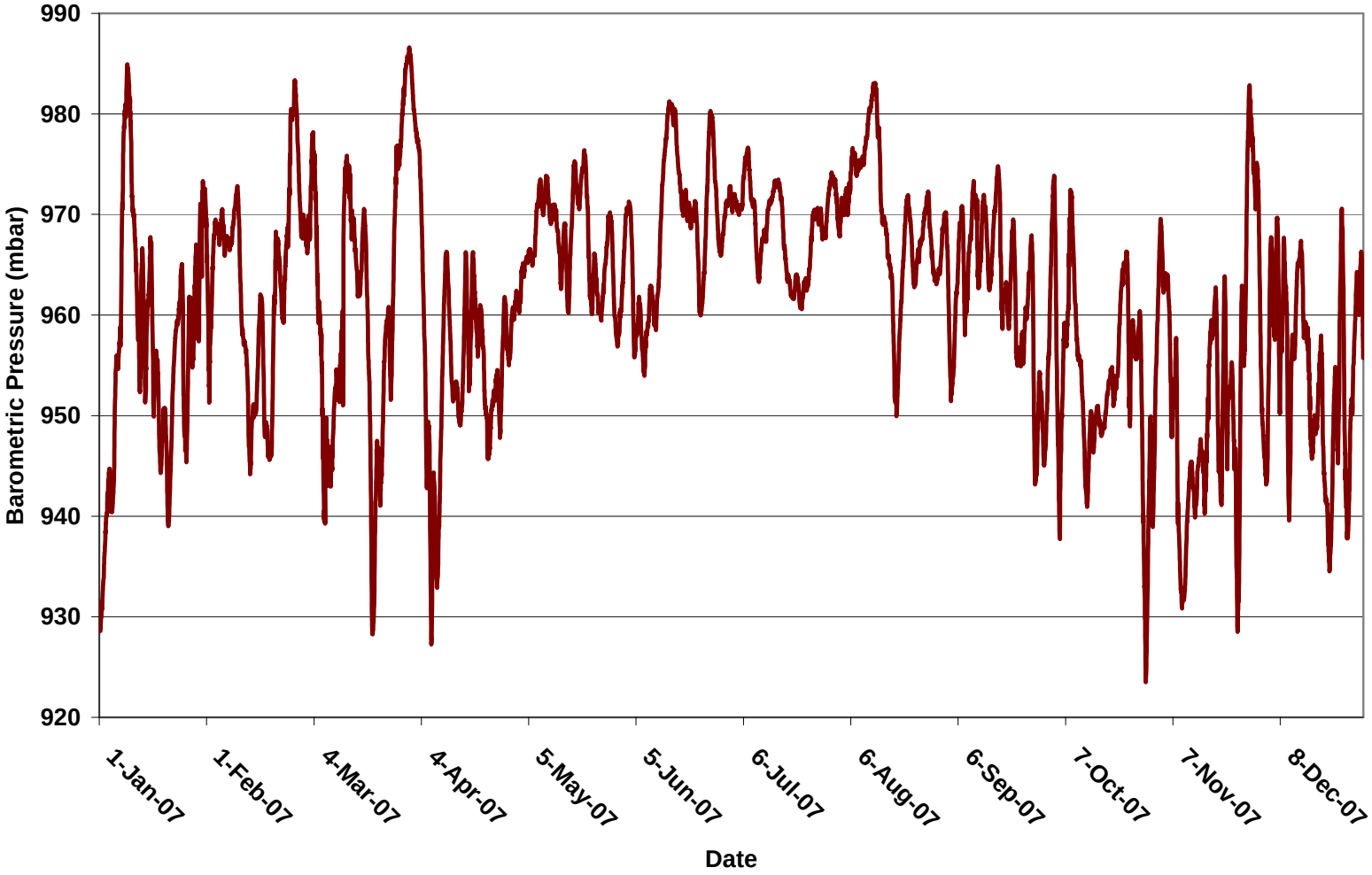


Figure 3-9. Hourly Average Solar Radiation

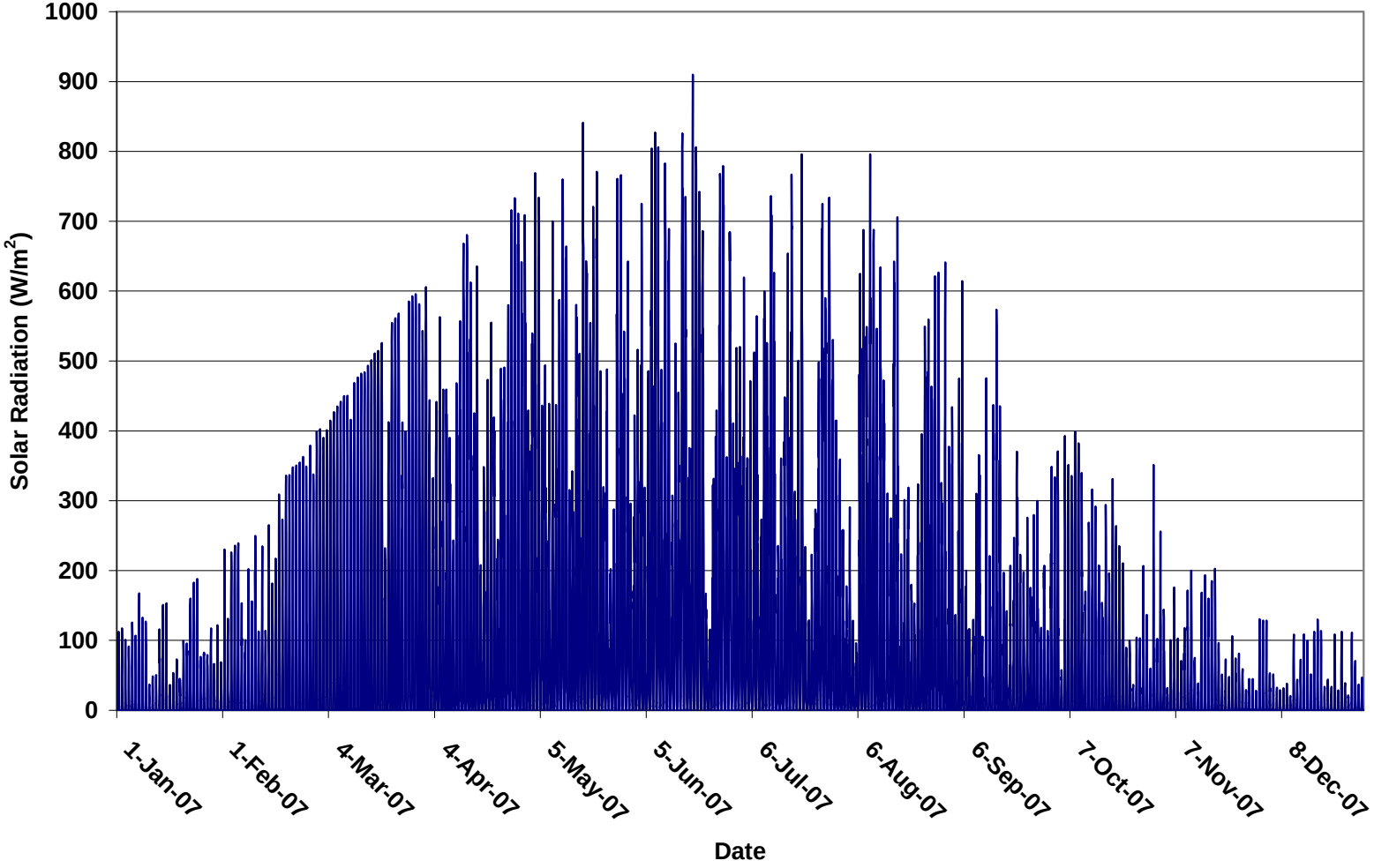
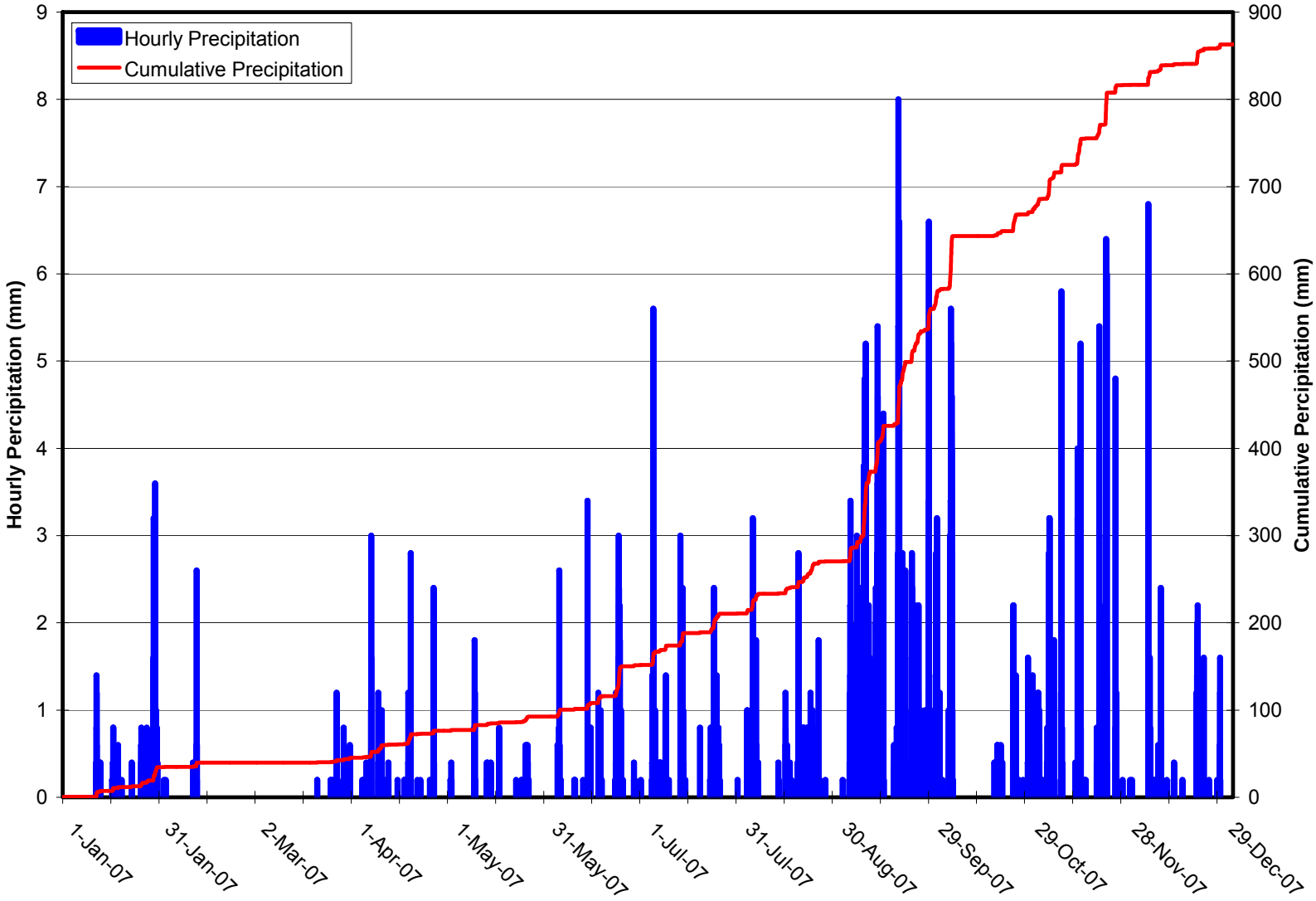


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, August 2006.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

U.S. Department of Commerce, National Climatic Data Center, Asheville, North Carolina, *http://www.ncdc.noaa.gov*.

Western Regional Climate Center, Desert Research Institute, Reno Nevada, *http://www.wrcc.dri.edu/summary/climsmak.html.*

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2007

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
Jan 2007	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	99.2%	100%	100%	100%	99.5%	0%
Feb 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.7%	0%
Mar 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Quarter A	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**99.7%**	**100%**	**100%**	**100%**	**99.7%**	**0%**
Apr 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
May 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%	95.3%
June 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**99.9%**	**65.4%**
July 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Aug 2007	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Sept 2007	99.6%	99.6%	21.8%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	98.5%	99.6%
Quarter C	**99.9%**	**99.9%**	**74.5%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.5%**	**99.9%**
Oct 2007	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	16%
Nov 2007	100%	100%	0%	97.2%	100%	100%	99.9%	99.9%	99.9%	100%	100%	100%	100%	0%
Dec 2007	100%	100%	0%	95.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Quarter D	**100%**	**100%**	**0%**	**97.4%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**5%**
Monitoring Year	**99.9%**	**99.9%**	**68.3%**	**99.2%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.8%**	**99.9%**

[1]CLM = Climatronics wind speed and wind direction sensor.
[2]RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 2 through October 5, 2007
[4] The Climatronics wind speed sensor was affected by icing during Quarter D. The R.M. Young wind speed sensor will be used to achieve the required data capture requirement of 90% or greater per monitoring quarter.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

Pebble 4 PSD Meteorological Monitoring Station
July 2006
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

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TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 4 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 4 July 12, 2006 Performance Audit Summary 12

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 4 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

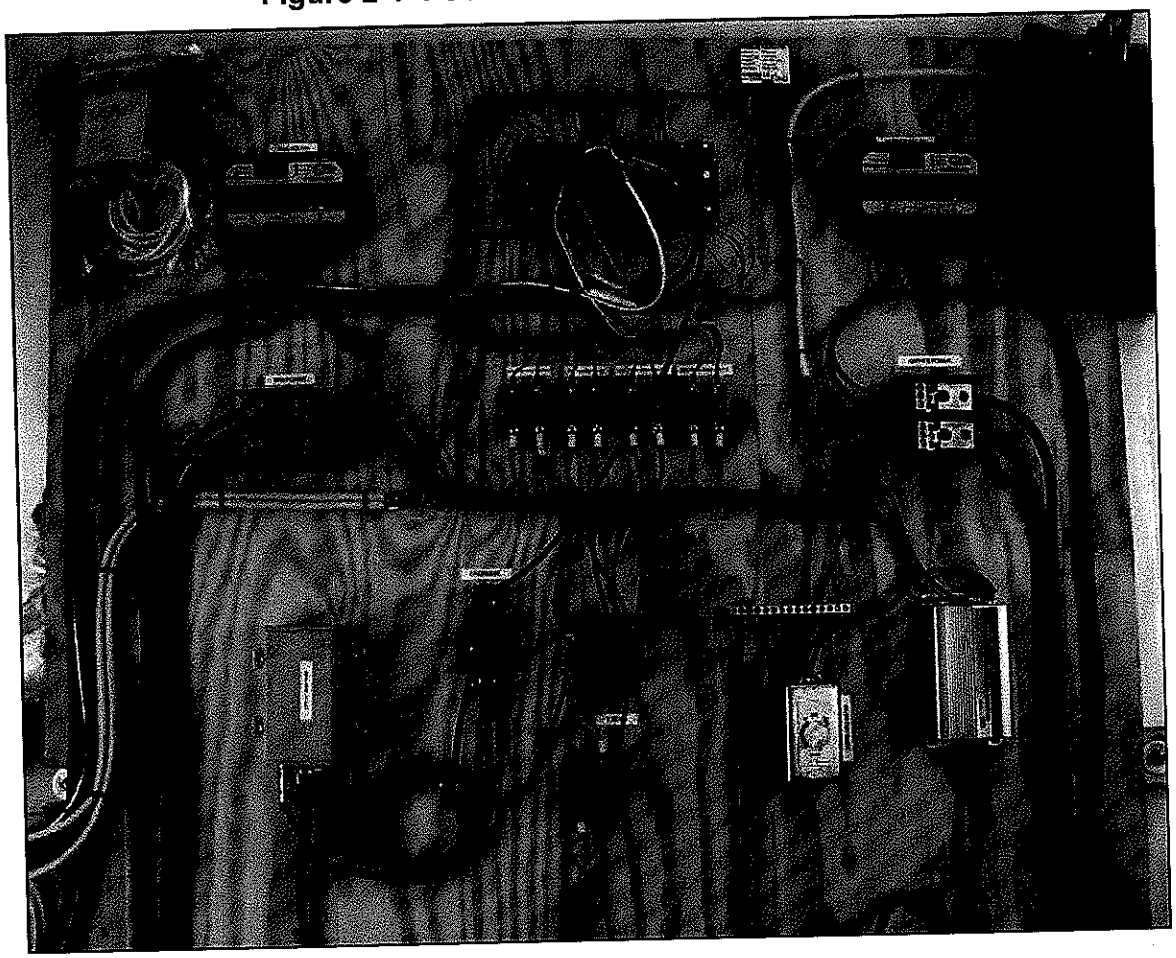
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 4 station was conducted in mid July 2006. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 4 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6' by 8' deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6' high fence and all instrumentation wires from the tower, precipitation gauge and evaporation gauge are protected in conduit These conduits all converge at a 5' by 7'

insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 4 Station DAS Wiring Panel



The Campbell Scientific CR10X DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is

dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are constantly monitored by the DAS.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 4 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best

reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 4 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 4 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed + **EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 4 station on July 12, 2006, with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Table 3-2 and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 4 July 12, 2006 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.32	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.3	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.030	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	4.7	Pass
Wind Direction Linearity	≤ 3	Degree	2.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	4.0	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.010	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	4.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.4	Pass
Barometric Pressure	≤ ±3	Mbar	1.3	Pass
Solar Radiation	≤ ±5+Res	% input	-3.9	Pass
Tipping Precipitation	≤ ±10	% input	3.6	Pass
Evaporation	≤ ±10	% input	2.4	Pass

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Jul 12, 2006
Witnesses: Dominic Shallies | Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 4 station is located on the crest of a knoll approximately 5 miles south of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

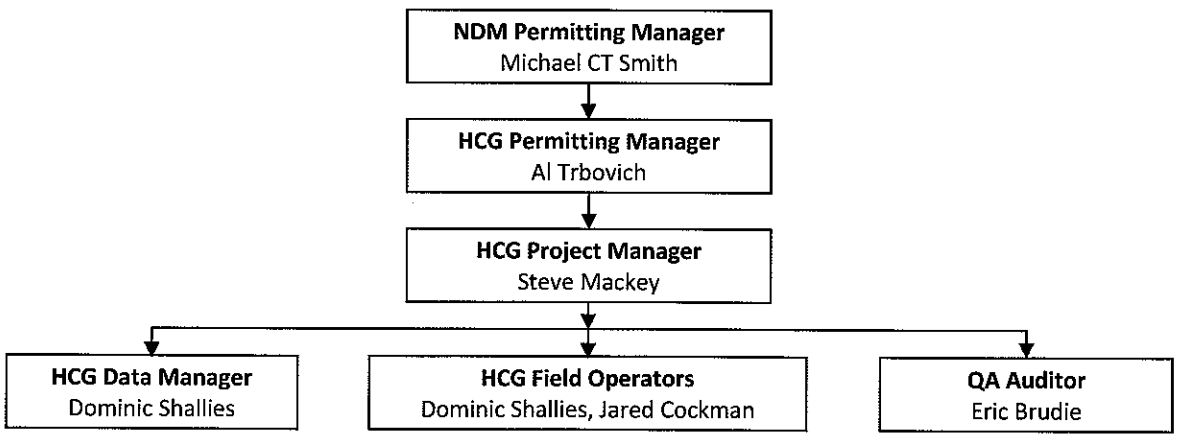
Indicated by Operator	Determined by Auditor
59° 50' N	59° 49.837 N
155° 18' W	155° 18.041'
Elevation: 1,200 feet	Elevation: 1,190 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR10X	X45838
DAS Wiring Panel	Campbell Scientific	CR10X	35367
Temperature (2-meter)	Met One	062MP	E2777, ID #2/2
Temperature (10-meter)	Met One	062MP	E2777, ID #1/2
Temperature Aspirators	Met One	076B-4	F5259 & F5260
Relative Humidity	Vaisala	HMP45AC	A4350044
Primary Wind Speed	Climatronics	F460-100075	5081
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2299
Primary Wind Direction	Climatronics	F460-100076	4745
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1452
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	71368
Backup Wind Spd Prop	RM Young	08254	63635
Barometric Pressure	Vaisala	PTB101B	B0440012
Solar Radiation	LI-COR	Li-200SX	PY52709
Precipitation-Tipping	Met-One	370	A6431
Precip. Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	687
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power? ■ Yes □ No Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained? ■ Yes □ No Comments: None.

Are all sensors operational, online and reporting data? ■ Yes □ No Comments: None.

Do all sensors meet EPA criteria for PSD quality sensors? ■ Yes □ No Comments: See table below.

Are spare parts stocked for items which are frequently worn out or broken? ■ Yes □ No Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base?	■ Yes □ No	Comments: None.
Is the height of the tower at least 10 meters above the ground?	■ Yes □ No	Comments: None.
Is the tower stable and plumb?	■ Yes □ No	Comments: None.
Is the tower protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter?	■ Yes □ No	Comments: None.
Are the temperature difference probes at heights of 2-m and 10-m above the ground?	■ Yes □ No	Comments: None.
Are the sensors at a distance greater than four times the height of any obstruction?	■ Yes □ No	Comments: None.
Is the ground beneath the temperature sensors natural native material?	■ Yes □ No	Comments: None.
Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Alter type shield surrounds Met-One gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: The lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Jul 12, 2006
Witnesses: Dominic Shallies | Auditor: Eric Brudie

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

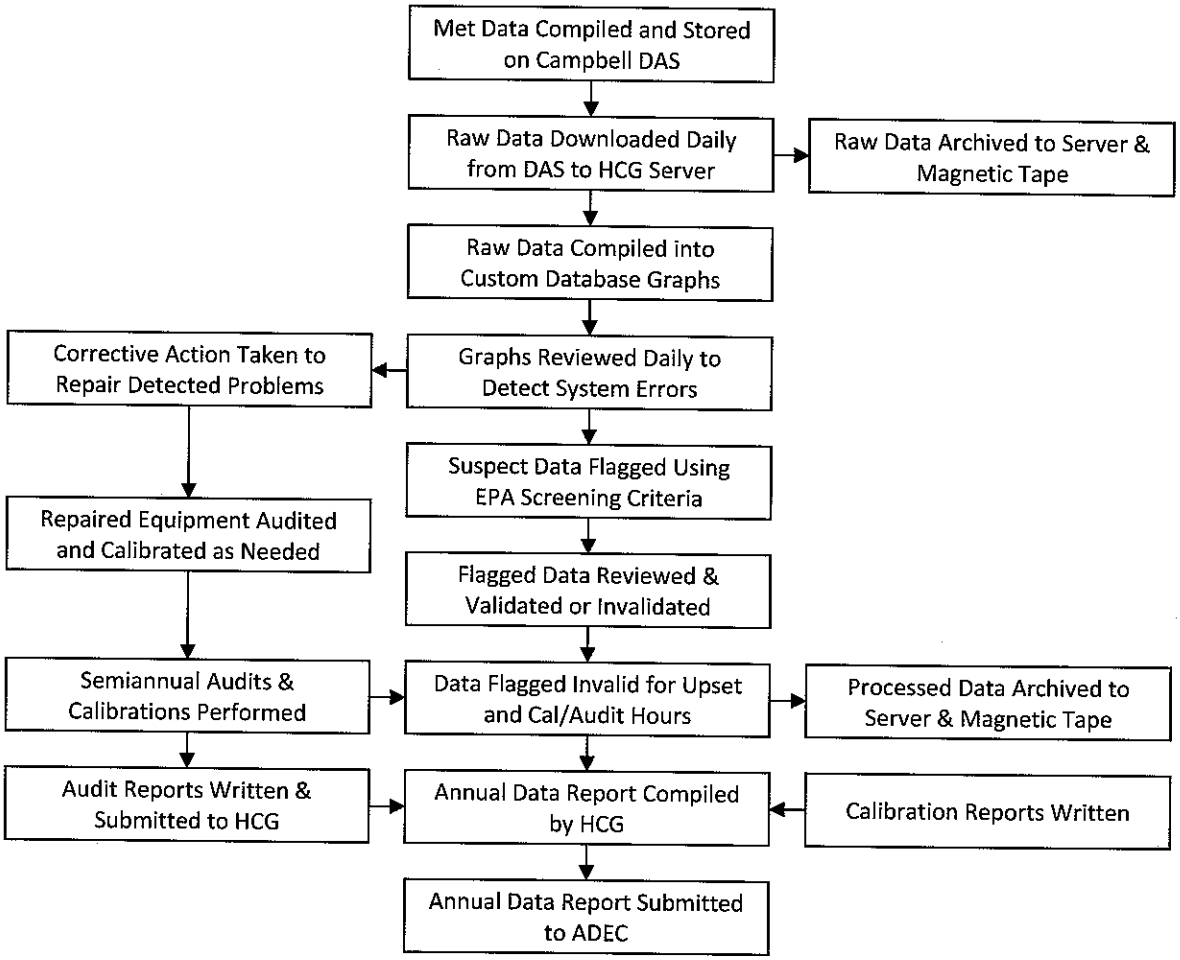
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Jul 12, 2006
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Isaac Bertschi
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
11:35:00	11:34:58	**-00:02**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 2/2 **Range:** -50 to 50 °C
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 1/2 **Range:** -50 to 50 °C
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 °C
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 °C

Begin: 1520
End: 1550

COLLOCATED THERMISTOR TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	32.62	32.58	-0.04	Pass	32.58	-0.04	Pass	0.00	Pass
Warm	15 to 25	21.44	21.39	-0.05	Pass	21.39	-0.05	Pass	0.00	Pass
Ice Bath	0	0.05	0.05	0.00	Pass	0.05	0.00	Pass	0.00	Pass
Cold	-15 to -25	-17.02	-16.72	0.30	Pass	-16.72	0.30	Pass	0.00	Pass
Very Cold	-35 to -45	-35.00	-34.68	0.32	Pass	-34.68	0.32	Pass	0.00	Pass
		Max Abs. Error		0.32	**PASS**		0.32	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1640	43.0	23.1	10.0	44.0	23.2	10.3	0.3	Pass
					Max Abs. Error		0.3	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1557	28.51	28.39	961.5	962.8	1.3	Pass
			Max Abs. Error		1.3	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/24/06	
Audit Inst	Offset Amount
24.13	-0.13
26.24	-0.13
28.12	-0.12
30.11	-0.11
Intercept	**-0.22**
Slope	**0.0035**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *HORIZONTAL WIND SPEED SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor: **Make:** Climatronics **Model:** 100075 **S.N.#:** 5081 **Cup #:** 2299 **Range:** 0-60 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1450
End: 1455

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<<0.003	**PASS**
New	0.0049	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22. gm-cm=72*oz-in.
Comments: None.

• *HORIZONTAL WIND SPEED SENSOR AUDIT - RM YOUNG*

Height: 10.6 **Meters**

Wind Spd Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Prop #:** 63635 **Range:** 0-50 **m/s**
Audit Equipment: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Audit Equipment: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174

Begin: 1455
End: 1500

TORQUE TEST			
Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.010	**PASS**
New	0.014	N/A	N/A

SYNCHRONOUS MOTOR TEST					
Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Absolute Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Conversions: Model 08254 Prop: m/s = 0.00512*rpm. gm-cm=72*oz-in.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

• *HORIZONTAL WIND DIRECTION SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Dir Sensor: **Make:** Climatronics **Model:** 100076 **S.N.#:** 4745 **Vane #:** 1452 **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** Climatronics **Model:** 101984 **S.N.#:** 145 **Torque:** Honeywell Mdl 366-0 **S.N.#:** 5042
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.030	**PASS**
New	0.104	N/A	**N/A**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	95.5	97.2	1.7	Pass
Compass	263.5	266.0	2.5	Pass
Compass	4.5	2.9	-1.6	Pass
Sharp Mtn West	46.1	47.9	1.8	Pass
	Max Abs. Error		**2.5**	**PASS**
	Mean Abs. Error		**1.9**	**GOOD**

Time: Begin: 1202 End: 1240

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.0	0.0	Pass
West	270.0	271.2	1.2	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.3	0.3	Pass
North	360.0	0.1	0.1	Pass
West	270.0	271.7	1.7	Pass
South	180.0	180.3	0.3	Pass
East	90.0	90.3	0.3	Pass
Max Abs. Error			**1.7**	**PASS**
Mean Abs. Error			**0.5**	**PASS**

Time: Begin: 1330 End: 1335

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.1	1.1	Pass	330.0	334.7	4.7	Pass
60.0	61.3	1.3	Pass	355.0	359.0	4.0	Pass
90.0	92.0	2.0	Pass	30.0	31.1	1.1	Pass
120.0	122.4	2.4	Pass	60.0	61.6	1.6	Pass
150.0	152.5	2.5	Pass	90.0	92.0	2.0	Pass
180.0	182.9	2.9	Pass	120.0	123.4	3.4	Pass
210.0	213.3	3.3	Pass	150.0	152.5	2.5	Pass
240.0	244.1	4.1	Pass	180.0	182.7	2.7	Pass
270.0	273.4	3.4	Pass	**Max Abs. Error**		**4.7**	**PASS**
300.0	304.4	4.4	Pass	**Mean Abs. Error**		**2.7**	**PASS**

Time: Begin: 1335 End: 1340

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp Mtn West	46.1	49.1	3.0	Pass
Compass	13.0	12.2	-0.8	Pass
Compass	95.0	95.0	0.0	Pass
Compass	171.5	171.4	-0.1	Pass
Compass	271.0	271.5	0.5	Pass
Peak 1590	104.4	108.4	4.0	Pass
	Max Abs. Error		**4.0**	**PASS**
	Mean Abs. Error		**1.4**	**GOOD**

Time: Begin: 1615 End: 1630

PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

• *HORIZONTAL WIND DIRECTION SENSOR AUDIT - RM YOUNG*

Height: 10.6 **Meters**

Wind Dir Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Vane #:** N/A **Range:** 0-360 **Deg**
Audit Equipment: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Compass: Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.6 **E of N**

TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	4.0	**PASS**
New	11.0	N/A	**N/A**

IN SITU AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	95.5	96.4	0.9	Pass
Compass	263.5	262.1	-1.4	Pass
Compass	4.5	2.9	-1.6	Pass
Sharp Mtn West	46.1	49.2	3.1	Pass
		Max Abs. Error	**3.1**	**PASS**
		Mean Abs. Error	**1.8**	**GOOD**

Time: Begin: 1202 End: 1240

BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.0	-1.0	Pass	150.0	150.1	0.1	Pass	270.0	268.1	-1.9	Pass
60.0	59.1	-0.9	Pass	180.0	179.5	-0.5	Pass	300.0	297.7	-2.3	Pass
90.0	90.0	0.0	Pass	210.0	209.4	-0.6	Pass	330.0	328.1	-1.9	Pass
120.0	119.5	-0.5	Pass	240.0	238.7	-1.3	Pass	355.0	353.4	-1.6	Pass
								Max Abs. Error		**2.3**	**PASS**
								Mean Abs. Error		**1.1**	**PASS**

Time: Begin: 1340 End: 1345

POST-AUDIT AZIMUTH ALIGNMENT TEST

Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp Mtn West	46.1	48.5	2.4	Pass
Compass	13.0	11.7	-1.3	Pass
Compass	95.0	95.8	0.8	Pass
Compass	171.5	171.1	-0.4	Pass
Compass	271.0	268.4	-2.6	Pass
Peak 1590	104.4	107.8	3.4	Pass
	Max Abs. Error		**3.4**	**PASS**
	Mean Abs. Error		**1.8**	**GOOD**

Time: Begin: 1615 End: 1630

PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Absolute Error >5° from True Azimuth (alignment). Max Absolute Error >5° (accuracy). Mean Absolute Error >3° (linearity). Azimuth Mean Absolute Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height: 1.0 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1125	800	24.7	0.0	23.2	2.0	1300	25.2	2.0%	Pass	
1305	800	24.7	0.0	0.0	25.2	1400	25.2	2.0%	Pass	
1403	800	24.7	0.0	0.0	25.6	1500	25.6	3.6%	Pass	
1504	800	24.7	0.0	0.0	25.6	1600	25.6	3.6%	Pass	
						Max Abs. Error		**3.6%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

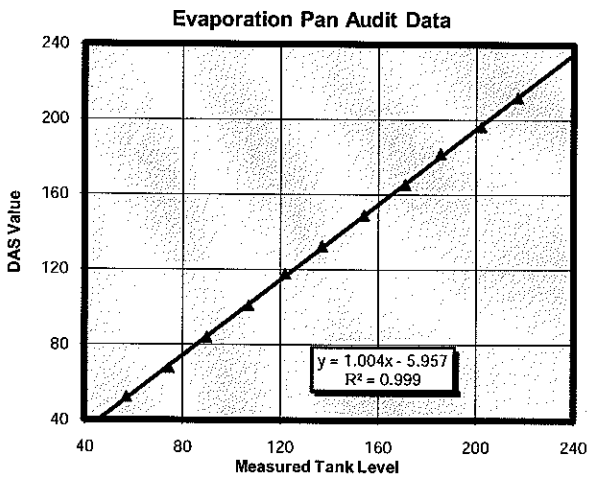
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan Level	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
57.0	52.3	51.0	1.2	2.4%	Pass
74.5	67.7	68.5	-0.8	-1.2%	Pass
90.0	83.7	84.0	-0.3	-0.4%	Pass
107.0	101.0	101.0	-0.1	-0.1%	Pass
122.0	117.5	116.0	1.4	1.2%	Pass
137.0	132.4	131.0	1.3	1.0%	Pass
154.0	148.9	148.0	0.8	0.6%	Pass
171.0	165.3	165.0	0.3	0.2%	Pass
185.5	181.6	179.5	2.1	1.2%	Pass
202.0	196.3	196.0	0.3	0.2%	Pass
217.0	211.6	211.0	0.5	0.2%	Pass
	Max Abs. Error		**2.1**	**2.4%**	**PASS**
	Intercept	**-6.0**	**Slope**	**1.0045**	**PASS**



Time: Begin: 1706 End: 1738

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

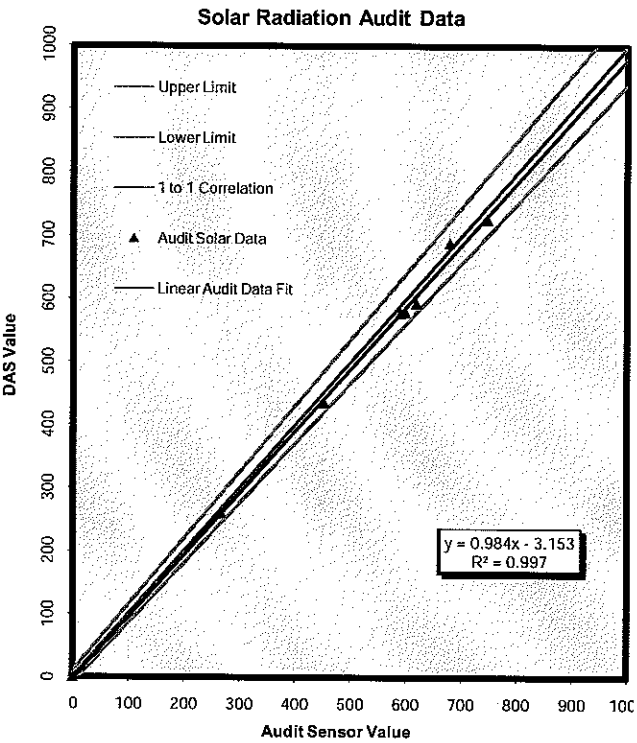
Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jul 12, 2006

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 W/m²
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 W/m²

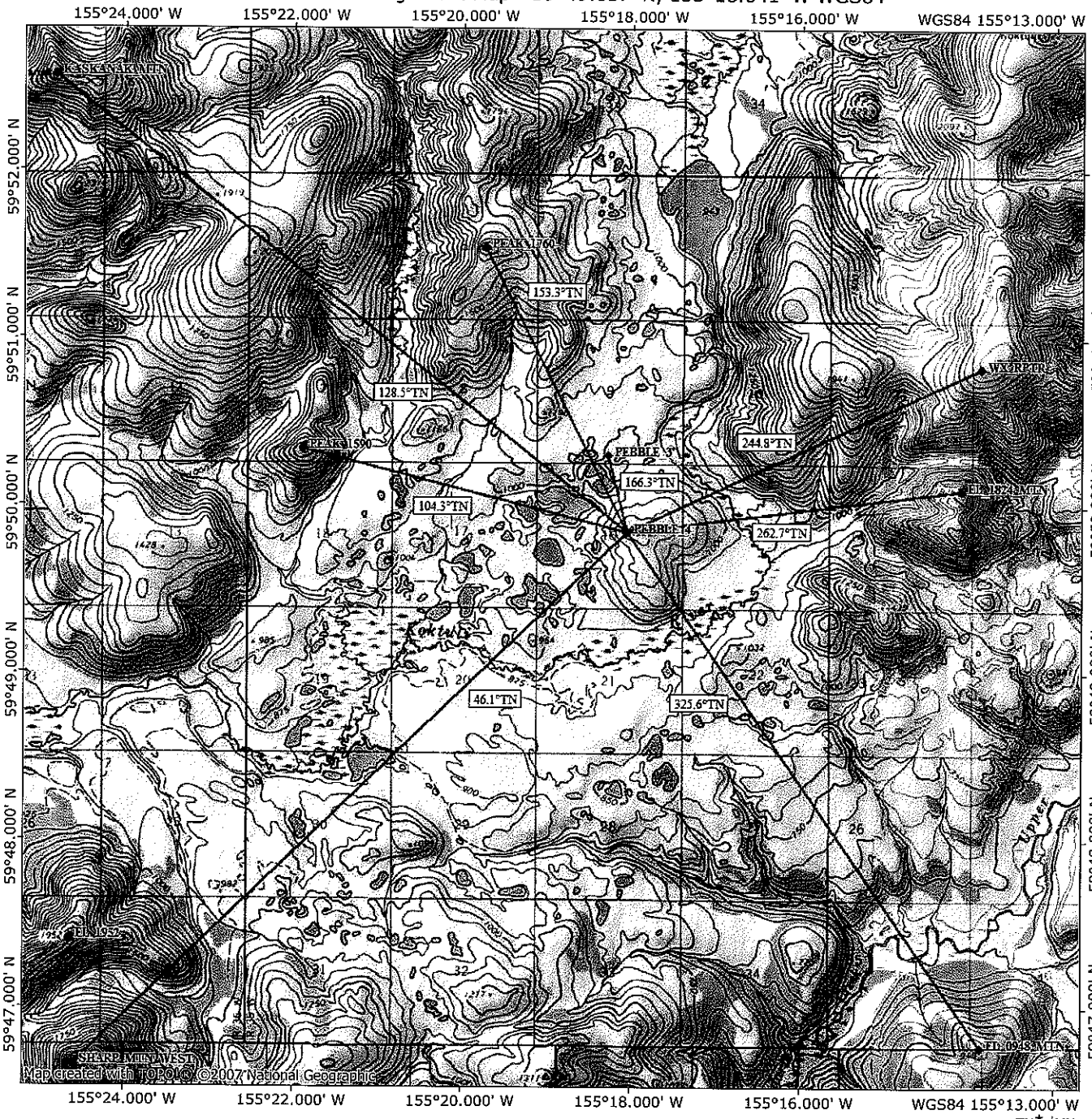
SOLAR RADIATION SENSOR TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1200	677.5	688.9	11.4	±43.9	1.7%	Pass
1300	588.8	577.7	-11.1	±39.4	-1.9%	Pass
1400	746.0	726.0	-20.0	±47.3	-2.7%	Pass
1500	597.9	578.1	-19.8	±39.9	-3.3%	Pass
1600	617.5	593.2	-24.3	±40.9	-3.9%	Pass
1700	451.9	434.9	-17.0	±32.6	-3.8%	Pass
1800	266.5	259.5	-7.0	±23.3	-2.6%	Pass
2400	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	0.9989	Max Abs. Percent Error			3.9%	PASS
R^2 Value	0.9978	Intercept	-3.2	Slope	0.9841	PASS



Begin Date: 07/12/06 **End Date:** 07/12/06

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when $R^2 > 0.995$.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17½°
08/30/06

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate 1750.01

Calibration complies with ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 4000-1338226

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Dominic Shallies, Anchorage, AK 99503 U.S.A. (RMA:933478)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	12/08/06	A5B28010-1
Thermistor Module	A17118	8/12/06	A5819038
Temperature Calibration Bath TC179	A45240		
Temperature Calibration Bath TC191	A42238		
Temperature Probe	157	9/01/06	A5815063
Thermistor Module	A27129	7/05/06	1000189003

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 6/07/06 **Cal Due: 6/07/07**

Test Conditions: 25.5°C 39.0 %RH 1013 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.000	0.072	N	0.000	-0.004	Y	-0.050	0.050	0.013	3.8:1
°C	25.000	25.020	Y	25.000	24.999	Y	24.950	25.050	0.013	3.8:1
°C	60.002	59.999	Y	60.001	59.999	Y	59.951	60.051	0.013	3.8:1
°C	100.002	100.001	Y	100.002	100.004	Y	99.952	100.052	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company © 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 101705-X0740015-RH **RMA #:** 95-49728 **Calibration Date:** Oct-17-2005
Model #: HMI41/HMP45 **Serial #:** X0650080 / X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH Recommended Calibration Due Date: Oct-17-2006

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH, 33%RH and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% and 97% RH points are not ISO17025 Accredited.

Calibration Data (As Found)

Out of Tolerance: NO

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Calibration Data (As Left)

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.35	21.50	0.15	0.20	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
11.13	11.40	0.27	2.00	0.92
32.70	33.10	0.40	2.00	1.01
75.44	75.00	-0.44	2.00	1.02
97.60	97.50	-0.10	3.00	N/A *

Problem Noted: None
Action Taken: No Adjustment Was Necessary

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number 270953-05, dated Oct. 29, 2004. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 1B

Model Number	Serial Number	Calibration Date	Due Date
Power Supply	TW14949	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7405014	Aug. 16, 2005	Aug. 16, 2006
HMK13B	500004	Sep. 2, 2005	Mar. 5, 2006
HMP233	V4210040	Jul. 21, 2005	Oct. 21, 2005

Ambient Conditions

Temperature:	21.50 °C
Humidity:	50.00 %RH

Approved By

Technical Operator
Jari Siltavuo

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052406. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 05/24/06

Lab temperature 72.8 °F
Lab pressure 663.1 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.13	0.13	-0.13
26.11	26.24	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.11	0.11	-0.11

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R Sanders Date: 5-24-06

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 RPM		
	- Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 24 May 2006

Tested By EJ

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 17 November 2005

Tested By EP

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 8884

TRACEABILITY CERTIFICATE NO. 05090203

ISSUED TO: Hoefler Consulting Group

INSTRUMENT: 366-3, .003-.03 Inch Ounces Torque Watch, Waters Manufacturing, Inc, S/N 4864

DATE DONE: September 02, 2005

DATE DUE: September 01, 2006

CERTIFIED BY METROLOGIST: E.P. Young

TEMPERATURE: 72 °F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

PROCEDURE/LIMITATIONS/ACCURACY STATEMENT: T.O. 33k6-4-2630-1. Accuracy: +/- 10 % of Full Scale.

COMPLIANCE

Alaska Calibration, Inc.'s calibration practices and procedures comply with the requirements of ANSI/SO/Z540-1 and ANS/ ISO/IEC17025: 2000 and relevant requirements of ISO 9002: 1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. This Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	33479
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	12/20/2005
Contact:	Chris Lindsey	**PO#:**	Verbal
Dept:		**Page:**	1
Gage:	.06-.60 oz Torque Watch	**Control:**	5042
Mfg:	Honeywell	**Model:**	.06-.60 oz Torque Watch
Location:		**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Cal-Tech Calibration, INC
Original Certificate (attached) # 1768

Reference HPI S/O # 13385

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
:

Last / Next Cal Dates: -->

Gage Status: PASS

Next Callbration Due: 12/20/2006

Certified By: Jorge Ashook Signature: _____

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 21C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994, ISO10012-1, and Houston Precision's Quality manual.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Gary Deterling Lab Manager.
*This Report shall not be reproduced except in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 1768
Instrument Make: Honeywell
Model: .06-.60" oz Torque Watch
S/N: None
ID: 5042

Date: 12-20-05
Temp: 74 Deg f
Humidity: 40%
Rec. In Tol.
Due Date: 12-20-06

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:

Accuracy: +\- 5% of full scale.

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	**1g-100g**	**822/265036-01**	**3-22-06**

Inch Oz. Range	As Found	After Adjust	Final Reading
.06	.05	none	.05
.18	.17	none	.17
.36	.35	none	.35
.48	.47	none	.47
.60	.59	none	.59

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: Hoefler Consulting Group

Address: 3401 Minnesota Drive Ste. 300

City, State, Zip: Anchorage, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 12th Day of July 20 05

DESCRIPTION: Pocket Transit

PURCHASE ORDER: S. Mackay

ORDER NUMBER: 176322

LOT NUMBER: 9680

MODEL NUMBER: 11-F.5008

SERIAL NUMBER: 508079931?

CALIBRATION DATE: 7/12/05

RECALIBRATION DUE DATE: 7/12/06

Signed: Raelene White
QUALITY CONTROL MANAGER

THE EPPLEY LABORATORY, INC.

12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.33 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, AK

Date of Test: October 20, 2005

In Charge of Test: R. T. Eppley

S.O. Number: 60557
Date: January 11, 2006

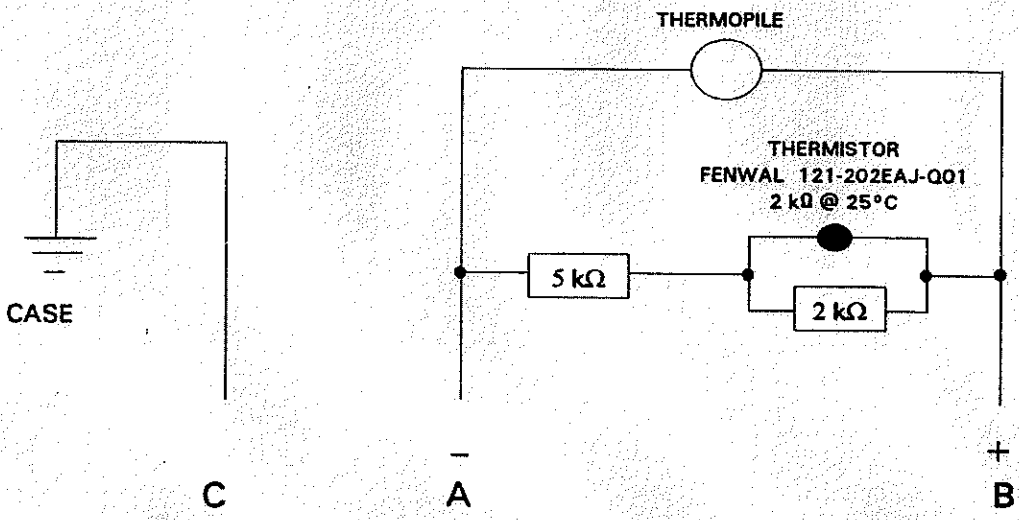
Reviewed by: George E. Kirk

Remarks:

PRECISION SPECTRAL PYRANOMETER
MODEL PSP

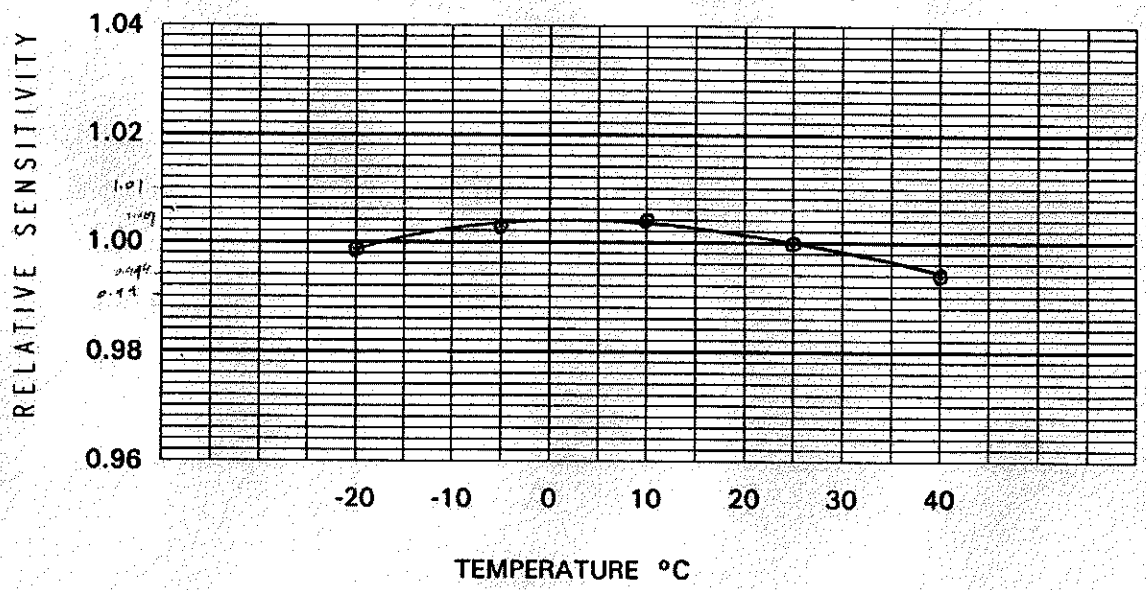
INSTRUMENT SERIAL NUMBER: 34377F3

INTERNAL WIRING



PIN CONNECTIONS ON PLUG

TEMPERATURE DEPENDENCE



EPLAB

TESTED BY: R. Eseman

DATE: Oct 18, 2005

Pebble 4
PSD Meteorological Monitoring Station

January 2007

Quality Assurance Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 4 PSD Meteorological Monitoring Station
January 2007
Quality Assurance Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION **1**

2.0 PERFORMANCE AUDIT **2**

2.1 Performance Audit Methodology **2**

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 6

2.2 Performance Audit Results **7**

2.3 Performance Audit Recommendations **7**

3.0 REFERENCES **9**

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 4 January 18, 2007 Performance Audit Summary 8
Table 2-3 Pebble 4 Oct. 11, 2006 Supplemental Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as a quantitative review of the Pebble 4 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

The performance audit was conducted at the Pebble 4 station on January 18, 2007, with Dominic Shallies of HCG assisting. Supplemental audits of some instruments were performed during October of 2006. On October 11, 2006 the evaporation pan and precipitation gauge were audited prior to winterization. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Table 2-2 contains summary data from the January 2007 audit and Table 2-3 summarizes the supplemental performance audit. Complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 4 January 18, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.29	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.29	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.4	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.040	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.2	Pass
Wind Direction Linearity	≤ 3	Degree	1.0	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.6	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	8.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.9	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.5	Pass
Barometric Pressure	≤ ±3	Mbar	1.3	Pass
Solar Radiation	≤ ±5+Res	% input	-6.8[1]	Pass
Tipping Precipitation	≤ ±10	% input	-8.5	Pass

1. Max % error value of 6.8 within limit of 5% input + resolution, see audit.

Table 2-3 Pebble 4 Oct. 11, 2006 Supplemental Performance Audit Summary

Parameter[1]	Limit	Units	Max Err	Status
Tipping Precipitation	≤ ±10	% input	2.0	Pass
Evaporation	≤ ±10	% input	2.5	Pass

1. Gauges audited prior to winterizing.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 18, 2007

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
11:18:00	11:18:05	**00:05**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E2777 # 2/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E2777 # 1/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1400
End: 1455

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	42.38	42.41	0.03	Pass	42.41	0.03	Pass	0.00	Pass
Warm	15 to 25	24.44	24.43	-0.01	Pass	24.43	-0.01	Pass	0.00	Pass
Ice Bath	0	0.02	0.13	0.11	Pass	0.13	0.11	Pass	0.00	Pass
Cold	-15 to -25	-22.68	-22.47	0.21	Pass	-22.47	0.21	Pass	0.00	Pass
Very Cold	-35 to -45	-34.37	-34.08	0.29	Pass	-34.08	0.29	Pass	0.00	Pass
		Max Abs. Error	0.29	**PASS**			0.29	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45C-L	**S.N.#:**	A4350044	**Range:**	0.8 to 100 % RH
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 % RH
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1238	94.9	-2.7	-3.3	99.6	-2.8	-2.9	0.4	Pass
1317	96.6	-2.7	-3.1	100.0	-2.8	-2.8	0.3	Pass
					Max Abs. Error		0.4	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 18, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4745	**Vane #:**	1452	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**		17.5	E of N

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1300 End: 1303

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	91.5	91.2	-0.3	Pass
Pebble Station 3	166.3	170.4	4.1	Pass
Compass	350.0	351.8	1.8	Pass
Compass	273.5	274.9	1.4	Pass
Compass	170.5	170.5	0.0	Pass
	Max Abs. Error		**4.1**	**PASS**
	Mean Abs. Error		**1.5**	**GOOD**

Time: Begin: 1140 End: 1200

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.0	0.0	Pass
West	270.0	271.6	1.6	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.7	0.7	Pass
North	360.0	0.1	0.1	Pass
West	270.0	272.0	2.0	Pass
South	180.0	179.4	-0.6	Pass
East	90.0	90.3	0.3	Pass
	Max Abs. Error		**2.0**	**PASS**
	Mean Abs. Error		**0.7**	**PASS**

Time: Begin: 1245 End: 1248

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	27.8	-2.2	Pass	330.0	331.6	1.6	Pass
60.0	58.5	-1.5	Pass	355.0	356.9	1.9	Pass
90.0	88.9	-1.1	Pass	30.0	28.1	-1.9	Pass
120.0	121.4	1.4	Pass	60.0	58.6	-1.4	Pass
150.0	150.1	0.1	Pass	90.0	89.2	-0.8	Pass
180.0	179.4	-0.6	Pass	120.0	121.1	1.1	Pass
210.0	209.9	-0.1	Pass	150.0	150.2	0.2	Pass
240.0	240.5	0.5	Pass	180.0	179.5	-0.5	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**2.2**	**PASS**
300.0	301.2	1.2	Pass	**Mean Abs. Error**		**1.0**	**PASS**

Time: Begin: 1250 End: 1254

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.040	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	91.5	91.4	-0.1	Pass
Compass	346.5	348.1	1.6	Pass
Compass	267.5	267.7	0.2	Pass
Compass	172.0	172.2	0.2	Pass
	Max Abs. Error		**1.6**	**PASS**
	Mean Abs. Error		**0.5**	**GOOD**

Time: Begin: 1340 End: 1400

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 18, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Prop #:** 63635 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.5 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1230 End: 1233

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	91.5	91.4	-0.1	Pass
Pebble Station 3	166.3	168.5	2.2	Pass
Compass	350.0	347.8	-2.2	Pass
Compass	273.5	269.6	-3.9	Pass
Compass	170.5	169.6	-0.9	Pass
Time: Begin: 1140	**Max Abs. Error**		**3.9**	**PASS**
End: 1200	**Mean Abs. Error**		**1.9**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.1	-0.9	Pass	150.0	149.8	-0.2	Pass	270.0	268.0	-2.0	Pass
60.0	59.3	-0.7	Pass	180.0	179.2	-0.8	Pass	300.0	297.4	-2.6	Pass
90.0	89.9	-0.1	Pass	210.0	208.7	-1.3	Pass	330.0	327.5	-2.5	Pass
120.0	119.7	-0.3	Pass	240.0	238.4	-1.6	Pass	355.0	352.2	-2.8	Pass
					Time: Begin: 1220			**Max Abs. Error**		**2.8**	**PASS**
					End: 1224			**Mean Abs. Error**		**1.3**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.007	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	8.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	90.5	91.9	1.4	Pass
Compass	346.0	342.5	-3.5	Pass
Compass	269.0	266.0	-3.0	Pass
Compass	161.5	161.7	0.2	Pass
Time: Begin: 1340	**Max Abs. Error**		**3.5**	**PASS**
End: 1400	**Mean Abs. Error**		**2.0**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 18, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1130	28.03	27.91	945.2	946.4	1.3	Pass
1426	28.01	27.89	944.5	945.8	1.3	Pass
			Max Abs. Error		1.3	**PASS**

Audit Inst Cal Data	
Cal. Date: 05/24/06	
Audit Inst	Offset Amount
24.13	-0.13
26.24	-0.13
28.12	-0.12
30.11	-0.11
Intercept	**-0.22**
Slope	**0.0035**

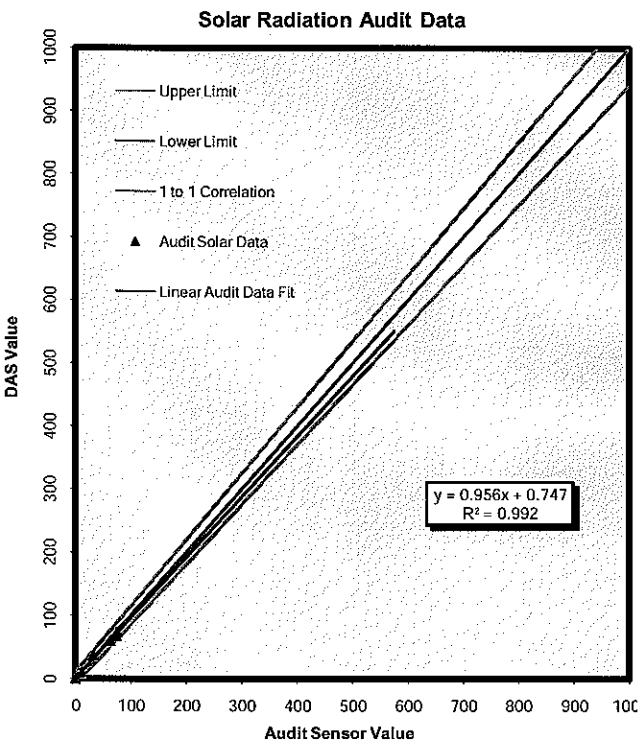
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1450	72.6	67.6	-4.9	±13.6	-6.8%	Pass
1200	31.7	36.4	4.7	±11.6	n/a	Pass
1300	61.9	59.5	-2.4	±13.1	-3.9%	Pass
1400	74.8	72.7	-2.1	±13.7	-2.8%	Pass
1500	74.6	72.6	-2.0	±13.7	-2.7%	Pass
1700	10.8	8.5	-2.3	±10.5	n/a	Pass
1900	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	**0.9962**	**Max Abs. Percent Error**			**6.8%**	**PASS**
R² Value	**0.9924**	**Intercept**	**0.7**	**Slope**	**0.9564**	**PASS**



Begin Date: 01/18/07 **End Date:** 01/18/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Jan 18, 2007

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1105	800	24.7	0.0		23.8	1200	23.8	-3.6%	Pass	
1220	800	24.7	0.0		22.6	1300	22.6	-8.5%	Pass	
1420	650	20.0	0.0		20.0	1500	20.0	0.0%	Pass	
						Max Abs. Error		**8.5%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Snowfall adapter on.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Oct 11, 2006

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
1430	800	24.7	0.0	23.2	1.2	1505	24.4	-1.2%	Pass	w/o snofall adapter
1510	800	24.7	1.2	0.0	26.4	1600	25.2	2.0%	Pass	w/o snofall adapter
1615	800	24.7	6.4	30.8	0.6	1710	25.0	1.2%	Pass	w/ snofall adapter
						Max Abs. Error		**2.0%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

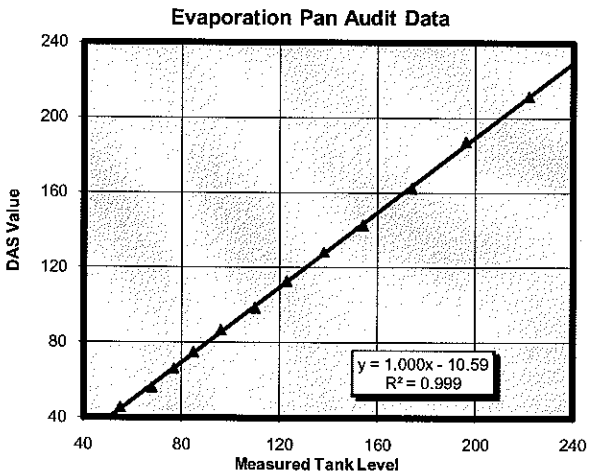
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

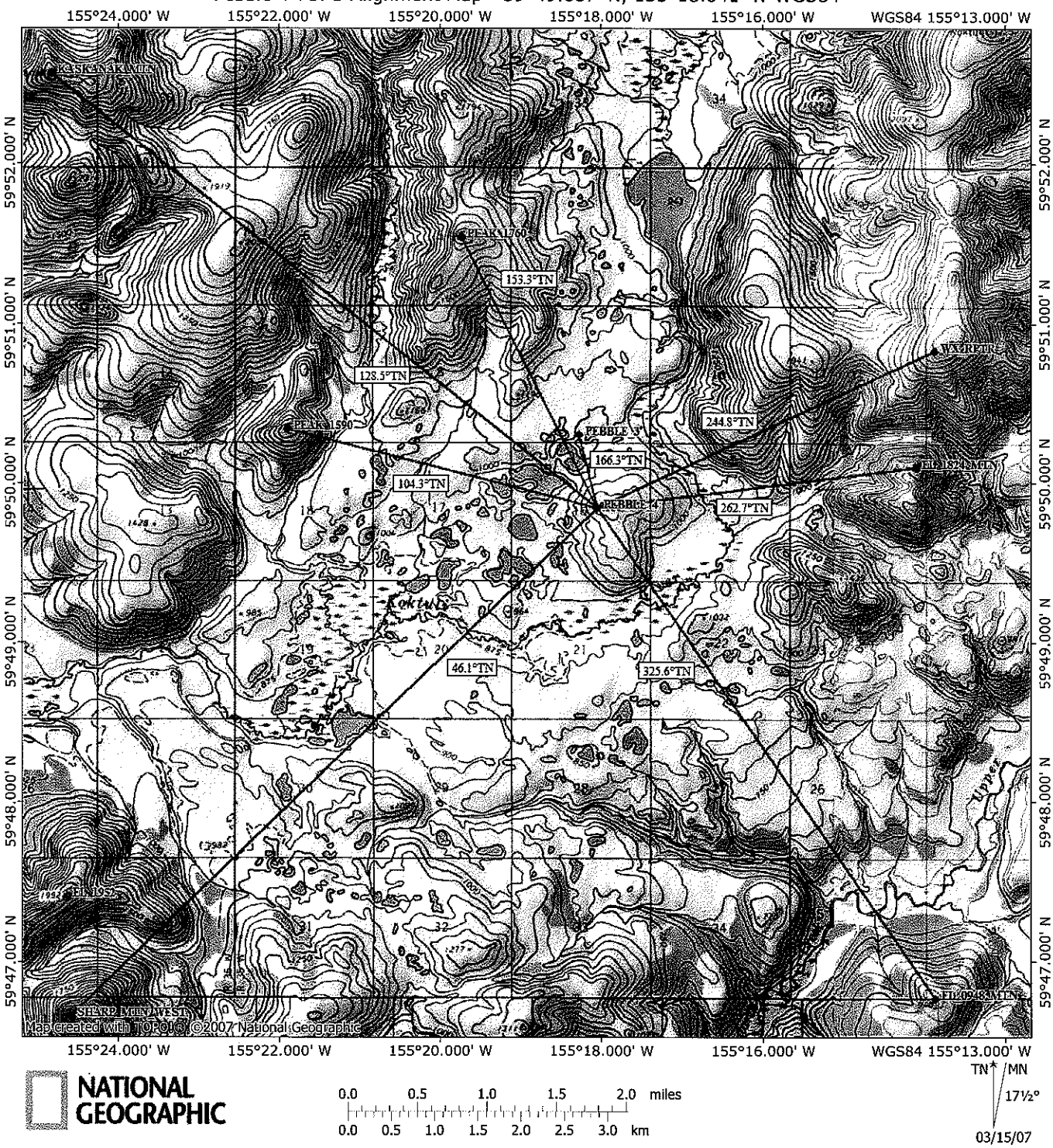
EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	222.0	211.4	211.4	0.0	0.0%	Pass
	196.0	187.0	185.4	1.6	0.9%	Pass
	174.0	162.2	163.4	-1.2	-0.7%	Pass
	154.0	142.5	143.4	-0.9	-0.6%	Pass
	138.0	128.4	127.4	1.0	0.8%	Pass
	123.0	112.5	112.4	0.1	0.1%	Pass
	110.0	98.2	99.4	-1.2	-1.2%	Pass
	96.0	86.8	85.4	1.4	1.6%	Pass
	85.0	74.6	74.4	0.2	0.3%	Pass
	77.0	66.2	66.4	-0.3	-0.4%	Pass
	68.0	56.2	57.4	-1.2	-2.1%	Pass
	55.0	45.5	44.4	1.1	2.5%	Pass
		Max Abs. Error		**1.6**	**2.5%**	**PASS**
		Intercept	**-10.6**	**Slope**	**1.0005**	**PASS**



Time: Begin: 1445 End: 1530

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.


Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84
155°24.000' W
155°22.000' W
155°20.000' W
155°18.000' W
155°16.000' W
WGS84 155°13.000' W
59°52.000' N
59°51.000' N
59°50.000' N
59°49.000' N
59°48.000' N
59°47.000' N
PEAK 1760
153.3°TN
128.5°TN
PEAK 1590
PEBBLE 3
244.8°TN
166.3°TN
104.3°TN
PEBBLE 4
262.7°TN
WX2RFTR
EL 1524 MTN
46.1°TN
325.6°TN
EL 1952
EL 0948 MTN
Map created with TOPO! ©2007 National Geographic
NATIONAL GEOGRAPHIC
0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km
TN MN
17½°
03/15/07

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Certificate 1750.01

Calibration complies with ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 4000-1338226

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Dominic Shallies, Anchorage, AK 99503 U.S.A. (RMA:933478)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Probe	128	12/08/06	A5B28010-1
Thermistor Module	A17118	8/12/06	A5819038
Temperature Calibration Bath TC179	A45240		
Temperature Calibration Bath TC191	A42238		
Temperature Probe	157	9/01/06	A5815063
Thermistor Module	A27129	7/05/06	1000189003

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 6/07/06 **Cal Due: 6/07/07**

Test Conditions: 25.5°C 39.0 %RH 1013 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.000	0.072	N	0.000	-0.004	Y	-0.050	0.050	0.013	3.8:1
°C	25.000	25.020	Y	25.000	24.999	Y	24.950	25.050	0.013	3.8:1
°C	60.002	59.999	Y	60.001	59.999	Y	59.951	60.051	0.013	3.8:1
°C	100.002	100.001	Y	100.002	100.004	Y	99.952	100.052	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

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VAISALA Certificate of Calibration

Report #: 112006-X0740015-RH **RMA #:** 95-56707 **Calibration Date:** Nov-20-2006
Model #: HMI41/HMP45 **Serial #:** X0650080/X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%RH, -20 to 60°C, Temp. Recommended Calibration Due Date: Nov-20-2007

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK USA

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% RH against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11% and 97%* RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U S Guide to the Expression of Uncertainty in Measurement *Note: the 0% and 97% RH points are not ISO17025 Accredited

Calibration Data (As Found)

Out of Tolerance: NO

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.12	21.20	0.08	0.21	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.30	-0.33	2.00	0.50 *
11.55	11.30	-0.25	2.00	0.92
75.10	74.60	-0.50	2.00	1.02
97.60	96.40	-1.20	3.00	1.50 *

Calibration Data (As Left)

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.57	21.60	0.03	0.21	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.43	11.60	0.17	2.00	0.92
75.10	75.10	0.00	2.00	1.02
97.60	96.70	-0.90	3.00	1.50 *

Problem Noted: None
Action Taken: The Unit Was Calibrated

The results of this calibration are related only to the items being calibrated, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN 274176, dated Oct. 2006. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994 This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 3A

Model Number	Serial Number	Calibration Date	Due Date
Power Supply	21609085	Nov. 24, 2004	Nov. 24, 2006
Fluke 45	7781003	Jan. 12, 2006	Jan. 12, 2007
HMK13B	V324	Oct. 13, 2006	Apr. 13, 2007
HMP233	671210	Nov. 10, 2006	Feb. 10, 2007
HMT333	B0920004	Sep. 27, 2006	Dec. 27, 2006
HMI41/HMP45	S1130071	Sep. 1, 2006	Dec. 1, 2006

Ambient Conditions

Temperature:	21.80 °C
Humidity:	49.10 %RH

Approved By

Technical Operator
Johnson François

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18811	Serial Number:	CA02136
Description:	Anemometer Drive - 20 to 990 RPM - Comprised of Models 18820A Control Unit & 18831A Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 24 May 2006

Tested By EP

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EK

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "In" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sean

Accuracy: +\- .1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE # 300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079319

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 052406. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 05/24/06 Lab temperature 72.8 °F
Lab pressure 663.1 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.13	0.13	-0.13
26.11	26.24	0.13	-0.13
28.00	28.12	0.12	-0.12
30.00	30.11	0.11	-0.11

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ **NO** ☒
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R Sanders Date: 5-24-06

Roger L. Sanders, PE

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Sheridan, Wyoming 82801 USA
(307) 672-7790
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THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppley

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble 4
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

Pebble Project
NORTHERN DYNASTY MINES INC.

for the

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 4 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 14

LIST of FIGURES and TABLES

Figure 2-1 Pebble 4 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 4 September 5-6, 2007 Performance Audit Summary (CR10X) 12
Table 3-3 Pebble 4 September 6-7, 2007 Performance Audit Summary (CR1000) 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 4 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

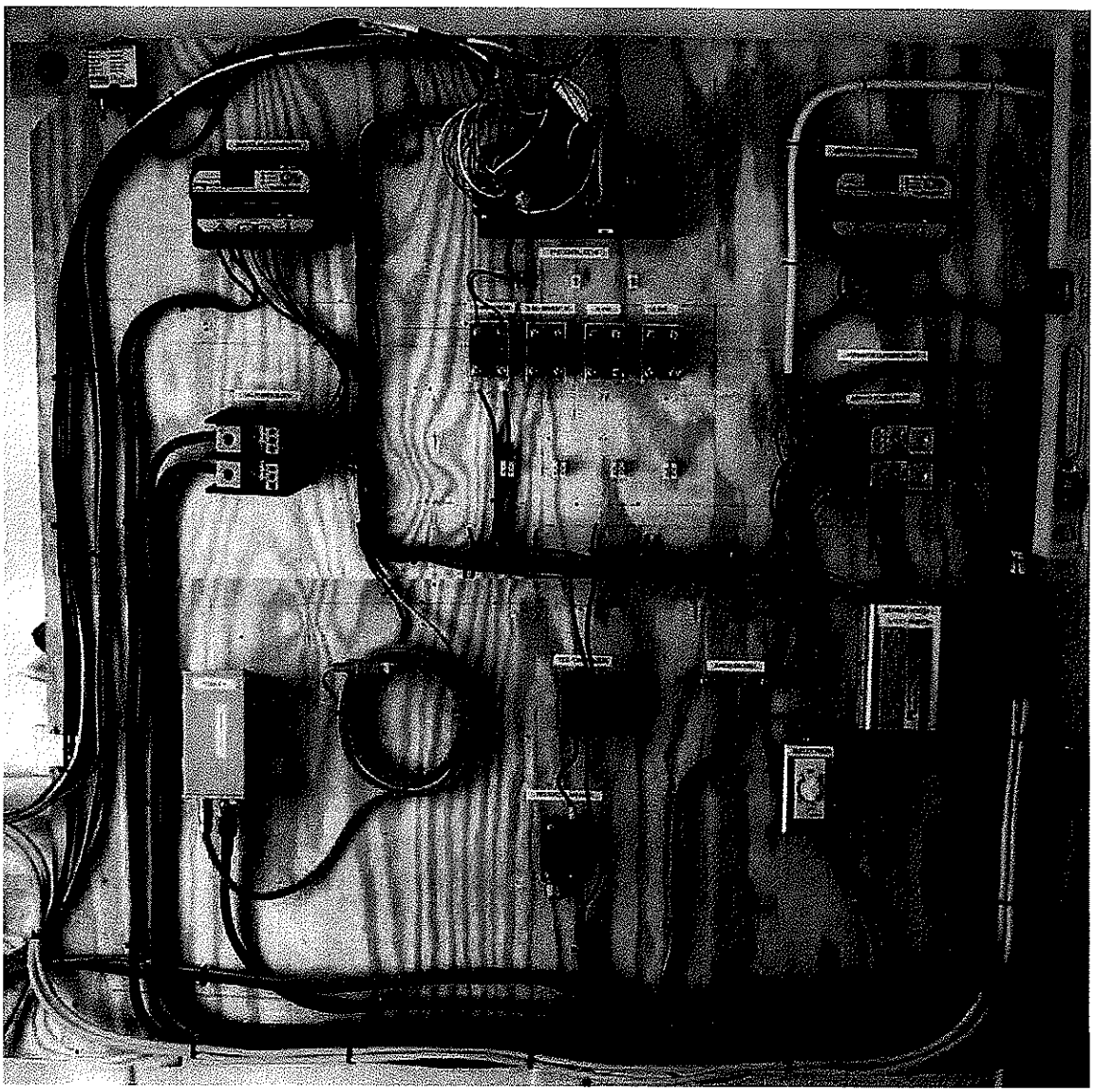
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 4 station was conducted in early September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 4 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6' by 8' deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6' high fence and all instrumentation wires from the tower, precipitation gauge and evaporation gauge are protected in conduit These conduits all converge at a 5' by 7'

insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 4 Station DAS Wiring Panel



The Campbell Scientific CR10X/CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater

radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 4 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates

a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 4 station is a well designed and operated meteorological monitoring station. During the recent audit the operator upgraded the data acquisition system and added current shunts to the system in order to remotely monitor the aspirator fans. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 4 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed + **EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audits were conducted at the Pebble 4 station from September 5-7, 2007, with Dominic Shallies of HCG assisting. The station was audited as found on September 5-6, 2007. After the initial audit the datalogger was upgraded from a Campbell Scientific CR10X to a CR1000 and the RM Young and Climatronics wind direction sensors were replaced. After these modifications the station was re-audited on September 6-7, 2007. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Tables 3-2 and 3-3, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 4 September 5-6, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:24	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.12	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.12	Pass
Air Temperature Difference	≤ ±0.1	°C	0.05	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.4	Pass
Wind Direction Linearity	≤ 3	Degree	1.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[1]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.008	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.5	Pass
Wind Direction Linearity	≤ 3	Degree	1.5	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[1]	N/A
Barometric Pressure	≤ ±3	Mbar	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-10.0[2]	Pass
Tipping Precipitation	≤ ±10	% input	-4.0	Pass
Evaporation	≤ ±10	% input	2.0	Pass

1. Not re-tested until after DAS/sensor change.
2. Max % error value of 10.0 within limit of 5% input + resolution, see audit.

Table 3-3 Pebble 4 September 6-7, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:22	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
Air Temperature Difference	≤ ±0.1	°C	0.03	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.7	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-4.3	Pass
Barometric Pressure	≤ ±3	Mbar	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-8.1[2]	Pass
Tipping Precipitation	≤ ±10	% input	3.0	Pass
Evaporation	≤ ±10	% input	2.4	Pass

1. New DAS/sensor, no as-found value.
2. Max % error value of 8.1 within limit of 5% input + resolution, see audit.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 4 station is located on the crest of a knoll approximately 5 miles south of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

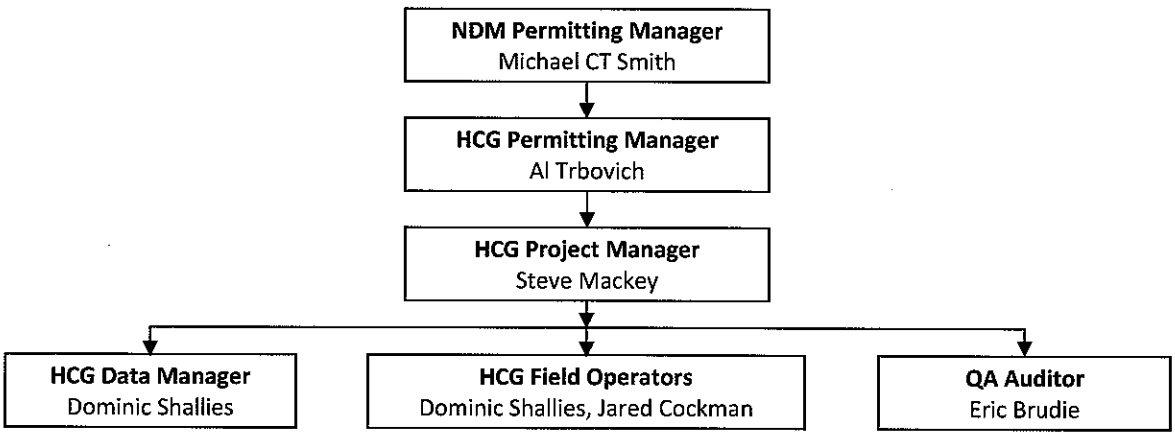
Indicated by Operator	Determined by Auditor
59° 50' N	59° 49.837 N
155° 18' W	155° 18.041'
Elevation: 1,200 feet	Elevation: 1,190 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
Old DAS[1]	Campbell Scientific	CR10X	X45838
Old DAS Wiring Panel	Campbell Scientific	CR10X	35367
New DAS[2]	Campbell Scientific	CR1000	Unknown
New DAS Wiring Panel	Campbell Scientific	CR1000	8248
Temperature (2-meter)	Met One	062MP	E2777, ID #2/2
Temperature (10-meter)	Met One	062MP	E2777, ID #1/2
Temperature Aspirators	Met One	076B-4	F5259 & F5260
Relative Humidity	Vaisala	HMP45AC	A4350044
Primary Wind Speed	Climatronics	F460-100075	5081
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2299
Old Primary Wind Direction	Climatronics	F460-100076	4745
New Primary Wind Direction	Climatronics	F460-100076	4662
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1452
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Old Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	71368
New Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	77028
Backup Wind Spd Prop	RM Young	08254	63635
Barometric Pressure	Vaisala	PTB101B	B0440012
Solar Radiation	LI-COR	Li-200SX	PY52709
Precipitation-Tipping	Met-One	370	A6431
Precip. Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	687
Evaporation Pan	NovaLynx	255-200	None

1. DAS and some sensors replaced after initial audit on Sep 6, 2007.
2. New DAS and sensors audited on Sep 6-7, 2007.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)? ■ Yes □ No Comments: None.

Are the sensors located at least 30 meters from large paved areas? ■ Yes □ No Comments: None.

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Alter type shield surrounds Met-One gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: The lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Sep 6-7, 2007
Witnesses: Dominic Shallies | Auditor: Eric Brudie

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

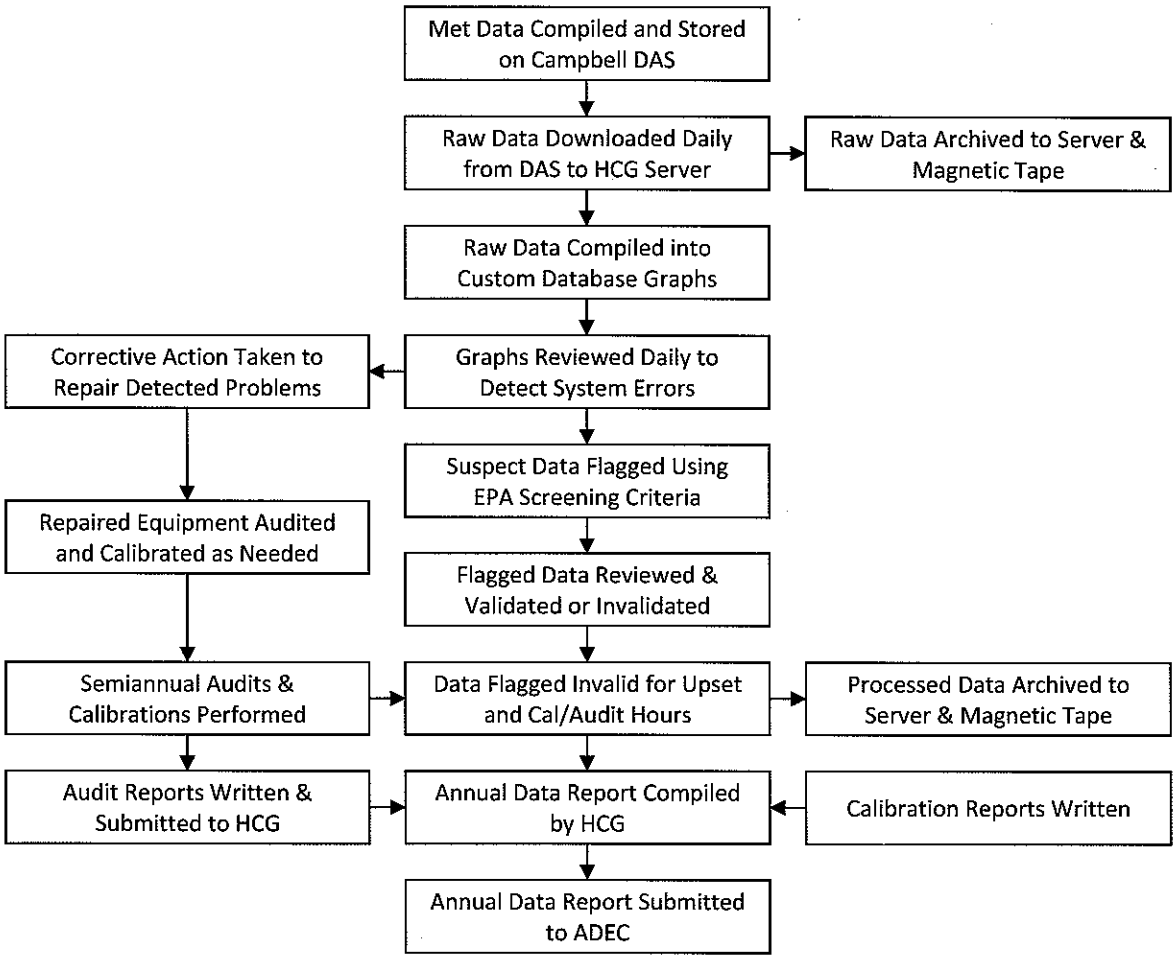
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: CR10X audit. Most audits on 9/6/07, only solar started on 9/5/07.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
9:43:00	9:42:36	**-00:24**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 2/2 **Range:** -50 to 50 °C
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 1/2 **Range:** -50 to 50 °C
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 °C
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1155
End: 1215

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	40.00	40.12	0.12	Pass	40.12	0.12	Pass	0.00	Pass
Warm	15 to 25	13.58	13.63	0.05	Pass	13.63	0.05	Pass	0.00	Pass
Ice Bath	0	-0.01	-0.03	-0.02	Pass	-0.03	-0.02	Pass	0.00	Pass
Cold	-15 to -25	-10.02	-9.98	0.04	Pass	-9.98	0.04	Pass	0.00	Pass
Very Cold	-35 to -45	-29.62	-29.55	0.07	Pass	-29.50	0.12	Pass	0.05	Pass
		Max Abs. Error		0.12	**PASS**		0.12	**PASS**	0.05	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
907	94.8	8.1	7.3	98.9	8.3	8.1	0.8	Pass
1042	93.5	8.7	7.7	95.2	8.9	8.2	0.5	Pass
1112	93.3	8.8	7.2	94.0	9.1	8.2	1.0	Pass
					Max Abs. Error		1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:** 2299	**Range:** 0-60	m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4745	**Vane #:** 1452	**Range:** 0-360	Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674			
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:** Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3	E of N

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1142 End: 1145

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble Station 3	166.3	170.6	4.3	Pass
Peak 1590	104.4	108.4	4.0	Pass
Hill 0948	325.6	327.1	1.5	Pass
Compass	272.5	274.0	1.5	Pass
	Max Abs. Error		**4.3**	**PASS**
	Mean Abs. Error		**2.8**	**GOOD**

Time: Begin: 1000 End: 1025

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	181.0	1.0	Pass
West	270.0	272.8	2.8	Pass
North	360.0	0.0	0.0	Pass
East	90.0	90.1	0.1	Pass
North	360.0	3.2	3.2	Pass
West	270.0	273.1	3.1	Pass
South	180.0	180.4	0.4	Pass
East	90.0	89.2	-0.8	Pass
	Max Abs. Error		**3.2**	**PASS**
	Mean Abs. Error		**1.4**	**PASS**

Time: Begin: 1125 End: 1129

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	27.6	-2.4	Pass	330.0	331.6	1.6	Pass
60.0	57.8	-2.2	Pass	355.0	356.2	1.2	Pass
90.0	88.3	-1.7	Pass	30.0	28.4	-1.6	Pass
120.0	119.7	-0.3	Pass	60.0	58.2	-1.8	Pass
150.0	149.2	-0.8	Pass	90.0	88.7	-1.3	Pass
180.0	178.7	-1.3	Pass	120.0	120.0	0.0	Pass
210.0	209.6	-0.4	Pass	150.0	149.3	-0.7	Pass
240.0	240.2	0.2	Pass	180.0	179.2	-0.8	Pass
270.0	270.8	0.8	Pass	**Max Abs. Error**		**2.4**	**PASS**
300.0	301.3	1.3	Pass	**Mean Abs. Error**		**1.1**	**PASS**

Time: Begin: 1136 End: 1140

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.060	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Prop #:** 63635 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.3 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1105 End: 1113

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble Station 3	166.3	168.9	2.6	Pass
Peak 1590	104.4	107.3	2.9	Pass
Hill 0948	325.6	330.1	4.5	Pass
Compass	272.5	269.3	-3.2	Pass
	Max Abs. Error		**4.5**	**PASS**
	Mean Abs. Error		**3.3**	**ALERT**

Time: Begin: 1000 End: 1025

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.9	0.9	Pass	150.0	149.5	-0.5	Pass	270.0	267.6	-2.4	Pass
60.0	60.2	0.2	Pass	180.0	180.0	0.0	Pass	300.0	296.9	-3.1	Pass
90.0	90.6	0.6	Pass	210.0	208.9	-1.1	Pass	330.0	326.5	-3.5	Pass
120.0	119.7	-0.3	Pass	240.0	238.0	-2.0	Pass	355.0	351.5	-3.5	Pass
								Max Abs. Error		**3.5**	**PASS**
								Mean Abs. Error		**1.5**	**PASS**

Time: Begin: 1055 End: 1100

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.008	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	10.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
905	28.64	28.54	966.6	968.4	1.8	Pass
			Max Abs. Error		1.8	PASS

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

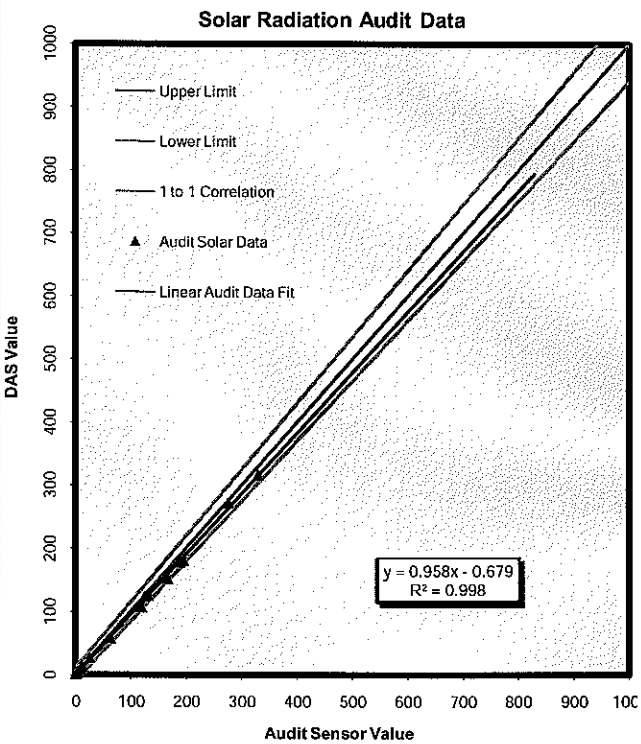
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1458	275.4	272.0	-3.4	±23.8	-1.2%	Pass
850	131.2	125.3	-5.9	±16.6	-4.5%	Pass
1137	194.4	180.8	-13.6	±19.7	-7.0%	Pass
1217	328.3	315.9	-12.4	±26.4	-3.8%	Pass
1600	124.4	123.1	-1.3	±16.2	-1.0%	Pass
1700	9.6	10.8	1.3	±10.5	n/a	Pass
1800	10.0	9.7	-0.3	±10.5	n/a	Pass
1900	12.3	12.2	-0.1	±10.6	n/a	Pass
2000	6.1	6.2	0.1	±10.3	n/a	Pass
2100	0.5	0.3	-0.1	±10.0	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
600	0.0	0.0	0.0	±10.0	n/a	Pass
700	3.0	2.7	-0.3	±10.1	n/a	Pass
800	26.4	25.9	-0.5	±11.3	n/a	Pass
900	63.4	57.5	-5.9	±13.2	-9.3%	Pass
1000	119.0	107.1	-11.9	±16.0	-10.0%	Pass
1100	166.2	151.4	-14.8	±18.3	-8.9%	Pass
1200	188.5	177.3	-11.2	±19.4	-5.9%	Pass
Corr. Val	**0.9993**	**Max Abs. Percent Error**			**10.0%**	**PASS**
R² Value	**0.9986**	**Intercept**	**-0.7**	**Slope**	**0.9589**	**PASS**



Begin Date: 09/05/07 **End Date:** 09/06/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
817	650	20.0	0.0		19.2	900	19.2	-4.0%	Pass	
901	650	20.0	0.0		19.6	1000	19.6	-2.0%	Pass	
1003	650	20.0	0.0		19.4	1100	19.4	-3.0%	Pass	
1110	650	20.0	0.0		20.0	1200	20.0	0.0%	Pass	
						Max Abs. Error		**4.0%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Snowfall adapter off.

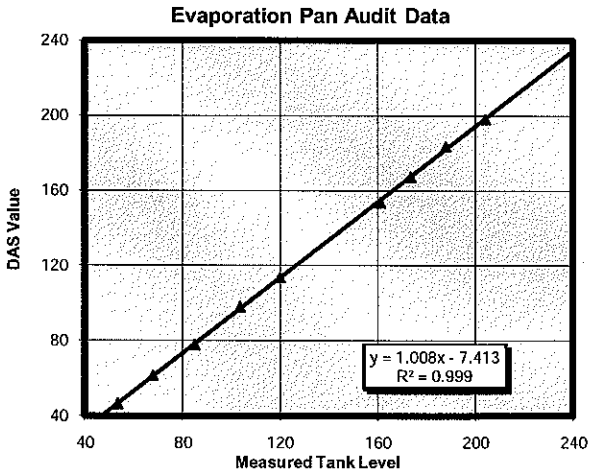
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	120.0	113.9	112.6	1.3	1.2%	Pass
	103.5	98.0	96.1	1.9	2.0%	Pass
	85.0	77.6	77.6	0.0	0.0%	Pass
	68.0	61.6	60.6	1.0	1.7%	Pass
	53.5	46.3	46.1	0.2	0.5%	Pass
	161.0	153.4	153.6	-0.2	-0.1%	Pass
	173.5	167.1	166.1	1.0	0.6%	Pass
	188.0	183.7	180.6	3.1	1.7%	Pass
	204.0	198.2	196.6	1.6	0.8%	Pass
		Max Abs. Error		**3.1**	**2.0%**	**PASS**
		Intercept	**-7.4**	**Slope**	**1.0087**	**PASS**



Time: Begin: 1030 End: 1115

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: CR1000 audit.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:36:30	16:36:08	**-00:22**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E2777 # 2/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E2777 # 1/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1520
End: 1535

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	42.08	42.25	0.17	Pass	42.25	0.17	Pass	0.00	Pass
Warm	15 to 25	20.01	20.05	0.04	Pass	20.05	0.04	Pass	0.00	Pass
Ice Bath	0	-0.05	0.10	0.15	Pass	0.10	0.15	Pass	0.00	Pass
Cold	-15 to -25	-9.90	-9.95	-0.05	Pass	-9.95	-0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-23.87	-23.76	0.11	Pass	-23.73	0.14	Pass	0.03	Pass
		Max Abs. Error	0.17	**PASS**		0.17	**PASS**	0.03	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45C-L	**S.N.#:**	A4350044	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST									
Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
09/06/07	1530	66.1	10.5	4.5	68.7	10.6	5.1	0.6	Pass
09/07/07	1330	93.0	8.3	7.3	92.3	8.6	7.4	0.1	Pass
						Max Abs. Error		0.6	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b + Ta) + \ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4662	**Vane #:**	1452	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319		**Magnetic Declin:**	17.3	**E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1617 End: 1620

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.5	0.5	Pass
West	270.0	272.6	2.6	Pass
North	360.0	0.7	0.7	Pass
East	90.0	92.3	2.3	Pass
North	360.0	0.9	0.9	Pass
West	270.0	272.4	2.4	Pass
South	180.0	180.8	0.8	Pass
East	90.0	92.6	2.6	Pass
	Max Abs. Error		**2.6**	**PASS**
	Mean Abs. Error		**1.6**	**PASS**

Time: Begin: 1633 End: 1640

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.8	-0.2	Pass	330.0	331.7	1.7	Pass
60.0	59.3	-0.7	Pass	355.0	356.2	1.2	Pass
90.0	91.0	1.0	Pass	30.0	29.2	-0.8	Pass
120.0	121.1	1.1	Pass	60.0	60.8	0.8	Pass
150.0	150.2	0.2	Pass	90.0	91.0	1.0	Pass
180.0	180.3	0.3	Pass	120.0	121.5	1.5	Pass
210.0	210.1	0.1	Pass	150.0	150.4	0.4	Pass
240.0	240.2	0.2	Pass	180.0	179.1	-0.9	Pass
270.0	270.8	0.8	Pass	**Max Abs. Error**		**1.7**	**PASS**
300.0	300.8	0.8	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1621 End: 1623

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
West Sharp Mtn	46.1	45.7	-0.4	Pass
Peak 1590	104.4	105.1	0.7	Pass
Peak 1760	153.4	152.9	-0.5	Pass
Hill 0948	325.6	326.7	1.1	Pass
Compass	273.0	269.7	-3.3	Pass
Peak 1824	262.7	261.8	-0.9	Pass
Time: Begin: 1700	**Max Abs. Error**		**3.3**	**PASS**
End: 1735	**Mean Abs. Error**		**1.1**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: New wind direction instrument SN 4662 replaced SN 4745.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 77028 **Prop #:** 63635 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.3 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1515 End: 1520

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:		**Max Abs. Error**		
End:		**Mean Abs. Error**		

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	32.1	2.1	Pass	150.0	149.6	-0.4	Pass	270.0	270.6	0.6	Pass
60.0	61.2	1.2	Pass	180.0	180.1	0.1	Pass	300.0	301.0	1.0	Pass
90.0	90.5	0.5	Pass	210.0	210.0	0.0	Pass	330.0	331.1	1.1	Pass
120.0	120.2	0.2	Pass	240.0	240.1	0.1	Pass	355.0	354.5	-0.5	Pass
					Time:	Begin: 1600		**Max Abs. Error**		**2.1**	**PASS**
						End: 1618		**Mean Abs. Error**		**0.7**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.007	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	7.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
West Sharp Mtn	46.1	47.0	0.9	Pass
Peak 1590	104.4	104.3	-0.1	Pass
Peak 1760	153.4	151.4	-2.0	Pass
Hill 0948	325.6	324.3	-1.3	Pass
Compass	273.0	268.7	-4.3	Pass
Peak 1824	262.7	261.7	-1.0	Pass
Time: Begin: 1700	**Max Abs. Error**		**4.3**	**PASS**
End: 1735	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: New sensor SN 77028 replaced sensor SN 71368.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1724	28.66	28.56	967.3	969.1	1.8	Pass
			Max Abs. Error		1.8	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

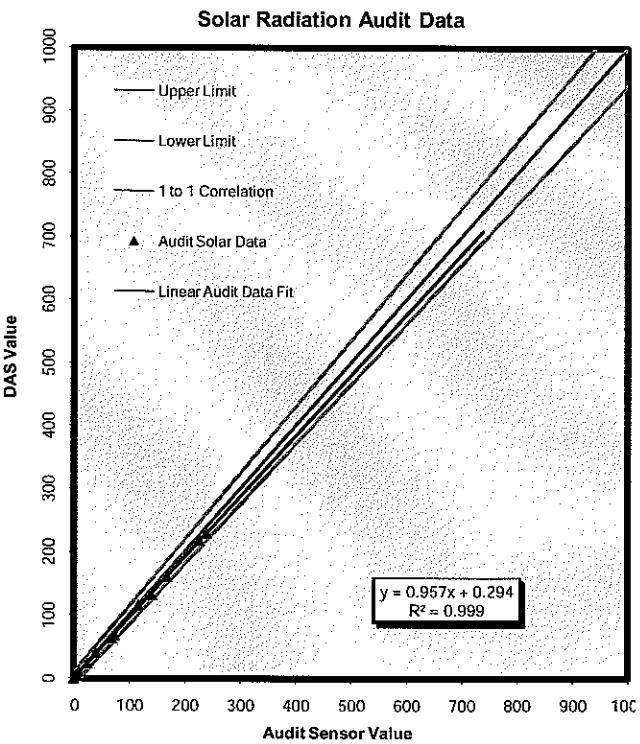
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1535	238.7	229.7	-9.0	±21.9	-3.8%	Pass
1555	225.9	217.6	-8.3	±21.3	-3.7%	Pass
1620	168.0	160.3	-7.7	±18.4	-4.6%	Pass
1700	140.5	131.3	-9.2	±17.0	-6.5%	Pass
1800	73.3	68.2	-5.1	±13.7	-6.9%	Pass
1900	23.3	23.3	0.0	±11.2	n/a	Pass
2000	8.7	9.7	1.0	±10.4	n/a	Pass
2100	0.0	0.2	0.2	±10.0	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
600	0.0	0.0	0.0	±10.0	n/a	Pass
700	4.4	4.2	-0.2	±10.2	n/a	Pass
800	38.5	40.5	2.0	±11.9	n/a	Pass
900	116.2	115.0	-1.2	±15.8	-1.0%	Pass
1000	68.4	62.9	-5.5	±13.4	-8.1%	Pass
Corr. Val	**0.9997**	**Max Abs. Percent Error**			**8.1%**	**PASS**
R² Value	**0.9994**	**Intercept**	**0.3**	**Slope**	**0.9574**	**PASS**



Begin Date: 09/06/07 **End Date:** 09/07/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/06/07	1625	650	20.0	0.0		20.6	1700	20.6	3.0%	Pass	
09/07/07	940	650	20.0	0.0	19.2	1.4	1100	20.6	3.0%	Pass	
							Max Abs. Error	**3.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Snowfall adapter off.

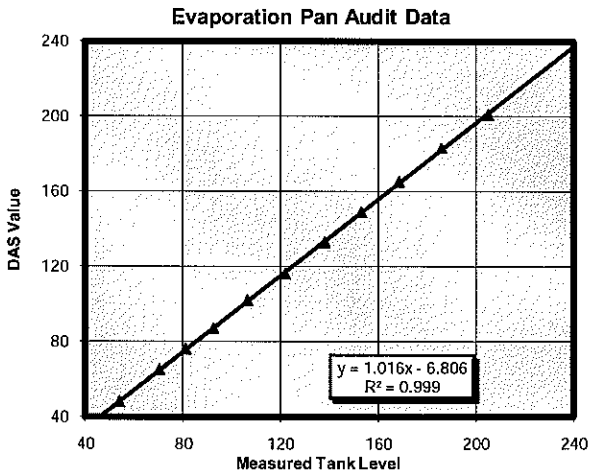
• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

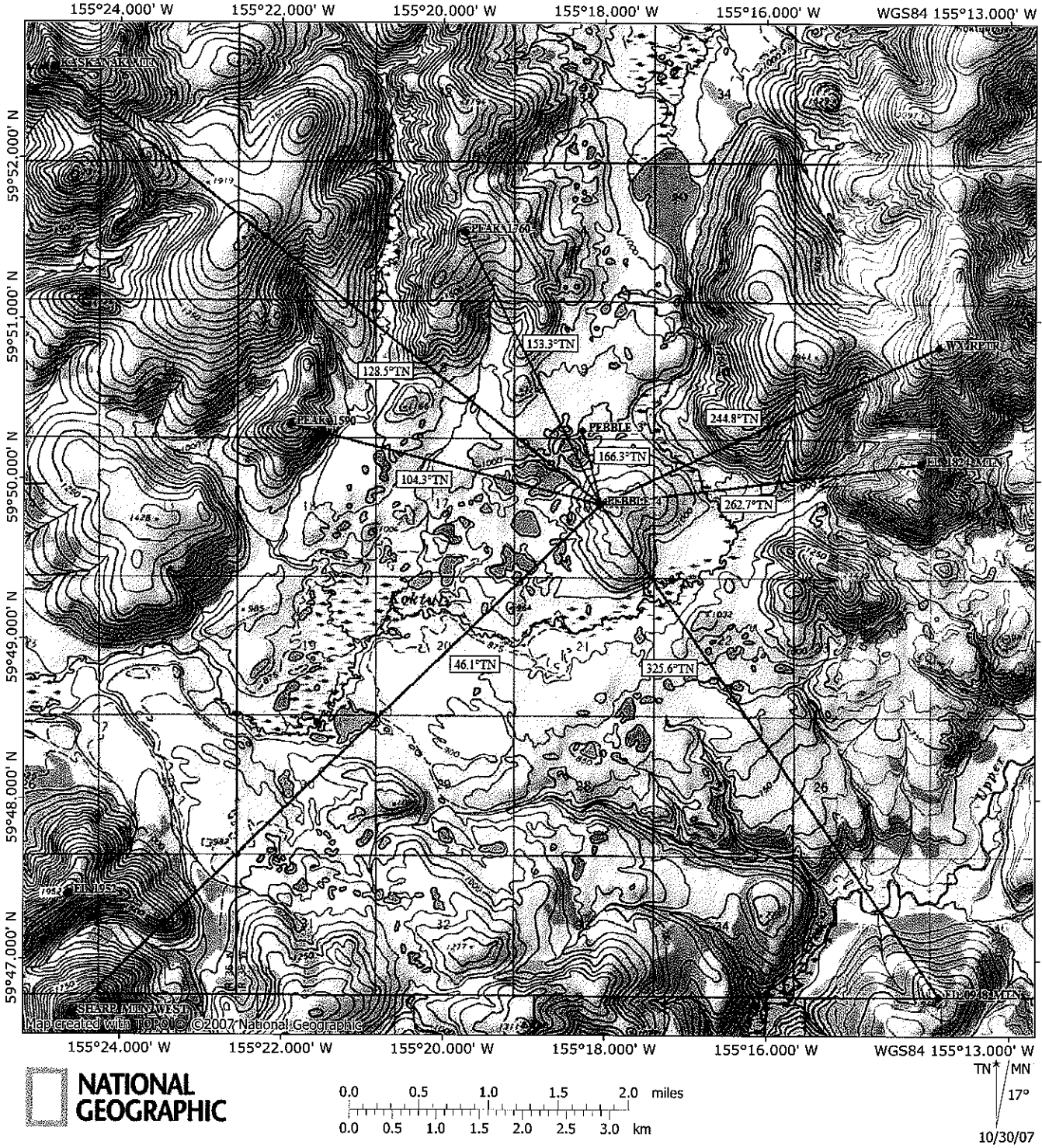
Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	205.0	200.9	198.2	2.7	1.4%	Pass
	186.0	183.3	179.2	4.1	2.3%	Pass
	168.5	165.1	161.7	3.4	2.1%	Pass
	153.0	149.0	146.2	2.8	1.9%	Pass
	138.0	132.8	131.2	1.6	1.2%	Pass
	122.0	116.1	115.2	0.9	0.8%	Pass
	106.5	101.8	99.7	2.1	2.1%	Pass
	92.5	87.0	85.7	1.3	1.5%	Pass
	81.0	76.0	74.2	1.8	2.4%	Pass
	70.5	65.2	63.7	1.5	2.4%	Pass
	54.0	48.0	47.2	0.8	1.7%	Pass
		Max Abs. Error		**4.1**	**2.4%**	**PASS**
		Intercept	**-6.8**	**Slope**	**1.0168**	**PASS**



Date: 09/07/07 **Time:** Begin: 1030 End: 1115

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Windy.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Blade unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07.	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**
Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%, RH Recommended Calibration Due Date: Jun-04-2008
Instrument Range: -20 to +60 °C, T

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C

Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07

Humidity Calibration, %RH

Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A

Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions

Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EJ

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM - Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EP

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "In" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE # 300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079931 9

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07

Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date: 10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments for Precision Measurements Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble 4
PSD Meteorological Monitoring Station

February 2008

Quality Assurance Performance Audit

for the

Pebble Project Meteorological Monitoring Program

Iliamna, Alaska

THE pebble PARTNERSHIP

prepared for

The Pebble Limited Partnership, care of Pebble Mines Corporation

Pebble 4 PSD Meteorological Monitoring Station
February 2008
Quality Assurance Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION **1**

2.0 PERFORMANCE AUDIT **2**

2.1 Performance Audit Methodology **2**

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 6

2.2 Performance Audit Results **7**

2.3 Performance Audit Recommendations **7**

3.0 REFERENCES **9**

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 4 February 12-13, 2008 Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for The Pebble Limited Partnership, care of Pebble Mines Corporation; in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (°C): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (°C): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as a quantitative review of the Pebble 4 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed + **EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

A performance audit was conducted at the Pebble 4 station on February 12-13, 2008, with Dominic Shallies of HCG assisting. The ambient temperature was too low to use the low flow tester required for the tipping precipitation gauge, so that instrument was tested on a March 6, 2008. All sensors were challenged with certified audit equipment and all instruments except the thermistors yielded errors below the PSD limits. The thermistors were replaced and re-audited. Table 2-2 contains summary data from the audit and complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 4 February 12-13, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:36	Pass
2-m Temperature Accuracy (Old)	≤ ±0.5	°C	0.40	Pass
10-m Temperature Accuracy (Old)	≤ ±0.5	°C	0.20	Pass
Air Temperature Difference (Old)	≤ ±0.1	°C	0.25	Fail
2-m Temperature Accuracy (New)	≤ ±0.5	°C	0.15	Pass
10-m Temperature Accuracy (New)	≤ ±0.5	°C	0.15	Pass
Air Temperature Difference (New)	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.8	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	3.4	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.4	Pass
Barometric Pressure	≤ ±3	Mbar	0.4	Pass
Solar Radiation	≤ ±5+Res	% input	-6.5[1]	Pass
Tipping Precipitation	≤ ±10	% input	-5.0	Pass

1. Max % error value of 6.5 within limit of 5% input + resolution, see audit.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Meteorological Measurement Methods Validation Criteria", ADEC, November 2007.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12-13, 2008

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: CR1000 SN: 8522. Wire panel #8248.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
10:41:00	10:40:24	**-00:36**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT (Existing)*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E2777 # 2/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	E2777 # 1/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 02/12/08
Time:
Begin: 1410
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	37.88	38.28	0.40	Pass	38.03	0.15	Pass	-0.25	Fail
Warm	15 to 25	20.69	20.89	0.20	Pass	20.69	0.00	Pass	-0.20	Fail
Ice Bath	0	-0.02	0.20	0.22	Pass	0.14	0.16	Pass	-0.06	Pass
Cold	-15 to -25	-21.38	-21.24	0.14	Pass	-21.24	0.14	Pass	0.00	Pass
Very Cold	-35 to -45	9.92	10.22	0.30	Pass	10.12	0.20	Pass	-0.10	Pass
		Max Abs. Error		0.40	**PASS**		0.20	**PASS**	0.25	**FAIL**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Sensors failed Delta T criteria, sensors replaced and re-tested.

• *TEMPERATURE SENSORS & ΔT AUDIT (Replacement)*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G9580 # 1/2	**Range:**	-50 to 50 °C
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G9580 # 2/2	**Range:**	-50 to 50 °C
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 °C
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 °C

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 02/13/08
Time:
Begin: 1410
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	39.43	39.58	0.15	Pass	39.58	0.15	Pass	0.00	Pass
Warm	15 to 25	21.15	21.13	-0.02	Pass	21.13	-0.02	Pass	0.00	Pass
Ice Bath	0	-0.01	0.07	0.08	Pass	0.07	0.08	Pass	0.00	Pass
Cold	-15 to -25	-1.89	-1.82	0.07	Pass	-1.82	0.07	Pass	0.00	Pass
Very Cold	-35 to -45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Max Abs. Error		0.15	**PASS**		0.15	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Replacement thermistors. No dry ice remaining for low temperature tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12-13, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4662	**Vane #:**	1452	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.2	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1419 End: 1421

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	46.4	0.3	Pass
Peak 1590	104.3	106.1	1.8	Pass
Pebble 3	166.3	166.2	-0.1	Pass
Peak 0918	325.6	326.5	0.9	Pass
Compass	261.5	257.7	-3.8	Pass
Peak 1824	262.7	263.1	0.4	Pass
		Max Abs. Error	**3.8**	**PASS**
		Mean Abs. Error	**1.2**	**GOOD**

Time: Begin: 1300 End: 1325

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	181.4	1.4	Pass
West	270.0	271.9	1.9	Pass
North	360.0	1.5	1.5	Pass
East	90.0	91.9	1.9	Pass
North	360.0	0.9	0.9	Pass
West	270.0	271.4	1.4	Pass
South	180.0	181.4	1.4	Pass
East	90.0	91.7	1.7	Pass
	Max Abs. Error		**1.9**	**PASS**
	Mean Abs. Error		**1.5**	**PASS**

Time: Begin: 1350 End: 1352

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.5	-0.5	Pass	330.0	331.4	1.4	Pass
60.0	59.7	-0.3	Pass	355.0	356.8	1.8	Pass
90.0	90.8	0.8	Pass	30.0	29.3	-0.7	Pass
120.0	120.5	0.5	Pass	60.0	60.6	0.6	Pass
150.0	150.1	0.1	Pass	90.0	90.4	0.4	Pass
180.0	180.5	0.5	Pass	120.0	121.4	1.4	Pass
210.0	210.1	0.1	Pass	150.0	150.2	0.2	Pass
240.0	240.6	0.6	Pass	180.0	179.8	-0.2	Pass
270.0	271.1	1.1	Pass	**Max Abs. Error**		**1.8**	**PASS**
300.0	301.3	1.3	Pass	**Mean Abs. Error**		**0.7**	**PASS**

Time: Begin: 1424 End: 1426

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.060	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	46.2	0.1	Pass
Peak 1590	104.3	106.2	1.9	Pass
Pebble 3	166.3	166.7	0.4	Pass
Peak 0918	325.6	327.2	1.6	Pass
Compass	278.0	274.6	-3.4	Pass
		Max Abs. Error	**3.4**	**PASS**
		Mean Abs. Error	**1.5**	**GOOD**

Time: Begin: 1550 End: 1605

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12-13, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 77028 **Prop #:** 63635 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.2 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1349 End: 1351

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	47.9	1.8	Pass
Peak 1590	104.3	105.2	0.9	Pass
Pebble 3	166.3	166.2	-0.1	Pass
Peak 0918	325.6	324.7	-0.9	Pass
Compass	261.5	258.0	-3.5	Pass
Time: Begin: 1300	**Max Abs. Error**		**3.5**	**PASS**
End: 1325	**Mean Abs. Error**		**1.4**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.3	1.3	Pass	150.0	149.2	-0.8	Pass	270.0	270.9	0.9	Pass
60.0	61.0	1.0	Pass	180.0	179.4	-0.6	Pass	300.0	300.6	0.6	Pass
90.0	90.6	0.6	Pass	210.0	210.2	0.2	Pass	330.0	331.3	1.3	Pass
120.0	120.3	0.3	Pass	240.0	240.2	0.2	Pass	355.0	354.3	-0.7	Pass
				Time:	Begin: 1330			**Max Abs. Error**		**1.3**	**PASS**
					End: 1333			**Mean Abs. Error**		**0.7**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.004	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	9.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	48.2	2.1	Pass
Peak 1590	104.3	106.3	2.0	Pass
Pebble 3	166.3	167.7	1.4	Pass
Peak 0918	325.6	325.4	-0.2	Pass
Compass	278.0	274.6	-3.4	Pass
Time: Begin: 1550	**Max Abs. Error**		**3.4**	**PASS**
End: 1605	**Mean Abs. Error**		**1.8**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12-13, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 hPa
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 hPa

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1118	28.38	28.28	957.80	958.18	0.38	Pass
			Max Abs. Error		0.38	PASS

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	-0.18
Slope	0.0031

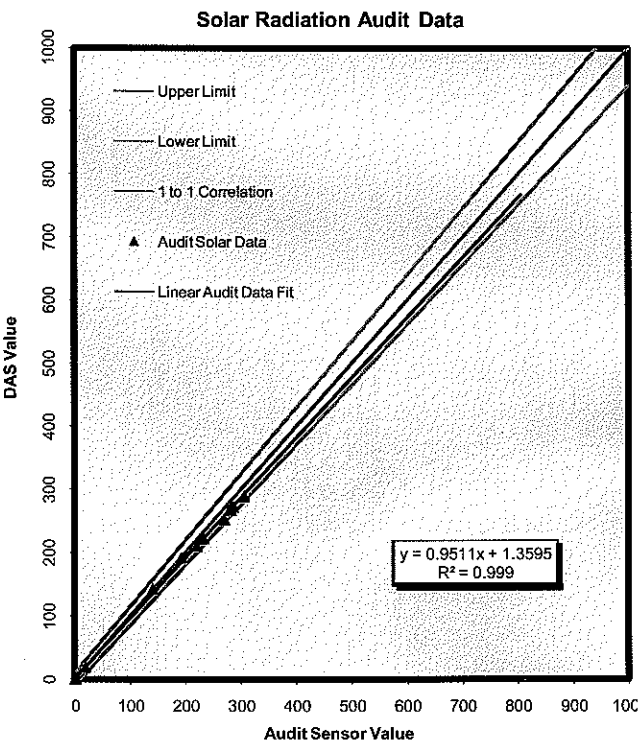
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 W/m²
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 W/m²

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1038	140.2	141.6	1.4	±17.0	1.0%	Pass
1114	191.5	191.4	-0.1	±19.6	-0.1%	Pass
1138	231.4	221.3	-10.1	±21.6	-4.4%	Pass
1210	269.2	251.6	-17.6	±23.5	-6.5%	Pass
1253	305.2	289.3	-15.9	±25.3	-5.2%	Pass
1435	285.6	271.3	-14.3	±24.3	-5.0%	Pass
1800	18.5	17.8	-0.7	±10.9	n/a	Pass
1900	1.3	0.9	-0.3	±10.1	n/a	Pass
2000	0.2	0.0	-0.2	±10.0	n/a	Pass
2100	0.1	0.0	-0.1	±10.0	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
1200	219.7	209.4	-10.3	±21.0	-4.7%	Pass
1300	281.4	266.5	-14.9	±24.1	-5.3%	Pass
1400	304.1	288.0	-16.1	±25.2	-5.3%	Pass
1500	280.8	271.3	-9.5	±24.0	-3.4%	Pass
1600	224.9	220.7	-4.2	±21.2	-1.9%	Pass
Corr. Val	0.9995	Max Abs. Percent Error			6.5%	PASS
R^2 Value	0.9990	Intercept	1.4	Slope	0.9511	PASS



Begin Date: 09/06/07 **End Date:** 09/07/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R^2 > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12-13, 2008

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
03/06/08	1317	650	20.0	0.2		19.2	1339	19.0	-5.0%	Pass	
03/06/08	1340	450	13.9	19.2		33.2	1358	14.0	0.7%	Pass	
03/06/08	1400	400	12.3	0.0		12.0	1418	12.0	-2.4%	Pass	
							Max Abs. Error		5.0%	PASS	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold in February, audited in March.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

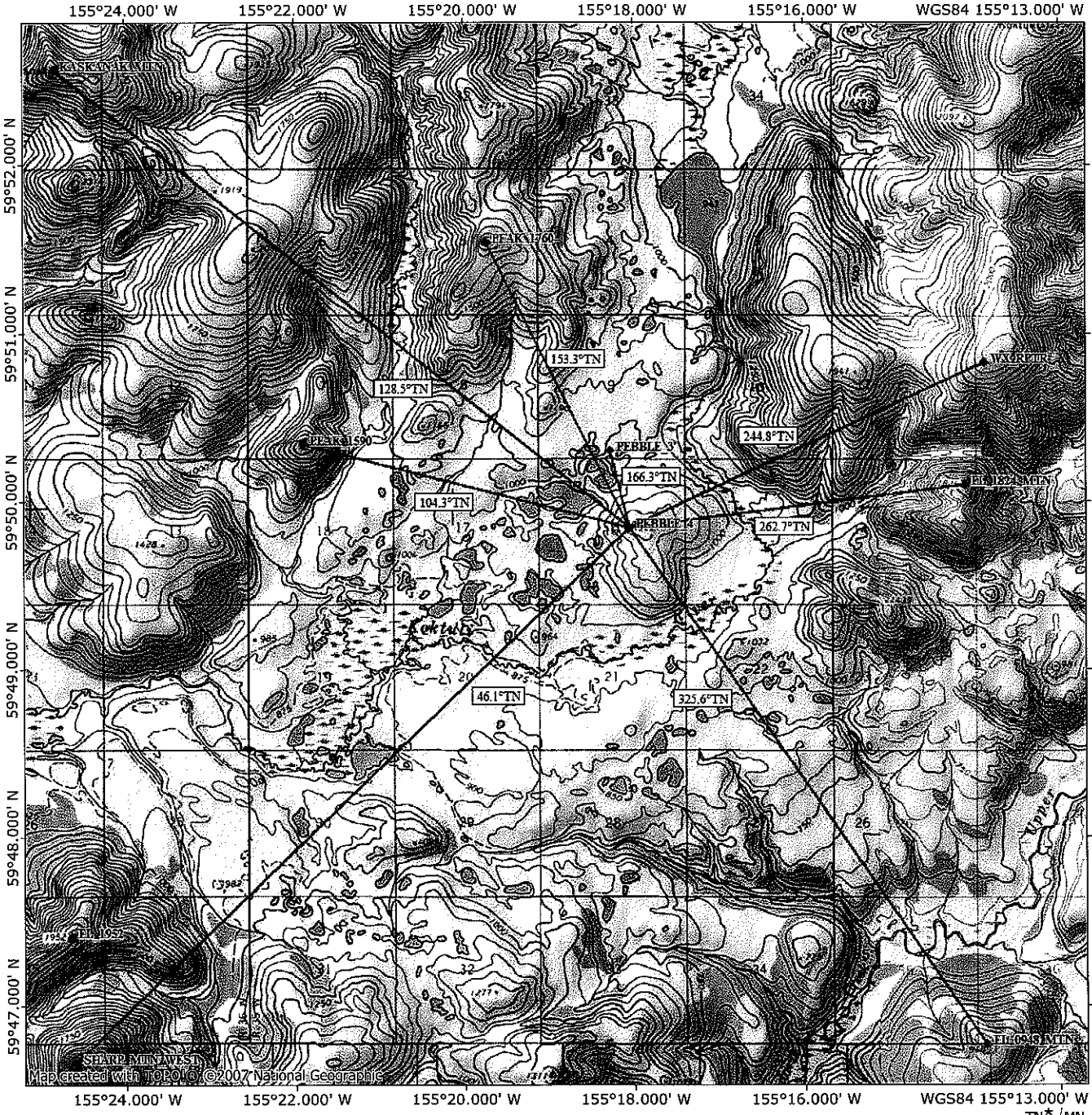
RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST

Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1116	71.9	-25.1	-28.4	82.4	-25.2	-27.4	1.0	Pass
					Max Abs. Error		1.0	PASS

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*\gamma/(a-\gamma)$, where $\gamma=a*Ta/(b+Ta)+\ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN * / MN
17°
10/30/07

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**
Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%, RH Recommended Calibration Due Date: Jun-04-2008
Instrument Range: -20 to +60 °C, T

Customer: HOEFLER CONSULTING GROUP
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EK

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: J. Soens (2)

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: –>

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sean

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner: HOEFLER Consulting Group
Name: _____

Address: 341 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 52200

ORDER NUMBER: 1572739

LOT NUMBER: _____

MODEL NUMBER: 5008

SERIAL NUMBER: 50801993 19

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date: 10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

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Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24 x 10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: R. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Appendix D

Validated Continuous Data Summaries

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-14.5	-15.2	-16.1	-16.2	-16.8	-17.1	-17.4	-17.5	-19.4	-21.0	-21.3	-21.3	-21.6	-21.2	-22.0	-23.0	-23.5	-24.2	-24.9	-25.0	-25.8	-25.4	-25.5	-26.8	-14.5	-26.8	-20.9
2	-26.4	-27.1	-27.5	-26.9	-26.9	-25.8	-25.9	-26.1	-26.0	-25.6	-25.4	-25.5	-25.3	-25.1	-25.3	-24.8	-25.1	-26.2	-26.4	-26.9	-26.9	-26.6	-27.3	-27.1	-24.8	-27.5	-26.2
3	-26.7	-27.2	-27.2	-27.4	-28.0	-27.6	-27.3	-27.5	-28.6	-28.3	-28.5	-29.1	-28.3	-28.0	-28.8	-28.9	-27.6	-27.4	-28.2	-28.7	-28.9	-29.1	-29.2	-28.8	-26.7	-29.2	-28.1
4	-29.7	-29.4	-29.8	-29.4	-29.2	-29.4	-29.7	-30.0	-29.6	-28.8	-28.2	-27.4	-25.5	-23.2	-22.6	-23.3	-22.1	-21.9	-20.9	-20.0	-19.0	-18.8	-19.4	-19.8	-18.8	-30.0	-25.3
5	-21.7	-21.6	-23.5	-24.1	-24.3	-23.9	-24.1	-24.4	-25.2	-26.2	-25.6	-26.1	-25.5	-25.2	-25.7	-25.7	-25.4	-25.4	-25.4	-24.6	-25.0	-25.8	-26.0	-25.7	-21.6	-26.2	-24.8
6	-25.8	-26.3	-25.8	-25.8	-25.3	-25.0	-26.0	-25.4	-25.6	-27.0	-26.1	-25.5	-25.7	-25.9	-26.1	-26.8	-27.9	-27.9	-27.7	-28.2	-29.2	-29.1	-29.8	-29.7	-25.0	-29.8	-26.8
7	-30.3	-30.3	-29.9	-29.9	-29.3	-30.0	-30.3	-31.0	-30.4	-30.7	-30.2	-30.4	-30.1	-29.3	-29.2	-29.7	-29.7	-30.1	-30.3	-30.8	-31.1	-30.3	-29.8	-30.5	-29.2	-31.1	-30.1
8	-30.5	-30.3	-30.0	-28.6	-29.0	-29.2	-28.8	-29.3	-29.7	-29.3	-28.2	-27.8	-26.8	-26.5	-26.2	-25.6	-25.5	-24.7	-25.0	-24.9	-24.5	-23.8	-23.7	-24.2	-23.7	-30.5	-27.2
9	-23.7	-23.9	-24.2	-25.1	-24.4	-24.3	-23.9	-24.4	-24.9	-23.7	-24.3	-21.8	-20.1	-20.3	-18.6	-16.3	-15.2	-15.2	-14.4	-14.6	-15.1	-14.9	-14.1	-13.3	-13.3	-25.1	-20.0
10	-13.1	-13.0	-12.5	-12.4	-12.2	-12.0	-11.6	-10.7	-9.6	-8.4	-7.6	-6.8	-6.2	-5.7	-5.2	-4.9	-4.6	-4.1	-3.9	-3.6	-3.4	-3.2	-3.1	-2.8	-2.8	-13.1	-7.5
11	-2.6	-2.2	-2.0	-1.9	-2.0	-1.9	-1.8	-1.7	-1.7	-1.7	-1.7	-1.4	-1.3	-1.4	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-1.1	-1.2	-1.2	-1.4	-1.1	-2.6	-1.6
12	-1.5	-1.6	-1.7	-1.7	-1.6	-1.6	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.3	-1.2	-1.2	-1.1	-1.2	-1.2	-1.2	-1.1	-1.2	-1.4	-2.4	-1.1	-2.4	-1.5
13	-2.9	-3.3	-3.2	-2.9	-2.9	-3.1	-3.3	-3.6	-3.6	-3.6	-3.8	-3.6	-3.7	-3.9	-3.9	-4.4	-5.2	-5.9	-7.7	-7.5	-7.5	-7.3	-7.3	-7.2	-2.9	-7.7	-4.6
14	-7.6	-8.0	-8.8	-9.1	-8.7	-8.9	-8.3	-7.9	-8.0	-7.8	-7.8	-7.7	-7.5	-8.0	-7.9	-8.3	-7.9	-7.7	-7.5	-7.6	-7.9	-7.7	-7.7	-7.9	-7.5	-9.1	-8.0
15	-8.3	-9.6	-10.3	-10.8	-10.5	-9.2	-8.6	-8.7	-9.2	-9.4	-9.4	-9.8	-10.3	-10.4	-10.3	-10.4	-10.5	-11.1	-11.9	-12.3	-12.9	-13.8	-14.3	-14.0	-8.3	-14.3	-10.7
16	-13.8	-14.4	-14.4	-14.9	-13.5	-10.2	-7.8	-7.5	-7.2	-6.8	-6.4	-6.4	-6.4	-6.0	-5.4	-4.9	-4.4	-4.1	-3.8	-3.8	-3.9	-3.9	-3.9	-3.5	-3.5	-14.9	-7.4
17	-3.4	-3.6	-4.1	-4.3	-4.4	-4.5	-4.6	-4.5	-4.1	-3.8	-3.7	-3.0	-2.7	-2.2	-2.0	-2.2	-2.2	-2.1	-1.6	-1.4	-1.3	-1.5	-1.6	-2.1	-1.3	-4.6	-3.0
18	-2.3	-2.4	-2.7	-3.0	-2.4	-2.2	-1.9	-2.3	-2.1	-2.1	-2.2							-3.0	-3.2	-3.1	-4.0	-3.9	-3.8	-4.2	-1.9	-4.2	-2.8
19	-4.2	-4.1	-3.9	-3.7	-3.8	-3.7	-3.8	-4.0	-4.0	-4.9	-5.3	-5.3	-5.6	-5.5	-4.3	-4.0	-4.0	-3.9	-3.2	-2.8	-2.5	-2.6	-2.4	-2.3	-2.3	-5.6	-3.9
20	-2.4	-2.4	-2.4	-2.5	-2.5	-2.6	-3.2	-3.0	-3.0	-3.6	-3.4	-3.2	-2.9	-3.9	-4.2	-3.4	-3.1	-3.1	-3.1	-3.4	-4.2	-4.4	-4.1	-3.9	-2.4	-4.4	-3.2
21	-4.2	-4.3	-5.9	-5.9	-7.4	-9.7	-9.9	-10.9	-11.1	-11.0	-11.3	-10.5	-10.2	-10.3	-10.5	-10.5	-10.4	-10.4	-10.7	-10.8	-10.8	-10.8	-10.7	-10.9	-4.2	-11.3	-9.5
22	-10.9	-10.9	-11.3	-11.2	-11.2	-11.3	-11.3	-11.9	-11.8	-11.8	-12.3	-12.1	-11.6	-12.2	-11.9	-12.1	-12.3	-12.5	-12.8	-12.9	-12.5	-11.5	-12.7	-14.6	-10.9	-14.6	-12.0
23	-14.9	-15.0	-14.9	-15.0	-15.5	-15.8	-16.5	-16.7	-16.5	-17.1	-17.3	-17.4	-17.3	-17.3	-17.3	-17.8	-18.2	-17.9	-17.7	-18.5	-18.5	-19.4	-19.9	-20.6	-14.9	-20.6	-17.2
24	-20.9	-21.2	-21.3	-21.8	-22.1	-22.6	-23.3	-24.6	-25.2	-24.8	-24.9	-25.1	-25.1	-24.6	-24.5	-24.9	-24.1	-24.3	-23.7	-23.1	-23.1	-24.2	-23.9	-24.5	-20.9	-25.2	-23.7
25	-24.1	-22.1	-16.3	-14.0	-13.5	-12.6	-11.2	-9.8	-7.0	-5.8	-5.3	-4.3	-3.8	-3.0	-2.9	-2.6	-2.5	-2.0	-1.9	-1.6	-1.4	-1.4	-1.1	-0.8	-0.8	-24.1	-7.1
26	-0.7	-0.9	-0.9	-1.0	-1.1	-1.0	-0.7	-0.5	-0.7	-0.9	-0.8	-0.3	-0.3	-0.3	-0.2	-0.3	-0.5	-0.8	-1.3	-1.5	-1.6	-2.1	-2.0	-1.9	-0.2	-2.1	-0.9
27	-1.2	-1.1	-1.0	-0.8	-0.3	-0.2	-0.2	-0.5	-0.4	-0.3	-0.6	-0.8	-0.9	-0.8	-0.8	-0.1	0.2	-0.4	0.1	0.6	0.9	1.1	0.9	0.5	1.1	-1.2	-0.3
28	0.3	0.1	-0.1	0.1	-0.2	-0.2	-0.3	-0.5	-0.3	-0.4	-0.7	-0.7	-0.5	0.2	0.3	0.2	0.0	-0.6	-0.6	-0.1	-0.2	0.6	1.0	1.2	1.2	-0.7	-0.1
29	1.4	1.0	2.0	2.0	2.4	2.3	1.5	1.3	1.2	1.8	1.8	2.2	2.8	2.9	2.9	2.3	2.6	2.4	2.0	1.6	1.0	0.7	0.6	0.6	2.9	0.6	1.8
30	1.0	1.7	1.9	2.0	2.2	2.3	2.3	2.9	3.3	3.8	4.2	5.4	5.4	4.5	4.8	4.7	3.4	2.2	1.9	1.6	1.6	1.4	1.2	1.1	5.4	1.0	2.8
31	1.2	1.3	1.5	1.5	1.6	1.5	1.5	1.1	1.1	1.0	0.8	0.9	0.9	1.5	1.1	1.2	1.2	1.0	0.9	1.6	2.0	1.6	1.0	0.5	2.0	0.5	1.2
Max.	**1.4**	**1.7**	**2.0**	**2.0**	**2.4**	**2.3**	**2.3**	**2.9**	**3.3**	**3.8**	**4.2**	**5.4**	**5.4**	**4.5**	**4.8**	**4.7**	**3.4**	**2.4**	**2.0**	**1.6**	**2.0**	**1.6**	**1.2**	**1.2**	**5.4**		
Min.	**-30.5**	**-30.3**	**-30.0**	**-29.9**	**-29.3**	**-30.0**	**-30.3**	**-31.0**	**-30.4**	**-30.7**	**-30.2**	**-30.4**	**-30.1**	**-29.3**	**-29.2**	**-29.7**	**-29.7**	**-30.1**	**-30.3**	**-30.8**	**-31.1**	**-30.3**	**-29.8**	**-30.5**		**-31.1**	
Avg.	**-11.7**	**-11.9**	**-11.8**	**-11.8**	**-11.7**	**-11.6**	**-11.5**	**-11.6**	**-11.6**	**-11.6**	**-11.5**	**-11.5**	**-11.2**	**-11.1**	**-11.0**	**-11.0**	**-10.9**	**-10.8**	**-10.8**	**-10.8**	**-10.9**	**-10.9**	**-11.0**	**-11.2**			**-11.2**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.4	0.7	1.2	1.3	0.8	0.7	0.6	0.2	0.4	0.4	-0.1	1.3	2.0	2.5	4.3	5.5	5.1	3.8	4.6	4.3	2.9	0.7	0.6	0.4	5.5	-0.1	1.9
2	0.6	0.6	0.9	1.3	1.7	1.8	1.4	1.2	1.2	1.2	1.3	1.6	1.8	1.8	1.6	1.5	1.4	1.3	1.2	1.2	1.1	0.9	0.9	0.7	1.8	0.6	1.3
3	0.6	0.3	0.4	0.5	0.4	0.2	0.2	0.1	0.0	-0.2	0.2	0.6	0.9	1.1	1.2	1.0	0.6	0.1	-0.7	-1.5	-2.0	-2.1	-2.2	-2.0	1.2	-2.2	-0.1
4	-2.9	-3.1	-3.8	-2.8	-2.4	-3.5	-3.4	-2.6	-3.6	-4.4	-4.0	-3.7	-3.7	-2.9	-2.0	-2.3	-2.5	-3.2	-3.5	-3.7	-2.6	-2.4	-2.9	-2.0	-2.0	-4.4	-3.1
5	-1.0	-1.1	-1.3	-1.1	-1.3	-1.9	-1.3	-0.9	-1.2	-1.7	-1.0	-0.8	-1.8	-1.7	-2.1	-2.2	-1.6	-1.5	-1.2	-2.4	-4.0	-4.7	-4.7	-3.9	-0.8	-4.7	-1.9
6	-3.4	-2.9	-2.4	-1.6	-1.6	-1.4	-0.7	-0.4	-0.4	-0.8	-0.2	0.2	0.1	0.7	0.3	-0.2	-0.4	-1.0	-0.7	-0.6	-0.7	-0.2	0.3	0.6	0.7	-3.4	-0.7
7	-0.6	-2.6	-2.4	-2.9	-2.1	-1.2	-2.7	-3.5	-3.5	-3.4	-3.3	-3.2	-3.0	-2.9	-2.8	-2.3	-1.6	-1.8	-2.7	-3.4	-3.4	-3.5	-3.5	-3.4	-0.6	-3.5	-2.7
8	-3.3	-3.1	-3.0	-3.0	-2.8	-2.8	-2.7	-2.8	-2.9	-2.8	-2.9	-2.8	-2.4	-2.0	-2.0	-2.3	-2.5	-2.8	-2.8	-3.0	-3.3	-3.3	-3.2	-3.1	-2.0	-3.3	-2.8
9	-3.0	-3.3	-3.1	-2.9	-2.7	-2.5	-2.4	-2.3	-1.8	-1.6	-1.2	-0.6	-0.2	0.1	-0.2	-1.2	-1.5	-1.9	-1.7	-1.9	-2.0	-2.1	-2.4	-2.4	0.1	-3.3	-1.9
10	-2.1	-1.8	-1.4	-1.0	-1.3	-2.1	-2.0	-1.8	-1.8	-1.7	-1.7	-1.7	-1.7	-1.7	-1.6	-1.6	-1.6	-1.8	-2.7	-4.3	-5.1	-5.4	-5.5	-5.5	-1.0	-5.5	-2.5
11	-5.4	-4.8	-4.4	-4.7	-4.9	-4.9	-4.5	-4.3	-4.3	-4.4	-3.7	-2.8	-1.9	-1.4	-1.3	-0.7	-0.4	-0.7	-0.8	-0.7	-0.9	-1.3	-1.1	-1.1	-0.4	-5.4	-2.7
12	-1.1	-1.5	-1.0	-0.7	-0.8	-0.8	-0.8	-0.6	-0.8	-0.8	-0.9	-0.2	0.1	0.5	0.6	0.4	0.2	0.0	-0.3	-0.3	-0.2	-0.4	-0.4	-0.4	0.6	-1.5	-0.4
13	-0.8	-0.3	0.2	-0.2	-0.1	0.3	0.0	-0.3	-0.5	-0.1	0.8	0.8	1.4	1.6	1.9	1.4	1.1	0.6	0.2	0.1	0.1	-0.4	-0.7	-0.9	1.9	-0.9	0.3
14	-0.5	-0.7	-1.0	-0.8	-0.8	-1.0	-1.1	-0.9	-0.9	-1.1	-1.1	-0.9	-0.5	-0.3	-0.4	-0.2	-0.4	-0.9	-1.5	-1.2	-1.0	-1.5	-2.4	-2.4	-0.2	-2.4	-1.0
15	-2.8	-2.4	-2.2	-3.1	-3.1	-2.8	-3.6	-2.9	-4.4	-3.6	-4.0	-3.6	-3.6	-3.8	-3.6	-4.2	-4.5	-5.2	-5.7	-5.4	-5.5	-5.8	-5.6	-5.5	-2.2	-5.8	-4.0
16	-5.6	-5.2	-3.8	-4.1	-4.5	-5.2	-4.0	-4.5	-3.8	-3.8	-2.9	-2.6	-2.7	-2.4	-2.2	-2.3	-2.4	-2.4	-2.3	-3.2	-3.4	-3.4	-3.4	-3.4	-2.2	-5.6	-3.5
17	-3.6	-3.7	-3.8	-3.8	-3.9	-4.0	-4.9	-4.9	-4.8	-5.0	-6.4	-4.9	-4.6	-3.0	-2.9	-3.2	-3.7	-3.9	-4.8	-4.8	-4.9	-4.2	-4.4	-5.2	-2.9	-6.4	-4.3
18	-5.3	-4.9	-4.8	-5.0	-5.5	-5.4	-5.1	-5.9	-6.0	-6.1	-6.3	-5.7	-5.5	-5.1	-5.1	-5.0	-4.2	-4.6	-5.4	-6.0	-6.3	-6.4	-6.7	-6.7	-4.2	-6.7	-5.5
19	-7.1	-7.6	-7.7	-8.6	-9.2	-9.7	-10.4	-11.1	-11.3	-12.5	-13.8	-15.1	-15.0	-14.6	-14.5	-14.6	-15.6	-16.5	-17.5	-18.3	-18.8	-18.8	-18.3	-18.3	-7.1	-18.8	-13.5
20	-18.3	-17.5	-18.1	-18.7	-18.5	-19.8	-20.3	-20.1	-19.5	-19.5	-18.8	-17.9	-16.8	-15.4	-14.8	-14.5	-14.7	-15.3	-16.0	-16.2	-16.4	-17.1	-17.6	-17.6	-14.5	-20.3	-17.5
21	-18.0	-18.2	-18.8	-19.0	-19.3	-20.0	-20.8	-21.2	-21.1	-21.0	-21.1	-20.3	-18.7	-17.4	-17.0	-16.8	-16.8	-16.8	-17.7	-18.2	-18.6	-19.1	-19.2	-19.1	-16.8	-21.2	-18.9
22	-19.0	-19.2	-19.0	-19.0	-19.0	-20.1	-20.3	-19.9	-19.7	-20.2	-20.1	-19.9	-18.9	-17.8	-17.2	-16.7	-16.4	-16.4	-16.8	-17.3	-17.5	-17.5	-17.8	-17.8	-16.4	-20.3	-18.5
23	-18.2	-18.8	-19.0	-18.5	-19.1	-19.3	-19.5	-19.8	-19.9	-20.0	-19.7	-18.5	-18.0	-17.4	-16.9	-16.3	-16.1	-17.1	-17.4	-17.8	-17.8	-18.6	-19.0	-18.3	-16.1	-20.0	-18.4
24	-18.8	-19.3	-19.4	-18.3	-18.3	-18.3	-19.1	-20.1	-20.7	-21.0	-20.1	-19.5	-19.1	-19.0	-19.0	-19.1	-19.4	-20.0	-20.7	-21.2	-21.5	-21.8	-21.9	-21.8	-18.3	-21.9	-19.9
25	-21.9	-21.9	-21.4	-21.1	-21.2	-21.3	-21.5	-21.8	-21.3	-20.7	-19.8	-18.3	-16.9	-14.9	-14.4	-14.1	-14.6	-15.3	-16.0	-15.3	-14.1	-13.4	-11.5	-9.2	-9.2	-21.9	-17.6
26	-6.8	-7.0	-7.5	-8.4	-8.4	-8.4	-7.9	-7.0	-6.9	-7.7	-8.3	-8.4	-7.5	-7.0	-6.7	-6.5	-6.6	-7.3	-8.2	-8.8	-8.8	-10.6	-10.0	-10.2	-6.5	-10.6	-7.9
27	-10.2	-11.1	-12.0	-12.8	-13.1	-13.4	-13.5	-12.9	-12.4	-11.7	-11.0	-10.6	-10.8	-10.2	-9.6	-9.3	-9.3	-9.4	-9.9	-9.6	-9.8	-9.8	-9.7	-10.0	-9.3	-13.5	-10.9
28	-10.2	-10.6	-10.6	-11.4	-12.0	-12.0	-12.5	-12.9	-13.9	-14.4	-15.2	-15.3	-15.3	-15.0	-15.3	-16.2	-17.1	-17.8	-19.0	-19.7	-20.1	-20.7	-20.9	-21.4	-10.2	-21.4	-15.4
Max.	**0.6**	**0.7**	**1.2**	**1.3**	**1.7**	**1.8**	**1.4**	**1.2**	**1.2**	**1.2**	**1.3**	**1.6**	**2.0**	**2.5**	**4.3**	**5.5**	**5.1**	**3.8**	**4.6**	**4.3**	**2.9**	**0.9**	**0.9**	**0.7**	**5.5**		
Min.	**-21.9**	**-21.9**	**-21.4**	**-21.1**	**-21.2**	**-21.3**	**-21.5**	**-21.8**	**-21.3**	**-21.0**	**-21.1**	**-20.3**	**-19.1**	**-19.0**	**-19.0**	**-19.1**	**-19.4**	**-20.0**	**-20.7**	**-21.2**	**-21.5**	**-21.8**	**-21.9**	**-21.8**		**-21.9**	
Avg.	**-6.7**	**-6.8**	**-6.7**	**-6.8**	**-6.9**	**-7.1**	**-7.2**	**-7.3**	**-7.3**	**-7.5**	**-7.3**	**-6.9**	**-6.5**	**-6.0**	**-5.8**	**-5.8**	**-5.9**	**-6.3**	**-6.8**	**-7.1**	**-7.3**	**-7.6**	**-7.6**	**-7.5**			**-6.9**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-21.6	-21.8	-22.1	-22.4	-22.8	-23.6	-23.8	-23.9	-24.3	-23.8	-23.1	-22.1	-21.1	-19.7	-18.7	-18.0	-17.9	-18.0	-18.3	-19.0	-19.8	-20.4	-20.9	-20.8	-17.9	-24.3	-21.2
2	-20.9	-21.0	-21.0	-21.3	-21.1	-21.3	-21.7	-21.7	-22.2	-22.0	-21.5	-20.4	-19.2	-18.3	-17.0	-16.5	-16.4	-16.7	-17.2	-17.4	-17.5	-17.8	-18.2	-18.7	-16.4	-22.2	-19.5
3	-18.9	-19.0	-19.4	-19.9	-19.8	-19.9	-20.2	-20.6	-20.7	-20.4	-19.4	-18.0	-16.9	-15.6	-14.6	-13.8	-13.4	-13.7	-14.4	-14.4	-14.3	-15.0	-14.3	-15.1	-13.4	-20.7	-17.1
4	-15.8	-16.0	-15.9	-15.4	-15.7	-15.6	-16.3	-17.0	-16.8	-16.3	-15.5	-15.5	-15.0	-14.6	-14.3	-14.1	-14.3	-14.8	-15.6	-16.9	-17.7	-18.0	-18.5	-19.2	-14.1	-19.2	-16.0
5	-20.0	-21.0	-21.9	-22.7	-23.3	-23.8	-24.4	-24.9	-25.2	-24.7	-24.1	-23.4	-22.8	-22.0	-21.4	-21.2	-21.3	-21.7	-22.4	-23.2	-23.8	-24.2	-24.7	-25.2	-20.0	-25.2	-23.0
6	-25.6	-26.1	-26.5	-26.8	-27.1	-27.4	-27.6	-27.7	-27.9	-27.4	-26.5	-25.8	-25.1	-24.2	-23.8	-23.3	-23.2	-23.4	-23.8	-24.1	-24.1	-24.3	-24.5	-24.7	-23.2	-27.9	-25.4
7	-24.8	-24.9	-24.9	-25.2	-25.2	-25.4	-25.4	-25.3	-25.5	-24.8	-23.8	-23.1	-22.1	-21.3	-20.4	-19.9	-19.7	-20.0	-20.7	-21.6	-22.2	-22.9	-23.6	-24.3	-19.7	-25.5	-23.2
8	-24.8	-25.3	-25.7	-25.8	-26.0	-26.3	-26.5	-26.5	-26.6	-26.3	-25.8	-25.1	-24.1	-22.9	-21.9	-21.2	-21.1	-21.1	-21.5	-21.9	-21.8	-21.9	-22.0	-22.3	-21.1	-26.6	-23.9
9	-22.6	-22.8	-23.0	-23.2	-23.1	-23.2	-23.1	-22.9	-22.3	-21.9	-21.9	-21.2	-20.4	-19.6	-18.9	-18.3	-18.1	-18.6	-19.5	-20.3	-20.9	-20.8	-20.3	-19.9	-18.1	-23.2	-21.1
10	-19.7	-19.5	-19.4	-19.1	-19.5	-19.7	-19.5	-19.0	-19.4	-19.3	-19.3	-18.5	-17.7	-16.4	-15.9	-15.5	-15.2	-15.7	-16.4	-17.8	-18.6	-19.1	-19.2	-19.6	-15.2	-19.7	-18.3
11	-20.5	-20.8	-21.0	-21.5	-21.9	-22.6	-23.1	-23.7	-23.9	-23.6	-22.9	-22.1	-21.1	-20.1	-19.2	-18.6	-18.2	-18.2	-18.4	-18.5	-18.4	-18.7	-19.1	-19.5	-18.2	-23.9	-20.7
12	-19.7	-20.0	-19.8	-19.9	-20.3	-20.5	-20.3	-20.3	-22.0	-21.3	-20.7	-19.8	-18.4	-16.2	-15.6	-15.2	-15.1	-15.1	-15.3	-15.7	-16.0	-16.9	-17.5	-17.6	-15.1	-22.0	-18.3
13	-17.6	-18.0	-18.7	-18.7	-18.9	-19.3	-19.7	-20.5	-21.1	-20.8	-20.2	-19.5	-18.7	-18.2	-17.9	-17.5	-17.9	-18.2	-18.8	-19.6	-19.8	-20.0	-20.7	-21.6	-17.5	-21.6	-19.2
14	-22.2	-22.5	-22.7	-22.9	-23.1	-23.1	-23.2	-23.7	-23.6	-22.9	-22.0	-21.4	-20.7	-20.2	-19.7	-19.4	-19.2	-19.6	-20.0	-20.6	-21.2	-21.7	-21.9	-22.4	-19.2	-23.7	-21.7
15	-23.0	-23.6	-24.3	-24.9	-25.5	-25.7	-26.1	-26.2	-26.0	-25.2	-23.9	-22.8	-21.6	-20.7	-20.0	-19.0	-18.2	-18.1	-18.8	-19.7	-20.6	-20.8	-21.2	-21.9	-18.1	-26.2	-22.4
16	-22.1	-22.2	-22.2	-22.2	-22.5	-22.7	-22.9	-22.7	-22.4	-21.6	-20.4	-19.2	-18.1	-16.7	-15.7	-15.2	-15.1	-15.7	-16.9	-18.1	-18.7	-19.4	-19.5	-19.7	-15.1	-22.9	-19.7
17	-20.1	-20.4	-20.5	-21.1	-20.7	-20.9	-21.2	-21.5	-21.7	-20.6	-18.8	-17.7	-16.9	-15.9	-14.8	-14.0	-13.2	-13.2	-14.0	-15.4	-16.4	-16.9	-16.4	-16.4	-13.2	-21.7	-17.9
18	-16.0	-15.7	-16.1	-16.3	-17.0	-17.1	-17.1	-17.5	-17.9	-17.9	-17.1	-16.0	-15.0	-13.9	-13.1	-12.7	-12.4	-12.5	-13.3	-14.9	-15.8	-15.6	-17.0	-17.4	-12.4	-17.9	-15.6
19	-17.2	-17.1	-17.9	-17.6	-17.8	-18.4	-18.6	-18.2	-18.0	-16.8	-15.4	-14.1	-13.2	-12.4	-11.2	-10.5	-9.9	-9.9	-10.9	-11.4	-12.9	-12.6	-12.5	-12.3	-9.9	-18.6	-14.4
20	-12.3	-12.4	-12.5	-12.9	-12.2	-12.7	-12.6	-12.2	-11.0	-9.8	-8.8	-7.9	-7.1	-6.4	-5.5	-4.9	-5.4	-5.9	-5.8	-5.6	-5.3	-4.9	-4.6	-4.5	-4.5	-12.9	-8.5
21	-4.8	-4.7	-4.5	-5.5	-5.7	-5.5	-5.3	-5.1	-5.0	-8.6	-9.3	-9.1	-9.1	-9.0	-8.9	-9.2	-9.6	-9.8	-10.3	-11.0	-11.5	-12.1	-13.8	-14.3	-4.5	-14.3	-8.4
22	-14.6	-15.3	-15.8	-16.6	-16.7	-18.1	-18.5	-18.6	-17.9	-17.7	-16.8	-16.0	-14.9	-13.7	-12.8	-12.1	-12.0	-12.0	-12.6	-13.4	-14.1	-14.9	-15.7	-16.2	-12.0	-18.6	-15.3
23	-16.6	-17.2	-17.3	-16.7	-16.5	-17.3	-18.3	-18.9	-18.9	-18.6	-18.1	-17.0	-16.2	-15.9	-15.5	-14.4	-14.3	-14.5	-14.9	-15.6	-16.5	-17.5	-17.8	-18.3	-14.3	-18.9	-16.8
24	-19.2	-19.6	-21.6	-21.5	-22.6	-22.2	-22.5	-22.1	-21.9	-20.5	-19.9	-19.3	-18.6	-17.8	-17.0	-16.5	-16.1	-15.9	-16.4	-17.4	-17.5	-17.4	-17.4	-17.4	-15.9	-22.6	-19.1
25	-16.0	-16.0	-16.0	-16.4	-16.8	-16.4	-17.1	-17.0	-17.1	-16.2	-15.2	-14.6	-13.4	-12.1	-11.3	-10.6	-10.3	-9.7	-9.7	-9.6	-9.5	-9.0	-9.0	-9.1	-9.0	-17.1	-13.2
26	-8.9	-8.4	-7.6	-7.6	-7.1	-6.8	-7.1	-7.5	-8.9	-10.0	-10.8	-11.2	-11.2	-11.2	-11.3	-11.3	-11.3	-11.6	-11.5	-10.8	-11.4	-11.8	-11.4	-10.6	-6.8	-11.8	-9.9
27	-9.8	-9.5	-10.6	-10.9	-11.4	-11.6	-11.8	-11.9	-12.0	-11.2	-10.9	-10.2	-10.0	-9.6	-9.4	-9.3	-9.5	-9.4	-9.8	-10.5	-11.4	-12.5	-12.9	-13.8	-9.3	-13.8	-10.8
28	-13.6	-14.5	-14.5	-14.2	-14.0	-14.2	-14.7	-15.2	-15.4	-14.5	-13.3	-11.9	-10.6	-9.8	-9.1	-8.6	-8.3	-8.5	-8.8	-9.9	-10.5	-10.2	-10.6	-11.0	-8.3	-15.4	-11.9
29	-10.5	-12.5	-12.5	-12.5	-12.9	-12.3	-13.0	-11.1	-12.7	-11.6	-10.4	-8.9	-7.3	-6.5	-5.6	-5.4	-5.3	-5.3	-6.0	-6.8	-7.2	-7.5	-7.7	-8.5	-5.3	-13.0	-9.2
30	-9.1	-8.4	-9.0	-8.1	-8.5	-8.5	-9.3	-10.0	-9.1	-7.8	-7.2	-6.5	-5.3	-4.3	-3.4	-2.8	-2.3	-2.4	-3.1	-3.2	-3.1	-2.4	-2.8	-3.4	-2.3	-10.0	-5.8
31	-3.4	-4.2	-3.8	-2.7	-3.0	-2.2	-1.5	-1.9	-1.7	-0.8	-0.6	-0.3	0.1	0.7	1.2	1.7	1.3	1.0	0.4	-0.9	-3.1	-2.7	-2.5	-2.9	1.7	-4.2	-1.3
Max.	**-3.4**	**-4.2**	**-3.8**	**-2.7**	**-3.0**	**-2.2**	**-1.5**	**-1.9**	**-1.7**	**-0.8**	**-0.6**	**-0.3**	**0.1**	**0.7**	**1.2**	**1.7**	**1.3**	**1.0**	**0.4**	**-0.9**	**-3.1**	**-2.4**	**-2.5**	**-2.9**	**1.7**		
Min.	**-25.6**	**-26.1**	**-26.5**	**-26.8**	**-27.1**	**-27.4**	**-27.6**	**-27.7**	**-27.9**	**-27.4**	**-26.5**	**-25.8**	**-25.1**	**-24.2**	**-23.8**	**-23.3**	**-23.2**	**-23.4**	**-23.8**	**-24.1**	**-24.1**	**-24.3**	**-24.7**	**-25.2**		**-27.9**	
Avg.	**-17.2**	**-17.4**	**-17.7**	**-17.8**	**-18.0**	**-18.2**	**-18.5**	**-18.6**	**-18.7**	**-18.2**	**-17.5**	**-16.7**	**-15.9**	**-15.0**	**-14.3**	**-13.8**	**-13.6**	**-13.8**	**-14.3**	**-15.0**	**-15.5**	**-15.8**	**-16.1**	**-16.4**			**-16.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-2.9	-3.0	-3.7	-3.3	-3.1	-3.6	-3.7	-4.5	-3.6	-3.2	-1.5	-1.2	-0.1	0.6	0.8	0.8	0.5	0.4	-0.6	-1.5	-1.9	-1.2	-1.4	-2.1	0.8	-4.5	-1.8
2	-2.2	-2.0	-2.2	-2.7	-2.9	-3.6	-3.8	-3.1	-2.6	-1.6	-0.4	0.3	0.3	0.2	-0.1	-0.1	-0.1	-0.3	-0.6	-1.0	-0.9	-1.1	-1.0	-1.2	0.3	-3.8	-1.4
3	-1.3	-1.3	-1.2	-1.1	-1.4	-1.5	-1.7	-1.4	-1.6	-1.3	-0.8	-0.3	-0.1	0.1	0.4	0.3	0.3	0.0	-0.5	-0.7	-1.0	-1.2	-1.5	-1.8	0.4	-1.8	-0.9
4	-2.3	-2.1	-2.0	-1.6	-1.5	-1.4	-1.8	-1.9	-1.1	-0.4	0.1	0.4	0.6	1.1	0.7	0.7	0.7	0.2	-0.3	-0.4	-0.4	-0.2	0.1	0.3	1.1	-2.3	-0.5
5	0.3	0.3	0.2	0.3	-0.6	0.7	0.7	1.7	2.1	2.6	2.7	3.1	3.9	4.2	4.7	5.2	5.3	2.3	2.1	1.4	1.1	1.2	1.3	1.1	5.3	-0.6	2.0
6	0.8	0.9	1.3	1.2	1.5	1.3	1.8	2.2	2.8	2.9	3.6	4.2	4.7	5.4	5.6	5.5	5.1	3.5	1.7	0.9	1.3	2.2	2.9	3.3	5.6	0.8	2.8
7	2.5	1.0	0.6	-0.1	-0.5	-0.8	-0.6	-0.3	-0.2	0.0	0.3	0.2	0.7	1.0	1.6	2.0	1.9	1.9	1.4	0.8	0.8	1.6	1.8	1.7	2.5	-0.8	0.8
8	2.0	1.7	1.6	1.7	2.1	2.4	3.0	3.1	3.3	4.0	4.7	5.5	5.6	5.7	5.7	5.9	5.1	4.9	4.2	3.6	3.0	2.5	1.2	0.8	5.9	0.8	3.5
9	0.8	0.6	0.5	0.6	0.8	0.8	0.2	0.0	0.0	0.1	0.5	0.8	0.8	1.0	1.5	1.3	1.2	0.9	1.0	0.9	0.5	0.2	-0.1	-0.2	1.5	-0.2	0.6
10	-0.4	-0.6	-0.7	-0.8	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.5	0.3	0.4	0.8	0.7	0.8	1.0	1.4	0.8	-0.2	-0.8	-0.9	-1.3	-1.4	1.4	-1.4	-0.3
11	-2.4	-2.2	-2.3	-2.3	-2.7	-2.5	-1.8	-2.0	-2.0	-1.3	0.0	0.6	1.0	1.1	1.0	1.1	0.9	0.6	0.2	-0.6	-1.7	-1.9	-2.2	-2.2	1.1	-2.7	-1.0
12	-2.1	-2.2	-1.9	-2.9	-2.6	-3.3	-4.0	-3.6	-2.8	-1.6	-0.7	0.1	1.0	1.7	1.9	2.2	2.6	2.7	2.4	1.2	0.5	0.5	0.2	-1.2	2.7	-4.0	-0.5
13	-2.0	-2.2	-2.1	-2.7	-3.0	-3.0	-3.2	-2.7	-2.0	-1.8	-1.5	-1.2	-0.4	0.6	1.3	2.0	2.7	3.0	2.0	0.5	-0.4	-0.9	-0.6	-0.6	3.0	-3.2	-0.8
14	-0.7	-1.4	-1.3	-1.3	-1.8	-2.1	-2.8	-3.0	-2.6	-2.1	-1.7	-0.6	0.8	1.5	1.9	1.4	1.8	1.6	0.9	0.1	-0.7	-1.3	-1.6	-1.8	1.9	-3.0	-0.7
15	-1.8	-2.0	-1.8	-1.5	-1.6	-1.4	-1.4	-1.0	-0.3	0.2	1.0	1.3	1.7	1.8	2.1	1.9	2.4	2.5	1.4	1.0	0.7	0.6	0.7	0.7	2.5	-2.0	0.3
16	1.1	1.2	0.9	0.9	0.2	-0.2	-0.8	-0.5	0.0	1.4	2.5	3.0	2.9	0.0	-1.2	-1.5	-1.6	-1.9	-2.5	-3.1	-3.8	-4.0	-4.3	-4.0	3.0	-4.3	-0.6
17	-4.1	-4.0	-3.3	-2.5	-1.8	-1.0	-0.5	-0.3	-0.2	-0.7	-1.0	-1.0	-0.9	-0.9	-0.9	-0.9	-0.8	-0.6	-0.6	-0.5	-0.4	-0.3	-0.2	-0.3	-0.2	-4.1	-1.1
18	-0.3	-0.3	-0.3	-0.2	-0.1	0.1	0.0	0.0	0.2	0.4	0.7	1.1	1.3	1.4	1.0	0.6	-1.4	-2.2	-2.7	-3.0	-3.1	-3.3	-3.6	-3.2	1.4	-3.6	-0.7
19	-1.9	-1.5	-2.0	-2.1	-1.1	-0.4	-0.4	-0.5	-0.3	0.0	0.1	0.2	0.1	0.0	-0.4	-0.8	-1.0	-1.2	-1.5	-1.6	-1.5	-1.3	-0.9	-0.9	0.2	-2.1	-0.9
20	-0.9	-1.0	-1.0	-0.7	-0.4	-0.3	0.6	0.9	0.9	1.3	1.6	1.9	2.5	2.7	2.6	2.7	2.5	1.7	1.7	1.4	1.2	1.0	0.8	1.3	2.7	-1.0	1.1
21	1.7	1.9	1.9	2.2	2.1	2.1	1.5	0.9	1.8	2.1	3.2	3.7	4.2	4.3	3.6	3.6	3.1	2.7	1.9	1.5	1.4	1.0	1.7	1.5	4.3	0.9	2.3
22	1.6	2.0	2.0	2.4	2.2	2.9	3.4	2.9	2.7	2.7	3.3	3.8	4.8	4.7	4.8	4.9	4.3	4.0	3.3	3.0	2.9	2.9	2.8	2.7	4.9	1.6	3.2
23	2.5	2.9	3.3	3.2	2.5	2.7	3.1	3.5	4.4	5.0	5.9	7.4	6.4	6.7	7.5	5.3	5.2	5.5	3.8	3.5	2.7	1.7	1.7	1.2	7.5	1.2	4.1
24	0.9	1.3	1.6	2.0	1.9	1.9	2.2	2.6	3.1	3.9	5.3	6.3	5.7	5.2	6.0	6.1	5.8	5.7	4.9	3.6	2.3	1.9	1.2	1.2	6.3	0.9	3.4
25	1.3	1.6	1.6	1.5	1.3	1.5	1.6	2.1	2.8	3.1	4.2	3.4	2.9	3.6	4.2	4.1	4.0	3.9	3.5	2.9	2.7	2.7	2.4	2.2	4.2	1.3	2.7
26	2.0	2.3	2.0	2.1	2.3	1.3	0.5	2.5	3.5	4.7	6.2	7.7	8.7	9.6	9.9	9.4	9.5	9.3	9.3	8.9	7.7	6.3	6.0	6.6	9.9	0.5	5.8
27	4.3	4.9	3.1	2.6	3.1	3.0	3.1	3.8	3.9	5.0	5.9	7.3	7.8	7.9	7.7	8.0	6.6	5.2	4.2	3.0	2.0	1.0	0.2	-0.4	8.0	-0.4	4.3
28	-0.7	-1.5	-1.9	-2.3	-2.9	-2.9	-2.9	-2.5	-2.2	-1.7	-0.5	1.9	3.9	4.9	5.4	5.5	4.9	4.0	3.5	2.4	0.7	-0.5	-0.8	-1.0	5.5	-2.9	0.5
29	-0.4	0.1	0.0	-0.4	-0.2	-0.4	0.3	1.7	2.4	3.0	3.4	4.2	5.7	6.3	6.4	7.3	6.9	6.2	6.2	5.3	3.4	1.8	0.9	0.7	7.3	-0.4	2.9
30	0.7	0.6	0.7	0.7	0.2	0.7	0.8	1.8	3.2	5.1	6.4	7.1	7.6	7.8	8.0	8.6	8.4	8.2	7.7	6.6	5.6	5.1	4.9	4.3	8.6	0.2	4.6
Max.	**4.3**	**4.9**	**3.3**	**3.2**	**3.1**	**3.0**	**3.4**	**3.8**	**4.4**	**5.1**	**6.4**	**7.7**	**8.7**	**9.6**	**9.9**	**9.4**	**9.5**	**9.3**	**9.3**	**8.9**	**7.7**	**6.3**	**6.0**	**6.6**	**9.9**		
Min.	**-4.1**	**-4.0**	**-3.7**	**-3.3**	**-3.1**	**-3.6**	**-4.0**	**-4.5**	**-3.6**	**-3.2**	**-1.7**	**-1.2**	**-0.9**	**-0.9**	**-1.2**	**-1.5**	**-1.6**	**-2.2**	**-2.7**	**-3.1**	**-3.8**	**-4.0**	**-4.3**	**-4.0**		**-4.5**	
Avg.	**-0.1**	**-0.1**	**-0.2**	**-0.2**	**-0.3**	**-0.3**	**-0.2**	**0.0**	**0.5**	**1.0**	**1.8**	**2.4**	**2.8**	**3.0**	**3.1**	**3.1**	**2.9**	**2.5**	**2.0**	**1.3**	**0.8**	**0.5**	**0.4**	**0.2**			**1.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	2.8	2.5	2.6	2.1	1.5	1.9	2.0	3.0	4.0	4.3	4.3	5.2	5.6	6.2	6.7	6.1	5.8	5.6	4.3	3.5	3.2	2.7	2.4	3.1	6.7	1.5	3.8
2	3.4	3.3	3.2	2.7	1.5	1.5	2.0	2.2	1.7	2.5	3.2	4.5	4.0	5.3	5.8	5.4	4.9	4.0	3.2	2.2	1.6	1.0	0.1	-0.2	5.8	-0.2	2.9
3	-0.3	-0.4	-0.4	-0.2	-0.7	-0.7	-0.3	0.1	1.0	2.4	4.0	5.2	6.5	7.2	8.2	8.5	7.2	5.9	5.9	4.8	4.1	4.0	3.9	3.2	8.5	-0.7	3.3
4	2.9	2.1	2.0	2.4	2.6	2.3	1.7	1.8	2.9	3.7	4.7	5.2	6.2	6.6	7.6	8.0	7.9	7.1	6.2	5.3	4.9	3.5	2.1	1.5	8.0	1.5	4.2
5	1.6	0.7	-0.7	-0.8	-0.6	-0.6	-0.4	-0.2	-0.2	0.4	1.6	2.3	3.6	4.7	6.2	6.9	7.5	7.5	7.8	6.8	5.6	5.5	4.3	4.2	7.8	-0.8	3.1
6	4.6	4.5	4.2	3.0	2.1	1.9	2.2	1.9	1.7	2.8	3.2	4.0	4.6	4.9	4.9	4.9	4.6	4.1	3.6	3.2	2.6	2.4	2.0	1.6	4.9	1.6	3.3
7	1.3	1.3	0.8	0.3	-0.3	-0.8	0.5	1.2	2.3	3.0	3.3	3.7	4.3	5.1	5.4	5.3	4.1	3.7	3.7	3.4	2.8	2.2	1.7	1.3	5.4	-0.8	2.5
8	1.0	0.7	0.5	0.4	0.2	0.1	0.0	-0.1	0.2	0.5	1.0	1.9	3.1	4.0	5.2	5.6	5.3	5.5	4.8	4.4	3.7	1.6	0.9	0.8	5.6	-0.1	2.1
9	0.9	0.7	-0.1	-0.2	0.1	0.3	0.1	0.0	-0.1	-0.2	-0.2	0.1	0.5	1.1	2.0	3.0	3.5	3.7	3.7	3.2	2.4	1.5	1.5	1.3	3.7	-0.2	1.2
10	1.0	1.1	0.9	0.6	0.4	0.7	1.2	1.2	1.9	2.8	3.6	4.4	4.7	5.4	5.7	5.9	5.4	5.0	4.8	4.5	2.9	2.7	1.7	1.1	5.9	0.4	2.9
11	1.2	0.8	-0.1	-0.1	0.1	0.4	0.9	2.1	2.9	4.2	5.0	5.7	6.1	6.5	6.6	6.6	6.4	5.9	5.2	4.3	2.9	1.1	0.2	-0.2	6.6	-0.2	3.1
12	0.0	-0.3	0.1	-0.2	-0.7	-0.7	0.5	1.6	2.7	3.8	4.7	5.2	5.1	5.4	5.7	5.8	5.5	5.1	4.7	3.4	2.5	1.3	1.3	1.2	5.8	-0.7	2.7
13	1.4	1.3	1.2	1.1	1.1	1.1	1.0	1.3	1.9	2.5	3.2	2.9	3.1	3.5	3.8	4.0	4.0	4.3	4.0	3.6	3.4	3.1	2.9	2.5	4.3	1.0	2.6
14	3.6	3.0	3.2	2.5	3.7	3.8	4.1	4.9	5.6	6.5	6.7	7.5	5.4	5.6	5.5	4.6	4.7	5.1	4.6	3.8	2.9	1.9	1.8	1.3	7.5	1.3	4.3
15	1.2	1.0	0.6	1.0	1.4	1.9	2.3	3.3	4.1	4.5	5.5	6.7	6.6	5.6	6.0	6.1	6.7	6.8	7.1	7.4	7.5	6.1	5.3	4.7	7.5	0.6	4.6
16	4.0	3.8	3.5	3.7	4.0	4.5	5.4	6.7	7.7	9.5	10.7	11.6	11.7	10.8	10.5	11.0	10.9	10.1	9.4	6.5	4.8	3.8	3.0	2.7	11.7	2.7	7.1
17	2.7	2.5	2.3	2.2	2.3	2.3	2.5	2.9	3.6	5.4	7.1	8.1	7.9	8.0	7.8	7.8	7.2	6.8	6.1	4.9	3.8	2.9	2.3	1.7	8.1	1.7	4.6
18	1.6	1.6	1.7	1.5	0.9	1.2	1.6	2.7	4.0	5.3	6.2	6.7	7.1	7.7	7.9	8.4	9.2	9.3	8.4	7.4	6.5	6.0	6.0	5.9	9.3	0.9	5.2
19	5.6	5.0	4.6	4.1	4.0	4.5	5.2	7.0	7.7	7.7	8.3	7.8	7.9	9.3	9.9	10.2	10.1	9.7	9.2	8.2	7.0	6.0	5.3	5.0	10.2	4.0	7.1
20	4.5	3.5	2.6	1.7	2.4	1.9	2.6	3.5	4.8	4.9	6.2	7.4	8.5	9.0	8.6	9.1	9.1	9.0	9.0	8.2	7.2	5.4	4.6	4.0	9.1	1.7	5.7
21	3.9	3.7	3.2	3.2	3.4	3.4	4.1	4.8	5.9	7.4	8.6	9.4	9.9	10.7	11.0	11.2	11.0	10.2	9.3	8.1	7.1	5.9	5.3	5.1	11.2	3.2	6.9
22	4.9	4.7	4.5	4.8	4.8	5.0	5.5	5.7	6.4	4.7	4.7	6.8	8.4	6.7	7.3	9.0	9.8	9.2	7.5	5.5	5.0	5.3	5.0	5.1	9.8	4.5	6.1
23	5.3	5.1	5.7	5.6	5.9	7.0	7.6	8.1	8.2	8.8	9.4	8.6	8.7	7.0	6.5	6.6	6.9	6.7	5.7	4.9	4.6	4.0	3.6	3.1	9.4	3.1	6.4
24	2.8	2.6	2.5	2.4	2.4	2.4	2.7	3.4	4.9	5.5	5.7	6.4	7.1	7.9	7.2	5.8	6.1	7.0	8.2	7.4	6.3	6.3	5.3	5.2	8.2	2.4	5.1
25	5.1	5.1	6.7	6.0	5.8	6.5	6.7	5.9	5.8	5.7	5.9	5.7	6.0	6.3	6.4	6.5	6.8	6.8	6.8	6.9	6.7	6.6	6.9	6.9	6.9	5.1	6.3
26	7.1	7.0	4.9	4.4	4.3	4.4	4.8	4.7	4.7	5.3	6.3	6.3	6.6	6.3	5.9	5.5	5.7	5.5	5.1	5.0	4.7	4.1	3.8	3.6	7.1	3.6	5.3
27	3.4	2.9	2.9	2.8	2.9	2.9	3.2	3.4	4.9	6.6	7.1	7.6	8.2	8.8	8.6	8.2	8.3	8.2	7.6	6.7	5.4	3.7	2.9	2.3	8.8	2.3	5.4
28	2.6	2.6	2.5	2.5	1.8	2.1	3.1	3.6	4.8	6.3	7.0	7.1	7.4	8.2	8.1	7.4	7.1	6.1	5.7	5.2	4.3	3.2	2.1	2.3	8.2	1.8	4.7
29	2.5	2.2	1.9	1.5	0.8	1.5	2.8	4.5	6.5	7.5	8.2	8.8	9.6	9.8	9.4	9.4	9.3	10.0	8.8	8.3	6.8	5.2	5.0	5.0	10.0	0.8	6.1
30	5.0	5.0	5.2	4.5	3.8	3.7	4.7	5.7	6.7	7.8	8.4	9.3	9.4	9.8	10.2	10.3	9.3	8.0	7.1	6.3	5.8	4.8	4.2	3.9	10.3	3.7	6.6
31	3.8	4.1	4.8	5.5	5.1	5.0	5.3	5.2	4.3	5.0	6.9	7.1	7.3	7.8	7.7	8.4	8.8	8.5	7.5	6.7	6.3	5.9	5.4	5.3	8.8	3.8	6.2
Max.	**7.1**	**7.0**	**6.7**	**6.0**	**5.9**	**7.0**	**7.6**	**8.1**	**8.2**	**9.5**	**10.7**	**11.6**	**11.7**	**10.8**	**11.0**	**11.2**	**11.0**	**10.2**	**9.4**	**8.3**	**7.5**	**6.6**	**6.9**	**6.9**	**11.7**		
Min.	**-0.3**	**-0.4**	**-0.7**	**-0.8**	**-0.7**	**-0.8**	**-0.4**	**-0.2**	**-0.2**	**-0.2**	**-0.2**	**0.1**	**0.5**	**1.1**	**2.0**	**3.0**	**3.5**	**3.7**	**3.2**	**2.2**	**1.6**	**1.0**	**0.1**	**-0.2**		**-0.8**	
Avg.	**3.0**	**2.7**	**2.5**	**2.3**	**2.2**	**2.3**	**2.8**	**3.3**	**4.0**	**4.7**	**5.5**	**6.1**	**6.5**	**6.8**	**7.0**	**7.1**	**7.1**	**6.8**	**6.3**	**5.5**	**4.7**	**3.9**	**3.3**	**3.1**			**4.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.6	3.7	3.8	3.7	4.0	4.0	4.4	5.8	6.8	7.2	7.5	7.8	8.5	7.8	8.8	8.3	7.6	6.3	5.8	5.8	5.2	4.4	4.2	4.2	8.8	3.7	5.9
2	4.1	4.0	3.9	3.6	3.7	3.8	4.0	4.3	4.5	5.2	5.8	6.8	7.9	8.6	8.9	9.1	9.4	9.8	9.6	9.0	8.2	6.9	5.6	5.4	9.8	3.6	6.3
3	5.6	4.9	4.6	4.1	4.2	4.5	4.9	5.7	6.6	7.1	7.6	8.7	9.6	9.9	10.8	12.2	12.7	11.8	12.0	11.4	11.3	10.2	9.2	7.7	12.7	4.1	8.2
4	7.3	6.7	6.5	6.9	6.9	7.2	7.5	7.5	7.5	8.1	8.4	8.8	9.8	10.3	9.8	9.2	9.7	8.3	6.6	6.0	5.4	5.1	4.6	4.5	10.3	4.5	7.4
5	4.3	4.3	4.2	4.0	4.0	4.2	4.7	4.7	4.9	5.3	6.0	7.1	7.8	7.3	7.3	8.2	8.0	7.3	6.8	7.2	6.5	5.8	5.6	5.0	8.2	4.0	5.8
6	4.5	4.4	4.6	4.7	4.7	4.7	5.0	6.6	8.2	10.3	11.5	10.9	10.7	10.6	10.1	9.4	8.8	8.6	8.6	6.6	5.4	4.3	4.1	4.4	11.5	4.1	7.1
7	4.2	5.3	5.3	4.4	4.8	6.7	6.2	7.2	9.0	10.3	9.9	9.5	9.6	8.9	9.4	8.0	6.9	6.5	5.8	5.9	5.2	4.2	3.2	2.9	10.3	2.9	6.6
8	2.9	2.8	3.0	3.2	2.9	3.8	4.3	5.1	5.2	6.2	7.3	8.4	9.1	8.1	7.4	7.6	8.5	6.7	6.3	5.8	4.8	3.9	3.2	2.4	9.1	2.4	5.4
9	1.7	2.0	2.3	2.2	2.1	2.5	2.4	3.9	5.1	6.4	7.4	8.2	8.6	8.3	8.4	9.1	9.1	9.0	9.4	9.6	9.0	8.2	7.8	7.8	9.6	1.7	6.3
10	7.9	7.7	7.4	7.2	6.8	8.1	8.1	9.0	9.7	11.2	13.4	15.2	16.4	17.5	18.5	19.1	19.7	19.4	19.8	17.7	12.8	9.2	7.5	6.7	19.8	6.7	12.3
11	5.8	5.2	4.6	4.5	4.3	4.4	4.6	5.2	6.0	6.7	7.8	9.5	11.5	12.6	12.4	11.4	9.9	8.8	8.0	6.8	5.4	4.8	4.5	4.3	12.6	4.3	7.0
12	4.2	4.2	4.2	4.1	4.0	3.7	4.1	4.4	4.7	4.9	4.9	5.2	5.5	5.8	6.1	7.2	7.9	8.2	8.3	8.1	7.6	6.4	5.7	5.6	8.3	3.7	5.6
13	5.3	5.4	5.4	5.5	5.0	4.7	5.8	7.0	7.7	8.3	8.9	9.4	9.2	9.5	10.4	11.2	9.6	9.4	9.9	9.7	9.3	9.0	8.7	8.3	11.2	4.7	8.0
14	7.9	7.7	7.1	7.1	7.0	7.1	7.7	8.7	9.7	10.8	11.7	12.6	12.8	13.0	11.7	11.9	12.1	12.3	12.8	12.8	12.5	12.1	12.1	11.4	13.0	7.0	10.5
15	10.6	10.3	9.8	9.8	9.9	9.5	9.9	10.9	12.0	13.9	15.4	16.5	17.6	18.6	19.4	19.3	20.1	19.9	19.4	18.9	17.8	16.3	14.5	12.2	20.1	9.5	14.7
16	11.3	10.4	9.3	8.4	8.6	9.1	9.6	10.8	12.1	13.7	14.5	15.4	15.8	16.0	16.0	16.0	15.3	14.7	13.2	12.0	11.1	10.3	9.2	7.5	16.0	7.5	12.1
17	6.3	5.2	4.4	4.0	3.8	3.7	3.9	4.2	4.7	5.4	6.2	6.3	6.9	7.9	8.6	9.8	10.5	9.0	8.7	9.1	9.2	8.9	8.5	7.8	10.5	3.7	6.8
18	7.7	7.6	7.6	7.2	6.1	5.8	7.1	8.1	9.1	9.6	9.7	10.1	11.1	12.9	13.9	14.2	13.4	13.5	12.2	11.6	9.9	9.3	9.3	9.2	14.2	5.8	9.8
19	9.1	9.1	8.2	8.9	9.1	9.0	9.5	10.9	12.4	13.7	15.2	16.5	17.7	18.8	19.8	20.3	21.0	21.2	21.2	20.9	20.0	18.7	17.3	16.3	21.2	8.2	15.2
20	14.7	14.1	13.1	13.0	12.3	12.7	13.5	14.4	15.7	17.5	18.9	20.2	21.1	21.7	22.2	22.5	22.4	22.1	21.5	19.8	18.4	16.6	14.9	14.2	22.5	12.3	17.4
21	13.7	13.2	12.0	12.4	11.7	11.2	11.5	12.4	13.2	14.3	15.4	15.7	16.6	17.1	17.3	17.8	17.9	17.5	16.5	15.3	12.8	11.2	9.4	7.4	17.9	7.4	13.9
22	6.5	6.0	5.6	5.1	4.7	4.7	5.0	5.3	5.5	6.0	6.3	6.6	6.7	7.0	7.4	7.3	7.4	7.4	7.3	7.2	7.1	6.9	6.8	6.7	7.4	4.7	6.3
23	6.5	6.3	6.5	6.3	6.2	6.1	6.3	6.3	6.4	6.5	6.4	6.4	6.5	6.5	6.5	6.5	6.4	6.2	6.0	6.0	6.0	6.0	5.7	5.6	6.5	5.6	6.3
24	5.5	5.5	5.3	5.4	5.5	5.9	6.2	6.7	6.8	7.3	7.6	7.5	7.4	7.9	7.5	7.6	7.4	7.7	7.5	7.2	6.9	6.5	6.4	6.3	7.9	5.3	6.7
25	6.0	5.7	5.7	5.6	5.6	5.8	6.1	6.6	7.5	8.3	8.1	8.0	8.0	8.3	9.0	8.7	8.9	8.8	8.2	8.2	7.4	6.3	5.5	5.2	9.0	5.2	7.1
26	4.8	4.5	4.9	5.4	5.7	6.2	6.9	7.9	9.0	9.7	10.4	10.5	11.7	12.4	13.3	13.6	13.6	14.0	14.3	13.9	12.9	10.9	9.9	9.4	14.3	4.5	9.8
27	8.8	8.2	7.4	7.3	7.3	7.7	8.9	10.4	11.8	12.7	13.4	13.6	14.8	15.5	15.5	16.9	16.8	16.7	15.9	14.6	12.8	10.8	9.7	8.9	16.9	7.3	11.9
28	8.3	8.1	7.4	7.0	7.1	7.0	7.0	7.3	7.7	8.5	8.9	8.7	9.0	10.1	10.9	10.7	10.6	11.1	11.8	11.6	10.9	10.1	9.2	8.9	11.8	7.0	9.1
29	8.8	8.8	8.7	8.1	7.7	7.6	8.3	9.4	10.5	11.6	12.6	13.0	13.6	13.9	14.0	14.6	13.8	13.3	13.1	12.1	11.1	9.7	8.6	7.9	14.6	7.6	10.9
30	8.3	8.4	8.3	8.3	8.3	8.2	8.0	7.7	7.6	7.8	7.8	8.6	10.0	10.6	11.6	12.1	12.0	11.8	11.8	11.3	9.3	9.2	8.6	8.4	12.1	7.6	9.3
Max.	**14.7**	**14.1**	**13.1**	**13.0**	**12.3**	**12.7**	**13.5**	**14.4**	**15.7**	**17.5**	**18.9**	**20.2**	**21.1**	**21.7**	**22.2**	**22.5**	**22.4**	**22.1**	**21.5**	**20.9**	**20.0**	**18.7**	**17.3**	**16.3**	**22.5**		
Min.	**1.7**	**2.0**	**2.3**	**2.2**	**2.1**	**2.5**	**2.4**	**3.9**	**4.5**	**4.9**	**4.9**	**5.2**	**5.5**	**5.8**	**6.1**	**6.5**	**6.4**	**6.2**	**5.8**	**5.8**	**4.8**	**3.9**	**3.2**	**2.4**		**1.7**	
Avg.	**6.9**	**6.7**	**6.4**	**6.2**	**6.1**	**6.3**	**6.7**	**7.5**	**8.3**	**9.1**	**9.8**	**10.4**	**11.0**	**11.4**	**11.8**	**12.0**	**11.9**	**11.6**	**11.3**	**10.7**	**9.7**	**8.7**	**8.0**	**7.4**			**9.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.5	8.7	8.7	8.4	7.3	7.9	8.7	9.5	10.6	12.0	12.4	12.8	13.8	14.0	14.4	14.5	14.2	14.1	13.8	13.4	12.4	10.4	9.7	9.7	14.5	7.3	11.2
2	9.4	9.0	8.3	8.3	8.4	8.7	9.0	10.1	11.7	13.6	14.4	15.0	15.4	15.5	16.2	16.0	16.5	16.9	17.1	16.7	16.0	15.1	13.7	13.4	17.1	8.3	13.1
3	13.0	12.5	11.5	10.8	10.4	10.3	10.5	10.9	11.7	12.4	13.6	14.4	15.0	15.6	16.4	17.1	16.4	15.6	13.0	12.2	11.7	11.2	10.9	10.0	17.1	10.0	12.8
4	9.2	8.7	8.6	8.3	8.1	8.3	8.5	9.1	9.8	10.5	11.2	11.9	11.6	11.7	12.8	13.1	12.1	11.3	11.4	11.8	11.7	11.0	9.7	9.3	13.1	8.1	10.4
5	8.8	8.5	8.5	8.4	8.6	9.2	9.5	10.2	11.7	12.8	13.6	14.5	14.3	14.4	14.7	14.1	13.1	13.0	9.8	8.9	8.6	8.4	8.3	8.3	14.7	8.3	10.8
6	8.8	8.8	8.7	8.6	8.6	8.6	8.8	9.0	9.2	9.4	9.5	9.8	10.8	11.4	12.5	13.3	13.9	14.0	14.2	14.2	13.8	13.4	11.5	11.1	14.2	8.6	10.9
7	10.5	10.5	10.1	9.8	9.7	10.2	10.5	11.5	13.4	14.5	15.0	15.4	15.7	16.1	16.7	16.9	17.2	16.9	14.8	13.7	12.7	11.5	10.8	10.3	17.2	9.7	13.1
8	10.0	9.8	9.7	9.6	9.5	9.9	9.4	9.7	10.1	10.4	10.5	10.6	11.0	11.4	11.4	11.4	11.6	12.1	11.8	11.4	10.0	8.9	8.4	7.8	12.1	7.8	10.3
9	7.1	6.4	6.4	6.7	6.8	7.4	7.7	8.3	8.9	9.7	10.7	11.6	13.0	13.1	14.3	14.1	13.8	14.3	13.6	13.2	12.7	12.1	11.3	10.1	14.3	6.4	10.6
10	9.3	9.2	8.9	9.2	8.9	10.2	10.3	11.8	13.1	14.4	14.4	15.1	14.7	14.0	15.0	15.1	13.4	12.4	11.5	10.8	10.3	9.7	9.0	8.9	15.1	8.9	11.6
11	8.7	8.7	9.1	8.9	8.8	8.5	8.4	9.1	10.6	11.7	13.3	14.1	14.9	15.4	15.3	15.4	15.8	15.6	14.9	14.1	13.0	10.9	10.2	9.7	15.8	8.4	11.9
12	9.2	9.0	9.3	8.8	8.7	9.5	10.0	11.4	12.5	13.5	13.6	14.1	14.9	14.6	12.3	12.3	10.4	10.1	10.3	10.4	10.3	9.8	9.5	9.3	14.9	8.7	11.0
13	8.9	8.6	8.3	8.1	8.0	8.0	8.1	8.2	8.3	8.4	8.7	8.7	8.9	9.1	9.4	9.7	9.8	10.3	10.1	9.9	9.9	9.7	9.2	8.7	10.3	8.0	9.0
14	8.4	8.4	8.3	8.2	8.1	8.1	8.3	8.4	8.7	9.5	10.5	11.1	11.6	12.0	11.2	11.0	11.1	10.8	10.5	10.1	10.0	9.7	9.4	9.2	12.0	8.1	9.7
15	8.8	8.8	8.7	8.6	8.5	8.6	8.7	9.1	9.5	10.1	11.5	12.0	12.6	13.4	13.4	13.2	13.1	13.1	12.7	12.1	11.1	10.3	9.9	8.9	13.4	8.5	10.7
16	8.4	8.2	8.0	7.5	7.1	7.3	7.8	9.1	9.7	10.8	12.4	13.8	14.5	15.0	15.1	15.8	16.1	16.5	16.8	16.7	15.4	13.8	11.9	10.9	16.8	7.1	12.0
17	10.1	10.4	9.3	9.3	8.9	8.9	10.4	11.7	13.2	14.6	15.4	16.1	16.9	17.2	18.1	18.6	18.4	15.6	13.7	12.1	11.2	10.0	9.5	9.6	18.6	8.9	12.9
18	9.4	9.3	9.2	9.1	9.0	9.0	9.3	10.0	10.6	11.3	11.8	13.0	14.0	13.9	11.5	12.4	12.0	11.2	11.0	11.5	11.7	11.5	11.2	10.7	14.0	9.0	11.0
19	10.5	10.0	9.6	10.1	9.3	8.5	8.4	9.1	10.7	12.2	13.0	14.0	15.2	15.0	14.9	14.6	14.9	14.6	14.9	14.6	14.1	13.7	13.5	13.8	15.2	8.4	12.5
20	13.4	13.4	13.2	12.6	12.9	12.6	13.4	12.9	13.4	14.5	14.9	15.1	16.1	17.6	18.0	17.7	17.4	17.2	16.5	16.3	14.3	12.7	11.8	10.5	18.0	10.5	14.5
21	9.9	9.6	9.3	8.7	8.3	7.9	7.8	7.9	7.8	7.8	8.4	8.7	8.8	9.6	9.9	9.9	9.8	8.7	8.3	8.1	7.6	7.1	6.7	6.9	9.9	6.7	8.5
22	6.9	6.9	6.8	6.8	6.8	6.7	6.7	6.8	6.8	6.8	7.0	7.3	7.4	7.7	7.7	7.8	8.1	7.8	7.6	7.4	7.3	7.3	7.3	7.3	8.1	6.7	7.2
23	7.5	7.5	7.0	7.0	7.0	7.0	7.1	7.4	7.7	8.1	8.4	8.7	8.7	9.0	8.9	8.8	8.7	8.8	8.6	8.6	8.1	8.2	8.1	8.1	9.0	7.0	8.0
24	8.0	8.3	8.4	8.2	8.1	8.0	8.2	8.4	9.1	9.8	10.2	10.1	10.4	10.6	10.8	11.3	11.9	11.4	11.4	11.3	11.0	11.2	11.3	10.8	11.9	8.0	9.9
25	10.7	10.8	11.0	11.3	11.4	11.3	11.9	13.0	13.7	14.6	14.7	15.5	15.9	16.4	16.1	15.7	15.3	15.3	14.9	14.9	14.4	13.7	13.4	13.1	16.4	10.7	13.7
26	12.8	11.8	11.4	11.4	11.0	10.2	11.2	12.2	12.8	13.5	15.5	17.3	18.2	19.3	18.9	17.6	19.1	20.1	19.2	18.4	17.6	16.7	15.9	14.1	20.1	10.2	15.3
27	14.5	15.3	15.0	12.9	13.6	14.7	15.0	15.6	15.8	17.3	18.6	18.6	19.8	20.4	21.3	22.1	22.6	21.3	20.6	19.2	17.6	16.0	16.0	16.8	22.6	12.9	17.5
28	15.8	14.5	11.8	11.1	10.6	10.3	10.1	10.1	10.1	10.5	10.8	12.7	15.3	16.4	17.4	17.8	17.6	17.7	17.2	15.6	13.4	11.7	11.1	10.9	17.8	10.1	13.3
29	10.7	10.6	10.6	10.3	10.2	9.9	10.8	10.9	11.7	12.7	14.0	15.8	16.8	17.1	17.9	18.5	18.7	18.6	18.5	17.1	16.9	15.5	13.6	13.2	18.7	9.9	14.2
30	13.5	13.3	12.5	11.2	11.0	10.8	10.7	10.8	11.1	10.7	10.9	11.1	12.2	12.7	14.0	14.4	14.6	14.1	13.1	12.8	12.1	11.4	10.5	10.0	14.6	10.0	12.1
31	9.8	9.6	9.2	9.0	8.7	8.4	8.5	9.0	9.4	9.7	10.1	10.6	11.4	12.8	13.5	13.7	13.5	12.6	11.2	10.6	10.1	9.4	9.3	9.2	13.7	8.4	10.4
Max.	**15.8**	**15.3**	**15.0**	**12.9**	**13.6**	**14.7**	**15.0**	**15.6**	**15.8**	**17.3**	**18.6**	**18.6**	**19.8**	**20.4**	**21.3**	**22.1**	**22.6**	**21.3**	**20.6**	**19.2**	**17.6**	**16.7**	**16.0**	**16.8**	**22.6**		
Min.	**6.9**	**6.4**	**6.4**	**6.7**	**6.8**	**6.7**	**6.7**	**6.8**	**6.8**	**6.8**	**7.0**	**7.3**	**7.4**	**7.7**	**7.7**	**7.8**	**8.1**	**7.8**	**7.6**	**7.4**	**7.3**	**7.1**	**6.7**	**6.9**		**6.4**	
Avg.	**10.0**	**9.8**	**9.5**	**9.3**	**9.1**	**9.2**	**9.5**	**10.0**	**10.7**	**11.5**	**12.2**	**12.9**	**13.5**	**13.9**	**14.2**	**14.3**	**14.2**	**13.9**	**13.3**	**12.8**	**12.2**	**11.4**	**10.7**	**10.3**			**11.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.2	9.2	9.1	9.1	9.1	8.9	8.9	8.8	8.9	9.1	9.6	10.2	9.7	10.0	10.0	10.0	9.7	9.2	9.2	9.2	9.0	8.8	8.9	8.9	10.2	8.8	9.3
2	8.8	8.8	8.8	8.7	8.7	8.9	9.0	8.8	8.9	9.2	9.1	9.1	9.1	9.3	9.4	9.5	9.2	9.3	9.6	9.8	9.9	9.6	9.5	9.4	9.9	8.7	9.2
3	9.2	9.3	9.1	9.0	8.9	8.8	8.9	9.2	9.5	9.8	10.1	10.3	10.9	10.9	11.5	11.7	11.4	11.0	10.4	9.8	9.4	9.3	9.3	9.3	11.7	8.8	9.9
4	9.3	9.3	9.2	9.2	9.2	9.3	9.3	9.4	9.4	9.4	9.6	9.7	10.0	10.0	10.0	10.0	10.0	10.2	10.3	10.1	10.0	10.0	9.9	10.1	10.3	9.2	9.7
5	10.1	10.2	10.1	9.7	9.6	9.8	9.9	10.5	10.9	10.6	10.5	10.4	9.8	9.5	9.4	9.7	10.0	10.1	10.4	10.6	10.4	9.9	9.6	9.0	10.9	9.0	10.0
6	8.4	7.9	7.6	7.3	7.2	8.2	9.6	10.2	10.5	11.5	11.7	12.4	13.0	13.9	14.3	13.0	12.6	13.2	12.8	12.8	11.4	10.5	9.5	8.9	14.3	7.2	10.8
7	8.7	8.2	8.6	9.1	8.8	8.0	8.4	9.6	10.8	11.8	12.7	13.0	13.6	14.5	15.6	15.9	16.3	16.2	15.7	15.1	14.2	13.0	11.5	10.3	16.3	8.0	12.1
8	10.2	9.2	9.4	8.9	9.0	8.9	9.4	9.8	10.4	12.0	14.1	15.0	16.2	16.5	17.2	17.4	17.6	18.0	17.4	16.2	15.0	13.5	12.6	12.7	18.0	8.9	13.2
9	11.8	11.1	11.4	11.5	10.8	9.9	10.6	12.2	13.3	14.5	15.8	16.8	17.5	18.7	18.3	18.8	18.6	18.0	18.0	17.2	15.9	15.5	15.3	13.9	18.8	9.9	14.8
10	13.4	13.8	14.0	13.9	13.9	13.4	12.6	13.4	15.0	16.4	17.6	18.5	19.3	20.1	20.7	20.8	20.8	20.3	20.0	18.5	16.8	16.3	15.4	15.2	20.8	12.6	16.7
11	14.2	14.0	12.3	12.1	12.1	12.3	12.8	13.0	13.9	14.5	15.1	16.5	17.6	17.5	17.2	18.0	18.2	17.3	17.0	16.5	15.9	15.5	15.1	14.9	18.2	12.1	15.1
12	15.0	14.8	14.1	13.7	13.3	13.4	13.2	13.3	13.4	13.9	14.1	15.2	16.7	18.8	19.0	21.3	22.5	23.0	22.9	21.9	20.4	18.5	17.7	17.0	23.0	13.2	17.0
13	16.8	16.7	16.1	15.8	16.3	15.6	15.1	15.7	16.5	17.8	18.6	19.4	19.9	20.9	20.8	21.3	21.6	21.5	19.8	19.0	17.5	15.7	13.7	12.6	21.6	12.6	17.7
14	11.4	9.5	8.3	7.5	7.2	7.5	7.8	8.0	8.1	7.9	8.0	8.4	8.7	9.4	9.7	9.8	9.5	9.5	9.3	9.6	9.3	8.6	8.3	8.2	11.4	7.2	8.7
15	8.2	8.3	8.4	8.5	8.9	9.1	9.3	9.4	9.8	10.3	11.2	11.3	11.5	11.9	12.2	11.9	11.9	11.6	11.3	11.4	10.9	10.5	10.3	9.8	12.2	8.2	10.3
16	9.6	9.3	9.0	8.2	7.6	7.6	7.6	8.1	10.2	10.9	11.3	13.4	15.1	16.4	16.9	17.8	17.5	15.4	15.0	13.7	12.0	11.8	11.6	11.5	17.8	7.6	12.0
17	11.1	10.4	10.0	9.4	9.5	9.3	9.2	9.5	10.7	12.1	12.0	12.1	12.4	13.9	12.9	12.9	12.4	12.3	11.4	10.8	10.1	9.9	9.6	9.1	13.9	9.1	11.0
18	9.5	9.5	9.1	8.9	8.9	9.0	8.9	8.8	9.1	9.3	9.2	9.2	9.3	9.8	10.5	11.2	11.4	11.2	11.0	10.9	10.9	10.8	10.7	10.8	11.4	8.8	9.9
19	10.7	10.8	10.4	10.4	10.3	10.0	10.6	11.0	11.5	11.8	12.4	12.9	12.7	12.7	13.3	13.3	12.5	12.2	11.2	10.6	10.4	10.2	10.1	9.8	13.3	9.8	11.3
20	9.5	9.2	9.0	9.1	9.1	9.1	9.1	9.0	9.0	9.5	9.8	10.5	10.8	11.2	11.5	12.1	12.2	12.5	11.6	10.8	9.4	9.1	9.1	9.3	12.5	9.0	10.1
21	9.3	9.2	8.8	8.5	8.6	8.3	8.2	8.3	8.4	8.7	9.0	9.2	9.3	9.5	10.1	10.6	10.5	10.7	10.6	10.2	9.6	9.2	8.8	8.7	10.7	8.2	9.3
22	9.0	8.9	9.0	8.7	8.7	8.7	8.7	8.6	8.7	9.0	9.4	9.7	9.8	9.7	9.5	9.6	9.7	9.6	9.4	9.0	8.8	8.6	8.6	8.6	9.8	8.6	9.1
23	8.6	8.8	9.0	8.6	8.8	8.5	8.3	8.2	8.5	9.4	10.4	11.1	11.5	12.1	12.4	12.4	12.5	12.4	12.2	11.8	11.5	11.5	11.6	11.9	12.5	8.2	10.5
24	11.9	11.7	11.3	11.0	10.4	10.4	10.5	10.4	10.7	11.4	12.1	13.0	14.3	14.8	14.0	13.5	14.7	14.3	12.4	12.0	12.0	11.3	10.3	10.6	14.8	10.3	12.0
25	10.6	10.5	10.6	10.1	9.5	9.3	9.0	9.0	9.1	9.4	9.9	10.3	11.2	13.0	14.4	15.3	15.8	15.3	14.0	12.4	10.6	9.8	9.4	9.7	15.8	9.0	11.2
26	9.8	9.3	8.7	8.9	9.1	9.4	9.6	9.5	10.2	10.9	12.1	12.8	12.9	13.5	14.2	13.9	13.7	13.5	12.7	11.7	11.4	11.0	10.8	11.1	14.2	8.7	11.3
27	11.4	10.8	9.9	10.4	9.0	8.8	9.2	10.2	12.2	12.8	14.3	15.7	15.5	15.4	15.6	16.1	15.7	15.6	15.2	14.9	14.2	12.7	12.0	12.3	16.1	8.8	12.9
28	11.9	10.4	10.3	9.8	10.7	9.7	9.8	9.9	10.9	13.1	14.5	15.2	16.2	17.0	17.4	17.5	17.8	18.2	17.0	15.4	14.3	13.4	12.5	12.5	18.2	9.7	13.6
29	11.3	11.4	11.7	10.9	10.6	10.7	10.5	10.5	10.7	10.7	11.5	12.3	13.6	14.9	15.3	15.6	15.6	15.4	15.1	14.0	13.0	12.3	11.2	10.8	15.6	10.5	12.5
30	9.6	9.6	9.0	8.3	7.9	8.5	8.7	8.9	9.9	11.3	12.1	12.7	13.0	13.5	14.2	14.7	14.7	15.2	14.8	13.7	11.7	10.9	10.1	9.7	15.2	7.9	11.4
31	9.6	8.6	8.4	8.6	7.4	7.2	7.3	7.0	8.4	10.2	10.7	12.6	14.4	14.6	14.7	13.8	13.2	13.5	13.0	12.7	11.4	10.1	10.2	11.0	14.7	7.0	10.8
Max.	**16.8**	**16.7**	**16.1**	**15.8**	**16.3**	**15.6**	**15.1**	**15.7**	**16.5**	**17.8**	**18.6**	**19.4**	**19.9**	**20.9**	**20.8**	**21.3**	**22.5**	**23.0**	**22.9**	**21.9**	**20.4**	**18.5**	**17.7**	**17.0**	**23.0**		
Min.	**8.2**	**7.9**	**7.6**	**7.3**	**7.2**	**7.2**	**7.3**	**7.0**	**8.1**	**7.9**	**8.0**	**8.4**	**8.7**	**9.3**	**9.4**	**9.5**	**9.2**	**9.2**	**9.2**	**9.0**	**8.8**	**8.6**	**8.3**	**8.2**		**7.0**	
Avg.	**10.6**	**10.3**	**10.0**	**9.8**	**9.6**	**9.6**	**9.7**	**9.9**	**10.6**	**11.3**	**11.9**	**12.5**	**13.1**	**13.7**	**13.9**	**14.2**	**14.2**	**14.1**	**13.6**	**13.0**	**12.2**	**11.5**	**11.1**	**10.9**			**11.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.3	10.5	10.4	9.8	9.1	8.6	8.3	8.3	8.5	8.7	9.0	9.3	9.8	10.5	11.2	12.0	12.7	12.4	11.3	9.6	8.2	7.6	7.5	7.7	12.7	7.5	9.7
2	8.0	8.1	8.1	8.0	7.8	8.0	8.2	8.4	9.0	9.4	10.3	11.1	11.4	12.3	12.6	11.9	11.2	10.6	10.2	9.5	8.9	8.6	8.5	8.4	12.6	7.8	9.5
3	8.6	8.5	8.5	8.6	8.6	8.5	8.3	8.3	8.2	8.5	8.8	8.8	8.8	8.5	8.4	8.2	8.0	7.8	7.6	7.5	7.4	7.4	7.4	7.3	8.8	7.3	8.2
4	7.3	7.6	7.8	7.7	7.8	8.0	7.3	7.4	8.8	10.4	10.9	11.8	12.7	13.7	13.8	14.1	13.0	12.6	12.5	10.6	10.6	10.3	10.3	9.8	14.1	7.3	10.3
5	10.1	10.0	10.0	9.7	9.2	8.4	9.3	9.0	8.4	9.7	11.3	11.3	13.2	13.9	14.4	12.9	9.7	8.4	8.6	8.8	9.3	9.3	9.2	8.8	14.4	8.4	10.1
6	8.5	7.8	7.3	7.2	7.6	7.2	6.8	7.2	7.6	8.4	8.8	9.1					10.7	10.5	10.0	9.5	9.1	7.7	7.2	7.2	10.7	6.8	8.3
7	7.4	7.6	7.6	7.7	7.7	7.9	7.9	7.9	8.1	8.5	8.6	8.6	8.9	9.0	9.2	9.5	9.7	9.3	9.2	8.4	8.2	8.4	8.7	8.8	9.7	7.4	8.5
8	8.9	8.8	9.1	9.2	9.4	9.6	9.7	10.0	10.1	10.2	10.0	10.1	10.2	10.2	10.5	10.7	10.8	11.4	11.3	11.2	11.0	10.5	10.0	9.8	11.4	8.8	10.1
9	9.5	9.2	8.9	9.0	9.1	9.0	9.0	9.1	9.0	9.0	9.3	9.6	9.6	10.3	10.4	10.9	11.1	11.4	11.0	10.6	9.8	9.3	9.3	9.5	11.4	8.9	9.7
10	9.0	9.1	9.3	8.9	8.7	8.7	8.6	8.8	8.3	9.0	9.9	10.7	11.1	11.0	11.1	11.2	10.9	11.2	10.7	9.8	9.2	8.7	8.8	8.8	11.2	8.3	9.7
11	8.4	8.5	8.8	8.8	8.8	8.5	8.5	8.4	8.5	8.9	9.3	8.7	8.7	8.4	7.9	7.8	7.8	7.9	7.6	7.5	7.5	7.8	8.1	8.3	9.3	7.5	8.3
12	8.3	8.3	8.2	8.1	8.0	8.2	7.9	7.5	7.8	7.7	8.1	9.2	10.4	11.2	11.8	12.1	12.1	9.7	8.4	8.0	7.8	7.5	7.7	7.5	12.1	7.5	8.8
13	7.3	7.2	6.8	6.9	7.0	7.2	7.0	6.9	7.0	7.2	7.3	7.2	7.5	8.4	8.1	8.2	8.1	7.2	7.0	7.2	6.6	6.4	6.2	5.7	8.4	5.7	7.1
14	5.6	5.9	6.0	6.1	5.9	6.0	5.8	5.0	4.4	5.3	6.8	7.5	8.1	8.8	8.9	9.8	10.0	9.7	9.1	9.0	7.7	6.9	6.5	6.2	10.0	4.4	7.1
15	5.9	5.9	5.7	5.3	5.7	5.0	4.4	4.4	3.3	4.4	6.0	7.3	7.8	8.7	9.7	10.3	9.7	8.7	9.6	9.4	7.7	6.8	7.1	7.1	10.3	3.3	6.9
16	6.6	6.2	5.9	5.9	5.6	6.3	6.4	6.6	5.8	5.1	6.9	8.6	9.1	9.3	10.5	11.0	10.9	10.3	10.2	8.9	7.4	7.1	6.7	6.2	11.0	5.1	7.6
17	5.6	5.0	4.5	4.5	4.8	5.1	4.9	5.0	5.2	5.7	6.1	6.5	6.7	7.0	7.8	8.3	8.5	8.8	9.1	8.4	7.4	7.4	7.5	7.9	9.1	4.5	6.6
18	8.0	7.7	6.9	6.8	6.9	7.0	7.2	8.0	8.2	8.4	8.8	9.1	9.5	9.5	9.4	9.0	9.2	9.2	8.9	8.7	8.6	8.4	8.5	9.1	9.5	6.8	8.4
19	9.2	9.1	9.2	9.0	8.3	8.0	8.1	8.1	7.9	8.1	8.2	8.4	8.4	8.5	8.3	8.8	8.2	7.6	7.3	7.1	6.8	6.8	6.7	6.6	9.2	6.6	8.0
20	6.5	6.5	6.5	6.4	6.5	6.5	6.5	6.4	6.4	6.4	6.2	6.4	6.7	7.0	7.4	7.7	8.2	8.9	8.0	7.4	7.2	7.4	6.9	6.3	8.9	6.2	6.9
21	6.2	6.0	5.7	5.9	6.1	6.2	6.7	6.4	6.7	7.1	7.8	8.5	9.0	9.2	9.6	10.0	9.8	10.7	10.0	9.4	7.9	7.0	6.3	5.4	10.7	5.4	7.7
22	5.4	4.6	4.1	4.4	4.5	4.0	3.9	4.6	5.0	5.6	5.6	7.5	7.8	8.8	9.0	8.8	8.7	8.2	7.1	6.2	6.0	5.7	5.5	5.3	9.0	3.9	6.1
23	5.3	5.5	5.5	5.9	5.9	5.8	6.2	5.9	6.0	6.5	6.3	6.9	7.3	7.7	7.8	7.5	7.0	6.5	6.4	6.2	6.0	6.0	6.1	6.2	7.8	5.3	6.4
24	6.2	5.7	5.6	5.8	5.5	4.9	4.6	4.8	5.1	5.3	5.8	6.1	6.6	6.8	7.3	7.7	6.0	6.8	4.9	5.0	5.0	4.9	4.4	3.9	7.7	3.9	5.6
25	3.3	3.2	3.5	3.7	4.1	4.9	5.0	5.1	4.8	4.7	5.1	5.6	6.1	6.5	6.2	6.4	6.2	5.9	5.7	5.2	5.2	5.2	5.0	4.7	6.5	3.2	5.0
26	4.4	4.1	3.9	3.5	3.5	3.3	3.2	3.2	3.0	2.9	3.6	5.0	5.2	5.5	5.8	5.9	6.4	6.3	6.7	6.2	5.6	5.5	5.4	5.5	6.7	2.9	4.7
27	5.0	5.0	4.8	4.9	3.1	3.2	2.5	2.5	2.2	2.5	2.8	3.7	4.3	4.7	5.6	5.6	5.3	5.7	5.7	5.7	5.7	5.6	5.3	5.0	5.7	2.2	4.4
28	5.0	4.6	4.0	3.4	3.1	3.0	3.0	3.2	3.2	3.4	3.7	4.1	4.5	4.6	4.7	5.0	5.3	5.7	5.6	5.1	4.9	4.6	4.7	4.8	5.7	3.0	4.3
29	4.2	4.4	4.1	4.0	3.4	3.8	3.6	3.4	3.4	3.7	4.7	5.1	6.0	6.4	6.8	6.4	6.1	5.9	5.7	5.5	5.3	5.5	5.0	4.5	6.8	3.4	4.9
30	4.2	3.7	2.7	2.6	3.0	3.1	3.2	3.2	3.2	3.3	3.5	4.7	4.8	5.2	4.8	5.2	4.9	5.1	4.5	3.9	3.8	4.0	4.1	4.1	5.2	2.6	4.0
Max.	**11.3**	**10.5**	**10.4**	**9.8**	**9.4**	**9.6**	**9.7**	**10.0**	**10.1**	**10.4**	**11.3**	**11.8**	**13.2**	**13.9**	**14.4**	**14.1**	**13.0**	**12.6**	**12.5**	**11.2**	**11.0**	**10.5**	**10.3**	**9.8**	**14.4**		
Min.	**3.3**	**3.2**	**2.7**	**2.6**	**3.0**	**3.0**	**2.5**	**2.5**	**2.2**	**2.5**	**2.8**	**3.7**	**4.3**	**4.6**	**4.7**	**5.0**	**4.9**	**5.1**	**4.5**	**3.9**	**3.8**	**4.0**	**4.1**	**3.9**		**2.2**	
Avg.	**7.0**	**6.8**	**6.7**	**6.6**	**6.5**	**6.5**	**6.4**	**6.4**	**6.4**	**6.8**	**7.3**	**7.9**	**8.3**	**8.7**	**8.9**	**9.1**	**8.9**	**8.7**	**8.3**	**7.9**	**7.4**	**7.1**	**7.0**	**6.9**			**7.4**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.9	3.7	3.3	3.0	2.9	2.8	2.9	2.7	2.5	3.1	4.0	5.0	5.3	5.4	5.9	6.4	6.4	6.2	4.8	4.8	4.1	3.9	3.9	3.5	6.4	2.5	4.2
2	3.2	2.9	2.4	2.4	2.5	2.3	2.3	2.4	2.4	2.4	2.3	2.6	3.3	4.1	4.4	4.9	5.3	5.4	4.7	3.7	3.5	3.0	2.6	2.1	5.4	2.1	3.2
3	1.6	1.5	1.5	1.5	1.4	1.2	1.5	1.5	1.3	1.3	1.7	2.8	3.6	4.3	4.4	4.5	4.3	4.3	3.9	3.4	2.7	2.3	1.5	1.8	4.5	1.2	2.5
4	0.8	1.4	1.7	1.7	1.6	1.4	1.5	1.8	2.4	2.1	2.0	2.0	2.2	2.4	2.5	2.6	2.6	2.3	1.8	1.6	1.4	1.5	2.0	1.9	2.6	0.8	1.9
5	1.8	1.8	1.5	1.6	1.8	1.8	1.5	1.1	0.9	1.6	1.9	2.0	2.1	2.7	3.6	4.1	3.7	3.6	2.5	2.2	1.6	1.1	0.6	0.2	4.1	0.2	2.0
6	-0.2	-0.6	-1.0	-1.1	-1.3	-1.3	-1.4	-1.7	-2.0	-2.4	-2.5	-2.2	-1.4	-1.0	-0.6	-0.4	-0.7	-0.5	-1.0	-1.6	-2.0	-2.1	-3.0	-3.2	-0.2	-3.2	-1.5
7	-3.8	-4.3	-4.7	-5.2	-5.5	-5.6	-5.5	-5.2	-4.9	-5.0	-4.8	-4.0	-3.3	-2.7	-2.7	-2.4	-2.2	-2.0	-2.9	-3.8	-4.7	-5.2	-5.6	-5.9	-2.0	-5.9	-4.2
8	-5.8	-5.6	-5.6	-6.0	-6.4	-6.5	-6.6	-7.0	-7.5	-7.4	-7.2	-6.0	-5.0	-4.0	-3.2	-2.7	-2.4	-2.6	-3.2	-4.1	-4.5	-4.0	-4.0	-5.4	-2.4	-7.5	-5.1
9	-5.8	-5.4	-5.2	-5.5	-6.1	-7.0	-6.8	-6.5	-7.5	-7.2	-5.7	-3.3	-0.8	0.8	1.3	2.0	1.9	1.0	0.1	-0.8	-1.8	-1.3	0.1	0.0	2.0	-7.5	-2.9
10	0.0	-0.7	-0.3	-0.5	-1.5	-0.3	-0.7	-1.2	-1.8	-2.3	-1.3	-0.3	0.4	0.7	0.9	1.2	0.9	1.0	0.0	-1.5	-2.1	-2.6	-3.3	-3.6	1.2	-3.6	-0.8
11	-4.4	-5.1	-4.7	-4.8	-4.6	-4.7	-4.9	-4.9	-4.1	-3.5	-2.7	-0.9	0.1	0.9	1.7	2.0	1.9	1.3	1.4	1.5	1.6	1.8	1.9	1.8	2.0	-5.1	-1.3
12	2.0	2.1	2.2	2.1	2.2	2.0	1.7	1.6	1.8	0.5	1.2	1.9	2.8	3.5	4.2	4.5	4.7	4.5	4.4	3.1	2.2	1.2	0.9	0.6	4.7	0.5	2.4
13	0.1	-0.2	-0.1	-0.3	-0.8	-1.3	-2.0	-2.7	-2.9	-3.4	-3.7	-3.8	-3.1	-2.6	-1.8	-1.0	-0.6	-1.4	-2.4	-3.3	-3.1	-3.0	-3.2	-3.2	0.1	-3.8	-2.1
14	-3.7	-4.1	-4.3	-4.4	-4.5	-4.6	-5.0	-5.2	-5.6	-6.8	-6.2	-4.6	-3.9	-3.0	-2.5	-2.3	-2.2	-2.7	-3.3	-3.0	-4.2	-5.3	-6.1	-6.0	-2.2	-6.8	-4.3
15	-5.8	-5.3	-4.7	-4.8	-4.8	-5.0	-4.6	-5.4	-4.7	-4.4	-2.6	-1.7	-0.4	1.3	1.3	1.5	1.4	1.2	0.8	-0.4	-0.5	-0.6	-0.7	-1.0	1.5	-5.8	-2.1
16	-1.4	-2.4	-3.1	-3.1	-3.8	-4.6	-5.2	-5.4	-6.1	-6.7	-6.1	-5.1	-4.5	-4.4	-4.2	-3.5	-3.4	-3.7	-4.5	-5.0	-5.0	-5.4	-5.5	-5.6	-1.4	-6.7	-4.5
17	-5.6	-5.6	-5.7	-5.7	-5.8	-5.9	-6.0	-5.9	-6.0	-5.8	-5.6	-5.6	-5.3	-5.0	-4.5	-4.0	-3.9	-4.0	-4.2	-4.2	-4.1	-4.4	-4.6	-4.5	-3.9	-6.0	-5.1
18	-4.5	-4.5	-4.7	-4.8	-4.7	-4.8	-4.8	-4.8	-5.0	-4.8	-4.9	-4.5	-4.5	-4.0	-3.7	-3.4	-3.8	-4.2	-4.4	-4.4	-4.6	-4.7	-5.2	-5.5	-3.4	-5.5	-4.5
19	-5.8	-6.5	-6.9	-6.6	-7.2	-7.0	-6.8	-6.4	-5.7	-5.9	-4.9	-3.7	-3.7	-3.7	-2.5	-2.2	-1.7	-1.9	-2.9	-4.1	-4.5	-4.2	-3.6	-3.6	-1.7	-7.2	-4.7
20	-3.5	-4.3	-4.6	-4.4	-5.1	-6.3	-6.5	-6.1	-5.3	-5.0	-4.7	-5.0	-2.2	-1.7	-0.7	-0.8	-0.3	0.0	0.4	0.5	0.8	1.1	1.4	1.7	1.7	-6.5	-2.5
21	1.6	1.9	2.2	2.3	2.5	2.5	2.2	2.2	2.2	1.8	2.0	2.1	2.2	2.8	2.7	2.2	2.2	1.9	0.8	0.7	0.3	-0.5	-1.0	-1.8	2.8	-1.8	1.6
22	-2.6	-3.4	-3.6	-4.8	-5.3	-6.0	-6.5	-6.9	-6.5	-6.4	-6.2	-6.4	-6.0	-3.9	-3.9	-1.5	-1.3	-1.5	-2.7	-3.2	-3.4	-4.4	-4.8	-4.3	-1.3	-6.9	-4.4
23	-4.8	-5.4	-6.3	-6.0	-5.1	-5.0	-5.3	-5.7	-5.0	-5.2	-5.0	-5.2	-4.8	-4.0	-3.6	-3.4	-3.2	-3.2	-3.8	-4.9	-5.4	-4.7	-4.9	-3.9	-3.2	-6.3	-4.7
24	-3.4	-3.5	-4.3	-5.1	-5.9	-5.1	-5.1	-4.8	-4.3	-3.6	-3.4	-2.6	-1.5	-0.5	0.1	-0.2	-0.3	-0.3	0.0	0.2	0.4	0.6	1.0	1.2	1.2	-5.9	-2.1
25	1.2	1.3	1.7	2.2	2.4	2.1	1.5	1.9	2.1	1.8	1.7	1.7	2.0	2.1	2.1	2.0	1.6	1.4	1.4	1.3	0.9	1.3	1.1	1.2	2.4	0.9	1.7
26	1.4	1.4	1.6	1.5	1.5	1.6	1.3	1.6	1.6	1.7	1.9	2.1	2.4	2.9	3.2	3.4	3.4	3.1	2.8	2.8	2.5	2.5	2.4	2.4	3.4	1.3	2.2
27	2.3	2.3	2.2	1.9	2.0	2.0	2.1	2.0	1.3	1.3	1.7	2.2	2.9	3.2	2.9	2.1	2.0	2.5	2.3	1.9	2.0	2.1	2.1	2.0	3.2	1.3	2.1
28	1.9	2.0	1.7	1.9	1.9	1.9	1.4	1.3	1.2	1.2	0.9	1.0	1.3	1.8	1.9	1.8	1.7	1.8	1.4	1.2	0.9	0.6	0.7	0.9	2.0	0.6	1.4
29	1.2	1.4	1.5	1.4	1.4	1.3	1.4	1.6	1.6	1.8	2.3	2.5	2.6	3.0	2.4	2.4	2.6	2.5	2.6	2.5	2.2	1.6	1.1	0.8	3.0	0.8	1.9
30	1.2	2.2	1.8	1.0	1.1	1.3	1.4	0.9	1.0	1.2	0.9	0.4	0.3	0.1	-0.2	-0.3	-0.5	-0.7	-0.9	-1.1	-1.0	-0.9	-0.9	-0.8	2.2	-1.1	0.3
31	-0.9	-1.0	-1.0	-1.1	-1.3	-1.6	-1.2	-0.6	-0.4	-0.5	-0.6	-0.4	-0.2	0.0	0.3	0.5	0.6	0.3	-0.3	-0.3	-0.1	0.1	-0.1	0.5	0.6	-1.6	-0.4
Max.	**3.9**	**3.7**	**3.3**	**3.0**	**2.9**	**2.8**	**2.9**	**2.7**	**2.5**	**3.1**	**4.0**	**5.0**	**5.3**	**5.4**	**5.9**	**6.4**	**6.4**	**6.2**	**4.8**	**4.8**	**4.1**	**3.9**	**3.9**	**3.5**	**6.4**		
Min.	**-5.8**	**-6.5**	**-6.9**	**-6.6**	**-7.2**	**-7.0**	**-6.8**	**-7.0**	**-7.5**	**-7.4**	**-7.2**	**-6.4**	**-6.0**	**-5.0**	**-4.5**	**-4.0**	**-3.9**	**-4.2**	**-4.5**	**-5.0**	**-5.4**	**-5.4**	**-6.1**	**-6.0**		**-7.5**	
Avg.	**-1.2**	**-1.4**	**-1.5**	**-1.6**	**-1.8**	**-1.9**	**-2.0**	**-2.1**	**-2.0**	**-2.1**	**-1.7**	**-1.2**	**-0.5**	**0.1**	**0.4**	**0.7**	**0.7**	**0.5**	**0.0**	**-0.5**	**-0.8**	**-0.9**	**-1.1**	**-1.2**			**-1.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	1.0	0.7	0.7	1.4	1.2	1.0	0.5	0.5	0.6	0.7	0.5	0.5	0.7	0.6	0.6	-0.1	-0.8	-1.2	-1.7	-2.0	-2.1	-2.2	-2.4	1.4	-2.4	0.0
2	-2.6	-2.8	-2.6	-2.7	-3.1	-3.2	-3.5	-3.5	-3.6	-3.1	-3.1	-3.2	-3.0	-3.5	-3.9	-4.1	-3.9	-3.2	-3.3	-4.0	-3.9	-3.8	-3.9	-4.0	-2.6	-4.1	-3.4
3	-4.0	-4.2	-4.2	-4.3	-4.0	-4.2	-4.1	-4.1	-4.6	-4.7	-4.4	-4.2	-3.7	-3.0	-2.7	-2.8	-3.0	-3.5	-3.8	-3.4	-3.0	-2.8	-2.4	-1.8	-1.8	-4.7	-3.6
4	-1.5	-1.5	-1.1	-0.6	-0.3	-0.1	0.0	0.4	0.7	0.9	1.1	1.3	1.2	1.2	1.1	0.9	0.9	1.1	1.1	0.9	1.1	1.2	1.2	0.8	1.3	-1.5	0.5
5	0.7	0.6	0.6	0.6	0.5	0.3	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.8	0.0	0.5
6	0.6	0.6	0.8	0.8	1.0	1.0	1.4	1.7	1.5	1.6	1.7	1.7	1.8	1.9	2.4	2.7	2.2	1.9	1.5	1.2	0.9	1.0	0.5	-0.1	2.7	-0.1	1.4
7	0.1	0.3	0.2	0.3	0.6	1.0	1.0	1.3	1.4	1.3	1.3	1.5	1.9	2.1	1.2	1.4	1.4	1.0	0.2	0.1	0.1	0.0	0.0	-0.2	2.1	-0.2	0.8
8	-0.4	-0.8	-1.1	-0.8	-0.3	0.1	0.7	1.1	1.3	0.5	0.5	0.9	1.1	1.5	2.1	2.3	2.4	2.8	2.4	2.5	2.1	1.2	0.7	0.8	2.8	-1.1	1.0
9	0.7	0.1	0.1	0.3	0.4	0.0	-0.2	-0.4	-0.6	-0.5	-0.3	0.1	0.3	0.5	1.0	1.0	0.9	0.3	-0.4	0.1	-0.1	0.0	-0.7	-1.0	1.0	-1.0	0.1
10	-1.1	-1.0	-0.7	-0.9	-1.3	-2.3	-2.3	-2.6	-3.0	-4.0	-3.4	-3.4	-2.2	-1.6	-1.6	-1.7	-1.6	-1.8	-2.2	-2.5	-2.8	-3.1	-3.3	-4.1	-0.7	-4.1	-2.3
11	-4.3	-4.3	-4.6	-4.5	-4.7	-5.0	-5.3	-5.2	-5.9	-6.3	-6.4	-6.0	-5.8	-5.9	-5.9	-6.1	-6.3	-6.8	-7.1	-7.3	-7.8	-8.2	-8.0	-7.7	-4.3	-8.2	-6.1
12	-8.6	-8.3	-8.0	-6.9	-9.1	-8.0	-7.0	-7.2	-8.2	-7.3	-7.7	-7.0	-7.4	-7.0	-6.4	-5.5	-4.1	-4.1	-4.1	-4.2	-4.1	-3.5	-3.3	-2.9	-2.9	-9.1	-6.2
13	-2.6	-2.3	-2.1	-2.0	-1.8	-1.6	-1.3	-1.4	-1.3	-1.1	-0.5	-0.1	-1.0	-1.3	-1.4	-2.1	-2.2	-1.9	-1.5	-1.6	-1.5	-1.5	-1.4	-1.2	-0.1	-2.6	-1.5
14	-1.5	-1.5	-1.6	-1.5	-1.7	-1.7	-1.9	-2.2	-2.4	-2.6	-2.9	-2.6	-1.8	-1.8	-1.7	-1.7	-1.7	-1.6	-1.9	-2.3	-3.1	-4.2	-4.9	-5.4	-1.5	-5.4	-2.4
15	-5.3	-5.8	-6.5	-6.5	-6.2	-6.2	-6.8	-6.9	-7.7	-8.9	-9.9	-9.9	-10.1	-10.3	-10.3	-10.5	-10.8	-11.4	-11.1	-11.7	-11.9	-12.1	-12.6	-12.4	-5.3	-12.6	-9.2
16	-11.9	-11.8	-11.8	-11.9	-11.9	-12.0	-12.2	-12.5	-12.5	-12.6	-12.6	-12.5	-12.4	-12.5	-12.3	-12.3	-12.3	-12.2	-12.1	-12.0	-12.4	-12.8	-12.9	-13.2	-11.8	-13.2	-12.3
17	-13.6	-13.9	-14.1	-13.8	-14.0	-13.9	-14.1	-14.0	-14.1	-14.1	-14.5	-15.0	-14.5	-14.4	-14.3	-14.2	-14.6	-14.7	-15.1	-15.8	-16.0	-15.9	-15.7	-15.9	-13.6	-16.0	-14.6
18	-16.2	-15.9	-16.1	-16.1	-16.3	-16.5	-16.3	-16.4	-16.1	-15.4	-15.4	-15.7	-14.9	-14.2	-13.7	-13.6	-13.7	-13.8	-14.3	-12.7	-12.9	-13.8	-13.5	-13.3	-12.7	-16.5	-14.9
19	-12.6	-13.2	-12.7	-13.1	-12.0	-10.9	-12.7	-10.2	-10.0	-8.9	-7.6	-6.4	-5.1	-4.6	-4.2	-3.9	-3.6	-2.9	-2.7	-2.5	-2.4	-1.5	-1.6	-1.3	-1.3	-13.2	-6.9
20	-0.5	0.3	0.6	0.9	1.2	2.3	2.7	2.4	2.9	2.7	2.7	2.5	2.4	2.6	2.4	2.4	2.7	2.6	3.2	2.9	2.4	2.1	3.0	2.9	3.2	-0.5	2.2
21	2.9	2.9	2.1	1.7	1.7	1.6	2.0	2.0	2.2	2.4	2.6	2.4	2.4	2.6	2.7	3.1	3.0	3.0	2.8	2.8	2.8	2.8	2.8	2.7	3.1	1.6	2.5
22	2.8	2.9	2.3	2.2	1.3	0.8	0.6	0.8	1.1	2.0	1.7	1.5	0.8	1.2	1.7	2.2	2.8	3.1	2.9	2.9	2.4	2.4	1.6	-0.2	3.1	-0.2	1.8
23	-0.5	-0.4	-0.1	-0.2	-0.4	-0.6	-0.7	-0.8	-1.2	-1.4	-1.5	-1.8	-2.3	-2.7	-2.7	-3.1	-2.8	-3.0	-2.9	-2.4	-2.9	-4.1	-4.9	-5.1	-0.1	-5.1	-2.0
24	-5.2	-5.2	-5.2	-5.2	-5.2	-5.4	-5.7	-5.7	-5.8	-5.6	-5.9	-4.9	-3.5	-2.4	-1.8	-1.3	-1.1	-0.9	-0.7	-0.9	-0.7	-0.3	-0.1	0.4	0.4	-5.9	-3.3
25	0.6	0.5	0.6	0.7	1.3	2.2	3.1	3.4	3.4	4.1	4.2	3.7	3.8	4.1	4.6	4.6	4.5	4.7	4.9	4.4	4.3	4.7	4.6	4.0	4.9	0.5	3.4
26	3.7	3.3	3.6	3.4	3.4	4.1	4.1	3.8	3.2	2.4	2.2	1.7	1.6	1.7	1.9	2.1	1.9	1.7	1.6	1.4	0.9	0.8	1.3	2.0	4.1	0.8	2.4
27	1.7	2.1	1.8	2.1	2.4	2.2	2.3	2.2	2.3	2.5	2.6	2.9	2.9	2.7	2.6	2.6	2.8	2.4	2.3	2.2	1.8	1.8	1.7	1.9	2.9	1.7	2.3
28	1.9	2.0	1.9	1.5	1.2	0.8	0.6	0.8	0.7	0.5	0.5	0.6	0.7	0.9	1.0	1.2	1.5	1.8	2.1	2.3	2.3	2.4	2.4	2.4	2.4	0.5	1.4
29	2.4	2.4	2.5	2.3	2.2	2.3	2.3	2.3	2.7	2.8	2.8	2.9	3.1	3.3	3.5	3.3	3.3	3.0	2.9	3.0	3.2	3.2	3.3	3.5	3.5	2.2	2.8
30	3.6	3.7	3.9	4.0	4.1	4.3	4.5	4.8	5.0	4.9	4.7	5.3	5.4	5.5	5.5	5.4	5.0	4.4	4.1	4.0	4.9	5.3	4.7	2.6	5.5	2.6	4.6
Max.	**3.7**	**3.7**	**3.9**	**4.0**	**4.1**	**4.3**	**4.5**	**4.8**	**5.0**	**4.9**	**4.7**	**5.3**	**5.4**	**5.5**	**5.5**	**5.4**	**5.0**	**4.7**	**4.9**	**4.4**	**4.9**	**5.3**	**4.7**	**4.0**	**5.5**		
Min.	**-16.2**	**-15.9**	**-16.1**	**-16.1**	**-16.3**	**-16.5**	**-16.3**	**-16.4**	**-16.1**	**-15.4**	**-15.4**	**-15.7**	**-14.9**	**-14.4**	**-14.3**	**-14.2**	**-14.6**	**-14.7**	**-15.1**	**-15.8**	**-16.0**	**-15.9**	**-15.7**	**-15.9**		**-16.5**	
Avg.	**-2.3**	**-2.3**	**-2.4**	**-2.3**	**-2.3**	**-2.2**	**-2.3**	**-2.2**	**-2.3**	**-2.2**	**-2.2**	**-2.1**	**-1.9**	**-1.7**	**-1.6**	**-1.6**	**-1.5**	**-1.6**	**-1.7**	**-1.8**	**-1.9**	**-2.0**	**-2.1**	**-2.3**			**-2.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 2 meters (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.0	2.3	2.1	1.9	1.6	2.1	1.6	1.4	1.3	1.0	0.7	0.6	1.1	1.4	1.7	1.3	0.4	0.2	0.3	-0.1	-1.3	-0.4	0.3	-1.8	2.3	-1.8	0.9
2	-1.9	-2.0	-2.6	-3.3	-3.7	-4.3	-4.6	-4.4	-5.1	-5.7	-5.6	-4.4	-4.0	-4.5	0.0	0.4	0.3	-1.7	-5.1	-6.1	-4.5	-2.4	-3.0	-3.9	0.4	-6.1	-3.4
3	-3.9	-3.6	-3.6	-3.8	-4.1	-4.5	-4.8	-5.5	-5.8	-5.6	-5.2	-4.9	-4.7	-4.5	-4.3	-4.7	-5.6	-6.5	-7.3	-7.6	-7.5	-7.9	-7.5	-7.5	-3.6	-7.9	-5.5
4	-7.6	-8.2	-7.8	-7.1	-6.3	-6.2	-6.5	-6.1	-5.8	-5.6	-5.8	-5.9	-5.7	-5.3	-4.8	-4.6	-4.6	-4.6	-4.4	-4.1	-3.9	-3.7	-3.6	-3.4	-3.4	-8.2	-5.5
5	-3.2	-3.1	-3.1	-2.9	-2.7	-2.7	-2.9	-3.1	-3.1	-3.2	-3.0	-2.4	-1.4	-0.8	-0.5	-0.3	-0.2	0.0	0.1	0.3	0.5	0.4	0.4	0.5	0.5	-3.2	-1.5
6	0.4	0.6	0.5	0.4	0.7	0.6	0.5	0.6	0.6	0.5	0.4	0.3	0.2	0.0	-0.4	-0.7	-0.7	-0.6	-0.4	-0.3	-0.2	-0.1	-0.2	-0.1	0.7	-0.7	0.1
7	-0.2	-0.1	-0.2	-0.3	-0.4	-0.5	-0.8	-0.8	-1.1	-1.2	-0.9	-0.5	-0.4	-0.6	-0.5	-0.3	-0.3	-0.2	-0.1	0.1	0.3	0.3	0.3	0.3	0.3	-1.2	-0.3
8	0.4	0.3	0.4	0.4	0.2	0.4	0.4	0.5	1.0	1.2	0.8	0.6	1.1	0.9	0.5	0.2	0.1	-0.4	-0.8	-1.1	-0.9	-0.8	-0.6	-0.7	1.2	-1.1	0.2
9	-0.8	-0.9	-0.6	-0.6	-0.6	-0.7	-0.8	-0.9	-1.0	-0.5	-0.1	0.3	0.8	1.1	1.4	1.5	1.6	1.6	1.8	1.8	1.8	1.7	1.6	1.7	1.8	-1.0	0.5
10	1.6	1.5	1.6	1.5	2.2	1.8	1.1	0.6	0.1	0.3	0.4	0.6	0.2	0.3	-0.5	-0.6	-0.8	-0.8	-0.6	-0.5	-0.3	-0.2	-0.3	-0.8	2.2	-0.8	0.4
11	-1.2	-1.4	-1.6	-2.2	-1.9	-2.0	-2.7	-3.5	-2.9	-3.5	-4.3	-4.0	-3.4	-3.3	-4.4	-4.0	-5.3	-5.0	-4.2	-4.8	-5.0	-6.1	-6.9	-7.4	-1.2	-7.4	-3.8
12	-7.5	-6.6	-5.8	-6.9	-6.9	-6.8	-5.3	-4.7	-3.7	-6.8	-6.2	-5.0	-3.8	-4.1	-3.5	-2.5	-3.8	-3.4	-3.2	-2.5	-3.0	-2.9	-4.0	-4.1	-2.5	-7.5	-4.7
13	-4.0	-3.3	-3.6	-3.4	-3.5	-3.5	-4.0	-3.9	-4.0	-4.3	-4.3	-4.4	-4.4	-4.3	-4.5	-5.0	-5.4	-6.5	-6.8	-7.1	-7.6	-8.9	-8.9	-10.4	-3.3	-10.4	-5.2
14	-11.7	-12.6	-13.0	-12.8	-12.7	-12.7	-13.0	-13.8	-14.6	-15.0	-14.2	-14.4	-14.3	-14.3	-14.0	-14.1	-14.9	-14.6	-14.5	-14.4	-14.0	-15.0	-15.0	-14.0	-11.7	-15.0	-13.9
15	-13.8	-14.6	-14.1	-12.3	-12.2	-12.3	-12.6	-12.7	-12.7	-12.4	-12.6	-12.9	-12.7	-12.6	-12.6	-12.7	-12.6	-12.7	-12.7	-12.8	-12.8	-12.6	-12.3	-12.4	-12.2	-14.6	-12.8
16	-13.0	-13.8	-14.2	-14.5	-14.7	-15.0	-15.0	-15.0	-15.0	-15.2	-15.6	-15.9	-15.9	-16.1	-16.3	-16.6	-17.0	-17.1	-17.0	-16.8	-16.9	-17.0	-17.1	-17.4	-13.0	-17.4	-15.8
17	-17.6	-17.7	-17.8	-17.8	-17.7	-17.8	-17.9	-17.9	-17.9	-17.8	-17.7	-17.7	-17.7	-17.6	-17.7	-17.8	-18.2	-18.7	-19.3	-19.5	-19.4	-20.0	-20.6	-20.7	-17.6	-20.7	-18.4
18	-20.7	-20.9	-21.2	-21.5	-21.3	-21.3	-21.7	-21.7	-21.9	-22.0	-22.3	-22.4	-22.6	-22.8	-22.9	-22.9	-22.7	-22.9	-23.4	-23.7	-23.6	-24.1	-24.4	-24.6	-20.7	-24.6	-22.5
19	-25.0	-25.9	-25.5	-25.5	-25.0	-24.4	-23.7	-24.2	-24.6	-24.5	-24.4	-24.8	-24.7	-24.3	-23.3	-23.6	-24.2	-25.2	-25.4	-25.4	-25.5	-25.7	-24.5	-23.5	-23.3	-25.9	-24.7
20	-24.0	-24.2	-25.0	-24.3	-23.4	-21.5	-15.7	-13.7	-13.2	-12.8	-12.1	-11.6	-10.5	-9.6	-8.6	-7.8	-7.1	-6.8	-6.9	-5.6	-5.6	-5.6	-5.3	-4.6	-4.6	-25.0	-12.7
21	-3.8	-2.8	-2.5	-2.2	-2.0	-2.1	-2.3	-3.1	-3.5	-4.1	-4.0	-3.9	-4.3	-4.6	-3.4	-3.8	-4.5	-3.9	-4.2	-4.0	-4.1	-3.9	-3.7	-3.0	-2.0	-4.6	-3.5
22	-2.4	-2.4	-2.3	-2.4	-2.2	-1.9	-1.5	-1.7	-2.1	-1.8	-1.4	-1.3	-1.0	-0.9	-0.7	-0.8	-0.7	-1.2	-1.1	-1.0	-1.0	-2.9	-4.2	-4.6	-0.7	-4.6	-1.8
23	-5.7	-7.9	-9.0	-9.5	-10.0	-10.0	-10.5	-11.1	-11.9	-12.1	-12.1	-12.0	-12.0	-12.0	-12.0	-12.0	-12.0	-12.7	-13.1	-12.5	-11.9	-11.4	-11.8	-12.4	-5.7	-13.1	-11.1
24	-13.8	-14.3	-14.1	-14.2	-14.7	-13.9	-13.2	-14.2	-14.6	-14.5	-14.4	-14.0	-13.9	-13.7	-13.9	-14.0	-14.0	-13.9	-14.2	-14.7	-14.6	-14.1	-14.1	-14.2	-13.2	-14.7	-14.1
25	-15.0	-15.7	-15.7	-15.8	-16.2	-16.8	-17.0	-17.2	-17.3	-17.8	-18.5	-18.5	-18.3	-18.1	-17.9	-18.4	-18.2	-18.5	-18.0	-18.3	-18.8	-18.1	-19.4	-20.1	-15.0	-20.1	-17.7
26	-20.3	-19.5	-19.3	-18.3	-17.4	-17.3	-18.7	-16.8	-14.9	-11.2	-11.2	-10.8	-10.6	-9.5	-8.0	-6.2	-5.1	-4.1	-3.9	-4.6	-4.8	-4.0	-3.6	-2.9	-2.9	-20.3	-11.0
27	-2.7	-2.3	-2.1	-1.9	-1.6	-1.1	-0.6	-0.1	0.1	0.5	0.8	1.1	1.1	1.3	1.5	0.7	0.2	-0.1	-0.1	-0.1	-0.3	-1.0	-1.2	-1.3	1.5	-2.7	-0.4
28	-1.3	-3.3	-5.0	-5.3	-5.8	-6.5	-6.8	-7.3	-6.8	-6.4	-7.1	-7.6	-7.2	-7.6	-7.8	-8.6	-9.4	-9.0	-9.6	-10.4	-10.3	-9.2	-8.7	-8.4	-1.3	-10.4	-7.3
29	-7.9	-8.1	-8.3	-8.8	-9.3	-9.1	-8.8	-9.3	-9.2	-9.1	-9.9	-10.0	-9.8	-9.6	-9.9	-11.6	-11.8	-10.0	-10.0	-9.4	-9.6	-9.6	-9.3	-9.4	-7.9	-11.8	-9.5
30	-9.4	-9.5	-9.9	-9.9	-10.1	-10.6	-11.5	-11.7	-12.3	-13.1	-13.2	-12.8	-12.2	-11.7	-11.4	-10.9	-11.0	-10.4	-11.2	-11.4	-11.7	-11.0	-10.9	-10.9	-9.4	-13.2	-11.2
31	-10.3	-10.2	-9.7	-9.8	-9.6	-10.0	-10.4	-10.8	-10.6	-10.9	-10.7	-10.5	-10.6	-10.2	-10.5	-10.6	-10.5	-10.4	-10.3	-9.8	-9.7	-9.9	-10.3	-9.0	-9.0	-10.9	-10.2
Max.	**2.0**	**2.3**	**2.1**	**1.9**	**2.2**	**2.1**	**1.6**	**1.4**	**1.3**	**1.2**	**0.8**	**1.1**	**1.1**	**1.4**	**1.7**	**1.5**	**1.6**	**1.6**	**1.8**	**1.8**	**1.8**	**1.7**	**1.6**	**1.7**	**2.3**		
Min.	**-25.0**	**-25.9**	**-25.5**	**-25.5**	**-25.0**	**-24.4**	**-23.7**	**-24.2**	**-24.6**	**-24.5**	**-24.4**	**-24.8**	**-24.7**	**-24.3**	**-23.3**	**-23.6**	**-24.2**	**-25.2**	**-25.4**	**-25.4**	**-25.5**	**-25.7**	**-24.5**	**-24.6**		**-25.9**	
Avg.	**-7.9**	**-8.1**	**-8.2**	**-8.2**	**-8.1**	**-8.1**	**-8.1**	**-8.1**	**-8.1**	**-8.2**	**-8.2**	**-8.0**	**-7.8**	**-7.7**	**-7.4**	**-7.5**	**-7.7**	**-7.8**	**-7.9**	**-8.0**	**-7.9**	**-8.0**	**-8.0**	**-8.1**			**-8.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-14.0	-14.8	-15.8	-15.9	-16.5	-16.9	-17.3	-17.4	-19.3	-20.8	-20.9	-21.1	-21.4	-21.0	-21.9	-22.7	-23.2	-23.9	-24.4	-24.6	-25.1	-24.9	-25.1	-26.2	-14.0	-26.2	-20.6
2	-25.8	-26.5	-26.5	-25.9	-26.3	-25.2	-25.7	-25.8	-25.7	-25.4	-25.2	-25.3	-25.2	-25.0	-25.1	-24.6	-24.8	-25.5	-25.8	-26.3	-26.4	-26.3	-26.8	-26.8	-24.6	-26.8	-25.7
3	-26.6	-27.0	-26.9	-27.3	-27.7	-27.4	-27.1	-27.3	-28.3	-27.7	-28.2	-28.8	-28.0	-27.8	-28.6	-28.7	-27.3	-27.1	-28.0	-28.5	-28.2	-28.0	-28.8	-28.2	-26.6	-28.8	-27.8
4	-29.3	-28.9	-29.1	-28.5	-28.4	-28.7	-28.6	-28.8	-28.9	-28.2	-27.8	-26.2	-23.3	-21.0	-20.5	-20.5	-20.0	-19.9	-18.6	-18.5	-18.1	-18.1	-18.9	-19.3	-18.1	-29.3	-24.1
5	-21.1	-21.1	-22.8	-23.4	-23.5	-23.3	-23.5	-23.9	-24.7	-25.3	-24.9	-25.5	-24.9	-24.7	-25.1	-25.1	-24.7	-24.9	-25.0	-24.4	-24.6	-25.3	-25.4	-25.0	-21.1	-25.5	-24.2
6	-25.0	-24.9	-24.9	-25.1	-24.4	-24.0	-25.0	-24.8	-25.3	-25.1	-25.1	-25.1	-25.4	-25.6	-25.4	-26.5	-26.8	-26.9	-27.3	-27.9	-28.9	-28.9	-29.7	-29.4	-24.0	-29.7	-26.1
7	-30.1	-30.1	-29.7	-29.7	-29.4	-30.0	-30.3	-30.9	-30.3	-30.5	-30.0	-30.3	-30.1	-29.3	-29.2	-29.6	-29.7	-29.9	-29.8	-30.4	-30.8	-30.1	-29.6	-30.2	-29.2	-30.9	-30.0
8	-30.0	-29.8	-29.6	-28.2	-28.7	-29.0	-28.3	-28.9	-29.2	-28.4	-27.6	-27.5	-26.5	-26.2	-25.8	-25.4	-25.1	-23.9	-24.6	-24.4	-24.0	-23.5	-23.2	-22.8	-22.8	-30.0	-26.7
9	-23.0	-23.1	-23.1	-24.4	-23.6	-23.5	-22.9	-23.5	-23.7	-22.7	-22.6	-20.7	-18.7	-18.1	-16.9	-15.6	-14.5	-14.2	-13.5	-13.7	-14.5	-14.4	-13.8	-13.0	-13.0	-24.4	-19.1
10	-12.8	-12.8	-12.4	-12.3	-12.1	-11.9	-11.5	-10.5	-9.3	-8.2	-7.5	-6.8	-6.2	-5.7	-5.2	-4.8	-4.6	-4.1	-3.9	-3.6	-3.4	-3.2	-3.1	-2.8	-2.8	-12.8	-7.4
11	-2.6	-2.2	-2.0	-1.9	-2.0	-1.9	-1.7	-1.7	-1.7	-1.7	-1.7	-1.5	-1.4	-1.5	-1.4	-1.4	-1.3	-1.2	-1.1	-1.1	-1.1	-1.2	-1.3	-1.5	-1.1	-2.6	-1.6
12	-1.5	-1.6	-1.7	-1.7	-1.6	-1.5	-1.5	-1.5	-1.6	-1.6	-1.5	-1.4	-1.5	-1.2	-1.1	-1.3	-1.2	-1.2	-1.3	-1.2	-1.2	-1.3	-1.4	-2.4	-1.1	-2.4	-1.5
13	-2.8	-3.2	-3.1	-2.9	-2.9	-3.1	-3.3	-3.6	-3.6	-3.6	-3.8	-3.7	-3.7	-3.8	-3.8	-4.2	-4.7	-5.1	-6.2	-6.4	-6.5	-6.1	-6.5	-6.5	-2.8	-6.5	-4.3
14	-6.8	-7.2	-8.1	-8.2	-8.2	-8.6	-7.8	-7.5	-7.7	-7.6	-7.6	-7.5	-7.4	-7.7	-7.6	-7.9	-7.6	-7.5	-7.4	-7.5	-7.7	-7.4	-7.5	-7.7	-6.8	-8.6	-7.6
15	-7.9	-8.8	-9.5	-9.9	-9.8	-8.7	-8.3	-8.6	-9.1	-9.3	-9.3	-9.5	-9.8	-10.1	-10.0	-10.1	-10.3	-10.6	-11.4	-11.8	-12.5	-13.4	-13.7	-13.2	-7.9	-13.7	-10.2
16	-13.0	-13.1	-13.2	-14.4	-12.7	-9.2	-7.0	-6.9	-6.8	-6.3	-5.7	-5.7	-6.0	-5.8	-5.1	-4.5	-4.0	-3.7	-3.5	-3.5	-3.8	-3.8	-3.9	-3.6	-3.5	-14.4	-6.9
17	-3.4	-3.7	-4.1	-4.3	-4.4	-4.5	-4.7	-4.4	-4.0	-3.7	-3.6	-2.8	-2.5	-2.0	-1.7	-2.0	-2.0	-1.9	-1.4	-1.2	-1.1	-1.4	-1.5	-1.9	-1.1	-4.7	-2.8
18	-2.1	-2.2	-2.6	-3.0	-2.3	-2.1	-1.8	-2.2	-2.1	-2.0	-2.1							-2.9	-3.0	-3.0	-3.5	-3.5	-3.5	-4.0	-1.8	-4.0	-2.7
19	-4.0	-3.9	-3.8	-3.4	-3.6	-3.6	-3.6	-3.9	-3.9	-4.1	-4.8	-4.8	-4.9	-4.8	-4.0	-3.8	-3.8	-3.7	-2.9	-2.6	-2.3	-2.4	-2.2	-2.1	-2.1	-4.9	-3.6
20	-2.3	-2.3	-2.3	-2.4	-2.5	-2.6	-3.0	-3.0	-2.8	-3.2	-3.0	-2.6	-2.1	-3.2	-3.6	-2.9	-2.8	-2.8	-2.9	-3.3	-3.9	-4.0	-3.3	-3.5	-2.1	-4.0	-2.9
21	-3.9	-3.9	-5.4	-5.5	-7.3	-9.6	-9.7	-10.8	-10.8	-10.6	-11.1	-10.5	-10.3	-10.3	-10.5	-10.5	-10.5	-10.5	-10.7	-10.8	-10.9	-10.9	-10.8	-10.9	-3.9	-11.1	-9.4
22	-10.9	-10.8	-10.9	-10.9	-11.0	-11.0	-10.9	-11.3	-11.3	-11.3	-11.6	-11.4	-11.1	-11.6	-11.3	-11.2	-11.2	-11.4	-11.8	-12.1	-11.7	-11.1	-12.1	-13.7	-10.8	-13.7	-11.4
23	-14.0	-14.5	-14.6	-14.9	-15.2	-15.5	-15.7	-15.9	-16.2	-16.8	-16.9	-17.2	-17.1	-17.3	-17.2	-17.5	-18.1	-17.9	-17.7	-18.4	-18.3	-19.3	-19.7	-20.3	-14.0	-20.3	-16.9
24	-20.4	-20.8	-21.1	-21.4	-21.6	-22.0	-22.7	-23.9	-24.2	-24.0	-24.3	-24.5	-24.7	-24.1	-24.0	-24.3	-23.6	-23.8	-23.3	-22.7	-22.3	-22.9	-22.9	-23.5	-20.4	-24.7	-23.0
25	-23.5	-21.3	-15.8	-13.6	-13.3	-12.4	-11.0	-9.6	-6.7	-5.5	-5.1	-4.2	-3.6	-3.0	-2.9	-2.6	-2.3	-1.6	-1.5	-1.2	-1.0	-1.1	-0.7	-0.5	-0.5	-23.5	-6.8
26	-0.4	-0.6	-0.6	-0.8	-1.0	-0.8	-0.5	-0.4	-0.7	-1.0	-0.8	-0.2	-0.3	-0.2	-0.1	-0.2	-0.4	-0.6	-1.2	-1.3	-1.4	-1.8	-1.6	-1.4	-0.1	-1.8	-0.8
27	-0.9	-0.9	-0.7	-0.6	-0.1	-0.1	-0.1	-0.4	-0.3	-0.2	-0.6	-0.8	-1.0	-0.8	-0.7	0.1	0.4	-0.2	0.2	0.8	1.1	1.2	1.0	0.6	1.2	-1.0	-0.1
28	0.4	0.2	0.0	0.1	-0.2	-0.2	-0.3	-0.5	-0.4	-0.4	-0.7	-0.7	-0.5	0.2	0.4	0.4	0.1	-0.4	-0.4	0.1	0.1	0.9	1.2	1.5	1.5	-0.7	0.0
29	1.6	1.3	2.4	2.3	2.7	2.6	1.7	1.5	1.3	1.9	2.0	2.5	3.1	3.2	3.2	2.6	3.0	2.6	2.2	1.7	1.0	0.7	0.6	0.7	3.2	0.6	2.0
30	1.1	1.9	2.2	2.3	2.5	2.5	2.6	3.3	3.7	4.2	4.6	5.9	5.8	4.9	5.1	5.1	3.6	2.3	2.0	1.7	1.7	1.5	1.2	1.1	5.9	1.1	3.0
31	1.2	1.4	1.6	1.6	1.7	1.6	1.6	1.1	1.1	1.0	0.8	0.9	0.9	1.5	1.0	1.2	1.2	1.0	1.0	1.7	2.2	1.8	1.1	0.6	2.2	0.6	1.3
Max.	**1.6**	**1.9**	**2.4**	**2.3**	**2.7**	**2.6**	**2.6**	**3.3**	**3.7**	**4.2**	**4.6**	**5.9**	**5.8**	**4.9**	**5.1**	**5.1**	**3.6**	**2.6**	**2.2**	**1.7**	**2.2**	**1.8**	**1.2**	**1.5**	**5.9**		
Min.	**-30.1**	**-30.1**	**-29.7**	**-29.7**	**-29.4**	**-30.0**	**-30.3**	**-30.9**	**-30.3**	**-30.5**	**-30.0**	**-30.3**	**-30.1**	**-29.3**	**-29.2**	**-29.6**	**-29.7**	**-29.9**	**-29.8**	**-30.4**	**-30.8**	**-30.1**	**-29.7**	**-30.2**		**-30.9**	
Avg.	**-11.4**	**-11.5**	**-11.4**	**-11.4**	**-11.4**	**-11.3**	**-11.2**	**-11.3**	**-11.4**	**-11.2**	**-11.2**	**-11.2**	**-10.9**	**-10.7**	**-10.6**	**-10.6**	**-10.5**	**-10.4**	**-10.4**	**-10.5**	**-10.6**	**-10.6**	**-10.7**	**-10.8**			**-10.9**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.6	1.0	1.4	1.6	1.1	1.0	0.8	0.4	0.7	0.7	0.0	1.6	2.2	2.5	4.6	6.1	5.6	4.3	5.2	4.6	3.1	0.6	0.7	0.5	6.1	0.0	2.1
2	0.6	0.6	1.0	1.5	1.9	2.0	1.5	1.2	1.3	1.3	1.4	1.6	1.7	1.7	1.5	1.5	1.5	1.4	1.3	1.4	1.3	1.1	1.0	0.8	2.0	0.6	1.3
3	0.7	0.4	0.5	0.6	0.5	0.2	0.2	0.2	0.1	-0.1	0.2	0.5	0.7	0.9	0.9	0.7	0.6	0.2	-0.1	-0.7	-1.0	-1.7	-1.8	-1.6	0.9	-1.8	0.0
4	-2.3	-2.3	-1.9	-2.3	-2.0	-2.4	-2.8	-2.2	-2.4	-3.4	-3.0	-3.1	-3.5	-2.7	-1.9	-2.1	-2.2	-2.5	-2.8	-2.6	-1.3	-1.2	-1.6	-0.9	-0.9	-3.5	-2.3
5	-0.3	-0.4	-0.6	-0.3	-0.5	-1.1	-0.9	-0.4	-0.5	-1.2	-0.5	-0.7	-2.0	-2.0	-2.5	-2.4	-1.6	-0.9	-0.5	-1.8	-3.4	-4.2	-3.9	-3.2	-0.3	-4.2	-1.5
6	-2.5	-2.3	-1.7	-0.9	-1.0	-0.8	-0.2	-0.1	-0.2	-0.4	0.1	0.2	0.2	0.6	0.2	-0.3	-0.4	-0.9	-0.5	-0.5	-0.5	0.1	0.7	1.0	1.0	-2.5	-0.4
7	-0.3	-2.4	-2.0	-2.9	-2.0	-1.1	-2.7	-3.4	-3.6	-3.5	-3.4	-3.3	-3.2	-3.0	-2.9	-2.3	-1.6	-1.8	-2.8	-3.5	-3.5	-3.6	-3.5	-3.4	-0.3	-3.6	-2.7
8	-3.4	-3.1	-3.0	-3.0	-2.8	-2.8	-2.7	-2.8	-3.0	-2.8	-2.9	-2.9	-2.6	-2.2	-2.1	-2.4	-2.7	-3.1	-3.1	-3.3	-3.4	-3.5	-3.3	-3.3	-2.1	-3.5	-2.9
9	-3.2	-3.4	-3.1	-2.9	-2.7	-2.5	-2.5	-2.3	-1.7	-1.5	-1.2	-0.8	-0.5	-0.2	-0.5	-1.5	-1.7	-2.0	-1.7	-2.0	-2.1	-2.2	-2.4	-2.3	-0.2	-3.4	-2.0
10	-1.8	-1.7	-1.3	-0.8	-1.1	-1.8	-1.8	-1.8	-1.9	-1.8	-1.8	-2.0	-2.0	-2.0	-1.9	-1.7	-1.7	-1.9	-2.6	-4.0	-5.0	-5.4	-5.5	-5.6	-0.8	-5.6	-2.4
11	-5.5	-4.7	-4.4	-4.7	-5.0	-4.8	-4.6	-4.3	-4.3	-4.4	-3.8	-2.9	-2.0	-1.5	-1.3	-0.7	-0.3	-0.7	-0.8	-0.6	-0.9	-1.2	-1.0	-1.0	-0.3	-5.5	-2.7
12	-1.0	-1.3	-0.8	-0.6	-0.7	-0.7	-0.6	-0.5	-0.7	-0.7	-0.8	-0.1	0.3	0.6	0.6	0.4	0.3	0.2	0.1	0.0	0.1	-0.1	-0.2	-0.1	0.6	-1.3	-0.3
13	-0.5	0.0	0.4	0.1	0.2	0.6	0.3	-0.1	-0.3	0.1	1.0	1.0	1.5	1.6	1.9	1.3	1.1	0.6	0.2	0.2	0.2	-0.4	-0.7	-0.9	1.9	-0.9	0.4
14	-0.5	-0.7	-0.9	-0.8	-0.8	-1.1	-1.1	-0.9	-0.9	-1.1	-1.1	-0.9	-0.6	-0.4	-0.4	-0.2	-0.4	-0.6	-0.8	-0.6	-0.6	-0.8	-1.6	-1.7	-0.2	-1.7	-0.8
15	-1.8	-1.8	-1.5	-2.2	-1.9	-2.1	-2.8	-2.1	-3.6	-2.6	-3.1	-3.0	-3.0	-3.2	-3.4	-4.3	-4.5	-4.9	-5.1	-4.5	-4.8	-5.2	-5.3	-5.2	-1.5	-5.3	-3.4
16	-5.3	-4.9	-3.3	-3.6	-2.9	-3.5	-2.8	-3.3	-2.8	-2.9	-2.7	-2.7	-2.9	-2.6	-2.6	-2.5	-2.5	-2.4	-2.2	-3.1	-3.3	-3.3	-3.2	-3.2	-2.2	-5.3	-3.1
17	-3.4	-3.5	-3.6	-3.7	-3.8	-3.8	-4.2	-4.2	-4.3	-4.4	-5.4	-4.5	-4.3	-3.2	-3.1	-3.4	-3.8	-3.9	-4.6	-4.6	-4.3	-3.9	-4.2	-4.9	-3.1	-5.4	-4.0
18	-5.2	-4.9	-4.8	-5.0	-5.4	-5.4	-5.0	-5.8	-5.7	-5.3	-5.6	-5.0	-5.3	-5.0	-5.0	-4.9	-4.3	-4.5	-5.2	-5.8	-6.1	-6.3	-6.7	-6.7	-4.3	-6.7	-5.4
19	-7.1	-7.6	-7.7	-8.6	-9.2	-9.7	-10.5	-11.2	-11.4	-12.6	-13.9	-15.0	-15.0	-14.7	-14.5	-14.7	-15.8	-16.5	-17.5	-18.3	-18.8	-18.7	-18.2	-18.2	-7.1	-18.8	-13.6
20	-18.1	-17.3	-18.0	-18.6	-18.4	-19.8	-20.3	-19.9	-19.4	-19.5	-18.7	-17.9	-16.9	-15.6	-15.0	-14.7	-14.8	-15.3	-15.9	-16.2	-16.3	-16.9	-17.5	-17.4	-14.7	-20.3	-17.4
21	-17.9	-18.1	-18.7	-19.0	-19.3	-20.1	-20.8	-21.1	-20.8	-20.9	-21.2	-20.4	-18.8	-17.6	-17.1	-17.0	-16.8	-16.7	-17.5	-18.0	-18.4	-18.9	-19.0	-19.0	-16.7	-21.2	-18.9
22	-18.8	-18.9	-18.7	-18.7	-18.7	-19.4	-20.0	-19.6	-19.4	-20.0	-20.1	-20.0	-19.1	-18.0	-17.5	-16.8	-16.4	-16.3	-16.6	-17.1	-17.4	-17.3	-17.6	-17.6	-16.3	-20.1	-18.3
23	-18.0	-18.6	-18.8	-18.3	-18.9	-19.1	-19.3	-19.6	-19.7	-19.9	-19.7	-18.7	-18.1	-17.7	-17.1	-16.5	-16.2	-17.0	-17.3	-17.7	-17.6	-18.4	-18.9	-18.1	-16.2	-19.9	-18.3
24	-18.6	-19.0	-19.0	-18.0	-18.1	-18.0	-18.7	-19.7	-20.3	-20.9	-20.1	-19.7	-19.4	-19.4	-19.5	-19.5	-19.7	-20.1	-20.7	-21.1	-21.4	-21.7	-21.7	-21.6	-18.0	-21.7	-19.8
25	-21.8	-21.7	-21.2	-20.9	-21.0	-21.1	-21.3	-21.6	-21.2	-20.5	-19.8	-18.2	-17.1	-15.2	-14.7	-14.4	-14.8	-15.3	-15.8	-15.1	-14.0	-13.2	-11.1	-8.8	-8.8	-21.8	-17.5
26	-6.5	-6.8	-7.4	-8.2	-8.0	-7.9	-7.5	-6.7	-6.7	-7.5	-7.9	-8.3	-7.5	-6.8	-6.7	-6.5	-6.5	-7.0	-7.8	-8.6	-8.6	-9.5	-9.1	-9.2	-6.5	-9.5	-7.6
27	-9.4	-10.2	-11.3	-12.1	-12.5	-13.0	-12.8	-12.3	-11.8	-11.4	-10.9	-10.6	-10.9	-10.3	-9.7	-9.3	-9.3	-9.3	-9.8	-9.3	-9.3	-9.5	-9.4	-9.7	-9.3	-13.0	-10.6
28	-10.1	-10.4	-10.6	-11.3	-12.0	-12.0	-12.5	-12.9	-13.7	-14.4	-15.3	-15.6	-15.6	-15.3	-15.6	-16.5	-17.3	-17.9	-18.9	-19.5	-19.9	-20.5	-20.7	-21.2	-10.1	-21.2	-15.4
Max.	**0.7**	**1.0**	**1.4**	**1.6**	**1.9**	**2.0**	**1.5**	**1.2**	**1.3**	**1.3**	**1.4**	**1.6**	**2.2**	**2.5**	**4.6**	**6.1**	**5.6**	**4.3**	**5.2**	**4.6**	**3.1**	**1.1**	**1.0**	**1.0**	**6.1**		
Min.	**-21.8**	**-21.7**	**-21.2**	**-20.9**	**-21.0**	**-21.1**	**-21.3**	**-21.6**	**-21.2**	**-20.9**	**-21.2**	**-20.4**	**-19.4**	**-19.4**	**-19.5**	**-19.5**	**-19.7**	**-20.1**	**-20.7**	**-21.1**	**-21.4**	**-21.7**	**-21.7**	**-21.6**		**-21.8**	
Avg.	**-6.5**	**-6.6**	**-6.5**	**-6.6**	**-6.6**	**-6.8**	**-7.0**	**-7.0**	**-7.1**	**-7.2**	**-7.1**	**-6.8**	**-6.5**	**-6.1**	**-5.9**	**-5.9**	**-5.9**	**-6.2**	**-6.6**	**-6.9**	**-7.0**	**-7.3**	**-7.4**	**-7.2**			**-6.7**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-21.5	-21.6	-21.9	-22.2	-22.7	-23.5	-23.6	-23.8	-24.2	-23.8	-23.2	-22.4	-21.4	-20.1	-19.0	-18.2	-18.1	-18.0	-18.1	-18.8	-19.6	-20.2	-20.7	-20.6	-18.0	-24.2	-21.1
2	-20.7	-20.9	-20.8	-21.1	-21.0	-21.1	-21.5	-21.6	-22.1	-21.9	-21.5	-20.6	-19.5	-18.6	-17.3	-16.8	-16.6	-16.7	-17.0	-17.2	-17.3	-17.7	-18.1	-18.6	-16.6	-22.1	-19.4
3	-18.7	-18.8	-19.2	-19.8	-19.7	-19.7	-20.0	-20.5	-20.6	-20.4	-19.6	-18.3	-17.2	-16.0	-14.9	-14.0	-13.5	-13.7	-14.3	-14.1	-14.1	-14.8	-14.1	-15.0	-13.5	-20.6	-17.1
4	-15.7	-15.9	-15.7	-15.1	-15.6	-15.5	-16.1	-16.8	-16.7	-16.3	-15.6	-15.8	-15.4	-15.0	-14.6	-14.5	-14.5	-15.0	-15.6	-16.8	-17.6	-18.0	-18.5	-19.3	-14.5	-19.3	-16.1
5	-20.1	-21.0	-21.9	-22.7	-23.4	-23.9	-24.4	-25.0	-25.2	-24.9	-24.4	-23.8	-23.2	-22.4	-21.9	-21.6	-21.6	-21.9	-22.4	-23.1	-23.8	-24.2	-24.7	-25.2	-20.1	-25.2	-23.2
6	-25.6	-26.1	-26.5	-26.9	-27.1	-27.4	-27.6	-27.8	-27.9	-27.6	-26.9	-26.3	-25.6	-24.8	-24.3	-23.8	-23.7	-23.7	-24.0	-24.3	-24.3	-24.5	-24.7	-25.0	-23.7	-27.9	-25.7
7	-25.1	-25.1	-25.1	-25.3	-25.3	-25.6	-25.6	-25.5	-25.5	-25.0	-24.2	-23.6	-22.5	-21.7	-20.7	-20.4	-20.0	-20.2	-20.8	-21.6	-22.2	-23.0	-23.8	-24.4	-20.0	-25.6	-23.4
8	-25.0	-25.4	-25.8	-26.0	-26.1	-26.5	-26.7	-26.6	-26.7	-26.5	-26.0	-25.4	-24.5	-23.4	-22.4	-21.6	-21.3	-21.2	-21.7	-22.1	-22.0	-22.0	-22.1	-22.4	-21.2	-26.7	-24.1
9	-22.6	-22.8	-23.0	-23.1	-23.2	-23.2	-23.1	-22.9	-22.4	-22.1	-22.1	-21.5	-20.8	-20.1	-19.4	-18.7	-18.4	-18.8	-19.4	-20.1	-20.7	-20.8	-20.4	-20.0	-18.4	-23.2	-21.2
10	-19.7	-19.5	-19.3	-19.0	-19.5	-19.6	-19.4	-18.9	-19.5	-19.5	-19.5	-18.8	-18.2	-16.8	-16.4	-16.0	-15.6	-15.8	-16.3	-17.5	-18.3	-18.8	-19.1	-19.5	-15.6	-19.7	-18.3
11	-20.3	-20.6	-20.8	-21.3	-21.8	-22.5	-23.1	-23.7	-24.0	-23.8	-23.2	-22.5	-21.6	-20.7	-19.7	-19.1	-18.5	-18.4	-18.4	-18.4	-18.4	-18.6	-19.0	-19.4	-18.4	-24.0	-20.7
12	-19.6	-19.9	-19.8	-19.9	-20.3	-20.6	-20.3	-20.4	-21.8	-21.3	-20.8	-20.0	-18.7	-16.6	-16.0	-15.5	-15.3	-15.2	-15.3	-15.5	-15.9	-16.7	-17.2	-17.3	-15.2	-21.8	-18.3
13	-17.5	-17.8	-18.5	-18.5	-18.7	-19.1	-19.6	-20.4	-21.0	-20.9	-20.4	-19.9	-19.2	-18.7	-18.4	-18.0	-18.2	-18.3	-18.8	-19.5	-19.7	-20.0	-20.6	-21.6	-17.5	-21.6	-19.3
14	-22.3	-22.5	-22.7	-22.8	-23.0	-23.1	-23.3	-23.7	-23.7	-23.0	-22.2	-21.7	-21.2	-20.7	-20.2	-19.9	-19.6	-19.8	-20.1	-20.5	-21.1	-21.6	-21.9	-22.3	-19.6	-23.7	-21.8
15	-22.9	-23.5	-24.2	-24.7	-25.4	-25.6	-26.0	-26.0	-25.9	-25.4	-24.3	-23.3	-22.1	-21.3	-20.6	-19.6	-18.7	-18.4	-18.8	-19.6	-20.5	-20.7	-21.1	-21.7	-18.4	-26.0	-22.5
16	-22.0	-22.1	-22.1	-22.1	-22.3	-22.3	-22.7	-22.5	-22.3	-21.7	-20.7	-19.7	-18.6	-17.3	-16.4	-15.8	-15.6	-15.9	-16.8	-17.6	-18.3	-19.0	-19.1	-19.3	-15.6	-22.7	-19.7
17	-19.4	-19.6	-19.9	-20.1	-20.0	-20.3	-20.7	-20.8	-21.0	-20.5	-19.2	-18.3	-17.5	-16.6	-15.5	-14.6	-13.7	-13.3	-13.7	-14.8	-15.6	-16.0	-15.7	-15.6	-13.3	-21.0	-17.6
18	-15.1	-15.2	-15.9	-16.0	-16.8	-16.8	-17.0	-17.2	-17.7	-18.0	-17.4	-16.4	-15.6	-14.6	-13.8	-13.5	-13.1	-12.9	-13.2	-14.3	-15.1	-15.1	-15.8	-16.3	-12.9	-18.0	-15.5
19	-16.5	-16.5	-17.0	-16.9	-16.9	-17.2	-17.2	-17.2	-17.5	-16.8	-15.7	-14.7	-13.7	-13.0	-11.9	-11.2	-10.4	-10.2	-10.6	-10.9	-11.5	-11.3	-11.9	-11.9	-10.2	-17.5	-14.1
20	-12.1	-12.1	-12.2	-11.8	-11.5	-11.7	-11.6	-11.4	-10.7	-9.8	-8.9	-8.1	-7.2	-6.5	-5.5	-4.8	-5.4	-6.0	-5.8	-5.5	-5.1	-4.7	-4.3	-4.3	-4.3	-12.2	-8.2
21	-4.7	-4.5	-4.3	-5.5	-5.7	-5.5	-5.3	-5.1	-5.0	-8.6	-9.3	-9.2	-9.3	-9.2	-9.1	-9.4	-9.6	-9.8	-10.3	-10.8	-11.4	-11.9	-13.5	-13.7	-4.3	-13.7	-8.3
22	-14.2	-14.6	-15.1	-16.1	-16.2	-17.5	-18.2	-18.1	-17.5	-17.5	-16.7	-16.0	-14.9	-13.8	-12.7	-12.0	-11.8	-11.7	-12.1	-12.6	-13.6	-14.3	-15.2	-15.8	-11.7	-18.2	-14.9
23	-16.2	-16.9	-16.9	-16.3	-16.3	-17.2	-17.9	-18.6	-18.7	-18.5	-18.1	-17.1	-16.3	-16.0	-15.7	-14.6	-14.3	-14.4	-14.7	-15.3	-16.0	-17.0	-17.3	-17.9	-14.3	-18.7	-16.6
24	-18.7	-19.0	-20.3	-20.5	-21.4	-21.2	-21.5	-21.5	-21.6	-20.4	-20.0	-19.5	-18.9	-18.1	-17.3	-16.7	-16.2	-15.9	-16.3	-16.9	-17.0	-17.0	-16.7	-16.4	-15.9	-21.6	-18.7
25	-15.4	-15.3	-15.6	-16.0	-16.1	-16.1	-16.6	-16.4	-16.5	-15.8	-15.0	-14.6	-13.5	-12.2	-11.5	-10.8	-10.5	-9.8	-9.5	-9.6	-9.2	-8.8	-8.6	-8.7	-8.6	-16.6	-13.0
26	-8.4	-7.9	-7.3	-7.3	-6.8	-6.8	-7.1	-7.5	-8.9	-10.0	-10.7	-11.1	-11.3	-11.3	-11.5	-11.5	-11.5	-11.7	-11.6	-10.7	-11.3	-11.7	-11.2	-10.5	-6.8	-11.7	-9.8
27	-9.7	-9.4	-10.2	-10.1	-10.7	-11.0	-11.1	-11.4	-11.8	-11.1	-10.9	-10.2	-10.0	-9.7	-9.4	-9.4	-9.5	-9.3	-9.6	-10.1	-10.9	-12.1	-12.5	-13.1	-9.3	-13.1	-10.5
28	-13.0	-13.8	-13.9	-13.8	-13.7	-14.0	-14.6	-15.0	-15.2	-14.3	-13.3	-12.0	-10.9	-9.9	-9.3	-8.9	-8.5	-8.5	-8.6	-9.2	-9.5	-9.3	-10.0	-10.6	-8.5	-15.2	-11.7
29	-10.1	-11.5	-11.6	-11.2	-11.3	-11.2	-11.8	-9.6	-11.3	-11.3	-10.4	-9.0	-7.4	-6.7	-5.8	-5.7	-5.3	-5.4	-5.7	-6.1	-6.5	-6.9	-7.2	-7.8	-5.3	-11.8	-8.6
30	-8.4	-7.7	-8.3	-7.3	-7.8	-7.7	-8.2	-8.6	-8.4	-7.5	-7.1	-6.9	-5.6	-4.9	-4.2	-3.4	-2.9	-2.4	-2.6	-2.6	-2.3	-1.8	-2.2	-3.0	-1.8	-8.6	-5.5
31	-2.9	-3.1	-3.0	-2.0	-1.9	-1.4	-1.1	-1.3	-1.3	-0.9	-0.7	-0.6	-0.2	0.3	0.7	1.2	1.1	1.1	0.9	0.2	-1.0	-1.1	-1.2	-1.6	1.2	-3.1	-0.8
Max.	**-2.9**	**-3.1**	**-3.0**	**-2.0**	**-1.9**	**-1.4**	**-1.1**	**-1.3**	**-1.3**	**-0.9**	**-0.7**	**-0.6**	**-0.2**	**0.3**	**0.7**	**1.2**	**1.1**	**1.1**	**0.9**	**0.2**	**-1.0**	**-1.1**	**-1.2**	**-1.6**	**1.2**		
Min.	**-25.6**	**-26.1**	**-26.5**	**-26.9**	**-27.1**	**-27.4**	**-27.6**	**-27.8**	**-27.9**	**-27.6**	**-26.9**	**-26.3**	**-25.6**	**-24.8**	**-24.3**	**-23.8**	**-23.7**	**-23.7**	**-24.0**	**-24.3**	**-24.3**	**-24.5**	**-24.7**	**-25.2**		**-27.9**	
Avg.	**-16.9**	**-17.1**	**-17.4**	**-17.5**	**-17.7**	**-17.9**	**-18.1**	**-18.2**	**-18.5**	**-18.2**	**-17.7**	**-17.0**	**-16.2**	**-15.4**	**-14.7**	**-14.1**	**-13.9**	**-13.9**	**-14.2**	**-14.7**	**-15.2**	**-15.5**	**-15.8**	**-16.1**			**-16.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-1.6	-1.1	-2.2	-2.6	-2.4	-2.5	-2.8	-3.4	-3.2	-2.6	-1.9	-1.5	-1.0	-0.3	0.3	0.5	0.3	0.3	-0.6	-1.1	-1.5	-0.9	-1.2	-1.1	0.5	-3.4	-1.4
2	-1.6	-1.5	-1.8	-2.3	-2.1	-2.4	-2.9	-2.6	-2.4	-1.6	-0.7	-0.2	-0.1	0.0	-0.1	-0.1	-0.1	-0.3	-0.6	-0.8	-0.6	-0.9	-0.8	-1.0	0.0	-2.9	-1.1
3	-1.1	-1.1	-1.1	-1.0	-1.3	-1.4	-1.6	-1.3	-1.6	-1.4	-1.1	-0.6	-0.4	-0.3	0.0	-0.1	-0.1	-0.3	-0.7	-0.6	-0.8	-1.0	-1.3	-1.3	0.0	-1.6	-0.9
4	-1.6	-1.6	-1.6	-1.2	-1.1	-1.1	-1.4	-1.6	-1.1	-0.6	-0.3	0.0	0.2	0.5	0.3	0.4	0.3	0.0	-0.3	-0.1	0.0	0.2	0.7	0.9	0.9	-1.6	-0.4
5	0.8	0.7	0.7	0.9	0.0	1.0	1.0	1.9	2.1	2.5	2.6	2.9	3.4	3.8	4.2	5.0	5.1	2.2	2.1	1.4	1.2	1.2	1.4	1.1	5.1	0.0	2.1
6	0.9	0.9	1.4	1.3	1.7	1.5	2.1	2.4	2.8	2.7	3.4	4.1	4.5	5.2	5.6	5.6	5.4	3.7	1.8	0.9	1.5	2.8	3.7	3.7	5.6	0.9	2.9
7	3.0	1.1	0.7	-0.2	-0.6	-0.9	-0.6	-0.2	-0.1	0.2	0.3	0.1	0.5	0.8	1.4	1.8	1.8	1.9	1.4	0.9	0.9	2.0	2.1	2.1	3.0	-0.9	0.9
8	2.3	2.0	1.9	2.1	2.5	2.9	3.4	3.5	3.6	4.1	4.7	5.3	5.4	5.6	5.6	5.8	5.1	5.0	4.4	3.8	3.5	3.0	1.3	0.8	5.8	0.8	3.7
9	0.9	0.6	0.5	0.7	0.9	1.0	0.2	0.0	0.0	0.1	0.5	0.9	0.8	1.0	1.6	1.3	1.2	0.9	1.1	1.0	0.6	0.2	-0.1	-0.2	1.6	-0.2	0.7
10	-0.5	-0.6	-0.7	-0.9	-1.0	-1.0	-1.1	-1.1	-1.0	-1.0	-0.5	0.3	0.5	0.9	0.8	0.9	1.1	1.5	0.9	0.1	-0.4	-0.5	-0.7	-1.1	1.5	-1.1	-0.2
11	-1.7	-1.5	-1.5	-1.5	-2.0	-2.0	-1.4	-1.5	-1.6	-1.3	-0.2	0.5	0.9	1.0	0.9	1.0	0.8	0.6	0.4	-0.4	-1.3	-1.5	-1.7	-1.7	1.0	-2.0	-0.7
12	-1.4	-1.4	-1.1	-2.4	-2.1	-2.6	-3.0	-2.6	-2.4	-1.4	-0.6	0.1	1.1	1.7	1.9	2.2	2.7	3.0	2.9	1.5	0.6	0.7	0.7	-0.4	3.0	-3.0	-0.1
13	-0.8	-0.7	-1.2	-1.7	-1.7	-2.1	-2.5	-2.0	-1.7	-1.7	-1.5	-1.3	-0.4	0.5	1.2	1.9	2.6	2.8	2.0	0.8	-0.2	-0.8	-0.4	-0.2	2.8	-2.5	-0.4
14	-0.4	-0.8	-1.0	-1.1	-1.6	-1.7	-2.8	-3.1	-2.8	-2.4	-2.1	-1.1	0.3	1.3	1.6	1.2	1.5	1.4	0.8	0.0	-0.6	-1.3	-1.5	-1.7	1.6	-3.1	-0.7
15	-1.7	-1.9	-1.8	-1.5	-1.6	-1.3	-1.4	-1.0	-0.3	0.1	0.9	1.1	1.3	1.4	1.7	1.6	2.0	2.2	1.4	1.0	0.8	0.8	1.0	1.0	2.2	-1.9	0.2
16	1.2	1.3	1.1	1.3	0.7	0.3	-0.2	-0.1	0.6	1.5	2.3	2.3	2.4	0.0	-1.4	-1.8	-2.0	-2.2	-2.8	-3.4	-4.1	-4.2	-4.2	-3.8	2.4	-4.2	-0.6
17	-3.6	-3.6	-3.0	-2.1	-1.6	-0.8	-0.4	-0.4	-0.3	-0.7	-0.9	-0.9	-1.0	-0.9	-0.9	-0.9	-0.8	-0.6	-0.7	-0.6	-0.4	-0.4	-0.3	-0.3	-0.3	-3.6	-1.1
18	-0.4	-0.4	-0.3	-0.2	0.1	0.3	0.0	0.1	0.3	0.6	0.8	1.2	1.3	1.4	0.9	0.6	-1.7	-2.3	-2.8	-3.1	-3.2	-3.3	-3.7	-3.2	1.4	-3.7	-0.7
19	-1.8	-1.5	-2.0	-2.2	-1.1	-0.4	-0.4	-0.6	-0.3	0.0	0.1	0.2	0.2	-0.1	-0.6	-0.9	-1.1	-1.3	-1.7	-1.7	-1.6	-1.3	-0.9	-1.0	0.2	-2.2	-0.9
20	-0.9	-1.0	-1.0	-0.7	-0.4	-0.3	0.7	0.9	1.0	1.5	1.7	2.0	2.6	2.7	2.7	2.6	2.4	1.8	1.8	1.6	1.4	1.2	1.1	1.5	2.7	-1.0	1.1
21	2.1	2.3	2.4	2.7	2.7	2.7	2.1	1.3	2.0	2.1	2.9	3.5	4.2	4.2	3.5	3.6	3.2	2.7	1.9	1.7	1.5	1.1	1.8	1.7	4.2	1.1	2.5
22	1.9	2.2	2.2	2.7	2.6	3.4	3.8	3.2	2.9	2.7	3.3	4.0	4.9	4.7	4.6	4.9	4.4	4.0	3.4	3.3	3.2	3.2	3.1	3.1	4.9	1.9	3.4
23	3.0	3.3	3.7	3.7	3.1	3.3	3.6	3.8	4.2	4.9	5.8	6.9	6.3	6.3	7.2	5.2	4.7	5.3	3.7	3.7	3.1	2.0	1.9	1.5	7.2	1.5	4.2
24	1.2	1.6	1.9	2.4	2.3	2.2	2.5	2.8	3.1	3.8	4.8	5.7	5.3	5.0	5.7	5.9	5.7	5.6	4.9	3.7	2.5	2.0	1.4	1.4	5.9	1.2	3.5
25	1.5	1.7	1.7	1.6	1.5	1.7	1.8	2.3	2.7	3.0	3.8	3.1	2.4	3.0	3.4	3.4	3.5	3.5	3.2	2.8	2.7	2.9	2.9	2.7	3.8	1.5	2.6
26	2.6	3.0	2.7	3.0	3.2	2.2	1.3	2.6	3.5	4.4	5.9	7.2	8.2	8.9	9.4	9.3	9.5	9.6	9.7	9.3	8.6	7.4	7.3	7.2	9.7	1.3	6.1
27	5.3	6.0	3.9	3.2	3.3	3.3	3.2	3.5	3.5	4.3	5.2	6.4	6.9	6.9	6.8	7.1	6.3	5.0	4.2	3.0	2.0	1.1	0.2	-0.4	7.1	-0.4	4.2
28	-0.7	-1.7	-2.1	-2.6	-3.1	-3.2	-3.1	-2.7	-2.5	-2.0	-0.8	1.2	3.2	3.9	4.5	4.7	4.2	3.6	3.3	2.5	1.1	0.0	-0.3	-0.6	4.7	-3.2	0.3
29	-0.1	0.4	0.3	-0.1	0.0	0.0	0.5	1.7	2.4	2.9	3.2	3.9	4.9	5.5	5.7	6.4	6.3	5.9	5.8	5.3	3.6	2.3	1.4	1.0	6.4	-0.1	2.9
30	1.0	0.8	0.9	0.8	0.9	1.5	1.3	1.8	2.9	4.5	5.7	6.3	6.7	7.1	7.4	7.8	7.6	7.5	7.2	6.4	5.7	5.4	5.1	5.0	7.8	0.8	4.5
Max.	**5.3**	**6.0**	**3.9**	**3.7**	**3.3**	**3.4**	**3.8**	**3.8**	**4.2**	**4.9**	**5.9**	**7.2**	**8.2**	**8.9**	**9.4**	**9.3**	**9.5**	**9.6**	**9.7**	**9.3**	**8.6**	**7.4**	**7.3**	**7.2**	**9.7**		
Min.	**-3.6**	**-3.6**	**-3.0**	**-2.6**	**-3.1**	**-3.2**	**-3.1**	**-3.4**	**-3.2**	**-2.6**	**-2.1**	**-1.5**	**-1.0**	**-0.9**	**-1.4**	**-1.8**	**-2.0**	**-2.3**	**-2.8**	**-3.4**	**-4.1**	**-4.2**	**-4.2**	**-3.8**		**-4.2**	
Avg.	**0.3**	**0.3**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.3**	**0.6**	**1.0**	**1.6**	**2.1**	**2.5**	**2.7**	**2.9**	**2.9**	**2.7**	**2.4**	**1.9**	**1.4**	**1.0**	**0.8**	**0.7**	**0.6**			**1.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.8	2.9	2.9	2.5	1.8	2.1	2.2	3.0	3.7	3.8	3.8	4.7	5.2	5.8	6.3	5.4	5.2	5.2	4.2	3.4	3.3	3.0	2.7	3.4	6.3	1.8	3.8
2	3.4	3.4	3.3	3.0	1.8	1.8	2.2	2.2	1.4	2.2	2.8	4.2	3.5	4.7	5.3	4.8	4.2	3.4	2.7	2.1	1.6	1.1	0.5	0.3	5.3	0.3	2.7
3	0.3	0.5	0.3	0.1	-0.4	-0.2	-0.1	0.1	0.8	2.0	3.3	4.5	5.7	6.5	7.3	7.8	6.8	5.5	5.6	4.7	4.2	4.2	4.2	3.6	7.8	-0.4	3.2
4	3.3	2.8	2.8	2.8	3.0	2.7	2.4	1.8	2.4	3.3	4.1	4.4	5.2	5.6	6.4	6.8	6.8	6.6	5.8	5.3	4.9	3.9	2.2	1.7	6.8	1.7	4.0
5	1.9	0.9	-0.8	-0.9	-0.5	-0.4	-0.6	-0.5	-0.5	-0.2	0.8	1.5	2.8	3.9	5.3	5.9	6.5	6.5	7.0	6.7	5.8	5.9	4.5	4.5	7.0	-0.9	2.8
6	4.8	4.7	4.5	3.4	2.4	2.2	2.2	1.7	1.3	2.0	2.6	3.3	3.8	4.2	4.2	4.3	4.1	3.7	3.4	3.1	2.7	2.5	2.2	1.8	4.8	1.3	3.1
7	1.6	1.5	1.1	0.7	0.2	-0.2	0.7	1.1	2.1	2.5	2.8	3.1	3.6	4.1	4.7	4.8	3.9	3.5	3.5	3.3	2.9	2.3	1.7	1.2	4.8	-0.2	2.4
8	0.9	0.7	0.5	0.4	0.1	0.0	-0.1	-0.2	0.0	0.2	0.7	1.5	2.7	3.4	4.1	4.7	4.6	4.7	4.4	4.2	3.7	1.8	1.3	1.0	4.7	-0.2	1.9
9	1.0	0.7	-0.1	0.0	0.2	0.3	0.1	0.0	-0.2	-0.3	-0.2	0.0	0.4	1.1	1.9	2.6	3.0	3.1	3.2	2.9	2.2	1.5	1.4	1.3	3.2	-0.3	1.1
10	1.2	1.2	0.9	0.9	0.9	1.1	1.2	1.1	1.6	2.4	3.0	3.5	3.7	4.4	4.8	4.9	4.5	4.3	4.3	4.3	3.1	3.1	2.1	1.6	4.9	0.9	2.7
11	1.5	1.5	0.6	0.5	0.9	0.9	1.1	1.8	2.5	3.4	4.0	4.6	5.0	5.3	5.5	5.6	5.5	5.2	4.6	4.0	2.9	1.5	0.8	0.6	5.6	0.5	2.9
12	0.6	0.3	0.5	0.1	-0.4	-0.2	0.6	1.3	2.2	3.1	3.7	4.2	4.3	4.4	4.6	4.8	4.6	4.4	4.1	3.2	2.5	1.4	1.3	1.2	4.8	-0.4	2.4
13	1.4	1.3	1.2	1.2	1.2	1.1	1.0	1.2	1.7	2.2	2.8	2.5	2.6	3.0	3.3	3.5	3.6	4.0	3.7	3.4	3.4	3.2	3.1	2.9	4.0	1.0	2.4
14	4.2	3.5	3.7	3.1	4.2	4.1	4.3	4.9	5.4	5.9	6.2	6.9	5.0	5.3	5.3	4.3	4.3	4.6	4.2	3.7	2.9	2.2	2.1	1.7	6.9	1.7	4.2
15	1.7	1.5	1.0	1.3	1.6	2.1	2.4	3.2	3.8	4.1	4.7	5.7	5.7	4.7	5.1	5.4	5.9	6.0	6.5	7.1	7.3	6.5	5.9	5.3	7.3	1.0	4.4
16	4.9	4.6	4.7	4.7	4.5	4.8	5.5	6.6	7.4	9.0	10.1	10.9	11.1	10.2	10.1	10.6	10.4	9.6	9.0	6.2	4.6	3.6	2.9	2.7	11.1	2.7	7.0
17	2.7	2.5	2.3	2.3	2.3	2.3	2.4	2.7	3.3	4.8	6.3	6.8	6.8	6.7	6.6	6.7	6.2	6.0	5.4	4.5	3.6	2.8	2.4	1.9	6.8	1.9	4.2
18	1.8	2.1	2.0	1.8	1.8	1.6	1.6	2.4	3.4	4.5	5.3	5.8	6.2	6.6	7.0	7.4	8.2	8.5	8.0	7.4	6.6	6.3	6.3	6.2	8.5	1.6	4.9
19	6.0	5.7	5.2	4.8	4.5	4.8	5.4	6.6	7.2	7.3	7.6	7.3	7.5	8.6	9.0	9.3	9.2	9.0	8.7	8.0	7.1	6.3	5.7	5.2	9.3	4.5	6.9
20	4.9	3.8	2.9	2.0	2.7	2.4	2.9	3.4	4.4	4.2	5.3	6.7	7.5	8.0	7.9	8.2	8.2	8.3	8.4	7.8	7.1	5.7	4.9	4.4	8.4	2.0	5.5
21	4.3	4.1	3.6	3.6	3.6	3.7	4.1	4.7	5.6	7.0	7.9	8.7	9.0	9.7	9.9	10.1	9.9	9.3	8.7	7.8	7.0	6.0	5.5	5.3	10.1	3.6	6.6
22	5.1	4.9	4.6	5.0	5.0	5.1	5.4	5.6	6.2	4.8	4.5	6.6	7.9	6.1	6.4	8.0	9.2	8.6	6.9	5.2	4.9	5.4	5.1	5.3	9.2	4.5	5.9
23	5.6	5.5	6.2	6.0	6.4	7.3	7.7	7.9	7.8	8.3	8.8	8.1	8.2	6.5	5.9	6.0	6.6	6.4	5.5	4.9	4.5	3.9	3.5	3.0	8.8	3.0	6.3
24	2.8	2.5	2.5	2.3	2.4	2.4	2.6	3.2	4.5	5.0	5.2	5.9	6.6	7.1	6.7	5.4	5.8	6.8	8.1	7.3	6.3	6.4	5.3	5.2	8.1	2.3	4.9
25	5.1	5.2	7.2	6.3	6.2	6.8	6.8	5.8	5.6	5.5	5.6	5.3	5.6	6.0	6.0	6.1	6.4	6.5	6.6	6.7	6.5	6.7	7.1	7.1	7.2	5.1	6.2
26	7.1	7.1	4.8	4.3	4.2	4.3	4.7	4.5	4.5	5.0	6.0	6.1	6.1	5.8	5.6	5.1	5.4	5.2	4.9	4.9	4.7	4.0	3.8	3.7	7.1	3.7	5.1
27	3.4	3.0	2.9	2.9	2.8	2.8	3.0	3.2	4.4	5.7	6.2	6.6	7.1	7.5	7.5	7.1	7.3	7.2	6.9	6.3	5.3	3.9	3.3	2.9	7.5	2.8	5.0
28	3.0	2.9	2.8	2.6	2.2	2.5	3.0	3.4	4.4	5.6	6.2	6.2	6.4	7.0	6.8	6.2	6.1	5.4	5.1	4.7	4.1	3.3	2.6	2.7	7.0	2.2	4.4
29	2.7	2.6	2.4	2.1	1.3	1.9	2.8	4.1	5.8	7.0	7.7	8.4	8.7	9.3	8.9	8.7	8.6	9.0	8.3	7.9	6.8	5.7	5.4	5.2	9.3	1.3	5.9
30	5.2	5.2	5.3	4.8	4.2	4.1	4.7	5.6	6.5	7.4	7.9	8.7	8.8	9.2	9.5	9.2	8.4	7.3	6.6	6.0	5.5	4.7	4.1	3.9	9.5	3.9	6.4
31	3.9	4.3	5.1	5.7	5.3	5.1	5.3	5.2	4.0	4.5	6.3	6.5	7.0	7.5	7.3	8.0	8.5	8.3	7.5	6.8	6.4	6.0	5.6	5.5	8.5	3.9	6.1
Max.	**7.1**	**7.1**	**7.2**	**6.3**	**6.4**	**7.3**	**7.7**	**7.9**	**7.8**	**9.0**	**10.1**	**10.9**	**11.1**	**10.2**	**10.1**	**10.6**	**10.4**	**9.6**	**9.0**	**8.0**	**7.3**	**6.7**	**7.1**	**7.1**	**11.1**		
Min.	**0.3**	**0.3**	**-0.8**	**-0.9**	**-0.5**	**-0.4**	**-0.6**	**-0.5**	**-0.5**	**-0.3**	**-0.2**	**0.0**	**0.4**	**1.1**	**1.9**	**2.6**	**3.0**	**3.1**	**2.7**	**2.1**	**1.6**	**1.1**	**0.5**	**0.3**		**-0.9**	
Avg.	**3.2**	**3.0**	**2.8**	**2.6**	**2.5**	**2.6**	**2.8**	**3.1**	**3.7**	**4.3**	**4.9**	**5.5**	**5.8**	**6.1**	**6.3**	**6.4**	**6.4**	**6.2**	**5.9**	**5.3**	**4.7**	**4.0**	**3.5**	**3.3**			**4.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.7	3.9	4.0	3.9	4.2	4.1	4.4	5.6	6.5	6.9	7.3	7.5	8.0	7.4	8.1	7.7	7.1	6.0	5.6	5.6	5.1	4.4	4.2	4.3	8.1	3.9	5.7
2	4.1	4.2	4.0	3.8	3.9	3.8	3.9	4.1	4.3	4.7	5.3	6.1	7.0	7.7	8.2	8.5	8.8	9.1	9.2	8.8	8.0	6.9	5.8	5.5	9.2	3.8	6.1
3	5.6	5.2	5.1	4.3	4.3	4.7	4.8	5.5	6.3	6.6	7.1	8.1	9.0	9.4	10.3	11.3	11.7	11.3	11.4	11.0	11.0	10.3	9.5	8.6	11.7	4.3	8.0
4	8.0	7.3	6.9	7.2	7.1	7.3	7.4	7.4	7.4	7.9	8.2	8.5	9.4	10.1	9.5	8.9	9.3	7.9	6.4	5.8	5.3	5.0	4.6	4.4	10.1	4.4	7.4
5	4.2	4.2	4.1	3.9	3.9	4.1	4.5	4.6	4.7	5.0	5.7	6.6	7.2	6.9	6.9	7.5	7.4	7.0	6.4	6.7	6.3	5.8	5.6	5.1	7.5	3.9	5.6
6	4.7	4.5	4.7	4.8	4.8	4.7	5.0	6.2	7.7	9.5	10.7	10.0	9.6	9.2	8.8	8.2	7.7	7.7	7.7	6.0	5.2	4.4	4.3	4.5	10.7	4.3	6.7
7	4.5	5.9	5.6	4.7	5.1	7.0	6.2	7.0	8.5	9.5	9.2	8.9	8.8	8.1	7.9	6.6	5.8	5.6	5.2	5.5	5.1	4.3	3.4	3.2	9.5	3.2	6.3
8	3.4	3.4	3.4	3.5	3.4	4.0	4.2	4.8	4.9	5.8	6.6	7.5	8.0	7.1	6.7	6.9	7.6	6.0	5.7	5.5	4.7	3.9	3.2	2.7	8.0	2.7	5.1
9	2.3	2.4	2.6	2.4	2.4	2.6	2.8	3.7	4.7	5.9	6.8	7.5	8.0	7.8	8.1	8.8	8.8	8.6	9.1	9.4	8.9	8.3	8.1	8.3	9.4	2.3	6.2
10	8.5	8.3	8.2	7.7	7.3	8.3	8.2	9.0	9.4	10.5	12.5	14.2	15.3	16.4	17.5	18.3	18.8	19.0	19.3	17.4	12.7	9.0	7.3	6.6	19.3	6.6	12.1
11	5.7	5.1	4.5	4.4	4.2	4.2	4.4	5.0	5.6	6.2	7.2	8.7	10.4	11.4	11.1	10.0	8.7	7.7	7.2	6.2	5.1	4.6	4.4	4.2	11.4	4.2	6.5
12	4.1	4.1	4.1	4.0	3.9	3.6	3.9	4.2	4.4	4.6	4.6	4.7	5.0	5.2	5.5	6.5	7.2	7.5	7.6	7.7	7.4	7.0	6.1	5.9	7.7	3.6	5.4
13	5.7	5.5	5.7	5.7	5.2	4.9	5.7	6.7	7.4	7.8	8.4	8.7	8.5	8.8	9.5	10.4	9.2	9.1	9.4	9.4	9.1	9.0	8.8	8.5	10.4	4.9	7.8
14	8.1	8.1	7.5	7.2	7.2	7.2	7.6	8.5	9.4	10.3	11.1	12.0	12.4	12.6	11.4	11.5	11.7	11.9	12.5	12.7	12.6	12.4	12.5	11.9	12.7	7.2	10.4
15	11.0	10.6	10.2	10.2	10.2	9.6	9.8	10.7	11.6	13.2	14.5	15.6	16.5	17.4	18.1	18.4	18.7	18.6	18.5	18.3	17.5	16.5	15.2	13.3	18.7	9.6	14.3
16	12.5	11.5	10.3	9.5	9.3	9.2	9.4	10.3	11.5	12.8	13.6	14.0	14.3	14.6	14.7	14.6	14.2	13.9	12.8	11.9	11.1	10.3	9.1	7.4	14.7	7.4	11.8
17	6.2	5.1	4.3	3.9	3.8	3.6	3.7	3.8	4.2	4.9	5.8	5.9	6.4	7.3	8.1	9.3	10.0	8.7	8.4	8.8	9.1	8.9	8.5	7.9	10.0	3.6	6.5
18	7.9	7.7	7.7	7.5	7.0	6.4	6.9	7.8	8.8	9.3	9.4	9.7	10.8	12.3	12.8	13.3	12.7	13.1	11.9	11.2	9.7	9.3	9.7	9.8	13.3	6.4	9.7
19	9.6	9.5	9.4	9.7	9.6	9.2	9.5	10.5	11.7	12.9	14.2	15.4	16.3	17.5	18.4	19.1	19.8	20.2	20.3	20.3	19.8	18.8	17.7	16.8	20.3	9.2	14.8
20	15.3	14.7	13.7	13.4	12.7	12.9	13.4	14.0	15.1	16.6	17.9	19.1	19.8	20.5	20.9	21.3	21.1	21.0	20.8	19.6	18.5	16.7	15.1	14.5	21.3	12.7	17.0
21	14.1	13.6	12.4	12.6	11.9	11.2	11.4	12.0	12.7	13.3	14.4	14.4	15.2	15.8	16.0	16.5	16.7	16.5	15.6	14.7	12.6	11.2	9.2	7.3	16.7	7.3	13.4
22	6.4	5.9	5.5	5.0	4.6	4.6	4.7	5.0	5.2	5.5	5.8	6.1	6.3	6.6	6.9	6.9	7.0	7.2	7.0	7.0	6.9	6.8	6.7	6.6	7.2	4.6	6.1
23	6.4	6.3	6.4	6.3	6.1	6.0	6.2	6.3	6.3	6.4	6.3	6.3	6.4	6.3	6.4	6.4	6.2	6.1	5.9	5.8	5.9	6.0	5.7	5.6	6.4	5.6	6.2
24	5.5	5.6	5.4	5.4	5.6	5.9	6.2	6.6	6.6	7.1	7.4	7.3	7.0	7.4	7.2	7.3	7.1	7.3	7.2	7.1	6.9	6.5	6.4	6.3	7.4	5.4	6.6
25	6.0	5.7	5.7	5.6	5.5	5.7	5.9	6.3	7.1	7.7	7.6	7.5	7.5	7.8	8.2	8.1	8.3	8.4	8.0	8.0	7.3	6.5	5.9	5.7	8.4	5.5	6.9
26	5.3	5.2	5.6	5.8	6.0	6.2	6.7	7.4	8.2	8.9	9.5	9.8	10.9	11.5	12.2	12.6	12.9	13.2	13.5	13.2	12.5	10.9	10.4	10.1	13.5	5.2	9.5
27	9.5	9.1	8.7	8.7	8.1	8.1	9.0	10.1	11.3	12.2	12.6	12.8	13.7	14.3	14.4	15.5	15.8	15.9	15.2	14.2	12.6	10.7	9.7	8.9	15.9	8.1	11.7
28	8.3	8.1	7.4	7.0	7.1	6.9	6.8	7.1	7.6	8.2	8.6	8.3	8.6	9.5	10.3	10.2	10.3	10.7	11.4	11.4	10.8	10.2	9.7	9.5	11.4	6.8	8.9
29	9.4	9.3	8.9	8.4	8.0	7.8	8.1	9.0	9.9	10.8	11.6	12.1	12.5	12.8	13.0	13.2	12.5	12.1	12.0	11.6	10.8	9.7	8.8	8.3	13.2	7.8	10.4
30	8.5	8.4	8.2	8.2	8.2	8.0	7.8	7.5	7.3	7.4	7.3	8.0	9.3	10.1	11.0	11.3	11.3	11.2	11.3	10.9	9.1	9.3	8.8	8.7	11.3	7.3	9.0
Max.	**15.3**	**14.7**	**13.7**	**13.4**	**12.7**	**12.9**	**13.4**	**14.0**	**15.1**	**16.6**	**17.9**	**19.1**	**19.8**	**20.5**	**20.9**	**21.3**	**21.1**	**21.0**	**20.8**	**20.3**	**19.8**	**18.8**	**17.7**	**16.8**	**21.3**		
Min.	**2.3**	**2.4**	**2.6**	**2.4**	**2.4**	**2.6**	**2.8**	**3.7**	**4.2**	**4.6**	**4.6**	**4.7**	**5.0**	**5.2**	**5.5**	**6.4**	**5.8**	**5.6**	**5.2**	**5.5**	**4.7**	**3.9**	**3.2**	**2.7**		**2.3**	
Avg.	**7.2**	**6.9**	**6.7**	**6.5**	**6.4**	**6.4**	**6.6**	**7.2**	**7.9**	**8.6**	**9.2**	**9.7**	**10.3**	**10.7**	**10.9**	**11.2**	**11.1**	**10.9**	**10.7**	**10.4**	**9.6**	**8.8**	**8.1**	**7.7**			**8.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	8.7	8.9	8.8	8.6	7.9	8.2	8.6	9.2	10.0	11.3	12.0	12.3	13.1	13.4	13.7	13.8	13.8	13.7	13.5	13.2	12.3	10.4	9.9	9.9	13.8	7.9	11.0
2	9.6	9.3	8.6	8.4	8.6	8.8	8.9	9.8	11.4	12.9	13.7	14.3	14.7	14.9	15.6	15.5	15.9	16.3	16.4	16.2	15.7	15.0	14.0	13.6	16.4	8.4	12.8
3	13.3	12.8	11.7	11.1	10.6	10.4	10.3	10.6	11.3	11.9	13.0	13.7	14.4	14.9	15.5	16.2	15.5	14.8	12.9	12.2	11.8	11.3	11.1	10.3	16.2	10.3	12.6
4	9.3	8.7	8.5	8.2	8.0	8.2	8.5	9.0	9.5	10.1	10.7	11.3	11.3	11.4	12.2	12.6	11.9	11.2	11.3	11.8	11.7	11.1	9.9	9.4	12.6	8.0	10.2
5	8.9	8.7	8.8	8.9	8.8	9.3	9.4	10.0	11.4	12.5	13.1	13.8	13.8	14.0	14.2	13.8	12.8	12.8	9.6	8.8	8.5	8.3	8.2	8.3	14.2	8.2	10.7
6	8.9	9.0	8.9	8.8	8.8	8.8	8.9	9.0	9.0	9.1	9.2	9.5	10.3	11.1	12.0	12.6	13.3	13.6	13.8	13.9	13.7	13.5	11.8	11.5	13.9	8.8	10.8
7	11.1	11.0	10.7	10.4	10.4	10.4	10.6	11.5	13.2	14.1	14.7	15.0	15.3	15.8	16.3	16.4	16.7	16.6	14.5	13.4	12.6	11.7	11.1	10.5	16.7	10.4	13.1
8	10.1	9.9	9.9	9.7	9.6	9.9	9.3	9.5	9.8	10.0	10.2	10.3	10.6	10.9	11.0	10.9	11.3	11.7	11.4	11.1	9.8	8.9	8.5	8.0	11.7	8.0	10.1
9	7.4	7.0	7.0	7.1	7.1	7.5	7.8	8.1	8.6	9.3	10.3	11.1	12.1	12.5	13.5	13.4	13.2	13.5	12.8	12.8	12.4	12.1	11.6	10.8	13.5	7.0	10.4
10	10.1	10.0	9.6	9.8	9.6	10.7	10.6	11.6	12.8	13.8	13.9	14.7	14.1	13.5	14.3	14.3	12.6	11.9	11.1	10.4	10.1	9.7	9.1	9.0	14.7	9.0	11.5
11	8.9	9.0	9.2	9.0	8.8	8.4	8.1	8.7	9.9	10.9	12.3	13.0	13.7	14.2	14.2	14.2	14.5	14.5	14.2	13.6	12.8	11.1	10.4	10.1	14.5	8.1	11.4
12	9.4	9.2	9.5	9.4	9.3	9.5	9.9	11.0	12.0	12.9	13.2	13.6	14.3	14.1	12.0	11.8	10.0	9.7	10.1	10.2	10.1	9.8	9.6	9.3	14.3	9.2	10.8
13	8.8	8.5	8.2	8.0	8.0	7.9	8.0	8.0	8.1	8.2	8.4	8.4	8.5	8.7	9.0	9.2	9.4	9.9	9.8	9.7	9.7	9.6	9.2	8.7	9.9	7.9	8.7
14	8.3	8.5	8.4	8.3	8.2	8.0	8.1	8.2	8.4	9.1	10.0	10.5	11.0	11.4	10.7	10.5	10.6	10.4	10.2	9.8	9.7	9.6	9.3	9.2	11.4	8.0	9.4
15	9.0	8.9	8.8	8.6	8.5	8.5	8.6	8.9	9.2	9.6	10.8	11.3	11.8	12.4	12.6	12.4	12.5	12.4	12.2	11.8	11.0	10.3	10.0	9.1	12.6	8.5	10.4
16	8.4	8.2	8.0	7.4	7.1	7.5	7.6	8.7	9.3	10.4	11.7	13.0	13.7	14.3	14.4	14.9	15.3	15.8	16.2	16.1	15.0	13.9	12.6	12.0	16.2	7.1	11.7
17	11.3	11.2	10.8	10.1	9.4	9.5	10.4	11.4	12.7	13.9	14.9	15.7	16.2	16.2	17.1	17.5	17.4	14.9	13.1	11.7	10.9	10.0	9.5	9.5	17.5	9.4	12.7
18	9.4	9.3	9.2	9.1	9.0	8.9	9.2	9.7	10.3	11.0	11.3	12.6	13.5	13.5	11.1	11.9	11.7	11.0	10.8	11.4	11.6	11.6	11.5	11.1	13.5	8.9	10.8
19	10.9	10.4	9.9	10.3	9.5	8.4	8.5	9.1	10.6	11.8	12.6	13.5	14.7	14.6	14.4	14.2	14.5	14.1	14.5	14.4	14.1	13.8	13.7	14.0	14.7	8.4	12.4
20	13.8	13.5	13.3	13.0	13.2	13.0	13.4	12.7	13.0	13.7	13.6	13.9	15.2	16.1	16.5	16.4	16.1	16.2	15.6	15.7	13.9	12.6	11.6	10.4	16.5	10.4	14.0
21	9.8	9.5	9.2	8.6	8.2	7.8	7.6	7.7	7.6	7.5	8.0	8.1	8.1	8.9	9.4	9.4	9.3	8.4	8.1	7.9	7.5	7.0	6.7	6.8	9.8	6.7	8.2
22	6.8	6.8	6.8	6.7	6.7	6.6	6.6	6.7	6.6	6.6	6.7	6.9	7.1	7.4	7.4	7.5	7.7	7.5	7.4	7.2	7.2	7.3	7.2	7.2	7.7	6.6	7.0
23	7.4	7.4	6.9	6.9	6.9	7.0	7.0	7.3	7.5	7.8	8.0	8.3	8.4	8.7	8.7	8.6	8.6	8.7	8.5	8.6	8.1	8.2	8.2	8.0	8.7	6.9	7.9
24	8.0	8.3	8.5	8.4	8.2	8.1	8.3	8.4	8.9	9.6	9.8	9.8	10.0	10.3	10.6	11.0	11.5	11.2	11.2	11.4	11.4	11.8	11.9	11.5	11.9	8.0	9.9
25	11.4	11.5	11.7	12.0	12.0	12.0	12.3	13.1	13.5	14.2	14.3	14.8	15.3	15.6	15.5	15.3	15.0	15.1	14.9	14.8	14.3	13.7	13.7	13.3	15.6	11.4	13.7
26	13.0	12.1	11.9	11.7	11.4	10.7	11.2	12.3	12.7	13.2	14.9	16.5	17.5	18.5	18.2	16.9	18.4	19.0	18.5	18.2	17.9	17.4	16.6	14.9	19.0	10.7	15.1
27	15.2	15.8	15.9	13.5	14.4	15.4	15.5	15.6	15.7	16.8	17.8	18.0	19.0	19.7	20.3	21.2	21.7	20.9	20.2	19.0	17.7	16.3	16.4	17.3	21.7	13.5	17.5
28	16.3	14.9	12.0	11.1	10.6	10.2	10.0	9.9	9.8	10.1	10.3	11.7	13.8	14.7	15.7	16.1	16.2	16.4	16.3	15.1	13.2	11.7	11.1	10.8	16.4	9.8	12.8
29	10.7	10.5	10.5	10.2	10.1	10.1	10.7	10.8	11.5	12.2	13.4	14.9	15.9	16.3	17.0	17.5	17.8	17.9	17.7	16.8	16.7	15.6	13.5	13.3	17.9	10.1	13.8
30	13.7	13.5	12.5	11.1	10.9	10.8	10.6	10.7	10.8	10.5	10.5	10.6	11.4	11.9	13.1	13.7	13.7	13.4	12.7	12.5	11.9	11.3	10.4	9.9	13.7	9.9	11.7
31	9.7	9.4	9.1	8.8	8.6	8.3	8.4	8.8	9.1	9.4	9.7	10.2	10.8	11.9	12.7	13.0	12.7	12.0	10.8	10.4	9.9	9.3	9.3	9.2	13.0	8.3	10.1
Max.	**16.3**	**15.8**	**15.9**	**13.5**	**14.4**	**15.4**	**15.5**	**15.6**	**15.7**	**16.8**	**17.8**	**18.0**	**19.0**	**19.7**	**20.3**	**21.2**	**21.7**	**20.9**	**20.2**	**19.0**	**17.9**	**17.4**	**16.6**	**14.9**	**21.7**		
Min.	**6.8**	**6.8**	**6.8**	**6.7**	**6.7**	**6.6**	**6.6**	**6.7**	**6.6**	**6.6**	**6.7**	**6.9**	**7.1**	**7.4**	**7.4**	**7.5**	**7.7**	**7.5**	**7.4**	**7.2**	**7.2**	**7.0**	**6.7**	**6.8**		**6.6**	
Avg.	**10.3**	**10.0**	**9.8**	**9.5**	**9.3**	**9.3**	**9.4**	**9.9**	**10.5**	**11.1**	**11.7**	**12.3**	**12.9**	**13.3**	**13.5**	**13.6**	**13.6**	**13.4**	**12.9**	**12.6**	**12.0**	**11.4**	**10.9**	**10.5**			**11.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

August 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	9.1	9.1	9.0	9.1	9.1	8.8	8.8	8.7	8.8	8.9	9.3	9.6	9.3	9.6	9.6	9.6	9.4	8.9	8.9	9.1	9.0	8.7	8.8	8.9	9.6	8.7	9.1
2	8.7	8.8	8.7	8.7	8.7	8.9	8.9	8.7	8.7	9.0	8.9	9.0	9.0	9.1	9.3	9.3	9.0	9.2	9.4	9.7	9.9	9.6	9.5	9.4	9.9	8.7	9.1
3	9.2	9.3	9.1	9.0	8.9	8.8	8.9	9.1	9.4	9.7	9.9	10.0	10.6	10.6	11.1	11.4	11.1	10.8	10.2	9.7	9.4	9.3	9.2	9.2	11.4	8.8	9.7
4	9.3	9.3	9.2	9.2	9.2	9.2	9.3	9.3	9.3	9.3	9.5	9.6	9.8	9.8	9.9	9.9	9.9	10.1	10.2	10.1	10.0	10.0	9.9	10.2	10.2	9.2	9.6
5	10.2	10.3	10.1	9.6	9.6	9.7	9.9	10.4	10.8	10.5	10.4	10.2	9.6	9.4	9.3	9.6	9.9	10.1	10.3	10.6	10.4	9.9	9.6	8.9	10.8	8.9	10.0
6	8.3	7.9	7.5	7.2	7.3	8.5	9.8	10.3	10.5	11.1	11.4	11.9	12.2	12.9	13.1	12.4	12.2	12.6	12.5	12.4	11.4	10.8	9.9	9.4	13.1	7.2	10.6
7	9.1	8.7	9.0	9.4	9.0	8.3	8.5	9.5	10.4	11.1	11.9	12.2	12.8	13.5	14.3	14.8	15.3	15.4	15.1	14.8	14.1	13.3	12.0	11.0	15.4	8.3	11.8
8	10.8	10.1	10.0	9.4	9.4	9.4	9.6	9.7	10.2	11.6	13.4	14.2	15.3	15.7	16.4	16.8	16.9	17.1	16.9	16.2	15.5	14.3	13.3	13.6	17.1	9.4	13.1
9	12.6	12.0	12.2	12.5	12.0	11.1	11.1	12.1	12.9	13.9	15.1	16.1	16.6	17.5	17.3	17.7	17.6	17.5	17.4	17.0	16.5	16.0	15.8	14.6	17.7	11.1	14.8
10	14.2	14.2	14.3	14.2	14.1	13.8	13.5	13.9	14.8	16.0	16.9	17.7	18.4	19.1	19.6	19.8	19.8	19.7	19.4	18.4	17.6	16.9	16.1	16.0	19.8	13.5	16.6
11	15.3	14.9	13.2	13.2	12.9	12.9	13.2	13.1	13.7	13.9	14.4	15.8	16.7	16.8	16.6	17.3	17.6	16.8	16.7	16.3	15.9	15.7	15.3	15.3	17.6	12.9	15.1
12	15.2	15.0	14.1	13.7	13.3	13.4	13.2	13.2	13.3	13.6	13.9	14.8	15.9	17.7	18.4	20.4	21.5	21.9	22.2	21.5	20.5	19.1	18.1	17.5	22.2	13.2	16.7
13	17.1	17.0	16.5	16.2	16.5	16.1	15.6	15.9	16.2	17.4	18.0	18.8	19.3	19.9	20.0	20.5	20.6	20.6	19.4	18.9	17.4	15.6	13.7	12.5	20.6	12.5	17.5
14	11.3	9.4	8.2	7.4	7.0	7.4	7.7	7.9	7.9	7.7	7.8	8.1	8.4	9.0	9.1	9.2	9.2	9.2	9.1	9.3	9.2	8.6	8.3	8.2	11.3	7.0	8.5
15	8.3	8.4	8.4	8.5	8.9	9.2	9.3	9.4	9.7	10.2	10.8	10.9	11.2	11.5	11.6	11.6	11.7	11.4	11.2	11.3	11.0	10.6	10.5	10.1	11.7	8.3	10.2
16	9.9	9.5	9.1	8.8	8.5	8.0	7.6	8.6	10.3	10.5	10.9	13.1	14.6	15.7	16.4	17.1	16.8	14.9	14.6	13.5	12.4	12.1	11.8	11.7	17.1	7.6	11.9
17	11.3	11.0	10.3	9.6	9.7	9.6	9.3	9.4	10.5	11.6	11.7	11.6	11.8	12.6	12.3	12.2	11.9	11.9	11.3	10.6	10.0	9.9	9.7	9.3	12.6	9.3	10.8
18	9.6	9.5	9.1	8.8	8.9	9.1	8.9	8.8	9.1	9.3	9.1	9.2	9.2	9.8	10.5	11.1	11.3	11.2	10.9	10.9	10.9	10.8	10.8	10.9	11.3	8.8	9.9
19	10.8	10.9	10.5	10.5	10.4	10.2	10.8	11.0	11.4	11.8	12.3	12.8	12.7	12.5	12.8	13.0	12.3	12.0	11.1	10.5	10.3	10.1	10.0	9.8	13.0	9.8	11.3
20	9.5	9.2	9.0	9.1	9.1	9.1	9.1	8.9	8.9	9.3	9.6	10.1	10.4	10.8	11.1	11.6	11.8	12.0	11.3	10.7	9.6	9.4	9.2	9.4	12.0	8.9	9.9
21	9.4	9.3	8.9	8.6	8.7	8.3	8.2	8.3	8.4	8.6	8.8	9.1	9.1	9.3	9.8	10.3	10.3	10.5	10.4	10.1	9.7	9.2	8.9	8.8	10.5	8.2	9.2
22	9.1	9.0	9.0	8.6	8.6	8.6	8.6	8.5	8.6	8.7	9.1	9.4	9.6	9.4	9.2	9.3	9.4	9.4	9.2	8.9	8.6	8.6	8.6	8.6	9.6	8.5	9.0
23	8.8	9.1	9.3	8.8	9.0	8.8	8.4	8.2	8.3	9.1	10.1	10.7	11.0	11.5	11.9	12.0	12.2	12.2	12.2	12.0	11.8	11.9	12.0	12.2	12.2	8.2	10.5
24	12.2	12.0	11.5	11.2	10.6	10.6	10.5	10.4	10.6	11.2	11.8	12.6	13.8	14.4	13.9	13.3	14.2	13.9	12.3	12.1	12.4	11.7	10.6	10.8	14.4	10.4	12.0
25	10.6	10.5	10.6	10.0	9.5	9.2	8.9	8.8	8.9	9.2	9.6	9.9	10.8	12.4	13.7	14.6	14.9	14.7	13.7	12.4	11.2	10.8	10.5	10.4	14.9	8.8	11.1
26	10.1	10.0	10.1	10.1	10.3	10.4	10.3	10.1	10.2	10.6	11.6	12.2	12.4	12.9	13.2	13.2	13.3	12.9	12.2	11.4	11.4	11.2	11.2	11.6	13.3	10.0	11.4
27	11.9	11.5	10.9	11.5	9.6	9.6	9.7	10.5	12.0	12.4	13.8	15.0	15.1	15.0	15.2	15.3	15.1	15.1	14.9	14.8	14.4	13.7	13.2	13.0	15.3	9.6	13.0
28	12.5	11.9	11.2	10.9	11.5	10.9	10.8	10.6	11.0	12.7	13.9	14.7	15.6	16.2	16.7	16.9	17.2	17.5	16.3	15.2	15.0	14.0	13.2	13.0	17.5	10.6	13.7
29	11.8	11.8	11.9	11.2	10.9	10.8	10.6	10.4	10.5	10.6	11.0	11.5	12.6	13.8	14.3	14.6	14.7	14.7	14.7	14.1	13.4	12.6	11.6	11.1	14.7	10.4	12.3
30	9.9	9.8	9.2	8.6	8.2	8.7	8.8	8.9	9.7	10.9	11.6	12.1	12.5	13.0	13.6	14.1	14.4	14.9	14.6	13.7	12.6	12.0	11.1	10.5	14.9	8.2	11.4
31	10.0	9.5	9.3	9.0	8.0	7.9	7.8	7.4	8.3	10.0	10.1	12.0	13.7	14.2	14.2	13.5	13.1	13.4	13.1	12.9	12.1	10.7	11.0	11.7	14.2	7.4	10.9
Max.	**17.1**	**17.0**	**16.5**	**16.2**	**16.5**	**16.1**	**15.6**	**15.9**	**16.2**	**17.4**	**18.0**	**18.8**	**19.3**	**19.9**	**20.0**	**20.5**	**21.5**	**21.9**	**22.2**	**21.5**	**20.5**	**19.1**	**18.1**	**17.5**	**22.2**		
Min.	**8.3**	**7.9**	**7.5**	**7.2**	**7.0**	**7.4**	**7.6**	**7.4**	**7.9**	**7.7**	**7.8**	**8.1**	**8.4**	**9.0**	**9.1**	**9.2**	**9.0**	**8.9**	**8.9**	**8.9**	**8.6**	**8.6**	**8.3**	**8.2**		**7.0**	
Avg.	**10.8**	**10.6**	**10.3**	**10.1**	**9.9**	**9.8**	**9.9**	**10.0**	**10.4**	**11.0**	**11.5**	**12.1**	**12.6**	**13.1**	**13.4**	**13.6**	**13.7**	**13.6**	**13.3**	**12.9**	**12.4**	**11.8**	**11.4**	**11.2**			**11.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2300	Max.	Min.	Avg.
1	11.6	10.8	10.7	10.2	9.2	8.5	8.2	8.2	8.3	8.5	8.7	9.0	9.4	10.1	10.7	11.5	12.0	11.8	11.0	9.8	8.7	8.4	8.2	8.1	12.0	8.1	9.6
2	8.1	8.2	8.2	7.9	7.8	7.9	8.1	8.3	8.8	9.0	9.7	10.2	10.6	11.3	11.7	11.3	10.7	10.2	9.9	9.4	8.8	8.6	8.4	8.3	11.7	7.8	9.2
3	8.6	8.5	8.6	8.6	8.5	8.5	8.3	8.3	8.1	8.4	8.6	8.7	8.6	8.4	8.3	8.1	7.9	7.7	7.6	7.4	7.4	7.6	7.6	7.5	8.7	7.4	8.1
4	7.5	7.9	8.1	7.9	8.1	8.3	7.6	7.4	8.8	10.2	10.7	11.5	12.3	13.1	13.3	13.6	12.6	12.2	12.0	10.8	11.1	10.6	10.6	10.3	13.6	7.4	10.3
5	10.5	10.3	10.2	10.0	9.7	8.9	9.5	9.2	8.3	9.3	10.6	10.5	11.9	12.6	13.4	12.2	9.5	8.7	9.0	9.0	9.5	9.4	9.3	9.0	13.4	8.3	10.0
6	8.5	7.9	7.4	7.4	7.9	7.4	6.7	7.1	7.4	8.1	8.6	9.3					11.7	11.2	10.2	9.5	9.2	7.8	7.3	7.3	11.7	6.7	8.4
7	7.4	7.5	7.6	7.8	7.9	8.1	8.1	8.0	8.2	8.5	8.6	8.6	8.9	9.0	9.2	9.4	9.6	9.2	9.2	8.4	8.3	8.5	8.7	8.8	9.6	7.4	8.5
8	8.9	8.8	9.0	9.2	9.4	9.6	9.7	10.1	10.2	10.2	10.0	10.0	10.1	10.0	10.3	10.5	10.6	11.1	11.2	11.2	11.0	10.5	10.0	9.8	11.2	8.8	10.1
9	9.5	9.2	9.0	9.3	9.3	9.2	9.3	9.2	9.1	9.1	9.3	9.5	9.5	10.1	10.2	10.7	11.0	11.5	11.2	10.7	10.0	9.8	9.7	9.9	11.5	9.0	9.8
10	9.5	9.3	9.6	9.3	9.0	8.9	8.8	8.9	8.8	9.0	9.7	10.2	10.5	10.4	10.6	10.6	10.4	11.0	10.5	9.8	9.3	8.9	8.9	8.9	11.0	8.8	9.6
11	8.6	8.7	9.0	8.9	8.8	8.6	8.6	8.5	8.6	8.9	9.2	8.8	8.8	8.3	7.8	7.7	7.8	7.8	7.5	7.4	7.6	7.9	8.2	8.3	9.2	7.4	8.3
12	8.4	8.3	8.2	8.0	8.0	8.2	7.9	7.4	7.8	7.5	7.8	8.9	9.8	10.3	10.8	11.2	11.3	9.5	8.4	8.0	7.9	7.7	7.7	7.6	11.3	7.4	8.6
13	7.4	7.2	6.9	6.9	7.0	7.1	6.9	6.8	7.0	7.2	7.1	7.0	7.2	8.0	7.8	7.8	7.8	7.0	7.0	7.2	6.6	6.4	6.2	5.7	8.0	5.7	7.1
14	5.7	6.0	6.1	6.1	6.0	6.1	6.1	5.6	4.9	5.3	6.6	7.3	7.9	8.4	8.5	9.4	9.7	9.3	8.8	8.7	8.0	7.4	7.0	6.7	9.7	4.9	7.2
15	6.5	6.4	6.3	6.1	6.3	5.5	5.0	4.8	3.9	4.5	5.9	6.9	7.4	8.1	8.8	9.3	8.9	8.6	9.3	9.2	8.4	7.8	7.5	7.3	9.3	3.9	7.0
16	6.8	6.2	6.0	6.0	5.7	6.5	6.5	6.9	6.0	5.3	6.7	8.1	8.6	8.8	9.6	10.2	10.1	9.7	9.7	8.8	7.7	7.1	6.8	6.3	10.2	5.3	7.5
17	5.6	5.1	4.7	4.7	4.9	5.0	4.9	5.0	5.1	5.7	5.9	6.3	6.5	6.8	7.5	7.9	8.2	8.5	8.8	8.6	7.7	7.8	7.8	8.2	8.8	4.7	6.5
18	8.2	7.9	6.9	6.8	7.0	7.0	7.3	8.2	8.3	8.4	8.8	9.0	9.4	9.4	9.3	9.0	9.1	9.1	8.9	8.7	8.5	8.4	8.5	9.1	9.4	6.8	8.4
19	9.2	9.1	9.3	9.0	8.2	8.1	8.2	8.2	8.0	8.0	8.1	8.3	8.3	8.4	8.1	8.7	8.1	7.5	7.3	7.0	6.8	6.8	6.7	6.6	9.3	6.6	8.0
20	6.5	6.5	6.5	6.4	6.4	6.5	6.4	6.4	6.3	6.3	6.2	6.4	6.6	6.8	7.2	7.6	8.2	8.8	8.1	7.5	7.5	7.6	6.8	6.3	8.8	6.2	6.9
21	6.2	6.3	6.1	6.2	6.4	6.4	7.0	6.5	6.9	7.2	7.8	8.3	8.6	8.9	9.3	9.6	9.5	10.3	9.8	9.5	8.6	7.6	7.0	6.7	10.3	6.1	7.8
22	6.5	5.9	5.3	5.1	5.6	5.3	5.0	5.0	5.2	5.9	5.7	7.3	7.6	8.4	8.8	8.7	8.8	8.3	7.2	6.3	6.0	5.7	5.4	5.2	8.8	5.0	6.4
23	5.3	5.5	5.6	6.0	5.9	5.9	6.5	6.1	6.2	6.5	6.1	6.5	6.9	7.3	7.5	7.3	6.8	6.3	6.3	6.1	6.0	6.0	6.1	6.2	7.5	5.3	6.3
24	6.2	5.7	5.5	5.8	5.4	4.9	4.5	4.7	5.0	5.2	5.6	5.9	6.4	6.7	6.9	7.3	6.1	6.8	5.0	5.0	5.2	5.0	4.4	3.9	7.3	3.9	5.6
25	3.3	3.3	3.5	3.7	4.0	4.8	5.0	5.1	4.7	4.6	4.9	5.4	5.8	6.2	6.0	6.2	5.8	5.7	5.6	5.1	5.2	5.2	5.0	4.7	6.2	3.3	4.9
26	4.4	4.0	3.8	3.4	3.4	3.2	3.1	3.1	2.9	2.8	3.4	4.7	4.9	5.1	5.4	5.6	6.2	6.0	6.5	6.1	5.7	5.8	5.5	5.6	6.5	2.8	4.6
27	5.0	5.1	5.1	5.3	3.3	3.3	2.5	2.6	2.2	2.4	2.6	3.3	3.9	4.2	5.2	5.4	5.0	5.6	5.7	5.7	5.8	5.7	5.3	5.0	5.8	2.2	4.4
28	5.0	4.6	4.0	3.3	3.1	3.0	3.0	3.1	3.2	3.3	3.5	3.9	4.2	4.3	4.4	4.7	5.1	5.5	5.4	5.1	4.9	4.8	4.9	5.0	5.5	3.0	4.2
29	4.5	4.7	4.8	4.7	4.2	4.3	4.3	4.2	4.1	4.2	4.9	4.9	5.6	5.9	6.3	6.0	5.8	5.7	5.5	5.3	5.3	5.5	4.9	4.4	6.3	4.1	5.0
30	4.2	3.6	2.7	2.5	2.9	3.0	3.1	3.2	3.1	3.2	3.3	4.6	4.7	5.0	4.6	4.9	4.7	4.9	4.4	3.9	3.8	4.1	4.0	4.0	5.0	2.5	3.8
Max.	**11.6**	**10.8**	**10.7**	**10.2**	**9.7**	**9.6**	**9.7**	**10.1**	**10.2**	**10.2**	**10.7**	**11.5**	**12.3**	**13.1**	**13.4**	**13.6**	**12.6**	**12.2**	**12.0**	**11.2**	**11.1**	**10.6**	**10.6**	**10.3**	**13.6**		
Min.	**3.3**	**3.3**	**2.7**	**2.5**	**2.9**	**3.0**	**2.5**	**2.6**	**2.2**	**2.4**	**2.6**	**3.3**	**3.9**	**4.2**	**4.4**	**4.7**	**4.7**	**4.9**	**4.4**	**3.9**	**3.8**	**4.1**	**4.0**	**3.9**		**2.2**	
Avg.	**7.1**	**6.9**	**6.8**	**6.8**	**6.6**	**6.6**	**6.5**	**6.5**	**6.5**	**6.8**	**7.2**	**7.6**	**8.0**	**8.3**	**8.5**	**8.7**	**8.6**	**8.5**	**8.2**	**7.8**	**7.6**	**7.3**	**7.2**	**7.0**			**7.4**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.8	3.6	3.2	2.9	2.8	2.7	2.9	2.7	2.5	3.4	3.9	4.8	5.1	5.2	5.7	6.1	5.8	5.9	4.7	5.0	4.2	4.2	4.2	3.7	6.1	2.5	4.1
2	3.3	3.0	2.4	2.5	2.6	2.4	2.4	2.6	2.5	2.5	2.4	2.4	3.0	3.9	4.0	4.5	4.9	5.3	4.8	4.0	3.8	3.3	2.9	2.3	5.3	2.3	3.2
3	1.8	1.7	1.7	1.6	1.6	1.4	1.8	1.7	1.4	1.4	1.8	2.6	3.3	3.9	4.0	4.1	4.1	4.1	4.1	3.7	3.1	2.8	2.2	2.2	4.1	1.4	2.6
4	1.8	1.8	2.1	2.1	1.8	1.7	1.7	2.0	2.5	2.1	2.0	1.9	2.1	2.4	2.4	2.6	2.6	2.2	1.7	1.5	1.4	1.5	2.0	1.9	2.6	1.4	2.0
5	1.8	1.8	1.5	1.8	1.8	1.8	1.5	1.1	1.0	1.6	1.8	1.7	1.9	2.2	3.0	3.5	3.3	3.4	2.6	2.3	1.8	1.4	1.0	0.6	3.5	0.6	1.9
6	0.1	-0.4	-0.8	-1.1	-1.3	-1.3	-1.4	-1.7	-2.1	-2.4	-2.6	-2.2	-1.6	-1.1	-0.9	-0.8	-0.8	-0.7	-1.0	-1.3	-1.6	-2.0	-2.6	-3.1	0.1	-3.1	-1.5
7	-3.6	-4.1	-4.6	-5.1	-5.4	-5.5	-5.4	-5.0	-4.6	-4.9	-4.8	-4.2	-3.6	-3.0	-3.1	-2.8	-2.7	-2.5	-3.0	-3.8	-4.6	-5.1	-5.6	-5.8	-2.5	-5.8	-4.3
8	-5.7	-5.6	-5.5	-5.9	-6.3	-6.4	-6.6	-7.0	-7.4	-7.5	-7.3	-6.4	-5.5	-4.6	-3.9	-3.3	-3.0	-3.0	-3.3	-3.9	-4.1	-3.9	-3.9	-5.2	-3.0	-7.5	-5.2
9	-5.6	-4.9	-4.4	-4.8	-5.5	-6.4	-6.2	-5.5	-6.6	-6.8	-5.5	-3.5	-1.2	0.4	1.0	1.6	1.5	0.8	0.2	-0.2	-0.7	-0.6	0.3	0.4	1.6	-6.8	-2.6
10	0.5	0.2	0.1	-0.4	-1.0	0.0	-0.4	-1.0	-1.5	-2.0	-1.2	-0.5	0.1	0.3	0.5	0.8	0.7	0.7	0.2	-0.7	-1.5	-1.9	-2.5	-2.8	0.8	-2.8	-0.6
11	-3.7	-4.0	-4.1	-4.1	-3.9	-4.2	-4.2	-4.1	-3.6	-3.3	-2.4	-0.9	0.0	0.6	1.3	1.8	1.7	1.2	1.4	1.6	1.7	1.9	1.9	1.8	1.9	-4.2	-1.1
12	2.1	2.2	2.3	2.2	2.3	2.1	2.0	1.8	2.1	0.9	1.5	1.9	2.6	3.3	3.8	4.1	4.3	4.3	4.5	3.9	3.0	1.8	1.1	0.8	4.5	0.8	2.5
13	0.3	-0.2	-0.1	-0.3	-0.8	-1.2	-2.1	-2.7	-2.9	-3.5	-3.9	-4.1	-3.6	-3.0	-2.3	-1.5	-1.3	-1.8	-2.5	-3.0	-2.9	-3.0	-3.2	-3.3	0.3	-4.1	-2.2
14	-3.7	-4.1	-4.4	-4.5	-4.6	-4.7	-5.0	-5.2	-5.5	-6.5	-6.2	-4.8	-4.4	-3.5	-3.0	-2.8	-2.6	-2.8	-3.1	-3.0	-3.6	-4.2	-5.2	-5.6	-2.6	-6.5	-4.3
15	-5.4	-4.8	-4.4	-4.5	-4.4	-4.5	-4.0	-4.5	-3.8	-3.6	-2.2	-1.7	-0.6	0.8	0.9	1.1	1.3	1.5	1.1	0.2	-0.2	-0.3	-0.4	-0.5	1.5	-5.4	-1.8
16	-0.8	-1.7	-2.5	-2.5	-3.1	-4.1	-4.9	-5.0	-6.0	-6.6	-6.2	-5.3	-4.8	-4.7	-4.6	-3.9	-3.7	-3.9	-4.6	-5.1	-5.1	-5.5	-5.6	-5.7	-0.8	-6.6	-4.4
17	-5.7	-5.7	-5.8	-5.8	-5.9	-6.0	-6.1	-6.0	-6.1	-5.9	-5.7	-5.7	-5.5	-5.1	-4.6	-4.1	-4.0	-4.1	-4.3	-4.2	-4.2	-4.4	-4.6	-4.6	-4.0	-6.1	-5.2
18	-4.6	-4.5	-4.7	-4.8	-4.8	-4.9	-4.8	-4.9	-5.0	-4.8	-5.0	-4.6	-4.6	-4.1	-3.8	-3.6	-3.9	-4.2	-4.4	-4.4	-4.7	-4.7	-5.0	-5.3	-3.6	-5.3	-4.6
19	-5.7	-6.3	-6.3	-6.1	-6.6	-6.2	-6.1	-5.4	-4.8	-4.6	-4.4	-3.5	-3.1	-3.1	-2.3	-2.0	-1.6	-1.7	-2.4	-3.4	-3.8	-3.2	-3.2	-2.7	-1.6	-6.6	-4.1
20	-2.5	-3.1	-3.4	-3.2	-3.4	-5.0	-5.5	-4.8	-4.1	-3.8	-3.9	-4.1	-1.6	-1.2	-0.3	-0.3	0.2	0.4	0.9	1.0	1.3	1.6	1.9	2.1	2.1	-5.5	-1.7
21	2.0	2.4	2.7	2.8	3.0	2.8	2.4	2.5	2.5	2.2	2.5	2.5	2.5	3.0	2.9	2.5	2.6	2.5	1.7	1.6	0.9	0.1	-0.1	-1.1	3.0	-1.1	2.1
22	-2.0	-3.1	-3.1	-3.9	-4.2	-4.7	-6.0	-6.5	-6.1	-5.7	-5.6	-6.1	-5.6	-3.9	-3.7	-1.8	-1.6	-1.7	-2.4	-3.0	-3.3	-4.1	-4.4	-4.2	-1.6	-6.5	-4.0
23	-4.5	-5.1	-5.7	-5.4	-4.9	-4.7	-4.8	-5.2	-4.8	-5.0	-4.8	-5.0	-4.9	-4.2	-3.9	-3.5	-3.3	-3.3	-3.8	-4.4	-5.0	-4.5	-4.3	-3.8	-3.3	-5.7	-4.5
24	-3.2	-3.3	-4.3	-5.0	-5.8	-5.1	-5.0	-4.6	-4.3	-3.6	-3.4	-2.6	-1.5	-0.5	0.0	-0.2	-0.4	-0.4	-0.1	0.1	0.4	0.6	1.3	1.7	1.7	-5.8	-2.0
25	1.6	1.5	1.9	2.5	2.7	2.3	1.6	2.0	2.3	1.9	1.8	1.7	2.1	2.2	2.3	2.1	1.7	1.4	1.4	1.4	0.9	1.4	1.1	1.3	2.7	0.9	1.8
26	1.5	1.6	1.8	1.7	1.6	1.7	1.5	1.7	1.7	1.8	2.0	2.2	2.4	2.9	3.2	3.4	3.4	3.2	3.1	3.0	2.7	2.7	2.8	2.7	3.4	1.5	2.3
27	2.5	2.5	2.3	2.0	2.1	2.1	2.3	2.1	1.4	1.5	1.8	2.4	2.9	3.2	2.9	2.1	2.1	2.5	2.5	2.3	2.4	2.5	2.4	2.1	3.2	1.4	2.3
28	2.2	2.5	2.4	2.6	2.1	2.1	1.8	1.6	1.5	1.5	1.0	0.9	1.1	1.5	1.6	1.5	1.5	1.6	1.4	1.2	1.0	0.7	0.8	1.0	2.6	0.7	1.5
29	1.3	1.4	1.5	1.4	1.4	1.4	1.4	1.7	1.7	1.9	2.4	2.6	2.6	2.9	2.3	2.3	2.5	2.5	2.7	2.5	2.2	1.5	1.0	0.8	2.9	0.8	1.9
30	1.3	2.5	1.9	1.1	1.2	1.5	1.6	0.9	1.2	1.4	1.0	0.4	0.3	0.0	-0.2	-0.4	-0.6	-0.8	-1.0	-1.1	-1.1	-1.0	-0.9	-0.9	2.5	-1.1	0.3
31	-1.0	-1.1	-1.1	-1.2	-1.4	-1.7	-1.3	-0.7	-0.5	-0.6	-0.7	-0.5	-0.3	-0.2	0.3	0.7	0.8	0.6	0.2	-0.1	0.2	0.2	-0.1	0.5	0.8	-1.7	-0.4
Max.	**3.8**	**3.6**	**3.2**	**2.9**	**3.0**	**2.8**	**2.9**	**2.7**	**2.5**	**3.4**	**3.9**	**4.8**	**5.1**	**5.2**	**5.7**	**6.1**	**5.8**	**5.9**	**4.8**	**5.0**	**4.2**	**4.2**	**4.2**	**3.7**	**6.1**		
Min.	**-5.7**	**-6.3**	**-6.3**	**-6.1**	**-6.6**	**-6.4**	**-6.6**	**-7.0**	**-7.4**	**-7.5**	**-7.3**	**-6.4**	**-5.6**	**-5.1**	**-4.6**	**-4.1**	**-4.0**	**-4.2**	**-4.6**	**-5.1**	**-5.1**	**-5.5**	**-5.6**	**-5.8**		**-7.5**	
Avg.	**-1.0**	**-1.1**	**-1.2**	**-1.3**	**-1.5**	**-1.6**	**-1.8**	**-1.8**	**-1.8**	**-1.8**	**-1.6**	**-1.2**	**-0.7**	**-0.1**	**0.2**	**0.4**	**0.5**	**0.4**	**0.1**	**-0.2**	**-0.5**	**-0.7**	**-0.8**	**-0.9**			**-0.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	1.1	0.7	0.7	1.5	1.3	1.1	0.5	0.6	0.6	0.7	0.5	0.5	0.6	0.5	0.5	-0.2	-0.9	-1.4	-1.9	-2.1	-2.3	-2.3	-2.5	1.5	-2.5	-0.1
2	-2.7	-2.8	-2.7	-2.6	-3.0	-3.0	-3.3	-3.1	-3.0	-2.8	-2.9	-2.9	-2.9	-3.4	-4.0	-4.2	-4.0	-3.3	-3.3	-4.0	-4.0	-3.9	-3.9	-4.0	-2.6	-4.2	-3.3
3	-3.9	-4.1	-4.1	-4.3	-4.1	-4.2	-4.2	-4.0	-4.5	-4.3	-4.0	-4.0	-3.7	-3.1	-2.8	-3.0	-3.1	-3.5	-3.5	-3.2	-2.9	-2.8	-2.3	-1.7	-1.7	-4.5	-3.6
4	-1.4	-1.6	-1.1	-0.7	-0.4	-0.2	-0.1	0.4	0.7	0.8	1.1	1.3	1.2	1.2	1.1	0.8	0.9	1.1	1.2	0.9	1.1	1.2	1.3	0.8	1.3	-1.6	0.5
5	0.6	0.5	0.6	0.5	0.5	0.2	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.5	0.6	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.8	-0.1	0.4
6	0.7	0.7	0.8	0.8	1.0	1.1	1.5	1.9	1.7	1.8	1.9	1.8	2.0	2.1	2.6	2.9	2.4	2.0	1.5	1.3	0.9	0.9	0.4	-0.1	2.9	-0.1	1.4
7	0.0	0.3	0.2	0.4	0.5	0.9	1.0	1.3	1.3	1.3	1.4	1.6	2.0	2.2	1.2	1.5	1.5	1.1	0.2	0.0	0.0	-0.1	-0.1	-0.3	2.2	-0.3	0.8
8	-0.4	-0.6	-0.7	-0.7	-0.2	0.2	0.8	1.1	1.3	0.4	0.4	0.8	1.1	1.5	2.3	2.5	2.7	3.1	2.7	2.8	2.2	1.2	0.7	0.7	3.1	-0.7	1.1
9	0.6	0.0	0.0	0.3	0.4	0.0	-0.1	-0.2	-0.3	-0.3	-0.1	0.3	0.4	0.6	1.0	1.1	1.1	0.6	0.0	0.4	0.2	0.3	0.0	-0.5	1.1	-0.5	0.2
10	-0.7	-0.6	-0.3	-0.6	-1.3	-2.1	-2.0	-2.3	-2.5	-3.4	-3.0	-3.0	-2.1	-1.5	-1.6	-1.6	-1.6	-1.8	-2.1	-2.5	-2.8	-3.0	-3.3	-3.9	-0.3	-3.9	-2.1
11	-4.0	-4.1	-4.4	-4.2	-4.3	-5.0	-5.3	-5.2	-5.8	-6.3	-6.4	-6.0	-5.8	-5.8	-5.9	-6.1	-6.2	-6.7	-7.0	-7.3	-7.8	-8.1	-7.4	-6.9	-4.0	-8.1	-5.9
12	-6.4	-7.0	-7.0	-6.2	-8.2	-7.3	-6.5	-6.6	-6.9	-6.6	-6.8	-6.0	-5.8	-6.9	-6.4	-5.3	-4.0	-4.1	-4.1	-4.3	-4.2	-3.6	-3.4	-3.0	-3.0	-8.2	-5.7
13	-2.7	-2.4	-2.2	-2.1	-1.8	-1.7	-1.2	-1.5	-1.3	-1.1	-0.4	0.1	-1.2	-1.4	-1.6	-2.3	-2.3	-2.0	-1.5	-1.7	-1.6	-1.6	-1.6	-1.3	0.1	-2.7	-1.6
14	-1.6	-1.7	-1.8	-1.7	-1.8	-1.8	-2.0	-2.3	-2.4	-2.6	-2.7	-2.2	-1.7	-1.7	-1.5	-1.4	-1.4	-1.4	-1.6	-2.0	-2.3	-3.5	-4.1	-4.4	-1.4	-4.4	-2.1
15	-4.6	-4.8	-5.3	-5.4	-4.9	-5.7	-6.5	-6.7	-7.5	-8.8	-9.8	-9.9	-10.0	-10.2	-10.3	-10.5	-10.9	-11.4	-11.0	-11.8	-11.9	-12.1	-12.7	-12.5	-4.6	-12.7	-9.0
16	-11.9	-11.8	-11.8	-11.9	-11.9	-11.9	-12.1	-12.5	-12.5	-12.6	-12.6	-12.5	-12.4	-12.5	-12.3	-12.3	-12.4	-12.2	-12.3	-12.1	-12.5	-12.9	-13.0	-13.3	-11.8	-13.3	-12.3
17	-13.8	-14.0	-14.1	-13.9	-14.1	-14.0	-14.2	-14.0	-14.1	-14.2	-14.5	-14.9	-14.6	-14.6	-14.5	-14.3	-14.6	-14.5	-15.0	-15.7	-15.9	-15.8	-15.7	-15.9	-13.8	-15.9	-14.6
18	-16.1	-15.8	-16.1	-15.9	-16.1	-16.4	-16.0	-16.1	-15.6	-14.9	-15.1	-15.3	-14.7	-14.1	-13.6	-13.6	-13.5	-13.3	-13.7	-12.2	-11.9	-12.6	-12.3	-12.0	-11.9	-16.4	-14.4
19	-11.5	-11.9	-11.6	-12.2	-10.8	-10.1	-10.6	-9.1	-9.2	-8.6	-7.4	-6.2	-4.9	-4.4	-4.1	-3.8	-3.5	-2.8	-2.6	-2.4	-2.4	-1.5	-1.6	-1.3	-1.3	-12.2	-6.4
20	-0.5	0.4	0.7	0.9	1.3	2.5	2.7	2.4	3.0	2.8	2.8	2.6	2.4	2.7	2.5	2.5	2.8	2.7	3.5	3.1	2.6	2.2	3.2	3.2	3.5	-0.5	2.3
21	3.2	3.0	2.2	1.7	1.7	1.5	2.0	2.0	2.2	2.4	2.7	2.4	2.4	2.6	2.7	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.9	2.8	3.2	1.5	2.6
22	2.8	2.9	2.4	2.3	1.2	0.7	0.5	0.7	1.0	2.0	1.6	1.4	0.6	1.1	1.7	2.2	2.9	3.3	2.9	2.8	2.3	2.4	1.5	-0.4	3.3	-0.4	1.8
23	-0.7	-0.6	-0.3	-0.4	-0.6	-0.9	-1.0	-1.1	-1.4	-1.6	-1.7	-2.0	-2.5	-2.9	-2.9	-3.2	-3.0	-3.1	-2.9	-2.6	-3.1	-4.3	-5.1	-5.4	-0.3	-5.4	-2.2
24	-5.4	-5.5	-5.4	-5.4	-5.4	-5.6	-5.9	-5.9	-5.9	-5.7	-5.9	-4.9	-3.6	-2.5	-1.9	-1.4	-1.2	-1.0	-0.7	-0.8	-0.8	-0.4	-0.1	0.3	0.3	-5.9	-3.4
25	0.3	0.3	0.3	0.4	1.1	2.1	3.1	3.5	3.5	4.3	4.3	3.8	3.9	4.2	4.7	4.7	4.7	4.9	5.1	4.7	4.7	5.2	5.2	4.4	5.2	0.3	3.5
26	4.0	3.7	4.0	3.6	3.8	4.5	4.4	3.9	3.2	2.6	2.3	1.6	1.4	1.4	1.6	1.9	1.7	1.6	1.5	1.2	0.8	0.7	1.2	1.9	4.5	0.7	2.4
27	1.7	2.1	1.8	2.1	2.2	2.1	2.2	2.2	2.2	2.5	2.6	2.9	2.9	2.7	2.6	2.6	2.9	2.4	2.3	2.1	1.8	1.8	1.6	1.9	2.9	1.6	2.3
28	1.9	1.9	1.9	1.4	1.3	1.0	0.9	0.8	0.8	0.8	0.4	0.4	0.5	0.6	0.8	1.1	1.5	1.8	2.1	2.3	2.3	2.3	2.3	2.4	2.4	0.4	1.4
29	2.3	2.4	2.4	2.2	2.2	2.2	2.3	2.3	2.6	2.8	2.8	2.9	3.1	3.3	3.4	3.3	3.3	3.0	2.9	3.0	3.2	3.2	3.3	3.4	3.4	2.2	2.8
30	3.5	3.6	3.8	3.9	4.0	4.2	4.4	4.7	5.0	4.9	4.7	5.3	5.4	5.5	5.5	5.4	5.1	4.5	4.2	4.2	5.1	5.4	4.9	2.7	5.5	2.7	4.6
Max.	**4.0**	**3.7**	**4.0**	**3.9**	**4.0**	**4.5**	**4.4**	**4.7**	**5.0**	**4.9**	**4.7**	**5.3**	**5.4**	**5.5**	**5.5**	**5.4**	**5.1**	**4.9**	**5.1**	**4.7**	**5.1**	**5.4**	**5.2**	**4.4**	**5.5**		
Min.	**-16.1**	**-15.8**	**-16.1**	**-15.9**	**-16.1**	**-16.4**	**-16.0**	**-16.1**	**-15.6**	**-14.9**	**-15.1**	**-15.3**	**-14.7**	**-14.6**	**-14.5**	**-14.3**	**-14.6**	**-14.5**	**-15.0**	**-15.7**	**-15.9**	**-15.8**	**-15.7**	**-15.9**		**-16.4**	
Avg.	**-2.2**	**-2.2**	**-2.2**	**-2.2**	**-2.2**	**-2.2**	**-2.1**	**-2.1**	**-2.1**	**-2.1**	**-2.1**	**-2.0**	**-1.9**	**-1.7**	**-1.6**	**-1.5**	**-1.5**	**-1.5**	**-1.6**	**-1.7**	**-1.9**	**-1.9**	**-2.0**	**-2.1**			**-2.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature at 10 meters (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.1	2.3	2.1	1.9	1.8	2.2	1.8	1.6	1.6	1.2	0.9	0.8	1.1	1.3	1.5	1.3	0.8	0.3	0.4	0.1	-0.4	0.3	0.9	0.1	2.3	-0.4	1.2
2	-0.9	-1.2	-2.0	-3.0	-3.4	-3.9	-4.1	-3.8	-4.5	-4.9	-4.5	-3.1	-2.4	-3.4	1.0	0.5	0.2	-1.0	-4.5	-5.1	-3.4	-1.6	-2.3	-3.1	1.0	-5.1	-2.7
3	-3.7	-3.6	-3.6	-3.8	-4.1	-4.5	-4.7	-5.3	-5.5	-5.3	-4.9	-4.7	-4.6	-4.5	-4.4	-4.8	-5.4	-6.0	-6.7	-7.1	-7.1	-7.5	-7.2	-7.2	-3.6	-7.5	-5.3
4	-7.4	-7.9	-7.4	-6.8	-6.2	-6.2	-6.5	-6.2	-5.9	-5.7	-5.8	-6.0	-5.8	-5.4	-4.9	-4.7	-4.6	-4.7	-4.4	-4.2	-3.9	-3.7	-3.7	-3.4	-3.4	-7.9	-5.5
5	-3.3	-3.2	-3.1	-3.0	-2.8	-2.8	-2.9	-3.1	-3.1	-3.2	-3.0	-2.4	-1.3	-0.8	-0.5	-0.3	-0.2	0.1	0.1	0.3	0.5	0.4	0.4	0.4	0.5	-3.3	-1.5
6	0.3	0.5	0.4	0.3	0.7	0.5	0.4	0.5	0.5	0.4	0.3	0.1	0.0	-0.2	-0.6	-0.9	-1.0	-1.0	-0.8	-0.9	-0.7	-0.6	-0.4	-0.4	0.7	-1.0	-0.1
7	-0.5	-0.5	-0.7	-0.8	-0.7	-0.8	-0.8	-0.9	-1.2	-0.8	-0.6	-0.5	-0.7	-0.9	-0.7	-0.5	-0.4	-0.4	-0.2	0.1	0.2	0.4	0.4	0.4	0.4	-1.2	-0.5
8	0.4	0.2	0.1	0.0	-0.4	-0.1	0.1	0.4	0.8	0.9	0.9	1.4	1.6	0.9	0.3	-0.1	-0.1	-0.6	-1.0	-1.3	-1.1	-1.0	-0.8	-0.9	1.6	-1.3	0.0
9	-1.0	-1.1	-0.8	-0.8	-0.7	-0.8	-1.0	-1.2	-1.0	-0.5	-0.2	0.4	0.8	1.2	1.7	1.9	2.0	1.8	2.0	1.7	1.7	1.5	1.5	1.6	2.0	-1.2	0.4
10	1.6	1.5	1.7	1.5	2.4	1.8	1.0	0.4	0.0	0.2	0.3	0.5	0.0	0.1	-0.7	-0.8	-1.0	-1.0	-0.8	-0.7	-0.5	-0.5	-0.5	-1.0	2.4	-1.0	0.2
11	-1.4	-1.6	-1.8	-2.3	-1.9	-2.1	-2.7	-3.2	-2.6	-3.1	-3.8	-3.1	-3.0	-3.2	-3.9	-3.5	-4.5	-4.0	-4.0	-4.4	-4.4	-5.2	-6.1	-6.3	-1.4	-6.3	-3.4
12	-6.4	-6.0	-5.4	-6.2	-5.7	-5.6	-4.0	-3.3	-2.6	-6.1	-5.3	-4.5	-3.4	-3.9	-3.4	-2.5	-3.8	-3.4	-3.2	-2.6	-3.1	-3.0	-3.9	-3.6	-2.5	-6.4	-4.2
13	-3.6	-2.8	-3.2	-3.0	-3.2	-3.3	-4.0	-3.9	-4.0	-4.3	-4.4	-4.6	-4.6	-4.5	-4.7	-5.2	-5.6	-6.6	-6.9	-7.2	-7.7	-8.9	-8.9	-10.4	-2.8	-10.4	-5.2
14	-11.6	-12.5	-12.7	-12.6	-12.5	-12.4	-12.9	-13.6	-14.4	-14.7	-14.1	-14.3	-14.2	-14.1	-13.8	-13.9	-14.7	-14.6	-14.3	-14.2	-14.0	-15.1	-14.9	-13.9	-11.6	-15.1	-13.8
15	-13.8	-14.6	-14.0	-12.2	-12.1	-12.3	-12.6	-12.7	-12.7	-12.4	-12.6	-12.9	-12.8	-12.7	-12.7	-12.8	-12.7	-12.7	-12.8	-12.8	-12.9	-12.6	-12.3	-12.4	-12.1	-14.6	-12.8
16	-13.0	-13.9	-14.3	-14.5	-14.7	-14.9	-15.0	-15.1	-15.1	-15.2	-15.7	-16.0	-15.9	-16.1	-16.3	-16.6	-17.0	-17.2	-17.1	-16.8	-16.8	-17.0	-17.1	-17.4	-13.0	-17.4	-15.8
17	-17.6	-17.7	-17.7	-17.7	-17.7	-17.7	-17.9	-17.8	-17.8	-17.7	-17.7	-17.7	-17.7	-17.6	-17.6	-17.9	-18.1	-18.6	-19.2	-19.3	-19.2	-19.8	-20.3	-20.5	-17.6	-20.5	-18.3
18	-20.4	-20.7	-20.9	-21.2	-21.0	-21.1	-21.5	-21.5	-21.7	-21.8	-22.1	-22.3	-22.5	-22.7	-22.8	-22.8	-22.6	-22.8	-23.2	-23.4	-23.4	-24.0	-24.3	-24.4	-20.4	-24.4	-22.3
19	-24.8	-25.6	-25.3	-25.2	-24.8	-24.2	-23.6	-24.0	-24.5	-24.2	-24.2	-24.6	-24.5	-24.2	-23.1	-23.4	-24.0	-25.0	-25.1	-25.2	-25.2	-25.5	-24.3	-23.1	-23.1	-25.6	-24.5
20	-23.3	-23.0	-24.1	-23.7	-22.3	-19.3	-14.9	-13.5	-13.0	-12.8	-12.1	-11.6	-10.6	-9.7	-8.7	-7.9	-7.2	-6.9	-7.0	-5.7	-5.7	-5.7	-5.4	-4.8	-4.8	-24.1	-12.4
21	-3.9	-3.0	-2.7	-2.5	-2.3	-2.3	-2.6	-3.4	-3.7	-4.1	-4.0	-3.9	-3.9	-3.9	-3.1	-3.0	-3.6	-3.5	-3.8	-3.8	-3.7	-3.6	-3.4	-2.8	-2.3	-4.1	-3.4
22	-2.3	-2.3	-2.1	-2.4	-2.3	-1.9	-1.5	-1.7	-2.2	-1.9	-1.4	-1.3	-1.1	-1.0	-0.9	-1.0	-0.9	-1.3	-1.3	-1.2	-1.2	-3.2	-4.5	-4.8	-0.9	-4.8	-1.9
23	-6.0	-8.1	-9.2	-9.7	-10.2	-10.2	-10.5	-11.1	-11.9	-12.1	-12.0	-11.9	-11.9	-11.7	-11.4	-11.4	-11.3	-12.0	-12.3	-11.9	-11.9	-11.4	-11.6	-12.0	-6.0	-12.3	-11.0
24	-13.2	-13.6	-13.5	-13.7	-14.1	-13.7	-13.3	-14.4	-14.7	-14.7	-14.5	-14.1	-14.0	-13.8	-14.1	-14.2	-14.1	-14.0	-14.3	-14.8	-14.7	-14.1	-14.1	-14.3	-13.2	-14.8	-14.1
25	-15.1	-15.7	-15.7	-15.9	-16.2	-16.7	-16.9	-17.0	-17.1	-17.6	-18.1	-18.2	-17.9	-17.6	-17.5	-17.9	-17.8	-18.0	-17.5	-17.9	-18.4	-17.7	-19.0	-19.7	-15.1	-19.7	-17.4
26	-19.9	-19.0	-18.9	-17.9	-16.9	-16.3	-18.0	-15.9	-13.6	-10.7	-11.0	-10.5	-10.3	-9.1	-7.7	-5.9	-4.9	-4.0	-3.9	-4.6	-4.7	-3.9	-3.4	-2.7	-2.7	-19.9	-10.6
27	-2.5	-2.2	-2.0	-1.8	-1.4	-0.9	-0.3	0.1	0.3	0.7	1.0	1.3	1.2	1.5	1.6	0.8	0.4	0.0	0.1	0.0	-0.4	-1.2	-1.4	-1.6	1.6	-2.5	-0.3
28	-1.5	-3.5	-5.1	-5.5	-5.9	-6.7	-7.0	-7.4	-6.8	-6.1	-6.6	-7.3	-6.8	-7.2	-7.5	-8.0	-8.8	-8.6	-9.3	-10.3	-10.1	-9.2	-8.7	-8.3	-1.5	-10.3	-7.2
29	-7.8	-8.0	-8.2	-8.9	-9.3	-9.0	-8.7	-9.2	-9.1	-9.1	-9.7	-9.7	-9.6	-9.3	-9.6	-11.2	-11.3	-9.6	-9.6	-9.2	-9.5	-9.5	-9.3	-9.4	-7.8	-11.3	-9.3
30	-9.4	-9.6	-9.9	-10.0	-10.1	-10.5	-11.0	-11.2	-11.7	-12.4	-12.7	-12.6	-11.9	-11.7	-11.3	-10.9	-11.0	-10.5	-11.4	-11.6	-11.9	-11.1	-11.0	-11.0	-9.4	-12.7	-11.1
31	-10.4	-10.2	-9.7	-9.8	-9.7	-10.1	-10.5	-10.8	-10.7	-10.9	-10.9	-10.6	-10.7	-10.3	-10.6	-10.7	-10.6	-10.5	-10.2	-9.6	-9.4	-9.4	-9.5	-8.5	-8.5	-10.9	-10.2
Max.	**2.1**	**2.3**	**2.1**	**1.9**	**2.4**	**2.2**	**1.8**	**1.6**	**1.6**	**1.2**	**1.0**	**1.4**	**1.6**	**1.5**	**1.7**	**1.9**	**2.0**	**1.8**	**2.0**	**1.7**	**1.7**	**1.5**	**1.5**	**1.6**	**2.4**		
Min.	**-24.8**	**-25.6**	**-25.3**	**-25.2**	**-24.8**	**-24.2**	**-23.6**	**-24.0**	**-24.5**	**-24.2**	**-24.2**	**-24.6**	**-24.5**	**-24.2**	**-23.1**	**-23.4**	**-24.0**	**-25.0**	**-25.1**	**-25.2**	**-25.2**	**-25.5**	**-24.3**	**-24.4**		**-25.6**	
Avg.	**-7.8**	**-8.0**	**-8.1**	**-8.1**	**-8.0**	**-7.9**	**-7.9**	**-8.0**	**-8.0**	**-8.0**	**-8.0**	**-7.9**	**-7.7**	**-7.6**	**-7.3**	**-7.4**	**-7.5**	**-7.6**	**-7.8**	**-7.9**	**-7.8**	**-7.9**	**-7.9**	**-7.9**			**-7.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.51	0.34	0.28	0.31	0.22	0.19	0.10	0.13	0.09	0.19	0.36	0.13	0.18	0.23	0.10	0.32	0.27	0.26	0.54	0.40	0.64	0.51	0.44	0.64	0.64	0.09	0.31
2	0.62	0.61	1.03	1.02	0.66	0.58	0.22	0.29	0.27	0.19	0.17	0.14	0.14	0.14	0.22	0.23	0.27	0.73	0.55	0.59	0.51	0.35	0.55	0.33	1.03	0.14	0.43
3	0.15	0.22	0.29	0.16	0.31	0.18	0.16	0.16	0.32	0.59	0.34	0.33	0.31	0.15	0.13	0.23	0.29	0.32	0.20	0.22	0.66	1.16	0.44	0.62	1.16	0.13	0.33
4	0.40	0.52	0.79	0.97	0.87	0.70	1.16	1.18	0.69	0.60	0.47	1.13	2.19	2.17	2.05	2.80	2.11	2.08	2.23	1.41	0.83	0.73	0.50	0.44	2.80	0.40	1.21
5	0.59	0.59	0.69	0.69	0.82	0.60	0.60	0.57	0.54	0.90	0.71	0.60	0.57	0.46	0.61	0.66	0.66	0.57	0.40	0.19	0.33	0.51	0.60	0.76	0.90	0.19	0.59
6	0.81	1.38	0.88	0.75	0.89	1.02	0.98	0.56	0.24	1.95	0.97	0.36	0.37	0.30	0.66	0.34	1.08	0.97	0.45	0.35	0.25	0.19	0.20	0.28	1.95	0.19	0.68
7	0.16	0.19	0.21	0.17	-0.02	-0.02	0.03	0.07	0.13	0.15	0.19	0.05	-0.01	0.06	0.09	0.08	0.06	0.17	0.44	0.40	0.29	0.24	0.18	0.31	0.44	-0.02	0.15
8	0.43	0.53	0.41	0.35	0.24	0.16	0.47	0.44	0.52	0.86	0.61	0.36	0.36	0.27	0.42	0.25	0.34	0.84	0.35	0.44	0.43	0.32	0.46	1.40	1.40	0.16	0.47
9	0.61	0.77	1.05	0.73	0.76	0.76	0.96	0.81	1.16	1.06	1.72	1.13	1.44	2.20	1.69	0.68	0.74	1.02	0.91	0.91	0.68	0.53	0.29	0.30	2.20	0.29	0.95
10	0.34	0.18	0.12	0.13	0.10	0.06	0.09	0.25	0.25	0.22	0.11	0.05	0.00	0.02	0.02	0.04	0.04	0.05	0.02	0.03	0.03	0.01	0.01	0.02	0.34	0.00	0.09
11	0.03	0.03	0.04	0.00	-0.01	0.02	0.02	0.01	-0.01	-0.01	-0.03	-0.09	-0.08	-0.07	-0.06	-0.04	0.00	0.07	0.09	0.02	-0.01	-0.07	-0.08	-0.06	0.09	-0.09	-0.01
12	-0.05	-0.04	-0.05	-0.02	-0.01	0.05	0.04	0.02	-0.04	-0.01	0.03	0.04	0.03	0.10	0.09	-0.05	-0.05	-0.05	-0.06	-0.03	-0.04	-0.05	0.03	0.01	0.10	-0.06	0.00
13	0.10	0.10	0.05	0.01	0.02	-0.06	-0.01	-0.03	0.00	-0.02	-0.02	-0.01	-0.01	0.08	0.10	0.23	0.48	0.77	1.54	1.04	1.03	1.22	0.84	0.75	1.54	-0.06	0.34
14	0.81	0.83	0.69	0.83	0.50	0.37	0.53	0.40	0.30	0.20	0.20	0.18	0.14	0.23	0.32	0.34	0.29	0.26	0.09	0.13	0.22	0.28	0.21	0.18	0.83	0.09	0.36
15	0.37	0.80	0.85	0.95	0.65	0.51	0.32	0.11	0.07	0.09	0.10	0.26	0.47	0.31	0.31	0.28	0.22	0.51	0.54	0.43	0.38	0.37	0.62	0.76	0.95	0.07	0.43
16	0.83	1.34	1.14	0.48	0.84	1.03	0.83	0.64	0.45	0.45	0.67	0.65	0.34	0.22	0.32	0.38	0.39	0.40	0.32	0.22	0.12	0.08	-0.02	-0.02	1.34	-0.02	0.50
17	-0.02	-0.04	-0.04	-0.03	-0.04	-0.03	-0.03	0.05	0.12	0.06	0.11	0.18	0.16	0.20	0.28	0.20	0.18	0.22	0.23	0.23	0.15	0.15	0.15	0.15	0.28	-0.04	0.11
18	0.15	0.19	0.09	0.07	0.05	0.05	0.05	0.06	0.07	0.08	0.08							0.14	0.23	0.15	0.43	0.44	0.29	0.23	0.44	0.05	0.16
19	0.24	0.22	0.11	0.31	0.18	0.10	0.15	0.09	0.12	0.83	0.43	0.42	0.74	0.70	0.32	0.17	0.16	0.13	0.25	0.20	0.20	0.19	0.17	0.15	0.83	0.09	0.27
20	0.10	0.16	0.11	0.06	0.04	0.06	0.25	0.06	0.19	0.40	0.38	0.67	0.80	0.67	0.63	0.46	0.34	0.29	0.20	0.15	0.23	0.42	0.75	0.36	0.80	0.04	0.32
21	0.34	0.49	0.53	0.39	0.14	0.09	0.18	0.13	0.30	0.39	0.20	-0.04	-0.08	-0.09	-0.08	-0.09	-0.07	-0.05	-0.04	-0.05	-0.06	-0.05	-0.03	-0.03	0.53	-0.09	0.10
22	0.01	0.12	0.42	0.27	0.20	0.26	0.42	0.64	0.50	0.54	0.69	0.70	0.43	0.60	0.64	0.86	1.08	1.10	0.98	0.84	0.82	0.41	0.59	0.96	1.10	0.01	0.59
23	0.89	0.54	0.25	0.14	0.27	0.34	0.77	0.80	0.34	0.34	0.42	0.27	0.15	-0.04	0.17	0.27	0.08	-0.01	0.04	0.07	0.18	0.05	0.19	0.33	0.89	-0.04	0.28
24	0.50	0.33	0.25	0.32	0.50	0.61	0.55	0.71	1.00	0.83	0.60	0.66	0.49	0.51	0.51	0.60	0.43	0.49	0.43	0.38	0.74	1.30	0.92	0.97	1.30	0.25	0.61
25	0.61	0.80	0.49	0.33	0.18	0.22	0.21	0.23	0.34	0.28	0.21	0.18	0.12	0.07	-0.03	0.05	0.18	0.36	0.42	0.45	0.41	0.34	0.35	0.33	0.80	-0.03	0.30
26	0.31	0.24	0.29	0.19	0.12	0.16	0.20	0.17	-0.03	-0.07	-0.02	0.09	0.02	0.10	0.10	0.12	0.13	0.13	0.14	0.18	0.18	0.28	0.43	0.45	0.45	-0.07	0.16
27	0.35	0.25	0.21	0.19	0.16	0.08	0.06	0.06	0.08	0.09	-0.04	-0.04	-0.02	-0.02	0.09	0.21	0.20	0.13	0.14	0.16	0.16	0.17	0.12	0.09	0.35	-0.04	0.12
28	0.09	0.05	0.05	0.06	0.03	0.02	0.01	0.01	0.00	0.00	0.03	0.02	0.00	0.01	0.04	0.14	0.11	0.25	0.24	0.25	0.27	0.28	0.28	0.24	0.28	0.00	0.10
29	0.21	0.29	0.40	0.34	0.32	0.29	0.18	0.18	0.09	0.12	0.21	0.25	0.33	0.30	0.31	0.32	0.33	0.29	0.21	0.08	0.02	-0.02	-0.02	0.06	0.40	-0.02	0.21
30	0.13	0.27	0.31	0.29	0.28	0.23	0.25	0.39	0.39	0.38	0.45	0.52	0.45	0.34	0.26	0.39	0.20	0.15	0.15	0.11	0.08	0.02	0.04	0.03	0.52	0.02	0.25
31	0.04	0.06	0.06	0.09	0.12	0.14	0.13	0.03	0.03	0.04	0.00	-0.01	-0.02	-0.01	-0.04	0.00	0.02	0.05	0.05	0.11	0.23	0.16	0.09	0.10	0.23	-0.04	0.06
Max.	**0.89**	**1.38**	**1.14**	**1.02**	**0.89**	**1.03**	**1.16**	**1.18**	**1.16**	**1.95**	**1.72**	**1.13**	**2.19**	**2.20**	**2.05**	**2.80**	**2.11**	**2.08**	**2.23**	**1.41**	**1.03**	**1.30**	**0.92**	**1.40**	**2.80**		
Min.	**-0.05**	**-0.04**	**-0.05**	**-0.03**	**-0.04**	**-0.06**	**-0.03**	**-0.03**	**-0.04**	**-0.07**	**-0.04**	**-0.09**	**-0.08**	**-0.09**	**-0.08**	**-0.09**	**-0.07**	**-0.05**	**-0.06**	**-0.05**	**-0.06**	**-0.07**	**-0.08**	**-0.06**		**-0.09**	
Avg.	**0.34**	**0.40**	**0.39**	**0.34**	**0.30**	**0.28**	**0.32**	**0.30**	**0.27**	**0.38**	**0.33**	**0.31**	**0.33**	**0.34**	**0.34**	**0.35**	**0.35**	**0.41**	**0.40**	**0.32**	**0.34**	**0.34**	**0.31**	**0.36**			**0.34**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.14	0.28	0.28	0.28	0.27	0.27	0.22	0.20	0.31	0.26	0.11	0.22	0.21	-0.03	0.32	0.59	0.59	0.49	0.57	0.29	0.18	-0.01	0.03	0.04	0.59	-0.03	0.25
2	0.02	0.01	0.09	0.18	0.19	0.17	0.06	0.04	0.03	0.06	0.05	0.04	0.00	-0.07	-0.06	0.00	0.05	0.05	0.08	0.14	0.16	0.14	0.16	0.13	0.19	-0.07	0.07
3	0.12	0.11	0.09	0.05	0.09	0.06	0.03	0.06	0.12	0.12	0.01	-0.06	-0.13	-0.18	-0.30	-0.28	-0.07	0.05	0.65	0.76	1.02	0.44	0.46	0.43	1.02	-0.30	0.15
4	0.65	0.77	1.89	0.51	0.39	1.12	0.58	0.45	1.19	1.02	1.00	0.63	0.22	0.24	0.15	0.20	0.37	0.72	0.68	1.13	1.28	1.27	1.27	1.03	1.89	0.15	0.78
5	0.75	0.74	0.69	0.79	0.89	0.76	0.43	0.45	0.74	0.52	0.53	0.13	-0.24	-0.24	-0.39	-0.23	0.03	0.58	0.70	0.58	0.67	0.57	0.81	0.72	0.89	-0.39	0.46
6	0.88	0.65	0.66	0.65	0.61	0.57	0.47	0.35	0.25	0.43	0.35	0.08	0.09	-0.11	-0.02	-0.08	0.04	0.14	0.17	0.08	0.27	0.36	0.39	0.37	0.88	-0.11	0.32
7	0.27	0.14	0.43	0.01	0.16	0.09	0.01	0.05	-0.10	-0.11	-0.11	-0.14	-0.15	-0.13	-0.06	0.02	-0.01	-0.06	-0.10	-0.10	-0.07	-0.08	-0.03	-0.03	0.43	-0.15	-0.01
8	-0.04	-0.01	-0.04	-0.04	-0.02	-0.04	-0.03	-0.02	-0.03	-0.01	-0.08	-0.11	-0.14	-0.16	-0.13	-0.08	-0.18	-0.24	-0.28	-0.24	-0.10	-0.14	-0.04	-0.12	-0.01	-0.28	-0.10
9	-0.12	-0.12	-0.04	-0.02	-0.03	-0.05	-0.03	0.01	0.16	0.08	-0.02	-0.15	-0.30	-0.31	-0.30	-0.30	-0.23	-0.14	-0.02	-0.09	-0.09	-0.06	-0.05	0.07	0.16	-0.31	-0.09
10	0.30	0.15	0.14	0.18	0.23	0.29	0.24	-0.04	-0.04	-0.08	-0.13	-0.21	-0.30	-0.26	-0.30	-0.10	-0.09	-0.11	0.08	0.29	0.09	0.00	-0.06	-0.06	0.30	-0.30	0.01
11	-0.03	0.07	-0.04	-0.02	-0.11	0.03	-0.03	-0.03	-0.04	-0.07	-0.08	-0.08	-0.09	-0.10	-0.09	-0.01	0.05	0.05	0.04	0.07	0.05	0.07	0.04	0.07	0.07	-0.11	-0.01
12	0.16	0.18	0.23	0.09	0.09	0.10	0.11	0.13	0.09	0.10	0.10	0.16	0.17	0.06	-0.02	0.01	0.11	0.20	0.32	0.31	0.29	0.24	0.25	0.28	0.32	-0.02	0.16
13	0.31	0.29	0.23	0.31	0.35	0.27	0.25	0.21	0.21	0.21	0.20	0.17	0.08	-0.02	-0.05	-0.04	-0.04	0.01	0.00	0.06	0.05	-0.02	0.02	-0.01	0.35	-0.05	0.13
14	0.05	0.03	0.03	0.05	0.01	-0.05	-0.03	0.00	0.02	0.00	-0.02	-0.03	-0.03	-0.07	-0.06	-0.06	-0.02	0.28	0.69	0.59	0.41	0.64	0.75	0.77	0.77	-0.07	0.16
15	1.01	0.56	0.64	0.97	1.14	0.70	0.81	0.82	0.82	1.00	0.91	0.58	0.60	0.60	0.13	-0.07	0.01	0.30	0.52	0.89	0.72	0.58	0.29	0.34	1.14	-0.07	0.62
16	0.29	0.29	0.50	0.52	1.59	1.67	1.17	1.22	1.01	0.92	0.13	-0.04	-0.12	-0.18	-0.31	-0.14	-0.12	-0.02	0.08	0.12	0.14	0.05	0.15	0.27	1.67	-0.31	0.38
17	0.23	0.24	0.25	0.18	0.09	0.18	0.62	0.70	0.53	0.60	1.02	0.38	0.21	-0.22	-0.27	-0.17	-0.08	0.05	0.17	0.23	0.61	0.35	0.25	0.33	1.02	-0.27	0.27
18	0.12	0.01	0.03	0.05	0.10	0.05	0.14	0.13	0.31	0.79	0.71	0.70	0.26	0.04	0.13	0.09	-0.08	0.16	0.15	0.16	0.18	0.16	0.05	0.00	0.79	-0.08	0.18
19	-0.05	-0.06	0.00	0.00	0.02	-0.01	-0.08	-0.10	-0.11	-0.10	-0.02	0.07	0.00	-0.03	-0.04	-0.13	-0.16	-0.01	0.00	-0.04	-0.03	0.01	0.09	0.12	0.12	-0.16	-0.03
20	0.24	0.24	0.03	0.08	0.06	0.07	0.05	0.12	0.08	0.03	0.10	-0.07	-0.09	-0.19	-0.20	-0.17	-0.12	-0.01	0.06	0.07	0.06	0.12	0.14	0.19	0.24	-0.20	0.04
21	0.11	0.10	0.08	0.05	-0.01	-0.03	0.05	0.10	0.28	0.08	-0.08	-0.11	-0.11	-0.14	-0.14	-0.12	-0.04	0.11	0.18	0.16	0.15	0.20	0.16	0.16	0.28	-0.14	0.05
22	0.26	0.25	0.22	0.22	0.31	0.69	0.30	0.32	0.24	0.15	0.00	-0.11	-0.20	-0.20	-0.24	-0.06	-0.01	0.05	0.21	0.18	0.18	0.20	0.18	0.21	0.69	-0.24	0.14
23	0.24	0.19	0.21	0.25	0.20	0.20	0.22	0.18	0.14	0.09	-0.02	-0.12	-0.17	-0.29	-0.21	-0.17	-0.10	0.04	0.09	0.12	0.20	0.14	0.08	0.19	0.25	-0.29	0.07
24	0.19	0.31	0.39	0.38	0.18	0.33	0.33	0.35	0.35	0.11	0.01	-0.15	-0.36	-0.36	-0.42	-0.39	-0.30	-0.10	0.02	0.06	0.07	0.12	0.15	0.19	0.39	-0.42	0.06
25	0.11	0.18	0.24	0.17	0.19	0.21	0.20	0.20	0.19	0.15	0.06	0.17	-0.15	-0.29	-0.23	-0.25	-0.23	0.02	0.15	0.24	0.14	0.16	0.39	0.39	0.39	-0.29	0.10
26	0.33	0.18	0.14	0.18	0.37	0.43	0.42	0.23	0.23	0.17	0.43	0.15	0.06	0.21	0.03	0.06	0.15	0.26	0.41	0.24	0.23	1.10	0.91	1.08	1.10	0.03	0.33
27	0.77	0.87	0.76	0.73	0.66	0.40	0.66	0.58	0.56	0.28	0.12	-0.02	-0.11	-0.14	-0.13	-0.08	0.09	0.10	0.14	0.26	0.48	0.32	0.34	0.33	0.87	-0.14	0.33
28	0.10	0.21	0.06	0.08	0.00	-0.03	-0.01	0.00	0.18	-0.02	-0.12	-0.24	-0.28	-0.31	-0.32	-0.35	-0.22	-0.07	0.10	0.16	0.18	0.13	0.13	0.11	0.21	-0.35	-0.02
Max.	**1.01**	**0.87**	**1.89**	**0.97**	**1.59**	**1.67**	**1.17**	**1.22**	**1.19**	**1.02**	**1.02**	**0.70**	**0.60**	**0.60**	**0.32**	**0.59**	**0.59**	**0.72**	**0.70**	**1.13**	**1.28**	**1.27**	**1.27**	**1.08**	**1.89**		
Min.	**-0.12**	**-0.12**	**-0.04**	**-0.04**	**-0.11**	**-0.05**	**-0.08**	**-0.10**	**-0.11**	**-0.11**	**-0.13**	**-0.24**	**-0.36**	**-0.36**	**-0.42**	**-0.39**	**-0.30**	**-0.24**	**-0.28**	**-0.24**	**-0.10**	**-0.14**	**-0.06**	**-0.12**		**-0.42**	
Avg.	**0.26**	**0.24**	**0.29**	**0.25**	**0.29**	**0.30**	**0.26**	**0.24**	**0.28**	**0.24**	**0.18**	**0.07**	**-0.04**	**-0.10**	**-0.12**	**-0.08**	**-0.02**	**0.10**	**0.21**	**0.24**	**0.27**	**0.25**	**0.26**	**0.27**			**0.17**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.13	0.21	0.13	0.12	0.09	0.07	0.13	0.11	0.08	-0.01	-0.15	-0.26	-0.32	-0.35	-0.32	-0.26	-0.16	0.03	0.19	0.21	0.21	0.20	0.18	0.24	0.24	-0.35	0.02
2	0.16	0.19	0.21	0.15	0.16	0.17	0.17	0.16	0.10	0.04	-0.09	-0.23	-0.24	-0.28	-0.29	-0.28	-0.17	-0.01	0.14	0.20	0.15	0.11	0.11	0.14	0.21	-0.29	0.03
3	0.19	0.13	0.15	0.15	0.16	0.14	0.14	0.13	0.11	0.00	-0.15	-0.28	-0.35	-0.39	-0.36	-0.25	-0.14	0.02	0.16	0.26	0.24	0.19	0.21	0.10	0.26	-0.39	0.02
4	0.13	0.12	0.23	0.23	0.15	0.20	0.20	0.18	0.10	0.04	-0.18	-0.35	-0.33	-0.40	-0.35	-0.37	-0.27	-0.16	0.03	0.11	0.09	0.05	0.00	-0.05	0.23	-0.40	-0.03
5	-0.08	-0.07	-0.01	-0.01	-0.10	-0.03	-0.04	-0.05	-0.04	-0.18	-0.34	-0.42	-0.44	-0.43	-0.44	-0.42	-0.35	-0.18	-0.02	0.03	-0.04	-0.04	-0.01	-0.02	0.03	-0.44	-0.15
6	-0.03	-0.07	-0.08	-0.03	0.00	-0.02	-0.05	-0.04	-0.05	-0.20	-0.43	-0.52	-0.55	-0.55	-0.56	-0.51	-0.42	-0.31	-0.25	-0.21	-0.22	-0.21	-0.24	-0.24	0.00	-0.56	-0.24
7	-0.25	-0.24	-0.23	-0.15	-0.14	-0.24	-0.20	-0.17	0.01	-0.20	-0.36	-0.43	-0.42	-0.43	-0.37	-0.44	-0.36	-0.22	-0.08	0.00	0.00	-0.06	-0.14	-0.17	0.01	-0.44	-0.22
8	-0.15	-0.10	-0.10	-0.14	-0.16	-0.18	-0.21	-0.15	-0.14	-0.22	-0.23	-0.33	-0.39	-0.42	-0.48	-0.39	-0.22	-0.12	-0.11	-0.12	-0.19	-0.17	-0.11	-0.07	-0.07	-0.48	-0.20
9	0.03	0.03	0.04	0.07	-0.07	-0.04	0.03	0.01	-0.08	-0.22	-0.24	-0.32	-0.45	-0.47	-0.51	-0.46	-0.32	-0.17	0.10	0.21	0.18	0.02	-0.08	-0.07	0.21	-0.51	-0.12
10	-0.05	0.02	0.02	0.04	0.02	0.10	0.08	0.05	-0.03	-0.18	-0.19	-0.36	-0.48	-0.46	-0.50	-0.44	-0.31	-0.11	0.16	0.31	0.28	0.24	0.18	0.16	0.31	-0.50	-0.06
11	0.21	0.18	0.17	0.14	0.10	0.03	0.03	0.04	-0.06	-0.21	-0.30	-0.43	-0.49	-0.53	-0.50	-0.45	-0.31	-0.17	-0.01	0.15	0.07	0.08	0.07	0.09	0.21	-0.53	-0.09
12	0.11	0.04	-0.01	-0.04	-0.06	-0.06	-0.02	-0.05	0.16	0.05	-0.08	-0.21	-0.29	-0.38	-0.38	-0.35	-0.24	-0.11	0.03	0.22	0.15	0.23	0.28	0.23	0.28	-0.38	-0.03
13	0.13	0.17	0.28	0.23	0.19	0.15	0.14	0.11	0.02	-0.08	-0.22	-0.36	-0.45	-0.57	-0.53	-0.48	-0.36	-0.17	-0.01	0.09	0.10	0.06	0.07	0.01	0.28	-0.57	-0.06
14	-0.01	0.03	0.03	0.06	0.09	0.03	-0.07	-0.02	-0.04	-0.12	-0.24	-0.33	-0.47	-0.51	-0.57	-0.54	-0.42	-0.23	-0.07	0.09	0.09	0.05	0.06	0.10	0.10	-0.57	-0.13
15	0.09	0.12	0.11	0.14	0.12	0.13	0.15	0.15	0.05	-0.18	-0.34	-0.46	-0.57	-0.60	-0.64	-0.60	-0.44	-0.24	-0.02	0.15	0.15	0.13	0.10	0.20	0.20	-0.64	-0.10
16	0.10	0.11	0.06	0.15	0.26	0.36	0.24	0.19	0.09	-0.12	-0.28	-0.45	-0.50	-0.63	-0.62	-0.62	-0.46	-0.22	0.10	0.44	0.40	0.38	0.40	0.39	0.44	-0.63	-0.01
17	0.73	0.78	0.62	1.00	0.70	0.61	0.53	0.63	0.63	0.09	-0.37	-0.53	-0.62	-0.68	-0.70	-0.63	-0.55	-0.17	0.34	0.64	0.75	0.90	0.73	0.83	1.00	-0.70	0.26
18	0.92	0.43	0.18	0.26	0.26	0.35	0.18	0.29	0.25	-0.07	-0.32	-0.41	-0.57	-0.68	-0.77	-0.78	-0.78	-0.41	0.11	0.60	0.68	0.45	1.22	1.05	1.22	-0.78	0.10
19	0.65	0.57	0.84	0.65	0.89	1.21	1.39	0.96	0.57	0.05	-0.36	-0.62	-0.43	-0.57	-0.75	-0.66	-0.55	-0.33	0.32	0.52	1.37	1.33	0.58	0.39	1.39	-0.75	0.33
20	0.26	0.29	0.40	1.06	0.68	0.97	0.98	0.79	0.32	-0.03	-0.17	-0.17	-0.12	-0.07	-0.02	0.01	0.01	-0.01	0.05	0.16	0.20	0.21	0.25	0.19	1.06	-0.17	0.26
21	0.17	0.22	0.18	0.06	0.06	0.02	0.00	-0.01	0.01	-0.02	0.03	-0.02	-0.18	-0.13	-0.15	-0.12	0.04	0.00	-0.04	0.22	0.13	0.16	0.34	0.60	0.60	-0.18	0.07
22	0.40	0.76	0.72	0.50	0.56	0.55	0.26	0.48	0.38	0.20	0.05	0.00	0.01	-0.01	0.07	0.12	0.25	0.30	0.47	0.87	0.55	0.61	0.58	0.40	0.87	-0.01	0.38
23	0.40	0.24	0.41	0.44	0.19	0.14	0.43	0.27	0.13	0.05	-0.04	-0.09	-0.11	-0.10	-0.17	-0.22	-0.07	0.09	0.15	0.33	0.47	0.50	0.50	0.41	0.50	-0.22	0.18
24	0.45	0.55	1.25	1.00	1.13	0.94	1.02	0.61	0.35	0.08	-0.06	-0.20	-0.28	-0.27	-0.26	-0.22	-0.12	-0.04	0.11	0.52	0.50	0.47	0.71	1.04	1.25	-0.28	0.39
25	0.68	0.69	0.37	0.43	0.61	0.30	0.46	0.56	0.60	0.37	0.19	0.05	-0.05	-0.15	-0.15	-0.17	-0.12	-0.10	0.14	0.01	0.29	0.27	0.34	0.45	0.69	-0.17	0.25
26	0.48	0.42	0.25	0.30	0.21	0.08	-0.04	-0.01	-0.02	0.00	0.08	0.07	-0.06	-0.15	-0.16	-0.17	-0.16	-0.11	-0.10	0.05	0.12	0.13	0.16	0.13	0.48	-0.17	0.06
27	0.08	0.13	0.47	0.77	0.64	0.56	0.75	0.48	0.29	0.15	0.02	0.04	0.02	-0.15	0.01	-0.08	0.02	0.13	0.20	0.34	0.55	0.39	0.45	0.68	0.77	-0.15	0.29
28	0.59	0.75	0.64	0.46	0.33	0.20	0.16	0.25	0.18	0.15	0.05	-0.06	-0.29	-0.17	-0.20	-0.23	-0.19	-0.01	0.23	0.73	0.95	0.90	0.57	0.37	0.95	-0.29	0.27
29	0.37	1.01	0.91	1.29	1.62	1.10	1.22	1.47	1.43	0.27	0.07	-0.14	-0.09	-0.17	-0.22	-0.22	-0.09	-0.01	0.26	0.74	0.68	0.58	0.55	0.78	1.62	-0.22	0.56
30	0.72	0.69	0.72	0.80	0.68	0.81	1.03	1.42	0.75	0.35	0.04	-0.38	-0.26	-0.64	-0.80	-0.58	-0.52	0.02	0.53	0.51	0.75	0.60	0.64	0.41	1.42	-0.80	0.34
31	0.48	1.14	0.85	0.73	1.14	0.81	0.46	0.61	0.37	-0.05	-0.11	-0.32	-0.33	-0.41	-0.45	-0.48	-0.19	0.13	0.52	1.02	2.14	1.53	1.31	1.32	2.14	-0.48	0.51
Max.	**0.92**	**1.14**	**1.25**	**1.29**	**1.62**	**1.21**	**1.39**	**1.47**	**1.43**	**0.37**	**0.19**	**0.07**	**0.02**	**-0.01**	**0.07**	**0.12**	**0.25**	**0.30**	**0.53**	**1.02**	**2.14**	**1.53**	**1.31**	**1.32**	**2.14**		
Min.	**-0.25**	**-0.24**	**-0.23**	**-0.15**	**-0.16**	**-0.24**	**-0.21**	**-0.17**	**-0.14**	**-0.22**	**-0.43**	**-0.62**	**-0.62**	**-0.68**	**-0.80**	**-0.78**	**-0.78**	**-0.41**	**-0.25**	**-0.21**	**-0.22**	**-0.21**	**-0.24**	**-0.24**		**-0.80**	
Avg.	**0.26**	**0.31**	**0.32**	**0.35**	**0.34**	**0.30**	**0.31**	**0.31**	**0.21**	**-0.01**	**-0.15**	**-0.27**	**-0.33**	**-0.38**	**-0.39**	**-0.36**	**-0.26**	**-0.09**	**0.12**	**0.30**	**0.38**	**0.33**	**0.32**	**0.32**			**0.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.31	1.84	1.44	0.63	0.66	1.08	0.91	1.10	0.49	0.62	-0.37	-0.31	-0.84	-0.93	-0.52	-0.32	-0.22	-0.12	0.02	0.44	0.39	0.29	0.24	1.05	1.84	-0.93	0.37
2	0.51	0.50	0.35	0.39	0.82	1.26	0.91	0.51	0.24	-0.08	-0.37	-0.51	-0.39	-0.15	0.00	0.02	0.00	-0.01	0.05	0.19	0.25	0.24	0.23	0.19	1.26	-0.51	0.21
3	0.16	0.14	0.17	0.16	0.13	0.11	0.13	0.11	-0.03	-0.14	-0.22	-0.30	-0.28	-0.45	-0.45	-0.38	-0.35	-0.27	-0.11	0.17	0.26	0.17	0.20	0.45	0.45	-0.45	-0.03
4	0.65	0.45	0.46	0.41	0.47	0.33	0.37	0.28	0.02	-0.19	-0.37	-0.39	-0.49	-0.58	-0.35	-0.33	-0.33	-0.19	-0.01	0.21	0.36	0.41	0.61	0.66	0.66	-0.58	0.10
5	0.46	0.47	0.50	0.63	0.63	0.31	0.32	0.16	0.05	-0.05	-0.08	-0.18	-0.42	-0.45	-0.56	-0.28	-0.17	-0.08	0.02	-0.01	0.09	0.07	0.08	0.03	0.63	-0.56	0.06
6	0.08	0.05	0.10	0.09	0.16	0.21	0.35	0.23	0.03	-0.20	-0.25	-0.10	-0.13	-0.25	-0.04	0.13	0.35	0.23	0.11	0.07	0.24	0.60	0.77	0.36	0.77	-0.25	0.13
7	0.45	0.10	0.13	-0.04	-0.04	-0.03	-0.03	0.03	0.10	0.19	0.03	-0.04	-0.20	-0.20	-0.26	-0.13	-0.08	-0.07	0.04	0.09	0.19	0.40	0.33	0.35	0.45	-0.26	0.05
8	0.26	0.33	0.32	0.34	0.37	0.44	0.46	0.39	0.37	0.10	0.00	-0.19	-0.25	-0.16	-0.14	-0.15	0.04	0.07	0.16	0.25	0.51	0.54	0.07	0.07	0.54	-0.25	0.17
9	0.10	0.06	0.06	0.09	0.12	0.14	0.01	0.01	-0.02	0.00	0.03	0.06	0.03	0.03	0.05	0.00	0.02	0.04	0.07	0.07	0.03	-0.02	-0.03	-0.03	0.14	-0.03	0.04
10	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.07	-0.09	-0.07	0.00	0.08	0.06	0.14	0.11	0.13	0.10	0.12	0.34	0.40	0.42	0.58	0.37	0.58	-0.09	0.09
11	0.73	0.75	0.79	0.80	0.68	0.54	0.39	0.47	0.39	0.04	-0.14	-0.16	-0.13	-0.12	-0.08	-0.10	-0.05	0.03	0.11	0.23	0.37	0.44	0.49	0.50	0.80	-0.16	0.29
12	0.63	0.79	0.90	0.52	0.54	0.74	1.02	1.01	0.42	0.23	0.17	0.02	0.05	0.01	-0.02	-0.03	0.09	0.31	0.46	0.25	0.11	0.26	0.56	0.79	1.02	-0.03	0.41
13	1.25	1.55	0.94	1.00	1.32	0.96	0.70	0.72	0.26	0.05	-0.01	-0.12	-0.07	-0.06	-0.12	-0.11	-0.12	-0.16	0.04	0.28	0.17	0.07	0.22	0.42	1.55	-0.16	0.38
14	0.35	0.65	0.32	0.24	0.27	0.37	-0.09	-0.11	-0.20	-0.28	-0.38	-0.52	-0.44	-0.26	-0.32	-0.25	-0.23	-0.25	-0.14	-0.08	0.07	0.05	0.08	0.08	0.65	-0.52	-0.04
15	0.07	0.09	-0.01	-0.01	-0.03	0.03	-0.01	-0.02	-0.01	-0.03	-0.12	-0.22	-0.31	-0.35	-0.38	-0.28	-0.40	-0.27	0.04	0.09	0.14	0.21	0.28	0.33	0.33	-0.40	-0.05
16	0.13	0.13	0.14	0.39	0.52	0.48	0.53	0.46	0.56	0.07	-0.18	-0.64	-0.51	-0.06	-0.20	-0.36	-0.39	-0.29	-0.26	-0.29	-0.27	-0.21	0.06	0.21	0.56	-0.64	0.00
17	0.52	0.39	0.25	0.30	0.19	0.21	0.10	-0.05	-0.06	0.01	0.03	0.06	-0.02	-0.03	0.00	-0.02	-0.01	-0.03	-0.06	-0.06	-0.03	-0.04	-0.05	-0.07	0.52	-0.07	0.06
18	-0.07	-0.04	-0.03	0.01	0.13	0.18	0.03	0.06	0.10	0.17	0.09	0.07	0.02	-0.04	-0.02	0.01	-0.34	-0.17	-0.10	-0.09	-0.08	-0.07	-0.06	0.01	0.18	-0.34	-0.01
19	0.11	-0.02	-0.04	-0.01	-0.02	-0.01	-0.05	-0.05	-0.05	0.02	-0.01	0.01	0.06	-0.10	-0.20	-0.11	-0.13	-0.12	-0.11	-0.11	-0.06	-0.02	-0.05	-0.06	0.11	-0.20	-0.05
20	-0.05	-0.01	-0.06	0.01	0.00	0.04	0.08	0.09	0.09	0.19	0.19	0.10	0.03	0.07	0.04	-0.14	-0.07	0.02	0.10	0.14	0.20	0.19	0.22	0.26	0.26	-0.14	0.07
21	0.35	0.41	0.45	0.43	0.61	0.64	0.65	0.38	0.20	-0.02	-0.32	-0.17	-0.10	-0.11	-0.15	-0.04	0.09	0.04	0.01	0.20	0.10	0.11	0.16	0.18	0.65	-0.32	0.17
22	0.24	0.25	0.22	0.30	0.32	0.45	0.44	0.26	0.17	-0.01	0.06	0.13	0.10	0.06	-0.13	0.04	0.09	0.05	0.09	0.25	0.29	0.31	0.33	0.33	0.45	-0.13	0.19
23	0.56	0.43	0.40	0.46	0.53	0.64	0.51	0.30	-0.13	-0.15	-0.09	-0.54	-0.20	-0.47	-0.33	-0.10	-0.42	-0.24	-0.09	0.23	0.32	0.33	0.19	0.28	0.64	-0.54	0.10
24	0.26	0.27	0.24	0.35	0.38	0.28	0.28	0.27	0.05	-0.17	-0.56	-0.61	-0.34	-0.18	-0.35	-0.28	-0.06	-0.09	0.05	0.18	0.17	0.10	0.19	0.18	0.38	-0.61	0.03
25	0.18	0.18	0.16	0.16	0.19	0.21	0.20	0.12	-0.01	-0.09	-0.39	-0.29	-0.45	-0.64	-0.81	-0.70	-0.48	-0.41	-0.35	-0.07	0.07	0.21	0.55	0.46	0.55	-0.81	-0.08
26	0.58	0.73	0.77	0.98	0.85	0.96	0.80	0.13	-0.01	-0.29	-0.30	-0.41	-0.58	-0.64	-0.41	-0.13	0.06	0.32	0.38	0.38	0.88	1.17	1.27	0.56	1.27	-0.64	0.33
27	1.04	1.07	0.84	0.66	0.21	0.29	0.11	-0.23	-0.40	-0.62	-0.78	-0.87	-0.91	-1.02	-0.86	-0.94	-0.29	-0.19	-0.02	0.01	0.08	0.07	-0.01	-0.03	1.07	-1.02	-0.12
28	-0.04	-0.16	-0.18	-0.24	-0.24	-0.22	-0.24	-0.19	-0.23	-0.24	-0.27	-0.75	-0.72	-0.93	-0.92	-0.82	-0.70	-0.44	-0.22	0.02	0.33	0.48	0.46	0.39	0.48	-0.93	-0.25
29	0.32	0.28	0.27	0.36	0.25	0.36	0.20	0.00	-0.01	-0.16	-0.20	-0.36	-0.77	-0.82	-0.67	-0.87	-0.56	-0.30	-0.39	-0.06	0.27	0.47	0.47	0.24	0.47	-0.87	-0.07
30	0.30	0.22	0.10	0.10	0.68	0.73	0.49	0.02	-0.23	-0.56	-0.68	-0.76	-0.85	-0.71	-0.52	-0.76	-0.88	-0.74	-0.52	-0.13	0.11	0.23	0.22	0.63	0.73	-0.88	-0.15
Max.	**1.31**	**1.84**	**1.44**	**1.00**	**1.32**	**1.26**	**1.02**	**1.10**	**0.56**	**0.62**	**0.19**	**0.13**	**0.10**	**0.07**	**0.14**	**0.13**	**0.35**	**0.32**	**0.46**	**0.44**	**0.88**	**1.17**	**1.27**	**1.05**	**1.84**		
Min.	**-0.07**	**-0.16**	**-0.18**	**-0.24**	**-0.24**	**-0.22**	**-0.24**	**-0.23**	**-0.40**	**-0.62**	**-0.78**	**-0.87**	**-0.91**	**-1.02**	**-0.92**	**-0.94**	**-0.88**	**-0.74**	**-0.52**	**-0.29**	**-0.27**	**-0.21**	**-0.06**	**-0.07**		**-1.02**	
Avg.	**0.38**	**0.39**	**0.33**	**0.31**	**0.35**	**0.39**	**0.32**	**0.21**	**0.07**	**-0.06**	**-0.19**	**-0.27**	**-0.30**	**-0.32**	**-0.29**	**-0.24**	**-0.18**	**-0.11**	**-0.02**	**0.11**	**0.20**	**0.25**	**0.29**	**0.31**			**0.08**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.93	0.46	0.30	0.43	0.29	0.21	0.19	-0.05	-0.26	-0.49	-0.52	-0.56	-0.43	-0.37	-0.45	-0.62	-0.53	-0.39	-0.11	-0.10	0.12	0.23	0.30	0.24	0.93	-0.62	-0.05
2	0.03	0.12	0.09	0.22	0.34	0.36	0.27	0.01	-0.26	-0.28	-0.41	-0.38	-0.42	-0.68	-0.59	-0.60	-0.78	-0.58	-0.50	-0.11	-0.04	0.12	0.38	0.45	0.45	-0.78	-0.13
3	0.55	0.88	0.71	0.31	0.34	0.49	0.26	0.01	-0.16	-0.38	-0.63	-0.65	-0.77	-0.65	-0.91	-0.73	-0.37	-0.43	-0.30	-0.09	0.16	0.26	0.32	0.40	0.88	-0.91	-0.06
4	0.41	0.78	0.74	0.44	0.38	0.45	0.66	-0.05	-0.44	-0.43	-0.68	-0.76	-1.03	-0.99	-1.18	-1.22	-1.09	-0.56	-0.40	-0.01	-0.01	0.40	0.08	0.23	0.78	-1.22	-0.18
5	0.32	0.25	-0.06	-0.10	0.16	0.21	-0.17	-0.26	-0.32	-0.54	-0.81	-0.82	-0.83	-0.85	-0.90	-1.00	-1.00	-1.02	-0.80	-0.14	0.20	0.40	0.27	0.28	0.40	-1.02	-0.31
6	0.16	0.21	0.26	0.39	0.32	0.23	0.01	-0.20	-0.41	-0.79	-0.60	-0.68	-0.77	-0.71	-0.72	-0.65	-0.50	-0.46	-0.20	-0.11	0.11	0.15	0.14	0.19	0.39	-0.79	-0.19
7	0.23	0.16	0.27	0.47	0.48	0.62	0.20	-0.05	-0.26	-0.52	-0.54	-0.60	-0.73	-0.94	-0.68	-0.50	-0.18	-0.27	-0.14	-0.03	0.04	0.05	0.01	-0.02	0.62	-0.94	-0.12
8	-0.04	-0.04	-0.04	-0.04	-0.06	-0.06	-0.08	-0.15	-0.19	-0.29	-0.35	-0.41	-0.36	-0.63	-1.06	-0.94	-0.74	-0.74	-0.44	-0.14	0.08	0.25	0.37	0.19	0.37	-1.06	-0.25
9	0.15	0.02	0.08	0.15	0.03	0.02	-0.03	-0.04	-0.07	-0.09	-0.10	-0.10	-0.11	-0.07	-0.09	-0.39	-0.50	-0.52	-0.45	-0.31	-0.22	-0.01	-0.04	0.00	0.15	-0.52	-0.11
10	0.16	0.11	0.09	0.31	0.48	0.46	0.06	-0.12	-0.22	-0.46	-0.55	-0.83	-1.01	-1.01	-0.89	-1.01	-0.93	-0.65	-0.48	-0.21	0.20	0.38	0.42	0.51	0.51	-1.01	-0.22
11	0.34	0.68	0.72	0.62	0.81	0.45	0.20	-0.24	-0.41	-0.78	-0.97	-1.13	-1.08	-1.23	-1.09	-1.07	-0.97	-0.72	-0.56	-0.33	0.05	0.41	0.58	0.72	0.81	-1.23	-0.21
12	0.58	0.64	0.33	0.30	0.35	0.56	0.19	-0.24	-0.54	-0.77	-1.01	-1.02	-0.83	-0.91	-1.08	-1.01	-0.90	-0.66	-0.54	-0.18	0.00	0.15	0.01	0.07	0.64	-1.08	-0.27
13	-0.02	-0.01	0.00	0.02	0.04	0.01	-0.04	-0.08	-0.17	-0.34	-0.43	-0.48	-0.54	-0.56	-0.45	-0.45	-0.39	-0.30	-0.30	-0.20	0.00	0.11	0.17	0.45	0.45	-0.56	-0.16
14	0.68	0.52	0.52	0.57	0.47	0.32	0.22	-0.01	-0.25	-0.53	-0.48	-0.55	-0.39	-0.25	-0.17	-0.24	-0.45	-0.49	-0.32	-0.16	-0.02	0.23	0.30	0.44	0.68	-0.55	0.00
15	0.43	0.46	0.49	0.34	0.25	0.21	0.11	-0.10	-0.33	-0.38	-0.76	-0.96	-0.97	-0.87	-0.87	-0.75	-0.82	-0.80	-0.54	-0.34	-0.14	0.40	0.59	0.58	0.59	-0.97	-0.20
16	0.89	0.77	1.27	0.98	0.55	0.36	0.07	-0.18	-0.31	-0.49	-0.55	-0.69	-0.65	-0.58	-0.48	-0.41	-0.49	-0.47	-0.41	-0.36	-0.27	-0.14	-0.02	-0.01	1.27	-0.69	-0.07
17	-0.01	-0.02	0.00	0.08	0.06	0.00	-0.10	-0.23	-0.33	-0.59	-0.80	-1.24	-1.14	-1.33	-1.16	-1.12	-1.01	-0.84	-0.68	-0.37	-0.21	-0.05	0.08	0.25	0.25	-1.33	-0.45
18	0.14	0.42	0.32	0.30	0.85	0.40	0.01	-0.38	-0.61	-0.82	-0.93	-0.92	-0.94	-1.02	-0.88	-0.99	-1.02	-0.81	-0.33	0.00	0.16	0.24	0.31	0.33	0.85	-1.02	-0.26
19	0.38	0.78	0.64	0.63	0.54	0.34	0.21	-0.31	-0.45	-0.46	-0.69	-0.43	-0.38	-0.76	-0.90	-0.95	-0.92	-0.72	-0.57	-0.19	0.14	0.33	0.35	0.23	0.78	-0.95	-0.13
20	0.37	0.34	0.26	0.31	0.32	0.57	0.26	-0.04	-0.44	-0.67	-0.93	-0.71	-0.95	-1.06	-0.67	-0.91	-0.92	-0.74	-0.64	-0.38	-0.09	0.29	0.29	0.44	0.57	-1.06	-0.24
21	0.34	0.40	0.40	0.33	0.19	0.29	0.05	-0.11	-0.27	-0.40	-0.67	-0.74	-0.84	-1.01	-1.07	-1.07	-1.08	-0.91	-0.61	-0.29	-0.08	0.17	0.20	0.16	0.40	-1.08	-0.27
22	0.17	0.16	0.14	0.15	0.16	0.10	-0.02	-0.08	-0.14	0.13	-0.18	-0.15	-0.54	-0.64	-0.94	-0.93	-0.60	-0.64	-0.60	-0.32	-0.15	0.10	0.13	0.20	0.20	-0.94	-0.19
23	0.34	0.33	0.49	0.38	0.51	0.33	0.08	-0.15	-0.35	-0.50	-0.58	-0.45	-0.56	-0.50	-0.59	-0.51	-0.27	-0.27	-0.17	-0.05	-0.08	-0.08	-0.05	-0.05	0.51	-0.59	-0.11
24	-0.01	-0.02	0.01	-0.02	-0.02	-0.05	-0.08	-0.15	-0.40	-0.52	-0.46	-0.50	-0.49	-0.80	-0.44	-0.34	-0.31	-0.20	-0.06	-0.09	-0.01	0.15	0.00	0.00	0.15	-0.80	-0.20
25	-0.02	0.13	0.46	0.33	0.37	0.34	0.10	-0.13	-0.18	-0.23	-0.28	-0.31	-0.41	-0.33	-0.38	-0.38	-0.34	-0.30	-0.25	-0.27	-0.15	0.08	0.16	0.27	0.46	-0.41	-0.07
26	0.07	0.08	-0.08	-0.07	-0.08	-0.10	-0.17	-0.23	-0.21	-0.30	-0.26	-0.29	-0.53	-0.49	-0.37	-0.35	-0.34	-0.29	-0.24	-0.16	-0.07	-0.02	0.00	0.02	0.08	-0.53	-0.19
27	-0.02	0.12	0.07	0.09	-0.04	-0.11	-0.13	-0.18	-0.50	-0.88	-0.88	-1.00	-1.04	-1.25	-1.12	-1.10	-0.99	-0.95	-0.67	-0.38	-0.11	0.21	0.40	0.53	0.53	-1.25	-0.41
28	0.37	0.32	0.24	0.15	0.43	0.50	-0.06	-0.21	-0.49	-0.66	-0.79	-0.82	-1.05	-1.19	-1.33	-1.20	-1.01	-0.74	-0.59	-0.52	-0.21	0.08	0.56	0.37	0.56	-1.33	-0.33
29	0.15	0.33	0.55	0.64	0.51	0.38	-0.07	-0.42	-0.66	-0.53	-0.43	-0.47	-0.91	-0.53	-0.48	-0.75	-0.75	-0.96	-0.48	-0.39	-0.03	0.51	0.38	0.18	0.64	-0.96	-0.18
30	0.15	0.16	0.08	0.29	0.45	0.33	0.00	-0.14	-0.22	-0.38	-0.42	-0.66	-0.59	-0.59	-0.72	-1.15	-0.92	-0.75	-0.49	-0.36	-0.25	-0.08	-0.07	-0.03	0.45	-1.15	-0.27
31	0.09	0.23	0.28	0.23	0.24	0.17	-0.02	-0.07	-0.30	-0.49	-0.58	-0.55	-0.35	-0.36	-0.37	-0.31	-0.33	-0.17	-0.06	0.05	0.08	0.14	0.17	0.16	0.28	-0.58	-0.09
Max.	**0.93**	**0.88**	**1.27**	**0.98**	**0.85**	**0.62**	**0.66**	**0.01**	**-0.07**	**0.13**	**-0.10**	**-0.10**	**-0.11**	**-0.07**	**-0.09**	**-0.24**	**-0.18**	**-0.17**	**-0.06**	**0.05**	**0.20**	**0.51**	**0.59**	**0.72**	**1.27**		
Min.	**-0.04**	**-0.04**	**-0.08**	**-0.10**	**-0.08**	**-0.11**	**-0.17**	**-0.42**	**-0.66**	**-0.88**	**-1.01**	**-1.24**	**-1.14**	**-1.33**	**-1.33**	**-1.22**	**-1.09**	**-1.02**	**-0.80**	**-0.52**	**-0.27**	**-0.14**	**-0.07**	**-0.05**		**-1.33**	
Avg.	**0.27**	**0.31**	**0.31**	**0.30**	**0.31**	**0.27**	**0.07**	**-0.15**	**-0.33**	**-0.48**	**-0.59**	**-0.64**	**-0.70**	**-0.75**	**-0.74**	**-0.76**	**-0.69**	**-0.59**	**-0.42**	**-0.21**	**-0.03**	**0.18**	**0.22**	**0.25**			**-0.19**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.14	0.15	0.14	0.18	0.19	0.08	0.01	-0.23	-0.33	-0.32	-0.25	-0.27	-0.50	-0.39	-0.75	-0.67	-0.55	-0.35	-0.20	-0.17	-0.10	-0.04	0.01	0.02	0.19	-0.75	-0.17
2	0.06	0.12	0.07	0.13	0.14	0.00	-0.11	-0.21	-0.28	-0.43	-0.51	-0.69	-0.88	-0.88	-0.68	-0.63	-0.55	-0.63	-0.46	-0.29	-0.16	0.00	0.21	0.08	0.21	-0.88	-0.27
3	0.05	0.37	0.52	0.25	0.10	0.13	-0.11	-0.18	-0.29	-0.42	-0.48	-0.63	-0.68	-0.43	-0.51	-0.95	-1.05	-0.51	-0.62	-0.34	-0.26	0.10	0.32	0.85	0.85	-1.05	-0.20
4	0.69	0.64	0.37	0.26	0.28	0.11	-0.05	-0.06	-0.14	-0.23	-0.25	-0.33	-0.44	-0.26	-0.34	-0.33	-0.38	-0.41	-0.19	-0.19	-0.12	-0.08	-0.08	-0.08	0.69	-0.44	-0.07
5	-0.07	-0.08	-0.08	-0.07	-0.07	-0.16	-0.19	-0.17	-0.19	-0.27	-0.34	-0.45	-0.65	-0.42	-0.44	-0.73	-0.65	-0.30	-0.33	-0.45	-0.17	-0.07	-0.01	0.07	0.07	-0.73	-0.26
6	0.14	0.15	0.12	0.15	0.12	0.00	-0.05	-0.45	-0.51	-0.82	-0.83	-0.88	-1.10	-1.32	-1.27	-1.23	-1.05	-0.93	-0.85	-0.57	-0.21	0.13	0.24	0.04	0.24	-1.32	-0.46
7	0.27	0.63	0.25	0.30	0.32	0.25	-0.04	-0.26	-0.45	-0.82	-0.63	-0.56	-0.81	-0.77	-1.41	-1.39	-1.15	-0.85	-0.55	-0.46	-0.17	0.05	0.20	0.37	0.63	-1.41	-0.32
8	0.52	0.61	0.34	0.36	0.41	0.17	-0.07	-0.32	-0.38	-0.49	-0.69	-0.95	-1.17	-0.95	-0.79	-0.68	-0.87	-0.66	-0.56	-0.38	-0.07	-0.03	0.02	0.32	0.61	-1.17	-0.26
9	0.56	0.45	0.28	0.22	0.27	0.18	0.39	-0.17	-0.40	-0.51	-0.53	-0.67	-0.62	-0.47	-0.34	-0.33	-0.32	-0.32	-0.33	-0.20	-0.08	0.14	0.33	0.51	0.56	-0.67	-0.08
10	0.52	0.57	0.82	0.56	0.52	0.27	0.11	-0.03	-0.33	-0.64	-0.90	-1.02	-1.06	-1.10	-1.01	-0.82	-0.85	-0.49	-0.49	-0.28	-0.09	-0.16	-0.12	-0.14	0.82	-1.10	-0.26
11	-0.13	-0.12	-0.12	-0.10	-0.11	-0.18	-0.23	-0.22	-0.35	-0.52	-0.64	-0.80	-1.11	-1.15	-1.25	-1.37	-1.22	-1.08	-0.85	-0.58	-0.35	-0.25	-0.19	-0.14	-0.10	-1.37	-0.54
12	-0.12	-0.10	-0.10	-0.08	-0.10	-0.11	-0.15	-0.20	-0.27	-0.37	-0.36	-0.43	-0.56	-0.56	-0.59	-0.71	-0.70	-0.70	-0.62	-0.45	-0.16	0.55	0.44	0.35	0.55	-0.71	-0.25
13	0.38	0.15	0.29	0.20	0.25	0.19	-0.10	-0.26	-0.34	-0.49	-0.51	-0.69	-0.65	-0.68	-0.85	-0.88	-0.32	-0.36	-0.48	-0.29	-0.13	0.03	0.15	0.14	0.38	-0.88	-0.22
14	0.19	0.33	0.41	0.10	0.27	0.13	-0.11	-0.23	-0.32	-0.49	-0.59	-0.57	-0.42	-0.37	-0.22	-0.31	-0.34	-0.40	-0.31	-0.12	0.09	0.22	0.41	0.49	0.49	-0.59	-0.09
15	0.45	0.32	0.37	0.39	0.30	0.16	-0.13	-0.24	-0.39	-0.73	-0.92	-0.99	-1.09	-1.17	-1.31	-0.92	-1.40	-1.24	-0.91	-0.60	-0.28	0.21	0.72	1.09	1.09	-1.40	-0.35
16	1.17	1.06	1.02	1.04	0.66	0.17	-0.22	-0.46	-0.64	-0.89	-0.92	-1.33	-1.52	-1.43	-1.36	-1.32	-1.10	-0.76	-0.40	-0.17	-0.07	-0.01	-0.01	-0.10	1.17	-1.52	-0.32
17	-0.09	-0.09	-0.10	-0.10	-0.09	-0.14	-0.18	-0.35	-0.47	-0.49	-0.42	-0.43	-0.43	-0.52	-0.52	-0.54	-0.47	-0.33	-0.29	-0.28	-0.10	0.01	0.05	0.08	0.08	-0.54	-0.26
18	0.19	0.08	0.06	0.32	0.84	0.64	-0.20	-0.30	-0.37	-0.30	-0.35	-0.36	-0.34	-0.67	-1.07	-0.85	-0.68	-0.42	-0.35	-0.40	-0.20	0.02	0.32	0.58	0.84	-1.07	-0.16
19	0.50	0.50	1.21	0.76	0.55	0.13	-0.02	-0.41	-0.67	-0.82	-0.99	-1.07	-1.33	-1.26	-1.36	-1.26	-1.16	-1.01	-0.89	-0.59	-0.24	0.15	0.47	0.49	1.21	-1.36	-0.35
20	0.57	0.63	0.60	0.39	0.41	0.27	-0.08	-0.40	-0.64	-0.84	-0.99	-1.10	-1.22	-1.24	-1.29	-1.25	-1.26	-1.07	-0.77	-0.17	0.09	0.11	0.22	0.31	0.63	-1.29	-0.36
21	0.32	0.33	0.41	0.28	0.18	0.06	-0.07	-0.35	-0.56	-0.94	-0.99	-1.28	-1.39	-1.30	-1.29	-1.31	-1.19	-0.99	-0.92	-0.59	-0.18	0.01	-0.14	-0.15	0.41	-1.39	-0.50
22	-0.11	-0.11	-0.11	-0.11	-0.12	-0.17	-0.22	-0.28	-0.33	-0.44	-0.52	-0.48	-0.43	-0.39	-0.42	-0.40	-0.37	-0.21	-0.27	-0.22	-0.17	-0.12	-0.09	-0.08	-0.08	-0.52	-0.26
23	-0.08	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.09	-0.09	-0.11	-0.13	-0.17	-0.15	-0.13	-0.15	-0.17	-0.15	-0.14	-0.17	-0.10	0.01	0.00	-0.01	0.01	-0.17	-0.10
24	0.00	0.06	0.04	0.06	0.10	0.08	0.03	-0.07	-0.21	-0.18	-0.20	-0.18	-0.34	-0.46	-0.30	-0.30	-0.38	-0.46	-0.35	-0.16	-0.07	-0.05	0.02	0.02	0.10	-0.46	-0.14
25	0.00	-0.01	-0.01	-0.02	-0.04	-0.08	-0.18	-0.34	-0.38	-0.66	-0.56	-0.52	-0.49	-0.55	-0.77	-0.54	-0.55	-0.42	-0.25	-0.20	-0.04	0.20	0.37	0.45	0.45	-0.77	-0.23
26	0.47	0.62	0.66	0.41	0.32	0.06	-0.20	-0.46	-0.74	-0.83	-0.86	-0.68	-0.82	-0.84	-1.12	-1.03	-0.72	-0.78	-0.82	-0.77	-0.41	0.06	0.52	0.73	0.73	-1.12	-0.30
27	0.73	0.93	1.25	1.35	0.76	0.45	0.08	-0.24	-0.45	-0.45	-0.75	-0.80	-1.07	-1.26	-1.10	-1.44	-1.00	-0.81	-0.69	-0.42	-0.18	-0.07	0.00	0.02	1.35	-1.44	-0.21
28	0.01	0.00	-0.02	-0.04	-0.04	-0.10	-0.20	-0.22	-0.19	-0.32	-0.37	-0.36	-0.39	-0.54	-0.62	-0.49	-0.33	-0.33	-0.37	-0.19	-0.14	0.06	0.49	0.58	0.58	-0.62	-0.17
29	0.69	0.47	0.20	0.34	0.30	0.14	-0.19	-0.42	-0.63	-0.77	-1.00	-0.91	-1.08	-1.10	-1.06	-1.35	-1.31	-1.16	-1.08	-0.54	-0.30	0.02	0.16	0.41	0.69	-1.35	-0.42
30	0.19	-0.01	-0.07	-0.08	-0.11	-0.18	-0.19	-0.27	-0.36	-0.43	-0.44	-0.57	-0.66	-0.56	-0.66	-0.79	-0.73	-0.58	-0.52	-0.39	-0.21	0.10	0.21	0.29	0.29	-0.79	-0.29
Max.	**1.17**	**1.06**	**1.25**	**1.35**	**0.84**	**0.64**	**0.39**	**-0.03**	**-0.09**	**-0.09**	**-0.11**	**-0.13**	**-0.17**	**-0.15**	**-0.13**	**-0.15**	**-0.17**	**-0.15**	**-0.14**	**-0.12**	**0.09**	**0.55**	**0.72**	**1.09**	**1.35**		
Min.	**-0.13**	**-0.12**	**-0.12**	**-0.11**	**-0.12**	**-0.18**	**-0.23**	**-0.46**	**-0.74**	**-0.94**	**-1.00**	**-1.33**	**-1.52**	**-1.43**	**-1.41**	**-1.44**	**-1.40**	**-1.24**	**-1.08**	**-0.77**	**-0.41**	**-0.25**	**-0.19**	**-0.15**		**-1.52**	
Avg.	**0.27**	**0.29**	**0.29**	**0.25**	**0.22**	**0.08**	**-0.09**	**-0.26**	**-0.39**	**-0.53**	**-0.60**	**-0.67**	**-0.78**	**-0.77**	**-0.83**	**-0.83**	**-0.76**	**-0.62**	**-0.53**	**-0.35**	**-0.15**	**0.04**	**0.18**	**0.25**			**-0.26**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0.22	0.23	0.11	0.17	0.52	0.28	-0.15	-0.32	-0.61	-0.71	-0.45	-0.49	-0.61	-0.59	-0.67	-0.69	-0.42	-0.39	-0.29	-0.24	-0.12	-0.02	0.22	0.18	0.52	-0.71	-0.20
2	0.19	0.21	0.35	0.12	0.19	0.10	-0.09	-0.23	-0.28	-0.69	-0.78	-0.69	-0.70	-0.60	-0.63	-0.42	-0.63	-0.61	-0.70	-0.45	-0.28	-0.12	0.28	0.22	0.35	-0.78	-0.26
3	0.36	0.36	0.28	0.28	0.27	0.09	-0.20	-0.25	-0.42	-0.49	-0.53	-0.64	-0.69	-0.66	-0.85	-0.98	-0.95	-0.71	-0.16	-0.02	0.11	0.04	0.16	0.23	0.36	-0.98	-0.22
4	0.10	-0.08	-0.08	-0.08	-0.05	-0.09	-0.07	-0.13	-0.29	-0.32	-0.49	-0.58	-0.27	-0.32	-0.53	-0.44	-0.19	-0.10	-0.14	-0.07	-0.02	0.15	0.19	0.11	0.19	-0.58	-0.16
5	0.09	0.23	0.33	0.53	0.16	0.10	-0.02	-0.18	-0.27	-0.38	-0.49	-0.69	-0.49	-0.45	-0.51	-0.25	-0.21	-0.19	-0.20	-0.17	-0.12	-0.10	-0.07	0.00	0.53	-0.69	-0.14
6	0.15	0.18	0.16	0.25	0.23	0.15	0.08	-0.02	-0.20	-0.30	-0.31	-0.25	-0.43	-0.34	-0.56	-0.65	-0.63	-0.49	-0.40	-0.32	-0.09	0.09	0.31	0.36	0.36	-0.65	-0.13
7	0.64	0.57	0.60	0.56	0.66	0.19	0.15	-0.06	-0.26	-0.46	-0.38	-0.43	-0.36	-0.34	-0.48	-0.48	-0.49	-0.30	-0.28	-0.29	-0.10	0.22	0.34	0.27	0.66	-0.49	-0.02
8	0.15	0.08	0.21	0.10	0.12	-0.03	-0.08	-0.19	-0.26	-0.32	-0.31	-0.36	-0.40	-0.46	-0.41	-0.42	-0.34	-0.42	-0.34	-0.29	-0.18	-0.04	0.11	0.19	0.21	-0.46	-0.16
9	0.36	0.55	0.61	0.43	0.28	0.12	0.05	-0.21	-0.33	-0.42	-0.43	-0.58	-0.91	-0.64	-0.77	-0.66	-0.58	-0.78	-0.80	-0.38	-0.31	-0.06	0.30	0.71	0.71	-0.91	-0.18
10	0.80	0.79	0.71	0.65	0.75	0.44	0.28	-0.24	-0.35	-0.56	-0.49	-0.49	-0.65	-0.51	-0.74	-0.76	-0.80	-0.50	-0.38	-0.34	-0.21	-0.08	0.08	0.08	0.80	-0.80	-0.11
11	0.23	0.24	0.11	0.11	0.06	-0.11	-0.29	-0.41	-0.70	-0.82	-0.97	-1.12	-1.21	-1.19	-1.18	-1.20	-1.23	-1.07	-0.72	-0.47	-0.26	0.24	0.21	0.35	0.35	-1.23	-0.47
12	0.20	0.18	0.21	0.61	0.59	0.01	-0.16	-0.45	-0.53	-0.54	-0.45	-0.47	-0.58	-0.44	-0.24	-0.53	-0.38	-0.38	-0.28	-0.19	-0.20	0.00	0.05	-0.08	0.61	-0.58	-0.17
13	-0.09	-0.10	-0.10	-0.09	-0.08	-0.10	-0.12	-0.14	-0.15	-0.21	-0.31	-0.35	-0.36	-0.38	-0.41	-0.42	-0.39	-0.41	-0.28	-0.20	-0.16	-0.02	-0.04	-0.01	-0.01	-0.42	-0.20
14	-0.02	0.11	0.13	0.10	0.10	-0.10	-0.15	-0.25	-0.31	-0.32	-0.51	-0.62	-0.68	-0.65	-0.48	-0.51	-0.46	-0.41	-0.27	-0.22	-0.24	-0.16	-0.07	0.05	0.13	-0.68	-0.25
15	0.11	0.06	0.06	0.07	-0.01	-0.11	-0.14	-0.16	-0.34	-0.47	-0.67	-0.72	-0.81	-0.94	-0.79	-0.74	-0.60	-0.69	-0.50	-0.26	-0.09	0.01	0.08	0.17	0.17	-0.94	-0.31
16	-0.02	-0.03	-0.03	-0.04	-0.04	0.19	-0.20	-0.40	-0.40	-0.48	-0.69	-0.83	-0.76	-0.74	-0.65	-0.92	-0.72	-0.66	-0.60	-0.68	-0.37	0.12	0.72	1.03	1.03	-0.92	-0.30
17	1.16	0.82	1.49	0.81	0.49	0.59	0.04	-0.31	-0.52	-0.68	-0.55	-0.45	-0.65	-1.00	-1.00	-1.11	-1.05	-0.72	-0.62	-0.44	-0.23	-0.05	-0.03	-0.01	1.49	-1.11	-0.17
18	0.02	0.00	0.01	0.00	0.02	-0.06	-0.10	-0.22	-0.33	-0.32	-0.48	-0.42	-0.47	-0.40	-0.44	-0.53	-0.33	-0.22	-0.22	-0.14	-0.02	0.11	0.24	0.31	0.31	-0.53	-0.17
19	0.43	0.39	0.22	0.22	0.22	-0.08	0.03	-0.01	-0.05	-0.33	-0.41	-0.48	-0.48	-0.47	-0.45	-0.32	-0.42	-0.44	-0.36	-0.18	-0.01	0.13	0.21	0.21	0.43	-0.48	-0.10
20	0.43	0.14	0.11	0.42	0.25	0.45	-0.04	-0.21	-0.40	-0.76	-1.21	-1.16	-0.95	-1.43	-1.49	-1.35	-1.32	-0.95	-0.88	-0.63	-0.35	-0.11	-0.16	-0.13	0.45	-1.49	-0.49
21	-0.10	-0.10	-0.09	-0.10	-0.10	-0.12	-0.15	-0.18	-0.22	-0.30	-0.46	-0.61	-0.68	-0.72	-0.57	-0.48	-0.49	-0.29	-0.23	-0.17	-0.11	-0.09	-0.07	-0.10	-0.07	-0.72	-0.27
22	-0.08	-0.08	-0.08	-0.08	-0.08	-0.09	-0.11	-0.15	-0.19	-0.19	-0.30	-0.31	-0.29	-0.26	-0.31	-0.30	-0.32	-0.23	-0.22	-0.15	-0.14	-0.09	-0.07	-0.07	-0.07	-0.32	-0.17
23	-0.06	-0.06	-0.08	-0.07	-0.08	-0.06	-0.10	-0.13	-0.21	-0.29	-0.36	-0.39	-0.35	-0.30	-0.25	-0.19	-0.13	-0.12	-0.11	-0.05	-0.03	0.04	0.03	-0.02	0.04	-0.39	-0.14
24	0.00	0.06	0.09	0.17	0.10	0.09	0.04	-0.05	-0.12	-0.25	-0.35	-0.33	-0.38	-0.37	-0.30	-0.27	-0.35	-0.16	-0.13	0.12	0.38	0.57	0.54	0.67	0.67	-0.38	-0.01
25	0.70	0.72	0.68	0.66	0.63	0.69	0.41	0.11	-0.23	-0.46	-0.39	-0.64	-0.61	-0.81	-0.63	-0.42	-0.35	-0.21	-0.02	-0.10	-0.12	0.04	0.27	0.21	0.72	-0.81	0.01
26	0.21	0.32	0.46	0.29	0.42	0.47	0.07	0.04	-0.09	-0.28	-0.56	-0.73	-0.66	-0.76	-0.73	-0.70	-0.76	-1.09	-0.74	-0.24	0.24	0.67	0.75	0.85	0.85	-1.09	-0.11
27	0.64	0.45	0.92	0.58	0.83	0.63	0.48	0.00	-0.13	-0.42	-0.77	-0.63	-0.77	-0.73	-1.00	-0.91	-0.96	-0.43	-0.48	-0.19	0.13	0.27	0.40	0.46	0.92	-1.00	-0.07
28	0.50	0.44	0.15	0.04	0.00	-0.07	-0.13	-0.20	-0.28	-0.44	-0.52	-1.04	-1.45	-1.68	-1.64	-1.66	-1.46	-1.23	-0.90	-0.51	-0.21	-0.05	-0.07	-0.09	0.50	-1.68	-0.52
29	-0.08	-0.08	-0.06	-0.07	-0.07	0.14	-0.11	-0.12	-0.20	-0.49	-0.64	-0.86	-0.89	-0.86	-0.93	-0.96	-0.91	-0.75	-0.79	-0.36	-0.22	0.10	-0.07	0.13	0.14	-0.96	-0.38
30	0.25	0.16	0.08	-0.06	-0.04	-0.02	-0.11	-0.16	-0.25	-0.25	-0.39	-0.49	-0.80	-0.85	-0.90	-0.68	-0.86	-0.75	-0.44	-0.28	-0.19	-0.13	-0.12	-0.11	0.25	-0.90	-0.31
31	-0.10	-0.12	-0.11	-0.13	-0.10	-0.11	-0.17	-0.23	-0.27	-0.32	-0.36	-0.39	-0.56	-0.82	-0.77	-0.76	-0.79	-0.57	-0.36	-0.26	-0.14	-0.06	-0.04	-0.06	-0.04	-0.82	-0.32
Max.	**1.16**	**0.82**	**1.49**	**0.81**	**0.83**	**0.69**	**0.48**	**0.11**	**-0.05**	**-0.19**	**-0.30**	**-0.25**	**-0.27**	**-0.26**	**-0.24**	**-0.19**	**-0.13**	**-0.10**	**-0.02**	**0.12**	**0.38**	**0.67**	**0.75**	**1.03**	**1.49**		
Min.	**-0.10**	**-0.12**	**-0.11**	**-0.13**	**-0.10**	**-0.12**	**-0.29**	**-0.45**	**-0.70**	**-0.82**	**-1.21**	**-1.16**	**-1.45**	**-1.68**	**-1.64**	**-1.66**	**-1.46**	**-1.23**	**-0.90**	**-0.68**	**-0.37**	**-0.16**	**-0.16**	**-0.13**		**-1.68**	
Avg.	**0.24**	**0.21**	**0.24**	**0.21**	**0.20**	**0.11**	**-0.03**	**-0.18**	**-0.30**	**-0.43**	**-0.51**	**-0.59**	**-0.64**	**-0.67**	**-0.69**	**-0.67**	**-0.63**	**-0.52**	**-0.41**	**-0.26**	**-0.12**	**0.05**	**0.15**	**0.20**			**-0.21**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	-0.05	-0.06	-0.06	-0.06	-0.07	-0.10	-0.10	-0.10	-0.14	-0.20	-0.32	-0.51	-0.39	-0.39	-0.41	-0.42	-0.28	-0.25	-0.26	-0.14	-0.08	-0.08	-0.04	-0.03	-0.03	-0.51	-0.19
2	-0.04	-0.05	-0.05	-0.05	-0.03	-0.02	-0.07	-0.09	-0.18	-0.17	-0.17	-0.16	-0.19	-0.19	-0.15	-0.24	-0.19	-0.18	-0.15	-0.08	0.01	0.03	0.04	0.00	0.04	-0.24	-0.10
3	-0.02	0.01	0.00	0.00	-0.02	-0.03	-0.08	-0.08	-0.12	-0.19	-0.24	-0.29	-0.29	-0.27	-0.41	-0.34	-0.26	-0.19	-0.13	-0.09	-0.07	-0.07	-0.05	-0.04	0.01	-0.41	-0.14
4	-0.05	-0.02	-0.04	-0.03	-0.02	-0.04	-0.04	-0.05	-0.05	-0.07	-0.10	-0.13	-0.18	-0.15	-0.16	-0.13	-0.12	-0.11	-0.09	-0.05	-0.02	0.00	0.01	0.04	0.04	-0.18	-0.07
5	0.07	0.04	0.01	-0.06	-0.05	-0.04	-0.07	-0.06	-0.07	-0.13	-0.10	-0.13	-0.11	-0.10	-0.09	-0.09	-0.14	-0.09	-0.10	-0.06	-0.01	0.00	-0.01	-0.07	0.07	-0.14	-0.06
6	-0.05	0.04	-0.01	-0.01	0.09	0.28	0.26	0.10	0.00	-0.37	-0.36	-0.53	-0.82	-0.98	-1.17	-0.52	-0.40	-0.64	-0.27	-0.44	-0.01	0.27	0.38	0.44	0.44	-1.17	-0.20
7	0.43	0.43	0.38	0.27	0.18	0.30	0.16	-0.09	-0.37	-0.70	-0.82	-0.76	-0.84	-1.01	-1.22	-1.10	-0.97	-0.79	-0.61	-0.39	-0.06	0.33	0.51	0.65	0.65	-1.22	-0.25
8	0.65	0.91	0.59	0.47	0.37	0.45	0.16	-0.09	-0.19	-0.41	-0.71	-0.77	-0.85	-0.78	-0.78	-0.61	-0.66	-0.84	-0.50	-0.06	0.50	0.83	0.71	0.83	0.91	-0.85	-0.03
9	0.79	0.86	0.78	0.95	1.24	1.21	0.45	-0.15	-0.40	-0.60	-0.69	-0.67	-0.98	-1.14	-1.03	-1.08	-0.92	-0.52	-0.55	-0.16	0.51	0.54	0.49	0.71	1.24	-1.14	-0.01
10	0.85	0.43	0.35	0.24	0.17	0.40	0.91	0.51	-0.18	-0.44	-0.63	-0.81	-0.87	-1.00	-1.09	-1.06	-0.99	-0.66	-0.56	-0.09	0.76	0.56	0.65	0.84	0.91	-1.09	-0.07
11	1.09	0.82	0.90	1.10	0.82	0.69	0.46	0.12	-0.27	-0.53	-0.69	-0.69	-0.82	-0.75	-0.68	-0.69	-0.66	-0.50	-0.28	-0.12	-0.01	0.15	0.13	0.33	1.10	-0.82	0.00
12	0.23	0.16	0.02	0.00	-0.07	0.00	-0.06	-0.08	-0.12	-0.24	-0.22	-0.40	-0.85	-1.07	-0.61	-0.95	-1.03	-1.06	-0.70	-0.41	0.08	0.58	0.32	0.44	0.58	-1.07	-0.25
13	0.35	0.33	0.36	0.38	0.23	0.56	0.45	0.15	-0.24	-0.43	-0.58	-0.58	-0.60	-0.92	-0.78	-0.80	-1.01	-0.91	-0.38	-0.14	-0.04	-0.06	-0.05	-0.10	0.56	-1.01	-0.20
14	-0.12	-0.10	-0.10	-0.10	-0.13	-0.09	-0.10	-0.13	-0.18	-0.17	-0.19	-0.25	-0.35	-0.46	-0.60	-0.52	-0.31	-0.27	-0.24	-0.28	-0.18	0.04	-0.01	0.03	0.04	-0.60	-0.20
15	0.06	0.07	0.04	0.07	0.05	0.03	0.01	-0.01	-0.04	-0.12	-0.32	-0.33	-0.37	-0.38	-0.54	-0.29	-0.27	-0.20	-0.14	-0.11	0.04	0.14	0.25	0.28	0.28	-0.54	-0.09
16	0.29	0.22	0.10	0.63	0.86	0.37	-0.03	0.47	0.09	-0.46	-0.35	-0.24	-0.48	-0.70	-0.52	-0.75	-0.68	-0.51	-0.42	-0.16	0.36	0.32	0.23	0.19	0.86	-0.75	-0.05
17	0.16	0.55	0.28	0.20	0.20	0.26	0.06	-0.11	-0.18	-0.46	-0.34	-0.45	-0.55	-1.24	-0.65	-0.66	-0.50	-0.44	-0.19	-0.13	-0.07	0.01	0.13	0.23	0.55	-1.24	-0.16
18	0.13	0.10	0.04	-0.01	0.03	0.11	0.06	-0.03	-0.02	-0.05	-0.11	-0.02	-0.08	0.01	-0.05	-0.13	-0.12	-0.06	-0.07	0.00	0.02	0.05	0.09	0.08	0.13	-0.13	0.00
19	0.11	0.09	0.12	0.14	0.13	0.23	0.19	0.01	-0.08	-0.03	-0.04	-0.12	-0.04	-0.19	-0.47	-0.36	-0.22	-0.19	-0.12	-0.13	-0.08	-0.04	-0.06	-0.01	0.23	-0.47	-0.05
20	0.02	0.04	0.00	0.00	0.02	0.03	0.04	-0.04	-0.11	-0.16	-0.27	-0.41	-0.33	-0.35	-0.40	-0.52	-0.39	-0.51	-0.29	-0.07	0.26	0.23	0.19	0.13	0.26	-0.52	-0.12
21	0.10	0.10	0.11	0.07	0.05	0.00	-0.01	-0.04	-0.04	-0.07	-0.12	-0.17	-0.15	-0.18	-0.31	-0.27	-0.26	-0.27	-0.16	-0.05	0.03	0.04	0.08	0.11	0.11	-0.31	-0.06
22	0.09	0.05	0.03	-0.03	-0.08	-0.05	-0.05	-0.10	-0.12	-0.25	-0.29	-0.29	-0.25	-0.26	-0.23	-0.26	-0.24	-0.20	-0.16	-0.11	-0.15	-0.02	0.01	0.05	0.09	-0.29	-0.12
23	0.24	0.27	0.31	0.19	0.17	0.22	0.14	0.04	-0.15	-0.29	-0.33	-0.39	-0.49	-0.54	-0.52	-0.40	-0.30	-0.18	-0.04	0.18	0.34	0.38	0.40	0.34	0.40	-0.54	-0.02
24	0.32	0.27	0.19	0.17	0.17	0.17	0.06	-0.02	-0.13	-0.17	-0.31	-0.40	-0.46	-0.40	-0.08	-0.20	-0.48	-0.45	-0.01	0.12	0.37	0.34	0.29	0.21	0.37	-0.48	-0.02
25	0.00	-0.04	-0.06	-0.08	-0.08	-0.08	-0.11	-0.14	-0.20	-0.23	-0.34	-0.37	-0.42	-0.55	-0.70	-0.76	-0.83	-0.59	-0.30	0.03	0.59	0.99	1.10	0.69	1.10	-0.83	-0.10
26	0.30	0.69	1.41	1.19	1.23	1.04	0.77	0.60	-0.05	-0.34	-0.47	-0.68	-0.50	-0.60	-0.94	-0.72	-0.42	-0.55	-0.48	-0.32	0.03	0.25	0.44	0.51	1.41	-0.94	0.10
27	0.57	0.71	1.00	1.11	0.62	0.75	0.50	0.25	-0.25	-0.43	-0.55	-0.70	-0.43	-0.42	-0.45	-0.81	-0.60	-0.54	-0.36	-0.12	0.22	0.97	1.22	0.74	1.22	-0.81	0.12
28	0.63	1.47	0.91	1.05	0.83	1.21	0.93	0.68	0.10	-0.40	-0.56	-0.47	-0.68	-0.78	-0.75	-0.59	-0.58	-0.70	-0.65	-0.17	0.61	0.56	0.67	0.47	1.47	-0.78	0.16
29	0.47	0.35	0.20	0.23	0.22	0.09	0.08	-0.10	-0.26	-0.14	-0.57	-0.78	-0.98	-1.07	-0.94	-1.00	-0.90	-0.65	-0.38	0.02	0.34	0.32	0.40	0.32	0.47	-1.07	-0.20
30	0.30	0.25	0.23	0.25	0.25	0.25	0.12	0.03	-0.20	-0.44	-0.56	-0.60	-0.55	-0.59	-0.58	-0.58	-0.34	-0.32	-0.21	0.08	0.87	1.04	0.95	0.83	1.04	-0.60	0.02
31	0.41	0.85	0.90	0.42	0.65	0.67	0.45	0.39	-0.10	-0.21	-0.56	-0.64	-0.63	-0.40	-0.47	-0.33	-0.09	-0.13	0.11	0.22	0.63	0.60	0.81	0.67	0.90	-0.64	0.18
Max.	**1.09**	**1.47**	**1.41**	**1.19**	**1.24**	**1.21**	**0.93**	**0.68**	**0.10**	**-0.03**	**-0.04**	**-0.02**	**-0.04**	**0.01**	**-0.05**	**-0.09**	**-0.09**	**-0.06**	**0.11**	**0.22**	**0.87**	**1.04**	**1.22**	**0.84**	**1.47**		
Min.	**-0.12**	**-0.10**	**-0.10**	**-0.10**	**-0.13**	**-0.10**	**-0.11**	**-0.15**	**-0.40**	**-0.70**	**-0.82**	**-0.81**	**-0.98**	**-1.24**	**-1.22**	**-1.10**	**-1.03**	**-1.06**	**-0.70**	**-0.44**	**-0.18**	**-0.08**	**-0.06**	**-0.10**		**-1.24**	
Avg.	**0.27**	**0.32**	**0.29**	**0.28**	**0.26**	**0.29**	**0.18**	**0.06**	**-0.14**	**-0.29**	**-0.38**	**-0.44**	**-0.50**	**-0.58**	**-0.57**	**-0.55**	**-0.49**	**-0.43**	**-0.28**	**-0.10**	**0.19**	**0.30**	**0.33**	**0.32**			**-0.07**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.33	0.33	0.32	0.17	-0.09	-0.11	-0.15	-0.22	-0.24	-0.33	-0.29	-0.31	-0.35	-0.46	-0.56	-0.64	-0.56	-0.30	0.17	0.50	0.74	0.74	0.41	0.74	-0.64	-0.03
2	0.1	0.07	0.05	-0.05	-0.06	-0.07	-0.07	-0.11	-0.19	-0.40	-0.59	-0.83	-0.76	-0.99	-0.96	-0.61	-0.51	-0.38	-0.26	-0.11	-0.09	-0.05	-0.06	-0.05	0.12	-0.99	-0.29
3	0.0	0.01	0.03	-0.01	-0.03	-0.01	-0.03	-0.02	-0.07	-0.12	-0.14	-0.16	-0.18	-0.17	-0.14	-0.10	-0.09	-0.08	-0.07	-0.03	0.06	0.17	0.19	0.21	0.21	-0.18	-0.03
4	0.3	0.29	0.27	0.27	0.24	0.34	0.28	-0.02	-0.05	-0.22	-0.14	-0.31	-0.47	-0.64	-0.51	-0.46	-0.34	-0.41	-0.43	0.16	0.46	0.34	0.33	0.44	0.46	-0.64	-0.01
5	0.3	0.31	0.18	0.28	0.48	0.54	0.26	0.19	-0.07	-0.37	-0.78	-0.84	-1.27	-1.29	-1.03	-0.77	-0.18	0.31	0.38	0.16	0.23	0.10	0.13	0.15	0.54	-1.29	-0.11
6	0.1	0.12	0.10	0.19	0.21	0.15	-0.08	-0.10	-0.18	-0.29	-0.13	0.14					1.03	0.66	0.17	0.01	0.14	0.15	0.05	0.12	1.03	-0.29	0.13
7	0.0	-0.05	0.06	0.12	0.18	0.22	0.19	0.12	0.12	-0.02	-0.01	0.03	-0.01	-0.06	-0.05	-0.08	-0.10	-0.07	-0.02	-0.01	0.03				0.22	-0.10	0.03
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Max.	**0.3**	**0.33**	**0.33**	**0.32**	**0.48**	**0.54**	**0.28**	**0.19**	**0.12**	**-0.02**	**-0.01**	**0.14**	**-0.01**	**-0.06**	**-0.05**	**-0.08**	**1.03**	**0.66**	**0.38**	**0.17**	**0.50**	**0.74**	**0.74**	**0.44**	**1.03**		
Min.	**0.0**	**-0.05**	**0.03**	**-0.05**	**-0.06**	**-0.09**	**-0.11**	**-0.15**	**-0.22**	**-0.40**	**-0.78**	**-0.84**	**-1.27**	**-1.29**	**-1.03**	**-0.77**	**-0.64**	**-0.56**	**-0.43**	**-0.11**	**-0.09**	**-0.05**	**-0.06**	**-0.05**		**-1.29**	
Avg.	**0.1**	**0.15**	**0.14**	**0.16**	**0.17**	**0.15**	**0.07**	**-0.01**	**-0.09**	**-0.24**	**-0.30**	**-0.32**	**-0.50**	**-0.58**	**-0.52**	**-0.43**	**-0.12**	**-0.08**	**-0.07**	**0.05**	**0.19**	**0.24**	**0.23**	**0.21**			**-0.04**

Total Hours in Month 720 **Hours Data Available** 161 **Data Recovery** 22.4%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October *2007*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 720 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 4 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	55.7	58.2	62.9	61.7	62.5	63.4	62.9	60.3	65.3	68.5	69.4	70.8	72.0	70.4	71.6	73.8	74.6	76.2	76.9	77.8	78.9	78.0	77.8	79.5	79.5	55.7	69.5
2	79.0	79.8	80.2	79.5	79.1	77.8	78.2	79.0	78.9	77.3	76.3	75.8	76.1	76.0	76.2	76.1	76.5	78.6	79.3	79.2	79.8	79.2	79.8	80.1	80.2	75.8	78.2
3	78.5	78.1	77.8	77.5	78.5	79.2	79.5	77.4	77.9	76.9	76.6	76.7	76.3	75.8	76.4	78.0	77.5	76.8	77.6	77.1	77.5	78.3	80.5	80.1	80.5	75.8	77.8
4	80.5	79.0	78.1	78.0	78.1	77.8	77.0	76.3	74.5	71.2	69.6	67.9	67.0	65.4	65.7	69.1	70.8	73.2	73.9	75.4	80.0	83.1	88.4	89.5	89.5	65.4	75.4
5	87.3	87.2	85.0	84.5	83.8	84.3	83.9	83.5	82.5	81.9	82.5	81.8	82.2	82.0	81.0	80.0	78.6	77.2	75.6	71.8	71.5	73.9	74.1	74.8	87.3	71.5	80.5
6	74.8	75.3	75.0	74.9	72.3	70.7	70.6	68.3	67.9	71.4	66.9	65.5	66.2	65.8	64.4	69.2	72.1	72.4	71.7	73.6	75.3	74.5	74.7	75.2	75.3	64.4	71.2
7	75.3	75.0	74.9	74.9	75.3	75.4	74.1	73.8	71.7	72.0	71.1	71.0	70.6	70.4	70.9	72.3	72.2	73.6	73.9	74.3	74.3	73.6	72.9	74.8	75.4	70.4	73.3
8	75.6	75.0	76.3	75.7	76.0	77.3	76.2	76.9	77.1	77.0	75.1	73.5	71.5	70.2	70.5	69.9	69.1	66.7	66.6	67.3	67.3	65.3	64.2	65.7	77.3	64.2	71.9
9	64.8	64.5	66.0	68.5	65.9	64.7	63.0	62.9	63.9	63.2	63.8	58.4	54.0	54.2	50.2	65.5	66.2	61.9	52.2	45.9	58.9	72.5	70.6	68.8	72.5	45.9	62.1
10	60.7	72.8	70.9	73.0	69.4	83.8	84.0	75.9	77.2	80.6	87.2	96.8	98.0	98.5	98.7	98.9	99.2	99.4	99.7	99.8	99.9	100.0	100.0	100.0	100.0	60.7	88.5
11	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.7	99.3	100.0	100.0	100.0	100.0	100.0	98.7	99.9
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	98.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2	99.9
13	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.8	99.5	99.0	98.6	97.3	97.7	97.7	96.2	95.5	92.6	100.0	92.6	98.9
14	88.5	84.4	85.2	84.4	85.5	90.4	93.3	93.8	94.9	95.2	93.9	93.4	92.3	88.9	87.8	88.5	88.3	88.1	89.1	89.1	89.6	79.5	82.7	90.8	95.2	79.5	89.1
15	92.1	95.5	93.8	94.9	93.7	89.9	90.3	91.2	92.6	92.3	92.5	90.8	89.3	91.1	88.8	89.7	90.9	91.6	91.8	91.9	93.7	94.0	93.5	92.3	95.5	88.8	92.0
16	89.6	89.9	89.3	90.1	82.2	66.0	54.1	53.3	60.8	69.9	74.1	83.7	89.4	90.0	85.1	84.3	84.8	86.5	87.8	92.5	96.8	97.4	99.4	99.9	99.9	53.3	83.2
17	100.0	100.0	99.8	99.6	99.5	99.5	99.4	99.5	99.6	99.7	99.7	99.4	95.9	93.2	91.6	92.1	91.0	89.5	84.9	84.3	84.3	85.5	84.5	87.5	100.0	84.3	94.2
18	88.9	89.3	94.5	99.9	99.6	98.6	96.6	95.0	95.7	94.4	94.5	94.9	99.0	97.6	91.9	97.9	100.0	100.0	100.0	99.8	99.7	99.9	99.6	99.8	100.0	88.9	97.0
19	99.9	99.8	99.6	99.3	99.2	99.1	98.8	99.7	96.0	94.2	97.0	99.7	98.0	98.9	91.9	91.3	96.6	97.5	93.1	93.8	93.0	93.2	92.6	94.3	99.9	91.3	96.5
20	96.4	96.4	96.5	98.8	98.1	98.2	97.5	99.9	97.4	94.6	91.1	83.4	76.8	79.2	82.4	80.4	78.3	85.4	90.1	89.1	83.5	77.9	72.7	69.4	99.9	69.4	88.1
21	70.4	70.7	76.9	74.2	76.1	86.1	86.2	89.8	88.9	88.4	92.8	96.4	95.8	95.6	95.4	95.5	95.5	95.5	95.3	95.3	95.3	95.3	95.4	95.2	96.4	70.4	89.3
22	95.2	95.1	94.9	95.1	94.8	94.9	94.6	94.4	94.6	94.4	94.1	94.3	94.5	94.0	94.2	94.0	93.0	90.8	89.1	90.5	91.5	87.3	91.1	94.0	95.2	87.3	93.4
23	92.8	92.1	92.3	92.1	91.6	91.3	90.9	90.6	91.0	90.3	90.2	90.0	90.1	90.3	89.9	89.7	89.4	89.5	89.0	88.0	86.2	85.6	84.5	83.6	92.8	83.6	89.6
24	83.4	82.6	81.2	81.3	80.9	81.0	81.4	83.0	83.8	82.3	80.7	81.4	80.8	79.4	78.3	79.4	77.4	77.7	76.0	73.9	70.9	74.7	72.5	74.7	83.8	70.9	79.1
25	76.4	72.1	60.4	69.6	86.0	90.7	91.2	91.5	90.7	91.4	92.2	92.8	94.9	96.5	98.4	98.0	95.4	89.5	88.8	88.3	89.1	91.2	92.7	91.3	98.4	60.4	88.3
26	91.5	92.7	91.4	93.1	95.9	94.6	91.9	91.7	96.5	99.5	100.0	98.3	98.2	94.2	87.0	85.2	87.8	88.4	87.2	83.8	82.7	84.2	82.9	81.4	100.0	81.4	90.8
27	79.6	83.7	84.4	85.3	87.5	91.4	91.1	92.9	90.1	93.0	98.7	100.0	100.0	100.0	95.8	82.1	77.2	85.6	83.8	82.7	83.7	85.4	88.5	91.7	100.0	77.2	88.9
28	93.9	96.1	97.7	95.7	98.4	98.0	99.0	99.8	99.8	99.0	100.0	100.0	98.7	96.4	94.6	93.0	94.4	95.7	95.8	92.4	92.6	86.8	84.7	83.4	100.0	83.4	95.2
29	82.7	84.3	76.6	77.1	73.5	74.4	84.0	87.8	92.7	91.7	94.0	92.7	88.6	89.6	90.4	95.6	92.7	94.4	97.0	98.6	99.8	100.0	100.0	100.0	100.0	73.5	89.9
30	100.0	97.9	95.4	93.0	91.9	92.1	92.8	84.9	79.7	75.9	74.4	66.1	68.2	76.0	74.4	74.2	83.0	90.5	91.3	93.4	95.3	97.4	98.8	99.2	100.0	66.1	86.9
31	98.5	98.3	96.0	92.9	90.5	90.0	92.2	98.1	99.4	99.4	100.0	99.7	99.7	96.0	97.4	95.4	94.3	94.4	95.7	93.5	87.6	86.6	90.9	94.7	100.0	86.6	95.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**55.7**	**58.2**	**60.4**	**61.7**	**62.5**	**63.4**	**54.1**	**53.3**	**60.8**	**63.2**	**63.8**	**58.4**	**54.0**	**54.2**	**50.2**	**65.5**	66.2	61.9	**52.2**	**45.9**	**58.9**	**65.3**	**64.2**	**65.7**		**45.9**	
Avg.	**85.5**	**86.0**	**85.6**	**86.0**	**86.0**	**86.5**	**86.3**	**86.2**	**86.5**	**86.6**	**87.0**	**86.9**	**86.6**	**86.3**	**85.1**	**85.8**	**86.0**	**86.6**	**86.1**	**85.8**	**86.3**	**86.3**	**86.6**	**87.2**			**86.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	94.0	91.1	87.7	87.0	88.4	88.1	90.0	93.9	90.7	90.1	94.3	82.9	79.1	77.5	62.3	54.2	57.0	65.2	64.0	70.6	84.5	98.5	100.0	100.0	100.0	54.2	83.0
2	100.0	100.0	98.3	94.5	90.3	90.2	94.8	97.0	95.7	94.8	94.0	91.3	89.8	89.9	90.6	90.2	89.8	89.9	89.8	88.2	88.7	90.3	89.7	91.3	100.0	88.2	92.5
3	92.2	94.3	94.1	93.7	93.1	94.7	94.8	93.1	92.8	93.7	93.1	91.2	89.0	87.5	86.1	90.2	90.9	93.2	94.5	93.2	91.5	90.9	91.3	85.4	94.8	85.4	91.9
4	86.3	85.3	87.9	83.8	80.2	82.6	81.1	76.2	79.3	82.2	80.1	80.9	83.3	80.3	76.0	78.4	76.6	73.9	72.0	77.5	60.4	56.0	59.5	49.8	87.9	49.8	76.2
5	42.4	42.7	43.0	43.5	47.0	48.8	47.6	45.2	47.1	48.3	50.2	52.3	59.6	63.3	72.0	74.0	68.3	65.5	63.5	68.9	77.6	83.4	82.6	77.7	83.4	42.4	58.9
6	73.8	71.7	67.4	64.4	65.2	65.4	65.2	66.0	68.1	68.9	66.1	66.0	68.4	68.3	72.7	77.5	76.9	78.1	75.9	74.5	74.1	72.5	73.1	69.9	78.1	64.4	70.4
7	75.6	90.0	89.3	92.4	95.0	96.8	99.4	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	100.0	100.0	75.6	97.4
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	96.8	96.0	95.6	96.0	95.9	95.7	100.0	95.6	99.0
9	95.7	98.0	98.4	98.5	98.3	98.8	99.8	100.0	99.5	98.6	97.5	95.8	93.5	92.3	93.4	98.9	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.3	98.2
10	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.4	98.6	99.9	99.5	99.0	98.9	100.0	98.4	99.7
11	99.0	99.5	99.5	99.4	99.1	99.4	99.5	99.6	99.5	99.6	99.9	99.7	98.2	96.3	97.6	94.6	92.1	93.5	93.3	91.5	92.9	94.0	92.2	91.9	99.9	91.5	96.7
12	91.6	93.5	90.8	90.3	89.4	88.3	87.5	85.5	86.9	86.9	85.2	77.4	74.4	72.1	70.5	71.2	71.6	71.7	70.7	68.5	65.3	64.9	64.6	63.7	93.5	63.7	78.4
13	68.2	64.5	63.9	68.6	67.8	65.8	72.0	80.8	85.6	82.0	73.9	77.0	76.3	75.7	76.4	83.6	86.9	91.6	97.3	97.8	95.2	97.7	98.4	98.0	98.4	63.9	81.0
14	91.6	93.3	95.4	94.2	96.2	99.6	99.7	97.6	95.7	95.4	94.9	93.2	89.5	90.0	90.6	87.3	87.2	88.1	84.0	75.6	72.2	73.5	77.4	76.9	99.7	72.2	89.1
15	77.6	76.2	74.8	78.2	76.9	75.6	78.6	74.7	79.5	78.2	79.0	78.6	79.2	81.3	82.2	85.5	84.4	84.4	84.3	83.5	83.9	85.1	83.3	82.9	85.5	74.7	80.3
16	82.2	81.1	77.9	80.0	80.8	83.0	80.6	82.3	82.0	85.0	86.0	85.5	87.1	87.0	87.0	87.5	88.1	86.4	84.6	91.6	95.0	97.6	97.2	93.0	97.6	77.9	86.2
17	93.4	94.5	95.5	96.3	97.1	98.1	99.0	97.6	96.6	94.8	98.7	93.8	88.7	78.2	78.4	84.0	93.2	90.7	93.9	93.5	88.4	84.5	84.3	90.4	99.0	78.2	91.8
18	94.6	96.0	97.7	97.1	98.8	98.8	96.5	99.1	99.0	99.0	98.9	98.0	97.3	96.3	95.7	95.0	93.6	93.0	95.2	95.9	95.6	96.1	98.0	97.5	99.1	93.0	96.8
19	94.8	94.0	92.7	94.0	90.9	89.6	90.2	91.4	90.1	89.7	88.4	88.9	86.9	86.4	85.9	83.8	84.3	84.4	84.2	82.8	81.0	77.9	72.3	62.5	94.8	62.5	86.1
20	59.2	56.9	59.3	64.1	66.4	67.2	68.4	66.5	63.4	63.2	63.5	63.3	60.5	60.0	58.5	59.1	61.0	63.0	64.0	63.3	64.5	66.2	67.0	66.1	68.4	56.9	63.1
21	66.4	67.0	69.1	67.7	65.5	67.7	70.7	71.1	69.4	68.8	70.0	68.2	64.3	61.5	59.7	59.5	59.6	58.9	63.0	63.5	62.5	63.9	63.1	61.4	71.1	58.9	65.1
22	60.3	60.5	58.7	58.4	57.9	62.5	62.2	59.3	58.1	60.1	60.1	63.7	63.5	59.5	59.9	57.4	57.4	59.1	59.7	60.5	60.9	59.4	58.7	57.6	63.7	57.4	59.8
23	58.4	58.8	58.6	56.3	58.7	59.2	59.5	60.4	60.4	60.7	61.1	58.8	60.5	60.1	59.7	58.5	54.9	59.3	58.2	58.2	53.7	57.8	61.5	53.5	61.5	53.5	58.6
24	53.3	54.8	55.5	48.0	61.4	65.2	67.0	71.0	73.6	76.3	75.1	71.7	66.5	57.2	54.7	55.1	55.7	53.1	54.3	56.0	57.8	58.7	55.7	52.3	76.3	48.0	60.4
25	51.5	50.4	47.5	45.1	45.0	46.5	46.8	50.0	46.4	43.6	42.4	41.8	43.4	47.2	63.8	72.7	76.6	78.7	78.1	79.6	83.2	87.0	91.1	92.9	92.9	41.8	60.5
26	92.7	92.8	95.0	95.8	95.1	94.0	93.5	92.0	89.4	89.7	90.9	91.8	86.6	83.0	83.0	81.8	82.0	84.3	88.5	90.2	88.5	91.3	82.7	79.3	95.8	79.3	88.9
27	70.5	73.0	73.6	77.3	75.5	74.9	72.8	67.7	65.2	66.4	63.7	62.0	63.8	58.7	55.3	56.0	58.9	57.5	57.3	50.6	51.6	53.2	55.3	59.8	77.3	50.6	63.4
28	58.1	57.5	54.2	61.0	63.4	62.9	64.4	63.9	65.8	66.0	68.2	69.2	68.0	64.6	65.0	65.1	64.3	64.4	65.8	66.0	66.6	67.1	66.3	67.1	69.2	54.2	64.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**42.4**	**42.7**	**43.0**	**43.5**	**45.0**	**46.5**	**46.8**	**45.2**	**46.4**	**43.6**	**42.4**	**41.8**	**43.4**	**47.2**	**54.7**	**54.2**	54.9	53.1	**54.3**	**50.6**	**51.6**	**53.2**	**55.3**	**49.8**		**41.8**	
Avg.	**79.4**	**79.9**	**79.5**	**79.6**	**80.1**	**80.8**	**81.5**	**81.5**	**81.4**	**81.5**	**81.3**	**80.1**	**79.2**	**77.7**	**77.8**	**78.6**	**79.0**	**79.5**	**79.7**	**79.9**	**79.7**	**80.8**	**80.7**	**79.1**			**79.9**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	67.2	66.2	66.4	66.8	66.8	67.5	67.3	66.5	67.1	63.9	61.8	60.7	57.5	55.5	53.1	53.0	54.4	55.2	54.9	57.1	58.8	60.3	61.5	60.2	67.5	53.0	61.2
2	60.1	60.2	59.2	59.0	56.4	56.6	57.1	56.5	58.7	57.5	57.0	56.5	54.2	54.3	53.7	52.7	52.2	53.7	56.2	55.0	54.3	54.3	54.8	55.7	60.2	52.2	56.1
3	55.2	54.5	56.1	57.9	57.5	58.3	59.1	59.3	59.7	58.4	58.1	55.9	55.5	53.9	53.7	55.3	55.7	55.9	59.8	58.6	57.4	61.7	59.0	59.5	61.7	53.7	57.3
4	61.7	63.9	63.7	63.0	63.9	64.3	66.1	68.6	68.2	69.0	69.9	69.2	68.6	67.3	66.3	65.8	66.4	67.5	69.3	73.7	75.8	74.5	73.4	72.9	75.8	61.7	68.0
5	72.4	72.6	72.7	72.2	72.1	72.1	71.8	70.9	70.2	68.6	66.3	63.8	62.3	60.9	58.8	58.9	59.1	59.6	59.9	60.8	61.6	62.6	62.8	64.0	72.7	58.8	65.7
6	65.2	64.9	64.7	65.6	66.4	67.5	67.5	67.8	67.7	66.8	64.6	63.2	62.5	61.2	60.1	59.8	59.5	59.7	59.9	60.0	60.0	60.1	59.9	61.6	67.8	59.5	63.2
7	62.4	62.4	62.3	63.0	64.0	63.8	64.1	64.4	66.1	63.9	61.2	59.6	57.9	55.7	53.6	52.6	53.4	54.1	58.8	63.4	64.9	68.0	69.4	69.8	69.8	52.6	61.6
8	71.4	72.6	72.4	72.4	73.9	74.7	74.1	74.8	75.3	74.6	72.3	69.8	69.5	68.6	65.8	63.5	63.1	64.5	67.6	69.2	69.1	69.1	69.8	70.7	75.3	63.1	70.4
9	72.0	72.3	72.0	73.1	74.7	75.2	76.2	75.9	75.0	74.1	73.0	70.9	69.0	67.3	65.5	64.3	64.1	65.5	67.3	68.1	69.2	69.3	68.9	69.8	76.2	64.1	70.5
10	69.5	68.6	68.8	67.5	68.0	68.1	68.5	64.9	65.0	64.4	65.2	65.7	63.9	62.0	61.5	61.0	60.9	61.7	63.0	67.8	69.4	68.5	67.4	68.4	69.5	60.9	65.8
11	70.6	70.2	70.6	70.8	71.0	70.5	70.9	72.3	72.5	71.3	69.7	68.0	65.9	64.2	63.2	62.1	61.9	61.7	63.9	65.4	64.3	63.4	64.5	66.3	72.5	61.7	67.3
12	65.8	66.6	65.2	65.2	66.2	66.3	64.0	62.5	64.7	62.5	62.6	64.8	64.3	60.0	61.5	58.3	57.1	56.8	57.6	56.5	55.5	60.9	63.9	62.3	66.6	55.5	62.1
13	58.7	58.0	59.4	58.4	58.4	58.8	60.2	62.8	65.2	66.1	64.9	64.4	62.0	61.7	60.8	57.7	56.1	54.5	56.1	59.0	59.4	58.9	59.4	59.1	66.1	54.5	60.0
14	59.4	57.4	57.3	57.0	57.0	56.5	56.0	58.0	57.8	54.9	52.0	51.6	50.3	49.4	48.9	50.0	48.9	49.5	50.2	51.4	52.7	55.0	55.3	57.7	59.4	48.9	53.9
15	60.6	61.8	63.3	65.4	67.3	66.5	68.3	67.9	66.6	64.5	62.6	60.9	57.9	55.2	54.1	50.7	50.3	51.8	55.7	58.1	60.7	60.6	63.4	65.1	68.3	50.3	60.8
16	65.3	65.0	65.4	65.5	65.5	65.5	66.3	65.2	64.4	63.1	61.6	59.8	58.2	55.4	53.1	51.3	51.3	54.7	61.3	63.6	64.6	66.0	63.8	61.6	66.3	51.3	61.6
17	62.2	63.0	63.8	65.1	64.0	64.4	65.7	67.0	67.8	68.2	62.9	60.3	60.1	57.3	55.6	52.5	51.9	54.5	57.2	60.1	62.7	64.4	61.6	60.3	68.2	51.9	61.4
18	58.4	57.3	61.4	61.3	62.5	63.2	73.0	75.8	79.5	83.3	77.3	71.7	66.6	60.9	57.7	56.9	57.8	55.2	58.8	64.3	66.2	63.3	68.5	69.3	83.3	55.2	65.4
19	67.9	66.8	68.7	67.6	67.6	69.5	70.3	68.9	68.6	67.9	63.4	59.2	56.7	56.9	54.4	53.6	51.3	50.7	55.3	55.4	59.9	58.3	57.2	60.3	70.3	50.7	61.5
20	59.3	59.0	58.7	56.7	53.9	54.7	56.0	56.5	53.5	49.9	49.0	68.5	86.8	92.3	86.4	85.4	91.1	95.4	95.0	89.9	85.1	81.4	76.8	81.4	95.4	49.0	71.8
21	88.7	89.6	92.0	98.3	99.3	98.9	98.8	98.9	98.7	96.1	96.2	96.3	96.3	96.4	96.4	96.2	95.9	95.7	95.5	94.5	94.0	93.8	91.7	90.5	99.3	88.7	95.4
22	87.8	85.8	83.8	85.3	85.3	87.4	88.1	87.3	85.9	84.6	81.6	80.0	79.4	79.1	78.5	79.1	78.5	75.8	74.3	75.3	76.4	78.0	81.0	80.5	88.1	74.3	81.6
23	79.6	79.1	80.2	79.0	73.7	73.3	77.3	79.1	78.9	79.5	80.2	78.9	75.1	77.7	75.2	72.0	75.0	75.9	76.2	74.1	72.9	71.0	68.1	66.8	80.2	66.8	75.8
24	67.8	66.6	69.7	68.6	70.3	69.2	70.3	69.4	69.1	65.6	64.2	63.9	64.8	65.7	63.9	63.7	63.4	62.5	59.6	60.3	59.1	58.5	57.4	55.5	70.3	55.5	64.5
25	46.0	45.4	52.8	70.5	76.5	80.5	84.8	86.9	89.3	90.0	89.7	90.8	91.0	92.1	92.8	94.1	95.7	94.9	93.1	92.9	88.0	84.4	79.8	78.8	95.7	45.4	82.5
26	77.8	78.1	80.4	86.4	87.6	94.0	97.7	97.2	96.1	95.4	94.9	94.6	94.6	94.4	93.2	92.0	91.6	94.1	92.0	88.0	89.3	91.9	90.3	89.8	97.7	77.8	90.9
27	90.3	88.6	86.4	84.1	80.3	78.9	80.0	78.8	79.8	79.5	79.7	76.4	76.7	74.1	74.6	74.6	73.1	67.1	65.8	65.4	64.3	69.5	71.0	72.5	90.3	64.3	76.3
28	68.4	71.2	69.5	66.0	64.6	65.0	65.9	68.4	73.6	70.0	65.7	65.7	63.5	63.9	64.2	64.0	65.5	65.9	65.7	67.6	66.8	64.4	64.1	62.9	73.6	62.9	66.3
29	59.4	66.3	66.0	65.5	66.7	64.1	66.3	61.5	67.2	67.0	65.6	66.1	57.8	56.1	51.8	55.9	59.0	56.9	60.6	59.0	54.6	51.5	49.4	51.9	67.2	49.4	60.2
30	55.9	59.4	62.2	57.7	58.2	57.6	59.4	61.0	57.5	54.1	55.6	57.8	54.0	52.7	50.3	49.3	48.0	49.2	50.0	47.0	45.6	42.3	45.4	48.7	62.2	42.3	53.3
31	46.4	46.0	44.6	37.9	36.5	31.3	27.4	29.1	28.3	27.1	29.2	28.1	31.1	30.0	34.9	33.6	42.1	45.5	48.8	51.4	60.6	51.6	47.7	56.9	60.6	27.1	39.4
Max.	**90.3**	**89.6**	**92.0**	**98.3**	**99.3**	**98.9**	**98.8**	**98.9**	**98.7**	**96.1**	**96.2**	**96.3**	**96.3**	**96.4**	**96.4**	**96.2**	**95.9**	**95.7**	**95.5**	**94.5**	**94.0**	**93.8**	**91.7**	**90.5**	**99.3**		
Min.	**46.0**	**45.4**	**44.6**	**37.9**	**36.5**	**31.3**	**27.4**	**29.1**	**28.3**	**27.1**	**29.2**	**28.1**	**31.1**	**30.0**	**34.9**	**33.6**	42.1	45.5	**48.8**	**47.0**	**45.6**	**42.3**	**45.4**	**48.7**		**27.1**	
Avg.	**66.2**	**66.4**	**67.1**	**67.5**	**67.6**	**67.9**	**69.0**	**69.2**	**69.6**	**68.4**	**67.0**	**66.6**	**65.6**	**64.6**	**63.3**	**62.6**	**63.0**	**63.4**	**64.8**	**65.6**	**65.9**	**65.7**	**65.4**	**66.2**			**66.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	68.8	74.5	75.5	73.2	71.9	74.3	73.2	72.3	63.4	62.1	54.4	59.0	53.3	51.5	52.8	56.1	61.5	62.2	64.2	67.1	62.7	58.3	56.2	58.2	75.5	51.5	63.6
2	63.9	69.9	68.4	61.2	57.3	59.7	70.0	79.5	81.5	80.4	77.3	75.7	76.8	78.6	80.4	80.9	80.0	80.7	82.2	81.0	77.5	76.4	72.7	72.8	82.2	57.3	74.4
3	76.3	78.9	79.0	79.1	83.1	84.4	85.3	82.7	85.1	85.2	84.5	79.8	76.1	75.7	73.8	74.3	75.0	78.2	82.6	79.2	79.1	81.1	83.1	78.7	85.3	73.8	80.0
4	80.5	79.5	78.0	73.8	72.4	71.3	72.8	73.9	71.0	67.0	65.2	62.2	61.9	59.4	59.8	60.2	60.3	61.9	65.0	63.9	62.0	58.6	54.2	51.2	80.5	51.2	66.1
5	49.8	50.8	52.1	54.1	60.8	59.9	63.4	59.0	61.5	62.6	64.6	64.0	64.0	64.5	63.0	59.2	59.3	88.9	89.2	94.6	96.8	96.9	95.3	97.2	97.2	49.8	69.7
6	95.9	95.9	91.9	92.7	89.2	88.8	83.3	81.8	78.1	79.4	75.3	69.7	64.0	57.9	55.0	56.1	56.2	72.3	90.2	97.2	94.5	83.3	78.3	78.9	97.2	55.0	79.4
7	82.4	95.2	99.3	99.9	100.0	100.0	100.0	100.0	100.0	98.9	95.8	96.5	95.8	93.1	89.3	85.2	84.7	84.0	87.0	90.5	90.2	80.6	79.2	81.3	100.0	79.2	92.0
8	80.7	82.2	82.3	81.9	78.9	75.7	70.7	71.1	71.3	69.9	67.5	64.6	64.8	64.4	67.0	66.3	74.0	71.8	76.1	80.1	84.1	87.1	95.9	99.3	99.3	64.4	76.2
9	96.2	96.7	96.6	93.9	91.8	90.7	97.5	100.0	100.0	99.9	97.6	94.7	95.3	93.9	88.5	90.5	91.6	93.0	92.2	92.9	94.8	97.0	98.6	98.4	100.0	88.5	95.1
10	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8	87.9	83.1	78.2	79.8	79.3	77.9	70.8	79.1	85.4	90.0	88.1	88.6	90.8	100.0	70.8	90.7
11	96.3	94.0	92.2	90.1	90.7	89.9	88.4	86.8	85.8	83.8	78.3	76.3	74.8	73.8	75.6	75.4	77.0	76.8	75.6	80.6	84.2	82.1	82.7	80.0	96.3	73.8	83.0
12	79.0	78.5	71.5	73.1	74.4	76.6	77.4	74.5	73.0	67.1	65.5	63.1	60.4	52.7	52.7	51.6	54.6	54.4	54.4	63.7	63.6	61.9	65.1	73.0	79.0	51.6	65.9
13	77.5	78.7	80.2	84.3	88.0	89.8	91.6	91.7	90.3	91.1	91.2	91.7	88.1	82.8	79.0	75.2	69.3	70.3	73.9	83.6	94.7	99.4	98.3	97.0	99.4	69.3	85.7
14	93.8	94.4	93.4	93.6	94.0	95.8	100.0	100.0	100.0	99.9	99.8	94.2	85.6	77.4	76.8	79.9	76.8	79.7	83.9	89.9	91.1	96.0	98.5	99.7	100.0	76.8	91.4
15	97.3	94.4	94.5	93.1	95.7	91.7	93.5	90.5	84.9	82.4	76.7	76.9	75.2	74.9	72.2	74.5	68.4	68.5	80.4	82.5	83.6	83.0	80.1	81.1	97.3	68.4	83.2
16	77.7	75.6	77.3	75.8	79.9	82.9	85.2	83.2	81.7	75.2	72.0	75.2	75.9	97.0	100.0	100.0	99.4	96.2	94.4	93.9	95.8	96.9	97.6	95.3	100.0	72.0	86.8
17	93.1	92.0	93.5	88.3	85.0	74.0	72.1	82.0	87.4	96.2	98.7	99.2	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	72.1	94.2
18	100.0	100.0	100.0	100.0	99.0	96.2	96.8	96.7	95.4	96.3	96.3	93.0	91.2	92.3	95.7	97.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.2	97.8
19	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.8	99.9	99.2	98.6	100.0	100.0	100.0	100.0	99.7	99.0	100.0	100.0	100.0	98.6	99.8
20	100.0	99.7	99.9	98.6	98.2	99.5	93.7	92.2	92.1	87.4	86.4	85.2	82.1	81.0	80.6	81.1	80.9	83.8	80.8	81.2	81.5	83.3	82.7	77.0	100.0	77.0	87.9
21	71.9	69.3	69.3	68.3	69.2	69.3	72.8	78.1	74.0	74.9	75.8	73.4	68.2	68.2	75.3	72.6	73.9	75.3	82.5	85.2	86.6	89.5	85.2	82.2	89.5	68.2	75.5
22	80.3	78.7	81.8	77.7	79.5	71.4	65.9	72.0	75.7	79.5	75.1	69.9	63.4	64.8	69.8	68.7	72.9	78.0	84.6	84.7	83.0	81.3	80.2	78.5	84.7	63.4	75.7
23	79.0	74.2	70.8	72.3	79.9	79.5	77.8	77.2	75.1	72.9	69.0	61.3	63.0	63.2	58.2	73.9	77.0	74.9	88.7	87.8	90.6	95.1	95.8	95.4	95.8	58.2	77.2
24	96.3	93.4	90.6	86.2	85.4	85.6	83.3	80.5	78.7	74.8	69.1	60.0	62.2	64.8	59.4	58.4	61.5	62.3	67.7	77.8	86.9	89.2	93.2	92.5	96.3	58.4	77.5
25	89.8	87.7	86.9	87.0	87.9	85.9	84.3	81.3	78.0	76.5	71.6	77.0	83.4	77.6	74.7	74.3	73.5	71.7	74.7	77.9	78.2	76.0	76.8	77.4	89.8	71.6	79.6
26	77.6	72.7	72.4	71.5	69.3	73.0	77.7	69.6	64.2	59.2	54.9	46.2	41.3	36.2	36.0	40.7	38.3	39.3	39.2	40.3	43.6	51.1	52.8	48.6	77.7	36.0	54.8
27	58.8	56.2	61.9	70.0	67.7	67.7	69.9	68.7	69.7	66.4	61.4	55.0	55.2	57.6	59.1	57.4	68.4	78.9	82.4	88.4	91.7	94.1	97.6	98.9	98.9	55.0	71.0
28	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.1	86.3	73.5	68.7	66.7	66.2	70.3	69.6	74.8	83.9	89.2	88.4	89.5	100.0	66.2	88.4
29	87.3	84.5	85.4	86.2	85.5	85.8	82.2	74.2	71.2	69.7	65.2	59.6	51.8	48.2	47.1	40.8	40.9	45.7	48.0	52.7	66.5	77.3	84.4	87.6	87.6	40.8	67.8
30	90.4	93.1	94.3	94.5	93.9	85.0	83.7	79.5	72.9	59.4	44.9	38.6	39.0	37.1	35.3	38.9	40.8	41.0	44.4	48.4	51.8	52.1	52.0	53.5	94.5	35.3	61.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.8**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**49.8**	**50.8**	**52.1**	**54.1**	**57.3**	**59.7**	**63.4**	**59.0**	**61.5**	**59.2**	**44.9**	**38.6**	**39.0**	**36.2**	**35.3**	**38.9**	**38.3**	**39.3**	**39.2**	**40.3**	**43.6**	**51.1**	**52.0**	**48.6**		**35.3**	
Avg.	**84.6**	**84.7**	**84.6**	**84.0**	**84.3**	**83.5**	**83.7**	**83.3**	**82.1**	**80.6**	**77.8**	**74.9**	**72.7**	**71.3**	**70.8**	**71.1**	**72.0**	**74.4**	**77.8**	**80.8**	**83.0**	**83.5**	**83.8**	**83.8**			**79.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	61.6	63.8	66.5	73.0	85.7	84.7	83.7	77.3	74.2	74.1	74.2	71.2	69.0	63.5	62.2	73.9	77.2	77.4	85.9	90.9	92.4	94.7	95.8	88.9	95.8	61.6	77.6
2	85.3	85.2	85.5	88.2	96.1	96.2	93.1	92.5	99.8	97.6	92.5	76.1	78.0	70.6	61.0	64.0	65.5	67.7	68.5	73.2	76.5	79.3	81.5	80.9	99.8	61.0	81.5
3	80.1	78.5	77.8	76.1	78.2	78.8	77.5	78.2	77.1	70.0	64.5	61.1	54.5	48.3	45.3	41.0	57.7	69.6	67.3	76.3	81.3	80.4	77.6	79.6	81.3	41.0	69.9
4	81.3	85.9	86.8	85.6	83.5	86.1	89.2	91.9	86.9	84.5	81.1	78.8	74.8	69.2	61.2	56.4	56.4	58.2	64.5	68.2	74.0	80.9	89.8	93.2	93.2	56.4	77.8
5	90.2	94.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	97.9	92.1	83.1	74.4	71.1	67.3	69.0	67.0	71.1	75.8	75.5	87.5	83.6	100.0	67.0	87.5
6	74.6	69.4	66.0	70.1	74.4	74.7	72.9	77.9	85.3	80.8	75.2	63.9	57.3	55.2	55.9	57.2	59.3	64.4	66.9	69.0	71.5	72.4	74.3	76.5	85.3	55.2	69.4
7	74.5	74.9	77.4	79.9	81.4	82.8	79.2	76.8	71.8	68.4	67.5	65.2	60.6	56.0	52.3	55.5	73.8	81.0	82.7	85.6	90.3	95.8	99.1	100.0	100.0	52.3	76.4
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	93.4	82.8	74.4	67.9	67.0	66.1	68.4	69.3	73.5	84.9	88.4	90.4	100.0	66.1	88.6
9	90.7	91.5	98.1	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	97.3	91.4	87.7	84.9	88.0	91.7	96.1	96.4	96.2	100.0	84.9	96.2
10	96.7	95.6	95.8	96.1	94.4	90.5	89.2	92.4	90.2	82.9	80.3	77.9	74.0	66.8	62.3	62.1	64.8	67.6	66.3	68.0	79.2	81.9	86.8	88.2	96.7	62.1	81.2
11	87.8	82.1	84.4	83.9	82.1	83.8	81.8	77.6	71.0	61.4	57.4	53.9	53.3	52.8	52.5	52.2	55.4	57.7	62.1	67.3	75.1	83.8	89.6	92.1	92.1	52.2	70.9
12	91.0	90.2	85.7	86.2	87.9	90.7	87.7	84.0	76.2	67.0	63.9	61.6	61.8	62.5	64.1	60.8	59.7	63.9	66.5	77.4	83.4	91.3	91.6	92.2	92.2	59.7	77.0
13	91.6	94.2	95.1	94.9	95.2	95.8	97.5	97.2	95.6	93.1	90.7	93.8	93.6	92.1	89.8	88.4	86.9	83.3	89.8	91.6	89.8	91.0	91.0	91.6	97.5	83.3	92.2
14	79.5	83.7	79.3	82.2	74.0	75.0	73.2	71.8	71.0	68.9	68.1	65.0	84.9	78.5	78.0	86.1	84.6	78.3	78.1	82.7	86.3	89.4	89.3	90.5	90.5	65.0	79.1
15	90.2	91.1	93.9	93.6	93.2	90.2	86.6	81.5	79.1	77.9	76.1	67.0	67.5	78.0	74.8	73.1	70.6	69.6	67.6	65.7	64.3	68.2	75.1	80.4	93.9	64.3	78.1
16	84.0	84.6	81.9	80.2	79.3	76.2	71.5	64.5	59.6	54.0	52.0	50.4	51.1	54.7	55.2	52.4	55.0	61.3	66.8	83.2	91.7	93.7	94.3	94.4	94.4	50.4	70.5
17	93.5	95.6	97.1	97.5	95.7	94.9	95.3	93.7	92.9	84.0	67.2	58.6	61.6	62.3	62.0	60.9	65.2	65.6	71.6	78.1	83.7	87.0	89.6	91.3	97.5	58.6	81.0
18	90.8	90.5	89.1	90.6	90.8	88.2	89.6	86.4	75.3	64.8	58.4	55.7	55.7	54.7	52.3	49.7	47.6	46.9	49.0	52.2	55.9	57.2	56.3	56.3	90.8	46.9	66.8
19	57.9	63.9	71.0	75.6	79.8	80.2	78.5	71.1	64.5	64.3	63.5	68.4	70.8	61.5	57.5	55.8	57.4	58.4	60.4	63.7	70.0	75.0	76.3	80.0	80.2	55.8	67.7
20	84.3	87.1	95.9	96.5	87.2	86.5	82.6	81.6	76.9	79.5	73.1	62.0	60.6	59.0	59.2	55.9	54.3	51.4	54.8	60.2	66.1	75.1	79.0	78.4	96.5	51.4	72.8
21	72.2	75.4	74.4	69.8	67.6	66.8	64.6	63.3	59.3	49.8	45.2	43.8	48.8	40.6	41.8	45.2	45.9	44.6	43.5	47.2	53.7	59.1	60.9	62.2	75.4	40.6	56.1
22	63.7	67.5	71.6	69.2	68.9	67.4	64.2	65.2	58.9	75.5	79.5	59.6	46.0	66.0	65.0	54.5	46.3	52.7	63.8	74.4	76.9	72.1	72.6	76.2	79.5	46.0	65.7
23	76.4	75.4	69.2	69.0	67.9	63.6	62.0	61.6	64.6	62.6	58.5	62.2	63.3	79.1	87.3	87.5	74.8	73.0	80.2	84.9	86.7	91.7	93.4	95.9	95.9	58.5	74.6
24	97.9	98.7	98.6	97.7	97.9	97.9	96.9	95.0	89.7	88.7	89.9	91.7	85.7	83.5	87.1	97.1	96.3	91.8	83.8	89.5	95.3	93.6	98.5	99.3	99.3	83.5	93.4
25	99.5	99.7	94.8	95.2	93.9	89.0	88.4	96.8	99.0	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.5	99.4	99.4	99.4	99.5	99.0	98.9	99.7	88.4	97.8
26	99.0	98.7	99.3	99.9	100.0	100.0	100.0	100.0	100.0	99.9	98.1	91.4	88.5	87.5	87.4	90.3	88.3	87.4	87.6	86.1	85.3	88.7	90.1	92.0	100.0	85.3	93.6
27	94.5	97.5	98.9	99.5	99.9	100.0	100.0	100.0	94.6	80.6	77.2	75.4	72.8	70.0	70.3	72.7	71.6	70.9	71.0	72.9	80.9	90.8	93.6	94.9	100.0	70.0	85.4
28	93.5	93.5	91.9	92.1	94.5	93.8	90.4	89.6	81.5	72.6	67.0	68.8	69.9	66.0	70.0	71.6	70.4	74.1	74.4	76.4	81.4	88.3	91.4	87.1	94.5	66.0	81.3
29	85.1	85.6	87.5	86.8	88.0	89.0	87.1	81.6	73.6	65.0	57.9	50.2	52.7	46.8	50.8	49.5	50.6	50.4	55.8	61.2	69.7	77.0	77.5	78.0	89.0	46.8	69.1
30	76.9	77.1	76.2	81.4	87.0	88.6	85.6	83.7	78.8	71.5	71.0	63.7	65.5	64.1	63.2	67.8	73.3	77.9	79.9	83.4	85.7	91.1	95.2	97.2	97.2	63.2	78.6
31	98.0	95.4	89.8	84.0	85.4	86.3	86.6	85.7	92.1	88.2	76.3	76.0	69.4	63.4	71.1	66.1	59.9	61.7	66.2	73.3	76.3	79.9	83.3	82.6	98.0	59.9	79.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.7**	**99.7**	**99.5**	**99.4**	**99.4**	**99.4**	**99.5**	**99.1**	**100.0**	**100.0**		
Min.	**57.9**	**63.8**	**66.0**	**69.0**	**67.6**	**63.6**	**62.0**	**61.6**	**58.9**	**49.8**	**45.2**	**43.8**	**46.0**	**40.6**	**41.8**	**41.0**	45.9	44.6	**43.5**	**47.2**	**53.7**	**57.2**	**56.3**	**56.3**		**40.6**	
Avg.	**85.2**	**86.0**	**86.4**	**86.9**	**87.4**	**87.0**	**85.6**	**84.5**	**81.9**	**78.3**	**75.0**	**71.3**	**70.2**	**68.3**	**67.4**	**67.2**	**67.6**	**68.7**	**70.8**	**75.2**	**79.5**	**83.4**	**86.0**	**86.7**			**78.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	86.1	93.9	95.2	95.5	92.3	91.5	88.6	80.3	74.1	72.3	69.1	69.8	65.5	71.5	64.0	66.7	69.1	78.1	82.4	80.9	83.4	90.4	91.4	91.0	95.5	64.0	81.0
2	91.2	89.9	92.1	94.4	93.0	92.9	91.8	88.6	87.6	82.3	78.3	72.3	66.4	61.8	59.3	57.5	56.7	55.6	56.4	62.8	70.5	74.8	82.9	81.0	94.4	55.6	76.7
3	79.5	87.6	91.3	89.2	87.2	89.7	89.7	86.6	81.1	79.6	76.5	71.0	65.1	62.8	58.7	53.5	49.5	51.2	52.5	54.6	55.3	59.2	64.0	72.3	91.3	49.5	71.1
4	75.3	79.3	82.3	81.3	82.3	82.0	82.9	87.6	92.1	93.0	94.1	94.7	92.2	88.0	93.9	97.0	95.0	97.2	98.6	99.1	99.3	99.5	99.8	99.9	99.9	75.3	91.1
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.6	98.0	86.5	77.5	76.1	76.2	73.1	73.2	76.9	81.5	78.5	79.8	82.3	83.0	86.9	100.0	73.1	88.7
6	89.4	89.8	88.3	87.2	87.0	88.7	86.3	78.7	71.1	60.4	50.1	63.0	64.1	67.6	69.6	71.7	73.8	74.3	74.4	82.5	87.5	92.3	92.8	91.6	92.8	50.1	78.4
7	91.8	84.7	82.2	89.5	86.9	67.9	73.7	69.1	56.9	45.9	46.1	48.8	49.1	56.7	60.0	66.5	70.8	70.2	72.8	72.6	77.6	83.9	90.5	90.8	91.8	45.9	71.0
8	88.9	89.3	87.8	85.1	85.9	80.3	79.4	76.8	75.4	69.3	64.5	58.9	54.3	65.3	73.1	71.9	64.0	76.6	73.5	74.1	79.7	85.8	88.2	91.5	91.5	54.3	76.7
9	95.0	93.6	93.3	94.7	95.3	92.1	93.8	87.7	82.8	75.7	71.8	65.6	64.7	72.3	75.5	72.3	75.5	80.0	78.9	74.8	84.6	89.2	86.5	82.9	95.3	64.7	82.4
10	80.9	79.8	78.6	79.6	82.1	74.8	75.8	69.9	67.9	64.8	57.1	49.0	45.7	42.3	39.3	37.1	35.7	37.0	37.0	47.9	68.8	86.3	94.0	95.9	95.9	35.7	63.6
11	97.9	99.1	99.6	99.9	100.0	100.0	100.0	99.9	99.8	97.8	91.5	82.0	73.0	66.0	65.5	66.0	70.7	75.7	78.8	85.2	91.6	94.4	96.2	98.7	100.0	65.5	88.7
12	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.6	99.1	91.4	84.3	81.1	80.7	79.9	82.3	89.6	94.3	95.1	100.0	79.9	94.9
13	98.3	99.2	97.5	90.2	92.3	94.5	90.7	83.8	81.1	78.8	74.5	69.9	74.2	73.4	69.1	64.3	79.8	84.8	81.1	82.0	83.3	81.1	81.8	81.5	99.2	64.3	82.8
14	83.6	83.2	86.0	82.9	83.5	83.5	83.0	78.1	77.1	70.5	65.8	60.8	62.5	64.1	75.5	78.9	76.7	78.5	77.0	73.9	75.4	75.5	72.0	71.9	86.0	60.8	75.8
15	76.7	77.7	81.0	80.4	81.5	82.4	79.8	75.2	70.3	62.4	56.0	51.2	47.2	41.8	36.0	34.3	32.2	32.8	32.8	33.8	37.9	41.6	46.8	55.1	82.4	32.2	56.1
16	55.5	60.6	67.8	72.6	70.8	68.6	69.0	65.5	61.9	57.3	54.2	49.6	47.4	48.4	47.0	46.6	48.8	51.2	64.4	67.9	73.8	78.5	81.8	92.5	92.5	46.6	62.6
17	98.2	99.0	99.5	99.7	99.7	99.9	99.6	99.2	96.4	91.7	85.0	86.2	85.1	79.6	76.0	68.3	66.4	84.8	90.6	87.9	86.9	89.2	90.0	93.6	99.9	66.4	89.7
18	92.2	93.7	92.7	93.4	95.8	97.5	95.0	91.2	87.2	83.3	83.7	82.1	75.3	65.3	62.9	60.1	62.5	61.1	68.0	69.4	81.8	86.8	85.0	86.7	97.5	60.1	81.4
19	86.7	86.0	90.6	89.5	88.9	89.9	89.6	86.2	80.8	74.8	68.4	63.8	58.6	53.7	48.4	45.0	42.8	41.0	41.4	45.1	46.5	49.7	53.5	56.7	90.6	41.0	65.7
20	63.5	66.1	69.7	68.8	71.2	69.2	66.1	63.4	59.2	52.9	47.6	43.8	41.3	38.8	36.2	31.1	31.4	31.6	31.6	36.8	43.0	48.6	54.7	57.0	71.2	31.1	51.0
21	56.9	58.8	64.4	61.0	65.6	70.9	70.4	66.7	63.6	61.1	57.3	55.6	52.2	48.0	46.0	43.5	42.5	42.4	60.6	68.2	79.1	83.2	91.1	97.6	97.6	42.4	62.8
22	98.9	99.2	99.5	99.7	99.9	100.0	100.0	99.9	99.9	99.9	99.9	99.9	99.9	100.0	99.9	99.9	99.9	99.7	99.7	99.8	99.8	99.9	99.9	100.0	100.0	98.9	99.8
23	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.4	99.2	98.6	95.4	92.8	94.7	95.6	100.0	92.8	99.0
24	95.3	92.9	94.2	93.8	92.7	91.2	89.5	87.3	90.1	88.1	85.0	87.3	91.0	90.6	90.5	87.6	89.5	88.2	86.1	85.7	87.3	88.6	88.1	89.0	95.3	85.0	89.6
25	91.6	94.0	93.9	95.3	95.9	94.9	94.0	91.5	84.6	79.3	80.1	81.1	81.9	79.7	73.9	75.0	74.6	75.0	76.8	76.3	79.5	85.0	88.4	88.8	95.9	73.9	84.6
26	90.2	91.9	91.0	89.4	87.2	87.1	86.9	81.9	76.8	72.5	67.4	63.0	57.6	53.4	50.1	50.0	49.6	50.7	52.1	56.7	65.6	76.7	80.7	80.0	91.9	49.6	71.2
27	82.5	85.4	88.6	89.0	89.5	89.3	87.0	76.9	68.3	63.0	65.9	65.1	56.9	51.7	46.9	46.2	47.0	42.7	50.9	56.5	64.7	77.5	83.4	86.0	89.5	42.7	69.2
28	90.3	92.7	97.2	98.1	94.6	96.6	98.5	99.0	96.5	91.7	90.8	94.8	93.7	87.5	80.3	81.0	80.4	78.3	72.7	71.4	74.9	76.9	78.6	78.1	99.0	71.4	87.3
29	76.9	76.0	76.1	79.7	81.3	82.1	80.3	74.1	72.7	73.4	68.8	66.1	64.8	63.4	65.8	64.4	68.8	70.2	69.8	74.3	80.9	88.2	97.5	97.7	97.7	63.4	75.6
30	93.9	94.9	98.3	99.1	99.4	99.5	99.6	99.7	99.8	99.8	99.8	99.7	94.9	84.4	76.3	72.7	72.3	74.0	74.3	79.1	92.9	90.0	93.7	93.7	99.8	72.3	90.9
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**99.9**	**99.7**	**99.7**	**99.8**	**99.8**	**99.9**	**99.9**	**100.0**	**100.0**		
Min.	**55.5**	**58.8**	**64.4**	**61.0**	**65.6**	**67.9**	**66.1**	**63.4**	**56.9**	**45.9**	**46.1**	**43.8**	**41.3**	**38.8**	**36.0**	**31.1**	31.4	31.6	**31.6**	**33.8**	**37.9**	**41.6**	**46.8**	**55.1**		**31.1**	
Avg.	**86.9**	**87.9**	**89.3**	**89.3**	**89.4**	**88.6**	**88.0**	**84.8**	**81.8**	**78.0**	**74.9**	**72.7**	**70.1**	**68.5**	**67.2**	**65.8**	**66.1**	**68.0**	**69.9**	**71.9**	**77.0**	**81.2**	**84.2**	**86.0**			**78.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	94.1	90.0	89.4	89.5	94.1	92.8	91.7	88.7	85.5	75.4	70.7	66.3	62.0	63.3	64.0	63.4	63.5	65.3	66.1	68.8	73.9	82.8	86.2	86.5	94.1	62.0	78.1
2	89.0	92.7	97.4	99.0	98.7	96.2	94.4	89.9	81.2	68.7	62.8	61.1	59.4	60.1	57.0	59.1	59.1	59.1	57.8	60.2	70.8	75.9	82.7	85.4	99.0	57.0	75.7
3	89.6	92.9	90.5	91.1	89.7	88.5	84.2	81.2	80.1	78.1	72.9	69.9	67.4	63.7	60.3	57.3	57.8	60.2	77.7	79.9	83.3	87.0	87.4	86.0	92.9	57.3	78.2
4	90.7	97.8	99.1	99.3	99.5	99.5	99.5	98.3	94.8	91.0	84.6	80.4	81.5	82.7	77.9	73.6	80.1	86.4	86.5	83.3	87.3	86.1	92.5	94.4	99.5	73.6	89.5
5	97.1	98.5	96.8	94.1	92.6	88.3	88.1	85.9	83.3	80.0	74.6	69.3	70.8	71.6	71.4	75.9	85.8	87.3	97.1	99.0	99.3	99.4	99.5	99.3	99.5	69.3	87.7
6	92.8	90.7	89.8	88.2	87.1	87.2	87.4	87.3	87.6	86.8	86.8	85.4	78.9	76.3	72.4	67.7	63.2	61.8	58.9	58.5	62.8	64.2	73.6	71.1	92.8	58.5	77.8
7	74.4	73.2	71.9	73.4	74.1	72.7	74.3	69.2	58.9	56.3	55.3	55.7	56.0	55.1	52.6	52.3	52.4	54.7	60.2	71.0	74.5	79.5	81.3	85.8	85.8	52.3	66.0
8	87.2	89.4	92.2	96.8	98.7	97.6	99.0	99.4	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.4	95.5	87.2	83.6	82.0	84.0	85.2	85.6	87.6	99.7	82.0	93.7
9	88.8	89.9	90.9	90.7	90.8	85.8	84.5	83.3	79.9	75.8	72.0	70.0	66.1	67.2	58.2	62.5	65.2	63.1	70.3	71.7	76.2	80.1	80.5	84.5	90.9	58.2	77.0
10	85.8	86.7	89.5	88.4	84.8	71.6	73.7	67.7	63.1	60.8	62.2	56.0	66.8	68.6	65.6	62.8	72.6	76.1	79.9	86.4	89.5	90.1	93.2	94.4	94.4	56.0	76.5
11	94.7	92.0	90.3	90.9	89.3	90.5	92.4	90.6	80.9	73.3	63.5	56.6	54.6	53.3	54.2	53.7	49.8	48.0	48.6	56.6	63.0	71.8	75.2	77.8	94.7	48.0	71.3
12	84.1	86.1	81.8	85.1	85.6	81.3	80.8	77.3	71.3	66.6	63.4	62.9	59.0	63.7	89.1	92.1	96.7	98.3	96.4	95.6	97.5	96.0	95.7	98.9	98.9	59.0	83.6
13	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.8	99.8	99.4	98.0	94.6	90.3	92.5	94.0	95.1	96.2	98.5	99.3	99.9	90.3	98.1
14	99.4	98.5	96.9	97.1	98.2	99.0	99.5	99.6	99.2	96.9	90.2	86.2	84.2	82.0	85.0	86.7	87.6	89.2	91.2	94.8	94.8	96.0	96.7	96.7	99.6	82.0	93.6
15	98.2	98.6	98.1	98.6	98.9	99.4	99.5	98.4	96.5	94.7	83.8	79.9	75.5	72.2	70.6	68.6	69.2	67.3	67.4	71.3	78.3	82.2	84.7	88.7	99.5	67.3	85.0
16	91.1	91.3	92.6	93.4	95.9	95.0	95.3	92.7	89.8	86.0	78.4	70.6	64.7	63.5	62.3	62.1	61.4	58.9	59.0	61.6	69.0	73.8	81.8	87.2	95.9	58.9	78.2
17	88.4	85.2	88.3	88.2	89.1	90.4	86.2	81.6	77.1	71.2	63.7	61.3	63.9	65.8	60.2	54.1	48.7	64.4	74.2	82.0	85.6	91.2	94.6	94.2	94.6	48.7	77.1
18	94.6	94.8	95.1	96.4	96.8	97.7	96.0	91.9	88.2	83.8	84.5	76.0	68.5	71.6	87.4	81.1	84.1	91.7	91.2	85.6	80.9	79.2	79.8	85.6	97.7	68.5	86.8
19	85.3	87.9	92.1	91.1	93.1	99.1	99.4	99.6	95.9	82.0	77.9	70.0	62.3	65.3	68.1	71.6	69.0	73.0	69.5	70.9	75.2	75.4	74.1	68.4	99.6	62.3	79.8
20	70.5	70.4	73.5	76.9	73.7	76.3	75.5	81.7	82.7	85.0	83.7	81.8	73.4	66.3	63.7	64.9	67.7	69.0	74.2	74.2	86.1	94.4	96.4	98.2	98.2	63.7	77.5
21	99.0	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.8	98.0	94.1	91.6	87.6	84.9	84.0	85.7	92.1	93.4	95.5	96.8	98.0	98.2	99.1	99.8	84.0	95.6
22	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.8	99.8	99.7	99.6	98.3	97.2	96.9	96.1	96.8	98.6	99.1	99.5	99.6	99.7	99.8	99.9	96.1	99.1
23	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.8	99.8	99.8	99.6	99.6	99.0	99.1	98.7	96.4	96.5	94.7	96.9	96.3	96.8	97.8	99.9	94.7	98.7
24	98.8	96.0	94.8	94.2	95.0	93.8	92.9	93.5	87.4	82.3	84.6	85.8	87.5	88.1	87.2	84.6	81.8	83.1	83.6	80.3	81.9	77.3	73.9	77.3	98.8	73.9	86.9
25	78.3	76.8	74.8	71.1	70.5	70.4	68.3	64.0	64.4	62.1	62.1	59.8	55.6	55.1	55.7	57.3	61.3	59.6	59.0	61.5	70.7	79.0	72.0	77.1	79.0	55.1	66.1
26	76.3	80.7	80.4	79.7	81.4	84.0	79.8	78.7	78.0	76.4	67.5	56.5	48.7	44.0	52.9	63.0	57.3	52.0	53.4	55.6	56.2	60.1	63.0	72.8	84.0	44.0	66.6
27	68.7	65.9	68.7	76.7	75.6	74.8	77.4	76.6	78.1	73.8	68.7	69.0	65.3	61.2	59.3	54.8	49.9	54.7	58.4	68.1	73.6	83.0	79.9	71.7	83.0	49.9	68.9
28	74.9	80.1	96.9	98.7	99.1	99.3	99.5	99.6	99.6	99.6	99.7	96.7	81.9	75.5	71.7	70.0	70.5	71.0	72.6	78.4	88.2	95.4	98.7	99.1	99.7	70.0	88.2
29	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.4	97.6	89.3	81.1	72.4	66.5	65.2	59.7	58.4	56.7	58.4	60.7	69.2	68.2	75.4	93.0	92.6	99.6	56.7	81.7
30	83.5	81.2	90.4	98.6	99.2	99.3	99.5	99.5	99.3	99.3	99.4	99.5	97.8	94.4	85.3	81.4	80.4	81.9	86.6	86.4	88.9	91.2	93.8	95.3	99.5	80.4	92.2
31	96.0	97.9	99.1	99.0	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.6	98.0	89.5	85.2	81.6	82.3	81.8	86.7	87.8	87.2	90.1	89.7	90.4	99.7	81.6	93.3
Max.	**99.8**	**99.8**	**99.9**	**99.9**	**99.9**	**99.9**	**99.9**	**99.9**	**99.9**	**99.9**	**99.9**	**99.9**	**99.8**	**99.8**	**99.7**	**99.4**	**98.7**	**98.3**	**98.6**	**99.1**	**99.5**	**99.6**	**99.7**	**99.8**	**99.9**		
Min.	**68.7**	**65.9**	**68.7**	**71.1**	**70.5**	**70.4**	**68.3**	**64.0**	**58.9**	**56.3**	**55.3**	**55.7**	**48.7**	**44.0**	**52.6**	**52.3**	48.7	48.0	**48.6**	**55.6**	**56.2**	**60.1**	**63.0**	**68.4**		**44.0**	
Avg.	**89.3**	**89.8**	**90.9**	**91.8**	**91.9**	**91.2**	**90.9**	**89.5**	**87.1**	**83.7**	**80.4**	**77.2**	**74.4**	**73.2**	**72.8**	**72.2**	**72.4**	**73.5**	**75.9**	**78.2**	**81.8**	**84.9**	**87.1**	**88.5**			**82.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

August 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	90.7	91.1	91.4	91.7	92.7	95.8	95.5	93.2	92.0	91.4	87.3	84.1	86.5	84.5	88.3	86.5	90.5	94.7	91.4	88.6	89.7	92.0	90.9	90.9	95.8	84.1	90.5
2	91.4	91.8	92.1	92.1	91.7	90.3	90.8	94.7	95.3	94.1	97.1	97.2	97.9	97.1	95.4	96.6	98.1	97.4	95.5	93.1	91.0	92.3	92.6	94.4	98.1	90.3	94.2
3	95.9	95.1	96.1	97.6	98.1	98.8	99.2	98.5	97.2	96.3	95.3	95.4	92.7	91.9	88.3	86.0	86.5	87.6	90.8	94.4	97.5	98.7	98.9	98.8	99.2	86.0	94.8
4	98.9	98.6	98.8	99.0	99.1	99.2	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.6	98.5	96.9	96.5	95.9	95.8	95.9	94.1	99.7	94.1	98.4
5	93.3	93.3	94.3	98.4	99.3	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.8	93.3	98.9
6	99.8	99.8	99.8	99.9	99.8	97.2	90.1	85.2	83.7	77.5	77.0	72.5	69.2	62.6	60.8	65.2	66.5	64.8	66.7	68.0	76.2	79.2	83.3	87.4	99.9	60.8	80.5
7	88.3	89.3	87.4	86.8	88.6	92.3	92.7	90.7	84.3	78.2	70.0	68.5	65.6	61.9	60.1	60.0	58.4	57.4	60.8	63.6	68.6	72.9	79.4	84.6	92.7	57.4	75.4
8	86.7	90.4	89.3	92.7	93.8	95.2	94.9	95.0	92.4	86.0	76.8	71.3	63.2	61.9	57.4	54.4	54.4	53.7	54.9	61.0	67.3	73.9	79.0	78.1	95.2	53.7	76.0
9	81.4	84.5	83.3	82.1	85.1	88.7	87.0	82.7	79.1	75.0	69.3	62.8	67.8	64.2	66.6	64.0	62.8	63.2	61.1	64.1	68.4	69.2	68.2	73.3	88.7	61.1	73.1
10	73.3	70.5	67.3	68.1	68.7	71.8	74.8	73.6	70.8	63.2	59.5	56.1	49.9	43.7	42.8	42.0	43.3	36.9	37.7	44.8	54.7	55.4	57.5	56.6	74.8	36.9	57.6
11	58.6	59.9	64.0	63.3	63.5	63.3	64.9	71.6	72.2	73.0	74.9	70.5	69.3	71.8	76.6	72.0	64.0	72.2	73.1	75.8	79.2	79.9	82.1	82.5	82.5	58.6	70.8
12	82.9	83.8	87.0	93.8	97.6	98.4	98.7	99.1	99.3	99.3	99.3	99.3	99.1	95.6	89.3	78.1	71.2	68.6	66.2	68.7	74.8	82.4	84.6	87.8	99.3	66.2	87.7
13	89.1	89.4	90.4	91.8	88.4	90.6	92.8	91.2	89.8	83.7	81.7	73.8	74.9	69.7	68.4	66.9	68.5	69.6	76.9	80.3	85.8	86.3	91.3	98.2	98.2	66.9	82.9
14	98.8	99.0	98.9	98.3	98.5	96.5	93.9	94.2	96.2	97.7	98.1	97.9	98.1	96.0	95.9	94.6	95.7	96.0	98.5	98.4	98.9	99.0	98.7	96.5	99.0	93.9	97.3
15	95.5	93.7	95.0	94.1	95.8	95.5	95.9	95.5	94.3	91.9	88.6	88.2	86.8	84.2	84.2	87.8	89.3	91.7	94.4	95.0	95.1	96.8	97.7	98.5	98.5	84.2	92.7
16	99.2	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.2	97.7	98.1	85.7	78.6	69.9	61.0	57.8	65.5	76.4	71.8	80.4	88.0	86.4	86.9	87.5	99.8	57.8	87.0
17	90.6	92.7	95.7	97.8	90.9	91.2	92.1	92.3	86.6	77.9	74.4	75.3	74.9	67.6	70.8	72.7	71.3	69.9	75.8	81.9	86.2	86.4	85.8	86.4	97.8	67.6	82.8
18	82.7	82.8	88.6	92.7	92.3	89.7	91.9	93.7	92.3	90.9	92.5	90.6	92.9	87.4	82.7	79.9	78.9	81.1	83.4	84.0	83.2	83.4	81.9	80.3	93.7	78.9	86.7
19	80.7	79.5	83.6	83.2	83.6	84.6	80.9	81.4	79.2	78.4	75.4	73.1	74.0	75.8	74.2	74.8	80.6	83.4	93.1	97.8	98.8	99.1	99.2	99.3	99.3	73.1	83.9
20	97.3	95.8	97.3	97.2	96.6	95.4	95.1	97.0	99.2	98.7	96.4	94.1	91.4	86.3	82.7	78.0	76.5	77.2	80.1	84.4	91.6	91.8	91.2	88.5	99.2	76.5	90.8
21	88.0	88.2	92.0	95.3	94.4	97.0	96.6	96.2	95.8	95.5	96.4	97.7	98.0	97.6	95.8	92.5	93.0	90.6	89.5	90.9	94.2	96.2	96.8	95.0	98.0	88.0	94.3
22	92.2	93.8	94.0	97.5	98.8	99.3	99.4	99.5	99.0	98.2	97.2	96.1	95.2	96.6	98.6	99.0	98.7	98.2	98.2	98.6	99.0	98.3	97.3	96.3	99.5	92.2	97.5
23	95.6	93.0	90.0	92.7	90.4	91.9	94.0	95.4	96.8	94.1	88.4	86.6	85.2	82.3	81.2	80.4	80.0	79.7	80.7	83.7	84.6	82.3	80.6	80.1	96.8	79.7	87.1
24	79.3	80.5	83.5	85.3	88.9	88.4	87.8	88.9	87.5	84.9	82.6	79.4	74.1	72.8	78.6	84.1	79.4	81.7	94.9	96.9	89.7	94.0	98.6	99.3	99.3	72.8	85.9
25	99.5	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.8	99.8	99.8	99.5	88.8	73.2	67.1	64.4	66.1	74.1	82.8	89.1	91.0	90.3	87.2	99.9	64.4	90.4
26	86.1	85.1	84.1	83.3	82.4	82.0	82.1	83.2	83.3	82.7	77.4	75.5	74.7	74.3	69.2	67.8	67.2	70.1	73.9	81.2	80.6	81.0	81.0	73.7	86.1	67.2	78.4
27	68.8	70.3	77.1	75.7	84.1	84.0	82.7	78.7	69.6	69.9	59.0	53.4	50.7	52.6	52.5	54.2	55.7	57.6	59.1	58.7	59.3	65.0	66.0	65.3	84.1	50.7	65.4
28	66.5	74.9	75.8	77.1	73.1	75.5	74.3	73.5	71.3	63.1	54.4	51.7	46.0	42.9	43.8	48.3	48.9	46.4	55.1	61.3	65.5	73.3	80.0	81.0	81.0	42.9	63.5
29	87.9	89.7	89.2	92.5	94.4	95.0	95.0	94.8	93.9	92.5	88.4	85.4	78.9	71.8	69.0	65.9	66.1	68.1	68.2	72.4	77.9	83.2	86.3	87.1	95.0	65.9	83.1
30	92.0	91.8	93.4	95.4	97.2	96.5	96.1	96.5	94.6	89.3	82.3	76.7	73.3	71.7	67.1	63.9	64.7	60.8	65.7	72.9	82.5	86.4	89.9	91.1	97.2	60.8	83.0
31	91.4	94.2	93.1	93.6	97.0	99.0	98.9	99.3	99.6	98.2	94.6	81.9	68.5	66.8	71.5	80.2	71.8	77.4	78.5	78.0	87.5	89.9	89.8	86.9	99.6	66.8	87.0
Max.	**99.8**	**99.8**	**99.8**	**99.9**	**99.8**	**99.8**	**99.8**	**99.8**	**99.9**	**99.8**	**99.8**	**99.8**	**99.7**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.7**	**99.7**	**99.9**		
Min.	**58.6**	**59.9**	**64.0**	**63.3**	**63.5**	**63.3**	**64.9**	**71.6**	**69.6**	**63.1**	**54.4**	**51.7**	**46.0**	**42.9**	**42.8**	**42.0**	43.3	36.9	**37.7**	**44.8**	**54.7**	**55.4**	**57.5**	**56.6**		**36.9**	
Avg.	**87.8**	**88.4**	**89.4**	**90.6**	**91.1**	**91.7**	**91.5**	**91.4**	**90.1**	**87.7**	**84.9**	**81.9**	**79.9**	**77.1**	**75.7**	**74.8**	**74.6**	**75.4**	**77.6**	**80.6**	**83.9**	**85.9**	**87.1**	**87.3**			**84.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	83.0	89.2	90.1	94.1	98.6	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.6	98.1	89.8	81.8	78.7	79.5	83.6	90.7	96.1	97.2	97.2	96.9	99.7	78.7	93.4
2	96.3	94.4	94.9	97.0	98.4	99.3	99.5	99.6	99.7	99.6	97.3	84.4	81.3	74.9	74.4	79.0	86.6	90.5	91.2	92.5	96.2	97.8	97.5	98.1	99.7	74.4	92.5
3	94.3	93.9	93.5	93.0	92.6	91.6	92.0	91.9	94.5	95.5	93.3	94.3	94.7	95.9	95.2	94.9	95.5	95.3	96.2	95.9	93.3	88.8	87.2	87.4	96.2	87.2	93.4
4	88.0	85.8	85.0	85.9	85.2	82.9	88.2	89.0	82.0	73.3	70.3	65.5	59.7	54.8	52.9	51.3	62.6	66.5	71.5	77.4	71.7	74.0	73.0	73.7	89.0	51.3	73.8
5	70.5	74.1	78.5	78.8	79.4	83.3	77.4	80.2	87.5	82.3	80.2	85.1	75.5	70.3	65.4	65.0	83.3	92.5	91.1	91.1	94.7	93.9	94.4	95.5	95.5	65.0	82.1
6	97.4	98.5	99.2	99.4	95.9	95.7	99.2	99.5	99.6	97.4	94.9	90.3					69.0	69.9	73.8	79.3	82.8	94.4	96.1	96.9	99.6	69.0	91.5
7	98.0	99.1	98.8	96.3	94.0	92.5	93.0	94.7	93.1	89.7	89.6	92.1	90.8	90.4	87.4	84.6	82.4	84.6	85.6	94.5	97.7	98.4	98.7	98.8	99.1	82.4	92.7
8	99.1	99.3	99.5	99.6	99.7	99.7	99.7	99.6	99.1	98.9	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	98.9	99.6
9	99.9	99.9	100.0	99.9	99.5	98.6	98.0	97.3	97.0	98.3	98.6	98.8	98.8	98.4	98.6	98.1	96.4	94.4	95.4	97.4	98.6	98.8	98.1	97.0	100.0	94.4	98.2
10	97.3	98.1	95.3	95.7	96.8	97.1	97.4	94.7	96.2	92.4	90.0	88.7	88.7	89.7	89.4	86.1	85.7	79.3	78.2	79.9	79.0	81.0	80.4	80.3	98.1	78.2	89.1
11	83.2	83.7	82.8	84.1	83.7	86.8	87.6	87.8	86.4	85.2	84.8	89.6	86.2	90.3	96.4	96.4	94.9	95.1	98.0	98.4	97.7	95.6	94.3	94.3	98.4	82.8	90.1
12	95.9	96.8	97.4	98.8	99.3	99.6	99.7	99.7	99.8	99.8	99.7	89.3	75.4	68.1	64.3	63.1	64.3	81.9	88.2	87.5	90.8	94.0	95.3	94.8	99.8	63.1	89.3
13	95.0	96.2	98.1	99.1	98.7	99.4	99.5	99.4	99.4	98.5	97.5	96.6	95.8	89.6	91.5	93.5	93.0	94.8	94.2	97.3	97.8	99.3	99.6	98.0	99.6	89.6	96.7
14	97.8	97.0	96.5	95.5	96.1	95.8	95.4	97.8	99.5	98.8	94.5	88.8	85.0	78.7	80.1	68.6	67.7	70.3	79.1	78.0	78.7	83.6	82.3	83.8	99.5	67.7	87.1
15	86.2	86.8	85.6	84.8	82.7	85.7	87.2	89.7	94.5	91.9	83.2	77.8	74.1	71.8	64.2	61.3	63.7	68.6	62.7	64.5	70.7	74.9	82.9	90.3	94.5	61.3	78.6
16	94.6	97.2	96.6	95.1	93.7	87.5	87.8	83.1	88.1	91.2	86.7	76.6	72.0	71.7	63.3	59.3	61.7	67.5	69.6	85.3	91.2	94.2	90.1	88.5	97.2	59.3	83.0
17	90.6	94.0	95.4	96.5	97.1	97.6	99.4	99.8	99.8	99.6	99.5	93.5	90.5	90.3	85.5	85.1	85.1	82.3	80.3	84.9	90.8	87.3	85.5	82.5	99.8	80.3	91.4
18	82.1	86.0	94.9	97.2	94.0	94.2	93.9	90.8	90.0	87.9	87.2	85.4	83.2	91.3	94.8	98.2	99.2	99.4	99.5	99.4	99.3	99.4	99.6	99.7	99.7	82.1	93.6
19	99.7	99.7	99.0	98.6	99.2	99.0	98.7	98.4	98.9	99.1	98.9	98.5	98.5	98.4	94.3	86.7	88.1	92.0	92.0	94.3	97.7	99.1	99.3	99.4	99.7	86.7	97.0
20	99.5	99.5	99.4	99.4	99.2	99.5	99.6	99.6	99.6	99.4	98.2	97.8	99.0	99.4	98.0	94.8	92.4	89.5	91.6	94.1	92.6	92.2	97.0	99.0	99.6	89.5	97.1
21	99.5	99.5	97.7	95.7	94.7	94.9	90.4	93.0	91.0	90.1	87.3	84.0	81.8	79.8	77.2	75.8	79.8	73.3	75.1	78.3	82.1	85.2	87.5	90.4	99.5	73.3	86.8
22	90.9	93.5	95.4	95.6	94.1	95.1	95.7	93.1	90.2	85.5	88.3	79.7	78.0	72.0	70.9	75.0	71.6	75.1	84.6	91.0	91.4	95.6	96.3	97.3	97.3	70.9	87.3
23	96.3	94.4	94.2	90.4	90.7	90.2	85.5	86.9	86.4	86.3	91.7	93.4	88.0	86.0	85.1	85.9	94.1	98.8	99.3	99.5	99.5	99.4	99.0	98.3	99.5	85.1	92.5
24	98.9	98.3	99.3	99.6	99.4	98.6	99.4	99.8	99.9	99.9	99.8	99.8	99.6	97.3	93.2	90.3	89.2	91.3	94.2	93.8	92.4	94.6	98.6	98.8	99.9	89.2	96.9
25	99.8	99.2	98.3	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8	96.8	94.2	92.2	93.3	94.1	91.6	94.0	96.0	95.6	95.4	94.1	96.3	100.0	91.6	97.1
26	98.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.9	95.8	95.4	92.4	94.4	92.0	94.5	92.4	94.7	97.1	97.1	97.6	95.7	100.0	92.0	97.3
27	94.1	91.9	89.5	87.0	97.8	97.2	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.4	93.5	91.6	95.5	86.3	87.7	90.4	85.2	84.8	86.5	91.3	100.0	84.8	93.7
28	90.5	93.9	97.5	98.9	98.9	98.9	97.4	97.0	97.5	99.0	100.0	99.8	97.7	97.4	97.4	96.5	93.8	89.6	88.1	89.8	90.2	91.2	90.8	86.6	100.0	86.6	94.9
29	90.9	89.4	89.4	90.1	92.3	92.7	92.9	94.3	93.3	91.9	88.8	91.8	89.0	89.7	83.5	87.1	89.4	92.8	97.7	99.2	99.4	98.5	98.5	99.4	99.4	83.5	92.6
30	99.8	100.0	99.6	98.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.8	95.4	94.9	97.4	98.3	98.3	98.4	98.5	99.0	99.1	99.0	99.9	100.0	94.9	98.8
Max.	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.7**	**99.7**	**99.7**	**99.8**	**99.7**	**99.7**	**99.8**	**99.8**	**99.8**	**99.9**	**99.9**	**100.0**		
Min.	**70.5**	**74.1**	**78.5**	**78.8**	**79.4**	**82.9**	**77.4**	**80.2**	**82.0**	**73.3**	**70.3**	**65.5**	**59.7**	**54.8**	**52.9**	**51.3**	**61.7**	66.5	62.7	**64.5**	**70.7**	**74.0**	**73.0**	**73.7**		**51.3**	
Avg.	**93.6**	**94.3**	**94.7**	**94.8**	**95.1**	**95.1**	**95.1**	**95.2**	**95.4**	**94.4**	**93.3**	**91.3**	**88.7**	**87.2**	**85.0**	**84.0**	**84.9**	**86.2**	**87.8**	**90.4**	**91.6**	**92.8**	**93.2**	**93.6**			**91.6**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	97.7	93.8	92.9	93.2	89.2	83.7	85.0	82.9	90.8	85.6	89.6	86.4	87.4	89.3	100.0	82.9	93.6
2	90.5	90.1	91.9	92.3	92.2	93.5	94.0	92.8	93.0	93.8	94.3	94.1	92.7	86.7	87.2	85.5	78.1	69.5	69.0	75.6	74.7	79.6	86.1	90.4	94.3	69.0	87.0
3	93.3	93.1	94.3	95.0	94.5	95.4	92.3	93.3	96.0	96.5	94.4	87.8	80.6	75.7	76.0	76.0	73.6	70.7	69.3	73.1	78.2	79.2	82.7	78.3	96.5	69.3	85.0
4	83.9	76.8	71.5	71.5	76.0	81.4	88.1	83.2	81.7	93.6	97.9	99.5	98.4	96.0	95.2	94.6	96.2	98.2	99.8	100.0	100.0	100.0	100.0	100.0	100.0	71.5	91.0
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	93.9	94.8	88.3	81.4	75.8	74.6	76.7	78.1	76.8	100.0	74.6	93.3
6	80.1	84.3	87.0	91.7	94.6	96.1	96.1	93.2	90.6	91.7	93.7	93.0	87.1	83.5	82.7	80.9	81.0	78.7	82.5	84.2	85.8	92.4	91.8	92.8	96.1	78.7	88.1
7	94.3	94.7	91.4	92.8	93.7	95.0	92.2	89.7	82.7	83.6	82.8	79.6	76.0	71.3	70.3	68.1	68.1	66.9	69.2	74.2	75.7	76.5	80.9	80.9	95.0	66.9	81.3
8	80.4	84.6	83.4	85.7	88.3	88.2	88.6	90.2	91.4	91.4	89.4	83.2	76.9	70.2	66.1	60.6	57.6	59.9	63.3	71.8	74.9	73.7	73.1	80.0	91.4	57.6	78.0
9	82.2	78.3	74.9	76.9	79.3	83.1	82.8	79.9	84.7	86.5	82.1	72.1	66.9	64.3	59.3	55.0	58.5	62.1	64.9	70.2	77.6	81.3	79.7	75.7	86.5	55.0	74.1
10	72.6	75.4	78.5	85.0	91.4	80.5	87.7	93.5	94.6	96.5	92.5	86.9	78.0	75.0	69.0	67.5	73.1	74.7	72.9	79.9	83.5	85.8	90.3	92.2	96.5	67.5	82.4
11	94.4	97.5	96.4	96.6	94.7	92.4	91.4	89.9	84.0	81.6	79.4	75.3	73.1	72.9	71.5	72.8	79.7	83.1	82.0	81.0	80.5	79.4	79.5	81.9	97.5	71.5	83.8
12	78.8	78.4	79.1	80.3	78.5	78.4	79.3	79.3	77.3	84.8	80.6	76.8	73.7	68.1	62.6	60.5	61.3	62.1	62.2	67.4	73.8	81.2	82.2	82.7	84.8	60.5	74.5
13	84.7	85.1	82.7	83.5	85.7	86.7	87.7	85.0	82.2	83.2	83.7	83.2	80.6	77.1	73.6	70.1	68.3	70.9	74.8	78.5	79.8	79.7	81.3	86.0	87.7	68.3	80.6
14	91.6	91.2	92.2	93.7	94.0	94.4	95.1	94.0	93.8	97.5	96.8	91.7	90.1	86.5	84.4	83.3	80.1	76.6	81.8	78.8	81.3	87.7	88.4	88.3	97.5	76.6	88.9
15	88.0	85.8	83.2	84.9	85.5	86.5	86.3	89.5	87.4	85.4	84.2	80.8	73.2	59.0	61.1	63.1	63.0	61.7	63.1	67.8	70.0	72.6	72.2	72.7	89.5	59.0	76.1
16	73.9	77.6	79.0	77.4	79.9	84.4	86.5	87.5	90.1	92.2	91.5	87.8	85.9	84.8	86.4	83.2	82.4	85.6	93.4	97.7	97.8	97.1	97.6	97.3	97.8	73.9	87.4
17	96.9	96.8	96.2	96.7	96.4	97.1	98.3	97.6	97.9	96.7	95.1	94.8	94.0	93.1	92.1	90.4	93.2	96.3	99.4	99.3	98.0	99.5	98.9	97.4	99.5	90.4	96.3
18	96.7	96.2	96.6	96.7	97.1	97.7	96.4	95.3	94.8	92.6	93.6	92.1	93.9	92.5	90.0	87.4	88.3	92.0	91.3	89.6	94.8	94.9	92.3	91.8	97.7	87.4	93.5
19	92.9	94.3	95.0	94.9	97.2	97.5	97.4	95.5	90.2	89.9	85.4	80.2	81.1	81.5	79.2	78.7	79.1	78.6	80.7	87.4	93.9	92.4	89.1	88.3	97.5	78.6	88.3
20	87.9	90.1	92.0	90.6	93.3	98.4	98.4	97.7	90.7	84.5	76.3	78.9	66.4	65.4	69.3	73.1	72.9	73.7	70.1	67.9	68.0	66.6	65.7	67.9	98.4	65.4	79.4
21	71.7	70.4	65.2	66.2	65.4	66.7	70.7	69.4	66.7	67.0	62.2	61.4	62.5	59.6	58.1	61.1	55.7	54.1	56.1	51.7	50.9	58.2	61.5	64.7	71.7	50.9	62.4
22	65.3	69.0	69.4	75.8	77.4	80.3	82.2	83.9	82.0	81.7	81.7	86.0	86.4	84.4	82.9	82.7	87.2	91.7	93.7	90.7	91.3	89.6	90.8	88.6	93.7	65.3	83.1
23	89.7	90.6	92.6	91.8	90.1	91.5	94.4	95.3	95.0	97.6	97.0	97.8	99.5	98.7	99.4	99.0	99.5	99.7	96.4	90.8	87.3	79.8	80.9	73.3	99.7	73.3	92.8
24	67.9	70.8	86.2	95.6	99.0	99.1	99.1	99.1	99.4	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	94.9	100.0	67.9	96.3
25	92.3	92.7	94.2	91.5	89.2	88.7	95.6	97.0	93.9	95.2	96.3	96.5	96.0	97.6	98.4	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	88.7	96.4
26	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.6	96.7	94.4	93.4	91.9	90.3	91.0	89.8	86.5	87.5	100.0	86.5	96.7
27	88.7	90.6	93.8	96.0	95.4	93.5	91.2	91.4	95.9	96.1	93.6	88.4	84.9	86.4	89.4	94.1	93.4	94.0	94.3	93.2	92.1	91.8	91.1	89.7	96.1	84.9	92.0
28	90.2	91.7	91.0	86.7	87.1	87.2	89.0	91.1	95.5	96.9	99.6	100.0	100.0	100.0	99.4	99.4	99.6	98.5	99.8	100.0	100.0	100.0	99.5	96.7	100.0	86.7	95.8
29	94.6	95.0	95.4	96.3	95.5	94.9	93.2	91.1	90.4	85.4	79.8	79.7	80.8	82.3	87.6	87.7	87.2	87.3	85.8	87.2	89.4	96.1	99.0	99.8	99.8	79.7	90.1
30	96.7	85.8	88.6	95.6	97.7	99.2	98.8	99.2	99.1	98.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.8	98.3
31	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	98.6	98.2	98.3	98.3	93.9	86.5	95.5	93.3	100.0	86.5	98.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**65.3**	**69.0**	**65.2**	**66.2**	**65.4**	**66.7**	**70.7**	**69.4**	**66.7**	**67.0**	**62.2**	**61.4**	**62.5**	**59.0**	**58.1**	**55.0**	**55.7**	54.1	56.1	**51.7**	**50.9**	**58.2**	**61.5**	**64.7**		**50.9**	
Avg.	**87.7**	**88.0**	**88.4**	**89.7**	**90.6**	**91.2**	**92.0**	**91.8**	**91.0**	**91.6**	**90.3**	**88.4**	**86.2**	**84.1**	**83.1**	**82.2**	**82.2**	**82.2**	**83.2**	**84.1**	**85.4**	**86.3**	**87.2**	**87.1**			**87.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	93.2	89.7	95.9	97.1	93.7	95.2	96.2	99.1	99.9	99.8	97.9	98.8	99.9	99.3	100.0	100.0	100.0	100.0	100.0	99.7	99.9	99.6	97.2	97.0	100.0	89.7	97.9
2	97.0	97.7	93.5	90.1	91.6	89.2	87.6	82.3	84.3	82.5	81.6	79.8	79.5	87.6	92.5	94.6	92.8	88.2	86.5	92.8	92.6	93.3	94.4	94.4	97.7	79.5	89.4
3	93.6	97.0	98.2	98.1	96.3	97.9	98.0	94.1	97.2	98.5	94.4	92.2	92.7	90.2	91.1	95.7	98.1	96.1	99.1	96.9	91.9	90.7	84.1	81.0	99.1	81.0	94.3
4	90.5	99.4	99.9	99.0	100.0	100.0	100.0	99.4	97.5	97.2	94.9	93.9	95.6	98.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.5	98.6
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.4	98.9	98.3	96.8	92.9	100.0	92.9	99.4
6	89.6	89.2	87.4	87.6	84.0	81.2	76.9	72.9	72.8	71.0	71.0	73.7	74.8	76.1	74.6	74.1	78.8	82.6	87.4	90.0	92.2	93.7	98.2	100.0	100.0	71.0	82.5
7	100.0	100.0	100.0	97.7	95.6	92.3	93.6	92.7	93.9	98.1	97.5	96.6	92.4	86.3	95.7	96.4	94.4	97.3	99.9	100.0	100.0	99.1	99.9	99.8	100.0	86.3	96.6
8	100.0	100.0	99.5	95.4	88.2	88.0	86.8	88.3	91.5	99.1	100.0	97.4	97.7	99.9	100.0	93.8	89.5	84.1	87.9	89.3	92.2	98.3	99.7	100.0	100.0	84.1	94.4
9	100.0	100.0	100.0	99.7	97.1	97.9	95.2	95.4	94.8	94.9	92.5	87.9	87.2	85.6	81.6	79.2	78.3	82.6	86.8	82.5	83.5	83.2	82.2	82.0	100.0	78.3	89.6
10	80.5	77.7	79.4	80.6	82.2	85.6	86.5	88.0	88.6	91.7	86.8	88.2	85.5	81.1	82.5	83.2	83.6	84.6	86.8	88.3	90.1	91.7	93.2	95.1	95.1	77.7	85.9
11	94.8	95.0	96.1	95.0	95.3	98.5	98.8	96.9	96.6	97.1	97.5	95.2	93.0	92.5	92.8	94.9	95.6	96.8	99.3	98.8	97.9	97.4	97.4	97.1	99.3	92.5	96.3
12	97.0	96.8	95.3	88.3	95.8	94.8	92.6	94.3	97.7	98.1	97.4	98.0	97.4	98.1	98.4	98.4	86.9	88.7	92.6	96.9	99.5	99.9	100.0	100.0	100.0	86.9	96.0
13	100.0	100.0	100.0	100.0	96.3	96.0	90.2	95.4	95.0	91.7	84.3	84.6	98.9	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	84.3	97.2
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	97.7	95.8	94.8	91.7	91.6	89.4	89.1	89.9	93.1	87.2	91.3	94.4	92.6	100.0	87.2	95.8
15	90.0	93.1	96.3	91.9	89.3	87.2	87.9	88.1	91.2	92.5	93.0	93.2	91.2	90.2	89.6	89.8	90.8	91.6	91.4	90.8	92.4	92.4	92.8	93.3	96.3	87.2	91.3
16	93.5	93.6	93.8	93.8	93.8	93.6	93.6	93.5	93.1	92.8	92.5	92.7	91.9	91.9	91.7	91.3	91.2	91.5	91.3	90.9	90.8	89.9	90.5	90.5	93.8	89.9	92.2
17	89.7	89.5	89.0	88.5	89.3	90.3	90.0	90.8	90.7	90.3	88.8	88.7	86.8	86.4	85.7	84.6	85.4	85.6	86.2	88.0	88.5	88.0	87.2	86.7	90.8	84.6	88.1
18	87.7	87.9	87.6	88.1	88.9	89.5	87.8	87.2	86.4	84.6	84.0	85.8	83.8	81.8	80.4	80.3	78.6	76.9	79.3	74.2	72.6	74.4	72.3	71.4	89.5	71.4	82.1
19	68.6	71.3	67.7	70.3	66.2	60.2	68.4	57.8	71.8	90.6	93.3	93.6	85.1	82.7	78.2	85.2	86.1	83.3	82.3	87.3	96.7	93.7	97.3	98.5	98.5	57.8	80.7
20	96.3	90.3	90.3	90.0	89.2	83.8	83.7	88.7	87.1	87.8	89.3	91.1	93.5	93.6	97.2	97.7	95.1	94.3	88.5	90.9	91.8	90.5	82.1	82.6	97.7	82.1	90.2
21	83.5	84.9	91.1	93.4	95.1	97.7	99.3	100.0	100.0	100.0	99.5	96.8	97.5	97.9	98.2	94.4	86.3	86.4	88.4	88.6	88.7	88.3	89.0	90.2	100.0	83.5	93.1
22	87.7	87.8	89.7	89.3	96.6	97.5	98.4	98.1	99.0	98.6	99.2	100.0	100.0	100.0	100.0	99.9	98.8	96.9	97.5	98.6	99.9	100.0	100.0	100.0	100.0	87.7	97.2
23	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	99.2	99.1	100.0	99.1	99.9
24	99.1	99.0	99.1	99.1	99.0	98.8	98.7	98.7	98.7	98.8	98.6	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.1	97.1	97.2	100.0	97.1	99.1
25	99.0	100.0	100.0	100.0	97.5	86.0	74.7	76.1	77.5	72.6	72.8	76.8	76.1	73.8	68.7	68.4	68.4	65.8	61.6	62.3	61.6	60.9	61.3	67.2	100.0	60.9	76.2
26	70.2	71.6	67.8	69.3	67.8	65.4	70.7	75.8	81.8	90.5	93.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	65.4	88.5
27	100.0	99.7	98.6	97.0	96.8	97.5	95.0	92.0	90.2	86.2	82.3	78.3	76.9	77.0	77.4	76.0	75.0	81.7	81.4	82.6	86.0	87.4	90.2	89.0	100.0	75.0	87.3
28	90.1	89.9	90.8	95.1	97.9	100.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7	95.0	92.6	92.7	93.2	94.6	93.4	100.0	89.9	96.8
29	93.0	93.6	93.0	94.5	94.0	93.8	93.4	93.8	90.7	88.3	87.7	85.5	83.8	80.4	77.0	76.1	76.2	78.8	79.9	79.3	77.3	74.9	73.2	72.5	94.5	72.5	84.6
30	71.2	70.0	67.7	67.4	67.7	65.9	64.6	61.5	60.9	62.8	63.9	57.4	56.5	54.5	54.2	54.5	56.9	61.0	61.5	61.1	52.7	49.3	52.7	70.0	71.2	49.3	61.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**68.6**	**70.0**	**67.7**	**67.4**	**66.2**	**60.2**	**64.6**	**57.8**	**60.9**	**62.8**	**63.9**	**57.4**	**56.5**	**54.5**	**54.2**	**54.5**	**56.9**	61.0	61.5	**61.1**	**52.7**	**49.3**	**52.7**	**67.2**		**49.3**	
Avg.	**91.9**	**92.2**	**92.3**	**91.9**	**91.5**	**90.8**	**90.3**	**90.0**	**91.0**	**91.9**	**91.1**	**90.8**	**90.4**	**90.0**	**90.0**	**90.0**	**89.2**	**89.4**	**90.0**	**90.5**	**90.6**	**90.6**	**90.6**	**91.1**			**90.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Relative Humidity (%)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	74.8	71.1	72.2	72.2	71.6	67.1	72.3	74.8	76.5	83.5	87.3	87.8	86.5	86.8	86.2	87.7	92.2	97.4	94.8	94.4	92.9	76.4	68.3	78.3	97.4	67.1	81.4
2	81.3	80.8	85.7	86.6	77.4	76.1	77.4	76.4	79.2	81.6	81.3	75.5	74.4	78.6	57.5	58.3	59.5	68.0	77.9	81.5	74.8	40.8	38.4	40.7	86.6	38.4	71.2
3	52.6	64.8	67.7	70.7	72.2	71.1	71.1	73.4	71.9	66.1	60.4	57.6	56.0	54.7	52.8	54.4	58.7	62.1	67.4	69.9	67.6	72.7	66.3	66.3	73.4	52.6	64.5
4	66.1	69.3	68.0	65.8	66.2	79.6	89.8	90.4	93.4	95.8	95.0	96.8	96.8	96.7	99.7	99.8	99.4	99.0	98.6	96.5	95.3	96.9	98.8	97.3	99.8	65.8	89.6
5	96.9	96.9	96.9	96.6	95.2	94.2	93.9	93.9	93.8	94.4	91.8	89.7	88.5	90.5	91.4	93.5	92.7	90.2	90.5	87.4	85.1	86.7	85.8	87.8	96.9	85.1	91.8
6	90.0	87.8	91.4	93.4	91.4	95.2	96.6	96.9	98.2	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.8	97.5
7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.0	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	99.9
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.8	94.7	90.1	93.1	95.7	98.0	96.8	95.4	95.3	94.2	91.5	85.6	88.4	89.1	88.8	88.0	81.8	100.0	81.8	94.3
10	77.1	72.4	69.3	70.3	67.2	75.9	86.7	88.9	92.4	93.3	94.3	91.8	93.1	89.0	93.8	96.8	98.0	99.5	99.7	100.0	100.0	100.0	96.5	95.8	100.0	67.2	89.2
11	95.4	95.5	95.3	93.6	89.6	90.6	91.7	97.6	88.4	88.4	91.3	90.7	89.2	86.0	91.6	90.8	92.4	93.8	89.6	89.8	90.1	92.0	94.7	94.7	97.6	86.0	91.8
12	94.8	89.1	83.9	87.4	85.1	86.5	82.7	82.1	77.6	82.6	82.3	80.4	79.1	81.6	80.5	86.5	94.8	94.4	93.0	93.0	93.7	97.1	98.5	99.1	99.1	77.6	87.7
13	99.3	98.5	99.6	98.8	98.5	98.7	99.9	99.9	99.8	99.6	99.5	99.4	99.4	99.4	99.3	98.9	98.5	98.0	97.7	96.9	95.9	95.6	94.5	92.7	99.9	92.7	98.3
14	92.4	92.8	91.8	90.5	89.6	89.9	89.0	90.3	91.2	91.8	91.3	90.8	89.5	89.1	88.2	88.6	92.1	92.1	92.0	92.4	91.7	91.4	92.4	92.3	92.8	88.2	91.0
15	91.2	91.1	92.7	91.9	91.7	90.7	90.2	89.6	88.7	89.7	90.3	91.0	90.9	90.5	89.6	89.4	88.7	90.3	90.9	92.0	91.6	91.7	91.0	91.4	92.7	88.7	90.7
16	91.8	91.0	90.9	90.4	89.7	90.2	90.4	89.8	89.3	88.2	88.7	89.3	88.7	87.9	87.9	87.6	86.8	86.7	86.4	86.8	87.6	87.3	87.6	87.5	91.8	86.4	88.7
17	85.4	86.3	87.6	87.5	87.7	87.8	87.2	85.6	84.9	85.0	84.9	83.3	83.1	82.4	81.3	81.5	81.1	82.6	84.1	84.2	83.4	84.5	84.8	84.9	87.8	81.1	84.6
18	84.7	84.6	85.0	85.2	83.9	83.5	83.9	84.0	84.1	83.8	84.1	83.3	82.6	82.1	82.5	82.6	82.3	82.5	82.9	82.8	81.5	82.0	82.2	82.2	85.2	81.5	83.3
19	82.6	82.3	81.5	81.3	80.5	78.8	76.9	77.4	77.7	78.9	78.5	80.0	79.4	78.5	75.9	76.7	78.1	80.8	80.6	79.2	77.9	78.0	75.9	70.9	82.6	70.9	78.7
20	72.0	71.1	73.5	72.2	74.1	76.3	74.6	71.1	73.2	90.7	93.3	94.7	95.3	95.9	96.6	97.1	97.7	97.8	97.9	98.6	98.5	98.5	98.8	99.2	99.2	71.1	87.9
21	99.7	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.4	99.4	99.3	98.5	93.9	88.3	87.6	88.8	86.7	86.2	88.3	86.7	83.7	82.7	84.3	100.0	82.7	93.9
22	86.0	86.3	88.6	92.8	94.0	94.1	91.3	92.5	96.8	94.1	91.1	90.1	89.1	89.9	89.1	93.3	92.6	92.6	93.3	93.1	93.2	99.4	99.6	99.2	99.6	86.0	92.6
23	98.3	97.0	96.3	95.9	95.3	83.3	78.9	82.8	87.0	86.9	83.1	80.7	82.9	88.5	89.4	87.5	85.9	90.2	90.7	91.9	95.3	94.9	94.1	94.0	98.3	78.9	89.6
24	92.7	92.7	92.8	92.5	92.4	93.2	93.4	92.1	92.3	92.3	92.4	92.8	92.8	93.0	92.8	92.8	92.7	92.9	92.6	92.2	92.4	92.8	92.7	92.5	93.4	92.1	92.7
25	91.9	91.5	91.5	91.3	91.0	90.4	89.9	89.4	88.5	86.7	85.7	85.6	84.0	81.0	79.9	80.4	79.4	78.8	79.0	78.2	78.1	77.0	79.7	79.4	91.9	77.0	84.5
26	77.0	71.2	68.5	61.6	54.1	48.8	56.1	61.2	62.4	66.2	68.3	65.2	63.4	53.8	57.4	66.1	74.6	80.6	85.5	84.4	82.0	77.5	76.8	75.3	85.5	48.8	68.2
27	79.7	79.8	80.0	77.3	74.6	73.3	70.6	69.4	69.0	67.8	67.7	66.3	67.8	67.7	67.0	72.8	76.4	79.7	79.9	82.3	92.4	99.8	100.0	100.0	100.0	66.3	77.5
28	100.0	99.4	98.9	98.8	98.4	98.0	97.7	97.6	97.9	96.5	94.2	95.1	92.8	91.8	92.4	94.2	96.4	92.8	93.7	95.3	95.6	94.8	92.2	88.8	100.0	88.8	95.6
29	81.8	80.1	79.5	82.1	84.7	82.7	80.0	83.1	82.8	78.7	83.7	85.0	84.6	83.3	83.3	87.8	89.9	87.9	89.2	89.7	92.4	92.5	90.9	91.0	92.5	78.7	85.3
30	91.3	91.4	92.8	92.4	91.8	92.7	92.8	91.2	91.6	93.4	94.0	92.8	87.5	84.9	84.9	89.6	94.7	93.6	94.7	94.2	93.5	93.7	93.4	93.6	94.7	84.9	91.9
31	94.0	93.6	93.2	93.1	93.4	93.7	94.2	95.1	94.2	93.7	93.5	94.8	94.9	93.8	93.5	95.1	93.7	94.4	94.4	94.7	95.2	95.5	94.4	91.9	95.5	91.9	94.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**52.6**	**64.8**	**67.7**	**61.6**	**54.1**	**48.8**	**56.1**	**61.2**	**62.4**	**66.1**	**60.4**	**57.6**	**56.0**	**53.8**	**52.8**	**54.4**	**58.7**	62.1	67.4	**69.9**	**67.6**	**40.8**	**38.4**	**40.7**		**38.4**	
Avg.	**87.8**	**87.4**	**87.6**	**87.5**	**86.5**	**86.5**	**87.1**	**87.6**	**87.7**	**88.3**	**88.4**	**87.9**	**87.4**	**86.7**	**86.1**	**87.5**	**88.8**	**89.6**	**90.0**	**90.3**	**90.1**	**89.1**	**88.4**	**88.2**			**88.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	9	60	104	112	82	37	5	0	0	0	0	0	0	0	112	0	17
2	0	0	0	0	0	0	0	0	0	0	5	49	85	118	89	37	5	0	0	0	0	0	0	0	118	0	16
3	0	0	0	0	0	0	0	0	0	0	10	64	97	101	62	34	7	0	0	0	0	0	0	0	101	0	16
4	0	0	0	0	0	0	0	0	0	0	7	31	91	79	65	36	6	0	0	0	0	0	0	0	91	0	13
5	0	0	0	0	0	0	0	0	0	0	12	57	108	126	107	56	9	0	0	0	0	0	0	0	126	0	20
6	0	0	0	0	0	0	0	0	0	0	14	66	107	93	95	44	7	0	0	0	0	0	0	0	107	0	18
7	0	0	0	0	0	0	0	0	0	0	15	66	117	167	99	46	8	0	0	0	0	0	0	0	167	0	22
8	0	0	0	0	0	0	0	0	0	0	19	74	121	133	107	51	9	0	0	0	0	0	0	0	133	0	21
9	0	0	0	0	0	0	0	0	0	0	18	69	127	87	93	67	7	0	0	0	0	0	0	0	127	0	20
10	0	0	0	0	0	0	0	0	0	0	3	16	30	37	32	18	3	0	0	0	0	0	0	0	37	0	6
11	0	0	0	0	0	0	0	0	0	0	4	21	40	48	44	30	7	0	0	0	0	0	0	0	48	0	8
12	0	0	0	0	0	0	0	0	0	0	10	29	43	50	36	14	3	0	0	0	0	0	0	0	50	0	8
13	0	0	0	0	0	0	0	0	0	0	7	39	116	81	68	75	22	1	0	0	0	0	0	0	116	0	17
14	0	0	0	0	0	0	0	0	0	0	24	94	149	151	127	62	15	1	0	0	0	0	0	0	151	0	26
15	0	0	0	0	0	0	0	0	0	1	10	61	139	153	88	25	20	1	0	0	0	0	0	0	153	0	21
16	0	0	0	0	0	0	0	0	0	0	6	26	29	36	32	21	7	0	0	0	0	0	0	0	36	0	7
17	0	0	0	0	0	0	0	0	0	0	8	29	49	53	47	25	7	0	0	0	0	0	0	0	53	0	9
18	0	0	0	0	0	0	0	0	0	0	11	36	60	73	73	30	9	1	0	0	0	0	0	0	73	0	12
19	0	0	0	0	0	0	0	0	0	1	26	45	20	44	31	26	10	1	0	0	0	0	0	0	45	0	8
20	0	0	0	0	0	0	0	0	0	1	11	39	77	99	85	50	18	1	0	0	0	0	0	0	99	0	16
21	0	0	0	0	0	0	0	0	0	1	25	84	96	79	80	85	43	2	0	0	0	0	0	0	96	0	21
22	0	0	0	0	0	0	0	0	0	2	32	106	149	160	147	106	31	2	0	0	0	0	0	0	160	0	31
23	0	0	0	0	0	0	0	0	0	2	29	84	88	183	157	120	29	2	0	0	0	0	0	0	183	0	29
24	0	0	0	0	0	0	0	0	0	3	59	146	184	188	167	112	35	3	0	0	0	0	0	0	188	0	37
25	0	0	0	0	0	0	0	0	0	0	14	71	60	77	64	74	29	2	0	0	0	0	0	0	77	0	16
26	0	0	0	0	0	0	0	0	0	1	16	45	81	79	83	55	28	3	0	0	0	0	0	0	83	0	16
27	0	0	0	0	0	0	0	0	0	1	17	44	68	79	68	63	27	3	0	0	0	0	0	0	79	0	15
28	0	0	0	0	0	0	0	0	0	2	18	47	70	99	118	80	27	3	0	0	0	0	0	0	118	0	19
29	0	0	0	0	0	0	0	0	0	2	56	66	56	66	41	23	13	2	0	0	0	0	0	0	66	0	14
30	0	0	0	0	0	0	0	0	0	6	61	122	100	100	97	18	12	3	0	0	0	0	0	0	122	0	22
31	0	0	0	0	0	0	0	0	0	0	5	25	44	69	54	54	18	2	0	0	0	0	0	0	69	0	11
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**61**	**146**	**184**	**188**	**167**	**120**	**43**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**188**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**16**	**20**	**36**	**31**	**14**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**58**	**87**	**97**	**82**	**51**	**15**	**1**	**0**	**0**	**0**	**0**	**0**	**0**			**17**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	5	32	73	157	230	194	103	42	5	0	0	0	0	0	0	230	0	35
2	0	0	0	0	0	0	0	0	0	5	53	95	115	131	79	29	18	4	0	0	0	0	0	0	131	0	22
3	0	0	0	0	0	0	0	0	0	12	48	149	203	226	194	144	69	11	0	0	0	0	0	0	226	0	44
4	0	0	0	0	0	0	0	0	0	13	91	171	220	236	215	162	79	11	0	0	0	0	0	0	236	0	50
5	0	0	0	0	0	0	0	0	0	15	96	176	224	239	218	166	84	11	0	0	0	0	0	0	239	0	51
6	0	0	0	0	0	0	0	0	0	10	30	71	87	153	93	103	57	11	0	0	0	0	0	0	153	0	26
7	0	0	0	0	0	0	0	0	0	6	39	57	82	75	89	101	41	14	0	0	0	0	0	0	101	0	21
8	0	0	0	0	0	0	0	0	0	6	28	52	87	181	202	97	44	12	0	0	0	0	0	0	202	0	29
9	0	0	0	0	0	0	0	0	0	10	41	81	132	141	156	100	29	7	0	0	0	0	0	0	156	0	29
10	0	0	0	0	0	0	0	0	0	6	33	87	198	147	250	115	58	13	1	0	0	0	0	0	250	0	38
11	0	0	0	0	0	0	0	0	0	6	37	74	94	113	95	62	24	6	0	0	0	0	0	0	113	0	21
12	0	0	0	0	0	0	0	0	0	13	60	97	139	171	235	155	74	23	1	0	0	0	0	0	235	0	40
13	0	0	0	0	0	0	0	0	0	15	55	75	107	114	103	75	41	9	1	0	0	0	0	0	114	0	25
14	0	0	0	0	0	0	0	0	0	28	53	126	193	265	150	106	60	35	2	0	0	0	0	0	265	0	42
15	0	0	0	0	0	0	0	0	1	22	127	142	164	182	172	149	83	27	2	0	0	0	0	0	182	0	45
16	0	0	0	0	0	0	0	0	1	18	62	108	149	217	209	160	81	27	3	0	0	0	0	0	217	0	43
17	0	0	0	0	0	0	0	0	2	51	170	254	300	309	265	203	85	30	2	0	0	0	0	0	309	0	70
18	0	0	0	0	0	0	0	0	2	28	85	158	179	273	183	107	85	30	4	0	0	0	0	0	273	0	47
19	0	0	0	0	0	0	0	0	3	86	169	254	321	336	313	249	159	58	5	0	0	0	0	0	336	0	81
20	0	0	0	0	0	0	0	0	4	75	183	269	323	337	314	253	170	62	5	0	0	0	0	0	337	0	83
21	0	0	0	0	0	0	0	0	5	85	194	279	333	348	324	260	175	67	5	0	0	0	0	0	348	0	86
22	0	0	0	0	0	0	0	0	6	88	195	281	334	351	326	160	135	94	11	0	0	0	0	0	351	0	83
23	0	0	0	0	0	0	0	0	7	92	199	283	311	355	261	255	169	66	10	0	0	0	0	0	355	0	84
24	0	0	0	0	0	0	0	0	9	98	199	289	348	363	345	278	191	82	9	0	0	0	0	0	363	0	92
25	0	0	0	0	0	0	0	0	13	89	195	264	349	268	204	129	120	42	8	0	0	0	0	0	349	0	70
26	0	0	0	0	0	0	0	0	7	70	188	287	346	329	379	251	182	86	14	0	0	0	0	0	379	0	89
27	0	0	0	0	0	0	0	0	17	79	160	222	310	338	309	228	126	45	9	0	0	0	0	0	338	0	77
28	0	0	0	0	0	0	0	0	12	101	216	303	371	399	372	308	219	107	15	0	0	0	0	0	399	0	101
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**101**	**216**	**303**	**371**	**399**	**379**	**308**	**219**	**107**	**15**	**0**	**0**	**0**	**0**	**0**	**399**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**28**	**52**	**82**	**75**	**79**	**29**	**18**	**4**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**40**	**108**	**171**	**221**	**244**	**223**	**161**	**96**	**35**	**4**	**0**	**0**	**0**	**0**	**0**			**54**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	24	137	242	330	385	402	377	310	220	108	17	0	0	0	0	0	402	0	106
2	0	0	0	0	0	0	0	0	23	124	232	321	374	390	370	307	219	112	19	0	0	0	0	0	390	0	104
3	0	0	0	0	0	0	0	0	26	133	242	332	381	401	369	300	224	111	26	0	0	0	0	0	401	0	106
4	0	0	0	0	0	0	0	0	30	141	257	348	401	415	389	325	235	122	24	1	0	0	0	0	415	0	112
5	0	0	0	0	0	0	0	0	39	160	271	359	413	427	401	335	244	133	26	1	0	0	0	0	427	0	117
6	0	0	0	0	0	0	0	1	44	164	276	366	422	435	409	344	250	139	29	1	0	0	0	0	435	0	120
7	0	0	0	0	0	0	0	1	46	174	285	375	429	442	414	348	256	146	35	1	0	0	0	0	442	0	123
8	0	0	0	0	0	0	0	1	26	115	214	371	431	450	416	324	203	96	28	1	0	0	0	0	450	0	111
9	0	0	0	0	0	0	0	1	31	152	227	347	431	450	424	358	264	152	32	1	0	0	0	0	450	0	120
10	0	0	0	0	0	0	0	1	51	206	239	331	416	408	399	367	271	159	42	2	0	0	0	0	416	0	120
11	0	0	0	0	0	0	0	2	69	197	311	401	454	469	442	372	277	166	46	2	0	0	0	0	469	0	134
12	0	0	0	0	0	0	0	3	60	182	291	386	443	477	449	379	282	169	51	3	0	0	0	0	477	0	132
13	0	0	0	0	0	0	0	4	87	213	328	415	468	482	454	386	292	178	55	3	0	0	0	0	482	0	140
14	0	0	0	0	0	0	0	5	90	217	332	420	474	484	458	392	296	180	51	5	0	0	0	0	484	0	142
15	0	0	0	0	0	0	0	7	99	225	339	428	480	493	464	396	302	187	64	4	0	0	0	0	493	0	145
16	0	0	0	0	0	0	0	8	105	232	341	437	488	501	473	404	308	192	68	5	0	0	0	0	501	0	148
17	0	0	0	0	0	0	0	11	114	242	357	446	499	511	482	412	316	199	74	6	0	0	0	0	511	0	153
18	0	0	0	0	0	0	0	8	82	190	346	452	502	514	485	415	318	203	78	7	0	0	0	0	514	0	150
19	0	0	0	0	0	0	0	15	129	256	372	462	515	526	496	426	329	211	85	8	0	0	0	0	526	0	160
20	0	0	0	0	0	0	0	13	64	111	160	156	232	212	216	198	113	74	36	4	0	0	0	0	232	0	66
21	0	0	0	0	0	0	0	9	44	131	181	257	334	374	413	269	227	186	99	12	0	0	0	0	413	0	106
22	0	0	0	0	0	0	0	26	157	283	402	489	530	554	527	454	350	224	79	13	0	0	0	0	554	0	170
23	0	0	0	0	0	0	0	14	148	289	408	498	548	561	531	457	333	203	104	15	0	0	0	0	561	0	171
24	0	0	0	0	0	0	0	30	163	295	414	504	557	568	536	463	363	240	112	14	0	0	0	0	568	0	177
25	0	0	0	0	0	0	0	25	104	259	228	258	325	336	317	412	241	152	63	13	0	0	0	0	412	0	114
26	0	0	0	0	0	0	0	16	51	89	174	250	368	399	384	388	316	215	122	18	0	0	0	0	399	0	116
27	0	0	0	0	0	0	1	44	180	314	436	527	577	585	552	476	375	252	123	20	0	0	0	0	585	0	186
28	0	0	0	0	0	0	1	48	186	324	444	533	583	593	560	486	385	260	131	22	0	0	0	0	593	0	190
29	0	0	0	0	0	0	1	57	204	324	445	532	585	596	564	489	389	264	125	24	0	0	0	0	596	0	192
30	0	0	0	0	0	0	2	59	178	310	428	518	573	581	549	486	392	260	126	27	0	0	0	0	581	0	187
31	0	0	0	0	0	0	2	55	129	227	353	472	526	543	518	493	342	261	147	29	1	0	0	0	543	0	171
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**59**	**204**	**324**	**445**	**533**	**585**	**596**	**564**	**493**	**392**	**264**	**147**	**29**	**1**	**0**	**0**	**0**	**596**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**89**	**160**	**156**	**232**	**212**	**216**	**198**	**113**	**74**	**17**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**90**	**207**	**309**	**397**	**456**	**470**	**446**	**386**	**288**	**179**	**68**	**8**	**0**	**0**	**0**	**0**			**138**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	0	2	56	179	293	444	538	565	606	523	426	322	210	121	38	1	0	0	0	606	0	180
2	0	0	0	0	0	0	2	48	147	244	334	394	381	444	350	307	272	178	80	32	1	0	0	0	444	0	134
3	0	0	0	0	0	0	1	21	77	114	175	233	227	312	333	231	263	184	93	29	1	0	0	0	333	0	95
4	0	0	0	0	0	0	3	46	166	268	361	394	407	441	273	251	224	170	65	16	1	0	0	0	441	0	129
5	0	0	0	0	0	0	6	91	131	177	152	245	429	393	563	314	252	156	82	26	1	0	0	0	563	0	126
6	0	0	0	0	0	0	10	80	118	270	234	301	360	459	307	228	116	62	26	10	1	0	0	0	459	0	108
7	0	0	0	0	0	0	2	34	125	197	194	187	459	297	424	336	226	192	70	19	1	0	0	0	459	0	115
8	0	0	0	0	0	0	7	56	89	205	326	390	367	300	324	249	161	136	70	31	2	0	0	0	390	0	113
9	0	0	0	0	0	0	6	30	80	126	183	228	243	243	234	186	132	89	60	42	2	0	0	0	243	0	78
10	0	0	0	0	0	0	7	38	121	211	318	468	434	415	277	328	394	390	137	43	3	0	0	0	468	0	149
11	0	0	0	0	0	0	13	73	255	406	486	501	557	467	333	429	284	286	190	58	6	0	0	0	557	0	181
12	0	0	0	0	0	0	9	61	277	370	533	628	668	608	585	575	516	354	179	78	6	0	0	0	668	0	227
13	0	0	0	0	0	0	13	85	263	242	434	538	680	680	655	469	511	368	169	48	10	0	0	0	680	0	215
14	0	0	0	0	0	0	7	52	178	226	351	531	450	359	612	377	427	350	137	33	5	0	0	0	612	0	171
15	0	0	0	0	0	0	9	61	129	186	288	324	365	344	347	238	425	347	65	42	7	0	0	0	425	0	132
16	0	0	0	0	0	0	15	52	130	358	409	636	557	429	353	250	223	207	115	43	7	0	0	0	636	0	158
17	0	0	0	0	0	1	12	61	83	114	174	194	185	208	164	146	120	90	73	67	10	0	0	0	208	0	71
18	0	0	0	0	0	0	10	28	104	189	348	296	287	276	175	111	110	170	79	37	8	0	0	0	348	0	93
19	0	0	0	0	0	1	18	62	136	285	248	228	375	473	363	223	180	129	81	29	6	0	0	0	473	0	118
20	0	0	0	0	0	0	15	60	150	265	307	411	537	373	346	555	329	153	104	52	8	0	0	0	555	0	153
21	0	0	0	0	0	1	19	57	96	191	419	306	352	399	378	256	130	133	113	36	8	0	0	0	419	0	121
22	0	0	0	0	0	1	16	53	91	217	159	193	214	245	240	144	88	116	63	14	4	0	0	0	245	0	77
23	0	0	0	0	0	3	45	137	225	364	322	489	323	445	412	218	342	242	187	97	14	0	0	0	489	0	161
24	0	0	0	0	0	1	19	64	157	244	441	491	257	172	279	236	157	123	74	51	13	0	0	0	491	0	116
25	0	0	0	0	0	1	22	64	146	213	412	255	360	478	580	444	364	279	213	66	24	0	0	0	580	0	163
26	0	0	0	0	0	6	80	250	311	531	593	672	716	704	583	403	414	411	350	205	28	1	0	0	716	0	261
27	0	0	0	0	0	7	132	247	357	449	595	666	733	727	569	594	278	240	79	38	17	1	0	0	733	0	239
28	0	0	0	0	0	5	25	73	153	222	477	667	542	711	578	577	513	376	270	132	33	2	0	0	711	0	223
29	0	0	0	0	0	6	86	138	137	180	224	284	642	581	465	568	378	233	249	135	38	2	0	0	642	0	181
30	0	0	0	0	0	9	111	238	375	503	611	709	655	538	356	553	554	411	260	139	38	3	0	0	709	0	253
Max.	**0**	**0**	**0**	**0**	**0**	**9**	**132**	**250**	**375**	**531**	**611**	**709**	**733**	**727**	**655**	**594**	**554**	**411**	**350**	**205**	**38**	**3**	**0**	**0**	**733**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**77**	**114**	**152**	**187**	**185**	**172**	**164**	**111**	**88**	**62**	**26**	**10**	**1**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**2**	**24**	**80**	**166**	**262**	**352**	**413**	**444**	**438**	**399**	**341**	**290**	**226**	**128**	**56**	**10**	**0**	**0**	**0**			**151**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	4	43	103	213	308	369	429	354	347	349	315	372	140	61	36	12	1	0	0	429	0	144
2	0	0	0	0	0	7	52	105	137	177	293	379	225	525	399	391	540	379	301	104	52	2	0	0	540	0	169
3	0	0	0	0	0	13	82	209	348	499	616	691	769	650	727	563	168	219	192	106	22	2	0	0	769	0	245
4	0	0	0	0	0	15	111	249	383	467	374	448	648	609	734	707	590	278	184	82	39	4	0	0	734	0	247
5	0	0	0	0	0	9	70	78	114	214	276	301	377	436	334	390	378	386	267	98	42	1	0	0	436	0	157
6	0	0	0	0	0	10	38	129	216	494	274	318	316	284	318	286	221	189	107	84	42	3	0	0	494	0	139
7	0	0	0	0	0	23	112	115	199	242	206	255	292	439	405	206	114	143	93	54	24	2	0	0	439	0	122
8	0	0	0	0	0	4	17	42	75	110	160	269	294	322	700	487	308	332	174	63	28	4	0	0	700	0	141
9	0	0	0	0	0	6	25	61	92	182	231	295	277	276	338	437	286	345	234	120	53	5	0	0	437	0	136
10	0	0	0	0	1	15	70	117	287	353	418	511	588	576	538	502	427	309	221	85	30	5	0	0	588	0	210
11	0	0	0	0	1	32	88	272	362	511	640	724	745	760	717	650	556	406	292	179	68	9	0	0	760	0	292
12	0	0	0	0	1	26	137	270	391	522	606	646	479	532	664	582	526	350	294	129	32	6	0	0	664	0	258
13	0	0	0	0	0	7	24	49	87	192	244	263	278	315	280	275	252	198	140	85	29	5	0	0	315	0	113
14	0	0	0	0	0	11	58	169	192	342	300	277	243	186	175	159	284	264	136	76	31	7	0	0	342	0	121
15	0	0	0	0	1	22	42	107	203	194	469	580	573	450	563	404	416	380	312	195	81	14	0	0	580	0	209
16	0	0	0	0	1	19	101	200	237	382	508	511	421	284	259	204	247	219	180	109	48	11	0	0	511	0	164
17	0	0	0	0	1	16	56	104	316	461	585	841	683	674	672	661	527	445	304	129	54	12	0	0	841	0	273
18	0	0	0	0	3	49	159	291	419	560	643	630	609	607	591	626	593	369	132	54	36	9	0	0	643	0	266
19	0	0	0	0	6	64	120	315	305	178	396	191	251	465	510	555	460	456	348	135	55	18	1	0	555	0	201
20	0	0	0	0	5	55	154	290	431	449	499	539	721	569	274	409	435	349	303	201	93	18	1	0	721	0	241
21	0	0	0	0	5	58	169	299	432	558	675	647	659	771	657	693	595	466	338	198	116	24	1	0	771	0	307
22	0	0	0	0	2	23	62	108	96	54	146	226	377	295	473	486	314	364	244	108	50	7	0	0	486	0	143
23	0	0	0	0	4	19	72	121	184	262	319	218	288	242	312	265	137	132	58	22	21	5	0	0	319	0	112
24	0	0	0	0	1	18	42	108	410	393	277	428	367	488	205	161	140	129	93	60	22	6	0	0	488	0	139
25	0	0	0	0	2	22	47	69	76	88	82	127	196	125	174	202	166	142	121	75	32	14	1	0	202	0	73
26	0	0	0	0	3	17	41	65	67	125	145	154	288	223	129	185	210	128	100	56	21	8	0	0	288	0	82
27	0	0	0	0	2	15	29	77	327	567	492	609	616	761	606	563	520	458	316	227	98	21	2	0	761	0	263
28	0	0	0	0	6	31	143	149	336	375	364	409	562	714	766	614	461	280	221	231	78	15	3	0	766	0	240
29	0	0	0	0	8	80	190	320	454	344	328	212	542	315	186	435	324	474	151	142	65	24	4	0	542	0	192
30	0	0	0	0	6	30	83	96	181	292	306	269	255	281	347	642	398	278	137	88	43	20	2	0	642	0	156
31	0	0	0	0	8	23	69	92	153	272	296	284	173	160	171	146	154	74	50	36	23	13	2	0	296	0	92
Max.	**0**	**0**	**0**	**0**	**8**	**80**	**190**	**320**	**454**	**567**	**675**	**841**	**769**	**771**	**766**	**707**	**595**	**474**	**348**	**231**	**116**	**24**	**4**	**0**	**841**		
Min.	**0**	**0**	**0**	**0**	**0**	**4**	**17**	**42**	**67**	**54**	**82**	**127**	**173**	**125**	**129**	**146**	**114**	**74**	**50**	**22**	**12**	**1**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**2**	**24**	**81**	**154**	**249**	**328**	**372**	**409**	**434**	**441**	**438**	**426**	**359**	**293**	**197**	**109**	**47**	**10**	**1**	**0**			**182**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	3	15	51	170	178	161	121	211	277	212	422	314	255	176	112	72	33	8	1	0	422	0	116
2	0	0	0	0	7	22	76	81	109	202	293	331	516	455	360	332	283	327	182	81	57	15	1	0	516	0	155
3	0	0	0	0	3	28	66	135	183	254	286	494	388	331	317	725	608	250	316	186	125	38	5	0	725	0	197
4	0	0	0	0	5	28	55	83	116	159	165	244	319	163	194	183	206	121	29	48	16	2	0	0	319	0	89
5	0	0	0	0	4	41	53	53	78	150	236	357	475	278	301	485	328	154	153	255	81	22	3	0	485	0	146
6	0	0	0	1	12	27	87	308	472	572	551	598	761	790	804	688	608	401	323	151	52	31	6	0	804	0	302
7	0	0	0	0	13	105	145	222	347	464	249	264	409	419	827	737	523	420	295	253	111	29	6	0	827	0	243
8	0	0	0	0	11	59	102	160	157	231	470	514	806	496	469	417	403	254	223	151	60	18	5	0	806	0	209
9	0	0	0	0	7	33	83	140	224	353	317	488	363	305	412	336	245	244	225	126	54	19	3	0	488	0	166
10	0	0	0	1	11	40	102	163	277	467	652	749	767	783	711	666	481	204	253	135	80	26	2	0	783	0	274
11	0	0	0	0	6	32	74	134	191	242	370	512	642	614	638	689	606	476	378	149	43	12	1	0	689	0	242
12	0	0	0	0	1	10	34	63	89	129	131	135	240	209	259	307	307	302	207	125	62	25	6	0	307	0	110
13	0	0	0	1	7	31	87	148	196	236	268	254	209	291	525	496	157	242	273	138	62	19	2	0	525	0	152
14	0	0	0	0	5	33	144	188	250	411	455	408	327	351	257	237	243	235	160	110	55	14	4	0	455	0	162
15	0	0	0	1	20	63	211	257	351	569	662	729	807	826	772	502	747	598	392	254	145	50	7	0	826	0	332
16	0	0	0	2	19	88	214	318	425	567	588	689	735	670	534	545	398	269	162	93	45	14	2	0	735	0	266
17	0	0	0	0	1	18	51	105	204	333	259	185	196	326	338	376	257	133	179	122	74	25	4	0	376	0	133
18	0	0	0	1	13	93	176	192	374	179	178	254	608	768	910	522	515	180	132	129	34	19	6	0	910	0	220
19	0	0	0	1	14	54	178	299	466	558	648	657	801	806	772	703	614	503	379	254	144	51	8	1	806	0	330
20	0	0	0	1	13	99	207	328	453	575	677	733	742	687	719	620	604	501	321	149	85	34	5	0	742	0	315
21	0	0	0	1	9	35	92	237	320	538	512	635	686	548	496	546	460	334	305	220	81	21	3	0	686	0	253
22	0	0	0	0	4	17	40	62	107	152	167	147	132	145	142	126	116	69	70	44	19	6	0	0	167	0	65
23	0	0	0	0	2	9	19	30	47	54	62	86	102	102	107	102	115	82	56	80	40	14	2	0	115	0	46
24	0	0	0	0	4	24	54	101	150	163	189	158	231	323	188	230	272	332	231	111	51	21	5	0	332	0	118
25	0	0	0	0	8	37	68	139	219	391	280	233	235	297	429	258	288	212	117	139	59	19	6	0	429	0	143
26	0	0	0	1	10	48	175	299	478	551	501	357	653	722	768	760	467	453	368	253	146	38	8	0	768	0	294
27	0	0	0	1	14	105	166	268	462	473	568	586	779	731	592	723	444	319	267	189	81	28	4	0	779	0	283
28	0	0	0	0	4	22	43	73	115	217	228	161	270	324	363	218	139	152	178	93	64	45	11	1	363	0	113
29	0	0	0	2	16	83	207	331	479	630	684	643	685	616	545	597	422	406	351	151	94	31	8	1	685	0	291
30	0	0	0	0	13	48	52	75	117	141	164	411	351	270	319	346	270	220	215	104	44	34	6	0	411	0	133
Max.	**0**	**0**	**0**	**2**	**20**	**105**	**214**	**331**	**479**	**630**	**684**	**749**	**807**	**826**	**910**	**760**	**747**	**598**	**392**	**255**	**146**	**51**	**11**	**1**	**910**		
Min.	**0**	**0**	**0**	**0**	**1**	**9**	**19**	**30**	**47**	**54**	**62**	**86**	**102**	**102**	**107**	**102**	**115**	**69**	**29**	**44**	**16**	**2**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**1**	**9**	**45**	**104**	**172**	**254**	**337**	**364**	**407**	**484**	**462**	**483**	**460**	**379**	**286**	**228**	**145**	**70**	**24**	**4**	**0**			**197**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	6	25	82	142	435	519	195	295	426	279	355	278	131	161	104	79	42	19	3	0	519	0	149
2	0	0	0	0	8	39	161	332	447	511	520	421	341	288	364	155	321	276	266	180	89	49	3	0	520	0	199
3	0	0	0	0	6	36	137	188	272	350	391	377	386	438	604	619	438	300	104	77	26	5	1	0	619	0	198
4	0	0	0	0	1	10	33	72	156	175	346	343	214	263	361	284	177	115	131	95	56	23	3	0	361	0	119
5	0	0	0	1	10	28	72	266	346	360	300	471	210	229	204	120	88	129	52	45	13	10	1	0	471	0	123
6	0	0	0	0	4	16	38	69	131	199	199	295	403	336	512	464	371	322	246	158	81	38	6	0	512	0	162
7	0	0	0	0	7	60	196	310	436	564	439	285	244	315	337	227	238	150	116	104	47	16	1	0	564	0	171
8	0	0	0	0	1	9	20	53	99	133	117	166	197	248	226	169	174	273	171	144	75	22	3	0	273	0	96
9	0	0	0	0	3	20	45	142	177	271	323	421	561	429	600	501	368	437	366	198	116	54	8	0	600	0	210
10	0	0	0	0	7	70	182	310	458	526	246	420	237	222	376	361	322	184	123	87	54	27	4	0	526	0	176
11	0	0	0	0	8	57	103	172	433	566	655	693	736	689	601	709	625	493	316	233	119	20	3	0	736	0	301
12	0	0	0	0	4	89	132	341	457	626	233	247	528	161	155	339	139	166	98	68	54	29	3	0	626	0	161
13	0	0	0	0	1	7	14	18	25	65	125	148	188	172	236	225	224	205	87	50	36	9	2	0	236	0	77
14	0	0	0	0	2	14	35	81	146	239	331	361	354	325	155	215	160	123	50	32	55	9	2	0	361	0	112
15	0	0	0	0	1	17	43	71	110	225	384	357	350	448	285	284	223	276	161	89	61	14	1	0	448	0	142
16	0	0	0	0	3	31	62	189	192	259	447	654	411	292	290	391	313	275	257	244	122	26	3	0	654	0	186
17	0	0	0	0	4	58	172	291	420	541	532	472	531	767	690	693	545	288	236	176	93	24	2	0	767	0	272
18	0	0	0	0	1	12	54	100	214	185	308	306	313	163	215	273	157	82	112	100	45	6	1	0	313	0	110
19	0	0	0	0	2	26	84	220	189	207	255	445	500	199	188	178	192	168	141	79	43	12	1	0	500	0	130
20	0	0	0	0	2	37	125	231	407	561	690	554	513	796	749	568	529	355	288	197	104	11	1	0	796	0	280
21	0	0	0	0	1	11	31	46	80	111	210	204	214	234	207	190	184	68	47	29	17	3	0	0	234	0	79
22	0	0	0	0	0	3	13	30	45	47	106	126	110	92	121	122	129	62	50	21	27	7	0	0	129	0	46
23	0	0	0	0	1	4	23	47	113	119	156	223	163	146	94	55	58	85	62	39	12	2	0	0	223	0	58
24	0	0	0	0	0	9	35	67	153	260	256	227	288	242	233	233	282	159	136	60	31	8	0	0	288	0	112
25	0	0	0	0	1	15	53	169	293	346	263	498	362	475	331	229	210	149	89	97	79	30	1	0	498	0	154
26	0	0	0	0	1	21	63	121	75	206	486	689	605	725	431	386	518	464	266	101	26	7	1	0	725	0	216
27	0	0	0	0	1	9	47	100	179	294	590	400	464	400	574	511	527	182	206	68	33	10	1	0	590	0	191
28	0	0	0	0	0	8	23	57	102	223	318	585	703	734	696	641	539	417	287	159	62	17	1	0	734	0	232
29	0	0	0	0	1	27	64	88	152	218	463	472	424	428	530	527	459	310	271	84	79	8	0	0	530	0	192
30	0	0	0	0	0	7	20	50	107	76	129	226	414	320	415	251	308	225	102	60	23	5	0	0	415	0	114
31	0	0	0	0	0	4	25	61	100	142	192	163	194	254	331	334	359	218	92	68	48	7	0	0	359	0	108
Max.	**0**	**0**	**0**	**1**	**10**	**89**	**196**	**341**	**458**	**626**	**690**	**693**	**736**	**796**	**749**	**709**	**625**	**493**	**366**	**244**	**122**	**54**	**8**	**0**	**796**		
Min.	**0**	**0**	**0**	**0**	**0**	**3**	**13**	**18**	**25**	**47**	**106**	**126**	**110**	**92**	**94**	**55**	**58**	**62**	**47**	**21**	**12**	**2**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**3**	**25**	**70**	**143**	**224**	**294**	**329**	**372**	**374**	**358**	**370**	**340**	**300**	**230**	**162**	**104**	**57**	**17**	**2**	**0**			**157**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	0	0	0	0	0	1	7	22	46	77	186	258	162	206	258	208	171	133	115	38	14	3	0	0	258	0	79
2	0	0	0	0	0	5	22	43	102	101	99	96	118	128	118	178	107	114	81	93	43	7	0	0	178	0	61
3	0	0	0	0	0	4	17	34	55	93	110	142	157	168	291	199	144	90	49	47	14	1	0	0	291	0	67
4	0	0	0	0	0	1	7	20	33	39	65	88	128	97	97	56	63	51	29	15	6	1	0	0	128	0	33
5	0	0	0	0	0	5	17	18	36	68	50	96	65	59	40	42	82	43	43	24	6	2	0	0	96	0	29
6	0	0	0	0	0	8	70	243	221	481	300	418	563	618	625	254	197	366	132	179	37	7	0	0	625	0	197
7	0	0	0	0	0	7	38	202	354	518	493	370	504	574	688	594	499	386	276	168	59	6	0	0	688	0	239
8	0	0	0	0	0	7	39	91	196	360	535	420	549	379	388	288	324	310	216	102	47	5	0	0	549	0	177
9	0	0	0	0	0	9	112	229	338	475	536	622	675	796	524	590	424	269	262	124	48	5	0	0	796	0	252
10	0	0	0	0	0	7	88	212	337	455	562	638	667	688	668	603	500	377	260	138	48	4	0	0	688	0	261
11	0	0	0	0	0	10	89	157	281	408	530	546	503	464	336	364	243	165	104	54	19	1	0	0	546	0	178
12	0	0	0	0	0	1	3	17	36	104	112	319	575	634	358	490	470	385	257	144	40	3	0	0	634	0	165
13	0	0	0	0	0	5	81	196	298	440	361	472	262	458	384	357	411	353	108	56	12	1	0	0	472	0	177
14	0	0	0	0	0	1	10	39	42	46	56	87	123	224	310	221	131	118	58	78	25	1	0	0	310	0	65
15	0	0	0	0	0	2	10	41	106	132	239	163	230	192	275	182	151	115	77	56	19	1	0	0	275	0	83
16	0	0	0	0	0	2	40	191	307	378	496	435	624	642	493	612	275	175	170	125	30	2	0	0	642	0	208
17	0	0	0	0	0	2	23	104	125	308	185	219	308	706	261	350	215	237	62	43	9	1	0	0	706	0	132
18	0	0	0	0	0	0	5	41	68	91	77	65	91	132	190	224	149	81	62	30	10	1	0	0	224	0	55
19	0	0	0	0	0	1	28	81	111	107	116	125	72	147	301	202	136	93	72	42	10	0	0	0	301	0	69
20	0	0	0	0	0	0	1	5	30	108	154	244	169	236	286	305	259	319	161	88	16	1	0	0	319	0	99
21	0	0	0	0	0	0	9	18	17	41	63	68	55	85	180	170	157	157	102	34	6	0	0	0	180	0	48
22	0	0	0	0	0	0	6	36	54	119	144	153	130	114	88	107	80	74	50	16	3	0	0	0	153	0	49
23	0	0	0	0	0	0	6	28	89	162	220	224	288	324	272	203	176	116	64	24	4	0	0	0	324	0	92
24	0	0	0	0	0	0	26	59	114	119	181	240	235	207	155	178	396	258	22	14	6	0	0	0	396	0	92
25	0	0	0	0	0	0	7	22	68	142	159	213	372	459	549	476	476	333	203	84	10	0	0	0	549	0	149
26	0	0	0	0	0	0	23	51	99	303	330	485	212	378	559	295	203	266	213	99	13	0	0	0	559	0	147
27	0	0	0	0	0	1	30	92	277	388	460	463	230	228	334	446	396	279	228	106	10	0	0	0	463	0	165
28	0	0	0	0	0	0	34	155	267	379	491	567	610	622	522	425	376	312	186	69	5	0	0	0	622	0	209
29	0	0	0	0	0	0	27	94	133	120	381	467	610	627	494	509	414	281	166	58	6	0	0	0	627	0	183
30	0	0	0	0	0	0	22	131	218	326	301	238	296	252	256	285	184	218	92	21	3	0	0	0	326	0	118
31	0	0	0	0	0	0	12	109	229	371	426	554	641	203	227	130	125	121	71	18	2	0	0	0	641	0	135
Max.	**0**	**0**	**0**	**0**	**0**	**10**	**112**	**243**	**354**	**518**	**562**	**638**	**675**	**796**	**688**	**612**	**500**	**386**	**276**	**179**	**59**	**7**	**0**	**0**	**796**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**17**	**39**	**50**	**65**	**55**	**59**	**40**	**42**	**63**	**43**	**22**	**14**	**2**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**29**	**90**	**151**	**234**	**272**	**306**	**330**	**356**	**340**	**308**	**256**	**213**	**129**	**71**	**19**	**2**	**0**	**0**			**129**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	3	21	63	73	146	124	152	184	321	377	343	260	102	18	2	0	0	0	377	0	91
2	0	0	0	0	0	0	2	21	54	145	331	352	353	434	391	185	152	93	46	14	1	0	0	0	434	0	107
3	0	0	0	0	0	0	2	16	46	89	121	135	137	121	107	65	37	42	20	7	1	0	0	0	137	0	39
4	0	0	0	0	0	0	3	48	142	256	199	252	355	475	381	299	154	173	147	29	2	0	0	0	475	0	121
5	0	0	0	0	0	0	8	45	99	280	383	335	614	544	480	123	11	10	12	6	0	0	0	0	614	0	123
6	0	0	0	0	0	0	3	26	57	107	151	177					200	131	68	23	10	0	0	0	200	0	48
7	0	0	0	0	0	0	0	4	40	115	63	49	75	74	87	117	93	42	29	16	4	0	0	0	117	0	34
8	0	0	0	0	0	0	0	1	7	19	16	38	56	80	90	81	63	130	33	19	4	0	0	0	130	0	27
9	0	0	0	0	0	0	0	0	7	32	72	105	81	123	140	217	310	155	50	58	27	1	0	0	310	0	57
10	0	0	0	0	0	0	0	4	79	193	264	365	356	249	247	337	304	167	180	55	9	0	0	0	365	0	117
11	0	0	0	0	0	0	0	2	24	76	105	42	30	34	33	47	46	34	14	17	3	0	0	0	105	0	21
12	0	0	0	0	0	0	0	0	8	28	112	197	420	475	474	381	338	99	56	35	10	0	0	0	475	0	110
13	0	0	0	0	0	0	0	0	4	32	35	70	180	221	103	136	102	39	48	13	6	0	0	0	221	0	41
14	0	0	0	0	0	0	0	1	31	117	148	131	215	270	236	437	131	197	123	113	11	0	0	0	437	0	90
15	0	0	0	0	0	0	0	2	48	163	283	396	358	368	574	548	288	99	169	99	10	0	0	0	574	0	142
16	0	0	0	0	0	0	0	2	22	152	265	358	212	319	435	353	268	181	151	79	8	0	0	0	435	0	117
17	0	0	0	0	0	0	0	0	8	14	39	94	79	136	156	194	196	197	156	49	8	0	0	0	197	0	55
18	0	0	0	0	0	0	0	0	10	35	55	103	142	103	41	18	33	27	17	9	6	0	0	0	142	0	25
19	0	0	0	0	0	0	0	1	15	37	35	64	49	117	207	121	124	68	62	28	1	0	0	0	207	0	39
20	0	0	0	0	0	0	0	0	8	20	39	61	73	106	157	120	170	247	37	11	3	0	0	0	247	0	44
21	0	0	0	0	0	0	0	0	15	69	260	333	370	173	171	261	236	305	164	67	4	0	0	0	370	0	101
22	0	0	0	0	0	0	0	1	17	64	105	182	183	223	147	71	46	29	13	4	0	0	0	0	223	0	45
23	0	0	0	0	0	0	0	0	11	71	142	179	198	190	111	86	66	42	22	8	1	0	0	0	198	0	47
24	0	0	0	0	0	0	0	0	3	17	31	72	87	94	276	199	72	51	10	5	0	0	0	0	276	0	38
25	0	0	0	0	0	0	0	0	10	35	56	137	175	154	143	120	163	85	43	22	1	0	0	0	175	0	48
26	0	0	0	0	0	0	0	0	11	59	199	280	187	125	232	111	127	110	81	15	1	0	0	0	280	0	64
27	0	0	0	0	0	0	0	0	8	34	88	230	148	300	281	97	146	91	41	10	0	0	0	0	300	0	61
28	0	0	0	0	0	0	0	0	3	24	60	101	103	101	97	118	86	87	51	9	1	0	0	0	118	0	35
29	0	0	0	0	0	0	0	0	9	90	197	174	205	182	207	148	95	57	41	11	0	0	0	0	207	0	59
30	0	0	0	0	0	0	0	0	2	20	33	51	80	114	104	106	45	46	16	5	0	0	0	0	114	0	26
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**48**	**142**	**280**	**383**	**396**	**614**	**544**	**574**	**548**	**343**	**305**	**180**	**113**	**27**	**1**	**0**	**0**	**614**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	**16**	**38**	**30**	**34**	**33**	**18**	**11**	**10**	**10**	**4**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**29**	**82**	**134**	**173**	**196**	**210**	**222**	**189**	**148**	**110**	**67**	**28**	**4**	**0**	**0**	**0**			**66**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	5	49	177	147	224	153	175	269	349	121	27	12	0	0	0	0	349	0	71
2	0	0	0	0	0	0	0	0	4	33	66	138	210	210	309	324	334	197	54	17	0	0	0	0	334	0	79
3	0	0	0	0	0	0	0	0	4	52	157	296	371	337	306	296	108	117	35	5	0	0	0	0	371	0	87
4	0	0	0	0	0	0	0	0	1	10	22	31	42	48	43	58	43	26	11	2	0	0	0	0	58	0	14
5	0	0	0	0	0	0	0	0	1	17	45	128	85	197	393	312	255	129	61	24	0	0	0	0	393	0	69
6	0	0	0	0	0	0	0	0	1	16	33	135	210	196	351	312	111	82	43	6	0	0	0	0	351	0	62
7	0	0	0	0	0	0	0	0	5	34	116	220	335	336	230	295	292	253	99	13	0	0	0	0	336	0	93
8	0	0	0	0	0	0	0	0	5	46	66	248	349	395	399	363	291	176	84	9	0	0	0	0	399	0	101
9	0	0	0	0	0	0	0	0	3	58	167	265	339	379	382	349	278	189	81	8	0	0	0	0	382	0	104
10	0	0	0	0	0	0	0	0	2	49	118	238	340	191	199	156	111	140	51	4	0	0	0	0	340	0	67
11	0	0	0	0	0	0	0	0	1	28	84	109	151	143	170	97	76	26	9	1	0	0	0	0	170	0	37
12	0	0	0	0	0	0	0	0	0	12	42	93	173	215	269	251	249	118	64	3	0	0	0	0	269	0	62
13	0	0	0	0	0	0	0	0	1	16	56	96	161	182	316	303	261	168	50	2	0	0	0	0	316	0	67
14	0	0	0	0	0	0	0	0	1	26	146	241	266	292	215	144	139	55	15	1	0	0	0	0	292	0	64
15	0	0	0	0	0	0	0	0	1	29	128	135	146	207	182	172	102	53	24	1	0	0	0	0	207	0	49
16	0	0	0	0	0	0	0	0	1	17	62	154	142	80	133	119	71	34	8	0	0	0	0	0	154	0	34
17	0	0	0	0	0	0	0	0	0	18	59	141	174	294	243	238	112	61	13	1	0	0	0	0	294	0	56
18	0	0	0	0	0	0	0	0	0	19	59	117	153	196	180	156	101	63	20	1	0	0	0	0	196	0	44
19	0	0	0	0	0	0	0	0	0	16	137	229	289	331	331	297	225	118	19	1	0	0	0	0	331	0	83
20	0	0	0	0	0	0	0	0	0	21	108	221	229	204	264	139	111	55	13	0	0	0	0	0	264	0	57
21	0	0	0	0	0	0	0	0	0	6	43	90	166	235	144	102	102	99	19	0	0	0	0	0	235	0	42
22	0	0	0	0	0	0	0	0	0	6	36	75	119	127	210	203	203	88	13	0	0	0	0	0	210	0	45
23	0	0	0	0	0	0	0	0	0	5	30	76	90	89	77	87	82	29	12	0	0	0	0	0	90	0	24
24	0	0	0	0	0	0	0	0	0	5	41	67	100	87	86	81	68	29	5	0	0	0	0	0	100	0	24
25	0	0	0	0	0	0	0	0	0	3	22	31	28	37	29	19	13	10	2	0	0	0	0	0	37	0	8
26	0	0	0	0	0	0	0	0	0	3	26	36	69	104	91	87	79	23	4	0	0	0	0	0	104	0	22
27	0	0	0	0	0	0	0	0	0	1	26	54	68	103	69	24	32	27	4	0	0	0	0	0	103	0	17
28	0	0	0	0	0	0	0	0	0	3	20	59	109	207	117	81	71	54	5	0	0	0	0	0	207	0	30
29	0	0	0	0	0	0	0	0	0	1	13	41	67	137	79	54	35	17	2	0	0	0	0	0	137	0	19
30	0	0	0	0	0	0	0	0	0	1	7	19	34	47	60	53	35	19	2	0	0	0	0	0	60	0	12
31	0	0	0	0	0	0	0	0	0	2	21	64	351	248	158	75	87	59	5	0	0	0	0	0	351	0	45
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**58**	**177**	**296**	**371**	**395**	**399**	**363**	**349**	**253**	**99**	**24**	**0**	**0**	**0**	**0**	**399**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**19**	**28**	**37**	**29**	**19**	**13**	**10**	**2**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	**69**	**129**	**180**	**194**	**200**	**178**	**143**	**85**	**28**	**4**	**0**	**0**	**0**	**0**			**51**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	5	38	86	100	69	85	103	40	16	2	0	0	0	0	0	103	0	23
2	0	0	0	0	0	0	0	0	0	2	30	80	219	255	256	150	118	27	3	0	0	0	0	0	256	0	47
3	0	0	0	0	0	0	0	0	0	2	25	69	105	144	133	86	84	40	2	0	0	0	0	0	144	0	29
4	0	0	0	0	0	0	0	0	0	0	7	17	24	30	32	23	23	10	1	0	0	0	0	0	32	0	7
5	0	0	0	0	0	0	0	0	0	1	11	40	69	101	84	68	45	16	2	0	0	0	0	0	101	0	18
6	0	0	0	0	0	0	0	0	0	0	12	29	32	48	176	148	61	16	2	0	0	0	0	0	176	0	22
7	0	0	0	0	0	0	0	0	0	0	8	34	40	66	86	103	66	10	3	0	0	0	0	0	103	0	17
8	0	0	0	0	0	0	0	0	0	0	5	14	25	28	48	71	40	38	2	0	0	0	0	0	71	0	11
9	0	0	0	0	0	0	0	0	0	1	19	82	57	92	91	118	107	17	1	0	0	0	0	0	118	0	24
10	0	0	0	0	0	0	0	0	0	1	9	68	172	115	120	90	51	24	1	0	0	0	0	0	172	0	27
11	0	0	0	0	0	0	0	0	0	1	36	81	138	200	197	165	104	29	1	0	0	0	0	0	200	0	40
12	0	0	0	0	0	0	0	0	0	1	15	41	70	71	75	67	28	10	0	0	0	0	0	0	75	0	16
13	0	0	0	0	0	0	0	0	0	0	4	17	26	23	38	30	26	20	1	0	0	0	0	0	38	0	8
14	0	0	0	0	0	0	0	0	0	0	24	80	144	107	169	98	60	24	1	0	0	0	0	0	169	0	29
15	0	0	0	0	0	0	0	0	0	0	8	61	110	125	194	160	91	19	1	0	0	0	0	0	194	0	32
16	0	0	0	0	0	0	0	0	0	0	8	73	155	105	160	91	49	18	1	0	0	0	0	0	160	0	27
17	0	0	0	0	0	0	0	0	0	0	6	38	145	181	185	155	88	16	0	0	0	0	0	0	185	0	34
18	0	0	0	0	0	0	0	0	0	0	8	43	70	203	150	149	67	16	0	0	0	0	0	0	203	0	29
19	0	0	0	0	0	0	0	0	0	0	7	24	60	83	96	69	37	7	0	0	0	0	0	0	96	0	16
20	0	0	0	0	0	0	0	0	0	0	1	6	25	51	51	36	26	7	0	0	0	0	0	0	51	0	8
21	0	0	0	0	0	0	0	0	0	0	1	5	18	27	27	73	25	4	0	0	0	0	0	0	73	0	7
22	0	0	0	0	0	0	0	0	0	0	0	4	7	17	26	48	17	1	0	0	0	0	0	0	48	0	5
23	0	0	0	0	0	0	0	0	0	0	3	22	73	106	92	67	69	14	0	0	0	0	0	0	106	0	19
24	0	0	0	0	0	0	0	0	0	0	3	17	35	74	41	53	45	7	0	0	0	0	0	0	74	0	12
25	0	0	0	0	0	0	0	0	0	0	2	31	55	81	61	45	22	3	0	0	0	0	0	0	81	0	13
26	0	0	0	0	0	0	0	0	0	0	1	12	20	53	59	42	26	2	0	0	0	0	0	0	59	0	9
27	0	0	0	0	0	0	0	0	0	0	1	11	11	23	29	26	27	11	0	0	0	0	0	0	29	0	6
28	0	0	0	0	0	0	0	0	0	0	2	21	45	35	36	31	18	3	0	0	0	0	0	0	45	0	8
29	0	0	0	0	0	0	0	0	0	0	1	15	33	45	44	26	13	1	0	0	0	0	0	0	45	0	8
30	0	0	0	0	0	0	0	0	0	0	0	6	14	28	25	18	9	1	0	0	0	0	0	0	28	0	4
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**38**	**86**	**219**	**255**	**256**	**165**	**118**	**40**	**3**	**0**	**0**	**0**	**0**	**0**	**256**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**7**	**17**	**25**	**18**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**10**	**38**	**70**	**86**	**95**	**80**	**49**	**14**	**1**	**0**	**0**	**0**	**0**	**0**			**19**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Solar (Watts/m^2)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	5	31	84	119	131	98	30	4	0	0	0	0	0	0	131	0	21
2	0	0	0	0	0	0	0	0	0	0	4	34	83	123	129	100	43	5	0	0	0	0	0	0	129	0	22
3	0	0	0	0	0	0	0	0	0	0	1	25	72	101	129	99	41	5	0	0	0	0	0	0	129	0	20
4	0	0	0	0	0	0	0	0	0	0	1	11	51	53	27	31	31	7	0	0	0	0	0	0	53	0	9
5	0	0	0	0	0	0	0	0	0	0	1	9	28	52	49	39	21	1	0	0	0	0	0	0	52	0	9
6	0	0	0	0	0	0	0	0	0	0	0	2	10	20	26	32	18	3	0	0	0	0	0	0	32	0	5
7	0	0	0	0	0	0	0	0	0	0	0	5	18	29	25	17	7	2	0	0	0	0	0	0	29	0	4
8	0	0	0	0	0	0	0	0	0	0	1	7	27	30	32	23	16	2	0	0	0	0	0	0	32	0	6
9	0	0	0	0	0	0	0	0	0	0	0	7	25	38	37	23	10	1	0	0	0	0	0	0	38	0	6
10	0	0	0	0	0	0	0	0	0	0	0	7	19	20	21	16	7	1	0	0	0	0	0	0	21	0	4
11	0	0	0	0	0	0	0	0	0	0	1	14	60	101	109	73	21	3	0	0	0	0	0	0	109	0	16
12	0	0	0	0	0	0	0	0	0	0	0	15	34	37	44	36	18	2	0	0	0	0	0	0	44	0	8
13	0	0	0	0	0	0	0	0	0	0	0	5	25	45	73	41	27	3	0	0	0	0	0	0	73	0	9
14	0	0	0	0	0	0	0	0	0	0	1	18	73	109	109	80	28	3	0	0	0	0	0	0	109	0	18
15	0	0	0	0	0	0	0	0	0	0	0	10	43	86	99	77	31	3	0	0	0	0	0	0	99	0	15
16	0	0	0	0	0	0	0	0	0	0	0	8	27	47	51	41	17	3	0	0	0	0	0	0	51	0	8
17	0	0	0	0	0	0	0	0	0	0	0	12	56	103	112	81	34	4	0	0	0	0	0	0	112	0	17
18	0	0	0	0	0	0	0	0	0	0	1	16	72	120	130	101	45	4	0	0	0	0	0	0	130	0	20
19	0	0	0	0	0	0	0	0	0	0	0	11	56	101	114	87	36	3	0	0	0	0	0	0	114	0	17
20	0	0	0	0	0	0	0	0	0	0	0	4	20	31	34	31	15	1	0	0	0	0	0	0	34	0	6
21	0	0	0	0	0	0	0	0	0	0	0	9	41	44	44	28	14	2	0	0	0	0	0	0	44	0	8
22	0	0	0	0	0	0	0	0	0	0	0	11	19	29	31	34	22	3	0	0	0	0	0	0	34	0	6
23	0	0	0	0	0	0	0	0	0	0	0	6	39	103	109	82	33	4	0	0	0	0	0	0	109	0	16
24	0	0	0	0	0	0	0	0	0	0	0	3	16	28	29	21	10	1	0	0	0	0	0	0	29	0	5
25	0	0	0	0	0	0	0	0	0	0	0	11	54	99	113	88	38	5	0	0	0	0	0	0	113	0	17
26	0	0	0	0	0	0	0	0	0	0	0	3	19	32	39	28	12	2	0	0	0	0	0	0	39	0	6
27	0	0	0	0	0	0	0	0	0	0	0	4	21	18	19	14	7	1	0	0	0	0	0	0	21	0	4
28	0	0	0	0	0	0	0	0	0	0	0	10	52	97	111	60	25	3	0	0	0	0	0	0	111	0	15
29	0	0	0	0	0	0	0	0	0	0	0	7	33	59	71	48	18	4	0	0	0	0	0	0	71	0	10
30	0	0	0	0	0	0	0	0	0	0	0	4	19	32	37	30	14	3	0	0	0	0	0	0	37	0	6
31	0	0	0	0	0	0	0	0	0	0	0	4	19	35	47	34	17	3	0	0	0	0	0	0	47	0	7
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**34**	**84**	**123**	**131**	**101**	**45**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**131**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**18**	**19**	**14**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**10**	**39**	**63**	**69**	**51**	**23**	**3**	**0**	**0**	**0**	**0**	**0**	**0**			**11**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	932	931	930	929	929	929	930	929	929	929	929	930	930	930	930	931	931	931	931	931	931	931	932	932	932	929	930.2
2	932	933	933	933	933	934	934	934	935	935	935	936	936	936	936	937	937	938	938	939	938	939	939	939	939	932	935.8
3	940	940	940	940	940	940	940	941	942	942	942	942	942	943	944	944	943	944	944	944	944	945	945	945	945	940	942.3
4	945	944	944	943	943	942	942	941	940	941	941	941	941	941	941	941	940	941	941	941	941	941	941	942	945	940	941.5
5	942	942	942	943	943	944	944	945	946	947	948	949	950	951	952	953	953	954	955	955	955	955	955	956	956	942	949.2
6	956	956	956	956	956	956	955	955	955	955	955	955	955	956	956	956	956	956	957	957	957	957	957	958	958	955	956.0
7	958	959	958	957	958	958	960	960	963	963	964	966	967	968	970	971	971	971	972	973	974	975	976	976	976	957	966.2
8	977	978	978	979	979	979	979	979	980	980	980	980	980	981	981	980	980	981	981	981	982	983	984	984	984	977	980.2
9	984	984	985	985	984	984	985	984	984	984	984	984	984	983	983	983	982	982	982	981	981	981	980	980	985	980	983.1
10	980	979	979	979	978	977	976	974	973	973	972	972	972	972	970	971	970	970	971	970	970	970	970	970	980	970	973.2
11	970	970	969	969	969	968	968	967	967	968	967	966	967	966	965	964	965	964	964	963	962	962	961	960	970	960	966.0
12	960	960	959	959	958	958	958	958	958	958	959	958	957	956	955	954	953	953	952	953	954	955	954	958	960	952	956.5
13	959	962	962	963	964	965	965	965	965	966	966	967	966	966	965	965	964	963	963	962	961	960	959	959	967	959	963.5
14	958	956	956	955	954	953	952	951	952	953	952	952	955	955	955	957	958	959	959	959	960	960	961	961	961	951	956.0
15	961	961	961	961	961	962	962	962	962	963	963	963	964	964	965	966	965	966	968	967	967	967	967	967	968	961	963.9
16	967	967	966	964	964	962	961	961	959	958	957	956	955	954	953	951	951	950	950	951	952	952	953	953	967	950	957.1
17	954	955	955	956	956	956	956	956	956	956	956	956	956	956	955	955	954	955	955	956	955	955	954	954	956	954	955.4
18	954	953	952	951	950	950	949	948	948	947	946	947	946	946	945	945	945	944	944	944	944	945	945	946	954	944	947.3
19	946	946	947	947	947	948	948	949	949	950	950	950	951	951	951	951	950	950	950	951	951	951	951	951	951	946	949.3
20	951	950	950	950	949	949	948	948	948	947	947	946	945	945	943	942	942	941	941	940	939	939	939	939	951	939	945.0
21	939	939	939	940	940	940	941	941	942	942	943	944	944	944	945	945	945	946	946	947	947	948	948	949	949	939	943.5
22	950	950	951	952	952	952	953	953	953	954	954	955	955	955	955	956	956	956	957	957	957	957	958	958	958	950	954.4
23	958	958	958	958	958	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959	960	960	960	961	961	958	959.1
24	961	961	961	961	961	960	961	961	962	961	962	963	964	964	964	964	964	965	964	965	965	965	965	964	965	960	962.8
25	963	963	962	961	958	957	955	953	952	952	951	950	949	948	948	949	949	949	948	948	947	946	948	948	963	946	952.4
26	948	948	947	947	945	946	946	947	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	961	961	945	952.0
27	962	962	961	961	961	961	962	962	961	962	962	960	960	960	960	958	957	958	957	956	955	955	955	956	962	955	959.3
28	956	956	956	956	956	957	957	958	958	960	961	962	963	963	963	963	965	965	965	965	966	966	966	967	967	956	961.1
29	966	965	965	964	962	962	960	961	958	961	961	961	958	959	959	959	959	957	958	958	958	961	964	967	967	957	960.8
30	967	968	970	971	971	971	970	970	967	967	964	966	966	966	964	968	969	971	972	972	972	971	973	973	973	964	969.1
31	971	971	971	971	971	971	971	971	971	972	973	972	973	973	972	972	971	971	971	970	970	969	970	969	973	969	971.0
Max.	**984**	**984**	**985**	**985**	**984**	**984**	**985**	**984**	**984**	**984**	**984**	**984**	**984**	**983**	**983**	**983**	**982**	**982**	**982**	**981**	**982**	**983**	**984**	**984**	**985**		
Min.	**932**	**931**	**930**	**929**	**929**	**929**	**930**	**929**	**929**	**929**	**929**	**930**	**930**	**930**	**930**	**931**	**931**	**931**	**931**	**931**	**931**	**931**	**932**	**932**		**929**	
Avg.	**957**	**957**	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**958**	**958**			**956.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	968	967	965	966	965	964	963	963	962	961	960	960	959	958	955	955	953	953	951	953	954	955	956	955	968	951	959.2
2	957	957	958	958	958	959	959	959	959	959	960	961	961	962	963	963	964	965	965	965	966	966	966	967	967	957	961.6
3	967	967	968	968	968	968	968	968	969	969	969	969	969	969	969	969	969	969	969	968	968	968	968	969	969	967	968.5
4	969	969	969	969	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	968	968	968	968	968	969	967	968.0
5	969	969	969	969	969	970	969	969	970	970	970	970	970	971	970	970	969	969	968	969	969	969	969	969	971	968	969.4
6	968	968	967	967	966	966	966	966	966	967	967	967	967	967	967	967	967	967	968	968	968	968	967	967	968	966	967.1
7	967	968	968	968	967	967	967	967	967	967	968	968	967	967	967	967	966	967	967	967	967	967	967	967	968	966	967.1
8	967	967	967	967	967	967	967	967	968	968	968	969	969	969	969	969	969	969	969	969	970	970	970	970	970	967	968.4
9	970	970	971	971	971	971	971	971	971	971	972	972	972	972	972	972	972	972	973	973	973	973	973	972	973	970	971.7
10	972	972	972	971	971	971	970	970	969	969	968	968	967	966	966	965	965	964	963	963	962	962	961	961	972	961	967.1
11	961	960	960	959	959	958	958	958	958	959	958	958	958	958	958	958	957	957	957	957	957	957	957	957	961	957	958.2
12	957	957	957	957	957	957	957	956	957	956	957	956	956	956	955	955	955	954	954	954	953	953	952	951	957	951	955.4
13	951	950	949	948	947	947	947	947	946	946	945	945	945	945	944	945	945	945	945	946	947	947	948	949	951	944	946.7
14	949	949	949	950	950	950	950	950	950	951	951	951	951	951	951	950	950	950	950	950	950	950	950	950	951	949	950.2
15	950	950	950	950	950	950	950	950	951	951	952	952	953	953	953	953	954	954	955	955	955	956	957	957	957	950	952.6
16	958	958	959	959	959	959	960	960	960	961	961	962	962	962	962	962	962	962	962	962	962	962	961	961	962	958	960.7
17	961	961	960	960	959	958	958	957	956	955	955	954	952	952	951	950	949	949	948	948	948	948	948	948	961	948	953.6
18	949	949	949	949	949	949	949	949	949	949	949	949	949	948	948	947	947	946	946	946	946	946	946	946	949	946	947.9
19	946	946	946	946	946	946	946	946	946	946	947	947	947	947	946	946	947	947	947	946	947	948	949	951	951	946	946.7
20	951	952	952	953	955	956	956	958	960	960	961	962	961	960	962	961	962	962	962	963	965	966	967	968	968	951	959.8
21	968	966	965	965	965	967	967	967	966	967	967	967	968	968	967	967	967	967	966	966	966	966	966	966	968	965	966.5
22	966	965	965	965	965	964	964	963	963	963	963	963	963	962	962	961	961	961	960	960	960	960	960	960	966	960	962.4
23	960	960	960	959	960	960	959	960	961	961	962	963	963	964	964	964	965	965	965	966	965	966	967	967	967	959	962.6
24	967	967	967	968	968	968	968	968	969	969	969	967	968	969	968	968	969	969	971	971	972	972	973	972	973	967	968.9
25	975	976	976	975	978	979	980	980	980	981	981	980	980	980	980	980	979	979	980	980	980	980	980	980	981	975	979.1
26	980	980	980	980	980	981	982	982	983	983	983	983	983	982	983	982	982	982	982	982	981	981	981	981	983	980	981.7
27	980	980	980	979	978	978	977	977	977	977	976	976	975	975	974	974	973	973	972	972	972	971	971	971	980	971	975.4
28	971	971	970	970	969	969	968	968	968	968	968	968	968	968	968	968	968	968	968	969	968	969	969	970	971	968	968.7
Max.	**980**	**980**	**980**	**980**	**980**	**981**	**982**	**982**	**983**	**983**	**983**	**983**	**983**	**982**	**983**	**982**	**982**	**982**	**982**	**982**	**981**	**981**	**981**	**981**	**983**		
Min.	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**945**	**945**	**945**	**945**	**944**	**945**	**945**	**945**	**945**	**946**	**946**	**946**	**946**	**946**		**944**	
Avg.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**			**963.0**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	970	970	969	970	969	969	968	969	969	969	969	969	969	968	968	968	967	967	967	967	968	968	968	967	970	967	968.4
2	968	967	966	968	967	968	968	968	968	969	969	969	970	970	967	968	969	968	969	968	968	968	970	971	971	966	968.3
3	970	972	973	973	972	973	974	975	975	976	977	977	978	978	978	978	978	978	978	978	977	976	975	976	978	970	975.7
4	976	975	975	975	976	975	974	974	973	973	971	972	972	972	970	970	969	967	969	969	967	966	965	963	976	963	971.1
5	963	964	964	962	961	961	960	959	960	960	960	959	961	960	960	961	960	960	960	959	958	958	958	959	964	958	960.3
6	957	956	956	958	956	955	954	955	955	952	950	951	950	947	946	947	945	945	943	943	942	941	940	941	958	940	949.3
7	939	942	942	945	942	939	944	948	949	947	947	947	949	948	950	945	947	948	947	947	947	946	943	943	950	939	945.5
8	944	944	945	944	944	945	945	946	946	946	947	947	947	947	947	946	945	945	944	943	943	944	944	945	947	943	945.1
9	945	945	945	945	945	945	945	947	946	947	948	948	948	948	948	949	949	950	950	951	951	951	952	952	952	945	947.9
10	952	952	953	953	953	953	953	953	953	953	953	955	955	954	954	954	954	953	953	953	954	954	954	954	955	952	953.3
11	953	953	952	953	951	952	952	951	952	952	954	955	955	955	955	955	956	953	955	955	954	956	956	957	957	951	953.9
12	958	956	958	958	958	958	960	960	951	952	953	954	954	968	969	970	971	971	972	972	973	973	973	974	974	951	963.1
13	974	974	975	973	975	974	975	975	975	975	976	975	976	975	974	975	974	975	975	973	973	975	974	972	976	972	974.5
14	973	973	974	975	975	972	972	972	972	974	974	972	973	971	971	969	970	969	970	970	969	968	970	969	975	968	971.4
15	970	969	970	969	969	969	969	969	969	970	970	969	969	969	969	968	968	967	967	967	966	967	966	967	970	966	968.5
16	966	966	966	965	965	965	965	965	965	964	964	964	964	963	963	962	962	962	962	962	962	962	962	962	966	962	963.7
17	962	962	962	962	962	962	962	962	962	963	963	963	964	964	964	964	964	964	965	965	966	967	967	968	968	962	963.7
18	968	968	968	969	969	969	969	970	970	970	970	971	970	970	970	970	970	969	969	969	968	968	968	968	971	968	969.2
19	967	967	966	965	964	964	963	963	962	962	961	960	960	959	957	957	957	956	956	955	954	954	954	953	967	953	959.8
20	953	953	952	951	950	949	948	947	945	944	943	942	939	938	935	934	932	931	929	929	929	928	928	928	953	928	939.9
21	929	929	929	929	930	930	930	930	931	931	933	934	935	936	937	938	939	939	940	941	942	943	943	944	944	929	935.0
22	945	945	947	946	947	948	947	946	946	946	947	947	947	947	946	946	945	945	945	945	944	944	944	943	948	943	945.7
23	943	943	942	941	942	943	943	943	943	943	944	945	944	944	945	945	946	946	947	947	948	949	949	951	951	941	944.9
24	951	952	952	953	954	954	955	955	955	956	957	957	958	958	958	958	958	958	958	959	959	959	959	959	959	951	956.4
25	959	959	959	959	960	960	960	959	960	960	960	961	961	961	961	960	960	959	959	958	957	957	956	955	961	955	959.2
26	954	954	953	952	952	952	952	953	953	954	954	955	957	957	958	958	958	959	960	961	962	962	963	964	964	952	956.4
27	964	966	967	968	968	969	969	970	970	970	971	972	972	972	972	974	973	975	975	976	976	977	976	976	977	964	971.5
28	976	976	976	976	976	977	977	975	975	976	975	976	975	975	975	975	975	975	975	976	976	976	976	977	977	975	975.6
29	977	977	977	977	977	978	978	978	979	979	980	980	980	980	980	981	981	981	981	981	982	982	982	983	983	977	979.7
30	982	982	982	982	983	983	983	984	984	984	984	984	984	985	985	985	985	985	985	985	985	985	986	986	986	982	984.1
31	986	986	986	986	986	986	986	986	986	986	986	987	987	986	986	986	986	986	986	986	986	986	985	986	987	985	985.9
Max.	986	986	986	986	986	986	986	986	986	986	986	987	987	986	986	986	986	986	986	986	986	986	986	986	987		
Min.	929	929	929	929	930	930	930	930	931	931	933	934	935	936	935	934	932	931	929	929	929	928	928	928		928	
Avg.	961	961	961	961	961	961	961	962	961	961	962	962	962	962	962	962	962	962	962	962	961	962	962	962			961.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	985	985	985	985	984	984	984	984	983	983	983	983	982	982	982	981	981	981	980	980	980	980	980	980	985	980	982.5
2	980	980	980	979	979	979	979	979	978	978	978	979	978	978	978	978	978	978	978	977	977	977	977	978	980	977	978.3
3	977	977	977	977	977	977	977	977	976	976	976	976	976	976	975	975	974	974	973	973	973	972	972	972	977	972	975.2
4	971	970	969	969	968	967	967	966	965	965	964	964	964	963	962	962	960	960	960	959	958	958	958	957	971	957	963.6
5	956	956	955	954	953	952	951	950	949	948	946	945	944	944	943	943	944	945	945	947	948	948	948	949	956	943	948.6
6	949	949	949	949	949	948	948	948	947	946	944	943	940	939	937	935	934	932	931	929	928	928	927	928	949	927	939.8
7	928	930	931	933	934	936	938	940	941	942	943	944	944	944	944	944	944	943	943	943	942	942	941	940	944	928	939.8
8	939	938	937	936	936	936	935	935	934	934	934	933	933	933	933	934	934	934	934	935	935	936	937	937	939	933	935.1
9	938	939	939	939	940	940	941	941	942	943	944	945	946	946	947	947	948	948	949	949	950	951	952	953	953	938	944.9
10	954	954	954	955	956	956	957	957	958	959	959	960	961	961	961	962	962	962	963	964	964	965	965	966	966	954	959.7
11	966	966	966	966	966	966	966	966	966	966	966	966	966	965	965	964	964	963	963	963	963	963	962	962	966	962	964.8
12	961	961	960	960	959	959	959	958	958	958	957	957	956	956	955	955	954	954	954	953	953	953	953	953	961	953	956.5
13	952	952	952	952	951	951	952	952	952	952	952	952	952	952	952	952	952	952	952	953	953	953	953	953	953	951	952.1
14	953	953	953	953	953	953	953	953	953	953	953	952	952	952	951	951	950	950	950	950	950	950	950	949	953	949	951.7
15	949	950	949	949	949	949	949	949	949	949	950	950	950	950	950	950	950	951	951	951	952	952	953	953	953	949	950.3
16	954	954	954	955	956	956	957	958	958	959	960	961	961	962	962	963	964	965	965	966	966	966	966	965	966	954	960.5
17	965	965	964	963	962	961	960	960	960	959	958	958	958	957	956	956	955	954	952	953	953	954	953	953	965	952	957.9
18	954	955	955	955	956	956	957	958	958	958	959	961	961	962	962	964	965	965	966	966	966	966	966	966	966	954	960.7
19	965	965	966	965	964	964	964	963	963	962	962	962	962	961	962	961	961	960	961	960	959	959	959	958	966	958	961.9
20	959	958	958	957	957	957	957	957	956	956	957	957	957	957	957	958	958	959	959	959	960	960	961	961	961	956	957.9
21	961	961	961	961	961	961	961	961	960	960	960	959	958	958	958	958	958	958	957	957	957	957	957	957	961	957	959.0
22	956	955	954	954	953	952	952	952	951	952	951	951	951	951	951	950	950	950	950	950	950	950	950	950	956	950	951.5
23	948	947	946	946	946	946	946	946	946	946	946	946	946	946	946	947	947	947	947	947	947	948	948	949	949	946	946.7
24	949	949	949	950	950	950	951	950	951	951	951	951	951	952	951	951	951	951	951	951	952	952	952	952	952	949	950.9
25	953	952	952	952	952	952	952	952	952	951	952	953	954	953	954	954	954	954	954	954	954	954	955	955	955	951	953.0
26	954	953	953	953	953	952	952	952	952	951	951	950	950	950	949	949	948	948	948	949	948	949	950	950	954	948	950.6
27	951	951	952	953	953	954	954	955	956	956	956	957	957	958	958	958	958	959	959	960	961	961	961	961	961	951	956.6
28	962	962	962	962	962	961	961	961	961	961	961	960	959	959	958	958	958	957	957	957	957	957	957	956	962	956	959.3
29	956	956	956	955	956	956	955	955	955	955	956	956	956	956	956	956	956	956	956	957	957	958	958	959	959	955	956.2
30	960	960	960	960	960	960	960	960	961	961	961	961	961	960	960	960	960	960	960	960	960	960	960	960	961	960	960.1
Max.	**985**	**985**	**985**	**985**	**984**	**984**	**984**	**984**	**983**	**983**	**983**	**983**	**982**	**982**	**982**	**981**	**981**	**981**	**980**	**980**	**980**	**980**	**980**	**980**	**985**		
Min.	**928**	**930**	**931**	**933**	**934**	**936**	**935**	**935**	**934**	**934**	**934**	**933**	**933**	**933**	**933**	**934**	**934**	**932**	**931**	**929**	**928**	**928**	**927**	**928**		**927**	
Avg.	**957**	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**			**956.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	961	961	961	961	961	961	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	961	961.7
2	962	962	961	961	961	960	960	961	961	961	961	961	961	961	961	961	961	962	962	963	964	964	964	964	964	960	961.8
3	965	965	965	965	965	965	965	965	965	965	965	965	964	964	964	964	964	964	964	965	965	965	965	965	965	964	964.7
4	965	965	965	965	965	965	966	966	966	966	966	966	966	966	965	965	965	966	966	966	966	966	966	966	966	965	965.6
5	966	966	966	966	966	966	967	966	966	966	966	966	967	966	966	966	966	965	965	965	965	965	966	966	967	965	966.1
6	966	966	965	965	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	967	967	968	968	968	965	966.1
7	968	969	969	969	970	970	970	970	971	971	971	971	971	971	971	971	971	971	971	971	972	972	972	973	973	968	970.7
8	973	973	973	973	973	973	973	974	974	974	973	973	973	973	972	972	971	971	971	971	971	971	971	970	974	970	972.3
9	970	970	970	970	970	970	970	970	970	971	971	971	971	971	971	971	972	972	972	973	973	973	973	974	974	970	971.3
10	974	974	974	974	974	974	974	974	974	974	973	973	973	973	972	972	972	972	971	971	971	971	971	971	974	971	972.6
11	970	970	970	970	969	969	969	969	969	969	969	969	969	969	969	969	969	969	970	970	970	971	971	971	971	969	969.6
12	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	970	970	970	970	970	970	970	970	970	971	970	970.6
13	970	969	969	969	969	969	969	968	968	968	968	968	968	968	967	967	967	967	967	967	966	967	966	966	970	966	967.8
14	966	966	965	964	964	963	963	963	963	963	963	963	964	964	965	965	965	965	965	966	966	967	967	967	967	963	964.7
15	968	968	968	968	968	969	969	969	969	969	969	969	969	969	968	968	967	967	966	966	966	965	964	964	969	964	967.6
16	964	963	962	962	961	961	961	960	960	960	960	960	960	960	961	961	962	962	962	963	964	965	965	966	966	960	962.0
17	966	966	967	967	967	968	968	968	969	969	969	970	970	970	970	971	971	971	972	973	973	974	974	975	975	966	969.8
18	975	975	975	975	975	975	975	975	975	975	975	975	975	974	974	974	973	973	973	973	973	972	972	972	975	972	974.1
19	972	972	972	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	972	972	972	973	973	973	971	971.3
20	973	973	973	973	974	974	974	974	974	974	975	975	975	974	975	974	975	974	974	974	975	976	976	976	976	973	974.4
21	976	976	976	976	976	976	976	976	976	976	975	975	975	974	974	973	973	973	972	972	972	972	971	971	976	971	974.2
22	971	971	970	969	968	968	967	966	966	966	965	964	964	964	963	963	962	962	962	962	962	962	962	961	971	961	964.9
23	961	961	961	960	960	960	960	960	961	961	961	962	962	963	963	963	963	963	964	964	965	965	966	966	966	960	962.4
24	966	966	966	966	966	966	965	965	965	965	963	964	964	963	963	963	963	962	962	962	962	962	962	962	966	962	963.8
25	961	961	960	960	960	960	960	960	960	961	961	961	961	961	961	961	960	960	960	960	960	960	960	959	961	959	960.3
26	960	960	960	961	961	961	961	961	961	962	962	962	963	963	963	963	962	963	963	964	964	964	965	965	965	960	962.1
27	965	965	965	965	965	965	965	966	966	966	966	967	967	967	967	967	967	967	968	968	968	969	969	970	970	965	966.7
28	970	970	970	970	969	969	970	970	970	970	970	970	969	970	969	969	970	970	970	969	969	969	969	969	970	969	969.6
29	968	968	968	967	967	966	966	966	965	964	964	963	963	962	962	961	961	960	960	960	960	960	960	960	968	960	963.3
30	959	959	959	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	957	957	958	958	958	958	959	957	957.8
31	958	958	958	958	958	959	959	960	960	960	960	961	960	960	961	960	960	961	961	961	961	962	962	963	963	958	960.0
Max.	976	976	976	976	976	976	976	976	976	976	975	975	975	974	975	974	975	974	974	974	975	976	976	976	976		
Min.	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	957	957	958	958	958	958		957	
Avg.	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	967	967	967	967	967			966.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	963	963	963	963	963	964	964	964	965	965	966	966	966	966	966	967	967	968	968	968	968	969	969	969	969	963	965.8
2	970	970	970	970	970	970	970	970	971	970	971	971	970	970	970	971	970	970	970	970	970	971	971	971	971	970	970.4
3	971	971	971	971	971	971	971	971	971	970	970	970	970	969	969	968	968	968	967	967	967	966	966	965	971	965	969.1
4	964	964	963	962	961	960	959	958	957	957	957	956	956	956	956	956	956	957	957	957	957	958	958	958	964	956	958.2
5	958	958	958	958	958	958	958	958	959	959	959	959	959	959	960	960	961	961	961	961	961	962	962	961	962	958	959.5
6	961	961	961	961	961	961	961	961	960	959	959	959	958	958	958	958	957	957	957	957	957	957	957	956	961	956	958.6
7	956	955	955	955	955	954	955	955	954	954	954	955	955	955	955	956	956	957	957	957	957	958	958	958	958	954	955.6
8	958	958	958	958	958	958	958	959	959	959	959	959	959	959	959	959	959	960	960	961	961	962	962	962	962	958	959.4
9	963	963	963	963	963	963	963	963	963	963	963	963	963	963	962	962	962	962	962	961	961	961	961	961	963	961	962.2
10	961	960	960	960	960	960	959	959	959	960	960	959	959	959	959	959	959	959	958	959	959	960	961	961	961	958	959.5
11	961	961	962	962	962	962	962	962	962	963	963	963	963	963	964	964	964	965	965	966	966	967	968	968	968	961	963.6
12	968	968	969	969	969	970	970	970	971	971	972	972	972	973	973	973	973	973	974	974	974	974	975	975	975	968	971.9
13	975	975	975	976	976	976	976	976	976	977	977	977	977	977	977	977	978	978	978	978	978	979	979	979	979	975	977.0
14	979	980	980	980	980	980	980	980	980	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	979	980.6
15	981	981	981	981	981	981	981	981	981	981	981	981	981	980	980	980	979	979	979	979	979	979	979	980	981	979	980.2
16	980	980	980	980	980	980	980	980	980	980	980	979	979	979	979	978	978	977	977	976	976	976	976	976	980	976	978.6
17	976	976	975	975	975	975	974	974	974	974	974	974	974	974	974	973	973	973	973	972	972	972	972	972	976	972	973.8
18	972	972	971	971	971	971	971	971	970	970	970	970	970	970	970	970	970	970	970	971	971	971	972	972	972	970	970.8
19	972	972	972	972	972	972	972	972	972	972	972	972	971	971	971	971	971	970	970	969	970	970	970	970	972	969	971.2
20	971	971	971	971	971	971	971	971	971	971	971	970	970	970	969	970	969	969	969	969	969	969	969	969	971	969	970.1
21	969	970	970	969	970	970	970	970	970	970	970	970	970	970	970	970	970	969	970	970	970	971	970	971	971	969	970.0
22	971	971	971	971	971	971	971	971	970	970	970	970	969	969	969	968	968	967	967	967	966	966	966	965	971	965	969.0
23	965	964	964	963	962	962	961	961	960	960	961	961	961	961	960	960	960	960	960	960	960	960	960	961	965	960	961.1
24	961	961	961	961	961	962	962	962	962	963	963	964	964	964	964	964	964	964	965	965	966	966	966	967	967	961	963.4
25	967	968	968	968	969	969	970	970	970	971	972	972	973	972	973	973	974	974	975	975	976	976	977	977	977	967	972.1
26	978	978	978	979	979	979	980	980	980	980	980	980	980	980	980	980	980	980	980	980	979	980	980	980	980	978	979.5
27	980	979	979	979	979	979	979	978	978	977	977	977	976	976	975	975	974	974	974	973	973	973	973	973	980	973	976.3
28	973	973	973	972	972	972	971	971	971	970	970	970	969	969	969	968	968	968	968	967	967	967	967	967	973	967	969.7
29	967	967	966	966	966	967	966	966	966	966	966	966	966	966	966	966	966	967	967	967	967	967	967	968	968	966	966.5
30	968	968	968	968	968	968	968	969	969	969	969	969	970	970	970	970	970	970	970	970	970	971	971	971	971	968	969.3
Max.	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**		
Min.	**956**	**955**	**955**	**955**	**955**	**954**	**955**	**955**	**954**	**954**	**954**	**955**	**955**	**955**	**955**	**956**	**956**	**957**	**957**	**957**	**957**	**957**	**957**	**956**		**954**	
Avg.	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**	**969**	**969**			**968.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	972	972	972	973	973	971	971.3
2	973	973	973	973	973	973	973	973	972	972	972	972	972	972	971	971	971	971	970	970	970	970	971	971	973	970	971.7
3	971	971	971	971	971	971	971	971	972	972	972	972	972	972	972	971	971	971	971	971	971	971	971	971	972	971	971.4
4	971	971	971	971	970	971	971	970	971	971	971	970	971	970	970	970	970	970	970	970	970	970	970	971	971	970	970.5
5	971	971	971	971	971	971	971	971	971	971	971	970	971	971	971	971	971	971	971	972	973	973	973	973	973	970	971.2
6	974	974	974	974	974	974	974	975	975	975	975	975	976	975	975	975	975	975	975	975	975	975	976	976	976	974	974.9
7	976	976	976	976	977	977	976	977	977	977	977	976	976	975	975	975	974	975	974	974	974	973	973	973	977	973	975.4
8	973	973	972	972	972	971	971	971	971	971	971	972	971	971	971	971	971	971	971	971	971	971	971	971	973	971	971.5
9	971	971	971	971	971	971	971	970	970	970	970	969	969	968	968	967	967	967	966	966	966	966	966	965	971	965	968.6
10	965	965	965	964	964	964	964	964	964	963	963	963	963	964	964	964	964	964	965	965	965	965	966	966	966	963	964.2
11	966	966	966	966	966	967	967	967	967	967	967	967	968	968	968	968	968	967	967	968	968	968	968	968	968	966	967.2
12	968	968	968	968	968	968	968	968	968	968	968	968	967	967	968	968	968	969	969	969	969	969	970	970	970	967	968.3
13	970	970	970	970	971	970	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	971	970	971.0
14	972	972	971	971	971	972	972	972	972	972	972	972	972	972	972	972	972	972	973	973	973	973	973	973	973	971	972.1
15	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973.1
16	973	973	973	973	973	973	973	973	973	973	973	973	973	973	972	972	972	972	972	972	971	972	972	971	973	971	972.5
17	972	971	971	971	971	971	970	970	970	969	969	968	968	968	967	967	967	967	967	967	967	967	967	967	972	967	968.6
18	966	966	966	966	966	966	965	965	965	965	964	964	964	964	964	964	964	964	963	963	964	964	964	964	966	963	964.5
19	964	964	964	963	963	964	963	963	963	963	963	963	963	963	962	962	962	962	962	962	962	962	962	962	964	962	962.8
20	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	963	963	963	963	962	962.0
21	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	963	963	963	963	964	963	963.6
22	963	962	962	962	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	963	961	961.2
23	962	962	962	962	962	962	962	962	962	963	963	963	963	963	963	963	963	963	963	963	963	964	963	964	964	962	962.7
24	964	963	963	963	963	963	963	962	963	963	963	964	963	963	963	963	963	963	963	964	963	964	964	965	965	962	963.2
25	964	964	965	965	965	965	965	966	966	966	967	967	968	968	968	968	968	967	968	969	969	969	970	970	970	964	966.9
26	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	969	970	970	970	970	970	970	970	969	970.0
27	970	970	970	970	970	970	970	970	971	971	971	971	970	970	970	969	969	969	969	970	970	970	970	970	971	969	970.0
28	970	970	970	970	970	970	970	970	971	970	970	970	970	969	969	968	968	968	968	968	968	968	968	969	971	968	969.3
29	969	969	969	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	969	969	969	969	968	968.3
30	969	970	970	970	970	971	971	971	971	971	972	972	972	972	972	972	972	972	973	973	973	973	973	973	973	969	971.5
31	973	973	973	973	973	973	973	973	974	974	974	974	974	974	974	974	973	974	974	974	974	974	974	974	974	973	973.6
Max.	976	976	976	976	977	977	976	977	977	977	977	976	976	975	975	975	975	975	975	975	975	975	976	976	977		
Min.	962	962	962	962	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961		961	
Avg.	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	968	969	969	969	969	969			968.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	973	973	973	973	973	973	973	973	973	973	973	973	974	973	973	973	973	972	972	972	972	971	971	971	974	971	972.7
2	972	971	970	970	970	969	970	969	969	969	969	969	969	968	968	968	968	968	968	968	968	969	969	969	972	968	969.1
3	969	969	970	970	970	970	971	971	971	971	972	972	972	971	971	971	971	971	972	971	971	972	971	971	972	969	970.8
4	971	970	971	970	970	970	971	970	971	971	971	972	972	972	972	972	973	973	973	973	973	972	972	971	973	970	971.4
5	970	971	970	970	970	971	971	971	971	972	972	971	972	972	973	972	973	973	973	972	972	973	973	974	974	970	971.7
6	974	974	974	974	975	975	975	976	975	976	976	976	977	976	976	976	976	976	976	976	976	976	976	976	977	974	975.6
7	976	975	975	976	976	976	975	975	975	975	975	975	975	974	974	974	974	974	974	974	974	974	975	975	976	974	974.8
8	975	975	974	974	974	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	974	974.9
9	975	975	975	975	975	975	975	975	976	976	976	976	976	976	975	975	975	975	975	975	976	976	976	976	976	975	975.4
10	977	977	977	977	977	977	977	977	977	978	978	978	978	978	978	978	978	978	978	978	979	979	979	979	979	977	977.5
11	979	979	980	980	980	980	980	980	980	980	981	980	980	980	980	980	981	981	981	981	981	981	981	981	981	979	980.4
12	981	981	982	982	982	982	982	982	982	983	983	983	983	983	983	982	982	982	982	982	983	983	983	983	983	981	982.3
13	983	983	983	983	983	983	982	982	983	982	982	981	981	980	980	979	979	979	978	978	978	978	978	978	983	978	980.7
14	978	979	978	979	978	978	977	977	976	976	975	975	974	973	973	972	971	971	971	970	970	971	970	970	979	970	974.3
15	970	970	969	969	970	970	969	969	969	969	970	969	970	970	970	970	969	969	969	969	969	969	969	969	970	969	969.4
16	969	969	969	968	968	968	968	968	968	968	968	968	967	967	966	966	966	966	966	966	966	966	966	966	969	966	967.2
17	966	965	965	965	965	965	965	965	965	965	965	965	965	964	964	964	964	964	964	964	964	964	964	963	966	963	964.5
18	963	962	961	961	960	960	959	958	958	957	957	956	956	954	954	953	952	952	952	951	951	951	951	951	963	951	955.9
19	952	952	951	951	951	950	950	950	951	952	952	952	953	953	953	953	954	954	955	955	956	956	957	957	957	950	952.9
20	958	958	958	958	958	959	959	960	960	960	961	961	961	961	961	961	962	962	963	963	963	964	964	964	964	958	960.8
21	965	965	965	965	965	965	966	966	966	967	967	968	968	968	969	969	969	969	969	969	970	970	971	971	971	965	967.6
22	971	971	971	971	971	971	971	972	972	972	972	972	972	972	972	971	971	971	971	971	970	970	970	970	972	970	971.2
23	970	970	970	969	969	969	969	969	969	969	968	968	968	968	967	967	967	966	966	966	965	965	965	964	970	964	967.6
24	964	964	964	963	963	963	963	963	963	963	963	963	964	963	963	963	963	963	963	964	964	964	965	965	965	963	963.5
25	965	965	965	965	965	966	966	966	966	966	967	967	967	966	966	966	965	965	966	966	967	967	967	967	967	965	966.0
26	967	967	967	967	967	967	967	967	968	967	968	968	968	967	968	968	968	968	968	968	969	969	969	969	969	967	967.7
27	969	969	969	969	970	970	970	970	970	970	970	970	970	971	971	971	970	970	971	971	971	971	972	972	972	969	970.3
28	972	972	972	972	972	972	972	972	972	972	972	972	972	971	971	970	970	969	969	969	969	969	968	968	972	968	970.8
29	968	968	968	968	968	967	967	967	966	966	966	966	966	966	966	965	965	965	965	964	964	964	965	964	968	964	965.9
30	964	964	964	964	963	964	964	964	964	964	964	964	964	964	964	964	963	963	963	963	964	964	964	963	964	963	963.7
31	964	964	964	964	964	964	964	964	964	965	965	965	964	964	964	964	964	964	964	964	965	965	965	965	965	964	964.3
Max.	983	983	983	983	983	983	982	982	983	983	983	983	983	983	983	982	982	982	982	982	983	983	983	983	983		
Min.	952	952	951	951	951	950	950	950	951	952	952	952	953	953	953	953	952	952	952	951	951	951	951	951		950	
Avg.	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	969	969	969	969	969	969	970	970	970			969.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	966	966	966	966	966	967	967	968	968	968	968	969	968	969	969	968	968	968	969	969	969	969	970	970	970	966	967.9
2	970	970	970	970	970	970	970	970	970	970	970	970	970	969	969	969	968	968	967	967	967	967	966	966	970	966	968.9
3	965	965	964	963	962	962	961	960	960	959	959	958	958	957	956	955	955	954	954	954	953	953	951	953	965	951	957.8
4	952	952	952	953	953	953	953	953	953	953	954	954	954	954	954	954	955	955	955	955	956	956	957	958	958	952	954.1
5	958	959	959	959	960	960	961	961	962	962	962	962	962	962	962	962	963	963	963	963	964	964	964	965	965	958	961.8
6	965	965	966	967	967	968	968	968	968	969	969	969					969	969	969	969	969	970	970	970	970	965	968.2
7	970	971	971	970	971	970	970	970	970	970	970	968	968	967	966	965	965	964	963	961	961	960	959	958	971	958	966.6
8	958	960	960	960	960	960	961	961	960	961	961	960	961	960	961	961	962	962	962	963	964	964	965	965	965	958	961.3
9	965	966	966	966	966	966	966	967	967	967	967	968	968	968	968	968	967	968	968	968	968	969	969	970	970	965	967.3
10	970	970	971	971	972	972	972	972	972	973	973	973	973	973	973	972	972	972	972	972	972	971	971	971	973	970	971.9
11	972	972	972	971	972	971	971	970	971	971	970	969	971	967	967	967	965	964	965	964	963	963	963	963	972	963	968.1
12	964	963	964	964	964	964	964	964	965	965	965	965	965	965	965	966	966	966	967	967	968	969	969	970	970	963	965.6
13	971	971	971	971	971	971	971	971	971	972	972	972	972	972	971	971	971	970	970	971	971	971	971	970	972	970	971.1
14	970	970	970	969	969	969	968	968	967	967	967	967	966	966	966	965	965	964	964	964	963	963	963	963	970	963	966.4
15	963	962	963	963	963	963	963	963	963	963	963	963	964	964	964	964	965	965	965	966	966	966	966	967	967	962	964.1
16	967	967	968	968	968	969	969	969	969	970	970	970	970	970	970	970	970	971	971	971	971	972	972	972	972	967	969.8
17	972	973	973	973	974	973	974	974	974	974	974	975	975	975	975	974	974	974	974	974	974	973	973	972	975	972	973.8
18	972	972	972	971	970	969	966	966	966	965	965	964	962	961	961	961	961	960	960	959	959	959	960	961	972	959	964.1
19	961	961	961	961	962	962	962	962	962	962	962	963	962	962	962	963	962	962	962	963	963	963	963	963	963	961	962.2
20	963	963	963	963	962	962	961	960	960	960	960	959	959	959	959	959	959	959	959	959	960	960	961	961	963	959	960.5
21	962	962	963	963	963	964	965	965	965	966	966	966	967	968	968	968	968	968	968	969	969	969	970	969	970	962	966.3
22	969	969	968	968	968	967	967	966	966	966	965	964	963	962	961	960	959	959	958	956	957	956	956	956	969	956	962.9
23	956	956	955	955	955	955	956	956	956	956	957	956	957	956	956	956	956	955	955	955	955	955	955	955	957	955	955.7
24	955	955	955	955	956	956	957	957	957	958	958	958	958	958	958	957	957	956	956	955	955	955	955	956	958	955	956.5
25	956	957	957	958	958	958	959	959	959	960	960	961	961	960	961	961	960	960	960	960	960	960	960	961	961	956	959.4
26	961	961	961	961	962	962	963	963	963	963	964	964	964	964	964	964	964	964	965	965	965	966	966	967	967	961	963.5
27	967	967	968	968	968	968	968	967	967	967	967	966	966	964	964	963	961	960	957	956	954	952	951	949	968	949	962.7
28	948	947	946	945	945	943	944	943	943	944	944	944	944	944	944	944	944	944	945	945	946	946	947	948	948	943	944.8
29	948	949	949	950	951	951	951	952	953	953	953	954	954	954	954	954	954	953	953	953	952	952	952	952	954	948	952.2
30	952	952	952	952	952	951	950	950	949	949	949	948	949	948	948	947	946	946	945	945	945	945	945	945	952	945	948.4
Max.	**972**	**973**	**973**	**973**	**974**	**973**	**974**	**974**	**974**	**974**	**974**	**975**	**975**	**975**	**975**	**974**	**974**	**974**	**974**	**974**	**974**	**973**	**973**	**972**	**975**		
Min.	**948**	**947**	**946**	**945**	**945**	**943**	**944**	**943**	**943**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**944**	**945**	**945**	**945**	**945**	**945**	**945**		**943**	
Avg.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**	**962**			**962.8**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	945	946	946	946	947	947	947	947	947	948	948	949	949	950	950	950	951	951	951	952	953	954	954	954	954	945	949.2
2	955	955	956	956	956	956	956	957	957	958	959	960	961	961	962	962	963	964	964	965	965	966	966	967	967	955	960.3
3	968	968	969	969	970	970	970	971	971	972	972	972	973	972	973	973	973	974	974	973	973	972	972	971	974	968	971.5
4	970	969	968	967	965	964	963	962	960	959	957	957	955	954	953	952	951	950	949	948	948	947	947	947	970	947	956.7
5	945	944	943	942	941	940	939	939	938	938	938	940	942	943	944	944	945	946	947	948	949	950	950	950	950	938	943.6
6	950	950	951	951	952	953	953	954	955	956	956	956	958	957	958	959	959	959	959	959	959	959	959	958	959	950	955.9
7	958	958	958	957	957	957	957	957	957	958	958	958	959	959	959	959	960	960	960	960	961	961	962	963	963	957	958.9
8	964	966	965	967	968	968	968	970	968	970	972	972	972	972	972	972	972	972	972	972	972	971	970	970	972	964	969.9
9	969	969	969	968	968	967	967	967	966	966	966	965	965	964	963	963	962	962	962	961	961	961	961	961	969	961	964.7
10	960	960	959	959	959	958	958	957	958	957	957	957	956	956	957	956	956	955	956	956	956	956	956	956	960	955	957.1
11	956	955	955	956	956	955	955	955	955	955	956	955	955	955	954	954	954	953	953	952	952	952	952	952	956	952	954.3
12	951	951	951	950	950	950	949	949	948	948	947	947	947	946	945	945	944	944	944	943	943	943	943	942	951	942	946.7
13	942	942	942	942	941	941	941	941	941	941	942	942	942	943	944	944	944	945	945	946	946	947	947	948	948	941	943.4
14	948	948	949	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	948	948	947	947	947	947	950	947	949.0
15	946	946	946	947	947	947	947	947	947	948	948	949	949	949	949	949	949	950	950	950	950	950	950	950	950	946	948.4
16	951	951	951	951	951	951	951	951	951	951	951	950	950	950	950	949	950	950	949	950	949	949	949	949	951	949	950.2
17	950	949	949	949	949	949	948	948	948	948	948	949	949	948	948	948	948	948	948	948	949	949	949	949	950	948	948.6
18	949	949	949	949	949	949	949	949	949	949	950	950	950	950	950	950	950	950	951	951	951	951	951	952	952	949	949.9
19	952	952	952	952	952	952	952	952	953	953	953	953	953	954	953	953	953	953	953	953	953	954	954	954	954	952	952.9
20	954	955	955	955	954	954	954	954	954	955	955	955	955	954	954	953	953	953	952	952	951	951	952	951	955	951	953.5
21	952	951	952	952	952	952	952	952	953	953	954	954	954	953	953	953	953	953	953	954	954	954	954	954	954	951	952.9
22	954	954	954	954	954	955	955	955	956	956	957	958	958	959	959	959	959	959	960	960	961	961	961	962	962	954	957.5
23	962	962	962	963	963	963	963	963	964	964	964	965	964	964	964	963	963	963	964	965	965	965	965	965	965	962	963.7
24	965	965	965	965	965	965	965	965	965	965	965	965	966	966	966	966	966	966	966	966	966	966	965	964	966	964	965.4
25	964	963	962	961	960	957	957	956	954	952	951	952	951	951	950	949	949	950	951	953	955	956	957	957	964	949	954.9
26	957	957	958	958	958	958	958	958	959	959	959	959	960	959	959	959	958	958	957	957	957	957	956	956	960	956	958.1
27	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	957	957	957	958	958	958	956	956.3
28	958	958	958	959	959	959	959	959	960	960	960	960	960	960	960	960	959	958	958	957	956	955	954	953	960	953	958.4
29	952	951	950	949	948	947	945	944	943	942	941	939	940	939	938	937	936	935	934	933	933	933	932	930	952	930	940.5
30	930	928	927	926	924	923	924	924	925	925	926	927	928	929	929	930	931	932	933	934	935	936	937	939	939	923	929.3
31	940	940	941	942	944	944	945	946	946	946	948	949	950	950	950	949	949	948	948	946	945	944	943	941	950	940	945.6
Max.	**970**	**969**	**969**	**969**	**970**	**970**	**970**	**971**	**971**	**972**	**972**	**972**	**973**	**972**	**973**	**973**	**973**	**974**	**974**	**973**	**973**	**972**	**972**	**971**	**974**		
Min.	**930**	**928**	**927**	**926**	**924**	**923**	**924**	**924**	**925**	**925**	**926**	**927**	**928**	**929**	**929**	**930**	**931**	**932**	**933**	**933**	**933**	**933**	**932**	**930**		**923**	
Avg.	**954**	**954**	**954**	**954**	**954**	**953**	**953**	**953**	**953**	**953**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**			**953.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	941	940	940	939	939	939	939	939	940	941	941	942	943	943	944	944	945	946	946	948	948	950	950	951	951	939	943.3
2	952	953	954	954	955	955	955	956	956	957	957	958	958	959	959	959	960	961	962	962	963	963	963	963	963	952	958.1
3	964	965	966	966	967	967	968	968	968	969	969	970	970	969	969	969	969	969	969	968	968	967	967	967	970	964	967.7
4	966	966	965	964	964	963	963	962	963	963	963	963	963	963	963	963	963	963	963	964	964	964	964	964	966	962	963.6
5	964	964	964	964	964	963	963	963	963	964	964	964	964	964	964	964	963	962	962	962	962	961	961	961	964	961	963.0
6	961	960	960	959	958	957	956	955	954	953	953	952	950	949	949	949	948	949	949	948	949	950	952	953	961	948	953.1
7	954	953	953	953	952	952	951	951	951	952	952	952	952	952	953	954	954	954	955	956	956	957	957	958	958	951	953.5
8	957	957	956	954	953	950	949	947	945	943	941	939	941	941	940	940	939	939	939	938	937	937	937	937	957	937	944.0
9	936	936	935	935	934	934	933	933	933	933	933	932	932	932	932	931	931	931	931	932	932	932	932	932	936	931	932.8
10	932	932	932	932	932	932	932	932	932	932	932	933	933	933	933	934	934	935	935	936	937	937	937	938	938	932	933.5
11	938	939	939	939	939	940	940	941	941	941	942	942	942	942	942	942	943	943	943	943	944	944	944	945	945	938	941.6
12	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	944	944	944	943	943	943	943	943	943	945	943	944.4
13	943	943	943	943	942	941	941	941	941	940	940	940	940	941	941	941	942	941	941	941	942	942	942	942	943	940	941.4
14	943	944	944	944	945	945	945	945	945	945	945	945	946	946	946	946	946	946	946	946	947	947	947	947	947	943	945.4
15	947	948	948	947	947	947	946	947	946	946	946	946	946	946	946	946	945	945	945	945	944	945	944	944	948	944	946.0
16	943	943	941	942	941	941	940	942	942	943	943	944	942	943	944	944	944	945	946	945	947	948	948	948	948	940	943.7
17	949	950	950	950	951	952	950	950	951	953	955	955	955	955	956	956	957	957	957	958	958	958	957	958	958	949	954.1
18	959	959	959	959	958	958	958	958	958	958	958	958	958	958	958	958	958	958	959	959	959	960	960	960	960	958	958.6
19	961	961	961	961	962	962	962	962	962	963	963	962	962	961	961	960	960	959	958	957	956	955	954	952	963	952	959.8
20	950	949	949	947	946	945	945	944	945	945	945	945	945	945	945	944	944	943	943	943	942	942	941	942	950	941	944.8
21	941	941	941	943	943	943	946	948	949	950	951	952	953	954	955	956	957	958	960	961	962	963	963	964	964	941	952.3
22	964	964	963	962	961	959	958	956	955	954	952	951	951	949	948	946	946	945	945	947	947	948	950	951	964	945	953.0
23	952	952	953	953	953	953	952	952	953	953	952	952	953	953	952	952	953	953	953	954	954	954	955	955	955	952	952.9
24	955	955	955	955	955	954	954	953	953	952	951	951	950	949	949	947	948	947	945	947	946	945	946	946	955	945	950.3
25	946	946	947	946	945	943	940	939	938	936	935	935	934	932	931	929	929	928	930	930	930	931	931	932	947	928	935.9
26	932	932	933	934	935	936	938	940	942	944	946	948	950	952	954	955	956	958	959	961	961	961	962	962	962	932	947.9
27	963	962	962	962	961	960	959	959	958	958	958	958	958	957	955	956	956	957	956	957	958	958	959	960	963	955	958.6
28	961	961	963	963	965	966	967	969	970	971	972	974	975	975	976	977	977	978	978	978	979	980	981	981	981	961	972.4
29	982	982	982	982	983	982	981	981	981	981	981	981	980	980	980	979	980	979	979	977	977	978	977	978	983	977	980.2
30	977	978	977	976	977	976	974	974	974	975	975	974	974	974	974	973	974	973	972	972	972	971	972	972	978	971	974.2
Max.	**982**	**982**	**982**	**982**	**983**	**982**	**981**	**981**	**981**	**981**	**981**	**981**	**980**	**980**	**980**	**979**	**980**	**979**	**979**	**978**	**979**	**980**	**981**	**981**	**983**		
Min.	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**932**	**931**	**929**	**929**	**928**	**930**	**930**	**930**	**931**	**931**	**932**		**928**	
Avg.	**953**	**953**	**953**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**952**	**953**	**953**	**953**	**953**	**954**			**952.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Barometric Pressure (mbar)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	973	974	974	974	973	974	975	975	974	974	974	974	975	974	973	973	973	972	972	971	970	969	968	968	975	968	972.8
2	967	965	964	963	962	961	960	958	958	957	956	955	955	954	953	952	951	950	950	951	950	949	949	949	967	949	955.8
3	949	949	948	948	948	947	947	947	946	946	946	947	946	946	946	945	945	945	944	944	944	944	944	943	949	943	946.0
4	943	943	943	943	944	944	944	944	945	946	947	949	950	951	952	953	954	955	955	956	957	958	959	961	961	943	949.8
5	962	964	964	965	966	967	967	967	967	968	968	968	967	967	967	966	966	966	965	965	964	964	963	963	968	962	965.7
6	961	961	960	960	959	959	958	958	958	958	958	958	958	959	960	961	963	964	964	966	966	967	968	968	968	958	961.3
7	969	969	970	969	970	969	969	969	968	967	967	966	964	963	961	958	956	955	955	953	951	950	950	950	970	950	962.0
8	952	953	955	956	956	957	956	956	957	957	957	956	957	957	958	958	959	960	961	962	963	964	965	966	966	952	958.2
9	967	967	968	968	967	966	966	965	965	964	964	963	963	963	963	962	963	962	962	961	960	961	960	960	968	960	963.8
10	958	958	955	953	950	949	948	946	945	944	942	941	941	940	940	940	940	941	942	943	944	945	945	946	958	940	945.6
11	948	949	950	951	953	954	955	955	956	956	957	957	958	958	958	957	957	957	957	957	957	956	956	956	958	948	955.2
12	956	956	956	956	956	956	956	957	957	958	958	959	960	960	961	961	961	962	963	963	963	964	964	965	965	956	959.5
13	965	965	965	965	965	965	965	965	965	965	965	965	966	966	965	965	966	966	966	966	967	967	967	967	967	965	965.6
14	967	967	967	967	966	966	966	966	966	965	965	964	963	963	962	961	960	959	959	959	958	958	958	958	967	958	962.9
15	959	959	959	958	959	959	959	959	959	959	959	959	959	958	959	958	957	958	957	958	958	957	958	958	959	957	958.4
16	959	957	956	958	955	954	957	956	955	954	954	952	953	952	951	952	949	949	949	948	950	948	947	948	959	947	952.6
17	948	946	946	946	946	946	947	949	949	947	946	949	948	947	948	949	949	949	949	949	949	950	950	950	950	946	948.0
18	950	950	949	949	949	948	948	948	948	949	949	949	949	949	949	949	949	949	950	950	950	951	951	952	952	948	949.3
19	952	953	953	953	953	953	953	953	954	955	955	956	956	956	956	956	956	957	958	958	958	957	957	956	958	952	955.2
20	956	956	955	954	954	952	951	950	948	947	947	947	946	945	945	944	944	944	944	944	944	943	943	943	956	943	947.8
21	942	942	942	942	942	941	942	942	942	942	942	941	941	941	941	941	940	940	939	938	938	937	937	937	942	937	940.5
22	937	936	936	936	935	935	935	935	935	935	936	936	936	937	937	937	937	938	938	939	939	940	941	941	941	935	936.9
23	942	942	943	945	945	946	947	948	948	949	950	951	951	952	952	952	953	953	953	954	954	954	954	955	955	942	949.6
24	954	955	954	953	953	952	951	951	951	950	950	949	948	947	947	946	946	945	946	947	948	949	950	950	955	945	949.7
25	952	953	954	958	959	960	960	961	962	963	964	964	965	967	968	968	969	970	970	970	971	969	969	968	971	952	963.9
26	969	968	967	965	965	963	963	961	960	959	957	955	953	951	949	949	948	947	946	946	944	945	943	942	969	942	954.8
27	942	941	941	941	941	940	939	938	938	938	938	938	938	938	938	939	939	939	940	940	941	941	942	942	942	938	939.6
28	943	943	945	946	947	948	949	949	950	950	951	951	951	951	952	952	952	951	952	951	951	950	951	952	952	943	949.4
29	953	953	954	955	955	955	956	956	957	957	957	958	958	958	959	959	960	960	960	961	961	962	962	962	962	953	957.8
30	963	963	964	964	964	964	964	964	964	964	963	964	963	963	962	961	961	960	960	960	960	960	961	962	964	960	962.4
31	962	963	964	964	965	965	965	966	966	966	966	966	966	966	965	965	964	963	962	961	960	959	958	957	966	957	963.6
Max.	**973**	**974**	**974**	**974**	**973**	**974**	**975**	**975**	**974**	**974**	**974**	**974**	**975**	**974**	**973**	**973**	**973**	**972**	**972**	**971**	**971**	**969**	**969**	**968**	**975**		
Min.	**937**	**936**	**936**	**936**	**935**	**935**	**935**	**935**	**935**	**935**	**936**	**936**	**936**	**937**	**937**	**937**	**937**	**938**	**938**	**938**	**938**	**937**	**937**	**937**		**935**	
Avg.	**955**	**956**	**956**	**956**	**956**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**954**	**954**	**954**	**954**	**954**	**954**	**955**	**955**			**955.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	10.8	11.3	12.9	13.5	14.3	14.5	8.5	8.4	9.0	11.0	11.8	11.8	11.2	10.0	8.4	7.9	7.5	7.9	6.9	8.1	7.6	7.6	7.1	7.5	14.5	6.9	9.8
2	7.1	7.0	7.0	7.5	7.7	8.5	8.9	8.6	9.4	9.4	9.9	9.1	9.1	9.2	9.5	9.4	8.6	8.2	8.4	9.3	9.0	8.6	10.0	9.4	10.0	7.0	8.7
3	9.3	8.1	8.8	8.6	10.0	9.4	11.9	11.9	9.1	9.6	8.4	10.4	12.3	10.8	5.7	5.7	11.2	11.7	6.5	3.9	5.8	7.4	5.5	6.9	12.3	3.9	8.7
4	5.6	6.9	7.1	7.3	7.2	5.8	6.5	6.2	5.4	6.0	6.2	5.0	3.5	2.2	2.0	1.7	3.2	2.9	2.4	2.7	1.5	1.1	1.3	1.1	7.3	1.1	4.2
5	1.4	1.9	3.5	4.1	4.7	2.6	4.1	6.8	5.9	5.6	7.6	6.8	6.5	4.9	6.1	6.4	4.9	3.0	2.5	1.7	2.0	3.0	3.3	3.4	7.6	1.4	4.3
6	4.0	4.5	3.7	3.1	3.5	2.9	4.6	4.6	3.7	8.2	10.2	8.0	8.0	5.1	5.3	5.3	8.0	8.3	7.9	9.9	9.3	11.0	11.1	11.8	11.8	2.9	6.8
7	12.3	12.8	16.4	18.9	21.2	22.5	21.4	16.6	19.3	17.0	18.6	18.7	16.6	15.1	12.0	9.0	9.8	14.2	17.0	16.4	14.9	14.6	13.0	10.3	22.5	9.0	15.8
8	9.5	11.0	10.9	13.3	9.6	7.2	9.5	8.2	6.9	7.8	9.8	11.3	10.6	10.9	10.1	12.3	14.4	11.4	11.3	12.4	10.3	6.1	5.9	7.1	14.4	5.9	9.9
9	8.2	6.6	6.0	2.4	6.2	5.9	5.2	4.3	4.7	3.0	3.8	1.5	1.4	2.4	3.3	2.7	3.5	5.4	4.7	5.0	5.7	3.9	6.5	7.0	8.2	1.4	4.6
10	5.2	7.1	9.1	5.5	5.3	6.7	6.7	11.5	16.9	19.0	17.9	19.0	17.5	15.3	17.1	16.7	15.7	17.0	14.8	14.7	15.4	14.4	13.5	14.2	19.0	5.2	13.2
11	13.7	15.8	15.5	15.8	15.2	14.8	16.0	17.2	16.4	15.8	17.1	19.3	20.0	19.0	19.6	19.0	19.0	17.8	16.8	17.6	18.6	19.5	19.4	19.0	20.0	13.7	17.4
12	19.0	17.7	17.2	15.9	16.0	16.9	17.3	16.2	14.5	14.5	13.3	12.5	12.1	14.7	15.9	17.4	19.0	20.3	19.2	18.0	15.5	13.2	14.2	20.1	20.3	12.1	16.3
13	16.9	15.6	11.8	10.2	9.8	7.4	8.0	7.2	5.0	7.6	5.5	3.8	3.8	1.9	1.8	2.5	3.2	3.5	6.2	8.0	7.9	8.8	9.0	9.9	16.9	1.8	7.3
14	10.0	10.9	14.1	14.5	15.8	17.2	21.3	23.9	25.6	23.7	23.4	22.1	21.3	18.7	18.2	13.9	14.1	8.8	6.7	8.7	7.3	8.1	7.7	7.5	25.6	6.7	15.1
15	6.8	7.7	7.0	8.1	9.7	11.0	8.5	10.3	9.0	7.7	9.2	12.1	11.0	11.0	9.5	8.7	9.6	13.0	7.7	4.5	8.1	5.3	8.1	6.6	13.0	4.5	8.8
16	4.3	3.7	4.3	6.3	6.1	5.2	13.3	14.0	15.2	16.2	21.0	21.4	18.8	18.2	19.7	20.3	20.4	21.7	22.0	22.3	18.5	16.6	15.0	15.5	22.3	3.7	15.0
17	14.7	10.2	10.4	11.0	9.1	6.4	5.9	6.2	9.0	10.4	10.6	10.5	10.5	14.0	15.5	15.5	14.0	14.0	12.2	12.8	11.2	8.8	10.3	10.6	15.5	5.9	11.0
18	7.9	6.1	6.1	4.7	3.7	3.4	5.3	5.6	5.7	4.5	4.4							3.3	1.8	1.4	3.4	2.4	2.3	1.8	7.9	1.4	4.1
19	1.6	1.2	1.3	0.8	1.7	1.6	1.3	1.0	1.7	3.2	3.0	2.6	1.3	1.7	2.3	2.1	5.7	7.7	9.6	8.6	8.9	8.0	8.6	9.4	9.6	0.8	3.9
20	8.2	8.8	8.6	8.6	9.5	9.8	10.5	10.1	8.4	9.3	7.7	6.8	7.3	7.7	7.8	9.5	8.3	8.9	9.2	11.4	10.1	8.9	7.6	6.2	11.4	6.2	8.7
21	5.2	5.8	5.0	2.7	2.7	4.2	2.8	6.0	4.8	5.6	5.9	7.7	6.7	7.1	7.2	5.5	6.5	4.9	5.7	5.5	4.7	4.3	4.8	3.8	7.7	2.7	5.2
22	2.6	2.7	2.3	1.3	2.5	2.5	1.5	1.0	1.7	2.0	2.7	2.9	2.9	3.7	3.9	4.0	3.7	3.9	4.0	4.0	3.3	1.9	2.6	5.0	5.0	1.0	2.9
23	4.0	4.4	4.8	4.3	5.9	6.5	4.9	5.7	6.5	6.6	6.9	7.3	7.6	8.0	8.2	10.2	10.0	10.5	10.2	10.4	11.0	11.2	10.8	9.0	11.2	4.0	7.7
24	10.1	8.9	10.3	7.9	8.4	10.0	7.4	7.1	6.6	9.4	9.8	9.8	7.4	4.9	7.0	7.2	7.2	7.6	7.4	6.5	4.4	5.0	5.6	5.5	10.3	4.4	7.6
25	8.4	6.9	10.1	14.1	15.7	16.7	15.2	15.8	17.0	19.7	16.8	19.3	17.6	21.9	21.6	20.9	16.1	18.1	19.9	20.1	21.2	22.5	24.2	21.7	24.2	6.9	17.6
26	22.4	22.7	23.0	24.8	24.1	23.3	22.6	21.2	22.1	21.5	19.3	16.1	14.6	13.7	14.0	12.7	10.8	10.7	9.7	9.9	10.2	8.1	10.0	11.3	24.8	8.1	16.6
27	13.5	13.6	14.5	15.3	19.1	18.6	18.0	16.6	16.1	21.5	19.3	20.8	20.5	21.5	18.0	19.2	18.9	14.3	15.0	15.0	16.2	17.7	16.0	15.2	21.5	13.5	17.3
28	14.5	13.9	14.6	14.9	13.6	13.9	12.6	12.2	12.7	10.0	6.0	5.7	5.1	8.7	8.3	7.8	8.6	8.3	10.7	12.7	12.8	14.1	15.0	13.2	15.0	5.1	11.2
29	13.0	11.9	12.8	10.6	16.1	17.0	18.7	17.5	21.3	23.3	16.9	18.3	21.3	21.8	19.2	15.6	17.1	17.8	18.7	22.7	23.9	23.0	22.5	16.5	23.9	10.6	18.2
30	13.9	16.0	17.4	17.7	18.8	20.4	20.1	20.7	23.4	25.6	24.6	25.6	31.3	29.1	30.3	25.5	24.3	22.2	18.3	18.0	19.6	22.9	15.4	13.1	31.3	13.1	21.4
31	14.1	14.4	16.4	17.8	16.8	17.4	17.2	16.3	18.0	13.8	14.8	13.8	10.4	12.1	12.7	11.3	12.6	11.7	8.7	6.5	11.4	9.4	9.1	8.0	18.0	6.5	13.1
Max.	**22.4**	**22.7**	**23.0**	**24.8**	**24.1**	**23.3**	**22.6**	**23.9**	**25.6**	**25.6**	**24.6**	**25.6**	**31.3**	**29.1**	**30.3**	**25.5**	**24.3**	**22.2**	**22.0**	**22.7**	**23.9**	**23.0**	**24.2**	**21.7**	**31.3**		
Min.	**1.4**	**1.2**	**1.3**	**0.8**	**1.7**	**1.6**	**1.3**	**1.0**	**1.7**	**2.0**	**2.7**	**1.5**	**1.3**	**1.7**	**1.8**	**1.7**	**3.2**	**2.9**	**1.8**	**1.4**	**1.5**	**1.1**	**1.3**	**1.1**		**0.8**	
Avg.	**9.6**	**9.6**	**10.1**	**10.0**	**10.6**	**10.6**	**10.8**	**10.9**	**11.3**	**11.9**	**11.7**	**12.0**	**11.6**	**11.5**	**11.3**	**10.9**	**11.2**	**10.9**	**10.4**	**10.6**	**10.6**	**10.2**	**10.2**	**9.9**			**10.8**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.9	12.0	11.6	10.1	8.0	11.0	13.1	12.0	7.2	8.5	9.6	8.3	7.5	8.0	16.4	17.6	17.6	17.7	18.3	21.0	20.9	18.7	20.7	22.8	22.8	7.2	13.6
2	22.1	20.2	16.9	18.9	21.6	18.5	19.5	20.3	21.1	22.7	21.8	20.5	21.3	22.5	21.9	20.0	17.0	17.5	18.1	18.3	18.0	16.6	15.6	16.5	22.7	15.6	19.5
3	17.0	15.2	14.6	12.2	14.1	12.9	12.2	9.9	8.9	7.6	7.8	7.6	7.2	5.3	2.9	1.9	1.0	0.7	1.6	2.9	3.9	3.8	3.8	4.1	17.0	0.7	7.5
4	4.0	5.2	7.0	3.9	3.5	5.3	5.2	4.2	4.8	5.2	4.4	5.7	4.5	3.0	1.7	2.4	3.1	3.5	3.2	3.1	2.7	2.8	2.8	2.8	7.0	1.7	3.9
5	2.9	2.9	2.7	1.9	3.8	3.8	2.3	2.4	3.0	2.3	4.6	5.2	3.1	4.2	3.0	2.6	2.9	7.4	9.0	8.6	6.0	4.9	3.8	3.3	9.0	1.9	4.0
6	7.6	9.6	9.8	10.3	10.8	10.5	12.2	11.6	10.7	10.1	10.3	9.1	8.2	7.5	5.0	2.9	2.6	2.0	1.7	1.3	2.1	2.6	3.9	4.4	12.2	1.3	6.9
7	3.8	1.8	2.5	1.8	2.0	3.6	3.1	1.7	1.0	1.0	1.1	1.1	2.4	2.3	1.1	1.2	2.8	2.5	3.1	2.6	1.4	1.9	1.1	1.9	3.8	1.0	2.0
8	1.5	1.4	1.5	1.1	2.1	3.2	3.1	3.3	2.3	3.3	3.9	3.3	2.9	4.6	4.2	4.1	2.5	2.3	2.1	1.8	1.2	1.3	1.2	1.3	4.6	1.1	2.5
9	1.7	1.1	1.4	1.6	1.3	1.1	1.1	0.9	1.0	1.5	1.8	2.3	4.0	4.6	4.3	2.0	1.8	1.5	0.9	1.4	0.9	1.4	0.5	1.1	4.6	0.5	1.7
10	2.8	2.3	1.9	2.1	1.2	2.6	2.9	3.8	4.5	4.7	3.9	3.5	2.7	4.0	5.4	6.0	2.6	2.4	3.1	5.9	4.9	3.0	3.7	2.6	6.0	1.2	3.4
11	2.0	1.5	2.4	2.6	2.7	2.2	3.1	4.8	6.2	4.2	6.2	8.8	9.0	9.3	9.1	9.2	10.9	13.0	13.6	13.5	11.6	12.7	12.9	11.8	13.6	1.5	7.6
12	12.1	9.7	10.5	10.6	10.0	9.7	9.7	9.3	9.1	10.5	9.0	10.7	11.5	11.3	11.6	9.5	7.2	6.8	6.7	8.2	10.9	11.9	10.4	11.7	12.1	6.7	9.9
13	10.0	8.6	10.3	11.5	11.6	11.8	10.9	6.9	6.4	5.8	8.3	7.5	6.8	6.4	7.3	8.5	7.3	8.3	10.9	12.0	10.4	8.7	8.1	7.5	12.0	5.8	8.8
14	10.8	10.4	10.7	10.6	11.3	9.2	8.9	10.2	10.4	8.9	8.8	8.6	8.1	7.1	5.6	6.1	4.5	5.8	3.9	3.5	2.4	2.0	3.0	3.0	11.3	2.0	7.2
15	3.5	3.1	2.8	3.1	3.0	2.8	3.0	1.9	3.6	2.7	2.5	2.5	1.2	1.9	2.1	4.0	4.1	3.8	3.8	3.2	3.3	3.6	3.4	3.5	4.1	1.2	3.0
16	4.5	3.7	1.8	1.7	2.3	2.0	1.9	2.0	1.6	2.0	3.4	4.3	3.7	3.1	1.3	0.8	0.8	0.8	1.2	2.7	1.7	1.3	1.1	1.9	4.5	0.8	2.1
17	1.8	1.8	2.4	1.9	1.2	0.8	1.3	1.3	1.2	1.5	2.9	2.0	3.1	4.2	4.7	5.4	4.3	5.0	3.9	2.3	4.3	4.1	3.2	3.2	5.4	0.8	2.8
18	2.5	2.2	2.7	2.0	2.0	2.8	2.7	2.9	2.2	1.7	2.0	1.6	1.8	2.8	2.9	1.8	2.2	2.2	2.2	3.4	3.6	3.7	3.4	4.6	4.6	1.6	2.6
19	6.3	6.0	6.7	11.0	12.8	10.5	8.3	9.7	9.0	9.0	8.8	9.0	9.1	9.2	12.4	15.8	16.5	12.7	17.5	23.2	23.9	23.7	23.2	19.7	23.9	6.0	13.1
20	19.2	19.1	20.8	20.6	22.4	19.2	20.2	19.5	20.7	18.2	16.3	15.1	19.5	22.3	22.0	22.2	21.1	22.9	22.7	25.6	24.4	17.2	15.0	13.7	25.6	13.7	20.0
21	14.5	17.6	23.1	24.5	26.7	21.8	17.2	18.7	19.2	18.7	16.1	15.0	12.1	8.5	10.9	10.8	7.6	9.2	7.6	11.1	10.0	8.0	7.5	7.9	26.7	7.5	14.3
22	8.0	7.8	6.7	8.1	7.6	6.6	5.9	7.5	7.5	6.9	6.9	4.9	5.4	6.4	6.9	5.7	6.7	6.7	7.0	7.8	7.0	8.2	7.6	6.0	8.2	4.9	6.9
23	6.9	6.0	5.7	9.3	10.6	9.2	11.3	11.5	9.1	7.8	9.7	7.0	10.9	10.1	9.6	9.9	7.5	8.1	10.8	10.2	10.5	11.8	10.0	9.4	11.8	5.7	9.3
24	6.3	10.8	11.7	12.9	8.9	10.3	9.0	10.8	11.1	11.0	14.9	17.3	20.9	18.2	22.5	23.7	22.5	20.3	22.0	21.9	22.3	21.2	22.2	22.5	23.7	6.3	16.5
25	17.7	12.3	16.8	20.0	18.2	13.0	7.7	7.5	4.9	4.2	5.6	7.0	7.4	6.6	7.2	7.3	6.7	6.5	6.3	4.8	3.4	2.8	3.0	4.3	20.0	2.8	8.4
26	9.2	11.9	13.5	15.2	13.5	11.4	10.0	9.2	8.0	4.8	4.4	2.9	3.4	5.7	6.8	6.9	6.0	6.0	5.6	2.2	4.6	6.6	9.4	8.8	15.2	2.2	7.7
27	9.5	9.3	8.6	8.2	9.7	10.6	12.1	9.0	7.2	9.4	8.5	6.7	8.8	6.8	5.8	5.9	6.8	6.2	5.9	5.1	2.9	3.5	3.6	4.1	12.1	2.9	7.3
28	3.0	2.0	3.2	6.3	6.8	6.9	6.6	7.4	8.1	8.9	9.4	11.5	11.5	12.7	14.0	12.9	13.7	14.8	13.7	12.7	13.2	13.6	12.7	12.2	14.8	2.0	9.9
Max.	**22.1**	**20.2**	**23.1**	**24.5**	**26.7**	**21.8**	**20.2**	**20.3**	**21.1**	**22.7**	**21.8**	**20.5**	**21.3**	**22.5**	**22.5**	**23.7**	**22.5**	**22.9**	**22.7**	**25.6**	**24.4**	**23.7**	**23.2**	**22.8**	**26.7**		
Min.	**1.5**	**1.1**	**1.4**	**1.1**	**1.2**	**0.8**	**1.1**	**0.9**	**1.0**	**1.0**	**1.1**	**1.1**	**1.2**	**1.9**	**1.1**	**0.8**	**0.8**	**0.7**	**0.9**	**1.3**	**0.9**	**1.3**	**0.5**	**1.1**		**0.5**	
Avg.	**7.8**	**7.7**	**8.2**	**8.7**	**8.9**	**8.3**	**8.0**	**7.9**	**7.5**	**7.2**	**7.6**	**7.5**	**7.8**	**7.8**	**8.2**	**8.1**	**7.5**	**7.7**	**8.1**	**8.6**	**8.3**	**7.9**	**7.7**	**7.7**			**8.0**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.9	12.7	13.3	12.8	14.1	12.8	14.0	13.4	13.5	11.9	11.6	11.4	11.1	10.2	12.5	11.4	15.8	16.0	15.9	14.6	12.1	12.0	12.1	13.1	16.0	10.2	12.9
2	15.7	16.0	17.9	17.0	16.6	16.3	13.6	16.1	15.9	15.6	13.7	16.4	13.1	13.1	15.4	18.6	16.5	16.3	14.3	18.4	20.3	21.4	20.8	13.2	21.4	13.1	16.3
3	13.8	14.8	9.8	10.1	12.8	11.7	11.1	8.4	10.7	12.6	11.1	11.2	11.7	9.0	7.9	10.8	10.7	9.8	10.2	9.0	10.0	15.7	21.2	21.1	21.2	7.9	11.9
4	20.3	20.3	20.8	22.9	17.8	18.5	19.0	19.4	22.0	21.8	22.4	23.8	18.7	19.6	16.3	20.3	19.4	23.8	20.6	17.6	18.7	22.0	25.0	26.6	26.6	16.3	20.7
5	27.1	24.6	20.3	20.9	24.7	22.1	22.0	22.6	18.7	21.2	22.3	21.8	19.6	15.7	14.7	12.7	17.2	16.9	16.6	18.3	23.2	23.9	22.1	20.1	27.1	12.7	20.4
6	20.7	23.4	23.8	19.3	13.9	17.8	19.8	20.1	16.9	20.1	25.2	25.6	25.7	27.4	32.2	33.0	29.9	32.0	33.8	35.5	36.5	36.2	37.6	37.2	37.6	13.9	26.8
7	37.4	37.0	37.6	30.2	29.9	36.9	32.8	30.1	18.2	24.2	28.1	30.7	25.2	24.8	20.3	26.2	27.0	24.9	23.5	24.8	23.5	25.1	28.0	28.6	37.6	18.2	28.1
8	26.9	23.3	23.2	22.2	22.4	22.1	20.0	18.9	17.9	16.6	15.1	14.8	13.5	12.2	11.5	13.1	15.7	17.9	17.6	20.5	22.9	21.9	16.4	17.4	26.9	11.5	18.5
9	14.4	13.3	15.4	16.9	15.9	17.9	16.5	13.9	13.4	13.4	14.3	13.0	13.2	12.3	11.4	10.9	10.0	9.7	8.8	9.0	8.6	8.3	7.0	5.6	17.9	5.6	12.2
10	6.2	6.4	7.1	7.1	8.6	8.6	10.3	11.1	12.9	14.5	11.7	10.6	9.3	8.5	8.5	9.4	9.4	9.0	8.1	8.7	9.0	9.0	8.6	9.1	14.5	6.2	9.2
11	11.4	13.1	13.2	15.4	14.5	19.3	19.8	18.0	18.3	19.9	15.5	16.7	16.0	15.2	14.9	14.9	13.4	13.0	21.3	18.9	25.2	22.4	22.4	20.5	25.2	11.4	17.2
12	18.4	22.8	25.4	26.6	27.2	28.6	26.7	27.3	19.9	19.6	17.6	19.4	17.8	16.6	15.4	13.9	12.1	11.1	7.2	9.8	5.4	8.0	11.6	10.9	28.6	5.4	17.5
13	7.1	6.0	7.8	13.4	13.5	8.5	13.4	11.0	5.2	7.0	7.6	7.4	9.5	9.5	13.7	12.3	15.3	12.7	10.7	14.0	18.7	19.5	16.0	21.1	21.1	5.2	11.7
14	21.9	20.7	19.8	18.4	13.9	21.7	25.1	21.8	19.8	16.5	11.1	17.5	16.0	17.9	19.5	23.0	21.4	19.6	21.0	16.3	20.9	22.9	21.3	19.9	25.1	11.1	19.5
15	13.7	13.8	12.2	12.1	9.6	11.6	10.9	9.5	9.0	8.6	9.8	9.7	9.7	8.8	9.6	10.3	11.3	11.5	11.9	11.9	14.2	12.3	13.7	10.8	14.2	8.6	11.1
16	9.0	7.4	6.9	6.7	6.7	5.6	6.7	7.6	8.5	9.7	11.0	11.1	9.0	8.3	8.3	9.3	9.5	8.6	7.1	7.7	7.9	8.1	7.2	6.2	11.1	5.6	8.1
17	5.7	5.4	5.2	5.0	3.5	3.2	4.0	3.9	2.9	4.0	4.0	4.4	4.6	4.7	4.3	4.0	4.0	4.3	4.8	5.5	5.4	5.1	3.6	3.2	5.7	2.9	4.4
18	2.4	0.8	1.1	0.9	1.3	1.7	1.6	1.3	1.7	1.4	1.3	1.3	2.0	2.4	2.6	3.4	4.5	2.5	4.1	6.1	5.1	7.1	6.5	4.8	7.1	0.8	2.8
19	4.3	4.1	5.1	4.4	4.5	5.1	5.0	4.3	3.8	3.7	3.9	2.4	1.4	2.3	3.2	3.6	2.5	2.6	3.7	2.7	4.3	3.5	2.8	1.4	5.1	1.4	3.5
20	0.7	0.6	1.5	2.9	2.8	5.0	4.5	8.0	10.5	12.1	14.9	15.1	17.1	17.2	17.6	17.5	14.6	12.0	11.6	11.0	10.5	9.6	8.8	8.5	17.6	0.6	9.8
21	6.7	4.4	4.8	3.2	3.6	6.5	8.4	9.0	11.1	14.1	14.4	14.3	10.4	7.7	8.7	7.7	11.9	11.9	10.3	4.7	9.1	10.4	11.4	13.8	14.4	3.2	9.1
22	11.2	11.4	8.1	6.5	8.4	7.6	4.0	7.0	13.1	13.3	11.3	10.2	9.1	6.7	7.8	9.8	9.8	9.1	7.8	8.2	8.1	9.6	12.3	12.6	13.3	4.0	9.3
23	12.4	6.0	10.1	17.3	15.6	11.4	14.0	15.8	14.3	15.8	14.5	10.3	11.0	15.2	13.8	8.9	8.6	11.5	13.8	12.4	13.3	11.3	11.2	11.6	17.3	6.0	12.5
24	12.0	13.0	9.8	8.1	7.1	6.1	7.8	9.1	8.0	8.1	7.2	6.2	5.4	6.0	5.8	6.2	6.3	3.9	2.4	3.2	2.7	1.6	2.2	2.4	13.0	1.6	6.3
25	0.9	0.8	0.9	1.1	1.1	1.0	1.6	1.9	1.5	2.2	1.1	1.4	1.0	1.3	1.0	1.9	1.1	2.3	3.7	6.0	7.3	8.8	11.7	12.6	12.6	0.8	3.1
26	13.9	14.8	13.1	12.0	14.6	13.8	9.7	11.2	9.4	10.0	12.4	11.0	7.8	6.4	6.5	5.8	6.3	5.2	3.6	5.2	4.7	3.8	5.6	8.1	14.8	3.6	8.9
27	9.7	6.1	8.4	10.1	9.7	11.8	14.7	15.3	15.8	17.3	19.9	20.0	21.1	19.3	22.7	18.0	12.8	15.5	11.5	11.7	10.7	8.5	13.0	15.4	22.7	6.1	14.1
28	14.2	15.3	12.8	9.9	10.3	3.6	2.8	10.0	15.2	13.3	8.7	7.6	5.6	8.0	8.3	8.3	7.9	7.2	7.4	6.3	7.4	8.1	5.6	3.6	15.3	2.8	8.6
29	3.8	6.2	4.6	5.6	6.8	5.5	6.2	8.6	7.4	6.7	6.9	5.5	8.7	9.1	9.9	10.3	8.0	7.1	7.5	8.7	11.0	6.8	4.9	7.9	11.0	3.8	7.2
30	9.2	14.5	13.8	11.5	8.9	8.7	8.0	7.3	5.3	4.5	4.1	3.9	5.4	3.7	3.0	3.9	3.1	3.3	3.2	2.5	2.3	1.5	0.9	1.4	14.5	0.9	5.6
31	1.0	2.2	2.4	1.4	1.0	0.8	0.7	0.8	0.8	0.6	0.8	1.0	1.0	1.2	1.3	1.6	3.8	3.9	3.9	4.5	6.9	6.4	5.6	5.8	6.9	0.6	2.5
Max.	**37.4**	**37.0**	**37.6**	**30.2**	**29.9**	**36.9**	**32.8**	**30.1**	**22.0**	**24.2**	**28.1**	**30.7**	**25.7**	**27.4**	**32.2**	**33.0**	**29.9**	**32.0**	**33.8**	**35.5**	**36.5**	**36.2**	**37.6**	**37.2**	**37.6**		
Min.	**0.7**	**0.6**	**0.9**	**0.9**	**1.0**	**0.8**	**0.7**	**0.8**	**0.8**	**0.6**	**0.8**	**1.0**	**1.0**	**1.2**	**1.0**	**1.6**	**1.1**	**2.3**	**2.4**	**2.5**	**2.3**	**1.5**	**0.9**	**1.4**		**0.6**	
Avg.	**12.4**	**12.3**	**12.1**	**12.0**	**11.6**	**12.0**	**12.1**	**12.3**	**11.7**	**12.3**	**12.0**	**12.1**	**11.3**	**11.0**	**11.2**	**11.6**	**11.6**	**11.4**	**11.2**	**11.4**	**12.4**	**12.6**	**12.8**	**12.7**			**11.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

April 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.1	5.7	5.3	4.6	4.6	5.1	5.0	5.3	4.7	5.2	2.3	1.6	3.0	3.3	1.5	1.4	1.2	1.3	1.9	1.8	1.9	1.4	1.2	3.6	5.7	1.2	3.2
2	2.7	2.2	1.9	2.0	3.2	5.4	6.5	8.0	8.8	10.1	11.6	12.2	12.2	14.5	14.4	13.2	12.5	11.9	11.4	12.2	14.8	13.0	13.4	11.0	14.8	1.9	9.5
3	10.3	10.0	9.8	10.7	8.8	9.4	8.5	8.8	8.1	9.1	9.8	9.7	10.1	9.7	11.3	10.8	11.0	10.5	9.4	10.0	8.5	9.9	7.8	7.6	11.3	7.6	9.6
4	9.1	9.0	8.5	10.3	8.3	7.9	8.0	7.5	9.8	11.3	12.5	12.5	12.1	13.3	12.0	12.1	11.1	10.9	8.3	6.3	4.9	5.0	6.1	4.7	13.3	4.7	9.2
5	3.4	2.7	3.3	5.0	3.8	9.6	11.7	13.1	11.4	14.0	16.3	16.2	16.9	14.3	14.0	11.9	15.5	20.7	17.3	15.7	12.0	14.0	14.7	12.4	20.7	2.7	12.1
6	13.4	12.5	14.8	13.6	13.6	9.2	11.6	11.8	8.1	8.4	10.3	11.7	14.3	15.0	12.7	9.6	9.7	11.0	9.0	7.7	7.7	7.2	6.6	4.3	15.0	4.3	10.6
7	2.1	2.2	1.9	2.4	0.2	13.3	17.2	17.8	17.9	17.7	16.2	15.8	15.7	13.7	11.9	13.8	10.7	9.9	9.8	7.5	5.4	6.7	9.1	12.2	17.9	0.2	10.5
8	14.2	14.1	15.1	14.9	14.4	12.6	13.1	12.4	11.7	11.0	10.7	10.3	10.5	10.7	10.7	7.3	5.3	3.3	3.4	4.3	4.4	5.9	5.2	5.5	15.1	3.3	9.6
9	8.6	7.6	6.5	7.1	6.4	4.4	4.4	2.7	4.6	6.7	7.5	10.6	11.0	11.8	11.1	12.1	10.7	9.3	9.9	12.0	10.3	11.6	8.7	7.1	12.1	2.7	8.4
10	5.1	4.8	5.9	5.7	5.3	3.9	4.7	4.7	4.5	4.7	6.0	8.4	9.1	8.2	8.9	8.1	8.0	8.7	8.4	7.0	5.5	7.8	6.4	5.4	9.1	3.9	6.5
11	4.5	5.4	5.2	5.7	4.5	3.3	4.0	4.9	3.9	1.3	4.2	6.1	7.1	7.3	7.3	8.1	9.1	8.9	9.1	5.7	4.8	5.2	6.3	6.2	9.1	1.3	5.7
12	6.8	5.3	5.0	3.4	4.8	5.1	5.5	4.7	3.4	2.5	3.1	2.5	3.3	2.6	1.9	2.9	4.2	3.9	2.8	3.6	3.0	1.6	3.1	4.4	6.8	1.6	3.7
13	6.4	6.1	5.1	5.7	6.2	5.7	5.4	5.0	5.6	5.3	6.1	7.0	5.7	4.2	2.7	2.5	2.1	2.9	3.9	5.0	7.1	7.0	5.2	5.2	7.1	2.1	5.1
14	3.0	2.3	1.7	1.1	2.1	1.9	2.5	3.4	3.1	2.5	2.4	3.2	3.9	6.5	8.3	7.8	7.5	7.4	6.0	6.1	6.2	7.0	6.9	8.7	8.7	1.1	4.7
15	8.9	8.2	9.0	9.3	8.3	9.0	8.6	7.5	10.5	9.7	9.5	9.6	9.4	7.8	5.9	4.5	2.8	2.9	3.0	1.2	1.4	1.7	2.4	2.0	10.5	1.2	6.4
16	2.0	2.4	1.9	6.1	7.1	5.9	3.9	3.5	3.6	3.7	3.2	4.8	5.0	10.6	11.8	10.3	9.4	7.7	8.0	7.4	5.5	2.2	1.2	1.8	11.8	1.2	5.4
17	3.3	4.1	6.4	7.7	11.4	15.6	19.1	20.5	19.6	22.2	23.3	25.4	24.5	25.8	26.7	25.7	25.5	26.8	29.2	29.4	30.0	27.6	25.0	25.6	30.0	3.3	20.9
18	24.5	21.0	18.1	20.5	21.2	19.4	16.8	17.1	17.7	18.4	17.6	16.2	16.5	15.9	14.2	11.3	5.6	3.6	2.1	2.1	2.4	3.1	3.6	2.7	24.5	2.1	13.0
19	3.8	4.6	2.7	2.4	6.1	10.0	8.9	7.1	8.4	12.6	12.2	13.8	13.2	19.1	18.3	14.6	13.6	13.1	12.4	12.5	11.4	12.5	12.7	12.5	19.1	2.4	10.8
20	10.8	12.8	10.2	9.6	11.6	7.1	9.4	12.0	13.8	15.0	15.6	11.9	14.6	15.8	16.0	16.8	16.5	13.9	13.0	14.1	12.6	9.8	7.3	7.6	16.8	7.1	12.4
21	7.5	7.8	7.8	7.4	7.9	7.7	5.8	4.1	4.5	5.3	8.9	9.5	11.5	15.0	14.7	15.5	14.7	12.9	13.2	12.4	10.5	8.7	10.8	11.5	15.5	4.1	9.8
22	9.4	13.7	15.6	14.6	13.0	14.0	13.7	15.7	15.9	15.4	13.6	15.1	14.2	14.8	12.9	13.2	14.7	11.9	10.6	8.7	9.5	9.0	8.2	7.5	15.9	7.5	12.7
23	7.3	13.9	13.3	13.7	12.5	11.1	9.6	9.9	7.7	7.9	5.5	5.2	8.4	7.0	6.7	9.1	3.7	6.0	6.0	4.1	2.1	3.5	6.0	8.0	13.9	2.1	7.8
24	6.9	7.2	6.3	5.4	4.2	4.0	5.2	7.8	9.6	7.6	7.3	9.0	6.4	3.3	4.4	4.9	4.5	2.9	6.7	6.1	4.5	5.0	7.1	8.1	9.6	2.9	6.0
25	8.8	10.0	10.2	11.2	10.7	10.0	10.5	11.3	12.5	14.0	16.4	16.6	15.3	14.5	14.5	12.6	12.4	11.1	8.8	7.1	2.4	2.1	3.4	3.8	16.6	2.1	10.4
26	4.7	7.8	7.7	9.6	9.3	6.0	6.1	7.1	8.6	7.5	7.8	6.4	4.8	5.0	6.6	7.5	9.0	10.6	8.9	7.2	5.8	8.6	6.2	5.3	10.6	4.7	7.3
27	4.4	3.9	5.1	3.3	1.3	2.0	2.6	5.6	4.1	3.1	3.8	4.9	6.3	6.5	6.5	6.3	7.8	8.2	7.2	5.9	5.2	5.2	4.2	4.3	8.2	1.3	4.9
28	3.9	4.8	3.1	3.4	3.7	2.9	1.7	1.0	1.0	1.0	1.2	2.6	4.0	5.3	7.0	9.0	9.9	9.9	10.6	9.3	7.0	5.7	7.6	8.8	10.6	1.0	5.2
29	10.3	11.6	10.0	8.5	9.4	8.0	8.8	8.0	10.7	11.4	13.3	11.8	12.8	13.2	11.9	12.6	11.7	9.8	7.8	6.8	3.4	1.9	2.3	0.8	13.3	0.8	9.0
30	1.5	2.1	1.2	1.4	2.5	2.6	4.2	4.6	5.9	5.2	4.1	4.2	4.4	3.5	4.2	4.7	3.8	3.3	4.3	3.3	1.8	1.5	1.6	1.9	5.9	1.2	3.2
Max.	**24.5**	**21.0**	**18.1**	**20.5**	**21.2**	**19.4**	**19.1**	**20.5**	**19.6**	**22.2**	**23.3**	**25.4**	**24.5**	**25.8**	**26.7**	**25.7**	**25.5**	**26.8**	**29.2**	**29.4**	**30.0**	**27.6**	**25.0**	**25.6**	**30.0**		
Min.	**1.5**	**2.1**	**1.2**	**1.1**	**0.2**	**1.9**	**1.7**	**1.0**	**1.0**	**1.0**	**1.2**	**1.6**	**3.0**	**2.6**	**1.5**	**1.4**	**1.2**	**1.3**	**1.9**	**1.2**	**1.4**	**1.4**	**1.2**	**0.8**		**0.2**	
Avg.	**7.1**	**7.5**	**7.3**	**7.5**	**7.5**	**7.7**	**8.1**	**8.4**	**8.6**	**9.0**	**9.4**	**9.8**	**10.2**	**10.6**	**10.4**	**10.0**	**9.5**	**9.2**	**8.7**	**8.1**	**7.1**	**7.1**	**7.0**	**7.0**			**8.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.4	2.3	2.0	2.3	2.4	1.3	1.2	2.2	1.9	2.6	2.1	1.5	1.4	1.7	2.1	3.6	2.5	2.7	3.4	1.4	1.6	1.6	2.0	1.4	3.6	1.2	2.1
2	0.8	1.2	0.7	1.9	3.7	4.9	5.7	5.2	2.7	1.9	2.1	2.8	7.7	4.8	7.0	9.5	12.4	12.1	14.3	10.5	8.3	7.7	7.3	6.7	14.3	0.7	5.9
3	7.2	5.6	4.0	1.8	1.7	1.7	1.0	1.1	1.0	2.3	2.7	3.0	3.1	2.5	2.9	2.6	5.6	4.6	4.4	4.9	4.1	2.2	1.6	2.5	7.2	1.0	3.1
4	2.6	3.7	3.6	1.6	1.0	1.6	1.4	1.7	1.7	1.3	2.9	4.8	6.1	5.8	5.9	5.5	5.5	5.8	4.2	3.3	1.7	3.5	3.8	2.6	6.1	1.0	3.4
5	1.8	2.4	4.5	3.8	1.5	2.5	4.6	2.5	3.1	4.3	4.4	4.7	5.0	5.7	6.3	6.8	7.3	7.3	5.4	5.1	5.2	5.6	5.4	4.7	7.3	1.5	4.6
6	3.5	2.6	7.5	5.1	3.2	3.8	4.3	4.1	5.7	6.1	6.1	6.7	6.8	7.5	8.3	8.2	9.0	10.1	9.4	8.3	7.6	8.0	7.9	7.7	10.1	2.6	6.6
7	9.3	8.5	8.5	8.3	6.7	4.6	4.4	4.3	4.6	4.3	3.9	4.2	5.3	4.9	3.6	4.5	6.7	5.8	5.0	4.9	5.0	5.5	6.5	5.2	9.3	3.6	5.6
8	5.6	5.5	5.6	5.3	5.7	5.1	5.5	5.1	5.2	5.6	5.0	3.9	2.1	3.1	4.2	3.9	4.3	4.8	4.4	4.1	2.7	3.7	3.1	1.9	5.7	1.9	4.4
9	1.5	1.2	1.4	1.6	2.4	3.5	3.5	3.4	2.0	2.8	3.2	3.8	3.2	4.0	6.0	5.8	5.4	5.1	4.3	3.3	2.9	1.5	0.9	1.1	6.0	0.9	3.1
10	1.1	1.1	0.8	1.0	1.4	1.1	0.9	1.4	1.1	2.0	2.4	3.5	3.5	3.7	4.0	5.1	4.8	4.6	4.0	4.3	3.5	3.7	3.6	2.6	5.1	0.8	2.7
11	2.1	3.3	3.3	3.0	6.7	7.0	6.1	6.9	8.7	10.2	10.1	9.5	8.9	8.3	8.4	8.4	8.1	7.8	7.2	8.2	6.7	4.3	3.9	4.1	10.2	2.1	6.7
12	2.9	2.1	2.1	1.9	2.3	4.6	5.8	6.7	8.3	9.3	9.2	9.1	9.8	10.7	11.5	11.0	11.3	10.1	10.3	11.3	9.8	6.8	6.4	6.8	11.5	1.9	7.5
13	6.8	7.3	6.7	6.3	7.4	7.9	7.6	6.7	7.3	8.8	8.5	8.1	8.2	9.0	9.1	9.6	9.5	8.9	6.6	5.4	5.8	5.1	5.9	6.0	9.6	5.1	7.4
14	4.7	3.6	6.0	6.1	11.1	11.5	10.9	9.4	8.2	6.6	5.2	6.6	5.1	5.2	8.7	8.6	10.3	9.6	8.4	8.4	7.3	5.8	6.0	7.7	11.5	3.6	7.5
15	8.0	5.9	6.2	7.5	6.6	5.3	2.4	4.6	4.3	7.2	8.6	9.5	8.5	6.3	5.0	3.7	3.8	3.3	1.8	1.8	2.0	3.6	6.1	7.0	9.5	1.8	5.4
16	7.2	5.3	5.4	7.5	6.7	6.9	6.5	5.8	5.2	4.0	2.5	3.6	3.6	3.6	3.0	4.0	6.1	4.6	5.4	8.4	7.2	7.8	6.4	6.6	8.4	2.5	5.5
17	8.2	6.7	6.8	6.3	5.3	3.8	2.7	3.1	3.0	4.2	8.2	9.1	8.1	8.7	10.8	11.2	10.5	10.2	9.1	6.6	6.3	3.7	2.6	1.8	11.2	1.8	6.5
18	1.7	3.3	4.0	4.2	5.4	2.5	2.5	3.0	4.3	5.5	5.1	5.0	4.6	4.6	3.8	3.7	3.2	3.6	3.5	2.3	2.7	2.3	2.4	1.7	5.5	1.7	3.5
19	1.6	2.5	3.4	2.9	3.0	2.7	1.9	2.9	3.0	3.2	4.7	6.5	4.3	5.0	6.5	7.7	7.5	8.0	8.5	6.1	3.9	3.7	3.0	1.5	8.5	1.5	4.3
20	2.0	2.6	2.6	3.5	2.5	4.1	3.3	3.9	4.5	4.8	4.6	2.9	3.6	4.8	4.9	5.6	5.7	5.1	5.7	6.3	5.9	4.8	2.2	2.8	6.3	2.0	4.1
21	2.1	3.0	2.6	2.3	2.0	1.5	1.0	0.9	1.2	1.6	2.3	2.9	3.7	4.9	6.4	7.2	8.5	9.4	12.4	12.7	12.4	10.8	8.8	10.8	12.7	0.9	5.5
22	10.3	9.2	8.6	7.5	7.9	6.6	10.7	12.2	14.0	9.7	6.1	13.4	14.1	10.3	9.7	9.1	10.5	9.7	7.6	4.8	1.5	1.9	1.7	3.4	14.1	1.5	8.4
23	4.2	3.8	3.2	3.2	3.2	3.5	5.9	9.4	9.0	11.2	13.7	12.7	13.3	11.3	10.6	10.8	14.7	17.2	15.7	11.6	11.8	10.5	11.9	8.7	17.2	3.2	9.6
24	12.6	10.6	11.3	10.7	10.3	10.1	9.4	9.8	12.1	13.1	13.7	14.4	12.5	10.8	9.6	6.9	4.9	4.2	7.1	4.2	3.1	2.7	1.8	2.1	14.4	1.8	8.7
25	2.1	1.7	6.8	4.2	1.9	1.3	1.0	1.1	1.6	2.4	2.9	4.3	4.2	4.2	4.6	3.7	2.7	2.6	1.7	1.2	1.3	1.7	2.7	3.6	6.8	1.0	2.7
26	4.0	6.0	5.7	3.6	3.0	2.7	3.1	4.7	5.8	4.3	3.9	7.2	8.1	7.4	7.4	8.9	12.2	10.2	8.5	6.9	5.3	3.9	2.5	2.7	12.2	2.5	5.7
27	3.7	3.6	3.8	3.2	3.8	4.5	6.7	6.6	7.0	7.8	8.4	7.6	7.6	9.7	9.8	9.3	8.7	10.1	9.6	9.4	8.2	6.9	5.8	5.7	10.1	3.2	7.0
28	4.6	6.0	6.1	5.6	5.7	5.5	4.1	3.1	4.1	5.9	8.2	8.2	8.9	10.3	10.1	11.4	10.9	9.3	7.9	8.0	9.5	6.2	4.3	1.8	11.4	1.8	6.9
29	1.0	1.3	1.5	2.1	4.2	7.7	8.1	7.5	6.4	4.7	3.9	4.3	3.5	3.2	4.8	5.9	4.3	4.0	4.7	4.9	5.1	3.0	2.1	0.6	8.1	0.6	4.1
30	0.7	0.6	0.6	1.7	3.4	3.4	3.0	3.0	1.6	2.4	2.6	6.5	6.3	7.3	8.0	8.0	8.1	7.7	7.5	6.5	6.0	4.3	2.4	3.0	8.1	0.6	4.4
31	2.4	2.6	3.9	4.7	5.9	6.8	9.2	11.8	9.3	5.9	7.5	5.8	7.7	6.7	4.2	3.8	3.7	4.0	5.9	6.4	6.8	5.1	5.6	6.4	11.8	2.4	5.9
Max.	**12.6**	**10.6**	**11.3**	**10.7**	**11.1**	**11.5**	**10.9**	**12.2**	**14.0**	**13.1**	**13.7**	**14.4**	**14.1**	**11.3**	**11.5**	**11.4**	**14.7**	**17.2**	**15.7**	**12.7**	**12.4**	**10.8**	**11.9**	**10.8**	**17.2**		
Min.	**0.7**	**0.6**	**0.6**	**1.0**	**1.0**	**1.1**	**0.9**	**0.9**	**1.0**	**1.3**	**2.1**	**1.5**	**1.4**	**1.7**	**2.1**	**2.6**	**2.5**	**2.6**	**1.7**	**1.2**	**1.3**	**1.5**	**0.9**	**0.6**		**0.6**	
Avg.	**4.2**	**4.0**	**4.5**	**4.2**	**4.4**	**4.5**	**4.7**	**5.0**	**5.1**	**5.3**	**5.6**	**6.3**	**6.4**	**6.3**	**6.7**	**6.9**	**7.4**	**7.2**	**6.9**	**6.2**	**5.5**	**4.8**	**4.4**	**4.2**			**5.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.4	4.3	5.5	5.7	7.5	5.3	4.6	6.4	7.6	7.4	7.4	9.0	10.4	9.8	13.0	11.6	12.2	10.5	7.9	8.3	7.6	6.0	6.1	6.4	13.0	4.3	7.7
2	6.0	5.4	4.4	4.0	3.3	3.9	5.1	4.1	3.0	4.1	3.9	5.4	5.9	5.5	4.4	4.4	3.8	4.4	4.1	4.8	5.1	4.0	3.5	1.5	6.0	1.5	4.3
3	0.8	1.9	2.3	2.2	1.7	2.4	0.9	1.0	2.3	2.8	3.1	2.6	3.2	2.3	3.2	4.7	4.5	3.0	3.7	2.1	1.8	1.3	2.0	4.5	4.7	0.8	2.5
4	7.0	7.7	7.6	9.6	10.2	10.5	10.4	10.3	7.9	8.1	9.8	9.7	9.9	6.6	3.1	2.7	2.3	6.9	8.1	8.2	9.1	7.9	7.0	6.8	10.5	2.3	7.8
5	7.5	6.8	4.9	4.4	3.6	4.0	5.1	6.3	6.5	7.0	8.8	13.8	16.9	19.4	17.5	17.0	16.0	14.4	10.9	12.9	12.5	10.1	9.8	12.1	19.4	3.6	10.3
6	12.4	10.9	12.5	12.4	9.3	4.7	5.6	4.0	3.3	5.3	6.0	6.0	6.2	6.9	6.8	7.3	5.4	4.3	5.0	6.3	4.0	2.8	2.1	1.4	12.5	1.4	6.3
7	2.2	2.7	1.9	3.1	3.4	8.0	3.6	1.5	4.4	7.4	8.1	8.0	10.7	14.4	17.2	17.9	16.7	17.2	15.7	13.4	14.4	12.9	9.0	7.1	17.9	1.5	9.2
8	6.7	6.7	7.6	5.1	7.5	8.2	7.1	7.1	6.0	4.8	4.5	6.6	6.6	8.1	5.8	4.7	7.4	10.1	11.6	11.2	9.6	7.9	6.5	6.6	11.6	4.5	7.2
9	3.9	2.8	2.7	1.7	1.0	1.3	1.5	2.0	3.5	2.9	4.2	4.4	3.9	3.6	1.6	1.5	1.9	1.2	2.7	5.4	4.5	3.4	5.5	5.5	5.5	1.0	3.0
10	7.1	8.7	9.8	11.4	10.8	10.8	10.3	13.4	12.6	10.2	8.5	7.1	5.7	5.0	4.8	4.3	4.4	3.5	4.0	5.1	8.7	7.0	7.6	4.7	13.4	3.5	7.7
11	3.8	3.5	5.2	4.1	2.8	2.5	1.4	0.7	2.5	3.7	2.6	2.9	5.3	7.5	8.3	9.4	9.6	9.2	8.5	8.6	8.2	8.0	5.4	4.1	9.6	0.7	5.3
12	5.5	5.0	4.2	3.5	2.2	1.7	1.0	2.0	3.0	4.4	4.3	4.2	4.7	4.8	4.7	4.1	4.2	4.1	3.9	2.8	3.0	3.5	3.0	1.9	5.5	1.0	3.6
13	1.3	0.6	1.6	1.7	1.6	2.7	3.2	2.6	2.1	2.9	3.2	4.0	5.5	4.9	3.8	3.8	5.5	4.6	5.4	4.4	4.0	1.9	1.7	1.7	5.5	0.6	3.1
14	2.0	2.9	3.8	2.6	3.4	3.4	3.5	2.6	2.8	4.4	4.1	3.9	2.9	3.5	1.9	2.2	3.1	3.6	4.5	4.7	4.9	5.5	5.5	6.1	6.1	1.9	3.7
15	8.3	9.0	8.5	10.8	12.8	12.2	12.1	12.5	11.5	11.3	10.2	9.2	7.8	7.5	8.4	8.8	8.6	9.2	9.0	8.7	8.4	9.1	10.2	9.3	12.8	7.5	9.7
16	9.5	9.4	8.5	9.5	9.6	8.8	8.2	9.6	7.4	5.6	5.7	6.8	8.1	7.1	7.4	7.1	7.1	8.0	9.8	8.8	8.8	8.9	9.2	9.2	9.8	5.6	8.3
17	8.2	7.3	6.5	5.7	5.7	4.3	4.1	4.0	3.5	2.9	2.2	3.0	3.2	3.7	3.0	3.2	3.3	3.5	2.1	3.6	3.5	2.5	2.7	3.6	8.2	2.1	4.0
18	3.5	2.4	1.6	2.2	4.3	5.3	4.6	3.1	1.7	1.4	2.0	1.9	1.5	1.9	3.5	3.7	3.0	2.1	2.6	3.9	4.1	1.1	0.7	2.3	5.3	0.7	2.7
19	2.7	3.3	6.3	7.6	7.9	8.4	9.4	7.4	6.6	7.7	7.6	9.0	10.1	10.7	11.3	11.5	10.9	10.0	10.3	10.6	11.4	12.1	13.1	14.1	14.1	2.7	9.2
20	11.9	12.3	11.0	11.3	11.2	12.3	12.9	12.9	11.3	12.4	12.3	12.3	11.7	10.0	10.4	10.5	11.4	10.6	11.1	10.5	10.7	14.6	14.0	12.7	14.6	10.0	11.8
21	10.8	11.5	7.7	9.8	8.6	6.4	6.3	7.1	7.2	7.2	6.7	7.2	7.3	7.7	8.1	7.4	7.4	7.5	10.8	12.2	8.8	7.4	8.2	8.6	12.2	6.3	8.2
22	7.2	8.1	6.4	6.1	3.7	1.8	2.2	3.2	5.7	5.1	4.7	4.7	4.3	3.7	4.3	4.2	3.2	3.7	3.4	3.5	3.7	4.3	6.1	6.6	8.1	1.8	4.6
23	7.9	7.4	8.4	8.4	9.4	10.5	11.8	12.6	13.8	13.4	13.3	13.4	12.9	12.8	13.4	12.3	13.1	12.9	12.1	11.5	10.8	9.9	10.3	10.4	13.8	7.4	11.4
24	10.3	9.6	8.1	7.8	7.9	8.9	8.5	8.6	7.3	8.7	9.7	9.7	9.8	9.8	9.0	10.7	10.7	11.8	11.6	10.8	10.0	8.8	9.8	10.1	11.8	7.3	9.5
25	8.6	7.3	7.5	7.5	6.8	6.8	5.3	5.7	8.8	10.1	9.9	9.7	9.9	10.0	11.9	12.1	12.4	12.0	10.7	10.9	8.7	7.9	7.6	7.3	12.4	5.3	9.0
26	5.4	5.1	6.5	6.7	5.3	5.1	4.5	5.3	6.5	5.9	5.4	4.5	4.2	3.8	4.0	3.3	2.3	3.2	4.4	6.0	6.7	5.6	2.9	1.8	6.7	1.8	4.8
27	2.4	3.4	4.2	4.1	3.7	3.9	2.4	2.5	2.4	2.0	3.4	3.9	4.3	5.2	5.0	5.4	5.9	5.9	7.1	6.1	7.3	7.6	6.0	5.9	7.6	2.0	4.6
28	5.2	4.2	3.4	3.5	3.2	4.0	3.2	1.7	1.0	1.7	2.5	3.2	2.8	4.4	5.3	4.0	3.2	2.3	5.9	6.4	5.9	5.8	5.9	6.1	6.4	1.0	3.9
29	4.7	2.6	1.7	1.9	1.4	1.0	1.9	3.4	3.6	3.9	4.0	4.3	4.5	4.0	4.8	6.2	8.5	6.9	6.2	6.1	6.7	4.7	4.0	4.4	8.5	1.0	4.2
30	2.4	2.5	1.9	2.3	2.0	3.1	4.2	4.7	4.0	4.6	4.3	3.6	4.0	3.1	3.0	4.0	4.0	4.6	4.6	6.2	4.4	4.0	2.0	2.1	6.2	1.9	3.6
Max.	**12.4**	**12.3**	**12.5**	**12.4**	**12.8**	**12.3**	**12.9**	**13.4**	**13.8**	**13.4**	**13.3**	**13.8**	**16.9**	**19.4**	**17.5**	**17.9**	**16.7**	**17.2**	**15.7**	**13.4**	**14.4**	**14.6**	**14.0**	**14.1**	**19.4**		
Min.	**0.8**	**0.6**	**1.6**	**1.7**	**1.0**	**1.0**	**0.9**	**0.7**	**1.0**	**1.4**	**2.0**	**1.9**	**1.5**	**1.9**	**1.6**	**1.5**	**1.9**	**1.2**	**2.1**	**2.1**	**1.8**	**1.1**	**0.7**	**1.4**		**0.6**	
Avg.	**6.0**	**5.8**	**5.7**	**5.9**	**5.7**	**5.7**	**5.5**	**5.6**	**5.7**	**6.0**	**6.1**	**6.5**	**6.8**	**6.9**	**7.0**	**7.0**	**7.1**	**7.0**	**7.3**	**7.5**	**7.2**	**6.5**	**6.2**	**6.2**			**6.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.3	1.2	0.7	1.1	2.8	2.6	3.3	5.1	5.3	4.0	3.7	3.7	3.1	3.9	3.9	4.2	4.1	4.5	4.5	4.3	3.0	3.5	3.9	3.2	5.3	0.7	3.4
2	2.5	2.4	2.3	1.0	0.8	1.1	0.7	1.0	1.6	4.0	4.0	4.0	4.5	4.2	3.8	4.8	4.3	5.5	6.1	5.9	5.5	5.7	4.4	5.1	6.1	0.7	3.6
3	4.0	3.1	4.6	4.3	2.8	1.7	2.0	2.5	3.6	2.7	2.7	3.3	3.4	3.1	3.3	4.5	6.3	6.5	5.0	4.4	2.4	0.9	2.3	5.9	6.5	0.9	3.5
4	5.9	5.8	5.4	6.5	4.7	4.5	4.1	3.4	3.4	5.5	6.5	7.2	7.7	5.9	7.3	8.1	7.3	5.3	3.8	3.8	3.3	4.7	6.0	5.3	8.1	3.3	5.5
5	3.3	2.9	2.4	3.1	1.2	0.7	0.8	1.0	1.4	2.4	3.9	4.0	3.6	3.9	4.6	4.7	4.3	2.7	8.9	8.5	7.2	6.8	6.3	5.3	8.9	0.7	3.9
6	5.8	5.5	4.5	4.5	4.9	4.5	3.6	3.7	2.8	2.9	2.5	1.2	2.2	1.8	2.7	3.1	3.1	2.4	2.2	2.1	1.1	1.0	3.0	2.4	5.8	1.0	3.1
7	2.5	2.4	2.2	1.9	2.1	0.5	1.1	1.1	1.2	1.7	1.3	2.5	1.7	1.7	2.6	3.9	4.1	3.9	5.3	4.8	4.3	4.0	3.4	2.2	5.3	0.5	2.6
8	1.3	0.9	1.1	0.8	0.5	0.9	1.9	2.2	3.2	3.9	3.7	3.6	3.5	5.1	5.5	6.3	7.4	8.8	8.2	6.9	7.0	6.0	4.7	4.9	8.8	0.5	4.1
9	7.9	6.3	5.6	4.8	2.9	1.4	2.4	2.7	3.5	3.0	3.1	4.8	5.7	4.1	3.7	3.8	2.8	3.9	4.3	2.2	2.9	2.2	2.2	2.6	7.9	1.4	3.7
10	3.8	4.7	4.0	3.2	3.2	2.4	2.6	1.2	1.4	2.6	3.6	2.6	5.6	4.7	3.7	5.9	8.2	7.4	6.6	6.9	6.2	6.4	7.1	6.3	8.2	1.2	4.6
11	4.7	4.4	4.0	4.2	5.4	5.5	6.4	5.6	5.0	5.2	6.0	6.7	7.3	7.1	7.0	6.3	6.1	6.5	7.4	6.8	6.1	5.6	4.6	3.9	7.4	3.9	5.7
12	2.4	1.9	1.0	1.5	2.6	3.0	2.8	2.5	2.7	2.0	2.0	3.4	2.8	3.4	5.3	5.9	5.5	4.4	4.3	3.4	3.5	4.2	4.6	5.1	5.9	1.0	3.3
13	4.3	3.8	4.4	4.1	3.9	3.3	3.2	3.0	2.7	4.3	4.4	5.1	4.8	4.6	4.6	4.6	3.7	3.8	3.4	2.8	2.1	2.2	2.5	2.4	5.1	2.1	3.7
14	2.6	1.8	1.6	1.5	1.8	1.5	1.7	3.2	2.6	2.3	3.5	5.4	5.4	5.4	5.5	6.4	6.7	6.0	5.3	4.4	3.9	4.2	3.5	2.4	6.7	1.5	3.7
15	2.3	1.7	1.8	1.5	2.0	1.0	1.0	1.1	2.8	3.1	3.8	4.3	4.9	5.6	6.8	6.7	7.5	6.8	6.0	5.7	5.2	4.0	5.3	5.4	7.5	1.0	4.0
16	5.2	3.7	4.3	3.9	2.6	1.3	2.1	3.7	2.5	3.3	4.7	4.8	4.9	5.7	5.6	6.3	6.2	5.4	6.1	6.9	9.0	9.2	7.0	7.4	9.2	1.3	5.1
17	6.2	4.4	5.9	5.3	4.5	4.4	4.3	5.2	4.1	3.5	2.4	1.8	2.8	4.4	4.1	5.4	7.1	8.2	8.3	7.7	7.3	5.4	2.7	5.6	8.3	1.8	5.0
18	7.1	8.8	9.1	7.4	7.9	4.4	3.6	2.6	2.2	1.8	1.9	2.4	2.7	3.9	4.5	3.5	4.7	2.4	1.4	1.4	1.4	1.4	1.8	1.3	9.1	1.3	3.7
19	1.7	2.6	3.5	2.8	2.5	2.0	1.1	1.9	2.0	3.3	3.5	2.8	2.0	2.3	2.8	2.6	2.5	4.2	2.6	2.3	2.6	2.4	2.0	1.3	4.2	1.1	2.5
20	0.9	1.0	0.9	1.1	0.9	1.3	1.3	1.4	1.9	3.7	5.4	5.3	4.8	5.5	6.3	6.9	5.4	5.7	5.1	6.0	8.2	6.9	7.1	8.1	8.2	0.9	4.2
21	8.3	8.7	7.0	7.1	7.7	7.8	7.5	7.7	8.5	8.5	7.9	7.4	7.1	6.1	6.0	6.8	7.2	7.1	6.6	6.0	6.4	5.8	4.4	5.2	8.7	4.4	7.0
22	4.9	5.3	5.6	6.1	6.7	7.0	6.8	6.6	6.8	6.5	6.2	6.1	5.5	5.2	5.1	4.5	4.9	4.5	4.7	4.7	5.2	5.4	5.1	4.9	7.0	4.5	5.6
23	5.1	3.5	1.3	1.3	1.5	0.9	1.0	2.1	2.1	2.8	3.8	4.8	5.1	6.4	6.1	6.5	9.1	10.1	7.6	7.6	6.8	7.6	6.6	7.4	10.1	0.9	4.9
24	5.7	8.2	8.6	8.9	8.8	7.8	7.6	7.6	8.0	8.6	6.5	5.6	5.0	6.9	6.9	6.7	6.2	5.3	4.9	5.2	4.0	7.0	7.0	5.7	8.9	4.0	6.8
25	6.5	9.4	10.1	10.5	11.1	10.2	10.5	9.3	10.8	9.5	7.2	5.9	6.0	7.5	8.7	8.0	8.2	8.6	9.1	4.7	2.8	1.3	2.0	1.2	11.1	1.2	7.5
26	1.5	1.8	1.8	1.3	1.3	3.3	2.3	5.1	4.9	3.8	3.3	3.5	2.9	3.3	4.3	5.0	3.1	5.3	6.2	5.6	3.4	3.9	2.9	2.8	6.2	1.3	3.4
27	1.0	1.5	1.4	2.1	1.2	2.6	3.9	3.1	2.2	4.7	4.0	4.3	4.3	5.1	6.2	5.6	6.0	8.1	6.0	6.6	5.0	6.8	2.6	1.9	8.1	1.0	4.0
28	2.1	2.7	3.7	4.5	4.4	5.2	5.5	5.6	5.6	6.4	6.7	6.8	7.8	8.6	9.0	9.3	9.0	8.3	8.6	10.3	9.5	7.3	6.2	6.9	10.3	2.1	6.7
29	7.1	5.4	4.3	3.7	2.8	2.7	5.5	5.5	5.0	4.9	4.9	5.4	5.9	6.0	6.3	5.8	5.9	5.8	5.8	5.9	5.3	4.6	5.6	2.5	7.1	2.5	5.1
30	3.2	3.5	1.7	2.3	2.1	2.2	2.1	2.3	3.0	3.1	4.4	4.5	4.4	5.0	4.8	5.6	6.1	5.8	5.1	4.2	4.0	3.0	3.7	4.0	6.1	1.7	3.7
31	3.3	2.8	2.5	3.2	2.6	2.1	1.6	2.1	3.5	5.0	5.7	5.6	5.8	6.9	7.6	9.7	9.9	11.5	11.1	11.1	10.4	11.0	11.5	10.6	11.5	1.6	6.6
Max.	**8.3**	**9.4**	**10.1**	**10.5**	**11.1**	**10.2**	**10.5**	**9.3**	**10.8**	**9.5**	**7.9**	**7.4**	**7.8**	**8.6**	**9.0**	**9.7**	**9.9**	**11.5**	**11.1**	**11.1**	**10.4**	**11.0**	**11.5**	**10.6**	**11.5**		
Min.	**0.9**	**0.9**	**0.7**	**0.8**	**0.5**	**0.5**	**0.7**	**1.0**	**1.2**	**1.7**	**1.3**	**1.2**	**1.7**	**1.7**	**2.6**	**2.6**	**2.5**	**2.4**	**1.4**	**1.4**	**1.1**	**0.9**	**1.8**	**1.2**		**0.5**	
Avg.	**4.0**	**3.9**	**3.8**	**3.7**	**3.6**	**3.2**	**3.4**	**3.6**	**3.7**	**4.2**	**4.3**	**4.5**	**4.6**	**5.0**	**5.3**	**5.7**	**5.9**	**6.0**	**5.8**	**5.5**	**5.0**	**4.8**	**4.6**	**4.5**			**4.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climtrncs) (m/s)

August 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.5	12.3	11.7	12.2	11.8	11.9	11.8	12.8	13.3	13.4	13.1	13.0	12.9	12.4	12.6	13.8	11.8	12.8	13.0	13.1	14.5	13.8	14.6	15.2	15.2	11.7	12.9
2	13.7	13.5	14.7	14.3	14.5	15.3	15.9	14.5	14.6	15.4	14.5	15.2	14.7	14.1	15.0	14.7	13.1	12.8	12.5	11.8	12.5	11.6	10.5	10.9	15.9	10.5	13.8
3	10.7	11.1	10.3	9.5	8.0	7.2	7.0	7.8	8.3	9.1	8.8	8.9	9.9	11.5	13.4	13.2	12.3	12.7	13.0	11.8	10.9	8.4	10.3	11.5	13.4	7.0	10.2
4	10.7	12.7	11.3	12.8	13.0	13.1	13.9	13.7	14.3	13.7	13.0	12.9	12.6	12.0	12.0	11.2	9.9	8.7	8.5	8.9	9.1	9.3	9.3	12.1	14.3	8.5	11.6
5	14.2	11.7	10.3	8.6	10.3	9.2	9.4	8.0	11.5	11.1	11.4	13.3	12.3	11.1	10.2	10.1	10.3	9.3	8.9	10.0	13.0	13.0	13.1	11.3	14.2	8.0	10.9
6	9.7	11.0	10.9	10.8	7.7	7.5	10.9	12.7	11.8	11.1	9.7	11.6	12.3	12.6	13.2	12.6	12.5	12.3	10.4	10.0	9.6	9.7	10.7	11.0	13.2	7.5	10.9
7	11.8	10.0	11.7	10.0	5.2	6.7	9.9	10.6	13.5	11.9	11.9	10.9	10.8	11.5	12.6	11.6	11.0	12.2	10.4	9.8	8.6	9.1	6.3	4.6	13.5	4.6	10.1
8	6.7	7.9	7.6	7.8	7.9	9.3	8.6	7.6	7.9	8.9	9.3	8.3	7.4	6.8	5.9	5.7	6.4	7.2	6.9	5.8	6.0	6.9	7.3	8.2	9.3	5.7	7.4
9	7.9	7.3	8.1	8.2	8.0	8.1	8.9	5.8	3.3	3.8	4.1	2.9	3.6	4.0	4.7	5.1	5.0	4.2	4.2	3.5	2.5	1.8	1.8	3.6	8.9	1.8	5.0
10	3.5	1.8	1.5	0.9	0.6	0.7	1.4	1.4	1.2	2.5	3.4	3.5	3.4	3.5	3.9	4.4	4.6	4.1	4.7	4.4	3.8	3.0	2.9	3.0	4.7	0.6	2.8
11	2.1	1.3	3.3	3.6	2.1	1.8	1.9	1.7	1.5	2.2	2.9	2.1	2.8	3.2	3.9	3.6	4.5	4.9	3.4	3.2	2.6	2.0	1.7	2.1	4.9	1.3	2.7
12	1.7	1.6	2.2	2.0	1.8	2.5	2.6	2.9	3.7	4.1	2.9	4.7	6.5	3.9	2.7	4.1	5.9	6.0	5.7	6.6	5.0	4.9	1.9	3.1	6.6	1.6	3.7
13	2.5	1.9	2.2	2.2	1.4	2.2	1.9	1.9	2.1	1.7	2.7	3.1	3.4	4.4	4.1	4.1	5.2	4.2	4.4	5.2	7.3	8.2	7.5	9.2	9.2	1.4	3.9
14	10.3	9.4	9.7	8.6	3.7	3.2	2.0	4.6	5.4	5.9	5.5	5.1	5.2	5.2	4.4	3.6	5.6	5.1	3.1	3.4	3.1	4.8	4.6	5.6	10.3	2.0	5.3
15	7.2	8.1	9.1	9.4	9.3	9.0	9.4	9.8	13.3	14.1	11.0	9.8	11.5	6.2	7.9	7.3	6.5	6.5	6.1	5.1	4.9	4.7	4.6	5.0	14.1	4.6	8.1
16	4.4	4.0	2.8	3.0	3.6	3.8	2.8	2.4	2.4	3.0	1.8	1.1	2.0	2.2	2.0	2.5	3.7	4.7	4.8	5.4	4.4	3.6	2.4	1.5	5.4	1.1	3.1
17	1.4	2.6	3.1	5.5	7.5	4.8	2.2	0.9	2.5	5.8	9.1	8.0	8.3	9.3	9.4	11.0	11.0	10.8	10.8	9.3	8.1	8.1	9.3	9.1	11.0	0.9	7.0
18	10.0	9.4	9.1	12.7	15.2	15.4	12.7	13.4	14.1	12.8	11.0	13.8	12.2	14.5	14.8	16.8	18.4	17.8	17.2	16.6	16.5	14.2	13.1	13.8	18.4	9.1	14.0
19	11.1	12.2	11.6	10.5	9.2	11.1	12.1	12.8	13.2	12.9	12.0	12.0	11.2	10.7	12.7	12.6	12.8	11.6	9.1	9.4	9.5	10.8	9.5	9.1	13.2	9.1	11.2
20	7.1	6.5	5.5	5.8	6.8	6.4	5.6	5.9	6.3	7.5	7.1	6.8	7.0	8.5	9.6	10.2	11.2	11.1	9.8	8.3	6.5	7.5	9.0	8.8	11.2	5.5	7.7
21	8.7	8.9	8.2	6.6	7.5	7.4	8.0	7.7	7.2	8.0	8.4	8.0	7.8	8.2	7.6	8.6	9.1	8.7	8.4	8.5	8.0	6.6	6.3	7.3	9.1	6.3	7.9
22	8.4	8.2	8.5	7.7	8.2	7.7	8.5	8.3	7.5	7.7	8.9	8.8	8.9	8.4	8.1	8.3	8.5	7.8	8.4	7.8	6.3	6.5	6.3	5.7	8.9	5.7	7.9
23	4.9	4.6	3.4	2.8	2.2	2.3	2.3	2.1	2.7	2.9	4.2	5.3	5.7	6.2	7.6	7.3	7.3	7.1	7.3	6.3	6.0	8.1	8.4	8.5	8.5	2.1	5.2
24	8.3	9.3	8.7	10.3	7.9	8.6	8.3	8.0	8.6	8.6	8.6	8.3	6.3	4.3	2.2	3.4	2.3	4.2	3.3	2.3	2.0	2.0	3.3	2.8	10.3	2.0	5.9
25	2.0	1.9	1.7	4.7	3.8	2.4	1.6	1.4	1.3	1.1	2.6	2.3	2.6	3.8	4.5	5.9	7.2	7.9	8.5	6.1	3.6	4.7	5.4	3.7	8.5	1.1	3.8
26	2.1	2.8	4.7	5.1	4.7	4.1	3.5	4.0	3.9	3.3	3.8	4.6	5.3	5.1	6.5	6.3	6.0	5.3	3.9	3.1	1.4	3.4	4.4	8.2	8.2	1.4	4.4
27	7.3	6.4	7.0	7.5	4.3	4.0	3.2	2.1	3.4	3.3	5.6	6.3	5.4	4.2	3.2	4.7	3.9	3.3	2.6	1.4	1.1	2.1	2.1	1.5	7.5	1.1	4.0
28	1.2	3.9	3.2	3.1	2.0	2.6	2.6	2.9	2.6	3.0	2.7	1.9	3.2	3.8	4.2	2.2	2.8	4.9	6.2	5.5	7.4	7.6	6.9	9.8	9.8	1.2	4.0
29	9.8	9.1	10.9	8.5	7.1	8.6	11.1	12.7	13.3	15.8	14.9	12.5	10.4	10.6	9.0	9.6	10.3	8.5	7.7	7.9	10.2	11.7	11.2	11.2	15.8	7.1	10.5
30	10.0	10.8	8.8	9.1	9.6	9.9	9.8	10.2	5.7	6.2	5.5	5.0	3.8	3.9	4.8	4.1	3.9	2.4	2.2	1.9	4.9	5.5	6.0	4.7	10.8	1.9	6.2
31	4.9	5.0	4.9	4.1	4.1	3.6	3.9	4.0	3.1	4.3	4.7	3.8	2.4	2.2	3.1	3.6	1.7	2.3	1.4	1.0	2.6	3.9	3.5	2.1	5.0	1.0	3.3
Max.	**14.2**	**13.5**	**14.7**	**14.3**	**15.2**	**15.4**	**15.9**	**14.5**	**14.6**	**15.8**	**14.9**	**15.2**	**14.7**	**14.5**	**15.0**	**16.8**	**18.4**	**17.8**	**17.2**	**16.6**	**16.5**	**14.2**	**14.6**	**15.2**	**18.4**		
Min.	**1.2**	**1.3**	**1.5**	**0.9**	**0.6**	**0.7**	**1.4**	**0.9**	**1.2**	**1.1**	**1.8**	**1.1**	**2.0**	**2.2**	**2.0**	**2.2**	**1.7**	**2.3**	**1.4**	**1.0**	**1.1**	**1.8**	**1.7**	**1.5**		**0.6**	
Avg.	**7.3**	**7.3**	**7.3**	**7.4**	**6.7**	**6.8**	**6.9**	**6.9**	**7.2**	**7.6**	**7.6**	**7.5**	**7.5**	**7.4**	**7.6**	**7.8**	**7.9**	**7.8**	**7.3**	**6.9**	**6.8**	**7.0**	**6.9**	**7.2**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climatronics) (m/s)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.1	2.1	2.1	2.1	2.7	3.9	4.0	3.5	3.7	4.9	4.3	3.1	3.2	4.0	3.2	3.9	4.7	5.0	5.5	5.1	3.8	4.4	3.7	3.1	5.5	1.1	3.6
2	3.4	2.9	3.9	4.4	3.8	3.8	4.2	3.5	2.6	4.6	5.1	5.1	4.2	4.9	5.0	6.3	6.6	7.0	8.0	7.6	5.6	5.9	6.5	5.4	8.0	2.6	5.0
3	7.8	8.3	9.6	10.5	11.1	11.2	10.0	12.0	12.1	12.5	14.4	13.8	14.1	13.6	13.7	13.5	13.9	14.0	13.0	11.3	12.2	12.6	12.0	14.8	14.8	7.8	12.2
4	11.0	11.0	11.7	7.6	6.0	4.3	3.4	1.3	2.7	5.6	7.7	6.0	4.6	5.1	3.1	2.8	5.8	5.7	7.6	7.8	7.7	8.0	9.4	5.4	11.7	1.3	6.3
5	2.4	2.3	2.8	4.7	4.3	4.1	2.7	2.4	5.1	6.6	7.3	6.6	6.5	6.6	5.5	5.8	2.0	1.4	2.4	2.7	3.1	2.4	2.5	2.6	7.3	1.4	4.0
6	3.0	4.1	2.8	3.2	2.8	3.0	2.3	2.1	1.9	5.0	2.2	0.7					0.2	1.4	4.6	3.7	2.9	3.3	3.0	2.0	5.0	0.2	2.7
7	3.8	5.9	6.5	7.4	6.5	7.2	7.9	9.6	11.3	12.6	13.1	13.2	14.2	16.2	17.4	19.1	19.1	18.2	18.8	19.2	17.9	18.1	20.3	21.6	21.6	3.8	13.5
8	20.1	14.5	10.2	11.0	9.3	12.8	11.6	10.3	9.8	11.2	10.8	11.3	10.1	9.6	9.0	8.4	7.1	7.8	9.6	7.9	5.4	5.1	5.8	6.4	20.1	5.1	9.8
9	6.6	5.9	5.5	5.8	5.9	5.5	6.1	5.9	5.2	5.1	5.2	5.5	4.2	3.7	4.9	3.9	4.4	4.6	3.7	3.9	3.4	2.6	2.4	2.0	6.6	2.0	4.7
10	1.5	1.1	1.3	1.7	1.4	1.7	1.3	1.5	1.3	1.6	1.1	3.5	5.8	6.7	9.4	10.8	9.9	11.0	10.0	8.7	11.3	13.5	16.0	15.0	16.0	1.1	6.1
11	12.0	14.0	15.9	15.7	16.6	16.9	17.3	18.9	19.6	17.3	18.1	18.2	20.1	21.7	20.0	20.3	21.6	25.3	23.3	21.5	22.2	21.9	20.4	20.3	25.3	12.0	19.1
12	17.7	17.1	15.5	13.3	8.8	7.3	4.5	3.1	5.0	4.3	2.9	3.1	5.2	7.2	6.5	7.2	6.7	7.5	9.6	8.8	7.3	6.4	8.6	7.7	17.7	2.9	8.0
13	3.6	4.1	4.2	4.1	4.5	5.0	4.9	6.4	6.7	6.6	5.4	4.4	3.0	4.2	4.1	2.7	2.9	5.7	3.8	5.0	4.7	4.3	4.3	3.0	6.7	2.7	4.5
14	2.7	3.3	3.5	2.8	2.9	2.6	2.2	1.8	2.6	2.9	1.9	1.3	1.1	2.4	2.8	2.4	3.9	4.4	5.3	5.8	6.3	6.8	8.1	8.1	8.1	1.1	3.7
15	7.8	7.8	9.2	8.1	8.1	8.1	7.1	8.6	6.4	8.4	11.0	11.7	11.5	10.1	11.4	11.9	11.6	9.0	8.4	7.4	5.9	5.6	7.8	8.1	11.9	5.6	8.8
16	6.2	7.4	5.8	5.5	5.1	2.7	2.6	2.2	1.9	2.8	4.9	4.6	4.9	5.0	5.3	6.1	6.5	6.2	5.9	7.5	7.0	6.7	8.1	6.8	8.1	1.9	5.3
17	7.3	4.5	5.4	4.9	2.1	3.0	3.8	2.3	2.4	3.8	4.8	4.7	4.2	2.3	3.1	3.7	2.9	2.3	3.1	3.6	4.2	3.3	4.7	6.8	7.3	2.1	3.9
18	6.6	8.0	8.5	8.1	10.7	12.6	13.6	16.0	15.9	19.2	19.7	20.1	22.6	22.5	20.5	17.5	17.8	17.0	14.9	14.7	14.6	13.1	8.0	6.0	22.6	6.0	14.5
19	6.2	5.9	6.5	8.8	5.2	4.6	6.0	7.3	5.1	5.9	7.1	8.0	10.7	11.7	13.2	12.9	13.9	14.2	15.7	13.5	13.3	12.9	12.2	13.2	15.7	4.6	9.7
20	13.6	11.9	12.8	12.3	10.3	10.4	10.1	10.9	10.9	8.7	8.2	8.4	9.3	7.9	7.3	5.5	6.4	6.7	6.4	3.5	3.0	5.9	4.2	4.9	13.6	3.0	8.3
21	3.8	2.4	3.1	2.9	3.6	6.1	4.8	3.8	6.0	7.9	9.6	10.7	9.7	7.6	6.9	7.9	6.4	7.1	7.6	6.8	6.7	5.4	3.2	4.9	10.7	2.4	6.0
22	4.7	5.5	6.2	4.8	4.7	5.4	5.0	3.6	2.5	3.2	3.0	6.0	6.1	8.4	9.5	8.6	11.0	10.1	9.5	12.9	14.2	11.5	12.5	10.4	14.2	2.5	7.5
23	9.1	6.7	5.7	8.2	6.0	6.3	4.5	3.1	3.8	3.8	4.1	3.7	5.1	6.1	8.0	7.6	7.7	7.1	7.7	9.2	8.2	6.0	5.4	3.9	9.2	3.1	6.1
24	5.9	3.6	2.5	7.4	7.8	8.4	6.8	4.8	5.1	5.6	5.6	7.5	6.7	6.1	8.8	8.0	6.4	5.4	6.1	2.8	3.6	5.0	5.4	7.0	8.8	2.5	5.9
25	6.6	6.4	7.6	5.4	2.8	6.2	8.1	7.9	7.9	8.8	7.6	7.5	7.8	7.1	7.5	7.6	6.5	7.5	8.5	7.0	8.0	8.1	8.1	7.5	8.8	2.8	7.3
26	6.8	7.9	7.1	7.0	6.1	4.3	3.9	3.9	3.3	2.4	1.4	4.5	3.4	3.8	2.5	1.5	1.3	2.3	2.7	3.6	3.1	3.4	2.1	2.2	7.9	1.3	3.8
27	2.3	2.1	3.4	4.1	3.2	2.9	3.2	2.9	3.0	3.3	2.7	2.1	4.4	4.1	4.0	4.6	6.0	6.6	9.8	9.6	13.5	14.6	16.0	14.8	16.0	2.1	6.0
28	16.7	16.8	17.2	16.3	13.8	14.1	14.1	12.1	9.8	6.7	4.9	6.0	6.8	6.5	5.8	4.0	2.0	3.3	3.9	3.7	3.6	2.7	2.1	1.6	17.2	1.6	8.1
29	4.0	4.0	5.2	4.7	4.9	4.9	4.9	4.1	2.7	2.2	1.8	1.6	2.5	4.0	4.9	5.3	4.2	3.4	3.4	4.2	5.5	6.0	8.2	8.6	8.6	1.6	4.4
30	7.4	6.4	5.6	3.5	5.8	5.2	7.0	6.0	7.4	8.8	8.1	9.8	9.7	8.1	5.5	5.1	4.3	6.0	6.9	3.3	1.3	3.3	4.4	4.7	9.8	1.3	6.0
Max.	**20.1**	**17.1**	**17.2**	**16.3**	**16.6**	**16.9**	**17.3**	**18.9**	**19.6**	**19.2**	**19.7**	**20.1**	**22.6**	**22.5**	**20.5**	**20.3**	**21.6**	**25.3**	**23.3**	**21.5**	**22.2**	**21.9**	**20.4**	**21.6**	**25.3**		
Min.	**1.1**	**1.1**	**1.3**	**1.7**	**1.4**	**1.7**	**1.3**	**1.3**	**1.3**	**1.6**	**1.1**	**0.7**	**1.1**	**2.3**	**2.5**	**1.5**	**0.2**	**1.4**	**2.4**	**2.7**	**1.3**	**2.4**	**2.1**	**1.6**		**0.2**	
Avg.	**7.0**	**6.8**	**6.9**	**6.9**	**6.2**	**6.5**	**6.3**	**6.1**	**6.1**	**6.7**	**6.8**	**7.1**	**7.7**	**7.8**	**7.9**	**7.7**	**7.5**	**7.8**	**8.2**	**7.7**	**7.7**	**7.6**	**7.9**	**7.6**			**7.2**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climatronics) (m/s)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.1	6.0	5.7	4.5	2.6	2.0	1.6	1.5	1.3	1.4	2.3	2.4	2.2	4.0	6.4	8.0	8.3	9.3	10.4	11.6	11.1	9.0	8.8	10.5	11.6	1.3	5.7
2	10.1	9.3	9.2	10.6	13.1	13.7	14.8	14.4	14.0	15.4	13.8	10.8	10.4	11.5	11.9	11.9	12.3	11.7	9.2	11.0	14.2	13.4	13.6	13.9	15.4	9.2	12.3
3	12.1	11.3	10.6	8.3	11.3	12.4	12.5	12.1	12.1	12.7	12.0	12.6	13.7	12.5	12.2	11.8	9.1	3.5	7.4	4.0	2.6	2.5	2.2	1.7	13.7	1.7	9.3
4	3.1	1.8	1.8	2.4	2.7	5.2	7.6	6.9	8.8	10.5	14.0	13.5	14.3	14.4	15.4	15.9	14.1	12.7	13.0	14.7	16.5	14.5	15.0	12.9	16.5	1.8	10.5
5	12.6	13.0	14.2	15.1	15.5	13.8	13.8	13.4	13.1	13.0	12.2	9.6	4.0	4.6	10.8	10.5	12.3	12.1	15.4	13.3	10.3	9.3	8.5	10.5	15.5	4.0	11.7
6	10.6	13.0	12.8	11.0	13.1	13.8	12.4	12.4	12.7	12.4	12.3	14.6	15.6	16.4	14.9	14.8	11.6	10.9	10.0	8.5	6.5	7.7	7.1	7.6	16.4	6.5	11.8
7	8.9	8.7	9.0	10.3	10.7	12.9	12.0	12.1	14.1	13.0	13.3	14.2	13.4	14.3	14.6	17.1	15.1	15.8	16.4	18.7	18.8	19.8	18.7	16.8	19.8	8.7	14.1
8	20.7	18.3	14.1	16.9	12.9	14.6	17.0	15.5	15.7	16.7	8.4	5.0	8.9	9.6	9.1	9.1	9.9	7.4	6.2	7.3	7.6	5.6	9.1	9.7	20.7	5.0	11.5
9	7.4	8.7	6.6	5.0	4.7	4.1	3.9	3.6	4.0	4.3	3.8	3.2	2.2	2.1	1.7	1.8	3.7	5.6	4.6	5.9	5.4	4.9	5.8	5.1	8.7	1.7	4.5
10	6.4	6.8	8.4	8.1	5.5	7.5	9.1	9.9	9.1	8.3	9.3	8.1	8.5	8.9	8.2	6.4	5.3	6.0	5.3	5.7	3.9	3.6	3.6	3.8	9.9	3.6	6.9
11	4.1	5.7	3.9	4.4	4.0	3.7	6.0	4.6	3.8	4.1	3.6	5.3	7.1	6.8	6.8	7.8	9.5	10.7	11.4	11.4	11.4	10.7	10.3	9.5	11.4	3.6	6.9
12	9.8	8.9	7.6	7.2	7.2	5.9	4.7	2.8	2.2	3.1	2.7	1.7	1.4	1.2	2.0	2.8	3.7	2.8	2.8	3.9	6.1	6.8	5.0	5.3	9.8	1.2	4.5
13	5.4	5.0	5.2	4.4	5.1	5.4	6.5	7.7	7.2	6.8	7.3	7.4	7.3	7.5	5.8	5.4	6.2	6.7	7.1	6.6	6.8	6.8	7.5	5.5	7.7	4.4	6.4
14	6.1	8.0	5.9	5.9	5.5	5.7	6.4	7.8	6.8	4.4	4.9	6.6	6.2	6.2	5.5	4.7	5.5	5.9	5.1	5.6	4.7	6.3	6.3	5.1	8.0	4.4	5.9
15	4.6	4.9	4.0	3.6	3.9	3.2	2.6	3.1	3.1	3.1	3.4	3.1	2.7	4.4	3.7	4.0	3.6	3.3	3.6	4.3	5.3	5.0	4.4	4.8	5.3	2.6	3.8
16	5.2	6.2	6.7	6.1	6.2	6.0	4.0	6.5	6.7	4.7	4.6	6.5	8.4	8.7	8.7	9.9	9.0	8.2	7.6	8.4	8.5	11.7	10.8	8.7	11.7	4.0	7.4
17	7.3	8.0	7.8	7.9	8.5	7.6	7.3	7.5	7.3	7.2	7.6	6.7	6.7	6.9	6.8	7.4	6.1	5.5	5.4	4.5	4.7	4.5	4.9	5.4	8.5	4.5	6.6
18	4.7	4.3	4.4	4.4	4.7	4.4	5.2	4.7	4.0	3.8	3.8	3.2	2.0	2.0	3.4	1.8	2.4	3.4	2.8	3.6	3.4	3.5	3.2	2.6	5.2	1.8	3.6
19	2.0	2.2	3.2	4.0	4.9	6.0	3.6	2.9	2.8	3.4	2.0	1.5	1.4	1.3	1.3	0.8	0.8	0.9	2.1	2.9	2.8	2.8	2.7	2.3	6.0	0.8	2.5
20	2.5	2.7	2.8	2.6	2.9	3.6	3.7	3.5	3.7	3.3	3.4	4.3	7.5	9.0	10.1	11.3	10.8	10.7	11.4	11.9	13.7	12.1	12.5	12.4	13.7	2.5	7.2
21	12.1	15.0	13.3	14.1	13.4	11.1	11.1	12.0	11.5	6.9	6.5	6.3	7.9	9.1	9.5	9.2	9.1	7.0	6.3	4.6	3.0	3.2	3.6	4.5	15.0	3.0	8.8
22	4.5	4.0	4.2	4.6	5.7	6.8	5.2	5.0	3.6	3.2	2.7	2.9	2.5	2.1	1.4	2.9	3.1	3.6	2.1	1.3	1.7	1.9	1.1	1.2	6.8	1.1	3.2
23	2.0	1.7	2.0	1.5	1.5	1.7	1.6	1.8	1.1	1.9	2.0	1.3	2.0	2.2	2.6	2.1	1.4	3.5	7.6	6.8	3.6	2.1	2.0	1.4	7.6	1.1	2.4
24	1.2	2.1	1.2	2.0	1.9	0.8	0.7	0.6	1.7	3.7	4.2	4.5	4.7	2.9	4.0	3.1	4.6	5.4	5.9	5.8	5.9	6.4	6.6	9.1	9.1	0.6	3.7
25	10.2	10.5	14.5	16.4	17.8	17.6	21.8	20.9	23.3	27.0	24.9	23.7	21.7	19.9	20.2	22.3	23.0	21.2	19.6	18.6	10.7	8.8	6.5	3.6	27.0	3.6	17.7
26	5.2	6.3	5.9	4.8	4.4	5.3	5.9	6.5	5.2	5.3	5.2	4.1	5.5	5.5	5.5	4.8	5.2	5.5	6.7	8.5	7.9	8.1	8.5	8.4	8.5	4.1	6.0
27	8.5	8.4	8.6	8.6	8.1	8.5	6.9	7.3	5.9	5.1	7.1	5.7	4.1	5.5	8.7	8.0	7.1	6.1	5.8	5.7	3.8	2.4	1.4	1.5	8.7	1.4	6.2
28	2.8	5.0	4.2	2.9	1.0	0.9	1.2	1.8	1.6	3.0	2.6	2.2	2.4	3.0	3.6	4.3	4.7	5.4	5.7	5.8	8.1	8.7	9.1	10.4	10.4	0.9	4.2
29	12.5	13.2	14.6	15.6	14.9	14.6	16.4	18.2	17.2	17.8	17.7	19.1	18.6	17.7	16.8	15.6	15.3	14.7	14.7	14.7	15.8	13.0	13.6	12.8	19.1	12.5	15.6
30	8.0	7.4	9.6	11.1	14.7	15.3	13.8	9.6	8.4	7.0	5.7	6.2	3.4	2.2	3.3	4.0	5.4	6.4	4.9	5.0	5.1	2.5	2.7	2.4	15.3	2.2	6.8
31	2.7	3.3	4.3	6.1	7.2	7.2	5.6	6.9	7.7	9.0	9.3	8.0	6.9	6.4	6.2	6.3	6.5	4.6	6.0	9.2	10.4	10.5	9.9	11.4	11.4	2.7	7.2
Max.	**20.7**	**18.3**	**14.6**	**16.9**	**17.8**	**17.6**	**21.8**	**20.9**	**23.3**	**27.0**	**24.9**	**23.7**	**21.7**	**19.9**	**20.2**	**22.3**	**23.0**	**21.2**	**19.6**	**18.7**	**18.8**	**19.8**	**18.7**	**16.8**	**27.0**		
Min.	**1.2**	**1.7**	**1.2**	**1.5**	**1.0**	**0.8**	**0.7**	**0.6**	**1.1**	**1.4**	**2.0**	**1.3**	**1.4**	**1.2**	**1.3**	**0.8**	**0.8**	**0.9**	**2.1**	**1.3**	**1.7**	**1.9**	**1.1**	**1.2**		**0.6**	
Avg.	**7.1**	**7.4**	**7.3**	**7.4**	**7.6**	**7.8**	**7.9**	**7.8**	**7.7**	**7.8**	**7.5**	**7.2**	**7.2**	**7.4**	**7.8**	**7.9**	**7.9**	**7.6**	**7.8**	**8.1**	**7.8**	**7.4**	**7.3**	**7.1**			**7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climatronics) (m/s)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.5	7.5	8.1	7.8	7.2	6.0	5.6	4.5	4.6	5.1	5.5	4.9	3.9	3.0	1.9	1.1	3.3	4.1	5.4	6.2	8.5	6.6	6.9	8.3	9.5	1.1	5.6
2	7.2	4.8	1.7	2.2	1.7	1.7	1.9	3.6	5.7	5.1	5.8	6.8	6.0	4.9	5.9	6.1	5.7	5.1	5.6	7.3	6.0	6.8	8.9	8.1	8.9	1.7	5.2
3	9.4	8.3	7.0	7.4	7.7	7.3	6.5	5.1	2.0	1.9	1.2	1.6	0.9	0.6	2.1	3.2	3.2	2.0	3.2	5.3	7.8	10.0	10.8	12.0	12.0	0.6	5.3
4	13.7	13.5	13.9	15.4	15.2	14.7	15.3	15.4	15.6	15.1	14.6	15.2	14.8	15.7	16.4	17.0	15.7	13.5	13.1	8.8	8.0	8.3	9.0	9.6	17.0	8.0	13.6
5	10.1	9.9	9.5	9.4	8.8	7.6	2.0	0.2	0.2	0.2	0.2	3.9	5.4	5.7	5.7	4.6	5.3	7.7	9.0	9.4	9.9	10.2	10.6	9.8	10.6	0.2	6.5
6	9.8	10.1	11.0	12.3	11.2	11.3	12.8	15.2	15.7	15.8	16.3	16.5	18.0	18.5	17.5	17.2	15.0	15.9	14.2	14.0	13.9	16.6	12.6	10.2	18.5	9.8	14.2
7	7.6	8.1	9.2	11.1	10.7	13.7	14.5	12.9	13.6	13.3	12.4	12.6	12.4	12.5	11.3	10.7	9.1	7.5	8.5	6.4	6.9	6.8	6.0	5.3	14.5	5.3	10.1
8	3.9	2.5	4.9	7.7	11.0	12.8	15.2	15.8	18.0	16.4	19.4	21.6	20.2	15.9	14.3	13.3	14.0	13.7	11.7	12.5	11.3	10.3	9.8	8.2	21.6	2.5	12.7
9	8.6	8.2	9.2	8.8	10.1	9.9	9.2	10.7	9.2	8.4	8.7	8.7	8.3	7.1	8.7	9.8	10.4	9.7	7.4	7.6	7.0	5.8	4.0	3.6	10.7	3.6	8.3
10	4.2	5.0	5.4	5.5	6.0	4.4	6.3	7.1	7.4	4.4	4.4	6.4	7.0	8.3	8.9	9.1	8.0	7.2	5.0	4.4	4.8	4.1	4.6	5.5	9.1	4.1	6.0
11	5.1	5.2	5.3	3.7	4.8	7.9	7.2	5.8	5.6	6.3	4.8	5.6	6.8	7.9	7.6	7.1	7.7	8.0	6.8	6.7	4.8	3.5	2.5	1.7	8.0	1.7	5.8
12	1.8	2.6	1.7	1.3	2.4	1.7	1.2	0.8	0.9	1.4	1.4	1.3	1.4	2.1	2.2	2.5	3.4	6.9	9.5	10.3	11.8	12.3	12.3	11.5	12.3	0.8	4.4
13	11.7	12.6	11.8	11.2	10.5	10.6	12.4	11.4	11.1	10.4	9.4	10.1	5.8	4.6	4.9	2.6	2.6	3.5	7.9	7.5	8.0	7.2	7.5	9.0	12.6	2.6	8.5
14	9.3	8.8	8.3	8.9	7.9	7.3	7.9	4.0	1.7	1.4	2.4	3.3	4.8	5.2	4.6	5.1	5.7	5.1	6.1	6.0	4.2	3.7	4.2	4.8	9.3	1.4	5.5
15	5.2	5.8	6.1	5.8	8.2	9.5	11.0	12.3	12.1	12.7	13.3	14.2	13.1	13.1	15.3	15.7	19.2	19.6	21.9	21.0	21.2	22.3	22.9	23.0	23.0	5.2	14.4
16	24.5	28.0	29.3	31.1	33.2	32.0	33.3	32.0	30.1	30.0	29.6	27.4	27.0	30.2	27.4	26.9	25.8	25.6	22.0	27.1	26.3	21.0	24.5	25.7	33.3	21.0	27.9
17	23.8	22.1	21.5	26.2	26.9	28.4	29.2	33.2	30.9	28.5	20.2	19.1	21.2	23.8	23.3	21.4	16.1	16.2	13.7	13.6	9.7	12.8	17.8	6.8	33.2	6.8	21.1
18	8.8	9.2	4.5	7.1	8.7	9.4	5.7	7.2	6.3	5.7	5.9	6.1	6.2	5.6	5.7	4.7	4.9	3.7	4.1	2.1	2.2	2.4	2.1	2.2	9.4	2.1	5.4
19	1.9	2.5	2.2	3.3	2.1	1.5	2.5	1.3	1.8	3.9	3.0	5.4	9.2	9.9	10.0	11.4	10.5	10.2	9.2	9.9	8.9	9.3	9.5	9.8	11.4	1.3	6.2
20	11.7	12.0	11.1	10.5	12.1	14.5	15.3	14.2	16.3	14.7	16.3	14.8	16.4	19.4	15.1	12.1	13.5	11.8	12.6	12.1	13.0	10.7	10.8	7.8	19.4	7.8	13.3
21	11.9	13.3	15.0	11.7	9.8	14.7	13.8	9.4	7.6	9.6	14.6	13.6	11.9	12.1	14.0	13.5	12.1	14.8	16.4	15.2	14.3	13.6	13.0	13.7	16.4	7.6	12.9
22	13.2	12.2	6.7	10.3	6.9	9.8	8.6	10.0	10.2	13.8	15.6	17.5	15.6	16.0	16.9	18.3	22.3	18.3	18.5	18.4	11.0	14.5	13.1	6.3	22.3	6.3	13.5
23	5.1	4.4	4.7	5.3	5.2	5.2	6.8	7.6	5.7	5.4	5.1	3.7	3.3	3.7	2.8	4.4	3.7	3.4	1.8						7.6	1.8	4.6
24														6.7	11.7	13.7	13.6	13.3	17.0	14.2	11.0	17.1	17.5	15.7	17.5	6.7	13.8
25	15.8	16.0	14.0	12.5	13.4	13.6	15.3	12.5	13.8	19.1	19.6	17.2	15.6	20.0	21.4	21.1	20.1	19.5	17.0	7.7	5.2	8.9	7.0	8.9	21.4	5.2	14.8
26	12.2	13.6	13.0	10.1	7.3	6.1	4.8	3.1	1.8	2.4	2.8	3.0	3.3	1.8	1.7	3.7	4.0	5.4	6.9	6.3	5.1	4.8	7.1	10.6	13.6	1.7	5.9
27	7.8	10.7	11.8	15.4	14.1	14.5	16.7	17.1	20.0	21.2	20.0	19.9	18.0	21.0	18.4	16.1	16.7	13.7	14.3	12.7	12.6	11.4	10.2	11.5	21.2	7.8	15.2
28	9.3	9.7	7.3	8.4	5.9	3.7	3.0	1.1	1.4	2.6	4.2	5.6	6.7	6.4	7.3	8.6	8.1	8.1	9.1	10.7	10.9	11.0	8.7	10.2	11.0	1.1	7.0
29	10.0	10.6	12.4	12.8	13.7	9.8	14.2	15.2	18.7	18.4	17.1	15.8	15.7	19.2	19.1	19.6	18.0	17.8	18.4	21.1	20.9	20.4	20.6	21.9	21.9	9.8	16.7
30	22.6	20.4	20.9	22.0	22.0	21.6	22.4	22.5	22.2	22.7	21.6	21.7	21.8	20.9	20.5	18.8	14.4	11.8	14.0	17.6	20.6	19.5	18.5	12.9	22.7	11.8	19.8
Max.	**24.5**	**28.0**	**29.3**	**31.1**	**33.2**	**32.0**	**33.3**	**33.2**	**30.9**	**30.0**	**29.6**	**27.4**	**27.0**	**30.2**	**27.4**	**26.9**	**25.8**	**25.6**	**22.0**	**27.1**	**26.3**	**22.3**	**24.5**	**25.7**	**33.3**		
Min.	**1.8**	**2.5**	**1.7**	**1.3**	**1.7**	**1.5**	**1.2**	**0.2**	**0.2**	**0.2**	**0.2**	**1.3**	**0.9**	**0.6**	**1.7**	**1.1**	**2.6**	**2.0**	**1.8**	**2.1**	**2.2**	**2.4**	**2.1**	**1.7**		**0.2**	
Avg.	**10.2**	**10.3**	**9.9**	**10.5**	**10.5**	**10.7**	**11.1**	**10.7**	**10.7**	**10.9**	**10.9**	**11.2**	**11.1**	**11.4**	**11.4**	**11.3**	**11.1**	**10.8**	**11.0**	**11.1**	**10.5**	**10.8**	**10.8**	**10.2**			**10.8**

Total Hours in Month 720 **Hours Data Available** 702 **Data Recovery** 97.5%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (Climatronics) (m/s)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.6	12.6	11.2	8.7	10.7	13.8	9.0	5.0	6.2	9.6	9.9	7.2	8.8	6.6	8.9	7.4	4.2	1.4	1.2	1.4	2.8	3.2	2.4	6.0	13.8	1.2	7.1
2	5.6	5.2	4.3	4.8	3.6	4.3	4.9	5.7	5.1	4.4	4.4	3.6	2.8	3.7	1.0	2.2	0.8	2.3	4.1	4.3	6.0	10.7	7.3	5.8	10.7	0.8	4.5
3	8.9	9.1	10.1	11.0	12.8	12.3	13.2	11.2	9.8	11.0	13.4	11.2	8.9	9.0	7.7	7.4	8.1	6.1	6.7	8.3	8.7	9.1	8.8	9.4	13.4	6.1	9.7
4	10.8	9.7	10.3	9.4	9.2	8.1	5.0	5.0	7.3	9.2	9.5	6.8	6.7	5.7	6.5	7.7	7.2	9.7	11.3	10.4	12.8	13.4	12.4	12.8	13.4	5.0	9.0
5	12.3	11.5	11.4	11.6	10.7	9.6	9.6	9.6	10.6	9.9	10.0	11.2	13.1	14.8	15.6	16.0	16.7	18.1	18.2	18.0	18.9	20.2	18.6	21.4	21.4	9.6	14.1
6	24.2	24.6	25.3	23.5	22.4	21.5	21.2	21.1	20.8	20.3	18.8	17.7	17.3	16.2	12.6	11.6	6.1	1.2							25.3	1.2	18.1
7												9.7	12.9	12.8	13.9	16.5	18.3	17.6	15.0	16.5	16.4	15.7	14.3	13.3	18.3	9.7	14.8
8	15.9	12.0	9.4	7.1	5.1				0.5	3.1	3.3	6.3	8.6	5.2	10.2	5.1	0.4								15.9	0.4	6.6
9												13.8	18.4	20.4	20.0	21.9	20.5	19.0	19.2	20.2	21.2	19.7	18.3	16.1	21.9	13.8	19.1
10	17.1	15.3	10.1	10.7	14.6	13.5	10.2	10.4	9.1	11.8	13.4	12.0	8.9	10.0	11.7	12.0	11.3	9.7	7.2	4.4	3.4	4.7	7.3	10.5	17.1	3.4	10.4
11	13.9	15.1	15.7	15.5	12.0	8.3	5.2	6.0	3.6	3.1	3.5	3.0	1.5	1.0	2.3	2.1	3.4	2.4	0.8	0.9	1.4	2.8	3.9	4.7	15.7	0.8	5.5
12	5.4	4.5	5.7	5.4	4.2	3.7	4.9	5.4	6.2	4.1	4.2	4.8	3.7	4.1	3.6	4.2	5.2	5.4	4.5	2.8	2.9	2.5	2.8	2.0	6.2	2.0	4.3
13	2.0	1.6	2.4	2.7	2.7	2.6	3.1	2.9	2.7	3.2	3.3	3.7	3.3	4.0	4.8	5.1	6.5	7.9	8.8	7.9	9.9	9.9	9.7	10.2	10.2	1.6	5.0
14	10.4	12.9	12.4	12.0	11.8	11.5	11.0	11.6	12.7	14.0	15.2	13.2	14.5	9.4	10.8	11.6	16.2	17.6	17.7	16.5	21.3	19.0	17.9	19.5	21.3	9.4	14.2
15	19.7	16.2	13.6	18.2	18.8	19.4	18.9	15.9	14.9	16.2	18.6	18.6	18.0	19.0	21.4	21.8	23.3	22.1	23.3	21.6	20.5	25.0	28.4	24.1	28.4	13.6	19.9
16	20.3	21.3	24.5	23.4	22.2	26.9	21.7	20.4	21.2	22.3	21.3	21.5	22.2	22.0	23.7	19.7	20.1	22.2	25.0	24.4	21.7	18.4	23.8	22.3	26.9	18.4	22.2
17	21.1	24.2	27.1	28.3	26.1	28.0	22.9	18.1	15.4	18.5	22.9	22.6	20.8	24.0	22.6	21.5	19.2	17.5	15.0	13.2	13.0	10.8	8.0	8.3	28.3	8.0	19.6
18	7.4	6.3	7.9	7.3	7.3	8.5	9.6	8.5	8.0	8.3	8.5	9.0	8.5	8.9	8.9	8.8	8.5	9.2	10.5	9.9	10.2	8.7	8.9	13.1	13.1	6.3	8.8
19	10.7	7.5	5.7	10.7	16.6	17.1	17.8	20.5	19.7	17.5	19.5	17.0	16.0	15.6	18.2	19.2	21.4	18.1	11.6	6.9	13.0	7.0	8.2	7.9	21.4	5.7	14.3
20	6.8	5.9	5.7	4.8	4.2	3.0	6.6	10.8	12.3	14.5	14.2	13.4	15.8	16.2	15.5	14.9	13.7	8.4	4.7	6.1	4.4	3.1	2.3	3.3	16.2	2.3	8.8
21	6.5	9.9	11.1	12.0	10.1	11.1	9.6	9.1	9.7	6.4	7.8	7.1	7.2	5.6	6.1	6.9	6.6	8.0	9.5	10.8	11.8	11.9	11.2	11.1	12.0	5.6	9.0
22	12.6	14.7	15.1	12.4	13.5	15.6	16.0	17.6	15.4	15.2	14.8	14.3	14.6	13.5	11.9	12.9	12.3	11.3	11.0	10.3	9.2	6.2	4.8	6.0	17.6	4.8	12.6
23	9.9	11.4	12.9	11.2	7.8	8.3	7.9	6.1	3.4	2.4	2.1	2.7	3.3	4.2	4.7	4.5	3.9	2.5	3.0	2.2	2.1	1.5	1.4	1.4	12.9	1.4	5.0
24	3.0	3.1	2.9	3.6	4.8	5.8	8.1	15.0	17.2	16.7	15.1	18.7	23.7	25.3	25.6	26.1	26.6	27.9	28.7	27.8	27.7	27.0	26.5	26.5	28.7	2.9	18.1
25	27.3	28.6	28.6	24.6	16.4	17.2	18.0	19.3	19.0	16.4	15.5	17.4	17.6	14.2	13.1	12.8	12.7	10.7	13.4	10.1	8.1	13.2	15.3	13.5	28.6	8.1	16.8
26	5.5	5.9	8.5	8.3	7.0	2.8	4.3	5.0	4.5	7.3	5.2	8.1	9.5	9.9	14.3	13.2	8.8	13.6	16.4	16.2	16.4	18.0	18.1	19.5	19.5	2.8	10.3
27	19.4	20.3	19.0	15.2	15.6	16.3	16.9	17.4	15.9	17.2	16.8	15.0	15.0	16.6	15.8	9.2	6.6	5.2	5.3	5.2	5.1	3.1	4.9	6.9	20.3	3.1	12.7
28	10.8	14.6	13.5	9.6	9.4	8.9	8.3	6.9	7.2	14.0	13.4	10.6	11.5	10.6	10.1	9.5	6.8	9.8	12.8	11.4	15.8	20.2	21.7	21.2	21.7	6.8	12.0
29	20.2	17.3	15.8	8.2	4.8	10.1	8.0	8.3	9.3	9.0	10.8	13.4	15.2	14.4	12.1	10.6	11.2	12.3	10.7	10.5	9.4	7.3	8.5	9.7	20.2	4.8	11.1
30	11.0	10.2	9.2	8.2	7.9	5.4	5.6	5.8	7.2	6.4	6.7	8.0	9.0	10.0	7.8	7.5	8.2	7.8	9.1	9.8	10.9	10.8	10.6	9.3	11.0	5.4	8.4
31	7.6	5.5	3.9	4.4	4.7	4.9	4.7	5.9	6.9	7.5	7.7	7.1	8.1	7.2	7.5	7.1	7.3	8.2	9.1	9.5	11.0	11.3	11.8	12.1	12.1	3.9	7.5
Max.	**27.3**	**28.6**	**28.6**	**28.3**	**26.1**	**28.0**	**22.9**	**21.1**	**21.2**	**22.3**	**22.9**	**22.6**	**23.7**	**25.3**	**25.6**	**26.1**	**26.6**	**27.9**	**28.7**	**27.8**	**27.7**	**27.0**	**28.4**	**26.5**	**28.7**		
Min.	**2.0**	**1.6**	**2.4**	**2.7**	**2.7**	**2.6**	**3.1**	**2.9**	**0.5**	**2.4**	**2.1**	**2.7**	**1.5**	**1.0**	**1.0**	**2.1**	**0.4**	**1.2**	**0.8**	**0.9**	**1.4**	**1.5**	**1.4**	**1.4**		**0.4**	
Avg.	**12.4**	**12.3**	**12.2**	**11.5**	**10.9**	**11.4**	**10.8**	**10.9**	**10.4**	**11.0**	**11.4**	**11.2**	**11.8**	**11.6**	**11.9**	**11.5**	**11.0**	**11.1**	**11.5**	**10.9**	**11.6**	**11.5**	**11.7**	**12.0**			**11.4**

Total Hours in Month 744 **Hours Data Available** 706 **Data Recovery** 94.9%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

January *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	25.0	24.5	21.5	18.4	20.9	21.7	15.2	11.8	19.9	18.5	16.0	18.2	16.1	22.5	24.3	16.3	17.0	18.8	14.3	20.3	16.6	11.4	18.8	10.1
2	17.8	21.1	16.0	16.7	14.8	19.9	24.8	17.4	15.3	17.7	21.0	21.5	19.1	19.7	19.5	17.6	16.3	11.8	7.1	15.5	16.0	15.5	13.4	14.7
3	23.2	14.5	8.9	3.3	2.4	3.1	357.5	352.9	351.9	342.9	325.4	335.8	341.2	322.9	355.3	357.5	342.5	343.3	357.4	350.1	342.5	355.2	21.5	357.2
4	15.1	18.5	14.7	19.0	24.5	24.7	25.2	27.2	29.1	29.5	27.1	23.5	24.9	10.9	13.7	25.1	27.9	27.4	25.1	23.5	20.1	33.5	223.0	197.1
5	179.9	307.0	18.9	22.7	15.9	343.5	3.8	18.5	17.7	3.6	9.0	12.0	14.1	4.0	9.5	12.7	14.9	1.5	350.1	291.5	300.4	13.4	10.9	7.2
6	18.0	21.8	27.1	15.4	15.9	7.2	21.6	14.1	18.5	13.1	16.4	16.1	16.7	4.4	9.7	10.7	6.0	0.2	1.6	8.6	4.8	0.7	9.6	358.6
7	8.2	13.5	5.9	4.8	358.4	358.4	359.7	2.3	0.6	357.5	1.4	350.4	4.1	4.0	3.0	359.3	356.6	3.5	1.1	1.8	0.1	355.7	355.4	354.9
8	357.4	0.6	355.0	352.0	4.6	17.2	1.7	2.3	7.9	7.3	6.5	8.7	7.5	2.0	2.2	18.4	11.3	7.4	18.2	11.3	15.3	29.2	18.8	11.8
9	13.2	20.1	12.2	284.6	12.3	17.8	17.4	19.7	23.9	37.8	42.0	71.9	41.9	39.8	92.2	142.3	128.8	131.7	133.4	138.6	131.5	169.4	137.1	130.2
10	136.3	133.8	138.0	141.5	134.0	123.5	122.5	118.2	119.2	118.5	118.1	115.8	126.5	129.7	127.8	128.0	126.2	120.2	125.1	125.6	121.8	123.8	127.5	122.6
11	120.8	118.4	119.3	119.1	121.7	122.6	121.7	118.4	119.9	121.8	118.8	115.8	114.9	115.7	114.0	113.7	114.6	114.5	108.6	107.6	110.1	111.2	110.9	111.6
12	110.1	110.2	107.4	107.8	110.7	111.4	113.8	119.8	124.5	122.1	122.7	121.7	121.6	119.1	122.2	115.8	115.5	114.3	116.9	116.6	118.8	125.0	180.5	238.1
13	230.3	230.6	230.8	229.1	219.2	207.7	204.7	204.1	176.9	206.1	200.4	195.2	214.5	184.1	141.3	81.8	19.7	23.4	14.0	17.6	14.8	18.2	24.9	25.2
14	18.7	16.5	18.3	13.3	16.8	13.8	1.0	359.0	359.3	0.1	0.3	1.7	2.2	1.3	359.9	8.6	6.7	350.6	338.6	342.9	338.7	321.0	323.9	326.4
15	338.2	339.7	357.0	1.6	352.0	340.9	329.6	330.1	333.8	321.8	327.3	341.7	337.5	336.2	343.0	345.7	329.0	348.0	338.0	1.6	0.7	1.3	17.7	22.7
16	24.1	29.3	27.0	27.8	32.6	68.6	96.3	103.9	101.1	106.2	109.1	108.5	102.3	100.9	104.3	104.6	107.1	110.3	112.6	114.3	116.5	117.4	119.8	115.0
17	119.1	137.6	143.7	141.6	136.7	132.8	134.6	133.5	129.0	120.7	124.0	118.8	133.7	134.2	123.1	124.5	125.5	129.3	119.5	124.3	125.1	131.7	129.1	121.9
18	122.7	123.8	115.1	90.9	72.6	52.0	71.7	53.4	70.1	47.8	17.5							264.9	278.6	293.9	11.9	344.2	357.3	289.4
19	318.0	291.5	267.1	291.5	262.3	253.3	209.9	235.1	258.4	16.6	32.5	32.7	54.5	44.7	61.3	85.0	91.5	96.8	104.8	106.4	106.0	106.8	104.0	102.5
20	107.0	107.5	110.8	104.8	104.7	99.1	99.2	99.5	100.1	98.6	97.8	82.0	71.9	31.8	19.1	21.6	19.8	6.3	357.3	10.7	19.6	17.6	18.9	21.5
21	19.7	7.2	1.7	3.3	304.9	257.7	261.2	255.0	288.0	279.1	256.8	258.4	259.1	249.1	244.3	248.4	253.0	257.1	262.4	257.2	252.6	251.4	255.5	256.1
22	250.8	204.6	166.0	147.8	132.7	122.5	99.7	41.0	22.6	22.0	27.7	19.4	29.8	21.8	17.6	18.2	9.8	15.5	14.9	19.8	11.4	355.2	4.6	25.0
23	20.0	19.8	17.3	8.6	12.8	18.0	8.7	3.5	13.2	6.4	8.7	10.7	4.8	10.2	4.6	345.3	350.4	0.3	360.0	14.0	3.1	351.1	351.6	357.8
24	349.3	340.8	341.2	333.3	331.4	332.4	339.6	356.1	340.5	348.0	2.3	2.8	6.7	1.9	3.0	14.5	18.0	11.8	20.7	32.7	25.9	25.5	26.1	21.5
25	21.4	34.0	84.7	95.6	92.5	91.0	82.0	83.1	100.9	105.3	105.7	106.2	106.8	108.3	104.2	104.6	102.0	100.5	104.8	107.5	106.8	107.7	111.6	114.2
26	111.6	111.6	112.2	113.3	113.4	113.1	113.9	116.2	117.0	113.4	115.5	120.0	127.3	127.7	138.3	141.4	135.6	125.2	125.3	124.6	129.8	133.2	116.7	113.8
27	114.4	109.2	106.7	108.5	111.8	112.8	112.4	115.7	116.1	130.6	121.6	115.7	115.0	108.7	114.1	117.3	112.7	99.8	104.4	104.1	102.6	100.4	101.4	102.2
28	103.7	101.5	106.6	108.9	107.3	109.2	105.0	107.0	114.1	122.0	131.2	139.8	144.8	140.6	133.7	128.3	128.2	116.5	112.3	119.0	125.4	120.4	122.8	118.7
29	113.9	103.4	98.6	98.7	107.9	106.0	102.1	104.6	107.2	114.4	109.6	108.6	109.6	109.7	109.3	108.2	110.4	112.8	114.8	112.3	113.3	114.5	115.7	119.0
30	106.8	107.0	111.1	112.5	116.5	114.6	110.1	111.1	112.2	113.6	118.4	119.0	125.9	123.3	117.7	133.9	139.0	136.7	137.6	139.5	139.4	139.8	135.4	140.4
31	139.7	141.6	145.6	143.4	146.4	137.1	134.6	145.6	141.9	134.9	142.1	149.6	138.3	147.8	148.9	123.8	114.0	113.0	110.8	127.6	118.7	114.3	134.8	124.0

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	121.7	129.8	134.0	133.4	127.2	116.4	125.8	137.0	134.4	151.1	135.6	143.0	131.4	106.3	110.4	107.4	100.9	97.5	99.6	130.8	131.0	132.4	121.9	119.1
2	109.7	109.6	111.2	117.9	117.4	120.2	119.1	120.4	120.2	123.5	123.7	123.1	121.9	120.5	117.9	114.0	116.7	113.8	111.5	112.3	115.2	118.8	121.0	121.3
3	116.2	118.9	121.4	121.1	116.6	110.3	113.1	122.4	124.3	127.5	120.0	122.0	126.0	132.8	157.2	191.3	179.2	277.1	12.1	23.3	17.7	23.6	28.6	26.8
4	26.9	26.2	19.4	26.4	28.2	21.4	22.4	28.5	21.1	19.4	24.9	24.8	25.1	26.1	12.6	16.9	26.1	26.8	25.0	25.3	28.7	39.0	33.7	51.4
5	86.9	129.2	98.1	84.6	99.5	118.6	107.8	95.6	115.8	102.2	110.5	113.5	144.2	139.4	157.5	150.9	148.7	117.1	110.8	123.4	121.3	121.2	129.3	140.9
6	112.4	106.1	100.6	100.6	103.2	101.4	107.3	109.3	107.8	103.7	113.6	114.5	108.9	112.5	136.3	140.6	131.7	156.7	56.6	128.0	82.6	67.5	77.9	76.0
7	110.5	116.7	143.2	128.6	66.3	83.6	131.0	163.3	188.6	210.7	181.9	181.0	139.7	159.7	232.4	30.7	37.4	106.2	135.0	138.8	126.4	130.3	123.4	118.4
8	114.6	99.6	147.0	161.5	143.6	135.4	135.2	135.6	148.3	142.7	145.4	142.4	148.5	144.2	146.8	139.9	145.4	148.9	165.5	202.5	225.1	237.2	240.3	225.6
9	199.1	250.6	247.0	254.8	216.9	194.0	275.6	257.6	120.9	128.5	131.6	126.5	109.4	118.9	150.3	162.1	173.2	153.5	109.9	150.2	193.9	120.7	197.8	343.1
10	24.8	23.9	38.1	31.1	22.3	18.0	22.9	23.9	13.3	10.3	12.4	358.6	28.8	11.8	14.7	19.2	13.2	345.4	352.4	24.8	26.1	28.9	27.8	28.9
11	24.8	91.0	117.4	125.5	130.2	127.6	134.9	120.9	122.5	126.1	115.9	113.4	118.4	120.9	127.0	124.2	118.1	117.6	117.2	116.0	105.4	105.7	106.8	105.6
12	106.3	104.6	107.2	110.7	106.5	105.8	105.2	103.9	105.3	107.3	104.7	110.0	113.6	115.6	114.3	111.3	106.2	99.9	79.1	69.9	61.7	56.4	60.0	51.3
13	41.4	60.8	56.6	42.3	45.8	48.6	54.2	56.2	61.8	53.0	55.6	52.8	66.2	72.1	94.6	108.5	115.8	119.5	113.5	105.6	116.6	125.4	124.7	129.5
14	118.3	128.7	125.1	120.1	116.4	120.9	121.0	119.1	120.6	121.2	114.3	111.4	120.1	126.2	132.2	119.7	104.7	115.8	85.8	80.3	77.0	46.0	24.5	25.8
15	22.8	21.5	23.7	23.5	26.3	28.3	31.5	35.5	23.3	24.6	37.7	25.7	32.2	21.3	17.1	21.1	26.0	28.5	28.5	27.1	26.4	29.9	29.1	30.6
16	31.2	30.5	18.4	20.2	81.2	32.6	48.8	44.0	73.1	94.4	124.7	133.9	139.3	138.2	163.5	268.6	291.0	338.6	87.7	131.2	128.4	132.2	102.7	132.7
17	137.5	124.5	125.8	117.6	125.0	97.3	50.9	31.3	32.3	36.7	23.6	36.7	29.0	84.2	103.3	114.3	138.8	124.8	127.7	109.6	109.1	114.6	114.0	116.2
18	101.9	77.1	102.5	37.1	30.2	26.1	40.5	27.2	25.0	29.4	38.7	53.2	38.0	24.0	16.8	33.4	80.5	57.1	29.1	23.7	21.6	14.1	14.4	13.2
19	15.9	11.9	0.8	4.7	2.2	2.6	357.9	352.2	339.1	332.1	336.3	355.0	358.9	2.3	0.7	2.6	1.1	6.1	5.2	4.5	3.5	5.4	6.8	16.5
20	23.5	27.1	23.9	18.9	4.1	11.6	9.3	9.7	3.6	9.1	6.2	10.1	356.3	351.5	350.6	348.8	343.7	347.7	349.4	350.9	356.5	3.6	10.6	347.7
21	351.3	358.5	0.0	357.5	357.0	6.6	5.0	11.4	11.2	9.7	9.2	16.0	19.9	11.9	0.5	2.6	10.0	18.3	22.0	20.7	26.4	20.9	26.4	23.9
22	19.1	17.3	18.2	23.8	15.9	13.3	13.9	18.3	18.8	22.6	15.7	16.4	7.0	15.6	28.7	32.0	32.0	19.7	16.9	31.9	33.1	36.8	29.0	26.2
23	27.7	28.7	31.7	20.8	18.1	15.8	12.3	21.4	23.4	20.3	23.7	16.5	13.4	2.2	2.4	13.0	28.1	20.9	30.7	21.9	0.9	10.9	15.5	331.4
24	332.6	9.8	9.2	0.7	358.6	357.2	349.8	347.0	357.8	7.4	1.6	6.3	353.5	350.9	0.9	360.0	355.5	352.4	2.2	7.5	7.9	4.8	3.8	2.0
25	8.0	3.1	355.6	0.2	356.2	0.2	12.7	7.3	24.3	6.5	14.1	11.7	8.3	4.0	7.8	6.1	10.4	10.0	13.7	5.8	334.1	21.3	42.2	352.5
26	318.2	333.5	333.0	332.7	337.9	336.9	338.6	341.8	339.4	343.4	350.6	36.0	338.1	326.5	313.6	318.3	321.1	325.9	2.1	51.2	21.2	14.9	11.2	3.9
27	356.9	356.1	8.3	5.3	7.1	10.9	15.8	20.5	28.6	27.3	17.6	22.1	19.8	23.3	26.2	22.8	23.5	27.3	29.9	28.9	30.6	24.8	19.6	19.7
28	27.5	16.8	22.4	19.3	12.3	17.1	17.3	19.9	18.9	27.1	21.2	20.2	17.9	10.8	8.3	10.6	14.6	14.6	13.4	17.3	15.4	22.6	29.4	25.4

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

March *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	27.9	32.6	30.0	26.7	24.0	20.3	31.8	26.3	31.6	32.5	30.2	27.0	21.3	20.1	22.3	20.6	13.1	7.1	7.9	9.0	7.7	9.6	7.3	8.9
2	14.1	14.1	13.5	14.7	23.6	18.4	12.9	16.3	12.5	7.3	7.9	9.2	6.6	4.0	6.2	4.4	6.3	8.0	15.9	7.8	1.4	5.4	6.7	10.0
3	6.7	10.3	8.4	3.5	5.4	8.7	20.2	29.0	21.9	15.8	26.2	25.5	23.7	9.5	4.9	7.9	11.6	15.5	13.2	11.6	4.9	16.8	358.2	358.7
4	2.2	2.4	1.8	2.4	11.3	17.5	26.0	22.8	28.5	16.9	9.6	4.1	2.9	1.9	2.4	0.1	2.9	3.8	358.0	356.3	6.5	2.6	359.1	1.3
5	1.3	3.1	6.3	4.9	4.9	6.8	3.8	1.9	8.1	12.3	7.4	3.1	2.5	2.5	356.9	358.2	2.1	359.4	357.8	358.2	358.7	0.5	2.2	1.4
6	0.2	0.5	2.0	7.7	4.2	4.7	5.0	5.6	355.7	359.3	1.2	4.3	5.7	2.9	358.0	1.4	9.3	7.7	1.5	0.7	2.0	1.5	359.9	0.4
7	0.3	2.1	3.3	11.8	7.9	359.4	0.5	2.0	4.9	359.0	2.1	1.4	4.6	3.8	5.5	1.9	357.5	354.1	353.4	348.3	351.4	357.6	0.0	1.3
8	0.2	359.5	357.8	359.5	358.3	359.7	0.8	1.7	1.4	1.2	1.6	1.4	359.5	2.3	353.6	349.8	350.5	358.1	356.0	0.4	357.6	357.0	356.8	2.2
9	3.7	3.4	6.7	6.0	5.2	5.6	4.1	0.5	356.8	354.9	2.6	355.7	356.0	359.6	357.0	359.1	359.8	358.1	10.9	20.9	25.6	25.8	27.0	20.7
10	24.1	26.7	17.6	25.0	24.1	20.5	20.0	23.9	22.8	21.4	16.9	15.3	22.1	22.4	27.3	13.0	18.4	16.2	14.5	14.0	17.5	18.3	17.3	14.7
11	12.0	10.4	9.0	6.6	6.2	2.7	4.9	5.1	3.5	0.8	0.1	358.2	0.7	358.6	359.5	359.6	359.4	357.9	1.5	3.5	0.7	0.5	2.4	0.9
12	2.7	6.5	357.8	4.2	2.3	2.9	1.3	1.5	318.5	326.8	319.5	327.8	332.6	347.1	345.7	335.2	343.2	346.6	331.0	343.3	321.8	349.6	354.9	351.0
13	347.4	334.1	344.3	344.2	348.2	334.4	339.9	338.1	19.2	0.3	342.9	337.2	332.7	326.1	332.2	347.3	342.5	345.2	344.1	351.6	352.1	355.6	359.5	1.1
14	1.2	357.7	357.7	1.2	0.2	358.8	358.1	5.9	1.6	4.7	355.6	345.5	356.3	351.6	355.8	351.8	351.7	349.1	354.3	355.5	354.7	359.1	356.9	354.7
15	2.2	357.7	355.3	358.1	15.5	12.0	20.9	23.7	24.2	21.3	11.4	7.8	7.1	3.5	3.1	358.4	357.9	352.2	354.9	352.6	1.7	4.9	6.2	12.1
16	17.2	21.6	28.2	30.0	27.4	14.9	23.5	19.6	17.1	15.8	11.3	10.2	8.4	1.7	0.4	353.6	355.2	0.4	5.6	7.0	15.4	23.2	22.5	18.0
17	17.9	20.6	23.3	20.9	25.8	26.3	22.2	30.4	26.4	23.2	22.7	17.0	18.2	11.3	15.0	4.4	348.7	335.9	340.4	8.4	22.7	23.4	14.8	15.2
18	58.1	34.1	162.6	248.4	247.3	208.7	147.6	140.2	129.5	121.4	30.7	292.2	252.4	252.9	257.9	258.1	261.0	317.5	327.9	333.8	4.7	8.9	15.3	11.8
19	18.6	12.7	19.7	14.3	15.6	16.5	16.4	16.1	21.7	18.5	20.8	22.1	318.0	313.0	12.7	8.4	350.4	1.4	13.6	19.1	29.7	32.8	35.6	106.0
20	204.7	175.0	34.9	59.8	83.2	111.6	88.4	113.5	107.6	105.1	106.1	106.9	106.1	101.2	99.5	97.6	92.6	86.0	81.0	85.0	90.0	92.3	92.4	93.1
21	73.8	65.6	80.5	148.6	143.0	143.0	144.5	145.2	156.0	210.7	227.1	239.4	249.4	250.5	244.6	245.1	234.9	232.6	237.6	317.9	336.2	351.4	359.9	353.3
22	5.9	349.6	350.5	8.8	9.9	22.2	13.4	5.2	19.3	19.5	21.2	24.8	18.5	27.3	4.0	5.9	10.3	20.6	19.1	14.1	16.1	15.3	13.0	12.0
23	14.4	351.3	0.4	359.7	15.5	20.6	7.5	7.8	12.1	8.2	0.3	4.0	349.1	350.6	349.1	348.4	348.8	344.7	334.0	331.1	331.4	331.4	335.0	340.1
24	353.2	357.3	3.8	1.9	6.3	6.7	3.5	7.1	14.8	30.5	29.1	33.3	22.7	20.2	6.4	8.4	0.7	340.2	348.8	3.9	348.8	292.4	2.2	26.8
25	118.0	305.6	350.7	28.0	40.8	118.2	67.4	110.3	133.8	116.9	53.9	22.0	183.4	154.6	225.4	250.1	291.7	115.4	111.4	111.1	95.4	101.2	101.1	105.6
26	105.2	97.7	96.8	101.7	105.9	118.6	143.2	178.8	210.0	225.4	230.4	225.5	221.1	224.2	237.5	251.7	257.0	261.2	283.8	341.9	357.2	354.2	13.3	15.8
27	20.3	47.2	15.8	15.1	13.7	13.5	12.8	16.2	11.9	8.5	6.0	358.6	1.9	2.3	1.3	352.0	350.3	354.8	344.3	352.4	0.2	14.7	7.5	6.8
28	1.7	4.0	3.8	7.1	20.1	26.8	13.2	13.6	9.1	10.0	359.0	341.5	317.2	336.7	343.0	327.9	323.0	332.4	331.0	334.3	337.4	330.8	354.4	8.1
29	13.6	8.0	357.7	358.4	12.4	13.2	5.1	340.4	359.5	358.5	5.0	351.7	331.3	335.9	321.6	326.1	332.1	323.7	330.2	340.4	4.7	351.0	334.9	358.4
30	6.9	8.3	16.5	18.1	24.9	24.4	14.6	11.9	21.7	22.5	10.7	18.8	16.9	17.9	17.1	17.4	20.8	11.2	14.3	19.0	23.5	43.3	149.5	123.8
31	84.1	25.0	22.8	52.2	349.8	351.3	161.5	101.9	324.2	211.0	187.2	269.3	303.3	319.9	305.2	302.1	8.4	359.3	3.2	4.0	9.5	10.9	13.3	12.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	10.5	10.3	14.6	15.8	13.7	14.3	18.8	18.2	17.8	18.7	21.3	7.8	16.7	19.3	36.9	207.7	209.0	183.0	134.2	136.0	128.7	128.0	96.8	101.6
2	109.3	93.3	104.6	77.3	99.2	104.1	97.1	103.6	104.1	106.9	113.3	116.4	122.5	127.4	127.5	127.2	128.5	124.8	125.0	122.5	116.3	110.7	112.9	107.4
3	106.2	107.9	105.0	109.4	112.9	109.3	110.2	113.4	113.6	113.1	104.2	105.6	115.2	110.7	113.2	112.7	113.3	112.4	106.9	94.2	102.3	106.5	100.7	97.2
4	99.9	100.9	86.2	83.2	79.1	73.9	80.0	92.6	100.6	106.3	112.2	112.2	109.3	111.4	110.9	114.6	112.7	108.0	106.6	96.2	85.8	85.2	98.0	99.7
5	92.5	73.4	74.4	75.5	28.3	53.5	50.6	53.1	49.0	47.6	46.3	57.6	51.2	50.8	49.2	50.5	97.9	98.2	103.0	105.2	100.4	100.9	104.4	103.2
6	104.3	102.3	105.6	109.1	107.0	103.5	97.6	97.3	85.0	41.6	49.9	44.0	45.8	47.4	43.5	41.8	37.6	13.8	24.1	16.6	21.3	26.6	43.5	58.0
7	142.4	138.6	152.9	141.5	121.4	117.5	126.3	116.2	115.1	117.9	118.1	118.4	115.9	112.0	101.6	105.0	104.0	108.5	110.6	101.3	88.6	70.0	46.5	44.5
8	51.3	48.3	47.9	46.2	47.3	49.2	49.4	45.0	45.2	51.5	47.8	49.9	51.6	52.8	49.6	62.0	92.3	120.0	125.1	114.9	96.8	112.0	136.0	126.2
9	118.7	106.5	100.5	98.5	94.8	99.6	93.8	90.6	105.7	106.6	110.6	107.9	108.4	113.4	118.5	114.7	119.5	116.6	123.3	123.0	127.3	127.4	125.9	127.8
10	123.5	126.4	131.4	138.2	143.8	134.8	128.6	127.3	120.9	109.1	121.6	131.2	142.0	149.1	136.1	133.8	126.9	144.5	133.1	138.2	131.0	130.0	119.1	128.8
11	130.2	126.7	133.5	114.4	113.7	94.7	100.8	115.9	124.7	123.6	105.3	111.9	119.3	122.2	129.0	131.6	123.2	136.2	137.2	125.2	119.1	92.4	101.3	99.2
12	90.3	78.8	60.5	27.8	33.1	19.4	16.8	15.4	20.9	356.3	25.7	15.1	21.6	24.7	315.0	299.3	311.2	326.6	335.8	227.5	277.4	266.5	1.5	19.6
13	15.7	16.8	23.7	21.1	18.0	20.7	22.4	10.7	18.2	10.1	9.6	11.7	0.4	350.5	338.7	322.5	325.7	272.8	308.7	4.9	13.3	11.9	21.6	22.2
14	24.1	26.6	55.1	76.9	34.5	46.9	127.3	129.3	120.8	159.0	148.6	124.3	128.9	135.6	139.3	140.1	140.0	140.5	134.0	138.2	108.7	96.4	97.6	99.9
15	100.2	101.5	97.3	103.5	102.9	100.2	101.4	95.1	107.3	107.2	109.4	101.2	100.3	105.9	111.2	96.8	158.6	235.2	201.7	218.0	230.5	302.7	329.2	348.0
16	13.1	344.6	347.2	356.0	7.7	7.1	357.3	353.4	0.1	349.2	311.9	292.0	270.9	227.5	235.0	246.5	250.8	235.6	237.5	255.1	255.8	322.6	207.0	108.8
17	101.9	103.3	118.9	119.6	109.5	110.3	114.6	118.3	121.4	120.1	118.8	113.3	113.3	112.5	111.5	111.2	110.2	114.0	117.7	116.4	114.3	113.8	112.4	110.9
18	110.9	108.8	107.1	111.2	112.1	111.1	105.7	111.4	109.8	111.9	111.3	115.7	118.9	118.7	123.3	143.7	194.5	216.8	277.5	258.7	263.5	252.8	261.6	6.0
19	79.3	122.5	165.9	124.4	114.5	117.2	121.3	128.5	126.0	121.4	121.0	123.0	129.7	129.4	126.1	123.9	122.5	124.4	124.6	117.0	105.3	104.8	105.3	108.9
20	103.7	111.0	104.4	102.6	108.4	89.6	93.2	97.7	96.1	97.0	100.2	95.8	100.9	105.2	110.9	108.6	105.6	107.4	108.6	113.7	114.8	114.3	111.3	115.3
21	111.1	101.2	97.3	98.4	102.3	101.2	112.2	113.4	114.8	119.8	107.6	104.9	105.3	108.5	108.1	108.2	111.3	111.7	110.5	107.0	112.9	103.8	102.1	104.1
22	102.4	101.5	97.0	105.3	104.9	98.2	101.0	100.8	106.1	102.7	100.5	104.4	90.0	100.4	84.5	83.4	82.3	74.3	68.2	60.1	65.0	69.3	64.2	57.6
23	46.2	72.5	61.8	53.1	44.7	49.0	51.4	52.4	61.1	54.1	48.5	81.0	129.0	125.9	127.1	144.2	110.8	143.3	121.0	95.9	128.9	128.9	115.0	107.5
24	105.6	99.7	90.7	91.6	99.2	91.3	100.2	107.2	112.0	105.4	109.7	114.1	105.0	80.2	118.2	121.2	121.4	133.8	117.6	123.8	149.5	115.0	101.0	103.0
25	103.5	101.0	101.3	99.7	99.2	101.3	103.6	103.4	101.6	106.9	104.8	107.1	104.1	111.3	117.4	118.8	121.2	115.8	120.7	116.9	80.6	56.8	92.2	77.8
26	49.1	50.0	42.6	47.6	50.5	28.2	20.4	23.9	20.5	15.9	11.6	16.8	353.3	12.4	356.9	359.6	350.0	343.4	339.0	330.8	340.0	343.0	15.7	15.5
27	29.5	44.4	118.0	126.9	209.2	175.2	141.3	119.9	138.0	153.8	171.2	152.3	173.4	197.4	204.7	200.4	209.6	226.2	229.2	234.2	210.4	227.5	238.6	252.8
28	252.6	248.1	263.1	266.1	262.7	254.8	268.4	258.2	149.7	130.3	126.3	138.0	141.6	133.5	125.9	131.3	138.4	136.4	137.3	138.5	134.5	125.8	112.3	104.7
29	102.4	98.1	96.3	98.0	102.1	101.1	92.9	89.1	98.4	108.8	104.0	102.0	105.0	110.3	104.6	103.6	109.7	119.1	118.5	114.3	122.1	189.4	175.3	267.0
30	184.5	146.0	135.7	5.9	20.9	36.7	23.2	29.6	30.7	53.1	87.7	91.2	30.3	28.0	33.6	154.0	190.2	182.4	193.1	198.6	228.6	286.9	282.0	352.9

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	64.4	149.5	162.4	191.6	162.0	275.3	153.8	105.0	126.8	159.0	178.4	216.5	250.1	339.6	56.4	169.2	320.4	255.3	167.4	218.8	225.5	244.5	251.6	298.8
2	193.9	97.2	351.9	101.9	20.1	16.2	20.4	85.4	149.9	161.5	221.2	66.9	91.3	78.3	119.8	134.3	126.1	125.4	120.9	119.9	118.4	107.2	113.6	114.6
3	117.7	106.4	114.8	132.7	131.0	83.2	16.3	7.6	273.1	343.2	13.7	2.6	4.0	339.5	286.0	263.5	317.5	318.0	248.3	252.2	257.1	281.3	311.1	23.9
4	24.6	26.8	26.3	58.4	349.2	7.8	16.0	230.0	173.3	203.7	239.8	252.1	250.4	244.1	242.4	243.2	238.1	232.6	170.6	178.7	240.3	256.5	262.1	265.8
5	340.3	280.7	253.5	253.6	258.0	21.5	18.7	342.6	257.5	265.1	275.8	260.2	253.1	247.8	299.4	296.7	294.2	283.0	284.3	289.4	279.6	292.3	266.6	249.7
6	247.6	312.3	359.5	333.9	351.6	347.0	302.8	275.3	267.2	260.0	262.3	273.9	296.1	311.3	317.2	316.0	310.9	299.1	312.6	321.1	316.9	318.4	320.0	322.7
7	323.3	324.9	324.3	330.8	344.8	7.8	348.7	347.1	339.9	346.2	326.6	333.7	317.2	319.5	336.6	280.0	255.1	240.4	249.2	259.2	252.1	266.4	260.5	256.3
8	251.5	252.7	258.2	257.1	259.5	255.6	252.5	254.3	254.9	254.1	256.0	255.0	229.3	223.5	232.4	239.8	229.3	234.8	224.5	218.9	209.5	148.9	151.9	122.8
9	148.3	204.8	301.0	43.4	102.6	112.9	118.3	125.2	137.1	123.6	133.6	123.3	135.3	121.4	127.6	138.1	146.7	142.4	153.6	168.3	185.4	183.7	212.4	120.3
10	169.9	129.3	38.0	355.0	24.4	56.4	140.7	145.7	152.2	153.0	149.9	173.7	187.8	181.7	167.8	177.3	178.5	152.9	142.8	136.1	124.2	118.6	124.3	94.0
11	92.9	90.4	109.1	82.0	96.9	97.2	96.2	105.7	113.3	115.4	123.1	126.2	127.8	127.0	132.4	133.9	140.5	142.8	144.5	149.4	149.4	138.7	132.8	137.9
12	156.5	154.1	111.3	117.6	79.4	101.5	110.8	110.6	121.1	127.1	124.8	137.4	135.6	134.1	135.9	138.2	132.8	133.1	133.1	131.0	130.9	134.2	126.6	118.2
13	116.4	122.4	120.7	110.3	110.8	112.1	114.8	111.1	113.2	115.5	113.6	114.9	114.4	120.4	120.6	113.0	107.2	104.3	86.4	75.3	67.7	62.9	52.1	39.9
14	76.8	88.7	65.4	30.5	48.7	48.5	40.4	38.1	71.6	98.6	81.6	98.5	139.1	112.4	115.4	128.0	118.9	120.1	117.6	120.2	125.1	120.1	113.2	107.6
15	111.3	110.9	112.8	111.4	107.0	92.7	60.0	77.7	84.4	106.0	110.6	121.1	134.4	156.9	143.7	162.5	178.7	179.4	220.0	288.9	318.1	7.8	18.7	21.8
16	21.2	25.4	23.2	14.8	25.3	23.6	29.3	25.9	28.1	75.1	118.4	118.6	134.3	162.1	147.7	148.6	156.6	166.4	161.6	154.7	148.0	142.0	140.0	142.5
17	141.3	142.2	143.6	139.1	145.7	148.4	150.4	146.4	142.6	149.5	140.9	134.8	158.1	161.2	153.3	151.6	154.2	155.1	156.1	156.2	148.0	150.0	133.4	109.7
18	149.0	124.2	118.0	115.2	118.8	177.2	141.5	135.8	140.8	138.4	136.3	146.0	146.6	173.1	154.0	171.0	184.8	161.5	193.8	208.7	192.9	237.7	266.2	315.6
19	330.9	4.5	11.6	10.5	17.3	359.7	332.6	310.7	284.8	288.5	269.5	258.9	225.6	232.5	243.1	240.0	246.7	236.0	237.2	243.2	246.1	261.7	273.2	282.9
20	264.2	282.1	270.8	269.1	270.0	264.5	272.8	253.1	245.1	245.8	248.8	256.6	244.5	230.9	228.7	222.1	212.8	227.0	234.6	234.4	233.0	240.1	273.3	274.0
21	263.1	273.3	281.5	292.4	284.7	297.4	315.7	249.6	274.5	55.2	165.7	125.2	138.8	143.9	143.0	137.1	145.5	132.6	122.3	120.1	112.1	105.9	103.6	108.0
22	110.0	104.6	100.3	103.6	103.0	100.5	106.5	87.6	110.3	113.0	125.8	115.6	118.1	146.6	137.9	133.8	127.6	141.4	148.8	148.3	21.5	125.7	135.4	86.4
23	86.2	20.3	45.7	39.2	46.1	75.3	75.4	106.9	112.6	115.6	116.5	116.6	121.7	138.9	143.8	126.0	118.5	118.0	117.1	129.7	133.8	126.4	130.0	119.9
24	124.3	126.7	124.3	118.5	119.0	123.2	121.1	125.5	129.4	127.4	126.2	122.1	128.7	128.0	129.3	131.9	118.8	117.7	107.9	127.8	126.3	147.0	143.2	84.3
25	120.7	186.4	91.8	113.1	123.6	54.8	139.8	139.7	130.5	142.2	177.2	150.9	146.6	147.7	147.4	138.4	137.1	144.7	154.6	193.9	233.2	328.6	12.6	8.0
26	12.1	49.7	144.2	154.1	151.7	117.1	147.9	134.6	131.0	132.0	153.1	146.2	151.4	154.7	142.2	138.9	140.7	134.1	128.5	127.5	130.6	131.4	147.2	164.1
27	145.4	137.4	152.1	138.2	145.2	139.1	138.5	146.0	140.0	142.4	146.1	143.7	147.0	148.5	151.2	155.9	152.0	149.9	148.0	137.1	144.6	131.6	123.0	121.6
28	114.3	112.1	104.7	102.8	117.0	111.8	104.6	133.7	129.3	127.3	122.8	140.5	131.6	137.2	153.5	152.1	146.0	152.9	149.4	141.7	141.9	141.9	126.4	163.1
29	272.3	358.1	4.0	8.3	14.7	20.3	23.4	22.6	18.6	17.4	11.3	18.9	181.7	136.9	209.9	156.2	176.7	180.9	156.8	161.2	156.7	149.8	163.7	271.6
30	268.2	204.4	358.0	356.1	27.4	24.2	27.8	19.8	63.4	114.7	129.4	114.0	124.8	129.2	138.7	156.8	147.0	142.3	141.6	134.5	138.8	134.1	121.0	124.4
31	110.0	74.2	66.5	89.3	96.7	101.5	104.7	120.0	127.5	125.4	132.7	138.7	128.9	93.4	25.0	50.1	80.1	95.0	116.4	104.8	109.6	99.2	98.7	112.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	126.4	124.9	116.8	122.2	114.5	121.1	102.4	116.2	119.3	116.3	119.1	124.7	128.0	123.3	121.7	136.0	131.1	133.1	135.1	124.4	135.3	136.3	117.1	107.1
2	107.5	111.6	98.6	97.5	102.4	95.7	99.4	115.9	122.4	116.6	123.7	102.2	118.7	103.7	120.1	136.5	128.6	138.7	145.4	145.9	128.4	142.7	132.9	113.4
3	64.8	30.5	41.0	147.8	121.9	120.7	237.0	87.8	117.7	145.8	132.2	138.1	142.9	92.5	116.3	154.0	155.7	133.7	152.3	167.1	300.3	293.2	334.9	5.3
4	12.0	15.9	18.3	17.7	15.9	14.5	17.0	20.2	20.9	24.1	12.8	12.7	19.7	26.0	128.6	147.2	190.2	161.8	156.7	153.4	146.1	142.6	142.3	143.1
5	148.4	145.3	144.3	144.4	135.3	121.3	114.2	120.3	121.8	128.6	128.6	122.2	117.9	112.6	115.6	117.3	114.9	121.7	129.9	123.6	116.4	111.5	106.7	113.9
6	112.2	114.2	108.4	110.1	115.1	111.0	94.1	84.1	47.2	43.4	81.8	150.6	147.6	156.8	149.3	151.7	157.0	164.3	163.5	156.9	149.1	141.5	118.7	3.3
7	21.1	49.6	34.2	18.6	17.0	47.0	139.0	88.4	82.4	64.8	70.1	101.7	116.8	113.6	118.4	120.9	117.1	115.2	115.8	113.5	110.6	111.0	101.1	102.2
8	105.7	105.4	102.2	95.8	96.3	100.0	100.4	115.7	109.7	124.5	126.2	134.5	125.8	122.2	118.0	102.4	128.2	125.3	125.3	120.5	118.1	137.1	125.7	117.6
9	103.9	100.0	121.2	91.8	6.6	327.9	15.2	10.1	17.6	19.3	20.6	13.5	0.2	11.8	328.6	54.7	351.9	36.5	348.5	1.8	348.6	356.3	357.4	15.4
10	11.1	4.8	3.9	7.3	9.9	4.6	10.3	359.6	0.3	5.2	2.1	359.1	331.8	325.8	329.4	328.0	329.3	313.3	319.8	243.1	226.8	251.6	246.7	241.5
11	248.1	222.6	210.8	238.6	231.2	236.7	247.1	179.8	138.9	167.3	196.8	170.1	161.7	158.1	160.5	159.9	153.8	149.7	137.4	147.5	146.3	148.3	153.9	168.6
12	163.8	169.0	170.9	134.7	188.7	238.4	140.0	142.5	145.5	141.6	148.5	168.2	170.3	172.1	171.2	173.9	171.4	177.2	175.2	182.4	166.5	161.1	142.0	130.7
13	166.1	165.0	289.1	288.0	327.7	14.0	15.5	5.0	282.6	271.2	261.3	263.4	256.4	258.9	276.7	250.6	200.7	249.2	262.5	259.8	274.3	344.0	327.3	329.6
14	314.2	314.1	349.7	1.1	4.2	0.1	359.3	353.7	302.0	5.4	14.8	24.9	92.8	115.5	116.1	208.1	264.0	264.1	263.7	257.7	266.3	276.6	316.6	1.3
15	12.7	15.6	13.2	8.4	4.5	11.8	11.7	5.4	3.2	4.0	8.2	5.9	4.3	1.7	344.0	349.5	332.0	338.9	348.1	342.9	340.3	343.2	344.8	2.5
16	9.2	8.2	11.8	10.4	8.5	5.7	8.6	7.4	11.4	337.1	335.1	290.3	287.9	292.4	285.9	293.6	281.1	264.4	248.6	238.5	234.4	238.2	247.1	258.4
17	244.3	238.2	238.5	238.4	240.1	244.1	236.0	256.8	247.3	246.7	255.4	260.0	261.9	330.1	334.8	7.6	19.5	146.4	26.3	0.1	359.8	354.1	313.8	8.2
18	8.2	334.7	331.6	340.9	6.2	13.2	19.2	22.5	345.2	307.8	237.7	221.7	287.5	245.4	231.6	224.4	350.4	338.4	247.9	184.5	143.1	34.5	199.9	311.8
19	7.7	353.7	9.0	12.9	17.0	14.9	10.5	8.9	11.0	358.3	359.2	355.2	1.9	0.2	358.3	359.9	0.3	353.7	340.4	340.9	346.8	348.1	349.1	349.5
20	1.6	3.4	14.0	10.2	11.2	7.1	4.9	9.4	5.6	359.3	0.5	355.6	353.0	344.5	334.3	333.8	335.0	340.4	320.4	323.4	318.8	330.6	342.9	349.2
21	358.0	356.0	11.8	359.7	359.6	2.1	2.3	0.2	352.3	340.4	313.5	294.5	300.1	300.3	289.3	284.0	289.8	279.1	252.2	251.1	247.9	238.5	247.1	245.3
22	251.0	250.1	249.1	247.4	228.5	237.3	243.1	219.2	222.7	218.4	200.6	200.5	181.0	168.8	187.1	188.9	198.2	200.2	177.1	172.8	171.9	147.3	149.8	125.2
23	122.0	122.0	120.3	124.1	120.4	119.0	116.4	112.3	112.6	117.5	120.3	119.9	119.4	117.3	114.7	111.5	112.2	109.1	106.7	104.0	103.9	105.4	105.3	104.5
24	99.1	99.7	101.5	101.0	102.9	105.3	106.3	110.0	107.3	108.0	110.6	117.1	119.5	122.9	134.3	130.4	126.8	127.7	126.9	125.2	125.1	122.4	117.4	117.7
25	126.5	127.8	127.6	128.1	125.2	131.2	137.3	141.4	138.2	132.4	131.7	130.5	130.3	124.9	129.2	130.1	133.4	133.0	134.0	133.4	127.1	122.3	124.4	118.5
26	127.7	121.8	115.1	115.8	119.1	125.6	139.7	132.1	127.6	129.4	139.5	139.2	133.8	131.9	158.2	192.5	233.2	212.6	254.7	260.5	257.9	262.5	262.2	309.6
27	11.6	16.3	25.2	19.2	15.6	21.7	5.4	27.2	35.7	52.6	150.4	161.6	162.1	163.3	176.3	189.7	177.4	177.7	191.6	220.5	253.1	251.5	255.8	258.3
28	254.3	266.9	261.5	269.3	277.1	268.6	267.6	255.1	139.5	149.7	145.7	145.1	134.4	126.1	134.0	145.9	141.1	141.9	125.5	135.1	112.0	117.3	112.2	112.2
29	109.6	101.7	83.8	143.9	212.3	207.9	84.7	120.7	133.8	135.3	149.4	139.7	155.6	164.7	221.4	235.2	254.4	256.2	253.4	254.5	257.4	260.4	262.4	260.7
30	287.2	270.3	264.2	242.7	241.2	229.9	239.8	256.2	263.3	260.4	254.2	253.2	259.0	229.4	191.0	171.3	171.4	157.6	144.3	146.1	148.9	147.9	139.1	150.2

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	130.2	118.1	127.7	334.2	28.1	19.4	14.9	24.2	18.9	13.5	0.3	1.1	350.8	326.1	323.5	303.1	256.3	252.7	268.9	288.1	253.1	124.0	117.5	121.5
2	135.4	141.7	161.2	192.3	192.2	200.2	156.9	208.1	242.7	337.1	327.5	310.8	328.6	336.5	328.2	344.1	324.3	330.7	340.4	351.0	334.8	343.4	7.3	11.1
3	22.2	42.2	112.8	120.5	133.8	183.6	164.2	139.3	144.2	150.3	144.6	148.5	149.5	142.0	148.2	154.0	160.4	148.5	139.4	138.1	133.9	200.8	181.3	133.7
4	129.3	128.8	131.6	129.6	127.0	138.8	125.8	132.2	145.2	130.3	134.5	127.0	127.7	127.0	122.8	124.1	120.3	113.7	120.0	127.3	148.0	150.3	134.8	136.1
5	139.2	151.6	147.8	156.3	309.9	334.9	345.0	278.5	269.3	285.0	285.7	273.9	303.4	357.4	275.0	255.1	4.5	113.0	132.7	130.6	131.8	132.4	125.5	112.4
6	106.4	113.6	112.8	113.7	122.5	119.5	126.6	126.1	128.2	134.4	150.4	127.9	155.4	144.0	152.3	165.1	168.8	173.8	174.8	214.8	229.0	343.4	88.4	113.4
7	97.4	104.0	121.0	110.3	105.0	47.9	37.5	12.3	238.4	235.5	13.5	32.0	279.4	276.8	260.6	294.5	272.9	263.5	152.8	145.3	135.3	129.3	127.0	101.8
8	164.2	158.6	135.3	215.1	60.2	120.0	118.2	117.1	123.4	127.6	145.5	163.6	153.2	144.8	149.8	146.1	138.3	132.2	121.4	129.9	145.2	145.3	150.9	155.7
9	141.3	135.4	122.6	125.3	129.2	116.1	130.7	121.0	113.8	115.3	87.4	91.2	110.1	82.3	112.6	149.9	168.6	172.1	166.2	166.4	227.9	291.7	13.2	15.1
10	20.2	24.3	19.3	17.9	17.8	29.9	9.8	24.6	138.0	356.8	14.5	26.5	159.4	175.9	179.8	151.5	141.7	144.3	145.2	150.3	143.6	137.7	128.9	129.0
11	132.2	131.2	134.1	133.1	136.3	139.2	138.5	140.3	146.6	143.5	143.8	151.8	146.5	152.1	163.6	152.2	162.7	164.7	161.2	159.0	151.3	146.5	135.7	138.4
12	150.0	141.6	130.1	23.0	26.7	20.2	29.1	29.3	38.3	348.1	306.3	242.4	2.0	277.6	186.0	163.7	134.5	143.6	145.3	139.0	146.5	127.3	129.8	128.5
13	144.7	149.0	149.2	144.9	134.1	137.1	148.3	165.0	138.4	132.3	145.7	145.7	148.4	147.5	145.2	146.4	154.4	149.5	151.6	151.0	137.8	151.7	158.4	150.0
14	150.4	138.1	176.5	145.7	164.1	180.2	144.0	131.4	144.9	142.1	149.0	143.2	152.4	161.8	152.6	146.0	160.1	165.8	160.4	149.0	131.1	131.2	152.1	166.8
15	166.5	167.2	154.0	160.9	187.0	174.0	270.1	265.7	250.2	255.3	250.5	251.8	256.1	255.9	267.4	263.8	269.6	257.8	254.5	256.1	258.7	259.9	262.0	260.5
16	253.6	268.7	268.2	271.0	261.2	284.6	303.8	342.2	274.7	313.7	355.8	354.9	352.9	342.3	334.9	328.5	330.5	332.8	335.7	321.1	328.5	342.1	6.7	10.7
17	13.1	2.8	11.3	13.5	9.7	14.1	17.3	19.4	33.2	38.7	42.0	101.0	146.5	152.4	149.2	152.9	152.3	153.5	146.8	139.9	139.6	144.6	131.9	122.1
18	126.4	120.2	117.2	124.1	119.5	125.5	113.1	107.9	131.8	104.4	195.3	28.5	6.3	123.8	142.1	143.0	132.8	137.6	182.9	84.5	174.6	38.5	75.7	19.6
19	11.8	16.2	17.8	45.2	65.6	112.1	332.6	309.7	333.3	12.5	16.8	336.8	298.5	231.3	162.6	115.1	170.3	264.0	271.8	253.2	254.1	259.3	269.9	301.2
20	334.3	255.7	270.0	352.4	322.5	0.3	252.6	217.0	243.9	242.4	255.2	253.6	246.7	236.4	242.5	255.8	270.0	259.9	251.1	250.8	260.2	265.2	258.7	253.1
21	252.3	254.8	247.7	255.6	254.2	256.0	255.3	255.0	253.0	254.6	250.7	255.8	258.9	254.7	237.9	231.7	230.7	225.2	222.7	225.5	219.7	217.6	206.1	200.5
22	186.9	182.1	184.3	180.5	181.4	189.1	182.4	188.1	190.8	191.9	193.3	186.5	180.0	179.2	170.7	160.5	144.1	140.8	137.3	132.7	128.8	126.6	131.3	127.6
23	128.5	129.5	220.5	261.8	275.4	281.5	124.1	126.9	131.3	173.8	150.4	140.5	134.6	128.9	126.1	125.4	119.2	118.7	127.2	124.6	127.2	122.8	120.4	119.3
24	118.0	108.5	103.8	102.9	102.3	102.2	101.8	101.6	91.9	94.8	87.0	73.6	54.4	48.6	45.4	59.2	63.3	64.6	53.7	59.2	57.0	49.6	59.0	75.4
25	64.2	45.3	44.9	46.9	47.3	44.3	51.0	52.9	48.4	48.2	64.3	70.0	66.8	46.6	35.9	40.0	49.3	56.8	71.0	85.0	117.0	125.9	148.3	255.0
26	261.1	231.6	232.4	268.1	326.7	4.0	344.8	10.8	12.0	14.5	29.4	37.6	29.1	10.7	96.1	152.4	181.1	252.4	260.5	260.2	244.8	232.0	204.8	129.7
27	205.9	274.7	19.6	133.5	323.1	353.2	3.9	11.1	345.7	14.7	11.5	7.4	343.2	355.3	339.0	321.5	335.7	342.1	350.8	354.3	13.1	15.9	329.3	275.3
28	298.2	302.3	272.2	272.1	270.7	265.5	267.1	267.2	262.9	259.7	255.6	252.4	259.6	258.0	259.2	259.5	256.4	258.3	259.8	265.1	267.8	256.6	260.4	261.8
29	260.3	264.6	265.8	266.3	282.2	344.5	346.0	337.3	350.1	351.2	351.0	330.9	336.6	335.6	339.0	345.1	339.3	327.7	311.5	296.6	320.6	304.9	262.6	281.4
30	321.4	350.3	284.5	244.2	260.1	242.9	257.7	250.2	257.1	251.0	252.4	254.4	251.8	257.2	252.9	245.9	250.5	255.6	246.9	234.3	224.3	220.2	214.9	225.6
31	229.0	262.0	213.7	205.2	221.4	241.8	220.5	169.9	140.8	146.2	139.7	145.0	141.5	146.8	134.9	132.0	133.4	128.2	118.4	121.8	125.4	127.5	122.6	119.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climtrncs) (Degrees)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	118.5	114.5	111.2	116.9	117.5	121.2	116.2	112.8	113.8	115.1	126.3	130.1	129.6	126.3	122.9	124.1	130.5	128.2	126.3	118.6	119.5	115.9	118.3	116.8
2	116.5	122.4	115.4	113.8	113.4	114.7	115.7	114.9	116.3	118.1	118.8	116.6	115.2	113.7	115.0	119.9	119.7	117.9	117.7	119.8	116.5	119.1	120.3	118.9
3	119.7	118.2	126.2	128.5	131.1	132.6	128.2	123.1	123.7	121.7	118.6	127.9	124.6	130.4	130.1	131.2	129.0	135.0	133.7	126.4	126.4	127.1	117.5	119.1
4	119.4	117.0	111.5	111.8	114.6	115.0	115.3	116.7	118.3	120.1	123.6	130.5	136.4	133.3	129.7	132.1	131.4	136.7	133.0	129.4	132.4	132.7	134.4	128.9
5	127.4	126.0	133.4	143.6	140.5	146.2	140.7	166.5	202.5	205.4	205.7	210.9	217.1	220.2	220.6	221.9	217.6	229.1	226.8	229.4	233.1	235.2	242.5	257.3
6	269.1	268.7	273.2	270.0	282.5	290.2	310.3	323.9	328.4	325.0	323.3	319.6	308.7	318.9	319.6	328.9	330.5	334.3	327.7	321.5	328.8	332.9	330.8	331.3
7	337.2	349.0	332.3	334.8	359.5	0.7	355.6	354.9	350.5	357.0	350.2	355.8	353.8	351.9	350.8	351.5	352.5	353.0	351.1	344.6	337.6	341.4	354.0	27.1
8	15.5	7.7	12.5	17.4	15.2	4.1	356.4	4.5	6.3	355.9	349.8	338.2	346.5	335.3	337.6	335.7	331.2	316.0	324.5	334.0	337.4	345.2	355.2	0.3
9	8.5	13.1	16.6	13.6	11.7	10.3	11.3	19.4	44.8	29.2	29.7	15.1	169.1	180.0	167.1	161.5	168.1	161.5	159.8	160.4	154.3	148.8	145.2	130.6
10	135.4	144.8	104.9	262.8	66.2	22.2	3.1	25.6	107.3	121.5	134.7	163.3	154.7	153.4	163.3	166.2	164.0	153.1	162.0	152.7	138.7	125.9	132.3	100.2
11	45.9	6.3	13.9	22.8	356.3	15.7	21.4	354.5	25.0	173.9	142.5	173.2	164.7	148.7	151.7	188.4	259.5	255.5	253.7	255.4	252.7	235.6	243.3	228.0
12	248.2	242.1	258.6	250.4	206.7	185.9	205.7	233.9	237.2	240.4	260.5	252.8	255.5	233.9	152.7	228.7	237.1	217.4	232.1	256.9	261.3	262.1	286.8	261.2
13	269.1	277.9	260.6	284.0	299.7	249.2	219.5	269.0	227.4	210.8	211.3	233.0	210.5	225.4	222.8	204.0	203.8	209.2	172.1	210.3	241.2	254.9	247.3	242.0
14	245.4	245.2	256.5	251.8	265.0	273.6	281.0	229.2	220.6	228.8	226.9	220.8	211.0	216.9	192.5	187.4	232.1	230.0	239.9	254.2	273.3	5.6	2.7	357.3
15	342.7	334.9	338.0	334.6	328.5	334.1	332.2	342.9	358.2	0.6	354.9	352.7	359.0	348.7	354.4	351.8	346.2	359.2	8.6	7.8	9.3	19.3	18.3	25.0
16	28.5	27.0	30.3	29.9	26.8	29.8	29.0	355.7	49.0	146.6	231.8	232.0	174.8	212.6	18.6	198.1	170.3	164.1	138.4	134.2	126.6	152.1	149.8	166.2
17	151.3	110.5	130.0	129.5	124.6	123.6	175.6	187.8	102.6	116.2	123.6	129.8	133.3	124.0	117.1	126.1	115.2	119.1	117.7	125.4	122.2	104.1	107.4	105.3
18	97.1	97.6	109.7	111.5	111.4	113.9	108.3	110.6	112.3	107.1	102.5	105.7	100.2	98.1	102.0	106.0	108.9	109.1	111.4	109.5	108.9	104.2	99.3	104.2
19	99.8	103.8	103.4	98.0	91.7	97.2	91.0	96.9	96.0	104.7	113.6	110.9	118.5	113.8	111.6	110.9	111.7	115.6	118.6	113.6	118.5	111.5	117.3	115.4
20	113.6	114.9	105.7	99.3	95.7	96.0	99.9	121.8	105.8	105.6	112.4	117.4	122.2	125.0	122.7	116.5	123.6	124.6	120.7	125.6	125.1	117.3	112.9	114.6
21	117.0	111.1	120.6	124.0	112.3	102.9	101.6	101.3	101.0	107.5	113.9	117.4	118.5	121.7	121.9	123.1	123.6	126.8	125.3	122.2	120.1	112.6	111.6	120.6
22	115.3	114.8	110.6	108.5	116.3	117.5	114.0	114.0	111.7	113.8	118.2	118.8	121.0	119.3	119.4	119.2	119.5	115.9	111.1	108.5	103.9	100.4	99.1	92.1
23	83.9	77.1	71.5	12.3	13.9	16.3	22.7	23.3	16.2	2.9	3.9	350.0	349.7	350.3	355.4	357.1	357.4	355.4	348.9	338.7	327.4	332.6	331.5	330.2
24	329.9	327.2	330.0	338.8	2.2	8.4	8.8	9.6	12.5	5.6	7.0	2.5	343.3	346.2	41.0	324.9	248.8	127.1	127.8	115.2	104.9	108.0	140.7	143.5
25	155.4	136.8	159.9	223.8	225.5	241.7	242.3	177.7	224.5	166.9	149.6	144.9	129.2	125.4	111.2	137.8	133.8	137.9	140.8	145.0	129.1	115.4	114.0	121.1
26	113.3	108.1	101.7	91.5	90.7	97.5	103.5	100.5	107.5	96.1	109.3	130.2	124.4	132.7	147.8	142.8	127.5	148.1	156.7	172.9	104.9	72.4	73.7	68.7
27	72.8	58.7	42.3	45.3	34.3	15.4	28.8	39.8	95.0	19.7	30.1	77.3	87.7	103.4	129.4	153.5	138.2	153.3	148.1	149.9	110.6	21.1	30.7	13.8
28	330.6	22.5	26.9	26.5	27.4	20.1	23.7	20.4	18.0	34.2	29.9	5.0	14.7	27.5	25.7	273.7	165.0	304.0	266.6	274.3	320.4	354.1	8.9	5.2
29	13.5	9.2	2.9	15.5	15.3	12.6	8.5	9.8	9.3	4.2	6.9	6.1	7.4	4.9	357.8	356.7	358.1	351.7	348.2	355.7	355.2	0.2	1.1	3.4
30	18.7	10.1	17.0	15.2	10.1	4.5	1.7	6.8	8.9	359.6	359.5	357.3	358.5	3.3	11.4	7.6	8.3	13.3	294.6	288.2	10.9	15.8	14.8	14.1
31	21.0	22.9	23.1	15.6	16.5	14.2	25.5	23.5	26.5	23.0	20.0	13.7	22.9	20.1	121.6	146.7	220.3	219.5	231.5	248.9	28.5	25.4	27.2	20.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	149.2	129.0	135.1	121.7	124.8	138.5	145.1	162.4	149.9	138.0	142.7	156.4	145.2	144.8	135.5	132.4	142.4	144.1	160.1	153.1	135.1	125.7	129.7	135.0
2	126.9	131.7	131.1	121.1	134.1	134.1	136.1	143.9	170.5	219.4	224.3	200.1	174.7	176.0	165.5	153.9	144.9	138.8	139.0	136.6	135.6	135.4	137.5	125.9
3	119.5	117.3	112.1	110.0	111.3	108.2	103.2	105.7	104.8	105.1	110.2	111.0	109.6	107.1	105.8	106.5	105.1	105.7	104.9	103.7	100.9	97.2	99.7	107.8
4	103.7	100.6	101.1	100.9	90.4	78.4	30.7	54.3	23.2	45.1	48.4	50.0	51.8	29.8	6.1	354.3	317.5	290.4	276.4	307.9	321.3	342.5	333.9	337.3
5	287.3	235.1	283.2	277.5	269.3	250.1	267.9	253.3	256.7	257.9	256.4	252.8	256.5	252.6	248.5	235.7	208.0	248.2	258.4	273.9	264.5	286.2	276.6	269.2
6	254.9	258.8	250.6	260.8	238.9	257.3	271.5	247.3	229.2	201.3	342.6	334.0					280.1	269.9	157.4	135.9	153.0	134.3	113.0	117.9
7	117.3	114.1	111.4	104.6	104.7	99.4	97.7	101.4	105.3	105.4	105.4	109.9	112.7	110.9	115.3	115.5	113.7	107.4	109.1	108.6	108.7	112.8	109.1	108.9
8	113.6	118.2	125.9	121.2	129.0	127.0	120.8	121.9	122.3	120.8	130.1	124.9	129.1	137.7	135.8	166.0	167.2	152.6	131.8	162.0	159.3	146.2	139.1	140.6
9	134.9	130.6	129.5	132.4	130.7	128.4	132.5	139.0	134.3	136.2	135.0	128.5	130.1	153.1	136.6	146.9	132.0	128.4	133.3	129.0	128.6	117.6	102.7	98.9
10	161.9	236.2	177.2	154.6	132.8	112.1	192.2	322.6	322.0	247.0	159.1	98.2	122.2	135.3	140.3	144.5	141.8	142.3	138.2	125.2	118.5	117.2	115.6	118.4
11	119.5	122.5	119.2	114.6	114.2	112.5	113.6	115.0	117.0	115.0	111.4	110.8	111.4	106.6	109.2	109.5	115.1	114.5	111.5	112.0	111.8	109.7	109.6	109.6
12	114.8	112.9	115.1	121.3	145.3	155.3	159.7	186.4	180.5	161.2	170.2	171.5	186.5	202.9	188.2	185.8	202.3	228.5	227.5	221.0	209.1	203.4	196.3	203.0
13	175.7	144.1	136.2	128.9	131.0	132.1	132.9	136.8	163.4	189.8	192.0	179.6	154.0	163.8	161.8	180.5	143.6	135.3	137.0	170.4	137.8	129.4	122.3	171.0
14	106.6	90.4	88.8	78.1	66.2	73.8	77.0	32.0	21.5	24.7	19.9	63.1	8.0	16.3	258.6	1.0	334.8	309.1	288.3	313.8	325.0	325.7	325.2	324.1
15	328.0	328.1	326.6	320.2	319.9	324.6	327.8	329.9	351.5	345.2	334.7	331.6	329.9	325.0	302.9	309.8	293.3	298.8	292.7	292.2	309.2	293.8	290.5	288.8
16	281.1	289.8	285.9	273.7	304.7	331.6	300.3	346.4	319.1	9.7	7.8	346.3	332.0	335.7	289.4	286.5	264.9	261.1	254.2	254.3	262.5	254.1	257.7	263.0
17	257.9	246.4	254.8	255.8	257.7	228.5	241.7	245.0	235.2	227.7	232.7	221.8	199.6	167.0	164.4	167.9	156.9	142.2	103.9	118.7	93.2	72.2	91.4	92.0
18	108.1	113.6	120.2	118.0	109.5	108.7	102.0	111.0	100.7	107.1	110.4	109.1	108.5	108.3	110.0	120.9	125.4	116.7	113.6	115.0	112.0	113.3	142.3	165.6
19	194.3	221.0	216.7	212.0	239.8	214.9	195.0	208.8	186.0	167.6	181.1	199.5	206.0	208.9	221.1	217.7	226.5	222.8	217.6	216.2	211.7	209.1	210.0	209.3
20	208.5	222.5	216.7	225.6	218.7	214.6	219.9	226.8	225.9	219.4	223.6	216.9	228.8	232.3	243.5	235.1	235.8	236.9	230.9	298.4	311.0	272.3	268.1	260.6
21	275.9	292.9	283.4	275.8	307.6	303.1	303.2	269.5	304.2	319.6	322.0	323.7	320.5	321.6	314.7	289.5	317.2	321.7	329.6	328.5	324.8	354.1	356.7	7.7
22	7.6	13.8	16.4	8.9	14.5	11.3	19.2	19.5	27.7	24.8	25.0	97.1	103.5	104.5	104.2	98.6	104.6	95.8	97.5	88.3	91.4	97.0	96.0	98.9
23	93.7	72.5	48.3	62.2	49.4	47.1	60.4	81.2	78.4	113.6	136.2	137.9	138.3	141.7	149.9	137.1	149.7	144.3	148.7	157.4	197.9	201.3	198.7	194.4
24	205.0	214.6	203.9	227.0	238.8	244.7	244.2	231.7	228.7	244.4	251.0	237.0	231.6	224.6	224.5	202.6	200.5	201.4	241.5	217.7	100.0	122.9	161.3	191.3
25	241.4	248.0	243.3	242.4	236.1	234.9	236.6	238.6	238.4	243.6	237.9	232.4	231.8	236.2	220.3	209.2	222.6	233.8	230.3	223.3	231.1	229.2	227.3	233.7
26	235.6	238.6	233.6	234.2	238.7	252.4	256.6	258.3	255.0	270.1	220.2	241.7	252.9	244.9	257.9	271.0	259.8	240.9	241.5	256.2	276.6	283.0	249.6	249.6
27	239.5	283.4	276.1	280.3	250.5	246.3	255.9	249.2	255.8	237.9	261.8	204.5	149.5	162.6	156.2	147.4	112.6	110.2	109.4	122.1	115.8	115.1	115.1	108.7
28	109.1	113.9	108.0	106.1	102.6	100.7	108.7	121.3	120.7	132.1	140.9	130.8	125.1	123.3	122.8	119.7	84.1	52.2	58.2	51.6	32.4	12.1	0.6	336.6
29	5.4	356.6	3.6	354.4	357.3	5.9	11.2	14.0	358.7	8.0	22.0	191.6	179.1	170.4	218.2	224.6	224.4	210.2	162.2	139.7	211.5	223.7	225.8	239.4
30	249.0	246.4	234.6	220.3	194.7	178.8	181.9	159.4	137.4	130.4	127.0	207.8	226.2	208.9	212.8	176.5	171.1	173.0	172.7	195.1	157.1	191.6	234.2	233.4

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	238.5	249.3	247.3	243.5	248.9	259.6	272.4	227.8	229.3	311.4	336.5	348.8	3.5	346.3	326.6	309.8	296.9	287.7	291.4	310.0	297.7	302.3	289.9	287.7
2	287.1	284.3	284.2	285.8	293.4	297.4	304.2	308.7	312.0	319.1	316.2	314.3	318.2	317.8	319.4	320.1	321.0	316.8	316.7	309.4	316.7	317.5	321.3	324.5
3	326.3	326.2	323.1	319.0	325.9	331.4	332.0	327.4	327.1	332.2	331.5	337.7	345.1	333.5	341.9	342.5	351.6	343.8	330.3	335.7	6.1	24.5	9.0	317.4
4	28.6	14.9	24.1	57.0	56.3	91.5	107.6	120.2	124.1	128.3	113.5	120.8	112.6	111.5	114.9	114.8	119.8	120.8	123.0	128.6	123.7	128.8	139.2	138.0
5	139.6	141.8	132.6	142.3	141.6	141.6	140.4	138.8	123.8	109.3	106.1	96.5	130.1	271.5	300.3	300.7	302.0	299.4	301.6	307.2	312.0	312.1	312.4	318.1
6	321.7	322.2	320.6	317.8	322.0	322.0	324.0	325.0	327.9	339.9	336.6	337.7	331.7	332.2	340.4	333.6	331.2	324.5	323.2	323.9	327.6	336.1	326.7	318.3
7	320.0	321.8	326.8	339.8	341.9	333.7	340.9	326.2	334.1	332.4	329.6	331.3	338.2	337.7	344.8	342.1	346.0	349.2	346.3	347.5	347.6	350.7	353.6	352.4
8	346.7	350.2	343.4	348.6	348.9	341.2	339.8	331.6	337.3	347.0	338.0	350.1	346.6	344.8	342.9	337.4	336.3	342.2	337.9	333.7	332.8	1.5	353.5	1.2
9	5.8	358.7	2.1	22.7	31.8	22.3	21.1	23.0	27.9	24.4	24.0	24.2	40.6	150.9	273.2	254.7	344.9	358.6	353.3	5.4	3.1	337.3	318.9	320.0
10	319.9	323.9	324.5	328.8	340.9	310.2	314.9	327.6	343.4	333.0	323.1	322.9	340.3	346.9	330.8	325.0	326.7	334.2	335.2	349.8	348.6	1.9	9.8	7.3
11	13.8	13.8	16.7	12.3	18.1	17.0	13.3	22.9	25.4	27.3	41.6	86.2	93.0	105.6	105.7	106.1	112.9	109.3	112.3	112.4	114.1	112.2	114.9	112.3
12	115.5	116.6	113.1	109.8	101.6	94.8	95.6	78.1	39.0	23.5	11.3	18.4	170.9	262.9	2.1	20.7	346.9	341.1	0.7	2.6	4.8	9.7	29.1	16.9
13	22.0	12.0	18.5	7.5	5.6	10.6	12.1	9.8	11.4	16.0	14.7	14.7	10.7	8.5	11.6	356.4	304.8	324.8	325.8	317.3	318.2	333.3	333.2	325.4
14	332.9	335.2	326.6	339.3	348.3	0.4	350.7	344.3	344.1	343.8	341.0	320.2	340.9	336.2	347.6	340.3	346.7	334.1	332.9	346.4	354.0	8.4	10.2	19.5
15	18.3	20.5	30.3	30.0	27.7	27.0	38.0	20.6	38.6	35.3	65.2	33.3	44.9	83.2	42.2	15.3	14.1	27.4	18.9	17.3	18.0	19.0	19.1	15.1
16	16.7	17.8	19.7	22.1	20.0	22.9	358.5	15.2	17.5	2.5	359.9	1.1	18.5	14.3	9.5	5.9	8.5	9.3	4.2	4.3	2.1	10.3	8.4	9.3
17	12.3	11.8	9.1	3.4	3.1	7.4	11.1	11.2	13.8	14.1	14.1	12.8	10.7	13.9	11.0	359.4	0.2	9.2	3.7	1.2	6.9	9.2	12.1	17.8
18	14.8	15.7	16.9	19.3	18.1	10.9	15.2	14.5	10.0	10.2	358.3	3.7	316.4	326.0	15.1	262.2	290.5	307.3	300.1	297.5	290.4	294.4	293.3	304.4
19	17.2	14.7	356.3	351.7	1.9	9.9	5.0	7.5	4.0	18.5	335.2	283.1	315.0	0.3	20.7	92.2	79.1	47.1	38.8	32.1	29.6	43.3	35.0	46.4
20	59.4	37.7	17.8	19.9	17.8	20.0	22.3	21.1	19.9	20.2	28.8	24.3	84.0	81.1	78.2	85.1	79.1	82.3	74.4	75.4	75.7	72.5	71.6	71.2
21	86.5	84.3	87.6	85.6	86.0	88.5	94.1	100.8	99.1	94.1	81.8	70.4	57.2	53.4	53.0	43.8	49.1	38.2	4.3	19.5	7.9	18.3	16.7	19.6
22	18.4	351.7	4.8	5.4	12.6	12.8	22.5	24.2	23.7	24.4	20.7	26.6	45.5	83.5	73.2	127.0	125.7	140.7	157.3	85.8	104.2	108.0	85.1	91.1
23	123.2	128.6	18.1	109.8	127.9	103.4	39.1	54.3	133.5	134.3	131.2	203.4	221.3	195.2	166.5	121.0	84.4	348.8	336.0	315.6	299.5	345.2	350.6	306.3
24	306.0	246.0	358.4	39.1	31.2	196.8	340.5	76.1	136.4	133.8	151.5	139.7	160.9	165.8	169.7	143.0	135.3	111.7	99.1	98.6	92.3	82.6	87.3	98.0
25	104.6	103.8	107.0	106.3	109.9	104.4	107.4	111.5	109.8	108.2	105.0	103.0	102.4	102.7	105.0	105.4	105.6	104.0	103.9	107.5	129.3	124.7	147.6	164.9
26	125.6	118.8	120.6	109.0	101.2	102.3	102.7	115.5	136.9	127.2	124.0	133.7	116.9	115.4	122.5	113.2	114.9	93.6	93.7	93.0	94.8	95.1	94.1	91.9
27	96.8	97.7	98.5	98.1	98.6	101.6	97.6	101.8	65.4	41.8	40.2	57.2	72.8	95.6	96.3	91.9	88.8	103.1	107.8	109.2	109.2	109.8	130.8	129.0
28	120.7	93.8	88.4	97.2	186.3	147.0	62.3	170.4	144.9	156.3	163.5	159.8	146.8	159.6	133.0	129.5	114.5	112.8	110.4	108.2	102.6	104.7	98.7	98.5
29	101.9	102.4	105.8	107.3	105.1	100.8	102.0	104.6	100.3	99.7	97.4	96.5	95.7	100.0	100.7	100.4	104.1	103.1	98.2	103.0	99.6	98.6	100.5	96.9
30	88.1	61.4	30.8	29.5	32.2	33.4	35.2	11.3	8.0	5.1	6.4	14.1	326.7	234.4	244.1	241.8	231.2	237.2	246.3	247.9	248.1	251.9	250.8	252.5
31	262.6	254.1	241.9	243.1	245.8	244.3	242.8	235.6	231.2	226.9	220.6	211.3	213.5	207.2	196.3	180.4	168.4	141.5	99.7	79.2	79.6	82.6	72.2	62.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	70.4	53.0	56.0	66.0	59.6	38.4	35.7	21.4	7.0	19.2	18.6	19.3	21.9	20.1	277.2	227.6	223.0	242.1	267.8	272.3	256.2	260.8	265.9	271.6
2	269.9	261.9	313.9	298.1	310.4	285.6	267.4	320.4	333.3	328.6	333.4	328.7	326.2	328.0	333.7	8.0	335.1	299.9	304.8	312.8	308.9	318.6	332.0	321.9
3	330.1	321.0	321.0	317.4	318.6	319.6	322.5	343.3	8.1	12.8	341.1	272.9	308.7	71.0	153.4	144.4	201.6	170.6	104.0	102.5	108.4	105.1	107.6	106.8
4	110.2	108.3	103.3	102.2	106.0	109.8	103.5	109.7	113.3	115.0	121.0	121.9	122.0	123.1	119.6	120.3	120.4	119.1	119.1	138.0	133.7	122.9	119.6	107.7
5	105.4	104.9	106.6	107.8	111.2	109.2	100.8	100.2	98.9	97.0	97.5	97.2	96.1	87.9	82.2	81.5	82.2	94.7	94.9	98.3	99.0	99.3	98.2	100.8
6	97.7	97.3	101.0	99.9	103.0	98.0	89.9	86.5	86.9	86.4	91.2	89.1	89.1	94.5	95.0	94.6	96.7	100.0	100.0	98.7	102.2	109.7	133.9	153.4
7	138.9	123.2	107.6	104.2	103.4	106.9	109.7	117.3	125.2	125.1	119.9	123.5	124.6	142.3	168.0	167.5	180.6	169.2	181.6	209.4	204.5	210.4	204.2	177.9
8	159.7	121.7	96.4	88.5	95.1	95.1	96.8	100.1	103.5	99.6	100.7	99.6	103.9	110.5	107.5	110.2	105.7	111.2	108.2	118.3	107.1	99.5	103.0	99.6
9	101.6	101.3	103.0	106.2	107.2	101.3	98.4	97.4	97.9	100.0	98.1	102.4	101.7	98.7	102.4	104.7	109.2	111.0	99.9	92.0	91.7	90.0	62.4	30.1
10	15.8	15.5	17.7	24.4	27.3	10.6	12.3	14.9	13.4	1.8	15.4	17.0	10.6	7.9	6.4	356.4	8.2	5.0	5.6	12.6	10.1	13.3	10.7	13.3
11	13.3	19.1	21.2	14.9	15.8	21.0	20.3	19.7	17.4	16.7	4.3	6.8	15.2	13.9	18.5	14.1	13.8	10.8	19.9	17.4	21.9	21.3	13.2	322.1
12	21.2	20.6	325.7	327.7	26.6	82.7	129.7	297.7	312.3	269.3	341.4	12.9	50.3	36.2	40.5	54.3	105.4	102.1	105.3	107.7	104.9	107.4	106.4	106.7
13	107.1	104.7	103.8	102.4	96.8	99.5	100.9	101.1	99.9	97.3	91.7	91.0	88.1	128.3	170.9	296.5	10.2	76.1	94.7	95.4	99.1	102.2	109.3	119.6
14	142.1	152.3	157.1	145.8	149.4	152.9	137.4	146.3	165.7	72.6	45.3	77.7	84.8	88.2	85.3	80.5	76.1	71.9	74.0	70.2	56.1	28.2	14.5	16.7
15	15.2	18.7	20.1	19.6	10.4	15.4	17.4	14.2	13.5	19.2	18.7	14.1	13.5	11.7	14.1	15.6	7.8	11.1	4.8	15.9	10.7	13.8	13.6	18.6
16	5.5	356.6	354.1	354.8	352.8	357.4	351.3	352.9	357.5	354.5	354.7	1.2	1.0	353.4	353.8	355.8	353.0	350.5	0.0	352.5	354.7	359.9	355.3	355.8
17	355.5	349.6	355.8	354.2	350.1	347.2	351.1	349.4	352.4	351.9	0.2	359.2	356.4	357.9	358.2	357.3	347.6	348.9	359.0	354.6	360.0	0.2	1.5	18.9
18	18.2	9.2	352.9	14.7	11.8	11.9	0.6	4.1	10.4	18.8	19.4	10.8	15.7	9.8	13.4	3.3	12.2	7.7	13.1	326.5	354.8	22.3	19.9	19.3
19	26.5	26.7	28.4	20.4	21.8	358.7	21.7	348.1	76.4	88.0	83.0	84.5	92.0	86.2	85.3	94.0	97.9	89.5	78.7	73.0	72.2	66.5	70.8	71.7
20	73.8	75.3	77.9	82.4	79.6	92.3	97.8	94.6	97.5	93.7	95.7	95.6	97.3	99.2	98.9	92.3	97.0	93.4	82.3	63.8	54.7	43.6	66.2	74.3
21	52.5	58.8	67.7	67.7	81.3	95.0	119.3	135.0	148.6	123.9	117.8	116.9	115.1	111.1	109.4	119.4	131.1	120.7	116.4	116.7	116.9	117.4	116.9	119.4
22	122.0	134.2	99.8	89.9	79.2	45.0	43.3	49.4	86.3	96.3	98.8	97.6	96.0	95.0	87.9	83.0	81.0	89.4	98.7	114.6	122.9	128.8	149.1	161.1
23	158.2	164.8	175.7	183.2	197.8	218.8	218.7	207.9	208.7	212.4	218.3	220.8	227.3	229.0	232.4	237.2	253.2	256.4	237.4	230.7	237.3	239.7	250.4	244.2
24	235.1	248.2	247.1	267.4	218.3	207.1	204.5	203.8	202.6	193.9	122.2	96.3	91.2	94.4	99.5	97.6	98.4	99.5	101.7	99.7	91.3	100.7	101.4	95.1
25	99.0	99.2	94.6	94.6	98.0	96.4	92.1	80.9	83.7	92.1	93.5	99.2	92.0	91.2	88.2	92.9	88.6	88.1	84.5	75.0	77.0	80.9	73.5	45.0
26	44.2	43.7	37.9	23.7	25.9	36.4	54.9	60.7	120.8	102.9	116.5	134.6	133.6	152.3	133.0	158.8	135.3	147.3	160.2	164.7	160.6	127.3	123.9	116.5
27	129.6	119.6	103.1	108.1	112.2	114.3	107.5	105.2	107.4	108.9	110.2	113.8	107.0	110.4	108.3	105.2	112.9	125.6	108.9	99.0	104.2	107.9	103.9	111.8
28	117.5	114.8	108.7	114.7	126.6	131.1	129.7	235.0	164.3	156.9	133.0	123.3	133.4	135.5	127.6	127.0	129.9	129.9	124.0	117.3	120.0	120.9	130.3	126.1
29	119.1	118.7	116.5	113.6	108.2	99.6	108.5	109.3	112.1	112.2	115.3	115.3	117.3	114.4	114.5	112.2	111.4	111.5	110.7	111.4	114.5	114.9	115.5	112.7
30	110.0	113.7	111.1	110.7	114.9	114.8	115.6	114.3	113.1	117.1	115.8	111.5	109.2	111.9	118.7	118.7	123.5	128.0	129.3	117.4	114.0	115.7	116.1	117.8

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	123.7	120.5	130.7	140.8	132.8	132.6	133.7	150.7	118.7	130.0	118.8	125.9	127.5	132.6	119.4	123.9	151.8	168.1	162.4	284.0	4.1	348.9	345.6	19.6
2	9.2	4.1	19.5	25.8	28.9	21.8	19.5	18.4	21.8	21.0	24.6	21.6	37.5	23.3	241.4	178.8	202.7	20.2	25.0	23.9	55.5	63.9	72.9	92.4
3	95.5	97.2	96.0	100.7	101.8	103.1	101.4	98.2	97.1	94.9	95.4	87.8	92.2	97.4	88.7	87.0	85.1	75.1	78.1	78.5	78.5	78.3	75.6	73.6
4	73.7	78.7	82.6	79.0	84.0	88.8	47.2	38.4	75.3	76.5	75.6	76.7	77.1	91.1	121.7	128.5	127.1	119.8	122.7	123.1	127.1	125.9	130.8	128.6
5	130.2	129.0	124.8	126.5	125.6	125.9	126.0	125.9	122.4	109.5	104.9	104.6	107.3	110.9	115.4	115.7	113.4	109.5	109.7	112.4	112.9	109.6	120.0	115.0
6	113.0	115.6	117.9	119.9	117.6	117.4	119.8	122.0	117.8	113.3	115.0	112.8	111.1	109.9	118.4	121.5	139.6	178.2	210.1	236.4	222.2	214.7	195.1	193.9
7	189.1	162.2	147.8	133.1	119.8	119.2	107.3	100.6	97.4	90.5	85.5	98.1	109.6	97.9	96.2	99.9	100.4	100.7	98.1	94.7	93.2	94.0	95.2	100.7
8	108.1	121.7	150.7	162.4	157.1	158.5	171.4	160.2	144.8	132.8	118.7	114.0	121.3	135.5	138.3	146.8	218.0	236.4	217.3	236.4	231.7	226.0	230.6	250.0
9	242.4	207.6	120.3	126.9	104.7	95.9	88.7	90.6	89.3	100.3	105.1	105.3	107.7	107.4	106.0	109.3	110.0	112.6	110.5	111.8	114.8	116.2	115.6	115.1
10	114.2	120.8	109.1	93.0	95.2	77.9	38.5	43.5	38.0	33.5	30.3	21.9	10.5	8.0	13.9	19.6	20.5	17.1	12.4	13.9	3.3	351.1	320.5	325.8
11	325.5	328.6	325.0	320.3	308.5	301.5	290.8	280.2	304.8	1.5	11.1	354.1	353.5	316.5	5.6	8.7	18.5	25.4	226.8	290.1	6.5	23.3	21.6	15.5
12	13.1	23.7	27.8	21.0	27.5	30.0	57.8	63.1	63.7	13.5	5.3	8.9	14.2	21.2	13.3	53.6	10.6	12.7	18.5	24.6	22.0	24.3	23.3	22.7
13	25.7	28.0	27.9	39.3	33.6	30.7	26.0	26.0	29.4	31.1	30.1	23.3	23.2	20.3	17.8	14.9	20.8	23.7	23.7	17.7	19.0	12.2	16.1	19.6
14	16.5	11.6	14.1	16.6	14.7	12.6	14.0	13.1	6.3	10.4	13.6	16.6	9.4	359.9	16.1	18.2	9.2	12.2	7.3	8.9	0.8	9.6	5.1	348.9
15	347.9	11.0	17.5	348.4	338.9	342.0	339.9	334.8	327.7	326.9	326.2	328.2	327.0	326.9	325.6	329.0	326.5	329.7	329.0	334.7	337.8	339.3	338.7	332.1
16	334.4	333.3	335.1	340.3	341.0	337.7	349.2	350.2	344.1	348.5	348.9	351.5	344.9	344.5	349.0	349.6	347.7	354.7	354.1	354.8	355.7	351.6	352.4	357.3
17	349.4	353.5	354.1	355.2	355.9	355.4	356.5	346.5	346.1	349.0	354.6	351.3	350.2	355.6	355.3	356.2	356.1	358.3	5.4	6.5	3.6	2.8	7.4	12.6
18	13.0	14.0	18.4	21.9	22.7	24.1	22.8	15.9	14.0	18.8	19.6	25.1	18.5	18.7	20.4	16.4	10.7	10.7	14.6	14.3	11.0	13.3	16.2	7.7
19	2.1	0.7	9.9	0.3	358.6	12.3	14.0	3.6	8.8	15.0	9.0	12.6	23.3	12.9	357.6	1.4	359.1	6.2	5.4	22.1	7.0	14.4	26.4	19.6
20	24.3	23.6	21.8	27.5	22.8	32.2	84.5	88.5	88.0	92.9	96.2	103.4	104.3	106.1	108.3	110.2	115.7	128.0	126.1	122.0	136.6	139.7	135.6	118.9
21	110.8	116.1	112.8	115.3	123.2	117.7	139.7	172.6	166.9	141.0	148.3	144.3	143.2	130.4	116.3	109.8	112.9	100.5	102.6	107.2	104.5	100.1	100.1	111.4
22	115.0	106.9	105.6	98.3	101.3	105.6	109.5	109.4	109.8	110.1	106.2	107.0	114.1	117.0	117.8	121.3	123.2	119.3	114.9	116.0	129.2	215.5	249.6	236.2
23	235.3	238.2	229.3	231.4	227.0	218.9	217.8	220.1	243.3	311.4	311.9	312.0	303.4	272.2	278.6	290.7	297.4	330.2	1.5	348.5	269.9	219.5	328.7	43.6
24	22.0	21.4	24.2	22.3	23.3	19.6	13.4	10.7	9.6	8.3	3.2	356.6	355.0	354.8	354.5	355.3	357.0	354.6	346.8	346.9	349.1	349.1	346.2	343.7
25	340.6	340.2	342.0	341.1	336.0	334.1	334.4	337.1	338.6	340.7	349.3	346.7	334.7	326.1	322.1	322.7	321.8	341.2	334.1	348.5	18.2	357.5	7.6	10.5
26	17.5	25.6	24.7	29.9	26.7	46.8	42.3	37.0	69.0	109.7	103.3	103.4	90.9	84.5	88.9	95.4	94.4	101.5	109.6	99.2	89.9	91.8	92.7	90.9
27	90.7	89.4	93.4	93.9	93.6	90.1	87.3	81.6	84.4	87.1	88.6	90.2	91.2	89.8	89.8	81.5	77.8	73.6	79.8	96.3	121.0	165.1	186.1	175.4
28	172.0	187.9	199.1	207.3	223.1	260.3	270.3	278.9	270.3	334.2	352.0	15.1	1.3	3.6	10.8	11.5	17.3	4.2	6.7	6.1	1.9	356.1	359.2	3.1
29	357.0	353.7	346.3	22.4	11.7	342.7	332.4	349.6	6.8	8.9	0.1	2.2	356.4	349.7	336.5	1.2	353.6	322.5	319.0	319.7	316.9	323.3	320.0	317.6
30	320.6	326.9	336.4	336.4	341.7	3.7	4.2	5.2	11.9	19.7	19.5	18.1	14.3	19.2	20.7	31.2	25.9	26.4	20.1	23.2	20.9	18.8	20.5	22.8
31	24.6	13.4	15.1	19.7	17.6	18.6	22.3	17.6	18.8	18.0	21.7	18.5	20.6	20.1	20.4	17.6	18.9	20.1	18.9	19.3	16.4	17.4	15.5	18.3

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.1	3.1	3.2	2.9	3.2	3.0	7.1	4.6	5.5	4.0	3.4	3.6	4.1	4.4	4.9	4.2	4.8	4.0	4.5	3.8	5.8	4.1	4.1	4.0	7.1	2.9	4.1
2	3.9	3.5	3.0	3.7	3.1	3.9	3.9	4.8	4.4	5.7	3.9	3.7	3.8	4.1	3.1	3.5	3.2	2.9	4.0	2.7	3.6	3.3	2.5	3.3	5.7	2.5	3.6
3	3.6	4.8	4.6	7.6	6.2	7.6	5.1	5.8	5.3	4.2	4.3	3.3	2.8	5.6	8.0	6.9	3.4	2.8	6.3	9.4	6.0	6.6	7.5	4.5	9.4	2.8	5.5
4	15.2	5.1	6.0	3.4	3.5	4.6	3.7	4.5	5.6	5.5	5.5	5.6	5.1	12.3	14.9	9.1	3.7	5.0	4.5	6.0	15.2	33.1	13.2	27.9	33.1	3.4	9.1
5	14.7	18.1	6.3	6.4	5.0	12.0	7.7	4.4	4.9	17.0	5.7	3.6	4.5	20.3	6.4	5.9	4.8	5.4	8.4	18.3	17.2	5.8	5.3	4.0	20.3	3.6	8.8
6	4.8	3.1	6.7	5.0	4.5	4.1	5.6	6.6	10.5	5.2	2.1	3.2	3.6	7.1	4.5	5.1	4.3	5.0	11.1	4.5	5.3	5.8	5.6	6.2	11.1	2.1	5.4
7	4.0	5.7	4.1	3.8	4.0	5.0	4.7	4.2	4.1	3.3	3.9	5.3	5.0	4.4	4.2	6.7	6.7	3.5	5.6	1.9	3.2	4.3	3.7	3.7	6.7	1.9	4.4
8	4.6	3.2	4.8	3.5	5.2	5.3	4.4	4.7	4.0	3.5	3.7	2.9	4.4	6.1	4.8	5.3	4.6	3.8	3.4	4.3	5.1	7.6	7.3	3.4	7.6	2.9	4.6
9	7.6	5.0	5.2	24.4	8.5	4.6	8.7	6.5	8.6	11.4	9.5	37.6	49.1	8.5	11.9	25.3	6.3	5.6	6.5	6.8	4.5	17.0	9.0	5.1	49.1	4.5	12.2
10	6.8	6.2	5.8	6.7	5.6	5.9	5.1	4.3	3.9	3.5	3.6	3.6	3.0	2.9	3.2	3.0	3.5	3.5	3.4	3.2	3.8	3.7	3.2	3.5	6.8	2.9	4.2
11	3.3	3.4	3.3	3.2	3.4	3.3	3.2	3.4	3.5	3.4	3.5	3.5	3.2	3.3	3.2	3.4	3.4	3.4	3.8	3.6	3.8	3.6	3.7	3.8	3.8	3.2	3.4
12	3.9	4.1	3.9	3.8	4.1	4.1	3.9	3.6	3.1	3.0	3.3	3.5	3.4	3.3	3.1	3.6	3.4	3.6	3.8	3.6	3.3	5.3	8.8	3.8	8.8	3.0	3.9
13	4.1	4.3	4.4	3.9	3.8	4.1	4.0	3.8	15.8	3.6	3.7	6.2	8.2	13.6	5.1	11.9	6.4	7.3	4.8	3.4	3.5	2.5	3.2	3.0	15.8	2.5	5.6
14	3.0	3.7	5.0	4.0	6.3	7.0	4.6	4.2	5.4	5.9	5.5	1.9	2.3	3.9	4.5	5.2	5.6	5.1	12.3	9.2	9.0	8.3	5.2	3.5	12.3	1.9	5.4
15	5.1	5.0	5.5	4.3	6.2	2.0	3.3	3.6	3.6	5.1	4.5	3.4	3.0	3.6	5.1	5.7	5.6	3.7	48.3	41.0	5.8	7.8	4.0	4.1	48.3	2.0	7.9
16	6.6	5.4	5.0	7.0	8.1	18.0	3.8	3.8	3.9	4.0	3.6	4.1	4.4	4.3	3.9	4.1	4.2	4.1	3.9	3.9	3.9	3.5	3.3	3.0	18.0	3.0	5.0
17	3.0	3.6	2.8	3.1	2.9	4.1	4.8	3.1	2.9	5.0	3.4	4.0	3.9	3.5	3.9	3.4	3.3	3.1	4.0	4.5	3.8	3.8	3.5	3.2	5.0	2.8	3.6
18	3.2	4.0	5.2	5.9	10.1	10.3	6.8	5.3	6.8	8.7	10.6							5.7	23.9	21.4	6.0	26.1	10.1	17.3	26.1	3.2	10.4
19	16.6	21.1	11.0	43.3	11.4	10.8	19.4	16.7	47.8	5.4	7.6	6.0	23.7	22.6	21.3	29.8	3.7	4.3	4.0	4.2	4.2	4.5	4.1	4.2	47.8	3.7	14.5
20	4.4	3.8	4.1	3.3	3.4	3.3	3.1	3.3	3.4	4.0	4.2	3.5	5.4	5.3	6.0	3.8	4.4	4.4	9.1	5.0	6.3	3.5	3.0	4.2	9.1	3.0	4.3
21	4.7	5.9	4.3	11.3	40.2	9.3	13.8	6.1	18.5	9.8	13.2	4.1	4.2	3.2	3.9	5.0	5.0	10.7	5.4	7.1	5.2	5.5	5.0	4.8	40.2	3.2	8.6
22	12.8	9.4	11.6	24.0	5.3	4.2	21.4	19.9	3.5	3.6	4.1	5.2	5.0	5.8	5.7	6.2	5.4	8.9	6.0	5.6	5.1	8.0	6.2	4.7	24.0	3.5	8.2
23	6.4	4.8	4.4	11.9	4.1	4.1	3.2	5.7	4.4	3.5	6.1	3.1	4.5	5.1	6.0	6.2	12.0	3.9	8.5	4.0	8.0	4.4	3.6	7.0	12.0	3.1	5.6
24	9.6	5.7	2.9	2.7	2.6	3.1	7.7	11.2	9.1	6.0	7.0	4.1	3.9	10.7	6.1	4.5	4.3	4.0	4.0	13.1	5.6	5.0	6.5	5.5	13.1	2.6	6.0
25	6.4	13.4	12.6	4.1	4.5	3.3	3.5	6.1	5.1	3.9	4.1	4.2	5.2	4.1	4.0	4.3	4.9	4.4	3.6	3.7	3.5	3.4	3.3	3.9	13.4	3.3	5.0
26	3.5	3.6	3.8	3.6	3.7	3.8	3.9	4.3	4.0	3.8	4.1	4.5	3.6	3.2	3.6	3.2	3.8	3.2	3.2	2.9	3.2	6.1	3.8	3.6	6.1	2.9	3.8
27	3.2	3.8	3.2	3.7	3.5	3.7	4.0	5.0	5.2	3.5	5.8	4.5	3.6	3.5	4.2	3.6	3.5	4.6	4.4	4.4	3.9	4.5	4.3	3.9	5.8	3.2	4.1
28	3.3	3.4	3.7	3.8	3.7	3.6	3.1	3.4	3.8	3.2	3.0	4.4	3.9	4.0	3.5	3.5	3.2	4.6	4.3	3.3	2.2	2.9	2.5	3.4	4.6	2.2	3.5
29	4.1	5.2	4.5	3.8	3.8	4.0	3.9	5.1	4.5	3.7	4.6	4.1	3.8	3.4	3.7	4.2	4.3	4.3	4.3	4.4	4.2	4.1	4.2	4.5	5.2	3.4	4.2
30	4.2	3.8	4.3	4.1	4.5	4.1	4.0	4.0	4.4	4.4	4.5	4.7	4.1	4.4	4.3	4.8	4.5	4.0	4.4	4.2	4.4	4.2	4.4	4.9	4.9	3.8	4.3
31	4.4	4.2	4.0	4.2	4.0	3.8	4.8	4.2	3.9	4.3	4.3	4.0	4.7	4.6	4.8	5.7	4.9	4.7	5.2	10.3	5.0	6.0	8.1	7.0	10.3	3.8	5.0
Max.	**16.6**	**21.1**	**12.6**	**43.3**	**40.2**	**18.0**	**21.4**	**19.9**	**47.8**	**17.0**	**13.2**	**37.6**	**49.1**	**22.6**	**21.3**	**29.8**	**12.0**	**10.7**	**48.3**	**41.0**	**17.2**	**33.1**	**13.2**	**27.9**	**49.1**		
Min.	**3.0**	**3.1**	**2.8**	**2.7**	**2.6**	**2.0**	**3.1**	**3.1**	**2.9**	**3.0**	**2.1**	**1.9**	**2.3**	**2.9**	**3.1**	**3.0**	**3.2**	**2.8**	**3.2**	**1.9**	**2.2**	**2.5**	**2.5**	**3.0**		**1.9**	
Avg.	**5.9**	**5.8**	**5.1**	**7.3**	**6.1**	**5.5**	**6.0**	**5.7**	**7.1**	**5.2**	**5.0**	**5.2**	**6.3**	**6.4**	**5.7**	**6.6**	**4.7**	**4.6**	**7.4**	**7.2**	**5.5**	**6.9**	**5.2**	**5.4**			**5.9**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.9	3.9	4.7	8.8	7.4	6.0	3.7	4.6	6.0	9.5	7.0	14.6	15.4	39.0	31.0	4.1	4.8	5.3	5.1	6.6	6.1	4.2	4.3	4.2	39.0	3.7	8.9
2	4.3	4.3	5.1	4.6	4.1	4.4	4.3	4.3	4.7	3.6	3.9	4.2	4.1	4.4	4.5	4.6	5.0	4.7	4.4	4.0	4.0	3.9	3.9	3.8	5.1	3.6	4.3
3	3.8	3.9	3.9	4.0	4.0	4.7	4.2	4.1	3.5	4.0	4.5	4.1	3.5	5.9	9.7	11.1	34.7	41.4	8.5	5.2	4.0	8.0	11.2	8.6	41.4	3.5	8.3
4	6.7	6.0	2.5	12.0	8.9	3.4	5.1	7.1	4.4	4.3	5.4	4.1	5.7	7.8	8.1	6.9	4.8	4.8	5.8	4.6	5.8	8.2	6.0	11.6	12.0	2.5	6.3
5	13.8	13.3	9.4	18.5	8.2	9.2	9.5	22.6	10.2	26.1	12.2	6.2	7.8	6.7	7.6	7.9	16.5	6.7	4.5	6.2	4.9	4.6	4.8	9.8	26.1	4.5	10.3
6	4.6	4.0	4.2	4.0	3.9	3.8	3.7	4.2	4.5	4.2	4.9	4.5	4.0	4.1	4.6	8.5	7.1	15.3	14.2	9.6	17.8	12.9	7.0	4.6	17.8	3.7	6.7
7	7.6	35.0	24.5	27.1	19.5	6.8	7.2	33.0	16.0	17.4	13.6	17.7	13.0	9.6	41.2	32.1	8.6	26.4	3.8	9.9	14.8	4.7	33.0	8.2	41.2	3.8	17.9
8	12.3	38.9	11.0	11.6	8.2	6.3	6.3	5.8	7.6	6.8	5.1	5.3	6.3	6.9	7.3	6.0	7.8	7.8	12.5	8.5	14.6	7.7	12.7	10.3	38.9	5.1	9.7
9	13.7	15.5	22.1	12.9	10.9	26.2	13.1	24.0	38.5	10.6	13.1	13.3	7.5	8.0	7.6	12.7	8.6	10.4	45.5	21.7	20.9	45.6	65.1	25.8	65.1	7.5	20.5
10	5.4	8.2	15.2	9.7	17.8	6.7	3.7	5.1	4.9	5.4	6.8	7.2	10.6	7.2	5.1	6.0	8.1	16.1	14.3	3.9	2.9	5.2	4.5	8.0	17.8	2.9	7.8
11	5.7	15.1	6.9	7.1	5.4	10.3	12.5	5.0	4.5	6.3	5.3	4.3	4.3	4.1	3.5	3.8	3.9	3.7	3.9	3.9	5.0	4.0	4.2	4.5	15.1	3.5	5.7
12	4.6	4.6	3.7	4.6	4.2	4.1	4.0	4.2	4.3	3.9	4.3	4.4	4.1	4.6	4.8	5.4	4.4	4.7	7.8	6.1	4.5	4.9	4.6	4.2	7.8	3.7	4.6
13	5.5	6.0	5.8	3.7	3.2	3.4	3.7	5.2	4.0	4.9	5.1	5.5	5.4	5.6	6.9	5.4	5.2	4.6	4.5	4.2	4.7	4.8	4.3	4.1	6.9	3.2	4.8
14	4.1	3.6	3.4	3.8	4.0	3.9	3.6	3.8	3.4	3.5	4.0	3.6	4.0	4.3	4.0	4.2	4.6	3.8	12.7	5.5	7.0	11.2	4.6	4.6	12.7	3.4	4.8
15	4.0	5.1	4.1	3.7	2.7	3.6	5.6	9.4	4.7	4.1	13.2	3.8	23.2	5.3	5.0	4.6	4.1	4.4	4.5	3.4	4.5	3.5	5.8	6.0	23.2	2.7	5.8
16	4.9	5.8	11.2	32.7	8.2	8.5	7.4	8.5	8.5	9.3	4.4	5.5	4.3	6.9	29.3	23.8	15.9	14.7	15.1	4.2	22.5	4.8	23.1	6.4	32.7	4.2	11.9
17	8.9	8.9	7.1	6.4	10.2	15.3	10.5	5.9	6.2	9.5	3.8	8.6	10.6	19.0	7.2	6.2	6.5	5.5	5.0	12.6	6.0	5.0	5.5	5.1	19.0	3.8	8.1
18	10.2	11.4	5.6	11.0	12.1	17.6	24.8	5.8	7.6	7.9	9.7	12.9	6.2	5.1	5.7	9.9	8.8	17.3	7.6	5.9	3.8	3.3	4.2	3.2	24.8	3.2	9.1
19	4.2	4.6	9.3	4.5	3.5	5.0	4.4	4.0	5.0	4.9	6.0	5.2	5.7	5.9	4.4	3.9	3.4	5.1	3.8	3.1	2.7	3.6	4.0	6.0	9.3	2.7	4.7
20	4.9	5.4	4.9	6.9	4.9	4.4	3.5	4.3	3.2	4.0	4.6	4.9	4.5	4.3	3.7	3.6	3.7	3.5	3.5	3.8	4.3	5.7	4.9	5.2	6.9	3.2	4.4
21	8.9	6.9	5.6	6.7	4.7	4.2	4.2	2.9	3.0	3.2	3.1	3.7	4.9	6.0	4.7	3.0	4.3	5.2	7.2	5.5	5.3	4.3	5.9	6.3	8.9	2.9	5.0
22	6.5	5.0	6.3	5.3	3.4	4.9	6.3	6.3	4.3	7.0	5.2	5.6	4.1	3.3	4.3	6.6	4.8	4.0	4.7	5.3	6.5	6.1	6.5	10.8	10.8	3.3	5.5
23	8.0	7.5	6.9	4.9	4.2	4.7	4.8	4.0	5.1	5.5	5.1	6.9	5.0	3.7	4.2	4.6	7.1	6.9	6.0	7.5	8.4	5.2	6.3	8.4	8.4	3.7	5.9
24	18.9	4.5	3.5	3.2	9.9	7.5	7.8	5.6	6.8	5.4	4.4	6.4	4.0	4.0	3.6	4.7	5.4	3.6	4.8	4.2	3.5	3.8	2.5	2.9	18.9	2.5	5.5
25	4.1	5.5	4.0	4.6	5.0	5.2	6.0	5.1	7.9	10.0	8.5	5.2	4.6	5.3	6.3	6.2	4.7	3.7	4.1	4.5	17.6	39.0	16.2	34.8	39.0	3.7	9.1
26	9.0	4.9	3.6	2.8	2.8	2.7	3.4	4.4	6.4	19.4	11.8	28.8	15.2	10.9	4.5	5.2	5.9	5.5	17.9	18.3	16.2	3.5	2.8	2.7	28.8	2.7	8.7
27	4.6	4.4	4.3	2.8	2.2	2.8	1.9	3.0	5.4	3.5	4.4	6.1	4.0	6.3	4.6	3.1	3.1	5.1	5.9	5.8	6.8	6.2	3.3	3.7	6.8	1.9	4.3
28	6.4	7.9	6.0	3.4	4.7	5.4	4.9	4.2	4.2	4.9	4.3	3.3	4.1	4.5	4.2	5.3	4.3	3.8	4.5	4.4	3.8	3.8	3.2	4.0	7.9	3.2	4.6
Max.	**18.9**	**38.9**	**24.5**	**32.7**	**19.5**	**26.2**	**24.8**	**33.0**	**38.5**	**26.1**	**13.6**	**28.8**	**23.2**	**39.0**	**41.2**	**32.1**	**34.7**	**41.4**	**45.5**	**21.7**	**22.5**	**45.6**	**65.1**	**34.8**	**65.1**		
Min.	**3.8**	**3.6**	**2.5**	**2.8**	**2.2**	**2.7**	**1.9**	**2.9**	**3.0**	**3.2**	**3.1**	**3.3**	**3.5**	**3.3**	**3.5**	**3.0**	**3.1**	**3.5**	**3.5**	**3.1**	**2.7**	**3.3**	**2.5**	**2.7**		**1.9**	
Avg.	**7.3**	**8.9**	**7.3**	**8.3**	**6.7**	**6.8**	**6.4**	**7.4**	**7.0**	**7.5**	**6.5**	**7.3**	**7.0**	**7.5**	**8.5**	**7.5**	**7.4**	**8.7**	**8.6**	**6.7**	**8.2**	**8.1**	**9.4**	**7.8**			**7.6**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

March *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.5	3.0	3.7	4.4	4.2	4.1	3.8	3.9	3.2	4.2	3.9	4.5	4.8	6.0	4.2	5.1	3.8	3.7	4.1	4.2	4.5	5.9	4.3	4.4	6.0	3.0	4.2
2	4.2	3.9	3.7	4.8	4.8	4.5	4.9	4.5	4.2	3.7	4.0	3.5	4.4	4.2	4.1	3.2	4.0	4.7	5.9	3.7	3.5	3.2	4.0	6.7	6.7	3.2	4.3
3	4.3	5.5	5.3	4.4	4.8	5.0	5.0	5.4	5.3	4.1	7.5	5.4	4.1	5.8	4.6	3.9	4.3	5.8	4.5	14.2	12.5	5.8	3.9	3.4	14.2	3.4	5.6
4	3.8	2.6	3.1	3.0	4.8	5.1	4.1	4.7	4.2	3.5	4.1	3.1	3.6	4.3	4.6	4.3	3.4	3.0	3.2	3.5	4.1	3.8	4.8	3.6	5.1	2.6	3.8
5	3.2	4.2	3.8	4.1	3.9	4.7	3.8	3.4	5.1	4.2	4.5	4.2	4.4	4.9	6.0	6.4	5.4	4.6	4.7	4.3	4.6	3.8	3.9	3.6	6.4	3.2	4.4
6	3.9	2.9	3.4	5.0	5.7	4.8	4.3	4.1	5.2	3.8	4.6	3.6	3.7	4.6	5.3	4.5	4.4	5.1	3.3	5.3	5.0	4.3	5.7	7.9	7.9	2.9	4.6
7	6.0	5.4	7.1	7.0	5.0	5.5	4.8	5.1	5.6	6.5	5.8	6.0	4.4	4.8	5.4	4.7	5.7	5.0	4.6	3.5	4.4	4.5	5.6	4.4	7.1	3.5	5.3
8	4.9	4.0	5.7	5.0	5.0	5.8	3.2	3.3	3.9	3.0	4.2	3.4	3.9	4.4	4.7	4.2	3.8	4.1	4.2	4.4	5.3	4.6	4.9	4.0	5.8	3.0	4.3
9	4.0	4.5	3.8	2.9	3.8	3.4	2.8	5.7	5.8	5.8	4.7	5.5	4.8	4.7	5.3	5.1	4.2	4.0	4.3	4.0	3.3	2.7	3.1	3.6	5.8	2.7	4.2
10	3.5	3.2	3.8	3.2	3.0	4.2	3.9	4.5	4.1	4.0	5.7	6.4	6.6	6.3	6.1	4.5	4.2	3.9	4.0	3.8	3.4	4.0	4.3	4.6	6.6	3.0	4.4
11	4.1	3.7	5.4	4.0	4.7	4.2	3.7	3.9	4.4	3.8	3.8	3.9	5.4	5.1	6.0	5.1	6.2	8.2	6.8	5.7	5.1	5.1	4.8	6.4	8.2	3.7	5.0
12	5.6	4.8	4.8	5.0	6.3	5.6	3.8	4.7	3.0	3.4	3.5	3.7	4.3	5.7	7.2	7.3	6.6	6.8	57.5	12.3	26.6	8.6	5.6	6.3	57.5	3.0	8.7
13	34.9	29.7	12.4	6.8	7.2	13.5	7.9	8.5	47.7	12.7	9.8	9.6	7.6	9.0	5.5	7.0	6.4	6.1	8.6	6.2	5.3	6.2	7.6	5.2	47.7	5.2	11.7
14	6.1	5.9	4.9	4.9	6.4	5.9	6.6	4.5	5.5	6.8	9.4	7.5	6.1	7.3	4.8	5.3	4.7	4.8	4.6	4.6	4.2	3.4	4.2	3.9	9.4	3.4	5.5
15	6.8	4.3	4.3	4.3	5.5	5.1	3.5	3.2	3.6	4.0	5.0	4.2	4.5	5.1	4.6	4.4	4.1	4.0	3.9	4.8	5.1	5.4	4.7	3.9	6.8	3.2	4.5
16	4.0	4.0	5.0	4.0	4.0	7.0	4.6	4.9	4.2	4.4	4.4	4.3	4.6	5.3	6.1	6.0	5.1	4.4	3.3	3.9	4.6	3.7	3.9	4.8	7.0	3.3	4.6
17	3.6	3.5	3.5	2.9	5.4	5.4	5.0	5.9	5.9	5.5	5.6	5.5	6.7	7.7	7.6	9.0	10.2	4.4	3.3	9.9	4.9	3.5	4.2	3.4	10.2	2.9	5.5
18	19.8	46.1	30.6	27.3	10.0	9.6	5.0	8.8	5.1	41.4	10.2	31.4	10.6	17.3	25.4	12.8	10.5	18.6	4.9	4.4	10.1	8.9	2.3	3.7	46.1	2.3	15.6
19	5.1	6.3	4.9	5.0	4.1	3.5	2.9	4.0	5.4	5.8	4.4	14.0	29.4	20.1	11.6	10.0	10.8	9.7	4.5	4.5	3.2	4.4	7.7	18.3	29.4	2.9	8.3
20	33.3	24.0	26.3	10.8	14.9	5.7	10.8	5.0	4.0	3.8	4.1	4.2	4.2	4.2	4.5	4.9	6.2	4.2	4.3	3.9	4.2	4.0	4.4	4.0	33.3	3.8	8.3
21	7.0	13.8	6.9	9.3	4.7	4.0	3.5	3.9	10.2	4.1	3.6	4.5	3.7	4.1	3.0	4.7	4.2	3.6	7.3	11.0	3.2	4.1	4.1	4.1	13.8	3.0	5.5
22	5.6	3.7	40.4	49.7	6.9	6.2	9.7	12.3	3.0	3.6	3.9	4.4	4.4	8.6	4.0	3.0	3.5	4.1	5.0	4.0	3.3	4.8	4.4	4.1	49.7	3.0	8.4
23	5.4	30.9	8.1	5.7	6.7	7.8	4.0	4.8	4.3	3.1	5.1	5.6	6.1	3.3	5.2	7.0	6.1	4.1	3.0	2.8	2.2	2.6	3.1	2.7	30.9	2.2	5.8
24	4.6	5.8	3.4	6.3	3.7	6.0	5.0	4.5	4.5	5.6	4.1	4.4	6.5	4.6	4.3	4.6	3.0	9.8	14.5	6.8	10.9	19.7	12.5	6.1	19.7	3.0	6.7
25	44.8	31.6	30.3	39.7	16.1	60.4	18.1	10.7	28.4	7.1	20.7	50.2	41.7	40.2	40.6	11.4	31.1	16.2	10.8	9.6	5.5	5.4	4.8	3.6	60.4	3.6	24.1
26	3.9	4.8	5.1	4.1	4.0	3.5	4.5	4.2	5.0	4.4	3.1	3.4	3.6	4.6	4.2	4.0	3.8	4.7	12.1	7.5	7.6	12.1	7.1	4.4	12.1	3.1	5.2
27	4.6	15.3	5.0	4.3	4.5	5.8	3.6	4.1	3.4	3.8	3.7	4.2	5.3	2.9	4.3	4.6	6.1	4.9	5.3	4.9	4.6	25.8	4.9	4.4	25.8	2.9	5.9
28	3.4	2.7	3.9	4.2	5.3	22.2	32.7	7.0	3.4	3.8	6.2	6.2	21.8	7.3	6.1	7.0	4.9	6.3	5.6	4.2	13.0	6.7	12.6	10.6	32.7	2.7	8.6
29	11.2	7.2	7.8	5.4	5.9	8.1	7.4	5.1	4.1	5.0	3.6	7.9	6.2	6.6	11.1	6.6	3.9	7.4	6.4	7.2	5.2	9.2	8.5	5.4	11.2	3.6	6.8
30	4.2	3.5	3.0	5.9	4.7	3.7	3.4	3.7	5.0	5.8	4.9	3.9	4.4	6.3	6.2	3.8	4.7	3.4	5.2	5.7	6.0	11.6	35.1	28.5	35.1	3.0	7.2
31	16.3	5.4	5.6	15.5	26.7	28.2	29.1	33.8	24.2	47.6	22.9	31.1	31.3	21.5	21.1	19.5	6.4	4.9	3.2	4.5	3.4	3.3	4.1	3.4	47.6	3.2	17.2
Max.	**44.8**	**46.1**	**40.4**	**49.7**	**26.7**	**60.4**	**32.7**	**33.8**	**47.7**	**47.6**	**22.9**	**50.2**	**41.7**	**40.2**	**40.6**	**19.5**	**31.1**	**18.6**	**57.5**	**14.2**	**26.6**	**25.8**	**35.1**	**28.5**	**60.4**		
Min.	**3.2**	**2.6**	**3.0**	**2.9**	**3.0**	**3.4**	**2.8**	**3.2**	**3.0**	**3.0**	**3.1**	**3.1**	**3.6**	**2.9**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**2.8**	**2.2**	**2.6**	**2.3**	**2.7**		**2.2**	
Avg.	**8.9**	**9.5**	**8.6**	**8.7**	**6.5**	**8.7**	**6.9**	**6.2**	**7.4**	**7.4**	**6.2**	**8.4**	**8.5**	**8.0**	**7.9**	**6.3**	**6.2**	**6.0**	**7.2**	**5.8**	**6.1**	**6.5**	**6.3**	**5.9**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	2.9	4.5	5.9	5.4	3.4	4.9	6.8	6.5	3.7	12.8	47.1	6.1	5.3	55.1	42.7	9.4	13.3	6.1	21.8	5.5	9.4	45.2	5.0	55.1	2.9	13.9
2	5.7	7.3	15.5	20.4	14.1	4.1	3.5	4.3	4.0	4.0	4.5	4.9	4.5	4.0	3.4	3.9	3.7	3.6	3.4	3.3	3.8	5.0	4.4	4.6	20.4	3.3	5.8
3	5.6	4.4	4.8	4.7	5.2	6.9	3.9	4.1	4.5	4.5	4.3	5.2	5.1	5.3	4.6	5.1	4.8	4.8	4.2	4.5	4.3	3.8	5.0	4.5	6.9	3.8	4.8
4	3.1	4.0	5.5	3.8	5.0	5.5	4.8	5.5	4.7	4.8	5.2	5.6	5.9	5.4	5.5	4.9	5.0	5.2	4.5	4.9	6.1	5.5	6.5	7.1	7.1	3.1	5.2
5	7.3	15.3	18.3	7.5	17.7	5.4	4.9	4.8	3.7	4.1	4.2	5.3	5.2	5.2	3.9	5.0	10.0	5.4	4.9	4.6	4.7	4.5	4.8	5.5	18.3	3.7	6.8
6	4.5	4.8	4.6	4.6	4.1	3.9	4.0	3.9	9.6	5.7	4.7	4.1	4.4	4.9	4.4	3.5	7.0	7.3	5.0	4.2	5.3	4.1	5.5	46.3	46.3	3.5	6.7
7	40.2	8.3	9.4	11.3	6.1	4.2	3.5	4.4	4.7	5.0	4.5	4.3	4.6	4.9	4.5	4.6	5.5	4.9	4.7	6.0	5.9	6.2	3.4	2.7	40.2	2.7	6.8
8	3.6	3.4	3.4	3.7	4.1	4.2	3.5	3.6	3.4	4.6	3.3	4.2	4.4	4.7	3.7	7.0	8.5	11.6	7.1	44.1	8.8	5.3	8.9	6.4	44.1	3.3	6.9
9	5.0	6.6	6.7	6.1	6.0	12.2	6.1	8.4	5.9	5.0	3.9	3.6	4.0	4.0	4.4	4.6	4.2	4.1	3.8	3.7	3.3	3.3	3.3	3.3	12.2	3.3	5.1
10	3.3	3.5	2.8	2.9	2.9	3.6	2.8	3.6	4.4	4.7	5.1	4.0	3.0	5.0	3.4	3.7	4.7	6.4	3.7	2.5	3.1	2.9	3.9	3.5	6.4	2.5	3.7
11	3.3	3.9	3.7	4.3	5.4	5.4	3.7	3.1	4.0	23.9	8.4	7.1	4.8	5.0	8.4	9.7	4.8	4.9	4.3	5.1	6.6	7.6	4.8	6.2	23.9	3.1	6.2
12	4.7	5.3	4.2	17.7	7.8	4.6	4.1	4.8	7.1	28.1	7.4	13.4	10.0	23.9	17.2	7.7	7.0	6.0	7.0	38.0	10.6	18.5	12.6	5.0	38.0	4.1	11.4
13	2.9	2.4	3.4	4.1	2.2	3.6	3.7	4.7	5.9	4.8	5.3	6.5	6.3	11.3	17.2	11.1	14.7	19.7	10.0	8.1	6.1	3.4	3.7	2.5	19.7	2.2	6.8
14	9.5	6.5	37.6	38.4	4.5	27.4	9.3	5.4	5.2	14.7	20.6	12.2	13.6	9.4	7.9	6.6	7.4	7.8	6.7	5.1	4.6	4.8	4.6	4.2	38.4	4.2	11.4
15	4.1	4.8	4.5	4.0	4.0	4.5	4.1	5.5	4.6	5.3	6.9	6.6	7.5	7.8	14.4	7.2	16.7	11.5	10.2	12.1	17.9	15.8	14.3	20.6	20.6	4.0	9.0
16	11.9	15.1	22.5	7.0	4.9	4.4	11.3	9.1	4.8	10.8	29.3	9.2	13.7	4.9	4.4	5.5	5.9	6.5	4.7	4.9	4.4	19.7	33.6	9.1	33.6	4.4	10.7
17	5.6	6.2	7.3	6.8	4.4	4.6	4.8	4.6	4.3	4.4	4.3	4.2	4.4	4.4	4.1	4.4	4.4	4.5	4.5	4.6	4.4	4.4	4.4	4.1	7.3	4.1	4.8
18	4.4	4.7	4.6	4.3	4.3	4.8	5.3	5.1	4.4	4.1	4.4	4.8	4.3	4.5	4.1	11.0	5.2	7.5	11.8	9.0	7.6	4.1	4.4	16.5	16.5	4.1	6.1
19	11.0	9.0	8.7	7.1	4.7	3.9	3.2	3.4	3.9	3.7	4.5	4.0	3.7	3.9	3.7	3.9	4.0	5.2	4.4	4.5	4.5	3.9	3.8	4.2	11.0	3.2	4.9
20	4.7	4.6	4.5	5.1	4.0	5.9	5.4	4.3	3.9	3.7	3.6	4.6	5.3	5.3	5.6	4.8	5.1	4.7	4.7	3.6	3.4	3.8	5.0	4.5	5.9	3.4	4.6
21	4.6	3.7	3.8	4.1	3.4	3.3	4.5	4.0	10.0	11.1	6.4	5.3	5.2	5.4	4.8	5.0	4.1	4.0	4.4	4.4	4.1	4.7	4.9	4.8	11.1	3.3	5.0
22	4.9	4.6	4.7	4.7	4.5	5.0	4.9	4.7	4.6	4.8	5.3	4.8	5.2	4.7	7.0	5.6	5.0	5.8	4.6	4.7	4.9	5.1	4.6	5.4	7.0	4.5	5.0
23	4.0	4.2	4.3	4.3	2.8	2.2	3.3	2.9	4.6	4.8	11.4	15.4	7.7	9.0	9.4	7.1	13.1	9.3	4.4	5.7	17.0	10.9	6.6	4.5	17.0	2.2	7.0
24	6.1	5.0	5.6	5.5	5.1	7.4	5.8	5.4	4.8	5.4	7.0	7.7	15.7	21.8	11.4	9.8	8.7	14.1	6.5	5.8	10.6	10.1	7.6	4.7	21.8	4.7	8.2
25	4.7	4.7	4.0	4.6	4.5	5.1	4.5	4.7	4.9	5.6	6.5	5.6	5.1	5.2	5.3	5.3	6.4	6.1	5.5	6.0	13.5	13.7	6.0	7.7	13.7	4.0	6.0
26	7.6	5.1	6.9	2.2	2.7	6.8	4.2	4.4	3.2	6.1	6.8	7.9	12.3	15.8	9.4	11.4	7.8	3.3	4.3	19.0	14.6	7.2	8.9	16.1	19.0	2.2	8.1
27	7.3	13.3	4.8	9.5	17.2	9.3	7.2	5.0	9.7	15.4	12.6	17.3	11.9	10.1	9.5	9.7	8.7	4.7	4.5	6.0	7.3	6.0	8.2	11.4	17.3	4.5	9.4
28	36.9	6.6	6.9	6.5	7.1	6.1	12.0	19.7	37.3	32.0	54.4	33.9	13.3	12.1	10.1	8.0	6.6	5.3	4.6	4.3	3.8	4.5	5.3	4.3	54.4	3.8	14.2
29	5.3	4.7	5.1	4.8	4.8	4.5	4.6	5.6	5.6	5.1	5.7	6.8	8.4	9.2	8.6	9.1	7.6	5.9	5.8	5.3	17.8	25.0	5.9	51.3	51.3	4.5	9.3
30	19.5	9.9	26.1	12.4	11.7	24.5	4.7	9.2	5.5	12.0	17.3	18.3	21.3	28.1	12.5	30.6	21.2	20.5	11.0	4.8	9.8	10.6	9.7	11.0	30.6	4.7	15.1
Max.	**40.2**	**15.3**	**37.6**	**38.4**	**17.7**	**27.4**	**12.0**	**19.7**	**37.3**	**32.0**	**54.4**	**47.1**	**21.3**	**28.1**	**55.1**	**42.7**	**21.2**	**20.5**	**11.8**	**44.1**	**17.9**	**25.0**	**45.2**	**51.3**	**55.1**		
Min.	**2.9**	**2.4**	**2.8**	**2.2**	**2.2**	**2.2**	**2.8**	**2.9**	**3.2**	**3.7**	**3.3**	**3.6**	**3.0**	**3.9**	**3.4**	**3.5**	**3.7**	**3.3**	**3.4**	**2.5**	**3.1**	**2.9**	**3.3**	**2.5**		**2.2**	
Avg.	**8.2**	**6.2**	**8.3**	**7.6**	**6.0**	**6.6**	**5.1**	**5.5**	**6.3**	**8.4**	**9.3**	**9.5**	**7.6**	**8.3**	**8.9**	**8.6**	**7.6**	**7.5**	**5.7**	**8.7**	**7.5**	**7.8**	**8.3**	**9.6**			**7.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	24.6	21.3	29.7	7.3	34.6	18.2	20.8	6.9	14.0	18.6	28.9	31.9	41.4	49.3	42.3	39.9	21.6	10.0	17.7	16.3	21.0	34.3	19.5	7.7	49.3	6.9	24.1
2	50.9	14.1	38.3	18.0	4.9	4.6	4.2	21.7	12.2	22.1	22.5	31.5	9.6	11.9	13.6	10.8	7.5	6.4	5.1	4.8	5.1	5.3	5.5	6.6	50.9	4.2	14.1
3	4.9	5.3	7.2	11.7	29.4	19.7	19.4	9.2	19.6	20.9	20.5	16.0	24.9	52.4	27.6	32.9	54.2	11.7	10.1	5.3	4.9	26.0	21.0	8.5	54.2	4.9	19.3
4	6.1	4.2	4.2	49.7	38.2	9.3	50.6	19.0	18.5	29.6	11.9	7.1	8.4	13.5	14.7	12.9	16.3	10.7	9.6	10.7	22.4	6.0	8.0	7.5	50.6	4.2	16.2
5	22.4	19.3	5.2	4.8	14.3	9.3	6.1	8.5	4.8	4.8	6.8	5.7	6.6	8.8	12.0	7.9	8.7	7.4	6.9	7.9	7.7	6.8	7.2	6.9	22.4	4.8	8.6
6	27.0	36.3	12.1	12.9	33.7	41.0	30.8	13.3	6.9	6.0	10.9	7.7	7.7	8.6	8.5	8.6	6.5	4.5	4.9	4.7	3.7	3.9	3.8	3.8	41.0	3.7	12.8
7	3.5	3.6	3.3	3.4	9.4	5.6	10.6	6.4	5.4	8.9	10.1	10.2	8.2	10.1	17.4	20.0	5.9	6.5	6.6	6.2	6.1	5.0	4.7	6.2	20.0	3.3	7.6
8	6.5	6.0	5.0	5.0	5.2	5.6	4.3	4.4	5.2	5.2	5.8	11.6	27.4	21.8	22.8	16.1	12.1	12.0	8.2	7.8	7.5	5.9	4.6	9.5	27.4	4.3	9.4
9	17.7	22.4	12.2	9.9	14.1	5.3	5.7	6.1	6.8	5.8	5.6	7.1	8.2	8.5	6.6	10.4	8.8	8.4	7.9	9.8	6.8	19.7	34.9	33.0	34.9	5.3	11.7
10	14.9	19.3	15.6	8.3	11.3	17.8	19.4	10.7	48.0	19.4	23.6	19.3	18.1	17.5	17.3	13.1	12.2	12.4	10.0	7.6	6.4	3.7	5.9	11.8	48.0	3.7	15.1
11	11.5	7.0	8.0	11.9	4.0	4.4	5.3	5.3	6.6	8.3	8.6	8.8	9.7	12.6	12.5	11.4	10.7	10.8	7.1	5.1	4.3	8.3	5.7	4.2	12.6	4.0	8.0
12	12.5	20.9	12.1	19.1	13.8	10.6	5.0	5.2	6.5	6.9	8.1	11.4	7.9	6.9	7.0	7.2	7.2	7.0	6.9	4.5	4.3	4.0	4.1	5.1	20.9	4.0	8.5
13	5.0	3.8	4.3	4.7	4.4	4.5	5.0	5.4	4.8	4.9	6.9	6.7	5.5	5.3	5.7	7.1	6.1	7.1	6.2	6.0	5.5	5.7	5.5	5.2	7.1	3.8	5.5
14	9.3	8.4	6.9	7.6	3.7	4.2	5.8	6.7	6.2	12.1	18.0	13.7	8.0	8.4	7.6	9.6	5.6	7.6	5.6	4.5	4.9	4.5	5.7	4.2	18.0	3.7	7.5
15	4.5	5.3	4.3	4.3	3.5	11.1	14.7	5.9	9.3	7.6	7.9	9.7	9.9	10.6	15.6	18.5	21.2	17.1	46.1	16.9	11.7	9.9	5.9	3.5	46.1	3.5	11.5
16	3.3	4.6	4.1	4.0	3.4	3.3	3.6	4.0	5.7	25.6	28.1	23.8	14.2	13.1	15.5	10.7	7.3	8.2	10.3	5.6	5.8	5.0	5.5	5.3	28.1	3.3	9.2
17	5.0	4.9	4.1	4.1	4.6	5.7	8.3	8.4	14.4	13.0	9.4	7.0	13.4	11.4	9.6	7.3	9.4	8.5	8.8	7.7	6.7	8.9	10.9	12.6	14.4	4.1	8.5
18	12.3	8.4	5.0	6.1	4.1	20.3	15.6	10.2	13.2	13.8	18.0	24.8	17.8	19.9	25.9	29.8	30.3	26.9	19.6	20.4	9.4	8.3	8.7	18.3	30.3	4.1	16.1
19	15.1	5.4	5.3	5.3	5.9	5.9	7.3	8.6	14.6	14.0	19.0	8.1	14.0	16.0	9.3	11.5	12.3	10.6	7.5	6.4	5.2	6.5	8.8	13.9	19.0	5.2	9.9
20	19.8	12.4	11.0	9.4	11.4	5.6	8.1	6.8	6.0	5.5	8.4	28.3	21.4	19.6	18.5	16.0	10.8	12.8	15.2	6.0	4.0	7.2	9.9	6.0	28.3	4.0	11.7
21	8.6	7.4	6.6	7.5	7.8	17.7	18.0	12.6	18.3	61.7	46.3	36.2	38.3	22.5	16.0	12.9	11.7	10.7	6.9	5.4	5.4	5.1	6.2	4.9	61.7	4.9	16.4
22	5.5	5.0	5.2	6.5	4.8	7.4	7.7	7.8	7.4	9.4	8.4	5.4	6.1	10.4	8.4	9.8	8.7	12.1	7.2	8.2	35.9	18.0	36.7	19.0	36.7	4.8	10.9
23	15.6	4.6	11.4	7.3	13.0	5.2	6.9	6.1	6.5	7.1	7.2	6.6	5.7	11.8	5.8	5.7	5.8	5.1	4.9	5.2	4.6	5.1	5.0	5.6	15.6	4.6	7.0
24	4.4	3.7	4.0	4.6	4.5	4.4	4.7	4.8	5.6	5.5	4.6	4.7	5.9	6.5	5.4	5.4	7.2	13.9	6.7	13.6	9.4	14.1	18.4	16.0	18.4	3.7	7.4
25	15.5	59.8	5.5	10.7	17.2	31.1	40.2	39.4	10.6	8.1	9.5	7.6	7.4	9.5	6.9	7.5	7.9	9.0	21.1	15.7	8.5	10.0	6.7	4.1	59.8	4.1	15.4
26	7.8	7.9	5.7	6.2	5.5	10.7	7.8	6.2	6.6	7.2	11.0	7.0	5.9	7.3	6.8	5.2	4.3	4.8	5.1	5.9	6.7	9.2	11.0	9.1	11.0	4.3	7.1
27	6.1	6.7	7.2	9.6	6.9	5.3	4.8	6.2	6.3	9.2	9.9	11.4	12.0	8.8	9.8	8.6	9.4	7.2	7.5	6.3	5.8	4.2	4.5	4.9	12.0	4.2	7.4
28	6.4	6.1	6.7	5.8	4.9	4.3	6.9	9.0	10.2	9.9	8.4	8.1	11.2	10.2	9.4	7.2	7.0	7.8	7.3	7.6	4.7	4.1	4.8	17.2	17.2	4.1	7.7
29	36.1	41.5	6.5	6.0	7.9	3.8	3.6	5.1	9.0	11.5	16.2	19.8	22.3	31.8	17.1	12.7	23.0	20.6	12.7	7.9	8.3	4.0	6.4	26.8	41.5	3.6	15.0
30	21.6	20.1	17.7	11.3	4.1	5.3	7.5	6.6	31.6	22.0	23.6	10.2	11.5	12.7	12.5	10.2	8.8	8.0	7.7	7.4	5.9	6.7	12.6	8.9	31.6	4.1	12.3
31	9.4	13.3	10.1	6.7	5.6	4.8	5.1	5.5	5.2	8.0	11.4	10.2	7.6	11.2	13.3	12.0	11.7	15.3	6.0	5.6	8.4	9.2	7.1	5.4	15.3	4.8	8.7
Max.	**50.9**	**59.8**	**38.3**	**49.7**	**38.2**	**41.0**	**50.6**	**39.4**	**48.0**	**61.7**	**46.3**	**36.2**	**41.4**	**52.4**	**42.3**	**39.9**	**54.2**	**26.9**	**46.1**	**20.4**	**35.9**	**34.3**	**36.7**	**33.0**	**61.7**		
Min.	**3.3**	**3.6**	**3.3**	**3.4**	**3.4**	**3.3**	**3.6**	**4.0**	**4.8**	**4.8**	**4.6**	**4.7**	**5.5**	**5.3**	**5.4**	**5.2**	**4.3**	**4.5**	**4.9**	**4.5**	**3.7**	**3.7**	**3.8**	**3.5**		**3.3**	
Avg.	**13.3**	**13.2**	**9.2**	**9.3**	**10.8**	**10.1**	**11.7**	**9.1**	**11.2**	**13.3**	**14.1**	**13.5**	**13.4**	**15.1**	**13.6**	**12.9**	**12.3**	**10.4**	**10.1**	**8.2**	**8.3**	**8.9**	**9.8**	**9.7**			**11.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.9	6.7	5.1	6.9	4.1	5.6	5.8	6.5	7.4	6.8	7.7	7.1	6.5	5.8	6.2	7.4	6.0	5.6	6.0	4.9	4.6	4.7	5.2	5.1	7.7	4.1	6.0
2	4.7	3.9	8.7	7.2	7.8	6.9	5.8	7.1	13.4	10.8	14.5	9.3	15.2	12.5	13.4	14.1	17.9	15.4	11.8	7.3	5.6	5.2	5.3	25.9	25.9	3.9	10.4
3	34.6	7.5	15.6	9.9	5.7	5.6	45.4	25.9	18.2	16.3	17.0	25.1	18.1	43.7	22.8	16.8	26.8	22.8	27.2	27.6	11.1	38.7	18.4	7.7	45.4	5.6	21.2
4	5.7	4.5	3.8	4.2	3.4	3.7	3.9	4.0	5.3	5.7	4.2	4.5	5.2	6.9	23.1	15.5	19.2	7.1	7.8	5.8	5.5	6.6	7.1	7.2	23.1	3.4	7.1
5	6.3	6.7	6.8	6.1	8.6	7.0	7.7	5.4	5.5	7.0	6.6	5.6	5.8	5.7	5.1	5.7	5.4	5.4	5.5	5.4	5.3	5.8	6.9	4.9	8.6	4.9	6.1
6	4.3	4.6	4.5	4.3	4.8	18.7	10.4	13.6	19.2	14.6	14.8	15.0	11.7	12.9	11.9	9.7	12.7	13.5	11.2	6.5	5.1	6.4	16.3	44.9	44.9	4.3	12.1
7	21.7	15.2	16.5	13.9	17.1	4.3	41.8	53.4	25.3	10.7	8.4	8.4	7.0	6.6	7.4	6.6	6.7	5.9	5.7	6.5	4.7	4.6	4.7	5.3	53.4	4.3	12.9
8	4.5	5.3	5.7	7.4	4.7	5.8	7.4	7.0	10.0	9.4	17.6	12.8	14.6	11.2	12.3	14.8	10.8	10.2	8.1	6.5	5.1	4.1	5.3	4.7	17.6	4.1	8.5
9	8.7	11.8	7.2	24.6	37.3	14.5	5.4	9.2	8.7	16.0	14.5	14.2	16.7	10.7	47.4	41.2	21.8	40.5	12.0	3.7	6.0	6.1	5.3	6.8	47.4	3.7	16.3
10	3.9	3.6	3.8	3.3	3.5	5.0	5.8	4.8	4.2	4.6	8.0	11.2	13.8	19.0	22.7	25.4	21.9	24.0	14.1	20.6	10.8	7.9	6.7	9.8	25.4	3.3	10.8
11	10.4	8.3	5.5	10.2	10.4	16.7	22.4	46.1	17.6	11.8	21.5	23.3	14.3	8.7	9.3	8.0	7.6	7.4	7.3	7.0	5.8	4.9	5.4	7.0	46.1	4.9	12.4
12	4.5	5.2	5.8	6.0	14.3	7.6	17.8	8.5	9.4	6.4	8.8	10.4	8.3	8.1	7.9	11.0	10.5	11.3	12.7	11.8	7.5	2.5	6.1	7.1	17.8	2.5	8.7
13	9.1	22.6	12.1	11.1	18.0	6.6	5.3	8.9	24.4	15.3	18.4	13.8	8.0	8.5	17.0	17.1	14.2	6.7	7.7	7.3	7.2	10.9	14.4	19.1	24.4	5.3	12.6
14	15.6	9.8	13.6	11.6	9.0	7.0	4.7	9.2	21.7	10.6	16.3	14.3	27.7	28.1	30.3	25.7	9.0	6.6	5.9	4.8	4.9	5.4	7.6	9.5	30.3	4.7	12.9
15	4.9	3.6	4.4	4.5	3.8	4.2	4.0	3.8	3.7	5.5	7.9	7.3	12.4	12.1	11.9	12.6	9.0	10.2	7.8	6.4	4.5	3.2	2.9	4.0	12.6	2.9	6.4
16	4.2	5.0	3.8	2.8	4.1	4.8	5.3	3.9	5.7	11.4	13.6	12.0	11.5	12.7	12.4	12.0	12.5	10.4	6.3	5.7	5.2	5.0	5.0	3.9	13.6	2.8	7.5
17	5.0	5.4	6.1	5.5	5.1	5.9	5.8	7.0	8.3	13.0	24.0	15.2	17.9	13.0	25.9	17.8	24.2	16.5	37.5	9.9	6.0	8.7	13.2	7.3	37.5	5.0	12.7
18	7.2	10.5	33.3	16.3	3.2	2.8	5.4	7.5	26.5	32.3	19.7	20.9	45.9	61.8	24.7	36.3	27.6	39.2	48.5	34.4	6.7	45.8	51.5	15.3	61.8	2.8	26.0
19	9.3	10.7	2.7	3.6	3.5	3.5	3.4	5.3	7.2	7.0	8.5	8.0	7.8	7.8	8.1	8.5	6.6	7.0	7.2	6.4	4.5	3.9	3.5	3.4	10.7	2.7	6.1
20	5.8	4.6	4.0	4.9	4.6	4.1	3.6	4.2	5.4	5.1	5.9	7.6	11.1	11.4	9.3	10.1	8.3	8.3	7.8	4.9	4.3	4.1	4.1	3.5	11.4	3.5	6.1
21	3.8	3.4	6.7	6.5	5.2	6.2	5.8	5.3	5.7	6.9	10.9	9.6	11.9	8.8	8.3	12.9	13.3	9.0	6.5	5.3	6.3	6.8	6.9	6.9	13.3	3.4	7.5
22	9.3	6.9	9.3	6.8	9.4	19.8	20.6	10.8	6.6	6.4	6.8	8.9	9.4	9.9	8.8	6.7	11.3	6.8	7.5	7.2	5.1	5.8	5.1	5.0	20.6	5.0	8.7
23	4.4	4.6	5.0	4.7	4.6	4.5	5.2	5.0	5.5	5.4	5.5	5.0	5.4	5.3	4.9	5.5	5.3	5.6	5.2	5.6	5.7	5.5	5.3	5.3	5.7	4.4	5.2
24	5.4	5.3	5.1	4.9	4.7	4.6	4.7	5.0	5.7	5.8	6.0	5.6	4.9	6.0	6.0	5.4	4.9	5.5	5.7	5.4	5.8	4.3	4.4	4.2	6.0	4.2	5.2
25	3.8	3.9	4.0	4.0	4.3	4.4	5.2	5.4	6.2	6.8	6.1	7.4	6.8	7.2	7.3	5.7	5.9	6.1	5.3	5.7	4.8	4.4	3.5	4.5	7.4	3.5	5.4
26	7.7	4.8	3.8	4.0	5.0	5.0	7.1	7.6	9.9	10.7	12.1	13.4	23.0	21.7	31.3	34.9	63.3	39.5	16.5	8.1	5.6	6.2	5.4	13.7	63.3	3.8	15.0
27	5.9	5.3	3.6	3.8	5.0	5.0	9.0	8.1	16.8	35.2	18.7	13.5	20.5	15.8	13.7	16.3	13.8	13.9	6.7	10.6	6.0	4.9	6.1	6.2	35.2	3.6	11.0
28	6.0	7.8	6.5	7.7	9.1	5.9	7.6	10.0	48.8	16.7	11.7	9.0	11.9	9.3	9.7	10.4	9.7	16.3	8.9	6.4	5.3	5.1	4.8	4.9	48.8	4.8	10.4
29	4.6	8.0	18.6	18.5	13.7	27.0	17.5	8.6	11.9	13.2	15.1	15.1	18.1	17.8	25.2	16.6	8.2	8.4	6.3	6.7	4.5	5.5	6.8	6.4	27.0	4.5	12.6
30	16.8	8.6	9.8	9.5	7.8	6.3	6.3	7.8	8.1	7.1	6.7	11.5	12.9	19.6	18.5	12.9	13.8	13.4	11.0	6.9	7.3	6.4	6.7	17.8	19.6	6.3	10.6
Max.	**34.6**	**22.6**	**33.3**	**24.6**	**37.3**	**27.0**	**45.4**	**53.4**	**48.8**	**35.2**	**24.0**	**25.1**	**45.9**	**61.8**	**47.4**	**41.2**	**63.3**	**40.5**	**48.5**	**34.4**	**11.1**	**45.8**	**51.5**	**44.9**	**63.3**		
Min.	**3.8**	**3.4**	**2.7**	**2.8**	**3.2**	**2.8**	**3.4**	**3.8**	**3.7**	**4.6**	**4.2**	**4.5**	**4.9**	**5.3**	**4.9**	**5.4**	**4.9**	**5.4**	**5.2**	**3.7**	**4.3**	**2.5**	**2.9**	**3.4**		**2.5**	
Avg.	**8.1**	**7.1**	**8.0**	**7.8**	**8.1**	**7.6**	**10.2**	**10.5**	**12.4**	**11.1**	**11.9**	**11.5**	**13.5**	**14.3**	**15.4**	**14.8**	**14.3**	**13.3**	**11.2**	**8.7**	**5.9**	**8.0**	**8.3**	**9.3**			**10.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	16.2	10.7	33.7	28.5	5.8	6.9	4.5	5.6	7.8	13.3	21.2	13.1	25.5	13.2	18.2	16.7	10.9	6.9	10.3	4.9	38.6	4.4	3.5	4.7	38.6	3.5	13.5
2	6.6	4.9	10.8	23.6	45.9	15.3	19.8	24.6	26.0	23.1	17.4	24.2	12.4	9.4	13.1	11.4	14.1	10.5	9.6	9.6	5.1	6.9	6.6	5.1	45.9	4.9	14.8
3	3.2	9.3	4.7	4.7	4.6	14.5	12.5	8.1	10.7	15.9	19.4	13.0	19.2	22.7	28.4	19.0	10.5	8.6	4.6	4.2	6.7	21.2	8.4	5.2	28.4	3.2	11.6
4	4.5	4.3	4.8	3.8	5.8	6.4	4.6	6.5	8.1	6.4	6.9	7.1	4.9	6.7	7.8	6.1	4.8	6.1	6.0	5.0	5.5	5.3	3.4	5.0	8.1	3.4	5.7
5	7.0	5.6	8.0	25.8	24.6	40.9	38.9	18.6	16.5	27.0	17.5	18.6	15.4	23.6	13.9	9.0	21.1	15.8	5.1	4.8	5.8	4.6	5.2	5.6	40.9	4.6	15.8
6	5.1	4.9	5.4	5.6	4.8	6.1	6.3	5.8	7.2	8.8	10.6	23.8	19.6	25.7	20.5	20.8	19.0	24.3	18.4	14.1	12.0	23.6	23.2	6.7	25.7	4.8	13.4
7	6.0	8.7	5.8	6.8	15.6	32.8	12.9	32.6	21.8	25.0	68.1	19.3	38.8	37.9	29.9	17.9	14.4	14.6	10.2	6.3	3.9	2.6	3.0	11.9	68.1	2.6	18.6
8	12.0	28.4	45.8	30.1	47.8	37.4	6.7	8.9	6.7	8.2	8.5	9.0	12.2	6.8	6.1	6.8	6.1	7.4	4.7	6.0	5.3	4.3	5.3	11.3	47.8	4.3	13.8
9	3.6	4.6	5.5	5.8	7.5	22.3	11.2	9.0	7.6	14.1	15.8	10.7	14.0	14.7	19.6	13.5	42.9	18.1	11.1	24.9	19.0	15.3	31.9	5.5	42.9	3.6	14.5
10	4.7	4.8	7.1	7.8	9.5	13.4	17.8	28.4	32.5	20.4	11.6	25.6	12.0	8.6	12.9	13.8	8.2	6.0	5.5	4.7	4.9	4.4	2.7	3.1	32.5	2.7	11.3
11	4.7	5.1	5.9	4.9	4.9	4.6	5.0	6.7	11.9	11.0	12.3	10.6	11.2	14.7	9.8	15.1	13.8	11.8	7.2	6.2	4.6	3.8	5.8	5.3	15.1	3.8	8.2
12	9.2	21.6	58.6	6.6	5.6	6.6	9.7	11.6	16.2	33.5	34.9	42.1	37.9	22.7	6.6	9.0	6.7	10.3	5.2	4.4	4.3	3.8	4.9	5.4	58.6	3.8	15.7
13	5.7	4.6	8.2	5.4	4.4	5.4	5.8	8.3	7.5	6.8	5.9	5.5	5.0	6.0	6.7	7.5	8.4	7.9	6.4	6.2	7.3	5.7	5.5	4.6	8.4	4.4	6.3
14	11.0	11.7	15.2	11.2	6.5	10.8	10.0	6.4	8.9	11.9	12.1	7.0	10.7	8.4	8.3	6.9	6.9	5.4	6.1	5.8	5.7	5.9	6.1	6.1	15.2	5.4	8.5
15	5.4	7.1	5.7	14.6	7.3	18.7	45.7	15.5	9.5	9.3	14.0	10.5	9.1	10.7	7.5	7.8	7.9	9.4	9.8	6.3	5.5	6.7	6.1	6.6	45.7	5.4	10.7
16	5.7	8.9	7.2	6.8	7.7	32.2	20.9	16.7	20.8	21.3	12.3	14.5	12.9	14.9	9.7	10.1	9.4	9.4	8.1	6.5	4.2	4.8	4.9	3.2	32.2	3.2	11.4
17	4.9	6.9	2.5	4.8	6.5	4.2	5.1	5.3	7.7	12.8	23.2	56.8	44.2	14.5	20.8	14.6	10.5	6.6	6.1	5.1	5.0	4.8	16.8	6.9	56.8	2.5	12.4
18	5.4	4.1	4.4	4.7	4.3	7.1	7.0	11.8	19.6	28.4	24.1	30.1	12.9	19.9	8.6	12.8	8.1	13.1	24.0	48.9	26.4	29.9	23.4	9.1	48.9	4.1	16.2
19	5.6	6.4	6.8	14.0	20.2	39.4	32.5	14.8	27.2	6.6	7.8	13.6	33.9	22.2	13.1	11.5	16.9	8.6	9.6	8.2	5.6	7.1	6.6	20.1	39.4	5.6	14.9
20	41.7	22.8	18.1	29.3	17.0	17.2	17.4	18.6	13.0	10.1	6.9	7.9	11.3	15.4	12.1	10.2	9.6	11.7	6.4	5.7	5.2	5.1	6.2	5.0	41.7	5.0	13.5
21	5.4	5.2	5.6	5.6	5.4	5.6	5.9	5.6	5.7	6.2	5.7	7.4	7.5	7.7	9.2	7.3	8.7	5.8	6.4	6.3	5.5	5.2	6.1	5.8	9.2	5.2	6.3
22	7.2	7.0	6.9	7.2	6.9	5.9	6.0	6.1	5.7	5.6	7.0	6.5	7.8	7.5	8.3	10.2	6.6	7.1	6.6	4.8	4.3	4.5	4.0	4.1	10.2	4.0	6.4
23	4.0	11.5	10.7	11.0	6.6	27.2	11.2	5.6	7.3	10.0	8.0	6.8	7.9	7.3	5.2	5.1	5.5	5.3	4.8	4.9	5.2	4.7	4.7	5.2	27.2	4.0	7.7
24	5.5	5.5	5.2	4.9	4.9	4.8	4.7	5.3	6.8	6.2	7.9	7.8	9.3	7.3	7.2	7.0	8.8	6.0	7.2	5.8	5.3	3.6	4.3	4.9	9.3	3.6	6.1
25	4.9	2.5	3.0	3.4	3.9	3.2	3.1	4.4	4.2	6.0	6.7	10.0	10.1	9.8	6.7	7.3	6.4	4.6	4.9	7.9	10.5	11.4	16.0	14.6	16.0	2.5	6.9
26	12.6	11.1	11.7	25.6	15.1	7.5	36.0	4.2	4.7	7.7	13.9	13.3	28.2	21.6	21.7	8.7	26.1	9.6	5.7	5.7	10.5	7.9	25.2	5.9	36.0	4.2	14.2
27	27.9	26.5	49.1	31.2	33.0	6.9	3.8	6.1	18.8	7.6	12.2	10.0	19.1	12.9	10.3	12.2	10.2	10.2	8.6	8.3	8.1	5.9	19.3	12.9	49.1	3.8	15.5
28	26.0	25.4	10.2	5.8	5.6	5.2	5.5	5.1	5.4	6.0	5.3	7.1	6.9	7.1	6.9	6.3	7.3	7.7	7.4	5.3	5.2	5.7	6.3	5.7	26.0	5.1	7.9
29	5.8	5.6	5.6	6.7	10.1	12.1	8.5	7.1	8.1	8.4	12.9	11.6	11.3	9.2	10.9	11.8	10.7	11.4	9.2	5.5	6.0	9.7	6.0	23.1	23.1	5.5	9.5
30	9.7	9.8	37.8	13.3	11.8	6.2	7.2	10.0	9.4	5.9	5.0	6.7	6.4	7.1	8.7	10.0	8.7	8.6	6.7	8.4	6.9	8.0	6.7	6.2	37.8	5.0	9.4
31	5.6	7.7	10.2	5.1	6.8	5.6	9.1	10.4	6.2	6.0	7.8	7.2	8.2	6.8	8.5	6.7	6.6	5.4	5.0	4.7	5.5	5.4	4.8	4.7	10.4	4.7	6.7
Max.	**41.7**	**28.4**	**58.6**	**31.2**	**47.8**	**40.9**	**45.7**	**32.6**	**32.5**	**33.5**	**68.1**	**56.8**	**44.2**	**37.9**	**29.9**	**20.8**	**42.9**	**24.3**	**24.0**	**48.9**	**38.6**	**29.9**	**31.9**	**23.1**	**68.1**		
Min.	**3.2**	**2.5**	**2.5**	**3.4**	**3.9**	**3.2**	**3.1**	**4.2**	**4.2**	**5.6**	**5.0**	**5.5**	**4.9**	**6.0**	**5.2**	**5.1**	**4.8**	**4.6**	**4.6**	**4.2**	**3.9**	**2.6**	**2.7**	**3.1**		**2.5**	
Avg.	**9.1**	**9.8**	**13.6**	**11.8**	**11.8**	**13.9**	**12.8**	**10.8**	**11.9**	**12.6**	**14.3**	**14.8**	**15.7**	**13.6**	**12.2**	**10.7**	**11.5**	**9.5**	**8.0**	**8.2**	**8.2**	**7.8**	**9.1**	**7.4**			**11.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climtrncs)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.3	4.6	5.1	4.7	5.0	5.4	5.7	4.8	5.1	5.1	5.1	6.3	5.0	5.4	5.4	5.3	6.0	4.5	4.9	4.8	4.4	4.7	4.3	4.3	6.3	4.3	5.0
2	4.8	4.9	4.6	4.5	5.1	4.9	4.5	4.9	4.9	4.9	4.9	4.8	5.0	4.9	4.6	5.4	5.4	4.8	4.7	4.7	4.4	4.5	4.8	4.8	5.4	4.4	4.8
3	4.4	4.5	4.1	3.8	3.7	3.9	4.2	4.4	4.9	4.9	5.1	6.2	6.5	5.4	5.1	5.0	5.7	5.6	4.7	4.5	4.4	5.2	4.6	4.6	6.5	3.7	4.8
4	4.7	4.7	5.4	5.0	4.8	4.6	4.6	5.1	4.9	4.8	5.4	5.5	5.7	5.7	5.7	5.4	5.1	5.8	5.0	4.8	5.3	5.6	5.1	5.0	5.8	4.6	5.1
5	4.4	5.2	5.2	6.5	5.2	6.1	4.4	7.1	5.7	6.2	5.2	6.2	6.1	6.7	6.5	7.6	6.8	6.9	5.6	5.1	5.7	5.1	6.9	5.5	7.6	4.4	5.9
6	7.0	4.2	4.7	4.5	5.7	7.3	5.8	5.3	6.6	7.0	9.3	7.8	5.7	7.6	6.1	4.6	6.0	8.0	6.0	5.7	4.7	3.8	4.0	2.8	9.3	2.8	5.8
7	2.8	6.1	3.4	4.8	19.5	6.9	4.7	5.3	5.1	7.1	8.4	6.9	7.4	9.6	7.4	8.1	7.8	6.2	6.1	5.2	4.3	4.1	12.7	8.9	19.5	2.8	7.0
8	6.9	4.8	5.5	5.3	6.1	3.2	4.5	6.0	4.5	5.8	8.9	9.4	10.9	10.8	14.7	12.5	8.0	7.7	6.7	3.5	2.7	5.4	7.1	4.3	14.7	2.7	6.9
9	3.8	3.9	3.5	2.6	2.7	2.0	3.0	6.1	9.5	8.6	9.1	27.9	18.5	27.8	14.1	12.4	10.8	7.2	8.6	5.6	5.5	7.5	8.0	2.4	27.9	2.0	8.8
10	4.8	9.7	9.0	21.3	43.7	39.7	9.7	7.6	44.2	20.4	14.6	14.9	19.6	19.0	23.3	18.3	16.1	12.4	8.6	3.6	3.3	3.9	14.1	6.1	44.2	3.3	16.2
11	9.0	19.4	15.4	5.4	9.3	4.3	6.9	12.5	34.5	19.1	14.2	21.8	18.4	15.9	9.5	21.0	7.4	6.0	5.3	5.2	7.1	9.1	12.2	13.5	34.5	4.3	12.6
12	19.9	15.6	23.3	28.5	17.1	27.4	17.7	17.9	8.2	8.6	14.4	11.1	5.4	18.2	18.4	21.0	11.7	8.4	11.6	5.8	5.5	7.7	50.4	5.9	50.4	5.4	15.8
13	7.8	17.0	10.1	15.4	23.4	10.8	11.0	12.4	14.2	25.3	27.0	19.1	28.2	13.4	15.0	16.7	10.2	15.7	7.0	7.5	5.6	5.9	6.5	5.6	28.2	5.6	13.8
14	5.4	8.3	5.8	6.8	21.0	17.8	53.4	7.3	5.8	5.3	5.7	5.8	7.4	7.8	12.5	15.0	10.4	5.3	13.8	6.2	12.6	3.0	3.6	6.5	53.4	3.0	10.5
15	4.4	3.6	4.1	4.0	4.8	4.7	4.2	4.7	3.9	3.5	5.2	6.2	4.1	11.9	6.9	5.7	6.8	4.7	4.4	5.8	4.5	4.3	4.0	3.9	11.9	3.5	5.0
16	3.6	4.1	4.6	5.2	4.4	4.1	8.8	16.8	16.9	11.7	20.9	66.0	42.0	46.6	32.7	51.7	31.8	7.8	5.4	4.2	3.9	6.4	5.0	23.7	66.0	3.6	17.8
17	17.4	9.6	9.5	5.0	4.1	6.9	39.6	47.2	15.3	13.6	6.3	6.8	7.5	7.7	7.0	7.3	6.8	6.4	6.1	5.2	4.9	5.3	6.0	5.9	47.2	4.1	10.7
18	5.2	6.0	5.9	5.2	4.8	5.0	5.1	5.0	4.9	5.8	5.4	5.5	5.7	5.9	5.6	5.9	5.8	5.6	5.4	5.5	5.4	6.0	5.6	5.6	6.0	4.8	5.5
19	5.2	5.2	5.2	5.4	6.3	5.5	6.4	5.2	4.8	5.1	5.8	6.5	6.1	6.2	5.7	5.7	4.9	5.4	5.0	4.8	5.3	4.6	4.7	5.0	6.5	4.6	5.4
20	5.5	5.0	5.6	5.8	4.9	5.3	5.2	6.0	7.1	5.7	5.9	8.0	7.6	7.1	6.9	6.7	6.3	7.0	5.8	4.8	3.8	4.3	4.6	4.5	8.0	3.8	5.8
21	4.5	4.5	4.2	4.1	4.4	4.5	4.6	4.6	4.8	5.3	4.8	4.7	5.3	4.8	5.0	5.2	4.7	4.9	4.4	4.1	3.9	4.5	5.2	4.8	5.3	3.9	4.7
22	5.1	4.3	4.9	5.0	4.5	4.3	4.4	4.6	4.7	4.8	5.0	5.0	5.2	5.3	5.1	5.2	5.7	5.0	4.7	4.8	4.8	4.8	5.0	4.7	5.7	4.3	4.9
23	3.9	5.1	6.2	11.1	14.5	17.4	9.4	6.2	4.6	6.0	6.4	9.5	9.2	9.3	7.4	6.0	5.7	5.1	3.9	4.2	3.3	3.1	3.4	4.2	17.4	3.1	6.9
24	4.2	3.8	4.3	3.4	6.4	4.9	5.5	5.4	6.2	4.3	4.3	4.7	10.0	17.0	18.7	23.1	24.5	23.6	8.1	8.7	7.3	12.5	5.6	9.9	24.5	3.4	9.4
25	8.9	4.9	19.1	6.9	6.2	8.9	18.4	37.0	15.3	38.5	15.1	15.5	15.6	12.2	13.0	10.6	12.5	7.0	5.0	4.9	8.7	7.3	4.4	6.2	38.5	4.4	12.6
26	8.8	7.2	3.9	3.4	2.7	4.4	4.6	5.7	7.1	8.3	11.2	15.2	14.4	16.0	9.2	10.6	10.6	11.2	7.7	13.0	35.2	10.3	6.9	4.7	35.2	2.7	9.7
27	5.8	7.7	5.5	4.4	23.8	5.9	16.7	45.7	10.9	10.5	7.4	13.1	9.2	8.8	13.4	19.6	11.9	13.6	12.7	28.3	18.1	11.2	4.2	13.0	45.7	4.2	13.4
28	49.2	3.9	5.2	3.6	5.9	3.5	4.1	3.6	7.8	9.5	16.8	37.3	40.0	20.0	55.3	69.5	48.7	18.1	5.2	6.0	6.0	7.1	6.1	3.8	69.5	3.5	18.2
29	3.6	5.3	4.8	6.3	6.0	7.8	5.7	4.6	4.2	3.3	4.6	4.7	5.8	6.0	8.8	6.8	5.4	7.1	6.0	4.8	3.7	3.3	3.6	3.4	8.8	3.3	5.2
30	4.9	5.9	5.7	4.2	4.5	4.2	4.1	3.2	8.2	6.5	12.1	9.2	13.8	13.2	11.4	12.6	10.2	20.9	15.5	31.5	4.9	3.4	4.2	5.1	31.5	3.2	9.1
31	5.9	2.7	4.0	5.1	3.9	5.2	5.5	4.6	7.0	7.8	8.8	11.1	33.1	18.8	19.1	21.6	10.7	22.8	31.2	28.5	5.4	5.3	5.3	5.2	33.1	2.7	11.6
Max.	**49.2**	**19.4**	**23.3**	**28.5**	**43.7**	**39.7**	**53.4**	**47.2**	**44.2**	**38.5**	**27.0**	**66.0**	**42.0**	**46.6**	**55.3**	**69.5**	**48.7**	**23.6**	**31.2**	**31.5**	**35.2**	**12.5**	**50.4**	**23.7**	**69.5**		
Min.	**2.8**	**2.7**	**3.4**	**2.6**	**2.7**	**2.0**	**3.0**	**3.2**	**3.9**	**3.3**	**4.3**	**4.7**	**4.1**	**4.8**	**4.6**	**4.6**	**4.7**	**4.5**	**3.9**	**3.5**	**2.7**	**3.0**	**3.4**	**2.4**		**2.0**	
Avg.	**7.6**	**6.5**	**6.7**	**6.7**	**9.2**	**8.0**	**9.4**	**10.2**	**9.4**	**9.1**	**9.1**	**12.3**	**12.4**	**12.1**	**12.2**	**13.9**	**10.7**	**9.0**	**7.6**	**7.8**	**6.6**	**5.8**	**7.3**	**6.2**			**9.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climatronics)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	36.2	8.6	4.1	8.8	9.1	3.5	4.4	5.7	5.5	5.6	8.4	10.6	11.1	9.2	14.6	17.4	11.0	8.3	5.8	3.5	4.3	4.6	6.1	4.8	36.2	3.5	8.8
2	3.6	4.5	5.2	4.1	2.5	3.4	3.7	6.8	15.5	8.3	10.1	11.8	11.4	11.3	13.2	7.4	7.8	5.3	4.6	4.5	4.3	4.2	4.4	5.4	15.5	2.5	6.8
3	4.6	4.6	4.8	5.1	5.1	5.6	5.7	5.7	5.2	5.4	5.2	5.1	5.3	4.9	5.0	5.5	5.1	5.0	5.3	5.3	5.4	5.8	5.2	4.8	5.8	4.6	5.2
4	5.0	5.1	4.5	5.2	7.0	7.8	10.0	53.3	45.9	6.6	4.1	7.1	10.8	14.5	26.8	20.5	11.4	18.6	7.7	5.8	5.4	6.9	5.0	16.4	53.3	4.1	13.0
5	15.5	44.2	52.0	11.7	16.7	9.0	12.4	12.1	6.4	6.1	6.3	5.6	7.1	8.3	10.4	28.1	39.5	46.1	29.6	7.1	9.4	11.2	7.8	8.8	52.0	5.6	17.1
6	10.3	5.2	7.4	6.2	13.9	18.7	14.1	10.0	17.4	26.0	39.7	61.2					1.0	100.1	49.6	5.5	10.0	12.1	18.6	12.8	100.1	1.0	22.0
7	8.0	6.0	4.4	5.7	5.8	4.9	5.1	5.6	4.9	5.5	5.0	5.0	5.5	5.0	5.6	4.9	5.4	5.0	5.5	5.0	5.2	5.0	4.9	5.1	8.0	4.4	5.3
8	5.1	5.7	5.6	6.1	5.6	6.2	5.1	5.6	6.0	5.5	5.4	5.7	9.1	5.1	8.9	32.9	21.5	18.8	6.2	12.8	7.8	9.4	7.8	5.8	32.9	5.1	8.9
9	4.5	3.5	4.8	5.0	5.0	4.9	5.3	5.3	7.3	7.5	9.2	4.3	5.4	15.6	10.4	9.4	7.9	11.8	7.5	8.1	5.5	16.7	13.7	9.2	16.7	3.5	7.8
10	80.3	35.3	16.3	8.5	31.3	14.7	55.1	36.7	31.1	10.6	85.7	12.2	12.5	8.0	6.1	5.3	6.0	6.1	7.0	5.6	5.2	4.6	4.1	4.4	85.7	4.1	20.5
11	4.8	4.7	4.7	5.9	4.4	4.6	4.8	4.9	5.2	6.0	5.8	5.3	5.3	5.6	5.3	4.9	5.2	5.1	5.4	5.4	4.5	5.2	5.0	4.9	6.0	4.4	5.1
12	4.8	4.9	5.5	8.3	9.7	9.9	12.9	11.0	7.4	6.5	9.6	23.2	24.0	13.4	14.7	12.0	13.1	11.0	8.9	9.2	6.7	7.9	6.9	6.3	24.0	4.8	10.3
13	22.5	8.2	5.4	6.2	7.9	7.0	12.1	10.9	12.6	4.9	9.5	6.8	19.0	12.6	12.2	20.5	11.4	14.7	16.7	23.4	9.3	5.5	24.0	52.5	52.5	4.9	14.0
14	13.4	8.4	8.5	8.0	12.0	17.3	23.4	14.7	6.7	6.5	12.2	49.6	84.0	25.0	18.5	36.6	25.5	28.1	20.8	12.2	4.4	4.0	4.0	3.3	84.0	3.3	18.6
15	4.1	4.7	4.2	3.4	4.2	4.3	8.2	5.7	13.3	11.8	5.4	5.6	5.5	10.4	8.8	12.8	6.7	7.1	6.5	5.6	6.6	13.5	4.5	5.2	13.5	3.4	7.0
16	11.7	8.8	21.5	7.5	18.2	31.1	25.9	16.7	53.1	10.6	10.0	20.1	12.6	13.2	29.5	23.7	14.8	12.1	6.0	7.7	6.2	8.0	5.5	4.8	53.1	4.8	15.8
17	5.1	13.9	6.7	4.7	9.7	14.6	10.5	10.3	10.8	7.8	5.0	7.6	13.5	28.0	20.8	11.9	26.2	20.4	10.4	12.4	13.8	11.1	11.6	5.7	28.0	4.7	12.2
18	7.1	9.3	4.7	6.5	6.2	5.1	6.1	10.9	6.0	4.9	4.8	4.8	4.7	4.6	5.4	7.9	5.4	6.0	4.8	6.5	5.7	5.9	12.8	25.2	25.2	4.6	7.1
19	7.6	10.7	9.6	10.4	6.1	14.0	12.8	10.8	8.8	13.6	9.4	10.3	6.7	6.2	6.6	7.8	6.5	7.7	6.1	6.4	6.9	6.3	6.4	5.5	14.0	5.5	8.5
20	5.5	9.2	6.1	5.9	7.0	5.0	5.8	6.5	6.3	7.1	7.4	7.7	5.4	7.4	6.4	10.7	9.1	8.0	15.7	22.9	51.5	6.1	6.6	5.1	51.5	5.0	9.8
21	11.4	28.1	11.3	24.4	32.8	9.3	14.5	11.9	21.7	5.4	6.4	5.9	8.4	8.1	9.9	12.4	13.8	10.5	5.2	7.4	6.7	16.3	20.2	10.5	32.8	5.2	13.0
22	10.3	5.2	4.2	7.6	5.4	4.1	7.7	7.9	25.1	15.3	24.9	6.7	7.0	8.0	6.2	5.8	5.4	6.9	5.2	5.2	5.7	5.4	5.0	5.2	25.1	4.1	8.1
23	7.4	9.0	10.0	5.1	11.3	8.1	15.9	17.6	11.9	8.9	15.7	9.8	8.8	8.4	8.5	6.0	5.5	6.1	6.2	13.8	9.3	5.7	6.1	13.0	17.6	5.1	9.5
24	15.7	9.4	6.8	13.1	6.4	8.1	6.4	9.8	8.5	13.3	12.4	6.2	8.2	8.1	21.7	15.4	9.1	7.2	14.1	41.3	17.9	14.7	11.7	25.7	41.3	6.2	13.0
25	5.9	4.7	7.8	10.4	24.2	9.4	5.9	5.5	6.0	6.2	6.7	8.5	8.1	8.3	10.1	14.4	11.4	8.0	7.6	8.6	5.1	6.1	5.0	5.1	24.2	4.7	8.3
26	6.0	5.9	8.0	6.6	6.3	8.7	8.9	9.5	9.5	44.3	31.1	14.7	13.3	9.8	15.8	26.3	44.3	11.1	7.7	13.8	9.4	8.3	16.5	17.8	44.3	5.9	14.7
27	49.4	49.3	14.5	23.3	18.7	12.3	10.9	14.4	15.8	12.5	24.7	40.9	14.0	12.7	15.2	11.3	10.9	5.8	4.9	6.2	5.3	4.9	5.4	6.3	49.4	4.9	16.2
28	5.5	5.2	6.0	5.1	5.8	5.3	6.6	4.6	4.4	6.6	6.7	6.5	6.1	5.5	7.0	7.7	27.3	16.9	9.8	13.3	13.7	9.9	13.8	23.3	27.3	4.4	9.3
29	8.9	12.7	11.7	10.0	12.1	9.6	4.6	3.6	17.7	8.6	10.4	53.4	32.3	35.5	9.1	9.6	7.8	12.3	10.8	13.7	26.9	5.3	8.1	5.7	53.4	3.6	14.2
30	6.5	6.9	7.1	19.5	8.6	9.8	5.0	13.7	4.9	6.3	9.1	23.3	6.6	6.9	9.4	15.9	14.0	10.9	9.1	13.2	32.4	48.6	8.6	5.1	48.6	4.9	12.5
Max.	**80.3**	**49.3**	**52.0**	**24.4**	**32.8**	**31.1**	**55.1**	**53.3**	**53.1**	**44.3**	**85.7**	**61.2**	**84.0**	**35.5**	**29.5**	**36.6**	**44.3**	**100.1**	**49.6**	**41.3**	**51.5**	**48.6**	**24.0**	**52.5**	**100.1**		
Min.	**3.6**	**3.5**	**4.1**	**3.4**	**2.5**	**3.4**	**3.7**	**3.6**	**4.4**	**4.9**	**4.1**	**4.3**	**4.7**	**4.6**	**5.0**	**4.9**	**1.0**	**5.0**	**4.6**	**3.5**	**4.3**	**4.0**	**4.0**	**3.3**		**1.0**	
Avg.	**12.9**	**11.4**	**9.1**	**8.6**	**10.6**	**9.2**	**11.0**	**11.6**	**13.4**	**9.8**	**13.5**	**14.9**	**12.8**	**11.0**	**11.8**	**14.0**	**13.0**	**14.7**	**10.4**	**10.4**	**10.4**	**9.3**	**8.8**	**10.5**			**11.4**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climatronics)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.0	5.3	5.4	6.8	10.9	9.0	27.7	26.8	15.9	58.5	24.6	36.5	25.0	27.8	9.4	10.7	8.5	8.1	6.3	5.3	6.9	11.9	5.4	5.8	58.5	5.3	15.2
2	5.6	7.0	7.6	6.1	6.8	5.6	5.0	4.9	5.1	4.5	6.3	7.5	8.0	6.3	6.8	7.1	7.8	7.6	6.5	6.3	5.3	5.7	4.2	4.0	8.0	4.0	6.2
3	4.7	5.1	6.2	7.7	5.7	4.2	4.4	4.1	4.2	4.7	6.3	5.3	6.2	6.9	8.2	7.9	14.0	44.5	8.5	5.5	13.8	9.9	33.1	53.6	53.6	4.1	11.4
4	18.8	21.8	13.9	38.6	23.9	10.6	6.2	5.3	8.2	12.4	6.9	9.8	5.0	4.9	5.4	4.8	4.4	5.0	7.3	6.6	5.2	5.5	4.9	5.4	38.6	4.4	10.0
5	8.8	10.4	5.7	5.4	4.7	6.4	7.0	5.8	6.3	5.9	5.0	5.1	47.0	19.3	6.7	7.3	5.7	6.9	7.5	8.0	7.4	4.1	5.6	4.8	47.0	4.1	8.6
6	5.8	4.1	4.2	6.4	4.6	4.2	5.2	5.3	5.9	6.5	5.2	4.5	4.8	5.0	5.6	4.3	5.5	5.6	5.3	4.5	3.8	4.3	8.2	5.2	8.2	3.8	5.2
7	5.0	5.4	5.7	5.7	6.0	7.1	4.6	4.7	4.5	4.6	4.7	4.5	7.0	5.5	7.0	5.9	7.3	10.4	6.6	6.9	4.9	8.4	13.3	12.2	13.3	4.5	6.6
8	4.4	8.0	7.1	4.5	11.8	6.0	4.8	6.2	5.2	5.0	23.1	19.9	10.3	9.4	12.2	9.5	8.3	7.9	8.1	6.9	5.2	16.7	17.5	16.2	23.1	4.4	9.8
9	11.1	8.5	12.0	7.0	7.7	7.6	6.7	5.7	4.9	4.3	5.5	6.7	40.2	28.9	61.4	42.8	16.9	13.4	11.5	13.7	9.8	11.3	5.2	10.4	61.4	4.3	14.7
10	5.0	3.8	3.9	8.7	11.0	6.0	5.4	10.0	4.6	10.5	4.3	5.9	14.2	9.8	10.4	10.3	12.3	18.7	9.9	7.1	13.3	16.9	9.4	7.6	18.7	3.8	9.1
11	8.5	4.3	6.2	8.3	6.3	8.4	8.5	8.1	12.3	14.1	30.8	8.3	5.5	6.5	7.5	6.7	5.4	4.5	4.1	4.1	3.9	4.2	4.1	5.3	30.8	3.9	7.8
12	4.7	4.4	4.7	3.9	5.4	6.4	5.6	19.7	21.3	5.8	11.8	34.6	42.0	57.5	30.2	24.7	14.6	13.4	9.8	8.5	11.9	5.8	5.2	5.6	57.5	3.9	14.9
13	4.3	11.0	7.8	9.2	12.1	8.5	6.8	8.9	5.3	5.2	6.3	6.6	6.5	12.2	11.5	37.8	15.1	10.2	7.9	8.0	8.0	8.0	4.6	7.0	37.8	4.3	9.5
14	5.3	7.4	14.3	8.3	10.4	13.1	11.1	7.1	7.9	13.3	16.9	6.5	9.7	9.6	14.8	13.3	11.7	6.9	5.3	11.6	8.8	2.8	5.5	5.9	16.9	2.8	9.5
15	9.9	11.6	7.4	6.2	6.1	6.4	14.5	6.0	18.3	21.7	26.4	31.3	39.0	8.1	29.3	12.1	6.5	12.9	6.9	5.2	4.4	4.4	7.3	7.3	39.0	4.4	12.9
16	5.5	4.4	4.3	6.5	6.0	5.9	25.2	4.8	5.9	15.2	16.1	14.8	6.8	4.7	10.7	12.8	7.4	7.6	13.6	12.5	14.9	7.3	6.5	7.0	25.2	4.3	9.4
17	7.0	6.5	9.2	13.4	12.0	9.6	3.8	3.8	3.2	3.7	4.3	4.0	7.1	4.8	6.9	14.5	12.6	5.6	10.9	11.3	8.6	3.3	3.4	4.1	14.5	3.2	7.2
18	4.9	4.1	6.0	5.1	4.1	6.5	5.9	6.3	8.8	8.0	9.6	9.0	24.6	35.0	12.5	25.3	30.7	21.2	20.8	12.3	7.2	7.1	11.2	22.4	35.0	4.1	12.9
19	13.0	7.3	12.3	13.0	10.7	6.2	9.0	6.2	8.9	3.7	44.0	9.7	28.0	30.9	77.9	88.5	29.9	80.1	8.1	4.4	8.6	12.8	11.8	10.0	88.5	3.7	22.3
20	16.4	16.7	6.3	12.5	6.9	5.6	6.1	6.5	6.8	12.9	21.7	9.3	6.9	4.6	5.0	3.7	5.2	4.2	6.3	5.3	5.3	7.9	7.4	7.2	21.7	3.7	8.2
21	7.6	5.7	5.5	5.4	5.0	7.1	6.9	4.6	4.3	4.8	6.4	14.6	9.2	9.0	4.9	4.9	5.1	21.0	10.6	12.2	17.1	8.7	5.9	9.5	21.0	4.3	8.2
22	10.1	14.9	9.6	9.3	5.7	4.2	6.3	4.9	6.4	5.2	7.1	5.2	17.2	44.8	23.4	16.2	11.0	6.2	16.2	40.9	19.6	35.8	53.8	16.9	53.8	4.2	16.3
23	9.7	18.4	60.4	73.6	31.7	20.7	78.3	28.5	33.5	5.7	19.7	26.9	16.4	16.1	11.6	8.5	24.0	12.9	7.4	9.1	26.2	20.5	15.6	27.2	78.3	5.7	25.1
24	31.3	13.6	68.4	14.8	21.8	43.9	62.9	68.2	23.6	8.2	10.7	8.0	17.1	29.1	20.7	9.0	8.4	6.6	4.1	3.6	6.2	5.1	7.5	5.0	68.4	3.6	20.7
25	4.3	5.0	4.7	4.7	4.6	4.6	4.3	5.5	4.8	4.9	4.8	5.1	4.9	4.9	5.2	5.1	4.7	5.1	5.3	5.7	14.5	6.0	22.4	22.1	22.4	4.3	6.8
26	7.2	4.9	4.5	10.2	5.8	5.8	10.0	15.5	9.9	6.8	7.3	10.7	5.1	6.7	6.9	6.0	8.0	5.1	5.0	4.9	4.6	4.9	6.0	4.9	15.5	4.5	6.9
27	4.3	4.2	4.7	4.8	4.4	5.0	6.8	5.8	13.1	5.8	5.1	18.1	7.1	9.5	5.7	6.4	7.0	4.8	5.0	6.0	7.4	12.2	32.9	34.1	34.1	4.2	9.2
28	35.0	3.8	3.6	9.6	49.1	68.5	29.9	17.7	25.2	8.1	9.4	11.6	14.1	14.1	12.1	9.0	7.4	7.6	8.3	7.0	5.3	5.1	5.2	4.8	68.5	3.6	15.5
29	4.7	5.0	4.8	4.6	5.5	5.6	5.7	5.3	5.2	5.1	5.5	5.9	6.4	6.5	5.8	5.7	5.6	6.1	5.5	5.7	5.4	5.2	5.1	5.8	6.5	4.6	5.5
30	13.5	7.1	6.3	4.2	4.0	4.3	6.0	7.4	6.9	11.2	13.4	5.9	52.0	6.8	8.4	11.2	12.2	7.8	7.7	5.2	5.7	9.1	7.6	6.9	52.0	4.0	9.6
31	7.3	6.3	6.3	5.2	5.1	5.0	7.1	6.0	6.7	5.5	6.1	5.4	5.1	6.3	6.3	7.0	7.9	15.1	9.8	5.8	5.2	5.0	7.5	6.9	15.1	5.0	6.7
Max.	**35.0**	**21.8**	**68.4**	**73.6**	**49.1**	**68.5**	**78.3**	**68.2**	**33.5**	**58.5**	**44.0**	**36.5**	**52.0**	**57.5**	**77.9**	**88.5**	**30.7**	**80.1**	**20.8**	**40.9**	**26.2**	**35.8**	**53.8**	**53.6**	**88.5**		
Min.	**4.3**	**3.8**	**3.6**	**3.9**	**4.0**	**4.2**	**3.8**	**3.8**	**3.2**	**3.7**	**4.3**	**4.0**	**4.8**	**4.6**	**4.9**	**3.7**	**4.4**	**4.2**	**4.1**	**3.6**	**3.8**	**2.8**	**3.4**	**4.0**		**2.8**	
Avg.	**9.3**	**7.9**	**10.6**	**10.6**	**10.2**	**10.3**	**12.8**	**10.5**	**9.8**	**9.4**	**12.1**	**11.5**	**16.1**	**14.6**	**14.5**	**14.2**	**10.7**	**12.7**	**8.3**	**8.4**	**8.8**	**8.9**	**11.1**	**11.3**			**11.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climatronics)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.6	10.6	7.5	6.7	10.1	16.7	5.7	12.6	10.5	7.1	6.2	8.3	8.7	7.3	51.5	46.3	27.3	6.2	12.4	9.9	5.2	7.5	7.6	6.7	51.5	4.6	12.6
2	9.6	10.6	39.2	34.8	31.7	36.9	11.6	23.6	6.5	6.8	5.4	6.3	6.2	5.2	13.6	8.7	30.9	16.9	16.1	6.8	7.9	7.8	5.5	5.9	39.2	5.2	14.8
3	5.3	4.8	7.5	5.7	3.8	3.7	4.4	20.1	15.4	10.9	29.4	30.5	40.7	53.0	38.7	11.5	24.2	43.5	6.3	7.7	5.4	4.5	5.8	4.3	53.0	3.7	16.1
4	4.3	4.9	4.2	4.1	4.2	4.6	4.0	5.0	4.5	4.3	3.9	4.6	4.9	4.9	4.2	4.4	4.5	4.2	4.1	9.0	7.3	4.4	4.8	5.0	9.0	3.9	4.8
5	4.1	4.0	4.5	4.4	5.9	7.0	3.6	3.9	4.0	4.0	4.3	4.8	6.4	6.7	4.8	5.1	8.1	4.3	4.1	3.9	3.9	4.0	4.4	3.9	8.1	3.6	4.7
6	4.4	4.4	4.3	6.1	4.6	6.8	6.2	5.3	5.6	5.2	5.3	4.8	4.9	6.6	5.3	5.1	5.7	5.5	7.0	6.1	5.5	4.8	16.6	8.5	16.6	4.3	6.0
7	5.3	5.5	4.4	5.3	5.2	4.3	4.5	6.0	5.6	5.5	4.2	4.5	4.9	6.6	11.7	10.6	5.0	10.6	11.8	5.9	6.4	8.4	6.8	16.4	16.4	4.2	6.9
8	8.3	13.3	6.9	9.1	4.4	5.5	4.6	5.3	5.4	4.8	4.8	5.0	6.6	5.2	5.1	5.2	4.6	4.6	7.1	4.5	5.8	5.0	4.9	5.5	13.3	4.4	5.9
9	5.5	6.1	5.4	5.1	4.9	5.0	5.3	4.1	4.8	6.1	4.8	4.8	4.6	4.7	4.6	4.4	4.1	5.2	5.9	5.9	4.4	6.1	27.3	18.9	27.3	4.1	6.6
10	6.0	7.0	6.0	4.9	5.5	16.6	4.9	3.9	4.0	15.4	9.3	5.1	9.4	9.0	13.4	14.1	12.3	11.0	12.0	10.9	9.0	4.5	8.3	3.5	16.6	3.5	8.6
11	4.7	4.8	6.0	9.7	7.3	4.4	4.7	5.6	5.7	6.1	13.9	11.0	5.1	5.1	6.0	4.6	3.9	5.2	8.3	6.7	9.5	6.3	10.3	27.6	27.6	3.9	7.6
12	6.8	4.9	28.8	46.8	9.2	72.6	59.5	73.6	41.5	37.2	28.2	22.5	18.0	6.7	6.7	24.0	19.2	7.5	6.1	5.5	3.9	3.9	4.3	4.3	73.6	3.9	22.6
13	4.2	4.1	4.2	4.5	4.5	4.7	4.5	4.7	5.3	5.7	5.9	7.2	7.0	33.1	52.1	29.8	20.9	30.8	4.2	4.1	6.1	5.3	6.8	7.1	52.1	4.1	11.1
14	6.3	4.9	5.8	7.0	9.3	13.2	5.1	10.2	21.8	18.1	37.4	24.2	4.5	4.3	4.4	5.5	4.4	4.2	4.1	4.6	14.4	18.9	4.8	5.4	37.4	4.1	10.1
15	6.9	6.3	4.6	5.9	4.0	3.1	3.4	4.1	3.7	3.8	3.9	4.7	4.2	6.3	5.8	4.6	7.2	5.4	15.8	8.5	6.6	6.8	6.2	4.7	15.8	3.1	5.7
16	20.3	20.3	14.5	15.4	8.6	23.2	7.4	13.8	23.2	14.6	16.8	20.5	20.5	9.0	9.1	15.1	9.4	8.5	16.1	10.9	14.0	20.7	16.8	16.6	23.2	7.4	15.2
17	16.2	6.8	15.1	13.3	7.8	4.2	6.3	2.7	7.3	6.0	18.0	17.4	16.8	19.7	18.7	17.2	8.3	3.7	15.0	11.3	14.8	15.9	21.7	46.1	46.1	2.7	13.8
18	10.0	13.2	25.1	11.6	7.7	11.9	12.0	9.7	8.5	5.3	7.0	9.0	6.4	4.5	7.0	11.8	4.9	6.8	8.2	16.7	22.8	6.4	5.0	4.1	25.1	4.1	9.8
19	33.0	5.8	7.2	5.4	29.7	62.5	18.7	30.9	23.9	7.7	21.2	17.3	5.0	5.5	4.4	4.3	5.0	6.5	4.4	4.8	5.8	5.2	4.6	4.3	62.5	4.3	13.5
20	4.6	4.3	4.4	5.3	4.6	6.1	4.6	4.7	4.6	4.7	4.9	5.4	5.0	4.7	5.3	5.8	6.9	5.1	10.2	5.5	12.2	9.3	7.7	10.3	12.2	4.3	6.1
21	6.2	6.3	4.3	5.9	13.2	6.2	11.2	5.6	4.8	8.1	4.5	5.5	4.4	4.4	5.4	8.3	5.7	6.5	4.3	4.3	4.4	4.2	4.5	5.0	13.2	4.2	6.0
22	5.1	6.6	14.6	6.5	15.1	6.7	7.5	7.7	12.8	6.5	6.4	5.3	5.1	5.7	5.5	6.1	6.7	6.3	6.8	8.7	4.6	5.0	17.3	8.2	17.3	4.6	7.8
23	4.4	6.1	6.4	6.7	12.6	6.6	8.2	6.3	6.2	7.5	11.2	8.2	7.0	6.0	8.0	7.1	15.1	5.5	13.4	8.8	4.9	7.0	6.0	10.2	15.1	4.4	7.9
24	7.8	6.2	9.4	16.9	18.4	1.1	0.3	0.4	0.7	3.5	51.5	4.4	5.3	5.4	4.8	4.3	4.5	4.9	4.4	5.4	8.6	5.3	5.4	4.8	51.5	0.3	7.6
25	4.7	4.7	5.1	4.4	4.8	7.5	5.4	8.2	11.8	7.3	6.0	4.9	6.4	6.1	6.8	5.8	5.2	5.5	8.0	7.7	11.7	9.6	7.9	6.1	11.8	4.4	6.7
26	3.7	3.5	4.3	8.0	11.3	12.0	9.7	19.6	30.7	8.5	27.1	6.5	8.5	14.0	14.9	11.0	16.4	11.9	6.4	5.9	7.4	10.7	6.0	4.2	30.7	3.5	10.9
27	5.2	5.3	4.8	5.0	4.4	5.1	4.2	4.6	4.3	4.7	5.7	5.6	7.1	5.2	6.0	6.0	4.9	5.3	8.8	5.6	4.9	5.6	7.1	6.3	8.8	4.2	5.5
28	4.8	4.5	5.3	5.4	7.1	18.6	24.2	35.5	40.8	17.1	9.3	4.4	7.3	6.2	4.2	5.3	4.4	5.5	5.3	4.9	4.0	4.7	5.9	5.0	40.8	4.0	10.0
29	5.0	4.1	3.6	4.5	3.8	5.3	4.4	4.1	4.2	3.9	3.9	4.8	4.3	4.0	5.0	4.6	5.2	4.7	4.6	4.5	5.4	4.4	4.5	4.0	5.4	3.6	4.5
30	4.7	5.3	4.7	5.0	5.2	5.6	4.8	4.9	4.7	5.0	4.8	5.2	4.5	4.4	4.8	4.5	5.5	4.8	7.1	5.6	4.7	5.3	4.8	6.1	7.1	4.4	5.1
Max.	**33.0**	**20.3**	**39.2**	**46.8**	**31.7**	**72.6**	**59.5**	**73.6**	**41.5**	**37.2**	**51.5**	**30.5**	**40.7**	**53.0**	**52.1**	**46.3**	**30.9**	**43.5**	**16.1**	**16.7**	**22.8**	**20.7**	**27.3**	**46.1**	**73.6**		
Min.	**3.7**	**3.5**	**3.6**	**4.1**	**3.8**	**1.1**	**0.3**	**0.4**	**0.7**	**3.5**	**3.9**	**4.4**	**4.2**	**4.0**	**4.2**	**4.3**	**3.9**	**3.7**	**4.1**	**3.9**	**3.9**	**3.9**	**4.3**	**3.5**		**0.3**	
Avg.	**7.4**	**6.6**	**8.9**	**9.3**	**9.0**	**12.9**	**8.7**	**11.6**	**11.1**	**8.4**	**12.2**	**9.1**	**8.3**	**9.0**	**11.3**	**10.0**	**9.7**	**8.6**	**8.3**	**7.0**	**7.7**	**7.2**	**8.3**	**9.0**			**9.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (Climatronics)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.6	5.0	8.2	5.8	4.5	5.6	30.5	53.1	43.6	9.1	5.7	11.5	7.3	14.7	5.7	6.9	9.4	65.1	91.9	63.9	23.9	32.7	37.1	3.9	91.9	3.9	22.9
2	7.0	12.6	9.8	6.6	7.5	6.1	7.3	5.0	7.5	5.2	5.2	7.4	17.4	8.0	53.9	18.4	60.7	18.7	6.9	11.0	21.1	7.3	5.6	14.9	60.7	5.0	13.8
3	8.6	9.4	5.4	5.7	5.2	5.2	5.5	4.6	4.7	5.9	5.1	6.0	6.8	6.7	6.8	5.0	8.8	5.8	5.5	4.0	4.0	3.9	3.9	4.6	9.4	3.9	5.7
4	5.3	3.6	3.3	3.5	6.0	6.3	19.3	25.4	8.1	5.4	3.7	4.2	4.5	15.8	6.4	5.3	4.5	3.9	3.9	4.6	4.0	4.5	4.0	4.1	25.4	3.3	6.6
5	4.1	4.7	4.1	4.0	4.6	4.7	4.3	4.1	5.4	6.5	5.5	4.1	4.2	4.5	4.4	4.3	4.3	4.1	4.6	4.9	5.5	4.4	4.7	4.5	6.5	4.0	4.6
6	4.6	4.5	4.1	4.3	5.4	4.9	4.3	4.2	4.3	4.3	4.7	4.1	4.0	4.2	3.8	3.9	6.3	49.3	39.3	11.1	11.1	14.7	5.5	7.9	49.3	3.8	9.0
7	8.2	13.8	9.8	5.1	9.8	9.8	4.5	6.6	4.6	5.1	5.9	7.7	6.1	4.4	3.9	3.9	4.1	4.2	4.6	5.7	5.2	4.2	4.0	4.1	13.8	3.9	6.1
8	4.7	6.0	14.4	8.7	7.5	6.7	8.8	13.3	6.8	8.0	6.9	5.2	11.1	7.6	5.7	6.8	32.7	9.8	5.8	6.5	8.9	10.8	7.5	9.8	32.7	4.7	9.2
9	6.6	100.2	28.6	10.5	10.4	5.1	4.5	4.0	3.9	4.9	5.4	6.2	3.7	4.1	3.6	3.7	3.6	3.7	4.2	4.0	5.1	3.9	4.3	4.6	100.2	3.6	9.9
10	4.9	5.2	7.6	5.5	6.5	11.2	6.5	6.2	7.1	6.6	4.2	7.2	5.4	9.8	7.4	4.9	6.1	7.8	5.8	5.9	10.6	17.8	10.7	3.5	17.8	3.5	7.3
11	4.0	4.1	5.9	4.8	9.2	13.9	30.5	14.6	17.3	24.3	6.1	16.5	29.3	37.2	12.3	16.4	5.9	6.7	75.4	89.0	28.3	7.3	6.3	5.5	89.0	4.0	19.6
12	11.6	18.7	12.8	7.3	15.2	19.2	21.7	16.6	14.2	12.4	13.4	9.8	10.0	5.7	9.9	17.1	13.1	6.9	7.9	11.9	11.5	11.1	6.0	7.0	21.7	5.7	12.1
13	7.5	11.5	7.8	15.3	9.0	8.5	6.8	8.4	7.3	6.1	5.3	5.6	5.2	4.7	3.4	4.0	3.6	3.7	4.2	8.4	4.1	4.4	4.2	4.4	15.3	3.4	6.4
14	5.9	3.1	3.0	4.2	3.7	4.4	4.6	7.4	9.7	5.0	8.6	8.7	12.7	14.8	12.1	10.1	10.1	13.6	12.7	5.6	21.2	9.4	15.3	13.3	21.2	3.0	9.1
15	6.2	15.1	17.4	8.1	4.6	4.0	3.6	5.0	3.9	6.5	4.8	5.1	4.0	4.4	3.3	4.2	3.3	4.1	4.1	3.3	3.7	2.9	2.9	4.7	17.4	2.9	5.4
16	5.0	3.3	3.4	4.4	3.3	3.2	9.7	3.9	4.8	5.1	6.0	6.5	4.0	5.8	4.1	10.0	5.1	14.3	10.8	11.6	17.4	10.3	10.2	16.8	17.4	3.2	7.5
17	3.6	12.7	10.7	13.3	18.5	16.8	17.6	4.1	6.4	5.4	11.3	7.3	5.1	16.2	12.9	15.3	14.5	18.4	10.3	10.9	12.9	12.1	9.5	6.9	18.5	3.6	11.3
18	6.6	9.6	4.3	4.4	4.0	3.3	5.7	4.3	3.7	4.7	5.4	4.1	5.3	4.3	4.5	6.3	9.4	9.1	3.7	3.9	5.5	5.9	7.3	7.0	9.6	3.3	5.5
19	12.4	13.6	15.5	14.2	12.2	7.6	9.1	16.4	14.1	11.9	10.8	6.2	5.1	9.2	13.1	17.5	17.7	9.6	8.0	18.3	14.6	12.0	7.2	8.3	18.3	5.1	11.9
20	5.1	8.0	7.4	7.6	6.6	16.8	18.2	4.6	4.0	3.9	4.4	3.9	3.7	3.3	3.5	3.1	4.5	5.7	6.2	4.9	3.2	3.4	6.2	7.3	18.2	3.1	6.1
21	3.7	3.6	3.5	3.5	3.2	3.7	16.9	4.6	5.9	8.6	4.6	7.7	11.3	3.9	6.0	4.5	6.4	4.8	4.4	3.6	3.6	5.8	3.2	8.2	16.9	3.2	5.6
22	3.5	4.5	4.0	5.1	4.1	3.5	3.8	3.5	4.1	3.9	4.5	4.0	3.3	3.8	4.3	3.7	3.4	3.7	3.1	3.5	18.8	26.0	9.7	8.9	26.0	3.1	5.9
23	5.2	10.2	5.1	6.5	10.2	5.0	6.3	6.5	27.5	18.1	13.6	16.1	22.4	5.8	7.8	7.8	6.7	21.1	10.7	86.0	20.5	51.5	46.9	22.9	86.0	5.0	18.3
24	7.9	7.1	7.1	6.4	3.9	5.4	7.9	7.6	7.8	12.0	14.0	14.2	12.4	9.0	10.1	12.0	19.6	14.0	3.2	2.9	2.8	2.8	3.0	3.2	19.6	2.8	8.2
25	2.9	3.1	2.7	3.3	3.8	3.8	3.1	3.7	2.9	6.1	8.1	4.1	3.2	5.3	5.2	4.8	4.7	17.7	4.7	18.6	8.5	13.4	10.4	3.0	18.6	2.7	6.1
26	21.0	7.1	5.3	5.5	9.4	71.7	25.2	34.8	36.2	10.6	16.4	6.4	6.1	5.0	5.9	5.9	5.0	6.9	4.7	5.3	4.1	5.0	4.9	4.4	71.7	4.1	13.0
27	4.3	4.3	4.5	4.5	5.1	4.5	4.8	4.3	4.9	4.4	4.0	4.5	4.0	4.0	4.0	7.7	5.3	5.4	8.2	10.6	8.1	14.0	7.8	5.9	14.0	4.0	5.8
28	4.0	10.7	6.4	4.2	14.4	16.6	8.2	6.9	20.8	7.4	11.6	8.0	14.2	17.4	9.3	6.4	4.2	12.7	8.3	6.1	15.7	15.1	18.6	18.4	20.8	4.0	11.1
29	15.0	13.5	10.7	13.4	28.3	11.4	15.9	15.2	11.9	10.6	14.9	17.4	14.3	13.4	7.5	16.5	15.7	5.3	3.4	3.9	3.8	17.7	6.6	4.1	28.3	3.4	12.1
30	2.7	7.2	2.8	3.7	3.0	10.7	10.8	9.1	9.0	3.2	3.9	6.6	12.4	4.0	6.2	7.0	4.1	7.0	4.7	3.8	4.3	3.1	3.4	3.6	12.4	2.7	5.7
31	5.0	6.0	8.8	6.2	7.7	5.1	5.5	3.8	3.9	3.3	3.9	3.8	5.3	3.7	6.4	4.2	5.0	5.1	4.8	3.9	3.6	3.7	4.4	2.9	8.8	2.9	4.8
Max.	**21.0**	**100.2**	**28.6**	**15.3**	**28.3**	**71.7**	**30.5**	**53.1**	**43.6**	**24.3**	**16.4**	**17.4**	**29.3**	**37.2**	**53.9**	**18.4**	**60.7**	**65.1**	**91.9**	**89.0**	**28.3**	**51.5**	**46.9**	**22.9**	**100.2**		
Min.	**2.7**	**3.1**	**2.7**	**3.3**	**3.0**	**3.2**	**3.1**	**3.5**	**2.9**	**3.2**	**3.7**	**3.8**	**3.2**	**3.3**	**3.3**	**3.1**	**3.3**	**3.7**	**3.1**	**2.9**	**2.8**	**2.8**	**2.9**	**2.9**		**2.7**	
Avg.	**6.5**	**11.0**	**7.9**	**6.6**	**8.0**	**9.8**	**10.7**	**10.1**	**10.2**	**7.6**	**7.3**	**7.4**	**8.5**	**8.4**	**8.2**	**8.0**	**9.9**	**11.9**	**12.1**	**14.1**	**10.2**	**11.0**	**9.1**	**7.4**			**9.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	11.0	11.5	13.0	13.5	14.4	14.6	8.3	7.6	8.9	10.9	11.3	11.7	10.7	10.2	8.6	7.7	7.3	8.0	6.5	8.2	7.4	6.8	7.2	6.4	14.6	6.4	9.6
2	7.1	7.2	6.9	7.4	7.3	8.5	9.1	8.5	8.7	9.1	10.0	9.3	9.2	9.2	9.7	9.3	8.6	7.3	7.5	9.1	8.6	8.1	9.3	9.0	10.0	6.9	8.5
3	9.5	7.6	7.2	7.4	8.6	7.9	10.4	11.7	8.9	9.8	8.6	10.6	12.4	10.9	5.5	5.1	11.3	11.8	5.9	3.7	6.0	7.0	5.3	6.6	12.4	3.7	8.3
4	4.9	6.1	6.4	7.4	7.5	6.0	6.7	6.3	5.6	6.2	6.4	5.1	3.6	2.0	1.9	1.8	3.3	3.0	2.5	2.7	1.4	0.9	1.2	1.0	7.5	0.9	4.2
5	1.3	1.8	3.6	4.2	4.6	2.5	3.7	7.0	5.8	4.9	6.8	6.3	6.5	4.8	5.5	5.8	4.6	2.6	2.3	1.6	2.0	2.8	2.9	3.0	7.0	1.3	4.0
6	3.9	4.6	3.7	3.0	3.2	2.6	4.6	4.4	3.5	7.1	10.0	8.0	7.9	4.3	4.5	4.7	6.2	7.3	7.2	8.3	7.4	9.9	9.4	10.1	10.1	2.6	6.1
7	9.8	11.1	12.3	14.0	19.2	20.0	18.7	14.2	15.8	15.4	14.6	18.1	13.5	12.0	9.3	8.1	8.9	10.8	14.2	12.4	12.7	14.0	12.7	10.2	20.0	8.1	13.4
8	8.7	9.3	10.4	13.2	9.2	7.1	7.9	6.8	5.5	6.2	8.2	8.9	8.5	9.3	8.1	11.8	12.7	9.2	11.2	10.8	9.3	6.2	5.8	6.4	13.2	5.5	8.8
9	7.5	6.7	5.6	2.3	6.0	5.9	4.9	4.2	4.7	3.0	3.9	1.4	1.2	2.5	3.2	2.5	3.4	5.4	4.7	5.0	5.6	3.9	6.4	7.0	7.5	1.2	4.5
10	5.1	7.1	9.0	5.4	5.2	6.7	6.7	11.3	16.3	18.2	17.3	18.2	16.7	14.8	16.4	16.1	15.3	16.6	14.5	14.1	14.8	13.9	13.1	13.6	18.2	5.1	12.8
11	13.2	15.2	15.0	15.3	14.7	14.2	15.3	16.4	15.7	15.3	16.4	18.4	19.2	18.2	18.9	18.4	18.5	17.5	16.6	17.3	18.2	19.0	18.9	18.4	19.2	13.2	16.8
12	18.4	17.2	16.8	15.6	15.7	15.9	17.0	16.5	14.7	14.6	13.4	12.6	12.3	14.6	15.6	17.0	18.5	19.5	18.5	17.8	15.7	13.4	13.1	18.0	19.5	12.3	15.9
13	15.5	14.8	11.8	11.2	11.1	8.7	9.4	8.2	5.8	8.5	6.4	4.5	4.5	2.2	1.3	1.3	1.8	2.3	6.0	8.7	8.3	9.5	9.6	10.4	15.5	1.3	7.6
14	10.4	11.0	13.7	12.3	14.4	15.2	19.2	20.2	21.3	19.1	18.2	15.3	14.8	14.3	15.0	11.3	10.8	8.5	6.6	8.7	7.4	8.3	8.0	7.8	21.3	6.6	13.0
15	7.1	7.9	6.5	6.8	8.9	11.3	8.8	10.6	9.3	7.9	9.5	12.3	11.3	11.3	9.8	8.9	9.9	13.1	7.5	4.3	7.2	4.6	8.1	7.0	13.1	4.3	8.7
16	4.4	3.9	4.4	6.4	6.3	5.1	13.0	13.7	14.8	15.7	20.1	20.5	18.1	17.6	19.0	19.5	19.6	20.7	21.0	21.3	17.8	16.1	14.6	15.2	21.3	3.9	14.5
17	14.4	10.1	10.2	10.8	9.9	7.4	7.2	8.9	13.7	14.3	12.8	12.0	11.4	14.4	15.2	15.0	13.7	13.7	12.1	12.6	11.1	8.8	10.2	10.6	15.2	7.2	11.7
18	7.9	6.2	6.1	4.8	4.0	3.9	6.0	6.2	6.2	4.9	4.4							3.5	1.8	1.4	3.2	2.5	2.1	1.8	7.9	1.4	4.3
19	1.6	1.2	1.3	0.6	1.8	1.7	1.2	1.0	1.7	3.3	3.3	2.9	1.3	1.7	2.4	2.0	5.9	7.9	9.9	8.8	9.0	8.1	8.7	9.5	9.9	0.6	4.0
20	8.3	8.8	8.6	8.7	9.6	9.8	10.5	10.2	8.5	9.3	7.8	6.9	7.5	7.9	7.7	9.7	8.4	7.5	8.5	9.6	9.7	9.0	7.6	6.3	10.5	6.3	8.6
21	5.2	5.1	4.1	2.3	2.6	4.2	2.8	6.0	4.8	5.7	6.0	7.6	6.7	7.1	7.3	5.6	6.6	4.9	5.9	5.6	4.8	4.5	5.0	4.0	7.6	2.3	5.2
22	2.6	2.8	2.4	1.2	2.7	2.7	1.6	1.0	1.9	2.3	3.1	3.2	3.3	3.8	3.8	3.9	3.2	3.8	3.7	4.0	3.2	1.7	2.3	5.0	5.0	1.0	2.9
23	3.8	5.0	5.0	3.9	5.5	6.8	3.6	4.6	6.2	4.9	5.8	5.9	6.3	7.1	7.5	10.5	9.8	9.0	9.4	9.6	9.8	11.3	10.8	8.7	11.3	3.6	7.1
24	10.3	9.0	10.6	8.2	8.7	10.2	7.4	6.6	6.8	9.2	9.6	8.5	6.5	4.6	6.5	6.7	7.0	6.4	7.5	6.6	4.5	5.1	5.8	5.5	10.6	4.5	7.4
25	8.4	7.1	10.0	13.9	15.3	16.2	14.9	15.5	16.5	19.0	16.3	18.6	17.1	20.9	20.6	20.1	15.8	17.5	19.2	19.4	20.3	21.5	23.1	20.8	23.1	7.1	17.0
26	21.4	21.7	22.0	23.6	22.9	22.2	21.6	20.3	21.1	20.4	18.2	15.7	14.2	13.3	13.6	12.4	10.6	10.6	9.7	9.9	10.1	8.0	10.0	11.2	23.6	8.0	16.0
27	13.3	13.4	14.3	15.0	18.5	18.1	17.5	16.2	15.7	20.4	18.6	19.2	19.2	19.9	16.6	17.8	18.1	14.1	14.8	14.7	15.9	17.2	15.7	15.0	20.4	13.3	16.6
28	14.3	13.8	14.3	14.7	13.5	13.8	12.7	12.4	12.9	10.1	6.1	5.8	5.1	8.7	8.3	7.8	8.6	8.3	10.7	12.6	12.6	13.8	14.7	13.0	14.7	5.1	11.2
29	12.8	11.8	12.7	10.6	15.8	16.6	18.2	17.1	20.5	22.2	16.5	17.7	20.5	20.9	18.6	15.3	16.7	17.4	18.1	21.8	22.8	21.9	21.4	16.0	22.8	10.6	17.7
30	13.7	15.7	16.9	17.2	18.1	19.6	19.4	19.9	22.3	24.3	23.4	24.3	29.5	27.5	28.6	24.1	23.0	21.0	17.6	17.3	18.7	21.7	14.8	12.7	29.5	12.7	20.5
31	13.7	14.0	15.8	17.1	16.2	16.7	16.5	15.7	17.2	13.4	14.3	13.4	10.2	11.8	12.4	11.2	12.5	11.6	8.7	6.5	11.2	9.4	8.9	7.9	17.2	6.5	12.8
Max.	**21.4**	**21.7**	**22.0**	**23.6**	**22.9**	**22.2**	**21.6**	**20.3**	**22.3**	**24.3**	**23.4**	**24.3**	**29.5**	**27.5**	**28.6**	**24.1**	**23.0**	**21.0**	**21.0**	**21.8**	**22.8**	**21.9**	**23.1**	**20.8**	**29.5**		
Min.	**1.3**	**1.2**	**1.3**	**0.6**	**1.8**	**1.7**	**1.2**	**1.0**	**1.7**	**2.3**	**3.1**	**1.4**	**1.2**	**1.7**	**1.3**	**1.3**	**1.8**	**2.3**	**1.8**	**1.4**	**1.4**	**0.9**	**1.2**	**1.0**		**0.6**	
Avg.	**9.3**	**9.3**	**9.7**	**9.6**	**10.4**	**10.4**	**10.5**	**10.6**	**11.0**	**11.5**	**11.2**	**11.4**	**11.0**	**10.9**	**10.7**	**10.4**	**10.7**	**10.4**	**10.0**	**10.1**	**10.2**	**10.0**	**9.9**	**9.6**			**10.4**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.9	11.8	11.3	9.9	8.0	10.9	12.9	11.8	7.2	8.4	9.5	8.1	7.4	7.9	15.8	17.2	17.1	17.2	17.7	20.0	20.0	18.0	19.9	21.8	21.8	7.2	13.2
2	21.2	19.4	16.4	18.2	20.7	17.8	18.8	19.5	20.2	21.6	20.8	19.6	20.4	21.4	20.9	19.2	16.5	17.0	17.6	17.8	17.4	16.1	15.2	16.0	21.6	15.2	18.7
3	16.5	14.8	14.3	12.1	13.8	12.7	12.1	9.9	8.9	7.6	7.8	7.6	7.2	5.3	2.8	1.8	0.8	0.4	1.4	2.9	3.8	3.8	3.7	4.1	16.5	0.4	7.3
4	4.0	5.3	7.2	3.8	3.5	5.5	5.3	4.2	4.9	5.1	4.6	5.9	4.7	3.1	1.6	2.4	3.1	3.6	3.2	3.1	2.8	2.9	2.9	2.8	7.2	1.6	4.0
5	2.8	2.8	2.6	1.8	3.7	3.8	2.2	2.3	2.9	2.1	4.5	5.2	3.1	4.2	3.0	2.5	2.7	7.4	9.0	8.6	6.0	4.9	3.7	3.2	9.0	1.8	4.0
6	7.6	9.6	9.7	10.2	10.8	10.4	12.1	11.4	10.6	10.0	10.3	9.1	8.2	7.5	5.0	2.8	2.6	1.8	1.7	1.2	2.0	2.6	3.9	4.5	12.1	1.2	6.9
7	3.7	1.7	2.4	1.6	1.9	3.6	3.1	1.6	0.9	0.9	1.0	1.1	2.5	2.4	1.0	1.1	2.8	2.4	3.1	2.5	1.3	1.7	0.9	1.7	3.7	0.9	2.0
8	1.3	1.2	1.3	0.9	1.9	3.4	3.3	3.5	2.5	3.7	4.5	3.9	3.4	5.2	4.3	4.1	2.5	2.3	2.0	1.7	1.0	1.2	1.0	1.2	5.2	0.9	2.6
9	1.6	1.0	1.3	1.5	1.2	0.9	1.0	0.8	0.8	1.4	1.6	2.2	4.0	4.7	4.3	2.0	1.7	1.4	0.7	1.3	0.7	1.3	0.2	0.9	4.7	0.2	1.6
10	2.8	2.2	1.8	2.0	1.1	2.5	3.0	3.8	4.0	3.9	3.4	3.2	2.6	3.5	5.0	6.0	2.3	2.3	3.1	6.1	5.0	2.9	3.7	2.6	6.1	1.1	3.3
11	2.0	1.4	2.4	2.6	2.8	2.2	3.6	6.1	7.4	4.4	6.3	8.8	8.9	9.1	9.0	9.1	10.8	12.9	13.3	13.3	11.6	12.6	12.8	11.7	13.3	1.4	7.7
12	12.0	9.7	10.4	10.6	10.0	9.7	9.7	9.3	9.1	10.4	9.0	10.6	11.4	11.2	11.5	9.5	7.3	6.9	6.8	8.4	11.0	12.1	10.5	11.9	12.1	6.8	10.0
13	10.3	8.7	10.5	11.7	11.8	12.1	11.1	7.1	6.6	6.0	8.5	7.7	7.0	6.5	7.4	8.5	7.3	8.4	11.1	12.3	10.6	8.9	8.3	7.6	12.3	6.0	9.0
14	10.8	10.5	10.7	10.6	11.3	9.3	9.0	10.3	10.5	9.0	8.9	8.7	8.3	7.2	5.6	6.1	4.6	5.9	3.9	3.6	2.3	1.9	3.1	3.1	11.3	1.9	7.3
15	3.5	3.1	2.8	3.1	3.0	2.9	3.1	1.9	3.6	2.8	2.5	2.5	1.0	1.9	2.0	4.0	4.3	4.0	3.9	3.3	3.4	3.7	3.5	3.6	4.3	1.0	3.1
16	4.7	3.8	1.6	1.6	2.2	2.0	1.9	2.0	1.6	1.9	3.3	4.3	3.7	3.1	1.1	0.6	0.7	0.6	1.1	2.6	1.6	1.2	0.9	1.8	4.7	0.6	2.1
17	1.7	1.7	2.4	1.9	1.1	0.6	1.3	1.2	1.2	1.5	2.9	2.0	3.1	4.2	4.8	5.4	4.3	5.0	3.9	2.2	4.3	4.1	3.1	3.2	5.4	0.6	2.8
18	2.4	2.1	2.7	2.0	2.0	2.5	2.6	3.0	2.2	1.8	2.1	1.6	1.8	2.9	2.8	1.8	2.2	2.2	2.2	3.5	3.8	3.4	3.2	4.3	4.3	1.6	2.5
19	6.1	5.3	5.8	9.3	10.1	8.6	7.6	9.9	9.3	9.3	8.9	8.6	8.2	8.4	10.5	12.9	13.6	10.2	13.0	17.2	17.6	17.4	17.8	18.0	18.0	5.3	11.0
20	18.8	18.7	20.2	19.1	16.9	16.2	15.8	15.6	15.6	14.3	13.7	12.4	17.9	21.6	21.4	21.8	20.8	22.4	22.2	24.7	22.3	14.5	12.6	13.5	24.7	12.4	18.0
21	13.9	15.2	19.5	22.2	24.3	17.2	12.8	15.8	15.9	14.7	12.5	13.9	11.9	7.4	9.5	8.5	6.3	8.6	7.5	10.8	10.2	8.1	7.7	8.0	24.3	6.3	12.6
22	7.7	7.5	6.5	8.3	7.3	6.0	5.4	7.2	7.3	6.5	6.5	4.5	4.2	6.2	7.2	5.9	7.0	6.4	6.6	8.0	7.1	8.4	7.8	6.1	8.4	4.2	6.7
23	7.1	6.1	5.8	9.3	10.4	8.6	10.2	11.5	9.2	7.7	9.8	6.6	9.4	8.4	7.9	8.9	7.6	7.9	11.0	10.1	9.8	10.5	9.4	9.4	11.5	5.8	8.9
24	6.3	9.0	9.3	11.1	8.2	9.8	9.0	10.8	10.1	9.1	12.3	14.7	20.0	17.7	18.4	19.6	20.9	19.8	17.2	16.8	17.1	16.5	16.4	17.2	20.9	6.3	14.0
25	13.5	10.5	15.6	16.3	16.7	11.4	6.9	6.1	4.8	3.9	5.1	6.4	6.0	5.6	6.2	6.5	5.9	5.4	5.7	4.0	3.1	2.8	3.0	4.2	16.7	2.8	7.3
26	9.4	12.1	13.6	15.2	13.6	11.6	10.2	9.4	8.2	4.7	4.4	2.9	3.2	5.8	7.0	7.1	6.2	6.2	5.6	2.1	4.1	6.3	8.0	6.7	15.2	2.1	7.7
27	9.0	8.9	7.1	6.1	7.0	8.7	11.7	9.3	7.5	9.7	8.2	6.7	8.8	6.9	6.1	6.1	7.1	6.5	6.1	5.3	2.9	3.6	3.6	4.1	11.7	2.9	7.0
28	3.0	1.8	3.2	6.4	6.3	6.6	6.3	7.3	8.1	9.2	9.5	11.6	11.2	10.5	10.9	11.2	12.5	13.5	12.0	12.1	12.4	13.6	12.9	12.3	13.6	1.8	9.3
Max.	**21.2**	**19.4**	**20.2**	**22.2**	**24.3**	**17.8**	**18.8**	**19.5**	**20.2**	**21.6**	**20.8**	**19.6**	**20.4**	**21.6**	**21.4**	**21.8**	**20.9**	**22.4**	**22.2**	**24.7**	**22.3**	**18.0**	**19.9**	**21.8**	**24.7**		
Min.	**1.3**	**1.0**	**1.3**	**0.9**	**1.1**	**0.6**	**1.0**	**0.8**	**0.8**	**0.9**	**1.0**	**1.1**	**1.0**	**1.9**	**1.0**	**0.6**	**0.7**	**0.4**	**0.7**	**1.2**	**0.7**	**1.2**	**0.2**	**0.9**		**0.2**	
Avg.	**7.6**	**7.3**	**7.8**	**8.2**	**8.3**	**7.8**	**7.6**	**7.6**	**7.2**	**6.8**	**7.2**	**7.2**	**7.5**	**7.5**	**7.6**	**7.6**	**7.2**	**7.4**	**7.6**	**8.0**	**7.7**	**7.3**	**7.1**	**7.3**			**7.5**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.1	13.0	13.5	12.9	14.1	12.8	14.1	13.5	13.6	12.1	11.9	11.6	11.1	10.1	12.6	11.2	13.9	12.5	12.3	11.6	9.4	9.9	9.3	10.4	14.1	9.3	12.1
2	14.0	14.3	15.7	15.2	16.3	15.3	12.0	15.0	13.8	11.7	10.9	12.8	10.0	10.1	11.9	13.9	12.9	12.8	13.2	14.0	16.1	15.9	15.6	10.6	16.3	10.0	13.5
3	10.5	12.3	8.0	8.0	9.8	9.4	10.9	8.7	10.3	11.7	11.1	11.4	11.9	8.2	6.1	8.5	9.1	9.1	9.0	8.0	9.1	14.9	18.8	18.1	18.8	6.1	10.5
4	15.8	15.2	16.0	17.6	14.7	17.2	18.7	19.0	21.6	20.5	18.0	17.6	14.6	15.3	12.8	16.9	14.8	17.4	17.9	16.2	14.4	17.2	21.8	21.1	21.8	12.8	17.2
5	21.4	18.6	15.2	15.6	19.5	17.4	17.0	18.0	15.0	18.2	17.4	16.7	15.3	12.5	13.3	11.1	14.0	14.6	14.9	16.4	20.0	19.9	16.9	15.9	21.4	11.1	16.4
6	17.2	19.4	19.1	15.1	11.0	14.0	15.1	15.3	15.5	17.0	20.0	19.3	19.5	21.1	28.1	27.1	23.9	25.4	27.1	29.2	28.7	29.1	32.1	31.1	32.1	11.0	21.7
7	31.5	29.1	29.3	25.9	25.0	31.6	27.1	24.0	14.3	20.9	22.1	24.7	19.2	19.4	16.0	21.3	23.9	23.3	22.4	24.2	22.6	22.1	23.4	22.7	31.6	14.3	23.6
8	22.4	19.8	20.7	18.9	20.0	18.9	16.5	14.8	14.2	13.5	12.2	12.1	11.9	10.1	11.3	13.2	15.5	16.2	16.3	17.1	20.6	19.7	15.1	14.1	22.4	10.1	16.0
9	11.6	11.0	12.2	12.8	12.3	13.6	12.6	11.9	12.1	12.6	11.6	12.2	12.2	10.7	10.6	9.8	8.8	8.9	7.7	9.2	8.9	8.6	7.3	5.8	13.6	5.8	10.6
10	6.4	6.6	6.9	7.4	8.9	8.7	10.4	11.3	12.9	14.5	11.1	10.0	9.2	8.4	8.8	8.4	9.3	8.7	7.6	8.1	8.9	8.9	8.5	8.5	14.5	6.4	9.1
11	10.0	11.0	11.4	12.2	11.8	14.8	15.2	14.0	13.9	16.5	13.3	14.9	13.4	13.4	12.7	13.0	11.3	11.2	17.0	15.0	20.7	18.4	17.5	16.8	20.7	10.0	14.1
12	16.0	19.1	22.3	20.2	22.0	22.0	21.2	21.5	19.7	19.4	17.6	19.3	17.8	16.4	15.2	14.1	12.2	11.1	7.1	9.7	5.4	7.8	11.0	10.5	22.3	5.4	15.8
13	6.7	5.9	7.9	13.3	13.0	8.6	13.4	11.0	5.1	6.5	7.6	7.5	9.7	9.7	13.8	12.1	15.1	12.7	10.7	13.6	17.9	17.8	13.8	16.9	17.9	5.1	11.3
14	17.3	18.2	17.3	14.7	11.7	18.6	21.8	16.5	15.7	13.7	10.0	17.2	14.6	16.7	18.0	21.9	20.6	19.2	19.9	15.4	19.8	19.6	19.2	18.3	21.9	10.0	17.3
15	11.9	12.4	11.6	10.8	9.0	10.4	11.0	9.7	9.2	8.8	8.6	7.9	7.9	7.5	8.1	9.2	10.2	11.5	11.6	11.8	11.9	9.6	10.7	9.5	12.4	7.5	10.0
16	8.8	7.5	7.1	7.0	6.9	5.4	6.9	7.6	8.4	9.1	9.2	9.6	7.8	7.2	7.2	9.2	9.2	7.3	5.5	6.0	7.5	8.3	7.4	6.2	9.6	5.4	7.6
17	5.7	5.5	5.4	5.1	3.5	3.3	4.0	4.0	2.9	4.1	4.1	4.3	4.5	4.1	4.0	3.6	3.9	4.4	5.0	5.4	5.4	5.2	3.4	3.0	5.7	2.9	4.3
18	2.4	0.5	0.9	0.8	1.1	1.6	1.5	1.2	1.7	1.3	1.1	1.2	1.9	2.3	2.5	3.4	4.5	2.5	4.2	6.3	5.0	6.4	6.4	4.1	6.4	0.5	2.7
19	4.3	3.7	5.1	4.1	4.4	4.8	4.9	4.2	3.9	3.7	3.9	2.3	1.2	2.1	2.9	3.4	2.3	2.2	3.4	2.6	4.5	3.7	2.9	1.3	5.1	1.2	3.4
20	0.5	0.4	1.4	2.9	2.7	4.9	4.5	7.9	10.5	12.0	14.6	14.8	16.6	16.7	17.1	17.0	14.3	11.9	11.6	11.1	10.5	9.7	8.9	8.6	17.1	0.4	9.6
21	6.8	4.5	4.8	3.2	3.7	6.6	8.4	9.0	11.0	14.0	14.2	14.0	10.4	7.9	8.8	7.9	11.7	11.7	10.2	4.8	9.3	10.2	9.9	13.6	14.2	3.2	9.0
22	9.8	11.6	7.9	5.3	7.3	7.7	3.7	6.0	13.0	13.2	11.5	10.5	8.9	6.7	6.0	7.4	8.1	9.3	7.7	7.7	8.0	8.9	10.8	10.9	13.2	3.7	8.7
23	11.3	5.1	8.8	14.9	14.3	11.0	11.0	13.2	12.4	12.0	12.8	8.4	10.6	15.2	13.8	9.0	8.8	11.7	13.9	12.6	13.4	11.5	11.4	11.8	15.2	5.1	11.6
24	11.7	12.1	7.9	6.5	5.4	5.1	6.9	7.4	7.6	8.3	7.4	6.5	5.1	5.9	4.8	5.6	5.5	3.9	2.3	2.7	2.6	1.6	2.2	2.4	12.1	1.6	5.7
25	0.8	0.6	0.7	1.0	1.1	0.8	1.5	1.8	1.4	2.2	1.0	1.4	0.9	1.1	0.9	1.9	1.0	2.3	3.8	6.1	7.4	8.8	11.6	12.5	12.5	0.6	3.0
26	13.6	14.5	13.0	11.9	14.4	13.5	9.5	11.1	9.4	10.0	12.1	10.8	7.8	6.5	6.6	5.9	6.4	5.2	3.7	5.4	4.4	3.5	5.4	7.8	14.5	3.5	8.8
27	9.7	6.2	7.8	9.3	8.7	10.5	12.8	14.4	13.4	13.5	15.2	17.2	16.6	14.9	18.3	17.0	11.9	14.3	11.7	11.3	9.3	6.8	10.1	12.5	18.3	6.2	12.2
28	11.4	11.8	9.9	7.9	10.1	3.5	2.6	8.9	11.9	11.1	8.5	7.8	5.6	8.2	8.5	8.6	8.1	7.4	7.7	6.5	7.3	8.3	5.5	3.3	11.9	2.6	7.9
29	3.5	5.6	4.2	5.0	6.0	5.0	5.6	8.9	6.4	5.8	5.4	5.1	8.9	9.4	10.0	10.6	8.3	7.3	7.6	8.8	9.8	6.6	5.0	7.1	10.6	3.5	6.9
30	7.4	11.5	12.9	11.2	8.8	8.8	7.4	6.4	5.2	4.5	3.5	3.7	5.0	3.5	2.8	3.9	3.2	2.9	2.9	2.4	2.3	1.5	0.8	1.3	12.9	0.8	5.2
31	0.9	2.2	2.4	1.2	0.8	0.6	0.5	0.7	0.6	0.4	0.6	0.8	0.8	1.0	1.1	1.4	3.4	3.5	3.3	3.6	5.9	5.5	5.1	5.3	5.9	0.4	2.1
Max.	**31.5**	**29.1**	**29.3**	**25.9**	**25.0**	**31.6**	**27.1**	**24.0**	**21.6**	**20.9**	**22.1**	**24.7**	**19.5**	**21.1**	**28.1**	**27.1**	**23.9**	**25.4**	**27.1**	**29.2**	**28.7**	**29.1**	**32.1**	**31.1**	**32.1**		
Min.	**0.5**	**0.4**	**0.7**	**0.8**	**0.8**	**0.6**	**0.5**	**0.7**	**0.6**	**0.4**	**0.6**	**0.8**	**0.8**	**1.0**	**0.9**	**1.4**	**1.0**	**2.2**	**2.3**	**2.4**	**2.3**	**1.5**	**0.8**	**1.3**		**0.4**	
Avg.	**10.8**	**10.6**	**10.6**	**10.3**	**10.3**	**10.5**	**10.6**	**10.9**	**10.5**	**11.0**	**10.6**	**10.8**	**10.0**	**9.8**	**10.2**	**10.6**	**10.5**	**10.4**	**10.3**	**10.4**	**11.2**	**11.2**	**11.2**	**11.0**			**10.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

April 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.3	4.7	4.9	4.4	4.2	4.8	5.0	5.2	4.5	5.2	2.2	1.3	2.8	3.3	1.4	1.2	1.0	1.2	1.8	1.7	1.8	1.3	1.0	3.6	5.2	1.0	3.0
2	2.7	2.1	1.7	1.8	3.1	5.4	6.5	8.0	8.8	10.1	11.5	12.1	12.1	14.2	14.1	13.0	12.3	11.7	11.3	12.0	14.6	12.9	13.3	10.9	14.6	1.7	9.4
3	10.3	10.0	9.8	10.7	8.8	9.4	8.5	8.8	8.2	9.1	9.8	9.7	10.0	9.7	11.3	10.8	11.0	10.5	9.4	10.0	8.5	9.9	7.9	7.7	11.3	7.7	9.6
4	9.1	9.1	8.6	10.3	8.4	8.0	8.1	7.5	9.8	11.3	12.4	12.3	12.0	13.1	11.9	11.9	11.0	10.9	8.3	6.4	5.0	5.1	6.1	4.7	13.1	4.7	9.2
5	3.4	2.7	3.2	5.1	3.7	9.8	11.9	13.3	11.7	14.2	16.4	16.2	16.9	14.4	14.2	12.2	15.1	20.0	16.9	15.3	11.9	13.9	14.5	12.3	20.0	2.7	12.0
6	13.3	12.4	14.5	13.4	13.4	9.2	11.5	11.8	8.2	8.7	10.5	12.0	14.5	15.2	13.0	10.0	10.0	10.0	9.2	7.5	7.8	7.5	6.8	4.3	15.2	4.3	10.6
7	2.1	2.2	1.8	5.1	12.2	16.1	16.4	17.6	16.9	16.8	15.9	15.5	15.3	13.5	11.8	13.6	10.7	9.9	9.8	7.6	5.5	6.9	9.4	12.5	17.6	1.8	11.0
8	14.4	14.3	15.3	15.1	14.6	12.9	13.4	12.7	12.0	11.3	11.0	10.6	10.8	11.0	11.0	7.6	5.4	3.2	3.3	4.3	4.4	6.0	5.2	5.5	15.3	3.2	9.8
9	8.6	7.7	6.5	7.1	6.5	4.4	4.6	3.2	5.6	7.7	9.5	10.9	11.0	11.8	11.1	12.1	10.6	9.3	9.8	11.9	10.2	11.5	9.0	7.5	12.1	3.2	8.7
10	5.8	5.9	7.2	6.9	6.2	4.5	5.3	5.3	5.0	6.0	7.5	10.0	10.1	8.1	8.8	8.1	8.0	8.7	8.4	7.0	5.5	7.8	6.4	5.3	10.1	4.5	7.0
11	4.4	5.3	5.1	5.7	4.5	3.3	4.0	5.0	3.9	1.1	4.2	6.2	7.2	7.3	7.3	8.1	9.1	8.8	9.0	5.7	4.8	5.2	6.4	6.2	9.1	1.1	5.7
12	6.9	5.4	5.1	3.2	4.8	5.1	5.4	4.4	3.4	2.3	3.0	2.3	3.2	2.5	1.9	3.0	4.3	4.0	2.9	3.6	2.9	1.4	2.9	4.4	6.9	1.4	3.7
13	6.2	6.2	5.3	5.8	6.3	5.8	5.5	4.4	5.5	4.4	5.3	6.2	4.9	4.0	2.7	2.5	2.0	2.9	4.0	4.4	6.7	6.1	5.3	5.3	6.7	2.0	4.9
14	2.9	2.3	1.6	1.0	2.2	1.9	2.5	3.3	3.1	2.5	2.3	3.2	3.9	6.5	8.3	7.7	7.5	7.4	6.0	6.1	6.3	7.1	7.0	8.7	8.7	1.0	4.6
15	8.9	8.3	9.0	9.3	8.3	9.0	8.7	7.6	10.5	9.7	9.5	9.6	9.4	7.9	6.0	4.5	2.7	2.9	3.0	1.1	1.2	1.6	2.2	1.7	10.5	1.1	6.4
16	1.8	2.2	1.7	5.8	5.9	4.6	3.0	2.9	3.1	3.5	3.2	4.8	5.0	10.6	11.7	10.2	9.5	7.8	8.1	7.5	5.6	2.1	1.1	1.7	11.7	1.1	5.1
17	3.3	4.1	6.4	7.7	11.3	15.3	18.4	19.6	18.9	21.2	22.2	24.2	23.4	24.5	25.5	24.7	24.5	25.7	27.2	25.9	26.6	24.8	22.9	23.6	27.2	3.3	19.7
18	22.5	19.5	16.9	19.6	20.2	18.5	16.0	16.2	17.3	17.8	17.1	15.8	16.1	15.5	14.0	11.2	5.7	3.7	2.1	2.2	2.5	3.3	3.7	3.5	22.5	2.1	12.5
19	5.1	4.9	2.8	2.4	6.5	10.7	9.6	7.5	8.8	12.7	12.0	13.5	13.0	18.3	17.6	14.3	13.3	12.6	11.9	12.0	11.3	12.4	12.5	12.3	18.3	2.4	10.8
20	10.6	12.5	10.1	9.5	11.5	7.2	9.6	11.9	13.6	14.8	15.3	11.9	14.3	15.5	15.7	16.4	16.1	13.7	12.9	13.9	12.5	9.8	7.3	7.6	16.4	7.2	12.3
21	7.5	7.9	7.9	7.5	8.0	7.8	5.9	4.1	4.4	5.4	8.9	9.5	11.4	14.8	14.5	15.2	14.4	12.8	13.1	12.3	10.5	8.7	10.8	11.5	15.2	4.1	9.8
22	9.4	13.5	15.3	14.4	12.9	13.8	13.5	15.4	15.6	15.1	13.4	14.9	14.1	14.6	12.8	13.2	14.5	12.0	10.8	9.0	9.7	9.2	8.3	7.7	15.6	7.7	12.6
23	7.5	14.0	13.4	13.9	12.7	11.3	9.9	10.1	7.9	8.2	5.7	5.2	8.4	7.0	6.7	9.0	3.7	6.0	6.1	4.2	2.0	3.4	6.0	8.0	14.0	2.0	7.9
24	6.9	7.2	6.3	5.4	4.2	4.0	5.2	7.8	9.5	7.7	7.4	9.0	6.4	3.3	4.4	4.9	4.5	2.8	6.7	6.1	4.5	5.0	7.1	8.1	9.5	2.8	6.0
25	8.8	10.0	10.2	11.2	10.7	9.9	10.4	11.3	12.4	13.8	16.0	16.2	15.1	14.3	14.2	12.5	12.2	11.1	8.8	7.1	2.4	2.0	3.5	3.9	16.2	2.0	10.3
26	4.8	8.0	7.9	9.9	9.6	6.2	6.2	7.3	8.8	7.0	6.7	6.0	4.6	4.8	6.2	6.9	9.0	10.9	9.2	7.4	5.8	8.8	6.0	4.8	10.9	4.6	7.2
27	4.2	4.0	5.1	3.3	1.1	1.9	2.5	5.6	4.1	3.0	3.8	4.8	6.4	6.5	6.5	6.4	7.9	8.2	7.3	5.9	5.3	5.2	4.2	4.3	8.2	1.1	4.9
28	3.8	4.7	2.9	3.2	3.5	2.7	1.6	0.9	0.6	0.8	1.1	2.4	4.0	5.2	6.9	8.9	9.8	9.8	10.4	9.2	6.9	5.7	7.6	8.8	10.4	0.6	5.1
29	10.3	11.6	10.0	8.6	9.4	8.0	8.9	8.1	10.7	11.3	13.1	11.7	12.7	13.1	11.8	12.5	11.7	9.7	7.8	6.9	3.4	1.9	2.3	0.7	13.1	0.7	9.0
30	1.4	2.0	1.0	1.3	2.4	2.4	4.3	4.7	6.1	5.3	4.1	4.1	4.3	3.4	4.2	4.7	3.7	3.2	4.3	3.3	1.7	1.4	1.5	1.8	6.1	1.0	3.2
Max.	**22.5**	**19.5**	**16.9**	**19.6**	**20.2**	**18.5**	**18.4**	**19.6**	**18.9**	**21.2**	**22.2**	**24.2**	**23.4**	**24.5**	**25.5**	**24.7**	**24.5**	**25.7**	**27.2**	**25.9**	**26.6**	**24.8**	**22.9**	**23.6**	**27.2**		
Min.	**1.4**	**2.0**	**1.0**	**1.0**	**1.1**	**1.9**	**1.6**	**0.9**	**0.6**	**0.8**	**1.1**	**1.3**	**2.8**	**2.5**	**1.4**	**1.2**	**1.0**	**1.2**	**1.8**	**1.1**	**1.2**	**1.3**	**1.0**	**0.7**		**0.6**	
Avg.	**7.0**	**7.5**	**7.3**	**7.6**	**7.9**	**7.8**	**8.1**	**8.4**	**8.6**	**8.9**	**9.4**	**9.7**	**10.1**	**10.5**	**10.2**	**9.9**	**9.4**	**9.0**	**8.7**	**7.9**	**6.9**	**6.9**	**6.9**	**7.0**			**8.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.4	2.2	2.0	2.3	2.3	1.2	1.0	2.2	1.8	2.6	2.0	1.3	1.2	1.4	1.9	3.5	2.3	2.6	3.4	1.2	1.5	1.5	2.0	1.3	3.5	1.0	2.0
2	0.6	1.0	0.5	1.6	3.7	4.7	5.7	5.3	2.6	1.7	2.0	2.7	7.8	4.9	7.0	9.4	12.2	12.0	14.0	10.5	8.3	7.7	7.3	6.7	14.0	0.5	5.8
3	7.2	5.6	4.0	1.7	1.5	1.6	0.9	0.9	0.7	2.0	2.5	2.8	2.9	2.3	2.8	2.5	5.7	4.7	4.4	4.9	4.1	2.1	1.5	2.4	7.2	0.7	3.0
4	2.5	3.8	3.7	1.4	0.8	1.5	1.3	1.6	1.5	1.1	2.8	4.9	6.2	5.8	5.9	5.5	5.5	5.8	4.2	3.3	1.6	3.5	3.8	2.5	6.2	0.8	3.3
5	1.7	2.3	4.5	3.7	1.4	2.4	4.4	2.2	3.2	4.4	4.5	4.7	5.1	5.7	6.4	6.9	7.4	7.5	5.5	5.2	5.2	5.6	5.4	4.7	7.5	1.4	4.6
6	3.4	2.4	7.0	5.0	3.0	3.6	4.2	4.1	5.8	6.1	6.2	6.8	6.9	7.7	8.5	8.4	9.2	10.3	9.6	8.6	7.9	8.3	8.1	7.9	10.3	2.4	6.6
7	9.5	8.8	8.7	8.5	6.6	3.8	4.2	4.1	4.8	4.2	4.0	4.3	5.4	5.1	3.5	4.5	6.8	5.8	5.0	4.9	5.0	5.6	6.6	5.3	9.5	3.5	5.6
8	5.7	5.5	5.6	5.4	5.8	5.2	5.6	5.1	5.5	5.9	5.0	3.9	1.9	3.0	4.1	3.8	4.3	4.8	4.4	4.1	2.7	3.7	3.1	1.8	5.9	1.8	4.4
9	1.4	1.0	1.3	1.5	2.4	3.6	3.7	3.7	2.1	3.1	3.6	4.0	3.2	4.1	6.0	5.8	5.4	5.1	4.2	3.3	2.8	1.4	0.7	0.9	6.0	0.7	3.1
10	0.9	0.9	0.5	0.7	1.3	1.0	0.7	1.2	0.8	1.8	2.2	3.5	3.5	3.6	3.9	5.1	4.8	4.6	3.9	4.3	3.4	3.7	3.6	2.6	5.1	0.5	2.6
11	2.0	3.3	3.2	2.9	6.7	7.0	6.1	7.0	8.7	10.1	10.0	9.4	8.8	8.2	8.4	8.3	8.0	7.8	7.2	8.2	6.7	4.2	3.8	4.0	10.1	2.0	6.7
12	2.8	1.9	2.0	1.7	2.2	4.5	5.9	6.8	8.3	9.3	9.1	9.0	9.7	10.5	11.3	10.8	11.1	10.0	10.2	11.1	9.7	6.7	6.4	6.8	11.3	1.7	7.4
13	6.8	7.3	6.8	6.4	7.4	8.0	7.7	6.7	7.3	8.8	8.5	8.1	8.2	9.0	9.1	9.5	9.5	8.9	6.7	5.5	6.0	5.3	6.1	6.2	9.5	5.3	7.5
14	4.8	3.7	6.1	6.3	11.3	11.7	11.2	9.7	8.4	6.7	5.2	6.7	5.1	5.2	8.7	8.5	10.2	9.5	8.4	8.4	7.3	5.8	6.1	7.8	11.7	3.7	7.6
15	8.0	5.9	6.1	7.5	6.6	5.3	2.3	4.7	4.3	7.2	8.6	9.5	8.5	6.3	5.0	3.6	3.7	3.2	1.6	1.7	1.9	3.2	5.9	7.2	9.5	1.6	5.3
16	7.4	5.5	5.5	7.0	6.9	7.1	6.7	6.0	5.4	4.0	2.4	3.5	3.5	3.5	2.9	4.0	6.1	4.6	5.4	8.4	7.2	7.7	6.3	6.5	8.4	2.4	5.6
17	8.2	6.7	6.8	6.3	5.3	3.8	2.6	3.1	2.9	4.2	8.2	9.1	8.1	8.6	10.6	11.0	10.3	10.0	9.1	6.6	6.3	3.6	2.5	1.6	11.0	1.6	6.5
18	1.6	3.2	3.9	4.2	5.4	2.4	2.4	2.9	4.2	5.4	5.1	4.9	4.5	4.6	3.7	3.6	3.1	3.5	3.4	2.2	2.7	2.2	2.3	1.6	5.4	1.6	3.5
19	1.4	2.1	3.0	2.5	2.9	2.4	1.9	2.9	2.9	3.2	4.8	6.5	4.3	4.9	6.5	7.7	7.5	8.0	8.5	6.2	3.9	3.7	2.9	1.4	8.5	1.4	4.2
20	1.8	2.5	2.6	3.5	2.4	4.1	3.3	3.9	4.5	4.8	4.7	2.8	3.6	4.7	4.9	5.6	5.7	5.1	5.8	6.4	6.0	4.7	2.1	2.8	6.4	1.8	4.1
21	2.0	2.9	2.6	2.3	1.9	1.4	0.8	0.7	1.0	1.3	2.1	2.7	3.6	4.8	6.3	7.2	8.5	9.3	12.2	12.5	12.3	10.7	8.8	10.7	12.5	0.7	5.4
22	10.2	9.2	8.6	7.5	7.9	6.6	10.6	12.1	13.8	9.6	6.1	13.2	13.8	10.1	9.6	9.0	10.4	9.6	7.5	4.7	1.4	1.8	1.6	3.4	13.8	1.4	8.3
23	4.3	3.8	3.2	3.2	3.2	3.6	5.9	9.4	9.0	11.1	13.5	12.5	13.0	11.1	10.5	10.7	14.3	16.7	15.3	11.4	11.6	10.3	11.7	8.7	16.7	3.2	9.5
24	12.4	10.4	11.2	10.6	10.3	10.0	9.3	9.7	11.8	12.8	13.4	14.1	12.2	10.7	9.5	6.9	4.9	4.2	7.1	4.1	3.0	2.6	1.7	2.1	14.1	1.7	8.5
25	2.0	1.5	6.9	4.1	1.7	1.1	0.8	1.0	1.5	2.3	2.9	4.3	4.2	4.2	4.6	3.7	2.7	2.5	1.6	1.1	1.2	1.6	2.4	2.9	6.9	0.8	2.6
26	3.5	6.1	5.7	3.6	3.0	2.7	3.1	4.7	5.8	4.3	3.9	7.1	8.1	7.4	7.3	8.8	12.0	10.0	8.4	6.9	5.3	3.9	2.4	2.6	12.0	2.4	5.7
27	3.7	3.5	3.7	3.1	3.8	4.5	6.6	6.6	6.9	7.7	8.3	7.5	7.6	9.6	9.7	9.2	8.7	10.0	9.5	9.3	8.1	6.9	5.7	5.7	10.0	3.1	6.9
28	4.6	6.1	6.1	5.7	5.7	5.5	4.1	3.0	4.1	5.9	8.1	8.2	8.8	10.2	10.0	11.2	10.7	9.2	7.8	8.0	9.4	6.1	4.3	1.7	11.2	1.7	6.8
29	0.9	1.1	1.2	1.7	3.9	7.7	8.3	7.7	6.2	4.4	3.6	4.1	3.4	3.1	4.8	5.9	4.3	3.9	4.7	4.9	5.1	3.0	2.0	0.3	8.3	0.3	4.0
30	0.5	0.4	0.5	1.4	3.4	3.5	3.0	2.8	1.5	2.3	2.5	6.5	6.3	7.3	8.0	7.9	8.1	7.7	7.4	6.5	6.0	4.3	2.3	2.9	8.1	0.4	4.3
31	2.4	2.5	3.9	4.8	5.9	6.9	9.2	11.7	9.2	5.9	7.4	5.7	7.6	6.8	4.2	3.8	3.7	4.0	6.0	6.5	6.8	5.2	5.6	6.4	11.7	2.4	5.9
Max.	**12.4**	**10.4**	**11.2**	**10.6**	**11.3**	**11.7**	**11.2**	**12.1**	**13.8**	**12.8**	**13.5**	**14.1**	**13.8**	**11.1**	**11.3**	**11.2**	**14.3**	**16.7**	**15.3**	**12.5**	**12.3**	**10.7**	**11.7**	**10.7**	**16.7**		
Min.	**0.5**	**0.4**	**0.5**	**0.7**	**0.8**	**1.0**	**0.7**	**0.7**	**0.7**	**1.1**	**2.0**	**1.3**	**1.2**	**1.4**	**1.9**	**2.5**	**2.3**	**2.5**	**1.6**	**1.1**	**1.2**	**1.4**	**0.7**	**0.3**		**0.3**	
Avg.	**4.1**	**4.0**	**4.4**	**4.1**	**4.4**	**4.5**	**4.6**	**4.9**	**5.1**	**5.3**	**5.6**	**6.3**	**6.3**	**6.3**	**6.6**	**6.9**	**7.3**	**7.1**	**6.9**	**6.2**	**5.5**	**4.7**	**4.4**	**4.2**			**5.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.4	4.2	5.4	5.6	7.5	5.3	4.6	6.3	7.6	7.5	7.4	8.9	10.3	9.7	12.7	11.4	12.0	10.3	7.8	8.3	7.6	5.9	6.1	6.4	12.7	4.2	7.6
2	6.0	5.4	4.5	4.0	3.2	3.9	5.1	4.1	3.0	4.0	3.8	5.4	5.9	5.5	4.3	4.4	3.8	4.3	4.1	4.8	5.1	3.9	3.4	1.3	6.0	1.3	4.3
3	0.6	1.9	2.3	2.1	1.6	2.4	0.8	0.8	2.2	2.7	3.1	2.5	3.1	2.2	3.1	4.6	4.4	2.9	3.6	2.0	1.7	1.2	1.8	3.8	4.6	0.6	2.4
4	6.3	7.3	7.5	9.5	9.8	9.8	10.1	10.4	8.0	8.1	8.6	8.6	9.8	6.6	3.1	2.6	2.2	6.9	8.1	8.2	9.0	7.9	6.9	6.8	10.4	2.2	7.6
5	7.4	6.8	4.9	4.4	3.6	4.0	5.2	6.4	6.5	7.0	8.7	13.5	16.4	18.7	17.0	16.5	15.6	14.1	10.8	12.6	12.4	10.0	9.8	12.0	18.7	3.6	10.2
6	12.2	10.8	12.4	12.2	9.2	4.6	5.6	4.0	3.2	5.4	6.1	6.0	6.1	6.9	6.8	7.2	5.4	4.3	5.0	6.3	3.9	2.7	2.1	1.3	12.4	1.3	6.2
7	2.0	2.6	1.8	2.7	3.0	8.2	3.6	1.3	4.4	7.5	8.3	8.1	10.7	14.1	16.6	17.3	16.2	16.7	15.3	13.2	14.1	12.7	9.0	7.1	17.3	1.3	9.0
8	6.7	6.8	7.6	5.1	7.6	8.2	7.1	7.1	6.0	4.8	4.5	6.5	6.6	8.0	5.8	4.7	7.3	10.0	11.4	11.1	9.5	7.8	6.5	6.6	11.4	4.5	7.2
9	3.9	2.7	2.6	1.6	0.9	1.2	1.4	1.7	3.3	2.7	4.0	4.2	3.7	3.3	1.4	1.3	1.7	0.9	2.6	4.4	4.5	3.1	4.8	5.2	5.2	0.9	2.8
10	6.0	6.5	7.7	8.9	9.0	8.6	9.3	11.4	10.5	8.0	7.4	6.2	5.8	5.0	4.7	4.2	4.3	3.5	4.0	5.1	8.6	6.9	7.6	4.7	11.4	3.5	6.8
11	3.7	3.5	5.2	4.1	2.8	2.4	1.2	0.5	2.4	3.6	2.5	2.8	5.2	7.4	8.2	9.4	9.5	9.1	8.4	8.5	8.1	7.9	5.4	4.2	9.5	0.5	5.3
12	5.6	5.1	4.3	3.5	2.1	1.6	0.9	1.9	3.0	4.4	4.3	4.3	4.8	4.8	4.8	4.2	4.2	4.1	3.8	2.8	2.9	3.5	2.9	1.8	5.6	0.9	3.6
13	1.2	0.4	1.5	1.6	1.4	2.5	3.0	2.3	1.9	2.8	3.1	4.0	5.6	4.9	3.7	3.7	5.5	4.6	5.4	4.4	4.0	1.8	1.5	1.5	5.6	0.4	3.0
14	1.9	2.9	3.6	2.3	2.9	2.9	3.1	2.3	2.6	3.9	3.8	3.8	2.8	3.4	1.8	2.1	3.1	3.6	4.5	4.7	4.9	5.6	5.6	5.5	5.6	1.8	3.5
15	7.6	8.6	7.7	8.7	9.7	10.5	10.4	9.4	8.8	9.0	8.8	7.9	7.1	6.8	8.4	8.4	8.8	9.3	9.1	8.9	8.7	9.4	10.5	8.0	10.5	6.8	8.8
16	7.8	7.8	7.5	7.9	7.6	7.0	6.7	7.5	6.4	5.7	5.8	6.9	8.2	7.2	7.5	7.2	7.2	8.1	9.8	8.8	8.8	8.9	9.1	9.2	9.8	5.7	7.7
17	8.3	7.3	6.6	5.7	5.8	4.3	4.2	4.1	3.5	2.8	2.1	3.0	3.1	3.7	2.9	3.0	3.1	3.5	2.0	3.5	3.2	2.2	2.7	3.4	8.3	2.0	3.9
18	3.1	2.4	1.5	1.9	3.5	4.8	4.6	3.1	1.4	1.3	1.9	1.8	1.2	1.7	3.4	3.6	2.9	1.9	2.5	3.9	4.1	1.0	0.6	2.2	4.8	0.6	2.5
19	2.4	2.7	5.4	7.0	7.7	7.9	7.8	6.0	5.7	6.7	6.7	8.2	8.9	9.5	9.9	10.1	9.3	9.5	10.6	10.8	11.6	12.3	13.2	14.2	14.2	2.4	8.5
20	10.3	10.5	10.1	9.6	9.6	9.9	9.5	10.5	9.1	10.7	10.7	11.4	10.8	10.0	10.5	10.7	11.7	10.8	11.4	10.7	10.9	14.7	14.2	12.8	14.7	9.1	10.9
21	9.7	10.9	6.6	8.8	8.2	5.3	5.3	6.0	7.2	7.4	6.9	7.4	7.4	7.9	8.2	7.4	7.5	7.6	10.7	12.1	8.8	7.4	8.2	8.6	12.1	5.3	8.0
22	7.2	8.0	6.4	6.2	3.7	1.7	2.1	3.1	5.8	5.2	4.7	4.7	4.4	3.7	4.3	4.2	3.2	3.7	3.4	3.5	3.7	4.3	6.1	6.6	8.0	1.7	4.6
23	7.9	7.4	8.4	8.4	9.3	10.4	11.7	12.5	13.6	13.2	13.0	13.2	12.7	12.6	13.2	12.2	12.9	12.8	12.1	11.4	10.8	9.9	10.3	10.3	13.6	7.4	11.2
24	10.3	9.6	8.1	7.8	7.9	8.9	8.5	8.6	7.3	8.7	9.7	9.7	9.8	9.8	9.0	10.5	10.6	11.6	11.4	10.6	9.9	8.7	9.7	10.0	11.6	7.3	9.4
25	8.5	7.2	7.4	7.5	6.8	6.7	5.3	5.7	8.7	10.0	9.8	9.6	9.8	9.9	11.7	11.9	12.1	11.8	10.5	10.7	8.6	7.9	7.6	7.2	12.1	5.3	8.9
26	5.3	5.1	6.5	6.7	5.2	5.1	4.4	5.3	6.4	5.9	5.4	4.5	4.1	3.7	3.9	3.2	2.1	3.1	4.4	6.0	6.8	5.6	2.8	1.7	6.8	1.7	4.7
27	2.1	3.3	4.3	3.9	3.5	3.9	2.0	2.4	2.3	1.9	3.3	3.8	4.2	5.2	4.9	5.3	5.9	5.9	7.1	6.1	7.3	7.6	6.0	6.0	7.6	1.9	4.5
28	5.2	4.2	3.4	3.5	3.1	4.0	3.2	1.5	0.9	1.6	2.4	3.1	2.8	4.3	5.3	4.0	3.1	2.2	5.9	6.4	5.9	5.8	5.9	6.1	6.4	0.9	3.9
29	4.7	2.5	1.6	1.8	1.3	0.8	1.8	3.3	3.6	3.8	3.9	4.2	4.5	3.9	4.8	6.2	8.5	7.0	6.3	6.1	6.7	4.7	3.9	4.4	8.5	0.8	4.2
30	2.3	2.5	1.9	2.2	1.9	3.1	4.3	4.7	4.0	4.7	4.4	3.5	3.9	3.1	2.9	3.9	4.0	4.6	4.5	6.1	4.3	3.9	1.9	2.0	6.1	1.9	3.5
Max.	**12.2**	**10.9**	**12.4**	**12.2**	**9.8**	**10.5**	**11.7**	**12.5**	**13.6**	**13.2**	**13.0**	**13.5**	**16.4**	**18.7**	**17.0**	**17.3**	**16.2**	**16.7**	**15.3**	**13.2**	**14.1**	**14.7**	**14.2**	**14.2**	**18.7**		
Min.	**0.6**	**0.4**	**1.5**	**1.6**	**0.9**	**0.8**	**0.8**	**0.5**	**0.9**	**1.3**	**1.9**	**1.8**	**1.2**	**1.7**	**1.4**	**1.3**	**1.7**	**0.9**	**2.0**	**2.0**	**1.7**	**1.0**	**0.6**	**1.3**		**0.4**	
Avg.	**5.7**	**5.6**	**5.5**	**5.5**	**5.3**	**5.3**	**5.1**	**5.1**	**5.3**	**5.7**	**5.8**	**6.2**	**6.6**	**6.8**	**6.8**	**6.8**	**6.9**	**7.0**	**7.2**	**7.4**	**7.2**	**6.5**	**6.2**	**6.0**			**6.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	1.2	1.1	0.5	1.0	2.8	2.4	3.1	5.2	5.0	3.9	3.6	3.4	3.0	3.9	3.9	4.2	4.1	4.6	4.5	4.4	2.9	3.5	3.9	3.1	5.2	0.5	3.3
2	2.4	2.3	2.2	0.8	0.6	1.0	0.5	0.8	1.4	3.9	4.0	4.0	4.6	4.3	3.8	4.7	4.4	5.6	6.3	5.7	5.7	5.7	3.7	4.4	6.3	0.5	3.5
3	4.2	3.1	4.7	4.3	2.7	1.6	1.8	2.4	3.5	2.6	2.6	3.2	3.3	3.0	3.1	4.4	6.3	6.5	5.0	4.4	2.3	0.7	2.2	5.9	6.5	0.7	3.5
4	5.9	5.9	5.5	6.6	4.7	4.6	4.1	3.4	3.3	5.5	6.5	7.2	7.7	5.9	7.3	8.1	7.3	5.3	3.8	3.8	3.3	4.6	6.0	5.2	8.1	3.3	5.5
5	3.2	2.8	2.3	3.1	1.0	0.5	0.7	0.8	1.3	2.3	3.8	4.0	3.6	3.7	4.6	4.7	4.4	2.7	8.9	8.5	7.2	6.9	6.4	5.3	8.9	0.5	3.9
6	5.8	5.5	4.4	4.4	4.9	4.4	3.5	3.6	2.7	2.8	2.5	1.0	2.1	1.6	2.6	3.0	3.0	2.3	2.1	2.0	1.0	0.8	3.0	2.3	5.8	0.8	3.0
7	2.4	2.4	2.1	1.9	2.0	0.3	0.8	0.9	0.9	1.5	1.0	2.4	1.5	1.5	2.5	3.9	4.1	3.9	5.3	4.8	4.3	4.0	3.4	2.1	5.3	0.3	2.5
8	1.2	0.7	1.0	0.6	0.4	0.8	1.9	2.2	3.2	3.9	3.7	3.7	3.5	5.1	5.5	6.3	7.3	8.7	8.2	6.9	6.9	6.0	4.7	4.8	8.7	0.4	4.1
9	7.8	6.2	5.5	4.7	2.7	1.3	2.3	2.6	3.5	2.9	3.1	4.8	5.7	4.2	3.6	3.8	2.6	3.8	4.3	2.1	2.8	2.1	2.1	2.4	7.8	1.3	3.6
10	3.8	4.8	3.9	2.9	3.0	2.3	2.4	0.9	1.1	2.2	3.2	2.4	5.6	4.7	3.7	5.8	8.1	7.3	6.5	6.9	6.1	6.3	7.1	6.3	8.1	0.9	4.5
11	4.7	4.4	3.9	4.1	5.3	5.4	6.3	5.6	5.0	5.1	5.9	6.6	7.2	7.0	7.0	6.3	6.1	6.5	7.4	6.8	6.1	5.6	4.6	3.9	7.4	3.9	5.7
12	2.3	1.8	0.9	1.4	2.6	2.8	2.7	2.5	2.7	1.8	1.8	3.3	2.7	3.4	5.3	5.9	5.5	4.4	4.3	3.4	3.5	4.2	4.6	5.1	5.9	0.9	3.3
13	4.3	3.8	4.4	4.1	3.9	3.4	3.2	3.0	2.7	4.3	4.4	5.1	4.8	4.7	4.7	4.7	3.6	3.8	3.4	2.7	2.0	2.2	2.5	2.3	5.1	2.0	3.7
14	2.5	1.7	1.5	1.4	1.7	1.4	1.6	3.2	2.6	2.2	3.4	5.3	5.4	5.4	5.5	6.3	6.7	6.1	5.3	4.4	3.8	4.2	3.5	2.3	6.7	1.4	3.6
15	2.2	1.6	1.7	1.3	1.9	0.8	0.8	0.9	2.7	3.0	3.7	4.2	4.9	5.7	6.8	6.7	7.5	6.8	6.0	5.7	5.3	4.0	5.3	5.4	7.5	0.8	4.0
16	5.1	3.7	4.3	3.9	2.5	1.1	2.0	3.6	2.4	3.0	4.2	4.4	4.6	5.6	5.8	6.6	6.4	5.6	6.3	7.1	9.3	9.3	5.7	6.2	9.3	1.1	5.0
17	5.8	3.7	5.0	4.8	3.9	4.3	4.2	5.2	4.1	3.5	2.3	1.5	2.6	4.4	4.0	5.3	7.1	8.1	8.2	7.6	7.2	5.3	2.5	5.5	8.2	1.5	4.8
18	7.1	8.8	9.0	7.3	7.8	4.4	3.6	2.5	2.1	1.6	1.7	2.2	2.4	3.8	4.4	3.4	4.7	2.4	1.3	1.2	1.2	1.2	1.7	1.2	9.0	1.2	3.6
19	1.5	2.3	3.4	2.8	2.4	1.9	0.9	1.7	1.7	2.9	3.3	2.7	1.7	2.2	2.7	2.5	2.4	4.2	2.5	2.2	2.6	2.3	1.9	1.2	4.2	0.9	2.3
20	0.7	0.8	0.8	0.9	0.7	1.0	1.1	1.2	1.7	3.7	5.4	5.3	4.7	5.4	6.3	6.9	5.4	5.7	5.2	6.1	8.2	7.0	7.1	8.2	8.2	0.7	4.2
21	8.3	8.7	7.1	7.1	7.7	7.8	7.5	7.7	8.5	8.5	7.9	7.5	7.1	6.1	6.0	6.9	7.2	7.1	6.6	6.0	6.4	5.8	4.4	5.2	8.7	4.4	7.0
22	4.9	5.3	5.6	6.2	6.7	6.9	6.8	6.6	6.8	6.5	6.2	6.1	5.6	5.2	5.1	4.5	4.9	4.5	4.8	4.8	5.3	5.5	5.1	4.9	6.9	4.5	5.6
23	5.1	3.5	1.2	1.2	1.5	0.7	0.8	2.1	2.1	2.8	3.8	4.8	5.1	6.4	6.1	6.5	9.0	10.0	7.6	7.5	6.8	7.6	6.6	7.4	10.0	0.7	4.8
24	5.8	8.1	8.6	8.9	8.8	7.8	7.7	7.6	8.0	8.6	6.6	5.7	5.1	7.2	7.2	6.9	6.4	5.5	5.1	5.4	4.1	7.2	7.2	5.8	8.9	4.1	6.9
25	6.6	9.7	10.4	10.8	11.4	10.5	10.8	9.5	11.1	9.8	7.4	6.0	6.1	7.7	9.0	8.3	8.4	8.8	9.2	4.7	2.7	1.2	1.9	1.1	11.4	1.1	7.6
26	1.3	1.7	1.7	1.1	1.2	3.0	2.2	4.3	4.4	3.4	3.2	3.5	2.7	3.0	4.3	5.0	3.0	5.3	6.2	5.7	3.3	3.8	2.9	2.8	6.2	1.1	3.3
27	0.8	1.3	1.2	2.0	1.0	2.5	3.1	2.8	1.9	4.4	3.7	3.8	4.1	5.1	6.3	5.8	6.2	7.6	5.7	5.9	4.5	6.4	2.5	1.9	7.6	0.8	3.8
28	2.0	2.7	3.7	4.5	4.4	5.2	5.5	5.7	5.6	6.4	6.8	6.9	7.8	8.7	9.0	9.3	9.0	8.3	8.6	10.3	9.5	7.3	6.2	6.9	10.3	2.0	6.7
29	7.2	5.4	4.4	3.7	2.8	2.7	5.6	5.8	5.0	4.7	4.6	5.5	6.0	6.2	6.4	5.7	6.0	5.9	6.0	6.0	5.5	4.7	5.7	2.4	7.2	2.4	5.2
30	3.0	3.1	1.5	2.2	2.0	2.1	2.0	2.3	3.0	3.0	4.4	4.5	4.5	5.0	4.8	5.6	6.2	5.8	5.2	4.2	4.0	2.9	3.7	4.0	6.2	1.5	3.7
31	3.3	2.8	2.5	3.2	2.6	2.1	1.5	2.1	3.5	5.1	5.7	5.6	5.8	6.9	7.5	9.6	9.8	11.3	11.0	11.0	10.2	10.9	11.3	10.5	11.3	1.5	6.5
Max.	**8.3**	**9.7**	**10.4**	**10.8**	**11.4**	**10.5**	**10.8**	**9.5**	**11.1**	**9.8**	**7.9**	**7.5**	**7.8**	**8.7**	**9.0**	**9.6**	**9.8**	**11.3**	**11.0**	**11.0**	**10.2**	**10.9**	**11.3**	**10.5**	**11.4**		
Min.	**0.7**	**0.7**	**0.5**	**0.6**	**0.4**	**0.3**	**0.5**	**0.8**	**0.9**	**1.5**	**1.0**	**1.0**	**1.5**	**1.5**	**2.5**	**2.5**	**2.4**	**2.3**	**1.3**	**1.2**	**1.0**	**0.7**	**1.7**	**1.1**		**0.3**	
Avg.	**3.9**	**3.9**	**3.7**	**3.7**	**3.5**	**3.1**	**3.3**	**3.5**	**3.7**	**4.1**	**4.2**	**4.4**	**4.6**	**4.9**	**5.3**	**5.7**	**5.9**	**5.9**	**5.8**	**5.4**	**5.0**	**4.8**	**4.5**	**4.4**			**4.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

August 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	12.3	12.2	11.5	12.1	11.6	11.7	11.6	12.5	13.0	13.1	12.8	12.7	12.6	12.1	12.4	13.4	11.6	12.5	12.8	12.8	14.1	13.5	14.3	14.9	14.9	11.5	12.7
2	13.4	13.2	14.4	14.1	14.2	14.9	15.5	14.2	14.3	14.9	14.2	14.8	14.4	13.9	14.6	14.4	12.9	12.6	12.4	11.7	12.3	11.4	10.4	10.7	15.5	10.4	13.5
3	10.6	11.0	10.2	9.4	8.0	7.1	7.0	7.8	8.3	9.0	8.8	8.8	9.8	11.3	13.1	12.9	12.0	12.4	12.7	11.6	10.7	8.3	10.3	11.3	13.1	7.0	10.1
4	10.6	12.5	11.2	12.7	12.8	12.9	13.6	13.4	14.0	13.3	12.6	12.5	12.3	11.7	11.7	10.9	9.8	8.6	8.5	8.8	9.0	9.2	9.2	11.8	14.0	8.5	11.4
5	13.8	11.5	10.2	8.5	10.2	9.1	9.2	7.9	11.2	10.9	11.1	12.9	12.1	10.9	10.1	10.0	10.1	9.2	8.9	9.9	12.8	12.8	12.8	11.2	13.8	7.9	10.7
6	9.7	10.9	10.9	10.7	7.7	7.6	11.0	12.9	12.0	11.3	9.9	11.8	12.5	12.8	13.4	12.8	12.7	12.5	10.6	10.2	9.9	9.9	10.9	11.2	13.4	7.6	11.1
7	12.0	9.7	11.9	10.2	5.2	6.2	9.6	10.2	13.5	10.6	11.7	10.1	10.3	10.9	12.2	11.2	10.4	11.8	10.3	10.0	8.9	9.4	6.2	4.6	13.5	4.6	9.9
8	6.3	6.4	6.8	7.4	7.2	7.0	8.2	6.5	6.4	8.3	8.9	8.4	7.3	6.8	5.8	5.8	6.6	7.5	7.1	6.0	6.2	6.9	6.6	6.9	8.9	5.8	7.0
9	6.7	6.6	8.0	7.6	7.0	6.7	7.5	5.7	3.4	3.8	4.1	2.7	3.5	3.9	4.7	5.1	5.0	4.2	4.3	3.5	2.5	1.7	1.7	3.6	8.0	1.7	4.7
10	3.5	1.7	1.4	0.7	0.3	0.5	1.3	1.3	1.0	2.3	3.3	3.4	3.3	3.4	3.9	4.4	4.6	4.0	4.7	4.4	3.8	3.0	2.9	3.0	4.7	0.3	2.7
11	2.1	1.2	3.3	3.6	1.9	1.6	1.8	1.4	1.2	2.0	2.8	2.0	2.7	3.1	3.9	3.6	4.5	4.9	3.4	3.1	2.5	1.9	1.6	2.0	4.9	1.2	2.6
12	1.6	1.4	2.1	1.9	1.7	2.4	2.5	2.9	3.7	4.2	2.9	4.7	6.6	3.8	2.6	4.0	5.9	6.0	5.7	6.6	5.0	4.9	1.7	3.1	6.6	1.4	3.7
13	2.4	1.8	2.0	2.1	1.2	2.1	1.8	1.8	2.0	1.5	2.5	3.0	3.3	4.4	4.1	4.0	5.2	4.2	4.4	5.2	7.4	8.2	7.5	9.2	9.2	1.2	3.8
14	10.2	9.4	9.6	8.6	3.7	3.2	1.8	4.6	5.4	6.0	5.5	5.2	5.3	5.2	4.4	3.6	5.7	5.2	3.1	3.4	3.1	3.7	3.7	5.1	10.2	1.8	5.2
15	7.4	8.4	9.4	9.6	9.5	9.2	9.7	10.0	12.1	11.8	10.4	9.6	10.2	5.9	7.6	7.4	6.6	5.8	4.9	4.2	4.1	4.6	4.6	5.2	12.1	4.1	7.8
16	4.6	4.2	2.9	3.1	3.7	4.0	2.9	2.2	2.2	3.0	1.6	0.8	1.8	1.9	1.8	2.3	3.5	4.7	4.8	5.4	4.4	3.6	2.3	1.3	5.4	0.8	3.0
17	1.3	2.5	3.0	5.5	7.5	4.8	2.1	0.6	2.4	5.8	9.0	7.9	8.3	9.2	9.4	10.8	10.9	10.7	10.7	9.2	8.1	8.1	9.3	9.0	10.9	0.6	6.9
18	10.0	9.4	9.1	12.5	14.9	15.1	12.5	13.2	13.9	12.6	10.9	13.5	12.1	14.3	14.5	16.4	17.8	17.3	16.7	16.1	16.1	13.9	12.9	13.5	17.8	9.1	13.7
19	11.0	12.1	11.6	10.4	9.2	11.0	12.0	12.7	13.1	12.8	11.9	11.8	11.0	10.6	12.5	12.4	12.6	11.4	9.1	9.5	9.5	10.7	9.5	9.1	13.1	9.1	11.1
20	7.1	6.6	5.5	5.8	6.9	6.5	5.7	5.9	6.3	7.5	7.2	6.8	7.0	8.5	9.6	10.1	11.1	11.0	9.8	8.2	6.5	7.5	9.0	8.7	11.1	5.5	7.7
21	8.7	8.9	8.2	6.7	7.5	7.4	8.1	7.8	7.3	8.0	8.4	8.0	7.8	8.2	7.6	8.5	9.0	8.6	8.4	8.4	8.0	6.6	6.3	7.3	9.0	6.3	7.9
22	8.3	8.1	8.5	7.8	8.2	7.8	8.5	8.3	7.6	7.8	8.9	8.8	8.9	8.4	8.1	8.3	8.5	7.8	8.4	7.9	6.3	6.5	6.3	5.8	8.9	5.8	7.9
23	4.9	4.6	3.4	2.4	2.0	2.1	2.2	2.1	2.6	2.4	3.6	5.1	5.6	6.1	7.0	6.7	6.7	6.8	7.5	6.6	6.2	8.4	8.7	8.8	8.8	2.0	5.1
24	8.5	9.5	9.0	10.5	6.7	7.1	7.5	6.8	7.5	6.7	7.0	6.7	6.3	4.2	2.1	3.5	2.2	4.1	3.3	2.3	2.0	1.9	3.3	2.7	10.5	1.9	5.5
25	1.9	1.8	1.6	4.8	3.8	2.4	1.5	1.3	1.2	0.9	2.6	2.2	2.5	3.8	4.4	5.9	7.2	7.9	8.5	6.1	3.5	4.7	5.4	3.6	8.5	0.9	3.7
26	2.0	2.7	4.7	5.2	4.7	4.2	3.5	4.0	3.9	3.3	3.8	4.5	5.3	5.1	6.5	6.2	5.9	5.3	3.8	3.1	1.2	3.4	4.4	8.3	8.3	1.2	4.4
27	7.4	6.6	7.2	7.8	4.3	3.7	3.2	1.9	3.4	3.1	5.8	6.4	5.5	4.2	3.1	4.7	3.8	3.2	2.5	1.2	1.0	2.1	2.1	1.4	7.8	1.0	4.0
28	1.1	3.9	3.3	3.2	2.0	2.5	2.6	2.9	2.5	3.0	2.6	1.6	2.9	3.8	4.0	1.9	2.6	5.0	6.3	5.5	7.6	7.4	5.8	7.5	7.6	1.1	3.8
29	9.1	7.6	8.8	7.8	6.7	8.3	9.2	10.5	10.8	11.6	11.5	9.7	8.6	8.9	8.2	8.9	9.2	8.4	7.8	7.6	9.8	9.8	9.3	8.6	11.6	6.7	9.0
30	9.9	8.9	8.4	8.6	8.1	8.0	8.0	7.6	4.8	5.4	5.1	4.6	3.6	3.5	4.3	3.8	3.4	2.2	2.1	1.6	4.3	5.2	5.5	4.5	9.9	1.6	5.5
31	4.9	5.2	5.1	3.9	4.0	3.3	4.0	4.0	3.2	4.4	4.6	3.6	2.1	2.0	3.0	3.5	1.5	2.2	1.3	0.8	2.6	4.0	3.6	2.0	5.2	0.8	3.3
Max.	**13.8**	**13.2**	**14.4**	**14.1**	**14.9**	**15.1**	**15.5**	**14.2**	**14.3**	**14.9**	**14.2**	**14.8**	**14.4**	**14.3**	**14.6**	**16.4**	**17.8**	**17.3**	**16.7**	**16.1**	**16.1**	**13.9**	**14.3**	**14.9**	**17.8**		
Min.	**1.1**	**1.2**	**1.4**	**0.7**	**0.3**	**0.5**	**1.3**	**0.6**	**1.0**	**0.9**	**1.6**	**0.8**	**1.8**	**1.9**	**1.8**	**1.9**	**1.5**	**2.2**	**1.3**	**0.8**	**1.0**	**1.7**	**1.6**	**1.3**		**0.3**	
Avg.	**7.2**	**7.1**	**7.2**	**7.3**	**6.5**	**6.5**	**6.6**	**6.6**	**6.9**	**7.1**	**7.3**	**7.2**	**7.3**	**7.2**	**7.4**	**7.7**	**7.7**	**7.7**	**7.3**	**6.8**	**6.7**	**6.9**	**6.7**	**7.0**			**7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2300	Max.	Min.	Avg.
1	0.9	2.0	2.0	2.0	2.6	3.9	4.0	3.5	3.7	4.9	4.3	3.0	3.2	3.9	3.1	3.8	4.7	4.9	5.5	5.1	3.7	4.3	3.7	3.1	5.5	0.9	3.6
2	3.3	2.9	3.9	4.4	3.8	3.8	4.2	3.5	2.5	4.6	5.1	5.1	4.2	4.9	5.0	6.3	6.6	6.9	7.9	7.5	5.6	5.9	6.5	5.4	7.9	2.5	5.0
3	7.8	8.3	9.6	10.5	11.0	11.1	10.0	11.9	12.0	12.4	14.1	13.6	13.9	13.4	13.5	13.4	13.7	13.8	12.9	11.2	12.1	12.5	11.9	14.5	14.5	7.8	12.0
4	11.0	10.9	11.6	7.7	6.0	4.3	3.5	1.1	2.6	5.8	7.9	6.2	4.7	4.8	2.8	2.5	5.9	5.8	7.7	8.0	7.9	8.0	9.6	5.0	11.6	1.1	6.3
5	2.3	2.2	2.6	4.7	4.3	4.0	2.6	2.3	5.1	6.6	7.3	6.6	6.6	6.7	5.5	5.8	1.8	1.3	2.3	2.7	3.0	2.4	2.4	2.6	7.3	1.3	3.9
6	3.0	4.1	2.8	3.2	2.7	3.0	2.3	2.0	1.8	4.8	0.0	0.5					0.0	0.0	2.7	3.7	2.9	3.3	3.0	2.0	4.8	0.0	2.4
7	3.7	5.9	6.5	7.4	6.5	7.2	7.9	9.6	11.2	12.4	12.9	12.9	13.8	15.7	16.7	18.3	18.3	17.6	18.1	18.4	17.3	17.5	19.5	20.6	20.6	3.7	13.2
8	19.3	14.1	10.0	10.9	9.2	12.5	11.5	10.2	9.7	11.0	10.6	11.1	10.0	9.4	8.9	8.3	7.1	7.8	9.5	8.0	5.5	5.2	5.9	6.4	19.3	5.2	9.7
9	6.6	6.0	5.5	5.8	5.9	5.5	6.1	5.9	5.2	5.2	5.3	5.5	4.2	3.7	4.9	3.9	4.4	4.6	3.7	3.9	3.4	2.5	2.3	2.0	6.6	2.0	4.7
10	1.4	1.0	1.1	1.6	1.3	1.6	1.1	1.3	1.2	1.5	1.0	3.5	5.8	6.7	9.3	10.6	9.8	10.8	9.9	8.6	11.1	13.2	15.5	14.5	15.5	1.0	6.0
11	11.8	13.6	15.3	15.2	16.1	16.3	16.7	18.1	18.7	16.7	17.4	17.5	19.2	20.7	19.2	19.4	20.5	23.9	22.2	20.5	21.1	20.8	19.5	19.5	23.9	11.8	18.3
12	17.1	16.6	15.1	13.0	8.7	7.3	4.5	3.1	5.1	4.3	2.9	3.0	5.2	7.2	6.5	7.2	6.7	7.5	9.6	8.8	7.3	6.5	8.5	7.7	17.1	2.9	7.9
13	3.5	4.0	4.2	4.1	4.5	5.0	4.9	6.5	6.7	6.6	5.5	4.4	3.0	4.2	4.1	2.6	2.8	5.7	3.8	5.0	4.7	4.3	4.3	3.0	6.7	2.6	4.5
14	2.6	3.3	3.5	2.8	2.9	2.6	2.1	1.7	2.6	3.0	1.8	1.2	0.9	2.2	2.7	2.2	3.9	4.4	5.4	6.0	6.5	7.0	8.3	8.3	8.3	0.9	3.7
15	8.0	8.0	9.4	8.3	8.3	8.3	7.3	8.8	6.0	8.2	11.2	11.9	11.7	10.3	11.5	11.9	11.6	9.1	8.5	7.5	6.0	5.6	7.9	8.2	11.9	5.6	8.9
16	6.3	7.5	5.9	5.5	5.1	2.6	2.5	2.0	1.7	2.6	4.4	4.5	5.1	5.1	5.4	6.1	6.6	6.2	6.0	7.6	7.0	6.8	8.2	6.9	8.2	1.7	5.3
17	7.4	4.4	5.5	4.9	1.9	3.0	3.9	2.2	2.3	3.8	4.8	4.7	4.2	2.2	3.0	3.7	2.9	2.2	3.1	3.5	4.2	3.3	4.6	6.8	7.4	1.9	3.9
18	6.6	8.0	8.5	8.1	10.6	12.4	13.4	15.6	15.5	18.4	18.9	19.2	21.4	21.4	19.7	16.9	17.0	16.4	14.6	14.3	14.3	12.9	8.0	6.0	21.4	6.0	14.1
19	6.2	6.0	6.5	8.8	5.3	4.6	6.0	7.3	5.2	6.0	7.1	8.0	10.6	11.6	13.1	12.7	13.7	13.9	15.3	13.2	13.0	12.7	12.0	13.0	15.3	4.6	9.7
20	13.3	11.8	12.6	12.2	10.3	10.3	10.1	10.9	10.8	8.7	8.2	8.4	9.3	8.0	7.5	5.6	6.5	6.8	6.5	3.5	2.9	5.9	4.2	4.9	13.3	2.9	8.3
21	3.8	2.3	3.1	2.9	3.6	6.2	4.9	3.8	6.1	8.1	9.8	10.9	9.9	7.8	7.1	8.0	6.6	7.3	7.8	7.0	6.8	5.2	3.0	4.3	10.9	2.3	6.1
22	4.3	5.4	6.3	4.4	4.6	5.3	5.1	3.7	2.4	3.1	3.0	6.0	6.1	8.4	9.5	8.6	10.9	10.0	9.5	12.8	14.0	11.5	12.3	10.3	14.0	2.4	7.4
23	9.1	6.8	5.9	8.3	6.1	6.4	4.5	3.1	3.8	3.7	4.1	3.6	5.1	6.1	8.0	7.6	7.7	7.1	7.7	9.1	8.2	6.1	5.4	3.9	9.1	3.1	6.1
24	5.9	3.6	2.5	7.4	7.8	8.4	6.9	4.8	5.1	5.7	5.6	7.6	6.7	6.1	8.8	7.9	6.3	5.4	6.1	2.7	3.6	5.0	5.5	7.0	8.8	2.5	5.9
25	6.7	6.5	7.7	5.4	2.7	6.2	8.2	8.0	8.0	8.9	7.7	7.5	7.9	7.2	7.5	7.6	6.6	7.6	8.5	7.0	8.0	8.1	8.2	7.5	8.9	2.7	7.3
26	6.8	8.0	7.1	7.0	6.2	4.4	3.9	3.9	3.3	2.3	1.2	4.5	3.4	3.9	2.4	1.4	1.2	2.3	2.7	3.6	3.0	3.4	2.0	2.1	8.0	1.2	3.7
27	2.1	1.9	3.4	4.1	3.1	2.8	3.1	2.8	3.0	3.3	2.7	2.0	4.4	4.1	3.9	4.6	6.0	6.6	9.7	9.5	13.2	14.2	15.5	14.4	15.5	1.9	5.8
28	16.2	16.3	16.7	15.8	13.6	13.9	13.9	11.9	9.8	6.7	4.9	6.1	6.8	6.5	5.8	4.0	2.0	3.3	3.9	3.7	3.6	2.5	2.0	1.5	16.7	1.5	8.0
29	3.6	3.6	4.5	4.2	4.2	4.4	4.9	4.2	2.6	2.0	1.8	1.4	2.4	4.0	5.0	5.3	4.2	3.4	3.4	4.3	5.6	6.0	8.3	8.7	8.7	1.4	4.3
30	7.5	6.5	5.6	3.5	5.9	5.2	7.1	6.0	7.4	8.7	8.1	9.8	9.7	8.2	5.5	5.2	4.4	6.1	7.0	3.3	1.2	3.3	4.5	4.8	9.8	1.2	6.0
Max.	**19.3**	**16.6**	**16.7**	**15.8**	**16.1**	**16.3**	**16.7**	**18.1**	**18.7**	**18.4**	**18.9**	**19.2**	**21.4**	**21.4**	**19.7**	**19.4**	**20.5**	**23.9**	**22.2**	**20.5**	**21.1**	**20.8**	**19.5**	**20.6**	**23.9**		
Min.	**0.9**	**1.0**	**1.1**	**1.6**	**1.3**	**1.6**	**1.1**	**1.1**	**1.2**	**1.5**	**0.0**	**0.5**	**0.9**	**2.2**	**2.4**	**1.4**	**0.0**	**0.0**	**2.3**	**2.7**	**1.2**	**2.4**	**2.0**	**1.5**		**0.0**	
Avg.	**6.9**	**6.7**	**6.8**	**6.8**	**6.2**	**6.4**	**6.2**	**6.0**	**6.0**	**6.7**	**6.6**	**7.0**	**7.6**	**7.7**	**7.8**	**7.6**	**7.3**	**7.6**	**8.0**	**7.7**	**7.6**	**7.5**	**7.7**	**7.5**			**7.1**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	6.1	5.9	4.5	2.6	1.9	1.4	1.4	1.1	1.3	2.1	2.3	2.0	4.1	6.6	8.1	8.4	9.3	10.4	11.7	11.2	9.1	8.9	10.5	11.7	1.1	5.7
2	10.1	9.3	9.3	10.5	13.0	13.6	14.7	14.4	14.1	15.4	13.8	10.9	10.6	11.6	12.1	12.0	12.4	11.8	9.3	11.1	14.2	13.4	13.7	13.9	15.4	9.3	12.3
3	12.2	11.4	10.7	8.4	11.4	12.5	12.6	12.2	12.3	12.9	12.2	12.7	13.7	12.7	12.2	11.9	9.0	3.2	7.6	4.1	2.3	2.5	2.2	1.6	13.7	1.6	9.4
4	3.1	1.7	1.8	2.3	2.6	5.2	7.5	6.9	8.7	10.4	13.7	13.1	14.0	14.1	15.0	15.4	13.9	12.5	12.7	14.3	15.9	14.0	14.4	12.5	15.9	1.7	10.2
5	12.2	12.6	13.8	14.5	15.0	13.4	13.5	13.1	12.9	12.8	12.1	9.6	4.0	4.6	10.9	10.6	12.4	12.1	15.2	13.3	10.5	9.5	8.7	10.6	15.2	4.0	11.6
6	10.8	13.1	12.9	11.2	13.1	13.8	12.5	12.5	12.9	12.6	12.4	14.6	15.6	16.4	15.0	14.9	11.8	11.1	10.2	8.7	6.7	7.9	7.3	7.7	16.4	6.7	11.9
7	9.1	8.8	9.1	10.4	10.9	13.0	12.1	12.2	14.2	13.1	13.4	14.3	13.4	14.4	14.5	17.0	14.8	15.0	16.1	18.2	18.4	18.6	16.9	15.5	18.6	8.8	13.9
8	20.2	17.5	14.0	16.6	12.4	14.5	16.9	15.4	15.7	16.4	8.2	4.7	8.8	9.5	9.0	9.2	10.1	7.5	6.4	7.5	7.8	5.4	8.6	7.9	20.2	4.7	11.3
9	6.5	8.0	5.7	5.1	4.8	4.2	3.9	3.7	4.2	4.5	3.9	3.3	2.1	1.9	1.4	1.6	3.6	5.1	4.2	5.1	4.7	4.9	5.9	5.2	8.0	1.4	4.3
10	6.6	7.0	8.6	8.3	5.6	7.6	9.3	10.1	9.3	8.4	9.5	8.3	8.3	8.7	8.4	6.5	5.4	6.0	5.4	5.7	3.6	3.6	3.4	3.5	10.1	3.4	7.0
11	3.9	5.8	3.9	4.2	4.0	3.7	5.8	4.7	3.8	4.1	3.5	5.3	7.1	6.8	6.8	7.8	9.4	10.6	11.2	11.3	11.2	10.6	10.2	9.4	11.3	3.5	6.9
12	9.7	8.8	7.5	7.2	7.1	5.9	4.7	2.7	2.2	3.1	2.4	1.5	1.2	0.9	1.9	2.8	3.5	2.7	2.5	3.5	5.4	6.3	5.1	5.5	9.7	0.9	4.3
13	5.6	5.0	5.3	4.1	4.7	5.1	6.3	7.3	7.0	7.0	7.3	7.4	7.2	6.9	5.6	5.3	6.3	6.8	7.4	6.7	7.0	7.0	7.7	5.6	7.7	4.1	6.3
14	6.3	8.2	6.0	6.1	5.4	5.0	6.2	7.9	6.9	4.4	4.9	6.8	6.3	6.3	5.3	4.6	5.4	6.1	5.3	5.5	4.3	5.9	5.9	5.2	8.2	4.3	5.8
15	4.5	4.8	4.2	3.6	4.0	3.3	2.6	3.1	3.1	3.1	3.3	3.0	2.6	4.4	3.7	3.9	3.6	3.4	3.7	4.4	5.5	5.1	4.5	4.8	5.5	2.6	3.8
16	5.3	6.3	6.8	6.3	6.4	6.1	3.5	6.5	6.8	4.3	4.2	6.1	8.5	8.8	8.2	8.9	8.3	7.8	6.7	7.4	7.1	11.0	9.9	8.2	11.0	3.5	7.1
17	7.2	7.8	7.3	6.5	7.5	6.8	7.2	7.4	7.5	7.4	7.7	6.8	6.4	7.0	6.7	6.2	5.1	5.3	4.3	3.8	4.2	4.3	4.9	5.6	7.8	3.8	6.3
18	4.8	4.4	4.5	4.6	4.9	4.2	5.3	4.7	3.7	3.7	3.3	2.6	1.9	1.8	3.3	1.6	2.4	3.4	2.8	3.7	3.4	3.6	3.2	2.5	5.3	1.6	3.5
19	1.9	2.1	3.0	3.6	4.4	5.8	3.2	2.7	2.4	3.5	1.9	1.4	1.2	1.1	1.1	0.7	0.6	0.8	2.1	3.0	2.9	2.8	2.7	2.3	5.8	0.6	2.4
20	2.5	2.7	2.8	2.6	2.9	3.7	3.8	3.6	3.8	3.3	3.4	4.4	7.5	9.0	10.2	11.3	10.9	10.7	11.5	12.0	13.7	12.1	12.5	12.5	13.7	2.5	7.2
21	12.0	14.8	13.2	13.9	13.3	11.1	11.0	11.9	11.4	6.9	6.6	6.4	8.1	9.3	9.7	9.4	9.3	6.9	5.6	4.5	2.9	3.2	3.6	4.5	14.8	2.9	8.7
22	4.5	3.7	3.7	4.0	5.6	6.9	5.3	5.1	3.7	3.3	2.7	3.0	2.5	2.0	1.3	2.8	3.1	3.5	2.0	1.2	1.6	1.8	0.9	1.1	6.9	0.9	3.1
23	1.9	1.6	2.0	1.3	1.3	1.6	1.5	1.7	1.0	1.8	1.9	1.1	2.0	2.2	2.6	2.1	1.4	3.6	8.0	7.2	3.7	1.9	1.7	1.2	8.0	1.0	2.3
24	1.0	2.1	1.1	2.0	1.9	0.6	0.6	0.5	1.9	3.9	4.3	4.7	4.8	2.9	4.2	3.3	5.0	5.7	6.4	6.6	6.6	6.9	6.6	9.1	9.1	0.5	3.9
25	10.1	10.4	14.1	15.9	17.2	17.1	20.9	20.0	22.1	25.5	23.7	22.6	20.8	19.2	19.4	21.4	22.0	20.4	18.8	18.0	10.5	8.7	6.4	3.6	25.5	3.6	17.0
26	5.2	6.3	6.0	4.9	4.4	5.4	5.9	6.4	5.2	5.3	5.2	4.1	5.5	5.5	5.5	4.9	5.2	5.5	6.8	8.6	8.0	8.2	8.5	8.4	8.6	4.1	6.0
27	8.5	8.5	8.6	8.6	8.1	8.5	6.9	7.3	6.0	5.3	7.3	5.8	4.2	5.5	8.7	8.1	7.1	6.1	5.8	5.7	3.8	2.3	1.2	1.3	8.7	1.2	6.2
28	2.6	5.1	4.2	2.9	0.8	0.8	1.1	1.7	1.5	2.9	2.6	2.1	2.3	3.0	3.6	4.3	4.7	5.4	5.7	5.8	8.1	8.7	9.1	10.4	10.4	0.8	4.1
29	12.3	13.0	14.3	15.2	14.5	14.2	16.0	17.6	16.7	17.2	17.2	18.4	18.0	17.2	16.3	15.2	15.0	14.4	14.4	14.4	15.4	12.8	13.4	12.7	18.4	12.3	15.2
30	8.0	7.5	9.9	11.4	14.9	15.5	14.1	9.2	7.7	6.4	5.4	6.3	3.3	2.4	3.6	4.5	6.1	7.1	5.5	5.7	5.8	3.1	3.2	2.8	15.5	2.4	7.1
31	3.2	3.8	5.0	7.1	8.4	8.4	5.8	7.2	9.5	11.1	11.7	10.2	9.0	7.6	6.6	6.4	6.6	4.6	6.0	9.3	10.5	10.6	10.1	12.0	12.0	3.2	7.9
Max.	**20.2**	**17.5**	**14.3**	**16.6**	**17.2**	**17.1**	**20.9**	**20.0**	**22.1**	**25.5**	**23.7**	**22.6**	**20.8**	**19.2**	**19.4**	**21.4**	**22.0**	**20.4**	**18.8**	**18.2**	**18.4**	**18.6**	**16.9**	**15.5**	**25.5**		
Min.	**1.0**	**1.6**	**1.1**	**1.3**	**0.8**	**0.6**	**0.6**	**0.5**	**1.0**	**1.3**	**1.9**	**1.1**	**1.2**	**0.9**	**1.1**	**0.7**	**0.6**	**0.8**	**2.0**	**1.2**	**1.6**	**1.8**	**0.9**	**1.1**		**0.5**	
Avg.	**7.0**	**7.4**	**7.3**	**7.4**	**7.5**	**7.7**	**7.8**	**7.8**	**7.7**	**7.8**	**7.5**	**7.2**	**7.2**	**7.3**	**7.7**	**7.8**	**7.8**	**7.6**	**7.7**	**8.0**	**7.6**	**7.3**	**7.1**	**7.0**			**7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.3	7.8	8.6	8.5	7.5	6.2	5.8	4.6	4.1	5.2	5.7	5.1	4.0	3.1	1.9	1.0	3.4	4.2	5.6	6.3	8.7	6.8	7.1	8.5	10.3	1.0	5.8
2	7.3	4.9	1.6	2.1	1.5	1.5	1.8	3.6	5.9	5.3	6.0	7.0	6.2	5.0	5.9	5.8	5.7	5.1	5.6	7.5	6.1	7.0	9.1	8.3	9.1	1.5	5.2
3	9.6	8.4	7.2	7.6	7.9	7.5	6.6	5.1	1.8	1.7	1.1	1.5	0.7	0.4	2.0	3.2	3.2	1.9	3.2	5.3	7.7	9.9	10.7	11.8	11.8	0.4	5.3
4	13.4	13.2	13.6	15.3	15.5	15.2	16.2	16.4	15.8	14.7	14.3	14.8	14.4	15.3	15.9	16.5	15.3	13.3	12.9	8.8	8.0	8.3	9.0	9.6	16.5	8.0	13.6
5	10.0	9.8	9.5	9.4	8.8	7.7	7.1	6.5	6.9	7.5	7.5	7.6	5.6	5.9	5.8	4.7	5.4	7.7	9.0	9.4	9.8	10.2	10.5	9.8	10.5	4.7	8.0
6	9.8	10.1	10.9	12.1	11.1	11.3	12.6	15.0	15.4	15.6	16.0	16.2	17.5	18.0	17.1	16.8	14.7	15.5	13.9	13.8	13.7	16.1	12.9	10.3	18.0	9.8	14.0
7	7.7	8.8	9.7	11.6	11.2	13.6	14.4	13.0	13.4	13.0	12.2	12.3	12.1	12.3	11.3	10.6	9.1	7.5	8.9	6.8	7.5	7.2	6.5	5.9	14.4	5.9	10.3
8	4.4	3.3	5.4	8.3	11.3	13.0	15.2	15.4	17.5	16.5	19.3	20.7	19.5	15.4	14.0	13.1	13.7	13.4	11.5	12.3	11.2	10.3	9.8	8.2	20.7	3.3	12.6
9	8.7	8.1	9.0	9.3	10.4	10.1	9.3	10.7	9.2	8.4	8.7	8.7	8.3	7.1	8.7	9.8	10.4	9.7	7.4	7.6	7.1	5.9	4.1	3.6	10.7	3.6	8.3
10	4.3	4.9	5.5	5.7	6.2	4.3	6.2	7.3	7.5	4.1	4.3	6.5	6.7	7.4	8.2	7.8	7.4	6.3	4.5	4.2	4.6	4.1	4.4	5.5	8.2	4.1	5.8
11	5.1	5.4	5.5	3.7	4.8	8.1	7.4	6.0	5.7	6.4	4.5	5.1	6.9	8.0	7.8	7.2	7.8	7.9	6.9	6.5	4.6	3.5	2.5	1.6	8.1	1.6	5.8
12	1.8	2.7	1.5	1.2	2.4	1.6	1.1	0.7	0.3	1.3	1.4	1.4	1.6	2.4	2.6	2.8	3.6	6.8	9.4	10.1	11.6	12.1	12.2	11.5	12.2	0.3	4.3
13	11.7	12.6	11.9	11.1	10.5	10.7	12.4	11.4	11.2	10.5	9.5	10.4	6.1	4.9	5.2	2.8	2.9	4.0	8.9	8.3	8.7	7.7	7.9	9.2	12.6	2.8	8.8
14	9.0	8.9	8.6	9.1	8.0	7.5	8.0	4.2	1.9	1.6	2.6	3.5	5.4	6.3	5.5	5.9	6.5	5.7	6.7	6.5	4.7	4.2	4.7	5.2	9.1	1.6	5.8
15	5.6	6.2	6.5	6.1	7.9	9.6	11.0	12.1	11.8	12.5	13.0	13.7	12.7	12.3	14.5	15.1	16.5	17.6	17.5	19.2	18.9	20.3	20.7	21.4	21.4	5.6	13.4
16	19.3	21.8	24.0	25.0	28.3	24.4	29.5	27.6	23.4	25.3	25.1	21.1	20.7	27.2	24.4	22.4	23.0	23.9	17.9	24.6	22.8	16.3	20.6	21.5	29.5	16.3	23.3
17	20.2	20.8	18.1	22.8	25.2	27.3	27.4	31.8	28.5	26.4	16.6	15.4	17.6	18.9	18.6	17.4	15.5	15.9	11.7	12.0	8.0	10.9	13.7	5.9	31.8	5.9	18.6
18	8.8	8.6	4.2	6.7	8.4	9.3	5.1	6.2	6.3	5.8	6.0	5.9	6.2	5.4	5.6	4.2	4.9	3.5	4.1	2.1	2.0	2.4	2.2	2.2	9.3	2.0	5.2
19	1.8	2.5	2.2	3.4	2.1	1.4	2.5	1.2	1.6	3.9	3.0	5.4	9.2	9.9	10.0	11.3	10.4	10.2	9.3	10.0	9.1	9.6	9.8	10.3	11.3	1.2	6.3
20	12.3	12.7	11.6	10.5	12.1	14.3	15.0	14.0	16.0	14.5	15.9	14.5	16.0	18.7	14.8	12.0	13.3	11.7	12.6	12.2	13.1	10.9	10.9	7.9	18.7	7.9	13.2
21	12.1	13.3	15.0	11.7	9.9	14.4	13.6	9.3	7.6	9.5	14.2	13.4	11.8	12.0	13.8	13.2	11.9	14.4	15.9	14.8	14.0	13.3	12.8	13.4	15.9	7.6	12.7
22	13.0	12.0	6.8	10.3	6.9	10.0	8.9	10.2	10.4	13.5	15.3	17.1	15.4	15.7	16.5	17.9	21.5	17.7	17.9	17.7	10.9	14.2	12.9	7.0	21.5	6.8	13.3
23	5.6	4.9	5.5	5.8	5.6	5.5	7.1	8.0	6.1	5.8	5.5	4.1	3.7	3.9	3.0	4.4	3.7	3.4	2.9	4.4	5.1	6.4	5.7	4.5	8.0	2.9	5.0
24	4.0	3.4	2.0	0.7		0.6	2.4	2.2	3.1	4.4	5.6	9.1	11.4	13.6	14.3	16.3	16.2	15.7	19.2	15.4	11.6	17.2	17.3	15.5	19.2	0.6	9.6
25	16.3	16.8	14.8	12.9	13.2	13.5	15.1	12.4	13.7	18.5	19.0	16.8	15.3	19.3	20.6	20.3	19.5	18.9	16.7	7.8	5.2	9.0	7.1	9.2	20.6	5.2	14.7
26	12.5	13.8	13.3	10.4	7.4	6.3	4.9	3.1	1.7	2.4	2.8	3.0	3.4	1.7	1.6	3.7	4.0	5.4	6.9	6.4	5.1	4.9	7.1	10.5	13.8	1.6	5.9
27	7.8	10.6	11.7	15.0	13.8	14.1	16.2	16.6	19.2	20.3	19.1	19.0	17.4	20.0	17.7	15.6	16.2	13.3	13.9	12.6	12.4	11.2	10.2	11.3	20.3	7.8	14.8
28	9.2	9.6	7.3	8.4	5.9	3.7	2.9	1.0	1.3	2.6	4.3	5.6	6.7	6.4	7.3	8.6	8.1	8.1	9.1	10.6	10.7	10.9	8.6	10.1	10.9	1.0	6.9
29	9.9	10.5	12.2	12.6	13.4	9.8	13.9	14.8	18.0	17.7	16.5	15.3	15.2	18.4	18.3	18.7	17.3	17.1	17.7	20.1	19.9	19.5	19.6	20.8	20.8	9.8	16.1
30	21.5	19.5	19.9	20.9	20.8	20.5	21.2	21.3	21.1	21.5	20.5	20.6	20.7	19.9	19.6	18.0	14.0	11.6	13.7	17.0	19.7	18.7	17.8	12.7	21.5	11.6	18.9
Max.	**21.5**	**21.8**	**24.0**	**25.0**	**28.3**	**27.3**	**29.5**	**31.8**	**28.5**	**26.4**	**25.1**	**21.1**	**20.7**	**27.2**	**24.4**	**22.4**	**23.0**	**23.9**	**19.2**	**24.6**	**22.8**	**20.3**	**20.7**	**21.5**	**31.8**		
Min.	**1.8**	**2.5**	**1.5**	**0.7**	**1.5**	**0.6**	**1.1**	**0.7**	**0.3**	**1.3**	**1.1**	**1.4**	**0.7**	**0.4**	**1.6**	**1.0**	**2.9**	**1.9**	**2.9**	**2.1**	**2.0**	**2.4**	**2.2**	**1.6**		**0.3**	
Avg.	**9.8**	**9.9**	**9.5**	**9.9**	**10.3**	**10.1**	**10.7**	**10.4**	**10.2**	**10.5**	**10.5**	**10.7**	**10.6**	**11.2**	**11.1**	**10.9**	**10.8**	**10.6**	**10.7**	**10.7**	**10.1**	**10.3**	**10.3**	**9.8**			**10.4**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Speed (RMYoung) (m/s)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.4	12.3	11.0	8.6	10.5	13.4	8.8	4.9	6.1	9.5	9.8	7.1	8.7	6.5	8.9	7.4	4.2	1.2	1.1	1.3	2.8	3.0	2.4	6.2	13.4	1.1	7.0
2	5.3	4.6	4.3	5.0	3.7	4.4	4.9	5.9	5.2	4.6	4.5	3.7	2.9	3.8	0.9	2.1	0.6	2.3	4.3	4.4	6.1	10.8	7.4	5.8	10.8	0.6	4.5
3	8.8	9.1	10.1	10.9	12.6	12.1	12.9	11.1	9.8	10.9	13.2	11.1	8.9	9.0	7.8	7.5	8.1	6.2	6.8	8.3	8.8	9.1	8.9	9.5	13.2	6.2	9.7
4	10.8	9.8	10.3	9.5	9.2	8.1	5.2	5.0	7.4	9.3	9.6	6.9	6.9	5.8	6.4	7.7	7.9	10.7	11.4	10.3	12.5	13.1	12.2	12.5	13.1	5.0	9.1
5	12.1	11.3	11.2	11.4	10.5	9.4	9.5	9.5	10.4	9.9	10.0	11.1	12.9	14.5	15.1	15.5	16.2	17.5	17.6	17.4	18.2	19.4	17.9	20.4	20.4	9.4	13.7
6	22.9	23.2	23.9	22.2	21.3	20.5	20.2	20.1	19.8	19.3	18.6	18.3	18.1	17.1	13.4	12.3	6.8	2.7	1.7	3.6	3.7	5.8	5.8	4.8	23.9	1.7	14.4
7	4.2	3.4	3.2	3.3	4.4	4.7	6.1	6.3	8.3	9.1	9.3	10.8	13.4	13.1	14.2	16.8	18.8	18.2	15.8	17.2	17.1	16.8	15.9	15.1	18.8	3.2	11.1
8	17.9	13.7	10.8	8.2	6.8	5.6	4.5	4.1	5.0	3.6	3.8	6.6	8.6	5.2	10.0	5.3	1.9	5.4	6.7	5.4	4.4	6.9	7.1	5.8	17.9	1.9	6.8
9	6.0	1.5	2.0	2.6	4.4	6.7	8.1	10.5	10.4	10.9	12.0	13.9	17.8	19.6	19.2	20.9	19.6	18.2	18.5	19.4	20.2	18.9	17.7	15.7	20.9	1.5	13.1
10	16.5	14.9	10.0	10.7	14.3	13.4	10.5	10.6	9.4	12.1	13.6	12.1	8.3	9.0	11.6	12.2	11.5	10.0	7.4	5.0	3.9	5.2	8.8	11.9	16.5	3.9	10.5
11	15.0	15.8	16.2	15.8	12.3	8.6	5.4	6.1	3.7	3.0	3.3	2.9	1.3	0.9	2.2	2.0	3.5	2.4	0.6	0.7	1.3	2.8	4.0	4.8	16.2	0.6	5.6
12	5.1	4.4	5.9	5.5	4.3	3.8	5.0	5.4	6.2	4.0	3.8	4.5	3.7	4.2	3.5	4.3	4.8	5.3	4.5	2.8	2.9	2.5	3.0	2.1	6.2	2.1	4.2
13	2.1	1.7	2.6	2.8	2.8	2.8	3.3	3.1	3.0	3.6	3.7	4.2	3.7	4.4	5.4	5.7	7.2	8.6	9.4	8.2	10.4	10.1	10.1	10.7	10.7	1.7	5.4
14	10.6	12.9	12.8	12.3	12.1	11.5	11.2	11.2	11.0	13.5	14.3	13.0	13.3	8.7	10.6	11.6	14.7	16.2	15.2	15.0	16.0	16.7	15.5	17.8	17.8	8.7	13.2
15	18.9	15.1	12.9	17.3	18.6	19.1	18.7	15.8	15.0	16.1	18.3	18.2	17.8	18.7	20.9	21.2	22.7	21.6	22.7	21.1	20.0	24.4	27.6	23.4	27.6	12.9	19.4
16	19.8	20.8	23.8	22.8	21.7	26.1	20.4	19.6	20.7	21.4	20.4	20.1	21.6	21.3	22.8	18.6	19.4	19.3	22.2	21.4	18.0	17.1	21.6	18.1	26.1	17.1	20.8
17	20.3	21.6	24.2	24.4	21.7	23.6	18.8	17.8	15.1	17.8	20.2	21.1	19.8	20.3	19.4	17.9	16.3	14.0	12.6	12.1	10.6	8.8	7.1	8.2	24.4	7.1	17.2
18	7.4	6.1	8.1	7.6	7.6	8.7	9.8	8.6	8.2	8.5	8.7	9.2	8.7	9.1	9.1	8.8	8.0	8.6	10.6	9.9	9.7	8.5	8.9	11.6	11.6	6.1	8.7
19	8.9	6.7	5.3	9.2	14.3	16.0	16.6	17.0	16.8	16.5	17.2	16.0	16.0	14.7	16.2	15.5	16.7	15.1	9.5	6.5	10.9	6.8	8.4	8.0	17.2	5.3	12.7
20	7.0	6.1	5.9	5.0	4.3	3.0	6.5	10.7	12.2	14.2	13.9	13.1	15.2	15.6	15.0	14.5	13.4	8.4	4.8	6.2	4.5	3.3	2.4	3.5	15.6	2.4	8.7
21	6.9	10.3	11.5	12.4	10.6	11.5	9.8	9.4	9.9	6.5	8.0	7.3	7.4	5.8	6.2	7.1	6.7	8.2	9.6	10.8	11.8	11.9	11.1	11.0	12.4	5.8	9.2
22	12.5	14.4	14.8	12.3	13.3	15.3	15.6	17.0	15.1	14.9	14.5	14.0	14.3	13.3	11.8	12.7	12.2	11.2	10.9	10.3	9.2	6.3	4.9	6.1	17.0	4.9	12.4
23	10.1	11.6	12.9	11.3	7.9	8.3	7.9	6.2	3.4	2.4	2.1	2.7	3.3	4.2	4.8	4.5	3.9	2.3	2.7	2.1	1.9	1.2	1.1	1.2	12.9	1.1	5.0
24	3.2	3.2	2.8	4.2	5.4	6.5	8.3	14.3	15.8	14.9	12.8	16.1	20.6	22.3	22.7	22.6	21.8	24.5	27.7	26.9	26.5	25.9	25.7	25.7	27.7	2.8	16.7
25	26.5	27.7	27.8	24.0	16.3	17.0	17.8	19.0	18.7	16.1	14.9	17.1	17.5	14.2	13.1	12.9	12.8	10.7	13.5	9.8	8.1	11.1	13.1	12.9	27.8	8.1	16.4
26	5.1	6.1	8.7	8.5	7.2	2.8	4.4	5.0	4.5	7.3	5.1	8.0	9.5	9.9	14.1	13.0	8.8	13.3	15.9	15.8	16.0	17.5	17.6	18.8	18.8	2.8	10.1
27	18.8	19.7	18.4	14.9	15.3	15.9	16.6	17.0	15.6	16.9	16.5	14.8	14.8	16.4	15.5	9.2	6.7	5.3	5.4	5.2	5.2	3.3	5.2	7.1	19.7	3.3	12.5
28	10.8	14.8	14.0	10.2	10.1	9.6	8.8	7.4	7.8	14.1	12.9	10.5	9.9	8.6	9.1	8.9	7.0	8.4	10.9	9.5	12.0	16.8	17.2	16.2	17.2	7.0	11.1
29	17.3	15.4	15.5	8.1	4.7	10.0	8.0	7.9	8.4	8.4	9.2	10.1	12.8	13.2	12.1	8.4	9.9	12.5	10.9	10.6	9.6	7.3	8.7	9.9	17.3	4.7	10.4
30	11.2	10.4	9.4	8.4	8.1	5.1	4.8	5.1	6.8	6.6	7.0	8.2	8.4	10.2	8.0	7.7	8.4	8.1	9.3	10.0	11.1	11.0	10.8	9.6	11.2	4.8	8.5
31	7.9	5.5	3.8	4.5	4.8	5.1	4.9	6.1	7.1	7.7	8.0	7.3	8.4	7.5	7.7	7.3	7.5	8.5	9.4	9.8	11.2	11.4	11.8	12.3	12.3	3.8	7.7
Max.	**26.5**	**27.7**	**27.8**	**24.4**	**21.7**	**26.1**	**20.4**	**20.1**	**20.7**	**21.4**	**20.4**	**21.1**	**21.6**	**22.3**	**22.8**	**22.6**	**22.7**	**24.5**	**27.7**	**26.9**	**26.5**	**25.9**	**27.6**	**25.7**	**27.8**		
Min.	**2.1**	**1.5**	**2.0**	**2.6**	**2.8**	**2.8**	**3.3**	**3.1**	**3.0**	**2.4**	**2.1**	**2.7**	**1.3**	**0.9**	**0.9**	**2.0**	**0.6**	**1.2**	**0.6**	**0.7**	**1.3**	**1.2**	**1.1**	**1.2**		**0.6**	
Avg.	**11.7**	**11.4**	**11.4**	**10.8**	**10.4**	**10.6**	**10.1**	**10.3**	**10.2**	**10.8**	**10.9**	**11.0**	**11.4**	**11.2**	**11.5**	**11.0**	**10.6**	**10.5**	**10.6**	**10.2**	**10.5**	**10.8**	**11.0**	**11.2**			**10.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	23.3	22.7	19.7	16.4	18.9	19.9	12.7	9.5	17.6	16.2	13.5	15.8	13.6	20.3	22.3	13.9	14.7	16.4	12.0	18.1	14.1	8.8	16.3	7.6
2	15.5	18.7	13.3	14.1	12.1	17.5	22.8	15.0	12.8	15.3	18.7	19.2	16.7	17.2	17.1	15.2	14.0	9.0	3.7	12.9	13.6	13.2	10.7	12.2
3	21.2	12.2	6.5	0.0	359.0	359.9	353.7	347.5	347.0	338.4	320.9	331.5	336.8	318.6	351.7	353.5	338.0	338.8	353.1	345.6	338.1	350.8	19.9	352.2
4	11.9	16.4	12.6	17.0	22.8	23.1	23.6	25.7	27.7	28.1	25.3	21.9	22.9	8.9	11.8	24.8	26.5	25.6	24.0	22.1	17.7	29.2	219.4	192.9
5	175.4	304.0	17.5	21.3	14.3	338.5	1.2	16.4	15.8	1.1	6.6	9.5	11.5	0.8	6.8	10.3	12.7	358.2	345.6	287.4	296.8	11.5	9.1	4.9
6	16.2	20.1	25.6	14.2	14.4	4.3	20.0	12.2	16.4	10.6	14.3	13.7	14.4	1.2	7.3	8.4	4.0	356.7	358.6	6.2	1.9	356.6	7.0	354.7
7	5.5	11.3	3.5	2.4	353.3	353.6	355.1	358.4	357.0	352.6	358.9	345.0	1.1	1.0	0.5	355.3	352.6	0.7	358.0	0.1	356.6	349.9	349.7	349.3
8	352.9	357.0	350.2	346.7	0.6	14.8	358.4	359.0	5.6	5.1	3.8	5.8	4.5	358.1	358.9	16.2	8.8	5.1	16.1	8.9	13.0	27.2	16.6	9.4
9	10.5	18.1	9.7	280.2	10.0	15.9	16.0	18.6	23.1	37.2	40.0	65.8	39.2	37.5	88.2	139.3	125.4	128.6	130.4	135.7	128.2	167.2	134.3	127.0
10	133.3	130.6	134.9	138.4	130.7	120.0	118.7	114.1	115.2	114.4	114.0	111.7	122.7	126.1	124.0	124.2	122.3	116.0	121.1	121.6	117.7	119.9	123.7	118.5
11	116.6	114.2	115.0	114.8	117.4	118.5	117.5	114.3	115.9	117.8	114.6	111.6	110.7	111.5	109.9	109.6	110.4	110.4	105.1	104.2	106.4	107.4	107.1	107.8
12	106.5	106.6	104.2	104.6	107.0	108.0	110.1	115.6	120.4	117.9	118.4	117.5	117.4	114.7	117.8	111.5	111.2	110.1	112.6	112.3	114.3	120.8	177.7	235.2
13	227.3	227.7	228.2	226.5	216.7	205.2	202.1	201.3	177.4	203.3	197.4	192.3	211.7	181.1	139.0	104.1	69.2	68.2	16.4	14.7	11.8	15.2	22.1	22.3
14	15.5	13.3	15.6	10.5	13.9	11.2	356.9	354.5	355.0	356.0	357.9	0.6	0.8	359.0	356.3	6.3	4.4	345.4	333.9	338.1	334.0	316.6	319.6	322.1
15	333.5	334.8	352.7	358.9	348.6	336.1	325.3	325.7	329.3	317.3	322.9	336.7	332.9	331.7	338.2	340.5	324.4	342.6	336.1	358.4	357.0	357.9	15.0	20.0
16	21.9	27.5	25.0	25.6	30.4	65.2	92.9	100.3	97.7	102.4	105.2	104.9	99.2	97.9	101.1	101.4	103.7	106.6	108.6	110.1	112.2	113.0	115.4	110.6
17	114.7	134.3	141.0	138.8	133.7	129.8	132.2	130.9	125.1	116.9	120.1	114.5	130.1	130.8	119.0	120.5	121.4	125.5	115.0	120.0	120.9	128.1	125.5	117.7
18	118.5	119.6	111.1	87.9	69.9	49.3	69.0	50.9	67.7	45.2	14.9							262.4	274.9	290.0	9.9	341.3	354.7	286.1
19	314.9	288.5	264.7	295.8	259.6	250.8	207.0	233.7	256.1	14.9	31.1	31.3	50.3	41.1	58.4	82.9	88.9	94.2	101.9	103.4	103.0	103.8	101.1	99.6
20	104.0	104.4	107.4	102.0	101.8	96.4	96.5	96.8	97.4	96.0	95.1	79.8	69.6	30.0	17.0	19.7	17.8	4.4	354.0	8.9	17.9	15.7	16.8	19.0
21	17.5	4.8	0.1	0.8	305.3	254.8	258.1	252.7	283.9	275.4	254.2	256.3	256.9	247.1	242.0	246.3	250.7	254.6	259.8	254.7	250.4	249.2	253.3	253.9
22	248.1	201.6	161.5	144.7	129.1	119.1	95.7	37.5	21.6	21.2	26.6	18.3	28.6	20.2	15.9	16.8	8.4	13.7	13.8	18.7	9.6	351.1	2.6	23.7
23	19.1	19.2	16.1	6.7	11.1	16.1	7.1	1.3	10.7	4.7	6.3	8.2	2.6	8.5	2.1	340.8	346.8	357.7	356.8	12.2	0.4	346.4	346.9	354.4
24	345.0	336.9	336.7	329.0	327.2	328.0	335.8	352.2	336.0	344.3	358.7	359.8	4.3	358.9	0.0	12.9	16.2	9.8	18.9	31.1	24.4	24.3	24.6	20.0
25	19.8	32.2	82.1	92.9	90.0	88.7	79.9	80.9	98.2	102.5	102.9	103.4	103.9	105.6	101.5	101.9	99.3	97.9	102.1	104.6	104.1	104.9	108.6	110.9
26	108.5	108.5	109.0	110.0	110.1	109.8	110.6	112.7	113.3	110.2	112.0	116.3	123.9	124.4	135.1	138.1	132.2	121.5	121.6	120.9	126.5	129.9	112.9	110.1
27	110.7	106.1	103.7	105.4	108.4	109.3	109.0	112.1	112.6	127.3	118.1	112.2	111.5	105.8	110.7	113.6	109.3	97.0	101.5	101.2	99.7	97.8	98.7	99.4
28	100.9	98.7	103.6	105.8	104.4	106.0	102.2	104.1	110.4	118.4	128.0	136.4	141.4	137.2	130.2	125.0	124.7	113.2	108.9	115.5	122.0	116.4	119.1	114.8
29	110.4	100.5	96.0	96.0	104.9	103.1	99.4	101.7	104.2	111.0	106.3	105.6	106.5	106.7	106.3	105.2	107.3	109.4	111.2	109.2	110.0	111.0	112.2	115.3
30	103.8	104.1	107.8	109.0	112.8	111.0	107.0	107.9	109.0	110.3	114.8	115.4	122.7	120.0	114.3	130.8	135.8	133.6	134.5	136.3	136.2	136.7	132.1	137.1
31	136.4	138.3	142.3	140.1	143.2	133.8	131.3	142.2	138.6	131.7	138.7	146.4	134.9	144.6	145.6	120.3	110.6	109.6	107.5	124.0	115.1	110.8	131.3	120.5

Total Hours In Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	118.3	126.2	130.6	129.8	123.8	113.0	122.1	133.5	131.0	147.9	132.1	139.6	128.0	103.5	107.5	104.4	98.1	94.8	97.0	127.6	127.7	129.1	118.5	115.7
2	106.4	106.5	107.9	114.2	113.9	116.6	115.6	116.9	116.6	120.1	120.2	119.6	118.4	117.0	114.5	110.6	113.2	110.4	108.2	108.9	111.7	115.2	117.4	117.7
3	112.7	115.3	117.9	117.6	113.1	107.0	109.5	118.5	120.6	123.9	116.3	118.3	122.3	129.1	153.9	188.3	189.8	252.8	10.9	21.9	15.7	21.5	26.7	25.0
4	25.3	24.4	17.1	24.4	26.2	19.4	20.4	26.7	19.1	17.4	22.8	22.6	23.2	24.7	11.1	13.8	24.3	25.2	23.4	23.6	26.5	36.4	31.7	48.3
5	84.1	125.8	94.9	81.0	96.6	114.9	104.6	92.6	112.8	99.2	107.5	109.8	140.7	135.8	154.1	147.4	145.6	113.4	107.3	119.7	117.4	116.9	125.7	137.9
6	108.7	103.0	97.7	97.7	100.3	98.6	104.2	106.0	104.6	100.7	110.1	111.0	105.6	109.0	132.7	136.9	127.9	154.5	54.1	124.7	80.0	65.0	75.2	73.5
7	107.7	115.5	140.1	126.6	62.9	81.1	127.9	160.8	179.6	208.0	180.0	178.5	136.5	156.6	231.3	28.9	35.8	103.3	131.3	135.5	123.6	127.1	110.8	115.4
8	112.2	92.4	143.9	159.2	140.6	131.9	131.7	132.3	145.0	139.5	142.3	139.1	145.0	140.4	143.1	136.3	141.8	145.5	162.6	200.1	223.1	235.6	238.4	224.4
9	197.0	246.8	244.7	252.9	215.9	192.8	272.8	254.3	128.9	125.1	128.9	123.1	106.1	115.4	147.0	158.9	170.2	150.1	105.8	147.4	197.0	117.2	219.6	337.0
10	23.2	22.4	35.9	29.1	20.5	15.4	20.7	21.8	11.3	8.4	10.4	355.1	26.7	9.8	12.7	17.1	11.0	341.6	348.6	22.9	24.3	27.6	26.7	27.9
11	23.5	88.1	114.5	122.7	127.7	125.1	132.3	118.0	118.8	122.4	112.1	109.9	114.6	117.1	123.5	120.6	114.1	113.6	113.3	112.2	102.3	102.7	103.8	102.6
12	103.1	101.6	104.1	107.2	103.5	102.7	102.1	100.8	102.3	104.2	101.8	106.7	109.9	111.7	110.5	107.8	103.1	97.0	76.6	67.5	59.4	54.4	57.8	49.4
13	39.7	58.5	54.4	40.7	44.0	46.8	52.1	54.1	59.5	50.9	53.5	50.8	63.8	69.6	91.8	105.1	112.0	115.5	109.8	102.3	112.9	121.8	121.1	125.8
14	114.4	125.2	121.5	116.2	112.7	116.9	117.1	115.2	116.5	117.1	110.6	107.9	115.9	122.5	128.7	115.7	101.6	111.8	82.8	77.7	74.3	42.8	23.0	24.4
15	21.2	20.2	22.2	22.3	25.0	26.7	29.7	33.1	22.1	23.0	35.6	24.0	28.1	19.7	15.5	19.2	24.1	27.0	27.0	25.8	25.2	28.2	27.4	28.9
16	29.5	29.0	17.1	17.5	77.7	30.5	46.0	40.8	68.9	90.0	120.8	130.3	135.7	134.6	160.4	267.3	287.0	330.3	84.1	127.5	124.7	128.7	100.1	128.6
17	133.4	120.8	121.9	113.9	123.9	94.0	47.4	29.1	30.8	34.2	22.1	34.2	27.0	81.5	100.0	110.9	135.3	121.3	124.3	106.4	105.9	111.2	110.6	112.8
18	98.6	74.1	99.6	35.1	28.1	24.3	38.1	25.5	23.5	27.2	36.2	49.5	35.9	21.9	14.7	31.5	78.2	54.7	27.6	21.9	19.8	12.1	12.7	11.4
19	14.0	10.1	357.9	2.3	0.6	0.3	353.9	347.0	334.6	327.6	331.7	350.7	355.5	359.0	357.8	359.4	358.5	4.2	3.5	3.3	2.5	4.1	5.2	14.8
20	21.9	25.7	22.2	17.1	2.7	9.9	7.5	8.0	2.2	7.4	4.0	8.1	352.0	346.6	345.8	344.1	339.5	343.1	344.6	346.1	351.8	0.9	8.9	343.2
21	347.0	355.4	357.3	353.5	352.9	4.8	3.6	9.5	9.2	7.5	6.9	14.0	18.1	10.0	357.5	1.0	8.4	16.7	20.4	19.1	25.0	19.4	24.8	22.2
22	17.6	15.7	16.5	22.2	14.3	11.6	12.2	16.6	17.1	20.7	13.8	14.5	5.3	13.8	27.1	30.3	30.6	18.2	15.3	30.4	31.6	35.5	27.4	24.2
23	26.1	26.9	30.2	19.2	16.4	14.1	10.6	19.7	21.7	18.3	21.7	14.4	11.6	359.5	359.9	11.3	26.6	19.3	29.3	20.3	357.5	8.9	13.9	327.1
24	328.1	7.9	7.3	358.0	355.2	353.2	345.1	342.3	354.5	5.2	359.0	3.9	348.7	346.3	358.4	357.9	351.4	347.5	0.6	6.0	6.1	3.3	2.6	1.0
25	6.4	0.4	351.4	358.1	352.2	357.1	10.9	5.4	22.6	3.6	12.4	10.0	6.5	1.9	5.9	3.7	8.8	8.4	12.3	3.8	330.5	19.3	40.6	349.5
26	313.9	329.0	328.7	328.2	333.2	332.3	334.0	337.3	334.9	339.6	347.3	33.7	333.8	322.1	309.3	314.0	316.9	321.5	358.5	49.5	19.3	13.2	9.2	2.6
27	352.6	352.1	7.0	3.9	5.3	8.8	13.9	19.0	27.2	25.8	15.7	20.3	18.1	21.5	24.4	21.0	21.9	25.6	28.4	27.4	29.2	23.5	18.1	18.0
28	26.1	15.8	20.8	17.8	10.7	15.4	15.7	18.4	17.3	25.4	19.4	18.3	16.1	8.9	6.5	8.8	12.9	12.9	11.7	15.6	13.7	20.9	28.1	23.9

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

March *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	26.6	31.5	28.7	25.3	22.4	18.6	30.6	24.8	30.3	31.0	28.6	25.3	19.3	18.2	20.5	18.9	11.3	5.6	6.5	7.3	6.2	7.9	5.8	7.3
2	12.2	12.3	11.7	12.8	22.0	16.6	11.0	14.4	10.6	5.4	6.1	7.2	4.9	2.4	4.6	3.3	4.9	6.6	14.2	6.2	359.3	4.1	5.3	8.4
3	5.2	8.7	6.6	1.7	3.9	7.2	18.6	27.5	20.2	13.8	24.4	23.7	21.9	7.5	3.2	6.4	9.9	14.0	11.6	9.8	2.3	15.3	354.8	355.6
4	0.7	1.4	0.8	1.2	9.6	15.9	24.6	21.2	27.1	14.9	7.7	2.8	1.0	0.4	0.9	357.9	1.9	2.9	355.0	352.3	5.1	1.1	356.0	359.8
5	359.8	1.9	4.9	3.7	3.2	5.5	2.4	360.0	6.4	10.4	5.7	1.7	1.0	0.6	353.4	355.2	360.0	356.6	354.2	354.8	356.0	358.1	0.8	359.8
6	358.1	358.7	0.1	6.5	2.4	2.8	3.6	4.2	351.9	356.2	359.3	2.8	4.2	1.6	354.9	359.5	7.7	6.3	359.9	358.5	0.6	0.0	356.6	357.9
7	357.2	0.6	2.0	9.9	5.9	355.8	357.6	0.1	3.1	355.3	359.9	358.9	2.8	2.0	3.6	359.6	353.5	349.7	348.4	343.3	346.4	353.9	357.1	359.3
8	357.5	356.2	353.7	356.4	354.3	356.6	358.7	0.3	0.2	359.4	359.7	359.1	355.8	359.8	348.6	344.5	345.5	354.2	351.5	357.7	353.0	352.7	352.4	359.8
9	1.7	1.1	5.0	4.3	3.6	3.8	2.5	357.6	352.8	350.4	0.4	351.2	351.6	356.6	352.9	355.5	356.7	354.2	9.2	19.0	23.8	24.1	25.2	18.8
10	22.3	24.9	15.7	23.1	22.1	18.5	18.1	22.0	20.7	18.9	14.5	12.9	19.8	20.3	25.3	11.2	16.5	14.3	12.4	11.9	15.6	16.3	15.4	13.0
11	9.9	8.4	7.1	4.9	4.6	1.3	3.4	3.4	2.0	357.8	356.8	354.3	357.8	355.1	356.4	356.4	356.4	354.6	359.7	1.4	358.5	358.3	0.7	358.7
12	359.9	4.4	354.2	2.9	0.1	1.4	359.4	359.5	317.4	325.5	318.5	326.7	331.3	342.0	340.8	330.3	338.3	341.6	325.9	338.4	317.0	344.9	350.3	346.2
13	343.4	329.0	339.7	339.4	343.8	329.6	335.3	333.5	19.1	356.4	337.8	332.2	327.9	321.5	327.6	342.7	337.8	340.4	339.2	346.7	347.2	351.4	356.2	359.1
14	359.4	354.5	354.4	359.4	357.5	355.7	354.5	4.6	359.6	2.4	351.3	340.5	351.9	347.2	351.5	347.2	346.8	344.2	349.3	350.8	349.6	355.9	353.0	350.4
15	359.2	354.0	350.8	354.6	13.9	10.4	19.2	22.1	22.5	19.4	9.5	5.7	5.3	1.1	0.9	355.1	354.3	347.1	349.9	347.4	358.7	2.8	4.2	10.1
16	15.4	19.9	26.7	28.5	25.9	12.9	21.8	17.8	15.2	13.6	9.2	8.1	6.3	358.7	357.2	348.6	350.6	357.5	3.8	5.2	13.6	21.5	20.9	16.4
17	16.1	18.9	21.6	19.1	24.3	24.8	20.7	28.8	24.4	21.3	20.6	15.0	16.2	9.3	13.1	0.9	343.3	330.5	335.3	5.7	21.1	21.8	13.5	13.9
18	55.8	25.7	162.5	242.8	244.3	206.5	144.3	136.7	126.4	118.5	27.8	286.5	249.2	249.8	254.7	255.1	257.7	313.0	323.6	329.4	1.9	6.4	13.3	9.7
19	17.0	10.8	17.6	12.6	14.0	14.7	14.7	14.7	20.3	16.6	18.6	19.4	312.4	308.6	9.9	5.9	346.2	359.0	12.1	17.4	27.9	31.3	34.2	102.6
20	192.6	169.1	32.4	56.8	80.1	108.7	85.6	110.7	104.8	102.3	103.3	104.1	103.4	98.6	97.0	95.2	90.4	84.0	79.0	83.0	87.9	90.0	90.2	90.8
21	71.5	63.3	78.3	145.4	139.8	139.9	141.6	142.3	153.2	208.3	224.5	236.7	246.9	247.9	242.1	242.7	232.5	230.3	235.2	313.1	331.4	346.6	356.6	348.1
22	3.3	344.3	346.1	6.9	7.7	20.6	10.9	2.2	17.2	17.3	19.2	23.0	16.5	25.5	2.4	4.3	8.8	19.1	17.4	12.3	14.3	13.4	11.0	10.1
23	12.6	347.7	357.2	356.4	13.7	18.8	5.6	5.9	9.9	5.9	356.3	1.4	344.7	345.2	343.9	343.2	343.8	339.7	329.3	326.4	326.7	326.8	330.2	335.2
24	348.2	353.1	1.3	359.7	4.5	4.2	1.0	5.5	12.7	28.6	27.2	31.5	20.8	18.2	4.4	6.1	357.7	335.7	345.0	1.2	343.5	287.8	359.8	25.2
25	109.2	303.5	351.2	21.2	36.6	109.4	62.2	106.1	130.0	113.0	50.9	20.5	184.4	149.0	220.4	247.4	283.5	112.2	108.3	108.2	93.0	98.7	98.5	103.0
26	102.5	95.3	94.3	99.1	103.1	115.5	140.1	176.2	207.9	223.1	228.0	223.1	218.8	221.8	235.0	249.4	254.5	258.3	279.6	336.9	352.9	350.2	11.2	13.9
27	18.4	45.6	13.7	13.0	11.6	11.5	10.4	14.0	9.4	6.2	3.6	355.2	0.5	1.0	359.6	347.6	346.3	350.8	339.6	348.0	357.2	13.0	5.6	5.1
28	0.1	2.2	1.7	5.3	18.3	24.3	10.4	11.4	6.6	7.8	354.9	336.3	312.5	331.7	338.0	323.2	318.3	327.7	326.2	329.4	332.8	325.8	350.6	5.7
29	11.4	5.7	353.6	354.9	10.4	11.4	2.7	335.3	356.2	354.6	3.1	347.7	326.4	331.0	317.0	321.6	327.4	319.0	325.3	335.5	2.2	347.3	330.0	355.0
30	4.6	6.4	14.6	16.3	23.3	22.9	12.6	9.7	19.9	20.4	8.6	16.8	14.7	16.0	15.3	15.7	19.1	9.9	12.8	17.5	22.3	41.9	148.0	120.5
31	80.5	23.7	21.8	48.0	345.7	346.5	158.9	101.5	327.4	196.0	187.3	263.4	298.3	313.5	299.5	296.4	6.3	356.4	0.7	2.2	7.4	8.8	11.5	11.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	8.6	8.0	13.1	14.0	12.0	12.5	17.2	16.3	15.9	16.4	18.6	3.8	14.6	17.4	31.9	206.3	206.8	180.0	130.5	131.0	124.3	123.6	92.9	99.0
2	106.4	90.3	100.6	73.6	95.4	101.0	94.2	100.7	101.1	103.7	109.2	112.1	118.1	123.1	123.2	122.9	124.3	120.3	120.6	118.0	112.1	107.0	108.9	104.1
3	102.9	104.6	101.9	105.9	109.1	105.9	106.7	109.6	109.8	109.2	101.2	102.7	111.3	107.2	109.7	109.1	109.7	108.9	103.8	91.6	99.5	103.4	98.0	94.5
4	97.0	98.0	83.8	80.9	76.7	71.5	77.6	90.1	97.9	103.2	108.6	108.5	106.0	107.8	107.4	110.8	109.0	104.8	103.5	93.5	83.5	82.8	95.1	97.0
5	89.9	70.9	71.3	73.2	26.0	51.6	48.8	51.4	47.4	46.1	44.9	55.9	49.6	49.2	47.5	48.8	95.3	95.7	100.3	102.4	97.7	98.2	101.6	100.4
6	101.5	99.5	102.7	106.0	104.1	100.7	95.0	94.8	82.6	40.1	48.3	42.5	44.3	45.9	42.1	40.4	36.3	12.1	22.3	14.8	19.5	25.0	41.7	58.7
7	139.3	134.6	149.2	137.8	118.0	114.0	122.9	112.6	111.4	114.0	114.0	114.1	112.1	108.5	98.6	101.9	101.0	105.1	107.2	98.3	85.9	67.8	44.8	42.9
8	49.5	46.7	46.2	44.6	45.7	47.4	47.7	43.4	43.5	49.7	45.9	48.0	49.8	51.0	47.8	60.0	89.8	116.5	121.7	112.2	94.1	108.4	132.4	122.4
9	114.6	103.2	97.6	95.7	92.3	96.8	91.1	87.6	102.3	103.1	107.0	104.5	105.1	109.5	114.1	110.8	115.1	112.6	119.1	118.8	123.4	123.6	121.8	124.0
10	119.1	122.6	128.2	135.2	141.0	132.0	125.8	124.3	118.0	106.0	117.5	127.6	138.9	146.0	132.9	130.5	123.1	141.1	129.7	134.9	127.7	126.8	115.5	125.7
11	126.9	123.2	130.2	110.7	110.1	92.0	97.9	111.8	120.9	120.6	101.9	108.3	115.3	118.1	125.3	127.9	119.3	132.7	133.7	121.6	115.6	89.8	98.3	96.3
12	87.8	76.6	58.4	25.5	31.1	17.5	15.1	13.6	18.8	352.4	23.7	12.6	19.6	22.2	310.5	294.5	306.3	321.9	331.1	224.7	273.0	261.6	359.2	18.1
13	13.8	14.9	22.2	19.4	15.8	18.8	20.8	8.8	16.2	8.7	7.7	10.0	357.4	346.0	334.2	317.7	321.1	269.2	304.0	2.5	11.2	10.1	20.0	20.4
14	22.4	25.0	53.8	75.3	33.4	45.4	123.9	126.0	117.5	156.1	145.2	120.8	125.3	132.2	135.9	136.8	136.6	137.2	130.7	134.9	105.7	94.0	95.1	97.2
15	97.5	98.8	94.9	100.8	100.3	97.6	98.8	92.7	104.3	104.2	106.1	98.5	97.5	102.9	108.0	94.2	155.5	232.7	199.0	217.4	228.5	298.1	324.9	344.3
16	10.7	340.3	343.1	352.0	6.1	5.5	353.4	349.2	356.6	345.5	307.1	287.3	267.3	225.1	232.6	244.2	248.4	233.1	235.0	252.7	253.3	318.7	221.3	105.4
17	99.1	100.3	115.4	116.1	106.4	107.1	110.9	114.4	117.4	116.3	115.1	110.2	110.2	109.4	108.6	108.2	107.3	110.8	114.1	113.0	111.0	110.5	109.2	107.9
18	107.8	106.0	104.3	108.1	108.9	108.0	102.9	107.9	106.5	108.2	107.8	112.0	115.1	114.9	119.6	140.4	190.1	214.4	273.8	255.8	260.4	250.5	258.7	6.2
19	76.8	118.7	162.9	120.6	110.6	113.4	117.1	124.7	122.2	117.2	116.9	119.0	126.1	125.7	122.3	119.9	118.4	120.6	120.8	113.3	102.2	101.7	102.2	105.4
20	100.9	107.5	101.4	99.7	104.9	87.2	90.6	95.0	93.5	94.3	97.3	93.2	97.9	102.0	107.1	104.9	102.2	104.0	105.1	109.8	110.8	110.3	107.5	111.3
21	107.2	98.1	94.4	95.5	99.2	98.2	108.4	109.2	111.2	116.3	104.0	101.6	102.0	104.9	104.5	104.7	107.5	107.8	106.7	103.6	108.9	100.6	99.0	100.9
22	99.3	98.5	94.3	102.1	101.7	95.4	98.0	98.0	102.9	99.7	97.7	101.4	87.6	97.5	82.2	81.2	80.1	72.1	65.9	58.0	62.7	67.1	62.0	55.7
23	44.5	70.4	59.7	51.2	43.2	47.2	49.6	50.5	59.0	52.1	46.8	78.6	125.2	122.1	123.2	140.8	107.5	139.9	117.1	93.3	125.0	125.3	110.8	103.8
24	102.1	96.7	88.2	89.2	96.4	88.5	97.3	103.7	108.0	102.0	105.9	110.0	101.2	77.5	114.2	117.1	117.8	130.2	113.3	119.8	146.2	111.2	97.9	99.9
25	100.4	98.0	98.4	96.9	96.4	98.4	100.6	100.4	98.7	103.5	101.6	103.9	101.1	107.5	113.0	114.4	116.8	111.7	116.2	112.6	77.7	54.6	89.4	75.4
26	47.0	47.9	40.5	45.8	48.6	26.6	18.6	21.9	18.3	13.8	9.5	14.8	349.5	9.8	353.5	355.8	345.5	338.4	334.1	326.2	335.6	338.7	13.7	13.6
27	28.0	42.9	113.7	122.7	207.2	172.5	138.0	115.6	134.5	150.5	168.2	148.9	170.4	194.8	202.2	197.8	207.1	223.6	226.7	231.6	207.8	224.8	235.9	249.8
28	250.1	245.5	260.3	263.3	260.4	253.0	265.4	254.1	189.4	127.0	126.6	136.4	137.8	129.7	121.8	127.5	134.9	133.0	133.9	135.3	131.3	121.8	108.4	101.7
29	99.4	95.4	93.7	95.3	99.2	98.3	90.4	86.7	95.7	105.5	101.0	98.9	101.6	106.6	101.4	100.4	106.0	114.9	114.2	110.3	118.5	186.5	172.4	283.2
30	181.9	142.4	133.8	2.6	18.8	33.7	21.2	27.5	28.8	51.0	85.1	88.5	27.9	25.7	31.6	150.3	186.9	179.4	190.0	195.6	225.9	283.4	278.0	350.2

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	61.9	145.3	157.4	188.6	157.0	272.7	159.7	101.6	123.2	155.5	175.6	213.4	247.5	335.0	53.8	166.5	316.1	252.4	164.4	217.1	223.7	233.6	248.0	295.4
2	208.7	100.2	330.2	96.2	18.8	14.4	18.4	82.5	146.3	158.9	218.2	62.9	88.5	75.8	116.0	130.5	121.9	121.1	116.4	115.4	114.0	103.8	109.6	110.6
3	113.3	103.0	110.5	128.8	128.3	78.4	13.2	6.4	268.7	339.3	10.6	359.2	0.9	335.3	282.1	260.3	312.6	313.2	245.5	249.4	254.2	276.3	307.7	22.4
4	23.3	25.3	24.6	53.2	336.9	5.4	14.5	227.1	170.4	200.7	236.9	249.3	247.8	241.3	239.6	240.3	235.2	229.9	167.2	175.4	237.0	253.3	258.7	262.1
5	336.8	276.7	250.5	250.6	258.2	20.6	17.2	339.9	254.6	261.7	271.6	257.3	250.4	245.1	294.4	291.8	289.3	278.6	279.8	284.8	275.5	287.7	263.2	246.8
6	244.7	308.2	356.0	329.0	346.9	342.7	297.7	271.1	263.6	257.0	259.0	269.9	291.1	306.3	312.3	311.1	306.0	294.0	307.6	316.2	312.0	313.5	315.1	317.9
7	318.4	320.1	319.4	326.0	341.0	6.1	345.2	343.6	335.0	341.6	321.8	328.9	312.4	314.7	331.9	275.8	252.2	237.7	246.4	256.3	249.4	263.1	257.5	253.2
8	248.7	249.9	255.3	254.3	256.5	252.8	250.5	252.9	252.5	251.5	253.3	252.0	226.5	220.5	229.6	236.9	226.6	232.2	221.9	216.5	207.1	145.4	148.4	119.2
9	144.5	202.3	294.7	40.4	99.3	109.4	114.6	121.7	133.8	119.9	130.1	119.8	132.0	117.7	124.0	134.7	143.3	138.9	150.1	165.2	182.3	173.4	226.0	114.7
10	166.8	137.1	35.6	357.1	23.5	53.0	137.8	141.5	164.8	149.7	147.1	170.6	184.8	178.6	164.6	174.2	175.3	149.4	139.4	132.7	120.7	114.9	120.7	90.7
11	90.0	87.5	105.7	78.7	94.2	94.5	93.5	102.5	109.8	111.7	119.4	122.6	124.3	123.5	128.8	130.3	137.0	139.2	141.1	146.0	146.2	135.3	129.6	134.6
12	153.0	151.2	107.5	113.7	75.9	98.1	107.3	107.2	117.6	123.6	121.3	134.0	132.2	130.9	132.5	134.9	129.4	129.8	129.9	127.9	127.8	131.1	123.3	114.8
13	112.7	118.7	117.0	107.1	107.6	108.6	111.2	107.6	109.6	111.8	110.2	111.2	110.7	116.5	116.9	109.6	104.0	101.2	84.2	73.0	65.5	60.8	50.3	38.2
14	74.5	86.2	63.4	28.9	46.9	46.8	38.7	36.3	69.4	96.0	79.2	96.0	135.8	108.9	111.8	124.3	115.0	116.6	113.7	116.2	121.5	116.3	109.5	104.5
15	107.7	107.4	109.1	108.0	103.9	90.1	57.6	75.3	82.0	102.9	107.1	117.6	131.2	153.7	140.4	159.1	175.5	176.1	216.5	284.1	313.3	5.5	16.9	20.0
16	19.4	24.0	21.5	13.1	23.7	22.0	27.7	24.0	26.3	72.9	114.7	115.5	131.0	158.8	144.2	145.3	153.4	163.1	158.3	151.4	144.8	138.8	136.8	139.3
17	138.1	139.0	140.4	135.9	142.4	145.1	147.0	143.0	139.1	146.2	137.6	131.4	154.9	158.1	150.1	148.3	151.0	151.9	153.0	153.1	144.8	146.6	130.0	106.3
18	146.1	120.6	114.3	111.5	114.7	175.3	138.4	132.4	137.5	135.1	132.9	142.7	143.0	169.9	150.8	167.4	181.7	158.1	190.8	205.7	189.3	234.8	262.5	311.0
19	327.1	2.7	10.3	9.3	16.1	357.1	328.4	305.5	280.2	283.5	265.6	255.9	222.7	229.6	240.6	237.4	243.9	233.4	234.7	240.6	243.4	258.5	269.3	278.8
20	261.3	277.9	266.9	265.5	266.1	261.0	268.5	250.2	242.6	243.2	246.1	253.4	241.3	228.0	226.0	219.5	210.2	224.3	231.9	231.6	230.3	237.4	269.7	270.0
21	259.7	269.3	277.4	288.0	280.3	293.6	312.2	250.7	270.0	50.5	163.1	122.3	135.7	140.4	139.7	133.8	142.2	129.2	118.8	116.5	108.8	103.1	100.9	105.0
22	107.0	101.9	97.7	100.7	100.1	97.7	103.5	85.3	107.2	110.2	122.3	112.0	114.6	143.4	134.6	130.5	124.2	138.2	145.5	145.0	17.6	122.5	133.9	83.7
23	83.9	18.3	43.5	37.3	43.9	73.0	73.2	103.9	109.3	112.1	113.0	113.0	118.1	135.5	140.6	122.9	115.5	114.9	114.1	126.8	131.0	123.4	127.1	116.7
24	121.1	123.6	121.1	115.3	115.8	120.1	117.9	122.4	126.4	124.4	123.0	118.9	125.7	125.0	126.2	128.8	115.7	114.8	105.2	124.8	123.4	144.1	139.3	81.3
25	117.5	193.0	89.6	110.2	121.2	49.2	139.6	145.6	127.1	139.0	174.5	147.6	143.3	144.5	144.1	135.2	133.9	141.4	151.5	191.2	230.8	324.1	10.6	6.1
26	10.0	48.0	140.8	150.8	148.4	114.0	144.6	131.3	127.8	128.8	150.0	143.0	148.4	151.6	139.0	135.8	137.5	131.1	125.3	124.3	127.4	128.2	144.0	161.3
27	142.2	134.2	149.0	135.0	142.0	136.0	135.3	142.9	136.9	139.2	142.9	140.4	143.8	145.2	147.9	152.6	148.6	146.6	144.7	133.9	141.3	128.4	119.7	118.3
28	110.9	108.8	101.8	99.9	113.3	108.3	101.7	130.3	126.0	123.8	119.4	137.2	128.3	133.9	150.2	148.8	142.6	149.7	146.2	138.4	138.6	138.6	123.0	160.9
29	269.7	359.7	3.8	7.4	12.5	18.5	21.5	20.7	16.7	15.3	8.4	16.4	178.8	133.9	207.2	153.1	173.5	177.8	153.6	157.9	153.4	146.0	160.1	252.2
30	277.7	191.5	346.0	353.7	26.1	22.9	26.5	18.1	61.7	112.1	126.3	111.0	121.6	126.0	135.5	153.6	143.7	139.0	138.3	131.3	135.5	130.9	118.0	121.1
31	106.9	71.7	64.2	87.1	94.1	98.8	101.8	116.7	124.3	122.2	129.5	135.6	125.8	90.8	23.3	48.1	77.9	92.6	113.3	102.0	106.6	96.5	96.0	108.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	123.2	121.8	113.6	119.1	111.4	118.0	99.7	113.2	116.1	113.2	115.9	121.5	124.9	120.2	118.5	132.8	128.2	129.9	132.0	121.3	132.1	133.1	113.9	104.2
2	104.5	108.5	95.9	94.5	99.6	93.0	96.7	112.7	119.2	113.6	120.6	99.6	115.7	101.0	116.9	133.2	125.4	135.4	142.1	142.6	125.2	139.3	129.6	110.0
3	51.8	28.1	39.4	144.4	118.2	117.4	247.8	84.2	114.7	142.5	129.0	135.1	139.4	89.7	113.4	150.5	152.3	130.7	149.3	166.2	295.7	285.2	330.3	2.9
4	10.0	14.0	16.4	15.9	14.1	12.7	15.3	18.4	19.1	22.4	11.0	10.8	17.9	24.0	125.6	144.0	187.2	158.7	153.6	150.3	142.8	139.4	139.0	139.7
5	145.1	142.0	141.0	141.1	131.9	118.0	111.0	117.0	118.4	125.4	125.4	118.9	114.7	109.6	112.3	114.1	111.7	118.5	126.8	120.2	113.1	108.4	103.7	110.5
6	109.0	110.8	105.5	106.9	111.7	107.0	91.4	81.7	44.8	41.0	79.3	147.3	144.2	153.6	145.9	148.3	153.6	161.1	160.3	153.7	145.7	138.1	115.6	358.7
7	20.6	47.3	32.4	16.2	13.9	45.0	136.6	93.0	80.2	62.6	67.8	98.7	113.1	110.1	114.5	116.9	113.3	111.5	112.2	110.1	107.3	107.7	98.1	99.2
8	102.6	102.3	99.2	93.1	93.5	97.2	97.6	112.1	106.4	120.9	122.6	130.9	122.2	118.6	114.4	99.3	124.5	121.5	121.5	116.5	114.0	133.7	121.7	113.5
9	100.2	96.6	117.4	88.0	4.6	324.9	14.8	8.5	15.4	16.8	18.4	11.0	356.6	9.3	324.1	50.8	348.2	28.2	343.8	359.4	343.6	352.2	353.5	13.4
10	9.0	3.1	1.9	5.5	7.7	2.7	7.9	356.5	357.3	3.3	358.9	356.0	327.1	321.2	324.9	323.8	324.9	308.6	314.9	239.4	224.5	248.8	244.1	239.1
11	245.5	220.3	208.3	235.9	228.9	234.1	244.6	185.6	135.6	164.3	194.2	167.1	158.4	154.9	157.4	156.8	150.5	146.2	133.9	144.1	142.9	145.0	150.5	165.5
12	160.5	165.9	167.9	130.8	185.6	235.9	138.6	138.9	142.0	138.1	145.0	165.1	167.3	169.2	168.2	170.8	168.4	174.1	172.2	179.4	163.3	157.7	138.1	126.6
13	162.4	156.8	284.7	284.1	324.9	12.4	13.5	2.1	278.3	267.2	257.5	259.9	253.6	255.8	272.5	247.2	197.6	246.5	259.2	256.6	270.2	339.7	323.6	325.5
14	309.8	309.6	345.9	357.6	1.5	356.8	355.4	349.6	298.3	2.5	12.1	22.4	89.6	113.7	112.9	204.3	260.6	260.8	260.5	254.9	263.0	272.5	311.9	358.0
15	10.6	13.6	11.2	6.6	2.7	9.7	9.5	3.5	1.3	1.5	5.7	3.6	1.3	358.6	339.4	345.4	327.3	334.2	343.3	338.0	335.4	338.3	339.7	359.5
16	7.4	6.3	9.9	8.1	6.8	3.8	6.7	5.5	9.5	332.5	330.1	285.6	283.1	287.6	281.5	288.7	276.8	261.2	246.2	236.2	232.0	235.8	244.6	255.6
17	241.9	235.7	236.0	236.0	237.7	241.6	233.6	254.0	244.6	243.6	251.6	256.4	258.5	325.2	330.6	5.0	16.9	143.1	24.1	356.3	356.4	350.8	309.1	5.8
18	5.7	329.8	327.3	336.9	4.2	11.0	17.3	20.5	340.0	303.3	235.1	219.0	283.1	241.9	228.6	221.8	346.7	334.5	247.2	181.7	139.9	22.8	218.0	307.2
19	4.9	349.9	7.1	11.0	15.1	13.1	8.3	7.0	9.0	354.7	355.9	351.2	358.8	356.8	355.0	357.0	357.4	349.4	335.6	336.0	341.8	342.9	343.9	344.3
20	358.5	0.2	12.1	8.3	9.3	5.0	3.2	7.2	3.4	356.0	357.0	351.4	349.2	339.7	329.6	328.9	330.2	335.5	315.7	318.6	314.0	325.7	337.8	344.1
21	354.3	351.4	9.9	356.5	356.1	359.4	359.7	357.3	347.1	335.3	308.6	289.7	295.3	295.5	284.5	279.6	285.3	274.8	249.6	248.6	245.3	236.0	244.5	242.8
22	248.2	247.6	246.4	244.8	226.1	234.8	240.7	216.9	220.4	215.9	197.6	197.7	178.2	165.6	184.0	185.8	195.2	197.5	174.2	169.9	169.2	144.2	146.5	121.7
23	118.1	118.1	116.3	120.4	116.4	114.8	112.3	108.5	108.7	113.3	116.2	115.7	115.3	113.2	110.7	107.8	108.4	105.6	103.4	101.0	100.9	102.3	102.2	101.4
24	96.3	96.9	98.5	98.1	99.9	102.1	103.2	106.4	104.0	104.6	107.0	113.3	115.4	119.1	130.9	126.9	123.1	124.1	123.3	121.7	121.6	118.8	113.8	114.0
25	123.0	124.3	124.1	124.7	121.6	127.8	134.0	138.1	134.9	129.0	128.3	127.1	127.0	121.4	125.7	126.7	130.0	129.6	130.6	130.0	123.5	118.5	120.7	114.9
26	124.4	118.2	111.5	112.3	115.4	122.1	136.4	128.7	124.3	125.8	136.1	135.7	130.5	128.5	154.6	189.6	228.5	209.5	251.2	257.4	255.1	259.4	258.8	306.1
27	10.1	14.8	23.1	17.4	14.0	19.6	1.9	25.0	33.3	49.5	147.2	158.5	158.9	160.1	173.1	186.7	174.4	174.8	188.4	217.8	250.4	248.8	252.7	255.3
28	251.4	263.3	258.1	265.5	272.8	265.0	263.9	252.2	130.0	145.9	142.1	141.6	130.7	122.2	130.5	142.4	137.6	138.6	122.1	131.8	108.6	113.6	108.6	108.8
29	106.2	98.3	80.6	140.8	209.5	207.8	82.0	117.2	130.3	131.9	146.2	136.2	152.1	161.4	218.9	232.6	251.7	253.2	250.6	251.8	254.6	257.4	259.3	257.6
30	283.2	266.6	260.8	239.9	238.9	227.3	237.2	253.3	260.0	257.2	251.4	250.1	255.5	226.6	188.3	168.3	168.4	154.4	140.9	142.9	145.6	144.8	135.8	146.9

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	127.1	114.3	129.9	328.0	26.4	17.9	12.9	22.3	16.9	10.6	357.1	357.5	346.6	321.3	318.5	298.4	253.4	250.2	265.1	283.1	246.1	120.5	114.0	117.9
2	132.4	138.4	158.4	193.3	269.2	197.8	152.7	205.8	240.2	332.4	322.6	305.8	323.7	331.8	323.2	339.7	319.4	325.7	335.6	346.4	329.8	338.5	5.0	9.3
3	20.0	39.9	109.1	116.7	130.6	181.7	161.2	136.0	140.9	147.0	141.3	144.9	146.2	138.8	144.8	150.6	157.4	145.3	136.2	134.8	130.9	204.2	178.7	130.4
4	126.0	125.4	128.1	126.2	123.4	135.6	122.5	129.1	141.9	127.1	131.3	123.6	124.5	123.7	119.3	120.8	116.6	110.2	116.4	124.1	144.9	147.2	131.6	133.1
5	136.2	148.5	144.6	153.0	306.6	330.9	339.4	275.1	265.1	281.3	281.1	270.1	298.5	353.8	270.9	252.4	2.8	110.3	129.4	127.2	128.4	129.0	121.9	109.2
6	103.4	110.1	109.5	110.4	118.9	116.3	123.4	122.6	124.8	130.9	147.1	124.5	152.0	140.8	148.9	161.8	165.9	170.6	171.6	212.3	227.1	339.7	85.0	109.8
7	94.4	100.8	117.5	106.3	101.1	299.5	34.1	10.5	235.5	232.4	11.1	29.4	277.8	272.2	257.2	290.0	269.1	260.3	149.5	141.9	131.8	125.6	123.3	98.6
8	161.7	164.4	130.3	217.3	58.8	108.5	114.8	113.9	119.6	124.0	142.0	160.4	149.9	141.4	146.5	142.8	134.9	128.8	117.6	126.3	141.9	142.0	147.8	152.7
9	138.0	132.3	118.9	121.6	125.6	113.3	127.4	117.8	110.4	112.2	84.8	88.7	107.0	80.0	109.4	146.5	166.8	168.9	163.0	163.1	224.3	286.9	11.6	13.7
10	18.2	22.2	17.2	16.1	16.2	28.0	6.3	11.0	136.2	353.3	12.3	23.5	156.2	173.0	176.9	148.3	138.4	140.9	141.8	147.0	140.3	134.4	125.5	125.6
11	128.8	127.7	131.2	130.0	133.2	135.9	135.2	136.9	143.3	140.1	140.7	148.6	143.2	148.9	160.5	148.8	159.4	161.5	158.1	155.7	148.1	143.2	132.2	135.0
12	146.5	137.9	125.8	22.1	25.2	18.3	27.2	27.1	36.0	344.3	301.8	239.7	358.5	273.0	182.7	160.5	131.1	140.2	141.9	135.6	143.2	123.7	126.4	125.1
13	141.4	145.6	146.0	141.6	130.8	133.6	144.9	161.7	134.9	128.8	142.4	142.3	145.0	144.1	141.9	143.1	151.1	146.1	148.3	147.6	134.5	148.5	155.1	146.6
14	147.1	134.7	174.1	142.0	160.9	177.4	140.6	127.9	141.4	138.6	145.7	139.9	149.1	158.7	149.3	142.7	157.0	162.8	157.2	145.6	127.7	127.8	148.8	163.8
15	163.7	164.4	150.5	157.2	184.1	171.5	266.1	262.2	247.5	252.2	247.5	248.9	253.1	252.9	263.8	260.6	265.8	254.8	251.7	253.3	255.8	256.7	258.8	257.3
16	250.9	265.0	264.5	267.1	257.7	279.7	298.6	337.4	270.5	310.5	352.2	351.1	348.9	337.5	330.0	323.7	325.6	327.9	330.9	316.2	323.7	337.1	4.5	8.5
17	10.7	359.6	8.6	11.4	7.3	11.6	15.2	17.1	31.0	36.5	39.4	102.0	143.9	149.1	145.8	149.6	149.0	150.3	143.5	136.5	136.3	141.3	128.3	118.4
18	122.9	116.4	113.6	120.4	115.6	121.8	109.8	105.0	128.5	101.8	192.3	26.4	3.5	120.4	138.8	139.6	129.3	134.3	180.1	79.7	175.0	36.4	72.8	18.4
19	11.0	14.8	16.0	43.4	63.0	106.6	330.5	304.5	328.0	10.7	14.8	332.7	293.7	228.4	159.5	112.0	167.2	260.7	267.6	250.5	251.4	256.3	266.3	296.5
20	334.9	254.0	267.5	354.7	319.3	359.1	249.5	214.4	240.9	239.7	252.4	250.9	244.1	233.8	239.9	252.8	266.0	256.6	248.4	248.2	257.1	261.8	255.8	250.5
21	249.7	252.3	245.1	252.8	251.4	253.1	252.6	252.2	250.3	251.9	247.9	252.9	255.8	251.7	235.3	229.2	228.3	222.7	220.2	223.1	217.3	215.3	203.2	197.5
22	183.7	178.9	181.0	177.3	178.2	185.5	179.2	184.6	187.2	188.4	189.9	183.2	177.1	176.3	167.7	157.3	140.6	137.4	134.0	129.2	125.4	122.9	127.9	124.1
23	124.8	126.1	218.5	259.1	271.9	303.8	118.7	123.4	127.7	170.7	147.1	137.1	131.1	125.2	122.4	121.9	115.4	114.9	123.5	120.8	123.4	118.9	116.4	115.4
24	114.3	105.3	100.8	100.1	99.4	99.4	99.0	98.9	89.5	92.4	84.7	71.4	52.5	46.8	43.7	57.3	61.3	62.5	51.8	57.2	55.1	47.8	57.0	73.4
25	62.3	43.6	43.3	45.1	45.6	42.7	49.1	51.0	46.7	46.3	62.2	67.9	64.8	44.7	34.0	38.2	47.4	54.9	68.8	82.7	113.6	121.6	145.0	252.4
26	258.1	228.3	229.2	264.5	325.5	0.9	340.9	8.9	10.4	12.5	27.1	35.5	26.7	7.7	93.3	149.1	177.5	249.8	257.4	257.3	242.1	229.5	201.2	125.5
27	201.7	269.9	12.4	130.4	318.5	348.2	1.9	9.3	341.5	12.6	8.9	4.9	339.4	351.7	334.1	316.5	330.9	338.0	346.3	350.7	11.1	13.7	326.6	271.8
28	293.4	298.1	267.9	267.9	266.7	262.0	263.5	263.5	259.6	256.5	252.9	249.9	256.5	255.1	256.1	256.5	253.7	255.1	256.7	261.6	264.1	253.8	257.2	258.6
29	257.2	261.2	262.4	262.7	277.5	339.2	341.1	332.5	345.4	346.7	346.8	326.2	331.8	331.0	334.4	340.6	334.7	323.0	306.6	291.7	315.7	300.1	259.4	276.4
30	316.8	346.4	280.5	241.1	256.6	240.1	254.6	247.2	253.8	248.2	249.9	251.7	249.2	254.4	250.1	243.4	247.8	252.8	244.4	231.8	222.0	217.9	212.5	223.2
31	226.5	258.6	211.2	202.7	219.0	239.5	218.2	167.2	137.5	143.0	136.5	141.7	138.1	143.6	131.4	128.6	129.8	124.6	114.5	118.0	121.6	123.8	118.7	115.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
1	114.6	110.9	107.9	113.0	113.7	117.2	112.5	109.4	110.2	111.4	122.4	126.4	125.8	122.4	118.7	120.1	126.4	123.9	122.2	114.4	115.3	111.7	114.0	112.6
2	112.4	118.2	111.3	109.6	109.4	110.7	111.5	110.8	112.2	113.9	114.6	112.4	111.0	109.4	110.7	115.6	115.5	113.6	113.5	115.4	112.3	115.0	116.2	114.8
3	115.5	114.0	122.1	124.3	126.9	128.3	124.0	118.9	119.5	117.5	114.5	123.7	120.4	126.3	126.0	127.2	124.9	130.9	129.6	122.3	122.4	122.9	113.3	114.9
4	115.2	113.0	107.6	107.7	110.4	110.8	111.1	112.6	114.1	115.9	119.6	126.4	132.1	129.1	125.7	128.2	127.4	132.6	128.9	125.2	128.1	128.5	130.2	124.7
5	123.3	121.9	129.4	139.4	136.2	141.9	136.3	163.0	199.8	203.0	203.4	208.7	214.9	217.9	218.3	219.7	215.5	226.9	224.6	227.3	231.0	232.9	240.1	254.5
6	265.6	265.3	269.3	266.5	277.9	285.3	305.0	318.7	323.2	320.0	318.4	314.6	303.8	314.1	314.8	324.0	325.7	329.4	322.9	316.6	323.9	328.0	326.0	326.4
7	332.2	344.8	327.5	329.9	355.7	356.7	350.4	349.8	344.8	352.9	345.0	351.7	349.2	347.5	345.9	347.0	348.0	348.3	346.1	339.8	332.8	336.6	350.2	25.4
8	13.8	5.9	10.6	15.6	13.4	2.7	351.4	1.9	4.3	351.4	345.0	333.5	341.8	330.7	333.3	330.8	326.5	311.1	319.6	329.1	332.6	340.8	352.1	357.6
9	6.5	11.0	14.7	11.6	9.5	7.9	9.2	17.3	42.7	27.1	27.5	12.0	166.2	177.2	164.0	158.3	165.1	158.4	156.6	157.2	150.5	143.6	140.8	127.1
10	131.9	141.5	101.6	261.5	308.7	18.6	2.0	23.9	102.7	118.3	131.1	160.1	151.3	150.0	159.9	163.0	160.7	149.6	158.9	149.4	135.0	121.6	128.3	97.2
11	43.5	6.3	12.4	21.3	351.6	15.0	20.6	351.1	22.2	171.3	139.1	170.4	161.6	145.2	148.3	185.1	256.6	253.0	251.3	252.8	250.1	232.9	240.6	225.6
12	245.5	239.4	255.7	247.5	203.7	183.0	202.8	231.5	234.8	238.2	257.4	250.3	253.2	231.3	149.4	226.3	234.8	215.1	229.8	254.2	258.0	259.1	284.6	258.0
13	265.4	274.5	257.0	280.3	296.5	246.5	217.3	265.7	224.8	207.9	208.8	230.7	208.1	223.2	220.3	201.4	201.2	206.5	169.4	207.8	238.7	252.2	244.9	239.5
14	243.0	242.7	253.7	249.2	261.3	269.7	275.9	226.8	218.3	226.4	224.5	218.6	208.8	214.5	189.7	184.7	229.6	227.5	237.4	251.4	269.9	4.2	0.6	354.2
15	337.7	329.9	333.0	329.6	323.7	329.2	327.3	337.7	353.4	357.4	350.0	347.5	354.7	344.4	349.8	346.6	341.2	355.5	6.9	6.0	7.7	17.5	16.6	23.2
16	26.8	25.3	28.7	28.8	25.6	28.7	27.5	353.6	47.4	143.5	229.5	229.0	172.2	210.6	16.1	196.9	167.2	161.2	135.0	130.6	122.8	148.8	146.9	163.2
17	149.7	106.9	126.5	125.9	120.6	119.8	179.9	187.4	99.7	112.7	119.8	126.2	129.8	120.2	113.4	122.4	111.6	115.3	113.9	121.5	118.2	101.0	104.2	102.2
18	94.5	95.0	106.4	107.9	107.8	110.1	105.0	107.0	108.6	103.8	99.6	102.6	97.4	95.4	99.2	103.0	105.7	105.9	108.0	106.2	105.7	101.4	96.7	101.2
19	97.1	101.0	100.6	95.3	89.2	94.7	88.5	94.2	93.4	102.0	110.5	107.9	115.2	110.6	108.5	108.0	108.7	112.5	115.3	110.5	115.4	108.6	114.2	112.4
20	110.5	111.7	102.6	96.6	93.0	93.4	97.1	118.7	102.9	102.8	109.5	114.5	119.1	121.9	119.6	113.5	120.5	121.6	117.7	122.6	122.3	114.4	110.0	111.6
21	113.9	108.1	117.5	120.8	109.1	100.0	98.8	98.4	98.1	104.5	110.6	114.1	115.3	118.6	118.7	119.9	120.5	123.6	122.2	119.0	116.9	109.5	108.4	117.3
22	112.1	111.5	107.5	105.3	113.0	114.2	110.8	110.8	108.5	110.6	115.0	115.5	117.9	116.2	116.2	116.0	116.2	112.6	107.9	105.3	100.9	97.5	96.2	89.4
23	81.4	74.5	68.8	10.0	11.6	12.9	21.0	21.9	14.5	360.0	1.2	345.5	345.2	345.7	351.2	352.7	353.1	350.1	343.6	333.8	322.7	327.7	326.7	325.5
24	325.1	322.5	325.3	333.9	359.7	6.7	6.2	7.8	10.8	3.7	5.0	360.0	338.6	342.1	39.9	320.3	245.9	124.2	124.2	111.4	101.8	105.0	137.5	139.8
25	151.7	133.3	155.9	221.4	223.0	239.1	239.4	174.7	222.4	164.1	146.3	141.5	125.7	121.9	108.0	134.5	130.4	134.6	137.6	141.8	125.7	111.7	110.6	117.6
26	109.8	104.7	98.8	88.9	88.4	94.9	100.3	97.7	104.6	93.5	106.4	127.0	121.1	129.4	144.5	139.6	124.3	144.7	153.5	170.0	101.2	69.9	71.2	66.5
27	70.5	56.5	40.6	43.3	32.7	13.9	27.1	35.0	92.6	17.4	28.0	75.2	85.6	100.6	126.2	150.4	134.8	149.9	144.6	146.2	105.3	19.8	29.3	13.7
28	327.8	21.3	25.5	24.9	26.2	19.1	22.3	19.1	16.6	32.4	27.4	1.0	11.0	25.2	24.1	263.9	162.4	299.5	263.0	270.3	315.7	350.5	7.1	3.4
29	11.7	7.3	0.4	13.5	13.4	10.1	6.5	7.9	7.4	2.7	5.0	4.4	5.6	2.4	354.2	352.7	354.3	346.9	343.1	350.6	350.1	357.2	358.1	1.8
30	16.8	8.5	15.1	13.3	8.4	2.2	359.0	4.9	6.6	356.2	355.8	353.3	354.8	0.2	9.1	4.8	5.7	10.8	290.6	283.9	8.8	13.6	12.5	11.9
31	19.1	20.7	21.0	13.7	14.7	12.5	23.5	21.4	24.6	20.8	17.6	11.0	20.4	16.3	118.6	143.3	217.3	216.9	228.0	245.8	27.0	23.5	25.4	18.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	144.1	124.8	130.8	118.0	121.1	134.4	141.5	159.3	146.5	134.2	139.1	153.0	141.6	141.3	131.7	128.6	138.7	140.5	157.0	149.7	131.4	121.6	125.8	131.1
2	122.9	127.9	127.2	117.1	130.2	130.2	132.4	140.1	167.1	217.0	221.8	197.3	171.8	173.1	162.4	150.7	141.5	135.3	135.5	133.1	132.1	131.9	133.9	122.0
3	115.6	113.5	108.6	106.6	107.9	105.1	100.3	102.6	101.8	102.0	106.9	107.6	106.3	104.0	102.6	103.3	102.0	102.6	101.9	100.6	98.0	94.5	96.9	104.5
4	100.7	97.7	98.2	97.9	87.7	75.9	28.7	53.9	16.1	43.1	46.5	48.0	49.6	27.7	2.4	350.6	312.5	285.6	272.2	302.9	316.2	338.0	329.1	333.5
5	282.8	225.9	278.6	273.3	265.5	247.2	264.3	249.9	253.8	255.0	253.5	250.3	253.8	249.8	245.8	228.6	208.8	250.6	256.2	270.6	261.2	282.0	272.5	265.7
6	251.9	255.8	247.8	257.7	236.1	254.3	267.7	244.7	226.8	199.7	359.9	76.1					307.7	17.2	147.0	133.8	151.3	131.9	110.7	115.1
7	115.0	111.5	108.7	102.3	102.5	97.3	95.7	99.2	102.7	102.8	102.9	107.1	109.8	108.0	112.4	112.6	110.7	104.6	106.3	105.7	105.8	110.0	106.2	106.1
8	110.8	115.3	122.9	118.4	126.1	124.1	117.9	119.1	119.6	118.0	127.1	122.0	126.2	134.9	132.9	164.3	165.7	150.6	128.9	160.3	157.4	144.0	136.6	138.1
9	132.1	127.7	126.8	129.7	128.0	125.8	129.9	136.5	131.7	133.7	132.3	125.8	127.4	151.2	134.1	144.8	129.3	125.8	131.1	126.6	126.1	114.9	100.3	97.1
10	152.4	239.8	177.0	152.7	130.4	109.6	191.2	323.1	323.1	246.9	155.3	96.1	119.7	132.8	138.0	142.1	139.4	139.9	135.7	122.7	115.9	114.4	113.0	115.8
11	117.0	119.9	116.5	111.9	111.6	109.9	111.0	112.4	114.5	112.4	108.9	108.2	108.8	104.2	106.8	107.0	112.6	112.0	108.9	109.5	109.1	107.1	107.1	107.1
12	112.3	110.4	112.6	118.7	142.6	152.8	157.3	185.1	179.0	159.0	168.4	169.7	185.2	201.9	186.7	184.2	201.1	227.9	226.7	220.3	208.4	202.3	194.9	202.0
13	174.1	141.5	133.5	126.1	128.5	129.4	130.4	134.1	161.6	188.4	191.0	178.4	152.0	161.9	160.0	179.4	141.4	133.0	134.6	168.9	135.4	126.9	119.8	169.6
14	104.5	88.6	86.9	76.5	64.8	72.2	75.0	31.8	22.3	25.6	20.2	62.4	2.9	16.1	258.3	1.4	334.1	308.3	287.3	312.8	324.1	324.7	324.1	323.0
15	326.8	327.0	325.4	319.2	319.1	323.5	326.8	328.9	351.3	344.5	333.5	330.4	328.9	324.0	301.8	308.8	292.0	297.5	291.5	291.0	308.3	293.1	289.3	287.7
16	280.3	288.8	285.2	273.3	303.8	331.1	299.3	346.1	319.4	9.8	7.8	345.9	331.4	335.3	289.0	285.8	264.6	261.0	254.0	254.2	262.5	253.9	257.6	262.8
17	257.9	245.9	254.5	255.7	257.6	228.3	241.4	244.9	235.4	227.5	232.4	221.6	199.1	166.0	163.1	166.8	155.2	140.1	101.9	116.6	91.6	70.9	89.9	90.3
18	105.9	111.4	117.8	115.5	107.1	106.1	99.7	108.5	98.4	104.3	107.7	106.3	105.8	105.6	107.4	118.3	122.8	114.2	111.1	112.5	109.4	110.8	139.9	163.7
19	193.1	220.6	216.1	211.5	239.3	214.4	194.2	208.3	184.8	166.0	179.8	198.7	205.4	208.4	220.9	217.6	226.3	222.7	217.5	216.1	211.5	208.9	209.9	209.1
20	208.3	222.4	216.5	225.3	218.6	214.5	219.8	226.5	225.6	219.4	223.5	216.9	228.6	232.2	243.5	235.2	235.8	237.0	230.9	298.2	311.5	272.4	268.4	260.8
21	275.8	292.8	283.0	275.6	307.5	302.0	302.4	269.4	303.4	319.1	321.2	322.9	319.8	321.1	314.0	288.8	316.6	321.4	329.2	328.0	324.1	354.1	356.8	8.1
22	8.1	14.7	17.4	9.2	15.4	12.0	20.2	20.4	28.2	25.4	25.3	95.5	101.7	102.6	102.3	97.0	102.6	94.2	96.0	86.8	89.7	95.3	94.4	97.2
23	92.1	71.3	48.1	61.1	49.6	47.0	59.5	79.8	77.0	111.6	134.2	135.7	136.1	139.6	148.0	134.8	147.7	142.1	146.6	155.6	197.1	200.7	197.9	193.7
24	204.3	214.4	203.7	226.6	238.4	244.5	243.9	231.4	228.5	244.2	250.8	236.6	231.4	224.3	224.4	202.1	200.0	201.0	241.5	217.6	98.2	120.8	159.9	190.5
25	241.3	247.8	243.2	242.2	236.2	234.8	236.5	238.5	238.2	243.3	237.8	232.3	231.7	236.1	220.2	209.0	222.6	233.7	230.2	223.3	230.9	229.2	227.2	233.6
26	235.6	238.5	233.5	234.1	238.7	252.5	256.7	258.6	255.3	269.7	221.0	241.8	252.8	244.8	257.5	271.5	260.9	240.8	241.4	256.1	276.6	282.7	249.6	249.4
27	240.4	284.3	275.9	279.9	250.0	246.1	256.1	249.2	255.7	237.7	261.6	204.0	147.6	161.1	154.6	145.5	110.3	107.9	106.8	119.7	113.2	112.4	112.4	106.2
28	106.6	111.3	105.6	103.8	100.5	98.6	106.2	118.8	118.2	129.5	138.2	128.2	122.4	120.7	120.1	117.1	82.6	51.5	57.3	51.1	32.4	12.3	0.9	335.7
29	5.6	356.7	3.9	354.4	357.1	6.3	11.7	14.3	358.8	8.6	22.4	191.0	177.9	168.8	218.1	224.3	224.2	210.0	160.6	137.6	211.1	223.4	225.5	239.1
30	248.9	246.2	234.5	220.1	194.0	177.7	180.9	157.8	135.1	128.0	124.8	207.3	225.9	208.7	212.8	175.6	170.1	171.9	171.7	194.7	154.2	190.8	234.2	233.3

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	238.4	249.2	247.3	243.6	249.2	260.0	274.1	228.1	230.4	311.5	336.2	348.7	3.7	345.8	325.8	308.9	296.1	287.0	290.4	308.9	296.6	301.4	289.0	287.0
2	286.3	283.6	283.6	285.1	292.6	296.4	303.3	307.9	311.3	318.3	315.4	313.7	317.5	317.3	318.9	319.7	320.7	316.3	316.1	308.6	316.0	316.7	320.6	323.6
3	325.6	325.5	322.5	318.3	325.1	330.6	331.2	326.7	326.4	331.3	330.7	336.8	344.2	332.9	341.1	341.9	351.3	343.2	329.7	335.3	6.3	25.5	9.7	317.5
4	28.9	15.4	24.1	56.2	55.5	89.8	105.2	117.8	121.6	125.7	111.0	118.2	109.8	108.7	112.2	112.1	117.1	118.2	120.3	126.1	121.1	126.3	136.8	135.6
5	137.2	139.4	130.0	140.1	139.3	139.1	138.0	136.3	121.4	106.8	103.7	94.5	127.9	270.9	299.4	299.7	301.1	298.4	300.8	306.4	311.3	311.6	311.9	317.6
6	321.1	321.5	320.1	317.4	321.5	321.4	323.4	324.3	327.3	339.1	335.9	336.9	331.0	331.4	339.8	333.0	330.5	323.8	322.7	323.5	327.1	335.5	326.0	317.7
7	319.4	321.3	326.1	339.1	341.1	332.8	340.1	325.4	333.1	331.4	328.7	330.3	337.3	337.0	344.0	341.4	345.4	348.5	345.4	346.5	346.5	349.9	353.4	351.9
8	345.8	349.3	342.7	347.8	348.5	340.4	339.1	330.9	336.5	346.0	337.6	349.8	346.1	344.2	342.5	337.0	335.9	341.8	337.6	333.0	332.2	1.7	353.5	1.7
9	5.9	358.5	2.2	23.8	32.6	23.5	22.4	23.9	28.8	25.3	24.9	24.7	40.5	148.7	270.4	253.8	344.9	358.9	353.4	5.7	3.5	337.3	318.4	319.7
10	319.5	323.4	324.0	328.2	340.6	309.7	314.4	327.0	342.8	332.3	322.5	322.4	339.9	346.6	330.3	324.4	326.2	333.8	334.7	349.2	348.7	2.4	10.8	7.8
11	14.8	14.6	17.6	12.6	19.0	18.1	14.1	23.9	26.2	28.2	41.1	84.6	91.4	103.7	103.8	104.2	110.7	107.1	110.1	110.2	111.9	110.0	112.7	110.1
12	113.3	114.4	111.0	107.5	99.7	93.2	94.0	77.0	38.8	24.5	12.2	18.6	169.6	262.3	2.2	20.9	346.9	340.7	1.0	2.7	5.2	10.0	29.8	17.7
13	22.8	12.6	19.3	7.9	5.8	11.1	12.9	10.3	12.2	16.8	15.5	15.5	11.2	8.9	12.0	356.7	304.4	324.6	325.4	316.8	317.7	332.7	332.5	325.0
14	332.4	334.6	326.0	338.6	348.0	0.7	350.3	343.6	343.3	343.6	340.6	319.8	340.5	335.9	347.4	340.1	346.6	333.7	332.4	346.1	353.8	8.6	10.9	20.7
15	19.3	21.4	31.1	30.6	28.6	27.7	37.7	21.4	38.2	34.8	63.6	33.5	44.3	81.9	42.0	16.0	14.8	28.0	19.7	18.4	19.0	20.1	20.3	16.2
16	17.9	19.1	20.9	23.2	21.2	23.9	358.9	16.3	18.6	2.6	359.9	0.9	19.3	15.2	10.1	6.2	8.8	10.0	4.0	4.4	2.0	10.8	8.7	10.0
17	13.1	12.5	9.7	3.3	3.1	7.5	11.8	12.1	15.0	15.2	15.1	13.7	11.2	14.8	11.7	359.8	0.1	9.7	3.3	1.7	7.4	9.7	13.0	18.7
18	15.7	16.7	17.9	20.2	19.1	11.5	16.0	15.3	10.5	10.7	358.2	3.8	315.9	325.9	16.1	262.2	290.4	306.7	299.6	297.0	289.9	293.9	293.0	304.1
19	18.1	16.0	356.9	351.9	2.3	10.7	5.8	8.7	4.8	19.8	335.8	284.5	317.1	3.2	29.8	110.6	80.1	48.3	38.7	32.8	30.3	42.9	35.4	45.6
20	58.1	37.7	18.9	20.7	19.1	21.4	23.5	22.2	21.0	21.1	29.0	24.7	82.5	79.9	77.0	83.7	78.0	81.1	73.3	74.3	74.7	71.4	70.6	70.2
21	85.1	82.9	86.1	84.2	84.5	87.1	92.6	99.2	97.4	92.6	80.6	69.5	56.7	53.0	52.7	43.9	49.0	38.1	4.8	20.2	8.0	19.2	17.7	20.4
22	19.3	351.5	5.3	5.5	13.3	13.5	23.5	25.0	24.7	25.5	21.5	27.3	44.1	81.3	69.7	125.0	123.5	138.5	155.6	83.3	102.2	105.9	81.5	89.0
23	120.8	125.3	19.8	106.7	126.7	101.4	41.2	53.6	131.9	132.1	128.9	203.0	220.9	194.6	165.3	118.9	83.3	348.1	335.2	314.9	299.0	345.2	351.2	306.8
24	306.9	246.1	358.8	39.2	30.9	200.4	330.7	68.7	135.0	131.9	150.3	137.9	159.2	164.1	168.2	140.5	133.0	109.6	97.8	97.1	90.8	81.3	85.8	96.5
25	102.7	102.0	105.0	104.2	107.8	102.4	105.3	109.3	107.5	105.9	102.7	100.9	100.4	100.7	102.7	103.1	103.3	101.9	101.8	105.3	126.9	122.3	145.5	163.5
26	123.1	116.5	118.2	106.8	99.1	100.2	100.4	113.3	134.8	125.0	121.7	131.5	114.5	113.1	120.1	110.8	112.5	91.8	91.9	91.1	92.9	93.5	92.3	90.0
27	95.0	95.9	96.6	96.2	96.8	99.6	95.7	99.7	64.2	41.8	40.4	56.6	71.4	93.8	94.6	90.3	87.2	101.2	105.5	107.0	107.0	107.8	130.9	128.0
28	119.5	91.8	86.5	95.0	190.2	141.1	60.0	168.5	142.6	154.3	162.1	157.9	144.8	158.1	130.8	127.3	112.2	110.6	108.2	106.0	100.6	102.4	96.8	96.7
29	99.8	100.1	103.3	104.8	102.8	98.7	99.8	102.3	98.2	97.7	95.3	94.4	93.6	97.9	98.4	98.4	101.8	100.8	96.1	100.6	97.5	96.6	98.4	94.8
30	86.3	60.4	31.2	29.9	32.7	33.6	35.5	11.6	8.3	5.7	7.1	14.5	326.3	234.3	244.1	242.1	231.2	237.1	246.3	247.9	248.4	252.4	251.3	253.1
31	263.4	254.8	242.5	243.6	246.3	244.8	243.9	236.6	231.4	226.9	220.4	210.9	213.1	206.5	195.5	179.5	167.2	139.2	97.7	78.0	78.4	81.4	71.2	61.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	69.3	52.6	55.6	65.6	59.0	38.0	35.8	21.5	7.3	19.5	19.2	20.0	22.7	20.8	277.2	229.0	222.6	241.9	267.6	272.1	256.1	260.7	265.8	271.6
2	269.8	261.8	318.6	297.6	309.8	286.0	267.6	319.6	332.8	328.0	332.8	327.8	325.4	327.3	332.8	8.8	334.5	298.9	303.7	311.6	307.7	317.4	330.6	320.6
3	328.9	319.9	319.9	316.3	317.7	318.7	321.5	342.7	9.0	14.1	341.2	272.4	309.9	69.9	152.4	142.1	201.2	169.7	101.9	100.4	106.0	102.9	105.3	104.3
4	107.6	105.9	101.3	100.3	103.6	107.3	101.5	107.2	110.7	112.5	118.6	119.5	119.6	120.7	117.2	117.8	118.1	116.7	116.8	135.6	131.1	120.5	117.2	105.3
5	103.1	102.8	104.3	105.5	108.8	106.8	99.1	98.5	97.3	95.3	95.7	95.4	94.0	86.0	80.5	79.7	80.5	93.0	93.1	96.5	97.1	97.4	96.4	98.8
6	95.7	95.4	98.9	97.8	100.8	95.9	87.8	84.4	84.9	84.4	89.0	87.0	87.1	92.3	93.0	92.5	94.6	97.8	97.8	96.6	99.9	107.1	131.5	151.7
7	137.2	120.6	104.2	101.5	100.8	104.1	106.6	114.5	122.5	122.4	117.1	120.7	121.8	139.7	166.6	165.8	179.5	167.7	180.4	209.5	204.3	210.2	203.8	176.5
8	157.4	119.1	94.5	86.9	93.2	93.2	95.0	98.0	101.2	97.7	98.8	97.5	101.7	107.8	104.9	107.6	103.2	108.5	105.7	115.7	104.6	97.3	100.6	97.5
9	99.4	99.2	100.9	103.5	104.4	98.9	96.2	95.2	95.8	97.7	96.0	99.9	99.5	96.4	99.9	102.0	106.3	108.3	97.7	89.8	89.5	87.8	60.7	29.5
10	16.3	15.8	18.2	24.8	27.6	10.7	12.8	15.3	13.8	1.1	15.6	17.5	10.8	8.0	6.5	356.2	8.3	5.2	5.7	12.9	10.3	13.7	11.0	13.9
11	13.8	19.7	21.8	15.3	16.3	21.4	20.7	20.0	17.6	17.0	3.9	6.7	15.6	14.4	18.9	14.8	14.5	11.3	20.1	17.9	22.6	22.4	14.3	322.8
12	22.5	21.8	327.5	329.5	27.2	79.6	129.5	304.9	330.9	267.9	342.1	13.5	47.9	35.4	39.5	53.0	103.1	99.9	103.1	105.3	102.5	104.8	104.0	104.2
13	104.6	102.4	101.6	100.2	94.8	97.4	98.8	98.9	97.7	95.2	89.7	88.9	86.1	126.3	169.2	296.1	10.7	74.4	92.5	93.2	96.8	100.0	106.9	117.0
14	139.8	150.2	155.1	143.5	147.4	151.2	135.4	144.5	164.4	71.4	46.5	76.6	83.2	86.3	83.2	78.9	74.6	70.4	72.5	68.8	55.1	27.9	15.0	17.3
15	15.9	19.5	20.8	20.4	10.6	16.1	18.1	14.9	14.3	19.9	19.6	14.9	14.4	12.5	14.9	16.4	8.3	11.7	5.0	16.7	11.5	14.7	14.5	19.6
16	6.0	357.1	354.4	355.2	352.7	358.8	350.9	352.9	358.2	354.7	354.6	1.4	0.9	352.5	352.5	355.5	352.1	349.6	359.7	351.6	354.2	0.1	355.2	355.3
17	354.9	348.8	355.6	353.8	349.3	346.3	350.0	348.5	351.3	350.8	0.2	358.9	356.3	357.8	358.2	357.6	346.8	347.9	359.0	354.6	0.3	0.7	1.8	19.3
18	18.7	9.7	352.7	14.9	12.2	12.4	0.6	3.9	10.8	19.6	20.0	11.2	16.5	10.3	14.0	3.8	12.9	8.7	14.0	325.6	356.2	23.4	21.0	20.3
19	21.1	27.0	28.5	21.3	22.7	358.9	21.4	349.1	73.5	86.7	82.0	83.4	90.7	85.0	84.0	92.7	96.4	88.1	77.6	71.9	71.3	65.6	69.8	70.8
20	72.8	74.3	76.9	81.2	78.5	90.9	96.5	93.3	96.2	92.4	94.4	94.2	96.0	97.8	97.4	90.9	95.5	92.0	81.2	62.9	54.3	43.8	65.3	73.3
21	52.2	58.1	66.7	66.7	80.1	93.6	117.4	132.8	146.7	121.8	115.7	114.8	112.9	109.0	107.4	117.4	129.0	118.7	114.5	114.8	115.0	115.4	115.1	117.6
22	120.1	132.1	98.4	88.6	78.2	45.1	43.4	49.3	85.0	95.1	97.5	96.3	94.7	93.7	86.7	82.0	79.9	88.0	97.2	112.6	120.9	126.6	147.2	159.5
23	156.5	163.6	175.4	183.2	197.9	219.0	218.8	207.9	208.7	212.5	218.4	221.2	227.8	229.5	233.2	237.8	253.9	257.0	239.1	231.7	238.3	240.2	250.6	244.6
24	235.7	248.3	247.6	264.3		181.3	172.1	118.8	102.8	92.1	85.5	96.1	90.3	93.1	98.0	96.2	96.9	98.1	100.2	98.2	89.9	99.0	99.6	93.5
25	97.3	97.7	93.2	93.1	96.2	94.7	90.4	79.6	82.3	90.5	91.8	97.5	90.4	89.6	86.7	91.2	87.0	86.6	83.0	73.8	75.7	79.6	72.2	45.0
26	44.1	43.6	38.1	24.4	26.3	36.6	54.4	59.9	118.4	100.5	114.1	131.9	131.1	149.6	129.9	156.6	132.9	145.0	158.1	162.9	158.5	124.9	121.6	114.2
27	127.2	117.2	100.9	105.6	109.7	111.9	105.1	103.0	105.0	106.4	107.6	111.2	104.5	107.8	105.8	102.9	110.3	123.2	106.6	97.1	101.8	105.3	101.6	109.2
28	114.9	112.2	106.1	112.0	124.2	128.7	127.2	236.4	163.4	155.2	130.7	120.9	130.9	133.0	125.1	124.6	127.5	127.6	121.6	114.8	117.7	118.5	127.9	123.6
29	116.6	116.3	114.0	111.2	105.7	97.7	106.0	106.8	109.5	109.7	112.7	112.8	114.9	112.0	112.1	109.7	108.9	108.9	108.2	108.8	112.0	112.3	113.0	110.2
30	107.5	111.3	108.7	108.2	112.4	112.3	113.1	111.8	110.5	114.8	113.3	109.1	106.8	109.4	116.3	116.3	121.2	125.6	126.8	115.0	111.5	113.2	113.7	115.3

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 4 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	121.3	118.2	128.2	138.4	130.3	130.1	131.1	148.3	116.4	127.7	116.3	123.6	125.0	130.2	116.9	121.4	149.4	160.8	179.3	285.3	5.0	348.7	345.7	20.4
2	9.4	4.2	20.3	26.5	29.4	22.5	20.3	19.1	22.7	21.9	25.2	22.2	37.1	23.8	241.5	178.1	203.3	20.6	25.8	24.4	54.7	62.7	71.7	90.6
3	93.7	95.3	94.4	98.8	99.9	101.2	99.5	96.5	95.4	93.2	93.8	86.2	90.5	95.6	87.0	85.4	83.6	73.9	76.8	77.3	77.2	77.0	74.3	72.3
4	72.4	77.4	81.2	77.6	82.5	87.2	46.9	37.9	74.1	75.2	74.3	75.4	75.7	89.4	119.3	126.3	125.0	117.5	120.5	120.7	124.7	123.5	128.3	126.2
5	127.7	126.6	122.5	124.1	123.3	123.5	123.7	123.6	120.1	107.3	102.9	102.5	105.1	108.6	113.1	113.4	111.1	107.2	107.4	110.1	110.5	107.3	117.8	112.6
6	110.7	113.3	115.6	117.7	115.3	115.1	117.6	119.8	115.6	111.0	112.9	110.5	108.7	107.4	116.2	119.2	137.4	176.3	220.2	236.8	222.3	214.5	194.3	193.3
7	188.5	160.8	146.0	131.3	118.2	117.5	105.6	98.9	95.7	88.6	83.8	96.3	107.6	96.3	94.5	98.3	98.7	99.0	96.4	92.9	91.4	92.1	93.4	98.9
8	106.4	120.1	148.9	160.7	163.4	163.0	163.0	160.1	143.0	130.7	116.7	111.9	119.3	133.4	136.1	144.6	218.2	236.6	217.3	236.8	232.2	226.5	231.0	250.8
9	243.3	217.4	116.8	124.7	103.7	95.0	87.2	88.9	87.5	98.4	103.2	103.4	105.5	105.3	103.9	107.0	107.7	110.3	108.2	109.5	112.6	114.1	113.4	112.9
10	112.0	118.6	107.0	91.2	93.5	76.5	38.7	43.5	38.2	33.8	30.9	22.3	10.7	7.9	14.3	20.2	21.0	17.7	13.0	14.6	3.8	351.2	319.6	324.8
11	324.7	327.7	324.2	319.6	307.6	300.9	290.4	280.0	304.5	2.0	11.8	354.4	356.0	316.6	6.0	9.3	19.5	25.6	226.0	296.8	7.4	24.1	22.3	16.2
12	13.4	24.3	28.0	21.5	27.7	29.2	56.2	61.2	62.1	12.9	5.1	9.2	14.3	21.6	13.6	52.7	10.9	13.2	19.1	24.8	22.4	24.8	23.8	23.8
13	26.4	27.9	28.2	38.6	33.5	30.5	26.3	26.5	29.8	31.3	30.4	23.7	23.5	20.9	18.4	15.6	21.2	24.1	24.0	18.0	19.4	12.5	16.6	20.0
14	16.9	11.8	14.4	17.0	15.1	13.1	14.4	13.3	6.0	10.6	13.6	16.8	9.6	359.7	16.4	18.7	9.4	12.5	7.1	8.9	0.9	9.3	5.5	348.5
15	347.0	11.1	17.8	347.6	337.9	341.1	338.9	333.8	326.7	325.9	325.4	327.3	326.0	325.9	324.7	328.2	325.5	328.6	328.1	333.7	336.8	338.4	337.9	331.2
16	333.4	332.3	334.1	339.3	340.0	336.8	348.1	348.9	343.0	347.5	347.7	350.5	343.8	343.6	347.9	348.9	346.7	354.0	353.3	354.2	355.4	350.5	351.5	357.2
17	348.1	352.5	353.1	354.5	356.0	354.9	356.8	345.1	345.0	347.8	353.9	350.2	349.1	355.1	354.7	355.7	355.4	357.8	4.9	6.4	3.3	2.4	7.4	13.0
18	13.4	14.3	18.9	22.3	23.2	24.4	23.2	16.3	14.5	19.3	20.1	25.4	18.9	19.2	20.8	16.8	10.8	10.8	15.1	14.7	11.1	13.6	16.5	7.3
19	1.5	0.5	10.0	359.5	358.0	12.2	14.0	3.3	8.4	15.1	8.7	12.4	23.7	12.8	357.3	1.5	359.0	5.6	4.8	22.2	6.7	14.7	26.7	19.9
20	24.6	24.0	22.5	27.9	23.9	31.4	82.9	86.9	86.4	91.3	94.6	101.4	102.3	104.0	106.1	108.1	113.6	125.9	124.0	120.0	134.4	137.4	133.2	116.8
21	108.6	113.8	110.5	113.0	121.0	115.5	137.7	171.6	165.5	138.7	146.2	142.1	141.1	128.1	114.3	107.6	110.9	98.9	100.8	105.1	102.6	98.4	98.5	109.4
22	112.7	104.7	103.4	96.5	99.5	103.4	107.3	107.1	107.5	107.8	104.1	104.8	111.7	114.6	115.5	119.0	120.9	117.0	112.6	113.7	127.0	215.2	249.6	236.0
23	235.1	238.1	229.1	231.0	226.9	218.7	217.6	220.0	243.3	311.7	312.0	312.1	303.7	272.8	279.0	290.7	297.6	331.2	2.4	1.3	270.3	220.3	330.3	44.3
24	23.9	23.7	26.5	23.9	25.0	20.6	13.7	10.9	9.5	8.3	2.9	356.0	354.2	353.7	353.6	354.9	357.3	353.6	345.9	346.0	348.0	348.0	345.3	342.9
25	340.0	339.5	341.3	340.5	335.2	333.3	333.6	336.3	337.9	340.0	348.8	345.9	333.9	325.6	321.8	322.5	321.5	340.6	333.4	348.3	18.4	357.3	7.2	10.3
26	17.5	25.9	25.2	30.2	27.0	48.6	42.4	36.9	67.4	107.4	101.2	101.5	89.1	82.8	87.0	93.3	92.5	99.2	106.9	97.1	87.8	89.7	90.6	88.7
27	88.7	87.4	91.3	91.8	91.5	88.0	85.3	79.8	82.5	85.1	86.5	88.0	89.1	87.8	87.7	79.7	76.2	72.0	78.1	94.0	118.3	163.4	185.0	174.4
28	170.7	186.8	198.4	207.2	222.9	259.8	269.8	278.2	269.7	332.9	350.8	15.0	0.8	3.2	10.4	11.2	17.7	3.9	5.9	5.1	1.2	355.6	358.5	2.2
29	356.2	352.6	345.0	22.4	11.3	341.5	331.5	348.8	6.4	8.7	359.3	1.3	356.2	349.0	335.5	0.6	353.1	321.7	318.3	319.0	316.3	322.7	319.4	317.0
30	319.8	326.0	335.4	335.5	340.6	3.7	3.9	4.9	11.7	20.1	19.8	18.3	14.0	19.6	21.0	31.2	25.9	26.6	20.5	23.6	21.3	19.3	20.9	23.2
31	25.0	13.7	15.7	20.3	18.0	19.1	22.7	18.3	19.3	18.6	22.1	19.0	20.9	20.5	20.7	18.0	19.4	20.6	19.4	19.8	17.0	17.9	15.9	18.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

January 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.1	3.2	3.2	3.0	3.3	3.1	8.3	4.6	5.6	4.2	3.6	3.7	4.2	4.6	5.0	4.3	5.0	4.0	4.6	4.0	5.7	4.8	4.3	3.9	8.3	3.0	4.3
2	4.2	3.6	3.3	3.8	3.2	4.2	4.0	5.0	4.5	5.7	4.0	3.8	4.0	4.1	3.2	3.6	3.3	3.0	6.3	3.1	3.7	4.2	2.7	4.0	6.3	2.7	3.9
3	3.7	4.9	5.0	8.7	8.1	9.4	7.1	6.1	7.2	3.9	4.3	3.3	2.6	5.5	8.5	9.3	3.2	2.6	8.8	10.5	5.7	9.1	7.9	5.7	10.5	2.6	6.3
4	16.6	4.9	6.7	3.6	3.7	4.7	3.7	4.6	5.6	5.5	5.6	5.7	5.0	12.4	11.4	7.8	3.6	4.9	4.8	5.8	14.0	36.1	12.8	42.5	42.5	3.6	9.7
5	14.6	18.7	6.4	6.5	5.6	12.7	8.1	4.5	5.3	17.9	7.1	3.7	4.5	21.1	7.2	6.1	4.8	7.0	9.0	17.8	17.0	6.2	5.5	5.1	21.1	3.7	9.3
6	5.1	3.2	6.6	5.0	4.6	5.3	5.7	6.8	10.9	5.4	2.2	3.3	3.6	8.9	5.3	5.3	5.4	9.1	12.3	6.0	7.9	9.6	7.6	10.0	12.3	2.2	6.5
7	5.5	6.8	5.9	9.2	12.0	12.4	13.6	8.9	10.8	9.5	7.6	7.1	10.2	6.9	9.5	8.3	8.8	7.5	13.5	7.4	10.5	8.0	6.5	5.7	13.6	5.5	8.8
8	7.9	9.2	6.1	4.2	5.7	5.7	8.8	7.1	5.3	4.7	7.1	3.3	7.2	7.1	8.7	6.6	7.0	4.5	3.5	5.0	5.4	7.6	7.3	3.9	9.2	3.3	6.2
9	8.7	5.2	5.6	23.5	9.5	4.7	8.9	6.6	8.4	11.4	9.0	39.0	49.5	7.7	11.9	27.0	6.4	5.7	6.5	6.9	4.5	17.1	9.3	5.1	49.5	4.5	12.4
10	6.9	6.3	5.8	6.8	5.6	6.0	5.2	4.2	3.8	3.4	3.5	3.3	3.2	3.2	3.4	3.3	3.8	3.5	3.6	3.4	3.9	3.7	3.3	3.6	6.9	3.2	4.3
11	3.4	3.3	3.3	3.2	3.4	3.4	3.3	3.4	3.5	3.4	3.4	3.4	3.1	3.1	2.9	3.2	3.2	3.1	3.4	3.2	3.3	3.1	3.2	3.3	3.5	2.9	3.3
12	3.3	3.6	3.4	3.2	3.5	3.5	3.4	3.5	3.3	3.1	3.4	3.6	3.5	3.3	3.2	3.4	3.2	3.2	3.5	3.4	3.2	5.5	8.7	3.8	8.7	3.1	3.7
13	4.1	4.4	4.4	3.9	3.7	4.2	4.1	3.8	14.4	3.7	3.7	6.1	8.3	13.3	4.9	6.2	0.2	0.1	13.9	3.4	3.3	2.7	3.3	3.0	14.4	0.1	5.1
14	3.0	3.7	5.5	3.8	6.1	9.2	12.4	16.3	17.3	18.7	22.4	12.2	11.2	15.1	17.2	8.4	8.2	7.4	12.7	9.3	8.9	8.1	5.1	3.4	22.4	3.0	10.2
15	4.8	4.9	9.0	9.2	8.3	1.8	3.6	3.6	3.5	5.0	4.4	3.2	2.8	3.5	4.9	5.5	5.6	5.5	46.9	41.0	7.0	10.0	4.1	4.1	46.9	1.8	8.4
16	6.6	5.4	5.0	7.1	8.3	17.8	3.6	3.5	3.7	3.7	3.2	3.6	4.1	4.0	3.5	3.7	3.7	3.6	3.4	3.6	3.7	3.4	3.3	2.8	17.8	2.8	4.8
17	3.0	3.7	2.9	3.0	2.9	4.1	4.8	3.2	3.2	5.0	3.5	3.9	4.0	3.6	4.0	3.6	3.5	3.4	4.0	4.8	4.0	3.9	3.8	3.3	5.0	2.9	3.7
18	3.3	4.2	5.1	5.6	10.0	10.2	6.7	5.2	6.7	8.8	11.4							5.4	23.0	20.6	6.0	25.7	9.8	17.0	25.7	3.3	10.3
19	16.1	20.9	10.3	34.5	10.5	10.4	19.1	16.4	46.1	5.4	7.5	5.9	22.3	21.7	21.1	29.0	3.4	4.0	3.7	3.9	3.8	4.2	4.0	4.0	46.1	3.4	13.7
20	4.1	3.5	3.6	3.1	3.2	3.2	3.0	3.2	3.3	3.9	4.0	3.5	5.4	5.3	6.0	3.9	4.5	6.4	10.4	4.8	6.9	3.5	3.4	4.9	10.4	3.0	4.5
21	4.8	10.2	7.7	13.8	37.6	9.0	13.2	5.9	18.3	9.3	12.9	3.8	4.1	3.3	3.9	5.0	4.9	10.4	5.0	6.8	5.1	5.4	4.8	4.4	37.6	3.3	8.7
22	12.3	9.4	11.7	28.3	5.2	4.0	21.4	19.7	3.2	3.6	5.4	5.4	5.4	6.0	5.7	6.1	5.7	10.0	5.8	5.4	5.2	8.9	8.6	4.7	28.3	3.2	8.6
23	6.6	5.0	4.5	13.0	4.1	4.1	3.0	7.4	4.9	5.3	7.0	3.0	8.3	5.4	8.3	6.8	13.3	8.2	11.2	4.5	10.6	5.7	6.1	9.0	13.3	3.0	6.9
24	10.5	6.6	2.8	2.6	2.5	2.9	8.4	12.9	9.6	7.5	8.0	5.0	5.4	12.0	7.4	4.2	4.4	4.0	4.0	13.0	5.8	5.1	6.5	5.4	13.0	2.5	6.5
25	6.5	13.4	12.6	3.9	4.2	3.1	3.5	6.0	4.9	3.8	3.9	4.0	5.0	4.0	3.9	4.2	4.6	4.3	3.5	3.5	3.3	3.1	2.9	3.5	13.4	2.9	4.8
26	3.1	3.2	3.4	3.2	3.3	3.4	3.4	4.0	3.7	3.3	3.7	4.5	3.8	3.4	3.4	3.2	3.7	3.3	3.4	3.1	3.3	6.2	3.6	3.4	6.2	3.1	3.6
27	2.9	3.5	2.9	3.4	3.1	3.4	3.6	4.8	5.0	3.5	5.9	4.3	3.3	3.2	4.0	3.4	3.2	4.4	4.1	4.2	3.8	4.3	4.1	3.8	5.9	2.9	3.8
28	3.2	3.2	3.4	3.4	3.3	3.1	2.9	3.1	3.3	3.1	3.0	4.3	3.8	3.9	3.5	3.6	3.3	4.4	3.9	3.2	2.4	2.9	2.7	3.3	4.4	2.4	3.3
29	3.8	5.0	4.3	3.6	3.5	3.8	3.8	4.9	4.3	3.4	4.2	3.8	3.4	3.1	3.4	3.9	4.0	3.9	4.0	4.1	3.8	3.8	4.0	4.5	5.0	3.1	3.9
30	3.9	3.6	3.9	3.8	4.2	3.9	3.6	3.6	4.1	4.0	4.4	4.5	4.3	4.4	4.1	4.7	4.3	3.9	4.4	4.1	4.3	4.1	4.4	4.8	4.8	3.6	4.1
31	4.4	4.1	4.1	4.1	4.0	3.7	4.9	4.2	4.0	4.3	4.3	4.1	4.6	4.7	4.9	5.6	4.6	4.3	5.0	10.2	4.7	5.6	8.1	6.9	10.2	3.7	5.0
Max.	**16.6**	**20.9**	**12.6**	**34.5**	**37.6**	**17.8**	**21.4**	**19.7**	**46.1**	**18.7**	**22.4**	**39.0**	**49.5**	**21.7**	**21.1**	**29.0**	**13.3**	**10.4**	**46.9**	**41.0**	**17.0**	**36.1**	**12.8**	**42.5**	**49.5**		
Min.	**2.9**	**3.2**	**2.8**	**2.6**	**2.5**	**1.8**	**2.9**	**3.1**	**3.2**	**3.1**	**2.2**	**3.0**	**2.6**	**3.1**	**2.9**	**3.2**	**0.2**	**0.1**	**3.4**	**3.1**	**2.4**	**2.7**	**2.7**	**2.8**		**0.1**	
Avg.	**6.1**	**6.2**	**5.4**	**7.5**	**6.3**	**5.8**	**6.7**	**6.4**	**7.7**	**5.9**	**5.9**	**5.6**	**7.0**	**6.9**	**6.5**	**6.6**	**4.8**	**5.0**	**8.1**	**7.4**	**5.8**	**7.5**	**5.5**	**6.2**			**6.4**

Total Hours in Month 744 **Hours Data Available** 738 **Data Recovery** 99.2%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

February 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	7.7	4.0	4.7	8.9	7.3	5.8	3.8	4.6	6.1	9.7	7.0	14.4	15.4	38.8	32.3	3.9	4.6	5.1	4.8	6.5	6.1	4.1	4.3	4.1	38.8	3.8	8.9
2	4.0	4.0	4.8	4.5	4.0	4.4	4.2	4.3	4.7	3.8	4.0	4.2	4.2	4.4	4.3	4.4	4.9	4.5	4.1	3.7	3.8	3.9	4.0	3.9	4.9	3.7	4.2
3	3.8	3.8	4.0	3.9	3.9	4.4	3.8	4.1	3.7	4.1	4.4	4.0	3.7	5.9	9.8	10.8	10.3	24.4	9.9	5.2	4.0	7.8	10.9	8.7	24.4	3.7	6.6
4	6.7	6.2	2.5	12.4	8.5	3.3	4.9	7.1	4.4	4.5	5.6	4.2	5.7	7.5	8.0	6.9	4.8	4.9	5.6	4.4	5.5	7.8	5.8	10.9	12.4	2.5	6.2
5	13.5	13.3	9.1	18.3	7.6	8.9	8.8	22.2	9.8	26.0	12.1	5.8	7.7	6.6	7.5	7.7	15.8	6.6	4.0	6.2	4.9	4.6	5.0	9.9	26.0	4.0	10.1
6	4.2	3.7	4.0	3.9	3.8	3.7	3.4	3.9	4.2	4.0	4.6	4.2	3.7	3.9	4.6	8.5	7.2	10.7	13.8	8.4	17.7	12.7	7.1	4.6	17.7	3.4	6.3
7	7.6	36.4	24.6	32.5	19.0	6.6	6.8	33.2	27.1	17.6	12.1	17.3	13.3	9.5	36.5	30.1	8.5	26.3	3.7	9.4	14.8	4.4	26.3	7.9	36.5	3.7	18.0
8	11.9	27.4	10.4	10.6	7.8	6.1	6.2	5.7	7.6	6.8	5.1	5.3	6.3	6.9	7.2	5.9	7.6	7.6	12.5	8.3	14.1	7.8	11.6	9.8	27.4	5.1	9.0
9	13.4	14.6	21.5	12.2	10.1	24.9	12.3	14.6	53.2	10.1	12.6	13.1	7.1	7.9	7.6	12.8	9.0	10.5	44.8	20.6	24.8	45.6	56.9	27.0	56.9	7.1	20.3
10	5.6	7.8	15.1	9.6	16.1	7.1	3.7	5.1	4.8	5.5	7.3	8.4	10.6	7.9	5.3	6.0	8.1	16.6	14.6	4.0	3.0	5.2	4.5	7.8	16.6	3.0	7.9
11	5.5	14.9	6.4	6.8	5.3	9.9	12.4	4.8	4.6	6.3	5.0	3.9	4.1	4.1	3.7	3.9	3.7	3.5	3.7	3.5	4.7	3.8	4.0	4.2	14.9	3.5	5.5
12	4.3	4.4	3.4	4.1	3.8	3.8	3.7	4.0	4.0	3.6	4.1	3.9	3.7	4.3	4.4	4.9	4.1	4.4	7.6	6.1	4.3	4.8	4.4	4.0	7.6	3.4	4.3
13	5.4	5.8	5.5	3.6	2.9	3.3	3.6	5.1	3.9	4.7	5.0	5.3	5.3	5.6	6.6	4.9	4.9	4.5	4.2	3.9	4.6	4.8	4.4	4.2	6.6	2.9	4.7
14	3.9	3.7	3.7	3.8	3.8	3.9	3.7	3.7	3.4	3.5	3.6	3.2	4.0	4.5	3.9	4.1	4.3	3.5	13.1	5.4	6.9	10.7	4.5	4.5	13.1	3.2	4.7
15	4.0	5.1	4.1	3.7	2.6	3.6	5.4	9.2	4.8	4.0	12.8	3.8	20.9	4.6	4.7	4.5	4.1	4.4	4.5	3.3	4.3	3.6	5.8	6.0	20.9	2.6	5.6
16	4.9	5.8	10.4	31.7	8.2	8.0	7.0	7.5	8.3	9.0	4.5	5.5	4.2	6.8	29.3	20.7	13.2	12.4	16.3	4.2	25.5	4.6	19.4	6.4	31.7	4.2	11.4
17	8.7	8.4	7.0	6.2	5.1	12.0	9.7	4.9	5.6	8.2	3.9	8.2	10.4	18.7	6.9	6.1	6.5	5.4	5.0	12.4	5.6	4.8	5.1	4.9	18.7	3.9	7.5
18	10.0	11.1	5.3	10.9	11.7	17.5	25.1	5.7	7.3	7.3	9.2	12.3	5.7	5.2	5.6	9.7	8.8	17.0	7.5	6.0	3.8	3.3	4.0	3.2	25.1	3.2	8.9
19	4.2	4.7	10.8	10.2	10.4	9.2	7.8	4.7	4.8	4.9	6.4	6.9	8.7	8.5	12.4	7.5	9.1	6.4	6.1	7.3	5.6	5.8	5.6	8.3	12.4	4.2	7.3
20	5.0	5.6	5.0	8.9	9.6	4.3	3.8	4.6	8.5	5.3	10.6	6.0	10.0	5.0	5.0	3.8	3.7	3.1	3.3	6.1	11.5	11.4	5.0	6.6	11.5	3.1	6.3
21	10.4	12.7	13.7	14.7	14.4	9.1	5.2	2.8	2.9	3.1	2.9	3.8	4.8	6.7	9.8	6.3	4.4	5.4	7.4	5.5	5.3	4.3	6.0	6.4	14.7	2.8	7.0
22	6.5	5.0	6.2	5.3	3.5	4.9	6.5	6.3	4.3	7.3	5.1	5.6	4.6	3.3	4.4	6.6	4.8	4.1	4.7	5.3	6.6	6.0	6.7	11.4	11.4	3.3	5.6
23	8.1	7.5	7.0	4.8	4.2	4.7	6.1	4.0	5.1	5.5	5.1	6.8	5.2	8.9	10.0	4.9	7.1	6.9	6.0	7.6	10.0	7.7	6.6	8.9	10.0	4.0	6.6
24	19.4	5.2	3.6	12.5	13.0	11.8	9.0	6.2	9.3	7.8	9.2	9.9	8.3	5.2	11.3	12.6	11.2	6.3	12.4	4.8	3.8	8.9	5.5	9.3	19.4	3.6	9.0
25	4.3	7.3	10.9	8.8	11.6	12.1	6.0	5.9	8.8	11.5	8.8	7.1	5.1	7.5	7.7	7.8	5.9	4.1	4.0	6.4	17.7	38.3	16.0	33.3	38.3	4.0	10.7
26	9.5	4.7	3.4	2.7	2.7	2.5	3.4	4.3	6.3	19.9	12.0	29.1	15.5	11.0	4.6	5.3	6.0	5.4	18.6	18.0	16.4	3.6	2.9	5.1	29.1	2.5	8.9
27	7.4	7.5	4.6	3.2	2.0	2.9	2.1	2.9	5.4	3.7	4.5	6.1	4.0	6.3	4.6	3.0	3.2	5.1	5.9	5.8	6.8	6.1	3.3	3.8	7.5	2.0	4.6
28	6.2	7.7	5.9	3.4	5.4	5.3	5.2	4.2	4.3	5.0	4.3	3.3	4.2	4.5	4.2	5.9	4.2	3.8	4.6	4.4	3.9	3.9	3.4	4.1	7.7	3.3	4.6
Max.	**19.4**	**36.4**	**24.6**	**32.5**	**19.0**	**24.9**	**25.1**	**33.2**	**53.2**	**26.0**	**12.8**	**29.1**	**20.9**	**38.8**	**36.5**	**30.1**	**15.8**	**26.3**	**44.8**	**20.6**	**25.5**	**45.6**	**56.9**	**33.3**	**56.9**		
Min.	**3.8**	**3.7**	**2.5**	**2.7**	**2.0**	**2.5**	**2.1**	**2.8**	**2.9**	**3.1**	**2.9**	**3.2**	**3.7**	**3.3**	**3.7**	**3.0**	**3.2**	**3.1**	**3.3**	**3.3**	**3.0**	**3.3**	**2.9**	**3.2**		**2.0**	
Avg.	**7.4**	**8.9**	**7.8**	**9.4**	**7.4**	**7.3**	**6.6**	**7.0**	**8.1**	**7.6**	**6.8**	**7.6**	**7.4**	**7.9**	**9.4**	**7.8**	**6.8**	**8.0**	**9.0**	**6.9**	**8.8**	**8.6**	**8.9**	**8.2**			**7.9**

Total Hours in Month 672 **Hours Data Available** 672 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

March 2007

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	3.7	3.0	3.8	4.5	4.4	4.1	4.0	4.1	3.3	4.2	4.0	4.6	4.7	5.9	4.2	5.0	3.8	6.0	4.6	4.5	4.9	6.6	5.5	5.3	6.6	3.0	4.5
2	4.2	3.9	3.7	4.8	4.8	4.6	4.8	4.6	4.1	3.8	5.3	4.0	7.1	7.6	6.4	5.7	7.0	6.3	6.1	4.9	11.8	5.4	5.6	7.5	11.8	3.7	5.6
3	5.0	6.8	6.0	7.9	7.3	6.0	5.0	5.5	5.4	4.1	7.6	5.4	4.2	8.3	6.2	4.7	4.3	5.8	4.6	14.7	14.2	6.2	13.3	7.0	14.7	4.1	6.9
4	11.6	7.5	10.4	10.5	4.9	5.3	4.1	4.8	4.3	3.5	4.8	8.1	9.3	13.3	11.3	13.1	9.4	6.5	11.9	7.5	6.6	11.2	14.8	14.9	14.9	3.5	8.7
5	14.4	10.1	5.2	6.3	8.5	7.6	9.5	10.6	6.3	4.1	5.4	10.0	10.8	10.7	11.7	10.7	10.3	11.6	11.2	12.6	13.2	15.7	9.9	12.1	15.7	4.1	9.9
6	14.8	16.0	13.8	8.0	10.3	9.2	7.2	6.4	11.5	14.4	14.7	8.1	6.4	10.0	19.7	16.0	5.1	7.9	15.9	17.7	13.0	15.5	19.6	19.5	19.7	5.1	12.5
7	20.4	14.3	11.8	10.3	10.6	21.1	18.7	14.8	8.3	15.7	15.3	16.6	9.2	13.1	8.9	13.0	14.1	10.8	9.4	3.9	8.5	15.7	16.8	14.8	21.1	3.9	13.2
8	17.6	15.8	14.2	15.2	14.5	13.8	14.7	9.4	11.7	12.6	10.7	9.0	9.9	7.9	6.7	4.8	4.6	11.7	10.8	13.4	13.7	14.5	12.7	11.4	17.6	4.6	11.7
9	7.8	8.7	4.9	4.8	6.5	5.1	8.3	9.1	10.1	8.3	9.0	8.6	8.1	8.9	9.7	10.1	9.1	8.0	4.4	4.0	3.3	2.7	3.2	3.6	10.1	2.7	6.9
10	3.5	3.3	3.9	3.2	3.1	4.2	3.9	4.5	4.1	3.9	5.6	7.4	6.7	6.3	6.3	4.5	4.2	3.8	3.9	3.7	3.4	3.9	4.2	4.6	7.4	3.1	4.4
11	4.1	3.9	7.1	5.3	8.2	8.8	7.1	6.4	8.1	11.5	11.4	10.3	9.4	12.2	10.6	11.0	10.7	13.9	12.6	11.5	17.0	15.0	12.7	15.3	17.0	3.9	10.2
12	11.7	9.5	13.2	10.2	12.8	14.6	13.4	15.1	3.0	3.2	3.5	3.5	4.0	6.1	8.0	7.1	6.4	6.6	57.4	12.5	26.9	9.7	9.9	9.8	57.4	3.0	11.6
13	35.0	29.5	12.9	8.0	9.0	13.7	7.9	8.6	44.5	13.8	10.3	9.5	7.4	8.9	5.3	7.4	6.9	6.2	8.8	6.6	7.7	9.8	11.2	13.5	44.5	5.3	12.6
14	11.3	11.7	12.5	13.3	11.2	14.7	15.7	5.0	11.8	10.3	12.3	8.5	10.5	10.0	10.9	8.9	6.8	5.7	8.5	10.3	9.0	15.1	12.5	10.4	15.7	5.0	10.7
15	10.5	10.9	7.2	8.3	5.4	6.2	3.5	3.3	3.7	3.8	4.9	4.6	5.3	7.7	8.3	8.7	8.0	5.3	7.3	7.5	9.2	6.5	6.2	4.4	10.9	3.3	6.5
16	4.0	3.9	5.2	4.1	4.0	8.0	4.6	4.9	4.2	4.3	4.9	5.3	5.4	8.7	8.4	7.5	7.0	7.2	3.3	5.2	4.5	3.5	3.8	4.8	8.7	3.3	5.3
17	3.6	3.5	3.5	3.0	5.5	5.3	4.9	5.9	5.6	5.3	5.5	5.4	6.8	8.4	7.7	12.6	13.4	5.5	3.5	10.4	4.8	3.5	4.1	3.8	13.4	3.0	5.9
18	20.0	31.4	14.1	31.3	9.5	10.7	5.0	8.3	5.2	42.5	9.2	28.9	10.2	17.8	24.8	12.4	10.0	18.5	4.8	4.2	10.6	10.7	2.4	4.0	42.5	2.4	14.4
19	5.0	6.4	5.0	5.0	4.0	3.7	2.9	4.0	5.3	5.6	4.4	14.4	28.3	20.3	12.6	10.1	11.5	10.8	4.7	4.1	3.1	4.3	7.3	17.4	28.3	2.9	8.3
20	35.7	19.4	26.7	10.7	14.6	5.5	10.9	4.8	3.9	3.7	4.0	4.2	4.1	4.1	4.3	4.6	6.0	4.1	4.3	3.8	3.9	3.7	4.2	3.8	35.7	3.7	8.1
21	6.8	13.8	6.9	9.3	4.5	3.9	3.4	3.9	10.1	4.1	3.4	4.4	3.7	4.0	3.1	4.7	4.2	3.5	6.9	11.0	3.0	5.3	11.2	5.7	13.8	3.0	5.9
22	7.2	4.1	40.9	50.3	8.0	6.3	10.1	12.5	3.1	3.6	3.9	4.5	4.4	8.5	5.0	3.8	3.3	4.1	5.0	4.1	3.3	5.7	4.6	4.1	50.3	3.1	8.8
23	5.4	31.4	10.4	11.9	7.0	8.1	4.5	7.2	4.7	2.8	8.8	8.8	8.3	3.1	6.1	7.8	6.2	4.0	2.9	2.7	2.0	2.5	3.0	2.6	31.4	2.0	6.8
24	5.8	7.6	6.6	7.6	3.9	7.2	9.2	6.2	4.9	5.6	4.2	4.3	6.6	4.6	5.8	6.1	7.9	10.0	15.0	7.9	10.9	18.5	13.1	5.8	18.5	3.9	7.7
25	43.0	25.2	27.1	43.0	12.8	57.8	21.1	10.3	28.9	6.6	19.3	49.8	40.5	39.0	39.3	10.8	20.8	15.6	10.4	9.3	5.1	5.1	4.6	3.5	57.8	3.5	22.9
26	3.7	4.6	4.9	3.9	3.9	3.5	4.4	4.2	5.1	4.3	3.0	3.3	3.5	4.5	4.2	4.0	3.6	4.3	11.7	7.6	9.0	13.4	8.3	4.4	13.4	3.0	5.3
27	4.6	15.2	5.0	4.4	5.0	6.9	3.7	4.2	3.4	3.9	6.8	8.8	9.9	10.4	13.6	8.7	8.9	9.3	5.1	7.7	8.5	26.1	5.0	7.0	26.1	3.4	8.0
28	8.6	7.8	7.7	5.6	5.3	21.0	33.0	7.6	3.5	4.3	7.1	6.5	21.6	7.3	6.1	6.9	4.9	6.2	5.5	4.2	13.8	6.6	13.4	11.3	33.0	3.5	9.4
29	11.9	8.9	10.2	6.8	6.4	8.5	8.4	5.0	6.6	7.5	4.2	8.7	6.1	6.5	11.2	6.5	3.8	7.4	6.7	7.5	6.3	9.6	8.5	8.0	11.9	3.8	7.6
30	5.7	3.6	3.0	5.9	4.7	3.8	3.5	3.8	5.1	5.8	4.7	4.0	4.4	6.3	6.1	3.7	4.7	3.3	5.3	5.5	5.5	10.8	27.1	28.9	28.9	3.0	6.9
31	16.2	5.1	5.4	15.1	19.6	27.8	29.7	33.2	23.5	37.2	25.8	30.5	30.5	21.2	19.7	19.3	7.2	5.9	3.8	5.6	3.8	3.7	4.2	3.5	37.2	3.5	16.6
Max.	**43.0**	**31.4**	**40.9**	**50.3**	**19.6**	**57.8**	**33.0**	**33.2**	**44.5**	**42.5**	**25.8**	**49.8**	**40.5**	**39.0**	**39.3**	**19.3**	**20.8**	**18.5**	**57.4**	**17.7**	**26.9**	**26.1**	**27.1**	**28.9**	**57.8**		
Min.	**3.5**	**3.0**	**3.0**	**3.0**	**3.1**	**3.5**	**2.9**	**3.3**	**3.0**	**2.8**	**3.0**	**3.3**	**3.5**	**3.1**	**3.1**	**3.7**	**3.3**	**3.3**	**2.9**	**2.7**	**2.0**	**2.5**	**2.4**	**2.6**		**2.0**	
Avg.	**11.7**	**11.2**	**10.1**	**10.9**	**7.7**	**10.5**	**9.3**	**7.7**	**8.5**	**8.5**	**7.9**	**10.0**	**9.9**	**10.0**	**10.1**	**8.4**	**7.6**	**7.6**	**8.9**	**7.6**	**8.4**	**9.2**	**9.1**	**8.8**			**9.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

April *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.5	3.0	4.4	5.8	5.4	3.5	4.9	6.8	6.4	3.8	13.2	46.9	5.9	5.1	54.2	42.5	9.1	13.0	5.6	21.4	5.2	8.0	47.4	5.3	54.2	3.0	13.8
2	5.1	7.1	15.5	20.3	13.1	3.7	3.3	4.0	3.7	3.5	3.9	4.5	4.6	4.4	3.7	4.1	4.1	3.8	3.5	3.3	3.4	4.4	3.8	4.0	20.3	3.3	5.6
3	5.1	3.9	4.4	4.1	4.8	6.3	3.5	3.6	4.0	3.8	4.0	4.9	4.6	4.8	4.1	4.6	4.3	4.3	3.8	4.3	4.1	3.5	4.8	4.3	6.3	3.5	4.3
4	3.0	3.7	5.4	3.8	4.9	5.4	4.7	5.2	4.5	4.5	4.6	5.0	5.4	4.8	5.0	4.4	4.5	4.8	4.1	4.7	5.9	5.5	6.2	6.6	6.6	3.0	4.9
5	7.0	14.9	18.4	7.5	17.9	5.2	4.7	4.6	3.6	3.9	4.0	5.1	5.0	4.9	3.8	4.8	9.7	5.1	4.7	4.3	4.5	4.3	4.5	5.2	18.4	3.6	6.6
6	4.3	4.5	4.3	4.2	3.8	3.7	3.7	3.6	9.3	5.6	4.5	3.9	4.3	4.7	4.2	3.3	7.0	6.9	5.0	4.0	5.4	4.2	5.4	44.8	44.8	3.3	6.4
7	41.1	8.0	9.5	11.6	5.9	4.0	3.8	4.0	4.2	4.7	4.1	3.9	4.2	4.5	4.3	4.4	5.2	4.4	4.3	5.8	5.7	6.1	3.3	2.5	41.1	2.5	6.6
8	3.6	3.3	3.3	3.5	3.9	4.0	3.4	3.4	3.2	4.4	3.2	4.0	4.3	4.5	3.6	6.9	8.1	11.3	7.0	43.2	8.4	4.8	8.8	6.4	43.2	3.2	6.7
9	4.7	6.2	6.2	5.8	5.7	11.7	5.8	8.2	5.5	4.6	3.4	3.3	3.6	3.4	4.0	4.1	4.0	3.6	3.9	3.7	3.7	3.7	3.6	3.5	11.7	3.3	4.8
10	3.5	3.6	2.9	2.9	2.9	3.7	3.1	3.8	4.4	4.1	4.9	4.2	3.1	5.0	3.3	3.7	4.8	6.4	3.6	2.4	3.1	2.9	3.6	3.6	6.4	2.4	3.7
11	3.3	3.9	3.8	4.0	4.9	5.1	3.3	2.7	4.0	23.8	7.9	6.6	4.6	5.0	8.4	9.9	5.0	4.9	4.2	4.9	6.5	7.2	4.5	5.8	23.8	2.7	6.0
12	4.4	5.2	3.9	17.5	7.9	4.4	4.1	4.8	6.9	28.0	7.2	13.7	10.0	23.6	17.5	7.6	6.9	5.9	6.8	38.1	10.0	17.4	12.6	5.0	38.1	3.9	11.2
13	2.9	2.5	3.5	4.0	2.2	3.7	3.7	4.9	5.8	4.6	5.8	6.5	8.1	12.4	17.7	10.9	14.6	18.9	9.9	9.2	6.8	3.4	3.8	2.5	18.9	2.2	7.0
14	9.5	6.4	37.3	37.4	4.3	26.8	9.2	5.4	5.0	14.8	20.5	12.0	13.5	9.4	7.9	6.4	7.3	7.7	6.7	5.1	4.4	4.4	4.3	4.0	37.4	4.0	11.2
15	3.9	4.6	4.2	3.9	3.9	4.3	3.9	5.3	4.2	4.9	6.4	6.2	7.1	7.5	13.9	7.0	16.7	11.3	10.3	8.0	14.3	15.5	14.6	21.1	21.1	3.9	8.5
16	12.5	15.6	22.5	8.3	5.5	4.8	13.1	10.0	6.7	11.1	27.5	8.9	13.1	4.8	4.3	5.5	5.8	6.5	4.7	4.7	4.1	19.4	35.8	8.5	35.8	4.1	11.0
17	5.2	5.8	7.0	6.8	3.9	4.1	4.2	4.3	4.3	4.3	4.1	3.8	3.9	3.8	3.7	3.9	4.0	4.0	4.1	4.1	3.9	3.9	4.0	3.7	7.0	3.7	4.4
18	4.0	4.4	4.2	3.8	3.9	4.3	4.8	4.6	3.9	3.7	3.8	4.5	4.2	4.3	4.1	11.1	21.8	8.8	11.5	8.5	7.1	4.3	4.4	14.3	21.8	3.7	6.4
19	11.2	9.5	9.5	7.7	4.4	3.8	3.2	3.5	4.0	3.8	4.4	4.0	3.9	4.1	3.9	4.0	4.0	5.3	4.6	4.4	4.0	3.5	3.4	3.7	11.2	3.2	4.9
20	4.2	4.2	4.1	4.6	3.5	5.7	5.0	4.0	3.5	3.4	3.3	4.2	4.8	4.9	5.1	4.3	4.6	4.2	4.2	3.4	3.2	3.6	4.6	4.3	5.7	3.2	4.2
21	4.2	3.4	3.5	3.7	3.0	3.0	4.3	3.6	10.0	11.2	5.8	4.8	4.7	4.9	4.3	4.5	3.7	3.7	4.0	3.8	3.8	4.2	4.4	4.4	11.2	3.0	4.6
22	4.5	4.3	4.3	4.3	4.0	4.7	4.5	4.4	4.2	4.5	4.9	4.4	4.9	4.4	6.8	5.5	5.0	5.8	4.5	4.6	4.7	5.1	4.4	5.1	6.8	4.0	4.7
23	3.8	4.1	4.2	4.1	2.6	2.0	3.1	2.7	4.5	4.6	11.3	15.1	7.9	9.0	9.5	7.2	12.6	9.4	4.3	5.4	16.8	10.4	6.1	3.9	16.8	2.0	6.9
24	5.5	4.6	5.3	5.2	4.7	7.2	5.3	4.9	4.3	4.9	6.5	7.2	15.2	20.9	11.1	9.4	8.3	14.0	6.2	5.7	10.8	9.7	7.1	4.3	20.9	4.3	7.8
25	4.3	4.2	3.7	4.4	4.2	4.6	4.1	4.3	4.6	5.0	6.0	5.0	4.7	4.6	5.0	5.1	6.4	5.7	5.4	5.6	12.8	13.5	5.6	7.7	13.5	3.7	5.7
26	7.4	5.0	6.9	2.1	2.5	6.8	4.2	4.4	3.2	6.1	7.2	7.8	13.1	16.4	10.5	13.3	8.6	3.1	4.2	19.1	15.2	7.6	9.9	16.8	19.1	2.1	8.4
27	7.4	12.9	4.6	9.2	16.6	9.0	7.2	4.9	9.8	15.6	12.8	17.6	12.0	10.4	9.7	10.0	8.7	4.6	4.5	6.0	7.4	5.9	8.2	10.8	17.6	4.5	9.4
28	36.3	6.5	6.4	5.9	6.7	5.8	10.3	17.5	20.2	32.2	52.3	31.1	13.5	12.3	10.1	8.3	6.7	5.4	4.6	4.2	3.8	4.7	4.7	4.0	52.3	3.8	13.1
29	4.9	4.5	4.8	4.5	4.4	4.2	4.4	5.3	5.3	4.5	5.3	6.3	7.7	8.6	8.1	8.4	7.0	5.6	5.4	4.8	17.6	24.6	5.8	34.2	34.2	4.2	8.2
30	19.8	9.9	30.2	13.1	11.4	24.3	4.7	9.1	5.6	11.8	16.9	17.9	21.4	28.3	12.5	30.3	21.4	20.9	11.1	5.1	9.6	10.0	9.0	11.6	30.3	4.7	15.2
Max.	**41.1**	**15.6**	**37.3**	**37.4**	**17.9**	**26.8**	**13.1**	**17.5**	**20.2**	**32.2**	**52.3**	**46.9**	**21.4**	**28.3**	**54.2**	**42.5**	**21.8**	**20.9**	**11.5**	**43.2**	**17.6**	**24.6**	**47.4**	**44.8**	**54.2**		
Min.	**2.9**	**2.5**	**2.9**	**2.1**	**2.2**	**2.0**	**3.1**	**2.7**	**3.2**	**3.4**	**3.2**	**3.3**	**3.1**	**3.4**	**3.3**	**3.3**	**3.7**	**3.1**	**3.5**	**2.4**	**3.1**	**2.9**	**3.3**	**2.5**		**2.0**	
Avg.	**8.0**	**6.0**	**8.3**	**7.5**	**5.8**	**6.3**	**4.9**	**5.3**	**5.6**	**8.2**	**9.0**	**9.1**	**7.4**	**8.2**	**8.8**	**8.5**	**8.0**	**7.3**	**5.6**	**8.4**	**7.2**	**7.5**	**8.3**	**8.7**			**7.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

May *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	23.9	21.4	31.2	7.4	34.1	20.1	17.2	6.2	13.5	19.0	29.3	31.2	38.8	49.5	42.5	39.9	22.0	9.5	17.9	13.7	19.6	28.5	19.2	6.3	49.5	6.2	23.4
2	51.0	21.7	36.0	20.4	4.8	4.6	4.0	21.5	12.3	22.2	22.3	30.9	9.4	11.8	13.4	11.1	7.7	6.6	4.9	4.6	4.8	4.8	4.9	6.1	51.0	4.0	14.2
3	4.6	4.7	6.5	11.7	29.1	17.6	18.1	9.0	17.4	21.2	21.2	17.1	25.9	52.5	26.3	32.2	54.1	12.0	9.8	5.1	4.6	23.0	21.4	8.2	54.1	4.6	18.9
4	6.0	4.2	4.1	48.8	28.3	10.2	51.1	18.6	18.4	30.0	11.5	6.9	8.2	13.2	14.4	12.7	16.0	10.6	9.8	10.3	21.5	5.7	7.4	6.9	51.1	4.1	15.6
5	23.1	18.8	5.1	5.5	17.2	10.7	6.3	9.7	4.5	4.5	6.4	5.4	6.4	8.5	11.5	7.8	8.6	7.1	6.6	7.6	7.3	6.4	6.6	6.5	23.1	4.5	8.7
6	26.4	36.3	13.6	13.2	34.2	41.5	30.5	12.9	6.3	5.7	10.6	7.2	7.6	8.7	8.6	8.7	6.5	4.5	4.9	4.8	3.7	4.0	3.8	3.8	41.5	3.7	12.8
7	3.5	3.6	3.3	3.3	10.7	5.9	11.7	6.9	5.3	9.3	10.1	10.0	8.2	10.1	18.0	20.1	5.7	6.3	6.4	5.8	5.9	4.6	4.3	5.8	20.1	3.3	7.7
8	6.3	5.8	4.7	4.7	4.8	5.4	4.5	4.5	5.0	4.9	5.5	11.1	26.9	22.3	22.4	15.6	12.0	12.0	8.0	7.7	7.2	5.9	4.5	8.6	26.9	4.5	9.2
9	17.1	20.8	11.7	9.4	13.5	4.6	5.4	5.8	6.7	5.5	5.5	7.0	8.0	8.3	6.7	10.5	8.9	8.3	7.9	9.7	6.6	37.6	30.9	31.8	37.6	4.6	12.0
10	13.4	11.8	14.1	7.1	9.3	16.8	19.2	10.4	25.5	19.7	23.3	19.6	18.3	17.7	17.5	13.3	12.1	12.3	10.0	7.5	6.3	3.4	5.6	11.2	25.5	3.4	13.6
11	11.1	6.8	7.4	11.5	3.7	4.1	5.1	4.9	6.4	8.0	8.6	8.8	9.7	12.5	12.6	11.5	10.7	10.7	7.1	5.1	4.2	8.3	5.8	4.2	12.6	3.7	7.9
12	12.7	23.0	11.5	19.1	13.4	10.2	4.5	4.8	6.4	7.1	8.3	11.5	7.9	6.9	6.9	7.2	7.2	7.0	6.9	4.6	4.3	3.9	4.3	5.0	23.0	3.9	8.5
13	4.5	3.9	4.3	4.3	3.8	4.0	4.6	4.9	4.4	4.4	6.5	6.3	5.0	5.3	5.7	6.9	5.7	6.8	6.1	6.0	5.4	5.5	5.3	5.1	6.9	3.8	5.2
14	9.1	8.0	6.8	7.6	3.5	4.0	5.8	6.6	6.1	11.8	17.8	13.3	8.0	8.0	7.3	9.6	5.5	7.5	5.5	4.5	5.2	4.4	5.2	3.8	17.8	3.5	7.3
15	4.0	4.8	3.8	3.8	3.2	10.9	14.6	5.8	9.1	7.1	7.4	9.6	10.0	10.7	15.7	18.7	21.6	17.3	45.2	16.3	12.0	10.8	5.8	3.5	45.2	3.2	11.3
16	3.2	4.5	4.1	4.1	3.4	3.3	3.6	4.0	5.8	25.3	28.0	23.5	14.0	13.2	15.6	10.7	7.3	8.2	10.3	5.6	5.7	5.0	5.3	5.1	28.0	3.2	9.1
17	4.8	4.8	4.1	3.9	4.5	5.6	8.1	8.1	14.3	13.1	9.4	7.1	13.6	11.6	9.7	7.3	9.4	8.5	8.8	7.7	6.5	8.8	10.6	12.0	14.3	3.9	8.4
18	12.2	8.3	4.8	5.7	3.9	19.8	15.8	10.3	13.3	13.9	18.1	24.7	17.9	20.1	26.1	30.2	30.6	26.8	19.4	20.6	9.5	8.1	8.0	19.1	30.6	3.9	16.1
19	14.9	6.1	5.2	5.4	5.6	6.3	6.9	8.5	14.3	13.4	18.0	7.8	14.0	15.7	9.2	11.3	12.0	10.4	7.5	6.4	5.1	5.9	8.1	13.2	18.0	5.1	9.6
20	19.2	12.1	10.3	8.9	10.8	5.2	7.4	6.4	6.0	5.5	8.2	27.7	20.9	19.4	18.4	16.1	10.9	12.8	15.3	5.9	4.0	6.9	9.7	5.6	27.7	4.0	11.4
21	7.5	6.8	6.2	7.1	7.3	17.3	18.1	10.7	17.2	61.2	46.0	36.6	37.9	22.6	16.1	12.9	11.6	10.8	7.1	5.5	5.0	4.7	5.7	4.6	61.2	4.6	16.1
22	5.2	4.7	5.0	6.0	4.5	7.1	7.2	7.5	7.0	9.2	8.1	5.0	6.0	10.5	8.4	9.9	8.8	12.0	7.1	8.2	36.0	17.6	35.8	18.6	36.0	4.5	10.6
23	15.3	5.0	11.3	7.2	12.9	5.2	6.7	5.7	6.2	6.8	6.9	6.3	5.8	11.8	5.7	5.7	5.6	5.0	4.7	5.2	4.5	5.1	5.1	5.5	15.3	4.5	6.9
24	4.5	3.8	4.0	4.4	4.4	4.4	4.6	4.8	5.6	5.5	4.8	4.7	5.9	6.4	5.4	5.4	7.0	13.6	6.5	13.3	9.3	14.4	15.1	15.6	15.6	3.8	7.2
25	15.6	58.6	5.3	10.3	17.3	28.0	39.0	51.4	10.2	8.0	9.3	7.6	7.4	9.6	6.9	7.4	7.7	8.7	21.1	15.6	7.9	9.9	7.2	3.7	58.6	3.7	15.6
26	8.2	7.8	5.5	6.2	5.5	10.3	7.8	6.3	6.6	7.1	11.0	7.1	5.9	7.4	6.8	5.1	4.2	4.6	5.2	6.0	6.7	9.2	11.0	9.2	11.0	4.2	7.1
27	6.0	6.6	7.2	9.5	6.8	5.2	4.7	6.2	6.2	9.1	9.9	11.4	12.1	8.8	9.9	8.8	9.5	7.3	7.4	6.1	5.7	4.1	4.5	4.8	12.1	4.1	7.4
28	6.2	5.8	6.3	5.4	4.8	4.1	6.5	8.9	10.3	9.8	8.3	8.1	11.2	10.2	9.4	7.3	7.0	7.8	7.3	7.4	4.6	4.0	4.7	16.2	16.2	4.0	7.6
29	33.7	30.6	7.4	5.8	8.5	3.8	3.5	5.1	9.0	11.9	17.0	20.3	22.3	32.0	17.2	12.8	23.2	21.1	12.8	7.9	8.3	3.9	6.4	23.5	33.7	3.5	14.5
30	18.3	21.1	12.8	10.9	4.0	5.2	7.3	6.5	30.0	21.9	23.3	10.0	11.4	12.6	12.4	10.3	8.8	7.9	7.5	7.2	5.8	6.5	12.4	8.7	30.0	4.0	11.8
31	9.1	13.2	9.8	6.4	5.2	4.6	4.8	5.2	5.2	7.9	11.4	10.0	7.5	11.0	13.2	11.9	11.7	15.1	5.9	5.3	8.1	9.0	6.7	5.2	15.1	4.6	8.5
Max.	**51.0**	**58.6**	**36.0**	**48.8**	**34.2**	**41.5**	**51.1**	**51.4**	**30.0**	**61.2**	**46.0**	**36.6**	**38.8**	**52.5**	**42.5**	**39.9**	**54.1**	**26.8**	**45.2**	**20.6**	**36.0**	**37.6**	**35.8**	**31.8**	**61.2**		
Min.	**3.2**	**3.6**	**3.3**	**3.3**	**3.2**	**3.3**	**3.5**	**4.0**	**4.4**	**4.4**	**4.8**	**4.7**	**5.0**	**5.3**	**5.4**	**5.1**	**4.2**	**4.5**	**4.7**	**4.5**	**3.7**	**3.4**	**3.8**	**3.5**		**3.2**	
Avg.	**12.9**	**12.8**	**8.8**	**9.2**	**10.4**	**9.9**	**11.4**	**9.3**	**10.1**	**13.2**	**13.9**	**13.3**	**13.3**	**15.1**	**13.5**	**12.9**	**12.2**	**10.3**	**10.0**	**8.0**	**8.1**	**9.0**	**9.4**	**9.3**			**11.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

June *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	5.8	6.6	5.0	6.7	3.9	5.5	5.5	6.4	7.3	6.6	7.5	7.1	6.5	5.8	6.3	7.4	5.8	5.5	5.9	5.0	4.5	4.5	5.0	4.8	7.5	3.9	5.9
2	4.4	3.6	8.5	7.0	7.4	6.7	5.5	6.9	13.1	10.6	14.2	8.9	15.0	12.2	13.3	13.8	17.6	15.5	11.7	7.2	5.5	5.2	5.2	25.1	25.1	3.6	10.2
3	34.5	7.7	15.5	9.9	5.4	5.5	41.3	25.8	17.9	16.4	16.6	24.8	18.0	43.7	22.4	17.0	26.8	22.4	27.2	23.8	11.0	38.8	19.1	8.5	43.7	5.4	20.8
4	6.0	4.5	3.8	4.1	3.5	3.7	3.8	3.9	5.2	5.7	4.2	4.5	5.1	6.9	22.7	15.7	19.0	7.2	7.9	5.8	5.6	6.4	7.0	7.1	22.7	3.5	7.0
5	6.3	6.6	6.7	6.0	8.5	7.0	7.5	5.3	5.5	6.9	6.6	5.7	5.7	5.5	5.0	5.5	5.1	5.3	5.5	5.5	5.0	5.5	6.5	4.6	8.5	4.6	6.0
6	3.9	4.3	4.1	3.9	4.5	18.1	10.0	13.4	19.2	14.5	14.6	15.2	11.8	13.1	12.0	9.8	12.7	13.5	11.3	6.6	5.0	6.4	16.0	44.3	44.3	3.9	12.0
7	24.5	14.9	16.0	14.0	17.8	4.2	39.0	51.2	24.4	10.5	8.3	8.2	6.7	6.2	7.1	6.5	6.5	5.5	5.4	6.0	4.4	4.2	4.5	5.1	51.2	4.2	12.5
8	4.3	5.1	5.5	7.0	4.5	5.5	7.0	6.7	9.6	9.2	17.3	12.9	14.5	11.0	11.9	14.2	10.8	10.3	8.3	6.4	4.9	4.1	5.3	4.4	17.3	4.1	8.3
9	8.4	11.3	6.8	23.9	34.4	14.0	5.0	9.1	8.6	16.8	15.2	15.0	18.0	12.1	47.3	41.1	21.6	36.0	13.0	5.1	6.6	7.7	6.8	6.7	47.3	5.0	16.3
10	4.2	5.1	6.9	4.0	4.8	7.6	7.2	10.5	8.9	6.8	10.4	12.7	13.9	19.3	23.2	26.0	22.4	24.4	14.4	20.6	10.7	7.8	6.6	9.7	26.0	4.0	12.0
11	10.1	8.2	5.5	10.0	10.3	16.3	19.0	42.3	17.2	12.0	21.7	23.6	14.5	8.9	9.4	8.3	7.8	7.4	7.3	7.0	5.8	4.9	5.2	7.0	42.3	4.9	12.1
12	4.6	5.2	5.9	6.0	14.1	7.5	16.9	8.4	9.5	6.4	8.9	10.5	8.3	8.2	7.9	11.1	10.5	11.2	12.8	11.8	7.5	2.4	6.0	7.1	16.9	2.4	8.7
13	8.2	21.5	12.7	10.6	18.3	7.3	5.2	9.5	23.6	14.6	17.7	12.9	7.7	8.0	16.3	16.5	14.3	6.4	7.2	6.7	6.7	11.5	14.6	19.5	23.6	5.2	12.4
14	16.2	9.6	14.7	12.5	10.7	8.9	6.6	10.8	21.8	12.5	17.5	15.0	27.9	27.8	30.6	25.9	8.4	6.0	5.3	4.4	4.4	5.0	7.5	11.5	30.6	4.4	13.4
15	5.5	3.6	4.5	6.3	6.1	4.2	4.0	5.4	6.9	7.3	9.0	9.3	14.2	13.5	12.4	14.3	9.0	10.4	9.1	6.5	4.4	3.0	2.5	5.2	14.3	2.5	7.3
16	4.3	5.7	3.6	2.7	4.0	6.1	5.4	3.6	5.8	11.9	13.6	11.7	11.0	12.4	12.1	11.8	11.9	9.8	6.1	5.6	5.1	4.9	4.9	3.6	13.6	2.7	7.4
17	4.9	5.2	6.0	5.5	5.0	5.7	5.7	6.6	8.0	12.6	22.5	14.4	17.5	12.8	27.1	18.9	24.9	16.4	36.7	10.5	6.4	9.2	12.9	7.7	36.7	4.9	12.6
18	8.6	10.4	32.7	16.2	3.3	3.0	5.3	7.5	26.6	32.0	19.4	20.7	44.4	61.0	25.1	36.1	28.1	39.7	45.9	33.6	6.7	46.3	39.4	15.6	61.0	3.0	25.3
19	10.3	11.4	3.7	3.8	3.6	3.5	3.4	5.3	7.8	8.7	10.6	9.9	10.1	10.2	10.8	10.9	8.8	8.7	7.4	6.3	4.3	3.7	3.8	3.2	11.4	3.2	7.1
20	8.0	8.4	4.0	4.8	4.8	5.3	4.1	4.6	7.5	8.6	8.6	9.8	12.8	12.1	9.4	10.0	8.2	8.1	7.9	4.8	4.2	4.0	3.9	3.4	12.8	3.4	7.0
21	9.9	6.8	6.4	8.7	6.7	8.2	8.2	8.2	6.8	6.9	10.8	9.5	11.9	8.8	8.1	12.6	13.1	8.5	6.3	5.2	6.1	6.6	6.8	6.8	13.1	5.2	8.3
22	9.0	6.6	9.0	6.7	9.3	19.8	20.1	10.7	6.5	6.5	7.0	9.4	9.2	10.0	8.9	6.4	11.6	6.8	7.2	7.2	5.2	5.7	5.0	5.1	20.1	5.0	8.7
23	4.7	4.8	5.1	4.9	4.7	4.5	4.9	4.4	5.0	5.1	5.4	5.1	5.2	5.1	4.5	5.0	4.7	5.0	4.6	5.3	5.2	5.0	4.8	4.7	5.4	4.4	4.9
24	5.0	4.9	4.7	4.6	4.3	4.1	4.2	4.4	5.2	5.2	5.5	5.3	4.8	6.1	6.1	5.6	5.0	5.7	5.8	5.5	6.0	4.4	4.2	4.0	6.1	4.0	5.0
25	3.9	4.0	4.1	4.0	4.3	4.3	5.1	5.3	6.2	6.8	6.1	7.4	6.8	7.3	7.3	5.8	6.0	6.2	5.3	5.8	4.8	4.4	3.4	4.3	7.4	3.4	5.4
26	7.7	4.8	3.5	3.8	4.8	4.9	7.1	7.6	10.0	10.8	12.1	13.6	22.7	21.7	31.4	35.8	64.5	39.6	16.1	7.6	5.2	5.6	5.1	13.6	64.5	3.5	15.0
27	5.9	5.1	3.6	4.1	4.8	5.0	10.2	8.0	17.4	34.5	18.8	13.6	20.5	16.0	13.8	16.6	14.0	14.0	6.7	10.8	5.8	4.8	5.9	5.8	34.5	3.6	11.1
28	5.9	7.3	6.1	7.4	8.6	5.5	7.0	9.4	46.6	16.9	11.9	9.1	12.0	9.3	9.7	10.5	9.6	16.3	8.8	6.4	4.9	5.0	4.5	4.5	46.6	4.5	10.1
29	4.3	7.7	18.4	18.7	13.6	26.6	17.7	8.4	12.0	13.2	15.2	15.3	18.5	18.0	25.2	16.4	7.8	8.1	6.1	6.5	4.2	5.1	6.3	6.1	26.6	4.2	12.5
30	16.8	8.3	9.3	9.3	7.7	6.2	6.2	7.4	7.6	6.6	6.5	11.1	12.2	19.6	18.9	13.1	14.0	13.6	11.1	6.9	7.4	6.5	6.6	19.0	19.6	6.2	10.5
Max.	**34.5**	**21.5**	**32.7**	**23.9**	**34.4**	**26.6**	**41.3**	**51.2**	**46.6**	**34.5**	**22.5**	**24.8**	**44.4**	**61.0**	**47.3**	**41.1**	**64.5**	**39.7**	**45.9**	**33.6**	**11.0**	**46.3**	**39.4**	**44.3**	**64.5**		
Min.	**3.9**	**3.6**	**3.5**	**2.7**	**3.3**	**3.0**	**3.4**	**3.6**	**5.0**	**5.1**	**4.2**	**4.5**	**4.8**	**5.1**	**4.5**	**5.0**	**4.7**	**5.0**	**4.6**	**4.4**	**4.2**	**2.4**	**2.5**	**3.2**		**2.4**	
Avg.	**8.5**	**7.3**	**8.1**	**7.9**	**8.1**	**7.8**	**9.9**	**10.6**	**12.6**	**11.4**	**12.1**	**11.7**	**13.6**	**14.4**	**15.5**	**14.9**	**14.3**	**13.1**	**11.1**	**8.6**	**5.8**	**8.0**	**7.8**	**9.3**			**10.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

July *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	16.6	10.4	25.4	13.8	5.8	6.9	4.3	5.5	8.1	14.1	22.1	14.2	26.5	13.2	18.9	16.7	10.3	6.7	9.6	4.8	38.3	4.6	3.3	4.8	38.3	3.3	12.7
2	6.5	4.8	10.7	23.0	38.0	14.8	24.4	24.6	25.9	23.7	17.7	24.1	12.7	9.4	13.3	11.6	14.1	10.5	10.0	10.7	4.9	6.9	7.0	5.2	38.0	4.8	14.8
3	3.2	9.2	4.4	4.7	4.7	14.6	12.6	8.1	10.8	16.9	19.5	13.2	19.5	22.8	28.6	18.9	10.6	8.7	4.6	4.2	7.0	23.3	8.4	5.3	28.6	3.2	11.8
4	4.7	4.5	4.9	3.8	6.0	6.4	4.8	6.5	8.0	6.4	6.9	7.2	5.1	6.8	7.8	6.2	4.8	5.8	6.1	5.1	5.6	5.4	3.3	5.0	8.0	3.3	5.7
5	6.9	5.6	8.0	26.1	22.9	38.0	38.1	17.4	15.7	27.3	16.9	17.9	15.5	24.3	13.1	8.6	21.7	15.4	5.1	4.9	5.8	4.6	5.3	5.3	38.1	4.6	15.4
6	4.6	4.5	5.1	5.3	4.8	5.9	6.4	5.8	7.1	8.8	10.7	22.8	19.9	26.0	20.9	20.8	19.3	24.4	18.3	14.2	11.5	23.3	22.5	6.3	26.0	4.5	13.3
7	5.6	8.3	5.7	6.4	16.0	30.3	12.2	33.2	20.9	24.6	67.3	19.6	40.1	37.4	29.1	17.8	13.8	14.1	10.3	6.3	3.9	2.6	3.1	11.4	67.3	2.6	18.3
8	11.8	27.0	43.8	29.9	46.6	27.4	6.1	8.6	6.6	8.3	8.6	9.1	12.3	6.9	6.2	6.9	6.2	7.5	4.7	6.1	5.3	4.3	5.4	11.6	46.6	4.3	13.2
9	3.6	4.6	5.4	5.9	7.6	23.1	11.1	8.8	7.3	13.8	15.5	10.4	13.6	14.5	19.3	13.5	42.7	18.3	11.3	25.2	18.9	14.8	33.1	5.7	42.7	3.6	14.5
10	4.6	4.7	7.3	7.8	9.8	13.4	18.8	28.0	31.5	20.6	11.9	26.1	12.2	8.7	13.0	14.0	8.2	6.0	5.5	4.7	4.9	4.4	2.7	3.1	31.5	2.7	11.3
11	4.7	5.1	5.9	4.9	4.8	4.5	5.0	6.7	12.2	11.1	12.5	10.6	11.3	14.9	10.1	15.3	14.0	12.0	7.4	6.2	4.6	3.8	5.7	5.2	15.3	3.8	8.3
12	9.1	22.4	58.0	5.9	5.5	6.5	9.7	11.7	16.2	34.0	34.1	42.4	37.8	22.3	6.3	9.1	6.8	10.3	5.3	4.3	4.3	3.8	4.9	5.5	58.0	3.8	15.7
13	5.6	4.6	8.3	5.4	4.4	5.4	5.9	8.2	7.5	6.9	6.0	5.5	5.0	6.1	6.7	7.6	8.4	7.9	6.4	6.2	7.2	5.9	5.6	4.5	8.4	4.4	6.3
14	10.9	11.9	15.7	11.2	6.6	10.7	9.9	6.4	8.8	11.7	12.3	7.0	10.8	8.6	8.4	6.9	7.0	5.7	6.2	5.7	5.5	6.0	6.1	6.2	15.7	5.5	8.6
15	5.5	7.0	5.7	14.4	7.2	17.9	45.2	14.9	9.1	8.9	13.4	10.2	8.5	10.2	6.9	7.2	7.2	8.9	9.4	5.9	5.0	6.2	5.6	6.1	45.2	5.0	10.3
16	5.4	8.2	6.5	6.3	7.2	31.2	20.6	17.0	20.7	21.1	14.1	15.8	14.3	15.5	9.5	10.2	9.4	9.5	8.2	6.6	4.1	5.2	6.2	3.1	31.2	3.1	11.5
17	4.7	8.7	2.5	4.7	7.3	5.0	4.9	5.0	7.7	12.9	22.8	57.9	44.1	14.7	21.2	14.7	10.6	6.7	6.1	5.1	4.9	4.8	17.1	6.8	57.9	2.5	12.5
18	5.4	3.9	4.2	4.9	4.2	7.1	6.7	11.3	19.6	27.9	23.7	31.0	14.0	19.8	8.6	13.0	8.2	13.0	24.3	47.5	25.8	29.1	22.8	8.7	47.5	3.9	16.0
19	5.6	6.5	6.8	14.1	20.3	38.5	30.6	14.7	26.3	6.5	7.9	14.0	34.0	22.1	13.4	11.2	17.2	8.2	9.0	7.9	5.3	6.6	6.2	20.1	38.5	5.3	14.7
20	40.5	21.8	17.6	26.8	17.2	17.4	17.3	17.9	12.5	10.0	6.7	7.6	11.1	15.1	11.9	9.8	9.1	11.1	6.2	5.6	4.8	4.6	5.8	4.9	40.5	4.6	13.1
21	5.3	4.9	5.5	5.2	5.2	5.3	5.6	5.3	5.4	5.9	5.5	7.1	7.1	7.4	9.0	7.3	8.6	5.7	6.4	6.3	5.4	5.1	6.3	6.1	9.0	4.9	6.1
22	6.9	6.6	6.5	6.8	6.6	5.6	5.4	5.8	5.6	5.7	7.2	6.3	7.6	7.3	8.4	10.2	6.7	7.1	6.6	4.7	4.4	4.7	4.2	4.2	10.2	4.2	6.3
23	4.1	11.5	10.5	10.6	6.1	31.2	10.4	5.4	7.3	10.1	8.0	6.8	8.0	7.4	5.2	5.2	5.2	5.0	5.0	5.0	5.3	4.7	4.5	4.9	31.2	4.1	7.8
24	5.2	5.0	4.9	4.5	4.6	4.4	4.4	5.0	6.6	5.8	7.7	7.8	9.2	7.1	7.0	6.8	8.6	5.8	7.0	5.6	5.3	3.5	4.1	4.9	9.2	3.5	5.9
25	4.7	2.3	2.8	3.2	3.8	2.9	3.0	4.2	3.9	5.8	6.6	10.1	10.0	9.8	6.9	7.3	6.4	4.5	4.8	7.8	10.2	10.4	15.9	14.1	15.9	2.3	6.7
26	12.7	11.0	11.7	25.4	18.6	8.8	36.7	4.2	4.6	7.6	14.3	13.5	28.7	22.4	21.9	8.8	26.3	9.3	5.3	5.2	10.2	7.7	25.7	5.8	36.7	4.2	14.4
27	26.6	27.1	50.2	32.7	29.5	8.1	4.4	6.3	20.3	7.6	13.0	10.6	19.7	13.2	9.9	12.4	10.3	10.9	9.4	9.0	8.2	5.7	18.9	12.4	50.2	4.4	15.7
28	25.7	25.0	9.7	5.4	5.2	4.8	5.1	4.7	5.0	5.5	5.0	6.8	6.4	6.6	6.3	5.8	6.9	7.2	6.9	4.8	4.7	5.3	5.9	5.2	25.7	4.7	7.5
29	5.3	5.1	5.1	6.2	9.6	12.4	8.7	6.9	8.5	9.8	13.7	11.8	11.3	9.1	11.1	12.4	10.9	11.7	9.3	5.5	6.0	9.4	5.5	22.5	22.5	5.1	9.5
30	10.1	10.6	36.9	13.2	11.3	6.2	6.9	9.6	8.8	5.7	4.8	6.5	6.2	6.6	8.3	9.9	8.4	8.1	6.6	8.2	6.9	8.1	6.7	6.2	36.9	4.8	9.2
31	5.5	7.2	10.4	5.4	6.7	5.5	8.9	10.6	6.1	6.1	7.9	7.3	8.3	6.8	8.6	6.8	6.7	5.6	4.7	4.6	5.6	5.4	4.8	4.6	10.6	4.6	6.7
Max.	**40.5**	**27.1**	**58.0**	**32.7**	**46.6**	**38.5**	**45.2**	**33.2**	**31.5**	**34.0**	**67.3**	**57.9**	**44.1**	**37.4**	**29.1**	**20.8**	**42.7**	**24.4**	**24.3**	**47.5**	**38.3**	**29.1**	**33.1**	**22.5**	**67.3**		
Min.	**3.2**	**2.3**	**2.5**	**3.2**	**3.8**	**2.9**	**3.0**	**4.2**	**3.9**	**5.5**	**4.8**	**5.5**	**5.0**	**6.1**	**5.2**	**5.2**	**4.8**	**4.5**	**4.6**	**4.2**	**3.9**	**2.6**	**2.7**	**3.1**		**2.3**	
Avg.	**9.0**	**9.7**	**13.1**	**11.1**	**11.4**	**13.6**	**12.7**	**10.6**	**11.8**	**12.6**	**14.3**	**14.9**	**15.8**	**13.6**	**12.1**	**10.7**	**11.4**	**9.4**	**7.9**	**8.2**	**8.1**	**7.7**	**9.1**	**7.3**			**11.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

August *2007*

Day	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Max.	Min.	Avg.
1	4.1	4.2	4.6	4.3	4.7	5.2	5.2	4.3	4.6	4.7	5.2	6.6	5.2	5.4	5.3	5.3	5.9	4.5	4.8	4.6	4.4	4.5	4.3	4.2	6.6	4.1	4.8
2	4.7	4.8	4.5	4.3	4.7	4.7	4.4	4.6	4.9	4.9	4.8	4.8	4.9	4.9	4.5	5.3	5.3	4.8	4.6	4.6	4.2	4.4	4.6	4.7	5.3	4.2	4.7
3	4.4	4.4	4.1	3.7	3.7	3.8	4.1	4.5	4.8	4.8	5.0	6.1	6.4	5.4	5.1	5.0	5.6	5.6	4.6	4.5	4.5	5.2	4.5	4.5	6.4	3.7	4.8
4	4.7	4.6	5.1	4.8	4.7	4.5	4.6	5.0	4.8	4.8	5.3	5.4	5.6	5.6	5.6	5.3	4.9	5.6	4.8	4.8	5.3	5.4	4.9	4.8	5.6	4.5	5.0
5	4.4	5.1	5.1	6.6	5.2	6.3	4.3	7.2	6.0	6.5	5.5	6.4	6.1	6.6	6.4	7.5	6.6	6.8	5.5	5.1	5.6	5.0	6.7	5.1	7.5	4.3	5.9
6	6.4	3.9	4.3	4.1	5.3	6.9	5.9	5.3	6.6	7.1	9.3	7.8	5.7	7.7	6.2	4.7	6.0	7.8	6.0	5.8	4.6	3.6	3.7	2.6	9.3	2.6	5.7
7	2.6	6.8	3.2	4.6	20.6	9.0	7.0	6.7	5.9	10.2	9.2	9.6	9.1	10.8	8.9	9.9	10.0	7.9	7.5	5.2	4.3	3.9	13.4	8.9	20.6	2.6	8.1
8	6.8	5.7	6.5	5.2	6.2	5.3	5.8	7.5	6.1	8.2	10.2	10.0	12.2	11.5	15.1	12.5	8.0	7.8	6.8	3.4	2.6	6.4	8.6	7.6	15.1	2.6	7.7
9	5.6	3.9	3.5	2.7	2.7	2.0	3.0	5.9	9.6	8.6	9.4	28.6	18.8	28.0	14.3	12.7	11.1	7.4	8.9	5.7	5.4	7.3	8.0	2.4	28.6	2.0	9.0
10	4.7	9.5	8.5	19.6	28.0	45.1	10.2	7.0	45.4	20.9	14.7	15.2	19.9	19.3	23.9	18.7	16.5	12.6	8.8	3.6	3.2	3.9	14.3	5.5	45.4	3.2	15.8
11	8.9	19.9	15.9	5.3	10.4	3.8	7.0	13.7	35.4	19.2	14.3	22.3	18.7	16.3	9.7	21.0	6.8	5.6	4.9	4.7	6.7	8.9	11.9	13.4	35.4	3.8	12.7
12	19.7	15.5	22.8	28.4	16.9	27.7	17.8	17.7	8.2	8.4	13.7	10.5	4.9	18.3	18.8	20.9	11.5	8.4	11.4	5.3	5.1	7.2	49.5	5.4	49.5	4.9	15.6
13	7.1	16.7	9.5	16.0	23.1	10.5	10.9	11.7	14.0	25.3	27.3	18.9	28.3	13.4	14.9	16.9	10.5	15.8	7.2	7.5	5.6	5.6	6.4	5.5	28.3	5.5	13.7
14	5.3	8.0	5.5	6.6	20.4	17.3	53.6	7.3	5.6	5.3	5.6	5.7	7.5	7.9	12.7	15.3	10.3	5.3	13.6	5.9	12.7	3.6	7.1	7.7	53.6	3.6	10.6
15	4.2	3.5	4.1	3.9	4.7	4.5	4.0	4.4	8.9	10.0	7.2	8.8	8.7	12.9	8.0	6.2	6.8	7.2	5.0	6.1	4.6	4.2	3.9	3.9	12.9	3.5	6.1
16	3.7	4.1	4.5	5.0	4.4	4.1	8.8	17.2	16.6	11.6	20.4	66.5	42.9	47.1	33.0	52.7	32.3	8.0	5.5	4.4	3.9	6.5	4.8	24.0	66.5	3.7	18.0
17	17.5	9.0	9.4	5.2	4.1	6.8	34.5	49.2	14.9	13.2	6.2	6.9	7.6	7.6	6.7	7.3	6.4	6.0	5.8	5.2	4.8	4.9	5.6	5.5	49.2	4.1	10.4
18	4.9	5.6	5.5	4.8	4.3	4.6	4.6	4.5	4.4	5.3	5.0	5.2	5.3	5.6	5.3	5.5	5.4	5.1	4.9	5.0	4.9	5.6	5.3	5.3	5.6	4.3	5.1
19	4.9	5.0	5.1	5.1	6.0	5.3	6.2	4.9	4.6	4.9	5.7	6.2	6.0	5.9	5.5	5.4	4.7	5.2	4.9	4.6	5.1	4.4	4.5	4.8	6.2	4.4	5.2
20	5.2	4.8	5.3	5.6	4.6	5.0	4.9	5.9	6.9	5.6	5.8	7.9	7.6	7.0	6.9	6.5	6.2	6.9	5.8	4.9	3.8	4.2	4.4	4.4	7.9	3.8	5.7
21	4.4	4.3	4.1	4.1	4.3	4.3	4.4	4.5	4.5	5.1	4.6	4.6	5.3	4.7	5.0	5.1	4.6	4.8	4.3	4.2	3.9	4.4	5.0	4.7	5.3	3.9	4.6
22	4.9	4.2	4.8	4.8	4.4	4.1	4.2	4.3	4.6	4.7	5.0	4.9	5.1	5.2	5.0	5.1	5.6	4.9	4.5	4.7	4.7	4.6	4.8	4.5	5.6	4.1	4.7
23	4.0	5.0	6.2	11.0	15.0	18.2	9.3	5.9	4.6	7.9	7.8	10.3	10.1	9.8	9.2	8.4	8.6	7.4	3.5	4.0	3.2	3.0	3.3	3.9	18.2	3.0	7.5
24	4.0	3.7	4.2	3.4	7.6	5.0	6.6	5.8	6.3	5.6	5.6	6.5	10.4	17.7	16.5	23.2	23.8	23.6	7.8	7.9	6.6	11.9	5.5	9.9	23.8	3.4	9.5
25	9.0	4.7	19.2	6.9	6.1	8.5	18.2	37.3	14.1	37.9	15.4	15.5	15.6	12.2	12.6	10.8	12.5	7.0	4.9	4.8	8.6	7.0	4.1	6.1	37.9	4.1	12.4
26	8.3	6.7	3.7	3.1	2.5	4.2	4.5	5.5	6.9	8.0	10.9	15.1	14.0	15.8	9.1	10.5	10.5	11.1	7.8	13.3	37.2	10.0	6.8	4.6	37.2	2.5	9.6
27	5.8	7.6	5.3	4.3	23.5	5.9	16.5	45.2	10.6	10.5	7.5	13.1	9.0	8.3	13.2	19.4	11.9	13.6	12.9	26.6	21.2	12.0	4.0	6.5	45.2	4.0	13.1
28	48.2	4.0	5.3	3.6	5.9	3.5	4.1	3.6	7.9	9.5	17.3	37.1	39.9	20.4	56.0	69.6	48.9	18.0	4.8	5.7	6.0	7.5	6.8	5.7	69.6	3.5	18.3
29	3.7	5.8	8.2	6.6	5.9	8.4	5.7	4.6	4.1	4.9	5.1	6.5	6.4	8.0	10.9	9.7	8.3	8.4	6.6	7.4	7.0	10.5	10.3	6.9	10.9	3.7	7.1
30	4.7	6.3	5.4	4.2	5.7	6.1	8.4	3.4	9.0	9.1	13.6	10.8	15.3	14.5	12.3	13.7	11.4	22.0	15.5	32.2	5.2	3.4	4.4	5.8	32.2	3.4	10.1
31	5.8	2.7	3.9	5.3	3.9	4.8	5.5	4.7	7.0	7.7	9.4	12.0	33.4	18.7	18.8	21.8	10.5	22.3	31.2	27.3	5.4	5.4	5.4	5.1	33.4	2.7	11.6
Max.	**48.2**	**19.9**	**22.8**	**28.4**	**28.0**	**45.1**	**53.6**	**49.2**	**45.4**	**37.9**	**27.3**	**66.5**	**42.9**	**47.1**	**56.0**	**69.6**	**48.9**	**23.6**	**31.2**	**32.2**	**37.2**	**12.0**	**49.5**	**24.0**	**69.6**		
Min.	**2.6**	**2.7**	**3.2**	**2.7**	**2.5**	**2.0**	**3.0**	**3.4**	**4.1**	**4.7**	**4.6**	**4.6**	**4.9**	**4.7**	**4.5**	**4.7**	**4.6**	**4.5**	**3.5**	**3.4**	**2.6**	**3.0**	**3.3**	**2.4**		**2.0**	
Avg.	**7.5**	**6.5**	**6.7**	**6.5**	**8.7**	**8.3**	**9.5**	**10.3**	**9.6**	**9.7**	**9.4**	**12.8**	**12.8**	**12.3**	**12.4**	**14.2**	**10.9**	**9.3**	**7.6**	**7.7**	**6.8**	**6.0**	**7.6**	**6.2**			**9.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

September 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2300	Max.	Min.	Avg.
1	35.6	8.5	4.1	8.4	8.7	3.5	4.4	5.7	5.6	5.7	8.6	10.8	11.4	9.4	14.7	17.5	11.2	8.4	6.0	3.6	4.4	4.7	6.2	4.8	35.6	3.5	8.8
2	3.6	4.6	5.3	4.0	2.4	3.4	3.7	6.9	15.5	8.2	10.0	12.0	11.5	11.4	13.5	7.7	7.9	5.4	4.6	4.6	4.2	4.2	4.4	5.3	15.5	2.4	6.8
3	4.4	4.3	4.4	4.7	4.6	5.1	5.4	5.2	4.9	5.0	4.8	4.8	5.0	4.7	4.8	5.2	4.9	4.8	5.0	5.0	5.1	5.4	4.8	4.5	5.4	4.3	4.9
4	4.7	4.9	4.2	4.8	6.8	7.7	9.8	51.5	45.2	6.5	3.9	6.9	10.6	14.7	27.1	21.2	11.5	17.9	7.1	5.7	5.4	7.9	4.9	16.2	51.5	3.9	12.8
5	15.1	41.8	49.6	11.1	16.0	8.7	11.8	11.6	6.0	5.7	5.9	5.4	6.6	7.9	10.1	27.6	40.3	46.5	27.9	6.8	9.0	10.9	7.4	8.3	49.6	5.4	16.6
6	9.7	5.0	7.1	5.9	13.9	18.2	13.3	9.7	17.1	14.4	43.2	23.0					6.9	11.0	10.0	5.7	10.4	12.3	18.6	12.8	43.2	5.0	13.4
7	8.0	6.0	4.3	5.4	5.5	4.6	4.9	5.2	4.5	5.1	4.7	4.8	5.5	5.0	5.6	5.0	5.4	4.7	5.2	4.8	5.0	4.9	4.7	4.9	8.0	4.3	5.2
8	5.1	5.7	5.6	6.0	5.6	6.1	5.1	5.5	6.0	5.4	5.4	5.6	9.1	5.4	9.2	34.1	22.1	19.7	6.2	13.4	8.1	9.6	8.1	6.1	34.1	5.1	9.1
9	4.7	3.4	4.8	5.1	4.9	4.9	5.4	5.5	7.5	7.7	9.3	4.2	5.3	16.2	10.7	9.8	8.0	11.9	7.7	8.2	5.5	16.5	13.4	9.0	16.5	3.4	7.9
10	82.5	31.0	17.0	8.9	31.9	14.4	56.2	33.7	31.2	10.4	79.0	11.9	12.4	8.2	6.4	5.5	6.2	6.3	7.2	5.6	5.2	4.7	4.2	4.4	82.5	4.2	20.2
11	4.8	4.7	4.8	6.0	4.5	4.7	4.8	4.9	5.1	6.1	5.8	5.3	5.2	5.4	5.2	4.8	5.2	5.1	5.3	5.3	4.4	5.1	5.0	4.9	6.1	4.4	5.1
12	4.8	4.8	5.4	8.2	9.9	10.3	13.3	11.2	7.4	6.9	10.0	23.8	24.6	13.7	15.1	12.2	13.6	11.0	8.9	9.2	6.9	8.2	7.2	6.6	24.6	4.8	10.6
13	23.2	8.5	5.5	6.0	7.9	7.0	12.4	11.1	13.0	5.0	9.6	6.8	19.5	12.9	12.5	21.0	11.7	15.0	17.2	23.9	9.6	5.5	24.5	53.4	53.4	5.0	14.3
14	13.2	8.4	8.4	7.9	11.7	17.0	23.4	13.8	6.7	6.4	12.3	49.1	75.2	25.0	18.4	36.3	25.8	27.9	20.4	12.4	4.3	3.9	4.0	3.1	75.2	3.1	18.1
15	4.1	4.7	4.2	3.4	4.2	4.2	8.3	5.7	13.8	11.9	5.4	5.7	5.4	10.5	8.9	13.0	6.4	7.0	6.2	5.4	6.8	13.3	4.2	4.8	13.8	3.4	7.0
16	11.3	8.4	21.3	7.2	18.4	31.1	25.8	16.6	52.9	8.9	8.2	20.2	12.9	13.4	29.4	23.3	14.5	11.8	6.0	7.8	6.2	8.1	5.5	4.8	52.9	4.8	15.6
17	5.1	14.1	6.7	4.7	9.9	14.7	10.5	10.4	10.9	7.7	5.0	7.5	13.8	27.0	21.4	12.3	27.1	20.8	10.1	12.2	13.4	11.0	11.4	5.7	27.1	4.7	12.2
18	6.9	9.3	4.9	6.6	6.0	4.9	5.7	10.6	5.7	4.6	4.7	4.7	4.5	4.4	5.3	7.8	5.4	6.0	4.7	6.6	5.7	5.9	13.2	25.7	25.7	4.4	7.1
19	7.8	10.7	9.6	10.4	6.1	14.1	13.0	11.1	8.7	13.9	9.4	10.7	6.9	6.4	6.5	7.7	6.4	7.6	6.1	6.4	7.0	6.4	6.6	5.6	14.1	5.6	8.6
20	5.8	9.2	6.0	5.9	6.9	4.9	5.7	6.4	6.3	7.0	7.2	7.6	5.5	7.4	6.5	10.7	9.2	8.1	15.7	22.7	51.5	5.8	6.5	5.1	51.5	4.9	9.7
21	10.8	28.2	11.2	24.7	33.6	9.5	14.2	11.7	21.6	5.5	6.4	5.9	8.5	8.2	10.2	12.0	14.1	10.8	5.3	7.6	6.7	16.9	20.4	9.0	33.6	5.3	13.0
22	7.3	5.8	4.3	6.1	6.2	4.6	7.4	7.8	25.1	15.1	24.3	6.6	6.7	7.6	5.9	5.6	5.0	6.8	5.1	5.1	5.6	5.2	4.8	4.9	25.1	4.3	7.9
23	7.2	8.7	9.4	4.9	10.8	7.8	15.5	17.6	11.7	8.9	15.8	10.0	9.0	8.6	8.8	6.1	5.6	6.3	6.5	14.2	9.6	5.9	6.4	13.4	17.6	4.9	9.5
24	16.0	9.2	6.9	13.0	6.4	8.2	6.4	9.8	8.3	13.3	12.3	6.3	8.2	8.0	21.7	15.6	9.4	7.5	14.2	41.9	17.7	14.8	12.2	26.1	41.9	6.3	13.1
25	5.9	4.7	7.8	10.4	24.3	9.4	5.9	5.5	5.9	6.2	6.7	8.5	8.0	8.3	10.1	14.6	11.4	7.9	7.6	8.4	5.2	6.1	5.0	5.1	24.3	4.7	8.3
26	6.0	5.9	8.1	6.5	6.3	8.8	8.9	9.6	9.6	42.8	31.0	14.7	13.3	10.0	15.8	26.8	38.5	11.2	7.7	13.8	9.1	7.9	16.8	18.0	42.8	5.9	14.5
27	49.1	47.7	14.2	23.1	18.7	12.4	11.1	14.6	16.1	12.5	24.8	41.5	14.5	13.2	15.7	11.6	10.8	5.5	4.7	6.3	5.4	5.0	5.5	6.1	49.1	4.7	16.3
28	5.3	5.2	5.7	4.8	5.4	4.9	6.3	4.6	4.6	6.6	6.9	6.5	6.2	5.5	7.0	7.7	26.7	16.3	9.3	12.7	13.4	9.7	14.5	23.7	26.7	4.6	9.2
29	9.7	12.4	9.8	10.6	11.0	10.8	5.3	3.7	19.0	10.0	10.4	54.0	33.2	36.6	9.0	9.5	7.6	12.5	11.2	14.0	27.5	5.2	7.9	5.7	54.0	3.7	14.4
30	6.5	6.8	7.1	19.8	8.9	10.0	4.8	14.1	4.9	6.2	9.1	23.8	6.5	7.1	9.5	16.3	14.4	11.2	9.5	13.5	31.8	49.7	8.6	5.0	49.7	4.8	12.7
Max.	**82.5**	**47.7**	**49.6**	**24.7**	**33.6**	**31.1**	**56.2**	**51.5**	**52.9**	**42.8**	**79.0**	**54.0**	**75.2**	**36.6**	**29.4**	**36.3**	**40.3**	**46.5**	**27.9**	**41.9**	**51.5**	**49.7**	**24.5**	**53.4**	**82.5**		
Min.	**3.6**	**3.4**	**4.1**	**3.4**	**2.4**	**3.4**	**3.7**	**3.7**	**4.5**	**4.6**	**3.9**	**4.2**	**4.5**	**4.4**	**4.8**	**4.8**	**4.9**	**4.7**	**4.6**	**3.6**	**4.2**	**3.9**	**4.0**	**3.1**		**2.4**	
Avg.	**12.8**	**11.1**	**8.9**	**8.5**	**10.6**	**9.2**	**11.0**	**11.4**	**13.4**	**9.3**	**13.3**	**13.6**	**12.6**	**11.1**	**11.9**	**14.1**	**13.1**	**11.8**	**9.0**	**10.4**	**10.3**	**9.4**	**8.9**	**10.4**			**11.1**

Total Hours in Month 720 **Hours Data Available** 716 **Data Recovery** 99.4%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

October 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.9	5.3	5.4	6.7	10.9	9.1	28.0	27.0	16.2	50.0	24.9	37.1	25.7	28.5	9.5	10.8	8.5	7.8	5.9	5.4	6.9	12.1	5.2	5.4	50.0	5.2	14.9
2	5.3	6.6	7.1	5.7	6.6	5.6	5.0	5.0	5.1	4.5	6.3	7.7	8.1	6.3	6.8	7.1	7.8	7.7	6.6	6.5	5.3	5.7	4.2	3.9	8.1	3.9	6.1
3	4.6	5.1	6.2	7.8	5.8	4.2	4.4	4.2	4.2	4.6	6.3	5.2	6.4	6.9	9.1	8.4	14.4	43.0	8.6	5.5	13.4	9.6	33.6	53.6	53.6	4.2	11.5
4	18.6	22.8	13.6	37.3	23.4	10.3	5.9	5.5	8.3	12.5	6.9	9.7	5.0	4.8	5.4	4.8	4.5	5.0	7.4	6.7	5.2	5.5	5.1	5.6	37.3	4.5	10.0
5	9.0	10.8	5.8	5.5	4.9	6.5	7.1	6.0	6.3	5.8	4.7	5.0	47.7	19.0	6.8	7.4	5.8	6.9	7.7	8.2	7.5	4.2	5.7	4.9	47.7	4.2	8.7
6	5.7	4.1	4.2	6.4	4.5	4.2	5.1	5.2	5.9	6.4	5.3	4.5	4.7	5.0	5.9	4.3	5.5	5.5	5.2	4.4	3.7	4.3	8.2	5.2	8.2	3.7	5.1
7	5.0	5.4	5.6	5.7	5.9	7.2	4.7	4.6	4.5	4.6	4.6	4.6	7.5	5.5	8.0	5.9	8.8	11.6	8.0	7.4	6.1	12.5	15.9	15.0	15.9	4.5	7.3
8	5.4	10.5	7.6	5.5	11.6	5.9	4.6	6.3	5.2	7.3	23.7	19.7	12.0	11.3	11.9	9.5	8.6	7.8	7.9	6.8	5.2	16.6	17.3	13.0	23.7	4.6	10.0
9	9.3	12.3	9.2	7.0	7.6	7.3	6.6	5.5	4.9	4.3	5.3	6.5	39.5	29.9	58.2	41.9	16.5	10.6	9.4	7.8	7.2	12.3	5.1	11.0	58.2	4.3	14.0
10	4.9	3.5	3.7	8.7	11.0	6.1	5.4	10.0	5.1	10.6	4.1	5.8	14.6	11.6	10.2	10.3	12.4	18.5	9.6	6.6	13.2	17.7	8.1	8.0	18.5	3.5	9.1
11	8.2	4.6	6.5	8.0	6.5	8.5	8.0	8.0	12.4	13.9	29.9	8.3	5.4	6.2	7.3	6.4	5.5	4.4	4.1	4.1	4.0	4.2	4.2	5.2	29.9	4.0	7.7
12	4.8	4.5	4.7	3.9	5.2	6.3	5.6	19.2	20.7	5.6	10.5	33.9	43.0	49.9	30.0	24.7	13.7	13.7	8.8	8.6	7.7	6.1	5.1	5.6	49.9	3.9	14.2
13	4.2	10.7	7.5	9.3	9.9	7.4	6.0	6.4	5.3	4.9	5.9	6.2	5.1	8.8	9.0	37.7	15.2	10.2	7.9	8.0	7.9	8.0	4.6	6.9	37.7	4.2	8.9
14	5.2	7.3	14.4	8.0	10.2	10.3	10.6	8.3	8.4	13.2	17.1	6.5	9.5	9.5	15.2	13.2	10.6	6.8	5.3	10.6	9.6	3.3	5.6	5.9	17.1	3.3	9.4
15	10.2	10.9	7.2	6.0	6.0	6.1	13.7	5.8	17.5	21.0	26.1	30.5	38.1	7.7	28.4	11.1	6.2	12.6	6.8	5.2	4.4	4.4	7.1	7.6	38.1	4.4	12.5
16	6.0	4.4	4.2	6.5	6.0	5.9	25.7	5.0	6.0	13.5	14.8	13.2	6.7	4.8	9.6	12.1	6.9	6.3	9.5	10.2	10.8	6.3	5.0	7.2	25.7	4.2	8.6
17	5.8	5.3	6.3	9.3	10.0	5.1	4.2	4.2	3.3	3.7	4.3	4.2	5.8	5.3	5.8	14.7	10.6	4.7	4.3	10.6	7.2	3.2	3.6	3.9	14.7	3.2	6.1
18	4.9	4.1	5.9	4.9	4.0	6.8	6.0	6.2	7.4	6.6	10.6	9.2	24.7	35.3	8.5	24.6	30.5	21.6	20.8	12.4	7.0	7.1	10.9	22.6	35.3	4.0	12.6
19	12.9	7.4	13.0	11.0	9.6	5.2	7.5	6.2	8.1	3.7	43.7	9.4	28.7	26.3	74.6	79.2	26.1	72.2	7.6	4.2	8.2	11.7	11.1	9.3	79.2	3.7	20.7
20	16.0	15.8	6.2	11.7	6.9	5.5	6.1	6.4	6.8	12.9	20.2	9.0	6.8	4.4	4.8	3.4	5.1	4.0	6.1	5.2	5.3	7.7	7.3	7.1	20.2	3.4	7.9
21	7.5	5.4	5.3	5.2	4.8	7.0	6.7	4.4	4.1	4.8	6.2	14.3	8.8	8.5	4.6	4.8	4.8	20.2	10.4	12.0	17.2	8.3	6.2	9.5	20.2	4.1	8.0
22	9.0	14.5	9.0	6.5	5.5	4.7	6.2	4.8	6.2	5.0	6.9	5.2	15.3	44.3	21.8	16.2	10.9	6.3	16.6	40.2	19.2	35.7	52.6	16.4	52.6	4.7	15.8
23	9.8	18.6	59.6	72.3	32.4	20.3	73.1	27.2	34.1	5.7	19.9	27.5	16.5	16.4	11.9	8.4	23.2	13.4	7.9	9.0	26.2	21.2	16.3	26.3	73.1	5.7	24.9
24	31.4	13.8	68.0	13.9	16.6	42.9	50.6	57.7	24.5	8.2	11.2	8.2	17.5	29.7	21.2	9.1	8.4	6.4	3.9	3.5	6.2	4.9	7.3	4.8	68.0	3.5	19.6
25	4.0	4.7	4.4	4.5	4.5	4.3	4.1	5.3	4.7	4.6	4.4	4.7	4.5	4.5	4.8	4.8	4.4	4.7	5.0	5.5	14.7	5.9	22.8	22.7	22.8	4.0	6.6
26	7.3	5.0	4.6	9.9	5.6	5.5	9.7	15.4	10.1	6.7	7.4	10.8	5.1	6.7	6.8	6.0	7.9	5.1	5.0	4.9	4.6	4.9	6.0	4.9	15.4	4.6	6.9
27	4.3	4.1	4.5	4.8	4.2	4.8	6.7	5.5	12.6	5.6	5.0	17.5	7.0	9.3	5.6	6.4	6.9	4.5	4.8	5.9	7.5	12.2	26.4	34.9	34.9	4.1	8.8
28	35.8	3.9	3.5	9.4	49.1	62.0	29.0	18.3	25.9	8.5	9.8	12.2	14.6	14.6	12.2	9.1	7.3	7.5	8.2	6.8	5.0	4.7	5.0	4.6	62.0	3.5	15.3
29	4.4	4.7	4.5	4.3	5.1	5.3	5.4	5.0	5.0	4.9	5.3	5.8	6.3	6.2	5.5	5.4	5.3	5.8	5.4	5.4	5.2	5.1	4.9	5.7	6.3	4.3	5.2
30	13.0	6.8	6.2	4.3	3.9	4.2	5.8	6.1	7.6	14.5	15.6	5.8	52.3	6.4	8.2	11.1	12.2	8.0	7.6	5.2	5.7	9.1	7.5	6.9	52.3	3.9	9.7
31	7.3	6.2	6.2	5.2	5.1	4.9	7.0	6.2	6.8	5.5	6.1	5.7	5.3	6.5	6.6	6.9	8.2	15.4	9.5	5.6	5.0	4.9	7.4	6.6	15.4	4.9	6.7
Max.	**35.8**	**22.8**	**68.0**	**72.3**	**49.1**	**62.0**	**73.1**	**57.7**	**34.1**	**50.0**	**43.7**	**37.1**	**52.3**	**49.9**	**74.6**	**79.2**	**30.5**	**72.2**	**20.8**	**40.2**	**26.2**	**35.7**	**52.6**	**53.6**	**79.2**		
Min.	**4.0**	**3.5**	**3.5**	**3.9**	**3.9**	**4.2**	**4.1**	**4.2**	**3.3**	**3.7**	**4.1**	**4.2**	**4.5**	**4.4**	**4.6**	**3.4**	**4.4**	**4.0**	**3.9**	**3.5**	**3.7**	**3.2**	**3.6**	**3.9**		**3.2**	
Avg.	**9.2**	**8.0**	**10.3**	**10.2**	**9.8**	**9.7**	**12.1**	**10.0**	**9.8**	**9.2**	**12.0**	**11.4**	**16.1**	**14.2**	**14.0**	**13.7**	**10.4**	**12.2**	**7.8**	**8.0**	**8.5**	**9.0**	**10.8**	**11.3**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

November 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	10.2	7.1	6.4	9.9	16.3	5.6	12.5	12.3	7.4	5.9	8.7	9.2	7.5	51.6	48.0	27.7	6.4	12.2	9.7	5.3	7.5	7.5	6.4	51.6	4.5	12.7
2	9.5	10.6	46.5	35.6	34.3	36.2	11.4	25.1	6.4	6.9	5.5	6.4	6.3	5.2	18.0	11.4	32.0	17.0	16.0	6.8	7.9	7.8	5.5	5.9	46.5	5.2	15.6
3	5.3	4.6	7.4	5.6	3.7	3.6	4.3	22.5	21.1	13.7	31.3	28.7	39.8	46.0	36.6	11.6	24.9	44.5	6.0	7.4	5.1	4.1	5.4	4.0	46.0	3.6	16.1
4	4.2	4.6	3.8	3.7	3.8	4.3	3.5	4.7	4.4	4.3	4.0	4.6	5.0	4.8	4.4	4.6	4.6	4.3	4.2	9.1	7.4	4.3	4.8	4.8	9.1	3.5	4.7
5	3.8	3.7	4.2	4.1	5.7	6.7	3.3	3.7	3.9	3.9	4.3	4.7	6.4	6.5	4.6	4.9	8.0	4.3	4.1	3.8	3.7	3.8	4.2	3.6	8.0	3.3	4.6
6	4.3	4.4	4.0	5.8	4.3	6.6	6.1	5.2	5.3	5.0	5.2	4.8	4.7	6.5	5.2	5.1	5.5	5.3	6.7	5.8	5.1	4.7	16.8	8.4	16.8	4.0	5.9
7	5.4	5.6	4.1	4.9	4.7	4.0	4.3	6.2	5.6	5.4	4.2	4.5	4.8	6.8	12.2	10.9	4.8	11.0	12.3	6.0	6.6	8.4	7.0	17.1	17.1	4.0	6.9
8	8.7	12.9	6.8	9.0	4.5	5.5	4.6	4.9	5.0	4.5	4.5	4.7	6.3	5.0	4.8	5.0	4.3	4.5	6.8	4.6	5.3	4.8	4.5	5.4	12.9	4.3	5.7
9	5.2	5.9	5.0	4.7	4.6	4.6	5.1	4.0	4.8	5.9	4.7	4.5	4.3	4.5	4.3	4.1	3.9	5.2	5.6	5.9	4.6	6.0	26.8	18.3	26.8	3.9	6.3
10	5.9	7.5	6.0	4.8	5.3	18.4	5.9	4.1	3.8	17.3	10.2	5.1	6.3	7.6	12.5	12.1	11.9	7.7	8.8	9.8	6.0	4.3	7.6	3.7	18.4	3.7	8.0
11	4.6	4.8	6.0	8.9	6.9	4.3	4.6	5.5	5.6	6.6	13.5	8.0	5.1	5.2	6.0	4.7	4.0	4.8	7.9	6.7	9.6	6.4	9.5	27.8	27.8	4.0	7.4
12	6.3	4.9	28.7	45.5	8.6	71.3	57.6	68.9	21.8	32.2	28.3	20.6	16.9	5.7	6.3	23.1	19.1	7.2	5.8	5.2	3.5	3.6	4.0	4.0	71.3	3.5	20.8
13	3.9	3.8	3.8	4.1	4.4	4.4	4.2	4.3	5.0	5.5	5.9	7.0	6.8	33.1	53.2	29.5	22.6	29.9	4.3	4.2	6.0	5.0	6.6	7.2	53.2	3.8	11.0
14	6.4	5.0	5.9	7.1	9.5	13.7	5.1	10.4	22.9	16.3	35.1	23.9	4.1	4.0	4.1	5.2	4.3	4.0	4.0	4.5	13.9	18.2	4.8	5.1	35.1	4.0	9.9
15	7.0	6.3	4.7	6.2	4.1	3.1	3.4	3.7	3.7	3.6	3.7	4.7	4.2	5.6	5.7	4.4	5.2	5.0	12.5	8.1	6.2	6.2	5.8	4.6	12.5	3.1	5.3
16	16.8	23.5	21.8	22.4	20.9	24.2	16.2	19.4	22.5	22.8	23.1	17.4	17.3	20.0	20.9	25.9	19.5	11.6	16.5	16.0	20.1	17.7	21.3	21.9	25.9	11.6	20.0
17	21.7	11.6	19.1	20.0	11.0	5.6	12.3	5.0	16.1	11.9	18.5	17.0	18.5	19.0	20.7	19.6	10.5	6.3	16.1	15.8	13.4	16.8	15.4	46.0	46.0	5.0	16.2
18	10.1	13.3	25.8	11.5	7.8	12.3	11.4	7.2	9.0	5.3	7.0	7.0	6.5	5.3	7.0	9.9	5.2	6.6	8.8	16.6	26.6	6.0	4.8	3.9	26.6	3.9	9.8
19	7.8	5.4	6.5	5.1	29.2	61.1	17.7	30.7	23.4	7.6	21.2	17.3	4.9	5.3	4.2	4.4	4.8	6.4	4.3	4.8	5.7	5.2	4.5	4.2	61.1	4.2	12.2
20	4.4	4.2	4.2	5.0	4.6	6.0	4.5	4.6	4.4	4.7	4.8	5.3	4.9	4.5	5.0	5.7	6.7	5.1	10.1	5.3	11.7	8.8	7.5	10.1	11.7	4.2	5.9
21	5.9	5.9	4.2	5.8	13.0	6.1	11.1	5.6	4.9	8.1	4.6	5.6	4.4	4.2	5.2	8.4	5.7	6.5	4.4	4.3	4.5	4.2	4.5	5.0	13.0	4.2	5.9
22	5.1	6.6	14.2	6.4	14.6	6.4	7.1	7.3	12.7	6.3	6.2	5.2	5.1	5.7	5.4	6.0	6.6	6.1	6.5	8.6	4.5	4.7	17.8	8.5	17.8	4.5	7.7
23	4.7	6.7	7.0	7.1	12.8	6.5	8.2	6.3	6.2	7.5	11.2	8.1	6.9	5.9	7.8	7.0	15.1	5.5	12.7	8.6	4.7	6.7	5.9	10.0	15.1	4.7	7.9
24	7.6	6.1	9.1	12.9		7.6	19.4	13.9	7.5	6.9	6.4	4.3	5.4	5.4	4.5	4.2	4.2	4.6	4.0	5.0	8.4	5.0	4.9	4.8	19.4	4.0	7.1
25	4.4	4.3	5.1	4.3	4.7	7.3	5.3	7.9	11.5	7.2	5.9	4.7	6.2	6.0	6.5	5.7	5.0	5.2	7.8	7.6	11.5	9.4	7.7	5.8	11.5	4.3	6.5
26	3.6	3.4	4.1	7.9	11.2	11.6	9.1	19.0	30.5	8.1	26.8	6.5	8.4	14.3	15.2	11.4	16.6	12.0	6.8	6.2	7.7	10.6	6.0	4.3	30.5	3.4	10.9
27	5.2	5.4	4.3	4.7	4.4	5.1	3.9	4.2	4.1	4.4	5.5	5.6	6.8	5.0	5.7	5.7	4.9	5.3	8.6	5.3	4.6	5.3	6.7	6.2	8.6	3.9	5.3
28	5.0	4.5	5.1	5.5	7.2	18.7	24.1	36.3	43.1	17.7	9.4	4.5	7.3	6.2	4.1	5.2	4.3	5.5	5.3	4.9	4.1	4.7	5.9	4.9	43.1	4.1	10.1
29	5.0	4.2	3.6	4.4	3.7	5.0	4.2	4.0	4.1	3.9	3.9	4.9	4.4	4.0	5.0	4.6	5.1	4.6	4.6	4.4	5.5	4.4	4.5	4.0	5.5	3.6	4.4
30	4.5	5.3	4.6	4.8	5.2	5.6	4.8	4.9	4.7	5.1	4.8	5.0	4.3	4.3	4.9	4.5	5.4	4.7	7.1	5.6	4.7	5.2	4.8	6.1	7.1	4.3	5.0
Max.	**21.7**	**23.5**	**46.5**	**45.5**	**34.3**	**71.3**	**57.6**	**68.9**	**43.1**	**32.2**	**35.1**	**28.7**	**39.8**	**46.0**	**53.2**	**48.0**	**32.0**	**44.5**	**16.5**	**16.6**	**26.6**	**18.2**	**26.8**	**46.0**	**71.3**		
Min.	**3.6**	**3.4**	**3.6**	**3.7**	**3.7**	**3.1**	**3.3**	**3.7**	**3.7**	**3.6**	**3.7**	**4.3**	**4.1**	**4.0**	**4.1**	**4.1**	**3.9**	**4.0**	**4.0**	**3.8**	**3.5**	**3.6**	**4.0**	**3.6**		**3.1**	
Avg.	**6.5**	**6.8**	**9.4**	**9.5**	**9.1**	**13.1**	**9.6**	**12.1**	**11.2**	**8.9**	**10.9**	**8.7**	**8.0**	**9.0**	**11.7**	**10.4**	**10.1**	**8.6**	**8.0**	**7.2**	**7.8**	**7.0**	**8.1**	**9.1**			**9.2**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 4 Meteorological Station - Wind Sigma (RMYoung)

December 2007

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.6	5.1	8.2	5.8	4.5	5.6	30.5	53.5	43.3	9.0	5.9	11.7	7.3	14.7	5.7	6.9	9.6	56.9	82.7	64.6	24.0	33.6	37.7	3.8	82.7	3.8	22.3
2	6.0	12.2	9.4	6.4	7.2	5.7	7.3	5.1	7.5	5.0	5.2	7.4	15.8	7.4	45.3	19.3	52.8	18.5	6.8	10.9	20.6	7.1	5.6	14.5	52.8	5.0	12.9
3	8.4	9.1	5.3	5.4	4.9	4.9	5.2	4.3	4.5	5.8	5.0	5.9	6.7	6.5	6.7	4.8	8.6	5.8	5.4	4.0	4.0	3.8	3.9	4.5	9.1	3.8	5.6
4	5.2	3.6	3.2	3.5	5.8	6.2	18.6	24.7	8.1	5.4	3.6	4.1	4.5	15.4	6.4	5.1	4.4	4.0	3.8	4.5	3.8	4.4	3.9	3.9	24.7	3.2	6.5
5	4.0	4.5	4.0	3.8	4.4	4.5	4.1	3.9	5.3	6.3	5.1	3.8	4.0	4.4	4.4	4.3	4.3	4.1	4.4	4.8	5.4	4.2	4.7	4.5	6.3	3.8	4.5
6	4.5	4.5	4.2	4.4	5.5	4.9	4.3	4.2	4.4	4.4	4.7	4.0	3.9	4.1	3.9	4.0	6.3	49.7	28.4	11.3	11.1	15.1	5.7	8.1	49.7	3.9	8.6
7	8.4	14.2	10.0	5.0	9.9	9.8	4.3	6.4	4.6	5.1	5.7	7.5	6.0	4.4	4.0	3.7	3.9	4.0	4.6	5.6	5.2	4.3	4.2	4.0	14.2	3.7	6.0
8	4.7	5.9	14.4	8.8	1.7	0.3	0.0	7.1	6.7	8.1	7.0	5.2	11.2	7.6	5.7	6.8	33.5	10.0	5.9	6.6	9.1	11.1	7.7	9.9	33.5	0.0	8.1
9	6.6	59.3	25.4	10.2	10.0	5.0	4.5	4.0	3.9	4.7	5.2	5.9	3.6	3.9	3.3	3.6	3.5	3.7	4.1	4.0	5.0	4.0	4.3	4.6	59.3	3.3	8.0
10	4.9	5.2	7.4	5.5	6.4	10.9	6.3	5.9	6.8	6.4	4.1	7.3	6.0	9.0	6.9	4.7	6.1	7.6	5.4	5.6	10.2	16.3	10.4	3.3	16.3	3.3	7.0
11	3.8	4.0	5.8	4.7	9.3	14.0	30.5	14.3	17.4	24.6	6.1	15.9	28.4	36.8	12.7	16.6	5.8	6.2	68.3	85.0	27.3	7.1	6.2	5.6	85.0	3.8	19.0
12	11.5	18.1	12.5	7.2	14.3	18.2	21.2	16.6	14.1	11.2	12.7	8.9	9.7	5.6	8.6	16.6	10.3	6.2	7.9	11.0	11.0	10.8	5.8	6.7	21.2	5.6	11.5
13	7.3	10.5	7.3	14.4	8.4	8.1	6.5	8.2	7.2	6.0	5.1	5.4	5.0	4.7	3.3	3.9	3.6	3.7	4.2	7.9	3.9	4.8	4.2	4.3	14.4	3.3	6.2
14	6.0	3.4	3.2	4.2	3.7	4.2	4.8	7.2	6.7	4.5	8.2	8.6	9.8	15.2	12.0	10.2	10.2	11.3	8.8	4.5	13.7	7.1	16.6	14.7	16.6	3.2	8.3
15	7.5	16.1	16.8	10.9	4.5	3.8	3.6	5.0	3.8	6.4	4.7	5.0	3.9	4.2	3.2	4.1	3.2	4.1	4.0	3.3	3.6	2.8	2.8	4.7	16.8	2.8	5.5
16	4.9	3.3	3.3	4.3	3.2	3.2	12.2	6.2	5.0	6.4	8.6	10.8	4.5	6.3	6.3	11.6	7.8	20.0	16.7	19.2	19.3	11.6	13.9	21.7	21.7	3.2	9.6
17	6.9	16.6	18.8	23.5	23.5	21.8	20.6	5.7	7.8	8.0	16.9	12.3	9.0	21.9	21.3	18.8	16.1	18.0	9.3	11.2	11.5	10.6	6.4	5.8	23.5	5.7	14.3
18	6.1	9.5	4.2	4.2	3.9	3.3	5.6	4.3	4.2	4.5	5.3	4.1	5.3	4.3	4.4	6.4	8.0	8.3	3.9	4.2	5.7	6.2	7.2	6.5	9.5	3.3	5.4
19	10.7	12.9	15.5	13.9	15.0	6.7	7.9	16.8	12.3	11.6	9.6	5.8	5.1	7.4	14.5	16.5	17.9	10.8	6.0	18.2	11.3	11.2	7.2	8.6	18.2	5.1	11.4
20	5.1	7.7	7.3	7.6	6.4	16.0	18.2	4.5	3.9	3.8	4.3	3.7	3.5	3.1	3.4	3.1	4.5	5.6	6.0	4.9	3.2	3.5	6.2	7.3	18.2	3.1	5.9
21	3.7	3.6	3.5	3.5	3.2	3.8	17.1	4.9	6.3	8.7	4.7	7.7	11.6	3.8	6.0	4.5	6.4	4.6	4.1	3.4	3.3	5.6	3.0	8.0	17.1	3.0	5.6
22	3.5	4.3	3.7	4.9	3.9	3.2	3.7	3.4	4.0	3.8	4.2	3.8	3.3	3.8	4.4	3.7	3.4	3.7	3.1	3.6	19.1	26.4	9.7	8.9	26.4	3.1	5.8
23	5.2	10.3	5.1	6.5	10.2	4.8	6.2	6.2	27.6	17.9	13.5	16.0	22.2	5.5	7.5	7.7	6.8	21.1	10.3	82.6	20.5	51.7	47.0	21.5	82.6	4.8	18.1
24	8.2	7.3	7.2	6.7	4.2	5.5	7.9	5.8	5.9	11.0	12.9	18.2	20.6	21.1	19.9	22.7	25.2	20.1	3.0	3.3	5.2	5.1	2.8	3.0	25.2	2.8	10.5
25	2.8	3.1	2.6	3.3	3.9	3.8	3.2	3.8	3.0	7.2	11.8	4.6	3.2	5.1	5.0	4.6	4.4	18.0	4.7	19.0	8.5	15.3	7.9	3.6	19.0	2.6	6.3
26	20.8	7.1	5.2	5.4	9.3	71.1	24.2	33.7	35.3	10.2	16.1	6.2	6.1	4.7	5.8	5.9	5.1	6.6	4.5	5.1	4.0	4.9	4.9	4.3	71.1	4.0	12.8
27	4.2	4.1	4.5	4.5	5.0	4.5	4.6	4.1	4.6	4.2	3.8	4.4	4.0	3.9	3.9	7.4	5.1	5.3	8.0	10.3	8.2	14.6	7.9	6.1	14.6	3.8	5.7
28	4.2	10.9	6.8	4.2	14.2	16.5	7.9	6.5	20.4	7.3	11.6	7.6	15.7	10.6	7.5	6.4	4.2	11.3	6.0	4.2	14.5	17.5	17.3	11.1	20.4	4.2	10.2
29	17.6	12.4	10.0	12.8	28.8	11.7	16.1	14.1	10.1	9.0	9.7	8.8	19.7	16.8	8.9	9.9	12.8	5.1	3.3	3.8	3.7	17.8	6.5	4.0	28.8	3.3	11.4
30	2.6	7.0	2.8	3.7	2.8	11.2	8.7	7.8	8.0	3.0	3.9	6.7	11.4	4.1	6.0	6.9	4.0	6.8	4.6	3.7	4.2	2.9	3.3	3.4	11.4	2.6	5.4
31	4.9	5.7	8.6	6.0	7.4	4.9	5.3	3.7	3.7	3.2	3.7	3.6	5.2	3.5	6.4	4.1	4.8	5.0	4.8	3.7	3.6	3.7	4.7	2.9	8.6	2.9	4.7
Max.	**20.8**	**59.3**	**25.4**	**23.5**	**28.8**	**71.1**	**30.5**	**53.5**	**43.3**	**24.6**	**16.9**	**18.2**	**28.4**	**36.8**	**45.3**	**22.7**	**52.8**	**56.9**	**82.7**	**85.0**	**27.3**	**51.7**	**47.0**	**21.7**	**85.0**		
Min.	**2.6**	**3.1**	**2.6**	**3.3**	**1.7**	**0.3**	**0.0**	**3.4**	**3.0**	**3.0**	**3.6**	**3.6**	**3.2**	**3.1**	**3.2**	**3.1**	**3.2**	**3.7**	**3.0**	**3.3**	**3.2**	**2.8**	**2.8**	**2.9**		**0.0**	
Avg.	**6.6**	**9.7**	**7.9**	**6.9**	**7.9**	**9.6**	**10.4**	**9.7**	**9.9**	**7.5**	**7.4**	**7.5**	**8.9**	**8.7**	**8.5**	**8.2**	**9.8**	**11.8**	**11.1**	**14.0**	**9.8**	**11.1**	**9.0**	**7.2**			**9.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Daily Cumulative Precipitation (mm)

January 2007- December 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.2	1.8	6.8	0.0
2	0.0	0.2	0.0	0.0	0.8	0.0	0.0	3.8	0.0	0.4	0.2	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.8	15.0	0.0	0.6	0.0
4	0.0	0.0	0.0	0.4	0.0	6.8	13.2	10.0	0.6	21.6	21.8	0.0
5	0.0	0.0	0.0	0.6	0.0	1.2	0.6	6.8	6.2	39.0	2.2	11.0
6	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	6.0	0.0	5.6	3.6
7	0.0	0.0	0.0	5.8	0.0	0.0	1.2	0.0	21.4	0.0	0.0	0.6
8	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	40.6	0.0	8.8	1.4
9	0.0	0.0	0.0	3.2	5.4	0.8	0.2	0.0	12.8	0.0	0.0	5.6
10	0.0	0.4	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	6.4	4.4	0.0	0.2	0.0	0.0	0.0	0.0	11.4	0.0	0.0	0.2
12	0.8	0.0	0.0	0.6	0.0	0.2	4.2	0.8	23.6	0.0	0.8	0.0
13	0.0	0.0	0.0	0.0	1.8	4.6	10.0	0.0	17.2	0.0	13.6	1.2
14	0.0	0.0	0.0	0.0	0.4	1.8	0.2	5.6	0.4	0.0	15.4	0.0
15	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.0
16	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2	0.2
17	0.0	0.0	0.0	0.6	1.0	7.6	0.0	0.0	2.0	0.0	0.0	0.0
18	1.0	0.0	0.0	4.2	0.0	0.4	0.8	6.0	42.8	15.2	0.0	0.0
19	0.2	0.0	0.0	6.8	0.0	0.0	0.0	1.6	15.2	2.6	4.8	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	13.2	1.8	10.6	10.8
21	0.0	0.0	0.4	0.2	0.0	0.0	0.2	4.2	0.0	0.4	0.2	4.8
22	1.0	0.0	0.0	0.2	0.2	8.4	4.8	9.8	11.2	0.0	36.8	1.8
23	0.0	0.0	0.0	0.0	0.0	24.4	12.4	1.8	7.8	0.0	0.0	0.2
24	0.0	0.0	0.0	0.0	1.4	1.6	4.0	2.0	12.8	13.6	0.0	0.2
25	3.8	0.0	0.4	0.4	4.6	0.0	0.0	0.2	3.4	5.2	8.4	0.0
26	0.0	0.0	0.4	3.0	0.6	0.0	0.0	0.2	2.0	0.2	0.0	0.0
27	2.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.2	4.2
28	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	23.2	0.0	0.0	0.2
29	10.2		1.2	0.0	0.0	0.0	0.0	0.0	3.4	2.4	0.2	0.0
30	5.4		0.2	0.0	0.0	0.2	0.2	0.0	17.4	4.0	0.2	0.0
31	0.0		1.4		0.0		0.0	0.0		4.4		0.0
Total	34.6	5.2	5.6	30.8	16.4	59.0	59.2	59.6	310.2	112.8	137.8	46.0

PLP Pebble 4 Meteorological Station - Daily Total Pan Evaporation (mm)

January 2007- December 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	2.4	2.5	1.9	0.4	0.0	-	-
2	-	-	-	-	-	1.9	4.3	0.0	1.7	0.3	-	-
3	-	-	-	-	2.1	3.7	0.0	0.0	0.0	0.6	-	-
4	-	-	-	-	3.0	0.0	0.0	0.0	0.8	0.0	-	-
5	-	-	-	-	2.2	0.4	0.1	0.0	0.0	0.0	-	-
6	-	-	-	-	3.9	4.0	0.0	5.6	0.0	-	-	-
7	-	-	-	-	1.2	6.4	1.3	5.3	0.0	-	-	-
8	-	-	-	-	0.0	0.0	0.0	4.2	0.0	-	-	-
9	-	-	-	-	0.0	0.0	2.6	2.6	0.0	-	-	-
10	-	-	-	-	0.0	5.1	3.3	5.3	2.4	-	-	-
11	-	-	-	-	4.5	4.0	6.1	2.9	0.0	-	-	-
12	-	-	-	-	4.1	0.0	0.0	1.4	0.0	-	-	-
13	-	-	-	-	0.0	0.0	0.0	3.2	0.0	-	-	-
14	-	-	-	-	0.4	0.0	0.9	0.0	0.0	-	-	-
15	-	-	-	-	2.9	8.8	2.7	0.0	2.4	-	-	-
16	-	-	-	-	2.0	4.9	4.6	0.6	1.5	-	-	-
17	-	-	-	-	2.1	0.0	3.9	4.0	0.0	-	-	-
18	-	-	-	-	2.9	1.0	0.0	0.0	0.0	-	-	-
19	-	-	-	-	3.5	11.1	0.9	0.0	0.0	-	-	-
20	-	-	-	-	3.1	12.0	5.7	0.0	0.0	-	-	-
21	-	-	-	-	6.2	5.3	1.4	0.0	0.6	-	-	-
22	-	-	-	-	2.2	0.0	0.0	0.0	0.0	-	-	-
23	-	-	-	-	3.2	0.0	0.0	0.0	0.0	-	-	-
24	-	-	-	-	0.0	0.0	0.0	0.0	0.0	-	-	-
25	-	-	-	-	0.0	2.8	3.8	1.0	0.0	-	-	-
26	-	-	-	-	0.0	4.4	4.0	2.3	0.0	-	-	-
27	-	-	-	-	3.7	5.3	5.7	2.5	0.0	-	-	-
28	-	-	-	-	3.8	0.0	3.8	5.5	0.0	-	-	-
29	-		-	-	2.3	4.8	3.9	4.0	0.0	-	-	-
30	-		-	-	2.8	1.6	1.3	0.4	0.0	-	-	-
31	-		-		1.8		3.1	0.8		-		-
Total	0.0	0.0	0.0	0.0	63.8	89.8	65.8	53.5	9.7	0.8	0.0	0.0

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2L

2008 Annual Data Report, Pebble 4 Station, for the Pebble Project Meteorological Monitoring Program

2008 Annual Data Report
Pebble 4 Station

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

April 2009

Pebble 4 Station
2008 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2009

prepared for

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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary 4
1.2 Measurements Method Table 5
1.3 Variations from the Quality Assurance Project Plan 5

2.0 Station Performance Summary **10**

2.1 Significant Project Events 10
2.2 Missing, Invalid, and Adjusted Data 11
2.3 Network Data Completeness 11
2.4 Precision Statistics 14
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics 14
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **20**

3.1 Air Quality Data Summary 20
3.2 Meteorological Data Summary 20
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 20
3.2.2 Temperature Climatology 32
3.3.3 Other Meteorological Parameters 37

4.0 References **43**

List of Figures

1-1. Map of the Pebble Project Area 7
1-2. Map of the Pebble 4 Station 8
1-3. Pebble 4 Meteorological Monitoring Station 9
3-1. 2008 Pebble 4 Station Wind Roses 22
3-2. Quarterly Pebble 4 Station Wind Roses (Climatronics)[1] 23
3-3. Quarterly Pebble 4 Station Wind Roses (RM Young) 24
3-4. 2008 Wind Rose Superimposed on Site Map 31
3-5. Hourly Average 2-Meter and 10-Meter Temperatures 35

3-6. Hourly Average Vertical Temperature Difference 36
3-7. Hourly Average Relative Humidity 39
3-8. Hourly Average Barometric Pressure 40
3-9. Hourly Average Solar Radiation 41
3-10. Hourly and Cumulative Precipitation 42

List of Tables

E-1. Meteorological Data Capture – Valid Hours per Month 2
E-2. Meteorological Data Capture – Percent Data Capture 3
1-1. Meteorological Measurement Methods 6
2-1. Chronology of Significant Events 10
2-2. Percentage of Final Data Set Flagged 12
2-3. Pebble 4 Station Percent Data Capture 13
2-4. September 6 and 7, 2007 Performance Audit Summary (CR1000) 16
2-5. February 12 and 13, 2008 Performance Audit Summary 17
2-6. September 24 and 25, 2008 Performance Audit Summary 18
3-1. Average and Maximum Wind Speeds at Pebble 4 Station 20
3-2. Average and Maximum Wind Speeds at Iliamna 21
3-3. 2008 Annual Wind Rose Analysis Table (Climatronics) 25
3-4. Quarter A Wind Rose Analysis Table (Climatronics) 26
3-5. Quarter B Wind Rose Analysis Table (Climatronics)[1] 26
3-6. Quarter C Wind Rose Analysis Table (Climatronics) 27
3-7. Quarter D Wind Rose Analysis Table (Climatronics) 27
3-8. 2008 Annual Wind Rose Analysis Table (RM Young) 28
3-9. Quarter A Wind Rose Analysis Table (RM Young) 29
3-10. Quarter B Wind Rose Analysis Table (RM Young) 29
3-11. Quarter C Wind Rose Analysis Table (RM Young) 30
3-12. Quarter D Wind Rose Analysis Table (RM Young) 30
3-13. 2-Meter Temperature Summary 33
3-14. 10-Meter Temperature Summary 34
3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary 38

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Data Summaries
E Validated Manual Particulate Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG, Inc., dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

PSD-quality meteorological monitoring for the Pebble Project began on August 1, 2005. This report provides details of the third year of meteorological measurements collected from January 1, 2008 through December 31, 2008 at the Pebble 4 station.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 4 meteorological monitoring station. The Pebble 4 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of the vertical temperature difference parameter during Monitoring Quarter A; the primary PSD-quality wind speed sensor (Climatronics, model F460 [P/N 100075]) during Monitoring Quarter A; the primary PSD-quality wind direction sensor (Climatronics model F460 [P/N 100076]) during Monitoring Quarters A, B and C; the secondary wind speed sensor (RM Young, model 05305-AQ) during Monitoring Quarter B; and the precipitation sensor during Monitoring Quarter B and C. However, the collocated secondary PSD-quality wind speed sensor (RM Young Co., model 05305-AQ) during Monitoring Quarter A; and the secondary PSD-quality wind direction sensor (RM Young Co., model 05305-AQ) during Monitoring Quarters A, B and C all had greater than 90 percent data capture. Therefore, measurements from the secondary PSD-quality instruments can be used to supplement data requirements for possible future modeling and permitting needs.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	744	744	0[4]	744	744	744	744	744	744	744	744	744	744	N/A[3]
February 2008	696	696	389	696	307[5]	696	684	684	684	696	696	696	696	N/A
March 2008	744	744	744	744	0	744	744	744	744	744	744	744	742	N/A
April 2008	720	720	720	638	0	720	372[6]	652	652	720	720	720	716	N/A
May 2008	744	744	744	738	0	744	660	741	741	744	744	744	288[7]	480
June 2008	720	720	720	720	0	720	720	720	720	720	720	720	0	720
July 2008	744	744	744	744	0	744	744	744	744	744	744	744	0	744
August 2008	744	744	744	744	0	744	744	744	744	744	744	744	0	744
September 2008	718	718	718	719	132	719	717	717	717	720	718	720	147	714
October 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	312
November 2008	720	720	720	720	720	720	720	720	720	720	720	720	720	N/A
December 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	N/A
Monitoring Year	**8,782**	**8,782**	**7,731**	**8,695**	**3,391**	**8,783**	**8,337**	**8,698**	**8,698**	**8,784**	**8,782**	**8,784**	**5,541**	**3,714**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed February 13, 2008, audit. Data invalidated from September 7, 2007, through February 13, 2008.
[5] Wind direction sensor failed September 24 and 25, 2008, audit. Data invalidated from February 13, 2008, through September 25, 2008.
[6] Wind speed sensor found broken on April 30, 2008, and May 12, 2008.
[7] Precipitation sensor failed September 24 and 25, 2008, audit. Data invalidated from May 12, 2008, through September 25, 2008.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	100%	100%	0.0%[4]	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A[3]
February 2008	100%	100%	55.9%	100%	44.1%[5]	100%	98.3%	98.3%	98.3%	100%	100%	100%	100%	N/A
March 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**100%**	**100%**	**51.9%**	**100%**	**48.1%**	**100%**	**99.5%**	**99.5%**	**99.5%**	**100%**	**100%**	**100%**	**99.9%**	**N/A**
April 2008	100%	100%	100%	88.6%	0.0%	100%	51.7%[6]	90.6%	90.6%	100%	100%	100%	99.4%	N/A
May 2008	100%	100%	100%	99.2%	0.0%	100%	88.7%	99.6%	99.6%	100%	100%	100%	38.7%[7]	100%
June 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
Quarter B	**100%**	**100%**	**100%**	**96.0%**	**0.0%**	**100%**	**80.2%**	**96.7%**	**96.7%**	**100%**	**100%**	**100%**	**46.0%**	**100%**
July 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
August 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	18.3%	99.9%	99.6%	99.6%	99.6%	100%	99.7%	100%	20.4%	99.2%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**6.0%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**99.9%**	**100%**	**6.7%**	**99.7%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Year	**100%**	**100%**	**88.0%**	**99.0%**	**38.6%**	**100%**	**94.9%**	**99.0%**	**99.0%**	**100%**	**100%**	**100%**	**63.1%**	**99.9%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed February 13, 2008, audit. Data invalidated from September 7, 2007, through February 13, 2008.
[5] Wind direction sensor failed September 24 and 25, 2008, audit. Data invalidated from February 13, 2008, through September 25, 2008.
[6] Wind speed sensor found broken on April 30, 2008, and May 12, 2008.
[7] Precipitation sensor failed September 24 and 25, 2008, audit. Data invalidated from May 12, 2008, through September 25, 2008.

1.0 Introduction

1.1 Project Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future air quality permitting needs for the Pebble Project. This meteorological monitoring project currently consists of seven PSD-quality meteorological monitoring stations. Four stations are located in the deposit area; Pebble 1, Pebble 4, Pebble 5, and Pebble 6. Three stations are located in the proposed Port area; Pebble Port, Williamsport, and North Head. Data from the non-PSD meteorological monitoring station, Pebble 3 and Pebble 5A, are being used for engineering and mine design purposes. This report focuses on the second year of measurements collected at the Pebble 4 station from January 1, 2008 through December 31, 2008. A separate annual data report has been prepared for each of the other PSD-quality meteorological monitoring stations.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 4 station.

The Pebble 4 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C]);
- Air temperature, ten meters above ground (degrees Celsius [°C]);
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]));
- Wind speed (meters per second [m/s]);
- Wind direction (degrees [°]);
- Wind direction standard deviation (wind sigma [σ_θ]);
- Relative humidity (percent [%]);
- Solar radiation (Watts per square meter [W/m^2]);
- Barometric Pressure (millibar [mb]);
- Precipitation (millimeters [mm]); and
- Evaporation (millimeters [mm]).

Measurements of these parameters will provide at least one year of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 4 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble 4 station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 4 PSD station.

1.3 Variations from the Quality Assurance Project Plan

During the second monitoring year, no variations occurred from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	Met One	Tipping bucket mechanism	0 to 76.2 mm/hr	± 1%	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for one second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

Figure 1-2. Map of the Pebble 4 Station

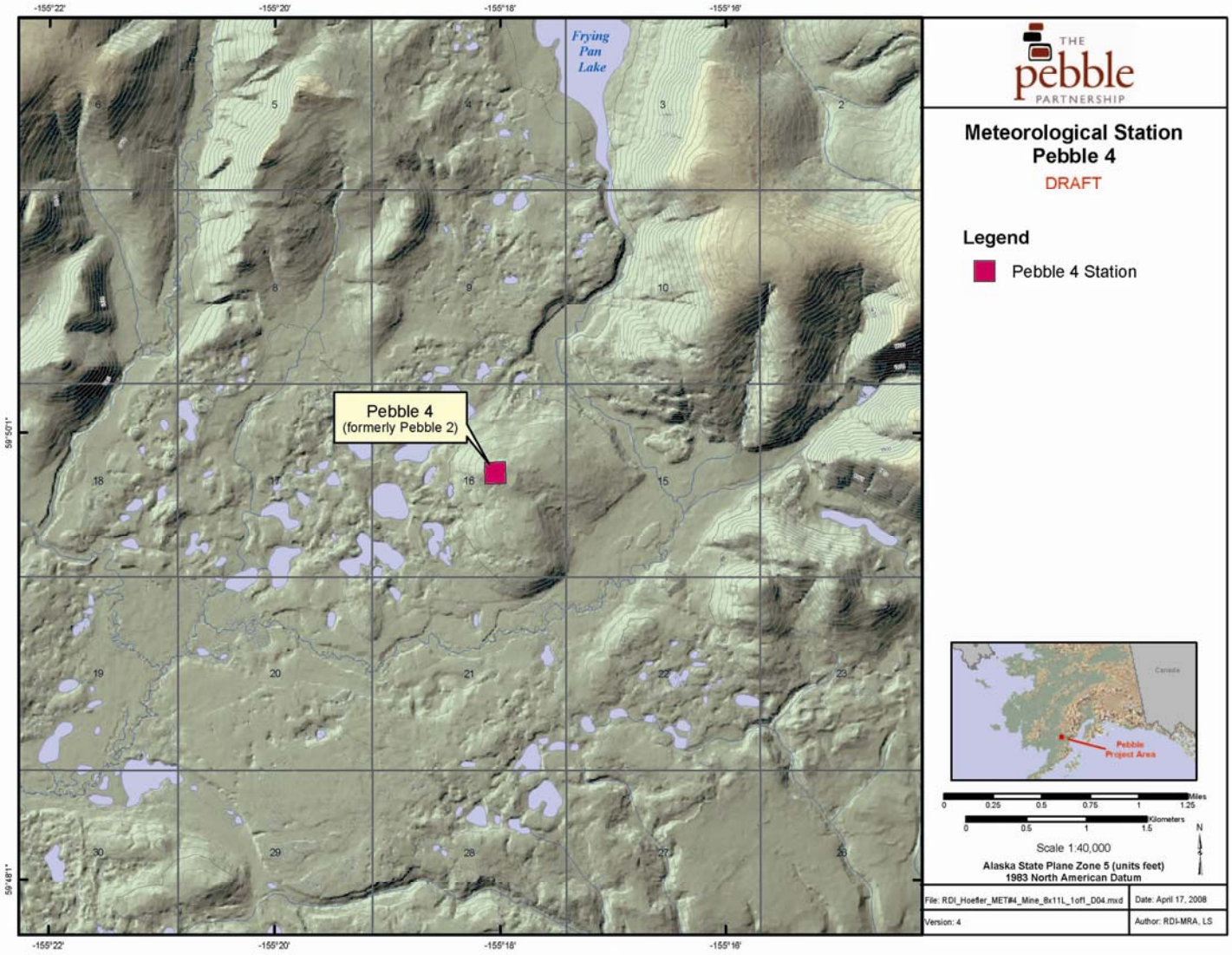
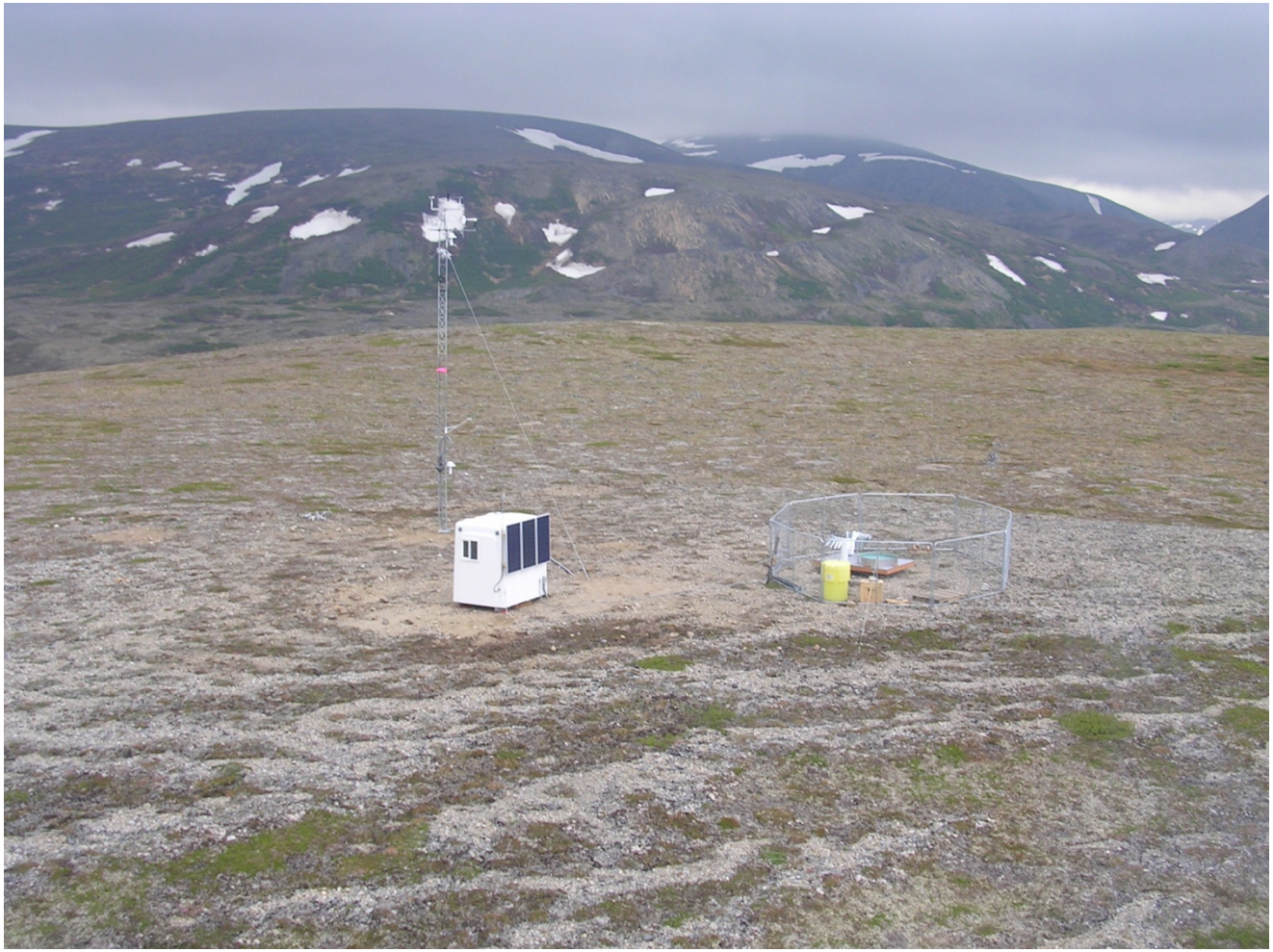


Figure 1-3. Pebble 4 Meteorological Monitoring Station



2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 4 station relevant to the 2008 meteorological monitoring year.

Table 2-1. Chronology of Significant Events

Date	Event
January 1, 2008	Beginning of 2008 monitoring year.
January 30, 2008	Refreshed and removed ice from snowfall adapter on Met-One tipping gauge.
February 12 and13, 2008	Annual Performance audit conducted. Vertical temperature difference parameter failed audit. Data invalidated to date of last audit. Both 2-meter and 10-meter thermistors replaced and an as-left audit conducted.
March 6, 2008	Audit of precipitation gauge.
April 30, 2008	Replaced RM Young Anemometer due to storm damage.
May 12, 2008	Calibrated and refreshed precipitation gauge, calibrated and started evaporation gauge. Found RM Young prop and tail destroyed, replaced instrument.
May 15, 2008	Replaced RM Young Anemometer due to storm damage.
June 2, 2008	Tested RM Young and evaporation gauge. Both OK.
July 30, 2008	Cleaned evaporation pan, repaired evaporation fence, and checked guy wires.
September 24 and 25, 2008	Full audit performed. Climatronic wind direction sensor failed. Data invalidated to date of last audit. Precipitation sensor failed. Data invalidated to May 12, 2008 calibration.
October 13, 2008	Evaporation gauge decommissioned for winter.
December 31, 2008	End of 2008 monitoring year.

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 4 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations.

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2008 monitoring year at the Pebble 4 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.3%
	< 0.1 m/s variation for 3 consecutive hours	2.5%
	<0.5 m/s variation for 12 consecutive hours	1.3%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	0.7%
	< 10° variation over 18 consecutive hours	0.7%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.1%
	< 0.1 m/s variation for 3 consecutive hours	0.5%
	< 0.5 m/s variation for 12 consecutive hours	0.1%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.0%
	< 1° variation over 3 consecutive hours	1.6%
	< 10° variation over 18 consecutive hours	1.2%
Temperature (2 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.2%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.1%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	1.4%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	0.0%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	0.0%
	< 0.5°C variation for 12 consecutive hours	1.3%
	Equals ambient temperature for 12 consecutive hours	1.4%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	0.0%
	> 6 mb variation for 3 consecutive hours	0.0%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	58.3%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 4 Station Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T[4]	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2008	100%	100%	0.0%[4]	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A[3]
February 2008	100%	100%	55.9%	100%	44.1%[5]	100%	98.3%	98.3%	98.3%	100%	100%	100%	100%	N/A
March 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**100%**	**100%**	**51.9%**	**100%**	**48.1%**	**100%**	**99.5%**	**99.5%**	**99.5%**	**100%**	**100%**	**100%**	**99.9%**	**N/A**
April 2008	100%	100%	100%	88.6%	0.0%	100%	51.7%[6]	90.6%	90.6%	100%	100%	100%	99.4%	N/A
May 2008	100%	100%	100%	99.2%	0.0%	100%	88.7%	99.6%	99.6%	100%	100%	100%	38.7%[7]	100%
June 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
Quarter B	**100%**	**100%**	**100%**	**96.0%**	**0.0%**	**100%**	**80.2%**	**96.7%**	**96.7%**	**100%**	**100%**	**100%**	**46.0%**	**100%**
July 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
August 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	18.3%	99.9%	99.6%	99.6%	99.6%	100%	99.7%	100%	20.4%	99.2%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**6.0%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**99.9%**	**100%**	**6.7%**	**99.7%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Year	**100%**	**100%**	**88.0%**	**99.0%**	**38.6%**	**100%**	**94.9%**	**99.0%**	**99.0%**	**100%**	**100%**	**100%**	**63.1%**	**99.9%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed February 13, 2008, audit. Data invalidated from September 7, 2007, through February 13, 2008.
[5] Wind direction sensor failed September 24 and 25, 2008, audit. Data invalidated from February 13, 2008, through September 25, 2008.
[6] Wind speed sensor found broken on April 30, 2008, and May 12, 2008.
[7] Precipitation sensor failed September 24 and 25, 2008, audit. Data invalidated from May 12, 2008, through September 25, 2008.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A performance audit was performed on all station sensors on September 6 and September 7, 2007 to check sensor operation after upgrading the CR10X data logger with a CR1000 data logger. All sensors passed. The results of the performance audit are presented in Table 2-4.

On February 12 and 13, 2008 the first annual performance audit was conducted at Pebble 4. All sensors passed with the exception of the vertical temperature difference parameter. Both the 2-meter and 10-meter temperature thermistors were replaced and an as-left audit was conducted. Vertical temperature difference data was invalidated from the date of the last audit on September 7, 2007. The results of this performance audit are presented in Table 2-5.

The second annual performance audit was conducted at the Pebble 4 station on September 24 and 25, 2008. All sensors passed with the exception of the primary PSD-quality wind direction sensor (Climatronics) and the precipitation sensor. Both instruments were repaired and a second audit was conducted. Wind direction (Climatronics) and precipitation data was invalidated from the date of the last audit on February 13, 2008. The results of this audit are presented in Table 2-6.

The performance audit involves reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with established PSD limits to assess the accuracy of the sensor.

During each of these audits, the power supply, DAS, communications system, and audited sensors all worked properly. A technical systems audit was performed during the September 24 and 25, 2008, audit and found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system.

Appendix C contains all of the complete technical systems and performance audit reports.

Table 2-4. September 6 and 7, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:22	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
Air Temperature Difference	≤ ±0.1	°C	0.03	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.07	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.7	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-4.3	Pass
Barometric Pressure	≤ ±3	mb	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-8.1[2]	Pass
Tipping Precipitation	≤ ±10	% input	3.0	Pass
Evaporation	≤ ±10	% input	2.4	Pass

[1] New DAS/sensor, no as-found value.

[2] Max percent error value of 8.1 within limit of 5% input + resolution, see audit.

Table 2-5. February 12 and 13, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:36	Pass
2-m Temperature Accuracy (old)	≤ ±0.5	°C	0.40	Pass
10-m Temperature Accuracy (old)	≤ ±0.5	°C	0.20	Pass
Air Temperature Difference (old)	≤ ±0.1	°C	-0.25	Fail
2-m Temperature Accuracy (new)[1]	≤ ±0.5	°C	0.15	Pass
10-m Temperature Accuracy (new) [1]	≤ ±0.5	°C	0.15	Pass
Air Temperature Difference (new) [1]	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.8	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.4	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.4	Pass
Barometric Pressure	≤ ±3	mb	0.4	Pass
Solar Radiation	≤ ±5+Res	% input	-6.5[2]	Pass
Tipping Precipitation	≤ ±10	% input	-5.0	Pass

[1] As left audit after thermistor replacement.

[2] Max percent error value of 6.5 within limit of 5% input + resolution, see audit.

Table 2-6. September 24 and 25, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:09	≤ ±5:00
2-m Temperature Accuracy (old)	≤ ±0.5	°C	0.36	≤ ±0.5
10-m Temperature Accuracy (old)	≤ ±0.5	°C	0.36	≤ ±0.5
Air Temperature Difference (old)	≤ ±0.1	°C	0.00	≤ ±0.1
Relative Humidity (dew point)	≤ ±1.5	°C	0.6	≤ ±1.5
Climatronics Wind System (In Situ)				
Wind Speed Torque	≤ 0.35	gm-cm	<0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 7.5	gm-cm	>>8[1]	Fail
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.7	Pass
Wind Direction Linearity	≤ 3	Degree	1.7	Pass
Climatronics Wind System (Replacement Direction Sensor)				
Wind Direction Torque	≤ 7.5	gm-cm	3.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.5	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 1.0	gm-cm	0.6	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	gm-cm	6.0	Pass
Wind Dir. Azim. Alignment (In Situ)	≤ ±5	Degree	4.7	Pass
Wind Direction Accuracy (In Situ)	≤ ±5	Degree	3.7	Pass
Wind Direction Linearity (In Situ)	≤ 3	Degree	2.8	Pass
Wind Direction Accuracy (Post Cal)	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity (Post Cal)	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Alignment (Post Audit)	≤ ±5	Degree	2.9	Pass

Table 2-6 (Cont.) September 24 and 25, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Barometric Pressure	≤ ±3	Mbar	1.6	Pass
Solar Radiation (In Situ)	≤ ±5+Res	% input	8.7[2]	Pass
Solar Radiation (Replacement)	≤ ±5+Res	% input	5.5[2]	Pass
Tipping Precipitation (In Situ)	≤ ±10	% input	17.0[3]	Fail
Tipping Precipitation (Repaired)	≤ ±10	% input	0.0[3]	Pass
Evaporation	≤ ±10	% input	1.3	Pass

[1] Wind direction sensor bearings seized.
[2] Maximum error within limit of 5% of input + resolution, see audit.
[3] Tipping bucket failed initially, replaced parts and re-audited with no error.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2008 year of meteorological monitoring at the Pebble 4 station. The mean hourly average wind speed during the monitoring year was 7.62 meters per second (m/s) and 7.55 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 28.00 m/s and 25.67 m/s were measured by the CLM and RMY sensors, respectively, on April 16 and January 19, 2008. Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 20 kilometers (km) from the Pebble 4 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.94 m/s, while the maximum daily average wind speed was 16.99 m/s, recorded on January 19, January 21, and May 23, 2008.

Table 3-1. Average and Maximum Wind Speeds at Pebble 4 Station

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	9.20	9.18	27.45	25.67
Quarter B	6.99	6.59	28.00	24.90
Quarter C	5.89	5.73	20.10	19.05
Quarter D	8.40	8.53	27.67	25.32
Monitoring Year	**7.62**	**7.55**	**28.00**	**25.67**

Table 3-2. Average and Maximum Wind Speeds at Iliamna

Monitoring Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
Quarter A	4.23	16.99
Quarter B	3.87	16.99
Quarter C	3.22	12.52
Quarter D	4.46	14.30
Monitoring Year	**3.94**	**16.99**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the 2008 monitoring year. Winds were predominantly from the north, east, and southeast, with other minor wind components. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. Quarters A and D are characterized by a major wind component from the north. Quarters B and C are characterized with a major component from the southeast, other wind components from the north and east, and minor wind components in other directions. The Quarter A and Quarter D wind roses indicate a lack of southern winds during this period. Tables 3-3 through 3-7 are the annual and quarterly wind analysis tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Figure 3-4 shows the 2008 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological station and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 4 station.

Figure 3-1. 2008 Pebble 4 Station Wind Roses

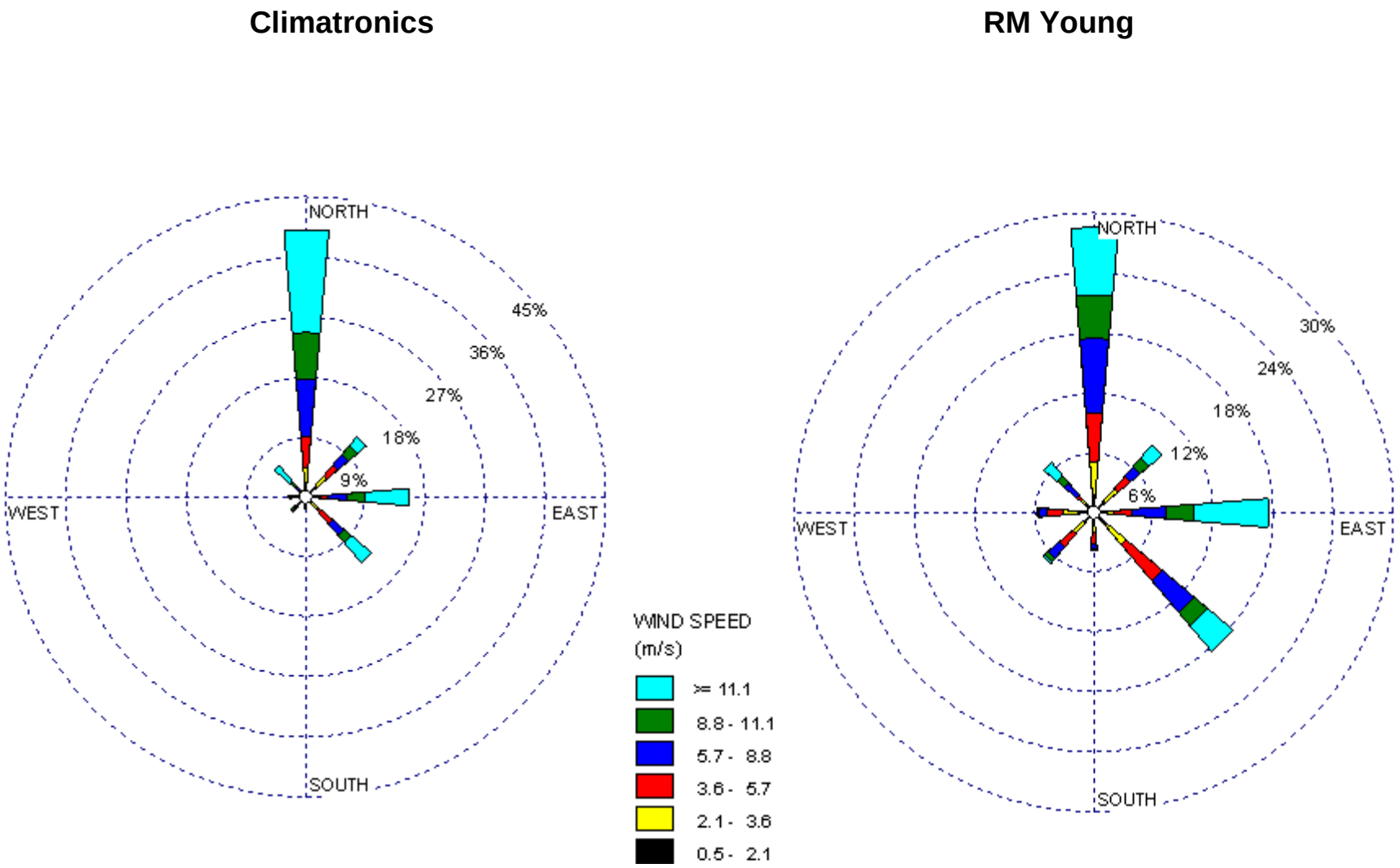
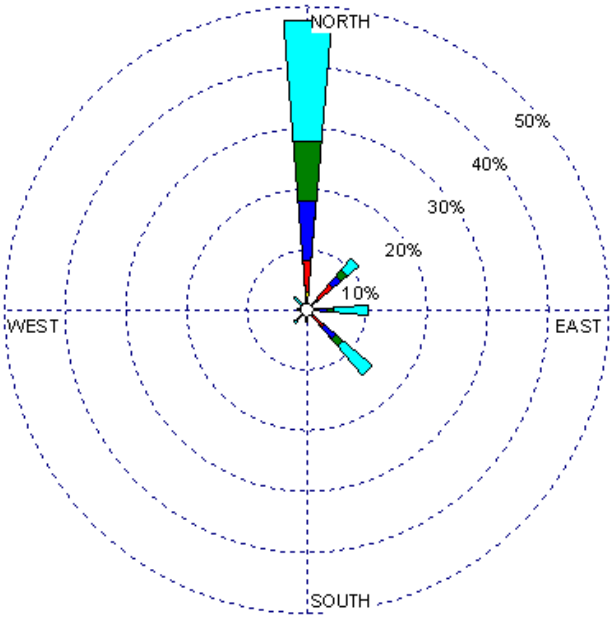
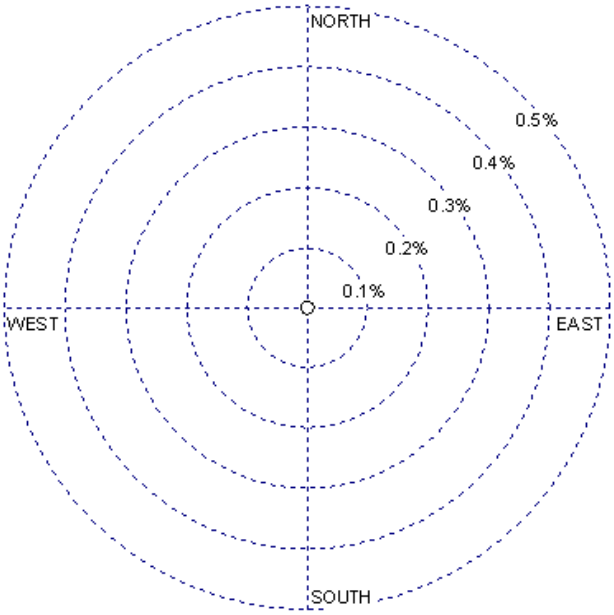


Figure 3-2. Quarterly Pebble 4 Station Wind Roses (Climatronics)[1]

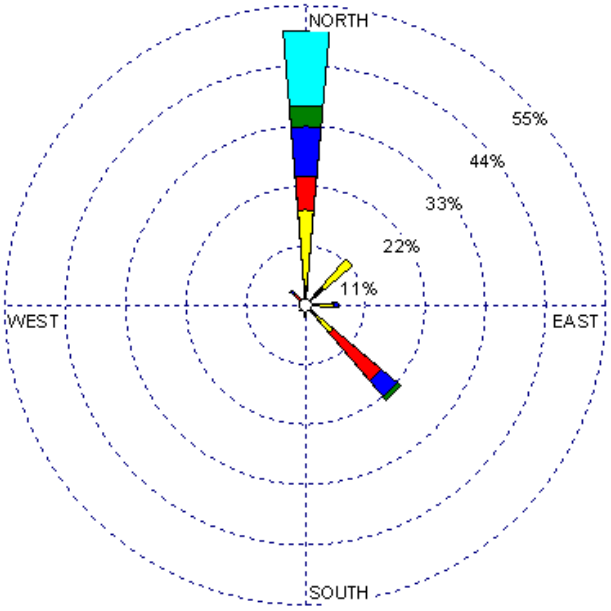
Quarter A (1/1/08 – 3/31/08)



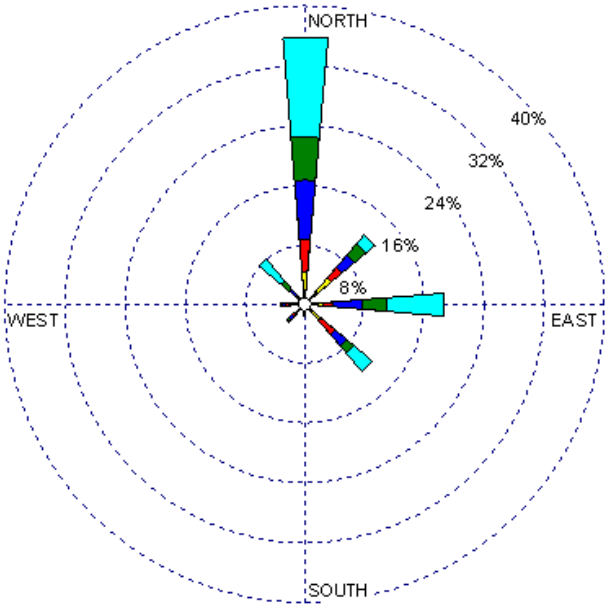
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



[1] Wind direction sensor failed September 24 and 25, 2008, audit. Data invalidated back to February 12 and 13, 2008, audit.

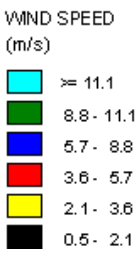
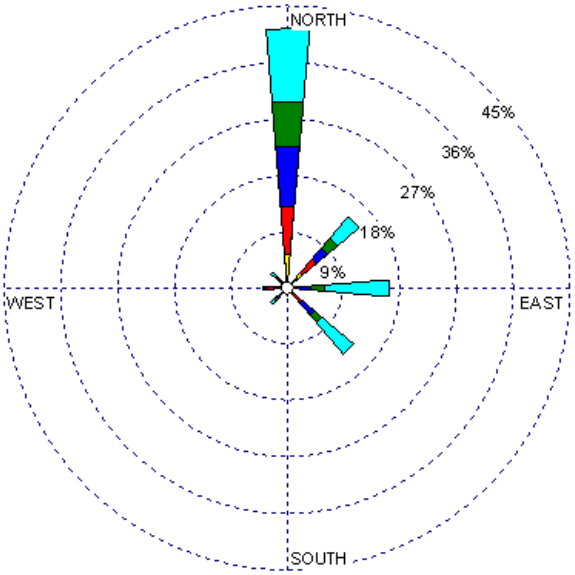
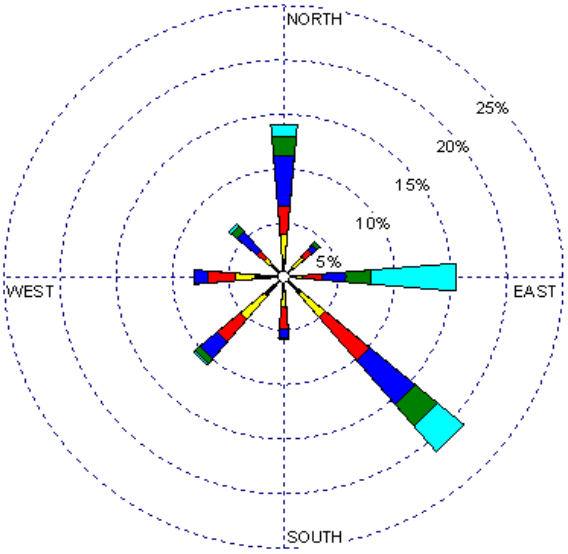


Figure 3-3. Quarterly Pebble 4 Station Wind Roses (RM Young)

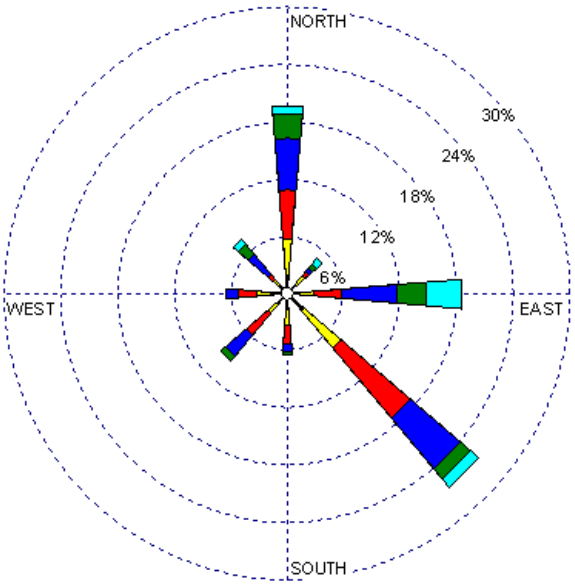
Quarter A (1/1/08 – 3/31/08)



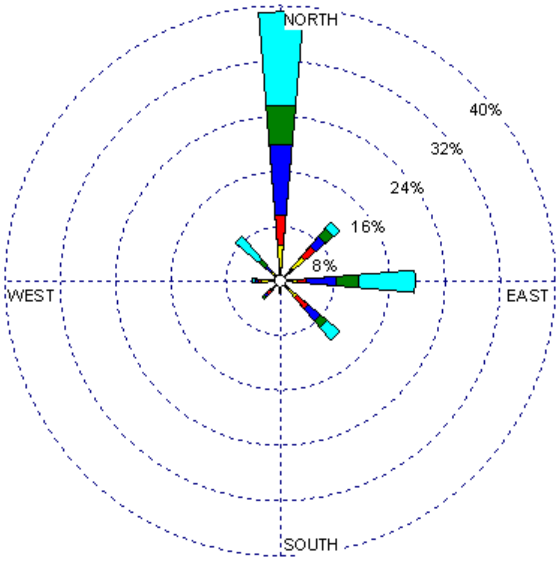
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



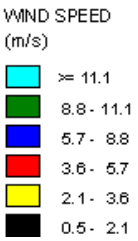


Table 3-3. 2008 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.74%	2.83%	4.54%	8.64%	6.87%	15.34%	39.97%
NE	2.09%	2.15%	2.21%	2.04%	1.62%	1.80%	11.92%
E	1.33%	1.06%	0.94%	3.04%	2.48%	6.67%	15.52%
SE	1.24%	1.33%	2.89%	2.18%	1.39%	3.95%	12.98%
S	0.68%	0.56%	0.32%	0.09%	0.00%	0.24%	1.89%
SW	1.09%	0.89%	0.24%	0.41%	0.24%	0.27%	3.13%
W	1.15%	0.65%	0.38%	0.30%	0.03%	0.15%	2.65%
NW	0.94%	0.24%	0.21%	0.77%	1.06%	3.13%	6.34%
Sub-Total:	10.27%	9.71%	11.74%	17.46%	13.69%	31.53%	94.40%
Calms (<0.5m/s):							2.16%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.24%	1.90%	5.05%	9.90%	9.71%	19.81%	47.62%
NE	1.14%	1.33%	3.24%	1.81%	1.24%	2.48%	11.24%
E	0.76%	0.86%	0.38%	1.33%	1.14%	5.71%	10.19%
SE	0.48%	0.67%	2.67%	2.48%	1.71%	6.19%	14.19%
S	0.48%	0.76%	0.10%	0.00%	0.00%	0.76%	2.10%
SW	1.14%	0.86%	0.10%	0.19%	0.10%	0.57%	2.95%
W	0.67%	0.38%	0.10%	0.38%	0.00%	0.19%	1.71%
NW	0.38%	0.00%	0.00%	0.19%	0.57%	2.00%	3.14%
Sub-Total:	6.29%	6.76%	11.62%	16.29%	14.48%	37.71%	93.14%
Calms (<0.5m/s):							1.12%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)[1]

Station ID: Pebble 4 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
E	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
W	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sub-Total:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calms (<0.5m/s):							0.00%
Total:							100.00%

[1] Wind direction sensor failed September 24 and 25, 2008, audit. Data invalidated back to February 12 and 13, 2008, audit.

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	3.82%	13.74%	6.11%	9.16%	3.82%	13.74%	50.38%
NE	4.58%	6.87%	0.00%	0.00%	0.00%	0.00%	11.45%
E	2.29%	3.05%	0.00%	0.76%	0.00%	0.00%	6.11%
SE	3.05%	3.82%	11.45%	3.82%	0.76%	0.00%	22.90%
S	1.53%	0.00%	0.76%	0.00%	0.00%	0.00%	2.29%
SW	0.76%	0.76%	0.00%	0.00%	0.00%	0.00%	1.53%
W	0.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.76%
NW	0.76%	0.00%	2.29%	0.76%	0.00%	0.00%	3.82%
Sub-Total:	17.56%	28.24%	20.61%	14.50%	4.58%	13.74%	99.24%
Calms (<0.5m/s):							0.02%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 4 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.86%	2.63%	4.21%	8.01%	5.70%	13.31%	35.72%
NE	2.40%	2.26%	1.86%	2.26%	1.90%	1.58%	12.27%
E	1.54%	1.04%	1.27%	3.98%	3.26%	7.51%	18.61%
SE	1.49%	1.49%	2.49%	1.95%	1.27%	3.12%	11.82%
S	0.72%	0.50%	0.41%	0.14%	0.00%	0.00%	1.77%
SW	1.09%	0.91%	0.32%	0.54%	0.32%	0.14%	3.30%
W	1.40%	0.81%	0.54%	0.27%	0.05%	0.14%	3.21%
NW	1.22%	0.36%	0.18%	1.04%	1.36%	3.85%	8.01%
Sub-Total:	11.72%	10.00%	11.27%	18.20%	13.85%	29.65%	94.70%
Calms (<0.5m/s):							1.54%
Total:							100.00%

Table 3-8. 2008 Annual Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.80%	3.30%	4.97%	7.36%	4.33%	6.76%	28.52%
NE	1.55%	1.70%	1.60%	1.26%	1.16%	1.66%	8.93%
E	1.08%	0.93%	1.79%	3.54%	2.68%	7.46%	17.49%
SE	1.74%	2.55%	4.72%	4.23%	1.71%	3.33%	18.28%
S	1.13%	0.91%	1.15%	0.46%	0.08%	0.13%	3.85%
SW	1.39%	1.46%	1.70%	1.50%	0.49%	0.26%	6.80%
W	1.74%	1.40%	1.53%	0.82%	0.07%	0.14%	5.70%
NW	1.32%	0.50%	0.55%	1.63%	0.90%	1.65%	6.55%
Sub-Total:	11.76%	12.76%	17.99%	20.80%	11.42%	21.39%	96.11%
Calms (<0.5m/s):							3.88%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.65%	3.80%	7.65%	9.40%	7.20%	11.55%	41.25%
NE	1.70%	1.51%	3.07%	2.20%	2.06%	4.49%	15.03%
E	0.41%	0.55%	1.01%	1.83%	2.15%	10.36%	16.32%
SE	0.60%	0.87%	1.88%	2.38%	1.65%	6.60%	13.98%
S	0.50%	0.32%	0.09%	0.00%	0.00%	0.41%	1.33%
SW	0.78%	0.69%	0.46%	0.50%	0.46%	0.69%	3.57%
W	0.96%	1.19%	1.05%	0.60%	0.00%	0.14%	3.94%
NW	0.96%	0.41%	0.37%	0.32%	0.32%	1.15%	3.53%
Sub-Total:	7.56%	9.35%	15.58%	17.23%	13.84%	35.38%	98.95%
Calms (<0.5m/s):							1.05%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.60%	2.43%	2.57%	4.54%	1.79%	1.15%	14.07%
NE	0.69%	1.83%	0.82%	0.55%	0.41%	0.05%	4.35%
E	0.87%	0.82%	1.83%	2.06%	2.29%	7.56%	15.44%
SE	2.15%	2.75%	5.22%	5.27%	2.57%	3.12%	21.08%
S	1.47%	1.37%	2.02%	0.82%	0.00%	0.09%	5.77%
SW	2.38%	2.80%	2.66%	2.02%	0.55%	0.23%	10.63%
W	2.57%	1.74%	2.52%	1.15%	0.09%	0.00%	8.07%
NW	1.60%	0.69%	0.92%	2.34%	0.64%	0.32%	6.51%
Sub-Total:	13.34%	14.44%	18.56%	18.74%	8.34%	12.51%	85.93%
Calms (<0.5m/s):							14.02%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 4 (RM Young) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.95%	3.77%	5.17%	5.35%	2.59%	0.82%	19.65%
NE	1.32%	1.13%	0.59%	0.45%	0.64%	0.82%	4.95%
E	1.50%	1.32%	2.95%	5.94%	3.04%	3.81%	18.56%
SE	2.50%	5.08%	9.53%	6.94%	1.36%	1.18%	26.59%
S	1.77%	1.54%	1.95%	0.86%	0.32%	0.00%	6.44%
SW	1.36%	1.36%	3.04%	2.90%	0.64%	0.00%	9.30%
W	1.81%	1.41%	2.04%	1.27%	0.05%	0.00%	6.58%
NW	1.32%	0.64%	0.73%	2.77%	1.36%	0.73%	7.53%
Sub-Total:	13.52%	16.24%	26.00%	26.50%	9.98%	7.35%	99.59%
Calms (<0.5m/s):							0.41%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

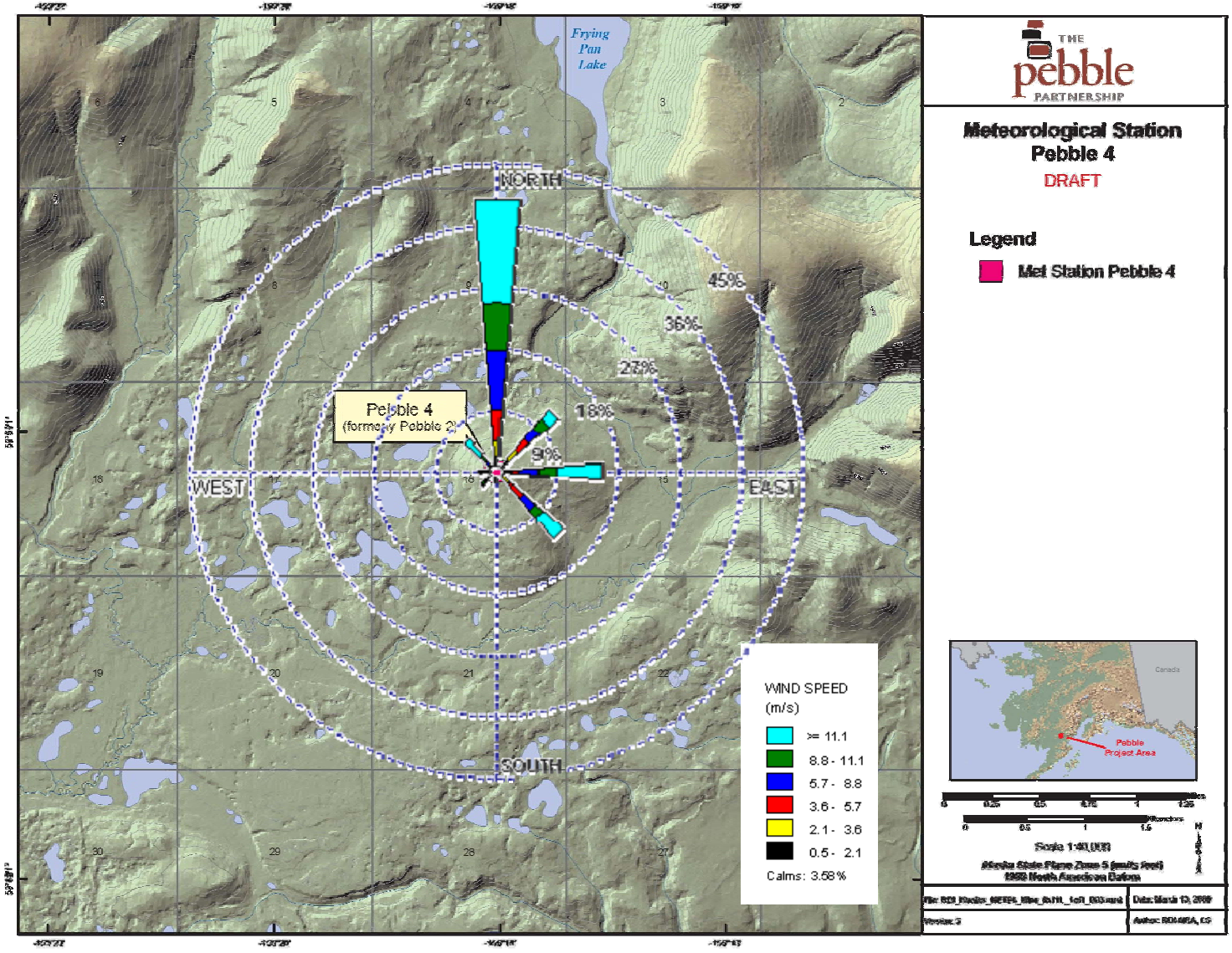
Station ID: Pebble 4 (RM Young) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.99%	3.21%	4.48%	10.14%	5.75%	13.49%	39.07%
NE	2.49%	2.31%	1.90%	1.86%	1.54%	1.31%	11.41%
E	1.54%	1.04%	1.36%	4.30%	3.21%	8.15%	19.60%
SE	1.72%	1.49%	2.22%	2.31%	1.27%	2.44%	11.45%
S	0.77%	0.41%	0.54%	0.14%	0.00%	0.00%	1.86%
SW	1.04%	1.00%	0.63%	0.59%	0.32%	0.14%	3.71%
W	1.63%	1.27%	0.50%	0.27%	0.14%	0.41%	4.21%
NW	1.40%	0.27%	0.18%	1.09%	1.27%	4.39%	8.60%
Sub-Total:	12.58%	11.00%	11.82%	20.69%	13.49%	30.33%	99.91%
Calms (<0.5m/s):							0.09%
Total:							100.00%

Figure 3-4. 2008 Wind Rose Superimposed on Site Map



3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Hourly average temperatures at the Pebble 4 station ranged from 20.6°C on July 31, 2008 to -30.9°C on January 12, 2008. The average 2-meter temperature during the monitoring year was -1.7°C, which is slightly more than the mean temperature of 0.2°C observed at the Iliamna Airport during the same period.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. Considerable monthly temperature variation existed throughout the late-autumn and winter months. The coldest temperatures were observed during January 2008. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 3.9°C measured on April 5, 2008. The greatest negative vertical temperature difference was -1.5°C measured on May 26, 2008.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	0.7	-30.3	-13.9	2.1	-30.9
February 2008	1.2	-26.3	-11.9	5.8	-28.0
March 2008	0.9	-18.3	-6.8	1.7	-19.7
Quarter A	**1.2**	**-30.3**	**-10.8**	**5.8**	**-30.9**
April 2008	3.6	-13.7	-5.0	6.6	-17.5
May 2008	6.9	-5.8	3.5	13.6	-5.0
June 2008	13.2	3.2	7.7	17.9	0.9
Quarter B	**13.2**	**-13.7**	**2.1**	**17.9**	**-17.5**
July 2008	14.1	5.9	9.8	20.6	3.7
August 2008	14.5	8.3	10.5	18.0	4.8
September 2008	10.1	3.2	6.5	13.0	0.4
Quarter C	**14.5**	**3.2**	**9.0**	**20.6**	**0.4**
October 2008	4.3	-14.3	-4.3	5.3	-15.4
November 2008	0.6	-25.0	-9.6	1.3	-26.3
December 2008	2.1	-19.7	-7.4	2.6	-27.9
Quarter D	**4.3**	**-25.0**	**-7.1**	**5.3**	**-27.9**
Monitoring Year	**14.5**	**-30.3**	**-1.7**	**20.6**	**-30.9**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	0.5	-30.2	-13.8	1.9	-30.8
February 2008	1.6	-26.0	-11.3	5.8	-27.8
March 2008	1.0	-18.3	-6.6	2.0	-19.8
Quarter A	**1.6**	**-30.2**	**-10.5**	**5.8**	**-30.8**
April 2008	4.2	-12.9	-4.7	6.9	-15.7
May 2008	6.9	-6.0	3.6	12.8	-4.7
June 2008	12.9	2.9	7.4	16.7	0.8
Quarter B	**12.9**	**-12.9**	**2.2**	**16.7**	**-15.7**
July 2008	13.9	5.8	9.6	19.4	3.7
August 2008	14.1	8.1	10.4	16.8	5.8
September 2008	10.0	3.4	6.6	12.3	0.8
Quarter C	**14.1**	**3.4**	**8.9**	**19.4**	**0.8**
October 2008	4.6	-14.1	-4.1	5.1	-15.3
November 2008	0.8	-24.7	-9.4	1.6	-26.2
December 2008	2.5	-19.5	-7.1	3.3	-27.8
Quarter D	**4.6**	**-24.7**	**-6.8**	**5.1**	**-27.8**
Monitoring Year	**14.1**	**-30.2**	**-1.6**	**19.4**	**-30.8**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

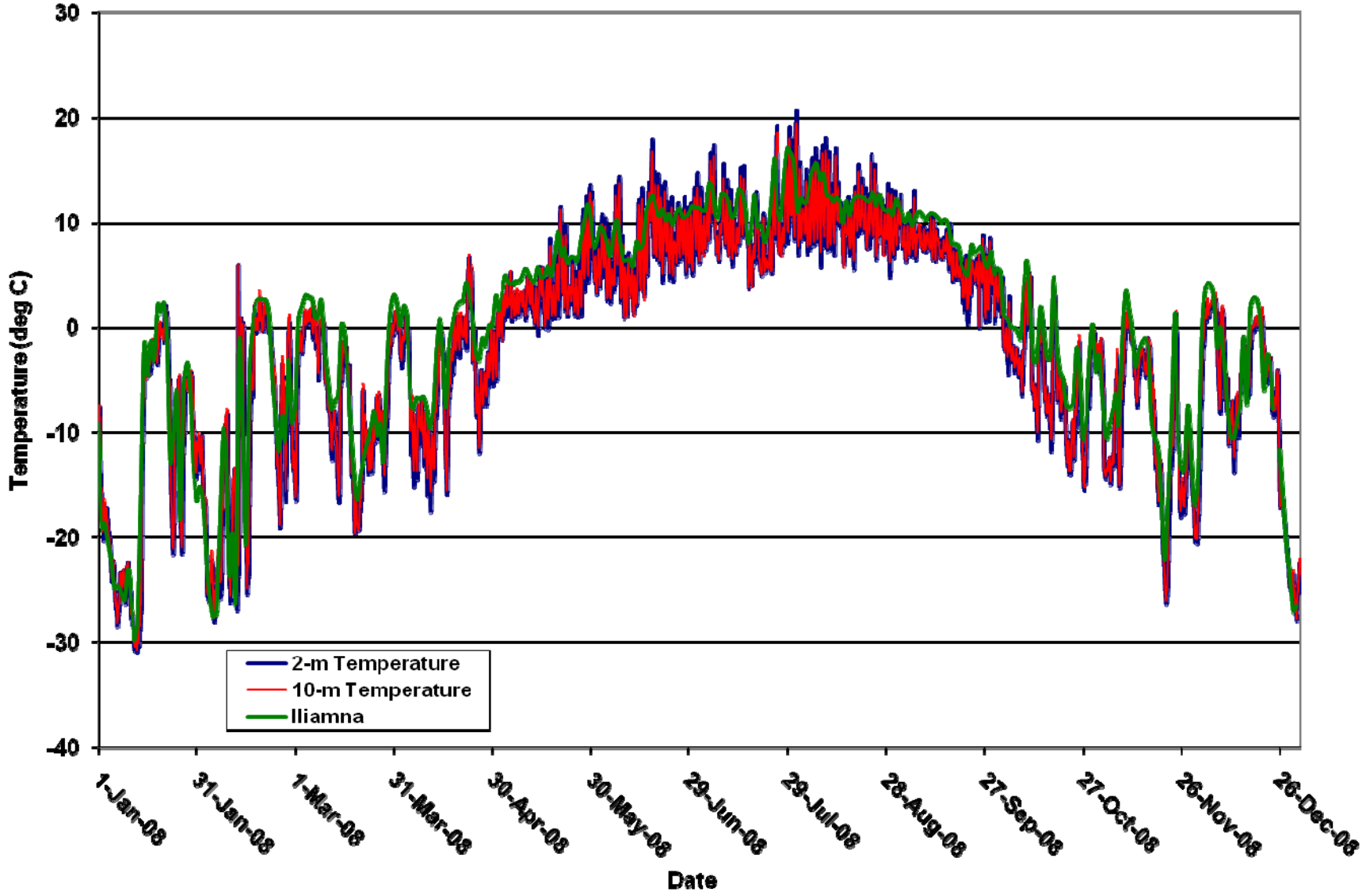
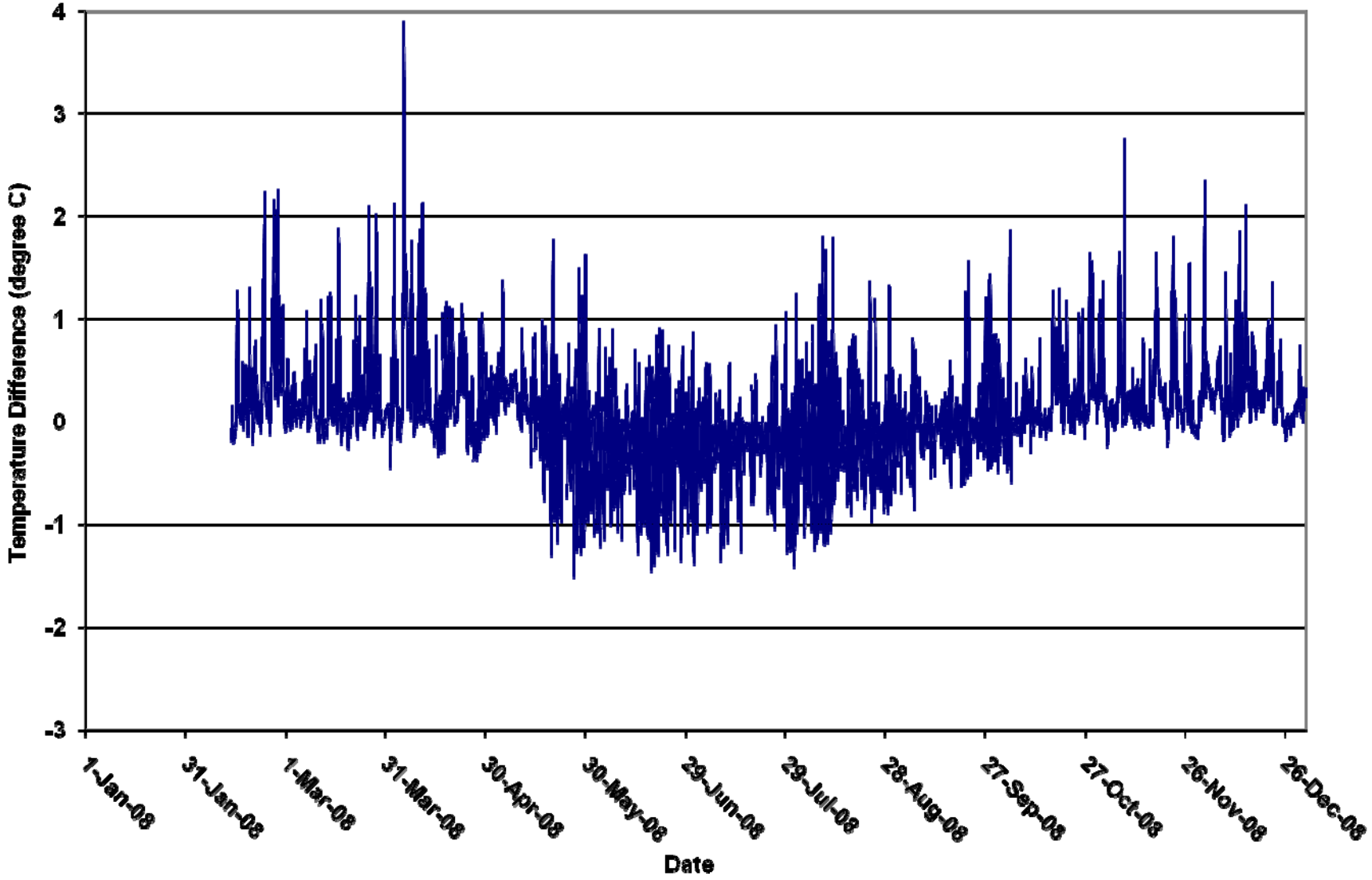


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation.

Table 3-15 provides a summary of the relative humidity, barometric pressure, and solar radiation at the Pebble 4 station during the 2008 monitoring year.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 4 station was 84.0 percent. The minimum relative humidity was 30.0 percent, measured on August 8, 2008. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 88.2 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 924 mb on February 19, 2008 to a maximum of 995 mb observed on December 12, 2008. The mean barometric pressure during the monitoring year was 962 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 1,009 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 880.0 W/m^2 recorded on June 27, 2008. The mean hourly average solar radiation for the monitoring year was 105.7 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the 2008 monitoring year. The highest total daily precipitation was 20.4 mm measured on October 11, 2008. The maximum monthly precipitation was 119.6 mm during October 2008. The cumulative precipitation during the monitoring year was 317.2 mm. Daily winter precipitation data (October through April) should be closely examined before use because snowfall adaptors may influence daily totals.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 4 station was 84.9 mm during June 2008.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, and solar radiation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mb)	Minimum Barometric Pressure (mb)	Maximum Barometric Pressure (mb)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2008	85.7	53.6	958	934	987	17.4	183.7
February 2008	79.9	32.3	953	924	971	52.8	390.3
March 2008	88.2	63.9	957	933	976	113.2	579.8
Quarter A	**84.7**	**32.3**	**956**	**924**	**987**	**61.3**	**579.8**
April 2008	84.4	39.3	968	951	993	192.8	722.1
May 2008	79.6	35.3	966	935	983	204.8	797.7
June 2008	79.9	40.1	969	952	981	205.2	880.0
Quarter B	**81.3**	**35.3**	**968**	**935**	**993**	**201.0**	**880.0**
July 2008	83.4	35.4	966	957	977	160.6	802.0
August 2008	80.9	30.0	964	950	977	152.5	716.9
September 2008	87.7	45.7	963	946	977	68.4	549.2
Quarter C	**84.0**	**30.0**	**965**	**946**	**977**	**127.9**	**802.0**
October 2008	86.9	35.5	958	941	976	62.2	415.6
November 2008	87.2	57.8	955	928	979	27.0	260.0
December 2008	84.2	45.9	966	925	995	10.7	128.4
Quarter D	**86.1**	**35.5**	**960**	**925**	**995**	**33.3**	**415.6**
Monitoring Year	**84.0**	**30.0**	**962**	**924**	**995**	**105.7**	**880.0**

Figure 3-7. Hourly Average Relative Humidity

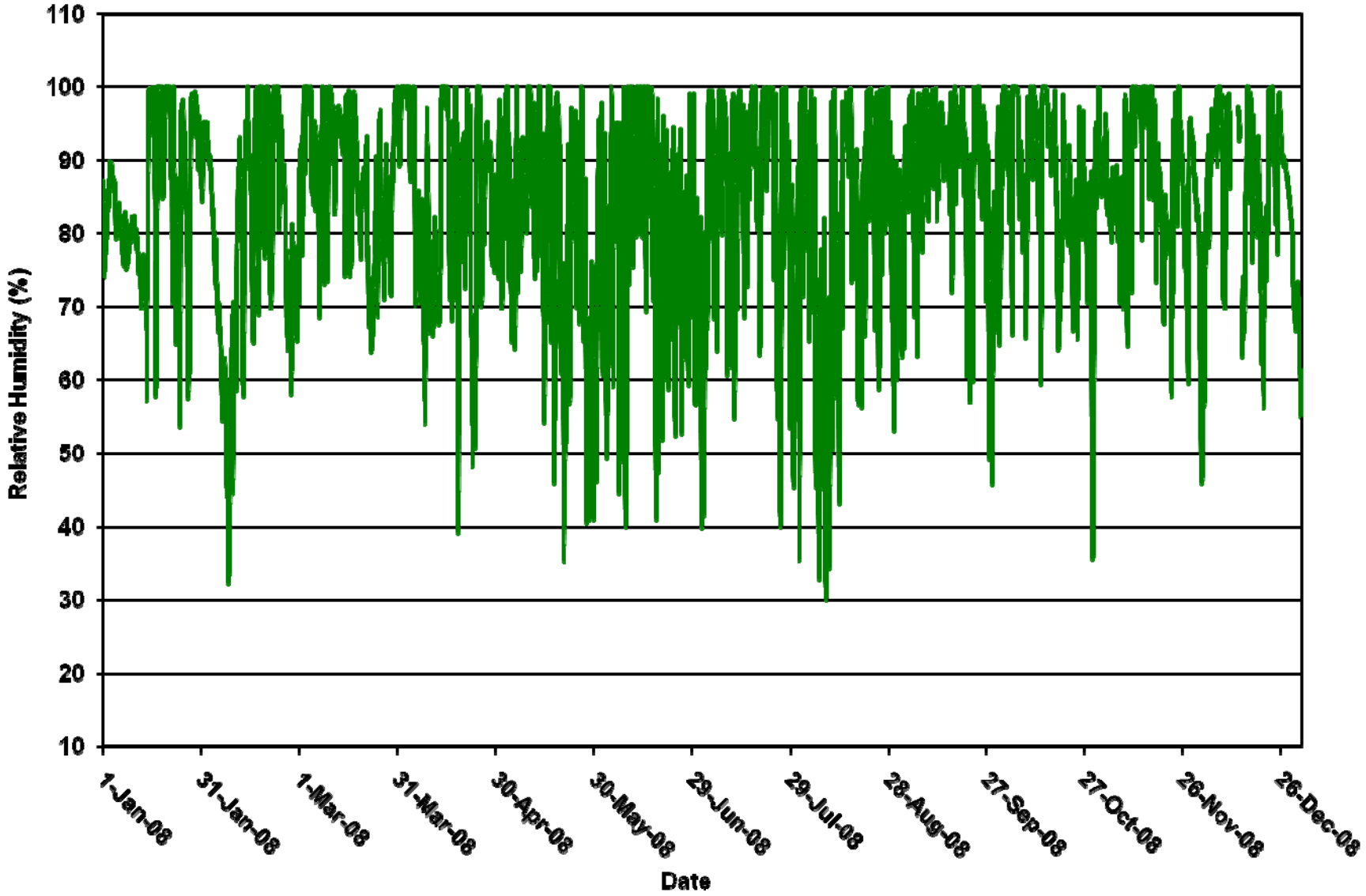


Figure 3-8. Hourly Average Barometric Pressure

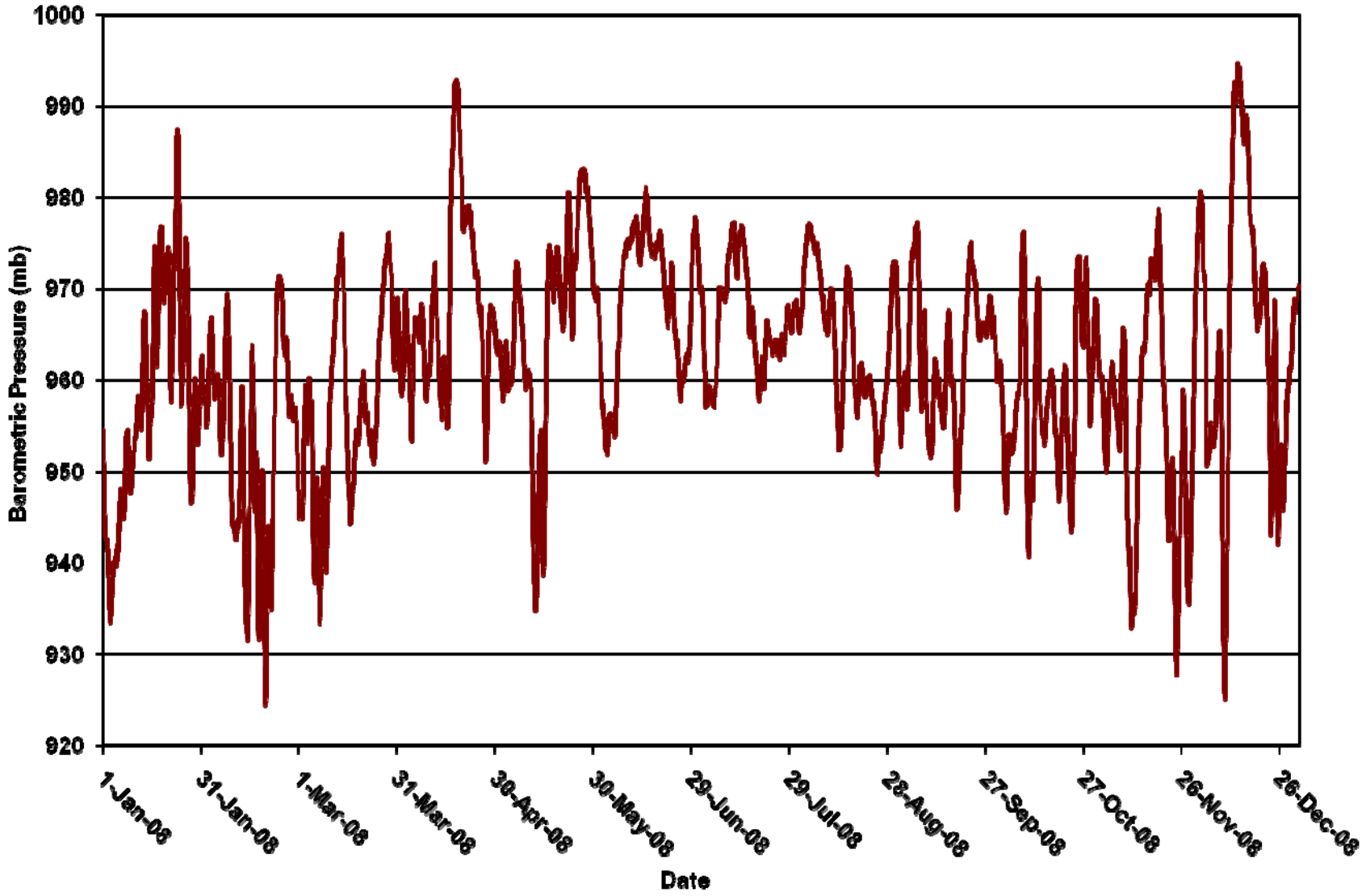


Figure 3-9. Hourly Average Solar Radiation

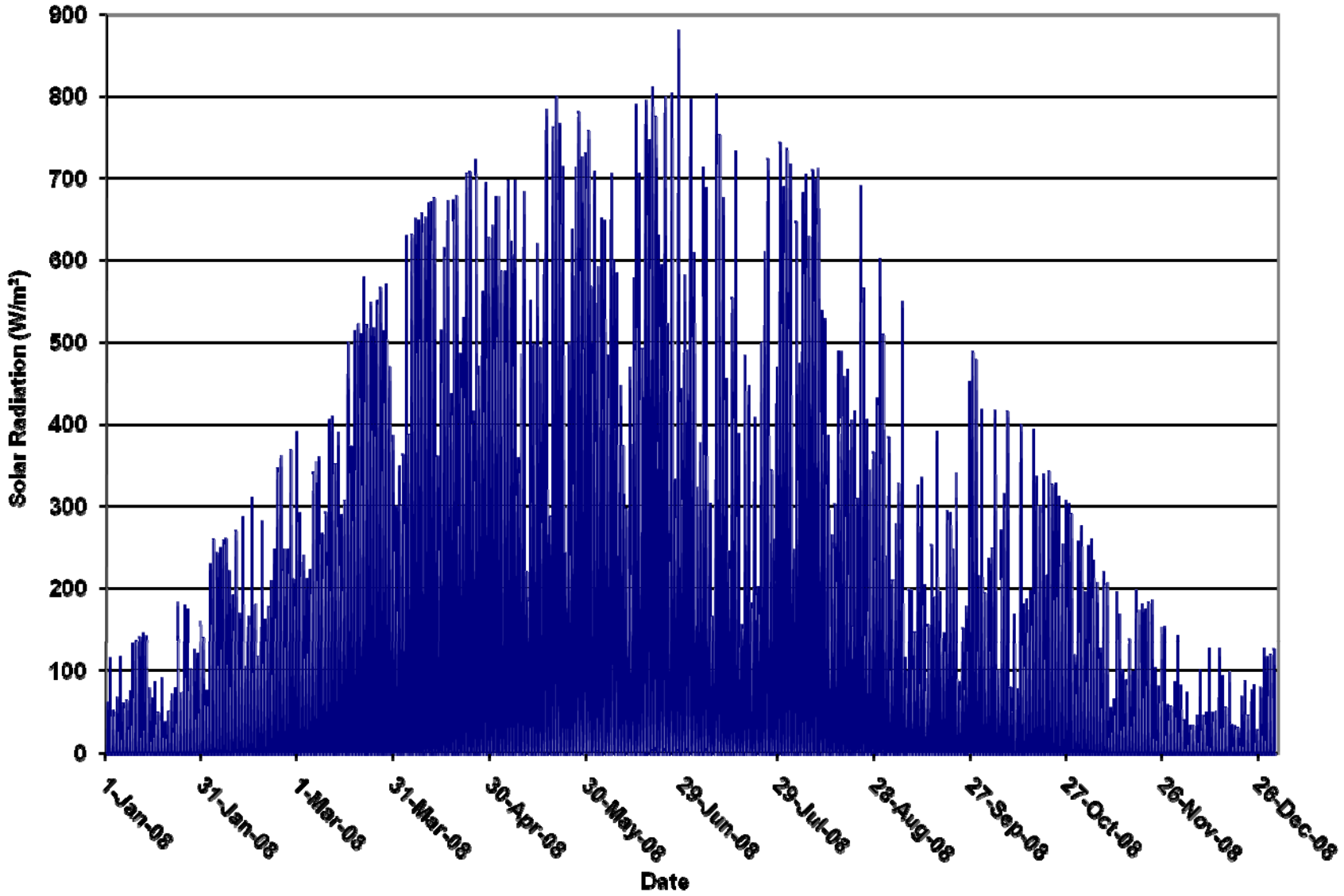
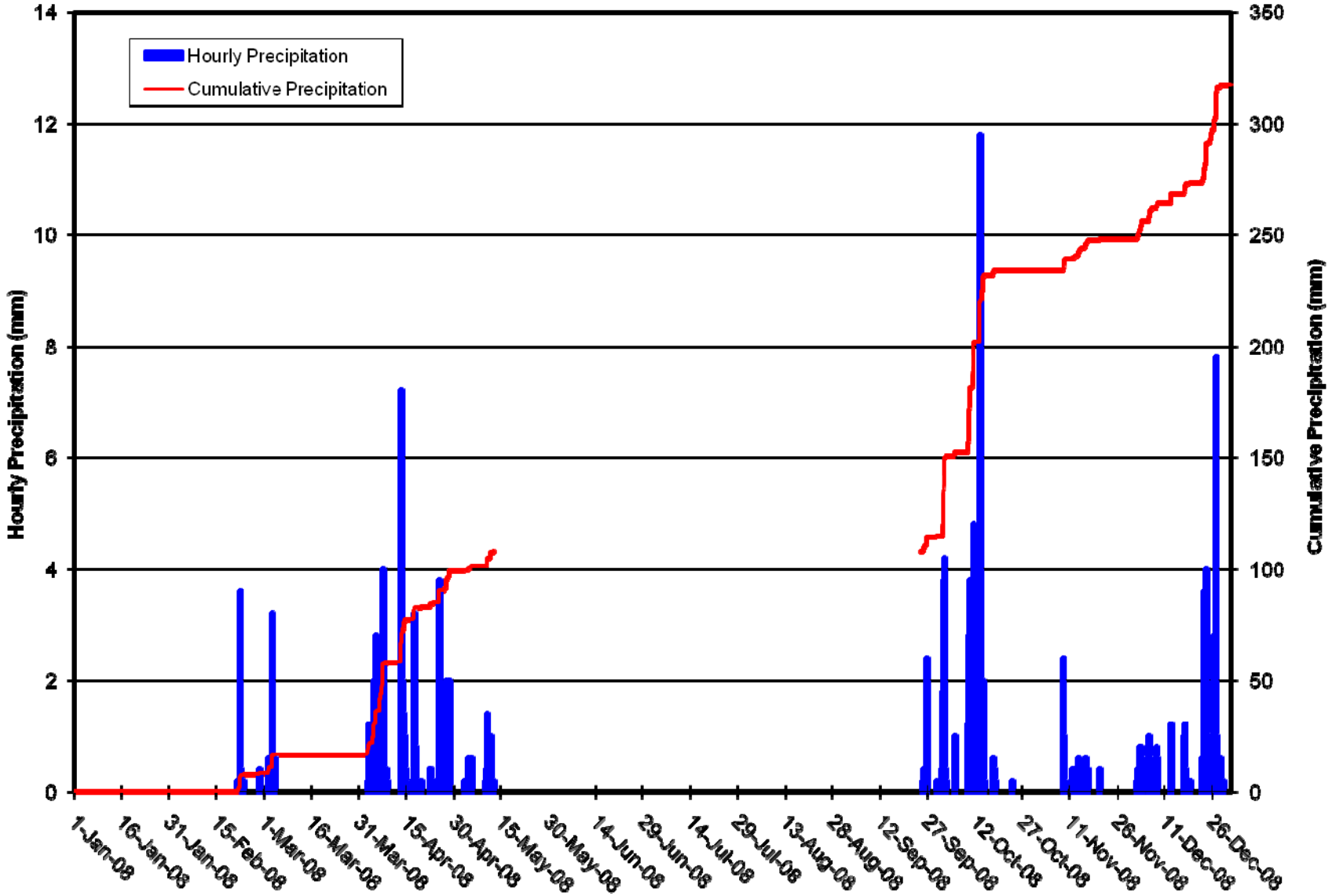


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, June, 2008.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

U.S. Department of Commerce, National Climatic Data Center, Asheville, North Carolina, *http://www.ncdc.noaa.gov*.

Western Regional Climate Center, Desert Research Institute, Reno Nevada, *http://www.wrcc.dri.edu/summary/climsmak.html.*

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2008

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	100%	100%	0.0%[4]	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A[3]
February 2008	100%	100%	55.9%	100%	44.1%[5]	100%	98.3%	98.3%	98.3%	100%	100%	100%	100%	N/A
March 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	99.7%	N/A
Quarter A	**100%**	**100%**	**51.9%**	**100%**	**48.1%**	**100%**	**99.5%**	**99.5%**	**99.5%**	**100%**	**100%**	**100%**	**99.9%**	**N/A**
April 2008	100%	100%	100%	88.6%	0.0%	100%	51.7%[6]	90.6%	90.6%	100%	100%	100%	99.4%	N/A
May 2008	100%	100%	100%	99.2%	0.0%	100%	88.7%	99.6%	99.6%	100%	100%	100%	38.7%[7]	100%
June 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
Quarter B	**100%**	**100%**	**100%**	**96.0%**	**0.0%**	**100%**	**80.2%**	**96.7%**	**96.7%**	**100%**	**100%**	**100%**	**46.0%**	**100%**
July 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
August 2008	100%	100%	100%	100%	0.0%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	18.3%	99.9%	99.6%	99.6%	99.6%	100%	99.7%	100%	20.4%	99.2%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**6.0%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**99.9%**	**100%**	**6.7%**	**99.7%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Monitoring Year	**100%**	**100%**	**88.0%**	**99.0%**	**38.6%**	**100%**	**94.9%**	**99.0%**	**99.0%**	**100%**	**100%**	**100%**	**63.1%**	**99.9%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Delta T failed February 13, 2008, audit. Data invalidated from September 7, 2007, through February 13, 2008.
[5] Wind direction sensor failed September 24 and 25, 2008, audit. Data invalidated from February 13, 2008, through September 25, 2008.
[6] Wind speed sensor found broken on April 30, 2008, and May 12, 2008.
[7] Precipitation sensor failed September 24 and 25, 2008, audit. Data invalidated from May 12, 2008, through September 25, 2008.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

CONTENTS

1. Pebble 4 Station September 2007 Quality Assurance Systems Audit and Performance Audit

2. Pebble 4 Station February 2008 Quality Assurance Performance Audit

3. Pebble 4 Station September 2008 Quality Assurance Systems Audit and Performance Audit

Pebble 4
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 4 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 10
3.1.7 Solar Radiation 10
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 11

3.3 Performance Audit Recommendations 11

4.0 REFERENCES 14

LIST of FIGURES and TABLES

Figure 2-1 Pebble 4 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 4 September 5-6, 2007 Performance Audit Summary (CR10X) 12
Table 3-3 Pebble 4 September 6-7, 2007 Performance Audit Summary (CR1000) 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 4 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

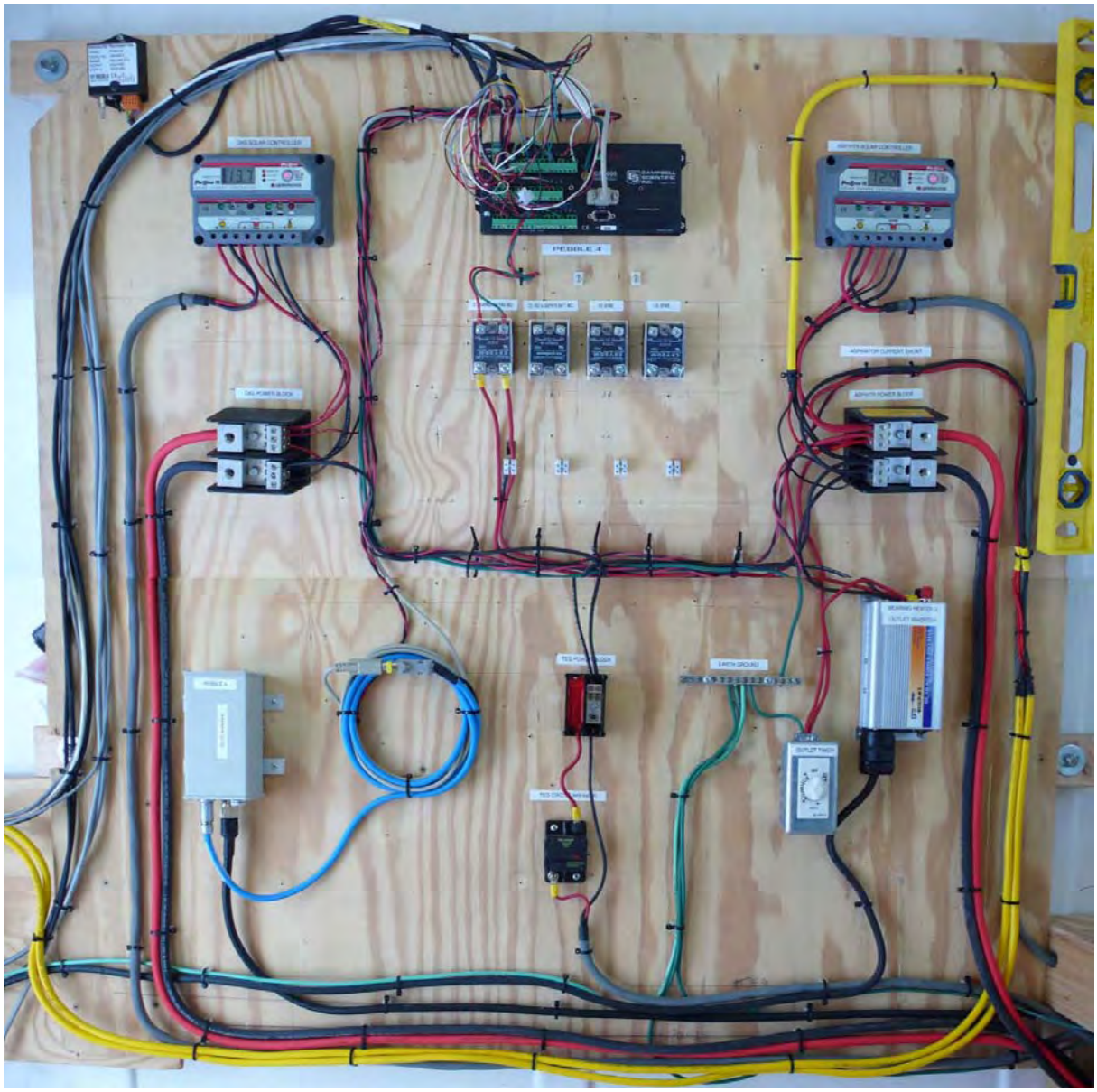
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 4 station was conducted in early September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 4 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence and all instrumentation wires from the tower, precipitation gauge and evaporation gauge are protected in conduit These conduits all converge at a 5’ by 7’

insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 4 Station DAS Wiring Panel



The Campbell Scientific CR10X/CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater

radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 4 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates

a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 4 station is a well designed and operated meteorological monitoring station. During the recent audit the operator upgraded the data acquisition system and added current shunts to the system in order to remotely monitor the aspirator fans. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 4 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audits were conducted at the Pebble 4 station from September 5-7, 2007, with Dominic Shallies of HCG assisting. The station was audited as found on September 5-6, 2007. After the initial audit the datalogger was upgraded from a Campbell Scientific CR10X to a CR1000 and the RM Young and Climatronics wind direction sensors were replaced. After these modifications the station was re-audited on September 6-7, 2007. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Tables 3-2 and 3-3, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 4 September 5-6, 2007 Performance Audit Summary (CR10X)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:24	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.12	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.12	Pass
Air Temperature Difference	≤ ±0.1	°C	0.05	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.4	Pass
Wind Direction Linearity	≤ 3	Degree	1.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[1]	N/A
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.008	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	10.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	4.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.5	Pass
Wind Direction Linearity	≤ 3	Degree	1.5	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	N/A[1]	N/A
Barometric Pressure	≤ ±3	Mbar	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-10.0[2]	Pass
Tipping Precipitation	≤ ±10	% input	-4.0	Pass
Evaporation	≤ ±10	% input	2.0	Pass

1. Not re-tested until after DAS/sensor change.
2. Max % error value of 10.0 within limit of 5% input + resolution, see audit.

Table 3-3 Pebble 4 September 6-7, 2007 Performance Audit Summary (CR1000)

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:22	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.17	Pass
Air Temperature Difference	≤ ±0.1	°C	0.03	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	1.7	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	N/A[1]	N/A
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-4.3	Pass
Barometric Pressure	≤ ±3	Mbar	1.8	Pass
Solar Radiation	≤ ±5+Res	% input	-8.1[2]	Pass
Tipping Precipitation	≤ ±10	% input	3.0	Pass
Evaporation	≤ ±10	% input	2.4	Pass

1. New DAS/sensor, no as-found value.
2. Max % error value of 8.1 within limit of 5% input + resolution, see audit.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 4 station is located on the crest of a knoll approximately 5 miles south of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

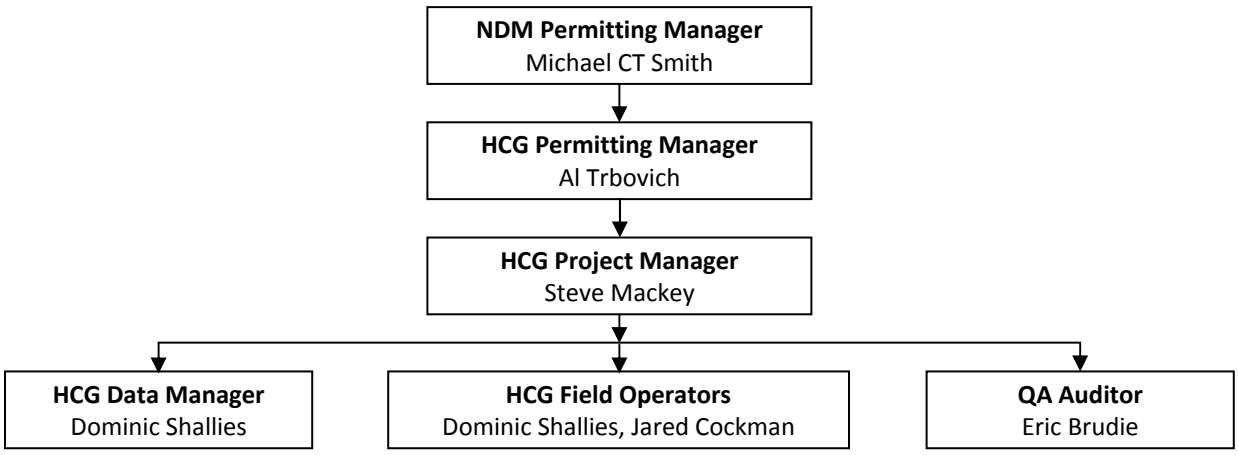
Indicated by Operator	Determined by Auditor
59° 50' N	59° 49.837 N
155° 18' W	155° 18.041'
Elevation: 1,200 feet	Elevation: 1,190 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
Old DAS[1]	Campbell Scientific	CR10X	X45838
Old DAS Wiring Panel	Campbell Scientific	CR10X	35367
New DAS[2]	Campbell Scientific	CR1000	Unknown
New DAS Wiring Panel	Campbell Scientific	CR1000	8248
Temperature (2-meter)	Met One	062MP	E2777, ID #2/2
Temperature (10-meter)	Met One	062MP	E2777, ID #1/2
Temperature Aspirators	Met One	076B-4	F5259 & F5260
Relative Humidity	Vaisala	HMP45AC	A4350044
Primary Wind Speed	Climatronics	F460-100075	5081
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2299
Old Primary Wind Direction	Climatronics	F460-100076	4745
New Primary Wind Direction	Climatronics	F460-100076	4662
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1452
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Old Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	71368
New Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	77028
Backup Wind Spd Prop	RM Young	08254	63635
Barometric Pressure	Vaisala	PTB101B	B0440012
Solar Radiation	LI-COR	Li-200SX	PY52709
Precipitation-Tipping	Met-One	370	A6431
Precip. Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	687
Evaporation Pan	NovaLynx	255-200	None

1. DAS and some sensors replaced after initial audit on Sep 6, 2007.
2. New DAS and sensors audited on Sep 6-7, 2007.

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 4 PSD Meteorological Station Systems Audit

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base?	■ Yes □ No	Comments: None.
Is the height of the tower at least 10 meters above the ground?	■ Yes □ No	Comments: None.
Is the tower stable and plumb?	■ Yes □ No	Comments: None.
Is the tower protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter?	■ Yes □ No	Comments: None.
Are the temperature difference probes at heights of 2-m and 10-m above the ground?	■ Yes □ No	Comments: None.
Are the sensors at a distance greater than four times the height of any obstruction?	■ Yes □ No	Comments: None.
Is the ground beneath the temperature sensors natural native material?	■ Yes □ No	Comments: None.
Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)?	■ Yes □ No	Comments: None.
Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.

Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Alter type shield surrounds Met-One gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: The lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

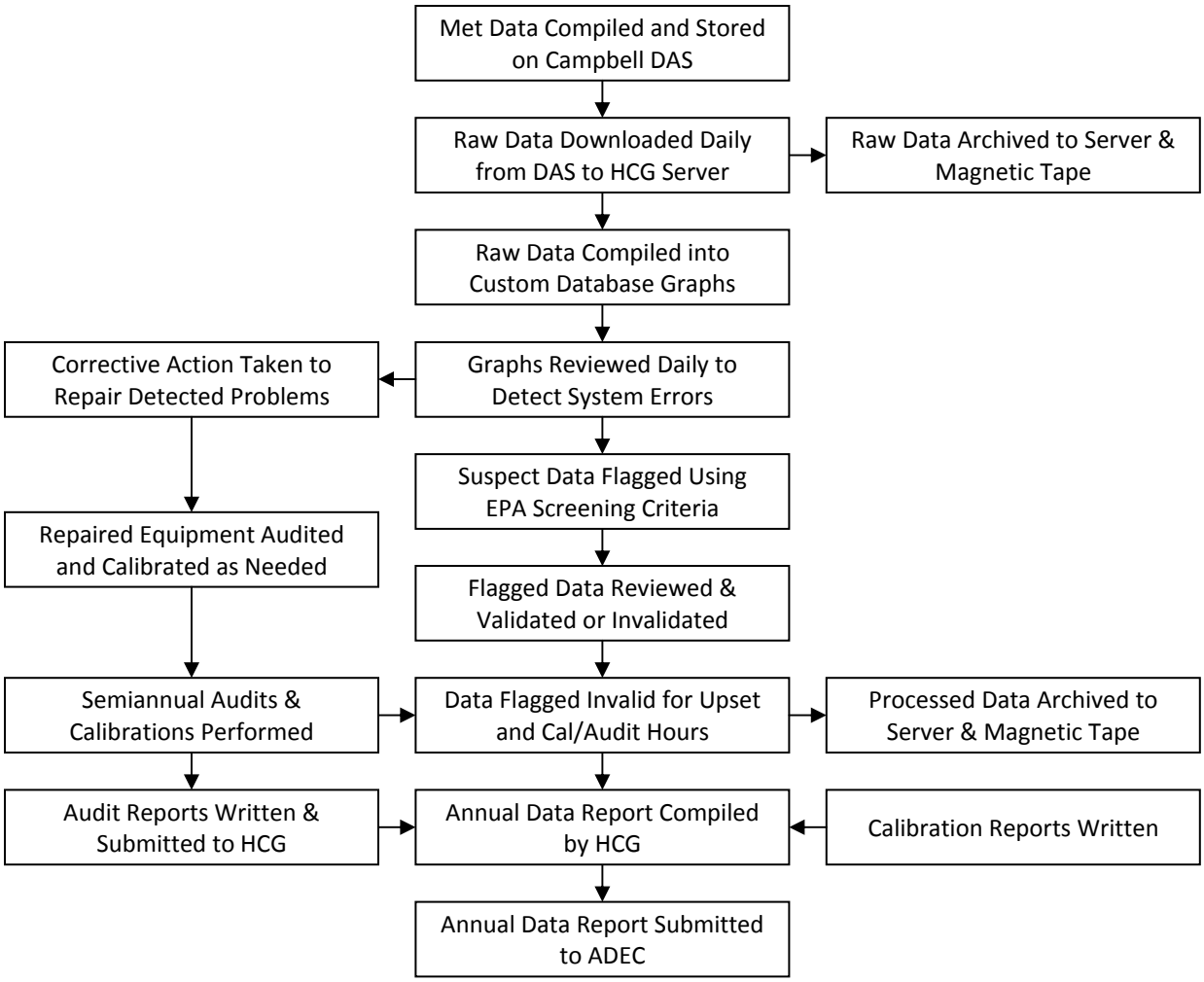
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 6-7, 2007
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: CR10X audit. Most audits on 9/6/07, only solar started on 9/5/07.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
9:43:00	9:42:36	**-00:24**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1155
End: 1215

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	40.00	40.12	0.12	Pass	40.12	0.12	Pass	0.00	Pass
Warm	15 to 25	13.58	13.63	0.05	Pass	13.63	0.05	Pass	0.00	Pass
Ice Bath	0	-0.01	-0.03	-0.02	Pass	-0.03	-0.02	Pass	0.00	Pass
Cold	-15 to -25	-10.02	-9.98	0.04	Pass	-9.98	0.04	Pass	0.00	Pass
Very Cold	-35 to -45	-29.62	-29.55	0.07	Pass	-29.50	0.12	Pass	0.05	Pass
		Max Abs. Error		0.12	**PASS**		0.12	**PASS**	0.05	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
907	94.8	8.1	7.3	98.9	8.3	8.1	0.8	Pass
1042	93.5	8.7	7.7	95.2	8.9	8.2	0.5	Pass
1112	93.3	8.8	7.2	94.0	9.1	8.2	1.0	Pass
					Max Abs. Error		1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: $Td=b*ע/(a-ע)$, where $ע=a*Ta/(b + Ta) + \ln(RH)$, and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60	**m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4745	**Vane #:**	1452	**Range:**	0-360	**Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864	
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674					
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042	
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3	**E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1142 End: 1145

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble Station 3	166.3	170.6	4.3	Pass
Peak 1590	104.4	108.4	4.0	Pass
Hill 0948	325.6	327.1	1.5	Pass
Compass	272.5	274.0	1.5	Pass
	Max Abs. Error		**4.3**	**PASS**
	Mean Abs. Error		**2.8**	**GOOD**

Time: Begin: 1000 End: 1025

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	181.0	1.0	Pass
West	270.0	272.8	2.8	Pass
North	360.0	0.0	0.0	Pass
East	90.0	90.1	0.1	Pass
North	360.0	3.2	3.2	Pass
West	270.0	273.1	3.1	Pass
South	180.0	180.4	0.4	Pass
East	90.0	89.2	-0.8	Pass
	Max Abs. Error		**3.2**	**PASS**
	Mean Abs. Error		**1.4**	**PASS**

Time: Begin: 1125 End: 1129

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	27.6	-2.4	Pass	330.0	331.6	1.6	Pass
60.0	57.8	-2.2	Pass	355.0	356.2	1.2	Pass
90.0	88.3	-1.7	Pass	30.0	28.4	-1.6	Pass
120.0	119.7	-0.3	Pass	60.0	58.2	-1.8	Pass
150.0	149.2	-0.8	Pass	90.0	88.7	-1.3	Pass
180.0	178.7	-1.3	Pass	120.0	120.0	0.0	Pass
210.0	209.6	-0.4	Pass	150.0	149.3	-0.7	Pass
240.0	240.2	0.2	Pass	180.0	179.2	-0.8	Pass
270.0	270.8	0.8	Pass	**Max Abs. Error**		**2.4**	**PASS**
300.0	301.3	1.3	Pass	**Mean Abs. Error**		**1.1**	**PASS**

Time: Begin: 1136 End: 1140

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.060	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
	Max Abs. Error			
	Mean Abs. Error			

Time: Begin: End:

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 71368 **Prop #:** 63635 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.3 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1105 End: 1113

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble Station 3	166.3	168.9	2.6	Pass
Peak 1590	104.4	107.3	2.9	Pass
Hill 0948	325.6	330.1	4.5	Pass
Compass	272.5	269.3	-3.2	Pass
Time: Begin: 1000	**Max Abs. Error**		**4.5**	**PASS**
End: 1025	**Mean Abs. Error**		**3.3**	**ALERT**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.9	0.9	Pass	150.0	149.5	-0.5	Pass	270.0	267.6	-2.4	Pass
60.0	60.2	0.2	Pass	180.0	180.0	0.0	Pass	300.0	296.9	-3.1	Pass
90.0	90.6	0.6	Pass	210.0	208.9	-1.1	Pass	330.0	326.5	-3.5	Pass
120.0	119.7	-0.3	Pass	240.0	238.0	-2.0	Pass	355.0	351.5	-3.5	Pass
					Time:	Begin: 1055		**Max Abs. Error**		**3.5**	**PASS**
						End: 1100		**Mean Abs. Error**		**1.5**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.008	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	10.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Instrument/DAS Changed-				
No Post-Audit Test				
Time: Begin:	**Max Abs. Error**			
End:	**Mean Abs. Error**			

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
905	28.64	28.54	966.6	968.4	1.8	Pass
			Max Abs. Error		1.8	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

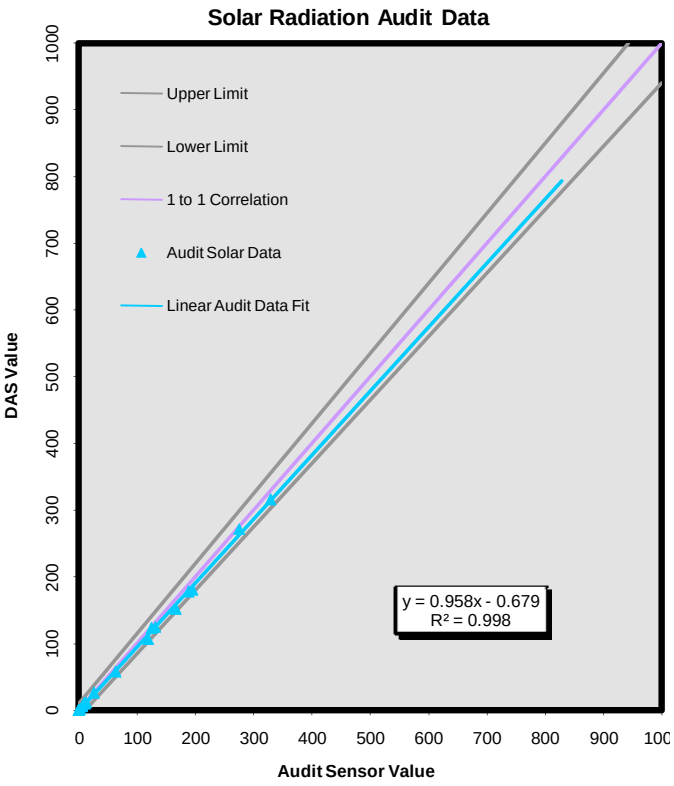
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1458	275.4	272.0	-3.4	±23.8	-1.2%	Pass
850	131.2	125.3	-5.9	±16.6	-4.5%	Pass
1137	194.4	180.8	-13.6	±19.7	-7.0%	Pass
1217	328.3	315.9	-12.4	±26.4	-3.8%	Pass
1600	124.4	123.1	-1.3	±16.2	-1.0%	Pass
1700	9.6	10.8	1.3	±10.5	n/a	Pass
1800	10.0	9.7	-0.3	±10.5	n/a	Pass
1900	12.3	12.2	-0.1	±10.6	n/a	Pass
2000	6.1	6.2	0.1	±10.3	n/a	Pass
2100	0.5	0.3	-0.1	±10.0	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
600	0.0	0.0	0.0	±10.0	n/a	Pass
700	3.0	2.7	-0.3	±10.1	n/a	Pass
800	26.4	25.9	-0.5	±11.3	n/a	Pass
900	63.4	57.5	-5.9	±13.2	-9.3%	Pass
1000	119.0	107.1	-11.9	±16.0	-10.0%	Pass
1100	166.2	151.4	-14.8	±18.3	-8.9%	Pass
1200	188.5	177.3	-11.2	±19.4	-5.9%	Pass
Corr. Val	**0.9993**	**Max Abs. Percent Error**			**10.0%**	**PASS**
R² Value	**0.9986**	**Intercept**	**-0.7**	**Slope**	**0.9589**	**PASS**



Begin Date: 09/05/07 **End Date:** 09/06/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 5-6, 2007

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
817	650	20.0	0.0		19.2	900	19.2	-4.0%	Pass	
901	650	20.0	0.0		19.6	1000	19.6	-2.0%	Pass	
1003	650	20.0	0.0		19.4	1100	19.4	-3.0%	Pass	
1110	650	20.0	0.0		20.0	1200	20.0	0.0%	Pass	
						Max Abs. Error		**4.0%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Snowfall adapter off.

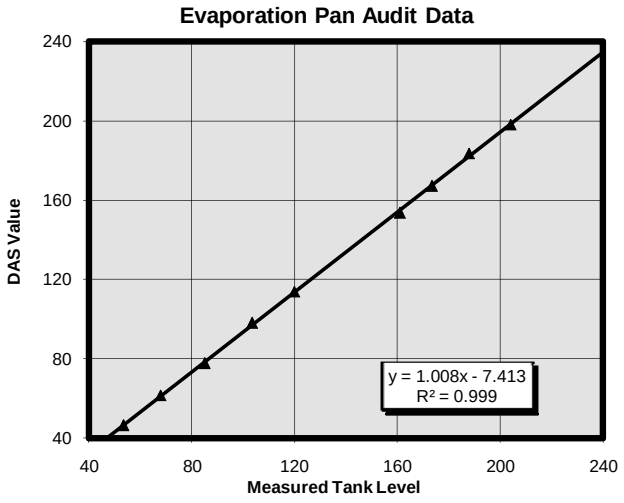
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	120.0	113.9	112.6	1.3	1.2%	Pass
	103.5	98.0	96.1	1.9	2.0%	Pass
	85.0	77.6	77.6	0.0	0.0%	Pass
	68.0	61.6	60.6	1.0	1.7%	Pass
	53.5	46.3	46.1	0.2	0.5%	Pass
	161.0	153.4	153.6	-0.2	-0.1%	Pass
	173.5	167.1	166.1	1.0	0.6%	Pass
	188.0	183.7	180.6	3.1	1.7%	Pass
	204.0	198.2	196.6	1.6	0.8%	Pass
		Max Abs. Error		**3.1**	**2.0%**	**PASS**
		Intercept	**-7.4**	**Slope**	**1.0087**	**PASS**



Time: Begin: 1030 End: 1115

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: CR1000 audit.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:36:30	16:36:08	**-00:22**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1520
End: 1535

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	42.08	42.25	0.17	Pass	42.25	0.17	Pass	0.00	Pass
Warm	15 to 25	20.01	20.05	0.04	Pass	20.05	0.04	Pass	0.00	Pass
Ice Bath	0	-0.05	0.10	0.15	Pass	0.10	0.15	Pass	0.00	Pass
Cold	-15 to -25	-9.90	-9.95	-0.05	Pass	-9.95	-0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-23.87	-23.76	0.11	Pass	-23.73	0.14	Pass	0.03	Pass
		Max Abs. Error	0.17	**PASS**		0.17	**PASS**	0.03	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
09/06/07	1530	66.1	10.5	4.5	68.7	10.6	5.1	0.6	Pass
09/07/07	1330	93.0	8.3	7.3	92.3	8.6	7.4	0.1	Pass
						Max Abs. Error		0.6	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4662	**Vane #:**	1452	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1617 End: 1620

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
		Max Abs. Error		
		Mean Abs. Error		

Time: Begin: End:

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.5	0.5	Pass
West	270.0	272.6	2.6	Pass
North	360.0	0.7	0.7	Pass
East	90.0	92.3	2.3	Pass
North	360.0	0.9	0.9	Pass
West	270.0	272.4	2.4	Pass
South	180.0	180.8	0.8	Pass
East	90.0	92.6	2.6	Pass
	Max Abs. Error		**2.6**	**PASS**
	Mean Abs. Error		**1.6**	**PASS**

Time: Begin: 1633 End: 1640

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.8	-0.2	Pass	330.0	331.7	1.7	Pass
60.0	59.3	-0.7	Pass	355.0	356.2	1.2	Pass
90.0	91.0	1.0	Pass	30.0	29.2	-0.8	Pass
120.0	121.1	1.1	Pass	60.0	60.8	0.8	Pass
150.0	150.2	0.2	Pass	90.0	91.0	1.0	Pass
180.0	180.3	0.3	Pass	120.0	121.5	1.5	Pass
210.0	210.1	0.1	Pass	150.0	150.4	0.4	Pass
240.0	240.2	0.2	Pass	180.0	179.1	-0.9	Pass
270.0	270.8	0.8	Pass	**Max Abs. Error**		**1.7**	**PASS**
300.0	300.8	0.8	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1621 End: 1623

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
West Sharp Mtn	46.1	45.7	-0.4	Pass
Peak 1590	104.4	105.1	0.7	Pass
Peak 1760	153.4	152.9	-0.5	Pass
Hill 0948	325.6	326.7	1.1	Pass
Compass	273.0	269.7	-3.3	Pass
Peak 1824	262.7	261.8	-0.9	Pass
	Max Abs. Error		**3.3**	**PASS**
	Mean Abs. Error		**1.1**	**GOOD**

Time: Begin: 1700 End: 1735

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: New wind direction instrument SN 4662 replaced SN 4745.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor: **Make:** RM Young **Model:** 05305 AQ **S.N.#:** 77028 **Prop #:** 63635 **Range:** 0-360 **Deg**
Spd Audit Eq: **Low Spd:** RM Young **Model:** 18811 **S.N.#:** CA02136 **Torque:** Watters Mdl 366-3 **S.N.#:** 4864
Spd Audit Eq: **High Spd:** RM Young **Model:** 18801 **S.N.#:** CA06174
Dir Audit Eq: **Linearity:** RMY Mdl 18112 Bench Stand **S.N.#:** None **Torque:** RMY Mdl 18331 Torque Gauge **S.N.#:** None
Dir Audit Eq: **Compass:** Brunton **Model:** 11-F5008 **S.N.#:** 5080799319 **Magnetic Declin:** 17.3 **E of N**

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1515 End: 1520

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
New Instrument/DAS-				
No In-Situ Test				
Time: Begin:		**Max Abs. Error**		
End:		**Mean Abs. Error**		

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	32.1	2.1	Pass	150.0	149.6	-0.4	Pass	270.0	270.6	0.6	Pass
60.0	61.2	1.2	Pass	180.0	180.1	0.1	Pass	300.0	301.0	1.0	Pass
90.0	90.5	0.5	Pass	210.0	210.0	0.0	Pass	330.0	331.1	1.1	Pass
120.0	120.2	0.2	Pass	240.0	240.1	0.1	Pass	355.0	354.5	-0.5	Pass
					Time: Begin:	1600		**Max Abs. Error**		**2.1**	**PASS**
					End:	1618		**Mean Abs. Error**		**0.7**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.007	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	7.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
West Sharp Mtn	46.1	47.0	0.9	Pass
Peak 1590	104.4	104.3	-0.1	Pass
Peak 1760	153.4	151.4	-2.0	Pass
Hill 0948	325.6	324.3	-1.3	Pass
Compass	273.0	268.7	-4.3	Pass
Peak 1824	262.7	261.7	-1.0	Pass
Time: Begin: 1700	**Max Abs. Error**		**4.3**	**PASS**
End: 1735	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: New sensor SN 77028 replaced sensor SN 71368.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1724	28.66	28.56	967.3	969.1	1.8	Pass
			Max Abs. Error		1.8	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

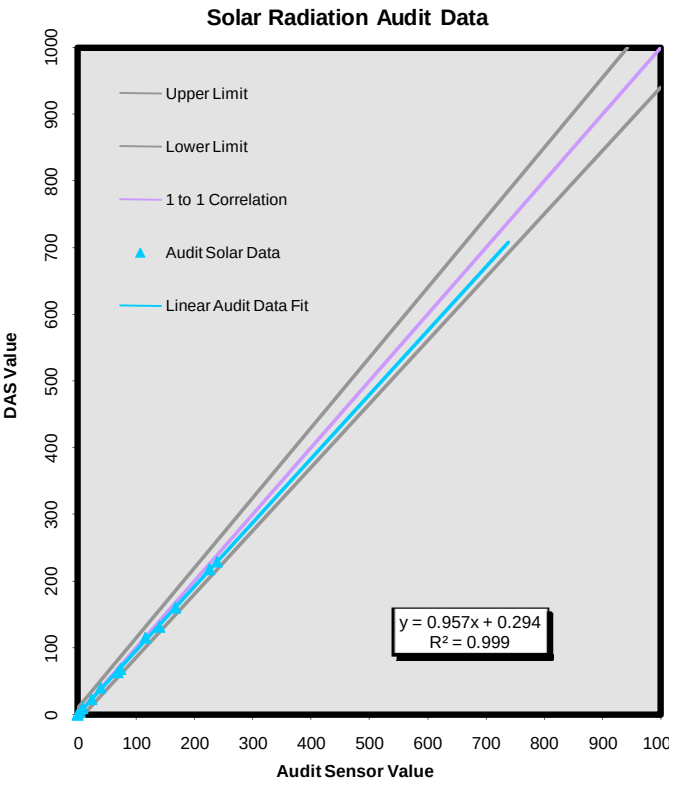
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1535	238.7	229.7	-9.0	±21.9	-3.8%	Pass
1555	225.9	217.6	-8.3	±21.3	-3.7%	Pass
1620	168.0	160.3	-7.7	±18.4	-4.6%	Pass
1700	140.5	131.3	-9.2	±17.0	-6.5%	Pass
1800	73.3	68.2	-5.1	±13.7	-6.9%	Pass
1900	23.3	23.3	0.0	±11.2	n/a	Pass
2000	8.7	9.7	1.0	±10.4	n/a	Pass
2100	0.0	0.2	0.2	±10.0	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
600	0.0	0.0	0.0	±10.0	n/a	Pass
700	4.4	4.2	-0.2	±10.2	n/a	Pass
800	38.5	40.5	2.0	±11.9	n/a	Pass
900	116.2	115.0	-1.2	±15.8	-1.0%	Pass
1000	68.4	62.9	-5.5	±13.4	-8.1%	Pass
Corr. Val	**0.9997**	**Max Abs. Percent Error**			**8.1%**	**PASS**
R² Value	**0.9994**	**Intercept**	**0.3**	**Slope**	**0.9574**	**PASS**



Begin Date: 09/06/07 **End Date:** 09/07/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 6-7, 2007

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/06/07	1625	650	20.0	0.0		20.6	1700	20.6	3.0%	Pass	
09/07/07	940	650	20.0	0.0	19.2	1.4	1100	20.6	3.0%	Pass	
							Max Abs. Error		**3.0%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Snowfall adapter off.

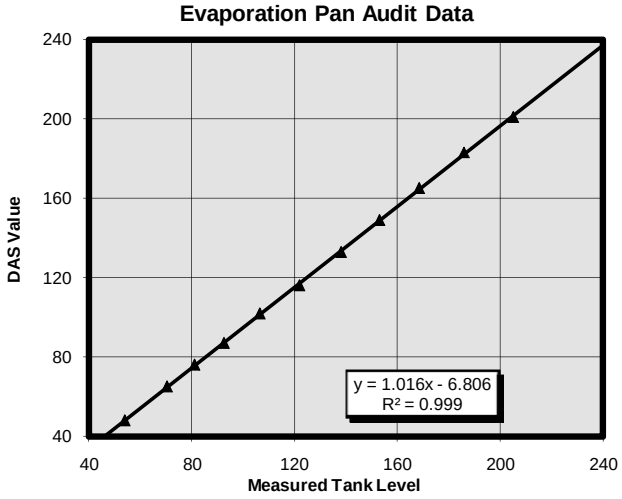
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

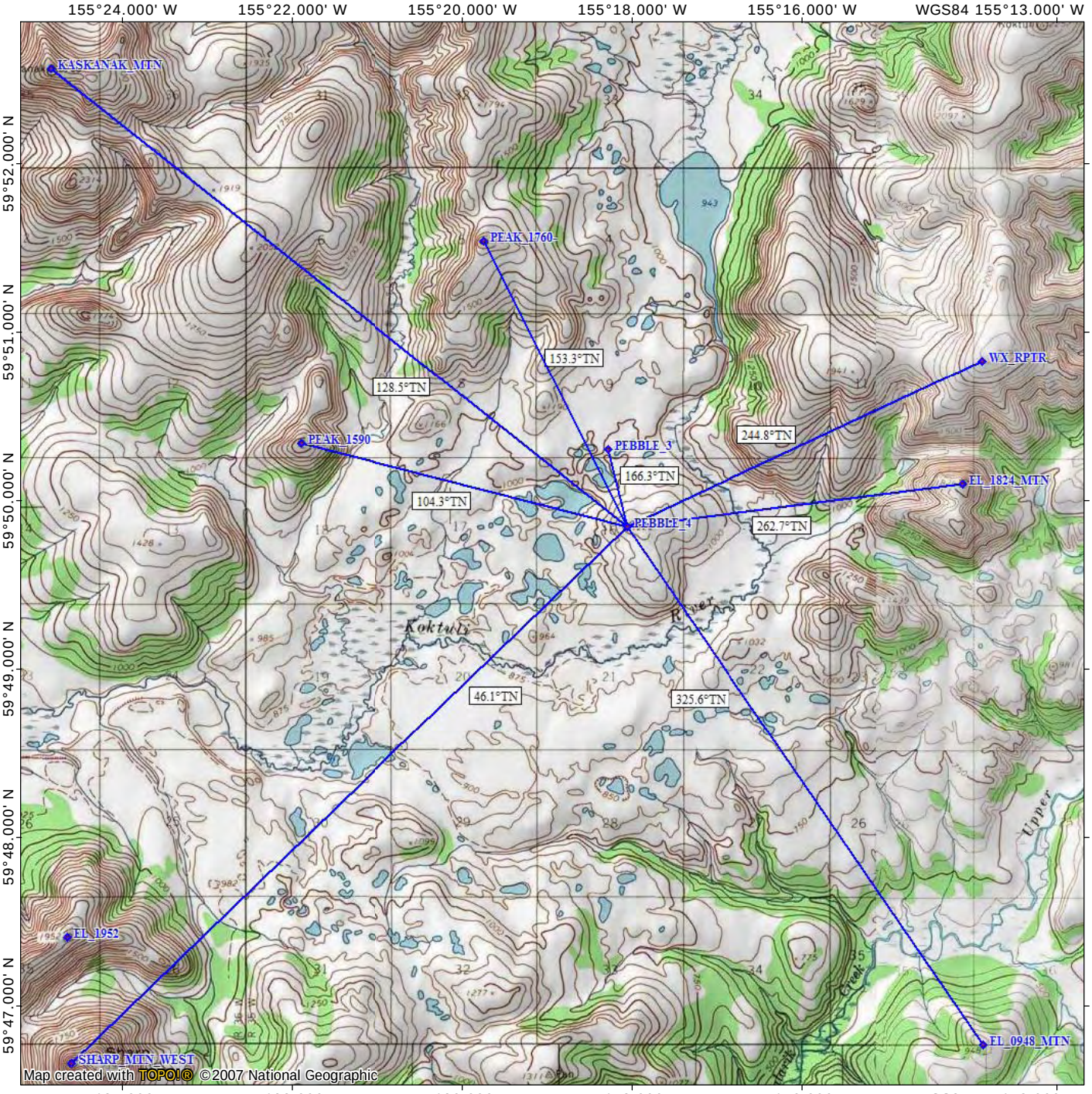
Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	205.0	200.9	198.2	2.7	1.4%	Pass
	186.0	183.3	179.2	4.1	2.3%	Pass
	168.5	165.1	161.7	3.4	2.1%	Pass
	153.0	149.0	146.2	2.8	1.9%	Pass
	138.0	132.8	131.2	1.6	1.2%	Pass
	122.0	116.1	115.2	0.9	0.8%	Pass
	106.5	101.8	99.7	2.1	2.1%	Pass
	92.5	87.0	85.7	1.3	1.5%	Pass
	81.0	76.0	74.2	1.8	2.4%	Pass
	70.5	65.2	63.7	1.5	2.4%	Pass
	54.0	48.0	47.2	0.8	1.7%	Pass
		Max Abs. Error		**4.1**	**2.4%**	**PASS**
		Intercept	**-6.8**	**Slope**	**1.0168**	**PASS**



Date: 09/07/07 **Time:** Begin: 1030 End: 1115

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Windy.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN 17°

10/30/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Block unit

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EJ

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V. Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE # 300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079319

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Lenyen
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments for Precision Measurements Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble Station 4
February 2008
Quality Assurance Performance Audit

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

Pebble 4 PSD Meteorological Monitoring Station
February 2008
Quality Assurance Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 PERFORMANCE AUDIT 2

2.1 Performance Audit Methodology 2

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 6

2.2 Performance Audit Results 7

2.3 Performance Audit Recommendations 7

3.0 REFERENCES 9

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 4 February 12 and 13, 2008 Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for The Pebble Limited Partnership, care of Pebble Mines Corporation (PMC); in support of the Pebble Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4.)

Pebble 4 is located approximately five miles south of the deposit area on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PMC to serve as a quantitative review of the Pebble 4 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the

gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

A performance audit was conducted at the Pebble 4 station on February 12 and 13, 2008, with Dominic Shallies of HCG assisting. The ambient temperature was too low to use the low flow tester required for the tipping precipitation gauge, so that instrument was tested on a March 6, 2008. All sensors were challenged with certified audit equipment and all instruments except the thermistors yielded errors below the PSD limits. The thermistors were replaced and re-audited. Table 2-2 contains summary data from the audit and complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 4 February 12 and 13, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:36	Pass
2-m Temperature Accuracy (Old)	≤ ±0.5	°C	0.40	Pass
10-m Temperature Accuracy (Old)	≤ ±0.5	°C	0.20	Pass
Air Temperature Difference (Old)	≤ ±0.1	°C	-0.25	Fail
2-m Temperature Accuracy (New)	≤ ±0.5	°C	0.15	Pass
10-m Temperature Accuracy (New)	≤ ±0.5	°C	0.15	Pass
Air Temperature Difference (New)	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.8	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.4	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	9.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	-3.5	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.4	Pass
Barometric Pressure	≤ ±3	Mbar	0.4	Pass
Solar Radiation	≤ ±5+Res	% input	-6.5[1]	Pass
Tipping Precipitation	≤ ±10	% input	-5.0	Pass

1. Max % error value of 6.5 within limit of 5% input + resolution, see audit.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Meteorological Measurement Methods Validation Criteria", ADEC, November 2007.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12 & 13, 2008

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: CR1000 SN: 8522. Wire panel #8248.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
10:41:00	10:40:24	**-00:36**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT (Existing)*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** E2777 # 1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 02/12/08
Time:
Begin: 1410
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	37.88	38.28	0.40	Pass	38.03	0.15	Pass	-0.25	Fail
Warm	15 to 25	20.69	20.89	0.20	Pass	20.69	0.00	Pass	-0.20	Fail
Ice Bath	0	-0.02	0.20	0.22	Pass	0.14	0.16	Pass	-0.06	Pass
Cold	-15 to -25	-21.38	-21.24	0.14	Pass	-21.24	0.14	Pass	0.00	Pass
Very Cold	-35 to -45	9.92	10.22	0.30	Pass	10.12	0.20	Pass	-0.10	Pass
		Max Abs. Error		0.40	**PASS**		0.20	**PASS**	0.25	**FAIL**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Sensors failed Delta T criteria, sensors replaced and re-tested.

• *TEMPERATURE SENSORS & ΔT AUDIT (Replacement)*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G9580 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G9580 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 02/13/08
Time:
Begin: 1410
End: 1500

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	39.43	39.58	0.15	Pass	39.58	0.15	Pass	0.00	Pass
Warm	15 to 25	21.15	21.13	-0.02	Pass	21.13	-0.02	Pass	0.00	Pass
Ice Bath	0	-0.01	0.07	0.08	Pass	0.07	0.08	Pass	0.00	Pass
Cold	-15 to -25	-1.89	-1.82	0.07	Pass	-1.82	0.07	Pass	0.00	Pass
Very Cold	-35 to -45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Max Abs. Error		0.15	**PASS**		0.15	**PASS**	0.00	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Replacement thermistors. No dry ice remaining for low temperature tests.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12 & 13, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4662	**Vane #:**	1452	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.2	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1419 End: 1421

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	46.4	0.3	Pass
Peak 1590	104.3	106.1	1.8	Pass
Pebble 3	166.3	166.2	-0.1	Pass
Peak 0918	325.6	326.5	0.9	Pass
Compass	261.5	257.7	-3.8	Pass
Peak 1824	262.7	263.1	0.4	Pass
		Max Abs. Error	**3.8**	**PASS**
		Mean Abs. Error	**1.2**	**GOOD**

Time: Begin: 1300 End: 1325

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	181.4	1.4	Pass
West	270.0	271.9	1.9	Pass
North	360.0	1.5	1.5	Pass
East	90.0	91.9	1.9	Pass
North	360.0	0.9	0.9	Pass
West	270.0	271.4	1.4	Pass
South	180.0	181.4	1.4	Pass
East	90.0	91.7	1.7	Pass
	Max Abs. Error		**1.9**	**PASS**
	Mean Abs. Error		**1.5**	**PASS**

Time: Begin: 1350 End: 1352

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.5	-0.5	Pass	330.0	331.4	1.4	Pass
60.0	59.7	-0.3	Pass	355.0	356.8	1.8	Pass
90.0	90.8	0.8	Pass	30.0	29.3	-0.7	Pass
120.0	120.5	0.5	Pass	60.0	60.6	0.6	Pass
150.0	150.1	0.1	Pass	90.0	90.4	0.4	Pass
180.0	180.5	0.5	Pass	120.0	121.4	1.4	Pass
210.0	210.1	0.1	Pass	150.0	150.2	0.2	Pass
240.0	240.6	0.6	Pass	180.0	179.8	-0.2	Pass
270.0	271.1	1.1	Pass	**Max Abs. Error**		**1.8**	**PASS**
300.0	301.3	1.3	Pass	**Mean Abs. Error**		**0.7**	**PASS**

Time: Begin: 1424 End: 1426

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.35	0.0049	<0.003	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	7.5	0.104	0.060	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	46.2	0.1	Pass
Peak 1590	104.3	106.2	1.9	Pass
Pebble 3	166.3	166.7	0.4	Pass
Peak 0918	325.6	327.2	1.6	Pass
Compass	278.0	274.6	-3.4	Pass
		Max Abs. Error	**3.4**	**PASS**
		Mean Abs. Error	**1.5**	**GOOD**

Time: Begin: 1550 End: 1605

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12 & 13, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 77028	**Prop #:** 63635	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA06174						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.2	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1349 End: 1351

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	47.9	1.8	Pass
Peak 1590	104.3	105.2	0.9	Pass
Pebble 3	166.3	166.2	-0.1	Pass
Peak 0918	325.6	324.7	-0.9	Pass
Compass	261.5	258.0	-3.5	Pass

Time: Begin: 1300 End: 1325 **Max Abs. Error** **3.5** **PASS** **Mean Abs. Error** **1.4** **GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.3	1.3	Pass	150.0	149.2	-0.8	Pass	270.0	270.9	0.9	Pass
60.0	61.0	1.0	Pass	180.0	179.4	-0.6	Pass	300.0	300.6	0.6	Pass
90.0	90.6	0.6	Pass	210.0	210.2	0.2	Pass	330.0	331.3	1.3	Pass
120.0	120.3	0.3	Pass	240.0	240.2	0.2	Pass	355.0	354.3	-0.7	Pass

Time: Begin: 1330 End: 1333 **Max Abs. Error** **1.3** **PASS** **Mean Abs. Error** **0.7** **PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	1.0	0.014	0.004	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	9.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Sharp West	46.1	48.2	2.1	Pass
Peak 1590	104.3	106.3	2.0	Pass
Pebble 3	166.3	167.7	1.4	Pass
Peak 0918	325.6	325.4	-0.2	Pass
Compass	278.0	274.6	-3.4	Pass

Time: Begin: 1550 End: 1605 **Max Abs. Error** **3.4** **PASS** **Mean Abs. Error** **1.8** **GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12 & 13, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1118	28.38	28.28	957.80	958.18	0.38	Pass
			Max Abs. Error		0.38	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

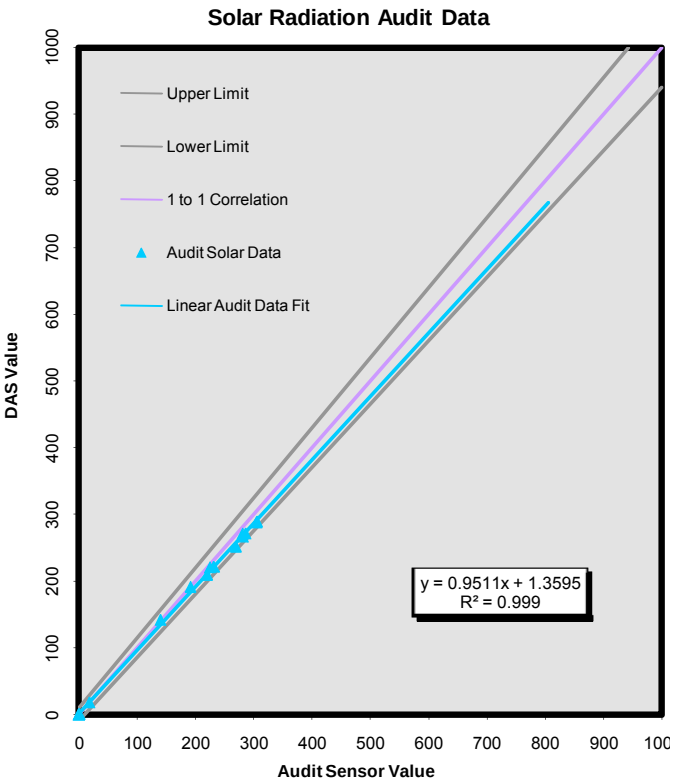
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1038	140.2	141.6	1.4	±17.0	1.0%	Pass
1114	191.5	191.4	-0.1	±19.6	-0.1%	Pass
1138	231.4	221.3	-10.1	±21.6	-4.4%	Pass
1210	269.2	251.6	-17.6	±23.5	-6.5%	Pass
1253	305.2	289.3	-15.9	±25.3	-5.2%	Pass
1435	285.6	271.3	-14.3	±24.3	-5.0%	Pass
1800	18.5	17.8	-0.7	±10.9	n/a	Pass
1900	1.3	0.9	-0.3	±10.1	n/a	Pass
2000	0.2	0.0	-0.2	±10.0	n/a	Pass
2100	0.1	0.0	-0.1	±10.0	n/a	Pass
2200	0.0	0.0	0.0	±10.0	n/a	Pass
1200	219.7	209.4	-10.3	±21.0	-4.7%	Pass
1300	281.4	266.5	-14.9	±24.1	-5.3%	Pass
1400	304.1	288.0	-16.1	±25.2	-5.3%	Pass
1500	280.8	271.3	-9.5	±24.0	-3.4%	Pass
1600	224.9	220.7	-4.2	±21.2	-1.9%	Pass
Corr. Val	**0.9995**	**Max Abs. Percent Error**			**6.5%**	**PASS**
R² Value	**0.9990**	**Intercept**	**1.4**	**Slope**	**0.9511**	**PASS**



Begin: 02/12/08 (Date) 1625 (Time) **End:** 02/13/08 (Date) 1605 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 12 & 13, 2008

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
03/06/08	1317	650	20.0	0.2		19.2	1339	19.0	-5.0%	Pass	
03/06/08	1340	450	13.9	19.2		33.2	1358	14.0	0.7%	Pass	
03/06/08	1400	400	12.3	0.0		12.0	1418	12.0	-2.4%	Pass	
							Max Abs. Error	**5.0%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold in February, audited in March.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

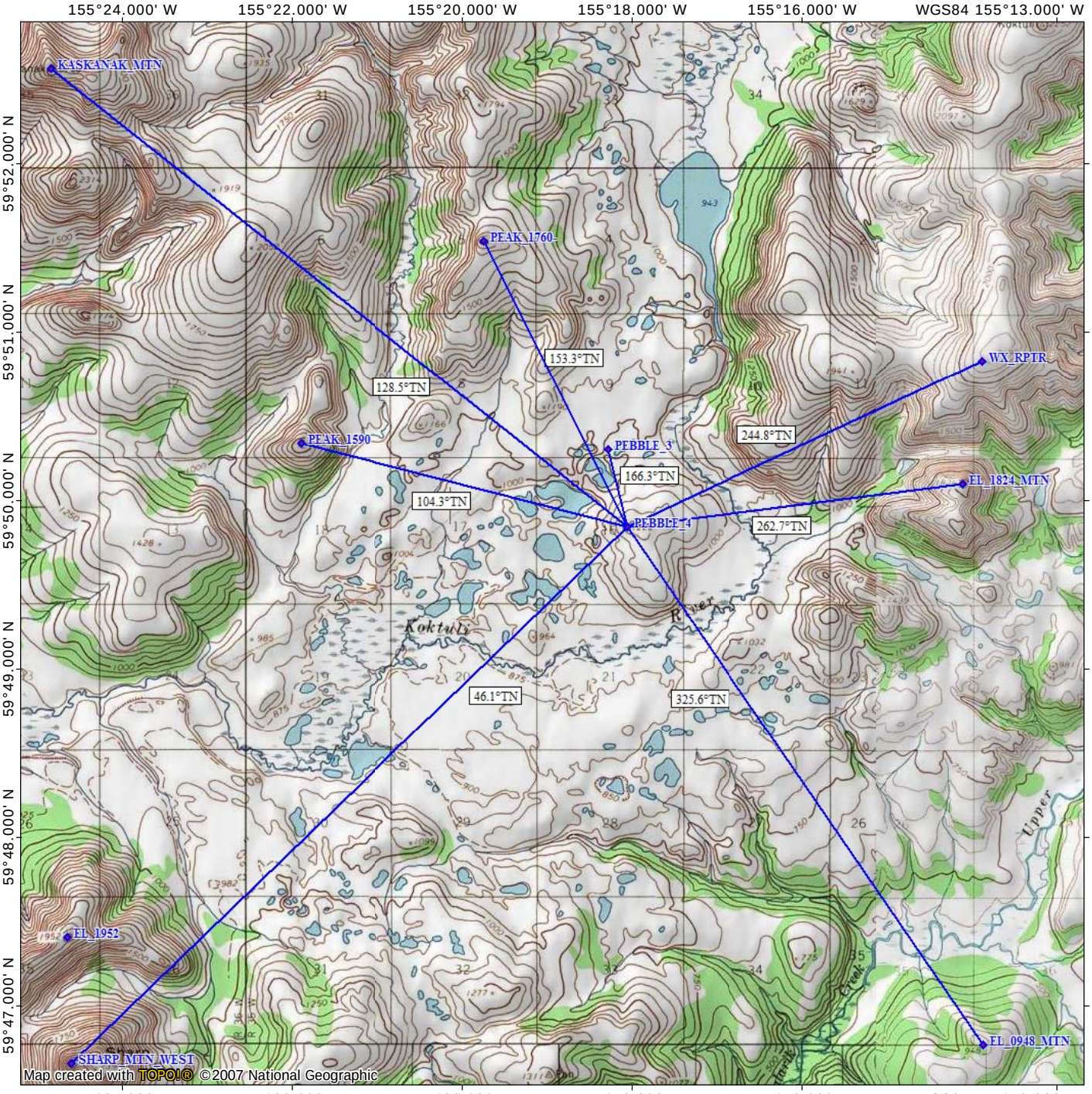
RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350044 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST

Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1116	71.9	-25.1	-28.4	82.4	-25.2	-27.4	1.0	Pass
					Max Abs. Error		1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN 17°

10/30/07

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

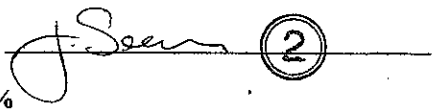
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: 

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner Name: HOEFLER Consulting Group

Address: 340 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER:

MODEL NUMBER: 5008

SERIAL NUMBER: 5080199319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: K. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Pebble Station 4
September 2008
Quality Assurance Systems Audit
and Performance Audit

for the:

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corporation

prepared by:

Hoefler
CONSULTING GROUP

Pebble Station 4
PSD Meteorological Monitoring Station
September 2008
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 9
3.1.7 Solar Radiation 9
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 10

3.3 Performance Audit Recommendations 10

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 4 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 4 September 24-25, 2008 Performance Audit Summary 11

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for Pebble Limited Partnership (PLP) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 4 Station (Pebble 4) located near the proposed mine site.

Pebble 4 is located approximately five miles south of the mine ore body on top of a windswept knoll at about 1,200 foot elevation. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. Approximately 50 foot south of the tower is an evaporation pan and a tipping precipitation gauge mounted on a 6' by 8' deck. Between the tower and the gauges is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 4 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR1000 DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PLP to serve as an official review of the Pebble 4 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

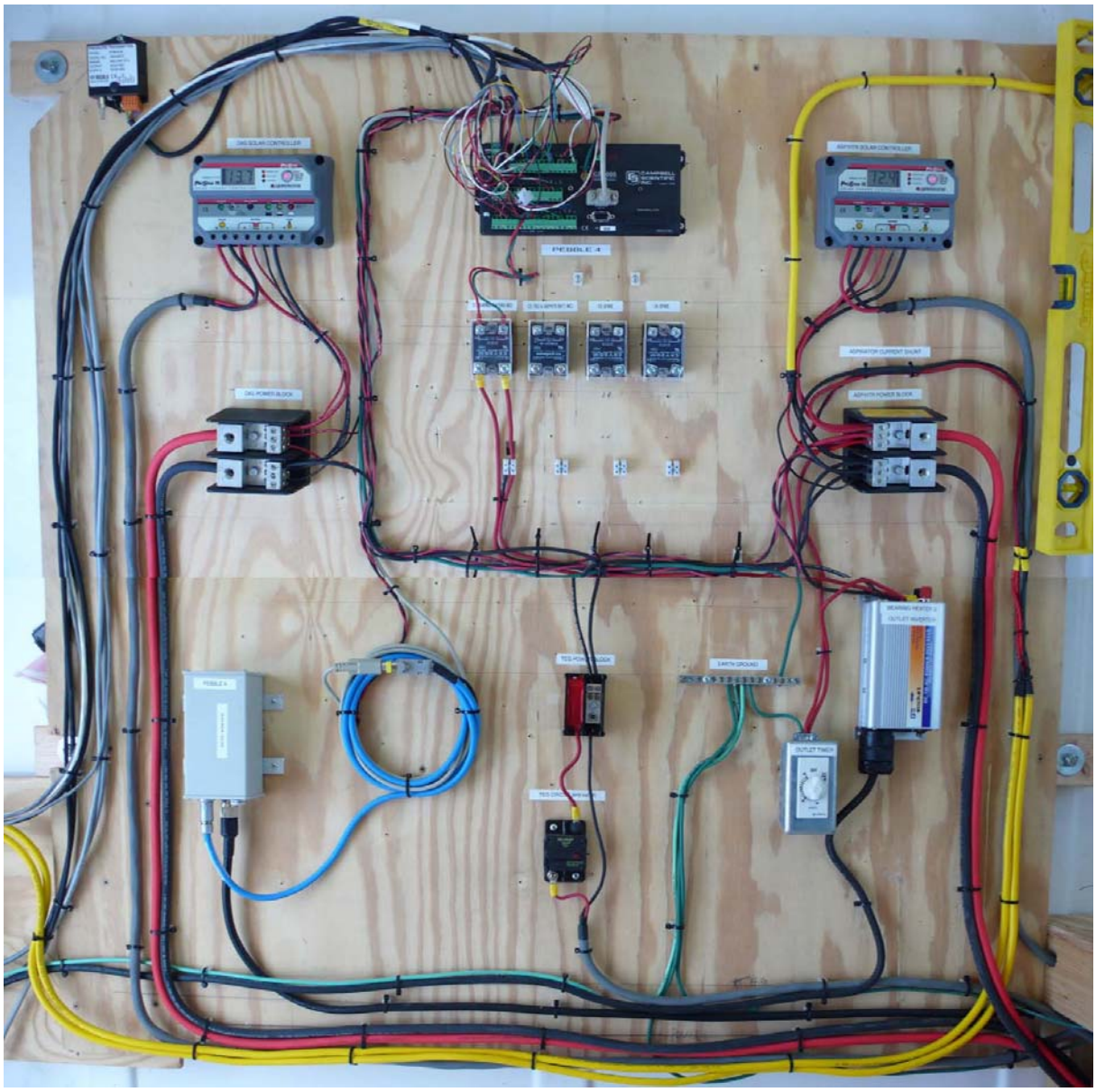
The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* was completed by HCG in August 2006. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the Plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 4 station was conducted in September 2008. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 4 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. The evaporation deck is surrounded by a 6’ high fence and all instrumentation wires from the tower, precipitation gauge and evaporation gauge are protected in conduit These conduits all converge at a 5’ by 7’ insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4’ by 4’ plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 4 Station DAS Wiring Panel



The Campbell Scientific CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS

and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan), and other system documentation, and a review of system operations. System operations include physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program. Program objectives, installations, operations, data management and quality assurance are all clearly outlined. Equally, the Pebble 4 station is representative of the Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had complete DAS and meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 4 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 4 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of

discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change.

An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run. The percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 4 station on September 24 and 25, 2008, with Dominic Shallies of HCG assisting. All PSD program sensors were challenged with certified audit equipment and except for the Climatronics wind direction sensor, yielded errors below the limits. The bearings on the Climatronics wind direction sensor were seized and the instrument was replaced and re-audited. The tipping precipitation gauge was out of repair upon arrival. The tipping bucket mechanism and bearing pins were replaced and the instrument was re-audited with no errors. Summary audit results are contained in Table 3-2, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 4 September 24-25, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:09	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.36	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.36	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity/Dew Point	≤ ±1.5	°C	0.6	Pass
Climatronics Wind System (In Situ)				
Wind Speed Torque	≤ 0.35	gm-cm	<0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 7.5	gm-cm	>>8	Fail[1]
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.7	Pass
Wind Direction Linearity	≤ 3	Degree	1.7	Pass
Climatronics Wind System (Replacement Direction Sensor)				
Wind Direction Torque	≤ 7.5	gm-cm	3.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.5	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.3	Pass
RM Young Wind System				
Wind Speed Torque	≤ 1.0	gm-cm	0.6	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	gm-cm	6.0	Pass
Wind Dir. Azim. Alignment (In Situ)	≤ ±5	Degree	4.7	Pass
Wind Direction Accuracy (In Situ)	≤ ±5	Degree	3.7	Pass
Wind Direction Linearity (In Situ)	≤ 3	Degree	2.8	Pass
Wind Direction Accuracy (Post Cal)	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity (Post Cal)	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Alignment (Post Audit)	≤ ±5	Degree	2.9	Pass

Table 3-2 (Cont.) Pebble 4 September 24-25, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Barometric Pressure	≤ ±3	Mbar	1.6	Pass
Solar Radiation (In Situ)	≤ ±5+Res	% input	8.7	Pass[2]
Solar Radiation (Replacement)	≤ ±5+Res	% input	5.5	Pass[2]
Tipping Precipitation (In Situ)	≤ ±10	% input	17.0	Fail[3]
Tipping Precipitation (Repaired)	≤ ±10	% input	0.0	Pass[3]
Evaporation	≤ ±10	% input	1.3	Pass

1. Wind direction sensor bearings seized.
2. Maximum error within limit of 5% of input + resolution, see audit.
3. Tipping bucket failed initially, replaced parts and re-audited with no error.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 4 PSD Meteorological Station Systems Audit

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 4 station is located on the crest of a knoll approximately 5 miles south of the mine ore body. The site is windswept and treeless with very little organics and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

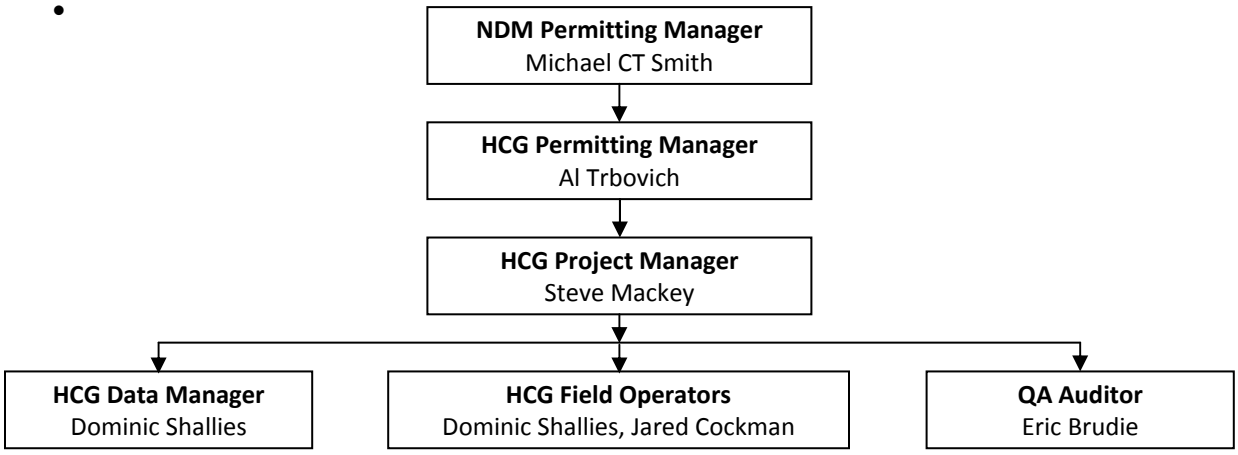
Indicated by Operator	Determined by Auditor
59° 50′ N	59° 49.837 N
155° 18′ W	155° 18.041′
Elevation: 1,200 feet	Elevation: 1,190 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR1000	8522
DAS Wiring Panel	Campbell Scientific	CR1000	8248
Temperature (2-meter)	Met One	062MP	G9580, ID #1/2
Temperature (10-meter)	Met One	062MP	G9580, ID #2/2
Temperature Aspirators	Met One	076B-4	F5259 & F5260
Relative Humidity	Vaisala	HMP45AC	A4350034
Primary Wind Speed	Climatronics	F460-100075	5081
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2299
Old Primary Wind Direction	Climatronics	F460-100076	4662
New Primary Wind Direction	Climatronics	F460-100076-J1	H8900C
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1452
Wind Sigma	Campbell Scientific	DAS Calculated	N/A
Backup Wind Monitor	RM Young	05305 Wind Mon-AQ	79700
Backup Wind Spd Prop	RM Young	08254	65383
Barometric Pressure	Vaisala	PTB101B	B0440012
Old Solar Radiation	LI-COR	Li-200SX	PY52709
New Solar Radiation	LI-COR	Li-200SX	PY59915
Precipitation-Tipping	Met-One	370	A6431
Precip. Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	687
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet modem on telephone grid.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power? ■ Yes □ No Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained? ■ Yes □ No Comments: None.

Are all sensors operational, online and reporting data? ■ Yes □ No Comments: None.

Do all sensors meet EPA criteria for PSD quality sensors? ■ Yes □ No Comments: See table below.

Are spare parts stocked for items which are frequently worn out or broken? ■ Yes □ No Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2-m & 10-m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution. (2-m & 10-m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 4 PSD Meteorological Station Systems Audit

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)? ■ Yes □ No Comments: None.

Are the sensors located at least 30 meters from large paved areas? ■ Yes □ No Comments: None.

Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Alter type shield surrounds Met-One gauge.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	■ Yes □ No	Comments: Six-foot fence surrounds evaporation pan and gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

Owner: PLP | Operator: Dominic Shallies | Alternate: Steve Mackey | Date: Sep 24-25, 2008
Witnesses: Dominic Shallies | Auditor: Eric Brudie

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

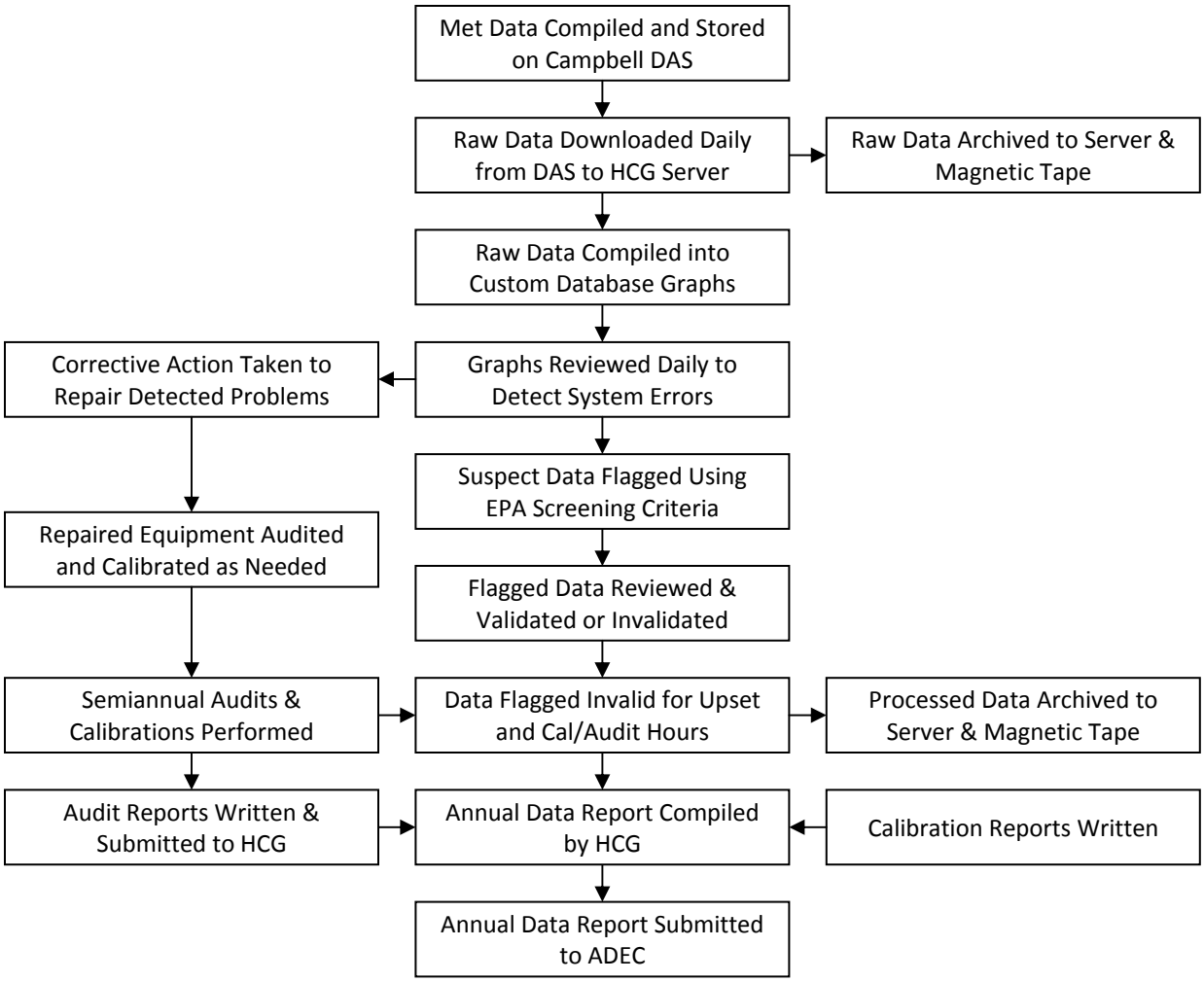
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: PLP Operator: Dominic Shallies Alternate: Steve Mackey Date: Sep 24-25, 2008
Witnesses: Dominic Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists and visit forms.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

• *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
12:31:00	12:30:51	**-00:09**	**PASS**

• *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.0 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G9580 #1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G9580 #2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Date: 09/25/08
Time:
Begin: 1200
End: 1235

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	35.40	35.76	0.36	Pass	35.76	0.36	Pass	0.00	Pass
Warm	15 to 25	18.77	18.78	0.01	Pass	18.78	0.01	Pass	0.00	Pass
Ice Bath	0	-0.03	0.05	0.08	Pass	0.05	0.08	Pass	0.00	Pass
Cold	-15 to -25	-16.75	-16.70	0.05	Pass	-16.70	0.05	Pass	0.00	Pass
Very Cold	-35 to -45	-32.79	-32.80	-0.01	Pass	-32.80	-0.01	Pass	0.00	Pass
		Max Abs. Error	0.36	**PASS**		0.36	**PASS**	0.00	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

• *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.0 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45C-L **S.N.#:** A4350034 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST									
Date	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
09/25/08	924	90.4	5.1	3.4	88.2	5.7	3.7	0.3	Pass
	1116	83.6	5.2	2.6	86.2	5.7	3.2	0.6	Pass
							Max Abs. Error	0.6	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (In Situ)*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60	**m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4662	**Vane #:**	1452	**Range:**	0-360	**Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864	
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674					
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042	
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.1	**E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1111 End: 1114

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	104.3	105.3	1.0	Pass
Sharp Mtn West	46.1	46.3	0.2	Pass
Peak 1760	153.3	153.6	0.3	Pass
Hill 0948	325.6	327.6	2.0	Pass
Compass	264.5	262.5	-2.0	Pass
Max Abs. Error			**2.0**	**PASS**
Mean Abs. Error			**1.1**	**GOOD**

Time: Begin: 905 End: 915

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.6	0.6	Pass
West	270.0	270.7	0.7	Pass
North	360.0	1.3	1.3	Pass
East	90.0	92.0	2.0	Pass
North	360.0	1.6	1.6	Pass
West	270.0	272.8	2.8	Pass
South	180.0	181.0	1.0	Pass
East	90.0	91.1	1.1	Pass
	Max Abs. Error		**2.8**	**PASS**
	Mean Abs. Error		**1.4**	**PASS**

Time: Begin: 1050 End: 1053

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.1	1.1	Pass	330.0	332.7	2.7	Pass
60.0	61.4	1.4	Pass	355.0	357.4	2.4	Pass
90.0	91.8	1.8	Pass	30.0	31.1	1.1	Pass
120.0	122.4	2.4	Pass	60.0	61.2	1.2	Pass
150.0	151.1	1.1	Pass	90.0	91.2	1.2	Pass
180.0	181.4	1.4	Pass	120.0	122.1	2.1	Pass
210.0	211.5	1.5	Pass	150.0	151.5	1.5	Pass
240.0	242.4	2.4	Pass	180.0	181.2	1.2	Pass
270.0	272.0	2.0	Pass	**Max Abs. Error**		**2.7**	**PASS**
300.0	302.6	2.6	Pass	**Mean Abs. Error**		**1.7**	**PASS**

Time: Begin: 1101 End: 1103

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	<0.2	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	>>8	**FAIL**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No Post-Audit				
New instrument installed				
Max Abs. Error				
Mean Abs. Error				

Time: Begin: N/A End: N/A

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind direction bearings in very poor condition, sensor replaced.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (Replacement Sensor)*

Height: 11.4 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5081	**Cup #:**	2299	**Range:**	0-60 m/s
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076-J1	**S.N.#:**	H8900C	**Vane #:**	1452	**Range:**	0-360 Deg
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.1	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22			N/A	
100	2.57			N/A	
200	4.92			N/A	
400	9.62		N/A		
1000	23.72		N/A		
2000	47.22		N/A		
	Max Abs. Error				

Time: Begin: N/A End: N/A

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No In Situ Audit				
New instrument installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	182.2	2.2	Pass
West	270.0	272.1	2.1	Pass
North	360.0	1.8	1.8	Pass
East	90.0	92.5	2.5	Pass
North	360.0	1.6	1.6	Pass
West	270.0	272.6	2.6	Pass
South	180.0	182.3	2.3	Pass
East	90.0	92.2	2.2	Pass
	Max Abs. Error		**2.6**	**PASS**
	Mean Abs. Error		**2.2**	**PASS**

Time: Begin: 1124 End: 1128

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.2	1.2	Pass	330.0	333.0	3.0	Pass
60.0	61.2	1.2	Pass	355.0	356.8	1.8	Pass
90.0	90.9	0.9	Pass	30.0	31.1	1.1	Pass
120.0	121.0	1.0	Pass	60.0	61.1	1.1	Pass
150.0	151.0	1.0	Pass	90.0	90.9	0.9	Pass
180.0	181.4	1.4	Pass	120.0	120.9	0.9	Pass
210.0	211.6	1.6	Pass	150.0	151.0	1.0	Pass
240.0	242.1	2.1	Pass	180.0	181.2	1.2	Pass
270.0	272.4	2.4	Pass	**Max Abs. Error**		**3.0**	**PASS**
300.0	302.6	2.6	Pass	**Mean Abs. Error**		**1.5**	**PASS**

Time: Begin: 1120 End: 1123

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	N/A	**N/A**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	N/A	**N/A**
New	7.5	0.104	3.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	104.3	105.4	1.1	Pass
Peak 1760	153.3	153.5	0.2	Pass
Sharp Mtn West	46.1	47.4	1.3	Pass
Peak 1824	262.7	264.3	1.6	Pass
Hill 0948	325.6	327.9	2.3	Pass
Compass	198.5	197.1	-1.4	Pass
Time: Begin: 1330	**Max Abs. Error**		**2.3**	**PASS**
End: 1342	**Mean Abs. Error**		**1.3**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Replacement wind direction sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.6 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 79700	**Prop #:** 65383	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA06174						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1027 End: 1030

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	104.3	102.2	-2.1	Pass
Sharp Mtn West	46.1	44.1	-2.0	Pass
Peak 1760	153.3	150.3	-3.0	Pass
Hill 0948	325.6	320.9	-4.7	Pass
Compass	264.5	265.9	1.4	Pass
Time: Begin: 905	**Max Abs. Error**		**4.7**	**PASS**
End: 915	**Mean Abs. Error**		**2.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST (In-Situ)

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.4	-1.6	Pass	150.0	147.8	-2.2	Pass	270.0	266.5	-3.5	Pass
60.0	58.1	-1.9	Pass	180.0	177.2	-2.8	Pass	300.0	296.3	-3.7	Pass
90.0	87.9	-2.1	Pass	210.0	206.6	-3.4	Pass	330.0	326.7	-3.3	Pass
120.0	117.6	-2.4	Pass	240.0	236.6	-3.4	Pass	355.0	352.0	-3.0	Pass
					Time: Begin: 1007			**Max Abs. Error**		**3.7**	**PASS**
					End: 1010			**Mean Abs. Error**		**2.8**	**PASS**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST (Post-Calibration)

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.8	0.8	Pass	150.0	150.9	0.9	Pass	270.0	269.8	-0.2	Pass
60.0	61.3	1.3	Pass	180.0	180.6	0.6	Pass	300.0	300.8	0.8	Pass
90.0	91.1	1.1	Pass	210.0	210.5	0.5	Pass	330.0	330.2	0.2	Pass
120.0	121.0	1.0	Pass	240.0	240.2	0.2	Pass	355.0	354.5	-0.5	Pass
					Time: Begin: 1016			**Max Abs. Error**		**1.3**	**PASS**
					End: 1020			**Mean Abs. Error**		**0.7**	**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	0.6	**PASS**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	6.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	104.3	105.4	1.1	Pass
Peak 1760	153.3	153.2	-0.1	Pass
Sharp Mtn West	46.1	46.9	0.8	Pass
Peak 1824	262.7	259.8	-2.9	Pass
Hill 0948	325.6	324.1	-1.5	Pass
Compass	198.5	196.0	-2.5	Pass
Time: Begin: 1330	**Max Abs. Error**		**2.9**	**PASS**
End: 1342	**Mean Abs. Error**		**1.5**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Calibrated direction key and re-audited.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** B0440012 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
10/13/08	1044	28.45	28.38	961.07	962.70	1.63	Pass
	1100	28.44	28.37	960.73	961.63	0.90	Pass
				Max Abs. Error		1.63	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/28/08	
Audit Inst	Offset Amount
24.09	-0.09
26.06	-0.07
28.08	-0.08
30.06	-0.06
Intercept	**-0.18**
Slope	**0.0040**

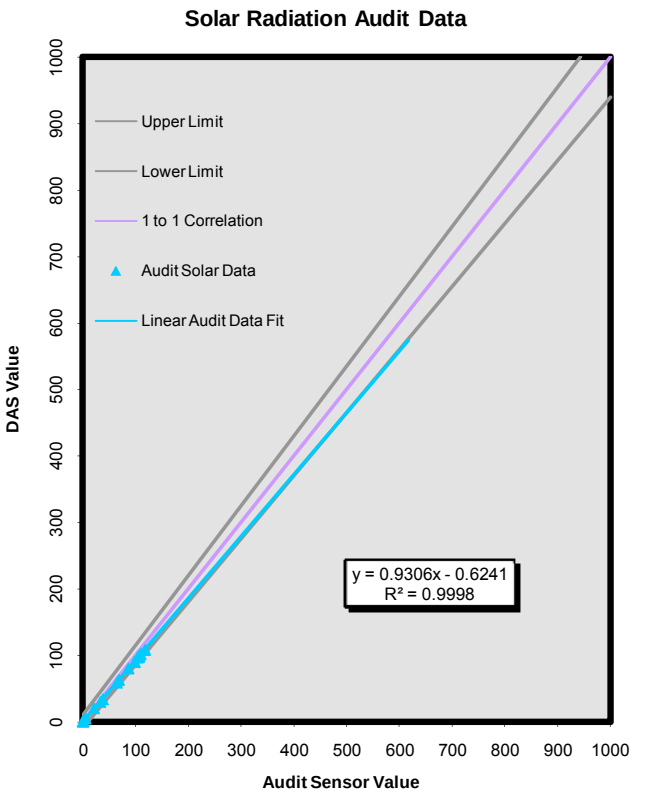
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: New audit instrument broken during September audit, audited with calibrated standard during October trip.

• *SOLAR RADIATION SENSOR AUDIT (In Situ)*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY52709 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1553	117.4	108.3	-9.1	±15.9	-7.8%	Pass
1613	109.4	101.6	-7.8	±15.5	-7.1%	Pass
1618	106.1	98.2	-7.9	±15.3	-7.4%	Pass
1628	105.0	97.0	-8.0	±15.3	-7.6%	Pass
1629	106.1	98.1	-8.0	±15.3	-7.5%	Pass
1632	103.5	96.4	-7.1	±15.2	-6.9%	Pass
1638	85.9	80.3	-5.6	±14.3	-6.5%	Pass
838	38.3	33.5	-4.8	±11.9	n/a	Pass
915	68.3	62.9	-5.4	±13.4	-7.9%	Pass
1700	97.8	89.8	-8.0	±14.9	-8.2%	Pass
1800	64.4	58.8	-5.6	±13.2	-8.7%	Pass
1900	21.6	19.9	-1.6	±11.1	n/a	Pass
2000	1.6	0.9	-0.7	±10.1	n/a	Pass
2100	0.6	0.1	-0.5	±10.0	n/a	Pass
700	0.0	0.1	0.1	±10.0	n/a	Pass
800	5.4	4.7	-0.7	±10.3	n/a	Pass
900	33.4	29.5	-3.8	±11.7	n/a	Pass
Corr. Val	**0.9999**	**Max Abs. Percent Error**			**8.7%**	**PASS**
R² Value	**0.9998**	**Intercept**	**-0.6**	**Slope**	**0.9306**	**FAIL**



Begin: 09/24/08 (Date) 1150 (Time) **End:** 09/25/08 (Date) 940 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: Sensor replaced for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

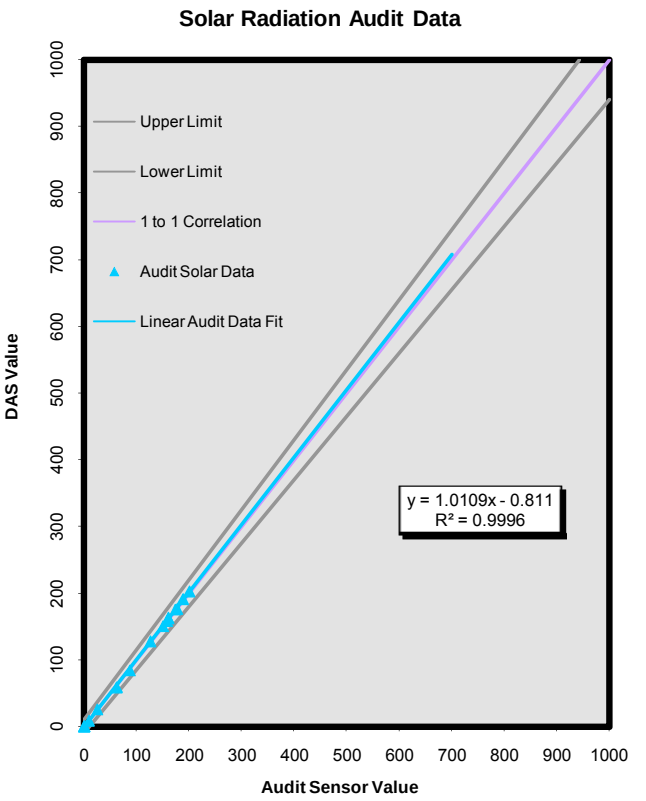
Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

• *SOLAR RADIATION SENSOR AUDIT (Replacement Sensor)*

Height: 3.9 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY59915 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1127	200.8	203.3	2.5	±20.0	1.2%	Pass
1144	161.2	163.4	2.2	±18.1	1.4%	Pass
1218	188.5	191.6	3.1	±19.4	1.6%	Pass
1252	157.7	158.5	0.8	±17.9	0.5%	Pass
1327	177.9	176.7	-1.2	±18.9	-0.7%	Pass
1347	150.6	150.9	0.3	±17.5	0.2%	Pass
1300	174.2	175.8	1.6	±18.7	0.9%	Pass
1400	157.8	158.5	0.7	±17.9	0.4%	Pass
1500	161.2	162.7	1.5	±18.1	0.9%	Pass
1600	126.9	128.0	1.1	±16.3	0.9%	Pass
1700	87.4	84.3	-3.1	±14.4	-3.5%	Pass
1800	62.3	58.9	-3.4	±13.1	-5.5%	Pass
1900	25.6	25.5	-0.1	±11.3	n/a	Pass
2000	0.5	0.8	0.3	±10.0	n/a	Pass
2100	0.0	0.0	0.0	±10.0	n/a	Pass
600	0.1	0.0	-0.1	±10.0	n/a	Pass
700	0.3	0.1	-0.2	±10.0	n/a	Pass
800	9.4	8.9	-0.5	±10.5	n/a	Pass
Corr. Val	**0.9998**	**Max Abs. Percent Error**			**5.5%**	**PASS**
R² Value	**0.9996**	**Intercept**	**-0.8**	**Slope**	**1.0109**	**PASS**



Begin: 09/25/08 (Date) 1120 (Time) **End:** 09/26/08 (Date) 830 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 4
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 24-25, 2008

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.0/1.5 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** A6431 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

	TIPPING PRECIPITATION GAUGE VOLUME TEST										
Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/24/08	1601	650	20.0	0.0		16.6	1632	16.6	-17.0%	Fail	Existing tipping bucket
09/24/08	1635	650	20.0	17.4	33.4	1.4	1702	17.4	-13.0%	Fail	Existing tipping bucket
09/25/08	935	350	10.8	11.4		22.2	1000	10.8	0.0%	Pass	Replacement pins & bucket
09/25/08	1001	650	20.0	0.0		20.0	1029	20.0	0.0%	Pass	Replacement pins & bucket
09/25/08	1030	650	20.0	20.0		40.0	1100	20.0	0.0%	Pass	Replacement pins & bucket
							Max Abs. Error		**17.0%**	**FAIL**	

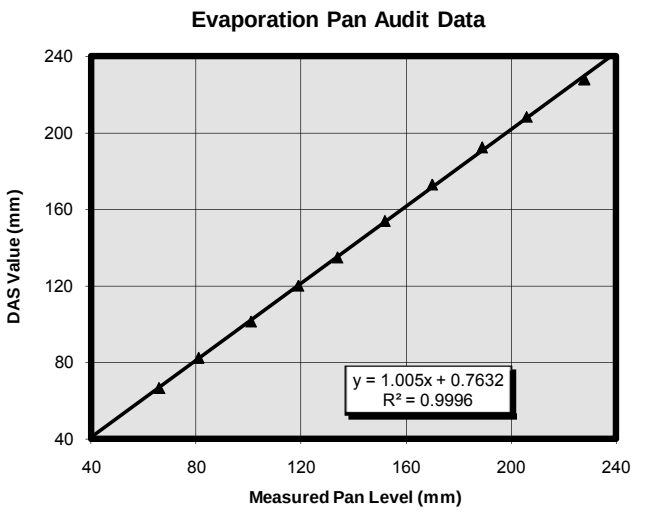
PSD Limits: Max Absolute Error > 10 % of Input.
Comments: In situ tipping mechanism failed. Replaced pins & bucket and re-audited.

• *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 687 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

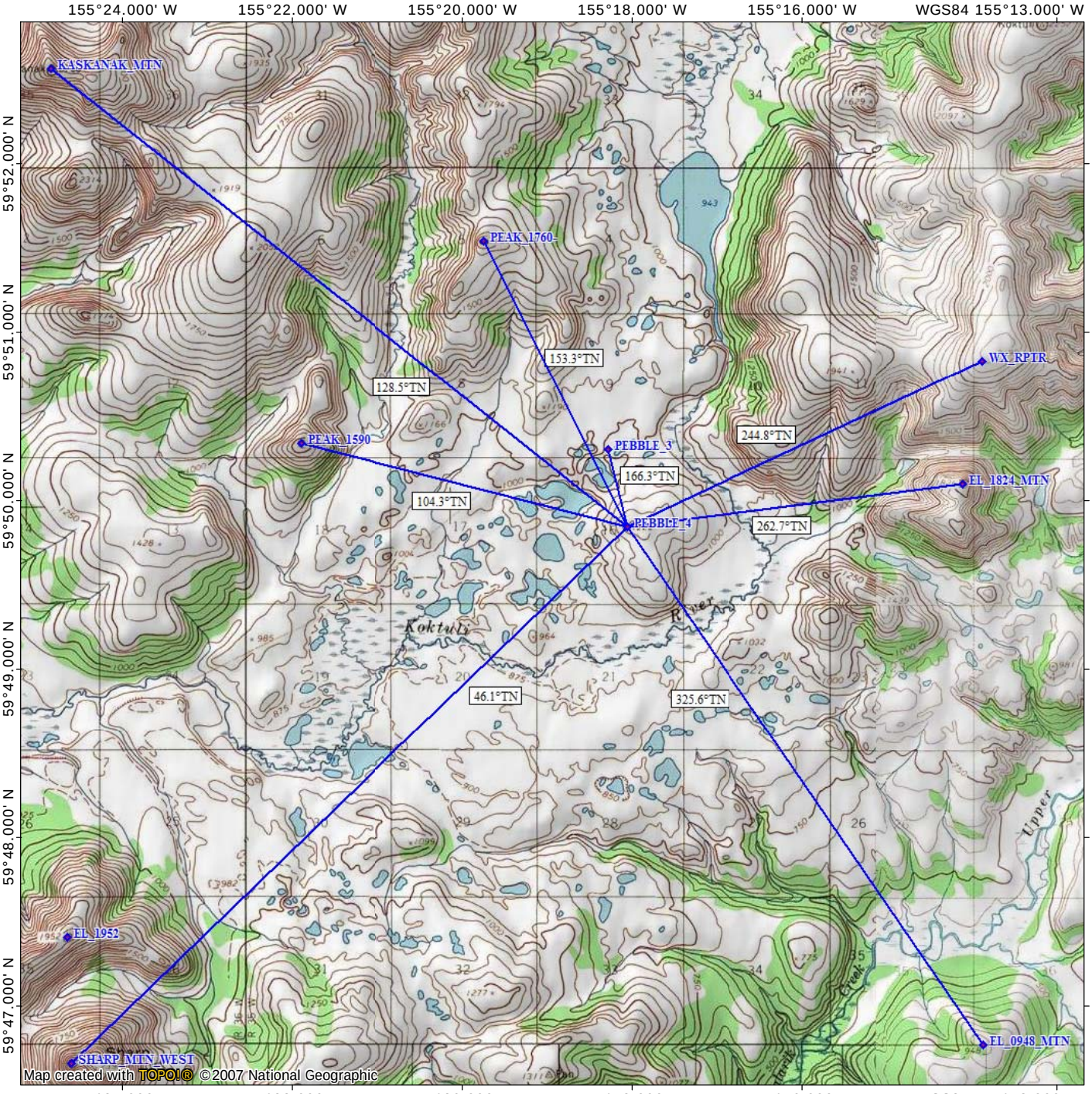
EVAPORATION PAN STAGE HEIGHT TEST						
Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	228.0	227.8	228.8	-1.0	-0.4%	Pass
	206.0	208.2	206.8	1.4	0.7%	Pass
	189.0	192.3	189.8	2.5	1.3%	Pass
	170.0	172.8	170.8	2.0	1.2%	Pass
	152.0	153.9	152.8	1.1	0.7%	Pass
	134.0	134.9	134.8	0.1	0.1%	Pass
	119.0	120.1	119.8	0.3	0.3%	Pass
	101.0	101.4	101.8	-0.4	-0.4%	Pass
	81.0	82.6	81.8	0.8	1.0%	Pass
	66.0	66.8	66.8	0.0	0.1%	Pass
		Max Abs. Error		**2.5**	**1.3%**	**PASS**
		Intercept	**0.8**	**Slope**	**1.0050**	**PASS**



Date: 09/24/08 **Time:** Begin: 1558 End: 1642

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

Pebble 4 TOPO Alignment Map - 59°49.837' N, 155°18.041' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN 17°

10/30/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1

ACCREDITED

Calibration Certificate No. 1750.01

Cert. No.: 4000-1974024

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Justin Mangold, Anchorage, AK 99503 U.S.A. (RMA:944729)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Calibration Bath TC191	A79341		
Thermistor Module	A27129	8/22/09	1000248949
Temperature Probe	3039	10/26/08	A7710039-4
Temperature Probe	149	3/06/09	A82225037-3
Thermistor Module	A17118	10/30/08	A7831032
Temperature Calibration Bath TC218	A73332		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 9/08/08 **Cal Due: 9/08/09**

Test Conditions: 24.5°C 45.0 %RH 1017 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.001	0.087	N	0.001	0.000	Y	-0.049	0.051	0.013	3.8:1
°C	25.001	25.076	N	25.001	25.000	Y	24.951	25.051	0.013	3.8:1
°C	60.001	60.127	N	60.001	59.999	Y	59.951	60.051	0.018	2.8:1
°C	100.001	100.333	N	100.001	100.001	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Date=MM/DD/YY

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025:2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001:2000 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company

© 2005 Control Company

VAISALA

Certificate of Calibration

Report #: 090408-X0740015-RH **RMA #:** 95-70314 **Calibration Date:** Sep-04-2008
Model #: HMI41/HMP45 **Serial #:** X0650080/X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%, RH Recommended Calibration Due Date: Sep-04-2009
Instrument Range: -20 to +60 °C, T

Customer: HOEFLER CONSULTING GROUP, INC.
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0% against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
22.11	22.30	0.19	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.12	11.30	0.18	2.00	0.92
33.04	32.30	-0.74	2.00	1.01
74.33	72.60	-1.73	2.00	1.02
Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.97	21.90	-0.07	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.21	11.50	0.29	2.00	0.92
32.80	33.00	0.20	2.00	1.01
74.89	74.90	0.01	2.00	1.02

Problem Noted: None
Action Taken: The Unit Was Calibrated

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN 276340-08. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 6B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900343	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7519018	Dec. 19, 2007	Jun. 19, 2009
HMK13B	P3940001	May. 16, 2008	Nov. 16, 2008
HMP233	V4210039	Jul. 17, 2008	Oct. 17, 2008
HMT333	B0920007	Jun. 17, 2008	Sep. 17, 2008
HMI41/HMP45	S0720005	May. 21, 2008	Nov. 21, 2008

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.50 %RH

Approved By

Technical Operator
Roun Roeun

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18811** (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA 02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft 27106D produces 10 pulses per revolution of the anemometer shaft

(2) Indicated on the Control Unit LCD display

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 7/31/08
Inspection Interval One Year

Tested By RP

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA 01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 10/23/08
Inspection Interval One Year

Tested By RP

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP. P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5103

Model Number: 366-3M
Part Number: 060-SQF41200-01
Order Code: TW3663M

Product Specifications

Full Scale Range: 0.2-2.0 GM CM
Calibrated At: 0.2-2.0 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW150

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/12/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-3M SERIAL NUMBER: 5103 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.01	0.00	0.00	.01
.2	0.00	.25	.37	.40
.4	.20	.47	.43	.60
.6	.40	.65	.60	.80
.8	.60	.84	.80	1.00
1.0	.80	1.02	1.05	1.20
1.2	1.00	1.25	1.28	1.40
1.4	1.20	1.46	1.49	1.60
1.6	1.40	1.68	1.70	1.80
1.8	1.60	1.91	1.94	2.00
2.0	1.80	2.14	2.17	2.20

Max pos error (% FS) = 8.5 % at .200
Max neg error (% FS) = -.2 % at .800

Torque Watch is a: PASS

Job 128274

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP.

P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5116

Model Number: 366-2M
Part Number: 060-SQF41198-01
Order Code: TQ3662M

Product Specifications

Full Scale Range: 1-7.5 GM CM
Calibrated At: 1-7.5 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW151

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/15/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-2M SERIAL NUMBER: 5116 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.05	0.00	0.00	.05
1.0	.25	.95	.95	1.75
2.0	1.25	1.85	1.88	2.75
3.0	2.25	2.77	2.82	3.75
4.0	3.25	3.73	3.77	4.75
5.0	4.25	4.62	4.76	5.75
6.0	5.25	5.61	5.77	6.75
7.0	6.25	6.50	6.72	7.75
7.5	6.75	6.96	7.14	8.25

Max pos error (% FS) = 0.0 %
Max neg error (% FS) = -7.2 % at 7.500

Torque Watch is a: PASS

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner: HOEFLER Consulting Group
Name: _____

Address: 341 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER: _____

MODEL NUMBER: 5008

SERIAL NUMBER: 508099319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072808. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/28/08 Lab temperature 72.9 °F
Lab pressure 660.0 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.09	0.09	-0.09
25.99	26.06	0.07	-0.07
28.00	28.08	0.08	-0.08
30.00	30.06	0.06	-0.06

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ NO ☒

Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R [illegible] Date: 7/28/08

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24 x 10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: R. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Appendix D

Validated Continuous Data Summaries

CONTENTS

Pebble 4 Station 2008 Hourly Data:

1. Temperature at 2 meters (deg. C)

2. Temperature at 10 meters (deg. C)

3. Temperature Difference 2 meter to 10 meter (deg. C)

4. Relative Humidity (%)

5. Solar (Watts/m^2)

6. Barometric Pressure (mbar)

7. Wind Speed – Climatronic (m/s)

8. Wind Direction – Climatronic (degrees)

9. Wind Sigma – Climatronic (σ_θ)

10. Wind Speed – RM Young (m/s)

11. Wind Direction – RM Young (degrees)

12. Wind Sigma – RM Young (σ_θ)

13. Daily Total Precipitation (mm)

14. Daily Total Evaporation (mm)

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-8.8	-8.3	-8.1	-8.2	-8.2	-8.3	-8.5	-7.6	-9.1	-8.6	-8.8	-9.4	-11.5	-11.9	-12.9	-12.8	-13.4	-12.3	-12.5	-13.9	-14.5	-14.3	-14.1	-15.5	-7.6	-15.5	-10.9
2	-16.5	-16.1	-15.9	-15.8	-16.7	-17.2	-17.8	-17.3	-18.6	-18.3	-18.5	-20.2	-18.9	-18.5	-19.0	-19.4	-19.5	-19.1	-18.5	-19.1	-20.3	-18.6	-18.3	-17.9	-15.8	-20.3	-18.2
3	-18.7	-19.3	-19.3	-19.2	-17.4	-18.0	-19.2	-19.6	-19.3	-18.8	-17.6	-18.2	-18.5	-17.7	-17.4	-18.0	-18.0	-17.3	-17.8	-18.3	-18.3	-18.6	-18.5	-18.3	-17.3	-19.6	-18.4
4	-18.7	-18.9	-18.8	-19.2	-19.5	-19.5	-19.5	-19.5	-19.6	-19.9	-19.9	-19.9	-20.0	-20.1	-20.2	-20.5	-20.6	-20.7	-20.8	-21.3	-21.7	-22.1	-22.0	-22.5	-18.7	-22.5	-20.2
5	-22.9	-23.2	-23.5	-23.8	-24.1	-23.6	-23.4	-23.8	-24.2	-23.7	-23.5	-22.8	-22.5	-22.6	-22.3	-22.3	-22.5	-22.7	-22.8	-22.7	-22.9	-23.7	-24.2	-24.4	-22.3	-24.4	-23.3
6	-24.7	-24.9	-24.8	-24.8	-25.1	-25.7	-26.1	-26.3	-26.2	-26.4	-26.8	-26.8	-26.8	-26.0	-26.3	-26.7	-26.5	-27.2	-27.5	-27.6	-27.8	-28.5	-27.8	-27.7	-24.7	-28.5	-26.5
7	-28.1	-28.1	-27.8	-27.4	-27.1	-27.2	-27.2	-27.0	-26.9	-26.7	-26.4	-26.2	-26.4	-25.3	-25.1	-24.9	-24.4	-23.8	-23.4	-23.9	-24.2	-24.0	-24.3	-25.0	-23.4	-28.1	-25.9
8	-25.3	-25.6	-25.5	-25.1	-25.0	-25.2	-24.9	-24.0	-23.8	-23.5	-23.9	-24.2	-24.3	-24.1	-23.9	-23.5	-23.2	-23.9	-24.2	-23.8	-24.3	-24.8	-25.2	-25.1	-23.2	-25.6	-24.4
9	-25.1	-25.5	-25.3	-24.8	-25.8	-25.7	-26.1	-26.2	-26.3	-26.0	-25.5	-25.8	-24.6	-23.8	-23.3	-22.9	-23.0	-23.3	-23.4	-23.2	-23.1	-22.9	-22.6	-22.5	-22.5	-26.3	-24.4
10	-22.4	-22.7	-23.0	-23.6	-23.6	-23.6	-24.7	-24.9	-24.5	-24.8	-24.4	-24.0	-24.1	-24.3	-25.2	-25.6	-25.8	-26.0	-26.4	-26.9	-27.0	-27.2	-27.7	-27.4	-22.4	-27.7	-25.0
11	-26.6	-25.4	-25.1	-25.2	-26.0	-26.8	-27.3	-27.2	-28.0	-28.4	-28.0	-27.8	-28.1	-27.5	-27.6	-27.5	-27.7	-28.2	-28.9	-29.1	-28.8	-29.4	-29.8	-29.7	-25.1	-29.8	-27.7
12	-30.0	-30.2	-30.3	-30.5	-30.5	-30.6	-30.6	-30.7	-30.7	-30.3	-30.3	-30.3	-30.2	-29.8	-29.7	-29.8	-30.0	-30.0	-30.1	-30.6	-30.1	-30.4	-30.7	-30.9	-29.7	-30.9	-30.3
13	-30.7	-29.9	-29.4	-29.7	-29.9	-28.8	-28.9	-29.1	-29.1	-28.9	-30.0	-30.1	-30.3	-29.8	-28.8	-28.0	-28.4	-28.5	-28.8	-28.5	-28.8	-27.9	-28.1	-27.6	-27.6	-30.7	-29.1
14	-26.8	-27.0	-26.9	-26.3	-27.1	-25.8	-25.8	-25.1	-18.7	-15.7	-14.0	-13.0	-11.9	-11.5	-11.3	-10.7	-10.2	-9.6	-8.8	-7.9	-7.6	-7.1	-6.7	-6.5	-6.5	-27.1	-15.9
15	-4.4	-3.6	-3.3	-3.2	-3.2	-4.3	-4.9	-4.6	-4.9	-4.6	-4.7	-4.7	-4.8	-4.5	-4.5	-4.6	-4.5	-4.7	-4.6	-4.5	-4.3	-4.2	-3.7	-3.4	-3.2	-4.9	-4.3
16	-3.3	-3.5	-2.7	-2.6	-2.6	-2.8	-3.7	-3.5	-3.5	-3.1	-3.9	-4.4	-4.4	-4.4	-3.8	-3.4	-3.5	-3.3	-3.3	-3.6	-3.6	-3.9	-3.8	-4.2	-2.6	-4.4	-3.5
17	-3.9	-3.7	-3.7	-3.0	-2.6	-2.4	-2.7	-2.6	-2.2	-2.0	-2.0	-1.7	-1.7	-1.3	-1.4	-1.2	-1.3	-1.8	-1.8	-1.9	-1.9	-1.8	-2.0	-2.2	-1.2	-3.9	-2.2
18	-2.2	-2.2	-2.3	-2.5	-2.6	-2.6	-2.7	-2.6	-2.7	-2.8	-2.7	-2.7	-2.8	-2.7	-2.5	-2.9	-2.5	-2.9	-2.9	-2.7	-2.3	-2.5	-2.9	-3.4	-2.2	-3.4	-2.7
19	-3.5	-3.4	-2.9	-2.3	-2.5	-2.2	-1.1	-0.6	-1.0	-1.2	-0.6	0.0	-0.1	-0.1	-0.2	-0.2	0.0	0.2	0.3	0.1	0.2	0.3	0.3	0.1	0.3	-3.5	-0.8
20	-0.1	-0.3	-0.6	-0.5	-0.1	-0.2	-0.2	-0.2	0.1	-0.1	-0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	-0.2	0.0	-0.7	-0.4	0.2	-0.7	-0.1
21	-0.8	-0.3	-0.5	-0.8	-1.3	-0.8	-0.6	-0.3	-0.1	0.1	0.4	0.8	1.4	1.7	1.9	1.9	2.0	2.1	2.0	1.5	1.2	1.0	1.1	1.5	2.1	-1.3	0.6
22	1.3	0.5	1.1	0.4	0.0	-0.1	-0.3	-0.7	-1.0	-1.0	-1.3	-2.5	-3.1	-3.6	-4.2	-4.5	-4.8	-5.0	-5.0	-5.0	-5.0	-5.4	-5.5	-5.3	1.3	-5.5	-2.5
23	-5.8	-7.2	-8.2	-9.2	-11.2	-12.9	-14.3	-15.5	-16.1	-16.6	-17.3	-17.5	-17.7	-18.2	-18.5	-19.0	-19.8	-20.6	-20.9	-21.2	-21.2	-21.2	-21.6	-21.1	-5.8	-21.6	-16.4
24	-20.3	-19.6	-20.0	-19.4	-18.9	-18.4	-17.7	-13.5	-11.2	-10.8	-10.2	-9.9	-9.8	-9.9	-9.4	-8.8	-8.6	-8.6	-8.4	-8.3	-7.9	-7.4	-7.1	-7.0	-7.0	-20.3	-12.1
25	-7.0	-6.9	-6.6	-6.4	-6.3	-6.8	-7.1	-6.8	-7.2	-5.8	-5.7	-5.5	-5.4	-5.1	-5.2	-5.1	-5.2	-4.7	-4.7	-6.8	-9.6	-11.7	-13.5	-15.7	-4.7	-15.7	-7.1
26	-17.1	-17.4	-17.7	-18.5	-19.2	-19.2	-19.9	-19.9	-20.2	-21.0	-20.2	-20.8	-21.5	-21.1	-21.4	-21.0	-17.9	-16.2	-15.2	-15.4	-13.8	-12.1	-11.4	-11.4	-11.4	-21.5	-17.9
27	-11.3	-11.1	-10.7	-10.6	-10.1	-9.5	-9.1	-8.7	-7.4	-6.6	-6.2	-6.1	-5.8	-5.8	-5.7	-5.6	-5.5	-5.3	-5.3	-4.9	-4.8	-5.0	-5.0	-4.9	-4.8	-11.3	-7.1
28	-4.7	-4.8	-4.9	-5.0	-4.9	-4.9	-5.3	-5.8	-5.8	-5.9	-5.8	-5.6	-5.5	-5.4	-5.3	-5.1	-5.0	-5.0	-5.0	-5.0	-4.9	-4.8	-4.8	-4.9	-4.7	-5.9	-5.2
29	-4.5	-4.4	-4.3	-4.3	-4.4	-4.9	-5.9	-5.4	-5.1	-4.6	-5.1	-5.8	-5.5	-5.6	-6.0	-6.9	-7.1	-7.3	-8.4	-8.4	-7.9	-8.0	-9.0	-10.0	-4.3	-10.0	-6.2
30	-9.3	-10.1	-10.0	-9.0	-9.7	-10.1	-10.3	-10.5	-11.4	-11.5	-13.0	-13.8	-13.5	-12.9	-12.5	-12.2	-12.7	-13.6	-13.2	-12.4	-11.6	-11.8	-13.3	-14.1	-9.0	-14.1	-11.8
31	-14.4	-14.0	-13.9	-13.8	-13.9	-13.1	-12.5	-12.3	-12.5	-13.4	-11.7	-13.1	-11.4	-11.2	-11.0	-11.0	-10.7	-10.7	-10.5	-10.5	-10.7	-10.8	-10.9	-12.1	-10.5	-14.4	-12.1
Max.	**1.3**	**0.5**	**1.1**	**0.4**	**0.0**	**-0.1**	**-0.2**	**-0.2**	**0.1**	**0.1**	**0.4**	**0.8**	**1.4**	**1.7**	**1.9**	**1.9**	**2.0**	**2.1**	**2.0**	**1.5**	**1.2**	**1.0**	**1.1**	**1.5**	**2.1**		
Min.	**-30.7**	**-30.2**	**-30.3**	**-30.5**	**-30.5**	**-30.6**	**-30.6**	**-30.7**	**-30.7**	**-30.3**	**-30.3**	**-30.3**	**-30.3**	**-29.8**	**-29.7**	**-29.8**	**-30.0**	**-30.0**	**-30.1**	**-30.6**	**-30.1**	**-30.4**	**-30.7**	**-30.9**		**-30.9**	
Avg.	**-14.1**	**-14.1**	**-14.0**	**-14.0**	**-14.2**	**-14.2**	**-14.5**	**-14.2**	**-14.1**	**-13.9**	**-13.8**	**-13.9**	**-13.9**	**-13.6**	**-13.6**	**-13.6**	**-13.6**	**-13.6**	**-13.6**	**-13.7**	**-13.8**	**-13.8**	**-14.0**	**-14.2**			**-13.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-12.4	-13.1	-13.2	-12.7	-12.3	-13.7	-13.6	-13.5	-13.2	-13.1	-13.4	-13.1	-13.0	-12.7	-11.1	-10.3	-10.5	-11.8	-12.0	-13.0	-13.4	-13.6	-14.2	-14.2	-10.3	-14.2	-12.8
2	-14.7	-15.4	-15.5	-15.5	-16.8	-17.2	-16.8	-16.9	-16.9	-16.6	-16.6	-17.8	-16.8	-16.4	-17.1	-17.4	-17.4	-17.0	-16.9	-17.6	-19.0	-18.8	-19.8	-20.5	-14.7	-20.5	-17.1
3	-21.1	-21.8	-21.7	-22.0	-23.1	-24.1	-24.9	-25.5	-25.5	-25.2	-25.5	-25.8	-25.5	-25.1	-24.5	-24.3	-24.0	-23.7	-24.4	-25.2	-25.1	-26.2	-25.4	-25.5	-21.1	-26.2	-24.4
4	-25.8	-25.9	-25.6	-25.0	-24.9	-24.9	-24.8	-25.0	-25.0	-25.5	-24.8	-25.2	-24.9	-23.5	-22.3	-22.3	-23.4	-23.0	-22.8	-23.9	-24.3	-24.7	-25.1	-25.0	-22.3	-25.9	-24.5
5	-25.7	-25.6	-25.6	-27.0	-27.6	-27.5	-27.6	-27.7	-27.8	-28.0	-27.8	-27.1	-26.7	-26.5	-26.1	-25.4	-25.5	-25.3	-25.7	-25.5	-25.6	-25.6	-25.1	-24.9	-24.9	-28.0	-26.4
6	-24.8	-24.6	-24.7	-24.7	-24.4	-24.2	-23.6	-23.9	-22.9	-23.2	-23.5	-22.7	-22.5	-22.4	-21.9	-23.0	-23.8	-23.8	-23.7	-23.9	-24.0	-24.1	-24.0	-24.0	-21.9	-24.8	-23.7
7	-25.1	-25.0	-25.9	-24.9	-24.1	-24.9	-23.9	-25.4	-24.3	-24.1	-25.1	-24.0	-24.1	-23.7	-20.6	-19.6	-18.0	-18.2	-17.8	-16.6	-16.9	-18.8	-18.7	-17.3	-16.6	-25.9	-22.0
8	-16.8	-18.0	-18.7	-17.7	-16.7	-13.9	-15.8	-13.6	-14.8	-12.7	-13.5	-12.4	-11.2	-10.3	-9.3	-9.3	-9.9	-10.3	-10.6	-10.4	-10.4	-10.6	-10.0	-9.1	-9.1	-18.7	-12.7
9	-9.4	-9.0	-8.9	-8.6	-8.8	-8.8	-9.0	-9.5	-9.2	-8.4	-8.4	-8.8	-8.3	-9.5	-11.7	-13.9	-14.4	-15.1	-17.1	-18.9	-20.5	-20.9	-21.5	-22.1	-8.3	-22.1	-12.5
10	-22.4	-23.8	-24.6	-23.7	-24.2	-24.2	-24.2	-23.9	-24.9	-26.2	-26.2	-24.2	-24.7	-24.9	-23.6	-23.9	-23.4	-22.4	-22.2	-22.3	-22.5	-23.0	-22.7	-22.2	-22.2	-26.2	-23.8
11	-20.8	-17.6	-16.5	-16.0	-15.4	-15.6	-15.7	-15.4	-15.5	-16.0	-15.6	-15.3	-14.0	-14.0	-15.0	-13.5	-14.3	-15.0	-16.5	-18.2	-17.8	-18.6	-19.5	-20.9	-13.5	-20.9	-16.4
12	-20.9	-22.3	-23.0	-23.7	-24.3	-25.3	-25.5	-26.1	-26.5	-26.9	-26.4	-25.5	-25.2	-24.4	-23.4	-12.4	5.8	-19.9	-23.3	-23.7	-22.9	-22.2	-20.8	-18.0	5.8	-26.9	-22.0
13	-11.2	-9.8	-10.4	-9.5	-7.1	-6.6	-5.4	-4.7	-3.8	-3.0	-2.3	-2.8	0.8	-1.1	-0.5	-0.1	-0.1	-0.1	-0.1	0.1	0.2	-0.1	0.0	0.1	0.8	-11.2	-3.2
14	0.1	0.3	0.4	0.2	-0.2	-0.3	-0.5	-4.4	-9.0	-11.0	-12.5	-13.8	-14.7	-15.6	-16.4	-17.2	-17.7	-18.2	-18.6	-18.6	-18.5	-18.1	-17.9	-17.8	0.4	-18.6	-10.8
15	-18.8	-19.6	-20.3	-20.6	-21.4	-22.4	-21.9	-22.4	-25.3	-24.6	-23.6	-24.0	-24.5	-23.7	-23.2	-23.0	-22.0	-22.6	-23.0	-23.7	-22.0	-20.1	-17.4	-16.2	-16.2	-25.3	-21.9
16	-14.7	-13.4	-12.1	-11.0	-10.0	-9.0	-8.6	-7.4	-7.3	-7.2	-6.9	-6.6	-6.1	-5.9	-5.6	-5.3	-5.0	-4.6	-4.7	-5.2	-5.3	-5.5	-5.1	-5.6	-4.6	-14.7	-7.4
17	-6.2	-6.5	-6.1	-6.1	-5.3	-3.6	-2.1	-1.3	-0.5	-0.3	0.9	1.3	2.0	0.9	0.4	0.3	0.3	0.3	-0.1	-0.4	-0.2	0.0	0.1	0.1	2.0	-6.5	-1.3
18	0.4	0.4	0.0	-0.3	-0.5	-0.3	-0.4	-0.4	0.2	0.3	0.4	0.4	0.4	0.4	0.8	0.7	0.4	0.3	0.3	0.1	-0.2	-0.3	-0.1	0.2	0.8	-0.5	0.1
19	0.4	0.9	1.3	0.8	0.1	1.3	2.1	2.2	1.4	0.4	1.0	1.0	1.0	1.0	1.1	1.5	2.0	2.0	2.3	2.1	0.9	0.8	0.7	0.6	2.3	0.1	1.2
20	0.2	0.0	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.3	-0.1	-0.1	0.5	1.2	1.4	1.0	1.4	1.2	1.5	1.9	1.7	1.8	1.7	1.4	1.9	-0.3	0.6
21	1.3	0.9	1.3	0.9	0.8	1.3	1.6	1.9	1.7	1.6	1.5	1.3	1.2	2.0	1.9	1.3	1.3	1.3	-0.1	0.3	0.4	-0.3	-0.4	0.0	2.0	-0.4	1.0
22	0.0	-0.2	-0.3	-0.4	-0.4	-0.5	-0.4	-0.5	-0.4	-0.6	-0.6	-0.6	-0.8	-0.5	-0.4	-0.8	-2.6	-2.0	-1.5	-1.7	-2.1	-2.3	-2.4	-3.0	0.0	-3.0	-1.0
23	-3.3	-3.3	-2.9	-3.1	-3.9	-3.9	-3.7	-4.5	-5.2	-6.2	-6.2	-5.5	-5.4	-4.7	-4.8	-4.9	-5.4	-5.5	-6.0	-7.2	-7.0	-7.8	-7.4	-7.6	-2.9	-7.8	-5.2
24	-8.4	-9.4	-9.5	-9.2	-9.4	-9.8	-9.5	-10.1	-11.0	-11.7	-12.3	-12.7	-13.3	-13.3	-12.8	-12.6	-12.6	-12.8	-13.5	-14.2	-14.6	-14.9	-15.0	-14.9	-8.4	-15.0	-12.0
25	-15.5	-16.2	-16.3	-16.4	-17.0	-17.5	-18.3	-19.0	-18.8	-18.7	-18.2	-17.4	-17.3	-16.6	-15.9	-14.4	-12.3	-7.3	-7.5	-7.1	-5.5	-3.8	-3.5	-3.9	-3.5	-19.0	-13.5
26	-4.7	-4.9	-4.6	-4.7	-5.1	-5.4	-5.1	-4.7	-8.1	-9.4	-9.1	-7.8	-6.8	-6.2	-5.8	-5.9	-6.1	-7.2	-8.0	-9.0	-9.5	-10.4	-10.4	-11.1	-4.6	-11.1	-7.1
27	-13.0	-13.9	-14.1	-15.5	-16.0	-16.5	-15.3	-15.6	-14.5	-13.5	-14.3	-13.4	-9.4	-7.3	-8.7	-7.1	-9.3	-7.8	-4.8	-3.3	-2.5	-2.2	-1.9	-1.7	-1.7	-16.5	-10.1
28	-1.8	-1.6	-1.4	-0.4	-0.9	-0.8	-0.5	0.2	0.4	0.0	-0.4	-0.7	-1.2	-1.2	-2.3	-3.3	-4.2	-5.3	-6.1	-7.1	-7.6	-7.9	-8.4	-9.2	0.4	-9.2	-3.0
29	-9.6	-9.9	-10.0	-9.4	-9.2	-10.3	-11.3	-12.0	-12.7	-12.5	-12.6	-13.0	-13.5	-13.5	-13.4	-13.2	-12.5	-11.8	-11.8	-11.9	-12.1	-12.6	-13.2	-13.8	-9.2	-13.8	-11.9
Max.	**1.3**	**0.9**	**1.3**	**0.9**	**0.8**	**1.3**	**2.1**	**2.2**	**1.7**	**1.6**	**1.5**	**1.3**	**2.0**	**2.0**	**1.9**	**1.5**	**5.8**	**2.0**	**2.3**	**2.1**	**1.7**	**1.8**	**1.7**	**1.4**	**5.8**		
Min.	**-25.8**	**-25.9**	**-25.9**	**-27.0**	**-27.6**	**-27.5**	**-27.6**	**-27.7**	**-27.8**	**-28.0**	**-27.8**	**-27.1**	**-26.7**	**-26.5**	**-26.1**	**-25.4**	**-25.5**	**-25.3**	**-25.7**	**-25.5**	**-25.6**	**-26.2**	**-25.4**	**-25.5**		**-28.0**	
Avg.	**-11.9**	**-12.0**	**-12.0**	**-11.9**	**-12.0**	**-12.0**	**-11.9**	**-12.0**	**-12.4**	**-12.5**	**-12.5**	**-12.3**	**-11.9**	**-11.6**	**-11.4**	**-11.0**	**-10.5**	**-11.2**	**-11.5**	**-11.9**	**-11.9**	**-12.1**	**-12.0**	**-11.9**			**-11.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-14.4	-15.0	-15.3	-15.4	-15.5	-15.6	-16.0	-16.2	-16.3	-16.4	-15.6	-14.4	-11.3	-9.8	-9.1	-7.8	-6.5	-5.8	-5.7	-4.9	-4.5	-3.6	-3.1	-2.7	-2.7	-16.4	-10.9
2	-2.1	-1.2	-0.4	-0.7	-1.0	-1.2	-1.4	-1.7	-1.8	-2.2	-2.4	-2.1	-1.6	-1.0	-0.6	-0.7	-1.0	-1.6	-1.6	-1.8	-1.6	-1.5	-1.5	-1.5	-0.4	-2.4	-1.4
3	-2.1	-2.1	-2.3	-2.4	-1.9	-1.5	-1.5	-1.5	-1.4	-1.1	-0.8	-0.8	-1.0	-0.9	-0.4	-0.1	0.0	0.2	0.2	0.2	0.3	0.4	0.4	0.8	0.8	-2.4	-0.8
4	1.3	1.3	1.4	1.3	0.4	0.1	0.2	0.4	0.4	0.4	0.4	0.3	0.8	1.0	1.2	1.1	1.3	1.4	1.3	1.2	0.7	0.7	0.4	0.3	1.4	0.1	0.8
5	0.6	0.5	0.9	1.4	1.1	1.0	1.0	0.9	1.1	1.1	0.9	0.6	0.5	0.6	0.7	1.4	1.7	1.6	1.1	0.6	0.4	0.5	0.6	0.5	1.7	0.4	0.9
6	0.5	0.2	0.1	-0.2	-0.5	-0.7	-0.6	-0.7	-1.0	-1.0	-1.0	-0.7	0.1	0.5	0.6	1.0	1.1	0.9	0.6	0.8	0.5	0.5	1.3	1.5	1.5	-1.0	0.2
7	1.0	0.1	-0.1	-0.2	-0.2	-0.8	-2.0	-1.6	-0.5	-0.7	-0.9	-0.7	-0.3	0.0	-0.1	-0.3	-0.6	-0.5	-1.0	-1.3	-1.6	-2.2	-2.9	-3.3	1.0	-3.3	-0.9
8	-3.5	-3.6	-3.8	-4.3	-4.6	-5.0	-4.6	-4.1	-3.9	-3.8	-3.6	-2.9	-1.5	-1.0	0.0	-0.3	0.2	0.3	0.1	0.1	-0.1	-0.1	0.1	0.0	0.3	-5.0	-2.1
9	0.0	-0.1	0.5	0.6	0.0	-0.2	-0.5	0.5	-0.4	-0.4	-0.2	0.0	0.4	0.1	0.3	0.3	0.4	0.3	-0.4	-0.9	-0.9	-0.7	-0.7	-0.4	0.6	-0.9	-0.1
10	0.1	-1.4	-1.5	-1.9	-3.4	-4.6	-4.8	-5.0	-5.3	-5.3	-5.4	-5.2	-5.0	-4.9	-4.9	-4.7	-4.8	-4.8	-4.9	-5.0	-5.1	-5.7	-6.1	-6.1	0.1	-6.1	-4.4
11	-6.5	-6.8	-7.3	-7.7	-7.7	-7.5	-7.4	-7.6	-7.9	-7.7	-7.7	-7.8	-8.0	-8.1	-8.1	-8.2	-8.4	-8.6	-8.7	-9.2	-10.9	-10.6	-9.5	-9.5	-6.5	-10.9	-8.2
12	-9.6	-11.9	-12.0	-12.3	-12.2	-12.3	-12.3	-12.6	-11.7	-11.2	-10.3	-9.9	-9.8	-9.8	-9.5	-9.1	-8.8	-8.5	-8.5	-8.2	-8.2	-8.1	-8.1	-8.1	-8.1	-12.6	-10.1
13	-8.2	-8.2	-8.4	-8.8	-9.1	-9.2	-9.4	-9.7	-9.9	-10.2	-10.6	-10.6	-10.7	-10.5	-10.4	-10.4	-10.9	-11.2	-11.2	-11.7	-13.2	-14.2	-14.8	-14.8	-8.2	-14.8	-10.7
14	-14.9	-15.1	-15.5	-15.8	-16.2	-15.4	-15.8	-16.2	-16.6	-15.7	-16.0	-15.8	-15.0	-13.8	-12.0	-11.2	-9.6	-7.5	-5.7	-5.5	-5.3	-5.3	-5.1	-5.1	-5.1	-16.6	-12.1
15	-4.8	-5.1	-5.1	-5.0	-4.4	-3.6	-3.1	-3.5	-3.3	-3.0	-3.0	-2.6	-2.2	-1.8	-1.5	-1.4	-1.5	-1.6	-1.7	-1.9	-2.1	-2.3	-2.4	-2.5	-1.4	-5.1	-2.9
16	-2.4	-2.3	-2.3	-2.7	-2.9	-2.8	-3.0	-3.1	-3.7	-3.7	-3.7	-3.1	-3.1	-3.1	-2.7	-2.9	-2.1	-1.9	-2.2	-2.2	-3.1	-4.3	-4.5	-4.6	-1.9	-4.6	-3.0
17	-5.0	-5.0	-5.1	-5.5	-4.5	-4.7	-3.9	-4.5	-5.0	-4.6	-4.2	-4.2	-4.2	-3.9	-3.9	-3.7	-3.6	-4.8	-6.9	-8.0	-8.6	-9.0	-9.1	-9.0	-3.6	-9.1	-5.5
18	-9.4	-10.2	-9.9	-10.1	-10.9	-11.8	-12.5	-12.9	-13.8	-14.2	-14.1	-14.0	-14.1	-13.8	-13.5	-13.2	-13.2	-13.3	-13.6	-13.8	-14.3	-15.5	-15.6	-15.5	-9.4	-15.6	-13.0
19	-15.9	-16.4	-17.2	-18.1	-18.5	-18.5	-18.9	-19.6	-19.4	-19.7	-19.7	-19.3	-18.5	-17.7	-17.2	-16.9	-16.4	-16.5	-16.8	-17.6	-17.9	-18.0	-18.3	-18.8	-15.9	-19.7	-18.0
20	-18.8	-18.7	-18.9	-18.9	-19.1	-19.0	-19.1	-19.1	-19.2	-19.2	-19.1	-19.2	-19.2	-19.1	-19.0	-18.7	-18.3	-17.5	-16.7	-16.4	-16.5	-17.0	-17.5	-16.8	-16.4	-19.2	-18.4
21	-16.3	-16.0	-15.8	-15.4	-15.0	-14.9	-16.3	-16.1	-14.9	-14.5	-14.7	-14.6	-13.2	-8.3	-6.5	-6.1	-6.2	-6.3	-6.0	-7.8	-9.3	-10.0	-9.9	-8.9	-6.0	-16.3	-11.8
22	-9.1	-9.6	-9.3	-9.7	-9.6	-9.2	-10.3	-11.3	-11.7	-12.3	-11.8	-11.8	-12.5	-12.0	-11.2	-10.8	-10.6	-10.5	-10.0	-10.0	-10.5	-11.1	-12.0	-11.6	-9.1	-12.5	-10.8
23	-11.6	-12.6	-12.5	-12.7	-12.1	-11.9	-13.1	-13.9	-13.6	-13.2	-13.8	-13.6	-13.5	-13.2	-12.5	-12.2	-11.8	-11.5	-11.4	-11.2	-11.6	-12.3	-13.3	-13.9	-11.2	-13.9	-12.6
24	-13.4	-13.3	-13.5	-13.2	-12.8	-13.0	-13.1	-13.2	-13.1	-13.8	-13.2	-12.5	-12.1	-11.3	-10.3	-10.1	-9.8	-9.2	-8.8	-8.1	-8.8	-9.4	-8.9	-8.3	-8.1	-13.8	-11.4
25	-8.9	-9.9	-10.4	-11.0	-10.7	-10.6	-10.5	-9.8	-9.3	-9.5	-9.3	-9.1	-9.1	-8.5	-8.3	-8.0	-7.5	-7.2	-6.7	-7.2	-8.3	-8.6	-9.0	-9.3	-6.7	-11.0	-9.0
26	-8.8	-7.8	-8.3	-8.6	-9.1	-10.4	-10.4	-9.8	-10.5	-10.8	-10.7	-9.7	-9.7	-9.1	-8.8	-7.4	-6.5	-6.8	-6.8	-6.8	-7.4	-7.7	-8.2	-8.9	-6.5	-10.8	-8.7
27	-9.4	-8.6	-8.7	-9.1	-9.4	-9.5	-9.6	-9.4	-9.5	-9.6	-9.9	-9.7	-9.5	-9.5	-9.0	-8.7	-8.2	-8.1	-8.4	-9.1	-10.6	-11.0	-10.3	-12.6	-8.1	-12.6	-9.5
28	-14.1	-13.8	-13.6	-13.9	-13.9	-14.3	-15.3	-15.6	-15.2	-15.0	-14.4	-13.6	-13.1	-13.2	-12.5	-12.1	-11.2	-10.7	-10.3	-10.0	-9.8	-9.5	-9.2	-9.3	-9.2	-15.6	-12.6
29	-9.6	-9.3	-8.9	-8.6	-8.5	-8.0	-7.4	-6.9	-6.5	-6.2	-5.4	-4.4	-3.4	-2.9	-2.6	-2.5	-2.5	-2.8	-2.8	-2.7	-2.5	-2.3	-2.1	-1.6	-1.6	-9.6	-5.0
30	-1.4	-1.3	-1.2	-1.2	-1.2	-1.3	-1.5	-1.5	-1.4	-1.0	-0.8	-0.5	-0.1	0.1	0.2	0.0	0.0	-0.1	-0.3	-0.6	-0.7	-0.5	-0.4	-0.7	0.2	-1.5	-0.7
31	-0.4	-0.3	-0.3	-0.2	-0.2	0.3	0.2	0.3	0.4	0.5	0.8	1.2	1.3	1.4	1.5	1.3	1.3	1.3	1.3	1.2	1.0	0.7	0.5	0.6	1.5	-0.4	0.7
Max.	**1.3**	**1.3**	**1.4**	**1.4**	**1.1**	**1.0**	**1.0**	**0.9**	**1.1**	**1.1**	**0.9**	**1.2**	**1.3**	**1.4**	**1.5**	**1.4**	**1.7**	**1.6**	**1.3**	**1.2**	**1.0**	**0.7**	**1.3**	**1.5**	**1.7**		
Min.	**-18.8**	**-18.7**	**-18.9**	**-18.9**	**-19.1**	**-19.0**	**-19.1**	**-19.6**	**-19.4**	**-19.7**	**-19.7**	**-19.3**	**-19.2**	**-19.1**	**-19.0**	**-18.7**	**-18.3**	**-17.5**	**-16.8**	**-17.6**	**-17.9**	**-18.0**	**-18.3**	**-18.8**		**-19.7**	
Avg.	**-7.0**	**-7.2**	**-7.3**	**-7.4**	**-7.5**	**-7.6**	**-7.8**	**-7.9**	**-7.9**	**-7.9**	**-7.7**	**-7.4**	**-7.0**	**-6.6**	**-6.1**	**-5.9**	**-5.6**	**-5.5**	**-5.6**	**-5.7**	**-6.2**	**-6.4**	**-6.4**	**-6.4**			**-6.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.4	0.2	0.1	0.1	0.0	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.1	0.3	0.6	0.4	0.4	0.2	0.0	-0.2	-0.4	-0.7	-1.1	-1.4	0.6	-1.4	-0.1
2	-2.3	-2.6	-2.8	-3.0	-2.9	-2.9	-3.0	-2.9	-3.2	-3.5	-3.8	-3.5	-3.5	-3.3	-3.0	-2.8	-3.0	-3.1	-2.7	-2.1	-1.9	-1.7	-1.5	-1.4	-1.4	-3.8	-2.8
3	-1.3	-1.0	-1.0	-1.2	-1.4	-1.5	-1.6	-1.5	-1.4	-1.4	-1.1	-1.0	-0.7	0.0	0.6	1.1	1.0	0.9	0.5	0.2	0.0	-0.1	-0.1	-0.2	1.1	-1.6	-0.5
4	-0.2	-0.2	-0.3	-0.4	-0.3	-0.4	-0.5	-0.4	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4	-0.2	-0.3	-0.2	-0.4	-0.7	-1.1	-2.1	-3.0	-4.3	-5.4	-0.2	-5.4	-1.0
5	-6.3	-7.0	-8.3	-9.2	-9.7	-10.4	-11.3	-11.7	-12.0	-12.0	-11.6	-11.4	-10.8	-10.5	-9.5	-9.1	-8.7	-8.2	-8.2	-8.9	-9.9	-10.9	-10.8	-10.6	-6.3	-12.0	-9.9
6	-11.2	-12.2	-12.6	-13.0	-13.6	-14.0	-14.5	-14.7	-15.1	-14.5	-13.9	-13.3	-11.9	-11.1	-10.5	-9.8	-9.3	-9.2	-9.6	-10.2	-10.2	-11.4	-11.9	-12.4	-9.2	-15.1	-12.1
7	-12.4	-12.8	-12.8	-13.1	-12.9	-12.8	-13.5	-13.6	-14.5	-14.1	-12.9	-11.7	-10.7	-9.3	-8.5	-7.8	-7.5	-7.5	-7.8	-8.3	-9.3	-9.8	-10.3	-10.1	-7.5	-14.5	-11.0
8	-11.2	-9.8	-10.2	-10.7	-10.7	-10.4	-10.3	-9.6	-9.6	-9.4	-9.8	-10.4	-10.0	-8.9	-7.9	-7.3	-7.2	-6.8	-7.7	-8.2	-8.9	-9.4	-9.4	-10.7	-6.8	-11.2	-9.3
9	-10.7	-10.4	-10.3	-10.3	-11.2	-11.3	-11.6	-11.7	-12.2	-13.1	-12.0	-11.5	-10.5	-9.7	-9.1	-8.4	-8.3	-8.3	-8.5	-9.4	-10.5	-11.1	-11.2	-11.4	-8.3	-13.1	-10.5
10	-12.2	-12.6	-13.5	-12.9	-14.0	-14.3	-14.6	-15.9	-15.3	-15.1	-13.8	-13.0	-12.5	-11.4	-10.3	-9.6	-9.2	-9.2	-9.7	-10.4	-11.5	-12.4	-12.9	-12.7	-9.2	-15.9	-12.5
11	-12.7	-14.7	-14.9	-15.0	-15.4	-16.5	-17.3	-17.5	-16.7	-15.5	-15.1	-14.6	-13.6	-12.3	-11.4	-10.7	-10.3	-10.3	-10.6	-11.1	-11.7	-12.9	-13.1	-13.7	-10.3	-17.5	-13.7
12	-13.1	-13.4	-13.5	-13.8	-14.0	-14.6	-14.4	-14.2	-14.1	-13.9	-13.4	-11.9	-11.0	-10.2	-8.9	-8.4	-8.1	-7.7	-7.6	-7.8	-7.7	-7.4	-8.1	-8.5	-7.4	-14.6	-11.1
13	-7.8	-6.9	-6.8	-7.3	-7.0	-6.3	-6.0	-6.1	-5.7	-5.5	-5.2	-5.0	-4.2	-2.7	-1.5	-0.6	-0.4	-0.3	-0.3	-0.3	-0.3	-0.5	-0.9	-1.1	-0.3	-7.8	-3.7
14	-1.4	-1.6	-1.8	-2.0	-2.0	-2.0	-2.2	-2.3	-2.4	-2.4	-2.1	-1.8	-1.6	-1.4	-1.2	-1.3	-1.4	-1.2	-0.9	-0.6	-0.6	-0.7	-1.0	-1.1	-0.6	-2.4	-1.5
15	-1.5	-2.0	-2.3	-2.7	-2.5	-2.3	-2.8	-2.5	-3.3	-4.6	-5.0	-5.7	-5.8	-5.9	-6.0	-7.1	-7.5	-7.6	-8.2	-8.9	-10.0	-11.0	-11.6	-12.0	-1.5	-12.0	-5.8
16	-12.4	-12.8	-13.2	-13.5	-13.9	-14.2	-14.5	-14.8	-15.8	-15.5	-14.3	-13.6	-12.6	-11.8	-10.6	-9.2	-8.6	-7.7	-7.1	-6.8	-6.2	-6.4	-6.8	-6.6	-6.2	-15.8	-11.2
17	-6.7	-6.1	-5.2	-6.1	-5.6	-5.4	-5.9	-5.2	-5.0	-4.6	-5.4	-4.5	-3.7	-3.2	-3.0	-2.7	-2.5	-2.5	-2.6	-2.1	-2.6	-2.8	-2.7	-3.0	-2.1	-6.7	-4.1
18	-3.1	-2.7	-2.5	-3.2	-4.4	-3.3	-3.5	-3.7	-2.5	-1.7	0.2	-0.1	-0.4	0.4	0.4	1.0	0.7	0.4	-0.1	-0.1	-0.5	-1.6	-2.2	-2.7	1.0	-4.4	-1.5
19	-2.6	-2.6	-2.2	-2.1	-1.9	-1.8	-2.2	-2.3	-1.7	-1.2	-0.2	0.5	0.8	1.0	1.0	1.1	1.1	0.8	0.2	-0.2	-0.7	-1.0	-1.7	-2.4	1.1	-2.6	-0.9
20	-2.5	-2.5	-2.0	-2.8	-2.2	-2.4	-2.3	-0.2	0.0	-0.1	1.0	0.2	0.7	0.8	1.0	0.6	0.7	0.2	-0.1	-0.2	-0.4	-0.5	-0.6	-0.8	1.0	-2.8	-0.6
21	-0.8	-0.8	-0.7	-0.8	-1.0	-0.9	-1.1	-1.0	-0.9	-0.7	-0.3	0.1	0.4	0.4	0.7	0.9	0.8	0.7	0.1	0.1	-0.2	-0.5	-1.4	-1.9	0.9	-1.9	-0.4
22	-1.5	-1.6	-0.8	-1.1	-2.0	-2.1	-1.1	-1.8	0.2	1.4	1.5	2.8	3.7	3.9	4.9	5.3	5.5	5.6	5.5	5.5	5.9	6.6	4.3	3.4	6.6	-2.1	2.3
23	4.0	4.3	4.3	3.3	2.6	3.5	3.2	1.9	2.3	2.2	2.4	2.3	1.8	2.9	3.3	3.9	5.1	5.6	5.3	5.3	5.3	5.0	4.5	3.9	5.6	1.8	3.7
24	1.9	0.2	-0.3	-0.6	-2.6	-3.3	-3.0	-3.1	-2.9	-2.7	-2.2	-2.1	-1.7	-1.4	-1.0	-0.7	-0.6	-0.7	-0.7	-0.6	-0.6	-0.3	-0.6	-2.0	1.9	-3.3	-1.3
25	-3.2	-3.9	-4.1	-4.8	-6.0	-6.4	-6.9	-7.6	-8.2	-8.4	-7.7	-7.2	-7.1	-6.6	-6.4	-6.2	-5.9	-5.9	-5.8	-5.7	-6.0	-6.9	-7.1	-7.7	-3.2	-8.4	-6.3
26	-8.7	-9.6	-10.1	-10.6	-11.3	-11.9	-11.8	-11.4	-11.0	-10.0	-9.1	-8.3	-7.3	-6.3	-5.8	-5.7	-5.5	-4.7	-4.1	-4.0	-4.3	-4.7	-5.4	-5.7	-4.0	-11.9	-7.8
27	-5.7	-5.7	-6.0	-6.2	-6.3	-7.0	-7.3	-7.4	-7.2	-7.1	-7.0	-6.7	-6.4	-5.7	-5.2	-5.1	-5.0	-4.9	-4.5	-4.3	-4.5	-4.8	-5.1	-5.1	-4.3	-7.4	-5.8
28	-5.4	-6.2	-6.5	-7.1	-6.4	-6.5	-6.7	-7.1	-7.4	-6.6	-6.4	-5.5	-4.8	-4.1	-3.6	-3.2	-2.6	-2.4	-2.6	-2.6	-3.0	-3.4	-4.1	-4.6	-2.4	-7.4	-5.0
29	-4.9	-4.7	-5.0	-5.6	-5.6	-5.1	-4.5	-4.6	-4.4	-4.1	-3.7	-3.3	-2.4	-1.6	-1.2	-0.8	-0.1	0.2	0.3	0.2	-0.3	-0.8	-1.8	-2.8	0.3	-5.6	-2.8
30	-3.0	-3.4	-3.9	-4.7	-5.0	-5.5	-5.5	-5.5	-5.5	-5.3	-4.4	-3.6	-2.2	-1.4	-0.9	-0.4	-0.6	-0.9	-1.3	-1.6	-1.8	-2.3	-2.5	-2.8	-0.4	-5.5	-3.1
Max.	**4.0**	**4.3**	**4.3**	**3.3**	**2.6**	**3.5**	**3.2**	**1.9**	**2.3**	**2.2**	**2.4**	**2.8**	**3.7**	**3.9**	**4.9**	**5.3**	**5.5**	**5.6**	**5.5**	**5.5**	**5.9**	**6.6**	**4.5**	**3.9**	**6.6**		
Min.	**-13.1**	**-14.7**	**-14.9**	**-15.0**	**-15.4**	**-16.5**	**-17.3**	**-17.5**	**-16.7**	**-15.5**	**-15.1**	**-14.6**	**-13.6**	**-12.3**	**-11.4**	**-10.7**	**-10.3**	**-10.3**	**-10.6**	**-11.1**	**-11.7**	**-12.9**	**-13.1**	**-13.7**		**-17.5**	
Avg.	**-5.3**	**-5.5**	**-5.6**	**-6.0**	**-6.3**	**-6.4**	**-6.6**	**-6.6**	**-6.5**	**-6.3**	**-5.9**	**-5.5**	**-4.9**	**-4.3**	**-3.8**	**-3.4**	**-3.2**	**-3.2**	**-3.3**	**-3.5**	**-3.8**	**-4.2**	**-4.7**	**-5.1**			**-5.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.1	-3.3	-3.4	-4.1	-4.3	-4.5	-4.9	-5.0	-5.0	-4.6	-3.9	-2.7	-1.3	-0.2	0.5	0.9	1.0	1.1	1.4	1.1	0.8	0.7	0.6	0.4	1.4	-5.0	-1.7
2	0.1	-0.3	-0.4	-0.8	-1.0	-0.9	-0.8	-0.7	-0.6	-0.3	0.5	0.9	1.5	1.8	0.4	1.0	2.3	2.1	2.2	1.1	1.3	0.4	1.0	0.6	2.3	-1.0	0.5
3	0.5	-0.1	-0.8	-1.1	-1.1	-0.9	-0.7	-0.3	0.3	0.4	1.1	1.7	2.3	2.6	2.5	2.6	1.3	1.1	1.2	1.4	2.5	1.3	0.8	1.2	2.6	-1.1	0.8
4	1.5	1.0	1.3	1.5	1.3	1.6	1.7	1.6	1.3	1.6	1.9	2.2	2.5	2.6	2.6	3.5	3.7	3.8	3.9	3.6	1.9	1.6	2.0	1.9	3.9	1.0	2.2
5	2.2	1.5	1.4	1.3	1.1	1.9	1.6	1.7	2.3	2.2	1.9	1.9	2.0	2.3	3.1	4.0	5.0	5.2	5.0	4.0	3.4	3.4	2.7	2.3	5.2	1.1	2.6
6	2.4	1.2	0.6	1.1	1.4	1.5	1.7	1.6	1.4	1.7	2.1	2.4	2.7	2.7	2.9	3.0	3.1	3.0	2.6	2.3	1.7	1.1	0.9	1.0	3.1	0.6	1.9
7	0.9	1.1	1.3	1.4	1.4	1.1	1.0	1.1	1.3	1.7	2.4	2.7	2.7	2.9	3.3	3.1	3.0	3.0	3.1	2.8	2.3	2.1	1.5	1.1	3.3	0.9	2.0
8	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.6	2.0	2.4	2.7	2.8	2.9	2.7	2.8	2.9	3.0	2.9	2.8	2.6	2.3	1.9	2.0	3.0	1.1	2.1
9	2.1	2.0	2.1	1.9	1.7	1.6	1.7	1.7	1.9	2.5	2.8	2.9	3.0	2.9	3.1	3.4	3.0	2.8	2.3	1.9	1.8	1.6	1.5	1.9	3.4	1.5	2.3
10	1.2	1.4	1.5	1.3	0.7	1.1	1.2	1.1	1.5	1.6	2.0	2.7	3.0	3.4	3.9	4.0	4.3	4.6	4.8	4.4	4.4	4.0	3.6	3.5	4.8	0.7	2.7
11	2.9	2.6	2.6	2.5	2.4	2.4	2.4	2.0	2.6	3.1	2.4	2.3	2.0	2.1	2.4	3.5	3.6	3.3	4.1	4.0	3.9	3.4	3.1	2.4	4.1	2.0	2.8
12	2.3	2.2	2.1	2.0	1.7	1.6	1.5	1.7	2.1	2.5	3.2	3.6	3.8	3.9	4.0	2.5	1.9	2.0	2.2	2.0	1.7	1.4	1.0	1.1	4.0	1.0	2.3
13	1.2	0.9	0.4	0.4	0.4	0.5	0.3	0.5	0.7	1.0	2.1	2.7	3.3	3.5	3.7	3.2	3.0	2.4	2.4	2.5	2.0	1.4	0.9	0.8	3.7	0.3	1.7
14	0.4	-0.2	-0.2	0.1	-0.7	0.5	1.3	1.7	1.9	2.2	2.2	2.6	3.3	4.3	4.4	4.3	5.2	5.7	5.7	5.1	4.6	4.7	4.7	4.2	5.7	-0.7	2.8
15	3.9	3.2	3.3	3.4	3.2	2.7	2.8	2.7	2.8	3.3	4.2	5.3	5.6	5.0	4.3	3.4	3.1	3.3	3.3	2.7	2.2	1.8	1.5	1.7	5.6	1.5	3.3
16	1.6	1.5	1.1	0.8	0.6	0.1	0.0	0.0	0.0	0.4	0.9	1.9	3.1	3.7	3.8	4.1	4.5	4.6	4.5	4.6	4.2	3.3	2.8	2.8	4.6	0.0	2.3
17	1.5	0.1	-0.1	0.2	0.6	0.2	0.2	1.0	1.7	2.5	3.5	4.7	5.8	6.5	7.2	7.9	8.4	7.6	7.5	7.9	6.9	5.3	3.6	2.7	8.4	-0.1	3.9
18	2.4	2.4	1.7	1.3	1.0	1.0	0.8	0.9	1.7	2.2	2.1	2.5	2.3	2.5	2.6	3.1	3.3	4.1	4.0	3.7	2.8	2.1	1.3	1.2	4.1	0.8	2.2
19	1.3	1.3	1.4	1.1	1.3	1.3	1.1	0.9	1.1	1.7	2.3	3.1	4.0	5.0	5.7	6.1	6.8	6.3	6.1	5.9	5.5	4.7	3.9	3.0	6.8	0.9	3.4
20	3.8	2.9	2.9	2.1	1.4	1.0	1.6	2.2	3.1	4.3	5.8	7.1	8.6	9.7	10.7	10.8	11.1	11.1	11.5	11.1	10.2	9.5	9.3	8.8	11.5	1.0	6.7
21	8.7	7.5	7.1	6.4	5.4	4.0	4.4	4.1	3.3	4.5	5.2	7.1	8.2	8.5	8.8	9.3	9.1	9.6	8.9	7.7	6.6	5.1	4.6	5.1	9.6	3.3	6.6
22	5.1	4.6	3.9	3.0	2.2	1.7	2.1	2.6	2.9	4.6	5.4	6.5	7.6	8.5	9.4	9.7	9.1	7.9	6.8	6.1	5.1	3.8	3.2	3.0	9.7	1.7	5.2
23	2.7	2.4	1.5	1.4	1.1	1.7	1.8	1.8	2.2	2.7	3.0	3.2	3.2	3.5	3.7	3.9	3.9	3.8	3.9	3.8	3.8	3.7	3.5	3.1	3.9	1.1	2.9
24	3.0	3.1	2.8	2.6	2.5	2.3	2.4	2.8	3.1	3.3	3.2	3.7	4.2	4.7	5.5	6.3	6.3	6.0	5.5	4.9	5.1	4.5	3.8	3.0	6.3	2.3	3.9
25	2.2	2.0	1.9	1.9	1.7	1.5	1.2	1.4	1.7	2.7	3.7	3.8	4.2	2.8	2.4	4.1	5.3	4.2	4.2	4.1	3.7	3.4	3.0	2.9	5.3	1.2	2.9
26	2.4	2.1	1.5	1.0	1.0	1.0	1.3	1.4	1.8	2.4	3.0	3.5	4.3	5.2	6.3	4.6	6.1	6.2	4.5	4.9	5.3	4.3	3.5	3.9	6.3	1.0	3.4
27	3.4	3.0	3.3	3.3	1.5	1.2	1.5	1.8	3.0	4.0	5.4	6.3	7.6	8.2	9.1	10.1	10.6	10.8	11.2	11.0	10.4	8.8	6.8	6.0	11.2	1.2	6.2
28	5.4	4.9	4.0	3.6	3.5	5.0	4.9	4.7	5.7	6.7	7.7	8.6	9.9	10.4	10.8	11.6	12.2	12.4	11.9	11.1	10.0	9.4	8.2	7.2	12.4	3.5	7.9
29	6.2	6.9	6.0	5.8	4.6	4.4	4.5	4.9	6.1	7.3	8.7	10.1	10.7	10.8	11.7	12.9	13.2	13.3	13.3	13.6	12.8	11.6	10.0	8.0	13.6	4.4	9.1
30	6.8	6.4	7.3	7.6	8.4	8.0	8.0	8.5	8.9	10.1	10.7	11.2	12.1	12.2	12.9	12.6	11.8	10.7	10.3	8.7	7.1	6.7	6.1	5.6	12.9	5.6	9.1
31	5.2	5.1	4.7	4.7	4.6	4.5	4.5	4.4	4.5	5.0	5.6	6.2	6.8	7.3	7.5	7.3	7.4	6.9	5.9	5.1	4.5	4.2	3.9	3.6	7.5	3.6	5.4
Max.	**8.7**	**7.5**	**7.3**	**7.6**	**8.4**	**8.0**	**8.0**	**8.5**	**8.9**	**10.1**	**10.7**	**11.2**	**12.1**	**12.2**	**12.9**	**12.9**	**13.2**	**13.3**	**13.3**	**13.6**	**12.8**	**11.6**	**10.0**	**8.8**	**13.6**		
Min.	**-3.1**	**-3.3**	**-3.4**	**-4.1**	**-4.3**	**-4.5**	**-4.9**	**-5.0**	**-5.0**	**-4.6**	**-3.9**	**-2.7**	**-1.3**	**-0.2**	**0.4**	**0.9**	**1.0**	**1.1**	**1.2**	**1.1**	**0.8**	**0.4**	**0.6**	**0.4**		**-5.0**	
Avg.	**2.6**	**2.3**	**2.1**	**1.9**	**1.6**	**1.6**	**1.7**	**1.8**	**2.2**	**2.8**	**3.3**	**4.0**	**4.6**	**4.9**	**5.2**	**5.5**	**5.7**	**5.6**	**5.4**	**5.0**	**4.5**	**3.9**	**3.4**	**3.1**			**3.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.4	3.2	3.3	4.1	4.6	4.5	4.6	4.7	4.7	5.2	6.4	7.6	8.0	7.9	8.4	8.6	7.9	6.8	6.5	5.9	5.7	4.9	4.6	3.8	8.6	3.2	5.6
2	4.1	4.8	4.9	5.0	5.0	4.8	5.1	5.6	6.5	6.9	7.8	8.1	8.9	9.7	10.3	10.1	10.7	9.6	9.5	9.4	9.2	8.7	7.5	6.6	10.7	4.1	7.5
3	6.4	5.9	5.5	5.0	5.2	5.0	5.9	5.9	6.2	6.5	7.8	8.9	9.1	10.2	10.4	9.0	9.4	10.0	8.9	8.6	6.4	5.5	4.5	4.1	10.4	4.1	7.1
4	3.6	3.5	3.2	2.8	2.6	2.9	2.9	3.3	4.0	5.0	6.5	6.6	7.1	7.9	8.2	9.1	9.5	8.9	9.2	8.7	7.9	6.9	5.3	3.6	9.5	2.6	5.8
5	2.8	2.4	2.4	2.4	2.9	3.1	3.3	3.6	3.9	4.8	4.5	4.3	4.5	5.2	6.0	6.2	6.1	5.8	5.4	5.5	4.9	4.6	4.4	4.4	6.2	2.4	4.3
6	4.0	3.5	3.9	3.8	3.5	3.9	4.1	4.0	4.2	5.1	6.2	8.0	9.4	10.6	11.5	12.3	13.5	12.4	12.2	11.9	10.8	11.5	10.2	8.5	13.5	3.5	7.9
7	7.9	7.1	6.7	6.2	5.6	5.0	6.3	7.5	8.6	9.9	11.2	11.6	12.6	12.4	14.0	13.6	13.9	14.3	14.1	13.9	12.3	11.3	8.9	6.6	14.3	5.0	10.1
8	5.1	4.2	4.0	2.8	2.5	2.7	3.2	3.1	4.4	5.4	5.9	6.9	7.5	7.8	8.4	8.5	8.7	8.1	7.8	7.4	7.3	6.6	4.7	3.3	8.7	2.5	5.7
9	2.7	2.4	2.1	1.5	1.1	1.0	0.9	1.0	1.2	1.4	2.2	3.3	3.7	4.1	4.6	5.0	6.1	6.6	6.7	5.6	5.5	5.4	4.1	3.9	6.7	0.9	3.4
10	3.4	2.5	2.0	1.7	1.5	1.2	1.1	1.4	1.7	2.0	2.8	3.4	4.9	5.6	6.0	6.2	6.9	7.1	6.4	6.3	5.6	5.1	4.9	4.9	7.1	1.1	3.9
11	4.8	4.2	3.8	3.5	3.6	3.6	3.1	3.1	3.4	3.9	4.5	5.1	5.3	4.8	4.7	5.1	5.2	5.4	5.7	5.7	5.5	4.8	4.3	3.8	5.7	3.1	4.5
12	2.9	2.3	2.1	1.9	1.7	1.6	1.5	1.4	1.8	2.6	3.8	4.6	4.9	5.6	5.4	5.1	5.0	4.3	4.0	3.8	3.3	3.0	2.7	2.4	5.6	1.4	3.2
13	2.3	2.2	2.3	2.3	2.9	3.2	3.7	3.4	4.3	5.2	5.7	6.5	7.8	9.2	9.9	10.4	11.0	11.9	11.9	12.1	12.0	11.4	10.1	9.8	12.1	2.2	7.1
14	8.6	7.2	6.4	5.0	4.7	4.0	4.0	3.8	4.0	5.0	5.7	7.0	9.7	10.7	11.5	12.3	13.0	13.3	13.2	11.1	9.1	9.2	8.8	8.1	13.3	3.8	8.1
15	7.4	6.1	6.0	4.2	3.5	3.4	4.1	3.3	3.0	4.1	4.5	5.5	7.2	8.3	9.1	10.0	9.8	9.0	10.3	9.9	8.7	7.6	7.2	6.6	10.3	3.0	6.6
16	6.1	5.7	5.3	5.2	5.1	5.0	5.6	6.3	6.8	7.5	8.9	9.7	10.2	10.4	11.8	12.6	13.0	12.9	13.1	13.8	12.7	12.3	12.0	11.5	13.8	5.0	9.3
17	11.6	11.1	10.7	10.6	10.2	10.5	10.5	10.2	11.2	12.4	12.4	13.1	14.7	15.6	16.4	17.0	17.5	17.9	17.7	16.8	15.7	13.7	11.6	9.7	17.9	9.7	13.3
18	8.8	9.2	8.6	8.4	8.8	7.2	6.8	7.0	7.8	8.6	10.3	11.6	12.5	13.0	13.8	14.3	14.8	14.7	14.3	14.3	13.9	13.4	11.5	10.2	14.8	6.8	11.0
19	9.3	8.7	8.5	8.4	7.3	6.5	6.6	6.6	8.0	9.2	10.2	10.8	11.6	12.0	13.5	13.3	13.5	14.3	14.6	14.4	13.7	12.7	11.6	10.3	14.6	6.5	10.6
20	9.0	8.2	7.3	7.4	6.6	6.7	6.1	6.6	7.6	7.8	8.1	10.6	11.5	12.8	13.5	13.2	13.3	12.9	12.2	11.1	9.7	8.9	7.6	6.2	13.5	6.1	9.4
21	5.5	4.8	4.4	4.9	5.3	5.1	5.8	6.8	7.7	8.3	9.0	9.3	10.1	10.7	11.1	12.0	12.7	13.6	13.8	13.2	12.4	10.8	9.3	8.9	13.8	4.4	9.0
22	8.4	8.0	7.7	7.4	7.0	6.9	6.8	7.7	8.2	8.6	9.7	10.2	10.9	11.6	11.9	11.7	10.9	10.9	10.6	9.7	8.4	7.7	6.9	6.6	11.9	6.6	8.9
23	6.4	6.1	5.9	5.7	4.8	4.6	5.2	5.9	7.1	7.6	8.5	9.3	10.1	10.0	10.8	11.4	11.8	12.2	12.4	11.9	11.0	9.7	8.1	6.3	12.4	4.6	8.4
24	5.4	5.0	4.8	4.9	4.8	4.5	4.8	5.8	7.0	7.6	8.6	8.9	8.8	8.7	8.7	8.7	8.6	8.2	8.2	8.2	8.1	7.7	7.5	7.1	8.9	4.5	7.1
25	7.0	7.3	7.3	7.0	6.5	6.0	6.1	6.8	7.1	8.1	8.3	9.3	10.0	10.7	10.7	11.5	11.8	11.8	10.4	10.0	9.1	8.6	8.4	7.9	11.8	6.0	8.7
26	7.2	6.8	6.8	7.0	7.2	6.9	6.4	7.8	8.1	8.6	9.6	10.4	10.7	9.4	9.6	10.1	10.7	11.0	11.0	11.0	11.1	10.7	9.8	9.1	11.1	6.4	9.1
27	7.4	7.7	7.7	6.6	6.7	6.6	6.7	7.3	7.7	8.1	8.4	9.3	10.1	11.4	11.6	12.4	12.1	12.2	11.8	11.0	10.1	8.7	7.3	6.1	12.4	6.1	9.0
28	5.5	5.1	5.5	5.6	5.0	5.1	5.6	5.6	6.6	7.4	7.3	7.6	8.4	9.1	11.1	10.2	9.9	10.7	11.2	11.4	10.8	9.1	8.3	7.4	11.4	5.0	7.9
29	6.8	6.6	6.6	6.1	6.0	6.1	6.0	6.1	6.4	7.3	8.2	9.1	9.9	10.2	10.9	11.6	11.7	11.6	11.8	10.7	9.1	7.8	7.0	6.2	11.8	6.0	8.3
30	5.7	5.5	5.4	5.3	5.1	5.3	5.1	5.5	6.9	7.8	8.8	9.6	10.1	10.9	11.5	12.0	12.1	12.2	12.7	13.3	11.7	11.5	11.0	10.1	13.3	5.1	9.0
Max.	**11.6**	**11.1**	**10.7**	**10.6**	**10.2**	**10.5**	**10.5**	**10.2**	**11.2**	**12.4**	**12.4**	**13.1**	**14.7**	**15.6**	**16.4**	**17.0**	**17.5**	**17.9**	**17.7**	**16.8**	**15.7**	**13.7**	**12.0**	**11.5**	**17.9**		
Min.	**2.3**	**2.2**	**2.0**	**1.5**	**1.1**	**1.0**	**0.9**	**1.0**	**1.2**	**1.4**	**2.2**	**3.3**	**3.7**	**4.1**	**4.6**	**5.0**	**5.0**	**4.3**	**4.0**	**3.8**	**3.3**	**3.0**	**2.7**	**2.4**		**0.9**	
Avg.	**6.0**	**5.6**	**5.4**	**5.1**	**4.9**	**4.8**	**4.9**	**5.2**	**5.9**	**6.6**	**7.4**	**8.2**	**9.0**	**9.5**	**10.2**	**10.5**	**10.7**	**10.7**	**10.6**	**10.2**	**9.4**	**8.7**	**7.7**	**6.8**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.5	10.4	9.8	8.7	8.3	8.5	7.1	7.3	9.4	10.2	11.6	12.4	13.1	14.0	14.5	14.7	14.5	13.5	12.6	12.1	10.7	9.8	9.2	8.6	14.7	7.1	10.9
2	7.9	7.5	6.8	6.6	6.6	6.3	6.1	6.4	6.8	7.5	8.8	9.8	10.7	11.7	12.0	13.4	12.4	13.1	11.6	9.7	9.9	9.5	8.7	8.0	13.4	6.1	9.1
3	7.9	7.2	7.6	8.5	9.3	8.5	8.8	8.5	9.0	7.7	7.1	7.9	8.6	9.3	10.4	11.3	10.9	9.7	9.3	9.1	9.0	9.2	8.3	7.6	11.3	7.1	8.8
4	7.5	7.6	7.5	7.6	8.5	8.8	8.7	8.8	8.9	9.7	10.5	11.2	11.9	12.6	12.7	12.3	12.9	12.7	10.2	9.1	9.2	9.1	8.9	8.6	12.9	7.5	9.8
5	8.5	8.3	8.6	10.3	10.4	10.0	9.8	9.7	10.0	11.3	12.8	14.1	15.2	16.6	16.4	14.8	14.0	14.5	14.5	14.8	14.6	13.7	13.2	12.8	16.6	8.3	12.5
6	12.0	11.0	10.7	10.3	10.3	11.1	10.6	11.3	12.3	14.7	15.9	15.8	17.3	15.4	13.9	14.0	13.5	13.1	12.1	11.8	11.2	10.7	10.3	9.6	17.3	9.6	12.5
7	9.1	8.8	8.6	8.3	8.3	8.3	8.4	8.4	7.1	7.4	7.5	7.4	7.4	7.7	7.4	7.5	7.7	8.3	8.7	9.1	8.8	8.6	8.1	7.6	9.1	7.1	8.1
8	7.3	7.0	7.1	7.2	7.2	7.1	6.3	6.7	7.0	7.2	7.7	8.0	8.1	8.4	9.4	9.9	10.0	9.9	9.8	9.9	9.5	9.3	9.1	8.9	10.0	6.3	8.2
9	8.8	9.2	9.2	9.5	9.7	9.9	9.9	10.0	10.5	10.8	11.0	12.4	13.3	14.1	15.1	15.5	15.2	14.2	13.0	12.1	11.1	10.6	10.1	9.5	15.5	8.8	11.4
10	9.1	8.6	8.4	8.2	8.2	8.1	7.8	7.9	8.9	9.6	10.4	10.8	11.1	12.9	13.9	13.7	13.9	14.0	13.5	12.8	11.5	10.7	9.5	8.5	14.0	7.8	10.5
11	7.9	7.5	7.3	7.2	7.2	7.0	6.9	6.9	7.2	8.5	9.1	9.6	10.5	11.4	12.1	12.9	13.1	13.1	12.8	12.4	11.6	10.3	9.2	8.5	13.1	6.9	9.6
12	7.8	7.3	6.8	7.1	6.4	5.9	5.9	6.9	8.7	9.7	10.2	10.3	10.4	11.1	11.3	10.9	10.6	10.4	8.9	8.1	7.8	7.6	7.3	7.3	11.3	5.9	8.5
13	7.5	7.5	7.4	7.3	7.2	7.1	7.1	7.1	7.2	7.4	7.7	8.1	8.7	9.3	9.7	9.8	9.8	9.8	9.7	9.7	9.5	9.3	8.9	8.3	9.8	7.1	8.4
14	8.0	8.0	8.0	8.2	8.0	7.9	8.0	8.3	8.6	8.8	9.8	10.6	11.4	12.4	13.7	14.2	14.5	15.2	15.0	14.6	13.7	13.0	12.0	11.1	15.2	7.9	11.0
15	10.0	9.9	9.6	9.5	9.5	9.1	8.7	8.9	9.4	10.5	11.6	12.2	13.1	14.2	15.0	15.3	14.6	13.4	12.5	11.4	10.6	10.0	9.8	10.0	15.3	8.7	11.2
16	10.2	10.1	10.0	9.7	9.4	9.4	9.2	9.4	9.5	9.4	8.9	8.6	9.2	10.0	10.5	10.0	8.9	8.3	8.3	8.1	7.9	7.8	7.7	7.6	10.5	7.6	9.1
17	7.5	7.5	6.2	5.0	3.9	3.7	3.8	4.1	4.4	4.8	4.4	4.9	5.8	6.4	6.8	7.1	7.7	8.3	8.1	7.8	7.2	6.8	6.3	6.0	8.3	3.7	6.0
18	5.6	5.2	4.5	4.4	4.3	4.0	4.0	4.1	4.4	4.8	5.6	6.5	7.1	7.5	6.9	6.8	7.8	7.7	7.8	7.5	7.5	7.8	7.8	7.7	7.8	4.0	6.1
19	7.3	7.4	7.1	6.6	6.2	6.9	7.1	7.4	7.8	8.4	9.4	10.8	11.1	11.7	12.9	12.7	12.3	12.1	12.0	11.0	10.6	10.4	10.0	9.5	12.9	6.2	9.5
20	9.0	9.4	9.2	9.0	8.9	8.8	8.7	8.7	8.4	8.0	6.9	6.6	6.7	6.8	6.6	6.7	6.4	5.9	5.6	5.5	5.5	5.5	5.6	5.7	9.4	5.5	7.2
21	5.7	5.4	5.2	5.0	5.0	5.0	5.1	5.2	5.4	5.6	6.1	6.8	7.3	8.4	9.1	9.2	10.5	10.9	10.7	9.9	10.6	8.8	8.2	7.5	10.9	5.0	7.4
22	6.8	6.4	6.2	5.7	5.3	5.4	5.7	5.6	5.7	6.2	6.8	6.6	6.3	6.4	6.2	6.6	6.5	6.2	6.3	6.4	6.3	6.2	6.0	5.7	6.8	5.3	6.1
23	5.7	5.7	5.6	5.6	5.6	5.6	5.6	5.8	6.3	6.3	6.4	7.0	7.6	7.8	7.9	9.0	10.2	10.3	10.1	8.9	7.1	6.4	5.8	5.5	10.3	5.5	7.0
24	5.3	5.3	5.7	5.7	5.2	5.3	5.6	6.1	6.8	7.4	8.2	8.6	9.9	10.8	12.1	13.0	14.4	15.0	12.9	14.0	12.7	13.0	13.9	13.1	15.0	5.2	9.6
25	11.9	10.8	10.1	9.2	8.8	8.7	8.4	8.8	9.9	11.1	12.7	14.2	15.5	16.6	17.7	18.3	18.9	18.7	19.0	19.2	18.4	17.3	16.2	15.3	19.2	8.4	14.0
26	13.7	12.0	11.6	10.7	7.9	7.8	7.6	7.3	7.3	7.5	7.6	7.5	7.6	7.9	8.7	9.8	10.1	10.8	11.1	11.0	10.4	9.4	8.5	8.2	13.7	7.3	9.2
27	7.7	7.5	7.4	7.2	7.1	7.0	7.1	7.0	6.9	7.0	7.3	7.7	8.0	8.8	9.3	9.1	9.1	9.4	9.8	9.3	9.2	8.5	7.9	7.9	9.8	6.9	8.1
28	7.9	7.8	8.0	7.9	8.3	8.4	8.7	9.6	10.6	11.4	12.4	13.3	13.6	14.5	14.7	15.1	16.1	15.6	16.1	15.6	15.3	14.7	13.3	12.5	16.1	7.8	12.1
29	11.4	10.5	10.1	9.5	8.1	8.7	8.7	8.8	9.2	10.6	12.3	13.7	14.6	15.9	17.0	18.3	19.0	19.1	18.2	18.2	17.1	15.9	14.0	12.1	19.1	8.1	13.4
30	11.0	10.6	10.6	10.8	10.9	11.0	10.7	10.7	10.6	11.6	12.9	13.7	15.3	16.5	17.2	17.8	17.3	17.2	16.0	15.2	14.6	13.5	11.9	10.5	17.8	10.5	13.2
31	9.5	10.3	10.1	9.3	8.6	8.4	8.5	9.3	10.2	11.6	14.0	15.7	17.0	18.7	19.5	19.7	20.1	20.5	20.6	20.3	19.6	17.7	14.4	12.6	20.6	8.4	14.4
Max.	**13.7**	**12.0**	**11.6**	**10.8**	**10.9**	**11.1**	**10.7**	**11.3**	**12.3**	**14.7**	**15.9**	**15.8**	**17.3**	**18.7**	**19.5**	**19.7**	**20.1**	**20.5**	**20.6**	**20.3**	**19.6**	**17.7**	**16.2**	**15.3**	**20.6**		
Min.	**5.3**	**5.2**	**4.5**	**4.4**	**3.9**	**3.7**	**3.8**	**4.1**	**4.4**	**4.8**	**4.4**	**4.9**	**5.8**	**6.4**	**6.2**	**6.6**	**6.4**	**5.9**	**5.6**	**5.5**	**5.5**	**5.5**	**5.6**	**5.5**		**3.7**	
Avg.	**8.6**	**8.3**	**8.1**	**7.9**	**7.7**	**7.7**	**7.6**	**7.8**	**8.2**	**8.8**	**9.5**	**10.1**	**10.8**	**11.5**	**11.9**	**12.2**	**12.3**	**12.3**	**11.8**	**11.4**	**10.9**	**10.4**	**9.7**	**9.1**			**9.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.2	10.4	11.1	11.8	11.8	11.1	7.0	8.7	7.5	8.2	9.0	9.3	10.1	11.9	14.2	15.2	14.9	15.5	15.8	15.1	13.8	12.3	10.0	9.1	15.8	7.0	11.5
2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.7	8.9	9.0	9.3	9.7	10.3	10.8	11.0	11.6	11.8	11.4	10.7	10.8	10.8	10.5	10.4	10.2	11.8	8.3	9.8
3	10.6	10.2	9.8	10.4	10.2	9.4	8.5	8.8	9.3	10.4	11.9	12.3	12.4	12.8	13.7	14.4	15.0	14.5	14.0	13.6	12.2	10.5	9.1	8.4	15.0	8.4	11.3
4	7.9	7.4	7.1	7.1	7.3	7.7	7.9	8.2	8.5	9.0	9.8	10.4	10.9	11.3	12.1	12.2	12.5	13.4	13.3	12.3	10.6	9.1	8.2	8.0	13.4	7.1	9.7
5	7.5	7.5	7.6	7.7	7.9	8.1	8.2	8.6	9.1	9.8	11.1	13.3	14.3	14.7	15.2	15.5	16.1	16.2	15.9	15.7	14.8	13.4	11.1	9.6	16.2	7.5	11.6
6	9.5	9.5	8.4	8.2	9.1	8.8	8.2	7.9	9.0	10.0	11.8	13.2	14.5	15.6	16.0	16.2	17.1	16.5	15.5	14.6	14.3	13.5	12.4	11.0	17.1	7.9	12.1
7	9.9	10.3	9.6	9.8	9.4	8.6	8.1	8.7	8.8	10.5	11.5	12.0	13.3	14.5	15.0	15.4	15.2	15.6	15.9	15.5	14.6	13.1	11.7	10.5	15.9	8.1	12.0
8	10.8	9.7	8.0	8.8	8.1	6.7	5.8	7.2	8.5	9.6	11.2	12.4	13.7	14.8	15.6	16.5	16.8	17.2	17.3	17.2	16.7	15.0	12.7	11.0	17.3	5.8	12.1
9	11.0	9.8	8.8	7.7	9.1	9.2	9.3	8.0	9.8	10.9	11.9	13.4	15.0	15.9	16.6	17.5	18.0	17.0	17.3	17.0	16.1	14.4	12.0	10.3	18.0	7.7	12.8
10	10.0	10.6	11.4	11.4	8.7	7.5	7.5	7.4	8.3	9.8	11.1	12.6	14.0	15.7	16.4	16.7	16.7	16.6	14.8	13.8	12.9	10.5	9.1	8.4	16.7	7.4	11.7
11	7.6	8.1	8.0	7.8	7.7	7.6	7.5	7.9	9.2	9.7	10.4	11.2	12.5	12.8	12.6	13.4	13.7	13.4	13.3	12.3	11.1	10.5	10.0	9.6	13.7	7.5	10.3
12	10.2	9.4	8.9	7.5	7.2	7.0	6.9	8.1	9.5	11.6	12.7	13.6	14.5	15.7	16.6	16.7	17.0	14.8	13.8	13.4	13.3	13.0	12.3	12.0	17.0	6.9	11.9
13	11.2	10.7	10.2	10.0	9.8	10.6	10.1	9.8	10.1	10.3	11.1	12.2	12.6	13.2	13.8	13.2	13.2	12.6	10.5	10.7	10.5	9.8	9.9	10.1	13.8	9.8	11.1
14	10.0	9.7	9.9	9.8	9.7	9.7	9.5	9.8	10.0	10.3	10.1	10.1	10.2	10.5	10.9	11.8	11.7	11.7	11.2	11.0	10.5	10.2	10.3	9.1	11.8	9.1	10.3
15	8.4	7.6	7.0	6.8	7.1	7.1	6.5	6.0	6.0	6.4	7.0	7.6	8.5	9.2	9.5	10.0	10.2	10.4	10.0	9.5	9.1	9.2	9.3	9.2	10.4	6.0	8.2
16	9.3	9.3	9.3	9.2	9.1	9.2	9.0	8.9	8.9	9.0	9.3	9.7	10.4	11.7	12.2	12.4	12.4	12.1	11.6	11.1	10.1	8.7	7.8	7.6	12.4	7.6	9.9
17	7.5	7.3	7.0	6.9	7.0	6.9	7.0	7.1	8.0	8.9	9.5	10.3	10.7	11.1	11.4	11.3	11.6	11.1	10.4	10.0	9.5	8.8	8.5	8.1	11.6	6.9	9.0
18	7.6	7.4	7.6	7.4	6.7	6.4	5.9	5.6	7.1	8.8	10.6	11.9	12.3	12.7	12.8	13.2	13.3	13.3	13.4	12.9	11.8	11.0	10.7	10.1	13.4	5.6	10.0
19	9.7	10.2	10.8	9.8	9.0	8.9	8.8	8.9	9.1	9.1	9.5	10.6	12.1	13.4	14.8	15.4	15.3	15.1	15.0	14.3	11.4	10.6	10.7	11.0	15.4	8.8	11.4
20	10.3	9.8	9.8	9.2	9.3	9.2	9.1	9.4	9.6	9.9	11.0	10.4	11.1	12.0	12.9	12.6	13.3	14.2	13.5	13.4	12.8	11.5	10.8	10.5	14.2	9.1	11.1
21	10.6	10.5	10.4	10.4	10.4	10.2	9.2	9.4	9.7	10.0	9.9	10.0	10.2	10.2	10.4	11.2	11.7	12.8	13.3	12.5	10.9	9.7	9.0	8.4	13.3	8.4	10.5
22	8.2	8.1	7.8	7.6	7.6	7.6	7.6	8.1	8.4	8.6	8.8	9.2	10.0	10.9	11.3	11.2	11.7	11.5	12.4	12.7	12.3	11.2	10.0	8.6	12.7	7.6	9.6
23	8.3	8.5	8.3	8.0	7.7	7.8	8.4	8.3	9.7	11.2	11.9	12.7	13.5	14.5	15.8	16.5	15.6	14.4	13.3	11.9	11.0	10.5	10.3	10.0	16.5	7.7	11.2
24	9.8	9.8	9.6	9.4	9.5	9.3	9.2	8.9	8.7	9.1	9.0	10.4	11.4	12.4	13.3	14.0	14.5	15.5	15.2	13.9	13.6	13.2	12.2	11.8	15.5	8.7	11.4
25	11.2	11.1	10.9	8.6	6.5	7.8	7.9	7.7	7.6	7.7	8.0	8.4	8.8	8.5	9.5	10.1	11.9	12.7	12.3	11.9	10.7	9.6	8.8	8.8	12.7	6.5	9.5
26	8.8	8.7	8.8	9.0	9.0	9.0	9.0	8.9	8.9	9.0	9.3	9.3	9.5	10.3	11.0	11.6	11.9	12.2	11.7	11.4	10.5	9.7	9.4	8.9	12.2	8.7	9.8
27	8.7	8.8	8.7	8.6	8.6	8.5	7.8	7.2	7.3	7.1	7.1	7.6	8.2	9.1	9.9	10.5	11.3	11.5	11.3	11.2	10.6	9.6	9.3	9.1	11.5	7.1	9.1
28	9.0	8.8	8.2	8.0	8.0	8.4	8.9	8.6	8.3	8.7	8.9	9.4	9.9	11.1	12.1	12.6	13.7	12.4	11.8	10.8	10.8	9.4	7.7	7.0	13.7	7.0	9.7
29	6.9	6.4	5.9	5.4	5.2	4.8	5.1	5.1	6.3	8.3	9.9	11.5	12.6	13.1	13.1	12.4	11.6	13.0	12.2	11.4	10.2	8.7	7.8	7.2	13.1	4.8	8.9
30	7.0	7.1	7.4	7.3	6.8	7.3	6.8	6.7	6.7	7.3	8.1	9.0	9.5	10.2	11.2	12.4	12.8	13.0	12.6	11.7	10.2	9.5	9.6	9.6	13.0	6.7	9.2
31	9.1	8.6	8.5	8.7	8.4	8.0	7.8	7.7	7.8	8.2	9.0	9.6	10.1	10.9	11.0	10.3	11.0	11.1	11.3	11.3	11.0	9.9	9.8	10.3	11.3	7.7	9.6
Max.	**12.2**	**11.1**	**11.4**	**11.8**	**11.8**	**11.1**	**10.1**	**9.8**	**10.1**	**11.6**	**12.7**	**13.6**	**15.0**	**15.9**	**16.6**	**17.5**	**18.0**	**17.2**	**17.3**	**17.2**	**16.7**	**15.0**	**12.7**	**12.0**	**18.0**		
Min.	**6.9**	**6.4**	**5.9**	**5.4**	**5.2**	**4.8**	**5.1**	**5.1**	**6.0**	**6.4**	**7.0**	**7.6**	**8.2**	**8.5**	**9.5**	**10.0**	**10.2**	**10.4**	**10.0**	**9.5**	**9.1**	**8.7**	**7.7**	**7.0**		**4.8**	
Avg.	**9.3**	**9.0**	**8.8**	**8.6**	**8.4**	**8.3**	**8.0**	**8.1**	**8.5**	**9.2**	**10.0**	**10.7**	**11.5**	**12.3**	**13.0**	**13.4**	**13.7**	**13.6**	**13.2**	**12.7**	**11.9**	**10.9**	**10.0**	**9.5**			**10.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.9	9.5	9.6	9.4	9.8	9.6	9.5	9.5	9.6	10.4	11.3	12.0	11.4	11.3	12.7	12.3	11.0	10.6	10.3	10.2	9.1	8.3	8.0	7.9	12.7	7.9	10.1
2	7.9	8.0	8.0	7.8	7.7	7.7	7.9	7.7	7.8	7.7	7.9	7.8	8.1	8.7	9.2	9.6	9.6	9.5	9.5	9.3	8.7	8.0	7.8	7.5	9.6	7.5	8.3
3	7.3	7.1	6.8	6.5	6.5	6.4	6.3	6.4	6.5	6.9	7.6	8.3	8.3	7.9	8.4	9.0	9.6	9.8	9.9	9.2	8.2	7.7	8.2	8.1	9.9	6.3	7.8
4	8.0	7.8	7.5	7.3	7.1	6.9	6.9	6.8	6.8	7.2	7.5	8.5	9.4	9.8	10.1	10.2	10.4	10.7	11.1	11.0	9.9	9.7	9.6	9.4	11.1	6.8	8.7
5	9.0	8.1	8.2	7.7	8.0	7.9	6.8	6.8	7.0	7.8	8.6	9.3	10.0	11.2	12.2	12.7	13.0	11.7	10.2	9.8	9.0	8.9	8.8	8.1	13.0	6.8	9.2
6	7.7	7.3	6.7	6.6	6.5	6.7	7.1	7.6	7.7	8.3	8.7	8.9	8.5	8.2	8.0	8.2	8.2	8.4	8.7	8.4	8.5	8.4	8.4	8.4	8.9	6.5	7.9
7	8.4	8.4	9.2	9.3	9.4	9.5	9.1	8.9	9.4	9.5	9.0	7.9	8.1	8.1	8.1	8.4	8.9	9.2	8.6	8.0	7.8	7.9	8.0	7.9	9.5	7.8	8.6
8	8.0	7.9	8.0	8.0	7.9	7.8	7.5	7.4	7.5	7.9	8.3	9.0	9.5	9.5	9.1	9.0	8.7	7.9	7.5	7.3	7.7	8.0	8.2	8.2	9.5	7.3	8.2
9	8.4	8.1	7.9	7.8	7.3	7.8	7.9	8.0	7.8	8.2	8.4	8.7	8.8	9.0	9.0	9.2	9.2	8.6	8.8	8.8	8.3	8.0	8.1	8.0	9.2	7.3	8.3
10	7.9	7.8	7.7	7.6	7.6	7.6	7.7	7.6	7.5	7.6	7.9	8.4	8.9	9.8	9.7	9.9	10.4	10.9	10.0	9.8	9.1	9.2	8.9	8.7	10.9	7.5	8.7
11	7.7	7.3	7.0	6.7	6.5	6.5	6.6	6.6	6.8	7.1	7.4	7.6	7.8	7.9	8.4	9.8	10.3	10.7	10.5	10.0	9.4	8.6	8.4	8.2	10.7	6.5	8.1
12	8.0	8.0	8.3	8.0	7.6	7.0	6.6	6.3	6.5	6.9	7.4	8.1	8.7	9.3	8.7	8.8	8.6	8.3	8.6	8.4	8.3	8.3	8.3	8.4	9.3	6.3	8.0
13	8.4	8.4	8.4	8.3	8.1	7.9	7.8	7.9	7.9	7.9	8.0	7.5	7.5	7.3	7.0	6.7	7.1	7.0	6.8	6.7	6.6	6.9	7.1	6.9	8.4	6.6	7.5
14	6.9	6.8	6.7	6.8	6.7	6.6	6.6	6.5	6.6	6.6	6.6	6.7	7.4	7.8	7.6	8.4	8.5	8.5	8.3	7.9	7.3	7.3	7.3	7.2	8.5	6.5	7.2
15	7.2	7.3	7.4	7.5	7.2	7.0	7.2	7.2	7.3	7.6	7.8	8.5	8.9	9.0	9.3	8.9	9.0	8.9	8.5	8.0	7.5	7.4	7.1	6.7	9.3	6.7	7.8
16	6.4	6.4	6.2	6.2	6.3	6.1	6.0	5.5	5.5	5.6	6.7	8.4	9.4	9.9	9.4	9.8	9.2	8.6	9.2	8.6	7.6	7.7	7.1	5.8	9.9	5.5	7.4
17	5.7	6.4	5.3	5.4	5.3	5.2	5.2	5.0	4.8	4.5	5.1	5.9	6.7	7.0	7.1	7.3	7.4	7.0	5.8	5.4	5.0	4.9	4.8	4.9	7.4	4.5	5.7
18	5.1	5.2	5.2	5.2	5.0	4.9	5.1	5.1	4.7	4.8	5.1	6.3	6.7	7.1	7.3	7.1	7.2	7.1	6.6	6.2	6.0	5.6	5.4	5.2	7.3	4.7	5.8
19	5.0	5.2	5.2	5.0	4.8	4.7	4.8	4.9	5.1	5.0	5.1	5.2	5.5	6.1	6.2	6.0	6.2	6.3	6.2	5.5	5.2	5.1	4.5	4.4	6.3	4.4	5.3
20	4.4	4.5	4.2	4.2	4.0	3.9	3.6	2.5	2.5	3.0	3.5	3.5	3.4	4.1	4.6	5.2	5.8	5.9	6.0	5.3	2.4	1.9	1.6	1.8	6.0	1.6	3.8
21	2.3	2.3	3.2	3.4	3.5	3.3	3.4	2.9	3.2	3.1	3.8	5.0	5.9	6.6	6.5	6.9	6.8	6.3	5.9	4.5	2.9	2.0	1.7	0.7	6.9	0.7	4.0
22	0.5	0.5	0.4	0.8	0.9	1.2	1.7	1.6	1.4	1.7	3.0	4.7	5.8	5.9	6.2	6.0	5.2	4.8	4.2	3.6	3.3	3.2	3.2	3.1	6.2	0.4	3.0
23	3.4	3.7	4.1	4.4	6.0	6.3	6.2	6.1	6.1	6.1	5.9	6.0	6.1	6.2	5.5	5.8	5.8	5.7	5.6	5.4	5.1	5.1	5.1	5.2	6.3	3.4	5.5
24	5.2	5.2	5.1	4.9	4.7	4.5	4.4	4.6	4.7	4.8	5.3	5.6	5.7	5.9	6.1	6.2	6.5	6.4	6.2	5.9	5.4	5.1	4.9	4.6	6.5	4.4	5.3
25	4.7	4.1	3.9	4.4	4.5	4.4	4.8	4.9	4.0	4.1	5.3	6.7			6.1	6.4	6.4	6.0	6.2	5.9	5.4	5.5	5.2	5.0	6.7	3.9	5.2
26	4.7	4.5	4.6	4.7	4.5	4.2	4.1	4.3	3.8	4.0	4.8	6.3	7.4	8.5	8.8	8.0	7.9	7.7	7.7	7.3	6.5	5.5	4.2	3.4	8.8	3.4	5.7
27	3.3	2.9	2.7	2.2	1.9	0.9	0.9	0.7	0.6	0.6	1.1	2.1	3.6	5.0	6.0	6.5	6.9	6.9	6.5	5.2	4.1	3.6	3.5	1.6	6.9	0.6	3.3
28	1.2	1.3	1.1	1.2	0.7	1.4	0.7	1.3	0.6	1.5	2.8	5.0	6.5	7.4	8.3	8.5	7.7	7.3	6.8	6.6	5.7	4.8	5.0	5.0	8.5	0.6	4.1
29	4.9	4.2	3.5	3.1	3.3	3.6	3.6	3.9	3.7	3.7	4.7	5.5	5.7	4.6	4.6	4.7	5.4	5.9	5.5	4.9	4.4	4.0	3.6	3.3	5.9	3.1	4.4
30	3.2	2.2	2.1	2.1	1.2	0.7	0.5	1.1	1.1	1.0	2.8	3.7	4.3	4.8	5.3	5.4	5.6	5.4	5.2	3.7	2.5	2.5	2.6	2.7	5.6	0.5	3.0
Max.	**9.9**	**9.5**	**9.6**	**9.4**	**9.8**	**9.6**	**9.5**	**9.5**	**9.6**	**10.4**	**11.3**	**12.0**	**11.4**	**11.3**	**12.7**	**12.7**	**13.0**	**11.7**	**11.1**	**11.0**	**9.9**	**9.7**	**9.6**	**9.4**	**13.0**		
Min.	**0.5**	**0.5**	**0.4**	**0.8**	**0.7**	**0.7**	**0.5**	**0.7**	**0.6**	**0.6**	**1.1**	**2.1**	**3.4**	**4.1**	**4.6**	**4.7**	**5.2**	**4.8**	**4.2**	**3.6**	**2.4**	**1.9**	**1.6**	**0.7**		**0.4**	
Avg.	**6.0**	**5.9**	**5.8**	**5.8**	**5.7**	**5.6**	**5.6**	**5.5**	**5.5**	**5.7**	**6.3**	**6.9**	**7.4**	**7.7**	**7.9**	**8.0**	**8.1**	**7.9**	**7.7**	**7.2**	**6.6**	**6.3**	**6.2**	**5.9**			**6.5**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.7	3.2	3.4	3.5	2.6	1.8	1.8	2.3	2.9	2.9	3.3	4.2	4.9	5.3	5.1	4.6	4.4	4.3	4.4	4.1	3.7	3.6	3.7	5.3	1.8	3.6
2	3.2	3.1	2.4	2.3	2.1	1.8	2.1	1.8	1.4	1.1	1.8	2.5	3.6	3.8	4.2	4.7	4.5	3.9	3.8	2.9	2.1	0.1	-0.5	-1.2	4.7	-1.2	2.4
3	-1.4	-1.8	-2.0	-1.6	-1.3	-1.5	-1.2	-1.6	-2.2	-2.0	-1.5	-1.2	-0.9	-0.5	-0.3	-0.3	0.0	0.3	-0.1	-0.9	-1.5	-1.9	-1.6	-2.2	0.3	-2.2	-1.2
4	-2.3	-3.0	-3.3	-3.3	-2.9	-3.2	-3.2	-4.4	-3.5	-3.4	-2.4	-0.6	0.7	1.9	2.5	3.0	2.8	1.6	1.4	0.4	-0.5	-0.7	-1.4	-1.7	3.0	-4.4	-1.1
5	-2.2	-2.4	-2.5	-2.3	-2.5	-2.6	-2.7	-3.0	-3.2	-3.1	-3.0	-2.9	-2.6	-2.5	-2.1	-2.0	-1.9	-1.7	-1.7	-2.1	-2.5	-2.7	-3.0	-3.3	-1.7	-3.3	-2.5
6	-3.3	-3.2	-3.5	-4.2	-4.2	-4.0	-3.9	-3.8	-3.8	-3.6	-3.4	-3.3	-3.1	-2.8	-2.5	-2.3	-2.1	-2.0	-2.2	-2.3	-2.4	-2.6	-2.6	-3.0	-2.0	-4.2	-3.1
7	-3.1	-3.3	-3.6	-3.5	-3.6	-3.8	-4.0	-4.1	-4.5	-4.6	-4.3	-4.2	-3.9	-3.6	-3.3	-3.1	-2.8	-3.0	-3.1	-3.2	-3.3	-3.4	-3.6	-4.1	-2.8	-4.6	-3.6
8	-4.0	-3.9	-3.9	-4.2	-4.7	-5.1	-5.3	-5.9	-5.7	-6.3	-6.4	-4.9	-4.1	-3.3	-2.8	-2.4	-2.3	-2.5	-3.1	-4.9	-5.4	-5.2	-3.9	-3.8	-2.3	-6.4	-4.3
9	-3.5	-3.0	-2.3	-1.3	-0.5	-1.1	-1.5	-1.9	-1.9	-1.4	-1.0	-0.4	0.2	0.8	1.3	1.6	2.4	2.9	3.0	3.1	3.4	3.7	4.1	4.1	4.1	-3.5	0.4
10	4.2	4.2	4.2	4.3	4.0	3.6	2.3	0.7	0.3	-0.1	0.6	2.8	3.5	4.1	4.4	4.9	5.2	4.8	4.5	4.4	4.4	4.5	4.4	4.6	5.2	-0.1	3.5
11	4.5	4.5	4.4	4.7	4.6	4.3	4.5	4.8	4.5	3.3	-1.0	-3.5	-4.4	-4.9	-5.3	-5.7	-5.9	-5.9	-6.1	-6.2	-6.1	-6.2	-6.3	-6.2	4.8	-6.3	-1.2
12	-5.9	-5.7	-5.4	-5.5	-5.9	-6.3	-6.7	-6.8	-7.0	-7.4	-7.7	-7.3	-6.6	-6.2	-6.0	-5.8	-5.9	-6.0	-6.2	-6.6	-7.0	-7.1	-7.3	-7.8	-5.4	-7.8	-6.5
13	-7.8	-8.8	-9.3	-9.6	-9.9	-9.7	-10.2	-10.7	-9.9	-10.1	-8.9	-8.2	-6.7	-4.0	-3.4	-2.6	-1.8	-2.0	-2.0	-2.3	-1.6	-1.4	-1.3	-1.1	-1.1	-10.7	-6.0
14	-0.9	-1.0	-1.0	-0.9	-0.8	-0.8	-0.8	-1.2	-1.4	-1.1	-0.9	-0.7	-0.5	-0.3	-0.1	0.2	0.5	0.6	0.6	0.5	0.3	-0.1	-0.1	0.0	0.6	-1.4	-0.4
15	-0.2	-1.5	-2.8	-3.7	-4.3	-4.9	-5.6	-6.1	-6.2	-6.6	-7.0	-6.5	-6.1	-6.1	-6.1	-6.0	-5.7	-5.9	-6.2	-6.6	-7.0	-7.5	-8.3	-8.4	-0.2	-8.4	-5.6
16	-8.4	-7.9	-7.8	-7.5	-7.5	-7.6	-7.6	-7.8	-8.1	-8.2	-7.6	-7.7	-7.1	-6.6	-6.9	-6.5	-6.4	-7.0	-8.0	-8.8	-9.0	-9.5	-9.3	-8.5	-6.4	-9.5	-7.8
17	-8.6	-8.5	-8.1	-7.9	-8.5	-10.0	-10.8	-11.8	-11.0	-11.1	-10.6	-10.2	-9.4	-8.5	-7.8	-7.2	-6.3	-4.1	-2.6	-1.8	-1.2	-0.8	0.0	0.1	0.1	-11.8	-7.0
18	0.2	0.3	0.4	0.8	1.3	1.0	1.2	0.6	0.5	0.7	0.8	1.6	2.2	2.5	2.8	3.0	2.8	2.5	2.3	1.6	0.6	0.4	-0.1	-0.7	3.0	-0.7	1.2
19	-1.6	-1.4	-2.1	-2.5	-2.8	-3.4	-4.2	-4.7	-5.7	-5.9	-6.3	-6.8	-7.0	-6.9	-5.7	-5.6	-6.0	-5.9	-5.5	-5.9	-6.0	-5.8	-5.8	-5.9	-1.4	-7.0	-5.0
20	-5.8	-5.3	-5.4	-4.9	-4.6	-4.7	-5.5	-6.1	-6.9	-7.6	-8.7	-7.9	-8.0	-7.9	-8.2	-8.3	-8.3	-8.0	-7.9	-7.5	-7.7	-6.9	-6.3	-6.8	-4.6	-8.7	-6.9
21	-5.9	-5.4	-5.1	-5.1	-5.4	-5.4	-5.8	-6.1	-6.2	-7.1	-8.1	-7.3	-7.0	-6.6	-6.3	-5.6	-5.9	-6.2	-6.7	-7.3	-8.0	-9.6	-10.1	-10.8	-5.1	-10.8	-6.8
22	-11.3	-11.3	-11.1	-11.4	-12.0	-12.3	-12.4	-12.5	-12.6	-12.8	-13.1	-12.9	-12.2	-11.9	-11.2	-10.9	-10.7	-11.4	-12.0	-12.5	-13.5	-13.8	-14.0	-13.2	-10.7	-14.0	-12.2
23	-12.5	-12.1	-12.0	-12.5	-12.5	-13.1	-14.0	-13.9	-13.5	-13.5	-13.0	-12.8	-12.3	-11.1	-10.9	-11.0	-11.2	-10.6	-10.3	-9.3	-9.3	-9.1	-9.0	-9.4	-9.0	-14.0	-11.6
24	-9.7	-9.6	-9.4	-9.3	-9.8	-10.7	-11.8	-12.6	-12.3	-11.0	-10.7	-10.2	-9.9	-9.8	-9.0	-8.2	-8.1	-8.1	-8.1	-8.8	-8.3	-8.3	-9.0	-9.5	-8.1	-12.6	-9.7
25	-8.2	-7.3	-7.0	-7.3	-7.4	-6.8	-6.3	-6.0	-5.5	-4.9	-4.4	-3.7	-3.4	-2.7	-2.3	-1.9	-1.8	-1.9	-2.1	-2.1	-1.4	-3.4	-4.8	-5.2	-1.4	-8.2	-4.5
26	-5.0	-4.9	-4.9	-5.1	-6.1	-6.7	-7.0	-7.3	-7.8	-8.0	-7.9	-8.3	-9.2	-9.4	-9.2	-9.6	-10.2	-10.7	-11.2	-11.5	-11.9	-12.1	-12.2	-12.5	-4.9	-12.5	-8.7
27	-12.7	-13.0	-13.9	-14.7	-14.8	-15.2	-14.9	-15.2	-15.3	-15.4	-15.2	-15.1	-14.6	-14.2	-13.3	-12.4	-12.8	-13.2	-13.8	-13.5	-13.7	-14.4	-14.8	-14.8	-12.4	-15.4	-14.2
28	-14.5	-14.5	-13.1	-13.3	-12.8	-11.9	-9.2	-8.4	-8.5	-7.8	-7.3	-6.7	-6.1	-6.0	-5.3	-5.2	-5.2	-5.1	-5.5	-5.6	-7.3	-6.1	-6.4	-7.5	-5.1	-14.5	-8.3
29	-7.3	-7.6	-7.1	-6.5	-6.6	-5.4	-4.8	-5.2	-4.5	-4.6	-3.8	-2.8	-2.3	-2.4	-1.9	-1.9	-1.8	-1.6	-1.7	-1.6	-1.7	-2.3	-2.4	-1.8	-1.6	-7.6	-3.7
30	-1.5	-1.3	-1.1	-0.9	-0.7	-0.6	-0.6	-0.5	-0.6	-0.8	-0.9	-1.3	-1.2	-1.1	-1.0	-0.9	-0.6	-0.8	-1.3	-1.6	-1.9	-1.6	-1.8	-1.9	-0.5	-1.9	-1.1
31	-1.7	-1.7	-1.7	-2.5	-3.7	-3.6	-2.8	-2.9	-3.2	-2.9	-2.3	-2.8	-2.2	-1.9	-2.0	-2.7	-2.4	-2.9	-3.6	-3.6	-3.3	-2.2	-3.0	-2.9	-1.7	-3.7	-2.7
Max.	**4.5**	**4.5**	**4.4**	**4.7**	**4.6**	**4.3**	**4.5**	**4.8**	**4.5**	**3.3**	**2.9**	**3.3**	**4.2**	**4.9**	**5.3**	**5.1**	**5.2**	**4.8**	**4.5**	**4.4**	**4.4**	**4.5**	**4.4**	**4.6**	**5.3**		
Min.	**-14.5**	**-14.5**	**-13.9**	**-14.7**	**-14.8**	**-15.2**	**-14.9**	**-15.2**	**-15.3**	**-15.4**	**-15.2**	**-15.1**	**-14.6**	**-14.2**	**-13.3**	**-12.4**	**-12.8**	**-13.2**	**-13.8**	**-13.5**	**-13.7**	**-14.4**	**-14.8**	**-14.8**		**-15.4**	
Avg.	**-4.3**	**-4.3**	**-4.4**	**-4.4**	**-4.5**	**-4.7**	**-4.9**	**-5.2**	**-5.2**	**-5.3**	**-5.2**	**-4.8**	**-4.4**	**-4.0**	**-3.6**	**-3.4**	**-3.3**	**-3.4**	**-3.6**	**-3.8**	**-4.1**	**-4.3**	**-4.4**	**-4.6**			**-4.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.4	-3.7	-3.1	-2.6	-3.2	-4.4	-2.9	-2.6	-3.0	-3.0	-2.7	-2.4	-1.6	-2.1	-2.0	-1.2	-1.4	-2.0	-2.6	-3.5	-3.5	-3.4	-2.9	-3.1	-1.2	-4.4	-2.8
2	-3.6	-4.1	-4.7	-5.1	-5.4	-5.4	-6.1	-6.2	-7.4	-10.4	-12.2	-12.7	-13.5	-13.5	-13.6	-13.7	-13.6	-13.8	-14.0	-14.2	-14.1	-14.2	-14.2	-14.4	-3.6	-14.4	-10.4
3	-14.4	-14.2	-14.2	-14.1	-13.7	-14.0	-14.0	-13.8	-13.6	-13.9	-14.0	-13.8	-13.4	-13.5	-13.3	-13.2	-12.9	-12.8	-13.4	-14.0	-13.7	-13.5	-13.2	-13.2	-12.8	-14.4	-13.6
4	-12.8	-12.9	-12.4	-12.6	-12.6	-13.2	-13.9	-14.3	-14.6	-14.9	-14.9	-14.6	-14.6	-14.1	-13.8	-13.4	-13.1	-13.0	-13.1	-13.0	-12.8	-12.6	-12.4	-13.0	-12.4	-14.9	-13.4
5	-13.2	-13.3	-13.0	-12.6	-12.7	-12.2	-11.9	-12.2	-12.2	-13.2	-11.8	-11.5	-9.6	-10.1	-9.7	-8.4	-7.2	-7.7	-8.7	-8.1	-7.1	-8.6	-7.0	-6.6	-6.6	-13.3	-10.4
6	-6.7	-6.1	-4.9	-5.3	-6.1	-6.2	-5.8	-5.1	-4.3	-4.2	-3.9	-3.9	-2.7	-3.0	-3.2	-4.4	-5.6	-5.8	-5.3	-6.8	-7.5	-7.3	-8.3	-10.0	-2.7	-10.0	-5.5
7	-11.6	-11.9	-12.6	-13.1	-13.5	-13.8	-14.4	-15.1	-15.1	-15.2	-15.1	-14.7	-14.4	-13.5	-12.7	-13.2	-12.8	-10.1	-8.9	-11.5	-7.6	-6.7	-6.7	-6.4	-6.4	-15.2	-12.1
8	-5.9	-6.3	-7.2	-5.6	-4.9	-4.6	-4.6	-4.8	-4.7	-5.0	-5.2	-5.4	-4.8	-4.0	-3.6	-3.4	-3.4	-3.0	-2.4	-2.3	-1.6	-1.4	-1.0	-1.2	-1.0	-7.2	-4.0
9	-0.9	-0.7	-0.1	-0.4	0.0	0.5	0.9	0.9	0.8	0.8	0.5	0.1	0.6	1.3	1.3	1.1	1.0	0.3	-0.2	0.2	0.6	0.9	1.0	1.2	1.3	-0.9	0.5
10	1.2	1.2	0.9	0.9	0.5	0.4	0.3	0.2	0.8	0.9	0.6	-0.3	0.0	-0.1	-0.3	-0.4	-0.3	-0.9	-1.2	-1.2	-0.6	-0.5	-0.8	-0.9	1.2	-1.2	0.0
11	-0.9	-1.0	-1.3	-1.4	-1.5	-1.4	-1.3	-1.5	-1.5	-1.6	-1.8	-1.7	-1.8	-1.7	-1.9	-2.0	-2.0	-2.3	-3.9	-4.1	-4.6	-4.4	-4.5	-4.3	-0.9	-4.6	-2.3
12	-3.8	-3.8	-4.6	-4.9	-5.9	-6.3	-6.5	-6.3	-6.2	-5.9	-6.3	-6.5	-7.0	-7.2	-7.5	-7.2	-7.0	-6.3	-5.6	-5.4	-4.8	-5.0	-4.7	-4.1	-3.8	-7.5	-5.8
13	-3.9	-3.5	-3.4	-3.5	-4.6	-4.6	-4.2	-4.0	-3.8	-3.8	-3.4	-2.9	-2.4	-2.7	-2.5	-2.3	-2.0	-2.1	-2.7	-2.9	-2.8	-2.6	-2.6	-2.5	-2.0	-4.6	-3.2
14	-2.5	-2.2	-2.2	-2.2	-2.3	-2.5	-2.6	-2.6	-2.5	-2.5	-2.5	-2.5	-2.7	-3.3	-3.3	-3.4	-3.5	-3.8	-4.1	-3.9	-3.8	-3.9	-3.8	-3.4	-2.2	-4.1	-3.0
15	-3.5	-3.8	-4.2	-4.6	-4.5	-4.5	-4.6	-4.5	-4.3	-4.0	-4.4	-4.2	-3.7	-3.3	-3.3	-2.8	-2.4	-1.9	-1.6	-1.5	-1.6	-1.5	-1.1	-1.0	-1.0	-4.6	-3.2
16	-1.1	-1.2	-1.3	-1.3	-1.4	-1.6	-1.6	-1.7	-2.9	-3.0	-3.1	-2.6	-2.5	-2.0	-1.8	-2.5	-3.2	-3.0	-3.9	-4.4	-5.0	-4.4	-4.4	-4.5	-1.1	-5.0	-2.7
17	-4.6	-5.1	-6.2	-6.8	-7.1	-7.0	-7.0	-7.8	-6.3	-7.1	-7.3	-6.9	-7.5	-7.4	-7.7	-8.1	-6.9	-8.4	-7.8	-7.8	-8.4	-8.9	-8.9	-8.6	-4.6	-8.9	-7.3
18	-9.5	-11.1	-11.7	-12.1	-12.4	-12.7	-13.2	-13.4	-13.2	-13.4	-13.3	-13.0	-13.4	-13.1	-12.8	-12.7	-13.1	-13.7	-14.3	-14.6	-15.1	-15.4	-15.5	-15.5	-9.5	-15.5	-13.2
19	-15.5	-15.7	-16.1	-16.3	-16.9	-16.8	-16.8	-16.8	-16.8	-16.8	-16.5	-15.8	-14.4	-13.9	-14.2	-14.2	-13.7	-14.3	-14.0	-13.0	-14.2	-13.7	-14.0	-14.7	-13.0	-16.9	-15.2
20	-16.0	-16.2	-15.8	-16.5	-17.6	-18.2	-18.5	-19.2	-19.6	-19.9	-20.9	-21.3	-21.5	-21.6	-21.5	-21.5	-21.8	-22.2	-22.4	-22.7	-22.9	-23.4	-23.7	-23.9	-15.8	-23.9	-20.4
21	-23.9	-24.5	-24.8	-25.0	-25.0	-25.5	-25.8	-25.6	-26.1	-26.3	-26.2	-26.2	-25.6	-25.1	-25.4	-25.1	-25.5	-25.4	-25.2	-24.9	-24.8	-24.1	-22.7	-22.3	-22.3	-26.3	-25.0
22	-22.0	-20.5	-20.1	-19.1	-19.6	-17.2	-15.0	-15.9	-15.3	-15.0	-15.5	-17.6	-16.0	-14.9	-14.0	-13.9	-13.4	-13.5	-12.8	-12.3	-12.1	-13.1	-13.0	-13.1	-12.1	-22.0	-15.6
23	-13.3	-12.2	-11.5	-11.0	-11.1	-10.6	-10.3	-10.6	-10.4	-10.9	-11.5	-11.3	-11.6	-10.8	-9.0	-8.8	-7.8	-6.2	-4.9	-4.1	-3.6	-3.3	-2.8	-1.8	-1.8	-13.3	-8.7
24	-1.5	-1.1	-0.5	0.0	0.0	0.4	1.1	1.3	0.8	0.6	0.8	0.5	0.6	0.2	-0.1	-0.2	-0.3	-0.5	-0.5	-0.8	-1.1	-3.0	-5.1	-7.0	1.3	-7.0	-0.6
25	-8.3	-10.0	-10.5	-10.7	-11.0	-10.9	-11.0	-11.3	-11.9	-12.6	-13.5	-14.4	-14.7	-15.6	-16.4	-17.3	-16.2	-16.4	-17.5	-17.4	-16.7	-17.1	-17.7	-17.5	-8.3	-17.7	-14.0
26	-18.0	-17.4	-16.7	-16.9	-16.5	-16.3	-15.2	-15.5	-15.3	-15.4	-14.8	-16.3	-16.2	-15.7	-15.7	-15.3	-15.6	-16.7	-16.3	-17.5	-17.2	-17.1	-16.8	-16.8	-14.8	-18.0	-16.3
27	-17.1	-17.3	-17.0	-17.7	-17.3	-17.1	-16.8	-16.4	-15.8	-15.4	-16.1	-14.8	-13.8	-13.8	-14.3	-14.2	-13.5	-13.8	-13.4	-13.6	-13.4	-13.0	-12.1	-12.0	-12.0	-17.7	-15.0
28	-11.4	-10.9	-10.3	-10.4	-10.5	-10.2	-10.2	-10.1	-9.7	-9.6	-9.7	-10.2	-10.2	-10.0	-9.7	-9.7	-9.9	-10.4	-10.6	-11.0	-11.8	-11.8	-12.1	-12.5	-9.6	-12.5	-10.5
29	-13.5	-13.6	-13.9	-13.9	-14.0	-14.3	-14.4	-14.8	-15.2	-15.4	-15.5	-15.8	-16.1	-16.2	-16.2	-16.2	-16.3	-16.7	-16.8	-17.1	-17.2	-17.4	-17.5	-17.7	-13.5	-17.7	-15.7
30	-18.2	-18.6	-19.0	-19.2	-19.6	-20.1	-20.4	-20.3	-20.1	-19.6	-19.5	-19.5	-19.6	-19.3	-19.3	-19.3	-20.0	-19.9	-20.5	-20.1	-19.3	-19.8	-20.5	-20.0	-18.2	-20.5	-19.7
Max.	**1.2**	**1.2**	**0.9**	**0.9**	**0.5**	**0.5**	**1.1**	**1.3**	**0.8**	**0.9**	**0.8**	**0.5**	**0.6**	**1.3**	**1.3**	**1.1**	**1.0**	**0.3**	**-0.2**	**0.2**	**0.6**	**0.9**	**1.0**	**1.2**	**1.3**		
Min.	**-23.9**	**-24.5**	**-24.8**	**-25.0**	**-25.0**	**-25.5**	**-25.8**	**-25.6**	**-26.1**	**-26.3**	**-26.2**	**-26.2**	**-25.6**	**-25.1**	**-25.4**	**-25.1**	**-25.5**	**-25.4**	**-25.2**	**-24.9**	**-24.8**	**-24.1**	**-23.7**	**-23.9**		**-26.3**	
Avg.	**-9.3**	**-9.4**	**-9.4**	**-9.5**	**-9.7**	**-9.7**	**-9.6**	**-9.7**	**-9.7**	**-9.9**	**-10.0**	**-10.1**	**-9.8**	**-9.7**	**-9.6**	**-9.6**	**-9.4**	**-9.5**	**-9.6**	**-9.8**	**-9.6**	**-9.7**	**-9.6**	**-9.7**			**-9.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 2 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-19.0	-17.8	-17.7	-18.4	-17.8	-18.4	-17.8	-17.3	-16.6	-16.1	-14.8	-14.1	-14.0	-13.5	-13.5	-12.9	-11.3	-11.4	-11.2	-10.8	-10.0	-8.1	-8.0	-7.8	-7.8	-19.0	-14.1
2	-6.7	-7.1	-7.4	-7.1	-6.8	-5.3	-5.1	-4.7	-4.1	-4.0	-3.7	-2.9	-2.1	-2.1	-1.8	-1.9	-1.8	-1.5	-1.7	-1.5	-1.4	-1.0	-0.7	-0.2	-0.2	-7.4	-3.4
3	0.1	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.2	1.4	1.4	0.8	0.7	0.6	0.7	1.2	1.5	1.7	2.4	2.2	2.0	1.8	2.4	0.1	1.1
4	1.3	1.1	1.2	1.2	1.5	1.4	1.3	1.3	1.1	1.0	1.2	1.2	1.5	1.5	1.2	1.0	1.7	1.9	1.6	1.8	1.7	1.7	1.9	1.9	1.9	1.0	1.4
5	1.9	1.7	1.7	1.9	2.0	1.9	1.9	1.9	2.1	1.8	2.1	2.3	2.4	2.3	2.2	2.1	2.0	2.1	2.2	2.3	2.2	2.4	2.1	2.1	2.4	1.7	2.1
6	2.0	2.0	1.7	1.9	2.1	1.9	2.0	2.0	2.3	2.4	2.4	2.5	2.2	2.1	2.6	2.5	1.9	1.8	1.5	1.2	1.3	1.4	1.0	0.5	2.6	0.5	1.9
7	0.3	-0.3	-0.4	-1.3	-2.2	-3.1	-3.6	-2.8	-2.9	-3.8	-4.8	-5.5	-5.8	-6.0	-5.9	-6.1	-6.4	-6.6	-7.0	-7.5	-8.1	-7.7	-7.8	-6.4	0.3	-8.1	-4.7
8	-7.7	-8.1	-4.7	-0.5	-1.2	0.9	0.7	-0.1	1.4	1.2	1.2	0.9	1.7	1.6	0.2	0.5	0.6	0.9	1.4	0.1	-0.3	0.9	-0.5	0.1	1.7	-8.1	-0.4
9	-1.7	-1.1	-1.3	-1.3	-2.1	-3.9	-5.1	-5.9	-6.1	-6.8	-6.7	-5.4	-4.8	-4.5	-5.3	-5.8	-5.5	-6.4	-7.1	-7.8	-7.9	-6.8	-6.0	-5.4	-1.1	-7.9	-5.0
10	-6.1	-5.7	-4.9	-5.0	-5.9	-7.7	-8.3	-8.3	-7.8	-9.0	-10.1	-11.1	-11.2	-10.5	-9.9	-10.0	-9.9	-10.2	-9.4	-8.7	-9.2	-9.1	-9.4	-9.7	-4.9	-11.2	-8.6
11	-9.6	-10.6	-10.4	-9.7	-9.7	-8.5	-9.1	-8.6	-8.7	-8.1	-8.1	-8.2	-8.4	-7.5	-7.0	-7.4	-8.4	-9.4	-10.3	-10.8	-11.1	-11.2	-12.0	-13.0	-7.0	-13.0	-9.4
12	-13.2	-13.8	-12.8	-11.9	-11.4	-11.4	-11.4	-10.8	-11.7	-9.8	-9.6	-10.3	-10.6	-10.4	-10.1	-10.0	-9.5	-9.3	-7.1	-6.8	-6.7	-7.5	-7.9	-6.6	-6.6	-13.8	-10.0
13	-6.9	-7.3	-7.9	-7.8	-8.0	-8.4	-8.8	-9.1	-9.4	-9.0	-9.1	-9.3	-9.7	-10.1	-10.2	-10.0	-9.8	-10.4	-9.9	-9.4	-7.8	-6.3	-5.2	-4.5	-4.5	-10.4	-8.5
14	-5.0	-5.5	-5.5	-5.7	-6.1	-5.8	-5.3	-5.9	-6.3	-6.1	-6.0	-6.1	-5.5	-5.5	-5.0	-4.3	-4.5	-4.2	-3.7	-3.5	-2.9	-2.3	-2.4	-2.1	-2.1	-6.3	-4.8
15	-1.9	-1.3	-1.4	-1.8	-1.8	-1.9	-1.8	-1.7	-1.5	-1.6	-2.1	-2.1	-1.9	-1.8	-1.8	-2.0	-2.1	-2.4	-2.4	-3.5	-3.9	-3.8	-3.9	-4.7	-1.3	-4.7	-2.3
16	-3.9	-3.9	-4.4	-4.8	-4.0	-4.5	-5.6	-4.7	-5.2	-5.8	-5.5	-6.4	-6.6	-5.8	-5.7	-5.7	-5.7	-6.0	-6.2	-6.3	-6.3	-5.8	-4.9	-4.2	-3.9	-6.6	-5.3
17	-3.0	-2.0	-1.7	-1.8	-1.6	-1.9	-1.9	-1.8	-1.5	-1.3	-1.1	-0.8	-0.6	-0.2	-0.1	-0.1	-0.3	-0.4	-0.3	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	-3.0	-1.0
18	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.4	-0.1	-0.1	0.0	0.0	0.0	0.0	0.3	0.5	0.7	0.6	0.6	0.5	0.5	0.6	0.9	0.9	0.8	0.9	-0.4	0.2
19	0.2	0.5	0.4	0.3	0.2	-0.1	0.0	0.1	0.0	-0.1	0.0	0.1	0.3	0.4	0.7	0.6	0.8	0.7	0.5	0.3	0.8	0.9	1.0	0.8	1.0	-0.1	0.4
20	0.7	0.7	0.8	0.9	0.4	0.2	0.1	-0.3	-0.2	0.1	-0.4	-0.2	0.1	0.6	0.7	1.0	0.7	0.5	-0.1	-0.9	-1.4	-1.6	-2.6	-2.7	1.0	-2.7	-0.1
21	-2.5	-1.7	-2.0	-2.1	-2.5	-2.8	-2.7	-3.5	-3.3	-3.3	-3.9	-3.6	-3.7	-3.8	-4.3	-3.1	-3.7	-3.9	-4.9	-4.2	-5.0	-4.6	-5.1	-4.9	-1.7	-5.1	-3.5
22	-5.3	-5.1	-4.4	-4.9	-4.9	-4.7	-4.0	-4.2	-4.2	-4.1	-4.1	-4.0	-3.8	-3.5	-3.6	-3.4	-3.5	-3.3	-3.3	-3.4	-3.7	-3.9	-3.9	-3.8	-3.3	-5.3	-4.0
23	-3.6	-3.7	-3.5	-3.5	-3.4	-3.2	-3.1	-3.0	-2.9	-3.2	-3.8	-5.7	-6.6	-7.0	-7.3	-7.8	-7.8	-7.8	-8.0	-7.6	-7.4	-7.3	-7.6	-8.0	-2.9	-8.0	-5.5
24	-7.3	-7.4	-6.6	-6.2	-6.8	-6.6	-8.4	-8.2	-7.5	-7.5	-7.4	-7.0	-7.3	-8.1	-8.2	-7.9	-8.0	-8.4	-8.4	-8.3	-8.1	-7.9	-8.1	-7.6	-6.2	-8.4	-7.6
25	-7.5	-7.5	-6.7	-6.3	-5.8	-5.9	-5.3	-4.9	-4.6	-4.4	-4.2	-4.1	-4.3	-4.9	-5.1	-5.1	-4.6	-6.3	-8.1	-8.9	-9.2	-9.8	-10.5	-11.2	-4.1	-11.2	-6.5
26	-11.6	-12.9	-14.8	-15.8	-16.5	-17.0	-17.1	-17.1	-16.5	-16.1	-16.1	-16.3	-16.1	-16.1	-15.9	-15.8	-15.8	-15.7	-15.8	-16.1	-16.4	-16.5	-16.8	-16.9	-11.6	-17.1	-15.9
27	-17.1	-16.8	-16.5	-16.7	-17.0	-17.3	-17.5	-17.8	-17.9	-18.2	-18.5	-18.7	-18.5	-18.3	-18.7	-18.7	-18.9	-19.2	-19.5	-19.7	-19.8	-19.8	-19.9	-20.5	-16.5	-20.5	-18.4
28	-20.8	-20.7	-20.8	-20.8	-21.0	-21.3	-21.2	-21.1	-21.3	-21.9	-21.9	-22.2	-22.0	-22.2	-22.3	-22.6	-22.9	-23.0	-23.1	-23.7	-23.9	-24.0	-24.4	-24.4	-20.7	-24.4	-22.2
29	-24.5	-24.7	-24.6	-24.7	-24.9	-24.6	-24.4	-24.6	-24.6	-24.6	-24.5	-24.2	-24.0	-23.6	-23.9	-23.7	-23.6	-24.0	-24.1	-23.8	-23.7	-23.8	-23.7	-23.8	-23.6	-24.9	-24.2
30	-24.8	-23.6	-24.2	-24.9	-25.5	-26.0	-25.5	-25.1	-24.8	-25.3	-26.0	-25.5	-25.4	-25.5	-25.7	-26.1	-26.0	-26.5	-26.8	-26.8	-27.1	-27.3	-26.9	-27.3	-23.6	-27.3	-25.8
31	-27.1	-26.9	-27.2	-27.9	-27.5	-27.0	-26.7	-26.9	-25.9	-25.6	-25.3	-25.3	-24.6	-24.9	-25.4	-25.1	-24.4	-24.6	-23.9	-23.5	-23.7	-23.9	-23.2	-22.4	-22.4	-27.9	-25.4
Max.	**2.0**	**2.0**	**1.7**	**1.9**	**2.1**	**1.9**	**2.0**	**2.0**	**2.3**	**2.4**	**2.4**	**2.5**	**2.4**	**2.3**	**2.6**	**2.5**	**2.0**	**2.1**	**2.2**	**2.3**	**2.4**	**2.4**	**2.1**	**2.1**	**2.6**		
Min.	**-27.1**	**-26.9**	**-27.2**	**-27.9**	**-27.5**	**-27.0**	**-26.7**	**-26.9**	**-25.9**	**-25.6**	**-26.0**	**-25.5**	**-25.4**	**-25.5**	**-25.7**	**-26.1**	**-26.0**	**-26.5**	**-26.8**	**-26.8**	**-27.1**	**-27.3**	**-26.9**	**-27.3**		**-27.9**	
Avg.	**-7.4**	**-7.4**	**-7.3**	**-7.2**	**-7.3**	**-7.4**	**-7.5**	**-7.5**	**-7.4**	**-7.4**	**-7.4**	**-7.4**	**-7.3**	**-7.3**	**-7.3**	**-7.3**	**-7.3**	**-7.5**	**-7.5**	**-7.6**	**-7.6**	**-7.4**	**-7.5**	**-7.4**			**-7.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-8.4	-8.1	-8.0	-8.2	-8.1	-8.2	-8.3	-7.5	-9.1	-8.5	-8.7	-9.3	-11.4	-11.9	-13.0	-12.9	-13.4	-12.2	-12.5	-13.7	-14.1	-14.0	-13.8	-15.4	-7.5	-15.4	-10.8
2	-16.2	-15.8	-15.3	-15.4	-16.6	-16.8	-17.0	-17.1	-18.2	-17.7	-17.4	-19.5	-18.5	-18.0	-18.8	-18.9	-19.1	-18.6	-17.9	-18.3	-19.4	-17.6	-17.0	-16.4	-15.3	-19.5	-17.6
3	-17.9	-18.6	-18.2	-18.1	-16.7	-16.8	-18.3	-19.0	-18.1	-18.6	-17.4	-18.3	-18.6	-17.7	-17.4	-18.0	-17.8	-17.3	-17.9	-18.5	-18.5	-18.7	-18.6	-18.4	-16.7	-19.0	-18.1
4	-18.8	-19.0	-19.0	-19.4	-19.6	-19.6	-19.6	-19.7	-19.7	-20.1	-20.0	-20.0	-20.2	-20.2	-20.4	-20.6	-20.7	-20.7	-20.8	-21.2	-21.5	-21.9	-21.8	-22.3	-18.8	-22.3	-20.3
5	-22.6	-23.0	-23.3	-23.6	-23.9	-23.4	-23.3	-23.7	-24.0	-23.6	-23.5	-22.7	-22.6	-22.7	-22.3	-22.2	-22.5	-22.7	-22.8	-22.6	-22.9	-23.8	-24.2	-24.3	-22.2	-24.3	-23.2
6	-24.8	-24.9	-24.7	-24.7	-25.0	-25.6	-26.1	-26.2	-26.1	-26.4	-26.6	-26.5	-26.7	-26.0	-26.3	-26.6	-26.4	-27.1	-27.3	-27.4	-27.5	-28.2	-27.6	-27.5	-24.7	-28.2	-26.3
7	-28.0	-27.8	-27.6	-27.3	-27.0	-27.0	-26.9	-26.7	-26.6	-26.5	-26.4	-26.1	-26.4	-25.4	-25.2	-25.0	-24.5	-23.9	-23.5	-23.9	-24.3	-24.0	-24.2	-24.7	-23.5	-28.0	-25.8
8	-24.9	-25.4	-25.1	-24.8	-24.6	-24.8	-24.5	-23.7	-23.7	-23.4	-23.9	-24.1	-24.1	-23.9	-23.9	-23.5	-23.1	-23.7	-23.9	-23.4	-24.0	-24.5	-24.9	-24.8	-23.1	-25.4	-24.2
9	-24.9	-25.2	-25.1	-24.6	-25.6	-25.4	-25.8	-26.0	-26.1	-25.7	-25.3	-25.5	-24.3	-23.6	-23.1	-22.8	-22.9	-23.1	-23.2	-23.1	-23.0	-22.8	-22.5	-22.5	-22.5	-26.1	-24.2
10	-22.4	-22.8	-22.9	-23.4	-23.4	-23.4	-24.3	-24.6	-24.2	-24.6	-24.2	-23.8	-24.0	-24.2	-25.0	-25.4	-25.6	-25.9	-26.2	-26.7	-26.9	-27.0	-27.5	-27.2	-22.4	-27.5	-24.8
11	-26.3	-25.3	-25.1	-25.1	-25.9	-26.7	-27.2	-27.0	-27.9	-28.2	-27.8	-27.6	-27.9	-27.2	-27.3	-27.2	-27.4	-27.9	-28.6	-28.8	-28.6	-29.1	-29.4	-29.5	-25.1	-29.5	-27.5
12	-29.8	-29.9	-30.0	-30.2	-30.2	-30.4	-30.4	-30.5	-30.5	-30.1	-30.1	-30.2	-30.1	-29.7	-29.6	-29.6	-29.8	-29.8	-29.9	-30.5	-30.2	-30.3	-30.7	-30.8	-29.6	-30.8	-30.2
13	-30.7	-29.8	-29.3	-29.6	-29.7	-28.6	-28.8	-29.0	-29.0	-28.9	-30.0	-29.9	-30.2	-29.6	-28.6	-27.8	-28.2	-28.3	-28.4	-28.0	-28.6	-27.6	-27.9	-27.2	-27.2	-30.7	-28.9
14	-26.5	-26.2	-26.5	-25.7	-26.6	-24.3	-25.2	-22.1	-17.8	-15.4	-13.6	-12.7	-11.8	-11.4	-11.3	-10.7	-10.1	-9.6	-8.7	-7.8	-7.6	-7.1	-6.8	-6.6	-6.6	-26.6	-15.5
15	-4.5	-3.8	-3.5	-3.3	-3.4	-4.5	-5.1	-4.8	-5.1	-4.8	-4.9	-4.9	-5.0	-4.7	-4.7	-4.7	-4.7	-4.8	-4.7	-4.6	-4.3	-4.3	-3.8	-3.5	-3.3	-5.1	-4.4
16	-3.3	-3.5	-2.9	-2.7	-2.7	-2.8	-3.3	-3.5	-3.2	-3.0	-3.2	-3.8	-4.4	-4.5	-4.0	-3.6	-3.6	-3.4	-3.3	-3.4	-3.2	-3.5	-3.4	-3.6	-2.7	-4.5	-3.4
17	-3.1	-2.8	-3.0	-2.4	-2.0	-1.9	-2.3	-2.2	-1.8	-1.6	-1.5	-1.2	-1.5	-1.1	-1.3	-1.2	-1.4	-2.0	-2.1	-2.1	-2.2	-2.1	-2.3	-2.5	-1.1	-3.1	-2.0
18	-2.4	-2.4	-2.6	-2.7	-2.8	-2.8	-2.9	-2.8	-2.8	-2.9	-2.9	-3.0	-3.1	-2.9	-2.7	-3.1	-2.7	-2.9	-2.8	-2.7	-2.4	-2.6	-3.0	-3.4	-2.4	-3.4	-2.8
19	-3.3	-2.9	-2.3	-1.9	-2.2	-1.9	-0.9	-0.4	-0.9	-1.2	-0.5	0.2	0.2	0.2	-0.1	0.0	0.2	0.4	0.4	0.2	0.3	0.3	0.2	-0.1	0.4	-3.3	-0.7
20	-0.4	-0.6	-0.9	-0.8	-0.5	-0.5	-0.5	-0.5	-0.3	-0.5	-0.5	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.4	-0.4	-0.9	-0.8	-0.2	-0.9	-0.4
21	-1.0	-0.7	-0.8	-1.2	-1.3	-1.0	-0.8	-0.6	-0.5	-0.1	0.5	0.8	1.1	1.5	1.8	1.7	1.8	1.9	1.8	1.3	0.8	0.6	0.7	1.2	1.9	-1.3	0.4
22	1.1	0.4	1.2	0.4	-0.1	-0.2	-0.4	-0.8	-1.3	-1.4	-1.7	-2.6	-3.3	-3.8	-4.4	-4.7	-5.1	-5.2	-5.1	-4.9	-5.0	-5.4	-5.5	-5.3	1.2	-5.5	-2.6
23	-5.8	-7.1	-8.2	-9.2	-11.0	-12.6	-14.0	-15.1	-15.7	-16.1	-16.8	-17.0	-17.3	-17.8	-18.1	-18.7	-19.5	-20.3	-20.7	-21.0	-20.8	-20.4	-21.2	-20.9	-5.8	-21.2	-16.1
24	-20.2	-19.6	-20.1	-19.5	-19.0	-18.6	-17.6	-13.3	-11.1	-10.7	-10.0	-9.7	-9.7	-10.0	-9.5	-9.0	-8.8	-8.7	-8.5	-8.4	-8.0	-7.6	-7.2	-7.2	-7.2	-20.2	-12.2
25	-7.2	-7.1	-6.8	-6.5	-6.4	-6.8	-7.2	-6.8	-7.2	-5.8	-5.4	-5.3	-5.1	-4.8	-4.9	-4.9	-5.2	-4.5	-4.7	-7.0	-9.7	-11.6	-13.3	-15.4	-4.5	-15.4	-7.1
26	-16.9	-17.0	-17.4	-18.2	-18.8	-18.8	-19.5	-19.6	-19.8	-20.6	-19.9	-20.3	-21.0	-20.4	-20.3	-19.9	-16.7	-14.7	-13.2	-13.7	-12.4	-11.3	-10.7	-10.9	-10.7	-21.0	-17.2
27	-10.9	-10.9	-10.5	-10.4	-10.1	-9.4	-9.0	-8.5	-7.2	-6.1	-5.8	-5.8	-5.7	-5.9	-6.0	-5.9	-5.8	-5.6	-5.5	-5.1	-5.0	-5.3	-5.1	-5.1	-5.0	-10.9	-7.1
28	-5.0	-5.0	-5.1	-5.2	-5.1	-5.1	-5.6	-6.0	-6.0	-6.1	-6.0	-5.9	-5.8	-5.7	-5.5	-5.4	-5.2	-5.2	-5.2	-5.0	-4.7	-4.8	-4.9	-4.8	-4.7	-6.1	-5.3
29	-4.4	-4.4	-4.1	-4.2	-4.2	-4.8	-5.9	-5.2	-4.8	-4.6	-4.6	-5.5	-5.3	-5.0	-5.8	-6.3	-6.3	-6.7	-7.4	-7.6	-7.4	-7.3	-8.5	-8.5	-4.1	-8.5	-5.8
30	-8.4	-9.2	-8.9	-8.4	-9.1	-9.6	-9.8	-10.2	-10.6	-11.3	-12.6	-13.5	-13.3	-12.8	-12.5	-12.0	-12.5	-13.4	-13.0	-12.0	-11.1	-11.5	-13.2	-14.0	-8.4	-14.0	-11.4
31	-13.9	-13.6	-13.6	-13.4	-13.2	-12.3	-11.8	-11.4	-11.6	-11.7	-11.1	-11.9	-11.1	-11.2	-11.0	-10.9	-10.8	-10.1	-10.3	-10.3	-10.4	-10.4	-10.4	-11.1	-10.1	-13.9	-11.6
Max.	**1.1**	**0.4**	**1.2**	**0.4**	**-0.1**	**-0.2**	**-0.4**	**-0.4**	**-0.3**	**-0.1**	**0.5**	**0.8**	**1.1**	**1.5**	**1.8**	**1.7**	**1.8**	**1.9**	**1.8**	**1.3**	**0.8**	**0.6**	**0.7**	**1.2**	**1.9**		
Min.	**-30.7**	**-29.9**	**-30.0**	**-30.2**	**-30.2**	**-30.4**	**-30.4**	**-30.5**	**-30.5**	**-30.1**	**-30.1**	**-30.2**	**-30.2**	**-29.7**	**-29.6**	**-29.6**	**-29.8**	**-29.8**	**-29.9**	**-30.5**	**-30.2**	**-30.3**	**-30.7**	**-30.8**		**-30.8**	
Avg.	**-13.9**	**-13.9**	**-13.9**	**-13.9**	**-14.0**	**-14.0**	**-14.3**	**-14.0**	**-13.9**	**-13.7**	**-13.6**	**-13.7**	**-13.8**	**-13.6**	**-13.6**	**-13.5**	**-13.5**	**-13.4**	**-13.4**	**-13.6**	**-13.6**	**-13.7**	**-13.8**	**-14.0**			**-13.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-11.6	-12.3	-12.4	-12.2	-11.9	-12.8	-13.0	-13.0	-12.8	-12.7	-12.9	-12.4	-12.2	-12.0	-10.9	-10.4	-10.5	-11.6	-11.8	-12.6	-12.7	-13.1	-13.2	-13.6	-10.4	-13.6	-12.3
2	-13.7	-14.3	-14.7	-14.7	-15.9	-15.9	-16.3	-16.2	-16.3	-16.2	-16.2	-16.9	-16.4	-16.2	-16.7	-17.1	-17.1	-16.6	-16.5	-17.3	-18.3	-18.3	-19.0	-20.1	-13.7	-20.1	-16.5
3	-20.7	-21.5	-21.3	-21.8	-22.8	-23.9	-24.7	-25.3	-25.1	-24.5	-25.2	-25.6	-25.2	-24.9	-24.3	-24.1	-23.8	-23.5	-24.0	-24.8	-24.8	-25.7	-24.7	-24.8	-20.7	-25.7	-24.0
4	-25.0	-25.1	-24.7	-23.9	-24.1	-24.0	-23.9	-24.2	-24.4	-24.2	-23.4	-22.2	-21.3	-21.4	-21.4	-21.4	-22.7	-22.4	-22.1	-23.1	-23.7	-24.3	-24.5	-24.4	-21.3	-25.1	-23.4
5	-25.0	-25.3	-25.3	-26.6	-27.4	-27.2	-27.4	-27.4	-27.6	-27.8	-27.6	-26.8	-26.4	-26.2	-25.8	-25.1	-25.3	-25.0	-25.4	-25.1	-25.0	-25.1	-24.4	-24.3	-24.3	-27.8	-26.0
6	-23.9	-23.7	-23.5	-23.7	-23.0	-22.5	-22.4	-22.5	-21.9	-22.1	-21.2	-21.5	-21.9	-22.0	-21.4	-22.6	-22.9	-23.2	-23.2	-23.4	-23.1	-23.6	-23.4	-23.2	-21.2	-23.9	-22.7
7	-23.9	-23.8	-23.8	-24.4	-23.5	-23.5	-23.1	-23.8	-23.6	-23.2	-24.2	-23.3	-22.4	-22.3	-19.0	-18.9	-17.6	-17.4	-17.0	-15.9	-15.7	-17.1	-17.5	-16.0	-15.7	-24.4	-20.9
8	-16.2	-17.1	-16.4	-15.7	-14.3	-12.3	-13.7	-12.3	-13.1	-11.7	-12.2	-10.9	-10.0	-9.7	-8.8	-8.7	-9.4	-9.7	-9.7	-9.6	-9.4	-9.7	-9.4	-8.8	-8.7	-17.1	-11.6
9	-9.1	-8.7	-8.5	-8.2	-8.5	-8.4	-8.6	-8.9	-8.6	-7.8	-8.0	-8.4	-8.0	-9.1	-11.3	-13.6	-14.2	-15.0	-16.5	-18.5	-19.8	-20.4	-21.2	-21.7	-7.8	-21.7	-12.1
10	-22.0	-23.3	-24.2	-23.2	-23.5	-23.3	-23.3	-23.0	-24.5	-25.7	-25.2	-22.2	-22.7	-24.2	-23.0	-22.9	-23.1	-21.9	-20.8	-20.3	-21.8	-22.3	-21.5	-21.0	-20.3	-25.7	-22.9
11	-18.3	-15.7	-15.5	-15.0	-14.5	-14.7	-15.0	-15.2	-15.2	-15.7	-15.3	-15.0	-13.8	-13.6	-14.5	-13.4	-14.2	-14.4	-16.1	-18.0	-17.4	-18.1	-19.0	-20.6	-13.4	-20.6	-15.7
12	-20.8	-22.1	-22.5	-23.2	-23.9	-24.8	-24.7	-25.4	-25.3	-25.4	-25.2	-24.9	-24.6	-23.7	-21.2	-12.1	5.8	-22.2	-22.5	-22.8	-22.1	-21.3	-19.9	-15.8	5.8	-25.4	-21.3
13	-10.5	-9.2	-10.1	-9.2	-6.7	-6.1	-5.0	-4.4	-3.5	-2.7	-2.1	-0.6	0.9	-1.2	-0.6	-0.3	-0.3	-0.3	-0.3	-0.1	0.0	-0.2	-0.1	0.0	0.9	-10.5	-3.0
14	0.1	0.2	0.2	0.3	0.0	-0.2	-0.5	-4.4	-9.2	-11.2	-12.6	-13.9	-14.9	-15.8	-16.5	-17.4	-17.9	-18.3	-18.7	-18.7	-18.6	-18.2	-18.0	-17.8	0.3	-18.7	-10.9
15	-18.9	-19.8	-20.5	-20.6	-21.5	-22.0	-21.8	-22.1	-24.9	-24.2	-23.2	-23.4	-23.2	-22.8	-22.4	-22.5	-21.7	-21.9	-22.3	-22.6	-21.4	-19.5	-17.0	-16.0	-16.0	-24.9	-21.5
16	-14.5	-13.4	-12.0	-10.9	-9.8	-8.9	-8.5	-7.3	-7.2	-7.1	-6.8	-6.4	-6.0	-5.8	-5.5	-5.3	-5.0	-4.5	-4.7	-5.2	-5.2	-5.4	-5.1	-5.4	-4.5	-14.5	-7.3
17	-5.7	-5.9	-6.0	-5.8	-4.9	-3.3	-1.5	-0.9	-0.2	0.1	0.8	1.3	2.3	1.0	0.5	0.4	0.3	0.3	0.0	-0.2	0.1	0.4	0.6	0.6	2.3	-6.0	-1.1
18	0.9	0.7	0.2	-0.1	-0.3	-0.2	-0.3	-0.3	0.4	0.4	0.4	0.5	0.3	0.3	0.8	0.6	0.4	0.3	0.3	0.0	-0.3	-0.3	0.2	0.5	0.9	-0.3	0.2
19	0.9	1.5	2.1	1.8	1.0	2.5	3.4	3.1	1.8	0.5	1.1	1.1	1.2	1.2	1.3	1.9	2.5	2.5	2.8	2.4	1.1	0.9	0.8	0.7	3.4	0.5	1.7
20	0.2	0.0	-0.4	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3	-0.3	-0.2	-0.2	0.6	1.3	1.9	1.5	1.8	1.9	2.2	2.4	2.2	2.2	2.2	1.8	2.4	-0.4	0.8
21	1.8	1.7	1.9	1.4	1.3	1.7	2.1	2.4	2.1	2.0	1.9	1.6	1.6	2.3	2.2	1.8	1.7	1.6	0.0	0.5	0.5	-0.3	-0.4	0.1	2.4	-0.4	1.4
22	0.0	-0.2	-0.3	-0.4	-0.3	-0.3	-0.2	-0.4	-0.3	-0.5	-0.6	-0.6	-0.8	-0.6	-0.4	-0.7	-2.7	-1.9	-1.5	-1.6	-1.9	-2.1	-2.1	-2.3	0.0	-2.7	-0.9
23	-2.5	-2.5	-2.8	-3.0	-3.4	-3.2	-3.0	-3.3	-3.8	-5.2	-5.1	-4.5	-4.4	-4.0	-3.9	-4.0	-4.6	-5.1	-4.3	-5.1	-5.4	-5.6	-6.1	-7.1	-2.5	-7.1	-4.3
24	-8.0	-9.0	-9.2	-8.9	-9.2	-9.5	-9.3	-9.9	-10.8	-11.6	-12.2	-12.5	-13.2	-13.2	-12.8	-12.5	-12.4	-12.5	-13.1	-13.8	-14.3	-14.6	-14.7	-14.6	-8.0	-14.7	-11.7
25	-15.2	-16.0	-16.1	-16.4	-16.9	-17.4	-18.2	-18.9	-18.9	-18.8	-18.4	-17.5	-17.4	-16.6	-15.9	-14.3	-12.2	-6.8	-7.0	-6.7	-4.9	-3.1	-2.8	-3.2	-2.8	-18.9	-13.3
26	-3.7	-3.7	-3.7	-3.7	-4.3	-4.6	-4.3	-3.6	-7.0	-8.4	-6.9	-6.7	-5.9	-5.5	-5.2	-5.3	-5.4	-6.7	-7.6	-8.5	-9.2	-10.2	-10.1	-10.8	-3.6	-10.8	-6.3
27	-12.6	-13.6	-13.7	-14.7	-15.2	-15.7	-14.4	-14.3	-13.0	-11.7	-13.3	-11.9	-7.3	-5.3	-6.9	-4.9	-7.4	-6.9	-4.6	-2.9	-1.9	-1.7	-0.9	-0.9	-0.9	-15.7	-9.0
28	-1.2	-0.6	-0.3	0.8	0.2	0.3	0.3	1.1	1.2	0.7	0.3	-0.1	-0.8	-0.5	-1.9	-2.8	-3.9	-5.0	-5.5	-6.4	-7.0	-7.4	-7.9	-8.4	1.2	-8.4	-2.3
29	-8.9	-9.3	-9.5	-8.9	-8.8	-9.6	-10.2	-11.2	-11.7	-12.1	-12.3	-12.8	-13.2	-13.4	-13.3	-13.1	-12.5	-11.9	-11.8	-12.0	-12.1	-12.7	-13.2	-13.9	-8.8	-13.9	-11.6
Max.	**1.8**	**1.7**	**2.1**	**1.8**	**1.3**	**2.5**	**3.4**	**3.1**	**2.1**	**2.0**	**1.9**	**1.6**	**2.3**	**2.3**	**2.2**	**1.9**	**5.8**	**2.5**	**2.8**	**2.4**	**2.2**	**2.2**	**2.2**	**1.8**	**5.8**		
Min.	**-25.0**	**-25.3**	**-25.3**	**-26.6**	**-27.4**	**-27.2**	**-27.4**	**-27.4**	**-27.6**	**-27.8**	**-27.6**	**-26.8**	**-26.4**	**-26.2**	**-25.8**	**-25.1**	**-25.3**	**-25.0**	**-25.4**	**-25.1**	**-25.0**	**-25.7**	**-24.7**	**-24.8**		**-27.8**	
Avg.	**-11.3**	**-11.4**	**-11.5**	**-11.4**	**-11.5**	**-11.4**	**-11.3**	**-11.4**	**-11.8**	**-12.0**	**-11.9**	**-11.6**	**-11.2**	**-11.2**	**-10.9**	**-10.6**	**-10.1**	**-11.0**	**-11.1**	**-11.4**	**-11.5**	**-11.6**	**-11.5**	**-11.4**			**-11.3**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-14.5	-15.1	-15.4	-15.5	-15.6	-15.7	-16.0	-16.2	-16.0	-15.8	-15.0	-14.0	-10.9	-9.4	-8.7	-7.4	-6.1	-5.5	-5.6	-4.8	-4.4	-3.3	-2.7	-2.2	-2.2	-16.2	-10.7
2	-1.5	-0.7	0.2	-0.2	-0.7	-0.9	-1.2	-1.7	-1.9	-2.2	-2.4	-2.1	-1.6	-0.9	-0.5	-0.5	-0.9	-1.7	-1.6	-1.8	-1.6	-1.5	-1.5	-1.5	0.2	-2.4	-1.3
3	-2.1	-2.1	-2.4	-2.4	-1.8	-1.4	-1.4	-1.3	-1.0	-0.8	-0.8	-0.8	-0.9	-0.9	-0.1	0.3	0.4	0.5	0.7	0.6	0.7	0.6	0.6	1.1	1.1	-2.4	-0.6
4	1.7	1.6	1.7	1.5	0.5	0.1	0.3	0.5	0.5	0.4	0.4	0.3	0.8	1.1	1.3	1.2	1.3	1.5	1.4	1.3	0.8	0.9	0.5	0.4	1.7	0.1	0.9
5	0.7	0.6	1.1	1.6	1.2	1.1	1.1	1.0	1.2	1.2	1.0	0.6	0.5	0.6	0.7	1.5	1.8	1.7	1.2	0.7	0.4	0.5	0.7	0.6	1.8	0.4	1.0
6	0.6	0.4	0.3	0.1	-0.1	-0.4	-0.4	-0.4	-0.6	-0.6	-0.5	-0.4	0.1	0.6	0.7	1.1	1.3	1.1	1.0	1.2	1.2	1.2	1.7	2.0	2.0	-0.6	0.5
7	1.3	0.4	0.2	0.3	0.5	-0.4	-0.9	-1.5	-0.4	-0.4	-0.4	-0.4	-0.1	0.1	-0.1	-0.4	-0.6	-0.6	-1.1	-1.3	-1.6	-2.2	-3.0	-3.4	1.3	-3.4	-0.7
8	-3.5	-3.6	-3.6	-4.0	-4.1	-4.4	-4.4	-4.1	-3.9	-3.8	-3.4	-2.5	-1.2	-0.7	0.3	0.1	0.6	0.6	0.4	0.3	0.2	0.2	0.4	0.3	0.6	-4.4	-1.8
9	0.2	0.2	0.8	0.9	0.3	0.3	0.0	1.0	0.0	0.0	0.3	0.4	0.7	0.3	0.3	0.3	0.5	0.6	0.1	-0.3	-0.3	0.0	0.0	-0.1	1.0	-0.3	0.3
10	0.3	-1.2	-1.3	-1.8	-3.5	-4.6	-4.8	-5.0	-5.3	-5.3	-5.4	-5.3	-5.1	-5.0	-5.0	-4.9	-5.0	-4.9	-4.9	-5.0	-5.2	-5.7	-6.0	-6.1	0.3	-6.1	-4.4
11	-6.4	-6.7	-7.2	-7.6	-7.7	-7.5	-7.4	-7.6	-7.9	-7.8	-7.8	-7.9	-8.1	-8.2	-8.3	-8.4	-8.4	-8.5	-8.4	-8.6	-9.7	-9.9	-9.1	-9.2	-6.4	-9.9	-8.1
12	-9.4	-11.5	-11.4	-11.6	-11.6	-11.3	-11.5	-11.8	-11.3	-11.1	-10.3	-10.1	-9.9	-9.9	-9.7	-9.3	-9.0	-8.7	-8.6	-8.2	-8.1	-8.1	-8.1	-8.1	-8.1	-11.8	-9.9
13	-8.2	-8.2	-8.5	-8.9	-9.2	-9.3	-9.5	-9.7	-9.9	-10.3	-10.7	-10.8	-10.8	-10.6	-10.5	-10.5	-10.9	-11.2	-11.2	-11.6	-12.3	-12.9	-13.6	-13.7	-8.2	-13.7	-10.5
14	-14.1	-14.3	-14.7	-15.5	-15.8	-15.2	-15.6	-16.1	-16.1	-15.6	-15.6	-14.8	-13.8	-12.5	-11.0	-10.3	-8.4	-6.2	-5.1	-5.1	-4.9	-5.1	-4.9	-4.9	-4.9	-16.1	-11.5
15	-4.5	-5.0	-5.1	-5.1	-4.2	-3.3	-2.7	-3.3	-3.0	-2.9	-3.0	-2.6	-2.2	-1.7	-1.3	-1.3	-1.5	-1.6	-1.6	-1.8	-2.1	-2.3	-2.4	-2.5	-1.3	-5.1	-2.8
16	-2.3	-2.3	-2.2	-2.5	-2.5	-2.1	-2.2	-2.3	-3.2	-3.5	-3.3	-3.1	-3.0	-3.1	-2.8	-2.7	-2.1	-1.6	-1.7	-1.7	-2.5	-2.5	-2.6	-3.0	-1.6	-3.5	-2.5
17	-3.4	-3.3	-3.7	-4.0	-3.9	-3.9	-3.7	-3.8	-4.2	-4.2	-3.9	-4.1	-4.1	-3.9	-4.1	-3.9	-3.8	-4.9	-7.0	-8.1	-8.8	-9.1	-9.2	-9.0	-3.3	-9.2	-5.1
18	-9.6	-10.3	-9.8	-10.1	-10.9	-11.8	-12.4	-12.8	-13.7	-13.9	-14.1	-14.0	-14.0	-13.9	-13.5	-13.2	-13.3	-13.3	-13.6	-13.8	-14.3	-15.3	-15.4	-15.4	-9.6	-15.4	-13.0
19	-15.8	-16.2	-17.0	-18.0	-18.3	-18.3	-18.8	-19.4	-19.3	-19.7	-19.8	-19.4	-18.6	-17.9	-17.4	-17.1	-16.6	-16.6	-16.8	-17.5	-17.8	-17.9	-18.2	-18.5	-15.8	-19.8	-18.0
20	-18.7	-18.7	-18.9	-18.9	-19.0	-19.0	-19.1	-19.2	-19.3	-19.3	-19.2	-19.1	-19.1	-19.2	-19.1	-18.8	-18.4	-17.6	-16.9	-16.5	-16.5	-17.0	-17.2	-16.7	-16.5	-19.3	-18.4
21	-16.3	-16.0	-15.7	-15.4	-15.0	-14.9	-16.3	-15.8	-14.8	-14.3	-14.4	-14.3	-12.4	-8.2	-6.3	-5.8	-6.1	-6.0	-5.5	-7.6	-8.9	-9.6	-9.5	-8.3	-5.5	-16.3	-11.6
22	-8.4	-8.3	-8.5	-9.3	-9.1	-8.7	-9.9	-10.9	-11.3	-11.8	-11.5	-11.6	-12.5	-12.1	-11.4	-10.9	-10.7	-10.4	-9.9	-9.8	-10.2	-10.3	-11.4	-10.8	-8.3	-12.5	-10.4
23	-11.1	-11.8	-11.8	-12.1	-11.9	-11.5	-12.5	-12.9	-13.0	-13.0	-13.6	-13.5	-13.5	-13.2	-12.5	-12.2	-11.8	-11.4	-11.1	-11.0	-11.2	-12.0	-12.9	-13.6	-11.0	-13.6	-12.3
24	-13.3	-13.1	-13.2	-13.0	-12.8	-13.0	-13.1	-13.1	-12.9	-13.4	-12.9	-12.4	-12.1	-11.3	-10.4	-10.1	-9.8	-9.2	-8.9	-7.9	-8.3	-8.7	-8.3	-8.1	-7.9	-13.4	-11.2
25	-8.6	-9.8	-10.3	-11.0	-10.7	-10.5	-10.3	-9.7	-9.2	-9.4	-9.2	-8.9	-8.9	-8.4	-8.2	-7.9	-7.1	-6.6	-6.4	-6.8	-7.1	-7.0	-7.0	-7.2	-6.4	-11.0	-8.6
26	-7.9	-7.2	-7.5	-8.0	-8.1	-9.0	-9.2	-8.8	-9.5	-9.6	-9.6	-9.0	-9.2	-8.9	-8.6	-7.2	-6.2	-6.7	-6.6	-6.6	-6.6	-6.9	-7.9	-8.1	-6.2	-9.6	-8.0
27	-8.0	-8.0	-8.4	-8.8	-9.0	-9.2	-9.4	-9.1	-9.3	-9.4	-9.8	-9.7	-9.6	-9.6	-9.1	-8.8	-8.2	-8.0	-8.3	-8.6	-9.9	-10.5	-9.8	-11.7	-8.0	-11.7	-9.2
28	-12.1	-12.4	-12.3	-12.9	-13.0	-13.1	-13.4	-14.1	-13.9	-14.2	-13.9	-13.1	-12.8	-12.9	-12.5	-12.1	-11.2	-10.5	-10.1	-9.4	-9.4	-9.0	-8.8	-8.8	-8.8	-14.2	-11.9
29	-9.1	-8.9	-8.4	-8.0	-7.9	-7.6	-7.0	-6.7	-6.1	-5.8	-5.3	-4.4	-3.4	-2.9	-2.6	-2.4	-2.5	-2.7	-2.7	-2.6	-2.4	-2.2	-2.0	-1.6	-1.6	-9.1	-4.8
30	-1.4	-1.3	-1.2	-1.2	-1.3	-1.3	-1.7	-1.5	-1.4	-1.0	-0.8	-0.5	-0.1	0.0	0.2	0.0	0.0	-0.1	-0.3	-0.7	-0.8	-0.5	-0.3	-0.7	0.2	-1.7	-0.7
31	-0.4	-0.2	-0.3	-0.1	-0.1	0.4	0.3	0.4	0.4	0.6	0.9	1.3	1.5	1.5	1.6	1.5	1.4	1.5	1.5	1.4	1.2	0.9	0.6	0.7	1.6	-0.4	0.8
Max.	**1.7**	**1.6**	**1.7**	**1.6**	**1.2**	**1.1**	**1.1**	**1.0**	**1.2**	**1.2**	**1.0**	**1.3**	**1.5**	**1.5**	**1.6**	**1.5**	**1.8**	**1.7**	**1.5**	**1.4**	**1.2**	**1.2**	**1.7**	**2.0**	**2.0**		
Min.	**-18.7**	**-18.7**	**-18.9**	**-18.9**	**-19.0**	**-19.0**	**-19.1**	**-19.4**	**-19.3**	**-19.7**	**-19.8**	**-19.4**	**-19.1**	**-19.2**	**-19.1**	**-18.8**	**-18.4**	**-17.6**	**-16.9**	**-17.5**	**-17.8**	**-17.9**	**-18.2**	**-18.5**		**-19.8**	
Avg.	**-6.6**	**-6.9**	**-6.9**	**-7.1**	**-7.3**	**-7.3**	**-7.5**	**-7.6**	**-7.6**	**-7.6**	**-7.5**	**-7.3**	**-6.9**	**-6.5**	**-6.1**	**-5.8**	**-5.5**	**-5.4**	**-5.4**	**-5.5**	**-5.8**	**-6.0**	**-6.0**	**-6.1**			**-6.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.7	0.5	0.3	0.2	0.1	-0.1	-0.3	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.5	-0.9	0.7	-0.9	0.0
2	-1.9	-2.4	-2.7	-2.9	-2.9	-2.9	-2.9	-2.9	-3.0	-2.9	-3.2	-2.3	-2.6	-2.5	-1.6	-1.3	-1.1	-1.0	-1.3	-1.1	-1.3	-1.4	-1.2	-1.2	-1.0	-3.2	-2.1
3	-1.0	-0.8	-0.8	-0.9	-1.1	-1.2	-1.3	-1.2	-1.0	-0.9	-0.6	-0.4	-0.1	0.1	0.5	1.0	1.1	1.0	0.7	0.4	0.0	0.0	-0.1	-0.1	1.1	-1.3	-0.3
4	-0.1	-0.1	-0.3	-0.4	-0.4	-0.3	-0.4	-0.3	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.4	-0.3	-0.2	-0.4	-0.6	-1.0	-2.0	-3.0	-4.3	-5.3	-0.1	-5.3	-1.0
5	-5.8	-5.7	-7.3	-8.5	-8.7	-9.5	-9.9	-9.9	-9.5	-9.0	-8.7	-7.5	-7.6	-7.9	-7.0	-7.9	-7.4	-6.9	-6.6	-7.8	-8.5	-9.3	-9.2	-9.2	-5.7	-9.9	-8.1
6	-10.0	-11.1	-11.6	-11.8	-12.6	-13.0	-13.4	-13.7	-13.7	-13.1	-13.0	-12.4	-11.5	-10.9	-9.6	-9.1	-8.9	-8.3	-8.7	-9.3	-9.6	-10.5	-11.1	-11.7	-8.3	-13.7	-11.2
7	-11.8	-12.0	-12.2	-12.6	-12.2	-12.2	-12.9	-13.1	-13.8	-12.9	-11.6	-11.5	-10.6	-9.3	-8.4	-7.7	-7.5	-7.3	-7.3	-7.3	-7.8	-8.9	-9.3	-9.4	-7.3	-13.8	-10.4
8	-9.5	-9.3	-9.3	-9.6	-9.4	-9.2	-9.3	-8.6	-8.6	-9.0	-9.6	-9.9	-9.6	-9.0	-8.1	-7.4	-7.3	-6.9	-7.8	-8.3	-8.8	-9.1	-9.0	-10.2	-6.9	-10.2	-8.9
9	-10.0	-9.8	-9.7	-9.8	-10.6	-10.9	-11.3	-11.3	-11.5	-12.5	-11.8	-11.4	-10.5	-9.7	-9.1	-8.4	-8.2	-8.2	-8.3	-8.9	-9.5	-10.0	-10.2	-10.2	-8.2	-12.5	-10.1
10	-10.9	-10.9	-12.2	-12.2	-12.9	-13.2	-13.5	-14.1	-14.2	-14.5	-13.6	-12.9	-12.4	-11.4	-10.3	-9.6	-9.1	-9.1	-9.2	-9.8	-10.7	-10.9	-11.7	-12.1	-9.1	-14.5	-11.7
11	-11.7	-12.5	-13.2	-12.8	-13.4	-14.9	-15.5	-15.6	-15.7	-15.2	-15.0	-14.6	-13.7	-12.3	-11.4	-10.7	-10.3	-10.3	-10.4	-10.6	-11.1	-11.9	-11.8	-12.9	-10.3	-15.7	-12.8
12	-12.6	-13.1	-13.0	-13.1	-13.1	-13.5	-13.2	-13.6	-13.4	-13.4	-13.1	-11.6	-10.9	-10.1	-8.9	-8.3	-7.9	-7.5	-7.1	-7.4	-7.3	-6.9	-7.4	-8.2	-6.9	-13.6	-10.6
13	-7.4	-6.4	-6.4	-7.0	-6.7	-6.1	-5.7	-5.8	-5.6	-5.5	-5.2	-5.1	-4.2	-2.6	-1.5	-0.5	-0.5	-0.4	-0.3	-0.4	-0.4	-0.5	-0.9	-1.1	-0.3	-7.4	-3.6
14	-1.4	-1.7	-1.8	-2.0	-2.0	-2.0	-2.2	-2.3	-2.4	-2.4	-2.2	-2.0	-1.9	-1.6	-1.4	-1.5	-1.6	-1.3	-1.0	-0.7	-0.5	-0.5	-0.8	-0.9	-0.5	-2.4	-1.6
15	-1.3	-1.6	-1.8	-1.9	-1.9	-2.0	-2.4	-2.4	-3.1	-4.4	-5.0	-5.8	-6.0	-6.0	-6.3	-7.3	-7.5	-7.7	-8.2	-8.9	-10.0	-10.9	-11.6	-11.9	-1.3	-11.9	-5.7
16	-12.4	-12.8	-13.1	-13.4	-13.9	-14.2	-14.3	-14.6	-15.6	-15.3	-14.2	-13.6	-12.8	-12.1	-10.9	-9.4	-8.6	-7.9	-7.2	-6.7	-6.0	-6.2	-6.7	-6.4	-6.0	-15.6	-11.2
17	-6.6	-5.8	-5.0	-5.8	-5.1	-4.7	-4.8	-4.5	-4.6	-4.3	-5.5	-4.7	-3.9	-3.3	-3.2	-2.9	-2.8	-2.8	-2.6	-2.2	-2.2	-2.3	-2.2	-2.3	-2.2	-6.6	-3.9
18	-2.4	-2.4	-2.0	-2.2	-3.2	-2.3	-2.5	-2.7	-1.6	-0.5	1.2	0.2	-0.3	0.5	0.5	1.2	0.8	0.4	-0.1	-0.1	-0.2	-1.2	-1.8	-2.2	1.2	-3.2	-1.0
19	-2.3	-2.1	-1.5	-1.1	-0.9	-0.9	-1.1	-1.3	-1.2	-0.9	-0.1	0.5	0.9	1.1	1.2	1.2	1.3	1.1	0.5	0.2	-0.2	-0.6	-1.1	-1.8	1.3	-2.3	-0.4
20	-1.8	-1.9	-1.2	-2.2	-1.6	-1.3	-1.2	0.7	0.7	0.2	1.4	0.4	0.8	1.0	1.2	0.6	0.8	0.2	-0.1	-0.2	-0.4	-0.6	-0.6	-0.7	1.4	-2.2	-0.2
21	-0.8	-0.7	-0.6	-0.8	-1.0	-0.8	-0.9	-0.9	-0.8	-0.7	-0.3	0.1	0.5	0.5	0.8	1.0	0.9	0.8	0.4	0.3	0.1	-0.1	-0.8	-1.3	1.0	-1.3	-0.2
22	-1.2	-1.2	0.1	-0.6	-1.5	-1.5	-0.5	-1.0	1.0	1.8	1.9	3.3	4.1	4.5	5.4	5.7	5.8	5.9	5.8	5.9	6.4	6.9	5.3	4.6	6.9	-1.5	2.8
23	4.9	5.0	5.1	4.4	3.7	4.1	3.9	2.8	3.0	2.5	2.7	2.8	2.5	3.2	3.6	4.4	5.6	5.9	5.7	5.9	5.9	5.6	5.1	4.7	5.9	2.5	4.3
24	2.4	0.5	0.1	-0.2	-1.9	-3.3	-3.2	-3.2	-3.1	-2.9	-2.5	-2.4	-2.0	-1.6	-1.2	-0.9	-0.8	-0.7	-0.7	-0.6	-0.6	-0.2	-0.6	-2.0	2.4	-3.3	-1.3
25	-3.3	-4.0	-4.2	-5.0	-6.1	-6.5	-6.8	-7.4	-7.9	-8.3	-7.6	-7.3	-7.2	-6.8	-6.5	-6.4	-6.1	-6.1	-5.8	-5.7	-5.8	-6.4	-6.7	-7.3	-3.3	-8.3	-6.3
26	-8.4	-9.2	-9.8	-10.4	-11.0	-11.5	-11.6	-11.2	-11.0	-10.0	-9.2	-8.6	-7.6	-6.6	-6.2	-6.0	-5.6	-5.1	-4.4	-4.2	-4.3	-4.7	-5.5	-5.8	-4.2	-11.6	-7.8
27	-5.8	-5.9	-6.1	-6.3	-6.4	-7.1	-7.4	-7.4	-7.4	-7.4	-7.3	-7.0	-6.8	-6.0	-5.5	-5.4	-5.3	-5.2	-4.7	-4.3	-4.5	-4.7	-4.9	-5.0	-4.3	-7.4	-6.0
28	-5.2	-5.7	-6.0	-6.1	-6.1	-6.0	-6.2	-6.5	-6.6	-6.3	-6.5	-5.6	-5.0	-4.4	-3.9	-3.3	-2.8	-2.6	-2.6	-2.5	-2.7	-3.2	-3.8	-4.1	-2.5	-6.6	-4.7
29	-4.3	-4.2	-4.5	-4.8	-4.5	-4.3	-4.1	-4.3	-4.3	-4.0	-3.7	-3.3	-2.5	-1.8	-1.3	-0.8	0.0	0.3	0.5	0.5	0.2	-0.2	-1.1	-2.3	0.5	-4.8	-2.5
30	-2.5	-3.0	-3.4	-4.0	-4.3	-5.0	-5.0	-5.1	-5.1	-5.1	-4.3	-3.5	-2.2	-1.5	-1.0	-0.5	-0.6	-1.0	-1.4	-1.7	-1.8	-2.3	-2.5	-2.8	-0.5	-5.1	-2.9
Max.	**4.9**	**5.0**	**5.1**	**4.4**	**3.7**	**4.1**	**3.9**	**2.8**	**3.0**	**2.5**	**2.7**	**3.3**	**4.1**	**4.5**	**5.4**	**5.7**	**5.8**	**5.9**	**5.8**	**5.9**	**6.4**	**6.9**	**5.3**	**4.7**	**6.9**		
Min.	**-12.6**	**-13.1**	**-13.2**	**-13.4**	**-13.9**	**-14.9**	**-15.5**	**-15.6**	**-15.7**	**-15.3**	**-15.0**	**-14.6**	**-13.7**	**-12.3**	**-11.4**	**-10.7**	**-10.3**	**-10.3**	**-10.4**	**-10.6**	**-11.1**	**-11.9**	**-11.8**	**-12.9**		**-15.7**	
Avg.	**-4.8**	**-5.0**	**-5.1**	**-5.5**	**-5.7**	**-5.9**	**-6.0**	**-6.1**	**-6.0**	**-5.9**	**-5.6**	**-5.2**	**-4.8**	**-4.2**	**-3.7**	**-3.3**	**-3.1**	**-3.0**	**-3.1**	**-3.2**	**-3.5**	**-3.8**	**-4.2**	**-4.7**			**-4.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.9	-3.0	-3.2	-3.7	-3.9	-4.1	-4.5	-4.7	-4.7	-4.5	-3.8	-2.6	-1.2	-0.1	0.7	1.1	1.4	1.4	1.7	1.6	1.4	1.2	1.0	0.8	1.7	-4.7	-1.4
2	0.5	-0.1	-0.2	-0.7	-0.9	-0.9	-0.6	-0.5	-0.6	-0.2	0.6	1.0	1.7	2.2	0.4	1.3	2.6	2.4	2.7	1.3	1.5	0.6	1.3	0.9	2.7	-0.9	0.7
3	0.9	0.0	-0.9	-1.2	-1.1	-0.8	-0.6	-0.1	0.4	0.7	1.6	2.1	2.8	3.1	3.1	3.0	1.3	1.2	1.4	1.9	3.1	1.6	1.1	1.6	3.1	-1.2	1.1
4	1.8	1.3	1.6	1.8	1.6	2.0	2.1	2.0	1.9	2.1	2.4	2.7	3.0	2.9	3.1	4.0	4.4	4.2	4.1	3.8	2.3	1.8	2.3	2.3	4.4	1.3	2.6
5	2.5	2.5	2.7	2.4	2.4	2.4	2.3	2.1	2.8	2.7	2.3	2.1	2.1	2.5	3.2	4.3	5.1	5.4	5.2	4.4	3.7	3.8	3.2	2.6	5.4	2.1	3.1
6	2.5	1.5	0.8	1.5	1.8	1.9	1.9	1.9	1.8	2.0	2.4	2.7	3.0	3.1	3.2	3.3	3.4	3.3	3.0	2.7	2.0	1.4	1.1	1.2	3.4	0.8	2.2
7	1.1	1.3	1.6	1.7	1.7	1.3	1.2	1.3	1.6	1.9	2.7	3.0	3.1	3.3	3.6	3.3	3.4	3.5	3.5	3.2	2.7	2.6	1.8	1.4	3.6	1.1	2.3
8	1.5	1.4	1.3	1.3	1.3	1.3	1.4	1.5	1.9	2.3	2.8	3.1	3.3	3.3	3.0	3.2	3.2	3.4	3.3	3.2	3.1	2.8	2.4	2.5	3.4	1.3	2.4
9	2.6	2.5	2.6	2.3	2.0	1.9	2.1	2.1	2.3	2.7	3.1	3.3	3.3	3.1	3.3	3.5	3.3	2.8	2.4	2.1	1.9	1.7	1.6	2.1	3.5	1.6	2.5
10	1.5	1.6	1.7	1.3	1.0	1.3	1.3	1.3	1.5	1.6	2.0	2.6	3.1	3.6	4.1	4.2	4.4	4.6	4.8	4.5	4.6	4.4	4.4	4.4	4.8	1.0	2.9
11	3.7	3.3	3.2	3.0	2.9	3.0	2.9	2.3	3.0	3.6	2.7	2.4	2.2	2.3	2.8	4.0	4.1	3.7	4.6	4.5	4.4	3.9	3.5	2.7	4.6	2.2	3.3
12	2.6	2.5	2.4	2.3	2.0	1.8	1.7	1.9	2.3	2.8	3.3	3.8	4.1	4.0	4.0	2.5	1.9	2.0	2.2	2.0	1.8	1.5	1.1	1.3	4.1	1.1	2.4
13	1.3	1.0	0.4	0.4	0.4	0.5	0.3	0.5	0.7	1.0	1.9	2.3	3.0	3.3	3.7	3.6	3.4	2.7	2.8	2.7	2.1	1.6	1.1	1.0	3.7	0.3	1.7
14	0.7	0.2	0.3	0.5	0.1	1.4	1.9	2.2	2.3	2.5	2.5	2.8	3.3	4.3	4.4	4.3	5.0	5.5	5.5	4.8	4.6	5.3	5.5	4.5	5.5	0.1	3.1
15	4.3	3.6	3.8	3.9	3.6	3.2	3.1	3.0	2.9	3.3	4.1	5.1	5.6	5.2	4.4	3.6	3.2	3.4	3.2	2.8	2.3	1.8	1.6	1.8	5.6	1.6	3.4
16	1.7	1.7	1.3	1.0	0.8	0.2	0.0	0.3	0.1	0.5	1.0	1.8	2.8	3.4	3.6	3.9	4.2	4.4	4.3	4.5	4.2	3.6	3.1	2.9	4.5	0.0	2.3
17	1.9	0.9	0.7	1.2	1.2	0.8	0.7	1.2	1.7	2.3	3.1	4.2	5.1	5.8	6.7	7.2	7.7	7.3	7.3	7.7	7.0	5.5	4.2	3.3	7.7	0.7	4.0
18	3.2	2.8	2.6	2.2	1.7	1.3	1.2	1.0	1.6	2.0	1.8	2.1	2.0	2.3	2.5	3.0	3.3	4.0	4.0	3.6	2.8	2.2	1.5	1.4	4.0	1.0	2.3
19	1.6	1.6	1.7	1.2	1.4	1.5	1.3	1.1	1.1	1.5	1.9	2.5	3.3	4.2	4.8	5.2	5.5	5.6	5.9	6.0	5.8	5.3	4.8	3.9	6.0	1.1	3.3
20	4.1	3.5	3.6	3.1	2.7	2.8	2.6	2.5	3.1	4.1	5.2	6.5	7.7	8.8	9.8	10.0	10.3	10.5	11.2	11.1	10.2	9.6	9.6	9.0	11.2	2.5	6.7
21	8.9	8.1	7.6	7.1	5.9	4.7	5.0	4.6	3.2	4.1	4.8	6.5	7.5	7.6	7.6	8.2	8.3	8.6	8.4	7.6	6.8	5.5	4.9	5.3	8.9	3.2	6.5
22	5.4	5.1	4.3	3.3	2.4	1.8	2.4	2.7	2.7	4.1	4.7	5.7	6.8	7.7	8.5	8.7	8.5	7.7	6.7	6.1	5.2	3.9	3.3	3.2	8.7	1.8	5.0
23	2.8	2.5	1.6	1.6	1.2	1.9	1.9	1.9	2.3	2.6	2.9	3.2	3.1	3.4	3.5	3.8	3.9	3.9	4.0	3.8	3.8	3.7	3.7	3.4	4.0	1.2	2.9
24	3.2	3.3	3.0	2.8	2.6	2.5	2.4	2.8	3.1	3.2	3.2	3.7	3.9	4.4	4.9	5.6	5.9	5.6	5.4	5.0	5.1	4.6	4.2	3.5	5.9	2.4	3.9
25	3.0	2.5	2.3	2.3	2.1	1.8	1.4	1.5	1.6	2.5	3.4	3.7	3.6	2.5	2.1	3.5	4.6	3.8	3.9	3.9	3.6	3.4	3.1	2.9	4.6	1.4	2.9
26	2.5	2.3	1.7	1.4	1.2	1.1	1.3	1.4	1.7	2.1	2.6	2.9	3.5	4.3	5.3	4.0	4.6	5.1	4.1	4.7	5.3	4.6	3.9	4.1	5.3	1.1	3.2
27	3.7	3.7	3.7	3.8	2.1	1.9	2.0	1.9	2.8	3.6	4.8	5.5	6.3	7.0	8.0	8.9	9.5	9.8	10.2	10.2	9.9	9.0	7.4	6.8	10.2	1.9	5.9
28	6.0	5.7	4.9	5.1	4.6	5.7	5.8	5.2	5.4	6.3	7.0	7.6	8.6	9.1	9.6	10.4	11.1	11.5	11.4	11.1	10.4	9.9	9.1	8.0	11.5	4.6	7.9
29	7.4	7.5	6.6	6.4	5.6	5.0	4.9	5.1	6.0	7.0	8.1	9.3	9.9	10.2	10.8	11.7	12.1	12.3	12.6	12.8	12.5	11.7	10.8	9.6	12.8	4.9	9.0
30	8.4	7.6	8.7	8.7	9.0	8.7	8.9	8.7	8.7	9.6	10.0	10.4	11.1	11.3	11.9	11.8	11.1	10.1	9.6	8.2	7.0	6.7	6.2	5.7	11.9	5.7	9.1
31	5.4	5.3	5.0	4.9	4.7	4.6	4.5	4.4	4.4	4.7	5.2	5.6	6.2	6.5	6.7	6.5	6.5	6.2	5.6	4.9	4.4	4.1	3.8	3.6	6.7	3.6	5.1
Max.	**8.9**	**8.1**	**8.7**	**8.7**	**9.0**	**8.7**	**8.9**	**8.7**	**8.7**	**9.6**	**10.0**	**10.4**	**11.1**	**11.3**	**11.9**	**11.8**	**12.1**	**12.3**	**12.6**	**12.8**	**12.5**	**11.7**	**10.8**	**9.6**	**12.8**		
Min.	**-2.9**	**-3.0**	**-3.2**	**-3.7**	**-3.9**	**-4.1**	**-4.5**	**-4.7**	**-4.7**	**-4.5**	**-3.8**	**-2.6**	**-1.2**	**-0.1**	**0.4**	**1.1**	**1.3**	**1.2**	**1.4**	**1.3**	**1.4**	**0.6**	**1.0**	**0.8**		**-4.7**	
Avg.	**3.0**	**2.7**	**2.5**	**2.4**	**2.1**	**2.0**	**2.0**	**2.0**	**2.3**	**2.7**	**3.2**	**3.8**	**4.3**	**4.7**	**5.0**	**5.2**	**5.4**	**5.4**	**5.3**	**5.1**	**4.7**	**4.2**	**3.8**	**3.5**			**3.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.4	3.2	3.3	4.2	4.7	4.6	4.7	4.9	4.8	5.1	6.1	6.9	7.0	6.9	7.4	7.5	7.2	6.3	6.1	5.7	5.5	4.9	4.7	3.9	7.5	3.2	5.4
2	4.3	5.1	5.1	5.3	5.2	5.0	5.2	5.5	6.3	6.6	7.1	7.4	8.1	8.9	9.2	9.3	9.8	9.0	9.0	8.9	9.0	8.6	7.7	7.0	9.8	4.3	7.2
3	6.7	6.4	6.1	5.9	5.8	5.7	6.3	5.9	6.1	6.2	7.5	8.3	8.7	9.6	9.4	8.1	8.3	8.8	8.2	7.7	6.1	5.4	4.5	4.1	9.6	4.1	6.9
4	3.7	3.5	3.2	3.0	2.7	2.9	2.9	3.1	3.7	4.5	5.7	5.8	6.4	7.0	7.4	8.0	8.3	8.0	8.2	8.0	7.5	6.8	5.6	4.3	8.3	2.7	5.4
5	3.5	3.0	2.8	2.7	3.0	3.1	3.3	3.6	3.7	4.5	4.3	4.0	4.2	4.8	5.4	5.5	5.5	5.2	5.0	5.0	4.7	4.4	4.3	4.6	5.5	2.7	4.2
6	4.3	3.9	4.2	4.2	4.1	4.2	4.3	4.0	4.2	4.9	5.9	7.3	8.6	9.9	10.8	11.3	12.5	11.4	11.2	11.0	10.7	11.2	10.1	8.8	12.5	3.9	7.6
7	8.0	7.3	7.3	6.6	6.3	5.9	6.7	7.4	8.1	9.2	10.4	11.0	11.8	11.9	13.2	13.0	13.3	13.7	13.7	13.5	12.3	11.2	9.0	7.1	13.7	5.9	9.9
8	5.5	4.8	4.4	2.8	2.7	2.8	3.1	2.8	4.0	4.8	5.4	6.3	6.9	6.9	7.3	7.7	7.9	7.7	7.5	7.0	7.1	6.5	4.9	3.4	7.9	2.7	5.4
9	2.6	2.4	2.0	1.4	1.0	0.9	0.8	0.8	0.9	1.2	1.8	2.9	3.1	3.5	3.9	4.2	5.2	5.7	5.6	5.2	5.2	5.1	4.2	3.9	5.7	0.8	3.1
10	3.4	2.5	2.0	1.6	1.4	1.2	1.0	1.2	1.5	1.7	2.3	2.8	4.2	5.2	5.5	5.8	6.2	6.6	6.1	5.9	5.5	5.2	5.0	5.0	6.6	1.0	3.7
11	4.9	4.3	4.1	3.9	3.8	3.7	3.1	2.9	3.0	3.5	4.1	4.6	4.8	4.5	4.5	4.9	5.0	5.2	5.5	5.6	5.5	4.9	4.4	3.9	5.6	2.9	4.4
12	3.0	2.3	2.0	1.9	1.6	1.6	1.4	1.2	1.4	2.0	3.1	4.0	4.2	4.9	4.9	4.7	4.6	4.0	3.7	3.6	3.2	3.0	2.6	2.4	4.9	1.2	3.0
13	2.3	2.2	2.3	2.4	2.9	3.3	3.8	3.3	4.3	5.0	5.4	6.3	7.5	9.0	9.6	10.1	10.4	11.2	11.3	11.6	11.6	11.2	10.7	10.5	11.6	2.2	7.0
14	9.3	7.4	6.4	5.0	4.8	4.1	3.9	3.6	3.8	4.6	5.2	6.3	9.0	10.1	10.6	11.3	11.7	12.1	12.2	10.8	9.2	9.2	8.9	8.4	12.2	3.6	7.8
15	7.9	6.5	6.5	4.8	3.6	3.6	4.2	3.1	2.7	3.7	4.2	4.9	6.4	7.3	8.1	9.0	9.0	8.6	10.0	9.8	8.8	7.7	7.2	6.7	10.0	2.7	6.4
16	6.1	5.7	5.3	5.3	5.1	5.1	5.6	6.2	6.6	7.3	8.6	9.5	9.8	9.8	11.1	11.7	11.9	12.3	12.4	12.8	12.5	12.2	12.0	11.7	12.8	5.1	9.0
17	11.8	11.5	11.2	11.1	10.7	10.7	10.8	10.1	10.9	12.0	11.6	12.3	13.8	14.7	15.4	16.0	16.4	16.7	16.7	16.1	15.2	13.7	12.0	10.3	16.7	10.1	13.0
18	9.5	9.6	9.0	8.8	9.0	7.4	6.9	6.9	7.5	8.0	9.5	10.6	11.4	11.9	12.3	12.9	13.4	13.6	13.5	13.6	13.3	12.9	11.8	10.6	13.6	6.9	10.6
19	9.8	9.1	9.0	8.7	7.6	6.9	6.7	6.6	7.7	8.7	9.5	10.2	10.9	11.4	12.2	11.9	12.3	13.0	13.5	13.5	13.0	12.5	11.8	10.5	13.5	6.6	10.3
20	9.1	8.6	8.2	7.7	7.3	7.6	6.3	6.4	7.2	7.3	7.5	9.7	10.5	11.5	12.3	12.0	12.0	11.7	11.2	10.3	9.3	8.8	7.7	6.6	12.3	6.3	9.0
21	6.1	5.3	5.1	5.2	5.8	6.0	6.3	6.7	7.3	7.9	8.5	9.0	9.8	10.3	10.6	11.5	12.2	12.8	13.0	12.4	11.8	10.6	9.6	9.1	13.0	5.1	8.9
22	8.6	8.4	8.2	8.0	7.9	7.7	7.2	7.5	7.8	8.1	9.0	9.4	10.0	10.5	10.9	10.8	10.2	9.9	9.7	9.2	8.2	7.5	6.8	6.5	10.9	6.5	8.7
23	6.4	6.1	6.0	5.9	5.4	5.1	5.3	5.8	6.7	7.1	7.6	8.2	8.9	9.0	9.5	10.1	10.7	11.1	11.4	11.1	10.5	9.5	8.3	6.9	11.4	5.1	8.0
24	6.1	5.7	5.4	5.4	5.2	4.9	5.0	5.6	6.5	7.0	7.7	7.9	8.1	8.0	8.1	8.2	8.1	8.0	8.0	8.0	8.0	7.7	7.4	7.1	8.2	4.9	7.0
25	7.0	7.3	7.3	7.0	6.5	6.1	6.2	6.8	7.2	8.0	8.0	9.0	9.5	10.0	10.1	10.5	10.6	10.6	9.9	9.6	8.9	8.5	8.4	7.9	10.6	6.1	8.4
26	7.3	7.0	7.0	7.2	7.4	7.3	6.6	8.1	8.2	8.5	9.6	10.2	10.3	9.0	9.2	9.8	10.4	10.7	10.8	10.8	10.9	10.8	10.0	9.3	10.9	6.6	9.0
27	7.7	8.1	8.0	7.0	6.9	6.9	6.9	7.3	7.5	7.7	7.9	8.6	9.2	10.1	10.5	11.0	11.0	11.2	10.7	10.2	9.5	8.6	7.6	6.7	11.2	6.7	8.6
28	6.2	5.7	5.6	5.6	5.2	5.4	5.6	5.4	6.3	6.9	6.7	7.2	8.0	8.7	10.3	9.9	9.6	10.1	10.6	10.9	10.6	9.0	8.3	7.7	10.9	5.2	7.7
29	7.1	6.8	6.6	6.1	6.0	6.1	6.1	6.0	6.2	6.9	7.9	8.5	9.2	9.6	10.2	10.7	10.8	10.7	10.7	10.1	8.9	7.9	7.2	6.5	10.8	6.0	8.0
30	6.0	5.9	5.9	5.7	5.5	5.5	5.4	5.5	6.6	7.6	8.4	9.2	9.7	10.4	11.0	11.3	11.3	11.7	12.0	12.3	11.4	11.3	11.1	10.8	12.3	5.4	8.8
Max.	**11.8**	**11.5**	**11.2**	**11.1**	**10.7**	**10.7**	**10.8**	**10.1**	**10.9**	**12.0**	**11.6**	**12.3**	**13.8**	**14.7**	**15.4**	**16.0**	**16.4**	**16.7**	**16.7**	**16.1**	**15.2**	**13.7**	**12.0**	**11.7**	**16.7**		
Min.	**2.3**	**2.2**	**2.0**	**1.4**	**1.0**	**0.9**	**0.8**	**0.8**	**0.9**	**1.2**	**1.8**	**2.8**	**3.1**	**3.5**	**3.9**	**4.2**	**4.6**	**4.0**	**3.7**	**3.6**	**3.2**	**3.0**	**2.6**	**2.4**		**0.8**	
Avg.	**6.3**	**5.9**	**5.7**	**5.4**	**5.2**	**5.0**	**5.1**	**5.1**	**5.6**	**6.2**	**6.9**	**7.6**	**8.3**	**8.8**	**9.4**	**9.6**	**9.9**	**9.9**	**9.9**	**9.7**	**9.1**	**8.6**	**7.8**	**7.1**			**7.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.8	10.6	10.3	9.2	8.8	8.8	8.0	7.4	9.0	9.8	10.9	11.4	11.9	12.7	13.1	13.3	13.2	12.5	11.9	11.4	10.5	9.7	9.2	8.7	13.3	7.4	10.6
2	8.0	7.6	6.9	6.7	6.7	6.4	6.2	6.3	6.7	7.2	8.3	9.3	10.0	10.7	11.3	12.3	11.4	12.1	11.0	9.4	9.6	9.4	8.7	8.0	12.3	6.2	8.8
3	8.1	7.3	7.8	8.7	9.6	8.9	9.1	8.6	8.9	7.4	6.8	7.5	8.3	9.0	9.7	10.6	10.2	9.1	9.0	8.9	8.8	9.1	8.3	7.5	10.6	6.8	8.6
4	7.5	7.5	7.4	7.7	8.7	9.0	9.0	8.8	8.8	9.5	10.2	10.8	11.3	12.1	12.3	11.9	12.4	12.2	9.8	8.9	8.9	8.8	8.7	8.5	12.4	7.4	9.6
5	8.4	8.2	9.1	10.9	10.9	10.5	10.2	9.9	9.9	11.2	12.4	13.5	14.6	15.8	15.4	14.1	13.4	13.9	13.9	14.4	14.3	13.6	13.3	13.0	15.8	8.2	12.3
6	12.3	11.2	11.2	10.9	10.9	11.4	11.1	11.8	12.3	14.3	15.2	15.0	16.3	14.4	13.2	13.1	12.8	12.4	11.6	11.4	10.8	10.5	10.1	9.5	16.3	9.5	12.2
7	9.0	8.8	8.5	8.3	8.3	8.3	8.3	8.3	7.0	7.3	7.4	7.1	7.1	7.3	7.1	7.3	7.4	7.9	8.3	8.7	8.6	8.5	8.1	7.7	9.0	7.0	7.9
8	7.5	7.2	7.2	7.3	7.3	7.1	6.3	6.6	6.9	7.0	7.5	7.8	7.8	8.1	9.0	9.6	9.8	9.7	9.7	9.7	9.3	9.2	9.0	8.9	9.8	6.3	8.2
9	8.9	9.3	9.4	9.8	10.0	10.2	10.1	10.1	10.3	10.4	10.3	11.5	12.3	12.9	13.8	14.2	14.0	13.0	12.0	11.5	10.8	10.4	10.0	9.5	14.2	8.9	11.0
10	9.1	8.6	8.4	8.2	8.3	8.2	7.9	7.9	8.5	9.1	9.7	10.2	10.6	11.9	12.6	12.8	13.1	13.1	12.8	12.3	11.2	10.6	9.4	8.5	13.1	7.9	10.1
11	8.0	7.5	7.3	7.2	7.1	6.9	6.8	6.8	6.9	8.0	8.5	8.8	9.6	10.4	11.0	11.7	12.0	12.0	11.8	11.7	11.1	10.2	9.3	8.6	12.0	6.8	9.1
12	7.9	7.4	7.3	7.5	6.9	6.5	6.4	6.8	8.3	9.2	9.7	9.9	10.0	10.4	10.6	10.4	10.2	10.0	8.8	8.0	7.8	7.6	7.3	7.3	10.6	6.4	8.4
13	7.5	7.5	7.4	7.2	7.2	7.1	7.0	7.0	7.1	7.2	7.5	7.7	8.3	8.8	9.3	9.4	9.4	9.4	9.4	9.3	9.2	9.1	8.8	8.3	9.4	7.0	8.2
14	8.1	8.0	8.0	8.2	8.1	8.0	8.0	8.2	8.5	8.6	9.5	10.2	10.9	11.8	12.9	13.3	13.8	14.4	14.4	14.0	13.5	12.9	12.0	11.2	14.4	8.0	10.7
15	10.2	10.1	9.8	9.6	9.6	9.3	8.9	8.7	9.2	10.1	11.1	11.5	12.2	13.2	13.7	14.1	13.6	12.8	11.9	11.2	10.5	10.0	9.8	10.1	14.1	8.7	10.9
16	10.2	10.1	10.0	9.7	9.4	9.4	9.1	9.3	9.4	9.2	8.7	8.4	8.9	9.6	10.0	9.7	8.8	8.3	8.3	8.0	7.8	7.8	7.7	7.6	10.2	7.6	9.0
17	7.5	7.5	6.1	4.9	3.9	3.7	3.7	4.0	4.2	4.6	4.3	4.7	5.6	6.1	6.6	6.9	7.5	8.2	8.0	7.7	7.2	6.8	6.3	5.9	8.2	3.7	5.9
18	5.6	5.2	4.5	4.3	4.2	3.9	3.9	4.0	4.1	4.5	5.2	5.9	6.4	6.7	6.3	6.4	7.2	7.0	7.4	7.2	7.2	7.6	7.8	7.8	7.8	3.9	5.9
19	7.7	7.5	7.4	6.9	6.5	7.1	7.2	7.3	7.7	8.0	8.8	10.0	10.4	11.0	12.2	12.1	11.6	11.6	11.6	10.8	10.6	10.4	10.2	9.6	12.2	6.5	9.3
20	9.3	9.9	9.5	9.1	9.3	9.2	8.9	8.7	8.3	7.9	6.8	6.4	6.5	6.5	6.3	6.4	6.2	5.8	5.5	5.4	5.4	5.5	5.6	5.6	9.9	5.4	7.3
21	5.7	5.4	5.2	5.0	5.0	5.0	5.1	5.2	5.3	5.5	5.8	6.3	7.0	7.9	8.6	8.8	10.0	10.5	10.4	9.7	10.3	8.8	8.2	7.5	10.5	5.0	7.2
22	6.7	6.4	6.1	5.6	5.3	5.4	5.7	5.5	5.5	6.1	6.5	6.3	6.0	6.1	5.9	6.3	6.3	5.9	6.2	6.2	6.1	6.0	5.9	5.7	6.7	5.3	6.0
23	5.7	5.6	5.6	5.6	5.6	5.6	5.5	5.7	6.1	6.0	6.1	6.5	7.2	7.4	7.5	8.5	9.3	9.5	9.4	8.3	7.0	6.3	5.8	5.5	9.5	5.5	6.7
24	5.3	5.5	5.9	5.8	5.3	5.4	5.7	6.1	6.8	7.3	8.0	8.4	9.4	10.2	11.4	12.2	13.5	14.4	12.9	14.0	13.0	13.5	14.4	13.7	14.4	5.3	9.5
25	12.5	11.4	10.7	9.8	9.3	9.2	8.8	9.0	9.9	10.8	12.1	13.4	14.6	15.6	16.7	17.3	17.8	18.0	18.2	18.5	18.1	17.4	16.5	15.9	18.5	8.8	13.8
26	14.1	12.7	12.6	11.3	8.0	7.7	7.5	7.2	7.1	7.3	7.4	7.2	7.3	7.5	8.2	9.4	9.6	10.2	10.4	10.4	10.0	9.2	8.4	8.1	14.1	7.1	9.1
27	7.6	7.4	7.3	7.1	7.0	7.0	7.0	6.9	6.8	6.8	7.0	7.5	7.8	8.6	9.0	8.7	8.8	8.9	9.4	8.9	8.9	8.4	8.1	8.1	9.4	6.8	7.9
28	8.0	8.0	8.2	8.2	8.7	8.7	9.0	9.6	10.4	11.2	11.8	12.7	13.2	13.9	14.1	14.6	15.3	15.1	15.4	15.3	15.2	14.8	13.8	13.1	15.4	8.0	12.0
29	12.1	11.3	10.7	10.2	9.2	9.4	9.2	9.0	9.0	10.2	11.7	12.9	13.7	14.7	15.8	17.0	17.7	17.9	17.5	17.7	17.1	16.1	14.2	12.2	17.9	9.0	13.2
30	11.1	10.7	10.7	10.9	11.0	11.1	10.8	10.8	10.6	11.4	12.2	12.9	14.2	15.3	16.0	16.6	16.2	16.0	15.2	14.6	14.1	13.3	12.0	10.8	16.6	10.6	12.8
31	9.8	10.5	10.2	9.5	8.8	8.6	8.7	9.3	9.9	11.1	13.3	14.9	16.0	17.4	18.1	18.5	18.9	19.2	19.4	19.3	19.0	17.5	14.5	12.7	19.4	8.6	14.0
Max.	**14.1**	**12.7**	**12.6**	**11.3**	**11.0**	**11.4**	**11.1**	**11.8**	**12.3**	**14.3**	**15.2**	**15.0**	**16.3**	**17.4**	**18.1**	**18.5**	**18.9**	**19.2**	**19.4**	**19.3**	**19.0**	**17.5**	**16.5**	**15.9**	**19.4**		
Min.	**5.3**	**5.2**	**4.5**	**4.3**	**3.9**	**3.7**	**3.7**	**4.0**	**4.1**	**4.5**	**4.3**	**4.7**	**5.6**	**6.1**	**5.9**	**6.3**	**6.2**	**5.8**	**5.5**	**5.4**	**5.4**	**5.5**	**5.6**	**5.5**		**3.7**	
Avg.	**8.7**	**8.5**	**8.3**	**8.1**	**7.9**	**7.8**	**7.7**	**7.8**	**8.0**	**8.5**	**9.1**	**9.6**	**10.2**	**10.8**	**11.2**	**11.5**	**11.7**	**11.6**	**11.3**	**11.1**	**10.7**	**10.3**	**9.7**	**9.2**			**9.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.5	10.7	12.3	12.6	12.2	11.7	8.2	9.4	7.7	8.0	8.7	9.0	9.6	11.1	13.3	14.1	14.0	14.6	15.0	14.4	13.4	12.3	10.6	9.7	15.0	7.7	11.5
2	8.9	8.5	8.3	8.4	8.4	8.4	8.5	8.7	8.7	8.9	9.1	9.3	10.0	10.5	10.6	11.1	11.3	11.0	10.4	10.4	10.6	10.3	10.4	10.4	11.3	8.3	9.6
3	10.8	10.8	10.3	10.5	10.3	9.7	8.9	8.8	9.1	10.0	11.3	11.4	11.5	11.9	12.8	13.5	13.9	13.6	13.1	12.8	12.0	10.7	9.5	8.8	13.9	8.8	11.1
4	8.2	7.9	7.8	7.8	7.6	7.8	7.9	8.1	8.3	8.7	9.4	9.9	10.2	10.6	11.5	11.6	11.9	12.6	12.5	11.7	10.3	9.1	8.6	8.4	12.6	7.6	9.5
5	8.0	7.9	8.1	7.8	8.2	8.2	8.3	8.6	8.9	9.5	10.4	12.5	13.4	13.7	14.2	14.4	15.0	15.2	15.1	15.0	14.4	13.5	11.7	10.4	15.2	7.8	11.3
6	10.0	9.9	9.2	9.2	9.7	9.4	8.6	8.1	8.8	9.5	11.1	12.3	13.5	14.4	14.9	15.2	15.8	15.5	15.0	14.4	14.1	13.6	12.7	11.3	15.8	8.1	11.9
7	10.2	10.5	9.8	9.9	9.6	8.8	8.3	8.6	8.6	10.0	10.6	11.4	12.3	13.3	14.0	14.3	14.3	14.7	14.9	14.6	14.2	13.3	12.3	11.2	14.9	8.3	11.6
8	11.2	10.3	9.3	9.5	9.0	7.7	7.1	7.7	8.4	9.1	10.5	11.5	12.7	13.8	14.6	15.5	15.9	16.4	16.6	16.5	16.3	15.0	13.5	12.1	16.6	7.1	12.1
9	12.0	10.8	9.9	9.5	9.9	9.8	9.8	8.6	9.7	10.5	11.2	12.5	14.0	14.8	15.4	16.3	16.8	16.4	16.6	16.4	15.8	14.8	13.2	12.0	16.8	8.6	12.8
10	11.5	11.8	12.3	12.3	9.4	8.1	7.9	7.5	8.0	9.4	10.5	11.8	13.1	14.6	15.2	15.7	16.0	15.7	14.2	13.3	12.6	10.8	9.9	9.1	16.0	7.5	11.7
11	8.3	8.1	8.0	7.9	7.8	8.2	8.1	8.3	9.0	9.3	10.0	10.7	11.7	12.0	11.7	12.3	12.6	12.6	12.6	12.0	11.1	10.8	10.4	10.5	12.6	7.8	10.2
12	10.7	10.3	9.7	8.6	9.0	8.5	8.0	8.7	9.6	11.1	12.1	12.9	13.9	14.9	15.8	16.1	16.3	14.2	13.3	13.2	13.1	13.1	12.5	12.2	16.3	8.0	12.0
13	11.7	11.0	10.9	10.4	10.2	10.9	10.7	10.1	10.3	10.2	10.9	11.7	12.2	12.7	13.4	12.9	12.6	12.2	10.2	10.5	10.4	9.9	10.1	10.3	13.4	9.9	11.1
14	10.2	9.9	10.1	10.1	9.9	10.1	9.9	9.9	9.9	10.2	9.9	9.9	10.0	10.2	10.5	11.3	11.4	11.3	11.0	10.8	10.3	10.1	10.2	9.1	11.4	9.1	10.3
15	8.3	7.6	7.0	6.8	7.2	7.2	6.5	5.9	5.8	6.1	6.6	7.2	8.1	8.8	9.1	9.5	9.8	10.1	9.7	9.3	9.0	9.1	9.2	9.1	10.1	5.8	8.0
16	9.2	9.3	9.2	9.1	9.0	9.1	8.9	8.8	8.7	8.8	9.1	9.4	10.0	11.1	11.4	11.7	11.7	11.4	11.0	10.6	10.0	9.0	8.3	8.2	11.7	8.2	9.7
17	7.9	7.8	7.7	7.5	7.6	7.6	7.7	7.6	8.0	8.7	9.2	9.7	10.0	10.3	10.6	10.6	10.7	10.3	9.9	9.7	9.4	8.8	8.6	8.3	10.7	7.5	8.9
18	8.0	7.8	7.9	7.9	7.5	7.1	6.8	6.3	7.3	8.6	10.2	11.3	11.7	12.0	12.3	12.6	12.6	12.7	13.0	12.5	11.9	11.2	11.0	11.0	13.0	6.3	10.0
19	10.4	10.8	11.1	10.4	9.6	9.4	9.1	9.1	9.3	9.2	9.3	10.3	11.6	12.8	14.0	14.8	14.7	14.8	14.6	14.2	11.6	11.2	10.9	11.2	14.8	9.1	11.4
20	10.7	10.1	10.2	9.6	9.8	9.6	9.5	9.6	9.7	9.8	10.8	10.2	10.8	11.6	12.3	12.2	12.8	13.5	13.3	13.2	12.7	11.6	10.9	10.6	13.5	9.5	11.0
21	10.9	10.8	10.8	10.6	10.5	10.3	9.3	9.3	9.5	9.7	9.6	9.7	9.8	9.9	10.0	10.6	11.4	12.2	12.4	11.8	10.6	9.6	8.8	8.3	12.4	8.3	10.3
22	8.1	8.0	7.8	7.6	7.6	7.5	7.7	8.0	8.3	8.4	8.6	9.0	9.8	10.6	10.9	10.9	11.3	11.3	12.0	12.2	12.0	11.3	10.5	9.9	12.2	7.5	9.6
23	9.7	9.6	9.2	9.0	8.8	9.1	9.5	9.1	9.9	11.1	11.5	12.2	12.9	13.9	14.8	15.7	14.9	13.7	12.7	11.8	10.9	10.5	10.4	10.1	15.7	8.8	11.3
24	10.0	9.8	9.7	9.6	9.6	9.5	9.3	8.9	8.7	9.0	8.8	9.8	10.7	11.6	12.5	13.4	14.1	15.0	15.0	13.8	13.8	13.6	12.9	13.0	15.0	8.7	11.3
25	12.4	11.7	11.4	9.3	6.7	7.8	7.9	7.7	7.5	7.5	7.7	8.1	8.3	8.1	9.0	9.7	11.2	12.1	11.9	11.6	10.5	9.6	9.0	8.8	12.4	6.7	9.4
26	8.7	8.6	8.8	8.9	9.0	9.0	8.9	8.9	8.8	8.8	9.1	9.1	9.4	10.1	10.8	11.2	11.3	11.5	11.3	11.0	10.3	9.6	9.4	8.8	11.5	8.6	9.6
27	8.7	8.7	8.6	8.6	8.5	8.5	7.7	7.1	7.1	6.9	6.9	7.3	8.0	8.8	9.4	9.8	10.4	10.8	10.7	10.8	10.4	9.7	9.4	9.2	10.8	6.9	8.8
28	9.2	9.1	8.6	8.4	8.5	8.6	9.0	8.8	8.3	8.6	8.7	9.1	9.6	10.8	11.6	11.9	12.8	12.0	11.7	10.9	10.9	10.1	8.5	7.8	12.8	7.8	9.7
29	7.9	7.3	6.9	6.8	6.5	6.1	6.2	6.2	6.9	8.3	9.6	11.1	11.8	12.3	12.4	11.9	11.4	12.6	12.0	11.2	10.2	9.1	8.3	7.8	12.6	6.1	9.2
30	7.3	7.6	7.6	7.5	7.2	7.7	7.2	7.0	6.8	7.2	7.9	8.8	9.3	9.8	10.7	11.7	12.2	12.3	12.2	11.5	10.2	9.8	9.8	9.7	12.3	6.8	9.1
31	9.2	8.7	8.7	8.9	8.5	8.2	7.9	7.8	7.9	8.3	9.0	9.5	9.9	10.5	10.7	10.3	10.8	11.2	11.3	11.4	11.2	10.3	10.2	10.6	11.4	7.8	9.6
Max.	**12.5**	**11.8**	**12.3**	**12.6**	**12.2**	**11.7**	**10.7**	**10.1**	**10.3**	**11.1**	**12.1**	**12.9**	**14.0**	**14.9**	**15.8**	**16.3**	**16.8**	**16.4**	**16.6**	**16.5**	**16.3**	**15.0**	**13.5**	**13.0**	**16.8**		
Min.	**7.3**	**7.3**	**6.9**	**6.8**	**6.5**	**6.1**	**6.2**	**5.9**	**5.8**	**6.1**	**6.6**	**7.2**	**8.0**	**8.1**	**9.0**	**9.5**	**9.8**	**10.1**	**9.7**	**9.3**	**9.0**	**8.8**	**8.3**	**7.8**		**5.8**	
Avg.	**9.7**	**9.4**	**9.3**	**9.1**	**8.8**	**8.7**	**8.4**	**8.3**	**8.5**	**9.0**	**9.6**	**10.3**	**11.0**	**11.7**	**12.3**	**12.7**	**13.0**	**13.0**	**12.7**	**12.4**	**11.8**	**11.0**	**10.4**	**9.9**			**10.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.2	9.8	9.8	9.8	10.2	9.9	10.0	9.8	9.7	10.3	11.1	11.5	10.9	10.8	12.0	11.6	10.6	10.4	10.2	10.1	9.2	8.3	8.1	8.0	12.0	8.0	10.1
2	8.0	8.1	8.1	7.9	7.7	7.8	8.0	7.7	7.8	7.6	7.8	7.7	8.0	8.5	8.9	9.3	9.3	9.3	9.6	9.4	9.0	8.3	8.1	7.8	9.6	7.6	8.3
3	7.4	7.2	6.9	6.6	6.5	6.4	6.3	6.4	6.5	6.8	7.5	8.1	8.0	7.5	8.0	8.6	9.1	9.4	9.6	9.0	8.1	7.6	8.2	8.1	9.6	6.3	7.7
4	7.9	7.7	7.4	7.2	7.0	6.9	7.0	6.9	6.8	7.0	7.2	8.1	8.8	9.1	9.5	9.6	10.0	10.4	10.7	10.8	10.2	9.9	9.7	9.7	10.8	6.8	8.6
5	9.3	8.8	8.9	8.3	8.6	8.2	7.6	7.5	7.5	8.2	8.4	8.9	9.5	10.6	11.4	11.8	12.3	11.2	10.0	9.8	9.3	9.2	9.2	8.7	12.3	7.5	9.3
6	8.0	8.0	6.9	6.7	6.9	7.0	7.3	7.7	7.8	8.3	8.7	8.8	8.5	8.1	8.0	8.2	8.3	8.6	8.8	8.5	8.7	8.7	8.6	8.6	8.8	6.7	8.1
7	8.6	8.7	9.6	9.7	9.8	9.8	9.4	9.2	9.6	9.7	9.0	7.8	7.9	8.0	8.0	8.1	8.6	8.9	8.5	7.9	7.7	7.8	7.9	7.9	9.8	7.7	8.7
8	7.9	7.9	7.9	8.0	7.9	7.7	7.5	7.4	7.4	7.6	8.0	8.7	9.2	9.3	9.0	8.9	8.6	7.9	7.4	7.3	7.9	8.3	8.5	8.5	9.3	7.3	8.1
9	8.7	8.4	8.0	7.9	7.4	8.0	8.2	8.1	7.9	8.2	8.4	8.6	8.6	8.8	8.8	9.0	9.0	8.5	8.7	8.8	8.3	8.2	8.3	8.0	9.0	7.4	8.4
10	8.0	7.8	7.7	7.6	7.6	7.6	7.6	7.5	7.4	7.5	7.6	8.1	8.5	9.2	9.4	9.6	10.0	10.5	9.7	9.8	9.2	9.2	8.9	8.7	10.5	7.4	8.5
11	7.7	7.2	7.0	6.6	6.4	6.5	6.5	6.6	6.8	7.0	7.2	7.4	7.6	7.6	8.0	9.3	9.9	10.2	10.2	10.0	9.5	8.7	8.5	8.3	10.2	6.4	7.9
12	8.1	8.0	8.3	8.0	7.6	7.0	6.6	6.3	6.4	6.8	7.3	8.0	8.7	9.2	8.6	8.7	8.6	8.2	8.5	8.4	8.3	8.2	8.3	8.4	9.2	6.3	7.9
13	8.4	8.4	8.4	8.3	8.1	7.9	7.8	7.9	7.9	7.9	8.0	7.5	7.5	7.2	6.9	6.6	6.9	6.9	6.8	6.7	6.7	7.1	7.3	7.1	8.4	6.6	7.5
14	7.1	7.0	6.8	7.0	6.9	6.8	6.7	6.7	6.7	6.5	6.5	6.6	7.2	7.6	7.4	8.0	8.2	8.3	8.1	7.9	7.6	7.5	7.4	7.3	8.3	6.5	7.3
15	7.4	7.4	7.6	7.6	7.4	7.2	7.5	7.3	7.4	7.6	7.8	8.3	8.7	8.7	8.9	8.6	8.6	8.6	8.3	8.0	7.6	7.4	7.1	6.7	8.9	6.7	7.8
16	6.5	6.6	6.4	6.5	6.6	6.3	6.4	6.1	6.0	5.9	6.6	8.0	8.9	9.3	8.9	9.3	8.8	8.5	8.9	8.5	8.0	8.0	7.5	6.2	9.3	5.9	7.5
17	6.2	6.6	5.6	5.4	5.3	5.2	5.2	5.0	4.7	4.5	4.9	5.6	6.6	6.8	6.8	7.1	7.2	6.8	5.7	5.4	5.0	4.9	4.9	4.9	7.2	4.5	5.7
18	5.2	5.3	5.4	5.4	5.2	5.1	5.3	5.3	4.8	4.8	5.1	6.2	6.8	7.1	7.1	6.9	7.1	6.9	6.5	6.2	6.0	5.8	5.5	5.3	7.1	4.8	5.8
19	5.1	5.2	5.3	5.0	4.8	4.7	4.7	4.9	5.1	4.9	4.8	4.9	5.1	5.7	5.8	5.5	5.6	5.8	5.9	5.4	5.2	5.2	4.7	4.5	5.9	4.5	5.2
20	4.5	4.6	4.4	4.4	4.3	4.2	4.0	2.8	2.8	2.9	3.4	3.2	3.1	3.7	4.1	4.6	5.3	5.6	5.7	5.2	3.4	2.8	2.9	3.0	5.7	2.8	4.0
21	3.5	2.8	3.4	3.7	3.6	3.5	3.6	3.2	3.5	3.3	3.7	4.7	5.5	6.1	6.0	6.4	6.4	6.0	5.7	4.7	3.6	2.8	2.3	1.7	6.4	1.7	4.2
22	1.7	1.7	1.9	1.9	1.9	2.0	2.2	2.3	2.2	2.3	3.1	4.5	5.4	5.5	5.7	5.6	4.9	4.6	4.1	3.6	3.3	3.2	3.2	3.1	5.7	1.7	3.3
23	3.4	3.7	4.1	4.5	6.1	6.3	6.2	6.1	6.1	6.1	5.9	6.0	6.0	6.1	5.4	5.7	5.7	5.6	5.5	5.4	5.0	5.1	5.1	5.2	6.3	3.4	5.4
24	5.2	5.2	5.0	4.9	4.7	4.5	4.4	4.8	4.8	4.9	5.3	5.4	5.6	5.6	5.8	6.0	6.1	6.2	6.1	5.8	5.5	5.2	5.0	4.8	6.2	4.4	5.3
25	4.9	4.5	4.1	4.5	4.6	4.6	4.9	5.3	4.4	4.3	5.4	6.8			6.1	6.1	6.2	5.8	6.1	5.9	5.5	5.6	5.3	5.2	6.8	4.1	5.3
26	5.0	4.8	4.9	5.2	4.8	4.4	4.6	4.6	4.2	4.2	5.0	6.0	7.1	8.2	8.4	7.9	7.8	7.3	7.5	7.4	6.9	6.3	5.4	4.4	8.4	4.2	5.9
27	4.2	3.5	3.3	2.8	2.3	1.4	1.3	1.1	0.9	0.8	1.1	1.9	3.3	4.6	5.5	6.1	6.5	6.7	6.5	5.6	4.6	4.0	4.1	2.8	6.7	0.8	3.5
28	2.6	2.1	1.7	2.0	1.8	2.0	2.1	1.7	2.1	2.6	2.9	4.7	6.1	7.1	7.8	8.2	7.2	7.0	6.8	6.8	6.2	5.3	5.3	5.1	8.2	1.7	4.5
29	5.1	4.6	4.2	4.0	4.0	4.2	4.2	4.2	4.2	4.1	4.7	5.3	5.5	4.4	4.4	4.4	5.1	5.5	5.3	5.0	4.6	4.2	3.9	3.7	5.5	3.7	4.5
30	3.5	3.0	2.9	2.9	1.9	1.3	1.0	1.3	1.9	1.5	2.9	3.5	3.9	4.4	4.9	4.9	5.1	4.9	4.9	4.5	3.3	2.9	3.1	3.3	5.1	1.0	3.2
Max.	**10.2**	**9.8**	**9.8**	**9.8**	**10.2**	**9.9**	**10.0**	**9.8**	**9.7**	**10.3**	**11.1**	**11.5**	**10.9**	**10.8**	**12.0**	**11.8**	**12.3**	**11.2**	**10.7**	**10.8**	**10.2**	**9.9**	**9.7**	**9.7**	**12.3**		
Min.	**1.7**	**1.7**	**1.7**	**1.9**	**1.8**	**1.3**	**1.0**	**1.1**	**0.9**	**0.8**	**1.1**	**1.9**	**3.1**	**3.7**	**4.1**	**4.4**	**4.9**	**4.6**	**4.1**	**3.6**	**3.3**	**2.8**	**2.3**	**1.7**		**0.8**	
Avg.	**6.3**	**6.2**	**6.1**	**6.0**	**5.9**	**5.8**	**5.8**	**5.7**	**5.7**	**5.8**	**6.2**	**6.7**	**7.1**	**7.4**	**7.5**	**7.7**	**7.8**	**7.7**	**7.6**	**7.3**	**6.8**	**6.5**	**6.4**	**6.2**			**6.6**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.6	3.9	3.8	3.8	3.7	3.1	2.6	2.4	2.7	3.0	2.9	3.2	4.0	4.6	5.0	5.0	4.4	4.2	4.3	4.4	4.0	3.7	3.6	3.7	5.0	2.4	3.7
2	3.2	3.2	2.6	2.5	2.5	1.9	2.4	2.2	1.8	1.2	1.8	2.4	3.5	3.5	4.0	4.3	4.2	3.6	3.6	2.9	2.2	0.2	-0.4	-1.0	4.3	-1.0	2.4
3	-1.2	-1.6	-1.9	-1.5	-1.1	-1.4	-1.2	-1.7	-2.3	-2.1	-1.7	-1.5	-1.2	-0.9	-0.7	-0.7	-0.5	-0.1	-0.3	-0.7	-1.0	-1.5	-1.2	-1.7	-0.1	-2.3	-1.2
4	-1.6	-2.1	-2.3	-2.9	-2.6	-2.5	-2.0	-2.5	-2.0	-2.4	-2.3	-0.9	0.5	1.5	2.3	2.4	2.3	1.3	1.2	0.4	-0.5	-0.7	-1.4	-1.7	2.4	-2.9	-0.8
5	-2.2	-2.4	-2.6	-2.4	-2.5	-2.6	-2.8	-3.1	-3.2	-3.2	-3.1	-3.0	-2.8	-2.5	-2.2	-2.0	-1.9	-1.8	-1.8	-2.1	-2.5	-2.8	-3.0	-3.3	-1.8	-3.3	-2.6
6	-3.3	-3.3	-3.5	-3.9	-3.9	-3.9	-3.8	-3.7	-3.7	-3.6	-3.5	-3.4	-3.2	-2.9	-2.6	-2.3	-2.0	-2.0	-2.2	-2.3	-2.4	-2.6	-2.6	-3.0	-2.0	-3.9	-3.1
7	-3.1	-3.3	-3.5	-3.5	-3.6	-3.8	-3.9	-4.1	-4.5	-4.5	-4.4	-4.3	-4.0	-3.8	-3.4	-3.2	-3.0	-3.0	-3.1	-3.1	-3.2	-3.2	-3.5	-3.9	-3.0	-4.5	-3.6
8	-3.9	-3.8	-3.7	-4.0	-4.6	-4.8	-4.9	-5.5	-5.4	-5.9	-6.2	-4.8	-4.2	-3.4	-2.9	-2.5	-2.3	-2.4	-2.8	-4.3	-4.9	-4.7	-3.3	-3.3	-2.3	-6.2	-4.1
9	-3.0	-2.7	-2.0	-1.1	-0.4	-1.1	-1.5	-1.9	-1.9	-1.3	-1.0	-0.4	0.4	1.1	1.5	1.8	2.7	3.2	3.2	3.3	3.6	4.0	4.3	4.2	4.3	-3.0	0.6
10	4.3	4.2	4.2	4.4	4.0	3.6	2.3	0.9	0.5	0.2	0.8	2.7	3.4	3.8	4.1	4.7	5.1	4.8	4.7	4.6	4.7	4.8	4.8	5.0	5.1	0.2	3.6
11	4.9	5.0	4.8	4.9	4.8	4.4	4.6	4.8	4.5	3.3	-1.1	-3.6	-4.5	-5.0	-5.4	-5.8	-6.0	-5.9	-6.1	-6.1	-6.0	-6.1	-6.1	-6.1	5.0	-6.1	-1.2
12	-5.8	-5.6	-5.4	-5.4	-5.8	-6.2	-6.6	-6.8	-7.1	-7.4	-7.6	-7.3	-6.5	-6.1	-6.0	-5.8	-5.8	-5.9	-6.0	-6.4	-6.8	-6.9	-7.1	-7.6	-5.4	-7.6	-6.4
13	-7.6	-8.5	-8.9	-9.3	-9.3	-9.4	-9.4	-10.0	-9.4	-9.8	-8.8	-8.3	-6.7	-4.0	-3.3	-2.5	-1.7	-1.9	-2.0	-2.3	-1.6	-1.4	-1.3	-1.2	-1.2	-10.0	-5.8
14	-1.0	-1.0	-1.0	-0.9	-0.9	-0.8	-0.8	-1.3	-1.5	-1.1	-0.9	-0.8	-0.6	-0.3	-0.2	0.2	0.7	0.7	0.7	0.5	0.3	0.0	-0.1	0.0	0.7	-1.5	-0.4
15	-0.2	-1.5	-2.9	-3.8	-4.4	-5.0	-5.7	-6.1	-6.3	-6.7	-6.9	-6.6	-6.2	-6.1	-6.1	-6.0	-5.7	-5.9	-6.2	-6.7	-7.1	-7.5	-8.3	-8.3	-0.2	-8.3	-5.7
16	-8.2	-7.9	-7.9	-7.6	-7.5	-7.6	-7.6	-7.9	-8.2	-8.2	-7.7	-7.8	-7.1	-6.6	-6.9	-6.6	-6.3	-6.9	-7.8	-8.2	-8.5	-9.1	-8.6	-7.7	-6.3	-9.1	-7.7
17	-7.6	-7.6	-7.4	-7.7	-8.0	-9.3	-9.6	-10.6	-10.4	-10.7	-10.2	-9.8	-9.0	-8.1	-7.5	-6.8	-5.7	-3.1	-1.7	-1.3	-0.8	-0.5	0.3	0.3	0.3	-10.7	-6.4
18	0.4	0.5	0.7	1.0	1.5	1.2	1.4	1.0	1.0	1.2	1.4	2.0	2.6	2.9	3.3	3.5	3.5	3.4	3.1	2.4	1.4	1.4	0.8	0.6	3.5	0.4	1.8
19	-0.3	-0.5	-1.2	-1.8	-2.0	-3.0	-3.8	-4.4	-5.5	-5.7	-6.1	-6.6	-6.9	-6.8	-5.5	-5.5	-6.0	-5.9	-5.5	-5.9	-6.0	-5.8	-5.7	-5.9	-0.3	-6.9	-4.7
20	-5.5	-4.8	-4.6	-4.5	-4.5	-4.6	-5.0	-5.7	-6.6	-7.2	-8.0	-7.6	-8.1	-8.0	-8.2	-8.1	-8.1	-7.7	-7.4	-7.0	-7.3	-6.7	-6.1	-6.3	-4.5	-8.2	-6.6
21	-5.7	-5.1	-4.8	-4.9	-5.2	-5.2	-5.5	-5.8	-5.9	-6.7	-6.9	-6.7	-6.8	-6.3	-6.0	-5.4	-5.7	-5.9	-6.4	-7.0	-7.8	-9.5	-10.0	-10.8	-4.8	-10.8	-6.5
22	-11.1	-11.0	-11.0	-11.3	-11.8	-12.1	-12.2	-12.4	-12.4	-12.6	-13.0	-12.9	-12.3	-11.9	-11.3	-11.0	-10.8	-11.3	-11.8	-12.2	-13.3	-13.7	-13.8	-13.0	-10.8	-13.8	-12.1
23	-12.3	-11.8	-11.7	-12.4	-12.4	-12.9	-13.8	-13.7	-13.3	-13.4	-12.9	-12.8	-12.4	-11.2	-11.0	-11.0	-11.2	-10.4	-10.0	-8.9	-9.0	-8.8	-8.8	-9.1	-8.8	-13.8	-11.5
24	-9.4	-9.3	-9.2	-9.1	-9.6	-10.6	-11.6	-12.4	-12.1	-10.7	-10.4	-9.9	-9.6	-9.7	-8.9	-8.1	-7.8	-7.9	-7.9	-8.4	-8.1	-7.7	-8.2	-8.5	-7.7	-12.4	-9.4
25	-7.7	-7.0	-6.8	-7.1	-7.4	-6.8	-6.3	-5.9	-5.4	-4.9	-4.4	-3.7	-3.3	-2.6	-2.2	-1.7	-1.6	-1.6	-1.6	-1.4	-0.8	-2.5	-3.7	-4.5	-0.8	-7.7	-4.2
26	-4.4	-4.5	-4.5	-4.8	-5.8	-6.5	-6.9	-7.2	-7.5	-7.8	-7.8	-8.3	-9.3	-9.4	-9.3	-9.8	-10.3	-10.6	-11.0	-11.4	-11.8	-12.0	-12.1	-12.5	-4.4	-12.5	-8.6
27	-12.7	-13.0	-13.9	-14.6	-14.8	-15.1	-14.7	-15.1	-15.2	-15.3	-15.2	-15.1	-14.5	-14.1	-13.2	-12.4	-12.7	-13.1	-13.4	-13.2	-13.4	-14.1	-14.4	-13.9	-12.4	-15.3	-14.0
28	-13.1	-13.0	-11.9	-12.0	-11.9	-10.2	-8.5	-7.6	-7.4	-6.8	-6.6	-6.2	-5.7	-5.5	-5.1	-4.8	-4.7	-4.7	-4.9	-4.9	-6.1	-5.7	-5.7	-6.2	-4.7	-13.1	-7.5
29	-6.1	-6.0	-5.9	-5.2	-5.2	-4.4	-3.7	-4.0	-3.6	-3.2	-3.0	-2.4	-2.0	-2.1	-1.6	-1.7	-1.5	-1.3	-1.4	-1.3	-1.4	-2.0	-2.1	-1.5	-1.3	-6.1	-3.0
30	-1.1	-1.0	-0.8	-0.6	-0.5	-0.4	-0.4	-0.2	-0.3	-0.5	-0.7	-1.0	-1.2	-1.0	-0.9	-0.6	-0.3	-0.5	-0.9	-1.1	-1.6	-1.3	-1.6	-1.6	-0.2	-1.6	-0.8
31	-1.5	-1.4	-1.5	-2.1	-3.0	-2.5	-2.0	-1.8	-2.0	-2.1	-1.9	-1.9	-1.9	-1.7	-1.7	-2.2	-2.1	-2.4	-2.9	-2.9	-2.5	-1.6	-2.3	-2.2	-1.4	-3.0	-2.1
Max.	**4.9**	**5.0**	**4.8**	**4.9**	**4.8**	**4.4**	**4.6**	**4.8**	**4.5**	**3.3**	**2.9**	**3.2**	**4.0**	**4.6**	**5.0**	**5.0**	**5.1**	**4.8**	**4.7**	**4.6**	**4.7**	**4.8**	**4.8**	**5.0**	**5.1**		
Min.	**-13.1**	**-13.0**	**-13.9**	**-14.6**	**-14.8**	**-15.1**	**-14.7**	**-15.1**	**-15.2**	**-15.3**	**-15.2**	**-15.1**	**-14.5**	**-14.1**	**-13.2**	**-12.4**	**-12.7**	**-13.1**	**-13.4**	**-13.2**	**-13.4**	**-14.1**	**-14.4**	**-13.9**		**-15.3**	
Avg.	**-4.0**	**-4.0**	**-4.0**	**-4.1**	**-4.3**	**-4.5**	**-4.5**	**-4.8**	**-4.9**	**-5.0**	**-5.0**	**-4.7**	**-4.4**	**-4.0**	**-3.6**	**-3.4**	**-3.3**	**-3.3**	**-3.4**	**-3.6**	**-3.8**	**-4.0**	**-4.1**	**-4.2**			**-4.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.5	-2.9	-2.4	-2.1	-2.0	-3.0	-2.3	-2.2	-2.4	-2.5	-2.1	-1.8	-1.5	-1.9	-1.8	-1.0	-1.1	-1.8	-2.5	-3.4	-3.4	-3.3	-2.7	-2.9	-1.0	-3.4	-2.3
2	-3.3	-3.9	-4.5	-4.9	-5.3	-5.4	-6.1	-6.2	-7.5	-10.7	-12.4	-12.9	-13.6	-13.7	-13.8	-13.9	-13.8	-13.9	-14.0	-14.1	-14.1	-14.2	-14.2	-14.3	-3.3	-14.3	-10.4
3	-14.3	-14.1	-14.1	-13.9	-13.6	-13.9	-13.8	-13.6	-13.5	-13.7	-13.8	-13.6	-13.2	-13.4	-13.2	-13.1	-12.8	-12.7	-13.2	-13.8	-13.4	-13.3	-13.1	-13.1	-12.7	-14.3	-13.5
4	-12.8	-12.9	-12.4	-12.6	-12.6	-13.2	-13.8	-14.3	-14.5	-14.8	-14.7	-14.5	-14.6	-14.1	-13.8	-13.5	-13.1	-13.1	-13.2	-13.0	-12.8	-12.7	-12.4	-12.9	-12.4	-14.8	-13.4
5	-13.1	-13.1	-13.0	-12.4	-12.7	-12.2	-11.9	-12.1	-12.1	-13.0	-11.8	-11.4	-9.3	-9.7	-9.5	-7.9	-6.5	-7.3	-7.9	-7.1	-5.8	-6.9	-6.0	-5.7	-5.7	-13.1	-9.9
6	-5.7	-5.4	-4.2	-4.2	-4.7	-4.8	-5.1	-4.2	-3.7	-3.5	-2.9	-2.9	-2.1	-2.6	-2.8	-4.2	-5.2	-5.5	-4.6	-6.2	-7.1	-7.0	-8.0	-9.9	-2.1	-9.9	-4.9
7	-11.6	-11.9	-12.6	-13.1	-13.4	-13.7	-14.3	-15.0	-15.0	-15.1	-14.9	-14.6	-14.2	-13.3	-12.6	-12.6	-11.2	-9.1	-8.5	-8.7	-6.6	-6.6	-6.6	-6.4	-6.4	-15.1	-11.7
8	-5.9	-6.2	-6.9	-5.5	-4.8	-4.6	-4.6	-4.7	-4.7	-5.0	-5.2	-5.2	-4.5	-3.8	-3.4	-3.3	-3.3	-2.8	-2.3	-2.1	-1.4	-1.2	-0.7	-1.0	-0.7	-6.9	-3.9
9	-0.6	-0.4	0.1	-0.2	0.2	0.8	1.1	1.2	1.0	1.1	0.7	0.4	0.9	1.5	1.5	1.2	1.1	0.4	-0.2	0.3	0.8	1.0	1.1	1.4	1.5	-0.6	0.7
10	1.3	1.3	1.2	1.4	1.0	0.7	0.4	0.4	1.1	1.3	0.8	-0.3	0.0	-0.1	-0.3	-0.4	-0.4	-1.0	-1.3	-1.2	-0.6	-0.5	-0.8	-0.9	1.4	-1.3	0.1
11	-0.9	-1.0	-1.1	-1.1	-1.2	-1.2	-1.1	-1.4	-1.4	-1.3	-1.4	-1.6	-1.8	-1.6	-1.7	-1.9	-1.8	-2.1	-3.4	-3.9	-4.3	-4.3	-4.5	-4.2	-0.9	-4.5	-2.1
12	-3.8	-3.8	-4.6	-4.9	-6.0	-6.3	-6.4	-6.4	-6.2	-5.9	-6.3	-6.4	-6.8	-7.0	-7.2	-6.8	-6.8	-6.2	-5.2	-5.0	-4.7	-4.9	-4.5	-4.0	-3.8	-7.2	-5.7
13	-3.9	-3.4	-3.4	-3.5	-3.9	-3.8	-3.4	-3.3	-3.1	-3.1	-2.7	-2.3	-2.0	-2.6	-2.5	-2.4	-2.0	-2.1	-2.6	-2.8	-2.7	-2.5	-2.5	-2.4	-2.0	-3.9	-2.9
14	-2.4	-2.1	-2.2	-2.2	-2.3	-2.5	-2.5	-2.6	-2.5	-2.5	-2.5	-2.5	-2.7	-3.2	-3.3	-3.4	-3.6	-3.8	-4.1	-3.9	-3.8	-3.9	-3.8	-3.4	-2.1	-4.1	-3.0
15	-3.5	-3.8	-4.2	-4.5	-4.5	-4.5	-4.4	-3.8	-4.0	-3.8	-4.2	-4.0	-3.6	-3.2	-3.0	-2.6	-2.2	-1.7	-1.4	-1.5	-1.6	-1.5	-1.1	-1.0	-1.0	-4.5	-3.1
16	-1.1	-1.2	-1.3	-1.4	-1.5	-1.6	-1.6	-1.8	-2.7	-2.6	-2.6	-2.2	-1.8	-1.7	-1.4	-2.2	-2.8	-2.4	-3.0	-3.7	-4.1	-3.7	-3.8	-4.1	-1.1	-4.1	-2.3
17	-4.2	-4.3	-5.2	-5.6	-6.0	-5.9	-5.3	-6.6	-5.4	-5.8	-6.3	-6.2	-6.7	-6.1	-6.6	-7.2	-5.9	-7.3	-7.2	-7.1	-7.5	-8.1	-8.2	-8.1	-4.2	-8.2	-6.4
18	-9.0	-10.8	-11.4	-11.8	-12.0	-12.2	-12.8	-13.0	-12.9	-13.0	-13.0	-12.7	-13.2	-12.9	-12.6	-12.5	-12.9	-13.4	-14.0	-14.3	-14.8	-15.1	-15.2	-15.2	-9.0	-15.2	-12.9
19	-15.3	-15.4	-15.9	-16.0	-16.6	-16.6	-16.5	-16.5	-16.6	-16.6	-16.2	-15.6	-14.3	-13.9	-14.1	-14.1	-13.5	-14.0	-13.8	-12.7	-13.9	-13.4	-13.6	-14.5	-12.7	-16.6	-15.0
20	-15.9	-16.1	-15.7	-16.4	-17.7	-18.2	-18.5	-19.2	-19.5	-19.8	-20.9	-21.4	-21.6	-21.8	-21.7	-21.7	-22.0	-22.3	-22.4	-22.6	-22.8	-23.3	-23.6	-23.8	-15.7	-23.8	-20.4
21	-23.8	-24.4	-24.7	-24.9	-24.9	-25.5	-25.7	-25.4	-25.9	-26.2	-26.0	-25.8	-25.3	-24.9	-25.2	-24.8	-25.1	-25.0	-24.7	-23.8	-23.5	-23.6	-22.5	-22.3	-22.3	-26.2	-24.7
22	-21.5	-19.8	-19.2	-17.9	-17.9	-15.4	-14.4	-14.5	-14.8	-14.4	-14.7	-16.3	-15.4	-14.6	-13.6	-13.2	-12.7	-13.1	-12.5	-11.7	-11.5	-12.3	-12.2	-12.2	-11.5	-21.5	-14.8
23	-12.1	-11.5	-11.1	-10.8	-10.8	-10.3	-10.1	-10.4	-10.3	-10.8	-11.4	-11.4	-11.3	-10.6	-8.9	-8.6	-7.6	-6.0	-4.6	-3.9	-3.4	-2.9	-2.7	-1.7	-1.7	-12.1	-8.5
24	-1.3	-1.0	-0.3	0.2	0.2	0.6	1.3	1.6	0.9	0.8	0.9	0.6	0.7	0.3	0.0	-0.2	-0.3	-0.5	-0.5	-0.8	-1.1	-2.9	-5.1	-7.1	1.6	-7.1	-0.5
25	-8.4	-10.0	-10.6	-10.8	-11.1	-10.9	-11.1	-11.3	-12.0	-12.6	-13.6	-14.3	-14.7	-15.2	-15.9	-16.4	-15.7	-16.0	-16.4	-16.4	-16.3	-16.8	-17.4	-17.1	-8.4	-17.4	-13.8
26	-17.6	-16.8	-16.3	-16.5	-16.1	-16.0	-15.0	-15.4	-15.1	-15.0	-14.5	-15.9	-15.8	-15.5	-15.6	-15.3	-15.6	-16.5	-16.0	-17.1	-16.8	-16.7	-16.5	-16.6	-14.5	-17.6	-16.0
27	-16.8	-17.0	-16.8	-17.1	-15.8	-16.1	-15.5	-15.6	-15.0	-15.0	-15.7	-14.0	-13.2	-13.7	-14.3	-14.2	-13.5	-13.8	-13.4	-13.6	-13.4	-13.1	-12.2	-12.0	-12.0	-17.1	-14.6
28	-11.4	-10.9	-10.3	-10.2	-10.4	-10.2	-10.3	-10.0	-9.7	-9.7	-9.8	-10.3	-10.3	-10.1	-9.7	-9.8	-10.0	-10.5	-10.7	-11.1	-11.9	-11.9	-12.2	-12.7	-9.7	-12.7	-10.6
29	-13.7	-13.8	-14.0	-14.0	-14.1	-14.4	-14.5	-14.9	-15.2	-15.5	-15.6	-15.9	-16.2	-16.3	-16.4	-16.3	-16.4	-16.8	-16.9	-17.2	-17.2	-17.5	-17.5	-17.7	-13.7	-17.7	-15.7
30	-18.2	-18.6	-18.9	-19.0	-19.4	-19.9	-20.1	-20.2	-19.8	-19.3	-19.3	-19.2	-19.5	-19.1	-19.2	-19.2	-19.7	-19.7	-20.3	-19.9	-18.8	-19.4	-20.2	-19.8	-18.2	-20.3	-19.5
Max.	**1.3**	**1.3**	**1.2**	**1.4**	**1.0**	**0.8**	**1.3**	**1.6**	**1.1**	**1.3**	**0.9**	**0.6**	**0.9**	**1.5**	**1.5**	**1.2**	**1.1**	**0.4**	**-0.2**	**0.3**	**0.8**	**1.0**	**1.1**	**1.4**	**1.6**		
Min.	**-23.8**	**-24.4**	**-24.7**	**-24.9**	**-24.9**	**-25.5**	**-25.7**	**-25.4**	**-25.9**	**-26.2**	**-26.0**	**-25.8**	**-25.3**	**-24.9**	**-25.2**	**-24.8**	**-25.1**	**-25.0**	**-24.7**	**-23.8**	**-23.5**	**-23.6**	**-23.6**	**-23.8**		**-26.2**	
Avg.	**-9.1**	**-9.2**	**-9.2**	**-9.2**	**-9.3**	**-9.3**	**-9.3**	**-9.4**	**-9.4**	**-9.6**	**-9.7**	**-9.8**	**-9.6**	**-9.5**	**-9.4**	**-9.4**	**-9.2**	**-9.3**	**-9.4**	**-9.4**	**-9.3**	**-9.4**	**-9.4**	**-9.5**			**-9.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature at 10 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-18.7	-17.6	-17.4	-17.4	-17.7	-17.9	-17.0	-16.5	-15.6	-15.3	-13.5	-12.7	-13.0	-12.5	-12.0	-10.8	-9.1	-9.5	-8.8	-8.6	-8.1	-7.4	-7.4	-7.1	-7.1	-18.7	-13.0
2	-6.2	-6.6	-6.7	-6.6	-6.5	-4.8	-4.5	-4.1	-3.7	-3.4	-3.2	-2.4	-1.6	-1.6	-1.3	-1.4	-1.4	-1.1	-1.2	-1.1	-1.1	-0.7	-0.3	0.2	0.2	-6.7	-3.0
3	0.5	0.8	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.4	1.7	1.6	1.1	1.0	0.7	0.9	1.5	1.7	2.0	2.7	2.5	2.2	2.0	2.7	0.5	1.4
4	1.5	1.3	1.3	1.4	1.6	1.5	1.5	1.4	1.2	1.2	1.3	1.4	1.8	1.8	1.5	1.1	1.8	2.1	1.8	2.0	1.9	2.0	2.1	2.2	2.2	1.1	1.6
5	2.2	2.0	2.0	2.2	2.3	2.2	2.2	2.1	2.4	2.2	2.5	2.6	2.9	2.7	2.5	2.5	2.5	2.6	2.8	3.0	2.8	2.9	2.6	2.5	3.0	2.0	2.5
6	2.4	2.4	2.0	2.3	2.5	2.4	2.5	2.6	2.9	3.1	3.0	3.3	2.7	2.5	2.9	2.8	2.1	1.9	1.7	1.5	1.7	1.7	1.2	0.7	3.3	0.7	2.3
7	0.4	-0.3	-0.4	-1.4	-2.3	-3.2	-3.7	-2.9	-2.9	-3.9	-4.9	-5.7	-5.9	-6.1	-6.1	-6.1	-6.4	-6.6	-6.8	-7.3	-7.9	-7.3	-7.1	-5.2	0.4	-7.9	-4.6
8	-6.2	-6.7	-3.5	0.3	-0.5	1.4	1.2	0.4	1.9	1.6	1.5	1.3	2.1	1.7	0.3	0.7	0.8	1.2	1.8	0.3	0.0	1.2	-0.4	0.3	2.1	-6.7	0.1
9	-1.5	-0.8	-1.0	-1.1	-2.0	-3.9	-5.2	-6.1	-6.2	-6.8	-6.5	-4.8	-4.2	-4.0	-4.7	-5.6	-5.5	-6.3	-7.2	-7.9	-8.0	-6.8	-6.0	-5.3	-0.8	-8.0	-4.9
10	-6.0	-5.7	-4.9	-5.0	-6.0	-7.7	-8.3	-8.2	-7.8	-9.0	-10.1	-11.1	-11.1	-10.0	-9.5	-9.6	-9.7	-9.3	-8.9	-8.4	-8.8	-8.9	-9.0	-9.0	-4.9	-11.1	-8.4
11	-8.7	-9.4	-9.3	-8.6	-8.7	-8.1	-8.6	-8.1	-7.9	-7.7	-7.8	-8.1	-8.4	-7.5	-7.1	-7.4	-8.4	-9.3	-10.0	-9.9	-10.2	-10.6	-11.4	-11.5	-7.1	-11.5	-8.9
12	-11.6	-11.9	-12.5	-11.6	-10.8	-10.8	-10.6	-10.5	-10.7	-9.5	-9.0	-9.4	-10.0	-10.4	-9.8	-9.2	-8.4	-8.3	-6.5	-6.5	-6.6	-7.4	-7.7	-6.2	-6.2	-12.5	-9.4
13	-6.6	-7.0	-7.7	-7.7	-7.9	-8.3	-8.6	-8.9	-9.0	-8.5	-8.7	-9.0	-9.2	-9.6	-9.5	-9.4	-9.3	-9.7	-8.3	-7.4	-5.7	-4.2	-3.2	-3.5	-3.2	-9.7	-7.8
14	-4.1	-4.7	-4.9	-5.4	-5.6	-5.2	-4.9	-5.3	-5.5	-5.2	-5.1	-5.2	-4.6	-4.5	-4.2	-3.5	-3.8	-3.4	-3.0	-2.7	-2.3	-1.8	-2.0	-1.8	-1.8	-5.6	-4.1
15	-1.6	-1.1	-1.2	-1.6	-1.6	-1.8	-1.6	-1.5	-1.3	-1.5	-2.1	-2.1	-1.8	-1.7	-1.7	-1.9	-2.0	-2.1	-2.1	-3.0	-3.4	-3.2	-3.2	-3.9	-1.1	-3.9	-2.0
16	-3.1	-3.3	-3.8	-4.3	-3.4	-3.7	-5.0	-4.2	-4.8	-5.3	-4.9	-5.7	-5.9	-5.7	-5.5	-5.5	-5.5	-5.6	-5.7	-5.6	-5.8	-5.2	-4.7	-4.0	-3.1	-5.9	-4.8
17	-2.6	-1.5	-1.4	-1.6	-1.4	-1.7	-1.9	-1.7	-1.4	-1.2	-0.9	-0.5	-0.3	0.0	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.1	-2.6	-0.8
18	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.5	0.7	0.9	0.7	0.7	0.6	0.6	0.7	1.0	1.1	1.0	1.1	-0.1	0.4
19	0.5	0.7	0.5	0.5	0.3	0.1	0.1	0.3	0.2	0.1	0.2	0.3	0.5	0.7	1.1	0.9	1.1	1.0	0.8	0.6	1.1	1.3	1.4	1.2	1.4	0.1	0.7
20	1.1	1.2	1.4	1.4	1.0	0.8	0.7	0.1	0.4	0.7	0.3	0.6	0.9	1.5	1.7	1.9	1.3	1.1	0.4	-0.7	-1.0	-1.1	-1.7	-2.1	1.9	-2.1	0.5
21	-1.9	-1.4	-1.7	-1.7	-1.8	-2.1	-2.1	-3.0	-2.8	-2.9	-3.6	-3.2	-3.2	-3.4	-4.0	-2.7	-2.9	-3.2	-4.2	-3.8	-3.6	-3.6	-4.1	-4.1	-1.4	-4.2	-3.0
22	-4.7	-4.6	-3.8	-4.4	-4.8	-4.6	-3.9	-4.2	-4.2	-4.1	-4.1	-4.1	-3.8	-3.5	-3.6	-3.5	-3.5	-3.3	-3.3	-3.4	-3.8	-3.9	-3.9	-3.8	-3.3	-4.8	-3.9
23	-3.6	-3.6	-3.4	-3.3	-3.3	-3.1	-3.0	-2.9	-2.9	-3.1	-3.7	-5.5	-6.2	-6.7	-7.0	-7.5	-7.4	-7.5	-7.7	-7.3	-7.1	-7.1	-7.4	-7.7	-2.9	-7.7	-5.3
24	-7.0	-7.1	-6.2	-5.8	-6.4	-6.2	-8.1	-7.5	-7.3	-7.2	-7.1	-6.7	-6.9	-7.4	-7.4	-7.2	-7.6	-7.9	-8.0	-8.0	-7.7	-7.7	-7.9	-7.5	-5.8	-8.1	-7.2
25	-7.3	-7.4	-6.6	-6.4	-5.8	-5.9	-5.3	-4.9	-4.6	-4.4	-4.2	-4.1	-4.3	-4.9	-5.1	-5.1	-4.6	-6.4	-8.2	-8.9	-9.3	-9.8	-10.5	-11.2	-4.1	-11.2	-6.5
26	-11.7	-13.0	-14.9	-15.9	-16.7	-17.2	-17.2	-17.2	-16.5	-16.1	-16.1	-16.3	-16.0	-16.0	-15.8	-15.7	-15.8	-15.6	-15.8	-16.1	-16.4	-16.5	-16.8	-17.0	-11.7	-17.2	-15.9
27	-17.2	-16.8	-16.5	-16.7	-17.0	-17.2	-17.5	-17.8	-17.9	-18.2	-18.5	-18.6	-18.5	-18.4	-18.8	-18.7	-18.9	-19.2	-19.6	-19.7	-19.7	-19.7	-19.9	-20.5	-16.5	-20.5	-18.4
28	-20.7	-20.7	-20.8	-20.8	-21.0	-21.3	-21.2	-21.1	-21.3	-21.8	-21.8	-22.1	-22.0	-22.1	-22.2	-22.4	-22.8	-22.9	-23.0	-23.6	-23.7	-23.8	-24.2	-24.3	-20.7	-24.3	-22.2
29	-24.4	-24.5	-24.4	-24.5	-24.7	-24.6	-24.2	-24.5	-24.5	-24.4	-24.3	-24.1	-23.9	-23.5	-23.8	-23.5	-23.4	-23.8	-23.9	-23.6	-23.5	-23.6	-23.5	-23.4	-23.4	-24.7	-24.0
30	-24.3	-23.2	-23.7	-24.7	-25.1	-25.2	-25.2	-24.9	-24.6	-25.1	-25.9	-25.1	-25.1	-25.3	-25.6	-26.0	-26.0	-26.4	-26.7	-26.7	-27.1	-27.3	-26.9	-27.2	-23.2	-27.3	-25.5
31	-27.1	-26.9	-27.0	-27.8	-27.4	-27.0	-26.5	-26.8	-25.7	-25.5	-25.2	-25.1	-24.3	-24.6	-25.3	-25.0	-24.1	-24.3	-23.7	-23.3	-23.4	-23.6	-23.0	-22.1	-22.1	-27.8	-25.2
Max.	**2.4**	**2.4**	**2.0**	**2.3**	**2.5**	**2.4**	**2.5**	**2.6**	**2.9**	**3.1**	**3.0**	**3.3**	**2.9**	**2.7**	**2.9**	**2.8**	**2.5**	**2.6**	**2.8**	**3.0**	**2.8**	**2.9**	**2.6**	**2.5**	**3.3**		
Min.	**-27.1**	**-26.9**	**-27.0**	**-27.8**	**-27.4**	**-27.0**	**-26.5**	**-26.8**	**-25.7**	**-25.5**	**-25.9**	**-25.1**	**-25.1**	**-25.3**	**-25.6**	**-26.0**	**-26.0**	**-26.4**	**-26.7**	**-26.7**	**-27.1**	**-27.3**	**-26.9**	**-27.2**		**-27.8**	
Avg.	**-7.0**	**-7.0**	**-7.0**	**-6.9**	**-7.1**	**-7.2**	**-7.3**	**-7.3**	**-7.1**	**-7.1**	**-7.1**	**-7.1**	**-7.0**	**-7.0**	**-7.0**	**-7.0**	**-6.9**	**-7.1**	**-7.1**	**-7.2**	**-7.2**	**-7.1**	**-7.1**	**-7.0**			**-7.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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Max.																											
Min.																											
Avg.																											

Total Hours in Month 744 **Hours Data Available** 0 **Data Recovery** 0.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
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2																											
3																											
4																											
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8																											
9																											
10																											
11																											
12																											
13																					-0.18	-0.11	-0.09	-0.06	-0.06	-0.18	-0.11
14	-0.1	-0.12	-0.14	0.03	0.16	0.13	0.05	-0.05	-0.17	-0.16	-0.14	-0.14	-0.19	-0.18	-0.14	-0.17	-0.19	-0.12	-0.10	-0.11	-0.12	-0.10	-0.09	-0.07	0.16	-0.19	-0.09
15	-0.1	-0.13	-0.14	-0.09	-0.04	0.46	0.17	0.36	0.37	0.36	0.47	0.61	1.29	0.88	0.76	0.45	0.29	0.65	0.71	1.09	0.64	0.59	0.40	0.23	1.29	-0.14	0.43
16	0.2	0.08	0.10	0.09	0.12	0.11	0.07	0.10	0.11	0.12	0.13	0.17	0.08	0.03	0.04	0.00	0.04	0.06	-0.01	0.01	0.08	0.16	0.06	0.25	0.25	-0.01	0.09
17	0.5	0.58	0.05	0.32	0.40	0.31	0.57	0.46	0.23	0.32	-0.01	-0.08	0.27	0.13	0.09	0.12	0.05	0.04	0.17	0.18	0.34	0.38	0.44	0.49	0.58	-0.08	0.26
18	0.6	0.30	0.20	0.13	0.11	0.15	0.12	0.14	0.22	0.11	0.07	0.08	-0.08	-0.08	0.00	-0.13	-0.04	-0.01	-0.01	-0.12	-0.13	-0.08	0.26	0.28	0.55	-0.13	0.09
19	0.5	0.59	0.75	0.94	0.86	1.15	1.31	0.84	0.37	0.18	0.13	0.13	0.22	0.18	0.24	0.32	0.49	0.45	0.52	0.35	0.12	0.10	0.09	0.06	1.31	0.06	0.45
20	0.0	-0.04	-0.21	-0.12	-0.05	-0.07	-0.04	-0.08	-0.08	-0.02	-0.02	-0.05	0.05	0.11	0.49	0.50	0.47	0.71	0.73	0.55	0.41	0.43	0.42	0.42	0.73	-0.21	0.19
21	0.5	0.79	0.61	0.50	0.43	0.44	0.44	0.46	0.45	0.44	0.38	0.33	0.35	0.33	0.32	0.42	0.46	0.24	0.05	0.19	0.14	0.03	0.00	0.08	0.79	0.00	0.35
22	0.1	0.02	-0.01	0.01	0.14	0.18	0.20	0.15	0.05	0.08	0.08	0.05	-0.01	-0.04	0.03	0.04	-0.10	0.06	0.04	0.15	0.17	0.25	0.31	0.65	0.65	-0.10	0.11
23	0.8	0.82	0.10	0.00	0.46	0.76	0.68	1.15	1.39	0.94	1.14	1.03	1.00	0.67	0.89	0.89	0.75	0.45	1.74	2.13	1.58	2.24	1.27	0.44	2.24	0.00	0.97
24	0.4	0.42	0.33	0.28	0.20	0.27	0.28	0.23	0.20	0.09	0.08	0.12	0.10	0.09	0.05	0.09	0.19	0.30	0.39	0.37	0.27	0.32	0.29	0.30	0.42	0.05	0.24
25	0.3	0.19	0.22	0.02	0.03	0.04	0.13	0.13	-0.09	-0.12	-0.11	-0.11	-0.01	0.08	0.01	0.09	0.13	0.52	0.46	0.40	0.60	0.74	0.77	0.69	0.77	-0.12	0.21
26	1.0	1.20	0.88	1.05	0.84	0.84	0.78	1.09	1.10	1.05	2.17	1.09	0.92	0.66	0.65	0.64	0.76	0.52	0.42	0.50	0.27	0.24	0.29	0.27	2.17	0.24	0.80
27	0.4	0.30	0.44	0.80	0.78	0.83	0.86	1.35	1.55	1.87	1.03	1.44	2.06	1.97	1.77	2.27	1.91	0.94	0.17	0.45	0.53	0.54	0.99	0.84	2.27	0.17	1.09
28	0.7	0.93	1.09	1.24	1.15	1.11	0.74	0.98	0.79	0.69	0.68	0.57	0.45	0.69	0.41	0.42	0.28	0.29	0.61	0.75	0.59	0.47	0.54	0.80	1.24	0.28	0.71
29	0.8	0.65	0.57	0.53	0.42	0.71	1.14	0.89	0.96	0.39	0.29	0.25	0.22	0.07	0.04	0.04	-0.02	-0.09	-0.04	-0.02	-0.01	-0.02	-0.03	-0.07	1.14	-0.09	0.32
Max.	**1.0**	**1.20**	**1.09**	**1.24**	**1.15**	**1.15**	**1.31**	**1.35**	**1.55**	**1.87**	**2.17**	**1.44**	**2.06**	**1.97**	**1.77**	**2.27**	**1.91**	**0.94**	**1.74**	**2.13**	**1.58**	**2.24**	**1.27**	**0.84**	**2.27**		
Min.	**-0.1**	**-0.13**	**-0.21**	**-0.12**	**-0.05**	**-0.07**	**-0.04**	**-0.08**	**-0.17**	**-0.16**	**-0.14**	**-0.14**	**-0.19**	**-0.18**	**-0.14**	**-0.17**	**-0.19**	**-0.12**	**-0.10**	**-0.12**	**-0.18**	**-0.11**	**-0.09**	**-0.07**		**-0.21**	
Avg.	**0.4**	**0.41**	**0.30**	**0.36**	**0.37**	**0.46**	**0.47**	**0.51**	**0.47**	**0.40**	**0.40**	**0.34**	**0.42**	**0.35**	**0.35**	**0.37**	**0.34**	**0.31**	**0.36**	**0.43**	**0.31**	**0.36**	**0.35**	**0.33**			**0.36**

Total Hours in Month 696 **Hours Data Available** 388 **Data Recovery** 55.7%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.1	-0.09	-0.07	-0.07	-0.07	-0.04	-0.05	-0.02	0.34	0.62	0.54	0.38	0.39	0.34	0.45	0.43	0.34	0.24	0.10	0.10	0.15	0.37	0.42	0.47	0.62	-0.09	0.21
2	0.5	0.47	0.61	0.42	0.26	0.27	0.17	-0.01	-0.02	-0.03	-0.03	0.03	0.05	0.05	0.05	0.16	0.04	-0.07	0.03	-0.04	-0.01	-0.01	0.03	0.06	0.61	-0.07	0.13
3	0.0	-0.03	-0.05	-0.01	0.04	0.04	0.10	0.26	0.36	0.27	0.03	0.03	0.05	0.03	0.28	0.48	0.34	0.33	0.48	0.46	0.42	0.25	0.20	0.31	0.48	-0.05	0.19
4	0.4	0.25	0.23	0.22	0.09	0.03	0.04	0.04	0.05	0.02	0.04	-0.03	0.08	0.11	0.07	0.07	0.08	0.11	0.13	0.12	0.08	0.13	0.05	0.11	0.37	-0.03	0.10
5	0.1	0.10	0.19	0.22	0.13	0.10	0.11	0.10	0.12	0.12	0.13	-0.04	-0.01	0.00	0.02	0.06	0.10	0.11	0.12	0.05	0.01	0.04	0.08	0.09	0.22	-0.04	0.09
6	0.1	0.20	0.22	0.29	0.39	0.30	0.27	0.29	0.35	0.37	0.41	0.34	0.05	0.05	0.12	0.10	0.12	0.17	0.35	0.39	0.69	0.72	0.48	0.44	0.72	0.05	0.30
7	0.4	0.31	0.24	0.50	0.71	0.42	1.08	0.13	0.12	0.35	0.49	0.33	0.11	0.13	0.08	-0.05	-0.05	-0.07	-0.08	0.07	0.00	-0.08	-0.09	-0.08	1.08	-0.09	0.20
8	0.0	-0.01	0.18	0.37	0.47	0.59	0.27	-0.03	-0.04	-0.01	0.19	0.43	0.32	0.28	0.26	0.33	0.47	0.32	0.27	0.28	0.31	0.31	0.31	0.28	0.59	-0.05	0.25
9	0.2	0.25	0.36	0.37	0.31	0.41	0.43	0.47	0.48	0.42	0.43	0.40	0.32	0.17	0.06	0.07	0.09	0.22	0.45	0.59	0.59	0.72	0.75	0.31	0.75	0.06	0.37
10	0.2	0.24	0.21	0.05	-0.03	-0.03	-0.04	-0.03	-0.02	-0.06	-0.07	-0.09	-0.11	-0.10	-0.13	-0.18	-0.16	-0.13	-0.06	-0.01	-0.05	0.01	0.06	0.00	0.24	-0.18	-0.02
11	0.0	0.12	0.03	0.09	0.10	-0.01	-0.04	-0.05	0.00	-0.07	-0.13	-0.13	-0.13	-0.15	-0.14	-0.19	-0.02	0.19	0.26	0.61	1.19	0.76	0.43	0.22	1.19	-0.19	0.12
12	0.2	0.46	0.56	0.73	0.61	0.95	0.80	0.77	0.42	0.13	0.00	-0.12	-0.14	-0.16	-0.19	-0.18	-0.18	-0.14	-0.04	-0.02	0.03	0.01	0.00	-0.01	0.95	-0.19	0.19
13	0.0	-0.02	-0.05	-0.06	-0.08	-0.08	-0.06	-0.05	-0.04	-0.07	-0.11	-0.13	-0.15	-0.09	-0.11	-0.11	-0.06	0.02	0.06	0.11	0.96	1.22	1.16	1.05	1.22	-0.15	0.14
14	0.8	0.79	0.82	0.32	0.46	0.16	0.20	0.14	0.53	0.05	0.40	0.98	1.21	1.26	0.97	0.93	1.23	1.22	0.59	0.45	0.36	0.29	0.22	0.20	1.26	0.05	0.61
15	0.3	0.12	0.02	-0.01	0.25	0.31	0.37	0.14	0.23	0.18	-0.03	0.04	0.04	0.11	0.13	0.08	-0.01	0.06	0.10	0.05	0.05	0.01	-0.01	0.00	0.37	-0.03	0.11
16	0.0	0.05	0.08	0.21	0.43	0.61	0.81	0.77	0.52	0.23	0.36	0.01	0.14	-0.05	-0.10	0.16	0.05	0.23	0.45	0.46	0.59	1.81	1.89	1.64	1.89	-0.10	0.47
17	1.7	1.74	1.41	1.49	0.66	0.71	0.23	0.72	0.83	0.46	0.32	0.13	0.13	0.02	-0.21	-0.19	-0.16	-0.03	-0.02	-0.08	-0.11	-0.06	-0.07	-0.10	1.74	-0.21	0.39
18	-0.1	-0.10	0.09	-0.01	0.01	0.04	0.03	0.02	0.15	0.22	0.07	0.01	0.05	-0.03	-0.01	-0.02	-0.08	-0.07	-0.02	-0.03	0.01	0.17	0.19	0.09	0.22	-0.12	0.03
19	0.0	0.13	0.11	0.13	0.17	0.15	0.06	0.13	0.04	-0.03	-0.08	-0.09	-0.11	-0.24	-0.25	-0.19	-0.26	-0.15	0.04	0.13	0.17	0.11	0.13	0.29	0.29	-0.26	0.02
20	0.1	-0.01	0.02	0.02	0.04	-0.04	-0.05	-0.09	-0.07	-0.12	-0.11	0.08	0.09	-0.11	-0.07	-0.13	-0.10	-0.14	-0.10	-0.08	0.02	0.04	0.23	0.07	0.23	-0.14	-0.02
21	0.0	0.01	0.11	-0.03	-0.02	0.04	0.03	0.29	0.04	0.26	0.30	0.27	0.79	0.14	0.17	0.22	0.20	0.34	0.52	0.24	0.35	0.42	0.43	0.63	0.79	-0.03	0.24
22	0.7	1.24	0.86	0.34	0.45	0.48	0.42	0.46	0.35	0.42	0.29	0.15	0.03	-0.10	-0.16	-0.11	-0.07	0.08	0.07	0.13	0.29	0.77	0.67	0.78	1.24	-0.16	0.36
23	0.6	0.83	0.64	0.59	0.18	0.42	0.64	1.03	0.57	0.24	0.12	0.18	0.00	0.00	0.00	-0.03	0.01	0.12	0.28	0.24	0.40	0.34	0.45	0.30	1.03	-0.03	0.34
24	0.1	0.22	0.33	0.22	0.05	0.00	0.03	0.06	0.21	0.39	0.31	0.10	0.01	-0.06	-0.03	-0.05	-0.03	0.02	-0.06	0.20	0.50	0.72	0.63	0.19	0.72	-0.06	0.17
25	0.2	0.15	0.15	0.01	0.01	0.07	0.17	0.10	0.04	0.05	0.11	0.14	0.21	0.10	0.12	0.10	0.37	0.62	0.25	0.48	1.17	1.56	2.02	2.10	2.10	0.01	0.43
26	0.9	0.59	0.81	0.63	1.01	1.45	1.26	0.92	1.03	1.25	1.14	0.72	0.41	0.19	0.16	0.26	0.26	0.12	0.18	0.19	0.78	0.71	0.39	0.85	1.45	0.12	0.67
27	1.3	0.58	0.29	0.29	0.37	0.28	0.23	0.26	0.27	0.19	0.05	-0.04	-0.14	-0.09	-0.04	-0.07	0.06	0.09	0.14	0.46	0.66	0.52	0.47	0.92	1.31	-0.14	0.29
28	2.0	1.37	1.32	0.91	0.90	1.17	1.85	1.46	1.33	0.80	0.53	0.46	0.28	0.36	0.02	0.02	0.07	0.18	0.25	0.53	0.45	0.48	0.48	0.49	2.03	0.02	0.74
29	0.5	0.34	0.42	0.66	0.61	0.37	0.39	0.29	0.41	0.39	0.13	-0.01	0.03	0.02	0.03	0.03	0.02	0.07	0.09	0.10	0.09	0.08	0.12	0.09	0.66	-0.01	0.22
30	0.0	-0.04	-0.05	-0.05	-0.05	-0.06	-0.13	-0.08	0.01	0.03	0.01	-0.01	-0.06	-0.05	-0.02	-0.07	0.00	-0.02	-0.02	-0.04	-0.06	0.04	0.06	0.02	0.06	-0.13	-0.03
31	0.1	0.08	0.09	0.11	0.11	0.13	0.09	0.10	0.08	0.07	0.09	0.13	0.14	0.14	0.14	0.15	0.14	0.16	0.17	0.16	0.17	0.13	0.06	0.10	0.17	0.06	0.12
Max.	**2.0**	**1.74**	**1.41**	**1.49**	**1.01**	**1.45**	**1.85**	**1.46**	**1.33**	**1.25**	**1.14**	**0.98**	**1.21**	**1.26**	**0.97**	**0.93**	**1.23**	**1.22**	**0.59**	**0.61**	**1.19**	**1.81**	**2.02**	**2.10**	**2.10**		
Min.	**-0.1**	**-0.10**	**-0.07**	**-0.07**	**-0.08**	**-0.08**	**-0.13**	**-0.09**	**-0.07**	**-0.12**	**-0.13**	**-0.13**	**-0.15**	**-0.24**	**-0.25**	**-0.19**	**-0.26**	**-0.15**	**-0.10**	**-0.08**	**-0.11**	**-0.08**	**-0.09**	**-0.10**		**-0.26**	
Avg.	**0.4**	**0.33**	**0.33**	**0.29**	**0.28**	**0.30**	**0.31**	**0.28**	**0.28**	**0.23**	**0.19**	**0.15**	**0.13**	**0.07**	**0.05**	**0.07**	**0.09**	**0.14**	**0.16**	**0.20**	**0.33**	**0.41**	**0.40**	**0.38**			**0.24**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.08	0.14	0.11	0.00	-0.04	0.00	0.03	0.04	0.02	-0.01	-0.07	-0.10	-0.20	-0.45	-0.25	-0.17	0.02	0.16	0.34	0.48	0.63	0.61	0.54	0.63	-0.45	0.08
2	0.4	0.22	0.06	0.14	-0.02	0.01	0.06	0.03	0.21	0.61	0.55	1.23	0.85	0.83	1.35	1.53	1.96	2.13	1.40	1.04	0.66	0.29	0.28	0.23	2.13	-0.02	0.67
3	0.2	0.17	0.25	0.27	0.31	0.29	0.31	0.31	0.33	0.48	0.47	0.61	0.60	0.11	-0.16	-0.12	0.03	0.10	0.15	0.15	0.06	0.07	0.06	0.08	0.61	-0.16	0.22
4	0.1	0.07	0.04	-0.03	-0.01	0.08	0.04	0.02	0.01	-0.03	-0.11	-0.10	-0.13	-0.12	-0.17	0.00	-0.07	-0.01	0.08	0.04	0.13	0.01	0.03	0.09	0.13	-0.17	0.00
5	0.5	1.25	0.96	0.70	0.92	0.95	1.39	1.84	2.49	3.00	2.87	3.90	3.27	2.60	2.50	1.20	1.32	1.28	1.62	1.07	1.33	1.64	1.52	1.43	3.90	0.54	1.73
6	1.2	1.13	1.06	1.17	1.05	1.01	1.09	1.04	1.46	1.31	0.93	0.92	0.36	0.13	0.91	0.72	0.44	0.89	0.92	0.85	0.66	0.91	0.83	0.69	1.46	0.13	0.90
7	0.6	0.73	0.61	0.51	0.72	0.63	0.59	0.50	0.64	1.18	1.29	0.24	0.15	0.07	0.03	0.10	0.07	0.15	0.47	0.99	1.44	0.87	0.91	0.69	1.44	0.03	0.59
8	1.8	0.42	0.84	1.08	1.25	1.25	0.96	1.02	0.98	0.38	0.19	0.46	0.32	-0.04	-0.11	-0.09	-0.10	-0.09	-0.13	-0.10	0.08	0.26	0.38	0.46	1.76	-0.13	0.48
9	0.7	0.62	0.58	0.46	0.64	0.35	0.31	0.44	0.64	0.62	0.24	0.09	0.01	0.02	-0.04	0.04	0.09	0.12	0.19	0.51	0.93	1.00	1.05	1.20	1.20	-0.04	0.45
10	1.3	1.73	1.31	0.71	1.03	1.04	1.15	1.88	1.11	0.64	0.23	0.09	0.01	0.00	-0.01	0.03	0.09	0.17	0.47	0.67	0.87	1.49	1.24	0.58	1.88	-0.01	0.74
11	1.0	2.11	1.78	2.14	2.01	1.59	1.80	1.87	1.01	0.31	0.11	0.02	-0.02	-0.01	-0.04	-0.02	0.03	0.07	0.19	0.42	0.64	0.94	1.30	0.77	2.14	-0.04	0.84
12	0.5	0.30	0.48	0.68	0.93	1.10	1.25	0.67	0.79	0.45	0.31	0.31	0.16	0.01	0.03	0.07	0.18	0.28	0.47	0.39	0.47	0.44	0.70	0.36	1.25	0.01	0.47
13	0.5	0.48	0.39	0.34	0.26	0.20	0.31	0.33	0.08	0.00	-0.01	-0.01	0.03	0.02	0.03	0.02	-0.05	-0.05	-0.02	-0.07	-0.07	0.02	-0.02	-0.02	0.48	-0.07	0.11
14	-0.1	-0.06	-0.05	-0.05	-0.02	-0.03	-0.03	-0.04	-0.06	-0.08	-0.11	-0.16	-0.22	-0.19	-0.18	-0.17	-0.20	-0.15	-0.17	-0.09	0.08	0.15	0.17	0.12	0.17	-0.22	-0.07
15	0.1	0.38	0.49	0.84	0.62	0.32	0.36	0.16	0.14	0.16	0.02	-0.07	-0.17	-0.16	-0.33	-0.17	-0.08	-0.12	-0.01	0.02	0.01	0.04	0.01	0.14	0.84	-0.33	0.11
16	0.0	0.00	0.13	0.11	0.04	0.03	0.23	0.25	0.20	0.16	0.03	-0.08	-0.24	-0.30	-0.29	-0.23	-0.06	-0.14	-0.14	0.08	0.19	0.17	0.01	0.19	0.25	-0.30	0.02
17	0.1	0.30	0.22	0.33	0.49	0.70	1.06	0.75	0.47	0.30	-0.06	-0.17	-0.18	-0.17	-0.19	-0.27	-0.28	-0.23	0.02	-0.09	0.33	0.51	0.49	0.73	1.06	-0.28	0.22
18	0.7	0.31	0.51	0.96	1.12	0.95	1.00	1.02	0.90	1.17	1.05	0.28	0.10	0.07	0.10	0.25	0.12	0.09	-0.03	-0.04	0.22	0.42	0.41	0.46	1.17	-0.04	0.51
19	0.3	0.49	0.66	1.00	1.03	0.88	1.12	1.00	0.59	0.23	0.05	0.05	0.11	0.11	0.17	0.17	0.23	0.27	0.29	0.40	0.56	0.46	0.63	0.67	1.12	0.05	0.48
20	0.7	0.58	0.75	0.55	0.63	1.05	1.10	0.88	0.65	0.39	0.41	0.20	0.16	0.16	0.17	0.04	0.05	-0.02	-0.01	-0.01	-0.01	-0.02	0.02	0.03	1.10	-0.02	0.35
21	0.0	0.05	0.07	0.03	0.04	0.09	0.13	0.15	0.10	0.05	0.00	0.01	0.04	0.08	0.12	0.09	0.15	0.18	0.30	0.21	0.33	0.46	0.53	0.63	0.63	0.00	0.16
22	0.3	0.37	0.86	0.44	0.53	0.61	0.64	0.73	0.77	0.48	0.40	0.47	0.43	0.68	0.54	0.40	0.28	0.27	0.30	0.36	0.44	0.37	0.94	1.15	1.15	0.25	0.53
23	0.9	0.70	0.75	1.06	1.02	0.58	0.77	0.88	0.71	0.26	0.29	0.54	0.64	0.27	0.24	0.47	0.46	0.34	0.43	0.59	0.57	0.55	0.60	0.82	1.06	0.24	0.60
24	0.5	0.32	0.36	0.38	0.67	-0.01	-0.14	-0.17	-0.19	-0.20	-0.25	-0.30	-0.31	-0.27	-0.22	-0.19	-0.17	-0.06	-0.07	-0.04	-0.01	0.02	0.01	0.01	0.67	-0.31	-0.01
25	-0.1	-0.10	-0.14	-0.13	-0.11	-0.02	0.05	0.22	0.29	0.17	0.12	-0.05	-0.11	-0.16	-0.18	-0.20	-0.21	-0.20	-0.05	0.02	0.15	0.43	0.45	0.42	0.45	-0.21	0.02
26	0.3	0.34	0.31	0.28	0.30	0.38	0.16	0.16	0.01	-0.04	-0.09	-0.28	-0.37	-0.35	-0.36	-0.33	-0.10	-0.31	-0.24	-0.11	0.00	0.00	-0.10	-0.11	0.38	-0.37	-0.02
27	-0.1	-0.13	-0.10	-0.08	-0.11	-0.10	-0.06	-0.06	-0.22	-0.27	-0.28	-0.31	-0.37	-0.34	-0.29	-0.37	-0.32	-0.30	-0.14	-0.02	0.04	0.08	0.12	0.08	0.12	-0.37	-0.15
28	0.2	0.54	0.53	1.00	0.30	0.51	0.53	0.58	0.72	0.27	-0.04	-0.16	-0.23	-0.26	-0.28	-0.07	-0.17	-0.17	-0.03	0.07	0.23	0.23	0.35	0.46	1.00	-0.28	0.21
29	0.6	0.42	0.50	0.75	1.06	0.78	0.39	0.25	0.14	0.05	-0.02	-0.07	-0.13	-0.16	-0.13	-0.07	0.04	0.10	0.19	0.31	0.49	0.62	0.64	0.56	1.06	-0.16	0.30
30	0.5	0.47	0.47	0.67	0.68	0.53	0.48	0.44	0.36	0.19	0.12	0.05	-0.08	-0.13	-0.11	-0.06	-0.03	-0.07	-0.10	-0.06	0.02	-0.02	0.00	0.03	0.68	-0.13	0.18
Max.	**1.8**	**2.11**	**1.78**	**2.14**	**2.01**	**1.59**	**1.80**	**1.88**	**2.49**	**3.00**	**2.87**	**3.90**	**3.27**	**2.60**	**2.50**	**1.53**	**1.96**	**2.13**	**1.62**	**1.07**	**1.44**	**1.64**	**1.52**	**1.43**	**3.90**		
Min.	**-0.1**	**-0.13**	**-0.14**	**-0.13**	**-0.11**	**-0.10**	**-0.14**	**-0.17**	**-0.22**	**-0.27**	**-0.28**	**-0.31**	**-0.37**	**-0.35**	**-0.45**	**-0.37**	**-0.32**	**-0.31**	**-0.24**	**-0.11**	**-0.07**	**-0.02**	**-0.10**	**-0.11**		**-0.45**	
Avg.	**0.5**	**0.48**	**0.49**	**0.55**	**0.58**	**0.52**	**0.57**	**0.57**	**0.51**	**0.41**	**0.29**	**0.25**	**0.15**	**0.08**	**0.09**	**0.08**	**0.12**	**0.15**	**0.22**	**0.26**	**0.38**	**0.43**	**0.47**	**0.45**			**0.36**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.29	0.27	0.33	0.38	0.43	0.43	0.34	0.27	0.17	0.07	0.07	0.07	0.06	0.15	0.24	0.34	0.32	0.38	0.52	0.54	0.42	0.35	0.43	0.54	0.06	0.29
2	0.5	0.26	0.19	0.09	0.09	0.06	0.19	0.26	0.06	0.03	0.14	0.17	0.22	0.31	-0.02	0.25	0.30	0.35	0.46	0.24	0.17	0.19	0.24	0.31	0.48	-0.02	0.21
3	0.4	0.16	-0.08	-0.10	-0.06	0.08	0.13	0.14	0.15	0.34	0.50	0.44	0.50	0.47	0.54	0.47	0.09	0.08	0.22	0.46	0.68	0.30	0.28	0.35	0.68	-0.10	0.27
4	0.3	0.29	0.33	0.35	0.31	0.43	0.40	0.42	0.50	0.50	0.52	0.51	0.51	0.30	0.53	0.52	0.73	0.40	0.25	0.21	0.37	0.26	0.35	0.39	0.73	0.21	0.40
5	0.3	0.99	1.38	1.18	1.26	0.57	0.71	0.37	0.49	0.52	0.33	0.20	0.13	0.23	0.19	0.25	0.13	0.16	0.25	0.41	0.35	0.42	0.44	0.23	1.38	0.13	0.48
6	0.1	0.22	0.18	0.41	0.42	0.31	0.25	0.35	0.41	0.34	0.33	0.29	0.35	0.36	0.35	0.36	0.36	0.34	0.37	0.35	0.33	0.27	0.20	0.17	0.42	0.09	0.31
7	0.2	0.21	0.26	0.27	0.28	0.23	0.23	0.22	0.22	0.27	0.32	0.34	0.30	0.35	0.27	0.27	0.35	0.43	0.47	0.47	0.41	0.44	0.28	0.24	0.47	0.17	0.30
8	0.3	0.25	0.23	0.23	0.22	0.21	0.23	0.24	0.31	0.33	0.39	0.43	0.42	0.43	0.36	0.36	0.35	0.34	0.39	0.41	0.47	0.48	0.48	0.50	0.50	0.21	0.35
9	0.5	0.46	0.47	0.43	0.37	0.35	0.38	0.35	0.37	0.28	0.27	0.36	0.25	0.20	0.19	0.17	0.24	0.04	0.11	0.16	0.05	0.07	0.15	0.19	0.48	0.04	0.27
10	0.3	0.22	0.20	0.07	0.28	0.22	0.05	0.22	0.10	0.02	-0.01	-0.06	0.15	0.20	0.25	0.26	0.07	0.01	-0.08	0.10	0.22	0.46	0.78	0.92	0.92	-0.08	0.20
11	0.7	0.64	0.59	0.59	0.53	0.56	0.50	0.33	0.40	0.44	0.29	0.10	0.17	0.22	0.35	0.52	0.47	0.43	0.53	0.52	0.50	0.44	0.40	0.28	0.75	0.10	0.44
12	0.3	0.28	0.29	0.31	0.27	0.22	0.18	0.19	0.21	0.27	0.03	0.17	0.24	0.12	0.05	0.01	0.04	0.01	-0.01	0.03	0.07	0.11	0.10	0.13	0.31	-0.01	0.15
13	0.1	0.09	0.00	0.02	0.00	0.04	0.02	0.03	0.05	0.02	-0.23	-0.43	-0.27	-0.21	-0.07	0.39	0.44	0.26	0.31	0.22	0.06	0.12	0.15	0.18	0.44	-0.43	0.06
14	0.3	0.37	0.46	0.38	0.75	0.82	0.62	0.46	0.35	0.30	0.29	0.22	0.04	0.02	0.01	-0.01	-0.18	-0.22	-0.16	-0.27	0.06	0.56	0.86	0.39	0.86	-0.27	0.27
15	0.3	0.40	0.48	0.54	0.40	0.42	0.32	0.33	0.17	-0.04	-0.11	-0.24	0.00	0.25	0.12	0.15	0.08	0.07	-0.09	0.12	0.11	0.02	0.10	0.11	0.54	-0.24	0.17
16	0.2	0.19	0.20	0.16	0.17	0.02	0.05	0.24	0.10	0.08	0.08	-0.09	-0.30	-0.36	-0.16	-0.19	-0.34	-0.24	-0.13	-0.12	0.03	0.23	0.23	0.09	0.24	-0.36	0.00
17	0.4	0.80	0.86	1.00	0.57	0.61	0.48	0.25	0.00	-0.20	-0.43	-0.50	-0.69	-0.65	-0.52	-0.77	-0.72	-0.36	-0.21	-0.26	0.19	0.24	0.58	0.67	1.00	-0.77	0.05
18	0.7	0.38	0.94	0.88	0.64	0.34	0.31	0.13	-0.13	-0.18	-0.37	-0.45	-0.29	-0.22	-0.12	-0.10	0.00	-0.11	-0.06	-0.10	0.05	0.12	0.20	0.23	0.94	-0.45	0.12
19	0.3	0.36	0.30	0.16	0.12	0.17	0.19	0.18	-0.01	-0.22	-0.45	-0.60	-0.72	-0.81	-0.97	-0.96	-1.30	-0.71	-0.26	0.04	0.36	0.63	0.90	0.87	0.90	-1.30	-0.10
20	0.3	0.55	0.64	1.04	1.37	1.77	0.98	0.32	0.05	-0.23	-0.60	-0.60	-0.87	-0.96	-0.86	-0.75	-0.81	-0.55	-0.28	0.05	-0.02	0.06	0.34	0.18	1.77	-0.96	0.05
21	0.2	0.61	0.50	0.66	0.45	0.64	0.56	0.43	-0.06	-0.43	-0.41	-0.54	-0.73	-0.91	-1.17	-1.08	-0.80	-0.93	-0.43	-0.10	0.15	0.38	0.31	0.24	0.66	-1.17	-0.10
22	0.3	0.47	0.37	0.32	0.13	0.14	0.27	0.09	-0.16	-0.51	-0.71	-0.84	-0.83	-0.82	-0.87	-0.99	-0.59	-0.18	-0.07	-0.01	0.02	0.09	0.13	0.13	0.47	-0.99	-0.17
23	0.1	0.12	0.12	0.12	0.13	0.16	0.09	0.08	0.06	-0.07	-0.12	-0.07	-0.11	-0.09	-0.15	-0.07	0.00	0.02	0.05	0.05	0.00	0.03	0.16	0.23	0.23	-0.15	0.04
24	0.2	0.21	0.21	0.20	0.17	0.11	0.04	0.06	0.03	-0.07	0.00	-0.06	-0.31	-0.33	-0.61	-0.73	-0.37	-0.36	-0.05	0.05	0.03	0.15	0.37	0.50	0.50	-0.73	-0.02
25	0.8	0.42	0.38	0.43	0.46	0.28	0.20	0.14	-0.05	-0.27	-0.32	-0.16	-0.58	-0.26	-0.35	-0.63	-0.66	-0.38	-0.23	-0.19	-0.09	-0.01	0.06	0.05	0.76	-0.66	-0.04
26	0.1	0.25	0.25	0.34	0.16	0.08	0.00	-0.04	-0.16	-0.28	-0.45	-0.57	-0.85	-0.95	-1.00	-0.66	-1.50	-1.11	-0.31	-0.24	0.03	0.29	0.39	0.22	0.39	-1.50	-0.25
27	0.4	0.70	0.49	0.47	0.60	0.67	0.49	0.17	-0.19	-0.44	-0.59	-0.81	-1.27	-1.15	-1.13	-1.21	-1.07	-0.96	-1.05	-0.78	-0.44	0.21	0.64	0.83	0.83	-1.27	-0.23
28	0.5	0.80	0.97	1.49	1.15	0.64	0.86	0.48	-0.27	-0.42	-0.64	-0.94	-1.28	-1.25	-1.15	-1.24	-1.10	-0.94	-0.43	-0.06	0.32	0.59	0.85	0.80	1.49	-1.28	-0.01
29	1.2	0.52	0.60	0.66	1.01	0.59	0.33	0.14	-0.08	-0.35	-0.55	-0.75	-0.76	-0.62	-0.82	-1.21	-1.10	-0.97	-0.75	-0.72	-0.29	0.08	0.85	1.63	1.63	-1.21	-0.06
30	1.6	1.15	1.43	1.04	0.53	0.77	0.85	0.12	-0.26	-0.50	-0.62	-0.75	-0.93	-0.94	-0.98	-0.82	-0.64	-0.60	-0.69	-0.42	-0.06	0.05	0.12	0.17	1.63	-0.98	-0.01
31	0.2	0.20	0.30	0.16	0.09	0.06	0.03	-0.03	-0.07	-0.25	-0.38	-0.58	-0.66	-0.86	-0.82	-0.79	-0.87	-0.65	-0.33	-0.19	-0.13	-0.15	-0.11	-0.06	0.30	-0.87	-0.25
Max.	**1.6**	**1.15**	**1.43**	**1.49**	**1.37**	**1.77**	**0.98**	**0.48**	**0.50**	**0.52**	**0.52**	**0.51**	**0.51**	**0.47**	**0.54**	**0.52**	**0.73**	**0.43**	**0.53**	**0.52**	**0.68**	**0.63**	**0.90**	**1.63**	**1.77**		
Min.	**0.1**	**0.09**	**-0.08**	**-0.10**	**-0.06**	**0.02**	**0.00**	**-0.04**	**-0.27**	**-0.51**	**-0.71**	**-0.94**	**-1.28**	**-1.25**	**-1.17**	**-1.24**	**-1.50**	**-1.11**	**-1.05**	**-0.78**	**-0.44**	**-0.15**	**-0.11**	**-0.06**		**-1.50**	
Avg.	**0.4**	**0.42**	**0.45**	**0.46**	**0.43**	**0.39**	**0.34**	**0.23**	**0.09**	**-0.02**	**-0.11**	**-0.19**	**-0.26**	**-0.25**	**-0.27**	**-0.26**	**-0.26**	**-0.19**	**-0.06**	**0.03**	**0.15**	**0.24**	**0.36**	**0.37**			**0.10**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	0.02	0.02	0.15	0.16	0.11	0.12	0.13	0.04	-0.06	-0.32	-0.75	-0.97	-0.95	-1.04	-1.10	-0.70	-0.46	-0.43	-0.23	-0.18	-0.04	0.03	0.07	0.16	-1.10	-0.27
2	0.2	0.28	0.27	0.28	0.24	0.25	0.15	-0.10	-0.20	-0.33	-0.64	-0.70	-0.86	-0.80	-1.06	-0.83	-0.99	-0.68	-0.50	-0.51	-0.19	-0.04	0.19	0.33	0.33	-1.06	-0.26
3	0.2	0.47	0.57	0.91	0.62	0.63	0.43	0.02	-0.15	-0.23	-0.28	-0.54	-0.36	-0.68	-0.96	-0.89	-1.13	-1.21	-0.72	-0.81	-0.36	-0.16	0.01	-0.01	0.91	-1.21	-0.19
4	0.1	0.02	-0.02	0.24	0.11	-0.01	-0.04	-0.20	-0.27	-0.51	-0.79	-0.74	-0.74	-0.90	-0.84	-1.10	-1.14	-0.89	-0.97	-0.76	-0.44	-0.10	0.31	0.68	0.68	-1.14	-0.38
5	0.7	0.55	0.44	0.31	0.07	0.02	-0.03	-0.04	-0.18	-0.29	-0.27	-0.22	-0.31	-0.44	-0.57	-0.65	-0.59	-0.60	-0.41	-0.45	-0.29	-0.23	-0.04	0.20	0.72	-0.65	-0.14
6	0.3	0.44	0.37	0.48	0.63	0.25	0.13	0.01	-0.07	-0.26	-0.31	-0.68	-0.75	-0.73	-0.70	-0.93	-1.01	-0.99	-0.95	-0.92	-0.07	-0.29	-0.13	0.32	0.63	-1.01	-0.25
7	0.2	0.25	0.57	0.45	0.76	0.90	0.44	-0.09	-0.45	-0.70	-0.79	-0.66	-0.84	-0.50	-0.81	-0.61	-0.67	-0.68	-0.42	-0.45	0.04	-0.08	0.16	0.50	0.90	-0.84	-0.15
8	0.5	0.51	0.36	0.01	0.24	0.16	-0.05	-0.25	-0.45	-0.55	-0.56	-0.57	-0.65	-0.94	-1.06	-0.83	-0.79	-0.35	-0.33	-0.38	-0.13	-0.08	0.12	0.07	0.51	-1.06	-0.25
9	0.0	-0.02	-0.04	-0.08	-0.07	-0.06	-0.08	-0.13	-0.26	-0.23	-0.38	-0.41	-0.55	-0.59	-0.68	-0.73	-0.92	-0.94	-1.14	-0.49	-0.34	-0.25	0.03	0.02	0.03	-1.14	-0.35
10	0.0	-0.04	-0.03	-0.05	-0.05	-0.07	-0.14	-0.22	-0.22	-0.26	-0.45	-0.63	-0.69	-0.40	-0.50	-0.46	-0.65	-0.49	-0.24	-0.35	-0.15	0.08	0.14	0.12	0.14	-0.69	-0.24
11	0.1	0.13	0.29	0.37	0.14	0.13	0.04	-0.20	-0.33	-0.41	-0.44	-0.51	-0.50	-0.30	-0.24	-0.18	-0.18	-0.16	-0.13	-0.09	0.04	0.04	0.07	0.16	0.37	-0.51	-0.09
12	0.1	-0.03	-0.04	-0.04	-0.03	-0.05	-0.08	-0.18	-0.40	-0.55	-0.67	-0.62	-0.69	-0.66	-0.47	-0.41	-0.38	-0.28	-0.25	-0.20	-0.10	-0.08	-0.11	-0.05	0.09	-0.69	-0.26
13	-0.1	0.01	0.02	0.09	0.04	0.11	0.10	-0.09	-0.04	-0.19	-0.22	-0.22	-0.33	-0.25	-0.32	-0.34	-0.59	-0.64	-0.62	-0.48	-0.44	-0.16	0.57	0.69	0.69	-0.64	-0.14
14	0.7	0.22	0.06	0.03	0.08	0.01	-0.13	-0.21	-0.26	-0.41	-0.48	-0.66	-0.68	-0.58	-0.90	-1.03	-1.28	-1.22	-0.97	-0.29	0.10	-0.05	0.08	0.26	0.71	-1.28	-0.32
15	0.5	0.33	0.48	0.57	0.18	0.20	0.13	-0.15	-0.35	-0.39	-0.40	-0.62	-0.73	-0.97	-1.08	-1.08	-0.79	-0.39	-0.31	-0.07	0.05	0.03	0.02	0.05	0.57	-1.08	-0.20
16	0.0	0.03	0.03	0.03	0.04	0.05	-0.02	-0.13	-0.21	-0.26	-0.31	-0.19	-0.38	-0.54	-0.69	-0.86	-1.01	-0.55	-0.73	-0.96	-0.19	-0.08	0.03	0.17	0.17	-1.01	-0.28
17	0.2	0.43	0.49	0.42	0.53	0.28	0.24	-0.12	-0.29	-0.42	-0.79	-0.81	-0.92	-0.89	-1.08	-1.08	-1.09	-1.12	-0.96	-0.69	-0.43	-0.08	0.35	0.55	0.55	-1.12	-0.30
18	0.6	0.43	0.42	0.44	0.25	0.23	0.10	-0.10	-0.34	-0.59	-0.78	-0.99	-1.14	-1.11	-1.45	-1.40	-1.41	-1.07	-0.80	-0.71	-0.58	-0.43	0.22	0.48	0.64	-1.45	-0.40
19	0.5	0.39	0.51	0.39	0.31	0.33	0.09	0.06	-0.21	-0.50	-0.74	-0.61	-0.74	-0.60	-1.39	-1.36	-1.23	-1.28	-1.05	-0.91	-0.69	-0.24	0.13	0.22	0.54	-1.39	-0.36
20	0.1	0.39	0.84	0.34	0.71	0.82	0.18	-0.18	-0.35	-0.46	-0.58	-0.87	-0.97	-1.27	-1.18	-1.19	-1.29	-1.17	-1.04	-0.78	-0.49	-0.16	0.09	0.43	0.84	-1.29	-0.34
21	0.6	0.51	0.67	0.31	0.52	0.91	0.46	-0.15	-0.48	-0.48	-0.54	-0.34	-0.34	-0.39	-0.47	-0.51	-0.52	-0.80	-0.89	-0.76	-0.61	-0.22	0.32	0.28	0.91	-0.89	-0.12
22	0.2	0.45	0.46	0.62	0.89	0.72	0.42	-0.14	-0.42	-0.51	-0.69	-0.82	-0.90	-1.01	-1.05	-0.90	-0.67	-0.98	-0.93	-0.51	-0.21	-0.13	-0.06	-0.02	0.89	-1.05	-0.26
23	0.0	0.04	0.14	0.17	0.52	0.48	0.13	-0.08	-0.43	-0.53	-0.90	-1.07	-1.18	-0.95	-1.28	-1.26	-1.15	-1.05	-0.98	-0.80	-0.54	-0.19	0.21	0.58	0.58	-1.28	-0.42
24	0.7	0.70	0.64	0.51	0.42	0.41	0.18	-0.18	-0.42	-0.56	-0.92	-0.97	-0.71	-0.65	-0.55	-0.54	-0.52	-0.21	-0.25	-0.16	-0.10	-0.06	-0.04	-0.02	0.74	-0.97	-0.14
25	0.0	0.03	0.05	0.03	0.05	0.04	0.08	0.03	0.04	-0.14	-0.29	-0.31	-0.49	-0.76	-0.63	-1.07	-1.24	-1.12	-0.52	-0.35	-0.22	-0.14	-0.01	0.06	0.08	-1.24	-0.29
26	0.1	0.20	0.21	0.16	0.23	0.32	0.17	0.21	0.06	-0.08	-0.06	-0.20	-0.38	-0.37	-0.42	-0.32	-0.33	-0.33	-0.22	-0.15	-0.16	0.07	0.25	0.19	0.32	-0.42	-0.03
27	0.2	0.40	0.28	0.35	0.23	0.28	0.21	0.02	-0.23	-0.44	-0.53	-0.77	-0.90	-1.24	-1.10	-1.36	-1.05	-0.97	-1.10	-0.82	-0.55	-0.04	0.35	0.58	0.58	-1.36	-0.34
28	0.7	0.53	0.19	0.09	0.23	0.33	-0.02	-0.19	-0.37	-0.48	-0.62	-0.46	-0.37	-0.44	-0.82	-0.34	-0.33	-0.54	-0.62	-0.47	-0.22	-0.12	0.00	0.23	0.73	-0.82	-0.17
29	0.3	0.12	-0.03	-0.02	0.01	0.01	0.10	-0.08	-0.17	-0.31	-0.31	-0.57	-0.75	-0.61	-0.73	-0.85	-0.93	-0.94	-1.07	-0.60	-0.19	0.13	0.23	0.25	0.28	-1.07	-0.29
30	0.3	0.43	0.41	0.42	0.40	0.27	0.29	-0.01	-0.25	-0.20	-0.39	-0.41	-0.31	-0.44	-0.51	-0.68	-0.81	-0.47	-0.75	-0.96	-0.31	-0.22	0.13	0.70	0.70	-0.96	-0.14
Max.	**0.7**	**0.70**	**0.84**	**0.91**	**0.89**	**0.91**	**0.46**	**0.21**	**0.06**	**-0.06**	**-0.06**	**-0.19**	**-0.31**	**-0.25**	**-0.24**	**-0.18**	**-0.18**	**-0.16**	**-0.13**	**-0.07**	**0.10**	**0.13**	**0.57**	**0.70**	**0.91**		
Min.	**-0.1**	**-0.04**	**-0.04**	**-0.08**	**-0.07**	**-0.07**	**-0.14**	**-0.25**	**-0.48**	**-0.70**	**-0.92**	**-1.07**	**-1.18**	**-1.27**	**-1.45**	**-1.40**	**-1.41**	**-1.28**	**-1.14**	**-0.96**	**-0.69**	**-0.43**	**-0.13**	**-0.05**		**-1.45**	
Avg.	**0.3**	**0.27**	**0.29**	**0.27**	**0.28**	**0.27**	**0.12**	**-0.09**	**-0.26**	**-0.38**	**-0.51**	**-0.60**	**-0.67**	**-0.70**	**-0.82**	**-0.83**	**-0.85**	**-0.75**	**-0.68**	**-0.54**	**-0.27**	**-0.11**	**0.12**	**0.27**			**-0.25**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.23	0.50	0.45	0.49	0.27	0.87	0.10	-0.38	-0.42	-0.75	-1.00	-1.17	-1.27	-1.34	-1.38	-1.26	-1.06	-0.75	-0.64	-0.29	-0.11	0.02	0.09	0.87	-1.38	-0.35
2	0.1	0.06	0.05	0.11	0.13	0.13	0.07	-0.08	-0.13	-0.26	-0.49	-0.49	-0.71	-1.02	-0.72	-1.09	-0.97	-0.95	-0.55	-0.32	-0.25	-0.11	0.01	0.07	0.13	-1.09	-0.31
3	0.2	0.06	0.12	0.18	0.25	0.33	0.21	0.04	-0.06	-0.28	-0.33	-0.38	-0.35	-0.29	-0.63	-0.66	-0.63	-0.53	-0.38	-0.24	-0.21	-0.13	-0.07	-0.04	0.33	-0.66	-0.16
4	0.0	-0.02	-0.03	0.09	0.19	0.22	0.23	0.02	-0.12	-0.17	-0.30	-0.44	-0.54	-0.57	-0.44	-0.39	-0.54	-0.49	-0.38	-0.26	-0.35	-0.27	-0.20	-0.10	0.23	-0.57	-0.20
5	-0.1	-0.02	0.51	0.57	0.50	0.53	0.44	0.19	-0.14	-0.10	-0.36	-0.53	-0.59	-0.80	-1.07	-0.76	-0.63	-0.62	-0.56	-0.48	-0.32	-0.14	0.17	0.22	0.57	-1.07	-0.17
6	0.3	0.20	0.47	0.56	0.56	0.22	0.49	0.43	-0.04	-0.44	-0.72	-0.79	-1.02	-0.94	-0.78	-0.88	-0.76	-0.68	-0.50	-0.45	-0.41	-0.23	-0.17	-0.12	0.56	-1.02	-0.24
7	-0.1	-0.04	-0.04	-0.04	-0.03	-0.04	-0.06	-0.07	-0.07	-0.08	-0.07	-0.30	-0.30	-0.36	-0.29	-0.26	-0.34	-0.42	-0.48	-0.40	-0.21	-0.12	-0.06	0.11	0.11	-0.48	-0.17
8	0.2	0.27	0.17	0.11	0.10	-0.03	0.00	-0.10	-0.13	-0.18	-0.20	-0.17	-0.26	-0.28	-0.38	-0.33	-0.23	-0.24	-0.15	-0.13	-0.15	-0.12	-0.04	0.02	0.27	-0.38	-0.09
9	0.1	0.08	0.28	0.28	0.32	0.26	0.17	0.03	-0.26	-0.45	-0.67	-0.89	-0.98	-1.19	-1.28	-1.35	-1.21	-1.23	-0.98	-0.62	-0.26	-0.12	-0.06	0.00	0.32	-1.35	-0.42
10	0.0	0.00	0.01	0.05	0.07	0.08	0.12	-0.01	-0.34	-0.56	-0.65	-0.68	-0.54	-1.05	-1.22	-0.92	-0.83	-0.94	-0.70	-0.47	-0.31	-0.15	-0.07	0.00	0.12	-1.22	-0.38
11	0.0	0.01	0.02	-0.02	-0.07	-0.07	-0.08	-0.09	-0.25	-0.53	-0.68	-0.75	-0.94	-0.99	-1.05	-1.14	-1.08	-1.17	-0.99	-0.74	-0.48	-0.11	0.15	0.13	0.15	-1.17	-0.45
12	0.1	0.14	0.54	0.45	0.54	0.57	0.49	-0.09	-0.40	-0.45	-0.49	-0.45	-0.43	-0.72	-0.75	-0.49	-0.44	-0.33	-0.13	-0.08	-0.05	-0.04	-0.04	-0.03	0.57	-0.75	-0.11
13	0.0	-0.01	-0.01	-0.03	-0.02	-0.03	-0.04	-0.05	-0.10	-0.17	-0.22	-0.37	-0.40	-0.43	-0.44	-0.41	-0.40	-0.38	-0.35	-0.37	-0.28	-0.20	-0.11	-0.02	-0.01	-0.44	-0.20
14	0.1	0.00	0.00	0.01	0.08	0.04	0.00	-0.09	-0.14	-0.24	-0.39	-0.48	-0.54	-0.63	-0.82	-0.95	-0.76	-0.76	-0.63	-0.59	-0.23	-0.04	0.00	0.05	0.09	-0.95	-0.29
15	0.1	0.18	0.12	0.12	0.11	0.24	0.14	-0.12	-0.24	-0.38	-0.57	-0.72	-0.88	-1.02	-1.27	-1.21	-1.00	-0.65	-0.61	-0.25	-0.08	0.01	0.02	0.05	0.24	-1.27	-0.33
16	0.0	0.02	0.01	-0.01	0.01	-0.01	-0.02	-0.03	-0.12	-0.12	-0.15	-0.18	-0.30	-0.36	-0.49	-0.27	-0.11	-0.07	-0.03	-0.06	-0.05	-0.05	-0.02	-0.02	0.02	-0.49	-0.10
17	0.0	-0.01	-0.04	-0.06	-0.05	-0.03	-0.06	-0.08	-0.16	-0.24	-0.11	-0.18	-0.26	-0.24	-0.24	-0.20	-0.16	-0.15	-0.15	-0.06	-0.02	-0.03	-0.03	-0.02	-0.01	-0.26	-0.11
18	0.0	-0.04	-0.02	-0.02	-0.05	-0.05	-0.09	-0.16	-0.31	-0.37	-0.44	-0.59	-0.72	-0.79	-0.60	-0.44	-0.53	-0.69	-0.44	-0.25	-0.24	-0.15	0.02	0.12	0.12	-0.79	-0.29
19	0.4	0.13	0.29	0.31	0.31	0.17	0.11	-0.02	-0.19	-0.43	-0.64	-0.80	-0.72	-0.68	-0.73	-0.60	-0.69	-0.49	-0.37	-0.19	-0.06	0.01	0.15	0.16	0.36	-0.80	-0.19
20	0.4	0.46	0.31	0.14	0.40	0.41	0.22	-0.01	-0.10	-0.12	-0.14	-0.14	-0.17	-0.27	-0.23	-0.31	-0.22	-0.14	-0.11	-0.09	-0.06	-0.03	-0.03	-0.02	0.46	-0.31	0.01
21	0.0	-0.01	-0.01	-0.01	-0.01	0.00	-0.01	-0.03	-0.08	-0.14	-0.28	-0.43	-0.31	-0.52	-0.48	-0.36	-0.46	-0.39	-0.26	-0.26	-0.28	-0.07	-0.03	-0.04	0.00	-0.52	-0.19
22	0.0	-0.03	-0.04	-0.04	-0.04	0.06	0.06	-0.11	-0.19	-0.14	-0.28	-0.29	-0.29	-0.28	-0.24	-0.25	-0.26	-0.22	-0.13	-0.14	-0.25	-0.17	-0.11	-0.03	0.06	-0.29	-0.14
23	0.0	-0.03	-0.02	-0.01	-0.02	-0.01	-0.04	-0.10	-0.21	-0.26	-0.30	-0.47	-0.42	-0.48	-0.41	-0.60	-0.88	-0.74	-0.75	-0.60	-0.17	-0.08	-0.05	0.02	0.02	-0.88	-0.28
24	0.0	0.14	0.18	0.13	0.11	0.10	0.06	0.02	-0.03	-0.11	-0.22	-0.24	-0.45	-0.62	-0.72	-0.81	-0.87	-0.61	0.03	-0.02	0.28	0.51	0.53	0.65	0.65	-0.87	-0.08
25	0.6	0.61	0.55	0.60	0.57	0.48	0.39	0.18	-0.08	-0.36	-0.58	-0.79	-0.91	-1.01	-1.02	-1.03	-1.04	-0.71	-0.72	-0.71	-0.25	0.11	0.27	0.51	0.63	-1.04	-0.18
26	0.4	0.73	0.95	0.55	0.18	-0.03	-0.07	-0.10	-0.14	-0.20	-0.23	-0.29	-0.34	-0.37	-0.47	-0.43	-0.43	-0.63	-0.64	-0.54	-0.37	-0.22	-0.10	-0.07	0.95	-0.64	-0.12
27	-0.1	-0.05	-0.06	-0.07	-0.07	-0.07	-0.07	-0.10	-0.16	-0.20	-0.30	-0.13	-0.19	-0.26	-0.28	-0.35	-0.37	-0.42	-0.41	-0.34	-0.30	-0.12	0.24	0.19	0.24	-0.42	-0.16
28	0.1	0.14	0.23	0.28	0.37	0.22	0.32	0.04	-0.25	-0.21	-0.55	-0.61	-0.36	-0.57	-0.53	-0.55	-0.81	-0.54	-0.62	-0.27	-0.08	0.12	0.49	0.54	0.54	-0.81	-0.13
29	0.7	0.76	0.60	0.69	1.07	0.69	0.45	0.18	-0.19	-0.41	-0.65	-0.80	-0.99	-1.18	-1.22	-1.27	-1.27	-1.16	-0.70	-0.46	-0.08	0.11	0.13	0.08	1.07	-1.27	-0.21
30	0.1	0.06	0.08	0.11	0.08	0.09	0.11	0.08	0.06	-0.21	-0.70	-0.78	-1.13	-1.26	-1.24	-1.22	-1.06	-1.19	-0.77	-0.54	-0.55	-0.16	0.16	0.28	0.28	-1.26	-0.40
31	0.3	0.18	0.17	0.24	0.21	0.20	0.25	0.04	-0.26	-0.50	-0.70	-0.89	-1.02	-1.26	-1.41	-1.25	-1.20	-1.27	-1.21	-1.00	-0.62	-0.19	0.11	0.12	0.27	-1.41	-0.46
Max.	**0.7**	**0.76**	**0.95**	**0.69**	**1.07**	**0.69**	**0.87**	**0.43**	**0.06**	**-0.08**	**-0.07**	**-0.13**	**-0.17**	**-0.24**	**-0.23**	**-0.20**	**-0.11**	**-0.07**	**0.03**	**-0.02**	**0.28**	**0.51**	**0.53**	**0.65**	**1.07**		
Min.	**-0.1**	**-0.05**	**-0.06**	**-0.07**	**-0.07**	**-0.07**	**-0.09**	**-0.16**	**-0.40**	**-0.56**	**-0.75**	**-1.00**	**-1.17**	**-1.27**	**-1.41**	**-1.38**	**-1.27**	**-1.27**	**-1.21**	**-1.00**	**-0.62**	**-0.27**	**-0.20**	**-0.12**		**-1.41**	
Avg.	**0.1**	**0.14**	**0.19**	**0.18**	**0.20**	**0.16**	**0.15**	**0.00**	**-0.17**	**-0.28**	**-0.42**	**-0.52**	**-0.59**	**-0.70**	**-0.74**	**-0.71**	**-0.69**	**-0.64**	**-0.50**	**-0.37**	**-0.22**	**-0.07**	**0.04**	**0.09**			**-0.22**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.4	0.32	1.17	0.77	0.44	0.61	1.26	0.70	0.24	-0.21	-0.29	-0.30	-0.54	-0.80	-0.84	-1.07	-0.90	-0.88	-0.72	-0.72	-0.43	-0.04	0.60	0.59	1.26	-1.07	-0.03
2	0.6	0.16	-0.07	-0.06	-0.06	-0.07	-0.07	-0.09	-0.13	-0.17	-0.25	-0.33	-0.32	-0.32	-0.32	-0.43	-0.58	-0.44	-0.29	-0.37	-0.24	-0.16	-0.02	0.16	0.59	-0.58	-0.16
3	0.2	0.61	0.50	0.13	0.10	0.30	0.33	0.05	-0.21	-0.44	-0.64	-0.84	-0.97	-0.91	-0.89	-0.89	-1.11	-0.90	-0.87	-0.71	-0.20	0.15	0.42	0.40	0.61	-1.11	-0.27
4	0.4	0.49	0.77	0.66	0.36	0.09	0.00	-0.14	-0.17	-0.29	-0.47	-0.52	-0.63	-0.65	-0.68	-0.56	-0.59	-0.80	-0.81	-0.68	-0.28	0.00	0.45	0.38	0.77	-0.81	-0.15
5	0.5	0.36	0.49	0.14	0.25	0.06	0.08	-0.02	-0.12	-0.32	-0.68	-0.82	-0.88	-0.93	-1.02	-1.06	-1.01	-0.97	-0.82	-0.70	-0.43	0.01	0.66	0.77	0.77	-1.06	-0.27
6	0.5	0.46	0.80	0.95	0.56	0.55	0.35	0.19	-0.20	-0.47	-0.68	-0.87	-1.04	-1.16	-1.08	-1.05	-1.25	-0.97	-0.51	-0.22	-0.14	0.04	0.29	0.36	0.95	-1.25	-0.19
7	0.4	0.17	0.27	0.17	0.20	0.27	0.25	0.00	-0.20	-0.55	-0.88	-0.64	-1.05	-1.17	-1.03	-1.12	-0.89	-0.90	-0.99	-0.96	-0.46	0.18	0.62	0.68	0.68	-1.17	-0.32
8	0.4	0.55	1.22	0.73	0.87	1.06	1.34	0.44	-0.13	-0.45	-0.68	-0.91	-1.00	-1.07	-1.00	-0.98	-0.86	-0.79	-0.74	-0.66	-0.41	0.06	0.76	1.04	1.34	-1.07	-0.05
9	0.9	1.05	1.16	1.80	0.85	0.65	0.53	0.59	-0.09	-0.44	-0.69	-0.90	-1.01	-1.13	-1.18	-1.15	-1.19	-0.61	-0.71	-0.60	-0.32	0.36	1.25	1.68	1.80	-1.19	0.03
10	1.5	1.24	0.92	0.93	0.74	0.59	0.41	0.20	-0.21	-0.48	-0.62	-0.81	-0.83	-1.07	-1.16	-1.06	-0.67	-0.88	-0.60	-0.49	-0.30	0.32	0.79	0.68	1.48	-1.16	-0.04
11	0.7	-0.03	-0.04	0.07	0.14	0.62	0.58	0.39	-0.20	-0.33	-0.47	-0.51	-0.80	-0.84	-0.86	-1.07	-1.04	-0.83	-0.67	-0.32	0.04	0.23	0.39	0.89	0.89	-1.07	-0.17
12	0.6	0.90	0.79	1.10	1.80	1.51	1.04	0.56	0.09	-0.49	-0.55	-0.63	-0.63	-0.76	-0.79	-0.62	-0.73	-0.59	-0.45	-0.26	-0.16	0.12	0.25	0.24	1.80	-0.79	0.10
13	0.5	0.36	0.68	0.33	0.37	0.28	0.54	0.31	0.12	-0.15	-0.23	-0.44	-0.41	-0.50	-0.46	-0.32	-0.56	-0.31	-0.26	-0.23	-0.02	0.04	0.12	0.17	0.68	-0.56	0.00
14	0.2	0.14	0.19	0.26	0.22	0.38	0.43	0.10	-0.02	-0.10	-0.20	-0.22	-0.24	-0.26	-0.40	-0.45	-0.39	-0.38	-0.27	-0.20	-0.16	-0.10	-0.05	-0.04	0.43	-0.45	-0.07
15	0.0	-0.04	-0.04	-0.03	0.11	0.08	-0.04	-0.12	-0.20	-0.33	-0.40	-0.40	-0.40	-0.41	-0.39	-0.46	-0.38	-0.38	-0.32	-0.22	-0.17	-0.10	-0.11	-0.06	0.11	-0.46	-0.20
16	-0.1	-0.05	-0.07	-0.06	-0.05	-0.05	-0.06	-0.09	-0.14	-0.20	-0.22	-0.26	-0.38	-0.61	-0.81	-0.74	-0.68	-0.71	-0.68	-0.46	-0.04	0.38	0.44	0.51	0.51	-0.81	-0.21
17	0.3	0.45	0.71	0.60	0.55	0.73	0.72	0.51	0.03	-0.22	-0.32	-0.60	-0.66	-0.76	-0.78	-0.69	-0.91	-0.85	-0.47	-0.36	-0.13	0.05	0.08	0.20	0.73	-0.91	-0.07
18	0.3	0.30	0.29	0.48	0.80	0.71	0.85	0.67	0.22	-0.17	-0.39	-0.58	-0.58	-0.66	-0.52	-0.60	-0.63	-0.62	-0.42	-0.41	0.08	0.22	0.31	0.83	0.85	-0.66	0.02
19	0.7	0.58	0.23	0.59	0.60	0.44	0.32	0.19	0.24	0.08	-0.21	-0.24	-0.52	-0.63	-0.75	-0.66	-0.53	-0.31	-0.37	-0.14	0.17	0.52	0.25	0.16	0.75	-0.75	0.03
20	0.3	0.33	0.46	0.47	0.44	0.39	0.42	0.23	0.12	-0.07	-0.18	-0.23	-0.29	-0.35	-0.59	-0.44	-0.47	-0.64	-0.23	-0.20	-0.04	0.08	0.14	0.10	0.47	-0.64	-0.01
21	0.2	0.27	0.41	0.17	0.15	0.10	0.07	-0.05	-0.15	-0.29	-0.35	-0.36	-0.40	-0.34	-0.44	-0.63	-0.39	-0.63	-0.83	-0.69	-0.26	-0.09	-0.14	-0.11	0.41	-0.83	-0.20
22	-0.1	-0.09	-0.04	-0.04	-0.07	-0.05	0.02	-0.05	-0.16	-0.19	-0.21	-0.20	-0.18	-0.27	-0.42	-0.31	-0.33	-0.26	-0.33	-0.50	-0.32	0.15	0.49	1.30	1.30	-0.50	-0.09
23	1.4	1.10	0.88	0.95	1.10	1.28	1.13	0.71	0.14	-0.15	-0.38	-0.58	-0.68	-0.58	-0.99	-0.86	-0.68	-0.66	-0.58	-0.11	-0.10	-0.06	0.09	0.15	1.37	-0.99	0.10
24	0.1	0.05	0.11	0.12	0.18	0.19	0.11	0.02	-0.02	-0.09	-0.19	-0.54	-0.73	-0.82	-0.71	-0.53	-0.41	-0.45	-0.27	-0.11	0.29	0.39	0.73	1.20	1.20	-0.82	-0.06
25	1.2	0.67	0.55	0.72	0.25	-0.01	-0.03	-0.07	-0.12	-0.22	-0.29	-0.27	-0.45	-0.43	-0.51	-0.42	-0.64	-0.60	-0.38	-0.33	-0.18	0.07	0.19	-0.01	1.18	-0.64	-0.05
26	0.0	-0.04	-0.05	-0.06	-0.05	-0.05	-0.05	-0.06	-0.07	-0.12	-0.17	-0.14	-0.18	-0.23	-0.27	-0.45	-0.60	-0.67	-0.39	-0.33	-0.14	-0.09	-0.04	-0.06	-0.03	-0.67	-0.18
27	-0.1	-0.04	-0.03	0.00	-0.01	-0.06	-0.09	-0.09	-0.16	-0.19	-0.25	-0.29	-0.21	-0.29	-0.54	-0.72	-0.87	-0.78	-0.60	-0.45	-0.19	0.01	0.07	0.11	0.11	-0.87	-0.24
28	0.2	0.27	0.39	0.41	0.45	0.29	0.10	0.20	0.02	-0.11	-0.19	-0.24	-0.36	-0.36	-0.49	-0.62	-0.88	-0.37	-0.05	0.14	0.13	0.68	0.81	0.80	0.81	-0.88	0.05
29	1.0	0.87	1.00	1.33	1.31	1.28	1.09	1.08	0.52	-0.03	-0.24	-0.33	-0.72	-0.80	-0.71	-0.55	-0.20	-0.42	-0.29	-0.17	-0.02	0.37	0.46	0.52	1.33	-0.80	0.27
30	0.3	0.50	0.24	0.27	0.46	0.39	0.39	0.33	0.17	-0.08	-0.21	-0.27	-0.27	-0.45	-0.55	-0.65	-0.60	-0.67	-0.39	-0.17	0.06	0.25	0.20	0.11	0.50	-0.67	-0.02
31	0.1	0.07	0.14	0.17	0.13	0.12	0.13	0.09	0.11	0.12	0.09	-0.13	-0.17	-0.42	-0.27	-0.02	-0.16	0.07	0.03	0.09	0.19	0.42	0.41	0.32	0.42	-0.42	0.07
Max.	**1.5**	**1.24**	**1.22**	**1.80**	**1.80**	**1.51**	**1.34**	**1.08**	**0.52**	**0.12**	**0.09**	**-0.13**	**-0.17**	**-0.23**	**-0.27**	**-0.02**	**-0.16**	**0.07**	**0.03**	**0.14**	**0.29**	**0.68**	**1.25**	**1.68**	**1.80**		
Min.	**-0.1**	**-0.09**	**-0.07**	**-0.06**	**-0.07**	**-0.07**	**-0.09**	**-0.14**	**-0.21**	**-0.55**	**-0.88**	**-0.91**	**-1.05**	**-1.17**	**-1.18**	**-1.15**	**-1.25**	**-0.97**	**-0.99**	**-0.96**	**-0.46**	**-0.16**	**-0.14**	**-0.11**		**-1.25**	
Avg.	**0.4**	**0.39**	**0.45**	**0.45**	**0.43**	**0.41**	**0.39**	**0.22**	**-0.02**	**-0.23**	**-0.37**	**-0.46**	**-0.57**	**-0.64**	**-0.69**	**-0.68**	**-0.68**	**-0.62**	**-0.49**	**-0.37**	**-0.13**	**0.14**	**0.35**	**0.45**			**-0.08**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.26	0.26	0.36	0.45	0.32	0.45	0.31	0.09	-0.12	-0.26	-0.52	-0.54	-0.51	-0.69	-0.64	-0.43	-0.20	-0.09	-0.06	0.07	0.04	0.07	0.11	0.45	-0.69	-0.04
2	0.1	0.11	0.12	0.08	0.09	0.08	0.12	0.04	0.00	-0.06	-0.07	-0.08	-0.13	-0.17	-0.28	-0.27	-0.31	-0.19	0.01	0.15	0.26	0.23	0.29	0.24	0.29	-0.31	0.01
3	0.2	0.14	0.15	0.09	0.09	0.03	0.01	0.02	-0.04	-0.05	-0.13	-0.17	-0.25	-0.35	-0.41	-0.45	-0.52	-0.36	-0.30	-0.18	-0.07	-0.03	0.00	-0.04	0.16	-0.52	-0.11
4	0.0	-0.04	-0.06	-0.05	-0.06	0.01	0.08	0.07	-0.05	-0.20	-0.24	-0.39	-0.57	-0.62	-0.59	-0.52	-0.40	-0.38	-0.35	-0.24	0.36	0.21	0.16	0.28	0.36	-0.62	-0.15
5	0.4	0.70	0.73	0.65	0.55	0.28	0.81	0.69	0.48	0.37	-0.21	-0.43	-0.56	-0.62	-0.78	-0.85	-0.74	-0.53	-0.19	-0.01	0.29	0.35	0.38	0.58	0.81	-0.85	0.10
6	0.3	0.70	0.20	0.09	0.45	0.34	0.13	0.14	0.10	0.09	0.07	-0.08	0.01	-0.01	-0.01	0.04	0.09	0.14	0.15	0.09	0.22	0.26	0.19	0.16	0.70	-0.08	0.16
7	0.2	0.25	0.40	0.37	0.43	0.34	0.30	0.23	0.23	0.20	0.01	-0.14	-0.15	-0.09	-0.15	-0.27	-0.33	-0.28	-0.11	-0.11	-0.07	-0.04	-0.04	-0.03	0.43	-0.33	0.05
8	0.0	-0.04	-0.03	-0.03	-0.04	-0.03	-0.04	-0.04	-0.09	-0.24	-0.29	-0.35	-0.29	-0.21	-0.19	-0.17	-0.10	-0.05	-0.07	-0.02	0.12	0.23	0.29	0.25	0.29	-0.35	-0.06
9	0.3	0.23	0.15	0.17	0.14	0.25	0.23	0.17	0.07	0.03	-0.03	-0.16	-0.13	-0.16	-0.17	-0.14	-0.24	-0.12	-0.09	-0.02	0.06	0.18	0.17	0.06	0.27	-0.24	0.04
10	0.1	0.02	-0.01	-0.02	-0.02	-0.03	-0.03	-0.04	-0.07	-0.13	-0.23	-0.28	-0.33	-0.54	-0.29	-0.35	-0.41	-0.43	-0.26	-0.06	0.15	-0.02	-0.03	-0.04	0.15	-0.54	-0.14
11	-0.1	-0.07	-0.07	-0.07	-0.06	-0.05	-0.06	-0.06	-0.07	-0.09	-0.13	-0.15	-0.21	-0.24	-0.43	-0.51	-0.39	-0.42	-0.23	-0.01	0.10	0.11	0.15	0.10	0.15	-0.51	-0.12
12	0.1	0.03	0.05	0.02	0.00	-0.02	0.00	-0.01	-0.02	-0.04	-0.04	-0.05	-0.04	-0.10	-0.10	-0.07	-0.05	-0.08	-0.01	-0.01	-0.02	-0.02	-0.02	0.02	0.05	-0.10	-0.02
13	0.0	0.01	-0.01	-0.01	-0.02	-0.02	-0.02	0.01	0.00	0.01	0.07	-0.02	-0.06	-0.09	-0.12	-0.14	-0.23	-0.15	-0.05	0.03	0.09	0.19	0.21	0.13	0.21	-0.23	-0.01
14	0.2	0.15	0.15	0.19	0.18	0.16	0.18	0.18	0.14	-0.01	-0.06	-0.07	-0.17	-0.17	-0.22	-0.39	-0.25	-0.24	-0.17	0.07	0.28	0.20	0.12	0.15	0.28	-0.39	0.02
15	0.2	0.16	0.14	0.12	0.14	0.16	0.24	0.15	0.11	0.01	-0.06	-0.14	-0.25	-0.32	-0.34	-0.23	-0.31	-0.30	-0.18	-0.02	0.06	0.05	0.01	-0.01	0.24	-0.34	-0.03
16	0.1	0.24	0.22	0.27	0.32	0.15	0.36	0.59	0.53	0.27	-0.13	-0.36	-0.47	-0.63	-0.42	-0.50	-0.36	-0.08	-0.29	-0.06	0.34	0.26	0.38	0.40	0.59	-0.63	0.05
17	0.4	0.27	0.24	-0.02	-0.05	-0.05	-0.05	-0.05	-0.08	0.01	-0.18	-0.22	-0.12	-0.23	-0.24	-0.27	-0.21	-0.17	-0.09	-0.02	0.05	0.07	0.10	0.09	0.44	-0.27	-0.03
18	0.1	0.17	0.21	0.23	0.23	0.17	0.20	0.23	0.09	-0.01	-0.06	-0.09	0.01	-0.04	-0.16	-0.21	-0.18	-0.15	-0.10	-0.04	0.08	0.16	0.06	0.06	0.23	-0.21	0.04
19	0.1	0.08	0.06	0.03	0.00	0.01	-0.01	-0.03	-0.05	-0.16	-0.23	-0.31	-0.36	-0.39	-0.42	-0.52	-0.62	-0.56	-0.28	-0.11	0.02	0.08	0.12	0.09	0.12	-0.62	-0.15
20	0.1	0.12	0.20	0.24	0.22	0.32	0.32	0.36	0.28	-0.01	-0.17	-0.26	-0.34	-0.41	-0.52	-0.60	-0.50	-0.37	-0.30	-0.02	1.04	0.92	1.27	1.26	1.27	-0.60	0.13
21	1.3	0.51	0.19	0.23	0.15	0.23	0.13	0.25	0.34	0.26	-0.15	-0.34	-0.38	-0.43	-0.46	-0.54	-0.43	-0.30	-0.18	0.26	0.61	0.77	0.63	1.00	1.25	-0.54	0.15
22	1.2	1.28	1.56	1.02	1.00	0.75	0.49	0.73	0.73	0.64	0.06	-0.18	-0.38	-0.49	-0.50	-0.43	-0.27	-0.18	-0.09	-0.04	-0.01	-0.01	-0.02	-0.05	1.56	-0.50	0.28
23	0.0	-0.03	-0.01	0.04	0.03	0.00	0.00	0.01	-0.01	-0.04	-0.05	-0.07	-0.11	-0.08	-0.19	-0.16	-0.13	-0.09	-0.07	-0.04	-0.01	0.02	0.03	0.00	0.04	-0.19	-0.04
24	0.0	-0.03	-0.03	-0.02	-0.01	-0.02	0.01	0.12	0.11	0.07	-0.03	-0.12	-0.17	-0.21	-0.26	-0.29	-0.34	-0.21	-0.14	-0.02	0.08	0.10	0.10	0.11	0.12	-0.34	-0.05
25	0.2	0.35	0.21	0.11	0.07	0.12	0.14	0.37	0.35	0.16	0.07	0.10			0.03	-0.27	-0.22	-0.17	-0.15	-0.03	0.12	0.11	0.14	0.21	0.37	-0.27	0.09
26	0.3	0.28	0.34	0.56	0.36	0.20	0.47	0.35	0.37	0.24	0.12	-0.26	-0.32	-0.35	-0.31	-0.18	-0.11	-0.33	-0.16	0.08	0.44	0.78	1.21	1.00	1.21	-0.35	0.21
27	0.9	0.63	0.63	0.52	0.39	0.45	0.36	0.40	0.33	0.19	-0.05	-0.21	-0.30	-0.39	-0.46	-0.43	-0.37	-0.21	0.06	0.37	0.52	0.49	0.52	1.15	1.15	-0.46	0.23
28	1.4	0.81	0.56	0.79	1.08	0.68	1.40	0.43	1.43	1.05	0.10	-0.31	-0.36	-0.33	-0.44	-0.32	-0.41	-0.24	-0.06	0.20	0.47	0.46	0.27	0.18	1.43	-0.44	0.37
29	0.2	0.40	0.73	0.84	0.70	0.55	0.53	0.39	0.46	0.41	-0.02	-0.23	-0.21	-0.21	-0.23	-0.32	-0.31	-0.37	-0.18	0.09	0.22	0.14	0.31	0.46	0.84	-0.37	0.18
30	0.3	0.85	0.82	0.74	0.69	0.60	0.50	0.21	0.73	0.49	0.09	-0.13	-0.40	-0.48	-0.44	-0.47	-0.47	-0.41	-0.27	0.80	0.79	0.46	0.49	0.67	0.85	-0.48	0.25
Max.	**1.4**	**1.28**	**1.56**	**1.02**	**1.08**	**0.75**	**1.40**	**0.73**	**1.43**	**1.05**	**0.12**	**0.10**	**0.01**	**-0.01**	**0.03**	**0.04**	**0.09**	**0.14**	**0.15**	**0.80**	**1.04**	**0.92**	**1.27**	**1.26**	**1.56**		
Min.	**-0.1**	**-0.07**	**-0.07**	**-0.07**	**-0.06**	**-0.05**	**-0.06**	**-0.06**	**-0.09**	**-0.24**	**-0.29**	**-0.52**	**-0.57**	**-0.63**	**-0.78**	**-0.85**	**-0.74**	**-0.56**	**-0.35**	**-0.24**	**-0.07**	**-0.04**	**-0.04**	**-0.05**		**-0.85**	
Avg.	**0.3**	**0.29**	**0.27**	**0.25**	**0.25**	**0.20**	**0.24**	**0.21**	**0.22**	**0.11**	**-0.07**	**-0.20**	**-0.26**	**-0.31**	**-0.33**	**-0.35**	**-0.32**	**-0.25**	**-0.14**	**0.03**	**0.22**	**0.22**	**0.25**	**0.29**			**0.05**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.4	0.25	0.59	0.46	0.27	0.49	0.75	0.62	0.40	0.10	0.00	-0.15	-0.18	-0.31	-0.26	-0.16	-0.16	-0.17	-0.03	0.01	-0.04	-0.03	-0.01	-0.03	0.75	-0.31	0.12
2	0.1	0.11	0.22	0.21	0.41	0.12	0.32	0.38	0.42	0.10	-0.01	-0.13	-0.11	-0.24	-0.22	-0.39	-0.31	-0.28	-0.27	0.01	0.02	0.04	0.08	0.22	0.42	-0.39	0.03
3	0.2	0.12	0.07	0.19	0.16	0.09	0.00	-0.05	-0.07	-0.13	-0.16	-0.22	-0.29	-0.35	-0.43	-0.39	-0.47	-0.42	-0.20	0.21	0.56	0.45	0.36	0.48	0.56	-0.47	-0.01
4	0.6	0.91	1.00	0.40	0.36	0.73	1.17	1.87	1.46	1.00	0.17	-0.25	-0.18	-0.35	-0.27	-0.58	-0.48	-0.31	-0.18	-0.04	0.00	-0.01	0.03	-0.01	1.87	-0.58	0.29
5	0.0	-0.05	-0.06	-0.05	-0.02	-0.06	-0.07	-0.04	-0.03	-0.04	-0.09	-0.09	-0.11	-0.05	-0.07	-0.04	-0.05	-0.05	-0.03	0.03	-0.02	-0.05	-0.03	0.01	0.03	-0.11	-0.04
6	0.0	-0.02	0.04	0.29	0.38	0.16	0.11	0.08	0.04	0.00	-0.04	-0.07	-0.10	-0.12	-0.11	-0.06	0.01	-0.03	0.03	0.00	0.00	0.04	0.02	0.02	0.38	-0.12	0.03
7	0.0	0.01	0.04	0.00	0.00	0.03	0.02	-0.02	0.02	0.04	-0.09	-0.10	-0.14	-0.22	-0.15	-0.08	-0.13	-0.06	0.03	0.06	0.09	0.13	0.11	0.23	0.23	-0.22	-0.01
8	0.2	0.08	0.20	0.13	0.13	0.31	0.37	0.45	0.35	0.36	0.25	0.10	-0.01	-0.06	-0.09	-0.09	-0.02	0.08	0.24	0.62	0.57	0.53	0.61	0.58	0.62	-0.09	0.24
9	0.5	0.32	0.25	0.20	0.12	0.01	0.04	-0.01	0.01	0.11	0.04	0.04	0.15	0.26	0.26	0.21	0.32	0.26	0.23	0.21	0.18	0.24	0.19	0.11	0.52	-0.01	0.18
10	0.1	0.04	0.08	0.09	0.08	0.05	0.04	0.15	0.14	0.29	0.21	-0.08	-0.15	-0.30	-0.28	-0.22	-0.11	0.03	0.17	0.24	0.27	0.29	0.36	0.41	0.41	-0.30	0.08
11	0.4	0.53	0.38	0.20	0.20	0.11	0.11	0.03	0.01	-0.01	-0.12	-0.11	-0.07	-0.07	-0.09	-0.07	-0.05	-0.01	0.03	0.07	0.08	0.06	0.14	0.13	0.53	-0.12	0.08
12	0.1	0.11	0.05	0.02	0.07	0.11	0.07	-0.02	-0.02	0.04	0.09	0.06	0.10	0.07	0.03	0.01	0.10	0.14	0.19	0.20	0.20	0.20	0.24	0.22	0.24	-0.02	0.10
13	0.3	0.30	0.42	0.36	0.52	0.32	0.81	0.68	0.52	0.32	0.05	-0.13	-0.03	-0.03	0.03	0.05	0.08	0.03	0.04	0.02	0.03	0.03	0.00	-0.03	0.81	-0.13	0.19
14	0.0	-0.03	-0.02	-0.02	-0.03	-0.01	-0.03	-0.04	-0.05	-0.02	-0.04	-0.06	-0.06	-0.06	-0.05	0.01	0.12	0.09	0.07	0.06	0.02	0.03	0.00	-0.01	0.12	-0.06	-0.01
15	0.0	-0.07	-0.16	-0.14	-0.10	-0.10	-0.07	0.00	-0.04	-0.01	0.01	-0.02	-0.05	0.00	0.03	0.01	0.03	0.06	0.00	-0.07	-0.06	-0.02	0.08	0.12	0.12	-0.16	-0.02
16	0.1	-0.03	-0.04	-0.06	-0.06	-0.04	-0.03	-0.02	-0.03	-0.04	-0.07	-0.07	-0.08	-0.05	-0.06	-0.07	0.06	0.13	0.21	0.58	0.54	0.45	0.68	0.80	0.80	-0.08	0.12
17	1.0	0.94	0.71	0.29	0.56	0.72	1.27	1.16	0.63	0.31	0.46	0.47	0.39	0.40	0.34	0.33	0.64	0.92	0.90	0.56	0.42	0.30	0.24	0.21	1.27	0.21	0.59
18	0.2	0.20	0.25	0.23	0.21	0.23	0.19	0.39	0.50	0.56	0.61	0.42	0.35	0.41	0.48	0.54	0.66	0.92	0.85	0.79	0.81	0.98	0.96	1.29	1.29	0.18	0.54
19	1.3	0.96	0.99	0.73	0.75	0.41	0.36	0.25	0.21	0.27	0.23	0.15	0.08	0.10	0.13	0.10	0.01	0.01	0.00	0.03	0.03	0.00	0.14	0.02	1.29	0.00	0.30
20	0.3	0.57	0.74	0.44	0.09	0.15	0.54	0.38	0.32	0.35	0.67	0.32	-0.07	-0.10	0.02	0.20	0.27	0.20	0.56	0.53	0.49	0.19	0.19	0.51	0.74	-0.10	0.33
21	0.2	0.24	0.28	0.24	0.17	0.21	0.24	0.26	0.22	0.46	1.17	0.57	0.23	0.27	0.32	0.24	0.24	0.30	0.36	0.27	0.18	0.12	0.10	0.00	1.17	0.00	0.29
22	0.2	0.21	0.06	0.13	0.15	0.17	0.17	0.14	0.11	0.12	0.12	0.01	-0.10	-0.05	-0.07	-0.03	-0.09	0.10	0.20	0.25	0.21	0.17	0.17	0.15	0.25	-0.10	0.10
23	0.3	0.27	0.22	0.10	0.09	0.18	0.18	0.19	0.24	0.10	0.09	0.04	-0.07	-0.09	-0.11	0.00	0.05	0.14	0.29	0.41	0.29	0.31	0.21	0.23	0.41	-0.11	0.15
24	0.2	0.27	0.20	0.18	0.19	0.10	0.13	0.17	0.21	0.27	0.28	0.30	0.29	0.15	0.05	0.11	0.21	0.23	0.19	0.41	0.26	0.54	0.78	1.06	1.06	0.05	0.28
25	0.5	0.34	0.26	0.13	0.00	-0.01	-0.01	0.04	0.09	0.02	0.03	0.01	0.13	0.12	0.08	0.21	0.22	0.36	0.47	0.63	0.62	0.92	1.09	0.66	1.09	-0.01	0.29
26	0.6	0.41	0.40	0.35	0.30	0.22	0.16	0.15	0.21	0.13	0.11	0.01	-0.07	-0.05	-0.09	-0.15	-0.12	0.07	0.15	0.16	0.13	0.11	0.02	0.00	0.62	-0.15	0.13
27	0.0	-0.01	0.04	0.09	0.04	0.11	0.12	0.11	0.09	0.09	0.03	0.04	0.10	0.12	0.07	0.06	0.09	0.11	0.38	0.29	0.26	0.31	0.45	0.96	0.96	-0.01	0.17
28	1.4	1.49	1.26	1.37	0.94	1.64	0.71	0.80	1.10	0.96	0.70	0.56	0.40	0.46	0.23	0.35	0.47	0.39	0.55	0.71	1.23	0.46	0.69	1.26	1.64	0.23	0.84
29	1.2	1.56	1.15	1.28	1.44	1.01	1.09	1.20	0.87	1.40	0.81	0.42	0.30	0.31	0.30	0.23	0.29	0.29	0.28	0.29	0.28	0.30	0.28	0.32	1.56	0.23	0.70
30	0.4	0.30	0.33	0.36	0.23	0.19	0.26	0.28	0.27	0.32	0.20	0.27	-0.01	0.06	0.15	0.25	0.26	0.27	0.44	0.46	0.30	0.25	0.13	0.37	0.46	-0.01	0.26
31	0.2	0.26	0.25	0.40	0.68	1.04	0.77	1.07	1.18	0.85	0.45	0.84	0.33	0.22	0.32	0.49	0.35	0.48	0.72	0.67	0.84	0.58	0.74	0.68	1.18	0.19	0.60
Max.	**1.4**	**1.56**	**1.26**	**1.37**	**1.44**	**1.64**	**1.27**	**1.87**	**1.46**	**1.40**	**1.17**	**0.84**	**0.40**	**0.46**	**0.48**	**0.54**	**0.66**	**0.92**	**0.90**	**0.79**	**1.23**	**0.98**	**1.09**	**1.29**	**1.87**		
Min.	**0.0**	**-0.07**	**-0.16**	**-0.14**	**-0.10**	**-0.10**	**-0.07**	**-0.05**	**-0.07**	**-0.13**	**-0.16**	**-0.25**	**-0.29**	**-0.35**	**-0.43**	**-0.58**	**-0.48**	**-0.42**	**-0.27**	**-0.07**	**-0.06**	**-0.05**	**-0.03**	**-0.03**		**-0.58**	
Avg.	**0.3**	**0.34**	**0.33**	**0.28**	**0.27**	**0.28**	**0.32**	**0.34**	**0.30**	**0.27**	**0.20**	**0.10**	**0.03**	**0.01**	**0.02**	**0.03**	**0.08**	**0.14**	**0.22**	**0.28**	**0.28**	**0.26**	**0.29**	**0.35**			**0.22**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.9	0.81	0.73	0.59	1.15	1.37	0.62	0.45	0.60	0.57	0.62	0.57	0.12	0.17	0.19	0.18	0.31	0.19	0.12	0.11	0.17	0.07	0.23	0.20	1.37	0.07	0.46
2	0.3	0.18	0.18	0.14	0.10	0.00	-0.04	-0.02	-0.06	-0.23	-0.20	-0.13	-0.12	-0.19	-0.19	-0.20	-0.15	-0.06	0.02	0.12	0.06	0.05	0.08	0.03	0.25	-0.23	-0.02
3	0.1	0.06	0.06	0.12	0.13	0.14	0.15	0.16	0.15	0.19	0.15	0.19	0.16	0.11	0.05	0.11	0.13	0.15	0.20	0.19	0.21	0.12	0.07	0.06	0.21	0.05	0.13
4	0.0	-0.03	0.04	-0.01	-0.02	0.06	0.06	0.06	0.09	0.14	0.16	0.08	0.03	0.02	0.02	-0.07	-0.07	-0.02	-0.05	-0.05	-0.07	-0.06	-0.04	0.02	0.16	-0.07	0.01
5	0.1	0.18	0.06	0.16	0.00	0.02	0.02	0.06	0.15	0.19	0.04	0.02	0.29	0.34	0.21	0.46	0.73	0.41	0.83	1.05	1.32	1.65	0.99	0.92	1.65	0.00	0.43
6	1.0	0.67	0.69	1.13	1.40	1.42	0.73	0.83	0.57	0.74	1.01	0.95	0.59	0.39	0.41	0.27	0.40	0.26	0.72	0.61	0.38	0.36	0.25	0.15	1.42	0.15	0.66
7	0.0	0.01	-0.03	0.02	0.04	0.05	0.05	0.06	0.16	0.09	0.25	0.09	0.17	0.20	0.16	0.55	1.59	1.03	0.39	2.76	1.02	0.11	0.08	-0.02	2.76	-0.03	0.37
8	0.0	0.10	0.27	0.17	0.03	0.03	0.02	0.05	0.05	0.04	0.03	0.23	0.26	0.14	0.17	0.09	0.15	0.15	0.20	0.19	0.20	0.20	0.24	0.24	0.27	0.00	0.14
9	0.3	0.28	0.25	0.25	0.26	0.26	0.26	0.24	0.23	0.22	0.21	0.24	0.30	0.20	0.14	0.13	0.11	0.05	0.05	0.10	0.22	0.14	0.12	0.15	0.30	0.05	0.20
10	0.1	0.17	0.27	0.50	0.52	0.25	0.12	0.17	0.34	0.34	0.22	0.03	0.01	0.01	0.00	-0.01	-0.02	-0.05	-0.03	-0.01	0.00	-0.01	-0.01	0.00	0.52	-0.05	0.12
11	0.0	0.01	0.20	0.21	0.33	0.22	0.19	0.10	0.11	0.32	0.36	0.11	0.05	0.04	0.14	0.15	0.25	0.24	0.41	0.25	0.32	0.13	0.00	0.02	0.41	0.00	0.17
12	0.0	-0.03	0.00	-0.06	-0.02	-0.02	0.02	-0.02	-0.03	0.04	0.02	0.06	0.19	0.18	0.33	0.33	0.19	0.15	0.38	0.41	0.16	0.08	0.15	0.07	0.41	-0.06	0.11
13	0.0	0.03	0.02	0.07	0.66	0.80	0.73	0.68	0.66	0.75	0.71	0.54	0.38	0.06	0.00	-0.02	-0.02	-0.01	0.09	0.14	0.15	0.14	0.15	0.13	0.80	-0.02	0.29
14	0.1	0.02	0.01	0.02	0.01	0.07	0.08	0.05	0.00	-0.01	-0.02	0.01	0.03	0.05	-0.04	-0.04	-0.03	-0.01	-0.03	-0.04	-0.02	-0.02	0.01	0.00	0.08	-0.04	0.01
15	0.0	-0.01	0.01	0.10	0.03	0.02	0.18	0.70	0.30	0.22	0.25	0.21	0.06	0.16	0.23	0.17	0.20	0.20	0.16	0.07	0.00	0.00	0.02	0.00	0.70	-0.01	0.14
16	0.0	-0.01	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	0.28	0.34	0.50	0.41	0.61	0.35	0.42	0.24	0.43	0.63	0.96	0.66	0.96	0.67	0.55	0.38	0.96	-0.02	0.35
17	0.4	0.78	0.99	1.14	1.09	1.13	1.65	1.13	0.93	1.24	1.04	0.66	0.83	1.30	1.15	0.89	1.00	1.10	0.65	0.66	0.94	0.75	0.78	0.56	1.65	0.36	0.95
18	0.4	0.29	0.27	0.32	0.39	0.50	0.46	0.37	0.29	0.35	0.34	0.29	0.22	0.22	0.23	0.26	0.21	0.23	0.26	0.28	0.27	0.29	0.32	0.29	0.50	0.21	0.31
19	0.3	0.27	0.25	0.27	0.23	0.25	0.31	0.34	0.23	0.17	0.22	0.13	0.16	0.06	0.13	0.10	0.13	0.27	0.26	0.37	0.31	0.32	0.37	0.18	0.37	0.06	0.23
20	0.1	0.09	0.13	0.07	-0.06	0.00	0.03	0.05	0.11	0.09	0.03	-0.07	-0.12	-0.22	-0.23	-0.20	-0.16	-0.08	0.03	0.08	0.07	0.06	0.07	0.04	0.13	-0.23	0.00
21	0.1	0.07	0.09	0.12	0.12	0.07	0.10	0.17	0.17	0.12	0.19	0.39	0.21	0.15	0.23	0.27	0.36	0.46	0.52	1.02	1.27	0.54	0.16	0.07	1.27	0.07	0.29
22	0.5	0.70	0.84	1.21	1.71	1.80	0.60	1.40	0.55	0.57	0.75	1.28	0.57	0.31	0.37	0.78	0.64	0.34	0.31	0.62	0.60	0.75	0.80	0.95	1.80	0.31	0.79
23	1.2	0.67	0.42	0.24	0.30	0.25	0.24	0.15	0.13	0.11	0.13	-0.04	0.40	0.21	0.04	0.22	0.15	0.17	0.32	0.24	0.24	0.31	0.10	0.14	1.19	-0.04	0.26
24	0.1	0.13	0.15	0.17	0.18	0.19	0.20	0.24	0.13	0.15	0.16	0.12	0.10	0.12	0.07	0.09	0.04	0.00	0.00	-0.01	-0.01	0.09	0.00	-0.07	0.24	-0.07	0.10
25	-0.1	-0.08	-0.07	-0.07	-0.07	-0.06	-0.04	-0.05	-0.04	-0.02	-0.04	0.06	0.06	0.45	0.55	0.87	0.55	0.43	1.04	1.00	0.39	0.34	0.32	0.39	1.04	-0.08	0.24
26	0.4	0.56	0.40	0.40	0.41	0.28	0.16	0.12	0.16	0.44	0.37	0.38	0.40	0.26	0.06	-0.01	-0.01	0.18	0.30	0.38	0.37	0.37	0.35	0.27	0.56	-0.01	0.29
27	0.3	0.29	0.27	0.60	1.54	0.95	1.24	0.83	0.81	0.42	0.39	0.80	0.60	0.14	-0.01	-0.04	-0.01	-0.04	0.00	-0.07	0.00	-0.09	-0.07	-0.01	1.54	-0.09	0.37
28	0.0	0.00	-0.01	0.20	0.08	-0.01	-0.05	0.03	0.06	-0.09	-0.07	-0.08	-0.08	-0.04	-0.05	-0.11	-0.10	-0.11	-0.10	-0.12	-0.12	-0.10	-0.10	-0.12	0.20	-0.12	-0.05
29	-0.1	-0.12	-0.10	-0.09	-0.09	-0.11	-0.12	-0.09	-0.04	-0.10	-0.09	-0.10	-0.11	-0.12	-0.15	-0.12	-0.09	-0.09	-0.07	-0.07	-0.04	-0.04	-0.04	-0.02	-0.02	-0.15	-0.09
30	0.0	0.06	0.16	0.22	0.27	0.23	0.24	0.14	0.29	0.25	0.24	0.24	0.03	0.15	0.14	0.14	0.20	0.21	0.19	0.19	0.47	0.41	0.34	0.22	0.47	-0.03	0.21
Max.	**1.2**	**0.81**	**0.99**	**1.21**	**1.71**	**1.80**	**1.65**	**1.40**	**0.93**	**1.24**	**1.04**	**1.28**	**0.83**	**1.30**	**1.15**	**0.89**	**1.59**	**1.10**	**1.04**	**2.76**	**1.32**	**1.65**	**0.99**	**0.95**	**2.76**		
Min.	**-0.1**	**-0.12**	**-0.10**	**-0.09**	**-0.09**	**-0.11**	**-0.12**	**-0.09**	**-0.06**	**-0.23**	**-0.20**	**-0.13**	**-0.12**	**-0.22**	**-0.23**	**-0.20**	**-0.16**	**-0.11**	**-0.10**	**-0.12**	**-0.12**	**-0.10**	**-0.10**	**-0.12**		**-0.23**	
Avg.	**0.2**	**0.21**	**0.22**	**0.27**	**0.36**	**0.34**	**0.27**	**0.28**	**0.25**	**0.25**	**0.27**	**0.26**	**0.21**	**0.17**	**0.16**	**0.18**	**0.24**	**0.21**	**0.27**	**0.37**	**0.33**	**0.25**	**0.21**	**0.17**			**0.25**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.24	0.33	0.92	0.17	0.58	0.89	0.77	0.93	0.77	1.22	1.37	0.99	0.99	1.57	2.11	2.23	1.94	2.34	2.22	1.90	0.68	0.56	0.68	2.34	0.17	1.11
2	0.6	0.44	0.64	0.45	0.24	0.44	0.58	0.52	0.42	0.56	0.51	0.47	0.53	0.55	0.45	0.48	0.42	0.48	0.47	0.41	0.32	0.35	0.42	0.39	0.64	0.24	0.46
3	0.4	0.39	0.38	0.34	0.33	0.33	0.36	0.27	0.26	0.23	0.24	0.31	0.17	0.32	0.23	0.14	0.17	0.26	0.22	0.29	0.32	0.25	0.23	0.20	0.39	0.14	0.28
4	0.2	0.19	0.15	0.16	0.17	0.16	0.17	0.16	0.13	0.16	0.17	0.19	0.29	0.29	0.23	0.10	0.14	0.18	0.19	0.22	0.21	0.25	0.29	0.31	0.31	0.10	0.20
5	0.3	0.26	0.26	0.29	0.28	0.30	0.31	0.28	0.35	0.37	0.41	0.38	0.42	0.37	0.34	0.38	0.51	0.53	0.55	0.63	0.60	0.52	0.50	0.42	0.63	0.26	0.40
6	0.4	0.45	0.33	0.43	0.47	0.46	0.50	0.55	0.64	0.73	0.59	0.72	0.54	0.36	0.31	0.25	0.30	0.15	0.21	0.32	0.35	0.26	0.14	0.18	0.73	0.14	0.40
7	0.2	0.05	0.00	-0.08	-0.09	-0.10	-0.11	-0.10	-0.04	-0.10	-0.16	-0.16	-0.17	-0.15	-0.13	-0.09	-0.04	0.03	0.20	0.22	0.16	0.35	0.70	1.18	1.18	-0.17	0.06
8	1.5	1.37	1.20	0.78	0.67	0.53	0.49	0.48	0.47	0.35	0.34	0.30	0.33	0.16	0.07	0.16	0.23	0.27	0.35	0.24	0.31	0.25	0.18	0.22	1.45	0.07	0.47
9	0.2	0.25	0.27	0.25	0.09	-0.01	-0.12	-0.13	-0.09	-0.06	0.26	0.66	0.60	0.44	0.57	0.12	0.02	0.14	-0.07	-0.07	-0.04	0.02	0.05	0.06	0.66	-0.13	0.14
10	0.1	0.05	-0.03	-0.06	-0.06	-0.02	0.03	0.08	-0.05	0.00	0.04	0.04	0.04	0.51	0.40	0.34	0.28	0.94	0.49	0.31	0.37	0.26	0.43	0.63	0.94	-0.06	0.21
11	0.9	1.17	1.09	1.17	1.00	0.42	0.55	0.55	0.75	0.46	0.31	0.10	0.06	0.00	-0.04	-0.02	0.00	0.12	0.33	0.91	0.94	0.60	0.66	1.43	1.43	-0.04	0.56
12	1.6	1.86	0.38	0.35	0.58	0.61	0.79	0.30	1.01	0.34	0.62	0.85	0.67	0.07	0.31	0.80	1.06	0.97	0.62	0.26	0.10	0.15	0.18	0.35	1.86	0.07	0.62
13	0.3	0.25	0.16	0.13	0.12	0.14	0.15	0.24	0.37	0.54	0.35	0.31	0.49	0.48	0.68	0.61	0.45	0.70	1.63	2.04	2.06	2.10	1.95	0.93	2.10	0.12	0.72
14	1.0	0.85	0.62	0.32	0.57	0.59	0.43	0.52	0.86	0.94	0.89	0.94	0.87	0.98	0.83	0.79	0.74	0.82	0.64	0.76	0.58	0.48	0.41	0.36	0.98	0.32	0.70
15	0.3	0.22	0.17	0.22	0.19	0.16	0.14	0.16	0.19	0.06	0.00	0.02	0.02	0.02	0.09	0.11	0.10	0.25	0.34	0.53	0.43	0.59	0.73	0.82	0.82	0.00	0.24
16	0.9	0.56	0.61	0.51	0.60	0.83	0.58	0.51	0.37	0.42	0.52	0.73	0.63	0.17	0.20	0.26	0.16	0.42	0.53	0.69	0.48	0.59	0.12	0.16	0.86	0.12	0.48
17	0.4	0.49	0.29	0.17	0.19	0.12	0.04	0.12	0.12	0.14	0.25	0.31	0.30	0.27	0.22	0.24	0.25	0.30	0.29	0.23	0.21	0.19	0.15	0.15	0.49	0.04	0.23
18	0.2	0.17	0.17	0.19	0.20	0.24	0.30	0.24	0.18	0.21	0.19	0.18	0.16	0.16	0.16	0.14	0.11	0.13	0.12	0.15	0.13	0.14	0.19	0.17	0.30	0.11	0.18
19	0.3	0.23	0.13	0.12	0.12	0.12	0.11	0.19	0.19	0.15	0.16	0.17	0.20	0.33	0.38	0.38	0.36	0.31	0.37	0.36	0.32	0.35	0.37	0.43	0.43	0.11	0.26
20	0.4	0.50	0.56	0.57	0.56	0.59	0.52	0.45	0.59	0.66	0.65	0.79	0.80	0.83	0.98	0.88	0.60	0.56	0.46	0.22	0.34	0.51	0.94	0.66	0.98	0.22	0.61
21	0.7	0.30	0.29	0.38	0.68	0.65	0.63	0.49	0.49	0.44	0.34	0.38	0.47	0.32	0.26	0.32	0.79	0.72	0.74	0.47	1.36	0.94	0.97	0.84	1.36	0.26	0.58
22	0.7	0.49	0.67	0.44	0.18	0.11	0.09	0.01	0.00	0.01	0.01	-0.02	0.02	0.01	0.02	-0.02	-0.01	0.00	-0.01	-0.01	-0.01	-0.01	0.00	0.01	0.67	-0.02	0.11
23	0.1	0.09	0.12	0.12	0.11	0.09	0.05	0.01	0.02	0.04	0.12	0.26	0.38	0.29	0.24	0.30	0.34	0.29	0.36	0.36	0.29	0.18	0.16	0.30	0.38	0.01	0.19
24	0.3	0.30	0.39	0.41	0.35	0.35	0.38	0.69	0.24	0.23	0.32	0.28	0.46	0.64	0.80	0.75	0.44	0.48	0.40	0.35	0.42	0.18	0.13	0.12	0.80	0.12	0.39
25	0.1	0.10	0.10	0.00	-0.03	0.00	0.01	0.00	0.00	0.02	0.01	-0.01	-0.03	-0.04	0.00	-0.03	0.01	-0.09	-0.10	-0.08	-0.07	-0.04	-0.04	-0.02	0.14	-0.10	-0.01
26	0.0	-0.08	-0.10	-0.12	-0.17	-0.14	-0.06	-0.01	-0.01	0.01	0.01	0.04	0.07	0.05	0.06	0.08	0.05	0.02	-0.01	-0.04	-0.02	-0.01	0.00	-0.03	0.08	-0.17	-0.02
27	0.0	-0.05	-0.05	-0.02	0.02	0.05	0.00	0.00	0.01	-0.02	-0.02	0.04	0.04	-0.02	-0.11	-0.03	-0.02	0.00	-0.01	0.02	0.08	0.08	0.01	-0.02	0.08	-0.11	0.00
28	0.0	0.01	0.01	0.02	0.02	0.02	0.01	0.00	-0.04	0.10	0.08	0.07	-0.01	0.07	0.12	0.15	0.11	0.12	0.10	0.10	0.13	0.17	0.15	0.14	0.17	-0.04	0.07
29	0.1	0.12	0.14	0.16	0.14	0.08	0.15	0.09	0.14	0.19	0.14	0.13	0.13	0.15	0.12	0.20	0.19	0.20	0.24	0.20	0.15	0.13	0.20	0.44	0.44	0.08	0.16
30	0.5	0.37	0.46	0.25	0.47	0.74	0.34	0.19	0.26	0.12	0.10	0.44	0.34	0.19	0.10	0.06	0.07	0.09	0.10	0.08	0.06	0.06	0.08	0.06	0.74	0.06	0.23
31	0.1	0.07	0.16	0.00	0.07	0.05	0.23	0.08	0.24	0.15	0.15	0.25	0.33	0.24	0.11	0.14	0.29	0.25	0.26	0.25	0.24	0.23	0.24	0.32	0.33	0.00	0.18
Max.	**1.6**	**1.86**	**1.20**	**1.17**	**1.00**	**0.83**	**0.89**	**0.77**	**1.01**	**0.94**	**1.22**	**1.37**	**0.99**	**0.99**	**1.57**	**2.11**	**2.23**	**1.94**	**2.34**	**2.22**	**2.06**	**2.10**	**1.95**	**1.43**	**2.34**		
Min.	**0.0**	**-0.08**	**-0.10**	**-0.12**	**-0.17**	**-0.14**	**-0.12**	**-0.13**	**-0.09**	**-0.10**	**-0.16**	**-0.16**	**-0.17**	**-0.15**	**-0.13**	**-0.09**	**-0.04**	**-0.09**	**-0.10**	**-0.08**	**-0.07**	**-0.04**	**-0.04**	**-0.03**		**-0.17**	
Avg.	**0.4**	**0.38**	**0.32**	**0.29**	**0.27**	**0.27**	**0.28**	**0.25**	**0.29**	**0.27**	**0.28**	**0.34**	**0.33**	**0.29**	**0.31**	**0.33**	**0.33**	**0.37**	**0.40**	**0.41**	**0.41**	**0.35**	**0.36**	**0.38**			**0.33**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	89.4	87.1	85.4	84.9	82.6	81.7	80.5	74.3	78.7	75.6	74.3	74.1	78.8	79.7	80.8	79.8	80.7	76.2	75.0	79.3	80.1	78.9	77.5	79.2	89.4	74.1	79.8
2	82.1	80.1	80.0	79.4	81.2	82.6	83.6	81.7	84.2	83.7	83.2	86.0	84.5	83.3	84.1	84.9	84.7	84.2	83.8	84.8	87.3	85.2	84.5	84.5	87.3	79.4	83.5
3	85.9	87.0	88.6	88.5	86.3	87.0	89.1	89.8	89.7	89.0	89.0	89.1	89.4	89.7	89.7	89.2	88.8	88.5	88.8	88.4	88.0	88.0	87.3	86.0	89.8	85.9	88.4
4	86.6	87.3	87.6	87.6	87.7	87.4	87.3	87.1	86.1	86.6	86.8	86.2	86.2	85.2	85.5	86.9	86.2	85.2	83.2	82.1	80.1	80.3	79.3	80.3	87.7	79.3	85.2
5	80.5	80.5	80.9	81.9	82.7	82.1	82.1	82.0	81.8	81.9	81.8	81.4	81.1	82.7	82.9	82.8	83.2	83.6	84.0	84.2	84.1	83.3	82.8	83.1	84.2	80.5	82.4
6	82.5	82.6	82.2	82.0	81.4	80.0	79.9	81.2	80.4	79.7	80.1	79.7	79.4	79.6	79.9	80.6	79.6	80.2	79.6	78.4	77.4	78.4	78.1	77.4	82.6	77.4	80.0
7	78.1	76.8	75.8	75.8	77.1	79.0	79.5	78.2	77.2	76.0	75.6	76.3	78.4	78.6	80.6	81.4	80.9	80.6	81.0	83.0	81.1	81.7	80.6	76.9	83.0	75.6	78.7
8	75.4	76.1	75.8	75.1	75.6	77.0	78.8	78.7	78.2	77.0	77.8	79.4	79.6	78.3	77.3	76.1	76.7	77.8	77.9	77.6	78.7	80.2	81.0	80.2	81.0	75.1	77.8
9	79.8	80.0	79.7	79.2	80.6	80.1	80.7	81.1	81.1	81.0	80.0	80.3	79.0	79.8	79.8	79.5	80.0	80.7	80.5	81.1	81.7	82.3	81.8	81.3	82.3	79.0	80.5
10	81.3	81.5	81.5	81.9	81.3	81.1	82.2	82.5	82.4	81.8	82.2	81.1	81.2	79.2	80.2	80.7	80.7	80.4	79.9	80.2	80.2	80.1	80.6	80.3	82.5	79.2	81.0
11	80.0	79.3	79.6	78.1	78.0	79.2	78.9	78.1	79.5	79.1	78.8	77.7	77.3	74.8	74.7	75.0	75.5	76.2	76.9	76.4	76.1	76.4	77.1	76.1	80.0	74.7	77.4
12	75.9	75.7	75.5	75.2	74.1	73.6	73.9	73.7	73.7	72.7	72.7	72.0	71.6	70.9	69.9	70.4	72.0	72.6	72.3	72.6	71.3	71.8	72.6	74.0	75.9	69.9	72.9
13	75.3	75.0	72.4	74.9	76.3	77.2	77.0	77.1	75.8	75.5	75.9	74.8	72.9	75.3	74.9	73.9	74.0	74.4	73.5	73.7	74.3	70.8	70.4	69.2	77.2	69.2	74.3
14	67.0	68.1	68.5	67.9	70.1	66.9	69.4	67.7	57.3	68.9	66.4	69.1	71.2	85.0	91.8	89.9	87.3	86.8	87.9	86.6	90.9	92.6	95.9	98.4	98.4	57.3	78.0
15	99.2	99.4	99.5	99.6	99.7	99.1	98.9	99.0	98.8	99.1	99.0	99.0	98.9	99.1	99.1	99.0	98.9	99.0	98.9	99.1	99.4	99.5	99.0	97.5	99.7	97.5	99.1
16	96.4	98.0	95.2	97.3	97.7	99.0	99.8	99.8	97.6	93.8	93.4	97.9	99.6	99.3	99.8	99.9	99.7	99.8	99.7	99.0	96.1	92.1	85.9	83.7	99.9	83.7	96.7
17	76.2	63.9	58.3	57.9	59.9	61.6	63.5	68.9	67.0	60.5	59.3	64.6	82.6	84.6	86.6	84.4	89.6	97.6	99.7	100.0	100.0	100.0	100.0	100.0	100.0	57.9	78.6
18	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	99.7	100.0	99.7	100.0
19	99.7	98.9	93.8	88.3	90.0	90.1	88.4	84.8	86.3	85.2	85.3	86.5	85.2	89.0	91.7	94.5	94.0	90.6	94.0	95.8	96.6	96.3	95.1	96.8	99.7	84.8	91.5
20	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	100.0
21	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	93.9	90.1	89.1	90.5	89.4	88.6	87.6	91.9	95.3	97.2	98.1	94.6	100.0	87.6	96.1
22	90.2	88.0	70.6	72.4	73.1	72.4	79.4	85.8	93.9	99.7	100.0	99.3	97.2	94.6	92.5	90.6	86.0	85.2	84.1	82.6	82.0	85.3	88.0	84.7	100.0	70.6	86.6
23	86.0	87.6	82.7	71.3	65.0	68.8	75.9	76.3	78.9	77.3	76.2	74.7	73.7	75.9	75.2	77.8	76.7	77.7	81.1	79.0	74.0	71.4	73.4	73.5	87.6	65.0	76.3
24	71.4	69.8	76.7	76.2	73.9	71.0	70.4	53.6	63.3	67.4	66.0	63.1	79.4	94.2	96.0	96.4	96.5	96.7	96.8	96.8	97.1	97.4	97.6	97.7	97.7	53.6	81.9
25	97.6	97.7	97.7	97.1	96.9	98.2	97.8	97.9	97.7	98.2	94.9	92.0	90.9	88.3	87.9	88.6	92.4	90.1	91.1	93.8	93.2	88.6	83.8	85.6	98.2	83.8	93.3
26	85.7	85.0	85.3	84.8	84.7	84.0	85.3	83.4	82.2	81.7	75.9	77.6	79.2	76.7	75.8	75.2	66.0	59.7	58.0	57.8	59.8	57.5	59.9	61.5	85.7	57.5	74.3
27	68.3	74.7	71.0	72.4	84.4	85.2	79.6	72.7	61.2	68.3	80.6	82.6	86.1	93.6	97.0	97.3	97.6	98.0	98.1	98.5	98.3	98.0	96.7	97.8	98.5	61.2	85.7
28	98.7	98.9	99.0	98.9	99.0	99.0	98.6	98.4	98.4	98.4	98.5	98.5	98.6	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.9	99.1	98.8	99.1	99.1	98.4	98.8
29	99.1	99.2	99.3	99.2	99.2	98.9	98.4	98.7	98.8	94.8	93.5	94.3	93.3	93.2	93.7	95.2	95.5	95.6	97.3	97.4	96.9	93.1	94.5	96.2	99.3	93.1	96.5
30	95.0	95.2	92.5	88.8	90.9	95.5	96.1	95.4	95.3	94.6	93.5	92.9	92.9	92.3	89.9	89.2	88.2	88.4	89.2	88.7	87.1	86.8	87.2	87.5	96.1	86.8	91.4
31	88.3	86.8	86.4	86.3	86.6	86.1	84.8	84.7	84.4	86.9	84.6	88.1	92.3	95.2	95.1	94.9	95.0	95.2	95.3	95.3	95.3	94.9	95.3	94.0	95.3	84.4	90.5
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**67.0**	**63.9**	**58.3**	**57.9**	**59.9**	**61.6**	**63.5**	**53.6**	**57.3**	**60.5**	**59.3**	**63.1**	**71.2**	**70.9**	**69.9**	**70.4**	**66.0**	59.7	58.0	**57.8**	**59.8**	**57.5**	**59.9**	**61.5**		**53.6**	
Avg.	**86.2**	**85.8**	**84.6**	**84.0**	**84.4**	**84.6**	**85.2**	**84.3**	**84.2**	**84.3**	**84.0**	**84.5**	**85.6**	**86.7**	**87.1**	**87.2**	**86.9**	**86.7**	**86.9**	**87.2**	**87.1**	**86.7**	**86.5**	**86.3**			**85.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	94.1	93.3	93.5	93.8	94.0	93.0	93.0	93.3	93.5	93.3	93.3	93.6	93.5	93.9	95.1	95.3	95.2	94.1	94.1	93.4	93.3	93.2	92.6	92.6	95.3	92.6	93.7
2	92.2	91.7	91.8	91.6	90.4	90.3	90.7	90.5	90.7	90.8	90.6	89.6	90.7	90.8	90.2	89.8	90.2	90.5	90.2	89.7	88.8	88.8	87.8	87.4	92.2	87.4	90.2
3	86.9	86.3	86.5	85.9	85.1	83.9	83.5	82.9	83.1	83.3	82.7	82.6	83.2	83.2	83.4	83.1	82.4	81.4	80.5	80.2	79.5	79.4	78.8	77.5	86.9	77.5	82.7
4	77.2	76.3	75.0	74.0	73.3	73.3	73.3	74.6	76.2	77.1	76.6	77.1	79.1	76.6	73.7	72.6	73.8	72.8	69.1	69.0	69.3	69.2	70.4	69.8	79.1	69.0	73.7
5	70.2	68.3	66.7	69.2	70.7	70.2	70.7	70.0	70.4	69.9	70.5	67.2	67.2	67.3	66.4	65.3	66.6	65.8	67.2	66.5	66.0	65.4	63.9	63.7	70.7	63.7	67.7
6	62.3	59.9	59.9	59.4	58.9	57.1	55.6	56.7	54.5	55.1	56.4	55.7	58.3	57.7	56.0	59.1	59.5	59.5	59.5	59.3	57.1	57.4	58.1	58.4	62.3	54.5	58.0
7	61.0	60.3	63.0	61.5	58.7	60.2	57.8	60.9	57.9	57.0	60.1	56.5	58.2	59.2	49.8	49.1	45.6	48.8	48.3	44.1	45.8	53.3	52.7	48.0	63.0	44.1	54.9
8	49.6	50.5	49.6	46.6	41.4	32.3	38.1	33.9	36.8	33.6	37.0	41.8	40.5	42.0	41.5	45.9	48.6	51.0	49.9	49.6	48.4	51.6	50.3	48.1	51.6	32.3	44.1
9	51.8	54.9	59.9	64.1	64.2	64.8	67.6	68.9	64.9	58.6	54.9	51.3	44.6	49.7	59.6	69.3	70.7	69.8	69.4	69.7	69.0	66.0	64.9	63.4	70.7	44.6	62.2
10	62.5	65.3	66.4	63.6	64.5	62.7	62.2	59.7	61.7	65.2	64.3	58.7	60.8	64.8	64.4	67.0	71.3	75.5	81.7	83.8	80.6	79.7	78.7	79.9	83.8	58.7	68.5
11	84.7	87.6	89.0	88.5	87.6	87.4	87.9	87.8	88.4	89.1	88.3	90.6	92.6	92.8	92.6	93.1	92.2	92.1	90.0	89.5	89.6	89.0	87.9	87.1	93.1	84.7	89.4
12	86.9	85.8	85.0	84.5	83.7	82.9	82.9	82.1	81.8	81.3	81.9	82.7	83.0	83.8	84.6	81.3	59.6	67.0	77.8	79.4	78.2	75.0	70.2	62.9	86.9	59.6	79.3
13	57.9	58.7	60.3	62.5	72.9	87.9	88.8	88.2	90.2	89.1	89.9	90.4	92.3	88.8	90.4	91.6	94.8	95.4	94.1	91.6	90.4	92.2	91.9	93.6	95.4	57.9	85.2
14	93.7	92.3	92.7	96.0	99.0	100.0	100.0	98.4	96.1	94.9	93.9	92.9	92.3	91.5	91.0	90.3	90.0	89.6	89.3	89.3	89.5	89.8	89.9	89.9	100.0	89.3	93.0
15	88.9	88.3	87.7	87.5	86.6	85.8	86.3	84.2	83.5	84.3	84.6	82.1	78.9	73.6	70.6	70.0	65.4	68.3	69.0	73.8	69.8	65.2	71.6	80.8	88.9	65.2	78.6
16	85.1	89.7	90.2	90.8	90.4	92.3	95.7	93.8	91.9	92.3	91.5	92.4	91.9	93.7	93.6	96.2	97.7	97.8	99.5	99.0	98.8	98.7	98.9	98.6	99.5	85.1	94.2
17	98.2	98.1	98.3	98.2	99.0	99.8	99.5	90.1	77.4	73.2	69.2	68.9	70.2	91.4	97.0	97.1	98.0	99.4	99.8	100.0	100.0	99.9	98.4	95.1	100.0	68.9	92.3
18	93.2	95.1	97.1	98.9	99.9	99.4	100.0	100.0	99.8	99.4	99.2	97.0	96.1	95.3	91.2	89.7	90.8	93.0	94.3	97.0	98.9	99.8	99.9	98.5	100.0	89.7	96.8
19	91.4	84.4	78.2	79.9	82.9	82.0	76.8	79.4	85.6	93.6	96.6	98.4	99.0	99.1	98.2	96.5	92.8	90.5	81.3	83.8	95.2	96.3	96.2	96.9	99.1	76.8	89.8
20	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	95.6	93.6	94.6	88.3	81.4	79.2	81.6	77.0	76.6	74.7	72.0	72.9	71.9	72.4	76.8	100.0	71.9	87.8
21	76.8	77.1	74.5	76.1	77.8	75.0	73.2	69.9	72.3	72.8	74.3	77.4	78.7	74.0	75.6	80.0	79.9	82.7	98.9	96.0	91.4	98.9	100.0	99.2	100.0	69.9	81.4
22	98.3	99.6	100.0	100.0	100.0	97.8	92.9	95.8	97.6	98.6	98.6	97.6	99.8	99.8	99.3	98.4	100.0	100.0	100.0	98.4	98.3	100.0	99.5	98.2	100.0	92.9	98.7
23	99.9	99.3	100.0	100.0	99.4	99.7	99.6	98.9	99.0	98.3	98.5	98.8	97.7	87.6	83.0	81.4	80.6	81.0	84.2	85.3	83.9	84.9	85.8	88.8	100.0	80.6	92.3
24	93.2	94.9	96.1	95.0	95.7	95.9	94.9	94.3	94.0	94.1	93.7	91.7	90.2	89.9	86.5	84.7	84.4	84.9	86.1	87.1	88.7	88.6	88.4	88.2	96.1	84.4	90.9
25	88.8	89.5	89.4	89.2	88.4	87.4	86.4	85.9	86.5	88.5	87.8	86.7	87.1	85.8	83.9	81.6	78.7	72.1	75.0	74.4	71.1	66.3	67.7	66.1	89.5	66.1	81.8
26	66.5	67.3	66.5	66.2	68.7	69.3	68.4	64.2	72.3	76.1	77.7	76.0	73.8	73.8	72.1	71.2	73.2	73.2	72.2	72.2	71.5	71.7	68.6	70.3	77.7	64.2	70.9
27	73.4	73.6	73.4	75.2	75.5	75.5	71.7	72.6	70.2	67.7	70.5	69.9	62.9	58.1	62.2	58.3	65.8	63.2	61.2	77.5	81.2	80.2	79.8	77.6	81.2	58.1	70.7
28	78.7	76.4	75.4	72.4	75.3	75.3	73.9	70.0	68.7	72.0	72.5	74.7	76.3	73.4	78.3	77.9	78.2	77.7	76.1	75.7	74.7	76.0	72.7	72.2	78.7	68.7	74.8
29	72.3	71.8	68.0	66.1	65.4	67.9	69.4	72.1	73.0	71.7	71.3	72.0	75.8	74.7	74.7	76.1	74.9	72.2	72.4	70.5	70.6	73.8	80.0	86.5	86.5	65.4	72.6
Max.	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.4**	**99.2**	**98.8**	**99.8**	**99.8**	**99.3**	**98.4**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.2**	**100.0**		
Min.	**49.6**	**50.5**	**49.6**	**46.6**	**41.4**	**32.3**	**38.1**	**33.9**	**36.8**	**33.6**	**37.0**	**41.8**	**40.5**	**42.0**	**41.5**	**45.9**	**45.6**	48.8	48.3	**44.1**	**45.8**	**51.6**	**50.3**	**48.0**		**32.3**	
Avg.	**80.5**	**80.6**	**80.5**	**80.6**	**81.0**	**81.0**	**80.7**	**80.0**	**79.9**	**79.9**	**80.0**	**79.6**	**79.4**	**79.1**	**78.8**	**79.1**	**78.5**	**78.8**	**79.5**	**79.9**	**79.7**	**80.1**	**79.9**	**79.9**			**79.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	88.0	88.8	89.1	90.0	91.5	90.1	90.8	90.7	91.3	91.8	92.1	91.0	81.4	78.3	78.6	79.1	77.5	77.2	89.2	92.8	93.3	86.1	81.7	82.0	93.3	77.2	86.8
2	83.6	82.8	82.6	87.4	90.9	92.7	96.0	99.5	100.0	100.0	100.0	98.4	94.3	91.2	89.0	88.3	91.9	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	82.6	94.5
3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.4	97.9	96.5	97.2	98.4	98.7	98.2	100.0	96.5	99.4
4	96.6	97.2	97.5	97.2	99.3	100.0	100.0	100.0	100.0	99.9	99.2	99.5	96.5	88.2	86.2	86.4	86.1	85.4	85.8	86.9	91.7	92.1	94.4	95.5	100.0	85.4	94.2
5	91.7	92.0	88.2	84.0	88.0	89.7	90.5	90.3	88.2	86.9	89.6	94.5	95.4	94.3	93.4	86.2	83.2	84.5	89.1	93.5	94.2	94.6	93.1	92.4	95.4	83.2	90.3
6	90.9	91.4	91.5	89.7	89.1	93.2	92.5	88.9	87.2	89.0	88.8	91.0	90.1	89.4	89.8	87.3	85.0	85.9	85.3	80.8	79.2	76.1	69.6	68.5	93.2	68.5	86.3
7	74.3	84.4	87.8	85.3	80.3	80.8	80.8	78.9	76.4	78.2	81.0	82.7	81.0	81.6	82.4	88.6	92.7	93.9	95.7	94.4	96.3	100.0	100.0	100.0	100.0	74.3	86.6
8	99.7	96.2	90.8	96.3	99.5	99.3	99.6	99.7	99.8	99.7	99.5	95.1	84.9	81.9	73.2	74.0	73.9	75.3	77.0	78.4	81.0	83.6	81.0	82.0	99.8	73.2	88.4
9	82.4	82.7	74.9	73.8	77.9	78.6	80.2	73.5	81.2	82.3	80.9	80.5	79.8	87.6	88.9	90.1	90.6	90.5	93.0	93.5	95.0	94.9	94.4	93.4	95.0	73.5	85.0
10	89.6	94.9	99.6	100.0	99.9	99.3	99.2	99.0	98.8	98.9	98.8	98.9	99.1	99.0	99.1	99.1	99.0	99.1	99.0	99.0	98.8	98.5	98.3	98.3	100.0	89.6	98.5
11	98.0	97.8	97.5	97.4	97.3	97.5	97.5	97.3	97.1	97.3	97.3	97.2	97.0	97.0	97.0	96.9	96.6	95.2	91.7	88.0	88.7	85.5	82.7	84.5	98.0	82.7	94.6
12	84.5	90.3	90.7	92.6	94.8	95.1	94.8	94.4	94.9	95.1	95.7	95.8	95.9	95.9	96.2	96.4	96.5	96.6	96.0	95.1	93.4	93.6	94.4	94.1	96.6	84.5	94.3
13	94.4	95.2	95.8	97.4	96.9	96.6	96.5	96.2	96.0	95.7	95.4	95.4	95.3	95.5	95.5	95.4	95.1	94.9	94.9	94.4	93.1	92.9	92.2	92.3	97.4	92.2	95.1
14	92.3	92.0	91.6	91.5	91.2	91.8	91.4	91.1	90.9	91.6	91.1	91.4	92.1	93.1	94.2	94.9	96.1	94.0	78.6	74.3	74.3	79.5	82.5	81.7	96.1	74.3	88.9
15	77.9	93.2	97.1	98.7	95.5	91.4	90.0	95.8	95.7	94.9	98.9	97.9	96.8	93.5	91.7	93.2	96.6	97.1	97.2	97.3	97.3	97.9	99.1	99.4	99.4	77.9	95.2
16	98.1	97.3	97.5	98.0	97.6	89.3	80.8	76.7	76.1	74.2	75.1	77.9	81.8	91.3	92.8	89.7	82.1	77.5	77.1	75.4	76.1	86.0	92.6	94.4	98.1	74.2	85.6
17	95.5	94.4	93.4	93.8	92.0	91.7	89.6	90.8	94.5	95.1	95.8	96.4	97.4	97.4	98.1	99.1	99.3	98.8	97.7	97.0	96.7	96.4	96.4	96.5	99.3	89.6	95.6
18	96.1	95.6	96.0	95.6	95.0	94.1	93.6	93.0	92.3	91.5	90.9	90.6	89.3	89.1	86.4	84.6	84.4	84.1	83.0	82.8	85.6	86.7	86.5	86.2	96.1	82.8	89.7
19	86.5	86.0	85.7	85.7	86.3	85.8	84.9	85.5	85.1	84.4	83.2	82.1	79.0	78.1	77.2	76.9	76.7	77.0	79.1	82.9	83.5	83.6	84.6	85.6	86.5	76.7	82.7
20	87.0	86.6	85.0	84.5	84.9	85.6	86.2	86.8	87.2	87.6	88.1	85.5	84.8	88.2	88.6	87.4	89.1	88.2	85.5	84.9	86.4	88.9	89.0	86.3	89.1	84.5	86.8
21	84.4	84.8	83.6	84.3	87.2	92.0	91.3	91.6	92.2	92.2	92.4	92.4	93.2	82.7	76.7	76.7	75.8	75.1	73.7	76.9	78.2	77.9	73.7	70.1	93.2	70.1	83.3
22	68.9	70.7	68.1	67.3	67.9	68.3	71.1	74.0	72.1	73.7	72.9	71.1	73.3	70.8	69.4	69.3	69.1	67.9	66.8	65.4	63.9	64.9	67.6	67.0	74.0	63.9	69.2
23	64.3	67.5	67.3	71.7	67.7	66.2	70.5	71.6	70.9	70.7	72.3	72.8	73.0	74.4	72.7	73.9	74.4	75.2	76.7	76.6	77.2	79.2	80.8	82.3	82.3	64.3	72.9
24	83.0	82.2	83.1	81.5	80.3	84.7	88.3	90.5	87.7	85.6	82.4	80.0	77.1	75.4	74.2	75.9	76.8	74.5	77.9	74.5	72.5	73.6	71.3	68.7	90.5	68.7	79.2
25	73.9	84.8	90.5	95.6	95.5	95.4	95.5	95.7	96.2	96.0	96.1	96.0	96.1	96.5	96.6	96.9	96.9	92.7	82.0	80.6	83.0	83.3	83.6	84.6	96.9	73.9	91.0
26	82.7	79.2	80.0	80.5	80.7	84.7	84.1	81.9	83.6	84.2	84.4	82.0	82.8	81.7	80.9	78.8	76.1	80.2	76.8	74.3	72.1	71.1	71.9	74.5	84.7	71.1	79.5
27	76.9	74.8	77.9	80.3	80.5	80.5	79.6	76.8	79.5	85.8	92.1	90.3	91.3	91.6	85.8	85.8	81.7	79.5	80.4	80.5	82.8	83.2	79.3	84.5	92.1	74.8	82.6
28	87.7	86.6	85.2	83.9	83.5	84.0	86.1	86.1	86.2	85.1	83.3	82.5	81.9	82.9	82.2	83.3	81.7	79.6	77.6	75.3	73.9	71.9	71.7	72.8	87.7	71.7	81.5
29	74.7	74.6	73.7	75.4	80.9	86.5	87.6	89.4	91.0	90.6	88.9	87.5	87.1	87.9	87.8	88.4	87.2	87.3	88.7	91.9	94.9	96.2	96.6	96.2	96.6	73.7	87.1
30	96.7	97.3	97.7	98.0	98.4	98.3	99.0	99.4	97.2	95.0	95.0	93.9	92.9	92.3	92.8	95.7	96.1	96.8	98.0	99.7	100.0	99.2	96.8	98.8	100.0	92.3	96.9
31	98.5	95.4	95.8	94.8	95.5	93.1	94.0	94.0	94.5	94.5	92.8	90.5	89.3	89.6	89.5	89.7	90.3	90.4	89.6	89.7	92.5	94.7	97.3	97.6	98.5	89.3	93.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.6**	**99.1**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**64.3**	**67.5**	**67.3**	**67.3**	**67.7**	**66.2**	**70.5**	**71.6**	**70.9**	**70.7**	**72.3**	**71.1**	**73.0**	**70.8**	**69.4**	**69.3**	**69.1**	67.9	66.8	**65.4**	**63.9**	**64.9**	**67.6**	**67.0**		**63.9**	
Avg.	**87.1**	**88.3**	**88.2**	**88.8**	**89.2**	**89.6**	**89.7**	**89.6**	**89.8**	**89.9**	**90.1**	**89.7**	**88.7**	**88.3**	**87.3**	**87.4**	**87.0**	**86.8**	**86.5**	**86.2**	**86.9**	**87.4**	**87.1**	**87.4**			**88.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	97.6	98.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.8	99.2	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6	99.7
2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.6	97.2	98.3	100.0	100.0	97.2	99.7
3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	93.2	89.5	87.2	88.1	90.5	93.2	94.4	94.8	97.1	97.8	100.0	87.2	96.9
4	97.8	99.3	99.4	99.9	99.7	99.3	99.2	98.3	98.2	98.7	99.0	99.5	99.7	99.7	99.3	99.6	99.7	99.8	100.0	100.0	100.0	99.9	99.5	98.8	100.0	97.8	99.3
5	98.3	97.7	92.4	83.6	76.9	75.8	72.8	73.3	71.4	70.6	70.3	72.8	80.7	84.3	75.7	75.1	77.6	76.4	77.6	77.0	74.0	75.2	78.1	81.3	98.3	70.3	78.7
6	83.1	82.3	84.2	85.8	85.1	83.4	82.2	80.4	81.1	80.7	81.6	82.8	81.6	79.9	75.4	73.3	71.8	70.6	75.9	78.1	77.2	79.9	81.3	82.1	85.8	70.6	80.0
7	82.5	83.2	84.7	84.0	84.2	82.6	82.8	80.7	82.4	81.2	77.9	77.1	78.5	74.6	68.5	66.8	67.8	67.7	67.8	65.9	65.3	64.8	69.2	66.3	84.7	64.8	75.3
8	68.8	58.2	57.4	59.5	59.1	57.8	56.9	54.2	54.0	54.9	56.4	58.7	61.9	67.8	66.5	68.6	68.4	69.9	89.8	97.2	96.9	95.9	92.2	91.2	97.2	54.0	69.3
9	93.1	93.0	91.6	90.7	90.9	90.0	87.7	85.8	85.6	87.0	83.2	82.0	80.3	79.8	78.0	74.4	72.8	69.3	66.5	71.8	74.5	75.1	71.4	66.5	93.1	66.5	80.9
10	68.4	72.2	74.8	71.4	74.8	76.4	77.2	78.9	78.2	78.5	74.7	72.0	72.5	72.4	68.9	67.1	66.9	69.0	66.1	66.8	68.7	69.1	69.5	68.3	78.9	66.1	71.8
11	67.3	72.9	74.4	73.8	75.3	78.3	81.7	82.2	82.0	79.8	79.3	80.7	80.3	78.3	74.5	72.0	71.4	71.2	72.0	71.7	71.7	73.8	74.1	74.1	82.2	67.3	75.5
12	71.2	73.2	72.5	71.1	70.9	72.8	72.7	70.8	71.4	71.4	73.3	71.6	68.9	73.2	68.7	67.6	68.6	71.6	72.6	73.4	71.6	68.0	70.4	72.4	73.4	67.6	71.2
13	73.9	75.5	82.6	90.0	97.9	98.4	98.1	98.4	98.5	98.6	98.8	98.8	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	73.9	96.2
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	97.1	97.8	99.8	99.6	97.5	100.0	97.1	99.6
15	99.3	99.8	98.3	100.0	99.6	98.5	99.0	99.4	99.7	97.6	96.0	95.3	92.8	89.9	86.4	82.2	78.3	77.3	74.1	73.3	73.0	71.1	71.1	71.5	100.0	71.1	88.5
16	71.5	71.7	71.9	72.8	73.4	72.9	73.0	72.9	76.9	77.1	74.3	73.8	74.4	71.8	68.1	71.2	75.4	74.4	76.2	75.1	70.9	79.2	90.8	92.9	92.9	68.1	75.1
17	95.5	88.0	82.9	89.8	87.9	85.3	85.4	82.2	83.0	84.9	98.5	99.4	99.7	99.9	99.9	99.8	97.5	95.0	94.1	91.6	91.7	93.7	94.0	94.2	99.9	82.2	92.2
18	95.0	91.1	83.8	83.5	92.3	86.4	80.3	80.4	69.9	59.1	39.3	54.4	73.3	71.0	70.5	76.9	79.3	82.4	83.7	82.1	82.2	83.8	84.1	84.7	95.0	39.3	77.9
19	84.1	82.9	77.3	78.3	80.1	78.1	78.2	79.6	79.4	81.2	79.7	76.6	77.1	77.6	76.7	76.3	76.8	77.5	80.3	82.5	85.5	86.7	89.4	92.8	92.8	76.3	80.6
20	93.6	93.2	87.5	89.5	85.8	86.9	86.7	72.5	72.7	77.5	73.1	84.2	80.8	80.5	79.9	84.6	85.1	87.7	91.0	92.0	93.9	94.2	95.3	96.5	96.5	72.5	86.0
21	97.4	97.4	96.4	98.1	99.6	98.8	99.1	98.5	97.2	97.0	94.2	92.2	89.7	89.7	87.8	86.3	86.8	88.3	92.0	90.1	91.0	90.2	94.7	96.9	99.6	86.3	93.7
22	96.7	96.3	87.4	90.6	96.2	97.5	91.1	93.7	78.4	66.1	66.0	58.1	54.2	56.1	55.7	55.5	54.1	53.8	58.3	59.6	58.2	48.2	57.9	60.6	97.5	48.2	70.4
23	60.3	59.0	57.1	59.7	62.1	58.0	57.8	62.6	62.8	64.2	65.2	65.4	68.8	60.4	60.3	60.0	52.9	50.8	60.1	61.0	59.6	60.7	63.4	67.0	68.8	50.8	60.8
24	79.6	89.5	88.5	85.6	95.3	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	79.6	97.4
25	99.9	99.5	99.4	98.5	97.9	97.4	96.7	95.6	92.7	88.1	79.9	75.6	73.4	71.3	72.4	71.2	70.1	70.3	71.8	73.7	77.3	78.9	80.9	80.8	99.9	70.1	83.9
26	81.1	81.2	83.5	85.4	85.3	85.2	84.4	84.6	85.8	86.7	84.7	83.0	80.3	78.7	83.2	87.4	91.9	91.5	90.8	87.8	86.7	87.6	92.0	93.6	93.6	78.7	85.9
27	94.2	94.8	94.4	93.8	92.2	94.2	95.3	94.0	92.9	91.3	92.2	91.7	90.5	89.1	90.5	92.0	92.0	92.3	89.9	88.6	89.4	90.1	89.7	89.9	95.3	88.6	91.9
28	90.6	91.2	91.3	92.6	91.8	91.3	90.9	91.4	92.5	90.2	91.6	89.9	90.2	86.4	84.6	80.0	77.2	76.9	76.1	75.7	76.7	78.1	81.9	80.2	92.6	75.7	85.8
29	79.9	80.7	84.4	86.1	85.9	85.7	85.8	87.7	87.3	88.0	86.9	86.1	83.9	80.6	76.6	74.7	75.9	76.0	75.9	75.6	77.0	77.9	80.7	83.7	88.0	74.7	81.8
30	82.1	82.9	83.9	85.9	86.3	87.5	87.0	85.4	84.7	82.9	81.3	79.9	77.0	76.5	75.7	74.0	79.2	88.1	92.2	91.8	91.6	96.5	97.6	98.2	98.2	74.0	85.3
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**60.3**	**58.2**	**57.1**	**59.5**	**59.1**	**57.8**	**56.9**	**54.2**	**54.0**	**54.9**	**39.3**	**54.4**	**54.2**	**56.1**	**55.7**	**55.5**	**52.9**	50.8	58.3	**59.6**	**58.2**	**48.2**	**57.9**	**60.6**		**39.3**	
Avg.	**86.8**	**86.8**	**86.1**	**86.7**	**87.5**	**87.3**	**86.7**	**86.1**	**85.3**	**84.4**	**83.2**	**83.4**	**83.7**	**83.0**	**81.2**	**80.8**	**80.8**	**81.2**	**82.8**	**83.1**	**83.2**	**83.7**	**85.5**	**86.0**			**84.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	97.9	97.2	95.2	93.2	88.7	86.6	86.2	85.6	85.0	84.2	83.1	81.7	78.5	76.3	74.9	74.8	74.2	73.7	69.9	71.2	71.2	73.7	75.5	76.2	97.9	69.9	81.4
2	77.2	81.6	85.9	93.2	95.8	95.7	92.0	86.3	87.1	87.7	85.1	84.0	81.2	80.1	92.3	87.7	79.4	84.0	84.0	95.2	93.8	99.0	96.9	98.2	99.0	77.2	88.5
3	97.4	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	97.1	95.4	92.2	83.0	75.5	73.7	89.1	93.6	90.5	86.0	75.9	84.8	91.8	85.2	100.0	73.7	92.1
4	81.0	83.5	80.5	78.8	80.0	77.2	75.6	76.3	78.5	76.2	74.7	72.7	70.8	69.9	72.1	65.6	65.3	66.3	65.6	66.3	83.8	87.1	82.8	82.0	87.1	65.3	75.5
5	78.4	81.9	83.7	82.5	83.2	77.7	79.1	77.6	73.3	75.1	78.8	79.3	79.9	79.9	76.5	68.0	64.3	72.1	73.4	78.5	81.6	82.2	86.0	91.9	91.9	64.3	78.5
6	94.2	97.7	100.0	100.0	98.9	96.2	96.3	97.7	97.5	91.7	88.5	84.7	82.1	81.5	79.6	77.7	75.1	72.1	73.8	75.6	79.7	85.0	89.1	90.1	100.0	72.1	87.7
7	91.0	86.6	82.3	81.9	82.1	84.6	85.3	84.6	83.7	81.2	76.3	75.9	76.7	76.3	74.9	76.8	76.8	76.9	76.3	77.2	79.6	80.6	87.3	91.8	91.8	74.9	81.1
8	90.9	92.6	92.8	92.8	93.1	92.8	90.9	89.3	86.9	84.3	82.2	81.8	80.5	82.1	83.4	82.7	82.5	81.4	81.6	81.6	81.9	83.0	85.8	83.7	93.1	80.5	85.9
9	82.2	83.1	83.1	85.1	87.1	87.8	87.2	87.2	85.3	82.5	80.2	80.8	83.5	86.1	87.8	86.8	89.5	96.7	98.8	99.9	100.0	100.0	100.0	100.0	100.0	80.2	89.2
10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8	97.4	97.2	96.6	95.6	89.0	85.4	83.8	86.4	86.4	84.6	100.0	83.8	95.9
11	88.5	89.2	87.3	88.3	89.9	89.0	89.6	91.3	89.5	88.8	93.6	96.3	97.3	97.9	95.0	79.9	76.9	80.1	74.0	74.8	74.5	78.5	82.5	89.6	97.9	74.0	86.8
12	90.6	90.8	90.6	90.1	92.1	93.6	93.9	92.0	88.0	84.6	81.6	77.0	75.0	75.2	75.4	89.9	95.3	94.6	90.7	89.6	91.4	94.0	96.6	95.6	96.6	75.0	88.7
13	94.5	96.3	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	97.7	93.8	87.6	84.1	80.1	79.0	80.2	87.8	81.5	77.2	80.8	82.4	85.1	87.0	100.0	77.2	90.6
14	90.1	93.6	92.5	89.0	90.2	78.1	73.3	73.2	72.7	69.6	69.1	69.7	67.7	61.0	62.5	64.9	59.6	54.2	55.0	63.0	67.3	61.0	60.0	64.1	93.6	54.2	70.9
15	65.3	70.3	67.8	68.4	70.8	77.3	79.4	81.4	83.7	85.6	83.1	75.6	72.2	78.0	82.4	89.8	93.6	95.7	96.8	98.3	99.6	100.0	100.0	100.0	100.0	65.3	84.0
16	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.6	90.7	81.2	78.5	75.2	71.4	67.5	66.1	65.3	68.3	73.8	74.9	74.9	100.0	65.3	86.9
17	79.6	89.0	97.2	94.3	90.4	89.2	88.9	88.6	87.9	86.0	82.2	74.8	67.5	62.2	58.2	52.1	45.9	56.8	57.3	54.7	56.8	65.4	72.6	74.0	97.2	45.9	73.8
18	71.7	67.9	71.5	77.2	82.7	90.0	95.4	98.6	97.6	95.4	97.8	96.2	98.9	99.2	98.7	98.1	93.8	87.7	84.1	85.7	92.6	95.9	97.3	97.6	99.2	67.9	90.5
19	93.8	90.2	86.1	87.4	83.4	83.7	86.9	89.1	92.0	91.1	89.8	84.4	77.2	68.2	65.2	63.6	61.9	63.0	60.9	61.5	63.0	66.3	70.6	73.3	93.8	60.9	77.2
20	67.2	73.2	71.7	73.9	75.5	75.9	73.4	71.4	69.3	66.6	61.1	58.8	54.4	48.2	44.9	48.5	46.7	43.7	36.8	35.3	41.2	41.5	39.6	40.6	75.9	35.3	56.6
21	41.4	46.4	48.3	50.3	53.9	63.7	61.9	62.1	68.2	68.1	68.6	62.0	60.1	62.0	59.2	51.6	54.9	56.5	61.6	68.2	71.8	78.9	81.1	78.4	81.1	41.4	61.6
22	77.4	76.2	79.8	87.5	90.0	92.1	90.4	89.1	87.8	79.1	75.7	67.8	62.7	58.4	59.0	56.8	57.9	61.0	62.3	65.5	69.7	76.9	78.7	79.2	92.1	56.8	74.2
23	82.2	85.4	95.8	96.4	97.2	92.3	90.7	91.7	89.0	86.9	85.2	84.2	87.0	87.3	86.9	86.4	86.5	87.5	87.6	88.6	87.4	87.9	87.0	88.0	97.2	82.2	88.5
24	89.1	89.4	91.0	91.1	93.4	96.1	96.8	95.2	93.4	93.2	95.0	92.5	90.7	86.4	79.9	73.8	70.1	70.5	71.1	74.6	71.4	77.2	74.1	74.4	96.8	70.1	84.6
25	79.8	85.6	85.5	85.8	87.5	87.3	88.2	86.3	84.5	79.1	69.3	67.7	72.3	87.8	95.3	89.6	77.7	86.1	83.3	84.2	86.3	88.5	89.4	90.6	95.3	67.7	84.1
26	94.4	96.5	97.1	99.8	100.0	100.0	99.9	99.5	96.8	90.5	87.8	85.3	81.6	73.9	65.5	82.6	73.5	73.4	85.9	84.2	76.2	78.7	81.8	81.3	100.0	65.5	86.9
27	84.4	82.2	77.4	75.0	85.5	87.4	87.1	87.2	81.9	77.0	69.0	64.4	58.8	53.6	50.5	46.8	41.8	42.2	40.6	41.4	43.6	53.5	65.5	65.5	87.4	40.6	65.1
28	63.5	64.5	67.6	68.5	68.1	61.6	61.9	64.5	63.3	61.3	57.7	55.6	51.6	49.1	47.4	43.5	41.0	43.8	49.4	53.2	57.6	59.8	64.2	66.5	68.5	41.0	57.7
29	70.0	65.8	69.4	70.0	74.6	76.0	76.3	75.5	70.9	65.5	59.0	51.9	50.0	49.6	47.8	44.6	43.7	43.4	42.6	40.9	43.0	44.7	48.4	54.7	76.3	40.9	57.4
30	58.5	59.8	55.7	56.1	60.1	61.1	61.7	62.0	62.8	58.7	55.7	53.0	49.4	47.2	46.6	47.3	46.3	50.0	58.0	67.7	74.9	72.5	75.3	78.8	78.8	46.3	59.1
31	81.8	84.2	87.7	90.0	91.6	92.4	92.8	94.0	95.6	94.4	88.8	85.0	79.2	77.1	74.5	75.4	76.1	79.4	85.3	91.0	93.2	93.3	95.0	96.0	96.0	74.5	87.2
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.2**	**98.7**	**98.1**	**96.6**	**96.7**	**98.8**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**41.4**	**46.4**	**48.3**	**50.3**	**53.9**	**61.1**	**61.7**	**62.0**	**62.8**	**58.7**	**55.7**	**51.9**	**49.4**	**47.2**	**44.9**	**43.5**	**41.0**	42.2	36.8	**35.3**	**41.2**	**41.5**	**39.6**	**40.6**		**35.3**	
Avg.	**82.4**	**83.9**	**84.6**	**85.4**	**86.6**	**86.6**	**86.5**	**86.4**	**85.6**	**83.3**	**81.1**	**78.4**	**76.0**	**74.2**	**73.2**	**71.9**	**70.6**	**72.2**	**72.1**	**73.6**	**75.5**	**78.5**	**80.7**	**81.7**			**79.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	96.5	97.4	97.8	91.3	87.9	88.1	86.5	83.9	83.6	78.9	69.4	63.4	63.4	64.0	60.9	60.6	62.2	71.6	74.5	78.3	81.3	86.0	86.9	93.6	97.8	60.6	79.5
2	89.1	80.1	77.7	74.7	74.1	75.5	74.6	72.9	67.9	67.4	64.1	59.7	57.2	53.2	49.8	51.0	49.3	53.4	54.4	55.0	55.7	58.0	63.7	69.5	89.1	49.3	64.5
3	71.1	73.7	77.1	82.5	82.5	82.0	79.1	80.7	82.7	83.8	75.5	69.3	69.8	62.0	63.9	71.9	70.8	67.6	70.8	71.7	80.1	84.0	88.8	91.8	91.8	62.0	76.4
4	93.3	94.4	97.8	99.0	99.7	100.0	100.0	100.0	98.5	92.5	78.2	78.7	77.2	71.1	69.3	63.6	60.3	61.9	60.3	59.2	62.6	66.5	74.3	84.2	100.0	59.2	80.9
5	90.0	93.0	93.8	95.1	95.2	94.5	93.2	90.5	91.0	83.2	88.5	91.8	91.9	87.6	82.5	78.8	79.0	79.9	80.8	80.6	87.3	91.4	92.4	89.4	95.2	78.8	88.4
6	89.3	90.9	88.8	88.7	89.8	89.6	91.1	94.4	95.2	92.4	85.6	77.0	66.6	57.8	54.3	51.7	44.6	53.8	56.2	60.0	55.1	58.2	71.6	79.0	95.2	44.6	74.2
7	84.5	90.1	88.1	90.6	92.8	95.0	93.1	88.4	84.4	77.4	70.4	66.7	60.0	60.3	49.0	54.9	61.9	61.0	62.5	63.1	69.2	73.2	79.7	88.3	95.0	49.0	75.2
8	93.9	95.4	94.0	97.9	99.8	96.1	79.9	82.6	71.2	68.2	69.4	65.3	53.0	44.2	40.7	40.1	47.6	52.2	56.6	59.6	53.2	50.0	65.3	88.7	99.8	40.1	69.4
9	91.0	91.2	91.5	96.4	99.6	100.0	100.0	100.0	100.0	100.0	100.0	96.5	95.7	93.0	84.3	81.8	74.9	73.1	73.8	79.3	79.5	77.6	81.7	84.5	100.0	73.1	89.4
10	89.1	96.0	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.3	87.5	82.1	81.3	78.5	75.5	78.1	76.4	79.1	85.8	86.5	82.3	100.0	75.5	90.6
11	81.5	86.3	87.8	89.9	88.8	87.9	90.3	90.6	93.1	90.8	88.2	86.9	88.5	92.6	90.5	86.4	86.2	84.6	82.5	80.8	79.5	83.5	89.4	90.3	93.1	79.5	87.4
12	92.9	97.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	97.4	89.3	80.0	81.5	85.7	87.3	94.1	92.5	95.1	96.8	97.0	99.7	100.0	100.0	80.0	95.3
13	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.6	99.2	98.5	97.2	94.8	89.3	79.6	84.9	79.9	80.0	79.9	79.5	81.0	85.3	86.9	100.0	79.5	92.3
14	91.4	97.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	99.9	99.7	99.7	97.7	87.2	77.0	73.5	70.5	69.4	69.6	78.7	92.7	92.8	91.9	90.5	100.0	69.4	90.8
15	90.3	93.7	92.8	97.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.3	95.7	93.4	83.8	83.3	88.6	82.5	83.4	88.6	95.4	98.6	99.1	100.0	82.5	94.4
16	99.4	99.5	99.7	99.7	99.8	99.9	99.8	99.7	99.7	99.7	99.6	98.6	91.7	88.8	82.7	77.9	75.9	74.3	74.5	70.9	74.7	77.2	78.7	80.4	99.9	70.9	89.3
17	76.9	78.4	78.6	78.5	81.2	80.2	81.5	86.1	83.2	79.5	81.8	78.1	69.4	63.4	56.4	50.9	44.8	40.9	43.9	46.6	49.2	62.8	71.2	77.7	86.1	40.9	68.4
18	84.2	82.5	82.7	84.1	82.7	93.1	98.0	98.4	95.4	90.4	81.6	72.8	63.8	62.9	57.3	50.0	47.5	48.4	54.3	54.6	56.2	59.9	69.5	74.7	98.4	47.5	72.7
19	78.0	80.9	81.7	81.2	86.7	90.5	90.9	92.2	86.2	80.4	76.4	73.6	70.7	69.6	63.2	63.5	60.7	54.0	51.9	55.7	57.4	63.1	70.0	78.4	92.2	51.9	73.2
20	85.5	89.0	89.5	87.1	88.4	87.4	92.4	96.1	92.1	93.7	91.5	74.9	71.2	64.5	61.6	63.9	60.2	60.1	62.8	67.7	72.7	74.5	79.9	84.9	96.1	60.1	78.8
21	87.5	90.8	93.9	94.0	91.2	89.5	86.5	84.2	80.7	78.1	75.1	73.7	70.5	68.3	67.5	65.6	61.4	59.7	58.8	60.9	64.1	69.9	77.2	79.3	94.0	58.8	76.2
22	81.4	83.1	83.3	83.2	84.6	85.4	88.2	86.7	84.1	82.8	79.7	75.8	71.4	66.7	65.7	67.7	73.0	73.9	73.1	72.1	78.1	82.6	88.4	90.5	90.5	65.7	79.2
23	91.2	91.5	91.5	92.7	94.4	92.6	91.2	88.4	80.4	73.4	69.7	65.9	61.6	62.2	59.2	56.4	54.9	53.9	52.4	54.7	56.3	62.4	71.4	79.9	94.4	52.4	72.8
24	83.9	86.3	85.5	84.1	86.6	90.8	89.9	86.2	78.9	74.1	69.7	67.6	68.5	74.8	75.9	75.8	76.9	79.0	79.8	79.9	80.4	81.9	84.1	86.3	90.8	67.6	80.3
25	87.1	83.8	82.6	84.2	89.4	94.2	92.1	88.2	83.7	76.7	75.0	69.5	64.4	62.2	61.0	56.0	52.8	52.7	58.0	61.4	67.5	70.8	72.1	75.4	94.2	52.7	73.4
26	78.7	78.5	77.8	76.2	74.5	78.0	85.7	73.6	76.0	75.1	71.3	68.9	71.8	78.4	77.3	74.1	70.6	65.6	64.1	62.8	62.9	64.8	67.9	71.9	85.7	62.8	72.8
27	83.8	81.7	80.6	87.8	87.2	86.7	86.4	83.4	82.9	83.4	83.5	78.7	75.4	66.0	62.4	60.1	59.3	59.5	61.5	62.2	62.4	66.7	73.0	78.1	87.8	59.3	74.7
28	81.1	87.4	90.3	93.1	97.9	99.0	96.8	98.9	95.2	89.4	90.2	89.2	85.6	80.7	68.7	78.6	84.8	79.7	74.0	70.7	72.8	82.3	86.6	91.9	99.0	68.7	86.0
29	94.8	97.2	98.8	99.1	98.7	97.6	96.3	96.8	98.1	93.1	84.2	78.9	72.1	68.8	62.3	59.6	58.4	56.8	56.6	60.8	65.6	72.2	77.1	82.4	99.1	56.6	80.3
30	84.9	83.9	83.3	83.4	83.9	84.8	84.9	84.3	79.4	73.7	70.0	65.7	63.6	61.3	58.0	60.3	62.3	61.0	60.1	57.0	67.8	68.6	72.4	74.4	84.9	57.0	72.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.3**	**95.7**	**93.4**	**86.4**	**87.3**	**94.1**	**92.5**	**95.1**	**96.8**	**97.0**	**99.7**	**100.0**	**100.0**		
Min.	**71.1**	**73.7**	**77.1**	**74.7**	**74.1**	**75.5**	**74.6**	**72.9**	**67.9**	**67.4**	**64.1**	**59.7**	**53.0**	**44.2**	**40.7**	**40.1**	**44.6**	40.9	43.9	**46.6**	**49.2**	**50.0**	**63.7**	**69.5**		**40.1**	
Avg.	**87.4**	**89.1**	**89.5**	**90.4**	**91.2**	**91.9**	**91.6**	**90.9**	**88.8**	**85.9**	**82.9**	**79.4**	**75.9**	**72.3**	**68.2**	**66.8**	**66.2**	**66.2**	**66.7**	**68.0**	**70.9**	**74.7**	**79.8**	**84.1**			**80.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	68.2	69.0	69.8	69.7	70.5	71.3	81.7	82.1	73.4	72.6	65.4	60.1	56.6	52.7	45.6	40.5	39.9	44.0	49.4	54.3	61.5	65.2	66.0	66.6	82.1	39.9	62.3
2	72.8	79.0	80.1	75.9	75.4	76.2	78.7	78.1	74.5	71.9	63.8	54.4	51.7	47.9	45.7	41.5	47.7	44.0	52.4	62.1	60.1	63.5	67.0	67.9	80.1	41.5	63.8
3	71.2	76.5	72.4	65.8	61.6	68.3	64.4	67.4	66.8	81.8	89.9	83.1	78.9	74.3	72.4	67.0	69.3	79.6	86.6	87.8	87.2	87.3	92.2	97.3	97.3	61.6	77.0
4	98.7	99.2	99.3	99.4	98.2	95.8	95.8	96.3	96.4	93.8	88.8	85.5	82.4	79.2	80.2	84.1	79.5	81.6	93.2	97.9	95.9	95.6	97.1	98.4	99.4	79.2	92.2
5	99.1	99.3	99.4	97.4	95.5	96.5	97.5	97.9	98.2	96.7	93.4	83.5	74.0	68.5	68.3	72.9	78.8	76.5	76.7	76.0	76.1	78.7	79.4	79.1	99.4	68.3	85.8
6	82.3	87.3	88.5	90.5	90.4	88.4	89.6	89.8	88.5	80.7	76.5	72.9	64.1	74.4	81.1	79.9	79.5	80.8	84.6	84.2	85.3	87.1	89.5	94.0	94.0	64.1	83.7
7	97.6	98.7	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.4	98.1	98.5	98.5	97.8	97.9	97.3	97.4	93.4	87.5	82.7	81.2	82.3	85.5	85.6	99.5	81.2	94.8
8	81.4	83.8	80.1	79.9	83.1	91.6	98.3	99.1	99.3	99.4	99.3	98.6	98.4	98.6	97.0	91.1	90.0	93.5	97.9	96.6	96.6	97.9	97.8	97.9	99.4	79.9	93.6
9	97.3	95.9	96.3	95.7	93.3	92.0	92.3	92.1	89.3	88.0	86.5	76.4	70.9	66.7	62.5	61.0	60.7	64.1	67.8	70.2	73.0	74.7	77.6	80.6	97.3	60.7	80.2
10	83.2	86.3	87.9	89.3	88.7	89.1	90.6	91.0	87.4	82.8	79.4	77.3	75.4	68.4	63.5	63.1	62.8	61.8	63.9	67.2	73.3	76.6	83.3	87.8	91.0	61.8	78.3
11	89.7	92.3	93.8	96.3	97.0	98.1	98.7	99.0	98.9	84.5	79.2	74.9	70.4	65.5	63.4	58.2	55.9	54.7	56.7	56.7	61.4	65.2	70.6	75.9	99.0	54.7	77.4
12	80.6	84.0	85.1	79.1	79.7	83.6	86.5	85.4	78.9	75.6	74.5	74.8	73.5	69.7	70.3	72.8	73.8	74.4	87.1	93.7	94.5	95.7	97.2	98.2	98.2	69.7	82.0
13	98.6	99.0	99.0	99.0	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.3	97.6	92.7	90.3	90.6	89.5	89.2	90.4	90.4	90.4	90.9	92.2	96.5	99.5	89.2	95.5
14	97.3	97.6	97.6	96.4	96.6	97.2	97.6	97.1	96.0	95.4	90.6	86.2	83.3	79.7	75.2	74.2	71.7	68.5	69.1	71.3	76.7	80.8	85.8	88.5	97.6	68.5	86.3
15	91.2	90.1	91.1	92.2	93.1	93.8	94.8	96.6	95.1	92.2	87.4	85.3	81.4	77.2	74.7	72.9	74.4	78.8	83.1	88.2	93.2	94.0	93.8	91.8	96.6	72.9	87.8
16	90.7	90.6	90.9	92.6	93.4	93.2	92.8	90.5	89.6	89.6	95.2	97.6	94.9	87.9	84.8	84.8	95.0	98.0	97.9	98.2	98.7	99.0	99.2	99.3	99.3	84.8	93.5
17	99.4	99.4	99.5	99.7	100.0	100.0	99.4	99.6	99.6	99.0	98.6	98.2	95.9	95.0	96.5	96.9	92.8	90.8	89.3	90.4	94.0	95.3	97.2	98.6	100.0	89.3	96.9
18	99.0	99.3	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	99.6	97.4	88.3	81.7	87.9	91.7	84.5	87.5	86.6	90.1	91.2	86.7	84.0	81.0	100.0	81.0	93.2
19	82.4	80.5	82.7	86.8	89.6	86.9	86.1	84.8	81.9	81.5	80.3	73.3	73.0	72.7	63.5	64.4	71.3	68.4	64.7	70.9	77.3	80.6	82.3	84.3	89.6	63.5	77.9
20	84.3	82.9	86.3	93.5	90.5	91.9	94.0	97.5	98.7	99.1	99.3	99.4	99.4	96.7	95.9	94.5	96.8	98.5	99.1	99.4	99.5	99.5	99.6	99.6	99.6	82.9	95.7
21	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.8	99.8	99.8	99.7	99.0	93.6	92.9	87.7	85.9	86.0	93.0	90.2	97.5	98.7	99.1	99.9	85.9	96.7
22	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.1	97.2	98.2	95.7	95.9	97.5	96.2	98.5	99.2	99.8	95.7	98.9
23	99.5	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.2	97.6	86.2	77.6	73.8	76.4	86.0	95.2	98.7	99.0	96.9	99.8	73.8	95.1
24	98.3	98.4	93.2	92.1	97.6	98.3	97.8	99.0	98.9	97.1	94.5	92.2	87.7	82.0	75.4	66.3	58.8	60.0	76.2	66.7	72.5	65.7	55.0	54.7	99.0	54.7	82.4
25	59.1	62.8	64.5	67.5	69.4	68.7	69.7	70.1	66.3	63.6	60.3	56.7	52.1	48.9	45.9	44.0	42.6	42.0	40.9	40.1	42.7	46.6	50.4	52.2	70.1	40.1	55.3
26	61.8	69.1	70.6	73.5	91.7	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.6	95.4	90.3	80.4	76.2	75.4	81.6	90.3	98.4	99.2	99.7	61.8	89.6
27	99.4	99.5	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.7	99.3	96.2	89.7	93.1	94.9	94.2	88.8	92.7	88.1	90.4	92.5	92.5	99.8	88.1	96.2
28	91.3	91.9	88.0	88.0	90.0	91.0	92.6	91.2	89.2	84.8	79.6	76.0	72.5	62.3	59.1	58.6	53.5	55.9	54.4	57.2	60.0	61.5	66.1	66.0	92.6	53.5	74.2
29	69.7	71.1	72.2	74.5	80.1	79.5	83.0	84.8	86.6	81.6	71.2	63.5	59.2	54.3	50.8	46.9	45.5	46.3	46.2	46.0	49.1	52.7	58.7	68.6	86.6	45.5	64.2
30	72.2	71.6	70.7	68.4	69.0	70.0	72.4	70.9	71.7	70.3	64.5	62.3	59.2	56.8	55.1	54.5	57.7	58.3	62.7	66.3	68.6	73.3	78.0	82.2	82.2	54.5	66.9
31	86.3	83.1	83.8	86.5	89.0	89.9	88.7	85.1	82.6	78.2	69.7	59.6	44.7	41.9	38.9	35.4	41.0	42.4	44.9	50.3	53.6	65.1	81.1	91.0	91.0	35.4	67.2
Max.	**99.7**	**99.7**	**99.8**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.8**	**99.8**	**99.8**	**99.7**	**99.1**	**97.4**	**98.5**	**99.1**	**99.4**	**99.5**	**99.5**	**99.6**	**99.6**	**100.0**		
Min.	**59.1**	**62.8**	**64.5**	**65.8**	**61.6**	**68.3**	**64.4**	**67.4**	**66.3**	**63.6**	**60.3**	**54.4**	**44.7**	**41.9**	**38.9**	**35.4**	**39.9**	42.0	40.9	**40.1**	**42.7**	**46.6**	**50.4**	**52.2**		**35.4**	
Avg.	**87.1**	**88.3**	**88.4**	**88.6**	**89.7**	**90.6**	**91.6**	**91.7**	**90.5**	**89.0**	**86.6**	**83.4**	**80.1**	**77.0**	**74.9**	**73.3**	**72.8**	**73.1**	**75.2**	**77.4**	**79.6**	**81.8**	**84.3**	**86.1**			**83.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	91.4	97.8	95.6	88.8	88.2	89.3	98.0	98.2	98.9	99.4	99.5	99.5	99.5	98.3	92.3	78.7	74.8	72.6	71.5	72.7	76.3	84.7	93.1	95.8	99.5	71.5	89.8
2	98.5	99.1	99.4	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.5	97.6	95.9	90.8	85.3	88.8	94.5	95.4	93.4	95.2	95.5	95.8	99.7	85.3	96.7
3	92.9	92.4	94.2	93.9	93.9	94.9	96.2	92.5	90.3	85.1	77.7	85.0	83.6	80.1	74.3	70.3	65.4	68.6	71.3	70.3	72.1	80.0	88.5	93.5	96.2	65.4	83.6
4	96.1	96.4	96.8	96.1	98.1	99.2	99.4	99.4	98.5	95.5	89.3	86.8	82.8	80.6	76.5	75.9	73.7	69.3	70.2	76.8	84.8	92.2	96.5	97.0	99.4	69.3	88.7
5	98.2	98.4	97.5	96.5	94.9	95.1	94.4	92.6	91.9	89.7	85.6	70.8	61.1	56.4	49.1	45.7	45.5	45.4	46.3	45.9	48.9	53.6	62.2	67.2	98.4	45.4	72.2
6	65.1	64.7	68.5	68.4	61.8	62.9	65.5	66.5	64.3	61.5	52.8	46.0	41.5	36.9	35.8	32.8	33.9	34.3	40.1	46.7	49.6	53.2	56.2	64.3	68.5	32.8	53.0
7	72.1	69.3	73.8	69.4	71.0	75.0	77.1	74.9	77.8	70.2	66.6	65.6	60.5	55.3	51.7	49.8	48.8	46.8	45.3	48.4	50.4	58.6	63.8	68.7	77.8	45.3	63.0
8	66.1	71.1	78.3	72.5	73.9	79.3	82.0	74.5	70.0	66.8	60.6	56.1	49.1	41.5	37.7	32.4	31.2	30.0	31.1	33.4	37.3	45.7	50.8	58.1	82.0	30.0	55.4
9	57.1	62.5	65.9	69.8	64.6	64.6	63.5	71.2	65.3	63.1	59.9	54.1	48.4	43.8	42.3	37.0	34.3	37.9	39.1	40.4	42.9	50.0	57.7	64.5	71.2	34.3	54.2
10	65.7	64.0	60.1	61.1	82.1	94.9	97.6	98.0	96.7	87.6	81.4	76.1	68.9	60.1	57.7	52.6	50.6	55.0	67.3	72.8	76.4	85.6	91.7	94.4	98.0	50.6	74.9
11	98.5	99.3	99.4	99.5	99.6	99.6	99.2	98.0	94.9	92.8	86.2	77.9	70.0	67.6	71.5	63.3	60.0	58.8	57.7	61.5	68.7	73.4	73.2	69.1	99.6	57.7	80.8
12	64.6	65.7	66.8	72.5	77.2	78.7	77.0	75.5	75.0	71.2	69.8	67.4	61.5	53.3	43.2	45.9	47.3	65.1	60.4	65.6	64.7	64.5	73.2	75.4	78.7	43.2	65.9
13	75.7	76.2	78.2	80.3	82.8	76.3	80.7	84.8	84.7	87.0	85.9	80.8	77.0	72.9	67.1	77.1	79.2	82.8	98.0	95.6	91.2	93.9	90.0	85.9	98.0	67.1	82.7
14	86.9	89.9	91.1	92.8	94.3	93.3	92.6	93.5	94.0	93.3	96.0	97.6	98.1	97.6	98.1	93.4	93.8	93.2	95.8	97.2	98.1	98.7	99.1	99.2	99.2	86.9	94.9
15	99.0	98.6	98.2	98.1	95.7	94.9	97.8	98.9	99.2	99.1	98.5	94.5	91.4	91.8	94.1	93.7	90.3	87.9	94.3	97.9	98.8	99.1	99.3	99.4	99.4	87.9	96.3
16	99.5	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.5	95.4	82.1	79.3	74.4	73.9	73.3	73.4	75.9	83.2	88.2	89.6	99.7	73.3	91.0
17	90.3	91.0	90.2	90.1	88.3	85.8	85.9	87.6	85.1	81.3	79.5	79.1	78.1	77.1	75.8	75.0	74.8	74.0	78.0	79.8	81.1	86.0	86.3	87.6	91.0	74.0	82.8
18	89.8	91.5	89.8	87.6	89.5	88.2	90.5	89.4	83.8	77.7	70.3	63.2	63.9	61.0	58.0	57.4	57.4	56.6	56.9	61.7	67.5	71.2	71.7	74.0	91.5	56.6	73.7
19	74.4	69.0	64.3	70.2	77.5	78.7	82.9	81.9	82.1	82.8	81.6	77.4	71.6	66.6	61.5	57.0	58.0	56.2	61.8	69.2	84.3	87.4	82.7	76.8	87.4	56.2	73.2
20	82.4	87.7	85.4	87.9	89.0	88.2	88.0	85.8	85.6	89.4	88.4	91.8	86.8	82.2	80.0	81.2	73.9	66.1	71.7	74.5	82.6	88.0	92.6	93.8	93.8	66.1	84.3
21	91.1	87.8	88.5	88.6	90.5	91.0	97.5	99.1	99.3	99.3	99.4	99.5	99.5	99.5	99.5	99.4	97.5	90.2	81.7	82.4	91.0	96.7	98.0	98.8	99.5	81.7	94.4
22	99.2	99.4	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.5	97.8	92.6	91.2	87.2	87.9	83.1	82.6	83.7	83.8	86.6	91.7	99.7	82.6	94.3
23	92.4	91.9	92.1	93.5	94.5	93.4	90.7	91.5	87.2	82.8	82.6	79.7	74.7	73.9	73.2	67.0	73.0	76.7	80.2	85.8	96.5	98.7	95.5	96.5	98.7	67.0	86.0
24	97.7	97.7	97.6	98.2	97.6	96.8	97.3	99.0	99.2	89.2	87.8	87.0	80.0	76.1	72.1	67.6	65.0	58.7	62.2	73.8	71.6	72.7	67.8	65.0	99.2	58.7	82.4
25	64.1	61.9	63.7	81.6	97.1	99.2	99.4	99.5	99.5	99.6	99.6	99.0	96.5	97.2	91.9	85.4	77.6	74.4	78.1	82.3	89.4	92.8	96.2	98.5	99.6	61.9	88.5
26	99.1	99.3	99.4	99.4	99.4	99.5	99.5	99.5	99.6	99.6	99.5	99.4	99.1	92.7	87.4	84.0	82.0	80.1	82.5	85.6	90.1	97.3	98.9	99.2	99.6	80.1	94.7
27	99.4	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.7	99.6	98.4	88.7	83.4	81.4	82.0	81.5	85.3	91.9	93.7	93.6	99.8	81.4	94.8
28	90.8	88.5	89.9	90.0	92.2	91.3	88.0	90.3	94.2	94.9	95.3	90.9	89.0	82.3	75.3	73.4	68.2	73.0	81.1	83.9	81.7	81.7	85.5	86.6	95.3	68.2	85.7
29	85.3	86.8	88.1	89.4	89.3	90.5	88.5	88.8	85.9	77.1	71.2	62.1	59.8	58.7	59.2	72.5	75.9	55.5	53.1	59.0	66.7	67.7	73.2	78.3	90.5	53.1	74.3
30	84.8	85.8	84.6	85.1	86.7	85.0	87.5	88.1	89.6	89.9	87.4	82.0	80.5	79.6	75.5	69.3	64.8	60.2	67.3	73.2	79.6	80.8	77.3	78.3	89.9	60.2	80.1
31	81.3	87.3	88.6	84.9	84.2	83.4	80.3	82.6	83.8	84.3	77.7	74.9	72.0	70.4	68.4	77.9	74.5	67.4	65.4	64.8	64.5	68.0	65.8	63.2	88.6	63.2	75.7
Max.	**99.5**	**99.5**	**99.6**	**99.6**	**99.6**	**99.6**	**99.7**	**99.7**	**99.8**	**99.8**	**99.8**	**99.8**	**99.7**	**99.6**	**99.5**	**99.4**	**97.5**	**93.2**	**98.0**	**97.9**	**98.8**	**99.1**	**99.3**	**99.4**	**99.8**		
Min.	**57.1**	**61.9**	**60.1**	**61.1**	**61.8**	**62.9**	**63.5**	**66.5**	**64.3**	**61.5**	**52.8**	**46.0**	**41.5**	**36.9**	**35.8**	**32.4**	**31.2**	30.0	31.1	**33.4**	**37.3**	**45.7**	**50.8**	**58.1**		**30.0**	
Avg.	**85.5**	**86.1**	**86.6**	**87.2**	**88.8**	**89.3**	**90.2**	**90.3**	**89.5**	**87.4**	**84.8**	**82.0**	**78.8**	**75.6**	**72.2**	**69.9**	**67.8**	**66.7**	**69.1**	**72.1**	**75.6**	**79.9**	**82.3**	**83.9**			**80.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	65.5	67.9	68.3	68.2	65.6	67.2	65.9	66.5	67.9	66.2	64.9	64.4	67.7	72.2	64.4	68.0	75.8	79.7	80.7	81.0	87.8	93.8	94.5	94.5	94.5	64.4	73.3
2	94.5	92.1	90.7	91.9	92.7	92.9	91.9	94.6	94.5	96.7	96.3	96.9	94.5	90.1	87.2	83.8	86.0	88.7	85.1	83.1	83.1	88.6	88.2	88.8	96.9	83.1	90.5
3	90.3	90.5	90.7	93.2	92.9	95.7	97.3	98.2	98.4	97.0	93.2	90.1	92.1	98.6	98.8	93.9	87.6	85.8	85.9	90.8	95.0	97.5	98.7	98.5	98.8	85.8	93.8
4	98.2	98.0	99.0	99.3	99.4	99.5	99.3	97.6	97.3	94.4	92.9	88.5	82.6	81.9	79.2	78.8	76.3	72.1	68.9	68.7	76.7	75.6	75.6	74.0	99.5	68.7	86.4
5	79.8	86.1	87.0	89.5	88.3	89.8	92.2	91.8	90.3	86.3	90.0	87.6	87.5	78.7	71.9	65.7	63.3	68.3	80.9	79.1	85.4	84.6	80.6	83.7	92.2	63.3	82.9
6	88.4	90.1	97.2	99.0	99.0	96.2	95.7	92.4	89.5	85.5	83.9	86.9	88.5	91.3	91.1	87.4	85.9	85.5	84.7	88.0	86.4	86.1	86.6	87.4	99.0	83.9	89.7
7	89.1	88.7	82.7	81.3	79.8	77.6	81.8	84.8	85.4	85.4	89.8	98.2	95.3	94.0	97.4	98.7	92.5	91.1	91.9	97.7	98.9	99.2	99.3	99.4	99.4	77.6	90.8
8	99.4	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	96.1	91.3	91.4	85.9	82.5	84.2	93.0	96.5	93.8	89.5	86.5	84.2	83.2	99.6	82.5	93.9
9	81.7	85.3	87.3	88.3	91.6	88.5	86.2	88.8	94.1	94.0	93.8	94.0	95.0	96.8	97.0	95.7	95.0	95.6	94.7	92.5	96.4	95.6	93.3	96.0	97.0	81.7	92.4
10	97.0	98.4	99.1	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.6	99.5	98.8	94.1	93.7	94.4	92.1	86.2	94.4	93.4	95.4	97.4	99.1	99.3	99.6	86.2	97.0
11	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.0	88.3	81.8	83.5	84.4	88.0	89.8	89.2	91.2	99.7	81.8	95.4
12	92.9	93.5	91.7	96.2	97.3	97.6	96.2	96.3	96.1	94.6	93.9	90.1	87.3	84.9	91.3	90.7	92.7	95.6	93.5	94.7	96.1	96.4	96.3	96.0	97.6	84.9	93.8
13	95.7	95.7	96.2	96.9	97.8	97.8	97.7	96.7	96.7	96.5	93.5	93.2	93.8	94.9	95.1	96.5	92.4	91.1	91.1	89.9	89.6	87.5	87.3	89.2	97.8	87.3	93.9
14	88.5	89.5	90.3	88.5	89.3	91.5	91.8	91.2	90.5	92.8	93.4	92.9	91.1	91.5	94.5	91.7	91.8	91.6	90.7	88.4	88.1	88.8	92.7	93.7	94.5	88.1	91.0
15	91.9	91.2	90.6	90.3	92.6	94.4	91.7	92.9	93.4	92.1	92.1	89.9	88.2	89.3	87.0	87.3	85.0	82.9	82.9	84.9	88.7	91.2	95.0	98.4	98.4	82.9	90.2
16	99.1	99.2	99.0	95.7	92.8	94.7	94.1	94.9	94.7	94.8	93.1	87.1	76.5	72.0	76.6	74.3	78.3	84.3	80.1	81.8	83.9	84.3	89.6	93.6	99.2	72.0	88.1
17	92.4	90.2	96.5	99.1	99.4	99.6	99.6	99.8	99.9	100.0	99.8	99.6	98.7	96.3	94.7	87.3	84.2	89.6	95.7	94.6	93.1	92.9	92.8	93.3	100.0	84.2	95.4
18	91.0	92.9	92.3	92.1	91.2	90.8	89.5	89.5	94.9	96.7	96.6	91.4	90.1	89.2	90.6	90.8	90.4	92.3	94.0	95.0	97.4	96.9	94.4	90.6	97.4	89.2	92.5
19	94.1	94.4	94.5	95.4	96.9	98.0	98.6	99.4	99.5	99.7	99.7	99.7	99.6	99.3	96.1	92.6	89.6	90.7	85.3	88.4	90.1	90.2	94.9	95.0	99.7	85.3	95.1
20	93.7	90.6	92.2	90.3	91.7	87.2	86.9	93.5	92.4	92.4	88.7	92.9	93.0	88.3	77.7	70.9	64.9	60.4	63.5	65.8	83.6	83.6	82.7	77.7	93.7	60.4	83.5
21	73.0	72.6	68.4	68.4	68.6	70.6	69.1	73.7	72.7	75.9	80.1	77.9	69.3	58.7	65.0	61.7	57.0	62.4	62.9	66.8	71.6	75.1	81.3	88.4	88.4	57.0	70.5
22	90.1	90.8	90.5	87.8	86.7	84.6	82.8	84.3	85.4	85.0	78.0	62.1	59.9	62.1	61.5	65.1	74.5	83.5	89.8	93.9	95.3	97.2	97.9	99.1	99.1	59.9	82.8
23	99.8	99.9	99.9	99.9	99.5	99.5	99.5	99.5	99.4	99.4	99.4	98.8	95.1	93.5	94.8	97.4	96.4	96.9	97.6	97.5	97.6	96.5	97.6	98.8	99.9	93.5	98.1
24	99.3	99.5	99.6	99.8	99.9	100.0	100.0	99.1	94.7	92.8	89.7	90.3	90.1	90.1	88.2	87.9	86.8	85.2	85.1	88.2	91.5	94.7	94.6	96.4	100.0	85.1	93.5
25	92.6	93.4	94.0	88.3	85.5	85.3	82.0	82.8	90.7	93.0	89.4	89.0	87.3	88.4	90.0	89.3	88.7	96.7	91.1	93.1	93.3	90.4	94.0	96.1	96.7	82.0	90.2
26	97.3	97.4	95.0	93.1	93.6	96.6	96.4	94.5	95.7	95.0	94.4	88.7	83.6	72.4	70.9	77.9	83.0	87.6	81.4	86.5	82.5	82.2	83.3	84.0	97.4	70.9	88.0
27	81.0	83.3	83.5	85.9	88.2	92.0	91.4	91.2	90.9	90.8	90.1	86.6	80.4	70.2	63.0	57.9	54.6	51.3	49.2	53.7	57.0	60.4	60.6	72.1	92.0	49.2	74.4
28	73.3	72.0	73.2	70.8	73.2	69.2	72.2	68.5	71.7	68.9	67.6	58.7	51.2	48.2	45.7	46.7	54.6	55.8	59.9	61.3	62.2	65.4	78.3	82.8	82.8	45.7	64.6
29	80.7	82.9	84.5	85.6	83.6	82.9	83.4	81.5	81.8	81.3	78.5	73.3	70.9	85.3	83.9	83.8	76.3	68.9	68.9	75.3	78.6	81.5	80.9	79.2	85.6	68.9	79.7
30	79.0	83.5	84.3	84.4	87.5	89.6	92.2	92.7	95.3	97.3	88.6	79.4	75.2	70.2	66.4	66.2	64.8	65.9	65.9	70.7	77.8	79.1	76.8	76.5	97.3	64.8	79.6
Max.	**99.8**	**99.9**	**99.9**	**99.9**	**99.9**	**100.0**	**100.0**	**99.8**	**99.9**	**100.0**	**99.8**	**99.7**	**99.7**	**99.7**	**99.7**	**99.0**	**96.4**	**96.9**	**97.6**	**97.7**	**98.9**	**99.2**	**99.3**	**99.4**	**100.0**		
Min.	**65.5**	**67.9**	**68.3**	**68.2**	**65.6**	**67.2**	**65.9**	**66.5**	**67.9**	**66.2**	**64.9**	**58.7**	**51.2**	**48.2**	**45.7**	**46.7**	**54.6**	51.3	49.2	**53.7**	**57.0**	**60.4**	**60.6**	**72.1**		**45.7**	
Avg.	**89.6**	**90.3**	**90.6**	**90.6**	**90.8**	**90.9**	**90.8**	**91.2**	**91.8**	**91.4**	**90.3**	**88.1**	**85.8**	**84.4**	**83.3**	**82.1**	**81.1**	**82.0**	**82.5**	**84.1**	**86.7**	**87.6**	**88.7**	**89.9**			**87.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	73.8	71.3	74.0	72.8	73.1	78.4	82.7	84.5	81.9	81.5	87.0	89.1	85.8	86.6	88.3	94.6	97.5	98.0	97.8	98.9	99.6	99.9	100.0	100.0	100.0	71.3	87.4
2	100.0	100.0	100.0	99.8	100.0	99.7	99.6	98.8	99.5	100.0	100.0	100.0	95.9	96.6	94.5	91.8	89.7	92.4	89.8	94.9	96.3	91.6	90.9	92.0	100.0	89.7	96.4
3	91.4	94.6	99.3	94.8	88.8	94.8	94.7	94.1	96.9	96.2	93.6	92.5	91.4	88.0	88.7	89.9	88.1	81.6	81.5	85.3	87.4	88.9	85.3	87.4	99.3	81.5	90.6
4	86.9	89.6	91.3	91.0	88.8	88.9	88.0	92.2	87.8	87.5	86.6	82.0	73.2	69.4	68.3	66.1	68.7	87.6	86.6	92.0	100.0	100.0	100.0	100.0	100.0	66.1	86.4
5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	99.9	100.0
6	99.9	99.9	99.7	99.3	99.4	99.4	99.4	99.2	99.0	98.5	98.1	97.3	96.3	94.5	92.0	88.5	82.0	84.5	90.7	90.1	87.6	88.3	86.0	90.5	99.9	82.0	94.2
7	90.2	90.5	91.3	92.5	91.8	89.5	87.7	91.3	89.7	90.1	91.1	86.3	85.3	84.2	83.1	81.4	77.7	78.9	77.6	77.8	79.9	78.1	82.1	85.1	92.5	77.6	85.6
8	87.9	87.2	81.1	85.1	84.4	79.6	79.5	82.8	83.5	85.0	85.7	79.9	77.6	71.8	69.3	65.8	65.8	66.1	69.2	77.9	76.9	72.6	70.6	72.1	87.9	65.8	77.4
9	74.4	76.1	77.9	80.8	81.0	92.6	94.3	98.4	98.7	96.7	97.7	98.4	96.9	93.5	93.3	95.8	96.3	96.0	96.7	97.0	97.2	96.8	96.5	97.9	98.7	74.4	92.5
10	98.4	98.5	98.9	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.6	99.1	97.8	97.8	95.8	94.8	93.9	91.5	100.0	91.5	98.6
11	89.9	87.4	87.6	88.8	95.1	98.3	98.8	99.3	99.6	99.8	100.0	99.7	99.0	98.7	98.5	98.3	98.2	98.2	98.0	98.0	98.0	97.8	97.5	97.4	100.0	87.4	96.7
12	97.7	97.3	97.4	96.8	96.1	95.8	95.5	95.1	94.3	93.5	92.9	92.0	89.4	87.6	87.4	87.5	84.1	82.6	82.3	81.6	81.9	80.6	80.4	81.8	97.7	80.4	89.7
13	80.6	84.1	86.1	87.1	87.7	87.2	89.0	90.4	88.5	89.3	86.1	86.2	76.5	59.4	63.7	65.5	69.5	83.8	89.3	94.5	95.3	96.1	98.5	100.0	100.0	59.4	84.8
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
15	100.0	100.0	100.0	100.0	99.5	99.3	98.7	98.4	98.4	98.0	97.8	97.7	96.1	94.5	94.7	94.5	93.2	92.0	92.3	92.3	92.9	92.9	93.3	92.9	100.0	92.0	96.2
16	93.0	92.6	93.6	93.4	93.8	94.1	93.9	93.9	94.3	93.8	92.4	92.0	90.6	88.0	89.6	89.5	88.1	88.3	89.3	90.7	90.4	91.0	90.2	88.3	94.3	88.0	91.5
17	88.8	89.9	89.7	93.9	96.1	96.5	96.3	94.9	95.2	95.0	95.3	95.5	96.1	96.7	97.1	97.6	98.2	99.5	94.8	89.2	90.8	92.9	90.9	91.8	99.5	88.8	94.3
18	91.6	88.3	86.4	85.1	84.0	85.6	84.9	85.2	83.7	81.0	78.2	72.0	70.2	69.2	68.7	66.1	65.6	66.1	64.1	64.5	68.4	68.0	68.2	69.6	91.6	64.1	75.6
19	72.3	69.7	69.9	69.2	68.2	68.5	70.0	70.9	73.1	73.3	73.8	75.0	75.5	75.4	72.2	73.1	76.4	76.6	76.2	78.1	77.6	78.6	80.2	81.8	81.8	68.2	74.0
20	80.8	88.4	95.6	97.6	98.9	97.9	98.2	95.2	90.8	95.4	93.7	88.5	91.8	90.5	89.1	86.8	84.8	86.0	84.3	84.3	85.6	82.3	81.3	85.3	98.9	80.8	89.7
21	81.3	80.7	79.6	80.6	82.5	83.6	85.3	86.8	85.1	86.9	87.2	84.2	84.3	83.2	83.9	79.6	78.6	79.7	81.4	80.7	82.7	91.6	91.9	91.5	91.9	78.6	83.9
22	92.0	91.8	90.5	89.2	88.9	88.2	86.9	87.0	85.7	85.2	85.6	84.7	81.0	79.9	77.6	78.5	77.4	79.6	81.1	80.8	81.7	80.9	79.2	75.0	92.0	75.0	83.7
23	71.6	68.5	66.7	71.3	71.0	72.8	75.2	73.3	70.4	71.7	70.8	72.4	72.8	69.1	71.3	73.9	81.4	81.5	81.8	75.6	76.2	74.1	79.1	78.0	81.8	66.7	73.8
24	85.1	85.7	87.3	84.2	83.1	86.8	80.5	80.0	81.2	76.2	75.1	73.5	73.8	74.9	71.4	68.9	65.7	69.1	69.7	77.8	75.1	72.8	74.1	76.8	87.3	65.7	77.0
25	75.9	71.2	71.7	81.8	95.5	96.8	97.3	97.3	95.4	96.5	95.6	94.9	92.8	88.6	87.7	86.1	85.2	82.9	82.6	83.0	79.7	84.2	87.2	84.9	97.3	71.2	87.3
26	81.7	79.6	79.7	79.3	82.5	86.7	91.5	94.0	96.0	96.7	95.7	93.0	90.4	86.7	83.0	80.6	82.4	84.0	85.6	86.9	88.6	89.1	86.6	84.6	96.7	79.3	86.9
27	82.6	82.0	83.5	85.5	84.7	85.0	82.3	82.1	82.6	83.1	81.2	80.0	78.5	79.1	75.7	70.7	73.2	76.6	77.6	75.1	75.7	78.8	79.8	78.4	85.5	70.7	79.7
28	75.7	75.9	76.3	80.6	83.4	86.9	85.3	78.8	77.6	73.6	72.4	76.7	79.1	80.0	78.1	75.9	76.2	79.1	82.0	84.1	88.4	79.2	81.5	82.6	88.4	72.4	79.6
29	75.4	69.8	59.6	50.5	49.4	44.0	37.9	41.5	35.5	38.2	39.1	35.9	36.5	44.3	44.7	47.1	57.1	64.3	71.1	75.9	75.4	80.7	87.7	88.8	88.8	35.5	56.3
30	90.7	91.6	91.8	90.3	92.4	94.3	90.5	89.4	90.3	88.6	83.6	85.3	93.9	95.1	92.2	89.6	87.5	87.8	89.7	92.1	95.2	94.7	95.9	96.2	96.2	83.6	91.2
31	96.7	95.5	96.4	99.4	99.9	99.9	99.7	99.6	97.6	96.5	95.1	96.0	93.9	92.1	91.5	92.0	91.2	90.8	91.5	91.4	91.7	85.1	87.5	86.7	99.9	85.1	94.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**71.6**	**68.5**	**59.6**	**50.5**	**49.4**	**44.0**	**37.9**	**41.5**	**35.5**	**38.2**	**39.1**	**35.9**	**36.5**	**44.3**	**44.7**	**47.1**	**57.1**	64.3	64.1	**64.5**	**68.4**	**68.0**	**68.2**	**69.6**		**35.5**	
Avg.	**87.3**	**87.0**	**87.2**	**87.8**	**88.4**	**89.4**	**89.1**	**89.5**	**88.8**	**88.6**	**88.1**	**87.1**	**86.0**	**84.4**	**83.7**	**83.1**	**83.2**	**84.9**	**85.6**	**86.7**	**87.5**	**87.2**	**87.6**	**88.0**			**86.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	88.0	88.3	87.1	85.7	87.2	90.7	88.0	87.9	89.0	90.9	90.6	90.4	87.8	89.8	89.5	85.7	85.2	86.3	88.3	92.5	93.1	91.2	89.8	89.4	93.1	85.2	88.9
2	91.4	92.8	94.3	94.4	95.6	95.4	96.4	95.2	94.7	93.6	91.9	90.1	87.8	84.7	83.6	85.2	84.8	85.6	84.9	83.8	82.5	85.7	84.9	87.3	96.4	82.5	89.4
3	86.6	86.8	87.1	86.6	85.1	87.1	87.1	86.4	85.4	85.3	84.5	82.6	81.2	82.2	81.9	81.4	80.3	80.4	81.9	84.9	82.7	82.5	79.9	79.8	87.1	79.8	83.7
4	78.9	81.7	79.8	81.6	81.4	83.6	86.4	88.8	88.8	89.0	87.6	86.0	85.9	83.9	83.0	83.2	83.3	84.4	87.0	87.4	86.2	84.7	83.5	86.5	89.0	78.9	84.7
5	86.8	86.7	84.8	83.5	86.2	84.9	83.9	87.0	86.0	86.6	84.1	89.3	87.2	85.8	85.0	84.2	83.3	82.9	83.0	82.7	79.0	82.4	80.7	81.4	89.3	79.0	84.5
6	83.0	84.2	82.7	85.1	86.8	87.5	85.7	83.7	80.6	78.0	73.9	72.7	70.7	70.7	73.5	75.3	76.0	74.1	71.7	75.2	74.8	70.6	72.1	78.4	87.5	70.6	77.8
7	82.8	82.0	84.0	85.0	84.9	84.7	86.3	87.7	87.6	87.5	87.6	86.1	84.9	81.8	78.7	79.9	77.8	69.7	79.2	94.1	97.8	97.7	97.7	97.9	97.9	69.7	86.0
8	98.2	97.6	97.5	98.5	98.9	98.9	98.9	98.9	98.9	98.7	98.3	96.1	92.7	87.2	85.2	83.4	81.5	81.8	80.7	77.8	71.8	70.3	68.9	69.2	98.9	68.9	88.7
9	67.5	65.5	64.6	68.4	68.1	68.5	69.5	72.0	75.3	76.4	79.6	80.1	78.7	78.3	80.4	84.4	86.7	94.0	95.6	96.4	93.1	89.0	88.3	86.2	96.4	64.6	79.4
10	86.2	83.8	84.2	80.1	78.4	84.6	88.0	88.9	76.7	72.0	85.9	99.7	97.9	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	72.0	91.9
11	100.0	100.0	97.8	95.3	93.9	92.0	92.4	96.6	97.5	95.2	95.5	96.5	100.0	99.7	100.0	100.0	99.8	99.0	98.8	99.9	99.3	99.3	99.2	99.4	100.0	92.0	97.8
12	99.6	99.6	99.0	98.9	98.2	98.1	98.0	98.1	98.2	98.3	98.0	97.9	97.5	97.4	97.2	97.7	97.7	98.1	95.9	96.1	99.2	99.2	99.2	99.5	99.6	95.9	98.2
13	99.7	99.9	99.9	99.7	98.5	94.8	90.0	84.5	79.1	80.7	81.8	81.0	80.4	93.3	99.3	100.0	100.0	100.0	100.0	99.7	97.3	94.7	94.6	97.9	100.0	79.1	93.6
14	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	99.7	99.5	99.5	99.6	99.6	99.6	99.6	99.8	100.0	99.5	99.9
15	99.7	99.6	99.3	99.1	99.2	99.0	98.2	94.4	94.6	93.7	96.7	96.2	96.2	89.8	86.7	84.8	86.9	88.4	88.8	95.3	99.2	100.0	99.7	99.9	100.0	84.8	95.2
16	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	97.9	90.2	89.8	89.7	90.7	92.4	85.7	85.6	88.6	89.1	84.7	87.0	90.5	100.0	84.7	94.2
17	92.1	93.8	97.7	98.2	98.0	97.4	96.1	95.4	86.7	85.9	87.4	84.6	86.7	85.2	81.8	77.6	73.3	80.7	80.3	80.4	81.0	82.7	82.2	80.8	98.2	73.3	86.9
18	82.0	88.2	89.8	91.7	92.3	91.5	92.3	91.9	89.5	89.2	89.0	86.9	87.1	87.9	87.4	87.3	86.7	86.9	87.0	87.1	88.0	88.2	87.5	86.4	92.3	82.0	88.4
19	85.8	85.2	85.3	84.8	85.8	83.8	81.7	81.3	80.8	80.3	79.6	77.5	72.9	71.1	75.3	73.1	69.5	72.7	75.1	68.3	71.6	68.0	67.7	70.6	85.8	67.7	77.0
20	77.1	76.5	73.6	72.6	76.3	78.1	76.7	79.4	82.6	83.9	85.1	85.3	83.6	82.3	81.6	81.1	81.1	82.0	81.9	81.8	80.9	81.5	81.2	81.0	85.3	72.6	80.3
21	79.4	80.4	81.0	80.6	80.7	81.5	81.6	80.7	81.1	81.6	80.3	80.3	79.1	77.4	78.5	77.4	78.2	78.5	78.8	79.5	79.5	80.1	79.6	80.0	81.6	77.4	79.8
22	80.8	78.3	76.5	75.6	80.4	68.9	58.4	62.1	59.4	57.8	61.5	74.3	77.9	81.2	75.5	80.2	80.5	84.9	90.0	81.0	68.7	71.6	73.7	72.1	90.0	57.8	73.8
23	76.1	76.7	75.1	81.7	92.6	95.6	95.1	95.0	95.1	94.6	94.4	94.5	94.3	95.2	96.4	96.2	97.2	98.1	98.8	99.2	99.0	98.0	99.2	98.0	99.2	75.1	93.2
24	98.3	99.0	93.7	89.5	90.3	87.8	82.2	81.1	88.3	89.4	86.6	89.1	88.5	95.0	98.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	98.8	97.6	100.0	81.1	93.9
25	96.7	95.6	95.4	95.3	95.0	95.2	95.0	94.9	94.3	93.8	93.2	92.5	92.4	91.5	90.7	90.5	91.3	90.7	90.1	90.2	89.5	88.3	87.4	87.0	96.7	87.0	92.4
26	86.2	85.6	85.1	83.5	82.4	82.6	80.9	82.4	82.4	78.7	75.4	80.9	82.5	81.3	82.1	81.5	83.5	85.4	79.3	81.4	77.1	75.4	73.9	72.4	86.2	72.4	80.9
27	72.6	74.3	71.9	72.4	70.4	69.0	68.3	67.4	65.4	65.1	69.0	62.5	59.6	63.3	67.4	69.2	68.4	71.0	72.4	87.6	91.7	93.1	93.5	93.9	93.9	59.6	73.3
28	94.9	95.1	95.3	95.3	95.1	95.5	95.3	95.5	95.8	94.4	93.5	93.7	93.9	94.2	93.1	92.9	92.8	92.7	93.2	91.4	91.1	90.6	90.6	91.1	95.8	90.6	93.6
29	92.0	92.4	92.3	91.5	91.3	91.7	88.6	87.9	87.6	88.1	87.4	86.5	87.5	86.7	85.8	85.5	86.1	87.6	87.5	87.2	86.6	85.3	84.5	84.0	92.4	84.0	88.0
30	84.0	82.8	84.7	83.1	81.9	81.9	82.0	82.0	83.9	83.6	82.9	83.6	83.2	82.2	81.3	81.4	82.0	80.3	81.8	80.1	74.0	76.0	78.5	76.9	84.7	74.0	81.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**67.5**	**65.5**	**64.6**	**68.4**	**68.1**	**68.5**	**58.4**	**62.1**	**59.4**	**57.8**	**61.5**	**62.5**	**59.6**	**63.3**	**67.4**	**69.2**	**68.4**	69.7	71.7	**68.3**	**68.7**	**68.0**	**67.7**	**69.2**		**57.8**	
Avg.	**88.2**	**88.4**	**88.0**	**87.9**	**88.5**	**88.3**	**87.4**	**87.6**	**86.8**	**86.4**	**86.7**	**87.2**	**86.3**	**86.3**	**86.3**	**86.3**	**86.2**	**86.7**	**87.2**	**88.3**	**87.4**	**87.0**	**86.8**	**87.2**			**87.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Relative Humidity (%)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	72.6	66.1	64.0	64.2	61.2	61.8	58.3	55.9	54.7	56.2	51.9	48.5	49.6	48.7	52.2	49.9	45.9	46.1	46.8	52.5	55.8	69.5	69.2	78.3	78.3	45.9	57.5
2	77.5	71.7	76.0	79.8	73.6	63.4	61.8	59.1	56.3	56.8	60.1	58.4	58.7	61.4	67.8	73.8	77.5	75.7	80.4	80.3	81.1	81.6	82.8	82.6	82.8	56.3	70.7
3	81.5	82.2	83.7	85.3	87.3	87.4	86.9	87.1	87.2	87.5	88.1	85.7	83.7	90.8	91.5	93.4	92.3	85.7	83.1	81.4	78.2	80.3	83.0	85.3	93.4	78.2	85.8
4	88.3	91.3	91.2	90.3	87.9	88.8	89.6	90.5	92.3	92.7	92.4	93.1	91.0	92.6	94.5	97.0	91.9	89.9	92.4	91.1	91.1	91.5	90.8	90.7	97.0	87.9	91.4
5	90.6	91.7	92.2	91.0	90.9	91.4	92.1	94.3	94.3	96.7	95.7	94.6	92.9	94.1	94.4	94.2	95.9	96.3	96.3	94.8	95.8	96.1	97.2	98.3	98.3	90.6	94.2
6	98.9	99.0	99.7	99.3	97.7	97.7	97.8	97.2	96.2	95.5	94.8	93.3	93.3	91.3	89.2	91.7	96.2	96.9	97.9	99.5	98.2	97.3	98.6	100.0	100.0	89.2	96.6
7	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.8	95.3	97.3	97.0	96.5	95.9	94.9	94.8	94.9	94.8	94.8	96.7	98.2	97.9	97.9	97.9	98.2	100.0	94.8	97.6
8	97.4	97.1	98.9	89.6	83.4	75.3	77.0	80.1	71.2	72.0	73.2	76.1	70.6	76.5	88.7	84.0	80.9	75.6	69.9	76.2	78.6	74.3	81.3	78.5	98.9	69.9	80.3
9	81.4	78.8	80.3	79.2	78.1	80.1	87.1	93.7	98.0	97.3	96.3	96.3	96.3	96.2	98.6	98.7	98.5	98.2	97.8	97.1	97.1	97.8	98.2	98.6	98.7	78.1	92.5
10	98.1	98.6	99.0	98.7	98.0	97.0	96.5	93.7	89.1	86.2	80.3	82.4	78.6	70.2	65.5	70.0	73.3	87.9	82.8	92.0	95.9	92.1	90.4	87.4	99.0	65.5	87.7
11	80.1	82.3	77.8	72.7	68.9	63.9	67.7	64.6	66.2	63.3	66.1	89.9	96.1	98.0	97.4	97.0	96.3	94.9	90.5	83.7	78.3	78.6	86.2	88.3	98.0	63.3	81.2
12	85.0	84.9	81.7	76.6	72.5	69.2	68.0	64.2	67.0	61.2	62.0	71.2	86.9	95.5	95.6	95.7	95.8	96.2	97.3	97.2	97.0	96.3	96.1	92.7	97.3	61.2	83.6
13	93.0	95.0	96.3	96.8	95.6	94.3	93.6	93.6	93.2	91.3	90.7	90.4	89.8	89.5	90.5	87.9	87.5	88.6	86.0	82.4	75.1	66.4	61.4	56.7	96.8	56.7	86.9
14	63.1	66.7	69.1	70.8	74.1	73.6	69.9	65.8	69.5	71.5	70.6	71.2	68.7	67.3	69.7	66.6	68.2	68.8	67.6	71.9	80.4	84.1	84.2	85.1	85.1	63.1	71.6
15	84.9	85.2	86.4	86.8	86.3	86.6	86.9	86.6	88.3	93.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.7	99.5	96.9	94.1	100.0	84.9	94.2
16	90.4	88.7	89.3	91.0	84.3	85.9	92.2	94.9	99.2	98.5	98.1	97.5	98.3	98.6	98.5	98.4	98.4	98.3	98.1	98.0	97.9	96.7	91.6	88.7	99.2	84.3	94.6
17	76.2	76.6	81.2	90.2	90.5	93.6	96.2	94.3	93.9	92.6	87.8	84.8	85.0	82.2	82.3	83.0	84.1	83.9	83.2	82.2	82.6	82.0	82.6	82.9	96.2	76.2	85.6
18	84.3	83.5	81.6	81.9	82.3	83.5	83.3	81.7	82.3	80.8	80.5	81.8	81.6	80.1	79.7	80.9	83.1	84.5	85.8	87.0	86.4	85.2	86.5	87.0	87.0	79.7	83.1
19	93.3	85.4	85.1	85.3	85.5	88.0	86.5	79.8	82.0	84.2	83.6	82.2	80.2	77.2	72.2	72.7	71.3	70.9	70.9	70.9	65.4	63.6	62.4	63.4	93.3	62.4	77.6
20	63.8	64.3	63.2	63.1	65.5	66.9	66.8	68.7	68.0	65.4	65.9	62.9	60.4	58.6	57.3	56.2	59.2	59.0	59.8	64.5	67.5	68.7	70.9	73.7	73.7	56.2	64.2
21	74.8	74.0	79.1	82.0	79.2	79.3	79.8	82.1	74.7	76.6	75.3	73.7	76.2	80.5	82.7	76.0	78.0	79.8	83.7	80.5	83.8	82.1	83.9	82.2	83.9	73.7	79.2
22	83.4	83.7	80.2	81.4	87.4	95.8	96.5	98.1	99.4	99.3	99.4	99.3	99.6	99.7	99.6	99.7	99.7	99.8	99.8	99.7	99.5	99.4	99.4	99.5	99.8	80.2	95.8
23	99.6	99.6	99.7	99.6	99.7	99.8	99.9	100.0	100.0	99.8	99.4	97.2	96.1	93.7	94.3	94.5	93.2	91.8	90.8	89.4	91.8	94.5	95.8	96.1	100.0	89.4	96.5
24	96.0	95.4	92.7	88.9	89.6	83.3	93.2	95.0	91.7	90.4	88.7	85.1	81.4	83.7	83.5	81.5	83.2	84.8	83.9	84.3	82.7	82.9	84.7	78.6	96.0	78.6	86.9
25	77.3	85.5	93.1	98.0	98.1	98.2	98.5	98.7	98.8	98.9	99.2	99.2	99.0	98.6	98.6	98.7	99.1	97.4	96.5	96.1	95.8	95.4	94.9	94.5	99.2	77.3	96.2
26	94.1	93.0	91.7	91.0	90.4	90.0	89.9	89.9	90.5	90.8	90.7	90.5	90.5	90.3	90.6	90.4	90.3	90.5	90.3	90.1	89.7	89.4	89.3	89.5	94.1	89.3	90.6
27	89.4	90.2	90.2	90.2	89.9	89.9	89.5	89.3	89.3	88.8	88.6	88.6	88.8	88.7	88.1	88.1	88.0	87.5	87.4	87.4	87.6	87.7	87.1	86.4	90.2	86.4	88.6
28	86.6	86.6	86.6	86.6	86.4	85.9	86.2	86.0	85.6	85.4	85.0	84.8	85.2	84.4	84.3	83.9	83.6	84.1	83.9	83.4	83.2	82.9	82.8	82.8	86.6	82.8	84.8
29	82.5	82.0	81.8	81.6	81.8	81.6	81.0	80.5	80.4	80.0	79.3	78.3	77.2	75.7	75.7	74.6	73.0	73.3	72.9	71.4	71.3	71.0	70.6	69.9	82.5	69.9	77.0
30	72.5	68.0	69.2	70.8	72.5	73.3	71.6	69.8	68.7	69.1	70.2	68.3	67.2	66.7	67.3	68.3	68.2	69.2	70.1	69.7	70.5	71.2	70.2	71.1	73.3	66.7	69.7
31	70.8	70.7	71.3	73.4	73.1	72.5	73.1	73.3	70.8	70.3	69.9	71.4	69.3	70.4	71.2	70.9	69.0	67.7	63.3	60.8	60.3	61.4	58.4	55.0	73.4	55.0	68.3
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**100.0**	**100.0**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.7**	**99.5**	**99.4**	**100.0**	**100.0**		
Min.	**63.1**	**64.3**	**63.2**	**63.1**	**61.2**	**61.8**	**58.3**	**55.9**	**54.7**	**56.2**	**51.9**	**48.5**	**49.6**	**48.7**	**52.2**	**49.9**	**45.9**	46.1	46.8	**52.5**	**55.8**	**61.4**	**58.4**	**55.0**		**45.9**	
Avg.	**84.8**	**84.4**	**84.9**	**85.0**	**84.2**	**83.8**	**84.4**	**84.1**	**83.7**	**83.5**	**83.3**	**83.7**	**83.5**	**83.7**	**84.4**	**84.3**	**84.4**	**84.5**	**84.1**	**84.3**	**84.4**	**84.4**	**84.7**	**84.4**			**84.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	0	7	38	61	62	48	26	7	0	0	0	0	0	0	62	0	10
2	0	0	0	0	0	0	0	0	0	0	0	10	53	101	116	94	45	6	0	0	0	0	0	0	116	0	18
3	0	0	0	0	0	0	0	0	0	0	0	5	25	52	47	24	18	5	0	0	0	0	0	0	52	0	7
4	0	0	0	0	0	0	0	0	0	0	0	9	34	56	68	59	34	6	0	0	0	0	0	0	68	0	11
5	0	0	0	0	0	0	0	0	0	0	0	12	57	95	117	76	37	7	0	0	0	0	0	0	117	0	17
6	0	0	0	0	0	0	0	0	0	0	0	11	38	58	60	55	44	8	0	0	0	0	0	0	60	0	11
7	0	0	0	0	0	0	0	0	0	0	0	7	31	64	61	60	40	7	0	0	0	0	0	0	64	0	11
8	0	0	0	0	0	0	0	0	0	0	0	10	35	59	75	65	38	14	0	0	0	0	0	0	75	0	12
9	0	0	0	0	0	0	0	0	0	0	1	17	68	118	134	111	52	9	0	0	0	0	0	0	134	0	21
10	0	0	0	0	0	0	0	0	0	0	1	19	76	121	137	119	62	11	1	0	0	0	0	0	137	0	23
11	0	0	0	0	0	0	0	0	0	0	1	21	88	134	141	123	69	15	1	0	0	0	0	0	141	0	25
12	0	0	0	0	0	0	0	0	0	0	1	14	41	123	145	128	74	16	1	0	0	0	0	0	145	0	23
13	0	0	0	0	0	0	0	0	0	0	1	18	77	128	142	129	76	17	1	0	0	0	0	0	142	0	25
14	0	0	0	0	0	0	0	0	0	0	0	6	31	60	80	66	39	9	0	0	0	0	0	0	80	0	12
15	0	0	0	0	0	0	0	0	0	0	0	9	28	52	67	58	41	10	1	0	0	0	0	0	67	0	11
16	0	0	0	0	0	0	0	0	0	0	1	13	62	87	58	36	33	11	1	0	0	0	0	0	87	0	13
17	0	0	0	0	0	0	0	0	0	0	0	5	26	44	49	48	32	5	0	0	0	0	0	0	49	0	9
18	0	0	0	0	0	0	0	0	0	0	1	12	40	62	92	59	42	14	1	0	0	0	0	0	92	0	13
19	0	0	0	0	0	0	0	0	0	0	1	6	18	29	38	32	26	8	0	0	0	0	0	0	38	0	7
20	0	0	0	0	0	0	0	0	0	0	1	11	26	51	51	48	36	11	1	0	0	0	0	0	51	0	10
21	0	0	0	0	0	0	0	0	0	0	2	32	53	64	71	53	24	8	1	0	0	0	0	0	71	0	13
22	0	0	0	0	0	0	0	0	0	0	1	21	58	53	72	79	61	12	1	0	0	0	0	0	79	0	15
23	0	0	0	0	0	0	0	0	0	0	2	35	111	165	184	168	79	22	1	0	0	0	0	0	184	0	32
24	0	0	0	0	0	0	0	0	0	0	1	11	28	50	72	66	46	16	1	0	0	0	0	0	72	0	12
25	0	0	0	0	0	0	0	0	0	0	2	16	65	161	167	178	137	46	3	0	0	0	0	0	178	0	32
26	0	0	0	0	0	0	0	0	0	0	3	43	125	174	118	102	80	28	3	0	0	0	0	0	174	0	28
27	0	0	0	0	0	0	0	0	0	0	1	18	41	64	80	102	60	22	3	0	0	0	0	0	102	0	16
28	0	0	0	0	0	0	0	0	0	0	2	23	66	88	117	125	75	49	3	0	0	0	0	0	125	0	23
29	0	0	0	0	0	0	0	0	0	0	2	18	50	86	112	121	104	54	5	0	0	0	0	0	121	0	23
30	0	0	0	0	0	0	0	0	0	0	6	25	50	70	128	160	93	42	5	0	0	0	0	0	160	0	24
31	0	0	0	0	0	0	0	0	0	0	6	67	93	139	132	121	83	84	8	0	0	0	0	0	139	0	31
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**67**	**125**	**174**	**184**	**178**	**137**	**84**	**8**	**0**	**0**	**0**	**0**	**0**	**184**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**18**	**29**	**38**	**24**	**18**	**5**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**53**	**86**	**96**	**88**	**55**	**19**	**1**	**0**	**0**	**0**	**0**	**0**			**17**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	3	20	45	67	77	77	60	31	6	0	0	0	0	0	77	0	16
2	0	0	0	0	0	0	0	0	0	0	9	44	133	217	229	213	166	87	13	0	0	0	0	0	229	0	46
3	0	0	0	0	0	0	0	0	0	0	6	65	178	233	260	236	184	101	10	0	0	0	0	0	260	0	53
4	0	0	0	0	0	0	0	0	0	0	10	80	167	221	244	229	178	99	17	0	0	0	0	0	244	0	52
5	0	0	0	0	0	0	0	0	0	0	12	86	172	227	249	234	184	105	19	0	0	0	0	0	249	0	54
6	0	0	0	0	0	0	0	0	0	0	14	92	178	235	258	243	191	113	22	0	0	0	0	0	258	0	56
7	0	0	0	0	0	0	0	0	0	0	15	96	183	239	261	246	195	117	24	0	0	0	0	0	261	0	57
8	0	0	0	0	0	0	0	0	0	0	11	92	153	221	195	107	114	68	16	0	0	0	0	0	221	0	41
9	0	0	0	0	0	0	0	0	0	0	12	52	108	133	185	191	131	63	24	1	0	0	0	0	191	0	38
10	0	0	0	0	0	0	0	0	0	0	21	112	195	249	270	220	136	75	19	1	0	0	0	0	270	0	54
11	0	0	0	0	0	0	0	0	0	0	13	56	107	155	169	168	109	70	18	1	0	0	0	0	169	0	36
12	0	0	0	0	0	0	0	0	0	1	50	134	209	267	288	271	221	134	30	1	0	0	0	0	288	0	67
13	0	0	0	0	0	0	0	0	0	0	10	45	63	92	106	99	89	76	31	1	0	0	0	0	106	0	26
14	0	0	0	0	0	0	0	0	0	1	16	62	137	154	154	166	138	71	23	1	0	0	0	0	166	0	38
15	0	0	0	0	0	0	0	0	0	1	42	157	243	288	311	298	236	151	50	2	0	0	0	0	311	0	74
16	0	0	0	0	0	0	0	0	0	1	18	63	80	111	135	166	179	83	39	2	0	0	0	0	179	0	37
17	0	0	0	0	0	0	0	0	0	1	15	48	85	103	117	110	77	45	20	1	0	0	0	0	117	0	26
18	0	0	0	0	0	0	0	0	0	1	75	122	148	203	281	166	112	106	47	8	0	0	0	0	281	0	53
19	0	0	0	0	0	0	0	0	0	1	19	63	128	162	158	151	157	88	28	2	0	0	0	0	162	0	40
20	0	0	0	0	0	0	0	0	0	1	19	73	133	150	177	169	121	75	32	3	0	0	0	0	177	0	40
21	0	0	0	0	0	0	0	0	0	3	31	74	126	159	182	209	147	80	26	2	0	0	0	0	209	0	43
22	0	0	0	0	0	0	0	0	0	2	28	83	112	149	193	247	150	103	46	4	0	0	0	0	247	0	47
23	0	0	0	0	0	0	0	0	0	8	104	218	275	230	323	346	284	198	91	11	0	0	0	0	346	0	87
24	0	0	0	0	0	0	0	0	0	8	76	184	281	340	361	341	284	200	96	12	0	0	0	0	361	0	91
25	0	0	0	0	0	0	0	0	0	4	42	103	241	248	176	178	142	92	46	7	0	0	0	0	248	0	53
26	0	0	0	0	0	0	0	0	0	5	38	98	162	225	248	231	226	135	66	17	0	0	0	0	248	0	60
27	0	0	0	0	0	0	0	0	0	7	101	190	251	308	368	257	199	127	61	10	0	0	0	0	368	0	78
28	0	0	0	0	0	0	0	0	0	6	34	110	181	202	212	210	186	149	109	20	0	0	0	0	212	0	59
29	0	0	0	0	0	0	0	0	0	12	107	216	306	365	390	380	300	287	207	44	0	0	0	0	390	0	109
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**107**	**218**	**306**	**365**	**390**	**380**	**300**	**287**	**207**	**44**	**0**	**0**	**0**	**0**	**390**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**20**	**45**	**67**	**77**	**77**	**60**	**31**	**6**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**33**	**98**	**165**	**205**	**227**	**212**	**169**	**108**	**43**	**5**	**0**	**0**	**0**	**0**			**53**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	14	121	230	292	229	278	204	213	125	55	12	0	0	0	0	292	0	74
2	0	0	0	0	0	0	0	0	0	16	50	109	168	224	236	240	180	130	76	16	0	0	0	0	240	0	60
3	0	0	0	0	0	0	0	0	0	9	41	75	106	146	197	180	211	122	58	21	1	0	0	0	211	0	49
4	0	0	0	0	0	0	0	0	0	11	41	96	149	181	222	210	184	122	68	15	0	0	0	0	222	0	54
5	0	0	0	0	0	0	0	0	0	12	53	75	124	188	275	342	254	135	70	20	0	0	0	0	342	0	65
6	0	0	0	0	0	0	0	0	1	20	55	117	349	284	279	232	328	225	99	28	1	0	0	0	349	0	84
7	0	0	0	0	0	0	0	0	1	24	66	159	306	360	281	254	268	247	210	42	1	0	0	0	360	0	92
8	0	0	0	0	0	0	0	0	1	30	167	169	265	240	230	193	170	116	58	19	1	0	0	0	265	0	69
9	0	0	0	0	0	0	0	0	1	21	73	115	146	238	293	235	230	243	57	14	1	0	0	0	293	0	69
10	0	0	0	0	0	0	0	0	1	38	96	184	259	295	357	405	325	161	103	25	2	0	0	0	405	0	94
11	0	0	0	0	0	0	0	0	2	33	136	206	277	301	408	355	295	334	190	75	4	0	0	0	408	0	109
12	0	0	0	0	0	0	0	0	3	36	109	191	251	332	352	337	267	196	108	38	3	0	0	0	352	0	93
13	0	0	0	0	0	0	0	0	3	39	113	210	275	344	390	368	350	253	162	69	5	0	0	0	390	0	108
14	0	0	0	0	0	0	0	0	4	45	146	183	241	276	289	216	203	169	126	33	2	0	0	0	289	0	81
15	0	0	0	0	0	0	0	0	3	37	98	133	197	258	277	306	275	177	102	42	4	0	0	0	306	0	80
16	0	0	0	0	0	0	0	0	6	67	170	274	425	457	501	447	435	329	215	85	6	0	0	0	501	0	142
17	0	0	0	0	0	0	0	0	6	50	134	251	354	365	373	336	310	223	129	59	9	0	0	0	373	0	108
18	0	0	0	0	0	0	0	0	7	88	197	301	412	471	509	356	293	243	136	54	6	0	0	0	509	0	128
19	0	0	0	0	0	0	0	0	9	68	156	325	439	499	521	453	493	375	209	84	11	0	0	0	521	0	152
20	0	0	0	0	0	0	0	0	10	58	199	358	452	510	464	398	372	290	144	53	8	0	0	0	510	0	138
21	0	0	0	0	0	0	0	0	8	44	147	272	387	576	580	565	448	256	153	127	14	0	0	0	580	0	149
22	0	0	0	0	0	0	0	0	10	81	281	276	295	508	521	472	437	358	286	160	20	0	0	0	521	0	154
23	0	0	0	0	0	0	0	0	37	156	288	379	469	527	549	532	473	373	272	182	25	0	0	0	549	0	178
24	0	0	0	0	0	0	0	0	14	67	217	342	439	516	473	459	366	383	244	76	17	0	0	0	516	0	151
25	0	0	0	0	0	0	0	0	16	81	258	414	489	551	551	543	450	375	260	133	24	0	0	0	551	0	173
26	0	0	0	0	0	0	0	1	32	150	278	399	491	545	566	551	488	388	266	152	17	0	0	0	566	0	180
27	0	0	0	0	0	0	0	1	26	105	196	298	385	460	486	512	434	380	281	132	30	1	0	0	512	0	155
28	0	0	0	0	0	0	0	1	42	162	295	408	512	570	568	542	485	359	215	106	25	0	0	0	570	0	179
29	0	0	0	0	0	0	0	1	29	116	184	385	440	448	470	470	422	261	171	76	19	0	0	0	470	0	146
30	0	0	0	0	0	0	0	1	27	82	144	253	377	353	386	326	291	195	136	61	25	1	0	0	386	0	111
31	0	0	0	0	0	0	0	1	22	70	161	230	282	300	265	188	169	137	112	49	13	0	0	0	300	0	83
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**42**	**162**	**295**	**414**	**512**	**576**	**580**	**565**	**493**	**388**	**286**	**182**	**30**	**1**	**0**	**0**	**580**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**41**	**75**	**106**	**146**	**197**	**180**	**169**	**116**	**55**	**12**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**59**	**151**	**239**	**324**	**373**	**392**	**362**	**326**	**248**	**154**	**66**	**9**	**0**	**0**	**0**			**113**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	1	32	73	144	231	311	349	347	290	296	246	190	82	33	2	0	0	349	0	110
2	0	0	0	0	0	0	0	2	19	78	144	232	245	292	333	363	349	202	131	93	30	1	0	0	363	0	105
3	0	0	0	0	0	0	0	2	39	95	157	253	361	498	605	628	502	438	272	115	30	1	0	0	628	0	167
4	0	0	0	0	0	0	0	2	19	76	157	241	266	310	362	362	385	233	141	88	26	3	0	0	385	0	111
5	0	0	0	0	0	0	0	6	74	211	362	456	550	613	632	607	527	440	322	189	63	3	0	0	632	0	211
6	0	0	0	0	0	0	0	8	91	223	358	481	576	632	651	626	557	458	334	198	69	4	0	0	651	0	219
7	0	0	0	0	0	0	0	10	99	230	365	487	580	633	648	621	549	454	324	191	56	4	0	0	648	0	219
8	0	0	0	0	0	0	0	10	104	225	358	482	572	625	656	571	449	319	206	151	73	5	0	0	656	0	200
9	0	0	0	0	0	0	0	13	103	93	316	487	581	640	652	624	557	465	337	206	78	6	0	0	652	0	215
10	0	0	0	0	0	0	0	16	109	245	382	502	595	653	670	643	576	482	357	220	87	7	0	0	670	0	231
11	0	0	0	0	0	0	0	18	118	250	385	506	599	653	671	645	576	478	353	209	79	7	0	0	671	0	231
12	0	0	0	0	0	0	0	19	108	197	379	504	597	671	676	646	574	477	348	210	57	7	0	0	676	0	228
13	0	0	0	0	0	0	0	15	65	132	220	310	359	361	359	307	230	202	149	63	27	4	0	0	361	0	117
14	0	0	0	0	0	0	0	11	50	134	242	331	413	432	512	495	453	436	213	154	45	7	0	0	512	0	164
15	0	0	0	0	0	0	0	17	69	148	264	299	422	490	615	462	452	528	378	235	103	14	0	0	615	0	187
16	0	0	0	0	0	0	1	24	115	251	385	511	607	658	671	526	359	396	311	210	80	9	0	0	671	0	213
17	0	0	0	0	0	0	1	32	114	216	323	403	375	354	394	437	371	377	270	184	55	10	0	0	437	0	163
18	0	0	0	0	0	0	1	29	109	226	370	473	603	651	673	655	579	392	313	239	94	19	0	0	673	0	226
19	0	0	0	0	0	0	2	41	150	274	456	548	610	676	657	635	564	444	288	177	82	18	0	0	676	0	234
20	0	0	0	0	0	0	2	42	104	171	212	250	271	282	325	359	485	291	203	112	44	9	0	0	485	0	132
21	0	0	0	0	0	0	1	21	72	153	294	395	505	406	469	524	313	256	194	138	66	15	0	0	524	0	159
22	0	0	0	0	0	0	4	59	178	303	432	549	639	692	706	680	612	520	397	261	132	27	1	0	706	0	258
23	0	0	0	0	0	0	4	56	177	310	442	556	644	695	708	683	615	523	400	264	129	27	1	0	708	0	260
24	0	0	0	0	0	0	4	42	86	150	272	352	362	415	318	330	305	194	152	123	56	10	1	0	415	0	132
25	0	0	0	0	0	0	4	43	161	325	456	569	659	710	722	696	621	537	391	253	129	25	1	0	722	0	263
26	0	0	0	0	0	0	5	42	113	183	269	385	406	438	470	399	420	383	343	178	92	22	1	0	470	0	173
27	0	0	0	0	0	0	5	54	130	231	302	446	530	544	458	440	561	370	344	203	131	32	2	0	561	0	199
28	0	0	0	0	0	0	10	94	207	331	339	414	488	582	694	568	463	465	295	228	132	44	2	0	694	0	223
29	0	0	0	0	0	0	6	38	113	196	305	451	532	568	627	558	559	534	412	272	144	41	2	0	627	0	223
30	0	0	0	0	0	0	10	63	164	321	304	496	595	642	608	579	431	328	238	167	78	28	2	0	642	0	211
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**94**	**207**	**331**	**456**	**569**	**659**	**710**	**722**	**696**	**621**	**537**	**412**	**272**	**144**	**44**	**2**	**0**	**722**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	**73**	**144**	**231**	**245**	**282**	**318**	**290**	**230**	**194**	**131**	**63**	**26**	**1**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**103**	**202**	**313**	**420**	**495**	**539**	**563**	**532**	**476**	**396**	**287**	**180**	**77**	**14**	**1**	**0**			**193**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	10	84	205	343	475	592	640	677	675	638	536	478	387	182	120	29	2	0	677	0	253
2	0	0	0	0	0	0	11	97	263	363	354	401	549	567	430	677	673	428	214	112	50	15	3	0	677	0	217
3	0	0	0	0	0	0	12	61	138	270	408	514	587	575	377	303	361	382	224	93	44	15	1	0	587	0	182
4	0	0	0	0	0	0	8	29	66	117	184	283	403	542	465	476	586	505	346	169	90	39	4	0	586	0	180
5	0	0	0	0	0	0	16	61	118	168	292	377	508	626	684	696	547	464	296	212	89	37	4	0	696	0	217
6	0	0	0	0	0	0	11	51	164	204	223	447	622	512	580	603	607	572	432	297	183	56	6	0	622	0	232
7	0	0	0	0	0	0	12	59	117	200	367	327	406	530	697	571	396	302	282	155	80	31	3	0	697	0	189
8	0	0	0	0	0	0	10	85	93	181	229	305	320	328	359	334	320	338	263	180	98	33	3	0	359	0	145
9	0	0	0	0	0	0	10	53	109	225	289	356	356	321	436	482	315	238	168	121	77	29	3	0	482	0	150
10	0	0	0	0	0	1	19	52	105	214	306	442	535	606	683	640	552	425	352	204	121	43	5	0	683	0	221
11	0	0	0	0	0	2	21	50	103	154	155	220	158	189	144	185	149	118	134	92	66	35	5	0	220	0	83
12	0	0	0	0	0	1	22	105	145	184	512	333	400	428	549	303	259	304	258	165	99	55	11	0	549	0	172
13	0	0	0	0	0	1	9	57	72	139	352	493	448	493	498	429	321	197	301	287	120	38	6	0	498	0	178
14	0	0	0	0	0	1	15	51	83	124	156	235	425	620	461	403	512	529	404	334	162	30	5	0	620	0	190
15	0	0	0	0	0	3	23	67	158	260	383	493	373	371	377	310	280	277	217	110	51	42	9	0	493	0	158
16	0	0	0	0	0	1	6	30	98	125	195	410	417	505	377	594	528	525	358	345	214	99	16	1	594	0	202
17	0	0	0	0	0	4	42	147	269	400	526	634	717	768	783	759	696	545	408	336	186	82	13	1	783	0	305
18	0	0	0	0	0	3	32	83	153	175	238	265	265	235	164	287	224	253	233	188	89	32	4	0	287	0	122
19	0	0	0	0	0	2	25	72	161	233	378	505	664	638	762	762	718	612	432	333	146	126	22	1	762	0	275
20	0	0	0	0	0	4	48	158	281	412	540	646	722	781	798	690	659	490	451	343	218	113	24	1	798	0	308
21	0	0	0	0	0	7	57	137	269	408	521	619	718	743	767	743	660	566	468	324	229	82	29	2	767	0	306
22	0	0	0	0	0	3	33	80	264	400	539	641	609	603	623	710	465	331	273	148	83	30	7	0	710	0	243
23	0	0	0	0	0	1	11	34	61	239	200	114	101	101	97	89	60	50	40	33	67	54	22	2	239	0	57
24	0	0	0	0	0	3	24	76	99	175	78	159	274	386	498	463	316	253	144	144	67	26	8	1	498	0	133
25	0	0	0	0	0	2	10	25	79	172	197	172	444	220	258	628	504	269	194	133	141	107	29	2	628	0	149
26	0	0	0	0	0	3	29	56	108	205	301	339	499	462	580	471	713	399	172	178	136	91	22	3	713	0	199
27	0	0	0	0	0	10	57	158	281	408	537	639	721	767	780	733	627	542	463	335	210	88	28	3	780	0	308
28	0	0	0	0	0	11	44	110	265	398	485	559	722	671	642	669	632	491	257	192	125	52	26	3	722	0	265
29	0	0	0	0	0	15	48	120	175	293	407	492	424	351	501	729	589	550	427	353	223	150	48	5	729	0	246
30	0	0	0	0	0	10	51	119	221	385	454	572	696	734	755	681	564	484	528	323	124	56	22	2	755	0	283
31	0	0	0	0	0	5	31	50	103	262	305	415	466	568	480	499	445	362	181	106	54	52	15	1	568	0	183
Max.	**0**	**0**	**0**	**0**	**0**	**15**	**57**	**158**	**281**	**412**	**540**	**646**	**722**	**781**	**798**	**762**	**718**	**612**	**528**	**353**	**229**	**150**	**48**	**5**	**798**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**25**	**61**	**117**	**78**	**114**	**101**	**101**	**97**	**89**	**60**	**50**	**40**	**33**	**44**	**15**	**1**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**24**	**78**	**156**	**253**	**341**	**419**	**490**	**513**	**525**	**534**	**478**	**396**	**300**	**211**	**121**	**57**	**13**	**1**			**205**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	4	15	24	49	122	331	593	601	633	693	707	414	244	215	130	124	48	29	3	707	0	207
2	0	0	0	0	0	3	35	102	122	197	349	390	430	395	548	410	591	304	215	208	114	69	18	4	591	0	188
3	0	0	0	0	0	6	32	53	127	242	393	346	379	493	574	405	577	642	314	389	121	44	17	2	642	0	215
4	0	0	0	0	0	4	16	133	172	280	418	324	380	461	427	644	615	491	526	396	261	131	50	5	644	0	239
5	0	0	0	0	0	6	24	20	88	181	198	209	257	386	482	441	365	330	206	177	116	83	28	3	482	0	150
6	0	0	0	0	1	5	12	30	63	150	308	520	648	635	568	706	699	556	485	378	86	180	59	6	706	0	254
7	0	0	0	0	1	9	67	188	309	432	459	305	409	384	519	316	545	597	398	390	153	186	40	5	597	0	238
8	0	0	0	0	1	14	61	176	217	298	358	392	294	455	584	427	395	187	206	237	131	133	37	4	584	0	192
9	0	0	0	0	0	3	11	37	84	96	189	315	298	313	328	364	448	385	419	160	138	115	35	5	448	0	156
10	0	0	0	0	0	7	34	67	74	96	215	199	374	178	192	212	314	159	82	94	51	38	7	2	374	0	100
11	0	0	0	0	0	6	33	101	196	252	296	286	256	138	134	118	116	113	91	63	61	48	20	6	296	0	97
12	0	0	0	0	1	5	23	70	163	294	466	413	441	329	227	215	165	140	86	46	32	18	13	3	466	0	131
13	0	0	0	0	0	4	17	62	76	97	135	210	375	296	217	289	579	345	378	253	257	150	20	4	579	0	157
14	0	0	0	0	1	7	62	69	126	283	336	427	544	561	788	765	667	619	464	64	39	138	28	7	788	0	250
15	0	0	0	0	1	13	79	155	212	233	234	406	518	626	705	627	383	173	174	55	39	24	8	1	705	0	195
16	0	0	0	0	0	3	21	55	110	182	261	268	212	275	487	422	425	235	343	423	121	110	36	9	487	0	166
17	0	0	0	0	1	10	73	186	301	435	557	656	739	787	795	772	707	628	520	398	273	159	63	9	795	0	336
18	1	0	0	0	1	10	61	184	314	406	550	654	639	672	730	746	687	554	412	344	273	172	46	8	746	0	311
19	1	0	0	0	1	12	39	153	296	423	476	351	393	329	807	769	700	621	507	398	280	104	21	3	807	0	278
20	0	0	0	0	1	9	77	191	296	244	450	678	593	774	668	687	722	630	521	402	278	164	69	11	774	0	311
21	1	0	0	0	1	12	83	187	310	344	333	321	263	221	353	567	402	631	390	388	288	139	46	9	631	0	220
22	0	0	0	0	1	14	95	171	287	291	420	459	537	594	540	411	267	457	438	204	70	37	15	3	594	0	221
23	0	0	0	0	1	10	38	101	243	364	470	567	606	500	768	799	697	641	535	405	279	165	68	9	799	0	303
24	1	0	0	0	1	9	62	183	312	319	517	522	326	306	242	270	213	83	96	65	36	21	11	1	522	0	150
25	0	0	0	0	1	6	45	67	94	169	212	229	343	530	345	735	803	647	260	170	108	75	38	15	803	0	204
26	1	0	0	0	0	5	20	61	104	157	201	286	332	272	308	235	236	194	154	99	101	44	16	3	332	0	118
27	0	0	0	0	1	8	25	65	118	207	228	385	516	682	583	880	528	501	536	388	272	81	19	5	880	0	251
28	0	0	0	0	1	6	29	85	193	224	200	148	137	225	443	189	237	308	260	187	99	66	29	4	443	0	128
29	0	0	0	0	0	1	12	22	88	193	146	316	356	317	348	465	488	492	575	291	136	54	37	6	575	0	181
30	0	0	0	0	1	4	29	108	265	287	400	364	344	275	484	439	427	387	429	386	155	143	71	8	484	0	209
Max.	**1**	**0**	**0**	**0**	**1**	**14**	**95**	**191**	**314**	**435**	**557**	**678**	**739**	**787**	**807**	**880**	**803**	**647**	**575**	**423**	**288**	**186**	**71**	**15**	**880**		
Min.	**0**	**0**	**0**	**0**	**0**	**1**	**11**	**20**	**49**	**96**	**135**	**148**	**137**	**138**	**134**	**118**	**116**	**83**	**82**	**46**	**32**	**18**	**7**	**1**		**0**	
Avg.	**0**	**0**	**0**	**0**	**1**	**7**	**41**	**104**	**180**	**250**	**337**	**385**	**418**	**435**	**496**	**501**	**480**	**410**	**341**	**253**	**150**	**98**	**33**	**5**			**205**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	1	9	87	165	295	421	540	612	727	734	785	795	722	568	415	360	172	94	29	4	795	0	314
2	0	0	0	0	0	6	38	98	122	174	304	318	449	555	474	609	523	522	187	114	116	67	17	4	609	0	196
3	0	0	0	0	0	3	23	51	83	120	145	153	136	128	321	323	275	234	171	105	75	53	17	2	323	0	101
4	0	0	0	0	0	2	6	35	79	138	216	278	351	374	191	204	295	189	72	50	64	47	15	3	374	0	109
5	0	0	0	0	0	8	40	66	159	203	426	567	481	714	448	295	330	250	217	235	85	38	6	1	714	0	190
6	0	0	0	0	1	7	27	70	112	357	524	495	687	354	286	362	301	230	138	135	121	60	38	6	687	0	180
7	0	0	0	0	0	2	9	16	45	117	115	201	211	253	178	174	214	285	302	207	107	59	26	3	302	0	105
8	0	0	0	0	0	1	7	17	29	57	67	56	92	128	166	106	87	76	41	49	47	28	6	1	166	0	44
9	0	0	0	0	0	5	42	104	214	265	412	548	592	741	802	765	702	645	490	333	112	52	23	3	802	0	285
10	0	0	0	0	0	4	29	94	200	246	307	270	224	722	751	485	364	507	295	176	101	46	14	1	751	0	201
11	0	0	0	0	0	1	5	15	116	257	303	397	590	603	585	676	604	550	506	381	260	149	50	3	676	0	252
12	0	0	0	0	0	8	61	156	232	286	263	229	254	414	452	261	245	178	83	31	23	12	5	2	452	0	133
13	0	0	0	0	0	1	6	16	39	65	100	181	203	238	245	217	193	155	131	143	95	54	16	2	245	0	87
14	0	0	0	0	0	2	18	52	74	151	262	296	318	495	555	496	459	325	262	221	101	49	7	2	555	0	173
15	0	0	0	0	0	6	37	84	122	225	289	363	494	637	734	716	464	261	230	74	42	12	10	1	734	0	200
16	0	0	0	0	0	2	9	29	75	73	162	172	336	326	382	165	108	78	79	45	32	23	6	1	382	0	88
17	0	0	0	0	0	1	9	26	83	128	52	106	155	146	150	129	138	122	130	60	16	12	4	1	155	0	61
18	0	0	0	0	0	2	18	33	109	165	292	483	352	366	252	241	252	241	170	70	82	44	13	1	483	0	133
19	0	0	0	0	0	2	14	53	130	235	374	423	339	312	407	351	445	226	193	110	65	50	16	2	445	0	156
20	0	0	0	0	0	1	8	41	52	54	45	71	151	183	142	175	117	70	36	20	12	4	3	0	183	0	49
21	0	0	0	0	0	0	4	14	36	65	159	227	300	326	337	279	408	273	188	199	180	34	5	1	408	0	126
22	0	0	0	0	0	1	20	40	81	128	161	142	104	101	126	202	155	121	106	96	71	42	11	1	202	0	71
23	0	0	0	0	0	2	9	35	88	119	175	322	293	292	221	343	500	328	347	187	35	10	3	0	500	0	138
24	0	0	0	0	0	1	6	22	55	121	191	216	418	473	517	548	607	446	243	254	123	58	40	2	607	0	181
25	0	0	0	0	0	2	28	125	232	363	485	590	672	723	704	695	644	461	387	385	151	83	29	1	723	0	282
26	0	0	0	0	0	1	15	25	50	74	86	109	145	155	253	204	178	344	238	245	148	50	5	0	344	0	97
27	0	0	0	0	0	0	5	21	47	60	111	74	136	226	166	194	189	259	217	122	130	64	13	1	259	0	85
28	0	0	0	0	0	0	10	59	205	206	421	387	240	389	314	345	469	285	334	156	111	54	15	1	469	0	167
29	0	0	0	0	0	1	19	95	214	352	490	582	640	741	712	694	660	550	339	247	94	38	7	0	741	0	270
30	0	0	0	0	0	0	2	29	63	211	372	430	644	690	647	619	535	546	316	176	201	68	15	1	690	0	232
31	0	0	0	0	0	0	15	94	207	334	453	566	661	736	676	636	517	560	451	314	210	88	16	1	736	0	272
Max.	**0**	**0**	**0**	**0**	**1**	**9**	**87**	**165**	**295**	**421**	**540**	**612**	**727**	**741**	**802**	**795**	**722**	**645**	**506**	**385**	**260**	**149**	**50**	**6**	**802**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	**29**	**54**	**45**	**56**	**92**	**101**	**126**	**106**	**87**	**70**	**36**	**20**	**12**	**4**	**3**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**20**	**57**	**118**	**186**	**268**	**318**	**368**	**428**	**419**	**397**	**377**	**319**	**236**	**171**	**103**	**50**	**15**	**2**			**161**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	1	19	119	177	228	227	345	412	693	717	624	611	548	446	365	200	72	9	0	717	0	242
2	0	0	0	0	0	0	3	16	27	51	96	170	222	213	203	241	247	141	95	157	50	21	5	0	247	0	82
3	0	0	0	0	0	1	16	93	219	345	449	595	615	560	592	531	645	408	436	326	148	74	7	0	645	0	252
4	0	0	0	0	0	0	5	53	72	122	204	218	265	304	341	232	313	472	440	314	107	28	7	0	472	0	146
5	0	0	0	0	0	0	7	48	95	201	422	532	555	513	670	683	642	542	419	319	188	84	10	0	683	0	247
6	0	0	0	0	0	0	15	99	217	339	463	573	648	702	561	557	587	418	209	110	83	38	6	0	702	0	234
7	0	0	0	0	0	0	8	62	163	325	474	413	612	629	551	577	413	425	413	383	180	41	7	0	629	0	236
8	0	0	0	0	0	0	6	86	203	327	449	558	643	695	711	690	629	547	449	309	191	70	6	0	711	0	274
9	0	0	0	0	0	0	7	82	198	322	443	551	632	682	698	678	609	290	347	289	176	52	4	0	698	0	253
10	0	0	0	0	0	0	10	93	164	343	402	493	646	713	624	588	655	382	215	197	162	30	3	0	713	0	238
11	0	0	0	0	0	0	8	68	203	191	226	213	411	366	452	538	515	398	326	173	86	34	2	0	538	0	175
12	0	0	0	0	0	0	3	31	174	313	337	353	447	529	445	405	386	228	171	81	61	30	2	0	529	0	167
13	0	0	0	0	0	0	2	26	63	117	209	337	230	384	313	190	295	147	118	102	42	10	1	0	384	0	108
14	0	0	0	0	0	0	1	24	50	56	78	70	80	112	229	265	183	187	102	61	46	11	1	0	265	0	65
15	0	0	0	0	0	0	1	19	60	107	170	240	302	263	196	250	214	202	118	52	32	12	1	0	302	0	93
16	0	0	0	0	0	0	1	15	42	65	79	171	279	489	489	391	383	364	340	259	118	26	2	0	489	0	146
17	0	0	0	0	0	0	4	52	111	138	167	294	273	350	333	303	487	378	176	132	66	15	1	0	487	0	137
18	0	0	0	0	0	0	3	46	157	193	311	408	353	458	457	324	292	302	271	142	54	15	1	0	458	0	158
19	0	0	0	0	0	0	1	21	46	56	106	175	283	374	467	386	255	169	144	72	30	6	0	0	467	0	108
20	0	0	0	0	0	0	1	17	71	113	129	133	276	310	366	202	304	399	113	115	81	11	0	0	399	0	110
21	0	0	0	0	0	0	1	4	48	92	114	108	152	116	264	400	276	413	373	272	63	9	0	0	413	0	113
22	0	0	0	0	0	0	0	13	41	67	71	148	187	309	231	223	269	151	301	226	118	24	1	0	309	0	99
23	0	0	0	0	0	0	1	24	148	275	373	486	515	551	690	598	286	325	230	42	29	11	1	0	690	0	191
24	0	0	0	0	0	0	0	29	84	131	174	448	547	566	524	297	261	322	188	67	63	16	0	0	566	0	155
25	0	0	0	0	0	0	0	6	31	61	87	119	135	146	187	272	406	284	156	171	60	8	0	0	406	0	89
26	0	0	0	0	0	0	0	3	10	34	72	48	73	133	141	213	273	338	120	130	23	4	0	0	338	0	67
27	0	0	0	0	0	0	0	12	35	47	72	96	120	178	313	366	366	288	221	153	56	5	0	0	366	0	97
28	0	0	0	0	0	0	0	4	67	53	94	147	234	209	306	315	430	205	85	48	78	9	0	0	430	0	95
29	0	0	0	0	0	0	0	19	99	185	308	460	575	600	460	210	216	360	201	128	69	5	0	0	600	0	162
30	0	0	0	0	0	0	0	10	49	111	212	252	222	339	506	509	342	390	181	87	26	4	0	0	509	0	135
31	0	0	0	0	0	0	0	2	14	33	60	122	110	239	134	116	175	93	82	64	26	4	0	0	239	0	53
Max.	**0**	**0**	**0**	**0**	**0**	**1**	**19**	**119**	**219**	**345**	**474**	**595**	**648**	**713**	**717**	**690**	**655**	**548**	**449**	**383**	**200**	**84**	**10**	**0**	**717**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	**33**	**60**	**48**	**73**	**112**	**134**	**116**	**175**	**93**	**82**	**42**	**23**	**4**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**39**	**101**	**163**	**228**	**299**	**357**	**410**	**425**	**393**	**386**	**326**	**241**	**172**	**87**	**25**	**2**	**0**			**152**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	6	59	129	156	310	276	264	384	311	224	143	87	53	16	1	0	0	384	0	101
2	0	0	0	0	0	0	0	4	18	24	37	30	91	162	204	203	210	124	78	39	8	0	0	0	210	0	51
3	0	0	0	0	0	0	0	4	22	46	81	113	133	170	202	226	278	179	136	49	11	1	0	0	278	0	69
4	0	0	0	0	0	0	0	3	80	128	193	293	327	306	300	237	215	204	244	145	50	3	0	0	327	0	114
5	0	0	0	0	0	0	0	6	40	111	240	296	487	549	421	419	452	160	77	65	23	1	0	0	549	0	139
6	0	0	0	0	0	0	0	2	18	39	41	116	66	38	53	80	44	32	26	25	7	0	0	0	116	0	24
7	0	0	0	0	0	0	0	2	17	37	66	76	99	60	54	142	198	172	68	29	9	0	0	0	198	0	43
8	0	0	0	0	0	0	0	2	22	99	156	192	144	131	197	167	83	30	35	18	4	0	0	0	197	0	53
9	0	0	0	0	0	0	0	1	10	30	55	118	75	83	93	97	146	57	63	54	14	0	0	0	146	0	37
10	0	0	0	0	0	0	0	1	10	48	89	157	183	325	148	251	275	208	98	61	15	0	0	0	325	0	78
11	0	0	0	0	0	0	0	1	8	23	30	42	75	74	210	335	244	270	114	53	8	0	0	0	335	0	62
12	0	0	0	0	0	0	0	0	5	22	55	148	186	204	164	105	82	61	39	9	2	0	0	0	204	0	45
13	0	0	0	0	0	0	0	0	4	20	19	27	42	64	71	79	156	84	34	23	5	0	0	0	156	0	26
14	0	0	0	0	0	0	0	1	13	46	50	76	128	121	138	253	139	142	119	44	8	0	0	0	253	0	53
15	0	0	0	0	0	0	0	0	21	52	73	114	180	161	188	122	188	155	105	52	7	0	0	0	188	0	59
16	0	0	0	0	0	0	0	1	12	53	186	289	347	387	186	225	179	127	197	76	8	0	0	0	387	0	95
17	0	0	0	0	0	0	0	1	19	96	159	141	196	141	123	122	95	89	38	19	2	0	0	0	196	0	52
18	0	0	0	0	0	0	0	0	9	41	75	118	50	75	105	133	144	96	51	18	2	0	0	0	144	0	38
19	0	0	0	0	0	0	0	0	8	50	83	116	169	169	196	258	293	202	120	32	2	0	0	0	293	0	71
20	0	0	0	0	0	0	0	0	15	61	115	131	148	291	274	277	224	169	123	81	5	0	0	0	291	0	80
21	0	0	0	0	0	0	0	0	16	54	123	183	225	248	222	226	167	131	100	30	4	0	0	0	248	0	72
22	0	0	0	0	0	0	0	0	28	131	230	317	341	277	281	167	126	91	51	14	1	0	0	0	341	0	86
23	0	0	0	0	0	0	0	0	2	14	29	44	82	75	87	64	52	32	21	8	1	0	0	0	87	0	21
24	0	0	0	0	0	0	0	0	4	25	51	81	94	118	141	143	150	90	59	20	1	0	0	0	150	0	41
25	0	0	0	0	0	0	0	0	5	30	70			176	159	163	128	84	59	26	1	0	0	0	176	0	41
26	0	0	0	0	0	0	0	0	9	37	104	185	288	452	228	132	93	262	130	54	2	0	0	0	452	0	82
27	0	0	0	0	0	0	0	0	22	132	259	369	448	488	488	445	361	260	144	34	1	0	0	0	488	0	144
28	0	0	0	0	0	0	0	0	19	124	250	354	422	478	387	307	186	131	74	28	1	0	0	0	478	0	115
29	0	0	0	0	0	0	0	0	8	42	86	123	111	132	143	197	177	212	84	18	0	0	0	0	212	0	56
30	0	0	0	0	0	0	0	0	11	103	225	333	418	364	203	179	213	148	142	22	0	0	0	0	418	0	98
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**80**	**132**	**259**	**369**	**487**	**549**	**488**	**445**	**452**	**270**	**244**	**145**	**50**	**3**	**0**	**0**	**549**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	**19**	**27**	**42**	**38**	**53**	**64**	**44**	**30**	**21**	**8**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**61**	**113**	**169**	**201**	**219**	**202**	**202**	**184**	**138**	**90**	**40**	**7**	**0**	**0**	**0**			**68**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	10	25	40	117	131	194	162	78	74	63	23	2	0	0	0	0	194	0	38
2	0	0	0	0	0	0	0	0	5	44	44	134	150	168	237	224	123	119	100	14	0	0	0	0	237	0	57
3	0	0	0	0	0	0	0	0	3	45	84	140	185	229	227	204	249	206	118	16	0	0	0	0	249	0	71
4	0	0	0	0	0	0	0	0	8	92	213	299	300	416	243	337	210	117	59	5	0	0	0	0	416	0	96
5	0	0	0	0	0	0	0	0	1	15	36	61	100	91	83	68	62	43	24	5	0	0	0	0	100	0	25
6	0	0	0	0	0	0	0	0	3	30	92	138	199	267	272	241	267	146	61	10	0	0	0	0	272	0	72
7	0	0	0	0	0	0	0	0	3	49	120	160	206	316	228	298	273	111	46	6	0	0	0	0	316	0	76
8	0	0	0	0	0	0	0	0	4	75	192	294	373	415	412	372	294	193	79	8	0	0	0	0	415	0	113
9	0	0	0	0	0	0	0	0	1	13	34	41	79	80	61	31	34	48	17	1	0	0	0	0	80	0	18
10	0	0	0	0	0	0	0	0	2	45	71	123	68	167	126	120	133	46	14	1	0	0	0	0	167	0	38
11	0	0	0	0	0	0	0	0	0	2	7	31	53	54	56	60	51	79	48	3	0	0	0	0	79	0	18
12	0	0	0	0	0	0	0	0	1	33	155	278	354	399	385	345	261	87	56	5	0	0	0	0	399	0	98
13	0	0	0	0	0	0	0	0	1	21	49	80	146	175	181	135	87	47	14	1	0	0	0	0	181	0	39
14	0	0	0	0	0	0	0	0	0	13	67	140	156	187	148	133	91	53	15	1	0	0	0	0	187	0	42
15	0	0	0	0	0	0	0	0	0	22	89	125	173	158	167	194	197	103	41	2	0	0	0	0	197	0	53
16	0	0	0	0	0	0	0	0	0	16	62	118	177	249	284	394	235	137	37	2	0	0	0	0	394	0	71
17	0	0	0	0	0	0	0	0	0	29	138	226	283	323	336	308	237	140	35	1	0	0	0	0	336	0	86
18	0	0	0	0	0	0	0	0	0	13	71	116	185	275	298	300	220	118	25	1	0	0	0	0	300	0	68
19	0	0	0	0	0	0	0	0	0	24	132	233	307	340	340	318	250	127	41	0	0	0	0	0	340	0	88
20	0	0	0	0	0	0	0	0	0	7	33	77	128	154	185	215	140	139	42	1	0	0	0	0	215	0	47
21	0	0	0	0	0	0	0	0	0	13	119	218	294	336	342	295	214	116	22	0	0	0	0	0	342	0	82
22	0	0	0	0	0	0	0	0	0	22	126	228	300	326	315	285	232	101	19	0	0	0	0	0	326	0	81
23	0	0	0	0	0	0	0	0	0	20	104	195	292	328	325	280	201	103	16	0	0	0	0	0	328	0	78
24	0	0	0	0	0	0	0	0	0	11	99	201	270	312	309	209	155	113	13	0	0	0	0	0	312	0	70
25	0	0	0	0	0	0	0	0	0	6	37	164	170	217	237	252	128	50	17	0	0	0	0	0	252	0	53
26	0	0	0	0	0	0	0	0	0	13	107	204	267	307	306	263	188	90	14	0	0	0	0	0	307	0	73
27	0	0	0	0	0	0	0	0	0	10	97	196	267	303	299	256	183	84	11	0	0	0	0	0	303	0	71
28	0	0	0	0	0	0	0	0	0	12	95	193	239	242	291	212	115	46	7	0	0	0	0	0	291	0	61
29	0	0	0	0	0	0	0	0	0	3	33	83	98	119	108	111	75	50	6	0	0	0	0	0	119	0	29
30	0	0	0	0	0	0	0	0	0	4	37	124	233	257	250	199	163	58	6	0	0	0	0	0	257	0	55
31	0	0	0	0	0	0	0	0	0	6	70	170	235	276	271	224	152	59	5	0	0	0	0	0	276	0	61
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**92**	**213**	**299**	**373**	**416**	**412**	**394**	**294**	**206**	**118**	**16**	**0**	**0**	**0**	**0**	**416**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**31**	**53**	**54**	**56**	**31**	**34**	**43**	**5**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**86**	**158**	**207**	**248**	**241**	**225**	**171**	**97**	**33**	**3**	**0**	**0**	**0**	**0**			**62**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	3	40	83	125	120	130	196	149	49	4	0	0	0	0	0	196	0	37
2	0	0	0	0	0	0	0	0	0	5	44	87	140	212	251	172	138	59	5	0	0	0	0	0	251	0	46
3	0	0	0	0	0	0	0	0	0	2	40	150	172	218	260	201	152	73	6	0	0	0	0	0	260	0	53
4	0	0	0	0	0	0	0	0	0	2	31	85	191	234	160	128	97	43	4	0	0	0	0	0	234	0	41
5	0	0	0	0	0	0	0	0	0	1	17	172	207	198	142	182	95	24	3	0	0	0	0	0	207	0	43
6	0	0	0	0	0	0	0	0	0	1	35	128	127	119	103	102	63	33	2	0	0	0	0	0	128	0	30
7	0	0	0	0	0	0	0	0	0	1	19	59	118	207	218	106	102	40	2	0	0	0	0	0	218	0	36
8	0	0	0	0	0	0	0	0	0	1	20	102	79	205	189	77	31	15	1	0	0	0	0	0	205	0	30
9	0	0	0	0	0	0	0	0	0	0	5	22	31	47	56	45	27	7	0	0	0	0	0	0	56	0	10
10	0	0	0	0	0	0	0	0	0	0	6	30	46	66	65	45	26	11	1	0	0	0	0	0	66	0	12
11	0	0	0	0	0	0	0	0	0	0	9	38	117	125	123	111	195	56	1	0	0	0	0	0	195	0	32
12	0	0	0	0	0	0	0	0	0	0	16	86	151	168	100	98	27	8	0	0	0	0	0	0	168	0	27
13	0	0	0	0	0	0	0	0	0	0	7	35	69	88	101	60	33	19	0	0	0	0	0	0	101	0	17
14	0	0	0	0	0	0	0	0	0	0	7	42	88	81	83	70	41	15	1	0	0	0	0	0	88	0	18
15	0	0	0	0	0	0	0	0	0	0	5	37	79	138	81	70	40	10	0	0	0	0	0	0	138	0	19
16	0	0	0	0	0	0	0	0	0	0	20	44	70	99	98	71	36	12	0	0	0	0	0	0	99	0	19
17	0	0	0	0	0	0	0	0	0	0	17	99	163	197	194	158	82	14	0	0	0	0	0	0	197	0	39
18	0	0	0	0	0	0	0	0	0	0	18	90	150	174	167	138	71	13	0	0	0	0	0	0	174	0	34
19	0	0	0	0	0	0	0	0	0	0	6	72	145	181	180	145	74	13	0	0	0	0	0	0	181	0	34
20	0	0	0	0	0	0	0	0	0	0	8	58	137	169	174	138	65	11	0	0	0	0	0	0	174	0	32
21	0	0	0	0	0	0	0	0	0	0	10	79	152	183	179	129	30	13	0	0	0	0	0	0	183	0	32
22	0	0	0	0	0	0	0	0	0	0	4	34	136	177	185	124	42	6	0	0	0	0	0	0	185	0	29
23	0	0	0	0	0	0	0	0	0	0	2	13	49	68	104	66	32	5	0	0	0	0	0	0	104	0	14
24	0	0	0	0	0	0	0	0	0	0	2	14	35	67	81	53	33	3	0	0	0	0	0	0	81	0	12
25	0	0	0	0	0	0	0	0	0	0	2	16	79	143	152	120	63	10	0	0	0	0	0	0	152	0	24
26	0	0	0	0	0	0	0	0	0	0	2	35	114	153	153	120	53	8	0	0	0	0	0	0	153	0	27
27	0	0	0	0	0	0	0	0	0	0	1	21	37	58	59	47	30	5	0	0	0	0	0	0	59	0	11
28	0	0	0	0	0	0	0	0	0	0	1	8	36	57	57	40	25	4	0	0	0	0	0	0	57	0	10
29	0	0	0	0	0	0	0	0	0	0	1	17	49	71	84	87	31	8	0	0	0	0	0	0	87	0	14
30	0	0	0	0	0	0	0	0	0	0	2	38	105	143	143	109	44	5	0	0	0	0	0	0	143	0	25
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**44**	**172**	**207**	**234**	**260**	**201**	**195**	**73**	**6**	**0**	**0**	**0**	**0**	**0**	**260**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**31**	**47**	**56**	**40**	**25**	**3**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**13**	**60**	**107**	**139**	**136**	**107**	**64**	**20**	**1**	**0**	**0**	**0**	**0**	**0**			**27**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Solar (Watts/m^2)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	1	19	82	73	58	43	19	2	0	0	0	0	0	0	82	0	12
2	0	0	0	0	0	0	0	0	0	0	0	9	28	40	37	39	23	2	0	0	0	0	0	0	40	0	7
3	0	0	0	0	0	0	0	0	0	0	0	5	7	12	72	49	23	3	0	0	0	0	0	0	72	0	7
4	0	0	0	0	0	0	0	0	0	0	0	6	14	34	20	29	24	2	0	0	0	0	0	0	34	0	5
5	0	0	0	0	0	0	0	0	0	0	0	7	24	33	28	14	11	1	0	0	0	0	0	0	33	0	5
6	0	0	0	0	0	0	0	0	0	0	0	9	20	36	45	30	23	3	0	0	0	0	0	0	45	0	7
7	0	0	0	0	0	0	0	0	0	0	1	12	27	46	101	47	28	4	0	0	0	0	0	0	101	0	11
8	0	0	0	0	0	0	0	0	0	0	0	4	28	35	45	34	17	2	0	0	0	0	0	0	45	0	7
9	0	0	0	0	0	0	0	0	0	0	0	10	34	36	49	33	12	2	0	0	0	0	0	0	49	0	7
10	0	0	0	0	0	0	0	0	0	0	0	13	33	61	127	84	27	3	0	0	0	0	0	0	127	0	14
11	0	0	0	0	0	0	0	0	0	0	1	7	19	36	48	39	26	4	0	0	0	0	0	0	48	0	7
12	0	0	0	0	0	0	0	0	0	0	0	4	18	44	52	36	13	3	0	0	0	0	0	0	52	0	7
13	0	0	0	0	0	0	0	0	0	0	1	22	83	125	127	91	30	3	0	0	0	0	0	0	127	0	20
14	0	0	0	0	0	0	0	0	0	0	1	24	75	94	86	62	22	2	0	0	0	0	0	0	94	0	15
15	0	0	0	0	0	0	0	0	0	0	0	3	24	30	56	41	16	3	0	0	0	0	0	0	56	0	7
16	0	0	0	0	0	0	0	0	0	0	0	12	39	53	98	49	12	2	0	0	0	0	0	0	98	0	11
17	0	0	0	0	0	0	0	0	0	0	0	4	15	29	34	26	11	2	0	0	0	0	0	0	34	0	5
18	0	0	0	0	0	0	0	0	0	0	0	7	18	26	33	27	12	2	0	0	0	0	0	0	33	0	5
19	0	0	0	0	0	0	0	0	0	0	0	5	22	31	28	24	20	1	0	0	0	0	0	0	31	0	5
20	0	0	0	0	0	0	0	0	0	0	0	5	28	68	46	31	17	2	0	0	0	0	0	0	68	0	8
21	0	0	0	0	0	0	0	0	0	0	0	7	24	43	54	87	33	4	0	0	0	0	0	0	87	0	11
22	0	0	0	0	0	0	0	0	0	0	0	5	19	32	45	29	12	2	0	0	0	0	0	0	45	0	6
23	0	0	0	0	0	0	0	0	0	0	0	12	58	72	71	77	31	4	0	0	0	0	0	0	77	0	14
24	0	0	0	0	0	0	0	0	0	0	0	8	38	83	64	42	25	2	0	0	0	0	0	0	83	0	11
25	0	0	0	0	0	0	0	0	0	0	0	3	15	28	28	23	14	3	0	0	0	0	0	0	28	0	5
26	0	0	0	0	0	0	0	0	0	0	0	9	40	80	79	70	35	7	0	0	0	0	0	0	80	0	13
27	0	0	0	0	0	0	0	0	0	0	0	12	100	128	111	82	31	5	0	0	0	0	0	0	128	0	20
28	0	0	0	0	0	0	0	0	0	0	0	12	59	108	117	88	37	5	0	0	0	0	0	0	117	0	18
29	0	0	0	0	0	0	0	0	0	0	0	11	64	110	119	91	39	5	0	0	0	0	0	0	119	0	18
30	0	0	0	0	0	0	0	0	0	0	0	14	67	116	126	98	42	6	0	0	0	0	0	0	126	0	20
31	0	0	0	0	0	0	0	0	0	0	0	14	67	113	124	97	43	6	0	0	0	0	0	0	124	0	19
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**100**	**128**	**127**	**98**	**43**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**128**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**7**	**12**	**20**	**14**	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**38**	**60**	**69**	**52**	**24**	**3**	**0**	**0**	**0**	**0**	**0**	**0**			**11**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	956	954	954	952	952	951	950	949	948	947	947	946	945	944	944	944	943	943	943	943	943	942	943	943	956	942	946.8
2	942	943	943	943	942	942	942	942	941	941	941	941	941	940	940	939	939	938	938	937	936	936	936	935	943	935	939.9
3	935	935	935	935	934	934	934	934	934	934	934	934	934	934	934	934	935	935	935	936	936	936	937	937	937	934	934.8
4	937	938	938	938	938	939	939	939	939	939	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	937	939.3
5	941	940	940	940	940	940	940	941	941	940	941	941	942	942	941	940	941	942	942	941	944	943	943	943	944	940	941.3
6	944	944	944	945	946	946	947	946	946	946	947	947	948	947	947	947	947	946	946	946	947	946	946	946	948	944	946.2
7	946	946	946	946	946	946	946	945	945	945	945	946	945	946	946	947	947	948	948	949	950	951	951	952	952	945	947.0
8	952	953	953	954	954	954	954	954	954	954	954	954	954	954	954	954	953	953	953	953	952	952	951	951	954	951	953.3
9	950	950	950	949	949	949	948	948	948	948	949	948	948	948	948	949	948	948	949	949	949	950	950	951	951	948	948.9
10	951	951	951	951	951	951	952	952	951	951	952	952	952	952	952	953	952	953	953	953	954	954	954	954	954	951	952.2
11	954	954	954	955	955	955	955	954	954	955	955	957	957	957	957	957	957	957	957	958	958	958	958	958	958	954	956.1
12	958	958	958	958	958	957	957	957	956	956	956	957	956	956	956	955	955	955	955	955	955	955	956	957	958	955	956.3
13	957	959	959	961	962	960	960	962	961	963	966	966	966	965	966	967	966	967	967	967	968	967	967	967	968	957	964.0
14	967	967	966	966	964	964	963	963	962	960	959	960	960	958	959	958	958	958	958	957	956	956	955	954	967	954	960.3
15	953	952	951	951	952	952	953	954	955	955	955	956	957	956	957	957	957	957	957	957	957	957	956	957	957	951	955.1
16	957	958	959	959	960	961	962	964	964	966	967	969	971	971	972	973	973	974	974	974	975	974	974	974	975	957	967.7
17	974	974	973	972	971	971	970	969	968	966	965	964	962	962	962	962	962	962	963	963	964	964	964	965	974	962	966.4
18	966	966	967	967	968	968	969	969	970	971	972	973	974	975	975	975	975	976	977	976	976	976	976	977	977	966	972.3
19	977	977	976	976	976	975	975	975	974	974	973	971	972	972	970	970	970	970	969	969	969	970	971	971	977	969	972.5
20	972	974	974	973	973	973	972	972	971	971	971	970	970	970	970	970	970	970	971	971	972	972	973	973	974	970	971.5
21	973	974	974	975	974	972	971	972	972	971	970	970	969	967	965	963	963	962	959	960	959	959	958	958	975	958	967.0
22	959	960	961	962	963	962	963	963	965	965	966	966	969	970	971	972	973	974	973	973	972	972	972	972	974	959	967.4
23	973	973	974	975	976	977	978	979	980	982	983	985	986	987	986	987	987	987	986	987	987	987	986	986	987	973	982.2
24	985	985	983	982	980	979	977	975	972	971	971	969	968	967	965	964	963	962	961	960	959	959	957	958	985	957	969.7
25	957	958	958	958	958	958	957	958	958	959	960	960	961	962	962	961	961	962	963	964	965	966	967	968	968	957	961.0
26	970	970	970	971	972	972	971	971	972	973	974	975	975	976	975	975	975	975	975	974	973	973	972	972	976	970	973.0
27	971	970	969	968	968	967	966	965	963	961	960	959	957	956	955	953	952	951	950	949	948	948	948	947	971	947	958.3
28	947	947	947	947	947	947	947	947	947	947	948	949	950	950	951	952	953	953	954	955	956	956	957	958	958	947	950.4
29	958	959	960	960	960	960	960	960	959	959	959	959	958	958	957	957	955	955	954	954	954	953	953	953	960	953	957.3
30	954	954	954	954	954	955	955	955	955	956	956	956	957	957	958	958	959	959	959	959	960	960	961	962	962	954	956.9
31	962	962	962	962	963	963	962	962	962	962	962	962	962	961	961	961	960	960	959	959	959	958	958	958	963	958	960.9
Max.	**985**	**985**	**983**	**982**	**980**	**979**	**978**	**979**	**980**	**982**	**983**	**985**	**986**	**987**	**986**	**987**	**987**	**987**	**986**	**987**	**987**	**987**	**986**	**986**	**987**		
Min.	**935**	**935**	**935**	**935**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**934**	**935**	**935**	**935**	**936**	**936**	**936**	**936**	**935**		**934**	
Avg.	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**			**957.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	958	958	958	958	958	958	958	958	957	957	957	956	957	956	956	956	955	955	955	955	955	955	955	956	958	955	956.5
2	956	956	957	957	957	957	957	958	958	959	960	960	961	961	962	962	963	963	963	964	965	965	965	965	965	956	960.5
3	966	966	966	966	966	966	965	966	967	965	965	965	965	964	963	962	961	962	962	960	961	960	960	960	967	960	963.6
4	960	960	960	959	960	959	959	958	958	958	959	959	959	959	959	958	958	958	959	959	959	959	959	959	960	958	958.9
5	960	960	960	960	961	960	960	960	959	960	960	959	959	958	957	957	956	955	955	955	954	954	953	953	961	953	957.7
6	952	952	952	952	952	952	952	952	952	952	953	953	954	954	954	955	955	955	955	956	956	957	957	958	958	952	953.9
7	959	959	960	960	960	961	962	963	964	964	965	966	966	967	967	968	968	968	968	969	969	969	969	968	969	959	965.0
8	969	969	969	969	969	969	969	969	968	969	968	968	967	966	965	965	964	963	963	963	962	960	960	958	969	958	965.9
9	958	956	955	954	953	953	952	951	949	949	949	948	947	946	946	945	945	944	944	944	944	944	944	944	958	944	948.6
10	944	944	944	944	944	944	944	944	943	944	944	944	943	943	943	943	943	943	943	943	943	943	943	943	944	943	943.5
11	943	944	944	944	944	944	944	944	944	944	944	945	945	945	945	945	945	945	945	946	946	947	948	949	949	943	944.8
12	950	951	951	952	953	954	955	956	956	957	957	958	959	959	958	958	957	957	957	956	955	954	953	951	959	950	955.2
13	950	949	949	947	945	942	942	940	938	938	938	937	937	936	935	935	934	934	935	934	933	932	933	933	950	932	938.6
14	933	933	932	932	932	932	932	933	933	936	937	938	939	940	941	941	941	941	942	942	943	944	945	947	947	932	937.8
15	948	950	952	953	954	955	956	958	959	960	961	961	962	963	963	963	964	963	962	961	962	962	961	960	964	948	958.8
16	959	959	959	958	956	954	954	952	950	949	948	946	946	946	946	946	946	947	948	949	950	951	951	952	959	946	951.0
17	952	952	951	951	950	948	947	946	944	943	941	938	937	935	934	933	933	932	932	935	937	938	940	941	952	932	941.1
18	941	941	942	941	940	940	940	940	942	944	945	947	947	948	949	949	949	949	949	949	950	950	950	950	950	940	945.5
19	949	948	947	946	943	941	939	937	936	934	932	931	930	929	927	926	925	925	924	925	926	927	928	928	949	924	933.6
20	930	931	933	936	937	938	939	940	942	943	943	943	944	943	943	942	941	940	940	939	938	937	937	938	944	930	939.1
21	937	937	936	936	936	935	935	935	935	936	936	937	938	939	939	939	940	941	942	943	944	945	945	946	946	935	938.9
22	947	948	948	949	950	950	951	952	953	953	954	955	956	956	957	958	960	960	961	962	963	964	965	965	965	947	955.7
23	966	967	967	968	968	968	968	969	969	969	970	970	971	971	971	971	971	971	971	971	971	971	971	971	971	966	969.6
24	971	971	971	971	971	971	971	970	971	970	971	971	971	971	970	971	970	970	970	970	970	970	969	969	971	969	970.5
25	968	968	967	966	965	965	964	964	964	964	964	964	964	963	963	963	963	963	963	963	964	964	964	964	968	963	964.3
26	965	965	965	964	964	964	964	963	963	963	962	962	961	961	960	959	959	958	957	957	957	957	956	956	965	956	960.9
27	956	956	956	957	957	957	957	957	957	957	957	958	958	958	958	958	957	957	957	956	956	956	956	956	958	956	957.1
28	957	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	957	956	957	957	957	957	957	957	956	956.3
29	957	957	956	956	955	955	954	954	953	953	953	952	952	951	950	950	950	949	948	948	947	947	946	946	957	946	951.6
Max.	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**970**	**971**	**970**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**	**971**		
Min.	**930**	**931**	**932**	**932**	**932**	**932**	**932**	**933**	**933**	**934**	**932**	**931**	**930**	**929**	**927**	**926**	**925**	**925**	**924**	**925**	**926**	**927**	**928**	**928**		**924**	
Avg.	**954**	**954**	**954**	**954**	**954**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**			**953.3**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	946	945	945	945	945	945	945	945	945	946	946	946	946	946	946	946	947	947	946	946	945	945	945	945	947	945	945.7
2	945	945	946	946	946	946	946	947	949	950	951	952	953	953	954	954	955	955	956	956	957	957	958	958	958	945	951.4
3	959	959	959	959	958	958	957	956	956	955	954	954	953	954	955	954	955	956	957	958	959	959	959	960	960	953	956.8
4	960	960	960	960	959	958	958	958	957	957	957	957	957	957	957	957	957	957	957	958	957	957	956	955	960	955	957.6
5	954	952	948	947	945	945	944	943	941	940	940	940	939	939	939	938	938	940	941	941	942	943	944	944	954	938	942.7
6	946	947	947	948	948	948	948	949	949	949	949	949	949	948	948	948	947	946	945	944	943	942	940	939	949	939	946.5
7	939	938	937	936	935	935	934	934	934	933	934	934	935	935	935	936	936	937	938	939	940	941	942	943	943	933	936.6
8	945	945	946	947	948	949	949	950	950	950	950	950	950	949	949	948	947	946	945	945	944	943	942	941	950	941	947.1
9	941	941	941	940	940	940	939	939	939	939	940	941	942	942	943	943	944	944	945	946	947	947	948	949	949	939	942.4
10	950	951	952	952	953	954	955	956	956	957	957	958	958	959	959	959	959	959	959	960	960	960	961	961	961	950	956.8
11	961	961	962	962	962	962	962	962	963	963	963	964	964	964	965	965	965	965	965	965	966	966	966	967	967	961	963.7
12	967	967	968	968	968	969	969	969	969	970	970	971	971	971	971	971	971	971	971	971	971	971	972	972	972	967	970.0
13	972	972	972	973	973	973	973	973	973	974	974	974	975	975	975	975	975	975	975	976	976	976	976	976	976	972	974.2
14	976	975	975	976	975	975	974	974	974	973	973	972	972	972	972	971	970	969	968	968	967	966	966	964	976	964	971.7
15	963	962	961	960	960	959	958	958	958	958	958	957	957	957	957	956	955	954	954	953	953	953	952	951	963	951	956.8
16	951	950	950	950	949	948	948	948	948	947	947	947	947	947	946	946	945	945	944	944	944	944	945	945	951	944	946.9
17	945	945	946	946	946	947	947	947	947	948	948	948	948	949	949	949	949	949	950	950	950	950	950	951	951	945	948.1
18	951	952	952	952	953	953	953	953	953	954	954	954	954	954	954	954	954	954	954	954	953	953	953	953	954	951	953.4
19	953	954	953	954	954	954	954	954	954	954	955	956	956	956	956	957	957	958	958	958	958	958	958	958	958	953	955.7
20	959	959	959	959	959	959	959	959	960	960	960	960	961	961	961	961	961	960	960	959	959	959	958	958	961	958	959.6
21	958	957	957	956	956	956	956	956	956	956	956	956	956	957	956	956	956	956	956	955	956	956	956	956	958	955	956.2
22	956	956	956	956	955	954	954	954	954	954	953	953	954	954	954	953	954	953	953	953	954	954	954	954	956	953	954.2
23	954	954	954	954	953	953	953	953	953	952	952	952	952	952	952	952	952	951	951	951	951	951	951	951	954	951	952.2
24	952	952	952	952	952	953	953	953	953	954	954	954	955	955	955	955	955	955	955	956	956	957	957	958	958	952	954.2
25	959	960	960	961	961	962	962	963	963	963	963	964	964	964	965	965	965	965	965	965	966	966	966	966	966	959	963.4
26	967	967	967	967	967	967	968	968	968	968	969	969	969	970	970	970	970	970	970	971	971	971	972	972	972	967	969.0
27	972	972	972	973	973	973	973	973	973	973	973	973	973	974	974	974	974	974	974	974	974	974	975	975	975	972	973.4
28	975	975	976	976	976	976	976	976	976	976	976	976	976	975	975	975	974	974	973	973	973	973	973	972	976	972	974.8
29	972	972	972	972	972	971	971	971	970	970	970	969	969	968	968	968	967	966	966	965	964	964	964	963	972	963	968.5
30	962	962	962	962	962	961	962	961	962	962	963	963	964	964	965	965	965	966	966	966	966	967	968	968	968	961	963.9
31	969	969	969	969	968	968	968	967	967	967	967	967	967	966	966	965	965	963	963	962	961	961	961	960	969	960	965.5
Max.	**976**	**975**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**976**	**975**	**975**	**975**	**975**	**975**	**975**	**976**	**976**	**976**	**976**	**976**	**976**		
Min.	**939**	**938**	**937**	**936**	**935**	**935**	**934**	**934**	**934**	**933**	**934**	**934**	**935**	**935**	**935**	**936**	**936**	**937**	**938**	**939**	**940**	**941**	**940**	**939**		**933**	
Avg.	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**958**	**958**	**958**	**958**	**958**	**957**	**957**	**957**	**957**	**957**	**958**	**958**	**958**			**957.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	959	959	959	959	959	959	959	958	958	959	959	959	960	959	959	959	959	960	960	960	961	962	962	963	963	958	959.6
2	963	964	965	965	966	967	968	968	969	969	969	970	969	970	970	969	969	968	967	968	967	966	966	966	970	963	967.3
3	965	965	965	964	964	964	964	964	964	964	964	964	963	962	962	962	961	960	960	959	959	959	958	957	965	957	962.2
4	956	956	956	954	955	954	953	954	954	955	955	956	956	956	956	957	957	957	957	958	958	959	961	962	962	953	956.3
5	963	964	965	965	965	966	966	967	967	967	967	967	967	967	967	966	966	965	965	965	966	966	966	966	967	963	965.8
6	966	966	967	966	967	967	966	967	967	967	966	965	965	965	965	965	965	965	965	964	964	965	965	965	967	964	965.6
7	965	966	966	966	967	967	967	967	967	968	968	968	968	968	968	968	967	967	967	967	966	967	966	966	968	965	966.8
8	965	965	965	964	963	963	963	962	962	961	961	960	960	960	959	959	958	958	958	958	958	958	958	958	965	958	960.8
9	959	959	959	960	960	961	960	961	960	961	961	962	962	961	961	961	961	961	961	961	961	961	961	961	962	959	960.6
10	962	962	963	963	963	964	964	965	965	966	966	967	967	968	968	968	968	968	968	969	969	969	970	970	970	962	966.3
11	970	971	971	971	971	972	971	972	972	972	973	973	973	972	972	972	971	971	971	970	970	969	969	969	973	969	971.2
12	968	968	967	966	966	966	966	965	965	964	964	964	964	964	963	963	963	962	962	962	962	962	962	961	968	961	964.1
13	960	960	960	959	959	959	959	958	958	958	957	957	958	958	958	958	959	959	958	959	958	956	956	958	960	956	958.3
14	959	961	960	960	960	961	962	962	962	963	962	962	962	962	962	962	962	962	962	962	962	961	961	961	963	959	961.4
15	960	959	959	958	957	956	955	955	955	955	955	955	956	956	955	955	956	957	958	962	963	965	967	967	967	955	958.2
16	967	969	968	970	970	974	974	977	979	979	980	981	982	982	983	983	983	984	984	984	984	985	985	985	985	967	978.8
17	986	987	987	988	988	989	989	990	990	991	991	992	992	992	993	992	992	992	992	992	992	993	993	993	993	986	990.7
18	993	993	992	992	992	992	992	992	992	991	991	992	992	991	991	991	990	990	989	989	989	988	988	988	993	988	990.9
19	988	987	987	986	986	986	985	985	985	984	984	984	984	983	983	983	982	981	981	980	980	980	980	979	988	979	983.5
20	979	979	979	979	978	978	976	977	977	976	977	978	978	977	978	977	978	977	977	978	978	978	978	977	979	976	977.6
21	978	978	978	978	977	978	978	978	978	978	978	978	977	978	978	979	979	979	979	978	979	979	979	979	979	977	978.2
22	979	979	978	978	978	978	978	978	978	978	978	978	978	978	978	977	977	976	976	976	976	976	976	976	979	976	977.5
23	976	976	976	975	975	975	974	974	974	974	973	973	973	973	973	973	972	972	972	972	971	972	972	972	976	971	973.4
24	972	972	972	972	972	972	972	972	971	971	971	971	971	971	971	970	970	969	969	969	968	968	968	968	972	968	970.5
25	968	968	968	967	967	968	968	968	968	968	968	968	968	968	967	966	966	966	965	965	965	965	965	965	968	965	966.9
26	965	964	963	963	963	962	962	961	960	960	958	956	956	956	956	955	955	954	954	953	953	953	953	952	965	952	957.8
27	952	952	951	951	951	952	952	951	952	952	953	953	954	955	955	956	958	958	959	960	961	962	963	964	964	951	955.3
28	964	964	964	965	966	966	966	967	967	967	967	968	968	968	968	968	968	967	967	967	967	968	968	968	968	964	966.8
29	968	968	968	967	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	965	965	965	965	968	965	966.8
30	965	965	964	964	964	964	963	963	963	963	963	963	963	963	963	963	963	963	963	963	963	964	964	964	965	963	963.6
Max.	**993**	**993**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**991**	**991**	**992**	**992**	**992**	**993**	**992**	**992**	**992**	**992**	**992**	**992**	**993**	**993**	**993**	**993**		
Min.	**952**	**952**	**951**	**951**	**951**	**952**	**952**	**951**	**952**	**952**	**953**	**953**	**954**	**955**	**955**	**955**	**955**	**954**	**954**	**953**	**953**	**953**	**953**	**952**		**951**	
Avg.	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**			**968.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	962	962	961	961	960	960	960	960	964	960	962.8
2	959	959	959	958	958	958	958	958	958	959	959	960	960	960	961	961	961	961	961	962	962	962	963	963	963	958	959.9
3	963	963	964	964	964	964	964	964	964	964	964	964	963	963	963	963	963	962	961	961	962	962	961	961	964	961	962.9
4	961	960	960	960	959	959	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	961	959	959.8
5	960	960	960	960	960	960	960	960	961	961	962	962	962	963	963	964	964	964	965	965	966	967	968	968	968	960	962.7
6	969	969	970	971	971	971	972	972	972	972	973	973	973	973	973	973	973	972	972	972	972	972	972	972	973	969	971.8
7	972	971	971	971	971	970	970	970	969	969	969	969	970	969	969	968	969	969	968	968	968	968	968	968	972	968	969.2
8	967	967	966	966	966	966	965	965	964	964	964	964	964	963	963	963	963	962	961	961	961	961	961	960	967	960	963.6
9	960	960	959	959	959	959	959	959	960	959	960	960	960	961	960	960	961	961	961	961	961	961	961	961	961	959	960.1
10	961	961	961	961	961	961	961	961	961	961	961	961	961	961	960	960	960	960	959	959	959	959	958	958	961	958	960.2
11	958	958	957	956	955	954	954	953	952	951	951	950	949	948	946	944	944	943	941	941	940	939	938	938	958	938	948.3
12	938	938	937	937	936	935	936	935	935	935	935	935	936	936	936	936	936	938	938	938	938	939	940	940	940	935	936.8
13	942	942	943	944	945	946	947	948	949	950	950	951	951	952	952	953	953	953	953	954	954	954	954	954	954	942	949.9
14	953	952	952	951	949	948	946	945	944	942	942	941	940	940	940	939	939	939	939	940	940	941	942	943	953	939	943.6
15	944	946	947	948	950	951	952	953	955	956	957	959	960	961	963	963	964	965	966	966	967	968	969	971	971	944	958.5
16	971	972	973	973	973	974	974	974	975	975	975	974	974	974	974	973	973	973	973	972	972	972	972	972	975	971	973.3
17	972	972	972	971	971	971	971	970	970	970	970	970	970	970	969	969	969	969	969	969	969	969	969	970	972	969	970.0
18	970	970	970	970	971	971	971	972	972	972	973	973	973	973	973	973	973	973	973	973	974	974	974	975	975	970	972.4
19	975	975	975	974	974	974	974	974	974	973	973	973	973	972	972	971	971	970	970	970	969	969	969	969	975	969	972.1
20	969	969	968	968	968	967	967	967	967	967	967	966	966	966	966	966	966	966	965	966	966	966	966	967	969	965	966.7
21	967	967	968	968	968	968	969	969	970	971	971	971	971	972	972	972	973	973	974	974	975	975	976	977	977	967	971.3
22	978	978	979	979	980	980	980	981	980	981	981	980	980	979	979	978	978	978	977	977	976	975	975	974	981	974	978.4
23	973	971	969	968	968	967	967	968	966	964	965	965	966	965	968	970	970	971	972	972	973	974	973	973	974	964	969.1
24	974	973	973	973	973	973	972	973	973	973	973	972	972	972	972	972	973	973	973	974	974	974	975	975	975	972	973.1
25	976	976	977	977	977	977	978	978	979	979	979	979	980	980	980	980	980	981	981	981	981	982	982	982	982	976	979.2
26	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	982	982	982	982	982	982	983	983	983	982	982.5
27	983	983	983	983	983	983	983	983	983	983	983	983	983	982	982	982	981	981	981	981	981	981	981	981	983	981	982.0
28	981	981	981	981	981	980	980	980	980	980	980	980	979	979	979	979	978	978	977	977	977	976	977	977	981	976	979.0
29	976	976	976	976	975	975	975	974	974	974	974	974	973	973	973	972	972	971	971	971	970	970	970	970	976	970	973.3
30	970	970	970	970	970	970	970	970	969	969	969	969	969	969	969	969	969	969	969	969	969	969	970	970	970	969	969.4
31	970	970	969	969	970	969	969	969	969	969	968	968	968	967	968	968	967	967	966	966	965	966	965	965	970	965	967.8
Max.	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**982**	**982**	**982**	**982**	**982**	**982**	**983**	**983**	**983**		
Min.	**938**	**938**	**937**	**937**	**936**	**935**	**936**	**935**	**935**	**935**	**935**	**935**	**936**	**936**	**936**	**936**	**936**	**938**	**938**	**938**	**938**	**939**	**938**	**938**		**935**	
Avg.	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**			**966.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	964	963	964	962	962	962	961	960	961	960	959	958	960	959	958	957	957	958	957	957	957	957	957	957	964	957	959.5
2	957	957	956	956	956	956	956	956	955	955	955	955	955	954	954	954	953	953	953	953	953	953	953	953	957	953	954.7
3	953	952	952	952	952	952	952	953	953	953	953	953	953	953	954	954	954	954	954	955	955	956	956	956	956	952	953.5
4	956	956	956	956	956	956	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	955	956	955	955.3
5	956	955	955	955	955	955	954	954	954	954	954	954	954	954	954	955	955	955	956	956	957	957	958	959	959	954	955.2
6	959	959	959	960	960	960	961	962	963	963	963	964	964	964	964	964	964	964	965	965	966	966	967	968	968	959	963.0
7	968	968	968	969	969	969	970	970	970	970	970	971	971	971	971	971	970	970	970	970	971	971	972	972	972	968	970.1
8	973	973	973	973	974	973	973	973	973	973	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	973	973.6
9	974	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	974	975	975	975	974	974.9
10	975	975	975	975	975	975	975	975	975	975	975	975	975	976	976	976	975	975	976	976	976	976	976	977	977	975	975.5
11	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	977	978	978	977	977.1
12	978	978	978	978	978	977	977	977	977	976	976	976	975	975	974	974	974	974	974	974	974	974	974	973	978	973	975.6
13	973	973	973	973	973	973	973	973	973	973	974	974	974	974	975	975	975	975	975	975	975	975	976	976	976	973	974.1
14	976	976	977	977	977	977	978	978	978	978	979	979	979	979	979	979	979	979	979	980	980	980	980	980	980	976	978.5
15	980	981	981	981	980	980	980	980	980	980	980	980	980	980	979	979	979	978	978	978	978	978	977	977	981	977	979.4
16	977	976	976	976	975	975	975	975	975	975	975	975	975	975	975	974	974	974	974	974	974	974	974	974	977	974	974.8
17	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	973	973	973	974	974	974	973	973.8
18	974	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	974	974	974	975	975	975	975	975	974	974.8
19	975	976	976	976	976	976	976	976	976	976	976	976	976	976	976	975	975	975	974	974	974	974	974	974	976	974	975.3
20	974	973	973	973	973	972	972	972	972	972	972	971	971	971	971	970	970	970	969	969	969	969	969	970	974	969	971.2
21	970	969	969	969	969	968	968	968	967	967	967	967	966	967	966	966	966	966	966	966	966	967	967	967	970	966	967.2
22	967	968	968	968	968	969	969	969	969	970	970	970	970	971	971	971	972	971	972	972	972	972	973	973	973	967	970.2
23	973	973	972	972	972	972	971	971	970	970	969	969	969	968	968	968	967	966	966	966	966	965	965	966	973	965	968.9
24	966	965	965	965	965	965	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	963	962	962	966	962	963.9
25	962	962	962	961	961	961	960	960	960	959	959	959	958	959	959	958	958	959	959	959	960	959	960	960	962	958	959.7
26	960	961	961	961	961	961	960	960	961	960	960	960	960	961	961	961	961	961	961	961	961	961	961	962	962	960	960.6
27	962	962	962	962	962	962	962	963	963	963	963	963	963	963	963	963	962	962	962	962	962	962	963	963	963	962	962.4
28	963	963	963	963	963	963	964	964	964	964	965	965	966	966	966	967	968	968	968	968	969	969	970	971	971	963	965.9
29	972	972	973	973	973	974	974	975	975	976	976	976	976	976	976	976	976	976	976	977	977	977	977	978	978	972	975.3
30	978	978	977	978	978	978	978	978	977	977	977	977	977	977	976	976	976	976	975	975	975	974	975	974	978	974	976.5
Max.	**980**	**981**	**981**	**981**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**980**	**979**	**979**	**979**	**979**	**979**	**980**	**980**	**980**	**980**	**980**	**981**		
Min.	**953**	**952**	**952**	**952**	**952**	**952**	**952**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**954**	**954**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**		**952**	
Avg.	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**969**	**969**	**969**			**968.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	974	974	974	974	973	973	972	973	972	972	972	971	971	970	970	970	970	970	970	970	970	970	970	970	974	970	971.4
2	970	970	970	970	970	969	969	969	969	969	968	968	968	967	966	966	965	965	964	963	963	962	962	962	970	962	966.9
3	962	961	961	960	959	959	958	957	957	958	958	957	957	957	957	957	957	957	958	957	958	958	958	959	962	957	958.3
4	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959	958	958	959	958	958	958	958	958	959	958	958.8
5	958	958	958	958	958	958	957	957	958	957	958	958	958	957	957	958	958	957	957	957	957	958	958	958	958	957	957.6
6	958	959	959	959	958	958	958	958	959	959	959	960	960	961	961	961	961	962	962	962	962	963	964	964	964	958	960.3
7	964	965	965	965	966	966	966	967	967	968	968	969	970	970	970	970	970	970	969	969	970	970	970	970	970	964	968.1
8	970	970	970	970	970	969	969	970	969	969	970	970	970	969	969	969	969	969	969	969	969	969	969	969	970	969	969.4
9	969	969	969	969	969	969	969	969	969	969	969	969	970	970	970	970	970	970	970	970	971	971	972	972	972	969	969.7
10	972	973	973	974	973	973	973	974	973	974	974	974	974	974	974	974	974	974	974	974	974	975	975	975	975	972	974.0
11	975	976	976	976	976	976	976	976	976	977	977	977	977	977	977	977	977	977	976	976	976	977	977	977	977	975	976.6
12	977	977	977	976	976	975	975	974	974	973	973	973	972	972	972	972	972	971	972	971	972	971	972	972	977	971	973.5
13	972	972	973	973	973	973	973	974	974	974	975	975	975	975	976	976	976	976	976	976	976	976	976	976	976	972	974.7
14	977	977	977	977	976	976	976	977	977	977	977	977	977	977	977	976	976	976	976	976	975	975	975	975	977	975	976.3
15	975	975	975	975	975	974	974	974	974	973	973	973	973	973	973	972	972	972	972	972	972	972	972	972	975	972	973.3
16	971	971	971	971	970	970	970	969	969	969	968	967	967	966	965	966	966	965	965	965	965	965	965	966	971	965	967.7
17	966	966	966	967	967	967	968	968	968	968	968	968	968	968	968	967	967	967	967	966	966	966	965	965	968	965	966.9
18	965	965	965	965	964	964	964	963	963	963	963	963	963	963	963	963	962	962	962	962	961	961	961	961	965	961	963.0
19	961	961	960	959	959	959	959	958	958	958	958	958	958	958	958	958	958	959	959	959	960	960	960	961	961	958	959.1
20	961	961	962	962	962	962	962	962	961	962	962	962	963	962	962	962	962	962	962	962	961	961	961	960	963	960	961.7
21	960	960	959	959	959	959	959	960	960	961	961	962	962	962	963	963	964	964	964	964	965	965	965	966	966	959	961.9
22	966	966	966	966	966	966	966	966	966	966	965	966	966	966	965	965	965	965	965	964	964	964	964	964	966	964	965.4
23	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	963	963	963	963	963	964	963	963.7
24	963	963	963	963	963	963	963	963	963	964	964	964	964	964	964	964	964	964	963	964	963	963	963	963	964	963	963.4
25	963	964	964	964	964	964	964	964	964	964	963	964	963	963	963	963	963	963	962	962	962	963	963	963	964	962	963.3
26	963	963	964	964	964	964	964	964	964	964	964	965	965	965	965	965	964	964	964	964	964	964	964	964	965	963	964.2
27	964	963	963	963	963	963	963	963	963	963	963	963	964	964	964	965	965	965	965	966	966	966	967	967	967	963	964.2
28	967	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	967	967	967	967	968	967	967.5
29	967	967	967	967	967	966	966	966	966	966	965	966	966	966	966	966	966	965	966	966	966	966	967	967	967	965	966.2
30	967	967	967	967	967	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	969	969	967	967.8
31	969	969	968	968	968	968	968	967	968	967	967	967	967	967	967	966	966	966	966	965	965	965	965	966	969	965	966.8
Max.	**977**	**977**	**977**	**977**	**976**	**976**	**976**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**976**	**976**	**976**	**977**	**977**	**977**	**977**		
Min.	**958**	**958**	**958**	**958**	**958**	**958**	**957**	**957**	**957**	**957**	**958**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**957**	**958**	**958**	**958**		**957**	
Avg.	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**967**	**966**	**967**	**967**	**967**	**967**	**967**	**967**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**			**966.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	966	966	966	966	966	966	966	966	967	967	967	968	968	968	968	968	968	968	968	968	969	969	969	970	970	966	967.4
2	971	971	971	971	972	972	972	972	973	973	973	973	973	973	973	974	974	974	974	974	975	975	975	975	975	971	973.0
3	976	976	976	976	976	976	976	976	977	977	976	977	977	977	977	977	977	977	976	976	977	977	977	977	977	976	976.4
4	977	977	977	977	977	977	977	977	977	977	977	977	977	976	976	976	976	976	976	975	975	976	976	976	977	975	976.4
5	976	976	975	975	975	975	975	975	975	975	975	975	975	974	974	974	974	974	974	974	974	974	974	974	976	974	974.8
6	975	974	975	975	975	975	975	975	975	975	975	974	974	974	974	973	973	973	974	973	973	973	973	973	975	973	974.0
7	973	973	972	972	972	972	972	972	971	971	971	971	971	971	970	970	970	970	969	969	969	969	969	969	973	969	970.7
8	969	969	969	968	968	968	968	968	968	967	967	967	967	967	967	966	966	966	966	966	966	966	966	966	969	966	967.1
9	966	966	966	966	966	966	966	966	965	965	965	965	965	965	965	966	966	966	966	966	967	967	967	968	968	965	965.8
10	968	968	968	969	969	969	969	970	970	970	970	970	970	970	969	969	969	969	969	969	969	970	970	970	970	968	969.3
11	970	970	970	970	969	969	969	969	969	968	968	968	968	968	967	967	966	965	965	965	964	964	964	964	970	964	967.3
12	963	963	962	961	961	960	960	959	959	958	958	958	957	957	956	956	955	955	955	955	955	955	954	954	963	954	957.9
13	954	954	953	953	952	953	953	953	953	953	953	953	953	953	953	953	953	954	955	955	955	956	956	956	956	952	953.6
14	957	957	957	958	958	958	959	960	960	961	961	962	962	963	963	964	964	965	965	966	966	967	967	968	968	957	962.0
15	968	969	969	970	970	970	971	971	971	971	972	972	972	972	972	972	972	972	972	972	972	972	972	972	972	968	971.2
16	972	972	972	971	971	971	971	971	971	971	971	970	970	970	969	969	968	968	968	967	967	967	967	967	972	967	969.6
17	967	966	966	966	965	964	964	964	963	963	962	962	962	961	961	960	960	960	959	959	959	959	958	958	967	958	962.0
18	958	958	958	957	957	957	957	956	956	957	956	956	956	956	956	956	956	956	956	956	956	957	957	958	958	956	956.8
19	958	958	958	959	959	960	960	960	961	961	961	961	962	961	961	961	961	961	961	961	961	961	962	962	962	958	960.5
20	962	962	961	961	961	961	961	961	960	960	960	960	960	960	959	959	959	958	958	958	958	958	959	959	962	958	959.9
21	958	958	958	958	958	958	958	958	958	958	959	959	959	959	959	959	959	959	959	959	959	960	960	960	960	958	958.8
22	960	960	960	960	960	960	960	960	961	961	960	960	960	960	960	960	960	959	959	959	959	959	959	959	961	959	959.8
23	958	958	958	958	958	958	957	957	957	958	958	957	958	957	957	957	957	956	956	956	956	956	956	956	958	956	957.2
24	955	955	954	954	953	953	952	952	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	950	955	950	951.3
25	951	951	951	951	952	952	952	952	953	953	953	953	953	954	954	953	953	953	952	952	952	953	953	953	954	951	952.4
26	953	953	953	953	954	954	954	954	954	955	955	955	956	956	956	956	956	956	956	956	957	957	957	957	957	953	955.2
27	957	957	958	958	958	958	958	958	958	958	959	959	959	959	960	960	960	960	960	960	960	961	961	961	961	957	959.0
28	962	962	962	962	962	963	963	963	963	964	964	964	965	965	965	965	965	966	966	967	967	968	968	969	969	962	964.5
29	969	970	970	970	971	971	971	971	972	972	972	972	973	973	973	973	972	972	972	972	972	973	973	973	973	969	971.7
30	973	973	973	973	973	973	972	972	972	972	973	972	972	972	971	971	970	969	969	968	968	967	967	966	973	966	971.0
31	966	965	965	964	963	962	960	960	959	959	958	957	957	956	956	956	955	954	954	954	954	953	953	953	966	953	958.0
Max.	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**977**	**976**	**976**	**977**	**977**	**977**	**977**	**977**		
Min.	**951**	**951**	**951**	**951**	**952**	**952**	**952**	**952**	**951**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**		**950**	
Avg.	**965**	**965**	**965**	**965**	**965**	**964**	**964**	**964**	**965**	**965**	**965**	**965**	**965**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**			**964.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	953	953	954	954	954	954	954	955	955	955	956	956	957	957	957	958	958	958	958	959	959	959	960	960	960	953	956.4
2	960	960	960	960	961	961	961	961	961	961	961	962	962	961	961	960	960	959	958	958	957	957	957	957	962	957	959.8
3	957	958	957	957	958	958	959	960	960	961	962	963	964	964	965	966	966	966	967	967	968	969	969	970	970	957	963.0
4	970	971	971	972	972	972	973	973	973	973	973	974	974	974	974	974	974	973	973	973	974	974	974	975	975	970	973.1
5	975	975	975	975	975	975	975	975	975	976	976	977	977	976	976	976	976	976	977	977	977	977	977	977	977	975	976.0
6	977	977	977	977	976	975	975	974	973	973	971	971	970	969	968	967	965	965	963	962	962	961	960	960	977	960	969.5
7	959	959	957	958	958	957	957	957	957	957	958	958	958	959	960	960	960	960	961	962	962	963	964	964	964	957	959.3
8	965	966	966	967	967	967	968	968	968	967	967	967	966	965	964	963	962	961	960	959	959	958	957	957	968	957	963.9
9	956	956	956	956	955	955	955	954	954	954	954	954	954	954	954	954	953	953	953	953	953	952	952	953	956	952	954.1
10	952	952	952	952	952	952	952	952	952	952	952	952	952	952	953	953	953	953	953	953	954	955	956	956	956	952	952.7
11	957	957	958	958	959	960	960	960	960	961	961	962	962	962	962	962	962	962	961	961	961	962	961	961	962	957	960.6
12	961	960	960	960	960	959	959	959	960	960	960	960	960	960	960	960	959	959	959	959	958	958	958	958	961	958	959.4
13	958	958	957	957	958	957	957	957	957	957	957	958	958	958	958	957	957	957	956	955	955	955	955	955	958	955	956.9
14	955	955	955	955	955	955	955	956	956	956	957	957	957	958	958	958	959	959	960	960	961	962	963	964	964	955	957.8
15	964	965	965	965	966	966	966	966	966	966	967	967	967	967	967	967	967	967	967	967	967	967	968	967	968	964	966.6
16	967	967	966	966	965	965	964	964	963	963	962	962	962	961	960	960	960	960	960	960	960	960	960	960	967	960	962.3
17	960	960	960	960	960	959	959	959	959	959	958	958	958	957	957	956	955	955	954	953	952	952	951	950	960	950	956.7
18	949	948	948	947	946	946	946	946	946	946	946	947	947	948	948	948	948	949	950	950	951	951	952	952	952	946	948.2
19	953	953	953	953	954	953	954	954	954	955	955	955	955	955	955	956	956	956	957	957	958	959	959	960	960	953	955.4
20	960	961	961	961	962	962	962	963	963	964	964	965	965	965	965	965	965	966	966	966	967	967	967	968	968	960	964.2
21	968	969	969	969	969	969	970	970	970	971	971	971	972	972	972	972	972	972	972	973	973	973	974	974	974	968	971.1
22	974	974	975	975	975	975	975	975	975	975	975	975	975	975	974	974	974	973	973	973	973	973	973	973	975	973	974.1
23	973	972	972	972	972	972	972	972	972	972	972	972	972	972	971	971	971	971	971	970	970	971	971	971	973	970	971.5
24	970	970	969	969	969	968	968	968	967	967	967	967	967	966	966	966	966	965	965	965	965	965	965	965	970	965	966.9
25	965	965	964	964	964	964	964	964	965	965	965	965	965	966	966	966	966	966	965	965	966	966	966	966	966	964	965.1
26	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	965	965	965	965	965	965	965	965	965	966	965	965.7
27	965	965	965	965	965	965	965	965	966	966	966	966	966	967	967	967	967	967	967	968	968	969	969	969	969	965	966.4
28	969	969	969	969	969	969	969	969	969	968	968	968	968	968	967	966	966	966	965	965	965	965	965	965	969	965	967.4
29	965	965	966	966	966	966	966	966	966	966	966	967	967	967	967	966	965	965	965	965	964	964	963	963	967	963	965.4
30	963	962	962	961	961	961	961	960	960	960	960	960	961	960	960	960	960	960	960	960	961	961	961	961	963	960	960.7
Max.	**977**	**977**	**977**	**977**	**976**	**975**	**975**	**975**	**975**	**976**	**976**	**977**	**977**	**976**	**976**	**976**	**976**	**976**	**977**	**977**	**977**	**977**	**977**	**977**	**977**		
Min.	**949**	**948**	**948**	**947**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**947**	**947**	**948**	**948**	**948**	**948**	**949**	**950**	**950**	**951**	**951**	**951**	**950**		**946**	
Avg.	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**	**963**			**963.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	961	961	961	962	961	961	962	962	962	962	962	962	962	962	961	961	961	960	960	959	959	959	959	959	962	959	960.8
2	958	958	957	957	957	956	956	955	954	954	954	953	953	952	951	950	949	949	948	948	948	948	947	947	958	947	952.6
3	947	946	946	946	946	946	946	946	946	947	948	948	949	950	950	950	951	951	952	952	953	953	953	954	954	946	949.0
4	954	954	954	954	954	954	954	954	954	953	954	954	953	953	953	952	952	952	952	952	952	952	952	953	954	952	953.1
5	952	953	953	953	953	953	953	953	953	953	953	954	954	954	954	954	954	954	955	955	955	955	956	956	956	952	953.7
6	956	957	957	957	957	957	957	957	958	958	958	958	959	958	958	958	958	958	958	958	958	958	958	958	959	956	957.8
7	959	959	958	959	959	959	959	960	960	961	962	962	963	964	964	965	966	967	967	968	969	969	970	970	970	958	963.3
8	971	972	972	973	974	974	974	974	975	976	976	976	976	976	976	975	975	974	974	973	973	972	971	971	976	971	973.9
9	970	968	967	965	965	963	963	961	960	958	958	956	954	952	950	949	948	945	944	943	943	942	942	942	970	942	954.5
10	941	941	941	942	942	942	943	944	945	946	947	948	948	948	948	948	948	949	949	949	949	949	949	949	949	941	946.1
11	949	949	948	948	947	947	947	947	947	949	949	949	950	950	950	951	952	953	954	955	957	958	959	959	959	947	951.0
12	960	961	962	962	962	963	963	964	965	966	967	967	968	969	968	969	969	970	971	971	971	971	971	971	971	960	966.7
13	970	970	969	969	968	967	966	965	964	963	963	962	961	960	959	958	957	957	956	956	957	956	956	956	970	956	961.8
14	955	955	955	954	954	955	955	955	955	955	955	955	955	955	955	955	954	954	954	954	954	954	954	954	955	954	954.7
15	953	954	953	953	954	954	954	954	955	955	955	956	956	956	956	956	957	957	957	957	957	957	958	958	958	953	955.5
16	958	958	958	958	958	958	958	959	959	959	959	960	960	960	960	960	960	960	961	961	961	961	961	961	961	958	959.5
17	961	961	961	961	961	961	961	960	960	960	960	960	960	960	959	959	958	958	957	957	957	957	956	956	961	956	959.2
18	956	955	955	955	954	954	955	954	954	954	954	954	954	954	953	953	952	952	952	951	951	951	950	950	956	950	953.2
19	949	949	948	948	947	947	947	947	947	947	948	948	949	949	949	949	950	950	951	952	952	953	953	954	954	947	949.3
20	954	954	955	955	955	955	955	956	956	957	957	958	958	959	959	959	959	960	960	960	960	961	961	961	961	954	957.7
21	961	961	961	961	962	961	961	961	961	961	961	961	961	961	960	959	958	958	957	956	956	955	954	954	962	954	959.4
22	953	954	954	954	953	952	951	951	950	951	951	950	950	950	949	949	948	947	946	946	945	945	945	944	954	944	949.4
23	944	944	944	944	944	943	944	944	944	945	944	946	946	947	947	948	949	951	951	951	951	952	952	952	952	943	947.1
24	952	952	952	953	955	955	956	959	960	962	964	965	966	968	969	969	970	970	970	971	972	972	973	973	973	952	963.7
25	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	972	972	971	971	971	970	970	969	969	973	969	972.1
26	968	968	967	966	966	965	965	964	965	965	964	965	965	965	965	964	964	966	966	966	967	966	966	965	968	964	965.5
27	966	967	969	968	968	969	970	970	971	971	971	973	973	973	972	973	973	973	973	973	973	973	972	972	973	966	971.1
28	971	970	969	968	967	966	965	964	963	963	962	961	960	959	958	957	956	956	956	956	955	955	955	955	971	955	961.2
29	955	955	955	956	956	956	957	957	958	958	959	959	960	960	960	960	961	961	961	962	962	963	963	963	963	955	959.1
30	964	964	965	965	966	966	966	967	967	967	968	968	969	969	969	969	969	969	969	969	969	968	968	968	969	964	967.4
31	968	967	967	966	966	965	965	964	964	963	963	963	962	962	962	961	961	961	961	961	961	960	960	961	968	960	963.0
Max.	**973**	**973**	**973**	**973**	**974**	**974**	**974**	**974**	**975**	**976**	**976**	**976**	**976**	**976**	**976**	**975**	**975**	**974**	**974**	**973**	**973**	**973**	**973**	**973**	**976**		
Min.	**941**	**941**	**941**	**942**	**942**	**942**	**943**	**944**	**944**	**945**	**944**	**946**	**946**	**947**	**947**	**948**	**948**	**945**	**944**	**943**	**943**	**942**	**942**	**942**		**941**	
Avg.	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**959**	**959**	**959**	**959**	**959**	**959**	**958**	**958**	**959**	**958**	**959**	**958**	**958**	**958**			**958.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	960	959	959	959	957	958	957	957	956	960	956	959.4
2	956	956	955	955	955	955	954	953	952	952	951	951	951	952	951	951	950	951	951	950	950	950	951	951	956	950	952.3
3	951	951	952	952	953	954	954	955	955	955	957	957	958	958	958	959	959	960	960	959	960	959	959	960	960	951	956.4
4	960	960	960	959	959	960	961	961	961	961	961	962	962	962	962	962	962	962	962	962	961	961	961	961	962	959	961.0
5	961	960	960	960	960	959	959	959	959	959	959	958	958	958	958	958	957	957	957	957	957	957	957	957	961	957	958.5
6	957	957	957	957	956	956	956	955	955	955	955	955	955	955	954	954	954	953	953	953	953	953	952	953	957	952	954.8
7	953	954	954	954	955	956	956	957	958	959	959	960	961	961	962	962	963	963	963	964	964	964	965	965	965	953	959.7
8	966	966	966	965	965	965	964	964	964	964	964	964	963	962	961	960	959	958	957	956	955	954	952	951	966	951	961.1
9	950	949	948	947	946	946	945	945	945	945	944	943	943	942	942	941	941	941	941	940	941	941	942	941	950	940	943.7
10	941	940	939	938	937	937	936	934	933	933	933	933	933	933	933	933	933	934	935	935	935	935	936	936	941	933	935.3
11	936	936	936	936	935	935	935	935	935	934	935	935	935	935	935	935	935	935	935	936	937	937	938	938	938	934	935.5
12	939	939	940	941	941	941	942	943	944	945	946	947	948	949	949	950	951	952	952	953	954	954	955	955	955	939	947.1
13	956	956	957	957	958	958	958	958	959	959	959	960	960	960	960	960	961	961	962	962	963	963	963	963	963	956	959.8
14	963	963	963	964	963	963	963	963	963	963	963	963	963	963	963	963	963	964	964	964	965	965	965	966	966	963	963.7
15	966	967	967	968	968	969	969	969	969	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	966	969.3
16	970	969	970	970	970	970	971	971	972	972	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	969	972.0
17	973	973	973	973	973	972	972	972	972	972	972	972	972	972	972	971	971	971	971	971	971	972	972	973	973	971	972.0
18	973	973	974	974	975	975	975	975	975	976	976	977	977	977	978	978	978	978	978	978	978	978	978	979	979	973	976.5
19	978	978	978	978	977	976	975	975	975	974	973	972	972	971	970	970	970	969	968	968	968	968	967	966	978	966	972.4
20	966	965	964	965	963	963	960	961	960	959	959	961	960	959	959	957	958	957	958	958	957	957	956	957	966	956	960.0
21	956	955	955	955	955	954	954	953	952	952	952	951	950	949	948	947	946	945	945	944	944	943	943	943	956	943	949.6
22	942	942	943	943	943	943	943	944	944	945	946	946	947	947	948	948	949	949	950	950	950	951	951	951	951	942	946.5
23	951	951	951	951	951	951	950	949	949	948	947	946	945	944	943	941	941	940	938	937	936	935	934	933	951	933	944.4
24	932	932	930	929	929	929	929	928	928	929	930	930	931	931	931	932	933	933	934	935	935	936	937	939	939	928	931.7
25	940	940	941	942	942	942	943	943	943	943	944	945	945	945	945	946	947	948	949	950	950	950	951	952	952	940	945.1
26	952	953	953	955	956	956	956	957	957	958	958	959	958	959	958	958	958	958	957	956	956	955	955	954	959	952	956.4
27	953	953	952	950	950	948	947	947	946	945	944	943	943	941	940	940	939	938	938	938	937	937	937	936	953	936	943.4
28	937	936	936	936	936	936	936	936	937	938	938	939	939	940	940	940	941	941	942	942	943	944	945	946	946	936	939.3
29	947	947	948	949	950	951	951	952	953	954	955	956	957	957	958	959	959	960	961	962	962	964	964	966	966	947	955.9
30	967	967	967	968	968	969	970	970	970	970	971	972	971	974	974	973	975	974	975	976	977	977	977	978	978	967	972.1
Max.	**978**	**978**	**978**	**978**	**977**	**976**	**975**	**975**	**975**	**976**	**976**	**977**	**977**	**977**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**979**	**979**		
Min.	**932**	**932**	**930**	**929**	**929**	**929**	**929**	**928**	**928**	**929**	**930**	**930**	**931**	**931**	**931**	**932**	**933**	**933**	**934**	**935**	**935**	**935**	**934**	**933**		**928**	
Avg.	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**955**	**956**			**955.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Barometric Pressure (mbar)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	978	979	979	979	979	979	979	979	979	979	980	980	980	981	980	981	980	980	980	980	980	980	980	980	981	978	979.5
2	979	979	979	978	977	976	976	975	975	975	974	974	973	973	973	972	972	972	972	972	972	971	971	971	979	971	974.3
3	971	970	969	969	968	967	966	965	965	963	961	961	959	956	953	953	953	951	953	952	951	951	951	951	971	951	959.5
4	951	952	952	952	952	952	952	951	952	952	953	953	952	953	953	952	952	953	953	954	954	954	955	955	955	951	952.7
5	955	955	955	955	955	955	955	955	954	954	954	954	954	954	954	953	953	953	953	953	953	953	953	954	955	953	954.0
6	954	954	954	954	955	954	954	955	955	955	956	957	957	958	958	958	958	959	959	960	960	960	961	961	961	954	956.9
7	962	962	963	963	963	963	964	964	964	965	965	965	965	965	965	965	964	964	964	964	963	963	962	961	965	961	963.7
8	959	958	956	954	952	951	949	947	945	943	942	940	938	936	934	933	931	931	930	929	928	928	927	926	959	926	940.3
9	926	926	925	925	925	926	926	926	926	927	928	929	929	930	931	932	933	934	936	937	938	939	941	942	942	925	930.7
10	944	945	947	948	949	951	953	954	955	957	959	961	963	964	965	966	967	968	969	970	971	972	973	974	974	944	960.2
11	975	976	977	977	978	978	979	979	980	980	981	982	983	983	984	985	985	986	987	988	989	990	990	991	991	975	982.6
12	991	992	993	992	992	992	992	992	991	992	992	992	992	991	991	991	990	991	991	991	991	992	992	993	993	990	991.6
13	994	994	994	994	994	995	994	994	993	993	994	994	994	994	994	994	994	993	993	993	992	992	992	992	995	992	993.6
14	992	992	992	991	990	990	989	989	989	989	990	990	989	988	987	987	987	987	987	986	986	986	987	987	992	986	988.6
15	987	986	987	986	987	987	987	987	988	988	988	989	989	988	988	988	988	988	989	988	988	988	988	987	989	986	987.7
16	987	987	986	986	986	986	985	984	984	984	983	983	983	982	982	981	980	980	980	979	979	978	978	978	987	978	982.6
17	977	978	978	977	977	977	976	976	977	976	976	976	977	977	977	976	976	975	975	976	976	976	976	975	978	975	976.4
18	975	975	975	974	973	973	973	972	971	971	972	972	971	971	970	969	968	969	968	968	968	968	968	968	975	968	970.9
19	967	968	967	966	967	966	966	965	966	966	967	967	967	967	967	966	967	966	967	966	967	966	967	967	968	965	966.6
20	967	967	968	968	968	968	968	969	969	970	970	971	971	971	971	971	972	972	972	972	972	973	973	973	973	967	970.3
21	973	973	973	972	972	972	972	972	972	971	972	971	972	971	971	971	970	970	970	970	969	969	968	968	973	968	971.0
22	968	967	967	966	965	964	963	962	962	962	962	963	962	962	961	961	960	959	958	956	956	955	954	952	968	952	961.1
23	950	948	946	945	943	943	944	945	947	948	950	952	952	953	953	954	954	955	956	956	956	956	958	959	959	943	951.0
24	959	961	961	962	964	965	966	967	967	968	969	969	969	968	968	969	968	968	967	966	965	964	962	961	969	959	965.5
25	959	958	957	954	952	951	949	947	946	946	945	944	943	943	943	943	943	942	944	945	945	947	947	949	959	942	947.5
26	949	949	950	952	952	952	952	951	952	952	953	953	953	953	952	952	951	950	950	950	950	949	949	950	953	949	951.1
27	948	949	946	946	946	947	948	947	947	948	947	949	948	951	951	951	953	953	952	952	952	954	956	957	957	946	949.9
28	956	957	957	958	957	958	958	957	957	959	959	959	959	960	960	959	959	959	959	960	960	961	960	961	961	956	958.6
29	961	961	962	961	961	961	961	961	961	961	962	962	962	963	962	963	963	963	964	964	964	965	965	966	966	961	962.5
30	966	967	967	967	967	968	968	968	968	968	968	969	969	969	969	968	969	968	968	968	968	968	968	968	969	966	968.0
31	968	968	968	968	968	968	968	968	968	968	968	968	968	969	969	969	969	970	970	970	970	970	970	970	970	968	968.8
Max.	**994**	**994**	**994**	**994**	**994**	**995**	**994**	**994**	**993**	**993**	**994**	**994**	**994**	**994**	**994**	**994**	**994**	**993**	**993**	**993**	**992**	**992**	**992**	**993**	**995**		
Min.	**926**	**926**	**925**	**925**	**925**	**926**	**926**	**926**	**926**	**927**	**928**	**929**	**929**	**930**	**931**	**932**	**931**	**931**	**930**	**929**	**928**	**928**	**927**	**926**		**925**	
Avg.	**966**	**966**	**966**	**966**	**966**	**966**	**965**	**965**	**965**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**966**	**965**	**966**	**966**	**966**	**966**	**966**	**966**			**965.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.3	12.9	13.2	13.6	13.3	13.1	11.6	9.8	11.5	11.9	10.9	10.9	11.8	12.4	13.5	13.6	14.0	12.8	10.2	11.1	11.6	10.9	8.8	10.0	14.0	8.8	11.9
2	7.6	7.8	8.7	8.6	9.2	9.1	8.8	8.8	8.4	7.9	7.5	7.0	4.9	5.2	6.0	4.9	6.1	6.2	5.6	4.6	5.0	3.2	3.0	2.6	9.2	2.6	6.5
3	4.2	4.1	4.6	3.6	1.6	1.9	4.1	4.4	3.5	4.4	4.4	5.1	5.6	4.6	3.9	4.9	5.9	4.8	4.7	4.8	4.7	4.9	5.5	3.6	5.9	1.6	4.3
4	4.1	4.7	2.9	4.6	4.7	4.9	5.3	5.6	6.8	5.9	5.7	6.9	8.0	7.4	8.5	6.8	7.0	10.0	11.5	13.4	13.7	13.8	14.5	16.1	16.1	2.9	8.0
5	13.7	12.8	13.3	13.9	12.4	14.7	16.5	16.7	11.0	17.5	20.8	21.0	20.9	19.6	21.7	25.2	22.9	22.2	22.2	23.5	22.4	22.2	24.9	26.4	26.4	11.0	19.1
6	25.0	23.2	23.1	22.1	23.5	19.4	21.3	21.1	21.2	20.4	18.8	18.4	16.5	12.9	13.2	14.7	14.7	16.6	14.2	13.3	12.1	8.3	10.0	9.3	25.0	8.3	17.2
7	7.6	7.6	6.3	6.4	7.6	8.2	7.8	9.9	10.5	11.5	10.4	10.6	10.8	9.7	10.1	10.8	10.2	7.9	13.7	13.4	9.1	7.0	6.0	5.7	13.7	5.7	9.1
8	7.7	8.6	7.9	7.1	8.6	8.6	6.4	9.1	8.9	8.5	9.2	8.3	9.1	9.4	10.6	11.1	9.5	10.1	9.1	7.4	8.9	8.4	10.2	10.3	11.1	6.4	8.9
9	10.2	9.0	10.0	10.9	10.6	10.7	10.0	12.0	12.7	14.4	13.1	12.3	14.6	17.2	15.3	16.3	15.2	15.0	13.5	12.2	9.1	11.5	10.4	12.0	17.2	9.0	12.4
10	12.3	10.4	13.0	11.9	11.4	13.5	10.5	9.3	13.4	17.5	16.0	16.9	18.6	18.2	18.1	15.4	14.0	14.0	11.5	11.0	7.3	8.8	6.0	8.1	18.6	6.0	12.8
11	14.3	16.8	14.3	13.2	7.7	9.6	8.6	16.2	19.9	17.2	12.5	9.9	5.8	9.1	9.8	10.3	13.6	14.8	13.6	10.7	10.4	10.1	10.6	8.8	19.9	5.8	12.0
12	9.5	9.4	8.9	9.6	8.9	9.3	10.7	10.6	10.7	11.1	12.3	12.5	13.1	13.5	14.9	15.8	15.7	15.8	19.3	20.5	24.7	19.4	24.7	22.8	24.7	8.9	14.3
13	23.7	22.1	18.5	19.2	12.3	20.1	27.5	24.0	21.6	23.7	13.6	12.2	12.4	14.7	14.8	14.8	13.5	17.3	14.6	16.5	12.6	6.6	7.2	8.0	27.5	6.6	16.3
14	8.8	7.4	5.6	2.5	5.2	4.3	4.8	3.0	5.7	8.2	12.9	13.8	12.5	15.6	16.5	15.4	16.6	15.6	16.0	15.5	13.0	13.0	11.7	11.9	16.6	2.5	10.6
15	14.9	19.3	21.7	18.0	15.1	14.9	12.0	13.5	15.9	13.7	11.3	12.9	10.5	12.3	13.0	12.0	12.1	11.5	10.9	8.2	6.2	4.6	8.2	6.8	21.7	4.6	12.5
16	5.7	3.0	1.5	1.0	1.7	2.2	2.6	1.1	3.1	2.4	2.6	3.5	2.9	2.6	3.7	2.5	2.8	3.8	3.3	3.0	3.1	3.4	4.9	7.2	7.2	1.0	3.1
17	6.5	6.7	9.0	12.0	11.6	11.2	10.8	9.8	10.5	10.7	11.3	14.5	18.3	16.0	13.9	11.4	11.6	11.8	9.1	5.3	6.1	6.5	8.1	8.3	18.3	5.3	10.5
18	5.4	5.5	4.7	4.4	5.0	5.5	5.2	4.4	4.0	3.4	2.5	2.1	2.2	1.7	1.4	1.2	0.3	0.2	0.2	1.5	3.2	3.9	4.5	4.0	5.5	0.2	3.2
19	4.0	3.2	4.8	7.1	7.4	10.5	14.2	12.6	13.8	13.2	17.1	22.4	20.8	23.7	24.4	26.9	26.5	23.4	27.0	26.1	27.2	25.5	22.4	20.5	27.2	3.2	17.7
20	19.3	16.4	11.8	11.3	12.4	9.1	8.3	8.1	7.7	5.3	6.8	8.5	8.2	8.3	7.4	5.9	3.9	1.9	0.8	0.2	0.2	0.2	0.2	0.2	19.3	0.2	6.8
21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	10.4	17.6	19.0	18.6	18.1	17.4	18.3	22.7	22.4	20.9	20.6	18.4	22.7	0.2	9.5
22	20.1	14.4	19.2	15.6	14.2	15.3	14.5	16.5	12.9	13.5	17.3	19.4	17.7	16.1	17.7	13.1	11.0	8.4	5.8	4.1	2.0	1.8	3.1	5.8	20.1	1.8	12.5
23	8.3	9.3	13.5	14.4	16.2	17.9	18.6	14.8	18.4	17.6	12.3	12.9	11.1	10.1	12.4	14.5	14.6	15.3	19.7	7.0	4.3	7.8	9.5	10.5	19.7	4.3	13.0
24	8.0	5.4	3.6	4.9	3.8	2.6	2.2	5.6	10.3	12.4	13.5	12.9	13.0	12.8	14.7	15.0	12.1	11.1	10.7	10.2	10.6	10.5	9.7	8.2	15.0	2.2	9.3
25	7.6	3.6	0.2	0.2	2.2	7.4	8.5	7.1	7.2	11.8	12.1	13.7	13.8	13.1	12.4	13.5	14.5	15.5	16.8	16.3	14.3	15.2	14.7	15.1	16.8	0.2	10.7
26	15.6	15.6	17.0	16.8	17.2	19.6	19.0	20.0	20.2	16.6	10.3	9.9	6.5	3.6	4.2	4.7	2.6	1.7	1.4	1.0	2.4	4.2	4.8	5.3	20.2	1.0	10.0
27	7.1	7.5	7.6	8.0	7.4	7.6	6.4	5.6	11.7	16.5	19.8	19.0	19.6	20.2	20.7	22.0	21.8	20.9	21.4	21.3	22.2	21.1	18.3	17.0	22.2	5.6	15.4
28	18.3	16.3	13.5	11.0	9.2	9.4	9.3	10.4	10.9	11.9	9.4	8.7	7.6	5.6	4.5	3.2	1.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	18.3	0.2	6.7
29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
30	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	11.4	15.7	16.5	16.4	15.0	16.7	18.7	18.2	17.8	15.8	12.3	18.7	0.2	7.4
31	13.9	14.0	13.3	10.9	9.7	7.7	5.3	4.6	5.6	5.5	2.3	3.0	3.2	1.6	1.2	1.3	1.4	0.9	0.6	0.9	0.7	0.9	0.8	1.3	14.0	0.6	4.6
Max.	**25.0**	**23.2**	**23.1**	**22.1**	**23.5**	**20.1**	**27.5**	**24.0**	**21.6**	**23.7**	**20.8**	**22.4**	**20.9**	**23.7**	**24.4**	**26.9**	**26.5**	**23.4**	**27.0**	**26.1**	**27.2**	**25.5**	**24.9**	**26.4**	**27.5**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**10.2**	**9.6**	**9.4**	**9.1**	**8.7**	**9.3**	**9.4**	**9.5**	**10.3**	**10.8**	**10.2**	**10.6**	**10.7**	**11.2**	**11.7**	**11.7**	**11.3**	**11.0**	**11.1**	**10.5**	**10.0**	**9.4**	**9.7**	**9.6**			**10.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.4	1.8	1.3	0.8	0.3	0.7	0.6	0.4	0.2	0.3	0.4	0.5	0.5	0.4	0.5	1.0	0.9	0.8	0.9	1.1	1.2	1.4	1.7	1.7	1.8	0.2	0.9
2	2.4	3.0	3.3	3.8	3.5	4.3	4.9	6.7	8.3	8.4	10.0	7.5	12.5	14.7	12.7	14.8	15.1	14.5	16.4	15.4	13.9	14.9	17.7	16.2	17.7	2.4	10.2
3	17.9	16.5	18.5	18.8	18.5	18.4	18.0	15.9	5.2	12.7	18.2	15.6	9.4	8.3	11.4	11.5	10.6	10.8	8.1	9.0	8.4	8.3	9.1	8.2	18.8	5.2	12.8
4	8.0	7.5	6.9	7.2	5.9	6.6	6.1	6.3	6.5	6.3	6.3	5.4	4.8	5.0	5.8	6.3	6.9	9.9	12.1	12.1	12.9	12.6	12.4	12.0	12.9	4.8	8.0
5	11.6	11.5	11.1	10.7	12.3	11.7	13.6	11.5	13.5	8.6	9.6	5.8	9.2	9.3	8.2	8.7	9.6	10.5	10.8	9.6	8.3	7.4	8.3	8.5	13.6	5.8	10.0
6	9.0	6.9	6.1	6.6	6.1	6.0	6.1	6.1	7.8	8.2	8.1	8.4	11.1	11.5	9.8	10.6	9.6	10.4	12.0	13.1	10.3	8.2	10.6	11.3	13.1	6.0	8.9
7	10.3	8.9	9.5	11.2	11.0	9.6	10.2	9.1	9.5	7.4	7.3	5.1	5.4	4.4	3.0	3.2	3.5	4.5	4.8	4.2	5.5	7.4	6.2	7.5	11.2	3.0	7.0
8	10.3	6.1	4.9	5.2	2.8	1.0	3.1	3.5	3.1	3.4	3.8	7.2	7.2	10.5	11.0	9.8	11.1	9.8	6.2	7.1	6.8	10.5	12.1	11.8	12.1	1.0	7.0
9	11.3	11.8	14.2	16.9	14.6	12.9	13.0	12.6	13.6	13.8	9.7	7.4	3.5	2.1	3.5	3.9	4.1	4.8	6.8	7.0	7.8	7.5	7.8	8.6	16.9	2.1	9.1
10	8.2	9.1	9.6	9.5	10.2	9.3	9.7	7.7	6.9	6.7	4.9	3.0	3.5	5.2	5.0	4.3	4.8	3.9	3.6	3.7	5.3	5.2	4.6	4.5	10.2	3.0	6.2
11	3.3	2.5	3.8	4.8	5.5	4.3	2.6	1.5	1.5	1.8	1.5	1.5	1.3	2.4	1.4	1.6	1.3	1.0	1.4	1.2	1.2	1.7	2.2	2.7	5.5	1.0	2.2
12	2.7	3.3	4.5	3.2	2.4	2.1	2.9	4.0	4.4	6.2	6.2	5.3	6.8	5.3	2.8	0.6	1.8	4.9	4.8	7.3	6.5	6.6	5.5	4.4	7.3	0.6	4.4
13	10.8	13.2	8.6	11.0	15.4	15.4	17.9	14.9	17.4	16.9	19.0	18.7	17.3	17.3	18.7	20.1	20.0	21.5	17.9	16.6	18.1	17.4	18.1	18.0	21.5	8.6	16.7
14	15.6	14.3	15.1	17.4	15.8	13.9	11.8	9.9	13.7	14.3	13.4	15.3	11.7	11.4	10.4	10.0	9.1	10.3	10.2	9.4	8.2	6.7	4.6	4.8	17.4	4.6	11.5
15	6.4	7.3	7.3	5.4	6.0	4.5	2.8	5.0	5.4	2.2	0.2	0.4	5.4	4.2	4.9	4.0	1.9	3.2	4.6	8.3	3.0	3.1	6.8	12.4	12.4	0.2	4.8
16	16.6	17.8	14.8	12.9	15.5	14.3	12.9	12.5	13.7	12.3	14.6	15.1	13.3	11.8	9.0	8.6	8.6	7.8	6.7	6.3	5.3	6.1	5.1	2.3	17.8	2.3	11.0
17	1.4	2.4	6.1	3.7	5.2	12.1	13.4	10.8	10.4	10.2	11.6	11.4	12.9	12.4	12.3	11.7	8.3	18.8	21.4	18.6	16.6	16.1	17.2	15.3	21.4	1.4	11.7
18	18.4	20.1	17.9	16.4	18.0	23.4	23.8	22.4	23.2	20.0	18.2	16.3	15.7	16.1	14.4	14.2	14.0	13.0	11.4	10.7	10.7	7.5	8.3	8.6	23.8	7.5	15.9
19	6.1	8.4	7.4	5.6	9.2	14.1	14.3	15.5	12.6	11.5	13.3	13.3	13.7	12.9	13.3	11.7	10.0	9.0	9.3	8.5	7.5	8.3	7.1	8.9	15.5	5.6	10.5
20	12.7	15.6	20.0	16.5	15.1	16.8	16.4	18.8	16.7	14.3	13.2	11.2	9.1	9.1	10.9	7.3	6.1	8.2	8.6	10.7	15.1	14.8	15.4	14.1	20.0	6.1	13.2
21	12.4	11.3	14.0	14.9	15.6	16.4	16.9	15.6	17.5	16.2	15.3	16.0	13.2	10.2	8.1	7.6	9.0	4.2	1.4	1.6	1.8	2.0	2.8	3.0	17.5	1.4	10.3
22	3.3	2.6	2.4	1.9	1.9	2.3	2.4	2.2	2.3	1.8	1.9	2.2	2.3	6.2	10.4	10.7	5.5	9.1	9.1	7.6	6.5	6.6	5.8	5.1	10.7	1.8	4.7
23	4.8	4.9	3.1	1.2	1.4	1.1	1.4	2.2	1.6	3.0	4.1	2.3	2.4	2.9	4.2	3.7	3.9	3.4	6.7	6.6	8.2	7.9	8.2	10.4	10.4	1.1	4.2
24	11.6	12.3	13.5	14.2	13.4	13.5	15.0	11.7	12.0	12.3	11.1	10.4	11.7	10.3	10.5	9.3	9.0	10.0	10.6	10.9	12.0	12.1	11.0	14.0	15.0	9.0	11.8
25	13.5	14.0	15.2	17.6	18.8	15.9	15.7	14.1	11.1	8.8	6.8	5.3	5.1	8.7	8.7	6.6	5.1	8.2	9.3	9.5	9.7	10.3	11.3	10.3	18.8	5.1	10.8
26	9.9	9.1	7.6	7.3	5.3	5.3	6.1	6.2	6.3	6.3	9.6	10.1	9.9	10.5	10.1	9.7	10.8	9.4	9.9	10.0	10.1	9.0	7.0	7.9	10.8	5.3	8.5
27	9.0	10.8	9.2	8.8	8.4	7.2	5.1	5.7	5.1	4.8	5.5	4.8	2.7	2.2	3.9	2.5	3.3	4.0	2.8	9.6	10.7	10.1	11.9	11.0	11.9	2.2	6.6
28	10.0	11.2	11.8	12.9	13.1	12.3	12.4	11.6	10.3	8.3	8.2	8.3	8.5	7.6	5.3	3.8	4.5	4.5	6.2	6.6	7.0	7.7	8.0	7.2	13.1	3.8	8.6
29	7.4	8.5	8.6	9.4	8.3	8.2	8.1	9.2	8.5	9.2	9.5	7.8	7.5	8.1	7.5	8.4	8.2	6.9	6.7	6.8	6.0	6.8	6.1	6.5	9.5	6.0	7.8
Max.	**18.4**	**20.1**	**20.0**	**18.8**	**18.8**	**23.4**	**23.8**	**22.4**	**23.2**	**20.0**	**19.0**	**18.7**	**17.3**	**17.3**	**18.7**	**20.1**	**20.0**	**21.5**	**21.4**	**18.6**	**18.1**	**17.4**	**18.1**	**18.0**	**23.8**		
Min.	**1.4**	**1.8**	**1.3**	**0.8**	**0.3**	**0.7**	**0.6**	**0.4**	**0.2**	**0.3**	**0.2**	**0.4**	**0.5**	**0.4**	**0.5**	**0.6**	**0.9**	**0.8**	**0.9**	**1.1**	**1.2**	**1.4**	**1.7**	**1.7**		**0.2**	
Avg.	**9.2**	**9.4**	**9.5**	**9.5**	**9.7**	**9.8**	**9.9**	**9.4**	**9.3**	**8.8**	**9.0**	**8.3**	**8.2**	**8.3**	**8.2**	**7.8**	**7.5**	**8.2**	**8.3**	**8.6**	**8.4**	**8.4**	**8.7**	**8.9**			**8.8**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.7	7.1	6.1	3.6	3.8	4.0	3.6	2.7	2.0	2.2	1.5	1.5	8.7	11.1	12.3	13.2	12.7	9.4	8.9	10.5	13.3	12.6	12.7	13.4	13.4	1.5	7.6
2	13.5	11.8	14.0	13.8	12.7	13.6	15.9	14.6	12.0	10.6	8.5	7.1	7.6	8.3	7.3	6.7	4.7	3.2	3.2	2.4	5.3	5.8	6.0	5.2	15.9	2.4	8.9
3	3.3	4.2	5.6	5.6	8.4	11.8	13.1	16.6	18.1	18.4	20.4	23.8	24.3	22.1	21.8	22.5	22.4	21.1	19.0	17.0	15.7	16.4	14.7	16.8	24.3	3.3	16.0
4	16.4	15.5	16.9	15.1	13.1	16.0	16.9	17.4	17.1	18.5	19.3	21.3	22.5	23.0	22.5	22.5	21.4	21.8	20.7	18.2	17.8	16.9	13.8	12.6	23.0	12.6	18.2
5	14.2	12.9	15.4	17.2	16.6	19.4	17.5	14.1	14.1	14.3	19.2	17.8	17.5	16.9	18.1	21.3	21.6	22.7	17.0	20.7	22.1	19.7	18.8	17.8	22.7	12.9	17.8
6	17.8	16.7	17.1	15.5	14.0	14.9	14.9	12.9	11.8	11.0	10.1	7.8	6.7	10.9	10.9	12.4	10.6	11.5	9.2	8.0	6.9	10.3	13.0	12.4	17.8	6.7	12.0
7	11.7	8.6	8.6	6.2	5.7	2.9	6.3	1.8	2.7	2.8	3.7	3.9	3.4	3.4	2.2	2.4	4.8	4.6	3.8	5.9	5.9	7.2	7.5	7.3	11.7	1.8	5.1
8	6.8	5.7	8.2	4.8	4.6	4.7	5.0	6.0	5.6	5.3	8.6	9.4	9.2	8.1	9.7	9.9	13.4	13.4	11.5	13.9	15.5	17.1	17.6	18.2	18.2	4.6	9.7
9	16.9	15.0	14.1	13.3	11.3	11.0	10.1	11.6	9.8	9.4	8.1	6.1	4.7	4.5	5.2	3.9	4.4	4.1	4.7	4.3	3.9	5.0	4.4	3.4	16.9	3.4	7.9
10	1.2	3.1	2.4	3.4	7.6	7.2	5.5	4.8	4.8	3.9	4.5	3.3	3.0	4.1	4.8	5.1	3.9	4.2	3.3	2.9	5.4	4.5	3.3	2.8	7.6	1.2	4.1
11	4.5	5.7	5.1	4.4	3.5	4.3	3.3	3.5	2.5	1.3	3.9	3.9	4.1	3.0	3.1	5.3	4.1	2.9	3.8	4.3	4.9	4.3	3.0	3.3	5.7	1.3	3.8
12	3.3	2.9	3.5	3.5	3.6	5.3	4.2	4.7	3.6	2.4	2.0	1.9	1.6	2.3	3.0	3.6	4.1	4.3	4.7	4.5	5.1	4.2	3.5	3.7	5.3	1.6	3.6
13	4.7	5.0	5.0	5.2	5.2	5.2	5.4	5.2	4.8	4.3	4.1	3.4	3.3	1.9	3.0	2.4	2.3	2.9	2.4	2.5	3.9	3.2	4.1	3.8	5.4	1.9	3.9
14	3.0	2.7	2.1	1.4	1.7	1.2	1.0	0.9	0.8	0.9	0.9	0.5	0.7	0.7	0.5	0.4	0.8	5.0	8.1	8.2	9.0	8.6	8.9	8.6	9.0	0.4	3.2
15	12.5	15.9	16.9	15.6	15.5	13.4	16.0	17.4	17.9	14.8	12.1	14.5	15.7	14.2	13.8	13.3	13.1	14.4	15.0	13.9	14.2	12.3	11.3	10.2	17.9	10.2	14.3
16	9.7	9.5	10.9	7.7	7.3	7.3	6.1	5.4	3.8	2.6	4.2	2.0	0.9	1.1	0.9	1.2	0.8	0.9	2.0	1.6	3.0	7.1	7.0	6.9	10.9	0.8	4.6
17	6.4	6.1	5.2	5.0	3.6	3.9	2.7	4.0	4.4	2.8	2.1	1.7	1.4	0.5	1.1	0.9	0.8	9.5	12.7	12.1	11.1	12.4	11.8	8.4	12.7	0.5	5.4
18	5.4	3.5	2.6	5.3	7.5	8.7	7.2	8.2	9.5	10.4	10.0	9.1	9.3	10.0	8.3	9.1	10.6	9.9	9.7	8.3	15.2	16.8	17.2	18.3	18.3	2.6	9.6
19	19.2	15.8	16.7	16.0	16.2	17.7	17.8	17.0	18.4	18.6	17.6	15.0	14.5	16.0	15.8	14.7	14.3	13.0	11.4	9.9	11.4	11.4	10.0	10.1	19.2	9.9	14.9
20	9.9	9.8	9.2	7.5	6.0	6.1	5.9	5.7	5.1	4.3	3.3	2.5	1.2	1.1	0.8	1.2	1.3	3.0	4.8	5.7	5.6	6.6	7.5	8.1	9.9	0.8	5.1
21	5.5	4.9	5.4	4.9	4.2	2.7	2.0	1.5	2.7	4.1	3.0	1.9	3.2	4.5	4.6	10.5	11.7	11.1	11.2	14.8	15.3	15.7	13.8	13.4	15.7	1.5	7.2
22	12.8	12.9	11.7	11.7	12.3	12.8	15.2	15.8	14.2	15.4	15.7	15.8	14.7	12.3	11.3	10.7	9.9	10.5	10.4	9.7	8.4	6.0	4.1	1.9	15.8	1.9	11.5
23	2.9	4.6	3.7	5.4	3.5	2.7	6.3	6.9	6.1	6.4	6.1	6.2	6.3	7.0	8.7	9.4	8.1	7.7	7.6	9.1	10.7	11.7	11.1	9.9	11.7	2.7	7.0
24	9.1	9.3	7.7	7.0	6.2	5.6	4.2	3.4	3.4	4.3	3.8	5.5	5.6	5.4	5.3	5.0	1.4	1.3	1.4	4.7	4.5	3.8	3.3	1.8	9.3	1.3	4.7
25	1.0	1.9	2.2	3.2	2.1	1.4	0.9	0.8	1.2	1.2	1.6	2.2	1.4	1.9	4.3	3.8	5.0	3.8	3.0	4.0	5.7	7.0	8.1	8.0	8.1	0.8	3.2
26	4.5	3.0	3.9	3.9	4.7	5.9	5.3	5.6	6.0	5.7	5.3	4.2	2.7	3.0	2.7	3.8	4.7	3.3	2.8	2.9	3.4	2.8	2.6	3.8	6.0	2.6	4.0
27	4.7	2.2	1.9	1.9	1.9	1.4	1.4	1.4	1.7	3.1	3.5	2.7	3.1	3.2	2.8	4.1	5.8	5.8	5.1	7.1	7.0	6.3	8.0	7.9	8.0	1.4	3.9
28	9.1	8.2	8.3	6.7	6.1	5.7	5.6	5.2	4.0	3.5	2.4	1.1	1.0	1.0	1.4	2.8	2.5	2.4	2.0	1.7	1.1	1.6	1.0	2.3	9.1	1.0	3.6
29	2.7	1.7	2.7	4.1	3.7	2.4	3.2	3.7	6.0	6.6	8.9	9.9	12.1	14.3	15.0	14.8	16.3	17.6	17.4	17.9	18.7	20.3	20.6	20.1	20.6	1.7	10.9
30	20.7	22.6	22.3	22.1	21.9	22.5	22.6	22.6	21.3	21.7	21.3	21.4	21.1	20.7	19.3	17.8	17.3	17.3	15.8	15.1	17.9	14.8	12.5	12.3	22.6	12.3	19.4
31	11.1	9.3	9.6	10.3	10.5	12.2	9.9	13.1	13.4	12.4	13.6	12.9	13.3	15.1	15.3	14.7	15.8	15.9	16.6	16.2	20.2	19.4	17.8	18.3	20.2	9.3	14.0
Max.	**20.7**	**22.6**	**22.3**	**22.1**	**21.9**	**22.5**	**22.6**	**22.6**	**21.3**	**21.7**	**21.3**	**23.8**	**24.3**	**23.0**	**22.5**	**22.5**	**22.4**	**22.7**	**20.7**	**20.7**	**22.1**	**20.3**	**20.6**	**20.1**	**24.3**		
Min.	**1.0**	**1.7**	**1.9**	**1.4**	**1.7**	**1.2**	**0.9**	**0.8**	**0.8**	**0.9**	**0.9**	**0.5**	**0.7**	**0.5**	**0.5**	**0.4**	**0.8**	**0.9**	**1.4**	**1.6**	**1.1**	**1.6**	**1.0**	**1.8**		**0.4**	
Avg.	**8.7**	**8.3**	**8.6**	**8.1**	**7.9**	**8.2**	**8.2**	**8.2**	**8.0**	**7.8**	**8.0**	**7.7**	**7.9**	**8.1**	**8.3**	**8.7**	**8.7**	**9.0**	**8.7**	**9.0**	**9.9**	**10.1**	**9.6**	**9.4**			**8.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	19.6	19.4	16.9	16.3	14.8	13.5	11.1	13.4	13.1	10.6	10.1	9.0	9.1	8.0	12.5	11.7	11.3	9.2	7.7	4.6	3.6	3.1	1.4	0.2	19.6	0.2	10.4
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	7.7	13.0	13.8	13.9	14.4	17.0	17.2	17.5	16.4	16.1	17.5	0.2	6.3
4	16.9	20.1	19.5	18.9	20.1	20.1	21.0	20.4	17.6	15.7	15.3	12.6	11.7	11.2	11.1	9.4	9.3	8.1	7.0	8.5	8.1	10.5	10.1	8.6	21.0	7.0	13.8
5	6.2	2.2	0.7	5.4	5.5	5.3	3.7	2.1	2.9	2.6	2.4	2.2	2.8	3.3	3.4	5.6	5.0	6.8	6.3	10.4	9.6	10.7	10.3	11.3	11.3	0.7	5.3
6	12.6	12.2	9.7	9.5	9.9	10.6	10.9	8.8	8.3	7.7	9.3	8.5	11.8	13.1	7.9	8.2	9.8	6.9	7.3	11.3	15.1	15.1	15.9	14.7	15.9	6.9	10.6
7	13.4	12.5	12.7	13.1	13.8	13.7	12.1	11.6	12.2	8.1	5.8	8.5	9.1	7.8	6.4	7.4	4.8	5.2	4.8	5.5	6.2	4.9	4.7	3.8	13.8	3.8	8.7
8	5.5	3.2	3.9	3.2	3.2	2.9	2.5	1.6	0.8	1.6	1.3	1.0	0.9	1.9	1.5	0.9	1.1	1.6	1.9	1.7	3.1	2.7	5.9	6.5	6.5	0.8	2.5
9	10.2	11.1	10.9	10.6	10.1	9.8	9.0	10.7	11.8	10.3	8.7	4.9	3.2	6.4	6.1	7.3	8.4	8.7	7.9	6.6	8.1	7.2	9.1	9.7	11.8	3.2	8.6
10	8.3	8.3	7.0	8.5	9.3	10.6	10.4	9.9	10.0	9.0	7.0	5.7	7.0	6.7	5.9	5.6	5.1	5.9	6.2	7.1	7.9	8.8	8.4	7.9	10.6	5.1	7.8
11	7.2	7.1	7.3	7.3	7.7	7.4	9.5	10.4	8.7	8.5	8.1	8.8	8.9	8.5	7.3	7.3	7.7	6.6	6.3	6.7	7.2	7.3	8.2	6.7	10.4	6.3	7.8
12	6.5	5.5	6.6	6.8	5.6	5.4	6.8	4.6	5.8	3.2	2.8	6.9	7.4	8.4	7.9	10.2	11.0	11.0	11.0	7.4	4.2	3.4	2.7	2.5	11.0	2.5	6.4
13	1.5	1.4	2.3	2.6	2.8	2.3	2.0	3.8	4.6	5.6	6.3	6.7	8.0	5.2	8.3	8.9	6.4	6.5	5.3	3.5	0.7	0.2	0.2	0.2	8.9	0.2	4.0
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.2	0.3
16	0.5	18.1	27.3	28.0	26.9	22.6	19.4	18.0	6.6	7.3	11.8	8.8	10.4	9.6	8.9	7.4	6.5	5.7	5.5	4.8	3.3	4.9	3.2	7.1	28.0	0.5	11.4
17	5.2	2.9	2.3	4.1	2.8	3.5	4.4	3.5	2.9	3.3	5.0	5.6	5.1	5.6	6.4	5.5	6.0	4.9	4.6	2.1	1.9	1.7	1.4	1.8	6.4	1.4	3.8
18	1.7	0.8	1.0	1.9	3.0	2.3	2.5	3.4	2.8	1.7	0.7	3.4	4.6	2.6	2.2	4.2	4.6	4.2	2.3	0.9	2.4	3.7	2.2	2.1	4.6	0.7	2.6
19	1.3	2.0	3.5	6.4	8.1	8.3	7.9	7.6	7.1	7.2	6.9	6.2	6.7	7.0	6.0	7.2	6.9	8.2	6.8	7.2	6.0	5.5	5.9	5.5	8.3	1.3	6.3
20	8.8	7.3	9.3	3.8	7.5	7.4	10.0	13.3	10.0	8.2	11.7	7.6	6.3	7.7	10.8	6.1	9.0	7.2	11.3	7.8	7.7	7.0	8.8	9.1	13.3	3.8	8.5
21	9.1	8.2	9.8	9.0	8.9	8.8	7.8	9.2	10.4	11.6	13.0	13.5	15.0	12.9	13.4	11.7	7.0	9.5	7.5	2.6	2.6	4.0	4.7	3.7	15.0	2.6	8.9
22	1.9	2.1	2.5	1.8	2.3	3.3	3.6	2.6	2.4	2.5	1.4	0.9	1.0	1.7	3.0	2.1	1.2	0.8	1.1	1.1	1.2	1.0	2.8	4.2	4.2	0.8	2.0
23	3.1	2.3	2.2	2.8	3.6	2.0	2.8	4.2	2.6	1.3	1.1	1.3	0.9	1.6	1.6	1.3	0.9	1.8	2.8	3.2	3.0	2.7	3.0	3.6	4.2	0.9	2.3
24	4.8	5.5	4.8	4.1	2.2	4.4	5.0	4.3	4.8	4.7	4.0	5.0	4.8	3.7	2.5	3.5	3.1	1.3	1.4	2.0	2.4	8.1	10.1	10.6	10.6	1.3	4.5
25	10.4	10.3	6.4	11.6	16.0	14.0	13.5	15.2	15.9	14.5	13.7	14.9	11.5	11.0	9.8	10.2	11.3	12.6	12.4	12.7	12.5	11.9	13.5	14.5	16.0	6.4	12.5
26	17.2	16.5	16.6	15.6	15.0	13.3	13.9	12.8	11.1	11.7	13.3	19.2	21.4	19.9	19.7	20.7	19.9	18.8	19.9	19.4	19.1	19.6	19.9	20.2	21.4	11.1	17.3
27	19.6	19.8	19.8	20.9	21.6	16.3	14.3	16.1	20.5	19.7	19.0	16.1	14.9	14.7	14.8	15.1	14.1	13.2	12.1	11.8	10.2	9.2	7.9	7.0	21.6	7.0	15.4
28	6.4	6.7	6.0	5.7	5.7	3.8	2.0	3.6	5.0	4.5	1.5	1.7	4.1	4.2	2.9	1.0	2.8	4.0	4.1	4.3	5.0	5.3	4.8	7.2	7.2	1.0	4.3
29	7.5	7.5	5.3	5.6	5.6	5.4	5.8	7.0	7.4	7.4	8.3	6.5	6.2	5.1	2.6	1.7	5.5	7.6	9.0	9.3	10.1	10.6	11.4	9.4	11.4	1.7	7.0
30	9.5	9.5	8.6	7.6	8.5	7.9	7.6	7.4	7.4	7.7	6.6	5.2	3.7	3.3	2.9	3.1	4.0	5.3	6.9	7.8	8.3	8.3	7.3	6.7	9.5	2.9	6.7
Max.	**19.6**	**20.1**	**27.3**	**28.0**	**26.9**	**22.6**	**21.0**	**20.4**	**20.5**	**19.7**	**19.0**	**19.2**	**21.4**	**19.9**	**19.7**	**20.7**	**19.9**	**18.8**	**19.9**	**19.4**	**19.1**	**19.6**	**19.9**	**20.2**	**28.0**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.2**	**7.4**	**7.5**	**7.7**	**8.0**	**7.5**	**7.3**	**7.5**	**7.1**	**6.6**	**6.5**	**6.4**	**6.6**	**6.4**	**6.5**	**6.6**	**6.6**	**6.5**	**6.5**	**6.3**	**6.2**	**6.5**	**6.7**	**6.7**			**6.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.7	7.0	7.0	7.9	8.1	9.0	9.7	8.3	9.3	8.8	9.6	9.0	8.1	6.6	7.2	7.0	7.2	8.0	8.5	9.0	10.0	10.4	8.3	9.6	10.4	6.6	8.3
2	9.3	8.1	9.5	10.0	9.9	9.8	11.7	13.8	13.2	12.4	9.2	5.6	5.6	3.7	4.7	2.5	2.7	3.0	3.4	3.2	2.1	4.2	1.2	1.5	13.8	1.2	6.7
3	3.0	1.9	0.3	0.2	0.2	0.2	0.2	0.2	4.0	3.3	4.5	5.9	7.4	8.3	7.0	8.8	5.2	2.5	4.4	4.3	3.7	6.8	4.9	5.6	8.8	0.2	3.9
4	8.7	7.1	9.5	10.2	9.2	11.6	9.4	7.1	7.0	6.0	5.9	5.0	3.3	2.3	3.0	2.5	4.0	2.2	0.7	1.5	3.0	3.1	1.1	1.6	11.6	0.7	5.2
5	1.9	4.6	5.5	4.8	5.2	3.4	3.2	2.4	1.8	2.0	1.8	1.2	1.4	1.4	1.4	1.7	1.3	1.6	1.4	3.4	2.2	3.3	3.0	2.1	5.5	1.2	2.6
6	0.9	3.1	3.6	2.1	2.2	1.8	2.1	3.2	5.8	7.8	7.9	7.7	12.0	12.4	12.1	12.4	13.1	14.6	14.9	14.6	14.3	12.9	13.6	15.1	15.1	0.9	8.8
7	15.9	16.7	16.3	16.2	17.0	17.3	15.6	15.5	15.8	15.9	16.6	19.2	18.2	16.9	18.9	17.9	15.6	13.6	14.7	15.1	14.6	14.0	10.5	7.8	19.2	7.8	15.7
8	9.7	11.8	11.6	11.6	11.8	11.1	10.9	12.8	12.2	11.9	12.5	14.5	14.5	15.0	15.2	15.0	13.7	14.8	15.0	14.7	15.3	13.3	10.0	10.1	15.3	9.7	12.9
9	9.5	10.2	10.6	9.6	10.5	9.8	9.2	9.5	8.9	8.9	9.9	10.4	10.9	9.2	9.9	9.9	8.1	4.0	3.0	1.7	1.0	1.3	1.9	0.8	10.9	0.8	7.4
10	1.5	1.4	1.1	1.2	1.5	1.7	0.8	1.9	1.2	2.0	1.7	0.8	0.8	1.1	1.1	1.2	1.2	1.0	1.2	1.4	2.7	3.0	5.1	7.3	7.3	0.8	1.8
11	5.0	7.0	8.0	8.7	8.6	8.6	8.6	8.1	9.2	13.1	11.5	10.2	11.5	15.7	11.4	18.6	17.9	15.3	18.1	18.5	18.5	17.0	17.7	17.3	18.6	5.0	12.7
12	14.2	15.5	13.9	14.4	12.9	15.4	14.1	15.0	15.0	17.6	16.5	16.9	17.0	14.9	17.3	14.1	15.6	15.0	15.4	14.9	14.5	15.0	13.9	15.6	17.6	12.9	15.2
13	15.6	14.4	13.8	12.8	10.9	11.5	8.5	8.1	8.8	8.6	10.5	11.7	12.5	12.8	13.7	14.4	14.8	13.9	15.8	14.5	12.1	13.0	10.7	8.8	15.8	8.1	12.2
14	8.7	8.3	5.3	3.5	4.4	9.5	11.0	13.2	13.0	16.0	13.1	11.6	10.7	10.9	11.5	10.0	10.7	12.2	10.3	8.3	9.0	7.3	3.7	1.7	16.0	1.7	9.3
15	2.0	3.2	3.7	3.2	2.6	2.3	2.1	3.4	4.3	4.7	6.2	6.8	6.3	7.9	6.5	6.5	5.7	6.1	5.7	6.2	6.2	6.7	6.0	5.6	7.9	2.0	5.0
16	5.4	5.4	4.0	4.4	2.2	1.3	2.4	2.1	3.2	2.8	4.2	6.1	6.9	7.9	7.9	8.0	7.7	6.4	5.1	4.2	3.9	3.1	1.2	0.7	8.0	0.7	4.4
17	2.3	4.6	4.5	3.8	3.2	3.6	3.6	3.1	4.2	5.6	4.3	5.1	3.7	2.1	1.8	2.3	2.4	3.8	3.0	2.7	5.6	5.5	5.0	4.5	5.6	1.8	3.8
18	3.6	2.3	6.0	6.6	5.8	4.3	5.0	3.5	3.7	4.3	4.6	4.3	5.3	5.4	4.4	6.0	7.4	7.5	8.0	8.0	7.2	5.2	4.6	5.6	8.0	2.3	5.3
19	4.6	3.4	2.0	1.4	1.0	1.2	1.4	1.2	1.9	3.4	4.0	4.0	3.9	2.8	4.2	4.9	6.0	6.7	6.1	6.1	6.2	6.9	8.9	8.1	8.9	1.0	4.2
20	8.0	6.9	7.6	8.8	7.9	7.7	9.1	9.0	7.7	5.7	3.3	4.1	3.3	3.6	3.3	3.8	3.0	2.4	2.7	4.8	2.2	1.5	1.2	0.8	9.1	0.8	4.9
21	1.0	2.1	1.0	0.9	1.4	1.9	1.4	1.1	1.1	1.6	1.3	2.4	2.6	4.4	3.6	4.5	4.5	4.7	7.2	7.8	7.1	5.7	4.5	3.4	7.8	0.9	3.2
22	3.7	6.1	6.6	5.3	5.3	3.9	3.3	2.8	2.4	3.2	3.4	3.0	3.6	4.2	4.8	6.5	7.9	10.0	10.8	9.8	9.4	12.3	12.5	14.4	14.4	2.4	6.5
23	15.4	19.1	17.8	19.1	17.6	16.1	20.8	17.1	19.6	22.2	22.5	20.3	24.7	26.0	26.6	21.4	16.6	17.9	18.1	18.8	17.3	15.8	14.4	15.8	26.6	14.4	19.2
24	15.4	16.7	17.8	16.9	17.0	14.5	12.0	14.9	15.3	15.2	12.2	12.3	12.9	12.8	12.0	11.4	11.2	10.6	9.6	7.0	5.1	5.3	4.3	5.4	17.8	4.3	12.0
25	5.0	5.1	4.3	4.3	5.0	5.2	4.7	4.9	5.1	5.8	6.4	7.5	6.1	6.5	5.7	5.4	6.9	5.6	6.2	3.8	6.1	5.0	2.6	2.7	7.5	2.6	5.2
26	3.3	3.3	3.5	4.7	3.0	2.2	2.1	3.4	3.0	3.8	4.9	5.0	4.7	4.8	3.6	6.5	5.9	4.8	4.3	3.3	6.3	6.4	4.7	3.2	6.5	2.1	4.2
27	3.0	5.4	4.2	6.4	5.3	5.2	3.0	1.8	1.2	3.4	2.8	3.4	5.2	4.6	4.1	4.3	4.3	4.3	4.8	4.8	4.8	4.5	6.7	6.7	6.7	1.2	4.3
28	3.4	3.5	4.0	4.8	3.7	2.9	3.8	4.5	4.2	2.4	4.3	4.4	4.6	4.1	4.6	4.6	4.3	4.4	5.6	5.9	5.6	6.0	6.6	6.6	6.6	2.4	4.5
29	7.6	8.4	6.8	6.5	6.0	5.5	5.6	8.8	10.2	10.4	10.2	9.5	8.0	7.3	7.0	8.0	7.3	6.7	6.3	5.6	5.8	6.7	6.4	7.3	10.4	5.5	7.4
30	7.2	5.4	3.7	2.5	2.6	3.1	4.0	4.4	5.4	6.0	7.3	8.6	8.9	11.0	11.2	11.5	12.3	12.0	11.0	10.0	9.4	9.9	10.6	9.8	12.3	2.5	7.8
31	9.6	9.5	10.7	12.7	12.3	11.5	10.9	10.1	12.2	12.8	14.1	12.9	13.3	14.3	14.5	13.8	13.4	12.9	12.8	11.1	10.9	11.1	9.4	10.7	14.5	9.4	12.0
Max.	**15.9**	**19.1**	**17.8**	**19.1**	**17.6**	**17.3**	**20.8**	**17.1**	**19.6**	**22.2**	**22.5**	**20.3**	**24.7**	**26.0**	**26.6**	**21.4**	**17.9**	**17.9**	**18.1**	**18.8**	**18.5**	**17.0**	**17.7**	**17.3**	**26.6**		
Min.	**0.9**	**1.4**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**1.1**	**1.6**	**1.3**	**0.8**	**0.8**	**1.1**	**1.1**	**1.2**	**1.2**	**1.0**	**0.7**	**1.4**	**1.0**	**1.3**	**1.1**	**0.7**		**0.2**	
Avg.	**6.8**	**7.3**	**7.2**	**7.3**	**6.9**	**6.9**	**6.8**	**6.9**	**7.4**	**8.0**	**8.0**	**8.0**	**8.3**	**8.4**	**8.4**	**8.6**	**8.3**	**8.0**	**8.2**	**7.9**	**7.8**	**7.8**	**6.9**	**7.0**			**7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.6	9.5	9.3	11.8	11.1	10.2	11.2	12.6	12.6	14.7	18.9	18.2	17.5	18.2	18.6	19.4	19.6	14.9	14.1	12.4	11.4	8.9	7.5	4.0	19.6	4.0	13.2
2	5.1	7.7	8.9	8.8	7.3	6.2	6.1	5.2	6.3	9.6	9.8	11.3	9.7	8.2	8.3	7.8	7.1	6.2	5.5	5.4	3.5	4.2	4.8	3.7	11.3	3.5	7.0
3	1.4	2.8	3.6	5.5	4.2	4.7	3.7	1.8	1.5	1.3	1.3	2.5	2.8	6.2	6.1	7.7	7.8	8.9	8.4	9.6	10.0	7.0	7.1	7.1	10.0	1.3	5.1
4	6.8	5.7	6.1	6.8	3.9	4.7	4.7	5.5	4.9	4.3	7.0	6.7	6.9	8.5	8.7	9.5	9.7	9.9	10.1	9.9	10.1	9.0	7.0	6.4	10.1	3.9	7.2
5	5.5	4.6	4.9	7.1	8.5	7.3	8.3	10.6	9.2	12.5	12.8	12.9	11.9	12.4	12.8	13.4	12.7	11.4	7.9	6.1	3.3	1.7	1.4	3.0	13.4	1.4	8.4
6	3.7	5.6	6.8	7.5	6.7	7.6	6.1	3.1	4.2	3.8	2.1	4.5	4.4	3.7	3.8	4.9	4.1	11.8	9.8	9.2	6.7	6.9	4.4	3.5	11.8	2.1	5.6
7	1.9	2.9	4.9	6.5	6.0	6.0	5.9	9.0	9.9	7.4	6.6	6.4	6.5	5.2	4.8	5.6	8.2	9.7	9.6	10.6	9.9	9.7	6.0	5.2	10.6	1.9	6.9
8	3.9	2.4	2.1	3.8	1.9	1.7	1.9	1.8	2.0	2.1	2.1	2.0	3.4	4.4	6.0	5.6	5.9	6.9	7.9	7.2	8.2	7.8	6.9	5.5	8.2	1.7	4.3
9	5.6	5.6	6.3	6.2	5.2	5.4	5.9	5.7	4.7	4.6	3.6	2.6	5.5	5.4	6.6	6.0	5.6	6.2	6.6	7.0	6.0	5.8	5.2	5.3	7.0	2.6	5.5
10	6.4	7.4	6.4	5.9	4.1	3.8	4.4	3.1	2.3	2.8	2.7	4.3	2.7	2.1	3.1	3.2	3.5	2.7	4.0	3.9	3.3	2.2	1.6	1.6	7.4	1.6	3.6
11	1.2	1.8	1.0	1.1	1.1	0.9	1.6	2.2	3.0	2.5	2.1	2.5	3.5	2.0	3.6	3.1	3.0	3.0	2.3	1.9	4.0	4.3	2.3	3.6	4.3	0.9	2.4
12	3.9	4.0	4.2	4.6	5.3	5.2	6.2	6.1	4.8	4.2	3.0	3.9	3.5	3.5	2.8	2.8	2.4	3.8	2.5	2.3	2.9	2.8	2.8	2.1	6.2	2.1	3.7
13	1.7	1.3	1.8	2.3	1.3	0.8	1.4	1.8	1.5	2.3	1.9	1.6	1.5	1.4	2.3	2.8	3.1	3.1	3.8	4.2	4.4	3.6	2.6	1.7	4.4	0.8	2.3
14	2.1	3.7	5.2	3.7	1.8	2.7	2.9	3.0	3.2	2.8	3.2	3.1	2.6	3.5	5.1	5.9	6.6	5.1	5.6	6.0	3.9	6.2	4.4	3.5	6.6	1.8	4.0
15	3.0	4.1	3.8	4.2	3.8	3.1	3.7	2.8	3.4	3.0	3.9	3.6	3.0	5.3	6.3	6.0	6.9	7.4	6.2	5.7	5.8	5.5	4.9	4.7	7.4	2.8	4.6
16	5.0	4.0	3.5	1.5	2.0	1.6	2.7	4.3	3.1	2.2	1.3	1.2	3.2	4.0	2.6	4.5	5.2	3.3	5.4	5.1	4.3	3.5	1.9	1.3	5.4	1.2	3.2
17	1.3	1.6	1.6	1.6	1.7	1.0	1.1	1.1	1.6	2.2	4.3	4.2	4.1	4.1	4.7	5.0	4.8	4.5	5.8	6.5	7.4	6.9	5.0	4.0	7.4	1.0	3.6
18	3.7	1.8	3.5	2.4	1.8	3.2	2.9	3.5	4.4	5.2	5.2	6.1	6.0	5.6	6.5	6.4	6.9	6.5	5.6	4.7	4.2	4.3	4.0	2.7	6.9	1.8	4.5
19	2.3	2.5	2.5	2.0	2.0	2.1	2.6	2.8	3.2	3.5	3.7	2.9	3.4	2.7	5.6	5.3	4.9	4.3	4.6	5.0	3.9	3.9	3.2	4.2	5.6	2.0	3.5
20	3.8	2.6	3.4	1.7	2.6	2.9	1.7	1.1	1.9	3.7	3.1	4.0	5.1	6.5	8.0	7.9	8.8	8.9	9.0	9.9	10.7	11.6	9.9	6.9	11.6	1.1	5.7
21	7.3	4.3	5.3	3.4	4.1	4.8	3.4	4.1	3.8	2.6	2.7	1.7	1.5	2.6	2.7	2.2	2.5	2.8	4.6	5.2	5.1	4.6	2.9	1.7	7.3	1.5	3.6
22	1.4	2.1	2.1	2.9	3.2	3.6	3.0	4.6	4.3	4.5	3.9	5.7	5.9	6.8	7.2	7.7	9.1	10.4	11.4	12.2	11.7	10.9	9.6	7.8	12.2	1.4	6.3
23	7.2	6.0	6.0	6.8	5.7	4.3	5.6	6.0	8.7	10.7	10.1	9.5	9.3	8.6	8.2	7.0	6.3	6.4	6.7	8.4	7.6	7.4	5.4	4.3	10.7	4.3	7.2
24	3.8	3.9	4.2	7.3	8.5	8.0	8.3	8.4	11.9	12.7	13.1	14.1	13.6	12.9	13.7	14.0	12.7	11.5	12.5	12.7	13.1	13.1	12.6	12.3	14.1	3.8	10.8
25	11.0	10.8	10.4	11.1	13.8	13.8	13.3	12.2	14.9	15.4	16.6	16.8	19.0	18.9	16.6	19.0	20.6	18.2	16.1	12.7	12.9	11.1	10.1	9.9	20.6	9.9	14.4
26	8.4	7.1	7.3	5.1	4.5	3.2	3.8	5.6	5.1	4.9	7.3	6.6	5.7	5.9	4.8	2.5	3.3	4.7	3.8	2.9	2.4	3.1	2.8	1.4	8.4	1.4	4.7
27	1.9	1.4	1.2	1.7	0.9	1.1	1.6	3.8	5.9	6.0	7.3	7.3	7.4	7.9	8.3	7.5	6.7	7.8	7.0	6.8	7.6	6.8	4.0	3.9	8.3	0.9	5.1
28	4.9	4.8	4.3	3.0	2.3	1.3	1.9	3.3	4.2	5.2	5.3	5.4	6.0	6.2	5.9	6.6	5.0	6.2	6.1	5.3	6.3	7.3	6.2	4.0	7.3	1.3	4.9
29	4.2	4.2	4.9	4.4	1.6	1.2	2.8	1.3	1.4	2.0	3.7	4.9	5.3	6.2	6.8	7.6	8.2	8.6	8.9	9.1	9.0	7.5	6.3	6.3	9.1	1.2	5.3
30	6.8	5.6	4.8	5.3	5.6	4.4	2.3	1.4	1.3	1.0	1.7	1.9	1.3	2.1	2.2	3.8	3.3	2.1	3.7	4.1	2.5	2.0	1.5	1.6	6.8	1.0	3.0
Max.	**11.0**	**10.8**	**10.4**	**11.8**	**13.8**	**13.8**	**13.3**	**12.6**	**14.9**	**15.4**	**18.9**	**18.2**	**19.0**	**18.9**	**18.6**	**19.4**	**20.6**	**18.2**	**16.1**	**12.7**	**13.1**	**13.1**	**12.6**	**12.3**	**20.6**		
Min.	**1.2**	**1.3**	**1.0**	**1.1**	**0.9**	**0.8**	**1.1**	**1.1**	**1.3**	**1.0**	**1.3**	**1.2**	**1.3**	**1.4**	**2.2**	**2.2**	**2.4**	**2.1**	**2.3**	**1.9**	**2.4**	**1.7**	**1.4**	**1.3**		**0.8**	
Avg.	**4.5**	**4.4**	**4.7**	**4.9**	**4.4**	**4.2**	**4.4**	**4.6**	**5.0**	**5.3**	**5.7**	**6.0**	**6.1**	**6.4**	**6.8**	**7.0**	**7.2**	**7.2**	**7.2**	**7.1**	**6.7**	**6.3**	**5.2**	**4.4**			**5.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.9	0.6	2.2	2.0	1.4	0.8	2.2	4.4	3.4	2.6	4.6	6.1	7.3	9.5	12.3	12.5	12.8	13.5	13.1	12.6	12.0	10.8	11.0	10.7	13.5	0.6	7.1
2	10.4	12.6	11.9	11.4	12.1	10.7	11.3	11.3	12.8	12.0	10.1	14.3	9.8	11.8	11.2	11.7	8.7	8.9	8.2	7.8	9.1	9.0	7.9	5.9	14.3	5.9	10.5
3	4.8	5.7	6.9	9.0	8.5	9.0	8.8	9.9	12.6	9.4	5.9	5.2	5.2	5.1	6.6	8.2	8.7	6.2	4.7	2.9	2.5	2.8	2.5	2.6	12.6	2.5	6.4
4	2.3	3.9	1.9	1.8	3.4	3.8	2.9	1.0	0.9	1.3	1.8	2.7	2.9	2.9	4.4	3.8	3.9	4.1	5.1	4.1	4.4	3.2	2.0	0.7	5.1	0.7	2.9
5	1.0	1.1	1.9	1.3	1.1	2.1	1.5	1.2	1.3	1.3	3.2	2.2	2.1	3.1	6.1	5.7	3.8	3.2	2.8	2.9	4.0	2.8	1.9	2.0	6.1	1.0	2.5
6	2.4	2.1	3.0	2.2	1.6	1.0	2.0	2.7	3.2	3.0	4.2	4.6	5.9	7.5	5.7	6.8	6.1	6.2	6.4	7.4	6.8	6.9	6.2	5.4	7.5	1.0	4.6
7	5.7	6.0	6.6	5.8	4.9	3.7	3.9	6.0	9.9	9.0	10.6	9.5	7.5	6.8	6.3	6.9	6.7	5.6	5.4	5.6	5.7	4.6	3.7	3.4	10.6	3.4	6.2
8	3.5	2.8	2.0	1.4	1.0	1.1	1.7	1.7	1.3	1.5	2.5	3.3	3.5	3.2	4.3	4.2	3.8	3.2	4.1	5.3	4.8	4.0	3.8	4.2	5.3	1.0	3.0
9	4.8	5.2	5.3	5.4	5.4	5.3	5.3	5.0	5.9	7.2	6.7	8.1	8.3	8.1	8.3	9.0	10.0	12.1	13.4	13.6	12.7	11.1	11.7	12.2	13.6	4.8	8.3
10	10.8	8.0	6.8	4.2	5.1	7.6	9.0	7.1	8.8	9.0	8.1	8.1	6.8	6.6	5.9	6.1	7.0	7.6	7.4	8.3	7.7	7.6	7.6	7.9	10.8	4.2	7.5
11	7.2	5.0	3.4	3.2	3.0	3.2	2.8	3.2	4.6	6.0	5.7	5.2	4.9	5.1	5.5	6.8	7.0	7.0	7.4	7.1	7.5	7.8	6.5	4.4	7.8	2.8	5.4
12	5.5	4.9	3.0	2.6	3.2	3.5	5.3	6.1	8.5	11.3	13.7	14.1	14.0	15.1	15.0	14.1	13.9	15.3	12.4	11.0	10.5	11.3	10.1	10.3	15.3	2.6	9.8
13	10.4	9.9	9.3	9.4	10.0	8.6	7.7	7.1	6.2	7.1	6.5	5.7	5.6	5.7	5.0	4.4	4.8	4.7	4.4	4.0	3.3	2.6	2.2	2.3	10.4	2.2	6.1
14	1.6	0.9	0.5	0.6	1.2	0.8	1.1	0.8	1.5	2.4	2.9	3.3	3.5	3.7	3.4	4.5	3.5	4.1	4.5	4.8	4.5	4.6	4.8	5.1	5.1	0.5	2.9
15	5.3	5.6	5.3	5.0	2.8	3.5	2.8	2.6	2.4	3.2	4.8	5.9	6.2	6.9	8.3	9.7	8.8	8.6	8.2	6.7	6.3	6.6	5.5	8.5	9.7	2.4	5.8
16	11.5	12.5	12.6	11.4	12.6	12.5	11.4	12.0	13.8	13.9	15.3	15.5	17.4	18.0	20.1	19.2	17.7	17.9	17.5	16.7	15.1	13.5	12.0	11.6	20.1	11.4	14.6
17	9.0	8.4	8.1	8.9	9.3	9.6	8.2	6.6	6.5	7.3	8.6	6.9	7.3	7.0	8.0	7.3	7.6	6.9	9.6	7.8	8.6	8.2	9.4	10.5	10.5	6.5	8.1
18	8.6	7.2	5.9	4.3	5.0	5.2	4.0	4.3	3.7	2.9	3.7	4.8	4.6	4.3	4.1	3.0	3.5	5.4	3.8	5.4	4.6	4.2	2.6	1.4	8.6	1.4	4.4
19	2.5	1.5	2.6	3.4	3.3	6.7	6.6	5.6	6.3	6.6	6.8	9.1	8.2	7.3	9.6	9.1	8.0	9.1	10.5	9.4	8.9	7.1	5.6	1.4	10.5	1.4	6.5
20	2.4	3.2	2.1	1.9	2.8	3.6	4.5	5.3	7.5	5.6	6.3	7.3	8.4	9.2	9.7	9.6	9.4	9.5	8.5	6.4	6.7	4.1	4.9	6.2	9.7	1.9	6.0
21	8.4	10.3	9.8	9.5	8.9	8.3	7.8	8.8	7.7	6.5	5.3	4.7	4.0	4.2	3.3	3.3	3.9	4.8	5.4	3.8	4.3	7.7	8.0	7.6	10.3	3.3	6.5
22	7.1	6.1	6.2	6.7	4.6	1.8	2.5	1.9	2.2	1.1	2.2	3.6	3.0	3.1	3.7	3.7	2.6	1.9	1.0	1.2	2.7	1.6	1.9	2.0	7.1	1.0	3.1
23	2.5	3.6	4.4	3.0	3.1	1.9	2.1	3.3	4.8	6.1	6.5	5.9	6.0	6.2	6.4	6.1	5.1	5.3	6.0	5.8	4.9	3.7	3.9	3.2	6.5	1.9	4.6
24	1.9	2.2	2.2	1.0	2.9	5.1	5.1	5.7	6.7	8.5	7.5	8.1	8.8	8.8	8.8	10.2	9.0	7.6	7.2	8.5	9.6	10.0	13.8	15.9	15.9	1.0	7.3
25	14.2	13.4	12.1	10.9	12.1	6.4	4.0	8.8	10.9	12.8	11.4	11.7	11.8	12.1	10.8	10.8	9.8	8.5	8.0	8.3	8.1	7.7	7.2	8.6	14.2	4.0	10.0
26	9.4	7.8	7.6	4.4	6.2	7.1	7.3	7.8	7.8	6.3	5.2	5.7	5.8	4.7	3.0	3.4	3.7	3.6	4.3	3.4	4.1	4.8	3.8	4.7	9.4	3.0	5.5
27	5.1	4.5	3.4	3.1	2.8	2.1	2.3	3.9	4.7	3.6	4.2	3.2	2.7	2.8	3.5	4.0	4.9	4.7	5.1	4.7	5.2	3.3	2.0	0.8	5.2	0.8	3.6
28	0.9	1.3	1.9	1.9	2.7	2.1	3.0	4.0	6.3	8.0	7.8	7.1	8.9	9.9	9.1	8.5	9.2	9.7	9.5	8.8	7.2	8.2	7.9	10.1	10.1	0.9	6.4
29	10.0	8.3	8.0	7.0	8.9	7.3	10.9	11.2	10.2	14.2	14.6	13.9	13.9	13.2	11.3	11.6	10.4	11.1	11.5	11.4	8.7	8.5	10.4	9.9	14.6	7.0	10.7
30	9.0	11.4	11.0	12.6	13.2	11.6	9.6	9.0	8.9	8.0	7.7	7.5	8.9	9.6	10.6	9.2	9.6	11.4	9.3	8.7	7.6	5.9	7.2	6.0	13.2	5.9	9.3
31	7.2	8.9	7.0	10.1	10.4	8.6	7.8	7.6	6.9	6.4	8.0	7.3	6.6	6.3	6.5	6.7	6.7	6.9	7.5	7.6	7.2	6.8	8.3	6.9	10.4	6.3	7.5
Max.	**14.2**	**13.4**	**12.6**	**12.6**	**13.2**	**12.5**	**11.4**	**12.0**	**13.8**	**14.2**	**15.3**	**15.5**	**17.4**	**18.0**	**20.1**	**19.2**	**17.7**	**17.9**	**17.5**	**16.7**	**15.1**	**13.5**	**13.8**	**15.9**	**20.1**		
Min.	**0.9**	**0.6**	**0.5**	**0.6**	**1.0**	**0.8**	**1.1**	**0.8**	**0.9**	**1.1**	**1.8**	**2.2**	**2.1**	**2.8**	**3.0**	**3.0**	**2.6**	**1.9**	**1.0**	**1.2**	**2.5**	**1.6**	**1.9**	**0.7**		**0.5**	
Avg.	**6.0**	**6.0**	**5.6**	**5.3**	**5.6**	**5.3**	**5.3**	**5.7**	**6.4**	**6.6**	**6.9**	**7.1**	**7.1**	**7.3**	**7.6**	**7.7**	**7.4**	**7.6**	**7.5**	**7.2**	**6.9**	**6.5**	**6.3**	**6.2**			**6.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.1	2.9	2.1	2.1	2.3	1.8	2.0	1.7	1.8	1.1	2.1	1.7	2.3	2.9	3.4	4.5	4.3	4.9	4.9	5.8	6.0	5.5	4.8	3.7	6.0	1.1	3.2
2	4.0	3.9	3.7	4.7	4.3	4.8	6.3	5.8	4.7	4.6	5.7	6.7	6.6	5.4	5.5	6.3	6.5	5.1	4.1	3.7	3.1	2.2	1.3	1.5	6.7	1.3	4.6
3	1.3	2.2	2.9	4.3	6.5	8.1	5.5	3.9	5.6	5.3	4.5	4.6	5.6	5.5	4.5	5.2	5.9	6.6	7.2	7.1	8.1	7.1	7.5	6.7	8.1	1.3	5.5
4	6.5	5.9	4.9	4.8	4.7	5.0	4.6	4.9	5.8	5.3	5.2	5.1	5.5	5.6	5.1	4.9	4.9	4.9	6.2	7.4	6.4	4.2	3.2	3.1	7.4	3.1	5.2
5	3.3	2.6	2.6	1.7	1.4	1.1	0.8	0.6	0.7	2.8	5.0	5.4	5.8	7.2	6.8	6.4	6.6	6.8	7.8	7.7	7.4	7.3	6.9	6.7	7.8	0.6	4.6
6	7.5	8.8	7.6	8.7	9.0	7.2	5.6	5.5	6.6	8.5	7.5	7.8	9.6	9.5	9.9	9.6	9.6	10.4	8.8	6.3	7.0	7.8	7.8	7.3	10.4	5.5	8.1
7	6.4	7.1	6.5	8.1	7.7	4.7	5.6	8.3	9.4	9.5	11.1	9.0	7.8	7.4	7.8	8.1	8.0	7.4	8.3	8.6	8.0	9.3	10.0	8.8	11.1	4.7	8.0
8	7.8	7.1	6.3	9.0	9.2	9.2	9.2	10.6	9.1	7.9	6.2	8.6	8.8	7.3	5.2	5.5	4.9	4.9	5.0	5.7	6.2	7.8	9.5	7.8	10.6	4.9	7.5
9	8.6	8.6	8.1	7.4	6.6	5.2	6.9	8.0	9.2	10.8	11.0	12.3	11.3	10.7	10.3	8.4	8.7	7.9	8.4	7.8	7.3	6.8	5.7	5.1	12.3	5.1	8.4
10	4.9	3.3	2.2	2.7	3.4	3.7	3.0	2.7	1.9	2.6	2.8	2.9	2.7	3.6	4.5	4.2	3.2	5.8	5.6	5.2	5.0	5.4	3.4	4.3	5.8	1.9	3.7
11	4.6	2.8	1.9	1.4	1.2	4.1	4.5	4.3	4.2	5.4	6.9	8.0	7.3	7.1	7.2	8.0	8.1	7.6	7.4	5.7	3.2	1.8	1.7	2.0	8.1	1.2	4.8
12	1.5	1.9	2.7	5.7	6.6	6.7	5.9	5.1	4.3	4.6	4.6	4.3	3.4	3.9	5.6	3.6	4.7	6.3	5.2	2.2	1.0	1.1	1.1	1.0	6.7	1.0	3.9
13	1.8	3.0	5.3	7.0	4.4	1.7	1.0	0.9	0.8	0.9	1.4	2.8	3.6	3.4	2.9	4.4	3.2	4.7	5.0	3.9	4.4	3.1	1.4	1.5	7.0	0.8	3.0
14	1.4	0.6	1.3	2.3	2.0	1.8	1.4	1.5	2.4	4.0	4.5	4.4	4.5	3.9	4.9	5.2	5.9	6.9	6.4	5.6	5.4	4.1	3.8	5.1	6.9	0.6	3.7
15	5.5	6.5	5.1	3.4	3.7	2.7	3.3	3.9	3.6	3.2	3.1	2.6	1.8	1.8	1.7	2.4	2.5	2.5	2.5	2.1	1.6	1.2	0.6	0.8	6.5	0.6	2.8
16	0.7	1.9	2.6	2.9	2.9	4.0	4.9	5.4	6.0	5.4	5.3	5.5	5.7	5.9	7.6	7.4	7.6	7.6	6.9	7.5	6.7	6.2	3.9	3.2	7.6	0.7	5.1
17	2.3	3.1	4.0	4.1	4.6	5.6	6.4	5.9	5.6	5.9	5.9	7.6	7.4	7.6	8.1	9.7	11.1	11.5	9.6	9.3	8.3	8.1	10.7	9.3	11.5	2.3	7.1
18	8.4	6.2	7.4	5.9	5.1	3.6	2.5	4.6	4.9	2.9	4.4	4.7	4.1	3.5	2.5	2.9	3.2	2.5	1.8	3.1	2.0	2.4	1.2	2.2	8.4	1.2	3.8
19	3.5	2.6	1.3	2.3	2.5	2.5	2.3	1.3	1.0	1.5	2.2	1.8	2.9	3.3	4.0	3.6	4.1	2.6	4.2	5.1	7.3	5.5	1.9	1.1	7.3	1.0	2.9
20	1.9	3.2	2.5	2.6	2.8	3.1	2.7	1.8	1.9	1.3	2.0	4.3	1.8	2.0	3.6	4.2	3.3	4.5	4.8	5.0	4.1	2.4	2.4	1.8	5.0	1.3	2.9
21	1.7	1.3	1.9	1.2	1.3	1.4	2.9	2.9	4.0	4.6	4.3	4.6	4.5	5.0	5.6	6.1	4.8	4.9	5.9	6.4	5.7	5.5	5.2	4.9	6.4	1.2	4.0
22	4.1	3.4	1.4	1.8	1.5	1.5	1.7	3.0	2.7	2.5	2.3	1.2	1.3	1.5	2.3	2.0	1.8	2.0	2.2	4.0	3.0	1.7	2.9	4.9	4.9	1.2	2.4
23	4.9	4.2	5.2	5.1	5.5	5.6	5.2	6.1	5.8	6.2	3.7	4.8	4.4	2.8	3.9	2.9	4.8	5.4	6.2	5.1	4.5	5.0	4.6	3.5	6.2	2.8	4.8
24	1.8	0.9	0.7	1.3	1.2	1.4	2.2	1.8	2.0	5.0	5.7	4.8	6.7	5.5	4.7	4.8	3.7	2.8	1.7	2.3	1.0	1.1	3.4	5.6	6.7	0.7	3.0
25	4.9	2.6	2.1	2.3	3.7	6.4	6.4	6.5	6.4	4.7	3.4	3.1	3.5	2.9	3.5	2.3	3.2	4.7	5.7	6.5	6.4	5.5	5.6	3.9	6.5	2.1	4.4
26	3.1	2.9	3.0	2.5	3.0	3.5	3.8	5.1	4.7	4.5	5.7	6.1	6.5	7.0	7.1	7.5	7.1	5.8	5.9	6.7	6.5	4.4	3.7	4.2	7.5	2.5	5.0
27	2.2	1.7	1.3	0.6	0.9	1.7	3.1	3.8	3.5	4.5	5.4	5.0	4.5	3.6	4.5	5.3	5.9	6.2	6.2	5.0	4.8	3.9	2.8	1.9	6.2	0.6	3.7
28	2.5	2.0	2.8	3.3	3.1	1.7	0.8	0.7	2.3	3.3	4.3	4.8	4.5	3.6	4.2	5.4	5.8	5.8	3.5	6.2	7.6	8.9	9.1	8.2	9.1	0.7	4.4
29	7.7	6.1	6.4	6.5	5.7	5.9	4.2	5.7	3.4	1.1	2.0	1.8	3.5	3.9	3.9	5.8	2.5	7.6	7.9	7.4	5.1	4.3	3.6	3.5	7.9	1.1	4.8
30	2.3	1.9	1.3	0.7	1.5	0.7	1.7	1.6	0.9	0.7	1.0	1.1	1.4	2.6	2.9	3.8	4.6	5.1	5.2	4.6	4.6	5.5	8.1	11.6	11.6	0.7	3.1
31	10.8	10.3	10.4	11.7	10.4	11.8	12.0	12.6	10.8	8.1	10.4	8.6	6.3	7.0	7.5	5.7	6.4	9.0	8.5	8.9	11.0	12.7	15.4	15.0	15.4	5.7	10.1
Max.	**10.8**	**10.3**	**10.4**	**11.7**	**10.4**	**11.8**	**12.0**	**12.6**	**10.8**	**10.8**	**11.1**	**12.3**	**11.3**	**10.7**	**10.3**	**9.7**	**11.1**	**11.5**	**9.6**	**9.3**	**11.0**	**12.7**	**15.4**	**15.0**	**15.4**		
Min.	**0.7**	**0.6**	**0.7**	**0.6**	**0.9**	**0.7**	**0.8**	**0.6**	**0.7**	**0.7**	**1.0**	**1.1**	**1.3**	**1.5**	**1.7**	**2.0**	**1.8**	**2.0**	**1.7**	**2.1**	**1.0**	**1.1**	**0.6**	**0.8**		**0.6**	
Avg.	**4.2**	**3.9**	**3.8**	**4.1**	**4.2**	**4.1**	**4.2**	**4.4**	**4.4**	**4.5**	**4.8**	**5.0**	**5.0**	**4.9**	**5.2**	**5.4**	**5.4**	**5.8**	**5.8**	**5.7**	**5.5**	**5.1**	**4.9**	**4.8**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.3	13.7	12.6	10.0	10.4	11.7	10.2	10.5	5.6	6.8	5.8	5.7	5.2	4.4	6.1	6.9	5.7	6.1	5.0	4.6	7.1	7.9	7.5	6.4	13.7	4.4	7.9
2	7.9	7.9	8.6	8.6	7.5	8.0	7.5	9.1	8.9	8.0	10.0	9.5	8.8	10.0	9.1	8.0	6.7	4.1	6.7	8.3	11.6	11.5	13.6	11.5	13.6	4.1	8.8
3	10.8	10.1	10.2	10.4	9.6	9.6	9.1	7.7	7.1	5.5	3.1	2.7	4.3	4.9	4.8	4.6	4.0	3.6	4.5	4.6	5.0	4.5	5.8	5.8	10.8	2.7	6.3
4	5.2	5.7	5.8	5.0	5.4	5.3	0.8	1.1	2.2	1.6	1.6	2.2	3.6	3.4	3.1	2.8	2.0	1.8	2.0	2.6	2.8	0.9	0.9	0.7	5.8	0.7	2.8
5	1.5	1.2	0.8	1.9	1.6	1.4	1.7	2.4	2.5	2.1	2.1	2.7	2.8	2.7	3.5	3.9	3.6	4.0	3.9	2.9	1.7	1.7	2.0	3.2	4.0	0.8	2.4
6	2.1	4.2	6.3	5.4	6.0	7.8	8.0	7.6	7.6	9.3	9.9	10.6	10.6	9.8	10.6	13.3	13.4	11.5	11.4	11.6	9.9	8.2	8.6	10.0	13.4	2.1	8.9
7	10.2	10.2	12.2	12.1	6.4	9.3	9.6	10.3	9.3	8.1	8.8	11.4	8.5	5.5	4.4	4.4	6.6	7.1	6.0	4.9	5.3	5.7	7.0	8.1	12.2	4.4	8.0
8	8.2	5.7	6.1	7.2	8.5	7.3	5.8	5.0	4.4	4.2	3.8	3.8	5.7	10.1	13.5	12.4	12.8	10.8	11.2	11.6	9.1	8.4	8.0	8.4	13.5	3.8	8.0
9	8.5	8.2	8.3	5.1	6.0	4.7	5.2	7.4	7.0	6.2	7.2	7.1	6.9	7.5	9.4	9.8	10.1	8.5	7.9	9.1	6.4	5.8	7.7	5.1	10.1	4.7	7.3
10	3.4	2.9	3.9	3.2	2.2	1.5	1.7	2.8	3.2	1.7	2.4	3.4	3.4	4.2	3.5	4.2	4.7	4.4	4.2	4.2	3.1	4.7	4.3	5.0	5.0	1.5	3.4
11	6.3	5.7	5.5	5.1	4.8	3.6	1.3	2.0	2.9	4.3	4.5	5.6	5.1	5.2	5.3	3.7	4.1	4.6	4.6	5.1	6.6	7.8	9.3	9.5	9.5	1.3	5.1
12	10.5	8.8	12.2	12.8	13.1	12.5	14.6	12.9	12.7	11.1	12.0	16.1	15.1	15.2	15.2	14.2	13.7	11.7	11.9	12.1	11.8	13.4	14.2	14.6	16.1	8.8	13.0
13	13.5	13.4	14.4	16.5	14.4	16.0	16.0	16.0	15.7	15.2	16.8	16.6	17.3	15.7	14.1	14.1	13.1	11.9	10.3	10.1	9.5	8.0	8.9	9.2	17.3	8.0	13.6
14	8.3	6.9	7.8	7.9	5.2	5.1	3.9	4.3	6.7	8.4	7.4	7.5	8.7	7.6	7.1	7.4	6.9	7.5	7.3	7.2	7.1	7.0	6.3	5.7	8.7	3.9	6.9
15	5.0	5.3	6.1	6.7	5.9	5.1	6.7	6.5	7.1	7.8	8.7	8.9	9.6	9.0	9.3	10.1	10.4	9.7	9.4	7.8	6.6	5.7	5.3	3.3	10.4	3.3	7.3
16	1.8	1.5	2.6	3.0	3.2	4.0	4.7	4.9	4.5	5.7	4.9	4.3	6.5	7.1	7.4	7.5	6.9	7.0	7.6	6.9	6.8	5.5	5.4	4.7	7.6	1.5	5.2
17	3.6	2.7	3.1	3.9	5.4	4.6	4.8	4.8	3.0	1.8	1.6	1.6	2.3	3.9	4.5	5.6	7.0	8.7	8.1	7.9	6.8	5.5	5.2	6.8	8.7	1.6	4.7
18	10.5	13.1	13.7	14.3	14.6	14.5	13.2	13.4	10.1	11.3	10.3	9.3	5.3	2.7	5.2	7.0	7.9	5.5	4.3	2.2	1.6	2.0	1.6	2.2	14.6	1.6	8.2
19	4.3	4.0	6.6	6.6	6.3	6.8	7.4	7.1	5.6	4.2	4.4	4.2	4.3	5.1	5.3	8.5	7.5	6.9	9.1	7.5	5.9	4.5	3.8	4.4	9.1	3.8	5.8
20	3.9	3.6	3.2	3.0	3.7	2.9	3.3	2.7	1.7	1.8	1.3	2.4	2.7	3.3	5.2	5.3	4.8	4.6	4.4	4.7	5.6	3.7	5.6	4.7	5.6	1.3	3.7
21	3.5	2.2	1.4	1.1	1.2	1.8	1.2	2.3	2.7	3.3	3.2	4.7	3.7	3.8	4.1	5.1	5.7	6.7	7.6	7.8	6.9	7.4	7.2	6.1	7.8	1.1	4.2
22	5.8	5.8	5.6	4.1	3.5	3.1	1.8	2.0	2.1	2.0	1.1	1.5	2.2	3.0	3.2	4.0	3.4	4.3	5.5	4.6	4.9	7.1	7.6	8.4	8.4	1.1	4.0
23	8.1	7.2	6.5	6.0	8.5	9.0	9.0	7.9	7.3	7.1	8.2	8.2	7.4	8.1	7.9	10.3	9.4	9.4	7.9	9.0	8.5	8.0	5.4	5.8	10.3	5.4	7.9
24	7.0	7.5	7.5	6.5	6.3	4.4	4.0	3.9	2.4	3.0	3.7	5.3	5.5	6.4	6.5	4.9	5.5	5.2	5.2	3.5	3.6	3.4	2.1	3.3	7.5	2.1	4.9
25	4.0	4.8	4.4	2.4	2.3	2.8	2.9	6.1	4.4	3.9	0.9	0.3		0.2	1.2	2.4	2.5	1.8	2.1	2.7	1.9	1.5	2.4	1.6	6.1	0.2	2.6
26	2.5	3.1	2.9	2.9	2.9	2.9	2.6	2.3	2.9	3.0	1.8	2.3	2.8	2.1	2.2	1.5	2.0	2.6	1.4	1.7	2.4	4.7	7.0	6.7	7.0	1.4	2.9
27	8.1	8.3	9.8	8.0	10.2	11.4	12.4	11.7	11.7	13.0	14.1	14.7	15.3	14.4	13.1	15.6	14.9	13.4	12.7	12.7	14.0	12.1	11.7	10.2	15.6	8.0	12.2
28	10.7	10.1	8.5	5.8	5.4	4.6	4.7	2.6	3.7	3.5	3.0	2.6	2.0	1.4	2.0	1.9	4.0	2.6	1.8	1.7	2.8	4.8	4.7	8.3	10.7	1.4	4.3
29	9.0	8.2	4.9	4.6	4.8	4.9	5.0	5.3	4.6	4.7	5.6	6.7	7.4	6.3	5.4	5.1	4.3	6.1	5.2	2.7	1.9	1.9	2.3	2.6	9.0	1.9	5.0
30	1.0	2.2	2.7	2.7	3.4	3.1	2.8	1.7	6.6	7.4	6.1	8.1	7.1	5.8	4.2	4.6	3.7	3.7	4.1	4.5	3.3	2.3	2.0	2.2	8.1	1.0	4.0
Max.	**13.5**	**13.7**	**14.4**	**16.5**	**14.6**	**16.0**	**16.0**	**16.0**	**15.7**	**15.2**	**16.8**	**16.6**	**17.3**	**15.7**	**15.2**	**15.6**	**14.9**	**13.4**	**12.7**	**12.7**	**14.0**	**13.4**	**14.2**	**14.6**	**17.3**		
Min.	**1.0**	**1.2**	**0.8**	**1.1**	**1.2**	**1.4**	**0.8**	**1.1**	**1.7**	**1.6**	**0.9**	**0.3**	**2.0**	**0.2**	**1.2**	**1.5**	**2.0**	**1.8**	**1.4**	**1.7**	**1.6**	**0.9**	**0.9**	**0.7**		**0.2**	
Avg.	**6.6**	**6.5**	**6.8**	**6.4**	**6.3**	**6.3**	**6.1**	**6.1**	**5.9**	**5.9**	**5.8**	**6.3**	**6.6**	**6.3**	**6.5**	**7.0**	**6.9**	**6.5**	**6.4**	**6.2**	**6.0**	**5.9**	**6.1**	**6.2**			**6.3**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	0.8	1.1	1.5	1.9	1.6	2.0	1.7	1.5	2.6	3.5	5.1	6.4	6.9	7.2	7.3	6.2	5.0	4.5	6.9	7.2	7.5	7.0	6.6	7.5	0.8	4.3
2	4.8	1.8	1.9	2.1	2.3	2.5	1.7	2.0	2.6	2.7	1.4	1.4	1.1	1.7	1.4	2.8	4.0	5.6	4.2	4.0	6.9	9.0	7.2	4.7	9.0	1.1	3.3
3	3.6	3.8	3.6	1.5	1.3	2.2	2.6	5.8	8.4	7.1	8.4	8.9	8.2	9.3	7.2	6.3	7.7	6.8	6.0	4.5	5.9	7.7	7.1	4.9	9.3	1.3	5.8
4	4.0	4.1	4.7	4.5	4.0	3.9	3.3	4.0	4.2	3.7	3.2	3.0	1.0	2.0	2.0	3.9	3.8	3.9	2.2	2.3	2.1	2.1	2.3	1.8	4.7	1.0	3.2
5	2.4	2.3	2.0	1.8	2.4	3.3	2.7	3.3	2.1	1.9	2.3	1.8	1.7	0.6	0.6	1.0	1.1	1.7	2.4	4.0	5.6	6.2	6.7	6.1	6.7	0.6	2.7
6	5.7	5.6	5.2	4.6	4.0	3.4	3.9	3.7	4.1	3.5	3.3	3.6	3.9	3.8	3.2	3.4	3.1	3.1	4.5	7.2	8.0	7.8	7.6	7.6	8.0	3.1	4.8
7	7.4	6.9	7.1	8.3	8.9	10.0	9.9	10.8	13.6	13.2	11.8	12.4	12.2	12.0	13.1	14.3	12.9	12.7	12.8	9.7	8.8	9.9	9.7	9.9	14.3	6.9	10.8
8	10.0	7.8	10.2	11.0	8.5	8.8	8.5	8.9	10.5	6.4	3.5	7.6	7.1	6.5	6.3	6.1	7.6	7.1	5.4	5.9	4.4	4.7	6.1	7.5	11.0	3.5	7.4
9	8.8	10.1	10.8	14.3	16.7	17.4	16.0	17.5	17.2	19.3	17.7	18.0	17.7	20.3	20.9	20.7	19.8	21.7	20.5	19.7	18.8	16.7	17.6	13.6	21.7	8.8	17.2
10	13.3	12.3	9.7	7.3	7.1	6.6	6.2	3.0	1.7	1.7	1.8	1.6	3.3	5.0	4.9	5.9	8.8	7.2	5.9	7.3	7.4	7.2	7.2	8.2	13.3	1.6	6.3
11	8.0	8.7	9.0	9.2	9.5	9.0	9.7	8.8	6.1	6.6	3.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.7	0.2	3.8
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	15.9	21.1	20.9	19.2	18.5	11.8	12.2	9.0	9.5	9.0	8.1	7.1	21.1	0.2	6.9
13	6.0	6.4	7.4	7.9	4.6	3.5	3.9	5.0	3.0	4.0	2.6	3.1	2.7	5.6	9.6	8.9	9.4	9.5	9.1	9.4	9.0	9.1	10.5	10.7	10.7	2.6	6.7
14	10.8	11.5	12.7	15.3	15.6	12.9	6.9	6.8	4.3	6.1	5.5	5.6	5.5	5.1	4.3	4.6	6.4	5.9	5.5	5.5	3.7	2.1	2.8	3.8	15.6	2.1	7.0
15	5.5	8.9	9.8	9.7	9.6	6.3	5.7	5.5	5.4	4.9	4.0	4.0	6.1	6.6	8.3	10.9	9.7	9.8	10.5	10.8	10.1	9.0	10.2	9.6	10.9	4.0	8.0
16	8.5	7.8	8.0	8.0	8.2	8.6	8.5	8.5	9.3	8.7	9.0	8.3	7.4	7.5	7.0	5.5	5.8	6.3	5.8	5.7	5.4	4.6	3.7	1.8	9.3	1.8	7.0
17	1.8	1.6	1.0	1.4	1.5	2.0	2.0	2.7	1.8	2.4	1.9	1.6	1.2	1.3	2.5	2.4	1.2	1.9	3.3	4.2	5.3	5.3	9.0	11.3	11.3	1.0	2.9
18	12.4	11.9	12.9	12.1	14.9	12.7	12.4	11.7	12.2	11.0	8.2	9.2	9.5	9.8	8.4	5.8	6.0	7.4	8.3	9.2	8.2	9.0	8.0	8.8	14.9	5.8	10.0
19	6.8	11.1	10.1	10.3	11.9	13.3	13.2	12.4	10.0	10.6	10.9	7.9	7.0	9.1	7.6	6.8	5.8	4.6	4.2	4.4	4.8	4.3	2.6	2.7	13.3	2.6	8.0
20	2.0	0.9	1.0	0.8	1.3	1.2	2.1	1.0	1.7	2.1	1.3	1.4	2.9	4.1	3.4	3.6	2.7	1.6	2.8	2.1	2.3	1.2	1.7	1.3	4.1	0.8	1.9
21	1.7	1.3	1.1	1.7	1.8	1.7	3.0	2.7	2.5	3.9	5.0	7.2	7.0	6.3	8.6	11.1	13.1	14.1	14.4	15.9	16.9	16.1	17.6	18.9	18.9	1.1	8.1
22	16.6	15.6	8.3	12.2	10.6	15.7	16.7	18.4	17.7	16.9	15.4	16.3	18.6	15.1	16.5	14.2	15.8	14.2	14.9	15.3	15.6	13.4	13.2	12.3	18.6	8.3	15.0
23	11.4	11.3	11.4	12.0	9.4	13.1	15.8	15.0	14.1	16.4	20.3	21.4	21.1	20.1	19.4	19.0	15.3	16.3	12.1	11.6	10.4	9.6	8.5	9.6	21.4	8.5	14.4
24	12.6	15.1	17.2	16.7	15.1	15.5	18.7	16.3	15.2	16.0	13.9	12.1	11.7	8.6	8.1	7.0	6.8	4.6	2.3	2.8	1.5	1.0	2.3	3.1	18.7	1.0	10.2
25	5.6	8.0	8.9	9.2	8.3	9.3	8.2	8.1	9.1	8.4	8.6	8.4	8.9	8.6	7.0	6.0	4.9	6.3	6.2	6.7	5.8	5.0	6.7	8.3	9.3	4.9	7.5
26	9.0	9.1	10.4	11.1	12.8	13.1	12.9	13.5	14.9	13.5	15.5	16.1	14.4	14.9	16.0	17.1	17.8	13.8	8.5	10.3	8.5	16.8	22.9	22.9	22.9	8.5	14.0
27	23.9	23.8	20.2	16.9	21.2	20.7	20.4	16.9	15.4	17.0	17.5	15.3	12.1	9.5	13.4	12.7	11.2	5.7	7.0	7.4	8.1	6.4	4.9	3.2	23.9	3.2	13.8
28	3.1	2.9	2.6	1.9	1.6	0.8	2.7	4.3	6.1	6.3	5.6	5.4	5.1	4.7	3.8	3.8	2.9	2.8	2.0	2.0	3.4	2.0	2.5	2.8	6.3	0.8	3.4
29	3.7	3.8	3.8	3.5	3.5	2.4	1.9	2.4	1.8	1.1	1.2	2.0	2.2	3.1	4.4	3.8	5.8	5.8	4.8	6.9	8.5	8.8	8.7	7.6	8.8	1.1	4.2
30	7.4	7.3	7.1	6.0	5.9	5.3	4.8	5.5	4.5	4.2	3.4	3.3	2.2	2.0	1.5	2.1	2.1	1.7	1.4	2.3	1.7	1.5	1.2	1.1	7.4	1.1	3.6
31	1.3	1.9	2.1	2.7	2.2	1.3	1.0	0.9	0.8	0.9	0.7	0.9	1.2	0.8	1.0	2.8	2.1	2.7	3.7	3.2	2.1	0.7	1.8	2.2	3.7	0.7	1.7
Max.	**23.9**	**23.8**	**20.2**	**16.9**	**21.2**	**20.7**	**20.4**	**18.4**	**17.7**	**19.3**	**20.3**	**21.4**	**21.1**	**21.1**	**20.9**	**20.7**	**19.8**	**21.7**	**20.5**	**19.7**	**18.8**	**16.8**	**22.9**	**22.9**	**23.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.1**	**7.3**	**7.2**	**7.3**	**7.3**	**7.4**	**7.3**	**7.3**	**7.2**	**7.2**	**6.8**	**6.9**	**7.3**	**7.5**	**7.7**	**7.7**	**7.7**	**7.2**	**6.7**	**7.0**	**7.0**	**6.9**	**7.3**	**7.1**			**7.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	3.7	2.7	1.4	1.8	4.8	3.9	3.0	4.0	3.9	4.2	4.1	3.3	8.0	7.5	5.8	6.4	4.4	4.9	9.0	14.2	11.7	14.7	13.6	14.7	1.4	6.0
2	14.4	13.0	12.8	13.4	10.6	9.8	10.2	11.9	13.7	16.8	18.9	18.2	19.1	17.7	16.7	17.7	20.0	19.8	19.1	19.4	21.8	21.9	21.3	21.3	21.9	9.8	16.6
3	21.5	21.3	20.0	17.3	18.0	13.4	11.9	12.9	14.6	14.8	12.2	11.6	11.1	9.9	10.6	7.4	8.2	10.2	6.9	6.2	11.9	14.6	14.8	15.3	21.5	6.2	13.2
4	16.2	17.4	18.3	20.3	20.1	15.4	9.9	13.3	14.9	13.4	10.8	9.6	8.4	7.1	7.7	7.1	7.3	6.9	6.9	6.3	5.8	6.3	5.6	5.8	20.3	5.6	10.9
5	5.6	6.7	6.9	6.4	5.5	6.4	7.1	7.3	7.3	6.4	4.9	5.9	4.6	5.2	5.2	5.1	5.4	5.7	6.2	5.4	5.8	5.7	5.8	5.6	7.3	4.6	5.9
6	5.8	5.6	5.5	5.8	6.8	7.9	7.9	8.1	7.8	7.4	8.7	7.1	7.1	3.7	5.2	5.6	5.8	4.8	4.0	6.8	6.9	8.6	8.3	11.8	11.8	3.7	6.8
7	11.4	12.0	11.2	11.9	11.0	10.7	11.5	9.0	7.1	6.2	6.2	6.6	4.6	2.7	3.9	3.5	2.1	1.0	1.0	1.5	2.1	2.8	3.7	2.3	12.0	1.0	6.1
8	1.9	2.1	1.6	1.6	0.9	0.2	0.2	0.2	0.2	1.5	6.2	7.0	8.8	9.9	9.8	8.2	9.1	10.5	11.9	12.6	14.3	14.8	15.2	12.9	15.2	0.2	6.7
9	14.7	16.0	18.0	16.8	16.6	16.5	16.5	15.3	12.1	10.1	9.0	7.6	7.8	11.5	12.3	12.2	11.6	8.6	6.4	13.1	16.9	10.5	9.3	9.2	18.0	6.4	12.4
10	9.8	9.1	9.2	8.4	6.8	7.5	8.2	11.7	12.2	12.2	13.5	2.9	1.3	1.7	1.1	1.4	4.7	7.5	5.9	4.7	8.0	10.3	9.4	7.8	13.5	1.1	7.3
11	6.7	7.0	7.4	7.2	7.5	7.4	7.0	6.7	5.5	6.0	4.9	2.6	1.7	1.0	0.8	0.8	0.8	1.1	1.9	2.0	2.2	1.7	2.9	1.4	7.5	0.8	3.9
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.0	6.9	7.3	7.5	8.1	7.6	5.8	5.3	5.4	6.0	4.0	4.6	4.7	3.5	3.1	3.4	3.1	8.1	0.2	3.7
14	3.6	5.2	5.2	4.3	3.3	2.4	2.2	2.7	2.5	2.6	1.9	2.0	1.5	1.3	1.7	1.6	1.3	1.1	1.3	1.2	1.4	1.2	1.6	1.5	5.2	1.1	2.3
15	2.0	3.9	3.1	2.5	3.4	3.4	3.1	2.8	2.9	4.0	5.4	5.7	7.1	7.2	9.0	9.7	10.7	10.3	9.0	10.3	9.5	7.9	10.5	9.6	10.7	2.0	6.4
16	8.1	8.9	9.3	8.5	8.5	5.4	4.5	3.2	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	9.3	0.2	2.5
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.5	8.7	8.8	11.2	12.8	12.3	12.8	11.7	12.8	0.2	3.5
18	8.8	11.5	9.5	8.6	9.8	10.2	10.7	10.5	10.4	10.7	11.1	11.5	12.2	11.8	11.2	11.2	10.8	11.0	11.2	12.6	13.1	12.6	12.9	11.0	13.1	8.6	11.0
19	10.0	10.6	9.5	11.1	10.6	11.9	14.5	15.6	16.6	17.6	19.4	21.6	21.2	21.4	23.0	19.6	19.5	17.8	21.9	24.5	23.1	21.6	21.1	23.8	24.5	9.5	17.8
20	23.0	22.3	26.3	25.3	22.8	22.5	26.4	25.6	26.8	27.2	27.7	23.8	17.5	19.6	22.9	23.1	22.5	22.7	17.2	15.3	16.2	15.7	14.3	14.1	27.7	14.1	21.7
21	13.2	13.7	11.8	9.8	10.9	9.9	9.5	9.3	10.0	8.7	7.3	6.0	7.7	7.2	6.5	4.2	5.5	5.7	4.6	3.9	4.7	5.9	6.7	5.8	13.7	3.9	7.9
22	5.2	4.1	4.3	3.2	3.2	1.6	1.0	1.4	1.9	1.6	2.3	2.0	1.4	1.0	1.6	1.0	2.4	1.2	0.7	1.2	1.9	1.6	1.7	1.4	5.2	0.7	2.0
23	0.7	0.7	0.4	1.0	1.6	1.1	1.7	1.8	1.5	1.9	1.1	0.7	1.1	1.5	3.9	2.1	2.9	5.7	9.7	10.2	11.4	11.0	9.7	10.7	11.4	0.4	3.9
24	11.0	12.2	12.5	14.4	12.8	12.1	12.3	12.3	16.2	17.7	15.3	14.7	14.5	13.7	14.3	15.5	14.2	12.3	9.9	6.0	6.7	10.9	9.3	7.6	17.7	6.0	12.4
25	7.2	8.3	10.7	8.5	7.4	6.0	4.5	2.1	4.3	4.9	4.9	4.1	2.4	2.3	2.9	5.0	5.7	3.9	6.9	5.9	8.3	10.7	12.2	13.1	13.1	2.1	6.3
26	11.2	12.5	14.8	10.8	8.9	8.2	8.8	6.2	7.0	7.5	8.8	5.3	12.4	12.9	15.9	16.6	16.6	14.4	13.0	12.9	10.7	11.6	11.8	9.0	16.6	5.3	11.2
27	9.1	10.1	8.5	7.1	8.2	7.6	7.3	6.8	7.7	7.6	7.6	6.2	4.1	5.6	7.5	6.0	6.6	7.5	6.9	6.9	7.6	8.1	8.0	7.8	10.1	4.1	7.3
28	7.6	9.1	9.7	11.2	11.1	10.5	10.9	11.0	10.5	10.8	8.2	8.1	9.0	9.7	10.1	10.0	10.3	10.5	10.0	10.8	10.7	9.8	9.6	9.4	11.2	7.6	9.9
29	10.2	10.0	9.8	8.9	8.6	8.3	8.0	9.2	10.1	9.6	11.0	12.8	9.7	11.9	13.6	14.1	12.6	13.6	13.5	14.2	15.9	15.4	14.7	14.4	15.9	8.0	11.7
30	12.1	10.3	13.8	14.9	14.3	11.1	8.3	4.9	9.4	13.7	15.0	16.3	18.3	14.2	6.7	14.8	11.6	13.0	15.1	14.8	8.3	8.4	10.4	13.5	18.3	4.9	12.2
Max.	**23.0**	**22.3**	**26.3**	**25.3**	**22.8**	**22.5**	**26.4**	**25.6**	**26.8**	**27.2**	**27.7**	**23.8**	**21.2**	**21.4**	**23.0**	**23.1**	**22.5**	**22.7**	**21.9**	**24.5**	**23.1**	**21.9**	**21.3**	**23.8**	**27.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**8.5**	**8.9**	**9.1**	**8.7**	**8.4**	**7.8**	**7.6**	**7.6**	**8.2**	**8.4**	**8.5**	**7.8**	**7.5**	**7.5**	**7.9**	**7.8**	**8.1**	**8.1**	**8.0**	**8.5**	**9.2**	**9.2**	**9.4**	**9.2**			**8.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (Climatronics) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.7	5.4	6.4	6.3	5.6	6.3	6.8	6.2	6.0	5.8	5.5	4.5	4.9	4.8	4.5	3.5	2.9	3.3	2.4	3.4	2.8	2.1	2.9	3.3	12.7	2.1	4.9
2	5.3	2.6	4.1	3.7	1.5	7.4	7.5	7.3	8.7	9.0	10.6	13.0	14.1	13.8	13.6	13.8	14.3	15.9	16.6	15.1	13.5	16.8	18.9	18.0	18.9	1.5	11.1
3	16.3	16.7	18.4	18.2	17.5	18.4	17.7	15.3	15.6	17.9	20.7	22.0	19.4	21.1	21.5	22.3	23.5	23.3	21.2	16.7	20.7	21.0	20.4	19.2	23.5	15.3	19.4
4	17.2	14.4	12.7	8.9	11.2	12.8	12.4	11.3	12.5	12.1	13.0	13.8	15.1	15.5	15.3	13.5	13.1	11.6	9.5	8.0	9.0	10.0	10.6	10.5	17.2	8.0	12.2
5	11.7	11.5	10.8	12.5	12.0	10.4	11.2	12.2	12.6	11.9	12.7	11.7	12.4	12.3	10.9	9.2	7.7	8.1	6.6	5.5	5.8	8.0	8.2	6.8	12.7	5.5	10.1
6	5.6	6.3	8.3	9.1	7.9	8.7	9.6	9.0	9.0	8.7	7.1	6.1	4.1	2.4	2.1	1.8	3.3	1.7	1.3	1.9	2.4	1.9	2.4	3.8	9.6	1.3	5.2
7	3.9	1.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.9	0.2	0.4
8	0.2	0.2	0.2	1.6	7.4	8.3	6.9	8.7	12.8	12.9	12.4	10.8	11.0	16.4	19.1	19.5	17.3	15.4	14.0	10.6	10.6	14.2	10.0	10.7	19.5	0.2	10.5
9	8.0	7.9	6.9	7.1	5.8	5.7	7.6	6.7	4.8	5.1	3.0	1.1	1.8	1.2	1.4	2.6	2.2	2.5	3.0	2.7	3.3	4.0	2.7	2.7	8.0	1.1	4.2
10	5.0	4.9	6.1	7.9	7.8	8.5	11.1	9.2	11.3	11.3	9.6	5.6	3.0	3.0	2.8	2.0	1.5	1.3	1.8	3.4	2.7	2.0	1.8	2.0	11.3	1.3	5.2
11	2.5	3.2	3.0	2.8	3.5	1.4	1.8	1.3	0.9	0.7	1.3	1.5	2.8	2.5	3.9	5.0	9.2	11.3	10.5	11.7	8.0	7.3	8.7	8.9	11.7	0.7	4.7
12	8.8	8.1	4.2	1.9	3.4	2.3	2.6	1.6	4.1	1.8	1.5	1.8	2.2	2.4	2.7	2.7	2.8	3.0	3.5	6.0	9.1	12.5	14.4	16.4	16.4	1.5	5.0
13	14.4	14.3	15.2	14.6	15.4	8.1	3.4	5.4	8.3	8.7	9.9	8.0	4.7	3.2	4.2	7.0	6.7	5.6	4.3	3.9	2.6	2.2	2.0	4.0	15.4	2.0	7.3
14	4.0	3.8	3.1	1.5	2.8	3.1	2.2	3.2	4.0	5.6	5.1	5.4	4.8	4.9	6.1	9.6	10.8	9.7	7.9	12.3	15.6	16.7	12.9	13.1	16.7	1.5	7.0
15	12.2	13.4	11.9	11.3	13.3	12.8	12.5	9.4	8.4	8.6	7.8	4.1	2.2	4.5	4.8	3.1	2.2	2.0	1.6	2.8	2.6	2.8	3.6	4.7	13.4	1.6	6.8
16	4.9	4.5	4.4	3.7	2.2	1.6	2.5	2.5	2.1	2.4	2.2	4.7	5.1	5.4	4.7	5.2	4.3	2.8	3.0	3.5	3.8	6.1	6.9	8.4	8.4	1.6	4.0
17	12.5	15.2	13.2	12.3	15.9	15.6	18.6	17.2	18.0	17.0	17.8	19.0	17.0	15.8	15.1	16.9	16.6	17.2	17.9	16.9	15.9	14.9	13.6	13.5	19.0	12.3	16.0
18	14.7	14.7	13.7	13.5	15.5	16.9	17.9	18.2	17.5	19.7	17.3	15.5	15.6	16.6	18.0	18.8	20.0	17.8	18.5	17.3	16.7	17.0	18.2	17.1	20.0	13.5	17.0
19	17.5	15.8	15.2	18.1	17.1	15.6	16.3	16.1	16.6	13.4	15.0	13.2	12.9	10.3	8.4	7.7	8.4	7.9	8.5	9.7	11.7	11.7	12.7	10.5	18.1	7.7	12.9
20	8.5	8.9	8.0	8.3	6.9	7.6	6.8	7.1	9.1	10.0	10.1	9.1	6.7	7.4	7.9	8.3	6.0	4.1	2.2	1.0	1.5	1.6	3.2	3.5	10.1	1.0	6.4
21	3.4	1.9	1.4	0.8	1.7	2.6	2.7	3.5	2.4	1.7	3.2	3.2	1.9	1.5	1.5	1.0	1.1	1.6	1.4	1.0	1.4	1.2	2.0	1.8	3.5	0.8	1.9
22	2.2	0.9	2.5	3.2	4.0	8.2	10.0	9.3	10.4	8.7	8.6	9.2	4.9	4.2	4.7	6.3	5.6	5.7	7.8	9.0	9.6	9.7	9.8	10.4	10.4	0.9	6.9
23	11.0	11.5	12.1	12.1	11.7	11.1	9.6	7.7	2.6	11.0	10.9	11.4	11.4	12.3	13.4	12.1	13.1	12.9	11.6	12.7	14.7	17.0	17.0	13.6	17.0	2.6	11.8
24	15.9	15.4	14.7	14.0	13.0	7.6	3.1	3.8	2.1	2.5	3.2	3.1	3.0	3.6	4.7	4.8	5.5	2.5	1.9	2.5	2.3	2.5	4.9	3.4	15.9	1.9	5.8
25	5.7	9.7	13.3	11.1	15.5	14.3	16.1	16.0	17.8	15.6	12.4	13.4	16.7	17.6	15.0	11.5	9.8	14.9	19.2	22.0	21.9	20.3	19.0	21.3	22.0	5.7	15.4
26	20.6	21.3	21.7	20.8	19.1	17.6	18.1	17.6	20.6	19.7	17.5	16.0	16.6	15.2	16.3	17.1	18.4	19.2	19.3	19.8	18.7	19.0	16.2	18.5	21.7	15.2	18.5
27	17.6	14.3	20.7	24.5	23.8	26.8	20.9	21.5	23.6	21.3	22.7	24.6	25.6	22.2	21.4	21.3	20.4	16.8	20.5	24.7	26.7	25.6	22.7	18.2	26.8	14.3	22.0
28	20.6	23.4	23.6	23.7	24.3	20.9	21.3	21.5	20.9	18.0	14.4	16.1	18.7	8.8	12.7	12.9	12.3	13.9	12.5	10.4	9.2	8.8	9.0	8.7	24.3	8.7	16.1
29	7.9	7.8	8.0	10.0	11.2	10.5	9.0	10.0	10.2	10.4	9.6	9.4	8.8	8.0	8.9	8.0	7.0	7.8	9.0	10.2	10.8	10.5	10.1	8.0	11.2	7.0	9.2
30	8.5	8.2	9.1	9.0	7.9	8.4	10.0	9.8	10.8	12.8	11.1	9.2	9.4	9.9	10.9	10.7	10.3	10.6	10.6	10.2	11.2	11.5	11.3	10.7	12.8	7.9	10.1
31	9.9	10.3	9.3	9.4	8.5	7.2	9.4	11.6	12.6	11.6	12.5	14.5	14.5	13.4	13.2	13.1	15.8	11.0	8.4	8.0	11.1	11.7	9.9	9.9	15.8	7.2	11.1
Max.	**20.6**	**23.4**	**23.6**	**24.5**	**24.3**	**26.8**	**21.3**	**21.5**	**23.6**	**21.3**	**22.7**	**24.6**	**25.6**	**22.2**	**21.5**	**22.3**	**23.5**	**23.3**	**21.2**	**24.7**	**26.7**	**25.6**	**22.7**	**21.3**	**26.8**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**10.0**	**9.6**	**9.8**	**9.8**	**10.1**	**9.9**	**9.9**	**9.7**	**10.2**	**10.2**	**10.0**	**9.7**	**9.4**	**9.0**	**9.4**	**9.4**	**9.4**	**9.1**	**8.9**	**9.1**	**9.6**	**10.0**	**9.9**	**9.7**			**9.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	15.6	20.2	21.5	22.5	23.2	24.0	24.7	29.2	26.2	24.2	22.2	27.7	27.1	25.7	24.1	21.3	23.4	20.9	17.1	18.3	15.8	20.6	17.5	21.9
2	12.9	19.5	19.3	14.7	15.5	16.3	15.9	17.0	13.2	18.8	14.3	18.6	24.1	14.0	20.9	16.8	18.2	18.2	19.2	30.5	23.5	13.2	8.1	5.4
3	19.9	18.6	21.2	15.1	21.7	16.0	22.7	25.5	24.3	19.6	17.3	20.9	13.1	18.4	3.0	6.1	7.7	357.6	356.2	19.6	7.2	10.7	10.6	6.8
4	3.0	12.4	348.5	6.9	8.5	9.9	2.3	7.9	13.0	14.0	10.6	15.4	15.5	15.6	11.5	7.9	8.7	9.9	9.4	3.0	2.8	7.2	10.2	5.2
5	6.3	14.0	7.8	0.8	2.4	359.1	355.9	356.9	4.5	357.4	1.8	2.4	1.3	3.5	356.0	347.5	354.4	351.4	348.9	348.1	351.5	349.3	356.2	351.2
6	355.6	351.9	349.5	348.1	354.0	0.6	0.2	357.6	353.9	358.4	354.8	347.0	2.2	353.3	0.6	7.4	359.4	359.2	1.8	356.8	351.3	5.8	348.9	1.3
7	19.0	19.0	15.5	17.3	16.3	11.0	6.7	6.6	12.6	14.5	6.4	9.7	7.1	1.6	1.0	1.3	359.8	5.3	357.1	5.1	10.7	17.1	16.4	21.0
8	13.6	13.5	8.8	10.8	9.9	10.2	358.6	4.8	10.7	6.3	7.1	16.3	11.6	6.7	6.4	14.5	10.8	13.4	9.0	11.2	10.1	18.3	11.7	17.2
9	15.1	7.7	14.6	12.7	12.5	3.8	0.5	358.5	355.8	0.4	5.0	1.1	349.7	357.9	347.6	333.5	337.6	331.7	335.0	327.8	316.1	321.9	328.4	334.2
10	332.6	325.3	336.6	348.7	343.0	343.1	358.8	5.6	354.9	352.7	352.1	352.5	353.2	357.8	0.1	6.9	9.2	12.8	4.4	9.0	357.9	354.7	345.4	354.7
11	343.6	336.8	333.0	339.7	353.8	3.7	11.8	358.0	14.2	15.4	1.9	11.1	350.3	348.4	352.8	350.0	356.7	7.7	11.3	11.6	7.9	14.0	20.0	20.8
12	18.8	19.8	18.0	15.8	20.3	19.8	15.4	15.1	9.4	12.6	11.6	14.1	12.1	11.2	9.9	12.8	10.7	9.3	355.2	355.8	353.5	358.5	357.2	357.8
13	356.1	355.6	342.8	355.9	5.9	354.1	355.7	360.0	357.3	355.4	10.6	14.7	20.0	14.7	6.8	1.2	0.2	9.4	357.1	1.2	15.4	14.3	15.3	19.3
14	20.5	9.5	26.5	1.9	17.8	29.1	27.6	46.0	113.6	124.0	107.3	104.1	101.9	104.4	103.0	106.4	108.1	106.9	107.8	105.5	101.7	115.0	126.7	125.9
15	119.2	111.0	114.5	122.5	133.1	139.9	135.5	136.6	131.8	123.3	123.4	123.7	134.0	132.3	122.4	127.2	128.6	129.4	125.9	121.1	133.1	136.0	129.1	136.5
16	137.3	198.9	291.0	285.5	154.3	165.2	162.9	183.7	263.0	277.1	176.1	188.4	239.4	221.7	212.2	194.6	152.9	115.0	92.2	97.6	105.1	55.5	49.7	84.4
17	87.1	87.5	100.3	95.9	99.8	101.7	99.1	95.2	91.3	96.6	94.8	93.9	82.6	91.7	92.8	98.2	101.3	104.2	126.4	143.6	138.9	130.6	138.8	142.5
18	146.2	123.3	126.9	152.3	132.7	121.5	121.0	115.2	122.4	128.8	120.8	127.8	126.4	123.8	100.8	26.9	331.6	34.8	73.9	102.8	105.5	111.1	125.6	125.9
19	136.6	135.1	126.2	121.8	122.8	123.7	116.4	120.9	132.1	126.5	123.8	121.5	122.8	121.4	122.9	117.1	123.4	126.9	119.5	117.1	116.4	121.9	125.5	127.9
20	129.0	129.5	123.9	119.0	117.0	121.6	120.0	119.4	118.1	125.5	111.1	102.2	104.5	107.3	109.4	106.4	100.7	72.4	68.9	102.3	41.8	117.2	116.4	115.3
21	122.3	136.7	136.6	128.9	119.0	112.0	104.5	110.5	119.1	119.6	117.1	119.9	113.8	111.9	105.5	108.5	108.6	113.3	114.9	120.7	115.5	115.9	109.5	120.5
22	131.6	149.5	181.5	175.1	168.8	175.8	180.2	177.9	171.2	174.5	209.8	222.6	227.9	223.7	222.8	231.9	233.7	227.1	216.2	199.5	152.6	27.3	357.0	330.4
23	333.7	326.9	340.0	331.6	330.3	340.1	337.9	341.4	338.1	343.4	338.6	340.1	336.6	329.3	340.7	346.4	352.2	347.6	349.2	15.0	9.1	15.9	16.3	18.4
24	16.5	14.6	23.9	16.8	24.4	32.2	358.7	106.4	101.0	104.9	109.9	111.5	115.2	114.8	115.1	116.5	119.2	117.8	117.7	116.3	121.2	122.1	129.3	131.3
25	131.6	140.9	98.4	104.0	256.4	261.0	264.7	266.9	268.7	290.4	290.2	294.4	296.5	296.2	294.2	295.2	296.0	303.9	315.9	337.3	356.1	352.3	360.0	2.3
26	10.1	12.6	9.2	11.9	20.0	11.4	9.2	13.8	11.8	18.0	29.8	20.3	22.3	26.1	21.3	23.8	15.2	347.9	0.8	322.2	93.6	115.0	115.1	125.0
27	124.5	126.5	126.0	126.7	131.4	134.1	133.3	131.8	119.5	113.5	110.3	112.9	110.2	107.6	105.7	105.1	106.8	107.4	107.2	107.5	108.4	110.1	114.9	115.9
28	117.6	121.8	125.6	129.3	130.9	137.5	145.1	138.6	129.8	127.0	124.4	125.8	122.0	113.9	111.0	100.4	66.8	314.9	275.1	322.7	246.0	259.9	6.0	333.2
29	354.9	291.9	257.7	255.9	298.1	308.3	262.4	257.5	286.6	314.4	25.8	28.8	328.9	312.3	20.0	11.1	26.1	23.3	21.4	21.5	35.5	23.2	25.8	14.6
30	26.9	14.4	22.0	25.0	13.7	22.3	13.2	352.8	358.1	6.1	8.1	10.6	17.7	27.4	20.9	10.3	6.1	23.4	7.0	349.1	351.8	351.2	353.8	3.4
31	4.1	11.1	8.5	9.9	7.6	5.8	352.4	352.0	4.8	2.4	14.2	214.1	268.2	223.1	245.8	267.4	288.4	352.0	220.3	214.4	297.2	330.8	327.9	10.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	28.0	26.4	24.5	17.4	13.2	24.0	26.3	17.5	15.2	26.4	34.7	43.5	37.2	37.3	91.2	95.0	78.4	33.4	28.6	19.8	26.8	22.3	20.5	22.5
2	19.4	21.1	24.0	26.7	18.2	12.0	13.9	17.3	13.4	16.5	16.7	11.8	359.6	10.1	352.9	9.0	357.7	347.2	343.0	341.8	352.2	1.2	2.8	7.8
3	359.0	16.2	358.0	5.8	9.0	3.6	5.3	5.2	354.7	1.7	7.0	9.8	24.5	32.9	26.9	17.3	23.1	26.5	23.7	19.3	23.1	20.5	23.6	22.3
4	19.9	17.4	21.1	21.3	23.2	21.4	23.9	23.1	23.3	24.0	25.0	23.6	23.5	24.4	25.3	23.9	13.2	13.8	17.4	16.6	17.3	15.6	13.4	11.7
5	14.3	17.7	14.9	16.1	19.4	16.0	22.8	20.1	18.1	10.4	16.9	7.0	17.0	21.3	12.9	16.7	22.3	23.2	24.1	22.6	13.3	15.3	21.5	21.4
6	20.1	22.2	23.1	25.0	26.7	25.9	24.7	26.6	17.7	18.6	16.8	10.7	18.8	17.6	9.5	11.4	9.6	20.4	15.6	17.2	10.8	8.5	14.5	17.8
7	15.2	12.5	13.5	18.6	16.7	11.5	14.2	10.1	8.7	359.8	0.4	9.7	23.6	22.9	347.7	358.4	9.2	20.4	26.0	27.9	22.1	15.6	14.1	17.8
8	24.0	22.8	23.9	24.9	42.5	69.0	34.7	71.2	45.3	73.0	48.7	90.3	80.8	78.7	67.7	70.2	78.9	78.6	68.1	71.1	73.1	43.4	37.5	38.8
9	44.8	46.1	41.8	43.9	41.8	42.8	35.7	43.3	45.5	61.0	61.6	20.2	17.6	10.9	13.7	10.2	13.3	12.8	13.4	11.9	15.0	18.3	19.8	18.8
10	18.5	19.1	17.3	17.9	15.7	15.2	15.9	18.1	19.0	22.0	26.5	31.7	29.6	24.7	24.8	22.4	28.8	27.0	32.6	28.6	28.4	28.3	26.7	26.3
11	44.5	96.1	119.1	127.0	123.7	136.1	150.3	202.6	205.4	222.5	219.4	225.0	184.0	161.7	209.7	162.3	155.5	201.0	217.3	177.8	285.9	234.6	223.6	224.2
12	233.8	243.2	248.3	235.1	221.9	269.5	355.2	14.5	6.3	8.0	5.4	9.1	11.5	12.4	201.4	255.4	344.3	4.2	19.8	17.1	20.3	25.0	28.2	40.0
13	104.2	103.7	121.9	104.4	94.6	97.2	94.7	95.7	97.8	99.6	102.1	105.3	104.9	105.1	105.7	109.7	110.2	111.1	106.0	105.9	108.0	103.4	106.4	108.0
14	106.9	104.5	104.6	111.3	115.0	116.3	118.0	218.3	250.1	240.5	240.7	236.7	238.3	237.2	233.0	234.8	235.2	229.3	228.4	222.2	226.5	253.2	255.2	260.7
15	258.7	264.8	258.3	262.3	259.8	266.4	283.4	286.1	258.6	265.9	255.8	2.3	8.1	15.6	18.5	9.5	358.9	2.3	19.7	19.5	36.0	54.9	100.1	115.0
16	104.7	106.1	107.1	104.6	106.8	102.2	99.1	94.4	78.4	74.6	73.0	78.0	71.7	70.3	76.2	80.0	80.6	104.8	151.0	141.9	132.4	135.8	138.7	140.4
17	123.4	135.1	129.4	116.4	112.4	103.4	100.9	97.4	92.1	71.5	56.9	47.9	53.4	60.8	42.5	46.5	83.3	109.0	110.2	114.1	115.1	119.6	120.7	121.8
18	113.0	108.9	108.5	104.4	105.4	108.0	107.2	107.3	112.4	118.6	114.7	113.9	115.4	115.4	115.7	112.9	119.6	121.9	121.4	115.3	115.5	123.8	118.8	117.0
19	97.0	105.8	90.3	41.6	13.0	34.3	36.9	37.9	29.6	29.0	46.2	39.5	35.5	40.0	38.0	50.8	41.9	41.8	48.0	58.2	75.9	96.9	90.0	99.2
20	107.8	114.5	111.9	113.5	115.4	117.5	123.4	125.7	123.8	111.5	109.5	105.7	101.0	92.8	107.0	99.7	86.9	46.8	44.1	46.6	45.4	46.4	46.0	44.4
21	48.8	48.2	47.9	44.8	46.6	46.1	44.5	41.1	46.7	41.1	43.1	46.1	45.3	51.1	57.5	49.5	46.5	101.4	96.8	48.2	86.2	15.7	29.0	53.6
22	51.2	53.9	88.5	95.0	110.8	101.1	99.6	56.3	69.6	75.2	81.4	79.0	86.9	99.2	104.5	113.9	128.4	115.4	115.8	119.6	116.1	115.0	110.4	115.1
23	118.9	128.0	121.3	95.5	38.1	56.1	46.5	22.9	43.3	7.9	25.4	48.2	357.1	17.6	12.8	21.8	15.9	10.8	19.4	22.7	14.5	13.6	20.7	24.4
24	21.6	15.1	11.8	8.9	16.1	13.3	10.0	21.0	17.4	14.7	15.9	12.6	14.3	14.2	20.7	19.0	15.3	12.3	9.0	1.0	356.4	3.6	11.7	7.1
25	3.3	9.8	11.3	8.7	358.9	6.5	9.1	14.2	19.2	25.6	26.9	32.9	24.2	22.3	23.7	20.0	14.2	51.0	39.7	36.1	49.2	71.6	70.4	76.6
26	77.2	81.9	77.5	77.4	62.4	59.8	54.0	63.2	30.2	16.6	12.0	11.8	9.8	14.7	18.3	19.5	15.7	18.0	19.1	23.8	27.2	27.4	26.2	22.6
27	22.9	21.6	19.4	15.8	17.7	21.6	25.5	25.3	25.4	25.5	26.5	27.3	19.2	21.4	21.8	35.4	25.3	29.4	350.8	45.9	43.5	42.2	44.9	45.6
28	39.6	40.6	41.0	47.4	45.0	44.5	46.4	50.9	51.2	41.4	22.3	25.3	19.2	14.8	12.0	20.6	11.3	16.1	15.4	17.1	18.1	15.7	16.7	15.1
29	17.7	17.8	18.8	20.6	21.9	16.0	15.3	17.8	17.5	20.4	22.7	20.5	16.1	21.9	20.6	20.6	19.9	21.3	12.4	18.9	12.8	13.3	27.3	26.0

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	27.8	26.1	26.0	20.4	15.4	26.4	22.9	26.9	30.3	34.3	27.2	32.3	92.5	91.3	89.5	93.6	94.2	82.0	67.1	65.2	73.4	72.2	70.1	71.8
2	81.0	85.3	92.5	96.1	95.3	97.5	108.6	118.3	128.1	134.4	134.0	137.3	133.4	135.4	134.1	142.2	148.9	127.5	135.9	130.9	116.0	114.9	103.8	109.2
3	130.1	132.7	130.6	128.4	111.9	117.4	119.5	117.1	115.0	115.7	114.7	110.9	113.3	116.4	115.7	119.2	124.6	125.7	126.6	125.2	119.1	122.3	118.4	110.7
4	111.2	108.1	106.4	116.1	108.0	107.4	112.1	111.6	114.1	113.5	110.5	110.1	111.3	116.7	117.5	118.0	117.2	114.9	111.2	107.1	104.1	104.8	102.2	101.6
5	102.1	93.4	100.7	105.8	92.4	92.5	92.0	95.9	96.0	94.6	95.2	98.4	98.5	101.4	104.1	107.5	108.6	110.1	119.9	119.9	114.6	120.2	120.2	116.9
6	117.3	119.6	123.3	124.7	123.5	116.2	113.3	114.1	113.3	113.6	116.6	119.3	119.4	118.1	118.3	109.6	118.0	118.2	103.0	102.8	41.3	32.2	47.2	42.8
7	35.0	21.0	24.1	15.4	28.8	21.9	15.8	301.5	9.5	355.6	10.9	10.2	8.0	10.4	353.4	242.5	253.6	252.2	263.6	248.8	227.7	223.5	219.8	236.7
8	227.8	212.4	210.5	174.6	147.5	133.0	115.3	114.0	109.8	99.2	94.2	98.7	95.1	81.9	64.2	40.5	35.2	45.4	40.3	43.5	44.5	41.4	40.9	36.7
9	37.7	41.5	27.6	23.4	16.4	18.0	22.0	29.9	15.3	19.4	19.7	20.2	29.3	6.4	21.9	22.0	16.5	1.0	18.4	20.3	13.7	15.2	16.3	27.6
10	290.3	252.3	248.9	234.3	245.3	246.4	254.6	256.7	242.5	246.5	246.8	240.1	234.0	244.6	247.9	252.3	261.5	247.5	255.0	243.6	251.6	255.5	250.3	258.3
11	258.3	257.1	252.6	248.3	249.3	249.2	252.3	247.7	258.1	240.4	229.0	244.9	251.7	242.8	268.5	259.2	288.0	334.7	356.4	346.8	1.2	4.8	335.0	276.0
12	305.5	15.0	9.9	13.0	17.1	14.4	10.5	20.8	23.5	20.6	13.5	4.9	5.0	11.3	11.0	4.2	358.5	351.2	354.1	341.1	354.5	339.9	322.1	324.6
13	329.9	336.9	347.8	342.2	335.4	331.8	342.3	349.7	345.2	343.9	351.1	354.7	359.3	351.7	341.5	341.8	352.1	352.4	345.9	334.6	12.0	7.2	13.5	23.1
14	22.3	20.6	20.4	23.9	26.6	20.9	22.4	25.4	23.2	25.1	27.2	27.0	27.9	29.9	22.4	27.6	97.7	110.4	105.7	104.8	105.7	113.3	120.8	117.1
15	116.7	114.9	110.0	104.9	106.0	101.0	108.3	109.5	111.8	117.1	118.7	114.5	115.4	110.8	114.3	115.4	114.5	111.1	110.4	107.2	108.1	105.7	99.9	100.6
16	98.5	92.2	96.1	90.1	84.2	85.7	76.3	82.7	64.7	116.8	120.9	141.7	254.4	236.1	194.2	302.1	301.8	325.8	357.5	352.7	13.8	14.7	15.5	18.6
17	13.4	13.4	16.6	20.2	10.7	8.2	10.7	17.0	18.3	15.4	4.3	12.1	13.7	34.4	169.3	166.0	192.7	214.0	224.2	221.8	211.3	203.1	207.7	219.4
18	235.0	239.8	342.3	356.8	2.5	7.0	2.1	6.5	359.7	348.2	351.6	353.9	355.9	7.8	359.7	342.3	338.9	349.4	348.5	350.0	356.8	4.4	8.0	1.2
19	357.7	352.9	356.4	12.5	7.0	359.4	1.4	3.5	356.0	353.3	354.2	352.4	351.0	353.8	351.8	353.4	351.7	352.3	357.1	352.0	348.3	345.9	340.8	343.0
20	348.0	347.9	344.5	352.3	353.6	7.1	16.3	18.7	17.2	12.4	16.6	29.1	19.2	124.6	26.3	307.6	324.5	359.2	14.4	4.1	5.3	21.6	18.3	23.3
21	19.8	19.6	19.7	23.2	19.1	340.1	109.8	41.0	346.2	4.3	13.1	21.2	355.1	16.1	29.0	24.6	27.7	25.6	21.9	26.1	25.0	28.9	27.7	27.1
22	22.8	20.2	19.2	24.8	28.3	26.4	22.1	17.2	22.7	15.3	19.3	24.8	25.6	26.2	27.7	25.8	21.5	16.1	12.5	21.2	27.9	19.9	14.9	53.5
23	15.6	22.1	32.3	13.2	20.2	8.0	13.5	10.6	13.4	12.1	10.9	11.0	17.6	5.2	351.0	336.8	334.5	332.8	334.6	337.1	340.5	340.9	357.1	8.3
24	8.3	4.5	12.6	20.5	21.3	23.7	24.3	22.0	28.1	20.3	11.0	16.7	24.8	14.1	21.3	345.3	325.7	246.1	289.2	13.3	19.6	1.5	7.9	25.3
25	11.2	104.3	103.9	121.4	125.0	159.9	194.9	4.8	248.2	178.3	14.2	32.7	248.9	285.7	8.4	357.4	14.7	358.5	348.6	357.7	4.7	6.7	16.2	13.8
26	21.3	20.6	4.0	5.1	19.8	10.7	5.8	14.1	15.5	14.4	15.2	17.8	359.8	355.6	305.9	340.5	315.3	272.2	268.6	271.7	3.6	356.1	355.3	14.2
27	13.7	348.0	282.3	277.9	265.4	291.8	299.4	354.0	323.2	278.0	268.9	312.2	293.3	269.2	336.2	316.6	326.5	322.0	323.6	338.6	357.8	11.3	359.7	10.0
28	11.9	12.9	11.3	4.8	11.9	10.2	15.5	20.1	8.0	30.1	24.9	47.6	64.7	37.7	9.1	22.1	26.5	21.3	19.6	7.1	346.2	7.8	63.2	138.8
29	129.7	165.9	149.9	137.2	141.5	138.2	131.0	133.4	117.2	119.8	115.8	115.3	118.2	117.6	119.4	117.3	113.8	110.2	112.0	111.8	112.8	113.3	113.7	109.5
30	108.8	109.0	109.9	110.7	112.1	112.0	111.7	112.0	114.4	114.6	116.0	115.9	115.5	117.4	118.2	116.7	116.6	115.7	117.3	115.0	115.5	119.5	122.3	125.2
31	122.3	126.6	128.8	124.4	122.3	116.4	122.8	118.8	121.7	121.6	116.7	120.6	119.1	119.7	118.8	121.0	118.6	118.3	117.7	117.3	112.8	116.4	114.8	112.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	112.9	112.4	114.1	115.2	115.7	122.1	120.8	117.8	118.0	120.7	121.4	122.3	121.0	119.7	116.3	114.7	115.2	116.8	119.1	132.7	133.6	130.3	132.8	132.5
2	133.0	133.2	134.5	134.6	134.6	135.0	135.0	135.0	135.0	135.0	134.9	134.7	134.9	156.4	192.9	153.2	121.5	130.2	135.0	152.8	131.7	129.0	144.1	139.6
3	139.1	135.9	144.3	142.9	150.6	158.1	148.5	142.2	130.2	137.0	129.4	136.3	127.4	121.0	120.4	119.4	118.1	118.3	116.6	113.2	115.8	111.1	114.7	115.6
4	116.1	112.1	115.7	114.9	111.1	111.2	109.0	112.0	114.9	116.5	120.9	123.7	125.7	130.6	130.3	136.5	146.4	149.2	148.4	165.0	200.1	222.9	234.2	237.7
5	250.3	282.5	340.8	331.9	331.9	314.4	309.9	310.9	324.3	345.6	5.5	9.9	285.1	265.8	268.7	293.9	273.1	320.1	322.7	333.0	330.6	331.1	325.8	329.5
6	329.5	322.0	330.8	340.9	343.3	351.1	358.1	12.0	3.7	9.1	359.2	8.4	354.5	349.8	332.3	342.8	341.4	339.6	349.1	358.9	1.2	359.0	4.2	8.1
7	1.5	7.7	9.1	18.2	2.2	359.2	6.4	6.8	9.5	4.9	357.3	355.6	348.7	338.4	329.9	334.2	311.7	314.2	314.7	324.6	334.0	6.1	10.7	3.5
8	11.6	349.7	6.8	21.3	20.3	26.1	25.6	12.4	56.2	134.8	157.5	47.9	58.5	122.7	125.3	195.4	247.7	218.0	274.1	273.5	266.0	295.9	324.1	11.0
9	340.0	341.9	339.5	340.3	359.3	7.9	356.3	358.8	352.8	4.6	24.1	29.7	30.5	293.4	298.4	309.1	310.7	326.4	322.0	324.4	320.9	324.6	322.2	323.1
10	343.4	351.7	4.0	6.8	10.9	7.6	11.8	16.0	12.1	18.4	24.2	14.3	21.2	20.2	13.2	344.9	342.4	327.3	325.3	327.9	333.0	334.9	350.5	9.6
11	0.6	9.2	16.8	10.8	17.3	13.5	2.9	0.1	9.7	19.1	24.9	19.5	11.2	352.5	348.2	339.4	335.4	346.1	337.9	333.7	330.9	340.3	335.4	358.6
12	350.5	6.2	354.7	353.2	351.8	351.4	6.4	358.2	7.7	12.3	354.3	339.9	322.3	331.7	320.8	325.0	330.9	335.7	334.6	326.8	340.9	350.6	2.6	243.0
13	288.8	126.7	129.5	120.2	121.7	124.6	126.4	132.2	140.2	134.6	132.7	133.9	159.9	157.5	206.4	224.9	223.7	216.6	211.2	209.6	207.7	229.2	236.0	234.8
14	240.6	245.0	245.7	243.3	245.2	246.7	250.7	248.9	244.1	255.2	255.1	254.2	252.7	255.2	257.4	266.9	277.3	266.0	266.7	245.9	243.5	254.5	242.7	255.8
15	251.0	347.1	45.8	31.1	32.3	19.2	22.9	21.1	18.1	10.5	13.1	3.7	5.5	0.9	2.2	355.5	352.7	352.2	353.6	350.5	344.9	348.2	346.2	341.7
16	337.5	336.5	349.5	349.4	348.7	349.8	339.0	327.9	300.3	315.9	311.4	298.2	304.9	319.7	316.1	301.2	301.6	301.0	285.2	278.1	279.6	246.4	237.4	266.2
17	249.9	266.0	265.4	252.5	277.9	305.7	356.5	350.4	304.9	266.5	249.4	252.0	250.8	244.1	246.6	243.0	244.1	246.4	256.2	242.5	180.0	153.0	20.9	136.5
18	168.9	332.5	359.3	19.0	25.8	30.5	29.0	25.1	26.0	354.3	1.4	137.0	127.4	148.7	164.1	154.1	152.6	152.2	160.7	174.2	157.5	141.5	180.3	181.1
19	198.4	181.0	137.0	116.5	108.8	112.4	112.8	114.4	113.9	114.6	123.9	126.0	132.3	135.7	129.9	132.0	131.9	130.4	136.0	133.9	129.6	130.0	126.9	124.5
20	126.7	131.7	111.9	123.9	116.9	121.5	120.0	111.4	109.7	125.2	126.1	136.0	130.0	138.3	122.8	121.5	127.4	125.8	130.4	129.5	130.6	140.4	141.9	132.2
21	145.0	133.4	130.8	133.8	133.1	137.3	143.4	140.7	136.7	137.2	136.0	134.9	136.5	135.4	133.7	139.4	145.1	133.7	129.6	129.4	143.9	134.8	136.2	116.6
22	147.2	159.1	153.1	185.0	180.8	130.6	120.5	177.2	98.5	122.5	265.8	288.6	11.4	51.9	97.0	107.1	91.0	53.2	76.4	7.2	35.2	94.7	22.1	19.6
23	6.2	7.9	348.7	2.5	18.3	0.8	359.2	12.5	15.6	25.3	39.4	142.1	145.8	299.2	274.3	269.9	232.9	253.4	260.2	269.0	263.4	264.4	265.2	267.4
24	255.3	257.1	254.1	244.1	200.7	249.7	235.5	244.9	243.6	246.9	245.5	253.5	252.5	251.6	252.7	244.7	245.6	260.4	251.3	209.2	144.2	200.3	227.4	226.6
25	218.4	215.9	232.6	313.6	320.0	330.8	342.6	337.8	334.5	332.7	335.5	338.4	333.4	329.0	323.0	318.9	328.8	338.5	348.8	346.8	347.0	350.6	345.1	350.0
26	351.3	349.4	352.5	356.6	0.3	6.6	8.1	6.1	9.1	1.7	349.1	352.0	356.6	356.6	0.4	359.4	357.2	1.9	359.9	353.8	354.8	353.3	353.2	353.7
27	355.2	353.7	355.0	354.0	352.8	358.2	352.8	350.3	356.3	358.8	0.1	353.8	347.3	350.1	354.9	0.7	358.9	358.8	3.7	3.0	6.9	15.7	18.4	17.2
28	18.1	17.9	19.9	21.4	25.9	18.3	355.6	4.2	3.7	7.4	274.8	265.5	263.9	266.1	253.0	249.9	338.4	334.3	335.8	320.7	314.9	321.8	322.9	326.2
29	330.7	333.9	355.4	19.6	13.1	12.2	359.6	8.9	8.7	9.0	9.6	1.1	7.3	5.2	359.1	349.6	343.3	344.8	346.2	347.2	350.9	351.0	351.0	9.5
30	13.2	14.0	16.3	19.3	17.7	18.0	20.3	22.5	23.8	30.7	30.1	27.1	10.7	10.0	14.7	15.6	13.3	14.9	6.2	9.1	0.3	16.1	20.2	23.4

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	27.6	26.3	24.6	26.9	29.7	28.0	25.8	26.5	25.2	21.6	22.8	17.1	17.4	2.7	352.8	5.0	359.8	3.1	357.5	355.7	351.9	351.1	344.9	340.9
2	352.6	15.0	6.1	11.4	10.2	15.5	4.2	4.5	11.2	13.6	16.1	15.4	17.7	72.8	158.9	300.7	302.8	257.6	185.0	200.7	304.7	321.4	165.0	103.5
3	71.5	115.3	131.9	124.9	127.5	134.2	135.8	125.2	103.5	63.7	86.4	91.6	100.0	110.8	101.4	118.2	150.3	127.7	27.5	33.7	92.1	112.7	97.7	45.0
4	58.7	68.3	54.5	58.7	60.5	51.7	57.4	74.6	79.0	80.4	75.5	75.9	80.3	37.7	34.5	91.6	80.4	136.0	248.3	275.6	209.0	253.9	267.3	330.4
5	329.2	8.3	14.7	13.4	14.8	12.3	9.1	1.4	18.4	19.5	102.4	153.2	226.6	247.4	217.2	120.3	148.6	139.4	147.2	147.3	183.5	143.4	151.2	255.7
6	266.0	121.3	115.4	119.1	103.0	112.0	122.7	110.9	103.5	107.0	112.2	115.1	124.1	120.1	116.0	111.4	118.3	115.6	113.7	113.8	114.3	116.4	111.4	112.8
7	113.6	114.3	111.5	110.8	112.5	112.8	110.1	107.5	107.8	106.5	107.0	109.4	110.5	109.9	111.1	113.2	108.5	104.8	110.4	113.4	115.2	107.7	95.7	96.1
8	100.2	103.8	103.9	99.9	100.4	101.0	103.2	99.6	108.0	105.6	106.8	104.6	108.1	108.4	108.6	109.5	110.7	113.8	112.9	112.8	109.0	104.7	102.1	106.7
9	102.3	100.8	105.7	103.6	104.2	103.0	106.0	105.9	105.9	116.0	112.2	106.3	110.4	117.3	110.6	118.6	129.8	157.9	171.9	197.1	242.4	277.2	259.5	307.2
10	239.0	249.6	348.4	294.4	354.9	329.3	358.6	351.5	332.7	13.9	13.2	52.9	263.4	249.8	248.9	247.6	235.5	236.6	227.9	206.4	153.0	127.5	98.6	103.7
11	116.6	101.7	101.3	104.1	98.5	97.5	98.9	99.4	99.0	105.5	111.9	104.9	104.5	104.5	101.0	107.3	106.9	105.1	107.4	105.4	102.7	98.2	100.2	100.0
12	99.1	102.6	102.4	99.7	100.0	98.6	104.1	97.6	103.2	106.5	109.4	108.8	108.0	114.1	113.9	119.5	105.1	105.2	107.0	104.5	103.5	101.4	99.4	108.2
13	109.1	107.4	106.8	111.1	118.4	115.9	118.9	118.8	114.2	113.3	109.3	107.7	114.6	114.2	118.9	122.0	125.9	120.1	114.4	118.1	114.6	108.8	111.3	96.3
14	94.4	107.3	92.2	66.3	27.2	42.5	44.9	43.5	42.9	40.4	28.7	24.3	20.1	28.9	42.3	43.8	46.1	49.8	50.1	64.0	50.0	52.2	47.6	352.0
15	249.8	246.0	252.5	234.2	205.8	196.8	144.6	137.5	128.8	143.7	144.7	149.5	159.9	175.5	187.1	195.1	189.8	179.2	148.8	127.5	134.4	141.0	137.3	158.7
16	177.9	183.4	173.7	183.7	217.8	159.9	95.8	64.8	66.9	91.7	95.2	108.1	122.0	122.4	126.2	132.8	133.0	142.1	136.3	148.4	161.0	170.9	190.3	319.1
17	0.5	14.3	5.9	6.1	3.9	14.4	12.0	7.3	13.5	18.0	17.9	11.3	0.9	6.4	37.1	27.9	32.4	200.3	205.6	155.1	137.9	146.7	138.5	126.3
18	119.4	106.2	122.7	123.4	123.2	129.4	145.2	138.0	145.6	135.7	118.1	118.5	145.5	150.4	162.5	167.2	135.7	122.4	120.2	124.5	137.3	148.7	148.1	123.8
19	123.0	125.9	151.2	246.0	294.5	80.3	122.9	34.7	18.3	20.4	345.8	342.5	338.6	310.5	310.1	319.0	301.0	316.3	317.0	314.3	319.2	328.6	336.9	351.0
20	15.6	14.3	5.8	11.7	11.4	9.4	12.9	15.8	22.2	21.0	36.6	10.8	25.8	39.7	32.6	180.8	216.7	251.2	189.4	162.3	210.2	215.5	198.8	258.9
21	61.1	136.1	121.0	122.9	275.0	250.9	267.9	351.0	151.8	143.0	212.3	122.5	142.8	170.9	175.1	200.1	223.6	206.8	201.8	219.8	235.8	243.3	258.7	277.5
22	266.3	258.6	267.2	254.9	251.5	264.1	356.0	312.5	286.5	8.7	22.2	23.5	22.4	45.3	124.9	122.1	129.8	135.8	125.5	121.7	104.2	101.6	105.5	104.8
23	105.7	108.5	105.2	105.1	101.2	102.3	110.6	100.3	104.4	106.3	101.2	98.8	107.8	110.1	109.9	113.0	112.6	114.3	119.1	118.3	117.9	120.4	123.0	125.3
24	130.6	129.7	132.9	131.1	127.6	122.9	121.6	126.4	127.9	127.5	129.0	129.0	123.3	128.9	124.0	119.9	122.3	120.8	129.2	164.0	144.1	143.7	183.1	167.5
25	155.5	137.7	131.4	130.7	133.3	129.5	132.7	135.9	138.7	145.7	152.3	170.0	163.0	192.5	203.2	172.1	198.0	195.4	219.5	183.5	187.1	177.7	144.1	140.6
26	204.4	215.7	233.4	258.8	255.3	295.0	287.3	269.6	275.5	255.7	249.8	250.1	259.9	262.9	271.1	258.2	282.4	278.3	240.9	253.9	255.3	251.1	270.6	293.1
27	285.8	303.1	343.1	307.4	359.9	356.7	349.1	19.4	284.5	267.6	342.7	314.6	278.0	281.9	283.0	278.6	286.8	284.7	280.6	278.9	291.8	290.9	313.7	318.1
28	9.3	4.9	358.2	358.8	9.3	15.6	2.4	358.1	0.0	349.3	266.7	284.6	283.2	293.1	299.4	288.1	275.3	267.4	304.8	310.9	309.2	315.8	329.1	3.5
29	3.6	359.9	8.2	8.0	11.0	5.9	3.0	14.6	7.5	6.5	3.8	358.7	351.3	347.0	346.6	348.0	346.5	341.2	345.8	346.5	343.2	352.9	9.7	12.8
30	16.4	28.4	34.0	54.4	88.1	84.4	97.9	97.7	115.7	122.7	124.0	126.2	134.0	137.4	142.4	139.3	136.3	132.5	131.9	128.9	134.0	123.5	107.5	102.4
31	98.4	102.0	105.9	113.1	111.2	109.1	103.5	101.7	109.6	110.8	112.4	120.1	126.6	121.7	120.5	121.8	119.5	123.2	126.2	126.2	120.7	118.9	114.4	115.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	114.2	120.4	110.8	110.0	103.1	98.3	99.3	103.9	108.5	110.1	111.5	114.4	116.0	117.8	114.7	114.2	116.1	117.5	113.9	122.0	123.5	124.0	123.3	107.4
2	101.2	100.2	104.5	104.7	107.7	100.6	90.6	95.8	103.9	103.8	100.7	103.3	104.5	105.6	116.8	119.2	123.5	123.7	122.1	117.5	137.3	127.4	123.5	121.9
3	310.2	6.6	22.1	16.7	18.7	20.4	65.2	97.8	125.3	300.5	348.8	214.7	92.1	143.2	154.6	165.1	157.6	159.3	146.1	149.0	146.0	139.9	133.8	137.0
4	129.3	138.2	129.7	117.6	130.2	123.7	128.8	118.1	139.2	150.9	141.0	144.3	146.4	138.1	138.8	143.7	146.3	142.3	148.8	145.4	146.1	150.9	139.0	132.2
5	136.6	129.7	133.2	125.2	120.3	120.9	110.1	113.1	120.1	117.3	112.9	108.6	102.6	105.1	108.1	106.8	109.6	114.2	121.5	123.6	141.8	166.2	256.5	313.6
6	4.0	9.4	357.6	4.9	0.8	11.5	14.2	346.7	5.3	345.7	345.4	324.6	330.7	338.2	326.6	334.3	295.3	313.4	313.3	302.6	328.2	315.1	303.3	311.1
7	244.3	270.4	353.1	1.8	0.9	358.0	357.5	4.0	4.3	0.3	339.2	323.3	329.8	344.2	355.8	272.8	233.4	230.0	233.9	238.3	233.2	234.0	237.2	190.1
8	181.3	170.5	136.3	119.2	132.9	180.2	169.6	174.3	180.5	171.6	204.1	191.3	203.9	190.9	217.8	218.5	229.7	227.7	225.0	228.6	219.6	220.3	230.3	241.7
9	246.3	238.4	236.2	244.8	245.6	243.8	245.4	245.4	250.9	233.0	257.5	232.8	261.0	252.0	245.5	256.3	258.5	258.6	262.6	251.2	246.6	247.2	252.8	256.9
10	247.2	250.3	256.0	255.0	251.8	255.2	259.8	256.1	246.4	243.8	250.5	249.7	237.2	209.2	183.8	238.0	204.7	206.4	207.2	163.3	184.0	217.1	242.1	253.7
11	220.7	262.6	210.1	216.6	181.7	266.3	244.8	242.7	233.4	238.1	233.3	156.7	176.1	199.0	216.0	220.1	222.4	235.2	235.5	220.7	233.6	227.9	238.0	247.8
12	254.3	257.3	255.2	250.4	245.9	251.0	245.8	256.0	260.0	257.7	252.4	241.2	253.3	247.0	253.0	235.1	197.1	220.7	195.7	192.8	214.9	234.1	259.4	250.2
13	270.6	252.7	322.7	332.6	282.9	268.8	310.0	261.7	344.7	352.2	302.6	18.0	252.6	256.3	178.7	41.2	147.9	156.4	164.6	159.0	158.6	153.1	208.6	211.8
14	204.3	257.8	243.0	248.0	257.5	244.7	255.5	249.2	253.3	236.9	235.3	233.2	225.7	145.2	130.8	147.8	174.9	193.9	193.5	153.5	227.6	260.0	264.4	265.0
15	229.3	243.3	253.8	242.6	234.7	256.1	250.2	230.4	229.0	227.6	241.8	242.4	245.4	250.5	242.5	225.3	237.8	242.0	232.8	217.1	233.5	252.4	250.7	250.4
16	257.1	250.2	251.9	244.5	242.9	255.6	343.4	20.3	14.1	13.3	26.0	327.8	144.1	170.0	199.7	257.4	266.2	264.5	260.1	254.9	247.4	262.8	263.2	245.6
17	294.7	25.0	26.8	21.3	23.5	339.1	67.0	102.5	105.6	130.9	146.6	140.0	142.4	134.2	146.6	156.3	160.6	176.2	160.4	150.1	144.8	133.8	134.1	118.9
18	130.2	263.0	257.1	259.5	266.8	242.1	240.0	246.2	242.1	249.4	246.6	243.4	248.5	227.4	202.0	206.1	206.7	224.4	235.7	237.5	238.0	264.9	254.2	280.5
19	340.7	357.8	9.8	352.0	253.3	249.4	245.2	240.7	245.1	243.3	254.7	241.0	253.6	238.2	178.6	171.1	167.0	193.8	193.6	173.1	184.2	183.8	173.7	142.2
20	147.7	134.3	122.8	105.8	57.1	111.5	166.3	100.4	158.5	132.1	126.3	138.7	141.5	150.0	145.7	140.7	145.4	142.3	144.7	136.9	136.3	136.3	131.5	129.9
21	135.8	138.6	135.7	126.2	124.6	117.1	112.0	125.4	131.5	152.9	143.3	107.0	347.4	10.8	71.4	103.4	122.0	143.7	168.5	157.3	160.0	151.3	123.2	134.4
22	153.8	147.9	121.6	130.0	110.6	126.5	139.2	108.8	121.8	129.8	145.1	134.9	139.6	139.7	139.1	138.0	129.2	132.2	139.0	132.0	126.5	131.1	132.8	128.2
23	127.4	125.3	127.0	125.0	118.6	111.9	112.2	112.0	120.9	128.4	125.5	120.7	129.5	130.8	132.5	139.9	149.6	141.2	136.5	140.5	145.9	145.6	148.1	132.4
24	131.9	122.1	111.8	107.0	111.2	110.9	105.4	108.1	116.4	114.2	115.9	114.2	122.5	126.8	121.1	120.7	121.2	117.1	113.4	112.9	111.8	106.7	105.2	101.9
25	98.1	99.4	100.8	102.5	108.1	107.1	104.0	101.9	97.5	104.6	105.2	103.2	107.3	106.1	109.9	108.8	113.5	112.2	112.9	115.1	115.1	112.3	106.6	110.5
26	103.8	83.6	93.3	102.5	97.2	44.7	41.8	59.0	85.0	93.1	63.8	64.8	118.3	131.3	121.1	126.1	127.3	111.6	85.0	71.8	78.9	95.0	143.9	90.5
27	121.0	145.3	91.1	182.5	265.7	252.0	291.1	80.3	97.5	116.7	122.5	125.4	130.3	122.2	125.9	141.2	129.0	141.8	157.7	154.9	147.9	137.8	155.0	129.2
28	125.0	119.7	122.9	131.2	132.4	205.7	233.2	240.8	237.5	242.0	251.3	238.3	229.2	238.4	226.3	226.4	233.6	200.1	201.8	197.9	179.9	163.3	165.7	125.4
29	125.3	132.5	133.0	134.4	192.8	181.7	118.9	194.2	245.2	212.6	163.9	164.1	152.6	141.4	139.9	134.4	136.4	136.1	130.4	131.4	126.8	125.2	119.7	118.7
30	114.9	111.6	116.9	124.7	116.9	121.9	120.9	129.3	103.2	135.6	213.5	41.5	65.9	286.1	351.1	75.4	221.5	300.0	217.9	247.3	33.4	25.8	34.0	20.8

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	296.2	138.8	107.6	133.1	150.8	239.0	12.4	30.6	49.5	102.3	123.4	131.7	128.1	125.4	128.1	123.8	130.9	125.9	117.4	115.7	120.6	121.6	111.5	111.9
2	109.9	116.2	117.1	115.5	112.5	108.2	106.2	111.3	113.8	122.1	125.1	121.6	120.1	123.3	121.9	123.1	138.8	133.6	133.8	127.3	133.1	138.3	129.0	115.1
3	106.5	97.5	101.8	98.6	99.2	92.0	102.5	119.7	117.6	132.7	129.3	129.9	136.8	120.9	117.0	132.1	133.4	141.3	135.0	134.1	149.0	125.3	140.5	135.0
4	122.5	133.5	120.3	32.5	86.5	95.2	84.1	111.5	142.3	50.2	148.2	144.9	148.6	133.5	132.4	117.2	129.0	147.8	156.9	157.2	144.3	143.2	154.3	172.5
5	191.2	259.2	18.4	42.8	64.4	122.7	156.1	239.3	163.5	122.7	143.6	164.8	162.5	139.1	159.5	158.1	159.1	159.6	164.3	149.8	155.5	154.3	172.3	146.3
6	151.5	117.6	103.8	59.9	38.2	285.7	329.7	24.5	20.6	72.1	138.8	147.3	142.0	153.1	155.6	161.6	160.7	161.1	159.4	143.1	147.3	133.7	140.4	140.3
7	133.2	140.7	144.2	139.9	142.2	134.6	133.6	130.7	131.0	127.6	124.8	127.9	135.1	137.0	135.0	131.8	127.5	133.1	136.1	135.6	138.1	148.7	148.8	134.7
8	155.8	135.6	110.2	245.1	277.9	200.3	165.3	173.6	181.3	221.9	221.8	223.7	167.9	159.8	168.6	163.8	157.8	171.6	196.0	183.6	166.3	159.1	139.0	140.1
9	130.4	114.6	110.3	107.9	108.8	107.8	106.8	125.2	121.8	136.0	150.1	137.6	147.6	147.7	137.9	132.1	131.3	116.5	115.1	117.5	118.1	122.2	118.8	115.1
10	116.6	125.9	125.8	138.8	117.3	119.7	120.8	126.2	122.3	129.5	134.2	132.9	144.3	143.8	146.9	141.7	137.4	141.2	140.4	131.6	138.5	138.5	137.0	131.9
11	131.4	133.4	134.3	133.9	145.3	147.9	154.2	145.9	145.6	152.6	151.9	157.9	146.8	152.1	149.2	142.1	146.1	155.5	145.4	137.9	142.1	139.5	134.4	126.7
12	120.7	124.2	137.4	128.6	108.7	111.8	120.2	118.4	126.2	129.8	135.0	129.4	124.4	133.7	132.4	128.5	124.6	120.4	123.0	119.0	118.8	116.4	119.6	117.7
13	119.6	119.2	119.4	117.1	115.1	116.6	119.1	118.3	118.1	119.4	119.1	125.7	123.0	134.0	145.7	149.4	149.6	150.5	157.0	147.1	146.8	146.3	154.5	161.9
14	158.1	168.3	89.0	232.7	168.2	200.0	191.6	244.1	155.3	134.7	139.1	143.0	146.0	144.1	150.0	174.4	160.5	171.3	169.6	172.9	173.4	163.6	147.6	146.3
15	133.2	124.4	131.8	135.1	140.5	132.8	146.6	145.3	134.1	147.9	133.2	137.7	139.8	145.2	145.6	146.0	138.4	135.0	131.8	138.0	135.5	129.4	130.4	121.5
16	112.1	110.5	113.7	116.4	115.7	115.0	117.8	118.3	116.2	121.8	116.6	116.9	113.5	114.9	113.5	115.1	119.9	113.8	114.0	114.0	118.2	118.7	122.6	125.9
17	143.4	153.3	221.8	234.9	231.7	228.3	220.4	227.0	226.4	226.1	232.5	230.4	224.3	226.2	228.9	234.3	238.2	226.9	239.3	233.8	228.8	227.1	227.3	228.3
18	227.6	231.6	226.1	225.3	239.6	237.8	244.2	257.7	257.5	267.4	248.7	235.3	251.0	254.7	238.8	241.8	237.4	252.3	242.3	251.9	261.7	270.3	303.6	297.6
19	14.8	305.8	330.8	0.0	352.8	330.2	346.9	329.7	325.2	334.4	356.7	343.7	336.9	326.6	348.6	341.8	352.7	339.7	352.0	340.3	342.3	328.7	332.8	343.2
20	312.0	330.2	294.2	278.6	268.8	264.8	259.3	258.6	249.9	235.7	200.1	224.5	223.8	217.1	217.9	211.0	215.5	220.1	213.9	209.8	215.9	212.7	184.2	160.3
21	173.6	184.2	181.2	181.9	177.9	178.3	184.5	196.8	201.2	211.9	220.1	218.6	235.5	253.0	259.8	235.8	250.8	232.0	251.2	230.8	230.2	232.9	235.1	242.2
22	246.7	241.2	247.0	251.5	256.0	303.9	49.9	204.8	248.1	190.3	149.7	146.5	169.4	189.4	225.3	208.2	253.4	271.9	234.5	156.7	177.7	169.0	155.8	142.5
23	137.8	125.5	176.1	185.5	225.5	227.7	245.3	246.4	249.5	243.9	233.0	228.2	227.6	224.0	217.7	213.7	197.1	188.6	200.7	205.8	228.6	243.7	267.2	256.6
24	242.5	26.2	78.9	347.2	10.5	9.5	21.1	12.4	7.9	14.0	8.7	6.9	3.6	356.1	344.1	351.0	353.4	345.5	352.0	357.9	355.1	339.1	337.8	335.7
25	330.9	331.9	338.0	358.5	358.4	27.8	1.8	5.9	359.0	4.4	355.8	342.7	339.8	344.3	354.2	351.2	348.5	345.1	338.8	330.8	319.2	318.8	317.2	324.3
26	345.0	15.8	7.5	330.5	259.3	255.4	251.9	251.3	253.1	252.7	248.5	249.9	246.3	252.5	253.4	233.4	240.5	244.0	210.3	174.8	180.5	191.0	173.4	182.0
27	187.1	186.2	204.9	200.1	202.4	173.7	160.2	116.3	116.3	118.3	118.5	110.6	104.2	124.8	125.1	113.7	120.4	134.1	134.2	161.6	141.9	159.1	178.6	182.4
28	229.3	306.2	288.9	311.9	349.2	340.1	351.0	6.5	5.7	0.2	352.1	341.8	337.5	348.6	343.4	344.2	337.5	324.6	321.7	330.0	327.7	325.5	323.0	326.1
29	331.4	347.6	1.4	355.2	358.1	359.4	349.4	340.3	354.6	351.9	353.1	352.2	340.6	341.3	330.2	331.0	331.2	330.4	325.7	331.6	334.0	328.9	343.4	354.5
30	349.8	355.1	349.9	352.1	351.9	350.6	344.6	332.0	330.8	326.4	329.5	322.1	325.0	328.4	325.8	321.3	328.7	336.3	339.0	334.2	341.7	341.9	349.5	338.6
31	358.4	357.6	349.3	7.4	6.1	8.1	358.7	9.4	3.5	7.5	336.0	322.2	334.2	302.5	295.6	294.6	284.3	285.7	282.3	276.2	283.2	268.8	265.3	262.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	252.6	222.8	308.2	299.3	353.9	279.5	216.2	332.6	99.7	23.8	101.7	130.7	152.1	146.6	145.7	151.5	142.9	137.8	138.4	136.3	141.1	150.5	142.7	151.1
2	149.8	147.8	155.6	149.3	142.9	145.4	147.5	140.4	137.9	130.3	138.4	141.4	138.4	146.1	149.0	147.5	147.2	157.6	153.1	146.3	145.6	146.2	136.9	293.1
3	328.8	355.3	6.3	359.4	12.8	9.4	18.2	13.0	17.7	17.9	29.0	132.5	134.9	135.6	139.0	136.3	148.0	145.1	144.2	132.7	135.3	132.2	126.3	123.3
4	133.2	138.5	137.2	132.7	135.0	125.1	127.2	128.1	129.4	128.1	143.5	143.6	141.5	140.3	139.5	135.0	139.7	144.4	141.5	147.0	151.0	151.4	142.6	135.7
5	134.6	129.7	134.5	126.7	165.5	307.4	273.6	308.1	271.0	4.3	9.0	12.4	357.0	345.5	347.2	352.4	356.4	349.4	352.5	345.7	344.4	346.1	1.7	18.9
6	12.3	7.6	13.3	5.4	6.1	4.7	15.9	17.4	9.5	359.6	357.3	357.5	347.4	341.8	325.4	328.4	324.4	318.0	324.6	326.0	328.5	334.3	348.2	9.0
7	8.5	350.4	358.7	338.1	334.6	354.5	331.2	354.0	9.1	0.2	1.3	357.4	339.0	339.1	350.5	328.4	333.1	327.6	321.0	323.7	332.9	344.1	348.0	1.2
8	5.0	11.3	6.7	356.4	0.9	7.7	8.6	8.1	7.1	355.2	354.1	2.9	5.4	358.0	359.2	5.9	357.5	1.3	353.4	352.3	333.6	334.7	344.5	0.3
9	2.0	16.4	11.6	3.3	3.3	16.5	356.9	4.5	351.8	1.3	1.1	358.0	358.4	358.8	354.3	355.3	343.7	337.1	345.5	346.3	345.7	335.2	354.2	12.6
10	16.4	12.8	6.9	40.2	121.9	121.0	121.5	144.6	159.5	146.7	149.7	165.6	167.5	158.3	178.5	214.5	152.0	156.5	173.3	150.0	136.9	142.3	130.1	140.0
11	140.9	148.8	146.0	169.1	206.4	105.9	108.0	105.4	112.2	119.3	111.6	116.0	117.9	120.3	134.7	119.6	126.6	131.9	132.7	143.2	136.1	125.2	66.2	59.5
12	31.7	18.1	12.7	16.1	12.1	14.8	19.0	21.6	16.8	22.6	19.6	22.8	21.7	21.9	26.3	14.0	67.5	140.1	143.8	172.8	281.9	157.3	135.1	251.4
13	6.7	7.1	12.1	20.6	19.4	82.2	56.9	147.4	138.1	312.2	321.1	4.8	3.1	0.0	12.6	30.2	182.2	138.3	131.4	127.4	118.7	107.2	99.3	109.1
14	166.2	122.1	111.7	109.6	106.7	91.3	80.5	151.1	129.9	137.7	144.3	145.3	140.8	141.6	130.8	139.3	137.0	138.8	142.8	145.0	148.6	139.8	133.3	246.6
15	244.8	253.6	268.9	275.3	272.5	252.8	246.2	258.6	252.1	252.3	246.0	246.4	220.2	194.1	186.5	171.6	151.5	155.2	147.8	141.9	134.0	85.0	201.3	53.7
16	113.4	98.1	126.6	135.8	137.6	126.1	129.3	133.8	128.4	135.7	146.6	143.6	138.4	140.5	137.2	139.9	141.9	146.9	141.1	134.5	138.2	137.4	124.5	102.6
17	87.8	67.9	90.3	92.5	87.0	96.1	98.3	93.2	85.2	92.2	102.4	109.1	114.7	123.3	122.1	115.3	116.3	115.0	116.1	120.7	118.4	108.8	107.4	107.0
18	106.1	105.1	102.6	85.6	94.2	61.0	27.6	15.4	25.5	34.7	25.6	28.1	88.5	147.7	137.9	156.5	173.2	188.8	170.8	168.1	176.1	239.6	295.8	351.1
19	18.4	27.1	347.3	91.3	125.2	143.1	167.8	253.1	318.2	134.9	349.1	291.9	254.5	246.5	285.4	312.6	12.2	342.9	340.7	325.1	5.2	10.7	345.3	276.3
20	221.7	262.6	301.5	15.3	12.0	7.7	1.7	330.4	313.8	262.2	331.2	17.4	24.2	249.5	256.3	266.0	302.9	0.5	4.6	349.9	7.9	83.9	325.1	281.9
21	291.2	326.6	10.3	304.6	267.2	266.1	250.8	268.7	257.2	252.3	248.8	256.4	246.0	243.2	233.8	233.6	238.5	229.4	234.2	235.2	242.3	258.6	250.2	253.2
22	247.8	258.8	261.4	266.1	264.7	272.8	328.0	18.2	14.0	16.7	19.5	29.8	223.3	225.5	180.7	291.1	243.9	282.1	275.9	259.2	271.1	348.1	0.2	9.5
23	10.2	2.8	4.1	1.5	4.4	2.9	6.9	8.8	1.6	12.8	15.5	11.0	19.9	60.0	176.8	176.9	149.3	138.3	129.7	131.1	128.8	115.0	109.5	121.4
24	158.4	277.5	172.1	220.1	196.3	215.6	258.6	285.6	357.4	0.5	11.9	8.3	3.9	10.5	4.3	10.4	13.3	8.7	89.3	126.8	101.5	245.4	7.4	5.9
25	6.8	355.5	249.3	219.8	232.7	252.0	245.0	242.4	242.4	246.1	241.0	223.6	191.7	190.5	171.4	153.7	149.4	126.2	132.5	141.5	141.5	135.6	137.5	130.5
26	126.2	112.6	117.4	113.8	123.4	134.2	129.2	126.9	127.3	125.6	129.3	131.0	135.5	144.0	141.4	153.1	157.7	158.3	150.3	154.5	144.7	135.4	144.1	143.7
27	129.6	112.4	98.9	58.1	114.4	193.3	255.0	255.7	259.0	254.1	251.8	252.0	255.6	244.2	246.9	249.4	253.7	252.5	258.1	254.1	255.0	264.7	260.4	252.8
28	267.6	349.3	9.1	4.1	4.1	3.8	316.5	103.8	17.7	7.6	9.4	2.1	8.9	347.8	346.0	302.4	267.2	334.4	306.4	323.7	333.8	345.9	356.1	358.7
29	352.1	353.4	1.1	1.3	9.1	10.4	12.2	15.1	353.7	15.5	22.3	340.6	234.3	239.0	248.1	263.0	294.9	244.8	246.8	245.5	245.2	255.2	255.8	275.2
30	292.2	274.0	300.2	305.2	14.7	21.3	125.3	144.4	155.8	132.3	185.5	143.9	129.1	134.8	108.1	124.6	124.1	127.7	133.2	143.2	130.1	108.0	109.8	113.9
31	111.3	116.8	111.9	102.5	101.4	93.0	86.5	92.9	93.8	92.7	88.3	89.0	79.3	86.7	74.0	76.4	65.2	56.4	59.5	45.4	45.0	44.5	49.5	50.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	44.9	41.4	42.3	42.6	49.4	46.9	47.4	45.4	59.8	52.0	56.5	111.8	135.7	129.6	93.8	114.7	114.4	94.5	78.9	70.8	92.3	100.6	98.8	95.2
2	97.1	96.0	94.8	98.1	98.1	96.9	97.2	94.0	95.9	100.1	108.2	107.1	100.4	103.4	106.5	102.8	100.0	63.1	33.2	38.8	44.3	31.3	35.5	38.2
3	39.7	42.0	30.1	24.9	22.2	19.5	18.9	14.1	16.3	12.6	16.4	53.2	120.8	136.6	165.8	192.6	187.7	159.8	163.1	151.9	137.8	132.2	217.3	232.2
4	231.3	218.2	214.0	202.6	201.6	217.9	126.8	169.2	194.5	245.4	258.4	195.1	173.9	179.8	173.2	171.4	168.8	183.1	164.7	148.9	165.2	218.2	279.7	147.2
5	127.8	108.9	77.2	43.8	32.8	129.1	45.7	20.6	17.4	30.5	129.3	143.9	144.0	154.7	175.0	226.6	250.0	359.4	21.3	29.6	47.1	68.4	85.7	112.1
6	111.3	77.8	114.0	106.8	101.3	100.4	93.0	89.8	89.8	87.9	91.1	98.2	98.4	99.0	98.4	103.9	103.3	102.4	103.9	99.7	92.5	89.6	99.2	95.7
7	88.2	89.4	97.9	99.4	72.9	57.3	71.5	69.8	67.4	71.2	82.9	121.0	107.9	105.4	129.8	110.8	118.7	114.7	123.3	124.9	118.8	126.0	130.1	137.2
8	151.8	185.6	168.1	167.9	171.2	177.8	179.3	166.3	147.5	119.6	97.2	100.5	98.7	103.2	104.0	100.7	94.9	98.7	95.0	93.8	82.2	91.2	100.8	102.9
9	105.5	111.1	108.0	96.5	77.2	69.8	76.2	87.7	86.0	83.9	80.4	80.9	84.9	99.3	110.9	108.5	109.1	103.3	109.3	113.6	116.6	101.7	108.7	108.7
10	95.0	115.3	113.7	127.1	132.1	147.5	142.7	151.8	132.9	166.5	175.9	184.4	201.0	207.2	250.0	234.2	232.6	233.9	239.9	236.0	253.0	254.2	251.4	243.0
11	235.5	259.8	256.8	243.7	249.5	255.5	265.4	127.7	140.4	163.4	172.1	176.4	171.3	185.9	178.6	178.4	145.7	142.6	132.6	120.5	116.0	104.1	103.1	102.6
12	101.7	96.7	105.0	107.1	109.2	104.1	104.7	101.4	101.3	100.6	104.2	109.1	108.0	109.1	104.5	105.7	102.5	100.3	102.3	103.1	102.0	104.3	104.0	104.1
13	102.9	98.0	101.4	107.8	114.4	108.0	107.7	107.3	106.8	104.4	109.6	111.2	120.9	120.6	112.2	112.6	111.2	105.9	101.9	100.9	101.7	99.8	97.1	98.1
14	99.5	98.6	103.1	108.7	113.7	118.8	120.9	113.5	106.4	107.4	101.7	94.2	98.6	112.8	110.9	112.1	119.4	117.9	114.5	113.7	116.4	114.7	116.1	110.4
15	114.6	111.5	102.3	101.0	106.7	109.6	100.5	99.0	98.8	102.1	107.3	114.9	120.5	118.1	121.4	114.3	117.5	113.9	111.9	113.7	109.0	117.2	126.8	127.6
16	120.1	49.5	26.7	18.2	9.4	14.9	18.4	14.3	9.5	10.9	6.4	352.0	334.3	325.6	321.8	291.6	311.2	300.3	294.1	289.2	294.5	276.3	262.1	262.1
17	273.7	278.3	243.2	254.7	248.8	253.7	243.3	258.9	273.2	354.5	101.5	40.7	84.4	123.5	108.6	97.8	103.3	106.2	105.1	93.9	84.7	75.0	65.4	41.9
18	32.6	32.3	35.1	34.8	38.0	35.4	34.6	32.7	14.1	16.5	16.8	9.6	16.0	6.9	338.6	329.7	341.6	5.7	13.6	30.4	7.4	64.5	64.9	58.1
19	72.9	67.2	74.2	85.0	89.4	89.9	89.8	102.6	119.1	142.9	151.3	159.8	151.6	171.2	236.9	287.3	281.8	285.2	290.9	285.1	285.4	291.2	280.7	285.9
20	284.2	292.8	281.2	280.1	296.7	315.6	326.8	5.6	295.3	325.5	4.5	237.9	333.9	309.1	282.5	272.7	266.7	293.2	310.6	337.0	2.5	7.1	3.8	359.3
21	14.9	358.8	341.0	355.0	332.9	354.4	3.1	13.1	357.2	20.6	12.2	17.2	8.5	330.0	334.3	315.8	311.0	315.9	326.6	321.6	325.9	331.2	350.0	6.8
22	3.7	5.1	4.7	9.6	13.3	14.1	346.3	11.7	17.0	18.9	315.1	244.9	217.1	162.6	159.7	169.2	155.1	127.7	123.4	127.6	119.1	115.0	108.9	112.8
23	115.2	126.0	132.9	141.3	207.6	217.3	215.4	220.3	226.3	211.5	201.8	211.8	211.2	202.3	201.0	198.9	212.6	204.2	201.0	205.9	199.5	201.5	184.4	165.6
24	144.7	135.9	131.8	125.3	122.8	122.6	111.0	109.8	83.1	64.4	70.8	85.4	89.0	101.0	104.2	88.3	92.2	91.4	99.2	71.2	70.7	65.5	30.8	20.0
25	21.8	18.9	19.3	4.3	352.3	8.0	25.0	49.1	17.6	20.0	178.0	184.8		182.8	163.9	121.0	105.4	124.8	61.3	35.4	24.3	44.3	98.5	44.1
26	13.8	28.4	22.2	28.4	27.7	26.1	24.2	22.1	21.9	21.6	82.2	352.6	11.6	101.7	131.5	55.9	310.5	232.7	256.2	338.2	343.8	9.2	5.8	5.8
27	13.9	19.2	14.5	19.4	8.7	6.2	10.1	10.6	10.8	5.8	15.5	16.7	8.7	7.4	7.7	2.8	0.6	1.8	4.3	2.3	0.2	2.4	357.1	3.1
28	8.3	7.4	13.2	13.7	7.8	7.7	4.9	357.0	9.8	20.5	18.8	29.0	20.3	357.6	214.9	180.7	158.2	140.7	114.0	80.9	104.3	119.2	119.4	106.3
29	113.7	115.9	131.1	137.0	129.9	123.2	121.2	118.3	118.9	113.7	116.3	113.7	127.0	118.0	116.0	116.9	134.1	138.2	133.7	131.3	127.0	117.7	101.3	117.6
30	37.7	21.0	20.8	22.7	15.3	350.1	346.3	349.3	329.4	359.9	355.5	354.0	357.9	345.6	338.5	331.4	312.3	328.6	341.0	353.0	17.7	26.7	7.1	20.6

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	356.2	36.5	63.9	97.0	118.5	100.6	65.9	56.2	88.3	111.5	137.5	109.2	115.6	129.3	144.6	152.2	170.6	141.9	139.4	126.5	141.5	126.7	125.2	143.0
2	138.0	242.8	353.7	21.4	45.4	10.8	23.1	53.7	37.4	25.4	296.9	353.5	33.4	230.8	243.0	241.0	251.7	251.8	264.6	255.3	246.0	247.5	246.0	246.1
3	255.2	257.5	254.2	260.1	295.5	353.9	307.2	346.1	357.0	358.5	351.3	339.8	346.1	354.7	357.9	338.6	326.5	335.3	345.6	333.5	351.7	357.2	4.5	2.4
4	4.4	5.6	3.6	5.7	8.0	11.6	9.8	23.9	19.9	21.2	20.4	30.7	8.8	252.3	257.1	253.4	240.1	217.8	205.7	202.1	181.3	132.3	157.2	190.7
5	241.0	240.5	232.6	241.2	253.0	234.3	238.3	249.4	258.9	258.3	257.3	253.8	258.5	293.3	274.9	269.7	302.8	1.7	4.5	4.2	12.5	8.7	4.7	8.6
6	10.6	6.8	4.5	10.6	11.1	2.5	351.1	348.3	350.3	3.7	4.1	9.6	6.0	4.5	3.5	349.9	329.5	325.2	332.0	338.2	335.5	341.9	330.4	334.4
7	331.6	327.0	314.6	317.7	320.7	327.8	331.8	327.6	339.0	331.4	330.6	343.6	338.7	345.6	333.5	328.2	327.6	325.8	330.1	336.5	331.1	333.6	332.3	326.0
8	326.7	320.0	325.6	324.8	321.2	325.6	329.6	327.2	336.3	346.4	6.7	352.6	358.5	356.7	352.0	353.7	353.0	1.3	16.2	11.1	19.9	27.5	66.8	81.0
9	86.4	89.9	98.4	106.3	109.1	109.0	107.4	105.2	105.2	107.0	104.2	104.5	103.2	103.5	104.5	104.2	106.1	107.7	107.0	105.6	105.9	106.6	110.2	113.6
10	110.9	109.1	119.0	149.1	226.1	226.9	258.2	251.4	211.2	209.2	243.2	193.8	151.1	139.0	127.5	126.3	124.5	126.1	126.8	124.4	126.8	131.5	127.5	111.3
11	102.4	100.0	99.3	102.5	105.4	99.2	106.0	122.0	107.9	86.9	14.5	15.7	9.5	5.6	4.6	1.0	0.8	357.3	355.2	354.3	351.0	349.3	351.0	354.7
12	352.1	350.7	347.4	346.0	346.3	344.8	343.5	340.8	336.4	334.4	328.9	338.6	342.7	348.6	347.6	345.0	347.1	346.6	341.2	336.5	324.9	339.9	325.1	354.5
13	353.0	3.4	2.6	9.2	5.5	11.2	15.2	23.8	22.7	19.9	26.4	27.0	35.1	113.7	100.8	95.7	97.5	99.4	94.8	90.2	93.8	98.3	106.6	111.1
14	117.2	123.9	128.0	132.0	137.2	143.9	153.0	168.1	145.7	142.9	134.0	129.4	128.4	126.7	128.3	121.7	112.4	101.8	95.5	99.8	79.8	19.6	15.2	13.5
15	14.6	14.5	12.2	19.1	17.9	10.9	19.1	18.6	16.8	10.1	8.7	20.2	18.6	18.6	15.8	20.0	17.8	17.1	18.5	22.1	18.3	18.3	18.2	14.1
16	12.5	17.7	23.9	24.4	23.1	24.3	23.5	19.0	20.6	19.0	20.1	18.6	17.5	15.8	14.2	9.4	10.5	15.4	15.9	12.6	18.0	28.0	26.3	36.7
17	74.9	80.7	91.0	147.7	96.2	23.7	41.9	31.0	28.5	20.6	19.0	29.2	25.7	29.8	26.9	22.9	2.1	135.1	128.0	123.4	114.4	111.6	100.8	101.5
18	105.4	102.2	103.1	105.1	109.5	107.5	105.6	103.0	102.4	100.7	98.5	85.8	84.5	89.6	87.0	65.6	58.0	48.3	53.0	39.8	18.8	13.7	22.9	17.5
19	6.7	13.9	13.1	14.2	16.8	17.6	20.0	20.4	19.0	21.1	24.5	10.8	12.5	14.7	15.6	16.7	21.3	20.4	22.0	19.7	22.0	25.2	23.7	25.1
20	21.3	327.6	295.2	291.5	260.9	226.8	189.8	231.5	315.4	24.4	327.5	331.5	9.5	18.1	16.4	12.5	15.6	256.0	18.2	296.4	19.2	296.5	297.6	325.6
21	298.1	288.2	343.9	22.9	10.1	22.8	13.8	5.9	345.3	12.9	7.5	15.2	16.4	9.9	352.6	349.6	351.6	353.8	358.9	0.7	4.1	12.7	7.2	2.9
22	359.5	357.2	350.8	357.1	356.1	352.0	352.5	354.7	359.7	6.2	4.6	6.8	0.8	11.1	3.8	6.6	8.4	4.4	11.3	11.0	11.6	17.6	18.7	23.1
23	29.0	25.6	25.3	24.3	14.5	9.9	10.7	14.2	5.2	12.8	3.1	5.0	7.3	6.0	2.7	338.5	330.8	327.6	319.6	307.8	294.9	291.7	294.4	294.7
24	299.9	306.2	309.3	308.1	305.7	308.9	322.5	322.8	316.3	317.6	320.5	320.3	306.2	285.4	270.1	258.3	251.1	262.8	210.1	230.6	147.1	197.2	96.6	68.4
25	90.9	98.2	106.6	110.0	101.0	99.9	99.5	91.1	93.5	99.5	107.4	105.9	105.6	105.4	104.1	88.7	74.7	83.2	80.7	83.8	70.3	33.2	19.6	19.7
26	18.3	22.9	18.5	19.1	17.9	15.7	16.9	18.5	13.9	17.1	11.5	10.8	13.7	9.6	8.8	2.3	1.0	357.9	343.0	355.6	359.1	6.0	358.8	356.1
27	357.2	1.2	3.9	4.2	6.9	9.7	12.1	15.8	17.1	18.8	20.0	19.0	359.6	359.1	11.3	11.3	2.3	14.8	2.9	13.8	18.2	20.5	23.3	23.5
28	25.2	35.7	67.1	47.1	6.9	83.8	107.7	121.7	120.4	128.8	134.2	134.7	132.4	136.4	119.4	111.7	86.7	83.9	69.7	60.1	28.4	22.2	14.1	21.2
29	24.5	26.4	25.3	24.1	26.0	22.5	27.8	29.6	29.0	65.8	96.4	109.0	122.8	127.1	117.4	133.1	109.3	109.3	120.4	103.8	104.8	104.9	99.5	101.4
30	103.4	101.0	103.3	100.1	103.8	97.2	80.0	89.6	84.7	76.3	85.7	114.1	138.9	117.2	62.3	78.9	124.2	100.7	58.1	103.9	47.9	74.1	53.5	17.4
31	120.7	136.2	138.7	130.1	31.5	15.7	315.0	11.8	18.1	340.4	322.3	316.4	286.2	244.2	313.8	7.5	332.1	9.9	24.1	24.1	28.2	109.3	19.3	14.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	22.9	17.2	51.4	38.1	21.7	20.0	1.5	352.8	8.4	1.2	13.4	347.3	357.8	1.7	10.0	2.6	3.7	350.9	1.5	346.1	0.4	16.6	2.1	357.5
2	344.8	343.5	336.8	336.8	335.4	335.9	332.2	335.7	341.6	1.1	4.8	8.3	1.1	4.5	1.0	358.4	355.8	356.7	354.2	352.4	356.3	359.3	359.5	0.8
3	352.8	355.4	358.5	358.0	355.1	348.5	340.2	340.0	335.8	347.9	341.2	339.1	338.9	344.8	345.2	320.8	325.2	331.0	353.5	1.0	350.0	357.9	355.7	5.3
4	5.7	6.9	4.5	8.2	357.6	1.2	1.0	1.5	4.6	9.7	6.5	15.0	14.3	19.0	16.0	11.1	12.4	15.3	16.1	20.0	21.2	21.3	21.4	19.2
5	20.6	15.8	14.8	15.0	6.1	10.2	17.6	11.1	17.3	14.5	26.5	17.8	40.0	17.5	21.9	27.4	24.7	25.2	22.5	24.9	19.2	23.6	24.8	22.3
6	21.0	23.8	21.1	24.7	17.7	14.5	16.3	20.0	22.5	19.6	13.2	17.9	24.0	352.4	17.2	16.4	15.3	19.5	6.0	12.2	2.9	6.7	3.2	8.5
7	19.4	17.2	9.6	9.9	17.7	16.3	17.8	14.0	14.8	15.9	11.2	17.2	12.6	5.4	25.8	27.5	39.7	130.1	215.3	12.8	226.4	196.3	160.7	164.6
8	154.0	94.0	54.5	143.8	118.5	114.1	115.6	107.2	105.3	102.0	101.6	91.6	94.4	92.3	88.8	87.8	84.9	89.9	100.5	101.5	92.4	91.0	89.0	80.5
9	88.5	85.5	90.3	94.9	91.6	93.0	95.4	101.0	100.7	101.8	93.0	84.7	90.5	98.2	104.2	110.3	109.2	100.4	82.9	101.9	108.1	103.8	99.3	103.9
10	110.2	109.0	98.1	88.3	59.8	50.3	50.9	40.8	30.7	24.1	58.5	123.5	277.8	99.2	64.2	29.4	89.3	123.0	127.6	131.4	119.9	107.9	105.5	101.1
11	95.4	94.5	90.4	88.2	92.9	93.7	93.7	91.4	87.0	97.7	98.1	124.7	117.3	53.8	30.9	315.9	322.8	265.0	262.1	272.4	258.1	251.5	254.7	262.4
12	260.1	251.3	243.6	242.1	235.6	229.8	247.8	254.8	255.2	253.7	251.9	247.0	245.8	251.7	250.8	259.9	259.9	286.0	295.5	146.2	27.5	113.5	111.0	120.9
13	117.3	128.9	111.7	114.7	95.5	93.3	93.2	95.9	94.7	92.4	88.4	89.8	99.2	104.5	111.9	116.0	122.6	168.3	175.6	182.1	175.3	162.5	163.9	164.5
14	169.2	171.2	170.3	164.8	156.7	147.2	150.0	145.4	147.7	146.9	157.3	158.0	169.0	263.2	255.3	261.1	247.1	269.1	268.8	236.5	227.6	224.5	224.8	218.9
15	230.0	247.2	243.6	259.9	223.5	219.8	207.1	190.9	118.9	108.2	94.4	94.7	100.6	97.8	100.2	106.6	107.1	107.3	104.4	108.4	105.3	103.4	109.9	110.7
16	115.4	115.6	123.5	145.2	152.7	161.3	161.5	200.4	265.1	290.5	273.4	264.8	199.5	103.5	77.2	335.3	23.9	12.3	25.6	28.4	23.3	47.2	82.6	263.0
17	310.9	36.1	21.9	21.3	22.4	23.0	23.7	27.1	22.1	14.2	30.4	15.8	19.8	22.1	15.4	16.5	16.7	17.1	19.1	15.8	10.5	14.0	14.0	17.8
18	16.9	18.5	25.2	19.4	21.5	20.1	17.2	23.6	28.3	24.2	27.1	27.4	28.3	27.9	27.7	26.5	21.1	22.9	22.4	21.9	18.6	22.5	23.5	25.9
19	25.8	32.3	31.5	26.9	25.3	24.9	23.7	19.0	18.2	19.3	21.2	13.2	11.8	13.7	9.0	13.6	12.6	17.4	8.6	5.0	8.8	7.2	7.4	2.1
20	9.5	13.7	0.4	3.1	21.7	8.7	5.0	3.5	5.2	2.1	7.7	12.7	11.7	8.1	5.5	7.4	5.1	5.2	7.2	4.8	2.2	8.6	5.9	0.8
21	352.7	4.2	5.1	6.6	7.8	13.4	8.0	11.0	15.1	14.4	11.2	19.1	18.7	19.6	16.0	24.3	21.3	27.8	26.4	26.6	21.5	22.8	23.6	25.3
22	23.4	27.7	24.8	28.3	27.6	33.3	154.7	130.4	144.6	110.2	106.9	46.2	127.5	188.1	130.6	83.6	122.2	186.3	36.3	133.7	130.2	76.3	87.0	101.4
23	110.0	287.7	122.8	151.2	159.4	118.7	143.2	191.0	181.2	169.1	202.7	357.1	21.3	99.9	127.0	194.2	143.3	124.4	110.6	102.5	93.0	95.7	92.0	97.9
24	99.6	99.3	100.3	95.7	98.0	101.1	101.2	96.2	102.7	110.6	108.4	106.1	107.3	105.8	112.2	110.5	110.5	112.0	119.9	142.9	146.8	208.9	220.8	231.8
25	246.7	249.4	238.7	233.5	230.0	221.0	227.9	229.4	236.7	237.9	249.7	256.9	245.6	231.6	331.2	3.3	352.6	344.6	328.8	309.4	336.2	343.3	348.3	347.2
26	4.6	343.2	336.3	334.2	326.3	323.8	317.3	329.5	323.4	334.0	333.9	358.3	3.0	4.5	6.4	9.8	8.5	10.1	9.5	11.5	16.5	17.7	18.0	22.8
27	29.7	31.2	26.3	17.1	27.1	23.5	26.8	21.4	22.5	24.1	22.5	24.7	26.3	24.4	20.0	15.1	19.7	18.5	17.7	14.3	18.8	20.2	18.1	19.4
28	20.1	17.0	22.3	18.9	20.9	21.0	18.8	20.3	24.4	21.2	19.8	19.4	18.3	19.9	20.9	21.9	21.1	21.1	21.1	23.0	21.0	18.1	19.3	19.6
29	19.6	18.7	18.5	9.0	14.0	9.1	350.0	349.1	353.7	344.6	354.7	0.2	356.4	354.8	1.8	349.4	334.4	328.6	322.8	328.9	339.4	344.5	345.3	335.8
30	330.8	336.1	339.8	333.4	334.0	344.9	350.2	5.1	355.3	345.4	1.9	0.4	1.8	356.5	0.4	359.5	1.1	2.9	12.0	1.7	356.6	4.2	10.1	17.2

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	15.7	1.7	9.1	11.2	30.7	26.6	16.2	23.1	23.2	21.2	16.6	22.2	25.5	26.8	26.4	29.5	30.4	32.7	26.2	51.5	49.3	70.4	57.8	71.7
2	96.3	97.5	106.0	114.3	117.6	100.4	104.2	99.5	96.0	98.9	105.7	99.9	103.1	102.1	99.4	100.6	101.7	105.4	107.2	104.7	101.3	104.1	106.8	105.9
3	104.4	106.1	106.4	106.1	105.6	105.0	104.4	99.1	97.2	91.3	94.3	92.0	95.5	98.1	99.9	100.8	104.8	105.1	100.1	98.1	108.4	110.2	109.6	109.9
4	114.4	104.2	118.9	122.3	130.7	132.1	131.0	130.2	133.2	121.1	120.2	115.7	109.3	107.5	109.9	107.1	109.9	114.7	124.2	124.1	126.5	123.1	119.0	118.3
5	120.3	122.2	118.5	115.8	116.2	114.9	116.4	118.7	111.4	105.2	108.1	105.1	107.7	112.9	103.6	103.8	103.2	101.0	97.4	100.6	106.1	95.3	98.1	96.5
6	95.8	101.2	101.5	100.0	101.0	101.2	108.1	105.8	105.9	108.4	101.8	101.0	59.8	34.2	56.3	104.7	97.2	55.3	18.6	9.1	21.2	22.5	16.2	14.8
7	13.3	19.0	17.6	18.8	17.3	12.9	15.4	15.5	14.7	10.4	14.7	9.0	13.8	16.1	16.0	20.4	21.2	22.2	24.2	24.4	29.3	27.0	26.8	36.4
8	24.4	20.8	62.2	78.3	53.9	70.4	59.4	46.5	56.2	56.4	56.4	51.6	51.1	53.5	42.8	36.7	39.3	37.6	37.4	29.3	31.4	36.0	24.6	29.8
9	25.9	22.8	22.9	22.0	18.7	15.7	20.7	19.3	12.0	12.2	23.3	337.0	341.2	67.1	173.6	242.1	236.5	229.6	240.5	247.4	247.6	255.6	248.6	150.1
10	143.3	142.3	186.7	208.2	217.3	218.5	214.7	213.5	222.4	224.5	243.0	261.1	288.1	309.5	295.0	10.8	99.4	358.4	320.5	264.0	269.1	296.1	350.3	355.0
11	353.3	10.6	12.5	12.4	11.3	32.0	126.3	102.8	301.7	286.9	215.9	253.0	257.7	296.6	310.8	323.8	0.8	22.6	11.8	359.8	345.1	348.3	3.2	355.9
12	359.2	2.2	12.0	350.6	352.8	339.9	6.8	28.2	13.4	356.6	339.0	357.6	22.8	29.8	27.1	25.4	24.0	16.7	4.0	359.4	349.4	348.1	357.9	2.3
13	353.1	351.7	356.8	359.3	357.6	357.4	78.1	14.7	0.3	11.7	23.6	24.5	24.8	21.7	18.5	19.7	20.8	25.6	29.2	25.8	24.8	31.5	75.9	117.1
14	138.1	135.2	144.6	162.8	126.5	125.7	106.9	122.5	131.0	136.0	133.8	141.7	135.5	130.2	130.9	123.7	130.0	129.7	137.3	131.7	122.9	114.6	121.4	120.1
15	121.0	122.0	126.8	124.3	127.0	132.1	128.1	128.2	112.1	132.9	143.0	137.9	137.4	110.5	107.9	107.8	34.7	17.8	27.4	25.1	30.4	35.5	27.3	27.9
16	28.1	18.5	21.3	22.5	75.8	31.9	110.7	105.7	136.5	91.7	125.6	130.7	124.6	128.9	133.5	132.6	133.8	134.9	134.1	134.1	132.3	129.3	130.5	126.8
17	119.0	112.4	117.6	121.5	115.0	117.0	112.0	111.2	112.5	112.5	109.9	112.4	113.0	117.3	120.5	120.4	116.7	112.6	112.3	112.4	115.3	118.9	113.8	116.7
18	117.7	119.1	117.3	114.3	114.0	113.6	111.9	113.0	112.4	109.5	107.0	108.0	109.3	111.2	109.6	112.0	109.0	108.7	108.3	105.5	103.8	106.5	109.1	108.0
19	104.8	105.6	100.6	102.0	99.9	100.7	103.9	103.3	97.7	91.7	100.5	93.0	89.2	82.7	78.5	76.7	63.8	58.1	45.0	43.3	53.7	55.3	55.7	56.2
20	59.6	69.0	72.0	71.3	49.8	43.7	46.0	50.5	44.5	44.9	43.8	45.7	52.1	53.8	59.0	71.2	59.6	79.3	140.3	239.0	255.1	353.2	15.8	16.9
21	22.2	118.0	116.5	94.5	7.0	3.5	8.2	18.6	11.2	315.2	19.5	22.0	38.9	105.2	27.8	293.3	355.0	13.6	25.7	156.9	48.9	63.9	34.9	31.5
22	20.2	30.0	92.6	117.9	127.5	109.7	110.5	114.0	120.4	128.0	141.4	135.5	118.6	133.2	134.3	146.3	143.9	133.3	123.3	133.8	134.8	134.4	131.3	127.2
23	114.5	109.9	110.6	107.5	108.5	107.9	106.3	115.9	212.6	300.5	294.1	298.4	293.7	293.4	298.0	296.4	295.7	297.2	295.0	289.5	290.2	292.0	294.1	297.6
24	298.8	297.2	309.1	320.6	326.0	342.5	192.2	269.2	272.9	271.9	287.7	276.3	293.5	348.2	3.2	2.4	13.6	352.6	115.5	123.4	107.6	108.5	99.8	110.3
25	116.9	105.3	116.4	119.4	112.8	108.2	110.2	109.6	114.3	117.6	123.3	134.0	137.1	133.7	140.1	132.7	244.3	304.3	320.9	319.3	323.5	328.0	325.3	322.5
26	323.4	321.1	324.4	321.7	321.3	313.1	320.0	316.8	314.7	314.8	314.2	315.0	311.0	309.3	311.3	321.1	324.4	320.9	319.4	319.8	317.2	318.1	320.5	326.1
27	323.3	325.8	339.8	346.6	347.6	352.7	353.7	351.9	351.7	347.3	344.7	351.6	359.2	354.5	0.3	352.9	356.2	1.4	0.4	1.8	358.2	1.1	2.2	3.1
28	7.3	5.1	5.9	5.2	5.6	4.9	2.1	1.4	3.0	5.2	3.1	9.5	4.6	14.3	8.3	11.7	13.0	6.7	358.1	10.6	11.4	12.1	7.5	14.0
29	20.1	19.4	18.2	16.9	16.6	22.3	22.5	20.6	19.7	18.9	19.8	22.9	22.3	21.3	26.8	15.9	18.9	20.1	22.7	25.9	23.0	19.6	16.7	6.4
30	5.0	14.1	18.6	10.0	11.6	14.3	18.0	20.4	21.1	19.4	19.8	12.3	12.5	16.1	18.4	22.9	19.3	16.3	14.5	11.0	17.9	23.0	20.7	24.1
31	17.6	22.9	10.7	9.8	15.9	22.6	11.8	19.7	22.4	17.3	22.5	15.4	14.2	8.2	13.1	12.4	11.6	14.2	16.8	22.1	34.2	29.4	29.8	20.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.7	3.0	2.6	3.2	2.7	3.0	3.9	5.1	4.1	3.8	3.8	4.2	4.3	4.7	4.6	3.7	3.8	4.2	8.8	3.2	2.9	3.7	6.6	4.5	8.8	2.6	4.1
2	6.1	5.8	5.0	10.7	6.6	4.7	3.5	4.0	3.7	4.4	4.3	6.8	6.9	8.1	5.5	4.9	9.2	6.2	7.5	5.4	6.4	5.5	7.3	20.6	20.6	3.5	6.6
3	5.2	6.5	5.2	8.2	30.7	9.9	5.3	5.3	5.0	7.9	5.7	6.6	5.5	6.1	14.7	11.0	6.1	11.7	17.0	11.7	11.1	3.8	4.6	10.0	30.7	3.8	9.0
4	10.3	4.2	14.6	7.2	4.0	8.6	9.5	4.8	4.5	4.2	5.1	4.1	3.0	4.4	4.3	10.5	10.8	9.2	6.9	13.5	17.4	14.2	11.8	11.0	17.4	3.0	8.3
5	14.1	3.6	10.6	11.7	12.5	17.3	14.3	12.1	15.5	12.8	13.5	16.0	17.9	16.7	15.1	2.7	10.9	5.5	3.1	3.6	7.6	7.9	15.7	3.1	17.9	2.7	11.0
6	16.2	6.3	3.8	3.3	10.8	17.0	15.8	15.5	10.6	17.7	9.0	4.8	11.8	12.0	12.5	10.7	16.2	14.1	15.5	12.5	5.0	12.8	10.6	12.3	17.7	3.3	11.5
7	6.7	4.0	6.6	5.5	4.7	4.9	9.7	8.2	4.4	3.4	9.3	6.4	9.5	13.0	13.1	9.9	13.0	11.5	15.1	10.9	9.8	7.0	4.7	4.2	15.1	3.4	8.1
8	9.0	4.5	6.7	9.6	3.8	5.0	13.7	9.9	7.6	9.9	7.5	5.9	5.0	10.6	10.2	4.8	4.6	6.6	4.1	6.0	5.0	10.7	4.2	6.2	13.7	3.8	7.1
9	10.4	6.3	5.3	5.3	9.3	15.1	12.9	13.1	12.5	12.4	12.7	13.3	6.4	13.0	8.5	4.4	5.3	3.2	3.1	6.8	7.6	5.7	7.1	6.5	15.1	3.1	8.6
10	4.2	6.2	5.2	9.5	4.3	3.6	13.3	13.0	14.0	8.0	8.4	6.0	9.1	11.5	20.6	7.7	6.8	10.4	14.7	14.8	13.7	11.3	10.0	14.3	20.6	3.6	10.0
11	8.9	3.4	4.6	5.9	14.4	12.8	8.9	15.4	9.0	4.4	19.1	32.1	25.5	13.3	12.7	8.8	12.5	11.2	10.1	10.5	11.6	7.9	3.8	6.2	32.1	3.4	11.4
12	4.9	3.9	5.6	4.1	5.8	5.9	3.2	4.8	6.7	4.1	5.8	4.3	5.8	4.6	6.0	3.6	5.3	7.9	11.4	15.9	9.9	14.6	18.3	19.9	19.9	3.2	7.6
13	17.7	17.2	7.0	16.6	14.0	11.0	14.9	18.1	15.7	13.3	11.6	10.6	6.7	9.5	13.0	14.9	15.4	14.8	13.5	17.0	38.7	9.8	12.4	4.8	38.7	4.8	14.1
14	5.2	4.5	8.2	37.6	15.0	7.1	4.1	29.1	9.3	9.5	3.8	3.5	4.2	4.3	4.6	4.6	3.2	3.3	3.4	3.6	4.5	6.8	6.5	3.5	37.6	3.2	7.9
15	3.7	3.6	3.6	4.0	7.4	4.7	5.4	5.7	4.1	5.2	6.7	6.0	9.8	10.3	6.1	3.9	5.0	6.3	4.1	6.4	12.4	14.2	7.6	12.6	14.2	3.6	6.6
16	7.2	81.6	19.0	51.1	20.1	12.0	19.2	45.8	8.8	14.0	33.3	16.3	63.2	40.7	20.6	15.8	24.8	16.1	20.6	11.1	10.4	20.5	26.3	5.0	81.6	5.0	25.1
17	10.1	6.7	3.6	4.7	4.8	4.0	4.4	4.3	4.9	3.4	3.6	5.7	4.3	4.6	4.0	4.1	3.7	4.8	10.2	4.9	7.1	3.9	8.5	4.0	10.2	3.4	5.2
18	5.2	10.0	10.9	5.5	6.5	6.6	2.9	4.9	6.7	5.1	9.8	13.4	12.5	9.3	28.8	8.2	34.6	22.3	38.4	9.0	8.5	6.5	8.3	10.2	38.4	2.9	11.8
19	5.0	4.5	4.7	5.5	6.5	3.7	4.6	6.5	6.0	3.8	4.0	2.9	3.0	3.6	3.9	3.7	4.2	3.7	3.3	4.0	3.7	3.6	4.0	3.3	6.5	2.9	4.2
20	3.7	3.4	4.2	3.8	3.6	3.4	3.3	3.8	4.8	6.5	5.7	3.6	3.0	3.0	3.7	3.4	7.7	16.7	38.2	32.5	31.3	7.5	5.2	2.8	38.2	2.8	8.5
21	3.9	3.4	4.5	6.7	6.6	4.5	4.4	6.9	3.7	4.2	4.2	4.0	3.8	3.9	3.8	4.9	5.4	5.5	7.5	3.9	4.3	5.0	3.7	5.8	7.5	3.4	4.8
22	4.1	17.4	4.4	5.1	3.9	3.5	3.7	6.0	3.9	5.1	16.8	3.9	4.7	7.6	4.5	5.1	5.8	5.9	8.2	10.6	29.1	27.7	19.5	8.2	29.1	3.5	8.9
23	5.0	4.1	5.7	5.1	4.9	3.6	4.1	4.1	3.6	2.8	4.7	4.1	3.2	5.6	6.7	7.3	13.2	5.8	4.4	36.7	22.5	12.5	5.4	10.9	36.7	2.8	7.7
24	12.2	15.1	10.4	8.2	8.4	8.1	45.7	12.4	4.3	4.8	4.9	3.8	3.8	3.3	3.0	3.7	3.5	3.8	3.3	3.7	3.6	3.5	5.9	5.6	45.7	3.0	7.7
25	4.6	41.4	15.5	0.2	47.1	4.9	4.2	5.2	9.4	5.3	7.5	3.5	2.9	3.6	3.4	3.0	3.0	6.5	7.6	5.9	15.4	11.7	15.8	15.5	47.1	0.2	10.1
26	3.5	4.9	7.9	3.4	7.8	4.4	2.6	3.0	3.0	7.2	13.7	4.2	5.4	18.6	7.0	5.2	7.4	34.8	31.8	65.9	21.4	8.2	9.8	16.1	65.9	2.6	12.4
27	6.2	5.2	7.4	4.5	4.2	3.9	3.4	4.3	4.9	3.3	3.6	3.3	3.4	3.1	3.5	3.5	3.5	3.3	3.5	3.5	3.5	3.6	3.9	3.9	7.4	3.1	4.0
28	3.6	3.7	3.1	4.2	4.8	5.9	5.7	4.9	4.3	3.9	3.9	4.0	3.5	3.9	4.4	8.7	65.3	16.7	10.3	32.6	73.2	20.0	15.8	49.7	73.2	3.1	14.8
29	25.3	42.0	14.2	12.0	34.4	78.8	16.9	33.4	35.6	59.6	7.3	44.3	17.6	53.7	23.1	11.8	9.0	7.0	4.4	6.3	10.4	8.6	10.6	7.4	78.8	4.4	23.9
30	8.2	6.4	5.7	6.6	7.2	7.2	5.6	20.1	17.9	14.5	11.4	5.4	8.7	6.1	5.8	9.7	15.7	7.2	18.4	2.7	7.3	6.4	6.1	12.2	20.1	2.7	9.3
31	13.1	7.2	7.7	16.0	8.9	12.4	18.1	23.1	9.6	10.3	28.0	42.8	18.7	35.0	39.7	21.7	39.1	35.7	20.6	79.6	43.5	28.6	14.5	16.1	79.6	7.2	24.6
Max.	**25.3**	**81.6**	**19.0**	**51.1**	**47.1**	**78.8**	**45.7**	**45.8**	**35.6**	**59.6**	**33.3**	**44.3**	**63.2**	**53.7**	**39.7**	**21.7**	**65.3**	**35.7**	**38.4**	**79.6**	**73.2**	**28.6**	**26.3**	**49.7**	**81.6**		
Min.	**3.5**	**3.0**	**2.6**	**0.2**	**2.7**	**3.0**	**2.6**	**3.0**	**3.0**	**2.8**	**3.6**	**2.9**	**2.9**	**3.0**	**3.0**	**2.7**	**3.0**	**3.2**	**3.1**	**2.7**	**2.9**	**3.5**	**3.7**	**2.8**		**0.2**	
Avg.	**8.0**	**11.0**	**7.2**	**9.2**	**10.5**	**9.6**	**9.3**	**11.4**	**8.3**	**8.9**	**9.3**	**9.5**	**9.5**	**11.2**	**10.2**	**7.3**	**12.1**	**10.4**	**11.9**	**14.7**	**14.8**	**10.1**	**9.5**	**10.2**			**10.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.4	3.8	4.5	6.2	12.7	6.2	7.9	7.9	6.5	5.2	5.5	16.3	7.7	12.6	23.1	8.6	10.0	10.6	9.1	7.5	8.8	5.5	5.0	9.4	23.1	3.8	8.5
2	5.1	5.1	4.9	5.5	9.6	8.5	18.1	6.7	3.3	3.2	4.0	5.3	13.3	14.8	12.6	7.4	11.2	12.5	5.1	5.8	10.0	12.7	14.3	10.0	18.1	3.2	8.7
3	10.7	4.2	15.7	15.3	7.5	11.2	11.2	7.7	15.9	13.4	8.9	6.5	7.7	8.0	15.0	5.0	7.3	6.1	4.5	5.7	5.4	4.8	4.1	4.5	15.9	4.1	8.6
4	3.6	4.3	5.2	4.7	6.3	5.7	5.3	4.4	4.5	4.3	5.7	3.5	4.7	4.8	4.6	4.8	5.2	4.6	5.9	4.6	4.6	3.9	3.8	5.1	6.3	3.5	4.8
5	5.7	4.5	6.4	3.5	5.2	5.1	3.8	5.2	5.2	13.2	6.4	12.0	8.2	8.9	6.5	7.3	4.5	4.3	4.0	3.8	5.8	9.0	6.0	5.8	13.2	3.5	6.3
6	3.9	5.9	4.9	5.6	5.2	5.8	5.3	5.2	4.1	4.6	5.7	5.8	3.4	4.0	8.9	4.3	6.0	4.4	10.7	6.5	8.6	7.1	6.7	4.9	10.7	3.4	5.7
7	3.5	4.9	3.2	5.2	7.3	3.9	5.1	6.8	7.9	12.1	13.3	13.9	7.0	11.4	19.7	17.2	14.4	7.6	22.2	26.5	9.1	5.6	11.5	8.7	26.5	3.2	10.3
8	9.4	7.0	6.4	7.2	31.4	64.9	16.3	26.9	20.2	9.7	23.4	6.4	5.1	4.7	5.8	5.3	3.9	4.2	7.2	4.9	5.9	6.8	3.4	5.8	64.9	3.4	12.2
9	5.5	5.5	4.1	3.6	5.7	4.2	3.4	3.3	3.8	5.7	15.7	17.8	17.0	40.7	8.0	10.0	10.8	9.6	4.3	6.1	5.9	5.1	4.5	4.2	40.7	3.3	8.5
10	5.1	4.7	5.8	6.2	3.3	4.0	3.3	5.1	5.7	4.8	4.7	21.4	4.8	4.7	4.9	7.5	5.0	5.0	5.9	5.5	3.6	4.4	6.1	6.7	21.4	3.3	5.8
11	29.6	17.3	7.1	6.2	5.8	9.8	11.8	17.4	15.8	12.1	15.5	15.6	33.7	33.8	29.9	37.9	28.3	64.4	31.4	40.5	64.7	15.7	15.5	18.6	64.7	5.8	24.1
12	10.2	10.9	7.0	16.2	35.3	45.0	16.4	8.5	9.4	5.9	7.1	7.8	5.4	20.5	58.7	68.4	55.7	35.9	5.7	4.6	5.9	5.9	4.8	21.3	68.4	4.6	19.7
13	8.0	5.2	8.7	5.9	5.6	5.4	6.1	8.1	4.5	4.3	4.6	4.3	4.2	4.0	4.1	3.5	3.8	3.2	4.1	4.5	3.5	4.0	3.7	3.6	8.7	3.2	4.9
14	3.8	3.8	4.1	3.5	3.3	2.9	3.8	52.7	11.6	7.5	8.7	4.0	4.5	5.0	4.2	5.6	6.7	4.7	4.3	5.6	7.4	8.3	6.2	7.6	52.7	2.9	7.5
15	6.1	5.7	5.4	18.5	9.6	34.5	39.1	42.1	8.1	37.1	56.4	26.9	3.9	3.1	3.6	8.4	33.3	15.9	6.8	2.5	92.0	49.5	21.2	7.8	92.0	2.5	22.4
16	4.1	3.4	4.2	4.1	3.3	5.6	5.4	9.9	4.7	5.2	5.3	4.5	5.6	5.1	5.2	3.7	3.4	16.1	7.9	5.9	4.1	6.1	5.1	10.1	16.1	3.3	5.8
17	14.2	8.6	3.9	5.6	7.0	4.6	3.7	6.2	6.6	9.2	8.6	2.9	5.8	5.4	4.8	5.3	16.2	3.7	3.3	3.4	3.2	3.7	3.0	3.2	16.2	2.9	5.9
18	5.1	3.1	3.1	4.6	4.7	3.5	3.5	3.8	3.9	4.3	3.3	3.4	3.6	3.9	4.1	5.0	7.4	3.5	4.4	8.7	5.9	4.6	5.2	3.6	8.7	3.1	4.4
19	7.5	4.1	12.2	14.3	6.9	7.4	6.6	5.8	5.7	3.8	6.1	4.3	2.9	5.1	4.8	6.6	5.7	7.0	5.3	10.0	4.3	7.7	6.1	8.3	14.3	2.9	6.6
20	4.1	3.7	3.2	3.9	3.6	4.7	3.7	3.3	5.2	3.6	3.7	4.8	5.3	5.2	5.4	7.5	15.2	4.2	4.2	3.6	3.7	4.1	2.9	3.5	15.2	2.9	4.7
21	3.4	4.2	2.6	3.1	3.6	4.6	3.3	3.9	3.3	3.5	3.5	2.9	3.2	4.5	6.3	10.5	8.9	28.8	65.6	31.3	17.6	16.5	4.3	12.5	65.6	2.6	10.5
22	10.3	17.6	5.8	4.6	9.5	5.5	4.1	19.7	10.9	13.8	4.8	6.3	3.4	5.3	3.2	11.4	7.7	5.3	3.2	4.0	5.6	3.7	5.6	4.6	19.7	3.2	7.3
23	4.5	5.2	11.1	44.9	43.8	27.9	35.4	5.1	25.3	13.8	5.4	38.6	13.0	7.1	8.0	7.9	8.8	17.1	2.9	2.9	3.9	3.1	4.9	4.8	44.9	2.9	14.4
24	5.8	5.9	5.0	7.7	5.8	6.5	7.6	7.8	6.7	5.1	4.5	11.2	5.9	3.6	3.9	4.0	3.9	5.8	7.2	13.9	17.8	13.4	6.9	10.4	17.8	3.6	7.3
25	13.8	9.3	8.7	14.1	16.2	16.3	11.6	4.2	4.1	3.4	4.4	5.3	5.7	4.3	4.0	6.6	15.5	4.9	4.9	4.1	8.9	4.3	3.8	3.4	16.3	3.4	7.6
26	3.5	3.6	4.1	4.4	25.3	26.5	22.7	9.6	16.6	6.9	5.0	5.9	3.5	3.5	3.9	3.1	3.9	3.5	4.5	3.2	3.8	6.1	10.5	5.2	26.5	3.1	7.9
27	4.6	3.8	4.5	3.0	4.6	4.5	4.1	5.3	6.6	4.6	4.3	4.0	5.5	6.4	5.3	23.0	9.2	14.6	54.8	4.1	2.9	2.3	3.1	3.0	54.8	2.3	7.8
28	1.9	3.5	5.6	1.7	1.8	2.1	1.9	2.4	2.6	5.9	5.5	7.3	3.2	5.4	8.8	6.4	12.1	7.7	3.9	3.9	3.7	2.8	3.0	3.3	12.1	1.7	4.4
29	3.4	4.1	3.1	3.6	3.0	4.8	3.1	3.6	3.1	3.3	4.5	5.1	5.7	3.8	3.1	3.2	3.2	5.3	5.1	5.3	10.0	8.5	3.9	4.4	10.0	3.0	4.4
Max.	**29.6**	**17.6**	**15.7**	**44.9**	**43.8**	**64.9**	**39.1**	**52.7**	**25.3**	**37.1**	**56.4**	**38.6**	**33.7**	**40.7**	**58.7**	**68.4**	**55.7**	**64.4**	**65.6**	**40.5**	**92.0**	**49.5**	**21.2**	**21.3**	**92.0**		
Min.	**1.9**	**3.1**	**2.6**	**1.7**	**1.8**	**2.1**	**1.9**	**2.4**	**2.6**	**3.2**	**3.3**	**2.9**	**2.9**	**3.1**	**3.1**	**3.1**	**3.2**	**3.2**	**2.9**	**2.5**	**2.9**	**2.3**	**2.9**	**3.0**		**1.7**	
Avg.	**6.9**	**6.0**	**5.9**	**8.0**	**10.1**	**11.8**	**9.4**	**10.3**	**8.0**	**7.9**	**8.8**	**9.4**	**7.0**	**8.6**	**9.7**	**10.5**	**11.3**	**11.1**	**10.6**	**8.2**	**11.6**	**8.1**	**6.4**	**7.1**			**8.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.9	3.2	3.9	9.9	5.5	6.2	5.7	5.9	8.8	11.4	38.6	44.2	4.6	3.8	3.6	4.0	4.5	8.8	6.4	7.3	4.7	4.7	4.5	5.0	44.2	3.2	8.7
2	6.3	6.9	4.7	4.2	3.9	4.9	3.9	4.7	4.6	3.4	4.5	4.0	3.2	5.0	3.6	5.8	6.6	10.3	6.6	8.4	5.1	7.1	4.1	4.4	10.3	3.2	5.3
3	9.5	8.2	5.8	4.7	5.8	3.0	3.2	3.7	3.2	3.2	3.4	3.2	4.8	3.8	3.6	3.1	3.8	3.0	3.1	4.1	5.1	3.3	4.2	3.2	9.5	3.0	4.2
4	3.3	4.6	4.4	4.9	3.4	3.8	3.6	3.6	3.8	3.6	3.4	3.3	3.4	4.7	3.9	3.9	3.9	3.8	3.7	4.0	3.7	3.9	3.5	3.8	4.9	3.3	3.8
5	4.7	5.9	6.0	4.3	6.5	4.5	4.8	5.9	4.7	5.0	3.5	3.7	4.0	4.1	3.9	3.8	4.1	3.4	5.9	3.8	3.3	3.3	3.6	3.9	6.5	3.3	4.4
6	4.1	3.2	3.1	2.8	4.0	5.6	2.9	3.6	3.6	3.2	3.8	4.5	5.8	6.7	7.6	4.6	5.2	4.8	4.6	5.1	24.1	11.1	3.4	6.4	24.1	2.8	5.6
7	8.7	4.4	5.2	7.4	17.9	12.9	8.9	47.4	14.9	26.4	7.0	10.0	35.8	11.4	26.5	14.1	6.8	6.4	8.6	4.6	5.6	4.3	6.6	7.5	47.4	4.3	12.9
8	12.6	11.9	4.6	21.1	5.9	7.4	5.0	3.4	6.0	3.8	4.4	4.3	5.2	6.5	7.0	6.9	4.6	3.4	4.0	2.6	3.5	2.9	3.2	3.8	21.1	2.6	6.0
9	3.8	6.4	14.8	9.3	8.5	7.6	8.1	7.8	4.1	3.4	4.3	5.3	8.6	11.2	7.2	6.0	10.2	15.2	10.4	4.4	9.6	6.8	4.0	9.2	15.2	3.4	7.8
10	93.2	11.4	13.2	18.5	9.2	6.3	5.4	8.8	6.4	4.8	6.4	7.1	9.6	6.0	3.7	5.6	4.9	4.9	5.1	5.6	3.4	6.2	6.5	7.1	93.2	3.4	10.8
11	8.8	6.5	4.2	3.1	5.1	3.2	4.3	6.9	20.5	18.2	5.6	11.8	10.4	20.2	19.7	12.0	13.7	22.7	12.8	11.3	13.7	11.4	36.2	13.5	36.2	3.1	12.3
12	30.2	14.5	9.7	11.7	11.3	5.3	7.9	3.0	5.8	9.6	12.8	14.2	18.1	16.6	12.8	11.5	13.6	15.3	15.1	9.2	13.3	15.3	8.7	8.2	30.2	3.0	12.2
13	8.0	9.0	9.8	9.5	11.5	10.5	10.0	10.7	8.7	9.7	11.1	13.6	12.5	30.7	34.2	35.3	35.6	12.9	15.7	12.8	9.7	11.3	4.2	3.5	35.6	3.5	14.2
14	5.1	5.0	5.3	6.8	5.8	6.0	2.9	3.9	4.7	4.1	4.6	3.3	4.2	6.3	10.5	10.7	48.9	5.4	5.9	3.5	4.3	3.9	3.3	4.1	48.9	2.9	7.0
15	3.5	3.2	4.0	3.6	3.4	4.1	3.3	2.9	3.0	3.4	3.6	3.4	3.3	3.3	3.5	3.8	4.0	2.8	2.8	3.1	3.3	3.5	3.3	3.4	4.1	2.8	3.4
16	5.0	3.7	3.3	4.1	4.2	4.8	3.4	9.2	15.6	39.4	5.1	26.3	40.0	43.8	59.2	27.2	41.9	31.1	12.6	9.2	6.0	2.9	2.4	3.2	59.2	2.4	16.8
17	4.2	4.3	6.2	4.6	13.4	15.1	15.9	4.7	4.8	5.2	11.9	16.1	12.1	76.2	19.1	10.1	17.0	17.2	5.2	5.9	7.8	4.2	5.6	5.9	76.2	4.2	12.2
18	5.4	6.9	57.8	16.4	16.3	11.1	12.8	13.9	11.7	4.6	3.9	14.3	13.4	9.6	14.9	8.1	3.8	6.5	6.1	8.4	18.6	12.9	6.8	24.5	57.8	3.8	12.9
19	21.9	8.7	15.7	8.3	15.1	18.3	19.6	14.5	14.5	8.0	9.7	7.0	5.8	7.1	4.8	8.1	10.5	6.0	14.5	10.6	3.1	2.7	3.1	3.2	21.9	2.7	10.0
20	2.8	2.8	4.4	7.1	11.7	11.4	7.3	4.8	5.3	5.3	8.0	8.2	42.8	17.9	88.5	17.7	24.7	12.2	10.4	19.3	16.8	3.9	4.0	6.2	88.5	2.8	14.3
21	5.4	7.3	7.5	4.5	11.0	28.5	27.4	55.9	19.3	21.4	22.1	31.6	32.3	15.7	59.4	4.4	3.3	2.8	4.2	3.9	4.0	4.7	3.9	3.5	59.4	2.8	16.0
22	4.0	3.4	2.4	3.8	3.5	3.3	3.6	4.4	4.0	3.2	4.5	3.7	3.9	3.6	3.7	6.5	4.1	8.2	4.5	4.1	4.5	8.8	15.3	25.0	25.0	2.4	5.7
23	7.7	6.4	10.2	8.5	7.3	14.0	9.3	3.8	4.4	6.2	7.2	5.6	5.1	14.0	10.6	7.3	6.8	4.2	5.7	4.4	2.5	3.9	11.6	9.3	14.0	2.5	7.3
24	12.3	13.7	10.4	5.2	3.8	4.5	6.6	7.7	6.1	6.1	9.7	10.6	5.9	13.0	9.1	40.0	68.3	44.1	37.1	11.3	6.3	11.8	10.4	23.0	68.3	3.8	15.7
25	72.5	78.4	53.5	4.2	12.6	41.7	92.9	70.7	43.4	54.4	25.2	7.7	63.2	38.5	12.4	27.5	3.4	17.3	11.2	13.6	12.9	11.9	2.9	2.8	92.9	2.8	32.3
26	13.0	24.3	11.2	11.9	7.8	6.0	6.9	8.2	4.4	4.6	4.3	9.7	14.7	28.9	44.2	23.8	9.7	17.4	13.9	15.4	15.0	21.4	40.9	9.5	44.2	4.3	15.3
27	3.2	32.8	28.6	20.1	19.5	45.2	32.7	22.4	25.0	15.0	9.3	30.8	25.2	25.2	41.6	38.5	4.0	6.1	6.9	4.2	17.0	8.9	15.6	5.7	45.2	3.2	20.1
28	1.8	2.9	4.7	10.3	7.5	6.8	4.6	6.2	14.3	6.9	11.8	20.2	35.8	19.2	15.5	11.2	6.4	6.8	6.0	7.9	21.3	11.7	73.8	17.4	73.8	1.8	13.8
29	7.3	42.3	44.1	23.4	18.5	15.9	16.3	7.4	8.3	8.4	5.2	3.8	4.2	4.3	3.7	3.8	3.8	3.3	3.1	3.4	3.5	3.2	3.8	3.3	44.1	3.1	10.2
30	3.6	3.0	3.0	3.2	3.3	3.3	3.2	3.2	3.0	3.0	3.2	3.1	3.0	3.6	3.5	3.0	3.1	2.9	3.2	3.4	3.2	3.9	2.8	3.3	3.9	2.8	3.2
31	4.7	3.3	3.6	2.9	3.8	2.6	3.6	3.0	2.9	2.5	3.3	3.3	3.5	3.3	3.5	3.3	4.1	4.0	4.4	3.9	3.7	4.1	3.8	3.6	4.7	2.5	3.5
Max.	**93.2**	**78.4**	**57.8**	**23.4**	**19.5**	**45.2**	**92.9**	**70.7**	**43.4**	**54.4**	**38.6**	**44.2**	**63.2**	**76.2**	**88.5**	**40.0**	**68.3**	**44.1**	**37.1**	**19.3**	**24.1**	**21.4**	**73.8**	**25.0**	**93.2**		
Min.	**1.8**	**2.8**	**2.4**	**2.8**	**3.3**	**2.6**	**2.9**	**2.9**	**2.9**	**2.5**	**3.2**	**3.1**	**3.0**	**3.3**	**3.5**	**3.0**	**3.1**	**2.8**	**2.8**	**2.6**	**2.5**	**2.7**	**2.4**	**2.8**		**1.8**	
Avg.	**12.3**	**11.3**	**11.8**	**8.4**	**8.6**	**10.4**	**11.1**	**11.7**	**9.3**	**9.9**	**8.4**	**10.9**	**14.3**	**15.0**	**17.6**	**12.0**	**12.4**	**10.1**	**8.4**	**7.1**	**8.3**	**7.1**	**9.9**	**7.6**			**10.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.5	3.4	3.4	3.3	3.6	3.2	2.7	3.3	3.0	2.8	3.1	3.2	2.6	3.3	2.9	3.0	2.9	3.0	4.0	3.1	3.6	2.6	0.2	0.3	4.0	0.2	2.9
2	0.3	0.2	0.1	0.4	0.4	0.3	0.1	0.1	0.1	0.1	0.3	0.2	0.3	31.0	12.8	22.3	7.7	8.2	9.1	16.8	17.1	4.1	6.8	6.0	31.0	0.1	6.0
3	3.4	4.9	3.9	5.9	4.6	8.9	8.0	12.8	4.0	5.6	4.2	7.5	5.3	3.0	2.7	2.7	2.8	3.0	2.9	3.2	3.2	3.3	3.5	3.3	12.8	2.7	4.7
4	3.7	3.4	3.9	3.8	3.1	3.2	3.2	3.3	3.3	3.5	3.2	2.9	4.0	3.3	2.8	4.1	3.8	3.4	3.1	15.5	7.9	6.2	8.7	6.2	15.5	2.8	4.6
5	9.6	39.7	5.5	5.4	7.2	12.3	12.3	10.9	11.0	15.4	13.1	19.7	48.6	12.0	21.1	7.3	5.9	14.0	7.5	2.5	2.7	1.9	3.3	5.2	48.6	1.9	12.3
6	2.9	4.9	3.6	7.5	3.5	5.7	14.3	8.1	11.5	10.5	15.5	14.0	9.4	4.5	4.9	5.6	5.5	5.6	7.6	15.5	17.7	10.5	10.0	3.3	17.7	2.9	8.4
7	11.8	16.3	15.0	3.9	12.2	13.8	8.2	7.0	6.0	11.6	15.4	16.0	13.8	19.9	6.4	4.0	8.9	3.4	8.5	3.2	17.3	12.7	12.8	10.4	19.9	3.2	10.8
8	3.8	18.0	8.1	4.8	3.8	4.6	3.7	7.0	48.3	10.6	14.3	37.8	88.8	6.7	18.1	48.8	84.3	93.8	9.8	6.9	9.8	28.6	13.1	13.0	93.8	3.7	24.4
9	4.3	3.5	3.1	6.3	12.6	13.3	14.1	13.2	8.7	10.3	8.0	10.8	46.4	9.1	14.3	9.5	5.1	7.8	10.9	9.9	4.0	4.3	4.1	1.9	46.4	1.9	9.8
10	20.0	14.2	13.1	11.8	3.9	5.6	2.8	1.8	4.1	2.9	4.0	7.5	3.5	6.4	5.9	13.4	6.8	3.7	4.2	3.5	4.3	2.0	15.8	12.6	20.0	1.8	7.2
11	11.9	5.8	3.3	3.4	2.9	7.1	11.6	17.4	7.0	5.1	6.8	4.4	12.9	10.6	9.9	4.9	6.2	4.9	6.1	5.4	6.9	15.2	4.3	15.9	17.4	2.9	7.9
12	13.2	16.6	13.2	13.2	18.9	15.1	9.6	13.5	13.4	10.7	15.1	10.7	6.5	10.3	10.8	5.7	3.5	5.9	4.7	7.8	48.3	18.3	21.1	57.9	57.9	3.5	15.2
13	69.7	21.7	11.8	8.8	5.7	8.0	12.8	11.0	9.5	4.7	4.7	6.4	12.6	12.9	16.8	5.5	6.5	7.1	5.8	7.5	12.3	6.1	3.7	3.8	69.7	3.7	11.5
14	4.6	5.3	5.5	4.4	4.8	4.6	4.9	4.5	5.2	6.7	5.4	4.6	4.1	3.7	5.2	5.8	5.8	11.2	32.1	10.5	15.6	7.3	56.9	8.9	56.9	3.7	9.5
15	12.1	37.1	23.5	5.7	13.2	9.9	4.6	3.1	5.1	11.4	11.7	18.3	12.1	23.3	19.2	20.5	9.6	11.5	14.4	4.4	3.5	2.8	5.1	3.8	37.1	2.8	11.9
16	3.7	4.6	3.1	2.3	3.3	4.0	4.8	7.7	53.8	23.3	5.8	7.6	9.8	4.7	7.5	9.5	7.7	7.4	13.3	13.9	14.7	31.0	46.9	10.2	53.8	2.3	12.5
17	12.5	19.3	38.5	8.2	17.9	23.3	9.9	13.1	45.6	51.1	7.9	5.8	7.2	6.7	5.5	7.4	8.1	8.3	13.9	16.3	61.4	28.2	77.3	23.8	77.3	5.5	21.6
18	27.2	69.5	66.4	38.0	4.6	5.8	5.5	4.4	6.8	41.5	69.2	20.8	7.0	12.5	18.2	5.2	5.2	5.8	8.1	34.0	12.3	5.2	19.3	12.6	69.5	4.4	21.1
19	35.6	24.7	12.9	3.8	2.9	5.4	4.1	3.9	3.7	4.2	4.4	9.6	6.0	4.6	5.7	5.7	4.7	3.4	5.9	6.7	4.1	23.5	7.4	5.8	35.6	2.9	8.3
20	5.0	11.4	5.0	51.1	37.3	6.0	11.1	3.2	5.2	8.9	8.3	11.0	9.7	17.0	17.2	16.6	7.4	13.9	6.7	10.9	8.4	4.2	3.8	7.2	51.1	3.2	11.9
21	4.0	7.3	4.3	3.9	4.5	5.5	3.7	3.6	4.8	3.7	4.3	2.8	3.4	3.1	3.3	3.7	6.8	6.8	3.9	28.2	11.3	7.2	6.9	8.6	28.2	2.8	6.1
22	29.4	17.5	23.8	29.1	22.4	43.7	11.2	53.7	46.5	37.6	72.6	43.2	53.8	27.9	9.3	13.5	23.3	28.6	37.8	14.3	32.5	20.3	28.4	5.5	72.6	5.5	30.2
23	10.5	9.5	12.9	11.2	6.4	19.4	12.2	8.4	11.5	22.7	32.6	25.8	95.5	22.1	6.1	14.5	47.8	35.8	7.5	7.3	6.2	7.9	9.4	12.8	95.5	6.1	19.0
24	8.8	7.4	11.3	16.0	49.0	16.2	5.7	8.2	6.6	7.1	8.4	6.0	6.0	5.9	5.8	5.5	6.6	9.9	19.3	28.6	16.6	21.9	3.3	6.0	49.0	3.3	11.9
25	4.8	4.3	10.6	15.2	4.2	6.4	5.0	3.8	3.4	2.3	5.0	3.4	4.2	4.6	6.5	5.7	6.9	5.9	4.3	8.3	4.1	6.4	2.8	2.2	15.2	2.2	5.4
26	2.9	2.1	13.6	23.6	12.5	17.7	14.5	13.8	9.5	16.3	12.2	16.5	27.2	18.4	30.3	30.5	30.7	27.7	32.1	11.0	10.6	5.4	6.6	6.6	32.1	2.1	16.3
27	14.8	5.0	11.5	7.3	4.4	24.5	14.7	4.5	21.9	29.3	32.3	14.5	3.8	6.6	18.3	27.3	28.1	23.8	15.6	16.0	12.7	4.4	6.1	4.9	32.3	3.8	14.7
28	5.1	4.2	4.9	2.8	4.9	9.7	35.8	10.6	9.2	6.3	34.8	12.7	12.6	13.7	11.1	60.0	13.9	5.8	5.6	12.4	7.0	4.5	6.6	2.2	60.0	2.2	12.4
29	2.8	1.9	20.4	6.4	5.1	8.0	12.3	7.5	4.3	7.4	9.1	12.7	11.8	18.1	15.8	26.6	11.0	4.0	3.2	2.8	7.1	3.2	6.8	13.2	26.6	1.9	9.2
30	10.0	7.2	5.7	3.9	5.3	4.2	4.3	3.8	4.5	5.2	4.1	8.2	6.9	8.2	6.5	7.4	9.1	8.7	11.1	8.5	15.7	5.6	4.0	3.4	15.7	3.4	6.7
Max.	**69.7**	**69.5**	**66.4**	**51.1**	**49.0**	**43.7**	**35.8**	**53.7**	**53.8**	**51.1**	**72.6**	**43.2**	**95.5**	**31.0**	**30.3**	**60.0**	**84.3**	**93.8**	**37.8**	**34.0**	**61.4**	**31.0**	**77.3**	**57.9**	**95.5**		
Min.	**0.3**	**0.2**	**0.1**	**0.4**	**0.4**	**0.3**	**0.1**	**0.1**	**0.1**	**0.1**	**0.3**	**0.2**	**0.3**	**3.0**	**2.7**	**2.7**	**2.8**	**3.0**	**2.9**	**2.5**	**2.7**	**1.9**	**0.2**	**0.3**		**0.1**	
Avg.	**11.7**	**13.0**	**12.1**	**10.4**	**9.5**	**10.5**	**8.9**	**8.9**	**12.6**	**12.6**	**14.5**	**12.1**	**17.8**	**11.1**	**10.7**	**13.4**	**12.8**	**12.7**	**10.6**	**11.2**	**13.3**	**10.2**	**13.5**	**9.3**			**11.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.4	3.5	4.9	3.8	3.7	3.0	3.2	4.2	4.0	4.3	4.8	3.8	6.2	14.3	10.8	8.5	21.0	14.5	17.2	17.0	2.2	6.7	9.5	5.0	21.0	2.2	7.5
2	7.9	11.1	14.4	9.2	5.7	9.4	11.9	12.3	3.6	3.5	5.5	8.2	4.6	46.2	38.5	35.9	65.7	7.4	51.4	56.3	16.9	30.0	62.9	60.1	65.7	3.5	24.1
3	45.6	16.7	4.5	8.0	7.3	7.1	7.8	11.8	6.9	25.5	12.4	8.2	9.9	3.8	7.8	7.1	6.6	25.8	13.2	9.3	17.1	10.6	12.6	18.9	45.6	3.8	12.7
4	8.3	4.6	7.1	7.5	6.7	4.5	4.8	14.2	11.4	14.1	6.5	4.0	7.1	33.4	16.5	14.1	13.9	53.2	66.6	24.9	23.9	10.4	36.4	19.7	66.6	4.0	17.2
5	32.7	7.3	3.1	3.9	3.7	10.9	6.2	13.0	10.5	9.8	58.0	62.8	44.7	12.0	31.9	17.7	23.0	11.3	53.6	12.2	26.3	23.0	16.9	43.2	62.8	3.1	22.4
6	20.3	25.9	6.6	14.4	9.2	7.6	4.7	6.6	3.6	4.2	5.8	7.3	4.1	4.2	5.2	4.9	6.3	5.8	4.1	3.5	4.0	3.7	3.8	4.3	25.9	3.5	7.1
7	5.1	3.2	3.6	3.5	3.4	3.5	3.1	3.1	3.5	3.4	3.8	3.7	3.9	3.7	3.7	4.2	4.3	4.7	4.0	3.4	5.1	4.3	5.4	4.1	5.4	3.1	3.9
8	3.6	3.4	4.0	3.8	3.9	4.7	3.5	4.3	5.4	5.5	4.3	3.6	3.7	3.4	3.6	3.4	3.7	3.5	3.4	3.6	3.2	3.5	3.4	3.4	5.5	3.2	3.8
9	4.5	4.2	4.3	4.8	4.2	3.7	3.6	4.3	5.4	5.0	4.4	5.0	4.0	5.7	3.6	4.8	12.4	4.3	14.5	10.3	15.2	15.7	10.2	42.2	42.2	3.6	8.2
10	17.5	21.7	33.7	44.6	30.7	21.9	31.6	18.2	26.3	4.6	6.2	37.8	36.8	9.6	6.4	9.6	13.1	16.6	11.4	36.2	5.7	20.5	4.1	4.1	44.6	4.1	19.5
11	12.3	3.7	4.5	4.0	3.7	3.5	4.3	4.8	3.9	4.4	8.0	8.0	5.9	5.9	10.4	4.5	4.1	4.4	4.6	4.7	5.4	6.1	5.4	5.7	12.3	3.5	5.5
12	5.8	5.2	5.1	4.6	4.6	4.6	5.1	5.0	4.9	4.2	4.2	3.6	4.8	4.7	5.9	6.9	4.7	5.0	4.4	4.8	4.4	4.5	5.0	4.0	6.9	3.6	4.8
13	3.6	3.9	3.9	4.1	4.4	3.4	3.6	3.8	4.6	3.9	4.4	5.3	5.0	4.8	5.6	6.1	7.3	9.2	4.0	5.6	5.8	6.8	10.4	5.8	10.4	3.4	5.2
14	7.6	6.6	9.3	33.7	5.8	7.2	3.2	3.3	3.5	3.8	10.1	5.7	5.1	4.5	4.9	4.5	5.5	5.1	5.4	8.9	4.5	5.6	16.4	70.5	70.5	3.2	10.0
15	11.1	11.8	15.9	8.8	29.0	7.4	21.6	6.1	5.2	9.2	6.8	9.0	10.7	9.7	10.0	4.2	7.8	7.9	9.1	4.1	6.3	6.0	5.3	6.5	29.0	4.1	9.6
16	8.6	9.0	10.6	17.7	13.3	51.3	9.9	18.7	14.4	16.0	7.2	13.8	8.3	7.7	7.2	6.6	11.4	8.5	10.5	9.7	9.0	5.2	36.1	29.6	51.3	5.2	14.2
17	18.9	4.8	12.3	6.5	9.1	5.9	10.0	9.1	7.5	3.7	9.6	10.1	12.9	27.9	24.0	19.0	25.1	24.5	11.3	19.3	10.2	3.5	4.3	9.3	27.9	3.5	12.4
18	6.5	24.5	6.6	4.7	4.4	5.9	6.3	9.4	7.2	6.4	8.1	16.7	12.0	12.0	12.0	8.5	12.4	9.7	10.6	18.2	9.1	12.3	10.4	11.7	24.5	4.4	10.2
19	7.9	15.2	28.7	11.5	51.5	42.0	8.0	50.7	10.6	6.6	12.1	10.0	15.9	16.5	11.5	14.0	11.5	8.6	5.9	3.5	5.0	4.2	4.1	15.5	51.5	3.5	15.5
20	10.3	10.3	13.9	4.2	4.9	2.9	2.8	3.1	5.8	8.4	15.9	14.5	18.0	8.9	37.3	21.5	14.8	11.6	51.6	7.8	19.5	13.9	13.8	22.4	51.6	2.8	14.1
21	70.4	22.7	21.6	61.4	56.2	14.7	27.8	62.9	71.4	56.8	22.8	28.8	21.2	18.4	25.0	24.6	12.6	11.6	4.5	9.5	4.5	6.8	8.5	11.3	71.4	4.5	28.2
22	9.2	11.3	6.0	12.1	9.5	12.7	44.2	44.8	26.4	30.7	14.0	14.9	18.0	27.4	27.5	14.5	12.3	7.4	6.0	6.2	7.7	7.6	5.1	6.4	44.8	5.1	15.9
23	4.6	4.4	5.2	4.6	5.7	7.5	5.3	6.7	6.7	5.4	6.1	6.9	5.7	4.8	4.7	4.9	7.4	6.5	5.3	5.1	4.6	5.0	4.0	4.0	7.5	4.0	5.5
24	4.8	4.3	3.9	4.1	3.8	4.9	4.5	4.7	5.2	5.7	4.8	5.7	5.8	7.0	8.0	9.4	6.5	5.8	7.4	32.4	11.0	11.7	15.0	19.4	32.4	3.8	8.2
25	8.9	10.2	9.9	10.0	6.9	8.2	5.2	5.0	4.4	4.9	9.5	16.6	16.2	15.8	9.4	13.9	20.3	12.8	7.4	24.8	14.3	12.9	30.1	34.4	34.4	4.4	13.0
26	20.5	15.4	14.0	5.8	26.2	52.1	17.9	8.5	14.6	7.8	9.4	7.8	10.8	17.6	23.7	27.4	19.0	12.5	24.9	24.7	13.5	4.9	38.2	41.7	52.1	4.9	19.1
27	17.2	16.0	29.7	12.1	14.2	13.1	23.9	12.7	47.0	21.2	24.2	21.0	13.0	17.9	23.3	20.6	21.8	17.7	11.3	10.4	4.4	6.5	7.7	7.6	47.0	4.4	17.3
28	14.4	18.1	13.7	11.9	18.8	15.6	14.1	12.3	12.8	51.6	21.0	16.5	15.9	17.1	12.2	19.6	17.7	12.9	13.6	6.1	3.9	6.5	7.9	13.0	51.6	3.9	15.3
29	13.6	12.9	9.3	8.4	5.0	11.4	13.6	4.9	10.0	9.6	13.9	15.0	11.5	10.1	9.1	9.7	11.8	10.8	9.0	7.9	5.4	13.3	7.9	3.2	15.0	3.2	9.9
30	3.6	5.7	5.8	24.9	11.6	17.7	9.6	10.1	6.0	9.1	7.8	8.1	12.1	9.0	8.2	7.5	6.3	9.8	8.4	6.5	4.8	9.9	6.6	6.0	24.9	3.6	9.0
31	5.8	5.8	5.3	4.0	4.3	4.5	4.3	5.0	4.3	4.1	5.6	6.6	7.1	7.6	7.5	8.0	7.1	6.8	6.1	5.3	5.8	4.2	5.7	4.8	8.0	4.0	5.7
Max.	**70.4**	**25.9**	**33.7**	**61.4**	**56.2**	**52.1**	**44.2**	**62.9**	**71.4**	**56.8**	**58.0**	**62.8**	**44.7**	**46.2**	**38.5**	**35.9**	**65.7**	**53.2**	**66.6**	**56.3**	**26.3**	**30.0**	**62.9**	**70.5**	**71.4**		
Min.	**3.4**	**3.2**	**3.1**	**3.5**	**3.4**	**2.9**	**2.8**	**3.1**	**3.5**	**3.4**	**3.8**	**3.6**	**3.7**	**3.4**	**3.6**	**3.4**	**3.7**	**3.5**	**3.4**	**3.4**	**2.2**	**3.5**	**3.4**	**3.2**		**2.2**	
Avg.	**13.4**	**10.4**	**10.4**	**11.7**	**12.0**	**12.0**	**10.5**	**12.4**	**11.5**	**11.4**	**10.9**	**12.5**	**11.6**	**12.6**	**13.4**	**11.8**	**13.5**	**11.5**	**14.9**	**13.0**	**9.0**	**9.2**	**13.3**	**17.3**			**12.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.4	5.2	4.7	4.0	6.2	5.0	4.9	4.6	6.0	4.6	5.3	7.2	6.2	5.2	5.8	5.4	6.1	5.7	5.5	6.1	5.3	5.4	4.5	8.6	8.6	4.0	5.5
2	6.8	5.6	5.5	4.6	8.0	7.9	6.1	9.5	7.9	6.5	7.4	7.7	9.0	13.3	11.4	12.4	10.7	9.6	8.7	8.9	9.2	8.8	7.4	9.1	13.3	4.6	8.4
3	85.3	22.4	9.9	7.0	8.3	5.2	67.0	66.0	16.1	38.1	37.5	32.3	28.7	21.1	18.5	9.4	10.9	9.8	11.4	7.1	6.4	8.1	6.6	5.0	85.3	5.0	22.4
4	7.4	6.9	7.0	3.7	7.9	5.8	7.0	5.9	8.8	12.0	10.0	8.7	10.5	7.7	10.0	9.5	9.6	9.3	8.5	6.8	6.7	5.0	7.3	3.4	12.0	3.4	7.7
5	7.4	6.1	3.5	7.0	5.2	5.2	5.0	5.1	4.9	5.4	5.0	5.2	5.9	5.7	6.5	6.8	6.1	6.4	5.9	6.4	24.4	40.5	25.6	36.8	40.5	3.5	10.1
6	14.5	10.2	14.6	11.7	12.7	8.9	7.3	23.2	13.2	24.3	34.0	18.1	21.3	31.1	22.6	36.3	42.7	8.4	9.6	9.5	7.5	7.6	14.2	41.1	42.7	7.3	18.5
7	35.5	18.4	13.9	13.1	12.4	13.6	13.4	12.4	13.2	14.1	21.8	8.9	8.4	18.7	26.8	36.5	12.5	6.7	8.2	7.1	5.1	6.2	10.9	14.8	36.5	5.1	14.7
8	19.0	26.6	13.2	7.4	30.8	26.5	14.0	34.1	19.7	23.1	25.3	33.2	26.9	21.6	14.0	11.4	15.2	9.4	8.7	6.6	7.8	6.0	9.5	7.4	34.1	6.0	17.4
9	7.7	9.6	8.3	7.1	5.5	5.1	6.6	7.2	10.1	7.3	12.0	19.8	9.2	9.9	9.5	9.3	16.9	12.2	10.5	6.5	7.0	7.5	6.7	5.6	19.8	5.1	9.0
10	5.4	4.8	6.3	4.8	7.4	7.7	6.6	7.9	9.4	9.6	11.1	8.0	21.2	36.5	31.8	44.8	29.9	29.6	17.8	9.5	17.7	21.3	12.7	9.3	44.8	4.8	15.5
11	51.0	26.5	91.2	44.7	34.9	64.7	11.6	23.6	7.9	11.2	26.3	25.2	35.4	37.8	11.8	12.3	15.2	13.2	16.2	28.2	7.0	6.9	14.7	8.4	91.2	6.9	26.1
12	12.2	7.1	7.4	7.2	7.5	6.5	5.8	5.4	8.3	9.4	20.8	14.3	13.9	15.2	11.5	21.1	12.4	11.9	17.2	11.8	11.9	15.9	13.6	7.9	21.1	5.4	11.5
13	23.3	13.0	31.4	47.7	46.3	73.0	28.7	34.8	66.2	41.7	43.2	25.7	39.1	34.9	99.6	60.3	22.5	14.4	13.3	10.2	9.3	10.7	33.7	31.0	99.6	9.3	35.6
14	41.1	21.6	7.3	7.5	19.8	9.9	6.9	6.0	7.5	10.0	11.0	14.8	25.4	44.7	13.3	11.1	17.6	12.5	13.5	20.7	38.6	8.9	14.8	11.8	44.7	6.0	16.5
15	16.1	9.6	10.9	16.0	13.5	19.7	12.1	9.0	6.9	14.3	7.7	10.1	22.5	10.0	12.1	15.0	16.2	8.7	11.5	7.3	9.3	11.0	13.5	8.4	22.5	6.9	12.1
16	6.5	6.5	6.5	14.8	9.9	12.8	32.1	4.5	8.2	14.6	47.1	77.1	15.1	17.0	38.0	17.0	11.5	21.1	7.6	9.8	10.8	11.0	10.3	13.3	77.1	4.5	17.6
17	28.4	15.6	8.1	8.8	9.2	33.3	62.4	32.1	20.8	35.4	14.8	13.1	19.7	20.0	17.9	19.0	18.1	23.0	16.6	9.3	6.9	6.5	8.6	11.4	62.4	6.5	19.1
18	11.1	72.1	8.7	15.1	21.3	9.7	7.3	7.5	8.8	7.5	7.9	10.3	13.1	21.8	16.3	17.7	13.9	16.4	16.5	17.2	15.8	12.2	13.8	15.8	72.1	7.3	15.7
19	38.2	14.2	8.2	28.2	12.9	15.2	12.1	7.6	8.4	11.1	13.1	24.0	21.5	29.9	18.9	15.1	15.0	20.7	18.1	15.4	15.5	10.8	11.3	5.8	38.2	5.8	16.3
20	30.8	23.5	14.8	35.9	22.0	70.0	36.8	71.6	54.6	10.1	16.8	17.2	17.7	12.7	13.9	12.2	14.6	9.8	9.3	6.6	5.8	4.9	5.4	5.7	71.6	4.9	21.8
21	4.4	9.0	8.5	8.1	13.2	5.4	6.4	6.8	11.4	25.4	27.1	44.1	64.9	22.4	66.6	73.3	32.3	46.9	31.2	15.4	12.4	8.8	11.4	9.8	73.3	4.4	23.6
22	12.2	23.2	11.0	8.3	11.3	10.8	27.1	6.4	8.6	11.1	14.9	11.4	13.4	12.9	12.5	10.2	7.5	7.3	6.2	6.2	5.9	7.1	4.6	5.8	27.1	4.6	10.7
23	5.2	5.9	6.5	4.6	5.7	7.2	6.0	5.6	8.0	6.0	6.5	8.2	9.3	10.4	9.7	15.7	14.6	14.1	14.6	7.7	8.0	6.1	6.5	7.0	15.7	4.6	8.3
24	8.2	6.6	8.3	5.6	4.1	5.7	5.3	8.5	6.3	7.1	7.1	6.4	7.2	7.1	8.5	7.4	6.8	7.7	5.6	5.5	5.5	5.9	6.0	5.8	8.5	4.1	6.6
25	5.6	5.6	5.4	5.6	4.8	5.2	4.6	5.3	5.5	6.0	5.5	7.1	6.8	6.6	6.9	6.4	6.7	6.0	5.2	5.6	5.7	6.7	5.3	5.2	7.1	4.6	5.8
26	6.8	10.3	7.3	7.7	11.8	37.7	16.2	6.6	16.7	9.1	11.3	8.4	24.8	8.4	9.5	14.7	11.2	13.7	19.4	17.1	18.7	9.5	42.5	94.7	94.7	6.6	18.1
27	17.6	54.2	71.8	43.3	88.8	28.2	29.4	15.2	7.4	19.3	7.2	8.9	10.4	11.3	13.5	14.6	18.8	15.1	13.1	11.2	8.1	5.0	20.0	8.8	88.8	5.0	22.6
28	6.2	4.6	5.1	10.7	13.3	69.5	20.9	11.3	10.2	7.8	11.6	12.5	8.8	11.0	13.7	12.7	25.1	10.5	9.3	7.7	19.8	6.3	9.0	4.6	69.5	4.6	13.4
29	7.4	4.1	8.2	7.0	66.6	61.2	5.3	49.4	14.4	18.7	14.7	18.1	15.4	9.4	9.8	11.4	9.7	11.1	12.4	8.1	6.0	4.6	4.2	4.7	66.6	4.1	15.9
30	4.2	5.5	8.8	6.8	6.8	4.6	10.4	32.0	32.0	77.5	97.1	42.1	63.4	46.3	37.2	74.5	33.2	37.0	61.6	46.0	50.7	14.0	12.0	5.1	97.1	4.2	33.7
Max.	**85.3**	**72.1**	**91.2**	**47.7**	**88.8**	**73.0**	**67.0**	**71.6**	**66.2**	**77.5**	**97.1**	**77.1**	**64.9**	**46.3**	**99.6**	**74.5**	**42.7**	**46.9**	**61.6**	**46.0**	**50.7**	**40.5**	**42.5**	**94.7**	**99.6**		
Min.	**4.2**	**4.1**	**3.5**	**3.7**	**4.1**	**4.6**	**4.6**	**4.5**	**4.9**	**4.6**	**5.0**	**5.2**	**5.9**	**5.2**	**5.8**	**5.4**	**6.1**	**5.7**	**5.2**	**5.5**	**5.1**	**4.6**	**4.2**	**3.4**		**3.4**	
Avg.	**17.7**	**15.1**	**14.1**	**13.5**	**17.6**	**21.4**	**16.2**	**17.5**	**14.2**	**16.6**	**19.4**	**18.3**	**19.8**	**18.7**	**19.9**	**20.8**	**16.1**	**14.3**	**13.8**	**11.4**	**12.3**	**9.6**	**12.2**	**13.7**			**16.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	66.7	72.0	8.5	14.6	51.4	86.6	15.5	7.6	24.4	22.3	15.9	10.1	13.4	11.1	8.7	9.3	9.6	7.3	6.6	7.2	5.7	5.5	4.5	5.3	86.6	4.5	20.4
2	5.4	4.7	5.4	5.8	5.2	5.9	5.0	4.8	4.6	7.8	7.3	6.5	11.8	8.1	11.0	10.2	11.1	8.9	8.3	7.8	8.9	5.5	7.4	10.9	11.8	4.6	7.4
3	9.3	14.7	7.3	10.8	5.4	6.6	10.9	4.2	5.6	6.5	7.9	9.7	11.8	11.9	12.3	13.7	9.0	8.2	8.4	13.0	12.4	10.2	21.7	8.3	21.7	4.2	10.0
4	15.8	6.0	26.1	32.2	8.6	8.1	20.2	53.5	53.1	47.7	24.8	18.7	35.4	20.7	10.9	14.8	17.9	10.2	8.3	8.4	8.1	6.8	12.0	46.4	53.5	6.0	21.4
5	42.1	39.3	16.4	53.1	46.5	28.5	19.9	38.1	14.9	55.3	22.9	34.4	38.1	41.3	15.0	11.2	13.8	15.0	17.9	18.4	8.6	17.9	21.3	11.9	55.3	8.6	26.7
6	12.2	12.2	10.8	34.5	32.3	76.0	33.6	10.2	8.3	64.9	12.1	9.9	13.4	8.6	9.3	9.4	10.3	7.8	7.3	7.1	6.1	7.3	8.0	7.5	76.0	6.1	17.5
7	4.8	5.9	5.5	4.3	4.6	6.2	7.2	9.7	5.0	5.0	5.8	5.4	7.4	6.7	5.9	6.5	5.8	8.0	8.1	7.8	7.7	6.7	6.1	10.3	10.3	4.3	6.5
8	8.4	6.3	11.6	44.3	31.1	45.4	32.7	20.8	25.0	21.1	19.9	20.1	11.5	11.4	9.5	9.0	14.0	10.0	11.8	14.8	6.3	3.8	8.8	6.9	45.4	3.8	16.8
9	4.9	5.4	4.5	5.1	4.5	4.9	5.4	11.5	7.4	15.9	7.6	9.0	9.4	10.5	11.8	11.1	11.6	8.2	6.6	5.6	5.5	5.6	5.2	4.8	15.9	4.5	7.6
10	5.9	5.1	4.9	6.1	6.5	5.2	4.3	6.2	5.3	7.2	7.6	9.9	9.4	9.7	13.8	14.2	10.1	10.4	11.3	9.2	9.0	6.9	3.7	4.0	14.2	3.7	7.7
11	4.2	6.6	7.2	11.6	6.1	4.9	9.1	6.8	7.4	9.2	10.2	10.8	14.0	16.1	11.9	12.2	14.7	10.5	11.0	11.7	7.3	5.5	8.1	6.0	16.1	4.2	9.3
12	3.5	5.4	15.6	19.2	6.8	6.3	6.3	5.0	7.1	6.6	6.0	8.0	6.6	6.0	6.9	7.0	6.4	5.2	4.7	4.8	4.7	4.5	4.4	4.3	19.2	3.5	6.7
13	4.5	4.3	4.3	5.3	4.3	3.7	4.5	4.7	5.4	4.6	5.0	5.8	7.1	9.4	9.0	8.7	7.4	8.2	7.3	7.8	8.3	9.0	6.3	4.2	9.4	3.7	6.2
14	11.6	25.0	58.9	66.2	10.8	24.7	12.9	37.3	68.9	9.1	12.2	13.2	14.9	16.1	21.0	15.3	20.7	17.2	13.0	9.9	9.4	11.3	10.3	7.6	68.9	7.6	21.6
15	11.5	4.7	5.4	4.7	6.3	7.5	18.3	9.9	26.4	15.4	10.2	9.5	9.5	9.3	9.2	7.6	6.4	8.4	7.4	7.6	5.3	4.7	5.7	4.8	26.4	4.7	9.0
16	4.8	4.9	4.9	5.4	4.8	4.8	5.2	5.2	5.0	5.6	4.5	5.8	5.1	5.5	5.1	5.0	4.9	5.2	4.8	4.9	5.4	5.1	5.5	5.7	5.8	4.5	5.1
17	7.4	15.4	7.3	10.0	7.0	6.2	8.1	8.5	8.2	7.4	7.6	8.6	9.1	6.7	7.5	6.8	7.6	12.8	6.0	6.9	6.2	5.4	4.7	4.6	15.4	4.6	7.7
18	5.0	6.8	8.4	7.3	6.2	6.9	8.8	11.4	8.7	16.0	13.1	8.0	12.4	10.5	11.7	13.3	11.9	9.3	9.6	6.3	9.2	10.5	28.2	18.0	28.2	5.0	10.7
19	20.7	40.6	33.2	12.2	13.5	10.9	11.7	4.1	7.4	6.4	15.2	12.6	9.4	11.0	12.9	12.5	19.2	13.2	11.4	5.9	5.1	6.8	10.9	38.9	40.6	4.1	14.4
20	39.0	6.5	41.5	25.6	11.0	9.0	7.5	5.7	10.1	14.1	9.4	10.6	9.4	7.9	7.1	6.5	8.2	7.1	6.4	8.0	6.9	16.4	8.8	9.4	41.5	5.7	12.2
21	6.4	5.6	7.3	7.2	4.9	5.1	6.5	5.5	4.6	7.0	8.9	10.8	11.6	9.3	18.2	16.9	30.0	15.0	11.9	12.2	17.0	7.7	9.9	6.1	30.0	4.6	10.2
22	6.1	6.4	5.9	5.3	6.4	61.3	40.7	43.7	13.7	50.5	25.0	14.2	11.7	11.1	8.9	13.0	21.3	43.8	31.8	32.7	8.8	13.4	7.7	4.7	61.3	4.7	20.3
23	7.4	6.4	19.8	8.8	10.3	13.9	9.4	7.3	6.6	7.9	6.8	8.5	9.8	9.6	8.5	11.9	13.1	10.6	11.4	10.0	7.3	9.8	8.2	11.0	19.8	6.4	9.8
24	28.8	28.5	27.3	38.7	15.1	6.6	7.1	4.6	11.2	7.6	9.9	11.5	13.1	13.5	11.8	11.9	13.5	17.0	14.9	15.1	15.6	6.4	4.4	4.7	38.7	4.4	14.1
25	3.9	3.7	7.2	13.1	16.2	17.2	16.3	10.7	18.4	13.5	14.3	8.5	7.4	12.4	14.8	13.7	15.7	14.4	8.8	8.9	8.1	5.5	5.4	4.7	18.4	3.7	10.9
26	18.0	8.9	5.8	45.3	7.2	5.9	5.6	5.3	4.7	5.5	8.6	7.5	6.3	6.3	17.4	17.9	11.2	14.0	22.8	13.9	14.4	8.0	6.2	8.6	45.3	4.7	11.5
27	9.8	7.8	9.3	7.6	9.3	19.3	12.4	8.8	7.0	6.4	7.2	10.3	9.0	13.0	13.5	12.7	12.3	11.9	8.4	7.3	5.7	6.8	19.7	34.6	34.6	5.7	11.3
28	26.2	23.3	14.8	37.1	14.2	23.0	13.4	16.2	13.5	15.6	13.4	12.8	9.5	12.0	10.0	11.9	15.4	6.6	11.3	5.5	4.7	5.3	5.0	3.8	37.1	3.8	13.5
29	3.3	17.5	14.1	14.5	14.3	15.9	9.6	4.8	11.9	11.5	13.9	14.6	6.6	9.5	9.6	9.1	12.7	8.5	5.6	7.5	8.2	5.3	9.0	11.3	17.5	3.3	10.4
30	6.0	13.2	11.0	8.2	7.6	6.7	7.2	5.3	5.8	8.2	8.2	9.7	9.3	9.2	9.6	10.7	9.8	10.4	11.3	7.9	10.7	6.2	8.4	13.8	13.8	5.3	8.9
31	12.6	14.6	15.1	10.7	13.5	9.7	13.9	10.4	12.1	10.7	23.1	11.4	10.9	22.0	12.8	13.3	15.1	15.1	10.4	8.1	6.7	6.6	5.6	8.2	23.1	5.6	12.2
Max.	**66.7**	**72.0**	**58.9**	**66.2**	**51.4**	**86.6**	**40.7**	**53.5**	**68.9**	**64.9**	**25.0**	**34.4**	**38.1**	**41.3**	**21.0**	**17.9**	**30.0**	**43.8**	**31.8**	**32.7**	**17.0**	**17.9**	**28.2**	**46.4**	**86.6**		
Min.	**3.3**	**3.7**	**4.3**	**4.3**	**4.3**	**3.7**	**4.3**	**4.1**	**4.6**	**4.6**	**4.5**	**5.4**	**5.1**	**5.5**	**5.1**	**5.0**	**4.9**	**5.2**	**4.7**	**4.8**	**4.7**	**3.8**	**3.7**	**3.8**		**3.3**	
Avg.	**13.4**	**13.8**	**13.7**	**18.5**	**12.6**	**17.5**	**12.5**	**12.5**	**13.5**	**15.9**	**11.8**	**11.2**	**11.8**	**11.8**	**11.2**	**11.2**	**12.6**	**11.6**	**10.5**	**9.7**	**8.2**	**7.6**	**9.1**	**10.7**			**12.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	21.6	11.9	43.4	34.2	16.0	34.7	22.2	43.3	44.7	47.6	42.7	24.9	18.0	17.6	17.0	14.3	12.3	9.3	7.7	6.6	6.2	5.0	4.1	5.4	47.6	4.1	21.3
2	3.5	5.2	7.0	5.7	6.4	4.7	5.2	5.8	11.2	9.1	6.3	5.0	5.6	9.3	8.6	9.1	10.6	11.9	7.8	17.1	8.7	19.0	53.6	37.3	53.6	3.5	11.4
3	30.0	12.2	12.0	12.9	8.5	4.9	13.2	14.4	5.0	7.5	13.2	16.6	10.1	13.0	15.8	13.2	13.0	12.8	11.0	11.1	5.9	5.9	4.4	5.3	30.0	4.4	11.3
4	7.6	5.0	5.6	4.5	4.6	4.6	5.3	5.3	4.9	6.2	9.8	9.7	10.0	9.5	12.1	12.4	10.7	16.0	10.4	6.9	4.9	4.4	4.8	9.0	16.0	4.4	7.7
5	41.9	10.4	8.9	10.3	42.2	13.6	23.8	29.9	88.2	16.5	12.6	17.0	19.3	15.3	17.2	17.5	17.6	14.8	13.3	9.2	5.1	5.3	17.7	6.4	88.2	5.1	19.7
6	7.7	14.3	15.8	13.5	11.7	14.9	9.9	7.0	9.3	13.8	13.9	15.0	15.2	12.2	10.1	8.0	12.0	7.2	6.6	9.5	9.1	4.8	3.7	10.2	15.8	3.7	10.6
7	7.2	11.0	12.0	4.6	4.1	18.8	23.3	12.9	10.9	15.3	15.9	13.0	13.0	14.8	14.0	15.2	14.3	13.4	12.2	8.3	6.8	4.9	9.2	15.4	23.3	4.1	12.1
8	15.7	14.4	10.0	14.0	13.9	11.0	2.8	4.9	10.5	12.1	12.4	14.0	12.4	13.8	23.2	17.0	17.8	16.4	16.9	13.1	8.3	7.4	3.1	14.2	23.2	2.8	12.5
9	12.4	4.7	4.5	11.4	13.7	20.5	15.5	12.8	12.3	14.8	14.5	15.5	14.9	13.1	14.4	16.3	15.5	14.8	14.5	9.5	10.8	4.6	20.8	3.6	20.8	3.6	12.7
10	4.1	14.4	12.8	24.1	19.9	7.4	8.7	17.0	17.0	16.9	14.2	19.9	24.1	20.8	19.7	50.6	71.5	17.0	11.0	14.1	8.2	3.8	7.1	4.7	71.5	3.8	17.9
11	7.1	10.0	18.0	56.2	32.0	9.6	5.8	5.9	7.8	7.2	7.1	6.7	11.8	12.2	10.5	10.7	11.7	9.6	8.4	8.7	7.1	19.1	31.8	22.5	56.2	5.8	14.1
12	28.4	5.9	6.9	4.4	3.4	4.4	5.6	7.4	6.4	7.4	6.4	7.6	15.2	12.1	14.2	22.7	58.2	8.0	13.3	61.7	26.1	29.0	32.6	34.4	61.7	3.4	17.6
13	29.9	14.8	5.3	4.3	6.2	59.2	71.1	66.1	42.5	21.5	24.9	14.3	14.1	15.3	18.0	39.8	16.5	21.3	12.2	6.4	7.9	10.1	17.9	21.5	71.1	4.3	23.4
14	26.3	100.8	38.8	11.2	13.3	19.2	21.5	13.6	6.9	8.0	5.1	6.5	7.4	9.2	7.4	7.3	7.1	5.3	7.5	5.3	5.5	6.6	7.4	20.5	100.8	5.1	15.3
15	7.9	5.1	9.1	7.4	8.8	14.0	8.0	7.6	7.1	7.0	8.5	11.8	26.4	25.4	22.2	23.4	16.3	15.5	12.2	9.4	11.6	77.9	79.2	39.7	79.2	5.1	19.2
16	77.6	20.8	13.2	9.4	9.3	6.7	5.8	5.4	5.6	8.2	8.2	5.9	8.1	11.1	10.2	10.5	9.0	8.5	8.7	7.2	4.8	4.0	9.4	17.0	77.6	4.0	11.9
17	19.9	10.1	7.9	6.0	5.1	5.6	4.9	5.0	4.8	8.0	9.3	7.4	8.4	7.3	8.7	8.0	7.8	6.0	6.5	5.8	5.3	7.4	6.1	4.7	19.9	4.7	7.3
18	4.7	6.2	7.4	9.7	5.2	39.6	30.5	10.4	5.6	26.9	10.6	14.0	25.1	14.8	25.5	20.0	16.1	20.2	38.8	8.6	12.5	19.4	47.6	14.6	47.6	4.7	18.1
19	5.2	33.1	84.7	32.1	14.4	16.5	12.7	95.6	55.7	50.2	13.4	48.8	14.9	14.9	45.4	26.8	14.6	18.1	12.4	6.9	12.9	6.9	28.2	87.9	95.6	5.2	31.3
20	23.2	15.6	34.9	6.5	7.2	8.6	12.2	17.9	30.4	21.4	40.0	6.4	51.1	22.2	13.2	18.2	38.0	15.4	11.3	10.8	20.9	29.8	44.2	10.9	51.1	6.4	21.3
21	22.3	37.3	4.4	33.2	12.7	16.2	12.1	8.7	8.8	5.6	6.5	6.7	6.8	10.6	7.5	9.3	11.7	13.5	11.5	8.2	7.5	6.0	6.2	5.8	37.3	4.4	11.6
22	6.4	9.7	23.2	22.7	11.0	12.2	30.3	7.5	5.4	7.0	5.7	46.1	36.4	31.6	25.5	45.2	40.4	29.2	27.0	14.5	7.9	43.3	13.6	3.8	46.1	3.8	21.1
23	4.2	10.0	10.4	10.8	11.3	8.8	8.7	7.7	13.8	16.6	13.9	14.4	10.8	69.0	20.6	80.1	16.8	8.8	6.7	6.5	6.6	10.8	5.6	11.4	80.1	4.2	16.0
24	64.1	42.7	51.8	41.6	47.1	32.2	15.3	35.0	32.5	10.6	8.5	17.3	13.8	14.6	17.8	16.3	17.1	35.6	73.5	15.9	64.1	72.5	22.7	10.7	73.5	8.5	32.2
25	11.2	28.0	75.5	38.9	10.7	6.1	9.3	6.7	5.6	8.0	17.4	11.9	12.6	22.6	17.9	26.2	22.1	18.0	8.1	6.2	7.4	4.6	4.5	7.5	75.5	4.5	16.1
26	17.6	9.2	7.3	7.8	6.5	7.2	7.9	5.9	6.5	5.9	8.2	5.7	5.4	6.9	7.6	7.5	8.8	10.8	6.1	8.7	9.4	4.3	7.5	10.1	17.6	4.3	7.9
27	8.2	13.6	47.0	89.9	21.4	76.7	8.4	5.9	6.9	5.2	4.8	5.3	5.9	9.8	7.3	7.3	7.6	7.5	6.5	7.0	4.7	7.4	17.7	18.0	89.9	4.7	16.7
28	13.3	33.3	8.9	6.9	7.8	9.9	31.5	89.7	4.8	10.1	9.0	11.0	7.9	21.8	13.9	22.9	16.4	24.4	9.2	6.0	5.6	5.7	10.4	14.8	89.7	4.8	16.5
29	6.2	12.4	13.4	11.2	5.9	4.8	4.8	5.5	37.8	70.8	12.2	84.0	19.0	18.0	17.9	16.9	57.5	9.0	8.3	5.9	5.8	6.0	14.2	17.0	84.0	4.8	19.3
30	20.8	10.0	25.3	70.5	17.3	68.4	8.5	16.7	45.3	63.2	49.8	40.9	33.3	20.2	24.4	18.8	16.2	10.1	10.1	7.9	7.0	5.9	4.9	5.5	70.5	4.9	25.0
31	5.4	5.3	8.7	6.4	6.2	6.1	5.8	5.3	5.7	6.4	8.5	9.3	6.3	17.2	12.7	8.2	9.1	6.6	8.3	5.7	5.0	3.9	4.4	5.1	17.2	3.9	7.2
Max.	**77.6**	**100.8**	**84.7**	**89.9**	**47.1**	**76.7**	**71.1**	**95.6**	**88.2**	**70.8**	**49.8**	**84.0**	**51.1**	**69.0**	**45.4**	**80.1**	**71.5**	**35.6**	**73.5**	**61.7**	**64.1**	**77.9**	**79.2**	**87.9**	**100.8**		
Min.	**3.5**	**4.7**	**4.4**	**4.3**	**3.4**	**4.4**	**2.8**	**4.9**	**4.8**	**5.2**	**4.8**	**5.0**	**5.4**	**6.9**	**7.3**	**7.3**	**7.1**	**5.3**	**6.1**	**5.3**	**4.7**	**3.8**	**3.1**	**3.6**		**2.8**	
Avg.	**18.1**	**17.3**	**20.5**	**20.1**	**13.0**	**18.3**	**14.5**	**18.8**	**18.1**	**17.3**	**14.0**	**17.2**	**15.6**	**17.0**	**16.1**	**20.0**	**19.8**	**14.0**	**13.5**	**10.6**	**10.3**	**14.4**	**17.6**	**16.0**			**16.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.6	3.7	3.9	4.6	4.1	3.5	3.4	3.2	19.0	6.5	10.0	30.4	8.3	8.7	13.5	14.3	6.2	10.2	8.2	8.5	8.0	5.8	5.7	5.7	30.4	3.2	8.4
2	5.0	5.3	5.5	5.4	5.1	5.0	5.0	5.1	5.2	5.5	5.4	7.1	6.5	6.4	6.8	6.6	6.8	27.3	5.6	6.3	5.3	5.0	5.0	5.1	27.3	5.0	6.5
3	6.1	4.1	8.0	5.3	6.8	5.5	3.6	4.3	4.2	5.5	17.9	35.9	17.1	6.8	22.8	10.3	11.4	14.8	9.7	9.2	5.5	8.2	18.4	6.9	35.9	3.6	10.3
4	8.8	7.7	9.0	6.2	5.1	8.9	76.3	46.3	11.3	20.6	22.3	43.7	16.2	15.6	17.3	18.9	22.9	19.4	23.3	9.1	13.4	12.7	12.7	53.0	76.3	5.1	20.9
5	21.8	55.4	90.3	56.8	24.4	13.3	43.8	3.0	5.9	11.6	21.1	12.9	17.9	18.8	27.4	29.3	29.4	65.8	11.2	14.7	25.3	34.4	18.3	8.7	90.3	3.0	27.6
6	15.3	17.9	7.6	6.0	7.2	4.3	5.5	6.7	6.2	6.1	6.3	6.1	5.7	5.2	5.4	6.6	5.4	5.4	5.5	5.7	7.4	7.6	6.3	6.2	17.9	4.3	7.0
7	7.3	5.7	8.6	8.4	14.1	10.1	5.2	5.2	6.9	8.7	11.3	7.0	8.0	8.6	11.3	16.0	5.5	6.2	5.1	5.0	6.0	5.2	6.3	5.6	16.0	5.0	7.8
8	10.3	11.6	9.6	8.3	6.5	7.5	8.3	7.6	5.9	9.4	18.0	10.3	7.6	7.0	6.3	6.8	4.9	5.6	5.8	6.0	7.4	7.9	6.6	6.0	18.0	4.9	8.0
9	6.7	5.1	5.3	11.7	6.0	8.3	8.3	6.0	5.5	6.0	5.7	5.0	5.6	9.4	5.8	5.7	5.0	5.8	5.6	5.0	7.3	5.1	4.7	5.6	11.7	4.7	6.3
10	7.2	7.5	7.3	4.5	5.8	15.3	12.2	17.2	7.5	15.3	11.8	8.8	15.1	13.1	17.2	11.3	9.1	11.2	8.0	8.4	21.7	14.2	8.7	17.9	21.7	4.5	11.5
11	8.9	9.8	10.5	6.1	6.6	6.3	60.4	11.4	6.2	8.8	9.1	13.4	13.5	8.3	7.6	17.1	14.4	8.7	9.6	7.2	4.9	5.7	5.0	5.1	60.4	4.9	11.0
12	6.1	6.2	5.1	4.8	4.9	5.1	5.2	5.2	5.3	5.6	5.8	4.9	5.3	5.7	5.6	5.2	5.6	5.3	5.4	5.5	5.3	5.3	5.1	4.7	6.2	4.7	5.3
13	5.1	5.6	5.6	5.5	5.4	4.7	5.0	4.6	5.0	5.1	4.7	4.9	6.8	5.9	5.0	5.5	5.2	5.2	5.2	5.0	4.6	5.7	5.5	5.4	6.8	4.6	5.3
14	5.8	6.7	6.4	6.5	8.8	5.9	8.4	7.5	5.9	7.8	5.9	5.2	5.6	6.0	8.9	9.0	7.4	6.9	5.1	4.8	4.7	3.9	5.1	5.7	9.0	3.9	6.4
15	8.6	5.2	5.1	5.5	4.9	4.9	5.9	5.2	4.4	5.9	5.7	6.0	6.0	5.7	7.6	5.3	5.8	6.2	5.1	5.2	4.8	5.2	8.0	6.6	8.6	4.4	5.8
16	14.8	76.7	5.5	5.4	3.9	9.3	7.1	6.4	7.9	4.1	9.1	16.8	9.6	10.2	8.0	10.2	16.8	8.5	16.5	5.2	5.3	13.7	5.0	6.7	76.7	3.9	11.8
17	19.4	27.3	15.6	8.7	9.0	9.5	11.7	8.8	14.4	38.1	28.8	33.9	23.0	10.8	10.0	6.8	6.2	7.9	7.6	6.6	9.8	6.6	17.0	7.5	38.1	6.2	14.4
18	4.6	4.5	4.7	5.3	5.7	4.7	5.2	5.5	6.3	5.6	5.7	7.5	11.2	16.9	11.3	4.8	11.2	18.8	25.2	28.6	28.1	50.1	38.4	15.1	50.1	4.5	13.5
19	14.9	11.3	5.9	8.4	9.1	5.3	4.8	6.1	13.4	5.9	5.9	9.5	6.2	8.9	24.6	5.5	6.6	8.3	7.8	6.6	6.2	11.1	10.0	5.7	24.6	4.8	8.7
20	13.0	13.1	12.6	12.9	20.5	23.3	16.0	20.2	42.8	44.8	79.5	15.6	49.0	24.2	9.9	9.9	14.1	7.8	17.0	5.7	9.2	10.5	13.3	14.2	79.5	5.7	20.8
21	5.5	18.1	19.1	18.5	29.0	12.2	21.7	35.8	23.4	8.0	10.8	5.7	22.4	25.8	19.7	21.4	11.7	14.9	8.4	5.2	6.5	2.9	17.2	7.2	35.8	2.9	15.5
22	12.5	7.9	10.5	5.3	3.6	5.2	19.2	24.4	4.1	8.9	32.1	22.0	39.0	15.4	16.6	15.1	17.0	7.9	6.4	9.1	6.5	4.8	4.5	4.6	39.0	3.6	12.6
23	5.5	5.7	3.7	11.8	12.6	5.0	5.1	6.7	5.5	9.3	7.4	6.1	6.4	6.7	8.9	6.0	6.6	5.9	8.2	9.0	5.3	7.0	11.7	9.7	12.6	3.7	7.3
24	9.1	6.9	4.8	5.2	5.7	6.9	6.3	6.4	27.7	25.8	11.3	5.8	7.1	6.0	6.8	7.7	7.8	7.3	8.5	8.1	8.6	14.0	25.7	14.1	27.7	4.8	10.2
25	13.3	5.5	5.0	40.2	47.1	17.0	36.8	2.9	8.4	6.6	51.5	39.3		0.2	48.5	15.2	19.1	16.3	18.5	6.7	19.8	46.5	12.2	20.8	51.5	0.2	21.6
26	6.5	7.7	6.6	3.9	4.9	5.9	2.8	3.6	4.8	7.1	56.8	15.9	12.9	52.4	27.3	47.7	37.2	15.6	72.1	42.9	37.3	6.5	5.2	4.6	72.1	2.8	20.3
27	6.8	5.3	5.4	6.2	6.7	4.4	5.1	5.1	3.0	4.0	8.8	8.7	5.3	8.3	7.3	9.6	10.4	10.4	6.7	10.5	12.0	8.6	11.1	6.1	12.0	3.0	7.3
28	1.8	2.7	4.5	3.4	3.5	4.3	10.5	15.7	5.0	6.7	6.5	7.7	22.9	70.8	38.1	47.4	8.9	9.3	12.7	17.0	12.8	5.5	9.3	4.9	70.8	1.8	13.8
29	6.6	3.7	6.8	3.5	3.8	6.8	5.3	5.3	4.8	5.7	7.5	8.7	8.0	8.4	12.9	9.6	11.6	13.5	9.3	9.8	10.6	14.5	31.1	14.5	31.1	3.5	9.3
30	27.0	8.2	3.4	5.1	7.0	19.5	23.6	35.4	9.4	8.9	9.4	10.6	10.7	15.0	16.6	11.4	22.3	24.1	11.0	10.6	7.3	10.8	18.5	7.9	35.4	3.4	13.9
Max.	**27.0**	**76.7**	**90.3**	**56.8**	**47.1**	**23.3**	**76.3**	**46.3**	**42.8**	**44.8**	**79.5**	**43.7**	**49.0**	**70.8**	**48.5**	**47.7**	**37.2**	**65.8**	**72.1**	**42.9**	**37.3**	**50.1**	**38.4**	**53.0**	**90.3**		
Min.	**1.8**	**2.7**	**3.4**	**3.4**	**3.5**	**3.5**	**2.8**	**2.9**	**3.0**	**4.0**	**4.7**	**4.9**	**5.3**	**0.2**	**5.0**	**4.8**	**4.9**	**5.2**	**5.1**	**4.8**	**4.6**	**2.9**	**4.5**	**4.6**		**0.2**	
Avg.	**9.7**	**12.1**	**10.1**	**9.6**	**9.6**	**8.3**	**14.6**	**10.9**	**9.5**	**10.6**	**16.4**	**13.9**	**13.1**	**13.7**	**14.5**	**13.2**	**11.8**	**12.7**	**11.8**	**9.6**	**10.6**	**11.5**	**11.7**	**9.7**			**11.6**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.7	42.2	38.1	19.3	17.1	36.7	27.9	40.9	24.0	48.9	22.1	7.9	5.3	7.7	6.1	8.2	16.6	5.8	23.4	9.5	9.7	7.5	5.8	13.6	48.9	5.3	19.0
2	8.8	73.2	61.8	35.6	11.5	43.9	65.9	27.3	22.1	5.1	38.9	56.5	50.0	18.3	21.8	14.5	9.4	5.3	8.1	9.2	10.1	5.5	5.3	7.2	73.2	5.1	25.6
3	15.4	12.8	10.1	39.5	42.6	14.7	28.0	9.5	10.3	8.9	7.7	7.1	11.3	10.2	8.9	18.0	6.4	10.9	9.7	11.4	6.9	8.7	7.0	8.6	42.6	6.4	13.5
4	6.9	7.7	3.3	7.3	8.8	6.6	8.2	4.5	3.8	5.1	7.9	7.2	47.1	33.1	25.9	11.0	12.2	9.3	7.3	11.8	31.5	29.5	14.7	31.1	47.1	3.3	14.3
5	11.2	14.0	17.3	12.3	16.6	7.7	12.7	7.4	12.4	9.1	7.7	8.0	8.0	54.4	60.5	10.0	32.6	6.4	8.6	9.0	3.9	4.6	5.2	4.3	60.5	3.9	14.3
6	4.6	8.0	4.8	4.3	3.6	9.5	6.3	9.4	5.3	6.8	4.3	4.3	4.5	7.3	11.5	18.9	10.2	11.2	4.8	6.5	4.1	4.4	3.9	3.9	18.9	3.6	6.8
7	4.3	4.7	6.7	5.0	5.3	6.8	5.9	4.9	8.5	7.7	6.7	6.4	6.1	6.8	6.1	4.5	5.2	4.9	4.4	4.9	5.4	6.0	5.0	4.4	8.5	4.3	5.7
8	4.2	5.8	5.9	4.3	4.9	4.7	4.0	5.0	3.7	21.0	10.4	9.5	8.9	11.5	10.3	10.2	10.9	6.9	6.5	8.9	9.5	15.1	8.9	4.4	21.0	3.7	8.1
9	4.4	3.9	5.7	3.8	4.2	4.2	4.5	4.5	4.6	4.4	4.2	4.5	4.9	4.7	4.9	5.2	4.6	4.3	4.6	5.0	4.9	4.7	4.7	4.7	5.7	3.8	4.6
10	5.3	4.7	7.3	36.2	8.0	9.7	11.0	13.4	32.0	28.9	25.9	54.9	19.1	8.4	8.2	7.1	7.3	6.6	7.7	6.0	5.4	6.2	7.2	5.4	54.9	4.7	13.8
11	5.7	4.7	5.2	5.2	5.3	4.8	7.0	6.3	8.0	59.3	6.8	5.2	8.5	15.8	18.3	29.7	27.8	27.6	22.4	19.6	8.5	7.2	11.6	16.1	59.3	4.7	14.0
12	11.1	8.3	4.4	4.7	4.4	3.9	3.9	4.1	4.9	5.2	4.8	4.6	5.2	4.6	5.1	4.9	5.6	10.2	7.1	9.4	8.3	20.0	8.7	25.4	25.4	3.9	7.5
13	16.1	9.3	7.2	8.0	9.9	12.7	7.6	4.2	7.1	8.7	8.6	7.2	36.2	9.0	5.5	5.3	5.3	7.1	4.7	4.4	4.1	5.5	3.4	4.0	36.2	3.4	8.4
14	4.6	4.1	4.0	4.5	4.9	4.9	7.7	5.3	3.0	3.5	4.4	3.9	3.6	3.6	3.0	6.5	4.0	6.4	4.6	3.7	23.2	8.5	5.9	6.4	23.2	3.0	5.6
15	4.4	4.8	3.5	5.6	4.9	7.2	5.7	4.7	6.8	4.4	10.0	13.3	6.5	6.0	5.1	4.0	5.0	4.4	4.7	4.4	4.6	5.5	3.8	4.5	13.3	3.5	5.6
16	5.3	5.6	5.1	4.1	4.5	4.1	4.3	4.2	4.0	3.8	3.3	3.5	6.3	6.0	3.6	5.6	4.7	3.7	3.8	4.6	6.1	5.5	5.7	19.7	19.7	3.3	5.3
17	12.4	21.2	31.7	20.4	24.8	5.8	9.6	4.4	4.3	4.5	5.3	5.0	17.2	4.9	4.6	7.6	38.0	19.5	9.2	8.4	5.5	4.6	4.9	3.3	38.0	3.3	11.6
18	3.6	3.2	3.3	4.2	3.7	3.6	4.1	3.4	3.1	3.4	3.7	4.5	4.3	3.8	4.4	10.1	6.5	3.9	3.5	14.6	12.1	6.1	5.9	6.2	14.6	3.1	5.2
19	9.7	3.0	5.3	2.9	4.8	3.6	3.4	3.9	5.3	5.8	4.3	14.9	9.4	4.5	5.1	4.2	4.9	5.2	5.2	4.8	4.7	4.6	8.9	6.1	14.9	2.9	5.6
20	6.9	39.9	38.6	22.7	10.3	47.4	10.3	47.5	65.8	6.2	78.8	83.7	11.0	6.6	7.4	6.2	16.8	19.6	23.8	47.0	14.9	44.9	18.8	30.3	83.7	6.2	29.4
21	18.0	21.5	34.6	14.6	19.2	9.9	8.7	9.8	21.5	8.3	4.0	4.7	5.1	8.8	13.4	3.8	5.9	6.6	13.6	12.2	10.2	4.8	6.2	9.4	34.6	3.8	11.5
22	10.5	12.0	14.9	11.6	10.9	7.8	7.8	10.3	11.9	6.6	7.6	7.6	12.4	4.1	8.6	5.6	6.9	6.2	5.1	3.3	4.7	5.0	4.8	3.9	14.9	3.3	7.9
23	3.3	3.8	4.5	5.2	5.3	3.9	4.7	6.3	10.8	11.9	9.5	9.1	7.0	7.7	10.5	8.9	4.1	3.8	8.1	6.5	3.9	3.5	6.6	4.4	11.9	3.3	6.4
24	3.4	5.3	3.9	3.8	5.5	8.0	4.7	5.2	4.1	4.1	3.4	4.2	9.0	6.5	5.1	8.4	4.5	22.3	56.4	51.8	83.8	95.5	13.4	14.7	95.5	3.4	17.8
25	8.9	5.9	3.8	3.8	4.2	4.4	5.9	5.5	5.7	5.7	4.1	4.5	3.7	3.8	4.5	7.5	6.9	5.3	3.6	3.1	7.0	16.2	4.8	4.0	16.2	3.1	5.5
26	3.9	4.2	3.3	3.1	3.5	3.2	3.4	3.4	3.5	4.1	4.8	4.9	5.9	4.6	5.3	11.2	11.1	13.0	30.9	13.7	11.7	8.6	12.3	11.6	30.9	3.1	7.7
27	11.5	13.5	9.6	8.5	6.5	3.4	4.9	4.9	5.5	4.3	4.4	8.4	9.7	10.7	4.8	6.6	9.7	31.1	8.8	9.3	4.3	5.0	7.3	7.0	31.1	3.4	8.3
28	7.1	14.9	12.1	24.7	18.5	68.8	25.0	6.0	5.1	4.3	4.1	5.6	4.5	3.4	7.5	4.4	7.3	5.2	18.2	13.9	12.5	11.2	6.8	4.4	68.8	3.4	12.3
29	3.6	3.5	3.7	3.3	2.9	3.7	6.5	4.2	11.8	25.1	36.9	12.4	11.9	10.4	5.6	18.6	3.3	3.4	7.6	3.6	2.9	3.3	3.5	4.4	36.9	2.9	8.2
30	3.6	4.6	3.3	3.9	4.1	5.8	7.4	5.2	5.7	9.0	24.1	12.8	8.7	6.4	34.3	49.3	7.0	22.0	24.8	13.5	54.1	25.6	34.2	23.2	54.1	3.3	16.3
31	24.1	12.6	10.2	7.6	28.3	11.6	61.6	17.7	17.8	37.9	18.6	20.7	21.0	62.5	44.2	6.4	29.9	14.9	6.3	8.6	39.5	57.6	6.8	6.9	62.5	6.3	23.9
Max.	**24.1**	**73.2**	**61.8**	**39.5**	**42.6**	**68.8**	**65.9**	**47.5**	**65.8**	**59.3**	**78.8**	**83.7**	**50.0**	**62.5**	**60.5**	**49.3**	**38.0**	**31.1**	**56.4**	**51.8**	**83.8**	**95.5**	**34.2**	**31.1**	**95.5**		
Min.	**3.3**	**3.0**	**3.3**	**2.9**	**2.9**	**3.2**	**3.4**	**3.4**	**3.0**	**3.4**	**3.3**	**3.5**	**3.6**	**3.4**	**3.0**	**3.8**	**3.3**	**3.4**	**3.5**	**3.1**	**2.9**	**3.3**	**3.4**	**3.3**		**2.9**	
Avg.	**8.2**	**12.3**	**12.0**	**11.0**	**10.0**	**12.0**	**12.2**	**9.5**	**11.0**	**12.0**	**12.5**	**13.1**	**12.0**	**11.5**	**11.9**	**10.4**	**10.7**	**10.1**	**11.5**	**11.1**	**13.5**	**14.2**	**8.1**	**9.8**			**11.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.8	5.5	28.6	37.1	24.7	5.2	10.8	22.0	9.8	7.3	10.3	37.4	26.9	7.4	6.6	19.2	15.6	20.8	22.4	18.6	11.7	9.1	12.1	9.5	37.4	3.8	15.9
2	3.1	3.6	3.0	3.1	5.0	4.7	7.0	3.4	3.3	10.2	6.1	10.8	11.5	5.8	8.4	11.6	11.0	11.4	8.2	7.9	11.8	13.8	14.3	15.2	15.2	3.0	8.1
3	8.1	10.1	14.8	13.7	10.6	8.2	4.0	3.8	2.9	5.5	3.9	4.2	6.2	5.3	6.6	6.9	6.0	4.8	16.4	12.2	7.5	14.1	10.8	10.5	16.4	2.9	8.2
4	6.2	5.2	7.9	4.2	14.0	10.8	10.1	8.8	5.0	5.2	6.0	7.8	6.2	5.9	3.7	2.9	4.4	4.6	3.8	3.3	3.6	4.8	6.0	4.6	14.0	2.9	6.0
5	4.3	6.4	5.2	6.1	6.0	5.7	4.3	3.8	6.2	5.2	9.2	9.1	24.5	5.5	6.0	5.6	10.3	6.0	5.1	6.8	5.5	5.7	5.3	7.1	24.5	3.8	6.9
6	7.5	9.3	7.7	4.8	7.3	3.2	6.0	4.3	4.6	7.1	4.8	5.7	5.8	21.9	7.9	6.8	4.9	12.9	12.5	5.3	18.5	12.2	8.8	6.4	21.9	3.2	8.2
7	6.2	5.4	9.1	5.9	5.8	5.4	5.4	4.8	5.4	6.8	4.8	4.1	6.6	22.7	7.3	9.1	27.5	43.4	83.4	39.6	48.8	32.6	16.0	21.7	83.4	4.1	17.8
8	16.1	33.1	18.9	25.4	25.3	8.9	6.8	5.6	4.9	5.0	5.5	5.1	4.2	4.0	4.3	4.3	3.4	4.8	4.2	4.1	4.9	4.6	4.5	4.5	33.1	3.4	8.8
9	5.6	6.4	3.9	4.5	4.6	4.3	4.6	4.0	4.5	5.0	10.6	5.7	7.0	4.9	6.1	4.2	4.5	8.3	4.5	8.4	4.1	7.8	4.7	6.2	10.6	3.9	5.6
10	4.2	7.0	4.9	5.5	16.9	4.8	5.1	7.3	8.7	7.2	19.0	54.1	100.5	11.2	23.1	43.3	14.5	5.7	3.1	4.4	14.5	4.0	4.2	4.7	100.5	3.1	15.7
11	4.4	4.2	4.7	4.0	4.0	3.6	5.0	4.2	5.4	4.3	6.8	16.3	12.7	29.7	81.4	40.0	28.9	17.1	15.3	12.3	13.4	15.2	10.3	9.2	81.4	3.6	14.7
12	13.3	16.7	12.2	10.5	6.0	9.0	14.0	8.7	11.6	9.0	8.3	14.4	11.0	8.9	11.8	8.7	18.7	24.6	71.4	57.5	40.2	18.7	16.2	13.6	71.4	6.0	18.1
13	15.8	6.5	9.3	18.7	5.4	4.7	4.7	4.0	5.5	5.7	4.2	3.8	6.8	5.8	5.7	6.1	4.8	14.8	8.9	9.0	11.6	14.6	7.0	11.4	18.7	3.8	8.1
14	10.1	6.5	6.5	4.6	8.8	7.4	6.3	5.4	5.2	6.3	11.4	11.1	36.5	21.1	9.5	17.9	19.1	37.3	40.8	21.1	12.4	22.0	27.2	19.0	40.8	4.6	15.6
15	16.8	5.0	8.4	14.6	14.1	10.4	7.9	17.0	16.4	7.3	5.6	5.7	4.7	5.2	4.4	3.8	3.5	4.5	4.5	3.6	3.7	4.0	4.2	3.7	17.0	3.5	7.5
16	4.9	4.7	5.8	7.2	4.9	5.9	6.1	40.0	13.1	21.0	51.4	66.4	28.2	36.7	60.4	81.4	9.1	10.9	9.9	11.0	7.2	15.0	93.2	58.2	93.2	4.7	27.2
17	72.2	26.5	4.7	4.1	4.0	3.9	3.0	5.2	13.5	8.8	7.3	14.9	7.3	3.6	6.9	8.6	5.4	3.4	3.8	3.2	3.8	4.1	3.9	4.6	72.2	3.0	9.4
18	4.4	5.7	7.9	5.7	4.2	2.7	2.4	3.7	4.0	3.7	4.8	4.4	3.9	3.8	3.7	3.4	4.2	4.0	3.9	3.3	4.4	4.0	3.5	4.1	7.9	2.4	4.2
19	6.6	5.4	7.2	6.2	5.9	5.5	5.7	5.9	4.1	4.6	5.3	4.6	3.8	4.2	4.5	5.1	6.5	5.4	6.7	6.2	4.0	6.7	6.8	10.6	10.6	3.8	5.7
20	5.9	5.5	16.2	16.2	8.3	8.1	15.1	13.3	7.8	14.5	8.9	4.0	6.2	5.5	9.4	4.0	7.2	5.2	5.5	7.5	10.0	4.4	6.5	10.2	16.2	4.0	8.6
21	8.6	8.6	5.9	5.1	8.3	4.6	5.1	3.9	4.1	4.9	8.5	4.8	4.9	5.5	5.0	8.0	5.2	4.9	5.0	5.6	5.3	5.2	6.0	5.0	8.6	3.9	5.8
22	4.8	4.6	4.5	6.2	4.0	38.6	12.9	18.1	7.3	12.9	9.0	22.5	32.3	48.9	14.4	44.0	8.5	43.6	98.3	43.1	17.1	43.2	34.0	31.7	98.3	4.0	25.2
23	69.8	49.4	89.8	38.5	26.4	38.2	28.7	14.5	26.9	24.9	43.7	49.8	25.4	41.7	8.4	55.2	29.7	5.1	4.8	4.5	5.4	4.2	6.3	4.5	89.8	4.2	29.0
24	4.2	3.8	3.9	5.1	4.3	5.2	6.4	6.2	4.6	4.0	3.8	3.9	3.6	4.0	4.1	3.7	3.3	3.7	5.6	7.4	9.8	23.3	8.3	10.1	23.3	3.3	5.9
25	12.7	10.9	7.6	3.9	4.3	8.7	9.9	17.2	7.6	9.4	6.6	8.7	16.4	39.4	44.7	9.5	10.3	26.2	7.1	11.9	14.7	13.7	11.0	7.9	44.7	3.9	13.3
26	7.4	10.4	8.5	11.7	11.7	17.0	6.0	17.8	10.6	19.2	15.3	11.8	7.4	7.4	6.2	6.2	8.4	6.8	11.5	5.0	6.7	4.3	4.6	8.1	19.2	4.3	9.6
27	9.2	6.8	5.8	16.1	6.4	8.6	9.0	7.3	7.0	5.7	5.9	6.9	8.2	8.0	6.4	4.9	6.0	5.1	5.7	4.3	5.9	4.2	3.7	5.4	16.1	3.7	6.8
28	5.9	3.7	4.4	4.6	3.4	3.2	3.9	4.5	3.9	4.2	4.8	5.1	3.9	3.3	3.6	4.1	3.9	4.2	4.1	3.9	4.2	4.6	4.4	4.5	5.9	3.2	4.2
29	3.2	3.3	3.2	4.6	4.9	7.2	9.3	9.2	8.2	7.5	10.3	10.9	10.6	9.5	9.2	8.0	5.0	4.4	4.2	4.1	3.9	6.4	4.1	4.6	10.9	3.2	6.5
30	4.8	9.9	4.6	3.8	2.9	5.9	10.3	14.0	12.3	8.7	9.8	11.1	12.1	10.2	15.4	10.3	10.7	7.0	4.7	19.2	15.5	12.9	5.7	3.7	19.2	2.9	9.4
Max.	**72.2**	**49.4**	**89.8**	**38.5**	**26.4**	**38.6**	**28.7**	**40.0**	**26.9**	**24.9**	**51.4**	**66.4**	**100.5**	**48.9**	**81.4**	**81.4**	**29.7**	**43.6**	**98.3**	**57.5**	**48.8**	**43.2**	**93.2**	**58.2**	**100.5**		
Min.	**3.1**	**3.3**	**3.0**	**3.1**	**2.9**	**2.7**	**2.4**	**3.4**	**2.9**	**3.7**	**3.8**	**3.8**	**3.6**	**3.3**	**3.6**	**2.9**	**3.3**	**3.4**	**3.1**	**3.2**	**3.6**	**4.0**	**3.5**	**3.7**		**2.4**	
Avg.	**11.7**	**9.7**	**10.8**	**10.1**	**8.7**	**8.7**	**7.9**	**9.6**	**7.8**	**8.4**	**10.4**	**14.2**	**14.8**	**13.2**	**13.2**	**14.9**	**10.0**	**12.0**	**16.2**	**11.8**	**11.0**	**11.3**	**11.8**	**10.7**			**11.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (Climatronics)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.5	24.7	11.3	11.3	10.7	14.1	4.4	6.2	6.6	6.2	8.3	9.8	5.7	5.2	4.3	8.2	12.6	7.9	15.8	13.2	11.6	14.3	13.7	18.3	24.7	3.5	10.3
2	5.8	19.2	5.6	16.5	30.0	11.6	4.5	5.8	5.4	4.7	5.2	4.2	3.8	3.7	4.2	3.8	4.2	4.0	3.8	3.9	4.3	4.2	3.5	4.1	30.0	3.5	6.9
3	4.5	3.7	3.9	3.9	4.2	4.3	4.5	4.8	5.9	4.7	5.1	4.8	4.8	4.9	4.4	4.6	4.8	4.5	5.9	6.0	4.3	4.0	3.8	4.0	6.0	3.7	4.6
4	4.3	5.0	8.4	4.7	6.0	4.1	3.7	4.0	4.5	4.6	3.9	3.8	4.7	3.9	3.9	4.1	4.1	7.1	4.0	5.2	4.3	3.9	4.1	3.5	8.4	3.5	4.6
5	4.3	3.4	3.8	4.5	3.8	3.6	4.5	3.2	5.3	3.5	3.8	4.3	4.0	3.9	4.6	3.6	3.6	3.1	4.4	4.5	5.3	4.8	3.8	4.5	5.3	3.1	4.1
6	4.6	4.4	5.1	4.3	4.7	3.8	3.4	4.2	4.5	3.4	6.5	4.7	36.9	23.9	17.7	20.8	4.0	27.7	15.3	10.5	4.3	7.6	5.2	3.3	36.9	3.3	9.6
7	3.3	4.3	4.6	5.2	4.5	4.5	4.3	5.4	5.4	4.3	5.7	3.8	4.0	4.4	4.1	5.2	5.3	5.9	7.7	6.0	7.2	4.7	5.4	20.9	20.9	3.3	5.7
8	12.7	9.8	26.2	5.4	15.0	4.8	10.3	6.1	4.5	5.4	6.4	12.7	8.5	6.4	6.1	4.1	4.7	4.8	4.3	6.3	7.1	8.1	7.6	9.0	26.2	4.1	8.2
9	4.4	4.6	5.6	5.0	5.7	10.1	6.1	5.4	6.1	9.8	18.6	26.0	33.6	82.7	40.1	9.1	14.1	9.5	15.0	12.1	8.5	6.3	28.2	23.1	82.7	4.4	16.2
10	12.3	6.2	15.0	7.3	11.8	7.4	3.7	5.2	5.8	4.7	12.0	9.7	29.5	11.2	35.5	42.5	36.9	23.5	31.1	4.9	11.9	14.5	23.3	12.8	42.5	3.7	15.8
11	11.7	6.1	5.4	5.3	8.2	24.4	34.9	52.1	54.4	71.5	37.2	28.3	24.3	51.0	30.1	39.6	9.9	7.5	4.4	10.3	9.8	15.1	8.2	6.5	71.5	4.4	23.2
12	10.5	10.4	8.4	31.8	15.6	56.4	13.0	24.4	17.6	15.0	28.0	25.5	9.5	4.5	5.1	23.4	6.5	11.0	14.1	9.3	13.1	7.5	10.8	9.4	56.4	4.5	15.9
13	11.4	7.0	11.5	13.0	11.7	15.4	77.8	9.0	15.7	10.1	8.0	5.9	8.8	9.2	7.3	4.5	5.5	5.2	4.0	4.3	8.5	5.1	23.9	12.8	77.8	4.0	12.3
14	9.3	12.8	20.3	53.5	9.1	15.2	20.1	11.5	5.5	6.3	9.8	10.0	11.6	4.9	5.5	4.6	5.7	6.3	13.0	10.2	3.7	3.3	4.0	3.3	53.5	3.3	10.8
15	3.4	3.8	4.6	6.5	5.1	4.8	4.1	6.1	7.1	9.0	3.6	4.9	42.6	6.0	5.7	10.4	26.4	8.8	7.0	5.3	11.1	10.4	9.3	10.9	42.6	3.4	9.0
16	8.9	7.8	6.6	8.8	79.0	89.6	47.1	20.2	22.2	24.3	31.4	9.2	4.7	4.6	6.2	5.6	5.0	6.9	4.7	4.3	4.3	4.8	4.2	4.6	89.6	4.2	17.3
17	3.2	4.5	3.6	3.8	3.8	3.8	3.5	3.7	3.3	3.8	3.7	3.4	3.5	4.0	3.2	3.3	3.6	3.2	3.1	3.1	3.4	4.3	4.6	4.7	4.7	3.1	3.7
18	3.2	3.6	3.3	3.4	3.1	3.6	3.3	3.9	4.1	3.7	3.9	4.2	4.1	3.8	4.3	4.0	3.7	3.7	3.7	4.0	4.0	3.9	3.6	3.5	4.3	3.1	3.7
19	3.6	4.1	4.4	3.8	3.6	4.1	3.8	4.4	8.4	6.8	3.8	5.1	4.0	6.5	6.2	7.6	11.6	11.0	6.4	5.2	5.1	4.8	4.6	5.8	11.6	3.6	5.6
20	7.1	5.5	5.0	4.3	9.9	4.4	6.7	4.9	3.6	2.6	3.8	3.4	7.6	5.8	5.8	4.6	14.9	18.9	44.4	40.6	38.8	25.1	5.2	8.5	44.4	2.6	11.7
21	11.2	14.2	19.7	63.9	7.6	9.1	9.1	7.7	6.5	26.0	8.8	7.5	69.2	41.1	37.2	48.5	35.4	23.6	58.6	73.1	11.0	44.1	13.4	9.0	73.1	6.5	27.3
22	7.3	72.8	13.9	7.8	9.5	4.7	4.0	3.8	3.6	5.5	4.7	6.2	7.9	12.9	6.7	5.2	3.7	6.0	3.7	4.4	3.5	3.4	3.8	4.6	72.8	3.4	8.7
23	5.9	3.5	3.4	3.9	3.8	3.9	5.2	4.7	82.6	13.2	3.9	6.5	4.9	4.1	3.3	4.2	3.0	4.1	4.1	4.8	4.4	3.9	3.4	4.0	82.6	3.0	7.9
24	3.0	4.2	7.3	3.8	3.9	23.4	41.4	20.7	18.0	11.0	30.9	15.5	21.8	26.8	7.6	13.9	9.6	25.7	50.0	11.3	10.1	16.7	7.5	13.4	50.0	3.0	16.6
25	8.1	4.5	4.0	3.3	3.7	3.6	3.6	3.7	3.7	3.3	3.2	4.5	4.1	3.8	5.3	5.3	61.4	10.7	8.7	3.5	4.7	4.3	4.8	4.2	61.4	3.2	7.1
26	4.3	3.8	4.0	4.9	4.9	5.8	5.3	4.2	3.8	3.9	3.9	4.9	4.2	4.2	5.0	3.9	3.4	3.7	3.5	3.5	4.0	4.0	5.6	4.5	5.8	3.4	4.3
27	4.4	6.1	6.1	6.7	5.6	9.6	12.4	10.5	10.2	4.5	3.6	10.2	15.6	11.4	13.2	8.7	10.0	11.5	12.3	14.0	14.9	14.4	12.0	11.4	15.6	3.6	10.0
28	9.9	6.4	7.7	7.9	9.9	7.7	12.6	14.4	9.2	5.3	8.5	10.4	8.7	12.8	4.2	3.2	5.2	6.2	12.1	9.9	7.6	9.6	8.3	6.5	14.4	3.2	8.5
29	4.4	5.0	4.6	4.6	5.3	4.4	6.0	5.0	3.6	4.3	4.9	5.3	5.3	5.1	5.0	6.8	6.2	6.0	4.2	5.3	4.2	5.6	4.1	8.1	8.1	3.6	5.1
30	6.3	10.4	5.7	6.0	5.8	6.2	4.0	3.5	4.7	3.8	5.3	4.8	7.2	6.1	4.3	4.3	5.7	5.7	5.7	6.0	4.8	4.7	5.7	5.2	10.4	3.5	5.5
31	4.5	5.8	8.0	7.9	9.0	6.7	11.9	6.4	4.3	4.3	5.3	3.6	4.0	6.8	3.2	3.3	3.4	4.4	6.2	7.3	4.2	5.1	5.4	7.1	11.9	3.2	5.8
Max.	**12.7**	**72.8**	**26.2**	**63.9**	**79.0**	**89.6**	**77.8**	**52.1**	**82.6**	**71.5**	**37.2**	**28.3**	**69.2**	**82.7**	**40.1**	**48.5**	**61.4**	**27.7**	**58.6**	**73.1**	**38.8**	**44.1**	**28.2**	**23.1**	**89.6**		
Min.	**3.0**	**3.4**	**3.3**	**3.3**	**3.1**	**3.6**	**3.3**	**3.2**	**3.3**	**2.6**	**3.2**	**3.4**	**3.5**	**3.7**	**3.2**	**3.2**	**3.0**	**3.1**	**3.1**	**3.1**	**3.4**	**3.3**	**3.4**	**3.3**		**2.6**	
Avg.	**6.5**	**9.3**	**8.0**	**10.4**	**10.2**	**12.1**	**12.2**	**8.9**	**11.2**	**9.3**	**9.4**	**8.5**	**13.2**	**12.4**	**9.7**	**10.3**	**10.8**	**9.3**	**12.3**	**10.1**	**7.9**	**8.8**	**8.1**	**8.1**			**9.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.4	13.1	13.4	13.8	13.4	13.3	11.9	10.1	11.7	12.2	11.1	11.2	12.0	12.6	13.7	13.8	14.2	13.0	10.1	11.4	11.8	11.2	8.9	10.3	14.2	8.9	12.1
2	7.6	8.0	8.9	8.4	9.3	9.2	9.0	9.0	8.4	8.1	7.5	7.1	5.1	5.1	6.1	5.0	6.0	6.3	5.7	4.8	5.2	3.2	2.9	2.6	9.3	2.6	6.6
3	4.3	4.2	4.7	3.5	1.4	1.9	4.2	4.5	3.6	4.4	4.5	5.3	5.5	4.7	3.6	4.2	5.4	4.2	4.6	4.9	4.5	4.9	5.5	3.4	5.5	1.4	4.3
4	3.7	4.8	2.6	4.1	4.3	4.8	4.7	5.2	6.9	6.0	5.6	7.2	8.4	7.6	8.4	6.2	6.2	9.2	10.5	10.9	11.0	11.9	12.9	13.2	13.2	2.6	7.3
5	11.6	12.8	11.6	11.5	10.8	11.4	13.7	14.7	9.8	14.6	17.0	16.0	15.7	14.9	18.5	24.4	20.2	20.8	21.4	22.7	20.6	20.9	20.7	25.0	25.0	9.8	16.7
6	21.0	21.4	22.1	21.3	20.7	15.1	17.2	17.4	18.9	16.5	16.7	17.8	14.0	11.7	11.8	12.6	11.9	13.6	11.3	11.9	11.6	7.1	9.7	8.3	22.1	7.1	15.1
7	7.7	7.9	6.4	6.5	7.8	7.9	6.7	8.6	10.2	11.5	8.9	9.7	9.5	8.5	9.1	9.4	8.9	7.2	11.5	10.7	8.4	7.1	6.2	5.9	11.5	5.9	8.4
8	7.3	8.7	7.3	6.9	8.2	8.2	5.2	7.7	8.3	7.4	8.0	8.4	8.7	8.2	9.3	11.1	9.1	9.8	8.4	7.2	8.5	8.2	10.0	10.3	11.1	5.2	8.4
9	9.7	8.0	10.0	10.7	9.9	9.2	8.2	10.1	11.0	12.0	11.1	10.4	14.1	14.7	14.7	16.1	15.2	15.0	13.6	12.2	9.3	11.5	10.5	12.1	16.1	8.0	11.6
10	12.4	10.6	13.0	11.4	11.4	13.5	9.3	7.8	11.8	16.0	14.7	15.7	17.0	15.4	13.8	12.8	12.4	13.4	10.2	9.6	6.7	8.1	5.9	7.5	17.0	5.9	11.7
11	13.9	16.5	14.2	13.1	7.3	8.1	8.2	14.0	18.7	16.8	12.1	9.5	5.3	8.5	9.1	10.0	11.7	12.9	12.5	10.1	9.3	9.9	10.8	8.9	18.7	5.3	11.3
12	9.6	9.6	9.0	9.7	9.1	9.4	10.9	10.6	9.8	10.8	11.7	12.4	12.5	12.7	13.7	15.4	14.4	14.0	16.9	17.1	22.2	16.3	20.0	17.9	22.2	9.0	13.2
13	19.5	18.2	17.9	16.0	10.4	18.0	23.1	19.3	17.9	20.2	12.0	11.1	12.3	13.7	12.5	11.9	10.8	15.0	12.8	13.1	11.9	6.4	6.9	8.2	23.1	6.4	14.1
14	9.0	6.8	5.7	2.5	5.3	4.5	5.0	3.0	5.6	8.0	12.7	13.5	12.4	15.1	16.0	15.0	16.1	15.3	15.5	15.1	12.8	12.8	11.5	11.7	16.1	2.5	10.5
15	14.5	18.5	20.6	17.4	14.8	14.4	11.8	13.2	15.5	13.5	11.4	13.0	10.6	12.2	12.9	12.0	12.0	11.4	10.8	8.2	6.3	4.5	8.2	6.8	20.6	4.5	12.3
16	5.7	2.9	1.4	0.8	1.6	2.2	2.6	0.9	3.1	2.3	2.6	3.6	2.8	2.5	3.7	2.5	2.9	3.9	3.4	3.0	3.1	3.5	4.9	7.3	7.3	0.8	3.1
17	6.6	6.7	9.0	11.8	11.5	11.1	10.7	9.8	10.5	10.7	11.2	14.2	17.8	15.6	13.7	11.3	11.6	11.8	9.1	5.3	6.1	6.4	8.2	8.0	17.8	5.3	10.4
18	5.2	5.3	4.5	4.1	4.7	6.2	6.0	5.1	4.5	3.8	2.8	2.3	2.3	1.7	1.3	0.0	0.0	0.3	0.0	2.3	3.5	4.3	5.2	4.7	6.2	0.0	3.3
19	5.1	4.7	7.7	11.1	10.2	12.9	15.7	12.6	13.5	12.9	16.2	20.8	19.8	22.4	23.1	25.4	25.0	22.1	25.4	24.6	25.7	24.1	21.3	19.7	25.7	4.7	17.6
20	18.6	15.7	10.9	10.8	11.9	9.0	8.4	8.5	8.1	5.9	7.2	8.8	8.6	8.8	8.0	6.4	4.6	2.6	1.5	1.2	1.8	3.9	4.4	3.7	18.6	1.2	7.5
21	2.8	2.0	1.8	1.7	3.5	8.4	14.8	14.8	13.5	13.9	13.9	14.0	14.9	17.0	18.4	17.9	17.5	16.8	17.6	21.6	21.3	20.0	19.7	17.8	21.6	1.7	13.6
22	19.2	14.1	18.7	15.4	14.0	15.2	14.4	16.2	12.8	13.5	16.9	18.8	17.2	15.8	17.3	13.0	10.9	8.5	5.9	4.2	2.0	1.7	2.8	6.0	19.2	1.7	12.3
23	8.6	9.5	13.6	14.4	16.1	17.7	18.3	14.8	18.1	17.4	12.4	13.0	11.2	10.3	12.5	14.2	13.5	15.0	19.0	6.5	4.1	7.2	9.5	10.5	19.0	4.1	12.8
24	7.7	5.1	3.7	4.8	3.9	2.7	2.1	5.6	10.3	12.2	13.3	12.7	12.7	12.5	14.2	14.5	11.6	10.4	10.0	9.6	10.0	9.9	9.2	7.9	14.5	2.1	9.0
25	7.3	3.7	1.3	1.1	3.4	7.2	8.5	7.3	7.6	11.6	11.5	12.8	13.3	12.8	12.1	13.2	14.3	15.4	16.7	16.3	12.3	13.9	13.7	13.3	16.7	1.1	10.4
26	14.3	14.8	14.9	16.0	16.9	18.1	16.9	19.3	19.0	16.2	10.4	10.1	6.7	3.7	4.3	4.9	2.6	1.6	1.3	0.8	2.3	4.1	4.7	5.3	19.3	0.8	9.6
27	7.0	7.4	7.6	7.9	7.4	7.6	6.4	5.6	11.5	16.0	18.9	18.2	18.8	19.3	19.7	20.8	20.7	19.9	20.3	20.2	21.1	20.1	17.6	16.4	21.1	5.6	14.9
28	17.5	15.7	13.2	10.8	9.2	9.3	9.2	10.3	10.8	11.7	9.2	8.1	7.1	5.4	4.5	3.3	1.7	0.9	0.8	0.6	0.4	1.6	1.8	1.5	17.5	0.4	6.9
29	1.4	2.5	2.8	2.8	2.1	1.0	2.5	1.4	1.4	0.6	1.6	1.6	1.1	1.2	1.5	2.4	3.1	4.0	5.5	5.9	4.6	4.3	3.6	5.1	5.9	0.6	2.7
30	4.1	3.2	4.9	4.8	5.1	6.2	6.1	3.6	4.6	8.2	8.4	11.4	14.8	15.7	16.7	15.7	14.0	15.4	16.3	18.5	17.3	17.0	14.6	11.0	18.5	3.2	10.7
31	12.8	13.2	11.5	9.5	8.6	6.8	4.6	3.8	4.8	4.3	2.1	2.9	3.1	1.4	1.0	1.0	1.2	0.7	0.6	0.8	0.6	0.8	0.6	1.3	13.2	0.6	4.1
Max.	**21.0**	**21.4**	**22.1**	**21.3**	**20.7**	**18.1**	**23.1**	**19.3**	**19.0**	**20.2**	**18.9**	**20.8**	**19.8**	**22.4**	**23.1**	**25.4**	**25.0**	**22.1**	**25.4**	**24.6**	**25.7**	**24.1**	**21.3**	**25.0**	**25.7**		
Min.	**1.4**	**2.0**	**1.3**	**0.8**	**1.4**	**1.0**	**2.1**	**0.9**	**1.4**	**0.6**	**1.6**	**1.6**	**1.1**	**1.2**	**1.0**	**0.0**	**0.0**	**0.3**	**0.0**	**0.6**	**0.4**	**0.8**	**0.6**	**1.3**		**0.0**	
Avg.	**10.0**	**9.5**	**9.5**	**9.2**	**8.8**	**9.4**	**9.6**	**9.5**	**10.4**	**11.0**	**10.4**	**11.0**	**10.8**	**10.7**	**11.1**	**11.2**	**10.6**	**10.7**	**10.6**	**10.0**	**9.5**	**9.3**	**9.4**	**9.4**			**10.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.5	2.1	1.5	0.9	0.1	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	3.2	4.0	3.5	4.0	0.0	0.8
2	4.6	5.2	5.4	6.1	5.4	6.6	7.1	9.6	11.5	11.2	12.0	7.9	11.2	13.3	11.1	13.0	12.5	13.1	15.5	14.6	12.1	12.7	13.4	13.7	15.5	4.6	10.4
3	14.5	15.7	15.2	15.6	15.7	12.9	13.5	12.1	4.6	9.3	14.8	13.3	9.2	8.1	11.1	11.2	10.4	10.6	8.0	8.8	8.4	8.2	9.0	8.2	15.7	4.6	11.2
4	7.9	7.4	7.0	7.3	6.0	6.7	6.1	6.4	6.6	6.4	6.4	5.5	4.9	5.1	6.0	6.4	6.9	9.8	12.0	12.1	12.9	12.6	12.2	11.5	12.9	4.9	8.0
5	11.3	11.6	10.9	10.8	12.3	11.8	13.7	11.6	13.5	8.3	9.6	5.4	9.1	9.4	8.0	8.7	9.8	10.7	11.1	9.8	8.2	7.4	8.4	8.7	13.7	5.4	10.0
6	9.2	7.1	6.3	6.8	6.3	6.2	6.3	6.2	8.0	8.4	8.1	8.1	11.3	11.6	9.1	10.2	9.0	10.6	11.6	13.0	9.9	7.7	10.4	11.4	13.0	6.2	8.9
7	10.5	8.7	9.6	11.3	11.0	9.4	10.1	8.6	8.7	6.5	6.7	4.8	5.6	4.4	2.7	2.7	3.2	4.5	4.7	4.2	5.6	7.3	5.9	7.5	11.3	2.7	6.9
8	10.5	6.3	5.0	5.4	2.8	0.9	3.2	3.4	3.2	3.4	3.8	7.2	7.2	10.5	11.0	9.8	11.1	9.9	6.4	7.2	6.9	10.7	12.3	12.0	12.3	0.9	7.1
9	11.5	12.0	14.3	16.8	14.7	13.0	13.2	12.8	13.7	13.8	9.7	7.3	3.4	2.0	3.5	3.8	4.2	4.7	6.8	6.8	7.8	7.7	8.0	8.8	16.8	2.0	9.2
10	8.4	9.3	9.7	9.6	10.4	9.4	9.8	7.9	7.0	6.9	5.1	3.1	3.6	5.4	5.1	4.5	4.9	4.0	3.8	3.9	5.5	5.4	4.8	4.6	10.4	3.1	6.4
11	3.3	2.4	3.7	4.7	5.5	4.3	2.5	1.4	1.4	1.6	1.3	1.3	1.1	2.2	1.3	1.5	1.1	0.8	1.3	1.1	1.1	1.6	2.1	2.7	5.5	0.8	2.1
12	2.7	3.3	4.5	3.2	2.4	2.0	2.5	4.0	4.1	5.7	5.2	5.3	6.9	4.4	0.6	0.0	0.0	4.3	4.9	7.4	6.7	6.8	5.7	4.5	7.4	0.0	4.1
13	10.7	12.9	8.5	10.9	15.1	14.9	17.3	14.6	16.9	16.5	18.3	18.1	16.8	16.8	18.1	19.3	19.2	20.6	17.3	16.2	17.5	16.9	17.5	17.5	20.6	8.5	16.2
14	15.3	14.0	14.8	17.1	16.1	14.7	12.7	10.6	14.3	14.9	14.0	15.9	12.4	12.2	11.2	10.8	9.8	11.0	10.8	10.0	8.8	7.3	5.0	5.2	17.1	5.0	12.0
15	7.0	7.9	8.0	5.9	6.6	4.9	2.9	5.3	5.8	2.4	1.4	3.3	5.1	4.6	5.4	4.0	2.0	3.4	5.0	9.1	3.1	3.2	7.2	12.9	12.9	1.4	5.3
16	17.0	18.0	15.1	13.3	15.8	14.6	13.1	12.8	14.1	12.7	14.9	15.3	13.6	12.1	9.3	8.8	8.9	8.0	6.8	6.6	5.8	7.3	6.5	2.8	18.0	2.8	11.4
17	1.6	3.2	8.0	4.7	7.0	13.0	13.4	10.9	10.8	10.5	11.7	11.6	13.1	12.6	12.7	12.2	9.0	19.2	21.9	19.4	17.7	17.3	18.8	17.6	21.9	1.6	12.4
18	18.2	19.3	17.3	15.8	17.2	22.1	22.3	20.8	22.0	19.1	17.7	15.9	15.3	15.7	14.1	14.0	13.7	12.8	11.3	10.7	10.9	7.8	8.4	8.7	22.3	7.8	15.5
19	6.2	8.4	7.5	5.8	8.7	14.3	14.5	15.7	12.8	11.8	13.5	13.6	13.9	13.1	13.5	11.9	10.3	9.3	9.5	8.8	7.7	8.4	7.2	9.1	15.7	5.8	10.6
20	13.7	16.7	20.8	17.5	15.9	17.8	17.4	20.0	17.9	15.4	14.1	11.9	9.2	9.2	10.8	7.4	6.2	8.4	8.9	11.0	15.3	15.0	15.6	14.3	20.8	6.2	13.8
21	12.7	11.6	14.2	15.0	15.7	16.5	17.0	15.8	17.5	16.3	15.4	16.1	13.4	10.5	8.3	7.8	9.3	4.3	1.5	1.9	2.1	2.5	4.2	4.6	17.5	1.5	10.6
22	5.4	4.7	4.6	3.8	4.0	4.8	5.1	4.4	4.7	3.5	3.8	4.3	4.6	9.4	13.5	12.6	6.5	10.4	10.7	9.0	7.8	7.8	7.0	6.2	13.5	3.5	6.6
23	5.9	5.9	3.8	1.3	1.7	1.3	1.7	2.8	2.0	3.6	5.3	2.8	2.9	3.5	5.0	4.4	4.5	3.6	7.6	7.3	8.7	8.1	8.5	10.7	10.7	1.3	4.7
24	11.8	12.0	12.7	12.8	13.1	12.9	13.7	11.7	11.7	12.1	11.1	10.0	11.6	10.3	10.8	9.5	9.1	9.8	9.7	9.5	10.6	10.7	10.5	12.2	13.7	9.1	11.3
25	11.6	12.6	14.1	15.2	15.5	13.5	14.3	13.8	11.2	9.1	7.0	5.6	5.3	9.1	9.0	6.9	5.0	8.4	9.5	9.8	9.9	10.4	11.4	10.4	15.5	5.0	10.4
26	9.9	9.2	7.8	7.4	5.3	5.3	6.1	6.3	6.4	6.2	9.1	9.3	9.0	10.4	10.3	9.9	10.7	9.5	10.0	10.2	10.3	9.2	7.2	8.1	10.7	5.3	8.5
27	9.2	11.1	9.4	8.9	8.6	7.5	5.3	5.8	5.3	4.9	5.7	4.9	2.8	2.3	4.0	2.5	3.4	4.0	2.6	9.8	10.9	10.4	12.1	11.3	12.1	2.3	6.8
28	10.3	11.4	12.0	13.2	13.3	12.5	12.6	11.8	10.5	8.5	8.5	8.6	8.7	7.6	5.0	3.9	4.4	4.5	6.3	6.7	7.3	7.8	8.2	7.2	13.3	3.9	8.8
29	7.6	8.7	8.9	9.7	8.6	8.3	8.2	9.4	8.7	9.5	9.8	8.0	7.5	8.4	7.8	8.7	8.4	7.1	6.4	6.9	5.7	6.6	6.3	6.9	9.8	5.7	8.0
Max.	**18.2**	**19.3**	**20.8**	**17.5**	**17.2**	**22.1**	**22.3**	**20.8**	**22.0**	**19.1**	**18.3**	**18.1**	**16.8**	**16.8**	**18.1**	**19.3**	**19.2**	**20.6**	**21.9**	**19.4**	**17.7**	**17.3**	**18.8**	**17.6**	**22.3**		
Min.	**1.5**	**2.1**	**1.5**	**0.9**	**0.1**	**0.7**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**1.1**	**1.6**	**2.1**	**2.7**		**0.0**	
Avg.	**9.3**	**9.6**	**9.7**	**9.5**	**9.7**	**9.7**	**9.9**	**9.5**	**9.5**	**8.9**	**9.1**	**8.4**	**8.2**	**8.4**	**8.2**	**7.8**	**7.4**	**8.2**	**8.4**	**8.7**	**8.5**	**8.5**	**8.9**	**9.1**			**8.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.0	7.5	6.4	3.7	3.9	4.3	3.9	3.0	2.1	2.4	1.6	1.3	9.0	11.1	12.2	13.0	12.6	9.5	9.0	10.6	13.3	12.6	12.7	13.4	13.4	1.3	7.8
2	13.5	11.8	13.8	13.6	12.6	13.5	15.5	14.2	11.6	10.1	8.2	6.8	7.8	8.3	7.3	6.7	4.8	3.2	3.2	2.4	5.5	5.9	6.1	5.3	15.5	2.4	8.8
3	3.3	4.2	5.6	5.5	9.0	13.6	14.7	17.5	18.1	17.8	19.7	22.8	23.1	20.7	20.6	21.8	21.4	20.2	18.3	16.5	15.3	16.0	14.4	16.3	23.1	3.3	15.7
4	16.0	15.1	16.4	14.7	13.5	16.5	17.5	18.1	17.1	17.9	18.6	20.4	21.4	21.9	21.5	21.4	20.4	20.8	19.8	17.6	17.3	16.4	13.6	12.5	21.9	12.5	17.8
5	13.9	12.8	15.1	16.7	16.2	18.8	17.1	13.8	13.9	14.1	18.6	17.3	17.0	16.5	17.6	20.5	20.7	21.6	16.5	19.8	21.1	19.0	18.2	17.2	21.6	12.8	17.3
6	17.2	16.3	16.6	15.1	13.7	14.6	14.6	12.7	11.7	10.9	10.1	7.8	6.7	10.8	10.8	12.3	10.5	11.4	9.2	8.0	7.1	10.6	13.3	12.7	17.2	6.7	11.9
7	11.9	8.8	8.8	6.1	5.8	2.8	6.3	1.5	2.5	2.4	3.5	3.7	3.4	3.3	2.1	2.3	4.8	4.7	3.8	6.0	5.9	7.3	7.6	7.4	11.9	1.5	5.1
8	6.9	5.7	8.3	4.8	4.7	4.8	5.1	6.1	5.6	5.2	8.8	9.4	9.2	8.2	9.9	10.2	13.6	13.6	11.7	14.1	15.6	17.2	17.7	18.2	18.2	4.7	9.8
9	17.0	15.2	13.6	13.2	11.0	10.9	10.2	11.8	9.8	9.6	8.4	6.3	4.9	4.1	5.4	4.0	4.5	3.9	4.7	4.4	3.9	4.9	4.5	3.5	17.0	3.5	7.9
10	1.1	3.0	2.3	3.3	7.4	7.1	5.7	5.0	5.0	4.0	4.7	3.4	3.1	4.2	5.0	5.3	4.0	4.4	3.3	2.9	5.5	4.7	3.4	2.9	7.4	1.1	4.2
11	4.7	5.9	5.4	4.6	3.6	4.5	3.5	3.7	2.6	1.2	4.2	4.1	4.3	3.2	3.5	5.7	4.3	2.9	3.5	4.3	4.3	3.8	2.7	3.3	5.9	1.2	3.9
12	3.2	2.9	3.2	3.3	3.5	5.3	4.1	4.9	3.7	2.4	1.9	1.6	1.8	2.6	3.1	3.3	3.8	4.1	4.6	4.6	4.8	4.3	3.6	3.8	5.3	1.6	3.5
13	4.9	5.2	5.0	5.4	5.4	5.3	5.4	4.9	5.0	4.6	4.1	3.4	3.4	2.2	4.4	3.9	3.4	4.2	3.1	3.2	4.8	4.0	5.2	5.0	5.4	2.2	4.4
14	3.9	3.6	3.6	2.1	3.2	1.9	1.6	1.0	0.9	3.1	2.4	1.1	0.7	3.3	2.3	2.0	1.8	5.2	8.2	8.3	9.0	8.6	8.9	8.6	9.0	0.7	4.0
15	12.3	15.4	16.4	15.1	15.2	13.2	15.6	16.9	17.3	14.4	11.9	14.2	15.3	13.9	13.6	13.1	12.8	14.1	14.7	13.7	14.0	12.2	11.2	10.2	17.3	10.2	14.0
16	9.6	9.5	10.9	7.7	7.4	7.4	6.3	5.4	3.9	2.4	4.2	1.9	0.8	1.0	0.7	1.0	0.7	0.7	1.7	1.4	2.8	7.3	7.2	7.1	10.9	0.7	4.5
17	6.3	6.0	5.3	5.2	3.4	3.7	2.5	4.1	4.5	2.8	1.9	1.5	1.2	0.3	0.9	0.7	0.7	9.3	12.3	11.8	10.9	12.0	11.5	8.4	12.3	0.3	5.3
18	5.6	3.6	2.3	5.2	7.3	8.2	6.8	7.9	9.3	10.4	9.9	8.4	8.4	8.9	7.3	9.2	10.8	9.7	9.7	8.1	12.8	13.4	14.7	14.4	14.7	2.3	8.8
19	15.7	14.6	14.2	14.4	13.9	14.4	14.1	13.8	15.7	16.9	15.6	14.0	14.0	14.6	15.1	13.6	13.5	12.4	9.8	9.5	11.5	11.5	10.2	10.3	16.9	9.5	13.5
20	10.1	10.0	9.4	7.3	5.8	5.7	5.8	5.8	5.3	4.1	3.3	2.5	1.0	0.9	0.6	1.0	1.2	2.5	4.8	5.6	5.7	6.9	7.7	8.3	10.1	0.6	5.1
21	5.6	5.0	5.5	5.1	4.2	2.5	2.0	1.3	2.6	3.8	2.8	1.7	3.1	4.4	4.5	10.8	12.0	11.3	11.4	14.9	15.4	15.8	13.9	13.6	15.8	1.3	7.2
22	13.0	13.1	12.0	11.9	12.5	12.9	15.3	15.6	14.4	15.1	15.7	15.9	14.8	12.5	11.6	11.0	10.2	10.3	10.1	10.0	8.6	6.0	3.9	1.8	15.9	1.8	11.6
23	2.8	4.8	3.8	5.3	3.6	2.5	6.3	6.5	6.0	6.2	5.8	5.9	6.4	6.7	8.4	9.6	8.4	8.0	7.9	9.3	10.9	11.9	10.3	9.3	11.9	2.5	6.9
24	8.3	8.1	7.3	7.2	6.4	5.8	4.3	3.5	3.5	4.3	3.6	5.4	5.8	5.1	5.4	5.0	1.1	1.1	1.2	4.6	4.6	3.2	3.0	1.7	8.3	1.1	4.6
25	0.9	1.8	2.1	3.2	2.0	1.3	0.8	0.6	1.0	1.1	1.5	2.3	1.3	1.7	4.1	3.7	5.1	3.7	2.9	3.5	4.8	6.7	8.2	8.0	8.2	0.6	3.0
26	4.5	2.7	3.4	3.6	4.8	5.5	4.6	5.5	6.0	5.7	5.3	4.1	2.4	2.8	2.5	3.5	4.8	3.2	2.7	2.8	3.2	2.6	2.5	3.7	6.0	2.4	3.8
27	4.7	1.9	1.8	1.7	1.8	1.2	1.3	1.3	1.6	3.1	3.5	2.6	3.1	3.1	2.6	4.1	6.0	6.0	5.2	7.3	6.7	6.0	6.9	7.3	7.3	1.2	3.8
28	8.8	8.1	7.9	5.7	6.0	5.3	5.7	5.3	4.0	3.6	2.3	0.9	0.9	0.9	1.3	2.8	2.5	2.4	1.9	1.6	0.9	1.5	0.9	2.1	8.8	0.9	3.5
29	2.7	1.5	2.6	4.0	3.7	2.3	3.1	3.7	6.0	6.6	8.9	9.9	11.9	14.0	14.6	14.5	15.9	17.0	16.9	17.3	18.0	19.4	19.7	19.3	19.7	1.5	10.6
30	19.8	21.6	21.3	21.0	20.8	21.4	21.5	21.5	20.3	20.7	20.3	20.4	20.2	19.8	18.6	17.7	17.0	17.1	15.6	14.9	17.5	14.6	12.4	12.1	21.6	12.1	18.7
31	11.0	9.3	9.5	10.2	10.4	12.1	9.9	12.9	13.1	12.2	13.4	12.7	13.1	14.8	14.9	14.4	15.4	15.5	16.2	15.8	19.4	18.8	18.3	19.0	19.4	9.3	13.8
Max.	**19.8**	**21.6**	**21.3**	**21.0**	**20.8**	**21.4**	**21.5**	**21.5**	**20.3**	**20.7**	**20.3**	**22.8**	**23.1**	**21.9**	**21.5**	**21.8**	**21.4**	**21.6**	**19.8**	**19.8**	**21.1**	**19.4**	**19.7**	**19.3**	**23.1**		
Min.	**0.9**	**1.5**	**1.8**	**1.7**	**1.8**	**1.2**	**0.8**	**0.6**	**0.9**	**1.1**	**1.5**	**0.9**	**0.7**	**0.3**	**0.6**	**0.7**	**0.7**	**0.7**	**1.2**	**1.4**	**0.9**	**1.5**	**0.9**	**1.7**		**0.3**	
Avg.	**8.6**	**8.2**	**8.4**	**7.9**	**7.8**	**8.0**	**8.1**	**8.1**	**7.9**	**7.7**	**7.9**	**7.5**	**7.7**	**7.9**	**8.1**	**8.6**	**8.7**	**8.8**	**8.5**	**8.9**	**9.7**	**9.8**	**9.5**	**9.3**			**8.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	19.1	20.1	18.9	18.5	17.0	15.6	12.7	14.5	14.2	12.4	11.9	10.6	11.3	10.2	12.3	11.6	11.2	9.1	7.8	4.8	3.9	3.6	2.2	1.4	20.1	1.4	11.5
2	1.7	2.5	3.1	2.0	2.1	2.1	1.2	0.9	1.2	1.7	1.8	1.7	2.3	2.6	2.8	2.9	2.3	2.0	2.1	2.3	2.5	5.3	6.5	6.7	6.7	0.9	2.6
3	6.5	7.4	6.9	6.2	6.1	5.6	5.6	4.2	4.7	4.4	6.7	6.1	8.3	11.2	12.4	12.8	13.7	13.9	14.4	16.6	16.8	17.1	16.1	15.8	17.1	4.2	10.0
4	16.6	19.3	18.8	18.2	19.3	19.3	20.1	19.6	17.0	15.4	15.0	12.6	11.6	11.1	10.9	9.6	10.7	10.2	8.9	11.4	11.3	14.9	14.1	12.1	20.1	8.9	14.5
5	8.8	5.2	7.5	7.5	7.5	7.2	5.1	2.9	3.9	3.2	2.8	2.5	3.3	3.9	4.1	6.7	5.6	7.2	6.4	10.5	9.7	10.8	10.5	11.5	11.5	2.5	6.4
6	12.7	12.3	9.9	9.7	10.1	10.3	9.6	8.5	7.4	7.3	7.9	7.9	11.1	13.0	8.1	8.4	10.1	7.1	7.2	9.4	12.0	12.6	12.5	12.5	13.0	7.1	9.9
7	11.9	11.0	11.2	13.2	12.5	11.7	10.1	10.0	11.0	6.6	5.7	7.5	8.7	7.5	6.7	7.7	4.9	5.4	4.9	5.7	6.4	4.5	4.4	3.3	13.2	3.3	8.0
8	5.3	3.0	3.5	3.3	3.3	2.9	2.5	1.5	0.6	1.4	1.2	0.9	0.7	1.8	1.4	0.7	0.9	1.4	1.9	1.6	3.1	2.6	6.2	6.5	6.5	0.6	2.4
9	10.6	11.4	11.2	10.9	9.9	9.3	8.2	9.7	11.4	9.3	8.9	5.0	3.2	6.5	6.3	7.5	8.6	9.0	8.0	6.8	8.3	7.4	9.3	9.9	11.4	3.2	8.6
10	8.0	8.3	6.8	7.5	8.7	9.0	10.0	10.2	9.4	9.2	7.2	5.7	7.3	6.8	5.8	5.4	5.3	6.1	6.4	7.3	8.1	9.0	8.3	7.5	10.2	5.3	7.6
11	6.4	6.4	7.5	6.9	7.9	6.9	7.4	8.6	7.8	8.7	8.4	9.0	8.5	8.2	7.3	7.5	7.9	6.8	6.6	6.9	7.4	7.2	8.4	6.3	9.0	6.3	7.5
12	6.2	5.3	6.4	6.6	5.4	4.9	6.1	4.2	5.4	3.1	2.4	7.0	7.6	8.6	8.1	10.5	11.2	11.3	11.2	7.6	4.3	3.3	2.6	2.4	11.3	2.4	6.3
13	1.4	1.3	2.2	2.6	2.8	2.2	1.9	3.9	4.7	5.6	6.3	6.7	8.0	5.2	8.3	9.2	6.9	8.1	9.4	5.6	6.3	9.6	12.3	11.9	12.3	1.3	5.9
14	10.4	10.7	8.2	9.4	10.2	9.4	7.7	7.4	6.6	7.3	7.0	6.7	7.4	7.7	7.7	6.6	6.3	6.0	4.0	4.6	3.3	4.8	2.8	3.6	10.7	2.8	6.9
15	3.7	2.6	2.5	3.0	2.5	3.0	5.5	7.6	9.6	8.5	13.2	9.7	10.2	11.5	13.3	17.8	19.8	20.0	20.5	21.3	20.5	3.3	0.9	1.0	21.3	0.9	9.6
16	0.1	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1
17	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.2
19	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
20	0.1	0.1	0.2	0.0	0.7	0.0	0.6	1.1	0.2	0.4	0.6	0.0	0.1	0.6	0.5	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.1	0.0	0.2
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0
23	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.2	0.0	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.1	0.2	0.4	0.0	0.1
26	0.7	0.3	1.7	4.5	0.9	2.5	3.2	2.6	1.6	2.1	0.9	2.1	5.7	2.3	5.1	5.8	6.4	5.0	4.8	3.3	2.1	0.4	0.8	0.3	6.4	0.3	2.7
27	3.0	0.8	2.2	0.9	0.1	3.5	1.3	0.3	5.0	5.9	5.1	1.3	0.0	0.1	1.2	4.5	4.1	3.3	2.8	2.7	2.2	0.7	0.2	0.1	5.9	0.0	2.1
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
29	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.8	1.8	1.8	1.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.4	1.0	1.8	0.0	0.4
30	1.3	0.3	1.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	4.5	5.3	3.4	3.1	2.9	3.1	3.9	5.3	5.9	7.1	8.0	8.3	7.6	6.9	8.3	0.0	3.3
Max.	**19.1**	**20.1**	**18.9**	**18.5**	**19.3**	**19.3**	**20.1**	**19.6**	**17.0**	**15.4**	**15.0**	**12.6**	**11.6**	**13.0**	**13.3**	**17.8**	**19.8**	**20.0**	**20.5**	**21.3**	**20.5**	**17.1**	**16.1**	**15.8**	**21.3**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**4.5**	**4.3**	**4.3**	**4.4**	**4.3**	**4.2**	**4.0**	**4.0**	**4.1**	**3.8**	**4.0**	**3.7**	**4.0**	**4.1**	**4.2**	**4.6**	**4.7**	**4.6**	**4.5**	**4.5**	**4.6**	**4.2**	**4.2**	**4.0**			**4.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.0	7.2	7.3	8.2	8.3	9.3	9.9	8.6	9.6	9.0	9.9	9.2	8.2	6.2	7.0	6.5	6.0	6.3	7.6	8.4	10.1	10.3	8.5	9.8	10.3	6.0	8.3
2	9.2	8.0	7.9	9.5	9.3	9.6	10.0	11.4	12.5	12.2	9.2	5.5	5.7	3.8	4.7	2.4	2.6	3.0	3.3	3.1	2.0	4.2	1.0	1.4	12.5	1.0	6.3
3	3.0	4.1	4.6	2.7	2.7	1.3	1.2	2.1	4.4	3.3	4.5	5.9	7.5	8.4	7.0	8.8	5.2	2.5	4.5	4.4	3.8	6.8	5.0	5.8	8.8	1.2	4.6
4	8.9	7.2	9.7	10.4	9.3	11.8	9.6	7.2	7.1	6.1	6.0	5.1	3.3	2.2	3.1	2.5	4.1	2.1	0.4	1.4	3.0	3.1	0.9	1.6	11.8	0.4	5.3
5	1.7	4.1	5.6	4.8	5.3	3.3	3.0	2.2	1.7	1.9	1.8	1.0	1.3	1.3	1.2	1.6	1.2	1.5	1.3	3.4	2.1	3.3	2.9	1.9	5.6	1.0	2.5
6	0.7	3.1	3.7	2.0	2.1	1.7	2.0	3.2	5.8	7.8	7.9	7.7	11.8	12.3	12.0	12.3	12.9	14.3	14.6	14.3	14.1	12.8	13.4	14.8	14.8	0.7	8.6
7	15.5	16.3	15.9	15.8	16.6	16.9	15.3	15.2	15.5	15.5	16.2	18.5	17.7	16.5	18.3	17.4	15.3	13.4	14.5	14.8	14.3	13.8	10.5	7.9	18.5	7.9	15.3
8	9.7	11.7	11.5	11.6	11.7	11.1	10.9	12.7	12.1	11.8	12.4	14.3	14.3	14.7	14.9	14.7	13.6	14.6	14.7	14.5	15.0	13.2	10.0	10.1	15.0	9.7	12.7
9	9.5	10.2	10.6	9.6	10.4	9.8	9.2	9.5	8.9	8.9	9.8	10.3	10.9	9.3	9.9	9.8	8.0	4.0	3.0	1.7	0.9	1.3	1.8	0.5	10.9	0.5	7.4
10	1.4	1.2	0.8	1.0	1.3	1.6	0.5	1.7	1.1	1.9	1.6	0.5	0.5	0.9	1.0	1.1	1.0	0.9	1.1	1.2	2.6	3.0	5.1	7.3	7.3	0.5	1.7
11	5.0	7.1	8.1	8.7	8.7	8.7	8.6	8.1	9.2	13.0	11.4	10.2	11.5	15.4	11.4	18.0	17.4	15.0	17.6	18.0	18.0	15.8	16.5	16.0	18.0	5.0	12.4
12	13.0	14.4	12.5	13.1	11.5	14.3	9.4	1.7	2.5	3.7	3.2	4.8	5.3	3.0	3.3	1.9	3.0	2.7	4.7	3.5	2.3	3.1	2.5	4.3	14.4	1.7	6.0
13	4.0	4.2	2.6	3.3	3.5	2.6	3.1	3.0	3.3	1.5	3.1	3.4	3.6	3.1	3.4	2.8	3.1	3.7	6.0	3.4	2.6	3.7	2.5	1.5	6.0	1.5	3.2
14	1.6	2.5	0.0	0.0	0.0	3.5	1.2	2.5	1.7	2.2	1.8	1.2	1.2	1.0	1.6	0.9	1.9	1.9	1.0	0.7	0.8	0.3	0.0	0.0	3.5	0.0	1.2
15	0.0	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.4	0.7	0.5	1.1	0.7	0.9	0.6	2.9	5.7	6.1	6.1	6.6	5.9	5.6	6.6	0.0	1.9
16	5.4	5.4	4.0	4.4	2.1	1.4	3.1	2.6	3.3	2.7	4.2	6.1	6.9	7.8	7.8	7.9	7.6	6.3	5.1	4.2	3.9	3.0	1.0	0.6	7.9	0.6	4.4
17	2.1	4.6	4.3	3.1	2.7	3.4	3.2	2.6	4.1	5.7	4.3	4.6	3.2	1.9	1.6	2.2	2.2	3.7	2.9	2.6	5.6	5.4	4.9	4.4	5.7	1.6	3.6
18	3.5	2.1	5.9	6.5	5.7	4.2	5.0	3.4	3.6	4.2	4.6	4.2	5.3	5.4	4.4	6.0	7.3	7.4	7.9	7.9	7.1	5.1	4.5	5.6	7.9	2.1	5.3
19	4.6	3.3	1.9	1.3	0.8	1.0	1.3	1.0	1.8	3.4	4.0	4.0	3.8	2.7	4.2	4.9	6.1	6.8	6.3	6.3	6.3	7.1	9.1	7.9	9.1	0.8	4.2
20	7.8	6.8	7.0	8.3	7.4	6.8	8.8	9.0	7.9	5.8	3.3	3.9	3.1	3.7	3.3	3.7	2.9	2.3	2.6	4.8	2.1	1.3	1.0	0.6	9.0	0.6	4.8
21	0.8	2.0	0.8	0.6	1.2	1.7	1.3	0.9	0.9	1.4	1.1	2.2	2.5	4.4	3.5	4.5	4.4	4.6	7.1	7.7	7.0	5.7	4.4	3.3	7.7	0.6	3.1
22	3.6	6.1	6.6	5.2	5.2	3.8	3.3	2.5	2.3	3.1	3.3	2.9	3.6	4.2	4.7	6.4	7.8	9.8	10.6	9.6	9.2	12.0	12.2	13.9	13.9	2.3	6.3
23	14.9	18.2	17.0	18.2	16.9	15.4	19.7	16.5	18.6	21.0	21.3	19.3	23.3	24.4	24.9	20.2	15.9	17.1	17.3	17.9	16.5	15.2	13.9	15.2	24.9	13.9	18.3
24	14.8	15.9	16.9	16.2	16.2	14.0	11.7	14.3	14.7	14.7	11.8	11.9	12.6	12.5	11.7	11.2	10.9	10.4	9.5	7.0	5.0	5.2	4.2	5.4	16.9	4.2	11.6
25	4.9	5.0	4.2	4.3	5.0	5.1	4.6	4.8	5.0	5.7	6.3	7.5	6.0	6.5	5.7	5.3	6.8	5.5	6.2	3.7	6.1	4.9	2.5	2.6	7.5	2.5	5.2
26	3.1	3.2	3.5	4.7	2.8	2.0	2.0	3.4	3.0	3.8	4.9	5.0	4.7	4.7	3.5	6.4	6.0	4.9	4.3	3.2	6.3	6.3	4.5	3.1	6.4	2.0	4.1
27	2.9	5.5	4.1	6.5	4.8	4.7	2.8	1.6	1.0	3.3	2.5	3.4	5.2	4.6	4.1	4.3	4.2	4.3	4.8	4.8	4.8	4.6	6.8	6.8	6.8	1.0	4.3
28	3.1	3.3	3.6	4.1	3.3	2.6	3.2	3.9	3.7	2.1	4.2	4.4	4.6	4.1	4.6	4.6	4.3	4.4	5.7	6.0	5.7	6.1	6.7	5.6	6.7	2.1	4.3
29	6.2	7.4	6.1	5.5	5.4	4.9	4.7	8.5	8.3	8.4	8.2	8.2	7.6	7.2	7.0	7.8	7.1	6.7	6.3	5.6	5.9	6.7	5.5	6.9	8.5	4.7	6.8
30	7.2	5.5	3.8	2.5	2.5	3.0	3.9	4.4	5.3	5.9	7.3	8.5	8.8	10.8	11.0	11.2	12.0	11.7	10.7	9.9	9.2	9.7	10.4	9.7	12.0	2.5	7.7
31	9.4	9.4	10.5	12.4	12.0	11.2	10.7	10.0	11.9	12.5	13.7	12.5	12.9	13.8	14.0	13.3	13.0	12.6	12.4	10.8	10.7	10.9	9.2	10.5	14.0	9.2	11.7
Max.	**15.5**	**18.2**	**17.0**	**18.2**	**16.9**	**16.9**	**19.7**	**16.5**	**18.6**	**21.0**	**21.3**	**19.3**	**23.3**	**24.4**	**24.9**	**20.2**	**17.4**	**17.1**	**17.6**	**18.0**	**18.0**	**15.8**	**16.5**	**16.0**	**24.9**		
Min.	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.4**	**0.5**	**0.5**	**0.9**	**0.7**	**0.9**	**0.6**	**0.9**	**0.4**	**0.7**	**0.8**	**0.3**	**0.0**	**0.0**		**0.0**	
Avg.	**6.0**	**6.6**	**6.5**	**6.6**	**6.3**	**6.2**	**5.9**	**5.8**	**6.2**	**6.5**	**6.6**	**6.7**	**7.0**	**7.0**	**7.0**	**7.2**	**6.9**	**6.7**	**7.1**	**6.8**	**6.7**	**6.8**	**6.0**	**6.1**			**6.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.4	9.4	9.1	11.6	10.9	10.0	11.0	12.3	12.3	14.2	18.0	17.4	16.7	17.4	17.8	18.5	18.7	14.4	13.7	12.1	11.1	8.8	7.4	3.9	18.7	3.9	12.8
2	5.0	7.7	8.8	8.8	7.2	6.1	6.1	5.2	6.3	9.5	9.7	11.2	9.6	7.4	8.3	7.7	7.0	6.1	5.5	5.4	3.4	4.1	4.7	3.7	11.2	3.4	6.9
3	1.3	2.7	3.6	5.4	4.1	4.8	3.6	1.6	1.3	1.1	1.0	2.3	2.7	6.1	6.0	7.7	7.7	8.8	8.3	9.5	9.8	6.9	7.0	7.0	9.8	1.0	5.0
4	6.7	5.6	6.0	6.7	3.8	4.7	4.7	5.5	4.8	4.2	6.9	6.6	6.9	8.3	8.5	9.3	9.5	9.7	9.9	9.7	9.9	8.8	6.9	6.3	9.9	3.8	7.1
5	5.4	4.5	4.8	7.0	8.4	7.2	8.2	10.4	9.1	12.2	12.4	12.6	11.6	12.1	12.4	13.0	12.4	11.1	7.8	6.1	3.2	1.6	1.3	2.8	13.0	1.3	8.3
6	3.4	5.0	6.2	6.6	5.9	7.2	5.7	2.7	3.9	3.5	2.0	4.5	4.4	3.5	3.7	4.9	4.0	11.8	9.9	9.3	6.9	7.0	4.4	3.4	11.8	2.0	5.4
7	1.7	2.8	4.6	5.7	5.3	5.4	5.4	7.6	8.3	6.6	6.4	6.6	6.7	5.1	4.6	5.6	8.1	9.7	9.5	10.5	9.9	9.6	5.9	5.2	10.5	1.7	6.5
8	3.9	2.3	2.0	3.8	1.8	1.6	1.8	1.6	1.8	2.0	1.9	1.8	3.3	4.3	6.0	5.6	5.9	6.9	7.8	7.1	8.1	7.7	6.8	5.5	8.1	1.6	4.2
9	5.6	5.6	6.2	6.2	5.2	5.5	6.0	5.7	4.7	4.6	3.5	2.4	5.5	5.4	6.6	6.0	5.6	6.2	6.6	7.0	6.0	5.8	5.2	5.3	7.0	2.4	5.5
10	6.3	7.4	6.4	5.9	4.1	3.8	4.4	3.1	2.2	2.8	2.6	4.3	2.5	1.9	3.0	3.1	3.4	2.6	4.0	3.9	3.2	2.1	1.5	1.5	7.4	1.5	3.6
11	1.0	1.7	0.8	0.9	0.9	0.7	1.4	2.1	3.0	2.4	2.0	2.4	3.4	1.9	3.5	3.1	2.9	2.9	2.2	1.8	4.0	4.3	2.2	3.6	4.3	0.7	2.3
12	3.8	4.0	4.2	4.6	5.3	5.2	6.2	6.1	4.8	4.2	2.9	3.9	3.5	3.4	2.8	2.7	2.3	3.7	2.5	2.3	2.8	2.8	2.7	2.0	6.2	2.0	3.7
13	1.6	1.2	1.7	2.0	1.1	0.5	1.3	1.7	1.4	2.0	1.7	1.4	1.3	1.1	2.0	2.6	2.9	3.0	3.8	4.2	4.3	3.6	2.5	1.6	4.3	0.5	2.1
14	2.0	3.6	5.2	3.7	1.7	2.7	2.9	3.0	3.1	2.7	3.1	3.0	2.4	3.3	5.0	5.8	6.6	5.0	5.5	6.0	3.8	6.2	4.4	3.4	6.6	1.7	3.9
15	2.9	4.0	3.7	4.1	3.8	3.0	3.7	2.7	3.3	3.0	3.8	3.6	2.9	5.3	6.3	6.0	6.9	7.4	6.1	5.7	5.8	5.5	5.0	4.7	7.4	2.7	4.5
16	5.0	4.0	3.5	1.4	1.9	1.5	2.3	4.4	3.0	1.9	1.0	1.0	3.1	4.0	2.5	4.4	5.2	3.2	5.4	5.1	4.2	3.5	1.8	1.1	5.4	1.0	3.1
17	1.1	1.5	1.6	1.4	1.6	0.8	1.0	0.9	1.4	2.0	4.2	4.1	4.0	3.9	4.6	4.9	4.7	4.5	5.7	6.4	7.3	6.8	4.9	3.9	7.3	0.8	3.5
18	3.7	1.6	3.5	2.3	1.7	3.1	2.8	3.5	4.4	5.2	5.1	6.1	6.0	5.6	6.4	6.3	6.8	6.4	5.6	4.6	4.1	4.2	4.0	2.6	6.8	1.6	4.4
19	2.1	2.2	2.2	1.7	1.9	2.0	2.5	2.7	3.1	3.4	3.6	2.8	3.3	2.5	5.5	5.3	4.8	4.2	4.5	5.0	3.9	3.8	3.1	4.2	5.5	1.7	3.3
20	3.8	2.6	3.4	1.6	2.6	2.9	1.5	0.8	1.8	3.6	3.0	3.9	5.0	6.4	7.9	7.8	8.7	8.7	8.8	9.7	10.4	11.3	9.7	6.8	11.3	0.8	5.5
21	7.2	4.1	5.2	3.3	4.1	4.8	3.4	4.0	3.7	2.4	2.5	1.4	1.2	2.4	2.6	1.9	2.3	2.6	4.6	5.1	5.1	4.6	2.8	1.6	7.2	1.2	3.5
22	1.3	2.0	2.0	2.8	3.1	3.5	2.9	4.6	4.3	4.4	3.8	5.6	5.9	6.7	7.1	7.6	9.0	10.2	11.1	11.9	11.4	10.7	9.4	7.7	11.9	1.3	6.2
23	7.1	6.0	6.0	6.8	5.6	4.2	5.6	5.9	8.6	10.4	9.9	9.3	9.1	8.5	8.0	6.9	6.2	6.4	6.6	8.2	7.5	7.3	5.3	4.2	10.4	4.2	7.1
24	3.7	3.8	4.1	7.1	8.3	7.8	8.2	8.3	11.6	12.4	12.7	13.7	13.2	12.5	13.2	13.5	12.3	11.2	12.1	12.4	12.7	12.8	12.3	12.0	13.7	3.7	10.5
25	10.8	10.6	10.2	10.9	13.4	13.4	13.0	11.9	14.4	14.9	16.0	16.1	18.1	18.1	16.0	18.1	19.5	17.4	15.5	12.3	12.5	10.9	9.9	9.8	19.5	9.8	13.9
26	8.3	7.1	7.2	5.0	4.5	3.1	3.8	5.7	5.2	4.9	7.4	6.8	5.6	5.9	4.8	2.3	3.2	4.7	3.8	2.9	2.3	3.0	2.7	1.2	8.3	1.2	4.6
27	1.7	1.3	1.1	1.5	0.7	1.0	1.5	3.7	5.9	6.0	7.2	7.3	7.3	7.8	8.2	7.4	6.6	7.7	6.9	6.7	7.5	6.7	3.9	3.9	8.2	0.7	5.0
28	4.8	4.7	4.3	3.0	2.2	1.1	1.8	3.2	4.2	5.2	5.3	5.4	5.9	6.2	5.8	6.6	5.0	6.2	6.1	5.3	6.2	7.3	6.2	4.0	7.3	1.1	4.8
29	4.1	4.2	4.9	4.4	1.4	1.0	2.8	1.1	1.3	1.8	3.7	4.9	5.2	6.1	6.7	7.5	8.1	8.5	8.8	8.9	8.8	7.4	6.2	6.2	8.9	1.0	5.2
30	6.7	5.5	4.7	5.2	5.5	4.3	2.2	1.3	1.1	0.8	1.5	1.7	1.1	1.9	2.0	3.6	3.2	1.9	3.6	4.0	2.4	1.9	1.4	1.5	6.7	0.8	2.9
Max.	**10.8**	**10.6**	**10.2**	**11.6**	**13.4**	**13.4**	**13.0**	**12.3**	**14.4**	**14.9**	**18.0**	**17.4**	**18.1**	**18.1**	**17.8**	**18.5**	**19.5**	**17.4**	**15.5**	**12.4**	**12.7**	**12.8**	**12.3**	**12.0**	**19.5**		
Min.	**1.0**	**1.2**	**0.8**	**0.9**	**0.7**	**0.5**	**1.0**	**0.8**	**1.1**	**0.8**	**1.0**	**1.0**	**1.1**	**1.1**	**2.0**	**1.9**	**2.3**	**1.9**	**2.2**	**1.8**	**2.3**	**1.6**	**1.3**	**1.1**		**0.5**	
Avg.	**4.4**	**4.3**	**4.6**	**4.7**	**4.3**	**4.1**	**4.3**	**4.4**	**4.8**	**5.1**	**5.5**	**5.8**	**5.9**	**6.2**	**6.6**	**6.9**	**7.0**	**7.1**	**7.1**	**7.0**	**6.6**	**6.2**	**5.1**	**4.3**			**5.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.7	0.4	2.1	1.8	1.3	0.5	2.2	4.5	3.4	2.4	4.5	6.0	7.2	9.3	12.0	12.1	12.4	13.0	12.7	12.2	11.7	10.6	10.8	10.5	13.0	0.4	6.8
2	10.2	12.2	11.5	11.1	11.8	10.4	11.0	11.0	12.4	11.7	9.8	13.8	9.5	11.5	10.9	11.4	8.5	8.7	8.0	7.7	8.9	8.9	7.8	5.8	13.8	5.8	10.2
3	4.8	5.7	6.8	8.9	8.4	8.9	8.7	9.7	12.3	9.2	5.9	5.1	5.2	5.1	6.5	8.0	8.5	6.2	4.6	2.8	2.4	2.7	2.3	2.5	12.3	2.3	6.3
4	2.2	3.8	1.8	1.7	3.3	3.8	2.8	0.8	0.6	1.1	1.7	2.5	2.7	2.7	4.3	3.7	3.8	4.0	5.1	4.1	4.3	3.1	1.9	0.5	5.1	0.5	2.8
5	0.8	0.9	1.8	1.1	0.9	1.9	1.3	1.1	1.1	1.1	3.1	2.0	1.9	2.9	6.1	5.7	3.7	3.1	2.7	2.8	4.0	2.8	1.8	1.9	6.1	0.8	2.4
6	2.3	2.0	3.0	2.2	1.5	0.9	1.8	2.7	3.2	3.0	4.1	4.5	5.8	7.4	5.7	6.8	6.1	6.2	6.4	7.3	6.8	6.8	6.1	5.3	7.4	0.9	4.5
7	5.6	5.9	6.5	5.8	4.8	3.6	3.8	5.9	9.7	8.8	10.4	9.3	7.4	6.7	6.3	6.9	6.6	5.5	5.3	5.6	5.6	4.6	3.7	3.3	10.4	3.3	6.2
8	3.5	2.7	1.9	1.2	0.8	0.9	1.6	1.6	1.1	1.3	2.4	3.2	3.5	3.2	4.3	4.2	3.8	3.1	4.1	5.3	4.8	3.9	3.8	4.2	5.3	0.8	2.9
9	4.7	5.1	5.2	5.3	5.3	5.3	5.2	4.9	5.8	7.1	6.6	8.0	8.2	8.0	8.1	8.8	9.7	11.8	13.0	13.1	12.2	10.7	11.3	11.8	13.1	4.7	8.1
10	10.5	7.8	6.6	4.1	5.0	7.4	8.8	6.9	8.6	8.8	7.9	7.9	6.7	6.5	5.7	6.0	6.9	7.4	7.3	8.2	7.6	7.4	7.5	7.8	10.5	4.1	7.3
11	7.0	4.9	3.2	3.0	2.9	3.1	2.6	3.1	4.5	5.9	5.6	5.1	4.8	5.0	5.4	6.6	6.8	6.9	7.3	6.9	7.3	7.6	6.4	4.3	7.6	2.6	5.3
12	5.4	4.8	2.8	2.4	3.0	3.4	5.2	5.9	8.3	10.9	13.1	13.5	13.4	14.3	14.3	13.5	13.3	14.6	12.0	10.8	10.3	11.0	9.9	10.1	14.6	2.4	9.4
13	10.1	9.7	9.2	9.2	9.8	8.5	7.6	7.0	6.2	7.0	6.5	5.7	5.5	5.7	5.0	4.3	4.8	4.6	4.4	3.9	3.2	2.5	2.1	2.2	10.1	2.1	6.0
14	1.5	0.7	0.3	0.4	1.0	0.7	1.0	0.6	1.3	2.2	2.8	3.2	3.5	3.6	3.2	4.4	3.4	4.0	4.4	4.8	4.5	4.6	4.8	5.1	5.1	0.3	2.7
15	5.2	5.6	5.3	4.9	2.7	3.4	2.6	2.5	2.3	3.1	4.7	5.9	6.1	6.8	8.2	9.5	8.6	8.4	8.1	6.6	6.3	6.6	5.5	8.4	9.5	2.3	5.7
16	11.2	12.1	12.2	11.1	12.2	12.1	11.0	11.5	13.3	13.3	14.8	14.9	16.6	17.1	19.0	18.2	17.0	17.2	16.8	16.1	14.5	13.1	11.6	11.2	19.0	11.0	14.1
17	8.8	8.3	8.0	8.9	9.2	9.5	8.0	6.6	6.5	7.3	8.6	6.8	7.3	7.0	7.9	7.3	7.6	6.8	9.5	7.8	8.5	8.1	9.3	10.3	10.3	6.5	8.1
18	8.5	7.2	5.9	4.3	5.0	5.2	4.0	4.3	3.7	2.8	3.7	4.8	4.6	4.2	4.1	2.9	3.4	5.4	3.8	5.4	4.6	4.2	2.5	1.2	8.5	1.2	4.4
19	2.4	1.3	2.4	3.1	3.0	6.8	6.6	5.8	6.5	6.7	6.5	9.0	8.4	7.4	9.3	9.1	7.9	9.1	10.0	9.6	9.1	7.3	5.8	1.2	10.0	1.2	6.4
20	2.2	3.1	1.9	1.8	2.8	3.6	4.5	5.3	7.5	5.6	6.3	7.2	8.3	9.0	9.5	9.5	9.2	9.4	8.4	6.3	6.7	4.1	4.9	6.2	9.5	1.8	6.0
21	8.4	10.2	9.7	9.4	8.9	8.3	7.7	8.7	7.7	6.5	5.3	4.7	4.0	4.2	3.3	3.2	3.9	4.8	5.4	3.7	4.3	7.7	8.0	7.6	10.2	3.2	6.5
22	7.1	6.1	6.3	6.8	4.6	1.7	2.5	1.8	2.1	0.9	2.1	3.6	2.9	3.1	3.7	3.6	2.5	1.8	0.8	1.1	2.7	1.5	1.8	2.0	7.1	0.8	3.0
23	2.4	3.6	4.4	2.9	3.1	1.8	2.0	3.3	4.9	6.2	6.5	5.9	6.0	6.2	6.3	6.1	5.0	5.3	5.9	5.7	4.9	3.7	3.9	3.1	6.5	1.8	4.5
24	1.8	2.2	2.2	0.8	2.9	4.6	5.2	5.5	5.9	8.1	6.7	7.3	7.7	8.1	8.7	9.8	8.4	7.4	7.0	8.1	9.0	10.2	13.8	15.8	15.8	0.8	7.0
25	14.2	13.3	12.0	9.9	10.6	6.3	3.7	7.5	9.3	10.6	10.4	11.7	11.9	11.9	9.9	10.1	9.3	8.3	8.1	8.5	8.2	7.8	7.3	8.7	14.2	3.7	9.6
26	9.4	7.6	6.4	4.0	6.2	7.1	7.3	7.7	7.8	6.3	5.2	5.7	5.9	4.7	3.0	3.3	3.7	3.5	4.2	3.3	4.0	4.7	3.8	4.7	9.4	3.0	5.4
27	5.1	4.5	3.4	3.1	2.8	2.1	2.3	3.9	4.6	3.6	4.2	3.1	2.6	2.7	3.4	4.0	4.8	4.6	5.0	4.7	5.1	3.3	1.9	0.6	5.1	0.6	3.6
28	0.7	1.2	1.7	1.8	2.6	1.9	2.9	3.7	5.7	7.2	7.4	7.1	9.0	9.6	9.2	8.5	9.0	9.9	9.6	8.9	7.4	8.3	8.0	10.2	10.2	0.7	6.3
29	10.1	8.1	7.5	6.7	7.9	6.9	10.5	11.3	9.5	13.4	13.6	13.1	13.9	13.1	11.4	11.7	10.5	11.2	11.5	11.5	8.8	8.6	10.3	9.3	13.9	6.7	10.4
30	8.9	10.4	10.7	12.1	12.7	11.3	9.6	9.1	9.0	8.1	7.8	7.6	9.0	9.7	10.6	9.2	9.7	11.4	9.3	8.8	7.6	6.1	7.1	6.0	12.7	6.0	9.2
31	6.5	8.0	6.6	8.9	9.0	7.5	6.9	6.9	6.2	5.8	7.6	7.4	6.7	6.3	6.5	6.7	6.6	6.8	7.4	7.5	7.2	6.7	8.1	6.7	9.0	5.8	7.1
Max.	**14.2**	**13.3**	**12.2**	**12.1**	**12.7**	**12.1**	**11.0**	**11.5**	**13.3**	**13.4**	**14.8**	**14.9**	**16.6**	**17.1**	**19.0**	**18.2**	**17.0**	**17.2**	**16.8**	**16.1**	**14.5**	**13.1**	**13.8**	**15.8**	**19.0**		
Min.	**0.7**	**0.4**	**0.3**	**0.4**	**0.8**	**0.5**	**1.0**	**0.6**	**0.6**	**0.9**	**1.7**	**2.0**	**1.9**	**2.7**	**3.0**	**2.9**	**2.5**	**1.8**	**0.8**	**1.1**	**2.4**	**1.5**	**1.8**	**0.5**		**0.3**	
Avg.	**5.9**	**5.8**	**5.5**	**5.1**	**5.4**	**5.1**	**5.2**	**5.5**	**6.2**	**6.3**	**6.6**	**7.0**	**7.0**	**7.2**	**7.5**	**7.6**	**7.3**	**7.4**	**7.4**	**7.1**	**6.9**	**6.4**	**6.2**	**6.1**			**6.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	2.8	1.9	2.0	2.1	1.6	1.8	1.6	1.6	0.8	2.0	1.5	2.1	2.7	3.2	4.4	4.1	4.7	4.8	5.7	5.9	5.4	4.7	3.6	5.9	0.8	3.1
2	3.9	3.8	3.6	4.7	4.2	4.8	6.2	5.7	4.6	4.5	5.7	6.6	6.5	5.4	5.5	6.2	6.4	5.0	4.0	3.6	3.0	2.1	1.2	1.4	6.6	1.2	4.5
3	1.1	2.0	2.6	3.8	6.1	7.1	5.5	3.7	5.6	5.2	4.6	4.5	5.5	5.4	4.4	5.1	5.7	6.5	7.1	7.0	7.9	7.0	7.3	6.6	7.9	1.1	5.3
4	6.3	5.8	4.8	4.7	4.6	5.0	4.5	4.8	5.7	5.2	5.1	5.0	5.4	5.5	5.0	4.8	4.8	4.8	6.1	7.2	6.3	4.1	3.1	3.0	7.2	3.0	5.1
5	3.2	2.4	2.5	1.5	1.2	0.9	0.7	0.4	0.5	2.5	4.6	5.2	5.5	6.9	6.5	6.1	6.0	6.5	7.3	7.7	7.5	7.3	6.8	6.6	7.7	0.4	4.4
6	7.0	8.0	7.4	8.1	7.8	6.3	5.5	5.4	6.1	7.5	6.8	7.1	9.2	9.4	9.9	9.7	9.6	10.5	8.9	6.4	7.2	8.0	7.9	7.0	10.5	5.4	7.8
7	5.8	7.0	6.1	8.2	7.9	4.4	5.5	8.0	8.3	8.2	9.4	8.1	7.8	7.3	7.6	8.1	8.0	7.5	8.4	8.8	8.1	9.4	9.8	8.4	9.8	4.4	7.8
8	7.1	6.7	5.4	8.2	7.9	8.1	8.0	8.8	7.6	7.3	5.8	7.6	7.9	6.6	5.0	5.1	4.7	4.5	4.7	5.5	6.3	7.9	9.6	7.2	9.6	4.5	6.8
9	7.5	8.5	7.5	5.9	5.8	4.8	6.5	7.0	9.0	9.3	9.4	10.8	10.2	9.7	9.6	7.8	8.5	7.9	8.2	7.7	7.2	6.9	5.4	4.9	10.8	4.8	7.8
10	4.9	3.3	2.1	2.6	3.3	3.6	3.0	2.6	1.8	2.5	2.6	2.8	2.5	3.4	4.4	4.1	3.0	5.7	5.6	5.2	5.0	5.3	3.4	4.2	5.7	1.8	3.6
11	4.5	2.7	1.8	1.2	1.0	4.1	4.4	4.3	4.1	5.4	6.8	7.9	7.1	7.0	7.1	7.9	8.0	7.5	7.3	5.6	3.1	1.6	1.6	1.9	8.0	1.0	4.7
12	1.4	1.8	2.5	5.7	6.3	6.5	5.9	5.1	4.3	4.7	4.7	4.3	3.3	3.8	5.6	3.4	4.7	6.3	5.2	2.1	0.8	1.0	0.9	0.8	6.5	0.8	3.8
13	1.7	2.7	5.0	7.1	4.3	1.5	0.8	0.8	0.7	0.7	1.2	2.5	3.4	3.2	2.7	4.3	3.1	4.7	5.0	3.8	4.4	3.0	1.2	1.3	7.1	0.7	2.9
14	1.3	0.4	1.2	2.2	1.9	1.7	1.3	1.3	2.3	3.9	4.5	4.4	4.5	3.8	4.8	5.2	5.9	6.8	6.4	5.6	5.4	4.1	3.8	5.1	6.8	0.4	3.7
15	5.5	6.5	5.1	3.3	3.7	2.6	3.3	3.9	3.6	3.2	3.1	2.5	1.6	1.7	1.6	2.3	2.4	2.4	2.4	2.0	1.5	1.1	0.4	0.6	6.5	0.4	2.8
16	0.5	1.9	2.5	2.8	2.8	4.0	4.8	5.3	6.0	5.3	5.2	5.4	5.6	5.8	7.5	7.3	7.5	7.5	6.8	7.4	6.6	6.1	3.7	3.2	7.5	0.5	5.1
17	2.2	3.0	4.0	4.1	4.6	5.6	6.4	5.9	5.6	5.9	5.9	7.5	7.3	7.5	8.1	9.5	10.9	11.3	9.5	9.1	8.2	8.0	10.5	9.1	11.3	2.2	7.1
18	8.3	6.1	7.3	5.8	5.1	3.5	2.3	4.5	5.0	2.8	4.5	4.7	4.1	3.4	2.2	2.8	3.1	2.4	1.7	3.1	1.9	2.3	1.0	2.0	8.3	1.0	3.7
19	3.5	2.6	1.1	2.3	2.4	2.5	2.2	1.1	0.8	1.3	2.0	1.6	2.8	3.2	3.9	3.5	3.9	2.4	4.3	5.2	6.8	5.2	1.7	0.9	6.8	0.8	2.8
20	1.7	3.1	2.4	2.5	2.5	2.8	2.5	1.6	1.8	1.2	1.7	4.3	1.6	1.8	3.5	4.2	3.2	4.2	4.3	4.9	3.6	2.3	2.2	1.7	4.9	1.2	2.7
21	1.6	1.2	1.7	1.1	1.2	1.3	2.8	2.8	4.0	4.6	4.3	4.6	4.5	5.1	5.7	6.1	4.8	4.8	5.9	6.4	5.8	5.5	5.2	4.9	6.4	1.1	4.0
22	4.1	3.4	1.3	1.7	1.4	1.3	1.5	2.9	2.6	2.4	2.3	1.0	1.1	1.2	2.2	1.8	1.6	1.9	2.0	4.0	3.0	1.5	2.6	4.4	4.4	1.0	2.2
23	4.5	3.7	4.4	4.5	4.6	4.5	4.5	5.5	5.1	5.4	3.5	4.6	4.4	2.6	3.8	2.7	4.7	5.3	6.1	5.1	4.5	5.0	4.5	3.5	6.1	2.6	4.5
24	1.7	0.7	0.5	1.1	1.0	1.3	2.1	1.7	1.7	4.5	5.3	4.7	6.0	5.2	4.5	4.6	3.6	2.6	1.5	2.2	0.9	0.9	3.2	5.0	6.0	0.5	2.8
25	4.3	2.3	2.0	2.1	3.6	6.4	6.4	6.5	6.4	4.7	3.3	3.0	3.4	2.8	3.5	2.1	3.1	4.6	5.7	6.4	6.3	5.4	5.5	3.8	6.5	2.0	4.3
26	3.0	2.8	2.9	2.4	3.0	3.4	3.8	5.1	4.7	4.4	5.6	6.1	6.4	6.9	7.0	7.4	7.0	5.8	5.8	6.7	6.4	4.3	3.6	4.2	7.4	2.4	4.9
27	2.2	1.6	1.2	0.5	0.8	1.6	3.1	3.8	3.4	4.5	5.4	5.0	4.5	3.5	4.5	5.4	5.9	6.2	6.2	5.1	4.9	3.9	2.7	1.8	6.2	0.5	3.6
28	2.4	1.8	2.5	2.7	2.6	1.5	0.6	0.5	2.3	2.8	4.0	4.4	4.0	3.5	4.2	5.4	5.8	5.7	3.5	6.3	7.8	9.0	8.5	7.1	9.0	0.5	4.1
29	7.6	5.8	5.4	5.6	5.1	5.4	3.9	5.6	3.0	0.8	1.9	1.6	3.4	3.8	3.9	5.8	2.4	7.6	7.9	7.4	5.1	4.3	3.5	3.4	7.9	0.8	4.6
30	2.2	1.7	1.1	0.4	1.4	0.5	1.6	1.4	0.7	0.4	0.8	0.8	1.2	2.4	2.8	3.7	4.6	5.0	5.2	4.5	4.5	5.4	8.0	11.3	11.3	0.4	3.0
31	10.6	10.1	10.2	11.5	10.2	11.6	11.8	12.4	10.6	8.0	10.3	8.6	6.3	7.1	7.5	5.7	6.5	9.2	8.7	9.1	11.2	12.8	15.4	15.0	15.4	5.7	10.0
Max.	**10.6**	**10.1**	**10.2**	**11.5**	**10.2**	**11.6**	**11.8**	**12.4**	**10.6**	**9.3**	**10.3**	**10.8**	**10.2**	**9.7**	**9.9**	**9.7**	**10.9**	**11.3**	**9.5**	**9.1**	**11.2**	**12.8**	**15.4**	**15.0**	**15.4**		
Min.	**0.5**	**0.4**	**0.5**	**0.4**	**0.8**	**0.5**	**0.6**	**0.4**	**0.5**	**0.4**	**0.8**	**0.8**	**1.1**	**1.2**	**1.6**	**1.8**	**1.6**	**1.9**	**1.5**	**2.0**	**0.8**	**0.9**	**0.4**	**0.6**		**0.4**	
Avg.	**4.0**	**3.7**	**3.5**	**3.9**	**3.9**	**3.9**	**4.0**	**4.2**	**4.2**	**4.2**	**4.6**	**4.8**	**4.8**	**4.8**	**5.1**	**5.2**	**5.3**	**5.7**	**5.7**	**5.7**	**5.4**	**5.0**	**4.8**	**4.6**			**4.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.4	13.8	12.8	10.2	10.6	11.9	10.4	10.7	5.6	6.9	5.9	5.7	5.2	4.3	6.1	6.8	5.7	6.1	5.0	4.7	7.1	7.9	7.5	6.4	13.8	4.3	7.9
2	7.9	7.8	8.5	8.6	7.4	7.9	7.4	9.1	8.8	7.9	9.8	9.3	8.7	9.8	8.9	7.9	6.6	4.1	6.9	8.6	11.8	11.7	13.7	11.7	13.7	4.1	8.8
3	11.0	10.3	10.4	10.6	9.7	9.7	9.2	7.5	7.1	5.3	2.8	2.7	4.3	4.9	4.8	4.5	4.0	3.5	4.5	4.6	5.0	4.5	5.7	5.8	11.0	2.7	6.3
4	5.2	5.6	5.8	4.9	5.4	5.2	0.6	1.0	2.1	1.4	1.4	2.0	3.5	3.3	3.1	2.7	1.8	1.6	1.8	2.5	2.7	0.7	0.8	0.5	5.8	0.5	2.7
5	1.3	1.1	0.6	1.8	1.5	1.3	1.6	2.4	2.4	2.1	1.9	2.6	2.6	2.6	3.4	3.9	3.5	3.8	3.8	2.8	1.6	1.6	1.9	3.1	3.9	0.6	2.3
6	1.9	4.2	6.2	5.3	6.0	7.7	8.0	7.5	7.5	9.3	9.8	10.4	10.5	9.7	10.4	13.0	13.0	11.3	11.2	11.4	9.8	8.2	8.5	9.8	13.0	1.9	8.8
7	10.1	10.1	11.9	11.8	6.4	9.4	9.6	10.3	9.4	8.2	8.8	11.2	8.4	5.5	4.4	4.3	6.6	7.1	6.0	4.9	5.3	5.7	6.9	8.0	11.9	4.3	7.9
8	8.0	5.7	6.1	7.1	8.5	7.3	5.8	5.0	4.4	4.2	3.7	3.7	5.7	9.9	13.1	12.2	12.5	10.7	11.0	11.4	9.0	8.3	8.0	8.3	13.1	3.7	7.9
9	8.4	8.1	8.2	5.1	6.1	4.8	5.2	7.4	7.0	6.2	7.2	7.1	6.9	7.5	9.3	9.7	10.0	8.4	7.8	9.0	6.3	5.8	7.6	5.1	10.0	4.8	7.3
10	3.3	2.9	3.9	3.2	2.1	1.4	1.6	2.7	3.2	1.5	2.3	3.4	3.3	4.2	3.5	4.2	4.7	4.4	4.2	4.2	3.0	4.6	4.3	5.0	5.0	1.4	3.4
11	6.3	5.7	5.5	5.1	4.8	3.5	1.1	2.0	2.9	4.4	4.5	5.6	5.1	5.2	5.3	3.6	4.1	4.6	4.5	5.1	6.5	7.8	9.1	9.4	9.4	1.1	5.1
12	10.3	8.7	11.9	12.5	12.8	12.3	14.2	12.6	12.4	10.9	11.7	15.6	14.6	14.7	14.7	13.8	13.4	11.5	11.6	11.9	11.6	13.1	13.8	14.2	15.6	8.7	12.7
13	13.2	13.1	14.0	16.0	13.9	15.5	15.5	15.5	15.2	14.7	16.2	16.0	16.6	15.1	13.7	13.7	12.7	11.6	10.1	10.0	9.4	7.9	8.8	9.0	16.6	7.9	13.2
14	8.3	6.8	7.7	7.8	5.1	5.0	3.8	4.3	6.7	8.3	7.4	7.5	8.6	7.5	7.0	7.3	6.8	7.4	7.3	7.1	7.0	6.9	6.3	5.7	8.6	3.8	6.8
15	4.9	5.2	6.0	6.6	5.8	5.1	6.7	6.4	7.0	7.7	8.6	8.7	9.5	8.8	9.1	10.0	10.2	9.6	9.2	7.7	6.6	5.7	5.2	3.3	10.2	3.3	7.2
16	1.7	1.3	2.6	3.0	2.8	3.9	4.6	4.7	4.0	5.2	4.3	4.2	6.6	7.3	7.6	7.6	7.0	7.1	7.7	7.0	6.9	5.5	5.4	4.7	7.7	1.3	5.1
17	3.4	2.6	3.0	3.9	5.4	4.5	4.8	4.9	2.9	1.7	1.5	1.5	2.2	3.9	4.5	5.6	7.0	8.6	8.0	7.8	6.8	5.6	5.3	7.0	8.6	1.5	4.7
18	10.7	13.2	13.9	14.4	14.6	14.6	13.3	13.6	9.6	11.0	10.1	8.3	5.1	2.5	5.3	7.2	8.0	5.3	4.3	2.1	1.5	1.9	1.4	2.1	14.6	1.4	8.1
19	4.3	4.1	6.7	6.6	6.3	6.8	7.3	7.1	5.5	4.2	4.3	4.2	4.3	5.2	5.3	8.5	7.5	7.0	9.1	7.6	5.9	4.5	3.7	4.4	9.1	3.7	5.8
20	3.9	3.6	3.1	2.9	3.7	2.8	3.4	2.5	1.5	1.6	1.1	2.3	2.7	3.3	5.2	5.3	4.8	4.6	4.4	4.8	4.8	3.1	5.0	4.4	5.3	1.1	3.5
21	3.4	2.0	1.2	0.8	1.0	1.6	1.0	2.1	2.4	3.3	3.0	4.7	3.4	3.7	4.1	5.1	5.8	6.8	7.7	7.9	7.0	7.5	6.8	5.2	7.9	0.8	4.1
22	4.8	5.0	4.8	3.6	3.4	2.9	1.6	1.9	2.1	1.9	0.9	1.3	2.0	3.0	3.2	4.0	3.4	4.3	5.5	4.6	4.8	7.0	7.6	8.3	8.3	0.9	3.8
23	8.0	7.1	6.4	5.9	8.3	8.8	8.8	7.8	7.3	7.1	8.1	8.1	7.3	8.0	7.8	10.1	9.3	9.3	7.9	8.9	8.4	7.9	5.4	5.8	10.1	5.4	7.8
24	6.9	7.4	7.3	6.5	6.3	4.3	4.0	3.8	2.3	2.9	3.7	5.3	5.5	6.4	6.5	4.9	5.5	5.2	5.1	3.5	3.6	3.4	2.0	3.2	7.4	2.0	4.8
25	3.8	4.9	4.4	2.2	2.0	2.5	2.8	6.3	4.4	3.9	0.1				0.6	2.3	2.4	1.7	2.1	2.8	1.7	1.3	2.4	1.6	6.3	0.1	2.7
26	2.4	3.1	2.9	2.9	2.9	2.9	2.6	2.3	2.9	3.0	1.8	2.1	2.5	1.9	2.1	1.3	1.8	2.5	1.3	1.6	2.2	4.3	6.0	5.7	6.0	1.3	2.7
27	7.7	8.3	9.5	8.0	9.0	9.6	11.3	10.7	10.9	10.9	13.2	14.0	13.4	12.8	11.6	13.2	13.3	11.7	10.6	11.5	12.3	10.5	11.0	8.4	14.0	7.7	11.0
28	9.3	8.6	8.1	5.7	4.8	4.1	4.2	2.4	3.4	3.5	2.9	2.6	1.8	1.1	1.7	1.7	4.0	2.5	1.6	1.6	2.7	4.7	4.6	8.2	9.3	1.1	4.0
29	8.8	8.2	4.8	4.5	4.7	4.7	4.9	5.2	4.5	4.6	5.5	6.6	7.4	6.3	5.4	5.1	4.2	6.0	5.1	2.6	1.7	1.7	2.2	2.4	8.8	1.7	4.9
30	0.8	2.2	2.7	2.7	3.2	2.8	2.5	1.5	6.6	6.5	5.7	7.9	6.6	5.7	4.2	4.6	3.7	3.7	4.1	4.5	3.2	2.2	1.8	2.1	7.9	0.8	3.8
Max.	**13.4**	**13.8**	**14.0**	**16.0**	**14.6**	**15.5**	**15.5**	**15.5**	**15.2**	**14.7**	**16.2**	**16.0**	**16.6**	**15.1**	**14.7**	**13.8**	**13.4**	**11.7**	**11.6**	**11.9**	**12.3**	**13.1**	**13.8**	**14.2**	**16.6**		
Min.	**0.8**	**1.1**	**0.6**	**0.8**	**1.0**	**1.3**	**0.6**	**1.0**	**1.5**	**1.4**	**0.1**	**1.3**	**1.8**	**1.1**	**0.6**	**1.3**	**1.8**	**1.6**	**1.3**	**1.6**	**1.5**	**0.7**	**0.8**	**0.5**		**0.1**	
Avg.	**6.4**	**6.4**	**6.7**	**6.3**	**6.2**	**6.2**	**5.9**	**6.0**	**5.7**	**5.7**	**5.6**	**6.4**	**6.3**	**6.3**	**6.4**	**6.8**	**6.8**	**6.4**	**6.3**	**6.1**	**5.9**	**5.7**	**6.0**	**6.0**			**6.2**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.1	0.6	1.0	1.3	1.7	1.5	1.9	1.6	1.3	2.6	3.4	5.0	6.3	6.8	7.1	7.2	6.2	5.0	4.5	6.8	7.2	7.5	6.9	6.6	7.5	0.6	4.2
2	4.8	1.7	1.8	2.0	2.3	2.5	1.6	2.0	2.6	2.7	1.3	1.3	0.8	1.5	1.2	2.7	4.1	5.7	4.2	3.9	6.9	8.9	7.2	4.6	8.9	0.8	3.3
3	3.5	3.8	3.6	1.3	1.1	2.0	2.5	5.9	7.8	6.5	8.3	9.1	8.2	9.0	6.6	6.2	7.9	6.9	6.0	4.6	5.9	7.2	6.0	4.1	9.1	1.1	5.6
4	3.5	3.7	3.9	3.9	3.6	3.7	3.0	4.1	4.3	3.8	3.2	3.0	0.7	1.8	1.9	3.9	3.8	3.8	2.2	2.2	2.3	2.5	2.8	2.0	4.3	0.7	3.1
5	2.8	2.7	2.4	2.1	2.8	4.1	3.3	4.0	2.5	2.3	2.8	2.2	2.0	0.5	0.7	1.4	1.4	2.3	3.1	5.0	7.1	7.2	7.2	6.9	7.2	0.5	3.3
6	6.7	6.6	5.6	5.4	4.8	3.9	4.8	4.6	5.1	3.8	3.4	4.0	4.0	4.0	3.5	3.8	3.3	3.3	4.8	7.6	8.3	8.1	7.8	7.8	8.3	3.3	5.2
7	7.6	7.0	7.2	8.4	9.0	10.1	10.0	10.9	13.5	13.2	11.9	12.5	12.3	12.0	13.1	14.3	13.0	12.8	12.8	9.8	8.9	10.0	9.8	10.0	14.3	7.0	10.8
8	10.1	7.9	10.3	11.1	8.6	8.9	8.6	9.0	10.6	6.4	3.0	7.4	6.6	6.2	6.1	5.9	7.3	6.3	5.3	5.6	4.4	4.7	6.1	7.5	11.1	3.0	7.2
9	8.7	10.0	10.6	13.8	16.0	16.6	15.4	16.7	16.5	18.4	16.9	17.3	17.3	19.4	19.8	19.7	18.9	20.5	19.5	18.8	18.0	16.1	16.9	13.3	20.5	8.7	16.5
10	13.0	12.1	9.6	7.3	7.1	6.6	6.2	2.9	1.6	1.6	1.6	1.5	3.3	5.0	5.0	5.9	8.7	7.1	5.9	7.2	7.3	7.1	7.1	8.1	13.0	1.5	6.2
11	7.9	8.6	8.9	9.1	9.4	8.9	9.6	8.7	6.1	6.6	10.3	14.1	13.4	15.1	16.0	18.1	18.3	21.0	22.6	23.5	24.1	23.8	23.6	21.0	24.1	6.1	14.5
12	21.8	22.0	20.9	19.5	21.4	22.7	22.2	21.7	19.7	18.6	15.9	16.5	19.3	20.4	20.3	18.8	18.1	11.6	12.2	9.0	9.5	8.9	8.1	7.0	22.7	7.0	16.9
13	6.0	5.7	6.6	7.0	4.2	3.2	3.8	5.1	2.9	3.9	2.6	3.2	2.5	5.5	9.4	8.8	9.3	9.3	9.0	9.4	8.9	9.0	10.4	10.6	10.6	2.5	6.5
14	10.7	11.1	12.0	14.1	14.5	12.5	6.6	6.1	3.9	5.5	5.3	5.5	7.1	7.2	6.0	6.5	7.1	5.9	5.5	5.5	3.7	2.3	3.2	4.0	14.5	2.3	7.2
15	5.9	9.3	10.2	10.6	10.7	6.5	6.8	6.8	7.2	6.3	5.1	5.3	7.2	7.2	8.7	11.1	9.6	9.7	10.4	10.8	10.1	9.0	10.3	9.4	11.1	5.1	8.5
16	8.1	7.8	8.2	8.2	8.4	8.8	8.7	8.7	9.4	8.8	9.2	8.5	7.4	7.4	7.0	5.2	5.4	6.3	5.9	5.5	5.5	4.7	3.7	1.8	9.4	1.8	7.0
17	1.7	1.4	0.8	1.2	1.4	2.0	2.1	2.8	1.8	2.6	2.0	1.7	1.4	1.8	3.2	2.4	1.0	1.8	3.2	4.1	5.3	5.2	8.9	11.2	11.2	0.8	3.0
18	12.2	11.8	12.6	11.9	14.5	12.4	12.1	11.6	12.0	10.9	8.1	9.2	9.5	9.7	8.4	5.9	6.1	7.6	8.5	9.3	7.8	8.7	8.2	8.7	14.5	5.9	9.9
19	6.3	10.9	9.6	10.2	11.8	13.2	13.2	12.4	10.0	10.6	11.1	7.7	6.8	9.1	7.6	6.9	5.9	4.7	4.3	4.5	4.9	4.5	2.6	2.7	13.2	2.6	8.0
20	2.0	0.7	0.8	0.6	1.2	1.0	2.1	0.8	1.6	2.1	1.2	1.3	2.8	4.1	3.4	3.5	2.7	1.5	2.8	1.9	2.3	1.0	1.5	1.1	4.1	0.6	1.8
21	1.6	1.2	0.9	1.6	1.6	1.6	2.8	2.4	2.3	3.6	4.3	7.1	7.0	6.1	8.6	11.1	13.0	13.9	13.4	13.9	14.4	15.1	15.0	15.6	15.6	0.9	7.4
22	14.9	14.4	7.9	11.5	10.2	15.1	16.1	17.3	15.6	14.3	12.9	14.0	16.3	13.8	14.0	12.1	13.8	11.9	13.7	14.0	14.1	13.2	13.1	12.3	17.3	7.9	13.6
23	11.6	11.4	11.5	12.0	9.2	11.7	14.2	14.2	12.8	15.7	17.9	18.9	17.9	17.0	17.1	18.6	15.2	16.1	12.1	11.6	10.3	9.6	8.5	9.6	18.9	8.5	13.5
24	12.5	14.8	16.8	16.4	14.9	15.2	18.3	16.0	15.1	15.8	13.8	12.2	11.7	8.6	8.1	7.0	6.8	4.6	2.1	2.7	1.3	0.8	2.2	3.1	18.3	0.8	10.0
25	5.5	7.9	8.8	9.0	8.3	9.3	8.0	7.9	8.8	8.1	8.3	8.2	8.8	8.6	7.0	6.0	4.9	6.3	6.3	6.8	5.8	5.1	6.9	8.4	9.3	4.9	7.5
26	9.1	9.3	10.5	11.2	12.7	13.0	12.8	13.5	14.4	13.5	14.2	14.5	13.6	13.4	14.1	14.4	15.6	12.8	8.4	9.6	7.9	14.2	20.4	21.0	21.0	7.9	13.1
27	21.2	20.2	16.9	13.8	17.9	18.2	18.5	16.2	14.9	16.6	17.1	14.8	11.1	8.6	12.3	11.8	9.7	5.0	6.3	7.0	8.2	6.5	5.0	3.2	21.2	3.2	12.5
28	3.2	2.9	2.5	1.8	1.4	0.6	2.5	4.2	5.9	6.2	5.5	5.4	5.1	4.7	3.8	3.8	2.8	2.7	1.9	1.9	3.5	1.9	2.4	2.8	6.2	0.6	3.3
29	3.7	3.9	3.9	3.6	3.6	2.4	1.9	2.4	1.8	1.0	1.0	1.9	2.1	3.0	4.4	3.8	5.8	5.8	4.8	6.9	8.5	8.8	8.6	7.5	8.8	1.0	4.2
30	7.3	7.2	7.0	5.9	5.8	5.2	4.8	5.5	4.5	4.1	3.3	3.2	2.1	1.9	1.4	2.0	2.0	1.6	1.3	2.2	1.6	1.3	1.0	1.0	7.3	1.0	3.5
31	1.1	1.8	1.9	2.6	2.2	1.3	0.9	0.7	0.7	0.8	0.6	0.8	1.1	0.6	0.8	2.5	1.9	2.6	3.7	3.2	2.1	0.5	1.8	2.1	3.7	0.5	1.6
Max.	**21.8**	**22.0**	**20.9**	**19.5**	**21.4**	**22.7**	**22.2**	**21.7**	**19.7**	**18.6**	**17.9**	**18.9**	**19.3**	**20.4**	**20.3**	**19.7**	**18.9**	**21.0**	**22.6**	**23.5**	**24.1**	**23.8**	**23.6**	**21.0**	**24.1**		
Min.	**1.1**	**0.6**	**0.8**	**0.6**	**1.1**	**0.6**	**0.9**	**0.7**	**0.7**	**0.8**	**0.6**	**0.8**	**0.7**	**0.5**	**0.7**	**1.4**	**1.0**	**1.5**	**1.3**	**1.9**	**1.3**	**0.5**	**1.0**	**1.0**		**0.5**	
Avg.	**7.6**	**7.8**	**7.6**	**7.7**	**7.8**	**7.9**	**7.9**	**8.0**	**7.7**	**7.6**	**7.3**	**7.6**	**7.6**	**7.7**	**7.9**	**8.1**	**8.0**	**7.6**	**7.3**	**7.6**	**7.6**	**7.5**	**7.8**	**7.6**			**7.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.1	3.7	2.7	1.3	1.8	4.9	3.7	2.8	3.9	3.4	4.1	4.0	2.9	7.1	7.1	5.8	6.3	4.3	4.7	8.5	13.2	11.4	13.2	12.7	13.2	1.3	5.7
2	14.4	13.0	12.8	13.4	10.7	10.0	10.4	12.0	13.6	14.5	15.6	16.6	16.6	14.6	14.7	16.2	19.0	18.5	18.3	18.7	20.5	19.6	19.1	18.4	20.5	10.0	15.5
3	20.5	20.2	18.2	15.9	17.1	13.2	12.0	12.9	14.5	14.6	12.2	11.6	11.2	10.0	10.7	7.5	8.4	10.3	6.6	5.8	11.8	13.6	14.1	13.9	20.5	5.8	12.8
4	13.8	14.8	15.5	17.4	18.5	13.3	8.6	11.4	12.3	11.9	9.4	9.2	8.1	7.1	7.8	6.8	7.1	6.9	7.0	6.4	5.9	6.4	5.7	5.9	18.5	5.7	9.9
5	5.7	6.6	6.8	6.3	5.0	6.0	7.2	6.9	7.2	6.3	5.0	5.8	4.7	5.2	5.3	5.2	5.5	5.9	6.3	5.5	5.9	5.8	5.9	5.7	7.2	4.7	5.9
6	5.8	5.6	5.6	6.0	6.7	7.9	7.8	8.3	8.0	7.4	8.4	7.2	7.2	3.4	5.2	5.5	5.8	4.7	3.5	6.5	6.3	8.0	7.3	10.6	10.6	3.4	6.6
7	11.3	11.9	10.5	10.8	10.9	10.6	11.3	8.7	7.0	6.1	5.8	6.7	4.4	2.7	4.0	3.5	2.1	0.8	0.8	1.3	1.9	2.7	3.6	2.1	11.9	0.8	5.9
8	1.7	2.0	1.5	1.4	2.0	3.1	3.8	4.3	4.7	5.6	6.5	7.4	9.1	10.0	9.7	8.1	9.0	10.2	11.6	12.3	14.0	14.5	14.9	12.8	14.9	1.4	7.5
9	14.4	15.6	17.5	16.3	16.1	16.0	16.0	14.9	11.9	10.0	9.0	7.6	7.8	11.4	12.1	11.9	11.4	8.6	6.6	13.1	16.3	10.4	9.2	9.2	17.5	6.6	12.2
10	9.7	9.0	9.2	8.4	6.9	7.7	8.4	11.9	12.3	12.3	13.6	3.1	1.2	1.6	1.1	1.6	6.2	8.5	6.0	4.8	8.6	11.4	10.5	8.7	13.6	1.1	7.6
11	7.4	7.6	8.1	8.0	8.3	8.4	8.1	7.7	6.4	6.9	5.7	3.0	2.0	1.1	0.8	0.9	0.9	1.2	2.3	2.4	2.7	2.1	3.5	2.7	8.4	0.8	4.5
12	1.0	1.1	1.8	2.2	2.8	2.6	2.6	3.1	3.4	3.2	2.8	1.6	1.8	2.0	1.9	2.1	1.4	1.2	0.4	0.5	0.5	2.1	1.9	1.9	3.4	0.4	1.9
13	2.6	2.9	3.3	3.5	4.3	5.3	6.7	7.5	8.7	8.9	8.7	9.1	8.4	6.4	5.9	6.0	6.6	4.5	5.1	5.2	3.8	3.3	3.8	3.4	9.1	2.6	5.6
14	3.9	5.6	5.5	4.6	3.5	2.6	2.4	2.9	2.7	2.8	2.1	2.2	1.7	1.4	1.9	1.8	1.3	1.1	1.3	1.3	1.5	1.4	1.8	1.7	5.6	1.1	2.5
15	2.3	4.8	3.8	3.0	4.3	4.3	3.8	3.2	3.3	4.5	6.0	6.3	7.9	7.8	9.7	10.3	11.2	10.7	9.3	10.5	9.8	8.3	10.8	9.9	11.2	2.3	6.9
16	8.4	9.1	9.3	8.4	8.4	5.4	4.7	3.7	2.2	1.4	0.6	0.8	1.1	0.5	1.4	1.5	1.7	1.0	2.0	2.2	3.1	2.8	1.5	0.8	9.3	0.5	3.4
17	0.8	2.0	3.3	3.6	4.0	3.6	3.2	3.9	2.5	2.3	3.4	2.5	3.7	4.5	4.5	4.2	8.5	8.6	8.8	11.0	11.6	11.7	12.2	11.5	12.2	0.8	5.7
18	8.7	11.3	9.5	8.6	9.9	10.2	10.6	10.5	10.4	10.7	11.0	11.5	12.1	11.7	11.2	11.1	10.7	10.9	11.1	12.4	12.8	12.4	12.7	10.8	12.8	8.6	11.0
19	9.9	10.5	9.4	10.9	10.4	11.7	14.1	14.9	16.0	16.9	18.6	19.6	19.1	19.8	19.6	18.1	17.7	17.2	18.7	20.2	19.9	18.3	17.9	19.8	20.2	9.4	16.2
20	19.9	20.7	22.9	23.4	21.8	19.8	23.8	22.1	21.9	22.9	23.8	21.8	15.7	16.8	19.3	19.3	18.4	18.3	14.4	12.8	14.2	13.7	12.1	11.9	23.8	11.9	18.8
21	12.8	11.7	9.9	8.5	9.8	9.5	8.4	8.7	9.9	8.5	7.0	6.1	7.8	7.4	6.6	4.3	5.6	5.8	4.7	4.0	4.8	6.0	6.9	5.9	12.8	4.0	7.5
22	5.3	4.2	4.4	3.3	3.3	1.5	0.9	1.3	1.8	1.5	2.2	2.0	1.2	0.8	1.4	0.8	2.3	1.0	0.5	1.1	1.8	1.6	1.7	1.3	5.3	0.5	2.0
23	0.5	0.5	0.2	0.9	1.5	1.0	1.6	1.7	1.4	1.8	0.9	0.6	1.0	1.3	3.6	1.9	2.8	5.7	9.7	10.1	11.2	10.9	9.7	10.6	11.2	0.2	3.8
24	11.0	12.4	12.7	14.7	13.3	12.2	12.1	12.1	15.7	17.1	14.9	14.3	14.2	13.4	14.1	15.1	13.9	12.2	10.1	6.3	6.9	10.4	9.1	7.5	17.1	6.3	12.3
25	7.1	8.3	10.5	8.6	7.6	6.3	4.8	2.3	4.8	5.4	5.5	4.5	2.7	2.5	3.2	4.9	6.0	4.1	7.3	6.3	8.5	10.2	11.2	12.1	12.1	2.3	6.4
26	9.4	11.8	14.0	10.9	9.2	8.5	9.1	6.4	7.2	7.5	8.8	5.0	10.3	10.7	13.4	14.9	15.3	13.0	11.8	12.0	10.6	11.8	11.9	9.1	15.3	5.0	10.5
27	9.3	10.3	8.7	7.0	8.4	7.6	7.4	6.9	7.8	7.7	7.7	6.3	4.2	5.6	7.5	6.0	6.7	7.6	6.9	6.9	7.7	8.3	8.1	7.9	10.3	4.2	7.4
28	7.7	9.1	9.8	11.2	11.1	10.6	11.0	11.0	10.6	10.9	8.3	8.2	9.2	9.8	10.2	10.2	10.4	10.6	10.1	10.9	10.8	9.9	9.8	9.5	11.2	7.7	10.0
29	10.3	10.1	9.9	8.0	8.3	7.8	8.1	9.1	9.7	9.7	10.6	11.7	9.4	11.4	11.7	13.8	12.6	13.5	13.4	14.0	15.7	15.2	14.6	14.3	15.7	7.8	11.4
30	12.1	10.3	13.6	14.7	14.2	11.1	8.2	4.5	9.0	13.5	13.4	14.6	15.7	13.1	6.4	13.4	10.3	11.1	13.9	12.9	8.0	7.7	9.5	13.3	15.7	4.5	11.4
Max.	**20.5**	**20.7**	**22.9**	**23.4**	**21.8**	**19.8**	**23.8**	**22.1**	**21.9**	**22.9**	**23.8**	**21.8**	**19.1**	**19.8**	**19.6**	**19.3**	**19.0**	**18.5**	**18.7**	**20.2**	**20.5**	**19.6**	**19.1**	**19.8**	**23.8**		
Min.	**0.5**	**0.5**	**0.2**	**0.9**	**1.5**	**1.0**	**0.9**	**1.3**	**1.4**	**1.4**	**0.6**	**0.6**	**1.0**	**0.5**	**0.8**	**0.8**	**0.9**	**0.8**	**0.4**	**0.5**	**0.5**	**1.4**	**1.5**	**0.8**		**0.2**	
Avg.	**8.4**	**8.9**	**9.0**	**8.7**	**8.7**	**8.1**	**8.0**	**7.9**	**8.4**	**8.5**	**8.4**	**7.7**	**7.4**	**7.4**	**7.7**	**7.8**	**8.2**	**7.9**	**7.8**	**8.2**	**9.0**	**9.1**	**9.1**	**8.9**			**8.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Speed (RMYoung) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.5	4.9	6.0	5.9	5.6	6.4	6.8	6.3	6.1	5.9	5.4	4.5	5.0	4.9	4.7	3.6	3.0	3.4	2.4	3.5	2.8	1.9	2.9	3.2	12.5	1.9	4.9
2	5.3	2.4	4.0	3.6	1.3	7.3	7.4	7.3	8.6	8.9	10.5	12.7	13.8	13.5	13.3	13.5	13.9	15.3	16.0	14.6	13.2	16.2	18.0	17.3	18.0	1.3	10.8
3	15.7	16.1	17.6	17.5	16.8	17.7	17.0	14.8	15.1	17.3	19.7	20.9	18.6	20.1	20.4	21.1	22.1	21.9	20.2	16.2	19.7	20.0	19.4	18.3	22.1	14.8	18.5
4	16.5	14.0	12.4	8.8	10.9	12.4	12.1	11.1	12.2	11.9	12.7	13.5	14.7	15.0	14.8	13.2	12.8	11.4	9.3	7.9	8.9	9.8	10.4	10.3	16.5	7.9	12.0
5	11.5	11.3	10.6	12.3	11.8	10.3	11.0	12.0	12.3	11.7	12.5	11.5	12.1	12.1	10.8	9.1	7.7	8.0	6.6	5.5	5.8	7.9	8.1	6.8	12.5	5.5	10.0
6	5.6	6.3	8.2	9.1	7.9	8.6	9.5	8.9	9.0	8.7	7.0	6.1	4.1	2.3	2.1	1.7	3.3	1.6	1.2	1.7	2.5	1.9	2.4	3.8	9.5	1.2	5.1
7	3.9	5.0	4.9	6.7	7.3	7.2	8.0	7.1	7.6	6.0	7.7	6.3	7.5	7.1	6.8	5.5	5.3	5.7	3.6	3.8	4.5	4.5	4.3	3.8	8.0	3.6	5.8
8	3.6	3.7	6.5	8.5	7.5	8.3	7.0	8.8	12.8	12.8	12.4	10.9	11.1	16.2	18.8	19.3	17.2	15.4	14.1	10.8	10.8	14.2	10.1	10.8	19.3	3.6	11.3
9	8.2	8.1	7.1	7.3	5.9	5.6	7.7	6.9	4.6	5.0	3.0	1.0	1.6	1.0	1.3	2.6	2.2	2.6	3.0	2.7	3.5	4.1	2.7	2.7	8.2	1.0	4.2
10	5.1	5.1	6.3	8.1	8.1	8.7	11.2	9.3	11.3	11.3	9.6	5.6	2.9	3.0	2.8	1.9	1.3	1.2	1.7	3.4	2.7	1.9	1.6	1.9	11.3	1.2	5.3
11	2.4	3.0	2.8	2.7	3.3	1.3	1.6	1.2	0.7	0.5	1.1	1.3	2.7	2.4	3.9	4.8	8.6	11.5	10.0	10.7	8.0	7.1	7.8	8.8	11.5	0.5	4.5
12	8.4	7.3	3.8	1.7	3.2	2.0	2.4	1.5	4.1	1.6	1.3	1.7	2.2	2.5	2.8	2.8	2.9	3.0	3.2	5.5	9.0	12.6	13.4	14.3	14.3	1.3	4.7
13	14.1	14.1	14.5	13.5	14.6	7.2	3.3	5.2	8.3	8.2	10.0	8.2	4.8	3.2	4.2	7.1	6.8	5.7	4.5	4.1	2.7	2.2	2.0	3.8	14.6	2.0	7.2
14	4.0	3.8	3.0	1.3	2.7	3.0	2.1	3.0	3.9	5.5	5.0	5.3	4.7	4.8	6.0	9.4	10.5	9.4	7.7	11.9	15.0	16.0	12.6	12.8	16.0	1.3	6.8
15	11.9	13.0	11.6	11.0	12.9	12.4	12.2	9.2	8.3	8.4	7.6	4.1	2.2	4.7	5.2	3.5	2.4	2.2	1.8	3.3	2.9	3.2	4.1	5.1	13.0	1.8	6.8
16	5.5	4.8	4.8	3.9	2.1	1.5	2.6	2.4	2.0	2.2	2.2	4.8	5.3	5.6	5.5	7.0	5.9	3.9	4.5	5.1	5.3	6.4	7.0	8.5	8.5	1.5	4.5
17	12.2	14.6	12.9	12.0	15.3	15.1	17.7	16.5	17.2	16.3	17.1	18.1	16.3	15.2	14.6	16.2	15.9	16.5	17.1	16.3	15.3	14.4	13.2	13.2	18.1	12.0	15.4
18	14.2	14.3	13.3	13.2	14.9	16.3	17.1	17.4	16.8	18.7	16.6	15.0	15.1	16.0	17.3	17.9	19.0	17.1	17.7	16.7	16.1	16.4	17.4	16.5	19.0	13.2	16.3
19	16.9	15.9	14.8	17.4	16.5	15.1	15.8	15.6	16.1	13.1	14.6	12.9	12.7	10.3	8.5	7.7	8.5	8.0	8.7	9.9	11.8	11.8	12.6	10.6	17.4	7.7	12.7
20	8.6	8.9	8.0	8.4	7.1	7.8	7.0	7.3	9.3	10.2	10.2	9.2	6.8	7.6	8.0	8.4	6.0	4.1	2.1	0.8	1.3	1.5	3.1	3.4	10.2	0.8	6.5
21	3.3	1.8	1.2	0.7	1.4	2.3	2.4	3.5	2.2	1.6	3.2	3.2	1.8	1.4	1.4	0.9	0.9	1.5	1.3	0.8	1.3	1.1	2.0	1.8	3.5	0.7	1.8
22	2.2	0.8	2.4	3.1	3.9	8.1	9.8	9.2	10.2	8.6	8.5	9.0	4.9	4.2	4.7	6.3	5.6	5.5	7.4	9.5	10.2	10.4	10.5	11.1	11.1	0.8	6.9
23	11.7	12.3	13.1	13.5	13.1	12.4	10.7	8.5	2.9	12.5	12.0	12.3	11.7	12.2	13.4	12.1	13.1	12.9	11.5	12.6	14.5	16.5	16.5	13.4	16.5	2.9	12.3
24	15.5	15.1	14.6	13.9	12.9	7.6	3.0	3.8	2.0	2.5	3.1	3.0	2.9	3.3	4.1	4.6	5.5	2.3	1.7	2.4	2.2	2.4	4.9	3.4	15.5	1.7	5.7
25	5.7	9.6	12.8	10.9	14.9	13.9	15.5	15.5	17.1	15.0	12.1	13.0	16.1	17.0	14.5	11.3	9.9	14.8	18.7	21.1	21.0	19.7	18.5	20.5	21.1	5.7	15.0
26	19.9	20.4	20.8	20.1	18.5	17.1	17.5	17.1	19.8	19.0	17.0	15.7	16.2	14.9	15.9	16.7	17.9	18.7	18.7	19.2	18.2	18.4	15.8	18.0	20.8	14.9	18.0
27	17.1	14.0	20.0	23.5	22.9	25.3	19.6	20.3	22.4	20.6	21.9	23.0	22.6	20.7	18.9	20.1	18.9	14.6	17.8	21.0	24.1	22.1	19.2	15.6	25.3	14.0	20.3
28	17.7	19.1	19.7	19.5	20.6	17.3	18.2	18.5	17.5	14.8	12.1	14.3	15.6	8.2	11.2	12.2	11.6	11.8	11.6	9.7	8.6	8.4	8.3	8.3	20.6	8.2	13.9
29	8.0	7.9	8.1	9.9	11.0	10.5	9.1	10.0	10.3	10.5	9.7	9.5	8.9	8.1	9.1	7.8	7.0	7.8	9.1	10.2	10.9	10.5	10.1	7.4	11.0	7.0	9.2
30	7.3	8.0	9.0	8.1	7.5	8.1	10.0	9.8	10.8	12.8	11.0	8.7	8.9	9.7	10.9	10.8	10.2	10.4	10.2	9.5	11.2	11.5	11.3	10.8	12.8	7.3	9.9
31	9.9	10.3	8.8	8.6	8.2	7.2	8.1	11.3	12.5	11.5	12.4	14.1	13.9	11.9	12.6	12.4	14.6	10.6	8.1	7.9	11.2	11.7	10.0	9.9	14.6	7.2	10.7
Max.	**19.9**	**20.4**	**20.8**	**23.5**	**22.9**	**25.3**	**19.6**	**20.3**	**22.4**	**20.6**	**21.9**	**23.0**	**22.6**	**20.7**	**20.4**	**21.1**	**22.1**	**21.9**	**20.2**	**21.1**	**24.1**	**22.1**	**19.4**	**20.5**	**25.3**		
Min.	**2.2**	**0.8**	**1.2**	**0.7**	**1.3**	**1.3**	**1.6**	**1.2**	**0.7**	**0.5**	**1.1**	**1.0**	**1.6**	**1.0**	**1.3**	**0.9**	**0.9**	**1.2**	**1.2**	**0.8**	**1.3**	**1.1**	**1.6**	**1.8**		**0.5**	
Avg.	**9.8**	**9.5**	**9.8**	**9.8**	**10.0**	**9.8**	**9.8**	**9.7**	**10.1**	**10.1**	**10.0**	**9.7**	**9.3**	**9.0**	**9.3**	**9.4**	**9.4**	**9.0**	**8.8**	**9.0**	**9.5**	**9.9**	**9.7**	**9.5**			**9.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	15.9	20.6	21.7	22.8	23.4	24.1	25.0	29.3	26.3	24.3	22.5	27.8	27.2	25.8	24.3	21.5	23.5	21.2	17.2	18.6	16.1	20.8	17.6	22.1
2	13.0	19.8	19.6	14.8	15.6	16.5	16.0	17.3	13.2	19.1	14.4	19.1	24.4	14.3	21.5	17.5	18.5	18.8	19.9	31.2	24.2	13.8	8.8	6.2
3	20.7	19.3	21.8	15.7	21.0	17.2	23.1	25.4	24.7	20.0	17.6	21.2	13.2	18.6	2.7	5.8	6.9	357.0	356.0	19.4	7.0	10.6	10.3	6.5
4	2.5	12.5	347.8	6.2	7.9	9.7	1.6	7.1	12.9	14.1	10.3	15.4	15.7	15.7	11.1	7.7	8.2	9.3	8.6	2.1	1.9	6.6	9.4	4.0
5	6.1	14.2	7.2	359.7	1.9	358.9	355.5	356.0	4.1	357.0	1.3	1.5	0.7	2.3	355.5	346.4	353.7	350.0	347.6	347.0	350.8	348.2	355.7	350.0
6	355.8	350.7	348.3	347.0	353.7	0.2	359.5	357.5	353.1	358.1	354.1	345.9	1.2	352.3	360.0	6.1	358.8	359.0	0.8	356.0	350.3	5.1	347.9	0.5
7	18.9	19.1	15.4	17.3	16.4	10.6	5.9	5.7	12.3	14.6	5.2	9.0	6.1	1.0	0.4	0.3	359.0	4.7	356.5	3.8	10.1	17.0	16.5	21.1
8	13.2	13.6	8.2	10.7	9.2	9.7	357.7	3.9	10.2	5.4	6.1	16.3	11.1	5.8	5.6	14.4	10.3	13.1	8.1	10.9	9.5	18.1	11.3	17.1
9	14.7	6.7	14.4	12.4	11.9	3.2	359.7	357.5	355.1	359.5	4.1	0.1	348.6	357.0	346.7	332.6	336.7	330.6	334.0	326.9	315.5	321.3	327.7	333.3
10	331.6	324.5	335.5	348.0	342.1	342.1	358.3	4.9	354.5	352.0	350.9	351.5	352.4	356.8	359.4	5.7	8.4	12.6	3.7	8.5	357.3	353.7	344.4	354.2
11	342.4	335.8	332.1	338.7	353.2	3.0	11.8	357.3	13.9	15.3	1.3	10.1	349.6	347.5	351.8	349.2	356.5	7.1	10.7	11.2	7.7	14.1	20.4	20.9
12	19.0	20.0	18.1	16.0	20.5	19.9	15.6	15.0	8.5	12.1	11.0	13.7	11.5	10.4	8.9	12.3	9.8	8.0	354.3	355.3	352.5	357.4	356.6	357.6
13	355.8	355.1	341.8	355.2	5.4	353.3	355.3	359.6	357.2	355.0	10.1	14.1	19.5	14.2	5.8	0.6	360.0	8.9	356.3	0.9	14.8	14.1	15.2	19.3
14	20.4	8.6	26.3	2.4	17.8	28.7	27.5	43.7	111.2	121.7	104.7	101.7	99.8	102.0	100.7	103.9	105.4	104.3	105.1	103.0	99.4	112.4	124.0	123.3
15	116.6	108.4	111.8	120.0	130.4	137.2	132.8	134.0	129.1	120.9	120.9	121.2	131.4	129.7	119.8	124.6	125.9	126.7	123.3	118.5	130.6	133.5	126.4	133.8
16	134.5	193.3	291.6	301.1	152.3	163.4	160.4	181.8	263.4	277.5	173.8	186.8	238.8	220.8	211.7	193.9	150.8	112.7	90.1	95.4	102.8	54.1	48.4	82.4
17	84.9	85.2	98.1	93.8	97.5	99.4	96.9	93.0	89.2	94.4	92.7	91.9	80.6	89.6	90.7	96.2	99.1	101.9	123.7	140.9	136.3	128.1	136.4	140.1
18	144.2	121.5	125.3	151.1	131.3	119.6	119.3	113.5	120.5	126.6	118.5	124.7	123.2	119.6	109.3	0.0	0.0	93.0	0.0	98.1	103.8	109.2	123.6	124.0
19	134.1	132.0	122.8	118.1	119.3	120.8	113.4	118.0	129.3	123.8	121.2	119.0	120.2	118.7	120.2	114.1	120.4	123.9	116.7	114.3	113.8	119.3	122.8	125.2
20	126.3	126.9	121.5	116.6	114.6	119.1	117.5	116.8	115.4	123.0	108.7	100.2	102.4	105.1	106.9	104.0	98.1	71.6	62.1	77.9	43.1	113.9	114.0	113.6
21	122.0	137.1	137.1	129.6	118.8	109.9	102.0	108.2	116.8	117.3	114.8	117.7	111.9	109.9	103.4	106.3	106.4	111.0	112.7	118.4	113.2	113.6	107.1	118.1
22	129.1	147.5	180.5	174.2	167.7	175.1	179.2	177.0	170.2	173.7	209.1	222.2	227.4	223.4	222.3	231.5	233.4	226.7	215.8	198.5	149.8	27.3	356.5	329.7
23	332.7	326.0	338.9	330.6	329.2	338.9	336.8	340.3	336.9	342.0	337.5	339.0	335.6	328.4	339.8	345.1	350.8	346.1	347.5	14.1	8.5	14.9	16.1	18.0
24	15.9	13.8	23.7	16.5	24.4	32.0	358.1	104.4	98.9	102.6	107.4	109.0	112.7	112.4	112.7	114.0	117.0	116.0	115.8	114.4	119.4	120.3	127.4	129.3
25	129.6	140.1	51.1	343.4	262.0	261.9	265.8	268.1	269.9	290.1	289.7	293.4	295.1	295.0	293.1	293.9	294.7	302.8	314.9	336.3	354.3	350.7	358.9	1.2
26	9.1	12.2	8.2	11.4	20.1	10.6	8.0	13.6	11.3	18.1	29.8	20.5	22.4	26.1	21.8	24.4	15.7	348.9	1.2	330.4	90.6	112.5	112.6	122.6
27	122.0	124.0	123.6	124.4	128.9	131.6	130.8	129.5	117.4	111.2	108.1	110.7	107.9	105.4	103.6	103.1	104.6	105.1	105.0	105.3	106.1	107.8	112.6	113.6
28	115.4	119.7	123.5	127.1	128.8	135.5	143.2	136.7	127.9	125.1	122.5	124.3	120.9	113.1	110.2	100.1	66.8	291.4	291.7	291.7	231.7	261.4	6.5	334.6
29	356.6	292.7	258.7	256.6	299.5	302.7	263.2	257.7	288.3	317.2	26.8	29.6	329.4	311.4	20.2	11.3	26.9	23.9	21.8	21.9	35.7	23.5	26.1	14.5
30	27.3	15.0	22.4	25.2	13.6	22.6	13.1	352.0	356.9	5.4	7.8	10.0	17.5	27.4	20.9	9.8	5.4	23.3	6.3	347.5	350.0	349.4	352.2	3.1
31	3.6	10.9	8.0	9.6	7.1	5.5	351.4	351.0	4.1	1.7	14.7	212.7	267.9	222.6	243.9	268.2	288.4	355.4	220.5	209.6	308.8	332.5	329.4	12.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	29.6	28.7	27.9	20.2	26.4	27.1	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	26.7	23.0	21.7	23.3
2	20.5	21.9	24.6	27.1	18.8	12.4	14.2	17.9	14.1	17.2	17.2	11.7	358.8	10.0	352.1	9.1	357.0	346.2	341.7	340.5	351.5	0.8	2.7	7.8
3	358.0	16.9	357.5	5.5	8.9	2.4	4.3	4.2	354.2	1.1	6.6	9.6	24.9	33.1	27.2	17.9	23.7	27.0	24.3	19.8	23.6	21.3	24.4	23.1
4	20.5	18.0	21.8	21.8	23.7	21.9	24.5	23.6	23.6	24.5	25.5	24.0	24.0	25.0	25.8	24.4	13.7	14.0	17.5	16.8	17.6	15.8	13.5	11.4
5	14.4	18.1	15.0	16.4	19.7	16.2	23.1	20.4	18.3	10.4	17.1	6.7	17.1	21.4	12.9	17.0	22.7	23.6	24.4	22.9	13.4	15.6	22.0	22.0
6	20.8	22.5	23.6	25.4	27.1	26.4	25.2	27.1	18.1	19.1	17.1	10.7	19.3	17.9	9.4	11.5	9.5	20.8	15.7	17.4	10.7	8.5	14.6	18.1
7	15.5	12.6	13.6	19.0	17.1	11.6	14.5	10.0	8.5	359.3	359.8	9.7	24.1	23.8	347.1	358.7	9.2	21.0	26.3	28.0	22.4	15.7	14.0	17.8
8	24.3	23.1	24.6	25.4	41.2	62.0	33.9	69.0	43.8	71.3	47.5	88.4	79.1	77.1	66.2	68.9	77.4	77.2	66.7	69.6	71.7	43.1	37.4	38.7
9	44.5	45.7	41.6	43.7	41.7	42.5	35.7	43.2	45.3	59.9	60.4	20.0	17.6	10.2	14.0	10.5	13.6	12.9	13.7	12.0	15.2	18.8	20.2	19.3
10	18.8	19.5	17.7	18.2	16.0	15.4	16.1	18.4	19.5	22.3	26.7	31.2	29.7	25.0	25.2	22.9	28.9	27.2	32.2	28.7	28.5	28.3	27.0	26.6
11	43.7	93.0	116.4	124.6	121.3	133.9	149.5	203.0	205.3	222.1	218.7	225.2	184.7	161.3	210.8	161.7	154.0	205.6	218.1	177.8	284.9	233.2	222.2	223.4
12	233.0	242.4	248.2	234.5	219.3	268.6	354.9	14.6	5.7	7.5	4.5	9.0	11.6	6.8	27.9	280.2	69.1	18.6	19.7	16.8	19.9	24.8	27.9	38.3
13	101.3	100.7	118.8	101.4	91.8	94.5	92.0	92.8	95.1	96.8	99.1	102.2	101.8	102.0	102.5	106.2	106.7	107.7	102.8	102.7	104.6	100.3	103.2	104.7
14	103.6	101.4	101.4	107.9	111.6	112.8	114.7	217.4	249.1	239.5	239.6	235.6	237.2	236.1	231.9	233.7	234.1	228.2	227.3	221.3	225.5	252.3	254.3	259.9
15	257.8	264.0	257.3	261.1	258.8	265.1	281.8	284.9	257.6	263.3	254.7	1.0	6.0	14.7	18.1	8.4	358.8	1.5	19.3	19.0	43.1	53.5	97.5	112.0
16	101.9	103.1	104.2	101.8	103.7	99.6	96.6	92.0	76.4	72.7	71.1	75.9	69.8	68.4	74.2	77.9	78.4	102.1	148.4	139.4	129.9	133.4	135.9	138.3
17	121.4	132.4	126.5	114.0	110.2	100.9	98.4	94.8	89.6	69.3	55.1	46.5	51.7	58.8	41.1	45.4	81.2	106.0	107.4	111.3	112.0	117.0	118.3	119.2
18	110.3	106.2	105.8	102.0	102.9	105.3	104.6	104.9	109.7	115.9	112.0	111.2	112.7	112.7	112.8	109.8	116.7	119.0	118.6	112.3	112.5	120.9	115.9	114.0
19	94.4	103.0	87.6	40.6	11.9	33.5	36.1	37.0	28.8	28.3	44.8	38.4	34.5	38.9	36.9	49.1	40.7	40.7	46.6	56.4	73.5	94.0	87.4	96.3
20	104.9	111.8	109.3	110.8	112.9	114.9	120.7	123.0	120.9	108.9	106.8	102.9	98.4	90.1	104.1	96.8	84.4	45.7	43.0	45.2	44.1	45.0	44.6	43.0
21	47.3	46.8	46.5	43.5	45.2	44.8	43.3	40.0	45.4	40.0	41.9	44.7	43.9	49.5	55.7	48.1	45.2	98.5	93.2	45.4	83.3	14.6	28.2	51.8
22	49.8	52.5	85.7	92.2	107.7	98.1	96.7	54.7	67.5	72.8	78.6	76.5	84.1	96.6	102.1	111.2	125.7	112.6	112.6	116.6	113.1	111.9	107.4	112.1
23	115.9	125.0	118.3	92.0	36.8	52.7	45.2	23.1	43.0	7.7	25.3	47.7	356.1	17.4	12.5	21.7	15.4	10.2	18.9	22.1	13.9	12.7	20.1	23.7
24	21.0	14.2	10.8	7.7	15.2	12.4	8.7	20.4	16.4	13.9	15.2	11.7	13.7	13.7	20.2	18.4	14.8	11.8	8.1	0.0	355.4	2.6	10.7	5.8
25	2.5	8.7	10.3	7.6	358.6	5.3	8.2	13.3	18.5	24.8	26.2	32.2	23.6	21.7	23.0	19.5	13.3	49.5	38.8	35.3	47.8	69.3	68.1	74.2
26	74.8	79.4	75.1	74.9	60.2	57.5	51.5	61.1	29.2	15.9	10.5	10.4	8.0	13.7	17.3	18.8	14.7	17.1	18.2	23.1	26.4	26.7	25.3	21.9
27	22.3	20.8	18.6	14.8	16.8	20.7	24.8	25.1	24.9	24.9	25.7	26.6	19.1	20.8	21.7	34.1	25.2	29.3	350.0	44.9	42.6	41.3	43.9	44.7
28	38.8	39.8	40.3	46.3	44.1	43.6	45.4	49.6	49.9	40.3	21.5	24.8	18.7	13.8	10.9	20.0	10.5	15.5	14.6	16.3	17.4	14.9	15.9	14.2
29	17.1	17.0	18.0	19.8	21.2	15.0	14.4	17.0	16.7	19.6	21.8	19.6	15.2	21.2	20.1	20.0	19.2	20.7	11.3	18.1	11.8	12.2	26.6	25.2

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	27.1	25.4	25.4	19.7	14.7	25.9	22.3	26.2	29.5	33.0	25.4	26.8	89.6	88.6	86.7	91.0	91.6	79.5	65.1	63.1	71.2	70.0	67.9	69.6
2	78.6	82.9	89.9	93.5	92.6	94.8	105.4	115.1	125.1	131.5	131.3	134.8	130.4	132.3	130.9	139.3	146.3	124.1	132.2	127.4	112.3	111.4	100.6	105.7
3	126.7	129.7	127.7	125.7	109.0	114.2	116.4	113.9	111.7	112.4	111.5	107.7	110.1	113.3	112.5	116.0	121.7	122.9	123.7	122.4	116.1	119.4	115.5	107.6
4	107.9	105.0	103.3	113.1	105.1	104.8	109.2	108.5	110.9	110.4	107.5	107.0	108.2	113.5	114.2	114.8	113.9	111.7	107.9	104.0	101.1	101.9	99.5	98.9
5	99.3	91.0	98.1	102.8	89.8	89.8	89.4	93.4	93.5	92.0	92.5	95.7	96.0	98.7	101.1	104.2	105.4	106.8	116.9	116.9	111.3	117.1	117.1	113.8
6	114.2	116.6	120.3	121.8	120.6	113.1	110.1	110.9	110.1	110.5	113.6	116.5	116.5	115.2	115.3	106.6	115.0	115.3	100.5	100.3	40.3	31.3	45.9	41.7
7	34.2	20.3	23.5	14.3	28.0	21.2	14.9	300.0	8.6	354.2	9.6	8.9	6.9	9.4	352.8	242.1	253.3	251.9	263.3	248.2	226.7	222.5	219.0	236.0
8	226.9	211.5	209.7	172.8	144.7	130.0	112.5	111.4	107.2	97.2	91.8	96.1	92.7	79.8	62.3	39.7	34.5	44.2	39.4	42.3	43.3	40.4	39.9	35.9
9	36.8	40.4	26.6	22.4	15.5	17.1	21.4	29.2	14.4	18.7	19.0	19.8	28.9	5.5	21.3	21.5	15.9	0.4	17.7	19.6	12.6	14.1	15.5	27.2
10	328.1	251.4	248.0	233.7	244.7	245.8	254.4	256.4	242.1	246.5	246.6	239.8	233.6	244.4	247.7	252.2	261.4	247.1	254.7	242.8	251.2	255.1	249.6	257.9
11	257.7	256.8	252.2	248.0	248.9	249.3	252.8	248.3	258.6	241.3	229.2	245.4	252.1	242.5	267.9	258.9	287.5	334.5	355.7	346.0	0.2	3.9	334.2	275.2
12	304.9	14.3	9.3	12.6	16.6	13.8	9.7	20.9	24.1	21.0	13.9	4.8	4.5	10.7	10.2	3.6	358.0	350.6	353.4	340.3	353.6	339.0	321.5	324.0
13	329.3	336.2	346.8	341.3	334.6	331.3	341.8	349.5	345.0	344.1	351.6	354.5	358.9	351.7	340.8	341.3	351.7	351.8	345.2	334.2	11.2	6.9	13.0	22.6
14	21.9	21.1	21.6	26.4	28.6	23.4	25.3	28.1	26.2	28.0	30.6	27.8	28.4	29.6	21.9	26.9	95.0	107.7	103.1	102.2	103.0	110.3	118.1	114.2
15	113.8	111.8	107.0	102.2	103.2	98.6	105.2	106.4	108.7	114.1	115.8	111.5	112.3	107.7	111.2	112.3	111.5	108.1	107.4	104.5	105.2	103.1	97.7	98.4
16	96.3	90.1	93.9	88.0	82.1	83.5	74.4	80.6	62.8	115.4	118.3	139.4	254.3	236.6	185.3	302.9	301.8	324.4	357.1	351.3	13.5	14.0	14.7	17.9
17	12.2	12.3	15.7	19.4	9.7	7.1	10.0	16.3	17.8	15.1	3.8	11.6	13.6	52.9	165.6	163.6	192.9	212.8	223.2	220.9	210.3	201.8	206.7	218.5
18	234.2	239.0	341.1	356.0	1.5	6.0	1.1	5.6	358.5	346.7	350.0	352.9	354.6	6.6	358.9	341.1	337.7	348.2	347.0	348.6	356.2	2.8	6.4	0.0
19	357.5	351.5	355.4	11.1	5.6	358.4	0.3	2.0	354.8	351.9	352.6	350.9	349.3	352.3	350.1	351.9	350.6	351.0	356.7	350.9	346.6	344.2	339.4	341.5
20	346.4	346.3	343.0	350.8	352.4	6.0	15.4	18.0	16.5	11.6	15.7	28.3	18.0	122.2	26.0	308.1	322.8	358.3	13.5	3.1	4.4	20.9	17.4	22.6
21	19.0	18.8	18.8	22.5	18.3	338.4	107.8	45.1	345.0	3.4	12.7	19.8	353.4	15.3	29.0	24.1	27.1	24.9	21.2	25.4	24.2	28.2	27.0	26.4
22	22.1	19.5	18.5	24.1	27.6	25.8	21.4	16.4	22.0	14.3	18.5	24.1	24.9	25.5	27.1	25.3	20.9	15.4	11.6	20.6	27.2	19.0	13.9	51.3
23	15.1	21.4	31.7	12.2	19.7	7.4	12.7	9.2	12.3	10.9	9.7	9.7	16.9	4.2	349.6	335.7	333.6	331.9	333.7	336.0	339.0	339.2	355.6	7.3
24	7.1	4.0	11.8	19.9	20.7	23.1	23.9	21.7	27.7	19.8	9.9	15.8	24.1	13.2	20.6	344.4	326.2	246.6	287.5	12.5	18.8	359.9	6.7	24.7
25	9.5	102.7	102.3	118.4	122.0	156.9	199.5	8.2	248.9	176.7	14.7	31.9	248.2	285.4	7.7	356.5	14.2	357.8	347.7	356.5	3.1	5.2	15.3	12.4
26	20.8	19.7	2.9	3.9	19.1	9.4	4.4	13.3	14.7	13.3	14.1	16.9	358.2	354.2	304.3	339.4	314.4	271.3	267.6	271.0	2.8	355.4	353.8	13.4
27	12.8	347.2	283.2	276.6	264.3	289.9	298.8	353.5	322.7	277.4	268.3	311.1	292.3	269.1	335.0	316.0	325.7	321.3	323.0	337.7	357.0	10.5	358.9	8.5
28	10.3	11.5	10.0	3.3	11.1	8.9	14.8	19.6	7.2	29.7	24.3	46.5	64.7	36.3	9.2	21.7	26.2	21.3	19.6	7.6	345.0	7.4	60.5	137.1
29	127.3	165.2	147.6	134.8	139.2	135.8	128.8	130.8	114.4	116.9	112.8	112.1	115.2	114.6	116.4	114.1	110.6	107.0	108.8	108.6	109.6	110.1	110.5	106.4
30	105.6	105.9	106.8	107.6	108.9	108.8	108.5	108.8	111.1	111.4	112.9	112.7	112.3	114.4	115.2	113.6	113.6	112.8	114.5	112.0	112.5	116.6	119.7	122.6
31	119.6	123.9	126.0	121.7	119.6	113.5	120.2	115.9	119.0	119.0	113.9	117.9	116.3	116.7	115.9	118.1	115.7	115.4	114.7	114.3	109.8	113.5	112.2	110.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	109.8	109.2	111.3	112.6	113.1	120.1	119.1	116.0	116.0	118.6	119.3	120.3	118.9	116.7	112.7	111.5	112.1	113.7	116.0	129.9	130.9	144.7	172.6	215.2
2	265.7	240.2	266.1	254.7	250.8	236.5	239.6	258.0	228.0	164.3	217.4	188.9	165.9	198.4	192.8	150.5	118.0	126.7	131.7	150.4	128.5	125.7	141.3	136.6
3	136.2	133.0	142.2	140.7	148.5	156.8	147.3	140.9	128.3	135.4	126.6	133.1	124.1	117.6	116.9	116.2	115.2	115.5	113.8	110.1	112.7	107.9	111.6	112.5
4	113.0	108.8	112.6	111.7	107.9	108.0	105.8	108.9	111.8	113.5	118.0	121.1	123.0	127.9	127.6	134.0	144.5	147.3	146.6	163.7	199.1	222.0	233.1	236.8
5	249.6	282.2	339.0	330.5	330.6	313.6	309.1	310.3	323.0	344.2	4.9	9.5	284.3	264.8	268.0	293.4	272.7	319.5	322.1	331.9	329.4	329.9	324.8	328.5
6	328.5	321.2	329.8	339.6	342.0	349.4	357.2	11.8	2.8	8.4	358.2	8.1	352.6	348.1	331.8	342.0	340.6	339.0	347.9	358.1	0.5	357.8	2.7	7.0
7	0.5	7.2	8.7	18.1	1.2	358.5	5.1	5.9	8.5	3.7	356.5	354.7	347.9	337.4	329.5	333.7	311.4	313.9	314.3	324.1	333.4	5.5	10.1	2.6
8	10.8	348.6	6.2	21.5	20.6	26.3	25.6	12.8	52.0	131.6	155.9	45.8	68.6	119.9	122.5	197.3	250.2	220.7	273.5	273.1	265.6	294.9	323.4	10.2
9	339.0	340.8	338.4	339.1	358.4	6.9	355.3	357.5	351.2	3.3	23.4	29.0	29.2	292.4	297.6	308.3	310.0	325.7	321.2	323.6	319.9	323.5	321.0	322.1
10	342.5	350.8	3.6	5.7	9.7	6.0	10.8	15.6	10.9	17.9	23.6	13.5	20.6	19.7	12.6	344.2	341.8	326.9	324.8	327.3	332.1	333.8	349.7	8.7
11	359.4	7.9	16.3	9.6	16.8	12.7	1.4	358.8	8.4	18.5	24.3	18.9	10.4	351.3	347.1	338.6	334.6	345.1	337.2	333.0	330.1	339.4	334.3	357.7
12	349.4	5.6	353.7	352.2	350.8	350.4	5.4	357.4	6.7	11.9	353.2	339.0	321.4	330.8	320.0	324.1	330.0	334.6	333.7	326.1	340.3	349.5	2.0	241.6
13	287.2	122.5	125.8	117.0	118.5	121.4	123.0	129.3	137.7	131.6	129.7	130.9	157.6	154.8	205.1	223.8	222.7	215.2	209.9	210.3	207.6	229.7	236.3	236.3
14	241.6	245.3	246.1	243.6	245.8	247.6	252.0	250.3	245.1	257.4	257.3	256.2	254.2	256.2	258.9	267.5	275.9	265.0	265.3	244.8	242.8	253.7	245.3	255.2
15	250.5	345.5	45.2	31.4	32.1	19.1	22.8	21.0	18.2	9.4	12.3	1.3	3.0	357.7	359.9	351.6	349.8	350.4	353.0	349.1	343.4	286.6	358.7	111.0
16	104.0	106.1	114.9	114.6	113.6	113.8	105.9	92.9	78.3	81.8	77.6	66.9	71.1	82.1	81.7	62.9	64.1	65.2	64.9	47.5	40.9	6.4	22.2	37.9
17	22.0	30.3	35.8	26.0	44.6	86.6	114.2	112.4	74.0	23.9	17.3	25.7	23.6	17.6	20.9	15.7	18.2	18.8	15.2	21.6	6.2	0.0	0.0	0.0
18	0.0	0.0	0.0	319.3	321.4	326.2	326.2	323.4	326.7	0.0	0.0	289.0	275.7	301.8	0.0	305.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	274.1	252.8	242.5	251.3	247.5	252.3	256.9	247.9	258.3	262.7	277.1	276.3	268.5	265.3	297.2	285.6	285.8	284.5	283.1	290.7	275.3	278.5
20	276.0	265.4	201.0	193.2	192.4	235.9	142.0	112.7	196.1	248.6	250.7	293.6	289.3	316.5	196.4	230.1	257.9	283.2	259.3	284.8	289.9	315.7	309.2	296.5
21	313.1	295.3	284.5	282.8	290.0	306.3	314.1	312.3	315.0	311.8	278.6	306.6	294.3	296.5	294.9	302.3	340.1	318.6	310.1	308.8	0.0	308.8	323.6	308.1
22	311.7	0.0	334.7	328.7	0.0	299.9	303.4	307.6	51.4	286.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	354.5	351.4
23	352.9	358.4	164.2	180.2	186.8	0.0	173.8	182.7	185.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.2	72.0	77.7	74.4	76.2	74.0	79.0
24	70.0	68.5	59.7	55.5	60.2	72.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	17.4	53.8	98.8	116.5	128.5	137.7	90.8	40.1	39.2	181.0	157.6	97.5	92.0	74.7	97.2	119.7	120.3	134.2	117.6	126.0	122.1	115.2	138.6
26	146.4	136.3	156.6	212.5	331.7	138.4	198.1	299.8	273.8	195.6	182.3	147.8	110.5	39.8	74.2	264.4	79.9	51.2	36.6	15.6	357.1	267.1	143.1	180.7
27	40.4	17.4	75.9	271.0	71.8	60.8	115.4	177.1	170.8	12.5	53.6	65.8	66.1	74.6	63.3	104.9	230.0	301.6	223.7	119.8	143.2	193.9	202.6	206.6
28	189.8	189.7	189.6	193.3	201.4	193.3	0.0	187.4	180.0	170.5	0.0	0.0	87.0	87.5	95.9	0.0	138.3	140.9	141.8	140.4	0.0	136.2	133.4	0.0
29	145.1	146.4	187.6	204.4	191.2	191.0	205.7	221.5	227.1	228.4	239.1	242.8	239.0	220.9	197.0	197.9	196.5	195.1	199.4	200.8	297.5	264.9	238.2	263.6
30	310.3	140.4	268.4	275.5	277.5	278.0	271.4	267.9	268.0	273.6	26.8	24.8	7.9	7.2	12.1	13.1	10.7	12.6	3.5	6.2	357.0	13.7	18.2	21.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	25.7	24.4	22.6	25.1	27.8	26.0	23.9	24.5	23.1	19.2	20.6	14.5	14.8	359.6	349.1	1.8	357.4	0.5	354.8	352.0	347.8	347.2	341.1	336.8
2	348.7	12.7	3.5	8.7	7.2	13.1	1.3	1.3	7.9	10.6	13.5	13.0	15.3	69.9	154.2	296.3	299.2	253.6	180.5	196.4	300.2	317.4	160.2	102.0
3	68.3	111.1	127.6	120.4	124.0	123.0	121.4	121.1	99.2	60.2	82.5	87.8	95.9	106.3	97.3	113.6	145.6	123.4	25.3	31.6	88.4	108.4	93.8	42.6
4	56.2	65.3	52.1	56.2	58.0	49.4	55.0	71.7	76.0	77.3	72.3	72.7	77.2	35.5	32.5	88.3	77.3	131.8	272.4	270.8	204.6	249.7	261.1	327.2
5	325.2	4.8	11.8	10.3	11.8	9.4	6.3	358.6	16.6	17.8	98.5	140.8	222.7	242.6	212.9	115.6	144.6	134.7	140.9	142.5	179.4	138.7	146.3	250.0
6	259.5	115.8	111.0	114.3	98.9	107.7	118.4	106.8	99.4	102.7	107.8	110.7	119.6	115.6	111.5	106.9	113.7	110.9	109.1	109.3	109.9	111.9	107.0	108.3
7	109.0	109.7	107.0	106.2	107.9	108.1	105.6	103.1	103.3	102.2	102.6	104.8	106.0	105.4	106.4	108.6	104.1	100.5	105.9	108.9	110.8	103.4	91.9	92.3
8	96.1	99.6	99.6	95.9	96.4	97.0	99.1	95.6	103.6	101.4	102.6	100.4	103.6	103.9	104.0	104.8	106.2	109.1	108.3	108.1	104.4	100.3	97.9	102.3
9	98.1	96.6	101.3	99.3	99.9	98.7	101.6	101.4	101.5	111.4	107.6	101.9	105.8	112.7	105.9	113.8	125.1	153.1	167.2	193.2	238.4	272.5	255.4	324.5
10	234.0	244.1	340.6	289.9	353.7	325.0	338.3	349.2	328.7	12.3	12.0	53.0	247.8	245.7	244.7	243.5	231.9	233.3	224.4	203.7	148.4	123.2	94.7	99.5
11	112.3	97.4	97.1	99.8	94.5	93.6	94.8	95.4	94.9	101.1	107.4	100.5	100.0	100.2	96.9	102.7	102.4	100.8	102.8	101.0	98.1	92.6	97.7	98.4
12	97.8	101.6	100.6	97.2	97.3	94.7	80.4	16.4	27.7	44.3	62.7	183.1	169.4	42.0	49.4	38.3	175.0	43.0	177.1	28.6	23.2	155.7	171.2	171.6
13	175.3	198.0	27.7	145.2	207.6	168.1	214.8	205.1	204.1	32.9	188.5	27.4	31.6	43.7	83.0	45.4	59.8	52.0	208.1	105.2	39.1	28.7	20.8	147.2
14	10.4	207.0	178.5	124.6	114.4	255.9	317.9	313.2	317.7	315.6	305.1	296.8	297.1	300.8	313.1	316.6	314.0	326.8	323.5	336.3	322.8	326.0	328.5	0.0
15	182.2	161.6	169.3	163.1	189.1	256.6	0.0	0.0	222.2	226.2	223.6	227.0	238.7	252.5	263.5	267.2	261.8	194.6	143.2	121.7	128.5	135.1	131.3	153.1
16	172.8	178.1	168.4	178.6	213.5	153.5	90.2	59.7	61.8	86.1	89.5	102.2	116.1	116.4	120.3	126.7	127.1	136.3	130.3	142.5	155.4	165.9	175.7	313.7
17	356.4	9.4	0.4	1.3	359.1	10.1	7.4	2.1	8.4	13.2	13.0	6.2	355.4	1.2	31.7	23.5	28.3	195.4	200.8	149.3	132.3	141.3	133.1	120.7
18	113.6	100.4	116.9	117.6	117.4	123.5	139.6	132.3	140.0	129.9	112.2	112.8	139.8	144.7	157.0	161.7	129.8	116.5	114.4	118.9	131.6	143.0	142.3	117.7
19	117.0	120.0	146.0	241.9	290.9	73.9	116.6	30.1	14.5	15.9	339.9	336.5	332.7	304.8	304.5	313.4	295.3	310.7	311.3	308.6	313.4	322.9	331.0	345.4
20	11.5	9.6	0.9	6.8	6.6	4.2	8.1	11.2	17.9	16.5	32.4	5.9	21.1	35.6	28.6	175.8	212.0	246.5	184.9	156.7	205.9	211.8	195.8	258.3
21	54.7	130.1	109.1	114.1	270.1	245.7	262.7	345.1	154.0	138.8	208.5	116.7	137.1	165.6	169.9	195.2	218.8	201.9	196.9	214.8	230.7	238.5	253.7	272.1
22	261.1	253.5	262.1	249.7	246.3	259.0	351.5	307.5	280.9	3.9	17.5	19.0	17.9	41.2	119.4	116.1	124.0	130.1	119.8	115.9	98.6	96.0	99.7	99.1
23	99.9	102.5	99.5	99.4	95.6	96.6	104.6	94.6	98.6	100.5	95.4	93.1	101.7	103.8	103.6	106.6	106.3	107.9	112.7	111.8	111.5	114.1	116.6	119.1
24	124.5	123.6	126.7	125.0	121.3	116.6	115.3	120.1	121.6	121.1	122.7	122.8	116.9	122.7	117.7	113.5	116.0	114.5	123.0	158.5	138.3	137.9	177.9	161.9
25	149.7	131.6	125.5	124.6	127.3	123.5	126.6	129.9	132.8	139.9	146.5	164.6	157.5	187.5	198.5	166.7	193.1	190.4	214.8	178.4	182.0	172.3	137.9	134.5
26	199.1	210.7	228.5	254.3	250.5	289.6	282.3	264.9	270.5	250.9	245.0	245.3	255.0	257.6	265.6	253.0	277.1	272.8	235.9	248.9	250.4	246.2	265.6	287.9
27	280.5	297.4	337.7	301.6	354.6	351.3	343.7	15.1	278.5	262.8	336.6	308.7	272.8	276.7	277.6	273.4	281.4	279.4	275.3	273.5	286.1	285.2	308.1	312.4
28	4.6	0.2	353.3	353.8	5.3	11.2	357.3	352.9	354.1	343.9	261.7	279.2	277.8	287.6	293.8	282.7	270.0	262.3	299.2	305.2	303.6	310.1	323.3	358.6
29	358.3	354.8	3.2	2.8	5.8	0.2	357.3	9.7	2.2	0.9	358.1	352.8	345.2	341.1	340.6	342.1	340.8	335.5	340.0	340.8	337.5	347.2	4.3	7.6
30	11.7	24.3	30.2	49.2	82.5	78.6	91.9	91.9	109.6	116.6	118.0	120.1	128.0	131.4	136.5	133.3	130.2	126.4	125.7	122.8	128.0	117.4	101.6	96.5
31	92.6	96.1	99.9	107.0	105.0	103.0	97.4	95.8	103.4	104.5	106.2	113.8	120.4	115.4	114.2	115.7	113.2	117.0	119.9	120.0	114.4	112.5	108.1	109.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	108.0	114.2	104.6	103.8	97.1	92.3	93.4	97.8	102.3	103.7	105.2	108.0	109.6	111.4	108.3	107.7	109.8	111.2	107.6	115.7	117.3	117.7	117.1	101.4
2	95.2	94.2	98.3	98.6	101.5	94.6	84.9	89.9	97.7	97.7	94.8	97.3	98.4	100.9	110.6	113.0	117.2	117.5	115.8	111.3	131.3	121.3	117.1	115.6
3	296.8	1.9	17.4	11.7	13.9	15.6	60.4	90.5	119.3	295.4	341.9	210.0	86.3	137.4	149.0	159.8	151.9	153.6	140.4	143.4	140.4	134.2	127.8	131.1
4	123.2	132.4	123.6	111.4	124.5	117.6	122.8	112.0	133.6	145.4	135.2	138.6	140.7	132.1	132.8	137.8	140.4	136.3	143.0	139.6	140.4	145.4	133.4	126.3
5	130.7	123.7	127.3	119.2	114.2	114.8	103.9	107.0	113.9	111.0	106.8	102.5	96.7	99.0	102.0	100.7	103.5	108.0	115.3	117.4	135.9	160.8	251.5	308.0
6	358.7	4.2	352.0	359.4	355.3	6.1	8.9	340.8	359.8	340.3	340.0	318.7	324.9	332.4	321.0	328.9	289.6	307.9	307.9	296.9	322.6	309.6	297.5	306.3
7	239.3	265.3	347.4	356.3	355.5	352.5	351.9	358.3	358.7	354.2	333.5	317.7	324.1	338.8	350.7	267.9	228.6	225.1	229.1	233.3	228.2	229.0	232.3	185.1
8	176.0	164.9	130.0	113.0	126.4	174.9	164.4	169.3	175.7	166.8	199.6	186.8	199.2	186.1	213.2	213.8	224.9	222.9	220.2	223.7	214.9	215.4	225.5	236.8
9	241.3	233.6	231.3	239.9	240.5	238.8	240.6	240.6	246.1	228.2	252.5	228.2	256.2	247.1	240.5	251.2	253.3	253.5	257.5	246.3	241.6	242.1	247.7	251.8
10	242.3	245.3	251.1	250.1	246.7	250.1	254.8	251.2	241.6	238.9	245.2	244.7	232.3	204.2	178.8	233.0	200.0	201.7	202.6	158.1	179.1	212.5	237.4	248.9
11	215.9	257.9	176.0	211.0	177.4	265.9	240.1	238.2	228.7	233.4	228.4	151.4	170.9	194.3	211.6	215.8	217.9	230.6	231.0	216.4	229.0	223.4	233.5	243.0
12	249.3	252.4	250.3	245.6	241.0	246.1	240.8	251.2	255.3	252.9	247.6	236.1	248.3	241.9	248.0	230.3	192.6	216.1	191.1	188.3	210.6	229.5	254.8	245.6
13	265.9	248.2	317.1	326.9	275.2	273.8	304.0	256.9	337.9	347.0	298.0	11.1	246.4	251.6	164.9	36.2	142.0	150.8	159.3	153.4	153.0	147.5	203.4	206.6
14	199.2	253.0	238.1	243.2	252.5	239.9	250.6	244.2	248.2	232.1	230.4	228.5	220.9	138.9	124.7	142.0	169.7	189.0	188.6	148.0	222.8	255.0	259.3	260.0
15	224.2	238.2	248.7	237.4	229.5	251.0	244.9	225.4	224.2	223.0	236.9	237.5	240.5	245.5	237.6	220.5	232.9	237.2	228.0	212.5	228.8	247.5	245.7	245.5
16	252.2	245.4	247.1	240.0	238.2	250.7	337.8	15.8	9.5	8.9	20.8	322.5	138.4	164.9	194.6	252.3	261.1	259.3	255.3	249.8	242.6	257.8	258.4	240.8
17	290.1	21.3	23.1	17.1	20.3	330.6	61.1	97.1	100.1	125.8	141.2	134.2	136.7	128.1	140.9	150.8	155.0	170.9	155.1	144.5	139.3	127.8	128.4	112.9
18	123.9	259.4	252.3	254.3	261.9	236.9	235.1	241.3	237.3	244.6	241.8	238.7	243.7	222.8	197.4	201.4	201.9	219.6	230.8	232.4	233.1	259.9	249.4	275.3
19	336.3	352.9	5.7	347.4	248.4	244.4	240.3	235.9	240.4	238.6	249.6	235.9	248.5	232.7	173.7	166.0	161.6	188.8	188.7	167.8	179.1	178.9	168.8	136.8
20	142.2	128.5	116.9	100.5	52.1	106.0	160.8	100.5	153.5	126.2	120.4	133.0	135.7	144.6	140.2	134.8	139.6	136.4	139.0	131.0	130.4	130.4	125.6	123.9
21	130.0	133.0	129.8	120.2	118.5	110.9	106.0	119.5	125.8	147.4	137.6	101.3	343.8	5.9	66.6	96.4	115.6	138.0	163.1	151.6	154.5	145.7	117.1	128.5
22	148.2	142.7	115.1	123.7	104.3	120.4	133.8	102.8	115.9	123.8	139.4	129.0	133.7	133.8	133.1	132.1	123.1	126.0	133.0	125.9	120.2	125.0	126.6	122.0
23	121.2	119.1	120.8	118.9	112.4	105.8	105.9	105.8	114.7	122.3	119.3	114.4	123.3	124.6	126.2	133.8	143.6	135.0	130.4	134.5	140.1	139.9	142.6	126.3
24	126.0	116.0	105.8	100.9	105.0	104.8	99.4	102.1	110.2	108.0	109.6	107.8	116.2	120.5	114.9	114.4	114.9	110.8	107.1	106.6	105.6	100.6	99.0	95.8
25	92.2	93.3	94.7	96.4	102.0	100.9	97.8	95.9	91.4	98.3	99.0	97.1	101.0	99.8	103.7	102.5	107.1	105.9	106.6	108.8	108.8	106.0	100.5	104.3
26	97.7	78.1	87.5	96.4	91.3	39.5	37.4	54.5	79.7	87.4	59.1	60.0	112.5	125.2	114.9	120.2	121.1	105.5	79.7	66.8	73.7	89.3	138.5	81.1
27	114.7	140.4	88.6	176.8	274.6	247.9	286.7	74.8	91.7	110.7	116.4	119.2	124.1	115.9	119.7	135.1	123.0	135.9	152.0	149.1	142.2	131.8	149.9	123.3
28	118.9	113.6	117.0	125.3	126.6	193.6	228.5	235.9	232.5	236.9	246.0	233.1	224.2	233.2	221.2	221.4	228.6	195.2	196.9	193.0	174.7	157.9	160.4	119.4
29	119.3	126.3	126.9	128.4	188.1	176.4	112.7	189.8	241.1	208.0	158.7	158.7	146.9	135.5	134.0	128.4	130.5	130.0	124.2	125.3	120.6	119.1	113.6	112.5
30	108.7	105.6	110.9	118.7	110.8	115.9	115.1	122.1	99.0	134.3	212.9	37.2	59.4	280.8	345.6	70.3	217.4	294.6	212.7	241.8	28.9	21.7	30.1	17.8

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	292.5	125.7	101.3	127.4	136.7	242.3	8.3	26.5	44.9	96.8	117.5	125.7	122.0	119.1	121.8	117.4	124.7	119.6	111.0	109.4	114.3	115.3	105.3	105.6
2	103.7	109.8	110.9	109.3	106.3	102.0	100.1	105.1	107.5	115.8	119.0	115.3	113.8	117.0	115.6	116.8	132.8	127.5	127.8	121.2	127.1	132.4	122.8	109.0
3	100.4	91.7	95.8	92.7	93.2	86.2	96.4	113.4	111.3	126.6	123.2	123.8	130.9	114.7	110.8	126.1	127.3	135.5	128.9	128.1	143.5	119.3	134.8	129.0
4	116.5	127.3	114.4	27.2	81.1	89.4	78.3	108.8	139.7	43.8	143.1	139.1	143.0	127.2	126.3	111.1	123.0	142.0	151.4	151.7	138.6	137.4	148.8	164.8
5	193.7	256.8	13.7	37.4	59.9	116.5	151.2	235.8	158.8	116.9	137.2	158.9	157.5	133.0	154.0	152.7	153.5	154.0	158.9	144.0	149.9	149.0	167.4	140.4
6	146.0	111.2	97.7	54.8	33.7	282.8	324.7	20.3	16.4	67.2	133.0	141.6	135.9	147.5	150.0	156.2	155.2	155.6	153.8	137.3	141.5	127.5	134.5	134.4
7	127.1	134.8	138.4	134.0	136.3	128.5	127.4	124.5	124.8	121.4	118.5	121.6	129.0	131.0	128.8	125.6	121.2	127.0	130.1	129.5	132.0	143.1	143.1	128.7
8	150.3	129.6	104.0	240.8	279.0	195.8	157.8	167.7	176.0	217.1	217.1	218.8	162.4	154.3	163.3	158.3	152.2	166.3	191.1	178.4	160.7	153.2	132.9	134.1
9	124.3	108.2	104.0	101.7	102.5	101.6	100.6	119.0	115.5	130.0	144.6	131.5	141.8	141.8	131.8	125.8	125.1	110.2	108.8	111.2	111.8	115.9	112.6	108.8
10	110.3	119.9	119.7	133.0	111.1	113.5	114.5	120.1	116.1	123.4	128.3	126.8	138.3	137.9	141.0	135.6	131.5	135.2	134.5	125.5	132.7	132.6	130.9	125.8
11	125.2	127.3	128.3	128.0	139.7	142.2	148.7	140.2	140.0	147.1	146.3	152.3	140.9	146.4	143.4	136.0	140.1	149.6	139.4	131.9	136.2	133.6	128.5	120.7
12	114.6	118.2	131.7	123.0	102.7	105.6	114.3	112.2	120.1	123.7	129.1	123.4	118.3	127.8	126.3	122.4	118.4	114.2	116.8	112.7	112.6	110.0	113.4	111.4
13	113.3	112.9	113.1	110.6	108.7	110.2	112.8	112.0	111.8	113.1	112.8	119.4	116.8	127.9	140.0	143.6	143.9	144.8	151.4	141.4	141.0	140.6	148.9	156.5
14	153.0	162.3	110.8	229.1	163.1	196.6	186.9	244.0	140.8	128.6	133.2	137.1	140.3	138.2	144.2	169.3	154.9	166.1	164.3	167.6	168.2	158.2	141.9	140.6
15	127.1	118.2	125.6	129.0	134.8	126.7	141.1	139.5	128.2	142.3	127.3	131.6	133.9	139.4	139.7	140.0	132.3	128.9	125.7	132.0	129.5	123.1	124.2	115.2
16	105.8	104.3	107.3	110.0	109.3	108.6	111.4	111.9	109.7	115.4	110.2	110.6	107.2	108.5	107.2	108.7	113.7	107.5	107.7	107.6	111.9	112.4	116.4	119.6
17	137.4	147.4	216.8	229.7	226.5	223.1	215.5	221.9	221.4	221.0	227.3	225.4	219.4	221.1	223.7	229.2	233.2	221.9	234.2	228.7	223.7	222.2	222.3	223.1
18	222.5	226.5	221.1	220.5	234.5	232.8	239.2	252.7	252.5	262.0	243.5	230.4	245.8	249.4	233.7	236.5	232.2	247.1	237.1	246.8	256.6	265.2	298.0	291.9
19	10.5	300.7	325.7	354.7	347.3	324.5	341.2	324.0	319.5	328.7	351.0	337.6	331.1	320.8	342.6	336.0	347.4	333.8	346.1	334.4	336.4	322.9	327.1	340.4
20	306.9	325.0	288.8	274.4	263.8	259.7	254.3	253.7	244.9	230.9	195.3	219.6	218.9	212.4	213.1	206.3	210.7	215.3	209.1	205.2	211.1	207.9	179.3	154.9
21	168.6	179.1	176.3	176.8	172.9	173.3	179.4	191.7	196.3	207.1	215.4	213.8	230.4	247.7	254.5	230.7	245.5	227.0	246.2	225.7	225.2	227.9	230.2	237.2
22	241.8	236.2	242.0	246.5	250.9	299.8	46.1	199.7	243.0	183.8	143.4	140.5	164.1	184.4	220.4	203.5	248.3	266.5	230.4	150.5	172.5	163.5	149.8	136.6
23	131.7	119.3	170.6	180.2	220.7	223.0	240.5	241.4	244.5	238.9	227.9	223.4	222.8	219.1	212.9	209.0	192.2	183.7	195.7	201.1	223.8	238.8	262.1	251.7
24	237.7	21.6	73.7	343.6	6.1	4.5	16.5	7.4	2.6	9.2	3.6	1.7	357.8	350.4	338.4	345.1	347.6	340.0	346.6	352.3	349.4	333.3	332.1	329.8
25	325.0	326.1	332.3	352.9	352.6	23.5	356.5	0.5	353.2	358.3	350.0	336.7	333.9	338.7	348.7	345.8	343.0	339.7	333.3	325.4	313.7	313.2	311.6	318.5
26	339.5	11.2	2.2	324.8	254.4	250.4	247.0	246.3	248.2	247.8	243.5	244.9	241.3	247.4	248.1	228.3	235.3	238.9	205.4	169.3	175.4	186.2	168.4	177.0
27	182.1	181.2	200.2	195.5	197.7	168.3	154.8	110.4	110.1	112.1	112.5	104.7	98.4	118.7	119.2	107.6	114.3	128.2	128.2	156.3	136.2	153.8	173.7	177.5
28	225.2	301.8	283.9	307.5	344.1	334.9	345.9	1.3	0.3	354.8	346.2	336.0	331.8	342.8	337.8	338.6	332.0	319.0	316.2	324.4	322.1	319.9	317.4	320.3
29	325.9	342.3	356.1	349.8	353.0	354.2	343.8	334.4	348.7	345.9	346.9	346.5	334.5	335.3	324.4	325.3	325.5	324.8	319.9	325.9	328.2	323.0	337.5	348.6
30	343.7	349.3	343.9	346.1	345.9	344.5	338.6	326.1	324.9	320.5	323.6	316.4	319.2	322.8	320.2	315.8	323.1	330.6	333.2	328.4	336.0	336.3	343.5	332.4
31	352.6	351.9	343.4	2.0	0.5	3.1	353.1	4.3	357.7	2.1	330.3	316.4	328.3	296.9	290.0	288.9	278.8	280.3	277.0	270.9	277.6	263.7	260.3	256.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	247.1	217.5	304.2	294.3	348.4	272.6	209.6	326.8	94.6	20.9	96.1	125.3	146.5	140.6	139.8	145.6	136.8	131.7	132.3	130.3	135.3	145.0	137.0	145.7
2	144.5	142.5	150.3	143.8	137.1	139.9	142.0	134.5	132.1	124.3	132.4	135.6	132.4	140.3	143.4	141.7	141.5	152.1	147.6	140.6	139.9	140.6	130.9	287.9
3	323.1	350.7	1.9	354.0	7.8	4.0	13.5	7.9	12.8	12.9	24.5	126.5	129.0	129.7	133.0	130.3	142.1	139.3	138.3	126.7	129.2	126.1	120.2	117.2
4	127.3	132.9	131.2	126.7	129.0	119.0	121.1	121.8	123.2	121.9	137.7	137.7	135.7	134.4	133.6	129.1	133.8	138.5	135.5	141.2	145.6	145.9	137.0	129.9
5	127.9	123.6	128.4	120.8	159.9	303.4	271.8	309.1	287.9	359.2	3.8	7.2	351.6	339.9	341.8	347.1	351.1	344.1	347.1	340.1	338.7	340.2	356.2	14.2
6	7.1	2.2	8.3	0.0	0.9	359.1	11.0	12.5	3.9	353.5	351.2	351.5	341.5	336.0	319.6	322.6	318.7	312.2	318.6	320.2	322.6	328.5	342.1	3.9
7	3.1	344.6	353.0	332.4	328.8	349.2	325.4	348.0	3.5	354.5	355.4	351.6	333.1	333.2	344.7	322.5	327.4	321.8	315.3	318.0	327.2	338.1	342.1	355.6
8	359.9	6.3	1.3	350.6	355.2	2.0	2.7	2.5	1.3	348.9	348.0	357.0	359.8	352.3	354.0	0.8	352.3	356.0	348.3	346.9	327.9	328.8	338.6	354.7
9	356.3	11.4	6.2	357.8	357.8	11.2	351.0	358.7	345.6	355.6	354.9	351.9	352.3	352.9	348.5	349.7	338.1	331.3	339.7	340.4	339.9	329.4	349.0	7.6
10	11.9	8.1	1.9	35.9	115.7	114.5	115.0	138.6	154.3	140.8	143.9	160.1	162.0	152.6	173.3	209.0	145.7	150.8	168.1	144.2	130.8	136.5	123.9	134.0
11	135.0	143.4	140.5	164.4	203.4	100.1	102.0	99.4	106.1	113.1	105.2	109.7	111.6	114.0	128.5	113.2	120.3	125.7	126.6	137.3	130.0	119.2	60.5	53.8
12	27.3	14.6	8.7	11.5	6.7	9.8	14.7	17.3	11.9	18.0	14.8	18.1	16.9	17.2	21.7	8.9	63.1	134.1	137.8	167.1	278.1	144.1	132.4	246.6
13	3.4	2.1	6.8	15.9	14.7	76.0	60.3	146.3	124.7	307.2	315.4	359.3	357.8	354.4	7.2	25.4	177.0	132.3	125.2	121.0	112.3	100.8	92.6	102.4
14	161.5	87.5	106.4	103.1	100.1	84.6	73.7	145.5	123.4	131.5	138.4	139.3	134.7	135.6	124.4	133.1	130.7	132.6	136.9	139.2	142.8	133.7	127.0	241.5
15	239.6	248.4	263.6	269.9	267.0	247.5	241.0	253.5	247.0	247.2	240.9	241.2	215.2	189.6	181.4	166.3	145.7	149.7	142.0	136.1	127.9	79.1	184.5	49.3
16	124.6	92.2	120.6	129.9	131.6	119.8	123.0	127.5	122.1	129.5	141.0	137.8	132.3	134.4	131.0	133.9	135.9	141.0	135.1	128.3	132.1	131.4	118.2	96.5
17	81.8	62.6	84.5	86.5	81.4	90.3	92.4	87.3	79.6	86.5	96.3	102.8	108.5	117.1	115.8	109.1	109.9	108.7	109.8	114.4	112.0	102.7	101.3	100.8
18	100.0	99.0	96.8	79.9	88.2	55.4	21.7	10.6	21.0	30.3	20.9	23.4	83.1	141.9	131.9	150.7	168.1	183.9	164.9	162.9	170.9	234.6	290.8	346.2
19	14.1	23.0	340.9	85.8	118.7	136.8	162.2	250.3	314.6	126.9	343.7	286.7	249.3	241.2	279.8	307.0	7.3	337.4	335.0	319.6	359.7	5.2	339.5	276.8
20	216.8	257.2	296.6	11.1	7.4	2.7	356.4	324.2	307.8	256.1	324.8	12.4	18.7	244.0	250.7	260.6	297.3	354.9	359.1	344.1	2.5	78.3	319.7	276.8
21	286.2	322.6	5.7	299.0	262.5	261.7	245.2	263.3	251.8	247.1	243.6	251.3	240.8	238.0	228.7	228.5	233.4	224.4	229.1	230.0	237.2	253.5	244.9	248.0
22	242.5	253.7	256.4	261.1	259.8	268.0	322.4	13.3	8.8	11.7	14.8	23.0	221.2	220.9	175.5	285.6	238.1	276.3	270.4	253.9	265.8	343.7	354.9	4.1
23	4.7	357.2	358.2	355.4	358.2	357.4	1.3	3.3	355.8	7.5	10.3	5.6	14.9	54.5	171.8	172.0	143.4	132.1	123.4	124.9	122.5	108.6	103.2	115.2
24	152.1	272.7	170.3	215.6	191.0	209.9	253.5	280.7	352.8	354.8	6.9	2.9	358.3	5.2	358.7	5.1	7.9	3.5	84.2	120.2	93.0	245.0	2.3	0.6
25	1.7	350.0	239.4	213.9	227.0	246.6	239.9	237.3	237.3	240.9	236.0	218.9	186.7	185.6	166.3	149.0	143.8	120.2	126.5	135.6	135.7	129.5	131.5	124.5
26	119.7	106.4	111.2	107.7	117.2	128.1	122.9	120.6	121.1	119.3	123.0	124.7	129.2	138.2	135.6	147.6	152.3	152.8	144.8	149.0	138.9	129.1	138.3	137.7
27	123.3	106.1	95.6	68.4	108.2	198.0	249.8	250.4	253.6	248.9	246.7	246.9	250.4	239.0	241.6	244.3	248.5	247.3	252.8	248.8	249.8	259.5	255.1	247.6
28	262.4	344.4	4.4	359.5	359.1	359.4	312.8	88.8	13.3	2.5	4.3	356.6	3.8	342.5	340.3	296.8	261.8	328.8	300.6	317.9	328.1	340.1	350.0	353.1
29	345.9	347.4	355.3	355.7	3.5	4.8	6.9	9.9	347.6	8.3	17.8	334.1	229.2	233.8	242.8	257.6	289.7	239.7	241.7	240.3	239.9	250.2	250.6	270.3
30	287.1	268.8	296.2	314.9	11.0	17.9	118.5	138.0	142.7	134.3	183.7	137.7	123.4	128.8	102.0	118.5	118.0	121.5	127.0	137.3	123.7	101.8	103.4	107.5
31	105.0	110.4	105.6	96.2	95.2	87.0	80.7	86.9	87.7	86.7	82.5	83.2	73.9	81.1	68.7	71.0	60.2	51.8	54.7	41.2	40.8	40.4	45.2	46.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	40.6	37.2	37.9	38.4	45.0	42.6	43.1	41.1	55.3	47.5	51.8	105.9	129.2	123.1	87.8	108.4	108.0	88.5	73.4	65.6	86.4	94.3	92.6	89.0
2	90.9	89.8	88.7	91.8	91.8	90.8	91.0	87.8	89.7	93.8	101.7	100.6	94.0	97.0	100.0	96.4	93.8	57.9	28.6	34.4	39.9	26.8	31.1	33.9
3	35.3	37.7	25.5	20.1	17.1	14.4	13.8	8.7	11.2	7.1	11.5	48.0	114.4	130.1	160.0	187.3	182.4	154.1	157.6	146.1	131.5	125.6	212.2	227.1
4	226.1	213.2	209.1	197.9	196.8	213.2	94.8	164.3	189.7	240.4	252.8	190.3	168.6	174.6	167.9	166.1	163.4	177.6	159.0	143.0	159.6	214.3	276.7	135.0
5	121.0	102.2	74.5	39.7	29.3	122.6	40.5	16.7	13.2	26.5	123.1	137.7	137.8	148.8	169.5	221.2	244.4	354.3	16.8	25.0	42.1	63.0	79.3	105.6
6	104.8	72.1	107.5	100.4	95.1	94.2	86.9	83.9	83.8	82.0	85.0	92.0	92.1	92.8	92.1	97.5	97.0	96.0	97.4	93.4	86.5	83.6	92.9	89.5
7	82.3	83.4	91.5	93.1	67.8	52.7	66.3	64.5	62.3	65.9	77.2	114.3	101.4	98.9	123.4	104.5	112.0	108.1	116.7	118.3	112.1	119.4	123.6	130.8
8	145.8	180.2	162.5	162.4	165.9	172.5	173.9	160.7	141.5	113.1	91.2	94.3	92.6	96.8	97.7	94.3	88.7	92.5	88.9	87.6	76.5	85.0	94.5	96.4
9	99.0	104.5	101.4	90.5	72.0	64.7	70.8	81.7	80.1	78.2	74.9	75.3	79.1	93.0	104.2	101.9	102.5	96.9	102.6	106.9	109.9	95.4	102.1	102.1
10	88.7	108.8	107.3	120.7	125.6	141.1	136.2	145.9	126.2	160.5	170.4	179.1	196.0	202.3	244.6	229.0	227.3	228.7	234.6	230.7	247.8	248.9	246.2	237.9
11	230.2	254.6	251.6	238.3	244.2	250.5	268.7	121.0	133.9	157.7	166.7	171.1	165.9	180.9	173.5	173.1	139.5	136.6	126.3	114.0	109.4	97.9	96.8	96.2
12	95.4	90.5	98.7	100.7	102.6	97.7	98.3	95.0	94.9	94.3	97.8	102.6	101.5	102.5	98.1	99.2	96.1	93.9	95.9	96.7	95.5	97.8	97.5	97.6
13	96.5	91.7	94.9	101.2	107.6	101.3	101.1	100.8	100.2	97.9	103.0	104.6	114.3	114.0	105.5	105.8	104.6	99.4	95.5	94.5	95.4	93.4	90.9	91.8
14	93.2	92.3	96.6	102.0	107.1	112.1	114.4	106.9	99.8	101.0	95.2	88.0	92.2	106.2	104.3	105.4	112.8	111.2	107.9	107.0	109.6	108.0	109.4	103.8
15	108.1	104.9	95.9	94.8	100.2	103.0	94.1	92.7	92.6	95.7	100.7	108.2	113.9	111.4	114.8	107.6	110.9	107.2	105.2	107.0	102.3	110.5	120.3	121.1
16	113.2	43.1	22.7	13.4	4.3	9.9	13.6	9.1	3.8	5.2	0.9	346.2	328.3	319.7	315.9	285.7	305.4	294.4	288.4	283.4	288.7	270.7	256.9	256.9
17	268.3	272.5	237.6	249.5	243.6	248.5	238.1	253.6	267.6	349.5	95.1	35.6	78.7	117.1	102.3	91.7	97.1	99.7	98.6	87.8	79.0	69.7	60.4	37.6
18	28.2	27.9	30.9	30.5	33.8	31.2	30.3	28.3	8.7	11.2	11.6	4.1	10.8	1.4	332.5	323.4	335.5	0.1	8.5	25.3	2.6	59.7	59.2	53.0
19	67.4	61.9	68.7	79.2	83.4	83.9	83.7	96.1	112.5	136.7	145.3	153.8	145.5	165.7	231.6	281.4	276.1	279.4	285.0	279.4	279.6	285.4	275.1	280.2
20	278.5	286.9	275.4	274.5	290.8	309.9	320.9	0.8	290.7	323.9	1.2	232.7	328.4	303.4	276.9	267.4	261.2	287.3	304.8	331.5	357.2	2.8	358.5	354.5
21	10.4	353.0	335.4	351.8	331.0	349.1	358.6	8.5	352.1	16.1	7.0	12.1	3.2	324.2	328.5	310.1	305.3	310.1	320.8	315.8	320.1	325.5	344.6	1.6
22	358.5	359.8	359.4	4.5	8.5	9.4	341.3	7.7	12.5	14.5	311.5	239.5	211.6	157.0	153.9	163.8	149.5	121.4	117.0	121.3	112.8	108.5	102.4	106.1
23	108.7	119.5	126.3	135.0	202.6	212.3	210.5	215.2	221.2	206.6	196.9	206.9	206.4	197.4	196.1	194.0	207.7	199.4	196.2	201.0	194.6	196.7	179.3	160.1
24	138.8	129.6	125.4	118.9	116.4	116.4	104.6	103.5	77.4	59.1	65.7	79.9	83.3	95.0	98.1	82.8	86.4	85.6	93.2	66.2	65.9	60.7	25.7	15.2
25	17.3	14.2	14.7	359.4	347.8	2.5	20.1	44.8	12.6	15.2	351.5				110.0	118.9	103.5	122.7	59.4	34.2	22.2	41.9	96.4	42.6
26	12.2	27.2	21.1	27.4	26.8	25.3	23.3	21.1	20.9	20.6	80.3	349.7	9.1	99.5	129.4	53.2	307.2	230.2	253.5	335.9	341.6	6.8	3.0	3.0
27	11.5	17.3	12.1	17.7	6.4	3.4	7.4	7.8	7.9	2.8	12.9	14.3	5.7	4.7	5.0	359.5	356.5	358.1	1.5	358.6	356.8	358.9	352.7	359.9
28	4.9	4.3	10.8	11.2	4.8	5.1	1.8	353.7	7.5	18.8	16.9	27.2	17.9	355.6	212.2	179.1	156.4	138.8	112.0	78.6	102.3	117.2	117.4	104.1
29	111.7	113.8	129.3	135.3	127.9	121.3	119.3	116.3	116.9	111.7	114.2	111.5	124.9	115.8	113.9	114.7	132.1	136.1	131.6	129.1	124.7	115.1	99.0	114.9
30	34.6	19.5	19.6	21.8	13.9	346.5	342.5	347.0	325.9	356.6	351.3	349.2	353.7	342.0	335.4	328.3	309.1	325.2	337.9	349.4	16.5	25.5	4.9	19.5

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	353.5	29.0	59.6	93.7	116.0	97.5	62.3	53.4	84.9	109.1	135.6	107.0	113.5	127.1	142.6	150.2	168.4	139.7	137.1	124.2	139.2	124.3	122.9	140.7
2	135.7	240.3	351.9	19.1	43.6	9.5	21.1	51.7	35.6	24.2	295.7	351.4	27.9	228.5	240.1	238.2	248.5	248.8	261.4	252.2	243.0	244.3	243.1	243.3
3	252.3	254.5	251.4	259.1	293.2	350.5	304.2	342.4	352.8	354.3	346.7	335.8	341.8	349.8	353.5	334.9	323.1	331.8	341.7	329.8	347.1	352.4	1.5	358.6
4	0.9	2.2	1.0	2.6	5.1	9.6	7.7	22.6	18.3	19.4	18.4	29.0	8.4	247.9	253.7	250.4	237.2	215.5	203.5	199.7	179.1	130.3	154.6	187.9
5	238.2	237.9	230.0	238.4	250.1	231.9	235.8	246.7	256.2	255.8	254.8	251.6	256.1	283.4	273.7	267.3	300.0	358.1	1.4	1.2	10.4	6.0	1.5	5.6
6	7.9	3.6	1.7	8.2	8.5	358.6	346.5	343.8	345.8	0.4	1.5	7.0	3.2	1.5	0.0	346.4	326.1	321.8	328.6	334.3	331.6	337.9	326.7	330.6
7	327.9	323.4	311.1	314.2	317.2	324.1	328.0	324.0	335.0	327.5	326.7	339.3	334.6	341.4	329.6	324.6	324.0	322.3	326.4	332.6	327.6	329.8	328.6	322.5
8	323.2	316.7	322.1	321.3	317.8	322.1	325.9	323.6	332.3	343.1	3.3	348.5	353.9	352.4	348.2	349.7	348.9	357.7	14.1	8.3	18.4	25.8	64.6	78.6
9	84.1	87.6	96.1	103.9	106.7	106.7	105.1	102.9	102.8	104.7	101.9	102.2	100.9	101.2	102.1	101.8	103.8	105.3	104.6	103.2	103.4	104.2	107.7	111.2
10	108.5	106.6	116.5	146.6	223.3	224.1	255.0	248.0	208.4	205.9	241.1	191.1	148.8	136.6	125.1	123.9	122.1	123.8	124.6	122.0	124.5	129.2	125.2	109.0
11	100.0	97.8	97.1	100.2	103.1	96.9	103.5	119.6	105.5	84.7	12.2	13.7	6.5	1.0	359.9	354.0	353.7	351.7	350.0	349.3	346.5	344.9	346.5	349.6
12	347.4	346.3	343.0	341.7	342.0	340.6	339.3	336.7	332.4	330.5	325.2	334.5	338.4	344.2	343.4	340.9	342.9	342.3	337.3	332.7	321.4	336.3	321.6	351.1
13	349.4	359.3	359.1	6.5	2.4	8.4	13.3	22.4	21.6	18.6	25.1	25.5	32.8	111.5	98.6	93.5	95.3	97.2	92.6	88.0	91.6	96.1	104.3	108.7
14	115.0	121.5	125.7	129.9	135.5	142.5	152.0	167.9	142.4	141.5	132.0	127.3	125.2	123.6	125.0	119.0	109.7	99.5	93.5	97.8	78.0	18.3	14.0	11.7
15	13.0	12.7	10.3	17.9	16.6	9.3	18.6	18.2	16.1	9.2	6.8	18.7	17.2	16.9	14.2	18.8	16.5	15.6	16.9	20.5	16.6	16.6	16.5	11.8
16	10.1	16.0	22.5	23.0	21.7	23.0	22.1	17.4	19.2	17.5	18.7	16.9	15.7	13.9	12.3	7.3	8.5	13.8	14.4	10.7	16.6	27.2	25.5	34.4
17	70.8	76.6	84.9	146.3	92.8	22.6	39.9	30.1	28.1	20.7	18.9	29.3	24.7	28.2	25.1	21.5	359.7	133.7	126.1	121.6	112.4	109.6	98.7	99.5
18	103.4	100.3	101.2	103.2	107.6	105.6	103.6	101.1	100.5	98.9	96.8	84.1	82.7	87.8	85.1	63.9	56.7	47.0	51.6	38.3	16.8	11.3	21.8	15.8
19	3.6	11.7	10.9	12.1	15.0	16.1	18.6	19.1	17.4	19.6	23.3	8.4	10.1	12.9	13.9	15.2	20.1	19.2	20.9	18.4	20.9	24.2	22.7	23.9
20	20.6	335.9	296.5	287.7	258.6	226.6	187.6	225.2	312.8	22.9	324.5	333.1	7.4	16.6	14.8	10.9	14.2	253.2	17.0	293.2	18.2	295.2	295.2	325.2
21	296.0	285.6	342.1	22.0	8.5	21.9	12.1	3.6	342.5	10.4	4.5	12.9	14.3	7.1	349.4	346.0	347.7	349.7	353.8	356.3	0.7	10.5	4.6	359.6
22	355.5	352.7	347.2	353.7	352.4	348.1	348.4	350.6	355.6	3.3	1.5	4.0	356.2	8.5	0.3	4.0	5.9	1.4	8.9	8.3	9.1	15.9	17.1	22.0
23	28.1	24.5	24.2	23.1	12.4	7.2	8.1	12.1	1.6	10.7	360.0	1.7	4.6	3.4	359.3	335.3	328.0	324.9	316.9	305.1	291.7	288.6	291.3	291.5
24	296.9	303.4	306.7	305.6	303.0	306.1	319.8	320.0	313.5	314.8	317.8	317.4	303.4	282.6	267.6	255.8	248.7	260.3	208.1	227.5	143.7	169.1	94.1	65.9
25	89.0	96.4	104.8	108.1	99.3	98.2	97.9	89.5	91.9	97.7	105.6	104.1	103.6	103.3	102.2	86.8	72.8	81.3	78.9	81.9	68.5	31.6	18.0	18.5
26	16.9	21.8	17.1	17.8	16.4	13.9	15.2	17.0	11.9	15.5	8.9	8.3	11.5	7.1	6.3	358.6	356.9	353.6	339.5	351.6	355.7	3.2	354.0	351.1
27	353.0	357.2	0.6	1.3	4.5	6.9	9.9	14.1	15.4	17.4	18.5	17.4	355.2	355.2	9.0	9.0	359.2	12.7	359.7	11.8	16.7	19.2	22.2	22.6
28	24.5	34.2	64.0	43.6	5.3	77.9	105.4	119.8	118.6	126.9	132.4	133.0	130.5	134.6	117.4	109.7	84.5	81.7	66.8	57.1	27.6	21.5	13.1	20.5
29	23.8	25.6	24.7	23.3	25.1	21.7	26.8	28.5	27.2	60.7	92.7	107.3	121.0	125.5	115.7	131.6	107.5	107.4	118.6	101.9	102.9	103.0	97.7	99.6
30	101.4	99.2	101.5	98.3	101.9	95.4	78.0	87.8	82.8	74.4	83.8	112.2	137.2	115.0	60.5	76.6	122.1	98.2	55.2	101.5	45.6	71.0	50.0	15.0
31	117.6	134.1	136.7	128.0	30.2	17.2	323.5	9.5	16.9	342.0	325.5	317.0	285.8	249.7	313.8	5.7	330.0	8.0	23.3	23.0	26.9	96.6	18.1	13.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	22.0	16.4	49.9	36.6	20.2	18.9	358.0	349.5	5.9	357.4	11.6	344.5	355.9	358.4	7.5	0.1	0.9	348.1	358.6	342.4	357.3	14.9	358.0	352.6
2	341.0	339.8	333.2	333.2	332.0	332.4	328.8	332.2	337.8	356.9	1.5	5.7	356.7	1.5	357.2	353.6	351.0	351.6	349.5	348.0	351.0	353.4	353.9	355.2
3	348.5	350.6	353.3	353.2	350.6	344.4	336.5	336.3	332.2	344.0	337.5	335.4	335.3	341.1	341.5	318.0	322.2	327.8	350.4	357.6	345.9	353.2	351.0	2.2
4	2.8	4.2	1.3	5.1	352.4	357.2	357.2	357.9	2.3	7.2	3.9	13.2	12.3	17.4	14.3	8.8	10.5	13.4	14.4	18.7	19.9	20.0	19.9	17.8
5	19.3	14.1	13.0	13.1	3.3	8.3	16.2	8.7	15.5	12.7	25.2	16.3	38.8	16.1	20.8	26.5	23.7	24.1	21.5	24.1	17.8	22.9	24.0	21.2
6	20.1	22.7	19.9	23.9	16.4	12.7	14.8	18.8	21.5	18.1	10.8	16.2	22.6	349.0	15.6	14.8	13.6	18.0	3.6	10.4	0.1	4.2	0.0	6.1
7	18.0	15.6	7.3	7.5	16.2	14.6	16.2	12.1	13.0	14.5	9.3	15.7	11.1	3.9	24.7	26.6	37.9	130.5	208.9	14.0	225.1	194.5	159.4	162.8
8	152.0	92.7	52.7	142.8	118.1	114.0	115.6	107.4	105.1	101.2	100.1	89.7	92.4	90.5	87.0	86.0	83.2	88.2	98.8	99.8	90.8	89.5	87.4	78.8
9	86.9	83.9	88.7	93.3	90.0	91.3	93.7	99.2	98.9	99.9	91.3	83.0	88.8	96.4	102.3	108.5	107.3	98.5	81.1	100.0	106.2	101.9	97.4	102.0
10	108.2	107.1	96.2	86.4	58.3	48.8	49.4	39.7	29.5	22.9	57.0	121.8	295.7	97.0	62.5	26.4	87.2	121.3	126.0	130.1	118.5	106.1	103.7	99.4
11	93.7	92.6	88.4	86.2	90.9	91.4	91.2	88.8	84.5	95.3	95.7	122.7	115.1	52.3	24.3	314.7	321.2	262.7	259.8	269.5	255.2	248.9	252.2	260.0
12	267.4	249.7	241.9	240.4	234.5	228.9	246.1	252.9	253.6	252.2	250.8	246.0	244.8	250.6	249.6	258.2	258.0	284.2	291.2	296.0	26.9	118.1	110.1	120.1
13	116.9	128.5	111.6	114.5	95.5	92.8	91.9	94.5	92.6	90.3	86.2	87.7	97.1	102.2	109.7	113.8	120.6	166.7	173.7	179.9	173.3	160.5	162.1	162.7
14	167.3	169.7	168.9	163.6	155.5	145.7	148.5	144.0	146.4	145.7	156.1	156.6	167.3	260.5	252.4	258.0	244.2	265.7	264.5	233.0	225.3	222.5	222.8	216.8
15	228.2	244.7	240.9	257.1	221.1	217.3	204.8	188.3	116.6	105.8	92.1	92.4	98.3	95.4	98.0	104.3	104.8	105.0	102.2	106.1	103.0	101.2	107.6	108.5
16	113.2	113.4	121.4	143.5	151.2	160.2	160.4	198.7	262.6	289.3	280.3	268.8	196.0	112.7	72.1	355.3	23.4	12.5	24.9	28.1	22.7	45.9	84.8	262.7
17	312.4	33.9	21.6	20.8	22.2	22.7	23.5	26.9	21.3	13.7	30.0	14.4	19.1	21.7	14.5	15.2	15.5	16.0	18.3	14.6	8.4	12.4	12.3	16.3
18	15.2	16.8	23.8	17.8	20.1	18.7	15.5	22.3	27.0	22.9	25.8	26.1	26.9	26.6	26.5	25.3	19.8	21.6	21.1	20.5	17.0	21.1	22.2	24.6
19	24.4	31.0	30.2	25.6	23.9	23.5	22.2	17.2	16.4	17.5	19.6	10.7	9.0	11.3	6.2	11.3	10.2	15.7	6.0	2.2	5.8	4.5	4.6	358.5
20	7.1	11.8	355.7	359.4	20.3	6.0	1.4	0.4	2.6	357.5	4.7	10.3	9.4	5.3	2.1	4.7	2.2	2.4	4.3	1.5	357.4	5.9	3.1	357.1
21	348.1	0.2	2.0	3.8	4.5	11.3	5.4	8.7	13.2	12.4	8.6	17.4	17.0	18.0	14.4	23.1	20.1	26.8	25.4	25.7	20.4	21.7	22.5	24.3
22	22.5	26.8	24.0	27.3	26.8	30.9	150.6	128.1	141.8	107.4	104.0	42.8	124.5	186.8	128.4	77.1	119.7	183.7	15.3	127.6	127.0	73.1	84.2	97.1
23	99.9	292.8	268.0	149.6	157.8	116.1	141.3	188.5	178.8	167.1	198.1	2.4	22.8	94.1	125.4	194.6	141.8	122.4	108.6	100.5	91.1	93.7	90.1	95.9
24	97.7	97.3	98.3	93.9	96.1	99.1	99.3	94.4	100.7	108.6	106.4	104.1	105.4	103.8	110.2	108.5	108.4	110.0	118.0	141.1	145.3	206.7	218.5	229.3
25	243.8	246.5	235.9	230.8	227.5	219.0	225.7	227.2	234.2	235.5	247.0	254.2	243.2	231.7	325.5	0.8	349.1	341.7	326.2	306.7	333.3	340.0	344.9	343.5
26	2.1	339.4	332.6	330.5	322.8	320.1	314.0	326.1	320.1	330.5	330.4	354.4	359.6	1.2	3.2	7.6	6.0	7.6	6.6	9.3	15.0	16.4	16.7	21.5
27	28.7	30.3	25.2	15.3	26.1	22.4	26.0	20.3	21.4	23.1	21.2	23.6	25.2	23.2	18.6	13.5	18.3	16.9	16.0	12.5	17.4	18.9	16.8	18.1
28	18.7	15.6	21.1	17.5	19.6	19.7	17.4	19.0	23.3	19.9	18.3	18.0	16.9	18.6	19.6	20.6	19.7	19.7	19.7	21.7	19.6	16.5	17.8	18.1
29	18.1	17.2	16.9	6.4	11.9	6.0	345.5	344.9	349.7	340.6	349.8	355.5	352.2	350.0	357.8	345.1	330.7	325.1	319.5	325.3	335.4	340.5	341.3	332.1
30	327.3	332.4	335.8	329.8	330.3	340.9	346.3	2.6	351.7	341.3	357.6	355.8	356.9	351.4	356.8	354.8	356.2	359.4	9.6	358.6	353.3	1.5	7.3	15.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	13.9	358.3	6.2	8.6	29.5	25.0	14.3	21.9	22.2	20.2	15.7	21.2	24.3	25.8	25.7	28.1	29.0	31.2	24.5	48.9	46.7	67.2	55.3	69.1
2	94.3	95.0	103.8	112.2	115.1	98.5	102.3	97.6	94.1	97.0	103.6	98.0	101.3	100.2	97.6	98.7	99.8	103.4	105.2	102.8	99.4	102.1	104.9	103.9
3	102.6	104.2	104.4	104.2	103.6	103.0	102.5	97.2	95.4	89.5	92.6	90.3	93.7	96.2	98.0	98.8	102.7	102.9	98.1	96.2	106.4	108.1	107.5	107.8
4	112.4	102.3	116.8	120.1	128.6	130.1	128.9	127.9	131.1	119.1	118.1	113.6	107.2	105.3	107.9	105.1	107.8	112.5	122.0	121.9	124.2	121.0	116.9	116.2
5	118.2	120.0	116.4	113.8	114.1	112.9	114.3	116.6	109.3	102.9	105.8	102.8	105.5	110.7	101.4	101.6	101.0	98.8	95.4	98.5	103.9	93.2	96.1	94.5
6	93.9	99.1	99.4	97.8	98.9	99.2	105.9	103.6	103.7	106.3	99.8	99.0	57.5	31.8	53.7	102.2	95.1	53.3	16.3	4.3	20.1	21.6	14.6	12.8
7	11.3	17.6	16.2	17.5	15.9	11.2	14.0	14.1	13.0	8.4	13.0	7.0	12.2	14.5	14.6	19.2	20.1	21.0	22.7	23.4	28.3	26.0	26.0	34.8
8	22.5	18.9	60.0	76.1	52.0	68.4	57.7	45.0	54.6	54.8	54.8	50.2	49.6	52.0	41.6	35.8	38.3	36.6	36.4	28.1	30.3	34.8	23.1	28.5
9	24.7	21.3	21.6	20.6	16.8	13.7	19.2	17.7	10.1	9.9	20.0	335.5	339.3	56.3	170.7	239.0	233.7	227.0	237.8	244.6	244.5	252.4	245.7	147.3
10	141.3	140.6	184.6	206.0	215.0	216.0	211.9	210.9	219.6	221.7	239.9	258.0	284.9	306.4	291.6	9.3	96.8	356.8	319.0	261.0	265.9	292.3	347.4	351.8
11	349.9	9.2	11.3	11.1	9.7	30.8	123.5	99.3	299.3	295.0	216.2	251.2	254.2	293.8	307.6	320.2	356.7	21.1	9.3	354.5	341.2	344.7	359.1	351.4
12	353.3	357.7	9.9	348.3	349.4	336.1	4.1	27.4	11.8	353.9	337.1	356.7	22.4	28.7	26.1	26.3	23.2	15.6	1.6	355.2	345.2	344.0	352.7	357.5
13	348.4	347.5	351.6	353.8	351.9	353.0	76.4	12.8	356.8	9.0	22.2	23.2	23.4	20.6	17.3	18.3	19.5	24.5	28.4	24.9	24.1	29.7	72.9	115.1
14	136.1	133.2	142.6	161.3	124.2	123.4	104.2	120.3	128.9	134.1	131.9	140.2	133.7	128.2	128.9	121.6	127.9	127.6	135.8	129.7	120.9	112.6	119.4	118.2
15	119.0	120.0	124.7	122.3	124.9	129.9	125.9	126.0	110.1	130.9	141.3	136.2	136.5	108.7	106.2	106.0	33.7	16.5	26.4	24.5	29.7	35.0	26.7	27.5
16	27.5	17.2	20.4	21.7	74.3	30.6	108.5	103.2	134.6	89.0	123.4	128.7	122.5	126.7	131.5	130.4	132.0	133.4	132.2	132.3	130.3	127.2	128.5	124.7
17	116.9	110.3	115.6	119.4	113.0	115.1	110.0	109.2	110.4	110.4	107.7	110.3	110.9	115.2	118.5	118.3	114.7	110.5	110.2	110.3	113.3	116.9	111.7	114.6
18	115.7	117.1	115.3	112.3	112.0	111.6	109.8	110.9	110.3	107.4	104.8	105.9	107.2	109.1	107.5	109.9	106.9	106.6	106.2	103.3	101.6	104.3	107.0	105.9
19	102.8	103.6	98.8	100.1	98.1	98.9	102.0	101.3	95.8	89.7	98.5	91.2	87.3	80.7	76.4	74.6	62.0	56.2	43.5	41.8	51.9	53.6	53.9	54.5
20	57.9	67.1	70.1	69.4	48.3	42.4	44.5	49.0	43.1	43.5	42.5	44.2	50.4	52.1	57.2	69.2	57.9	77.3	138.3	239.5	252.3	351.8	14.7	15.5
21	21.1	115.5	113.6	83.8	5.8	0.3	6.4	17.5	10.0	312.9	18.1	20.7	38.6	103.7	25.5	291.9	357.0	14.3	26.8	141.2	45.9	58.5	33.2	29.1
22	19.4	27.5	90.2	115.8	125.5	107.6	108.4	111.9	118.4	125.9	139.6	133.6	116.6	131.0	132.2	144.6	142.3	131.6	121.6	132.0	133.3	132.9	129.6	125.4
23	112.6	108.1	108.7	105.6	106.5	105.8	104.3	113.7	199.3	297.7	291.3	295.3	290.4	290.1	294.6	293.0	292.3	293.7	291.5	286.2	286.9	288.7	290.8	294.2
24	295.4	293.9	305.9	317.5	322.8	339.6	189.2	266.2	269.5	268.7	284.6	273.2	290.2	345.0	359.9	358.6	11.6	350.1	113.3	120.7	105.1	106.3	97.7	108.2
25	114.7	103.1	114.4	117.5	110.8	106.1	108.2	107.6	112.4	115.8	121.4	132.2	135.3	131.8	138.3	130.8	241.1	300.9	317.7	316.1	320.3	324.7	322.0	319.2
26	320.2	317.8	320.9	318.4	317.9	309.9	316.8	313.6	311.6	311.7	311.1	312.0	307.9	306.4	308.3	317.8	321.1	317.6	316.1	316.5	314.0	314.9	317.3	322.7
27	320.0	322.4	336.0	342.5	343.6	348.2	348.8	347.6	347.2	343.3	340.7	346.9	353.8	350.1	354.2	348.4	351.6	357.4	355.6	356.3	352.5	355.3	357.1	358.6
28	3.9	2.3	2.4	2.2	2.3	1.7	356.4	356.3	358.8	2.1	359.4	6.8	1.2	12.1	5.7	9.3	10.9	3.8	352.9	7.8	9.0	9.7	4.5	11.8
29	18.7	17.9	16.6	15.3	14.8	21.0	21.1	19.2	18.3	17.5	18.4	21.5	20.9	20.0	25.8	14.1	17.5	18.8	21.6	24.9	21.8	18.2	15.1	3.4
30	2.0	12.1	17.1	7.6	9.4	12.5	16.6	19.2	19.9	18.1	18.4	10.0	10.3	14.2	16.9	21.6	17.9	14.6	12.4	8.8	16.3	21.8	19.2	22.9
31	16.0	21.7	8.2	7.3	13.8	21.2	9.3	18.3	21.3	15.5	21.4	13.6	12.2	5.1	10.9	10.1	9.2	12.2	15.0	20.6	33.3	28.3	28.7	19.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.9	2.8	2.4	3.1	2.6	3.0	3.9	5.1	4.1	3.7	3.7	4.1	4.3	4.7	4.5	3.5	3.7	4.1	8.7	3.2	3.1	3.6	6.5	4.4	8.7	2.4	4.0
2	6.8	5.7	4.9	9.7	6.4	4.6	3.7	4.1	4.6	4.5	4.8	6.9	6.8	8.0	5.3	4.8	8.9	6.2	7.4	5.3	6.1	5.7	7.6	20.7	20.7	3.7	6.7
3	5.2	6.2	4.9	7.8	28.2	8.5	5.0	5.2	4.7	7.9	5.8	6.5	5.8	6.1	14.8	9.2	5.6	11.3	17.2	11.7	10.8	4.3	4.7	10.0	28.2	4.3	8.7
4	8.6	4.5	14.8	4.7	4.4	8.2	8.4	4.4	4.8	4.6	5.3	4.4	3.2	4.6	4.8	10.4	8.5	9.5	6.4	12.1	9.8	9.5	9.1	8.1	14.8	3.2	7.2
5	13.6	4.0	7.9	11.3	14.2	18.0	16.2	13.6	14.8	18.6	14.3	14.1	16.0	10.8	14.3	2.5	16.6	11.0	4.5	5.9	15.6	11.3	20.7	7.2	20.7	2.5	12.4
6	19.0	14.9	5.6	4.5	19.9	14.9	17.1	19.0	17.4	17.7	15.9	6.6	12.3	11.3	13.1	6.8	14.0	16.0	12.9	12.9	10.8	11.4	10.5	12.3	19.9	4.5	13.2
7	6.8	3.9	6.8	5.5	4.8	5.5	6.9	6.2	4.9	3.8	6.8	5.8	7.2	13.7	13.2	10.3	14.0	11.2	15.6	7.1	7.2	6.8	4.9	4.1	15.6	3.8	7.6
8	8.8	4.7	5.6	10.2	4.7	5.3	11.6	8.0	7.6	6.7	5.2	5.9	5.3	7.5	9.5	4.8	4.9	6.3	4.2	5.5	5.0	10.6	4.5	6.4	11.6	4.2	6.6
9	9.2	4.7	5.5	5.1	7.2	11.9	10.6	13.3	15.3	11.9	12.1	10.5	7.4	13.7	9.9	4.4	5.3	3.2	3.1	6.6	7.5	5.5	7.0	6.5	15.3	3.1	8.2
10	4.1	6.0	5.1	10.5	5.8	3.4	13.5	11.4	15.7	14.9	12.7	11.8	12.5	16.6	15.7	5.0	5.9	8.8	15.3	14.4	13.9	11.3	11.2	13.6	16.6	3.4	10.8
11	10.5	3.4	4.6	6.2	14.1	10.8	9.0	14.0	8.2	4.8	19.9	31.8	25.4	15.1	12.7	9.0	14.8	9.4	7.8	10.3	11.0	7.6	3.8	6.4	31.8	3.4	11.3
12	4.9	3.9	5.7	4.4	5.7	6.0	3.4	4.9	6.6	4.5	5.8	4.6	6.1	4.8	5.2	3.5	5.4	5.4	14.1	18.5	13.9	16.4	19.4	22.2	22.2	3.4	8.1
13	22.5	21.3	8.4	17.5	14.6	13.7	22.1	20.2	20.0	20.8	10.8	10.3	6.8	8.6	11.0	14.9	14.7	12.8	15.6	17.7	38.5	9.4	11.8	4.8	38.5	4.8	15.4
14	5.3	5.2	8.1	37.3	15.2	6.6	4.0	26.3	9.3	9.6	3.7	3.3	3.9	4.1	4.4	4.4	3.1	3.1	3.3	3.4	4.3	6.8	6.4	3.4	37.3	3.1	7.7
15	3.7	3.5	3.6	4.0	7.4	4.8	5.5	5.8	3.9	5.1	6.7	6.0	9.8	10.3	6.1	3.8	4.9	6.2	4.0	6.3	12.6	14.5	7.6	12.7	14.5	3.5	6.6
16	7.2	82.4	18.5	31.7	21.0	12.6	19.8	46.3	9.0	13.9	35.3	17.0	63.6	40.5	20.9	16.5	25.5	16.0	20.3	10.8	10.3	19.9	25.5	4.9	82.4	4.9	24.6
17	10.0	6.7	3.4	4.6	4.6	3.8	4.2	4.3	4.8	3.4	3.6	5.7	4.2	4.6	4.0	4.1	3.6	4.6	10.0	5.0	7.1	3.8	8.4	4.1	10.0	3.4	5.1
18	5.4	9.9	10.9	5.8	6.5	6.6	2.8	4.9	6.5	4.9	9.4	11.9	10.2	9.7	16.0	0.0	0.0	0.1	0.0	4.8	8.2	6.3	8.3	10.0	16.0	0.0	6.6
19	4.6	4.5	4.7	5.6	6.6	3.6	4.6	6.6	6.0	3.6	4.0	2.9	3.0	3.6	3.9	3.7	4.0	3.5	3.3	4.0	3.7	3.5	3.9	3.1	6.6	2.9	4.2
20	3.6	3.3	4.1	3.8	3.6	3.5	3.4	3.9	4.9	6.5	5.5	3.3	2.7	2.7	3.5	3.2	7.6	14.5	19.4	12.3	19.8	7.4	5.3	3.0	19.8	2.7	6.3
21	4.0	3.7	4.9	6.3	7.8	4.6	4.3	6.9	3.8	4.4	4.3	4.1	3.8	4.0	3.5	4.8	5.3	5.6	7.5	4.0	4.3	5.0	3.6	5.8	7.8	3.5	4.8
22	4.0	18.1	4.1	5.2	4.1	3.5	3.4	5.8	4.1	5.2	17.0	3.7	4.7	7.6	4.4	5.1	5.9	5.8	8.2	11.1	29.9	26.7	19.6	8.1	29.9	3.4	9.0
23	5.0	4.0	5.6	5.1	4.8	3.5	4.0	4.0	3.5	2.7	4.6	4.0	3.1	5.6	6.5	7.5	14.4	6.9	5.2	36.5	21.7	11.7	5.4	10.5	36.5	2.7	7.7
24	11.7	14.7	10.2	8.4	8.3	7.9	45.2	12.3	4.1	4.6	4.8	3.8	3.9	3.4	3.1	3.8	3.5	3.8	3.3	3.7	3.6	3.5	5.9	5.6	45.2	3.1	7.6
25	4.6	49.4	67.8	26.6	11.7	5.1	4.2	5.1	9.2	5.1	7.0	3.4	3.0	3.5	3.3	2.9	3.0	6.6	7.5	5.8	15.1	12.1	15.7	13.9	67.8	2.9	12.2
26	4.3	5.4	6.6	4.0	8.1	4.9	3.3	3.4	3.6	7.4	13.7	4.2	5.3	17.1	6.8	5.1	7.5	34.7	31.3	55.1	21.4	8.1	9.7	16.4	55.1	3.3	12.0
27	6.1	5.1	7.4	4.5	4.2	4.0	3.4	4.3	4.9	3.3	3.5	3.2	3.3	3.0	3.2	3.1	3.2	3.0	3.3	3.3	3.3	3.4	3.9	3.9	7.4	3.0	3.9
28	3.7	3.7	2.9	4.1	4.7	6.0	5.7	5.0	4.2	3.8	3.8	3.9	3.4	3.9	4.3	8.5	63.2	0.5	0.1	0.3	25.6	19.7	15.6	49.2	63.2	0.1	10.2
29	25.4	41.8	14.2	11.8	34.1	76.8	17.3	33.5	35.7	57.8	7.2	42.7	17.2	53.8	22.5	11.8	9.4	6.9	4.6	6.5	10.2	8.7	10.7	8.2	76.8	4.6	23.7
30	8.3	6.6	5.9	6.7	7.6	7.5	5.1	20.6	16.0	12.5	11.1	5.5	8.8	6.1	5.6	8.8	11.3	7.1	19.4	4.8	10.0	9.2	11.6	12.8	20.6	4.8	9.5
31	15.3	5.0	7.1	12.8	7.8	11.6	18.8	22.9	6.7	7.1	27.1	44.7	18.7	35.4	37.9	23.5	38.7	30.5	22.3	78.3	32.9	28.4	14.3	16.2	78.3	5.0	23.5
Max.	**25.4**	**82.4**	**67.8**	**37.3**	**34.1**	**76.8**	**45.2**	**46.3**	**35.7**	**57.8**	**35.3**	**44.7**	**63.6**	**53.8**	**37.9**	**23.5**	**63.2**	**34.7**	**31.3**	**78.3**	**38.5**	**28.4**	**25.5**	**49.2**	**82.4**		
Min.	**3.6**	**2.8**	**2.4**	**3.1**	**2.6**	**3.0**	**2.8**	**3.4**	**3.5**	**2.7**	**3.5**	**2.9**	**2.7**	**2.7**	**3.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.3**	**3.1**	**3.4**	**3.6**	**3.0**		**0.0**	
Avg.	**8.3**	**11.6**	**8.8**	**9.3**	**9.7**	**9.4**	**9.4**	**11.3**	**8.7**	**9.2**	**9.5**	**9.6**	**9.4**	**11.1**	**9.5**	**6.8**	**10.9**	**8.9**	**9.9**	**12.5**	**12.8**	**10.1**	**9.8**	**10.3**			**9.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.0	3.9	4.9	6.7	3.2	6.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	8.7	5.5	4.9	9.1	9.1	0.0	2.7
2	5.1	5.0	4.8	5.3	9.2	7.7	18.3	6.7	3.5	3.3	4.1	5.7	12.7	14.1	12.3	6.9	10.9	14.1	5.6	5.7	12.0	13.0	11.0	8.8	18.3	3.3	8.6
3	12.8	4.4	15.7	14.7	6.2	3.7	4.7	4.4	16.3	8.7	7.1	6.4	7.6	7.8	14.5	5.0	7.2	5.9	4.4	5.8	5.3	4.7	4.1	4.5	16.3	3.7	7.6
4	3.6	4.3	5.1	4.7	6.3	5.6	5.2	4.4	4.5	4.3	5.6	3.5	4.7	4.6	4.5	4.7	5.5	5.5	6.1	4.5	4.9	4.0	4.2	4.7	6.3	3.5	4.8
5	5.9	4.6	6.6	3.6	5.3	4.6	3.8	5.2	5.4	13.0	6.5	12.4	8.5	9.0	6.7	7.5	4.5	4.3	4.0	3.7	6.0	8.6	5.9	5.8	13.0	3.6	6.3
6	3.8	5.8	4.8	5.5	5.0	5.7	5.1	5.0	4.1	4.6	6.1	5.5	3.3	4.1	8.8	4.9	4.8	4.4	11.5	6.7	8.5	6.5	6.6	5.2	11.5	3.3	5.7
7	3.6	5.3	3.5	5.2	7.3	4.2	5.3	6.6	6.9	12.3	14.1	13.6	6.8	11.2	20.4	17.5	15.0	7.6	22.5	26.6	9.0	5.9	11.5	8.8	26.6	3.5	10.4
8	9.2	6.9	6.3	7.0	29.1	55.1	15.5	26.8	19.6	9.7	22.9	6.3	4.8	4.6	5.7	5.2	3.7	4.0	7.1	5.0	5.8	6.4	3.2	5.6	55.1	3.2	11.5
9	5.4	5.3	3.9	3.5	5.6	4.1	3.1	3.2	3.7	5.4	15.3	17.7	17.0	41.0	7.8	9.3	10.8	9.4	4.6	7.0	6.2	4.9	4.4	4.1	41.0	3.1	8.4
10	5.1	4.6	5.9	6.2	3.4	4.2	3.5	5.1	5.7	4.7	4.6	18.8	4.5	4.6	4.8	7.0	4.9	5.0	5.2	5.1	3.7	4.4	5.9	6.5	18.8	3.4	5.6
11	28.1	17.7	7.2	6.2	5.8	10.1	12.6	16.9	15.9	12.3	15.3	15.4	34.9	35.3	30.5	39.5	29.9	63.0	32.2	39.2	66.0	16.0	15.2	18.6	66.0	5.8	24.3
12	10.2	11.1	7.2	16.4	34.1	45.2	15.6	7.5	8.7	4.5	4.4	6.1	5.1	20.4	22.0	0.7	4.5	13.2	5.8	5.0	6.1	6.0	4.8	20.6	45.2	0.7	11.9
13	7.8	4.9	9.0	5.6	5.7	5.4	6.0	8.0	4.4	4.1	4.2	3.9	3.8	3.6	3.8	3.3	3.7	3.1	3.8	4.2	3.3	3.7	3.4	3.4	9.0	3.1	4.7
14	3.6	3.5	3.8	3.5	3.3	3.0	3.9	53.6	11.8	7.5	8.8	3.9	4.4	4.9	4.3	5.6	6.6	4.6	4.2	5.4	7.2	8.3	6.2	7.6	53.6	3.0	7.5
15	6.1	5.7	5.4	18.4	9.7	34.4	38.9	42.0	8.4	34.9	56.6	27.4	3.8	3.6	3.7	9.4	33.1	16.0	7.2	2.7	86.2	48.3	20.9	7.8	86.2	2.7	22.1
16	3.7	3.0	3.9	3.7	3.0	5.3	5.2	9.6	4.5	5.0	5.2	4.3	5.5	5.1	5.1	3.5	3.3	15.8	8.2	6.0	4.1	6.0	5.2	10.0	15.8	3.0	5.6
17	14.0	8.9	3.8	5.4	6.8	4.3	3.4	6.1	6.5	9.1	8.4	2.8	5.5	5.3	4.7	5.2	15.7	3.5	3.2	3.4	3.2	3.8	3.0	3.2	15.7	2.8	5.8
18	5.1	3.0	2.9	4.4	4.5	3.3	3.3	3.5	3.8	4.3	3.4	3.4	3.7	4.0	4.2	5.0	7.4	3.5	4.4	8.7	6.1	4.6	5.2	3.7	8.7	2.9	4.4
19	7.4	3.8	12.0	13.7	6.7	7.2	6.3	5.6	5.7	3.8	5.8	4.1	2.7	4.9	4.6	6.3	5.4	6.7	5.0	9.7	4.3	7.5	6.1	8.2	13.7	2.7	6.4
20	4.0	3.7	3.1	3.9	3.6	4.7	3.5	3.2	4.9	3.7	3.7	4.7	5.2	5.3	5.1	7.3	14.8	4.0	3.9	3.5	3.5	3.9	2.7	3.2	14.8	2.7	4.6
21	3.2	4.0	2.4	2.9	3.5	4.4	3.1	3.7	3.1	3.2	3.3	2.8	3.1	4.3	6.1	10.0	8.5	28.2	64.9	30.4	17.4	16.3	4.3	11.6	64.9	2.4	10.2
22	9.6	16.7	5.8	4.6	9.4	5.4	3.9	19.1	10.2	13.2	4.6	6.0	3.3	5.3	2.9	11.2	7.7	5.4	3.3	4.1	5.7	3.7	5.4	4.7	19.1	2.9	7.1
23	4.6	5.1	11.1	41.4	42.3	27.0	34.3	4.9	25.0	13.2	5.3	37.7	12.8	6.9	7.6	7.8	8.7	17.4	2.9	2.8	4.0	3.3	4.9	4.7	42.3	2.8	14.0
24	5.8	5.8	4.8	5.1	5.8	5.8	5.3	7.9	7.1	5.0	4.5	9.9	4.7	3.7	3.8	3.9	3.9	5.6	4.9	12.0	13.1	11.9	6.9	7.8	13.1	3.7	6.5
25	10.7	9.0	8.0	12.6	17.1	11.3	9.8	3.9	4.1	3.5	4.5	5.2	5.7	4.3	4.0	6.7	15.3	4.7	4.7	3.9	8.5	4.2	3.6	3.4	17.1	3.4	7.0
26	3.4	3.5	4.0	4.3	24.8	26.0	22.5	9.3	16.1	7.6	5.5	6.5	4.0	3.9	4.1	3.1	4.3	3.7	4.6	3.2	3.9	6.0	10.6	5.2	26.0	3.1	7.9
27	4.6	3.7	4.5	3.2	4.8	4.6	4.2	5.3	6.6	4.7	4.3	4.1	5.4	6.3	5.2	21.5	9.0	14.8	55.0	3.9	2.8	2.3	2.9	2.8	55.0	2.3	7.8
28	2.0	3.4	5.5	1.5	1.7	2.0	1.8	2.2	2.4	5.8	5.6	7.3	3.3	5.7	7.6	6.5	11.8	7.1	4.2	4.3	3.8	3.1	3.3	3.6	11.8	1.5	4.4
29	3.6	4.2	3.1	3.6	2.9	5.1	3.5	3.7	3.2	3.3	4.4	5.2	6.0	3.8	3.0	3.2	3.3	5.4	5.6	5.4	9.8	8.1	4.0	4.5	9.8	2.9	4.5
Max.	**28.1**	**17.7**	**15.7**	**41.4**	**42.3**	**55.1**	**38.9**	**53.6**	**25.0**	**34.9**	**56.6**	**37.7**	**34.9**	**41.0**	**30.5**	**39.5**	**33.1**	**63.0**	**64.9**	**39.2**	**86.2**	**48.3**	**20.9**	**20.6**	**86.2**		
Min.	**2.0**	**3.0**	**2.4**	**1.5**	**1.7**	**2.0**	**1.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.7**	**2.8**	**2.3**	**2.7**	**2.8**		**0.0**	
Avg.	**6.8**	**5.9**	**5.8**	**7.7**	**9.5**	**10.9**	**8.7**	**9.8**	**7.7**	**7.4**	**8.4**	**8.7**	**6.7**	**8.2**	**7.5**	**7.8**	**9.1**	**9.9**	**10.3**	**8.1**	**11.4**	**8.0**	**6.2**	**6.8**			**8.2**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.9	3.3	4.0	9.4	5.7	6.2	5.7	5.9	8.6	11.2	33.9	38.9	4.6	3.8	3.5	4.0	4.5	8.5	6.3	7.1	4.6	4.5	4.3	4.8	38.9	3.3	8.2
2	6.1	6.8	4.6	4.1	3.8	4.8	3.7	4.8	4.5	3.5	4.6	4.2	3.3	5.3	3.7	6.1	6.8	10.2	6.4	8.1	5.1	7.0	3.8	4.3	10.2	3.3	5.2
3	9.5	8.3	5.8	4.6	5.7	3.1	3.3	3.8	3.3	3.3	3.5	3.2	4.9	3.9	3.7	3.2	3.8	2.9	2.9	4.1	5.1	3.4	4.4	3.1	9.5	2.9	4.3
4	3.2	4.4	4.1	5.0	3.2	3.5	3.6	3.6	3.8	3.7	3.3	3.2	3.3	4.8	4.0	4.0	4.0	3.8	3.6	3.8	3.4	3.5	3.3	3.6	5.0	3.2	3.7
5	4.5	5.8	5.8	4.0	6.3	4.4	4.7	5.7	4.7	4.8	3.5	3.6	3.9	3.9	3.6	3.6	3.9	3.3	6.0	3.9	3.3	3.4	3.7	4.0	6.3	3.3	4.4
6	4.2	3.3	3.1	2.8	4.0	5.7	2.9	3.6	3.6	3.2	3.8	4.6	5.9	6.8	7.6	4.5	5.3	4.8	4.3	4.8	23.5	10.8	3.2	6.0	23.5	2.8	5.5
7	8.3	4.5	5.3	7.5	17.9	12.8	8.2	47.3	13.7	25.9	6.9	8.7	36.2	10.8	26.1	14.3	7.0	6.5	8.6	4.8	5.5	4.1	6.5	7.6	47.3	4.1	12.7
8	12.6	12.1	4.7	21.8	5.9	7.3	5.0	3.4	5.8	3.7	4.3	4.2	5.1	6.3	6.8	6.6	4.4	3.2	3.8	2.5	3.3	2.7	3.0	3.5	21.8	2.5	5.9
9	3.6	6.1	14.8	9.2	9.0	7.5	8.3	7.7	4.3	3.5	4.4	5.1	8.5	9.9	7.2	6.1	9.8	13.5	9.8	4.6	9.0	6.0	4.4	9.2	14.8	3.5	7.6
10	84.5	11.8	13.4	18.8	9.5	6.5	5.4	8.9	6.4	4.9	6.4	7.2	9.8	6.2	3.8	5.7	5.0	5.0	5.1	5.6	3.4	6.2	6.4	7.1	84.5	3.4	10.5
11	8.8	6.6	4.1	3.2	5.2	3.3	4.3	7.0	20.5	18.0	5.7	11.9	10.4	20.4	19.6	11.9	13.6	22.6	8.6	10.1	8.2	9.9	35.6	13.3	35.6	3.2	11.8
12	30.3	14.7	8.2	11.2	10.4	5.9	7.6	3.2	6.0	9.8	12.3	12.1	17.2	16.5	11.9	10.0	12.8	13.9	13.8	8.8	12.2	15.2	8.6	8.2	30.3	3.2	11.7
13	8.0	8.5	9.7	9.1	11.1	10.4	9.6	11.8	10.8	11.3	10.4	13.1	12.5	29.2	33.8	35.3	35.2	11.7	15.7	12.8	8.3	10.7	4.4	3.6	35.3	3.6	14.0
14	5.0	5.1	5.5	6.9	6.0	6.4	3.2	4.2	4.4	4.4	4.5	3.3	4.4	5.8	9.9	10.1	49.5	5.4	5.6	3.2	4.0	3.9	3.4	4.2	49.5	3.2	7.0
15	3.6	3.3	3.8	3.2	3.1	3.9	3.1	2.9	3.0	3.5	3.7	3.4	3.3	3.2	3.5	3.8	4.1	2.7	2.7	2.9	3.0	3.2	3.1	3.2	4.1	2.7	3.3
16	4.9	3.7	3.3	4.1	4.1	4.6	3.4	9.0	15.4	39.6	5.1	27.5	39.7	44.8	46.8	27.3	39.5	31.7	11.3	8.5	6.0	3.0	2.6	3.4	46.8	2.6	16.2
17	4.7	4.6	6.5	4.7	12.7	14.1	15.9	4.8	4.9	5.4	11.0	15.9	12.0	53.1	13.0	9.8	17.2	17.4	5.1	5.8	7.9	4.4	5.7	5.9	53.1	4.4	10.9
18	5.6	7.1	57.5	15.7	16.1	10.9	12.5	13.4	12.4	5.1	5.8	9.4	11.2	7.5	12.4	8.2	3.8	8.6	7.6	7.6	19.5	7.9	4.2	12.9	57.5	3.8	11.8
19	22.1	13.1	17.2	7.6	12.2	17.0	15.8	10.9	18.9	12.7	16.1	11.7	7.1	14.6	8.2	14.0	9.9	9.5	15.6	10.3	3.1	2.6	3.0	3.2	22.1	2.6	11.5
20	3.0	2.8	4.3	8.1	10.2	10.9	7.5	4.8	5.1	5.6	8.1	8.2	39.7	18.3	86.3	15.6	24.8	8.6	11.1	18.6	16.7	3.8	4.1	6.3	86.3	2.8	13.9
21	5.4	7.5	7.8	4.5	10.7	28.8	26.6	55.5	19.5	20.0	22.3	29.5	32.3	15.5	53.7	4.4	3.4	2.8	4.2	4.0	4.0	4.7	3.9	3.5	55.5	2.8	15.6
22	3.9	3.5	2.4	3.9	3.5	3.4	3.5	4.5	3.9	3.6	4.6	3.7	3.9	3.7	3.7	6.6	4.0	7.5	4.3	4.0	4.5	9.1	14.4	24.1	24.1	2.4	5.6
23	7.4	6.5	10.2	7.5	7.4	13.8	8.4	4.3	4.3	6.0	6.0	4.9	5.2	14.0	10.7	7.1	6.7	4.2	5.6	4.3	2.4	3.9	13.4	8.3	14.0	2.4	7.2
24	10.1	12.2	8.3	5.3	3.7	4.6	6.5	7.8	6.1	5.9	10.1	10.5	5.9	12.7	9.2	39.9	66.6	41.2	35.3	11.7	6.5	10.6	10.4	23.3	66.6	3.7	15.2
25	70.2	77.0	51.3	4.2	12.7	42.2	93.4	69.5	43.1	55.9	24.1	7.6	64.3	37.9	12.3	27.4	3.7	16.9	10.2	11.7	9.2	11.4	3.1	3.3	93.4	3.1	31.8
26	12.8	23.6	7.7	12.0	7.9	5.9	4.6	7.6	4.6	5.0	4.7	10.1	13.9	29.9	44.1	23.8	10.2	17.0	13.7	15.5	13.2	21.1	39.4	9.2	44.1	4.6	14.9
27	3.7	32.1	27.1	19.8	19.9	44.2	32.5	22.5	25.0	15.1	9.0	30.6	24.9	23.8	41.0	38.2	3.9	6.0	6.8	4.2	15.6	8.6	12.0	4.0	44.2	3.7	19.6
28	2.2	3.4	4.6	8.3	6.3	7.4	5.2	6.5	14.6	6.9	11.3	17.2	27.6	18.9	15.3	11.2	6.2	6.3	5.8	8.5	21.7	11.9	70.8	18.2	70.8	2.2	13.2
29	7.5	43.5	45.4	24.4	19.3	16.2	17.1	7.5	8.5	8.6	5.2	3.9	4.3	4.4	3.8	3.9	3.7	3.2	3.1	3.3	3.5	3.2	3.8	3.1	45.4	3.1	10.4
30	3.3	2.9	2.9	3.1	3.2	3.3	3.1	3.1	3.0	3.1	3.2	3.2	3.1	3.8	3.6	3.1	3.1	3.0	3.3	3.4	3.2	4.0	2.8	3.1	4.0	2.8	3.2
31	4.7	3.1	3.5	2.8	3.8	2.6	3.6	3.1	3.1	2.6	3.3	3.4	3.6	3.4	3.7	3.3	4.1	4.2	4.6	4.0	3.7	4.2	3.9	3.7	4.7	2.6	3.6
Max.	**84.5**	**77.0**	**57.5**	**24.4**	**19.9**	**44.2**	**93.4**	**69.5**	**43.1**	**55.9**	**33.9**	**38.9**	**64.3**	**53.1**	**86.3**	**39.9**	**66.6**	**41.2**	**35.3**	**18.6**	**23.5**	**21.1**	**70.8**	**24.1**	**93.4**		
Min.	**2.2**	**2.8**	**2.4**	**2.8**	**3.1**	**2.6**	**2.9**	**2.9**	**3.0**	**2.6**	**3.2**	**3.2**	**3.1**	**3.2**	**3.5**	**3.1**	**3.1**	**2.7**	**2.7**	**2.5**	**2.4**	**2.6**	**2.6**	**3.1**		**2.2**	
Avg.	**11.9**	**11.3**	**11.5**	**8.3**	**8.4**	**10.4**	**10.9**	**11.6**	**9.5**	**10.2**	**8.4**	**10.4**	**13.9**	**14.3**	**16.7**	**12.0**	**12.3**	**9.9**	**8.1**	**6.9**	**7.8**	**6.7**	**9.5**	**7.1**			**10.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.5	3.4	3.6	3.5	3.6	3.3	2.7	3.0	2.9	2.9	3.3	3.3	2.8	3.6	3.0	3.0	2.9	3.1	4.2	3.1	3.8	19.3	13.0	28.7	28.7	2.7	5.4
2	27.2	9.9	11.5	12.2	9.6	13.8	20.8	16.2	27.6	20.2	25.2	18.7	15.1	8.6	15.0	23.1	7.8	8.3	9.3	17.5	17.9	4.0	7.0	6.2	27.6	4.0	14.7
3	3.5	5.2	4.1	6.3	4.9	9.5	8.5	13.5	4.0	6.0	4.4	7.8	5.3	3.0	2.9	2.8	2.9	3.1	2.9	3.3	3.3	3.3	3.5	3.3	13.5	2.8	4.9
4	3.8	3.4	3.9	3.8	3.1	3.2	3.1	3.2	3.3	3.5	3.3	3.0	4.0	3.3	2.8	4.4	3.9	3.5	3.3	16.0	8.0	6.0	8.8	6.3	16.0	2.8	4.6
5	9.8	39.2	5.0	5.2	7.0	12.4	12.3	10.8	10.7	15.2	12.0	19.4	48.2	11.8	21.0	7.4	5.9	13.9	7.3	2.5	2.5	1.9	3.2	5.0	48.2	1.9	12.1
6	2.8	4.7	3.5	7.2	3.2	6.7	15.9	7.4	11.1	10.2	12.6	14.4	11.2	5.5	4.8	5.8	5.3	5.4	9.0	11.7	13.7	15.9	5.7	3.1	15.9	2.8	8.2
7	12.0	12.5	12.8	4.1	11.9	14.2	4.8	6.0	5.1	7.1	16.0	12.8	12.4	19.8	6.3	4.0	9.0	3.4	8.7	3.2	17.5	11.6	10.7	9.2	19.8	3.2	9.8
8	4.0	17.7	7.4	5.0	3.7	4.6	3.6	6.9	43.7	10.6	15.1	38.1	71.6	7.0	17.9	46.6	84.8	95.0	9.7	6.7	9.8	28.4	13.0	13.2	95.0	3.6	23.5
9	4.3	3.4	3.0	6.7	14.0	13.4	11.7	13.6	8.5	9.5	8.1	10.5	45.8	9.2	14.3	9.7	5.2	7.8	11.1	10.0	4.0	4.3	4.1	1.8	45.8	1.8	9.8
10	20.0	14.0	13.4	8.7	3.9	3.3	3.2	2.0	4.8	3.0	4.0	6.9	3.4	6.5	5.5	13.1	6.6	3.7	4.1	3.5	4.3	2.1	15.7	11.5	20.0	2.0	7.0
11	10.4	5.9	3.6	3.7	3.0	7.4	4.5	6.4	5.5	5.2	6.8	4.5	14.1	7.6	10.1	4.8	6.1	5.1	6.0	5.3	6.9	13.8	4.2	15.9	15.9	3.0	7.0
12	11.1	15.3	13.6	11.1	18.4	14.0	7.6	11.9	11.4	11.0	13.8	10.6	6.3	10.1	10.7	5.5	3.4	5.8	4.7	7.8	48.1	18.1	21.2	58.4	58.4	3.4	14.6
13	70.3	21.1	11.5	8.9	5.7	8.1	12.8	11.4	9.8	4.8	4.7	6.5	13.0	13.5	17.2	5.4	6.6	7.2	6.1	7.7	12.8	6.4	3.8	4.1	70.3	3.8	11.6
14	4.8	5.5	5.6	4.6	5.0	4.8	5.2	4.8	5.8	7.1	5.7	4.9	4.5	4.0	4.8	5.6	5.2	10.5	31.0	10.3	15.1	7.1	38.1	8.4	38.1	4.0	8.7
15	11.7	37.8	22.7	5.3	12.3	9.8	4.6	2.9	5.0	13.1	12.5	18.8	14.5	26.1	24.3	24.3	13.8	19.2	31.2	13.5	4.9	31.0	59.8	22.0	59.8	2.9	18.4
16	1.8	3.7	2.4	2.4	2.4	2.4	2.2	4.6	6.1	11.8	1.8	2.5	3.8	1.0	1.4	1.9	0.6	1.2	2.9	2.6	5.7	6.2	8.1	1.6	11.8	0.6	3.4
17	2.0	5.3	6.3	4.0	9.9	7.9	2.8	4.0	22.0	1.9	1.9	1.1	1.4	1.7	0.3	0.2	0.2	1.5	1.0	1.6	1.6	0.0	0.0	0.0	22.0	0.0	3.3
18	0.0	0.0	0.0	1.0	1.0	0.7	0.1	0.8	0.7	0.0	0.0	9.0	12.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	0.0	1.3
19	0.0	0.0	0.4	2.0	1.7	3.9	1.5	2.4	4.5	1.0	1.0	0.3	5.7	4.0	1.9	1.4	10.4	1.9	1.2	0.8	0.9	2.7	1.0	1.8	10.4	0.0	2.2
20	6.2	7.9	15.9	8.2	24.4	2.3	43.0	35.9	16.5	14.1	28.2	3.8	5.6	43.5	27.0	5.4	23.6	9.9	8.2	6.0	1.1	1.6	1.0	1.7	43.5	1.0	14.2
21	1.7	1.4	1.4	1.2	1.3	2.2	0.7	2.4	7.5	6.1	12.3	12.6	1.4	3.4	3.8	11.7	2.5	4.8	1.1	0.0	0.0	0.0	0.4	0.1	12.6	0.0	3.3
22	0.1	0.0	1.9	1.1	0.0	0.3	0.2	0.2	6.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	3.8	6.6	0.0	0.9
23	5.9	1.9	0.3	1.3	3.2	0.0	1.0	3.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.0	4.0	3.0	2.9	3.5	6.5	6.5	0.0	1.8
24	3.2	2.1	4.0	5.2	1.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.8
25	0.0	1.4	2.7	9.6	2.3	2.3	1.5	33.8	1.5	1.4	24.6	29.0	4.4	18.5	7.5	5.7	5.7	4.2	5.8	22.7	10.3	35.7	18.3	16.5	35.7	0.0	11.1
26	45.2	26.8	56.1	43.4	39.7	64.5	87.6	79.7	53.3	59.3	25.4	49.1	85.2	62.7	96.4	91.7	69.3	87.3	99.7	72.9	68.9	36.1	35.8	59.6	99.7	25.4	62.3
27	77.2	34.3	68.1	70.9	2.1	82.2	45.7	14.4	84.6	98.6	95.8	56.2	1.9	4.5	34.0	76.1	59.2	29.2	74.3	53.5	52.7	13.0	4.1	2.6	98.6	1.9	47.3
28	0.1	0.0	0.1	0.1	0.1	1.9	0.0	0.5	1.3	1.3	0.0	0.0	6.8	2.6	0.0	0.0	1.7	2.1	3.1	0.6	0.0	0.1	0.8	0.0	6.8	0.0	1.0
29	0.0	0.0	4.3	2.4	1.5	0.2	5.1	7.3	7.7	9.8	14.3	6.9	7.0	6.4	0.2	0.0	0.1	0.0	0.2	0.2	18.1	13.7	25.1	20.7	25.1	0.0	6.3
30	35.9	28.2	14.5	2.1	4.8	3.3	1.6	0.4	0.3	0.6	29.4	8.4	7.9	7.5	6.8	7.6	10.0	8.3	11.1	9.1	17.4	6.1	4.2	3.5	35.9	0.3	9.5
Max.	**77.2**	**39.2**	**68.1**	**70.9**	**39.7**	**82.2**	**87.6**	**79.7**	**84.6**	**98.6**	**95.8**	**56.2**	**85.2**	**62.7**	**96.4**	**91.7**	**84.8**	**95.0**	**99.7**	**72.9**	**68.9**	**36.1**	**59.8**	**59.6**	**99.7**		
Min.	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**12.6**	**10.4**	**10.1**	**8.4**	**6.8**	**10.2**	**10.5**	**10.3**	**12.5**	**11.2**	**12.7**	**12.0**	**13.9**	**10.0**	**11.3**	**12.2**	**11.8**	**11.5**	**12.0**	**9.9**	**11.7**	**9.7**	**10.6**	**10.5**			**11.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.3	3.5	5.0	3.8	3.6	3.0	3.2	4.2	4.0	4.4	4.9	4.1	5.9	14.2	9.3	8.7	20.3	15.5	21.4	17.2	2.5	6.4	10.1	4.9	21.4	2.5	7.6
2	7.6	12.0	15.3	11.8	6.4	10.1	13.9	12.7	4.5	4.3	6.2	8.1	4.9	44.9	38.7	36.2	66.6	7.4	51.7	56.6	17.1	30.4	49.3	49.4	66.6	4.3	23.6
3	44.2	16.5	4.7	8.8	9.3	22.5	10.3	12.2	6.7	25.5	12.8	7.9	9.6	3.6	7.4	7.0	6.6	25.4	13.4	9.2	16.6	10.5	12.2	18.7	44.2	3.6	13.4
4	8.0	4.6	6.8	7.2	6.6	4.2	4.6	13.7	11.1	13.6	6.3	3.9	6.9	33.1	16.2	13.8	13.5	53.1	33.4	24.3	24.4	10.4	32.1	20.3	53.1	3.9	15.5
5	33.4	6.9	3.5	4.4	4.2	11.2	7.5	14.1	10.6	9.8	56.7	57.5	43.5	12.1	31.9	17.2	23.1	10.8	50.5	12.0	27.0	22.8	16.6	41.7	57.5	3.5	22.0
6	19.0	7.6	6.5	14.3	9.0	7.5	4.8	6.7	3.4	4.0	5.6	7.2	4.2	4.2	5.1	4.7	6.3	5.7	4.1	3.4	3.9	3.6	3.7	4.2	19.0	3.4	6.2
7	5.0	3.1	3.5	3.4	3.4	3.4	3.0	2.9	3.3	3.3	3.7	3.5	3.8	3.5	3.6	4.1	4.1	4.5	3.9	3.2	5.0	4.1	5.2	3.9	5.2	2.9	3.8
8	3.5	3.3	3.9	3.6	3.7	4.5	3.3	4.0	5.2	5.3	4.1	3.4	3.6	3.3	3.5	3.2	3.6	3.4	3.4	3.5	3.1	3.3	3.2	3.3	5.3	3.1	3.7
9	4.3	4.0	4.2	4.5	4.1	3.5	3.4	4.1	5.2	4.9	4.3	4.9	3.9	5.7	3.5	4.8	12.3	4.1	14.7	10.9	14.7	15.3	9.8	28.3	28.3	3.4	7.5
10	16.8	20.7	34.4	41.9	19.3	23.4	16.0	17.7	28.2	5.0	6.1	37.7	23.7	9.1	6.3	9.2	12.7	15.7	11.0	36.1	5.6	20.4	3.9	3.9	41.9	3.9	17.7
11	12.3	3.4	4.3	3.8	3.6	3.3	4.1	4.6	3.7	4.2	7.9	7.7	5.6	5.6	10.1	4.3	4.0	4.2	4.4	4.5	5.5	8.3	9.4	9.1	12.3	3.3	5.8
12	7.7	8.4	6.9	7.1	5.7	8.3	36.5	19.4	51.1	76.9	86.0	61.4	91.2	76.8	70.0	19.6	64.0	75.5	85.2	71.6	23.6	84.8	53.1	91.6	91.6	5.7	49.3
13	75.4	69.8	88.1	98.0	47.3	87.3	44.6	54.3	67.5	37.4	85.3	92.6	71.3	80.3	88.8	43.7	84.4	86.5	75.6	92.8	67.4	96.3	82.9	81.2	98.0	37.4	74.9
14	89.3	38.6	4.8	1.5	1.8	76.8	16.5	30.9	18.2	20.5	26.0	16.2	57.0	14.8	23.9	14.5	52.1	59.3	15.6	16.1	13.1	8.5	1.8	0.0	89.3	0.0	25.7
15	0.8	4.0	20.4	5.2	26.7	2.5	0.0	0.0	0.1	9.9	12.7	16.9	16.8	21.0	16.1	16.4	13.9	40.8	9.2	4.0	6.4	6.2	5.5	6.6	40.8	0.0	10.9
16	8.7	9.1	10.8	18.0	13.6	52.8	9.5	18.4	14.1	15.6	7.0	13.6	8.2	7.7	7.2	6.7	11.5	8.6	10.6	9.8	9.2	5.4	11.9	28.0	52.8	5.4	13.2
17	19.1	4.7	12.3	6.1	8.2	7.1	10.8	8.9	8.4	4.0	9.9	10.4	12.5	28.3	23.9	18.9	25.0	25.0	11.5	19.6	10.4	3.5	4.5	9.5	28.3	3.5	12.6
18	6.6	24.9	6.6	4.7	4.5	5.8	6.4	9.5	7.3	6.5	8.2	16.6	12.2	12.1	12.2	8.7	12.6	9.7	10.5	18.2	9.2	12.5	10.5	11.8	24.9	4.5	10.3
19	8.0	15.3	30.2	11.5	50.3	41.5	8.0	50.1	10.6	6.9	12.1	9.0	15.7	16.5	11.5	13.9	11.6	8.5	5.8	3.5	4.9	4.2	4.0	15.2	50.3	3.5	15.4
20	10.4	10.5	12.1	4.0	5.1	3.8	3.3	3.5	6.2	8.7	16.1	14.9	17.7	8.9	37.2	21.9	14.7	11.6	47.5	8.1	20.1	14.4	14.0	19.5	47.5	3.3	13.9
21	69.3	22.9	14.3	62.4	57.1	15.1	28.1	64.1	67.6	57.1	22.9	29.0	21.7	19.0	25.7	25.0	12.7	11.8	4.8	9.3	4.5	6.8	8.4	11.2	69.3	4.5	27.9
22	9.1	11.2	5.9	12.1	9.5	12.6	44.4	44.5	25.7	31.5	14.9	15.5	18.7	26.9	27.3	14.6	12.5	7.5	6.1	6.3	7.6	7.4	4.9	6.2	44.5	4.9	15.9
23	4.4	4.2	5.0	4.4	5.5	7.2	5.1	6.5	6.4	5.1	5.8	6.7	5.5	4.8	4.6	4.9	7.3	6.5	5.4	5.1	4.7	5.1	4.1	4.1	7.3	4.1	5.3
24	4.9	4.3	4.0	4.1	3.8	4.9	4.6	4.7	5.3	5.8	4.8	5.8	5.9	7.1	8.0	9.5	6.5	5.9	7.5	33.2	11.3	11.9	15.3	19.7	33.2	3.8	8.3
25	9.0	10.4	10.1	10.2	7.1	8.4	5.2	5.1	4.5	5.1	9.6	17.0	16.6	16.0	9.7	14.3	20.7	13.0	7.4	25.4	14.6	13.2	30.4	34.7	34.7	4.5	13.2
26	19.3	15.8	14.0	5.9	26.4	51.5	17.7	8.3	14.3	7.8	9.5	7.8	10.8	17.3	23.3	27.1	18.7	12.2	24.7	24.4	13.5	5.0	38.3	41.5	51.5	5.0	19.0
27	17.2	15.8	30.0	12.2	12.6	12.2	23.9	13.5	46.1	20.7	24.0	20.7	12.7	17.6	23.1	20.3	21.8	17.6	11.0	10.1	4.3	6.3	7.7	7.6	46.1	4.3	17.0
28	14.6	17.9	12.3	9.1	18.5	15.6	10.3	10.1	10.1	49.7	20.6	16.1	15.6	17.1	12.2	19.4	17.7	12.6	13.5	6.2	4.0	6.4	7.9	11.3	49.7	4.0	14.5
29	11.2	11.8	9.5	9.7	7.3	11.2	11.8	5.7	12.0	10.9	12.1	9.5	9.1	8.4	7.3	8.3	9.9	9.2	9.2	7.8	5.2	13.2	9.1	3.6	13.2	3.6	9.3
30	4.1	5.8	5.9	24.2	11.4	17.6	9.5	9.8	6.1	9.1	7.9	8.3	12.3	9.3	8.5	7.7	6.6	10.0	8.5	6.5	4.9	9.9	6.5	5.8	24.2	4.1	9.0
31	5.7	5.6	5.2	3.9	4.2	4.4	4.1	4.9	4.3	4.0	5.5	6.7	7.1	7.7	7.5	8.0	7.1	6.8	6.1	5.4	5.8	4.2	5.6	4.8	8.0	3.9	5.6
Max.	**89.3**	**69.8**	**88.1**	**98.0**	**57.1**	**87.3**	**44.6**	**64.1**	**67.6**	**76.9**	**86.0**	**92.6**	**91.2**	**80.3**	**88.8**	**43.7**	**84.4**	**86.5**	**85.2**	**92.8**	**67.4**	**96.3**	**82.9**	**91.6**	**98.0**		
Min.	**0.8**	**3.1**	**3.5**	**1.5**	**1.8**	**2.5**	**0.0**	**0.0**	**0.1**	**3.3**	**3.7**	**3.4**	**3.6**	**3.3**	**3.5**	**3.2**	**3.6**	**3.4**	**3.4**	**3.2**	**2.5**	**3.3**	**1.8**	**0.0**		**0.0**	
Avg.	**17.8**	**12.8**	**12.9**	**13.6**	**12.9**	**17.5**	**12.1**	**15.1**	**15.2**	**15.4**	**16.8**	**17.5**	**17.9**	**18.0**	**18.8**	**14.1**	**19.5**	**19.0**	**19.0**	**18.2**	**11.9**	**14.9**	**15.5**	**19.4**			**16.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.4	5.3	4.6	3.9	6.0	4.9	4.8	4.4	5.8	4.5	5.2	7.1	6.2	5.3	5.8	5.4	6.2	5.6	5.3	6.1	5.3	5.5	4.6	8.4	8.4	3.9	5.4
2	6.6	5.4	5.3	4.4	7.8	7.7	5.8	9.1	7.7	6.5	7.2	7.6	8.8	13.6	11.4	12.3	10.7	9.6	8.7	8.9	9.4	8.9	7.5	9.3	13.6	4.4	8.3
3	68.9	22.5	10.3	8.0	8.6	5.6	67.0	65.9	16.2	37.3	33.7	32.7	28.6	21.5	18.9	9.7	11.2	10.0	11.7	7.2	6.6	8.3	6.9	5.2	68.9	5.2	21.8
4	7.6	7.2	7.1	3.7	8.2	5.8	7.2	6.0	9.1	12.3	10.3	8.9	10.8	7.9	10.3	9.7	9.9	9.6	8.6	6.9	6.8	5.0	7.5	3.4	12.3	3.4	7.9
5	7.6	6.2	3.6	7.1	5.3	5.3	5.0	5.0	5.0	5.3	5.0	5.1	5.8	5.5	6.3	6.7	5.9	6.4	5.9	6.4	24.9	41.1	25.4	36.2	41.1	3.6	10.1
6	13.9	10.0	10.7	11.2	10.6	8.9	8.3	23.4	12.3	23.2	34.2	18.0	20.8	29.2	22.6	36.4	42.8	8.4	9.7	9.5	7.5	7.5	14.2	40.3	42.8	7.5	18.1
7	34.1	18.2	11.7	11.8	9.8	9.9	10.9	11.4	13.0	11.7	21.0	8.9	8.3	17.8	27.0	36.2	12.5	6.7	8.2	7.1	5.2	6.3	10.8	15.1	36.2	5.2	13.9
8	19.4	27.3	13.1	7.4	31.2	27.6	14.0	34.5	20.2	23.8	25.6	32.2	26.9	21.9	14.0	11.3	15.1	9.3	8.5	6.5	7.6	6.0	9.4	7.4	34.5	6.0	17.5
9	7.7	9.4	8.2	7.1	5.5	5.0	6.6	7.2	10.1	7.2	12.1	20.0	9.2	10.0	9.4	9.4	16.8	12.1	10.4	6.6	7.0	7.5	6.7	5.5	20.0	5.0	9.0
10	5.5	4.8	6.4	4.8	7.4	7.7	6.5	7.9	9.3	9.6	11.0	8.1	21.1	37.0	32.1	44.8	30.2	29.5	17.8	9.8	17.9	21.3	12.7	9.3	44.8	4.8	15.5
11	52.4	26.4	62.9	45.9	35.6	59.5	11.5	23.6	7.7	11.0	26.4	25.9	36.0	38.2	11.8	12.2	15.2	13.1	16.1	28.1	7.0	6.9	14.6	8.4	62.9	6.9	24.8
12	12.2	7.1	7.5	7.2	7.6	6.5	5.9	5.4	8.4	9.4	20.8	14.2	13.8	15.3	11.4	21.0	12.6	11.8	17.3	12.1	11.9	15.9	13.5	8.0	21.0	5.4	11.5
13	23.4	13.0	30.8	47.5	41.4	50.0	27.4	34.9	64.4	41.8	42.9	21.6	37.2	34.3	99.3	60.1	23.1	14.8	13.7	10.3	9.3	10.7	34.0	31.6	99.3	9.3	34.1
14	42.2	22.3	7.2	7.5	20.9	10.0	6.8	6.1	7.5	9.9	11.0	14.6	25.4	45.0	13.6	11.5	18.0	12.7	13.8	21.1	38.6	8.8	14.7	11.7	45.0	6.1	16.7
15	16.2	9.5	11.1	16.1	13.3	19.6	12.0	8.9	6.6	14.2	7.7	10.1	22.6	10.0	12.1	14.9	16.1	8.8	11.4	7.3	9.2	10.9	13.6	8.4	22.6	6.6	12.1
16	6.5	6.5	6.6	14.8	9.9	12.5	32.8	4.7	8.6	14.8	40.9	76.0	15.5	17.3	37.7	16.9	11.4	21.0	7.7	9.8	10.8	11.0	10.2	13.4	76.0	4.7	17.4
17	28.0	15.6	8.0	9.1	8.7	28.0	51.6	32.6	20.8	33.7	15.3	13.5	20.2	20.4	18.4	19.4	18.5	23.3	16.9	9.4	7.1	6.7	8.8	11.7	51.6	6.7	18.6
18	11.1	72.7	8.7	15.0	21.2	9.8	7.2	7.4	8.7	7.5	8.0	10.2	13.0	21.7	16.5	17.9	14.2	16.3	16.5	17.3	15.7	12.1	13.7	15.7	72.7	7.2	15.7
19	38.3	14.4	7.8	28.3	13.0	15.4	12.2	7.4	8.2	11.1	13.0	24.1	21.3	29.3	19.4	15.6	15.3	21.2	18.5	15.7	15.8	10.9	11.4	6.0	38.3	6.0	16.4
20	31.4	24.0	15.1	36.2	21.1	70.6	37.7	66.9	55.7	10.5	17.1	17.7	18.1	13.1	14.2	12.4	14.8	10.0	9.5	6.8	6.1	5.1	5.5	5.7	70.6	5.1	21.9
21	4.7	9.4	8.8	8.3	13.5	5.4	6.5	6.9	11.7	25.9	27.7	43.4	61.4	22.6	66.1	70.4	29.5	46.4	31.8	15.7	12.7	8.9	11.4	10.0	70.4	4.7	23.3
22	12.6	23.8	10.9	8.4	11.1	11.1	28.2	6.3	8.7	11.3	15.3	11.7	13.7	13.2	12.8	10.4	7.7	7.5	6.5	6.4	5.9	7.2	4.7	5.8	28.2	4.7	10.9
23	5.1	5.9	6.6	4.7	5.7	7.2	5.9	5.5	7.9	6.1	6.6	8.3	9.6	10.6	10.0	15.9	14.9	14.3	14.9	7.9	8.1	6.3	6.7	7.2	15.9	4.7	8.4
24	8.4	6.7	8.2	5.4	4.1	5.6	5.1	8.4	6.3	7.0	7.1	6.3	7.2	7.2	8.5	7.3	6.8	7.7	5.6	5.4	5.4	5.8	5.8	5.7	8.5	4.1	6.5
25	5.5	5.4	5.3	5.4	4.7	5.0	4.5	5.2	5.4	5.8	5.4	7.0	6.7	6.4	6.8	6.3	6.6	6.0	5.1	5.5	5.6	6.5	5.2	5.1	7.0	4.5	5.7
26	6.7	9.9	7.1	7.6	11.4	37.4	16.7	6.3	16.1	8.9	11.2	8.2	24.7	8.5	9.5	14.6	11.3	13.5	19.0	16.6	18.2	9.2	43.6	85.1	85.1	6.3	17.5
27	17.5	54.7	69.3	43.8	81.8	28.6	29.3	15.0	7.1	19.3	7.3	9.1	10.6	11.2	13.7	14.9	18.9	15.5	13.4	11.4	8.2	5.2	20.7	9.0	81.8	5.2	22.3
28	6.3	4.7	5.2	11.0	13.5	68.4	20.8	11.2	10.0	7.8	11.5	12.5	8.7	10.9	13.5	12.6	24.7	10.7	9.6	8.0	20.2	6.5	9.3	4.5	68.4	4.5	13.4
29	7.3	4.1	8.3	7.2	62.3	63.5	5.4	50.5	14.3	18.7	15.1	18.6	15.8	9.7	10.0	11.6	9.9	11.3	12.6	8.2	6.1	4.6	4.3	4.8	63.5	4.1	16.0
30	4.3	5.4	8.9	6.9	6.9	4.7	10.7	29.6	28.4	73.1	97.4	38.7	59.9	46.4	37.0	74.0	28.1	37.4	61.6	45.7	49.8	14.6	12.0	5.2	97.4	4.3	32.8
Max.	**68.9**	**72.7**	**69.3**	**47.5**	**81.8**	**70.6**	**67.0**	**66.9**	**64.4**	**73.1**	**97.4**	**76.0**	**61.4**	**46.4**	**99.3**	**74.0**	**42.8**	**46.4**	**61.6**	**45.7**	**49.8**	**41.1**	**43.6**	**85.1**	**99.3**		
Min.	**4.3**	**4.1**	**3.6**	**3.7**	**4.1**	**4.7**	**4.5**	**4.4**	**5.0**	**4.5**	**5.0**	**5.1**	**5.8**	**5.3**	**5.8**	**5.4**	**5.9**	**5.6**	**5.1**	**5.4**	**5.2**	**4.6**	**4.3**	**3.4**		**3.4**	
Avg.	**17.2**	**15.3**	**12.8**	**13.5**	**16.9**	**20.2**	**15.8**	**17.3**	**14.0**	**16.3**	**19.1**	**18.0**	**19.6**	**18.7**	**20.0**	**20.7**	**16.0**	**14.3**	**13.9**	**11.5**	**12.3**	**9.7**	**12.3**	**13.4**			**15.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	64.1	70.2	8.2	15.3	38.1	85.9	15.6	7.7	23.5	22.3	15.9	10.3	13.6	11.2	8.9	9.5	9.9	7.4	6.5	7.1	5.7	5.5	4.4	5.3	85.9	4.4	19.7
2	5.2	4.6	5.4	5.7	5.1	5.7	4.8	4.7	4.6	7.9	7.3	6.6	11.8	8.2	11.2	10.2	11.4	9.2	8.5	8.0	9.0	5.7	7.6	10.9	11.8	4.6	7.5
3	9.0	14.2	7.1	10.5	5.3	6.5	10.6	4.2	5.6	6.7	8.0	9.8	12.0	12.1	12.2	13.7	9.1	8.5	8.6	13.2	12.5	10.2	22.0	8.6	22.0	4.2	10.0
4	16.0	6.1	26.1	32.0	8.3	7.9	20.1	48.0	51.7	46.6	24.2	18.7	35.1	21.3	11.2	14.8	18.2	10.5	8.4	8.7	8.3	7.0	12.2	38.5	51.7	6.1	20.8
5	31.6	37.2	17.3	52.8	42.1	28.8	20.6	37.6	15.6	53.1	23.0	33.2	38.1	42.0	15.4	11.5	14.2	15.4	18.4	18.8	8.8	17.7	20.8	12.3	53.1	8.8	26.1
6	12.6	12.2	10.7	33.6	31.7	57.5	33.9	10.5	8.6	64.5	12.3	10.1	13.7	8.7	9.4	9.7	10.6	8.0	7.5	7.3	6.2	7.5	8.2	7.8	64.5	6.2	16.8
7	4.9	6.1	5.7	4.6	4.8	6.3	7.4	9.9	5.1	5.0	5.8	5.4	7.6	6.9	6.0	6.6	5.8	8.2	8.3	8.0	8.0	6.7	6.2	10.4	10.4	4.6	6.7
8	8.5	6.5	11.3	44.7	29.1	46.0	33.1	21.3	25.5	21.4	19.6	20.0	11.7	11.7	9.8	9.2	14.2	10.2	12.1	15.0	6.5	3.8	9.1	7.2	46.0	3.8	17.0
9	4.9	5.4	4.5	5.1	4.4	4.8	5.2	11.8	7.5	16.3	7.8	9.3	9.6	10.7	12.1	11.3	11.7	8.2	6.6	5.6	5.5	5.7	5.1	4.8	16.3	4.4	7.7
10	5.9	5.1	4.8	6.3	6.6	5.4	4.4	6.2	5.5	7.3	7.9	10.1	9.6	10.0	14.0	14.5	10.3	10.5	11.5	9.4	9.2	7.1	3.9	4.0	14.5	3.9	7.9
11	4.2	6.7	7.4	11.9	6.2	5.0	9.2	7.0	7.5	9.3	10.4	11.2	14.3	16.7	12.2	12.3	15.0	10.7	11.1	11.8	7.4	5.6	8.2	6.0	16.7	4.2	9.5
12	3.6	5.4	15.9	20.0	6.6	6.3	6.5	5.1	7.1	6.7	6.1	8.1	6.7	6.0	7.0	7.1	6.5	5.4	4.8	4.9	4.7	4.6	4.5	4.4	20.0	3.6	6.8
13	4.6	4.5	4.4	5.3	4.2	3.7	4.7	4.8	5.5	4.7	5.1	5.8	7.2	9.6	9.1	8.9	7.5	8.3	7.4	7.9	8.5	9.2	6.3	4.4	9.6	3.7	6.3
14	12.0	25.0	56.4	51.0	11.2	26.9	13.1	36.4	62.7	9.4	12.5	13.5	15.3	16.4	21.4	15.7	21.2	17.7	13.4	10.2	9.7	11.5	10.5	7.8	62.7	7.8	20.9
15	11.8	4.7	5.4	4.8	6.6	7.6	18.8	10.2	26.9	15.8	10.3	9.7	9.8	9.6	9.4	7.7	6.5	8.5	7.5	7.9	5.5	4.6	5.7	4.9	26.9	4.6	9.2
16	4.7	4.8	4.9	5.3	4.8	4.8	5.3	5.2	4.9	5.6	4.5	5.8	5.1	5.5	5.0	5.0	5.0	5.2	4.8	4.9	5.6	5.2	5.5	5.8	5.8	4.5	5.1
17	7.6	15.7	7.3	9.9	7.0	6.1	7.9	8.4	8.1	7.3	7.5	8.5	9.0	6.6	7.5	6.8	7.5	12.6	6.0	6.8	6.2	5.2	4.6	4.5	15.7	4.5	7.7
18	5.0	6.8	8.3	7.2	6.2	6.8	8.8	11.4	8.7	15.8	12.9	7.9	12.3	10.4	11.6	13.4	11.7	9.3	9.6	6.4	9.2	10.3	27.7	17.8	27.7	5.0	10.6
19	20.9	39.7	32.5	10.9	13.9	11.0	12.1	4.2	7.4	6.4	15.1	12.0	9.1	11.0	11.8	12.0	19.6	11.6	11.8	5.8	4.9	6.9	10.9	31.3	39.7	4.2	13.9
20	37.6	6.5	41.8	23.2	11.0	9.0	7.5	5.7	10.1	13.9	9.6	10.5	9.2	7.8	7.0	6.4	8.1	7.0	6.3	8.0	6.9	16.5	8.8	9.6	41.8	5.7	12.0
21	6.6	5.5	7.2	7.1	4.9	5.0	6.4	5.7	4.8	7.0	8.8	10.6	11.5	9.3	18.1	17.0	29.6	14.8	11.8	12.4	16.9	7.7	9.8	6.1	29.6	4.8	10.2
22	6.2	6.4	5.9	5.5	6.4	61.2	40.2	44.5	13.7	50.4	25.5	14.6	12.0	11.3	8.9	13.1	21.1	40.6	31.9	33.2	8.9	13.6	7.7	4.9	61.2	4.9	20.3
23	7.6	6.4	20.2	8.9	10.3	13.8	9.4	7.3	6.7	7.9	6.8	8.4	9.8	9.5	8.5	12.0	13.2	10.8	11.5	10.2	7.2	9.8	8.1	11.0	20.2	6.4	9.8
24	28.8	28.6	27.0	31.2	15.5	6.5	7.3	4.6	10.4	9.0	9.9	10.2	14.5	11.2	11.1	12.0	12.1	16.2	14.6	13.4	15.6	6.2	4.3	4.8	31.2	4.3	13.5
25	4.0	3.8	6.8	12.5	12.8	17.6	16.3	13.4	14.3	14.6	13.5	8.5	7.3	10.7	15.8	14.5	14.4	13.3	8.6	8.9	8.0	5.3	5.2	4.6	17.6	3.8	10.6
26	18.4	10.2	8.4	44.6	7.2	5.8	5.6	5.3	4.7	5.5	8.6	7.5	6.3	6.3	17.2	17.5	11.0	14.0	22.7	14.1	14.6	8.2	6.4	8.6	44.6	4.7	11.6
27	9.9	7.8	9.5	7.9	9.6	19.8	12.8	8.7	7.0	6.4	7.2	10.1	8.6	12.8	13.6	12.5	12.4	12.2	8.7	7.5	6.0	6.9	20.2	34.4	34.4	6.0	11.4
28	26.2	23.4	14.8	37.0	14.1	22.6	13.4	15.5	12.4	14.6	11.2	12.3	9.0	10.3	8.5	11.0	15.5	6.6	11.2	5.6	4.8	5.3	5.0	3.8	37.0	3.8	13.1
29	3.4	18.0	13.4	13.4	12.5	14.0	10.3	4.6	10.6	9.3	9.4	10.1	6.7	8.6	9.5	9.1	12.6	8.4	5.6	7.4	7.9	5.3	8.6	6.4	18.0	3.4	9.4
30	4.9	8.8	8.3	5.3	4.4	5.0	6.6	5.4	5.9	8.1	8.3	9.7	9.3	9.3	9.6	10.8	9.7	10.2	11.3	7.9	9.2	6.0	5.3	13.6	13.6	4.4	8.0
31	11.8	12.5	14.9	11.5	12.5	12.0	10.8	10.1	10.9	9.8	22.1	11.4	10.6	21.9	12.7	13.3	14.8	15.1	10.3	7.8	6.5	6.5	5.6	8.0	22.1	5.6	11.8
Max.	**64.1**	**70.2**	**56.4**	**52.8**	**42.1**	**85.9**	**40.2**	**48.0**	**62.7**	**64.5**	**25.5**	**33.2**	**38.1**	**42.0**	**21.4**	**17.5**	**29.6**	**40.6**	**31.9**	**33.2**	**16.9**	**17.7**	**27.7**	**38.5**	**85.9**		
Min.	**3.4**	**3.8**	**4.4**	**4.6**	**4.2**	**3.7**	**4.4**	**4.2**	**4.6**	**4.7**	**4.5**	**5.4**	**5.1**	**5.5**	**5.0**	**5.0**	**5.0**	**5.2**	**4.8**	**4.9**	**4.7**	**3.8**	**3.9**	**3.8**		**3.4**	
Avg.	**13.0**	**13.5**	**13.6**	**17.6**	**11.7**	**17.0**	**12.5**	**12.4**	**13.0**	**15.8**	**11.5**	**11.0**	**11.8**	**11.7**	**11.2**	**11.3**	**12.6**	**11.4**	**10.6**	**9.8**	**8.2**	**7.7**	**9.0**	**10.1**			**12.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	21.4	11.8	43.8	34.4	16.4	32.7	21.6	43.9	44.2	45.7	41.8	24.7	18.7	18.2	17.5	14.7	12.7	9.5	7.8	6.9	6.4	5.0	4.3	5.5	45.7	4.3	21.2
2	3.6	5.3	7.1	5.7	6.6	4.8	5.3	6.1	11.5	9.2	6.5	5.2	6.0	9.6	8.8	9.4	10.8	12.2	7.9	17.5	8.9	19.4	53.4	37.0	53.4	3.6	11.6
3	29.9	12.7	11.5	12.3	8.2	7.6	14.3	14.3	5.2	8.0	13.3	17.0	10.4	13.3	16.1	13.4	13.3	13.2	11.3	11.2	6.0	6.0	4.3	5.3	29.9	4.3	11.6
4	7.9	5.4	5.9	4.6	4.7	4.6	5.3	5.4	4.8	6.3	10.0	10.1	10.3	9.8	12.5	12.7	11.0	16.4	10.7	7.1	5.0	4.4	5.0	9.1	16.4	4.4	7.9
5	40.7	9.9	9.1	10.4	42.4	13.6	22.8	23.9	61.7	16.1	12.1	17.1	19.6	14.7	16.6	17.1	16.1	14.0	11.8	7.6	4.8	3.9	17.9	6.9	61.7	3.9	18.0
6	9.6	13.3	16.0	13.0	13.3	14.1	9.7	7.0	8.5	12.8	11.4	11.7	12.7	11.6	10.1	8.0	12.0	7.1	6.5	9.6	9.2	4.9	3.5	10.8	16.0	3.5	10.3
7	7.3	10.3	11.7	4.4	4.1	18.7	23.5	13.2	11.3	14.2	14.4	12.6	12.6	14.4	13.8	15.3	13.9	13.4	12.3	8.3	6.9	4.6	9.4	14.9	23.5	4.1	11.9
8	14.5	13.6	10.3	10.9	13.0	11.5	6.2	10.6	13.2	10.4	11.2	12.2	11.8	12.7	23.2	16.9	17.7	17.1	15.8	11.9	8.4	7.4	3.0	13.6	23.2	3.0	12.4
9	13.5	5.1	5.6	13.2	14.2	20.3	15.6	14.5	11.3	14.0	15.2	14.6	14.1	14.0	14.0	15.4	15.1	14.4	14.3	9.3	10.1	4.6	20.6	4.4	20.6	4.4	12.8
10	4.6	15.1	13.0	23.8	19.3	7.4	8.7	17.7	17.7	17.4	14.6	20.6	24.5	21.4	20.3	50.7	71.6	17.4	11.3	14.3	8.4	4.0	7.2	4.9	71.6	4.0	18.2
11	7.4	10.3	18.5	58.0	30.9	9.6	5.7	5.8	7.8	7.2	7.0	6.7	11.8	12.3	10.8	10.7	11.9	9.7	8.6	9.0	7.3	19.2	31.4	21.8	58.0	5.7	14.1
12	27.8	6.1	7.2	4.8	4.1	5.1	6.0	7.7	6.7	7.8	6.8	8.2	15.6	12.1	14.5	22.7	57.6	8.2	13.8	62.1	21.4	24.8	31.0	34.4	62.1	4.1	17.4
13	28.3	13.8	6.3	4.6	7.0	58.0	64.4	64.9	40.2	20.6	24.9	13.8	13.9	15.7	18.3	39.7	16.8	21.8	12.3	6.4	7.9	10.0	18.5	21.6	64.9	4.6	22.9
14	27.2	78.7	37.7	10.9	13.0	19.2	21.4	14.2	7.1	8.3	5.4	6.8	7.7	9.5	7.5	7.6	7.4	5.6	7.8	5.5	5.6	6.9	7.6	20.6	78.7	5.4	14.5
15	7.8	5.0	8.9	7.2	8.7	13.9	8.0	7.6	7.2	6.9	8.4	11.6	26.1	25.9	22.9	23.8	16.8	15.9	12.6	9.6	11.7	77.5	65.5	39.7	77.5	5.0	18.7
16	56.5	20.5	13.3	9.7	9.5	6.6	5.9	5.6	5.5	8.5	8.5	6.2	8.5	11.4	10.5	10.7	9.2	8.7	8.9	7.3	5.1	4.3	9.5	16.8	56.5	4.3	11.1
17	19.5	9.8	7.6	5.8	4.9	5.5	4.8	4.9	4.5	7.8	9.1	7.2	8.4	7.3	8.7	7.9	7.7	5.9	6.5	5.9	5.3	7.1	5.9	4.5	19.5	4.5	7.2
18	4.5	6.1	7.3	9.3	5.1	39.7	30.6	9.8	6.0	26.8	11.1	14.1	24.6	15.2	26.3	20.7	16.5	20.8	38.7	8.9	12.7	19.2	48.1	14.5	48.1	4.5	18.2
19	5.1	32.9	82.0	30.9	14.6	16.9	13.1	94.4	53.6	50.0	13.2	49.0	14.3	14.7	45.0	27.0	14.1	17.3	11.2	6.8	13.3	7.0	29.0	70.8	94.4	5.1	30.3
20	23.0	15.6	35.3	6.7	7.6	9.5	12.1	18.0	30.1	20.1	39.6	6.5	50.5	22.2	13.1	18.0	37.6	15.1	10.0	10.3	20.7	29.0	43.7	10.8	50.5	6.5	21.1
21	22.5	37.3	5.3	33.1	12.7	16.6	12.0	8.6	8.8	5.5	6.6	6.7	6.8	10.5	7.4	9.2	11.6	13.3	11.3	8.1	7.4	6.0	6.2	5.8	37.3	5.3	11.6
22	6.4	9.8	22.7	22.5	10.9	12.1	30.4	8.1	5.7	7.3	6.1	34.5	32.8	30.0	25.9	44.8	39.5	29.7	27.1	14.5	7.7	43.8	12.8	5.1	44.8	5.1	20.4
23	4.2	9.6	9.7	9.7	10.1	11.7	9.6	8.6	12.8	17.3	14.5	14.8	11.2	68.7	21.1	79.8	17.2	9.1	6.8	6.6	6.7	10.8	5.5	11.5	79.8	4.2	16.2
24	64.8	40.5	46.1	42.7	47.1	33.9	15.0	35.8	33.2	9.7	10.4	17.2	11.3	14.7	17.4	17.2	17.1	35.8	72.7	16.2	48.5	66.7	22.5	10.7	72.7	9.7	31.1
25	10.6	27.6	72.2	40.0	10.6	6.0	9.2	6.7	5.6	7.9	17.3	11.7	12.9	23.0	18.2	25.9	22.7	18.1	8.3	6.5	7.6	4.8	4.7	7.8	72.2	4.7	16.1
26	18.2	9.1	7.3	7.8	6.6	7.4	8.0	5.8	6.5	5.8	8.2	5.7	5.6	7.2	7.8	7.7	9.0	11.1	6.2	8.9	9.7	4.5	7.6	10.4	18.2	4.5	8.0
27	8.2	13.1	30.5	74.7	21.4	69.0	8.5	6.0	7.0	5.2	4.8	5.3	5.9	9.7	7.4	7.3	7.5	7.5	6.6	7.0	4.7	7.3	17.6	18.1	74.7	4.7	15.0
28	13.3	34.2	9.1	9.6	6.3	9.4	31.0	76.5	5.1	10.2	8.9	10.2	8.1	21.3	13.7	22.8	16.1	24.0	9.2	5.9	5.7	5.4	6.0	13.9	76.5	5.1	15.7
29	4.1	11.0	12.5	11.0	7.6	6.4	5.3	6.4	37.3	57.4	12.4	83.2	18.7	17.7	17.9	16.8	57.5	9.0	8.3	5.8	5.7	6.1	14.1	16.9	83.2	4.1	18.7
30	20.8	10.0	25.7	59.8	16.8	53.7	8.6	16.9	38.7	49.2	44.9	39.7	27.5	20.4	24.3	18.8	16.1	10.2	10.4	8.2	7.1	5.9	4.8	5.5	59.8	4.8	22.7
31	5.3	5.3	8.5	6.3	6.1	6.0	5.5	5.0	5.6	6.2	8.3	8.9	6.0	16.6	12.2	7.8	8.7	6.4	8.0	5.5	4.9	3.8	4.2	4.9	16.6	3.8	6.9
Max.	**64.8**	**78.7**	**82.0**	**74.7**	**47.1**	**69.0**	**64.4**	**94.4**	**61.7**	**57.4**	**44.9**	**83.2**	**50.5**	**68.7**	**45.0**	**79.8**	**71.6**	**35.8**	**72.7**	**62.1**	**48.5**	**77.5**	**65.5**	**70.8**	**94.4**		
Min.	**3.6**	**5.0**	**5.3**	**4.4**	**4.1**	**4.6**	**4.8**	**4.9**	**4.5**	**5.2**	**4.8**	**5.2**	**5.6**	**7.2**	**7.4**	**7.3**	**7.4**	**5.6**	**6.2**	**5.5**	**4.7**	**3.8**	**3.0**	**4.4**		**3.0**	
Avg.	**17.4**	**16.4**	**19.6**	**19.3**	**13.0**	**17.8**	**14.4**	**18.5**	**16.9**	**16.1**	**13.8**	**16.6**	**15.1**	**17.0**	**16.3**	**20.0**	**19.8**	**14.1**	**13.4**	**10.6**	**9.7**	**14.0**	**16.9**	**15.4**			**15.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	3.6	3.8	4.6	3.9	3.4	3.3	3.1	18.8	6.3	9.6	30.2	8.6	8.8	13.1	14.1	6.1	9.8	7.9	8.2	7.8	5.6	5.5	5.6	30.2	3.1	8.2
2	4.8	5.2	5.3	5.3	4.9	4.9	4.9	5.0	5.1	5.4	5.3	6.9	6.4	6.3	6.6	6.4	6.6	26.5	5.7	6.3	5.2	5.2	5.2	5.1	26.5	4.8	6.4
3	6.1	4.0	8.4	5.5	7.0	5.8	3.8	5.3	4.6	6.6	18.8	35.4	17.1	7.2	23.3	10.6	11.7	15.0	10.0	9.5	5.9	8.1	18.6	6.8	35.4	3.8	10.6
4	8.6	7.5	8.8	6.3	5.2	8.8	67.9	44.2	11.5	20.5	22.7	44.3	16.7	16.0	17.9	19.4	23.6	19.9	24.1	9.2	13.7	12.9	13.4	38.2	67.9	5.2	20.0
5	21.6	54.9	55.3	55.2	24.1	13.3	42.1	3.1	6.5	11.3	21.7	13.3	18.4	19.3	28.0	29.3	29.2	66.0	12.0	15.0	24.3	33.2	18.1	8.7	66.0	3.1	26.0
6	15.0	17.7	7.5	5.9	7.0	4.2	5.4	6.4	5.9	5.8	6.1	6.0	5.5	5.1	5.2	6.5	5.1	5.2	5.4	5.4	7.1	7.4	6.0	6.0	17.7	4.2	6.8
7	7.0	5.5	8.2	8.1	13.5	9.7	5.1	5.0	6.7	8.4	10.8	7.1	7.8	8.4	11.5	15.9	5.5	6.2	5.2	5.2	6.0	5.2	6.5	5.8	15.9	5.0	7.7
8	10.6	11.9	9.8	8.5	6.7	7.6	8.3	7.8	6.0	9.5	17.5	10.1	7.4	6.8	6.1	6.6	4.8	5.4	5.6	5.8	7.0	7.7	6.4	5.7	17.5	4.8	7.9
9	6.5	5.0	5.1	11.1	5.7	8.1	8.0	5.7	5.2	5.6	5.4	4.7	5.3	9.1	5.8	5.5	4.9	5.6	5.6	5.0	7.4	5.0	4.5	5.4	11.1	4.5	6.1
10	7.1	7.5	7.2	4.6	5.9	15.9	12.6	17.7	7.6	15.8	12.1	8.9	15.4	13.1	17.0	11.2	9.2	11.1	7.9	8.3	21.5	14.2	8.6	17.7	21.5	4.6	11.6
11	8.8	9.8	10.5	6.0	6.7	6.3	59.1	11.6	6.5	9.1	9.4	13.6	13.8	8.4	7.7	17.6	14.8	9.1	9.8	7.2	4.9	5.5	4.8	4.8	59.1	4.8	11.1
12	6.0	6.0	5.0	4.6	4.8	4.9	5.1	4.9	5.1	5.4	5.7	4.8	5.3	5.6	5.5	5.1	5.4	5.1	5.2	5.3	5.0	5.1	5.0	4.5	6.0	4.5	5.2
13	4.9	5.5	5.4	5.3	5.4	4.6	4.8	4.4	4.8	4.9	4.6	4.8	6.9	6.1	5.0	5.4	5.1	5.1	5.1	4.7	4.5	5.5	5.4	5.2	6.9	4.4	5.1
14	5.6	6.5	6.2	6.4	8.8	5.9	8.6	7.5	5.7	7.6	5.7	5.1	5.5	6.0	8.8	8.9	7.4	6.9	5.0	4.7	4.7	3.8	5.1	5.7	8.9	3.8	6.3
15	8.7	5.1	4.9	5.3	4.6	4.9	5.8	5.1	4.3	5.6	5.6	6.1	6.1	5.8	7.8	5.3	5.8	6.1	5.0	5.1	4.6	5.3	8.1	6.7	8.7	4.3	5.7
16	14.8	72.4	5.6	5.8	5.3	9.7	7.9	7.0	8.2	5.8	10.1	17.1	9.6	10.1	7.9	10.0	16.7	8.6	16.4	5.1	5.3	13.5	4.9	6.8	72.4	4.9	11.9
17	19.6	27.1	15.9	8.8	9.0	9.4	11.7	8.8	14.2	38.7	28.3	33.3	22.7	10.8	9.8	6.5	6.0	7.7	7.4	6.3	9.5	6.4	16.4	7.4	38.7	6.0	14.2
18	4.8	4.6	4.8	5.5	5.8	4.9	5.3	5.6	7.4	6.5	7.2	11.4	11.3	17.5	11.5	4.9	10.4	18.8	26.1	28.2	28.7	49.1	37.4	14.6	49.1	4.6	13.9
19	14.5	11.0	5.8	8.0	8.8	5.0	4.5	5.9	13.5	6.2	5.9	9.8	6.3	9.1	24.4	5.4	6.3	8.1	7.7	6.5	6.0	10.8	9.6	5.6	24.4	4.5	8.5
20	12.6	12.9	12.4	12.8	20.1	23.0	16.2	20.5	43.1	39.4	79.7	15.4	49.2	24.2	9.6	9.7	13.9	7.6	17.2	5.7	12.7	10.9	11.1	14.7	79.7	5.7	20.6
21	5.8	18.8	19.6	16.2	26.9	12.5	22.3	36.6	23.7	8.5	11.0	6.1	22.9	25.9	20.1	21.3	11.7	15.0	8.4	5.1	6.5	3.0	17.1	8.7	36.6	3.0	15.6
22	11.3	9.2	9.1	4.5	4.3	5.5	18.5	24.9	4.2	8.9	31.5	21.5	39.0	15.9	17.1	15.6	17.4	8.0	6.5	9.4	6.5	4.7	4.3	4.5	39.0	4.2	12.6
23	5.5	5.7	3.8	12.0	12.8	4.9	5.0	6.5	5.4	9.3	7.5	6.1	6.4	6.8	9.0	6.1	6.5	5.9	8.3	9.0	5.3	7.2	11.8	10.0	12.8	3.8	7.4
24	9.3	7.1	4.8	5.2	5.8	6.9	6.2	6.3	27.4	26.0	11.1	5.5	6.8	5.8	6.5	7.3	7.6	7.1	8.4	7.9	8.3	13.5	26.2	14.3	27.4	4.8	10.1
25	14.2	5.6	5.3	40.4	43.6	17.5	34.8	2.9	8.9	6.7	15.6				21.7	15.3	19.1	16.2	18.3	6.7	20.2	46.3	12.2	20.1	46.3	2.9	18.6
26	6.9	7.8	6.8	4.0	4.9	6.0	3.0	3.8	5.0	7.5	57.2	15.9	14.1	52.1	27.4	47.1	36.9	15.3	72.4	43.4	37.5	8.5	8.0	7.0	72.4	3.0	20.8
27	7.5	5.8	6.0	6.6	9.8	9.8	6.6	6.1	3.4	9.7	9.8	9.6	7.6	12.8	10.5	14.7	14.1	14.4	12.0	11.5	16.8	11.3	12.6	11.3	16.8	3.4	10.0
28	2.0	4.8	4.8	3.9	4.2	6.2	11.6	16.7	6.1	7.2	6.8	7.9	23.6	68.8	35.5	42.0	9.0	9.4	12.7	17.2	12.8	5.5	9.3	4.9	68.8	2.0	13.9
29	6.7	3.7	6.9	3.6	3.9	6.9	5.3	5.3	4.8	5.7	7.6	8.7	8.1	8.5	12.9	9.5	11.7	13.5	9.3	9.8	10.8	14.7	31.5	14.4	31.5	3.6	9.3
30	26.9	8.4	3.6	5.2	7.4	20.1	23.7	33.9	9.3	12.6	10.5	10.7	12.8	15.1	16.8	11.0	22.4	24.2	10.6	11.7	7.7	11.7	19.8	8.0	33.9	3.6	14.3
Max.	**26.9**	**72.4**	**55.3**	**55.2**	**43.6**	**23.0**	**67.9**	**44.2**	**43.1**	**39.4**	**79.7**	**44.3**	**49.2**	**68.8**	**35.5**	**47.1**	**36.9**	**66.0**	**72.4**	**43.4**	**37.5**	**49.1**	**37.4**	**38.2**	**79.7**		
Min.	**2.0**	**3.6**	**3.6**	**3.6**	**3.9**	**3.4**	**3.0**	**2.9**	**3.4**	**4.9**	**4.6**	**4.7**	**5.3**	**5.1**	**5.0**	**4.9**	**4.8**	**5.1**	**5.0**	**4.7**	**4.5**	**3.0**	**4.3**	**4.5**		**2.0**	
Avg.	**9.6**	**12.0**	**8.9**	**9.5**	**9.6**	**8.5**	**14.2**	**10.9**	**9.6**	**10.9**	**15.3**	**13.1**	**13.3**	**14.3**	**13.7**	**13.1**	**11.8**	**12.8**	**12.0**	**9.6**	**10.8**	**11.6**	**11.8**	**9.5**			**11.5**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.4	34.1	37.4	19.5	17.2	37.2	28.3	40.1	25.1	49.2	22.6	7.8	5.3	7.7	6.1	8.3	16.5	5.8	23.5	9.7	9.8	7.5	5.7	13.8	49.2	5.3	18.7
2	8.8	71.0	60.0	35.7	11.1	44.3	66.0	27.3	21.1	5.1	38.5	56.2	46.1	18.4	21.9	14.2	9.3	5.2	8.1	9.0	10.1	5.3	5.3	7.1	71.0	5.1	25.2
3	15.3	12.6	10.0	36.9	42.8	15.0	28.3	9.8	12.8	11.4	7.3	6.9	10.3	11.4	13.1	18.5	6.2	10.3	9.2	11.2	5.8	10.3	10.6	10.9	42.8	5.8	14.0
4	8.8	10.7	7.9	10.8	10.8	7.5	10.6	4.6	4.1	5.4	8.4	7.2	46.5	31.1	25.9	10.9	12.1	9.2	7.3	11.8	31.4	29.3	14.5	31.0	46.5	4.1	14.9
5	10.9	13.7	16.9	11.8	16.2	7.5	12.4	7.1	12.1	8.9	7.5	7.8	7.7	32.1	59.5	9.8	32.6	8.1	9.4	9.9	4.4	6.5	9.6	5.5	59.5	4.4	13.7
6	5.9	10.1	8.8	4.9	3.9	8.9	5.0	8.4	4.6	9.3	7.2	4.7	6.1	9.5	12.3	19.4	10.0	11.2	4.7	6.3	3.9	4.3	3.7	3.7	19.4	3.7	7.4
7	4.1	4.5	6.7	5.0	5.3	6.6	5.5	4.8	8.2	7.4	6.4	5.9	6.0	6.3	5.8	4.3	5.0	4.8	4.2	4.7	5.1	5.7	4.8	4.2	8.2	4.1	5.5
8	4.0	5.7	5.7	4.2	4.8	4.5	3.8	4.9	3.5	21.8	12.4	9.8	12.1	11.2	11.2	10.6	11.1	12.6	7.3	9.6	9.9	15.3	8.8	4.4	21.8	3.5	8.7
9	4.4	3.9	5.6	3.8	4.3	4.2	4.4	4.3	4.5	4.4	4.1	4.4	4.7	4.6	4.7	5.1	4.5	4.3	4.5	5.0	4.9	4.7	4.7	4.7	5.6	3.8	4.5
10	5.3	4.7	7.2	36.1	7.9	9.5	10.9	13.3	33.3	29.0	25.9	55.5	19.1	8.5	8.2	7.2	7.1	6.5	7.7	5.9	5.3	6.3	7.3	5.5	55.5	4.7	13.9
11	5.6	4.5	5.1	5.1	5.1	4.7	6.9	6.3	8.0	58.8	7.5	5.9	11.0	14.5	15.0	16.3	17.5	14.7	11.7	9.7	5.3	3.4	7.6	8.7	58.8	3.4	10.8
12	5.3	6.3	4.5	4.4	4.3	3.8	3.9	3.9	4.7	5.0	4.6	4.4	5.0	4.6	4.2	4.5	4.9	9.3	6.3	9.3	8.3	20.6	8.5	26.0	26.0	3.8	6.9
13	17.5	13.1	11.1	10.0	12.2	13.7	8.5	4.4	7.2	9.1	8.6	7.4	36.1	9.0	5.5	5.2	5.2	7.0	4.7	4.5	4.0	5.4	3.4	4.0	36.1	3.4	9.0
14	4.6	4.0	4.0	4.6	5.2	5.1	8.1	5.1	5.2	3.8	4.6	3.6	3.7	3.6	3.0	6.3	4.1	6.2	4.5	3.5	22.9	8.8	6.3	7.0	22.9	3.0	5.7
15	5.4	5.4	4.0	6.1	5.3	8.6	6.3	5.1	7.0	5.4	12.3	15.0	7.0	6.6	5.6	4.2	5.2	4.7	5.0	4.7	4.9	5.8	4.1	5.1	15.0	4.0	6.2
16	6.0	5.9	5.3	4.2	4.6	4.2	4.3	4.5	4.3	4.1	3.5	3.8	6.5	6.5	4.0	7.5	5.3	4.2	4.2	5.3	6.6	5.6	5.7	18.3	18.3	3.5	5.6
17	12.4	21.6	31.0	21.0	25.1	5.5	8.5	4.4	4.2	4.6	5.4	4.8	10.8	4.6	4.6	7.3	35.3	18.6	9.2	8.4	5.6	4.7	4.8	3.2	35.3	3.2	11.1
18	3.6	3.1	3.2	4.1	3.7	3.5	4.1	3.3	3.0	3.3	3.6	4.5	4.3	3.8	4.5	9.8	6.4	3.8	3.4	15.1	13.4	6.8	6.3	6.8	15.1	3.0	5.3
19	10.8	3.5	6.1	3.3	5.4	4.0	3.6	4.1	5.6	6.3	4.4	16.5	10.9	5.2	5.6	4.6	5.1	5.3	5.4	5.0	5.0	4.6	8.8	6.2	16.5	3.3	6.1
20	6.7	17.7	37.5	19.1	10.2	47.0	10.3	43.8	66.8	6.1	78.6	82.1	12.2	7.0	7.8	6.5	17.2	19.7	23.8	47.3	15.4	45.0	19.7	31.2	82.1	6.1	28.3
21	18.5	21.9	34.7	14.3	19.5	10.2	9.3	10.1	21.6	8.8	4.0	5.3	5.7	10.4	14.4	3.6	4.4	5.3	14.4	19.1	15.2	5.6	11.7	18.9	34.7	3.6	12.8
22	14.0	15.1	15.7	13.2	12.4	9.7	6.6	11.3	17.4	12.4	13.3	13.2	19.5	5.5	14.6	9.4	8.4	9.0	6.3	3.7	5.5	5.5	5.3	4.1	19.5	3.7	10.5
23	3.4	3.9	4.6	5.5	6.2	5.0	5.9	8.2	12.9	13.1	15.1	13.8	11.6	16.3	13.0	8.2	3.9	3.6	8.1	6.8	3.8	3.3	6.5	4.3	16.3	3.3	7.8
24	3.5	5.4	3.8	3.8	5.6	8.2	4.5	5.1	4.1	4.0	3.3	4.2	9.2	6.3	5.1	8.3	4.5	21.4	55.9	51.8	83.0	90.7	12.0	14.8	90.7	3.3	17.4
25	9.0	5.9	3.9	3.8	4.0	4.3	5.7	5.4	5.6	5.6	4.1	4.5	3.6	3.7	4.5	7.5	7.0	5.4	3.6	3.1	6.9	16.2	5.0	4.5	16.2	3.1	5.5
26	4.3	4.4	3.6	3.3	3.8	3.7	3.7	3.8	4.1	4.5	6.2	6.8	7.2	6.9	7.5	17.5	20.4	15.7	30.8	14.8	13.3	14.7	22.9	19.1	30.8	3.3	10.1
27	21.5	28.6	21.5	13.3	15.5	4.7	6.3	5.4	6.1	4.6	4.6	10.3	12.0	12.5	5.6	7.6	10.8	32.1	9.2	11.0	4.8	5.2	7.5	7.1	32.1	4.6	11.2
28	7.1	13.9	12.3	24.1	18.0	67.7	17.9	5.9	5.2	4.3	4.2	5.8	4.7	3.5	7.6	4.4	7.5	5.4	18.5	14.1	12.1	11.0	7.1	4.4	67.7	3.5	11.9
29	3.5	3.5	3.7	3.3	2.9	3.8	6.3	4.0	11.0	24.4	38.7	12.5	12.0	10.4	5.6	18.9	3.3	3.4	7.6	3.5	2.8	3.2	3.4	4.3	38.7	2.8	8.2
30	3.5	4.4	3.2	3.8	4.0	5.8	7.5	5.2	5.8	9.0	24.1	12.7	8.7	6.4	33.6	48.8	7.0	22.3	24.4	13.9	54.4	25.5	32.2	22.1	54.4	3.2	16.2
31	24.5	12.9	10.2	7.7	27.6	8.4	53.1	15.5	13.7	36.2	15.6	19.7	20.9	60.9	43.8	6.8	30.1	16.0	6.5	9.0	33.7	55.7	5.5	7.0	60.9	5.5	22.5
Max.	**24.5**	**71.0**	**60.0**	**36.9**	**42.8**	**67.7**	**66.0**	**43.8**	**66.8**	**58.8**	**78.6**	**82.1**	**46.5**	**60.9**	**59.5**	**48.8**	**35.3**	**32.1**	**55.9**	**51.8**	**83.0**	**90.7**	**32.2**	**31.2**	**90.7**		
Min.	**3.4**	**3.1**	**3.2**	**3.3**	**2.9**	**3.5**	**3.6**	**3.3**	**3.0**	**3.3**	**3.3**	**3.6**	**3.6**	**3.5**	**3.0**	**3.6**	**3.3**	**3.4**	**3.4**	**3.1**	**2.8**	**3.2**	**3.4**	**3.2**		**2.8**	
Avg.	**8.7**	**12.1**	**12.8**	**11.2**	**10.5**	**12.2**	**11.8**	**9.3**	**11.4**	**12.4**	**13.1**	**13.6**	**12.5**	**11.3**	**12.4**	**10.4**	**10.6**	**10.0**	**11.3**	**11.2**	**13.5**	**14.3**	**8.7**	**10.2**			**11.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.9	5.9	28.0	36.5	21.7	5.5	11.9	23.2	11.4	10.0	12.2	37.6	26.3	11.3	8.9	19.7	16.7	22.2	23.2	19.6	14.4	10.0	16.2	12.3	37.6	3.9	17.0
2	3.1	3.6	2.9	2.9	4.7	4.6	6.8	3.2	3.2	18.7	16.5	12.8	20.4	13.9	13.8	14.9	10.4	15.3	10.1	10.3	13.1	22.3	22.7	28.8	28.8	2.9	11.6
3	10.0	9.0	18.4	17.2	10.5	7.9	3.8	3.6	2.7	5.3	3.7	4.0	5.9	5.0	6.3	6.9	5.9	4.5	17.0	12.6	7.0	14.1	11.1	13.5	18.4	2.7	8.6
4	12.2	9.8	16.7	8.3	16.4	18.5	15.1	16.6	13.4	6.3	8.9	9.4	6.8	6.2	4.1	3.3	4.6	5.0	4.2	3.6	3.8	5.1	6.4	5.1	18.5	3.3	8.7
5	4.5	6.8	5.7	6.7	7.7	6.9	4.6	4.5	6.8	5.7	9.5	9.6	24.8	5.8	6.3	5.6	10.7	6.0	5.4	6.9	5.7	5.8	5.4	7.5	24.8	4.5	7.3
6	7.9	9.6	8.0	4.9	8.0	3.8	6.7	4.7	4.9	7.7	5.4	6.3	6.1	22.9	8.9	7.4	5.4	13.9	14.0	6.0	19.3	14.2	10.9	8.3	22.9	3.8	9.0
7	6.7	5.9	10.5	7.2	6.2	5.9	6.0	5.6	5.9	7.2	5.3	4.5	7.1	22.6	7.5	8.6	24.0	33.9	80.8	33.1	49.4	32.4	16.0	21.5	80.8	4.5	17.2
8	15.8	32.9	17.8	26.4	21.6	8.6	6.6	5.5	4.8	5.0	5.5	5.1	4.2	3.9	4.2	4.2	3.3	4.7	4.0	4.0	4.8	4.5	4.5	4.5	32.9	3.3	8.6
9	5.6	6.4	3.8	4.4	4.5	4.3	4.5	3.9	4.4	4.9	10.6	5.8	6.9	4.9	5.9	4.2	4.6	8.1	4.5	8.3	4.0	7.6	4.6	6.1	10.6	3.8	5.5
10	4.2	7.1	4.9	5.5	16.7	4.7	4.9	7.2	9.1	7.6	18.9	53.9	96.6	11.2	22.5	32.1	14.6	5.7	3.1	4.5	14.8	4.0	4.2	4.7	96.6	3.1	15.1
11	4.5	4.3	4.7	4.1	4.0	3.6	5.1	4.3	5.4	4.3	6.8	16.4	12.8	29.3	74.2	40.7	28.1	17.3	14.7	12.4	13.4	15.2	10.1	9.2	74.2	3.6	14.4
12	14.7	16.3	11.9	10.2	5.8	8.7	13.4	8.3	11.0	8.5	7.7	13.7	10.5	8.4	10.9	8.3	18.2	25.4	58.9	63.5	35.0	11.3	16.5	13.9	63.5	5.8	17.1
13	15.8	6.4	9.1	18.5	5.5	4.9	4.9	4.0	5.5	5.7	4.2	3.8	6.6	5.7	5.8	6.1	4.7	14.8	8.6	8.8	11.3	14.5	6.9	11.3	18.5	3.8	8.1
14	9.9	6.4	6.5	4.6	8.9	7.5	6.3	5.4	5.2	6.4	11.7	11.4	37.1	21.2	9.2	17.6	18.5	37.5	36.6	19.6	12.0	21.6	26.7	19.0	37.5	4.6	15.3
15	16.4	4.8	8.1	14.4	13.7	10.3	7.9	17.0	16.5	7.3	5.6	5.6	4.5	5.0	4.3	3.7	3.5	4.3	4.4	3.5	3.6	3.8	4.2	3.7	17.0	3.5	7.3
16	4.9	4.8	5.8	7.3	5.0	6.1	6.1	39.5	13.0	21.7	42.9	63.5	30.0	18.8	18.4	73.2	9.4	11.5	9.7	11.0	7.2	14.5	88.8	41.5	88.8	4.8	23.1
17	65.8	24.3	4.8	4.3	4.3	4.1	2.9	5.1	14.0	8.9	7.4	16.1	7.6	3.6	7.1	9.6	5.8	3.9	4.1	3.6	4.4	4.7	4.5	5.0	65.8	2.9	9.4
18	4.8	6.0	8.2	6.1	4.3	2.8	2.7	3.9	4.0	3.8	4.8	4.4	4.0	3.9	3.7	3.5	4.4	4.1	3.9	3.4	4.7	4.1	3.6	4.1	8.2	2.7	4.3
19	6.8	5.4	7.2	6.4	6.0	5.7	6.0	6.5	4.4	4.9	5.6	5.2	4.9	4.8	8.4	5.8	7.5	6.2	11.7	16.6	8.7	14.3	12.7	23.1	23.1	4.4	8.1
20	10.2	8.3	26.4	17.8	9.1	12.7	20.0	19.8	17.5	25.4	18.7	4.9	9.1	10.7	19.4	8.3	17.6	12.5	10.3	14.2	14.8	7.2	12.9	15.5	26.4	4.9	14.3
21	11.0	14.0	10.3	7.8	12.1	5.3	7.4	4.4	4.6	5.3	9.5	5.2	5.4	5.9	5.5	8.4	5.5	5.1	5.1	5.6	5.5	5.4	6.2	5.0	14.0	4.4	6.9
22	4.8	4.6	4.5	6.0	3.9	33.9	13.2	18.1	7.3	12.7	8.9	20.9	34.1	49.7	14.8	41.3	8.6	39.9	82.7	37.0	17.1	43.0	33.8	32.7	82.7	3.9	23.9
23	71.9	41.8	78.9	39.6	26.6	37.3	28.6	14.6	27.3	24.8	37.8	31.6	21.7	41.4	8.4	54.7	30.2	5.0	4.9	4.4	5.3	4.2	6.3	4.4	78.9	4.2	27.2
24	4.1	3.7	3.8	5.0	4.2	5.1	6.3	6.1	4.5	4.0	3.8	3.8	3.6	3.9	4.1	3.7	3.3	3.8	5.5	7.5	9.8	22.9	8.0	9.8	22.9	3.3	5.8
25	12.6	10.8	7.5	3.7	4.1	8.5	9.7	16.9	7.4	9.1	6.5	8.5	16.0	31.5	45.4	10.0	10.4	26.4	6.8	12.3	14.0	13.7	11.5	7.1	45.4	3.7	12.9
26	10.3	10.4	8.2	10.7	11.5	16.5	6.0	17.3	10.5	19.1	15.6	12.6	11.8	10.5	10.5	9.7	9.9	10.1	13.8	5.7	7.7	4.6	5.0	8.4	19.1	4.6	10.7
27	9.2	6.8	6.0	17.7	6.5	9.1	9.2	7.7	7.2	5.8	6.1	6.9	8.4	8.3	7.0	5.4	6.2	5.5	6.0	4.5	6.3	4.5	4.1	5.6	17.7	4.1	7.1
28	6.0	4.0	4.6	4.9	3.5	3.4	4.3	4.8	3.9	4.3	5.0	5.3	4.1	3.6	3.8	4.2	4.0	4.4	4.3	4.1	4.4	5.0	4.6	4.8	6.0	3.4	4.4
29	3.4	3.6	3.5	5.1	5.4	8.9	7.8	9.5	9.3	7.3	9.1	14.2	11.1	10.9	15.6	6.9	4.8	4.2	4.1	3.9	3.8	6.2	3.9	4.3	15.6	3.4	7.0
30	4.5	9.3	4.4	3.5	2.8	5.7	10.6	14.9	13.3	7.0	13.8	15.7	23.8	16.3	15.6	12.0	13.7	14.1	5.4	22.0	16.4	14.4	5.7	4.1	23.8	2.8	11.2
Max.	**71.9**	**41.8**	**78.9**	**39.6**	**26.6**	**37.3**	**28.6**	**39.5**	**27.3**	**25.4**	**42.9**	**63.5**	**96.6**	**49.7**	**74.2**	**73.2**	**30.2**	**39.9**	**82.7**	**63.5**	**49.4**	**43.0**	**88.8**	**41.5**	**96.6**		
Min.	**3.1**	**3.6**	**2.9**	**2.9**	**2.8**	**2.8**	**2.7**	**3.2**	**2.7**	**3.8**	**3.7**	**3.8**	**3.6**	**3.6**	**3.7**	**3.3**	**3.3**	**3.8**	**3.1**	**3.4**	**3.6**	**3.8**	**3.6**	**3.7**		**2.7**	
Avg.	**12.2**	**9.8**	**11.4**	**10.6**	**8.9**	**9.0**	**8.3**	**10.2**	**8.6**	**9.2**	**10.9**	**14.0**	**15.7**	**13.4**	**12.7**	**14.7**	**10.5**	**12.5**	**15.6**	**12.4**	**11.4**	**11.8**	**12.6**	**11.5**			**11.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Northern Dynasty Mines Pebble 4 Meterological Station - Wind Sigma (RMYoung)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.0	26.1	11.9	13.4	10.4	14.2	4.8	6.5	6.7	6.2	8.8	10.3	5.8	5.3	4.4	7.9	11.9	7.9	15.5	12.9	11.3	14.5	13.4	18.6	26.1	4.0	10.5
2	5.7	19.9	5.6	16.7	29.2	11.5	4.5	5.7	5.4	4.6	5.1	4.0	3.7	3.6	4.2	3.7	4.1	3.9	3.8	3.8	4.2	4.1	3.4	4.0	29.2	3.4	6.8
3	4.4	3.7	3.8	3.8	4.1	4.2	4.4	4.7	5.8	4.6	5.0	4.6	4.7	4.7	4.3	4.5	4.8	4.3	5.7	5.9	4.3	4.1	3.8	3.9	5.9	3.7	4.5
4	4.4	4.9	8.3	4.6	6.1	4.2	3.8	4.0	4.6	4.5	3.8	3.9	4.8	3.8	3.9	4.1	4.1	7.2	3.9	5.1	4.2	3.7	4.0	3.5	8.3	3.5	4.6
5	4.2	3.2	3.7	4.5	3.8	3.6	4.5	3.2	5.4	3.4	3.8	4.3	4.0	4.0	4.6	3.5	3.5	3.0	4.3	4.4	5.3	4.8	3.7	4.4	5.4	3.0	4.0
6	4.5	4.2	5.0	4.3	4.6	3.7	3.4	4.2	4.4	3.4	6.4	4.6	37.1	23.4	17.6	21.1	3.9	27.3	15.6	9.1	4.4	7.7	5.7	3.7	37.1	3.4	9.6
7	3.7	4.7	4.9	5.5	5.0	5.2	4.9	6.3	6.0	5.8	6.2	4.9	4.5	4.7	4.6	5.8	5.7	6.2	8.2	6.3	7.3	4.9	5.5	20.4	20.4	3.7	6.1
8	12.2	9.1	26.4	5.4	14.8	4.7	10.0	5.9	4.4	5.3	6.3	12.4	8.3	6.2	5.8	4.0	4.6	4.7	4.3	6.4	7.1	8.2	7.8	9.4	26.4	4.0	8.1
9	4.5	4.8	5.9	5.3	6.1	11.2	6.8	5.7	6.7	10.4	13.7	12.0	33.0	65.0	40.6	8.9	13.9	9.4	14.7	11.9	8.3	6.0	27.9	23.0	65.0	4.5	14.8
10	12.1	6.1	15.0	7.2	11.5	7.3	3.6	5.0	5.6	4.6	11.9	9.6	29.6	11.5	35.3	43.0	37.0	23.7	30.9	4.9	11.4	14.6	24.2	12.2	43.0	3.6	15.7
11	11.6	6.5	5.8	5.7	7.9	24.7	34.5	51.1	55.6	59.7	35.6	26.6	24.5	51.1	30.5	39.2	10.6	7.9	4.8	12.4	9.0	15.9	12.1	7.5	59.7	4.8	22.9
12	11.0	10.2	9.8	32.3	15.0	53.7	13.8	25.1	18.7	14.9	27.5	25.5	9.3	4.4	4.9	18.0	6.4	11.9	15.3	10.6	13.0	6.3	16.5	17.9	53.7	4.4	16.3
13	9.6	6.1	12.0	15.3	12.8	17.4	76.3	9.9	16.4	10.8	8.2	6.1	9.2	9.3	7.5	4.9	5.7	5.3	3.9	4.3	7.9	4.7	24.5	13.0	76.3	3.9	12.5
14	9.4	13.0	20.5	54.1	9.2	15.4	20.1	11.6	5.6	6.4	10.2	10.4	11.8	5.0	5.6	4.5	5.8	6.3	13.2	10.5	3.6	3.4	3.9	3.2	54.1	3.2	10.9
15	3.3	3.7	4.5	6.5	5.1	4.9	4.1	6.1	7.2	9.1	3.5	5.0	42.6	6.2	5.8	10.5	26.1	9.3	7.0	5.4	11.3	10.4	9.6	11.3	42.6	3.3	9.1
16	9.2	8.2	6.9	8.9	79.2	91.4	47.2	20.6	22.8	24.8	31.9	9.4	4.6	4.6	6.3	5.8	5.2	7.1	4.9	4.5	4.5	5.0	4.4	4.7	91.4	4.4	17.6
17	3.2	4.5	3.5	3.7	3.8	3.9	3.6	3.7	3.4	3.9	3.7	3.4	3.5	4.0	3.1	3.2	3.6	3.3	3.1	3.2	3.5	4.2	4.6	4.7	4.7	3.1	3.7
18	3.2	3.5	3.3	3.5	3.2	3.6	3.3	4.0	4.2	3.7	3.8	4.2	4.1	3.9	4.3	4.0	3.7	3.6	3.6	3.8	3.9	3.8	3.6	3.4	4.3	3.2	3.7
19	3.4	3.9	4.2	3.6	3.4	3.9	3.6	4.3	8.4	6.8	3.7	5.0	4.0	6.6	6.2	7.6	11.5	10.8	6.2	5.0	5.0	4.8	4.5	5.8	11.5	3.4	5.5
20	7.0	5.4	4.8	4.3	9.6	4.2	6.5	4.8	3.4	2.5	3.6	3.2	7.8	5.7	5.7	4.5	14.7	18.8	44.4	36.6	39.1	25.1	5.4	9.1	44.4	2.5	11.5
21	11.5	14.2	19.1	52.0	7.8	10.3	10.4	7.9	7.6	25.8	9.2	8.0	68.9	34.8	32.0	48.8	32.1	17.8	53.6	65.0	8.9	41.2	12.3	6.7	68.9	6.7	25.2
22	7.2	63.6	14.2	7.8	9.5	4.7	4.0	3.9	3.6	5.5	4.8	6.3	7.9	12.9	6.8	5.2	3.7	6.1	3.5	4.7	3.8	3.7	4.1	4.7	63.6	3.5	8.4
23	5.8	3.4	3.2	3.7	3.7	3.8	5.0	4.7	79.6	13.2	3.8	6.5	4.8	4.0	3.3	4.1	3.0	4.2	4.0	4.5	4.2	3.7	3.3	3.9	79.6	3.0	7.6
24	3.0	4.2	7.4	3.7	3.7	24.1	39.7	20.6	17.8	10.9	31.0	15.6	21.9	27.4	7.2	14.2	10.5	26.1	47.7	11.5	10.1	16.8	7.4	13.3	47.7	3.0	16.5
25	8.1	4.5	4.1	3.3	3.8	3.6	3.6	3.7	3.8	3.3	3.1	4.5	4.2	3.8	5.3	5.4	60.9	10.7	8.7	3.5	4.7	4.1	4.6	4.2	60.9	3.1	7.1
26	4.2	3.8	3.9	4.8	4.9	5.7	5.2	4.2	3.7	3.7	3.8	4.9	4.1	4.2	4.9	3.8	3.3	3.7	3.5	3.5	3.9	3.9	5.5	4.3	5.7	3.3	4.2
27	4.3	5.9	5.9	5.1	5.0	11.2	13.2	11.4	9.0	5.0	3.7	14.0	22.4	13.0	22.4	11.1	14.0	16.9	22.8	28.7	20.5	28.0	29.2	18.2	29.2	3.7	14.2
28	21.4	16.4	18.3	20.0	22.3	19.3	28.0	26.1	22.3	13.4	15.2	15.7	17.7	14.4	5.8	3.6	6.9	9.5	13.8	11.7	9.1	12.0	10.6	7.5	28.0	3.6	15.0
29	4.8	5.3	5.3	5.1	5.8	4.6	6.4	5.3	3.9	4.6	5.2	5.5	5.6	5.3	5.1	7.5	6.6	6.4	4.3	5.4	4.4	5.9	4.6	10.5	10.5	3.9	5.6
30	8.3	12.0	6.2	8.0	6.0	8.2	4.3	3.8	5.0	4.1	5.6	5.9	8.9	6.9	4.7	4.4	6.1	6.3	6.3	8.0	5.2	4.9	6.2	5.4	12.0	3.8	6.3
31	5.0	6.0	10.0	9.6	10.8	7.1	13.6	7.0	4.6	4.8	5.6	4.2	5.1	8.7	3.6	3.8	4.1	5.3	6.9	7.8	4.2	5.2	5.6	7.6	13.6	3.6	6.5
Max.	**21.4**	**63.6**	**26.4**	**54.1**	**79.2**	**91.4**	**76.3**	**51.1**	**79.6**	**59.7**	**35.6**	**26.6**	**68.9**	**65.0**	**40.6**	**48.8**	**60.9**	**27.3**	**53.6**	**65.0**	**39.1**	**41.2**	**29.2**	**23.0**	**91.4**		
Min.	**3.0**	**3.2**	**3.2**	**3.3**	**3.2**	**3.6**	**3.3**	**3.2**	**3.4**	**2.5**	**3.1**	**3.2**	**3.5**	**3.6**	**3.1**	**3.2**	**3.0**	**3.0**	**3.1**	**3.2**	**3.5**	**3.4**	**3.3**	**3.2**		**2.5**	
Avg.	**6.9**	**9.4**	**8.5**	**10.7**	**10.6**	**12.8**	**12.8**	**9.4**	**11.7**	**9.3**	**9.5**	**8.4**	**13.8**	**11.9**	**9.9**	**10.3**	**10.9**	**9.5**	**12.5**	**10.4**	**8.0**	**9.2**	**9.1**	**8.7**			**10.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Daily Total Precipitation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	-	-	-	-	19.0	0.0	0.0
2	0.0	0.0	2.6	0.6	0.0	-	-	-	-	16.8	0.0	3.8
3	0.0	0.0	5.2	4.6	0.6	-	-	-	-	0.0	0.0	4.6
4	0.0	0.0	0.6	8.2	0.8	-	-	-	-	0.0	0.0	0.0
5	0.0	0.0	0.0	6.4	0.8	-	-	-	-	1.8	0.0	3.0
6	0.0	0.0	0.0	6.4	0.0	-	-	-	-	0.0	0.0	2.6
7	0.0	0.0	0.0	14.4	0.0	-	-	-	-	0.0	0.0	0.0
8	0.0	0.0	0.0	1.0	0.0	-	-	-	-	0.0	3.0	2.4
9	0.0	0.0	0.0	0.0	0.0	-	-	-	-	18.8	2.2	0.0
10	0.0	0.0	0.0	0.0	3.6	-	-	-	-	10.4	0.0	0.0
11	0.0	0.0	0.0	0.0	2.8	-	-	-	-	20.4	0.4	0.0
12	0.0	0.0	0.0	0.0	-	-	-	-	-	0.0	0.6	4.4
13	0.0	0.0	0.0	14.6	-	-	-	-	-	18.6	2.4	0.0
14	0.0	0.0	0.0	4.4	-	-	-	-	-	11.2	1.4	0.0
15	0.0	0.0	0.0	0.0	-	-	-	-	-	0.0	1.6	0.0
16	0.0	0.0	0.0	0.2	-	-	-	-	-	0.0	1.6	0.2
17	0.0	0.0	0.0	5.0	-	-	-	-	-	2.2	0.0	4.0
18	0.0	0.0	0.0	0.2	-	-	-	-	-	0.2	0.0	0.6
19	0.0	0.0	0.0	0.2	-	-	-	-	-	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	-	-	-	-	-	0.0	0.4	0.0
21	0.0	1.2	0.0	0.0	-	-	-	-	-	0.0	0.0	0.0
22	0.0	6.2	0.0	1.6	-	-	-	-	-	0.0	0.0	1.8
23	0.0	0.4	0.0	0.4	-	-	-	-	-	0.2	0.0	14.8
24	0.0	0.0	0.0	0.0	-	-	-	-	-	0.0	0.0	1.2
25	0.0	0.0	0.0	5.6	-	-	-	-	-	0.0	0.0	6.2
26	0.0	0.0	0.0	0.2	-	-	-	-	4.2	0.0	0.0	6.0
27	0.0	0.0	0.0	5.4	-	-	-	-	0.0	0.0	0.0	12.8
28	0.0	0.4	0.0	3.0	-	-	-	-	0.0	0.0	0.0	0.6
29	0.0	0.0	0.0	0.0	-	-	-	-	0.2	0.0	0.0	0.2
30	0.0		0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
31	0.0		0.0		-		-	-		0.0		0.0
Total	0.0	8.2	8.4	82.4	8.6	0.0	0.0	0.0	4.4	119.6	13.6	69.2

Pebble 4 Meteorological Station - Daily Total Pan Evaporation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	5.2	2.1	3.3	3.1	0.0	-	-
2	-	-	-	-	-	0.0	4.3	0.6	0.0	0.0	-	-
3	-	-	-	-	-	3.3	0.0	4.8	0.0	0.0	-	-
4	-	-	-	-	-	4.0	0.9	1.9	0.1	0.0	-	-
5	-	-	-	-	-	0.6	2.6	5.5	1.7	0.0	-	-
6	-	-	-	-	-	1.9	4.2	7.1	0.0	0.0	-	-
7	-	-	-	-	-	5.1	0.0	6.3	0.0	0.0	-	-
8	-	-	-	-	-	3.7	0.2	6.1	0.0	0.0	-	-
9	-	-	-	-	-	1.1	7.0	6.5	0.0	0.0	-	-
10	-	-	-	-	-	1.0	3.9	3.9	0.0	0.0	-	-
11	-	-	-	-	-	0.0	4.8	3.1	0.0	0.0	-	-
12	-	-	-	-	0.0	0.0	0.0	2.9	0.0	0.0	-	-
13	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-
14	-	-	-	-	0.0	0.0	2.2	0.0	0.0	-	-	-
15	-	-	-	-	0.0	2.1	5.0	0.0	0.7	-	-	-
16	-	-	-	-	0.0	1.0	0.0	0.6	0.1	-	-	-
17	-	-	-	-	3.1	6.7	0.0	3.5	0.0	-	-	-
18	-	-	-	-	0.0	5.0	1.2	0.9	0.0	-	-	-
19	-	-	-	-	3.3	5.0	3.2	1.6	0.0	-	-	-
20	-	-	-	-	3.1	6.3	0.0	0.0	0.0	-	-	-
21	-	-	-	-	4.4	2.0	0.0	0.0	1.4	-	-	-
22	-	-	-	-	5.4	5.2	0.0	0.0	0.0	-	-	-
23	-	-	-	-	0.0	4.7	0.0	0.0	0.0	-	-	-
24	-	-	-	-	2.1	4.5	0.0	0.0	0.0	-	-	-
25	-	-	-	-	0.0	5.6	1.4	1.7	0.0	-	-	-
26	-	-	-	-	1.6	0.0	0.0	0.7	0.0	-	-	-
27	-	-	-	-	4.2	4.4	0.0	0.0	0.0	-	-	-
28	-	-	-	-	5.3	1.3	3.9	0.0	0.0	-	-	-
29	-	-	-	-	5.4	3.6	0.1	0.8	0.0	-	-	-
30	-	-	-	-	0.8	1.4	1.9	3.3	0.0	-	-	-
31	-		-		2.8		6.8	0.0		-		-
Total	-	-	-	-	41.5	84.9	55.8	65.0	7.1	0.0	-	-

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2M

2008 Annual Data Report, Pebble 5 Station, for the Pebble Project Meteorological Monitoring Program

2008 Annual Data Report
Pebble 5 Station

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

April 2009

Pebble 5 Station
2008 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2009

prepared for

Pebble Limited Partnership,
care of Pebble Mines Corp.
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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary 4
1.2 Measurements Method Table 5
1.3 Variations from the Quality Assurance Project Plan 5

2.0 Station Performance Summary **10**

2.1 Significant Project Events 10
2.2 Missing, Invalid, and Adjusted Data 11
2.3 Network Data Completeness 11
2.4 Precision Statistics 14
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics 14
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **20**

3.1 Air Quality Data Summary 20
3.2 Meteorological Data Summary 20
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 20
3.2.2 Temperature Climatology 32
3.3.3 Other Meteorological Parameters 37

4.0 References **43**

List of Figures

1-1. Map of the Pebble Project Area 7
1-2. Map of the Pebble 5 Station 8
1-3. Pebble 5 Meteorological Monitoring Station 9
3-1. 2008 Pebble 5 Station Wind Roses 22
3-2. Quarterly Pebble 5 Station Wind Roses (Climatronics) 23
3-3. Quarterly Pebble 5 Station Wind Roses (RM Young) 24
3-4. 2008 Wind Rose Superimposed on Site Map 31

3-5. Hourly Average 2-Meter and 10-Meter Temperatures 35
3-6. Hourly Average Vertical Temperature Difference 36
3-7. Hourly Average Relative Humidity 39
3-8. Hourly Average Barometric Pressure 40
3-9. Hourly Average Solar Radiation 41
3-10. Hourly and Cumulative Precipitation 42

List of Tables

E-1. Meteorological Data Capture – Valid Hours per Month 2
E-2. Meteorological Data Capture – Percent Data Capture 3
1-1. Meteorological Measurement Methods 6
2-1. Chronology of Significant Events 10
2-2. Percentage of Final Data Set Flagged 12
2-3. Pebble 5 Station Percent Data Capture. 13
2-4. August 31 and September 1, 2007 Performance Audit Summary 16
2-5. February 10 and 11, 2008 Performance Audit Summary 17
2-6. September 25 and 26, 2008 Performance Audit Summary 18
3-1. Average and Maximum Wind Speeds 20
3-2. Average and Maximum Wind Speeds at Iliamna Airport 21
3-3. 2008 Annual Wind Rose Analysis Table (Climatronics) 25
3-4. Quarter A Wind Rose Analysis Table (Climatronics) 26
3-5. Quarter B Wind Rose Analysis Table (Climatronics) 26
3-6. Quarter C Wind Rose Analysis Table (Climatronics) 27
3-7. Quarter D Wind Rose Analysis Table (Climatronics) 27
3-8. 2008 Annual Wind Rose Analysis Table (RM Young) 28
3-9. Quarter A Wind Rose Analysis Table (RM Young) 29
3-10. Quarter B Wind Rose Analysis Table (RM Young) 29
3-11. Quarter C Wind Rose Analysis Table (RM Young) 30
3-12. Quarter D Wind Rose Analysis Table (RM Young) 30
3-13. 2-Meter Temperature Summary 33
3-14. 10-Meter Temperature Summary 34
3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary 38

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Data Summaries
E Validated Manual Particulate Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

Prevention of Significant Deterioration (PSD) quality meteorological monitoring for the Pebble Project began on July 1, 2007 and will be ongoing. This report provides details of the 2008 calendar year of meteorological measurements collected from January 1, 2008 through December 31, 2008 at the Pebble 5 meteorological station.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 5 meteorological monitoring station. The Pebble 5 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of precipitation during Monitoring Quarter A (January 1, 2008 through March 31, 2008) as a result of instrument failure.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2008	744	744	744	744	744	744	744	744	744	744	744	744	0[4]	N/A[3]
February 2008	695	695	695	695	695	695	695	695	695	696	696	696	0	N/A
March 2008	744	744	744	744	744	744	744	744	744	744	744	744	611	N/A
April 2008	720	720	720	720	720	720	720	720	720	720	720	720	720	N/A
May 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	481
June 2008	720	720	720	720	720	720	720	720	720	720	720	720	720	720
July 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	744
August 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	744
September 2008	718	718	718	719	719	719	717	717	717	720	720	720	718	718
October 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	287
November 2008	720	720	720	720	720	720	720	720	720	720	720	720	720	N/A
December 2008	743	743	743	743	743	743	743	743	743	744	744	744	743	N/A
Monitoring Year	**8,781**	**8,781**	**8,781**	**8,782**	**8,782**	**8,782**	**8,780**	**8,780**	**8,780**	**8,784**	**8,784**	**8,784**	**7,208**	**3,693**[3]

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] The evaporation gauge was in commission from May 12, 2008, through October 12, 2008.
[4] Precipitation gauge failed March audit. Data invalidated from September 1, 2007 through March 6, 2008.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%[4]	N/A[3]
February 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100%	100%	100%	0.0%	N/A
March 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	82.1%	N/A
Quarter A	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**28.0%**	**N/A**
April 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	N/A
May 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	95.0%
June 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
Quarter B	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100.0%**	**98.0%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	99.9%	99.9%	99.6%	99.6%	99.6%	100%	100%	100%	99.7%	99.7%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	N/A
December 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100%	100%	100%	99.9%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100.0%**	**100%**
Monitoring Year	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**82.1%**	**99.3%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] The evaporation gauge was in commission from May 12, 2008 through October 12, 2008.
[4] Precipitation gauge failed March audit. Data invalidated from September 1, 2007 through March 6, 2008.

1.0 Introduction

1.1 Project Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future air quality permitting needs for the Pebble Project. This meteorological monitoring project currently consists of seven PSD-quality meteorological monitoring stations. Four stations are located in the deposit area; Pebble 1, Pebble 4, Pebble 5, and Pebble 6. Three stations are located in the proposed Port area; Pebble Port, Williamsport, and North Head. Data from the non-PSD meteorological monitoring station, Pebble 3 and Pebble 5A, are being used for engineering and mine design purposes. This report focuses on the first year of measurements collected at the Pebble 5 station from January 1, 2008 through December 31, 2008. A separate annual data report has been prepared for each of the other PSD-quality meteorological monitoring stations.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 5 station.

The Pebble 5 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C]);
- Air temperature, ten meters above ground (degrees Celsius [°C]);
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]));
- Wind speed (meters per second [m/s]);
- Wind direction (degrees [°]);
- Wind direction standard deviation (wind sigma [σ_θ]);
- Relative humidity (percent [%]);
- Solar radiation (Watts per square meter [W/m^2]);
- Barometric Pressure (millibar [mb]);
- Precipitation (millimeters [mm]); and
- Evaporation (millimeters [mm]).

Measurements of these parameters will provide at least one year of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 5 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble 5 station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 5 station.

1.3 Variations from the Quality Assurance Project Plan

During the 2008 monitoring year, no variations occurred from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 12 in	± .254 mm	N/A[3]	N/A[3]
Precipitation	Met One	Tipping bucket mechanism	0 to 76.2 mm/hr	± 1%	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.

[2] Instantaneous barometric pressure measurements are collected for one second during every hour.

[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

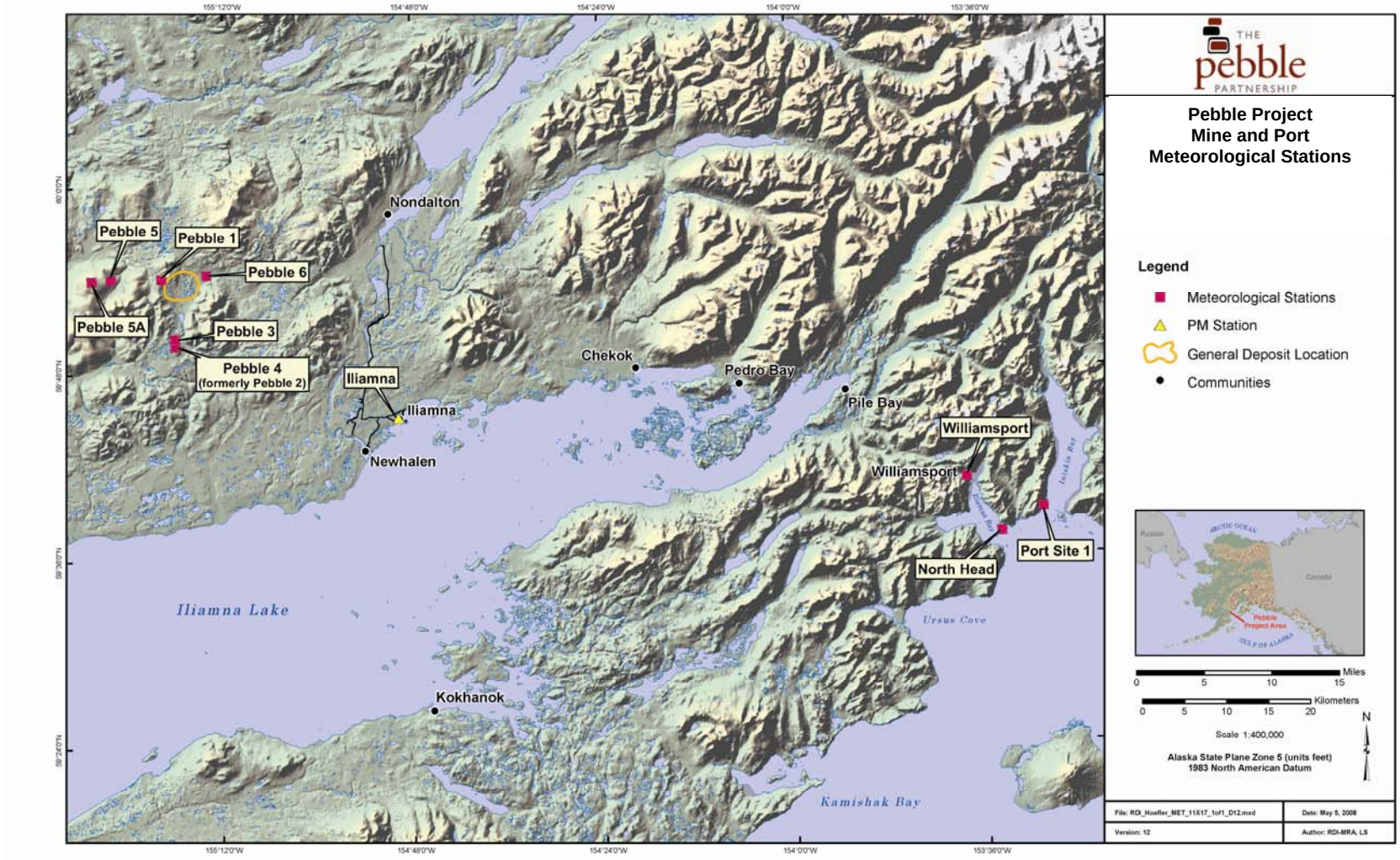


Figure 1-2. Map of the Pebble 5 Station

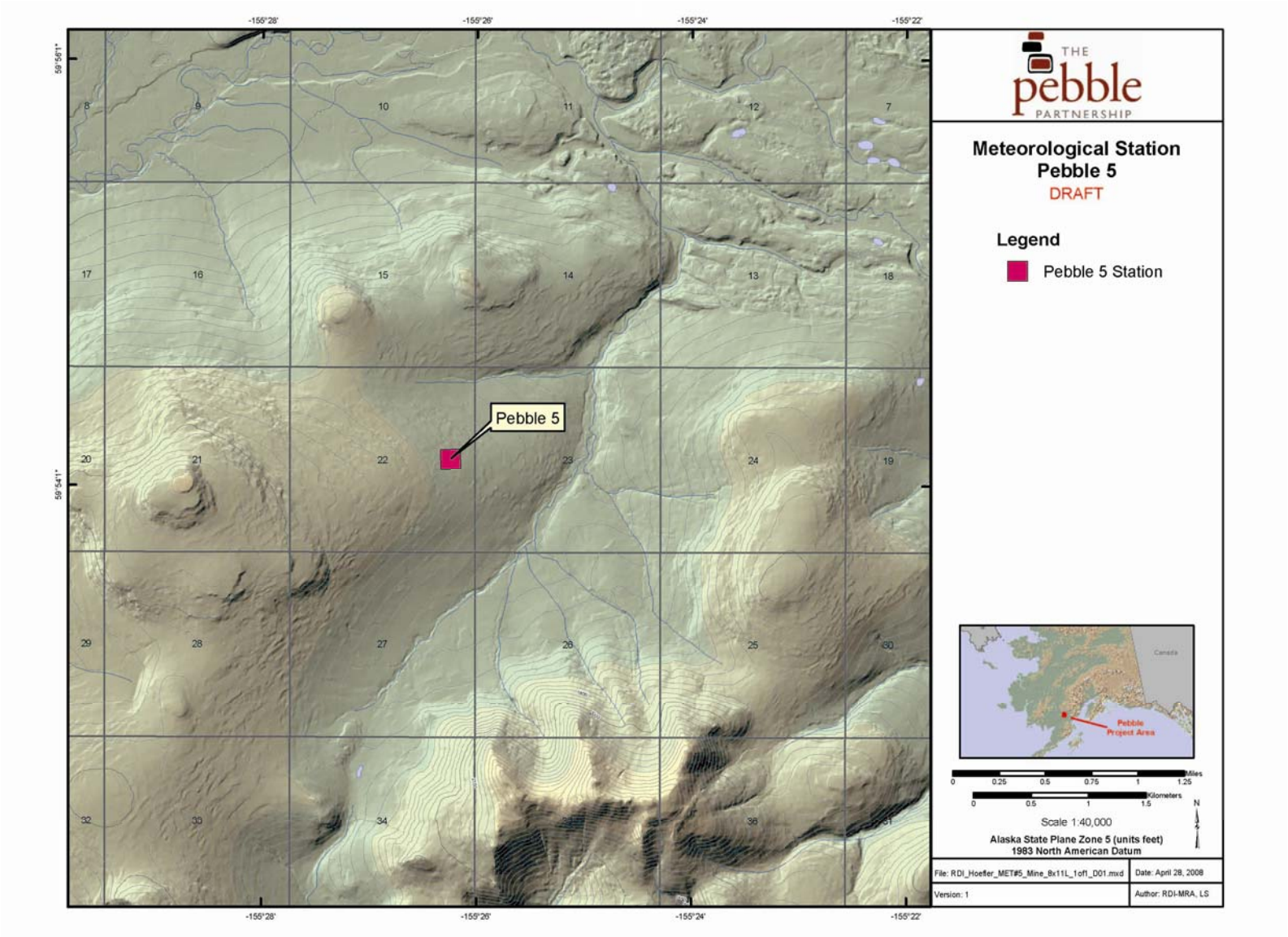
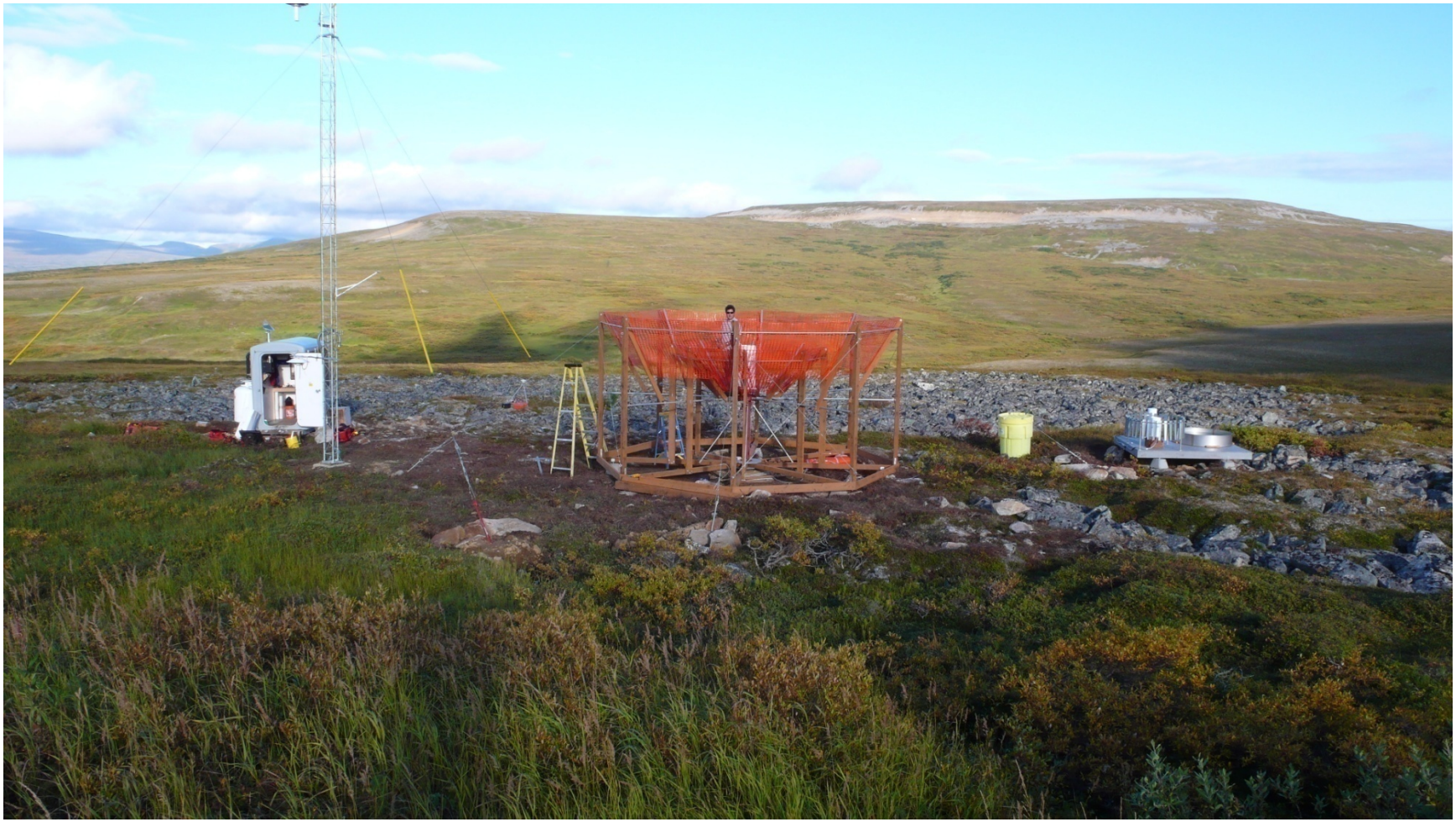


Figure 1-3. Pebble 5 Meteorological Monitoring Station



2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 5 station relevant to the 2008 meteorological monitoring year.

Table 2-1. Chronology of Significant Events

Date	Event
January 1, 2008	Beginning of 2008 monitoring year.
January 30, 2008	Site visit to service precipitation gauges. Met-One tipping gauge in a snow drift-dug out.
February 10 and 11, 2008	Full audit performed (all sensors passed, too cold to perform weighing precipitation test).
March 5, 2008	Precipitation gauge audit and calibration (instrument failed and replaced). Dug out Met-One tipping gauge buried with snow.
March 26, 2008	Check the 2 m aspirator for signs of snow drifting due to seemingly low temp readings for the last 4 days. Found aspirator not full of snow although the snow had come to within ~2ft of it. Snow was shoveled out to provide a good snow-free area under the aspirator.
April 29, 2008	Dug out 2 m aspirator from snow drift, still running and no snow inside. 8'+ snow/ ice on evaporation deck, unable to start evaporation gauge.
May 12, 2008	Calibrated and refreshed precipitation gauges, calibrated and started evaporation gauge.
July 30, 2008	Fixed broken building guy. Serviced precipitation gauges.
September 25 and 26, 2008	Full audit performed (all sensors passed).
October 12, 2008	Evaporation gauge decommissioned for winter.
December 31, 2008	Ending of 2008 monitoring year.

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 5 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations.

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2008 monitoring year at the Pebble 5 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.1%
	< 0.1 m/s variation for 3 consecutive hours	3.3%
	<0.5 m/s variation for 12 consecutive hours	1.8%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	2.0%
	< 10° variation over 18 consecutive hours	1.7%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.1%
	< 0.1 m/s variation for 3 consecutive hours	0.9%
	< 0.5 m/s variation for 12 consecutive hours	0.1%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.0%
	< 1° variation over 3 consecutive hours	1.3%
	< 10° variation over 18 consecutive hours	1.1%
Temperature (2 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	2.0%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	0.6%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	7.1%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	1.7%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	1.8%
	Equals ambient temperature for 12 consecutive hours	2.8%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	0.0%
	> 6 mb variation for 3 consecutive hours	0.0%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	70.0%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).

[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 5 Station Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip[4]	Evap
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	N/A[3]
February 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100%	100%	100%	0.0%	N/A
March 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	82.1%	N/A
Quarter A	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**28.0%**	**N/A**
April 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	N/A
May 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	95.0%
June 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
Quarter B	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100.0%**	**98.0%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	99.9%	99.9%	99.6%	99.6%	99.6%	100%	100%	100%	99.7%	99.7%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	N/A
December 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100%	100%	100%	99.9%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100.0%**	**100%**
Monitoring Year	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**82.1%**	**99.3%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] The evaporation gauge was in commission from May 12, 2008, through October 12, 2008.
[4] Precipitation gauge failed March audit. Data invalidated from September 1, 2007 through March 6, 2008.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A performance audit was performed on all station sensors on August 31 and September 1, 2007 to check sensor operation against certified audit equipment. All sensors passed. The results of the performance audit are presented in Table 2-4.

The first annual performance audit for 2008 was conducted at the Pebble 5 station on February 10 and 11 on all instruments except the precipitation gauge due to the extreme cold ambient temperature. All sensors passed except the precipitation gauge (tested March 5, 2008). The precipitation data was invalidated from the date of the last audit on September 1, 2007. The results of this audit are presented in Table 2-5.

The second annual performance audit for 2008 was conducted at the Pebble 5 station on September 25 and 26, 2008 on all instruments. All sensors passed. The results of this audit are presented in Table 2-6.

Performance audits involve reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with

established PSD limits to assess the accuracy of the sensor. Complete performance audit reports for the monitoring year are available in Appendix C.

A technical systems audit was performed during the September 25 and 26, 2008 performance audit. During each technical audit, the power supply, DAS, communications system, and audited sensors all worked properly. The systems audit found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system. Appendix C contains the complete technical systems audit report.

Table 2-4. August 31 and September 1, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	-0.06	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	-0.06	Pass
Air Temperature Difference	≤ ±0.1	°C	-0.02	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.07	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.5	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.9	Pass
RM Young Wind System				
Wind Speed Torque-Old Bearings[1]	≤ 0.014	oz-in	0.009	Pass
Wind Speed Torque-New Bearings[1]	≤ 0.014	oz-in	0.008	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.4	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.1	Pass
Wind Direction Linearity	≤ 3	Degree	1.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.9	Pass
Barometric Pressure	≤ ±3	Mbar	-0.7	Pass
Solar Radiation	≤ ±5+Res	% input	-5.0	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Tipping Precipitation	≤ ±10	% input	-3.3	Pass
Evaporation	≤ ±10	% input	4.9	Pass

[1] The bearing was tight for a new instrument; changed and rechecked.

Table 2-5. February 10 and 11, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:03	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.4	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.0	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.2	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.5	Pass
Barometric Pressure	≤ ±3	Mbar	0.7	Pass
Solar Radiation	≤ ±5+Res	% input	-6.4[1]	Pass
Weighing Precipitation (Old)[2]	≤ ±10	% input	-42.1	Fail
Weighing Precipitation (New)[2]	≤ ±10	% input	6.6	Pass
Tipping Precipitation[2]	≤ ±10	% input	-5.0	Pass

[1] Max percent error value of 6.4 within limit of 5% input and resolution, see audit.

[2] Too cold to run precipitation gauge tests in February; tested on March 5, 2008.

Table 2-6. September 25 and 26, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.25	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.25	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.35	gm-cm	0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque (In Situ)	≤ 7.5	gm-cm	7.0	Pass
Wind Dir. Azim. Alignment (In Situ)	≤ ±5	Degree	4.1	Pass
Wind Direction Accuracy (In Situ)	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity (In Situ)	≤ 3	Degree	0.8	Pass
Wind Direction Torque (New Bearings)	≤ 7.5	gm-cm	6.0	Pass
Wind Direction Accuracy (New Bearings)	≤ ±5	Degree	2.2	Pass
Wind Direction Linearity (New Bearings)	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Alignment (Post Audit)	≤ ±5	Degree	2.8	Pass
RM Young Wind System (in Situ)				
Wind Speed Torque	≤ 1.0	gm-cm	0.6	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	10.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	3.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass

Table 2-6 (Cont.) September 25 and 26, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System (Replacement)				
Wind Speed Torque	≤ 1.0	gm-cm	0.4	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	5.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.7	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	3.1	Pass
Wind Speed Torque	≤ 1.0	gm-cm	0.4	Pass
Barometric Pressure	≤ ±3	Mbar	1.5	Pass
Solar Radiation	≤ ±5+Res	% input	6.3[1]	Pass
Tipping Precipitation	≤ ±10	% input	4.8	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Evaporation	≤ ±10	% input	4.0	Pass

[1] Maximum error within limit of 5% of input + resolution, see audit.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2008 meteorological monitoring year at the Pebble 5 station. The mean hourly average wind speed during the 2008 monitoring year was 5.78 meters per second (m/s) and 5.60 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 29.53 m/s and 27.47 m/s were measured by the CLM and RMY sensors, respectively, on January 19, 2008.

Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 37 kilometers (km) from the Pebble 5 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.94 m/s, while the maximum hourly average wind speed was 16.99 m/s, recorded on January 19, 21 and May 23, 2008.

Table 3-1. Average and Maximum Wind Speeds

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	6.60	6.26	29.53	27.47
Quarter B	6.05	6.01	22.70	20.83
Quarter C	4.73	4.45	18.40	17.09
Quarter D	5.76	5.70	23.73	21.99
Monitoring Year	**5.78**	**5.60**	**29.53**	**27.47**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the first monitoring year. Winds were predominantly from the northwest and southeast, with other minor wind components from the north, south and southwest. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. All of the quarterly wind roses are characterized by major wind component from the southeast. The Quarter A and D wind roses also exhibited a major wind component from the northwest. Quarter B and Quarter C wind roses exhibited other minor wind components from the south, northwest and southwest directions. Quarter A and Quarter D wind roses exhibited other minor wind components from the north, south and southwest directions. Tables 3-3 through 3-7 are the annual and quarterly wind tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Table 3-2. Average and Maximum Wind Speeds at Iliamna Airport

Monitoring Period	Mean Daily Average Wind Speed (m/s)	Maximum Daily Average Wind Speed (m/s)
Quarter A	4.23	16.99
Quarter B	3.86	16.99
Quarter C	3.23	12.52
Quarter D	4.46	14.30
Monitoring Year	**3.94**	**16.99**

Figure 3-4 shows the 2008 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological station and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 5 station.

Figure 3-1. 2008 Pebble 5 Station Wind Roses

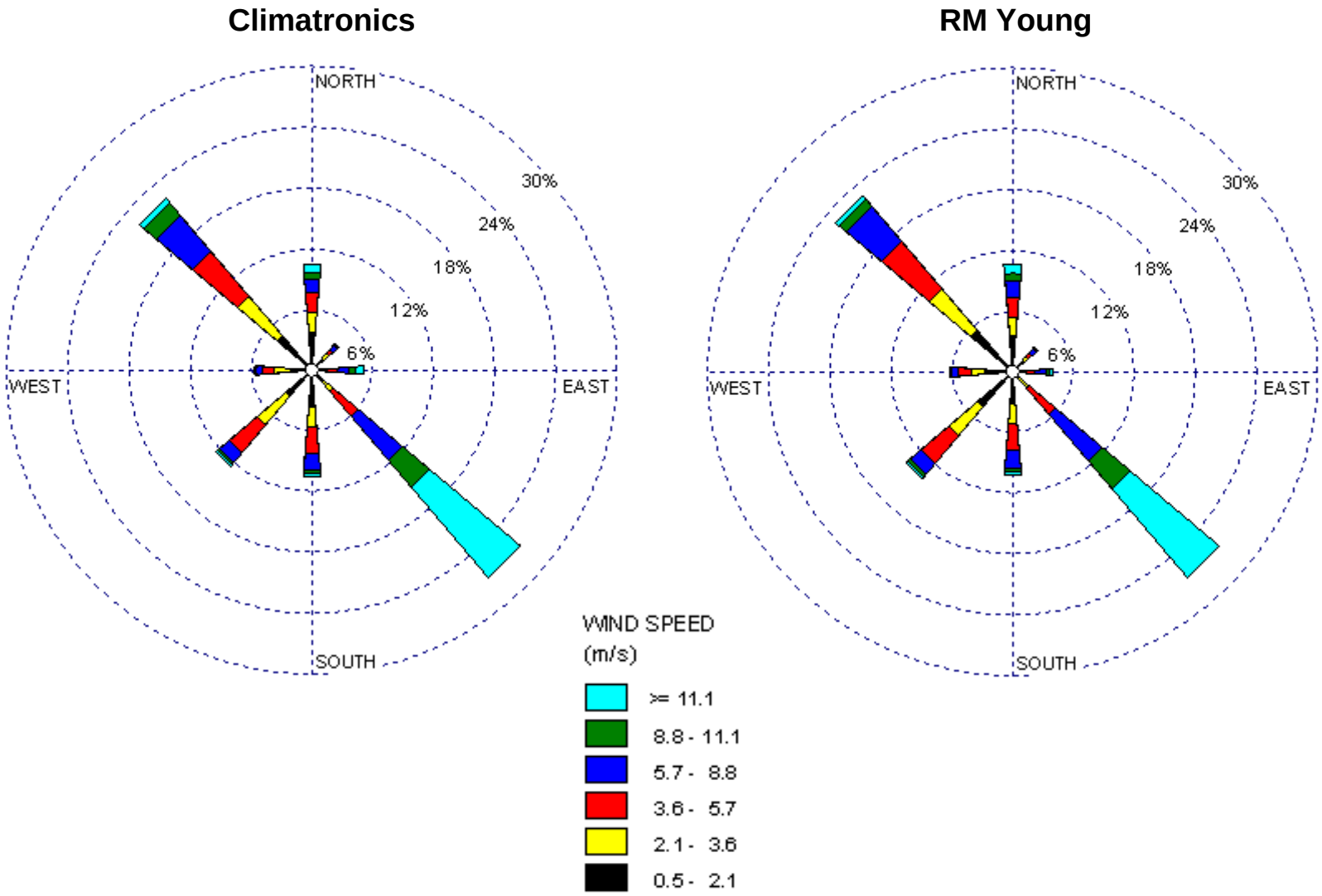
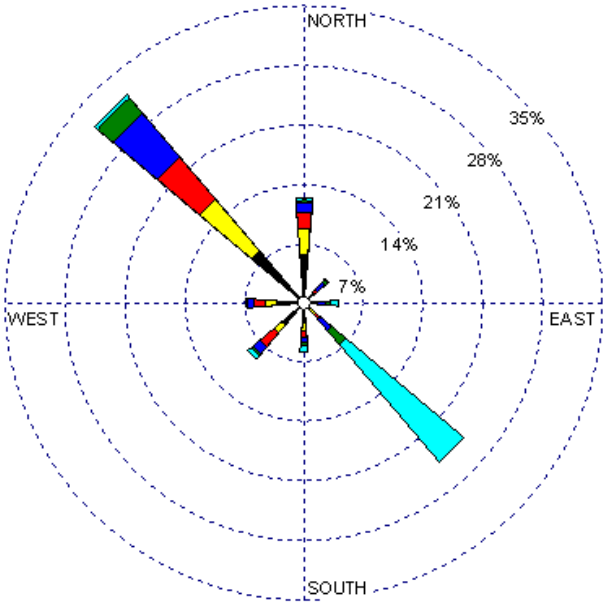
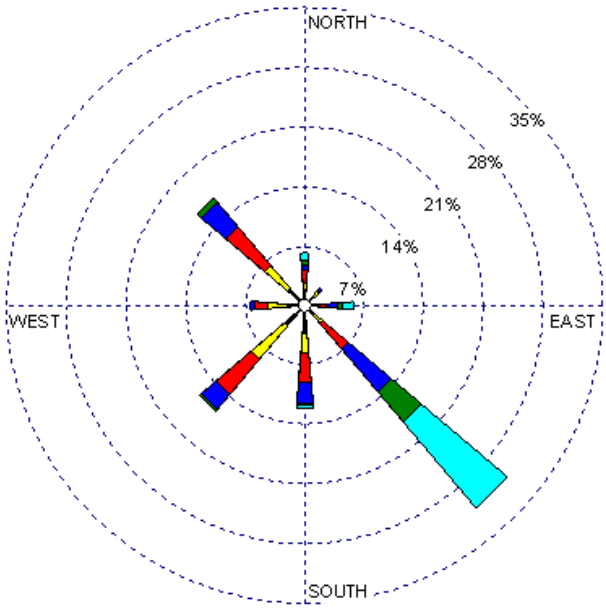


Figure 3-2. Quarterly Pebble 5 Station Wind Roses (Climatronics)

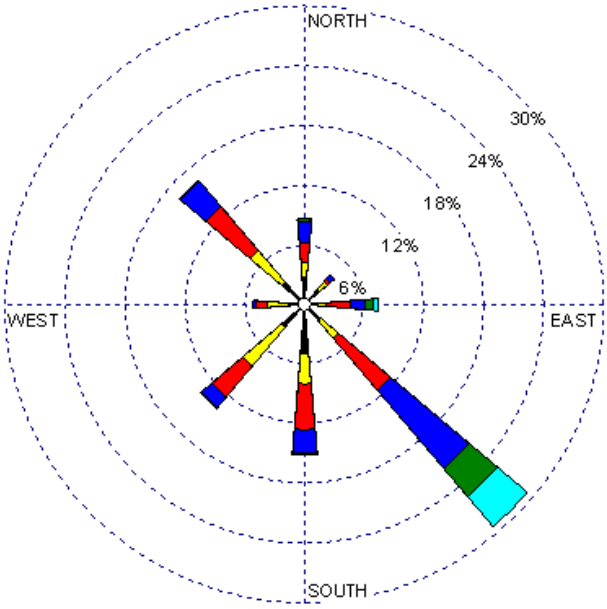
Quarter A (1/1/08 – 3/31/08)



Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)

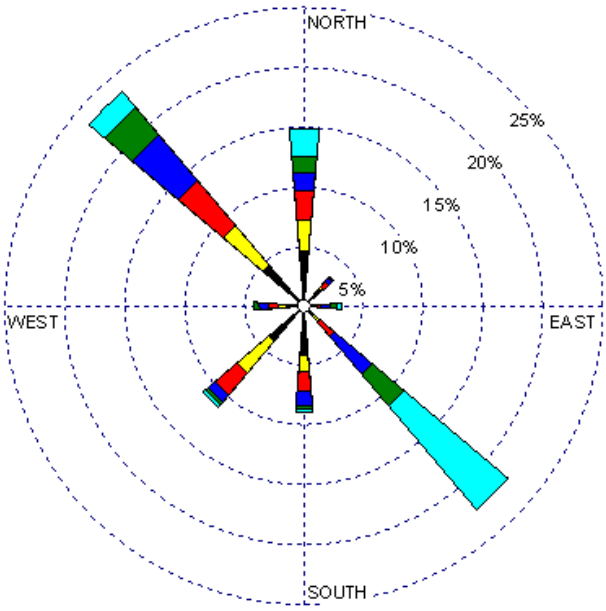
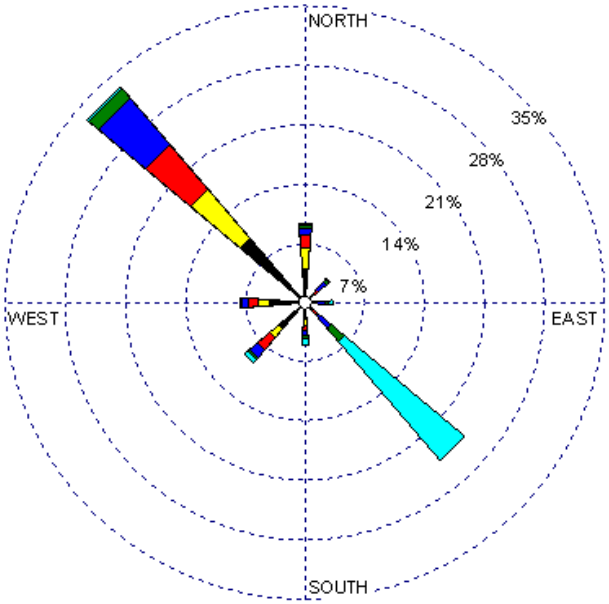
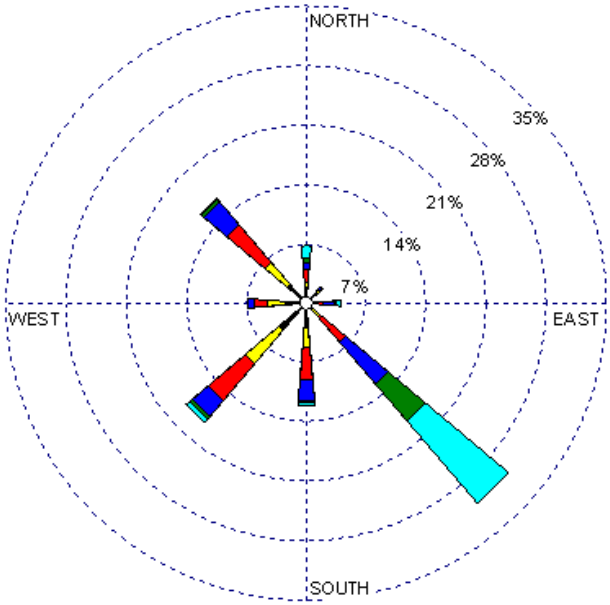


Figure 3-3. Quarterly Pebble 5 Station Wind Roses (RM Young)

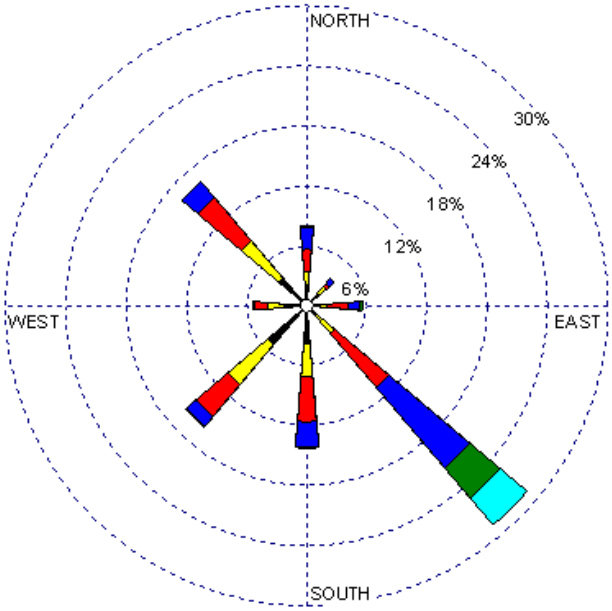
Quarter A (1/1/08 – 3/31/08)



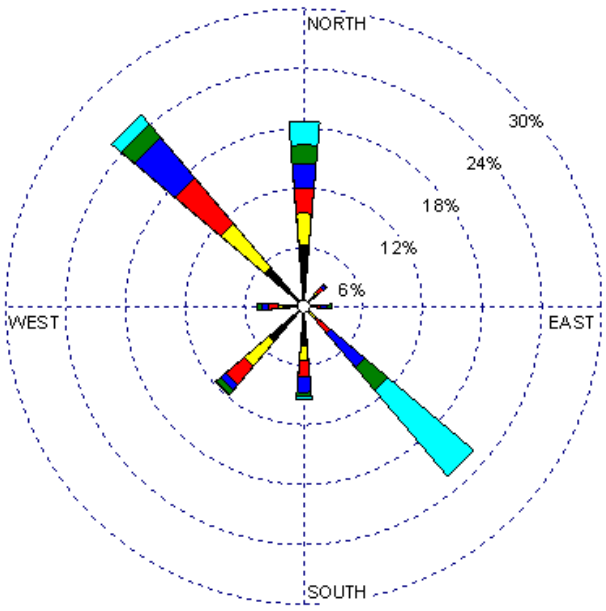
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



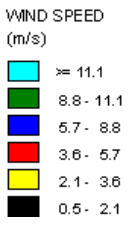


Table 3-3. 2008 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 5 (Climatronics) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	3.81%	1.94%	1.96%	1.39%	0.59%	0.87%	10.55%
NE	1.61%	0.63%	0.46%	0.64%	0.11%	0.07%	3.51%
E	0.83%	0.68%	1.09%	1.13%	0.64%	0.80%	5.17%
SE	1.50%	1.28%	3.26%	5.67%	3.48%	11.62%	26.81%
S	3.77%	1.91%	2.55%	1.70%	0.26%	0.35%	10.55%
SW	3.43%	3.70%	3.51%	1.36%	0.24%	0.21%	12.44%
W	2.15%	1.57%	1.21%	0.55%	0.17%	0.01%	5.66%
NW	4.59%	4.96%	5.78%	4.71%	1.52%	0.59%	22.14%
Sub-Total:	21.69%	16.67%	19.81%	17.14%	7.01%	14.52%	96.83%
Calms (<0.5m/s):							3.17%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 5 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	5.73%	3.12%	1.83%	1.19%	0.28%	0.28%	12.42%
NE	0.87%	0.55%	0.69%	1.24%	0.32%	0.18%	3.85%
E	0.55%	0.60%	0.50%	0.92%	0.60%	1.01%	4.17%
SE	1.05%	0.87%	0.64%	1.79%	2.11%	18.10%	24.56%
S	2.52%	0.92%	0.64%	0.69%	0.28%	0.82%	5.87%
SW	3.39%	1.28%	2.11%	1.05%	0.37%	0.46%	8.66%
W	3.35%	1.28%	1.24%	0.73%	0.23%	0.00%	6.83%
NW	8.16%	7.84%	6.55%	6.65%	2.38%	0.55%	32.13%
Sub-Total:	25.62%	16.45%	14.21%	14.25%	6.55%	21.40%	98.49%
Calms (<0.5m/s):							1.51%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 5 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.06%	0.64%	1.47%	0.69%	0.50%	0.87%	6.23%
NE	1.51%	0.78%	0.09%	0.37%	0.09%	0.00%	2.84%
E	1.15%	0.64%	0.78%	1.28%	0.60%	1.33%	5.77%
SE	1.65%	1.15%	4.03%	6.51%	4.63%	13.20%	31.16%
S	3.39%	2.29%	3.35%	2.52%	0.28%	0.37%	12.19%
SW	3.25%	5.09%	5.41%	2.25%	0.23%	0.05%	16.27%
W	2.06%	2.29%	1.51%	0.55%	0.00%	0.00%	6.42%
NW	2.66%	3.53%	5.91%	3.85%	0.60%	0.05%	16.59%
Sub-Total:	17.74%	16.41%	22.55%	18.01%	6.92%	15.86%	97.48%
Calms (<0.5m/s):							2.51%
Total:							100.00%

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 5 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.77%	1.45%	2.04%	2.13%	0.23%	0.05%	8.66%
NE	2.09%	0.95%	0.41%	0.59%	0.00%	0.00%	4.03%
E	1.04%	1.22%	2.40%	1.54%	0.82%	0.45%	7.48%
SE	2.18%	2.40%	6.80%	10.20%	3.72%	3.90%	29.19%
S	4.99%	3.04%	4.58%	2.40%	0.18%	0.00%	15.19%
SW	3.13%	5.03%	4.08%	1.36%	0.09%	0.00%	13.69%
W	1.68%	2.04%	1.27%	0.18%	0.00%	0.00%	5.17%
NW	2.99%	4.17%	5.80%	3.31%	0.14%	0.00%	16.41%
Sub-Total:	20.85%	20.31%	27.38%	21.71%	5.17%	4.40%	99.82%
Calms (<0.5m/s):							0.18%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 5 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	4.67%	2.54%	2.49%	1.54%	1.36%	2.27%	14.86%
NE	1.95%	0.23%	0.63%	0.36%	0.05%	0.09%	3.31%
E	0.59%	0.27%	0.68%	0.77%	0.54%	0.41%	3.26%
SE	1.13%	0.68%	1.54%	4.17%	3.44%	11.37%	22.34%
S	4.17%	1.40%	1.63%	1.18%	0.32%	0.23%	8.93%
SW	3.94%	3.40%	2.45%	0.77%	0.27%	0.32%	11.15%
W	1.54%	0.68%	0.82%	0.73%	0.45%	0.05%	4.26%
NW	4.58%	4.30%	4.85%	5.03%	2.95%	1.77%	23.47%
Sub-Total:	22.56%	13.50%	15.09%	14.54%	9.38%	16.49%	91.57%
Calms (<0.5m/s):							8.40%
Total:							100.00%

Table 3-8. 2008 Annual Wind Rose Analysis Table (RM Young)

Station ID: Pebble 5 (RM Young) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	3.66%	1.85%	1.93%	1.60%	0.72%	0.98%	10.72%
NE	1.50%	0.50%	0.47%	0.64%	0.11%	0.06%	3.28%
E	0.73%	0.51%	1.07%	1.03%	0.39%	0.28%	4.01%
SE	0.93%	1.32%	3.36%	5.89%	3.62%	11.44%	26.58%
S	3.28%	1.94%	2.59%	1.77%	0.31%	0.36%	10.25%
SW	4.56%	3.74%	3.52%	1.42%	0.30%	0.28%	13.82%
W	2.74%	1.45%	1.24%	0.60%	0.16%	0.01%	6.20%
NW	5.46%	5.37%	6.09%	4.50%	0.89%	0.42%	22.72%
Sub-Total:	22.86%	16.67%	20.26%	17.45%	6.50%	13.85%	97.58%
Calms (<0.5m/s):							2.41%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 5 (RM Young) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	4.12%	2.34%	1.60%	0.82%	0.32%	0.18%	9.40%
NE	0.73%	0.55%	0.78%	1.24%	0.37%	0.14%	3.80%
E	0.32%	0.46%	0.55%	1.01%	0.50%	0.46%	3.30%
SE	0.46%	0.82%	0.73%	2.06%	1.97%	18.38%	24.43%
S	2.02%	0.73%	0.64%	0.55%	0.41%	0.78%	5.13%
SW	4.08%	1.42%	1.92%	1.19%	0.28%	0.46%	9.35%
W	4.17%	1.28%	1.28%	0.78%	0.18%	0.00%	7.70%
NW	9.95%	7.52%	6.87%	7.24%	1.42%	0.28%	33.27%
Sub-Total:	25.85%	15.12%	14.39%	14.89%	5.45%	20.67%	96.38%
Calms (<0.5m/s):							3.61%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 5 (RM Young) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.06%	0.50%	1.42%	0.92%	0.55%	1.37%	6.83%
NE	1.79%	0.37%	0.09%	0.32%	0.05%	0.00%	2.61%
E	0.78%	0.46%	0.82%	1.24%	0.32%	0.60%	4.22%
SE	1.01%	1.24%	3.80%	6.51%	5.64%	12.65%	30.84%
S	3.07%	2.29%	3.67%	2.47%	0.23%	0.41%	12.14%
SW	4.31%	5.09%	5.59%	2.52%	0.32%	0.55%	18.38%
W	2.43%	2.15%	1.60%	0.73%	0.05%	0.00%	6.97%
NW	2.98%	3.30%	5.87%	3.48%	0.41%	0.09%	16.13%
Sub-Total:	18.42%	15.40%	22.87%	18.19%	7.56%	15.67%	98.12%
Calms (<0.5m/s):							1.87%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 5 (RM Young) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	2.22%	1.32%	2.13%	2.22%	0.09%	0.00%	7.99%
NE	1.72%	0.86%	0.41%	0.64%	0.00%	0.00%	3.63%
E	1.13%	0.95%	2.09%	1.18%	0.23%	0.05%	5.63%
SE	1.27%	2.40%	7.08%	10.53%	3.86%	3.54%	28.68%
S	3.95%	3.22%	4.45%	2.50%	0.14%	0.00%	14.25%
SW	5.17%	5.17%	4.17%	1.27%	0.09%	0.00%	15.88%
W	2.27%	1.72%	1.27%	0.14%	0.00%	0.00%	5.40%
NW	3.68%	4.95%	5.63%	2.00%	0.00%	0.00%	16.24%
Sub-Total:	21.42%	20.60%	27.22%	20.46%	4.40%	3.58%	97.69%
Calms (<0.5m/s):							2.31%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

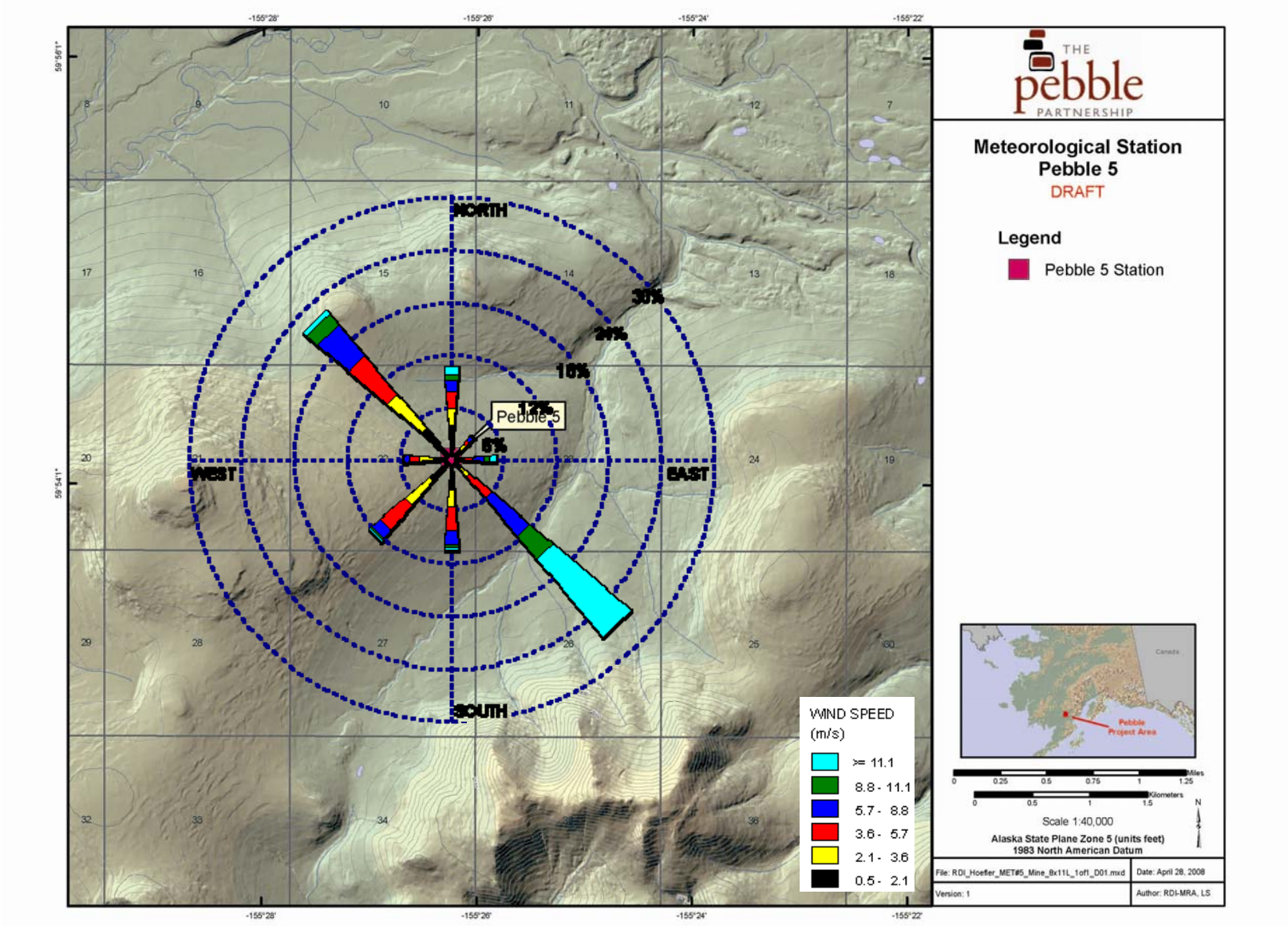
Station ID: Pebble 5 (RM Young) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	6.21%	3.22%	2.54%	2.40%	1.90%	2.36%	18.62%
NE	1.77%	0.23%	0.59%	0.36%	0.05%	0.09%	3.08%
E	0.68%	0.18%	0.82%	0.68%	0.50%	0.05%	2.90%
SE	1.00%	0.82%	1.81%	4.44%	3.04%	11.28%	22.38%
S	4.08%	1.50%	1.59%	1.54%	0.45%	0.27%	9.42%
SW	4.67%	3.26%	2.40%	0.73%	0.50%	0.14%	11.69%
W	2.08%	0.63%	0.82%	0.77%	0.41%	0.05%	4.76%
NW	5.26%	5.71%	5.98%	5.30%	1.72%	1.31%	25.28%
Sub-Total:	25.74%	15.54%	16.54%	16.22%	8.56%	15.54%	98.14%
Calms (<0.5m/s):							1.85%
Total:							100.00%

Figure 3-4. 2008 Wind Rose Superimposed on Site Map



3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Daily average temperatures at the Pebble 5 station ranged from 19.5°C on July 31 to -32.2°C on January 12. The average 2-meter temperature during the monitoring year was -2.33°C, which is less than the mean temperature of 0.2°C observed at the Iliamna Airport during the same period.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. Considerable monthly temperature variation existed throughout the late-autumn and winter months. The coldest temperatures were observed during January. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 8.3°C measured on March 25, 2008. The greatest negative vertical temperature difference was -6.6°C measured on April 10, 2008.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	-0.2	-31.6	-15.0	0.9	-32.2
February 2008	0.1	-28.3	-13.2	1.2	-31.3
March 2008	0.7	-19.2	-7.9	1.4	-21.1
Quarter A	**0.7**	**-31.6**	**-12.0**	**1.4**	**-32.2**
April 2008	0.0	-14.7	-5.7	0.1	-19.9
May 2008	7.9	-4.6	2.7	12.4	-8.4
June 2008	13.0	3.4	7.7	17.6	0.8
Quarter B	**13.0**	**-14.7**	**1.6**	**17.6**	**-19.9**
July 2008	13.1	5.9	9.7	19.5	3.5
August 2008	13.5	8.5	10.2	18.8	4.6
September 2008	9.9	2.4	6.1	13.1	-0.6
Quarter C	**13.5**	**2.4**	**8.7**	**19.5**	**-0.6**
October 2008	3.9	-15.0	-4.9	4.8	-16.6
November 2008	-0.1	-25.6	-10.3	1.5	-27.9
December 2008	1.9	-26.0	-7.9	2.3	-29.4
Quarter D	**3.9**	**-26.0**	**-7.7**	**4.8**	**-29.4**
Monitoring Year	**13.5**	**-31.6**	**-2.3**	**19.5**	**-32.2**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	0.4	-30.6	-14.2	1.7	-31.3
February 2008	0.6	-26.3	-11.9	1.8	-28.2
March 2008	1.2	-19.0	-6.8	1.9	-20.5
Quarter A	**1.2**	**-30.6**	**-11.0**	**1.9**	**-31.3**
April 2008	5.4	-13.4	-4.8	8.1	-17.0
May 2008	8.6	-3.5	3.3	12.3	-5.5
June 2008	12.8	3.0	7.5	16.6	0.6
Quarter B	**12.8**	**-13.4**	**2.0**	**16.6**	**-17.0**
July 2008	13.0	5.7	9.5	19.0	3.4
August 2008	13.4	8.4	10.3	18.0	5.6
September 2008	9.9	2.9	6.2	12.5	0.3
Quarter C	**13.4**	**2.9**	**8.7**	**19.0**	**0.3**
October 2008	4.1	-14.5	-4.6	4.6	-16.2
November 2008	0.1	-24.8	-9.9	1.7	-26.6
December 2008	2.3	-25.0	-7.4	2.7	-28.6
Quarter D	**4.1**	**-25.0**	**-7.3**	**4.6**	**-28.6**
Monitoring Year	**13.4**	**-30.6**	**-1.9**	**19.0**	**-31.3**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

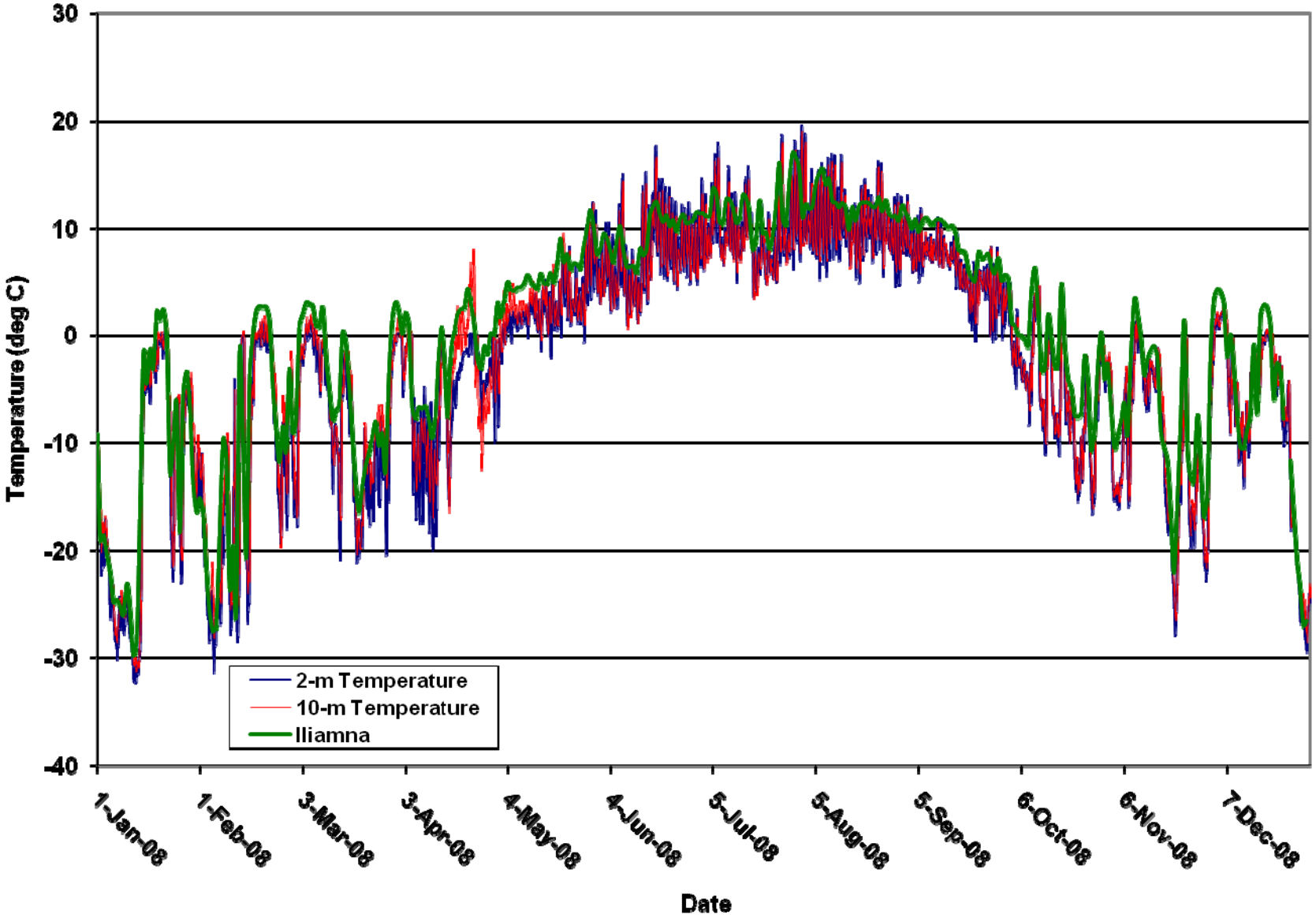
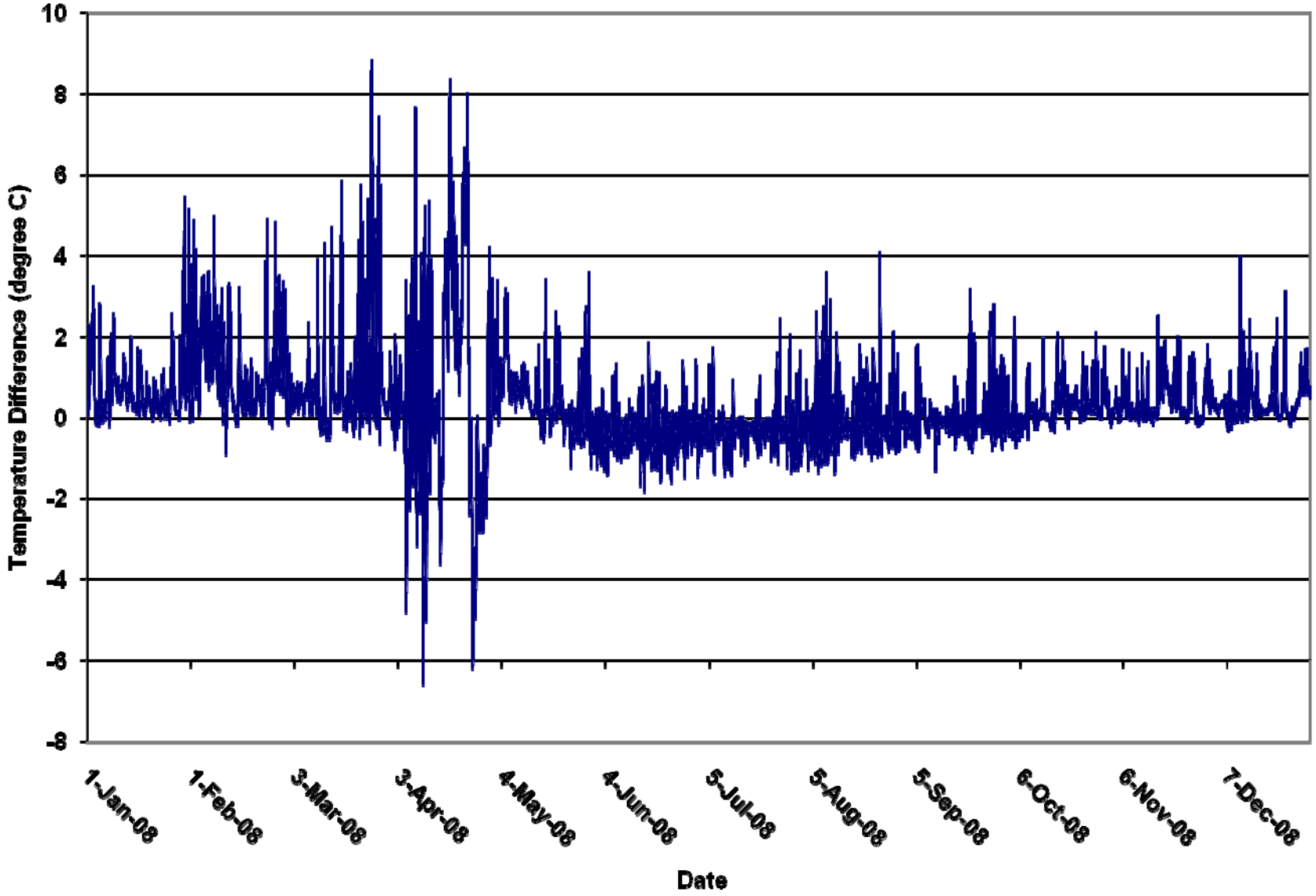


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation.

Table 3-15 provides a summary of the relative humidity, barometric pressure, and solar radiation at the Pebble 5 station during the 2008 monitoring year.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 5 station was 85.8 percent. The minimum relative humidity was 30.0 percent measured on December 1. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 62.0 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 917 mb on February 19 to a maximum of 988 mb observed on December 13. The mean barometric pressure during the monitoring year was 954 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 1,009 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 935.0 W/m^2 recorded on June 25. The mean hourly average solar radiation for the monitoring year was 111.9 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the 2008 monitoring year. The highest maximum total daily precipitation was 33.3 mm measured on October 11. The maximum monthly precipitation was 170.7 mm during September. The cumulative precipitation during the monitoring year was 473 mm. Daily winter precipitation data (October through April) should be closely examined before use because of snowfall adaptors may influence daily totals.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 5 station was 81.2 mm in June.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, solar radiation, and precipitation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mbar)	Minimum Barometric Pressure (mbar)	Maximum Barometric Pressure (mbar)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2007	86.4	44.4	951	926	980	15.1	189.7
February 2007	81.4	35.9	946	917	965	50.4	383.8
March 2007	91.2	50.0	950	926	968	115.1	623.0
Quarter A	**86.4**	**35.9**	**949**	**917**	**980**	**60.4**	**623.0**
April 2007	97.9	86.9	961	945	985	205.9	782.8
May 2007	83.3	42.7	959	929	975	234.3	832.0
June 2007	78.6	42.0	960	944	972	217.5	935.0
Quarter B	**86.6**	**42.0**	**960**	**929**	**985**	**219.4**	**935.0**
July 2007	82.9	40.4	958	949	969	175.4	822.0
August 2007	80.6	35.7	956	942	969	163.0	832.0
September 2007	88.3	46.4	954	938	969	74.0	544.9
Quarter C	**83.9**	**35.7**	**956**	**938**	**969**	**138.2**	**832.0**
October 2007	87.6	36.3	951	932	967	56.8	430.5
November 2007	87.1	52.5	948	922	972	25.2	277.0
December 2007	84.1	30.0	958	918	988	8.8	130.7
Quarter D	**86.3**	**30.0**	**952**	**918**	**988**	**30.3**	**430.5**
Monitoring Year	**85.8**	**30.0**	**954**	**917**	**988**	**111.9**	**935.0**

Figure 3-7. Hourly Average Relative Humidity

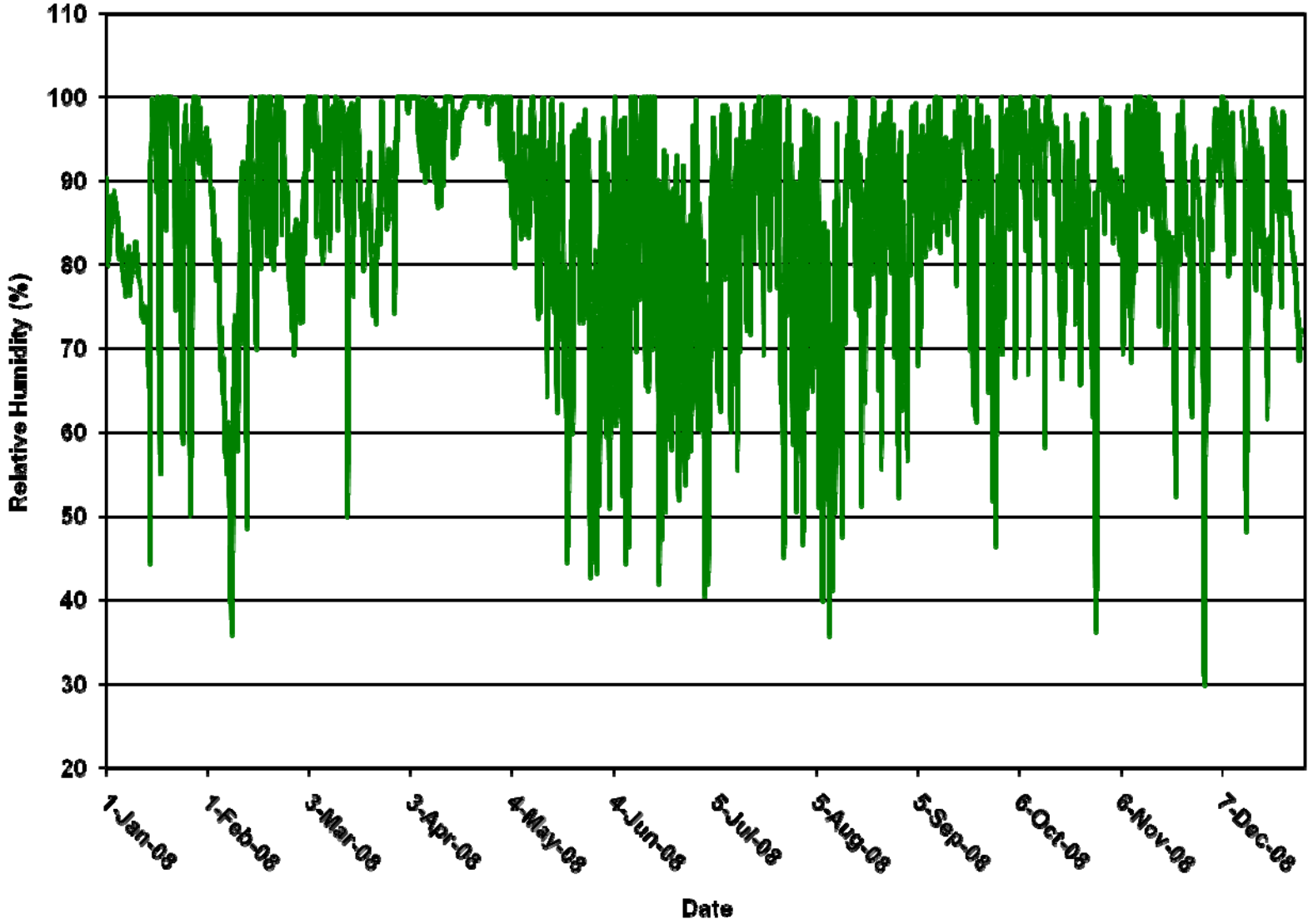


Figure 3-8. Hourly Average Barometric Pressure

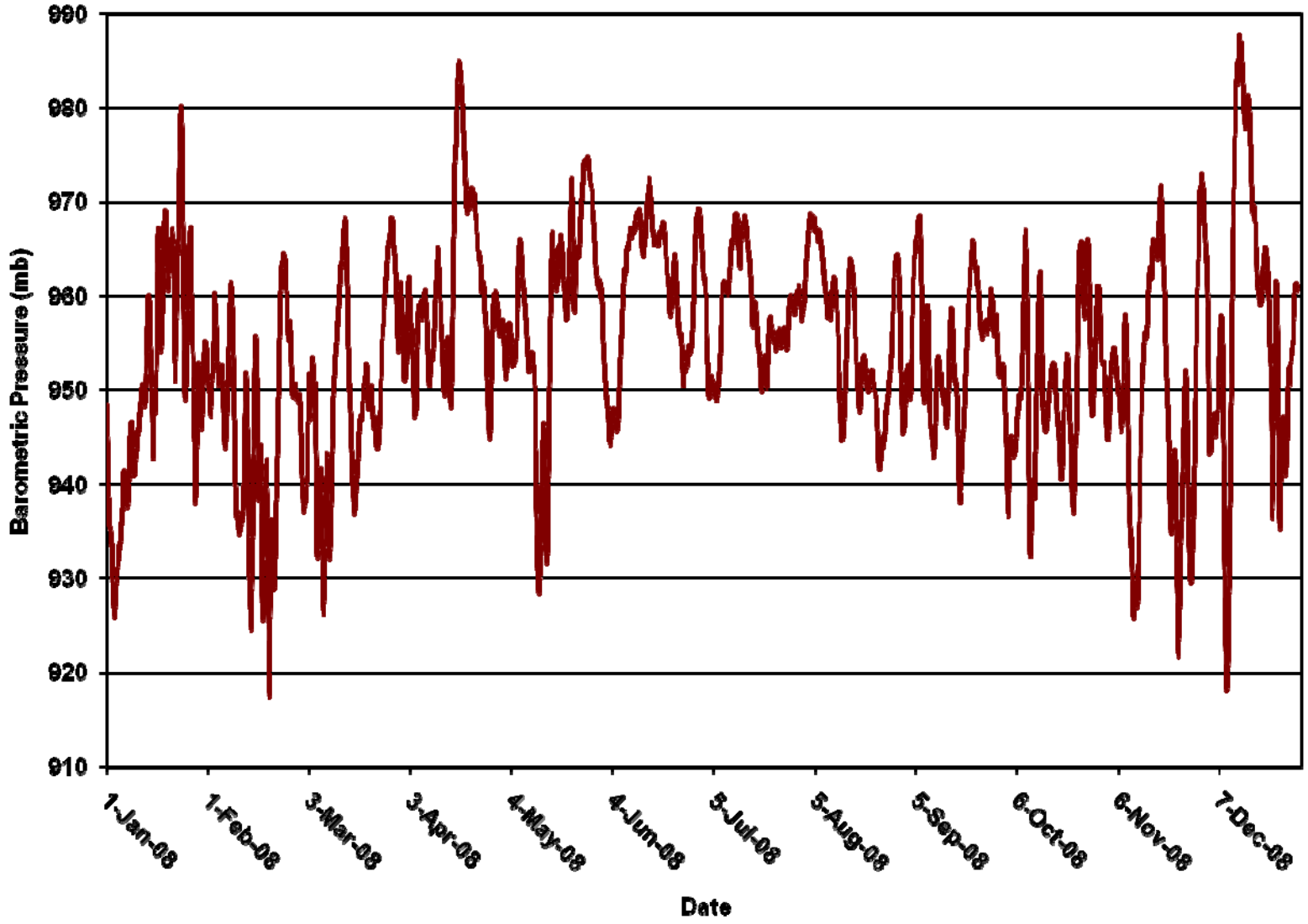


Figure 3-9. Hourly Average Solar Radiation

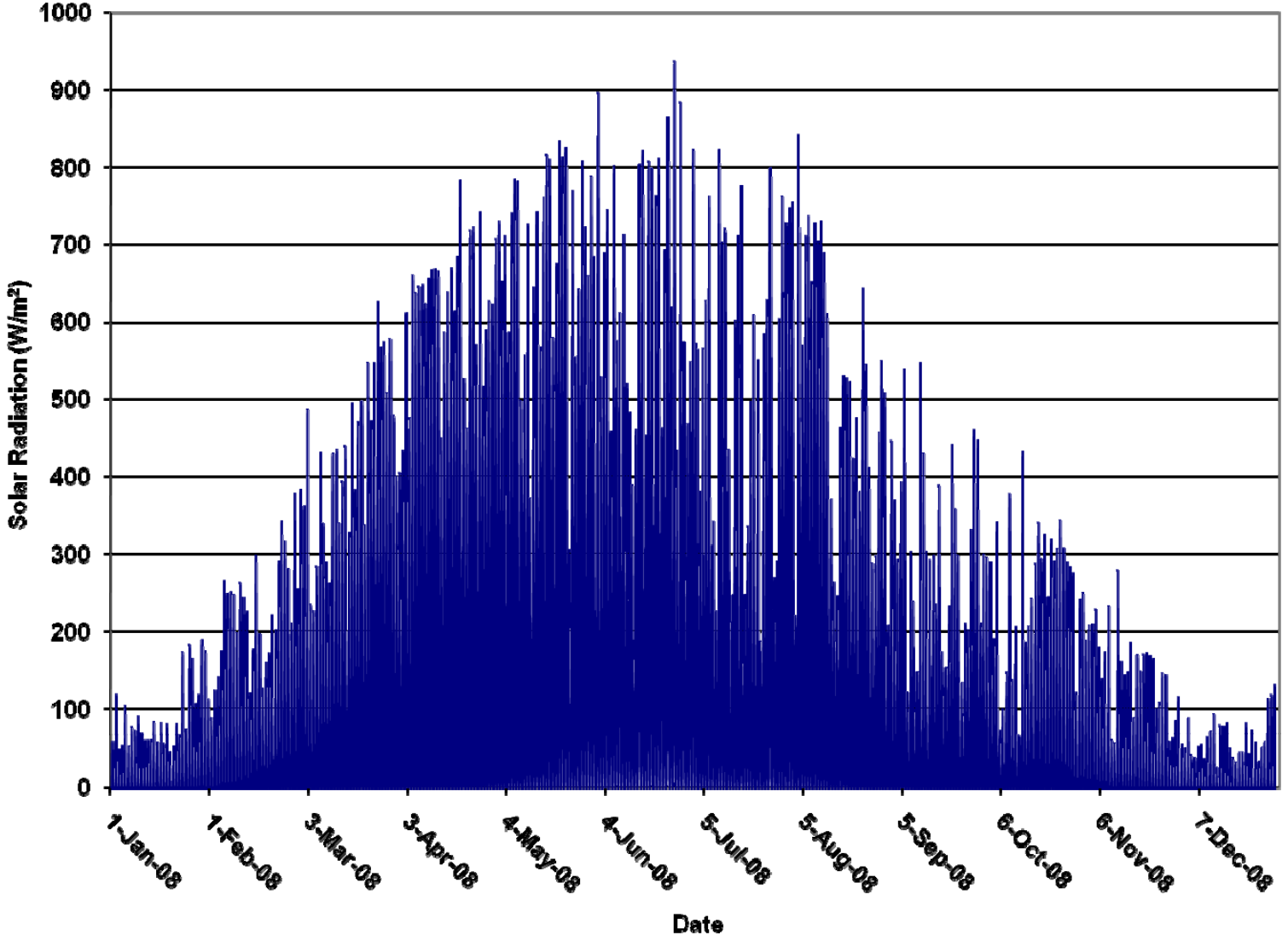
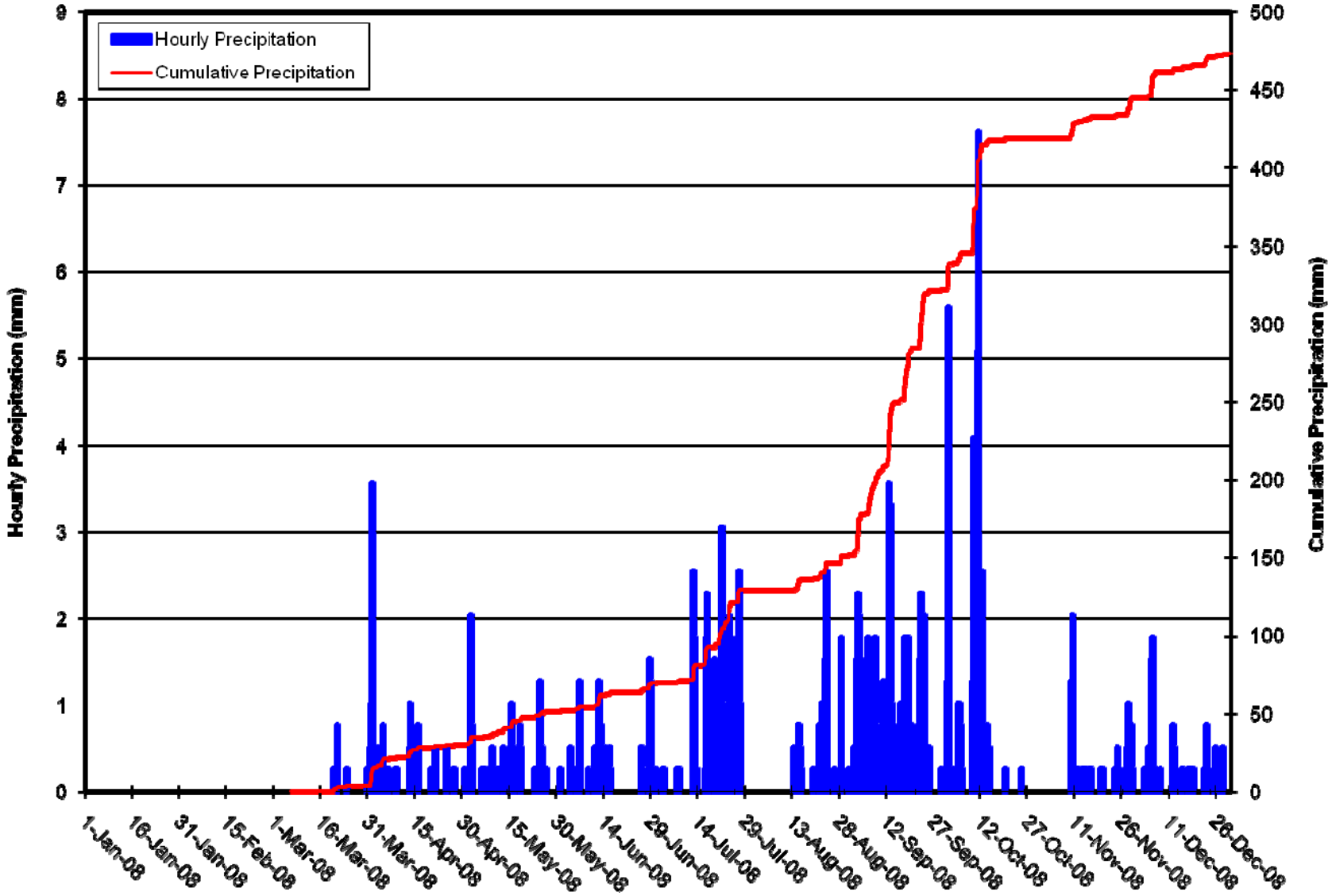


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, June, 2008.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

U.S. Department of Commerce, National Climatic Data Center, Asheville, North Carolina, *http://www.ncdc.noaa.gov*.

Western Regional Climate Center, Desert Research Institute, Reno Nevada, *http://www.wrcc.dri.edu/summary/climsmak.html.*

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2008

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	∆ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip[4]	Evap
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	N/A[3]
February 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100%	100%	100%	0.0%	N/A
March 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	82.1%	N/A
Quarter A	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**28.0%**	**N/A**
April 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	N/A
May 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	95.0%
June 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
Quarter B	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100.0%**	**98.0%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	99.9%	99.9%	99.6%	99.6%	99.6%	100%	100%	100%	99.7%	99.7%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	N/A
December 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100%	100%	100%	99.9%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100.0%**	**100%**
Monitoring Year	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**82.1%**	**99.3%**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Not applicable. The evaporation gauge was in commission from May 12 to October 12.
[4] Precipitation gauge failed March audit. Data invalidated from September 1, 2007 through March 6, 2008.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

CONTENTS

1. Pebble 5 Station September 2007 Quality Assurance Systems Audit and Performance Audit

2. Pebble 5 Station February 2008 Quality Assurance Performance Audit

3. Pebble 5 Station September 2008 Quality Assurance Systems Audit and Performance Audit

Pebble 5
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 5 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 6

3.0 PERFORMANCE AUDIT 7

3.1 Performance Audit Methodology 7

3.1.1 Data Acquisition System 8
3.1.2 Air Temperature and Air Temperature Difference 8
3.1.3 Relative Humidity 8
3.1.4 Wind Speed 9
3.1.5 Wind Direction 9
3.1.6 Barometric Pressure 11
3.1.7 Solar Radiation 11
3.1.8 Precipitation 11
3.1.9 Evaporation 12

3.2 Performance Audit Results 12

3.3 Performance Audit Recommendations 12

4.0 REFERENCES 14

LIST of FIGURES and TABLES

Figure 2-1 Pebble 5 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 7
Table 3-2 Pebble 5 August 31 to September 1, 2007 Performance Audit Summary 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 5 Station (Pebble 5) located near the proposed mine site.

Pebble 5 is located approximately five miles west of the deposit area at roughly 1,430 foot elevation on an east facing slope above a tributary to the Koktuli River. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 50 feet south of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 80 feet south of the tower. Approximately 30 feet east of the tower is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 5 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Precipitation 2 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 5 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan) was completed by HCG in August 2006. While the Plan has not been updated to include the Pebble 5 station, the Plan does describe virtually identical systems previously installed on the project. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

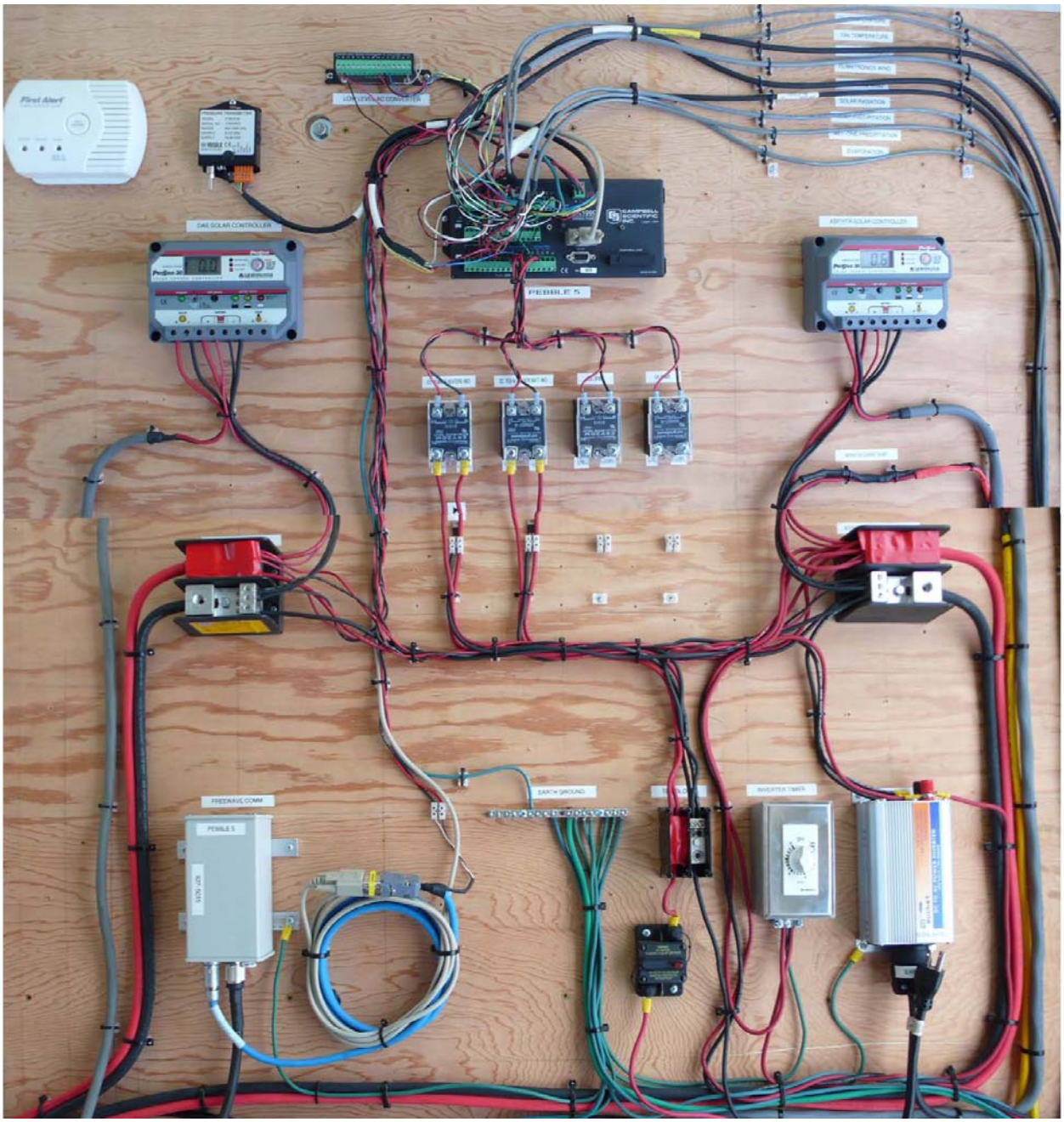
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 5 station was conducted in September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 5 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’

deck supported on four adjustable pier blocks, which allow leveling. All instrumentation wires from the tower, precipitation gauges and evaporation gauge are protected in conduit. These conduits all converge at the insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 5 Station DAS Wiring Panel



The Campbell Scientific CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the solar power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, and other system documentation, and a review of system operations. System operations include both physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program, although not updated to include Pebble 5. Program objectives, general installations, operations, data management and quality assurance are all clearly outlined. The Pebble 5 station is representative of the generic Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had DAS and most meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 5 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 5 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Maintain complete equipment manuals for station in digital or paper form
- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 5 station from August 31 to September 1, 2007, with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Tables 3-2, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 5 August 31 to September 1, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	-0:05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	-0.06	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	-0.06	Pass
Air Temperature Difference	≤ ±0.1	°C	-0.02	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.070	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.3	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.5	Pass
Wind Direction Linearity	≤ 3	Degree	0.6	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.9	Pass
RM Young Wind System				
Wind Speed Torque-Old Bearings[1]	≤ 0.014	oz-in	0.009	Pass
Wind Speed Torque-New Bearings[1]	≤ 0.014	oz-in	0.008	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.4	Pass
Wind Direction Accuracy	≤ ±5	Degree	3.1	Pass
Wind Direction Linearity	≤ 3	Degree	1.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.9	Pass
Barometric Pressure	≤ ±3	Mbar	-0.7	Pass
Solar Radiation	≤ ±5+Res	% input	-5.0	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Tipping Precipitation	≤ ±10	% input	-3.3	Pass
Evaporation	≤ ±10	% input	4.9	Pass

1. The bearing was tight for a new instrument; changed and rechecked.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 5 PSD Meteorological Station Systems Audit

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 1, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 5 PSD Meteorological Station Systems Audit

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 1, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 5 station is located on an east facing slope above a tributary to the Koktuli River. The site is rocky and treeless with some low shrubs and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

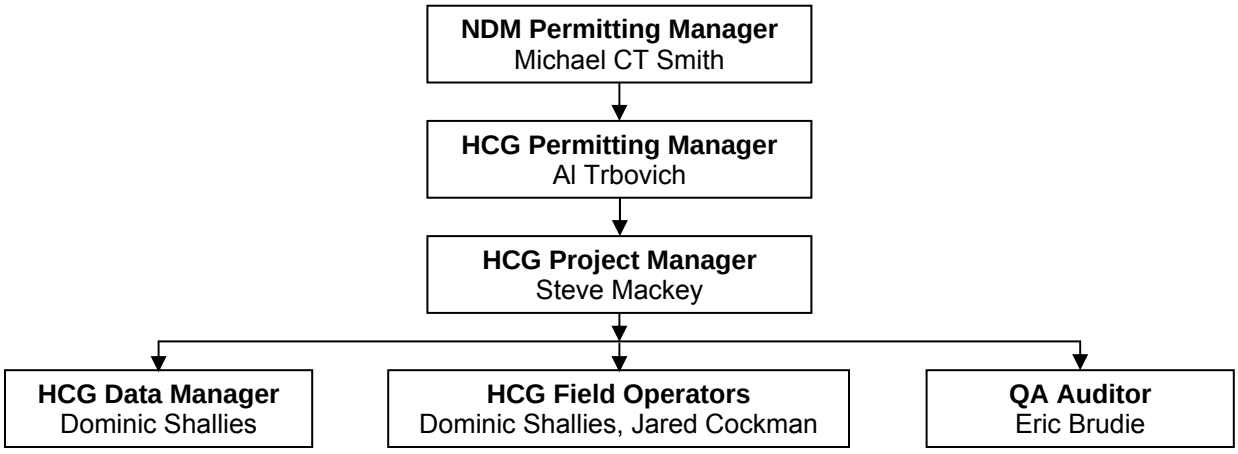
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.149' N
155° 26' W	155° 25.603' W
Elevation: 1,430 feet	Elevation: 1,430 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 1, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR1000	9723
DAS Wiring Panel	Campbell Scientific	CR1000	9475
Temperature (2-meter)	Met One	062MP	G3472, ID #1/2
Temperature (10-meter)	Met One	062MP	G3472, ID #2/2
Relative Humidity	Vaisala	HMP45AC	C0540049
Temperature Aspirators	Met One	076B-4	G4413 &G4717
Primary Wind Speed	Climatronics	F460-100075	5195
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2326
Primary Wind Direction	Climatronics	F460-100076	4867
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1489
Wind Sigma	Campbell Scientific	DAS Calculated	9723
Backup Wind Speed/Direction	RM Young	05305 Wind Mon-AQ	78079
Backup Wind Spd Prop	RM Young	08254	64932
Barometric Pressure	Vaisala	PTB101B	C0910027
Solar Radiation	LI-COR	Li-200SX	PY56228
Precipitation-Weighing	ETI	8205-00710 Noah II	388
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Precipitation-Tipping	Met-One	370	G4673
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	931
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet telephone modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power? ■ Yes □ No Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained? ■ Yes □ No Comments: None.

Are all sensors operational, online and reporting data? ■ Yes □ No Comments: None.

Do all sensors meet EPA criteria for PSD quality sensors? ■ Yes □ No Comments: See table below.

Are spare parts stocked for items which are frequently worn out or broken? ■ Yes □ No Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2m & 10m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution (2m & 10m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 5 PSD Meteorological Station Systems Audit

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 1, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10” range	Not Specified	N/A
Range:	2” to 10”	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.

Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	□ Yes ■ No	Comments: Limited quantity of animals in area which could impact pan & gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.

Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

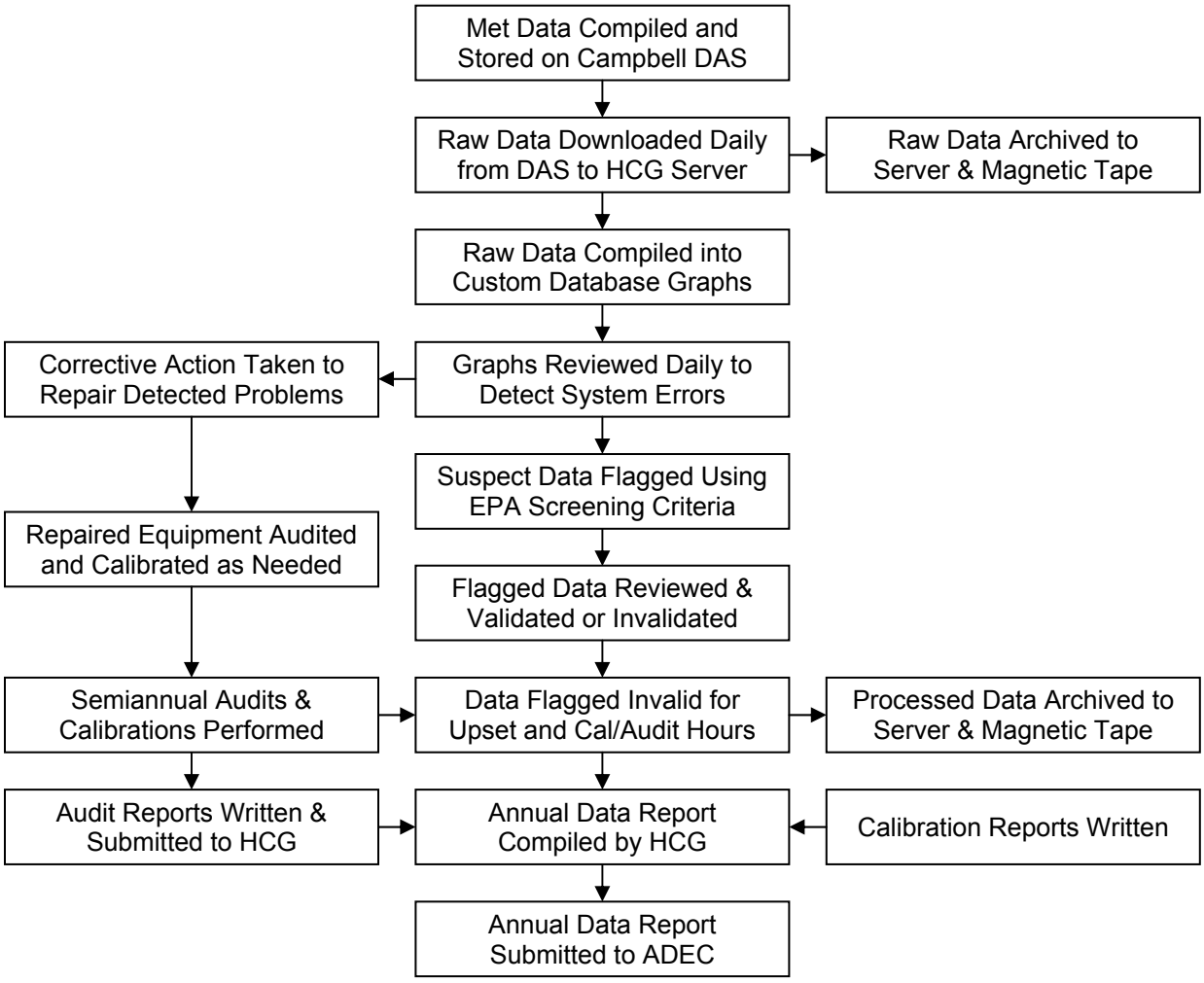
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 1, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing? ■ Yes □ No Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use? ■ Yes □ No Comments: None.

Are adjusted and unadjusted data sets maintained? ■ Yes □ No Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or

invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists, inventories and visit forms.
- Maintain all equipment manuals in the field or on the field computer.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8/31 to 9/1, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
14:17:00	14:16:55	**-00:05**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.3 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G3472 # 1/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G3472 # 2/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1557
End: 1630

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	33.61	33.63	0.02	Pass	33.63	0.02	Pass	0.00	Pass
Warm	15 to 25	23.21	23.15	-0.06	Pass	23.15	-0.06	Pass	0.00	Pass
Ice Bath	0	0.22	0.26	0.04	Pass	0.26	0.04	Pass	0.00	Pass
Cold	-15 to -25	-23.70	-23.73	-0.03	Pass	-23.73	-0.03	Pass	0.00	Pass
Very Cold	-35 to -45	-38.50	-38.50	0.00	Pass	-38.52	-0.02	Pass	-0.02	Pass
		Max Abs. Error		0.06	**PASS**		0.06	**PASS**	0.02	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Aspirators Met One Model 076B-4, SN#'s G4413 & G4717.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.3 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45AC	**S.N.#:**	C0540049	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1420	53.2	16.0	6.6	59.1	15.6	7.6	1.0	Pass
1450	75.3	15.0	10.4	78.3	13.4	9.7	-0.7	Pass
						Max Abs. Error	1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8/31 to 9/1, 2007

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.3 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5195	**Cup #:**	2326	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4867	**Vane #:**	1489	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: ? End: ?

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Kaskanak Mtn	346.4	349.7	3.3	Pass
Pebble 5a	85.1	86.0	0.9	Pass
Cone Mtn	182.7	184.1	1.4	Pass
Compass	273.5	274.6	1.1	Pass
Time: Begin: 1430 End: 1445	**Max Abs. Error**		**3.3**	**PASS**
	Mean Abs. Error		**1.7**	**GOOD**

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	182.1	2.1	Pass
West	270.0	271.9	1.9	Pass
North	360.0	1.0	1.0	Pass
East	90.0	91.1	1.1	Pass
North	360.0	1.0	1.0	Pass
West	270.0	272.3	2.3	Pass
South	180.0	182.1	2.1	Pass
East	90.0	91.2	1.2	Pass
	Max Abs. Error		**2.3**	**PASS**
	Mean Abs. Error		**1.6**	**PASS**

Time: Begin: 1550 End: 1553

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.1	-0.9	Pass	330.0	331.2	1.2	Pass
60.0	58.5	-1.5	Pass	355.0	355.5	0.5	Pass
90.0	89.1	-0.9	Pass	30.0	29.1	-0.9	Pass
120.0	119.5	-0.5	Pass	60.0	58.5	-1.5	Pass
150.0	149.7	-0.3	Pass	90.0	89.3	-0.7	Pass
180.0	179.9	-0.1	Pass	120.0	119.7	-0.3	Pass
210.0	209.8	-0.2	Pass	150.0	150.0	0.0	Pass
240.0	240.0	0.0	Pass	180.0	180.0	0.0	Pass
270.0	270.4	0.4	Pass	**Max Abs. Error**		**1.5**	**PASS**
300.0	300.9	0.9	Pass	**Mean Abs. Error**		**0.6**	**PASS**

Time: Begin: 1556 End: 1601

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.070	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Kaskanak Mtn	346.4	349.3	2.9	Pass
Pebble 5a	85.1	85.2	0.1	Pass
Cone Mtn	182.7	183.9	1.2	Pass
Compass	274.5	276.1	1.6	Pass
Time: Begin: 1650 End: 1705	**Max Abs. Error**		**2.9**	**PASS**
	Mean Abs. Error		**1.5**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8/31 to 9/1, 2007

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.5 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 78079	**Prop #:** 64932	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.3	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: ? End: ?

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Kaskanak Mtn	346.4	348.2	1.8	Pass
Pebble 5a	85.1	87.5	2.4	Pass
Cone Mtn	182.7	182.1	-0.6	Pass
Compass	273.5	273.6	0.1	Pass
Time: Begin: 1430 End: 1445	**Max Abs. Error**		**2.4**	**PASS**
	Mean Abs. Error		**1.2**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.7	1.7	Pass	150.0	149.2	-0.8	Pass	270.0	267.2	-2.8	Pass
60.0	61.0	1.0	Pass	180.0	178.4	-1.6	Pass	300.0	296.9	-3.1	Pass
90.0	90.9	0.9	Pass	210.0	208.1	-1.9	Pass	330.0	327.3	-2.7	Pass
120.0	119.6	-0.4	Pass	240.0	237.4	-2.6	Pass	355.0	353.0	-2.0	Pass
				Time: Begin: 1457				**Max Abs. Error**		**3.1**	**PASS**
				End: 1459				**Mean Abs. Error**		**1.8**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.009	**PASS**
New	0.014	0.008	**PASS**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	7.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Kaskanak Mtn	346.4	348.6	2.2	Pass
Pebble 5a	85.1	88.0	2.9	Pass
Cone Mtn	182.7	182.9	0.2	Pass
Compass	274.5	273.6	-0.9	Pass
Time: Begin: 1650 End: 1705	**Max Abs. Error**		**2.9**	**PASS**
	Mean Abs. Error		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Wind speed bearings tight for new instrument, replaced and retested.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8/31 to 9/1, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** C0910027 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST						
Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1407	28.35	28.25	956.78	956.13	-0.7	Pass
			Max Abs. Error		0.7	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

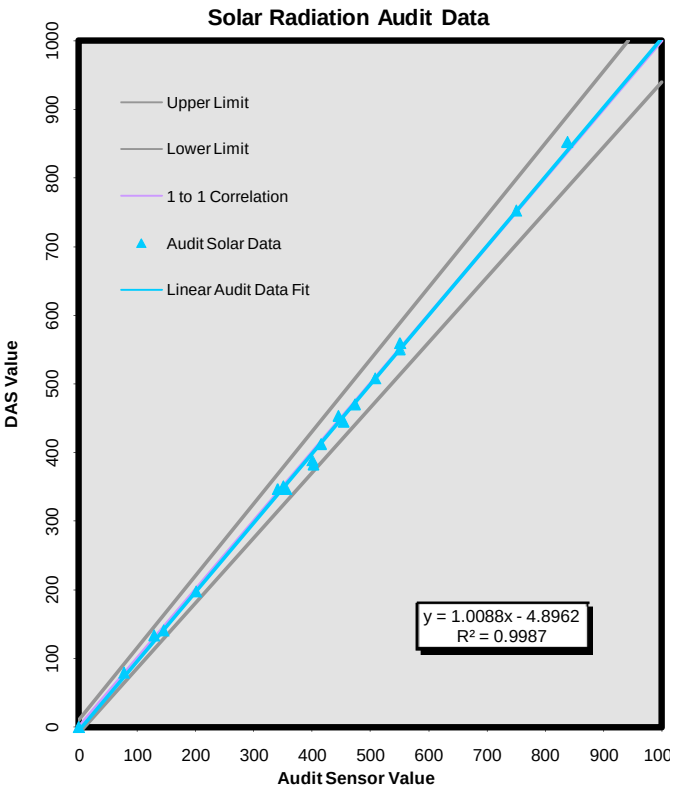
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56228 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1236	145.4	140.6	-4.8	±17.3	-3.3%	Pass
1401	201.2	197.5	-3.7	±20.1	-1.8%	Pass
1428	838.2	852.3	14.1	±51.9	1.7%	Pass
1520	508.6	508.0	-0.6	±35.4	-0.1%	Pass
1609	77.5	79.2	1.7	±13.9	2.2%	Pass
1202	473.7	469.9	-3.8	±33.7	-0.8%	Pass
1405	351.2	350.7	-0.5	±27.6	-0.1%	Pass
1503	750.6	752.2	1.6	±47.5	0.2%	Pass
1540	551.0	550.4	-0.6	±37.6	-0.1%	Pass
1602	129.5	133.5	4.0	±16.5	3.1%	Pass
1605	0.0	0.0	0.0	±10.0	n/a	Pass
1400	551.3	559.1	7.8	±37.6	1.4%	Pass
1500	445.7	453.1	7.4	±32.3	1.7%	Pass
1300	401.0	388.4	-12.6	±30.1	-3.1%	Pass
1400	355.9	346.3	-9.6	±27.8	-2.7%	Pass
1500	402.6	382.5	-20.1	±30.1	-5.0%	Pass
1600	454.5	444.8	-9.7	±32.7	-2.1%	Pass
1700	415.5	412.1	-3.4	±30.8	-0.8%	Pass
1800	341.1	346.3	5.2	±27.1	1.5%	Pass
Corr. Val	**0.9994**	**Max Abs. Percent Error**			**5.0%**	**PASS**
R² Value	**0.9987**	**Intercept**	**-4.9**	**Slope**	**1.0088**	**PASS**



Begin Date: 08/31/07 **End Date:** 09/01/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8/31 to 9/1, 2007

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.6 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 388 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 1323 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm** 1342
1351

1359									
Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1323	4.00	1600	21.9	0.00	22.61	22.61	3.1%	Pass	
1342		1600	21.9	22.61	45.72	23.11	5.4%	Pass	
1351		1600	21.9	45.72	69.09	23.37	6.6%	Pass	
1359		1600	21.9	69.09	91.95	22.86	4.2%	Pass	
1427	7.38	1600	21.9	0.00	22.86	22.86	4.2%	Pass	
1453		1600	21.9	22.86	46.23	23.37	6.6%	Pass	
1501		1600	21.9	46.23	68.83	22.60	3.1%	Pass	
1518		1600	21.9	0.25	23.62	23.37	6.6%	Pass	
1541		1600	21.9	23.62	46.74	23.12	5.4%	Pass	
	12.00								
					Max Abs. Error		**6.6%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.1/1.6 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** G4673 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

	TIPPING PRECIPITATION GAUGE VOLUME TEST										
Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/01/07	1120	650	20.0	0.00		19.81	1155	19.81	-1.0%	Pass	
09/01/07	1201	650	20.0	0.00		19.81	1249	19.81	-1.0%	Pass	
09/01/07	1302	800	24.7	0.00		24.38	1359	24.38	-1.3%	Pass	
09/01/07	1405	800	24.7	0.00		24.13	1455	24.13	-2.3%	Pass	
09/01/07	1502	800	24.7	0.00		23.88	1555	23.88	-3.3%	Pass	
							Max Abs. Error		**3.3%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** 8/31 to 9/1, 2007

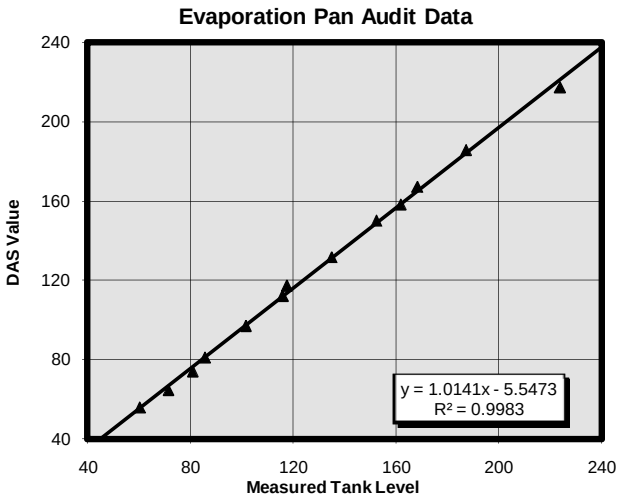
● *EVAPORATION GAUGE AUDIT*

Height: 0.7 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 931 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

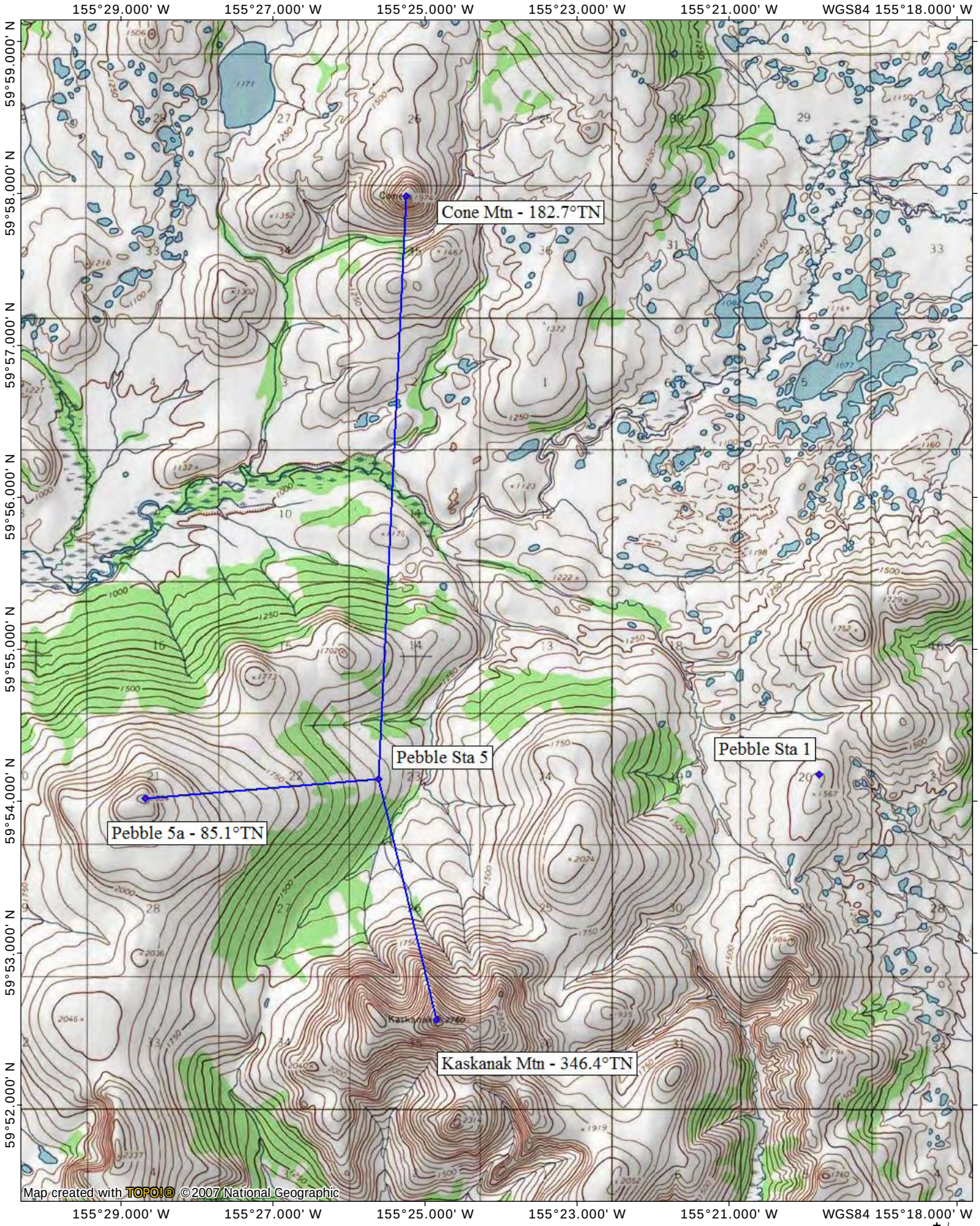
Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
8 13/16	223.8	217.5	218.3	-0.8	-0.4%	Pass
7 6/16	187.3	185.8	181.8	4.0	2.2%	Pass
6 10/16	168.3	167.2	162.7	4.5	2.7%	Pass
6	152.4	150.2	146.9	3.3	2.3%	Pass
5 5/16	134.9	131.7	129.4	2.3	1.8%	Pass
4 9/16	115.9	112.2	110.3	1.9	1.7%	Pass
4	101.6	97.1	96.1	1.0	1.0%	Pass
3 6/16	85.7	81.2	80.2	1.1	1.3%	Pass
2 13/16	71.4	64.7	65.9	-1.2	-1.8%	Pass
2 6/16	60.3	55.9	54.8	1.2	2.1%	Pass
3 3/16	81.0	74.2	75.4	-1.3	-1.7%	Pass
4 10/16	117.5	117.4	111.9	5.5	4.9%	Pass
6 6/16	161.9	158.3	156.4	1.9	1.2%	Pass
		Max Abs. Error		**5.5**	**4.9%**	**PASS**
		Intercept	**-5.5**	**Slope**	**1.0141**	**PASS**



Date: 09/01/07 **Time:** Begin: 1430 End: 1500

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

TOPO! map printed on 10/30/07 from "Pebble 5.tpo"



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17°
10/30/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Block unit

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

R.M. Young Company
2801 Aero Park Drive
Traverse City, Michigan 49686 USA

Certificate of Calibration and Testing

Test Unit:			
Model:	18801	Serial Number:	CA01674
Description:	Anemometer Drive - 10 to 10,000 RPM		
	- Comprised of Models 18820 Control Unit & 18830 Motor Assembly		

R.M. Young Company certifies that the above equipment has been inspected and calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technologies (NIST).

Nominal Motor Rpm	Output Frequency (1) Hz	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6000	3200	6000	6000
8100	4320	8100	8100
9900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output
(2) Frequency output produces 32 pulses per revolution of the motor shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 22 November 2006

Tested By EJ

Tel: 231-946-3980 Fax: 231-946-4772 Email: met.sales@youngusa.com Website: www.youngusa.com

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	36861
Address:	3401 Minnesota Drive Suite 300 Anchorage, AK 99503	**Date:**	10/25/2006
		PO#:	1208-003-161
Contact:	Chris Lindsey	**Page:**	1
Dept:			

Gage:	Torque Watch m#366-3	**Control:**	4864
Mfg:	Water's	**Model:**	Torque Watch m#366-3
Location:		**Serial #:**	4864

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by: Caltech Calibration
Original Certificate (attached) # 4074

Reference HPI S/O # 14307

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:

:

Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 10/25/2007**

Certified By: Denice V. Mills Signature: Denice V. Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4074
Instrument Make: Water TQ Watch
Model: 366-3
S/N: 4864
ID: 4864

Date: 10-25-06
Temp: 74 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 10-25-07

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by:_____

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner Weights	**1156**	**822/270636-04**	**3-01-08**
In. Oz. Range Red	**As Found**	**After Adjust**	**Final Reading**
.003	.003	none	.003
.009	.008	none	.008
.015	.014	none	.014
.021	.022	none	.022
.027	.028	none	.028
.03	.02	none	.02
Black			
.03	.03	none	.03
.024	.024	none	.024
.018	.017	none	.017
.012	.011	none	.011
.006	.005	none	.005
.003	.002	none	.002

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice V Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner:
Name: DOMINIC SHALLIES

Address: 3401 MINNESOTA DR. STE # 300

City, State, Zip: ANCHORAGE, AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 2ND Day of NOVEMBER 2006

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: RA 7277

ORDER NUMBER: 23732

LOT NUMBER: 19802

MODEL NUMBER: 5008

SERIAL NUMBER: 508079319

CALIBRATION DATE: 11-2-06

RECALIBRATION DUE DATE: 11-2-07

Signed: Linda Lenyen
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: eplab@mail.bbsnet.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments for Precision Measurements Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20 to 40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one-half a solar constant). The adopted calibration temperature is 25 °C.

As a result of a series of comparisons, it has been found to have a sensitivity of:

$$9.29 \times 10^{-6} \text{ volts/watts meter}^{-2}$$

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Ninth International Pyrheliometric Comparisons (IPC IX) at Davos, Switzerland in September-October 2000.

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to:
Hoefler Consulting Group
Anchorage, Alaska

Date of Test: November 30, 2006

In Charge of Test: R. T. Eppman

S.O. Number: 60951
Date: November 30, 2006

Reviewed by: Thomas D. Kirk

Remarks:

Pebble Station 5
February 2008
Quality Assurance Performance Audit

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

Pebble 5 PSD Meteorological Monitoring Station
February 2008
Quality Assurance Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 PERFORMANCE AUDIT 2

2.1 Performance Audit Methodology 2

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 7

2.2 Performance Audit Results 7

2.3 Performance Audit Recommendations 7

3.0 REFERENCES 9

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 5 February 10 and 11, 2008 Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for The Pebble Limited Partnership, care of Pebble Mines Corporation (PMC); in support of the Pebble Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 5 Station (Pebble 5.)

Pebble 5 is located approximately five miles west of the deposit area at roughly 1,430 foot elevation on an east facing slope above a tributary to the Koktuli River. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 50 feet south of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 80 feet south of the tower. Approximately 30 feet east of the tower is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 5 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PMC to serve as a quantitative review of the Pebble 5 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited by adding measured water volumes to the gauge opening using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

A performance audit was conducted at the Pebble 5 station on February 10 and 11, 2008, with Dominic Shallies of HCG assisting. All sensors except the precipitation gauges were challenged with certified audit equipment and yielded errors below the PSD limits. Attempts were made to audit the tipping precipitation gauge, but the ambient temperature was too cold to operate the testing device. The Precipitation gauges were audited on March 5, 2008. The tipping gauge passed the audit but the weighing gauge failed and was replaced and then re-audited. Table 2-2 contains summary data from the audit and complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 5 February 10 and 11, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:03	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.34	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.060	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	3.4	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.3	Pass
Wind Direction Linearity	≤ 3	Degree	0.7	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.0	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.007	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.2	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-3.5	Pass
Barometric Pressure	≤ ±3	Mbar	0.7	Pass
Solar Radiation	≤ ±5+Res	% input	-6.4[1]	Pass
Weighing Precipitation (Old)[2]	≤ ±10	% input	-42.1	Fail
Weighing Precipitation (New)[2]	≤ ±10	% input	6.6	Pass
Tipping Precipitation[2]	≤ ±10	% input	-5.0	Pass

1. Max % error value of 6.4 within limit of 5% input + resolution, see audit.
2. Too cold to run precipitation gauge tests in February; tested on March 5, 2008.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Meteorological Measurement Methods Validation Criteria", ADEC, November 2007.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 10 & 11, 2008

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: DAS CR1000 SN: 9723; Wire panel # 9475.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
14:40:00	14:40:03	**00:03**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.3 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G3472 # 1/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G3472 # 2/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1145
End: 1205

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	42.07	42.41	0.34	Pass	42.41	0.34	Pass	0.00	Pass
Warm	15 to 25	19.03	19.11	0.08	Pass	19.11	0.08	Pass	0.00	Pass
Ice Bath	0	-0.01	0.09	0.10	Pass	0.09	0.10	Pass	0.00	Pass
Cold	-15 to -25	-10.84	-10.76	0.08	Pass	-10.76	0.08	Pass	0.00	Pass
Very Cold	-35 to -45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Max Abs. Error	0.34	**PASS**		0.34	**PASS**	0.00	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: No dry ice available for very cold test.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.3 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45AC **S.N.#:** C0540049 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Date	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
02/11/08	1030	89.5	-12.4	-13.6	94.8	-12.2	-12.8	0.8	Pass
02/11/08	1135	85.5	-11.2	-12.9	92.0	-1.4	-12.5	0.4	Pass
						Max Abs. Error		0.8	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 10 & 11, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.3 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5195	**Cup #:**	2326	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4867	**Vane #:**	1489	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.2	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

02/11/08 **Time:** Begin: 1122 End: 1125

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble 5a	85.1	86.3	1.2	Pass
Kaskanak Mtn	346.4	349.8	3.4	Pass
Compass	275.0	276.3	1.3	Pass
Compass	194.0	195.8	1.8	Pass

Time: Begin: 1450 **Max Abs. Error** **3.4** **PASS**
02/10/08 End: 1520 **Mean Abs. Error** **1.9** **GOOD**

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.8	0.8	Pass
West	270.0	271.8	1.8	Pass
North	360.0	1.2	1.2	Pass
East	90.0	91.6	1.6	Pass
North	360.0	0.7	0.7	Pass
West	270.0	271.8	1.8	Pass
South	180.0	180.6	0.6	Pass
East	90.0	91.0	1.0	Pass
	Max Abs. Error		**1.8**	**PASS**
02/11/08	**Mean Abs. Error**		**1.2**	**PASS**

Time: Begin: 1109 End: 1111

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.1	-0.9	Pass	330.0	330.9	0.9	Pass
60.0	58.7	-1.3	Pass	355.0	355.6	0.6	Pass
90.0	88.9	-1.1	Pass	30.0	29.1	-0.9	Pass
120.0	119.2	-0.8	Pass	60.0	59.0	-1.0	Pass
150.0	149.5	-0.5	Pass	90.0	89.2	-0.8	Pass
180.0	179.5	-0.5	Pass	120.0	119.2	-0.8	Pass
210.0	209.6	-0.4	Pass	150.0	149.4	-0.6	Pass
240.0	239.3	-0.7	Pass	180.0	179.3	-0.7	Pass
270.0	270.0	0.0	Pass	**Max Abs. Error**		**1.3**	**PASS**
300.0	300.3	0.3	Pass	**Mean Abs. Error**		**0.7**	**PASS**

02/11/08 **Time:** Begin: 1113 End: 1115

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.35	0.0049	<0.003	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	7.5	0.104	0.060	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Kaskanak Mtn	346.4	346.5	0.1	Pass
Compass	272.5	272.3	-0.2	Pass
Compass	192.0	189.0	-3.0	Pass
Compass	204.0	201.3	-2.7	Pass
Compass	90.0	87.0	-3.0	Pass

02/11/08 **Time:** Begin: 1250 **Max Abs. Error** **3.0** **PASS**
End: 1330 **Mean Abs. Error** **1.8** **GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 10 & 11, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.5 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 78079	**Prop #:** 65545	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.2	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

02/11/08 **Time:** Begin: 1043 End: 1045

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble 5a	85.1	87.3	2.2	Pass
Kaskanak Mtn	346.4	348.3	1.9	Pass
Compass	275.0	274.8	-0.2	Pass
Compass	194.0	196.2	2.2	Pass
Time: Begin: 1450	**Max Abs. Error**		**2.2**	**PASS**
02/10/08 End: 1520	**Mean Abs. Error**		**1.6**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.6	1.6	Pass	150.0	150.3	0.3	Pass	270.0	268.1	-1.9	Pass
60.0	61.6	1.6	Pass	180.0	180.1	0.1	Pass	300.0	297.8	-2.2	Pass
90.0	91.4	1.4	Pass	210.0	209.6	-0.4	Pass	330.0	327.9	-2.1	Pass
120.0	120.9	0.9	Pass	240.0	238.7	-1.3	Pass	355.0	353.4	-1.6	Pass
					Time:	Begin: 1035		**Max Abs. Error**		**2.2**	**PASS**
					02/11/08	End: 1040		**Mean Abs. Error**		**1.3**	**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	1.0	0.014	0.007	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	7.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Kaskanak Mtn	346.4	347.1	0.7	Pass
Compass	272.5	270.9	-1.6	Pass
Compass	192.0	188.9	-3.1	Pass
Compass	204.0	200.5	-3.5	Pass
Compass	90.0	90.2	0.2	Pass
Time: Begin: 1250	**Max Abs. Error**		**3.5**	**PASS**
02/11/08 End: 1330	**Mean Abs. Error**		**1.8**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 10 & 11, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** C0910027 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
02/10/08	1505	27.68	27.58	934.02	934.73	0.71	Pass
02/11/08	1028	27.74	27.64	936.06	936.54	0.48	Pass
				Max Abs. Error		0.71	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

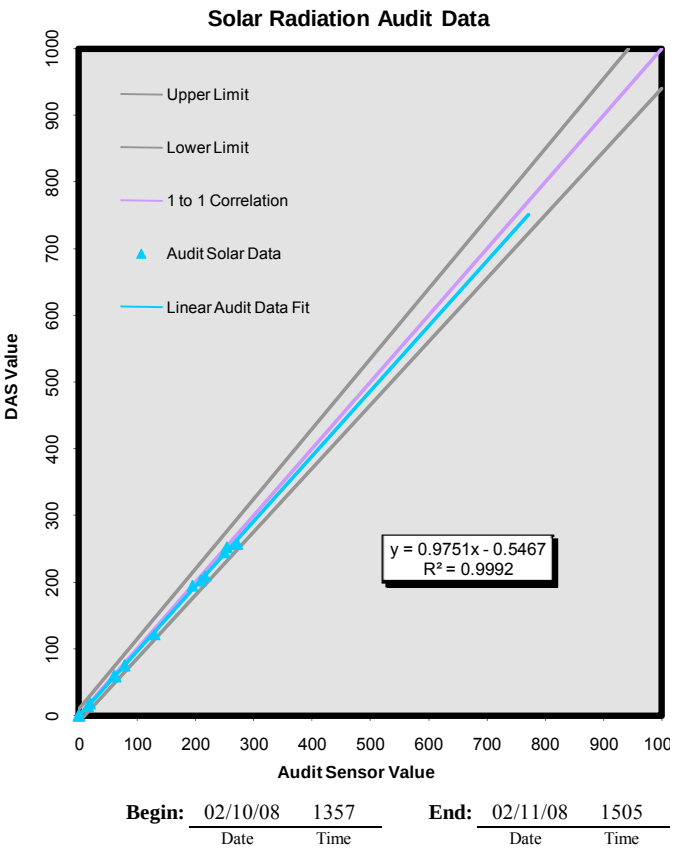
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56228 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1409	271.2	257.6	-13.6	±23.6	-5.0%	Pass
1034	60.5	60.2	-0.3	±13.0	-0.5%	Pass
1500	253.6	252.4	-1.2	±22.7	-0.5%	Pass
1600	194.6	194.5	-0.1	±19.7	-0.1%	Pass
1700	78.7	75.3	-3.4	±13.9	-4.3%	Pass
1800	19.5	18.2	-1.3	±11.0	n/a	Pass
1900	0.9	0.9	0.0	±10.0	n/a	Pass
2000	0.0	0.0	0.0	±10.0	n/a	Pass
800	0.0	0.0	0.0	±10.0	n/a	Pass
900	0.2	0.3	0.1	±10.0	n/a	Pass
1000	15.5	14.0	-1.6	±10.8	n/a	Pass
1100	62.7	58.7	-4.0	±13.1	-6.4%	Pass
1200	129.6	121.6	-8.0	±16.5	-6.2%	Pass
1300	209.3	202.2	-7.1	±20.5	-3.4%	Pass
1400	249.9	244.5	-5.4	±22.5	-2.2%	Pass
1500	216.3	209.6	-6.7	±20.8	-3.1%	Pass
Corr. Val	**0.9996**	**Max Abs. Percent Error**			**6.4%**	**PASS**
R² Value	**0.9992**	**Intercept**	**-0.5**	**Slope**	**0.9751**	**PASS**



Begin: 02/10/08 (Date) 1357 (Time) **End:** 02/11/08 (Date) 1505 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 10 & 11, 2008

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.6 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 332 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

	WEIGHING PRECIPITATION GAUGE VOLUME TEST									
Date:	Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
03/05/08	1042	4.00	1600	21.9	0.00	14.48	14.48	-34.0%	Fail	
03/05/08	1056		1600	21.9	14.48	37.34	22.86	4.2%	Pass	
03/05/08	1111		1600	21.9	0.00	18.29	18.29	-16.6%	Fail	
03/05/08	1126	8.25	1600	21.9	18.29	30.99	12.70	-42.1%	Fail	
						Max Abs. Error		**42.1%**	**FAIL**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold in February, tested in March. Instrument failed, replaced with SN 343.

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.6 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

	WEIGHING PRECIPITATION GAUGE VOLUME TEST									
Date:	Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
03/05/08	1147	4.00	1600	21.9	31.24	52.58	21.34	-2.7%	Pass	
03/05/08	1154		1600	21.9	52.58	75.44	22.86	4.2%	Pass	
03/05/08	1203		1600	21.9	75.44	98.03	22.60	3.0%	Pass	
03/05/08	1212		1600	21.9	5.33	28.70	23.37	6.6%	Pass	
03/05/08	1218		1600	21.9	28.70	51.82	23.11	5.4%	Pass	
03/05/08	1228	8.50	1600	21.9	51.82	74.17	22.35	1.9%	Pass	
03/05/08	1236		1600	21.9	74.17	96.52	22.35	1.9%	Pass	
03/05/08	1244		1600	21.9	96.52	119.38	22.86	4.2%	Pass	
						Max Abs. Error		**6.6%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Replacement instrument.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 10 & 11, 2008

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.1/1.6 **Meters**

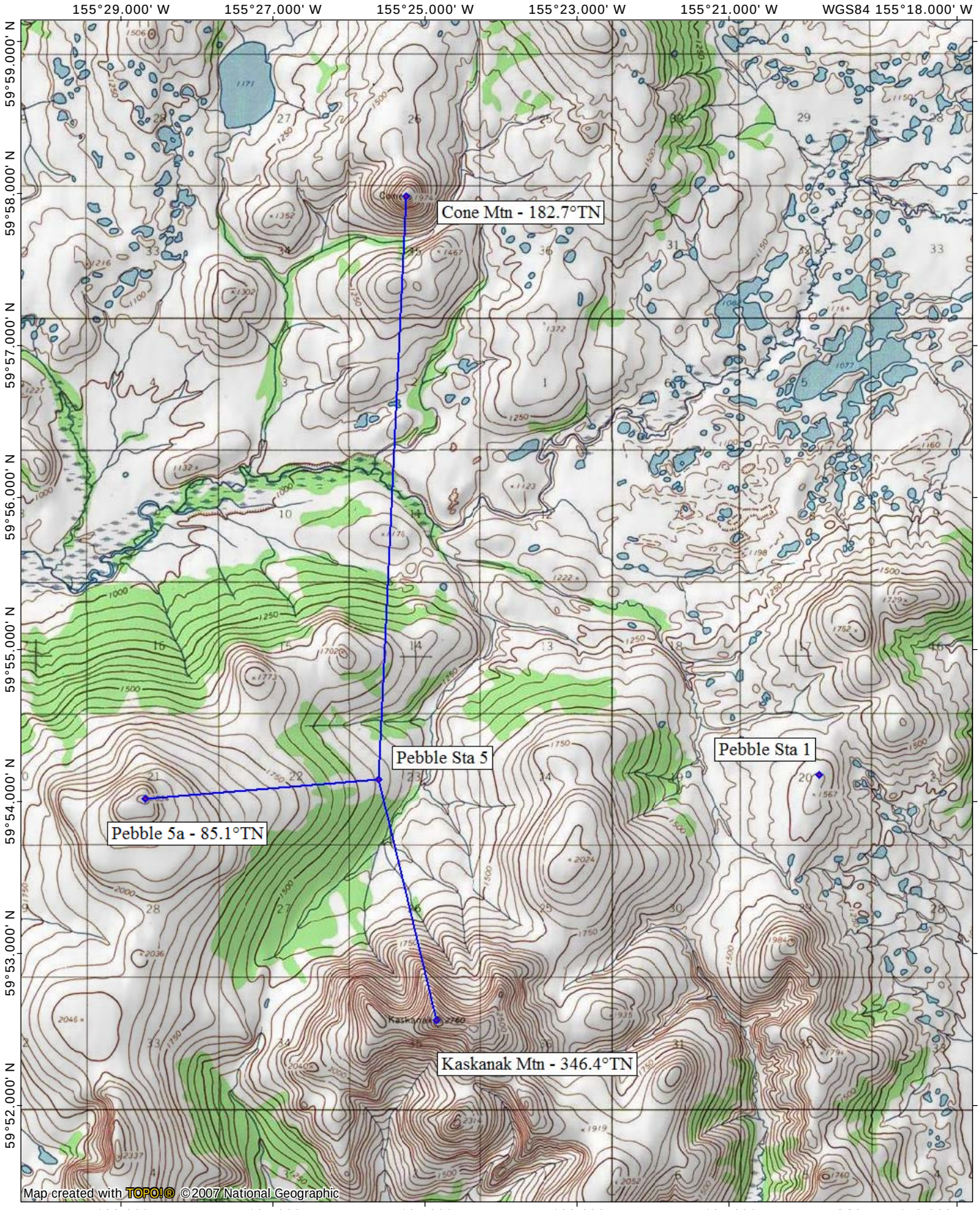
Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** G4673 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
03/05/08	1029	450	13.9	2.29		15.49	1051	13.2	-5.0%	Pass	
03/05/08	1052	650	20.0	15.49	21.84	13.46	1122	19.8	-0.9%	Pass	
03/05/08	1125	650	20.0	13.46		32.77	1152	19.3	-3.5%	Pass	
							Max Abs. Error		**5.0%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold in February to run precip tests, tested in March.

TOPO! map printed on 04/25/08 from "Pebble 5.tpo"



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17°
04/25/08

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

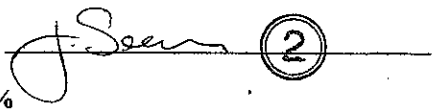
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: 

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner Name: HOEFLER Consulting Group

Address: 340 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER:

MODEL NUMBER: 5008

SERIAL NUMBER: 5080199319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

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Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: K. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Pebble Station 5
September 2008
Quality Assurance Systems Audit
and Performance Audit

for the:

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corporation

prepared by:

Hoefler
CONSULTING GROUP

Pebble Station 5
PSD Meteorological Monitoring Station
September 2008
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

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TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 9
3.1.7 Solar Radiation 9
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 10

3.3 Performance Audit Recommendations 10

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 5 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 5 September 25-26, 2008 Performance Audit Summary 11

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for Pebble Limited Partnership (PLP) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 5 Station (Pebble 5) located near the proposed mine site.

Pebble 5 is located approximately five miles west of the deposit area at roughly 1,430 foot elevation on an east facing slope above a tributary to the Koktuli River. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 50 feet south of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 80 feet south of the tower. Approximately 30 feet east of the tower is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 5 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR1000 DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Precipitation 2 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PLP to serve as an official review of the Pebble 5 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

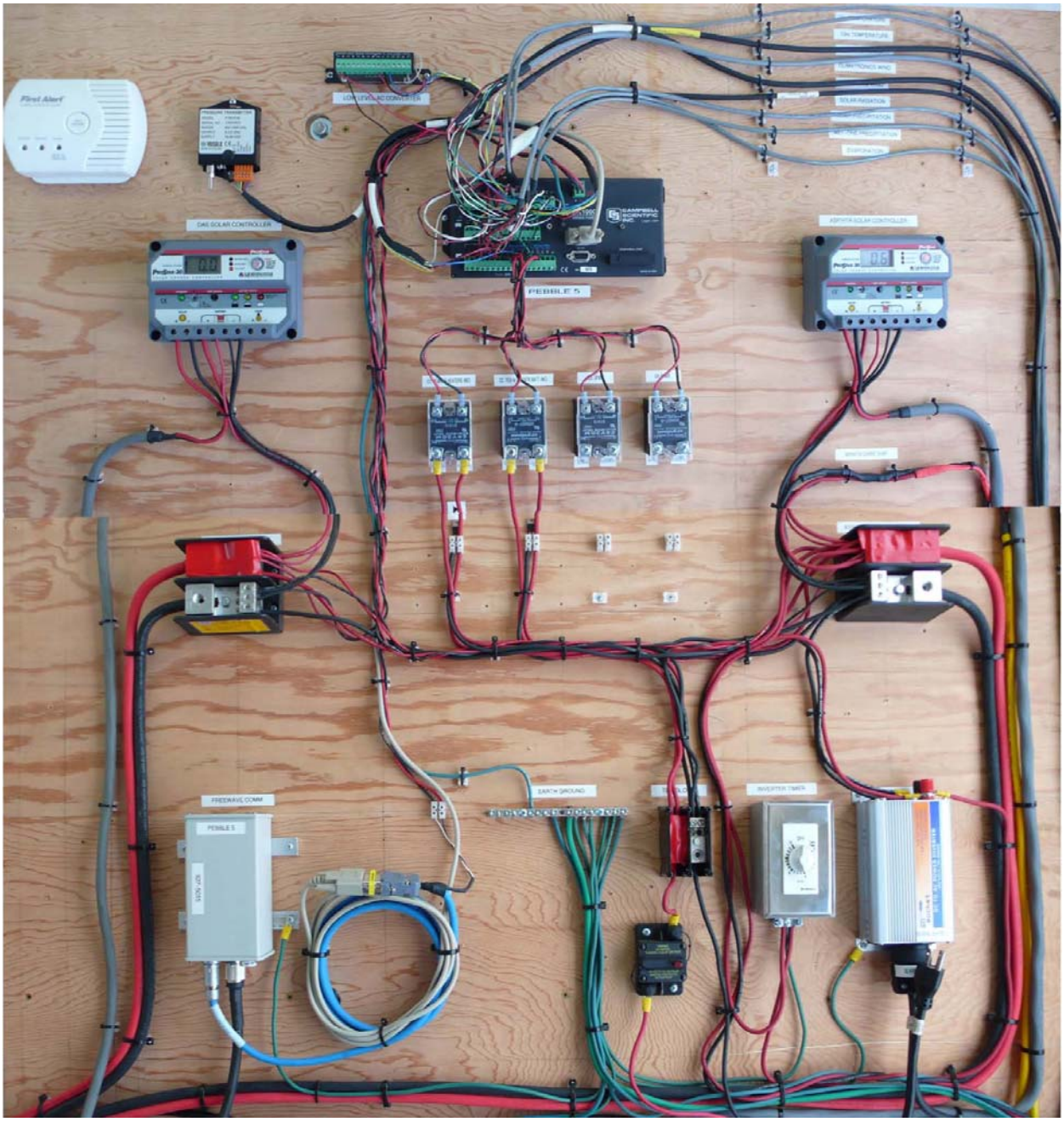
The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan) was completed by HCG in August 2006. While the Plan has not been updated to include the Pebble 5 station, the Plan does describe virtually identical systems previously installed on the project. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 5 station was conducted in September 2008. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 5 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. All instrumentation wires from the tower, precipitation gauges and evaporation gauge are protected in conduit. These conduits all converge at the insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4’ by 4’ plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 5 Station DAS Wiring Panel



The Campbell Scientific CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the solar power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, and other system documentation, and a review of system operations. System operations include both physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program, although not updated to include Pebble 5. Program objectives, general installations, operations, data management and quality assurance are all clearly outlined. The Pebble 5 station is representative of the generic Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had DAS and most meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical

data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 5 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 5 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Maintain complete equipment manuals for station in digital or paper form
- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of

discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change.

An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 5 station on September 25 and 26, 2008, with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Table 3-2, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 5 September 25-26, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:05	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.25	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.25	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (Dew Point)	≤ ±1.5	°C	0.8	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.35	gm-cm	0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque (In Situ)	≤ 7.5	gm-cm	7.0	Pass
Wind Dir. Azim. Alignment (In Situ)	≤ ±5	Degree	4.1	Pass
Wind Direction Accuracy (In Situ)	≤ ±5	Degree	1.6	Pass
Wind Direction Linearity (In Situ)	≤ 3	Degree	0.8	Pass
Wind Direction Torque (New Bearings)	≤ 7.5	gm-cm	6.0	Pass
Wind Direction Accuracy (New Bearings)	≤ ±5	Degree	2.2	Pass
Wind Direction Linearity (New Bearings)	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Alignment (Post Audit)	≤ ±5	Degree	2.8	Pass
RM Young Wind System (In Situ)				
Wind Speed Torque	≤ 1.0	gm-cm	0.6	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	10.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	3.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass

Table 3-2 (Cont.) Pebble 5 September 25-26, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System (Replacement)				
Wind Speed Torque	≤ 1.0	gm-cm	0.4	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	5.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.7	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	3.1	Pass
Barometric Pressure	≤ ±3	Mbar	1.5	Pass
Solar Radiation	≤ ±5+Res	% input	6.3[1]	Pass
Tipping Precipitation	≤ ±10	% input	4.8	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Evaporation	≤ ±10	% input	4.0	Pass

1. Max Error within limit of 5% input + resolution, see audit.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 5 PSD Meteorological Station Systems Audit

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 5 PSD Meteorological Station Systems Audit

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 25-26, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 5 station is located on an east facing slope above a tributary to the Koktuli River. The site is rocky and treeless with some low shrubs and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

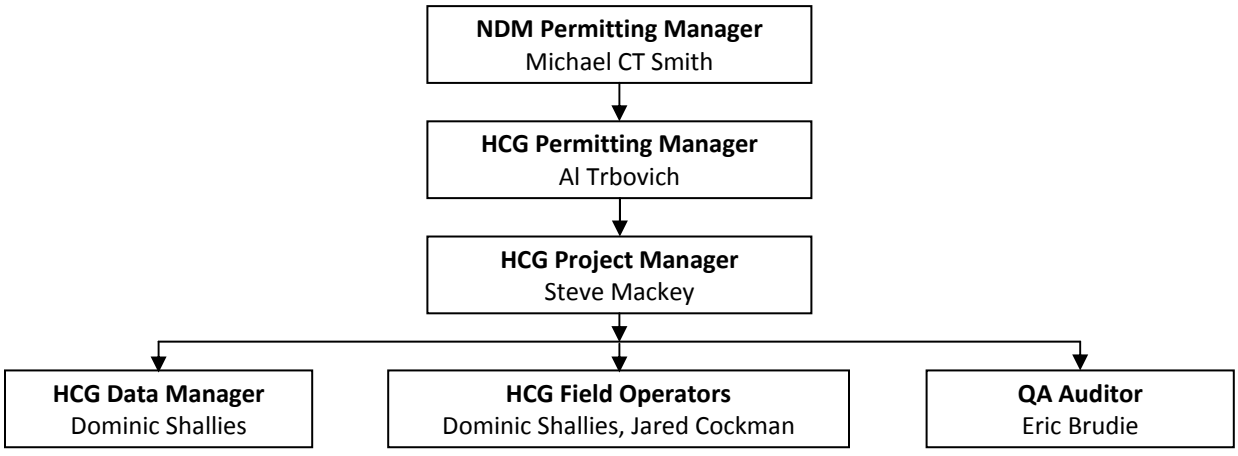
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.149' N
155° 26' W	155° 25.603' W
Elevation: 1,430 feet	Elevation: 1,430 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR1000	9723
DAS Wiring Panel	Campbell Scientific	CR1000	9475
Temperature (2-meter)	Met One	062MP	G3472, ID #1/2
Temperature (10-meter)	Met One	062MP	G3472, ID #2/2
Relative Humidity	Vaisala	HMP45AC	C0540049
Temperature Aspirators	Met One	076B-4	G4413 &G4717
Primary Wind Speed	Climatronics	F460-100075	5195
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2326
Primary Wind Direction	Climatronics	F460-100076	4867
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1489
Wind Sigma	Campbell Scientific	DAS Calculated	9723
Old Backup Wind Spd/Dir	RM Young	05305 Wind Mon-AQ	78079
New Backup Wind Spd/Dir	RM Young	05305 Wind Mon-AQ	83831
Backup Wind Spd Prop	RM Young	08254	65545
Barometric Pressure	Vaisala	PTB101B	C0910027
Solar Radiation	LI-COR	Li-200SX	PY56228
Precipitation-Tipping	Met-One	370	G4673
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	343
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	931
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet telephone modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2m & 10m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution (2m & 10m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 5 PSD Meteorological Station Systems Audit

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 25-26, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	□ Yes ■ No	Comments: Limited quantity of animals in area which could impact pan & gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 25-26, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

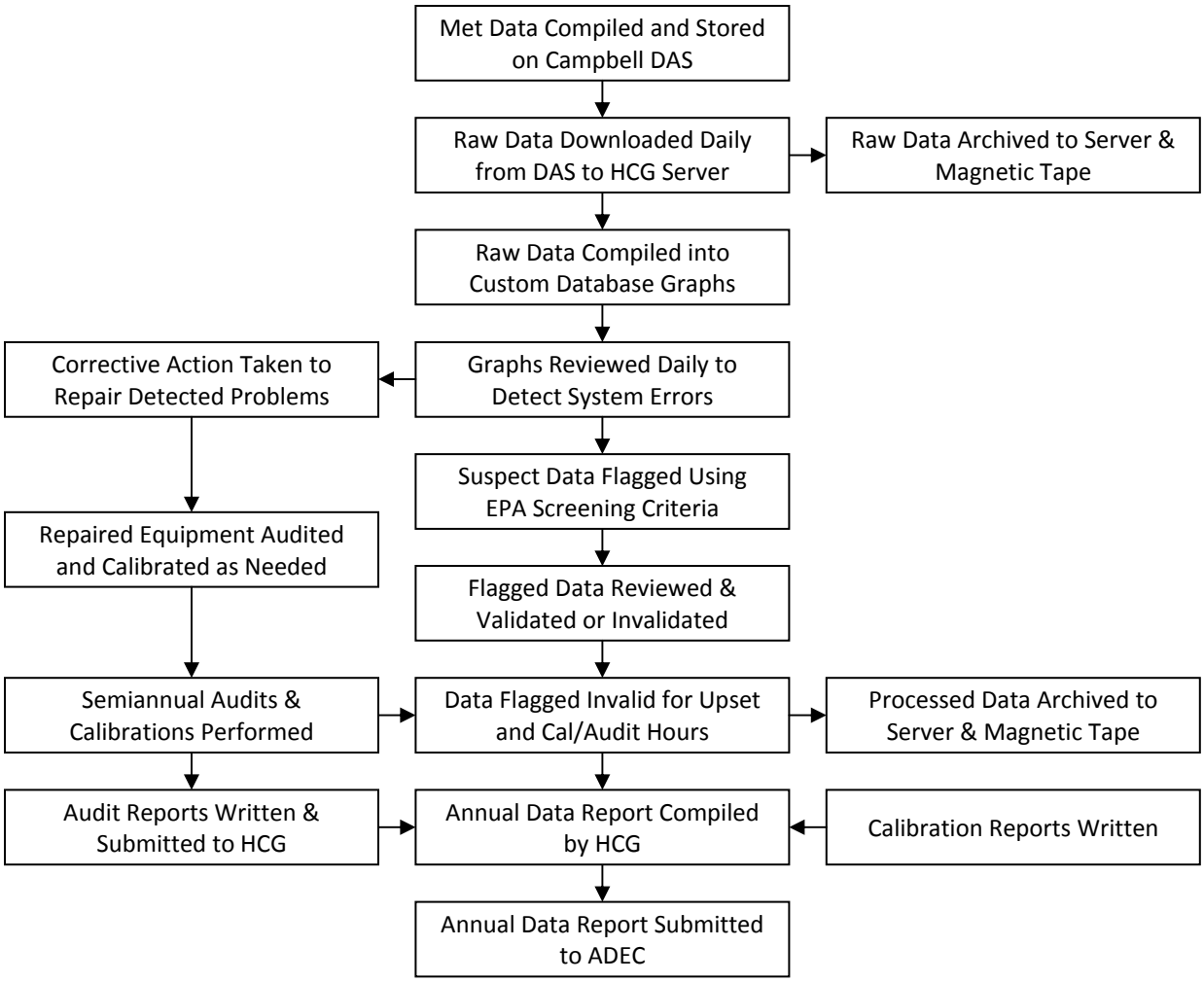
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 25-26, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 25-26, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be

validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 25-26, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

Have audits been conducted on the suggested schedule of every six months? ■ Yes □ No Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists, inventories and visit forms.
- Maintain all equipment manuals in the field or on the field computer.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
9:31:30	9:31:35	**00:05**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 2.3 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G3472 # 1/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G3472 # 2/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1030
End: 1133

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	42.05	42.30	0.25	Pass	42.30	0.25	Pass	0.00	Pass
Warm	15 to 25	19.77	19.82	0.05	Pass	19.82	0.05	Pass	0.00	Pass
Ice Bath	0	-0.09	0.02	0.11	Pass	0.02	0.11	Pass	0.00	Pass
Cold	-15 to -25	-19.29	-19.19	0.10	Pass	-19.19	0.10	Pass	0.00	Pass
Very Cold	-35 to -45	-43.92	-44.11	-0.19	Pass	-44.11	-0.19	Pass	0.00	Pass
		Max Abs. Error	0.25	**PASS**		0.25	**PASS**	0.00	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 2.3 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45AC	**S.N.#:**	C0540049	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1005	87.7	5.0	3.2	91.6	5.1	3.8	0.6	Pass
1020	79.5	6.1	2.8	83.7	6.1	3.6	0.8	Pass
					Max Abs. Error		0.8	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (In Situ)*

Height: 11.3 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5195	**Cup #:**	2326	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4867	**Vane #:**	1489	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.1 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1225 End: 1227

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble 5a	85.1	81.0	-4.1	Pass
Kaskanak Mtn	346.4	345.7	-0.7	Pass
Cone Mtn	182.7	179.7	-3.0	Pass
Wigley Shelter	221.2	222.3	1.1	Pass
Compass	280.0	278.3	-1.7	Pass
Compass	42.0	38.1	-3.9	Pass
Max Abs. Error			**4.1**	**PASS**
Mean Abs. Error			**2.4**	**GOOD**

Time: Begin: 935 End: 955

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	182.1	2.1	Pass
West	270.0	273.5	3.5	Pass
North	360.0	1.6	1.6	Pass
East	90.0	90.7	0.7	Pass
North	360.0	1.2	1.2	Pass
West	270.0	272.9	2.9	Pass
South	180.0	181.9	1.9	Pass
East	90.0	91.3	1.3	Pass
Max Abs. Error			**3.5**	**PASS**
Mean Abs. Error			**1.9**	**PASS**

Time: Begin: 1127 End: 1130

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.9	-1.1	Pass	330.0	331.6	1.6	Pass
60.0	58.5	-1.5	Pass	355.0	356.6	1.6	Pass
90.0	89.0	-1.0	Pass	30.0	28.5	-1.5	Pass
120.0	119.2	-0.8	Pass	60.0	58.5	-1.5	Pass
150.0	149.7	-0.3	Pass	90.0	88.9	-1.1	Pass
180.0	179.8	-0.2	Pass	120.0	119.2	-0.8	Pass
210.0	210.2	0.2	Pass	150.0	150.0	0.0	Pass
240.0	240.3	0.3	Pass	180.0	180.0	0.0	Pass
270.0	270.7	0.7	Pass	**Max Abs. Error**		**1.6**	**PASS**
300.0	301.0	1.0	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1141 End: 1143

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	0.2	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	7.0	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No Post-Audit				
New bearings installed				
Max Abs. Error				
Mean Abs. Error				

Time: Begin: N/A End: N/A

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind direction bearings changed for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (Replacement Bearings)*

Height: 11.3 **Meters**

Wind Spd Sensor:	**Make:** Climatronics	**Model:** 100075	**S.N.#:** 5195	**Cup #:** 2326	**Range:** 0-60	**m/s**			
Wind Dir Sensor:	**Make:** Climatronics	**Model:** 100076	**S.N.#:** 4867	**Vane #:** 1489	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** Climatronics	**Model:** 101984	**S.N.#:** 145	**Torque:** Honeywell Mdl 366-0	**S.N.#:** 5042				
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22			N/A	
100	2.57			N/A	
200	4.92			N/A	
400	9.62		N/A		
1000	23.72		N/A		
2000	47.22		N/A		
	Max Abs. Error				

Time: Begin: N/A End: N/A

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No In Situ Audit				
New bearings installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.2	0.2	Pass
West	270.0	270.8	0.8	Pass
North	360.0	0.1	0.1	Pass
East	90.0	90.6	0.6	Pass
North	360.0	0.1	0.1	Pass
West	270.0	271.5	1.5	Pass
South	180.0	180.5	0.5	Pass
East	90.0	89.8	-0.2	Pass
	Max Abs. Error	**1.5**	**PASS**	
	Mean Abs. Error	**0.5**	**PASS**	

Time: Begin: 1220 End: 1222

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	29.1	-0.9	Pass	330.0	332.2	2.2	Pass
60.0	58.8	-1.2	Pass	355.0	356.9	1.9	Pass
90.0	89.4	-0.6	Pass	30.0	29.4	-0.6	Pass
120.0	119.6	-0.4	Pass	60.0	59.1	-0.9	Pass
150.0	150.7	0.7	Pass	90.0	89.7	-0.3	Pass
180.0	180.4	0.4	Pass	120.0	119.6	-0.4	Pass
210.0	210.3	0.3	Pass	150.0	150.5	0.5	Pass
240.0	240.3	0.3	Pass	180.0	180.7	0.7	Pass
270.0	271.5	1.5	Pass	**Max Abs. Error**		**2.2**	**PASS**
300.0	301.5	1.5	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1158 End: 1202

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	N/A	**N/A**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	N/A	**N/A**
New	7.5	0.104	6.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Spire 2458	233.5	233.8	0.3	Pass
Kaskanak Mtn	346.4	349.2	2.8	Pass
Pebble 5a	85.1	84.2	-0.9	Pass
Compass	269.0	269.1	0.1	Pass
Compass	43.5	43.9	0.4	Pass
Time: Begin: 1320	**Max Abs. Error**		**2.8**	**PASS**
End: 1345	**Mean Abs. Error**		**0.9**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind direction bearings replaced.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ (In Situ)*

Height: 10.5 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 78079	**Prop #:** 65545	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1019 End: 1021

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Pebble 5a	85.1	86.8	1.7	Pass
Kaskanak Mtn	346.4	345.6	-0.8	Pass
Cone Mtn	182.7	181.1	-1.6	Pass
Wigley Shelter	221.2	222.3	1.1	Pass
Compass	280.0	276.9	-3.1	Pass
Compass	42.0	44.6	2.6	Pass
Time: Begin: 935	**Max Abs. Error**		**3.1**	**PASS**
End: 955	**Mean Abs. Error**		**1.8**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.2	0.2	Pass	150.0	149.5	-0.5	Pass	270.0	267.8	-2.2	Pass
60.0	59.9	-0.1	Pass	180.0	178.7	-1.3	Pass	300.0	297.9	-2.1	Pass
90.0	89.8	-0.2	Pass	210.0	208.1	-1.9	Pass	330.0	328.1	-1.9	Pass
120.0	119.9	-0.1	Pass	240.0	237.7	-2.3	Pass	355.0	353.3	-1.7	Pass
				Time: Begin: 1012				**Max Abs. Error**		**2.3**	**PASS**
				End: 1015				**Mean Abs. Error**		**1.2**	**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	0.6	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	10.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No Post-Audit				
New sensor installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Sensor replaced for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ (Replacement Sensor)*

Height: 10.5 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 83831	**Prop #:** 65545	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1108 End: 1111

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
No In Situ Audit				
New bearings installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.7	1.7	Pass	150.0	151.2	1.2	Pass	270.0	270.1	0.1	Pass
60.0	61.7	1.7	Pass	180.0	180.8	0.8	Pass	300.0	300.2	0.2	Pass
90.0	91.2	1.2	Pass	210.0	210.4	0.4	Pass	330.0	330.3	0.3	Pass
120.0	120.8	0.8	Pass	240.0	240.1	0.1	Pass	355.0	354.4	-0.6	Pass
				Time: Begin:	1104	**Max Abs. Error**			**1.7**		**PASS**
				End:	1107	**Mean Abs. Error**			**0.8**		**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	N/A	**N/A**
New	1.0	0.014	0.4	**PASS**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	N/A	**N/A**
New	11.0	0.153	5.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
Spire 2458	233.5	233.5	0.0	Pass
Kaskanak Mtn	346.4	347.8	1.4	Pass
Pebble 5a	85.1	87.6	2.5	Pass
Compass	269.0	268.9	-0.1	Pass
Compass	43.5	46.6	3.1	Pass
Time: Begin: 1320	**Max Abs. Error**	**3.1**		**PASS**
End: 1345	**Mean Abs. Error**	**1.4**		**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** C0910027 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
10/12/08	1007	28.42	28.35	960.05	958.56	-1.49	Pass
				Max Abs. Error		1.49	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/28/08	
Audit Inst	Offset Amount
24.09	-0.09
26.06	-0.07
28.08	-0.08
30.06	-0.06
Intercept	**-0.18**
Slope	**0.0040**

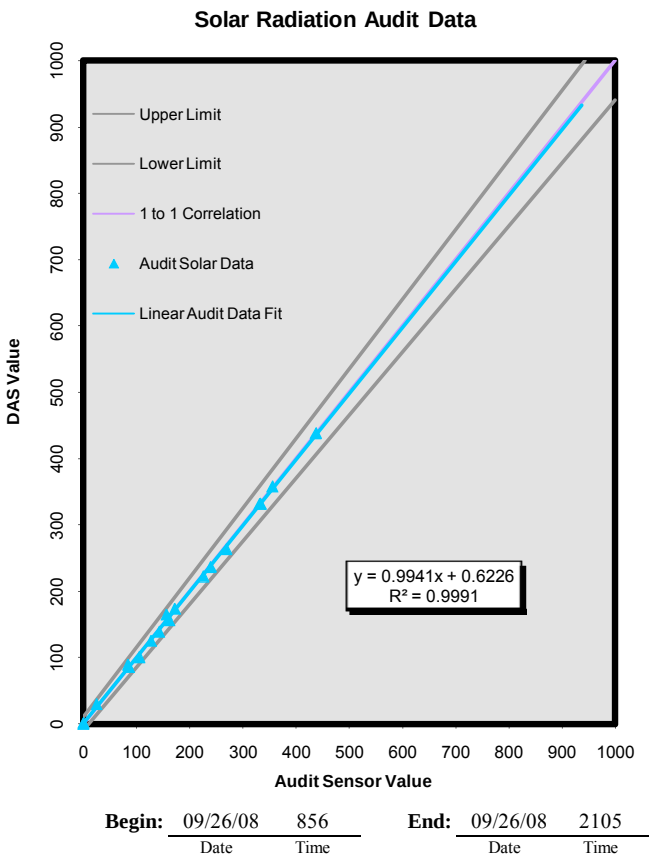
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: New audit instrument broken during September audit, audited with calibrated standard during October trip.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.2 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56228 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
859	85.7	85.7	0.0	±14.3	0.0%	Pass
959	156.6	164.5	7.9	±17.8	5.0%	Pass
1101	355.6	357.8	2.2	±27.8	0.6%	Pass
1126	333.6	331.7	-1.9	±26.7	-0.6%	Pass
1148	437.5	438.2	0.7	±31.9	0.2%	Pass
1254	269.5	263.4	-6.1	±23.5	-2.3%	Pass
1000	105.8	100.7	-5.1	±15.3	-4.8%	Pass
1100	226.1	222.3	-3.8	±21.3	-1.7%	Pass
1200	331.5	331.6	0.1	±26.6	0.0%	Pass
1300	239.6	236.4	-3.2	±22.0	-1.3%	Pass
1400	142.6	138.9	-3.7	±17.1	-2.6%	Pass
1500	127.5	125.1	-2.4	±16.4	-1.9%	Pass
1600	161.6	156.1	-5.5	±18.1	-3.4%	Pass
1700	172.2	173.4	1.2	±18.6	0.7%	Pass
1800	83.9	89.2	5.3	±14.2	6.3%	Pass
1900	24.8	29.8	5.0	±11.2	n/a	Pass
2000	0.3	1.7	1.4	±10.0	n/a	Pass
2100	0.0	0.0	0.0	±10.0	n/a	Pass
Corr. Val	**0.9995**	**Max Abs. Percent Error**			**6.3%**	**PASS**
R² Value	**0.9991**	**Intercept**	**0.6**	**Slope**	**0.9941**	**PASS**



Begin: 09/26/08 (Date) 856 (Time) **End:** 09/26/08 (Date) 2105 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 1.1/1.6 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.01in **S.N.#:** G4673 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/25/08	1504	650	20.0	0.00		19.05	1530	19.05	-4.8%	Pass	
09/25/08	1532	650	20.0	19.05	30.61	7.99	1600	19.55	-2.3%	Pass	
09/25/08	1626	650	20.0	8.64		28.45	900	19.81	-1.0%	Pass	Removed pin play.
09/26/08	910	650	20.0	0.00		19.56	1000	19.56	-2.2%	Pass	
09/26/08	1003	650	20.0	0.00		19.81	1100	19.81	-1.0%	Pass	
09/26/08	1113	650	20.0	0.00		19.56	1200	19.56	-2.2%	Pass	
							Max Abs. Error		**4.8%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.6 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 343 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1525		1600	21.9	17.02	39.88	22.86	4.2%	Pass	
1546		1600	21.9	39.88	63.25	23.37	6.6%	Pass	
1555		1600	21.9	63.25	86.11	22.86	4.2%	Pass	
1608		1600	21.9	86.11	109.22	23.11	5.4%	Pass	14.73 mm after 1600 hour.
1626		1600	21.9	14.73	37.85	23.12	5.4%	Pass	
1640		1600	21.9	37.85	60.45	22.60	3.1%	Pass	
1648		1600	21.9	60.45	83.31	22.86	4.2%	Pass	
1659	12.00	1600	21.9	83.31	106.20	22.89	4.4%	Pass	
					Max Abs. Error		**6.6%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 5
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 25-26, 2008

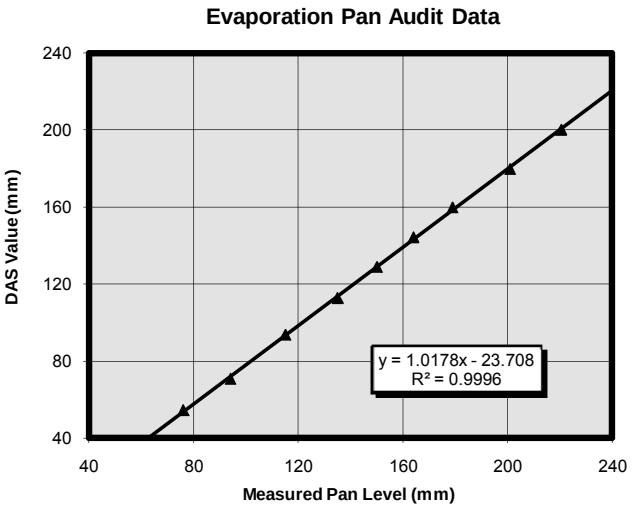
● *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 931 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

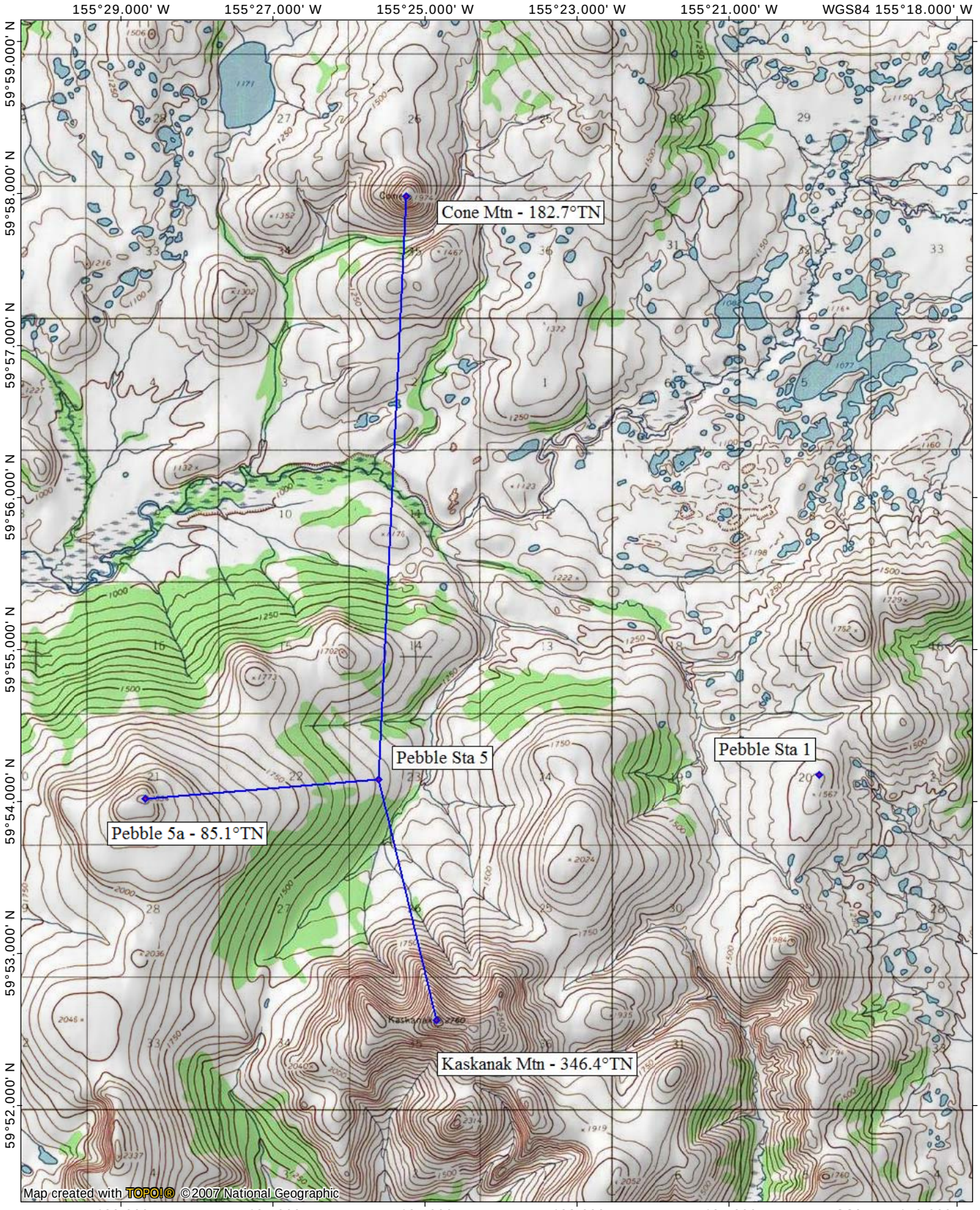
Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	220.5	200.4	196.8	3.6	1.8%	Pass
	201.0	179.8	177.3	2.5	1.4%	Pass
	179.0	159.9	155.3	4.6	3.0%	Pass
	164.0	144.4	140.3	4.1	2.9%	Pass
	150.0	128.9	126.3	2.6	2.1%	Pass
	135.0	112.8	111.3	1.5	1.4%	Pass
	115.0	93.6	91.3	2.3	2.5%	Pass
	94.0	70.7	70.3	0.4	0.6%	Pass
	76.0	54.4	52.3	2.1	4.0%	Pass
		Max Abs. Error		**4.6**	**4.0%**	**PASS**
		Intercept	**-23.7**	**Slope**	**1.0178**	**PASS**



Date: 09/25/08 **Time:** Begin: 1449 End: 1530

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Tubing between gauge and pan frozen upon arrival. Thawed tubing, audited system and winterized pan.

TOPO! map printed on 04/25/08 from "Pebble 5.tpo"



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17°
04/25/08

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1

ACCREDITED

Calibration Certificate No. 1750.01

Cert. No.: 4000-1974024

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Justin Mangold, Anchorage, AK 99503 U.S.A. (RMA:944729)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Calibration Bath TC191	A79341		
Thermistor Module	A27129	8/22/09	1000248949
Temperature Probe	3039	10/26/08	A7710039-4
Temperature Probe	149	3/06/09	A82225037-3
Thermistor Module	A17118	10/30/08	A7831032
Temperature Calibration Bath TC218	A73332		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 9/08/08 **Cal Due: 9/08/09**

Test Conditions: 24.5°C 45.0 %RH 1017 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.001	0.087	N	0.001	0.000	Y	-0.049	0.051	0.013	3.8:1
°C	25.001	25.076	N	25.001	25.000	Y	24.951	25.051	0.013	3.8:1
°C	60.001	60.127	N	60.001	59.999	Y	59.951	60.051	0.018	2.8:1
°C	100.001	100.333	N	100.001	100.001	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Date=MM/DD/YY

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025:2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001:2000 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company

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VAISALA

Certificate of Calibration

Report #: 090408-X0740015-RH **RMA #:** 95-70314 **Calibration Date:** Sep-04-2008
Model #: HMI41/HMP45 **Serial #:** X0650080/X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%, RH Recommended Calibration Due Date: Sep-04-2009
Instrument Range: -20 to +60 °C, T

Customer: HOEFLER CONSULTING GROUP, INC.
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0% against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
22.11	22.30	0.19	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.12	11.30	0.18	2.00	0.92
33.04	32.30	-0.74	2.00	1.01
74.33	72.60	-1.73	2.00	1.02
Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.97	21.90	-0.07	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.21	11.50	0.29	2.00	0.92
32.80	33.00	0.20	2.00	1.01
74.89	74.90	0.01	2.00	1.02

Problem Noted: None
Action Taken: The Unit Was Calibrated

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN 276340-08. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 6B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900343	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7519018	Dec. 19, 2007	Jun. 19, 2009
HMK13B	P3940001	May. 16, 2008	Nov. 16, 2008
HMP233	V4210039	Jul. 17, 2008	Oct. 17, 2008
HMT333	B0920007	Jun. 17, 2008	Sep. 17, 2008
HMI41/HMP45	S0720005	May. 21, 2008	Nov. 21, 2008

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.50 %RH

Approved By

Technical Operator
Roun Roeun

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18811** (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA 02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft 27106D produces 10 pulses per revolution of the anemometer shaft

(2) Indicated on the Control Unit LCD display

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 7/31/08
Inspection Interval One Year

Tested By RP

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA 01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 10/23/08
Inspection Interval One Year

Tested By RP

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP. P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5103

Model Number: 366-3M
Part Number: 060-SQF41200-01
Order Code: TW3663M

Product Specifications

Full Scale Range: 0.2-2.0 GM CM
Calibrated At: 0.2-2.0 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW150

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/12/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-3M SERIAL NUMBER: 5103 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.01	0.00	0.00	.01
.2	0.00	.25	.37	.40
.4	.20	.47	.43	.60
.6	.40	.65	.60	.80
.8	.60	.84	.80	1.00
1.0	.80	1.02	1.05	1.20
1.2	1.00	1.25	1.28	1.40
1.4	1.20	1.46	1.49	1.60
1.6	1.40	1.68	1.70	1.80
1.8	1.60	1.91	1.94	2.00
2.0	1.80	2.14	2.17	2.20

Max pos error (% FS) = 8.5 % at .200
Max neg error (% FS) = -.2 % at .800

Torque Watch is a: PASS

Job 128274

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP.

P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5116

Model Number: 366-2M
Part Number: 060-SQF41198-01
Order Code: TQ3662M

Product Specifications

Full Scale Range: 1-7.5 GM CM
Calibrated At: 1-7.5 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW151

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/15/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-2M SERIAL NUMBER: 5116 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.05	0.00	0.00	.05
1.0	.25	.95	.95	1.75
2.0	1.25	1.85	1.88	2.75
3.0	2.25	2.77	2.82	3.75
4.0	3.25	3.73	3.77	4.75
5.0	4.25	4.62	4.76	5.75
6.0	5.25	5.61	5.77	6.75
7.0	6.25	6.50	6.72	7.75
7.5	6.75	6.96	7.14	8.25

Max pos error (% FS) = 0.0 %
Max neg error (% FS) = -7.2 % at 7.500

Torque Watch is a: PASS

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner: HOEFLER Consulting Group
Name: _____

Address: 341 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER: _____

MODEL NUMBER: 5008

SERIAL NUMBER: 508099319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072808. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/28/08 Lab temperature 72.9 °F
Lab pressure 660.0 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.09	0.09	-0.09
25.99	26.06	0.07	-0.07
28.00	28.08	0.08	-0.08
30.00	30.06	0.06	-0.06

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ NO ☒

Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R [illegible] Date: 7/28/08

Roger L. Sanders, PE

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STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24 x 10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: R. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Appendix D

Validated Continuous Data Summaries

CONTENTS

Pebble 5 Station 2008 Hourly Data:

1. Temperature at 2 meters (deg. C)

2. Temperature at 10 meters (deg. C)

3. Temperature Difference 2 meter to 10 meter (deg. C)

4. Relative Humidity (%)

5. Solar (Watts/m^2)

6. Barometric Pressure (mbar)

7. Wind Speed – Climatronic (m/s)

8. Wind Direction – Climatronic (degrees)

9. Wind Sigma – Climatronic (σ_θ)

10. Wind Speed – RM Young (m/s)

11. Wind Direction – RM Young (degrees)

12. Wind Sigma – RM Young (σ_θ)

13. Daily Total Precipitation (mm)

14. Daily Total Evaporation (mm)

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-10.8	-11.7	-11.7	-11.4	-11.5	-10.7	-10.7	-10.3	-10.7	-10.7	-10.7	-12.1	-13.4	-14.3	-13.5	-14.2	-15.0	-16.8	-16.7	-18.3	-18.6	-18.2	-17.5	-17.8	-10.3	-18.6	-13.6
2	-18.3	-17.7	-17.7	-18.1	-20.0	-21.5	-21.7	-22.3	-21.7	-21.8	-20.2	-19.6	-20.7	-21.2	-20.3	-19.5	-20.3	-20.9	-20.8	-20.7	-20.4	-21.5	-20.5	-19.9	-17.7	-22.3	-20.3
3	-20.7	-20.9	-20.4	-20.9	-21.3	-20.6	-19.9	-18.5	-17.9	-18.7	-17.7	-18.0	-17.5	-17.1	-18.5	-18.3	-18.2	-18.2	-18.2	-18.7	-19.2	-19.1	-18.9	-19.6	-17.1	-21.3	-19.0
4	-19.8	-19.6	-19.3	-19.9	-19.6	-20.3	-20.1	-20.0	-20.3	-20.5	-20.4	-20.7	-20.6	-20.7	-20.8	-21.1	-21.6	-21.6	-22.9	-24.7	-25.0	-24.6	-25.0	-26.1	-19.3	-26.1	-21.5
5	-26.3	-25.9	-25.8	-25.3	-24.8	-24.2	-24.9	-25.4	-25.1	-25.0	-24.3	-23.8	-23.6	-23.1	-23.0	-23.1	-23.6	-23.8	-23.6	-23.3	-23.9	-24.8	-25.3	-25.8	-23.0	-26.3	-24.5
6	-26.0	-26.5	-26.6	-26.8	-27.0	-27.5	-27.4	-27.6	-27.8	-28.3	-28.3	-28.1	-27.6	-27.5	-27.3	-27.3	-27.3	-28.1	-28.4	-28.9	-28.9	-28.9	-28.6	-28.9	-26.0	-28.9	-27.7
7	-29.7	-30.1	-29.3	-28.7	-27.9	-28.2	-28.5	-28.4	-28.9	-28.4	-27.6	-27.5	-27.1	-26.2	-25.7	-25.4	-25.3	-24.7	-24.3	-24.4	-24.5	-24.7	-26.2	-27.2	-24.3	-30.1	-27.0
8	-26.8	-26.8	-27.1	-27.0	-27.0	-27.3	-26.3	-25.9	-25.7	-25.3	-24.7	-25.3	-25.5	-25.5	-25.1	-25.0	-25.0	-26.0	-26.7	-26.4	-26.7	-27.5	-27.4	-27.3	-24.7	-27.5	-26.2
9	-27.4	-27.2	-27.5	-27.8	-27.1	-27.5	-27.3	-27.4	-27.2	-26.9	-26.6	-26.3	-26.3	-26.1	-25.5	-24.8	-25.1	-25.1	-24.9	-24.7	-24.4	-24.1	-23.9	-23.9	-23.9	-27.8	-26.0
10	-23.9	-24.1	-24.6	-24.7	-25.2	-24.9	-25.4	-25.2	-25.1	-26.2	-26.7	-26.2	-26.6	-26.5	-26.5	-26.5	-27.1	-27.7	-27.6	-27.8	-27.8	-27.2	-28.1	-27.6	-23.9	-28.1	-26.2
11	-26.8	-27.0	-26.8	-27.0	-27.7	-28.3	-28.4	-28.5	-28.4	-28.9	-28.8	-28.7	-29.3	-29.1	-29.2	-29.0	-29.1	-29.8	-30.2	-30.5	-30.6	-31.2	-31.9	-32.0	-26.8	-32.0	-29.0
12	-31.7	-31.6	-32.1	-31.9	-32.2	-31.9	-31.9	-32.2	-31.6	-31.5	-31.3	-31.1	-30.9	-30.6	-30.7	-31.5	-31.8	-32.2	-31.8	-31.7	-31.4	-31.4	-31.4	-31.8	-30.6	-32.2	-31.6
13	-31.5	-31.4	-31.3	-31.1	-30.9	-30.7	-30.8	-31.1	-30.9	-31.3	-31.4	-31.4	-31.1	-30.8	-30.2	-30.2	-29.8	-29.9	-30.0	-29.6	-29.2	-29.4	-29.8	-28.5	-28.5	-31.5	-30.5
14	-28.7	-27.9	-27.1	-25.5	-25.7	-24.8	-24.5	-22.3	-15.7	-16.1	-14.8	-13.2	-12.4	-11.8	-11.1	-10.6	-10.3	-9.8	-9.3	-8.5	-8.0	-7.3	-6.8	-6.2	-6.2	-28.7	-15.8
15	-4.8	-4.3	-3.9	-3.7	-3.7	-4.5	-5.0	-5.0	-5.5	-5.2	-5.3	-5.4	-5.3	-5.2	-5.2	-5.0	-5.0	-5.1	-5.1	-5.0	-4.6	-4.1	-4.0	-3.7	-3.7	-5.5	-4.7
16	-3.5	-3.4	-3.2	-3.3	-3.3	-3.4	-4.2	-4.6	-4.9	-5.1	-4.3	-4.3	-4.1	-4.1	-4.7	-4.1	-3.7	-3.9	-4.2	-4.0	-4.9	-6.2	-5.6	-5.6	-3.2	-6.2	-4.3
17	-5.8	-6.3	-5.9	-5.0	-4.4	-3.9	-3.4	-3.2	-2.8	-2.3	-2.1	-2.2	-2.6	-2.2	-2.1	-1.6	-1.9	-2.2	-2.2	-1.9	-2.0	-2.0	-2.4	-2.6	-1.6	-6.3	-3.0
18	-2.4	-2.8	-3.0	-3.0	-3.0	-3.2	-3.2	-3.3	-3.3	-3.1	-3.5	-3.8	-3.9	-3.3	-2.9	-3.6	-3.5	-3.4	-4.3	-2.6	-2.0	-1.7	-2.4	-2.8	-1.7	-4.3	-3.1
19	-2.6	-2.7	-3.1	-2.9	-2.9	-2.6	-1.6	-0.5	-0.9	-1.1	-0.9	-0.5	-0.7	-0.9	-1.0	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.6	-0.7	-0.7	-0.5	-3.1	-1.3
20	-0.7	-0.9	-0.9	-0.8	-0.5	-0.4	-0.4	-0.4	-0.3	-0.2	-0.3	-0.1	0.0	0.1	0.1	-0.1	-0.5	-0.9	-1.0	-0.8	-2.1	-0.9	-2.0	-2.1	0.1	-2.1	-0.7
21	-1.9	-1.8	-1.4	-1.1	-1.1	-1.5	-1.1	-0.5	-0.5	-0.2	-0.1	0.1	0.2	0.4	0.5	0.8	0.9	0.9	0.8	0.6	0.5	0.5	0.4	0.6	0.9	-1.9	-0.2
22	0.5	0.0	0.1	-0.5	-0.8	-1.0	-1.6	-1.9	-1.7	-1.5	-2.1	-3.3	-4.1	-4.6	-5.0	-5.7	-6.0	-6.1	-5.8	-5.8	-6.1	-6.1	-6.3	-6.4	0.5	-6.4	-3.4
23	-6.8	-8.2	-8.9	-10.7	-12.9	-14.3	-15.8	-17.1	-17.8	-18.7	-19.1	-19.4	-19.2	-19.4	-19.7	-20.2	-20.6	-21.9	-22.0	-21.7	-22.4	-22.7	-21.6	-21.9	-6.8	-22.7	-17.6
24	-21.3	-19.4	-19.2	-18.6	-18.4	-18.6	-16.1	-13.1	-11.4	-10.8	-10.1	-9.9	-10.4	-10.2	-9.7	-9.3	-9.1	-8.9	-8.7	-8.4	-8.1	-7.7	-7.3	-7.2	-7.2	-21.3	-12.2
25	-7.3	-6.8	-6.6	-6.8	-6.4	-7.0	-6.7	-5.9	-6.3	-6.3	-6.4	-6.3	-6.5	-6.7	-6.2	-6.4	-6.1	-6.3	-6.3	-8.4	-10.4	-13.3	-15.2	-16.2	-5.9	-16.2	-7.8
26	-17.3	-18.2	-18.9	-19.6	-20.2	-21.8	-22.2	-20.9	-21.1	-21.6	-22.4	-22.9	-22.5	-22.2	-22.3	-21.3	-19.9	-17.6	-15.4	-14.3	-10.8	-9.8	-10.0	-10.8	-9.8	-22.9	-18.5
27	-10.7	-11.0	-10.1	-10.2	-9.8	-9.3	-8.0	-7.8	-8.0	-7.4	-7.0	-6.8	-6.7	-6.5	-6.2	-6.0	-5.9	-5.9	-5.7	-5.5	-5.3	-5.6	-5.5	-5.3	-5.3	-11.0	-7.3
28	-5.1	-5.1	-5.3	-5.4	-5.4	-5.4	-5.6	-6.1	-6.3	-6.4	-6.4	-6.2	-6.1	-5.6	-5.5	-5.7	-5.6	-5.5	-6.2	-6.9	-6.4	-5.5	-5.2	-5.1	-5.1	-6.9	-5.8
29	-5.1	-5.3	-4.5	-4.5	-4.1	-4.5	-5.5	-5.2	-5.8	-6.4	-5.8	-6.1	-5.8	-6.4	-8.7	-8.3	-10.0	-10.8	-9.5	-10.7	-10.9	-12.5	-12.3	-12.3	-4.1	-12.5	-7.5
30	-12.8	-12.2	-13.8	-12.3	-10.5	-10.4	-11.3	-12.1	-12.8	-12.8	-13.5	-13.7	-13.9	-14.2	-14.3	-14.4	-15.1	-15.6	-15.3	-15.0	-15.9	-15.1	-15.5	-15.9	-10.4	-15.9	-13.7
31	-15.6	-16.4	-15.9	-16.0	-15.1	-14.6	-14.1	-14.2	-15.1	-14.7	-14.4	-12.0	-10.9	-12.2	-11.1	-10.7	-10.5	-10.9	-11.9	-12.5	-13.2	-13.5	-15.3	-15.0	-10.5	-16.4	-13.6
Max.	**0.5**	**0.0**	**0.1**	**-0.5**	**-0.5**	**-0.4**	**-0.4**	**-0.4**	**-0.3**	**-0.2**	**-0.1**	**0.1**	**0.2**	**0.4**	**0.5**	**0.8**	**0.9**	**0.9**	**0.8**	**0.6**	**0.5**	**0.5**	**0.4**	**0.6**	**0.9**		
Min.	**-31.7**	**-31.6**	**-32.1**	**-31.9**	**-32.2**	**-31.9**	**-31.9**	**-32.2**	**-31.6**	**-31.5**	**-31.4**	**-31.4**	**-31.1**	**-30.8**	**-30.7**	**-31.5**	**-31.8**	**-32.2**	**-31.8**	**-31.7**	**-31.4**	**-31.4**	**-31.9**	**-32.0**		**-32.2**	
Avg.	**-15.2**	**-15.3**	**-15.2**	**-15.2**	**-15.2**	**-15.3**	**-15.3**	**-15.1**	**-14.9**	**-14.9**	**-14.8**	**-14.7**	**-14.7**	**-14.6**	**-14.6**	**-14.5**	**-14.6**	**-14.8**	**-14.8**	**-14.9**	**-15.0**	**-15.1**	**-15.2**	**-15.3**			**-15.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-15.0	-15.3	-15.1	-15.7	-15.5	-16.1	-15.4	-14.6	-14.8	-14.1	-13.3	-13.5	-12.6	-12.0	-11.0	-11.2	-11.2	-11.8	-12.2	-13.5	-15.4	-16.6	-16.7	-18.4	-11.0	-18.4	-14.2
2	-18.7	-18.2	-18.6	-17.9	-17.4	-18.0	-18.5	-19.8	-19.9	-20.2	-21.5	-20.2	-18.2	-18.7	-17.6	-17.8	-18.5	-19.1	-19.7	-20.3	-20.9	-21.3	-20.7	-21.0	-17.4	-21.5	-19.3
3	-21.8	-23.6	-23.9	-23.6	-24.4	-25.3	-25.3	-25.9	-25.9	-25.8	-25.9	-26.3	-25.6	-25.7	-25.2	-24.8	-25.4	-25.8	-27.1	-28.0	-28.5	-28.4	-28.3	-27.8	-21.8	-28.5	-25.8
4	-27.5	-27.2	-27.0	-27.1	-26.9	-27.7	-26.3	-26.3	-26.2	-25.8	-24.1	-24.0	-23.9	-23.9	-23.9	-23.9	-23.8	-24.3	-25.9	-25.3	-26.3	-27.5	-26.8	-27.9	-23.8	-27.9	-25.8
5	-28.3	-28.6	-29.3	-28.0	-29.7	-31.3	-30.2	-29.8	-29.9	-29.4	-28.8	-28.3	-27.6	-27.8	-26.5	-27.0	-27.3	-27.3	-28.8	-28.4	-27.5	-26.7	-26.8	-26.4	-26.4	-31.3	-28.3
6	-26.5	-26.7	-27.1	-26.2	-26.1	-25.4	-25.2	-25.7	-25.1	-24.9	-25.3	-25.0	-25.0	-25.0	-24.0	-24.6	-24.5	-25.4	-26.1	-26.3	-25.2	-26.0	-25.2	-25.9	-24.0	-27.1	-25.5
7	-25.5	-24.5	-26.4	-26.0	-25.1	-25.0	-26.8	-26.0	-25.5	-25.3	-24.4	-23.2	-22.6	-21.4	-20.1	-18.5	-18.4	-18.1	-18.4	-17.8	-16.9	-17.1	-19.1	-21.2	-16.9	-26.8	-22.2
8	-20.5	-20.7	-17.7	-19.1	-18.8	-16.8	-16.1	-16.9	-16.1	-15.7	-16.6	-15.8	-14.7	-14.7	-14.1	-14.0	-13.7	-14.0	-14.7	-15.8	-14.5	-13.5	-11.8	-11.2	-11.2	-20.7	-15.7
9	-11.1	-10.3	-10.0	-10.0	-10.0	-9.8	-10.0	-10.1	-10.7	-11.4	-12.0	-11.9	-12.3	-12.9	-14.8	-15.1	-15.0	-16.2	-18.3	-19.7	-21.8	-21.6	-22.3	-23.6	-9.8	-23.6	-14.2
10	-24.9	-24.3	-24.4	-24.5	-25.2	-24.8	-27.7	-26.7	-26.3	-26.7	-27.3	-26.6	-25.6	-25.0	-23.8	-24.5	-24.5	-24.0	-24.7	-24.3	-23.9	-23.9	-23.2	-23.5	-23.2	-27.7	-25.0
11	-23.2	-19.0	-14.8	-14.1	-15.0	-15.0	-14.8	-13.6	-13.7	-13.7	-12.9	-12.5	-4.2	-8.1	-9.6	-13.1	-14.5	-15.0	-16.5	-17.2	-17.8	-18.1	-18.5	-19.1	-4.2	-23.2	-14.7
12	-20.6	-21.5	-23.7	-26.3	-27.4	-26.9	-26.4	-27.8	-28.4	-27.1	-28.1	-27.9	-26.9	-25.9	-25.3	-24.7	-23.5	-22.0	-22.0	-24.2	-22.8	-20.1	-20.6	-15.1	-15.1	-28.4	-24.4
13	-11.9	-10.5	-9.9	-9.4	-7.7	-7.3	-6.3	-5.1	-4.2	-3.2	-2.7	-2.1	-1.4	-0.9	-0.8	-0.6	-0.3	-0.3	-0.3	-0.1	-0.1	-0.1	-0.2	0.0	0.0	-11.9	-3.6
14	-0.1	-0.1	0.0	-0.2	-0.3	-0.4	-0.5	-3.4	-8.0	-9.6	-11.7	-13.5	-14.4	-14.1	-15.1	-16.7	-17.3	-18.2	-18.6	-18.6	-18.4	-18.1	-17.6	-18.0	0.0	-18.6	-10.5
15	-19.2	-20.0	-20.8	-20.9	-21.4	-21.6	-22.9	-24.1	-24.8	-26.0	-26.7	-25.9	-25.5	-24.9	-24.3	-24.0	-23.7	-24.2	-25.2	-24.7	-24.9	-22.9	-18.6	-16.1	-16.1	-26.7	-23.1
16	-15.1	-13.6	-12.5	-11.3	-10.4	-9.5	-9.1	-8.0	-7.7	-7.6	-7.8	-7.5	-6.9	-6.5	-5.9	-5.5	-5.4	-5.0	-4.7	-5.3	-5.7	-5.8	-5.8	-6.4	-4.7	-15.1	-7.9
17	-6.1	-6.4	-6.2	-6.2	-4.7	-3.3	-1.8	-1.5	-1.2	-2.2	-1.6	-0.3	-0.7	-0.2	0.0	-0.3	-0.2	0.0	-0.4	-0.6	-0.5	-0.6	-0.7	-1.0	0.0	-6.4	-1.9
18	-0.6	-0.2	-0.4	-0.6	-0.7	-0.7	-0.6	-0.6	-0.4	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.2	-0.1	-0.1	0.0	-0.4	-0.3	-0.1	0.0	0.0	-0.7	-0.3
19	0.1	0.5	0.2	-0.8	-1.0	-0.7	-1.1	-0.3	-0.2	-0.9	-1.2	-0.3	-0.2	0.3	0.6	0.9	0.9	0.8	1.0	1.2	0.7	0.3	0.2	0.1	1.2	-1.2	0.1
20	0.2	0.0	-0.4	-0.3	-0.2	-0.4	-0.4	-0.5	-0.8	-0.9	-0.7	-0.5	0.1	0.5	1.0	0.6	0.3	0.1	0.3	0.1	0.2	-0.4	-0.2	0.1	1.0	-0.9	-0.1
21	0.1	-1.4	-1.3	-1.1	0.1	-0.8	-1.4	-0.9	-0.9	-1.5	-1.5	-0.6	0.0	0.5	0.8	0.5	0.3	0.8	0.1	-0.7	-0.8	-1.0	-0.7	-0.6	0.8	-1.5	-0.5
22	-0.7	-0.8	-0.6	-0.6	-0.9	-1.2	-1.3	-1.2	-1.0	-1.2	-1.2	-1.3	-1.1	-1.1	-0.5	-0.6	-1.1	-1.4	-1.6	-1.8	-2.1	-2.3	-2.6	-3.0	-0.5	-3.0	-1.3
23	-3.0	-3.1	-3.5	-3.8	-5.8	-6.0	-6.9	-7.8	-8.1	-7.1	-8.0	-7.6	-6.6	-5.2	-5.8	-6.1	-6.9	-7.0	-8.4	-8.6	-9.7	-10.4	-10.3	-10.9	-3.0	-10.9	-6.9
24	-11.5	-10.4	-9.6	-9.4	-9.4	-9.2	-9.6	-10.6	-10.6	-11.9	-12.6	-13.6	-14.6	-14.5	-14.2	-14.1	-13.8	-13.9	-14.6	-15.4	-15.6	-15.6	-15.7	-16.2	-9.2	-16.2	-12.8
25	-16.2	-16.8	-16.2	-17.0	-17.3	-17.7	-18.5	-19.2	-19.4	-19.3	-19.0	-18.7	-18.3	-17.8	-18.1	-14.9	-12.8	-12.2	-10.9	-9.9	-9.4	-9.6	-9.8	-8.6	-8.6	-19.4	-15.3
26	-8.2	-10.4	-9.2	-10.2	-10.5	-11.1	-10.4	-11.1	-12.1	-13.0	-11.9	-10.6	-9.5	-7.7	-8.2	-9.3	-9.9	-10.3	-10.2	-11.0	-11.5	-11.8	-12.1	-13.3	-7.7	-13.3	-10.6
27	-15.0	-16.3	-16.7	-16.7	-16.6	-16.5	-17.8	-18.0	-16.8	-15.2	-14.1	-14.6	-12.3	-10.3	-8.6	-9.6	-8.9	-8.3	-6.1	-6.2	-6.3	-6.0	-5.5	-5.6	-5.5	-18.0	-12.0
28	-5.1	-5.1	-6.4	-5.3	-5.7	-5.8	-5.8	-5.2	-5.6	-4.6	-3.8	-3.7	-3.2	-3.4	-3.6	-4.2	-4.7	-6.0	-7.8	-9.9	-8.8	-9.7	-10.2	-10.5	-3.2	-10.5	-6.0
29	-10.4	-12.3	-13.4	-12.0	-13.5	-13.3	-13.5	-14.0	-13.5	-16.2	-16.8	-15.8	-14.2	-14.2	-14.1	-13.8	-13.5	-13.5	-15.3	-14.4	-13.7	-13.6	-14.4	-15.0	-10.4	-16.8	-13.9
Max.	**0.2**	**0.5**	**0.2**	**-0.2**	**0.1**	**-0.4**	**-0.4**	**-0.3**	**-0.2**	**0.0**	**0.0**	**-0.1**	**0.1**	**0.5**	**1.0**	**0.9**	**0.9**	**0.8**	**1.0**	**1.2**	**0.7**	**0.3**	**0.2**	**0.1**	**1.2**		
Min.	**-28.3**	**-28.6**	**-29.3**	**-28.0**	**-29.7**	**-31.3**	**-30.2**	**-29.8**	**-29.9**	**-29.4**	**-28.8**	**-28.3**	**-27.6**	**-27.8**	**-26.5**	**-27.0**	**-27.3**	**-27.3**	**-28.8**	**-28.4**	**-28.5**	**-28.4**	**-28.3**	**-27.9**		**-31.3**	
Avg.	**-13.3**	**-13.3**	**-13.3**	**-13.2**	**-13.4**	**-13.4**	**-13.5**	**-13.6**	**-13.7**	**-13.8**	**-13.8**	**-13.5**	**-12.7**	**-12.4**	**-12.2**	**-12.3**	**-12.3**	**-12.5**	**-13.0**	**-13.3**	**-13.4**	**-13.4**	**-13.2**	**-13.3**			**-13.2**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

March *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-15.5	-15.8	-16.2	-16.5	-16.8	-16.9	-16.8	-17.0	-17.2	-17.8	-16.9	-16.8	-15.5	-12.0	-9.9	-9.5	-8.2	-7.2	-6.8	-6.6	-5.8	-5.3	-4.8	-4.1	-4.1	-17.8	-12.3
2	-3.6	-3.0	-2.5	-1.6	-1.8	-1.7	-1.6	-1.9	-2.0	-2.4	-2.5	-2.4	-2.2	-1.8	-1.4	-1.1	-2.0	-1.7	-1.4	-2.3	-2.5	-2.1	-2.0	-1.8	-1.1	-3.6	-2.0
3	-1.7	-2.5	-2.7	-2.3	-1.9	-1.2	-1.3	-1.7	-1.8	-1.5	-1.2	-1.2	-1.3	-1.3	-1.0	-0.6	-0.4	-0.4	-0.2	-0.2	0.0	0.1	0.2	0.3	0.3	-2.7	-1.1
4	0.3	0.6	0.7	1.0	0.5	0.0	0.0	0.1	0.0	-0.2	-0.4	-0.3	-0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.3	0.2	0.0	-0.1	-0.2	1.0	-0.4	0.2
5	-0.1	0.2	0.7	1.1	0.9	1.0	1.2	1.2	1.4	1.4	1.2	0.6	0.6	0.7	0.5	0.8	1.2	1.2	0.9	0.5	0.2	0.2	0.3	0.2	1.4	-0.1	0.7
6	0.0	-0.4	-0.5	-0.7	-1.0	-1.2	-1.2	-1.3	-1.6	-1.7	-1.7	-1.7	-0.6	-0.2	-0.2	0.4	0.6	0.3	0.2	-0.1	-0.8	-1.1	-0.9	-0.8	0.6	-1.7	-0.7
7	-0.5	-0.9	-1.2	-1.4	-2.5	-3.3	-3.2	-2.7	-2.1	-1.9	-2.5	-1.6	-1.1	-0.7	-0.8	-0.5	-0.6	-0.5	-1.1	-2.0	-2.2	-2.5	-2.4	-3.1	-0.5	-3.3	-1.7
8	-3.7	-3.8	-4.3	-4.7	-4.7	-4.9	-5.6	-4.8	-4.6	-4.3	-4.5	-4.1	-2.7	-2.4	-1.9	-1.9	-1.2	-0.9	-0.7	-0.8	-1.2	-1.6	-1.2	-1.3	-0.7	-5.6	-3.0
9	-1.6	-1.8	-1.5	-1.3	-1.1	-1.2	-1.4	-1.4	-0.9	-1.0	-1.1	-0.8	-0.3	-0.6	-0.9	-0.6	-0.5	-0.7	-2.3	-4.5	-3.0	-1.8	-3.2	-2.5	-0.3	-4.5	-1.5
10	-3.1	-2.2	-2.7	-1.9	-2.8	-3.7	-3.9	-4.4	-4.6	-5.0	-4.3	-4.4	-4.6	-4.4	-4.5	-4.5	-4.3	-5.0	-5.0	-5.2	-5.5	-6.1	-6.2	-6.1	-1.9	-6.2	-4.3
11	-6.7	-7.0	-7.7	-8.0	-8.0	-7.9	-7.8	-7.9	-8.2	-8.3	-8.0	-7.9	-8.3	-8.2	-8.2	-8.2	-8.2	-8.4	-8.6	-10.0	-11.3	-11.9	-10.1	-9.9	-6.7	-11.9	-8.5
12	-12.8	-13.5	-14.6	-12.3	-11.4	-11.4	-12.0	-12.1	-11.8	-11.0	-10.3	-10.2	-9.9	-9.6	-9.0	-8.8	-8.5	-8.4	-8.4	-8.3	-8.4	-8.4	-8.5	-8.5	-8.3	-14.6	-10.3
13	-8.6	-8.7	-8.9	-9.3	-9.4	-9.5	-9.7	-10.0	-10.3	-10.6	-10.9	-10.9	-10.8	-10.5	-10.5	-10.7	-11.0	-11.0	-11.5	-12.0	-14.1	-16.1	-16.6	-18.3	-8.6	-18.3	-11.2
14	-19.0	-18.5	-18.0	-19.7	-18.7	-19.8	-20.1	-20.4	-20.8	-20.2	-18.5	-16.5	-14.4	-13.7	-11.4	-9.0	-6.6	-5.5	-5.4	-6.0	-5.7	-5.8	-5.8	-5.6	-5.4	-20.8	-13.6
15	-5.5	-5.7	-5.4	-5.1	-4.8	-4.1	-3.7	-3.9	-3.9	-3.6	-3.3	-3.0	-2.7	-2.4	-2.1	-1.8	-1.8	-1.9	-2.1	-2.3	-2.5	-2.5	-2.5	-2.6	-1.8	-5.7	-3.3
16	-2.6	-2.6	-2.6	-2.7	-3.1	-4.4	-4.7	-4.3	-4.1	-5.8	-5.0	-3.4	-3.0	-2.9	-3.4	-3.3	-2.2	-2.3	-5.1	-6.7	-6.6	-5.8	-5.9	-7.1	-2.2	-7.1	-4.2
17	-8.3	-8.4	-9.2	-9.3	-9.0	-8.5	-8.1	-7.5	-8.5	-8.1	-7.0	-5.4	-4.9	-4.1	-3.9	-3.9	-3.8	-4.1	-6.2	-7.6	-8.5	-9.0	-9.0	-8.4	-3.8	-9.3	-7.1
18	-8.9	-9.7	-11.2	-11.3	-12.1	-13.1	-13.2	-13.6	-15.0	-15.4	-15.2	-14.8	-14.8	-14.3	-14.0	-13.7	-13.8	-14.6	-15.0	-14.3	-15.2	-16.1	-17.1	-17.3	-8.9	-17.3	-13.9
19	-18.1	-18.6	-19.0	-19.2	-19.7	-19.8	-20.1	-20.5	-21.1	-21.0	-20.9	-20.2	-19.1	-18.2	-17.8	-17.6	-17.3	-17.3	-17.9	-18.3	-19.8	-19.2	-19.6	-20.6	-17.3	-21.1	-19.2
20	-20.4	-19.6	-19.6	-19.6	-20.2	-19.9	-19.8	-19.7	-19.9	-19.9	-19.6	-19.9	-19.7	-19.3	-18.9	-18.4	-18.2	-17.7	-17.3	-17.2	-17.5	-18.3	-19.7	-18.9	-17.2	-20.4	-19.1
21	-17.9	-17.1	-17.0	-15.6	-15.1	-14.6	-14.2	-13.7	-13.5	-14.0	-14.2	-12.5	-10.6	-8.9	-9.0	-8.9	-8.8	-8.6	-9.6	-10.0	-11.4	-13.9	-14.0	-13.1	-8.6	-17.9	-12.8
22	-12.8	-12.0	-12.4	-13.7	-14.6	-12.8	-13.6	-15.6	-14.7	-16.0	-13.7	-13.4	-13.7	-13.1	-12.6	-11.5	-11.6	-11.9	-12.9	-14.6	-16.9	-14.9	-14.5	-15.7	-11.5	-16.9	-13.7
23	-15.6	-16.3	-14.0	-12.2	-12.0	-14.0	-16.8	-17.7	-16.1	-16.0	-16.1	-14.5	-14.3	-14.0	-13.4	-13.2	-13.1	-13.4	-14.1	-13.5	-14.9	-15.0	-16.0	-16.1	-12.0	-17.7	-14.7
24	-14.3	-14.2	-14.7	-14.8	-13.9	-13.7	-13.9	-14.4	-15.6	-17.2	-14.3	-13.8	-13.0	-11.5	-11.1	-10.0	-10.3	-11.6	-10.1	-9.8	-14.2	-13.5	-10.8	-10.2	-9.8	-17.2	-13.0
25	-10.9	-10.1	-9.7	-9.3	-10.4	-9.7	-8.8	-8.4	-9.5	-11.2	-10.2	-10.2	-9.5	-8.9	-8.8	-8.3	-8.5	-9.7	-11.1	-12.9	-13.2	-15.1	-15.7	-15.2	-8.3	-15.7	-10.6
26	-14.5	-14.6	-15.6	-14.9	-15.0	-15.9	-14.8	-15.1	-15.3	-13.5	-11.5	-11.0	-9.6	-8.6	-7.7	-7.6	-7.6	-8.0	-8.7	-9.9	-11.1	-12.7	-11.7	-10.7	-7.6	-15.9	-11.9
27	-11.9	-10.8	-13.3	-13.3	-12.6	-12.8	-10.8	-11.5	-10.5	-9.8	-10.1	-9.4	-9.0	-9.4	-9.5	-9.2	-9.2	-9.8	-10.3	-11.6	-12.8	-13.1	-13.9	-15.9	-9.0	-15.9	-11.3
28	-17.8	-17.3	-18.5	-18.5	-20.3	-20.0	-19.5	-20.4	-19.6	-19.4	-16.4	-14.4	-13.0	-12.3	-11.8	-11.6	-11.5	-12.3	-14.5	-15.0	-15.5	-15.3	-13.2	-8.8	-8.8	-20.4	-15.7
29	-8.3	-9.2	-9.7	-9.7	-8.1	-8.4	-7.5	-7.1	-6.6	-6.1	-5.5	-5.0	-4.3	-3.9	-3.6	-3.5	-3.6	-3.9	-3.7	-3.4	-3.1	-2.8	-2.6	-2.3	-2.3	-9.7	-5.5
30	-1.9	-1.8	-1.8	-1.7	-1.5	-1.6	-1.8	-1.8	-1.7	-1.6	-1.3	-1.0	-0.5	-0.5	-0.3	-0.3	-0.3	-0.4	-0.5	-0.7	-0.8	-0.7	-0.7	-0.8	-0.3	-1.9	-1.1
31	-0.8	-0.7	-0.8	-0.6	-0.6	-0.3	-0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.8	-0.1
Max.	**0.3**	**0.6**	**0.7**	**1.1**	**0.9**	**1.0**	**1.2**	**1.2**	**1.4**	**1.4**	**1.2**	**0.6**	**0.6**	**0.7**	**0.5**	**0.8**	**1.2**	**1.2**	**0.9**	**0.5**	**0.2**	**0.2**	**0.3**	**0.3**	**1.4**		
Min.	**-20.4**	**-19.6**	**-19.6**	**-19.7**	**-20.3**	**-20.0**	**-20.1**	**-20.5**	**-21.1**	**-21.0**	**-20.9**	**-20.2**	**-19.7**	**-19.3**	**-18.9**	**-18.4**	**-18.2**	**-17.7**	**-17.9**	**-18.3**	**-19.8**	**-19.2**	**-19.7**	**-20.6**		**-21.1**	
Avg.	**-8.6**	**-8.6**	**-8.8**	**-8.7**	**-8.8**	**-8.9**	**-8.9**	**-9.0**	**-9.0**	**-9.1**	**-8.6**	**-8.1**	**-7.5**	**-7.0**	**-6.7**	**-6.3**	**-6.1**	**-6.3**	**-6.7**	**-7.3**	**-7.9**	**-8.1**	**-8.0**	**-7.9**			**-8.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-1.3	0.1	-1.3	0.0
2	-2.0	-2.7	-4.1	-5.2	-5.3	-5.7	-5.2	-4.3	-5.2	-4.3	-3.9	-4.2	-4.1	-3.2	-3.3	-3.4	-3.0	-3.2	-3.0	-2.8	-2.3	-2.3	-1.6	-1.4	-1.4	-5.7	-3.6
3	-1.3	-1.2	-1.1	-1.2	-1.4	-1.6	-1.7	-1.7	-1.7	-1.5	-1.3	-1.2	-1.0	-0.7	-0.7	-0.7	-0.4	-0.4	-0.5	-0.7	-0.8	-0.8	-0.6	-0.6	-0.4	-1.7	-1.0
4	-0.6	-0.5	-0.6	-0.7	-0.8	-0.7	-0.8	-0.8	-0.8	-0.8	-0.7	-0.5	-0.4	-0.4	-0.3	-0.1	0.0	0.1	0.0	-0.2	-1.3	-2.7	-3.9	-4.5	0.1	-4.5	-0.9
5	-5.8	-7.0	-8.2	-9.5	-10.4	-11.9	-13.5	-14.7	-14.7	-13.1	-11.0	-7.9	-5.9	-6.8	-7.5	-8.2	-8.2	-7.5	-6.8	-7.7	-10.4	-12.7	-13.2	-13.1	-5.8	-14.7	-9.8
6	-13.0	-13.7	-14.5	-15.3	-15.6	-16.5	-17.0	-17.0	-16.5	-15.2	-13.7	-12.5	-11.1	-9.8	-8.3	-8.7	-8.8	-8.1	-8.2	-9.0	-11.2	-13.5	-14.5	-14.7	-8.1	-17.0	-12.8
7	-15.4	-15.8	-16.0	-15.2	-15.4	-16.3	-17.0	-17.5	-16.9	-14.7	-12.7	-11.3	-9.8	-7.9	-6.8	-6.9	-7.1	-6.7	-7.1	-8.5	-10.7	-12.4	-12.1	-12.3	-6.7	-17.5	-12.2
8	-13.5	-14.9	-15.8	-16.7	-17.2	-17.4	-17.4	-17.2	-16.2	-13.4	-10.4	-7.7	-5.9	-5.7	-5.8	-5.5	-4.9	-4.9	-5.8	-6.1	-7.6	-9.1	-10.5	-11.8	-4.9	-17.4	-10.9
9	-11.4	-11.0	-10.8	-10.9	-11.5	-13.0	-13.7	-14.6	-14.4	-12.5	-10.5	-9.1	-8.6	-8.3	-7.9	-8.2	-8.2	-8.1	-8.7	-9.9	-11.8	-13.8	-14.7	-15.0	-7.9	-15.0	-11.1
10	-14.9	-14.7	-15.2	-16.2	-17.3	-17.6	-18.0	-18.2	-17.1	-14.4	-12.0	-8.6	-6.6	-6.3	-6.5	-6.9	-6.3	-7.4	-8.9	-10.6	-13.1	-15.6	-16.4	-16.3	-6.3	-18.2	-12.7
11	-16.4	-17.3	-17.8	-18.7	-19.6	-19.9	-19.3	-19.9	-19.3	-16.1	-12.5	-10.2	-8.8	-9.9	-10.3	-10.8	-10.4	-10.0	-10.5	-12.1	-13.9	-15.6	-16.5	-17.0	-8.8	-19.9	-14.7
12	-17.0	-15.9	-16.3	-17.6	-18.3	-18.6	-18.1	-17.8	-17.2	-15.0	-11.7	-10.4	-9.7	-9.2	-8.0	-8.5	-8.6	-8.2	-7.9	-8.0	-9.7	-10.4	-11.0	-11.5	-7.9	-18.6	-12.7
13	-11.2	-10.6	-9.0	-7.6	-7.2	-7.0	-6.4	-5.7	-5.5	-5.3	-4.3	-2.6	-1.9	-1.3	-0.4	-0.1	0.0	0.1	0.0	-0.1	-0.5	-1.3	-1.3	-1.2	0.1	-11.2	-3.8
14	-1.1	-1.1	-1.3	-1.6	-2.0	-2.4	-2.6	-2.8	-2.9	-2.8	-2.7	-2.5	-2.3	-2.0	-1.7	-1.4	-1.3	-1.2	-1.2	-1.2	-1.3	-1.4	-1.5	-1.6	-1.1	-2.9	-1.8
15	-1.8	-1.9	-2.1	-2.4	-2.8	-3.2	-3.4	-3.4	-3.4	-3.8	-4.2	-4.3	-4.3	-4.3	-4.2	-4.1	-4.2	-4.4	-5.6	-7.4	-8.4	-9.7	-10.8	-11.4	-1.8	-11.4	-4.8
16	-11.9	-12.3	-12.7	-12.8	-13.2	-13.7	-14.2	-14.5	-15.0	-15.9	-15.9	-15.5	-14.9	-14.3	-13.7	-12.8	-11.8	-11.0	-10.5	-10.1	-9.8	-9.7	-9.5	-9.3	-9.3	-15.9	-12.7
17	-9.1	-8.8	-8.4	-8.1	-7.8	-7.7	-7.7	-7.9	-7.8	-7.7	-7.5	-7.2	-6.9	-6.6	-6.2	-5.9	-5.5	-5.1	-4.8	-4.5	-4.3	-4.4	-4.7	-4.9	-4.3	-9.1	-6.6
18	-5.1	-5.3	-5.5	-5.6	-5.8	-5.9	-6.2	-6.4	-6.6	-6.7	-6.6	-6.3	-6.0	-5.6	-5.2	-4.7	-4.3	-4.1	-3.9	-3.7	-3.6	-3.5	-3.5	-3.6	-3.5	-6.7	-5.2
19	-3.7	-3.8	-3.7	-3.7	-3.8	-3.9	-3.9	-4.0	-4.0	-3.9	-3.7	-3.4	-3.2	-3.5	-3.6	-3.4	-3.1	-2.8	-2.6	-2.7	-3.1	-3.2	-3.0	-3.0	-2.6	-4.0	-3.5
20	-3.1	-3.1	-3.1	-3.0	-2.9	-2.8	-2.7	-2.7	-2.6	-2.5	-2.3	-2.2	-2.1	-2.0	-2.0	-1.9	-1.8	-1.8	-1.8	-1.7	-1.7	-1.6	-1.7	-1.6	-1.6	-3.1	-2.3
21	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.5	-1.4	-1.3	-1.3	-1.3	-1.4	-1.3	-1.3	-1.3	-1.3	-1.6	-1.5
22	-1.4	-1.5	-1.6	-1.6	-1.7	-1.8	-1.8	-1.9	-1.9	-1.8	-1.7	-1.5	-1.3	-1.2	-1.0	-0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1.9	-1.0
23	0.1	0.1	0.1	0.0	-0.3	-0.7	-1.2	-1.5	-1.7	-1.4	-0.9	-0.4	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1.7	-0.3
24	0.1	0.1	0.1	-0.2	-1.1	-1.9	-2.6	-2.9	-2.5	-2.0	-1.5	-1.1	-0.8	-0.6	-0.3	-0.2	-0.2	-0.3	-0.2	-0.1	0.0	-0.1	-0.6	-1.4	0.1	-2.9	-0.9
25	-2.1	-2.2	-1.8	-1.9	-1.6	-1.7	-1.8	-2.0	-2.4	-2.5	-2.5	-2.4	-2.5	-2.6	-2.7	-2.7	-2.7	-2.7	-2.7	-2.8	-3.0	-3.3	-3.8	-4.2	-1.6	-4.2	-2.5
26	-4.7	-5.4	-5.9	-6.5	-7.1	-7.6	-8.0	-8.1	-8.1	-7.8	-7.6	-7.4	-7.0	-6.7	-6.3	-5.9	-5.4	-5.0	-4.6	-4.4	-4.3	-4.3	-4.4	-4.6	-4.3	-8.1	-6.1
27	-4.6	-4.7	-4.7	-4.8	-4.9	-5.1	-5.2	-5.3	-5.4	-5.3	-5.2	-5.1	-4.9	-4.7	-4.4	-4.2	-4.1	-3.9	-3.7	-3.6	-3.6	-3.6	-3.7	-3.7	-3.6	-5.4	-4.5
28	-3.8	-3.9	-4.2	-4.4	-4.4	-4.5	-4.5	-4.5	-4.3	-4.0	-3.6	-3.2	-3.1	-2.9	-2.7	-2.4	-2.3	-2.3	-2.2	-2.3	-2.4	-2.6	-2.8	-3.0	-2.2	-4.5	-3.4
29	-3.2	-3.3	-3.3	-3.4	-3.4	-3.3	-3.4	-3.4	-3.8	-3.2	-2.0	-1.9	-1.1	-0.3	0.0	0.1	0.1	0.1	0.0	-1.3	-2.7	-4.1	-4.8	-5.2	0.1	-5.2	-2.4
30	-6.2	-7.0	-7.6	-7.8	-8.2	-8.7	-9.9	-9.9	-8.0	-6.6	-5.1	-3.4	-2.1	-1.4	-0.7	-0.6	-0.6	-1.0	-1.5	-2.1	-2.4	-2.6	-2.9	-3.1	-0.6	-9.9	-4.6
Max.	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**		
Min.	**-17.0**	**-17.3**	**-17.8**	**-18.7**	**-19.6**	**-19.9**	**-19.3**	**-19.9**	**-19.3**	**-16.1**	**-15.9**	**-15.5**	**-14.9**	**-14.3**	**-13.7**	**-12.8**	**-11.8**	**-11.0**	**-10.5**	**-12.1**	**-13.9**	**-15.6**	**-16.5**	**-17.0**		**-19.9**	
Avg.	**-6.2**	**-6.4**	**-6.6**	**-6.8**	**-7.1**	**-7.4**	**-7.6**	**-7.7**	**-7.6**	**-6.9**	**-6.0**	**-5.2**	**-4.6**	**-4.3**	**-4.1**	**-4.0**	**-3.8**	**-3.7**	**-3.8**	**-4.2**	**-4.8**	**-5.5**	**-5.8**	**-6.1**			**-5.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.2	-3.4	-3.8	-5.5	-6.2	-7.7	-8.4	-8.0	-7.4	-6.1	-4.4	-3.1	-1.6	-0.8	-0.6	-0.4	-0.4	-0.6	-0.7	-0.9	-1.5	-1.4	-1.4	-1.8	-0.4	-8.4	-3.3
2	-2.1	-2.1	-1.7	-1.8	-1.8	-1.8	-1.9	-2.6	-2.5	-2.0	-1.2	-0.5	-0.1	0.1	0.2	0.3	0.5	0.8	1.0	0.8	0.4	0.3	0.3	0.3	1.0	-2.6	-0.7
3	0.3	0.2	-0.1	-0.5	-0.8	-0.2	-0.6	-0.7	-0.1	-0.2	-0.5	0.4	0.8	1.0	1.1	1.2	0.9	0.6	0.6	1.0	1.5	0.8	0.3	0.7	1.5	-0.8	0.3
4	0.6	0.4	0.4	0.4	0.7	0.5	0.7	0.5	0.7	1.1	1.3	1.4	1.4	1.3	1.7	2.0	2.1	2.1	1.9	1.2	1.5	0.9	0.4	0.1	2.1	0.1	1.1
5	0.6	0.7	0.1	0.3	-0.5	-0.7	-0.7	-0.2	0.6	1.1	1.4	1.1	1.3	1.4	1.6	1.8	1.7	1.9	1.8	1.9	2.0	2.1	2.0	1.5	2.1	-0.7	1.0
6	1.4	1.1	0.9	1.0	1.6	1.4	1.4	1.1	1.1	1.1	1.3	1.3	1.5	1.6	1.7	1.7	1.7	1.7	1.5	1.2	0.7	0.6	0.5	0.5	1.7	0.5	1.2
7	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.8	1.1	1.6	1.8	1.9	2.0	2.1	2.0	1.9	2.0	2.0	2.0	1.7	1.6	1.3	1.2	2.1	0.6	1.3
8	1.3	1.3	1.2	1.2	1.0	0.8	0.8	1.1	1.2	1.4	1.5	1.8	1.8	1.7	1.7	1.8	1.9	2.1	2.1	2.0	1.9	1.9	2.0	2.0	2.1	0.8	1.6
9	1.9	1.8	1.6	1.5	1.5	1.2	1.3	1.4	1.7	1.9	2.1	2.1	1.9	1.9	2.0	2.3	2.2	1.9	1.8	1.6	1.6	1.3	1.5	0.9	2.3	0.9	1.7
10	1.2	1.0	0.6	0.3	0.2	-0.2	0.3	0.8	0.9	0.9	1.2	1.7	1.8	2.6	2.5	2.7	3.0	3.2	2.9	2.5	2.6	2.2	2.1	2.5	3.2	-0.2	1.6
11	2.4	2.2	2.1	2.2	2.1	2.3	2.2	2.3	2.8	3.0	2.5	2.1	2.1	2.1	3.2	3.7	3.7	3.4	3.8	3.5	3.4	3.2	2.6	2.3	3.8	2.1	2.7
12	2.3	2.0	1.8	1.7	1.6	1.5	1.2	1.2	1.7	2.1	2.9	3.3	3.8	3.6	3.4	2.5	1.9	2.0	1.9	1.7	1.3	1.0	0.8	1.0	3.8	0.8	2.0
13	0.9	0.7	0.4	0.4	0.4	0.5	0.4	0.3	0.5	0.7	1.4	1.9	2.8	3.1	3.1	3.2	2.9	2.2	2.2	2.0	1.6	1.2	0.7	0.3	3.2	0.3	1.4
14	0.1	0.3	-0.4	-1.3	-1.4	-1.1	-0.5	0.3	0.8	0.9	1.3	1.9	2.7	3.5	4.0	4.1	4.4	4.2	4.1	3.0	2.8	2.9	3.1	2.5	4.4	-1.4	1.8
15	2.4	2.1	2.6	2.5	2.2	2.1	2.3	2.3	2.7	2.9	2.6	3.8	4.7	5.1	4.4	4.3	3.2	2.7	2.5	2.3	1.8	1.4	1.1	1.3	5.1	1.1	2.7
16	1.1	0.9	0.8	0.7	0.4	0.2	0.2	0.0	0.1	0.3	0.7	1.6	2.4	3.4	3.8	4.0	4.0	3.8	3.6	3.4	2.6	1.7	0.8	-0.1	4.0	-0.1	1.7
17	-0.8	-1.8	-2.0	-2.0	-2.1	-1.7	-1.3	-0.3	1.0	1.8	2.6	3.7	4.6	4.3	5.1	5.3	5.4	5.4	5.6	5.1	4.7	3.5	2.8	2.7	5.6	-2.1	2.1
18	2.0	1.1	1.1	1.7	1.0	0.6	1.1	1.5	1.5	2.2	2.1	2.4	2.6	2.8	2.7	2.6	3.0	3.1	3.0	2.5	2.2	1.5	0.9	0.9	3.1	0.6	1.9
19	0.8	1.3	1.2	0.5	0.6	0.7	0.9	0.8	0.9	1.0	1.4	2.3	3.1	3.7	4.0	4.9	4.5	4.1	3.9	3.8	3.6	2.8	2.2	2.0	4.9	0.5	2.3
20	2.1	1.9	1.5	0.8	0.8	-0.2	0.5	1.6	2.8	3.9	5.2	6.6	7.5	8.2	9.0	8.9	8.8	8.9	7.9	7.8	7.2	7.2	7.0	7.3	9.0	-0.2	5.1
21	7.4	6.1	4.7	3.6	3.7	3.3	2.8	3.5	3.7	4.1	5.0	5.7	6.5	6.3	6.6	7.3	6.7	6.7	7.0	6.6	5.7	4.7	4.1	3.8	7.4	2.8	5.2
22	4.0	3.7	3.2	2.9	2.4	2.3	1.5	2.3	3.1	3.4	4.1	4.7	5.8	6.9	7.6	8.3	7.6	7.1	5.7	5.0	4.2	3.5	3.0	2.7	8.3	1.5	4.4
23	2.4	1.7	1.2	1.2	1.0	1.4	1.6	1.7	2.2	2.4	2.9	3.2	3.1	3.0	3.1	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.0	2.5	3.2	1.0	2.5
24	2.3	2.4	2.3	2.1	2.1	1.9	2.0	2.4	2.6	3.0	3.1	3.7	4.6	4.7	5.5	6.4	6.3	5.8	4.5	3.0	4.0	3.4	2.6	2.5	6.4	1.9	3.5
25	2.1	2.0	1.5	1.4	1.4	1.2	1.2	1.6	1.6	2.1	3.3	3.5	3.5	2.7	3.0	3.4	4.1	4.3	3.7	3.7	3.3	2.7	2.3	2.2	4.3	1.2	2.6
26	1.8	1.7	1.3	1.2	1.1	1.3	1.4	1.3	1.8	2.4	2.9	3.4	4.0	4.6	5.2	3.6	4.3	5.1	5.4	5.1	4.5	3.9	3.5	2.4	5.4	1.1	3.0
27	2.2	1.4	0.9	0.9	0.6	-0.6	0.7	1.5	2.4	3.7	4.4	5.9	6.7	7.7	8.4	9.5	9.8	10.1	10.2	9.9	8.7	7.0	5.3	4.0	10.2	-0.6	5.0
28	3.2	2.9	3.0	2.8	3.2	3.6	3.6	4.5	5.1	6.1	7.4	8.4	8.5	9.2	10.3	11.3	11.7	11.3	10.3	9.2	8.8	8.0	6.5	5.3	11.7	2.8	6.9
29	4.4	4.0	4.6	4.1	3.3	3.3	4.2	4.9	5.7	6.8	7.9	9.1	9.5	10.2	10.9	11.6	12.3	12.2	12.4	12.4	11.7	10.2	7.8	6.3	12.4	3.3	7.9
30	5.8	5.0	4.2	4.6	6.0	5.8	5.5	6.4	7.2	8.4	9.2	10.3	10.5	10.6	11.2	11.6	11.1	9.5	9.2	8.5	7.1	6.2	5.6	5.0	11.6	4.2	7.7
31	4.6	4.5	4.1	3.9	3.8	3.8	4.0	3.9	3.9	4.3	6.0	6.4	6.8	7.0	6.8	6.9	6.8	6.5	6.0	5.3	4.4	4.1	3.7	3.0	7.0	3.0	5.0
Max.	**7.4**	**6.1**	**4.7**	**4.6**	**6.0**	**5.8**	**5.5**	**6.4**	**7.2**	**8.4**	**9.2**	**10.3**	**10.5**	**10.6**	**11.2**	**11.6**	**12.3**	**12.2**	**12.4**	**12.4**	**11.7**	**10.2**	**7.8**	**7.3**	**12.4**		
Min.	**-3.2**	**-3.4**	**-3.8**	**-5.5**	**-6.2**	**-7.7**	**-8.4**	**-8.0**	**-7.4**	**-6.1**	**-4.4**	**-3.1**	**-1.6**	**-0.8**	**-0.6**	**-0.4**	**-0.4**	**-0.6**	**-0.7**	**-0.9**	**-1.5**	**-1.4**	**-1.4**	**-1.8**		**-8.4**	
Avg.	**1.8**	**1.5**	**1.3**	**1.1**	**1.0**	**0.8**	**0.9**	**1.2**	**1.6**	**2.1**	**2.7**	**3.3**	**3.8**	**4.1**	**4.4**	**4.6**	**4.6**	**4.4**	**4.2**	**3.9**	**3.5**	**3.0**	**2.5**	**2.2**			**2.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.5	3.4	4.1	4.9	4.9	5.0	4.9	4.8	4.9	5.7	7.8	8.6	7.5	8.1	9.0	8.1	6.6	6.3	5.9	5.7	5.1	4.9	3.7	9.0	3.2	5.7
2	3.9	4.4	4.4	4.6	4.7	4.4	4.1	5.1	5.8	6.7	7.2	7.7	8.8	9.7	10.5	10.5	10.4	10.0	9.1	8.9	8.5	7.9	6.5	6.5	10.5	3.9	7.1
3	5.7	5.3	5.1	4.9	4.7	4.7	5.1	5.4	5.6	6.7	7.9	8.8	8.7	9.4	10.2	10.5	8.6	8.7	7.8	6.7	5.7	4.7	3.8	3.5	10.5	3.5	6.6
4	3.2	3.0	2.8	2.4	2.2	2.2	2.3	3.2	4.7	5.6	6.2	7.3	7.8	8.2	8.8	9.0	9.4	9.0	8.7	8.1	7.2	5.9	4.9	4.2	9.4	2.2	5.7
5	3.6	3.6	3.2	2.8	2.6	2.7	2.9	3.3	3.4	4.1	4.2	4.1	4.3	5.3	6.3	5.9	6.1	6.1	5.2	5.3	5.1	4.9	4.7	3.6	6.3	2.6	4.3
6	3.5	2.9	2.9	2.9	2.6	3.1	3.6	4.0	4.0	4.8	6.2	8.2	9.6	10.2	10.9	11.4	12.2	11.7	11.7	9.8	10.4	10.0	8.2	6.3	12.2	2.6	7.1
7	6.2	6.2	5.6	5.0	4.6	5.2	6.4	7.0	8.6	9.6	11.2	12.0	12.1	13.2	13.6	14.1	14.7	15.0	14.9	13.3	12.5	10.5	8.7	7.2	15.0	4.6	9.9
8	7.2	6.3	5.7	4.5	4.0	4.0	3.8	4.6	4.4	5.8	7.0	7.8	7.6	8.1	8.4	8.4	8.2	8.1	8.1	7.8	7.9	6.4	4.0	3.1	8.4	3.1	6.3
9	2.3	1.9	1.7	1.2	0.9	0.8	0.8	0.9	1.2	1.6	2.7	3.3	3.7	4.1	4.8	5.4	6.5	5.6	6.2	6.1	5.8	5.3	4.4	4.2	6.5	0.8	3.4
10	4.0	3.8	3.3	3.0	2.7	2.5	1.8	2.4	2.6	3.3	3.8	4.3	4.9	5.9	6.8	7.7	8.0	7.6	7.1	6.4	5.7	4.9	4.8	4.6	8.0	1.8	4.7
11	4.3	3.7	3.4	2.9	2.9	3.0	2.8	3.1	3.4	4.1	4.2	4.4	4.6	4.9	5.1	5.9	6.3	6.3	6.2	6.2	5.9	5.0	4.4	3.5	6.3	2.8	4.4
12	3.1	3.2	2.8	2.3	1.8	1.6	1.2	1.7	2.8	3.7	4.5	5.0	5.3	5.0	5.1	5.2	4.8	4.5	3.8	3.3	3.0	2.7	2.5	2.3	5.3	1.2	3.4
13	2.0	2.0	2.4	2.7	3.2	3.6	3.9	4.2	5.0	5.5	5.8	6.7	8.3	9.6	10.1	10.9	11.9	12.3	13.3	13.9	13.5	12.1	11.0	10.3	13.9	2.0	7.7
14	9.2	8.1	7.5	5.5	4.7	4.1	4.5	5.0	4.9	7.2	9.7	9.0	10.9	12.1	13.2	14.6	15.2	14.6	13.8	11.7	9.6	9.9	8.5	8.3	15.2	4.1	9.2
15	7.5	6.7	5.2	5.4	3.5	3.0	3.0	4.2	4.5	6.4	7.0	8.7	9.1	10.8	12.1	12.1	11.4	9.5	10.4	10.1	8.5	7.6	7.6	7.2	12.1	3.0	7.6
16	6.8	6.5	5.9	5.7	5.6	5.2	5.5	6.1	6.8	7.5	8.1	9.2	10.1	11.0	11.4	11.7	12.3	13.0	13.0	13.2	12.6	11.8	10.4	8.9	13.2	5.2	9.1
17	9.2	9.6	9.3	9.4	9.7	9.5	9.6	9.9	11.3	13.0	13.8	14.1	14.0	15.5	16.8	17.5	17.6	17.6	17.6	16.9	15.5	13.8	11.7	9.8	17.6	9.2	13.0
18	8.5	8.9	8.1	8.1	8.1	8.0	7.6	8.1	9.6	11.1	11.3	11.3	12.8	13.4	12.9	14.3	14.5	14.4	13.6	13.6	12.7	12.0	9.7	8.4	14.5	7.6	10.9
19	8.5	8.4	8.4	7.9	6.8	5.7	6.0	7.6	9.4	10.1	10.2	10.4	10.6	11.7	13.1	13.8	14.3	14.3	14.5	14.2	13.5	12.2	10.9	10.3	14.5	5.7	10.5
20	9.5	8.5	7.2	6.6	6.3	5.3	6.2	7.7	9.0	10.0	10.4	11.3	12.3	13.2	13.6	13.8	13.6	13.1	12.4	11.5	10.0	8.8	7.5	6.5	13.8	5.3	9.8
21	6.2	6.1	5.9	6.0	6.0	5.2	5.5	6.4	7.5	7.9	8.7	9.5	10.1	10.1	10.7	11.5	12.3	13.2	13.8	13.6	12.6	11.0	8.7	7.8	13.8	5.2	9.0
22	7.3	6.8	7.0	7.3	6.3	6.4	7.4	8.4	8.9	10.1	10.9	11.5	11.7	12.4	12.7	11.6	11.0	10.8	10.1	9.6	8.2	7.5	6.7	6.2	12.7	6.2	9.0
23	6.0	5.9	5.7	5.6	5.0	4.8	5.2	5.7	6.6	7.8	8.9	9.9	10.4	10.8	11.3	11.7	12.2	12.4	12.3	11.9	10.8	9.5	8.0	6.7	12.4	4.8	8.5
24	6.2	5.7	5.0	4.3	4.4	4.7	5.1	5.8	6.5	7.9	8.2	9.2	9.0	8.4	8.7	8.6	8.9	8.5	8.0	7.9	7.8	7.5	7.3	7.1	9.2	4.3	7.1
25	7.0	7.2	7.1	6.8	6.3	5.9	6.4	7.2	7.4	8.1	8.5	9.8	10.8	11.6	12.2	12.1	11.6	11.3	10.5	9.7	9.0	8.6	8.6	7.7	12.2	5.9	8.8
26	7.3	6.8	6.4	6.4	6.3	6.0	6.5	7.1	8.0	8.8	9.8	10.7	11.8	10.6	10.5	11.2	10.6	10.3	10.3	10.3	10.4	10.3	9.1	8.1	11.8	6.0	8.9
27	6.9	7.1	7.8	6.9	5.7	5.5	6.7	7.3	7.7	8.6	8.3	9.6	10.9	12.3	11.8	11.7	12.0	12.4	11.7	11.2	9.5	8.9	8.1	7.3	12.4	5.5	9.0
28	6.7	5.5	5.0	4.8	5.7	5.9	6.4	6.8	7.6	8.9	8.8	8.4	9.3	10.4	11.2	10.7	9.1	10.3	10.2	10.1	10.0	9.1	8.1	7.8	11.2	4.8	8.2
29	7.4	6.8	6.6	6.1	6.0	6.2	6.2	6.0	6.0	6.8	7.3	8.2	8.9	9.3	10.2	10.9	11.3	11.4	10.8	10.4	9.0	7.7	6.8	6.1	11.4	6.0	8.0
30	5.5	5.2	5.1	5.2	5.0	5.2	4.8	6.1	7.3	7.8	8.8	9.5	10.0	9.8	10.7	11.6	11.5	10.8	11.4	11.6	11.0	11.2	10.4	8.7	11.6	4.8	8.5
Max.	**9.5**	**9.6**	**9.3**	**9.4**	**9.7**	**9.5**	**9.6**	**9.9**	**11.3**	**13.0**	**13.8**	**14.1**	**14.0**	**15.5**	**16.8**	**17.5**	**17.6**	**17.6**	**17.6**	**16.9**	**15.5**	**13.8**	**11.7**	**10.3**	**17.6**		
Min.	**2.0**	**1.9**	**1.7**	**1.2**	**0.9**	**0.8**	**0.8**	**0.9**	**1.2**	**1.6**	**2.7**	**3.3**	**3.7**	**4.1**	**4.8**	**5.2**	**4.8**	**4.5**	**3.8**	**3.3**	**3.0**	**2.7**	**2.5**	**2.3**		**0.8**	
Avg.	**5.9**	**5.7**	**5.3**	**5.0**	**4.8**	**4.6**	**4.9**	**5.5**	**6.2**	**7.1**	**7.8**	**8.6**	**9.2**	**9.8**	**10.4**	**10.8**	**10.8**	**10.6**	**10.4**	**10.0**	**9.2**	**8.4**	**7.4**	**6.5**			**7.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.2	7.8	8.7	8.6	8.0	7.0	6.4	7.8	8.9	10.1	11.6	12.6	13.3	14.0	14.6	14.5	14.4	13.7	12.6	11.9	10.6	9.6	8.9	8.4	14.6	6.4	10.5
2	7.8	7.4	6.8	6.4	6.1	6.1	6.0	6.3	6.4	6.9	8.3	9.7	10.6	11.4	11.3	11.6	12.7	13.2	12.3	10.2	10.2	9.5	8.6	7.6	13.2	6.0	8.9
3	7.7	7.4	7.6	8.6	9.1	8.3	8.3	8.6	8.5	8.1	7.1	7.8	8.3	9.0	9.7	10.5	10.4	10.3	9.7	9.6	9.3	9.2	8.7	8.4	10.5	7.1	8.8
4	8.0	7.7	7.4	7.4	7.7	7.8	7.7	8.3	9.2	10.0	10.8	12.0	13.1	14.1	13.9	12.9	13.6	14.1	12.8	10.9	9.7	10.0	9.3	9.7	14.1	7.4	10.3
5	8.7	9.0	9.8	9.8	11.1	10.6	10.5	10.7	10.9	12.3	13.1	14.4	15.7	16.5	16.8	16.3	15.2	15.0	15.4	15.7	14.7	13.5	13.2	12.2	16.8	8.7	13.0
6	12.5	12.1	10.9	9.7	8.8	9.5	10.4	12.1	13.1	15.4	17.2	17.4	17.9	17.3	16.6	15.2	14.4	14.8	13.8	12.4	11.5	10.9	10.5	10.0	17.9	8.8	13.1
7	9.5	9.0	8.6	8.3	8.4	8.6	8.4	8.4	7.6	7.4	7.7	7.4	7.6	7.9	7.5	7.5	7.7	8.4	9.1	9.0	8.7	8.4	8.0	7.7	9.5	7.4	8.2
8	7.2	7.2	7.0	6.8	6.6	7.2	7.3	7.4	7.4	7.8	8.2	8.4	8.4	9.1	9.6	10.0	9.9	9.8	9.8	9.8	9.7	9.9	9.5	9.6	10.0	6.6	8.5
9	8.7	8.6	8.7	9.0	9.1	9.3	9.4	10.2	10.8	11.8	11.5	12.5	13.8	14.7	15.3	15.7	15.6	14.6	13.0	12.2	11.2	10.6	10.0	9.5	15.7	8.6	11.5
10	8.9	8.5	8.3	8.3	8.1	8.1	8.0	8.2	8.6	10.2	11.0	11.9	11.9	12.1	12.6	13.2	13.2	13.2	12.9	12.5	11.5	10.6	9.7	8.6	13.2	8.0	10.4
11	7.9	7.7	7.6	7.5	7.3	7.0	7.0	7.1	7.2	8.8	9.6	10.0	11.4	12.0	12.5	12.9	13.3	13.2	12.8	12.2	11.6	10.2	8.7	8.3	13.3	7.0	9.7
12	8.0	7.7	6.8	5.4	5.0	5.3	6.6	7.3	8.5	9.1	10.1	10.2	10.2	10.7	11.0	10.5	10.3	9.9	8.6	8.0	7.7	7.5	7.3	7.3	11.0	5.0	8.3
13	7.4	7.4	7.3	7.1	7.1	7.0	6.9	7.1	7.3	7.4	7.7	8.2	8.6	8.9	9.4	9.8	9.8	10.1	10.6	10.4	10.0	9.4	8.8	8.5	10.6	6.9	8.4
14	8.3	8.1	8.0	8.2	8.2	8.1	8.5	9.0	9.5	9.8	10.3	11.5	11.8	12.7	13.9	14.2	13.8	14.2	14.5	14.7	13.9	12.9	11.9	11.1	14.7	8.0	11.1
15	10.2	9.7	9.4	9.3	9.2	9.2	9.2	9.2	9.9	11.2	11.9	12.7	13.5	14.7	15.5	15.7	15.0	13.7	12.6	11.3	10.5	10.0	9.8	9.7	15.7	9.2	11.4
16	10.0	9.8	9.8	9.6	9.4	9.3	9.1	9.2	9.3	9.1	8.7	8.6	9.6	10.3	11.4	10.6	8.9	8.4	8.4	8.2	8.0	7.9	7.7	7.5	11.4	7.5	9.1
17	7.4	7.5	6.2	4.8	3.7	3.5	3.5	3.8	4.3	4.7	4.2	4.6	6.0	6.8	6.7	6.9	7.4	8.5	7.7	7.7	7.4	6.8	6.3	5.8	8.5	3.5	5.9
18	5.7	5.3	4.8	4.3	4.1	3.9	4.0	4.4	4.8	4.9	5.9	5.8	6.1	6.6	6.9	7.6	8.1	8.1	8.2	7.5	7.3	7.5	7.1	6.7	8.2	3.9	6.1
19	6.4	6.3	6.5	6.0	5.7	5.8	6.3	6.7	6.9	7.5	8.7	9.6	11.0	11.3	12.3	11.3	11.4	11.0	10.6	9.9	10.0	9.7	8.9	8.7	12.3	5.7	8.7
20	8.7	8.2	8.4	8.2	8.7	8.7	8.8	9.2	8.9	8.1	7.5	6.7	7.9	8.6	8.2	7.6	6.7	6.3	5.6	5.4	5.3	5.4	5.5	5.6	9.2	5.3	7.4
21	5.6	5.1	4.8	4.8	4.9	4.9	5.0	5.1	5.3	5.7	6.3	7.0	7.7	8.4	9.1	9.9	11.2	11.4	10.1	11.3	10.7	9.8	8.6	7.6	11.4	4.8	7.5
22	7.2	6.9	6.6	6.3	5.9	5.7	6.1	6.6	6.7	7.2	7.4	7.4	6.7	6.3	6.6	6.6	6.5	6.5	6.6	6.4	6.3	6.1	5.8	5.6	7.4	5.6	6.5
23	5.5	5.7	5.5	5.3	5.3	5.3	5.4	5.7	6.2	6.7	7.1	7.8	8.2	8.3	8.4	8.4	9.8	9.9	9.5	8.4	7.3	6.5	6.0	5.5	9.9	5.3	7.0
24	5.2	5.0	5.1	5.4	4.9	5.0	5.5	6.2	6.6	6.9	7.5	8.3	9.2	10.5	12.0	12.5	13.7	13.5	12.5	12.6	12.1	12.3	12.1	10.3	13.7	4.9	9.0
25	9.5	8.2	7.8	8.0	7.3	6.6	6.9	8.3	9.4	10.8	12.2	13.8	15.3	16.4	17.3	18.0	18.2	18.4	18.6	18.1	17.5	16.1	14.5	12.6	18.6	6.6	12.9
26	11.2	10.4	9.7	10.8	8.1	8.4	7.6	8.1	8.2	8.7	9.2	9.8	9.1	9.3	9.6	9.7	9.7	10.3	10.6	11.1	10.4	9.0	8.5	8.1	11.2	7.6	9.4
27	7.8	7.4	7.2	7.0	6.7	6.9	7.0	7.2	7.1	7.3	7.8	7.8	8.2	8.7	9.3	9.1	9.5	9.5	9.9	9.9	9.3	8.4	7.6	7.6	9.9	6.7	8.1
28	7.6	7.5	7.4	8.3	7.6	8.1	8.6	9.0	10.6	11.7	12.5	13.4	13.3	14.2	14.5	15.3	15.3	15.1	15.4	14.9	14.3	13.6	12.5	10.5	15.4	7.4	11.7
29	9.2	8.2	8.0	7.1	7.0	6.1	7.1	8.0	8.9	10.5	11.9	13.3	14.5	14.2	15.7	17.3	18.1	18.0	16.8	17.1	16.0	14.5	12.4	11.2	18.1	6.1	12.1
30	10.1	9.5	9.2	9.0	8.7	9.1	9.4	9.5	10.3	12.1	12.3	13.2	14.9	16.3	17.0	17.2	16.7	16.2	15.6	14.6	13.5	12.3	10.7	9.1	17.2	8.7	12.4
31	8.4	8.3	7.7	7.8	7.1	7.0	6.9	8.1	9.6	11.5	13.3	15.2	16.4	17.7	18.5	18.5	19.0	19.5	19.5	19.0	18.3	16.8	14.9	14.1	19.5	6.9	13.5
Max.	**12.5**	**12.1**	**10.9**	**10.8**	**11.1**	**10.6**	**10.5**	**12.1**	**13.1**	**15.4**	**17.2**	**17.4**	**17.9**	**17.7**	**18.5**	**18.5**	**19.0**	**19.5**	**19.5**	**19.0**	**18.3**	**16.8**	**14.9**	**14.1**	**19.5**		
Min.	**5.2**	**5.0**	**4.8**	**4.3**	**3.7**	**3.5**	**3.5**	**3.8**	**4.3**	**4.7**	**4.2**	**4.6**	**6.0**	**6.3**	**6.6**	**6.6**	**6.5**	**6.3**	**5.6**	**5.4**	**5.3**	**5.4**	**5.5**	**5.5**		**3.5**	
Avg.	**8.2**	**7.9**	**7.7**	**7.5**	**7.3**	**7.2**	**7.3**	**7.8**	**8.3**	**9.0**	**9.6**	**10.3**	**11.0**	**11.6**	**12.1**	**12.2**	**12.2**	**12.2**	**11.8**	**11.4**	**10.8**	**10.2**	**9.4**	**8.8**			**9.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.5	13.3	10.8	11.8	10.7	10.6	9.5	8.5	9.0	10.2	11.6	13.0	15.3	16.8	17.8	18.8	18.7	18.8	18.5	17.5	15.4	12.5	10.7	9.8	18.8	8.5	13.5
2	9.3	9.0	9.3	8.8	9.1	8.9	8.8	8.8	9.0	9.4	9.7	9.9	10.3	10.7	11.3	11.2	11.7	11.4	11.4	11.7	10.8	10.5	10.2	10.0	11.7	8.8	10.0
3	9.6	9.7	10.1	9.8	9.3	8.3	8.1	8.5	9.1	10.3	11.3	12.6	14.2	13.8	14.3	15.5	15.3	15.0	14.5	13.3	12.1	10.3	9.1	8.5	15.5	8.1	11.4
4	8.2	8.1	8.0	7.8	7.8	7.9	8.0	8.5	8.7	9.3	10.1	11.0	11.1	11.6	12.2	12.6	12.8	13.7	13.8	12.7	11.5	9.7	8.5	8.0	13.8	7.8	10.1
5	7.8	7.5	7.3	7.8	7.3	7.5	7.7	8.3	9.0	9.2	11.0	13.0	13.1	14.2	14.4	15.0	15.4	15.4	14.7	14.4	13.4	12.0	8.9	7.7	15.4	7.3	10.9
6	7.4	6.7	5.2	5.6	5.6	7.3	7.4	7.8	9.1	10.4	11.5	12.6	14.1	15.4	15.1	15.7	16.0	15.2	14.2	13.5	13.1	12.2	10.0	9.4	16.0	5.2	10.9
7	9.1	9.4	9.0	8.4	7.1	7.0	6.7	7.5	8.8	10.0	11.0	12.1	13.1	13.9	14.1	14.0	15.4	14.8	13.9	14.0	13.2	10.7	8.8	7.9	15.4	6.7	10.8
8	7.6	7.3	6.4	6.2	5.5	6.8	5.8	6.0	8.0	9.3	10.6	11.9	13.2	14.5	15.3	16.0	16.5	16.4	16.5	15.8	15.1	12.6	9.4	8.0	16.5	5.5	10.9
9	8.2	7.6	7.4	7.0	7.5	7.3	7.9	8.1	9.6	10.5	11.6	13.2	14.8	15.4	16.3	16.3	16.9	16.3	15.9	15.8	14.5	11.3	10.4	10.3	16.9	7.0	11.7
10	10.4	10.2	10.3	11.0	9.8	8.2	7.2	8.6	9.4	10.4	12.7	14.2	15.3	15.5	15.7	15.3	16.7	15.9	14.6	13.8	13.3	11.0	9.6	9.1	16.7	7.2	12.0
11	8.6	7.9	8.2	9.0	8.9	8.5	7.7	8.2	9.5	10.4	11.2	12.0	13.0	13.6	13.7	13.8	13.6	13.4	13.2	12.5	11.0	9.4	7.7	7.2	13.8	7.2	10.5
12	8.3	7.0	8.6	8.1	7.0	7.7	7.5	8.1	8.5	10.3	11.7	12.7	14.2	15.2	16.1	16.4	16.8	16.4	14.5	13.2	12.0	12.1	11.2	9.8	16.8	7.0	11.4
13	10.2	9.5	9.5	9.6	9.2	9.7	9.9	9.8	10.3	11.0	11.3	11.5	12.1	12.6	13.3	12.9	13.6	12.9	11.3	10.8	10.3	9.7	9.6	9.3	13.6	9.2	10.8
14	8.7	8.4	8.4	8.9	8.9	8.8	9.2	9.5	10.1	10.5	10.4	10.8	10.6	11.0	11.3	11.3	11.6	11.6	11.1	10.8	10.4	10.1	10.1	9.8	11.6	8.4	10.1
15	8.9	8.4	7.9	7.7	7.3	7.1	7.0	6.4	6.4	6.8	7.3	7.6	8.2	8.8	9.5	10.1	10.4	10.5	10.9	10.3	9.9	9.8	9.5	9.4	10.9	6.4	8.6
16	9.2	9.2	9.2	9.1	8.9	8.9	8.8	8.7	8.8	8.9	9.3	9.8	10.5	11.3	12.0	12.3	12.1	12.1	11.2	10.7	9.8	8.5	7.7	7.1	12.3	7.1	9.8
17	6.6	6.1	6.7	5.3	5.3	5.3	5.5	6.0	7.7	9.0	9.5	10.2	10.9	11.3	11.9	11.8	11.4	10.6	10.1	9.6	9.0	8.6	8.3	7.6	11.9	5.3	8.5
18	7.1	6.9	7.1	6.4	5.3	4.9	5.7	5.8	7.3	8.6	10.3	11.9	12.6	12.7	13.5	13.7	13.9	13.7	13.8	13.8	12.3	11.1	9.4	9.2	13.9	4.9	9.9
19	10.2	9.9	8.6	9.2	9.5	8.2	8.2	7.0	9.3	8.9	9.8	11.1	12.7	13.5	14.0	14.4	14.6	14.4	14.1	13.5	10.6	10.2	10.2	10.2	14.6	7.0	10.9
20	9.5	9.3	9.2	9.4	9.2	9.3	7.9	8.7	9.6	10.9	11.0	10.6	11.2	11.7	12.0	12.3	12.8	13.5	13.0	12.3	12.2	11.2	10.0	10.0	13.5	7.9	10.7
21	9.9	9.4	9.8	9.2	9.4	9.3	9.1	9.2	9.4	10.2	10.8	10.7	11.2	11.5	12.0	12.1	12.0	13.0	13.0	11.8	10.4	9.3	9.1	8.3	13.0	8.3	10.4
22	8.2	7.0	6.8	6.9	7.2	7.3	7.4	7.6	7.8	8.3	8.7	9.4	10.1	11.0	10.6	11.4	12.3	11.4	11.3	11.7	11.0	9.6	7.8	8.2	12.3	6.8	9.1
23	8.2	8.5	8.4	7.8	7.8	8.2	7.6	8.0	9.3	11.2	11.9	12.2	12.9	13.9	15.1	15.7	15.9	16.2	15.4	12.0	10.9	10.7	10.2	10.2	16.2	7.6	11.2
24	9.9	9.6	9.3	9.1	9.1	9.1	8.1	8.7	8.8	9.1	9.2	10.4	11.0	12.3	13.6	14.4	15.1	16.0	15.2	14.3	13.7	11.5	9.7	9.3	16.0	8.1	11.1
25	8.5	8.6	8.4	7.7	7.2	7.2	6.1	5.5	6.0	7.1	8.3	9.4	9.9	10.1	10.1	10.6	11.3	12.3	12.2	11.5	10.5	9.5	8.9	8.9	12.3	5.5	9.0
26	9.0	8.8	8.9	9.0	9.0	9.0	8.8	8.8	8.8	8.9	9.3	9.3	9.4	9.8	10.8	11.1	11.2	12.0	11.7	10.9	10.3	9.6	9.3	9.3	12.0	8.8	9.7
27	8.7	8.6	8.2	8.4	8.3	8.2	8.2	8.1	8.2	8.0	8.3	8.7	8.8	9.3	9.9	10.5	10.8	11.0	11.0	10.5	10.3	9.1	8.7	8.3	11.0	8.0	9.1
28	8.2	8.1	7.6	7.8	7.6	7.9	8.4	7.2	7.6	8.4	9.0	9.6	10.3	11.3	12.0	12.7	12.9	11.3	10.6	10.2	10.0	7.7	5.9	5.7	12.9	5.7	9.1
29	4.6	4.9	5.4	4.7	4.7	4.7	5.3	5.9	7.2	8.6	10.0	11.4	12.1	12.4	12.7	12.5	13.2	12.8	12.1	10.5	9.6	8.6	6.9	5.7	13.2	4.6	8.6
30	5.7	6.0	5.3	5.4	5.5	5.3	4.8	4.7	5.7	6.9	8.1	9.2	9.8	10.4	11.4	12.3	12.3	12.9	12.1	11.5	10.3	9.6	9.6	9.3	12.9	4.7	8.5
31	8.8	8.6	8.3	8.5	8.2	7.9	7.9	7.9	7.8	7.7	7.8	8.5	9.1	9.9	10.3	10.2	10.7	10.8	10.7	11.1	10.2	8.7	8.9	8.4	11.1	7.7	9.0
Max.	**13.5**	**13.3**	**10.8**	**11.8**	**10.7**	**10.6**	**9.9**	**9.8**	**10.3**	**11.2**	**12.7**	**14.2**	**15.3**	**16.8**	**17.8**	**18.8**	**18.7**	**18.8**	**18.5**	**17.5**	**15.4**	**12.6**	**11.2**	**10.3**	**18.8**		
Min.	**4.6**	**4.9**	**5.2**	**4.7**	**4.7**	**4.7**	**4.8**	**4.7**	**5.7**	**6.8**	**7.3**	**7.6**	**8.2**	**8.8**	**9.5**	**10.1**	**10.4**	**10.5**	**10.1**	**9.6**	**9.0**	**7.7**	**5.9**	**5.7**		**4.6**	
Avg.	**8.6**	**8.4**	**8.2**	**8.1**	**7.8**	**7.8**	**7.6**	**7.8**	**8.5**	**9.3**	**10.2**	**11.0**	**11.8**	**12.4**	**13.0**	**13.3**	**13.7**	**13.6**	**13.1**	**12.5**	**11.5**	**10.2**	**9.2**	**8.7**			**10.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.9	8.8	8.5	8.2	8.0	8.5	7.6	7.7	8.2	10.0	12.1	12.2	13.1	12.9	12.1	12.8	12.4	11.4	10.5	9.9	8.9	8.3	8.1	8.2	13.1	7.6	9.9
2	8.1	8.2	8.0	8.0	7.7	7.6	7.8	7.5	7.6	7.6	7.7	7.7	8.4	8.9	9.8	9.9	9.9	9.8	9.4	8.7	7.9	7.4	7.0	7.0	9.9	7.0	8.2
3	6.7	6.4	6.1	5.9	6.0	6.1	6.3	6.0	6.2	6.5	7.0	7.6	8.1	8.2	8.8	9.1	9.2	9.7	9.8	9.3	8.5	7.8	7.9	7.8	9.8	5.9	7.5
4	7.5	7.5	7.4	7.2	7.0	6.9	6.5	6.0	6.3	6.5	7.3	8.1	8.9	9.7	10.1	10.2	10.5	11.1	11.1	10.5	8.9	7.8	5.9	6.3	11.1	5.9	8.1
5	6.0	5.8	5.4	5.0	6.2	6.4	5.6	6.1	6.9	7.5	9.3	10.4	11.5	11.4	10.2	10.7	11.8	11.5	10.4	8.7	8.6	7.0	7.5	7.4	11.8	5.0	8.2
6	6.1	5.6	5.9	6.4	5.9	6.0	6.7	7.0	6.9	7.2	7.7	8.6	8.6	8.1	7.9	8.0	7.8	7.8	8.0	8.2	7.7	7.5	7.7	7.3	8.6	5.6	7.3
7	7.4	7.7	8.3	9.2	8.6	8.3	8.0	7.7	7.8	8.3	8.6	8.3	8.1	8.1	8.0	8.3	9.1	9.0	8.6	8.0	7.7	7.6	7.7	7.7	9.2	7.4	8.2
8	7.8	7.6	7.7	7.8	7.8	7.4	7.1	7.2	7.2	7.5	8.4	8.9	9.4	9.4	9.0	8.7	8.5	7.8	7.4	7.2	6.8	7.1	7.4	7.7	9.4	6.8	7.9
9	7.7	8.0	8.2	7.8	7.1	6.8	6.8	7.3	7.2	7.4	7.8	8.3	8.7	8.7	9.0	8.9	8.9	8.6	8.6	8.5	8.1	7.8	7.6	7.8	9.0	6.8	8.0
10	7.6	7.6	7.6	7.5	7.3	7.2	7.1	7.2	7.2	7.4	8.2	8.4	9.4	10.1	10.3	10.7	10.8	11.0	10.1	9.5	8.8	9.0	8.8	8.8	11.0	7.1	8.6
11	8.4	7.4	7.0	6.6	6.5	6.7	6.6	6.8	7.1	7.4	7.3	7.4	7.6	7.7	8.5	9.4	10.6	10.1	9.9	9.5	9.0	8.4	7.9	7.9	10.6	6.5	8.0
12	7.9	7.9	8.1	8.0	7.5	6.9	6.5	6.4	6.5	6.8	7.3	7.9	8.4	9.3	9.0	8.6	8.6	8.4	8.5	8.5	8.4	8.4	8.5	8.5	9.3	6.4	7.9
13	8.5	8.5	8.5	8.4	8.1	7.9	7.8	7.8	7.9	7.9	7.8	7.3	7.3	7.1	7.0	6.9	7.2	7.0	6.7	6.5	6.6	6.8	7.3	7.1	8.5	6.5	7.5
14	7.1	6.9	6.7	6.7	6.6	6.3	6.2	6.1	6.2	6.3	6.8	6.9	7.1	7.6	7.9	8.0	8.7	8.4	8.1	7.8	7.2	7.0	7.1	7.1	8.7	6.1	7.1
15	6.8	6.8	6.9	7.1	6.9	6.9	6.8	6.9	7.0	7.4	7.7	8.4	8.8	9.0	9.2	9.0	8.6	8.5	8.1	7.7	7.2	7.2	7.0	6.6	9.2	6.6	7.6
16	6.8	6.6	5.7	5.3	5.8	5.8	5.7	5.3	4.4	5.3	7.1	8.1	9.2	8.8	8.9	9.5	8.6	8.1	8.1	7.4	7.0	7.2	6.8	6.1	9.5	4.4	7.0
17	6.4	5.8	5.4	5.2	4.8	5.1	4.8	4.5	4.4	4.4	4.7	5.8	6.2	6.9	7.0	7.0	6.9	6.6	5.8	5.3	4.7	4.7	4.5	4.4	7.0	4.4	5.5
18	4.4	4.5	4.6	4.5	4.5	4.3	4.2	4.3	4.3	4.6	5.1	5.8	6.4	6.3	6.2	6.0	6.5	6.2	6.0	5.9	5.5	5.0	5.0	4.8	6.5	4.2	5.2
19	4.4	4.2	4.3	4.1	4.2	4.3	4.4	4.4	4.4	4.9	5.4	5.7	5.9	6.1	6.5	5.2	5.3	5.3	5.1	4.7	4.5	4.4	4.1	4.0	6.5	4.0	4.8
20	3.9	4.1	3.9	3.8	3.3	2.2	2.2	1.3	1.6	2.3	3.0	2.5	2.5	3.3	4.7	4.7	5.5	5.4	4.7	3.0	1.3	1.7	1.6	0.5	5.5	0.5	3.0
21	0.7	1.5	1.5	0.7	1.4	1.7	2.2	1.9	1.5	2.6	3.5	4.4	5.3	5.6	6.0	6.7	6.3	5.9	5.0	2.6	0.8	0.4	0.1	-0.1	6.7	-0.1	2.8
22	-0.5	0.3	-0.1	0.8	0.3	-0.1	-0.5	-0.1	-0.1	1.2	3.0	4.6	5.4	5.8	6.1	5.7	4.8	4.5	3.9	3.2	3.0	3.1	3.1	3.1	6.1	-0.5	2.5
23	3.1	3.6	3.7	5.3	6.0	6.0	5.9	5.9	5.8	5.8	5.7	5.9	5.9	6.0	5.1	5.5	5.5	5.3	5.4	5.2	4.9	4.8	4.8	4.9	6.0	3.1	5.2
24	4.9	4.8	4.7	4.6	4.6	4.5	4.3	4.2	4.3	4.4	4.8	5.2	5.4	5.9	6.3	6.0	6.2	6.2	6.0	5.5	5.0	4.5	4.4	4.2	6.3	4.2	5.0
25	4.1	4.0	3.9	3.9	3.4	3.5	3.8	3.7	3.9	4.3	5.0	5.6	5.9	6.4	6.3	6.5	6.5	6.3	5.9	5.6	5.1	4.9	4.4	4.4	6.5	3.4	4.9
26	4.6	4.3	3.8	4.1	3.8	3.9	3.6	3.3	3.5	3.7	4.7	7.3			7.9	7.7	8.0	8.3	8.3	6.5	4.5	3.5	3.1	3.4	8.3	3.1	5.1
27	1.8	1.2	0.8	1.5	0.4	0.3	-0.2	-0.4	-0.6	0.2	1.1	2.0	3.6	4.9	6.0	6.4	6.6	6.3	5.7	4.1	2.5	1.6	0.9	0.3	6.6	-0.6	2.4
28	0.7	0.5	0.7	0.3	-0.2	-0.3	0.5	1.7	1.5	2.0	3.6	5.0	5.9	7.1	7.9	8.2	8.0	7.5	6.7	5.6	4.2	5.2	5.2	4.7	8.2	-0.3	3.9
29	4.5	4.2	4.2	3.2	2.1	2.0	2.8	3.1	3.5	4.0	4.6	5.2	5.5	4.5	4.2	4.3	4.9	5.4	5.0	4.3	3.6	3.7	3.2	2.4	5.5	2.0	3.9
30	2.0	1.8	1.0	1.0	-0.2	0.5	-0.3	-0.1	0.2	0.7	2.3	3.2	4.0	4.6	4.7	4.8	4.8	4.6	4.4	2.6	1.4	0.7	1.4	2.1	4.8	-0.3	2.2
Max.	**8.9**	**8.8**	**8.5**	**9.2**	**8.6**	**8.5**	**8.0**	**7.8**	**8.2**	**10.0**	**12.1**	**12.2**	**13.1**	**12.9**	**12.1**	**12.8**	**12.4**	**11.5**	**11.1**	**10.5**	**9.0**	**9.0**	**8.8**	**8.8**	**13.1**		
Min.	**-0.5**	**0.3**	**-0.1**	**0.3**	**-0.2**	**-0.3**	**-0.5**	**-0.4**	**-0.6**	**0.2**	**1.1**	**2.0**	**2.5**	**3.3**	**4.2**	**4.3**	**4.8**	**4.5**	**3.9**	**2.6**	**0.8**	**0.4**	**0.1**	**-0.1**		**-0.6**	
Avg.	**5.5**	**5.4**	**5.3**	**5.3**	**5.1**	**5.0**	**4.9**	**4.9**	**5.0**	**5.4**	**6.2**	**6.7**	**7.3**	**7.5**	**7.7**	**7.8**	**7.9**	**7.7**	**7.4**	**6.7**	**6.0**	**5.7**	**5.5**	**5.4**			**6.1**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.6	1.1	1.8	1.9	2.4	2.5	2.6	3.5	2.4	2.9	3.1	3.4	4.6	4.7	4.8	4.7	4.4	4.4	4.2	3.7	3.5	3.4	3.3	2.9	4.8	1.1	3.2
2	3.0	2.4	2.3	2.2	2.2	2.1	1.7	1.2	1.0	1.0	2.0	2.9	3.5	3.5	3.9	4.8	4.3	4.1	3.5	2.4	1.9	0.1	-0.4	-0.7	4.8	-0.7	2.3
3	-1.0	-1.1	-1.4	-1.3	-1.3	-1.5	-1.9	-2.7	-2.7	-2.5	-2.2	-2.0	-1.6	-1.3	-1.1	-1.2	-0.9	-0.7	-0.6	-1.4	-2.5	-3.2	-2.9	-2.5	-0.6	-3.2	-1.7
4	-3.9	-3.8	-4.0	-4.0	-4.4	-3.6	-4.5	-3.5	-4.9	-3.3	-2.3	-0.7	0.1	1.3	1.9	2.3	2.1	1.7	0.8	-0.1	-0.5	-1.2	-1.2	-1.1	2.3	-4.9	-1.5
5	-1.6	-2.3	-2.8	-2.8	-2.3	-2.1	-2.4	-2.6	-2.9	-2.8	-2.5	-2.3	-2.0	-1.9	-1.9	-1.7	-1.7	-1.7	-1.9	-2.3	-2.9	-3.1	-3.6	-3.7	-1.6	-3.7	-2.4
6	-3.6	-3.7	-4.0	-4.2	-4.0	-4.0	-4.0	-4.2	-4.1	-4.0	-3.7	-3.5	-3.3	-3.1	-2.8	-2.6	-2.4	-2.6	-2.5	-2.9	-3.2	-3.3	-3.5	-3.6	-2.4	-4.2	-3.5
7	-3.7	-4.0	-4.1	-4.1	-4.2	-4.5	-4.6	-4.7	-5.0	-5.0	-4.7	-4.6	-4.3	-4.2	-3.9	-3.6	-3.5	-3.6	-3.7	-3.9	-4.0	-4.1	-4.4	-4.4	-3.5	-5.0	-4.2
8	-4.4	-4.3	-4.7	-5.1	-5.6	-6.0	-6.6	-7.5	-8.3	-8.0	-6.5	-4.9	-4.1	-3.5	-3.0	-2.8	-2.7	-3.1	-4.1	-5.5	-6.3	-6.0	-6.4	-5.8	-2.7	-8.3	-5.2
9	-5.5	-3.8	-2.6	-1.4	-1.1	-1.5	-1.9	-2.1	-2.1	-1.7	-1.3	-0.6	0.1	0.6	1.0	1.1	1.8	2.2	2.5	2.7	3.0	3.3	3.5	3.5	3.5	-5.5	0.0
10	3.7	3.7	3.6	3.5	3.6	3.2	2.0	1.7	1.4	1.9	2.4	3.0	3.6	3.8	4.1	4.5	4.7	4.3	3.8	3.8	3.7	3.8	3.8	3.9	4.7	1.4	3.4
11	4.1	3.8	4.0	4.3	4.3	4.2	4.4	4.5	3.1	-1.2	-3.0	-4.5	-5.4	-5.7	-6.1	-6.4	-6.6	-6.6	-6.7	-6.7	-6.7	-6.8	-6.8	-6.6	4.5	-6.8	-2.1
12	-6.3	-6.2	-6.0	-6.1	-6.7	-7.2	-7.5	-7.8	-8.2	-8.8	-8.5	-7.9	-7.1	-6.6	-6.3	-6.0	-6.3	-6.7	-7.0	-8.3	-9.2	-8.6	-8.8	-9.5	-6.0	-9.5	-7.4
13	-10.1	-10.8	-11.1	-11.1	-11.0	-10.5	-11.0	-11.0	-10.3	-10.0	-8.6	-7.6	-6.6	-4.5	-3.4	-3.3	-2.7	-2.3	-3.0	-2.8	-1.9	-1.6	-1.3	-1.2	-1.2	-11.1	-6.6
14	-1.0	-0.9	-1.1	-1.0	-1.0	-0.6	-1.2	-1.6	-1.2	-0.7	-0.4	-0.3	-0.1	0.0	0.4	0.6	0.4	0.5	0.5	0.5	0.7	0.4	0.0	-0.4	0.7	-1.6	-0.3
15	-1.1	-2.2	-3.5	-4.1	-4.4	-5.4	-5.8	-5.9	-6.6	-7.2	-7.3	-7.2	-7.1	-7.0	-7.0	-7.0	-6.6	-7.1	-7.2	-7.2	-7.5	-8.4	-9.2	-9.5	-1.1	-9.5	-6.3
16	-9.4	-8.8	-8.7	-8.6	-8.8	-8.7	-8.6	-8.8	-9.0	-8.2	-8.8	-8.2	-7.3	-7.6	-7.4	-7.3	-7.8	-8.4	-8.9	-9.1	-9.6	-9.5	-10.0	-9.6	-7.3	-10.0	-8.6
17	-9.8	-10.1	-10.1	-9.7	-10.5	-10.1	-10.0	-10.2	-11.2	-11.2	-8.5	-8.4	-7.6	-7.1	-7.4	-7.0	-5.0	-3.4	-3.4	-2.8	-1.7	-1.0	-0.2	0.0	0.0	-11.2	-6.9
18	0.1	0.2	0.2	0.6	0.6	0.7	0.9	0.8	0.7	0.8	1.0	0.8	1.5	2.1	1.9	1.3	1.9	1.1	0.0	-0.7	-0.6	0.0	-1.0	-1.0	2.1	-1.0	0.6
19	-2.7	-3.5	-4.1	-5.1	-5.3	-5.9	-4.8	-5.8	-7.2	-8.1	-7.7	-8.0	-8.2	-7.4	-6.5	-6.8	-7.3	-6.6	-6.9	-6.5	-6.3	-6.7	-7.1	-6.9	-2.7	-8.2	-6.3
20	-6.8	-6.6	-5.8	-5.3	-5.4	-6.5	-6.9	-7.6	-8.8	-9.2	-9.0	-9.9	-9.8	-9.3	-9.3	-9.1	-8.7	-8.7	-8.0	-7.1	-8.3	-8.1	-8.2	-7.9	-5.3	-9.9	-7.9
21	-7.0	-6.1	-5.3	-5.8	-5.8	-5.9	-6.2	-6.6	-6.8	-7.4	-7.2	-7.4	-7.9	-7.4	-6.8	-6.1	-6.0	-6.3	-6.9	-8.4	-9.7	-10.5	-11.3	-12.0	-5.3	-12.0	-7.4
22	-12.0	-12.5	-12.4	-12.7	-13.1	-13.3	-13.4	-13.9	-14.3	-14.4	-14.3	-14.0	-13.5	-12.9	-12.4	-12.2	-11.6	-12.3	-13.3	-13.4	-14.2	-14.7	-15.2	-15.4	-11.6	-15.4	-13.4
23	-14.6	-14.5	-13.6	-13.5	-13.6	-14.1	-14.2	-14.3	-14.6	-14.8	-14.6	-14.0	-13.3	-12.7	-12.1	-12.1	-11.9	-11.4	-12.1	-11.2	-9.9	-9.6	-9.8	-9.8	-9.6	-14.8	-12.8
24	-10.3	-10.6	-10.8	-10.3	-10.6	-11.4	-13.0	-13.6	-13.0	-12.5	-12.5	-12.0	-11.5	-10.0	-9.4	-8.7	-8.7	-8.7	-8.9	-9.4	-9.4	-10.7	-10.3	-8.8	-8.7	-13.6	-10.6
25	-9.2	-8.9	-7.7	-7.6	-7.6	-7.1	-6.7	-6.4	-5.8	-5.1	-4.5	-4.0	-3.4	-2.9	-2.4	-2.6	-2.8	-2.0	-3.6	-4.0	-4.0	-4.7	-4.9	-5.9	-2.0	-9.2	-5.2
26	-6.7	-6.9	-6.3	-7.1	-8.4	-8.1	-7.8	-7.7	-7.9	-7.9	-8.5	-9.4	-10.3	-10.4	-10.7	-11.1	-11.4	-11.6	-11.9	-12.3	-12.2	-12.5	-13.0	-13.7	-6.3	-13.7	-9.7
27	-13.9	-14.6	-15.1	-15.5	-15.4	-15.5	-15.7	-16.2	-16.3	-15.9	-16.6	-15.3	-14.5	-14.3	-13.5	-13.2	-13.4	-13.8	-14.8	-15.0	-15.1	-15.3	-15.7	-15.1	-13.2	-16.6	-15.0
28	-15.2	-14.3	-13.7	-13.0	-11.0	-9.0	-8.8	-7.4	-6.8	-6.6	-6.3	-6.0	-5.8	-5.6	-5.3	-4.7	-5.0	-5.6	-5.7	-5.9	-6.8	-7.7	-7.9	-7.5	-4.7	-15.2	-8.0
29	-6.5	-6.3	-5.8	-5.5	-5.6	-5.4	-4.7	-3.9	-3.8	-3.6	-3.2	-2.5	-1.7	-1.3	-2.3	-1.6	-1.8	-1.8	-1.9	-2.0	-2.0	-2.6	-2.7	-2.5	-1.3	-6.5	-3.4
30	-2.1	-2.0	-1.5	-1.5	-1.2	-0.8	-0.8	-0.7	-0.8	-0.7	-2.1	-1.8	-1.1	-1.2	-1.3	-1.4	-1.3	-2.3	-3.3	-1.6	-2.3	-2.4	-2.8	-2.6	-0.7	-3.3	-1.7
31	-2.2	-2.6	-2.4	-3.4	-4.5	-5.1	-5.2	-4.9	-4.5	-4.7	-4.6	-3.3	-3.3	-2.7	-2.7	-3.1	-3.1	-2.8	-3.1	-3.0	-3.3	-3.2	-3.3	-3.2	-2.2	-5.2	-3.5
Max.	**4.1**	**3.8**	**4.0**	**4.3**	**4.3**	**4.2**	**4.4**	**4.5**	**3.1**	**2.9**	**3.1**	**3.4**	**4.6**	**4.7**	**4.8**	**4.8**	**4.7**	**4.4**	**4.2**	**3.8**	**3.7**	**3.8**	**3.8**	**3.9**	**4.8**		
Min.	**-15.2**	**-14.6**	**-15.1**	**-15.5**	**-15.4**	**-15.5**	**-15.7**	**-16.2**	**-16.3**	**-15.9**	**-16.6**	**-15.3**	**-14.5**	**-14.3**	**-13.5**	**-13.2**	**-13.4**	**-13.8**	**-14.8**	**-15.0**	**-15.1**	**-15.3**	**-15.7**	**-15.4**		**-16.6**	
Avg.	**-5.1**	**-5.2**	**-5.1**	**-5.1**	**-5.2**	**-5.2**	**-5.4**	**-5.5**	**-5.8**	**-5.8**	**-5.5**	**-5.2**	**-4.8**	**-4.3**	**-4.1**	**-3.9**	**-3.9**	**-3.9**	**-4.3**	**-4.5**	**-4.8**	**-5.0**	**-5.2**	**-5.2**			**-4.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.7	-3.2	-2.9	-2.7	-2.7	-3.4	-2.1	-2.5	-2.9	-2.7	-2.6	-2.4	-2.7	-2.6	-2.6	-2.7	-3.2	-4.4	-5.4	-5.7	-4.8	-4.0	-3.4	-4.2	-2.1	-5.7	-3.3
2	-4.1	-4.7	-5.3	-6.1	-6.5	-6.6	-6.9	-7.3	-8.5	-11.2	-12.6	-13.3	-13.9	-14.2	-14.4	-14.4	-14.4	-14.5	-15.0	-15.3	-15.3	-15.1	-15.0	-15.1	-4.1	-15.3	-11.2
3	-15.3	-15.2	-15.0	-14.7	-14.5	-14.6	-14.5	-14.2	-14.2	-15.0	-15.1	-14.8	-14.6	-15.0	-14.4	-14.1	-13.9	-14.1	-14.6	-15.3	-15.2	-15.6	-15.2	-14.9	-13.9	-15.6	-14.7
4	-14.3	-14.5	-14.2	-14.1	-14.4	-14.3	-14.3	-15.4	-15.8	-16.1	-16.0	-15.7	-15.6	-15.0	-14.8	-14.3	-13.7	-13.9	-13.7	-13.6	-13.2	-13.3	-13.5	-13.5	-13.2	-16.1	-14.5
5	-14.0	-14.0	-13.7	-13.3	-13.3	-12.9	-12.7	-12.4	-11.9	-12.7	-12.3	-11.8	-10.6	-9.5	-8.9	-7.9	-6.9	-8.8	-9.8	-8.0	-9.3	-9.4	-8.0	-8.0	-6.9	-14.0	-10.8
6	-7.2	-6.2	-5.5	-5.0	-5.3	-6.0	-5.1	-5.2	-4.9	-4.6	-4.4	-3.8	-3.6	-3.9	-4.5	-5.2	-5.8	-5.8	-6.3	-6.8	-8.2	-8.7	-10.9	-12.2	-3.6	-12.2	-6.0
7	-12.4	-13.2	-13.6	-14.3	-14.9	-15.5	-15.4	-15.9	-15.7	-15.0	-15.4	-15.5	-14.7	-14.0	-13.9	-13.6	-12.9	-12.1	-10.8	-7.9	-6.8	-7.1	-6.6	-6.6	-6.6	-15.9	-12.7
8	-5.8	-5.4	-5.5	-5.7	-5.6	-5.4	-5.2	-5.2	-5.0	-5.2	-5.7	-6.0	-6.2	-5.1	-4.7	-4.3	-3.9	-3.5	-3.1	-2.6	-2.3	-2.1	-2.1	-2.4	-2.1	-6.2	-4.5
9	-2.4	-2.0	-1.8	-1.3	-0.1	0.5	0.4	0.8	0.5	-0.4	-0.4	-0.6	-0.3	0.1	0.6	1.3	0.9	-0.2	-0.7	-0.2	0.6	0.9	1.3	1.4	1.4	-2.4	-0.1
10	1.2	1.5	1.0	0.0	-1.5	0.0	-0.1	-0.1	0.1	-0.6	-0.6	-0.6	-0.6	-0.8	-0.9	-1.0	-0.7	-0.8	-1.3	-1.1	-0.6	-0.5	-0.7	-0.9	1.5	-1.5	-0.4
11	-0.8	-0.8	-1.4	-2.0	-2.1	-1.9	-1.7	-2.1	-2.1	-2.6	-2.9	-2.8	-2.2	-1.8	-1.8	-1.7	-2.5	-3.8	-5.1	-4.4	-4.5	-3.7	-3.5	-3.9	-0.8	-5.1	-2.6
12	-3.5	-4.4	-4.7	-4.6	-4.9	-6.1	-6.1	-6.4	-6.1	-5.9	-6.1	-6.2	-6.3	-6.1	-6.9	-7.0	-6.4	-5.3	-5.3	-4.7	-4.5	-4.2	-4.3	-4.4	-3.5	-7.0	-5.4
13	-4.3	-3.9	-4.2	-3.6	-4.7	-6.1	-7.0	-6.2	-6.5	-6.1	-6.3	-5.8	-4.2	-3.3	-2.8	-2.3	-2.4	-2.4	-3.0	-3.1	-3.2	-3.2	-2.9	-2.7	-2.3	-7.0	-4.2
14	-2.9	-2.5	-2.6	-2.6	-2.8	-2.9	-2.9	-3.3	-3.2	-2.9	-3.4	-3.3	-3.3	-2.9	-2.9	-3.1	-3.2	-3.7	-4.1	-4.2	-4.1	-4.2	-4.2	-3.9	-2.5	-4.2	-3.3
15	-3.9	-4.3	-4.7	-4.5	-4.5	-4.6	-4.4	-4.5	-4.8	-5.1	-5.1	-5.2	-4.4	-3.8	-3.9	-3.3	-2.8	-2.4	-2.0	-1.8	-1.7	-1.5	-1.4	-1.3	-1.3	-5.2	-3.6
16	-1.2	-1.4	-1.4	-1.3	-1.6	-1.7	-1.8	-2.5	-4.3	-4.8	-4.4	-2.6	-2.2	-2.0	-2.0	-2.1	-3.3	-3.1	-3.6	-4.6	-5.2	-5.3	-4.9	-5.9	-1.2	-5.9	-3.1
17	-7.0	-6.5	-7.0	-6.6	-7.3	-7.8	-7.5	-7.9	-7.9	-8.1	-7.8	-7.4	-7.4	-7.4	-8.0	-8.0	-8.1	-8.0	-8.8	-8.8	-9.7	-10.1	-10.3	-10.0	-6.5	-10.3	-8.1
18	-11.3	-11.3	-12.0	-12.9	-13.6	-14.1	-13.9	-14.6	-14.6	-15.0	-15.0	-15.7	-15.0	-14.3	-14.3	-15.0	-15.4	-15.7	-16.0	-16.6	-16.7	-16.6	-17.4	-17.9	-11.3	-17.9	-14.8
19	-17.3	-18.0	-18.2	-17.9	-17.8	-18.1	-18.5	-18.4	-18.1	-18.2	-16.9	-15.6	-15.5	-15.2	-14.5	-15.0	-14.7	-15.2	-15.5	-15.5	-15.3	-15.9	-16.5	-16.7	-14.5	-18.5	-16.6
20	-17.3	-17.4	-17.4	-17.8	-18.5	-19.4	-20.1	-20.7	-20.9	-21.6	-21.8	-21.9	-22.2	-22.4	-22.3	-22.4	-22.6	-23.0	-23.1	-23.4	-23.7	-24.0	-24.4	-24.7	-17.3	-24.7	-21.4
21	-25.3	-25.3	-25.7	-26.4	-26.4	-26.8	-27.3	-27.9	-27.8	-27.6	-27.3	-27.0	-26.3	-26.4	-25.7	-25.7	-25.5	-24.4	-24.3	-24.1	-23.8	-23.2	-22.3	-21.4	-21.4	-27.9	-25.6
22	-21.2	-20.7	-20.3	-19.6	-18.9	-18.3	-17.2	-16.3	-16.4	-16.7	-16.2	-16.8	-14.1	-14.3	-15.0	-14.9	-13.8	-13.0	-13.6	-13.2	-12.7	-15.0	-14.8	-15.6	-12.7	-21.2	-16.2
23	-15.5	-13.4	-12.7	-12.1	-10.9	-10.4	-10.1	-10.1	-10.2	-10.3	-10.8	-10.5	-10.4	-9.1	-8.6	-7.7	-7.0	-5.9	-4.5	-4.0	-4.3	-3.9	-3.4	-2.9	-2.9	-15.5	-8.7
24	-1.6	-1.2	-0.6	0.0	0.1	0.5	1.1	1.0	0.5	0.5	0.6	0.3	0.2	0.0	-0.1	-0.3	-0.4	-0.5	-0.5	-0.7	-0.9	-2.8	-5.4	-7.6	1.1	-7.6	-0.7
25	-9.0	-10.3	-10.9	-11.3	-11.5	-11.6	-11.7	-12.0	-12.4	-13.3	-14.1	-14.9	-15.3	-15.9	-17.5	-17.6	-17.2	-17.7	-17.9	-17.9	-18.4	-18.1	-18.9	-19.7	-9.0	-19.7	-14.8
26	-19.7	-18.4	-18.6	-18.0	-17.4	-17.2	-16.4	-16.1	-16.3	-15.9	-16.4	-16.4	-17.3	-16.8	-16.7	-16.7	-16.4	-16.9	-18.0	-18.6	-18.4	-17.8	-18.4	-19.1	-15.9	-19.7	-17.4
27	-19.3	-19.2	-19.5	-19.6	-17.4	-17.2	-16.7	-16.4	-17.3	-17.6	-16.4	-16.4	-15.1	-14.9	-14.2	-13.5	-13.4	-13.1	-14.1	-14.3	-13.2	-13.3	-13.4	-12.0	-12.0	-19.6	-15.7
28	-11.8	-11.1	-11.9	-11.9	-11.9	-12.2	-11.4	-11.4	-11.5	-11.5	-11.2	-11.3	-11.0	-10.7	-10.2	-10.4	-10.3	-11.2	-12.2	-12.1	-12.8	-12.5	-12.8	-13.1	-10.2	-13.1	-11.6
29	-13.8	-13.9	-14.4	-14.7	-14.9	-15.2	-15.4	-15.6	-16.1	-16.1	-16.2	-16.8	-17.0	-17.1	-17.1	-16.9	-17.1	-17.4	-17.7	-18.0	-18.3	-18.5	-18.7	-18.9	-13.8	-18.9	-16.5
30	-19.5	-20.4	-20.6	-21.3	-21.3	-21.7	-21.3	-21.3	-21.3	-21.4	-21.5	-21.3	-21.3	-21.6	-20.4	-21.2	-21.8	-22.8	-21.9	-21.6	-21.5	-21.6	-21.9	-20.9	-19.5	-22.8	-21.3
Max.	**1.2**	**1.5**	**1.0**	**0.0**	**0.1**	**0.5**	**1.1**	**1.0**	**0.5**	**0.5**	**0.6**	**0.3**	**0.2**	**0.1**	**0.6**	**1.3**	**0.9**	**-0.2**	**-0.5**	**-0.2**	**0.6**	**0.9**	**1.3**	**1.4**	**1.5**		
Min.	**-25.3**	**-25.3**	**-25.7**	**-26.4**	**-26.4**	**-26.8**	**-27.3**	**-27.9**	**-27.8**	**-27.6**	**-27.3**	**-27.0**	**-26.3**	**-26.4**	**-25.7**	**-25.7**	**-25.5**	**-24.4**	**-24.3**	**-24.1**	**-23.8**	**-24.0**	**-24.4**	**-24.7**		**-27.9**	
Avg.	**-10.1**	**-10.0**	**-10.2**	**-10.2**	**-10.2**	**-10.4**	**-10.2**	**-10.3**	**-10.5**	**-10.8**	**-10.8**	**-10.7**	**-10.4**	**-10.2**	**-10.1**	**-10.0**	**-10.0**	**-10.1**	**-10.4**	**-10.3**	**-10.3**	**-10.3**	**-10.5**	**-10.6**			**-10.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 2 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-19.7	-20.2	-19.7	-19.9	-19.9	-19.1	-16.4	-15.4	-14.9	-14.0	-13.3	-12.1	-12.1	-11.4	-11.2	-10.9	-10.9	-10.0	-10.7	-10.2	-9.5	-7.8	-7.3	-5.5	-5.5	-20.2	-13.4
2	-5.1	-5.3	-6.1	-6.5	-5.6	-5.1	-4.1	-4.6	-4.7	-4.3	-3.8	-3.3	-2.8	-2.5	-2.2	-2.2	-2.3	-2.2	-2.7	-2.4	-2.0	-1.4	-1.2	-0.8	-0.8	-6.5	-3.5
3	-0.4	0.0	0.1	0.2	0.4	0.3	0.4	0.5	0.8	0.8	0.8	1.2	1.2	0.7	0.8	0.6	0.6	1.0	1.4	1.6	1.9	1.8	1.8	1.6	1.9	-0.4	0.8
4	1.3	1.0	1.1	1.2	1.3	1.1	1.1	0.9	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.6	1.3	1.6	1.7	1.6	1.7	1.6	1.7	1.7	1.7	0.6	1.2
5	1.7	1.5	1.6	1.7	1.8	1.7	1.8	1.8	1.7	1.8	1.9	2.0	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.3	2.2	2.1	1.9	2.0	2.3	1.5	1.9
6	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.1	2.2	2.1	1.7	1.8	1.8	1.5	1.6	1.4	1.0	0.9	1.0	0.7	0.5	0.3	2.2	0.3	1.6
7	0.1	-0.7	-1.3	-2.1	-3.0	-4.1	-4.1	-3.9	-3.9	-4.7	-5.6	-6.5	-6.8	-6.0	-6.5	-6.8	-6.9	-7.4	-6.9	-7.0	-8.4	-9.2	-8.9	-7.4	0.1	-9.2	-5.3
8	-7.7	-6.9	-4.7	-5.8	-6.0	-4.6	-3.8	-3.0	-2.2	-1.0	-1.9	-1.4	-0.7	-0.9	-0.2	-0.4	-0.5	-0.4	-1.2	-1.5	-1.2	-1.7	-2.1	-2.8	-0.2	-7.7	-2.6
9	-2.6	-2.9	-3.1	-3.4	-4.4	-5.2	-6.3	-6.5	-6.9	-8.4	-7.1	-5.6	-6.5	-6.2	-5.8	-6.2	-6.7	-4.7	-5.4	-7.1	-6.7	-6.1	-4.9	-4.4	-2.6	-8.4	-5.5
10	-4.7	-4.9	-5.0	-5.2	-6.2	-7.9	-8.4	-8.5	-8.6	-9.6	-10.8	-11.6	-12.0	-11.6	-11.3	-9.7	-9.3	-9.9	-9.6	-10.0	-10.5	-11.0	-11.4	-11.4	-4.7	-12.0	-9.1
11	-11.3	-11.7	-10.9	-10.5	-10.1	-9.5	-9.3	-10.9	-11.2	-10.7	-8.9	-7.2	-7.4	-7.4	-7.4	-8.2	-9.0	-10.4	-11.7	-12.5	-12.9	-13.4	-13.3	-13.2	-7.2	-13.4	-10.4
12	-14.0	-14.1	-13.5	-11.9	-11.8	-11.0	-11.0	-10.8	-10.5	-9.2	-8.6	-8.6	-10.0	-9.8	-9.3	-8.7	-7.9	-8.6	-6.4	-6.4	-7.3	-8.1	-8.1	-7.5	-6.4	-14.1	-9.7
13	-7.3	-7.7	-7.9	-7.7	-8.2	-9.0	-9.4	-10.1	-10.0	-9.9	-10.1	-11.3	-10.9	-9.9	-10.8	-10.8	-10.3	-9.3	-9.3	-9.3	-7.2	-5.3	-5.6	-4.3	-4.3	-11.3	-8.8
14	-3.5	-4.4	-3.7	-3.6	-4.9	-3.5	-4.6	-4.5	-4.3	-4.0	-3.9	-4.8	-4.2	-3.6	-3.9	-4.2	-4.1	-4.0	-4.0	-3.8	-3.5	-2.9	-2.9	-2.8	-2.8	-4.9	-3.9
15	-2.3	-1.8	-1.7	-2.2	-2.2	-2.5	-2.2	-2.2	-2.0	-1.9	-2.1	-1.8	-1.6	-1.8	-2.0	-1.7	-2.0	-2.6	-2.4	-3.5	-4.1	-3.8	-3.4	-4.5	-1.6	-4.5	-2.4
16	-4.3	-4.4	-4.6	-5.5	-5.8	-4.8	-5.7	-5.5	-3.9	-4.7	-4.8	-5.0	-4.6	-5.2	-5.3	-5.3	-5.5	-4.5	-5.1	-4.9	-4.7	-4.5	-3.9	-3.9	-3.9	-5.8	-4.9
17	-3.3	-2.2	-1.9	-1.9	-1.9	-1.9	-2.1	-2.1	-1.8	-1.5	-1.4	-1.3	-1.0	-0.6	-0.4	-0.5	-0.7	-0.8	-0.6	-0.6	-0.6	-0.6	-0.7	-0.5	-0.4	-3.3	-1.3
18	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.8	-0.7	-0.5	-0.5	-0.4	-0.3	-0.2	0.0	0.1	0.3	0.3	0.2	0.1	-0.1	-0.1	0.3	0.3	0.4	0.4	-0.8	-0.2
19	0.0	0.0	0.4	0.3	0.2	0.0	0.0	0.0	-0.1	-0.2	0.0	0.2	0.1	-0.3	-0.4	-0.5	-0.5	-0.2	-0.5	-0.6	-0.4	-0.4	-0.7	-1.1	0.4	-1.1	-0.2
20	-1.1	-1.0	-1.0	-0.7	-0.7	-0.7	-0.3	-0.9	-0.8	-0.8	-1.3	-1.6	-2.2	-2.3	-2.6	-1.7	-1.1	-1.0	-1.2	-2.3	-3.2	-3.7	-3.1	-3.3	-0.3	-3.7	-1.6
21	-3.1	-3.2	-3.7	-4.2	-4.2	-3.4	-3.4	-3.8	-3.4	-3.8	-4.3	-4.5	-4.3	-3.1	-2.6	-2.4	-4.0	-4.3	-4.7	-5.2	-5.2	-5.0	-5.6	-5.4	-2.4	-5.6	-4.0
22	-4.8	-5.0	-4.8	-4.3	-4.5	-4.8	-3.8	-3.8	-3.9	-3.9	-3.9	-4.0	-3.3	-3.0	-2.7	-2.6	-2.6	-2.0	-3.0	-3.5	-3.6	-3.9	-4.1	-4.1	-2.0	-5.0	-3.7
23	-3.7	-3.6	-3.6	-3.6	-3.6	-3.4	-3.2	-3.1	-2.9	-3.3	-4.1	-6.1	-7.3	-8.0	-7.8	-7.8	-8.5	-8.6	-8.3	-8.2	-7.9	-8.1	-8.1	-8.1	-2.9	-8.6	-5.9
24	-8.0	-7.7	-8.1	-9.4	-10.2	-9.8	-9.3	-8.6	-7.4	-7.4	-7.1	-7.4	-9.5	-9.8	-9.2	-9.1	-8.9	-8.3	-9.0	-8.7	-8.2	-8.3	-8.0	-7.6	-7.1	-10.2	-8.6
25	-7.5	-7.7	-7.1	-6.6	-6.0	-6.0	-5.6	-5.1	-4.9	-4.6	-4.6	-4.3	-4.6	-5.1	-5.1	-5.2	-4.6	-7.0	-8.6	-9.4	-9.9	-10.5	-11.1	-11.8	-4.3	-11.8	-6.8
26	-12.3	-13.8	-15.6	-16.5	-17.3	-17.8	-17.9	-18.1	-17.8	-17.7	-17.6	-17.3	-17.2	-17.3	-17.1	-17.2	-17.2	-17.1	-17.3	-17.5	-17.7	-17.9	-17.7	-17.7	-12.3	-18.1	-17.0
27	-17.8	-17.3	-17.0	-17.2	-17.7	-17.9	-18.1	-18.3	-18.6	-18.9	-19.2	-19.3	-19.4	-19.4	-19.7	-19.8	-19.9	-20.0	-20.4	-20.5	-20.7	-20.9	-21.4	-21.7	-17.0	-21.7	-19.2
28	-21.6	-21.3	-21.5	-21.6	-21.9	-21.8	-21.8	-22.0	-22.2	-22.3	-22.7	-22.8	-23.0	-23.1	-23.0	-23.3	-23.7	-23.9	-24.1	-24.6	-25.1	-25.3	-25.5	-25.8	-21.3	-25.8	-23.1
29	-26.2	-26.5	-26.8	-26.6	-26.3	-26.3	-26.7	-26.5	-26.3	-26.3	-26.2	-26.2	-26.3	-26.0	-25.9	-25.5	-25.7	-25.8	-25.8	-25.3	-24.8	-25.0	-25.6	-25.8	-24.8	-26.8	-26.0
30	-26.0	-26.0	-25.7	-26.1	-26.5	-26.5	-26.5	-26.7	-25.8	-27.8	-28.1	-27.3	-27.1	-27.2	-27.0	-28.2	-27.6	-27.8	-28.8	-28.4	-29.1	-28.5	-29.1	-29.4	-25.7	-29.4	-27.4
31	-29.0	-28.5	-29.0	-29.4	-28.4	-28.0	-27.9	-27.5	-27.2	-26.6	-27.0	-25.7	-25.2	-25.7	-25.2	-25.3	-25.6	-24.8	-24.0	-24.0	-24.6	-24.9	-24.9	-24.1	-24.0	-29.4	-26.3
Max.	**1.9**	**2.0**	**1.9**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**1.9**	**2.1**	**2.2**	**2.1**	**2.1**	**2.1**	**2.0**	**2.1**	**2.2**	**2.2**	**2.2**	**2.3**	**2.2**	**2.1**	**1.9**	**2.0**	**2.3**		
Min.	**-29.0**	**-28.5**	**-29.0**	**-29.4**	**-28.4**	**-28.0**	**-27.9**	**-27.5**	**-27.2**	**-27.8**	**-28.1**	**-27.3**	**-27.1**	**-27.2**	**-27.0**	**-28.2**	**-27.6**	**-27.8**	**-28.8**	**-28.4**	**-29.1**	**-28.5**	**-29.1**	**-29.4**		**-29.4**	
Avg.	**-7.8**	**-7.9**	**-7.9**	**-8.0**	**-8.1**	**-8.1**	**-8.0**	**-8.0**	**-7.8**	**-7.8**	**-7.8**	**-7.8**	**-7.9**	**-7.8**	**-7.7**	**-7.7**	**-7.7**	**-7.7**	**-7.9**	**-8.1**	**-8.2**	**-8.1**	**-8.1**	**-8.0**			**-7.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-10.6	-11.5	-11.7	-11.3	-11.4	-10.4	-10.7	-10.1	-10.3	-10.4	-10.6	-11.7	-13.0	-14.0	-13.1	-13.4	-13.6	-15.9	-14.4	-16.4	-16.4	-16.2	-16.6	-16.7	-10.1	-16.7	-12.9
2	-16.9	-16.6	-16.2	-16.8	-18.0	-19.4	-19.7	-20.3	-19.8	-19.6	-17.6	-17.4	-18.6	-18.7	-18.1	-17.5	-18.4	-19.0	-17.9	-17.5	-18.0	-18.7	-18.1	-17.4	-16.2	-20.3	-18.2
3	-18.4	-18.3	-18.6	-18.4	-18.6	-18.5	-18.1	-17.9	-17.6	-18.3	-17.4	-18.1	-17.6	-16.8	-18.0	-17.9	-18.0	-17.9	-18.2	-18.8	-19.4	-19.1	-19.0	-19.7	-16.8	-19.7	-18.3
4	-20.0	-19.7	-19.4	-20.1	-19.8	-20.5	-20.3	-20.2	-20.5	-20.6	-20.6	-20.8	-20.7	-20.8	-21.0	-21.0	-21.2	-21.2	-21.7	-21.9	-22.3	-22.4	-23.2	-23.3	-19.4	-23.3	-21.0
5	-23.8	-23.6	-23.9	-24.5	-24.3	-24.0	-24.4	-24.8	-24.7	-24.7	-24.2	-23.9	-23.6	-23.2	-23.0	-23.1	-23.4	-23.7	-23.6	-23.3	-23.7	-24.6	-25.1	-25.5	-23.0	-25.5	-24.0
6	-25.7	-26.2	-26.3	-26.5	-26.6	-27.1	-27.0	-27.2	-27.3	-27.9	-28.0	-27.9	-27.6	-27.4	-27.3	-27.1	-27.1	-27.6	-27.8	-28.3	-28.4	-28.2	-28.0	-28.1	-25.7	-28.4	-27.4
7	-28.7	-28.6	-28.5	-28.1	-27.5	-27.4	-27.2	-27.1	-27.3	-27.0	-27.0	-26.8	-26.6	-26.4	-25.9	-25.6	-25.5	-24.9	-24.4	-24.5	-24.5	-24.6	-25.1	-25.7	-24.4	-28.7	-26.5
8	-25.6	-25.6	-25.2	-25.0	-25.1	-25.2	-25.5	-25.4	-24.7	-23.7	-24.4	-24.8	-24.1	-24.1	-24.2	-24.6	-24.3	-24.6	-24.7	-25.3	-25.3	-25.8	-25.7	-24.7	-23.7	-25.8	-24.9
9	-25.6	-25.3	-25.1	-25.8	-25.9	-26.1	-25.9	-26.3	-26.3	-25.9	-25.7	-25.3	-25.4	-25.0	-24.5	-24.0	-24.1	-24.2	-24.2	-24.0	-23.7	-23.5	-23.4	-23.5	-23.4	-26.3	-24.9
10	-23.5	-23.7	-24.1	-24.1	-24.6	-24.4	-24.7	-24.5	-24.5	-25.6	-25.6	-25.3	-25.8	-25.9	-25.9	-25.9	-26.3	-26.9	-26.9	-27.1	-27.2	-26.7	-27.5	-27.0	-23.5	-27.5	-25.6
11	-26.3	-26.6	-26.4	-26.4	-27.1	-27.7	-27.7	-27.9	-27.9	-28.4	-28.4	-28.2	-28.7	-28.5	-28.7	-28.5	-28.4	-28.8	-29.2	-29.4	-29.6	-30.1	-30.6	-30.4	-26.3	-30.6	-28.3
12	-30.5	-30.6	-30.7	-30.4	-30.7	-30.7	-30.8	-30.7	-30.3	-30.4	-30.2	-30.2	-30.0	-29.9	-29.9	-30.6	-31.0	-31.3	-31.1	-31.1	-31.0	-31.0	-31.1	-31.3	-29.9	-31.3	-30.6
13	-31.1	-31.0	-30.9	-30.9	-30.7	-30.4	-30.5	-30.7	-30.4	-30.9	-30.9	-31.0	-30.5	-30.3	-29.8	-29.6	-29.2	-29.2	-29.1	-28.6	-28.0	-28.6	-28.1	-27.0	-27.0	-31.1	-29.9
14	-26.7	-25.9	-25.6	-23.9	-24.4	-23.7	-23.4	-20.3	-15.2	-15.6	-14.1	-12.6	-12.1	-11.6	-10.8	-10.3	-9.8	-9.4	-8.8	-8.0	-7.7	-7.0	-6.6	-6.0	-6.0	-26.7	-15.0
15	-4.5	-4.0	-3.7	-3.5	-3.4	-4.3	-4.8	-4.8	-5.2	-4.9	-5.0	-5.0	-5.1	-4.9	-4.8	-4.8	-4.8	-4.9	-4.9	-4.9	-4.5	-3.8	-3.8	-3.4	-3.4	-5.2	-4.5
16	-3.3	-3.2	-2.8	-2.4	-1.6	-2.1	-2.6	-3.1	-3.4	-3.6	-3.1	-3.3	-3.3	-3.4	-4.5	-4.1	-3.7	-3.8	-4.1	-3.9	-4.0	-4.9	-4.6	-4.7	-1.6	-4.9	-3.5
17	-4.6	-4.6	-4.5	-3.7	-3.1	-2.9	-2.5	-2.5	-2.0	-1.5	-1.3	-1.4	-2.1	-1.7	-1.7	-1.1	-1.4	-1.9	-2.0	-1.6	-1.6	-1.7	-2.2	-2.4	-1.1	-4.6	-2.3
18	-2.3	-2.7	-2.9	-2.9	-2.8	-3.1	-3.1	-3.2	-3.2	-3.0	-3.3	-3.4	-3.4	-3.0	-2.7	-3.4	-3.3	-2.9	-3.2	-2.0	-1.7	-1.5	-2.1	-2.2	-1.5	-3.4	-2.8
19	-2.1	-2.3	-2.8	-2.4	-2.3	-2.1	-1.0	0.2	-0.2	-0.5	-0.3	0.2	0.1	-0.2	-0.3	-0.3	0.0	-0.1	0.0	-0.2	-0.1	-0.2	-0.3	-0.5	0.2	-2.8	-0.7
20	-0.5	-0.7	-0.7	-0.6	-0.4	-0.3	-0.3	-0.3	-0.2	-0.2	-0.3	-0.1	0.1	0.3	0.2	-0.2	-0.5	-0.9	-1.0	-0.5	-1.1	-0.6	-1.4	-1.4	0.3	-1.4	-0.5
21	-1.2	-1.2	-0.9	-0.8	-0.6	-1.0	-0.6	0.0	-0.1	0.3	0.5	0.7	1.1	1.2	1.5	1.5	1.6	1.7	1.5	1.0	0.7	0.7	0.6	1.0	1.7	-1.2	0.4
22	0.8	0.6	0.7	0.0	-0.3	-0.5	-1.1	-1.4	-1.4	-1.3	-2.0	-3.1	-4.1	-4.4	-5.0	-5.5	-5.9	-5.9	-5.7	-5.6	-5.8	-5.7	-5.9	-6.1	0.8	-6.1	-3.1
23	-6.7	-8.2	-8.9	-10.3	-12.1	-13.4	-15.0	-16.4	-16.9	-17.6	-18.1	-18.4	-18.2	-18.6	-18.9	-19.4	-19.9	-21.1	-21.1	-21.2	-21.6	-21.5	-21.2	-21.4	-6.7	-21.6	-16.9
24	-21.2	-18.3	-18.7	-18.5	-18.4	-18.6	-15.9	-12.7	-11.2	-10.7	-10.0	-9.7	-10.1	-10.1	-9.6	-9.2	-9.0	-8.9	-8.7	-8.4	-8.0	-7.6	-7.2	-7.1	-7.1	-21.2	-12.0
25	-7.3	-6.7	-6.5	-6.3	-5.7	-6.8	-6.5	-5.6	-6.1	-5.9	-6.0	-6.0	-6.3	-6.2	-5.5	-5.9	-5.8	-6.1	-6.2	-8.5	-10.6	-12.8	-14.5	-15.4	-5.5	-15.4	-7.5
26	-16.4	-17.2	-17.7	-18.4	-19.0	-20.3	-19.6	-19.6	-20.5	-20.8	-20.8	-21.0	-20.5	-20.8	-20.9	-19.8	-17.8	-15.4	-13.5	-12.4	-10.1	-9.3	-9.6	-9.9	-9.3	-21.0	-17.1
27	-10.0	-10.4	-9.3	-9.6	-9.6	-9.0	-7.4	-7.4	-7.6	-7.0	-6.7	-6.5	-6.4	-6.3	-6.1	-5.9	-5.8	-5.7	-5.6	-5.3	-5.2	-5.5	-5.3	-5.1	-5.1	-10.4	-7.0
28	-5.0	-5.0	-5.2	-5.3	-5.2	-5.2	-5.5	-6.0	-6.2	-6.4	-6.4	-6.2	-6.1	-5.6	-5.6	-5.7	-5.7	-5.4	-5.1	-5.4	-4.3	-4.5	-4.6	-4.6	-4.3	-6.4	-5.4
29	-4.5	-4.2	-4.2	-4.2	-3.5	-3.6	-4.4	-4.5	-5.0	-4.8	-4.7	-5.1	-4.7	-4.9	-6.4	-6.0	-6.3	-7.3	-8.3	-8.7	-8.2	-8.3	-8.8	-8.9	-3.5	-8.9	-5.8
30	-8.6	-8.5	-8.3	-9.4	-10.0	-9.6	-9.9	-10.1	-10.2	-11.7	-12.7	-12.9	-13.3	-13.6	-14.1	-14.0	-14.5	-14.5	-14.4	-13.7	-14.2	-14.1	-15.0	-15.3	-8.3	-15.3	-12.2
31	-14.8	-14.7	-14.3	-14.7	-12.3	-11.9	-12.4	-11.6	-12.5	-10.0	-9.3	-9.9	-10.2	-11.5	-10.7	-10.7	-10.6	-10.5	-11.2	-11.6	-11.3	-11.8	-11.4	-12.2	-9.3	-14.8	-11.8
Max.	**0.8**	**0.6**	**0.7**	**0.0**	**-0.3**	**-0.3**	**-0.3**	**0.2**	**-0.1**	**0.3**	**0.5**	**0.7**	**1.1**	**1.2**	**1.5**	**1.5**	**1.6**	**1.7**	**1.5**	**1.0**	**0.7**	**0.7**	**0.6**	**1.0**	**1.7**		
Min.	**-31.1**	**-31.0**	**-30.9**	**-30.9**	**-30.7**	**-30.7**	**-30.8**	**-30.7**	**-30.4**	**-30.9**	**-30.9**	**-31.0**	**-30.5**	**-30.3**	**-29.9**	**-30.6**	**-31.0**	**-31.3**	**-31.1**	**-31.1**	**-31.0**	**-31.0**	**-31.1**	**-31.3**		**-31.3**	
Avg.	**-14.4**	**-14.3**	**-14.3**	**-14.4**	**-14.4**	**-14.5**	**-14.5**	**-14.3**	**-14.2**	**-14.1**	**-14.0**	**-14.0**	**-14.1**	**-14.1**	**-14.0**	**-14.0**	**-14.0**	**-14.1**	**-14.1**	**-14.1**	**-14.1**	**-14.2**	**-14.4**	**-14.4**			**-14.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-12.4	-13.1	-13.3	-12.6	-13.3	-12.9	-13.0	-13.2	-13.5	-13.1	-12.6	-12.8	-12.3	-11.7	-11.1	-11.2	-11.2	-11.6	-11.9	-12.6	-13.3	-13.2	-13.6	-13.7	-11.1	-13.7	-12.6
2	-13.8	-14.2	-14.5	-15.6	-15.7	-16.3	-16.3	-16.6	-16.6	-17.3	-17.3	-17.9	-17.3	-17.8	-17.1	-17.2	-17.5	-17.6	-17.8	-18.0	-18.7	-18.9	-19.3	-19.9	-13.8	-19.9	-17.1
3	-21.0	-22.3	-22.0	-22.4	-23.1	-24.2	-24.4	-25.0	-25.2	-25.0	-25.4	-25.7	-25.3	-25.6	-25.0	-24.5	-25.0	-25.0	-25.1	-25.8	-26.5	-26.3	-26.5	-26.4	-21.0	-26.5	-24.7
4	-26.0	-25.4	-24.5	-24.6	-24.4	-24.2	-23.6	-23.3	-23.5	-23.4	-22.2	-22.2	-22.2	-21.6	-21.8	-21.1	-21.7	-21.8	-23.7	-22.5	-23.6	-24.3	-24.2	-24.4	-21.1	-26.0	-23.3
5	-25.4	-25.7	-26.3	-26.5	-28.0	-28.2	-28.1	-27.4	-27.5	-28.2	-27.4	-26.8	-26.4	-26.3	-25.5	-25.4	-25.5	-25.5	-25.8	-25.4	-25.6	-24.9	-25.4	-24.6	-24.6	-28.2	-26.3
6	-24.5	-24.1	-24.0	-23.7	-23.4	-21.8	-21.7	-22.0	-21.7	-22.2	-23.5	-23.2	-23.9	-24.3	-23.1	-22.8	-23.1	-24.0	-23.0	-24.3	-23.8	-24.3	-23.2	-24.4	-21.7	-24.5	-23.3
7	-24.4	-23.0	-24.7	-24.5	-23.6	-23.6	-25.0	-24.9	-23.9	-22.9	-23.0	-22.3	-21.6	-20.3	-19.1	-17.1	-17.2	-17.1	-16.8	-16.3	-15.7	-15.8	-16.3	-16.2	-15.7	-25.0	-20.6
8	-17.7	-17.0	-14.7	-15.9	-16.3	-14.5	-13.5	-14.5	-13.3	-13.1	-14.8	-13.6	-12.6	-12.9	-12.6	-12.4	-11.6	-11.8	-13.2	-13.0	-13.0	-12.2	-10.7	-10.3	-10.3	-17.7	-13.5
9	-10.3	-9.8	-9.5	-9.3	-9.3	-9.1	-9.3	-9.2	-9.6	-9.9	-10.3	-10.3	-10.6	-10.8	-13.7	-14.3	-14.6	-15.0	-16.9	-17.9	-19.7	-19.0	-20.1	-21.3	-9.1	-21.3	-12.9
10	-22.8	-22.4	-22.3	-21.8	-22.7	-21.5	-25.5	-23.9	-24.2	-24.9	-25.1	-25.0	-24.4	-24.4	-23.0	-23.9	-24.5	-24.1	-24.7	-23.9	-23.0	-22.5	-22.2	-21.5	-21.5	-25.5	-23.5
11	-21.9	-16.7	-13.8	-13.7	-14.4	-14.1	-14.3	-13.2	-13.4	-13.4	-12.6	-12.4	-5.1	-8.5	-9.4	-12.9	-14.6	-15.1	-16.5	-17.4	-17.4	-17.5	-17.9	-18.7	-5.1	-21.9	-14.4
12	-20.1	-20.6	-22.4	-23.2	-24.2	-24.3	-24.1	-24.6	-25.2	-25.4	-24.7	-25.1	-24.8	-24.3	-23.7	-23.0	-21.2	-19.5	-19.2	-22.3	-19.6	-18.1	-18.4	-12.5	-12.5	-25.4	-22.1
13	-10.1	-8.9	-8.9	-8.6	-6.9	-6.6	-5.7	-4.6	-3.7	-2.5	-2.1	-1.4	-0.9	-0.4	-0.2	-0.1	-0.1	-0.1	0.0	0.2	0.2	0.3	0.2	0.2	0.3	-10.1	-2.9
14	0.2	0.3	0.4	0.1	-0.2	-0.3	-0.3	-3.4	-8.0	-9.6	-11.6	-13.6	-14.5	-14.1	-15.3	-16.9	-17.5	-18.3	-18.7	-18.7	-18.5	-18.1	-17.6	-18.1	0.4	-18.7	-10.5
15	-19.4	-20.1	-21.0	-20.9	-21.3	-21.1	-22.5	-23.0	-23.0	-23.4	-23.5	-24.1	-23.6	-23.5	-23.0	-22.9	-22.0	-22.4	-22.6	-23.0	-22.6	-20.8	-17.7	-15.6	-15.6	-24.1	-21.8
16	-14.6	-13.3	-12.1	-10.9	-10.0	-9.2	-8.9	-7.7	-7.5	-7.4	-7.6	-7.4	-6.7	-6.4	-5.8	-5.3	-5.2	-4.7	-4.6	-5.3	-5.4	-5.6	-5.4	-5.7	-4.6	-14.6	-7.6
17	-5.2	-5.7	-6.0	-5.8	-3.9	-2.5	-1.2	-0.7	-0.3	-0.9	-0.4	0.4	0.0	0.1	0.2	-0.2	-0.2	0.2	-0.1	-0.4	-0.1	0.0	0.2	0.2	0.4	-6.0	-1.3
18	0.2	0.1	-0.2	-0.4	-0.5	-0.5	-0.3	-0.4	-0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	-0.3	-0.2	0.2	0.5	0.5	-0.5	0.0
19	0.8	1.2	1.3	0.7	0.1	0.4	0.1	0.4	0.4	-0.5	-1.0	-0.2	-0.2	0.3	0.9	1.2	1.3	1.3	1.4	1.5	0.9	0.4	0.3	0.2	1.5	-1.0	0.6
20	0.3	0.1	-0.3	-0.2	-0.1	-0.2	-0.2	-0.3	-0.6	-0.7	-0.5	-0.4	0.6	1.3	1.8	1.5	1.5	1.1	0.9	0.8	0.8	0.4	0.5	0.8	1.8	-0.7	0.4
21	0.7	-0.5	-0.3	0.0	1.0	-0.1	-0.8	-0.2	-0.1	-0.7	-0.7	0.1	0.7	1.1	1.3	1.0	0.9	1.3	0.5	-0.2	-0.2	-0.7	-0.4	-0.4	1.3	-0.8	0.1
22	-0.5	-0.7	-0.6	-0.6	-0.4	-0.5	-0.3	-0.7	-0.9	-0.9	-0.7	-0.9	-1.1	-1.1	-0.3	-0.3	-0.8	-1.3	-1.4	-1.5	-1.7	-1.8	-2.1	-2.4	-0.3	-2.4	-1.0
23	-2.4	-2.3	-2.9	-2.9	-3.9	-4.1	-3.7	-3.9	-4.3	-4.7	-5.3	-3.8	-3.6	-3.7	-3.6	-3.8	-4.3	-4.5	-4.8	-4.9	-6.1	-5.5	-6.2	-7.9	-2.3	-7.9	-4.3
24	-8.9	-9.5	-9.2	-9.1	-9.2	-9.2	-9.4	-10.2	-10.5	-12.0	-12.6	-13.5	-14.2	-14.0	-13.6	-13.2	-12.9	-12.9	-13.3	-14.3	-14.8	-14.8	-15.0	-15.2	-8.9	-15.2	-12.1
25	-15.4	-16.1	-16.1	-16.9	-17.4	-17.8	-18.6	-19.2	-19.7	-19.5	-19.1	-18.6	-17.9	-17.2	-16.4	-14.9	-12.6	-11.6	-10.5	-9.2	-8.8	-8.6	-9.2	-7.5	-7.5	-19.7	-14.9
26	-5.6	-8.0	-7.4	-7.2	-8.2	-8.0	-8.1	-8.1	-8.1	-8.1	-8.1	-7.9	-7.1	-6.5	-6.3	-6.3	-6.6	-9.3	-9.1	-9.5	-10.4	-11.1	-11.3	-12.5	-5.6	-12.5	-8.3
27	-13.6	-13.8	-13.2	-14.6	-14.7	-14.3	-14.8	-14.5	-13.6	-12.0	-11.6	-11.9	-9.1	-6.8	-6.5	-8.4	-8.3	-7.0	-4.9	-5.3	-5.0	-4.9	-4.6	-4.3	-4.3	-14.8	-9.9
28	-3.6	-3.6	-3.8	-3.4	-3.2	-3.1	-3.3	-2.8	-2.5	-1.5	-1.6	-1.9	-1.7	-2.0	-2.9	-3.6	-3.8	-4.7	-4.9	-6.5	-6.8	-8.7	-7.9	-7.8	-1.5	-8.7	-4.0
29	-8.5	-9.4	-10.7	-8.8	-11.6	-10.1	-11.2	-11.3	-11.5	-13.8	-15.3	-14.6	-13.8	-13.9	-13.8	-13.7	-13.0	-12.7	-13.3	-13.2	-13.5	-13.5	-14.2	-15.0	-8.5	-15.3	-12.5
Max.	**0.8**	**1.2**	**1.3**	**0.7**	**1.0**	**0.4**	**0.1**	**0.4**	**0.4**	**0.2**	**0.3**	**0.4**	**0.7**	**1.3**	**1.8**	**1.5**	**1.5**	**1.3**	**1.4**	**1.5**	**0.9**	**0.4**	**0.5**	**0.8**	**1.8**		
Min.	**-26.0**	**-25.7**	**-26.3**	**-26.5**	**-28.0**	**-28.2**	**-28.1**	**-27.4**	**-27.5**	**-28.2**	**-27.4**	**-26.8**	**-26.4**	**-26.3**	**-25.5**	**-25.4**	**-25.5**	**-25.5**	**-25.8**	**-25.8**	**-26.5**	**-26.3**	**-26.5**	**-26.4**		**-28.2**	
Avg.	**-11.9**	**-11.9**	**-11.8**	**-11.8**	**-12.0**	**-11.8**	**-12.0**	**-12.0**	**-12.1**	**-12.3**	**-12.4**	**-12.3**	**-11.7**	**-11.6**	**-11.3**	**-11.4**	**-11.4**	**-11.5**	**-11.7**	**-12.0**	**-12.1**	**-12.1**	**-12.0**	**-11.9**			**-11.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-15.6	-15.9	-16.3	-16.6	-17.0	-17.0	-16.9	-16.9	-16.7	-16.1	-15.9	-15.4	-14.1	-10.9	-9.2	-8.7	-7.6	-6.8	-6.7	-6.6	-5.7	-5.1	-4.6	-3.6	-3.6	-17.0	-11.9
2	-3.0	-2.3	-1.9	-0.8	-0.7	-0.9	-1.3	-1.7	-1.8	-2.2	-2.3	-2.2	-2.0	-1.6	-1.1	-0.8	-1.1	-1.5	-1.3	-1.7	-1.9	-1.7	-1.7	-1.6	-0.7	-3.0	-1.6
3	-1.4	-1.8	-2.3	-1.9	-1.5	-0.8	-1.0	-1.3	-1.4	-1.2	-0.9	-0.9	-0.9	-0.8	-0.4	0.1	0.2	0.4	0.6	0.3	0.5	0.6	0.6	0.8	0.8	-2.3	-0.6
4	1.3	1.4	1.4	1.7	0.8	0.1	0.2	0.3	0.2	0.1	0.0	0.1	0.5	0.7	0.9	0.9	1.1	1.2	1.1	0.8	0.6	0.3	0.2	0.3	1.7	0.0	0.7
5	0.7	1.1	1.5	1.7	1.3	1.4	1.7	1.7	1.9	1.9	1.8	1.1	1.0	1.3	0.9	1.3	1.7	1.6	1.1	0.6	0.2	0.3	0.4	0.5	1.9	0.2	1.2
6	0.4	0.1	0.0	-0.1	-0.4	-0.5	-0.8	-0.8	-1.1	-1.1	-1.0	-0.9	0.1	0.3	0.3	0.9	1.0	0.9	1.1	1.0	0.7	0.3	0.1	0.1	1.1	-1.1	0.0
7	0.4	-0.1	-0.5	-0.2	-0.3	-1.0	-0.9	-1.4	-0.7	-0.6	-0.7	-0.6	-0.5	-0.6	-0.5	-0.3	-0.4	-0.2	-0.8	-1.6	-1.8	-2.4	-2.2	-2.9	0.4	-2.9	-0.9
8	-3.5	-3.6	-4.0	-4.5	-4.5	-4.7	-5.3	-4.6	-4.5	-4.2	-4.2	-3.1	-1.8	-1.6	-1.3	-1.4	-0.7	-0.4	-0.4	-0.4	-0.8	-1.1	-0.6	-0.8	-0.4	-5.3	-2.6
9	-1.2	-1.3	-0.9	-0.7	-0.5	-0.5	-0.5	-0.6	-0.2	-0.3	0.0	0.2	0.5	-0.4	-0.8	-0.6	-0.4	-0.3	-0.6	-0.6	-0.6	-0.4	-0.4	-0.4	0.5	-1.3	-0.5
10	-0.3	-0.2	-0.9	-1.5	-2.4	-3.4	-3.6	-4.0	-4.2	-4.5	-4.2	-4.3	-4.5	-4.4	-4.7	-4.6	-4.7	-5.0	-5.0	-5.1	-5.5	-6.0	-6.2	-6.0	-0.2	-6.2	-4.0
11	-6.6	-6.9	-7.6	-7.8	-7.8	-7.8	-7.9	-7.9	-8.3	-8.4	-8.1	-8.1	-8.4	-8.5	-8.5	-8.5	-8.5	-8.6	-8.5	-9.0	-9.5	-9.6	-9.4	-9.3	-6.6	-9.6	-8.3
12	-11.4	-11.2	-10.3	-10.8	-11.1	-11.4	-11.8	-12.1	-11.8	-10.8	-10.5	-10.5	-10.3	-10.0	-9.5	-9.3	-8.9	-8.7	-8.6	-8.4	-8.4	-8.5	-8.5	-8.6	-8.4	-12.1	-10.1
13	-8.6	-8.7	-9.0	-9.3	-9.5	-9.6	-9.8	-10.1	-10.4	-10.8	-11.1	-11.2	-11.1	-10.9	-11.0	-11.2	-11.4	-11.3	-11.6	-12.0	-12.5	-12.8	-13.6	-14.2	-8.6	-14.2	-10.9
14	-14.3	-14.0	-14.8	-15.0	-15.9	-16.7	-16.8	-17.3	-16.9	-16.9	-15.9	-14.7	-13.1	-12.3	-10.7	-7.2	-5.4	-4.9	-4.8	-5.4	-5.3	-5.5	-5.4	-5.3	-4.8	-17.3	-11.4
15	-4.8	-5.5	-5.3	-5.0	-4.6	-3.5	-3.3	-3.7	-3.6	-3.3	-3.0	-2.8	-2.4	-2.1	-1.7	-1.5	-1.5	-1.7	-1.8	-2.0	-2.3	-2.4	-2.4	-2.4	-1.5	-5.5	-3.0
16	-2.4	-2.4	-2.4	-2.4	-2.8	-3.6	-3.6	-3.5	-3.3	-3.0	-3.8	-3.0	-2.8	-2.6	-2.7	-2.4	-1.8	-1.5	-1.6	-2.2	-2.2	-3.0	-3.4	-3.8	-1.5	-3.8	-2.8
17	-3.2	-3.0	-3.4	-3.5	-3.5	-3.5	-3.3	-4.0	-4.1	-4.3	-4.5	-4.1	-3.8	-3.7	-4.0	-4.1	-3.7	-4.2	-6.3	-7.7	-8.6	-9.0	-9.0	-8.2	-3.0	-9.0	-4.9
18	-8.8	-9.7	-11.0	-11.3	-12.0	-12.7	-13.0	-13.4	-14.5	-14.9	-15.0	-14.9	-15.0	-14.6	-14.0	-13.6	-13.8	-14.1	-14.5	-14.3	-14.9	-15.5	-16.1	-16.4	-8.8	-16.4	-13.7
19	-16.9	-17.5	-18.1	-18.3	-18.8	-19.0	-19.3	-19.7	-20.3	-20.5	-20.4	-19.9	-19.0	-18.3	-17.8	-17.5	-17.2	-17.1	-17.4	-17.9	-18.8	-18.9	-19.1	-19.3	-16.9	-20.5	-18.6
20	-19.5	-19.4	-19.6	-19.6	-19.9	-19.8	-19.8	-19.8	-19.9	-20.0	-19.8	-19.7	-19.4	-19.4	-18.9	-18.8	-18.5	-18.0	-17.5	-17.4	-17.4	-17.6	-17.8	-17.4	-17.4	-20.0	-19.0
21	-17.1	-16.7	-16.2	-15.6	-15.2	-14.9	-14.4	-13.9	-13.6	-13.1	-12.2	-11.0	-9.5	-8.7	-8.4	-8.1	-8.2	-8.1	-8.2	-8.5	-9.2	-10.8	-11.7	-11.5	-8.1	-17.1	-11.9
22	-10.7	-9.8	-10.2	-11.1	-10.2	-10.8	-11.2	-11.8	-11.5	-12.4	-12.8	-12.7	-13.0	-12.8	-12.7	-11.9	-11.3	-10.8	-10.8	-10.9	-11.1	-10.9	-11.5	-11.4	-9.8	-13.0	-11.4
23	-11.6	-11.9	-11.5	-11.4	-11.5	-12.1	-13.0	-12.8	-14.0	-14.0	-14.8	-14.2	-14.4	-13.9	-13.1	-12.7	-12.4	-12.0	-11.9	-11.8	-12.7	-13.0	-13.6	-13.9	-11.4	-14.8	-12.8
24	-13.6	-13.4	-13.3	-13.8	-13.7	-13.7	-13.6	-13.4	-13.5	-13.7	-13.3	-13.3	-12.6	-11.6	-11.0	-10.1	-9.1	-8.7	-8.4	-8.2	-8.8	-8.5	-8.2	-8.1	-8.1	-13.8	-11.5
25	-8.4	-8.7	-9.0	-9.0	-9.9	-9.4	-8.5	-8.2	-8.6	-9.4	-9.9	-9.9	-9.7	-9.2	-9.1	-8.4	-7.1	-6.7	-6.5	-6.7	-6.6	-6.8	-7.1	-6.6	-6.5	-9.9	-8.3
26	-7.0	-7.1	-6.8	-6.8	-8.4	-8.4	-8.2	-8.9	-9.3	-9.4	-9.1	-8.9	-8.9	-8.5	-7.7	-7.3	-6.4	-6.4	-6.5	-7.3	-8.0	-7.8	-7.5	-7.6	-6.4	-9.4	-7.8
27	-7.4	-7.5	-8.4	-8.6	-8.0	-8.4	-9.1	-10.6	-9.7	-9.4	-10.0	-9.6	-9.2	-9.3	-9.5	-9.1	-8.7	-8.8	-8.9	-9.5	-10.0	-10.1	-10.3	-11.4	-7.4	-11.4	-9.2
28	-12.1	-12.1	-12.3	-13.0	-12.9	-13.0	-14.2	-14.2	-14.3	-14.0	-14.1	-14.0	-13.1	-12.8	-12.4	-12.2	-11.7	-11.1	-10.1	-9.8	-9.9	-9.5	-9.2	-7.3	-7.3	-14.3	-12.1
29	-7.1	-7.6	-8.2	-8.3	-7.2	-7.8	-6.9	-6.6	-6.1	-5.6	-5.1	-4.6	-3.8	-3.4	-3.0	-2.8	-2.9	-3.3	-3.2	-2.9	-2.7	-2.5	-2.2	-1.9	-1.9	-8.3	-4.8
30	-1.6	-1.5	-1.5	-1.4	-1.4	-1.4	-1.6	-1.5	-1.5	-1.3	-0.9	-0.6	-0.2	-0.2	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.5	-0.6	-0.7	0.0	-1.6	-0.8
31	-0.7	-0.5	-0.6	-0.3	-0.4	0.1	0.5	0.4	0.4	0.7	0.9	1.4	1.7	1.7	1.7	1.5	1.4	1.4	1.3	1.1	0.7	0.6	0.4	0.5	1.7	-0.7	0.7
Max.	**1.3**	**1.4**	**1.5**	**1.7**	**1.3**	**1.4**	**1.7**	**1.7**	**1.9**	**1.9**	**1.8**	**1.4**	**1.7**	**1.7**	**1.7**	**1.5**	**1.7**	**1.6**	**1.3**	**1.1**	**0.7**	**0.6**	**0.6**	**0.8**	**1.9**		
Min.	**-19.5**	**-19.4**	**-19.6**	**-19.6**	**-19.9**	**-19.8**	**-19.8**	**-19.8**	**-20.3**	**-20.5**	**-20.4**	**-19.9**	**-19.4**	**-19.4**	**-18.9**	**-18.8**	**-18.5**	**-18.0**	**-17.5**	**-17.9**	**-18.8**	**-18.9**	**-19.1**	**-19.3**		**-20.5**	
Avg.	**-7.0**	**-7.0**	**-7.2**	**-7.3**	**-7.4**	**-7.6**	**-7.6**	**-7.8**	**-7.9**	**-7.8**	**-7.8**	**-7.5**	**-7.1**	**-6.7**	**-6.4**	**-6.1**	**-5.7**	**-5.6**	**-5.7**	**-6.0**	**-6.2**	**-6.4**	**-6.5**	**-6.4**			**-6.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	0.4	0.3	0.2	0.2	0.1	-0.1	-0.1	-0.2	-0.1	0.0	0.2	0.3	0.7	0.9	0.7	0.6	0.4	0.5	0.1	-0.1	-0.2	-0.8	-1.1	0.9	-1.1	0.1
2	-1.0	-2.4	-2.9	-3.2	-3.3	-3.9	-4.0	-3.9	-4.3	-3.5	-4.0	-4.3	-4.2	-3.7	-3.6	-3.5	-3.4	-3.4	-2.4	-1.8	-1.3	-1.6	-1.3	-1.5	-1.0	-4.3	-3.0
3	-1.4	-1.0	-0.8	-1.0	-1.3	-1.6	-1.8	-2.0	-1.7	-1.3	-1.0	-0.6	-0.4	0.3	0.7	0.8	1.0	0.9	0.2	0.0	-0.2	-0.4	-0.3	-0.3	1.0	-2.0	-0.6
4	-0.4	-0.3	-0.4	-0.6	-0.6	-0.6	-0.7	-0.6	-0.7	-0.6	-0.4	-0.2	-0.1	-0.1	0.1	0.3	0.3	0.0	-0.1	-0.9	-2.1	-3.3	-4.2	-5.3	0.3	-5.3	-0.9
5	-6.6	-7.8	-9.3	-10.0	-10.3	-10.7	-11.4	-11.7	-11.2	-11.3	-11.8	-11.6	-10.7	-10.3	-9.6	-9.0	-8.8	-8.4	-8.2	-9.2	-10.0	-10.4	-10.7	-10.8	-6.6	-11.8	-10.0
6	-11.7	-12.9	-13.1	-13.2	-14.0	-14.4	-14.5	-14.5	-14.1	-14.2	-14.2	-13.2	-11.7	-11.2	-10.6	-9.9	-9.4	-9.2	-9.3	-9.5	-10.1	-11.4	-11.1	-11.4	-9.2	-14.5	-12.0
7	-12.1	-12.5	-12.2	-12.0	-12.7	-12.8	-13.0	-13.7	-13.2	-12.7	-12.2	-11.7	-10.5	-9.5	-8.5	-8.2	-7.7	-7.8	-7.9	-7.8	-8.0	-8.5	-8.6	-8.8	-7.7	-13.7	-10.5
8	-8.9	-9.0	-9.3	-9.5	-9.9	-9.8	-9.8	-9.7	-10.1	-9.9	-8.5	-8.3	-8.1	-8.2	-8.3	-8.0	-7.8	-8.0	-8.3	-8.4	-8.7	-9.0	-10.2	-10.2	-7.8	-10.2	-9.0
9	-10.4	-10.3	-10.7	-10.4	-11.1	-11.6	-12.0	-12.2	-13.3	-13.0	-11.9	-11.4	-10.5	-9.9	-9.4	-9.1	-8.8	-8.8	-9.4	-10.0	-10.4	-10.8	-10.6	-11.1	-8.8	-13.3	-10.7
10	-10.9	-11.2	-12.0	-13.5	-13.9	-14.5	-14.8	-15.6	-15.0	-14.7	-14.2	-13.4	-13.2	-11.6	-10.8	-10.2	-9.8	-9.8	-9.8	-10.4	-11.2	-11.7	-11.9	-12.1	-9.8	-15.6	-12.3
11	-12.1	-13.2	-13.3	-14.3	-14.4	-15.5	-16.0	-17.0	-15.9	-15.5	-15.6	-15.3	-13.7	-12.4	-11.5	-11.1	-10.7	-10.6	-11.0	-11.6	-12.3	-12.7	-12.9	-13.3	-10.6	-17.0	-13.4
12	-13.2	-13.4	-13.2	-13.8	-13.7	-13.2	-13.5	-13.5	-13.6	-14.0	-12.6	-12.3	-11.2	-10.2	-9.1	-8.8	-8.3	-7.7	-7.9	-8.2	-7.9	-7.6	-7.9	-7.6	-7.6	-14.0	-10.9
13	-7.6	-7.0	-6.6	-6.9	-7.0	-6.2	-5.6	-5.3	-5.5	-5.6	-3.9	-2.8	-2.2	-1.2	-0.9	-0.5	-0.4	-0.4	-0.4	-0.4	-0.6	-0.8	-1.2	-1.4	-0.4	-7.6	-3.4
14	-1.6	-1.7	-1.9	-2.1	-2.1	-2.3	-2.6	-2.8	-2.8	-2.7	-2.5	-2.2	-1.9	-1.8	-1.9	-1.8	-1.5	-0.9	-0.6	-0.9	-0.8	-0.8	-1.1	-1.5	-0.6	-2.8	-1.8
15	-1.7	-2.1	-2.4	-2.1	-2.3	-2.7	-2.7	-3.2	-4.8	-5.3	-6.3	-6.7	-6.4	-6.4	-6.9	-7.5	-7.7	-8.0	-8.5	-9.4	-10.3	-11.6	-12.0	-12.4	-1.7	-12.4	-6.2
16	-13.1	-13.6	-13.9	-14.2	-14.6	-15.0	-15.4	-16.2	-16.5	-15.9	-14.5	-14.2	-13.2	-12.4	-11.1	-9.7	-9.0	-8.4	-7.7	-7.2	-7.4	-6.7	-6.5	-5.6	-5.6	-16.5	-11.7
17	-6.0	-5.2	-4.0	-4.3	-4.7	-4.8	-4.6	-3.8	-3.5	-3.4	-3.2	-3.0	-3.6	-3.3	-3.1	-2.9	-2.5	-2.6	-2.7	-2.7	-3.1	-2.7	-2.6	-2.7	-2.5	-6.0	-3.5
18	-2.3	-2.0	-1.5	-1.0	-2.0	-2.1	-1.6	-1.1	-0.2	1.2	1.1	2.0	1.1	1.5	1.5	2.1	2.0	2.5	2.0	2.7	2.0	1.9	1.8	1.7	2.7	-2.3	0.6
19	0.9	1.5	0.7	-0.1	-0.7	-0.7	-1.2	-1.1	-0.3	0.9	0.4	1.0	1.4	2.1	2.3	1.8	1.7	1.9	1.6	1.7	0.3	0.2	-1.0	-1.2	2.3	-1.2	0.6
20	-1.9	-1.4	-0.6	-1.6	-1.6	-0.8	-0.8	1.1	1.4	1.7	2.2	1.8	1.6	1.5	1.8	1.3	1.2	0.7	0.2	0.3	0.1	0.6	0.0	-0.5	2.2	-1.9	0.3
21	0.0	-0.4	0.1	0.3	0.3	-0.5	-0.4	-0.9	-1.0	-0.9	-0.6	-0.2	0.5	0.3	0.9	1.0	1.0	0.7	0.6	0.9	1.5	1.6	1.1	0.9	1.6	-1.0	0.3
22	0.7	0.9	1.4	1.7	2.6	3.0	3.6	3.9	3.6	2.5	3.8	4.0	4.7	4.5	4.4	5.4	5.6	6.3	6.8	5.6	5.9	5.8	4.8	5.2	6.8	0.7	4.0
23	5.4	5.4	5.0	4.4	4.0	4.6	4.1	3.4	4.1	4.0	4.5	5.2	4.8	4.5	4.9	5.5	7.6	8.1	7.9	7.0	7.0	5.6	6.4	5.3	8.1	3.4	5.4
24	4.5	2.6	1.6	1.2	0.6	-2.1	-4.2	-4.4	-4.7	-4.4	-3.8	-3.0	-2.8	-2.3	-1.9	-1.4	-1.1	-1.1	-0.8	-0.3	-0.2	-0.1	-0.7	-2.2	4.5	-4.7	-1.3
25	-3.3	-3.8	-4.3	-5.7	-6.5	-6.8	-7.5	-8.0	-8.6	-8.4	-7.7	-7.5	-7.3	-7.1	-6.8	-6.7	-6.4	-6.1	-6.0	-6.0	-6.3	-6.8	-7.9	-8.8	-3.3	-8.8	-6.7
26	-9.7	-10.3	-10.8	-11.3	-11.8	-12.1	-12.5	-12.0	-11.3	-10.2	-9.5	-8.8	-7.8	-6.9	-6.3	-6.2	-5.8	-5.0	-4.6	-4.5	-4.6	-5.2	-6.2	-6.4	-4.5	-12.5	-8.3
27	-6.2	-6.4	-6.6	-6.8	-7.2	-7.7	-8.1	-8.1	-7.9	-7.8	-7.6	-7.5	-7.2	-6.3	-5.8	-5.9	-6.0	-5.7	-5.2	-5.0	-5.2	-5.5	-5.8	-5.9	-5.0	-8.1	-6.6
28	-6.1	-6.3	-6.2	-6.3	-6.6	-6.5	-6.6	-6.7	-7.2	-6.8	-5.9	-4.9	-4.8	-4.4	-3.5	-3.1	-3.1	-3.0	-3.1	-3.2	-3.9	-4.3	-4.6	-4.9	-3.0	-7.2	-5.1
29	-5.2	-4.7	-4.9	-4.9	-5.1	-4.8	-4.9	-5.0	-4.9	-4.8	-4.5	-3.9	-3.2	-1.9	-1.1	-0.7	-0.2	0.1	-0.1	-0.3	-0.8	-1.4	-2.0	-2.8	0.1	-5.2	-3.0
30	-3.4	-3.9	-4.9	-5.3	-4.9	-5.3	-5.6	-6.0	-6.3	-6.0	-4.9	-4.1	-2.8	-1.7	-1.0	-0.5	-0.4	-1.5	-1.7	-2.1	-2.7	-3.0	-3.2	-3.3	-0.4	-6.3	-3.5
Max.	**5.4**	**5.4**	**5.0**	**4.4**	**4.0**	**4.6**	**4.1**	**3.9**	**4.1**	**4.0**	**4.5**	**5.2**	**4.8**	**4.5**	**4.9**	**5.5**	**7.6**	**8.1**	**7.9**	**7.0**	**7.0**	**5.8**	**6.4**	**5.3**	**8.1**		
Min.	**-13.2**	**-13.6**	**-13.9**	**-14.3**	**-14.6**	**-15.5**	**-16.0**	**-17.0**	**-16.5**	**-15.9**	**-15.6**	**-15.3**	**-13.7**	**-12.4**	**-11.5**	**-11.1**	**-10.7**	**-10.6**	**-11.0**	**-11.6**	**-12.3**	**-12.7**	**-12.9**	**-13.3**		**-17.0**	
Avg.	**-4.8**	**-5.1**	**-5.2**	**-5.5**	**-5.8**	**-6.0**	**-6.3**	**-6.4**	**-6.3**	**-6.1**	**-5.6**	**-5.2**	**-4.8**	**-4.2**	**-3.8**	**-3.5**	**-3.3**	**-3.2**	**-3.2**	**-3.4**	**-3.7**	**-4.0**	**-4.4**	**-4.7**			**-4.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-3.4	-3.5	-3.7	-4.2	-4.5	-4.8	-5.0	-5.5	-5.3	-4.8	-4.2	-3.1	-1.3	-0.1	0.6	1.2	1.4	1.4	1.4	1.2	1.0	0.6	0.1	-0.2	1.4	-5.5	-1.9
2	-0.2	-0.3	-0.5	-1.4	-1.6	-1.7	-1.5	-1.5	-1.2	-0.6	0.1	0.6	1.1	1.9	2.3	2.4	3.9	4.0	4.2	3.2	1.6	0.7	1.1	1.0	4.2	-1.7	0.7
3	1.3	0.7	-0.1	-0.7	-0.8	0.2	0.1	-0.1	0.3	0.1	0.4	1.0	2.0	2.5	2.2	2.7	2.1	1.3	1.3	2.1	2.9	1.8	0.8	1.4	2.9	-0.8	1.1
4	1.1	0.9	1.0	1.0	1.6	1.2	1.4	1.2	1.6	2.0	2.3	2.4	1.9	2.2	2.7	3.3	3.4	3.6	4.0	4.2	4.0	3.0	2.5	2.5	4.2	0.9	2.3
5	2.4	2.4	2.3	2.3	1.8	2.3	2.5	2.1	2.7	3.1	3.2	2.6	3.1	3.7	4.0	4.1	4.8	4.8	4.7	4.4	3.7	3.6	3.5	2.7	4.8	1.8	3.2
6	2.6	2.6	1.9	1.7	2.4	2.2	2.0	1.7	1.5	1.8	2.2	2.4	2.6	2.8	2.8	2.7	2.8	2.8	2.4	2.1	1.6	1.2	0.9	0.9	2.8	0.9	2.1
7	0.9	1.1	1.0	1.2	1.3	1.1	1.1	1.1	1.5	2.0	2.6	2.9	3.0	3.1	3.2	3.1	3.0	3.1	3.1	3.0	2.6	2.5	2.0	1.7	3.2	0.9	2.1
8	2.0	2.0	1.8	1.9	1.5	1.1	0.9	1.6	2.0	2.3	2.5	3.0	2.9	2.7	2.6	2.8	2.9	3.2	3.1	2.9	2.8	2.8	2.9	2.9	3.2	0.9	2.4
9	2.8	2.7	2.3	2.2	2.1	1.7	1.8	1.9	2.3	2.7	2.9	2.9	2.6	2.4	2.4	2.8	2.7	2.4	2.3	2.0	1.9	1.8	2.0	1.8	2.9	1.7	2.3
10	2.5	1.6	1.5	1.1	1.0	1.1	0.9	1.2	1.5	1.7	2.0	2.5	2.9	3.2	3.9	4.0	4.2	4.3	4.2	3.1	3.9	3.2	3.0	3.6	4.3	0.9	2.6
11	3.2	2.9	2.8	2.9	2.8	3.1	3.0	3.0	3.7	3.9	3.2	2.7	2.6	2.7	4.2	4.8	4.7	4.3	5.0	4.6	4.4	4.1	3.4	2.9	5.0	2.6	3.5
12	2.9	2.5	2.4	2.2	2.1	1.8	1.5	1.5	2.0	2.4	3.2	3.8	4.2	3.9	3.7	2.7	2.1	2.2	2.1	2.0	1.5	1.1	0.9	1.1	4.2	0.9	2.3
13	1.0	0.8	0.5	0.4	0.4	0.6	0.4	0.4	0.6	0.8	1.6	2.0	2.8	3.2	3.2	3.4	3.0	2.4	2.3	2.2	1.7	1.4	0.9	0.6	3.4	0.4	1.5
14	0.4	0.8	0.1	-0.6	-0.1	-0.2	0.2	0.9	1.4	1.4	1.9	2.5	3.5	4.6	4.8	4.2	4.5	4.5	4.5	3.5	3.2	3.8	4.1	4.0	4.8	-0.6	2.4
15	4.2	3.8	3.7	3.5	2.9	2.8	2.9	2.9	3.1	3.2	2.7	3.7	4.6	4.8	4.2	3.8	2.9	2.5	2.3	2.3	1.9	1.5	1.2	1.5	4.8	1.2	3.1
16	1.3	1.0	0.9	0.8	0.4	0.2	0.2	0.0	0.1	0.1	0.6	1.1	2.0	2.9	3.3	3.4	3.5	3.4	3.4	3.3	3.1	2.8	2.6	2.1	3.5	0.0	1.8
17	1.4	1.0	1.1	1.1	1.3	1.2	1.3	1.4	1.4	1.9	2.8	3.8	4.9	4.9	5.6	6.0	6.4	6.6	6.3	6.2	5.4	4.1	3.3	3.4	6.6	1.0	3.5
18	2.8	2.5	2.0	2.2	1.4	0.8	1.3	1.5	1.5	1.9	1.7	2.0	2.2	2.4	2.3	2.3	2.7	2.9	3.0	2.6	2.3	1.5	0.9	1.0	3.0	0.8	2.0
19	1.0	1.4	1.3	0.8	0.8	1.0	1.1	0.9	0.8	0.9	1.3	2.3	3.1	3.8	4.1	4.9	4.8	5.1	5.2	5.2	5.1	4.7	4.2	3.9	5.2	0.8	2.8
20	3.7	3.5	3.4	2.1	1.9	2.5	1.8	1.9	2.8	3.8	5.1	6.6	7.7	8.3	9.3	9.4	9.5	9.6	8.8	9.1	8.3	8.2	8.7	8.5	9.6	1.8	6.0
21	8.7	8.2	6.5	5.8	5.6	5.4	4.4	4.1	3.8	4.1	5.1	5.9	6.6	6.8	6.9	7.3	7.2	7.3	7.6	7.3	6.3	5.5	4.9	4.6	8.7	3.8	6.1
22	4.7	4.3	3.8	3.3	2.7	2.7	1.6	2.4	3.1	3.3	4.0	4.7	5.9	7.0	7.7	7.9	6.9	6.5	5.3	5.0	4.3	3.6	3.1	2.8	7.9	1.6	4.4
23	2.5	1.8	1.3	1.3	1.1	1.6	1.9	1.8	2.3	2.5	2.8	3.1	2.9	3.0	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.2	3.2	2.9	3.3	1.1	2.6
24	2.6	2.7	2.5	2.3	2.3	2.1	2.1	2.4	2.6	2.9	2.8	3.3	3.8	4.0	4.5	5.2	5.2	4.9	4.3	3.1	4.2	3.7	3.0	2.9	5.2	2.1	3.3
25	2.5	2.3	1.7	1.6	1.7	1.3	1.4	1.7	1.6	2.0	2.8	3.1	2.8	2.2	2.4	2.9	3.6	3.8	3.3	3.4	3.1	2.8	2.5	2.4	3.8	1.3	2.5
26	1.9	1.9	1.5	1.4	1.3	1.5	1.5	1.3	1.6	2.1	2.6	3.1	3.6	4.1	4.6	3.3	4.0	4.7	4.8	4.7	4.5	4.2	3.9	3.4	4.8	1.3	3.0
27	3.3	2.3	1.8	1.6	1.3	0.8	1.4	1.8	2.3	3.3	4.0	5.4	6.4	7.3	8.1	8.8	9.2	9.6	9.8	9.5	8.9	7.9	6.4	5.3	9.8	0.8	5.3
28	4.9	3.8	4.5	4.3	4.6	5.3	4.7	5.1	5.1	5.9	7.1	7.7	8.4	9.1	9.9	10.8	11.2	10.8	10.1	9.5	9.4	9.2	8.4	7.9	11.2	3.8	7.4
29	6.9	6.8	6.8	6.4	5.1	4.5	5.1	5.3	5.7	6.5	7.7	8.8	9.2	9.9	10.5	11.2	11.8	11.9	12.2	12.3	12.0	11.2	9.7	9.5	12.3	4.5	8.6
30	8.7	7.1	7.8	7.3	7.9	6.7	6.6	6.9	7.3	8.0	8.5	9.4	9.7	9.8	10.2	10.4	10.0	8.7	8.2	7.6	6.6	5.8	5.4	4.9	10.4	4.9	7.9
31	4.7	4.5	4.2	4.1	3.9	3.8	4.1	4.0	3.9	4.1	5.4	5.6	6.0	6.2	6.1	6.2	6.2	6.0	5.5	4.9	4.1	4.0	3.6	3.0	6.2	3.0	4.8
Max.	**8.7**	**8.2**	**7.8**	**7.3**	**7.9**	**6.7**	**6.6**	**6.9**	**7.3**	**8.0**	**8.5**	**9.4**	**9.7**	**9.9**	**10.5**	**11.2**	**11.8**	**11.9**	**12.2**	**12.3**	**12.0**	**11.2**	**9.7**	**9.5**	**12.3**		
Min.	**-3.4**	**-3.5**	**-3.7**	**-4.2**	**-4.5**	**-4.8**	**-5.0**	**-5.5**	**-5.3**	**-4.8**	**-4.2**	**-3.1**	**-1.3**	**-0.1**	**0.6**	**1.2**	**1.4**	**1.3**	**1.3**	**1.2**	**1.0**	**0.6**	**0.1**	**-0.2**		**-5.5**	
Avg.	**2.8**	**2.5**	**2.2**	**1.9**	**1.8**	**1.7**	**1.7**	**1.8**	**2.0**	**2.4**	**2.9**	**3.5**	**4.0**	**4.4**	**4.7**	**4.9**	**5.0**	**4.9**	**4.8**	**4.5**	**4.2**	**3.7**	**3.3**	**3.1**			**3.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.2	3.6	3.5	4.3	5.2	5.1	5.1	5.0	5.0	4.9	5.6	7.0	7.4	6.6	7.1	7.7	7.2	6.1	5.9	5.6	5.5	4.9	4.8	3.7	7.7	3.2	5.4
2	4.0	4.6	4.7	4.8	5.0	4.6	4.3	5.0	5.5	6.2	6.7	7.1	7.9	8.8	9.3	9.4	9.5	9.0	8.5	8.2	8.3	7.8	6.5	6.8	9.5	4.0	6.8
3	6.3	5.9	5.8	5.6	5.3	5.4	5.6	5.5	5.4	6.5	7.5	8.3	8.1	8.7	9.2	9.1	7.7	7.9	7.3	6.5	5.4	4.5	3.8	3.4	9.2	3.4	6.4
4	3.2	3.0	2.8	2.6	2.3	2.3	2.3	3.0	4.2	4.8	5.4	6.2	6.5	6.8	7.3	7.6	8.0	7.8	7.6	7.3	6.7	5.8	4.9	4.3	8.0	2.3	5.1
5	3.7	3.7	3.2	2.8	2.6	2.7	2.9	3.2	3.3	3.9	3.9	3.8	3.9	4.8	5.6	5.3	5.4	5.4	4.7	4.8	4.6	4.6	4.7	3.8	5.6	2.6	4.1
6	3.8	3.5	3.6	3.9	3.6	3.7	3.9	3.9	3.9	4.5	5.8	7.5	8.7	9.5	10.1	10.8	11.6	10.9	11.0	9.4	10.3	10.1	8.5	7.4	11.6	3.5	7.1
7	7.0	6.6	6.3	5.9	5.9	5.9	6.6	6.9	8.1	9.0	10.2	10.9	11.4	12.5	13.0	13.6	14.1	14.1	14.3	13.0	12.3	10.4	8.8	7.5	14.3	5.9	9.8
8	7.6	6.4	5.8	4.6	4.1	4.1	3.7	4.5	3.9	5.5	6.5	7.0	6.9	7.0	7.3	7.6	7.5	7.5	7.5	7.1	7.3	6.1	4.0	3.0	7.6	3.0	5.9
9	2.1	1.8	1.6	1.1	0.8	0.7	0.6	0.7	0.8	1.3	2.2	2.9	3.2	3.6	4.2	4.6	5.5	4.9	5.5	5.6	5.4	5.1	4.4	4.1	5.6	0.6	3.0
10	4.0	3.8	3.3	3.1	2.8	2.6	1.7	2.2	2.4	2.9	3.5	3.9	4.4	5.4	6.2	6.7	7.0	7.0	6.5	5.9	5.3	4.7	4.8	4.8	7.0	1.7	4.4
11	4.5	4.1	3.7	3.4	3.4	3.3	2.8	2.9	3.0	3.7	3.9	4.1	4.3	4.5	4.6	5.2	5.5	5.6	5.7	5.7	5.5	4.8	4.4	3.7	5.7	2.8	4.3
12	3.2	3.3	3.0	2.6	1.9	1.5	1.1	1.4	2.2	3.2	3.8	4.4	4.7	4.6	4.8	4.9	4.5	4.1	3.5	3.1	2.8	2.5	2.4	2.2	4.9	1.1	3.2
13	2.1	2.1	2.5	2.7	3.2	3.6	3.9	4.1	4.7	5.2	5.5	6.3	7.8	8.8	9.4	10.3	11.3	11.9	12.8	13.4	13.1	12.0	11.4	10.7	13.4	2.1	7.5
14	9.9	8.8	8.3	6.2	5.3	4.4	4.4	4.8	4.6	6.7	8.0	7.9	9.3	10.4	12.4	13.7	14.1	13.7	12.8	11.3	9.5	9.9	8.6	8.6	14.1	4.4	8.9
15	8.4	7.6	6.3	6.4	4.2	3.5	3.2	4.0	4.2	5.7	6.1	7.5	7.9	8.9	11.2	10.9	10.1	8.6	9.7	9.6	8.2	7.4	7.4	7.1	11.2	3.2	7.3
16	6.7	6.4	5.9	5.6	5.5	5.2	5.4	5.9	6.6	7.1	7.6	8.4	9.2	9.9	11.0	11.3	11.7	12.3	12.3	12.6	12.3	11.8	11.3	10.8	12.6	5.2	8.9
17	10.2	10.2	10.2	10.4	10.4	10.2	10.1	9.9	11.0	12.5	12.9	13.4	13.5	14.6	15.6	16.2	16.3	16.5	16.6	16.0	15.0	13.6	12.0	10.1	16.6	9.9	12.8
18	9.3	9.7	8.8	8.9	8.7	8.6	7.8	7.9	9.1	10.4	10.7	10.8	11.6	12.2	11.9	13.0	13.4	13.3	13.0	13.0	12.4	12.0	10.6	9.2	13.4	7.8	10.7
19	9.1	8.9	8.8	8.5	8.0	6.8	6.3	7.4	9.0	9.5	9.7	9.9	10.2	11.0	12.1	12.6	13.0	13.1	13.5	13.4	12.8	11.9	11.0	10.7	13.5	6.3	10.3
20	9.5	8.8	7.8	7.2	7.0	6.5	6.5	7.4	8.5	9.2	9.4	10.0	10.8	11.6	12.1	12.3	12.1	11.8	11.4	10.5	9.2	8.4	7.3	6.6	12.3	6.5	9.3
21	6.4	6.1	5.9	6.0	6.0	5.4	5.6	6.2	7.0	7.4	8.2	9.0	9.5	9.7	10.1	10.7	11.6	12.4	12.9	12.7	12.0	10.7	8.8	8.2	12.9	5.4	8.7
22	8.1	7.5	7.6	7.7	7.0	7.0	7.6	8.2	8.5	9.5	10.2	10.5	10.6	11.0	11.4	10.7	10.2	9.9	9.3	8.9	7.8	7.2	6.5	6.1	11.4	6.1	8.7
23	5.9	5.8	5.6	5.5	5.0	5.0	5.3	5.6	6.3	7.1	7.8	8.5	8.9	9.3	9.7	10.0	10.7	11.1	11.1	11.0	10.3	9.4	8.1	6.9	11.1	5.0	7.9
24	6.4	5.8	5.2	4.5	4.6	4.8	5.1	5.5	6.1	7.1	7.4	8.0	8.0	7.7	8.0	7.9	8.1	7.8	7.6	7.6	7.6	7.4	7.3	7.1	8.1	4.5	6.8
25	7.0	7.2	7.2	6.9	6.3	5.9	6.4	7.0	7.2	7.8	8.2	9.2	9.9	10.5	10.9	10.9	10.5	10.5	9.9	9.4	8.6	8.4	8.5	7.8	10.9	5.9	8.4
26	7.4	6.9	6.5	6.5	6.4	6.3	6.8	7.4	8.2	8.8	9.7	10.4	11.3	10.1	9.8	10.5	10.2	10.1	10.0	10.1	10.3	10.2	9.5	8.8	11.3	6.3	8.9
27	7.6	7.9	8.5	7.7	7.2	6.6	7.1	7.2	7.4	8.1	7.8	8.7	9.7	10.8	10.7	10.7	10.9	11.1	10.7	10.3	9.1	8.7	8.2	7.4	11.1	6.6	8.8
28	6.9	5.8	5.2	5.1	6.4	6.1	6.4	6.6	7.2	8.2	7.9	7.6	8.5	9.5	10.3	9.9	8.7	9.8	9.9	10.0	9.9	9.1	8.1	8.0	10.3	5.1	8.0
29	7.5	6.9	6.6	6.0	5.9	6.2	6.1	5.9	5.8	6.4	6.9	7.7	8.4	8.9	9.6	10.2	10.5	10.5	10.2	9.7	8.7	7.6	6.8	6.1	10.5	5.8	7.7
30	5.5	5.4	5.3	5.3	5.2	5.4	5.2	6.0	7.0	7.4	8.2	8.8	9.4	9.4	10.1	10.9	11.0	10.5	11.0	11.3	10.7	11.1	10.8	10.1	11.3	5.2	8.4
Max.	**10.2**	**10.2**	**10.2**	**10.4**	**10.4**	**10.2**	**10.1**	**9.9**	**11.0**	**12.5**	**12.9**	**13.4**	**13.5**	**14.6**	**15.6**	**16.2**	**16.3**	**16.5**	**16.6**	**16.0**	**15.0**	**13.6**	**12.0**	**10.8**	**16.6**		
Min.	**2.1**	**1.8**	**1.6**	**1.1**	**0.8**	**0.7**	**0.6**	**0.7**	**0.8**	**1.3**	**2.2**	**2.9**	**3.2**	**3.6**	**4.2**	**4.6**	**4.5**	**4.1**	**3.5**	**3.1**	**2.8**	**2.5**	**2.4**	**2.2**		**0.6**	
Avg.	**6.2**	**5.9**	**5.7**	**5.4**	**5.2**	**5.0**	**5.0**	**5.4**	**5.9**	**6.7**	**7.2**	**7.9**	**8.4**	**8.9**	**9.5**	**9.8**	**9.9**	**9.8**	**9.8**	**9.4**	**8.9**	**8.3**	**7.5**	**6.8**			**7.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.6	9.2	9.6	9.9	9.0	7.7	7.0	7.6	8.5	9.5	10.8	11.5	12.0	12.6	13.2	13.2	13.1	12.6	11.8	11.2	10.2	9.3	8.7	8.3	13.2	7.0	10.3
2	7.7	7.3	6.8	6.4	6.2	6.2	6.1	6.2	6.3	6.8	8.0	9.1	9.9	10.6	10.7	11.3	11.9	12.2	11.7	9.8	10.0	9.3	8.5	7.7	12.2	6.1	8.6
3	8.0	7.5	7.7	8.8	9.4	8.7	8.8	8.9	8.6	8.0	6.8	7.5	8.0	8.8	9.2	10.0	10.1	9.6	9.2	9.3	9.0	9.0	8.7	8.4	10.1	6.8	8.7
4	8.0	7.7	7.4	7.6	7.9	8.0	7.7	8.2	9.0	9.6	10.5	11.4	12.4	13.3	13.4	12.3	13.1	13.7	12.4	10.7	9.4	10.0	9.3	10.2	13.7	7.4	10.1
5	10.1	10.3	10.6	11.0	11.5	11.0	10.8	11.0	10.8	11.9	12.6	13.7	14.9	15.9	16.2	15.5	14.5	14.4	14.8	15.0	14.4	13.4	13.4	12.5	16.2	10.1	12.9
6	12.8	12.4	11.3	10.5	10.4	11.2	11.6	12.4	12.8	14.9	16.4	16.3	16.6	16.0	15.3	14.3	13.6	13.8	12.8	11.5	10.9	10.5	10.4	9.8	16.6	9.8	12.9
7	9.2	8.8	8.5	8.2	8.2	8.5	8.2	8.2	7.2	7.0	7.4	7.0	7.2	7.5	7.1	7.1	7.3	7.8	8.5	8.5	8.4	8.2	8.0	7.8	9.2	7.0	7.9
8	7.4	7.3	7.1	6.9	6.6	7.2	7.2	7.3	7.3	7.5	7.9	8.1	8.1	8.7	9.1	9.6	9.6	9.5	9.5	9.5	9.5	9.7	9.4	9.5	9.7	6.6	8.3
9	8.6	8.5	8.8	9.3	9.4	9.5	9.5	10.1	10.7	11.4	10.8	11.6	12.7	13.4	13.8	14.3	14.3	13.5	12.2	11.5	10.7	10.3	9.8	9.3	14.3	8.5	11.0
10	8.8	8.3	8.2	8.2	8.0	8.0	7.9	8.0	8.3	9.3	9.8	10.7	10.7	11.1	11.8	12.3	12.5	12.6	12.3	12.0	11.1	10.4	9.4	8.4	12.6	7.9	9.9
11	7.7	7.5	7.5	7.4	7.2	6.9	6.9	7.0	7.0	8.1	8.8	9.1	10.1	10.6	11.1	11.5	11.9	12.0	11.7	11.4	11.0	10.0	8.8	8.4	12.0	6.9	9.1
12	8.0	7.8	7.1	6.1	5.7	6.3	6.8	7.1	8.1	8.7	9.4	9.6	9.6	10.0	10.2	10.0	9.7	9.5	8.4	7.8	7.6	7.4	7.2	7.2	10.2	5.7	8.1
13	7.3	7.4	7.3	7.1	7.1	6.9	6.8	6.9	7.1	7.1	7.4	7.8	8.1	8.5	8.9	9.4	9.4	9.7	10.1	10.0	9.7	9.2	8.8	8.5	10.1	6.8	8.2
14	8.3	8.2	8.1	8.2	8.2	8.1	8.5	8.9	9.3	9.5	9.8	10.9	11.2	12.0	13.1	13.3	13.1	13.6	13.9	14.1	13.4	12.8	11.9	11.0	14.1	8.1	10.8
15	10.1	9.7	9.4	9.4	9.3	9.2	9.1	9.1	9.7	10.9	11.4	12.1	12.8	13.7	14.4	14.5	14.0	13.0	12.1	11.0	10.4	9.9	9.7	9.6	14.5	9.1	11.0
16	9.8	9.7	9.7	9.5	9.3	9.2	9.0	9.1	9.1	8.9	8.5	8.4	9.0	9.6	10.4	9.9	8.6	8.2	8.2	8.0	7.8	7.7	7.6	7.4	10.4	7.4	8.9
17	7.3	7.4	6.0	4.6	3.5	3.4	3.4	3.6	4.0	4.4	3.9	4.3	5.7	6.4	6.3	6.7	7.2	8.2	7.5	7.6	7.2	6.7	6.2	5.8	8.2	3.4	5.7
18	5.6	5.2	4.6	4.1	4.0	3.8	3.8	4.0	4.3	4.5	5.5	5.4	5.7	6.1	6.4	7.0	7.5	7.6	7.7	7.2	7.1	7.3	7.1	6.9	7.7	3.8	5.8
19	6.7	6.8	6.8	6.4	6.1	6.1	6.4	6.7	6.7	7.0	7.9	9.0	10.1	10.5	11.7	10.9	11.0	10.8	10.5	9.7	9.8	9.7	9.2	9.3	11.7	6.1	8.6
20	9.3	9.3	9.1	8.6	9.2	9.0	9.1	9.3	8.7	7.8	7.2	6.4	7.2	7.7	7.4	6.9	6.2	5.8	5.3	5.2	5.1	5.2	5.4	5.5	9.3	5.1	7.3
21	5.5	5.0	4.7	4.7	4.8	4.9	4.9	5.0	5.1	5.4	5.9	6.6	7.2	7.8	8.4	9.4	10.6	10.8	9.8	10.8	10.6	9.7	8.5	7.5	10.8	4.7	7.2
22	7.1	6.9	6.6	6.3	5.9	5.7	6.0	6.4	6.3	6.7	7.0	6.9	6.3	5.9	6.2	6.2	6.2	6.2	6.2	6.2	6.1	5.9	5.7	5.5	7.1	5.5	6.3
23	5.5	5.7	5.4	5.3	5.3	5.2	5.3	5.5	5.8	6.2	6.3	6.7	7.4	7.6	7.6	7.7	9.0	9.2	8.9	7.9	7.0	6.4	6.0	5.6	9.2	5.2	6.6
24	5.1	5.0	5.1	5.2	5.1	5.0	5.6	6.1	6.4	6.6	7.1	7.8	8.6	9.6	11.0	11.8	12.9	13.1	12.8	12.9	12.4	12.9	12.9	11.4	13.1	5.0	8.9
25	10.6	9.4	9.0	9.2	8.6	8.2	7.8	8.6	9.2	10.2	11.3	12.8	14.3	15.4	16.3	16.8	17.3	17.7	17.9	17.8	17.5	16.5	15.2	13.7	17.9	7.8	13.0
26	12.4	11.3	11.8	11.8	10.6	9.2	7.9	8.0	8.0	8.4	8.8	9.3	8.5	8.8	9.2	9.2	9.3	9.7	10.1	10.5	10.1	8.8	8.4	8.0	12.4	7.9	9.5
27	7.7	7.3	7.1	6.9	6.6	6.8	7.0	7.1	6.9	7.0	7.5	7.5	7.8	8.3	8.9	8.8	8.9	9.0	9.4	9.5	9.0	8.3	7.8	7.9	9.5	6.6	7.9
28	8.0	7.7	7.9	8.7	8.1	8.3	8.8	9.0	10.1	10.9	11.4	12.2	12.8	13.7	13.9	14.5	14.6	14.6	14.9	14.7	14.4	13.9	13.0	11.1	14.9	7.7	11.5
29	10.6	9.9	9.4	8.5	8.0	8.2	8.0	8.2	8.7	9.9	11.2	12.2	13.1	13.7	14.9	16.4	17.1	17.2	16.7	17.0	16.1	14.8	12.8	11.5	17.2	8.0	12.3
30	10.4	9.9	9.5	9.4	9.2	9.5	9.7	9.8	10.2	11.4	11.6	12.3	13.7	15.0	15.7	15.9	15.6	15.4	14.9	14.1	13.4	12.5	11.2	10.2	15.9	9.2	12.1
31	9.2	8.9	8.7	8.7	8.2	7.6	8.0	8.1	9.2	10.8	12.3	14.2	15.3	16.5	17.2	17.5	18.2	18.7	19.0	18.8	18.3	17.4	15.5	15.0	19.0	7.6	13.4
Max.	**12.8**	**12.4**	**11.8**	**11.8**	**11.5**	**11.2**	**11.6**	**12.4**	**12.8**	**14.9**	**16.4**	**16.3**	**16.6**	**16.5**	**17.2**	**17.5**	**18.2**	**18.7**	**19.0**	**18.8**	**18.3**	**17.4**	**15.5**	**15.0**	**19.0**		
Min.	**5.1**	**5.0**	**4.6**	**4.1**	**3.5**	**3.4**	**3.4**	**3.6**	**4.0**	**4.4**	**3.9**	**4.3**	**5.7**	**5.9**	**6.2**	**6.2**	**6.2**	**5.8**	**5.3**	**5.2**	**5.1**	**5.2**	**5.4**	**5.5**		**3.4**	
Avg.	**8.5**	**8.2**	**8.0**	**7.8**	**7.6**	**7.5**	**7.5**	**7.8**	**8.1**	**8.6**	**9.1**	**9.6**	**10.2**	**10.8**	**11.3**	**11.4**	**11.6**	**11.6**	**11.3**	**11.0**	**10.6**	**10.1**	**9.5**	**9.0**			**9.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.7	14.2	11.9	12.8	12.4	11.6	10.3	8.5	8.7	9.4	10.5	12.1	14.5	16.0	17.0	17.7	17.6	18.0	17.7	17.0	15.2	12.6	10.9	10.0	18.0	8.5	13.4
2	9.5	9.1	9.4	8.8	9.1	8.8	8.6	8.6	8.8	9.2	9.3	9.5	9.7	10.2	10.7	10.7	11.1	10.9	10.8	11.3	10.6	10.4	10.5	10.3	11.3	8.6	9.8
3	10.2	10.6	10.2	10.0	9.5	8.8	8.5	8.6	8.7	9.7	10.6	11.9	13.3	13.2	13.5	14.2	14.1	14.1	13.5	12.7	11.7	10.3	9.2	8.6	14.2	8.5	11.1
4	8.3	8.2	8.2	8.0	7.8	7.9	8.1	8.3	8.5	8.9	9.6	10.3	10.2	10.7	11.2	11.6	11.9	12.7	12.9	12.1	11.1	9.6	8.7	8.2	12.9	7.8	9.7
5	8.0	7.8	7.5	8.2	7.5	7.5	8.0	8.4	8.8	8.9	10.4	12.2	12.4	13.2	13.5	13.9	14.4	14.7	14.3	14.2	13.6	12.7	10.8	10.0	14.7	7.5	10.9
6	9.6	8.0	6.8	6.9	8.2	8.6	8.3	8.1	8.8	9.7	10.6	11.7	12.8	14.0	14.2	14.7	15.1	14.8	14.1	13.5	13.2	12.5	11.5	10.6	15.1	6.8	11.1
7	9.9	9.8	9.5	9.0	8.1	7.8	7.5	7.8	8.4	9.2	10.0	11.0	11.9	12.8	13.3	13.5	14.2	14.1	13.6	13.8	13.4	12.0	10.7	10.0	14.2	7.5	10.9
8	9.5	9.2	8.3	8.9	7.5	8.1	7.7	6.8	7.7	8.6	9.7	10.8	12.0	13.3	14.2	14.9	15.5	15.7	15.9	15.7	15.4	13.7	12.1	11.6	15.9	6.8	11.4
9	11.4	10.0	10.1	9.1	9.1	8.9	8.9	8.6	9.3	9.8	10.6	12.1	13.7	14.4	15.3	15.6	16.2	16.0	15.7	15.7	14.9	13.3	11.8	12.0	16.2	8.6	12.2
10	11.7	11.8	11.5	11.9	11.6	11.0	10.1	9.2	9.1	9.9	12.1	13.5	14.4	15.0	15.1	14.8	15.9	15.3	14.3	13.6	13.2	11.3	9.9	9.7	15.9	9.1	12.3
11	8.9	8.0	8.4	9.2	9.1	8.7	7.9	8.3	9.3	9.9	10.4	10.9	11.8	12.3	12.3	12.4	12.5	12.5	12.4	11.9	11.0	10.1	9.4	8.9	12.5	7.9	10.3
12	9.9	9.1	9.5	9.5	9.1	8.9	9.1	9.1	8.9	10.0	11.2	12.1	13.6	14.3	15.3	15.6	16.1	15.9	13.9	13.1	12.5	12.9	11.8	11.2	16.1	8.9	11.8
13	11.0	10.3	10.1	10.2	9.9	10.3	10.5	10.4	10.4	10.8	11.1	11.1	11.6	12.1	12.8	12.5	13.1	12.6	10.9	10.5	10.2	9.7	10.0	9.8	13.1	9.7	10.9
14	9.3	9.0	9.0	9.3	9.1	9.2	9.6	9.7	10.1	10.3	10.1	10.4	10.2	10.5	10.8	11.0	11.3	11.3	10.9	10.7	10.3	10.0	10.0	9.7	11.3	9.0	10.1
15	8.9	8.4	7.9	7.8	7.4	7.3	7.2	6.3	6.2	6.5	6.9	7.1	7.8	8.4	9.1	9.7	10.0	10.2	10.6	10.1	9.7	9.6	9.5	9.3	10.6	6.2	8.4
16	9.1	9.1	9.1	9.0	8.8	8.8	8.8	8.6	8.6	8.6	8.9	9.2	9.5	10.4	11.3	11.5	11.4	11.4	10.8	10.4	9.8	8.7	8.1	7.5	11.5	7.5	9.5
17	7.0	6.6	7.1	6.3	6.3	6.1	6.1	6.5	7.6	8.5	9.0	9.5	10.1	10.4	10.8	10.9	10.6	10.1	9.7	9.3	8.8	8.5	8.2	7.7	10.9	6.1	8.4
18	7.3	7.1	7.3	6.7	6.1	5.6	6.5	6.7	7.3	8.3	9.6	11.1	11.8	12.1	12.8	13.2	13.3	13.3	13.5	13.6	12.5	11.7	10.7	10.4	13.6	5.6	9.9
19	10.7	10.9	10.4	10.2	10.2	9.7	8.7	7.4	9.5	8.8	9.6	10.9	12.2	12.7	13.2	13.6	14.0	14.1	13.8	13.4	10.6	10.8	10.6	10.9	14.1	7.4	11.1
20	10.6	9.8	9.6	9.8	9.9	9.9	9.1	9.4	10.0	10.7	10.6	10.2	10.9	11.4	11.7	11.9	12.3	12.8	12.6	12.2	12.2	11.4	10.7	10.6	12.8	9.1	10.8
21	10.5	10.3	10.1	10.3	10.8	10.8	10.2	9.9	9.4	9.9	10.5	10.3	10.8	11.0	11.2	11.3	11.3	12.1	12.4	11.3	10.2	9.3	9.0	8.5	12.4	8.5	10.5
22	8.5	7.9	7.3	7.1	7.5	7.4	7.5	7.6	7.7	8.1	8.4	8.8	9.5	10.0	9.8	10.5	11.8	11.1	11.1	11.5	11.1	10.5	9.5	9.1	11.8	7.1	9.1
23	9.2	9.4	9.4	9.1	9.0	8.9	9.1	9.6	10.3	10.9	11.3	11.4	12.2	13.2	14.2	15.0	15.3	15.7	14.8	11.9	10.9	10.6	10.3	10.4	15.7	8.9	11.3
24	10.1	9.9	9.5	9.4	9.4	9.5	9.0	9.0	8.9	8.9	8.9	9.5	10.2	11.4	12.8	13.6	14.4	15.3	15.0	14.4	14.3	13.4	12.2	11.5	15.3	8.9	11.3
25	12.5	12.4	11.5	9.8	8.4	8.3	6.8	6.1	6.1	6.8	8.0	8.8	9.2	9.2	9.3	9.7	10.4	11.7	11.7	11.2	10.4	9.5	8.9	8.8	12.5	6.1	9.4
26	9.0	8.7	8.8	9.0	9.0	8.9	8.7	8.7	8.7	8.8	9.1	9.1	9.2	9.6	10.4	10.7	10.9	11.5	11.3	10.7	10.2	9.6	9.4	9.4	11.5	8.7	9.6
27	8.6	8.6	8.5	8.4	8.3	8.2	8.1	8.0	8.0	7.8	7.8	8.1	8.2	8.5	9.1	10.0	10.3	10.5	10.6	10.5	10.3	9.6	9.3	9.3	10.6	7.8	8.9
28	8.9	8.6	8.7	8.3	8.2	8.4	9.0	7.6	7.6	8.1	8.7	9.1	9.7	10.6	11.3	11.9	12.1	11.1	10.6	10.2	10.3	9.0	7.9	7.9	12.1	7.6	9.3
29	6.6	6.8	7.2	6.5	6.9	5.8	6.1	6.9	7.5	8.4	9.8	10.9	11.5	11.7	12.0	11.8	12.3	12.4	11.7	10.4	9.6	8.8	7.8	6.6	12.4	5.8	9.0
30	6.5	6.9	6.3	6.0	6.4	6.2	6.4	6.2	6.1	6.7	7.9	8.8	9.4	9.9	10.8	11.5	11.7	12.1	11.7	11.3	10.3	9.7	9.7	9.4	12.1	6.0	8.7
31	8.9	8.6	8.4	8.7	8.3	8.0	8.0	7.9	7.9	7.8	7.8	8.5	9.0	9.7	10.1	10.1	10.6	10.9	10.8	11.1	10.4	9.2	9.3	8.9	11.1	7.8	9.1
Max.	**14.7**	**14.2**	**11.9**	**12.8**	**12.4**	**11.6**	**10.5**	**10.4**	**10.4**	**10.9**	**12.1**	**13.5**	**14.5**	**16.0**	**17.0**	**17.7**	**17.6**	**18.0**	**17.7**	**17.0**	**15.4**	**13.7**	**12.2**	**12.0**	**18.0**		
Min.	**6.5**	**6.6**	**6.3**	**6.0**	**6.1**	**5.6**	**6.1**	**6.1**	**6.1**	**6.5**	**6.9**	**7.1**	**7.8**	**8.4**	**9.1**	**9.7**	**10.0**	**10.1**	**9.7**	**9.3**	**8.8**	**8.5**	**7.8**	**6.6**		**5.6**	
Avg.	**9.5**	**9.2**	**9.0**	**8.8**	**8.7**	**8.5**	**8.3**	**8.2**	**8.5**	**9.0**	**9.6**	**10.3**	**11.1**	**11.7**	**12.2**	**12.6**	**13.0**	**13.0**	**12.7**	**12.2**	**11.6**	**10.7**	**9.9**	**9.6**			**10.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.4	9.1	8.9	8.6	8.6	9.1	8.2	8.1	8.5	9.8	11.6	11.9	12.5	12.2	11.7	12.2	11.8	10.9	10.2	9.8	9.0	8.3	8.1	8.3	12.5	8.1	9.9
2	8.3	8.4	8.2	8.1	7.9	7.7	8.0	7.6	7.7	7.6	7.6	7.6	8.2	8.6	9.3	9.4	9.4	9.5	9.3	8.8	8.0	7.5	7.1	7.0	9.5	7.0	8.2
3	6.7	6.5	6.2	5.9	6.1	6.3	6.4	6.0	6.2	6.4	6.9	7.4	7.8	7.8	8.3	8.6	8.7	9.2	9.5	9.1	8.4	7.8	7.9	7.7	9.5	5.9	7.4
4	7.5	7.5	7.3	7.1	6.9	6.8	6.6	6.1	6.3	6.4	7.1	7.7	8.5	9.2	9.6	9.6	9.8	10.4	10.6	10.3	9.8	8.7	7.7	7.2	10.6	6.1	8.1
5	7.4	6.9	6.8	6.8	7.4	7.3	6.8	6.9	7.3	7.8	9.1	10.0	10.8	10.7	9.9	10.5	11.3	10.8	10.1	8.7	8.9	8.3	8.5	8.2	11.3	6.8	8.6
6	6.7	6.5	6.5	6.7	6.3	6.5	7.0	7.2	6.9	7.3	7.8	8.7	8.7	8.2	8.0	8.0	7.8	7.9	8.2	8.3	7.9	7.7	8.0	7.5	8.7	6.3	7.5
7	7.6	7.9	8.8	9.7	9.0	8.8	8.5	7.9	8.1	8.4	8.5	8.2	8.0	8.0	7.9	8.1	8.7	8.8	8.4	7.8	7.6	7.5	7.7	7.6	9.7	7.5	8.2
8	7.8	7.5	7.7	7.7	7.8	7.3	7.0	7.2	7.2	7.3	8.0	8.4	9.0	9.2	8.8	8.6	8.4	7.8	7.3	7.3	6.9	7.3	7.7	8.0	9.2	6.9	7.8
9	8.1	8.4	8.5	8.0	7.2	6.9	7.1	7.6	7.3	7.4	7.7	8.1	8.5	8.6	8.8	8.8	8.8	8.4	8.5	8.5	8.2	7.9	7.8	7.9	8.8	6.9	8.0
10	7.7	7.6	7.6	7.4	7.3	7.2	7.1	7.2	7.1	7.2	7.7	7.8	8.5	8.8	9.3	10.2	10.3	10.5	9.9	9.5	9.1	9.1	8.8	8.8	10.5	7.1	8.4
11	8.3	7.3	6.9	6.6	6.5	6.7	6.6	6.7	7.0	7.3	7.1	7.2	7.3	7.4	7.9	9.0	10.0	9.9	9.8	9.5	9.1	8.5	8.1	8.1	10.0	6.5	7.9
12	7.9	8.0	8.2	8.0	7.5	6.9	6.5	6.4	6.4	6.8	7.2	7.9	8.4	9.0	8.8	8.5	8.6	8.3	8.5	8.5	8.4	8.4	8.4	8.5	9.0	6.4	7.9
13	8.6	8.5	8.5	8.4	8.1	7.9	7.7	7.8	7.9	7.9	7.8	7.3	7.2	7.0	6.8	6.7	6.8	6.8	6.7	6.6	6.8	7.0	7.6	7.4	8.6	6.6	7.5
14	7.4	7.1	6.9	6.9	6.9	6.4	6.4	6.3	6.3	6.3	6.7	6.7	6.8	7.4	7.4	7.6	8.2	8.0	7.9	7.7	7.2	7.1	7.2	7.2	8.2	6.3	7.1
15	6.9	6.9	7.0	7.2	7.0	7.0	7.0	7.0	7.1	7.5	7.7	8.2	8.5	8.6	8.9	8.7	8.3	8.3	7.9	7.6	7.2	7.2	6.9	6.5	8.9	6.5	7.5
16	7.0	6.9	6.1	6.1	6.3	6.0	5.9	6.0	5.4	5.5	6.7	7.5	8.5	8.1	8.5	9.0	8.2	7.9	8.1	7.8	7.4	7.6	7.1	6.6	9.0	5.4	7.1
17	6.7	6.3	6.2	5.7	5.2	5.1	4.8	4.6	4.5	4.4	4.5	5.3	5.8	6.6	6.7	6.7	6.7	6.5	5.8	5.2	4.7	4.7	4.6	4.4	6.7	4.4	5.5
18	4.4	4.5	4.6	4.5	4.6	4.4	4.3	4.3	4.4	4.6	5.1	5.5	6.1	6.1	6.1	5.7	6.1	6.0	5.9	5.8	5.5	5.4	5.2	4.9	6.1	4.3	5.2
19	4.6	4.3	4.4	4.2	4.2	4.2	4.3	4.4	4.3	4.7	5.0	5.3	5.5	5.7	5.9	4.8	4.9	5.0	4.9	4.7	4.5	4.4	4.2	4.2	5.9	4.2	4.7
20	4.1	4.3	4.3	4.0	3.5	3.1	2.8	2.5	2.5	2.4	2.7	2.1	2.0	2.8	4.0	4.1	4.9	4.9	4.7	3.8	3.3	3.2	3.6	3.7	4.9	2.0	3.5
21	2.9	2.1	3.0	3.1	2.8	3.0	3.4	3.3	2.8	2.8	3.4	4.2	4.9	5.0	5.4	5.9	5.7	5.5	4.9	3.2	2.1	1.6	1.4	1.5	5.9	1.4	3.5
22	1.6	1.0	1.2	1.5	1.4	1.3	1.4	1.4	1.1	1.6	2.9	4.3	5.0	5.3	5.6	5.2	4.4	4.2	3.7	3.1	2.9	3.0	3.1	3.1	5.6	1.0	2.9
23	3.0	3.6	3.7	5.3	6.0	5.9	5.9	5.9	5.8	5.8	5.7	5.8	5.7	5.8	4.9	5.3	5.3	5.2	5.4	5.1	4.9	4.7	4.8	5.0	6.0	3.0	5.2
24	5.0	4.9	4.8	4.6	4.6	4.6	4.3	4.2	4.4	4.4	4.7	5.0	5.3	5.6	5.9	5.6	5.8	5.8	5.7	5.4	5.1	4.7	4.5	4.6	5.9	4.2	5.0
25	4.5	4.4	4.2	4.2	4.3	4.0	4.2	4.1	4.1	4.4	4.9	5.3	5.6	6.0	6.0	6.2	6.1	6.0	5.8	5.5	5.2	5.2	4.7	4.6	6.2	4.0	5.0
26	4.7	4.7	4.3	4.5	4.5	4.4	4.2	3.7	4.0	3.9	4.7	7.8			8.2	7.4	7.8	7.9	8.1	7.5	6.7	5.3	4.4	4.4	8.2	3.7	5.6
27	4.4	3.7	2.1	2.6	1.3	1.0	0.6	0.3	0.3	0.3	0.9	1.4	3.0	4.2	5.2	5.7	6.2	6.3	6.0	5.1	3.7	3.1	2.9	2.9	6.3	0.3	3.1
28	3.5	3.1	3.2	2.4	1.8	1.5	1.8	2.7	2.7	2.7	3.5	4.7	5.5	6.5	7.4	7.8	7.7	7.2	6.7	6.3	5.4	5.5	5.3	4.8	7.8	1.5	4.6
29	4.7	4.4	4.4	3.7	3.1	2.8	3.4	3.7	3.9	4.2	4.5	5.0	5.1	4.1	3.8	3.9	4.5	5.1	4.8	4.5	3.9	3.9	3.5	3.0	5.1	2.8	4.1
30	2.9	2.7	2.1	2.2	1.1	1.1	1.2	1.3	0.9	0.9	1.9	2.9	3.3	3.8	4.0	4.3	4.3	4.3	4.3	3.8	2.5	2.2	2.7	2.7	4.3	0.9	2.6
Max.	**9.4**	**9.1**	**8.9**	**9.7**	**9.0**	**9.1**	**8.5**	**8.1**	**8.5**	**9.8**	**11.6**	**11.9**	**12.5**	**12.2**	**11.7**	**12.2**	**11.8**	**10.9**	**10.6**	**10.3**	**9.8**	**9.1**	**8.8**	**8.8**	**12.5**		
Min.	**1.6**	**1.0**	**1.2**	**1.5**	**1.1**	**1.0**	**0.6**	**0.3**	**0.3**	**0.3**	**0.9**	**1.4**	**2.0**	**2.8**	**3.8**	**3.9**	**4.3**	**4.2**	**3.7**	**3.1**	**2.1**	**1.6**	**1.4**	**1.5**		**0.3**	
Avg.	**6.0**	**5.8**	**5.8**	**5.7**	**5.5**	**5.4**	**5.3**	**5.3**	**5.3**	**5.5**	**6.0**	**6.5**	**6.9**	**7.1**	**7.3**	**7.4**	**7.5**	**7.4**	**7.3**	**6.8**	**6.3**	**6.1**	**6.0**	**5.9**			**6.2**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.9	2.3	2.7	2.8	3.3	3.1	2.9	3.6	2.6	3.0	3.0	3.0	4.1	4.2	4.4	4.5	4.1	4.2	4.1	3.7	3.5	3.4	3.3	2.9	4.5	2.3	3.4
2	3.0	2.4	2.3	2.4	2.4	2.2	2.2	2.3	2.0	1.7	2.1	2.7	3.2	3.2	3.6	4.3	4.0	3.8	3.3	2.5	1.9	0.0	-0.5	-0.6	4.3	-0.6	2.4
3	-0.8	-1.1	-1.3	-1.3	-1.3	-1.5	-1.9	-2.8	-2.9	-2.7	-2.4	-2.2	-1.9	-1.7	-1.6	-1.6	-1.3	-0.9	-0.8	-1.1	-1.9	-2.1	-1.9	-1.3	-0.8	-2.9	-1.7
4	-1.9	-2.7	-2.6	-2.3	-2.2	-1.8	-2.0	-2.7	-2.9	-3.0	-2.4	-1.0	-0.3	1.0	1.4	1.6	1.6	1.5	0.8	0.3	-0.4	-1.2	-1.2	-1.0	1.6	-3.0	-1.0
5	-1.5	-2.3	-2.7	-2.8	-2.3	-2.2	-2.5	-2.6	-2.9	-2.9	-2.7	-2.5	-2.3	-2.3	-2.3	-2.2	-2.1	-2.0	-2.1	-2.4	-3.0	-3.1	-3.5	-3.6	-1.5	-3.6	-2.5
6	-3.6	-3.7	-3.9	-4.1	-4.1	-4.1	-4.1	-4.2	-4.2	-4.1	-3.9	-3.8	-3.7	-3.5	-3.3	-3.0	-2.8	-2.8	-2.7	-3.0	-3.2	-3.3	-3.5	-3.6	-2.7	-4.2	-3.6
7	-3.8	-4.0	-4.1	-4.2	-4.3	-4.6	-4.7	-4.8	-5.1	-5.1	-4.9	-4.8	-4.5	-4.4	-4.1	-3.8	-3.6	-3.7	-3.7	-3.8	-3.9	-4.0	-4.3	-4.3	-3.6	-5.1	-4.3
8	-4.3	-4.2	-4.5	-5.0	-5.4	-5.5	-6.0	-6.6	-7.1	-6.8	-6.3	-5.2	-4.7	-3.9	-3.3	-3.0	-2.8	-3.0	-3.5	-4.6	-5.3	-5.1	-5.1	-4.8	-2.8	-7.1	-4.8
9	-4.9	-3.3	-2.4	-1.2	-0.9	-1.5	-1.9	-2.0	-2.0	-1.6	-1.2	-0.5	0.3	0.8	1.2	1.3	2.0	2.5	2.8	3.1	3.4	3.7	3.8	3.8	3.8	-4.9	0.2
10	4.0	3.9	3.8	3.7	3.7	3.3	2.1	1.9	1.6	2.1	2.4	2.9	3.4	3.5	3.8	4.2	4.6	4.3	4.0	4.0	3.9	4.0	4.1	4.2	4.6	1.6	3.5
11	4.5	4.3	4.4	4.6	4.5	4.3	4.5	4.6	3.0	-1.5	-3.2	-4.7	-5.5	-5.8	-6.2	-6.4	-6.6	-6.6	-6.7	-6.7	-6.6	-6.7	-6.7	-6.5	4.6	-6.7	-2.0
12	-6.2	-6.1	-5.9	-6.1	-6.6	-7.1	-7.5	-7.7	-8.1	-8.5	-8.3	-7.8	-7.0	-6.4	-6.3	-6.0	-6.1	-6.3	-6.6	-7.8	-8.5	-7.9	-8.1	-8.7	-5.9	-8.7	-7.1
13	-9.0	-8.9	-9.2	-9.3	-10.0	-9.9	-9.7	-10.2	-9.6	-9.5	-8.4	-7.6	-6.6	-4.4	-3.1	-3.2	-2.5	-2.2	-3.0	-2.8	-1.9	-1.6	-1.3	-1.1	-1.1	-10.2	-6.0
14	-0.9	-0.8	-1.0	-0.9	-0.9	-0.5	-1.2	-1.6	-1.2	-0.7	-0.5	-0.3	-0.2	0.0	0.4	0.5	0.4	0.5	0.5	0.5	0.6	0.4	0.0	-0.4	0.6	-1.6	-0.3
15	-1.2	-2.2	-3.7	-4.2	-4.5	-5.6	-5.9	-6.0	-6.7	-7.3	-7.4	-7.4	-7.4	-7.2	-7.2	-7.0	-6.6	-7.0	-7.2	-7.4	-7.7	-8.2	-8.8	-9.3	-1.2	-9.3	-6.4
16	-9.2	-8.9	-8.7	-8.6	-8.9	-8.8	-8.7	-8.9	-9.0	-8.4	-9.0	-8.4	-7.6	-7.8	-7.6	-7.4	-7.7	-8.2	-8.4	-8.6	-9.1	-9.0	-9.1	-9.0	-7.4	-9.2	-8.5
17	-9.3	-9.6	-8.7	-8.3	-9.5	-9.4	-9.3	-9.1	-9.4	-9.1	-7.7	-7.8	-7.3	-6.8	-6.9	-6.4	-3.9	-3.0	-2.5	-1.9	-1.1	-0.7	0.0	0.1	0.1	-9.6	-6.1
18	0.2	0.4	0.4	0.8	0.8	0.9	1.1	1.0	0.9	1.1	1.4	1.2	1.9	2.4	2.3	1.7	2.3	1.8	1.0	0.5	0.4	1.0	0.1	0.1	2.4	0.1	1.1
19	-0.8	-2.5	-3.4	-4.4	-4.5	-5.0	-4.5	-5.4	-6.0	-6.7	-6.9	-7.4	-8.0	-7.3	-6.3	-6.6	-7.1	-6.3	-6.5	-6.2	-6.2	-6.6	-7.1	-7.0	-0.8	-8.0	-5.8
20	-6.9	-6.4	-5.7	-5.1	-5.1	-6.5	-6.9	-7.5	-8.5	-8.9	-8.2	-10.0	-9.9	-9.5	-9.3	-8.8	-8.4	-8.5	-7.6	-6.7	-8.2	-7.9	-8.1	-7.7	-5.1	-10.0	-7.8
21	-6.4	-5.6	-5.1	-5.6	-5.7	-5.9	-6.0	-6.4	-6.6	-7.3	-7.1	-7.2	-7.4	-6.9	-6.3	-5.8	-5.7	-6.0	-6.6	-7.9	-9.2	-10.2	-11.0	-11.7	-5.1	-11.7	-7.1
22	-11.6	-12.1	-12.0	-12.4	-12.8	-13.1	-13.1	-13.6	-13.8	-13.9	-13.8	-13.7	-13.2	-12.6	-12.1	-11.9	-11.3	-11.7	-12.6	-12.9	-13.7	-14.2	-14.8	-14.8	-11.3	-14.8	-13.0
23	-14.0	-13.7	-13.0	-13.0	-13.3	-13.7	-13.7	-13.9	-14.2	-14.4	-14.3	-13.7	-13.0	-12.5	-11.9	-11.8	-11.7	-11.2	-11.6	-10.8	-9.7	-9.3	-9.6	-9.7	-9.3	-14.4	-12.4
24	-10.2	-10.5	-10.7	-10.2	-10.5	-11.5	-12.9	-13.4	-13.0	-12.5	-12.4	-11.8	-11.2	-10.0	-9.2	-8.5	-8.4	-8.3	-8.5	-8.9	-8.7	-9.2	-8.7	-8.2	-8.2	-13.4	-10.3
25	-8.8	-8.6	-7.5	-7.4	-7.5	-7.1	-6.8	-6.5	-5.9	-5.1	-4.5	-4.0	-3.4	-2.8	-2.4	-2.5	-2.8	-2.0	-3.4	-3.5	-3.3	-3.9	-4.3	-4.6	-2.0	-8.8	-4.9
26	-5.4	-6.4	-6.1	-6.8	-7.6	-7.2	-7.2	-7.2	-7.5	-7.7	-8.2	-9.1	-10.1	-10.3	-10.5	-10.9	-11.1	-11.3	-11.6	-11.9	-11.8	-12.1	-12.7	-13.4	-5.4	-13.4	-9.3
27	-13.6	-14.3	-14.9	-15.2	-15.1	-15.2	-15.3	-15.8	-15.9	-15.6	-16.2	-14.8	-14.3	-14.2	-13.2	-13.0	-13.0	-13.3	-13.5	-14.0	-14.2	-14.7	-14.7	-14.4	-13.0	-16.2	-14.5
28	-14.1	-12.9	-12.6	-12.2	-9.8	-8.2	-8.3	-6.9	-6.4	-6.2	-6.0	-5.7	-5.6	-5.5	-5.1	-4.5	-4.8	-5.0	-5.2	-5.4	-5.5	-5.6	-6.1	-6.2	-4.5	-14.1	-7.2
29	-5.9	-5.8	-5.4	-5.0	-5.2	-4.6	-3.6	-2.9	-2.4	-2.7	-2.6	-2.1	-1.5	-1.2	-2.3	-1.6	-1.7	-1.7	-1.9	-1.9	-1.9	-2.4	-2.5	-2.3	-1.2	-5.9	-3.0
30	-1.9	-1.7	-1.3	-1.3	-1.1	-0.8	-0.8	-0.7	-0.8	-0.7	-1.8	-1.6	-1.0	-1.2	-1.2	-1.2	-1.1	-1.4	-2.1	-1.0	-1.6	-1.5	-1.8	-2.0	-0.7	-2.1	-1.3
31	-1.8	-2.2	-2.0	-2.9	-3.7	-3.8	-3.7	-3.4	-3.4	-2.9	-3.1	-2.6	-2.6	-2.3	-2.3	-2.7	-2.4	-2.3	-2.5	-2.6	-2.4	-2.5	-2.9	-2.5	-1.8	-3.8	-2.7
Max.	**4.5**	**4.3**	**4.4**	**4.6**	**4.5**	**4.3**	**4.5**	**4.6**	**3.0**	**3.0**	**3.0**	**3.0**	**4.1**	**4.2**	**4.4**	**4.5**	**4.6**	**4.3**	**4.1**	**4.0**	**3.9**	**4.0**	**4.1**	**4.2**	**4.6**		
Min.	**-14.1**	**-14.3**	**-14.9**	**-15.2**	**-15.1**	**-15.2**	**-15.3**	**-15.8**	**-15.9**	**-15.6**	**-16.2**	**-14.8**	**-14.3**	**-14.2**	**-13.2**	**-13.0**	**-13.0**	**-13.3**	**-13.5**	**-14.0**	**-14.2**	**-14.7**	**-14.8**	**-14.8**		**-16.2**	
Avg.	**-4.6**	**-4.8**	**-4.7**	**-4.7**	**-4.8**	**-4.9**	**-5.0**	**-5.1**	**-5.3**	**-5.4**	**-5.3**	**-5.1**	**-4.8**	**-4.4**	**-4.1**	**-3.9**	**-3.8**	**-3.7**	**-4.0**	**-4.2**	**-4.4**	**-4.5**	**-4.8**	**-4.8**			**-4.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.4	-2.8	-2.5	-2.4	-1.8	-2.4	-1.6	-1.8	-2.3	-2.4	-2.1	-2.2	-2.6	-2.6	-2.6	-2.6	-2.9	-3.7	-4.9	-5.2	-4.6	-3.7	-3.3	-4.0	-1.6	-5.2	-2.9
2	-4.1	-4.8	-5.3	-6.2	-6.5	-6.7	-7.0	-7.3	-8.7	-11.4	-12.7	-13.4	-14.0	-14.3	-14.5	-14.5	-14.4	-14.5	-14.9	-15.1	-15.0	-14.8	-14.8	-15.0	-4.1	-15.1	-11.3
3	-15.1	-15.0	-14.8	-14.5	-14.4	-14.5	-14.4	-14.1	-14.1	-14.8	-14.9	-14.5	-14.3	-14.7	-14.2	-13.9	-13.7	-13.7	-14.2	-14.7	-14.6	-14.9	-14.6	-14.3	-13.7	-15.1	-14.5
4	-14.0	-14.0	-13.9	-14.0	-14.1	-14.1	-14.2	-15.0	-15.5	-15.6	-15.5	-15.4	-15.3	-14.8	-14.5	-14.2	-13.8	-13.9	-13.7	-13.6	-13.3	-13.3	-13.5	-13.6	-13.3	-15.6	-14.3
5	-13.9	-13.9	-13.7	-13.4	-13.3	-12.9	-12.8	-12.5	-11.8	-12.5	-12.1	-11.7	-10.4	-9.0	-8.3	-7.5	-6.2	-7.4	-8.7	-7.0	-7.6	-8.0	-6.7	-6.7	-6.2	-13.9	-10.3
6	-6.1	-5.5	-5.0	-4.6	-4.7	-5.4	-4.8	-4.6	-4.4	-4.2	-3.6	-3.1	-2.9	-3.0	-3.7	-4.3	-5.4	-5.2	-5.3	-5.8	-7.9	-8.3	-10.4	-11.9	-2.9	-11.9	-5.4
7	-12.3	-13.2	-13.5	-14.1	-14.4	-14.9	-14.9	-15.5	-15.0	-14.7	-14.5	-15.0	-14.0	-13.5	-13.8	-13.1	-12.0	-10.8	-9.2	-7.5	-6.7	-7.1	-6.6	-6.6	-6.6	-15.5	-12.2
8	-5.7	-5.3	-5.5	-5.7	-5.6	-5.4	-5.2	-5.2	-5.0	-5.2	-5.8	-6.0	-5.8	-4.8	-4.4	-4.2	-3.8	-3.5	-2.9	-2.5	-2.2	-2.0	-1.9	-2.3	-1.9	-6.0	-4.4
9	-2.2	-1.9	-1.6	-1.1	0.1	0.7	0.6	1.0	0.6	-0.2	-0.2	-0.4	-0.1	0.2	0.8	1.4	1.0	-0.2	-0.7	-0.1	0.8	1.1	1.5	1.6	1.6	-2.2	0.1
10	1.5	1.7	1.2	0.6	-0.3	0.2	0.0	0.0	0.3	0.1	-0.3	-0.6	-0.6	-0.8	-0.9	-1.1	-0.8	-0.9	-1.3	-1.1	-0.7	-0.5	-0.8	-0.9	1.7	-1.3	-0.3
11	-0.8	-0.8	-1.3	-1.9	-1.9	-1.7	-1.6	-2.0	-2.1	-2.3	-2.6	-2.3	-2.0	-1.8	-1.6	-1.6	-1.8	-2.2	-3.7	-3.9	-4.2	-3.6	-3.5	-3.9	-0.8	-4.2	-2.3
12	-3.5	-4.2	-4.4	-4.6	-4.9	-6.1	-6.1	-6.3	-6.1	-5.9	-6.0	-6.1	-6.1	-5.8	-6.5	-6.6	-6.0	-5.0	-5.1	-4.6	-4.5	-4.2	-4.4	-4.3	-3.5	-6.6	-5.3
13	-4.3	-3.9	-4.1	-3.6	-4.3	-5.2	-5.7	-5.2	-5.4	-5.2	-4.9	-4.7	-3.7	-3.1	-2.8	-2.3	-2.4	-2.4	-2.9	-3.0	-3.0	-3.0	-2.6	-2.6	-2.3	-5.7	-3.8
14	-2.7	-2.5	-2.4	-2.5	-2.7	-2.7	-2.7	-3.1	-3.0	-2.8	-3.2	-3.1	-3.1	-3.0	-3.0	-3.1	-3.2	-3.7	-4.2	-4.2	-4.2	-4.2	-4.2	-3.9	-2.4	-4.2	-3.2
15	-3.9	-4.3	-4.8	-4.5	-4.5	-4.6	-4.3	-4.3	-4.6	-4.9	-5.0	-5.0	-4.4	-3.8	-3.7	-3.1	-2.7	-2.3	-1.9	-1.8	-1.7	-1.6	-1.4	-1.3	-1.3	-5.0	-3.5
16	-1.2	-1.4	-1.4	-1.3	-1.6	-1.7	-1.7	-2.3	-2.7	-2.3	-2.3	-2.2	-1.9	-1.9	-1.8	-1.8	-2.7	-2.6	-2.9	-3.7	-4.5	-4.5	-4.0	-4.7	-1.2	-4.7	-2.5
17	-5.3	-5.2	-5.3	-5.7	-6.6	-7.1	-6.8	-7.1	-6.8	-7.2	-6.9	-6.4	-6.7	-5.7	-6.8	-7.3	-7.6	-7.4	-8.0	-8.2	-9.1	-8.8	-8.8	-8.5	-5.2	-9.1	-7.1
18	-9.7	-10.6	-11.6	-12.0	-12.7	-12.9	-13.1	-13.4	-13.5	-13.8	-13.7	-13.8	-13.9	-13.4	-13.4	-13.5	-14.0	-14.6	-14.8	-15.3	-15.7	-15.7	-16.1	-16.8	-9.7	-16.8	-13.7
19	-16.6	-16.8	-17.2	-17.0	-16.9	-17.3	-17.6	-17.5	-17.2	-17.4	-16.2	-14.9	-14.9	-14.6	-13.7	-14.4	-14.1	-14.5	-15.0	-14.8	-14.7	-15.3	-15.7	-16.2	-13.7	-17.6	-15.8
20	-16.9	-17.0	-17.1	-17.5	-18.1	-18.9	-19.8	-20.3	-20.6	-21.3	-21.6	-21.8	-22.0	-22.2	-22.1	-22.2	-22.4	-22.7	-22.8	-23.1	-23.4	-23.7	-24.1	-24.3	-16.9	-24.3	-21.1
21	-24.8	-24.8	-25.0	-25.4	-25.5	-25.7	-26.0	-26.4	-26.4	-26.6	-26.3	-26.1	-25.7	-25.7	-24.8	-24.8	-24.3	-23.7	-23.5	-23.4	-23.2	-22.8	-22.0	-21.2	-21.2	-26.6	-24.8
22	-20.7	-20.2	-19.6	-19.2	-18.4	-17.8	-16.1	-15.6	-15.4	-14.7	-14.5	-15.0	-12.9	-13.4	-14.7	-14.5	-13.4	-12.6	-13.3	-12.4	-12.3	-13.6	-12.9	-14.0	-12.3	-20.7	-15.3
23	-13.6	-11.8	-11.2	-11.2	-10.6	-10.3	-10.0	-10.1	-10.2	-10.3	-10.6	-10.4	-10.1	-9.0	-8.6	-7.7	-7.0	-5.9	-4.4	-3.9	-4.3	-3.8	-3.4	-2.8	-2.8	-13.6	-8.4
24	-1.5	-1.1	-0.5	0.1	0.4	0.7	1.3	1.3	0.8	0.7	0.8	0.4	0.4	0.1	0.0	-0.2	-0.4	-0.4	-0.4	-0.6	-0.8	-2.8	-5.5	-7.7	1.3	-7.7	-0.6
25	-9.0	-10.3	-10.9	-11.4	-11.6	-11.7	-11.7	-12.0	-12.5	-13.3	-14.1	-14.8	-15.2	-15.4	-16.3	-16.6	-16.4	-17.0	-16.9	-17.4	-17.9	-17.4	-18.4	-18.7	-9.0	-18.7	-14.5
26	-18.1	-17.5	-17.9	-17.3	-16.7	-16.6	-16.1	-16.0	-16.1	-15.3	-15.9	-15.7	-16.5	-15.9	-15.7	-15.8	-15.7	-16.2	-17.0	-17.3	-17.1	-16.3	-16.7	-17.8	-15.3	-18.1	-16.5
27	-18.1	-18.1	-18.1	-18.2	-16.5	-16.0	-15.5	-15.6	-16.0	-16.8	-15.9	-15.5	-14.4	-14.6	-14.0	-13.4	-13.3	-13.1	-14.2	-14.4	-13.2	-13.1	-13.3	-11.8	-11.8	-18.2	-15.1
28	-11.5	-11.0	-12.0	-12.0	-12.0	-12.4	-11.5	-11.5	-11.5	-11.6	-11.4	-11.5	-11.2	-10.8	-10.3	-10.6	-10.5	-11.3	-12.3	-12.2	-13.0	-12.6	-12.9	-13.2	-10.3	-13.2	-11.7
29	-13.9	-14.0	-14.5	-14.8	-14.9	-15.3	-15.5	-15.7	-16.0	-16.2	-16.3	-16.9	-17.0	-17.2	-17.1	-17.0	-17.2	-17.4	-17.7	-18.1	-18.3	-18.5	-18.7	-19.0	-13.9	-19.0	-16.6
30	-19.5	-20.1	-20.2	-20.8	-20.9	-21.2	-20.8	-20.7	-20.7	-20.9	-20.8	-20.6	-20.5	-20.4	-19.8	-20.3	-20.8	-21.7	-20.7	-20.7	-20.9	-20.6	-21.1	-20.1	-19.5	-21.7	-20.6
Max.	**1.5**	**1.7**	**1.2**	**0.6**	**0.4**	**0.7**	**1.3**	**1.3**	**0.8**	**0.7**	**0.8**	**0.4**	**0.4**	**0.2**	**0.8**	**1.4**	**1.0**	**-0.2**	**-0.4**	**-0.1**	**0.8**	**1.1**	**1.5**	**1.6**	**1.7**		
Min.	**-24.8**	**-24.8**	**-25.0**	**-25.4**	**-25.5**	**-25.7**	**-26.0**	**-26.4**	**-26.4**	**-26.6**	**-26.3**	**-26.1**	**-25.7**	**-25.7**	**-24.8**	**-24.8**	**-24.3**	**-23.7**	**-23.5**	**-23.4**	**-23.4**	**-23.7**	**-24.1**	**-24.3**		**-26.6**	
Avg.	**-9.7**	**-9.7**	**-9.8**	**-9.9**	**-9.9**	**-10.0**	**-9.9**	**-10.0**	**-10.1**	**-10.3**	**-10.3**	**-10.3**	**-10.1**	**-9.8**	**-9.8**	**-9.7**	**-9.6**	**-9.7**	**-9.9**	**-9.9**	**-9.9**	**-9.9**	**-10.0**	**-10.2**			**-9.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature at 10 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-18.9	-19.4	-18.8	-19.0	-18.0	-17.4	-15.7	-14.8	-14.2	-13.6	-12.7	-11.7	-11.5	-11.1	-10.7	-10.6	-10.0	-8.7	-10.0	-8.8	-8.2	-6.9	-6.5	-5.3	-5.3	-19.4	-12.6
2	-5.0	-5.0	-5.8	-6.1	-5.0	-4.6	-3.4	-3.9	-4.0	-3.6	-3.0	-2.4	-2.0	-1.8	-1.6	-1.7	-1.9	-1.7	-2.4	-2.0	-1.7	-1.1	-0.8	-0.3	-0.3	-6.1	-3.0
3	0.0	0.3	0.5	0.6	0.6	0.7	0.9	1.0	1.2	1.1	1.3	1.5	1.4	1.0	1.3	1.0	0.9	1.3	1.7	2.0	2.2	2.1	2.0	1.8	2.2	0.0	1.2
4	1.5	1.3	1.2	1.4	1.4	1.3	1.3	1.1	0.8	1.0	1.0	1.1	1.1	1.0	0.9	0.7	1.5	1.9	2.0	1.9	2.0	1.9	2.1	2.1	2.1	0.7	1.4
5	2.0	1.8	1.9	2.0	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.3	2.5	2.4	2.3	2.5	2.6	2.6	2.6	2.7	2.6	2.4	2.2	2.3	2.7	1.8	2.3
6	2.2	2.3	2.2	2.4	2.4	2.3	2.3	2.3	2.3	2.6	2.7	2.7	1.9	1.9	1.8	1.6	1.7	1.6	1.2	1.2	1.4	1.0	0.7	0.3	2.7	0.3	1.9
7	0.2	-0.7	-1.3	-2.3	-3.3	-4.3	-4.3	-4.0	-4.2	-5.0	-5.9	-6.7	-7.0	-6.3	-6.8	-7.0	-7.0	-6.7	-6.4	-6.5	-8.1	-9.2	-8.9	-6.5	0.2	-9.2	-5.3
8	-6.9	-5.7	-3.9	-5.3	-5.6	-4.3	-3.3	-2.7	-2.2	-1.2	-2.1	-1.7	-0.9	-1.0	-0.3	-0.3	-0.5	-0.3	-1.1	-1.3	-1.0	-1.5	-1.9	-2.5	-0.3	-6.9	-2.4
9	-2.2	-2.5	-2.6	-3.1	-4.4	-5.3	-6.4	-6.5	-7.0	-8.3	-6.9	-5.3	-6.5	-6.1	-5.4	-5.9	-6.6	-4.6	-5.4	-7.0	-6.6	-6.1	-4.9	-4.4	-2.2	-8.3	-5.4
10	-4.7	-5.0	-5.1	-5.3	-6.3	-8.0	-8.4	-8.5	-8.7	-9.6	-10.8	-11.6	-11.5	-11.0	-10.7	-8.9	-8.8	-8.6	-8.4	-8.7	-8.8	-8.7	-8.5	-8.2	-4.7	-11.6	-8.4
11	-8.1	-7.7	-9.2	-9.1	-8.9	-8.6	-8.2	-9.2	-9.0	-9.5	-8.2	-7.1	-7.4	-7.4	-7.5	-8.2	-9.1	-10.1	-10.2	-10.9	-11.5	-12.0	-11.9	-11.7	-7.1	-12.0	-9.2
12	-11.9	-13.2	-12.4	-10.7	-10.2	-10.1	-10.0	-10.1	-10.0	-8.9	-8.2	-8.3	-9.7	-9.6	-9.2	-8.3	-7.5	-8.1	-6.2	-6.4	-7.4	-8.2	-8.2	-7.5	-6.2	-13.2	-9.2
13	-7.4	-7.7	-7.9	-7.8	-8.2	-8.9	-9.3	-9.6	-9.5	-9.7	-9.8	-10.0	-10.0	-9.0	-9.7	-9.3	-9.2	-8.6	-8.3	-8.0	-5.0	-3.5	-3.2	-2.9	-2.9	-10.0	-8.0
14	-2.9	-3.8	-3.1	-3.0	-3.7	-2.7	-3.0	-3.6	-3.7	-2.9	-2.7	-4.0	-3.3	-3.0	-3.2	-3.6	-3.6	-3.5	-3.4	-3.3	-3.1	-2.5	-2.5	-2.5	-2.5	-4.0	-3.2
15	-2.0	-1.5	-1.6	-2.0	-2.0	-2.4	-2.1	-2.1	-1.9	-1.9	-2.0	-1.7	-1.6	-1.8	-1.9	-1.7	-2.0	-2.3	-2.1	-2.8	-3.4	-3.3	-3.0	-3.0	-1.5	-3.4	-2.2
16	-2.7	-3.1	-3.8	-4.7	-5.3	-4.0	-4.5	-4.4	-3.3	-4.5	-4.4	-4.6	-4.2	-5.0	-5.0	-5.2	-5.4	-4.3	-5.0	-4.7	-4.5	-4.3	-3.7	-3.8	-2.7	-5.4	-4.4
17	-2.9	-2.0	-1.7	-1.8	-1.7	-1.8	-2.1	-2.0	-1.7	-1.4	-1.2	-1.1	-0.8	-0.4	-0.1	-0.3	-0.5	-0.6	-0.5	-0.5	-0.5	-0.5	-0.6	-0.4	-0.1	-2.9	-1.1
18	-0.3	-0.5	-0.4	-0.4	-0.4	-0.5	-0.6	-0.6	-0.4	-0.3	-0.2	-0.1	-0.1	0.1	0.3	0.4	0.4	0.4	0.2	0.1	0.0	0.4	0.5	0.6	0.6	-0.6	-0.1
19	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.0	0.2	0.4	0.3	-0.1	-0.1	-0.2	-0.2	0.0	-0.3	-0.4	-0.2	-0.2	-0.4	-0.7	0.5	-0.7	0.0
20	-0.7	-0.4	-0.5	-0.3	-0.3	-0.3	0.1	-0.5	-0.5	-0.3	-0.7	-0.9	-1.3	-1.5	-1.3	-0.9	-0.2	0.1	-0.2	-0.7	-1.8	-2.6	-2.4	-2.2	0.1	-2.6	-0.9
21	-2.2	-2.4	-2.7	-2.4	-2.7	-2.5	-2.5	-3.4	-3.1	-3.3	-4.0	-4.4	-4.0	-2.6	-2.1	-1.8	-3.2	-3.2	-2.9	-3.7	-4.1	-3.4	-3.6	-2.9	-1.8	-4.4	-3.0
22	-2.9	-3.5	-4.0	-4.1	-4.5	-4.7	-3.8	-3.7	-3.9	-3.8	-3.8	-3.9	-3.2	-3.0	-2.7	-2.7	-2.6	-2.0	-3.1	-3.5	-3.6	-3.9	-4.1	-4.1	-2.0	-4.7	-3.5
23	-3.6	-3.5	-3.6	-3.6	-3.6	-3.3	-3.2	-3.1	-2.9	-3.3	-4.0	-5.6	-6.7	-7.4	-7.4	-7.4	-8.0	-8.0	-7.9	-7.8	-7.7	-8.0	-7.9	-7.9	-2.9	-8.0	-5.6
24	-7.8	-7.5	-7.7	-8.4	-8.5	-7.8	-7.9	-7.7	-6.7	-6.8	-6.8	-6.9	-7.0	-6.7	-7.5	-7.4	-8.0	-7.8	-8.0	-8.0	-8.0	-8.0	-8.0	-7.6	-6.7	-8.5	-7.6
25	-7.5	-7.6	-7.0	-6.5	-5.9	-6.0	-5.5	-5.0	-4.8	-4.5	-4.5	-4.2	-4.5	-5.1	-5.1	-5.1	-4.6	-7.1	-8.7	-9.5	-10.0	-10.5	-11.2	-11.9	-4.2	-11.9	-6.8
26	-12.4	-13.9	-15.7	-16.6	-17.4	-17.8	-17.9	-18.0	-17.7	-17.6	-17.4	-17.1	-17.1	-17.2	-16.9	-17.0	-17.0	-16.9	-17.1	-17.4	-17.6	-17.8	-17.6	-17.6	-12.4	-18.0	-16.9
27	-17.8	-17.3	-17.0	-17.2	-17.6	-17.8	-18.0	-18.2	-18.5	-18.8	-19.1	-19.2	-19.2	-19.2	-19.4	-19.5	-19.7	-19.8	-20.1	-20.2	-20.4	-20.6	-20.9	-21.3	-17.0	-21.3	-19.0
28	-21.2	-21.0	-21.1	-21.2	-21.4	-21.4	-21.4	-21.5	-21.7	-21.9	-22.2	-22.5	-22.6	-22.6	-22.5	-22.8	-23.1	-23.3	-23.5	-24.0	-24.3	-24.5	-24.6	-24.9	-21.0	-24.9	-22.6
29	-25.3	-25.1	-25.6	-25.3	-25.0	-24.9	-25.1	-25.4	-25.7	-25.0	-25.0	-25.0	-25.3	-25.4	-25.2	-24.9	-25.0	-25.1	-25.1	-24.5	-24.0	-24.0	-24.5	-25.1	-24.0	-25.7	-25.0
30	-25.1	-25.4	-24.8	-25.2	-25.8	-25.9	-25.9	-25.5	-24.6	-27.2	-27.0	-25.6	-26.3	-26.5	-26.1	-27.2	-26.2	-26.5	-27.6	-27.4	-27.7	-27.3	-27.6	-27.9	-24.6	-27.9	-26.3
31	-27.3	-27.1	-27.6	-28.6	-27.8	-27.0	-26.8	-26.6	-26.3	-25.8	-25.8	-24.7	-24.3	-25.1	-24.5	-24.7	-24.9	-23.8	-23.1	-23.2	-24.2	-24.5	-24.1	-23.4	-23.1	-28.6	-25.5
Max.	**2.2**	**2.3**	**2.2**	**2.4**	**2.4**	**2.3**	**2.3**	**2.3**	**2.3**	**2.6**	**2.7**	**2.7**	**2.5**	**2.4**	**2.3**	**2.5**	**2.6**	**2.6**	**2.6**	**2.7**	**2.6**	**2.4**	**2.2**	**2.3**	**2.7**		
Min.	**-27.3**	**-27.1**	**-27.6**	**-28.6**	**-27.8**	**-27.0**	**-26.8**	**-26.6**	**-26.3**	**-27.2**	**-27.0**	**-25.6**	**-26.3**	**-26.5**	**-26.1**	**-27.2**	**-26.2**	**-26.5**	**-27.6**	**-27.4**	**-27.7**	**-27.3**	**-27.6**	**-27.9**		**-28.6**	
Avg.	**-7.2**	**-7.3**	**-7.4**	**-7.5**	**-7.6**	**-7.6**	**-7.5**	**-7.5**	**-7.4**	**-7.5**	**-7.5**	**-7.4**	**-7.4**	**-7.4**	**-7.3**	**-7.3**	**-7.3**	**-7.2**	**-7.4**	**-7.5**	**-7.6**	**-7.6**	**-7.6**	**-7.4**			**-7.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.21	0.03	0.07	0.07	0.24	0.04	0.24	0.37	0.33	0.16	0.44	0.40	0.28	0.46	0.80	1.35	0.93	2.32	1.96	2.24	2.07	0.90	1.08	2.32	0.03	0.72
2	1.4	1.08	1.46	1.23	1.97	2.05	2.02	2.01	1.96	2.19	2.60	2.24	2.06	2.52	2.24	2.01	1.90	1.91	2.88	3.25	2.34	2.73	2.45	2.51	3.25	1.08	2.13
3	2.3	2.67	1.80	2.54	2.70	2.13	1.80	0.59	0.32	0.41	0.28	-0.10	-0.02	0.33	0.50	0.41	0.23	0.23	-0.04	-0.15	-0.16	-0.07	-0.11	-0.16	2.70	-0.16	0.77
4	-0.2	-0.09	-0.09	-0.15	-0.12	-0.19	-0.18	-0.15	-0.17	-0.12	-0.14	-0.11	-0.09	-0.12	-0.17	0.10	0.44	0.45	1.17	2.84	2.73	2.20	1.83	2.79	2.84	-0.19	0.52
5	2.5	2.25	1.87	0.79	0.52	0.15	0.52	0.56	0.45	0.31	0.08	-0.07	-0.09	-0.11	-0.06	0.01	0.16	0.13	-0.02	-0.08	0.13	0.20	0.23	0.25	2.54	-0.11	0.45
6	0.3	0.31	0.29	0.30	0.31	0.47	0.39	0.41	0.43	0.45	0.35	0.17	-0.04	0.04	0.06	0.13	0.20	0.52	0.54	0.60	0.55	0.67	0.60	0.77	0.77	-0.04	0.37
7	1.0	1.47	0.82	0.63	0.39	0.83	1.29	1.31	1.54	1.37	0.68	0.64	0.46	-0.15	-0.20	-0.20	-0.21	-0.15	-0.11	-0.07	0.04	0.11	1.04	1.47	1.54	-0.21	0.58
8	1.2	1.19	1.86	2.03	1.89	2.11	0.81	0.50	1.04	1.54	0.36	0.48	1.47	1.36	0.92	0.38	0.67	1.38	1.99	1.07	1.35	1.65	1.63	2.59	2.59	0.36	1.31
9	1.9	1.91	2.46	1.95	1.23	1.33	1.42	1.10	0.84	0.94	0.86	0.94	0.83	1.11	1.00	0.86	1.00	0.85	0.76	0.77	0.67	0.62	0.55	0.40	2.46	0.40	1.09
10	0.4	0.44	0.52	0.55	0.62	0.57	0.65	0.61	0.60	0.59	1.03	0.90	0.83	0.67	0.65	0.57	0.83	0.84	0.73	0.69	0.65	0.54	0.64	0.56	1.03	0.44	0.65
11	0.4	0.37	0.48	0.58	0.53	0.61	0.69	0.56	0.48	0.46	0.48	0.50	0.54	0.52	0.48	0.48	0.67	0.93	1.00	1.06	1.00	1.05	1.33	1.61	1.61	0.37	0.70
12	1.2	1.06	1.34	1.50	1.43	1.23	1.12	1.46	1.34	1.06	1.03	0.93	0.93	0.70	0.74	0.86	0.76	0.89	0.75	0.53	0.48	0.42	0.35	0.42	1.50	0.35	0.94
13	0.4	0.44	0.40	0.23	0.23	0.31	0.36	0.44	0.48	0.44	0.42	0.45	0.54	0.47	0.44	0.60	0.60	0.69	0.85	0.99	1.15	0.80	1.70	1.44	1.70	0.23	0.62
14	2.0	2.03	1.42	1.55	1.32	1.07	1.15	1.98	0.53	0.48	0.64	0.63	0.38	0.22	0.26	0.33	0.44	0.39	0.47	0.55	0.32	0.22	0.22	0.25	2.03	0.22	0.79
15	0.3	0.27	0.28	0.25	0.22	0.20	0.26	0.26	0.26	0.35	0.30	0.35	0.25	0.26	0.40	0.26	0.24	0.21	0.19	0.14	0.13	0.22	0.24	0.26	0.40	0.13	0.25
16	0.2	0.24	0.46	0.89	1.74	1.36	1.53	1.51	1.45	1.50	1.23	1.03	0.82	0.78	0.25	0.04	0.01	0.11	0.11	0.16	0.89	1.34	0.99	0.89	1.74	0.01	0.81
17	1.2	1.68	1.42	1.24	1.30	0.96	0.95	0.73	0.74	0.82	0.79	0.80	0.53	0.45	0.41	0.46	0.50	0.25	0.17	0.28	0.39	0.37	0.14	0.12	1.68	0.12	0.69
18	0.1	0.07	0.06	0.09	0.15	0.01	0.13	0.18	0.08	0.07	0.23	0.35	0.50	0.38	0.19	0.19	0.23	0.49	1.15	0.56	0.31	0.27	0.31	0.57	1.15	0.01	0.28
19	0.5	0.40	0.33	0.46	0.61	0.51	0.60	0.73	0.69	0.57	0.62	0.66	0.82	0.69	0.64	0.61	0.76	0.75	0.72	0.55	0.49	0.45	0.39	0.26	0.82	0.26	0.58
20	0.2	0.20	0.22	0.18	0.13	0.09	0.10	0.10	0.06	0.04	0.01	0.04	0.09	0.15	0.10	-0.03	-0.01	-0.06	0.00	0.23	1.01	0.28	0.62	0.70	1.01	-0.06	0.19
21	0.7	0.66	0.47	0.36	0.47	0.52	0.54	0.51	0.33	0.48	0.62	0.68	0.84	0.80	0.94	0.70	0.68	0.72	0.63	0.39	0.24	0.21	0.16	0.31	0.94	0.16	0.54
22	0.3	0.58	0.68	0.48	0.42	0.51	0.51	0.41	0.29	0.18	0.13	0.19	0.05	0.13	0.05	0.13	0.15	0.22	0.13	0.22	0.38	0.41	0.37	0.28	0.68	0.05	0.30
23	0.1	-0.01	-0.02	0.37	0.84	0.90	0.80	0.77	0.85	1.09	0.98	0.98	0.93	0.74	0.76	0.76	0.70	0.80	0.80	0.52	0.79	1.24	0.35	0.51	1.24	-0.02	0.69
24	0.2	1.03	0.53	0.11	0.00	0.03	0.21	0.40	0.12	0.18	0.15	0.26	0.23	0.13	0.09	0.09	0.07	0.02	0.00	0.04	0.12	0.14	0.15	0.07	1.03	0.00	0.18
25	0.0	0.11	0.14	0.53	0.70	0.20	0.18	0.27	0.25	0.38	0.41	0.32	0.22	0.48	0.65	0.51	0.26	0.25	0.09	-0.14	-0.12	0.53	0.72	0.72	0.72	-0.14	0.32
26	0.9	1.03	1.24	1.22	1.22	1.43	2.59	1.21	0.61	0.82	1.61	1.93	1.98	1.44	1.35	1.49	2.03	2.14	1.84	1.88	0.71	0.43	0.38	0.94	2.59	0.38	1.35
27	0.7	0.56	0.80	0.60	0.23	0.25	0.59	0.42	0.42	0.43	0.32	0.29	0.27	0.18	0.13	0.10	0.12	0.13	0.14	0.16	0.13	0.12	0.19	0.18	0.80	0.10	0.31
28	0.1	0.15	0.11	0.12	0.15	0.18	0.14	0.12	0.08	0.02	-0.02	-0.02	-0.03	0.01	-0.04	0.01	-0.01	0.14	1.14	1.52	2.05	0.99	0.52	0.43	2.05	-0.04	0.33
29	0.6	1.08	0.28	0.28	0.62	0.85	1.07	0.76	0.81	1.62	1.16	1.07	1.13	1.45	2.25	2.35	3.64	3.49	1.14	1.95	2.72	4.19	3.50	3.40	4.19	0.28	1.73
30	4.2	3.77	5.47	2.87	0.53	0.83	1.40	2.00	2.66	1.08	0.80	0.76	0.66	0.57	0.23	0.34	0.64	1.13	0.87	1.27	1.72	1.01	0.43	0.59	5.47	0.23	1.49
31	0.8	1.66	1.64	1.32	2.81	2.77	1.77	2.60	2.56	4.73	5.16	2.16	0.68	0.70	0.33	0.02	-0.08	0.38	0.72	0.96	1.93	1.69	3.81	2.78	5.16	-0.08	1.83
Max.	**4.2**	**3.77**	**5.47**	**2.87**	**2.81**	**2.77**	**2.59**	**2.60**	**2.66**	**4.73**	**5.16**	**2.24**	**2.06**	**2.52**	**2.25**	**2.35**	**3.64**	**3.49**	**2.88**	**3.25**	**2.73**	**4.19**	**3.81**	**3.40**	**5.47**		
Min.	**-0.2**	**-0.09**	**-0.09**	**-0.15**	**-0.12**	**-0.19**	**-0.18**	**-0.15**	**-0.17**	**-0.12**	**-0.14**	**-0.11**	**-0.09**	**-0.15**	**-0.20**	**-0.20**	**-0.21**	**-0.15**	**-0.11**	**-0.15**	**-0.16**	**-0.07**	**-0.11**	**-0.16**		**-0.21**	
Avg.	**0.8**	**0.93**	**0.93**	**0.81**	**0.81**	**0.79**	**0.82**	**0.79**	**0.72**	**0.80**	**0.75**	**0.64**	**0.59**	**0.55**	**0.52**	**0.50**	**0.61**	**0.68**	**0.75**	**0.80**	**0.88**	**0.87**	**0.86**	**0.93**			**0.76**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.6	2.23	1.84	3.08	2.26	3.14	2.44	1.40	1.30	1.02	0.72	0.66	0.27	0.31	-0.05	-0.03	-0.03	0.18	0.27	0.91	2.16	3.42	3.11	4.72	4.72	-0.05	1.58
2	4.9	4.03	4.07	2.33	1.76	1.74	2.17	3.22	3.31	2.92	4.19	2.33	0.84	0.89	0.49	0.61	0.98	1.54	1.94	2.25	2.23	2.42	1.36	1.08	4.89	0.49	2.23
3	0.8	1.36	1.93	1.19	1.32	1.03	0.88	0.92	0.69	0.77	0.54	0.61	0.31	0.10	0.17	0.30	0.48	0.73	2.03	2.22	1.96	2.05	1.84	1.42	2.22	0.10	1.07
4	1.5	1.87	2.46	2.52	2.54	3.50	2.72	3.04	2.66	2.39	1.85	1.80	1.76	2.25	2.12	2.86	2.03	2.45	2.24	2.81	2.69	3.24	2.64	3.55	3.55	1.52	2.48
5	2.8	2.94	3.07	1.47	1.72	3.12	2.15	2.39	2.44	1.17	1.41	1.51	1.15	1.52	0.93	1.59	1.81	1.80	2.96	3.03	1.85	1.82	1.41	1.84	3.12	0.93	2.00
6	1.9	2.65	3.05	2.50	2.73	3.61	3.42	3.64	3.40	2.69	1.72	1.72	1.07	0.71	0.93	1.85	1.44	1.43	3.07	1.94	1.39	1.72	2.01	1.51	3.64	0.71	2.17
7	1.2	1.45	1.66	1.55	1.50	1.39	1.86	1.13	1.65	2.40	1.36	0.89	1.04	1.04	0.99	1.41	1.18	0.93	1.64	1.51	1.25	1.28	2.77	5.01	5.01	0.89	1.59
8	2.8	3.72	3.00	3.21	2.49	2.32	2.65	2.40	2.82	2.67	1.87	2.18	2.04	1.77	1.57	1.59	2.19	2.19	1.50	2.79	1.43	1.34	1.14	0.92	3.72	0.92	2.19
9	0.8	0.50	0.57	0.73	0.70	0.71	0.72	0.81	1.12	1.49	1.63	1.55	1.72	2.14	1.08	0.74	0.35	1.18	1.34	1.81	2.04	2.54	2.18	2.28	2.54	0.35	1.28
10	2.1	1.93	2.06	2.76	2.49	3.22	2.20	2.86	2.16	1.81	2.14	1.59	1.18	0.63	0.77	0.54	0.07	-0.12	0.02	0.35	0.82	1.45	1.01	1.97	3.22	-0.12	1.50
11	1.3	2.36	1.01	0.43	0.56	0.90	0.58	0.37	0.27	0.25	0.23	0.13	-0.92	-0.40	0.14	0.25	-0.09	-0.06	-0.09	-0.20	0.40	0.52	0.57	0.34	2.36	-0.92	0.37
12	0.6	0.82	1.33	3.10	3.27	2.62	2.29	3.14	3.23	1.76	3.34	2.75	2.10	1.62	1.63	1.75	2.36	2.46	2.78	1.90	3.23	1.98	2.16	2.61	3.34	0.55	2.28
13	1.8	1.61	1.00	0.77	0.85	0.69	0.66	0.47	0.53	0.66	0.65	0.61	0.58	0.57	0.59	0.47	0.24	0.20	0.23	0.33	0.35	0.38	0.38	0.27	1.84	0.20	0.62
14	0.3	0.38	0.43	0.25	0.14	0.12	0.13	-0.04	0.00	-0.01	0.11	-0.10	-0.10	-0.02	-0.15	-0.18	-0.17	-0.16	-0.14	-0.13	-0.11	-0.06	0.03	-0.13	0.43	-0.18	0.02
15	-0.2	-0.16	-0.18	-0.08	0.09	0.52	0.46	1.14	1.81	2.60	3.23	1.77	1.87	1.41	1.29	1.13	1.67	1.78	2.57	1.68	2.32	2.11	0.88	0.53	3.23	-0.18	1.26
16	0.4	0.35	0.34	0.35	0.43	0.34	0.19	0.27	0.21	0.18	0.17	0.15	0.21	0.14	0.16	0.14	0.19	0.27	0.06	0.04	0.27	0.25	0.39	0.64	0.64	0.04	0.26
17	0.9	0.68	0.18	0.41	0.82	0.81	0.62	0.81	0.97	1.31	1.19	0.72	0.70	0.31	0.16	0.06	0.04	0.21	0.23	0.22	0.35	0.63	0.94	1.21	1.31	0.04	0.60
18	0.8	0.33	0.22	0.20	0.17	0.23	0.30	0.25	0.22	0.20	0.27	0.43	0.28	0.22	0.26	0.23	0.38	0.25	0.26	0.16	0.06	0.13	0.27	0.44	0.83	0.06	0.27
19	0.6	0.73	1.08	1.49	1.18	1.10	1.25	0.70	0.55	0.40	0.15	0.14	0.06	0.07	0.24	0.29	0.38	0.48	0.46	0.31	0.11	0.08	0.05	0.07	1.49	0.05	0.50
20	0.1	0.06	0.06	0.07	0.06	0.15	0.23	0.15	0.19	0.16	0.18	0.15	0.45	0.82	0.75	0.84	1.13	1.02	0.67	0.66	0.61	0.74	0.67	0.69	1.13	0.06	0.44
21	0.6	0.95	1.01	1.07	0.88	0.76	0.63	0.65	0.84	0.82	0.84	0.74	0.71	0.55	0.46	0.55	0.60	0.48	0.38	0.53	0.51	0.35	0.26	0.24	1.07	0.24	0.64
22	0.2	0.13	0.01	0.05	0.48	0.76	0.95	0.47	0.09	0.21	0.44	0.32	0.07	0.05	0.22	0.26	0.24	0.13	0.13	0.34	0.38	0.57	0.49	0.64	0.95	0.01	0.32
23	0.6	0.74	0.62	0.90	1.90	1.98	3.20	3.89	3.77	2.40	2.71	3.81	3.05	1.50	2.20	2.29	2.61	2.47	3.63	3.68	3.67	4.92	4.01	2.96	4.92	0.62	2.65
24	2.6	0.85	0.38	0.26	0.20	0.08	0.24	0.38	0.10	-0.10	0.01	0.04	0.39	0.51	0.62	0.88	0.94	0.98	1.37	1.09	0.89	0.75	0.74	0.94	2.59	-0.10	0.63
25	0.8	0.72	0.10	0.07	-0.11	-0.14	-0.04	-0.05	-0.23	-0.19	-0.17	0.09	0.43	0.66	1.73	0.06	0.26	0.58	0.45	0.71	0.60	0.99	0.65	1.16	1.73	-0.23	0.38
26	2.6	2.44	1.75	3.04	2.36	3.08	2.24	3.02	3.99	4.85	3.71	2.68	2.41	1.21	1.97	3.02	3.24	1.00	1.04	1.52	1.14	0.71	0.82	0.82	4.85	0.71	2.28
27	1.4	2.49	3.50	2.18	1.85	2.28	3.02	3.44	3.24	3.16	2.48	2.75	3.25	3.54	2.17	1.22	0.62	1.29	1.19	0.89	1.35	1.08	0.84	1.23	3.54	0.62	2.10
28	1.5	1.43	2.56	1.94	2.50	2.69	2.52	2.39	3.12	3.07	2.21	1.75	1.47	1.36	0.72	0.54	0.95	1.30	2.88	3.40	2.03	0.94	2.28	2.75	3.40	0.54	2.01
29	1.9	2.90	2.65	3.20	1.87	3.14	2.32	2.69	2.08	2.43	1.50	1.21	0.38	0.34	0.26	0.08	0.45	0.75	2.02	1.18	0.17	0.10	0.22	-0.04	3.20	-0.04	1.41
Max.	**4.9**	**4.03**	**4.07**	**3.21**	**3.27**	**3.61**	**3.42**	**3.89**	**3.99**	**4.85**	**4.19**	**3.81**	**3.25**	**3.54**	**2.20**	**3.02**	**3.24**	**2.47**	**3.63**	**3.68**	**3.67**	**4.92**	**4.01**	**5.01**	**5.01**		
Min.	**-0.2**	**-0.16**	**-0.18**	**-0.08**	**-0.11**	**-0.14**	**-0.04**	**-0.05**	**-0.23**	**-0.19**	**-0.17**	**-0.10**	**-0.92**	**-0.40**	**-0.15**	**-0.18**	**-0.17**	**-0.16**	**-0.14**	**-0.20**	**-0.11**	**-0.06**	**0.03**	**-0.13**		**-0.92**	
Avg.	**1.4**	**1.46**	**1.44**	**1.41**	**1.34**	**1.58**	**1.48**	**1.58**	**1.60**	**1.50**	**1.40**	**1.21**	**0.99**	**0.89**	**0.84**	**0.87**	**0.92**	**0.96**	**1.28**	**1.31**	**1.25**	**1.33**	**1.25**	**1.44**			**1.28**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.1	-0.11	-0.10	-0.15	-0.14	-0.13	-0.08	0.09	0.45	1.61	1.05	1.39	1.35	1.11	0.66	0.82	0.57	0.48	0.13	0.01	0.10	0.20	0.23	0.53	1.61	-0.15	0.42
2	0.6	0.64	0.58	0.80	1.11	0.78	0.34	0.17	0.15	0.16	0.19	0.19	0.19	0.21	0.27	0.31	0.85	0.24	0.19	0.58	0.58	0.33	0.28	0.19	1.11	0.15	0.41
3	0.3	0.65	0.44	0.39	0.44	0.35	0.29	0.39	0.45	0.31	0.28	0.30	0.39	0.49	0.62	0.71	0.59	0.76	0.80	0.45	0.50	0.46	0.44	0.52	0.80	0.28	0.47
4	0.9	0.84	0.69	0.70	0.28	0.12	0.19	0.25	0.25	0.29	0.42	0.37	0.52	0.62	0.68	0.60	0.68	0.68	0.59	0.54	0.42	0.38	0.37	0.46	0.92	0.12	0.49
5	0.8	0.89	0.84	0.65	0.42	0.40	0.45	0.54	0.57	0.57	0.57	0.52	0.42	0.60	0.35	0.49	0.45	0.35	0.23	0.08	0.04	0.09	0.15	0.28	0.89	0.04	0.45
6	0.4	0.50	0.47	0.57	0.67	0.66	0.48	0.50	0.58	0.60	0.71	0.85	0.71	0.51	0.50	0.50	0.47	0.59	0.87	1.09	1.45	1.36	0.97	0.83	1.45	0.38	0.70
7	0.9	0.72	0.72	1.28	2.14	2.21	2.38	1.30	1.37	1.28	1.72	1.03	0.57	0.10	0.32	0.19	0.19	0.31	0.37	0.39	0.44	0.11	0.20	0.17	2.38	0.10	0.85
8	0.2	0.16	0.36	0.18	0.24	0.26	0.35	0.16	0.09	0.03	0.25	0.95	0.91	0.78	0.63	0.43	0.47	0.48	0.39	0.41	0.45	0.48	0.57	0.54	0.95	0.03	0.41
9	0.4	0.50	0.54	0.59	0.61	0.73	0.98	0.78	0.69	0.80	1.07	1.07	0.77	0.18	0.11	0.07	0.11	0.48	1.78	3.92	2.46	1.46	2.80	2.03	3.92	0.07	1.04
10	2.7	2.00	1.71	0.44	0.41	0.34	0.33	0.36	0.42	0.50	0.10	0.12	0.08	-0.07	-0.24	-0.07	-0.40	0.00	0.01	0.04	0.00	0.08	0.09	0.15	2.73	-0.40	0.38
11	0.1	0.08	0.10	0.20	0.28	0.07	-0.05	-0.05	-0.07	-0.05	-0.17	-0.22	-0.17	-0.38	-0.35	-0.29	-0.23	-0.20	0.05	0.99	1.81	2.28	0.68	0.59	2.28	-0.38	0.21
12	1.3	2.29	4.32	1.55	0.23	0.00	0.16	-0.06	-0.04	0.24	-0.17	-0.32	-0.42	-0.48	-0.52	-0.50	-0.44	-0.34	-0.23	-0.13	-0.03	-0.02	-0.01	-0.02	4.32	-0.52	0.27
13	0.0	-0.03	-0.06	-0.08	-0.08	-0.09	-0.10	-0.12	-0.13	-0.18	-0.22	-0.28	-0.34	-0.40	-0.49	-0.53	-0.38	-0.34	-0.10	-0.01	1.58	3.33	3.02	4.08	4.08	-0.53	0.33
14	4.7	4.47	3.23	4.68	2.79	3.07	3.27	3.13	3.92	3.28	2.52	1.79	1.29	1.47	0.71	1.76	1.18	0.62	0.59	0.68	0.44	0.36	0.39	0.35	4.72	0.35	2.11
15	0.6	0.23	0.18	0.17	0.20	0.61	0.41	0.20	0.29	0.34	0.26	0.24	0.28	0.30	0.39	0.32	0.27	0.22	0.23	0.24	0.18	0.14	0.16	0.15	0.65	0.14	0.28
16	0.2	0.20	0.23	0.30	0.32	0.79	1.07	0.83	0.82	2.81	1.19	0.40	0.18	0.27	0.61	0.89	0.43	0.81	3.46	4.50	4.38	2.80	2.48	3.36	4.50	0.17	1.39
17	5.1	5.39	5.86	5.73	5.47	4.97	4.83	3.46	4.33	3.79	2.54	1.29	1.07	0.45	-0.08	-0.25	0.03	-0.12	-0.10	-0.07	-0.02	0.00	0.04	0.18	5.86	-0.25	2.24
18	0.1	0.01	0.17	-0.01	0.08	0.38	0.20	0.18	0.50	0.48	0.19	-0.11	-0.20	-0.30	-0.02	0.02	-0.02	0.48	0.55	0.02	0.36	0.62	0.93	0.94	0.94	-0.30	0.23
19	1.2	1.08	0.96	0.90	0.95	0.84	0.79	0.79	0.76	0.53	0.52	0.26	0.04	-0.06	-0.05	0.06	0.07	0.21	0.52	0.46	1.03	0.35	0.54	1.35	1.35	-0.06	0.59
20	0.9	0.13	0.00	-0.02	0.33	0.03	-0.01	-0.10	0.01	-0.09	-0.27	0.19	0.32	-0.13	-0.02	-0.42	-0.35	-0.33	-0.23	-0.18	0.14	0.73	1.90	1.54	1.90	-0.42	0.17
21	0.8	0.35	0.80	-0.03	-0.12	-0.24	-0.16	-0.20	-0.17	0.82	2.02	1.48	1.08	0.19	0.62	0.72	0.60	0.50	1.34	1.52	2.15	3.07	2.34	1.63	3.07	-0.24	0.88
22	2.1	2.19	2.22	2.57	4.39	2.00	2.40	3.78	3.19	3.61	0.93	0.65	0.72	0.30	-0.08	-0.47	0.25	1.10	2.12	3.74	5.77	4.07	2.94	4.31	5.77	-0.47	2.28
23	4.0	4.35	2.50	0.84	0.53	1.91	3.83	4.84	2.04	1.99	1.30	0.31	-0.19	0.09	0.29	0.48	0.68	1.42	2.22	1.70	2.22	1.97	2.38	2.28	4.84	-0.19	1.83
24	0.7	0.76	1.32	1.01	0.17	0.06	0.29	1.07	2.11	3.44	1.08	0.53	0.37	-0.09	0.09	-0.08	1.18	2.90	1.73	1.63	5.43	4.97	2.66	2.10	5.43	-0.09	1.48
25	2.4	1.39	0.61	0.32	0.44	0.27	0.26	0.12	0.92	1.85	0.27	0.33	-0.20	-0.35	-0.31	-0.10	1.35	3.03	4.66	6.17	6.61	8.29	8.57	8.53	8.57	-0.35	2.31
26	7.5	7.54	8.84	8.07	6.61	7.49	6.60	6.25	5.92	4.10	2.46	2.12	0.78	0.12	-0.04	0.35	1.19	1.57	2.20	2.54	3.13	4.85	4.14	3.12	8.84	-0.04	4.06
27	4.5	3.33	4.92	4.71	4.63	4.37	1.75	0.95	0.82	0.35	0.20	-0.15	-0.22	0.14	0.04	0.11	0.48	1.00	1.35	2.09	2.77	3.05	3.60	4.52	4.92	-0.22	2.05
28	5.7	5.19	6.22	5.49	7.46	7.07	5.33	6.23	5.25	5.45	2.28	0.33	-0.09	-0.50	-0.57	-0.63	-0.22	1.20	4.38	5.21	5.53	5.77	3.97	1.54	7.46	-0.63	3.65
29	1.2	1.62	1.50	1.36	0.97	0.68	0.65	0.57	0.55	0.55	0.45	0.48	0.50	0.52	0.66	0.73	0.69	0.60	0.49	0.49	0.36	0.39	0.34	0.31	1.62	0.31	0.69
30	0.3	0.31	0.30	0.23	0.19	0.13	0.17	0.26	0.24	0.34	0.40	0.37	0.27	0.28	0.32	0.26	0.23	0.18	0.27	0.14	0.09	0.23	0.14	0.16	0.40	0.09	0.24
31	0.1	0.20	0.20	0.31	0.24	0.47	0.52	0.36	0.40	0.66	0.89	1.28	1.58	1.60	1.66	1.42	1.32	1.29	1.21	1.03	0.59	0.51	0.34	0.42	1.66	0.14	0.78
Max.	**7.5**	**7.54**	**8.84**	**8.07**	**7.46**	**7.49**	**6.60**	**6.25**	**5.92**	**5.45**	**2.54**	**2.12**	**1.58**	**1.60**	**1.66**	**1.76**	**1.35**	**3.03**	**4.66**	**6.17**	**6.61**	**8.29**	**8.57**	**8.53**	**8.84**		
Min.	**-0.1**	**-0.11**	**-0.10**	**-0.15**	**-0.14**	**-0.24**	**-0.16**	**-0.20**	**-0.17**	**-0.18**	**-0.27**	**-0.32**	**-0.42**	**-0.50**	**-0.57**	**-0.63**	**-0.44**	**-0.34**	**-0.23**	**-0.18**	**-0.03**	**-0.02**	**-0.01**	**-0.02**		**-0.63**	
Avg.	**1.6**	**1.54**	**1.63**	**1.41**	**1.36**	**1.31**	**1.22**	**1.19**	**1.18**	**1.30**	**0.81**	**0.57**	**0.40**	**0.24**	**0.22**	**0.25**	**0.40**	**0.65**	**1.03**	**1.30**	**1.64**	**1.70**	**1.54**	**1.52**			**1.09**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.4	0.29	0.18	0.11	0.06	0.04	-0.15	-0.23	-0.25	-0.17	0.01	0.16	0.30	0.68	0.82	0.61	0.47	0.30	0.42	0.03	-0.18	-0.29	-0.76	0.15	0.82	-0.76	0.12
2	1.0	0.32	1.16	2.06	1.97	1.76	1.22	0.45	0.91	0.75	-0.07	-0.09	-0.11	-0.51	-0.30	-0.15	-0.40	-0.18	0.58	1.05	0.99	0.62	0.31	-0.10	2.06	-0.51	0.55
3	0.0	0.18	0.26	0.24	0.12	-0.01	-0.13	-0.21	-0.08	0.17	0.22	0.54	0.61	1.01	1.37	1.56	1.42	1.30	0.74	0.65	0.51	0.40	0.38	0.26	1.56	-0.21	0.48
4	0.2	0.16	0.19	0.10	0.14	0.17	0.09	0.17	0.15	0.22	0.29	0.33	0.29	0.29	0.34	0.41	0.30	-0.03	-0.17	-0.63	-0.83	-0.68	-0.34	-0.78	0.41	-0.83	0.02
5	-0.8	-0.78	-1.10	-0.54	0.13	1.20	2.13	3.05	3.41	1.82	-0.77	-3.69	-4.82	-3.52	-2.06	-0.85	-0.54	-0.88	-1.46	-1.46	0.42	2.30	2.51	2.23	3.41	-4.82	-0.17
6	1.3	0.88	1.44	2.09	1.58	2.11	2.53	2.51	2.41	0.97	-0.49	-0.74	-0.60	-1.46	-2.30	-1.27	-0.64	-1.03	-1.12	-0.51	1.08	2.10	3.31	3.28	3.31	-2.30	0.73
7	3.3	3.27	3.85	3.21	2.73	3.53	3.95	3.80	3.70	1.98	0.56	-0.36	-0.64	-1.58	-1.70	-1.27	-0.61	-1.07	-0.79	0.66	2.63	3.86	3.50	3.47	3.95	-1.70	1.67
8	4.6	5.86	6.50	7.22	7.27	7.68	7.64	7.55	6.10	3.45	1.86	-0.55	-2.20	-2.53	-2.57	-2.48	-2.86	-3.18	-2.45	-2.30	-1.09	0.08	0.34	1.65	7.68	-3.18	1.90
9	1.0	0.78	0.12	0.47	0.42	1.34	1.71	2.39	1.13	-0.52	-1.46	-2.37	-1.95	-1.58	-1.51	-0.89	-0.63	-0.68	-0.72	-0.10	1.46	2.97	4.07	3.92	4.07	-2.37	0.39
10	3.9	3.47	3.28	2.63	3.37	3.09	3.14	2.65	2.08	-0.32	-2.19	-4.86	-6.60	-5.27	-4.29	-3.31	-3.56	-2.41	-0.95	0.27	1.93	3.94	4.44	4.29	4.44	-6.60	0.37
11	4.3	4.08	4.58	4.49	5.25	4.42	3.25	2.91	3.36	0.61	-3.14	-5.04	-4.96	-2.49	-1.23	-0.24	-0.33	-0.64	-0.49	0.53	1.59	2.91	3.56	3.68	5.25	-5.04	1.29
12	3.8	2.53	3.08	3.76	4.58	5.36	4.58	4.33	3.58	1.02	-0.88	-1.87	-1.50	-1.05	-1.01	-0.28	0.36	0.50	0.01	-0.22	1.85	2.83	3.15	3.93	5.36	-1.87	1.77
13	3.6	3.64	2.36	0.70	0.24	0.73	0.81	0.31	0.02	-0.31	0.42	-0.26	-0.30	0.06	-0.43	-0.41	-0.45	-0.47	-0.44	-0.38	-0.16	0.50	0.07	-0.23	3.64	-0.47	0.40
14	-0.5	-0.57	-0.56	-0.44	-0.02	0.15	0.05	-0.01	0.02	0.14	0.21	0.29	0.34	0.20	-0.21	-0.34	-0.16	0.30	0.60	0.24	0.48	0.58	0.41	0.17	0.60	-0.57	0.06
15	0.1	-0.23	-0.29	0.30	0.52	0.52	0.69	0.16	-1.35	-1.51	-2.15	-2.39	-2.06	-2.11	-2.73	-3.42	-3.49	-3.64	-2.92	-2.08	-1.88	-1.89	-1.21	-0.97	0.69	-3.64	-1.42
16	-1.1	-1.28	-1.24	-1.32	-1.36	-1.34	-1.20	-1.66	-1.51	0.04	1.41	1.31	1.71	1.94	2.55	3.09	2.81	2.59	2.72	2.91	2.47	2.97	2.97	3.66	3.66	-1.66	0.96
17	3.1	3.54	4.42	3.79	3.12	2.90	3.09	4.05	4.26	4.25	4.26	4.21	3.29	3.29	3.16	3.01	3.03	2.49	2.03	1.79	1.18	1.72	2.07	2.16	4.42	1.18	3.09
18	2.7	3.27	3.97	4.60	3.71	3.79	4.54	5.29	6.45	7.90	7.66	8.37	7.11	7.10	6.71	6.75	6.37	6.60	5.85	6.43	5.61	5.41	5.28	5.34	8.37	2.72	5.70
19	4.6	5.28	4.43	3.61	3.06	3.13	2.73	2.94	3.73	4.78	4.07	4.46	4.63	5.51	5.84	5.18	4.78	4.77	4.21	4.40	3.46	3.39	2.02	1.82	5.84	1.82	4.04
20	1.2	1.71	2.52	1.41	1.28	2.05	1.86	3.76	3.93	4.16	4.49	3.96	3.70	3.52	3.80	3.21	3.01	2.44	2.02	1.98	1.80	2.20	1.63	1.14	4.49	1.14	2.62
21	1.6	1.18	1.75	1.93	1.89	1.10	1.22	0.76	0.58	0.71	1.03	1.35	2.14	1.87	2.45	2.46	2.40	2.01	1.87	2.21	2.88	2.91	2.40	2.19	2.91	0.58	1.79
22	2.2	2.44	2.96	3.37	4.32	4.74	5.42	5.79	5.49	4.33	5.48	5.56	6.07	5.73	5.40	5.54	5.52	6.24	6.69	5.54	5.83	5.74	4.68	5.08	6.69	2.18	5.01
23	5.3	5.27	4.91	4.32	4.31	5.32	5.23	4.94	5.76	5.36	5.36	5.65	4.88	4.44	4.78	5.48	7.50	8.01	7.78	6.87	6.85	5.54	6.31	5.22	8.01	4.31	5.64
24	4.4	2.53	1.58	1.39	1.75	-0.23	-1.55	-1.49	-2.23	-2.42	-2.30	-1.90	-1.94	-1.69	-1.64	-1.14	-0.87	-0.85	-0.64	-0.24	-0.13	0.02	-0.05	-0.82	4.39	-2.42	-0.44
25	-1.1	-1.63	-2.50	-3.82	-4.88	-5.04	-5.71	-5.95	-6.20	-5.96	-5.18	-5.09	-4.76	-4.48	-4.13	-4.02	-3.73	-3.42	-3.22	-3.22	-3.21	-3.47	-4.16	-4.57	-1.14	-6.20	-4.15
26	-5.0	-4.90	-4.93	-4.78	-4.72	-4.55	-4.50	-3.84	-3.25	-2.38	-1.90	-1.46	-0.77	-0.20	-0.03	-0.35	-0.36	0.06	-0.01	-0.13	-0.29	-0.93	-1.73	-1.82	0.06	-4.96	-2.20
27	-1.6	-1.79	-1.95	-2.05	-2.24	-2.63	-2.84	-2.75	-2.57	-2.46	-2.42	-2.39	-2.25	-1.58	-1.38	-1.71	-1.93	-1.84	-1.47	-1.36	-1.59	-1.89	-2.10	-2.19	-1.36	-2.84	-2.04
28	-2.3	-2.35	-2.03	-1.90	-2.14	-2.04	-2.14	-2.13	-2.84	-2.80	-2.27	-1.73	-1.74	-1.52	-0.85	-0.65	-0.77	-0.73	-0.94	-0.97	-1.48	-1.72	-1.79	-1.94	-0.65	-2.84	-1.74
29	-1.9	-1.49	-1.62	-1.44	-1.71	-1.50	-1.48	-1.63	-1.10	-1.55	-2.47	-2.01	-2.02	-1.67	-1.17	-0.77	-0.31	0.00	-0.09	0.93	1.96	2.74	2.85	2.34	2.85	-2.47	-0.63
30	2.9	3.13	2.74	2.52	3.33	3.43	4.23	3.93	1.67	0.62	0.15	-0.65	-0.62	-0.31	-0.28	0.02	0.21	-0.46	-0.28	-0.10	-0.32	-0.34	-0.30	-0.23	4.23	-0.65	1.04
Max.	**5.3**	**5.86**	**6.50**	**7.22**	**7.27**	**7.68**	**7.64**	**7.55**	**6.45**	**7.90**	**7.66**	**8.37**	**7.11**	**7.10**	**6.71**	**6.75**	**7.50**	**8.01**	**7.78**	**6.87**	**6.85**	**5.74**	**6.31**	**5.34**	**8.37**		
Min.	**-5.0**	**-4.90**	**-4.93**	**-4.78**	**-4.88**	**-5.04**	**-5.71**	**-5.95**	**-6.20**	**-5.96**	**-5.18**	**-5.09**	**-6.60**	**-5.27**	**-4.29**	**-4.02**	**-3.73**	**-3.64**	**-3.22**	**-3.22**	**-3.21**	**-3.47**	**-4.16**	**-4.57**		**-6.60**	
Avg.	**1.4**	**1.29**	**1.34**	**1.27**	**1.27**	**1.37**	**1.35**	**1.39**	**1.25**	**0.76**	**0.33**	**-0.04**	**-0.16**	**0.07**	**0.25**	**0.46**	**0.55**	**0.54**	**0.58**	**0.76**	**1.13**	**1.48**	**1.46**	**1.41**			**0.89**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.2	-0.10	0.10	1.23	1.68	2.99	3.46	2.52	2.04	1.29	0.23	0.06	0.36	0.70	1.23	1.61	1.78	1.97	2.11	2.17	2.45	1.94	1.49	1.61	3.46	-0.24	1.44
2	1.9	1.71	1.23	0.41	0.19	0.15	0.38	1.09	1.27	1.35	1.25	1.10	1.27	1.78	2.11	2.14	3.41	3.24	3.22	2.36	1.14	0.44	0.76	0.70	3.41	0.15	1.44
3	1.0	0.53	0.01	-0.15	0.00	0.44	0.77	0.57	0.41	0.27	0.85	0.66	1.21	1.49	1.15	1.50	1.20	0.61	0.75	1.10	1.49	1.04	0.45	0.74	1.50	-0.15	0.75
4	0.6	0.58	0.65	0.65	0.80	0.67	0.75	0.71	0.92	0.96	0.96	0.97	0.55	0.90	0.99	1.23	1.33	1.51	2.07	2.96	2.56	2.09	2.04	2.37	2.96	0.55	1.24
5	1.8	1.77	2.19	2.00	2.25	2.98	3.21	2.32	2.08	1.93	1.79	1.51	1.80	2.33	2.42	2.32	3.10	2.95	2.87	2.54	1.72	1.45	1.45	1.17	3.21	1.17	2.16
6	1.2	1.56	0.98	0.72	0.87	0.77	0.55	0.58	0.38	0.70	0.90	1.04	1.14	1.19	1.12	0.99	1.01	1.04	0.94	0.95	0.84	0.66	0.46	0.40	1.56	0.38	0.88
7	0.4	0.46	0.45	0.53	0.55	0.55	0.53	0.49	0.65	0.83	1.01	1.12	1.11	1.12	1.13	1.09	1.06	1.12	1.07	1.06	0.94	0.90	0.67	0.53	1.13	0.35	0.81
8	0.7	0.67	0.63	0.64	0.44	0.28	0.17	0.47	0.75	0.87	0.94	1.13	1.05	0.95	0.88	0.99	0.97	1.03	0.98	0.93	0.91	0.92	0.93	0.88	1.13	0.17	0.79
9	0.9	0.86	0.79	0.69	0.65	0.51	0.51	0.49	0.60	0.77	0.80	0.79	0.64	0.50	0.38	0.46	0.49	0.48	0.46	0.38	0.29	0.54	0.52	0.85	0.87	0.29	0.60
10	1.3	0.66	0.93	0.80	0.84	1.30	0.60	0.39	0.63	0.84	0.78	0.85	1.05	0.61	1.39	1.28	1.20	1.18	1.32	0.58	1.30	0.95	0.96	1.15	1.39	0.39	0.95
11	0.8	0.71	0.71	0.72	0.70	0.78	0.76	0.72	0.90	0.89	0.71	0.57	0.55	0.55	1.05	1.12	1.05	0.92	1.16	1.05	0.99	0.91	0.77	0.66	1.16	0.55	0.83
12	0.7	0.54	0.51	0.51	0.44	0.38	0.27	0.27	0.29	0.36	0.33	0.45	0.41	0.30	0.33	0.23	0.23	0.18	0.19	0.22	0.17	0.13	0.08	0.15	0.66	0.08	0.32
13	0.1	0.09	0.06	0.04	0.04	0.10	0.04	0.06	0.10	0.11	0.20	0.12	0.07	0.05	0.08	0.13	0.14	0.14	0.16	0.19	0.15	0.18	0.24	0.35	0.35	0.04	0.12
14	0.3	0.49	0.50	0.76	1.26	0.97	0.70	0.64	0.60	0.51	0.59	0.58	0.80	1.08	0.79	0.05	0.15	0.22	0.41	0.41	0.49	0.82	0.97	1.53	1.53	0.05	0.65
15	1.8	1.78	1.10	0.99	0.71	0.72	0.64	0.61	0.34	0.29	0.14	-0.10	-0.06	-0.32	-0.24	-0.48	-0.25	-0.22	-0.15	0.00	0.15	0.11	0.14	0.22	1.84	-0.48	0.33
16	0.1	0.10	0.11	0.09	0.03	0.02	0.03	0.04	0.08	-0.21	-0.13	-0.49	-0.43	-0.55	-0.51	-0.57	-0.42	-0.39	-0.21	-0.15	0.55	1.07	1.78	2.11	2.11	-0.57	0.09
17	2.2	2.82	3.19	3.01	3.43	2.96	2.68	1.68	0.49	0.10	0.13	0.12	0.24	0.63	0.55	0.71	1.01	1.19	0.78	1.06	0.72	0.54	0.51	0.71	3.43	0.10	1.31
18	0.8	1.46	0.93	0.53	0.38	0.22	0.24	0.05	-0.01	-0.34	-0.42	-0.36	-0.37	-0.40	-0.37	-0.29	-0.32	-0.20	0.06	0.12	0.12	0.02	0.02	0.08	1.46	-0.42	0.08
19	0.1	0.11	0.09	0.30	0.21	0.27	0.18	0.16	-0.02	-0.17	-0.05	-0.06	0.00	0.14	0.14	-0.03	0.28	0.93	1.22	1.39	1.47	1.95	1.97	1.87	1.97	-0.17	0.52
20	1.6	1.60	1.94	1.27	1.09	2.63	1.31	0.28	0.06	-0.04	-0.09	0.00	0.27	0.11	0.36	0.46	0.64	0.71	0.94	1.36	1.06	1.08	1.75	1.28	2.63	-0.09	0.90
21	1.3	2.09	1.84	2.28	1.95	2.12	1.57	0.55	0.13	0.06	0.10	0.19	0.12	0.46	0.34	0.05	0.50	0.64	0.54	0.67	0.63	0.74	0.81	0.79	2.28	0.05	0.85
22	0.7	0.60	0.58	0.38	0.34	0.32	0.11	0.18	-0.06	-0.10	-0.06	0.04	0.11	0.18	0.10	-0.43	-0.66	-0.59	-0.37	-0.07	0.10	0.10	0.15	0.18	0.70	-0.66	0.08
23	0.1	0.08	0.08	0.16	0.17	0.21	0.21	0.14	0.09	0.08	-0.08	-0.10	-0.15	0.00	0.04	0.05	0.04	0.10	0.11	0.10	0.10	0.11	0.25	0.33	0.33	-0.15	0.09
24	0.3	0.29	0.23	0.23	0.20	0.18	0.13	0.05	0.05	-0.09	-0.26	-0.41	-0.71	-0.73	-1.03	-1.24	-1.08	-0.85	-0.21	0.08	0.19	0.32	0.32	0.38	0.38	-1.24	-0.15
25	0.4	0.32	0.20	0.24	0.26	0.15	0.15	0.14	-0.03	-0.15	-0.48	-0.44	-0.73	-0.57	-0.56	-0.52	-0.48	-0.53	-0.41	-0.29	-0.12	0.09	0.17	0.17	0.44	-0.73	-0.12
26	0.1	0.15	0.20	0.19	0.23	0.23	0.10	-0.07	-0.13	-0.23	-0.28	-0.33	-0.47	-0.45	-0.59	-0.39	-0.35	-0.37	-0.59	-0.33	0.06	0.35	0.33	0.98	0.98	-0.59	-0.07
27	1.1	0.91	0.91	0.65	0.71	1.48	0.70	0.26	-0.07	-0.35	-0.39	-0.45	-0.28	-0.43	-0.34	-0.70	-0.62	-0.47	-0.48	-0.33	0.18	0.98	1.08	1.32	1.48	-0.70	0.22
28	1.7	0.90	1.52	1.47	1.37	1.66	1.13	0.52	-0.09	-0.18	-0.30	-0.67	-0.16	-0.13	-0.32	-0.55	-0.51	-0.42	-0.21	0.22	0.57	1.19	1.86	2.60	2.60	-0.67	0.55
29	2.6	2.77	2.13	2.34	1.81	1.20	0.96	0.38	-0.01	-0.29	-0.20	-0.28	-0.29	-0.28	-0.38	-0.47	-0.50	-0.31	-0.23	-0.08	0.28	0.94	1.92	3.20	3.20	-0.50	0.72
30	2.9	2.08	3.62	2.66	1.89	0.84	1.06	0.49	0.09	-0.48	-0.68	-0.88	-0.85	-0.80	-1.03	-1.25	-1.11	-0.82	-0.93	-0.93	-0.51	-0.34	-0.15	-0.06	3.62	-1.25	0.20
31	0.0	0.08	0.16	0.15	0.09	0.08	0.06	0.06	-0.02	-0.11	-0.66	-0.87	-0.83	-0.86	-0.68	-0.68	-0.60	-0.53	-0.50	-0.43	-0.28	-0.11	-0.04	-0.03	0.16	-0.87	-0.27
Max.	**2.9**	**2.82**	**3.62**	**3.01**	**3.43**	**2.99**	**3.46**	**2.52**	**2.08**	**1.93**	**1.79**	**1.51**	**1.80**	**2.33**	**2.42**	**2.32**	**3.41**	**3.24**	**3.22**	**2.96**	**2.56**	**2.09**	**2.04**	**3.20**	**3.62**		
Min.	**-0.2**	**-0.10**	**0.01**	**-0.15**	**0.00**	**0.02**	**0.03**	**-0.07**	**-0.13**	**-0.48**	**-0.68**	**-0.88**	**-0.85**	**-0.86**	**-1.03**	**-1.25**	**-1.11**	**-0.85**	**-0.93**	**-0.93**	**-0.51**	**-0.34**	**-0.15**	**-0.06**		**-1.25**	
Avg.	**1.0**	**0.92**	**0.92**	**0.85**	**0.82**	**0.91**	**0.77**	**0.54**	**0.40**	**0.31**	**0.25**	**0.19**	**0.24**	**0.31**	**0.34**	**0.28**	**0.41**	**0.47**	**0.55**	**0.62**	**0.67**	**0.71**	**0.80**	**0.94**			**0.59**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.15	0.11	0.19	0.25	0.22	0.16	0.14	0.10	0.02	-0.12	-0.83	-1.19	-0.89	-0.92	-1.28	-0.94	-0.51	-0.41	-0.35	-0.22	-0.15	-0.11	0.03	0.25	-1.28	-0.27
2	0.2	0.26	0.24	0.25	0.23	0.23	0.21	-0.14	-0.22	-0.42	-0.48	-0.55	-0.92	-0.92	-1.16	-1.08	-0.92	-0.95	-0.63	-0.69	-0.24	-0.12	0.01	0.33	0.33	-1.16	-0.31
3	0.6	0.59	0.74	0.66	0.54	0.69	0.48	0.04	-0.20	-0.25	-0.40	-0.45	-0.59	-0.66	-0.95	-1.33	-0.91	-0.76	-0.50	-0.25	-0.26	-0.16	-0.04	-0.07	0.74	-1.33	-0.15
4	0.0	0.06	-0.01	0.10	0.17	0.02	-0.04	-0.13	-0.49	-0.81	-0.83	-1.10	-1.33	-1.34	-1.42	-1.41	-1.41	-1.24	-1.06	-0.78	-0.47	-0.07	0.08	0.11	0.17	-1.42	-0.56
5	0.1	0.08	0.04	-0.03	-0.05	0.00	-0.01	-0.08	-0.18	-0.23	-0.24	-0.25	-0.35	-0.54	-0.75	-0.62	-0.72	-0.71	-0.51	-0.52	-0.49	-0.28	0.05	0.27	0.27	-0.75	-0.25
6	0.3	0.52	0.70	1.03	1.07	0.59	0.30	-0.03	-0.13	-0.28	-0.38	-0.75	-0.92	-0.74	-0.81	-0.62	-0.58	-0.83	-0.71	-0.41	-0.10	0.06	0.37	1.16	1.16	-0.92	-0.05
7	0.9	0.43	0.71	0.92	1.35	0.66	0.20	-0.11	-0.49	-0.64	-1.04	-1.03	-0.66	-0.77	-0.67	-0.55	-0.55	-0.90	-0.60	-0.29	-0.18	-0.04	0.06	0.23	1.35	-1.04	-0.13
8	0.4	0.14	0.16	0.09	0.10	0.11	-0.02	-0.07	-0.48	-0.38	-0.50	-0.81	-0.75	-1.02	-1.11	-0.81	-0.68	-0.65	-0.68	-0.66	-0.60	-0.36	-0.02	-0.13	0.38	-1.11	-0.36
9	-0.2	-0.11	-0.13	-0.16	-0.14	-0.13	-0.16	-0.24	-0.34	-0.39	-0.51	-0.41	-0.51	-0.59	-0.62	-0.81	-0.98	-0.70	-0.71	-0.56	-0.41	-0.17	-0.02	-0.06	-0.02	-0.98	-0.38
10	0.0	0.02	0.04	0.10	0.04	0.04	-0.11	-0.26	-0.29	-0.38	-0.29	-0.39	-0.45	-0.45	-0.60	-0.98	-0.98	-0.66	-0.62	-0.49	-0.32	-0.18	0.03	0.16	0.16	-0.98	-0.29
11	0.1	0.38	0.29	0.47	0.49	0.33	-0.02	-0.21	-0.37	-0.40	-0.34	-0.29	-0.31	-0.40	-0.49	-0.74	-0.82	-0.74	-0.53	-0.51	-0.36	-0.25	-0.06	0.16	0.49	-0.82	-0.19
12	0.1	0.13	0.14	0.26	0.10	-0.06	-0.06	-0.26	-0.60	-0.46	-0.63	-0.58	-0.55	-0.39	-0.30	-0.28	-0.34	-0.34	-0.32	-0.29	-0.18	-0.16	-0.11	-0.04	0.26	-0.63	-0.22
13	0.1	0.12	0.11	0.04	-0.01	0.03	0.00	-0.10	-0.24	-0.32	-0.37	-0.37	-0.57	-0.73	-0.72	-0.60	-0.61	-0.45	-0.49	-0.45	-0.39	-0.09	0.34	0.46	0.46	-0.73	-0.22
14	0.7	0.71	0.75	0.64	0.67	0.36	-0.13	-0.25	-0.28	-0.48	-1.64	-1.07	-1.59	-1.69	-0.80	-0.82	-1.12	-0.98	-0.94	-0.40	-0.09	0.00	0.13	0.31	0.75	-1.69	-0.33
15	0.9	0.85	1.06	0.97	0.74	0.53	0.27	-0.13	-0.35	-0.67	-0.86	-1.16	-1.21	-1.85	-0.84	-1.27	-1.32	-0.87	-0.63	-0.48	-0.39	-0.26	-0.19	-0.11	1.06	-1.85	-0.30
16	-0.1	-0.15	-0.07	-0.10	-0.07	0.00	-0.06	-0.17	-0.17	-0.38	-0.50	-0.72	-0.95	-1.02	-0.40	-0.36	-0.59	-0.72	-0.72	-0.59	-0.30	-0.04	0.89	1.89	1.89	-1.02	-0.23
17	1.0	0.63	0.88	0.94	0.74	0.73	0.52	0.06	-0.26	-0.55	-0.94	-0.67	-0.45	-0.89	-1.20	-1.30	-1.27	-1.12	-1.06	-0.89	-0.54	-0.19	0.26	0.36	1.03	-1.30	-0.22
18	0.8	0.83	0.72	0.76	0.64	0.56	0.22	-0.22	-0.45	-0.70	-0.60	-0.51	-1.18	-1.18	-0.98	-1.27	-1.20	-1.01	-0.67	-0.63	-0.31	-0.02	0.92	0.79	0.92	-1.27	-0.20
19	0.6	0.45	0.47	0.69	1.16	1.04	0.28	-0.17	-0.49	-0.58	-0.53	-0.47	-0.39	-0.62	-1.04	-1.22	-1.31	-1.18	-1.00	-0.84	-0.63	-0.27	0.17	0.37	1.16	-1.31	-0.23
20	0.0	0.22	0.65	0.65	0.78	1.13	0.33	-0.30	-0.52	-0.83	-1.00	-1.25	-1.52	-1.59	-1.51	-1.51	-1.48	-1.28	-1.06	-0.95	-0.74	-0.44	-0.21	0.06	1.13	-1.59	-0.52
21	0.2	0.04	-0.02	0.01	0.04	0.26	0.09	-0.21	-0.50	-0.47	-0.54	-0.50	-0.54	-0.41	-0.57	-0.73	-0.69	-0.74	-0.83	-0.88	-0.65	-0.29	0.09	0.39	0.39	-0.88	-0.31
22	0.8	0.70	0.52	0.43	0.71	0.64	0.22	-0.21	-0.45	-0.52	-0.69	-1.01	-1.19	-1.34	-1.30	-0.94	-0.77	-0.90	-0.79	-0.63	-0.38	-0.25	-0.20	-0.17	0.80	-1.34	-0.32
23	-0.1	-0.10	-0.05	-0.03	0.03	0.15	0.03	-0.11	-0.31	-0.74	-1.06	-1.44	-1.47	-1.47	-1.59	-1.61	-1.44	-1.31	-1.18	-0.86	-0.46	-0.15	0.05	0.17	0.17	-1.61	-0.63
24	0.1	0.14	0.20	0.19	0.17	0.12	-0.03	-0.25	-0.37	-0.74	-0.85	-1.14	-0.95	-0.69	-0.73	-0.70	-0.84	-0.66	-0.41	-0.26	-0.20	-0.11	-0.07	-0.06	0.20	-1.14	-0.34
25	-0.1	0.03	0.11	0.13	0.09	0.02	0.00	-0.17	-0.21	-0.29	-0.31	-0.66	-0.89	-1.09	-1.24	-1.20	-1.09	-0.81	-0.58	-0.38	-0.34	-0.20	-0.02	0.06	0.13	-1.24	-0.38
26	0.1	0.10	0.18	0.10	0.11	0.30	0.29	0.25	0.17	0.02	-0.07	-0.28	-0.51	-0.44	-0.70	-0.61	-0.39	-0.18	-0.26	-0.14	-0.19	-0.10	0.43	0.73	0.73	-0.70	-0.05
27	0.7	0.74	0.70	0.83	1.44	1.09	0.35	-0.08	-0.29	-0.46	-0.53	-0.85	-1.16	-1.51	-1.09	-1.01	-1.05	-1.22	-0.95	-0.95	-0.33	-0.24	0.09	0.08	1.44	-1.51	-0.24
28	0.2	0.33	0.20	0.28	0.77	0.12	-0.01	-0.16	-0.47	-0.72	-0.93	-0.84	-0.76	-0.96	-0.97	-0.82	-0.35	-0.42	-0.30	-0.19	-0.06	0.02	0.03	0.19	0.77	-0.97	-0.24
29	0.2	0.10	0.01	-0.14	-0.09	0.01	-0.06	-0.05	-0.20	-0.32	-0.37	-0.48	-0.52	-0.45	-0.56	-0.74	-0.80	-0.91	-0.63	-0.68	-0.31	-0.15	-0.05	0.02	0.19	-0.91	-0.30
30	0.1	0.16	0.13	0.13	0.18	0.24	0.37	-0.12	-0.38	-0.42	-0.63	-0.63	-0.52	-0.40	-0.59	-0.69	-0.55	-0.35	-0.47	-0.35	-0.28	-0.14	0.42	1.34	1.34	-0.69	-0.14
Max.	**1.0**	**0.85**	**1.06**	**1.03**	**1.44**	**1.13**	**0.52**	**0.25**	**0.17**	**0.02**	**-0.07**	**-0.25**	**-0.31**	**-0.39**	**-0.30**	**-0.28**	**-0.34**	**-0.18**	**-0.26**	**-0.14**	**-0.06**	**0.06**	**0.92**	**1.89**	**1.89**		
Min.	**-0.2**	**-0.15**	**-0.13**	**-0.16**	**-0.14**	**-0.13**	**-0.16**	**-0.30**	**-0.60**	**-0.83**	**-1.64**	**-1.44**	**-1.59**	**-1.85**	**-1.59**	**-1.61**	**-1.48**	**-1.31**	**-1.18**	**-0.95**	**-0.74**	**-0.44**	**-0.21**	**-0.17**		**-1.85**	
Avg.	**0.3**	**0.28**	**0.32**	**0.35**	**0.41**	**0.33**	**0.12**	**-0.12**	**-0.32**	**-0.46**	**-0.61**	**-0.72**	**-0.83**	**-0.90**	**-0.89**	**-0.93**	**-0.89**	**-0.80**	**-0.67**	**-0.55**	**-0.35**	**-0.16**	**0.11**	**0.30**			**-0.28**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.4	1.45	0.89	1.29	0.97	0.74	0.61	-0.23	-0.36	-0.57	-0.77	-1.06	-1.30	-1.46	-1.44	-1.33	-1.29	-1.09	-0.84	-0.70	-0.46	-0.30	-0.19	-0.10	1.45	-1.46	-0.26
2	-0.1	-0.08	-0.07	0.01	0.03	0.08	0.04	-0.07	-0.10	-0.16	-0.36	-0.60	-0.65	-0.82	-0.56	-0.35	-0.79	-0.92	-0.57	-0.35	-0.20	-0.14	-0.08	0.05	0.08	-0.92	-0.28
3	0.3	0.01	0.08	0.17	0.32	0.38	0.48	0.27	0.10	-0.13	-0.27	-0.35	-0.29	-0.27	-0.44	-0.47	-0.37	-0.71	-0.46	-0.34	-0.27	-0.16	0.02	-0.02	0.48	-0.71	-0.10
4	0.0	-0.05	-0.04	0.20	0.20	0.22	0.03	-0.10	-0.23	-0.35	-0.38	-0.61	-0.65	-0.77	-0.54	-0.53	-0.47	-0.47	-0.44	-0.19	-0.28	-0.03	-0.02	0.50	0.50	-0.77	-0.21
5	1.3	1.34	0.82	1.17	0.44	0.48	0.24	0.27	-0.08	-0.32	-0.55	-0.77	-0.73	-0.66	-0.60	-0.79	-0.67	-0.54	-0.61	-0.69	-0.32	-0.12	0.22	0.29	1.34	-0.79	-0.04
6	0.2	0.23	0.39	0.78	1.66	1.76	1.18	0.25	-0.26	-0.49	-0.77	-1.10	-1.35	-1.29	-1.39	-0.97	-0.80	-0.95	-0.98	-0.82	-0.59	-0.35	-0.16	-0.22	1.76	-1.39	-0.25
7	-0.3	-0.18	-0.18	-0.13	-0.16	-0.17	-0.17	-0.23	-0.34	-0.40	-0.37	-0.37	-0.45	-0.50	-0.43	-0.41	-0.42	-0.55	-0.62	-0.50	-0.31	-0.15	-0.07	0.05	0.05	-0.62	-0.31
8	0.2	0.13	0.11	0.14	0.00	0.07	-0.07	-0.13	-0.16	-0.27	-0.24	-0.23	-0.34	-0.42	-0.50	-0.45	-0.31	-0.31	-0.26	-0.24	-0.22	-0.18	-0.09	-0.04	0.19	-0.50	-0.16
9	-0.1	-0.09	0.11	0.22	0.31	0.23	0.14	-0.05	-0.12	-0.41	-0.68	-0.87	-1.16	-1.36	-1.45	-1.43	-1.32	-1.17	-0.86	-0.71	-0.44	-0.32	-0.19	-0.14	0.31	-1.45	-0.49
10	-0.1	-0.18	-0.14	-0.12	-0.11	-0.07	-0.11	-0.23	-0.29	-0.83	-1.19	-1.26	-1.22	-1.02	-0.88	-0.92	-0.71	-0.62	-0.56	-0.47	-0.36	-0.25	-0.22	-0.22	-0.07	-1.26	-0.51
11	-0.2	-0.14	-0.17	-0.09	-0.05	-0.10	-0.09	-0.11	-0.20	-0.62	-0.87	-0.91	-1.29	-1.38	-1.41	-1.40	-1.42	-1.24	-1.10	-0.80	-0.60	-0.18	0.07	0.13	0.13	-1.42	-0.59
12	0.0	0.09	0.30	0.61	0.77	0.97	0.20	-0.16	-0.34	-0.41	-0.62	-0.54	-0.58	-0.72	-0.73	-0.53	-0.53	-0.37	-0.20	-0.19	-0.11	-0.09	-0.08	-0.08	0.97	-0.73	-0.14
13	-0.1	-0.03	-0.04	-0.05	-0.05	-0.07	-0.09	-0.11	-0.17	-0.23	-0.26	-0.41	-0.44	-0.38	-0.44	-0.42	-0.42	-0.39	-0.45	-0.39	-0.32	-0.18	-0.08	0.01	0.01	-0.45	-0.23
14	0.0	0.02	0.02	0.03	0.03	0.01	0.03	-0.11	-0.21	-0.33	-0.48	-0.57	-0.60	-0.71	-0.87	-0.92	-0.71	-0.60	-0.55	-0.63	-0.43	-0.11	-0.02	-0.04	0.03	-0.92	-0.32
15	0.0	-0.03	-0.01	0.05	0.04	0.02	-0.06	-0.15	-0.25	-0.31	-0.48	-0.62	-0.75	-1.01	-1.15	-1.18	-0.96	-0.65	-0.44	-0.28	-0.16	-0.11	-0.08	-0.07	0.05	-1.18	-0.36
16	-0.1	-0.11	-0.10	-0.10	-0.09	-0.09	-0.11	-0.11	-0.20	-0.18	-0.20	-0.26	-0.56	-0.65	-1.03	-0.69	-0.30	-0.21	-0.19	-0.17	-0.18	-0.16	-0.14	-0.11	-0.09	-1.03	-0.25
17	-0.1	-0.10	-0.13	-0.17	-0.17	-0.13	-0.11	-0.16	-0.23	-0.32	-0.25	-0.28	-0.33	-0.40	-0.34	-0.27	-0.23	-0.28	-0.23	-0.19	-0.14	-0.10	-0.10	-0.07	-0.07	-0.40	-0.20
18	-0.1	-0.10	-0.13	-0.13	-0.13	-0.14	-0.19	-0.35	-0.50	-0.33	-0.41	-0.40	-0.40	-0.49	-0.50	-0.58	-0.56	-0.53	-0.45	-0.26	-0.23	-0.18	-0.06	0.23	0.23	-0.58	-0.29
19	0.3	0.41	0.29	0.45	0.42	0.32	0.11	0.00	-0.23	-0.45	-0.76	-0.67	-0.97	-0.79	-0.64	-0.42	-0.38	-0.23	-0.03	-0.14	-0.11	-0.04	0.37	0.63	0.63	-0.97	-0.11
20	0.6	1.05	0.69	0.33	0.53	0.28	0.26	0.08	-0.22	-0.31	-0.30	-0.33	-0.72	-0.91	-0.82	-0.71	-0.48	-0.45	-0.27	-0.18	-0.13	-0.11	-0.10	-0.07	1.05	-0.91	-0.10
21	-0.1	-0.09	-0.09	-0.08	-0.07	-0.06	-0.07	-0.09	-0.14	-0.22	-0.36	-0.39	-0.52	-0.55	-0.71	-0.46	-0.66	-0.56	-0.28	-0.46	-0.16	-0.15	-0.09	-0.10	-0.06	-0.71	-0.27
22	-0.1	-0.03	-0.02	0.00	0.01	-0.03	-0.06	-0.28	-0.35	-0.45	-0.34	-0.52	-0.39	-0.42	-0.38	-0.37	-0.28	-0.30	-0.32	-0.30	-0.26	-0.18	-0.09	-0.06	0.01	-0.52	-0.23
23	0.0	0.00	-0.09	-0.01	-0.01	-0.06	-0.10	-0.20	-0.34	-0.53	-0.78	-1.07	-0.79	-0.71	-0.74	-0.67	-0.85	-0.78	-0.61	-0.44	-0.27	-0.13	0.00	0.05	0.05	-1.07	-0.38
24	0.0	0.04	-0.05	-0.14	0.19	0.04	0.01	-0.07	-0.15	-0.30	-0.43	-0.57	-0.64	-0.93	-0.95	-0.71	-0.79	-0.41	0.34	0.31	0.24	0.54	0.78	1.12	1.12	-0.95	-0.11
25	1.1	1.15	1.16	1.17	1.31	1.64	0.90	0.26	-0.21	-0.61	-0.85	-0.99	-1.00	-1.02	-0.98	-1.14	-0.91	-0.72	-0.70	-0.28	-0.01	0.35	0.71	1.07	1.64	-1.14	0.06
26	1.2	0.86	2.13	1.02	2.48	0.81	0.36	-0.12	-0.27	-0.31	-0.38	-0.47	-0.58	-0.53	-0.46	-0.48	-0.42	-0.59	-0.51	-0.59	-0.30	-0.13	-0.14	-0.09	2.48	-0.59	0.10
27	-0.1	-0.10	-0.09	-0.09	-0.11	-0.04	0.03	-0.07	-0.21	-0.35	-0.33	-0.32	-0.36	-0.39	-0.39	-0.30	-0.59	-0.56	-0.51	-0.47	-0.33	-0.06	0.14	0.30	0.30	-0.59	-0.22
28	0.4	0.28	0.53	0.38	0.44	0.23	0.17	0.01	-0.52	-0.79	-1.07	-1.25	-0.46	-0.53	-0.61	-0.81	-0.69	-0.46	-0.50	-0.14	0.13	0.27	0.45	0.69	0.69	-1.25	-0.16
29	1.3	1.71	1.34	1.36	1.02	2.08	0.94	0.18	-0.21	-0.59	-0.76	-1.06	-1.38	-0.54	-0.83	-0.92	-1.01	-0.80	-0.09	-0.03	0.16	0.30	0.38	0.29	2.08	-1.38	0.12
30	0.3	0.35	0.31	0.38	0.43	0.40	0.38	0.28	-0.15	-0.70	-0.75	-0.90	-1.25	-1.31	-1.28	-1.26	-1.15	-0.82	-0.65	-0.46	-0.13	0.14	0.46	1.10	1.10	-1.31	-0.26
31	0.9	0.60	0.91	0.84	1.11	0.63	1.03	0.07	-0.44	-0.70	-0.92	-1.08	-1.14	-1.23	-1.29	-0.94	-0.83	-0.77	-0.56	-0.24	0.06	0.61	0.58	0.84	1.11	-1.29	-0.08
Max.	**1.4**	**1.71**	**2.13**	**1.36**	**2.48**	**2.08**	**1.18**	**0.28**	**0.10**	**-0.13**	**-0.20**	**-0.23**	**-0.29**	**-0.27**	**-0.34**	**-0.27**	**-0.23**	**-0.21**	**0.34**	**0.31**	**0.24**	**0.61**	**0.78**	**1.12**	**2.48**		
Min.	**-0.3**	**-0.18**	**-0.18**	**-0.17**	**-0.17**	**-0.17**	**-0.19**	**-0.35**	**-0.52**	**-0.83**	**-1.19**	**-1.26**	**-1.38**	**-1.46**	**-1.45**	**-1.43**	**-1.42**	**-1.24**	**-1.10**	**-0.82**	**-0.60**	**-0.35**	**-0.22**	**-0.22**		**-1.46**	
Avg.	**0.3**	**0.27**	**0.28**	**0.31**	**0.38**	**0.34**	**0.19**	**-0.05**	**-0.24**	**-0.42**	**-0.55**	**-0.67**	**-0.75**	**-0.78**	**-0.80**	**-0.74**	**-0.69**	**-0.61**	**-0.47**	**-0.37**	**-0.22**	**-0.05**	**0.07**	**0.19**			**-0.21**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	0.91	1.08	0.96	1.69	1.08	0.83	-0.04	-0.34	-0.79	-1.18	-0.82	-0.86	-0.84	-0.86	-1.09	-1.04	-0.79	-0.74	-0.56	-0.26	0.09	0.14	0.15	1.69	-1.18	-0.09
2	0.2	0.13	0.10	-0.07	-0.03	-0.09	-0.12	-0.14	-0.16	-0.20	-0.32	-0.39	-0.52	-0.49	-0.55	-0.54	-0.56	-0.54	-0.58	-0.43	-0.18	-0.12	0.22	0.26	0.26	-0.58	-0.21
3	0.5	0.96	0.07	0.17	0.28	0.53	0.40	0.17	-0.33	-0.66	-0.69	-0.69	-0.95	-0.65	-0.78	-1.30	-1.19	-0.96	-0.95	-0.57	-0.34	0.03	0.10	0.08	0.96	-1.30	-0.28
4	0.1	0.09	0.14	0.19	0.07	0.06	0.07	-0.17	-0.25	-0.43	-0.47	-0.75	-0.88	-0.94	-1.01	-0.95	-0.87	-1.00	-0.88	-0.65	-0.34	-0.03	0.14	0.28	0.28	-1.01	-0.35
5	0.2	0.29	0.20	0.36	0.14	0.02	0.32	0.17	-0.17	-0.29	-0.61	-0.85	-0.65	-0.94	-0.94	-1.14	-0.96	-0.72	-0.42	-0.16	0.24	0.69	1.93	2.32	2.32	-1.14	-0.04
6	2.2	1.27	1.56	1.33	2.65	1.30	0.93	0.27	-0.33	-0.62	-0.85	-0.97	-1.22	-1.37	-0.90	-0.99	-0.92	-0.45	-0.06	0.06	0.12	0.37	1.43	1.21	2.65	-1.37	0.25
7	0.9	0.47	0.51	0.59	1.01	0.81	0.87	0.33	-0.39	-0.74	-1.03	-1.10	-1.17	-1.17	-0.81	-0.52	-1.19	-0.78	-0.29	-0.28	0.21	1.26	1.84	2.15	2.15	-1.19	0.06
8	1.9	1.87	1.94	2.76	1.98	1.35	1.84	0.81	-0.21	-0.68	-0.98	-1.11	-1.13	-1.15	-1.07	-1.08	-0.96	-0.67	-0.58	-0.08	0.26	1.10	2.63	3.61	3.61	-1.15	0.52
9	3.2	2.35	2.64	2.14	1.59	1.59	1.00	0.50	-0.25	-0.68	-0.96	-1.14	-1.08	-1.06	-1.03	-0.72	-0.71	-0.33	-0.18	-0.07	0.35	1.94	1.44	1.68	3.21	-1.14	0.51
10	1.3	1.55	1.16	0.99	1.85	2.76	2.95	0.53	-0.33	-0.43	-0.58	-0.74	-0.88	-0.45	-0.54	-0.52	-0.89	-0.63	-0.36	-0.24	-0.08	0.33	0.30	0.59	2.95	-0.89	0.32
11	0.3	0.13	0.22	0.20	0.22	0.23	0.28	0.12	-0.20	-0.51	-0.80	-1.10	-1.23	-1.26	-1.41	-1.36	-1.10	-0.97	-0.84	-0.53	0.08	0.67	1.66	1.74	1.74	-1.41	-0.23
12	1.5	2.06	0.83	1.44	2.13	1.16	1.56	0.95	0.34	-0.37	-0.46	-0.55	-0.68	-0.91	-0.84	-0.83	-0.66	-0.48	-0.56	-0.12	0.54	0.81	0.59	1.38	2.13	-0.91	0.37
13	0.7	0.78	0.68	0.66	0.64	0.60	0.58	0.64	0.10	-0.16	-0.26	-0.47	-0.47	-0.51	-0.56	-0.40	-0.51	-0.32	-0.38	-0.25	-0.06	-0.03	0.44	0.54	0.78	-0.56	0.08
14	0.5	0.55	0.57	0.49	0.22	0.34	0.39	0.21	-0.03	-0.14	-0.30	-0.44	-0.39	-0.48	-0.47	-0.28	-0.31	-0.34	-0.24	-0.14	-0.09	-0.05	-0.08	-0.09	0.57	-0.48	-0.02
15	0.0	-0.02	0.04	0.13	0.08	0.19	0.25	-0.05	-0.22	-0.31	-0.42	-0.50	-0.42	-0.39	-0.38	-0.46	-0.34	-0.30	-0.30	-0.21	-0.20	-0.17	-0.06	-0.05	0.25	-0.50	-0.17
16	-0.1	-0.11	-0.11	-0.10	-0.12	-0.08	-0.08	-0.11	-0.20	-0.33	-0.47	-0.60	-0.96	-0.97	-0.65	-0.77	-0.65	-0.64	-0.44	-0.29	-0.05	0.15	0.38	0.42	0.42	-0.97	-0.29
17	0.4	0.53	0.38	1.01	1.00	0.82	0.66	0.56	-0.08	-0.41	-0.45	-0.65	-0.77	-0.94	-1.03	-0.91	-0.78	-0.56	-0.40	-0.30	-0.17	-0.10	-0.03	0.10	1.01	-1.03	-0.09
18	0.2	0.21	0.27	0.34	0.80	0.74	0.79	0.85	-0.03	-0.33	-0.67	-0.84	-0.82	-0.62	-0.74	-0.58	-0.58	-0.42	-0.28	-0.20	0.27	0.57	1.27	1.20	1.27	-0.84	0.06
19	0.6	1.05	1.82	1.01	0.73	1.58	0.52	0.41	0.18	-0.08	-0.21	-0.24	-0.57	-0.86	-0.76	-0.77	-0.53	-0.33	-0.26	-0.04	0.04	0.66	0.41	0.64	1.82	-0.86	0.21
20	1.0	0.50	0.41	0.42	0.65	0.57	1.20	0.72	0.34	-0.20	-0.37	-0.40	-0.38	-0.29	-0.37	-0.43	-0.58	-0.68	-0.45	-0.08	0.00	0.18	0.72	0.53	1.20	-0.68	0.13
21	0.6	0.89	0.33	1.09	1.36	1.49	1.07	0.63	0.06	-0.21	-0.29	-0.47	-0.43	-0.47	-0.77	-0.77	-0.65	-0.85	-0.62	-0.46	-0.17	-0.03	-0.11	0.15	1.49	-0.85	0.06
22	0.2	0.88	0.50	0.21	0.28	0.09	0.10	-0.04	-0.14	-0.24	-0.37	-0.52	-0.68	-1.04	-0.86	-0.90	-0.51	-0.32	-0.14	-0.20	0.06	0.89	1.73	0.93	1.73	-1.04	0.00
23	1.0	0.87	0.95	1.31	1.16	0.66	1.43	1.63	1.06	-0.37	-0.64	-0.87	-0.78	-0.69	-0.85	-0.72	-0.55	-0.52	-0.62	-0.12	-0.04	-0.05	0.11	0.18	1.63	-0.87	0.15
24	0.1	0.30	0.23	0.30	0.28	0.37	0.87	0.40	0.06	-0.24	-0.34	-0.96	-0.80	-0.89	-0.84	-0.79	-0.67	-0.75	-0.17	0.08	0.55	1.87	2.45	2.29	2.45	-0.96	0.16
25	4.1	3.72	3.10	2.10	1.22	1.13	0.71	0.62	0.16	-0.31	-0.35	-0.60	-0.75	-0.89	-0.84	-0.96	-0.84	-0.60	-0.43	-0.30	-0.09	-0.03	0.08	-0.05	4.10	-0.96	0.41
26	0.0	-0.11	-0.01	-0.02	-0.01	-0.07	-0.06	-0.12	-0.10	-0.12	-0.20	-0.22	-0.22	-0.25	-0.38	-0.35	-0.37	-0.52	-0.39	-0.19	-0.12	0.00	0.08	0.10	0.10	-0.52	-0.15
27	-0.1	-0.01	0.32	0.02	0.00	0.00	-0.03	-0.13	-0.21	-0.23	-0.51	-0.58	-0.64	-0.82	-0.80	-0.49	-0.46	-0.53	-0.42	-0.07	0.06	0.51	0.62	0.99	0.99	-0.82	-0.15
28	0.7	0.58	1.10	0.53	0.53	0.49	0.65	0.36	0.07	-0.22	-0.34	-0.49	-0.60	-0.71	-0.66	-0.74	-0.72	-0.28	-0.02	0.00	0.34	1.37	2.02	2.13	2.13	-0.74	0.25
29	2.0	1.91	1.77	1.72	2.14	1.13	0.84	1.00	0.27	-0.17	-0.29	-0.49	-0.60	-0.63	-0.65	-0.72	-0.85	-0.42	-0.36	-0.07	-0.01	0.16	0.89	0.92	2.14	-0.85	0.40
30	0.8	0.86	1.09	0.66	0.92	0.88	1.60	1.46	0.35	-0.15	-0.25	-0.38	-0.43	-0.49	-0.67	-0.79	-0.61	-0.76	-0.35	-0.18	-0.02	0.03	0.12	0.09	1.60	-0.79	0.16
31	0.1	-0.02	0.08	0.15	0.07	0.05	0.06	0.06	0.12	0.09	0.05	0.00	-0.07	-0.18	-0.23	-0.13	-0.08	0.05	0.14	0.00	0.20	0.45	0.39	0.58	0.58	-0.23	0.08
Max.	**4.1**	**3.72**	**3.10**	**2.76**	**2.65**	**2.76**	**2.95**	**1.63**	**1.06**	**0.09**	**0.05**	**0.00**	**-0.07**	**-0.18**	**-0.23**	**-0.13**	**-0.08**	**0.05**	**0.14**	**0.08**	**0.55**	**1.94**	**2.63**	**3.61**	**4.10**		
Min.	**-0.1**	**-0.11**	**-0.11**	**-0.10**	**-0.12**	**-0.09**	**-0.12**	**-0.17**	**-0.39**	**-0.79**	**-1.18**	**-1.14**	**-1.23**	**-1.37**	**-1.41**	**-1.36**	**-1.19**	**-1.00**	**-0.95**	**-0.65**	**-0.34**	**-0.17**	**-0.11**	**-0.09**		**-1.41**	
Avg.	**0.9**	**0.82**	**0.77**	**0.75**	**0.82**	**0.70**	**0.72**	**0.41**	**-0.03**	**-0.34**	**-0.50**	**-0.64**	**-0.71**	**-0.75**	**-0.75**	**-0.74**	**-0.70**	**-0.56**	**-0.41**	**-0.22**	**0.04**	**0.44**	**0.77**	**0.87**			**0.07**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.4	0.37	0.41	0.41	0.53	0.59	0.63	0.48	0.31	-0.23	-0.45	-0.33	-0.60	-0.67	-0.39	-0.57	-0.57	-0.49	-0.24	-0.10	0.06	0.01	0.07	0.16	0.63	-0.67	-0.01
2	0.1	0.16	0.17	0.15	0.13	0.10	0.16	0.07	0.04	0.00	-0.04	-0.06	-0.16	-0.25	-0.47	-0.47	-0.45	-0.26	-0.06	0.11	0.09	0.09	0.05	0.07	0.17	-0.47	-0.03
3	0.1	0.06	0.09	0.07	0.09	0.12	0.11	0.05	0.05	-0.11	-0.14	-0.24	-0.28	-0.38	-0.50	-0.48	-0.50	-0.51	-0.31	-0.16	-0.11	-0.02	-0.02	-0.09	0.12	-0.51	-0.13
4	-0.1	-0.03	-0.08	-0.07	-0.09	-0.08	0.05	0.05	-0.03	-0.10	-0.18	-0.36	-0.40	-0.49	-0.50	-0.56	-0.64	-0.71	-0.53	-0.26	0.94	0.90	1.74	0.93	1.74	-0.71	-0.02
5	1.4	1.11	1.46	1.81	1.21	0.85	1.21	0.75	0.42	0.25	-0.19	-0.33	-0.79	-0.69	-0.35	-0.24	-0.50	-0.69	-0.31	0.03	0.32	1.26	1.02	0.77	1.81	-0.79	0.41
6	0.7	0.86	0.63	0.31	0.41	0.51	0.26	0.18	0.09	0.06	0.09	0.08	0.15	0.05	0.07	0.04	0.05	0.11	0.17	0.14	0.12	0.16	0.25	0.17	0.86	0.04	0.23
7	0.2	0.20	0.48	0.47	0.40	0.49	0.48	0.18	0.27	0.12	-0.13	-0.17	-0.12	-0.08	-0.10	-0.19	-0.33	-0.28	-0.17	-0.13	-0.07	-0.07	-0.05	-0.06	0.49	-0.33	0.05
8	0.0	-0.06	-0.05	-0.04	-0.03	-0.06	-0.07	-0.03	-0.04	-0.17	-0.36	-0.46	-0.41	-0.21	-0.19	-0.17	-0.11	-0.05	-0.07	0.01	0.02	0.16	0.25	0.38	0.38	-0.46	-0.08
9	0.5	0.37	0.28	0.19	0.08	0.06	0.23	0.27	0.11	-0.05	-0.10	-0.19	-0.18	-0.18	-0.13	-0.13	-0.19	-0.20	-0.11	0.02	0.04	0.12	0.23	0.17	0.46	-0.20	0.05
10	0.1	0.04	0.03	-0.02	-0.01	0.03	-0.02	-0.01	-0.09	-0.22	-0.52	-0.53	-0.96	-1.32	-0.98	-0.57	-0.55	-0.45	-0.24	-0.03	0.23	0.09	0.02	-0.01	0.23	-1.32	-0.25
11	-0.1	-0.10	-0.10	-0.04	0.00	0.06	0.04	-0.03	-0.07	-0.15	-0.16	-0.20	-0.27	-0.30	-0.61	-0.40	-0.57	-0.28	-0.16	0.01	0.08	0.07	0.13	0.11	0.13	-0.61	-0.13
12	0.1	0.07	0.06	0.03	0.02	0.00	-0.03	-0.03	-0.03	-0.04	-0.02	-0.07	-0.08	-0.21	-0.20	-0.12	-0.07	-0.12	-0.03	-0.02	-0.01	-0.04	-0.02	0.04	0.07	-0.21	-0.04
13	0.0	0.02	0.03	0.00	-0.03	-0.05	-0.04	-0.04	-0.02	-0.02	-0.01	-0.07	-0.05	-0.10	-0.18	-0.22	-0.33	-0.16	-0.03	0.04	0.19	0.18	0.30	0.24	0.30	-0.33	-0.01
14	0.3	0.20	0.16	0.19	0.26	0.14	0.11	0.16	0.09	-0.03	-0.13	-0.18	-0.22	-0.27	-0.42	-0.38	-0.43	-0.32	-0.18	-0.06	0.10	0.11	0.07	0.04	0.26	-0.43	-0.03
15	0.1	0.14	0.12	0.11	0.10	0.14	0.21	0.15	0.14	0.04	-0.08	-0.23	-0.30	-0.37	-0.38	-0.35	-0.34	-0.24	-0.17	-0.09	0.00	0.04	-0.02	-0.04	0.21	-0.38	-0.05
16	0.2	0.34	0.40	0.73	0.55	0.21	0.24	0.64	1.03	0.24	-0.39	-0.58	-0.76	-0.65	-0.47	-0.54	-0.31	-0.28	-0.03	0.31	0.41	0.35	0.28	0.42	1.03	-0.76	0.10
17	0.3	0.48	0.78	0.51	0.35	0.04	-0.07	0.09	0.10	-0.03	-0.27	-0.44	-0.38	-0.32	-0.31	-0.28	-0.22	-0.12	-0.07	-0.07	0.00	0.04	0.03	0.04	0.78	-0.44	0.01
18	0.0	-0.02	0.03	0.02	0.05	0.03	0.05	0.06	0.05	-0.02	-0.08	-0.22	-0.28	-0.15	-0.16	-0.33	-0.37	-0.25	-0.17	-0.15	0.04	0.47	0.19	0.16	0.47	-0.37	-0.04
19	0.1	0.13	0.11	0.04	-0.02	-0.08	-0.04	-0.08	-0.10	-0.21	-0.37	-0.40	-0.39	-0.40	-0.51	-0.37	-0.37	-0.32	-0.18	-0.03	0.07	0.09	0.12	0.14	0.14	-0.51	-0.13
20	0.2	0.26	0.41	0.27	0.22	0.92	0.61	1.20	0.91	0.04	-0.30	-0.38	-0.48	-0.58	-0.71	-0.65	-0.61	-0.47	-0.05	0.84	2.08	1.54	2.03	3.18	3.18	-0.71	0.44
21	2.2	0.64	1.47	2.39	1.43	1.27	1.21	1.45	1.30	0.19	-0.12	-0.26	-0.46	-0.56	-0.55	-0.82	-0.55	-0.37	-0.13	0.61	1.29	1.26	1.33	1.61	2.39	-0.82	0.66
22	2.1	0.71	1.39	0.74	1.04	1.42	1.87	1.57	1.20	0.45	-0.13	-0.28	-0.42	-0.50	-0.52	-0.46	-0.39	-0.26	-0.16	-0.11	-0.08	-0.06	-0.07	-0.07	2.09	-0.52	0.37
23	-0.1	-0.03	0.01	0.06	0.01	-0.03	-0.03	0.01	-0.01	-0.03	-0.04	-0.12	-0.17	-0.19	-0.17	-0.14	-0.16	-0.11	-0.07	-0.07	-0.05	-0.03	0.00	0.02	0.06	-0.19	-0.06
24	0.0	0.05	0.02	-0.01	0.03	0.05	0.06	0.00	0.09	-0.01	-0.06	-0.14	-0.16	-0.27	-0.43	-0.46	-0.42	-0.33	-0.26	-0.05	0.10	0.13	0.07	0.40	0.40	-0.46	-0.07
25	0.4	0.42	0.34	0.36	0.86	0.56	0.43	0.36	0.19	0.05	-0.16	-0.26	-0.33	-0.33	-0.29	-0.34	-0.36	-0.27	-0.19	-0.05	0.09	0.24	0.38	0.21	0.86	-0.36	0.10
26	0.2	0.42	0.56	0.41	0.67	0.51	0.56	0.41	0.46	0.16	0.00	0.53			0.29	-0.30	-0.24	-0.34	-0.20	0.98	2.16	1.75	1.35	1.02	2.16	-0.34	0.51
27	2.6	2.47	1.25	1.04	0.89	0.75	0.84	0.76	0.85	0.18	-0.28	-0.53	-0.66	-0.74	-0.78	-0.69	-0.37	-0.05	0.30	1.06	1.17	1.52	1.95	2.68	2.68	-0.78	0.68
28	2.8	2.60	2.51	2.09	1.99	1.76	1.22	1.00	1.16	0.73	-0.12	-0.25	-0.45	-0.65	-0.50	-0.38	-0.27	-0.25	-0.04	0.65	1.20	0.27	0.07	0.10	2.81	-0.65	0.72
29	0.2	0.21	0.24	0.42	1.06	0.84	0.64	0.55	0.41	0.18	-0.06	-0.21	-0.36	-0.37	-0.37	-0.43	-0.37	-0.31	-0.15	0.13	0.30	0.27	0.29	0.63	1.06	-0.43	0.15
30	0.9	0.88	1.05	1.23	1.31	0.65	1.54	1.41	0.70	0.23	-0.35	-0.35	-0.67	-0.76	-0.62	-0.55	-0.55	-0.37	-0.11	1.14	1.14	1.48	1.26	0.62	1.54	-0.76	0.47
Max.	**2.8**	**2.60**	**2.51**	**2.39**	**1.99**	**1.76**	**1.87**	**1.57**	**1.30**	**0.73**	**0.09**	**0.53**	**0.15**	**0.05**	**0.29**	**0.04**	**0.05**	**0.11**	**0.30**	**1.14**	**2.16**	**1.75**	**2.03**	**3.18**	**3.18**		
Min.	**-0.1**	**-0.10**	**-0.10**	**-0.07**	**-0.09**	**-0.08**	**-0.07**	**-0.08**	**-0.10**	**-0.23**	**-0.52**	**-0.58**	**-0.96**	**-1.32**	**-0.98**	**-0.82**	**-0.64**	**-0.71**	**-0.53**	**-0.26**	**-0.11**	**-0.07**	**-0.07**	**-0.09**		**-1.32**	
Avg.	**0.5**	**0.43**	**0.48**	**0.46**	**0.45**	**0.39**	**0.41**	**0.39**	**0.32**	**0.05**	**-0.17**	**-0.24**	**-0.37**	**-0.41**	**-0.38**	**-0.39**	**-0.37**	**-0.29**	**-0.13**	**0.16**	**0.40**	**0.41**	**0.44**	**0.47**			**0.13**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.3	1.19	0.94	0.87	0.86	0.56	0.28	0.13	0.22	0.06	-0.08	-0.40	-0.52	-0.46	-0.39	-0.24	-0.24	-0.18	-0.10	0.05	0.02	-0.04	0.00	0.04	1.29	-0.52	0.16
2	0.0	0.06	0.06	0.29	0.14	0.16	0.55	1.04	0.99	0.66	0.17	-0.17	-0.23	-0.24	-0.30	-0.43	-0.23	-0.26	-0.16	0.08	0.00	-0.09	-0.02	0.07	1.04	-0.43	0.09
3	0.1	0.07	0.06	0.08	0.06	-0.01	-0.08	-0.10	-0.16	-0.17	-0.19	-0.28	-0.31	-0.39	-0.49	-0.41	-0.39	-0.22	-0.16	0.31	0.60	1.08	0.98	1.26	1.26	-0.49	0.05
4	2.0	1.06	1.35	1.72	2.24	1.75	2.49	0.75	1.95	0.35	-0.06	-0.29	-0.37	-0.33	-0.53	-0.71	-0.48	-0.22	0.00	0.34	0.08	-0.06	-0.01	0.12	2.49	-0.71	0.55
5	0.1	0.03	0.04	0.03	-0.04	-0.03	-0.04	-0.02	0.03	-0.05	-0.14	-0.27	-0.30	-0.40	-0.41	-0.54	-0.35	-0.26	-0.20	-0.11	-0.05	-0.04	0.04	0.09	0.09	-0.54	-0.12
6	0.0	-0.01	0.12	0.12	0.00	-0.08	-0.09	0.01	-0.07	-0.15	-0.23	-0.28	-0.41	-0.40	-0.43	-0.40	-0.44	-0.23	-0.15	-0.04	0.01	0.06	0.00	0.02	0.12	-0.44	-0.13
7	0.0	-0.02	-0.03	-0.08	-0.07	-0.09	-0.11	-0.12	-0.09	-0.10	-0.14	-0.18	-0.24	-0.21	-0.18	-0.17	-0.15	-0.08	0.01	0.07	0.09	0.09	0.11	0.07	0.11	-0.24	-0.07
8	0.0	0.01	0.17	0.08	0.23	0.42	0.61	0.89	1.23	1.23	0.21	-0.22	-0.51	-0.43	-0.34	-0.21	-0.09	0.09	0.55	0.95	1.02	0.93	1.36	1.01	1.36	-0.51	0.38
9	0.6	0.46	0.27	0.23	0.18	0.05	0.04	0.08	0.08	0.09	0.14	0.18	0.18	0.19	0.21	0.13	0.27	0.31	0.36	0.39	0.38	0.35	0.32	0.31	0.60	0.04	0.24
10	0.3	0.22	0.19	0.16	0.10	0.06	0.08	0.28	0.22	0.27	-0.08	-0.04	-0.21	-0.26	-0.26	-0.26	-0.08	0.04	0.12	0.17	0.20	0.19	0.25	0.32	0.32	-0.26	0.08
11	0.4	0.46	0.44	0.28	0.17	0.12	0.10	0.08	-0.09	-0.26	-0.18	-0.16	-0.12	-0.09	-0.08	-0.04	0.00	0.02	0.04	0.04	0.05	0.07	0.10	0.13	0.46	-0.26	0.06
12	0.1	0.18	0.07	0.04	0.05	0.07	0.00	0.10	0.08	0.23	0.17	0.13	0.15	0.19	0.01	0.02	0.17	0.39	0.38	0.52	0.78	0.67	0.69	0.86	0.86	0.00	0.25
13	1.1	1.96	1.86	1.82	1.02	0.59	1.23	0.85	0.68	0.58	0.20	0.05	0.02	0.12	0.22	0.09	0.11	0.05	-0.01	0.00	0.03	0.02	0.03	0.01	1.96	-0.01	0.53
14	0.0	0.10	0.10	0.08	0.10	0.10	-0.04	-0.02	0.05	0.00	-0.01	-0.03	-0.03	-0.03	-0.01	-0.03	-0.01	0.00	0.01	-0.03	-0.02	-0.01	0.00	-0.06	0.10	-0.06	0.01
15	-0.1	-0.08	-0.15	-0.10	-0.08	-0.17	-0.09	-0.09	-0.14	-0.06	-0.07	-0.23	-0.27	-0.21	-0.19	-0.03	-0.01	0.14	-0.01	-0.22	-0.21	0.18	0.41	0.23	0.41	-0.27	-0.07
16	0.2	-0.05	-0.06	-0.07	-0.09	-0.08	-0.10	-0.08	-0.07	-0.13	-0.16	-0.19	-0.33	-0.19	-0.15	-0.01	0.03	0.24	0.44	0.52	0.44	0.54	0.88	0.60	0.88	-0.33	0.09
17	0.5	0.57	1.37	1.34	0.95	0.66	0.67	1.03	1.77	2.11	0.84	0.63	0.36	0.36	0.47	0.56	1.10	0.38	0.94	0.91	0.63	0.34	0.19	0.14	2.11	0.14	0.78
18	0.1	0.18	0.25	0.20	0.17	0.23	0.18	0.25	0.27	0.34	0.36	0.40	0.35	0.33	0.36	0.43	0.39	0.65	0.96	1.17	0.93	0.97	1.04	1.13	1.17	0.13	0.49
19	1.9	0.96	0.64	0.68	0.81	0.81	0.38	0.31	1.23	1.40	0.81	0.59	0.16	0.10	0.17	0.14	0.17	0.30	0.45	0.26	0.10	0.09	-0.05	-0.07	1.93	-0.07	0.51
20	-0.1	0.20	0.10	0.15	0.29	-0.01	0.03	0.08	0.25	0.33	0.81	-0.03	-0.15	-0.22	-0.07	0.28	0.32	0.27	0.44	0.49	0.05	0.16	0.12	0.14	0.81	-0.22	0.16
21	0.6	0.53	0.22	0.20	0.14	0.08	0.17	0.13	0.19	0.15	0.11	0.22	0.51	0.56	0.52	0.32	0.22	0.21	0.34	0.52	0.58	0.29	0.27	0.36	0.60	0.08	0.31
22	0.4	0.37	0.31	0.31	0.23	0.27	0.29	0.30	0.53	0.50	0.48	0.31	0.25	0.25	0.30	0.34	0.25	0.59	0.70	0.49	0.50	0.50	0.47	0.61	0.70	0.23	0.40
23	0.6	0.80	0.55	0.42	0.29	0.46	0.45	0.44	0.37	0.39	0.38	0.32	0.26	0.21	0.22	0.22	0.16	0.22	0.44	0.42	0.20	0.23	0.20	0.11	0.80	0.11	0.35
24	0.1	0.09	0.06	0.03	0.03	-0.09	0.11	0.17	0.03	0.03	0.18	0.22	0.27	-0.03	0.17	0.20	0.27	0.36	0.40	0.52	0.71	1.45	1.62	0.66	1.62	-0.09	0.32
25	0.4	0.24	0.22	0.13	0.03	-0.01	-0.01	-0.04	-0.02	0.01	0.00	0.00	0.00	0.05	0.02	0.10	0.06	0.03	0.28	0.54	0.68	0.80	0.60	1.27	1.27	-0.04	0.23
26	1.3	0.49	0.27	0.29	0.83	0.94	0.60	0.44	0.35	0.25	0.29	0.31	0.15	0.17	0.19	0.21	0.29	0.33	0.34	0.37	0.37	0.31	0.29	0.29	1.29	0.15	0.40
27	0.3	0.31	0.24	0.25	0.30	0.35	0.38	0.39	0.44	0.31	0.39	0.46	0.20	0.12	0.25	0.21	0.37	0.51	1.25	1.01	0.94	0.57	1.01	0.69	1.25	0.12	0.47
28	1.1	1.42	1.08	0.71	1.21	0.86	0.58	0.51	0.45	0.35	0.32	0.25	0.20	0.14	0.18	0.12	0.21	0.60	0.57	0.51	1.34	2.11	1.74	1.32	2.11	0.12	0.74
29	0.7	0.51	0.33	0.44	0.41	0.75	1.08	0.98	1.41	0.95	0.57	0.32	0.20	0.03	0.06	0.02	0.06	0.06	0.03	0.10	0.12	0.24	0.23	0.26	1.41	0.02	0.41
30	0.3	0.26	0.19	0.22	0.19	0.05	-0.02	-0.01	0.02	0.05	0.29	0.17	0.09	-0.02	0.06	0.20	0.24	0.88	1.20	0.61	0.72	0.88	0.98	0.69	1.20	-0.02	0.34
31	0.5	0.44	0.42	0.50	0.82	1.35	1.52	1.51	1.12	1.78	1.52	0.71	0.74	0.41	0.42	0.38	0.71	0.53	0.57	0.42	0.87	0.65	0.33	0.64	1.78	0.33	0.78
Max.	**2.0**	**1.96**	**1.86**	**1.82**	**2.24**	**1.75**	**2.49**	**1.51**	**1.95**	**2.11**	**1.52**	**0.71**	**0.74**	**0.56**	**0.52**	**0.56**	**1.10**	**0.88**	**1.25**	**1.17**	**1.34**	**2.11**	**1.74**	**1.32**	**2.49**		
Min.	**-0.1**	**-0.08**	**-0.15**	**-0.10**	**-0.09**	**-0.17**	**-0.11**	**-0.12**	**-0.16**	**-0.26**	**-0.23**	**-0.40**	**-0.52**	**-0.46**	**-0.53**	**-0.71**	**-0.48**	**-0.26**	**-0.20**	**-0.22**	**-0.21**	**-0.09**	**-0.05**	**-0.07**		**-0.71**	
Avg.	**0.5**	**0.42**	**0.38**	**0.37**	**0.37**	**0.33**	**0.36**	**0.33**	**0.43**	**0.37**	**0.22**	**0.08**	**0.00**	**-0.02**	**0.00**	**0.02**	**0.09**	**0.19**	**0.32**	**0.37**	**0.39**	**0.44**	**0.46**	**0.43**			**0.28**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.43	0.40	0.30	0.93	1.01	0.55	0.72	0.54	0.30	0.55	0.19	0.11	0.06	0.01	0.06	0.32	0.65	0.48	0.45	0.21	0.25	0.15	0.19	1.01	0.01	0.38
2	0.0	-0.06	-0.08	-0.09	-0.06	-0.06	-0.06	-0.08	-0.12	-0.21	-0.12	-0.04	-0.10	-0.09	-0.09	-0.11	-0.04	0.03	0.10	0.20	0.22	0.24	0.23	0.17	0.24	-0.21	-0.01
3	0.2	0.20	0.17	0.15	0.11	0.14	0.04	0.10	0.10	0.25	0.23	0.25	0.26	0.27	0.23	0.21	0.27	0.35	0.45	0.56	0.53	0.79	0.67	0.53	0.79	0.04	0.30
4	0.3	0.48	0.28	0.16	0.30	0.24	0.17	0.35	0.38	0.51	0.49	0.37	0.31	0.16	0.39	0.02	-0.07	0.04	-0.03	-0.03	-0.06	0.01	-0.05	-0.06	0.51	-0.07	0.19
5	0.2	0.11	0.02	-0.06	-0.04	-0.04	-0.03	-0.04	0.05	0.26	0.15	0.05	0.16	0.48	0.61	0.36	0.71	1.34	1.07	1.00	1.69	1.43	1.31	1.29	1.69	-0.06	0.50
6	1.1	0.74	0.51	0.43	0.58	0.61	0.30	0.60	0.59	0.45	0.81	0.65	0.67	0.89	0.78	0.86	0.45	0.61	0.97	1.02	0.32	0.32	0.46	0.26	1.07	0.26	0.62
7	0.1	0.01	0.09	0.14	0.48	0.60	0.46	0.44	0.75	0.31	0.93	0.48	0.68	0.47	0.15	0.54	0.84	1.32	1.61	0.38	0.12	0.04	-0.01	0.05	1.61	-0.01	0.46
8	0.0	0.05	0.02	0.00	-0.02	-0.03	-0.02	0.01	0.03	0.02	-0.03	0.00	0.38	0.27	0.31	0.11	0.06	0.07	0.14	0.14	0.16	0.16	0.15	0.12	0.38	-0.03	0.09
9	0.2	0.14	0.17	0.23	0.23	0.23	0.20	0.20	0.14	0.15	0.18	0.18	0.15	0.12	0.18	0.15	0.09	-0.01	-0.03	0.06	0.19	0.24	0.19	0.16	0.24	-0.03	0.15
10	0.3	0.20	0.24	0.55	1.22	0.19	0.10	0.11	0.25	0.69	0.27	-0.04	-0.02	-0.04	-0.02	-0.03	-0.06	-0.15	-0.08	-0.06	-0.02	-0.02	-0.02	-0.01	1.22	-0.15	0.15
11	0.0	0.08	0.13	0.12	0.22	0.21	0.08	0.02	0.06	0.27	0.39	0.41	0.20	0.06	0.21	0.11	0.64	1.60	1.39	0.50	0.32	0.09	0.06	0.01	1.60	0.01	0.30
12	0.0	0.28	0.23	0.06	-0.05	-0.01	0.00	0.02	-0.02	-0.04	0.12	0.15	0.27	0.26	0.41	0.45	0.43	0.23	0.26	0.05	-0.02	-0.04	-0.06	0.13	0.45	-0.06	0.13
13	0.0	0.04	0.05	0.04	0.44	0.93	1.24	1.01	1.10	0.93	1.40	1.05	0.52	0.25	0.08	0.01	-0.01	-0.02	0.06	0.02	0.13	0.24	0.23	0.16	1.40	-0.02	0.41
14	0.2	0.03	0.16	0.08	0.16	0.21	0.20	0.25	0.19	0.09	0.21	0.17	0.19	-0.06	-0.09	0.00	0.00	-0.03	-0.04	-0.03	-0.03	0.00	0.00	-0.01	0.25	-0.09	0.08
15	0.0	-0.05	-0.15	0.01	0.00	0.02	0.10	0.24	0.21	0.25	0.02	0.18	0.01	0.04	0.16	0.16	0.11	0.08	0.08	0.04	-0.01	-0.01	-0.01	-0.01	0.25	-0.15	0.06
16	0.0	0.00	0.03	0.02	-0.01	-0.01	0.07	0.15	1.63	2.53	2.05	0.39	0.31	0.11	0.18	0.36	0.59	0.54	0.62	0.91	0.70	0.75	0.89	1.16	2.53	-0.01	0.58
17	1.7	1.23	1.73	0.93	0.70	0.71	0.70	0.78	1.07	0.95	0.87	0.98	0.70	1.75	1.24	0.69	0.49	0.57	0.73	0.58	0.61	1.26	1.54	1.58	1.75	0.49	1.00
18	1.6	0.68	0.41	0.87	0.90	1.22	0.73	1.21	1.08	1.18	1.32	1.91	1.15	0.85	0.93	1.57	1.36	1.09	1.26	1.30	1.03	0.89	1.27	1.11	1.91	0.41	1.12
19	0.8	1.18	0.98	0.91	0.96	0.82	0.89	0.87	0.86	0.80	0.72	0.69	0.60	0.65	0.73	0.62	0.64	0.74	0.58	0.71	0.57	0.60	0.82	0.49	1.18	0.49	0.76
20	0.4	0.39	0.35	0.34	0.40	0.46	0.36	0.33	0.29	0.25	0.19	0.16	0.17	0.19	0.24	0.23	0.25	0.31	0.29	0.31	0.32	0.30	0.28	0.38	0.46	0.16	0.30
21	0.5	0.48	0.61	0.98	0.94	1.08	1.26	1.50	1.44	0.98	0.98	0.95	0.55	0.69	0.91	0.85	1.24	0.72	0.76	0.62	0.51	0.36	0.30	0.18	1.50	0.18	0.81
22	0.5	0.41	0.66	0.39	0.46	0.46	1.06	0.76	1.01	2.02	1.69	1.74	1.14	0.89	0.27	0.35	0.37	0.38	0.33	0.74	0.43	1.38	1.92	1.64	2.02	0.27	0.87
23	1.9	1.62	1.49	0.84	0.27	0.12	0.12	0.04	0.05	0.06	0.16	0.08	0.28	0.11	0.03	0.05	0.05	0.04	0.13	0.09	0.04	0.10	0.04	0.06	1.92	0.03	0.32
24	0.1	0.12	0.19	0.14	0.21	0.21	0.25	0.23	0.25	0.12	0.14	0.13	0.21	0.10	0.07	0.05	0.03	0.04	0.06	0.03	0.05	-0.01	-0.06	-0.06	0.25	-0.06	0.11
25	-0.1	-0.03	0.01	-0.06	-0.06	-0.05	-0.02	-0.02	-0.07	-0.05	-0.03	0.09	0.08	0.50	1.13	1.07	0.82	0.72	0.98	0.51	0.53	0.71	0.49	1.08	1.13	-0.08	0.34
26	1.5	0.88	0.77	0.76	0.70	0.60	0.31	0.17	0.23	0.59	0.50	0.70	0.86	0.96	0.97	0.93	0.75	0.67	1.05	1.31	1.36	1.49	1.63	1.35	1.63	0.17	0.88
27	1.2	1.10	1.46	1.47	0.92	1.19	1.23	0.84	1.30	0.86	0.58	0.88	0.76	0.24	0.14	0.06	0.06	0.07	-0.10	-0.07	0.00	0.26	0.15	0.17	1.47	-0.10	0.61
28	0.3	0.10	-0.09	-0.09	-0.13	-0.12	-0.08	-0.15	-0.07	-0.11	-0.17	-0.15	-0.11	-0.11	-0.12	-0.11	-0.11	-0.09	-0.11	-0.06	-0.15	-0.11	-0.12	-0.13	0.27	-0.17	-0.09
29	-0.1	-0.14	-0.14	-0.09	-0.07	-0.12	-0.10	-0.04	0.06	-0.08	-0.10	-0.03	-0.03	-0.06	-0.05	-0.06	-0.11	-0.07	-0.09	-0.05	-0.05	-0.03	-0.02	-0.03	0.06	-0.14	-0.07
30	0.0	0.29	0.44	0.49	0.39	0.54	0.49	0.61	0.59	0.53	0.67	0.71	0.82	1.24	0.59	0.87	1.03	1.04	1.21	0.93	0.62	1.06	0.81	0.77	1.24	0.00	0.70
Max.	**1.9**	**1.62**	**1.73**	**1.47**	**1.22**	**1.22**	**1.26**	**1.50**	**1.63**	**2.53**	**2.05**	**1.91**	**1.15**	**1.75**	**1.24**	**1.57**	**1.36**	**1.60**	**1.61**	**1.31**	**1.69**	**1.49**	**1.92**	**1.64**	**2.53**		
Min.	**-0.1**	**-0.14**	**-0.15**	**-0.09**	**-0.13**	**-0.12**	**-0.10**	**-0.15**	**-0.12**	**-0.21**	**-0.17**	**-0.15**	**-0.11**	**-0.11**	**-0.12**	**-0.11**	**-0.11**	**-0.15**	**-0.11**	**-0.07**	**-0.15**	**-0.11**	**-0.12**	**-0.13**		**-0.21**	
Avg.	**0.4**	**0.37**	**0.37**	**0.34**	**0.37**	**0.38**	**0.35**	**0.38**	**0.47**	**0.50**	**0.51**	**0.44**	**0.38**	**0.38**	**0.35**	**0.35**	**0.37**	**0.43**	**0.47**	**0.40**	**0.34**	**0.43**	**0.44**	**0.42**			**0.40**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.8	0.84	0.88	0.90	1.83	1.66	0.69	0.57	0.62	0.42	0.59	0.40	0.61	0.37	0.51	0.32	0.92	1.35	0.74	1.45	1.30	0.90	0.80	0.19	1.83	0.19	0.82
2	0.1	0.26	0.29	0.43	0.59	0.52	0.67	0.69	0.68	0.78	0.76	0.93	0.82	0.76	0.61	0.50	0.41	0.47	0.28	0.41	0.34	0.29	0.40	0.49	0.93	0.13	0.52
3	0.4	0.33	0.40	0.35	0.29	0.40	0.46	0.48	0.39	0.32	0.45	0.30	0.21	0.30	0.48	0.38	0.30	0.33	0.31	0.35	0.36	0.31	0.23	0.22	0.48	0.21	0.35
4	0.2	0.22	0.17	0.21	0.17	0.19	0.17	0.18	0.14	0.21	0.23	0.15	0.12	0.09	0.09	0.09	0.22	0.30	0.33	0.32	0.30	0.27	0.32	0.34	0.34	0.09	0.21
5	0.3	0.30	0.32	0.30	0.30	0.31	0.30	0.31	0.29	0.32	0.36	0.39	0.40	0.38	0.34	0.36	0.38	0.39	0.41	0.44	0.42	0.34	0.31	0.33	0.44	0.29	0.35
6	0.3	0.32	0.29	0.35	0.35	0.32	0.32	0.33	0.41	0.48	0.49	0.59	0.17	0.09	0.01	0.12	0.14	0.22	0.20	0.22	0.42	0.24	0.17	0.00	0.59	0.00	0.27
7	0.0	0.00	-0.08	-0.15	-0.22	-0.27	-0.15	-0.16	-0.24	-0.26	-0.25	-0.23	-0.16	-0.22	-0.30	-0.22	-0.09	0.67	0.47	0.52	0.38	0.00	0.04	0.86	0.86	-0.30	0.00
8	0.8	1.17	0.78	0.49	0.42	0.31	0.50	0.29	0.04	-0.21	-0.20	-0.26	-0.18	-0.13	-0.04	0.01	0.03	0.10	0.10	0.21	0.22	0.22	0.15	0.27	1.17	-0.26	0.21
9	0.4	0.40	0.44	0.29	0.04	-0.11	-0.09	0.00	-0.09	0.02	0.23	0.35	0.02	0.06	0.41	0.27	0.11	0.16	-0.01	0.11	0.06	0.06	0.03	0.02	0.44	-0.11	0.13
10	0.0	-0.08	-0.08	-0.07	-0.05	-0.08	-0.03	0.00	-0.03	-0.02	0.00	0.04	0.43	0.69	0.60	0.76	0.51	1.25	1.18	1.28	1.71	2.29	2.87	3.20	3.20	-0.08	0.68
11	3.2	4.00	1.70	1.32	1.21	0.90	1.06	1.64	2.19	1.16	0.67	0.10	0.04	-0.01	-0.07	-0.07	-0.05	0.30	1.50	1.62	1.37	1.43	1.38	1.49	4.00	-0.07	1.17
12	2.1	0.87	1.15	1.16	1.62	0.91	0.97	0.61	0.53	0.36	0.39	0.27	0.25	0.21	0.06	0.34	0.43	0.47	0.23	-0.04	-0.04	-0.02	-0.06	-0.01	2.13	-0.06	0.53
13	0.0	-0.04	-0.03	-0.05	0.00	0.17	0.13	0.48	0.46	0.19	0.28	1.23	0.91	0.93	1.08	1.44	1.15	0.69	0.97	1.30	2.23	1.72	2.44	1.43	2.44	-0.05	0.79
14	0.7	0.55	0.57	0.63	1.14	0.76	1.64	0.92	0.53	1.12	1.19	0.83	0.88	0.68	0.65	0.58	0.52	0.49	0.57	0.53	0.44	0.46	0.34	0.30	1.64	0.30	0.71
15	0.3	0.22	0.14	0.20	0.18	0.13	0.13	0.10	0.10	0.05	0.04	0.04	0.01	0.00	0.06	0.01	0.05	0.23	0.34	0.78	0.76	0.48	0.40	1.49	1.49	0.00	0.26
16	1.6	1.26	0.79	0.80	0.52	0.79	1.15	1.08	0.55	0.20	0.46	0.42	0.39	0.21	0.24	0.12	0.07	0.28	0.13	0.19	0.24	0.18	0.17	0.17	1.59	0.07	0.50
17	0.3	0.23	0.18	0.14	0.15	0.08	0.03	0.07	0.08	0.10	0.10	0.17	0.19	0.26	0.25	0.18	0.20	0.18	0.13	0.11	0.11	0.13	0.11	0.13	0.35	0.03	0.15
18	0.1	0.15	0.19	0.14	0.13	0.17	0.19	0.19	0.18	0.19	0.21	0.18	0.16	0.15	0.16	0.15	0.13	0.14	0.10	0.14	0.13	0.15	0.13	0.14	0.21	0.10	0.16
19	0.1	0.23	0.13	0.11	0.11	0.12	0.13	0.17	0.19	0.17	0.19	0.20	0.19	0.19	0.31	0.36	0.30	0.25	0.22	0.26	0.21	0.24	0.28	0.49	0.49	0.11	0.22
20	0.4	0.55	0.52	0.40	0.37	0.39	0.37	0.32	0.22	0.51	0.59	0.70	0.89	0.77	1.29	0.86	0.87	1.06	1.01	1.59	1.33	1.11	0.71	1.10	1.59	0.22	0.75
21	0.9	0.83	1.02	1.74	1.47	0.88	0.88	0.37	0.31	0.53	0.33	0.13	0.30	0.57	0.58	0.62	0.71	1.09	1.87	1.49	1.07	1.60	1.97	2.46	2.46	0.13	0.99
22	1.9	1.48	0.85	0.24	0.08	0.04	0.05	0.04	0.01	0.05	0.09	0.08	0.09	0.01	-0.03	-0.04	-0.03	0.01	-0.05	0.00	0.00	0.00	-0.01	0.00	1.94	-0.05	0.20
23	0.1	0.09	0.06	0.04	0.03	0.03	0.00	0.02	0.01	0.02	0.06	0.48	0.61	0.54	0.42	0.41	0.50	0.59	0.40	0.39	0.26	0.18	0.23	0.22	0.61	0.00	0.24
24	0.2	0.22	0.40	0.97	1.70	1.98	1.34	0.93	0.69	0.60	0.26	0.54	2.46	3.14	1.70	1.72	0.87	0.50	0.95	0.73	0.16	0.24	0.07	0.03	3.14	0.03	0.93
25	0.1	0.10	0.13	0.08	0.10	0.08	0.10	0.10	0.11	0.13	0.08	0.07	0.05	0.04	0.08	0.06	0.00	-0.12	-0.08	-0.09	-0.10	-0.07	-0.09	-0.09	0.13	-0.12	0.03
26	-0.1	-0.17	-0.16	-0.12	-0.08	-0.08	0.03	0.08	0.05	0.15	0.19	0.21	0.16	0.14	0.16	0.23	0.28	0.20	0.16	0.04	0.10	0.11	0.10	0.05	0.28	-0.17	0.07
27	0.0	-0.02	0.00	0.02	0.12	0.09	0.06	0.10	0.06	0.11	0.11	0.16	0.19	0.19	0.26	0.30	0.21	0.24	0.26	0.33	0.27	0.37	0.47	0.39	0.47	-0.02	0.18
28	0.4	0.38	0.37	0.43	0.46	0.37	0.39	0.49	0.48	0.37	0.44	0.34	0.39	0.50	0.50	0.55	0.55	0.60	0.52	0.60	0.78	0.85	0.84	0.93	0.93	0.34	0.52
29	0.9	1.32	1.22	1.36	1.34	1.47	1.61	1.13	0.61	1.29	1.19	1.20	1.07	0.66	0.67	0.59	0.68	0.64	0.67	0.86	0.79	0.92	1.09	0.65	1.61	0.59	1.00
30	0.9	0.62	0.90	0.91	0.78	0.58	0.61	1.18	1.15	0.62	1.14	1.70	0.76	0.65	0.90	1.00	1.47	1.37	1.21	0.98	1.46	1.11	1.48	1.50	1.70	0.58	1.04
31	1.7	1.43	1.39	0.74	0.59	0.97	1.12	0.86	0.95	0.75	1.22	1.01	0.82	0.60	0.65	0.64	0.70	0.93	0.85	0.79	0.47	0.46	0.77	0.68	1.72	0.46	0.88
Max.	**3.2**	**4.00**	**1.70**	**1.74**	**1.83**	**1.98**	**1.64**	**1.64**	**2.19**	**1.29**	**1.22**	**1.70**	**2.46**	**3.14**	**1.70**	**1.72**	**1.47**	**1.37**	**1.87**	**1.62**	**2.23**	**2.29**	**2.87**	**3.20**	**4.00**		
Min.	**-0.1**	**-0.17**	**-0.16**	**-0.15**	**-0.22**	**-0.27**	**-0.15**	**-0.16**	**-0.24**	**-0.26**	**-0.25**	**-0.26**	**-0.18**	**-0.22**	**-0.30**	**-0.22**	**-0.09**	**-0.12**	**-0.08**	**-0.09**	**-0.10**	**-0.07**	**-0.09**	**-0.09**		**-0.30**	
Avg.	**0.6**	**0.58**	**0.48**	**0.46**	**0.51**	**0.45**	**0.48**	**0.44**	**0.38**	**0.35**	**0.38**	**0.41**	**0.43**	**0.41**	**0.41**	**0.41**	**0.40**	**0.50**	**0.52**	**0.58**	**0.57**	**0.53**	**0.59**	**0.63**			**0.48**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	90.3	89.9	90.4	89.1	88.5	86.1	85.7	82.2	82.9	81.2	80.4	79.9	81.9	83.6	80.6	81.5	81.7	86.6	83.8	87.0	88.2	85.3	82.7	81.7	90.4	79.9	84.6
2	83.3	82.0	81.4	82.8	83.9	87.5	87.6	87.1	87.4	86.9	85.8	85.3	86.0	85.4	85.1	84.9	84.6	86.2	86.7	85.1	86.2	87.0	87.5	86.8	87.6	81.4	85.5
3	87.0	87.0	88.2	88.0	87.3	88.1	87.7	88.1	88.4	88.2	88.6	88.6	88.8	88.8	88.0	88.3	88.1	88.1	88.0	87.5	87.1	87.0	86.8	87.4	88.8	86.8	87.9
4	87.5	87.3	87.1	87.3	87.1	87.4	87.0	86.4	86.1	86.3	86.4	86.3	85.9	85.4	85.7	85.8	85.6	84.9	82.8	82.1	82.0	81.9	81.5	81.1	87.5	81.1	85.3
5	81.4	81.1	80.8	81.5	82.2	82.0	81.5	81.3	81.7	81.7	82.4	82.8	83.3	83.6	83.6	83.5	83.0	82.8	83.1	83.3	82.4	81.6	81.1	80.8	83.6	80.8	82.2
6	80.4	80.0	79.8	79.7	79.4	79.2	79.1	78.7	78.3	78.1	78.2	78.4	79.0	79.0	79.3	79.2	79.0	78.6	78.1	77.5	77.6	77.5	77.8	77.5	80.4	77.5	78.7
7	76.8	76.4	77.0	77.2	78.3	78.4	78.1	77.7	77.2	76.6	77.2	77.4	78.5	80.0	80.8	80.9	80.9	81.5	82.1	81.6	82.2	82.2	79.5	77.0	82.2	76.4	79.0
8	76.8	76.6	76.8	76.6	76.5	78.4	79.6	80.9	80.1	78.1	80.3	81.4	79.4	79.0	78.9	79.2	78.5	78.9	79.5	80.6	80.2	80.5	80.6	79.3	81.4	76.5	79.0
9	79.4	79.9	79.3	79.4	79.7	79.4	79.5	79.2	79.6	79.7	80.0	80.3	80.4	80.5	81.1	81.8	81.4	81.4	81.8	81.8	82.2	82.5	82.7	82.7	82.7	79.2	80.7
10	82.6	82.4	81.9	81.9	81.4	81.6	81.2	81.4	81.4	80.3	80.1	80.5	79.9	80.0	80.1	80.0	79.3	78.8	78.8	78.6	78.7	79.2	78.2	78.9	82.6	78.2	80.3
11	79.8	79.3	79.6	79.4	78.6	78.0	78.0	77.9	77.9	77.4	77.5	77.6	76.9	77.2	77.0	77.3	77.1	76.4	75.9	75.6	75.5	74.8	74.2	74.1	79.8	74.1	77.2
12	74.5	74.3	73.9	74.2	73.7	74.0	74.0	73.7	74.3	74.4	74.7	74.8	74.9	75.1	74.6	73.8	73.8	73.3	73.8	73.7	73.8	74.0	74.0	73.6	75.1	73.3	74.1
13	73.9	74.3	74.5	74.7	74.9	75.0	74.9	74.7	74.4	74.2	74.1	73.9	73.9	74.4	74.4	74.0	74.3	73.8	73.7	73.1	72.4	72.2	71.1	68.0	75.0	68.0	73.7
14	68.0	67.6	67.5	65.5	66.6	66.2	69.1	64.3	44.4	74.0	81.3	84.1	83.5	88.9	92.1	93.3	93.5	93.7	94.0	94.0	93.4	93.6	95.9	97.5	97.5	44.4	80.5
15	99.3	99.6	99.6	99.7	99.6	99.0	98.9	99.0	98.7	98.9	98.8	98.8	98.8	98.8	98.8	98.7	98.7	98.5	98.5	98.9	99.4	98.5	98.2	96.9	99.7	96.9	98.9
16	93.9	94.2	93.9	94.3	92.7	92.4	93.6	92.4	92.7	94.8	88.8	90.7	92.8	91.5	96.6	99.6	100.0	99.9	99.9	99.6	97.5	96.2	92.5	85.7	100.0	85.7	94.4
17	82.5	72.9	69.7	69.0	69.3	68.7	70.4	74.2	68.7	59.6	55.1	61.1	85.3	87.6	89.7	86.3	94.4	98.6	99.4	98.1	97.8	97.4	98.4	99.1	99.4	55.1	81.4
18	98.9	99.5	99.8	100.0	99.4	100.0	99.7	99.2	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.1	98.6	93.8	89.8	89.0	93.5	95.0	100.0	89.0	98.1
19	94.1	93.0	91.4	90.9	92.8	92.0	91.4	87.2	88.0	84.3	88.3	88.3	90.2	93.0	95.9	97.3	97.8	98.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	84.3	93.9
20	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
21	99.7	98.6	99.4	96.8	94.2	99.7	97.2	96.6	97.5	96.6	97.1	96.7	96.8	97.4	98.3	95.5	95.0	94.6	95.1	96.4	98.1	98.8	99.8	98.0	99.8	94.2	97.2
22	94.8	86.7	77.4	76.1	74.7	78.4	91.9	96.0	98.3	99.8	99.6	99.3	98.6	98.2	96.6	95.3	92.3	89.3	84.3	82.2	84.0	86.0	90.8	88.5	99.8	74.7	90.0
23	92.0	91.5	89.7	79.7	75.6	75.6	77.1	79.3	78.7	78.9	80.5	79.0	77.7	79.4	78.2	79.5	79.3	78.5	79.1	78.9	77.8	75.9	70.8	74.1	92.0	70.8	79.5
24	74.2	66.1	70.2	62.2	66.6	71.1	59.6	58.7	61.5	72.7	71.6	72.0	88.4	94.2	94.6	95.0	95.6	95.9	96.0	96.3	96.3	96.6	97.0	96.5	97.0	58.7	81.2
25	94.9	91.7	94.9	96.5	98.0	99.0	99.0	96.2	93.2	91.9	93.0	93.4	93.2	93.2	92.1	93.6	95.1	94.6	96.3	96.7	94.3	87.9	84.7	82.7	99.0	82.7	93.6
26	84.1	83.8	82.6	82.4	81.8	82.8	83.2	79.6	78.6	78.0	79.8	79.7	79.0	77.0	75.0	70.5	64.7	60.6	59.0	55.5	50.3	50.1	54.9	73.5	84.1	50.1	72.8
27	80.0	82.4	76.4	81.3	88.8	81.2	61.8	57.2	69.8	76.9	87.3	91.4	92.9	96.4	98.5	98.6	98.9	99.6	100.0	100.0	100.0	100.0	99.6	99.8	100.0	57.2	88.3
28	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.7	99.9	100.0	100.0	100.0	98.9	99.6	99.9	99.5	99.3	99.1	98.9	97.0	97.4	99.1	99.2	100.0	97.0	99.5
29	99.9	98.4	99.9	98.6	93.4	92.7	96.5	96.0	94.8	93.7	92.3	93.2	92.5	93.7	96.5	97.7	96.5	97.7	98.8	95.6	94.9	93.3	94.1	93.8	99.9	92.3	95.6
30	93.6	93.9	92.4	94.3	95.8	95.2	94.0	94.2	93.4	93.3	92.6	92.6	92.4	92.1	91.9	91.9	91.2	91.0	91.3	91.4	90.7	91.5	90.9	90.9	95.8	90.7	92.6
31	90.8	90.5	90.6	90.7	91.9	91.6	92.4	91.2	90.9	91.6	91.0	92.9	94.2	93.0	94.5	95.9	96.4	95.5	94.2	93.5	92.9	92.5	91.2	91.6	96.4	90.5	92.6
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**68.0**	**66.1**	**67.5**	**62.2**	**66.6**	**66.2**	**59.6**	**57.2**	**44.4**	**59.6**	**55.1**	**61.1**	**73.9**	**74.4**	**74.4**	**70.5**	**64.7**	60.6	59.0	**55.5**	**50.3**	**50.1**	**54.9**	**68.0**		**44.4**	
Avg.	**86.9**	**85.8**	**85.4**	**84.8**	**84.9**	**85.2**	**84.8**	**84.2**	**83.8**	**84.8**	**85.2**	**85.8**	**87.3**	**87.9**	**88.3**	**88.3**	**88.3**	**88.3**	**88.1**	**87.7**	**87.2**	**86.8**	**86.7**	**86.8**			**86.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	91.5	91.4	91.2	90.8	91.1	90.8	91.3	92.2	91.5	92.8	92.7	93.2	93.7	94.2	94.9	94.5	94.6	93.9	93.6	92.0	90.6	90.3	89.3	88.5	94.9	88.5	92.1
2	88.2	88.8	88.2	89.2	89.2	88.8	88.1	87.0	87.4	85.8	85.0	88.0	88.5	88.1	89.1	88.6	88.1	87.1	87.0	86.7	85.2	86.0	86.3	85.7	89.2	85.0	87.5
3	84.6	82.6	83.4	83.1	82.2	81.4	81.5	80.8	80.9	81.1	80.6	80.6	81.1	81.0	81.6	81.9	81.0	81.0	79.1	78.3	78.4	78.3	78.5	78.9	84.6	78.3	80.9
4	79.5	79.4	79.9	79.4	80.1	78.9	80.6	80.5	80.5	81.6	82.9	82.6	82.5	81.4	79.8	78.7	76.8	74.1	72.8	68.5	68.3	69.6	67.5	68.6	82.9	67.5	77.3
5	68.7	71.6	69.6	68.6	69.3	72.5	71.6	70.8	70.0	70.1	68.2	67.4	65.8	68.4	64.8	66.7	68.0	67.1	68.8	68.5	67.3	65.7	66.1	63.5	72.5	63.5	68.3
6	64.1	63.0	63.6	61.9	59.2	57.7	58.1	58.3	58.0	57.1	57.9	57.8	59.9	60.4	57.4	58.8	57.2	57.6	55.9	56.3	55.1	59.4	55.5	58.9	64.1	55.1	58.7
7	61.1	55.8	60.2	60.8	59.0	58.0	61.3	60.7	56.5	57.8	57.3	54.2	55.6	54.7	52.3	49.6	46.4	43.9	42.5	41.9	39.7	40.7	46.6	53.8	61.3	39.7	52.9
8	51.2	51.4	42.6	46.0	45.6	39.2	36.2	43.1	38.5	35.9	47.4	46.6	42.7	50.7	55.3	55.1	54.6	56.0	60.3	65.2	58.7	55.4	58.9	57.7	65.2	35.9	49.8
9	59.2	61.5	66.7	72.8	73.6	73.7	73.9	72.7	68.3	64.9	64.3	61.3	63.8	66.1	72.2	73.7	67.9	67.5	67.7	65.3	68.6	61.0	60.9	61.9	73.9	59.2	67.1
10	65.1	61.8	61.0	60.7	60.9	57.8	65.5	62.2	61.9	61.5	63.9	63.6	65.6	67.2	68.3	69.2	71.8	75.0	78.3	79.7	79.5	78.4	78.1	77.6	79.7	57.8	68.1
11	77.7	85.2	83.5	82.0	86.1	85.5	87.9	89.2	91.3	90.1	89.8	91.6	89.3	70.8	79.1	88.8	92.3	91.8	90.4	89.4	89.1	88.8	88.2	87.9	92.3	70.8	86.9
12	86.0	85.6	84.5	82.0	82.1	81.4	80.4	79.4	78.8	80.0	78.6	79.4	80.0	80.7	81.3	81.5	81.7	80.5	69.9	75.7	69.9	59.0	64.3	48.6	86.0	48.6	77.1
13	65.6	73.8	68.0	70.8	79.6	91.7	94.1	89.1	88.7	93.7	93.9	89.7	88.3	88.3	95.6	96.6	95.1	95.0	93.9	91.3	90.9	90.4	91.1	92.5	96.6	65.6	87.8
14	96.2	98.0	97.4	99.3	100.0	100.0	100.0	97.6	96.7	95.1	93.2	92.1	91.3	89.7	87.9	87.6	86.5	86.4	85.4	85.5	84.2	85.1	84.9	85.1	100.0	84.2	91.9
15	84.3	82.5	82.0	82.9	82.2	79.7	80.0	77.3	76.2	77.2	75.6	75.3	71.2	71.1	71.5	70.8	70.9	70.4	71.1	72.2	75.7	69.9	70.3	86.6	86.6	69.9	76.1
16	89.5	92.2	93.4	93.8	93.7	94.7	96.0	97.1	96.5	95.4	95.2	95.2	96.5	97.5	98.0	98.2	99.4	99.1	100.0	100.0	100.0	100.0	100.0	99.4	100.0	89.5	96.7
17	96.0	97.6	100.0	99.3	94.2	93.8	90.2	89.3	84.2	83.8	82.9	79.6	83.2	93.2	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	100.0	79.6	94.4
18	93.2	97.7	98.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	96.4	96.1	94.8	93.3	92.2	93.8	94.6	97.9	99.8	99.8	96.6	93.9	100.0	92.2	97.3
19	88.6	85.0	84.5	84.7	86.5	83.0	82.8	81.2	85.6	89.2	99.4	100.0	100.0	100.0	98.0	93.8	91.7	91.7	90.5	91.1	96.8	99.8	100.0	100.0	100.0	81.2	91.8
20	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	97.2	96.1	96.2	90.3	86.1	80.2	80.4	81.2	82.5	81.6	83.5	82.4	85.1	83.3	82.9	100.0	80.2	91.2
21	83.5	87.1	86.9	84.0	79.6	84.9	88.9	85.0	84.3	86.9	87.0	85.6	84.2	83.3	83.4	84.7	85.1	82.5	91.6	96.8	93.5	97.1	99.2	99.1	99.2	79.6	87.7
22	100.0	100.0	100.0	100.0	99.4	97.6	95.1	98.6	100.0	98.7	96.5	96.6	98.9	98.8	97.9	97.6	98.5	98.5	98.5	96.7	97.4	96.2	96.3	96.7	100.0	95.1	98.1
23	97.6	96.9	99.4	100.0	100.0	99.8	99.5	99.6	99.5	99.9	99.5	99.4	96.5	83.6	86.1	84.6	87.3	88.8	87.8	85.6	87.2	88.6	89.3	91.9	100.0	83.6	93.7
24	95.7	97.5	98.2	98.3	98.1	98.2	97.7	96.5	96.4	94.4	93.7	92.6	91.7	92.1	91.8	89.9	87.9	87.3	86.9	88.1	88.3	88.9	89.0	89.0	98.3	86.9	92.8
25	88.6	89.8	89.3	88.9	88.5	87.6	86.4	86.0	86.1	87.3	87.3	88.6	87.6	85.7	84.3	81.9	80.9	79.9	79.5	79.1	79.3	78.6	78.3	79.4	89.8	78.3	84.5
26	77.4	77.6	77.5	77.1	80.1	80.0	80.1	78.7	81.1	81.8	83.6	82.1	81.4	75.5	76.7	77.1	75.6	74.2	72.4	74.1	73.8	74.4	74.8	75.1	83.6	72.4	77.6
27	75.2	75.1	75.2	74.0	74.0	73.6	75.2	75.4	74.3	71.7	69.2	73.8	74.3	75.4	75.9	78.0	72.1	74.5	70.2	71.0	84.4	85.2	82.4	84.6	85.2	69.2	75.6
28	84.0	83.2	85.4	84.2	85.0	84.1	84.6	82.1	83.3	81.8	81.8	82.9	81.9	79.3	78.7	84.1	78.9	78.9	79.2	83.0	79.4	80.9	78.3	75.8	85.4	75.8	81.7
29	74.1	75.7	76.9	74.9	75.3	73.5	73.8	74.1	73.2	78.3	79.6	79.4	76.3	78.1	77.9	76.6	77.1	76.6	76.1	75.8	73.6	73.3	79.6	84.1	84.1	73.2	76.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**51.2**	**51.4**	**42.6**	**46.0**	**45.6**	**39.2**	**36.2**	**43.1**	**38.5**	**35.9**	**47.4**	**46.6**	**42.7**	**50.7**	**52.3**	**49.6**	**46.4**	43.9	42.5	**41.9**	**39.7**	**40.7**	**46.6**	**48.6**		**35.9**	
Avg.	**81.6**	**82.3**	**82.3**	**82.4**	**82.6**	**82.3**	**82.8**	**82.2**	**81.7**	**81.8**	**82.2**	**81.8**	**81.3**	**80.6**	**81.1**	**81.5**	**80.7**	**80.5**	**80.2**	**80.7**	**80.6**	**80.2**	**80.5**	**80.9**			**81.4**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	87.1	88.8	90.0	90.4	89.6	89.2	88.2	89.3	89.0	90.7	91.0	89.9	89.3	84.7	81.5	83.3	83.7	85.9	96.3	99.0	98.8	96.9	93.9	87.8	99.0	81.5	89.8
2	85.3	86.9	87.4	89.7	96.4	97.0	97.9	99.8	100.0	99.8	99.0	98.4	97.9	96.4	94.2	91.5	92.3	97.2	96.4	98.6	99.9	100.0	100.0	99.9	100.0	85.3	95.9
3	98.3	99.9	99.9	99.9	98.6	94.1	94.3	97.9	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	100.0	94.1	99.2
4	97.9	97.5	98.1	95.5	98.1	100.0	100.0	100.0	100.0	99.9	99.7	100.0	98.3	96.4	96.0	94.3	93.8	94.1	95.1	96.1	96.5	100.0	100.0	100.0	100.0	93.8	97.8
5	100.0	99.9	95.9	90.9	92.3	91.3	87.8	86.3	83.8	83.4	87.6	95.3	94.3	94.0	94.5	91.9	88.7	88.7	91.7	95.1	96.2	96.5	95.5	93.5	100.0	83.4	92.3
6	92.2	92.9	92.4	90.4	89.5	92.0	94.4	91.7	90.9	91.7	90.3	92.5	90.7	91.3	92.2	90.4	88.8	86.6	82.2	81.3	83.5	84.2	83.3	83.9	94.4	81.3	89.1
7	82.7	85.8	91.2	89.5	84.6	81.6	80.3	82.0	83.1	82.5	84.9	82.8	86.2	87.4	88.4	88.5	91.2	88.9	89.8	89.7	94.3	100.0	95.2	94.9	100.0	80.3	87.7
8	96.5	97.1	95.9	97.9	95.2	95.1	98.8	100.0	99.6	98.9	98.6	92.9	89.4	86.4	84.0	86.7	84.1	84.6	84.1	85.1	87.2	90.5	86.3	88.3	100.0	84.0	91.8
9	92.0	92.6	89.6	86.2	83.1	83.0	81.8	82.1	82.1	83.1	84.1	83.2	83.2	90.9	97.7	96.0	98.6	98.3	98.2	97.7	97.0	97.0	98.1	96.6	98.6	81.8	90.5
10	95.7	94.8	95.0	97.5	98.9	94.4	92.8	94.5	93.4	92.1	92.0	91.8	92.3	92.2	94.2	93.8	91.6	93.7	93.6	95.3	96.4	97.6	97.2	92.2	98.9	91.6	94.3
11	95.8	97.2	97.4	97.4	96.6	99.4	99.9	100.0	99.5	98.9	97.9	99.9	97.3	96.9	98.0	95.4	92.3	90.5	86.0	85.7	84.3	87.2	87.4	89.0	100.0	84.3	94.6
12	91.7	90.1	91.2	95.4	97.5	98.1	97.8	96.0	95.8	96.8	97.4	97.4	97.6	98.2	99.0	99.2	99.4	99.3	99.4	99.5	99.4	99.4	99.4	99.3	99.5	90.1	97.3
13	99.4	99.3	99.2	99.0	99.0	98.9	98.7	98.3	97.6	97.2	96.6	96.5	96.6	96.8	96.8	96.5	96.0	96.2	95.4	94.8	91.5	90.4	90.0	87.6	99.4	87.6	96.2
14	88.0	88.9	88.2	86.9	88.3	86.7	86.7	85.8	86.2	86.8	88.5	90.1	92.4	92.1	96.4	98.1	58.4	50.0	56.9	75.9	75.7	83.6	88.3	86.4	98.1	50.0	83.6
15	84.3	95.3	97.7	98.3	98.7	96.5	97.2	98.5	98.7	98.8	98.6	98.4	97.9	96.8	96.2	96.2	97.5	98.4	99.1	99.3	99.1	99.1	99.2	99.0	99.3	84.3	97.5
16	98.3	98.2	98.4	97.5	98.8	95.9	90.4	84.7	81.9	82.1	79.3	76.3	80.2	83.2	84.3	87.1	85.1	88.1	85.7	83.7	85.4	92.3	95.8	97.5	98.8	76.3	88.8
17	98.7	97.7	99.2	99.1	98.6	97.7	97.2	96.7	98.7	98.7	98.5	96.1	96.3	96.3	97.0	98.1	97.7	95.3	93.6	95.8	97.6	98.8	98.5	95.7	99.2	93.6	97.4
18	99.1	99.7	99.0	98.8	96.9	95.2	94.7	93.9	91.4	90.6	90.4	91.7	91.2	91.3	88.7	88.1	87.8	86.8	86.7	87.3	86.5	85.9	86.0	86.6	99.7	85.9	91.4
19	86.7	86.7	85.7	85.5	85.6	85.2	85.1	84.7	84.3	83.7	83.8	82.8	80.8	79.5	79.6	80.7	80.8	79.4	79.9	83.8	85.8	87.2	86.9	86.5	87.2	79.4	83.8
20	87.0	87.3	87.2	87.1	86.5	87.1	87.1	87.2	86.8	87.1	87.0	86.6	85.8	84.5	84.7	84.5	86.2	86.2	86.6	89.0	88.1	88.3	87.7	87.3	89.0	84.5	86.8
21	86.8	86.5	86.6	87.6	86.9	90.1	92.0	92.5	92.1	91.9	93.0	93.2	92.5	93.4	90.2	85.5	85.2	81.8	83.6	83.4	82.4	81.6	80.6	80.7	93.4	80.6	87.5
22	78.2	76.3	75.9	75.3	77.2	76.3	76.3	75.5	74.0	76.3	76.0	76.4	77.1	79.7	80.6	79.3	79.5	78.2	79.5	79.7	79.5	76.2	74.9	75.1	80.6	74.0	77.2
23	75.5	76.2	75.7	77.0	75.3	73.1	76.5	78.1	78.9	80.1	82.4	80.7	82.5	81.8	81.0	83.2	84.0	83.3	83.8	84.9	84.7	84.4	84.3	85.8	85.8	73.1	80.5
24	86.7	86.5	85.7	85.1	86.1	87.0	89.9	88.8	87.0	84.7	86.9	84.2	84.9	84.3	84.7	85.5	86.1	85.4	86.1	83.8	82.5	83.3	82.8	84.4	89.9	82.5	85.5
25	86.0	86.3	90.1	92.8	94.6	93.8	95.2	96.7	99.5	97.1	99.0	98.2	99.3	99.4	99.1	96.1	91.8	91.7	90.4	89.4	89.2	89.0	89.9	89.4	99.5	86.0	93.5
26	89.9	89.4	89.1	88.9	89.1	89.1	89.1	88.0	88.5	88.5	88.4	89.9	91.7	88.5	85.1	86.8	85.9	84.4	84.4	85.4	85.0	84.4	84.9	86.9	91.7	84.4	87.6
27	85.8	86.0	85.7	88.5	87.0	85.5	86.3	91.5	91.2	90.4	93.8	93.6	90.6	90.2	92.5	93.5	91.0	91.1	89.7	88.0	87.9	87.6	86.9	86.2	93.8	85.5	89.2
28	87.4	86.7	87.4	86.6	87.2	87.7	87.5	87.4	87.7	87.4	88.6	89.3	89.4	89.6	89.3	90.0	88.2	88.7	86.3	84.6	84.1	82.0	83.1	79.1	90.0	79.1	86.9
29	74.3	76.0	77.4	84.2	90.5	91.5	93.3	94.7	93.9	92.2	91.4	91.0	91.9	93.4	95.0	96.3	95.5	95.5	95.0	96.8	97.8	98.9	98.6	99.3	99.3	74.3	91.8
30	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
31	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**74.3**	**76.0**	**75.7**	**75.3**	**75.3**	**73.1**	**76.3**	**75.5**	**74.0**	**76.3**	**76.0**	**76.3**	**77.1**	**79.5**	**79.6**	**79.3**	**58.4**	50.0	56.9	**75.9**	**75.7**	**76.2**	**74.9**	**75.1**		**50.0**	
Avg.	**90.6**	**91.2**	**91.4**	**91.6**	**91.8**	**91.4**	**91.5**	**91.7**	**91.5**	**91.3**	**91.8**	**91.6**	**91.5**	**91.5**	**91.6**	**91.5**	**89.7**	**89.3**	**89.5**	**90.6**	**90.8**	**91.7**	**91.4**	**90.9**			**91.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	100.0	100.0	99.7	98.7	99.2	98.3	99.3	99.2	98.4	99.6	99.3	98.9	99.2	99.8	99.7	99.6	99.9	99.7	100.0	99.9	100.0	100.0	100.0	100.0	100.0	98.3	99.5
3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	100.0	99.6	100.0
5	98.1	96.6	95.8	97.5	99.7	98.5	96.8	94.6	95.5	98.5	100.0	98.3	96.7	94.7	93.5	93.6	94.5	95.0	95.7	93.9	95.4	97.1	98.9	99.1	100.0	93.5	96.6
6	98.5	95.9	94.8	93.6	93.0	91.3	91.6	91.5	92.5	94.5	96.2	97.7	99.0	99.6	96.4	94.5	95.5	95.3	94.3	93.4	95.7	95.7	94.5	94.4	99.6	91.3	95.0
7	93.0	92.5	92.6	94.5	92.4	91.4	90.8	90.0	92.1	95.3	97.2	98.5	98.7	96.5	94.9	94.0	93.8	94.0	92.6	91.0	95.0	97.7	99.5	97.6	99.5	90.0	94.4
8	95.4	93.6	91.5	90.6	90.5	90.4	90.7	90.9	93.2	97.5	99.6	96.6	96.9	96.8	96.8	96.9	97.6	96.9	96.4	95.7	92.3	94.1	94.1	99.5	99.6	90.4	94.8
9	99.8	99.9	99.3	99.6	98.4	98.3	97.9	95.4	96.4	99.3	99.7	96.9	94.7	94.6	94.8	93.6	93.9	92.9	92.1	93.1	96.2	96.3	95.1	94.5	99.9	92.1	96.4
10	95.6	95.2	93.7	91.9	90.7	90.9	90.0	90.1	92.4	96.4	99.1	97.2	96.1	94.7	94.9	94.3	94.8	91.9	91.1	92.4	94.6	92.4	91.9	93.2	99.1	90.0	93.6
11	91.7	90.3	89.9	87.6	87.6	87.7	88.6	86.9	89.2	94.5	98.5	97.3	92.0	91.0	92.7	95.6	95.6	93.9	92.5	92.6	92.7	91.0	90.8	90.3	98.5	86.9	91.7
12	92.2	93.1	89.6	89.5	87.2	89.3	89.7	89.6	90.6	95.4	97.1	95.7	91.9	93.7	89.9	90.3	91.7	92.3	91.9	89.6	89.6	94.9	94.6	96.7	97.1	87.2	91.9
13	98.6	97.9	96.0	95.2	95.4	95.7	96.3	96.4	96.4	96.5	97.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.5	100.0	100.0	100.0	95.2	98.4
14	100.0	100.0	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
15	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.6	99.5	99.5	99.6	99.6	99.6	99.6	99.4	98.3	96.6	94.2	92.9	93.0	93.1	100.0	92.9	98.5
16	94.8	96.1	96.9	97.6	97.7	98.3	98.4	98.4	97.6	96.3	96.0	96.8	97.6	97.7	97.9	98.0	97.6	96.5	94.4	93.5	93.3	93.4	93.4	93.5	98.4	93.3	96.3
17	93.7	93.8	94.0	94.2	94.4	94.4	94.3	94.2	94.3	94.4	94.5	94.6	94.7	94.9	95.1	95.4	95.8	96.2	96.9	97.7	98.3	98.3	98.2	98.3	98.3	93.7	95.4
18	98.2	98.2	98.1	98.0	98.0	97.9	97.8	97.7	97.6	97.5	97.6	97.6	97.8	97.9	98.1	98.4	98.5	98.6	98.8	98.9	99.0	99.1	99.1	99.0	99.1	97.5	98.2
19	99.0	99.0	99.4	99.4	99.2	99.2	99.1	99.2	99.3	99.4	99.6	99.7	99.4	98.9	99.1	99.5	99.8	99.9	100.0	99.1	99.1	99.5	99.9	99.5	100.0	98.9	99.4
20	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0
21	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
22	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
23	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
24	100.0	100.0	100.0	99.6	99.6	99.3	99.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	99.0	99.9
25	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
26	100.0	100.0	99.9	99.5	99.0	98.4	97.7	97.3	97.0	97.0	96.9	96.9	96.9	97.1	97.2	97.6	98.0	98.6	99.1	99.4	99.5	99.6	99.6	99.6	100.0	96.9	98.4
27	99.6	99.6	99.6	99.6	99.5	99.4	99.4	99.4	99.3	99.3	99.4	99.4	99.5	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	99.7
28	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
29	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	99.1	98.3	100.0	98.3	99.8
30	97.6	96.7	95.6	95.3	94.9	93.3	92.8	92.8	94.6	95.7	97.6	99.4	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.8	97.8
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**91.7**	**90.3**	**89.6**	**87.6**	**87.2**	**87.7**	**88.6**	**86.9**	**89.2**	**94.4**	**94.5**	**94.6**	**91.9**	**91.0**	**89.9**	**90.3**	**91.7**	91.9	91.1	**89.6**	**89.6**	**91.0**	**90.8**	**90.3**		**86.9**	
Avg.	**98.2**	**97.9**	**97.5**	**97.4**	**97.2**	**97.1**	**97.0**	**96.8**	**97.2**	**98.2**	**98.9**	**98.7**	**98.4**	**98.2**	**98.0**	**98.0**	**98.2**	**98.0**	**97.8**	**97.6**	**97.8**	**98.0**	**98.1**	**98.2**			**97.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	100.0	99.9	99.3	97.7	97.3	94.9	93.4	93.6	94.1	95.6	97.5	98.1	98.6	98.1	97.6	96.8	95.6	94.1	93.5	92.8	92.5	93.7	94.2	94.3	100.0	92.5	96.0
2	94.1	94.9	95.4	98.7	100.0	100.0	99.4	97.1	97.4	96.5	96.3	95.2	93.0	90.6	91.4	93.7	93.1	92.3	93.1	95.9	99.8	100.0	100.0	100.0	100.0	90.6	96.2
3	99.8	99.8	100.0	100.0	100.0	99.8	99.5	100.0	100.0	99.8	98.6	97.2	93.3	90.7	89.7	89.1	91.2	94.6	94.3	89.7	85.8	92.2	95.7	90.4	100.0	85.8	95.5
4	89.7	91.4	89.6	89.3	85.6	87.6	85.9	87.1	85.0	80.8	80.3	80.7	83.6	84.8	81.7	79.8	80.6	80.2	81.5	88.9	86.6	90.9	91.6	92.9	92.9	79.8	85.7
5	88.9	86.9	89.0	85.0	87.3	90.7	91.7	91.0	92.0	89.3	87.0	90.6	89.4	88.6	88.6	87.1	88.8	89.7	90.7	89.7	89.9	89.2	89.8	94.7	94.7	85.0	89.4
6	96.3	98.4	98.6	99.5	95.7	93.5	93.8	97.2	97.0	93.9	92.7	91.6	90.5	89.5	88.1	87.1	86.3	83.2	83.8	84.6	87.3	89.5	92.7	93.6	99.5	83.2	91.9
7	93.4	90.6	89.7	89.0	88.7	89.0	89.2	89.6	87.9	86.2	84.5	84.0	84.3	84.0	84.0	84.4	84.9	83.9	84.0	83.8	84.7	84.9	88.9	91.2	93.4	83.8	86.9
8	90.7	90.9	91.5	91.3	93.3	95.2	95.4	91.3	90.2	88.9	88.3	87.1	87.8	89.7	91.0	90.0	89.1	86.8	86.3	86.2	85.9	85.2	84.4	83.6	95.4	83.6	89.2
9	83.3	84.3	87.1	87.9	88.3	91.3	90.5	90.5	87.3	86.2	84.7	85.8	91.1	92.9	94.1	92.7	92.8	95.7	96.4	97.7	98.6	97.7	96.5	99.3	99.3	83.3	91.4
10	97.4	99.1	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.3	97.2	95.6	90.4	90.3	90.3	89.3	88.1	90.6	90.7	89.7	92.2	92.7	88.5	100.0	88.1	95.0
11	88.1	90.2	89.7	89.4	90.7	89.2	90.0	89.4	86.4	86.5	91.2	94.3	94.9	93.8	82.9	76.3	75.2	77.3	73.7	76.0	76.5	78.3	82.9	87.3	94.9	73.7	85.4
12	86.7	89.1	89.7	90.0	90.6	92.9	94.9	94.2	91.2	87.2	81.6	78.4	74.4	77.0	78.2	85.8	91.0	89.8	89.2	88.3	92.1	95.0	96.9	95.0	96.9	74.4	88.3
13	95.5	96.9	98.9	99.7	99.7	99.7	99.2	99.1	99.9	99.5	96.0	93.9	88.7	85.3	83.6	80.8	82.0	88.3	84.2	81.0	83.4	84.1	85.6	87.9	99.9	80.8	91.4
14	90.0	85.8	90.5	93.7	88.0	84.5	83.3	81.8	79.3	78.8	73.9	72.5	69.9	64.4	65.4	68.0	66.7	66.1	65.4	73.8	77.7	72.9	70.1	73.1	93.7	64.4	76.5
15	73.3	76.8	75.5	76.4	78.5	79.1	81.0	81.2	81.6	82.3	88.0	83.0	77.5	75.0	82.3	82.1	90.4	94.8	94.1	95.4	96.5	97.2	98.3	97.7	98.3	73.3	84.9
16	98.2	99.3	99.0	96.6	98.2	99.3	99.3	99.7	98.6	98.3	98.1	97.8	94.0	84.9	80.6	78.4	75.3	74.6	74.5	74.3	77.0	80.4	83.6	85.4	99.7	74.3	89.4
17	87.5	91.1	92.2	92.1	90.2	90.2	91.8	91.4	90.1	87.8	84.3	76.3	69.1	71.8	65.6	63.7	63.3	63.3	62.5	65.5	69.7	75.3	77.1	71.1	92.2	62.5	78.5
18	73.9	75.6	74.9	74.9	83.3	90.9	91.2	93.1	94.1	89.8	93.9	94.4	93.0	92.5	94.4	95.5	95.7	94.9	91.6	90.6	93.8	97.4	98.7	99.2	99.2	73.9	90.3
19	96.6	88.6	84.1	87.4	87.3	87.4	89.0	92.1	91.5	94.1	91.0	85.2	77.8	73.7	69.9	64.3	68.4	71.1	71.8	72.4	73.5	77.9	79.9	77.5	96.6	64.3	81.4
20	78.3	79.0	78.0	78.4	76.0	79.3	77.5	73.8	69.7	68.1	63.3	60.4	57.3	56.1	47.7	44.5	50.8	50.3	55.3	51.0	49.9	49.3	50.1	48.7	79.3	44.5	62.2
21	46.6	50.5	57.1	61.7	59.9	60.6	66.2	65.6	67.0	67.8	63.4	61.0	61.0	65.3	68.6	61.2	64.7	68.1	66.1	67.9	75.1	81.1	83.7	85.2	85.2	46.6	65.6
22	83.7	81.2	83.5	87.6	91.4	89.4	95.5	90.9	85.3	84.6	83.2	79.0	68.9	63.3	59.9	63.2	64.5	66.9	69.6	71.2	73.8	78.5	81.1	81.2	95.5	59.9	78.2
23	83.1	88.6	95.5	95.7	96.0	92.4	89.8	89.8	86.1	85.2	83.5	82.4	86.9	89.8	89.2	89.0	88.8	88.4	89.4	89.8	89.0	88.9	88.0	90.3	96.0	82.4	89.0
24	91.6	91.5	92.5	93.1	93.8	96.0	96.7	94.8	93.8	92.7	93.9	90.0	85.0	84.3	79.1	75.2	73.2	73.2	79.6	85.0	75.1	81.3	81.7	77.5	96.7	73.2	86.3
25	77.0	81.8	90.1	90.8	88.9	89.6	87.2	82.3	83.6	80.5	75.7	73.2	82.2	93.0	92.8	91.7	85.8	86.5	86.2	85.8	89.3	89.5	92.4	92.7	93.0	73.2	86.2
26	97.4	96.7	98.5	95.9	93.2	91.2	91.4	96.0	93.4	89.9	87.7	84.5	83.1	78.8	73.8	91.2	88.0	80.1	76.1	80.8	79.7	79.4	83.2	87.9	98.5	73.8	87.4
27	88.2	89.5	90.5	89.6	90.2	95.0	92.4	89.8	86.3	80.8	79.2	68.6	60.5	55.3	50.7	46.9	42.7	44.7	45.1	46.2	52.7	62.8	72.1	72.3	95.0	42.7	70.5
28	72.8	73.7	75.2	73.6	70.3	67.9	69.6	67.6	63.8	60.6	59.7	57.4	54.7	51.0	47.4	44.6	44.8	50.9	56.1	60.3	62.0	65.4	70.3	74.5	75.2	44.6	62.3
29	78.6	79.3	76.4	77.2	80.6	81.7	79.0	75.6	73.5	69.3	61.3	57.5	55.0	52.4	51.3	50.0	47.7	46.1	44.6	43.2	44.0	48.1	57.2	60.6	81.7	43.2	62.1
30	62.8	66.4	69.2	66.8	65.2	72.0	73.7	71.2	69.3	65.3	62.3	57.7	56.1	54.2	52.8	51.9	51.3	54.1	60.0	66.0	71.8	74.8	76.8	80.0	80.0	51.3	64.6
31	82.8	84.6	88.5	91.8	93.5	93.9	92.3	93.5	94.6	93.3	85.4	80.5	77.4	76.0	76.1	75.0	76.6	77.8	82.3	86.9	91.2	90.8	92.8	97.4	97.4	75.0	86.5
Max.	**100.0**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.3**	**98.1**	**98.6**	**98.1**	**97.6**	**96.8**	**95.7**	**95.7**	**96.4**	**97.7**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**46.6**	**50.5**	**57.1**	**61.7**	**59.9**	**60.6**	**66.2**	**65.6**	**63.8**	**60.6**	**59.7**	**57.4**	**54.7**	**51.0**	**47.4**	**44.5**	**42.7**	44.7	44.6	**43.2**	**44.0**	**48.1**	**50.1**	**48.7**		**42.7**	
Avg.	**86.0**	**86.8**	**88.0**	**88.4**	**88.4**	**89.2**	**89.3**	**88.7**	**87.4**	**85.8**	**84.1**	**81.8**	**79.8**	**78.6**	**77.1**	**76.5**	**76.7**	**77.3**	**77.8**	**79.1**	**80.5**	**82.7**	**84.8**	**85.5**			**83.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	95.3	93.4	94.6	89.1	82.6	81.9	81.4	80.6	80.0	78.3	71.9	63.0	61.8	65.7	63.4	59.5	61.8	68.8	72.3	75.3	76.8	82.0	81.9	90.8	95.3	59.5	77.2
2	88.7	82.6	79.4	77.2	75.4	77.2	79.7	75.0	72.0	67.1	67.0	63.0	59.5	54.2	51.2	51.0	51.9	53.4	57.4	58.8	59.8	62.3	67.7	67.7	88.7	51.0	66.6
3	73.2	73.8	77.3	80.6	86.5	82.6	82.3	85.4	88.4	79.8	72.2	65.6	72.8	69.9	65.7	66.5	73.1	71.7	75.1	78.6	83.6	87.6	91.5	94.4	94.4	65.6	78.3
4	95.1	96.3	99.2	99.3	99.8	100.0	99.9	95.9	87.1	82.3	79.3	73.1	72.5	71.4	67.2	64.2	60.9	61.9	61.9	62.7	64.6	71.6	77.1	81.9	100.0	60.9	80.2
5	86.3	87.1	90.0	94.0	96.1	95.2	93.6	91.4	91.5	86.8	89.5	90.9	90.3	84.6	77.0	77.6	77.3	75.4	80.0	82.7	82.7	82.8	83.1	92.0	96.1	75.4	86.6
6	92.2	94.5	95.0	91.7	92.8	92.9	93.2	94.6	97.2	94.7	86.8	77.2	69.0	62.8	63.3	57.0	52.6	59.5	61.1	69.9	58.4	68.4	82.5	90.7	97.2	52.6	79.1
7	90.4	91.5	94.7	95.4	96.5	97.6	94.7	91.8	84.5	79.6	73.9	67.9	64.1	53.9	47.9	44.4	46.8	53.4	45.8	59.9	67.2	75.3	81.6	82.2	97.6	44.4	74.2
8	72.4	76.5	72.1	77.4	67.7	55.0	53.0	53.7	75.7	58.8	54.7	55.7	54.2	48.7	53.8	46.3	50.8	52.5	56.9	59.9	53.7	57.8	73.6	88.1	88.1	46.3	61.2
9	92.9	91.0	92.7	98.5	100.0	99.3	99.8	100.0	100.0	98.7	93.4	87.3	87.1	85.8	82.9	83.5	74.9	83.8	78.0	77.1	79.5	79.9	82.8	83.3	100.0	74.9	88.8
10	82.9	85.5	90.8	93.8	95.2	96.0	100.0	100.0	100.0	96.5	93.4	90.6	88.0	81.5	77.0	73.2	69.8	70.7	74.6	76.9	80.3	85.7	81.1	80.1	100.0	69.8	86.0
11	82.8	86.3	87.8	91.1	90.8	90.5	93.8	94.8	94.8	92.1	92.4	91.0	91.4	90.9	90.9	86.8	81.8	79.9	77.2	75.9	78.2	83.2	86.5	89.8	94.8	75.9	87.5
12	89.9	87.0	89.0	93.0	96.9	99.4	99.9	99.8	93.5	89.7	85.7	83.5	82.9	84.0	84.6	87.8	91.0	91.9	92.9	94.5	95.2	97.0	98.6	99.4	99.9	82.9	92.0
13	100.0	98.6	97.5	99.8	100.0	99.9	99.3	97.8	97.3	97.2	97.9	96.1	89.5	84.4	81.0	75.2	70.4	70.5	66.6	65.7	70.3	76.9	82.6	87.8	100.0	65.7	87.6
14	92.0	95.2	93.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8	89.4	82.8	78.1	73.1	68.3	65.0	66.1	68.7	77.8	91.2	88.7	90.3	88.4	100.0	65.0	87.3
15	88.9	89.9	97.4	96.3	97.5	100.0	100.0	100.0	100.0	99.3	96.0	89.4	86.0	79.3	71.7	70.1	75.8	86.3	81.8	83.9	89.4	94.0	94.5	96.5	100.0	70.1	90.2
16	99.3	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	94.1	89.1	84.9	82.7	82.2	79.8	75.3	75.4	71.5	75.2	77.9	82.7	85.9	100.0	71.5	89.8
17	84.8	82.5	85.2	84.5	84.0	88.1	90.1	87.9	84.1	72.1	69.7	66.0	63.9	60.9	56.0	50.3	46.2	42.6	42.0	48.1	49.5	58.2	66.1	75.4	90.1	42.0	68.2
18	83.5	82.2	83.9	82.8	84.0	84.7	89.7	89.5	84.6	75.8	75.1	72.3	65.0	62.4	63.6	52.2	47.4	54.0	58.4	58.7	61.9	65.7	76.2	81.7	89.7	47.4	72.3
19	81.2	81.5	80.7	82.3	87.2	90.1	93.7	88.8	80.0	77.9	77.0	76.2	75.4	71.0	65.3	62.5	59.4	55.4	50.6	53.7	57.5	63.7	70.8	75.0	93.7	50.6	73.2
20	80.3	85.9	90.8	91.8	91.0	93.1	93.0	86.7	81.8	77.5	74.9	68.4	66.2	62.0	59.8	60.8	60.1	59.2	61.8	66.0	72.0	74.8	80.1	82.6	93.1	59.2	75.9
21	82.3	83.1	85.3	86.2	84.5	88.7	87.6	85.1	80.7	78.5	75.8	72.1	69.7	71.3	69.1	66.3	63.8	60.4	58.0	59.9	63.3	69.7	78.4	83.0	88.7	58.0	75.1
22	84.6	87.3	86.9	86.3	88.9	89.2	85.5	79.4	79.0	72.9	68.3	70.2	68.4	65.5	62.5	67.9	70.8	73.7	75.0	73.1	77.1	80.6	86.0	90.6	90.6	62.5	77.9
23	91.6	91.5	91.1	90.8	93.1	90.3	86.3	85.0	80.5	72.3	67.3	64.4	61.4	59.5	58.3	56.1	53.2	52.0	52.7	54.1	57.4	62.3	68.1	75.0	93.1	52.0	71.4
24	76.6	79.8	82.6	86.5	87.3	88.0	87.2	83.8	80.1	72.2	70.3	65.9	66.8	74.3	75.4	75.1	75.1	76.9	79.5	80.4	80.0	80.4	82.5	83.9	88.0	65.9	78.8
25	84.9	81.9	80.4	81.6	86.8	91.8	88.0	82.3	79.6	73.4	71.1	65.0	60.1	56.3	54.1	54.6	53.8	54.0	57.5	60.2	66.6	67.7	67.3	74.1	91.8	53.8	70.5
26	75.5	76.4	78.1	78.2	79.6	84.8	82.6	79.7	74.9	71.8	67.3	63.1	57.1	68.1	70.5	64.0	67.5	70.2	72.5	69.5	67.6	69.7	76.5	74.8	84.8	57.1	72.5
27	78.3	75.4	72.4	75.2	80.5	85.8	82.0	81.7	81.1	76.0	80.0	74.7	70.0	61.5	60.4	60.6	60.2	57.9	61.6	62.7	66.9	66.2	65.8	67.9	85.8	57.9	71.0
28	71.8	84.9	94.7	96.6	93.6	92.2	90.4	89.0	86.1	77.7	80.0	84.8	80.6	74.4	70.9	75.1	89.0	83.0	84.9	83.2	80.3	80.0	86.4	84.2	96.6	70.9	83.9
29	87.0	91.7	96.9	99.6	96.7	94.4	94.0	93.3	94.2	91.8	87.2	83.7	79.0	75.1	68.7	63.4	62.1	60.2	60.9	62.6	67.1	72.5	77.1	81.8	99.6	60.2	80.9
30	85.4	85.4	85.3	83.5	83.4	83.3	87.3	84.0	78.2	75.2	71.7	68.0	63.9	68.3	64.2	60.1	63.0	72.2	72.0	68.3	72.3	69.6	71.0	74.5	87.3	60.1	74.6
Max.	**100.0**	**99.7**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.3**	**96.1**	**91.4**	**90.9**	**90.9**	**87.8**	**91.0**	**91.9**	**92.9**	**94.5**	**95.2**	**97.0**	**98.6**	**99.4**	**100.0**		
Min.	**71.8**	**73.8**	**72.1**	**75.2**	**67.7**	**55.0**	**53.0**	**53.7**	**72.0**	**58.8**	**54.7**	**55.7**	**54.2**	**48.7**	**47.9**	**44.4**	**46.2**	42.6	42.0	**48.1**	**49.5**	**57.8**	**65.8**	**67.7**		**42.0**	
Avg.	**85.7**	**86.6**	**88.2**	**89.4**	**89.9**	**90.4**	**90.3**	**88.6**	**86.9**	**82.2**	**79.2**	**75.7**	**72.9**	**70.4**	**67.7**	**65.4**	**65.2**	**66.4**	**67.1**	**69.0**	**71.5**	**75.1**	**79.7**	**83.4**			**78.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	75.9	82.0	76.0	78.5	80.1	82.8	82.2	78.3	75.3	71.4	66.7	61.9	56.8	52.4	48.0	42.4	40.4	43.4	48.7	54.0	61.4	65.1	66.4	65.6	82.8	40.4	64.8
2	70.8	77.8	77.6	74.4	75.3	74.1	75.0	74.3	73.3	70.5	62.4	53.0	47.8	47.9	46.4	45.5	44.7	41.9	45.6	56.5	53.9	59.3	67.6	70.5	77.8	41.9	61.9
3	68.4	71.4	69.4	63.2	60.7	69.1	67.4	64.0	66.3	74.4	88.1	84.4	79.4	75.0	73.6	68.8	69.3	78.2	80.8	80.4	82.8	84.1	87.9	90.6	90.6	60.7	74.9
4	93.0	95.7	97.6	97.3	95.2	94.5	95.5	93.6	89.6	86.3	81.4	77.1	72.9	70.1	73.7	82.9	76.9	73.1	84.3	92.4	96.3	91.0	94.9	91.7	97.6	70.1	87.4
5	93.1	92.1	89.0	88.8	84.4	87.5	89.7	90.0	92.5	85.0	81.0	75.6	70.9	66.4	65.0	69.5	76.1	75.7	74.3	70.9	75.6	81.0	80.7	83.7	93.1	65.0	80.8
6	78.3	78.8	83.1	88.9	92.1	92.3	90.9	88.7	86.2	76.5	63.4	65.3	62.5	66.0	69.9	74.6	75.8	73.9	77.9	82.5	84.2	85.1	86.1	88.9	92.3	62.5	79.7
7	93.3	96.7	97.9	98.7	98.5	97.3	99.0	98.3	97.0	93.2	88.6	92.1	92.9	88.9	90.8	90.5	90.7	86.6	81.2	79.2	79.2	79.5	80.7	78.8	99.0	78.8	90.4
8	79.8	78.4	78.9	85.5	93.6	97.8	98.0	98.2	99.0	98.6	96.0	95.6	96.4	95.1	93.2	91.0	92.8	95.7	97.8	97.3	97.0	95.6	97.2	96.1	99.0	78.4	93.5
9	97.9	98.1	97.7	95.6	93.5	91.2	92.6	89.2	85.4	79.6	81.2	76.3	69.4	64.5	61.8	60.2	60.5	63.3	68.6	70.0	72.5	73.5	76.1	79.3	98.1	60.2	79.1
10	82.0	85.7	87.3	86.7	88.0	88.4	88.9	88.7	87.3	80.7	76.6	73.8	72.8	71.8	69.2	66.2	66.0	65.9	66.9	68.2	74.0	76.5	81.1	85.9	88.9	65.9	78.3
11	88.8	89.8	89.5	90.9	92.8	94.2	95.0	94.1	92.5	82.8	75.5	74.1	67.5	64.4	62.5	59.4	56.1	55.6	57.1	59.3	60.6	66.8	70.1	70.9	95.0	55.6	75.4
12	73.4	74.6	75.0	82.8	83.8	84.0	80.9	80.5	75.9	76.2	73.7	74.1	73.8	69.8	70.6	73.5	74.2	75.9	87.3	92.1	93.2	94.2	94.9	96.0	96.0	69.8	80.4
13	96.3	96.1	96.4	97.6	97.4	98.8	99.2	98.7	98.3	98.3	98.0	96.5	95.3	93.0	91.3	88.4	88.6	86.3	83.7	85.7	87.5	90.4	92.1	92.1	99.2	83.7	93.6
14	93.1	93.6	94.0	93.4	93.2	93.7	90.4	88.5	87.1	88.4	87.6	82.7	81.1	78.6	73.2	73.7	76.9	74.0	72.7	72.2	76.4	80.7	85.7	88.8	94.0	72.2	84.2
15	90.3	94.8	93.5	93.2	93.3	93.9	94.0	94.8	93.3	86.1	83.9	80.6	79.0	75.3	72.3	71.7	73.6	78.0	82.5	87.7	91.5	91.4	91.0	91.7	94.8	71.7	86.6
16	90.7	90.8	90.4	91.5	92.3	92.1	91.6	90.2	89.3	89.2	93.7	95.1	91.5	86.1	80.4	82.1	93.4	96.2	96.2	96.4	97.2	97.6	97.4	98.4	98.4	80.4	92.1
17	98.0	96.7	97.3	97.5	98.6	97.2	98.3	99.0	97.5	97.7	97.8	98.1	93.6	92.9	96.6	95.1	92.7	88.6	90.7	89.4	90.6	92.3	95.4	96.8	99.0	88.6	95.4
18	96.0	98.1	99.9	100.0	100.0	100.0	100.0	98.7	96.1	96.7	90.4	89.6	86.8	85.4	85.9	84.0	79.8	81.6	79.9	86.8	89.5	86.9	89.1	89.0	100.0	79.8	91.3
19	87.9	87.8	86.5	90.6	93.0	93.5	91.2	88.1	89.2	89.6	85.1	80.3	77.2	76.8	69.2	78.2	78.8	79.4	74.7	83.9	87.1	88.9	91.1	88.6	93.5	69.2	84.9
20	89.2	89.7	92.6	94.2	89.0	91.5	90.0	89.6	94.3	97.6	98.6	99.8	92.6	85.0	86.0	89.5	95.1	97.1	99.6	99.8	100.0	99.5	98.8	98.7	100.0	85.0	94.1
21	97.0	97.3	98.4	98.9	98.5	98.4	99.0	98.9	98.9	98.8	97.4	93.8	93.2	91.0	88.7	83.6	77.1	78.1	88.8	82.1	82.7	92.3	96.2	99.0	99.0	77.1	92.8
22	98.5	97.0	97.7	97.7	98.7	100.0	100.0	98.7	97.8	97.1	97.0	97.1	99.0	97.9	95.2	92.0	88.5	90.6	92.1	93.6	94.8	94.5	97.1	98.7	100.0	88.5	96.3
23	98.9	98.0	99.0	99.5	99.7	100.0	100.0	100.0	98.5	96.3	95.3	92.3	90.8	91.2	93.3	92.4	80.3	77.4	79.0	88.5	95.3	95.2	95.3	98.3	100.0	77.4	93.9
24	100.0	100.0	98.5	93.7	97.5	98.6	99.5	100.0	100.0	99.9	98.9	95.6	91.9	86.4	77.9	70.2	65.8	71.2	74.0	71.0	74.5	70.0	63.5	67.6	100.0	63.5	86.1
25	70.7	74.3	74.9	72.1	74.6	77.4	76.9	71.9	69.8	66.7	64.6	61.0	56.4	53.2	50.4	48.7	48.0	45.9	45.1	46.0	46.7	52.8	59.3	65.2	77.4	45.1	61.4
26	72.0	73.6	75.8	71.3	81.8	84.1	89.4	94.2	94.4	89.6	88.6	84.3	89.2	87.5	86.8	87.7	87.6	84.7	79.6	74.0	77.8	89.0	95.3	97.5	97.5	71.3	84.8
27	98.4	98.7	98.0	98.2	99.6	98.4	98.1	97.1	98.2	99.0	95.5	94.0	93.2	90.5	87.1	89.2	89.5	89.7	85.8	85.6	88.1	91.6	93.8	91.4	99.6	85.6	93.7
28	89.3	93.0	90.4	90.5	93.5	94.3	93.5	94.1	89.5	84.6	82.1	78.9	73.9	64.6	63.8	60.0	58.6	60.6	59.9	62.8	64.7	66.2	69.6	75.2	94.3	58.6	77.2
29	77.9	80.6	81.8	84.8	83.4	89.1	89.9	89.5	87.2	82.5	73.7	68.0	65.2	64.1	59.7	54.0	52.0	50.6	52.4	51.4	55.8	57.5	65.6	73.2	89.9	50.6	70.4
30	78.1	77.6	79.8	79.7	80.6	78.0	76.2	76.0	76.3	69.5	69.1	67.4	64.0	61.1	59.3	59.9	62.2	64.0	66.2	70.3	73.9	78.4	82.6	88.4	88.4	59.3	72.4
31	91.1	89.2	90.8	90.3	93.5	93.8	93.3	92.4	87.5	80.3	74.4	63.5	54.4	49.7	46.7	47.0	49.5	49.9	48.4	53.1	60.2	66.7	76.6	80.0	93.8	46.7	71.8
Max.	**100.0**	**100.0**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**98.9**	**99.8**	**99.0**	**97.9**	**96.6**	**95.1**	**95.1**	**97.1**	**99.6**	**99.8**	**100.0**	**99.5**	**98.8**	**99.0**	**100.0**		
Min.	**68.4**	**71.4**	**69.4**	**63.2**	**60.7**	**69.1**	**67.4**	**64.0**	**66.3**	**66.7**	**62.4**	**53.0**	**47.8**	**47.9**	**46.4**	**42.4**	**40.4**	41.9	45.1	**46.0**	**46.7**	**52.8**	**59.3**	**65.2**		**40.4**	
Avg.	**87.4**	**88.6**	**88.9**	**89.2**	**90.2**	**91.2**	**91.1**	**90.3**	**89.1**	**86.6**	**84.1**	**81.3**	**78.4**	**75.6**	**73.8**	**73.3**	**72.9**	**73.3**	**74.9**	**76.9**	**79.5**	**81.7**	**84.5**	**86.3**			**82.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	81.6	83.0	91.7	87.5	89.0	88.0	90.5	98.4	98.3	95.0	91.4	90.0	81.5	75.3	71.1	66.0	66.4	62.9	64.4	68.2	73.9	83.4	91.1	92.7	98.4	62.9	82.6
2	94.7	95.5	93.6	95.7	94.8	96.5	97.9	97.9	97.7	95.8	95.1	94.7	93.2	90.6	88.2	88.0	84.9	86.8	89.2	86.1	92.3	94.6	94.9	95.4	97.9	84.9	93.1
3	94.1	93.8	96.1	95.8	96.3	97.4	95.2	93.2	90.7	86.4	81.3	74.1	65.4	71.8	70.5	65.8	65.0	65.3	69.6	72.5	73.8	79.8	86.0	90.9	97.4	65.0	82.1
4	91.9	91.0	91.4	92.1	95.5	95.5	94.3	94.2	92.0	89.5	87.7	84.5	83.9	80.7	77.7	74.6	74.1	68.7	68.0	74.1	79.4	87.1	92.3	93.5	95.5	68.0	85.6
5	94.4	95.3	97.4	91.6	96.8	97.3	95.9	94.1	91.3	92.7	86.8	72.7	69.2	58.7	55.0	53.0	52.5	51.1	51.8	51.6	54.0	59.8	71.2	74.8	97.4	51.1	75.4
6	72.9	73.5	79.9	77.8	79.9	71.3	69.0	68.5	64.2	61.0	56.9	53.3	46.9	42.2	42.0	40.1	39.9	41.1	49.2	54.5	56.6	61.8	70.4	71.5	79.9	39.9	60.2
7	75.7	73.3	73.4	76.0	81.7	84.0	85.0	82.1	77.7	74.1	71.5	69.3	65.2	60.4	58.4	56.6	52.5	51.9	56.3	56.1	57.1	71.5	77.8	79.3	85.0	51.9	69.4
8	81.5	82.2	84.0	81.7	82.7	75.3	77.2	80.2	75.0	69.6	64.6	61.9	53.8	48.5	43.2	39.1	38.2	35.7	38.9	41.8	46.0	56.3	64.7	69.4	84.0	35.7	62.1
9	68.6	70.5	69.7	72.9	72.4	72.7	70.5	72.2	68.3	67.8	65.6	61.2	52.9	49.0	45.4	43.1	41.2	42.2	46.0	45.5	50.7	64.0	63.4	63.1	72.9	41.2	59.9
10	61.9	62.7	64.2	62.3	66.2	72.4	79.3	83.2	87.6	84.4	73.0	65.6	63.4	59.2	59.7	60.2	50.5	56.4	67.3	71.1	73.8	84.7	88.8	87.9	88.8	50.5	70.2
11	92.2	96.8	95.1	89.2	89.2	88.5	92.1	91.0	87.7	84.2	81.5	76.9	70.3	66.3	66.3	64.7	60.4	58.9	58.3	61.4	65.1	72.3	76.9	77.6	96.8	58.3	77.6
12	63.5	71.8	62.1	66.3	72.7	71.6	74.1	78.3	84.3	78.8	74.0	73.3	66.8	60.7	51.7	48.4	47.5	51.9	62.4	62.8	73.6	70.1	73.0	79.0	84.3	47.5	67.4
13	76.0	79.2	78.9	77.5	82.2	80.0	78.1	82.0	84.9	79.5	80.1	84.7	83.0	78.4	70.8	78.2	75.2	81.9	89.7	89.9	87.1	91.4	90.0	90.1	91.4	70.8	82.0
14	90.7	91.8	93.8	93.1	94.5	95.5	94.1	92.3	92.6	91.4	92.3	91.4	94.2	94.5	92.9	91.4	91.5	91.8	93.0	92.8	94.2	95.0	97.1	97.5	97.5	90.7	93.3
15	94.7	94.9	92.8	91.8	90.0	89.4	90.2	97.1	99.8	99.9	99.7	99.0	97.3	96.3	94.6	93.6	91.3	90.3	87.8	92.6	94.7	96.1	96.4	97.4	99.9	87.8	94.5
16	98.4	98.7	99.0	99.2	99.3	99.3	99.4	99.5	99.5	98.8	96.4	94.7	91.3	84.3	81.0	78.4	77.2	74.7	76.4	76.9	77.5	82.2	84.7	89.1	99.5	74.7	89.8
17	92.3	94.8	91.8	93.7	93.8	92.1	90.8	91.5	87.4	81.4	78.7	78.2	76.7	76.0	74.4	74.0	74.6	76.2	78.4	81.2	82.2	84.8	85.2	86.3	94.8	74.0	84.0
18	88.2	89.9	89.1	90.8	93.2	92.8	89.3	88.2	86.3	78.8	71.3	60.7	60.5	58.1	54.0	53.1	51.2	54.1	56.3	53.4	67.2	68.5	72.1	72.6	93.2	51.2	72.5
19	66.5	63.9	70.0	66.6	65.6	75.7	78.0	85.2	79.0	81.9	79.0	74.0	65.3	69.3	68.6	67.7	63.5	64.4	72.5	78.0	88.0	85.5	83.3	79.9	88.0	63.5	73.8
20	84.4	88.5	90.0	89.4	86.8	83.9	88.4	86.2	85.8	85.8	88.4	92.6	82.3	76.6	81.2	82.6	79.2	75.2	78.8	79.4	82.4	88.4	92.0	90.8	92.6	75.2	85.0
21	91.6	94.5	91.8	94.3	93.0	91.8	93.3	94.5	96.1	94.8	92.0	93.9	91.8	90.2	88.4	81.6	82.3	79.4	79.1	84.2	88.2	92.4	97.7	97.0	97.7	79.1	90.6
22	96.8	97.6	99.7	99.8	99.4	99.2	99.4	99.2	99.5	99.5	98.7	94.9	91.3	88.6	90.4	87.1	84.3	88.8	88.4	85.8	85.8	88.2	92.9	90.8	99.8	84.3	93.6
23	91.4	90.8	89.8	92.6	91.5	89.3	90.7	91.2	88.1	85.1	80.9	78.9	77.4	73.9	69.3	65.5	66.3	65.2	72.9	89.8	92.8	95.1	90.9	90.4	95.1	65.2	83.7
24	93.2	94.4	96.2	96.7	96.0	93.3	94.7	91.9	88.3	84.5	86.9	84.9	82.5	77.0	70.2	66.5	61.6	55.8	58.9	68.6	72.4	72.7	74.5	72.9	96.7	55.8	80.6
25	73.2	70.9	72.5	74.3	77.5	77.5	88.0	93.9	97.9	98.0	91.9	85.8	84.2	84.1	84.7	81.9	78.4	74.2	76.9	81.9	87.9	91.2	93.7	94.6	98.0	70.9	84.0
26	92.8	94.9	94.7	94.8	94.3	96.2	97.7	98.2	97.6	96.4	93.8	94.5	94.8	93.3	88.1	89.6	86.7	82.6	82.2	86.1	91.1	95.4	94.4	93.9	98.2	82.2	92.7
27	98.7	98.5	98.5	99.1	99.3	99.4	99.5	99.5	99.3	99.4	97.6	93.3	94.0	90.0	87.9	82.8	81.4	80.4	79.3	79.1	81.1	89.3	90.0	89.6	99.5	79.1	92.0
28	89.6	89.1	89.5	89.2	91.0	91.5	92.1	96.4	96.7	95.1	91.4	87.3	85.2	78.3	74.5	71.1	69.1	84.7	84.7	89.0	84.0	91.1	93.2	89.9	96.7	69.1	87.2
29	92.6	92.4	89.7	90.6	90.7	90.1	86.6	84.9	84.3	80.8	68.6	61.0	60.6	58.6	62.2	70.4	66.7	52.4	53.7	60.1	62.6	72.3	76.1	88.3	92.6	52.4	74.8
30	91.4	89.4	92.5	93.7	92.3	92.3	93.4	94.5	95.9	94.4	86.2	83.0	82.5	80.9	73.7	70.3	68.8	62.7	66.2	73.6	76.9	77.8	72.9	77.3	95.9	62.7	82.6
31	81.4	84.7	87.5	81.6	81.0	80.2	75.4	77.5	80.6	83.7	84.8	81.9	79.8	77.6	74.5	76.9	72.6	66.5	67.0	65.8	68.7	72.9	69.2	71.8	87.5	65.8	76.8
Max.	**98.7**	**98.7**	**99.7**	**99.8**	**99.4**	**99.4**	**99.5**	**99.5**	**99.8**	**99.9**	**99.7**	**99.0**	**97.3**	**96.3**	**94.6**	**93.6**	**91.5**	**91.8**	**93.0**	**92.8**	**94.7**	**96.1**	**97.7**	**97.5**	**99.9**		
Min.	**61.9**	**62.7**	**62.1**	**62.3**	**65.6**	**71.3**	**69.0**	**68.5**	**64.2**	**61.0**	**56.9**	**53.3**	**46.9**	**42.2**	**42.0**	**39.1**	**38.2**	35.7	38.9	**41.8**	**46.0**	**56.3**	**63.4**	**63.1**		**35.7**	
Avg.	**85.7**	**86.7**	**87.3**	**87.0**	**88.0**	**87.7**	**88.4**	**89.6**	**88.9**	**86.7**	**83.5**	**80.4**	**77.0**	**73.9**	**71.3**	**69.8**	**67.6**	**66.9**	**69.8**	**72.7**	**76.2**	**81.2**	**83.8**	**85.0**			**80.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	69.4	70.4	72.1	73.9	73.9	71.2	75.5	75.5	75.1	68.3	60.8	59.7	58.2	61.3	62.4	56.7	62.7	72.3	75.2	80.2	89.0	91.7	91.7	88.9	91.7	56.7	72.3
2	88.7	86.7	86.4	86.5	89.2	91.4	90.0	93.0	92.3	93.1	93.5	94.0	89.0	85.6	81.5	78.9	82.4	85.3	84.5	87.5	93.1	96.1	98.2	97.7	98.2	78.9	89.4
3	98.3	97.2	96.1	97.3	96.3	96.0	95.4	98.8	98.1	97.7	94.0	94.9	92.2	96.4	95.2	91.4	90.9	87.8	86.1	88.6	92.6	95.1	96.8	98.8	98.8	86.1	94.7
4	98.1	97.1	98.6	98.8	99.2	98.6	96.6	96.8	95.5	95.4	91.2	86.8	83.6	82.0	78.1	78.5	76.8	70.3	68.0	74.8	81.2	82.4	88.4	85.8	99.2	68.0	87.6
5	86.9	85.7	91.9	93.1	87.6	83.4	85.6	84.3	84.2	87.6	83.3	80.5	72.5	70.5	79.1	81.2	73.6	72.7	74.4	88.7	85.6	91.0	88.1	87.8	93.1	70.5	83.3
6	92.7	95.2	95.8	95.4	96.5	95.5	94.3	92.9	93.4	90.5	86.6	82.7	81.9	85.5	85.8	86.9	88.3	88.7	88.1	87.8	91.6	91.4	89.4	93.1	96.5	81.9	90.4
7	93.4	92.4	86.3	81.0	82.5	84.4	87.3	90.9	91.5	92.1	92.8	95.4	91.9	90.9	93.9	94.0	88.8	89.3	89.4	94.3	96.1	97.9	97.7	98.5	98.5	81.0	91.4
8	97.8	98.4	97.9	96.9	96.4	98.2	98.8	97.8	95.8	96.8	94.9	91.8	89.8	88.7	84.6	82.0	83.3	91.1	93.7	91.3	96.1	93.8	91.0	87.7	98.8	82.0	93.1
9	85.1	84.7	84.1	85.9	91.1	94.4	94.1	90.7	94.0	96.8	97.0	96.3	95.8	96.1	94.2	93.8	94.2	94.3	93.2	91.9	93.8	94.6	93.2	94.2	97.0	84.1	92.6
10	96.4	96.9	97.3	98.4	99.2	99.2	99.6	99.8	99.9	99.8	95.2	93.2	90.7	87.1	86.3	84.0	84.1	82.3	89.3	92.2	92.6	94.7	97.0	97.7	99.9	82.3	93.9
11	97.6	98.8	99.4	99.1	96.9	94.8	97.2	99.2	98.8	98.1	99.3	99.7	99.8	99.6	97.9	90.9	82.9	81.5	85.0	87.2	88.3	89.7	89.9	90.4	99.8	81.5	94.3
12	91.3	91.2	89.5	92.3	93.5	93.8	94.4	94.7	95.0	93.6	92.6	89.5	88.1	85.2	88.7	91.6	91.3	92.9	91.3	92.3	93.4	93.4	93.3	92.8	95.0	85.2	91.9
13	92.8	93.2	93.2	93.8	94.9	95.1	95.2	94.7	94.5	93.8	92.7	93.5	93.7	94.7	94.2	93.9	91.4	90.2	89.0	87.9	86.4	86.4	83.7	85.3	95.2	83.7	91.8
14	84.8	86.3	88.1	88.1	88.6	91.3	92.4	92.3	91.7	92.8	90.9	91.9	93.6	92.2	93.4	92.9	90.0	91.0	90.5	89.4	89.3	88.6	92.2	94.8	94.8	84.8	90.7
15	94.5	93.6	93.5	92.8	93.9	94.5	94.0	93.3	93.2	90.8	89.9	87.5	85.6	86.4	84.2	84.7	85.4	82.8	84.3	84.8	87.5	88.9	92.9	96.8	96.8	82.8	89.8
16	91.5	90.3	95.5	98.2	94.8	95.9	96.6	94.7	95.1	94.2	93.4	86.1	77.6	83.6	83.3	77.5	82.4	85.0	86.3	86.1	87.6	86.8	89.8	91.1	98.2	77.5	89.3
17	92.6	94.3	94.0	95.3	97.9	99.0	99.9	99.4	99.4	98.1	99.7	96.7	94.4	89.1	88.5	88.0	88.5	90.0	92.0	95.1	96.0	97.2	97.0	98.2	99.9	88.0	95.0
18	99.1	98.8	96.9	97.5	96.1	97.1	97.4	96.4	96.3	96.1	94.7	95.0	94.7	95.5	94.7	95.7	94.9	95.9	96.4	97.3	99.0	98.6	96.8	95.1	99.1	94.7	96.5
19	96.4	98.1	99.0	99.9	100.0	99.7	99.8	100.0	100.0	100.0	99.5	97.1	94.9	95.1	94.0	95.7	94.1	95.7	94.0	91.7	94.8	95.6	96.1	95.1	100.0	91.7	96.9
20	94.9	91.7	91.0	93.5	94.6	95.3	96.5	96.9	95.4	93.3	90.2	95.0	97.7	91.3	75.2	77.5	70.9	69.9	70.1	81.1	87.2	82.5	81.4	81.8	97.7	69.9	87.3
21	80.0	78.6	79.0	85.4	84.6	81.6	79.3	81.0	83.1	78.7	78.3	78.6	72.9	75.2	70.6	65.0	63.3	65.0	68.9	78.7	83.3	84.2	90.2	92.9	92.9	63.3	78.3
22	93.5	90.4	90.3	86.3	86.5	89.3	90.6	89.2	84.0	86.3	77.3	63.9	62.0	61.4	63.5	71.2	80.2	87.7	92.7	95.7	97.3	97.7	98.3	99.5	99.5	61.4	84.8
23	99.4	99.1	99.8	98.3	98.5	98.9	98.8	96.9	97.2	96.9	93.5	94.8	92.6	91.5	94.5	96.4	95.8	94.8	95.7	96.8	97.5	96.5	95.9	95.1	99.8	91.5	96.5
24	93.9	93.8	95.9	97.0	95.7	95.4	96.0	99.0	97.0	96.9	93.8	92.4	91.6	89.7	87.3	90.2	87.7	85.9	86.7	89.4	93.7	96.1	96.6	93.3	99.0	85.9	93.1
25	93.3	92.4	91.8	89.3	91.1	90.3	87.8	87.2	89.2	91.5	90.4	86.8	87.0	86.7	88.0	86.7	89.2	91.2	92.0	94.9	95.9	92.7	95.2	96.4	96.4	86.7	90.7
26	95.9	95.1	97.7	95.6	96.3	95.8	96.0	97.2	95.0	96.1	95.0	74.9	64.9	78.3	76.1	81.3	77.0	75.6	73.7	83.0	86.9	87.7	83.5	79.5	97.7	64.9	86.6
27	85.8	86.4	89.0	86.7	91.7	93.6	93.7	93.1	93.6	92.8	88.9	85.5	77.5	70.3	62.9	57.9	54.8	51.9	52.5	58.8	65.7	70.1	73.5	75.9	93.7	51.9	77.2
28	71.7	73.3	72.8	74.9	77.0	77.2	71.4	65.1	66.6	69.9	62.7	56.6	52.4	49.0	46.4	47.0	49.2	57.4	59.6	60.0	66.8	61.5	76.7	83.4	83.4	46.4	64.5
29	80.3	81.3	82.3	87.0	90.5	90.6	86.3	85.2	81.1	76.9	76.4	72.9	74.4	87.7	89.8	88.4	82.4	74.2	72.6	76.9	84.4	82.3	81.7	82.7	90.6	72.6	82.0
30	83.0	84.3	86.9	86.3	90.9	92.5	96.3	98.4	99.7	100.0	96.3	83.3	77.1	72.1	71.1	69.4	69.8	69.6	69.4	77.7	81.5	84.2	81.6	79.2	100.0	69.4	83.4
Max.	**99.4**	**99.1**	**99.8**	**99.9**	**100.0**	**99.7**	**99.9**	**100.0**	**100.0**	**100.0**	**99.7**	**99.7**	**99.8**	**99.6**	**97.9**	**96.4**	**95.8**	**95.9**	**96.4**	**97.3**	**99.0**	**98.6**	**98.3**	**99.5**	**100.0**		
Min.	**69.4**	**70.4**	**72.1**	**73.9**	**73.9**	**71.2**	**71.4**	**65.1**	**66.6**	**68.3**	**60.8**	**56.6**	**52.4**	**49.0**	**46.4**	**47.0**	**49.2**	51.9	52.5	**58.8**	**65.7**	**61.5**	**73.5**	**75.9**		**46.4**	
Avg.	**90.6**	**90.5**	**91.1**	**91.5**	**92.2**	**92.5**	**92.6**	**92.5**	**92.2**	**91.8**	**89.5**	**86.6**	**83.9**	**84.0**	**82.8**	**82.3**	**81.5**	**82.1**	**82.8**	**86.1**	**89.1**	**89.6**	**90.6**	**91.0**			**88.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	81.2	84.6	82.5	84.6	82.2	79.9	80.0	73.8	81.8	81.9	86.2	91.4	81.7	86.6	91.1	92.1	93.7	93.9	95.1	94.7	95.6	97.8	97.7	96.8	97.8	73.8	87.8
2	97.7	95.3	96.6	96.6	96.6	97.1	97.6	97.0	96.9	96.4	98.5	94.2	90.8	94.0	92.9	88.1	87.5	86.1	89.4	93.4	94.8	93.8	90.5	85.3	98.5	85.3	93.6
3	84.4	85.5	89.4	86.7	87.3	94.2	97.1	98.2	99.9	99.3	97.8	97.5	95.6	94.7	96.1	96.9	94.9	88.1	89.1	90.4	91.9	91.4	87.8	85.0	99.9	84.4	92.5
4	90.3	91.4	91.1	89.2	91.2	87.2	88.4	85.4	89.3	88.5	90.2	83.4	79.1	72.4	70.3	66.8	71.6	69.0	76.8	79.1	88.3	99.8	99.9	99.2	99.9	66.8	84.9
5	98.0	98.1	98.1	98.6	97.7	96.1	96.0	97.8	99.8	98.3	97.6	98.3	93.6	95.0	96.1	95.8	97.1	98.5	99.2	99.6	99.7	98.7	99.8	100.0	100.0	93.6	97.8
6	99.8	99.3	99.4	99.9	99.7	99.6	99.4	99.0	99.4	98.7	97.4	96.2	96.8	95.6	93.8	89.9	89.3	95.2	94.4	94.0	93.5	91.6	93.6	94.2	99.9	89.3	96.2
7	94.5	96.1	95.6	97.4	95.9	97.7	98.3	97.6	93.4	93.8	92.7	89.6	88.6	87.3	87.4	83.7	82.6	83.0	81.8	82.9	84.9	85.9	88.2	89.4	98.3	81.8	90.3
8	91.8	90.8	88.4	90.5	86.2	83.3	83.7	85.6	88.5	87.5	84.7	79.1	75.6	73.0	69.7	67.1	67.4	68.6	71.5	74.8	76.8	74.2	72.4	71.7	91.8	67.1	79.3
9	76.1	80.4	79.4	81.9	82.7	91.2	93.3	95.6	95.5	95.2	97.6	98.5	98.1	95.7	94.3	95.5	95.9	95.4	94.9	94.6	94.8	94.0	94.5	96.7	98.5	76.1	92.2
10	97.6	97.6	98.4	99.9	99.5	99.3	99.6	97.2	97.5	97.3	97.2	99.5	100.0	100.0	99.4	98.0	92.9	92.2	93.6	94.4	94.9	94.8	93.7	91.3	100.0	91.3	96.9
11	87.9	86.6	85.6	88.8	93.2	94.1	95.8	95.7	95.9	99.6	99.1	98.4	97.7	97.5	97.2	96.7	96.8	97.2	96.9	96.9	97.0	96.7	94.4	93.4	99.6	85.6	95.0
12	93.4	93.1	96.0	95.7	96.5	96.7	96.0	94.6	94.3	93.4	93.2	92.2	90.1	85.6	86.3	85.5	83.5	84.1	84.6	87.0	87.6	83.6	83.6	84.8	96.7	83.5	90.1
13	85.3	86.7	87.8	87.7	88.7	89.0	89.2	90.7	89.0	87.4	80.7	77.2	70.7	58.3	59.9	63.1	70.1	79.5	91.4	95.6	95.8	95.8	97.4	98.7	98.7	58.3	84.0
14	98.7	98.8	99.2	99.4	99.6	98.6	99.8	99.9	97.9	98.2	96.1	96.0	95.3	96.3	96.2	97.1	99.9	100.0	100.0	100.0	98.8	99.8	99.8	100.0	100.0	95.3	98.6
15	100.0	100.0	100.0	100.0	99.9	98.9	98.7	98.5	97.9	97.5	97.5	97.6	97.7	97.6	97.7	97.5	97.0	95.6	95.1	93.9	93.6	93.5	93.3	94.2	100.0	93.3	97.2
16	94.6	95.4	96.3	96.3	96.6	96.3	95.7	95.6	96.5	93.6	95.6	93.1	90.0	93.7	91.5	88.6	89.2	89.4	90.0	89.8	90.7	90.7	91.0	91.2	96.6	88.6	93.0
17	92.2	93.8	93.4	92.9	94.5	96.0	96.3	96.1	96.2	95.6	95.4	93.4	92.4	87.7	91.8	91.4	79.4	85.7	91.5	91.9	92.9	94.3	91.1	91.2	96.3	79.4	92.4
18	90.7	86.7	85.2	84.6	85.0	84.4	83.3	81.7	81.1	77.4	74.6	73.2	71.0	69.1	70.5	72.8	69.7	72.2	73.1	71.7	69.3	66.5	69.8	68.3	90.7	66.5	76.3
19	71.2	73.3	72.6	74.4	74.3	74.7	69.0	69.9	74.5	76.3	75.5	76.7	78.1	76.5	73.1	74.3	77.7	74.5	75.7	74.6	74.8	82.3	85.0	88.3	88.3	69.0	75.7
20	91.7	95.8	97.1	97.0	97.6	97.9	97.1	95.6	96.4	96.9	92.3	94.6	93.6	90.9	89.8	87.4	85.7	85.9	86.3	84.8	87.8	89.6	90.3	89.0	97.9	84.8	92.1
21	86.1	84.2	81.5	84.6	84.2	84.4	86.7	86.4	86.3	86.1	85.4	86.3	87.1	87.5	88.2	81.7	79.9	80.4	81.9	85.0	91.3	94.7	94.1	93.7	94.7	79.9	86.2
22	93.7	93.4	93.4	93.0	92.6	91.4	89.4	90.6	90.6	89.5	89.1	88.8	87.1	84.8	84.1	84.0	80.7	81.7	85.0	83.9	83.7	83.0	83.3	82.3	93.7	80.7	87.5
23	79.5	76.7	73.1	73.1	73.7	74.2	74.3	73.5	74.0	76.0	78.1	79.1	77.1	77.0	76.3	78.0	84.5	84.8	87.3	85.1	77.2	74.6	80.2	80.3	87.3	73.1	77.8
24	86.5	88.9	92.4	89.4	87.5	89.0	85.3	84.6	85.5	85.1	82.7	80.3	78.6	73.2	70.8	67.6	65.7	65.9	69.7	76.0	73.4	74.1	76.5	73.2	92.4	65.7	79.2
25	79.1	78.3	78.8	85.8	93.1	94.1	95.6	97.0	97.0	97.4	98.1	96.6	94.8	91.7	89.1	88.8	87.6	85.6	86.4	87.0	86.9	88.8	86.6	84.8	98.1	78.3	89.5
26	86.2	87.6	84.7	85.7	91.9	93.2	96.3	97.1	97.3	97.1	96.4	95.4	93.8	88.3	85.4	85.8	87.5	87.3	89.6	90.0	90.8	90.3	88.7	87.7	97.3	84.7	90.6
27	86.6	86.3	87.0	87.3	85.6	84.8	83.6	84.8	85.5	82.3	84.3	79.4	77.9	78.5	72.7	71.4	73.3	75.6	77.9	78.6	78.4	80.0	79.2	76.0	87.3	71.4	80.7
28	72.3	67.8	75.7	79.6	62.0	64.8	81.5	78.0	73.9	75.1	77.8	82.6	84.5	83.8	81.4	71.3	76.6	78.7	78.7	82.3	84.8	88.5	78.4	67.6	88.5	62.0	77.0
29	55.3	45.2	38.2	36.6	36.3	37.8	44.6	55.9	62.6	43.3	41.4	47.7	54.0	48.8	58.7	58.0	58.1	70.2	77.7	81.0	80.7	79.1	85.9	88.9	88.9	36.3	57.7
30	90.5	92.6	92.6	90.4	92.1	94.8	93.8	92.7	93.9	91.5	92.6	90.4	91.0	94.4	93.0	93.8	89.2	90.2	93.3	89.0	92.2	91.2	91.8	94.4	94.8	89.0	92.1
31	93.8	96.7	94.4	98.2	99.7	99.8	98.7	98.6	96.7	95.0	94.7	94.6	93.4	90.7	88.9	91.0	87.0	86.2	87.1	87.9	86.3	86.9	86.0	84.7	99.8	84.7	92.4
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**99.8**	**99.8**	**99.9**	**99.9**	**99.6**	**99.1**	**99.5**	**100.0**	**100.0**	**99.4**	**98.0**	**99.9**	**100.0**	**100.0**	**100.0**	**99.7**	**99.8**	**99.9**	**100.0**	**100.0**		
Min.	**55.3**	**45.2**	**38.2**	**36.6**	**36.3**	**37.8**	**44.6**	**55.9**	**62.6**	**43.3**	**41.4**	**47.7**	**54.0**	**48.8**	**58.7**	**58.0**	**58.1**	65.9	69.7	**71.7**	**69.3**	**66.5**	**69.8**	**67.6**		**36.3**	
Avg.	**88.0**	**88.0**	**87.9**	**88.6**	**88.5**	**89.0**	**89.8**	**89.8**	**90.5**	**89.4**	**89.0**	**88.4**	**87.0**	**85.4**	**85.0**	**83.9**	**83.6**	**84.5**	**86.6**	**87.4**	**88.0**	**88.6**	**88.5**	**87.8**			**87.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	85.1	85.9	83.9	85.9	87.8	92.7	88.7	89.1	91.0	90.4	91.3	90.0	91.0	91.8	91.7	92.1	91.6	94.1	96.9	98.8	98.8	95.4	92.5	94.7	98.8	83.9	91.3
2	95.0	97.2	97.6	98.7	98.8	98.4	98.2	97.7	96.6	94.2	93.4	92.6	91.6	90.8	90.2	89.3	88.4	87.8	88.4	88.4	88.2	89.0	88.9	90.1	98.8	87.8	92.9
3	90.9	91.3	91.1	89.7	88.8	90.1	89.6	88.4	87.6	89.1	89.3	86.2	85.4	87.3	85.3	83.9	82.7	83.7	85.9	88.4	86.9	87.5	85.7	84.3	91.3	82.7	87.5
4	83.6	85.8	85.1	86.2	87.1	87.9	88.7	90.8	91.3	90.9	90.2	89.4	88.6	86.8	85.0	86.2	86.1	86.8	88.1	89.4	87.1	86.4	87.5	88.1	91.3	83.6	87.6
5	88.0	85.8	84.6	84.4	84.7	84.1	84.2	83.8	81.8	83.6	84.8	88.5	87.2	83.2	81.9	81.4	81.6	82.5	85.6	83.4	83.2	85.5	85.1	85.7	88.5	81.4	84.4
6	88.9	90.5	88.5	86.4	86.9	88.3	86.5	86.4	83.9	79.2	74.7	70.7	69.6	71.3	72.9	73.3	71.1	69.7	71.0	71.0	70.7	70.9	77.9	82.8	90.5	69.6	78.5
7	82.6	85.4	86.0	87.1	88.0	88.3	88.3	87.6	86.7	85.2	84.2	88.3	84.8	82.0	82.2	79.2	76.6	75.3	78.9	97.6	98.2	97.7	97.6	97.9	98.2	75.3	86.9
8	98.2	98.3	98.6	98.9	98.9	99.0	98.8	98.6	98.5	97.8	97.1	94.4	91.9	88.2	87.1	86.1	83.6	81.9	80.5	77.4	75.7	74.0	74.4	74.7	99.0	74.0	89.7
9	74.9	72.9	71.1	70.5	68.6	68.4	72.2	71.6	76.6	80.5	79.9	82.8	80.8	80.8	79.7	77.9	82.2	93.9	97.9	96.8	91.2	88.4	84.0	82.4	97.9	68.4	80.2
10	83.9	80.4	79.4	80.3	84.7	83.8	86.7	86.2	79.5	79.4	87.0	99.9	99.6	100.0	100.0	100.0	100.0	99.7	99.2	97.5	98.7	99.0	99.1	99.7	100.0	79.4	91.8
11	97.0	92.8	95.8	99.9	97.6	93.9	94.4	99.7	100.0	100.0	98.9	98.1	97.3	97.2	94.0	88.4	86.8	92.6	92.9	100.0	99.8	95.9	95.9	100.0	100.0	86.8	96.2
12	99.6	98.7	96.3	94.9	96.1	96.5	95.5	95.9	99.0	96.8	96.9	97.8	94.2	90.4	87.9	88.3	87.2	84.2	89.5	98.7	99.6	98.8	97.7	96.5	99.6	84.2	94.9
13	97.8	96.9	98.2	97.9	97.1	93.5	93.4	88.4	85.5	84.4	86.3	86.3	85.3	89.2	96.8	97.5	98.3	98.4	95.8	96.3	94.3	92.3	90.2	91.1	98.4	84.4	93.0
14	93.4	96.8	92.0	96.5	95.9	94.7	95.0	97.3	99.2	98.3	98.7	96.6	95.0	92.0	89.9	87.5	88.0	94.6	98.8	100.0	99.9	99.5	99.7	99.8	100.0	87.5	95.8
15	99.6	98.6	94.1	90.9	91.2	93.3	88.9	89.5	93.4	95.7	97.3	99.0	98.1	93.8	89.1	85.9	88.1	88.6	88.6	94.7	98.1	98.3	97.9	98.3	99.6	85.9	93.8
16	98.2	98.3	98.4	97.9	98.1	98.2	98.7	99.3	96.8	94.7	91.3	89.4	86.7	90.8	91.3	90.3	91.7	85.9	92.0	87.7	83.2	84.9	83.4	85.7	99.3	83.2	92.2
17	91.7	93.2	92.4	92.1	96.0	98.0	96.0	92.9	89.9	91.4	88.2	84.6	85.0	72.8	73.5	76.2	78.9	79.0	81.3	81.5	83.3	84.0	84.5	83.2	98.0	72.8	86.2
18	87.0	88.6	90.9	92.9	93.2	93.3	92.8	91.8	91.7	91.3	91.4	90.7	91.2	91.8	91.5	91.0	90.5	90.3	90.1	89.8	89.9	89.7	89.2	89.1	93.3	87.0	90.8
19	89.3	88.7	88.4	88.8	88.2	88.2	87.2	86.8	83.5	80.8	77.8	72.0	72.3	72.7	70.6	72.6	70.7	72.1	74.3	72.6	71.1	72.5	72.2	74.6	89.3	70.6	78.7
20	76.8	75.1	72.4	73.1	75.1	78.9	80.7	81.0	80.8	82.7	83.8	83.9	83.1	82.3	81.3	81.1	81.1	81.2	81.7	81.7	81.2	81.0	80.7	79.9	83.9	72.4	80.0
21	80.2	80.8	80.5	80.8	81.2	80.3	80.2	79.3	79.6	79.7	79.5	79.8	80.2	79.7	80.2	79.6	79.4	80.2	80.5	83.3	82.7	81.8	79.1	80.4	83.3	79.1	80.4
22	80.2	82.1	78.1	76.2	73.3	68.8	68.4	66.5	66.8	67.1	63.4	65.2	58.1	57.5	59.0	58.3	58.7	59.3	70.2	69.2	60.5	66.7	52.5	56.3	82.1	52.5	65.9
23	62.2	69.3	81.8	95.6	95.6	95.3	95.2	95.1	94.5	93.7	90.7	84.6	90.3	92.0	93.1	96.6	97.9	96.0	94.1	94.8	96.6	97.0	97.0	97.2	97.9	62.2	91.5
24	96.4	97.9	93.3	87.9	87.3	85.4	80.2	81.2	89.8	88.4	86.1	91.0	92.3	95.3	97.4	98.0	99.2	99.5	98.7	97.9	97.2	96.2	97.3	95.6	99.5	80.2	92.9
25	95.4	92.7	92.3	92.7	92.3	92.0	92.1	92.3	91.7	90.7	89.2	88.5	88.3	84.1	84.0	87.2	88.6	89.5	88.0	88.3	86.0	81.9	84.6	84.3	95.4	81.9	89.0
26	83.9	82.0	82.7	82.9	83.2	84.3	83.6	83.8	85.6	81.4	83.0	81.3	84.1	81.6	82.1	84.0	84.3	83.9	83.8	81.3	79.6	73.6	73.0	76.4	85.6	73.0	81.9
27	77.9	77.6	77.8	76.8	67.9	65.6	64.9	63.1	66.0	67.5	65.0	65.9	62.0	62.7	64.5	64.3	64.6	66.4	70.1	86.4	90.1	91.9	92.5	92.0	92.5	62.0	72.6
28	91.9	91.7	91.3	92.5	91.7	91.4	93.1	92.9	92.9	93.9	93.6	91.6	91.4	92.1	93.3	93.6	93.3	94.2	93.9	93.8	93.3	93.2	93.0	92.7	94.2	91.3	92.8
29	92.5	92.1	91.8	91.6	91.5	91.2	90.7	90.3	89.9	90.0	89.0	89.6	89.7	89.3	89.6	89.0	88.5	89.0	88.2	88.2	88.1	88.1	88.1	87.0	92.5	87.0	89.7
30	86.2	84.8	84.1	84.5	83.5	84.2	83.1	83.2	84.5	84.9	85.5	85.3	85.2	85.2	84.2	84.3	84.5	83.8	80.4	79.3	79.9	79.5	79.3	76.2	86.2	76.2	83.1
Max.	**99.6**	**98.7**	**98.6**	**99.9**	**98.9**	**99.0**	**98.8**	**99.7**	**100.0**	**100.0**	**98.9**	**99.9**	**99.6**	**100.0**	**100.0**	**100.0**	**100.0**	**99.7**	**99.2**	**100.0**	**99.9**	**99.5**	**99.7**	**100.0**	**100.0**		
Min.	**62.2**	**69.3**	**71.1**	**70.5**	**67.9**	**65.6**	**64.9**	**63.1**	**66.0**	**67.1**	**63.4**	**65.2**	**58.1**	**57.5**	**59.0**	**58.3**	**58.7**	59.3	70.1	**69.2**	**60.5**	**66.7**	**52.5**	**56.3**		**52.5**	
Avg.	**88.3**	**88.4**	**88.0**	**88.5**	**88.3**	**88.3**	**87.9**	**87.7**	**87.8**	**87.5**	**86.9**	**86.8**	**86.0**	**85.2**	**85.0**	**84.8**	**84.8**	**85.5**	**86.8**	**88.5**	**87.8**	**87.4**	**86.7**	**87.2**			**87.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Relative Humidity (%)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	72.1	71.9	68.6	66.9	65.0	60.2	46.9	42.1	41.7	38.8	37.2	31.2	32.1	30.0	35.2	33.5	42.4	56.7	55.7	59.8	67.3	77.8	76.7	66.6	77.8	30.0	53.2
2	64.8	65.1	67.6	73.8	68.6	66.0	62.5	63.4	63.4	63.0	63.6	68.8	67.7	71.5	77.7	83.9	88.4	87.0	93.8	91.1	88.0	85.6	87.4	88.1	93.8	62.5	75.0
3	85.8	85.4	88.1	87.9	88.1	90.8	90.8	91.3	88.3	88.9	91.9	88.6	86.2	92.2	90.9	92.3	92.5	87.2	84.3	83.1	82.0	83.7	84.8	86.4	92.5	82.0	88.0
4	88.2	90.3	91.0	89.3	89.2	91.0	91.0	93.3	95.4	93.7	94.6	95.0	94.9	96.0	96.8	98.7	94.4	92.1	92.0	92.1	91.4	92.2	91.5	91.4	98.7	88.2	92.7
5	91.7	93.1	92.7	91.7	91.9	92.0	92.3	93.6	94.8	95.0	95.0	94.3	92.9	93.3	93.7	93.1	92.1	92.3	92.8	91.7	92.5	93.4	96.1	95.0	96.1	91.7	93.2
6	96.1	95.5	94.8	93.3	91.8	92.2	92.6	92.3	92.2	90.3	89.7	89.8	93.3	92.7	92.9	96.2	94.8	96.5	98.6	98.8	98.0	99.3	99.6	99.9	99.9	89.7	94.6
7	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.4	98.8	98.5	98.2	98.0	98.1	98.2	97.6	97.5	95.1	95.6	99.0	98.4	96.5	96.3	96.5	97.7	100.0	95.1	98.3
8	97.2	97.9	99.1	98.3	98.6	99.4	98.4	92.4	88.3	83.9	86.1	85.0	82.9	84.7	89.7	89.8	88.0	84.0	82.9	81.7	78.8	81.0	82.0	82.4	99.4	78.8	88.9
9	80.4	81.1	81.5	79.3	79.0	82.5	93.3	95.7	95.8	95.6	95.8	94.6	93.2	94.2	96.4	96.5	97.8	93.0	90.6	95.8	94.8	94.2	91.2	93.3	97.8	79.0	91.1
10	96.3	97.3	98.2	97.9	95.0	93.8	90.0	85.1	87.0	81.5	78.4	80.8	79.7	76.9	74.2	76.0	83.2	88.8	89.9	91.1	93.0	90.0	86.1	78.6	98.2	74.2	87.0
11	76.1	72.0	65.9	62.7	62.7	63.9	68.1	75.1	74.6	82.8	87.9	91.6	95.2	98.2	97.3	97.5	97.1	96.1	93.7	92.5	90.6	88.9	89.3	87.5	98.2	62.7	83.6
12	85.3	82.8	80.3	68.7	65.0	62.1	59.3	59.8	60.7	67.1	74.4	77.2	90.4	94.6	95.0	95.7	95.8	97.4	97.4	97.7	98.2	97.7	97.0	96.8	98.2	59.3	83.2
13	97.0	97.0	97.2	97.3	96.7	96.0	95.9	95.5	95.5	95.6	95.0	94.4	94.6	93.6	92.0	90.3	87.2	84.8	81.5	81.4	73.2	64.5	63.0	57.7	97.3	57.7	88.2
14	54.5	59.4	53.3	53.4	58.2	48.2	52.5	52.9	57.8	63.5	63.6	69.5	63.2	57.8	62.9	65.1	64.9	69.1	68.6	72.0	82.8	88.0	87.2	88.9	88.9	48.2	64.9
15	87.4	86.7	87.3	88.7	87.9	89.7	88.9	89.3	89.4	93.5	96.1	94.8	93.7	94.8	97.3	94.9	96.8	98.9	94.8	96.6	99.5	98.2	94.2	92.4	99.5	86.7	93.0
16	89.0	89.2	90.0	93.0	95.9	87.8	84.4	89.4	87.7	94.4	89.3	89.8	87.2	91.6	92.2	94.0	97.4	83.4	91.2	89.3	81.4	80.2	77.9	82.9	97.4	77.9	88.7
17	77.8	77.1	82.6	90.3	92.5	92.7	96.1	95.2	94.7	93.0	89.8	88.0	89.0	86.0	85.3	86.0	87.3	87.8	85.2	84.1	83.5	83.8	86.5	84.6	96.1	77.1	87.5
18	85.6	85.2	83.5	83.8	84.3	85.2	85.0	84.9	84.4	83.7	82.7	82.8	83.1	82.3	82.8	83.9	85.2	86.0	88.2	91.8	93.9	91.2	91.4	89.2	93.9	82.3	85.8
19	93.0	89.8	83.2	83.7	83.4	84.3	82.6	76.6	79.1	81.5	79.7	77.8	79.0	80.7	78.5	79.3	80.9	77.5	78.0	77.5	74.9	72.5	73.0	73.1	93.0	72.5	80.0
20	73.0	72.7	73.5	71.9	71.2	70.0	66.9	68.7	67.2	66.8	67.9	66.2	67.6	66.6	70.6	67.6	63.5	63.5	61.6	65.0	69.1	73.9	74.1	78.2	78.2	61.6	69.0
21	79.0	80.1	81.5	82.2	83.0	80.8	74.9	79.1	75.4	74.8	77.7	78.4	77.2	76.3	75.9	75.5	77.4	81.3	82.1	82.7	83.5	79.9	81.1	82.8	83.5	74.8	79.3
22	82.5	82.8	82.3	81.5	88.9	95.1	96.9	97.4	96.4	95.4	94.9	93.8	93.5	94.9	97.4	98.7	98.2	97.2	96.8	97.3	96.4	96.8	96.9	97.7	98.7	81.5	93.7
23	97.8	97.5	97.7	97.6	97.8	97.5	97.6	96.6	94.8	95.7	96.4	86.6	88.8	88.5	89.4	90.4	90.1	89.6	89.5	90.2	93.2	94.0	94.3	94.7	97.8	86.6	93.6
24	95.3	94.8	94.3	95.0	95.5	94.8	93.0	91.4	85.6	86.8	86.6	85.3	86.5	84.0	82.4	82.4	82.8	81.4	78.3	79.7	81.5	83.9	83.9	76.2	95.5	76.2	86.7
25	75.0	83.0	94.3	96.4	96.7	97.2	97.7	97.7	97.7	97.6	98.3	98.1	97.9	97.4	97.3	97.3	95.1	93.8	93.1	94.0	93.9	93.7	93.1	92.7	98.3	75.0	94.5
26	92.2	90.6	89.2	87.3	86.4	86.2	86.6	87.4	87.9	87.9	87.9	88.2	88.2	88.1	88.4	88.1	88.5	88.5	88.2	88.1	87.9	87.9	88.1	88.2	92.2	86.2	88.2
27	88.3	88.6	88.7	88.6	88.1	88.2	88.1	87.8	87.5	87.2	87.0	86.6	86.5	86.1	86.0	85.8	86.2	85.9	85.3	85.4	85.1	84.5	83.6	83.9	88.7	83.6	86.6
28	84.0	83.8	83.2	82.5	81.7	82.7	82.2	82.0	82.0	83.4	82.8	83.1	82.7	82.0	81.4	80.7	81.0	80.9	81.2	81.4	81.4	81.3	80.7	81.0	84.0	80.7	82.0
29	80.7	80.3	79.9	79.8	79.3	79.5	79.1	79.4	79.4	78.4	78.1	77.8	77.8	77.9	77.9	77.2	76.8	76.5	75.9	75.2	74.2	73.6	74.0	74.3	80.7	73.6	77.6
30	74.4	74.0	72.7	72.9	73.0	72.8	72.4	71.9	68.6	71.8	73.5	69.8	69.2	69.3	68.7	71.2	69.8	69.5	71.6	71.3	72.1	71.7	71.7	72.3	74.4	68.6	71.5
31	72.6	71.8	72.2	74.8	73.6	72.8	72.3	71.7	70.9	70.0	70.6	69.2	68.2	69.3	67.8	68.0	67.5	64.7	63.1	63.3	62.9	60.6	59.5	56.0	74.8	56.0	68.1
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.8**	**99.4**	**98.8**	**98.5**	**98.3**	**98.1**	**98.1**	**98.2**	**97.6**	**98.7**	**98.2**	**98.9**	**99.0**	**98.8**	**99.5**	**99.3**	**99.6**	**99.9**	**100.0**		
Min.	**54.5**	**59.4**	**53.3**	**53.4**	**58.2**	**48.2**	**46.9**	**42.1**	**41.7**	**38.8**	**37.2**	**31.2**	**32.1**	**30.0**	**35.2**	**33.5**	**42.4**	56.7	55.7	**59.8**	**62.9**	**60.6**	**59.5**	**56.0**		**30.0**	
Avg.	**84.3**	**84.4**	**84.3**	**84.2**	**84.2**	**83.7**	**83.2**	**83.2**	**82.7**	**83.2**	**83.6**	**83.1**	**83.2**	**83.5**	**84.2**	**84.7**	**85.1**	**84.7**	**84.7**	**85.2**	**85.2**	**85.2**	**84.9**	**84.2**			**84.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	0	6	28	56	60	48	31	6	0	0	0	0	0	0	60	0	10
2	0	0	0	0	0	0	0	0	0	0	0	7	16	49	118	99	46	5	0	0	0	0	0	0	118	0	14
3	0	0	0	0	0	0	0	0	0	0	0	5	25	49	46	28	19	4	0	0	0	0	0	0	49	0	7
4	0	0	0	0	0	0	0	0	0	0	0	7	28	48	54	47	24	5	0	0	0	0	0	0	54	0	9
5	0	0	0	0	0	0	0	0	0	0	0	6	33	59	67	104	62	6	0	0	0	0	0	0	104	0	14
6	0	0	0	0	0	0	0	0	0	0	0	6	19	32	54	47	25	6	0	0	0	0	0	0	54	0	8
7	0	0	0	0	0	0	0	0	0	0	0	6	26	53	78	52	32	6	0	0	0	0	0	0	78	0	11
8	0	0	0	0	0	0	0	0	0	0	0	8	27	45	72	67	57	10	0	0	0	0	0	0	72	0	12
9	0	0	0	0	0	0	0	0	0	0	0	7	19	46	71	91	50	7	0	0	0	0	0	0	91	0	12
10	0	0	0	0	0	0	0	0	0	0	0	8	15	38	70	66	46	7	0	0	0	0	0	0	70	0	10
11	0	0	0	0	0	0	0	0	0	0	0	6	13	37	60	61	44	7	0	0	0	0	0	0	61	0	10
12	0	0	0	0	0	0	0	0	0	0	0	5	14	40	59	61	45	8	1	0	0	0	0	0	61	0	10
13	0	0	0	0	0	0	0	0	0	0	0	6	13	44	60	61	44	8	0	0	0	0	0	0	61	0	10
14	0	0	0	0	0	0	0	0	0	0	0	6	31	54	84	80	42	9	0	0	0	0	0	0	84	0	13
15	0	0	0	0	0	0	0	0	0	0	0	9	27	35	47	58	33	10	1	0	0	0	0	0	58	0	9
16	0	0	0	0	0	0	0	0	0	0	1	9	21	33	80	82	53	16	1	0	0	0	0	0	82	0	12
17	0	0	0	0	0	0	0	0	0	0	0	6	27	56	49	55	40	6	1	0	0	0	0	0	56	0	10
18	0	0	0	0	0	0	0	0	0	0	1	16	60	69	81	67	41	17	1	0	0	0	0	0	81	0	15
19	0	0	0	0	0	0	0	0	0	0	0	7	26	42	42	45	33	12	1	0	0	0	0	0	45	0	9
20	0	0	0	0	0	0	0	0	0	0	0	12	29	54	51	48	21	4	0	0	0	0	0	0	54	0	9
21	0	0	0	0	0	0	0	0	0	0	2	27	54	71	81	60	33	9	1	0	0	0	0	0	81	0	14
22	0	0	0	0	0	0	0	0	0	0	1	25	54	60	67	59	62	14	1	0	0	0	0	0	67	0	14
23	0	0	0	0	0	0	0	0	0	0	2	28	100	154	174	161	74	20	2	0	0	0	0	0	174	0	30
24	0	0	0	0	0	0	0	0	0	0	1	11	29	54	74	70	47	16	1	0	0	0	0	0	74	0	13
25	0	0	0	0	0	0	0	0	0	0	2	35	76	173	183	169	128	40	3	0	0	0	0	0	183	0	34
26	0	0	0	0	0	0	0	0	0	0	3	44	122	166	111	98	78	30	3	0	0	0	0	0	166	0	27
27	0	0	0	0	0	0	0	0	0	0	1	18	41	57	86	106	50	23	3	0	0	0	0	0	106	0	16
28	0	0	0	0	0	0	0	0	0	0	2	30	61	96	115	118	72	48	4	0	0	0	0	0	118	0	23
29	0	0	0	0	0	0	0	0	0	0	2	22	64	115	168	190	163	70	5	0	0	0	0	0	190	0	33
30	0	0	0	0	0	0	0	0	0	0	3	23	64	101	175	164	90	34	5	0	0	0	0	0	175	0	27
31	0	0	0	0	0	0	0	0	0	0	3	50	66	92	113	104	72	46	7	0	0	0	0	0	113	0	23
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**50**	**122**	**173**	**183**	**190**	**163**	**70**	**7**	**0**	**0**	**0**	**0**	**0**	**190**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**13**	**32**	**42**	**28**	**19**	**4**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**15**	**40**	**67**	**86**	**83**	**53**	**16**	**1**	**0**	**0**	**0**	**0**	**0**			**15**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	3	26	47	64	90	74	57	25	5	0	0	0	0	0	90	0	16
2	0	0	0	0	0	0	0	0	0	0	4	83	60	60	124	121	79	49	8	0	0	0	0	0	124	0	25
3	0	0	0	0	0	0	0	0	0	0	5	43	89	139	141	92	71	48	8	0	0	0	0	0	141	0	27
4	0	0	0	0	0	0	0	0	0	0	6	65	116	165	176	147	116	63	12	0	0	0	0	0	176	0	36
5	0	0	0	0	0	0	0	0	0	0	10	139	227	266	265	222	150	74	13	0	0	0	0	0	266	0	57
6	0	0	0	0	0	0	0	0	0	0	9	85	172	227	250	237	188	109	17	0	0	0	0	0	250	0	54
7	0	0	0	0	0	0	0	0	0	0	10	86	172	228	252	238	191	113	19	0	0	0	0	0	252	0	55
8	0	0	0	0	0	0	0	0	0	0	9	87	151	219	246	158	99	69	16	0	0	0	0	0	246	0	44
9	0	0	0	0	0	0	0	0	0	0	11	54	135	188	177	197	132	53	29	1	0	0	0	0	197	0	41
10	0	0	0	0	0	0	0	0	0	0	15	102	185	240	264	252	195	75	18	1	0	0	0	0	264	0	56
11	0	0	0	0	0	0	0	0	0	0	14	59	122	202	245	210	143	66	24	1	0	0	0	0	245	0	45
12	0	0	0	0	0	0	0	0	0	0	24	104	153	190	219	226	205	147	32	1	0	0	0	0	226	0	54
13	0	0	0	0	0	0	0	0	0	0	13	60	113	105	121	118	78	64	37	1	0	0	0	0	121	0	30
14	0	0	0	0	0	0	0	0	0	0	27	65	130	175	177	157	137	72	27	1	0	0	0	0	177	0	40
15	0	0	0	0	0	0	0	0	0	1	27	127	214	273	298	285	235	149	45	2	0	0	0	0	298	0	69
16	0	0	0	0	0	0	0	0	0	0	17	67	107	133	155	190	196	120	60	2	0	0	0	0	196	0	44
17	0	0	0	0	0	0	0	0	0	1	14	50	88	103	120	126	90	52	22	1	0	0	0	0	126	0	28
18	0	0	0	0	0	0	0	0	0	1	23	67	100	151	150	160	133	122	51	9	0	0	0	0	160	0	40
19	0	0	0	0	0	0	0	0	0	1	20	67	131	172	173	165	117	96	31	2	0	0	0	0	173	0	41
20	0	0	0	0	0	0	0	0	0	1	24	84	142	167	222	167	141	77	32	3	0	0	0	0	222	0	44
21	0	0	0	0	0	0	0	0	0	2	31	80	127	168	181	201	157	97	36	5	0	0	0	0	201	0	45
22	0	0	0	0	0	0	0	0	0	3	36	98	175	165	219	292	207	112	45	5	0	0	0	0	292	0	56
23	0	0	0	0	0	0	0	0	0	3	53	164	245	317	343	317	273	192	86	7	0	0	0	0	343	0	83
24	0	0	0	0	0	0	0	0	0	4	32	91	169	241	305	317	282	200	93	9	0	0	0	0	317	0	73
25	0	0	0	0	0	0	0	0	0	4	46	94	251	279	122	196	153	108	50	8	0	0	0	0	279	0	55
26	0	0	0	0	0	0	0	0	0	4	36	99	153	198	202	212	196	145	76	14	0	0	0	0	212	0	56
27	0	0	0	0	0	0	0	0	0	6	90	191	279	253	377	322	201	162	58	9	0	0	0	0	377	0	81
28	0	0	0	0	0	0	0	0	0	5	39	118	181	175	254	215	208	189	105	13	0	0	0	0	254	0	63
29	0	0	0	0	0	0	0	0	0	8	100	209	298	358	384	380	337	264	133	30	1	0	0	0	384	0	104
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**100**	**209**	**298**	**358**	**384**	**380**	**337**	**264**	**133**	**30**	**1**	**0**	**0**	**0**	**384**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**26**	**47**	**60**	**90**	**74**	**57**	**25**	**5**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**26**	**92**	**156**	**194**	**216**	**207**	**164**	**107**	**41**	**4**	**0**	**0**	**0**	**0**			**50**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	8	91	190	256	210	362	248	210	135	61	14	0	0	0	0	362	0	74
2	0	0	0	0	0	0	0	0	0	15	59	148	179	221	272	487	269	158	105	21	0	0	0	0	487	0	81
3	0	0	0	0	0	0	0	0	0	9	53	99	138	176	181	235	224	92	49	16	1	0	0	0	235	0	53
4	0	0	0	0	0	0	0	0	0	12	40	103	179	211	227	223	209	140	75	18	0	0	0	0	227	0	60
5	0	0	0	0	0	0	0	0	0	9	56	98	136	210	283	266	238	153	69	24	0	0	0	0	283	0	64
6	0	0	0	0	0	0	0	0	1	23	70	75	272	338	330	407	429	244	103	28	1	0	0	0	429	0	97
7	0	0	0	0	0	0	0	0	1	24	71	170	277	340	257	270	271	266	229	41	1	0	0	0	340	0	92
8	0	0	0	0	0	0	0	0	1	20	83	118	248	290	269	216	183	125	67	22	1	0	0	0	290	0	68
9	0	0	0	0	0	0	0	0	1	21	82	129	182	217	262	247	232	233	58	15	1	0	0	0	262	0	70
10	0	0	0	0	0	0	0	0	1	46	114	199	261	311	373	430	367	155	96	26	2	0	0	0	430	0	99
11	0	0	0	0	0	0	0	0	2	40	130	197	231	307	394	361	435	423	259	61	3	0	0	0	435	0	119
12	0	0	0	0	0	0	0	0	2	36	99	184	267	325	340	333	274	193	112	40	3	0	0	0	340	0	92
13	0	0	0	0	0	0	0	0	2	33	94	178	254	318	394	391	340	236	138	50	4	0	0	0	394	0	101
14	0	0	0	0	0	0	0	0	4	62	184	279	375	440	434	309	296	182	129	36	3	0	0	0	440	0	114
15	0	0	0	0	0	0	0	0	3	43	95	131	178	278	288	329	319	202	121	56	6	0	0	0	329	0	85
16	0	0	0	0	0	0	0	0	7	80	143	278	306	480	495	478	356	312	204	85	6	0	0	0	495	0	135
17	0	0	0	0	0	0	0	0	7	54	129	253	341	380	383	362	341	234	179	61	9	0	0	0	383	0	114
18	0	0	0	0	0	0	0	0	5	57	143	261	361	439	447	470	412	232	134	59	8	0	0	0	470	0	126
19	0	0	0	0	0	0	0	0	9	71	188	309	409	477	497	493	476	370	222	69	11	0	0	0	497	0	150
20	0	0	0	0	0	0	0	0	10	57	129	169	216	280	338	302	267	213	123	42	7	0	0	0	338	0	90
21	0	0	0	0	0	0	0	0	9	54	146	285	362	543	504	491	419	285	144	116	16	0	0	0	543	0	141
22	0	0	0	0	0	0	0	0	11	119	281	377	348	392	465	469	472	354	300	155	20	0	0	0	472	0	157
23	0	0	0	0	0	0	0	0	29	90	278	399	469	529	547	533	478	377	267	183	17	0	0	0	547	0	175
24	0	0	0	0	0	0	0	0	19	57	238	333	420	472	511	623	385	306	245	119	15	0	0	0	623	0	156
25	0	0	0	0	0	0	0	0	16	75	266	370	484	547	567	547	473	386	266	139	14	0	0	0	567	0	173
26	0	0	0	0	0	0	0	0	30	143	274	388	490	548	574	563	497	385	284	154	14	0	0	0	574	0	181
27	0	0	0	0	0	0	0	1	26	104	200	289	407	492	499	507	428	347	275	137	25	1	0	0	507	0	156
28	0	0	0	0	0	0	0	1	38	159	293	406	509	560	578	554	494	358	214	106	27	0	0	0	578	0	179
29	0	0	0	0	0	0	0	1	27	101	220	334	477	426	463	474	407	223	157	71	20	0	0	0	477	0	142
30	0	0	0	0	0	0	0	1	32	87	176	289	401	308	354	312	267	200	147	79	29	0	0	0	401	0	112
31	0	0	0	0	0	0	0	2	29	141	220	295	385	376	403	250	202	162	130	79	18	1	0	0	403	0	112
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**38**	**159**	**293**	**406**	**509**	**560**	**578**	**623**	**497**	**423**	**300**	**183**	**29**	**1**	**0**	**0**	**623**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**40**	**75**	**136**	**176**	**181**	**216**	**183**	**92**	**49**	**14**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**60**	**150**	**237**	**317**	**369**	**397**	**393**	**344**	**248**	**160**	**69**	**9**	**0**	**0**	**0**			**115**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	1	35	88	171	270	347	434	377	316	317	266	270	106	44	2	0	0	434	0	127
2	0	0	0	0	0	0	0	3	46	230	380	464	499	608	611	526	386	255	181	117	32	1	0	0	611	0	181
3	0	0	0	0	0	0	0	3	45	104	182	291	384	462	402	355	378	466	112	64	26	2	0	0	466	0	136
4	0	0	0	0	0	0	0	3	28	129	247	334	351	401	505	659	597	304	234	118	36	8	0	0	659	0	165
5	0	0	0	0	0	0	0	6	75	208	329	463	560	617	638	611	545	450	273	191	62	3	0	0	638	0	210
6	0	0	0	0	0	0	0	6	89	217	354	476	569	627	645	621	557	459	336	201	67	4	0	0	645	0	218
7	0	0	0	0	0	0	0	8	94	223	358	479	573	628	648	616	553	456	328	181	51	4	0	0	648	0	217
8	0	0	0	0	0	0	0	9	101	222	356	479	571	623	558	479	501	342	226	233	66	5	0	0	623	0	199
9	0	0	0	0	0	0	0	14	113	242	374	494	587	645	657	630	570	467	346	211	79	6	0	0	657	0	226
10	0	0	0	0	0	0	0	15	108	242	381	501	594	649	667	643	581	482	358	223	88	6	0	0	667	0	231
11	0	0	0	0	0	0	0	18	117	246	384	504	596	649	668	642	577	478	354	211	79	7	0	0	668	0	230
12	0	0	0	0	0	0	0	19	105	238	374	496	590	650	665	640	577	475	346	210	57	8	0	0	665	0	227
13	0	0	0	0	0	0	0	16	64	132	224	311	340	427	416	447	328	263	219	117	47	6	0	0	447	0	140
14	0	0	0	0	0	0	0	16	67	140	259	423	507	586	481	501	484	517	371	147	53	8	0	0	586	0	190
15	0	0	0	0	0	0	0	17	65	151	218	365	492	638	623	436	462	471	386	246	111	13	0	0	638	0	196
16	0	0	0	0	0	0	1	24	114	255	387	508	603	656	670	639	508	401	296	196	65	10	0	0	670	0	222
17	0	0	0	0	0	0	1	29	111	204	365	509	539	486	612	614	571	470	343	195	82	11	0	0	614	0	214
18	0	0	0	0	0	0	1	31	114	234	375	490	607	653	684	670	635	450	304	256	104	21	0	0	684	0	235
19	0	0	0	0	0	0	2	39	126	266	408	561	709	783	720	659	593	476	312	182	77	19	0	0	783	0	247
20	0	0	0	0	0	0	2	46	139	203	257	305	309	324	397	446	526	440	264	139	58	11	0	0	526	0	161
21	0	0	0	0	0	0	1	20	70	134	251	339	433	404	462	433	324	261	225	154	73	15	0	0	462	0	150
22	0	0	0	0	0	0	5	67	188	313	440	557	647	703	717	692	628	531	408	272	140	28	1	0	717	0	264
23	0	0	0	0	0	0	4	59	180	314	450	567	655	711	722	695	629	533	409	274	137	29	1	0	722	0	265
24	0	0	0	0	0	0	6	54	108	220	317	454	436	484	570	478	359	228	191	152	77	13	1	0	570	0	173
25	0	0	0	0	0	0	3	27	174	329	458	577	666	720	742	714	669	601	402	186	89	29	1	0	742	0	266
26	0	0	0	0	0	0	4	48	113	201	274	408	449	487	517	481	412	438	296	192	120	22	1	0	517	0	186
27	0	0	0	0	0	0	6	54	128	211	318	428	520	590	518	502	448	361	293	194	98	30	2	0	590	0	196
28	0	0	0	0	0	0	11	108	203	273	360	457	492	545	627	625	486	542	324	215	125	45	2	0	627	0	227
29	0	0	0	0	0	0	6	40	129	296	319	414	510	584	621	606	585	619	425	283	148	43	2	0	621	0	235
30	0	0	0	0	0	0	10	71	190	349	479	630	612	663	702	707	508	367	263	179	87	29	2	0	707	0	244
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**108**	**203**	**349**	**479**	**630**	**709**	**783**	**742**	**714**	**669**	**619**	**425**	**283**	**148**	**45**	**2**	**0**	**783**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**28**	**88**	**171**	**270**	**309**	**324**	**377**	**316**	**317**	**228**	**112**	**64**	**26**	**1**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**29**	**108**	**220**	**335**	**452**	**525**	**581**	**595**	**569**	**510**	**429**	**303**	**188**	**79**	**15**	**1**	**0**			**206**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	12	85	207	348	483	602	695	730	722	725	610	480	415	220	125	35	2	0	730	0	271
2	0	0	0	0	0	0	10	68	222	301	321	406	541	576	653	651	482	536	282	126	71	21	2	0	653	0	219
3	0	0	0	0	0	0	11	78	171	313	398	539	712	712	569	395	366	375	234	119	59	19	2	0	712	0	211
4	0	0	0	0	0	0	7	32	67	121	198	280	404	544	505	584	563	529	377	165	73	51	5	0	584	0	188
5	0	0	0	0	0	0	17	70	118	199	297	473	633	709	740	737	571	392	347	200	115	42	4	0	740	0	236
6	0	0	0	0	0	0	12	74	276	377	516	629	731	784	766	667	649	578	453	319	190	71	7	0	784	0	296
7	0	0	0	0	0	0	11	61	108	356	585	701	780	767	703	675	467	352	235	165	90	33	4	0	780	0	254
8	0	0	0	0	0	0	11	119	182	239	221	351	359	474	498	451	385	400	287	172	97	35	4	0	498	0	178
9	0	0	0	0	0	0	15	56	142	276	372	382	453	464	557	555	399	309	244	128	107	38	5	0	557	0	188
10	0	0	0	0	0	1	22	66	118	236	362	505	609	667	726	709	622	443	287	171	84	40	6	0	726	0	236
11	0	0	0	0	0	2	23	68	129	245	371	367	324	255	198	218	192	134	140	98	70	37	6	0	371	0	120
12	0	0	0	0	0	1	19	79	223	273	486	596	644	573	582	375	283	317	256	170	75	40	6	0	644	0	208
13	0	0	0	0	0	1	19	86	157	204	294	502	679	739	563	645	445	343	372	320	206	110	9	0	739	0	237
14	0	0	0	0	0	2	17	56	85	130	174	247	437	496	565	547	514	472	309	148	123	44	6	0	565	0	182
15	0	0	0	0	0	3	24	96	174	342	433	519	657	716	659	757	501	347	239	168	88	61	15	0	757	0	242
16	0	0	0	0	0	1	9	48	139	203	273	525	633	739	803	814	705	603	490	362	229	107	17	1	814	0	279
17	0	0	0	0	0	4	47	153	279	414	536	653	744	797	810	780	717	553	464	280	224	103	15	1	810	0	316
18	0	0	0	0	0	2	28	165	130	284	305	509	578	561	506	518	479	286	231	137	137	77	11	0	578	0	206
19	0	0	0	0	0	2	20	77	170	226	284	498	632	669	533	675	453	593	426	367	189	106	25	1	675	0	248
20	0	0	0	0	0	5	55	164	289	425	551	663	743	832	821	751	668	554	432	327	234	116	27	1	832	0	319
21	0	0	0	0	0	8	66	150	263	427	534	661	745	798	813	785	735	590	461	372	245	123	37	2	813	0	326
22	0	0	0	0	0	5	50	107	254	363	553	659	744	798	824	761	563	400	294	163	98	40	8	1	824	0	279
23	0	0	0	0	0	2	18	60	161	193	306	241	244	189	120	113	98	61	66	52	70	103	54	3	306	0	90
24	0	0	0	0	0	3	28	102	114	237	236	390	580	503	672	765	539	481	158	234	149	34	11	1	765	0	218
25	0	0	0	0	0	3	12	34	83	164	387	305	516	428	499	554	497	541	301	251	220	69	22	2	554	0	204
26	0	0	0	0	0	5	33	73	148	228	348	494	568	551	631	457	642	497	481	291	132	46	29	3	642	0	236
27	0	0	0	0	0	12	65	168	291	422	549	667	749	797	807	748	650	560	455	341	208	100	31	3	807	0	318
28	0	0	0	0	0	12	60	121	279	412	528	671	620	620	650	722	630	406	273	193	139	77	22	3	722	0	268
29	0	0	0	0	0	16	51	134	192	260	277	372	380	407	466	564	656	449	432	377	245	145	55	5	656	0	228
30	0	0	0	0	0	12	41	147	159	380	482	577	562	544	722	787	650	419	463	384	138	62	21	3	787	0	273
31	0	0	0	0	0	10	55	81	89	193	671	541	501	530	357	443	299	251	204	153	81	70	47	4	671	0	191
Max.	**0**	**0**	**0**	**0**	**0**	**16**	**66**	**168**	**291**	**427**	**671**	**701**	**780**	**832**	**824**	**814**	**735**	**603**	**490**	**384**	**245**	**145**	**55**	**5**	**832**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**32**	**67**	**121**	**174**	**241**	**244**	**189**	**120**	**113**	**98**	**61**	**66**	**52**	**59**	**19**	**2**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**4**	**28**	**93**	**175**	**283**	**398**	**501**	**587**	**612**	**614**	**611**	**517**	**427**	**326**	**225**	**139**	**66**	**17**	**1**			**234**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	5	21	28	47	95	263	692	838	557	665	895	597	240	220	158	110	44	38	3	895	0	230
2	0	0	0	0	0	3	38	82	111	184	208	280	467	434	529	460	442	282	199	194	108	73	24	4	529	0	172
3	0	0	0	0	0	8	39	73	134	237	486	353	354	447	536	684	320	337	222	135	116	80	25	3	684	0	191
4	0	0	0	0	1	8	55	172	306	414	364	547	640	607	643	674	744	646	531	410	279	87	45	5	744	0	299
5	0	0	0	0	1	13	42	40	84	139	182	201	260	392	457	316	373	309	202	210	145	71	37	3	457	0	145
6	0	0	0	0	1	4	22	46	88	173	335	602	656	551	631	799	494	643	515	250	178	138	68	5	799	0	258
7	0	0	0	0	1	12	93	124	273	330	511	456	300	430	461	488	561	574	391	172	235	80	29	5	574	0	230
8	0	0	0	0	1	17	66	168	204	243	294	489	317	531	607	378	332	252	336	337	347	165	34	4	607	0	213
9	0	0	0	0	0	4	16	45	90	149	270	224	280	295	391	541	709	352	286	229	136	106	42	6	709	0	174
10	0	0	0	0	0	7	44	70	82	125	133	195	267	283	325	520	504	260	178	118	64	39	15	2	520	0	135
11	0	0	0	0	0	6	33	83	183	239	137	187	167	205	282	470	484	371	230	201	103	70	27	8	484	0	145
12	0	0	0	0	1	7	43	91	213	266	389	307	258	128	189	154	129	127	116	67	50	25	18	2	389	0	108
13	0	0	0	0	0	3	19	47	92	127	157	239	448	382	345	408	460	343	360	342	292	130	22	4	460	0	176
14	1	0	0	0	1	15	67	147	214	420	561	583	747	803	794	614	733	477	497	76	114	92	31	13	803	0	292
15	1	0	0	0	1	14	39	186	287	413	524	623	607	747	821	745	717	324	208	90	47	31	14	2	821	0	268
16	0	0	0	0	0	3	18	57	96	147	274	309	248	334	205	179	370	453	402	356	150	84	28	8	453	0	155
17	1	0	0	0	1	9	39	121	306	441	711	357	341	712	804	807	737	649	533	413	287	169	70	11	807	0	313
18	1	0	0	0	1	12	57	168	262	453	305	274	749	772	496	790	713	518	322	388	208	146	39	8	790	0	278
19	1	0	0	0	1	12	39	184	308	335	221	207	203	415	595	759	734	642	535	419	281	124	21	4	759	0	252
20	0	0	0	0	1	9	42	182	316	438	559	680	773	811	741	789	732	648	537	418	293	177	76	13	811	0	343
21	1	0	0	0	1	17	79	119	215	181	314	327	278	200	349	463	405	431	463	437	302	138	51	10	463	0	199
22	1	0	0	0	1	14	103	162	309	296	440	500	631	693	607	313	257	372	295	194	73	36	15	4	693	0	222
23	0	0	0	0	1	9	37	102	246	496	674	862	778	718	818	801	741	658	544	423	295	179	76	11	862	0	353
24	1	0	0	0	1	18	93	190	233	475	495	620	460	266	349	320	407	250	107	66	45	19	7	2	620	0	184
25	0	0	0	0	3	20	110	186	235	264	286	510	685	838	935	775	620	412	259	140	102	70	40	16	935	0	271
26	1	0	0	0	0	9	28	62	124	169	189	310	385	266	434	315	214	177	183	124	113	75	19	5	434	0	134
27	0	0	0	0	1	8	37	80	156	265	218	519	635	881	466	447	545	595	515	453	127	138	29	5	881	0	255
28	0	0	0	0	1	6	32	134	230	408	466	343	390	523	568	305	183	331	238	143	103	70	35	7	568	0	188
29	0	0	0	0	0	3	13	23	53	126	137	213	249	221	326	440	459	467	320	333	126	76	38	5	467	0	151
30	0	0	0	0	1	5	29	162	201	276	392	467	324	200	431	541	225	178	454	325	122	173	59	10	541	0	191
Max.	**1**	**0**	**0**	**0**	**3**	**20**	**110**	**190**	**316**	**496**	**711**	**862**	**838**	**881**	**935**	**895**	**744**	**658**	**544**	**453**	**347**	**179**	**76**	**16**	**935**		
Min.	**0**	**0**	**0**	**0**	**0**	**3**	**13**	**23**	**47**	**95**	**133**	**187**	**167**	**128**	**189**	**154**	**129**	**127**	**107**	**66**	**45**	**19**	**7**	**2**		**0**	
Avg.	**0**	**0**	**0**	**0**	**1**	**9**	**47**	**111**	**190**	**277**	**350**	**416**	**458**	**488**	**527**	**540**	**498**	**411**	**340**	**254**	**165**	**97**	**36**	**6**			**217**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1	0	0	0	1	12	72	180	303	442	497	565	759	813	822	818	755	585	431	384	187	97	39	6	822	0	324
2	0	0	0	0	0	5	33	88	97	153	311	439	505	565	332	347	559	563	239	113	114	73	27	5	565	0	190
3	0	0	0	0	0	3	15	48	65	106	193	246	165	194	295	242	228	381	171	124	75	45	10	2	381	0	109
4	0	0	0	0	0	2	8	58	90	186	225	381	564	453	205	218	294	298	137	100	116	93	36	4	564	0	144
5	0	0	0	0	0	9	32	72	147	214	424	486	627	476	292	369	276	241	257	255	64	28	6	1	627	0	178
6	0	0	0	0	1	7	41	99	170	518	493	624	762	571	599	386	290	374	368	230	130	69	20	5	762	0	240
7	0	0	0	0	0	6	24	31	70	138	153	223	274	310	224	222	227	318	339	207	104	42	14	2	339	0	122
8	0	0	0	0	0	1	8	28	36	69	76	83	142	199	227	172	97	97	93	71	53	43	9	1	227	0	63
9	0	0	0	0	0	6	51	125	177	330	391	559	710	820	798	804	696	566	341	323	110	41	13	3	820	0	286
10	0	0	0	0	0	4	52	93	170	507	675	700	505	402	295	380	253	245	222	164	103	58	19	2	700	0	202
11	0	0	0	0	0	2	4	18	55	426	449	365	717	720	702	694	713	591	522	395	279	159	47	5	720	0	286
12	0	0	0	0	1	11	68	178	222	310	381	332	336	434	414	256	266	162	78	35	21	12	5	2	434	0	147
13	0	0	0	0	0	1	11	29	64	84	121	200	213	192	206	200	179	211	246	154	117	46	14	3	246	0	95
14	0	0	0	0	0	2	16	51	86	145	250	334	327	409	602	413	253	210	223	283	191	105	12	2	602	0	163
15	0	0	0	0	0	4	35	88	127	184	228	319	427	608	712	693	464	222	135	42	27	8	5	1	712	0	180
16	0	0	0	0	0	2	12	36	91	88	157	193	538	541	773	357	132	113	118	71	72	37	9	1	773	0	139
17	0	0	0	0	0	2	12	50	96	131	81	144	248	241	166	142	167	228	124	115	63	38	22	2	248	0	86
18	0	0	0	0	0	2	24	73	128	151	265	194	203	248	313	315	334	270	162	77	71	51	15	1	334	0	121
19	0	0	0	0	0	1	14	51	101	181	313	286	495	398	400	308	377	290	166	117	97	67	15	2	495	0	153
20	0	0	0	0	0	1	14	82	94	120	132	164	609	604	498	393	202	256	104	30	13	11	9	0	609	0	139
21	0	0	0	0	0	0	7	21	52	86	175	208	323	349	385	381	550	337	228	456	140	65	17	2	550	0	158
22	0	0	0	0	0	1	17	35	78	171	151	186	79	77	174	162	133	127	110	106	64	39	14	1	186	0	72
23	0	0	0	0	0	1	12	36	104	155	316	416	425	377	416	414	584	383	258	134	71	11	4	0	584	0	172
24	0	0	0	0	0	0	5	18	41	99	184	247	343	522	591	516	624	350	182	123	110	55	43	2	624	0	169
25	0	0	0	0	0	2	35	130	246	375	495	607	691	746	734	796	650	529	552	377	235	113	36	1	796	0	306
26	0	0	0	0	0	1	36	55	92	115	172	229	227	219	198	159	158	201	195	270	162	65	14	1	270	0	107
27	0	0	0	0	0	0	2	14	59	124	132	148	153	211	194	138	288	247	264	190	114	48	10	1	288	0	97
28	0	0	0	0	0	0	9	58	257	401	498	594	253	398	403	540	409	344	356	183	80	35	20	1	594	0	202
29	0	0	0	0	0	1	16	106	181	357	495	604	753	318	583	597	637	529	230	234	133	57	12	0	753	0	243
30	0	0	0	0	0	0	6	40	201	329	374	432	659	712	727	671	644	553	424	294	179	87	17	1	727	0	264
31	0	0	0	0	0	1	18	97	214	334	460	584	687	742	746	599	571	549	467	327	223	96	19	1	746	0	281
Max.	**1**	**0**	**0**	**0**	**1**	**12**	**72**	**180**	**303**	**518**	**675**	**700**	**762**	**820**	**822**	**818**	**755**	**591**	**552**	**456**	**279**	**159**	**47**	**6**	**822**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	**36**	**69**	**76**	**83**	**79**	**77**	**166**	**138**	**97**	**97**	**78**	**30**	**13**	**8**	**4**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**23**	**67**	**126**	**227**	**299**	**358**	**442**	**447**	**452**	**410**	**387**	**335**	**250**	**193**	**114**	**58**	**18**	**2**			**175**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	1	26	113	229	374	481	591	678	723	755	714	634	591	471	366	232	84	10	0	755	0	295
2	0	0	0	0	0	0	2	17	34	82	125	166	183	187	221	171	208	163	174	155	34	21	9	0	221	0	81
3	0	0	0	0	0	1	22	107	224	358	475	587	832	228	449	721	530	476	453	323	146	38	8	0	832	0	249
4	0	0	0	0	0	0	13	96	106	189	234	320	369	372	471	331	416	570	454	317	203	60	9	0	570	0	189
5	0	0	0	0	0	0	6	28	76	123	386	501	375	567	650	712	649	558	406	329	199	92	11	0	712	0	236
6	0	0	0	0	0	0	18	109	247	363	508	596	662	733	543	605	557	342	165	113	88	43	6	0	733	0	237
7	0	0	0	0	0	0	13	83	215	342	465	536	589	613	444	324	649	460	267	333	194	46	8	0	649	0	233
8	0	0	0	0	0	0	10	91	208	335	457	572	657	710	728	707	657	543	463	277	213	76	6	0	728	0	280
9	0	0	0	0	0	0	8	74	202	329	450	567	646	704	670	543	532	379	293	264	185	45	4	0	704	0	246
10	0	0	0	0	0	0	11	89	199	227	394	516	728	370	299	364	579	261	160	136	179	39	3	0	728	0	190
11	0	0	0	0	0	0	8	51	215	318	420	592	618	689	656	626	491	427	362	212	111	40	3	0	689	0	243
12	0	0	0	0	0	0	3	29	139	230	353	392	452	607	576	480	408	226	196	73	48	30	2	0	607	0	177
13	0	0	0	0	0	0	2	29	71	121	187	293	268	368	339	292	258	204	133	102	37	14	1	0	368	0	113
14	0	0	0	0	0	0	1	26	72	146	156	215	166	263	212	153	169	186	98	69	36	13	0	0	263	0	83
15	0	0	0	0	0	0	1	21	65	104	157	165	193	187	227	244	121	120	161	51	38	13	1	0	244	0	78
16	0	0	0	0	0	0	1	22	55	119	134	196	342	380	463	435	346	410	255	265	147	41	2	0	463	0	151
17	0	0	0	0	0	0	4	64	172	274	234	348	409	502	527	368	326	248	159	109	39	14	1	0	527	0	158
18	0	0	0	0	0	0	3	48	156	284	406	527	444	329	426	302	291	254	248	166	67	17	1	0	527	0	165
19	0	0	0	0	0	0	1	27	62	72	130	191	360	523	409	427	344	196	147	76	18	5	0	0	523	0	124
20	0	0	0	0	0	0	1	16	71	161	186	183	299	226	221	264	390	420	205	84	74	11	0	0	420	0	117
21	0	0	0	0	0	0	1	10	48	102	146	224	286	273	449	438	336	476	353	166	24	4	0	0	476	0	139
22	0	0	0	0	0	0	0	10	43	81	113	165	241	382	240	311	350	143	97	238	133	27	1	0	382	0	107
23	0	0	0	0	0	0	1	26	85	283	375	495	536	613	639	501	390	419	258	15	54	29	1	0	639	0	197
24	0	0	0	0	0	0	0	40	131	195	176	497	458	487	536	509	471	537	175	90	61	19	0	0	537	0	183
25	0	0	0	0	0	0	0	10	55	169	186	363	399	372	411	341	392	307	218	146	78	11	0	0	411	0	144
26	0	0	0	0	0	0	0	3	19	47	114	84	101	139	231	251	245	288	206	83	39	6	0	0	288	0	77
27	0	0	0	0	0	0	0	11	32	60	112	139	154	172	222	256	296	205	207	109	66	6	0	0	296	0	85
28	0	0	0	0	0	0	0	6	29	105	138	220	252	396	298	456	394	161	78	85	106	8	0	0	456	0	114
29	0	0	0	0	0	0	0	23	138	224	317	480	549	447	424	380	513	363	296	129	56	5	0	0	549	0	181
30	0	0	0	0	0	0	0	12	46	98	222	255	227	287	504	416	263	372	137	72	24	4	0	0	504	0	122
31	0	0	0	0	0	0	0	3	19	33	47	76	86	162	198	168	207	100	72	169	48	4	0	0	207	0	58
Max.	**0**	**0**	**0**	**0**	**0**	**1**	**26**	**113**	**247**	**374**	**508**	**596**	**832**	**733**	**755**	**721**	**657**	**591**	**471**	**366**	**232**	**92**	**11**	**0**	**832**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**19**	**33**	**47**	**76**	**86**	**139**	**198**	**153**	**121**	**100**	**72**	**15**	**18**	**4**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**42**	**112**	**192**	**267**	**356**	**405**	**420**	**433**	**413**	**400**	**336**	**238**	**165**	**96**	**28**	**3**	**0**			**163**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	5	43	224	352	244	446	290	242	317	274	191	110	67	14	1	0	0	446	0	117
2	0	0	0	0	0	0	0	4	21	24	43	46	226	239	367	321	208	133	75	38	8	0	0	0	367	0	73
3	0	0	0	0	0	0	0	2	22	41	92	125	139	203	289	293	277	267	136	60	27	1	0	0	293	0	82
4	0	0	0	0	0	0	0	3	26	72	123	247	261	313	291	259	322	392	269	145	52	3	0	0	392	0	116
5	0	0	0	0	0	0	0	6	34	125	194	262	538	362	144	261	417	331	91	35	29	1	0	0	538	0	118
6	0	0	0	0	0	0	0	3	21	58	54	121	87	56	59	96	50	34	28	27	9	0	0	0	121	0	29
7	0	0	0	0	0	0	0	2	19	39	105	98	122	90	75	138	303	188	102	46	10	0	0	0	303	0	56
8	0	0	0	0	0	0	0	1	25	76	206	239	189	131	179	164	103	43	37	15	4	0	0	0	239	0	59
9	0	0	0	0	0	0	0	1	12	31	55	96	75	94	110	108	148	123	80	44	15	0	0	0	148	0	41
10	0	0	0	0	0	0	0	1	15	51	130	145	407	545	306	354	285	206	79	56	16	0	0	0	545	0	108
11	0	0	0	0	0	0	0	1	14	45	41	61	85	88	240	294	428	182	91	60	9	0	0	0	428	0	68
12	0	0	0	0	0	0	0	1	6	38	72	165	198	303	232	125	85	92	59	14	2	0	0	0	303	0	58
13	0	0	0	0	0	0	0	0	4	24	31	45	72	89	117	139	293	132	50	27	8	0	0	0	293	0	43
14	0	0	0	0	0	0	0	1	17	75	155	138	163	180	270	236	295	118	77	64	11	0	0	0	295	0	75
15	0	0	0	0	0	0	0	1	24	44	101	206	225	210	234	161	215	123	86	44	7	0	0	0	234	0	70
16	0	0	0	0	0	0	0	1	14	85	258	307	388	270	245	256	175	188	112	75	8	0	0	0	388	0	99
17	0	0	0	0	0	0	0	1	24	94	134	175	133	147	115	122	96	71	40	25	2	0	0	0	175	0	49
18	0	0	0	0	0	0	0	0	2	36	78	127	120	65	70	146	153	78	60	28	2	0	0	0	153	0	40
19	0	0	0	0	0	0	0	0	13	66	139	147	157	175	234	161	158	116	66	37	3	0	0	0	234	0	61
20	0	0	0	0	0	0	0	0	16	94	158	120	166	327	442	316	388	191	107	64	5	0	0	0	442	0	100
21	0	0	0	0	0	0	0	0	17	54	133	191	256	209	230	358	219	156	98	29	4	0	0	0	358	0	81
22	0	0	0	0	0	0	0	0	25	128	240	283	291	298	281	175	151	101	39	13	1	0	0	0	298	0	84
23	0	0	0	0	0	0	0	0	5	19	48	85	126	135	90	71	94	57	35	11	1	0	0	0	135	0	32
24	0	0	0	0	0	0	0	0	6	32	45	91	79	160	210	202	166	121	81	23	1	0	0	0	210	0	51
25	0	0	0	0	0	0	0	0	7	51	110	135	184	201	133	179	140	93	64	25	1	0	0	0	201	0	55
26	0	0	0	0	0	0	0	0	11	67	101	222	332	236	139	125	156	173	89	30	2	0	0	0	332	0	70
27	0	0	0	0	0	0	0	0	12	114	231	335	416	459	461	426	351	255	149	32	2	0	0	0	461	0	135
28	0	0	0	0	0	0	0	0	10	107	226	309	378	447	409	297	181	130	74	28	1	0	0	0	447	0	108
29	0	0	0	0	0	0	0	0	10	68	131	184	211	190	185	205	180	150	60	13	0	0	0	0	211	0	66
30	0	0	0	0	0	0	0	0	7	32	190	171	280	298	174	173	146	100	82	22	0	0	0	0	298	0	70
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**43**	**224**	**352**	**335**	**538**	**545**	**461**	**426**	**428**	**392**	**269**	**145**	**52**	**3**	**0**	**0**	**545**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**19**	**31**	**45**	**72**	**56**	**59**	**71**	**50**	**34**	**28**	**11**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**16**	**67**	**132**	**171**	**225**	**227**	**219**	**216**	**215**	**151**	**84**	**40**	**8**	**0**	**0**	**0**			**74**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	9	38	112	256	296	264	237	127	123	113	39	3	0	0	0	0	296	0	67
2	0	0	0	0	0	0	0	0	5	35	41	103	141	128	172	290	114	144	87	11	0	0	0	0	290	0	53
3	0	0	0	0	0	0	0	0	3	23	37	78	141	184	191	168	141	94	67	17	0	0	0	0	191	0	48
4	0	0	0	0	0	0	0	0	5	78	194	275	304	329	277	341	230	120	82	9	0	0	0	0	341	0	94
5	0	0	0	0	0	0	0	0	1	11	24	44	47	66	61	72	40	20	13	2	0	0	0	0	72	0	17
6	0	0	0	0	0	0	0	0	1	11	30	47	68	78	73	100	76	42	24	3	0	0	0	0	100	0	23
7	0	0	0	0	0	0	0	0	1	15	35	64	89	118	96	148	144	86	33	5	0	0	0	0	148	0	35
8	0	0	0	0	0	0	0	0	3	56	172	270	349	368	378	360	291	196	82	7	0	0	0	0	378	0	105
9	0	0	0	0	0	0	0	0	1	12	33	43	77	138	76	41	45	50	17	1	0	0	0	0	138	0	22
10	0	0	0	0	0	0	0	0	2	46	157	100	120	160	147	207	141	56	17	1	0	0	0	0	207	0	48
11	0	0	0	0	0	0	0	0	0	3	18	30	67	61	46	57	60	64	41	3	0	0	0	0	67	0	19
12	0	0	0	0	0	0	0	0	1	23	85	167	247	317	340	431	229	160	48	5	0	0	0	0	431	0	86
13	0	0	0	0	0	0	0	0	1	19	50	84	147	186	182	146	78	47	13	1	0	0	0	0	186	0	40
14	0	0	0	0	0	0	0	0	0	13	65	141	148	180	181	204	110	69	23	2	0	0	0	0	204	0	47
15	0	0	0	0	0	0	0	0	0	15	76	119	155	179	242	221	148	117	37	1	0	0	0	0	242	0	55
16	0	0	0	0	0	0	0	0	0	12	47	94	143	194	201	288	226	139	40	2	0	0	0	0	288	0	58
17	0	0	0	0	0	0	0	0	0	18	109	205	283	333	341	300	227	136	36	1	0	0	0	0	341	0	83
18	0	0	0	0	0	0	0	0	0	11	46	84	209	293	282	269	221	99	20	1	0	0	0	0	293	0	64
19	0	0	0	0	0	0	0	0	0	13	116	212	283	322	326	294	231	144	36	1	0	0	0	0	326	0	82
20	0	0	0	0	0	0	0	0	0	8	39	77	124	163	244	225	132	75	19	1	0	0	0	0	244	0	46
21	0	0	0	0	0	0	0	0	0	12	143	239	283	319	304	274	266	135	24	1	0	0	0	0	319	0	83
22	0	0	0	0	0	0	0	0	0	8	101	189	241	275	290	231	237	113	19	0	0	0	0	0	290	0	71
23	0	0	0	0	0	0	0	0	0	15	81	178	268	307	308	270	186	114	18	0	0	0	0	0	308	0	73
24	0	0	0	0	0	0	0	0	0	10	88	181	249	342	308	214	139	103	15	0	0	0	0	0	342	0	69
25	0	0	0	0	0	0	0	0	0	6	36	117	273	261	308	233	173	55	14	0	0	0	0	0	308	0	62
26	0	0	0	0	0	0	0	0	0	5	29	79	216	274	290	253	186	98	10	0	0	0	0	0	290	0	60
27	0	0	0	0	0	0	0	0	0	5	76	175	245	283	284	248	181	89	8	0	0	0	0	0	284	0	66
28	0	0	0	0	0	0	0	0	0	7	77	176	212	231	275	224	122	47	8	0	0	0	0	0	275	0	57
29	0	0	0	0	0	0	0	0	0	3	24	74	105	114	121	116	74	39	6	0	0	0	0	0	121	0	28
30	0	0	0	0	0	0	0	0	0	3	32	132	241	186	166	139	152	62	6	0	0	0	0	0	241	0	47
31	0	0	0	0	0	0	0	0	0	3	49	138	206	250	248	214	151	59	5	0	0	0	0	0	250	0	55
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**78**	**194**	**275**	**349**	**368**	**378**	**431**	**291**	**196**	**87**	**17**	**0**	**0**	**0**	**0**	**431**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**18**	**30**	**47**	**61**	**46**	**41**	**40**	**20**	**5**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**72**	**134**	**193**	**223**	**226**	**216**	**157**	**93**	**29**	**3**	**0**	**0**	**0**	**0**			**57**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	2	23	62	111	121	131	189	144	48	4	0	0	0	0	0	189	0	35
2	0	0	0	0	0	0	0	0	0	3	23	83	153	208	178	126	127	43	5	0	0	0	0	0	208	0	40
3	0	0	0	0	0	0	0	0	0	2	48	153	142	171	210	192	157	69	6	0	0	0	0	0	210	0	48
4	0	0	0	0	0	0	0	0	0	2	27	92	176	229	143	124	84	37	4	0	0	0	0	0	229	0	38
5	0	0	0	0	0	0	0	0	0	1	13	59	166	180	151	126	137	24	3	0	0	0	0	0	180	0	36
6	0	0	0	0	0	0	0	0	0	1	31	104	114	139	99	96	69	36	3	0	0	0	0	0	139	0	29
7	0	0	0	0	0	0	0	0	0	1	18	59	95	161	173	96	75	35	2	0	0	0	0	0	173	0	30
8	0	0	0	0	0	0	0	0	0	1	25	95	66	169	233	105	41	15	1	0	0	0	0	0	233	0	31
9	0	0	0	0	0	0	0	0	0	0	5	25	32	49	61	48	31	8	0	0	0	0	0	0	61	0	11
10	0	0	0	0	0	0	0	0	0	0	6	30	57	48	39	29	16	8	1	0	0	0	0	0	57	0	10
11	0	0	0	0	0	0	0	0	0	0	14	69	135	277	217	158	132	36	1	0	0	0	0	0	277	0	43
12	0	0	0	0	0	0	0	0	0	0	14	56	87	161	125	100	37	12	1	0	0	0	0	0	161	0	25
13	0	0	0	0	0	0	0	0	0	0	7	34	77	115	144	116	47	13	1	0	0	0	0	0	144	0	23
14	0	0	0	0	0	0	0	0	0	0	13	64	102	122	147	82	40	11	1	0	0	0	0	0	147	0	24
15	0	0	0	0	0	0	0	0	0	0	8	31	106	186	102	79	40	9	0	0	0	0	0	0	186	0	23
16	0	0	0	0	0	0	0	0	0	0	9	34	67	84	89	81	44	12	0	0	0	0	0	0	89	0	18
17	0	0	0	0	0	0	0	0	0	0	9	68	127	170	166	136	73	13	0	0	0	0	0	0	170	0	32
18	0	0	0	0	0	0	0	0	0	0	8	57	101	135	149	132	79	10	0	0	0	0	0	0	149	0	28
19	0	0	0	0	0	0	0	0	0	0	5	57	129	167	171	141	74	13	0	0	0	0	0	0	171	0	32
20	0	0	0	0	0	0	0	0	0	0	5	31	54	110	173	133	66	10	0	0	0	0	0	0	173	0	24
21	0	0	0	0	0	0	0	0	0	0	5	45	121	164	169	129	32	10	0	0	0	0	0	0	169	0	28
22	0	0	0	0	0	0	0	0	0	0	3	24	104	162	165	108	43	6	0	0	0	0	0	0	165	0	26
23	0	0	0	0	0	0	0	0	0	0	2	14	54	75	101	76	34	6	0	0	0	0	0	0	101	0	15
24	0	0	0	0	0	0	0	0	0	0	2	20	50	84	108	57	36	4	0	0	0	0	0	0	108	0	15
25	0	0	0	0	0	0	0	0	0	0	2	17	48	136	146	91	47	8	0	0	0	0	0	0	146	0	21
26	0	0	0	0	0	0	0	0	0	0	2	28	72	141	145	115	51	6	0	0	0	0	0	0	145	0	23
27	0	0	0	0	0	0	0	0	0	0	1	21	37	60	60	48	28	5	0	0	0	0	0	0	60	0	11
28	0	0	0	0	0	0	0	0	0	0	1	8	34	57	64	41	29	4	0	0	0	0	0	0	64	0	10
29	0	0	0	0	0	0	0	0	0	0	1	19	47	70	85	85	35	9	0	0	0	0	0	0	85	0	15
30	0	0	0	0	0	0	0	0	0	0	2	15	26	36	107	115	51	4	0	0	0	0	0	0	115	0	15
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**48**	**153**	**176**	**277**	**233**	**192**	**157**	**69**	**6**	**0**	**0**	**0**	**0**	**0**	**277**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**26**	**36**	**39**	**29**	**16**	**4**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**49**	**90**	**133**	**135**	**105**	**63**	**17**	**1**	**0**	**0**	**0**	**0**	**0**			**25**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Solar (Watts/m^2)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	1	17	50	56	53	40	22	3	0	0	0	0	0	0	56	0	10
2	0	0	0	0	0	0	0	0	0	0	1	10	33	51	44	43	25	4	0	0	0	0	0	0	51	0	9
3	0	0	0	0	0	0	0	0	0	0	0	5	9	10	87	60	25	3	0	0	0	0	0	0	87	0	8
4	0	0	0	0	0	0	0	0	0	0	0	11	15	41	37	32	35	3	0	0	0	0	0	0	41	0	7
5	0	0	0	0	0	0	0	0	0	0	1	7	25	39	36	19	13	2	0	0	0	0	0	0	39	0	6
6	0	0	0	0	0	0	0	0	0	0	0	9	18	39	53	40	22	3	0	0	0	0	0	0	53	0	8
7	0	0	0	0	0	0	0	0	0	0	1	9	17	53	56	44	27	3	0	0	0	0	0	0	56	0	9
8	0	0	0	0	0	0	0	0	0	0	0	4	26	37	37	30	14	2	0	0	0	0	0	0	37	0	6
9	0	0	0	0	0	0	0	0	0	0	0	6	32	40	65	32	14	2	0	0	0	0	0	0	65	0	8
10	0	0	0	0	0	0	0	0	0	0	0	11	30	48	71	68	30	4	0	0	0	0	0	0	71	0	11
11	0	0	0	0	0	0	0	0	0	0	0	11	34	66	94	57	30	3	0	0	0	0	0	0	94	0	12
12	0	0	0	0	0	0	0	0	0	0	0	4	13	19	25	15	5	1	0	0	0	0	0	0	25	0	3
13	0	0	0	0	0	0	0	0	0	0	0	4	10	40	79	71	25	1	0	0	0	0	0	0	79	0	10
14	0	0	0	0	0	0	0	0	0	0	1	16	31	68	79	57	22	2	0	0	0	0	0	0	79	0	12
15	0	0	0	0	0	0	0	0	0	0	0	3	17	30	82	30	16	3	0	0	0	0	0	0	82	0	8
16	0	0	0	0	0	0	0	0	0	0	0	6	15	21	42	49	9	2	0	0	0	0	0	0	49	0	6
17	0	0	0	0	0	0	0	0	0	0	0	4	15	26	36	39	13	3	0	0	0	0	0	0	39	0	6
18	0	0	0	0	0	0	0	0	0	0	0	6	29	28	32	24	11	2	0	0	0	0	0	0	32	0	6
19	0	0	0	0	0	0	0	0	0	0	0	4	18	43	45	26	19	2	0	0	0	0	0	0	45	0	7
20	0	0	0	0	0	0	0	0	0	0	0	5	18	45	32	33	18	2	0	0	0	0	0	0	45	0	6
21	0	0	0	0	0	0	0	0	0	0	0	6	24	41	51	82	32	3	0	0	0	0	0	0	82	0	10
22	0	0	0	0	0	0	0	0	0	0	0	5	22	39	43	38	13	2	0	0	0	0	0	0	43	0	7
23	0	0	0	0	0	0	0	0	0	0	0	7	21	38	73	68	24	4	0	0	0	0	0	0	73	0	10
24	0	0	0	0	0	0	0	0	0	0	0	8	32	53	59	44	24	2	0	0	0	0	0	0	59	0	9
25	0	0	0	0	0	0	0	0	0	0	0	5	21	29	33	25	18	2	0	0	0	0	0	0	33	0	6
26	0	0	0	0	0	0	0	0	0	0	0	8	24	33	51	52	27	5	0	0	0	0	0	0	52	0	8
27	0	0	0	0	0	0	0	0	0	0	0	8	31	51	59	56	24	4	0	0	0	0	0	0	59	0	10
28	0	0	0	0	0	0	0	0	0	0	0	7	21	43	113	85	33	5	0	0	0	0	0	0	113	0	13
29	0	0	0	0	0	0	0	0	0	0	0	6	17	49	117	96	42	5	0	0	0	0	0	0	117	0	14
30	0	0	0	0	0	0	0	0	0	0	0	7	17	54	131	104	45	5	0	0	0	0	0	0	131	0	15
31	0	0	0	0	0	0	0	0	0	0	0	7	18	50	115	91	39	5	0	0	0	0	0	0	115	0	14
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**50**	**68**	**131**	**104**	**45**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**131**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**	**10**	**25**	**15**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**23**	**41**	**62**	**50**	**23**	**3**	**0**	**0**	**0**	**0**	**0**	**0**			**9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	950	948	947	946	946	944	943	942	942	941	940	939	939	938	937	937	936	936	936	936	935	935	935	935	950	935	940.2
2	935	935	935	935	935	934	935	934	934	934	934	934	933	933	932	932	931	931	930	929	929	928	928	928	935	928	932.4
3	927	927	927	927	926	926	926	926	926	926	926	927	927	926	926	927	927	927	927	928	928	928	929	929	929	926	927.0
4	929	930	930	930	930	931	931	931	931	931	932	932	932	932	932	932	932	932	933	933	933	933	933	934	934	929	931.7
5	934	933	933	933	934	934	934	934	934	935	935	936	936	936	936	936	936	937	937	937	937	937	938	938	938	933	935.5
6	939	940	940	940	941	941	941	941	941	941	941	941	941	941	941	940	940	940	940	939	939	939	939	938	941	938	940.1
7	938	939	939	938	938	938	938	938	938	938	938	938	938	938	938	939	939	940	941	941	942	943	943	944	944	938	939.4
8	945	945	945	946	946	946	946	946	946	946	947	947	947	947	946	946	946	946	945	945	945	944	943	943	947	943	945.6
9	943	943	942	942	942	942	941	941	941	941	941	942	942	942	942	941	941	942	942	942	942	942	942	943	943	941	941.8
10	943	943	944	944	944	944	944	944	944	945	945	945	946	946	946	946	945	945	945	945	946	946	946	946	946	943	944.9
11	946	947	947	947	948	948	948	948	947	948	948	949	949	949	949	950	950	950	950	950	950	951	951	951	951	946	948.7
12	951	950	950	950	950	950	949	949	949	949	949	949	949	949	949	948	948	949	949	949	950	949	951	951	951	948	949.3
13	951	952	954	954	954	955	955	956	957	957	958	958	958	959	960	960	960	960	960	960	960	960	959	959	960	951	957.3
14	959	959	958	958	956	956	955	954	954	952	951	951	953	952	951	950	950	950	950	949	948	947	946	946	959	946	952.2
15	946	945	943	943	944	944	945	946	946	947	947	948	949	949	949	949	950	950	950	950	949	948	948	948	950	943	947.1
16	950	951	951	952	953	954	955	956	957	958	960	961	963	964	964	965	965	966	966	967	967	967	967	967	967	950	960.2
17	966	966	965	965	964	963	962	962	961	960	959	958	956	956	955	954	954	954	955	955	955	956	957	958	966	954	959.0
18	958	958	959	959	960	960	961	962	963	963	964	965	967	968	968	968	968	968	969	969	968	968	967	967	969	958	964.5
19	968	969	968	967	967	966	966	966	966	965	965	964	964	964	963	962	962	961	961	961	962	962	963	963	969	961	964.4
20	965	966	966	966	965	965	965	964	964	964	963	963	963	963	963	963	963	963	963	964	964	965	965	965	966	963	964.1
21	965	966	966	967	966	966	965	965	964	964	963	963	962	960	959	957	956	954	953	953	952	952	951	951	967	951	960.0
22	952	953	954	955	955	955	955	956	956	957	959	960	961	963	964	965	965	966	965	965	965	965	965	965	966	952	959.9
23	965	966	967	969	970	971	972	973	974	975	976	977	978	979	979	979	979	980	978	978	979	979	979	978	980	965	975.1
24	977	976	975	974	972	970	968	967	965	964	963	961	960	959	957	954	954	953	952	951	951	950	949	949	977	949	961.3
25	950	950	950	951	951	951	951	952	952	953	954	955	955	955	955	955	956	957	957	958	959	959	960	961	961	950	954.4
26	963	964	964	965	966	966	966	965	966	966	967	967	967	967	967	967	967	967	967	966	965	965	964	963	967	963	965.6
27	962	961	960	959	959	958	957	956	955	953	951	951	950	949	947	946	945	944	943	942	941	941	940	940	962	940	950.3
28	939	938	938	938	938	938	939	939	939	940	941	942	942	943	944	944	945	946	947	948	948	949	950	950	950	938	942.7
29	951	952	952	953	953	953	952	952	952	952	951	951	951	951	950	949	948	948	947	947	946	946	946	946	953	946	950.0
30	946	946	947	947	947	948	948	948	948	949	949	950	951	951	952	952	953	953	954	954	954	954	955	955	955	946	950.4
31	955	955	955	955	955	955	955	955	954	954	954	954	954	954	953	953	952	952	952	951	951	951	951	951	955	951	953.3
Max.	**977**	**976**	**975**	**974**	**972**	**971**	**972**	**973**	**974**	**975**	**976**	**977**	**978**	**979**	**979**	**979**	**979**	**980**	**978**	**978**	**979**	**979**	**979**	**978**	**980**		
Min.	**927**	**927**	**927**	**927**	**926**	**926**	**926**	**926**	**926**	**926**	**926**	**927**	**927**	**926**	**926**	**927**	**927**	**927**	**927**	**928**	**928**	**928**	**928**	**928**		**926**	
Avg.	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**950**	**950**	**951**	**950**	**950**	**950**	**950**	**950**	**950**			**950.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	951	951	950	950	950	950	950	950	950	950	949	949	949	948	948	948	948	947	947	947	948	947	948	948	951	947	948.9
2	948	949	949	950	950	950	950	951	951	952	953	953	954	955	955	956	956	957	957	958	958	959	959	959	959	948	953.6
3	960	960	960	960	960	959	959	958	959	958	958	957	957	956	956	955	954	954	954	953	953	953	953	952	960	952	956.6
4	953	953	952	952	952	951	951	951	950	951	951	951	951	951	951	951	951	951	952	952	952	952	952	952	953	950	951.5
5	952	952	952	953	953	952	952	952	952	951	951	951	951	950	950	949	949	948	947	947	946	946	946	945	953	945	949.9
6	945	944	944	944	944	944	944	944	945	945	945	946	947	947	947	947	948	948	948	948	949	949	950	950	950	944	946.3
7	950	951	952	953	953	954	954	955	955	956	957	958	958	959	959	960	960	960	960	961	961	961	961	961	961	950	957.1
8	961	961	961	961	961	961	961	960	960	960	960	960	959	959	958	957	957	956	955	955	954	953	952	952	961	952	958.1
9	950	950	948	947	947	946	945	944	943	942	941	940	939	939	938	938	937	937	937	937	936	937	937	937	950	936	941.2
10	937	937	937	937	937	937	936	936	935	936	935	935	935	935	935	935	935	935	935	935	935	936	936	936	937	935	935.7
11	936	936	936	936	936	936	936	936	936	936	937	937	937	937	937	937	937	937	938	938	938	939	940	940	940	936	937.0
12	941	942	943	944	945	946	947	948	949	949	950	951	952	952	951	950	950	949	949	948	947	946	946	944	952	941	947.5
13	942	941	941	940	937	936	935	933	932	931	930	931	930	930	929	929	928	928	927	927	927	927	926	927	942	926	931.7
14	926	925	925	925	925	925	925	925	926	928	928	930	931	932	932	933	933	934	934	935	935	936	938	939	939	925	930.1
15	941	943	944	945	946	947	948	950	951	952	953	953	954	955	954	955	956	955	955	953	954	953	953	952	956	941	950.9
16	950	951	951	950	948	947	946	945	944	942	941	940	939	939	938	938	939	939	940	941	941	942	943	944	951	938	943.3
17	944	943	943	942	941	941	940	938	937	936	934	931	930	928	927	926	926	926	927	928	930	931	933	934	944	926	933.9
18	935	936	935	935	935	934	934	934	936	937	938	940	941	941	942	942	942	942	942	942	942	943	942	942	943	934	938.8
19	942	941	940	939	936	935	932	931	929	928	926	924	923	922	921	919	919	918	917	918	919	920	920	922	942	917	926.7
20	923	925	927	929	931	931	932	933	935	935	936	936	936	936	935	934	934	933	933	932	931	931	931	931	936	923	932.1
21	931	930	930	930	929	929	929	929	929	929	930	930	931	932	932	932	933	934	935	936	936	937	938	939	939	929	932.0
22	939	940	941	941	942	943	943	944	945	946	947	948	948	949	950	950	951	953	953	954	955	956	957	958	958	939	948.1
23	958	959	960	960	960	961	961	961	962	962	963	963	963	963	963	963	963	963	963	964	964	964	964	964	964	958	962.2
24	964	964	965	964	964	964	964	964	964	964	964	964	964	964	963	963	963	963	963	963	963	962	962	962	965	962	963.4
25	961	961	960	959	958	958	957	957	956	956	956	956	956	956	956	956	955	956	956	956	957	957	957	957	961	955	957.1
26	957	957	957	957	957	957	956	956	956	956	955	955	954	954	953	952	952	951	951	950	950	950	950	950	957	950	953.9
27	950	949	949	950	950	950	950	950	950	950	950	950	951	951	950	950	950	950	949	949	949	949	950	950	951	949	949.8
28	950	950	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	950	950	949	949.2
29	950	949	949	949	948	947	947	946	946	946	945	945	944	944	943	942	942	941	940	940	940	939	939	939	950	939	944.1
Max.	**964**	**964**	**965**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**963**	**963**	**963**	**963**	**963**	**964**	**964**	**964**	**964**	**964**	**965**		
Min.	**923**	**925**	**925**	**925**	**925**	**925**	**925**	**925**	**926**	**928**	**926**	**924**	**923**	**922**	**921**	**919**	**919**	**918**	**917**	**918**	**919**	**920**	**920**	**922**		**917**	
Avg.	**946**	**947**	**947**	**947**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**946**	**945**	**945**	**945**	**945**	**945**	**946**	**946**	**946**	**946**			**945.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	938	938	938	938	937	937	937	937	938	938	938	939	939	939	939	939	939	940	939	939	939	939	939	939	940	937	938.4
2	939	939	939	938	939	939	939	940	941	942	944	945	946	946	946	947	947	947	948	948	949	950	950	951	951	938	944.1
3	951	952	952	951	951	950	949	949	949	948	948	947	947	948	948	949	949	950	951	951	951	951	952	953	953	947	949.9
4	953	953	953	953	953	952	951	951	951	951	950	950	950	951	951	951	951	951	950	951	951	950	949	948	953	948	951.0
5	947	944	942	940	939	937	937	935	935	933	933	933	932	932	933	932	933	933	934	934	935	936	936	937	947	932	936.0
6	938	939	940	940	941	941	941	941	941	942	941	942	941	941	940	939	939	938	938	937	936	935	934	932	942	932	939.1
7	932	931	930	929	928	927	927	927	926	926	926	927	927	927	928	928	929	929	930	931	932	933	934	935	935	926	929.2
8	937	938	938	940	941	941	942	942	943	943	943	943	943	943	942	941	940	939	939	938	938	937	936	935	943	935	940.0
9	935	934	934	934	933	933	932	932	932	932	933	933	934	935	935	936	936	937	937	938	939	940	940	941	941	932	935.3
10	942	943	944	945	945	946	947	948	948	949	950	950	951	951	951	951	951	952	952	952	952	953	953	953	953	942	949.2
11	954	954	954	954	955	955	955	955	955	956	956	956	957	957	957	957	957	957	957	957	958	958	959	959	959	954	956.2
12	960	960	960	961	961	961	961	962	962	962	963	963	963	963	963	963	963	963	963	963	964	964	964	964	964	960	962.3
13	964	965	965	965	965	965	965	966	966	966	967	967	967	968	968	968	968	967	968	968	968	968	968	968	968	964	966.6
14	968	968	968	968	967	967	967	966	966	966	965	965	965	965	964	963	963	962	961	960	960	959	958	957	968	957	964.0
15	956	955	954	953	952	952	951	951	950	951	950	950	950	950	950	949	948	947	946	946	946	945	944	944	956	944	949.6
16	943	943	942	942	942	941	941	940	940	940	940	939	939	939	939	938	938	937	937	937	937	937	937	937	943	937	939.4
17	938	938	939	939	939	939	939	940	940	940	940	941	941	941	941	941	941	941	942	942	942	943	943	944	944	938	940.5
18	944	944	945	945	945	946	946	946	946	946	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	944	946.4
19	947	947	947	947	947	948	948	948	948	949	949	949	950	950	950	950	951	950	950	951	951	951	951	951	951	947	949.2
20	951	952	952	952	952	952	952	952	952	952	952	953	953	953	953	953	953	952	952	952	951	951	951	951	953	951	951.9
21	950	950	949	949	948	948	948	948	948	949	949	949	949	949	949	950	950	949	949	950	950	950	950	950	950	948	949.2
22	950	950	950	949	949	948	948	948	948	948	947	947	947	947	947	946	946	946	946	946	946	946	947	947	950	946	947.5
23	947	947	946	946	946	946	945	945	945	945	944	944	944	944	944	944	944	944	944	944	944	944	944	944	947	944	944.8
24	944	944	944	945	944	945	945	945	945	946	946	947	947	947	947	947	947	948	948	948	949	949	950	950	950	944	946.6
25	951	952	952	953	953	954	954	955	955	956	956	956	957	957	957	957	957	957	957	957	958	958	958	959	959	951	955.7
26	959	959	959	959	960	960	960	960	961	961	961	961	962	962	962	962	962	962	963	963	963	964	964	964	964	959	961.4
27	965	965	965	965	965	965	965	965	965	965	965	966	966	966	966	966	966	966	966	966	967	967	967	967	967	965	965.8
28	968	968	968	968	968	968	968	968	968	968	968	968	968	967	967	967	966	966	965	965	965	965	965	965	968	965	967.1
29	965	965	964	964	964	964	964	963	963	963	962	962	962	961	961	960	960	959	958	958	957	957	957	956	965	956	961.1
30	956	956	956	956	955	955	954	956	956	957	957	957	958	958	958	958	958	958	958	957	959	960	960	960	960	954	957.1
31	959	961	961	962	961	959	960	960	960	960	959	959	959	958	958	958	957	956	955	955	954	953	953	953	962	953	957.8
Max.	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**967**	**968**	**968**	**968**	**968**	**968**	**968**	**968**		
Min.	**932**	**931**	**930**	**929**	**928**	**927**	**927**	**927**	**926**	**926**	**926**	**927**	**927**	**927**	**928**	**928**	**929**	**929**	**930**	**931**	**932**	**933**	**934**	**932**		**926**	
Avg.	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**			**950.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	953	952	952	951	951	951	951	951	951	951	951	952	951	951	952	952	952	952	952	953	953	954	954	955	955	951	952.1
2	956	956	957	958	958	959	960	960	961	961	961	962	962	962	962	961	961	960	960	960	959	959	958	958	962	956	959.6
3	958	957	957	957	957	957	957	956	956	956	956	956	955	955	955	954	954	953	953	951	951	951	950	950	958	950	954.6
4	949	948	949	948	948	947	947	947	948	948	948	948	948	949	949	948	948	949	948	950	951	952	954	955	955	947	949.0
5	956	957	957	958	958	958	959	959	959	959	959	959	959	959	959	959	958	958	958	958	959	959	959	959	959	956	958.4
6	959	959	959	959	959	959	959	959	959	959	959	958	958	958	958	958	958	958	958	958	958	958	958	958	959	958	958.5
7	959	959	959	959	960	960	960	960	960	960	960	961	961	960	960	960	960	959	959	959	959	959	959	958	961	958	959.6
8	958	958	957	957	956	956	955	955	954	954	953	952	952	952	952	951	951	950	950	950	950	951	951	951	958	950	953.1
9	952	952	953	953	953	953	953	954	954	954	954	954	954	954	954	954	954	954	954	953	954	954	954	955	955	952	953.5
10	955	955	955	956	956	956	957	957	958	958	959	959	959	960	960	960	960	961	961	961	962	962	962	963	963	955	958.8
11	963	963	964	964	964	964	964	964	965	965	965	965	965	965	964	964	964	963	963	963	963	962	962	962	965	962	963.8
12	961	960	960	959	959	958	958	958	957	957	957	957	956	956	956	956	956	955	955	955	955	954	954	953	961	953	956.8
13	953	952	952	952	951	951	951	951	950	950	949	950	949	950	950	950	950	951	950	950	950	950	951	951	953	949	950.6
14	952	952	953	953	952	953	954	954	955	955	955	955	955	956	955	955	955	955	954	954	954	954	953	953	956	952	954.1
15	952	952	952	951	950	949	948	948	949	949	949	950	950	951	951	952	953	953	954	956	957	959	960	962	962	948	952.4
16	963	964	965	966	967	968	969	970	970	971	973	974	975	975	975	975	976	976	976	976	976	977	977	978	978	963	972.1
17	978	979	979	980	981	981	982	982	982	983	983	984	984	985	985	984	984	984	984	985	984	985	985	985	985	978	982.9
18	985	985	985	985	985	984	984	984	984	984	984	984	984	984	983	983	982	982	982	981	981	981	981	980	985	980	983.1
19	980	980	980	979	978	978	977	977	977	976	976	975	975	975	975	975	975	974	973	972	972	973	972	971	980	971	975.7
20	971	971	970	970	969	970	969	969	969	969	969	970	970	969	969	970	970	970	970	970	970	969	969	970	971	969	969.7
21	970	970	970	970	970	970	970	971	971	971	971	970	970	970	971	971	971	971	971	970	971	971	971	971	971	970	970.6
22	971	971	970	970	971	971	971	971	971	971	971	971	970	970	970	970	969	969	969	968	968	969	969	969	971	968	970.0
23	969	969	968	968	968	967	967	967	967	966	966	966	966	966	965	965	965	964	964	964	964	964	965	964	969	964	966.0
24	964	964	964	964	964	965	964	964	964	964	964	964	964	963	963	962	962	962	962	961	961	961	960	961	965	960	963.0
25	960	961	961	962	962	961	961	962	961	961	961	961	961	960	960	959	959	959	959	958	958	958	958	958	962	958	960.1
26	958	958	957	957	956	955	955	954	953	952	952	951	951	950	950	949	949	948	948	947	947	947	947	946	958	946	951.5
27	946	946	945	945	945	945	945	945	946	946	946	947	947	948	949	950	951	951	952	953	954	955	956	956	956	945	948.7
28	957	957	957	958	958	958	958	959	959	959	959	960	960	960	960	960	960	960	959	960	960	960	960	960	960	957	959.0
29	960	961	960	960	960	960	960	960	960	960	960	960	960	959	959	959	959	959	958	958	958	958	958	958	961	958	959.4
30	958	958	957	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	957	957	957	957	958	956	956.5
Max.	**985**	**985**	**985**	**985**	**985**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**985**	**985**	**984**	**984**	**984**	**984**	**985**	**984**	**985**	**985**	**985**	**985**		
Min.	**946**	**946**	**945**	**945**	**945**	**945**	**945**	**945**	**946**	**946**	**946**	**947**	**947**	**948**	**949**	**948**	**948**	**948**	**948**	**947**	**947**	**947**	**947**	**946**		**945**	
Avg.	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**961**	**960**	**960**	**960**	**961**	**961**	**961**			**960.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	957	957	957	957	957	957	957	957	957	957	957	957	957	956	956	956	955	955	955	954	954	954	953	953	957	953	956.1
2	953	952	952	952	951	951	951	951	952	952	952	953	953	953	954	954	954	954	954	955	955	955	956	956	956	951	953.2
3	956	956	956	957	957	957	957	957	957	957	957	957	957	957	956	956	956	955	955	954	955	955	955	954	957	954	956.0
4	954	954	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	953	953.0
5	953	953	953	953	953	953	953	954	954	954	955	955	956	956	956	957	957	958	958	959	960	960	961	961	961	953	956.0
6	962	962	963	963	964	964	965	965	965	965	966	966	966	966	966	966	966	966	966	965	965	965	965	964	966	962	964.8
7	965	964	964	964	963	963	963	963	962	961	961	961	961	962	961	961	961	960	960	960	960	960	960	959	965	959	961.6
8	959	959	959	958	958	958	958	958	957	957	957	957	956	956	956	955	955	955	954	954	954	954	954	953	959	953	956.3
9	953	953	952	952	952	952	952	952	952	952	952	953	953	954	953	954	953	954	954	954	954	954	954	954	954	952	953.0
10	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	953	953	953	953	952	952	952	952	954	952	953.3
11	951	951	950	949	948	947	947	946	945	944	943	942	941	940	939	938	937	936	935	934	934	933	932	932	951	932	941.4
12	931	931	930	930	930	929	929	929	929	929	929	929	929	929	929	930	930	931	931	932	932	932	933	934	934	929	930.2
13	935	935	936	937	937	939	940	940	941	942	942	943	944	945	945	945	946	946	946	946	946	946	946	945	946	935	942.2
14	945	945	944	943	942	941	940	938	937	936	935	934	933	932	932	932	932	932	932	932	933	934	935	936	945	932	936.3
15	937	938	939	940	942	943	944	945	947	948	950	951	952	953	955	955	956	957	958	958	959	960	961	962	962	937	950.4
16	963	964	964	965	965	966	966	966	966	967	967	967	966	966	966	965	965	965	965	964	964	964	964	964	967	963	965.2
17	964	964	964	963	963	963	962	962	962	962	962	962	962	962	961	961	961	961	961	961	961	961	961	961	964	961	962.0
18	961	962	962	962	962	963	963	963	964	964	964	965	965	965	965	965	965	965	965	965	965	966	966	966	966	961	964.1
19	966	966	966	966	966	966	966	966	965	965	965	965	965	964	964	963	963	963	962	962	962	962	961	961	966	961	964.1
20	961	961	961	960	960	960	960	959	959	959	959	958	958	958	958	958	958	958	958	958	958	958	958	959	961	958	958.9
21	959	959	960	960	960	960	961	961	962	962	963	963	963	964	964	964	965	965	966	966	967	967	968	969	969	959	963.3
22	970	970	971	971	971	972	972	972	972	972	973	972	972	971	971	970	970	970	969	968	967	967	967	966	973	966	970.3
23	965	963	961	961	959	959	959	959	958	958	958	958	958	959	961	962	963	963	964	965	965	965	965	964	965	958	961.5
24	965	965	965	964	965	965	965	965	965	965	965	964	964	964	964	965	965	965	965	965	966	966	966	967	967	964	965.0
25	967	968	968	968	969	969	969	970	970	970	970	971	971	971	971	971	972	972	972	972	973	973	974	974	974	967	970.7
26	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974.1
27	974	975	975	975	975	974	974	974	974	974	974	974	974	974	974	974	973	973	973	973	972	973	973	973	975	972	973.8
28	973	973	973	973	972	972	972	972	972	972	972	971	971	971	971	970	970	970	969	969	969	969	969	969	973	969	971.0
29	969	969	968	968	968	967	967	967	967	966	966	966	966	965	965	965	964	964	963	963	963	963	963	963	969	963	965.5
30	963	963	962	962	962	961	962	962	961	961	961	961	961	961	961	961	961	961	961	961	962	962	962	961	963	961	961.5
31	961	961	961	961	961	961	960	960	961	960	961	961	960	960	960	960	959	959	958	958	957	956	956	955	961	955	959.4
Max.	**974**	**975**	**975**	**975**	**975**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**975**		
Min.	**931**	**931**	**930**	**930**	**930**	**929**	**929**	**929**	**929**	**929**	**929**	**929**	**929**	**929**	**929**	**930**	**930**	**931**	**931**	**932**	**932**	**932**	**932**	**932**		**929**	
Avg.	**959**	**959**	**959**	**959**	**959**	**958**	**958**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**958**	**959**	**959**			**958.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	955	955	955	955	954	954	953	953	952	952	952	951	952	951	951	950	950	949	950	949	949	949	949	949	955	949	951.6
2	949	949	949	949	948	948	948	948	948	948	948	947	947	947	946	946	946	945	945	945	945	945	945	945	949	945	946.8
3	945	945	945	944	944	944	944	945	945	945	945	945	945	946	946	946	946	946	946	947	947	947	947	947	947	944	945.5
4	948	948	948	947	947	947	947	947	947	947	947	947	947	947	947	946	947	947	947	947	947	947	947	947	948	946	947.1
5	947	947	947	947	946	946	946	946	946	946	946	946	946	946	946	947	947	948	948	948	949	949	950	951	951	946	947.1
6	951	951	951	952	953	953	953	954	954	955	955	955	956	956	956	956	956	957	957	958	958	958	959	959	959	951	955.1
7	960	960	961	961	961	962	962	962	962	962	963	963	963	963	963	963	963	963	962	963	963	963	963	964	964	960	962.1
8	964	964	965	965	965	965	965	965	965	965	965	965	966	966	966	966	966	966	965	965	965	965	966	966	966	964	965.2
9	966	966	967	966	966	966	967	966	967	967	967	967	967	967	967	967	967	967	966	966	966	966	966	967	967	966	966.6
10	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	967	968	968	968	968	968	967	967.0
11	968	968	968	969	968	968	969	968	968	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968.6
12	969	969	969	969	969	969	969	968	968	968	968	967	967	967	966	966	966	965	965	965	965	965	965	965	969	965	967.0
13	965	965	965	964	964	964	965	965	965	965	965	965	966	966	966	966	967	967	966	967	967	967	967	967	967	964	965.6
14	968	968	968	968	969	969	969	970	970	970	970	970	971	971	970	970	970	970	971	971	971	971	971	972	972	968	970.0
15	972	972	972	972	972	972	972	972	972	972	971	971	971	971	971	970	970	970	970	969	969	969	968	968	972	968	970.9
16	968	968	968	967	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	965	965	965	966	966	968	965	966.6
17	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	966	965	965	965	965	965	966	966	965	965.6
18	966	966	967	967	966	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	967	967	967	967	967	966	966.6
19	967	968	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	966	966	966	966	966	966	966	968	966	967.1
20	966	965	965	965	964	964	964	964	964	964	964	963	963	963	963	962	962	962	961	961	961	961	962	962	966	961	963.1
21	961	960	961	961	960	960	960	960	959	959	959	959	958	959	959	958	958	958	958	958	958	959	959	959	961	958	959.1
22	959	959	960	960	960	960	960	961	961	962	962	962	962	963	963	963	963	963	964	964	964	964	964	964	964	959	962.0
23	964	964	964	964	963	963	963	963	962	962	961	961	961	960	960	959	959	959	958	958	957	957	957	957	964	957	960.7
24	957	957	957	957	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	957	955	955.9
25	954	953	952	953	952	952	952	952	952	951	951	951	951	950	951	952	952	951	952	952	952	952	952	953	954	950	951.9
26	952	953	953	953	953	953	953	952	952	952	952	952	952	953	953	953	953	953	953	953	953	953	953	953	953	952	952.6
27	954	954	954	954	954	954	954	954	954	955	955	955	955	955	955	954	954	954	954	954	954	954	954	955	955	954	954.3
28	955	955	955	955	955	955	955	956	956	956	957	957	957	958	958	959	959	959	960	960	961	961	962	963	963	955	957.6
29	963	964	964	965	965	965	966	966	967	967	968	968	968	968	968	968	968	968	968	968	968	969	969	969	969	963	967.0
30	969	969	969	969	969	969	969	969	969	969	969	969	969	969	968	968	967	967	967	967	967	966	967	966	969	966	968.2
Max.	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**971**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**971**	**971**	**971**	**971**	**971**	**972**	**972**		
Min.	**945**	**945**	**945**	**944**	**944**	**944**	**944**	**945**	**945**	**945**	**945**	**945**	**945**	**946**	**946**	**946**	**946**	**945**	**945**	**945**	**945**	**945**	**945**	**945**		**944**	
Avg.	**960**	**960**	**961**	**961**	**960**	**960**	**960**	**961**	**961**	**960**	**961**	**961**	**961**	**961**	**961**	**960**	**960**	**960**	**960**	**960**	**960**	**960**	**961**	**961**			**960.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	966	966	966	966	965	965	964	965	964	964	963	963	963	962	962	962	962	962	962	962	962	962	962	961	966	961	963.3
2	962	962	962	962	962	962	961	961	961	961	960	960	960	959	958	958	957	957	955	955	955	955	954	954	962	954	958.8
3	954	953	953	952	952	951	950	950	950	949	950	950	949	949	949	950	949	950	950	949	950	950	950	951	954	949	950.4
4	951	951	951	951	951	952	951	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	950	950	952	950	950.8
5	950	950	950	950	950	950	949	949	950	950	950	950	950	949	949	950	950	949	949	949	949	950	950	950	950	949	949.6
6	950	951	951	951	950	951	951	951	951	951	951	952	952	952	952	953	953	953	954	954	954	955	955	956	956	950	952.2
7	956	956	957	957	957	958	958	958	959	960	960	960	961	961	961	961	961	961	961	961	961	962	962	962	962	956	959.6
8	961	962	962	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	960	961	960	960	961	961	962	960	960.9
9	961	961	961	961	960	960	960	960	960	961	961	961	961	962	962	962	962	962	962	962	963	963	963	964	964	960	961.4
10	964	965	965	965	965	965	965	966	965	966	966	966	966	966	966	966	966	966	966	966	966	966	966	967	967	964	965.6
11	967	968	968	968	968	968	968	968	968	968	969	968	969	969	968	968	968	968	968	968	968	968	968	968	969	967	968.1
12	968	969	968	968	968	967	966	966	965	965	965	964	964	964	965	964	963	964	964	963	964	964	964	964	969	963	965.2
13	964	964	965	965	965	965	965	966	966	966	966	967	967	967	968	968	968	968	968	968	968	968	968	968	968	964	966.3
14	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	967	967	968	967	967.9
15	967	967	967	967	966	966	966	966	965	965	965	965	965	965	964	964	964	964	964	964	964	964	964	964	967	964	965.1
16	964	963	963	962	962	962	961	961	961	961	960	960	960	958	958	958	958	957	957	957	957	957	957	957	964	957	959.5
17	957	957	957	958	958	958	959	959	959	959	959	959	959	959	959	959	959	958	958	958	957	957	957	957	959	957	958.2
18	957	957	956	956	956	955	955	955	955	954	954	954	955	955	954	954	954	954	953	953	953	953	953	953	957	953	954.5
19	952	952	952	951	951	951	950	950	950	950	950	950	950	950	950	950	951	951	951	951	952	952	952	953	953	950	950.9
20	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	954	953	953	953	952	952	952	951	954	951	953.0
21	951	951	951	950	950	950	951	951	952	952	953	953	954	954	955	955	955	956	956	956	956	956	957	957	957	950	953.4
22	957	958	958	958	958	958	957	957	957	957	957	957	957	957	957	957	957	956	956	956	956	956	956	956	958	956	956.7
23	955	956	955	955	955	955	955	956	955	955	955	955	955	955	955	955	955	955	954	954	955	954	954	954	956	954	955.0
24	955	955	955	955	955	955	955	955	955	955	955	956	956	956	956	956	955	956	955	955	956	955	956	956	956	955	955.3
25	956	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	955	955	955	955	955	955	956	955	955.5
26	955	956	956	956	956	956	956	956	956	956	956	956	957	957	957	956	956	956	956	956	955	955	955	955	957	955	955.9
27	955	955	955	955	954	954	954	954	954	955	955	955	955	955	956	956	957	957	957	957	958	958	958	959	959	954	955.7
28	959	959	959	959	960	960	960	960	960	960	960	960	960	960	960	960	960	959	959	959	959	959	959	959	960	959	959.4
29	959	959	959	959	959	958	958	958	959	958	958	958	959	958	958	958	958	958	958	958	959	959	959	960	960	958	958.6
30	960	960	960	960	960	960	960	960	960	960	961	960	961	960	960	960	960	960	960	960	960	960	961	961	961	960	960.2
31	961	961	961	961	961	960	960	960	960	960	959	959	959	959	959	959	958	958	958	958	958	958	958	958	961	958	959.2
Max.	**968**	**969**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**	**968**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**		
Min.	**950**	**950**	**950**	**950**	**950**	**950**	**949**	**949**	**950**	**949**	**950**	**950**	**949**	**949**	**949**	**950**	**949**	**949**	**949**	**949**	**949**	**950**	**950**	**950**		**949**	
Avg.	**959**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**			**958.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	958	958	958	958	958	958	958	958	959	959	959	959	959	959	959	959	960	960	960	960	960	961	961	961	961	958	959.2
2	962	962	963	963	963	964	964	964	964	964	965	965	965	965	965	966	966	966	966	966	966	967	967	967	967	962	964.8
3	967	968	968	968	968	968	968	968	969	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	969	967	968.2
4	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	968	967	967	967	967	967	967	967	968	967	967.9
5	967	967	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	966	966	966	966	967	967	967	966	966.6
6	967	967	967	967	967	967	967	967	967	967	967	967	966	966	966	966	966	966	966	965	965	965	965	965	967	965	966.2
7	965	965	965	964	964	964	964	964	963	964	963	963	963	963	963	963	962	962	962	961	961	962	961	961	965	961	963.0
8	961	961	961	961	961	960	960	960	960	960	960	959	959	959	959	959	958	958	958	958	958	958	958	959	961	958	959.4
9	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	959	959	959	960	960	960	958	958.3
10	960	960	961	961	961	961	961	961	961	962	962	962	962	962	962	961	961	961	961	961	961	962	962	962	962	960	961.3
11	962	962	962	961	961	961	961	961	961	960	960	960	960	960	959	959	958	958	957	957	956	956	956	956	962	956	959.3
12	955	955	954	954	953	953	952	952	951	951	951	950	950	949	948	948	947	947	947	947	947	947	947	947	955	947	950.1
13	946	946	946	945	945	945	945	945	945	945	945	945	945	945	945	945	945	946	947	947	947	948	948	948	948	945	945.8
14	949	949	950	950	950	950	951	951	952	953	953	954	954	955	955	956	956	956	957	958	958	959	959	960	960	949	953.9
15	960	961	961	961	962	962	962	963	963	963	963	964	964	964	964	964	964	964	964	964	964	964	964	963	964	960	962.8
16	963	963	963	963	963	963	962	962	962	962	962	962	962	961	961	961	960	960	959	959	959	959	959	959	963	959	961.2
17	958	958	958	957	956	956	956	955	955	955	954	954	954	953	953	952	952	952	951	950	951	951	951	950	958	950	953.8
18	950	950	950	949	949	949	949	949	948	949	948	948	948	948	948	948	948	948	948	948	948	949	949	950	950	948	948.6
19	950	950	950	951	951	951	952	952	952	953	953	953	953	954	954	953	953	953	953	953	953	953	953	954	954	950	952.3
20	954	953	953	953	953	953	953	952	952	952	952	952	952	952	951	951	951	950	950	950	950	950	950	951	954	950	951.7
21	951	950	950	950	950	950	950	950	950	950	950	950	950	951	951	951	951	951	951	951	951	951	952	952	952	950	950.5
22	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	951	951	951	951	951	951	951	951	951	952	951	951.5
23	950	950	950	950	950	950	949	949	949	949	949	949	949	949	949	949	949	948	948	948	948	948	948	947	950	947	949.0
24	947	946	946	945	945	944	944	943	943	942	942	942	942	942	942	942	942	942	942	942	942	942	943	943	947	942	943.1
25	943	943	943	943	943	944	944	944	944	944	945	945	945	945	945	945	945	944	944	944	944	944	944	945	945	943	944.1
26	945	945	945	945	945	945	945	946	946	946	947	947	948	948	948	948	948	948	948	948	948	949	949	949	949	945	946.8
27	949	949	949	949	949	949	950	950	950	950	950	951	951	951	951	951	951	951	952	952	952	952	953	953	953	949	950.6
28	953	953	953	954	954	954	954	955	955	955	956	956	956	957	957	957	958	958	958	959	959	960	960	961	961	953	956.3
29	961	961	962	962	962	963	963	963	963	964	964	964	964	964	964	964	964	964	964	963	964	964	964	964	964	961	963.3
30	964	964	964	964	964	964	964	964	964	964	964	964	964	963	963	963	962	961	960	960	959	959	959	958	964	958	962.4
31	958	957	956	955	955	953	952	952	951	951	950	949	949	948	948	947	947	946	946	946	946	945	946	946	958	945	950.0
Max.	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**		
Min.	**943**	**943**	**943**	**943**	**943**	**944**	**944**	**943**	**943**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**942**	**943**	**943**		**942**	
Avg.	**957**	**957**	**957**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**	**956**			**956.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	946	946	946	946	946	946	947	947	947	947	947	948	948	949	949	949	950	950	950	950	951	951	952	952	952	946	948.4
2	952	952	952	952	952	952	952	953	953	953	953	954	954	953	953	952	952	951	951	950	949	949	949	949	954	949	951.8
3	949	950	950	950	950	950	951	952	952	953	954	954	955	956	956	957	957	958	958	959	959	960	961	961	961	949	954.7
4	962	962	963	963	963	964	964	964	964	964	965	965	965	965	965	965	965	965	965	965	965	966	966	966	966	962	964.4
5	966	966	966	966	966	966	966	967	967	967	967	968	968	968	968	968	968	968	968	968	968	968	968	969	969	966	967.4
6	969	968	968	968	968	967	966	965	965	964	963	962	962	961	960	959	957	957	956	954	953	953	952	952	969	952	961.1
7	951	951	950	950	950	949	949	949	949	949	949	950	950	950	951	951	951	952	952	953	953	954	955	955	955	949	951.0
8	956	957	957	958	958	958	959	959	959	959	958	958	957	957	956	955	954	953	952	951	950	950	949	948	959	948	955.4
9	948	948	948	947	947	947	946	946	946	946	946	946	946	946	945	945	945	944	944	944	944	944	944	944	948	944	945.6
10	943	943	944	943	943	943	943	943	943	943	943	943	944	944	944	944	944	944	945	945	946	946	947	948	948	943	944.1
11	948	949	949	950	950	951	951	951	952	952	952	953	953	954	954	953	953	953	953	953	953	953	953	953	954	948	951.8
12	952	952	952	951	951	951	951	951	951	951	951	951	952	951	952	952	951	951	950	950	950	950	950	950	952	950	951.0
13	950	950	949	949	949	949	949	949	949	949	949	950	950	950	950	949	949	948	948	947	947	947	946	947	950	946	948.6
14	947	946	946	946	947	947	947	947	947	947	948	948	949	949	950	950	950	951	951	952	953	953	954	955	955	946	949.1
15	955	956	956	957	957	957	957	957	958	958	958	958	959	959	959	959	958	958	958	958	958	959	959	959	959	955	957.8
16	958	958	958	957	957	956	956	955	955	954	954	954	953	953	952	952	952	951	951	951	951	951	951	951	958	951	953.8
17	951	951	951	951	951	950	950	950	950	950	950	949	949	949	948	948	947	946	946	945	944	943	943	942	951	942	948.1
18	941	940	940	939	939	938	938	938	938	938	938	939	939	939	939	940	940	940	941	942	942	943	943	944	944	938	940.0
19	944	945	945	945	945	945	945	945	945	946	946	946	947	947	947	947	948	948	948	949	950	950	951	951	951	944	946.8
20	952	952	952	953	953	953	954	954	954	954	955	956	956	956	956	957	957	957	957	957	958	958	959	959	959	952	955.4
21	959	960	960	960	960	960	961	961	961	962	962	962	963	963	963	963	963	964	964	964	965	965	965	965	965	959	962.2
22	965	966	966	966	966	966	966	966	966	966	966	966	966	966	965	965	965	964	964	964	964	964	964	964	966	964	965.0
23	964	963	963	963	963	963	963	963	963	963	963	963	963	963	962	962	962	962	961	961	962	962	961	961	964	961	962.4
24	961	961	960	960	960	959	959	959	959	958	958	958	958	958	957	957	957	956	956	956	956	956	956	956	961	956	958.0
25	956	956	956	956	956	956	956	956	956	956	956	956	956	957	957	957	957	957	957	957	957	957	957	957	957	956	956.3
26	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	957	956	956	956	956	956	957	957	957	957	956	956.9
27	957	957	957	957	956	957	957	957	958	958	958	958	959	959	959	959	958	959	959	960	960	961	961	961	961	956	958.3
28	960	960	960	960	960	960	960	960	960	959	959	959	959	959	958	958	957	957	956	956	956	956	956	956	960	956	958.5
29	956	956	957	957	957	957	957	957	957	957	957	958	958	958	958	957	956	956	956	956	955	955	955	954	958	954	956.5
30	954	953	953	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	954	952	952.0
Max.	**969**	**968**	**968**	**968**	**968**	**967**	**966**	**967**	**967**	**967**	**967**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**	**969**		
Min.	**941**	**940**	**940**	**939**	**939**	**938**	**938**	**938**	**938**	**938**	**938**	**939**	**939**	**939**	**939**	**940**	**940**	**940**	**941**	**942**	**942**	**943**	**943**	**942**		**938**	
Avg.	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**954**	**955**	**955**	**955**	**955**	**955**	**955**	**954**	**954**	**954**	**954**	**954**	**954**	**955**	**955**			**954.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	952	952	952	953	952	952	952	952	953	953	953	953	953	953	952	952	952	951	951	951	950	950	950	950	953	950	951.8
2	949	949	949	948	948	947	947	946	946	945	945	944	944	943	942	941	941	940	940	939	939	939	938	938	949	938	943.7
3	937	937	937	937	937	937	937	937	938	938	939	940	940	941	941	942	942	943	943	943	944	944	945	945	945	937	940.2
4	945	945	945	945	945	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	945	943	944.1
5	943	943	943	943	943	943	943	944	944	944	944	944	945	945	945	945	945	945	946	946	946	947	947	947	947	943	944.7
6	948	948	948	948	948	948	948	948	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	948	948.8
7	950	950	950	950	950	951	951	951	952	952	953	954	954	955	956	956	957	958	958	959	960	960	961	961	961	950	954.5
8	962	963	963	964	965	965	965	966	966	966	967	967	967	967	966	966	966	965	965	964	964	963	962	962	967	962	964.8
9	961	959	959	957	956	955	953	952	951	950	949	947	946	944	943	941	940	938	936	935	935	934	934	933	961	933	946.2
10	933	932	932	933	933	934	935	935	936	937	938	938	939	939	939	940	939	940	940	940	940	940	941	940	941	932	937.2
11	940	940	940	939	939	939	939	939	940	940	942	942	943	944	944	945	945	946	947	948	949	950	951	952	952	939	943.5
12	952	952	953	954	954	955	955	956	957	958	959	959	960	961	961	961	961	961	962	963	962	962	962	962	963	952	958.4
13	961	961	960	960	959	958	957	956	955	954	954	952	951	950	950	949	948	948	948	948	948	947	947	947	961	947	952.8
14	947	946	947	946	946	946	946	946	947	947	947	947	947	947	947	947	946	946	946	946	946	946	946	946	947	946	946.3
15	946	946	946	946	946	947	947	947	947	947	948	948	948	948	949	949	949	949	949	949	950	950	950	950	950	946	948.0
16	950	950	950	951	951	951	951	951	951	952	952	952	952	952	952	952	952	952	952	953	953	953	953	953	953	950	951.8
17	953	953	953	953	953	953	953	952	952	952	952	952	952	952	951	951	950	950	950	950	949	949	949	949	953	949	951.3
18	948	948	947	947	947	947	947	947	946	946	947	947	947	946	946	946	945	945	944	944	944	943	943	942	948	942	945.8
19	942	942	941	941	941	941	941	941	941	941	941	941	942	942	942	942	942	942	943	944	944	945	945	946	946	941	942.1
20	946	946	947	947	947	947	948	948	949	949	950	950	951	951	951	952	952	952	952	952	953	953	953	953	953	946	950.0
21	953	954	954	954	954	954	954	954	954	954	954	954	954	953	953	952	952	951	951	950	949	948	948	947	954	947	952.2
22	948	947	947	947	946	945	946	945	945	945	945	944	944	943	943	942	942	941	940	939	938	938	938	938	948	938	943.1
23	938	938	938	938	937	937	937	938	939	939	939	940	940	941	942	943	944	944	945	944	944	945	945	945	945	937	940.8
24	946	946	947	948	949	950	951	953	955	956	957	959	960	961	961	961	962	962	962	963	964	965	965	965	965	946	956.9
25	965	965	965	965	965	965	965	965	965	965	966	966	966	966	965	965	964	963	963	963	963	963	962	962	966	962	964.5
26	962	961	960	960	959	959	958	958	958	958	958	958	959	959	958	958	958	958	958	958	959	960	960	960	962	958	958.9
27	960	962	962	962	962	963	964	964	964	966	966	966	965	966	966	966	965	965	966	965	965	965	964	964	966	960	964.3
28	963	962	961	960	959	958	957	956	955	954	954	953	952	951	950	949	949	948	948	948	948	948	948	947	963	947	953.2
29	947	947	948	948	948	949	949	949	950	950	951	951	952	952	953	953	953	953	954	954	955	955	955	956	956	947	951.4
30	956	957	957	957	958	959	959	959	959	960	960	961	961	961	961	961	961	961	961	961	961	961	961	960	961	956	959.6
31	960	959	959	959	958	958	957	957	956	956	956	955	955	954	954	954	953	953	953	953	953	953	953	953	960	953	955.5
Max.	**965**	**965**	**965**	**965**	**965**	**965**	**965**	**966**	**966**	**966**	**967**	**967**	**967**	**967**	**966**	**966**	**966**	**965**	**966**	**965**	**965**	**965**	**965**	**965**	**967**		
Min.	**933**	**932**	**932**	**933**	**933**	**934**	**935**	**935**	**936**	**937**	**938**	**938**	**939**	**939**	**939**	**940**	**939**	**938**	**936**	**935**	**935**	**934**	**934**	**933**		**932**	
Avg.	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**950**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**950**	**950**	**950**	**951**	**951**	**951**	**951**			**950.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	952	952	952	951	951	951	951	950	950	953	950	952.2
2	950	949	949	949	948	948	947	947	946	946	946	945	945	945	945	945	945	945	945	945	945	945	946	945	950	945	946.3
3	946	946	946	947	947	947	948	948	948	949	950	950	951	951	951	952	952	952	953	953	953	953	953	954	954	946	949.9
4	954	954	954	954	954	953	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	954	953	953	954	953	953.9
5	953	953	953	953	952	952	952	951	951	951	951	951	951	951	951	950	950	950	950	950	950	950	950	950	953	950	951.1
6	950	950	950	949	949	949	949	948	948	948	948	948	948	947	947	947	946	946	946	946	946	946	946	946	950	946	947.6
7	946	946	947	947	948	948	949	950	950	951	952	953	953	954	954	954	955	955	955	956	956	956	957	957	957	946	952.0
8	958	958	958	958	958	957	957	957	957	957	957	956	956	955	954	953	952	951	950	949	948	947	945	944	958	944	953.7
9	944	943	941	940	940	939	938	938	938	937	937	936	936	935	935	934	934	934	934	934	934	934	934	934	944	934	936.7
10	933	933	932	931	930	930	929	928	926	926	926	926	926	926	926	926	926	926	927	927	928	928	929	930	933	926	928.2
11	929	929	929	928	928	928	928	927	927	927	928	928	928	927	927	927	927	928	928	928	929	930	930	931	931	927	928.2
12	931	932	933	933	933	934	935	936	937	938	938	940	940	941	942	943	943	944	945	946	946	947	947	948	948	931	939.6
13	948	949	950	950	950	951	951	951	952	952	952	952	953	953	953	953	953	954	954	954	955	955	955	956	956	948	952.2
14	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	956	957	957	957	958	958	958	956	956.1
15	959	960	960	960	961	961	961	961	962	962	962	963	963	962	963	963	963	963	963	963	963	963	963	963	963	959	961.8
16	962	962	962	963	963	963	963	964	965	965	966	966	966	966	966	966	966	966	965	966	966	966	966	966	966	962	964.6
17	966	965	965	965	965	965	965	965	965	965	965	965	965	964	964	964	964	964	964	964	965	965	965	966	966	964	964.8
18	966	966	967	967	968	968	968	968	969	969	970	970	970	970	970	971	971	971	971	971	972	972	972	972	972	966	969.5
19	971	971	971	971	971	970	969	969	968	968	967	966	966	965	964	965	965	964	964	964	963	963	962	961	971	961	966.7
20	961	961	961	960	959	957	956	956	956	956	955	954	954	953	952	952	952	951	951	951	950	949	949	949	961	949	954.5
21	949	948	948	948	948	947	946	946	945	944	944	943	942	941	940	940	938	938	937	936	936	936	935	935	949	935	942.1
22	935	935	935	935	935	936	936	936	937	937	938	938	939	940	940	941	941	942	942	942	943	943	943	944	944	935	938.8
23	944	944	944	943	943	943	942	942	941	940	940	939	938	936	935	934	933	932	931	930	929	928	927	926	944	926	936.9
24	925	925	924	923	922	922	922	922	922	923	923	923	924	925	925	925	926	926	927	927	928	929	930	931	931	922	924.9
25	931	932	933	934	935	934	935	935	936	936	937	937	937	938	939	939	940	941	942	943	943	944	944	945	945	931	937.9
26	946	946	947	948	948	949	949	950	950	950	951	952	952	952	952	952	951	951	950	949	949	948	948	947	952	946	949.4
27	947	946	945	943	942	941	940	940	939	938	937	936	935	934	933	932	932	931	931	930	930	930	930	930	947	930	936.3
28	930	930	930	930	930	930	930	930	931	931	932	932	933	933	933	933	934	934	935	935	936	937	938	939	939	930	932.7
29	939	940	941	942	942	943	944	945	945	947	948	949	950	950	951	952	953	954	954	955	956	957	957	958	958	939	948.9
30	959	960	961	961	961	961	962	963	963	964	964	965	965	966	966	966	967	968	969	968	969	970	970	971	971	959	965.0
Max.	**971**	**971**	**971**	**971**	**971**	**970**	**969**	**969**	**969**	**969**	**970**	**970**	**970**	**970**	**970**	**971**	**971**	**971**	**971**	**971**	**972**	**972**	**972**	**972**	**972**		
Min.	**925**	**925**	**924**	**923**	**922**	**922**	**922**	**922**	**922**	**923**	**923**	**923**	**924**	**925**	**925**	**925**	**926**	**926**	**927**	**927**	**928**	**928**	**927**	**926**		**922**	
Avg.	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**948**	**949**			**948.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Barometric Pressure (mbar)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	971	971	971	971	971	971	971	971	972	972	972	973	973	973	972	972	972	972	972	972	972	972	972	971	973	971	971.8
2	971	971	971	969	969	968	968	968	968	967	967	967	966	966	965	965	965	964	964	964	964	964	964	964	971	964	966.6
3	964	963	962	962	961	959	959	959	958	956	954	953	952	949	946	946	946	945	943	944	944	944	944	943	964	943	952.3
4	944	944	944	944	944	944	944	944	944	944	945	946	946	946	945	945	945	945	945	946	946	947	947	946	947	944	945.1
5	947	947	947	947	947	948	947	947	947	947	947	947	947	947	946	946	945	945	945	946	946	946	946	946	948	945	946.6
6	946	947	947	947	947	947	947	948	948	948	949	949	950	950	950	950	951	951	952	952	952	953	953	954	954	946	949.6
7	954	955	955	956	956	956	956	957	957	957	958	958	958	958	958	957	957	956	956	956	956	955	955	953	958	953	956.3
8	952	951	949	947	945	944	942	940	938	936	935	934	932	930	928	926	925	924	923	923	922	921	920	920	952	920	933.7
9	919	919	918	918	918	919	919	919	919	920	920	921	922	922	923	924	925	926	928	929	931	932	933	934	934	918	923.3
10	936	937	938	940	942	943	945	946	948	950	952	953	955	956	957	958	959	960	962	962	964	965	966	967	967	936	952.5
11	968	968	969	970	970	970	971	971	972	972	973	974	975	976	977	977	978	979	980	981	981	982	983	983	983	968	975.0
12	984	984	985	984	984	984	984	984	984	984	984	984	984	983	983	983	983	983	984	984	984	985	986	986	986	983	984.0
13	987	987	988	987	986	987	987	986	986	986	987	986	986	986	987	987	986	986	985	985	985	984	984	984	988	984	986.1
14	984	984	983	983	982	982	981	981	980	980	980	980	980	980	979	979	979	978	979	978	978	978	979	979	984	978	980.3
15	979	979	980	979	979	980	980	980	980	980	980	981	981	981	981	981	981	981	981	981	981	981	980	980	981	979	980.2
16	980	979	979	979	978	978	977	976	976	976	975	975	974	973	973	973	972	971	971	970	970	970	969	970	980	969	974.3
17	970	970	970	969	970	970	969	969	968	969	969	970	969	969	969	969	968	968	969	969	968	969	968	968	970	968	969.0
18	968	967	968	966	965	965	965	965	965	964	964	964	964	963	962	962	961	961	961	961	961	961	960	960	968	960	963.5
19	961	961	961	960	960	960	960	959	959	959	960	960	960	960	960	959	959	959	959	959	960	960	960	960	961	959	959.7
20	960	960	960	961	961	961	961	962	962	962	963	963	964	964	964	964	964	964	964	965	965	965	965	965	965	960	962.9
21	965	965	965	965	965	964	964	964	964	964	964	964	964	964	963	963	963	962	962	962	962	961	961	961	965	961	963.4
22	960	959	959	959	958	957	955	955	955	954	955	955	955	954	953	953	952	951	950	949	948	948	947	945	960	945	953.5
23	943	941	939	938	937	936	937	938	940	942	944	945	946	946	947	947	948	949	949	949	950	951	951	952	952	936	944.5
24	954	955	955	956	957	958	958	959	960	960	961	961	962	961	961	961	961	960	959	958	958	956	954	954	962	954	958.3
25	952	950	948	946	945	942	942	940	940	938	936	936	936	936	935	936	936	938	940	940	941	942	943	944	952	935	941.0
26	945	945	946	947	947	947	947	947	947	947	947	947	947	947	946	946	946	945	945	944	944	944	943	943	947	943	945.8
27	943	942	942	941	942	942	941	942	942	942	943	944	944	944	944	946	945	946	947	947	948	949	949	950	950	941	944.4
28	951	951	952	952	952	952	952	952	951	951	952	952	952	952	952	952	952	952	952	952	953	953	953	953	953	951	952.0
29	954	954	954	954	954	954	954	954	954	954	955	955	955	955	955	955	956	956	957	957	957	958	958	959	959	954	955.3
30	959	960	960	960	960	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	961	959	960.7
31	961	960	961	961	961	961	961	961	961	961	962	962	962	962	962	962	962	962	962	962	963	963	963	963	963	960	961.7
Max.	**987**	**987**	**988**	**987**	**986**	**987**	**987**	**986**	**986**	**986**	**987**	**986**	**986**	**986**	**987**	**987**	**986**	**986**	**985**	**985**	**985**	**985**	**986**	**986**	**988**		
Min.	**919**	**919**	**918**	**918**	**918**	**919**	**919**	**919**	**919**	**920**	**920**	**921**	**922**	**922**	**923**	**924**	**925**	**924**	**923**	**923**	**922**	**921**	**920**	**920**		**918**	
Avg.	**959**	**959**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**958**	**958**	**959**	**959**	**959**	**958**	**958**	**958**	**958**	**958**	**958**	**959**	**959**	**959**	**959**			**958.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.1	6.0	5.4	5.1	5.2	2.6	5.2	5.5	4.2	3.5	3.6	6.2	6.7	6.0	4.5	1.7	1.5	2.2	1.6	1.7	1.3	2.4	4.1	3.1	6.7	1.3	4.0
2	2.4	5.5	4.2	3.3	2.2	1.7	1.8	2.4	1.6	1.3	3.6	2.0	1.6	4.0	2.1	3.3	3.9	1.6	1.1	2.8	1.3	1.2	1.4	2.2	5.5	1.1	2.4
3	2.2	1.7	1.1	1.4	1.4	1.3	3.4	3.7	1.1	1.1	1.4	4.2	1.0	0.8	0.9	1.9	0.7	1.1	1.8	2.2	2.4	1.6	1.4	1.7	4.2	0.7	1.7
4	1.3	0.8	1.8	1.4	1.0	1.4	1.7	1.5	2.2	1.0	1.2	0.7	1.6	2.3	2.9	2.3	2.1	1.4	2.1	2.1	3.2	3.1	2.2	3.3	3.3	0.7	1.9
5	3.0	4.1	5.0	7.8	8.9	8.4	9.9	8.2	10.0	9.5	7.9	8.0	8.2	8.4	10.0	9.5	10.3	11.1	12.1	11.6	12.7	13.1	13.8	13.2	13.8	3.0	9.4
6	11.8	10.1	10.5	9.9	8.9	5.8	7.4	8.3	8.1	7.6	9.3	8.7	7.1	6.6	7.3	8.4	8.6	7.4	6.2	6.5	7.4	6.1	6.0	5.0	11.8	5.0	7.9
7	3.4	1.6	0.7	0.4	1.9	3.1	3.5	3.4	2.1	0.8	3.9	2.7	3.7	4.1	3.4	3.4	3.0	2.3	6.8	4.6	3.7	3.3	2.4	3.2	6.8	0.4	3.0
8	4.0	2.1	0.7	1.0	0.9	2.5	0.9	0.8	1.2	1.0	3.3	1.6	2.5	0.9	2.0	1.5	1.9	0.3	1.1	2.6	1.7	2.6	1.6	2.5	4.0	0.3	1.7
9	3.1	2.5	2.9	3.3	5.1	4.2	3.6	4.0	3.0	4.6	4.7	4.0	2.5	3.6	5.4	7.0	7.5	7.2	8.1	8.9	9.6	11.5	12.1	9.1	12.1	2.5	5.7
10	9.5	9.9	9.1	8.1	7.9	8.4	7.4	9.2	8.6	4.5	4.6	7.2	6.8	7.5	6.8	6.0	5.6	6.1	7.6	7.9	7.5	8.5	6.5	8.0	9.9	4.5	7.5
11	8.8	7.3	7.2	8.6	7.7	7.0	7.2	7.8	9.4	9.0	9.4	10.2	7.2	7.8	7.6	7.3	5.6	4.4	4.9	4.7	4.8	3.4	2.7	1.5	10.2	1.5	6.7
12	1.6	2.2	2.3	2.8	2.8	2.4	2.6	1.8	2.3	3.0	3.5	3.9	3.3	2.8	1.7	2.2	4.8	4.0	6.4	7.7	9.1	11.8	11.0	9.2	11.8	1.6	4.4
13	11.1	10.2	10.8	8.3	8.4	7.9	9.3	9.5	10.2	10.3	9.2	8.8	8.5	8.6	6.6	3.4	6.9	4.9	5.4	5.7	6.9	2.4	2.1	2.0	11.1	2.0	7.4
14	1.6	1.9	0.9	2.4	1.4	1.3	0.8	2.0	5.1	9.0	13.6	15.1	11.5	10.2	15.3	19.1	20.1	18.8	19.1	18.0	14.1	12.9	17.7	18.6	20.1	0.8	10.4
15	17.6	17.9	21.2	25.2	21.8	22.3	20.2	19.6	20.1	18.0	16.5	18.2	16.1	15.5	16.4	15.0	15.1	12.9	11.9	9.7	10.7	14.9	16.3	15.6	25.2	9.7	17.0
16	8.1	4.6	4.2	4.1	4.4	5.4	6.1	6.7	7.5	7.7	7.7	7.7	8.9	7.6	5.4	6.4	5.8	3.7	3.0	2.0	2.3	1.8	2.3	3.5	8.9	1.8	5.3
17	3.4	4.6	8.7	10.2	11.7	11.7	12.4	11.1	11.1	10.7	11.1	13.4	14.9	12.0	10.2	12.5	13.2	14.0	13.6	14.3	14.7	12.9	10.9	10.5	14.9	3.4	11.4
18	11.3	8.7	7.7	8.8	8.1	6.8	5.9	5.1	4.1	3.0	2.9	3.9	3.5	2.7	1.0	1.7	2.1	2.2	1.8	2.9	2.8	3.9	10.4	16.4	16.4	1.0	5.3
19	16.0	14.5	10.5	15.4	18.4	16.5	20.1	18.8	20.1	17.7	21.8	23.2	24.7	24.0	24.0	26.7	27.8	27.5	29.5	26.9	25.7	24.7	23.1	21.6	29.5	10.5	21.6
20	20.3	17.3	15.8	14.6	12.1	11.5	11.7	11.5	9.5	8.5	8.6	9.8	10.7	10.4	8.0	2.8	0.5	1.5	0.8	0.7	0.7	0.6	2.6	3.5	20.3	0.5	8.1
21	4.2	5.8	6.6	5.2	4.6	11.5	10.2	12.9	12.2	14.0	15.5	17.0	17.4	18.3	19.7	18.8	17.5	18.1	18.9	20.2	19.2	19.3	18.3	18.3	20.2	4.2	14.3
22	20.2	16.6	20.0	19.3	17.8	19.3	19.0	17.5	18.3	19.3	17.9	18.6	16.7	16.9	14.9	14.4	10.9	11.1	5.9	3.6	2.8	2.7	2.4	3.2	20.2	2.4	13.7
23	4.7	8.0	7.9	11.9	12.6	12.7	10.0	8.7	6.9	6.0	8.7	8.5	8.0	8.2	7.4	9.3	11.1	11.2	13.7	9.9	6.2	3.4	2.2	3.1	13.7	2.2	8.4
24	1.9	1.3	1.4	0.9	1.2	1.6	4.5	8.6	3.8	8.1	7.6	10.8	13.2	15.2	14.9	20.0	21.2	19.4	18.7	18.2	15.0	14.4	16.9	10.9	21.2	0.9	10.4
25	6.3	5.8	3.5	2.0	2.3	7.2	9.2	7.1	6.3	9.5	10.3	9.9	7.6	6.9	8.8	8.5	8.9	7.9	7.9	6.7	5.6	6.7	7.7	6.2	10.3	2.0	7.0
26	8.4	8.8	7.5	6.7	6.8	4.0	4.5	6.7	4.2	2.2	1.8	1.5	3.4	1.5	1.1	1.0	1.1	1.4	1.5	1.9	2.5	4.6	5.2	12.7	12.7	1.0	4.2
27	14.5	15.5	15.4	17.4	18.7	15.6	15.5	12.6	15.4	16.8	19.4	20.2	21.0	19.7	19.5	20.0	20.6	19.6	19.9	19.3	17.9	18.4	17.8	18.0	21.0	12.6	17.9
28	17.9	19.9	20.4	18.4	17.3	17.9	16.4	14.9	14.7	13.2	11.7	8.1	7.3	5.0	5.3	5.2	3.2	2.1	1.0	1.1	1.4	1.8	0.7	1.0	20.4	0.7	9.4
29	1.6	4.1	5.3	5.1	4.8	3.2	2.6	2.0	2.9	2.6	1.5	1.0	0.6	0.9	0.7	0.8	1.3	2.1	1.4	1.1	2.5	1.8	1.6	1.2	5.3	0.6	2.2
30	0.8	0.6	1.3	3.8	1.4	2.5	0.5	0.7	3.7	7.4	7.2	6.3	6.0	6.7	6.0	5.3	4.6	3.2	2.7	3.3	2.2	4.5	4.7	5.2	7.4	0.5	3.8
31	4.6	3.7	5.4	1.7	4.3	4.0	1.0	0.8	1.7	3.8	3.0	6.5	4.3	1.3	2.2	2.0	3.6	1.0	0.2	0.2	0.2	0.2	0.6	1.2	6.5	0.2	2.4
Max.	**20.3**	**19.9**	**21.2**	**25.2**	**21.8**	**22.3**	**20.2**	**19.6**	**20.1**	**19.3**	**21.8**	**23.2**	**24.7**	**24.0**	**24.0**	**26.7**	**27.8**	**27.5**	**29.5**	**26.9**	**25.7**	**24.7**	**23.1**	**21.6**	**29.5**		
Min.	**0.8**	**0.6**	**0.7**	**0.4**	**0.9**	**1.3**	**0.5**	**0.7**	**1.1**	**0.8**	**1.2**	**0.7**	**0.6**	**0.8**	**0.7**	**0.8**	**0.5**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.6**	**1.0**		**0.2**	
Avg.	**7.5**	**7.2**	**7.3**	**7.6**	**7.5**	**7.5**	**7.6**	**7.5**	**7.5**	**7.6**	**8.1**	**8.6**	**8.3**	**7.9**	**7.8**	**8.0**	**8.1**	**7.5**	**7.6**	**7.4**	**7.0**	**7.1**	**7.4**	**7.6**			**7.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.8	0.6	0.5	0.6	0.7	0.7	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.8	0.2	0.4
2	0.2	0.2	0.2	1.9	2.5	1.3	0.4	0.8	1.1	0.9	1.2	3.4	7.2	7.1	10.5	9.6	8.0	7.5	6.5	5.9	5.8	6.6	8.3	9.3	10.5	0.2	4.4
3	8.8	4.3	5.5	5.0	5.5	7.3	9.0	10.0	7.4	7.4	9.9	6.9	8.6	3.7	4.9	3.4	2.4	1.6	2.2	1.8	3.6	2.9	3.4	5.4	10.0	1.6	5.4
4	4.5	3.4	4.1	3.2	2.8	1.5	1.2	4.0	3.4	0.9	0.7	0.7	0.7	0.9	1.6	1.7	4.6	2.2	2.6	2.1	3.2	2.1	2.0	2.5	4.6	0.7	2.4
5	2.4	0.8	2.6	3.5	2.4	1.7	1.1	1.2	2.8	1.7	2.1	2.5	1.5	2.0	1.1	1.7	2.7	2.5	2.8	2.0	3.2	4.8	4.7	3.6	4.8	0.8	2.4
6	4.4	3.0	4.3	3.9	0.9	4.1	3.8	2.9	4.5	5.0	3.9	5.0	5.9	5.8	2.9	2.5	3.9	1.5	2.3	2.7	4.1	4.7	3.2	5.2	5.9	0.9	3.8
7	7.3	4.3	4.0	5.4	5.9	4.8	2.1	4.3	1.4	4.8	5.6	3.7	4.0	4.0	3.8	3.4	2.1	3.0	1.5	1.8	1.3	1.2	1.6	2.7	7.3	1.2	3.5
8	2.0	1.9	0.9	1.9	1.2	1.0	1.3	2.7	1.0	1.4	3.2	2.5	1.2	2.8	3.5	2.3	3.2	2.5	3.2	4.4	2.2	2.5	6.2	5.0	6.2	0.9	2.5
9	6.0	7.9	11.4	12.9	11.7	11.6	10.3	9.8	4.7	3.3	3.8	1.9	1.0	1.2	1.4	2.2	2.8	2.8	1.8	1.9	1.3	3.2	3.8	2.1	12.9	1.0	5.0
10	2.6	5.2	3.1	3.1	1.5	1.4	2.2	1.2	4.4	1.8	2.9	1.3	1.8	1.2	0.8	1.3	1.7	1.3	2.5	2.4	2.9	2.3	2.1	2.0	5.2	0.8	2.2
11	1.2	2.7	3.2	4.5	4.1	4.9	4.4	4.3	3.9	4.7	3.2	1.5	0.8	1.0	3.6	2.4	1.6	1.9	1.7	1.6	0.7	1.2	1.1	1.4	4.9	0.7	2.6
12	3.9	1.4	1.0	0.9	0.9	2.0	3.0	2.4	2.3	2.1	0.9	1.4	0.7	1.4	1.6	1.2	0.9	0.8	0.9	1.2	0.9	0.7	1.0	2.3	3.9	0.7	1.5
13	10.2	15.2	11.8	13.8	16.1	15.2	15.2	14.2	16.0	19.3	20.1	17.1	15.8	16.0	15.9	14.9	15.0	15.1	15.5	14.5	13.9	14.8	14.1	13.4	20.1	10.2	15.1
14	14.0	14.2	14.4	13.6	14.2	13.4	13.4	12.7	13.9	12.5	16.9	16.1	14.4	7.5	8.0	9.8	8.9	10.4	9.0	7.2	4.5	5.8	5.1	5.5	16.9	4.5	11.1
15	6.7	6.1	6.3	8.5	8.5	8.6	7.6	3.5	4.0	3.1	1.4	0.8	0.9	0.8	1.3	1.2	2.5	1.4	1.1	1.1	1.0	3.8	4.9	13.0	13.0	0.8	4.1
16	15.9	19.5	18.8	16.3	16.1	16.4	13.0	14.6	12.2	9.5	10.0	8.9	9.9	9.7	10.1	9.0	8.0	8.7	8.8	8.3	11.8	11.8	12.9	7.3	19.5	7.3	12.0
17	5.4	8.6	14.7	13.3	15.1	13.8	12.6	14.4	11.6	7.9	6.1	6.3	5.9	8.0	9.4	7.5	5.9	13.2	16.8	16.8	16.4	15.6	18.7	17.8	18.7	5.4	11.7
18	15.0	16.3	14.0	14.5	15.6	17.2	19.7	18.4	18.2	17.6	16.7	14.2	14.2	13.3	13.2	12.5	13.6	13.0	13.2	13.0	10.9	10.7	9.8	10.3	19.7	9.8	14.4
19	9.4	9.9	6.6	3.5	4.3	3.9	2.3	5.2	6.5	5.2	3.2	5.8	6.1	7.9	9.0	8.1	6.0	4.9	4.3	7.0	7.1	3.4	2.9	4.2	9.9	2.3	5.7
20	11.8	12.8	16.5	15.8	14.8	15.6	17.3	19.4	18.0	14.8	12.9	11.0	12.2	13.4	11.7	8.3	6.9	4.9	4.4	4.2	4.7	3.5	4.4	7.3	19.4	3.5	11.1
21	9.8	5.5	4.4	6.5	9.3	7.7	4.3	3.3	3.9	2.6	3.3	6.5	7.6	9.0	7.9	6.6	4.8	4.1	4.4	2.5	2.2	1.9	3.3	3.1	9.8	1.9	5.2
22	2.8	2.6	3.8	3.2	2.9	2.3	2.4	2.6	4.2	4.6	4.0	3.2	4.0	5.3	11.1	14.1	14.7	12.0	11.9	12.3	12.6	11.7	10.7	10.6	14.7	2.3	7.1
23	9.3	8.3	5.0	4.2	2.2	0.8	0.7	1.0	1.0	2.0	1.0	1.8	2.7	2.6	1.3	3.0	2.1	2.1	1.1	1.2	1.7	2.5	1.8	1.4	9.3	0.7	2.5
24	3.2	3.3	6.0	6.9	7.4	6.2	5.8	6.1	5.5	4.9	4.7	5.4	4.6	3.9	2.9	2.6	3.7	4.8	5.3	6.1	7.3	9.9	9.7	7.2	9.9	2.6	5.6
25	5.5	6.2	7.2	10.1	9.0	10.2	8.2	7.7	5.2	3.3	2.2	1.7	1.4	1.9	0.9	1.1	0.8	0.6	1.3	1.5	1.6	2.1	2.6	3.3	10.2	0.6	4.0
26	5.7	2.1	2.5	1.0	1.3	1.1	1.0	0.8	0.7	0.8	1.0	0.9	1.3	0.9	1.0	1.4	2.3	4.4	3.8	3.2	3.1	5.2	6.4	6.5	6.5	0.7	2.4
27	5.6	1.8	2.1	3.0	5.0	4.9	1.2	2.2	1.0	1.0	0.7	0.8	1.2	0.9	0.9	1.1	1.2	1.1	1.2	1.1	1.2	1.7	1.6	0.7	5.6	0.7	1.8
28	1.2	1.4	0.9	1.9	1.2	1.6	0.7	1.3	1.2	1.2	2.5	0.8	1.4	3.3	2.5	1.5	3.1	2.4	1.1	1.7	1.0	1.7	1.0	2.6	3.3	0.7	1.6
29	3.1	1.1	1.5	1.1	1.9	1.0	4.0	2.8	4.3	1.9	1.9	2.1	3.1	2.8	2.9	1.0	1.8	2.0	1.4	3.6	5.1	4.8	3.7	3.1	5.1	1.0	2.6
Max.	**15.9**	**19.5**	**18.8**	**16.3**	**16.1**	**17.2**	**19.7**	**19.4**	**18.2**	**19.3**	**20.1**	**17.1**	**15.8**	**16.0**	**15.9**	**14.9**	**15.0**	**15.1**	**16.8**	**16.8**	**16.4**	**15.6**	**18.7**	**17.8**	**20.1**		
Min.	**0.2**	**0.2**	**0.2**	**0.6**	**0.7**	**0.7**	**0.4**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.2**	**0.3**	**0.2**	**0.2**	**0.3**	**0.2**		**0.2**	
Avg.	**6.2**	**5.9**	**6.1**	**6.3**	**6.4**	**6.3**	**5.8**	**6.0**	**5.7**	**5.0**	**5.0**	**4.6**	**4.8**	**4.8**	**5.0**	**4.7**	**4.7**	**4.6**	**4.6**	**4.6**	**4.7**	**4.9**	**5.2**	**5.5**			**5.3**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	2.7	2.8	3.4	3.0	2.7	1.1	1.0	0.8	1.6	2.5	2.5	3.0	6.4	7.8	8.7	8.9	8.1	6.6	7.3	8.1	6.2	5.6	5.8	8.9	0.8	4.6
2	5.3	6.2	7.6	10.9	16.3	14.5	12.3	13.6	13.2	14.0	12.7	11.0	9.6	7.7	7.2	6.7	7.7	7.2	6.3	5.7	6.7	7.3	6.1	5.5	16.3	5.3	9.2
3	5.9	7.3	8.8	10.4	13.1	14.7	17.6	19.7	19.4	18.1	19.7	21.0	23.0	22.0	20.9	19.2	19.3	21.4	18.1	15.8	15.2	19.2	19.6	16.3	23.0	5.9	16.9
4	15.8	15.3	15.7	16.1	12.7	12.0	14.7	14.8	14.6	15.2	18.3	19.4	19.2	20.1	19.0	18.2	19.5	19.5	19.9	18.3	17.1	18.3	17.2	15.4	20.1	12.0	16.9
5	15.8	17.5	18.2	18.0	18.5	19.5	17.6	15.5	14.4	18.0	22.0	20.8	18.4	18.3	19.0	17.1	19.4	17.9	16.0	18.8	20.4	19.0	19.0	20.5	22.0	14.4	18.3
6	19.9	19.9	18.4	16.7	15.3	14.2	12.2	12.8	12.7	13.4	11.6	10.2	10.4	13.7	13.0	15.3	15.9	14.5	14.1	8.0	4.2	3.0	4.5	3.3	19.9	3.0	12.4
7	3.7	3.6	2.8	1.9	2.4	1.2	1.2	0.9	1.1	1.3	1.1	0.6	0.7	1.4	0.8	1.3	4.6	5.5	7.2	7.4	5.4	7.6	7.4	9.1	9.1	0.6	3.3
8	10.5	10.6	10.9	8.4	4.2	2.0	2.3	5.8	6.7	5.4	5.8	8.9	9.5	6.6	6.0	4.8	3.8	5.0	7.9	7.6	7.1	6.2	6.6	7.6	10.9	2.0	6.7
9	6.4	4.5	5.5	5.7	5.8	5.5	5.3	4.1	6.0	5.0	3.4	1.9	1.8	1.8	1.8	1.0	2.5	1.9	0.6	1.2	0.7	0.6	0.8	0.7	6.4	0.6	3.1
10	0.7	4.3	4.6	3.4	5.3	8.1	3.9	3.6	5.0	5.9	4.5	5.2	5.2	2.9	2.2	4.4	2.7	4.4	2.7	5.0	6.3	6.6	6.3	6.3	8.1	0.7	4.6
11	7.1	7.4	7.8	6.7	5.4	5.2	4.7	4.5	3.9	2.2	2.4	3.8	4.0	3.0	3.1	3.7	2.0	1.9	1.1	1.9	2.5	2.1	2.0	4.6	7.8	1.1	3.9
12	2.0	1.8	2.5	3.1	2.5	1.8	1.0	1.1	1.0	0.6	1.4	1.7	2.0	2.3	3.0	2.5	2.8	3.1	2.8	2.9	2.9	2.6	2.8	3.0	3.1	0.6	2.2
13	3.3	3.4	3.8	3.5	3.6	3.4	3.1	2.7	2.3	2.2	1.8	1.4	1.3	1.4	1.7	1.7	2.0	2.1	1.6	2.2	3.0	2.1	1.1	0.7	3.8	0.7	2.3
14	1.0	1.0	0.5	0.6	0.8	0.3	0.4	0.4	0.6	0.3	0.5	0.3	0.6	1.1	1.1	3.6	3.2	4.6	6.2	9.0	6.1	6.9	10.2	8.4	10.2	0.3	2.8
15	12.9	15.2	16.2	16.7	16.4	15.9	13.3	14.7	16.3	15.6	14.4	14.5	14.2	12.9	12.9	12.4	12.5	12.6	13.8	14.8	14.0	12.8	12.9	12.5	16.7	12.4	14.2
16	11.1	10.7	11.0	9.6	7.0	3.9	2.9	2.5	1.1	1.0	1.2	1.0	1.1	1.0	1.0	0.7	1.2	1.0	0.8	0.9	2.4	2.1	1.0	1.4	11.1	0.7	3.2
17	1.3	1.4	0.9	1.1	1.2	1.0	1.5	1.5	0.6	0.5	0.6	0.9	0.7	0.6	0.7	0.8	0.5	5.3	10.0	10.8	11.6	12.0	8.5	3.8	12.0	0.5	3.2
18	2.7	2.8	5.0	5.6	5.9	4.4	5.0	4.4	5.0	6.1	4.3	4.5	3.5	3.3	4.6	5.8	5.6	5.7	6.5	6.7	8.0	8.4	5.4	6.7	8.4	2.7	5.2
19	6.2	8.0	8.4	9.6	9.0	8.5	10.6	9.9	8.1	8.9	8.8	7.5	8.3	8.2	8.2	8.7	8.8	8.6	7.4	7.4	5.4	5.2	5.8	5.3	10.6	5.2	7.9
20	4.9	5.1	5.4	4.5	3.3	3.0	2.7	2.5	1.9	1.6	1.2	0.8	0.8	0.8	0.6	0.8	0.7	1.0	3.3	3.5	3.0	2.7	2.7	1.6	5.4	0.6	2.4
21	0.7	1.0	2.5	1.9	3.1	3.4	2.9	3.0	3.2	3.2	2.4	1.1	1.4	0.6	1.8	4.2	4.2	1.6	5.6	5.3	4.0	4.2	5.1	7.4	7.4	0.6	3.1
22	6.0	5.6	5.2	2.4	2.3	5.9	5.4	2.4	2.9	2.6	3.0	4.3	4.8	2.9	2.0	2.1	3.8	3.2	1.6	0.8	0.7	4.6	5.5	3.5	6.0	0.7	3.5
23	4.3	3.1	3.0	1.8	3.5	4.2	1.2	1.4	1.5	1.4	1.3	1.7	1.6	3.6	5.3	5.3	5.0	5.0	5.1	6.5	6.5	6.0	6.0	5.4	6.5	1.2	3.7
24	4.8	3.9	4.9	2.0	2.9	1.4	1.2	2.6	2.2	2.3	2.6	2.3	1.2	1.6	1.8	1.7	2.6	3.2	3.5	3.1	1.1	0.9	0.8	1.0	4.9	0.8	2.3
25	2.3	2.4	2.4	2.0	2.8	3.7	3.5	5.4	5.1	2.8	0.9	0.9	1.3	1.1	1.5	1.1	0.9	1.1	1.3	0.8	1.2	0.7	0.7	0.8	5.4	0.7	1.9
26	1.3	1.1	1.2	1.0	1.6	1.0	1.5	1.1	1.4	2.1	2.3	1.8	1.9	1.4	1.1	1.5	3.2	5.4	4.7	4.6	3.5	2.6	5.1	5.9	5.9	1.0	2.4
27	4.1	5.0	3.4	3.9	4.5	3.1	0.7	1.2	1.6	1.2	1.1	1.3	1.8	4.2	4.2	4.6	5.7	5.8	6.7	7.0	7.1	6.3	4.9	3.0	7.1	0.7	3.8
28	1.5	2.4	1.8	1.8	0.8	1.8	1.4	1.5	1.1	0.6	1.2	1.2	1.1	0.6	1.0	0.9	0.6	1.0	0.6	0.8	1.3	1.4	2.7	3.3	3.3	0.6	1.4
29	3.8	4.3	3.4	3.3	5.9	4.3	7.0	6.2	7.1	8.4	9.0	9.9	11.0	13.1	15.0	15.7	14.8	17.0	15.4	17.6	17.8	19.3	16.6	19.9	19.9	3.3	11.1
30	20.4	19.4	18.8	18.1	18.6	18.8	21.7	20.7	19.3	18.4	16.2	15.7	15.7	16.1	16.2	15.5	15.3	15.9	18.9	18.6	18.2	15.5	14.9	16.2	21.7	14.9	17.6
31	15.4	13.9	12.8	9.1	9.6	11.8	13.9	13.0	14.2	13.9	14.9	16.8	17.6	20.5	19.8	17.1	17.1	16.4	17.1	18.4	17.7	19.2	17.2	16.6	20.5	9.1	15.6
Max.	**20.4**	**19.9**	**18.8**	**18.1**	**18.6**	**19.5**	**21.7**	**20.7**	**19.4**	**18.4**	**22.0**	**21.0**	**23.0**	**22.0**	**20.9**	**19.2**	**19.5**	**21.4**	**19.9**	**18.8**	**20.4**	**19.3**	**19.6**	**20.5**	**23.0**		
Min.	**0.7**	**1.0**	**0.5**	**0.6**	**0.8**	**0.3**	**0.4**	**0.4**	**0.6**	**0.3**	**0.5**	**0.3**	**0.6**	**0.6**	**0.6**	**0.7**	**0.5**	**1.0**	**0.6**	**0.8**	**0.7**	**0.6**	**0.7**	**0.7**		**0.3**	
Avg.	**6.6**	**6.8**	**7.0**	**6.6**	**6.7**	**6.5**	**6.2**	**6.3**	**6.3**	**6.2**	**6.2**	**6.3**	**6.3**	**6.5**	**6.6**	**6.7**	**7.0**	**7.3**	**7.5**	**7.7**	**7.4**	**7.5**	**7.3**	**7.1**			**6.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.1	15.7	15.3	14.6	14.0	14.0	12.7	11.9	11.5	10.8	11.2	11.8	11.0	9.1	13.7	12.5	11.4	10.7	10.9	8.0	5.0	3.7	0.2	0.2	16.1	0.2	10.7
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0	5.1	5.4	4.5	7.3	4.4	2.8	1.6	0.9	6.1	8.6	6.4	10.8	9.2	10.8	0.2	3.2
3	10.6	11.1	12.2	12.4	8.5	7.5	7.7	7.7	7.2	8.4	8.4	11.4	12.8	13.7	15.3	14.5	15.3	15.1	13.7	17.6	18.6	17.6	17.0	19.7	19.7	7.2	12.7
4	19.4	20.9	20.2	19.5	20.0	19.4	19.1	17.3	15.8	15.3	15.7	14.0	14.1	12.6	11.9	15.4	19.3	18.3	18.1	16.7	12.8	14.4	7.9	6.8	20.9	6.8	16.0
5	6.7	4.8	3.8	4.8	5.0	3.8	4.0	2.8	3.5	3.5	1.8	0.9	2.1	3.5	5.2	6.1	5.6	5.1	5.4	6.3	7.0	7.2	7.9	8.2	8.2	0.9	4.8
6	8.8	8.7	7.4	8.2	8.2	6.6	6.2	5.6	4.5	4.6	5.3	6.3	7.7	5.1	5.1	6.4	7.0	7.7	6.8	6.9	3.3	3.8	4.7	4.5	8.8	3.3	6.2
7	5.0	4.7	5.0	6.6	5.1	3.5	3.9	5.0	5.1	5.4	6.8	6.3	5.6	4.2	4.9	4.5	4.9	4.1	4.5	5.2	5.2	4.2	4.4	2.3	6.8	2.3	4.9
8	1.0	1.0	0.6	0.6	0.7	1.2	1.4	1.6	1.1	1.6	3.2	3.3	3.8	4.2	3.7	3.8	3.5	3.2	2.6	2.0	3.5	4.1	6.2	6.3	6.3	0.6	2.7
9	7.4	5.0	6.8	7.8	7.9	7.7	7.7	6.2	3.3	1.0	2.4	4.1	5.7	6.9	6.6	6.3	7.1	7.9	7.4	5.2	5.9	5.1	5.4	6.0	7.9	1.0	5.9
10	5.4	5.5	5.8	3.9	2.4	3.9	1.1	1.4	1.1	1.2	1.1	1.0	1.2	2.6	2.2	1.8	2.8	4.5	4.9	5.0	4.4	4.6	4.8	6.1	6.1	1.0	3.3
11	4.3	2.2	1.8	1.5	2.8	2.2	1.0	1.6	1.2	3.4	1.1	1.5	3.0	5.1	7.0	6.8	6.3	6.0	6.0	6.5	6.2	5.1	5.0	4.5	7.0	1.0	3.8
12	4.6	5.1	3.9	2.8	1.8	3.6	4.7	3.8	2.1	1.1	3.8	3.4	5.9	4.0	5.4	6.7	8.1	9.5	5.3	3.1	3.6	3.6	1.7	1.7	9.5	1.1	4.1
13	3.9	2.1	3.3	4.9	5.0	4.5	5.1	6.5	5.5	6.8	8.4	10.9	12.6	13.5	12.6	12.6	11.2	8.3	9.5	9.9	7.7	7.0	6.3	5.8	13.5	2.1	7.7
14	5.9	5.3	4.8	4.3	4.3	3.4	2.5	1.8	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	5.9	0.2	1.5
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
16	3.2	3.3	3.8	3.0	3.9	3.5	4.0	3.2	4.4	5.6	5.9	2.7	3.6	2.3	2.8	4.4	3.9	4.0	3.1	3.4	2.7	5.4	6.7	5.7	6.7	2.3	3.9
17	5.0	5.3	5.3	5.5	3.4	2.3	1.3	3.1	2.5	0.7	1.8	3.0	4.8	6.0	6.4	5.0	3.2	3.4	3.2	2.9	1.7	5.7	5.2	3.1	6.4	0.7	3.7
18	2.2	1.6	2.4	2.5	1.9	1.1	1.5	2.0	2.1	3.0	2.2	3.9	7.8	7.5	5.8	5.1	7.1	5.9	6.2	6.9	6.8	5.8	6.0	6.6	7.8	1.1	4.3
19	6.3	5.6	5.0	6.8	9.0	8.9	10.4	8.6	9.0	7.6	7.3	6.8	11.6	14.6	12.9	9.1	7.0	7.2	8.0	13.4	14.4	11.3	6.4	13.5	14.6	5.0	9.2
20	13.1	11.2	13.7	12.9	13.6	14.1	12.8	14.0	13.6	15.1	15.9	15.2	11.9	12.3	16.5	12.5	13.6	13.5	16.8	13.7	13.9	16.5	16.6	15.8	16.8	11.2	14.1
21	15.7	15.1	15.6	15.6	14.1	12.7	13.9	12.7	9.1	8.1	7.8	11.9	15.1	14.9	15.3	11.1	9.6	8.3	9.4	10.5	11.8	7.5	5.5	7.8	15.7	5.5	11.6
22	8.2	9.9	10.4	9.7	3.8	4.7	3.7	3.4	3.4	3.3	1.8	1.7	2.2	1.8	2.6	2.1	1.9	2.2	2.7	3.2	3.1	1.5	1.7	0.9	10.4	0.9	3.7
23	1.6	1.1	0.8	0.9	1.2	0.8	0.9	0.5	0.7	0.5	0.8	1.0	1.3	0.7	1.4	1.8	3.1	3.3	4.0	3.2	4.5	2.4	5.7	6.1	6.1	0.5	2.0
24	6.7	10.3	10.3	10.2	5.0	2.2	1.8	1.4	1.6	1.0	1.2	2.1	2.0	1.3	1.0	2.8	6.3	4.0	4.4	5.1	4.5	6.7	8.4	7.8	10.3	1.0	4.5
25	8.4	8.0	6.7	7.7	7.4	7.8	9.6	8.2	7.3	7.1	7.8	8.9	7.9	8.3	9.1	9.4	9.9	9.0	8.5	9.1	9.2	7.7	7.6	8.3	9.9	6.7	8.3
26	8.4	8.3	8.4	8.5	8.5	8.2	7.3	8.6	9.4	10.6	12.3	12.1	12.4	11.9	12.2	12.1	12.2	12.2	11.9	12.1	11.8	11.9	12.2	12.0	12.4	7.3	10.6
27	12.1	12.3	12.5	12.4	11.8	11.6	10.2	10.7	10.3	11.1	10.6	10.3	9.3	8.9	9.6	9.2	8.8	7.3	7.4	7.0	5.9	4.9	3.7	2.8	12.5	2.8	9.2
28	2.6	1.7	1.6	1.9	0.9	1.7	1.3	1.0	1.0	0.8	0.9	1.9	3.7	2.9	2.9	3.0	3.4	2.9	2.8	3.6	3.3	3.5	4.4	5.4	5.4	0.8	2.5
29	4.9	3.9	3.8	2.8	1.0	2.6	2.8	3.6	3.1	1.4	2.7	3.9	3.1	4.2	4.6	4.9	5.2	5.8	5.4	4.8	5.0	5.0	6.6	5.9	6.6	1.0	4.0
30	4.7	4.2	3.4	1.3	1.0	1.9	2.2	1.2	1.6	1.0	0.9	1.4	1.1	1.6	2.1	2.4	3.2	3.1	4.0	5.4	5.1	4.6	4.1	3.1	5.4	0.9	2.7
Max.	**19.4**	**20.9**	**20.2**	**19.5**	**20.0**	**19.4**	**19.1**	**17.3**	**15.8**	**15.3**	**15.9**	**15.2**	**15.1**	**14.9**	**16.5**	**15.4**	**19.3**	**18.3**	**18.1**	**17.6**	**18.6**	**17.6**	**17.0**	**19.7**	**20.9**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.7**	**6.5**	**6.5**	**6.5**	**5.8**	**5.5**	**5.4**	**5.2**	**4.7**	**4.7**	**5.0**	**5.6**	**6.3**	**6.3**	**6.9**	**6.6**	**6.8**	**6.5**	**6.5**	**6.8**	**6.5**	**6.3**	**6.1**	**6.2**			**6.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	3.0	3.5	3.7	3.4	2.7	2.1	3.1	3.9	3.1	2.5	1.6	2.4	3.4	4.2	5.9	5.3	4.9	4.8	4.9	4.6	6.1	6.3	5.8	6.6	6.6	1.6	4.1
2	7.1	6.7	5.7	5.2	4.6	5.9	6.1	6.6	5.8	5.0	2.9	1.9	1.8	1.1	2.8	5.6	5.1	6.8	5.8	3.7	1.5	2.1	1.8	0.7	7.1	0.7	4.3
3	1.1	2.4	0.2	0.2	0.2	1.1	4.6	3.3	5.0	3.4	4.0	4.2	5.6	6.4	4.5	6.7	6.4	4.9	2.6	1.8	5.1	4.8	4.3	6.5	6.7	0.2	3.7
4	9.4	6.9	8.6	9.8	11.0	8.9	7.9	6.8	7.5	7.9	6.7	4.9	1.9	0.8	2.1	3.4	3.6	3.4	1.2	0.9	1.4	1.6	0.9	1.1	11.0	0.8	4.9
5	2.9	2.2	0.8	0.8	0.7	0.7	0.6	1.1	0.8	0.8	1.3	1.4	1.1	1.1	2.0	3.4	3.5	3.9	3.4	4.0	4.2	4.1	3.4	4.5	4.5	0.6	2.2
6	4.1	3.3	3.6	4.4	3.2	3.7	2.6	3.0	3.5	8.7	10.0	9.5	11.0	12.7	12.4	10.6	11.1	11.8	11.0	12.0	10.7	12.5	14.2	16.4	16.4	2.6	8.6
7	15.5	14.7	17.2	16.7	16.8	17.6	17.6	17.7	17.0	19.1	19.1	19.6	20.5	18.9	19.0	18.9	18.4	18.3	18.2	16.8	14.7	15.5	14.5	14.1	20.5	14.1	17.4
8	17.3	16.0	14.7	15.7	16.4	16.6	14.9	13.4	12.9	15.3	14.5	14.6	15.0	15.6	15.8	14.4	14.9	14.5	14.9	14.2	13.5	13.4	12.3	10.2	17.3	10.2	14.6
9	9.8	9.6	7.5	7.0	9.0	6.5	8.7	9.8	10.8	11.2	10.5	11.1	10.8	9.6	8.2	8.4	8.0	5.6	4.9	2.6	1.6	3.2	2.1	1.5	11.2	1.5	7.4
10	1.5	0.8	0.9	0.7	0.9	0.7	1.3	0.6	0.5	0.5	1.1	0.7	1.0	2.3	3.2	3.6	3.0	2.6	2.3	2.1	3.4	3.4	5.7	6.4	6.4	0.5	2.1
11	7.1	8.6	8.3	8.3	9.3	10.9	11.3	11.7	14.0	14.3	14.1	13.8	13.9	15.2	17.7	18.3	16.0	15.4	19.8	19.1	17.7	16.6	13.4	12.7	19.8	7.1	13.6
12	15.6	11.9	9.8	7.2	8.7	9.4	9.5	8.8	6.8	7.4	9.6	12.3	10.6	12.6	14.5	15.4	14.4	12.5	12.4	12.7	12.8	13.0	12.1	12.7	15.6	6.8	11.4
13	12.0	11.3	10.8	10.2	10.3	11.6	9.0	7.3	8.7	10.0	9.1	9.3	10.2	10.6	10.8	13.1	13.4	12.7	15.0	15.4	14.0	14.8	14.5	16.2	16.2	7.3	11.7
14	14.6	11.9	7.4	3.6	1.8	2.0	4.4	7.1	7.6	6.3	6.1	6.4	7.6	7.7	6.4	4.8	6.2	7.1	6.9	5.7	5.4	2.4	0.9	1.0	14.6	0.9	5.9
15	1.4	4.8	5.6	4.5	4.7	6.2	6.5	5.3	6.4	5.7	4.3	4.8	5.6	5.6	6.5	5.8	7.5	5.7	4.2	5.9	6.3	6.2	6.9	7.0	7.5	1.4	5.6
16	8.4	7.8	7.2	6.3	4.7	3.8	1.6	1.3	1.7	1.9	1.6	3.8	4.4	5.0	6.4	6.9	6.9	6.4	4.8	2.8	2.9	3.1	3.6	1.9	8.4	1.3	4.4
17	1.2	0.8	0.7	0.6	0.8	1.1	0.7	1.1	1.2	1.4	1.4	1.6	2.0	2.5	2.2	2.4	2.9	3.2	2.6	2.9	3.3	5.3	6.0	8.7	8.7	0.6	2.4
18	8.7	4.8	4.5	10.3	8.1	5.1	7.1	8.6	7.8	5.0	5.6	3.8	3.2	3.4	3.1	4.6	5.8	5.6	7.3	6.5	8.1	6.2	5.6	4.8	10.3	3.1	6.0
19	5.0	2.9	1.6	2.7	2.3	2.6	2.2	1.2	1.3	1.7	1.2	2.1	1.7	2.0	2.0	2.6	4.1	4.9	4.6	4.7	4.7	5.2	5.8	5.6	5.8	1.2	3.1
20	5.0	5.3	3.9	2.2	1.4	2.7	2.3	1.0	1.4	2.1	2.4	3.7	2.4	2.5	2.1	2.1	2.6	2.8	3.5	3.6	3.0	3.1	3.9	3.4	5.3	1.0	2.9
21	3.6	3.0	1.3	1.2	1.0	0.8	0.9	0.8	1.5	1.2	1.6	1.8	2.1	3.5	4.4	3.7	4.4	4.2	3.4	4.3	8.0	8.5	7.9	7.4	8.5	0.8	3.4
22	7.4	8.3	8.3	8.7	6.8	3.9	1.7	1.2	1.6	1.4	2.2	1.9	2.0	1.8	2.1	4.0	6.1	6.8	7.7	10.0	11.1	10.7	12.5	14.1	14.1	1.2	5.9
23	16.5	18.0	19.4	20.9	20.5	21.7	22.7	22.3	21.7	22.0	20.1	20.5	21.3	21.4	18.8	20.8	17.4	16.6	14.7	14.2	14.1	14.9	17.1	18.7	22.7	14.1	19.0
24	18.8	17.7	15.8	16.8	16.8	15.4	13.9	15.6	16.8	15.6	11.7	11.4	11.4	10.0	9.2	8.4	8.3	9.2	8.1	8.1	6.7	6.3	4.8	6.3	18.8	4.8	11.8
25	7.0	5.3	5.4	5.8	6.4	4.8	4.1	6.1	6.2	6.4	6.8	6.9	6.3	6.6	8.0	7.5	8.0	6.5	6.5	5.8	6.3	5.1	4.4	4.1	8.0	4.1	6.1
26	3.4	4.4	4.5	4.7	2.3	2.0	3.0	4.0	3.6	4.6	5.1	3.8	4.1	4.3	4.0	5.3	4.6	4.2	4.6	4.1	4.8	5.8	5.3	4.8	5.8	2.0	4.2
27	5.6	3.7	2.8	2.3	1.7	2.0	1.2	0.7	1.2	2.8	2.7	3.0	2.7	2.9	2.7	3.5	3.5	3.4	3.9	4.4	4.6	4.9	7.2	6.0	7.2	0.7	3.3
28	2.5	1.5	4.4	2.7	4.0	5.3	3.2	1.8	1.3	1.9	2.9	3.6	2.3	2.3	2.7	3.4	3.4	4.3	4.8	4.9	4.8	4.9	4.9	3.5	5.3	1.3	3.4
29	3.0	3.1	3.7	3.0	3.5	2.6	4.7	5.2	5.6	5.3	5.5	5.5	6.0	5.2	5.3	5.4	4.9	4.2	4.2	4.3	4.7	4.7	3.9	3.8	6.0	2.6	4.5
30	4.0	3.0	1.8	1.6	2.1	3.8	6.2	5.0	4.0	5.6	5.5	5.5	5.4	8.3	9.0	9.5	9.3	9.4	8.6	6.2	7.4	6.5	7.3	10.2	10.2	1.6	6.0
31	14.2	13.9	14.0	11.5	11.6	11.9	13.8	14.9	12.2	11.5	12.8	12.1	11.7	13.1	13.4	14.9	12.4	12.9	12.5	10.1	11.8	15.8	16.4	15.2	16.4	10.1	13.1
Max.	**18.8**	**18.0**	**19.4**	**20.9**	**20.5**	**21.7**	**22.7**	**22.3**	**21.7**	**22.0**	**20.1**	**20.5**	**21.3**	**21.4**	**19.0**	**20.8**	**18.4**	**18.3**	**19.8**	**19.1**	**17.7**	**16.6**	**17.1**	**18.7**	**22.7**		
Min.	**1.1**	**0.8**	**0.2**	**0.2**	**0.2**	**0.7**	**0.6**	**0.6**	**0.5**	**0.5**	**1.1**	**0.7**	**1.0**	**0.8**	**2.0**	**2.1**	**2.6**	**2.6**	**1.2**	**0.9**	**1.4**	**1.6**	**0.9**	**0.7**		**0.2**	
Avg.	**7.6**	**7.0**	**6.6**	**6.4**	**6.3**	**6.2**	**6.4**	**6.4**	**6.4**	**6.7**	**6.6**	**6.7**	**6.7**	**7.1**	**7.3**	**7.8**	**7.8**	**7.6**	**7.4**	**7.0**	**7.2**	**7.4**	**7.4**	**7.6**			**7.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	15.6	13.9	13.3	13.3	12.6	11.8	12.3	12.0	14.0	14.6	17.1	15.4	15.0	16.0	15.9	15.8	15.7	16.5	13.9	12.9	11.5	7.6	6.3	5.9	17.1	5.9	13.3
2	5.6	6.7	6.6	6.7	7.4	5.1	3.4	2.7	2.9	4.2	5.8	6.8	5.6	4.5	5.2	4.6	3.8	4.4	3.0	4.5	2.6	1.6	2.5	1.7	7.4	1.6	4.5
3	2.0	0.7	1.0	1.0	1.0	1.1	2.3	1.9	1.8	1.7	1.7	2.0	3.2	4.2	4.6	6.0	6.9	8.6	9.4	10.7	11.4	11.4	11.5	9.6	11.5	0.7	4.8
4	9.7	11.3	8.9	7.7	7.3	7.6	7.3	5.4	4.5	4.4	6.1	7.8	7.3	7.6	8.3	9.6	9.9	10.4	9.9	9.7	9.7	9.0	8.2	9.2	11.3	4.4	8.2
5	10.4	11.8	11.4	10.5	11.9	12.0	11.3	10.7	9.6	9.7	9.9	10.4	10.5	10.6	11.3	10.8	10.1	9.3	7.8	5.6	5.6	3.7	1.7	3.9	12.0	1.7	9.2
6	5.4	5.2	5.3	4.8	3.8	3.1	2.6	2.2	2.5	2.5	2.2	3.6	4.2	3.8	4.7	2.7	4.2	8.9	6.7	6.0	4.9	4.8	4.5	4.6	8.9	2.2	4.3
7	1.9	2.0	4.0	2.1	3.1	4.1	4.3	4.2	5.7	4.7	5.4	5.4	5.0	4.8	3.3	2.9	3.3	5.4	3.6	5.2	6.9	6.5	6.3	6.3	6.9	1.9	4.4
8	6.0	4.5	3.1	2.6	3.3	3.3	3.3	2.3	2.2	1.6	2.3	3.3	4.1	5.0	5.7	6.1	4.9	6.4	6.8	7.0	7.1	5.4	3.3	4.0	7.1	1.6	4.3
9	3.9	4.4	3.6	3.7	4.8	6.3	4.0	3.3	4.6	4.2	3.2	2.7	2.9	3.5	3.4	4.1	4.2	4.3	4.7	4.9	5.4	5.1	4.3	5.2	6.3	2.7	4.2
10	6.0	4.7	2.7	1.7	2.2	1.9	0.9	1.1	1.2	1.7	1.1	1.6	1.5	1.4	2.2	3.6	3.4	2.5	3.4	3.9	2.8	3.8	4.3	3.3	6.0	0.9	2.6
11	1.1	1.0	0.9	1.0	0.8	1.2	1.1	1.2	1.6	1.5	1.7	1.2	1.4	2.2	4.2	4.9	4.9	4.8	4.1	4.1	3.6	3.8	3.9	5.2	5.2	0.8	2.6
12	5.1	4.1	3.0	0.9	1.6	3.3	1.5	1.1	1.4	1.8	2.2	2.2	2.2	2.5	1.3	0.8	2.2	2.5	2.6	2.7	1.3	1.8	1.6	0.5	5.1	0.5	2.1
13	0.7	0.6	1.7	2.8	3.9	2.9	2.2	1.7	3.4	2.0	1.7	1.6	1.9	2.7	2.6	2.2	2.4	1.7	2.5	3.2	3.7	3.7	4.9	5.1	5.1	0.6	2.6
14	3.0	1.9	1.4	1.5	1.4	0.9	0.7	1.3	1.3	1.7	4.1	2.3	2.9	3.1	2.1	2.4	4.6	4.8	5.8	4.1	5.6	6.4	7.8	4.6	7.8	0.7	3.1
15	1.3	1.7	1.5	1.6	1.6	1.2	1.0	1.5	1.6	2.2	2.5	2.5	2.4	3.0	2.5	5.6	6.1	6.9	4.3	4.6	5.1	6.0	6.2	4.4	6.9	1.0	3.2
16	1.0	1.1	0.9	0.6	0.7	0.5	0.7	0.7	0.8	1.5	1.2	1.3	1.7	1.7	2.3	2.8	3.2	4.2	4.8	4.4	3.8	2.9	2.1	2.6	4.8	0.5	2.0
17	1.4	0.9	1.4	0.9	0.8	0.8	0.9	0.7	1.0	1.8	3.0	2.3	1.3	2.3	3.7	4.7	4.7	4.2	4.6	5.5	6.6	6.3	5.7	4.8	6.6	0.7	2.9
18	4.0	4.9	3.1	1.0	0.9	0.7	1.0	1.2	1.7	3.4	3.0	3.7	5.5	4.7	5.0	4.9	4.8	5.3	4.3	4.2	3.0	3.0	2.9	1.3	5.5	0.7	3.2
19	0.8	1.0	1.0	0.9	1.4	0.9	1.2	1.0	2.0	2.1	2.4	2.4	1.9	2.4	3.8	3.9	4.3	4.7	3.9	4.1	4.0	3.3	2.6	2.9	4.7	0.8	2.5
20	2.9	3.1	1.4	2.1	1.0	1.0	0.9	1.2	2.2	3.1	3.7	5.1	6.2	7.7	7.8	7.8	8.1	8.6	8.3	9.0	8.7	7.4	7.3	6.9	9.0	0.9	5.1
21	9.0	13.5	10.5	8.2	5.9	4.6	3.7	4.8	4.0	2.8	2.0	1.4	1.9	2.3	2.3	2.2	2.0	2.5	3.6	4.6	3.9	2.8	5.5	4.1	13.5	1.4	4.5
22	2.6	4.8	5.1	5.7	5.5	2.8	3.4	3.2	3.7	3.0	3.4	5.6	5.9	7.1	7.3	7.6	8.5	9.9	10.3	10.8	11.5	12.4	12.6	9.6	12.6	2.6	6.8
23	10.0	10.5	9.0	8.0	8.2	8.1	6.8	8.0	9.8	10.0	8.7	7.8	7.1	7.3	7.4	7.2	6.4	5.5	5.7	7.5	7.8	6.0	4.5	6.9	10.5	4.5	7.7
24	8.9	7.7	3.7	5.5	6.0	7.9	7.9	8.6	8.8	10.7	11.5	11.3	11.9	11.5	11.9	13.0	13.9	11.8	10.0	9.9	10.4	11.5	10.0	10.7	13.9	3.7	9.8
25	11.7	14.3	16.5	16.3	14.8	13.0	13.7	14.6	16.3	17.0	16.7	16.5	17.1	18.1	18.4	14.0	13.0	14.7	12.7	11.2	10.6	10.8	7.2	5.6	18.4	5.6	14.0
26	6.8	6.3	4.4	3.9	1.7	0.8	2.9	4.2	5.6	5.7	5.2	6.2	6.7	5.5	3.9	4.1	4.5	4.6	3.0	3.0	2.5	2.0	2.6	1.2	6.8	0.8	4.1
27	2.7	1.6	1.3	1.1	1.5	1.1	0.9	4.3	6.2	6.3	6.6	7.9	9.0	8.4	7.3	7.8	6.6	7.1	6.2	6.2	5.6	4.2	3.4	3.2	9.0	0.9	4.9
28	3.5	3.4	3.5	5.1	4.0	2.3	2.3	0.9	2.7	2.7	5.8	6.5	6.9	6.6	5.1	5.6	4.2	4.7	4.5	3.9	4.7	6.4	5.4	5.1	6.9	0.9	4.4
29	4.3	4.2	4.5	4.9	4.6	2.6	2.7	3.4	3.0	3.4	2.9	3.0	3.8	5.1	5.6	6.6	6.5	6.9	6.8	7.4	8.4	8.1	7.7	7.5	8.4	2.6	5.2
30	6.4	5.2	5.2	4.5	4.6	3.7	3.5	2.9	1.7	1.3	1.8	1.9	1.6	1.8	1.6	1.7	3.1	2.4	2.8	2.8	1.6	0.9	0.9	1.2	6.4	0.9	2.7
Max.	**15.6**	**14.3**	**16.5**	**16.3**	**14.8**	**13.0**	**13.7**	**14.6**	**16.3**	**17.0**	**17.1**	**16.5**	**17.1**	**18.1**	**18.4**	**15.8**	**15.7**	**16.5**	**13.9**	**12.9**	**11.5**	**12.4**	**12.6**	**10.7**	**18.4**		
Min.	**0.7**	**0.6**	**0.9**	**0.6**	**0.7**	**0.5**	**0.7**	**0.7**	**0.8**	**1.3**	**1.1**	**1.2**	**1.3**	**1.4**	**1.3**	**0.8**	**2.0**	**1.7**	**2.5**	**2.7**	**1.3**	**0.9**	**0.9**	**0.5**		**0.5**	
Avg.	**5.1**	**5.2**	**4.7**	**4.3**	**4.3**	**3.9**	**3.7**	**3.7**	**4.3**	**4.4**	**4.8**	**5.1**	**5.3**	**5.6**	**5.7**	**5.9**	**6.0**	**6.5**	**6.0**	**6.1**	**6.0**	**5.6**	**5.3**	**4.9**			**5.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.8	1.2	1.1	2.6	2.4	0.9	1.0	0.9	1.4	1.9	3.2	5.4	6.7	8.1	9.8	11.2	11.5	11.0	10.8	10.3	9.2	8.4	8.9	13.2	13.2	0.8	5.9
2	12.4	12.4	10.6	9.2	10.5	9.3	9.5	11.1	10.5	11.7	10.2	11.6	12.6	10.2	11.1	11.3	11.0	10.5	9.9	9.1	9.7	8.8	7.0	6.9	12.6	6.9	10.3
3	5.8	7.0	7.7	8.6	6.8	8.3	6.9	11.2	10.0	9.6	8.7	6.8	5.4	7.0	7.6	7.7	7.0	6.3	5.5	5.1	4.0	2.8	2.9	3.9	11.2	2.8	6.8
4	3.7	3.6	2.7	2.3	1.3	0.9	0.9	1.0	1.2	1.7	1.8	2.4	2.0	2.0	2.3	3.4	2.0	1.4	3.1	4.2	5.1	3.5	3.4	1.2	5.1	0.9	2.4
5	1.4	1.8	0.6	1.2	0.8	1.8	1.6	1.4	1.5	2.6	3.1	2.2	1.7	1.8	1.7	3.2	2.9	3.5	2.2	3.3	3.5	3.1	1.3	2.9	3.5	0.6	2.1
6	2.7	2.1	1.8	1.5	2.2	2.8	1.7	0.7	1.5	1.4	3.4	4.3	5.3	6.5	6.3	7.3	7.0	6.6	6.0	8.6	9.8	8.4	6.1	7.4	9.8	0.7	4.6
7	8.7	6.5	8.2	8.1	5.4	5.6	4.6	7.5	11.6	11.5	11.2	11.5	10.2	9.9	9.6	9.2	7.6	7.5	6.8	6.7	4.6	3.1	2.7	2.4	11.6	2.4	7.5
8	4.6	5.0	4.2	3.1	2.9	1.6	1.9	2.2	2.6	3.3	2.5	3.5	4.2	4.8	5.0	4.9	4.8	4.4	6.5	6.2	5.2	6.2	5.7	2.6	6.5	1.6	4.1
9	2.2	2.8	4.5	3.7	2.9	4.4	3.8	4.3	6.8	8.3	5.9	6.2	8.5	8.2	8.0	9.1	8.4	8.8	9.5	9.7	9.0	10.6	10.2	9.8	10.6	2.2	6.9
10	8.5	8.0	7.2	8.0	6.5	6.6	7.4	7.5	8.1	8.5	7.8	8.7	7.7	6.3	4.8	4.9	5.5	6.8	7.0	7.9	8.2	7.9	9.2	7.7	9.2	4.8	7.4
11	5.9	4.0	7.3	7.0	7.4	7.8	2.5	3.6	3.6	3.7	3.6	4.6	6.3	6.1	5.0	5.7	6.9	6.2	7.3	7.1	6.4	6.1	6.6	6.7	7.8	2.5	5.7
12	7.0	6.9	5.1	3.7	4.8	4.1	6.6	8.2	10.7	11.2	12.5	13.8	13.4	14.3	12.5	11.7	13.5	13.5	11.2	11.0	9.2	9.8	9.3	9.0	14.3	3.7	9.7
13	10.0	8.5	8.4	8.1	8.7	8.4	7.5	6.3	5.7	6.0	5.4	5.9	5.0	5.2	4.8	3.7	4.4	3.0	2.3	2.7	3.1	3.6	4.0	4.4	10.0	2.3	5.6
14	5.2	4.8	4.5	3.3	3.2	3.9	2.9	2.7	1.3	2.5	3.2	2.9	2.8	3.0	3.0	3.3	3.4	2.9	3.8	3.9	4.3	5.0	4.1	3.8	5.2	1.3	3.5
15	4.2	2.2	3.0	3.0	3.5	2.7	3.5	4.3	3.6	4.9	5.5	6.2	5.8	6.1	8.2	9.9	8.2	6.2	5.6	6.3	5.8	5.7	5.4	4.3	9.9	2.2	5.2
16	6.7	8.6	10.0	11.3	11.6	11.3	10.4	11.9	11.8	15.1	14.5	14.3	13.5	17.0	18.4	17.7	16.0	15.8	15.0	14.5	14.0	12.4	12.8	11.7	18.4	6.7	13.2
17	10.0	10.0	7.7	8.7	9.8	9.8	6.6	6.3	5.4	5.6	6.1	6.8	6.9	5.7	6.2	5.8	5.7	5.6	6.2	5.3	6.5	7.9	8.4	7.0	10.0	5.3	7.1
18	5.9	3.1	3.9	3.4	3.7	4.3	3.7	3.3	3.1	2.1	2.5	3.2	2.0	2.3	2.3	3.1	2.1	3.1	2.5	2.8	3.1	1.4	1.5	1.3	5.9	1.3	2.9
19	1.1	1.8	3.1	4.2	4.2	3.5	2.6	4.0	4.8	5.8	4.9	5.1	5.6	6.6	6.5	5.9	7.0	6.5	6.9	4.2	3.6	3.6	3.0	3.8	7.0	1.1	4.5
20	3.7	3.0	2.6	2.1	4.5	5.7	6.1	4.7	5.5	6.1	6.4	7.5	8.4	8.6	8.3	9.0	8.2	9.5	8.4	7.7	6.4	6.5	7.1	7.5	9.5	2.1	6.4
21	8.1	9.7	9.4	8.4	7.0	6.7	5.9	6.0	5.0	3.9	2.8	2.5	3.2	3.0	2.9	2.2	3.2	3.0	3.3	2.2	2.3	1.8	6.1	6.4	9.7	1.8	4.8
22	6.0	5.4	4.3	3.4	2.0	1.0	0.6	1.1	1.7	2.2	1.9	3.2	3.1	3.2	3.5	3.3	1.6	1.7	2.4	3.0	2.1	2.0	2.8	2.2	6.0	0.6	2.7
23	1.5	1.8	1.7	1.8	1.0	1.0	0.6	2.6	2.2	3.6	4.7	4.7	4.9	5.1	5.8	6.2	5.5	4.9	4.9	5.0	4.3	4.4	3.3	1.3	6.2	0.6	3.4
24	0.9	0.7	0.9	1.2	1.4	1.1	3.0	3.6	4.8	4.7	5.8	4.7	5.5	5.8	7.4	7.8	6.6	4.6	6.7	7.6	5.4	5.7	7.3	5.3	7.8	0.7	4.5
25	5.7	5.3	6.2	5.4	5.0	5.5	4.8	7.1	7.8	7.4	9.2	8.8	9.1	8.9	7.8	8.1	7.1	6.7	6.9	6.2	6.1	5.1	5.0	5.8	9.2	4.8	6.7
26	5.1	1.0	1.2	0.9	1.7	1.9	1.5	3.7	4.1	3.1	2.9	2.4	5.0	3.6	2.5	2.9	3.0	2.9	2.8	3.0	3.7	4.8	3.5	5.4	5.4	0.9	3.0
27	6.3	5.2	5.1	3.3	2.3	2.5	2.6	2.2	4.1	4.4	4.1	5.4	3.1	3.2	3.0	3.2	4.5	4.6	4.7	4.2	3.5	4.1	4.5	3.4	6.3	2.2	3.9
28	2.6	1.1	2.2	4.0	3.4	2.7	3.5	3.7	4.1	5.4	5.6	5.6	6.6	7.7	6.3	6.3	7.7	6.6	6.5	6.2	5.1	5.1	5.4	6.0	7.7	1.1	5.0
29	5.1	4.3	5.4	4.1	1.3	4.1	5.9	8.0	6.8	8.9	11.2	8.8	8.6	6.9	7.2	7.1	7.9	8.1	7.5	8.1	6.3	7.2	7.5	6.7	11.2	1.3	6.8
30	5.5	5.5	6.8	5.9	5.3	4.8	5.3	4.4	4.9	6.0	5.9	6.4	7.4	7.5	7.9	7.6	7.8	8.5	7.1	6.7	6.8	5.1	3.7	3.7	8.5	3.7	6.1
31	2.7	2.1	1.7	2.7	3.1	1.3	1.9	2.2	2.7	3.7	5.4	4.7	4.4	4.9	5.1	4.7	4.7	4.9	5.2	4.6	4.3	4.4	6.1	6.5	6.5	1.3	3.9
Max.	**12.4**	**12.4**	**10.6**	**11.3**	**11.6**	**11.3**	**10.4**	**11.9**	**11.8**	**15.1**	**14.5**	**14.3**	**13.5**	**17.0**	**18.4**	**17.7**	**16.0**	**15.8**	**15.0**	**14.5**	**14.0**	**12.4**	**12.8**	**13.2**	**18.4**		
Min.	**0.8**	**0.7**	**0.6**	**0.9**	**0.8**	**0.9**	**0.6**	**0.7**	**1.2**	**1.4**	**1.8**	**2.2**	**1.7**	**1.8**	**1.7**	**2.2**	**1.6**	**1.4**	**2.2**	**2.2**	**2.1**	**1.4**	**1.3**	**1.2**		**0.6**	
Avg.	**5.2**	**4.7**	**4.8**	**4.6**	**4.4**	**4.4**	**4.1**	**4.8**	**5.1**	**5.7**	**5.9**	**6.1**	**6.3**	**6.4**	**6.5**	**6.7**	**6.5**	**6.3**	**6.3**	**6.2**	**5.8**	**5.6**	**5.6**	**5.5**			**5.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.2	4.2	1.6	1.1	1.3	0.8	0.7	0.8	1.2	1.9	2.5	2.2	2.0	2.0	1.8	2.8	3.9	3.7	3.8	4.6	5.7	6.5	7.5	7.5	7.5	0.7	3.1
2	6.5	5.3	5.6	4.5	4.9	4.7	4.2	4.0	3.4	3.9	5.5	5.5	5.1	5.0	4.5	4.6	5.7	5.3	4.3	3.5	4.2	3.1	2.7	2.6	6.5	2.6	4.5
3	0.9	2.5	3.1	2.9	3.7	2.4	1.2	1.2	2.3	2.8	2.4	1.7	2.2	2.5	3.3	4.5	5.2	5.9	7.3	6.7	8.8	6.9	6.4	8.2	8.8	0.9	4.0
4	8.4	8.9	8.3	6.0	6.3	6.2	5.9	6.9	6.8	7.3	3.8	4.3	5.7	5.7	5.0	5.1	5.5	5.1	6.3	6.6	3.6	3.2	4.6	4.1	8.9	3.2	5.8
5	4.4	4.3	5.4	3.6	5.1	3.6	1.7	0.8	1.6	2.8	3.1	4.9	4.5	5.4	5.2	5.3	5.7	6.3	6.5	6.5	6.0	5.9	4.8	4.6	6.5	0.8	4.5
6	4.5	1.5	2.5	1.8	4.4	4.8	4.7	3.4	4.1	5.8	4.1	3.8	6.5	7.3	6.6	6.5	7.5	7.6	6.9	6.1	5.3	4.2	3.7	3.6	7.6	1.5	4.9
7	3.8	4.1	4.5	4.1	4.1	4.1	3.9	4.4	6.0	6.6	6.5	6.3	6.1	6.8	6.1	5.7	6.6	5.6	5.6	5.9	5.8	3.5	4.1	4.5	6.8	3.5	5.2
8	4.6	4.4	3.2	2.0	1.8	1.3	1.9	1.5	3.1	5.9	6.1	5.9	5.1	5.4	4.8	5.0	4.6	4.4	4.7	4.8	5.6	5.0	3.4	3.4	6.1	1.3	4.1
9	4.1	3.0	2.3	4.2	4.7	5.2	6.3	4.3	4.2	6.0	5.1	5.4	6.8	6.7	7.3	7.0	6.5	6.3	5.9	6.3	5.4	3.8	1.7	1.1	7.3	1.1	5.0
10	1.1	1.0	0.8	0.8	0.9	1.8	2.6	4.6	5.9	4.7	3.6	3.2	2.1	1.3	2.3	2.9	3.3	3.7	4.4	5.1	3.0	5.8	5.6	4.1	5.9	0.8	3.1
11	5.5	6.3	4.8	3.5	4.1	3.2	4.3	5.7	6.5	6.1	6.2	6.3	5.8	5.8	6.5	6.8	7.5	7.0	6.1	4.8	4.3	1.7	1.8	1.9	7.5	1.7	5.1
12	1.0	1.6	0.9	0.9	1.5	1.0	0.8	0.7	0.9	1.8	1.4	1.9	2.5	3.5	3.3	2.9	3.0	3.4	4.6	3.6	1.7	2.0	1.7	1.2	4.6	0.7	2.0
13	0.8	1.1	0.9	0.9	0.8	0.8	0.8	0.8	0.9	1.0	1.1	2.0	2.1	2.2	2.4	2.2	2.9	2.8	6.9	6.2	6.1	4.7	3.2	2.4	6.9	0.8	2.3
14	1.2	1.0	0.8	1.0	1.8	1.6	2.7	1.4	3.2	6.7	6.7	5.9	5.0	4.9	5.4	4.9	5.1	6.1	5.8	5.2	4.6	2.5	1.8	3.2	6.7	0.8	3.7
15	5.1	4.2	4.4	4.2	4.6	3.1	2.7	0.9	1.1	1.4	1.6	1.8	1.4	1.4	1.4	1.6	1.8	1.7	1.4	2.3	1.2	0.9	0.8	0.6	5.1	0.6	2.1
16	0.6	1.4	2.4	1.9	2.6	3.4	4.7	5.1	4.1	6.7	5.6	5.7	5.0	4.6	5.7	6.7	7.1	6.8	6.6	9.1	8.5	3.8	3.0	4.4	9.1	0.6	4.8
17	4.0	3.2	5.1	3.4	4.0	5.0	4.7	5.0	4.5	4.6	5.0	5.6	5.8	6.2	6.8	7.3	8.4	9.0	8.8	11.4	10.4	5.8	6.4	6.9	11.4	3.2	6.1
18	7.1	6.8	6.7	5.3	4.9	1.6	1.2	0.9	0.6	1.4	3.1	3.3	3.7	3.2	3.0	3.1	3.3	2.4	2.9	2.6	1.2	0.6	0.9	1.1	7.1	0.6	2.9
19	0.8	0.8	1.5	0.7	0.6	3.0	2.3	1.6	2.0	1.4	0.9	0.9	2.3	3.3	3.3	3.4	2.8	2.8	3.4	3.6	2.7	1.6	0.7	0.8	3.6	0.6	2.0
20	1.6	1.6	1.4	0.8	0.9	0.6	1.2	1.3	0.9	1.6	2.2	2.5	1.4	1.2	1.7	1.9	2.4	3.4	3.2	3.8	2.7	2.8	2.0	0.7	3.8	0.6	1.8
21	0.9	1.0	0.6	1.0	1.9	2.3	2.5	2.8	1.8	1.3	2.2	4.0	3.3	3.6	4.0	4.2	3.3	3.4	4.2	3.8	2.9	3.8	3.6	3.8	4.2	0.6	2.7
22	3.3	2.0	1.4	1.1	0.7	0.7	0.5	0.6	0.7	1.0	1.3	1.2	1.2	2.6	2.0	1.5	2.5	2.1	2.3	2.4	1.8	1.9	2.1	0.8	3.3	0.5	1.6
23	0.9	1.0	1.3	2.3	1.3	0.8	2.7	4.1	3.9	3.2	3.1	3.0	2.4	2.0	2.5	2.3	1.9	2.2	3.9	3.4	5.1	4.5	3.5	3.3	5.1	0.8	2.7
24	4.3	3.0	1.4	1.6	1.0	1.5	0.9	2.0	3.7	2.7	3.2	3.4	4.0	4.0	4.1	4.4	4.4	4.3	2.8	2.4	1.3	3.7	3.2	1.5	4.4	0.9	2.9
25	2.8	3.7	3.4	2.3	1.2	2.1	1.3	1.5	1.3	1.2	1.3	3.0	3.6	4.1	3.9	3.9	4.8	5.2	5.1	5.7	6.4	5.9	6.4	4.7	6.4	1.2	3.5
26	2.8	3.4	2.7	3.0	3.7	3.7	4.8	4.8	6.3	6.6	6.3	6.2	7.1	6.4	7.1	5.8	6.5	5.7	4.9	5.3	4.8	3.6	1.7	2.3	7.1	1.7	4.8
27	2.8	1.7	1.9	1.8	2.1	2.1	1.1	0.9	1.3	1.3	2.8	1.7	2.4	1.7	3.4	3.4	3.3	3.6	4.0	2.8	2.6	2.5	1.7	1.7	4.0	0.9	2.3
28	2.1	1.4	1.3	0.9	0.7	0.9	2.7	1.7	1.0	1.3	2.5	2.5	2.9	2.9	3.3	3.8	4.3	2.9	3.1	2.7	4.9	4.0	4.6	3.8	4.9	0.7	2.6
29	3.9	5.0	5.0	3.2	4.0	1.9	0.9	0.9	0.9	1.3	1.5	1.5	2.3	2.5	2.9	4.6	4.0	6.0	5.6	6.3	3.1	2.2	3.1	3.3	6.3	0.9	3.2
30	3.0	1.9	1.1	1.3	1.0	0.8	1.4	2.2	1.7	1.1	1.0	1.3	1.7	2.3	2.5	3.2	3.6	4.5	5.0	4.4	5.2	7.3	9.2	9.7	9.7	0.8	3.2
31	9.4	9.3	10.1	12.8	13.2	12.6	13.4	12.1	9.1	4.0	4.3	4.5	4.0	4.9	7.2	6.0	7.2	7.8	7.8	7.4	7.2	7.0	8.4	4.9	13.4	4.0	8.1
Max.	**9.4**	**9.3**	**10.1**	**12.8**	**13.2**	**12.6**	**13.4**	**12.1**	**9.1**	**7.3**	**6.7**	**6.3**	**7.1**	**7.3**	**7.3**	**7.3**	**8.4**	**9.0**	**8.8**	**11.4**	**10.4**	**7.3**	**9.2**	**9.7**	**13.4**		
Min.	**0.6**	**0.8**	**0.6**	**0.7**	**0.6**	**0.6**	**0.5**	**0.6**	**0.6**	**1.0**	**0.9**	**0.9**	**1.2**	**1.2**	**1.4**	**1.5**	**1.8**	**1.7**	**1.4**	**2.3**	**1.2**	**0.6**	**0.7**	**0.6**		**0.5**	
Avg.	**3.5**	**3.2**	**3.1**	**2.7**	**3.0**	**2.8**	**2.9**	**2.9**	**3.1**	**3.4**	**3.4**	**3.6**	**3.7**	**3.9**	**4.2**	**4.3**	**4.7**	**4.7**	**5.0**	**5.0**	**4.6**	**3.9**	**3.7**	**3.4**			**3.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.5	7.1	5.5	3.5	2.3	6.4	4.1	3.3	3.8	5.5	7.3	6.8	5.5	6.2	6.4	7.1	5.7	5.3	4.6	4.4	3.6	4.9	5.8	6.6	8.5	2.3	5.4
2	7.1	8.2	10.0	9.5	9.5	8.9	9.1	8.8	9.4	8.2	8.5	9.1	9.8	9.1	8.4	9.0	4.8	4.0	4.3	4.2	4.6	3.9	3.5	3.4	10.0	3.4	7.3
3	3.1	3.8	3.7	3.8	4.2	3.8	3.4	1.9	1.0	0.8	0.8	1.5	2.9	4.9	4.8	4.7	4.2	3.9	3.4	3.7	4.1	4.2	4.5	5.5	5.5	0.8	3.4
4	5.0	4.2	4.5	4.7	4.5	5.7	4.4	5.0	4.3	4.9	3.1	2.7	2.6	3.7	2.9	3.0	4.0	3.3	3.2	1.8	2.0	0.7	1.8	0.9	5.7	0.7	3.4
5	1.2	1.0	1.6	1.5	1.1	0.7	0.8	0.8	0.7	0.9	0.7	1.7	2.8	2.8	3.3	2.6	3.0	3.4	2.9	2.2	1.8	1.9	1.9	1.8	3.4	0.7	1.8
6	1.7	2.9	5.5	6.7	4.1	6.0	7.5	7.3	5.6	6.1	5.6	10.1	11.9	13.4	13.3	10.8	9.2	7.3	6.7	8.4	5.3	7.6	7.2	5.2	13.4	1.7	7.3
7	7.1	7.9	9.8	8.3	4.6	4.1	4.1	5.4	4.9	4.3	5.0	8.1	8.6	6.3	5.9	5.5	7.5	6.9	6.6	6.1	6.1	5.8	7.7	7.6	9.8	4.1	6.4
8	7.7	7.0	7.4	7.8	7.4	7.7	6.2	4.1	3.5	2.8	4.0	4.2	5.1	8.3	12.2	10.2	11.0	12.4	10.2	9.1	3.8	3.6	4.5	6.2	12.4	2.8	6.9
9	7.2	7.3	6.1	4.8	3.7	1.9	1.5	1.7	2.3	2.2	3.5	3.6	4.2	5.7	8.9	9.3	9.9	9.1	8.7	9.0	8.3	7.2	7.0	5.7	9.9	1.5	5.8
10	5.4	7.3	5.3	4.2	2.9	1.3	1.0	1.0	2.2	1.9	2.9	4.8	4.2	4.8	3.5	3.2	3.9	3.7	3.5	4.4	2.7	4.1	4.9	4.0	7.3	1.0	3.6
11	4.7	5.5	4.3	5.2	6.5	4.3	3.8	3.2	2.7	4.1	4.4	4.8	3.8	3.9	4.5	3.8	4.5	4.7	4.2	4.3	5.5	6.6	6.6	7.2	7.2	2.7	4.7
12	8.2	9.3	9.6	11.1	13.6	13.1	12.7	13.0	12.8	12.5	12.1	13.9	14.1	13.3	13.8	12.2	12.3	13.2	13.4	12.6	12.3	12.2	12.8	13.0	14.1	8.2	12.4
13	13.4	12.7	13.9	13.6	13.7	14.2	14.1	13.1	13.4	12.9	14.9	14.9	15.9	14.7	12.5	12.0	12.3	11.6	12.2	12.1	12.7	10.9	10.8	10.0	15.9	10.0	13.0
14	9.6	9.6	9.5	7.5	5.5	6.4	6.0	5.1	5.7	8.1	8.5	9.0	7.3	6.7	7.3	7.0	7.3	6.4	5.3	5.9	5.4	6.1	6.5	5.8	9.6	5.1	7.0
15	5.0	4.3	5.6	5.5	5.6	4.8	4.7	4.1	5.6	6.1	6.9	8.6	9.0	8.1	8.6	8.1	9.5	8.8	8.7	8.2	6.9	7.0	7.3	6.0	9.5	4.1	6.8
16	4.9	1.9	1.3	0.8	1.3	1.8	0.8	1.0	1.4	0.9	2.8	3.4	4.5	5.0	5.3	5.1	4.7	5.2	4.4	4.8	4.2	4.0	4.5	5.1	5.3	0.8	3.3
17	5.9	5.6	3.5	1.9	1.9	4.6	5.4	4.9	3.5	1.6	1.3	2.3	2.0	2.8	4.0	5.1	4.6	6.4	7.6	5.0	4.1	3.9	3.5	3.4	7.6	1.3	4.0
18	4.9	6.0	6.9	6.0	6.4	5.6	4.6	4.7	5.9	6.2	7.0	6.9	6.0	5.3	4.8	6.4	6.4	5.1	3.6	2.7	0.9	0.9	1.7	2.6	7.0	0.9	4.9
19	1.8	1.2	1.6	1.8	2.5	4.3	4.1	4.7	5.1	4.5	3.9	3.3	3.9	3.9	4.3	6.7	5.4	5.4	5.3	5.0	3.7	3.3	3.9	3.6	6.7	1.2	3.9
20	2.9	3.7	3.0	3.8	3.5	2.3	2.9	2.4	2.7	1.4	1.8	2.8	2.9	3.2	3.6	3.4	3.3	3.3	3.0	3.0	1.3	0.7	1.2	2.7	3.8	0.7	2.7
21	1.6	0.7	1.1	2.2	1.8	2.4	3.3	2.6	1.8	0.6	0.9	1.0	1.8	3.1	3.3	4.6	4.3	5.0	5.3	4.2	4.3	4.6	4.0	4.1	5.3	0.6	2.9
22	3.1	0.8	1.7	0.6	1.0	1.3	1.2	1.4	0.5	0.7	1.2	1.3	2.0	2.6	3.1	3.7	3.8	3.2	4.0	3.9	3.7	3.7	4.2	4.5	4.5	0.5	2.4
23	4.5	3.8	3.9	5.1	6.5	6.9	7.1	6.1	5.5	5.4	5.7	6.3	5.9	6.7	7.7	7.9	8.2	6.2	7.6	8.0	7.7	7.4	7.5	6.7	8.2	3.8	6.4
24	7.0	6.3	7.1	7.4	6.9	5.8	3.8	2.6	1.8	1.9	2.5	3.4	3.8	4.6	5.2	5.2	4.4	4.8	4.0	2.9	2.6	1.4	1.9	0.8	7.4	0.8	4.1
25	0.7	0.9	1.2	0.9	1.3	0.9	0.8	1.0	1.1	1.3	1.5	1.8	1.5	1.4	1.8	2.5	2.8	3.1	2.4	1.5	0.4	0.5	0.9	0.4	3.1	0.4	1.4
26	0.5	0.6	0.8	0.6	1.0	0.7	0.5	0.7	0.6	0.6	0.6	0.2	0.3		1.7	2.3	1.3	2.3	2.3	2.4	3.3	4.2	1.8	1.1	4.2	0.2	1.3
27	2.8	2.8	1.9	1.3	3.5	5.8	4.5	2.5	3.9	5.3	5.4	6.7	7.8	7.4	6.9	6.8	9.0	9.4	8.1	6.0	5.1	5.3	4.7	3.3	9.4	1.3	5.3
28	3.1	4.5	4.6	4.7	3.4	3.6	0.9	1.0	0.9	0.9	1.0	1.4	1.7	1.7	1.7	1.6	1.7	2.9	2.9	1.7	1.7	3.5	3.0	6.4	6.4	0.9	2.5
29	8.7	9.4	8.6	4.0	3.8	4.7	3.7	5.3	5.5	5.3	6.5	7.0	7.4	6.9	6.4	6.0	4.0	4.8	4.5	2.7	1.8	1.5	2.1	1.8	9.4	1.5	5.1
30	2.5	1.2	1.0	1.2	1.6	1.1	1.9	2.8	2.4	1.4	2.4	3.9	4.3	4.2	3.5	2.6	2.9	2.7	1.8	2.4	1.2	1.5	1.0	0.8	4.3	0.8	2.2
Max.	**13.4**	**12.7**	**13.9**	**13.6**	**13.7**	**14.2**	**14.1**	**13.1**	**13.4**	**12.9**	**14.9**	**14.9**	**15.9**	**14.7**	**13.8**	**12.2**	**12.3**	**13.2**	**13.4**	**12.6**	**12.7**	**12.2**	**12.8**	**13.0**	**15.9**		
Min.	**0.5**	**0.6**	**0.8**	**0.6**	**1.0**	**0.7**	**0.5**	**0.7**	**0.5**	**0.6**	**0.6**	**0.2**	**0.3**	**1.4**	**1.7**	**1.6**	**1.3**	**2.3**	**1.8**	**1.5**	**0.4**	**0.5**	**0.9**	**0.4**		**0.2**	
Avg.	**5.0**	**4.9**	**5.0**	**4.7**	**4.5**	**4.7**	**4.3**	**4.0**	**4.0**	**4.0**	**4.4**	**5.2**	**5.5**	**5.9**	**6.0**	**5.9**	**5.9**	**5.8**	**5.5**	**5.1**	**4.4**	**4.4**	**4.6**	**4.5**			**4.9**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.2	1.0	1.2	1.9	2.5	2.9	2.5	2.3	2.7	4.0	6.7	6.2	7.2	8.8	7.4	8.5	5.6	7.5	6.5	4.9	8.1	7.1	6.4	4.0	8.8	1.0	4.9
2	3.3	2.9	2.0	2.5	2.6	3.0	2.3	2.2	2.2	1.1	1.9	1.5	0.8	1.0	1.3	2.2	4.2	3.9	2.8	3.6	5.2	6.8	6.3	6.6	6.8	0.8	3.0
3	6.3	4.1	2.5	2.8	1.4	1.8	3.6	4.6	5.5	5.0	4.5	5.7	7.0	6.7	6.8	6.9	6.1	5.4	3.9	4.0	2.4	2.4	1.2	1.2	7.0	1.2	4.2
4	2.9	1.6	1.2	1.7	1.5	1.2	1.1	0.6	1.4	0.6	0.9	1.0	1.2	1.5	1.9	2.4	2.2	1.8	2.0	1.0	1.1	0.5	0.5	1.2	2.9	0.5	1.4
5	2.8	2.6	2.6	1.6	2.5	4.5	4.6	1.8	1.1	1.0	0.7	1.4	2.2	1.9	2.0	2.5	1.7	2.7	3.4	3.7	3.6	3.9	4.0	3.3	4.6	0.7	2.6
6	3.1	3.8	3.5	2.3	1.8	1.7	2.1	1.1	0.9	1.2	1.6	1.4	2.2	2.1	2.4	2.4	2.6	3.4	3.9	4.1	3.8	3.7	4.4	5.2	5.2	0.9	2.7
7	5.1	5.4	5.6	6.4	6.9	6.8	7.5	8.2	9.1	8.6	9.2	8.6	8.9	8.5	8.0	7.8	9.1	8.5	7.5	6.5	5.7	6.2	5.2	6.7	9.2	5.1	7.3
8	6.5	7.2	7.9	8.2	7.5	7.5	6.6	5.5	4.2	4.0	4.0	4.5	3.8	4.1	4.6	5.1	5.3	4.8	4.4	3.5	1.2	1.2	2.0	1.9	8.2	1.2	4.8
9	1.6	7.6	8.7	12.8	13.3	14.1	15.0	18.2	17.2	17.1	18.0	18.2	16.8	16.6	18.1	17.6	16.9	17.9	18.5	17.7	15.9	13.6	13.1	13.9	18.5	1.6	14.9
10	12.4	11.7	10.3	7.1	5.4	5.3	5.6	5.7	5.5	3.5	4.0	4.6	5.3	4.7	5.4	7.2	8.4	7.8	6.4	7.1	8.8	8.3	7.6	7.2	12.4	3.5	6.9
11	7.3	6.4	6.6	8.2	8.0	8.8	7.7	10.0	6.0	1.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	10.0	0.2	3.1
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	5.1	9.0	5.7	7.6	7.2	6.7	6.4	7.7	9.2	12.1	11.8	12.1	0.2	3.8
14	12.3	14.6	14.7	14.6	15.7	12.7	7.8	7.7	7.8	8.0	8.7	8.6	8.1	8.1	7.8	7.1	7.0	5.8	5.3	3.3	1.8	1.5	0.5	0.2	15.7	0.2	7.9
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
16	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.9	0.9	1.7	3.5	3.9	5.7	6.0	6.3	7.4	9.1	9.1	0.2	2.0
18	10.4	11.0	13.0	13.2	12.1	14.1	13.1	12.0	13.7	13.3	11.7	9.4	9.5	8.6	6.1	3.7	4.4	4.2	2.4	3.2	2.6	2.1	1.3	1.9	14.1	1.3	8.2
19	3.1	3.4	2.3	2.7	4.0	3.1	1.2	2.1	3.5	2.6	2.6	3.1	2.8	2.8	1.6	2.5	2.5	1.4	1.2	1.3	0.8	0.8	1.3	0.8	4.0	0.8	2.2
20	0.8	1.0	0.9	0.8	0.9	1.3	0.9	1.1	0.8	0.8	1.7	1.5	1.3	1.6	1.3	1.2	0.7	1.4	1.3	0.7	1.5	1.3	0.8	0.7	1.7	0.7	1.1
21	1.1	1.2	2.0	1.4	1.1	0.9	1.7	2.8	2.2	1.1	1.7	1.5	2.2	3.8	5.4	6.7	8.2	7.7	8.8	8.8	9.0	9.1	9.6	9.2	9.6	0.9	4.5
22	10.1	8.2	9.2	7.4	7.6	8.2	7.5	5.2	5.6	5.1	6.6	6.9	8.9	7.7	7.4	5.1	5.1	7.6	7.3	10.4	9.9	8.3	3.6	2.0	10.4	2.0	7.1
23	4.1	4.0	4.2	3.2	3.7	7.7	10.8	9.5	9.4	8.5	8.9	9.7	10.8	12.7	11.7	9.0	10.2	7.2	4.0	5.1	6.0	6.6	5.4	5.3	12.7	3.2	7.4
24	6.0	6.4	5.8	7.4	7.0	8.2	10.1	7.7	6.4	7.6	7.0	6.0	4.0	2.4	5.8	6.8	6.9	6.4	7.0	6.0	3.1	2.3	2.5	2.1	10.1	2.1	5.9
25	3.6	5.0	9.6	10.7	9.0	5.1	3.8	2.8	3.6	7.7	10.7	7.4	6.6	8.2	6.1	5.8	2.1	1.9	1.3	1.0	1.2	1.1	0.8	2.0	10.7	0.8	4.9
26	4.1	2.6	1.6	1.5	2.9	4.5	6.2	7.1	6.9	7.7	8.2	7.0	6.5	6.9	5.9	6.5	9.5	8.3	10.6	10.3	16.1	13.9	13.4	12.9	16.1	1.5	7.5
27	14.4	12.8	10.8	10.8	10.5	11.4	9.7	6.7	8.4	7.3	3.0	6.5	10.1	10.2	7.2	6.2	5.7	3.8	3.6	2.0	2.1	1.2	1.5	1.1	14.4	1.1	7.0
28	1.2	2.2	2.5	1.7	2.5	2.0	3.8	8.2	11.5	11.5	10.7	9.0	7.0	6.1	5.7	2.7	3.3	3.9	2.3	1.7	2.0	3.0	1.8	1.5	11.5	1.2	4.5
29	0.7	0.3	0.6	0.6	0.2	1.1	1.8	1.6	3.5	4.5	4.7	4.9	3.3	4.1	5.7	5.3	6.2	6.0	6.1	7.2	7.8	9.0	9.1	8.8	9.1	0.2	4.3
30	8.5	8.9	8.3	8.3	9.1	4.4	2.2	2.0	1.6	1.6	1.8	1.9	2.2	2.1	1.5	1.5	2.0	2.4	1.9	2.5	2.5	1.9	1.7	2.3	9.1	1.5	3.5
31	2.6	4.1	3.9	2.2	1.5	2.5	2.5	1.9	1.0	2.3	1.8	0.5	1.4	0.4	0.6	0.7	0.5	0.5	0.4	0.6	1.1	0.9	0.6	0.7	4.1	0.4	1.5
Max.	**14.4**	**14.6**	**14.7**	**14.6**	**15.7**	**14.1**	**15.0**	**18.2**	**17.2**	**17.1**	**18.0**	**18.2**	**16.8**	**16.6**	**18.1**	**17.6**	**16.9**	**17.9**	**18.5**	**17.7**	**16.1**	**13.9**	**13.4**	**13.9**	**18.5**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**4.4**	**4.5**	**4.6**	**4.6**	**4.6**	**4.7**	**4.6**	**4.5**	**4.6**	**4.4**	**4.6**	**4.5**	**4.6**	**4.8**	**4.8**	**4.5**	**4.7**	**4.6**	**4.3**	**4.3**	**4.4**	**4.3**	**4.0**	**4.0**			**4.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.7	0.8	0.9	0.6	1.1	0.7	1.2	2.4	1.5	1.0	1.2	1.7	1.1	1.2	1.0	1.5	1.8	1.6	1.1	3.2	3.6	4.4	6.1	6.1	6.1	0.6	1.9
2	5.9	5.6	5.5	5.2	3.8	4.3	4.4	5.1	6.0	5.9	5.7	7.6	8.3	8.0	8.8	9.2	10.4	10.8	9.9	9.1	8.3	9.9	9.3	9.3	10.8	3.8	7.3
3	9.4	8.2	9.1	9.3	8.7	7.7	7.5	9.6	9.3	8.8	8.5	8.8	7.9	5.8	6.0	5.7	5.4	6.5	6.1	6.1	6.6	5.0	5.1	4.5	9.6	4.5	7.3
4	3.8	3.5	4.6	3.0	5.3	7.9	8.9	7.1	4.9	3.5	4.9	3.6	3.0	3.0	2.5	3.3	4.0	3.2	3.2	1.5	1.6	2.3	1.5	3.0	8.9	1.5	3.9
5	3.1	2.0	2.8	4.1	5.0	5.8	5.4	4.2	3.1	3.1	3.4	1.3	1.2	2.0	1.6	0.7	1.4	1.6	1.1	1.0	2.4	1.5	1.2	1.5	5.8	0.7	2.5
6	1.3	0.9	1.4	1.3	1.6	0.7	0.5	1.1	0.9	0.9	1.1	1.2	1.4	0.9	1.5	2.0	3.9	1.7	1.9	2.8	1.8	1.4	3.2	3.2	3.9	0.5	1.6
7	2.8	1.7	2.8	2.8	1.8	3.5	3.4	1.8	1.6	0.7	1.6	0.7	0.6	0.8	0.4	0.7	0.5	1.7	4.1	2.6	2.8	4.9	3.9	9.4	9.4	0.4	2.4
8	7.8	4.1	3.2	4.0	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.8	10.2	12.5	11.4	11.3	9.4	9.2	12.5	0.2	3.7
9	9.5	8.2	9.2	10.2	13.6	13.9	11.5	11.8	9.6	5.4	4.5	5.2	4.7	5.8	7.4	9.5	8.8	5.4	5.2	9.0	12.3	11.5	10.6	11.1	13.9	4.5	8.9
10	11.8	10.6	7.3	3.1	4.1	7.1	8.9	7.2	4.4	4.1	4.1	3.2	1.9	1.9	1.3	1.6	3.6	9.0	8.9	7.8	9.3	11.1	9.8	9.5	11.8	1.3	6.3
11	8.1	8.1	7.3	7.1	7.5	7.7	6.6	5.8	5.3	4.5	3.2	3.2	2.3	1.8	1.9	2.3	1.6	2.6	1.8	4.5	2.5	2.1	4.7	4.6	8.1	1.6	4.5
12	2.9	2.2	2.4	3.7	3.2	5.6	1.7	2.6	3.2	4.1	3.9	3.4	3.2	3.1	4.4	6.9	5.5	4.0	3.3	3.3	3.6	4.9	4.1	4.2	6.9	1.7	3.7
13	2.9	3.8	2.8	4.9	4.8	5.3	4.9	6.8	6.0	6.7	4.3	3.1	4.1	6.4	5.4	6.1	5.5	5.5	3.6	5.1	6.8	7.3	8.1	6.7	8.1	2.8	5.3
14	6.0	5.3	6.0	6.6	7.4	7.4	5.4	5.0	5.4	5.3	3.9	2.3	1.9	1.9	2.5	3.3	3.8	3.8	3.7	3.6	4.3	4.6	3.8	2.3	7.4	1.9	4.4
15	3.5	4.7	4.1	3.7	4.5	4.0	3.8	2.7	2.7	2.8	2.7	5.3	4.5	5.7	6.8	10.3	10.5	8.9	8.0	9.8	10.0	10.1	10.0	9.4	10.5	2.7	6.2
16	9.7	10.4	12.5	11.9	9.3	6.8	5.1	3.9	3.7	4.3	4.3	2.2	2.2	2.2	1.5	1.1	1.2	1.2	1.1	1.2	0.5	0.2	0.2	0.2	12.5	0.2	4.0
17	0.2	0.8	1.8	0.8	0.2	0.4	0.5	1.1	1.1	0.5	0.7	0.5	0.2	0.3	2.5	2.9	1.4	1.1	1.6	1.2	1.0	4.7	6.4	6.4	6.4	0.2	1.6
18	7.0	9.6	4.3	3.2	2.6	1.7	1.3	1.7	1.8	2.1	1.5	3.0	1.9	2.4	1.7	3.5	2.9	2.7	3.9	4.5	4.4	5.7	4.1	2.6	9.6	1.3	3.3
19	2.5	3.5	2.7	4.8	4.3	3.0	3.0	5.0	7.5	8.7	12.0	11.6	12.3	13.6	14.0	14.2	11.0	11.6	12.4	10.8	12.1	11.7	8.9	11.7	14.2	2.5	8.9
20	9.3	9.8	9.3	10.9	12.4	14.3	16.6	16.6	16.6	16.4	17.5	17.0	15.0	15.1	14.6	14.5	13.4	12.6	13.0	11.2	10.5	12.6	9.7	7.0	17.5	7.0	13.2
21	5.9	6.3	5.0	2.4	5.1	4.3	3.3	2.7	2.1	1.6	1.0	1.1	1.0	1.9	1.2	1.4	1.2	0.8	1.1	0.5	0.8	0.8	0.6	0.7	6.3	0.5	2.2
22	0.6	0.5	0.8	1.1	0.6	0.6	1.0	1.0	1.3	2.8	3.2	2.8	6.0	2.6	0.8	0.8	0.5	1.1	0.9	1.6	2.3	1.8	2.3	2.1	6.0	0.5	1.6
23	3.0	3.2	3.1	3.4	3.6	2.8	2.2	2.3	1.6	3.0	4.7	3.8	1.7	4.9	6.1	5.4	5.9	6.6	9.5	9.3	8.9	8.5	7.6	6.6	9.5	1.6	4.9
24	10.1	12.0	12.9	14.2	14.8	12.4	10.0	8.5	13.5	11.9	11.7	12.2	13.5	11.1	11.1	11.6	11.7	12.0	11.7	9.3	10.8	11.2	13.4	12.6	14.8	8.5	11.8
25	13.7	11.3	12.3	11.8	10.7	11.4	10.6	8.0	3.0	5.2	3.9	4.1	6.3	1.8	2.1	2.7	3.9	4.8	3.2	0.2	0.2	0.2	0.2	0.2	13.7	0.2	5.5
26	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.4	8.4	10.1	9.6	8.2	7.9	8.0	5.6	4.3	3.6	10.1	0.2	3.0
27	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.9	2.8	4.1	3.2	2.4	2.8	1.9	3.3	4.1	0.2	1.1
28	4.9	4.9	5.5	5.4	6.1	5.6	3.5	4.7	4.5	3.1	3.2	4.4	5.5	5.4	3.8	3.7	2.7	2.1	1.5	2.0	1.7	1.9	2.9	2.2	6.1	1.5	3.8
29	2.1	4.4	4.8	4.4	3.7	4.2	5.5	5.1	6.0	6.8	5.0	6.0	6.0	7.4	6.5	7.8	8.4	8.4	8.7	9.1	9.3	8.7	8.5	9.9	9.9	2.1	6.5
30	8.7	8.3	9.9	10.1	9.5	9.9	9.9	9.7	9.5	8.6	8.6	8.1	8.1	6.9	9.4	8.8	6.5	1.9	4.6	3.8	2.3	3.6	1.4	2.7	10.1	1.4	7.1
Max.	**13.7**	**12.0**	**12.9**	**14.2**	**14.8**	**14.3**	**16.6**	**16.6**	**16.6**	**16.4**	**17.5**	**17.0**	**15.0**	**15.1**	**14.6**	**14.5**	**13.4**	**12.6**	**13.0**	**12.5**	**12.3**	**12.6**	**13.4**	**12.6**	**17.5**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.8**	**0.9**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**5.3**	**5.2**	**5.2**	**5.2**	**5.2**	**5.3**	**4.9**	**4.8**	**4.6**	**4.4**	**4.4**	**4.3**	**4.2**	**4.1**	**4.4**	**5.0**	**5.0**	**4.9**	**5.2**	**5.3**	**5.4**	**5.7**	**5.4**	**5.5**			**5.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (Climatronics) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.7	4.9	4.5	2.6	2.9	2.1	0.6	0.5	0.8	1.0	0.7	0.8	1.0	0.6	0.9	0.9	1.2	2.0	2.0	2.0	3.0	4.5	4.5	3.9	4.9	0.5	2.1
2	3.1	3.6	4.1	10.7	10.8	6.9	10.0	11.0	11.0	10.6	11.6	14.3	14.3	14.8	15.0	15.2	15.6	17.1	17.3	16.7	16.5	15.5	16.5	17.2	17.3	3.1	12.5
3	15.0	14.4	17.8	15.8	16.0	18.7	18.8	19.4	16.3	16.9	20.7	21.3	20.6	20.8	22.9	23.7	22.8	20.9	20.7	20.8	20.3	20.5	19.6	19.4	23.7	14.4	19.3
4	17.7	16.8	15.9	16.0	15.0	16.1	15.7	16.4	14.4	16.4	16.9	14.6	13.0	13.9	14.3	12.7	12.9	12.0	13.1	12.0	12.1	12.4	13.4	16.5	17.7	12.0	14.6
5	17.3	15.9	15.0	12.9	13.1	11.9	11.7	12.7	10.8	11.6	12.6	12.8	12.4	12.4	11.6	11.0	9.4	10.1	10.2	9.3	8.5	7.2	6.2	6.3	17.3	6.2	11.4
6	6.3	8.0	8.6	6.8	7.9	8.6	7.1	4.9	3.8	5.0	5.7	3.3	1.7	1.0	0.9	0.8	0.6	1.4	0.4	0.8	1.1	1.3	1.1	0.5	8.6	0.4	3.6
7	0.7	1.4	1.9	1.8	2.6	3.1	1.3	0.7	2.3	2.0	1.6	1.5	1.2	2.3	2.7	2.7	2.4	1.2	1.1	0.7	1.9	1.4	1.1	0.9	3.1	0.7	1.7
8	1.1	0.7	0.8	1.8	1.9	1.7	1.8	2.8	4.6	6.5	5.3	5.0	7.3	8.5	13.2	11.7	9.0	7.5	5.7	5.6	5.4	4.0	3.8	2.7	13.2	0.7	4.9
9	3.3	1.8	1.3	2.4	3.4	2.1	1.6	1.3	2.1	2.4	1.1	0.9	1.2	0.8	1.0	1.8	1.3	1.6	1.6	1.4	1.2	2.7	5.5	8.6	8.6	0.8	2.2
10	9.8	8.6	10.1	11.4	11.4	11.4	10.8	10.6	11.0	10.0	6.9	4.5	4.5	3.7	2.1	4.4	3.4	3.4	3.6	3.2	4.2	4.4	3.6	3.3	11.4	2.1	6.7
11	3.7	2.6	0.9	0.8	0.9	0.9	0.8	1.7	2.0	1.4	2.3	5.2	6.0	4.8	4.6	4.9	3.8	1.1	3.1	2.9	2.8	3.2	3.5	4.0	6.0	0.8	2.8
12	3.4	1.7	1.3	1.4	2.0	1.0	1.0	0.9	0.8	0.9	1.1	0.7	0.8	1.0	0.7	0.7	1.4	0.9	3.3	4.9	5.6	5.9	5.0	5.2	5.9	0.7	2.1
13	6.6	7.0	6.9	8.4	9.2	8.8	3.8	5.5	5.2	1.0	1.1	1.2	0.8	0.4	0.2	1.7	0.9	0.9	0.9	1.1	1.8	1.9	2.1	3.7	9.2	0.2	3.4
14	5.0	6.2	7.1	5.4	2.3	2.5	3.5	3.5	7.5	15.6	16.1	15.8	14.7	11.4	13.7	13.5	12.6	12.9	11.8	12.7	17.4	18.3	15.0	14.9	18.3	2.3	10.8
15	15.3	13.1	11.9	13.0	12.7	10.5	11.5	9.6	8.9	9.6	11.1	8.5	3.6	5.1	6.6	3.0	1.6	1.6	0.7	1.1	0.7	0.8	0.6	0.9	15.3	0.6	6.8
16	1.2	1.1	1.1	0.8	0.8	1.2	2.0	2.2	2.6	3.2	4.9	9.8	12.3	12.8	13.4	13.8	13.7	11.3	13.3	16.5	15.5	14.7	16.4	16.6	16.6	0.8	8.4
17	16.1	12.8	13.6	15.0	16.1	14.2	14.3	16.5	17.5	17.9	17.6	16.1	15.9	16.9	16.7	15.2	17.0	16.7	14.6	12.9	12.6	14.7	14.3	14.5	17.9	12.6	15.4
18	16.5	15.8	15.4	15.0	15.5	17.9	14.8	16.0	16.0	16.3	16.3	15.7	14.9	15.5	17.9	18.1	17.6	15.8	15.9	17.2	16.2	14.6	14.0	14.6	18.1	14.0	16.0
19	13.5	13.2	12.4	12.7	14.0	13.6	14.4	13.8	14.8	14.7	12.2	11.8	9.1	5.3	5.5	3.8	3.9	4.5	4.5	5.2	7.4	6.8	5.9	4.6	14.8	3.8	9.5
20	5.3	5.2	4.9	6.3	6.6	6.5	7.8	4.1	1.7	2.3	1.2	1.1	0.9	1.3	5.8	4.7	1.3	1.8	1.3	1.5	1.2	1.4	0.9	1.3	7.8	0.9	3.2
21	1.0	0.7	1.0	1.6	1.2	1.3	1.2	0.6	0.5	1.0	1.0	0.6	0.5	1.8	1.4	1.6	1.3	1.0	1.6	1.4	1.1	1.7	1.7	3.1	3.1	0.5	1.2
22	3.6	3.5	2.7	4.5	4.6	6.1	9.8	12.0	9.4	11.0	13.8	10.1	6.2	4.4	6.0	7.3	8.1	9.8	10.2	10.8	10.7	10.7	10.5	11.7	13.8	2.7	8.2
23	14.1	15.1	13.5	12.4	11.8	11.6	10.0	7.8	3.4	7.7	8.2	9.2	7.5	8.4	8.9	9.6	7.3	8.8	9.9	10.3	11.9	11.1	10.3	9.0	15.1	3.4	9.9
24	7.1	8.0	6.5	4.0	2.7	3.3	5.4	6.1	5.8	4.9	4.9	5.2	3.2	3.9	2.9	2.7	2.1	1.1	1.7	2.6	2.7	3.9	5.4	4.2	8.0	1.1	4.2
25	5.3	8.6	14.9	14.9	17.5	17.8	16.5	15.5	15.0	14.8	13.9	16.0	18.2	17.1	15.3	12.5	10.1	14.0	12.3	12.6	14.0	12.8	14.7	14.0	18.2	5.3	14.1
26	12.8	14.4	15.0	12.7	10.9	9.6	11.3	10.4	10.6	11.5	10.6	10.6	11.6	11.3	11.5	10.5	8.6	9.2	10.8	12.3	12.9	11.7	12.7	14.3	15.0	8.6	11.6
27	12.4	12.5	14.3	16.5	16.7	15.6	15.2	16.4	14.9	17.9	15.8	13.9	13.3	14.0	16.1	11.9	13.3	15.5	13.4	17.6	15.8	11.5	10.2	13.1	17.9	10.2	14.5
28	14.4	15.6	13.2	13.1	10.3	10.1	10.6	11.8	10.9	16.6	13.0	15.0	10.3	9.0	9.1	6.9	8.5	7.8	6.9	6.6	6.0	5.6	4.5	5.2	16.6	4.5	10.0
29	4.5	3.9	2.7	4.2	2.3	2.2	3.2	4.0	2.4	3.5	3.7	3.5	3.3	3.7	4.7	5.2	4.5	3.5	4.4	4.0	5.2	3.3	4.2	3.3	5.2	2.2	3.7
30	4.4	2.5	5.1	3.7	4.8	5.2	5.0	2.3	2.2	3.3	0.9	3.2	2.0	2.3	3.2	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5.2	0.2	2.2
31	0.2	0.2	0.8	1.5	1.4	3.2	2.6	1.9	1.8	1.8	3.1	5.1	7.1	6.3	6.1	6.9	6.7	8.1	10.0	10.9	4.4	1.7	2.0	1.3	10.9	0.2	4.0
Max.	**17.7**	**16.8**	**17.8**	**16.5**	**17.5**	**18.7**	**18.8**	**19.4**	**17.5**	**17.9**	**20.7**	**21.3**	**20.6**	**20.8**	**22.9**	**23.7**	**22.8**	**20.9**	**20.7**	**20.8**	**20.3**	**20.5**	**19.6**	**19.4**	**23.7**		
Min.	**0.2**	**0.2**	**0.8**	**0.8**	**0.8**	**0.9**	**0.6**	**0.5**	**0.5**	**0.9**	**0.7**	**0.6**	**0.5**	**0.4**	**0.2**	**0.7**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.8**	**7.7**	**7.9**	**8.1**	**8.0**	**7.9**	**7.9**	**7.8**	**7.4**	**8.4**	**8.2**	**8.3**	**7.7**	**7.6**	**8.2**	**7.8**	**7.2**	**7.2**	**7.3**	**7.7**	**7.8**	**7.4**	**7.4**	**7.7**			**7.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	302.6	303.5	311.0	319.1	315.8	321.2	314.8	310.9	316.6	320.9	332.0	312.0	313.7	316.3	328.9	358.0	296.0	355.2	325.5	348.8	348.4	319.7	321.8	332.1
2	338.0	308.1	309.6	310.7	337.7	338.5	356.9	337.1	335.5	293.0	308.5	347.0	333.0	302.1	304.7	279.8	310.0	312.6	236.9	306.9	211.1	198.1	230.5	299.4
3	262.1	252.6	191.4	188.3	221.3	206.8	292.5	298.2	176.4	359.3	246.5	304.5	120.5	0.5	348.7	336.4	119.6	338.7	339.2	334.0	311.0	333.6	6.7	5.2
4	1.7	248.3	337.8	16.4	2.5	19.6	316.6	349.4	352.6	291.5	6.0	27.0	358.8	347.2	346.2	343.5	328.3	338.9	337.7	329.8	325.7	354.1	2.0	343.0
5	350.8	340.5	337.6	327.5	326.6	328.7	328.3	330.5	328.2	330.8	337.5	337.6	338.0	340.8	338.5	335.3	333.9	329.1	329.6	337.7	340.6	338.8	335.8	332.8
6	335.8	324.9	321.2	324.3	331.3	341.1	337.9	329.1	326.5	332.4	327.8	326.3	325.6	325.8	320.1	324.5	326.6	327.2	331.0	322.5	320.1	324.8	325.2	325.3
7	329.1	335.2	214.1	186.2	338.3	333.2	329.0	333.4	351.3	336.1	334.3	321.3	334.9	321.7	337.0	331.4	330.4	326.3	335.8	357.0	345.5	333.7	339.4	332.3
8	329.8	354.2	279.0	319.1	358.1	328.7	331.9	3.1	214.3	276.1	338.5	23.5	335.1	322.8	349.2	48.0	309.6	332.9	305.8	326.4	335.9	334.2	304.0	332.8
9	306.2	300.8	308.2	326.0	315.3	312.2	329.1	327.9	337.0	342.2	339.6	331.6	309.5	331.6	339.3	334.5	339.0	336.4	334.6	334.2	328.0	327.6	327.9	330.2
10	331.0	329.6	332.1	335.6	329.1	329.2	331.2	328.2	326.7	339.3	333.6	337.4	328.9	327.0	330.4	333.7	324.3	324.3	324.2	325.6	328.3	336.9	335.3	325.0
11	319.6	317.3	324.4	334.0	339.9	336.1	336.0	328.6	330.9	329.5	330.2	328.7	323.6	325.6	321.9	321.7	321.9	324.8	321.5	323.7	322.0	329.0	328.3	343.8
12	15.0	0.6	346.1	345.2	335.4	349.8	353.0	348.1	343.4	342.9	338.9	338.9	351.4	14.7	347.5	331.6	333.6	328.3	333.9	341.0	335.6	338.9	346.4	339.0
13	339.8	331.8	335.6	334.5	334.3	331.3	333.8	332.8	330.1	326.8	330.3	332.9	325.0	325.9	329.0	330.3	336.1	336.7	317.4	315.5	320.6	53.8	300.3	323.8
14	326.8	309.0	156.4	204.8	280.7	179.6	123.6	167.7	249.1	156.8	142.6	134.8	127.9	124.2	128.5	130.8	131.6	130.2	135.3	133.5	123.3	130.6	137.6	138.2
15	129.9	126.5	128.4	137.7	143.6	153.2	151.3	152.3	148.1	152.7	150.8	146.5	153.4	149.1	143.8	149.2	151.8	152.5	150.8	152.8	150.7	150.7	143.5	152.6
16	192.0	214.2	232.1	229.0	244.4	243.0	239.6	240.0	252.4	252.6	235.7	217.2	226.6	218.8	174.8	162.2	163.6	165.7	179.4	215.1	195.6	178.5	161.3	167.1
17	195.6	151.1	137.1	134.4	128.1	127.8	122.5	125.4	118.8	111.5	110.1	110.0	104.2	105.5	108.5	115.6	117.4	126.5	140.7	156.7	161.0	160.2	149.9	148.1
18	147.4	144.4	147.7	154.5	147.2	138.2	141.1	153.2	162.6	199.1	191.5	230.9	235.4	223.3	67.6	103.8	164.7	179.1	179.0	171.2	177.3	208.1	154.5	143.2
19	139.5	143.7	144.7	138.8	144.1	144.9	133.3	143.6	140.1	133.9	134.4	133.5	134.5	132.5	132.7	133.8	135.4	136.9	135.8	133.4	133.2	135.3	138.2	139.9
20	142.3	146.3	142.4	139.0	128.7	133.2	134.5	134.3	134.5	140.9	132.9	130.7	130.8	130.6	129.4	87.5	35.9	56.1	344.0	148.7	74.8	164.9	156.2	144.1
21	151.8	151.6	153.6	224.8	170.1	130.0	136.6	132.0	130.7	130.0	132.9	131.8	132.7	129.3	124.0	120.5	122.2	125.2	121.3	132.0	128.4	131.3	127.4	133.5
22	140.2	154.1	171.5	169.1	165.0	169.5	175.8	175.0	174.5	177.1	205.0	214.0	222.4	217.3	232.7	222.4	220.1	199.2	208.8	200.6	208.5	248.2	293.4	313.8
23	331.7	322.2	336.7	321.6	319.8	315.1	318.7	321.7	326.2	317.6	316.6	319.8	325.6	314.7	302.0	324.7	336.4	343.9	336.7	340.2	320.9	294.2	74.7	332.0
24	222.7	277.2	343.6	10.0	352.1	11.9	185.9	145.2	203.1	150.3	146.4	139.2	139.0	137.0	135.3	141.5	146.2	147.2	150.1	153.2	161.2	162.4	159.7	173.6
25	190.0	207.7	234.6	263.4	310.2	251.6	247.3	254.7	258.3	262.3	266.9	269.6	250.1	249.6	258.8	258.6	275.2	290.2	299.1	325.3	335.4	330.5	338.2	333.3
26	327.2	331.5	335.2	328.7	327.4	341.1	333.1	326.8	323.3	8.0	320.1	311.1	307.3	120.2	188.7	230.8	342.3	97.2	353.6	290.5	156.8	221.6	192.0	151.1
27	147.3	146.2	145.6	145.0	150.1	144.8	148.3	148.8	143.4	138.3	132.8	133.4	132.3	132.2	127.5	129.9	131.7	127.9	126.4	127.1	125.1	125.5	130.4	131.9
28	130.8	135.7	141.9	146.5	148.1	147.2	147.7	146.4	142.1	145.4	149.5	144.7	141.0	187.3	222.5	232.4	227.7	219.1	268.0	243.8	207.0	289.1	152.1	187.4
29	333.5	246.9	260.2	260.6	291.1	310.5	261.5	242.4	204.4	243.2	238.6	183.5	195.7	342.5	345.3	175.3	331.2	323.4	11.3	340.4	8.1	4.9	345.6	324.4
30	273.8	243.1	285.7	305.1	22.4	316.3	135.1	336.9	329.8	324.8	322.1	315.5	314.3	311.5	318.4	326.1	328.5	348.8	9.2	344.5	337.5	334.4	338.9	331.8
31	337.0	339.3	331.0	352.6	319.0	321.7	344.1	221.6	272.8	299.9	286.5	242.0	225.0	343.8	251.1	250.3	229.4	193.6	147.2	84.6	218.5	184.9	210.4	205.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	203.5	350.8	203.1	199.8	226.0	210.3	236.4	172.8	126.5	221.5	172.1	74.7	67.6	73.6	125.4	108.1	127.1	56.7	25.2	0.3	228.0	328.8	222.2	210.9
2	251.5	266.0	303.8	307.5	296.6	314.2	40.2	282.7	330.0	337.5	334.5	341.7	329.0	326.5	323.2	328.8	321.4	317.3	320.9	325.3	336.0	326.7	319.3	321.8
3	330.3	337.8	330.6	338.7	341.0	336.5	335.9	327.8	320.8	321.9	337.2	345.6	337.0	16.6	350.8	27.6	321.4	2.7	335.1	313.8	316.4	301.7	317.2	298.4
4	287.2	279.5	303.5	286.8	283.8	246.2	191.7	312.3	286.4	174.0	154.2	39.1	346.3	351.2	310.1	246.3	308.3	322.7	341.8	323.2	333.3	325.1	327.3	323.8
5	338.7	342.9	336.7	329.2	340.3	332.7	350.3	260.6	334.2	57.7	357.8	346.2	257.8	301.0	225.2	312.9	323.2	336.3	336.5	313.3	326.2	309.5	302.7	322.5
6	270.5	236.0	310.4	294.6	180.3	309.1	301.1	287.6	300.0	301.5	269.1	303.7	303.8	313.1	303.6	321.0	318.8	303.3	322.5	335.6	331.3	326.9	343.9	309.8
7	312.3	320.3	317.2	324.2	316.5	327.4	298.0	310.2	348.9	314.7	317.9	329.4	317.9	314.8	341.0	340.3	349.0	358.1	9.6	14.0	346.5	318.3	301.3	318.2
8	345.6	282.7	29.6	344.3	335.9	144.4	182.3	143.1	287.5	181.0	125.9	127.8	148.5	44.3	124.1	168.4	126.0	77.0	122.8	121.1	160.7	42.4	49.7	43.3
9	48.4	64.1	64.1	58.5	57.4	60.3	57.5	59.9	35.8	31.4	12.7	330.3	344.6	317.6	3.7	292.5	316.8	307.1	4.4	316.9	303.2	321.3	318.2	335.6
10	340.9	301.9	322.3	314.3	326.1	314.6	345.6	341.4	311.6	277.1	264.8	195.1	241.5	230.8	204.2	346.2	304.3	308.8	14.5	358.3	327.3	323.0	278.0	321.9
11	1.7	126.5	178.7	243.9	215.7	276.5	215.6	167.2	166.5	280.1	279.6	190.2	182.5	198.4	178.6	355.1	4.3	5.6	358.1	10.0	303.9	209.7	227.4	345.6
12	206.1	261.6	284.2	293.3	335.2	216.2	283.5	317.5	286.9	331.6	328.3	305.5	250.0	282.9	314.3	277.8	293.9	283.6	340.9	357.4	208.8	154.0	278.0	328.2
13	123.2	127.7	135.5	125.5	110.4	108.9	110.2	106.9	109.7	112.8	113.3	116.6	114.7	114.3	113.9	113.6	114.2	114.4	112.4	115.6	114.6	113.3	119.4	117.6
14	116.1	116.3	115.5	121.1	123.2	124.2	127.2	165.8	191.1	218.5	236.0	232.1	224.9	204.1	196.7	193.8	200.3	208.5	214.1	204.3	214.8	242.6	260.2	260.5
15	250.4	273.5	250.4	264.6	264.2	285.6	301.1	285.7	266.2	241.4	273.0	325.8	282.0	192.4	227.8	209.0	208.3	287.7	337.5	3.7	231.3	142.4	151.8	135.2
16	124.0	124.8	118.1	118.6	118.3	114.5	111.2	113.4	104.2	91.7	90.6	88.5	94.8	95.1	98.6	95.6	100.0	120.6	150.6	165.0	152.5	145.3	143.7	162.4
17	142.0	138.3	141.6	134.0	126.8	118.3	112.4	114.2	106.1	84.6	81.4	49.4	33.3	48.1	42.9	41.1	66.6	115.5	119.8	125.1	129.0	129.5	132.5	132.8
18	126.8	123.0	119.6	115.4	112.1	113.0	113.1	118.6	122.6	131.5	127.3	125.8	125.9	124.0	123.7	126.4	129.9	134.8	137.8	133.4	125.9	128.7	128.5	125.5
19	119.8	117.1	90.6	46.1	331.5	350.8	332.6	40.2	1.5	356.3	25.6	27.7	28.3	29.2	48.4	50.1	41.4	34.0	28.9	51.5	74.4	96.2	92.1	101.1
20	117.0	121.5	124.1	130.5	129.6	128.6	133.3	133.3	132.9	125.8	127.3	117.7	113.6	110.6	116.2	121.5	105.1	60.7	49.5	15.8	26.8	9.4	18.0	43.8
21	53.8	25.9	22.5	25.2	36.6	39.2	20.4	13.6	22.6	29.7	38.7	39.4	40.2	59.0	65.1	54.6	26.5	68.2	112.1	106.0	134.6	77.9	83.4	74.2
22	65.4	45.1	84.2	87.1	113.4	119.8	110.8	70.9	83.8	92.8	117.9	89.9	85.5	97.8	111.1	116.6	130.7	128.0	126.5	130.5	131.7	129.0	133.6	139.2
23	145.4	145.4	127.6	127.0	81.9	151.7	267.0	318.5	298.0	298.8	204.9	301.0	294.2	308.8	264.4	295.2	315.1	305.4	261.2	306.3	316.0	321.9	313.8	322.2
24	341.3	340.0	339.5	335.0	334.3	344.9	346.5	340.0	350.0	335.7	332.5	323.9	322.8	324.1	330.7	338.1	345.1	352.8	336.1	347.4	345.5	337.8	331.3	330.2
25	343.1	348.3	341.5	338.1	334.7	335.3	337.8	333.4	328.7	328.5	325.1	314.1	298.0	317.2	283.0	253.8	262.3	257.1	310.4	336.6	349.3	335.9	349.1	15.5
26	79.4	331.9	320.9	221.7	333.0	0.9	349.9	277.9	334.2	329.4	292.7	310.2	218.7	334.1	279.6	312.2	316.7	307.7	318.2	319.8	323.3	289.2	293.7	296.4
27	302.7	325.2	327.1	315.8	301.2	277.0	201.5	242.7	210.4	236.0	353.9	320.7	200.0	326.9	35.3	339.4	343.1	337.9	297.5	328.5	298.4	314.1	319.6	216.9
28	244.1	347.0	317.7	345.2	318.0	336.8	267.9	338.4	286.6	289.7	327.3	232.7	295.4	298.2	301.6	1.6	315.5	314.4	276.8	321.7	343.2	359.0	278.6	326.3
29	310.2	283.7	318.4	292.4	347.3	164.4	312.2	319.0	304.8	325.1	7.0	325.6	335.7	309.0	329.5	74.3	351.4	10.0	332.0	313.6	321.0	329.7	329.0	321.9

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	317.7	314.4	309.7	303.8	312.7	302.2	309.1	358.8	210.0	129.5	115.8	119.3	113.9	112.8	105.1	107.7	104.8	99.5	89.1	59.3	76.0	81.4	83.8	86.8
2	87.1	89.4	99.7	108.3	112.8	109.7	109.5	122.3	133.3	142.4	143.5	141.3	140.4	143.5	145.6	146.9	152.3	139.7	127.7	135.5	132.5	128.7	126.4	127.8
3	124.9	136.3	140.6	142.1	128.8	126.0	128.0	127.0	127.7	121.1	123.1	121.2	123.7	126.9	129.3	125.4	131.4	132.3	132.3	133.4	143.9	140.0	139.2	130.6
4	131.8	127.7	125.6	128.1	124.7	119.7	122.9	119.5	116.3	120.6	122.1	118.3	119.5	121.8	120.4	123.1	123.3	123.9	123.7	120.3	112.9	117.7	117.0	116.7
5	115.5	115.0	117.2	112.7	114.9	118.7	111.0	112.8	108.1	109.4	115.3	113.1	113.4	115.2	115.0	119.3	115.8	115.1	123.1	125.1	125.5	127.2	128.8	133.3
6	134.0	135.7	136.2	136.1	140.7	128.7	118.1	112.4	122.3	127.7	130.6	124.7	125.0	129.3	133.8	128.2	129.7	126.3	120.4	94.4	51.7	18.2	23.1	20.0
7	16.0	20.0	8.3	2.9	346.8	322.7	343.4	117.3	312.3	322.7	318.4	231.9	319.9	330.4	230.4	203.8	242.8	236.6	233.6	227.5	198.6	201.1	201.5	206.9
8	204.8	188.2	197.1	197.3	173.2	150.7	155.7	132.3	125.0	121.3	103.7	119.4	109.5	96.3	72.9	47.4	16.2	32.9	50.7	48.7	36.3	22.7	26.1	22.3
9	13.3	4.1	2.4	9.1	20.8	10.8	357.7	15.5	12.5	356.2	3.0	7.4	358.9	28.1	339.2	64.3	317.5	310.1	207.8	308.5	273.1	201.8	239.3	148.3
10	279.4	232.2	222.4	202.4	209.5	232.6	219.5	215.9	220.4	233.2	228.0	237.9	238.2	228.1	207.2	229.2	211.9	212.9	235.1	236.0	240.3	242.8	239.8	237.6
11	240.9	236.6	239.5	237.1	239.3	238.6	236.2	232.4	236.5	236.5	247.3	246.7	234.6	211.5	232.3	256.4	313.7	23.2	82.0	216.8	254.6	257.9	224.9	210.0
12	42.7	213.4	288.6	289.8	296.5	335.8	260.2	195.9	182.2	281.3	352.4	16.9	10.2	11.9	358.1	353.3	341.5	346.4	352.0	350.8	349.6	342.3	348.8	330.4
13	323.5	334.0	335.3	329.7	338.1	336.0	333.9	331.1	326.8	331.3	309.6	308.9	318.1	307.9	305.6	317.8	328.0	312.0	307.5	289.8	270.2	251.1	203.7	196.3
14	218.6	319.0	189.1	240.0	352.5	49.3	348.7	325.5	342.5	331.4	276.5	163.8	165.8	223.0	161.5	209.8	197.0	178.7	177.0	147.6	178.7	158.8	144.9	134.8
15	132.2	134.5	125.4	121.5	121.9	115.5	118.5	119.0	125.1	126.5	125.7	125.3	120.9	121.7	126.7	126.0	125.9	126.8	127.0	126.9	126.1	123.6	124.3	126.7
16	120.8	118.6	122.2	121.0	111.3	130.4	146.1	180.9	165.3	202.8	137.4	151.6	117.3	93.9	348.7	230.2	210.7	197.5	289.1	318.9	333.3	338.0	357.4	316.9
17	292.1	297.9	266.2	293.5	276.7	222.2	294.1	286.5	276.6	331.8	331.8	237.0	199.9	247.3	94.4	42.0	110.4	188.6	209.2	198.1	187.7	190.7	196.8	224.2
18	327.9	307.2	313.1	317.9	327.1	320.5	331.8	319.4	324.1	313.8	316.8	328.3	327.5	328.2	317.7	320.7	318.6	317.6	321.9	333.2	334.2	335.2	338.6	330.7
19	327.1	323.9	328.1	327.8	324.5	323.2	320.1	323.2	322.2	321.6	317.4	321.3	327.4	331.6	332.4	329.2	333.0	339.9	327.0	343.1	331.9	326.2	321.1	319.6
20	322.6	318.4	315.0	310.0	313.1	319.4	326.6	325.3	324.9	316.5	334.9	345.3	194.9	211.6	188.0	186.2	142.9	226.6	325.1	328.5	317.6	334.8	332.3	343.6
21	268.9	293.8	323.1	338.0	314.8	315.1	329.8	317.2	313.3	316.7	318.1	297.7	319.2	154.1	309.4	307.7	298.1	5.7	302.6	330.4	356.1	331.8	313.7	303.0
22	297.5	296.0	295.5	46.2	276.4	311.4	334.1	345.0	335.0	345.3	334.2	305.9	321.9	347.2	324.2	340.4	319.6	320.7	293.3	97.2	254.5	296.3	288.9	295.7
23	290.7	307.5	311.2	313.9	306.2	303.7	336.6	334.4	332.0	345.3	345.3	320.6	347.5	320.2	323.2	320.3	305.4	322.0	324.7	323.0	332.2	326.2	332.9	323.4
24	319.7	325.1	318.3	342.1	313.4	340.2	216.4	291.5	284.3	297.4	307.5	311.6	249.7	321.4	348.8	313.9	321.0	299.9	293.3	303.9	309.7	229.6	291.9	339.3
25	297.5	281.4	219.7	158.3	204.2	219.7	230.6	247.2	222.8	261.0	7.8	30.4	205.5	198.2	331.0	169.8	192.9	268.1	304.4	298.5	308.6	335.0	190.9	273.6
26	240.9	260.1	209.8	307.4	314.7	325.2	312.2	297.6	312.3	313.1	328.9	327.5	332.8	319.5	211.4	339.1	311.7	286.6	277.0	263.2	228.8	283.6	281.7	272.5
27	282.3	285.2	298.1	286.9	280.9	293.5	338.6	26.9	191.0	155.6	33.9	31.0	99.3	282.8	282.5	296.7	303.2	307.0	296.6	294.5	300.5	301.3	303.5	313.8
28	314.2	323.3	314.3	320.9	249.3	286.0	202.3	319.3	285.2	279.7	288.1	220.6	238.0	31.5	196.4	19.7	326.3	218.2	199.1	188.5	193.5	186.4	146.5	172.3
29	201.7	219.4	225.2	191.7	162.2	213.8	145.2	133.1	127.3	123.3	125.3	125.2	123.5	124.0	127.5	126.2	121.9	117.5	116.4	121.0	122.2	122.0	116.3	119.1
30	118.6	120.5	120.4	119.7	119.3	121.0	122.6	124.5	122.1	123.5	125.3	121.8	119.5	120.4	122.2	122.8	120.0	121.2	126.4	126.9	126.8	128.1	135.3	133.4
31	133.9	140.1	140.5	143.6	145.5	141.5	130.2	123.0	129.7	130.6	126.4	129.5	129.7	129.8	129.9	130.2	128.1	126.7	126.7	130.6	129.5	129.4	127.7	126.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	125.0	124.1	124.7	125.8	128.4	130.4	128.7	127.1	126.4	126.0	127.2	130.4	131.2	131.1	134.1	129.9	129.0	132.2	131.0	139.7	137.7	137.8	185.9	217.5
2	213.2	42.3	38.0	38.0	38.0	40.6	247.5	217.3	211.0	220.8	222.3	223.5	229.3	186.4	204.7	203.3	180.8	144.7	148.0	180.3	152.9	140.6	149.3	151.3
3	144.3	144.1	148.6	150.4	154.0	144.4	147.0	141.0	143.6	153.0	136.9	138.6	135.7	134.0	131.0	129.2	129.9	125.3	127.2	124.4	127.3	122.1	126.9	129.8
4	128.9	125.8	126.6	126.8	123.9	124.1	125.7	123.9	125.4	124.4	126.7	129.1	131.6	138.2	142.4	147.1	154.3	155.0	155.2	163.1	189.8	219.8	248.9	284.5
5	292.6	316.3	338.6	309.4	316.0	308.9	313.1	291.6	290.4	308.6	321.8	98.3	250.8	275.0	283.5	281.6	283.5	299.4	329.4	326.4	318.2	308.0	308.0	303.5
6	300.2	308.5	328.4	321.6	322.2	324.2	318.2	311.2	312.4	315.9	318.7	318.5	335.2	340.9	332.6	334.5	341.5	340.0	340.6	343.8	334.0	339.2	348.1	341.6
7	338.0	324.0	327.9	326.6	318.0	319.3	321.1	326.4	326.2	320.8	318.9	317.8	319.8	332.3	335.7	322.1	315.8	301.5	295.0	295.8	298.5	303.9	294.2	317.2
8	318.1	293.5	213.5	219.5	186.2	193.9	198.4	197.6	194.2	196.3	218.9	229.9	221.9	223.5	221.0	219.4	211.7	228.8	218.3	246.1	261.0	292.6	297.5	305.9
9	310.1	313.2	299.7	297.8	304.6	306.8	308.3	308.1	313.9	182.0	308.8	313.2	301.8	291.7	292.8	293.6	303.4	312.6	309.9	307.5	318.0	308.9	298.7	295.9
10	301.5	319.1	319.6	319.0	279.7	321.0	175.2	342.8	210.6	303.3	218.5	283.2	148.3	315.6	318.9	285.5	282.2	295.4	289.6	296.5	293.4	290.1	301.1	302.0
11	302.2	328.8	277.6	309.0	302.9	319.3	267.2	303.4	227.6	15.6	93.1	339.2	302.5	310.8	313.8	318.4	325.1	317.5	310.2	299.2	297.4	285.2	289.2	288.2
12	293.8	292.8	290.4	288.6	310.9	301.3	297.3	302.7	304.8	215.1	318.2	323.3	312.7	309.3	314.5	315.8	316.2	314.6	312.1	279.9	285.6	276.1	261.5	214.9
13	212.8	198.1	194.8	209.6	220.9	200.0	218.2	216.0	205.6	215.8	184.2	185.0	176.5	190.3	192.3	200.4	202.0	196.9	213.8	215.3	215.8	217.5	220.6	220.9
14	219.4	225.4	223.8	227.1	233.4	235.4	234.5	237.1	228.0	223.8	223.1	226.6	238.6	240.8	204.8	218.0	219.9	209.9	177.9	234.0	236.6	218.0	223.8	217.3
15	220.9	55.1	177.5	204.1	131.0	328.0	353.2	335.7	324.8	332.7	322.4	332.9	338.4	333.9	331.5	337.3	341.0	338.6	337.5	335.4	339.6	332.9	339.2	338.9
16	341.1	344.7	337.9	339.8	332.8	327.4	333.5	325.5	304.0	308.7	317.5	305.5	313.1	323.5	315.0	301.9	295.2	287.4	284.0	261.1	240.8	244.7	250.7	246.5
17	252.2	262.6	261.8	258.4	298.6	293.2	296.2	287.5	280.9	193.3	237.6	225.0	209.4	217.1	224.8	228.4	211.1	227.9	235.4	227.5	205.3	223.7	226.3	218.8
18	219.9	190.7	243.9	232.4	212.8	188.4	194.9	185.1	187.4	215.0	192.3	208.7	220.7	213.8	233.3	205.9	203.5	171.5	182.2	168.2	175.9	166.3	150.5	154.8
19	156.1	152.7	232.8	193.2	168.6	171.0	153.2	170.3	188.1	229.3	210.7	206.1	168.3	141.3	146.0	160.0	173.3	201.6	183.7	146.1	138.1	149.7	215.1	140.6
20	136.1	143.8	139.9	133.9	137.2	133.6	128.3	123.3	125.8	128.0	125.7	132.6	140.7	129.9	127.2	138.2	131.9	139.9	140.2	139.7	141.2	142.8	142.4	139.1
21	146.0	141.3	141.9	141.3	138.4	134.8	139.1	137.2	128.8	143.1	132.0	129.9	133.3	131.6	136.4	136.1	144.8	157.9	155.9	139.0	134.9	149.1	198.2	179.9
22	166.2	141.8	137.3	141.9	182.5	195.5	211.7	204.1	169.2	154.7	186.1	175.3	182.0	163.4	168.7	163.2	168.5	147.9	135.9	169.0	204.1	197.3	244.1	227.2
23	204.0	201.8	255.7	259.3	203.1	240.5	313.5	258.4	236.1	279.0	287.8	268.3	244.2	273.5	193.9	279.3	282.3	279.8	251.5	237.6	248.8	218.8	237.3	222.3
24	221.9	233.3	229.6	228.1	215.8	167.3	85.6	191.4	320.9	74.7	117.4	20.3	38.5	93.4	44.4	157.5	221.9	235.5	219.3	197.3	187.1	199.8	213.2	215.0
25	209.2	217.8	249.0	297.6	308.0	306.3	305.8	312.3	305.3	317.4	327.8	323.0	328.9	325.4	322.2	321.8	326.8	334.5	333.3	333.9	340.7	338.1	329.2	322.9
26	330.0	326.4	330.8	332.1	331.8	326.8	329.9	327.4	330.7	340.9	340.0	341.2	346.0	346.0	348.1	346.9	348.7	353.2	351.1	348.6	347.4	342.4	343.3	344.9
27	344.8	342.4	344.0	340.0	338.0	336.1	334.7	333.9	339.9	343.4	345.1	342.2	337.9	339.7	344.8	342.0	339.9	342.0	339.0	332.4	337.8	332.0	317.9	320.5
28	318.7	330.3	307.3	322.7	305.3	252.3	328.8	320.3	337.1	152.3	193.6	251.5	251.1	235.6	314.1	308.7	325.4	321.7	324.2	307.8	294.3	299.9	299.9	290.3
29	295.1	308.7	306.2	310.7	158.5	329.4	336.6	323.1	326.2	310.0	323.3	324.6	335.5	345.5	343.1	330.8	333.8	334.7	337.5	335.3	334.2	327.4	327.5	329.1
30	331.1	333.1	329.8	350.3	45.5	323.7	317.1	320.1	2.8	22.8	186.5	151.9	116.5	29.6	334.9	333.4	359.2	40.1	3.3	335.6	327.5	333.6	328.4	330.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	328.1	332.1	325.8	322.9	329.0	330.0	320.0	307.5	316.8	321.4	305.4	290.0	310.3	318.5	315.7	318.7	340.9	343.9	341.9	346.4	348.1	332.3	317.0	318.6
2	317.2	330.4	339.0	325.4	322.5	319.8	322.2	321.5	321.0	323.8	332.3	358.0	5.6	174.5	205.0	240.6	274.1	278.2	265.2	301.0	305.8	213.3	275.6	215.1
3	171.1	215.0	223.9	191.8	140.5	174.2	129.2	134.5	130.2	99.7	128.4	115.7	113.9	116.5	93.1	111.7	148.1	129.7	93.6	46.9	75.3	122.8	118.2	71.0
4	65.1	82.6	73.0	71.7	62.8	67.9	69.8	75.1	72.7	65.7	72.9	79.9	114.5	238.8	84.4	53.9	83.6	91.4	172.1	218.6	256.8	239.2	318.1	215.8
5	250.8	242.3	157.0	9.5	104.9	224.1	246.1	199.6	238.8	311.1	212.4	338.1	194.1	214.2	209.6	218.0	220.3	227.2	215.9	217.8	217.4	226.8	218.8	214.7
6	213.2	217.4	218.0	202.8	180.9	198.6	221.9	150.1	135.1	131.2	133.1	136.8	134.2	131.1	125.3	125.3	127.5	122.2	120.8	122.7	120.0	120.5	123.2	123.6
7	121.6	117.5	121.1	122.3	123.3	126.1	123.0	120.9	120.9	118.7	122.7	125.0	124.6	127.0	124.9	124.7	117.9	117.2	123.3	122.1	120.7	124.2	122.5	122.0
8	122.6	122.7	117.1	114.1	119.1	121.0	117.1	112.5	116.3	116.5	114.9	116.6	120.6	121.2	122.2	120.4	122.3	122.7	120.9	118.3	116.6	113.1	113.3	117.8
9	118.1	111.6	94.8	109.6	106.2	94.0	111.5	114.3	120.0	129.8	119.6	113.8	118.4	131.3	125.3	125.9	131.1	141.7	142.4	118.8	131.1	146.4	34.3	217.3
10	235.6	73.1	326.8	73.0	225.7	261.8	204.2	174.4	162.7	240.6	223.3	203.5	190.4	202.6	225.6	228.0	217.5	210.0	213.8	183.2	138.6	119.3	124.2	117.0
11	129.5	119.9	121.6	122.3	117.2	114.8	124.2	123.6	114.2	114.4	124.0	122.4	121.6	118.8	110.6	112.6	113.0	117.0	112.1	114.5	113.1	105.2	103.6	109.5
12	112.6	111.3	111.6	104.9	108.9	101.1	101.3	81.8	86.9	98.9	118.4	119.2	120.3	126.3	128.7	130.6	116.0	113.6	106.0	107.8	107.8	106.1	106.4	112.0
13	116.7	117.8	119.1	123.4	131.4	138.1	144.5	139.5	133.2	129.3	125.3	116.5	126.3	129.3	124.6	128.2	130.9	127.4	123.3	123.2	118.5	118.3	123.7	125.6
14	126.5	118.5	105.1	89.7	343.5	64.7	35.0	30.5	27.8	12.6	7.4	359.0	7.1	19.3	41.4	61.0	62.1	65.0	70.5	75.8	80.4	60.2	4.9	269.6
15	243.2	239.0	218.2	211.5	204.0	191.6	194.1	205.6	180.4	188.8	197.8	170.4	156.5	171.6	176.0	181.9	183.9	174.5	168.6	150.5	158.4	156.7	150.9	165.2
16	178.2	183.9	189.2	186.3	204.7	205.9	154.9	190.9	188.6	168.6	155.2	125.8	136.3	133.7	139.6	142.1	145.3	145.3	161.9	179.0	221.1	221.4	228.0	248.1
17	308.8	250.1	241.2	224.4	228.3	284.7	267.8	316.2	302.7	327.5	333.1	70.7	38.6	211.9	206.0	213.6	217.7	223.2	204.4	215.8	205.2	153.9	151.3	142.4
18	143.1	141.4	132.4	143.8	135.3	127.1	146.2	154.0	158.9	171.4	145.2	146.0	156.8	163.1	173.1	178.0	164.4	144.4	139.9	147.0	143.3	132.9	137.0	143.3
19	142.2	195.6	215.3	213.0	227.9	225.9	235.2	264.3	283.5	43.6	307.6	3.7	313.7	290.5	295.6	281.9	290.3	306.6	297.1	301.9	299.0	299.5	297.9	304.2
20	301.6	307.3	304.0	323.4	15.0	322.0	336.4	67.6	51.9	355.1	356.9	0.8	42.7	121.7	157.3	190.2	201.6	205.5	207.2	212.5	210.4	223.1	228.4	239.2
21	213.1	219.7	260.0	199.7	186.3	212.1	329.3	50.8	52.3	1.1	133.3	157.8	194.1	220.6	212.2	198.1	222.4	220.5	215.7	216.1	233.5	233.0	236.9	243.1
22	245.7	248.0	245.9	248.0	237.9	191.0	351.9	182.0	294.4	285.0	117.8	148.1	168.3	145.3	146.5	140.6	136.4	129.6	129.5	125.3	118.3	120.1	113.7	108.9
23	113.9	113.0	110.2	113.1	112.0	114.4	115.1	115.9	120.6	116.6	108.5	113.8	112.7	113.0	119.4	119.5	116.3	120.7	124.2	124.8	125.8	130.1	137.6	141.0
24	140.3	141.3	143.3	142.5	140.1	135.2	131.6	137.1	139.2	138.1	140.0	139.5	131.7	130.7	127.9	118.7	121.9	132.4	148.6	180.7	153.0	151.5	178.5	172.7
25	174.9	160.8	148.8	143.2	148.2	161.7	154.7	163.4	155.1	159.1	155.9	161.7	158.5	166.5	165.9	168.1	175.8	183.5	187.3	177.2	176.2	178.2	181.4	178.5
26	190.1	183.6	188.3	198.6	196.0	202.7	211.7	213.0	215.5	212.5	216.5	210.9	207.7	208.5	186.7	242.2	241.1	229.3	279.3	257.2	235.0	237.3	242.2	246.7
27	257.4	258.2	255.9	238.5	267.5	286.6	191.5	154.8	121.6	268.6	282.0	270.5	272.3	285.2	281.4	284.6	287.5	287.9	276.7	270.8	273.5	278.8	284.0	285.1
28	249.4	306.0	285.4	270.5	289.4	284.9	304.7	306.8	107.9	291.5	265.4	281.3	276.3	276.9	275.0	274.5	278.0	286.5	292.3	296.9	292.8	294.4	302.4	308.9
29	315.2	321.7	309.7	313.5	303.0	292.1	316.0	320.2	330.8	340.4	351.2	352.4	349.1	353.5	346.4	346.7	347.7	350.6	351.4	350.5	349.2	346.6	339.2	328.2
30	321.6	313.0	301.6	197.9	189.6	164.1	134.2	136.6	148.3	146.0	132.9	131.1	139.6	146.8	142.7	144.6	145.4	142.3	138.0	131.1	115.1	115.1	112.0	122.6
31	123.3	123.9	123.7	121.6	122.4	124.3	121.6	122.4	122.2	121.6	118.4	120.0	119.8	121.5	120.6	122.8	121.4	117.6	118.2	120.6	131.0	130.6	136.5	139.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	130.3	128.8	129.0	125.5	116.2	114.8	109.1	109.0	115.2	115.4	111.6	110.1	118.0	121.5	121.4	122.3	126.7	126.4	124.8	125.1	122.1	110.1	113.8	122.7
2	117.3	99.2	91.8	96.5	105.3	99.0	102.1	81.1	106.8	97.4	102.1	107.5	101.3	75.7	119.7	122.0	117.8	139.6	146.5	146.8	193.4	189.8	160.3	203.1
3	240.5	300.1	302.0	331.6	274.7	14.5	86.2	105.8	144.5	173.7	138.7	73.5	164.7	157.1	168.5	153.7	151.2	153.4	153.7	150.7	149.0	145.1	148.8	145.8
4	144.7	147.9	140.0	137.6	135.9	138.3	136.9	131.7	133.6	146.9	144.3	142.4	140.5	136.8	142.8	144.2	148.8	150.0	149.3	148.2	148.2	149.9	145.8	142.8
5	144.1	146.8	146.3	146.5	134.1	131.5	126.4	123.1	123.0	115.6	118.8	117.0	111.3	113.3	114.1	109.0	112.1	118.1	129.5	132.8	140.9	144.4	288.0	296.4
6	300.9	306.5	323.9	321.6	325.7	311.5	324.9	346.1	312.2	302.7	293.8	338.5	326.7	334.5	326.5	314.8	303.5	301.9	297.8	295.6	284.5	298.3	299.9	296.4
7	235.8	247.1	293.0	313.3	307.7	305.8	315.5	331.3	346.5	345.7	325.8	326.3	330.8	348.5	343.0	311.7	246.5	200.8	221.1	227.9	230.6	218.7	215.2	198.2
8	219.0	214.8	233.5	208.4	223.0	216.7	225.2	242.7	35.0	88.9	199.7	185.2	183.2	184.9	197.9	201.4	195.0	203.6	206.8	197.8	204.7	200.9	201.6	218.4
9	212.0	222.2	216.8	215.1	220.4	220.6	209.3	200.7	213.7	228.4	215.2	245.4	251.8	268.3	259.6	242.1	244.5	230.9	221.3	242.5	246.2	239.1	222.7	229.0
10	243.8	229.6	201.6	168.2	204.4	215.3	14.9	22.7	30.8	148.0	56.5	302.4	158.0	83.1	143.2	175.3	161.6	163.4	172.5	177.9	176.1	217.3	230.0	227.0
11	26.2	211.6	29.0	276.8	213.5	251.5	15.9	52.2	47.2	49.9	320.5	35.5	304.0	205.2	228.1	236.4	237.2	232.9	228.3	235.8	208.8	194.1	207.9	230.6
12	232.3	222.2	224.7	202.8	257.7	221.6	304.6	343.3	73.9	56.9	54.2	48.2	28.8	292.2	243.0	184.7	214.8	218.2	230.6	220.3	250.2	291.0	290.3	110.1
13	181.1	152.9	301.0	297.7	302.1	310.5	320.2	301.5	301.7	335.8	351.9	1.7	344.5	317.6	321.9	328.0	278.0	286.9	268.8	270.0	242.7	222.1	246.1	239.6
14	246.8	170.5	9.7	333.8	17.6	318.7	116.5	10.8	10.8	29.0	309.4	345.9	352.0	345.0	354.7	69.7	200.6	196.6	184.2	167.4	212.1	214.8	224.5	216.5
15	228.2	160.3	329.0	216.1	346.4	21.6	247.0	334.9	18.0	22.8	43.8	53.7	49.7	47.5	155.6	187.7	186.5	212.7	206.5	193.3	198.4	201.7	216.0	217.9
16	179.2	171.6	235.0	103.3	357.9	18.0	6.5	125.9	130.4	7.6	350.9	355.1	350.8	213.2	186.5	234.5	259.8	232.4	239.1	235.7	230.5	235.6	233.6	263.9
17	194.1	201.7	224.2	205.2	201.6	215.1	214.1	130.0	81.6	15.3	54.3	356.8	207.9	164.1	157.4	147.7	163.6	155.1	148.2	142.7	143.2	143.2	150.6	145.1
18	230.2	209.8	202.2	135.1	81.1	129.8	171.8	24.8	32.7	217.7	205.3	225.9	243.4	202.9	192.5	167.8	190.0	202.8	220.5	231.8	229.8	231.6	242.0	189.7
19	157.5	55.6	152.5	183.7	209.1	223.4	327.4	151.1	77.4	53.0	192.2	224.3	240.9	225.2	197.4	177.4	170.0	175.7	183.5	182.5	194.9	197.4	202.6	191.0
20	190.3	211.9	199.0	208.4	175.9	216.2	258.1	79.7	70.5	126.8	141.1	142.6	139.1	140.3	142.9	144.2	147.7	149.5	152.0	140.2	134.3	138.4	140.3	157.5
21	158.1	140.0	142.6	150.7	144.4	153.1	151.2	141.6	133.1	112.3	152.2	69.0	17.8	2.5	22.9	37.1	41.2	143.3	148.5	153.8	153.2	145.3	144.6	189.2
22	180.1	153.1	142.5	145.8	136.5	152.9	192.7	192.6	192.9	184.6	221.6	128.0	137.8	141.2	142.8	140.3	137.9	138.7	141.7	140.9	141.4	145.3	145.2	142.4
23	144.3	141.5	146.5	144.2	143.2	149.2	149.6	138.8	135.1	137.9	135.8	137.4	131.5	131.6	136.5	142.5	149.7	142.3	138.8	146.4	151.6	163.9	165.1	147.8
24	146.6	142.0	151.4	129.9	132.5	136.8	128.2	123.2	118.9	121.5	124.0	122.1	127.3	129.9	124.6	121.5	123.6	116.6	117.9	117.6	113.3	110.3	107.5	108.5
25	112.2	117.1	118.6	119.5	118.4	121.5	115.4	114.0	110.1	110.9	112.7	109.5	109.8	109.8	112.9	116.0	109.0	114.8	119.1	124.0	127.0	123.1	98.2	93.6
26	83.1	122.4	127.9	126.5	137.1	127.8	59.2	77.7	84.3	77.4	67.5	58.8	51.5	114.5	137.1	83.0	70.3	83.5	101.1	84.0	117.7	127.5	138.6	179.6
27	154.7	272.7	199.4	105.2	187.5	200.4	164.9	123.9	126.3	125.3	132.8	127.0	129.9	125.6	129.8	132.4	133.2	139.3	154.0	147.5	152.1	167.0	252.7	244.5
28	178.6	207.4	207.9	227.1	221.4	190.1	167.2	345.8	255.8	185.3	211.8	211.5	200.9	207.8	223.6	208.9	198.0	192.8	182.7	179.2	182.1	162.9	172.7	170.8
29	176.3	159.7	153.3	141.0	150.6	193.3	180.5	191.4	206.5	199.9	203.8	172.0	161.6	151.2	141.2	141.3	132.0	135.6	137.2	130.0	136.0	141.6	142.8	143.8
30	144.9	147.9	144.7	158.7	160.1	177.3	227.9	227.9	249.9	358.9	16.1	26.3	43.6	339.7	49.5	0.1	150.0	230.3	227.1	234.0	30.3	280.7	323.2	189.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	210.3	199.3	198.6	224.4	211.6	168.1	255.0	106.5	45.8	40.4	81.3	118.2	132.7	126.4	120.8	123.3	126.9	129.5	120.0	116.1	116.6	119.2	127.3	130.8
2	132.8	129.1	122.6	117.1	116.1	111.2	109.8	120.8	122.1	123.5	122.3	117.9	123.2	120.7	120.9	123.5	131.0	132.4	136.9	139.6	144.6	140.3	125.8	127.1
3	115.6	120.3	105.9	111.2	104.8	115.7	106.2	120.1	118.9	129.6	131.9	121.1	110.0	117.7	107.8	112.4	107.9	137.6	123.7	112.4	119.6	103.9	133.6	110.6
4	126.4	116.7	155.7	136.3	98.4	353.2	336.0	355.4	32.4	26.0	103.3	88.1	112.0	114.9	116.7	149.3	155.2	102.8	182.1	223.7	221.0	226.0	216.8	134.0
5	186.9	173.7	121.3	158.6	151.7	167.4	144.3	143.8	16.4	138.2	134.2	140.3	68.1	42.4	72.9	171.8	180.4	215.0	124.5	146.0	172.5	208.5	179.8	216.8
6	211.9	207.6	160.0	175.5	210.2	215.9	200.8	130.9	33.3	26.0	122.5	146.7	141.6	141.7	140.4	153.4	150.5	139.1	140.5	144.9	140.0	145.3	160.6	139.7
7	138.0	147.7	147.6	148.0	145.8	139.9	144.1	143.1	141.0	138.6	138.7	141.4	142.6	143.2	139.9	140.9	143.4	143.5	143.2	146.8	159.8	202.8	213.7	228.7
8	226.0	224.4	226.4	208.0	216.6	211.8	207.2	210.8	208.0	203.7	208.9	204.6	172.4	170.0	180.3	183.6	170.3	170.4	190.0	189.8	186.6	199.7	196.6	196.0
9	177.3	177.3	153.1	150.7	156.6	145.2	144.8	157.0	137.8	133.2	149.0	144.1	143.9	144.0	132.9	131.8	136.5	125.9	122.4	129.0	140.7	129.4	134.0	129.3
10	132.6	136.8	141.6	139.1	134.8	132.6	128.1	135.6	138.1	144.6	137.3	138.8	140.0	140.0	144.1	132.7	145.4	143.1	145.6	138.9	145.5	144.6	140.5	138.9
11	135.0	144.4	132.6	147.3	152.7	148.6	117.8	156.7	179.8	206.4	178.1	160.1	138.6	137.1	143.5	140.9	136.0	148.7	148.0	147.5	141.0	148.9	155.3	159.6
12	150.0	152.1	150.2	162.3	132.3	130.3	143.9	138.7	131.4	133.1	133.5	133.7	132.8	134.3	132.2	130.7	131.6	130.5	130.7	129.9	128.4	127.1	132.0	130.3
13	129.7	133.3	130.1	131.7	135.0	131.3	135.5	141.2	142.8	139.4	144.4	140.6	151.9	149.0	144.1	161.0	152.0	161.4	184.2	204.8	215.5	226.1	226.0	230.1
14	227.9	230.1	233.9	219.6	212.8	227.2	224.6	223.7	179.7	215.5	226.1	175.1	164.9	144.4	174.5	178.5	148.9	148.7	170.7	174.7	176.9	161.3	164.5	165.5
15	169.7	194.1	208.6	210.2	212.9	191.4	220.7	209.9	174.1	138.0	149.2	143.0	144.6	139.4	139.3	149.7	145.4	148.6	163.0	155.0	158.5	164.8	173.6	163.2
16	128.8	121.3	125.5	124.7	126.7	128.3	127.7	126.6	126.7	129.0	127.5	125.6	118.7	123.6	123.6	121.9	128.1	124.3	125.3	125.4	124.4	128.8	127.7	131.7
17	144.2	151.8	190.5	204.6	206.2	207.4	192.2	203.1	207.3	201.1	205.7	212.2	219.7	207.5	209.6	213.3	220.1	222.6	223.3	220.0	216.6	215.4	214.4	200.9
18	198.2	204.9	200.5	186.5	194.1	196.4	197.3	210.7	217.9	212.9	224.2	234.2	215.8	282.0	238.7	254.4	248.7	253.0	327.9	267.6	250.9	178.2	207.9	220.1
19	183.8	259.6	292.3	296.2	299.9	301.2	304.3	309.5	311.2	321.3	330.9	328.3	330.9	317.5	338.2	333.2	338.8	333.3	350.4	327.4	332.8	323.7	317.0	296.7
20	281.7	283.8	269.4	250.4	256.3	237.1	242.0	220.4	198.3	198.8	204.5	191.4	203.6	189.3	198.6	193.6	193.7	196.3	189.2	181.5	178.7	187.6	179.0	167.9
21	172.9	181.5	180.1	175.0	176.4	178.2	178.1	186.0	194.1	193.6	188.4	194.1	223.2	251.3	294.5	276.3	272.2	214.6	251.3	258.2	285.3	236.7	231.0	221.5
22	216.5	220.9	218.2	230.6	325.8	300.1	202.3	242.4	185.8	111.9	116.0	128.6	144.2	200.9	193.1	202.5	206.7	203.1	200.4	194.5	199.3	201.6	213.7	197.9
23	194.2	185.3	139.0	229.5	326.5	22.0	117.0	214.0	229.8	236.5	220.3	206.7	196.1	191.1	186.2	187.0	187.2	187.3	187.6	192.1	191.2	210.7	222.9	13.3
24	29.3	187.6	216.2	160.9	310.7	47.8	327.8	330.5	328.7	331.6	327.8	339.0	340.4	335.0	339.7	347.0	353.1	337.1	346.8	354.7	358.7	338.2	335.6	330.0
25	326.6	324.8	321.8	324.5	317.6	331.4	330.9	323.9	327.2	332.0	328.7	330.3	337.4	337.5	343.3	340.6	334.4	329.5	321.2	319.4	313.9	305.8	303.4	289.7
26	296.8	172.7	303.2	316.2	275.2	214.6	295.5	205.6	191.7	205.8	222.5	197.0	233.3	227.8	226.6	221.2	226.7	194.0	204.1	183.1	213.4	205.8	199.9	190.9
27	190.7	186.3	201.1	192.3	190.7	240.6	247.5	179.6	135.3	137.2	141.9	131.2	120.7	127.0	126.7	127.9	135.3	139.6	143.8	155.5	199.3	222.3	230.3	230.3
28	223.9	191.4	201.8	283.0	289.3	285.3	291.9	307.2	326.2	333.0	329.2	326.5	335.4	345.4	348.0	333.7	325.0	324.9	325.3	327.9	324.2	321.0	313.5	307.9
29	320.6	323.1	320.1	326.3	337.4	324.5	318.7	323.9	328.6	339.5	342.8	337.8	332.9	333.2	325.2	326.4	319.1	323.0	319.7	327.8	329.6	320.9	329.8	343.2
30	343.1	331.6	328.8	332.2	328.2	326.5	322.9	325.5	320.8	326.0	330.3	327.9	327.6	324.6	325.8	324.0	331.8	340.1	336.4	340.3	347.7	346.0	339.7	334.3
31	325.6	307.8	281.6	314.6	312.0	48.1	316.6	312.7	330.8	332.5	334.4	330.6	317.9	306.3	304.3	301.2	292.2	295.2	301.0	290.9	284.6	266.2	240.8	251.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	261.0	257.7	28.5	147.6	195.6	186.9	30.4	355.1	358.2	26.7	31.8	33.4	34.2	51.3	71.6	202.8	215.4	226.6	222.3	217.8	225.0	228.5	226.0	222.9
2	223.3	218.6	211.3	189.0	183.5	187.3	211.6	186.6	193.7	194.5	167.6	164.8	153.0	159.9	166.0	157.7	146.5	140.6	145.0	212.5	233.7	230.2	225.1	243.5
3	119.5	285.1	304.3	325.2	333.0	304.5	339.4	331.6	336.6	334.9	341.0	22.0	99.8	210.7	146.5	127.7	137.4	143.5	141.0	148.6	141.5	154.7	152.3	148.6
4	148.4	147.0	149.1	151.2	145.7	148.3	151.6	142.9	142.4	142.6	150.6	148.8	139.6	136.7	137.3	136.6	149.0	153.1	142.3	143.1	167.7	198.7	225.0	220.9
5	222.3	228.7	227.0	214.0	233.4	220.1	242.7	223.3	11.7	348.0	10.7	354.8	350.2	338.4	345.4	347.0	344.1	351.4	344.7	346.7	345.3	342.5	328.5	327.7
6	327.9	0.0	335.4	334.7	330.4	331.1	333.3	340.1	353.1	343.9	348.2	334.9	333.1	325.8	329.5	326.5	321.9	320.1	326.7	328.7	330.4	328.1	332.3	347.9
7	326.7	333.3	329.1	325.4	319.5	314.4	314.1	327.9	324.9	326.4	333.3	333.9	335.3	334.3	341.4	342.9	325.3	323.3	326.6	331.1	337.1	324.9	314.6	316.3
8	314.8	316.2	317.2	320.0	331.5	318.5	328.8	353.3	329.1	316.7	334.5	338.6	347.2	351.0	4.4	1.9	340.5	359.1	331.1	349.4	328.7	328.5	316.3	312.8
9	320.6	321.9	307.2	311.0	306.8	308.8	322.1	326.4	330.6	332.2	335.3	328.0	343.5	348.4	347.9	352.1	343.0	345.1	339.2	345.8	336.9	318.0	350.5	309.4
10	183.2	245.6	332.3	173.1	200.8	207.9	206.5	216.8	217.4	217.6	218.6	231.8	347.6	352.1	207.7	204.1	115.1	145.2	185.6	149.0	215.4	226.6	227.0	224.3
11	226.3	228.3	201.3	198.5	176.6	198.0	157.1	135.8	134.6	133.2	131.3	126.6	126.5	124.2	131.7	132.4	127.9	128.6	122.8	139.6	160.8	138.1	180.7	192.1
12	213.6	212.1	189.6	328.6	326.5	268.8	308.2	302.0	353.9	314.0	328.6	345.6	350.3	349.1	5.9	50.2	27.5	64.1	151.5	150.0	202.4	198.7	233.7	239.9
13	205.6	208.7	131.2	74.8	318.9	184.1	188.4	201.6	191.9	182.6	13.5	332.6	331.0	344.9	33.5	75.4	104.3	122.1	133.8	144.1	133.6	130.7	132.5	124.2
14	133.0	157.2	84.3	301.3	148.6	106.3	122.0	121.9	160.2	149.0	147.8	148.4	141.4	139.1	145.0	150.1	143.5	143.5	142.2	157.5	158.4	181.1	156.3	197.1
15	227.5	219.7	219.1	223.0	224.7	208.5	224.4	29.5	7.4	37.8	43.4	27.6	9.7	352.3	342.6	25.0	119.9	155.0	181.1	228.4	206.9	181.9	166.7	155.1
16	141.0	144.0	146.4	145.4	145.7	156.9	157.2	155.1	153.8	139.1	144.1	147.6	135.5	131.3	139.1	139.8	146.3	146.5	148.6	143.1	147.4	196.8	224.3	162.2
17	146.1	162.8	135.8	149.3	147.1	138.1	124.1	129.0	138.2	130.3	110.9	116.8	123.8	127.5	127.3	128.0	127.8	128.5	132.8	135.5	135.0	126.3	122.7	128.3
18	133.6	126.5	138.1	124.5	128.9	63.6	319.9	251.2	38.7	66.8	32.9	37.9	30.4	38.4	74.7	56.0	69.0	42.1	4.0	53.1	60.0	352.2	255.7	200.2
19	207.9	212.0	194.2	202.2	157.8	200.6	304.5	288.6	211.4	337.7	173.8	104.7	311.7	299.2	308.1	297.3	335.4	334.0	306.7	316.5	11.0	307.5	182.1	198.4
20	214.8	169.8	170.8	192.7	164.4	272.8	211.3	192.5	192.2	319.2	350.8	3.1	8.2	338.4	341.8	308.4	319.7	332.7	319.9	325.7	337.1	341.7	308.9	208.6
21	198.7	189.4	187.1	213.8	272.3	272.0	238.8	226.2	271.7	230.9	210.1	230.6	239.7	214.8	189.9	243.6	218.8	200.8	225.5	263.3	223.9	214.9	210.0	223.5
22	213.7	260.3	289.7	193.3	256.7	26.4	337.7	18.2	53.5	28.2	31.5	20.3	58.7	3.3	307.7	257.4	290.1	252.5	290.7	275.0	251.5	228.1	261.3	163.1
23	153.4	146.1	201.2	270.8	211.2	184.8	288.7	319.5	320.4	328.5	344.6	348.2	342.6	332.2	340.6	316.9	323.6	325.6	212.6	198.8	222.4	195.9	184.3	224.4
24	232.3	224.1	37.4	291.5	156.1	168.3	211.6	262.5	305.6	323.9	338.8	340.3	350.2	348.0	351.8	348.3	348.0	345.7	353.3	2.1	339.4	309.2	311.5	308.7
25	305.3	295.2	272.6	227.0	169.3	198.4	177.3	344.9	343.9	8.3	40.3	214.7	213.1	156.3	170.8	135.1	141.2	142.4	131.0	145.7	146.5	153.1	151.1	142.9
26	166.5	139.0	162.3	164.6	158.6	136.5	147.5	140.9	146.3	143.7	144.8	140.2	142.5	144.4	144.3	145.9	140.1	137.5	156.3	158.8	152.0	152.5	183.4	185.3
27	177.8	212.5	220.9	208.8	220.1	230.5	310.1	195.0	191.0	15.6	255.0	241.9	302.8	303.1	269.8	255.6	247.0	276.7	279.6	265.8	264.4	246.8	223.5	233.6
28	249.1	238.1	217.8	351.3	124.1	219.0	282.8	333.3	276.9	334.5	356.1	359.8	332.0	320.2	325.6	297.3	291.0	319.2	292.9	311.2	317.6	327.5	330.6	319.3
29	318.9	321.0	320.8	316.9	312.4	297.3	154.9	161.2	299.1	164.4	98.0	351.0	269.3	229.4	203.6	201.7	193.1	222.6	222.7	225.6	206.0	193.7	201.5	214.2
30	206.6	214.2	211.5	180.2	174.7	191.0	204.0	210.3	202.4	176.8	71.6	36.8	17.6	82.1	102.2	121.1	101.8	129.3	132.1	141.2	148.0	134.2	119.4	115.6
31	115.8	119.4	118.3	111.0	110.7	110.5	116.1	116.1	110.7	81.7	69.0	75.2	78.9	78.6	61.4	62.6	51.4	54.5	42.9	35.9	38.4	42.8	53.6	34.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	28.6	31.5	34.9	50.0	64.4	29.7	21.3	19.4	22.6	44.5	41.6	49.5	87.0	91.7	82.3	70.8	100.2	112.1	91.5	88.6	106.3	91.2	96.8	101.2
2	109.0	105.9	114.2	114.8	110.5	106.7	110.4	106.3	110.1	108.8	112.3	109.8	118.8	112.1	108.3	106.0	89.8	72.3	47.9	23.1	2.5	13.3	12.0	15.5
3	25.6	30.0	35.0	15.3	10.9	0.2	358.2	13.5	0.4	206.4	110.3	56.5	113.6	131.4	151.1	189.4	180.2	172.4	165.0	168.6	157.5	171.7	213.0	196.3
4	203.1	192.6	186.0	191.2	191.0	196.9	211.9	207.0	203.8	210.2	214.6	171.3	204.3	209.1	165.0	148.9	142.4	178.6	202.9	217.5	210.2	183.0	198.4	270.6
5	189.6	146.2	217.6	175.2	192.7	240.0	192.7	190.4	232.0	194.0	137.6	174.9	170.2	196.9	217.7	254.8	247.5	53.9	81.3	85.5	167.8	190.1	185.4	186.4
6	179.7	144.1	130.9	121.5	111.9	108.0	109.3	101.7	98.1	93.5	91.4	102.4	106.1	111.1	112.9	100.1	91.3	89.9	93.3	100.5	83.4	98.7	110.0	96.7
7	97.6	107.1	113.6	104.5	78.1	79.3	91.4	83.3	71.3	71.0	84.9	118.4	126.1	128.4	127.7	122.9	122.0	124.5	126.9	131.7	133.4	137.8	137.6	147.0
8	151.2	181.2	175.8	179.2	176.8	184.2	178.9	170.6	161.8	152.4	118.7	105.2	97.2	109.0	109.2	105.1	101.8	110.9	106.1	105.0	75.4	87.7	89.9	111.6
9	118.2	116.7	111.5	102.8	110.1	78.7	150.0	67.7	67.7	92.6	87.5	81.8	88.6	102.0	121.5	123.5	119.5	124.1	127.3	126.0	130.2	123.3	122.2	123.1
10	122.6	128.5	131.1	133.7	124.6	118.8	57.5	54.2	129.6	159.7	161.6	190.1	197.5	195.0	214.1	235.3	207.3	220.1	222.7	222.9	204.3	220.4	219.3	213.7
11	236.3	226.8	213.8	222.2	226.5	211.1	195.8	191.9	189.8	178.0	175.6	173.6	165.5	167.0	169.4	169.1	172.2	157.5	143.0	143.5	128.1	120.3	113.0	121.1
12	123.5	118.0	112.5	118.8	124.9	116.5	116.2	113.3	114.2	113.0	112.9	115.6	117.7	119.6	118.5	116.5	114.2	113.5	116.1	117.7	116.3	115.5	116.5	116.4
13	116.9	111.8	111.2	117.3	122.7	118.4	121.2	117.8	120.1	114.4	119.6	121.6	128.4	129.2	118.5	113.6	120.5	116.1	114.3	112.1	113.8	115.7	115.0	115.8
14	116.2	121.4	122.8	127.9	131.0	132.5	130.3	132.8	124.8	124.1	122.8	119.5	119.1	122.8	122.1	123.3	127.2	127.4	126.2	128.4	139.6	142.5	147.2	140.8
15	142.0	143.9	138.3	132.9	117.7	127.7	119.5	121.8	120.5	113.4	122.0	126.7	135.2	126.6	131.0	123.7	126.2	124.0	121.5	129.6	130.9	140.1	136.5	137.4
16	135.1	133.5	354.7	229.6	299.0	314.4	5.7	251.0	19.8	85.0	331.1	323.0	332.6	322.3	317.3	292.0	320.3	290.6	281.7	270.4	266.9	258.9	249.6	244.3
17	260.9	257.0	238.4	227.3	219.7	213.4	214.7	217.1	211.8	258.6	9.9	32.3	30.2	67.5	94.2	99.1	90.0	97.2	110.5	95.6	94.2	97.8	90.0	29.2
18	22.1	12.4	13.3	16.2	20.5	14.3	12.2	9.8	5.2	6.1	354.0	339.7	335.7	315.5	311.3	304.6	313.4	315.2	311.2	325.8	155.7	301.4	81.9	83.0
19	71.7	42.2	57.7	47.9	43.7	81.9	71.7	87.7	92.0	105.4	134.8	146.8	135.7	152.8	198.6	272.3	281.9	286.9	291.3	281.2	286.3	286.0	287.6	280.9
20	264.3	263.2	282.6	267.1	287.4	296.1	298.4	298.3	300.4	337.6	344.0	341.4	333.8	286.0	273.0	307.1	295.8	310.7	296.7	320.8	307.7	272.7	306.0	298.8
21	304.3	354.2	269.5	291.6	288.4	286.9	286.8	304.6	295.0	179.9	142.7	35.5	9.4	336.4	336.0	309.8	294.8	309.4	318.6	299.0	295.8	297.9	308.7	307.8
22	310.6	173.6	264.2	210.3	343.2	181.9	220.3	199.9	186.1	183.5	152.7	289.6	184.5	153.1	169.0	167.6	150.1	141.4	148.0	189.7	195.2	197.4	199.5	191.3
23	194.1	186.5	213.2	185.9	199.6	200.2	200.5	206.1	204.3	201.4	204.9	204.0	198.7	189.2	185.9	189.0	194.6	196.1	191.9	193.9	194.2	196.7	191.8	182.5
24	169.9	166.4	155.4	148.6	155.1	151.5	140.3	127.6	137.6	141.3	128.4	133.8	113.9	115.9	110.1	111.9	97.3	101.6	98.2	89.2	92.1	113.0	127.7	33.6
25	301.2	348.3	5.2	314.0	326.3	317.6	335.5	15.3	30.7	358.0	21.0	34.2	14.0	15.3	40.8	66.5	36.1	82.0	83.7	86.1	300.7	284.6	353.4	212.3
26	221.9	203.1	184.7	296.8	326.0	276.9	183.5	162.4	189.4	145.7	227.1	166.6	145.9		304.0	325.0	292.3	297.3	296.3	305.0	315.3	327.5	299.6	244.7
27	333.0	333.4	313.6	310.7	327.9	320.8	332.9	341.3	338.6	333.3	347.7	344.7	342.9	345.4	345.9	347.5	341.2	346.3	343.6	346.0	350.5	335.9	329.4	333.5
28	341.1	343.0	330.2	325.3	318.0	313.1	158.9	271.8	299.9	201.5	150.1	80.6	55.3	15.6	59.8	13.6	71.9	152.1	141.6	148.1	155.8	206.9	228.6	145.9
29	141.5	149.1	147.8	115.2	116.5	130.6	133.8	143.1	143.8	156.1	144.6	129.7	140.7	134.1	143.7	140.2	143.1	136.9	138.5	150.2	147.3	176.5	197.6	193.6
30	204.8	247.8	189.8	208.9	325.6	329.8	313.2	322.4	324.6	341.5	332.0	354.0	359.1	331.7	335.0	320.4	328.6	300.6	349.9	327.8	239.8	204.1	192.7	183.0

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	197.5	191.8	194.1	198.6	221.0	221.4	203.5	248.1	176.1	140.6	146.8	140.0	145.6	146.6	153.8	155.5	176.2	150.6	150.1	162.7	148.1	147.9	155.3	160.2
2	168.4	142.1	143.3	167.6	176.8	219.3	219.6	224.1	225.1	237.0	208.1	213.8	126.8	176.6	93.7	256.5	245.1	228.1	228.5	225.1	233.4	217.1	217.7	218.4
3	220.0	209.5	219.9	213.5	264.9	256.3	299.7	322.1	333.0	333.5	327.8	327.2	336.8	343.2	330.8	330.8	329.9	336.6	327.0	320.3	325.3	349.8	237.3	290.7
4	322.5	315.3	331.2	312.4	314.0	306.7	300.9	220.0	323.4	344.3	161.8	336.1	353.1	227.3	309.1	296.3	292.4	271.5	43.4	356.7	242.6	311.4	255.8	217.7
5	228.3	228.0	230.1	194.7	210.3	223.8	225.2	322.4	308.9	239.2	137.1	6.6	311.1	341.2	347.3	331.1	342.6	349.6	337.0	353.7	348.1	348.3	355.9	341.8
6	330.2	325.6	322.7	324.8	326.3	334.9	328.6	2.4	1.1	331.4	318.0	330.1	341.8	1.5	347.1	317.1	325.2	326.6	324.1	326.9	319.6	312.9	308.2	321.5
7	328.2	328.6	327.0	327.4	327.5	329.9	330.2	322.8	333.6	324.3	335.1	343.3	335.0	336.9	328.3	327.4	324.3	324.6	329.5	333.2	326.8	326.4	329.5	321.8
8	323.0	319.7	315.8	316.7	321.5	326.7	326.1	327.8	322.1	319.2	324.7	325.8	342.5	0.4	1.4	3.8	2.7	1.3	4.1	9.5	17.8	82.0	190.8	209.6
9	237.0	120.5	120.1	122.6	123.4	122.2	122.1	122.1	120.9	121.6	122.5	120.9	118.5	117.8	120.2	121.5	123.2	123.2	122.8	122.1	122.7	124.1	130.0	131.5
10	136.3	133.3	141.3	149.8	217.2	219.7	234.8	238.6	233.1	234.7	219.4	209.0	179.4	155.3	150.3	151.3	144.2	147.0	150.9	144.8	142.9	142.4	144.7	135.2
11	133.1	131.4	127.5	126.9	124.6	121.5	126.3	136.4	148.2	328.7	344.1	334.5	337.9	343.9	344.3	347.9	344.3	339.3	337.8	339.5	337.1	336.9	340.4	340.9
12	341.8	340.3	337.7	337.1	331.9	331.5	329.3	333.4	332.5	333.3	332.6	330.4	332.9	341.5	327.0	329.4	340.8	337.9	332.8	330.9	328.7	340.6	330.8	329.5
13	312.7	333.1	318.7	324.5	308.1	238.0	290.1	289.8	196.2	41.9	163.1	50.1	119.2	153.6	136.7	129.7	120.0	115.9	117.4	126.1	122.1	125.7	133.0	135.6
14	132.6	140.1	142.6	141.1	143.4	160.1	186.7	185.2	178.1	165.5	156.1	152.9	151.2	147.0	154.8	156.8	138.1	140.6	134.5	163.1	155.0	198.5	5.3	340.5
15	335.4	338.1	339.3	339.2	339.3	339.4	339.4	339.4	339.4	339.4	339.3	339.2	339.1	339.1	339.3	339.4	339.2	339.2	339.2	339.3	339.2	339.2	339.2	339.2
16	339.2	339.3	339.2	339.1	339.1	339.2	339.2	339.2	339.2	339.2	339.3	339.3	339.3	339.4	339.3	339.1	339.1	339.2	339.2	339.1	339.1	339.1	339.1	339.1
17	339.1	339.1	339.1	339.1	339.1	339.1	339.1	339.1	339.1	339.1	339.1	339.1	339.1	340.2	353.6	9.2	151.2	167.5	159.4	146.7	139.4	133.5	123.6	121.7
18	125.3	125.3	124.4	124.8	124.6	123.6	120.3	118.1	119.5	120.1	118.9	109.6	109.0	103.9	91.9	54.3	74.4	51.3	9.4	39.2	2.7	3.1	297.5	276.6
19	313.1	327.3	344.5	4.1	0.1	89.2	3.7	323.2	311.0	329.8	330.7	332.2	337.6	347.3	347.5	331.0	324.8	245.7	331.2	321.2	342.8	50.5	350.6	9.2
20	190.7	330.4	205.0	202.5	198.3	2.3	18.3	40.6	23.1	182.5	321.7	13.8	16.7	44.4	27.9	2.8	39.1	316.4	195.7	182.3	11.3	205.6	341.6	219.3
21	327.8	240.2	260.2	342.9	336.9	28.3	323.0	322.7	332.3	5.1	3.7	339.8	339.4	331.5	337.8	352.6	350.3	353.9	347.3	339.2	336.4	329.7	327.9	330.4
22	330.1	327.3	328.9	329.2	321.3	325.2	327.3	336.3	346.0	334.9	337.5	330.6	330.3	340.4	340.8	349.4	0.0	341.4	334.5	334.1	342.7	336.9	334.7	336.9
23	312.5	316.5	317.4	339.8	360.0	340.9	343.8	330.0	322.3	335.1	331.8	334.4	331.9	328.7	328.7	324.2	317.5	322.8	306.4	289.6	276.3	264.9	268.7	279.0
24	274.9	290.9	294.5	297.5	294.7	298.4	309.9	323.3	325.3	294.5	286.5	290.1	253.9	204.2	238.4	236.5	236.5	237.5	231.5	225.1	245.8	211.0	210.7	217.7
25	153.9	146.9	133.3	140.8	143.1	164.6	231.2	174.6	143.4	136.8	146.2	150.6	132.8	137.9	138.6	127.3	213.1	221.3	142.4	181.4	313.7	187.7	234.4	313.1
26	295.7	324.6	4.2	47.4	7.3	348.2	330.8	331.8	335.5	327.9	328.6	334.0	326.6	336.3	342.6	333.6	331.3	351.5	347.6	341.7	338.5	340.2	336.8	341.2
27	336.6	331.0	334.6	338.4	334.6	337.5	332.4	328.2	344.9	332.3	301.7	327.2	319.0	316.5	314.8	335.4	349.9	346.3	336.4	305.2	341.2	211.9	241.7	197.5
28	194.7	209.7	213.2	176.5	252.8	167.0	116.0	148.8	148.2	154.4	154.3	150.6	152.8	155.8	150.8	147.1	139.7	146.1	195.3	227.8	206.2	212.0	212.7	184.4
29	171.3	307.7	218.1	223.0	177.7	184.7	202.2	201.4	233.9	226.7	227.9	229.7	207.3	174.9	162.9	184.3	166.6	166.3	176.1	155.6	147.6	137.0	136.9	139.5
30	138.2	135.8	134.6	136.4	132.4	152.6	229.2	249.7	358.9	198.9	170.0	175.7	114.7	200.6	106.0	117.4	146.2	113.1	160.4	156.5	202.0	173.6	189.1	188.9
31	201.0	221.1	230.7	287.2	205.9	210.1	211.4	198.6	219.1	212.8	224.9	211.2	194.5	267.1	238.3	60.8	240.0	194.4	230.4	191.9	193.6	356.7	193.3	202.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	220.1	359.9	285.6	214.8	219.7	117.8	306.7	303.5	320.2	322.5	288.5	323.8	25.4	21.0	42.3	33.0	29.8	38.2	328.6	342.2	335.8	340.0	345.6	328.3
2	327.3	322.2	331.7	317.8	337.2	338.6	330.2	322.9	324.2	343.5	338.6	330.5	335.2	347.7	353.3	355.8	337.6	339.6	338.1	337.3	344.7	340.4	343.3	338.0
3	333.8	332.3	336.8	334.9	334.9	334.5	335.3	337.5	328.4	330.4	330.9	330.8	332.7	332.4	333.2	316.2	309.3	313.3	322.4	330.0	333.5	349.6	342.2	347.8
4	338.0	348.4	351.2	351.9	326.7	320.7	339.3	342.8	330.7	341.3	316.6	329.9	334.3	334.9	341.6	337.0	326.6	322.5	321.3	354.0	337.2	345.3	335.0	306.8
5	298.6	335.6	331.7	308.1	292.0	294.3	300.0	307.3	311.7	298.3	292.9	242.7	349.3	329.9	341.8	187.4	308.0	327.0	245.1	296.6	291.9	294.5	263.9	308.4
6	322.3	318.8	326.1	318.7	333.8	351.2	292.6	320.8	177.5	239.2	183.8	191.6	248.7	233.7	341.9	328.2	305.9	298.5	230.6	328.3	331.6	5.4	330.1	327.7
7	319.9	349.0	344.3	315.1	294.4	323.9	335.9	297.6	345.4	33.3	324.0	39.7	257.1	3.5	58.0	331.7	348.0	214.7	223.3	189.8	199.7	175.6	186.7	209.9
8	212.9	205.1	200.4	210.6	188.8	192.3	173.8	142.2	140.1	121.4	73.8	143.1	140.3	129.1	129.6	125.9	117.6	104.3	113.3	114.9	110.4	112.9	101.0	94.0
9	97.3	92.9	92.3	101.3	111.7	111.7	109.7	116.1	106.2	91.8	85.6	82.1	86.4	79.8	101.5	118.2	116.6	102.2	94.7	118.7	121.2	123.3	122.6	125.0
10	129.6	126.2	110.3	105.5	98.4	77.2	71.1	53.9	15.1	2.8	41.6	58.4	52.6	23.3	23.4	35.1	85.1	133.5	143.9	148.8	133.9	124.2	124.0	119.0
11	117.2	115.6	104.3	103.4	120.2	114.0	115.4	113.6	110.3	121.7	114.0	124.5	149.1	147.0	182.0	217.4	258.5	238.8	208.4	237.0	212.2	207.7	253.9	238.6
12	215.4	235.1	217.1	228.2	212.0	221.5	223.1	190.3	190.7	228.9	235.6	241.0	232.5	231.9	232.1	243.3	239.1	244.3	222.3	210.2	197.8	183.2	193.7	200.2
13	192.4	177.8	198.6	153.0	137.5	132.1	134.0	142.7	144.2	136.5	143.0	145.2	143.2	133.3	135.2	139.5	138.4	176.4	188.9	184.9	183.1	176.2	173.6	176.3
14	184.2	184.6	181.2	170.9	165.1	164.7	169.9	171.6	176.4	168.2	196.3	220.0	232.4	195.3	207.8	224.0	212.1	196.2	193.6	197.1	203.0	207.7	203.2	202.9
15	203.1	226.7	222.9	217.7	213.2	198.9	200.4	203.7	166.6	110.9	67.3	147.7	133.1	126.2	128.7	136.2	138.7	132.6	127.6	122.4	126.0	129.0	128.0	128.2
16	132.9	133.0	139.9	150.9	158.2	184.4	192.6	223.3	231.3	236.0	237.3	223.2	230.7	221.2	200.1	205.7	174.8	197.7	201.9	199.7	198.4	162.8	161.2	179.5
17	172.7	185.6	195.3	208.3	293.5	171.7	211.7	199.7	213.5	241.1	198.3	333.1	199.9	310.6	319.1	330.7	99.9	128.4	104.2	117.0	108.4	338.3	322.1	321.3
18	334.2	329.4	9.1	354.4	351.2	9.3	344.7	340.0	315.3	346.1	332.7	340.4	323.9	336.7	352.1	350.4	356.2	4.7	336.4	327.3	339.3	321.2	328.4	340.6
19	341.0	335.0	334.2	323.9	326.1	10.8	27.4	348.2	344.3	343.0	338.7	343.1	335.6	343.2	351.8	339.7	336.9	341.1	337.9	344.5	341.4	342.9	340.0	339.8
20	336.3	326.7	324.6	327.4	330.4	343.2	337.1	332.1	332.9	326.4	332.0	333.6	343.8	345.0	342.3	342.1	341.2	340.4	344.2	342.1	346.9	346.8	351.4	342.4
21	345.0	349.2	347.7	331.8	333.2	340.7	343.1	327.6	336.0	332.6	166.9	342.4	197.2	305.1	291.6	7.3	328.6	275.8	190.4	161.2	340.1	349.1	2.7	337.9
22	147.5	30.5	346.5	310.9	15.2	201.3	179.7	253.6	197.8	210.2	206.8	198.6	230.1	327.6	31.3	342.8	211.8	224.0	273.4	201.3	287.5	227.0	205.7	256.7
23	212.3	229.3	223.7	231.8	216.5	209.3	214.8	241.3	221.4	259.8	244.0	255.2	338.8	136.2	134.7	133.0	137.3	128.9	131.2	124.8	118.8	122.9	118.4	115.1
24	112.1	113.5	113.6	114.2	116.9	117.2	111.0	108.7	112.3	115.2	119.0	120.3	124.7	119.4	126.3	128.7	129.5	133.6	136.2	154.0	152.5	185.0	196.7	193.2
25	209.2	206.2	211.0	210.1	203.3	205.1	206.0	191.8	201.0	201.2	210.9	203.1	200.9	286.8	300.0	299.3	300.8	298.6	303.8	295.0	306.0	316.0	312.6	347.0
26	329.0	328.9	319.2	327.9	327.6	332.8	340.2	332.1	325.4	330.9	331.2	332.9	328.8	339.9	340.0	336.1	338.7	346.0	343.6	341.8	341.8	343.1	336.7	349.4
27	330.4	330.3	302.1	313.1	244.1	193.5	189.6	124.3	277.7	268.2	307.8	204.3	274.1	303.6	345.7	259.7	307.5	342.5	301.7	330.2	336.2	337.1	3.3	311.2
28	306.9	299.8	308.6	308.2	304.1	309.6	327.2	314.9	310.9	339.9	317.5	311.2	304.9	306.7	318.7	319.7	341.0	14.5	3.1	26.9	64.0	21.7	16.6	8.9
29	32.4	340.6	330.4	327.0	327.1	326.9	320.2	319.2	319.7	327.1	331.6	332.9	324.7	330.0	336.7	331.8	321.1	327.2	322.5	327.0	330.0	327.3	329.4	322.4
30	325.0	314.1	324.0	315.9	324.2	327.8	327.2	331.4	328.6	323.8	333.1	333.0	336.5	335.4	322.6	332.7	333.0	336.5	357.0	345.6	327.7	335.1	295.5	343.3

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	314.6	306.1	306.0	263.5	316.8	270.1	150.5	21.9	122.9	46.3	34.5	77.2	279.2	128.5	115.1	353.5	0.1	131.3	2.1	144.7	118.5	134.4	131.4	147.5
2	210.3	195.5	185.4	148.5	133.8	109.2	119.7	126.2	128.4	125.6	127.0	118.4	112.3	117.5	117.1	114.2	117.6	123.5	127.3	125.2	120.8	119.5	119.3	122.3
3	118.4	123.4	120.6	118.3	114.4	115.5	121.3	119.7	114.4	111.8	115.7	116.0	116.0	112.8	113.4	114.7	113.4	116.1	117.9	120.1	123.2	124.7	124.4	125.6
4	125.7	122.8	127.8	137.1	141.4	138.7	139.8	142.4	136.7	139.3	143.0	130.2	122.2	123.4	124.8	125.8	124.3	125.9	134.1	139.2	134.5	135.3	135.8	141.1
5	145.1	146.5	140.6	131.8	132.7	136.4	134.5	131.6	126.7	127.1	126.6	127.4	129.2	129.8	126.9	125.5	125.8	125.2	128.3	132.0	132.4	111.7	111.2	122.2
6	121.6	130.0	122.2	123.7	126.9	130.3	122.6	113.8	111.2	107.1	112.7	107.1	359.8	44.1	3.7	224.4	133.4	230.9	292.0	199.3	313.9	309.9	327.6	21.4
7	290.9	349.1	349.3	337.4	349.7	331.0	337.5	318.6	348.2	355.5	10.7	357.3	33.0	328.2	309.6	302.0	306.7	323.1	250.5	239.9	309.7	334.1	333.1	329.9
8	340.8	287.8	178.4	36.8	0.3	8.0	19.5	15.9	50.3	53.7	42.0	34.3	29.4	37.5	52.3	43.1	35.7	20.5	2.0	2.3	5.6	8.0	19.1	19.0
9	19.7	356.7	318.5	326.6	310.0	348.9	348.0	340.9	337.6	319.3	196.4	359.9	354.1	190.8	165.4	24.5	16.3	201.1	27.4	263.4	185.3	235.8	220.2	214.2
10	204.6	191.5	195.8	204.4	203.7	192.9	197.3	201.0	205.8	213.4	222.8	230.2	229.5	242.2	246.7	261.7	246.9	246.4	250.1	236.8	263.6	283.3	286.3	288.7
11	288.7	287.5	295.6	283.7	256.9	212.9	245.9	209.1	201.0	182.0	220.7	235.6	242.1	260.3	285.8	314.0	340.2	325.6	338.6	326.8	311.3	309.3	311.5	324.6
12	336.6	355.8	290.9	257.7	331.1	307.0	320.6	220.6	192.7	233.8	216.9	191.9	72.7	189.8	15.1	213.3	9.1	15.3	311.9	308.8	327.9	343.0	342.9	342.8
13	328.6	333.4	333.1	339.0	344.9	333.4	342.6	347.4	340.3	11.8	62.0	345.0	203.4	213.5	325.3	310.7	282.6	188.5	186.8	326.9	192.3	211.8	208.9	207.2
14	213.7	216.7	178.0	196.4	109.3	222.1	193.1	192.3	175.1	144.0	141.8	148.5	148.2	148.9	142.1	143.3	150.1	144.3	144.8	143.6	141.4	133.9	135.9	136.3
15	135.0	131.7	143.0	136.6	139.1	141.0	139.8	143.1	137.0	143.2	155.8	157.2	157.3	157.3	146.7	199.2	163.2	191.5	214.9	335.6	345.8	220.6	226.0	296.7
16	297.4	249.6	205.5	147.2	52.5	210.3	157.9	159.1	225.8	138.9	184.6	138.1	141.3	150.7	155.8	150.8	149.2	150.6	152.5	150.1	148.4	148.9	148.7	145.1
17	139.9	138.9	130.3	132.4	134.8	133.4	131.2	130.1	133.9	132.0	131.7	131.8	132.6	133.6	133.7	134.4	136.3	133.6	134.4	131.2	131.2	132.4	141.4	137.6
18	135.8	136.5	132.7	130.5	132.4	132.9	129.9	127.4	128.5	125.6	125.0	120.2	115.0	116.8	121.4	122.1	119.6	121.1	119.9	119.8	118.2	118.2	119.1	119.4
19	120.1	118.0	114.5	113.1	113.3	110.5	114.6	115.3	117.1	116.8	112.0	112.7	105.4	84.2	81.6	69.5	46.3	65.0	51.0	48.3	53.0	55.9	48.8	22.3
20	48.0	66.8	54.2	65.2	68.8	74.0	69.1	33.4	62.7	24.5	109.2	216.1	141.1	73.6	94.6	106.0	224.4	180.9	139.1	203.0	191.3	209.5	233.2	243.1
21	201.6	164.5	217.7	239.2	241.9	178.5	178.0	63.0	41.2	321.1	32.8	53.2	324.8	220.3	284.9	255.5	5.1	197.9	206.9	209.3	190.4	200.1	218.5	214.6
22	224.8	216.1	176.2	170.3	164.3	135.8	134.1	144.5	158.5	159.8	155.1	157.3	200.0	191.4	173.6	172.3	172.9	171.5	149.0	151.4	152.3	152.1	152.0	143.7
23	135.2	132.0	130.9	125.4	125.4	127.1	132.7	150.7	245.9	285.8	280.6	269.0	258.1	253.4	258.8	261.5	259.2	255.5	261.3	255.3	256.1	257.1	257.9	268.9
24	282.3	277.3	281.2	266.9	226.6	266.7	293.9	276.1	273.1	261.7	265.0	279.9	292.3	284.3	312.6	314.4	315.6	202.5	195.0	209.8	173.1	140.4	142.8	211.2
25	182.9	132.4	136.0	136.7	131.0	130.3	128.6	126.4	134.0	134.8	143.6	147.5	146.3	147.7	149.5	154.4	261.0	295.6	300.3	306.4	307.9	313.5	313.3	316.5
26	316.0	314.4	314.7	314.3	318.3	317.7	315.7	314.3	311.9	304.3	303.1	309.2	308.6	306.3	306.1	302.1	308.0	301.8	298.7	302.2	305.2	303.8	313.1	319.8
27	325.4	325.5	333.3	342.0	343.7	344.4	344.1	345.2	340.9	339.0	338.2	341.4	337.5	340.5	341.0	337.8	338.3	341.6	340.8	340.2	340.6	339.3	334.0	336.9
28	340.9	346.8	341.0	336.7	346.3	344.4	344.2	341.7	358.2	351.2	342.9	342.4	340.0	337.5	349.8	353.8	342.2	343.8	347.9	344.9	338.0	334.1	336.0	339.7
29	328.7	326.2	335.1	339.4	2.4	344.6	333.5	330.6	346.2	341.4	333.5	333.8	317.1	321.9	316.1	310.1	301.8	315.2	317.5	326.2	326.1	335.7	313.3	330.2
30	318.7	325.5	309.9	316.8	302.2	304.0	310.6	320.3	335.5	340.6	309.0	311.5	338.1	342.7	0.7	340.8	322.6	332.1	17.7	14.2	333.1	359.6	11.6	281.3
31	147.0	354.1	344.3	65.5	52.7	8.1	352.9	13.9	8.2	24.8	339.5	330.3	320.7	330.6	330.9	330.0	325.1	322.5	317.4	315.7	340.6	80.5	95.5	137.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.2	12.6	6.5	9.7	10.6	13.7	26.2	23.0	21.2	26.9	22.8	8.1	12.6	10.9	13.5	64.4	45.2	49.3	49.1	17.5	30.7	47.0	11.5	26.5	64.4	6.5	23.7
2	28.4	8.0	10.3	17.5	25.2	26.5	23.9	10.8	16.3	78.6	30.5	74.8	15.6	8.8	52.7	48.7	11.3	67.0	66.0	16.4	75.6	18.8	52.0	45.6	78.6	8.0	34.6
3	45.7	48.8	42.8	29.1	62.6	60.4	27.8	8.9	56.8	57.8	73.9	12.1	99.5	32.2	51.4	35.1	66.0	37.2	54.0	15.7	8.4	14.8	19.2	17.2	99.5	8.4	40.7
4	22.8	90.0	38.3	56.9	53.2	77.4	23.0	38.2	19.9	90.5	34.8	38.8	30.1	24.5	9.0	12.9	11.3	33.5	39.1	13.3	12.1	22.7	33.6	17.4	90.5	9.0	35.1
5	18.1	11.6	8.8	4.8	5.2	4.7	3.9	5.8	4.2	5.5	5.5	4.9	4.2	4.7	3.8	4.6	3.6	3.0	3.1	4.3	3.7	3.0	3.5	3.2	18.1	3.0	5.3
6	3.9	4.8	3.5	6.0	5.0	9.4	9.4	5.8	5.4	5.3	3.8	3.9	4.9	6.1	4.7	3.5	4.4	3.8	5.2	3.5	3.9	5.3	4.4	4.8	9.4	3.5	5.0
7	26.8	44.9	63.4	88.4	38.3	5.2	6.0	8.8	27.8	50.1	23.5	25.4	11.4	12.9	9.2	14.4	12.5	13.5	7.4	11.2	11.7	5.7	9.0	13.0	88.4	5.2	22.5
8	7.5	81.8	63.9	64.3	70.0	28.4	75.4	52.6	63.9	37.9	31.7	78.6	41.9	65.3	17.5	68.9	45.8	63.3	21.0	70.7	37.6	51.3	63.9	12.1	81.8	7.5	50.6
9	45.9	33.6	11.9	8.5	7.1	7.3	7.8	6.8	30.0	7.8	8.2	13.1	39.7	12.1	7.9	4.0	4.0	3.7	4.2	3.7	2.9	3.1	3.2	4.8	45.9	2.9	11.7
10	4.0	3.7	3.3	4.4	3.5	4.3	4.8	3.6	3.5	10.8	4.4	5.7	4.1	4.4	4.6	6.4	5.4	10.2	4.0	5.5	4.9	5.4	5.4	6.9	10.8	3.3	5.1
11	4.8	6.8	7.3	3.0	4.3	4.0	4.6	4.3	5.6	4.1	4.4	6.3	7.7	5.0	3.2	3.8	4.5	4.4	4.4	5.2	4.5	7.2	9.6	26.1	26.1	3.0	6.0
12	28.9	41.3	13.3	13.2	9.3	23.7	20.0	23.5	16.9	13.3	14.1	20.6	16.7	40.8	84.1	15.7	8.2	8.2	5.6	6.0	5.3	6.9	7.7	7.0	84.1	5.3	18.8
13	4.5	5.2	6.6	10.0	5.5	5.5	3.6	3.6	4.0	4.6	5.3	5.2	6.0	5.9	6.1	14.7	5.8	8.4	8.7	5.7	9.1	84.8	43.2	41.2	84.8	3.6	12.6
14	24.8	16.2	56.8	48.6	69.9	42.0	0.3	54.6	39.2	56.7	3.9	4.9	8.2	7.3	4.5	4.3	3.9	3.9	3.6	4.2	5.1	6.8	4.3	4.7	69.9	0.3	19.9
15	4.1	4.1	4.7	4.9	5.2	4.5	4.5	6.9	4.4	4.3	4.8	3.9	10.4	6.4	4.0	4.5	5.1	8.1	6.0	8.4	6.1	4.4	3.8	7.2	10.4	3.8	5.5
16	34.4	40.2	10.6	5.0	6.5	6.4	4.0	3.4	4.0	5.2	8.7	7.0	6.2	15.1	15.1	12.8	10.0	13.0	30.6	16.8	20.5	58.6	49.4	36.7	58.6	3.4	17.5
17	22.0	26.6	4.1	4.7	5.5	4.7	3.9	4.0	4.1	4.0	6.8	5.0	4.4	4.6	5.9	4.5	5.1	5.1	7.7	5.9	4.0	4.3	5.2	5.6	26.6	3.9	6.6
18	4.5	7.3	7.0	6.3	7.4	8.6	29.3	30.0	30.4	40.2	53.8	10.8	7.4	28.8	93.9	48.9	36.0	31.0	29.1	29.6	67.7	46.2	17.8	4.0	93.9	4.0	28.1
19	4.6	4.2	5.1	5.0	3.7	6.5	4.9	5.7	4.0	4.5	4.6	4.6	4.6	4.7	5.0	4.6	4.5	4.2	4.3	4.8	5.0	5.0	4.6	4.9	6.5	3.7	4.7
20	4.3	5.3	4.5	5.7	5.0	4.8	4.1	4.0	4.3	5.7	4.1	3.6	3.6	3.6	3.7	44.4	52.8	9.3	36.0	89.9	80.2	28.6	9.3	4.1	89.9	3.6	17.5
21	5.7	5.6	10.3	69.7	50.9	3.9	5.4	5.2	4.3	5.0	4.2	4.4	4.4	4.5	4.5	5.0	6.0	5.3	6.8	5.6	5.2	5.6	5.9	6.6	69.7	3.9	10.0
22	5.9	11.9	6.9	5.5	7.3	7.0	6.6	5.9	7.3	6.7	10.5	6.1	6.6	5.0	7.5	6.7	8.8	7.6	9.7	71.7	34.2	18.6	25.1	9.5	71.7	5.0	12.4
23	5.6	4.1	6.2	3.7	4.4	3.4	4.4	4.9	7.0	5.1	3.4	5.3	6.4	11.4	7.0	4.0	6.4	4.5	3.4	5.8	26.6	23.4	68.9	23.8	68.9	3.4	10.4
24	92.0	81.9	26.1	31.8	65.9	102.1	30.0	22.0	44.3	11.5	8.9	6.6	4.5	4.7	4.8	5.7	3.7	4.2	4.4	3.8	6.9	5.3	3.6	14.7	102.1	3.6	24.6
25	36.6	35.0	14.5	49.1	20.1	5.9	4.1	9.0	8.0	8.1	5.0	7.2	12.2	9.2	6.8	8.7	7.7	5.5	9.6	6.5	10.4	6.9	9.6	12.9	49.1	4.1	12.8
26	7.9	4.5	4.8	5.5	4.6	23.2	10.1	7.2	59.9	54.9	48.4	47.4	21.2	103.4	83.8	94.7	50.5	70.9	52.7	98.8	82.3	48.2	36.6	6.3	103.4	4.5	42.8
27	4.4	3.4	4.2	5.9	4.9	4.2	3.5	5.8	6.1	4.1	3.7	3.6	3.6	3.9	4.7	4.5	4.0	4.3	4.3	4.6	5.3	5.1	5.1	4.6	6.1	3.4	4.5
28	4.5	4.5	3.7	4.5	4.0	4.1	4.3	4.8	3.7	4.7	5.6	6.4	6.0	25.6	10.1	3.5	4.1	8.4	88.5	76.6	17.0	59.7	98.9	70.6	98.9	3.5	21.8
29	87.2	29.6	6.8	14.5	7.4	30.7	59.6	66.2	17.7	41.2	87.4	71.4	82.5	45.1	86.2	70.9	57.8	13.6	89.3	67.0	15.7	13.7	36.9	29.2	89.3	6.8	47.0
30	54.6	71.4	48.1	7.5	98.4	6.6	91.5	87.8	9.8	4.2	5.8	7.4	6.0	4.9	4.1	6.1	5.4	7.5	34.5	14.2	28.8	7.7	8.6	11.8	98.4	4.1	26.4
31	16.9	20.3	4.3	80.9	9.0	10.7	75.5	51.6	81.7	5.4	17.5	7.8	8.4	67.6	56.8	53.1	7.2	37.7	86.5	72.7	64.9	47.8	9.4	21.5	86.5	4.3	38.1
Max.	**92.0**	**90.0**	**63.9**	**88.4**	**98.4**	**102.1**	**91.5**	**87.8**	**81.7**	**90.5**	**87.4**	**78.6**	**99.5**	**103.4**	**93.9**	**94.7**	**66.0**	**70.9**	**89.3**	**98.8**	**82.3**	**84.8**	**98.9**	**70.6**	**103.4**		
Min.	**3.9**	**3.4**	**3.3**	**3.0**	**3.5**	**3.4**	**0.3**	**3.4**	**3.5**	**4.0**	**3.4**	**3.6**	**3.6**	**3.6**	**3.2**	**3.5**	**3.6**	**3.0**	**3.1**	**3.5**	**2.9**	**3.0**	**3.2**	**3.2**		**0.3**	
Avg.	**21.7**	**24.8**	**16.4**	**21.8**	**21.9**	**17.7**	**18.8**	**18.5**	**19.9**	**21.4**	**17.7**	**16.5**	**16.2**	**19.0**	**21.8**	**22.1**	**16.4**	**17.7**	**25.1**	**24.7**	**22.5**	**21.7**	**21.6**	**16.3**			**20.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	69.0	54.2	45.9	14.8	69.6	16.1	65.2	63.9	97.3	58.0	90.0	36.9	56.2	39.6	6.1	55.6	22.7	58.4	36.8	26.9	88.2	34.4	18.3	33.6	97.3	6.1	48.2
2	71.9	77.0	36.3	26.9	9.2	49.6	77.0	61.3	12.2	35.3	18.2	20.1	3.5	4.3	4.1	4.2	3.4	3.4	4.6	7.1	8.9	5.6	6.5	4.6	77.0	3.4	23.1
3	5.0	14.0	8.6	10.2	7.1	6.0	5.7	5.3	19.9	11.2	8.5	8.3	8.7	36.6	24.2	56.9	46.9	53.1	23.8	53.7	18.0	28.0	39.2	10.4	56.9	5.0	21.2
4	38.9	44.7	7.4	34.8	59.7	61.0	81.5	8.2	57.2	26.5	44.2	76.9	56.2	89.6	53.6	53.6	8.5	53.0	34.5	47.4	10.9	16.8	64.1	13.2	89.6	7.4	43.4
5	14.0	52.3	20.9	49.6	31.4	23.6	38.9	82.5	25.9	86.6	43.0	18.6	73.6	27.1	94.2	34.1	9.6	36.1	14.4	20.1	26.7	14.1	8.4	40.8	94.2	8.4	36.9
6	48.0	56.6	35.5	40.8	30.8	14.4	9.0	30.7	5.6	7.5	66.0	24.1	11.8	8.9	52.9	19.3	14.4	73.1	14.9	44.0	37.7	16.5	42.0	35.5	73.1	5.6	30.8
7	11.1	20.0	39.8	12.0	15.4	11.3	46.4	45.4	79.3	11.9	18.4	33.4	33.8	18.6	37.9	47.9	33.2	50.2	42.0	45.3	70.2	85.3	61.4	11.5	85.3	11.1	36.7
8	43.9	65.3	72.3	32.0	27.6	50.9	49.3	39.7	74.0	93.0	22.8	18.8	82.6	72.7	66.1	28.4	37.2	41.7	25.4	12.7	24.5	38.7	13.3	10.4	93.0	10.4	43.5
9	14.8	8.8	5.9	4.3	4.4	4.3	3.8	11.5	29.8	34.3	16.0	24.0	69.7	50.3	42.0	54.3	20.5	22.4	62.5	63.2	81.8	9.8	8.5	18.0	81.8	3.8	27.7
10	23.0	8.3	22.1	12.5	42.1	28.6	16.2	31.0	34.8	87.9	56.7	35.7	47.0	50.2	24.9	89.0	85.3	86.3	16.0	22.1	7.8	6.2	48.4	19.3	89.0	6.2	37.6
11	32.5	44.3	62.3	42.4	47.2	19.9	43.9	35.4	70.0	12.7	22.4	24.9	60.2	53.6	82.2	76.0	35.4	24.6	31.0	23.7	89.2	48.3	94.4	73.6	94.4	12.7	47.9
12	7.6	69.8	64.4	65.3	59.5	61.3	64.6	60.5	50.3	77.7	46.7	29.4	66.1	59.8	25.5	70.6	16.3	54.0	36.0	27.2	42.6	57.6	91.8	81.0	91.8	7.6	53.6
13	5.5	3.4	7.1	8.7	5.0	4.1	5.7	4.8	5.0	4.5	4.8	5.4	5.5	5.2	4.8	4.4	5.2	4.8	4.5	4.3	5.6	5.3	4.5	5.1	8.7	3.4	5.1
14	4.5	4.3	4.2	4.4	4.1	4.2	4.1	23.5	9.9	18.5	9.4	6.1	7.4	18.6	14.5	12.6	16.8	10.5	7.4	14.2	10.0	9.2	5.6	8.7	23.5	4.1	9.7
15	6.4	9.1	7.6	7.2	6.6	9.8	7.8	23.6	12.1	33.0	56.6	101.6	52.4	72.5	53.7	64.6	15.7	66.6	73.2	50.8	63.3	40.1	13.8	7.5	101.6	6.4	35.7
16	4.5	4.3	3.7	4.7	4.2	4.1	3.9	4.4	4.5	5.4	4.6	4.1	5.1	3.3	3.2	3.7	5.9	10.6	10.6	5.9	6.7	6.1	6.9	14.4	14.4	3.2	5.6
17	9.1	5.4	5.9	6.5	3.8	5.6	4.7	3.9	5.9	7.2	7.1	29.1	7.5	8.2	12.2	11.4	19.5	5.7	4.7	4.7	4.3	4.5	4.3	4.4	29.1	3.8	7.7
18	4.9	5.3	5.0	6.3	5.7	5.8	5.0	5.9	5.4	7.5	5.1	4.8	4.7	5.4	4.8	6.0	5.3	5.3	4.6	5.0	3.9	4.8	4.7	4.3	7.5	3.9	5.2
19	5.2	4.2	16.8	34.6	9.2	19.1	62.8	19.2	28.2	8.0	12.7	8.1	4.8	5.4	7.1	4.9	10.6	9.7	12.1	7.4	16.0	8.0	5.8	11.9	62.8	4.2	13.8
20	5.0	4.9	4.6	4.5	5.1	5.3	5.0	4.9	5.0	5.0	5.2	7.5	5.2	3.8	4.4	4.7	14.1	9.1	26.0	7.7	7.8	14.7	16.7	8.3	26.0	3.8	7.7
21	3.5	18.7	11.0	14.9	7.6	5.8	13.6	12.9	8.3	13.4	10.3	7.0	6.1	7.9	8.0	17.2	13.1	28.7	18.2	33.5	38.3	50.0	6.2	5.5	50.0	3.5	15.0
22	12.4	10.9	11.0	4.4	13.8	5.4	9.8	12.1	5.3	5.2	6.2	6.2	4.4	7.4	4.5	4.5	5.1	5.7	4.9	5.3	4.5	4.5	3.6	5.9	13.8	3.6	6.8
23	5.2	5.5	13.7	8.7	90.9	77.3	85.5	59.7	57.4	10.6	39.5	14.0	30.9	28.2	49.7	14.3	11.1	66.1	68.1	38.0	29.0	7.2	44.7	27.6	90.9	5.2	36.8
24	18.9	35.8	8.7	8.0	8.3	8.6	16.2	9.3	10.8	6.6	7.1	4.8	3.9	4.4	12.5	9.4	11.4	17.2	5.4	10.5	5.7	6.5	4.9	3.8	35.8	3.8	9.9
25	11.8	10.3	9.3	5.7	8.2	6.9	7.3	9.0	4.7	5.4	8.1	14.0	63.3	54.4	72.1	48.7	28.6	74.9	63.3	47.8	44.4	22.8	16.1	60.6	74.9	4.7	29.1
26	33.5	20.6	54.4	83.2	37.1	46.4	46.6	85.0	83.1	55.6	87.9	73.4	36.5	69.7	51.3	56.0	22.0	12.6	14.2	8.5	20.2	14.1	11.5	7.5	87.9	7.5	43.0
27	14.0	28.9	13.4	12.2	10.4	31.8	65.2	52.5	69.2	88.8	32.3	72.1	41.3	93.0	92.0	59.7	22.1	28.7	26.7	25.2	51.5	17.1	35.2	88.8	93.0	10.4	44.7
28	49.9	17.4	68.2	38.3	45.2	30.7	87.3	47.5	66.0	44.2	9.7	72.5	62.1	12.8	26.9	89.3	11.3	9.7	77.8	23.2	59.1	19.8	94.5	8.5	94.5	8.5	44.7
29	24.5	74.2	28.9	44.1	62.0	81.5	24.0	22.3	10.4	26.3	65.4	34.4	24.6	8.6	25.8	87.4	34.4	19.0	29.1	9.8	5.4	7.0	6.8	7.7	87.4	5.4	31.8
Max.	**71.9**	**77.0**	**72.3**	**83.2**	**90.9**	**81.5**	**87.3**	**85.0**	**97.3**	**93.0**	**90.0**	**101.6**	**82.6**	**93.0**	**94.2**	**89.3**	**85.3**	**86.3**	**77.8**	**63.2**	**89.2**	**85.3**	**94.5**	**88.8**	**101.6**		
Min.	**3.5**	**3.4**	**3.7**	**4.3**	**3.8**	**4.1**	**3.8**	**3.9**	**4.5**	**4.5**	**4.6**	**4.1**	**3.5**	**3.3**	**3.2**	**3.7**	**3.4**	**3.4**	**4.5**	**4.3**	**3.9**	**4.5**	**3.6**	**3.8**		**3.2**	
Avg.	**20.6**	**26.8**	**24.0**	**22.1**	**25.2**	**24.1**	**33.0**	**30.2**	**32.7**	**30.6**	**28.4**	**28.2**	**32.2**	**31.7**	**33.1**	**37.5**	**20.2**	**32.5**	**27.3**	**24.0**	**30.4**	**20.8**	**27.0**	**21.8**			**27.7**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.1	8.1	8.2	6.4	6.4	8.2	28.1	27.4	86.0	42.5	18.7	17.8	11.9	7.9	4.8	3.6	3.4	5.5	7.3	9.5	10.9	7.5	6.0	5.0	86.0	3.4	14.6
2	5.4	5.0	4.9	5.2	4.5	3.9	4.8	5.0	6.8	5.1	5.4	5.6	5.1	4.8	5.9	7.4	6.6	9.6	5.5	4.2	4.3	3.5	3.9	4.4	9.6	3.5	5.3
3	3.7	7.3	6.4	4.6	7.2	4.6	4.1	4.7	4.2	4.4	4.5	4.6	4.8	5.1	5.2	4.8	5.3	4.8	6.0	6.7	8.3	5.0	5.4	4.2	8.3	3.7	5.2
4	4.1	4.9	3.7	4.4	5.1	4.9	4.5	4.8	5.0	4.6	4.7	4.4	4.6	5.0	4.5	4.7	4.4	4.6	4.2	4.4	4.5	4.7	4.3	4.1	5.1	3.7	4.6
5	4.5	4.8	4.4	5.3	5.2	5.0	6.9	6.0	5.9	4.9	4.9	5.0	4.7	4.6	4.3	5.7	5.0	5.0	5.1	4.8	4.3	4.9	4.8	4.7	6.9	4.3	5.0
6	4.4	4.3	4.5	4.9	5.2	7.3	3.8	3.8	5.4	5.3	5.2	3.4	4.0	4.3	4.2	4.5	4.2	4.8	3.8	23.3	32.5	9.7	10.8	12.9	32.5	3.4	7.4
7	9.2	11.0	15.0	18.6	47.3	52.6	22.5	101.3	58.6	14.9	21.5	68.3	81.6	70.3	75.8	47.9	7.7	5.7	7.9	8.4	10.8	6.4	13.1	12.8	101.3	5.7	32.9
8	20.2	13.3	5.2	6.0	28.1	31.7	66.5	6.6	3.6	6.3	8.4	4.9	4.2	11.6	11.3	10.1	7.2	10.3	6.1	4.4	6.9	9.9	8.7	9.8	66.5	3.6	12.6
9	4.8	8.6	10.8	6.6	7.4	16.8	14.5	10.5	4.6	10.4	12.0	11.6	25.1	34.6	36.5	95.4	19.9	29.2	72.0	25.1	56.2	60.3	57.6	80.9	95.4	4.6	29.6
10	68.0	8.9	4.8	15.6	18.1	8.9	13.6	19.3	5.7	8.2	6.9	6.0	9.4	13.6	91.4	12.5	16.5	26.7	56.3	7.2	5.5	5.3	4.8	7.4	91.4	4.8	18.4
11	5.5	4.7	6.0	4.9	8.2	6.3	5.5	5.3	6.7	17.7	24.9	14.5	6.7	14.3	14.7	16.7	43.9	55.0	83.7	67.3	28.0	41.8	54.9	77.8	83.7	4.7	25.6
12	61.0	58.5	6.7	10.0	11.6	36.6	59.0	45.0	20.9	90.1	20.6	18.0	25.5	14.5	17.0	16.3	17.4	14.0	15.3	15.1	13.2	13.2	17.0	11.1	90.1	6.7	26.1
13	9.6	13.0	11.3	11.6	8.9	9.2	12.4	12.8	14.8	12.5	13.4	19.2	20.6	15.9	18.3	17.2	21.8	19.9	17.7	13.3	12.8	25.2	65.1	78.5	78.5	8.9	19.8
14	50.0	38.1	70.0	67.0	37.8	69.7	49.9	68.8	27.1	59.8	77.0	59.6	56.8	74.2	38.2	12.1	40.0	39.4	22.2	17.5	21.4	8.0	4.4	10.6	77.0	4.4	42.5
15	4.4	4.3	3.9	3.5	3.8	3.8	4.2	4.4	3.4	3.6	4.3	4.0	4.2	4.3	4.0	4.0	3.9	3.8	3.8	3.6	3.5	3.8	4.1	3.8	4.4	3.4	3.9
16	4.2	3.6	3.6	3.8	6.6	19.3	42.0	28.9	86.0	31.0	25.3	42.5	26.4	57.7	33.2	83.4	18.5	15.8	62.8	24.2	14.4	27.4	52.3	17.7	86.0	3.6	30.4
17	30.3	34.8	37.7	46.9	45.2	35.7	37.9	60.7	47.8	64.5	25.1	53.9	24.6	65.6	61.4	26.7	53.5	16.5	7.9	10.0	7.0	4.8	12.9	16.5	65.6	4.8	34.5
18	25.1	16.8	8.5	9.1	4.5	5.9	8.4	8.5	7.4	6.1	10.0	4.1	5.7	8.1	8.9	5.8	5.0	5.0	6.2	4.9	4.5	5.9	4.6	4.8	25.1	4.1	7.6
19	4.4	3.0	3.8	5.3	4.1	4.8	3.6	4.0	4.5	3.6	3.6	4.7	3.7	5.6	5.8	4.1	5.7	4.5	5.3	5.3	5.6	2.6	2.6	4.1	5.8	2.6	4.3
20	3.6	3.9	3.9	4.6	5.4	4.9	6.5	4.2	6.8	6.4	13.6	46.2	30.2	33.8	21.4	44.2	27.7	73.9	5.2	6.6	5.7	5.4	17.9	60.7	73.9	3.6	18.5
21	81.5	82.7	13.0	36.0	8.8	6.2	24.3	12.7	11.8	9.6	12.5	63.7	54.4	63.9	52.1	9.3	8.0	70.9	10.2	20.6	28.5	38.3	12.9	5.7	82.7	5.7	30.7
22	7.6	10.8	10.0	86.5	57.0	9.2	10.8	31.4	17.8	33.2	56.2	14.4	9.0	30.4	12.8	18.4	5.7	9.9	82.6	55.5	82.8	8.4	4.8	11.5	86.5	4.8	28.2
23	11.4	10.7	19.6	20.2	18.0	7.4	55.2	23.0	19.4	25.7	23.3	24.2	29.9	6.7	11.2	7.6	5.2	9.3	4.5	3.8	4.2	4.7	6.9	5.8	55.2	3.8	14.9
24	10.2	8.7	4.6	93.6	30.4	75.4	63.9	8.5	41.2	16.2	17.4	56.8	84.2	32.8	41.0	50.0	19.6	4.0	3.8	10.2	60.0	31.5	41.7	36.0	93.6	3.8	35.1
25	9.9	23.4	27.6	66.6	27.5	16.1	17.9	12.7	15.6	91.7	28.7	69.1	51.4	73.7	80.2	21.4	22.6	48.5	15.3	56.3	46.5	67.0	43.5	60.3	91.7	9.9	41.4
26	70.5	75.6	15.7	32.4	14.4	55.3	20.8	48.3	58.3	12.2	47.3	14.8	9.4	24.8	79.4	34.9	8.1	4.7	7.7	14.6	22.4	47.2	22.0	4.3	79.4	4.3	31.0
27	5.8	3.5	13.3	5.8	6.9	5.0	93.2	46.8	38.4	56.4	29.3	47.0	55.7	8.8	20.5	5.5	5.9	3.9	3.9	3.2	3.4	4.7	4.3	12.2	93.2	3.2	20.1
28	14.9	17.9	18.4	46.1	53.5	38.3	80.7	32.6	76.8	71.1	59.7	66.1	75.6	100.6	52.8	47.4	31.2	44.5	27.4	16.6	12.6	23.2	18.1	37.7	100.6	12.6	44.3
29	44.8	28.8	14.4	17.8	10.0	29.8	3.6	6.0	4.3	4.5	5.1	4.5	4.8	5.1	4.8	4.6	6.2	4.2	5.0	4.8	4.4	5.0	4.5	4.6	44.8	3.6	9.7
30	4.4	4.5	5.0	5.1	5.0	5.2	4.4	4.7	4.7	4.6	4.9	5.1	5.5	5.3	4.7	4.8	4.2	4.6	3.9	4.1	4.5	4.8	4.1	5.1	5.5	3.9	4.7
31	4.3	3.7	3.7	6.5	4.8	8.3	4.6	5.1	4.1	4.9	4.8	4.2	4.0	4.1	3.9	4.2	4.6	4.5	5.0	4.6	4.6	4.6	3.9	3.8	8.3	3.7	4.6
Max.	**81.5**	**82.7**	**70.0**	**93.6**	**57.0**	**75.4**	**93.2**	**101.3**	**86.0**	**91.7**	**77.0**	**69.1**	**84.2**	**100.6**	**91.4**	**95.4**	**53.5**	**73.9**	**83.7**	**67.3**	**82.8**	**67.0**	**65.1**	**80.9**	**101.3**		
Min.	**3.6**	**3.0**	**3.6**	**3.5**	**3.8**	**3.8**	**3.6**	**3.8**	**3.4**	**3.6**	**3.6**	**3.4**	**3.7**	**4.1**	**3.9**	**3.6**	**3.4**	**3.8**	**3.8**	**3.2**	**3.4**	**2.6**	**2.6**	**3.8**		**2.6**	
Avg.	**19.3**	**17.0**	**11.9**	**21.3**	**16.3**	**19.2**	**25.1**	**21.4**	**22.7**	**23.6**	**19.3**	**24.8**	**24.0**	**26.2**	**26.8**	**20.5**	**14.2**	**18.2**	**18.5**	**14.8**	**17.2**	**16.0**	**16.8**	**20.0**			**19.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	4.3	4.4	4.4	4.7	4.6	4.6	4.6	4.4	4.4	4.0	4.1	3.8	4.1	4.2	3.9	3.7	4.1	3.5	4.7	4.3	6.0	11.3	26.3	26.3	3.5	5.5
2	28.1	24.4	0.2	0.3	0.1	57.1	30.3	33.2	17.8	17.4	9.6	3.6	8.7	24.0	4.7	27.9	17.1	57.1	34.7	10.7	8.3	3.6	5.1	8.7	57.1	0.1	18.0
3	4.5	4.4	4.3	3.7	4.0	6.4	5.3	3.3	4.5	5.2	5.2	7.1	3.7	3.4	3.3	3.5	3.6	4.2	3.8	3.7	3.9	4.2	4.3	4.1	7.1	3.3	4.3
4	4.2	4.0	4.7	4.2	4.1	4.2	4.7	4.6	4.2	4.3	4.6	4.6	4.8	4.8	5.5	5.7	3.6	3.3	3.1	9.7	9.8	5.1	14.9	9.3	14.9	3.1	5.5
5	7.5	13.6	17.2	6.9	7.4	9.4	7.6	14.2	6.4	5.7	64.8	85.9	33.7	5.1	7.2	8.1	4.8	12.8	9.8	4.5	7.1	3.3	5.1	5.1	85.9	3.3	14.7
6	4.2	5.5	8.9	4.4	2.6	3.1	8.5	7.9	4.5	5.1	5.4	3.8	7.7	6.1	5.8	4.8	4.5	3.8	3.1	2.7	12.8	17.8	10.3	11.4	17.8	2.6	6.4
7	7.7	10.1	7.2	6.1	5.2	6.6	6.1	3.1	3.7	4.9	2.8	3.5	5.7	6.8	5.0	4.9	6.5	3.7	5.6	2.5	6.3	4.3	4.1	40.0	40.0	2.5	6.8
8	43.1	71.6	50.3	49.7	29.8	15.1	10.3	7.9	24.3	8.4	6.1	8.7	6.6	4.2	5.9	5.4	13.2	7.0	6.3	37.6	15.4	7.7	3.7	5.7	71.6	3.7	18.5
9	5.2	8.3	6.8	7.3	4.4	5.8	5.8	4.2	41.2	51.0	30.5	9.2	6.0	6.8	6.4	6.8	4.1	3.9	4.1	4.0	6.0	6.2	4.5	3.6	51.0	3.6	10.1
10	8.1	7.7	4.7	23.5	65.4	60.1	77.3	94.2	67.0	84.7	68.3	51.0	78.2	13.8	16.4	11.0	27.5	2.4	3.3	2.3	3.8	3.8	7.2	7.0	94.2	2.3	32.9
11	8.4	69.1	43.5	51.0	8.6	40.5	75.4	96.9	79.7	73.8	99.1	40.5	11.1	6.7	7.5	3.2	6.1	6.3	5.1	3.9	4.4	6.7	4.3	5.9	99.1	3.2	31.6
12	6.8	5.0	4.5	73.2	19.1	7.2	5.2	5.7	8.9	69.7	28.3	10.9	6.6	6.2	5.5	4.0	4.1	3.6	8.2	30.8	12.4	51.3	46.4	38.7	73.2	3.6	19.3
13	23.8	40.8	19.6	9.5	9.8	11.0	10.1	7.6	9.2	9.7	7.6	7.6	5.8	4.6	4.6	4.9	6.6	9.4	5.3	5.4	6.9	4.3	5.3	6.0	40.8	4.3	9.8
14	5.4	3.9	4.0	4.8	4.7	4.3	5.4	4.1	5.0	2.4	0.3	5.3	6.7	10.6	8.9	9.8	10.0	19.1	16.3	8.6	3.9	5.4	15.8	12.0	19.1	0.3	7.4
15	10.1	87.5	40.6	54.4	94.3	30.2	25.3	8.7	8.0	5.1	4.8	5.2	4.7	5.0	5.0	4.8	4.0	4.1	4.6	3.9	4.1	4.6	4.6	5.5	94.3	3.9	17.9
16	5.2	6.8	6.1	8.6	6.5	5.7	5.8	12.8	4.3	2.8	4.3	8.6	6.6	10.1	7.5	5.3	5.2	5.7	11.3	4.0	18.9	8.5	4.8	3.7	18.9	2.8	7.0
17	9.0	10.0	4.8	4.6	14.2	5.3	8.5	6.3	47.7	51.7	44.6	13.2	13.7	9.9	7.0	9.6	26.6	9.7	9.0	30.9	46.2	7.9	6.7	32.1	51.7	4.6	17.9
18	51.8	84.2	76.5	64.8	30.1	44.7	20.9	12.9	16.1	10.4	17.7	25.9	9.3	10.7	20.2	51.3	19.1	33.4	26.0	24.6	31.7	44.3	40.4	34.1	84.2	9.3	33.4
19	44.0	53.7	35.4	26.6	24.0	23.1	22.9	18.6	31.0	39.3	32.6	31.3	28.0	5.9	19.1	19.3	21.4	23.8	21.6	12.8	4.2	14.8	45.0	5.6	53.7	4.2	25.2
20	4.8	10.4	6.2	4.7	5.3	4.7	4.8	3.9	3.8	4.3	4.1	10.5	8.5	7.0	4.9	8.4	6.0	4.9	4.1	4.8	5.1	4.2	4.1	4.1	10.5	3.8	5.6
21	5.4	4.4	4.4	4.2	4.5	3.6	4.4	5.0	4.9	5.7	5.0	5.5	5.3	3.6	5.3	5.9	8.1	5.9	7.6	6.0	4.2	14.8	30.5	22.5	30.5	3.6	7.4
22	21.5	3.7	7.4	5.0	54.8	45.2	35.6	34.6	38.3	23.8	39.8	42.6	38.6	31.1	22.0	33.3	22.3	27.3	38.5	51.1	16.8	82.3	58.4	34.8	82.3	3.7	33.7
23	7.6	25.6	69.1	91.3	17.5	56.5	46.5	63.7	45.7	66.0	52.2	53.7	65.6	69.8	17.2	70.9	4.8	7.0	20.1	42.6	19.6	48.8	7.2	6.3	91.3	4.8	40.6
24	8.5	6.5	9.6	20.8	22.5	78.8	91.9	92.3	87.5	70.8	25.8	35.9	11.4	63.1	63.9	84.1	7.0	21.4	13.3	8.8	8.0	16.8	6.9	8.8	92.3	6.5	36.0
25	7.6	5.4	39.5	6.0	6.3	6.8	5.7	5.6	8.0	5.4	4.1	3.8	7.6	6.7	6.0	5.3	4.0	7.2	8.2	5.8	5.9	6.4	3.5	3.4	39.5	3.4	7.3
26	4.0	3.9	3.1	3.1	2.7	3.1	4.7	5.1	6.4	4.8	4.4	3.9	3.7	4.7	4.4	4.8	5.3	8.4	8.2	5.1	4.3	3.9	3.7	3.6	8.4	2.7	4.6
27	3.8	3.5	3.3	3.5	4.2	4.0	4.6	4.4	3.9	4.2	3.7	4.2	4.3	5.7	3.7	3.7	4.8	5.1	6.0	4.0	5.6	4.7	9.8	9.2	9.8	3.3	4.7
28	12.9	24.0	19.7	38.9	75.8	63.7	76.1	46.1	60.2	30.8	36.8	63.5	5.6	14.5	19.5	16.4	6.8	5.9	7.8	5.3	5.6	6.5	9.5	2.6	76.1	2.6	27.3
29	9.6	7.8	5.4	6.0	84.2	14.3	11.1	6.5	6.9	27.6	7.8	8.4	7.7	8.9	8.4	8.3	5.4	4.5	4.2	4.8	6.8	3.2	4.2	5.0	84.2	3.2	11.1
30	7.7	5.7	19.9	60.4	81.6	29.7	8.7	26.2	61.6	44.8	29.8	26.6	35.6	59.0	14.3	11.8	27.1	15.2	14.6	6.3	5.2	6.2	5.6	6.5	81.6	5.2	25.4
Max.	**51.8**	**87.5**	**76.5**	**91.3**	**94.3**	**78.8**	**91.9**	**96.9**	**87.5**	**84.7**	**99.1**	**85.9**	**78.2**	**69.8**	**63.9**	**84.1**	**27.5**	**57.1**	**38.5**	**51.1**	**46.2**	**82.3**	**58.4**	**40.0**	**99.1**		
Min.	**3.8**	**3.5**	**0.2**	**0.3**	**0.1**	**3.1**	**4.4**	**3.1**	**3.7**	**2.4**	**0.3**	**3.5**	**3.7**	**3.4**	**3.3**	**3.2**	**3.6**	**2.4**	**3.1**	**2.3**	**3.8**	**3.2**	**3.5**	**2.6**		**0.1**	
Avg.	**12.5**	**20.5**	**17.7**	**21.7**	**23.3**	**21.8**	**21.1**	**21.5**	**23.8**	**24.8**	**21.8**	**19.6**	**14.8**	**14.1**	**10.6**	**14.9**	**9.8**	**11.0**	**10.6**	**11.7**	**9.9**	**13.6**	**12.9**	**12.4**			**16.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.5	5.1	5.8	6.5	7.6	8.5	6.5	13.1	9.0	12.4	29.8	13.3	7.9	4.5	3.0	6.5	10.3	7.1	8.2	10.0	5.0	5.5	3.5	2.6	29.8	2.6	8.3
2	3.0	6.3	4.5	4.0	5.6	4.5	4.0	3.7	3.5	9.3	9.9	30.4	78.1	31.1	18.5	14.2	9.0	3.8	8.4	64.0	77.1	22.4	91.4	82.6	91.4	3.0	24.5
3	30.9	27.0	21.7	52.1	10.7	12.2	7.3	6.6	5.9	17.3	6.7	5.9	5.8	6.8	11.2	18.0	10.7	7.6	38.7	32.2	22.5	15.9	21.4	11.2	52.1	5.8	16.9
4	5.2	9.9	12.5	13.8	7.2	9.4	8.7	9.1	11.8	11.3	10.4	11.8	30.7	82.8	46.3	18.7	16.3	11.9	34.1	19.2	60.6	59.1	53.1	46.7	82.8	5.2	25.0
5	51.8	60.9	58.5	87.2	80.1	65.7	47.2	28.0	66.6	50.0	38.6	59.9	29.4	62.5	18.9	11.5	4.5	5.0	6.1	5.2	9.4	9.7	12.3	10.2	87.2	4.5	36.6
6	9.9	7.8	47.8	32.1	20.1	14.7	26.0	20.7	9.3	3.8	3.3	5.0	4.2	4.4	5.1	5.2	4.4	5.3	5.4	5.1	5.2	4.9	5.0	4.7	47.8	3.3	10.8
7	5.7	4.9	4.4	4.4	4.6	4.1	4.3	4.2	4.6	3.8	4.5	4.1	3.9	4.1	4.4	3.9	4.1	5.3	3.8	4.4	4.7	5.0	5.0	5.9	5.9	3.8	4.5
8	4.3	4.7	4.8	4.6	4.5	4.1	4.7	5.0	4.3	4.3	3.7	4.3	5.0	4.8	4.6	4.6	4.8	4.6	5.0	4.8	5.2	5.0	5.3	7.7	7.7	3.7	4.8
9	6.2	5.8	9.4	9.5	9.2	10.3	6.2	5.5	6.6	5.0	4.6	5.2	6.5	5.0	5.2	4.8	5.1	5.6	6.3	13.6	7.2	5.7	96.4	39.0	96.4	4.6	11.8
10	49.8	63.4	46.5	96.9	52.7	62.1	75.7	27.2	64.7	32.5	38.1	16.5	46.3	11.2	5.0	5.2	15.0	16.6	15.2	26.9	11.1	9.9	7.5	4.3	96.9	4.3	33.3
11	8.6	5.4	4.6	5.0	4.8	4.7	4.8	6.6	5.2	5.4	5.7	5.6	5.9	6.6	6.3	6.1	8.1	6.8	5.8	5.6	5.6	6.3	5.3	5.4	8.6	4.6	5.8
12	5.3	5.7	5.7	6.1	7.3	7.8	7.8	11.2	10.2	9.4	6.1	4.9	7.8	5.3	5.1	5.6	6.7	6.7	5.9	5.7	5.5	5.2	5.4	5.9	11.2	4.9	6.6
13	5.7	5.5	5.7	4.9	6.0	6.1	5.1	4.8	4.4	4.7	5.2	4.9	6.0	5.5	5.1	6.1	6.0	5.4	5.7	5.2	4.8	5.3	5.5	4.4	6.1	4.4	5.3
14	5.1	5.7	5.0	42.7	34.5	58.9	10.0	6.8	7.4	8.4	10.1	9.7	7.3	8.8	9.3	9.2	7.4	5.0	5.9	8.4	6.8	38.3	60.3	54.3	60.3	5.0	17.7
15	74.2	10.5	9.1	10.1	11.5	11.0	4.7	17.7	6.2	12.4	15.6	15.5	8.2	5.5	8.0	7.7	6.4	5.2	7.9	8.0	9.1	10.1	5.2	7.1	74.2	4.7	12.0
16	7.0	6.1	6.3	7.3	6.7	10.5	28.5	30.1	21.9	24.6	62.1	7.2	9.0	7.8	6.8	7.3	5.5	6.3	7.9	15.8	13.3	11.5	6.5	64.4	64.4	5.5	15.9
17	43.1	47.8	37.6	70.4	36.8	53.3	45.9	13.0	23.2	52.3	57.5	52.2	72.4	19.4	15.2	13.7	8.9	5.4	18.6	11.1	28.5	7.7	7.4	4.9	72.4	4.9	31.1
18	3.5	6.3	15.7	4.5	5.9	16.0	9.0	6.2	8.1	8.9	10.7	14.0	19.0	17.0	22.1	20.8	18.0	9.2	7.5	6.9	10.2	7.2	5.0	11.4	22.1	3.5	11.0
19	7.5	48.9	53.5	37.8	31.1	37.6	47.9	49.0	68.9	42.9	51.6	21.2	40.2	28.2	17.0	19.1	19.0	8.1	5.3	7.7	7.6	4.4	2.4	5.2	68.9	2.4	27.6
20	5.2	4.6	5.9	39.6	67.3	7.2	29.8	80.9	68.5	37.9	34.9	13.6	71.7	21.5	21.2	20.7	18.5	13.5	9.6	8.8	21.6	18.0	13.0	28.4	80.9	4.6	27.6
21	17.0	42.5	84.8	56.7	35.1	69.9	86.5	96.3	55.2	47.9	40.0	23.6	36.5	12.2	11.2	15.8	7.9	7.1	10.5	9.8	5.7	5.9	6.1	4.7	96.3	4.7	32.9
22	4.8	6.1	6.9	7.2	28.3	63.3	33.5	28.7	57.6	50.3	52.2	33.8	19.5	41.4	26.2	11.8	9.8	9.3	8.1	5.8	8.5	7.0	5.7	7.4	63.3	4.8	22.2
23	6.2	6.2	5.6	5.3	6.0	6.6	6.5	6.2	7.2	8.1	6.9	7.1	6.6	7.1	8.4	6.5	6.1	6.5	6.8	6.2	6.0	6.1	5.6	5.7	8.4	5.3	6.5
24	5.1	5.8	6.3	5.7	6.0	6.3	5.7	5.4	5.6	5.8	7.0	7.3	5.8	5.8	6.6	8.2	10.2	6.3	15.2	15.8	10.1	16.0	14.6	10.3	16.0	5.1	8.2
25	9.6	15.1	8.9	5.8	8.9	12.6	13.4	11.5	11.3	11.9	7.9	8.6	9.6	10.2	8.5	6.8	13.4	8.3	8.9	11.5	11.6	10.8	15.6	11.5	15.6	5.8	10.5
26	11.7	11.9	12.2	7.6	18.1	25.2	19.8	14.1	8.9	8.0	10.7	16.7	12.6	14.0	45.7	19.4	12.4	20.5	18.1	12.0	6.5	4.7	8.4	4.1	45.7	4.1	14.3
27	9.5	23.8	21.2	19.8	70.8	49.1	56.5	47.6	54.2	77.0	16.4	13.0	17.6	15.1	16.0	13.0	10.1	13.1	12.8	8.6	6.9	4.6	4.4	6.7	77.0	4.4	24.5
28	47.1	61.8	7.4	64.5	42.8	3.8	30.9	7.5	78.1	25.8	16.8	8.6	26.9	22.1	14.4	12.3	14.0	10.6	7.6	5.7	3.6	2.8	5.9	5.8	78.1	2.8	21.9
29	12.0	9.0	5.9	6.6	17.4	32.4	5.0	6.0	7.0	5.8	9.4	12.3	10.9	13.5	15.0	14.4	12.6	16.2	15.9	14.0	10.5	4.5	6.5	4.1	32.4	4.1	11.1
30	6.0	17.6	17.6	24.5	32.7	30.8	2.8	4.8	8.5	7.6	8.1	9.1	9.0	6.8	6.7	6.2	6.5	6.4	6.4	8.3	8.3	8.2	7.0	5.6	32.7	2.8	10.6
31	4.9	4.8	4.7	5.5	5.4	5.0	5.5	5.1	6.3	6.6	6.5	6.5	6.8	7.6	6.8	7.0	7.0	7.4	6.6	9.6	6.1	5.1	4.9	4.8	9.6	4.7	6.1
Max.	**74.2**	**63.4**	**84.8**	**96.9**	**80.1**	**69.9**	**86.5**	**96.3**	**78.1**	**77.0**	**62.1**	**59.9**	**78.1**	**82.8**	**46.3**	**20.8**	**19.0**	**20.5**	**38.7**	**64.0**	**77.1**	**59.1**	**96.4**	**82.6**	**96.9**		
Min.	**3.0**	**4.6**	**4.4**	**4.0**	**4.5**	**3.8**	**2.8**	**3.7**	**3.5**	**3.8**	**3.3**	**4.1**	**3.9**	**4.1**	**3.0**	**3.9**	**4.1**	**3.8**	**3.8**	**4.4**	**3.6**	**2.8**	**2.4**	**2.6**		**2.4**	
Avg.	**15.2**	**17.6**	**17.6**	**24.1**	**22.1**	**23.0**	**21.0**	**18.8**	**22.9**	**19.7**	**19.1**	**14.6**	**20.2**	**16.1**	**13.0**	**10.6**	**9.6**	**8.3**	**10.6**	**12.1**	**13.1**	**10.7**	**16.2**	**15.4**			**16.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	4.8	4.8	6.4	6.5	6.1	6.0	6.4	6.3	6.2	7.2	7.1	7.5	6.5	6.4	7.0	5.9	5.3	6.3	5.5	7.0	7.2	8.1	5.6	8.1	4.8	6.4
2	11.8	9.3	7.1	8.0	7.1	8.5	9.8	15.3	11.5	8.9	8.0	12.1	15.3	16.2	15.0	15.7	26.3	14.1	13.2	7.7	41.1	41.4	21.2	60.6	60.6	7.1	16.9
3	58.6	62.7	68.0	86.0	87.8	73.4	38.3	54.3	21.6	73.5	37.6	42.8	24.3	16.0	28.0	9.4	6.9	9.2	6.4	5.0	5.1	5.9	6.3	8.2	87.8	5.0	34.8
4	7.6	6.6	6.0	4.4	5.5	5.2	9.3	9.8	10.4	12.1	9.0	7.9	7.5	6.8	7.5	6.4	7.2	6.4	7.0	6.7	5.3	6.9	5.8	5.5	12.1	4.4	7.2
5	6.0	5.0	5.6	5.7	5.7	5.1	7.5	6.1	6.5	6.7	7.1	7.6	6.7	7.0	7.5	7.3	7.7	9.0	7.2	7.9	6.4	8.7	48.9	7.9	48.9	5.0	8.6
6	5.1	5.6	6.2	5.3	7.0	40.2	35.4	23.0	14.9	25.0	80.5	16.8	19.4	19.7	21.2	34.5	27.2	10.3	9.8	9.2	12.8	7.9	4.7	9.0	80.5	4.7	18.8
7	47.2	34.6	6.5	53.5	15.9	7.0	10.2	8.3	10.7	13.0	10.3	12.6	18.6	19.4	32.4	36.7	45.5	16.5	28.9	11.8	7.7	15.0	10.0	9.3	53.5	6.5	20.1
8	7.8	10.1	43.5	64.5	10.0	15.8	11.9	51.4	13.1	49.4	36.7	21.3	13.3	18.0	12.3	13.5	15.0	11.5	11.9	9.5	9.4	9.7	15.6	21.2	64.5	7.8	20.7
9	17.7	12.4	12.0	11.0	11.9	6.3	9.7	9.8	8.7	13.8	20.8	27.3	29.0	16.5	35.3	15.2	20.8	18.5	16.3	9.1	8.4	12.8	22.8	17.7	35.3	6.3	16.0
10	6.8	15.4	34.0	81.3	15.9	64.3	52.2	64.1	19.1	52.2	62.1	59.3	40.3	87.1	47.9	13.0	24.9	25.3	15.3	8.8	21.1	14.5	9.7	20.4	87.1	6.8	35.6
11	82.1	44.6	60.3	76.2	54.0	47.3	68.5	44.8	13.9	18.6	34.3	47.8	70.8	21.3	16.3	10.0	9.5	11.2	13.3	10.5	16.4	9.3	7.3	8.3	82.1	7.3	33.2
12	7.7	4.8	15.8	93.3	52.3	22.6	26.9	67.5	57.4	47.8	27.8	35.2	57.3	31.0	53.8	85.7	15.6	12.9	11.7	12.7	34.1	8.6	14.1	70.8	93.3	4.8	36.1
13	61.1	71.2	33.5	8.8	6.6	8.0	27.9	59.8	9.3	23.3	24.4	29.0	37.9	19.7	27.0	33.9	35.9	50.4	35.0	16.3	32.0	11.7	5.3	14.7	71.2	5.3	28.5
14	72.7	31.7	87.8	73.3	75.6	91.0	47.6	19.1	19.3	25.0	12.3	32.3	17.1	22.6	41.7	91.1	23.6	18.1	12.0	25.7	23.7	9.5	8.8	43.2	91.1	8.8	38.5
15	65.0	77.4	28.0	58.1	80.9	67.9	90.3	72.2	33.1	22.0	11.0	16.8	23.6	17.3	81.7	11.4	18.4	14.8	14.2	10.0	7.6	8.5	8.9	11.9	90.3	7.6	35.5
16	50.0	38.7	72.7	82.3	21.2	69.9	56.7	45.1	22.5	66.2	35.8	46.1	37.4	48.1	20.4	39.3	13.7	18.4	10.8	11.1	13.7	26.0	25.1	34.3	82.3	10.8	37.7
17	37.1	57.4	53.1	52.3	27.7	46.9	52.6	30.6	46.0	49.0	16.4	67.6	84.3	39.4	27.8	14.8	17.9	19.1	16.4	9.3	5.8	6.9	6.7	54.2	84.3	5.8	35.0
18	30.6	9.9	60.9	73.7	86.9	82.5	47.5	40.8	32.7	19.6	35.0	21.5	11.9	21.8	15.4	21.2	15.4	14.0	18.8	18.6	14.8	11.0	26.8	52.1	86.9	9.9	32.6
19	94.7	72.8	75.8	72.2	50.5	86.6	29.1	63.5	51.3	30.2	73.6	28.8	58.3	38.7	26.5	22.1	16.9	16.4	20.2	17.5	13.5	11.2	14.5	15.3	94.7	11.2	41.7
20	24.7	17.1	50.9	29.6	65.8	87.4	97.4	75.6	41.5	20.5	14.1	12.2	12.3	11.7	11.4	10.8	9.3	9.3	9.3	8.4	7.6	8.5	8.2	13.1	97.4	7.6	27.4
21	7.7	5.6	7.4	6.4	8.0	8.7	7.6	7.9	14.8	27.1	29.7	69.1	32.7	18.2	36.1	40.8	49.0	34.5	21.1	17.2	17.3	29.5	13.5	22.3	69.1	5.6	22.2
22	31.3	15.5	9.0	9.4	7.1	57.7	45.7	34.1	41.2	46.1	31.1	12.7	15.0	10.1	10.4	8.3	7.2	7.3	6.7	7.1	6.5	6.9	6.3	6.2	57.7	6.2	18.3
23	6.3	5.6	5.9	6.5	7.1	8.6	8.0	7.7	7.2	6.9	8.9	12.6	13.3	13.6	12.1	11.5	13.8	16.1	13.0	9.4	6.8	11.8	12.0	6.3	16.1	5.6	9.6
24	5.9	24.2	46.4	27.2	9.6	7.0	7.6	6.4	8.3	8.4	9.0	9.0	9.7	9.0	7.8	7.6	7.3	9.0	7.9	8.6	8.2	7.3	8.0	7.8	46.4	5.9	11.1
25	7.5	6.2	6.3	6.9	6.9	6.9	7.0	7.1	6.8	7.0	7.4	9.2	8.6	8.0	9.5	9.8	9.3	8.7	7.7	8.6	7.4	8.3	12.0	8.8	12.0	6.2	8.0
26	12.4	9.6	7.2	12.8	52.1	57.9	34.3	17.5	9.2	14.8	18.0	7.7	9.0	38.4	15.2	28.4	10.6	26.2	14.2	15.5	13.9	8.7	11.5	18.7	57.9	7.2	19.3
27	14.5	88.0	36.3	80.6	36.0	48.7	48.0	11.8	6.2	8.7	11.1	8.6	11.3	12.8	14.7	12.1	10.9	12.6	11.3	10.5	9.5	27.5	31.7	49.0	88.0	6.2	25.5
28	48.1	32.6	23.1	6.7	10.2	43.4	21.6	64.0	17.8	42.1	11.6	11.5	11.9	15.7	15.6	12.9	14.7	20.7	10.1	11.1	9.6	11.4	8.2	8.8	64.0	6.7	20.1
29	10.2	10.1	10.5	8.2	11.1	19.7	18.1	10.6	9.8	9.9	10.9	27.2	13.9	14.0	13.1	11.2	12.4	14.4	13.2	9.7	7.0	5.8	5.4	5.6	27.2	5.4	11.7
30	7.0	8.8	9.0	16.0	12.3	31.5	8.8	9.1	47.5	33.1	49.2	44.2	62.5	47.8	67.8	82.8	65.9	36.5	18.1	12.8	66.2	93.6	24.9	29.3	93.6	7.0	36.9
Max.	**94.7**	**88.0**	**87.8**	**93.3**	**87.8**	**91.0**	**97.4**	**75.6**	**57.4**	**73.5**	**80.5**	**69.1**	**84.3**	**87.1**	**81.7**	**91.1**	**65.9**	**50.4**	**35.0**	**25.7**	**66.2**	**93.6**	**48.9**	**70.8**	**97.4**		
Min.	**5.1**	**4.8**	**4.8**	**4.4**	**5.5**	**5.1**	**6.0**	**6.1**	**6.2**	**6.2**	**7.1**	**7.1**	**6.7**	**6.5**	**6.4**	**6.4**	**5.9**	**5.3**	**6.3**	**5.0**	**5.1**	**5.8**	**4.7**	**5.5**		**4.4**	
Avg.	**28.4**	**26.6**	**29.8**	**37.5**	**28.5**	**37.7**	**31.4**	**31.4**	**20.6**	**26.2**	**25.0**	**25.5**	**26.0**	**22.4**	**24.6**	**24.2**	**18.8**	**16.6**	**13.6**	**11.1**	**14.9**	**15.1**	**13.7**	**21.5**			**23.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	53.8	35.4	16.0	13.3	25.2	54.1	79.0	72.8	45.7	29.9	31.5	16.5	14.8	12.3	11.3	9.7	11.4	10.7	8.4	7.6	7.8	6.8	6.8	5.4	79.0	5.4	24.4
2	7.5	5.5	6.4	7.1	6.2	7.1	7.4	7.3	7.1	6.6	8.5	8.0	9.1	10.6	9.5	9.5	9.9	9.1	8.2	12.6	12.7	9.4	12.4	10.3	12.7	5.5	8.7
3	18.5	13.6	17.8	10.8	12.1	9.4	13.0	9.2	7.6	11.7	5.6	21.1	16.6	8.5	12.1	10.3	14.2	13.3	11.3	8.3	13.4	22.3	25.1	13.8	25.1	5.6	13.3
4	11.7	12.7	13.0	23.3	46.4	88.8	59.5	19.1	51.6	17.3	33.8	25.2	46.9	44.5	65.3	38.5	62.8	47.6	49.2	19.6	14.3	29.3	45.7	78.9	88.8	11.7	39.4
5	41.7	19.5	90.6	24.7	78.1	34.9	71.4	81.9	61.4	44.2	18.6	42.8	64.4	50.9	52.1	29.3	44.4	35.7	42.6	25.4	28.4	13.5	85.6	16.8	90.6	13.5	45.8
6	23.9	54.6	94.0	63.0	47.2	20.8	40.1	74.3	33.6	60.7	21.3	14.1	13.7	15.4	12.4	8.9	9.5	11.7	11.7	7.4	5.9	8.2	38.0	22.2	94.0	5.9	29.7
7	6.0	7.7	6.3	9.6	11.4	9.5	9.2	7.4	6.3	6.4	6.8	6.3	7.2	6.8	6.4	6.9	7.6	7.5	8.3	9.6	19.2	29.1	32.7	24.8	32.7	6.0	10.8
8	7.2	8.1	8.4	24.3	38.5	24.1	14.6	14.2	14.8	13.4	18.8	20.9	14.0	10.7	12.7	11.3	9.8	9.4	10.2	8.5	9.2	7.9	7.4	28.8	38.5	7.2	14.5
9	40.2	29.5	14.9	12.9	13.4	11.6	17.7	17.0	9.9	8.6	11.2	16.0	10.3	11.0	11.4	9.5	10.4	11.0	8.0	7.9	9.3	6.9	7.4	7.8	40.2	6.9	13.1
10	7.2	6.6	6.4	6.2	6.1	7.3	7.2	6.7	7.6	7.5	8.8	8.6	8.2	10.3	11.2	15.4	10.9	9.5	9.0	8.4	8.6	6.4	6.4	5.9	15.4	5.9	8.2
11	11.7	19.6	6.5	6.1	5.8	6.6	99.1	31.5	50.6	32.8	37.3	15.4	10.9	12.0	15.5	15.1	14.5	14.2	11.9	11.5	9.6	8.5	12.2	13.5	99.1	5.8	19.7
12	7.3	6.7	11.6	35.6	4.5	7.1	8.1	9.8	6.4	7.6	8.3	6.7	6.4	7.0	8.2	9.1	7.1	7.0	7.5	6.9	7.3	6.8	7.0	8.0	35.6	4.5	8.7
13	6.6	7.2	6.9	5.7	6.1	6.0	6.0	7.5	8.4	8.0	9.3	7.0	8.7	9.0	10.2	11.3	13.2	28.5	36.9	31.3	20.2	10.8	8.5	8.3	36.9	5.7	11.7
14	6.7	7.1	5.8	6.1	7.8	7.1	7.4	19.4	38.2	21.3	13.9	49.4	50.3	31.7	37.1	15.4	17.8	23.1	16.4	11.4	9.9	7.0	7.8	12.0	50.3	5.8	17.9
15	14.3	20.5	16.7	15.9	14.8	30.3	11.9	16.3	28.2	9.3	9.3	9.4	11.2	14.0	12.5	7.5	10.0	11.2	13.2	13.2	12.9	13.8	13.9	15.3	30.3	7.5	14.4
16	11.6	7.3	6.9	6.4	6.4	6.7	7.4	6.9	7.4	7.4	6.2	7.1	7.4	6.3	6.6	6.7	6.5	7.0	6.8	6.6	6.5	6.3	6.2	5.7	11.6	5.7	6.9
17	8.7	11.9	7.6	12.8	9.1	7.7	13.5	11.4	12.3	11.1	8.9	9.9	11.4	11.5	9.5	11.0	11.5	9.9	9.9	10.2	8.3	6.9	7.2	12.9	13.5	6.9	10.2
18	14.5	21.9	17.9	9.0	11.7	8.8	10.5	11.8	16.3	15.1	19.6	11.9	26.8	43.0	28.2	21.8	37.7	22.2	14.7	36.9	7.5	60.1	48.5	45.9	60.1	7.5	23.4
19	65.7	65.2	8.5	4.9	5.8	7.1	10.8	7.8	5.9	6.4	9.7	9.2	11.5	14.4	12.0	14.8	7.9	12.0	9.3	10.8	11.1	6.6	11.7	8.4	65.7	4.9	14.1
20	5.9	7.2	16.8	56.0	12.2	5.4	4.9	13.0	12.0	8.5	11.3	12.3	18.6	12.0	13.1	10.9	9.9	9.3	9.3	9.5	10.3	9.8	9.3	10.4	56.0	4.9	12.4
21	10.5	9.8	9.5	9.4	10.8	9.7	9.8	9.6	8.0	9.0	11.1	16.9	18.0	22.7	15.8	51.9	30.2	20.4	25.2	47.1	35.9	92.3	7.6	9.3	92.3	7.6	20.9
22	12.7	8.7	7.8	11.3	56.9	27.4	55.5	65.1	49.5	31.5	55.3	10.3	25.8	12.1	14.4	12.1	19.7	22.9	13.8	11.7	9.9	21.3	10.1	8.0	65.1	7.8	23.9
23	15.9	28.8	21.1	11.0	73.9	39.4	89.2	10.7	17.5	13.4	12.1	12.5	11.1	9.2	8.6	8.4	10.6	15.3	9.8	8.9	8.4	11.8	13.6	41.0	89.2	8.4	20.9
24	38.9	64.5	42.3	26.1	36.4	62.1	17.2	5.2	6.1	7.1	6.8	9.7	9.8	9.9	10.3	12.2	13.0	16.0	11.1	11.7	12.5	8.4	6.9	6.8	64.5	5.2	18.8
25	5.8	5.4	4.7	6.5	7.5	6.9	9.2	6.6	5.6	7.7	6.8	9.4	10.7	12.2	13.3	12.1	12.7	14.0	11.2	8.1	7.4	7.0	6.1	5.2	14.0	4.7	8.4
26	6.3	47.5	49.3	60.1	46.5	56.1	83.4	29.2	15.0	15.8	24.1	37.4	9.8	12.3	19.1	21.3	16.0	18.4	16.4	23.1	13.2	7.3	10.3	7.8	83.4	6.3	26.9
27	6.4	9.1	8.1	11.1	30.6	17.5	16.7	38.3	9.0	9.9	12.8	6.5	14.6	11.2	14.0	12.0	11.0	9.9	10.2	13.7	20.8	8.8	5.4	7.2	38.3	5.4	13.1
28	43.0	42.6	51.8	9.2	10.6	40.7	7.9	9.2	9.6	9.0	10.6	10.3	11.1	10.2	13.6	10.2	7.9	8.9	8.6	8.2	9.1	7.2	10.6	6.3	51.8	6.3	15.3
29	5.3	6.6	4.0	7.8	64.6	6.3	6.6	5.6	8.6	7.6	6.9	9.5	8.9	9.9	11.7	11.5	9.6	9.3	7.5	8.5	6.7	6.4	8.4	5.2	64.6	4.0	10.1
30	5.5	8.2	4.7	5.1	4.2	5.1	5.5	6.6	9.2	9.7	9.7	8.3	10.9	13.4	10.7	10.8	11.3	10.9	12.2	12.4	8.0	6.9	11.9	8.8	13.4	4.2	8.8
31	44.4	67.2	73.3	42.9	11.7	95.7	26.6	43.4	14.2	10.2	8.7	11.4	18.3	15.9	14.0	13.5	12.5	12.9	11.5	11.3	11.2	12.5	5.6	6.6	95.7	5.6	24.8
Max.	**65.7**	**67.2**	**94.0**	**63.0**	**78.1**	**95.7**	**99.1**	**81.9**	**61.4**	**60.7**	**55.3**	**49.4**	**64.4**	**50.9**	**65.3**	**51.9**	**62.8**	**47.6**	**49.2**	**47.1**	**35.9**	**92.3**	**85.6**	**78.9**	**99.1**		
Min.	**5.3**	**5.4**	**4.0**	**4.9**	**4.2**	**5.1**	**4.9**	**5.2**	**5.6**	**6.4**	**5.6**	**6.3**	**6.4**	**6.3**	**6.4**	**6.7**	**6.5**	**7.0**	**6.8**	**6.6**	**5.9**	**6.3**	**5.4**	**5.2**		**4.0**	
Avg.	**18.2**	**21.5**	**21.1**	**17.9**	**23.3**	**23.5**	**26.7**	**21.8**	**18.8**	**15.0**	**15.0**	**14.8**	**16.7**	**15.5**	**16.2**	**14.5**	**15.5**	**15.1**	**14.2**	**13.8**	**12.1**	**15.0**	**16.0**	**15.1**			**17.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.6	8.9	69.5	54.2	49.2	92.3	59.5	43.9	41.2	11.6	10.4	19.7	33.3	31.8	74.9	23.3	14.3	13.6	13.6	8.1	6.0	5.7	5.7	7.6	92.3	5.7	29.4
2	10.6	11.9	15.9	28.9	25.7	33.4	22.0	25.4	21.8	48.0	10.9	12.3	10.7	11.3	17.0	10.3	10.0	8.5	9.2	24.4	7.2	6.8	14.2	42.1	48.0	6.8	18.3
3	92.4	20.6	7.3	11.0	7.8	79.7	74.2	29.7	12.1	13.8	19.3	47.9	54.8	60.8	36.1	15.9	14.2	12.5	10.7	10.4	6.8	8.5	8.4	6.5	92.4	6.5	27.5
4	7.4	7.4	7.2	9.5	10.1	15.7	17.7	9.0	8.0	8.0	25.7	27.7	11.5	11.6	15.3	9.5	11.5	12.4	10.7	9.1	41.4	34.5	11.3	14.6	41.4	7.2	14.5
5	14.9	11.6	14.4	21.4	6.2	11.8	63.4	58.4	71.7	11.3	16.6	17.2	16.2	15.1	16.0	20.3	14.9	15.6	10.7	10.9	7.6	5.9	5.1	4.4	71.7	4.4	19.2
6	5.0	53.7	47.1	55.3	7.6	10.0	8.3	16.7	14.0	9.8	17.3	22.9	12.6	11.3	10.0	13.7	10.7	8.7	7.5	5.8	6.6	5.5	8.4	8.0	55.3	5.0	15.7
7	9.9	8.8	7.3	8.1	8.8	7.6	15.9	8.2	7.3	9.9	10.0	9.9	11.3	11.6	15.9	13.6	9.6	10.8	9.4	10.8	9.2	6.9	4.6	3.9	15.9	3.9	9.6
8	4.1	5.6	7.2	9.3	28.6	17.8	16.3	64.0	37.2	7.2	8.9	11.3	15.1	18.7	21.9	22.7	16.0	15.6	15.3	18.4	8.8	5.3	7.2	7.5	64.0	4.1	16.3
9	7.3	43.9	55.1	10.9	7.1	5.6	6.6	5.5	8.5	8.1	11.9	14.0	15.3	14.9	15.6	15.1	16.0	12.5	11.7	12.2	11.7	8.4	98.3	68.2	98.3	5.5	20.2
10	17.7	87.5	90.2	96.0	44.5	73.9	20.1	15.6	7.0	7.2	10.0	16.5	70.1	83.4	37.6	21.8	46.7	38.3	17.7	13.1	46.3	5.7	6.9	9.8	96.0	5.7	36.8
11	7.6	7.7	27.0	27.4	19.4	29.4	14.9	9.2	6.6	8.7	7.4	8.7	10.8	13.7	12.5	13.3	10.5	10.8	10.6	13.1	9.0	71.7	25.5	19.6	71.7	6.6	16.5
12	55.8	35.7	14.7	31.2	13.6	58.2	62.8	52.8	56.7	15.9	24.5	22.4	35.1	25.9	26.5	16.1	19.7	51.8	26.0	21.9	33.4	21.8	80.6	62.5	80.6	13.6	36.1
13	48.3	56.6	31.8	54.1	42.8	18.8	59.8	39.3	22.4	36.9	70.0	17.7	15.3	24.0	28.7	39.3	17.7	32.8	8.9	8.2	8.4	6.0	5.5	8.6	70.0	5.5	29.3
14	67.3	75.2	61.7	75.2	27.4	76.6	10.5	39.1	21.8	6.5	7.2	8.4	8.7	10.3	10.7	10.5	8.4	8.3	8.7	8.4	8.7	44.6	22.6	30.7	76.6	6.5	27.4
15	7.4	6.2	6.5	7.5	7.1	15.0	24.2	58.8	20.9	12.4	14.8	20.0	27.0	28.8	48.3	56.5	56.7	30.3	56.4	10.2	75.8	47.6	36.8	57.1	75.8	6.2	30.5
16	64.1	34.4	7.9	11.8	13.1	11.3	12.8	9.7	10.4	8.0	8.4	9.1	9.1	12.9	10.3	8.6	9.1	12.5	10.1	7.4	6.5	38.9	27.6	12.7	64.1	6.5	15.3
17	12.1	14.8	9.3	8.8	6.4	7.8	6.3	4.1	8.6	13.1	10.9	11.1	10.3	10.0	9.8	9.5	9.2	9.0	9.9	6.3	6.5	9.9	7.8	6.2	14.8	4.1	9.1
18	5.9	6.0	6.3	8.6	5.1	71.3	36.4	69.8	74.8	26.0	12.6	14.5	16.5	23.6	30.2	26.8	18.8	47.8	18.5	28.1	47.7	82.2	80.8	60.1	82.2	5.1	34.1
19	15.8	66.1	23.9	48.8	95.6	27.1	85.5	75.5	25.0	45.1	61.5	94.9	17.6	17.8	15.3	14.9	24.3	13.2	12.5	13.8	70.5	31.0	55.2	51.3	95.6	12.5	41.8
20	77.2	28.8	30.8	57.4	35.5	73.3	36.8	52.4	52.4	28.1	23.3	13.2	48.6	38.9	23.7	28.8	24.6	23.9	16.3	7.0	11.1	16.2	57.8	22.8	77.2	7.0	34.5
21	21.9	62.4	16.0	30.8	15.0	3.8	12.0	5.5	76.2	45.9	27.0	8.9	13.1	35.1	19.5	14.9	14.7	15.8	21.3	26.0	35.3	13.0	10.1	6.6	76.2	3.8	22.9
22	8.1	51.2	46.0	18.0	71.2	49.4	89.9	21.7	46.6	16.4	16.5	20.3	26.5	61.5	16.2	61.9	70.3	94.7	30.0	19.3	45.8	31.2	68.6	38.9	94.7	8.1	42.5
23	46.3	31.5	82.5	58.8	78.9	70.0	78.6	5.8	5.3	9.6	14.0	19.3	24.8	38.1	26.3	48.9	26.5	44.7	14.1	32.6	8.0	37.6	33.3	14.4	82.5	5.3	35.4
24	9.0	15.5	67.1	91.1	84.8	92.3	59.8	46.0	12.2	16.8	16.2	14.2	17.2	18.9	15.5	17.8	18.8	18.2	24.1	19.9	31.2	8.5	33.1	46.5	92.3	8.5	33.1
25	5.3	8.0	20.3	60.2	79.5	58.2	90.4	41.7	26.8	22.5	46.0	18.1	16.2	40.4	44.5	28.0	12.2	12.9	10.2	8.9	8.0	9.4	8.9	10.6	90.4	5.3	28.6
26	22.6	11.0	12.6	12.6	15.9	13.0	7.4	7.9	7.0	7.1	7.8	7.9	7.9	8.1	8.1	11.3	7.8	12.1	10.6	6.9	10.1	14.9	60.7	40.1	60.7	6.9	13.8
27	35.6	30.5	19.7	21.6	8.5	14.1	29.8	45.3	79.3	16.0	26.8	19.5	29.4	28.8	18.3	16.9	15.7	14.1	10.3	11.9	10.0	18.6	36.7	25.8	79.3	8.5	24.3
28	50.0	35.7	64.2	59.9	46.4	53.6	4.2	35.8	73.0	21.2	17.3	23.3	15.1	19.0	15.0	16.6	13.7	15.0	17.4	26.4	6.6	7.1	5.6	4.8	73.0	4.2	27.0
29	3.4	2.9	4.3	14.1	3.8	84.6	69.5	61.0	68.9	24.8	61.0	83.4	37.2	49.7	25.3	17.6	16.5	11.4	12.6	9.4	39.5	32.9	21.1	19.7	84.6	2.9	32.3
30	18.9	25.2	43.4	24.2	22.2	36.6	13.6	28.8	40.3	23.9	58.5	31.0	21.8	38.6	27.9	17.1	15.3	13.6	13.0	10.8	7.7	8.5	7.5	6.8	58.5	6.8	23.1
31	7.3	7.9	8.8	7.2	6.7	7.2	8.3	8.1	8.7	14.4	7.6	8.0	8.6	13.8	9.4	8.3	7.5	7.3	6.8	7.7	6.8	8.4	6.4	9.9	14.4	6.4	8.4
Max.	**92.4**	**87.5**	**90.2**	**96.0**	**95.6**	**92.3**	**90.4**	**75.5**	**79.3**	**48.0**	**70.0**	**94.9**	**70.1**	**83.4**	**74.9**	**61.9**	**70.3**	**94.7**	**56.4**	**32.6**	**75.8**	**82.2**	**98.3**	**68.2**	**98.3**		
Min.	**3.4**	**2.9**	**4.3**	**7.2**	**3.8**	**3.8**	**4.2**	**4.1**	**5.3**	**6.5**	**7.2**	**7.9**	**7.9**	**8.1**	**8.1**	**8.3**	**7.5**	**7.3**	**6.8**	**5.8**	**6.0**	**5.3**	**4.6**	**3.9**		**2.9**	
Avg.	**24.7**	**28.2**	**29.9**	**33.3**	**28.9**	**39.3**	**36.1**	**32.1**	**31.4**	**17.9**	**21.9**	**21.7**	**21.5**	**26.7**	**22.7**	**21.0**	**18.8**	**20.9**	**15.0**	**13.8**	**20.6**	**21.1**	**27.8**	**23.5**			**24.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.9	7.9	11.9	32.8	49.9	11.1	10.0	16.5	8.8	10.2	14.8	10.6	26.7	12.1	10.7	9.4	18.9	19.3	8.0	7.0	12.6	9.1	8.3	8.3	49.9	6.9	14.2
2	7.4	8.9	6.8	6.6	6.7	6.7	7.0	6.7	7.2	7.4	9.2	7.4	9.2	8.7	9.0	9.6	10.4	16.3	9.1	12.0	12.3	13.1	8.5	6.7	16.3	6.6	8.9
3	10.5	8.7	14.4	9.8	8.7	11.8	12.2	21.0	42.5	48.1	62.2	22.8	18.1	7.8	25.1	9.4	11.6	8.7	13.1	10.9	9.5	20.7	12.8	8.5	62.2	7.8	17.9
4	9.8	9.0	10.0	8.8	9.6	7.7	15.2	12.2	11.9	11.7	97.4	46.8	35.6	20.2	41.0	15.2	10.2	17.8	12.0	18.7	22.8	42.0	19.9	91.5	97.4	7.7	24.9
5	61.1	90.4	44.2	29.6	15.0	71.0	45.3	48.9	48.3	19.4	73.0	55.3	42.8	19.7	10.1	59.1	17.9	48.4	36.3	61.4	50.3	20.4	22.9	22.7	90.4	10.1	42.2
6	69.3	16.7	6.7	5.8	15.4	10.1	7.1	8.5	8.9	6.3	11.1	10.4	7.4	7.7	7.7	10.1	10.0	7.3	9.2	8.2	10.9	7.1	7.8	6.6	69.3	5.8	11.5
7	7.4	8.3	6.6	12.3	8.4	7.2	19.1	10.8	6.7	8.0	8.6	17.0	7.8	7.6	6.1	10.6	9.4	10.5	7.0	7.4	8.0	7.2	7.2	8.9	19.1	6.1	9.1
8	11.1	8.6	9.5	9.9	9.7	8.5	8.7	11.1	11.6	14.3	13.9	12.4	12.6	9.2	8.3	10.5	9.9	6.9	8.5	12.6	12.8	7.8	8.4	7.4	14.3	6.9	10.2
9	5.6	7.1	8.9	10.0	12.4	30.1	48.7	39.3	23.3	8.2	9.7	12.9	10.7	11.9	8.9	7.0	7.3	7.7	6.5	6.5	7.6	5.9	6.3	5.9	48.7	5.6	12.8
10	6.3	4.5	7.2	7.0	10.8	15.2	27.9	27.3	16.4	29.6	24.1	15.2	12.2	9.5	24.3	20.2	13.8	15.8	12.2	10.6	16.7	22.3	14.3	10.9	29.6	4.5	15.6
11	9.8	9.5	14.7	7.2	9.8	12.9	12.5	10.0	14.7	10.7	10.5	9.8	13.7	14.1	12.8	13.3	18.5	11.5	9.5	9.4	8.5	6.5	7.6	8.5	18.5	6.5	11.1
12	7.1	7.0	7.5	8.4	7.8	8.4	7.6	7.5	6.7	6.7	6.7	7.2	7.2	7.3	6.9	6.7	7.5	6.9	6.7	7.0	7.0	7.6	7.0	7.3	8.4	6.7	7.2
13	6.7	7.2	7.2	8.7	7.3	7.3	7.4	7.2	7.4	8.1	8.0	7.8	8.3	7.7	8.1	8.3	8.0	7.7	7.6	6.9	6.5	6.7	7.1	7.4	8.7	6.5	7.5
14	7.5	7.3	7.2	7.6	6.5	6.0	6.9	6.0	6.4	7.3	6.9	6.3	7.2	7.6	8.2	7.4	7.3	7.7	8.0	7.1	7.5	6.9	8.2	8.6	8.6	6.0	7.2
15	5.6	10.2	6.6	8.3	6.1	10.1	6.8	7.6	7.1	7.4	7.5	7.1	8.2	7.6	8.8	9.0	7.7	7.6	7.3	6.3	7.0	8.2	6.9	7.3	10.2	5.6	7.6
16	10.2	59.6	44.9	47.9	69.6	21.1	76.4	65.1	93.5	58.1	54.2	13.5	12.4	8.6	10.5	14.7	12.0	18.4	11.2	7.4	5.9	11.8	7.3	8.0	93.5	5.9	30.9
17	6.1	5.0	25.5	72.9	80.4	11.1	9.3	10.3	10.6	68.5	47.9	16.0	13.6	26.5	16.3	10.5	9.0	13.0	10.0	8.6	10.4	9.9	10.0	21.3	80.4	5.0	21.8
18	9.4	8.2	7.9	6.4	8.1	8.4	8.1	7.7	10.4	9.4	13.5	6.8	6.3	9.3	12.2	10.0	6.9	8.6	14.5	53.1	82.3	53.9	17.5	11.8	82.3	6.3	16.3
19	11.2	38.7	14.2	10.3	10.6	12.6	11.1	8.4	7.8	12.5	11.0	16.1	12.6	18.7	45.2	8.0	10.5	9.5	10.0	7.5	7.6	11.0	8.7	9.3	45.2	7.5	13.5
20	16.8	7.6	6.9	11.9	11.6	5.6	10.4	8.6	8.4	73.4	16.2	16.3	16.6	17.7	17.8	25.9	21.4	20.8	8.3	10.0	21.1	41.3	28.7	6.7	73.4	5.6	17.9
21	60.3	75.7	75.2	14.6	48.5	26.3	4.3	9.4	81.1	55.7	52.4	39.8	24.2	15.6	22.1	16.5	12.8	9.4	11.6	6.8	4.6	4.9	4.1	4.9	81.1	4.1	28.4
22	7.3	66.3	85.0	94.1	60.6	74.0	50.8	14.6	83.3	23.4	29.1	96.9	29.9	31.6	22.2	14.0	12.0	16.0	13.1	25.7	21.7	27.8	20.5	23.3	96.9	7.3	39.3
23	23.3	21.5	11.6	16.2	8.3	8.5	8.0	9.5	9.2	10.4	10.9	9.3	9.3	9.5	9.6	10.2	9.8	10.1	9.0	9.3	8.8	8.2	8.5	10.3	23.3	8.0	10.8
24	9.0	8.5	8.0	7.6	6.9	7.7	11.1	10.5	10.3	27.8	15.2	16.9	11.4	8.9	12.0	11.4	9.2	10.0	10.3	6.7	5.7	67.5	86.8	88.7	88.7	5.7	19.5
25	37.4	42.4	30.5	61.7	13.7	33.9	43.7	40.8	55.7	21.2	26.6	17.7	15.3	30.9	16.5	17.9	11.6	11.5	9.6	8.1	96.6	37.4	32.0	55.8	96.6	8.1	32.0
26	28.1	67.5	17.2	84.5	38.4	45.5	72.4	65.7	41.6	80.7	94.6	18.7	55.0		87.1	16.1	53.3	12.9	9.6	9.1	5.4	10.6	85.8	44.9	94.6	5.4	45.4
27	9.3	8.8	69.8	45.0	22.1	5.6	10.8	52.4	9.4	7.6	9.2	8.8	9.0	10.9	11.6	12.0	7.8	9.0	6.3	8.9	12.7	6.8	6.7	5.4	69.8	5.4	15.2
28	15.9	12.2	3.3	3.7	6.4	10.7	40.8	59.5	16.5	67.0	28.0	37.4	29.3	29.1	51.9	78.1	47.9	16.0	7.8	9.4	20.3	25.4	51.6	15.6	78.1	3.3	28.5
29	10.8	5.3	7.1	24.7	11.9	5.2	8.3	10.2	7.7	12.8	10.7	8.7	9.0	9.1	8.6	9.1	12.9	11.2	9.8	13.9	54.1	39.2	20.3	44.2	54.1	5.2	15.2
30	23.1	84.6	52.4	54.7	39.2	25.3	47.6	8.2	16.4	57.3	15.7	12.9	14.0	19.5	15.5	24.8	24.6	29.8	27.7	18.6	67.5	11.2	21.0	26.5	84.6	8.2	30.8
Max.	**69.3**	**90.4**	**85.0**	**94.1**	**80.4**	**74.0**	**76.4**	**65.7**	**93.5**	**80.7**	**97.4**	**96.9**	**55.0**	**31.6**	**87.1**	**78.1**	**53.3**	**48.4**	**36.3**	**61.4**	**96.6**	**67.5**	**86.8**	**91.5**	**97.4**		
Min.	**5.6**	**4.5**	**3.3**	**3.7**	**6.1**	**5.2**	**4.3**	**6.0**	**6.4**	**6.3**	**6.7**	**6.3**	**6.3**	**7.3**	**6.1**	**6.7**	**6.9**	**6.9**	**6.3**	**6.3**	**4.6**	**4.9**	**4.1**	**4.9**		**3.3**	
Avg.	**17.0**	**24.1**	**21.0**	**24.3**	**20.7**	**17.5**	**21.8**	**20.7**	**23.0**	**26.3**	**26.6**	**19.5**	**16.5**	**13.9**	**18.5**	**16.2**	**14.3**	**13.5**	**11.0**	**13.2**	**20.8**	**18.6**	**18.8**	**19.8**			**19.1**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.0	32.1	17.0	23.3	12.5	14.4	26.8	52.1	48.8	9.2	7.4	7.6	8.0	7.6	7.9	8.3	10.2	9.2	8.5	11.9	7.7	8.1	6.8	16.5	52.1	6.8	15.7
2	21.3	19.3	23.1	19.6	30.4	26.9	14.4	17.3	21.6	79.1	19.0	40.1	69.2	53.3	80.4	69.5	12.0	17.7	23.3	19.0	11.4	10.9	8.5	9.1	80.4	8.5	29.8
3	7.2	27.1	18.1	22.6	84.7	23.5	11.9	8.5	8.7	8.4	8.9	7.3	7.8	8.1	6.7	6.6	7.9	13.0	8.0	7.9	45.5	48.3	59.5	77.2	84.7	6.6	22.2
4	25.0	68.7	38.7	13.6	10.2	14.1	47.0	78.0	37.8	89.6	19.7	82.9	49.7	75.6	35.9	24.5	12.7	58.0	8.7	39.1	78.5	61.4	37.4	17.0	89.6	8.7	42.7
5	8.1	52.1	11.3	15.6	16.6	6.4	9.8	58.2	93.1	54.8	82.3	20.2	16.3	14.6	16.0	8.8	14.1	14.8	7.1	12.1	7.1	8.3	9.4	6.2	93.1	6.2	23.5
6	5.3	5.0	5.1	6.8	8.0	9.0	8.5	35.1	44.0	49.1	13.3	22.9	16.1	15.4	11.2	18.3	10.8	6.3	8.9	5.4	9.3	11.5	10.8	5.4	49.1	5.0	14.2
7	5.8	5.1	6.6	6.2	6.4	4.9	5.0	5.7	7.7	5.7	9.6	7.3	7.0	6.4	6.9	7.3	6.5	6.8	5.7	5.5	6.3	6.4	5.9	5.9	9.6	4.9	6.4
8	5.4	5.4	5.9	5.3	4.6	5.3	5.5	5.2	9.5	4.1	4.1	6.8	8.3	12.7	10.6	10.8	11.0	10.1	9.0	12.3	74.2	85.5	23.4	24.7	85.5	4.1	15.0
9	56.0	10.3	6.9	7.3	6.7	6.5	6.4	5.7	5.9	6.2	5.9	6.0	6.1	6.3	6.2	6.1	6.6	6.2	6.5	6.4	7.0	6.9	7.3	5.5	56.0	5.5	8.6
10	6.1	5.8	7.6	15.5	10.0	13.2	13.6	9.9	6.7	7.3	9.2	7.6	12.6	16.4	11.1	8.0	6.8	7.3	6.3	7.5	5.5	5.0	5.3	7.8	16.4	5.0	8.8
11	5.9	5.8	5.7	6.4	6.8	7.9	7.8	6.6	86.9	12.1	9.5	6.5	7.3	7.0	5.8	6.5	6.7	5.3	4.9	5.6	5.0	5.0	4.5	4.2	86.9	4.2	9.8
12	4.3	5.1	4.5	5.4	4.4	4.4	4.2	4.5	4.5	4.2	4.4	4.1	4.7	6.0	9.0	5.7	4.9	4.2	5.1	7.1	7.3	9.4	4.5	5.8	9.4	4.1	5.3
13	21.3	5.2	9.4	16.6	69.0	85.7	33.5	61.4	35.4	65.0	48.8	68.9	47.7	31.2	6.1	7.0	6.4	7.6	7.0	8.1	7.0	5.6	4.3	4.1	85.7	4.1	27.6
14	4.5	5.4	4.0	4.4	5.2	13.0	8.2	14.5	8.7	11.5	6.1	6.2	5.9	5.3	6.1	12.3	5.6	6.2	5.0	42.0	38.5	29.3	44.0	24.6	44.0	4.0	13.2
15	6.8	2.8	0.4	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.4	0.2	0.3	0.3	0.2	0.3	6.8	0.2	0.7
16	0.2	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.2	0.5	0.3	0.2	0.4	0.5	0.3	0.3	0.1	0.3	0.3	0.3	0.1	0.2	0.2	0.0	0.5	0.0	0.3
17	0.3	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	1.2	23.5	80.5	44.5	12.7	9.4	8.8	4.7	6.5	7.6	5.8	80.5	0.2	8.7
18	6.0	5.5	5.2	5.3	5.3	5.1	5.5	5.4	4.8	4.9	4.5	5.4	5.3	4.9	6.9	18.2	9.6	25.3	14.1	14.5	67.4	47.1	71.9	57.4	71.9	4.5	16.9
19	11.8	25.7	38.3	36.9	41.5	81.9	46.3	49.7	9.4	13.8	16.9	13.9	15.5	30.7	18.8	28.6	19.2	77.6	63.2	16.4	40.4	78.3	28.7	45.6	81.9	9.4	35.4
20	92.2	42.6	21.4	57.4	60.9	27.4	29.3	27.3	19.3	98.8	65.7	38.6	28.6	16.1	17.8	19.1	86.6	87.8	59.6	82.0	38.1	59.2	84.8	65.6	98.8	16.1	51.1
21	81.9	70.0	24.1	47.0	25.4	69.3	26.0	7.2	39.6	23.7	34.1	21.9	17.1	8.1	4.4	10.3	7.5	9.1	4.7	3.1	3.7	4.5	4.7	5.4	81.9	3.1	23.0
22	4.6	5.1	5.6	5.1	6.3	8.8	5.7	18.5	9.5	10.1	5.9	5.3	3.9	6.3	5.7	14.3	15.0	5.1	4.0	4.4	6.9	7.6	18.4	35.4	35.4	3.9	9.1
23	10.8	11.6	13.6	16.7	25.1	9.7	6.5	7.2	4.1	6.0	6.1	8.0	4.6	4.5	4.0	5.8	5.4	6.8	9.1	14.5	6.7	6.4	6.7	8.6	25.1	4.0	8.7
24	9.0	8.1	7.2	7.2	7.5	6.9	5.8	7.6	8.2	7.1	5.6	8.1	18.7	32.0	6.6	5.8	5.9	5.3	8.7	11.5	29.1	14.7	12.8	54.6	54.6	5.3	12.2
25	39.1	8.9	5.9	5.2	4.8	33.2	18.8	75.4	38.2	6.7	4.6	10.9	6.9	5.0	9.9	5.7	61.9	25.3	44.5	60.4	57.1	44.3	59.0	66.8	75.4	4.6	29.1
26	8.3	49.8	77.7	71.5	41.8	17.1	7.9	6.4	6.1	6.0	5.3	6.5	6.4	12.7	11.1	18.7	9.2	9.7	6.9	4.8	4.2	5.0	6.1	3.9	77.7	3.9	16.8
27	4.3	5.1	11.6	7.5	8.6	5.5	6.3	8.2	6.4	31.5	36.0	13.8	12.5	6.6	10.0	15.9	11.5	12.8	11.1	45.4	44.9	59.8	68.4	67.5	68.4	4.3	21.3
28	65.8	44.2	48.8	72.0	61.2	82.6	68.0	9.4	6.2	5.1	5.3	6.1	6.8	13.0	38.7	58.6	31.9	25.8	35.4	51.4	27.7	22.3	40.9	24.2	82.6	5.1	35.5
29	64.8	92.7	71.6	64.1	48.4	21.4	9.0	12.6	31.9	3.6	5.7	6.7	31.3	25.0	15.9	21.7	8.8	13.3	13.1	15.0	13.0	4.9	4.9	5.2	92.7	3.6	25.2
30	4.0	4.0	4.2	4.5	3.9	47.1	31.5	34.8	72.4	59.5	46.2	78.3	80.1	42.8	18.2	22.4	22.1	13.3	28.7	28.6	36.4	33.4	82.6	29.1	82.6	3.9	34.5
31	37.3	20.2	17.2	89.0	40.5	16.5	17.7	20.8	46.4	15.5	26.3	32.1	25.2	91.9	91.1	52.2	68.5	23.9	63.7	22.2	23.7	77.4	72.7	77.7	91.9	15.5	44.6
Max.	**92.2**	**92.7**	**77.7**	**89.0**	**84.7**	**85.7**	**68.0**	**78.0**	**93.1**	**98.8**	**82.3**	**82.9**	**80.1**	**91.9**	**91.1**	**80.5**	**86.6**	**87.8**	**63.7**	**82.0**	**78.5**	**85.5**	**84.8**	**77.7**	**98.8**		
Min.	**0.2**	**0.2**	**0.3**	**0.2**	**0.3**	**0.3**	**0.3**	**0.4**	**0.2**	**0.3**	**0.3**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.1**	**0.2**	**0.3**	**0.2**	**0.1**	**0.2**	**0.2**	**0.0**		**0.0**	
Avg.	**20.6**	**21.0**	**16.7**	**21.3**	**21.2**	**21.6**	**15.7**	**21.1**	**23.3**	**22.6**	**16.7**	**17.8**	**17.1**	**18.3**	**16.2**	**18.6**	**17.1**	**17.0**	**15.8**	**18.5**	**23.1**	**25.0**	**25.9**	**24.7**			**19.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	70.8	42.9	86.1	59.2	54.4	93.0	33.8	10.4	30.7	55.7	65.3	13.7	64.8	64.2	65.4	53.0	74.2	27.7	41.8	36.0	19.8	13.5	12.0	5.5	93.0	5.5	45.6
2	7.2	5.1	7.8	10.3	9.5	6.9	6.2	5.6	5.7	8.2	8.6	6.2	7.2	6.6	11.3	11.6	4.7	6.0	5.6	5.7	8.2	7.4	8.0	6.7	11.6	4.7	7.4
3	6.5	5.8	4.5	5.2	4.6	4.7	5.4	6.6	6.0	3.7	6.4	3.9	4.0	5.1	5.8	6.1	5.1	4.7	7.4	5.4	5.4	9.7	9.1	8.3	9.7	3.7	5.8
4	10.0	10.5	11.6	20.3	12.4	7.1	12.0	6.3	8.0	55.0	7.5	11.7	11.2	9.6	8.3	9.1	6.4	5.6	5.5	40.8	18.5	11.7	25.2	7.4	55.0	5.5	13.8
5	7.2	34.3	18.5	8.7	6.7	6.0	11.6	14.5	15.6	30.3	31.8	82.8	54.0	52.2	32.0	56.2	52.9	75.1	98.9	83.6	47.7	66.9	76.8	64.1	98.9	6.0	42.8
6	29.7	40.9	19.1	12.8	11.4	80.2	77.6	55.7	93.0	71.1	46.4	49.3	54.9	71.7	59.5	51.8	12.0	45.1	74.3	48.4	75.4	80.6	11.3	11.5	93.0	11.3	49.3
7	29.5	47.1	18.5	13.8	22.1	17.0	17.6	42.7	44.6	89.2	72.9	76.5	86.3	50.9	45.1	67.6	70.3	80.1	10.5	45.6	23.0	17.9	34.6	9.4	89.2	9.4	43.0
8	6.5	12.3	10.3	7.5	25.8	20.9	32.8	18.0	9.2	16.9	63.4	16.2	4.8	6.5	7.2	7.0	11.4	5.8	5.7	5.0	5.0	6.7	5.8	5.0	63.4	4.8	13.1
9	5.0	5.0	6.7	9.3	6.1	6.3	9.1	6.2	9.9	6.1	10.9	13.0	9.9	6.9	15.5	5.9	6.3	6.4	5.4	8.6	5.8	5.2	5.5	6.0	15.5	5.0	7.5
10	4.8	5.5	9.6	16.5	16.2	8.6	4.7	14.9	17.8	13.3	39.2	7.8	9.6	10.3	12.5	7.0	32.3	7.8	4.4	5.2	14.2	4.8	5.0	5.6	39.2	4.4	11.6
11	5.4	5.2	5.5	7.0	6.1	5.3	6.3	6.3	6.3	9.2	9.3	14.2	13.0	24.5	35.0	15.4	12.7	6.5	53.5	20.2	21.5	38.1	10.1	4.8	53.5	4.8	14.2
12	16.0	58.8	18.5	6.9	15.9	6.6	90.6	24.1	24.5	22.5	7.4	13.1	9.4	9.2	12.3	4.2	4.7	7.7	9.7	13.9	8.3	12.0	17.9	15.1	90.6	4.2	17.9
13	25.5	21.6	14.7	10.6	8.1	5.4	5.1	4.4	5.9	4.7	5.2	9.8	7.2	3.8	7.3	5.2	15.0	14.8	10.6	9.0	6.7	6.8	6.4	6.6	25.5	3.8	9.2
14	5.7	12.5	7.1	7.4	5.5	4.7	7.1	7.3	7.0	7.1	17.8	14.9	15.6	20.7	12.3	12.9	14.0	7.9	7.9	7.9	7.5	7.4	7.6	13.4	20.7	4.7	10.0
15	9.2	8.2	9.1	8.2	9.0	10.1	9.4	9.3	34.8	39.0	59.4	6.1	15.1	6.3	7.5	5.2	4.6	4.6	4.9	4.5	5.0	3.9	4.1	4.1	59.4	3.9	11.7
16	5.2	4.3	5.8	4.4	7.0	10.0	6.0	17.0	9.3	3.6	5.6	14.8	18.0	17.9	38.9	42.6	60.1	34.9	28.3	26.0	26.3	59.5	63.8	25.3	63.8	3.6	22.3
17	21.5	19.8	23.7	55.9	94.0	55.5	57.5	24.3	31.4	90.9	29.4	77.9	46.4	23.0	33.5	51.6	60.9	62.3	42.8	55.8	64.8	44.3	12.8	5.4	94.0	5.4	45.2
18	4.6	6.1	42.6	67.9	34.8	27.0	24.3	38.8	30.4	41.9	21.3	5.9	48.5	19.7	27.5	11.9	16.7	20.4	9.3	7.5	32.9	6.7	12.7	49.9	67.9	4.6	25.4
19	27.2	12.9	35.5	7.4	12.1	46.2	38.0	18.9	12.9	19.6	7.7	9.5	5.7	7.8	9.2	6.6	5.4	4.2	5.0	5.5	8.3	5.8	7.3	6.7	46.2	4.2	13.6
20	7.5	6.0	7.5	7.0	5.8	3.6	4.2	4.4	4.5	4.5	5.6	6.7	7.1	6.0	4.5	4.3	4.1	4.3	5.5	4.5	8.1	5.7	8.5	16.1	16.1	3.6	6.1
21	7.6	8.1	6.7	41.2	6.2	7.8	10.3	8.1	13.9	86.9	86.3	87.1	70.8	28.0	70.8	92.7	86.8	97.8	26.9	85.1	32.8	33.0	45.3	47.8	97.8	6.2	45.3
22	80.4	59.2	44.1	68.3	76.2	62.7	32.1	59.0	35.8	25.1	30.4	53.7	7.0	70.7	31.5	54.9	72.0	96.2	49.6	34.7	79.6	70.4	19.2	68.8	96.2	7.0	53.4
23	20.7	20.8	17.9	14.1	12.4	11.8	19.3	41.8	68.4	52.1	12.8	52.3	50.2	21.5	4.1	7.0	6.8	5.1	4.7	5.2	4.8	4.4	5.1	5.5	68.4	4.1	19.5
24	5.7	5.5	5.4	5.0	4.9	5.7	7.9	8.4	5.7	6.1	5.4	5.0	5.1	5.3	6.7	4.9	4.4	4.1	4.2	8.3	5.3	14.5	5.6	7.0	14.5	4.1	6.1
25	8.4	20.3	9.3	7.2	6.4	5.1	4.8	13.0	35.4	11.7	19.9	16.1	6.9	86.2	40.0	9.0	7.6	6.3	4.3	5.2	5.9	5.9	7.0	17.0	86.2	4.3	15.0
26	5.2	4.1	7.3	4.5	4.0	4.8	4.3	5.4	3.7	5.0	4.2	5.5	4.1	5.1	3.3	5.5	4.8	3.7	2.9	5.1	4.6	11.4	15.7	35.5	35.5	2.9	6.7
27	52.9	25.0	10.1	12.7	53.8	24.8	40.0	79.2	41.1	62.6	9.3	49.1	59.8	27.2	41.0	70.3	32.0	76.8	22.7	46.8	46.1	19.8	16.2	27.8	79.2	9.3	39.5
28	11.0	12.0	7.9	7.0	6.5	7.1	16.5	10.3	13.2	33.7	8.7	7.7	8.3	8.1	10.0	14.5	19.8	16.8	19.3	27.0	44.7	68.8	30.3	20.3	68.8	6.5	17.9
29	21.4	9.1	5.3	4.0	4.1	6.9	4.5	8.1	8.7	5.4	8.7	5.1	5.0	6.3	5.1	6.3	6.1	5.2	5.3	4.0	4.9	3.8	3.2	5.9	21.4	3.2	6.4
30	4.4	6.4	6.6	5.1	3.8	3.5	2.6	3.2	3.4	3.1	4.6	4.5	5.3	7.9	4.6	4.5	7.3	68.8	22.6	51.8	66.9	40.8	80.3	75.0	80.3	2.6	20.3
Max.	**80.4**	**59.2**	**86.1**	**68.3**	**94.0**	**93.0**	**90.6**	**79.2**	**93.0**	**90.9**	**86.3**	**87.1**	**86.3**	**86.2**	**70.8**	**92.7**	**86.8**	**97.8**	**98.9**	**85.1**	**79.6**	**80.6**	**80.3**	**75.0**	**98.9**		
Min.	**4.4**	**4.1**	**4.5**	**4.0**	**3.8**	**3.5**	**2.6**	**3.2**	**3.4**	**3.1**	**4.2**	**3.9**	**4.0**	**3.8**	**3.3**	**4.2**	**4.1**	**3.7**	**2.9**	**4.0**	**4.6**	**3.8**	**3.2**	**4.1**		**2.6**	
Avg.	**17.4**	**17.8**	**16.1**	**17.2**	**18.2**	**18.9**	**20.1**	**19.1**	**21.2**	**29.5**	**23.7**	**24.7**	**23.8**	**23.0**	**22.3**	**23.5**	**24.0**	**27.1**	**20.0**	**23.7**	**23.6**	**22.9**	**19.1**	**19.6**			**21.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (Climatronics)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.1	15.9	45.3	86.6	44.8	69.7	61.0	54.0	63.5	71.9	51.5	78.2	84.7	75.5	98.8	65.2	77.9	65.2	57.9	53.2	21.7	18.5	11.2	48.0	98.8	11.2	55.7
2	57.6	35.1	29.4	10.9	5.4	17.5	8.0	4.4	3.6	3.9	3.9	7.5	4.6	5.1	4.8	4.8	4.8	6.2	4.2	4.2	5.4	4.9	4.8	4.4	57.6	3.6	10.2
3	4.7	5.2	4.5	5.4	5.5	5.3	4.7	4.5	5.3	6.2	5.3	5.6	5.3	5.7	5.7	5.4	5.4	5.2	5.0	4.8	5.3	5.1	4.8	4.8	6.2	4.5	5.2
4	5.0	5.0	6.0	4.9	5.6	4.3	4.1	3.9	4.4	5.6	4.3	5.8	4.8	4.1	4.2	3.9	4.6	5.0	6.0	6.3	5.6	4.9	5.0	4.1	6.3	3.9	4.9
5	4.4	4.0	5.9	4.5	4.5	5.1	4.8	4.9	4.7	4.2	4.3	4.0	4.1	4.8	5.3	4.4	4.2	4.0	5.2	4.0	4.4	10.7	6.9	5.9	10.7	4.0	5.0
6	5.8	4.6	6.9	5.7	4.7	5.4	5.8	7.0	7.8	5.4	7.2	9.2	40.6	32.1	52.1	56.3	37.8	40.8	64.3	16.0	37.2	8.8	29.5	66.1	66.1	4.6	23.2
7	86.9	14.1	18.8	20.4	14.0	8.5	33.1	14.5	41.9	33.1	33.0	27.2	13.7	26.4	12.6	7.1	8.6	7.0	27.7	0.3	61.9	18.7	14.6	18.2	86.9	0.3	23.4
8	24.8	55.0	73.9	38.9	21.3	27.1	24.5	25.5	11.6	15.0	12.6	14.5	7.1	13.2	4.9	5.8	8.0	11.2	13.3	11.3	14.2	11.4	10.7	13.5	73.9	4.9	19.6
9	9.6	38.8	59.5	34.5	8.9	22.4	34.5	30.8	17.8	54.9	25.5	89.4	74.7	60.6	80.4	60.2	46.1	51.2	94.8	77.7	85.5	78.5	11.7	6.5	94.8	6.5	48.1
10	5.1	7.0	9.3	5.5	7.1	7.5	5.8	5.4	8.1	7.3	9.8	8.9	4.7	17.4	85.8	4.6	8.5	5.9	4.5	6.6	12.0	4.3	4.0	4.9	85.8	4.0	10.4
11	3.1	10.2	91.0	67.3	63.0	86.7	49.6	45.9	37.0	30.0	57.5	7.3	5.7	11.0	12.8	17.5	10.0	66.2	10.4	12.1	7.4	6.7	6.6	8.4	91.0	3.1	30.1
12	7.1	75.1	47.3	47.4	14.2	23.1	27.4	47.2	31.3	53.6	51.7	70.9	85.9	44.6	73.3	59.3	26.9	73.6	20.8	6.1	6.7	12.8	7.4	6.0	85.9	6.0	38.3
13	10.7	7.3	4.9	4.9	9.0	5.1	13.3	14.7	30.2	85.4	87.4	59.4	49.1	79.0	43.6	9.4	88.1	12.8	34.5	82.2	25.0	14.1	25.2	24.0	88.1	4.9	34.1
14	30.1	29.1	27.1	29.1	62.6	80.7	29.7	30.9	34.2	4.1	4.6	6.3	5.4	5.4	3.6	3.9	7.2	6.0	6.0	5.2	4.2	4.6	5.4	4.9	80.7	3.6	17.9
15	4.5	5.8	8.3	6.5	6.1	5.5	6.4	5.8	8.5	5.5	5.0	6.7	15.8	31.2	5.5	44.8	69.9	16.3	57.8	26.5	33.0	37.5	49.4	55.4	69.9	4.5	21.6
16	44.8	65.9	56.4	70.5	62.4	78.4	34.8	60.9	45.6	54.5	28.9	4.7	4.9	5.6	5.8	6.0	5.2	6.6	5.3	4.8	4.7	5.0	6.2	3.7	78.4	3.7	28.0
17	4.6	8.2	5.3	5.2	4.6	5.1	5.1	4.5	4.4	4.4	4.4	4.8	4.7	5.2	5.2	5.0	4.5	4.6	4.7	5.8	5.4	6.5	5.4	5.0	8.2	4.4	5.1
18	4.5	4.6	4.7	4.4	4.4	4.2	4.9	5.1	4.8	5.0	4.8	4.9	5.0	5.4	5.0	5.2	5.4	5.1	5.5	5.1	4.7	5.0	5.0	4.8	5.5	4.2	4.9
19	4.9	6.0	5.3	5.5	5.1	5.4	4.9	5.0	4.9	4.6	6.4	5.7	6.3	10.0	4.4	8.7	10.2	9.6	7.4	7.8	4.6	5.4	8.5	24.1	24.1	4.4	7.1
20	24.4	5.6	7.7	6.2	4.8	7.4	5.6	40.1	54.7	16.5	94.1	94.7	82.6	56.8	9.4	79.8	84.7	25.3	72.9	23.9	80.1	50.0	75.6	69.8	94.7	4.8	44.7
21	23.3	56.0	48.8	56.1	76.4	77.6	78.4	53.5	94.7	71.6	72.9	62.7	72.2	90.9	65.0	50.3	53.4	50.9	50.5	71.1	58.2	13.1	20.5	5.9	94.7	5.9	57.3
22	6.9	20.4	24.7	17.0	25.8	6.9	6.1	6.2	7.5	7.9	4.9	6.8	16.5	26.8	11.5	8.9	6.5	6.5	5.2	3.9	4.7	3.8	4.3	5.2	26.8	3.8	10.2
23	4.4	4.0	3.9	4.6	4.6	4.2	4.4	16.2	31.0	10.6	6.3	5.5	8.3	4.6	8.5	5.2	10.8	10.0	6.0	5.0	6.1	6.5	6.9	6.5	31.0	3.9	7.7
24	8.3	6.5	7.7	18.0	22.0	24.2	4.2	13.0	8.2	13.5	7.6	6.2	6.3	4.8	27.1	9.6	75.0	22.4	27.2	27.6	32.5	12.8	10.4	46.5	75.0	4.2	18.4
25	68.6	7.6	4.7	4.8	4.1	4.1	4.8	5.3	4.5	5.0	5.2	4.4	4.0	4.6	4.1	9.9	22.0	7.3	6.0	5.5	4.4	5.1	4.1	3.9	68.6	3.9	8.5
26	4.6	4.4	4.1	5.0	8.4	6.7	5.7	5.6	5.3	4.8	4.7	4.4	4.2	4.4	4.5	5.4	5.0	4.7	4.2	5.2	3.8	4.9	4.6	4.5	8.4	3.8	5.0
27	4.7	5.1	6.1	6.1	4.1	5.3	4.2	4.7	4.1	4.2	4.4	5.3	5.9	5.2	4.8	5.3	5.7	4.4	4.8	4.1	5.1	5.1	5.0	4.0	6.1	4.0	4.9
28	3.9	7.0	5.5	7.6	8.8	11.4	9.1	5.3	17.9	7.5	4.3	9.4	7.1	5.5	7.0	9.9	4.4	4.9	7.7	5.1	8.5	6.6	8.3	7.4	17.9	3.9	7.5
29	9.8	7.4	29.8	7.5	25.7	12.8	11.4	6.9	46.2	13.8	10.8	10.2	19.2	25.5	8.9	6.1	7.0	13.0	13.8	19.6	12.0	31.2	14.0	19.2	46.2	6.1	15.9
30	8.8	37.2	12.8	25.0	16.3	8.5	20.3	58.7	58.6	24.8	98.0	14.8	85.6	51.5	80.9	71.7	38.3	20.4	64.9	55.8	54.2	81.2	43.4	92.2	98.0	8.5	46.8
31	32.4	45.3	31.2	67.8	82.9	40.0	19.2	42.8	67.1	74.2	23.1	31.5	5.8	11.0	19.4	6.8	7.6	5.2	2.8	3.0	44.7	57.7	52.4	98.1	98.1	2.8	36.3
Max.	**86.9**	**75.1**	**91.0**	**86.6**	**82.9**	**86.7**	**78.4**	**60.9**	**94.7**	**85.4**	**98.0**	**94.7**	**85.9**	**90.9**	**98.8**	**79.8**	**88.1**	**73.6**	**94.8**	**82.2**	**85.5**	**81.2**	**75.6**	**98.1**	**98.8**		
Min.	**3.1**	**4.0**	**3.9**	**4.4**	**4.1**	**4.1**	**4.1**	**3.9**	**3.6**	**3.9**	**3.9**	**4.0**	**4.0**	**4.1**	**3.6**	**3.9**	**4.2**	**4.0**	**2.8**	**0.3**	**3.8**	**3.8**	**4.0**	**3.7**		**0.3**	
Avg.	**17.2**	**19.5**	**22.5**	**22.1**	**20.6**	**21.8**	**17.3**	**20.4**	**24.8**	**22.9**	**24.0**	**21.8**	**24.0**	**23.7**	**24.7**	**20.9**	**24.3**	**18.6**	**22.6**	**18.4**	**21.4**	**17.5**	**15.2**	**21.8**			**21.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.3	6.2	5.5	4.8	5.0	2.3	5.1	5.6	3.9	3.2	3.3	6.1	6.6	5.7	4.1	1.4	1.3	2.0	1.3	1.5	1.1	2.2	3.7	2.9	6.6	1.1	3.8
2	2.2	5.5	4.2	3.2	2.0	1.4	1.5	2.1	1.3	1.1	3.5	1.9	1.3	4.1	1.9	3.2	3.9	1.4	0.9	2.6	1.1	1.0	1.1	1.9	5.5	0.9	2.3
3	2.0	1.5	0.9	1.2	1.2	1.0	3.4	3.7	0.8	0.9	1.2	4.2	0.7	0.5	0.7	1.8	0.4	0.9	1.6	2.0	2.5	1.4	1.3	1.7	4.2	0.4	1.6
4	1.2	0.5	1.4	1.2	0.8	1.2	1.6	1.3	2.1	0.7	1.0	0.5	1.4	2.1	3.0	2.2	1.8	1.2	2.0	1.9	3.0	3.0	2.1	3.1	3.1	0.5	1.7
5	2.9	3.9	4.7	6.6	7.7	7.0	7.9	6.9	8.1	8.0	7.5	7.7	8.0	8.6	9.8	8.6	8.8	8.6	9.4	11.0	12.7	12.9	12.4	10.8	12.9	2.9	8.4
6	10.7	9.1	10.3	9.1	7.6	5.8	7.4	7.3	7.3	6.7	7.8	7.6	6.6	6.1	7.4	7.6	7.5	6.4	5.5	6.4	7.8	5.8	5.6	4.7	10.7	4.7	7.3
7	3.4	1.5	0.6	0.3	1.7	2.8	3.1	3.3	2.0	0.8	4.2	2.8	3.6	4.3	3.4	3.4	2.9	2.1	6.5	5.0	3.9	3.0	2.3	3.2	6.5	0.3	2.9
8	3.6	2.1	0.5	0.8	0.7	2.4	0.6	0.5	1.0	0.8	3.1	1.5	2.3	0.6	1.9	1.3	1.7	1.6	1.9	2.7	1.4	2.4	1.5	2.4	3.6	0.5	1.6
9	3.2	2.5	3.0	3.1	5.5	4.5	3.3	3.6	3.1	4.8	4.7	3.9	2.5	3.4	5.3	6.6	7.9	7.2	7.6	8.4	8.3	10.3	10.8	8.2	10.8	2.5	5.5
10	8.4	8.7	8.0	8.1	6.8	7.4	6.7	8.1	7.8	4.4	4.2	7.3	6.0	6.9	6.1	5.9	5.8	6.5	7.6	7.9	7.1	9.0	6.6	8.3	9.0	4.2	7.1
11	9.9	8.2	7.3	8.6	8.9	7.4	7.6	7.4	9.5	8.7	9.3	10.8	7.7	8.2	8.6	8.3	6.2	4.5	5.4	5.0	5.3	3.5	2.8	1.4	10.8	1.4	7.1
12	1.7	2.2	2.7	3.2	3.1	2.7	2.9	1.8	2.7	3.4	4.0	4.6	3.8	3.2	1.9	2.4	5.1	4.2	6.4	8.9	9.8	13.9	13.5	10.6	13.9	1.7	4.9
13	13.3	10.4	11.5	8.8	8.6	7.9	9.4	9.4	9.7	10.2	9.0	8.8	8.6	8.6	6.4	3.8	6.9	5.1	6.0	6.5	7.4	2.2	2.2	2.0	13.3	2.0	7.6
14	1.6	2.1	0.7	2.6	1.4	1.2	0.5	1.9	5.1	8.9	13.4	14.4	11.0	9.8	14.4	17.8	18.7	17.6	17.9	16.9	13.5	12.4	16.7	17.5	18.7	0.5	9.9
15	16.5	16.8	19.7	23.4	20.3	20.9	18.9	18.4	18.8	16.9	15.5	17.1	15.2	14.7	15.5	14.3	14.3	12.3	11.5	9.4	10.3	14.2	15.5	14.9	23.4	9.4	16.1
16	7.8	4.5	4.2	4.1	4.5	5.4	6.1	6.6	7.4	7.6	7.5	7.5	8.7	7.5	5.3	6.3	5.7	3.6	2.8	1.9	2.2	1.6	2.0	3.3	8.7	1.6	5.2
17	3.2	4.3	8.3	9.9	11.3	11.2	11.9	10.8	10.8	10.3	10.7	12.8	14.1	11.5	9.9	12.0	12.7	13.5	13.0	13.7	14.1	12.4	10.5	9.5	14.1	3.2	10.9
18	10.0	7.7	6.8	7.9	7.2	6.2	5.3	4.5	3.7	2.7	2.6	3.6	3.4	2.5	0.8	1.4	1.9	1.9	1.6	3.0	2.9	4.3	11.0	16.1	16.1	0.8	5.0
19	14.9	13.7	10.1	14.5	17.3	15.5	18.6	17.8	18.9	16.8	20.4	21.7	23.1	22.4	22.4	24.9	25.8	25.7	27.5	25.0	23.9	23.1	21.7	20.4	27.5	10.1	20.3
20	19.2	16.6	15.2	14.0	11.7	11.1	11.4	11.3	9.5	8.5	8.5	9.6	10.6	10.5	8.4	3.2	0.6	1.9	0.9	1.0	1.1	1.0	4.6	6.9	19.2	0.6	8.2
21	7.6	8.1	8.4	6.6	5.7	13.1	11.3	13.5	12.7	14.4	16.4	16.6	16.5	17.3	18.6	17.8	16.6	17.2	17.8	19.0	18.2	18.2	17.3	17.4	19.0	5.7	14.4
22	19.1	15.9	19.1	18.4	17.0	18.4	18.1	17.0	17.5	18.4	16.9	17.6	15.8	15.9	14.2	13.7	10.5	10.8	5.8	3.4	2.7	2.5	2.3	3.0	19.1	2.3	13.1
23	3.9	7.2	6.9	10.9	11.7	12.6	9.5	7.8	5.8	5.8	8.6	7.9	6.7	7.7	7.5	7.6	9.6	11.1	11.9	9.2	5.1	3.3	1.8	2.7	12.6	1.8	7.6
24	1.6	1.0	1.0	0.6	0.9	1.3	4.4	8.4	3.6	7.9	7.3	10.4	12.5	14.3	13.9	18.7	19.9	18.1	17.6	17.2	14.2	13.6	15.8	10.4	19.9	0.6	9.8
25	5.9	5.5	3.4	1.9	2.0	6.9	8.5	6.9	6.1	9.0	10.0	9.6	7.3	6.7	8.7	8.3	8.8	7.9	8.0	5.7	4.9	5.7	7.4	5.8	10.0	1.9	6.7
26	7.4	6.8	6.3	5.3	5.4	3.4	3.9	5.6	3.6	1.9	1.4	1.2	3.3	1.2	0.8	0.6	0.7	1.0	1.2	1.5	2.1	4.2	4.8	12.3	12.3	0.6	3.6
27	13.9	14.8	14.7	16.5	17.6	14.9	14.9	12.2	14.7	16.0	18.2	19.0	19.6	18.5	18.2	18.6	19.2	18.3	18.6	18.0	16.7	17.2	16.7	17.0	19.6	12.2	16.8
28	16.8	18.6	19.1	17.3	16.4	16.9	15.5	14.1	13.9	12.6	10.9	7.6	6.8	4.6	5.0	4.9	3.1	2.0	0.7	0.8	1.2	1.6	0.4	0.7	19.1	0.4	8.8
29	1.3	4.0	5.1	5.0	4.8	3.0	2.4	1.7	2.7	2.4	1.2	0.7	0.2	0.5	0.1	0.3	0.9	1.8	1.0	0.7	2.3	1.6	1.4	0.9	5.1	0.1	1.9
30	0.5	0.3	1.1	3.9	1.1	2.4	0.5	0.9	3.1	6.4	6.6	6.3	6.1	7.0	6.3	5.3	4.3	3.5	2.8	3.3	1.9	4.1	4.3	4.9	7.0	0.3	3.6
31	3.9	3.1	4.2	1.1	4.1	3.6	0.6	0.6	1.4	3.7	2.9	6.3	4.1	1.1	2.0	1.8	3.4	0.7	0.1	0.4	0.5	0.6	1.3	1.0	6.3	0.1	2.2
Max.	**19.2**	**18.6**	**19.7**	**23.4**	**20.3**	**20.9**	**18.9**	**18.4**	**18.9**	**18.4**	**20.4**	**21.7**	**23.1**	**22.4**	**22.4**	**24.9**	**25.8**	**25.7**	**27.5**	**25.0**	**23.9**	**23.1**	**21.7**	**20.4**	**27.5**		
Min.	**0.5**	**0.3**	**0.5**	**0.3**	**0.7**	**1.0**	**0.5**	**0.5**	**0.8**	**0.7**	**1.0**	**0.5**	**0.2**	**0.5**	**0.1**	**0.3**	**0.4**	**0.7**	**0.1**	**0.4**	**0.5**	**0.6**	**0.4**	**0.7**		**0.1**	
Avg.	**7.2**	**6.9**	**6.9**	**7.2**	**7.1**	**7.2**	**7.2**	**7.1**	**7.1**	**7.2**	**7.8**	**8.3**	**7.9**	**7.6**	**7.5**	**7.6**	**7.6**	**7.1**	**7.2**	**7.1**	**6.7**	**6.8**	**7.1**	**7.3**			**7.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.3	0.2	0.6	0.5	0.5	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.5	1.2	1.1	1.4	1.2	0.8	0.3	0.6	0.6	0.6	2.5	0.0	0.6
2	0.5	1.6	1.3	3.2	3.8	1.7	0.4	0.9	1.3	1.1	1.6	4.1	6.9	6.0	9.3	7.5	7.4	7.5	6.0	5.0	5.1	5.5	7.8	8.5	9.3	0.4	4.3
3	7.0	3.7	4.7	4.5	5.2	6.3	8.0	8.3	6.4	6.6	8.4	6.9	7.7	3.4	4.4	3.1	2.1	1.3	1.8	1.4	3.4	2.6	3.3	5.5	8.4	1.3	4.8
4	4.5	3.3	4.1	3.1	2.6	1.2	0.8	3.9	3.3	0.5	0.2	0.3	0.4	0.6	1.2	1.3	4.5	1.9	2.3	1.7	2.7	1.6	1.6	2.0	4.5	0.2	2.1
5	2.0	0.5	2.1	3.2	2.0	1.3	0.7	0.8	2.4	1.3	1.7	2.1	1.1	1.7	0.8	1.4	2.2	2.3	2.4	1.7	2.9	4.7	4.7	3.5	4.7	0.5	2.1
6	4.3	2.8	4.1	3.8	0.6	4.1	3.8	2.7	4.6	5.0	3.7	4.9	5.9	5.6	2.6	2.2	3.6	1.2	2.0	2.4	3.7	4.3	2.8	5.0	5.9	0.6	3.6
7	6.9	4.0	3.6	5.0	5.6	4.3	1.8	4.1	1.0	4.6	5.3	3.4	3.7	3.9	3.6	3.0	1.7	2.6	1.1	1.4	0.9	0.9	1.3	2.5	6.9	0.9	3.2
8	1.6	1.6	0.5	1.5	0.8	0.6	1.0	2.4	0.6	1.1	2.8	2.2	0.8	2.4	3.2	2.1	3.0	2.3	2.8	4.1	1.9	2.2	6.0	4.9	6.0	0.5	2.2
9	5.9	7.7	11.1	12.5	11.4	11.3	10.1	9.5	4.6	3.1	3.7	1.6	0.7	0.8	1.2	1.9	2.4	2.6	1.5	1.6	0.9	2.9	3.6	1.8	12.5	0.7	4.8
10	2.4	5.3	2.9	2.9	1.1	1.0	2.0	0.8	4.4	1.5	2.8	1.0	1.5	0.9	0.5	0.6	0.9	1.0	2.3	2.1	2.4	1.9	1.8	1.7	5.3	0.5	1.9
11	0.9	2.3	2.8	4.2	3.7	4.8	4.2	4.0	3.6	4.7	3.3	1.3	0.0	0.4	3.0	2.1	1.3	1.7	1.4	1.4	0.3	0.9	0.8	1.0	4.8	0.0	2.3
12	3.9	1.1	0.7	0.6	0.6	1.9	3.0	2.4	2.2	1.9	0.6	1.2	0.4	1.2	1.4	1.0	0.6	0.4	0.5	0.9	0.6	0.3	0.7	1.9	3.9	0.3	1.2
13	9.6	14.4	11.4	13.1	15.0	14.2	14.1	13.3	14.9	17.8	18.6	16.0	14.8	15.0	15.0	14.2	14.3	14.4	14.7	13.9	13.3	13.9	13.3	12.7	18.6	9.6	14.2
14	13.3	13.7	14.0	13.6	14.1	13.3	13.4	12.7	13.8	12.4	16.5	15.8	14.2	7.6	8.0	9.7	8.9	10.3	9.0	7.2	4.5	5.9	5.2	5.6	16.5	4.5	10.9
15	6.8	6.2	6.4	8.5	8.5	8.6	7.7	3.5	4.0	3.1	1.1	0.4	0.5	0.4	1.0	1.0	2.3	1.1	0.8	0.7	0.6	3.6	4.7	12.5	12.5	0.4	3.9
16	15.1	18.3	17.6	15.4	15.2	15.4	12.3	13.7	11.6	9.1	9.5	8.5	9.4	9.2	9.6	8.5	7.6	8.4	8.6	8.1	11.5	11.6	12.7	7.4	18.3	7.4	11.4
17	5.4	8.5	14.1	13.0	14.4	13.1	11.9	13.6	10.9	7.5	5.9	6.1	5.9	7.9	9.3	7.9	6.4	13.7	17.5	17.6	17.1	16.3	19.2	18.1	19.2	5.4	11.7
18	15.0	15.9	13.6	13.9	14.8	16.2	18.4	17.3	17.2	16.8	16.0	14.0	13.6	12.7	12.6	11.9	13.0	12.4	12.7	12.4	10.6	10.5	9.6	10.2	18.4	9.6	13.8
19	9.2	9.4	6.3	3.4	3.8	3.6	2.0	5.0	6.3	5.3	3.1	5.9	6.2	7.9	8.9	8.0	6.0	4.9	4.3	7.0	6.9	3.3	3.0	4.7	9.4	2.0	5.6
20	12.4	13.4	16.6	15.8	14.9	15.8	17.5	19.6	18.3	15.2	13.3	11.3	11.9	12.7	11.1	7.9	6.6	4.7	4.2	4.2	4.6	3.4	4.4	7.2	19.6	3.4	11.1
21	9.6	5.5	4.4	6.4	9.1	7.7	4.2	3.3	3.8	2.5	3.1	6.4	7.5	8.8	7.7	6.4	4.7	3.9	4.2	2.3	1.9	1.6	3.1	3.1	9.6	1.6	5.1
22	2.9	2.8	4.3	3.6	3.2	2.4	2.5	2.9	4.8	5.1	4.3	3.5	4.4	5.7	11.1	13.8	14.2	11.6	11.5	11.9	12.1	11.3	10.4	10.3	14.2	2.4	7.1
23	9.0	8.1	4.8	4.1	2.0	0.5	0.5	0.9	0.8	2.1	1.0	1.9	2.6	2.4	1.1	3.0	1.9	1.8	0.9	0.9	1.4	2.1	1.6	1.1	9.0	0.5	2.4
24	2.9	3.0	5.7	6.2	6.7	6.2	5.5	6.0	5.7	4.7	4.5	4.8	4.1	3.4	2.7	2.5	3.7	4.9	5.1	6.1	7.5	9.6	8.5	6.0	9.6	2.5	5.2
25	5.4	6.2	6.9	9.7	7.9	9.1	7.8	7.1	4.2	2.7	1.8	1.5	1.2	1.7	0.6	0.8	0.6	0.3	1.1	1.3	1.4	1.8	2.5	2.9	9.7	0.3	3.6
26	5.4	1.9	2.2	0.7	1.0	0.7	0.7	0.4	0.3	0.3	0.7	0.6	1.1	0.6	0.7	1.1	2.0	4.3	3.4	2.9	2.8	5.2	6.4	6.5	6.5	0.3	2.2
27	5.5	1.5	1.8	2.8	4.9	5.0	0.9	2.1	0.7	0.6	0.2	0.4	0.9	0.6	0.5	0.8	0.8	0.7	1.0	0.8	0.9	1.5	1.4	0.4	5.5	0.2	1.5
28	0.9	1.1	0.6	1.7	0.9	1.3	0.3	1.0	0.9	0.9	2.1	0.5	1.2	3.3	2.3	1.3	3.0	2.2	0.7	1.5	0.6	1.6	0.7	2.2	3.3	0.3	1.4
29	3.0	0.8	1.3	0.8	1.7	0.7	4.0	2.6	4.2	1.7	1.8	1.8	2.7	2.7	2.5	0.5	1.5	1.8	1.2	3.4	4.5	4.2	3.2	2.7	4.5	0.5	2.3
Max.	**15.1**	**18.3**	**17.6**	**15.8**	**15.2**	**16.2**	**18.4**	**19.6**	**18.3**	**17.8**	**18.6**	**16.0**	**14.8**	**15.0**	**15.0**	**14.2**	**14.3**	**14.4**	**17.5**	**17.6**	**17.1**	**16.3**	**19.2**	**18.1**	**19.6**		
Min.	**0.5**	**0.3**	**0.2**	**0.6**	**0.5**	**0.5**	**0.2**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.5**	**0.5**	**0.6**	**0.3**	**0.5**	**0.7**	**0.3**	**0.3**	**0.6**	**0.4**		**0.0**	
Avg.	**5.9**	**5.7**	**5.9**	**6.1**	**6.1**	**6.0**	**5.5**	**5.7**	**5.4**	**4.8**	**4.8**	**4.4**	**4.5**	**4.5**	**4.8**	**4.4**	**4.4**	**4.4**	**4.4**	**4.4**	**4.4**	**4.7**	**5.0**	**5.3**			**5.1**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.8	2.5	2.8	3.5	3.0	2.8	0.9	0.8	0.5	1.4	2.4	2.5	2.8	6.2	7.4	8.2	8.4	7.7	6.2	7.2	7.8	6.0	5.5	5.7	8.4	0.5	4.4
2	5.1	6.0	7.3	10.3	15.3	13.6	11.7	12.9	12.7	13.4	12.2	10.7	9.3	7.6	7.1	6.6	7.6	7.0	6.1	5.5	6.5	7.1	6.0	5.4	15.3	5.1	8.9
3	5.7	7.2	8.5	10.1	12.4	13.9	16.6	18.4	18.1	16.9	18.3	19.4	21.3	20.5	19.4	18.3	18.8	19.9	17.0	15.0	14.5	18.0	18.4	15.4	21.3	5.7	15.9
4	15.0	14.6	14.9	15.2	12.4	12.1	14.6	14.6	14.4	15.0	17.7	18.5	18.7	18.7	17.7	17.0	18.2	18.2	18.6	17.1	16.0	17.3	16.7	15.4	18.7	12.1	16.2
5	15.7	16.4	17.0	16.8	17.2	18.1	16.5	14.5	13.6	16.7	20.3	19.3	17.1	17.1	17.7	16.1	18.1	16.8	15.1	17.6	19.0	17.8	17.8	19.2	20.3	13.6	17.1
6	18.7	18.6	17.4	15.8	14.6	13.5	11.6	12.1	12.2	12.8	11.1	9.8	10.0	13.1	12.5	14.5	15.1	13.7	13.3	7.6	4.0	2.9	4.4	3.2	18.7	2.9	11.8
7	3.7	3.6	2.7	1.8	1.8	0.9	0.8	0.5	0.7	0.9	0.8	0.3	0.3	1.1	0.5	1.1	4.6	5.5	7.1	7.3	5.3	7.6	7.3	8.8	8.8	0.3	3.1
8	10.2	10.4	10.6	8.2	4.1	1.8	1.9	5.7	6.5	5.2	5.5	8.5	9.0	6.3	5.8	4.7	3.8	5.0	7.7	7.5	7.0	6.2	6.6	7.6	10.6	1.8	6.5
9	6.4	4.5	5.5	5.8	5.8	5.5	5.2	4.1	6.0	5.0	3.4	1.8	1.6	1.6	1.4	0.6	2.2	1.7	0.3	1.0	0.4	0.3	0.6	0.4	6.4	0.3	3.0
10	0.4	4.4	4.6	3.3	5.2	7.9	3.8	3.5	5.0	5.9	4.5	5.2	5.2	2.9	2.0	4.3	2.6	4.3	2.5	5.0	6.3	6.6	6.2	6.3	7.9	0.4	4.5
11	7.0	7.3	7.7	6.7	5.4	5.1	4.7	4.4	3.9	2.1	2.4	3.8	4.0	2.9	3.0	3.7	1.7	1.6	0.8	1.6	2.4	1.9	1.8	4.3	7.7	0.8	3.8
12	1.7	1.5	2.5	3.0	2.4	1.6	0.7	0.8	0.7	0.2	1.2	1.8	2.0	2.3	2.9	2.4	2.6	3.0	2.7	2.9	2.8	2.4	2.6	2.7	3.0	0.2	2.1
13	2.9	3.1	3.5	3.0	3.3	3.0	2.7	2.4	2.3	2.3	2.2	1.6	1.4	1.8	2.7	2.5	2.0	2.0	1.4	2.2	3.0	2.1	0.9	0.4	3.5	0.4	2.3
14	0.8	0.7	0.2	0.3	0.6	0.1	0.1	0.1	0.7	0.2	0.4	0.1	0.4	0.9	0.7	3.5	2.9	4.3	6.0	8.6	6.0	6.8	9.9	8.1	9.9	0.1	2.6
15	12.2	14.3	15.1	15.5	15.3	14.9	12.6	13.9	15.3	14.7	13.6	13.6	13.4	12.3	12.4	11.8	11.9	12.0	13.1	14.0	13.3	12.1	12.3	11.9	15.5	11.8	13.4
16	10.6	10.2	10.5	9.2	6.7	3.7	2.7	2.3	0.7	0.8	0.9	0.7	0.7	0.7	0.6	0.4	1.0	0.7	0.6	0.5	2.2	1.6	0.7	1.2	10.6	0.4	2.9
17	1.1	1.2	0.7	0.8	1.0	0.8	1.3	1.3	0.3	0.1	0.3	0.6	0.4	0.2	0.2	0.5	0.0	5.1	9.6	10.3	11.1	11.4	8.2	3.7	11.4	0.0	2.9
18	2.5	2.7	4.7	4.8	4.6	3.8	4.3	3.9	4.4	5.9	3.9	3.6	2.8	2.8	4.0	4.9	4.9	5.1	5.6	6.1	7.4	7.7	5.3	5.7	7.7	2.5	4.6
19	4.9	5.9	6.5	7.7	6.9	6.8	8.9	7.6	6.6	7.2	8.0	6.3	6.4	7.0	7.2	7.0	7.7	8.5	6.0	7.4	4.6	3.8	4.7	4.6	8.9	3.8	6.6
20	3.9	4.7	5.3	4.6	3.3	2.7	2.2	1.9	1.5	1.4	0.9	0.5	0.5	0.5	0.3	0.5	0.3	0.7	2.7	3.0	2.8	2.4	2.1	1.3	5.3	0.3	2.1
21	0.4	0.7	2.1	1.6	3.0	3.3	2.6	3.0	3.1	3.0	2.3	0.9	1.1	0.3	1.6	4.2	4.2	1.3	5.6	5.0	4.0	4.1	4.9	7.4	7.4	0.3	2.9
22	6.1	5.6	5.3	2.1	2.1	5.6	4.9	2.1	2.6	2.3	2.7	4.1	4.2	2.6	1.7	1.8	3.3	3.0	1.4	0.4	0.4	4.7	5.6	3.5	6.1	0.4	3.2
23	4.3	2.9	2.9	1.5	3.4	4.2	0.9	1.1	1.2	1.1	1.0	1.4	1.2	3.0	4.8	4.8	5.0	4.5	4.1	5.1	5.8	4.7	5.2	4.5	5.8	0.9	3.3
24	4.5	3.4	4.5	1.7	2.6	1.0	0.9	2.5	2.0	2.2	2.5	2.1	0.9	1.3	1.5	1.3	2.4	3.2	3.5	3.0	0.9	0.6	0.5	0.8	4.5	0.5	2.1
25	2.2	2.3	2.3	1.7	2.6	3.6	3.4	5.3	5.0	2.7	0.6	0.6	1.1	0.8	1.2	0.9	0.7	0.9	1.2	0.5	0.9	0.2	0.4	0.5	5.3	0.2	1.7
26	1.1	0.8	1.0	0.8	1.3	0.6	1.3	0.8	1.1	1.9	1.9	1.5	1.5	1.1	0.7	1.2	3.0	5.4	4.6	4.5	3.4	2.5	5.1	5.9	5.9	0.6	2.2
27	4.1	5.1	3.3	3.9	4.5	3.1	0.4	0.9	1.4	0.8	0.8	1.1	1.5	4.1	4.2	4.6	5.7	5.9	6.7	7.1	7.2	6.4	5.0	2.8	7.2	0.4	3.8
28	1.2	2.0	1.7	1.6	0.5	1.6	1.1	1.3	0.9	0.3	0.9	1.0	0.8	0.2	0.8	0.6	0.2	0.8	0.3	0.5	1.1	1.2	2.5	3.0	3.0	0.2	1.1
29	3.5	4.2	3.2	3.1	5.7	4.1	6.8	6.0	6.8	8.1	8.6	9.5	10.5	12.4	14.1	14.8	13.9	15.9	14.4	16.4	16.6	17.9	15.5	18.4	18.4	3.1	10.4
30	18.9	18.0	17.4	16.8	17.3	17.4	20.0	19.1	17.9	17.1	15.2	14.8	14.9	15.2	15.8	15.2	14.5	14.9	17.6	17.3	16.9	14.6	14.1	15.2	20.0	14.1	16.5
31	14.5	13.3	12.3	8.8	9.3	11.4	13.2	12.4	13.6	13.2	14.1	15.9	16.6	19.1	18.5	16.1	16.1	15.5	16.1	17.3	17.1	18.7	18.1	18.0	19.1	8.8	15.0
Max.	**18.9**	**18.6**	**17.4**	**16.8**	**17.3**	**18.1**	**20.0**	**19.1**	**18.1**	**17.1**	**20.3**	**19.4**	**21.3**	**20.5**	**19.4**	**18.3**	**18.8**	**19.9**	**18.6**	**17.6**	**19.0**	**18.7**	**18.4**	**19.2**	**21.3**		
Min.	**0.4**	**0.7**	**0.2**	**0.3**	**0.5**	**0.1**	**0.1**	**0.1**	**0.3**	**0.1**	**0.3**	**0.1**	**0.3**	**0.2**	**0.2**	**0.4**	**0.0**	**0.7**	**0.3**	**0.4**	**0.4**	**0.2**	**0.4**	**0.4**		**0.0**	
Avg.	**6.2**	**6.4**	**6.6**	**6.1**	**6.2**	**6.1**	**5.8**	**5.8**	**5.9**	**5.8**	**5.8**	**5.9**	**5.9**	**6.0**	**6.1**	**6.3**	**6.6**	**6.9**	**7.0**	**7.2**	**7.0**	**7.0**	**6.9**	**6.8**			**6.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	117.7	18.2	18.3	17.7	17.3	17.4	15.9	14.8	14.3	13.5	14.0	14.4	14.1	14.6	13.5	12.0	11.0	10.3	10.5	7.9	6.4	6.2	4.0	3.7	117.7	3.7	17.0
2	3.3	1.4	0.6	0.2	0.4	1.5	4.3	3.1	3.8	4.6	4.4	5.7	5.8	4.7	7.7	4.4	2.6	2.2	2.8	6.1	8.4	6.3	10.4	8.9	10.4	0.2	4.3
3	10.2	10.7	11.8	11.9	8.3	7.3	7.5	7.4	7.0	8.2	8.2	10.8	12.2	13.1	14.5	13.8	14.5	14.4	13.1	16.5	17.4	16.5	16.0	18.4	18.4	7.0	12.1
4	18.1	19.4	18.8	18.1	18.6	18.1	17.8	16.2	14.9	14.5	14.9	13.5	13.7	13.7	13.7	14.7	18.2	17.6	17.4	16.0	12.5	13.6	7.6	6.7	19.4	6.7	15.4
5	6.7	4.3	3.3	4.7	4.4	3.7	3.8	2.7	3.5	3.5	1.5	0.5	1.4	3.5	5.2	6.1	5.6	5.0	4.9	4.9	6.0	7.2	8.0	8.3	8.3	0.5	4.5
6	8.9	8.6	6.6	6.8	6.5	5.1	5.6	5.4	4.5	4.4	4.7	5.7	7.4	5.0	4.5	6.1	7.0	7.7	6.9	7.1	3.1	3.6	4.7	4.3	8.9	3.1	5.8
7	4.7	4.2	4.3	5.4	4.6	3.1	3.4	3.8	3.9	4.8	6.1	5.8	4.8	3.7	4.7	3.8	4.5	4.1	4.5	5.3	5.3	4.2	4.5	2.2	6.1	2.2	4.4
8	0.6	0.6	0.3	0.3	0.3	0.9	1.2	1.4	0.8	1.4	3.1	3.2	3.8	4.1	3.6	3.7	3.4	3.2	2.6	1.8	3.5	4.1	6.4	6.4	6.4	0.3	2.5
9	7.5	4.9	6.9	7.9	8.1	7.8	7.6	6.3	3.1	0.7	2.1	3.9	5.7	6.9	6.6	6.4	7.2	7.8	7.4	5.2	5.3	5.1	5.5	6.1	8.1	0.7	5.9
10	5.4	4.9	5.1	3.4	2.2	3.6	0.8	0.9	0.8	0.9	0.8	0.7	0.9	2.3	1.9	1.7	2.7	4.5	5.0	5.1	4.5	4.6	4.9	6.1	6.1	0.7	3.1
11	4.3	1.9	1.6	1.2	2.8	2.0	0.7	1.2	0.9	2.6	0.7	1.2	2.9	5.0	6.5	6.1	5.3	5.4	6.0	6.6	6.3	5.2	5.0	4.6	6.6	0.7	3.6
12	4.6	5.2	3.9	2.6	1.6	3.6	4.8	3.8	2.0	0.8	3.3	2.8	5.8	3.9	5.2	6.3	7.5	9.1	5.0	3.0	3.6	3.5	1.5	1.6	9.1	0.8	4.0
13	3.8	1.9	3.2	4.9	5.0	4.4	5.0	6.4	5.4	6.6	8.2	10.5	12.2	12.7	11.8	12.4	12.0	9.9	12.4	13.1	10.5	12.6	12.9	13.0	13.1	1.9	8.8
14	13.9	12.5	12.0	12.2	12.7	10.5	9.0	7.8	6.2	4.1	4.6	8.5	9.2	7.2	4.4	5.5	4.6	4.9	4.0	6.3	7.6	5.1	4.8	5.0	13.9	4.0	7.6
15	5.3	2.0	0.8	0.5	0.2	0.7	0.8	3.4	4.0	5.4	5.6	7.4	8.7	8.1	8.1	12.2	14.9	15.5	15.9	17.2	16.8	13.3	15.8	14.9	17.2	0.2	8.2
16	13.8	11.1	11.2	8.0	8.9	6.6	8.8	6.1	11.7	14.2	10.3	5.7	6.8	3.7	4.6	8.8	7.5	7.3	5.5	5.6	4.3	8.1	9.7	8.2	14.2	3.7	8.2
17	7.2	7.4	7.0	7.0	4.4	3.0	1.6	4.1	3.1	0.6	2.1	3.5	5.5	6.8	7.2	5.7	3.6	4.1	3.8	3.4	1.7	6.5	6.0	3.5	7.4	0.6	4.5
18	2.3	1.5	2.5	2.6	2.0	1.0	1.5	2.1	2.2	3.2	2.1	3.7	7.7	7.4	5.6	4.9	6.9	5.6	6.0	6.7	6.5	5.4	5.6	6.3	7.7	1.0	4.2
19	5.9	5.2	4.7	6.6	8.8	8.6	10.0	8.3	8.7	7.2	7.0	6.5	11.2	13.9	12.3	8.8	6.7	7.0	7.8	12.9	13.7	10.9	6.2	12.9	13.9	4.7	8.8
20	12.6	10.8	13.2	12.4	13.0	13.5	12.2	13.3	13.0	14.3	15.1	14.4	11.5	11.8	15.6	12.0	13.0	12.9	16.0	13.1	13.3	15.7	15.8	15.1	16.0	10.8	13.5
21	14.9	14.4	14.9	14.9	13.5	12.3	13.3	12.2	8.8	7.9	7.6	11.4	14.3	14.2	14.6	10.7	9.3	8.2	9.2	10.2	11.3	7.3	5.4	7.7	14.9	5.4	11.2
22	8.0	9.6	10.0	9.4	3.5	4.6	3.4	3.2	3.2	3.1	1.5	1.5	2.0	1.6	2.4	1.9	1.7	1.9	2.5	3.0	3.0	1.2	1.5	0.7	10.0	0.7	3.5
23	1.4	0.9	0.5	0.5	1.0	0.5	0.6	0.2	0.4	0.2	0.5	0.7	1.1	0.3	1.2	1.5	3.1	3.3	4.0	3.2	4.6	2.3	5.7	6.0	6.0	0.2	1.8
24	6.6	10.0	10.0	9.9	4.9	2.0	1.6	1.1	1.3	0.6	0.8	2.0	1.8	1.1	0.7	2.6	6.2	3.9	4.3	5.1	4.4	6.8	8.3	7.7	10.0	0.6	4.3
25	8.3	7.9	6.7	7.8	7.4	7.9	9.6	8.0	7.3	6.5	6.1	7.1	6.9	6.9	7.5	7.9	7.5	8.1	7.5	8.1	9.0	7.4	6.0	6.5	9.6	6.0	7.5
26	6.8	6.3	6.9	7.3	7.3	6.1	5.8	6.8	8.1	10.5	12.1	12.0	12.4	11.9	12.2	12.1	12.1	12.1	11.9	12.1	11.8	11.9	12.2	12.0	12.4	5.8	10.0
27	12.0	12.2	12.5	12.3	11.4	11.0	9.4	9.6	10.2	11.1	10.6	10.3	9.1	8.7	9.6	9.3	8.7	7.4	7.2	6.2	5.7	4.2	3.4	2.5	12.5	2.5	8.9
28	2.3	1.4	1.4	1.7	0.5	1.5	1.0	0.7	0.7	0.5	0.7	1.7	3.7	2.8	2.7	2.9	2.9	2.5	2.4	3.5	3.2	3.4	4.4	5.5	5.5	0.5	2.3
29	5.0	3.9	3.9	2.7	0.6	2.3	2.4	3.0	2.6	1.1	2.3	3.4	2.8	4.2	4.6	4.4	4.8	5.5	5.3	4.4	4.4	3.8	5.2	4.8	5.5	0.6	3.6
30	4.1	3.7	2.8	0.8	0.7	1.6	2.0	0.9	1.2	0.6	0.6	1.1	0.7	1.4	1.8	2.0	3.1	3.0	4.0	5.1	4.2	4.2	3.4	2.6	5.1	0.6	2.3
Max.	**117.7**	**19.4**	**18.8**	**18.1**	**18.6**	**18.1**	**17.8**	**16.2**	**14.9**	**14.5**	**15.1**	**14.4**	**14.3**	**14.6**	**15.6**	**14.7**	**18.2**	**17.6**	**17.4**	**17.2**	**17.4**	**16.5**	**16.0**	**18.4**	**117.7**		
Min.	**0.6**	**0.6**	**0.3**	**0.2**	**0.2**	**0.5**	**0.6**	**0.2**	**0.4**	**0.2**	**0.5**	**0.5**	**0.7**	**0.3**	**0.7**	**1.5**	**1.7**	**1.9**	**2.4**	**1.8**	**1.7**	**1.2**	**1.5**	**0.7**		**0.2**	
Avg.	**10.9**	**6.9**	**6.9**	**6.7**	**6.0**	**5.7**	**5.7**	**5.5**	**5.3**	**5.3**	**5.4**	**6.0**	**6.9**	**6.9**	**7.2**	**7.0**	**7.3**	**7.1**	**7.2**	**7.5**	**7.3**	**7.0**	**7.0**	**7.1**			**6.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.5	3.0	3.1	3.0	2.2	1.7	2.8	3.8	2.8	2.2	1.4	2.3	3.3	3.8	5.8	5.0	4.7	4.9	4.9	4.6	6.2	5.6	5.5	6.1	6.2	1.4	3.8
2	6.8	5.8	5.6	4.1	3.9	5.3	5.1	5.7	5.0	4.6	2.5	1.6	1.4	0.8	2.6	5.6	5.1	6.9	5.9	3.6	1.3	2.1	1.6	0.4	6.9	0.4	3.9
3	0.9	2.9	3.5	4.0	4.5	5.3	5.4	4.5	4.9	3.2	3.9	4.0	5.4	6.2	4.3	6.4	6.3	4.7	2.4	1.6	4.8	4.6	4.1	6.2	6.4	0.9	4.3
4	9.0	6.6	8.2	9.4	10.6	8.6	7.6	6.6	7.2	7.6	6.5	4.7	1.6	0.5	1.8	3.2	3.3	3.1	0.9	0.7	1.2	1.4	0.5	0.9	10.6	0.5	4.7
5	2.8	2.0	0.4	0.5	0.3	0.5	0.3	0.9	0.5	0.4	1.0	1.2	0.9	0.9	1.9	3.3	3.5	3.9	3.4	4.0	4.1	4.0	3.3	4.5	4.5	0.3	2.0
6	4.1	3.3	3.5	4.3	3.1	3.6	2.4	2.9	3.3	8.4	9.7	9.2	10.6	12.2	11.8	10.2	10.6	11.2	10.5	11.5	10.2	11.9	13.4	15.5	15.5	2.4	8.2
7	14.6	13.9	16.2	15.8	15.8	16.5	16.6	16.6	16.0	17.8	17.8	18.3	19.1	17.7	17.8	17.7	17.2	17.1	17.1	15.9	13.9	14.6	13.7	13.3	19.1	13.3	16.3
8	16.3	15.1	13.9	14.7	15.4	15.6	14.1	12.6	12.2	14.4	13.7	13.8	14.3	14.8	14.9	13.7	14.2	13.8	14.1	13.5	12.8	12.6	11.7	9.7	16.3	9.7	13.8
9	9.4	9.1	7.1	6.6	8.6	6.2	8.4	9.4	10.3	10.8	10.0	10.5	10.4	9.3	8.0	8.1	7.8	5.5	4.8	2.4	1.4	3.1	1.9	1.4	10.8	1.4	7.1
10	1.4	0.5	0.6	0.4	0.6	0.4	1.1	0.3	0.2	0.2	0.8	0.5	0.7	2.2	3.2	3.6	2.9	2.5	2.2	1.9	3.3	3.2	5.5	6.1	6.1	0.2	1.8
11	6.9	8.2	8.1	8.0	9.0	10.3	10.8	11.2	13.2	13.5	13.4	13.1	13.2	14.3	16.5	17.0	15.0	14.5	18.3	17.8	16.5	15.4	12.6	12.0	18.3	6.9	12.9
12	14.6	11.2	9.3	6.8	8.2	8.9	8.9	8.3	6.4	7.0	9.2	11.7	10.1	12.0	13.8	14.5	13.6	11.8	11.7	12.0	12.1	12.3	11.5	12.0	14.6	6.4	10.8
13	11.5	10.9	10.9	10.9	11.3	12.3	9.6	8.1	9.1	9.7	8.8	8.8	9.8	10.2	10.3	12.5	12.8	12.1	14.2	14.5	13.2	14.0	13.7	15.2	15.2	8.1	11.4
14	13.8	11.3	7.0	3.3	1.5	1.8	4.4	7.0	7.5	6.4	6.2	6.6	7.7	7.7	6.3	4.7	6.0	6.8	6.6	5.4	5.1	2.1	0.6	0.8	13.8	0.6	5.7
15	1.2	4.7	5.5	4.4	4.5	6.0	6.3	5.2	6.3	5.6	4.2	4.6	5.4	5.5	6.4	5.6	7.3	5.7	4.1	5.7	6.2	6.0	6.7	6.9	7.3	1.2	5.4
16	8.3	7.7	7.0	6.2	4.6	3.7	1.8	1.9	1.7	1.7	1.4	3.6	4.2	4.8	6.2	6.6	6.6	6.1	4.7	2.7	2.8	3.1	3.5	1.7	8.3	1.4	4.3
17	0.9	0.6	0.4	0.3	0.6	0.8	0.4	0.8	0.9	1.1	1.1	1.2	1.8	2.4	2.1	2.3	2.8	3.1	2.5	2.8	3.2	5.1	5.7	8.4	8.4	0.3	2.1
18	8.4	4.7	4.3	9.9	7.8	4.9	6.8	8.3	7.6	4.9	5.4	3.6	3.0	3.3	2.9	4.5	5.7	5.4	7.1	6.3	7.8	6.1	5.5	4.6	9.9	2.9	5.8
19	4.8	2.6	1.3	2.4	2.1	2.4	2.0	1.0	1.1	1.5	0.9	1.9	1.5	1.8	1.8	2.5	4.0	4.9	4.6	4.7	4.7	5.2	5.9	5.7	5.9	0.9	3.0
20	5.0	5.4	4.0	1.9	1.0	2.2	1.7	0.5	1.0	1.8	2.2	3.6	2.2	2.3	1.9	2.0	2.5	2.7	3.4	3.5	2.8	3.0	3.8	3.2	5.4	0.5	2.7
21	3.5	2.9	1.0	0.9	0.7	0.4	0.6	0.4	1.2	0.8	1.3	1.5	1.9	3.4	4.3	3.6	4.3	4.1	3.3	4.1	7.8	8.3	7.7	7.3	8.3	0.4	3.1
22	7.2	8.1	8.0	8.5	6.7	3.7	1.5	1.0	1.4	1.2	1.8	1.6	1.7	1.5	1.8	3.8	5.9	6.5	7.4	9.5	10.5	10.1	11.8	13.2	13.2	1.0	5.6
23	15.3	16.7	17.9	19.2	18.8	19.9	20.8	20.5	19.9	20.2	18.4	18.9	19.6	19.6	17.4	19.2	16.1	15.5	13.8	13.4	13.3	14.1	16.0	17.4	20.8	13.3	17.6
24	17.6	16.6	14.9	15.7	15.8	14.5	13.2	14.7	15.7	14.6	11.1	10.9	10.8	9.6	8.8	8.0	7.9	8.8	7.9	7.8	6.5	6.2	4.7	6.2	17.6	4.7	11.2
25	6.8	5.1	5.1	5.6	6.2	4.6	4.0	5.9	6.0	6.2	6.6	6.7	6.1	6.4	7.8	7.3	7.8	6.3	6.3	5.7	6.1	5.0	4.3	4.0	7.8	4.0	5.9
26	3.3	4.2	4.4	4.6	2.1	1.7	2.9	3.8	3.5	4.5	5.0	3.6	4.0	4.2	3.8	5.2	4.4	4.0	4.5	4.0	4.6	5.6	5.1	4.7	5.6	1.7	4.1
27	5.5	3.5	2.7	2.1	1.5	1.8	0.9	0.4	0.9	2.6	2.5	2.8	2.5	2.8	2.5	3.4	3.4	3.3	3.7	4.3	4.5	4.9	7.2	5.9	7.2	0.4	3.2
28	2.4	1.1	4.2	2.4	3.8	5.3	3.1	1.7	0.9	1.8	2.8	3.5	2.1	2.1	2.6	3.2	3.3	4.3	4.7	4.9	4.8	4.9	4.9	3.5	5.3	0.9	3.3
29	2.7	2.8	3.6	2.9	3.3	2.4	4.3	4.7	4.9	5.3	5.5	5.5	5.9	5.2	5.1	5.2	4.8	4.1	4.1	4.2	4.6	4.8	3.7	3.0	5.9	2.4	4.3
30	3.4	2.9	1.6	1.4	1.9	3.5	6.0	4.8	3.8	5.4	5.2	5.3	5.2	8.0	8.6	9.1	8.9	9.0	8.3	6.0	7.0	6.1	6.9	9.6	9.6	1.4	5.8
31	13.4	13.1	13.1	10.8	11.0	11.3	13.0	14.1	11.5	10.9	12.0	11.4	11.1	12.3	12.7	14.0	11.8	12.2	11.8	9.6	11.2	14.8	15.4	14.3	15.4	9.6	12.4
Max.	**17.6**	**16.7**	**17.9**	**19.2**	**18.8**	**19.9**	**20.8**	**20.5**	**19.9**	**20.2**	**18.4**	**18.9**	**19.6**	**19.6**	**17.8**	**19.2**	**17.2**	**17.1**	**18.3**	**17.8**	**16.5**	**15.4**	**16.0**	**17.4**	**20.8**		
Min.	**0.9**	**0.5**	**0.4**	**0.3**	**0.3**	**0.4**	**0.3**	**0.3**	**0.2**	**0.2**	**0.8**	**0.5**	**0.7**	**0.5**	**1.8**	**2.0**	**2.5**	**2.5**	**0.9**	**0.7**	**1.2**	**1.4**	**0.5**	**0.4**		**0.2**	
Avg.	**7.2**	**6.7**	**6.3**	**6.2**	**6.1**	**6.0**	**6.0**	**6.0**	**6.0**	**6.3**	**6.2**	**6.4**	**6.4**	**6.7**	**7.0**	**7.5**	**7.4**	**7.3**	**7.1**	**6.7**	**6.9**	**7.1**	**7.0**	**7.2**			**6.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.6	13.2	12.6	12.6	11.9	11.2	11.6	11.3	13.1	13.7	15.9	14.4	14.0	15.0	14.9	14.9	14.7	15.5	13.1	12.3	10.9	7.2	6.0	5.7	15.9	5.7	12.5
2	5.3	6.3	6.2	6.3	7.0	4.8	3.1	2.5	2.7	4.0	5.5	6.5	5.3	4.3	4.9	4.4	3.6	4.2	2.8	4.4	2.4	1.4	2.3	1.5	7.0	1.4	4.2
3	1.8	0.4	0.7	0.7	0.7	0.8	2.0	1.7	1.5	1.5	1.3	1.6	3.0	4.1	4.4	5.8	6.6	8.3	9.0	10.2	10.8	10.9	10.9	9.2	10.9	0.4	4.5
4	9.3	10.8	8.5	7.5	7.1	7.4	7.1	5.2	4.3	4.2	5.9	7.5	7.1	7.4	8.0	9.2	9.5	9.9	9.5	9.3	9.3	8.6	7.9	8.8	10.8	4.2	7.9
5	10.0	11.2	10.9	10.0	11.3	11.4	10.8	10.2	9.2	9.2	9.5	9.9	9.9	10.0	10.7	10.1	9.6	8.9	7.5	5.4	5.4	3.5	1.5	3.9	11.4	1.5	8.7
6	5.4	5.1	4.2	4.0	3.1	2.6	2.4	1.9	2.3	2.2	1.9	3.4	3.9	3.5	4.3	2.4	4.1	8.8	6.7	6.0	4.8	4.7	4.5	4.5	8.8	1.9	4.0
7	1.6	1.8	3.9	1.9	3.0	4.0	3.9	3.7	5.6	4.6	4.7	4.9	4.6	4.6	3.0	2.7	3.1	5.3	3.5	5.0	6.7	6.3	6.1	6.1	6.7	1.6	4.2
8	5.8	4.3	2.9	2.3	3.1	3.2	3.1	2.1	2.1	1.3	2.1	3.1	4.0	4.9	5.5	5.9	4.8	6.2	6.5	6.8	6.9	5.2	3.1	3.8	6.9	1.3	4.1
9	3.8	4.2	3.5	3.5	4.6	6.2	3.9	3.2	4.5	4.0	3.1	2.5	2.8	3.4	3.2	4.0	4.1	4.2	4.6	4.8	5.3	4.9	4.1	5.0	6.2	2.5	4.1
10	5.8	4.5	2.5	1.4	2.1	1.8	0.6	0.9	1.0	1.5	0.7	1.3	1.2	1.0	2.0	3.4	3.2	2.3	3.3	3.8	2.6	3.7	4.2	3.2	5.8	0.6	2.4
11	0.7	0.8	0.5	0.7	0.5	0.9	0.8	0.9	1.4	1.3	1.5	0.9	1.2	2.1	4.1	4.8	4.8	4.7	4.0	4.0	3.4	3.7	3.7	5.1	5.1	0.5	2.4
12	5.0	4.0	2.8	0.6	1.4	3.1	1.2	0.8	1.1	1.6	2.0	1.9	1.9	2.3	1.0	0.4	2.0	2.4	2.5	2.6	1.1	1.8	1.5	0.1	5.0	0.1	1.9
13	0.5	0.2	1.5	2.7	3.8	2.8	1.8	1.4	3.4	1.7	1.4	1.3	1.6	2.4	2.3	1.9	2.2	1.4	2.4	3.1	3.5	3.6	4.8	4.9	4.9	0.2	2.4
14	2.7	1.6	1.1	1.2	1.1	0.5	0.3	1.1	1.1	1.4	3.9	1.9	2.7	2.8	1.8	2.1	4.4	4.6	5.7	3.9	5.5	6.2	7.5	4.4	7.5	0.3	2.9
15	1.1	1.4	1.3	1.4	1.4	0.9	0.8	1.2	1.4	2.0	2.3	2.3	2.1	2.8	2.1	5.5	5.9	6.7	4.2	4.4	5.0	5.9	6.0	4.2	6.7	0.8	3.0
16	0.8	0.8	0.7	0.2	0.4	0.2	0.3	0.3	0.4	1.3	0.9	1.0	1.4	1.4	2.1	2.7	3.1	4.1	4.7	4.3	3.7	2.8	2.0	2.4	4.7	0.2	1.7
17	1.2	0.6	1.2	0.6	0.5	0.5	0.7	0.3	0.6	1.5	2.9	2.1	1.0	2.0	3.5	4.5	4.6	4.0	4.5	5.3	6.4	6.1	5.5	4.5	6.4	0.3	2.7
18	3.8	4.8	2.8	0.7	0.5	0.3	0.7	0.9	1.6	3.3	2.8	3.5	5.4	4.5	4.9	4.8	4.6	5.1	4.2	4.1	2.9	2.8	2.9	1.0	5.4	0.3	3.0
19	0.4	0.7	0.7	0.6	1.1	0.6	0.9	0.7	1.8	1.8	2.2	2.3	1.6	2.2	3.6	3.8	4.2	4.6	3.8	3.9	3.8	3.2	2.4	2.8	4.6	0.4	2.2
20	2.7	3.0	1.1	1.9	0.6	0.6	0.6	0.9	2.0	2.9	3.5	4.9	6.0	7.4	7.5	7.5	7.9	8.3	8.0	8.6	8.4	7.1	7.0	6.6	8.6	0.6	4.8
21	8.7	12.8	10.0	7.9	5.7	4.5	3.5	4.6	3.8	2.5	1.7	1.1	1.6	2.1	2.1	2.0	1.6	2.2	3.4	4.4	3.7	2.6	5.3	4.0	12.8	1.1	4.3
22	2.4	4.6	4.9	5.4	5.3	2.5	3.2	3.0	3.5	2.8	3.2	5.4	5.7	6.9	7.0	7.3	8.2	9.5	9.8	10.3	11.0	11.8	11.9	9.2	11.9	2.4	6.4
23	9.6	10.0	8.7	7.6	7.9	7.8	6.6	7.7	9.4	9.6	8.3	7.5	6.8	7.0	7.2	7.0	6.2	5.3	5.5	7.2	7.6	5.8	4.3	6.6	10.0	4.3	7.4
24	8.5	7.3	3.3	5.2	5.7	7.6	7.6	8.2	8.3	10.2	10.9	10.7	11.3	11.0	11.3	12.3	13.2	11.1	9.5	9.3	9.8	10.8	9.4	10.1	13.2	3.3	9.3
25	11.1	13.5	15.4	15.3	13.9	12.3	12.9	13.7	15.2	15.8	15.6	15.3	15.9	16.8	17.1	13.1	12.2	13.8	12.0	10.6	10.2	10.3	6.8	5.3	17.1	5.3	13.1
26	6.5	6.0	4.2	3.6	1.4	0.4	2.6	4.0	5.3	5.4	5.0	6.0	6.6	5.3	3.7	3.9	4.3	4.4	2.8	2.8	2.3	1.8	2.5	1.0	6.6	0.4	3.8
27	2.5	1.4	1.1	0.7	1.3	0.8	0.6	4.1	6.0	6.1	6.3	7.6	8.7	8.0	7.0	7.5	6.3	6.8	6.1	6.0	5.4	4.0	3.2	3.0	8.7	0.6	4.6
28	3.2	3.3	3.3	5.0	4.0	2.0	2.1	0.6	2.6	2.5	5.7	6.3	6.7	6.4	5.0	5.4	4.2	4.6	4.4	3.8	4.6	6.2	5.3	4.9	6.7	0.6	4.3
29	4.2	4.0	4.3	4.7	4.4	2.5	2.6	3.3	2.9	3.3	2.8	2.8	3.7	5.0	5.5	6.4	6.2	6.7	6.6	7.1	8.1	7.7	7.4	7.2	8.1	2.5	5.0
30	6.1	4.9	4.9	4.3	4.4	3.5	3.4	2.8	1.4	1.0	1.5	1.6	1.3	1.6	1.3	1.4	2.9	2.3	2.7	2.7	1.5	0.6	0.6	0.9	6.1	0.6	2.5
Max.	**14.6**	**13.5**	**15.4**	**15.3**	**13.9**	**12.3**	**12.9**	**13.7**	**15.2**	**15.8**	**15.9**	**15.3**	**15.9**	**16.8**	**17.1**	**14.9**	**14.7**	**15.5**	**13.1**	**12.3**	**11.0**	**11.8**	**11.9**	**10.1**	**17.1**		
Min.	**0.4**	**0.2**	**0.5**	**0.2**	**0.4**	**0.2**	**0.3**	**0.3**	**0.4**	**1.0**	**0.7**	**0.9**	**1.0**	**1.0**	**1.0**	**0.4**	**1.6**	**1.4**	**2.4**	**2.6**	**1.1**	**0.6**	**0.6**	**0.1**		**0.1**	
Avg.	**4.8**	**4.9**	**4.3**	**4.0**	**4.0**	**3.6**	**3.4**	**3.4**	**4.0**	**4.1**	**4.5**	**4.7**	**5.0**	**5.3**	**5.4**	**5.6**	**5.7**	**6.2**	**5.8**	**5.9**	**5.8**	**5.4**	**5.0**	**4.7**			**4.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	1.0	0.8	2.5	2.3	0.7	0.7	0.6	1.1	1.7	2.9	5.2	6.5	7.8	9.3	10.7	10.9	10.5	10.3	9.8	8.7	8.0	8.5	12.5	12.5	0.5	5.6
2	11.7	11.8	10.0	8.7	10.0	8.8	8.9	10.5	9.9	11.1	9.7	10.9	11.9	9.7	10.5	10.8	10.5	10.1	9.5	8.8	9.3	8.5	6.7	6.7	11.9	6.7	9.8
3	5.5	6.7	7.3	8.1	6.4	7.9	6.5	10.6	9.5	9.2	8.5	6.6	5.1	6.7	7.2	7.3	6.6	6.1	5.3	4.9	3.7	2.5	2.7	3.7	10.6	2.5	6.4
4	3.5	3.3	2.6	2.1	1.0	0.6	0.5	0.7	1.0	1.5	1.6	2.1	1.7	1.7	2.1	3.2	1.7	1.1	2.9	4.1	4.9	3.3	3.2	0.8	4.9	0.5	2.1
5	1.1	1.6	0.3	0.9	0.4	1.5	1.3	1.1	1.3	2.3	2.8	1.9	1.3	1.5	1.4	3.0	2.7	3.4	2.0	3.1	3.4	3.0	1.0	2.8	3.4	0.3	1.9
6	2.5	1.8	1.5	1.2	2.0	2.7	1.6	0.3	1.4	1.0	3.2	4.1	5.1	6.3	6.0	7.1	6.7	6.4	5.8	8.3	9.4	8.0	5.7	7.0	9.4	0.3	4.4
7	8.4	6.3	8.0	7.8	5.2	5.4	4.5	7.2	11.0	11.0	10.7	11.0	9.8	9.5	9.2	8.8	7.3	7.2	6.6	6.5	4.4	3.0	2.5	2.3	11.0	2.3	7.2
8	4.5	4.9	4.1	2.9	2.7	1.5	1.7	2.0	2.5	3.2	2.3	3.4	4.1	4.7	4.9	4.8	4.7	4.3	6.4	6.1	5.0	6.0	5.6	2.4	6.4	1.5	3.9
9	2.0	2.6	4.4	3.6	2.8	4.2	3.6	4.2	6.5	8.0	5.7	6.0	8.2	7.9	7.6	8.7	8.0	8.4	9.1	9.3	8.6	10.1	9.7	9.3	10.1	2.0	6.6
10	8.1	7.7	6.9	7.7	6.3	6.3	7.1	7.2	7.7	8.1	7.5	8.3	7.4	6.1	4.6	4.7	5.3	6.6	6.8	7.5	7.8	7.6	8.8	7.4	8.8	4.6	7.1
11	5.7	3.7	7.0	6.7	7.2	7.4	2.1	3.3	3.4	3.5	3.4	4.4	6.0	5.8	4.8	5.4	6.6	5.9	7.1	6.8	6.1	5.9	6.3	6.4	7.4	2.1	5.5
12	6.7	6.5	4.7	3.4	4.6	3.9	6.3	7.9	10.1	10.6	11.8	12.9	12.6	13.5	11.7	11.0	12.7	12.7	10.6	10.5	8.9	9.4	9.0	8.7	13.5	3.4	9.2
13	9.5	8.2	8.1	7.9	8.4	8.2	7.3	6.1	5.5	5.8	5.2	5.7	4.8	5.1	4.7	3.6	4.3	2.8	2.1	2.5	3.0	3.5	3.9	4.3	9.5	2.1	5.4
14	5.0	4.7	4.4	3.1	3.0	3.8	2.8	2.6	1.0	2.4	3.1	2.7	2.6	2.8	2.7	3.2	3.3	2.7	3.7	3.8	4.3	4.8	3.9	3.6	5.0	1.0	3.3
15	4.1	2.0	2.9	2.9	3.4	2.5	3.3	4.2	3.4	4.7	5.4	6.0	5.6	5.9	7.9	9.5	7.9	6.0	5.5	6.1	5.6	5.5	5.3	4.2	9.5	2.0	5.0
16	6.4	8.1	9.5	10.7	11.0	10.8	9.8	11.2	11.2	14.1	13.7	13.5	12.7	15.9	17.1	16.4	15.0	14.9	14.1	13.7	13.2	11.8	12.2	11.2	17.1	6.4	12.4
17	9.6	9.6	7.5	8.4	9.5	9.5	6.4	6.2	5.3	5.5	5.9	6.6	6.7	5.5	6.0	5.7	5.5	5.4	6.1	5.1	6.3	7.7	8.1	6.7	9.6	5.1	6.9
18	5.7	2.9	3.8	3.4	3.6	4.2	3.7	3.3	2.9	1.9	2.3	3.1	1.9	2.1	2.1	3.0	1.9	3.0	2.1	2.6	3.0	1.1	1.3	1.1	5.7	1.1	2.8
19	0.9	1.5	3.0	4.2	4.1	3.4	2.4	3.9	4.7	5.0	4.3	4.4	5.1	6.1	6.1	5.5	6.7	6.1	6.9	3.8	3.2	3.0	2.6	3.7	6.9	0.9	4.2
20	3.7	2.9	2.5	1.9	4.4	5.5	5.9	4.6	5.4	6.0	6.2	7.3	8.2	8.2	7.9	8.6	7.9	9.1	8.1	7.5	6.3	6.3	6.9	7.3	9.1	1.9	6.2
21	7.9	9.4	9.1	8.2	6.9	6.5	5.8	5.8	4.9	3.7	2.7	2.4	3.1	2.9	2.8	2.0	3.1	2.9	3.2	2.0	2.1	1.6	6.0	6.3	9.4	1.6	4.6
22	5.8	5.2	4.1	3.3	1.9	0.7	0.3	0.8	1.5	1.9	1.6	3.0	2.9	3.1	3.4	3.1	1.4	1.6	2.2	2.9	2.0	1.9	2.7	2.0	5.8	0.3	2.5
23	1.3	1.6	1.5	1.7	0.7	0.7	0.2	2.5	2.0	3.5	4.6	4.6	4.8	5.0	5.7	6.1	5.3	4.7	4.8	4.9	4.2	4.3	3.2	1.1	6.1	0.2	3.3
24	0.6	0.4	0.6	1.0	1.2	0.8	2.5	3.0	4.0	4.1	4.9	4.4	5.3	5.3	7.0	7.7	6.6	4.2	6.7	7.6	5.4	5.4	6.7	4.4	7.7	0.4	4.2
25	4.7	4.3	5.1	4.5	4.5	4.9	4.1	5.8	6.3	6.5	7.7	7.7	8.4	8.3	7.5	7.7	6.5	6.1	6.2	5.5	5.8	5.0	5.0	5.7	8.4	4.1	6.0
26	5.1	0.7	0.8	0.5	1.4	1.7	1.2	3.5	4.0	2.9	2.8	2.2	4.9	3.5	2.3	2.7	2.8	2.8	2.6	2.9	3.5	4.7	3.4	5.2	5.2	0.5	2.8
27	6.2	5.1	4.9	3.1	2.2	2.4	2.5	2.0	3.9	4.3	4.0	5.3	2.9	3.0	2.9	3.0	4.3	4.5	4.6	4.1	3.3	4.0	4.5	3.3	6.2	2.0	3.8
28	2.4	0.8	2.0	3.9	3.3	2.6	3.4	3.6	3.6	4.8	5.0	5.0	6.1	7.5	6.2	5.6	6.6	5.7	5.6	5.3	4.4	4.4	5.1	6.0	7.5	0.8	4.5
29	4.3	3.7	4.6	3.3	0.9	3.3	5.2	6.4	5.9	8.5	11.0	8.2	7.5	6.2	6.5	6.4	7.0	7.1	6.6	7.0	5.4	6.1	6.5	6.6	11.0	0.9	6.0
30	5.4	4.8	5.5	5.1	4.3	3.9	4.3	3.6	4.3	5.3	5.2	5.5	6.5	6.8	6.9	6.8	7.0	8.0	6.5	6.3	6.9	5.1	3.4	3.3	8.0	3.3	5.4
31	2.3	1.8	1.4	2.4	2.9	1.0	1.7	1.8	2.4	3.2	4.8	4.2	4.1	4.6	4.9	4.6	4.6	4.9	5.1	4.6	4.3	4.3	6.0	6.4	6.4	1.0	3.7
Max.	**11.7**	**11.8**	**10.0**	**10.7**	**11.0**	**10.8**	**9.8**	**11.2**	**11.2**	**14.1**	**13.7**	**13.5**	**12.7**	**15.9**	**17.1**	**16.4**	**15.0**	**14.9**	**14.1**	**13.7**	**13.2**	**11.8**	**12.2**	**12.5**	**17.1**		
Min.	**0.5**	**0.4**	**0.3**	**0.5**	**0.4**	**0.6**	**0.2**	**0.3**	**1.0**	**1.0**	**1.6**	**1.9**	**1.3**	**1.5**	**1.4**	**2.0**	**1.4**	**1.1**	**2.0**	**2.0**	**2.0**	**1.1**	**1.0**	**0.8**		**0.2**	
Avg.	**4.9**	**4.4**	**4.5**	**4.4**	**4.1**	**4.1**	**3.8**	**4.4**	**4.8**	**5.3**	**5.5**	**5.8**	**5.9**	**6.1**	**6.1**	**6.3**	**6.2**	**6.0**	**6.0**	**5.9**	**5.6**	**5.3**	**5.4**	**5.2**			**5.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.1	4.0	1.3	0.8	1.0	0.5	0.3	0.4	0.9	1.7	2.4	2.0	1.7	1.7	1.4	2.6	3.8	3.6	3.7	4.5	5.6	6.3	7.2	7.3	7.3	0.3	2.9
2	6.3	5.1	5.4	4.3	4.6	4.5	4.0	3.8	3.3	3.6	5.4	5.4	5.0	4.9	4.4	4.5	5.5	5.2	4.1	3.4	4.1	3.0	2.6	2.5	6.3	2.5	4.4
3	0.6	2.3	3.0	2.6	3.1	1.9	0.9	0.9	2.1	2.6	2.1	1.4	1.8	2.3	3.1	4.2	5.0	5.7	7.0	6.4	8.4	6.6	6.1	7.8	8.4	0.6	3.7
4	8.0	8.5	7.9	5.7	6.0	5.9	5.7	6.7	6.6	7.0	3.6	4.1	5.5	5.5	4.8	5.0	5.3	5.0	6.1	6.4	3.4	3.0	4.5	3.9	8.5	3.0	5.6
5	4.2	4.2	5.3	3.4	5.0	3.5	1.5	0.5	1.3	2.7	3.0	4.8	4.4	5.1	5.0	5.1	5.5	6.2	6.4	6.4	6.0	5.8	3.9	3.6	6.4	0.5	4.3
6	3.6	1.2	2.0	1.3	3.6	4.1	4.2	3.0	4.0	5.6	3.9	3.6	5.9	6.6	5.9	5.9	6.7	6.6	5.8	5.1	4.5	3.4	3.1	3.5	6.7	1.2	4.3
7	3.3	3.6	3.7	3.4	3.5	3.7	3.7	3.7	5.1	5.7	5.9	5.7	5.6	6.2	5.8	5.5	5.8	5.0	4.9	5.3	5.4	3.0	4.0	4.3	6.2	3.0	4.7
8	4.4	4.0	2.8	1.7	1.3	1.0	1.5	1.2	2.6	5.4	5.6	5.6	5.0	5.2	4.6	4.9	4.2	4.3	4.2	4.5	4.8	4.1	3.1	3.2	5.6	1.0	3.7
9	3.6	2.5	2.1	4.2	4.7	5.1	5.3	3.4	3.6	5.4	4.6	4.9	6.6	6.6	7.0	6.9	6.2	6.1	5.5	6.1	4.9	3.3	1.4	0.8	7.0	0.8	4.6
10	0.9	0.7	0.4	0.4	0.7	1.6	2.5	4.5	5.8	4.6	3.5	3.0	1.8	1.0	2.1	2.8	3.1	3.6	4.2	4.9	2.9	5.7	5.4	4.0	5.8	0.4	2.9
11	5.4	6.2	4.6	3.3	3.9	2.9	4.0	5.4	6.3	5.9	6.0	6.0	5.6	5.6	6.2	6.5	7.2	6.7	5.9	4.6	4.1	1.4	1.6	1.8	7.2	1.4	4.9
12	0.7	1.4	0.6	0.7	1.2	0.7	0.5	0.4	0.5	1.5	1.1	1.6	2.2	3.3	3.1	2.8	2.8	3.3	4.3	3.4	1.6	1.8	1.4	0.9	4.3	0.4	1.7
13	0.5	0.8	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.7	1.7	1.8	2.0	2.2	2.0	2.7	2.6	6.7	6.0	6.0	4.5	3.0	2.2	6.7	0.5	2.1
14	0.8	0.6	0.5	0.6	1.5	1.3	2.5	1.1	3.1	6.5	6.5	5.7	4.8	4.7	5.3	4.8	5.0	6.0	5.6	5.1	4.4	2.2	1.7	3.1	6.5	0.5	3.5
15	5.1	4.1	4.3	4.1	4.5	3.0	2.6	0.6	0.9	1.3	1.5	1.6	1.2	1.1	1.1	1.3	1.5	1.4	1.2	2.2	0.9	0.6	0.5	0.2	5.1	0.2	1.9
16	0.2	1.2	2.3	1.7	2.5	3.3	4.5	4.9	4.0	6.4	5.4	5.6	4.8	4.4	5.5	6.5	6.9	6.6	6.4	8.7	8.1	3.6	2.9	4.2	8.7	0.2	4.6
17	3.7	3.0	5.0	3.3	3.8	4.8	4.4	4.8	4.4	4.4	4.7	5.4	5.6	5.9	6.6	7.0	8.1	8.6	8.4	10.8	9.9	5.5	6.1	6.6	10.8	3.0	5.9
18	6.8	6.5	6.5	5.1	4.7	1.2	0.9	0.6	0.2	1.1	3.0	3.2	3.6	3.1	2.8	2.9	3.1	2.2	2.8	2.5	0.9	0.2	0.5	0.9	6.8	0.2	2.7
19	0.6	0.5	1.4	0.4	0.2	2.9	2.1	1.3	1.8	1.1	0.6	0.6	2.0	3.1	3.1	3.3	2.5	2.5	3.2	3.2	2.6	1.4	0.3	0.5	3.3	0.2	1.7
20	1.3	1.4	1.1	0.5	0.5	0.2	0.9	1.0	0.6	1.4	2.0	2.4	1.2	0.9	1.5	1.6	2.1	3.2	2.9	3.1	2.4	2.6	1.7	0.5	3.2	0.2	1.5
21	0.6	0.6	0.2	0.8	1.8	2.2	2.4	2.7	1.5	1.0	2.1	3.9	3.2	3.5	3.9	4.1	3.2	3.3	4.0	3.7	2.8	3.7	3.6	3.8	4.1	0.2	2.6
22	3.2	1.8	1.2	0.9	0.3	0.4	0.2	0.3	0.3	0.8	1.1	0.9	1.0	2.3	1.9	1.3	2.3	1.9	2.1	2.2	1.6	1.7	1.9	0.5	3.2	0.2	1.3
23	0.5	0.7	0.9	2.1	1.0	0.5	2.5	3.6	3.4	2.7	2.9	2.8	2.1	1.6	2.2	2.0	1.6	2.0	3.8	3.2	5.0	4.3	3.3	3.2	5.0	0.5	2.4
24	4.2	2.9	1.1	1.5	0.7	1.2	0.6	1.8	3.5	2.4	2.9	3.1	3.8	3.8	4.0	4.2	4.2	4.1	2.5	2.2	1.1	3.6	3.0	1.3	4.2	0.6	2.7
25	2.7	3.7	3.2	2.1	0.8	1.9	1.0	1.2	1.0	0.9	1.0	2.8	3.4	3.9	3.7	3.6	4.6	5.0	5.0	5.5	6.2	5.6	6.1	4.5	6.2	0.8	3.3
26	2.5	3.2	2.5	2.8	3.6	3.5	4.6	4.7	6.2	6.4	6.1	6.1	6.8	6.3	6.9	5.6	6.4	5.5	4.8	5.2	4.6	3.5	1.4	2.1	6.9	1.4	4.6
27	2.6	1.6	1.7	1.7	2.0	2.0	0.8	0.7	1.1	1.1	2.7	1.5	2.2	1.5	3.2	3.4	3.2	3.5	4.0	2.7	2.4	2.3	1.5	1.6	4.0	0.7	2.1
28	1.9	1.1	1.1	0.5	0.3	0.6	2.6	1.5	0.7	1.0	2.4	2.3	2.7	2.6	2.9	3.7	4.3	2.6	3.0	2.6	4.4	3.3	3.8	3.4	4.4	0.3	2.3
29	3.5	4.3	4.3	3.0	4.0	1.6	0.5	0.6	0.5	1.0	1.2	1.2	2.1	2.3	2.8	4.5	3.9	5.9	5.5	6.2	2.9	2.0	2.9	3.1	6.2	0.5	2.9
30	2.8	1.7	0.8	1.1	0.8	0.5	1.3	2.0	1.5	0.8	0.6	1.0	1.5	2.0	2.3	3.0	3.3	4.3	4.8	4.2	5.0	7.0	8.8	9.2	9.2	0.5	2.9
31	8.9	8.8	9.6	12.0	12.4	11.8	12.6	11.4	8.6	3.8	4.1	4.3	3.7	4.6	7.0	5.9	7.0	7.6	7.7	7.3	7.1	6.9	8.1	4.8	12.6	3.7	7.8
Max.	**8.9**	**8.8**	**9.6**	**12.0**	**12.4**	**11.8**	**12.6**	**11.4**	**8.6**	**7.0**	**6.5**	**6.1**	**6.8**	**6.6**	**7.0**	**7.0**	**8.1**	**8.6**	**8.4**	**10.8**	**9.9**	**7.0**	**8.8**	**9.2**	**12.6**		
Min.	**0.2**	**0.5**	**0.2**	**0.4**	**0.2**	**0.2**	**0.2**	**0.3**	**0.2**	**0.7**	**0.6**	**0.6**	**1.0**	**0.9**	**1.1**	**1.3**	**1.5**	**1.4**	**1.2**	**2.2**	**0.9**	**0.2**	**0.3**	**0.2**		**0.2**	
Avg.	**3.2**	**3.0**	**2.8**	**2.5**	**2.7**	**2.5**	**2.6**	**2.6**	**2.8**	**3.1**	**3.2**	**3.4**	**3.5**	**3.7**	**3.9**	**4.1**	**4.4**	**4.5**	**4.7**	**4.8**	**4.3**	**3.6**	**3.4**	**3.2**			**3.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.4	7.0	5.3	3.3	2.0	6.3	4.0	3.1	3.7	5.3	7.2	6.7	5.2	5.8	6.0	6.8	5.4	5.0	4.4	4.1	3.4	4.6	5.5	6.3	8.4	2.0	5.2
2	6.8	7.8	9.5	9.0	9.0	8.4	8.6	8.4	8.9	7.8	8.1	8.6	9.3	8.6	7.9	8.5	4.5	3.8	4.2	4.2	4.6	3.9	3.5	3.4	9.5	3.4	7.0
3	3.0	3.8	3.6	3.8	4.2	3.8	3.4	1.8	0.8	0.5	0.5	1.3	2.6	4.8	4.7	4.6	4.1	3.8	3.3	3.6	3.9	4.1	4.4	5.4	5.4	0.5	3.3
4	4.8	4.0	4.4	4.6	4.4	5.5	4.3	4.8	4.2	4.8	3.0	2.5	2.4	3.5	2.8	2.8	3.8	3.2	3.0	1.6	1.8	0.4	1.6	0.6	5.5	0.4	3.3
5	0.8	0.7	1.4	1.3	0.9	0.3	0.5	0.5	0.3	0.6	0.4	1.4	2.6	2.6	3.2	2.4	2.9	3.3	2.8	1.8	1.5	1.7	1.7	1.6	3.3	0.3	1.6
6	1.4	2.7	5.3	6.3	3.8	5.7	7.1	6.9	5.3	5.7	5.3	9.5	11.2	12.6	12.5	10.2	8.7	6.9	6.3	8.0	5.0	7.2	6.8	5.0	12.6	1.4	6.9
7	6.7	7.5	9.3	7.8	4.4	3.9	3.9	5.1	4.7	4.2	4.8	7.7	8.3	6.1	5.8	5.3	7.2	6.7	6.4	5.9	5.9	5.7	7.4	7.4	9.3	3.9	6.2
8	7.5	6.8	7.3	7.6	7.2	7.4	6.0	4.0	3.4	2.6	3.8	3.9	4.9	7.8	11.4	9.7	10.3	11.7	9.6	8.6	3.6	3.4	4.3	5.9	11.7	2.6	6.6
9	6.8	6.9	5.8	4.5	3.4	1.7	1.3	1.4	2.1	2.0	3.3	3.4	4.0	5.4	8.5	8.9	9.4	8.8	8.4	8.6	8.0	6.9	6.7	5.5	9.4	1.3	5.5
10	5.2	7.1	5.2	4.0	2.8	1.1	0.8	0.8	2.1	1.7	2.7	4.6	4.1	4.7	3.4	3.1	3.8	3.6	3.4	4.3	2.5	3.9	4.8	3.9	7.1	0.8	3.5
11	4.6	5.3	4.2	5.1	6.3	4.1	3.7	3.1	2.6	4.1	4.4	4.7	3.6	3.8	4.4	3.7	4.3	4.5	4.1	4.2	5.3	6.4	6.3	6.9	6.9	2.6	4.6
12	7.9	8.8	9.1	10.5	12.9	12.3	11.9	12.2	12.0	11.8	11.4	13.0	13.3	12.5	13.0	11.5	11.6	12.4	12.6	11.9	11.6	11.5	12.1	12.3	13.3	7.9	11.7
13	12.6	12.0	13.1	12.8	13.0	13.4	13.3	12.3	12.7	12.2	14.0	14.0	14.9	13.9	11.8	11.3	11.6	11.0	11.6	11.5	12.0	10.4	10.3	9.5	14.9	9.5	12.3
14	9.2	9.2	9.1	7.3	5.3	6.2	5.8	4.9	5.5	7.8	8.2	8.6	7.0	6.5	7.1	6.8	7.0	6.2	5.1	5.7	5.2	5.9	6.3	5.6	9.2	4.9	6.7
15	4.8	4.1	5.4	5.3	5.3	4.6	4.4	3.9	5.4	5.8	6.6	8.3	8.7	7.8	8.2	7.8	9.1	8.4	8.3	7.9	6.7	6.8	7.0	5.8	9.1	3.9	6.5
16	4.7	1.6	1.1	0.6	1.1	1.6	0.4	0.7	1.1	0.5	2.3	3.1	4.1	4.4	4.7	5.1	4.3	5.1	4.3	4.6	4.1	3.9	4.4	5.0	5.1	0.4	3.0
17	5.8	5.5	3.4	1.7	1.7	4.5	5.3	4.8	3.4	1.4	0.9	2.1	1.8	2.6	3.8	4.9	4.3	6.1	7.2	4.8	3.9	3.7	3.3	3.4	7.2	0.9	3.8
18	5.0	6.0	6.9	6.0	6.4	5.6	4.6	4.7	5.9	6.3	7.0	6.7	5.6	4.9	4.5	6.3	6.1	4.7	3.4	2.5	0.6	0.6	1.5	2.4	7.0	0.6	4.8
19	1.6	1.0	1.5	1.7	2.4	4.1	3.9	4.4	4.8	4.3	3.8	3.2	3.8	3.8	4.3	6.6	5.4	5.4	5.2	4.9	3.7	3.2	3.8	3.6	6.6	1.0	3.8
20	2.8	3.6	2.9	3.7	3.4	2.2	2.9	2.4	2.6	1.1	1.6	2.6	2.6	3.1	3.5	3.2	3.1	3.1	3.0	2.6	1.1	0.4	1.0	2.7	3.7	0.4	2.5
21	1.4	0.3	0.8	2.1	1.6	2.2	3.2	2.5	1.6	0.2	0.6	0.7	1.6	2.8	3.0	4.3	4.3	4.8	4.8	4.1	4.3	4.5	4.0	4.1	4.8	0.2	2.7
22	3.1	0.5	1.5	0.3	0.6	1.0	1.0	1.2	0.1	0.4	0.9	1.0	1.8	2.4	2.9	3.6	3.6	3.0	3.8	3.8	3.5	3.5	4.0	4.2	4.2	0.1	2.1
23	4.3	3.5	3.7	5.0	6.3	6.6	6.9	5.9	5.4	5.2	5.5	6.1	5.8	6.4	7.5	7.7	7.9	6.0	7.3	7.7	7.4	7.2	7.2	6.6	7.9	3.5	6.2
24	6.9	6.2	6.9	7.1	6.7	5.6	3.7	2.4	1.6	1.6	2.3	3.3	3.6	4.3	5.0	4.9	4.2	4.6	3.8	2.7	2.4	1.1	1.7	0.4	7.1	0.4	3.9
25	0.4	0.6	0.9	0.6	1.0	0.6	0.4	0.7	0.8	1.1	1.3	1.7	1.3	1.2	1.7	2.3	2.7	2.9	2.2	1.3	0.1	0.1	0.5	0.0	2.9	0.0	1.1
26	0.2	0.3	0.6	0.2	0.7	0.5	0.1	0.4	0.3	0.2	0.0				0.9	2.0	1.1	2.2	2.2	2.3	3.2	3.7	1.6	0.9	3.7	0.0	1.1
27	2.2	2.3	1.5	1.0	2.8	5.2	3.8	2.1	3.4	4.3	5.3	6.5	7.4	7.0	6.6	6.6	8.2	9.1	7.9	5.9	4.9	4.5	3.8	2.6	9.1	1.0	4.8
28	2.7	4.0	3.5	3.8	3.1	3.4	0.6	0.8	0.7	0.7	0.8	1.2	1.5	1.4	1.4	1.3	1.4	2.8	2.7	1.5	1.5	3.3	2.7	6.1	6.1	0.6	2.2
29	8.4	9.0	8.3	3.8	3.7	4.5	3.5	5.2	5.3	5.2	6.3	6.8	7.2	6.7	6.2	5.9	3.9	4.6	4.3	2.6	1.6	1.3	2.0	1.6	9.0	1.3	4.9
30	2.4	1.0	0.8	1.0	1.3	0.8	1.6	2.5	1.9	1.1	2.1	3.8	4.2	3.9	3.2	2.4	2.6	2.4	1.7	2.1	1.0	1.3	0.8	0.5	4.2	0.5	1.9
Max.	**12.6**	**12.0**	**13.1**	**12.8**	**13.0**	**13.4**	**13.3**	**12.3**	**12.7**	**12.2**	**14.0**	**14.0**	**14.9**	**13.9**	**13.0**	**11.5**	**11.6**	**12.4**	**12.6**	**11.9**	**12.0**	**11.5**	**12.1**	**12.3**	**14.9**		
Min.	**0.2**	**0.3**	**0.6**	**0.2**	**0.6**	**0.3**	**0.1**	**0.4**	**0.1**	**0.2**	**0.0**	**0.7**	**1.3**	**1.2**	**0.9**	**1.3**	**1.1**	**2.2**	**1.7**	**1.3**	**0.1**	**0.1**	**0.5**	**0.0**		**0.0**	
Avg.	**4.7**	**4.6**	**4.7**	**4.4**	**4.3**	**4.4**	**4.0**	**3.8**	**3.8**	**3.7**	**4.1**	**5.1**	**5.3**	**5.6**	**5.7**	**5.7**	**5.6**	**5.5**	**5.2**	**4.8**	**4.1**	**4.2**	**4.4**	**4.3**			**4.7**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	0.8	1.0	1.7	2.4	2.8	2.3	2.0	2.5	3.8	6.6	6.0	7.0	8.5	7.2	8.2	5.5	7.3	6.3	4.8	7.8	6.9	6.3	3.9	8.5	0.8	4.7
2	3.2	2.7	1.8	2.4	2.4	2.9	2.2	2.1	2.1	0.9	1.8	1.3	0.6	0.7	1.1	2.0	4.1	3.8	2.7	3.5	5.0	6.7	6.1	6.4	6.7	0.6	2.9
3	6.1	3.9	2.3	2.6	1.1	1.6	3.5	4.0	4.6	4.3	3.8	4.7	6.2	6.3	5.5	5.6	5.2	4.9	3.3	3.5	1.9	1.9	1.0	0.9	6.3	0.9	3.7
4	2.4	1.4	0.9	1.5	1.4	1.0	0.9	0.3	1.2	0.3	0.7	0.7	0.9	1.2	1.6	2.2	2.1	1.6	1.9	0.8	0.9	0.3	0.3	1.2	2.4	0.3	1.2
5	3.4	2.9	2.9	1.6	2.7	4.8	4.6	1.6	0.9	0.8	0.5	1.2	2.1	1.7	1.7	2.0	1.4	2.5	3.0	3.8	3.7	4.0	4.2	3.2	4.8	0.5	2.5
6	2.4	3.2	3.1	1.9	1.5	1.4	1.7	0.9	0.7	1.0	1.4	1.2	2.1	2.0	2.3	2.2	2.3	2.8	3.5	3.3	3.4	3.5	4.3	4.6	4.6	0.7	2.4
7	4.1	4.2	4.6	5.2	5.7	5.3	5.9	7.0	7.7	7.1	7.7	8.1	7.4	7.3	6.5	6.4	7.5	7.1	5.9	5.2	4.6	5.1	4.1	5.9	8.1	4.1	6.1
8	5.5	6.5	7.5	7.7	6.6	5.9	5.2	4.3	3.7	3.7	3.2	3.8	3.5	4.1	4.6	5.2	5.3	4.8	4.4	3.5	1.0	1.0	1.8	1.7	7.7	1.0	4.4
9	1.3	7.2	8.3	12.1	12.5	13.3	14.1	16.9	16.1	15.9	16.8	17.0	16.1	16.2	17.0	16.5	15.9	16.8	17.3	16.6	15.0	12.9	12.5	13.3	17.3	1.3	14.1
10	11.9	11.2	9.9	6.9	5.3	5.2	5.5	5.6	5.4	3.4	3.9	4.5	5.2	4.6	5.2	7.1	8.2	7.5	6.3	7.0	8.6	8.1	7.4	7.0	11.9	3.4	6.7
11	7.1	6.2	6.4	7.9	7.8	8.5	7.5	9.6	5.8	5.9	7.8	6.3	7.5	9.2	9.0	10.4	10.8	10.4	11.0	11.7	11.4	11.8	12.1	12.2	12.2	5.8	8.9
12	13.0	13.1	11.4	11.0	9.9	9.9	9.1	10.1	9.4	9.5	9.1	8.8	9.0	10.8	9.0	9.3	10.4	11.4	8.3	6.7	5.3	6.5	6.0	4.3	13.1	4.3	9.2
13	3.1	3.3	3.5	3.1	1.2	0.6	1.5	0.6	0.8	1.1	1.3	1.3	3.2	4.9	8.7	5.5	7.3	6.9	6.5	6.2	7.4	8.9	11.6	11.3	11.6	0.6	4.6
14	11.9	13.9	14.0	13.9	14.9	12.2	7.6	7.6	7.6	7.8	8.5	8.4	8.0	7.9	7.6	6.9	6.9	5.7	5.3	3.2	1.6	1.4	1.0	2.2	14.9	1.0	7.7
15	3.3	2.5	3.0	1.4	1.5	2.6	0.8	1.3	1.4	1.7	1.5	2.1	2.0	1.8	2.0	2.7	2.7	2.2	2.3	2.8	4.2	3.7	4.0	2.7	4.2	0.8	2.3
16	3.1	1.3	1.2	3.9	3.6	3.1	2.9	2.1	1.7	2.6	2.3	0.8	1.4	0.9	1.5	2.0	3.0	1.7	0.8	1.0	0.9	0.6	0.8	1.0	3.9	0.6	1.8
17	0.7	0.4	1.7	2.0	1.1	0.8	0.8	1.3	2.8	2.3	2.7	1.1	1.7	1.0	0.9	0.6	1.6	3.5	3.9	5.8	6.0	6.2	7.3	8.9	8.9	0.4	2.7
18	10.1	10.7	12.6	12.7	11.6	13.4	12.5	11.5	13.1	12.7	11.2	9.1	9.1	8.3	5.9	3.6	4.3	4.1	2.3	3.0	2.4	1.8	1.1	1.5	13.4	1.1	7.9
19	2.9	3.3	1.9	2.3	3.3	2.7	0.9	1.8	3.5	2.2	2.2	2.6	2.4	2.3	1.3	2.3	2.4	1.2	0.9	1.1	0.5	0.5	1.1	0.6	3.5	0.5	1.9
20	0.5	0.8	0.7	0.5	0.7	1.1	0.8	0.9	0.6	0.6	1.4	1.4	1.2	1.5	1.2	1.0	0.4	1.1	1.1	0.4	1.4	1.1	0.6	0.5	1.5	0.4	0.9
21	0.8	1.0	1.8	1.3	0.9	0.7	1.6	2.4	2.0	0.9	1.3	1.2	2.0	3.2	4.8	6.8	8.3	7.8	8.8	8.3	7.7	6.8	7.5	7.3	8.8	0.7	4.0
22	7.8	6.5	7.3	6.0	6.9	7.3	6.1	5.2	5.9	4.9	6.2	5.7	6.8	7.1	6.9	4.8	5.2	7.3	5.8	8.2	9.5	7.4	3.0	1.7	9.5	1.7	6.2
23	4.0	3.6	3.8	2.8	3.5	6.8	10.3	7.8	8.2	7.1	7.2	8.3	8.3	9.5	8.7	7.3	9.6	6.1	3.9	5.0	6.0	6.5	5.3	5.3	10.3	2.8	6.5
24	5.9	6.4	5.7	7.4	6.9	8.1	9.9	6.6	5.4	7.5	6.9	6.0	4.0	2.2	5.7	6.7	6.7	6.3	6.9	5.9	3.0	2.2	2.4	1.8	9.9	1.8	5.7
25	3.5	4.9	9.2	10.2	8.7	4.9	3.7	2.6	3.4	7.5	10.3	7.2	6.4	8.0	6.0	5.6	1.9	1.7	1.0	0.8	1.0	0.9	0.6	1.9	10.3	0.6	4.7
26	4.1	2.3	1.2	1.2	2.6	4.1	4.9	5.7	5.9	6.2	6.5	6.0	5.7	5.8	5.5	5.4	7.8	8.2	10.5	9.7	14.1	12.6	11.2	12.1	14.1	1.2	6.6
27	12.3	9.8	9.3	9.6	9.4	9.9	7.8	5.7	8.3	6.9	2.8	5.5	8.9	9.5	6.8	5.4	5.5	3.7	3.2	1.9	1.8	1.1	1.3	0.9	12.3	0.9	6.1
28	1.0	2.0	2.3	1.5	2.3	1.7	3.4	7.9	10.9	10.9	10.3	8.7	6.8	5.8	5.4	2.4	3.0	3.7	2.1	1.6	1.9	2.9	1.6	1.4	10.9	1.0	4.2
29	0.6	0.1	0.5	0.4	0.2	1.1	1.7	1.4	3.3	4.4	4.6	4.8	3.2	3.9	5.6	5.1	6.0	5.9	5.9	7.0	7.6	8.7	8.7	8.5	8.7	0.1	4.1
30	8.2	8.6	8.0	8.0	8.8	4.2	2.0	1.8	1.4	1.4	1.5	1.6	2.0	2.0	1.3	1.3	1.9	2.2	1.8	2.3	2.3	1.7	1.5	2.1	8.8	1.3	3.2
31	2.4	4.0	3.8	2.0	1.3	2.4	2.4	1.8	0.9	2.2	1.6	1.0	1.3	0.3	0.5	0.5	0.5	0.3	0.2	0.3	0.9	0.7	0.3	0.5	4.0	0.2	1.3
Max.	**13.0**	**13.9**	**14.0**	**13.9**	**14.9**	**13.4**	**14.1**	**16.9**	**16.1**	**15.9**	**16.8**	**17.0**	**16.1**	**16.2**	**17.0**	**16.5**	**15.9**	**16.8**	**17.3**	**16.6**	**15.0**	**12.9**	**12.5**	**13.3**	**17.3**		
Min.	**0.5**	**0.1**	**0.5**	**0.4**	**0.2**	**0.6**	**0.8**	**0.3**	**0.6**	**0.3**	**0.5**	**0.7**	**0.6**	**0.3**	**0.5**	**0.5**	**0.4**	**0.3**	**0.2**	**0.3**	**0.5**	**0.3**	**0.3**	**0.5**		**0.1**	
Avg.	**4.8**	**4.8**	**4.9**	**4.9**	**4.8**	**4.8**	**4.6**	**4.5**	**4.8**	**4.8**	**5.0**	**4.7**	**4.9**	**5.1**	**5.1**	**4.9**	**5.3**	**5.2**	**4.7**	**4.7**	**4.8**	**4.7**	**4.4**	**4.4**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.5	0.6	0.7	0.4	0.9	0.5	0.9	2.4	1.2	0.8	1.0	1.4	0.8	0.8	0.7	1.2	1.5	1.4	0.8	2.7	3.1	4.1	5.8	4.8	5.8	0.4	1.6
2	4.9	4.9	4.7	5.1	3.5	3.8	3.4	4.2	4.8	5.5	5.0	6.0	7.2	8.6	9.0	9.3	9.2	9.8	8.8	7.9	8.0	9.2	8.7	8.1	9.8	3.4	6.6
3	7.8	6.5	8.0	7.9	7.3	6.4	6.3	8.2	7.3	6.5	6.8	6.5	6.1	4.6	4.9	5.4	5.4	6.4	5.3	4.8	5.3	5.0	4.8	4.4	8.2	4.4	6.2
4	3.4	3.4	4.5	2.7	4.4	7.0	7.4	6.8	4.2	2.8	4.6	3.1	2.6	2.5	2.3	2.8	3.3	2.8	2.8	1.1	1.4	2.1	1.2	2.9	7.4	1.1	3.4
5	3.1	1.7	2.5	4.0	5.0	5.8	5.3	4.1	2.9	3.1	3.3	1.2	1.0	1.7	1.4	0.5	1.2	1.4	1.0	0.8	2.3	1.2	1.1	1.2	5.8	0.5	2.4
6	1.0	0.7	1.1	1.0	1.3	0.5	0.4	0.9	0.7	0.7	0.9	1.0	1.3	0.7	1.3	1.9	3.8	1.5	1.7	2.6	1.5	1.1	2.8	2.7	3.8	0.4	1.4
7	2.4	1.5	2.5	2.6	1.6	2.9	3.2	1.6	1.4	0.5	1.4	0.5	0.4	0.6	0.3	0.5	0.4	1.5	4.0	2.4	2.6	4.7	3.6	8.9	8.9	0.3	2.2
8	7.3	3.9	3.2	3.8	2.5	2.9	2.9	3.2	3.9	3.7	1.4	2.3	5.0	6.4	5.0	4.9	4.1	6.1	9.9	11.9	10.8	10.8	9.0	8.8	11.9	1.4	5.6
9	9.1	7.9	8.8	9.8	12.9	13.2	11.0	11.3	9.3	5.2	4.4	5.0	4.5	5.7	7.2	9.2	8.5	5.4	5.4	9.0	11.9	11.1	10.3	10.7	13.2	4.4	8.6
10	11.4	10.2	7.1	3.0	3.9	6.9	8.6	7.0	4.4	4.1	4.0	3.4	2.0	2.1	1.5	1.7	4.0	9.3	9.0	8.0	9.4	11.1	9.8	9.5	11.4	1.5	6.3
11	8.1	8.0	7.2	7.1	7.5	7.6	6.6	5.7	5.3	4.5	3.1	3.2	2.2	1.7	1.8	2.2	1.5	2.6	1.6	4.5	2.5	1.9	4.6	4.5	8.1	1.5	4.4
12	2.8	2.0	2.3	3.6	3.1	5.4	1.5	2.4	3.0	4.0	3.9	3.4	3.1	3.0	4.3	6.6	5.3	3.8	3.1	3.1	3.3	4.7	3.9	4.0	6.6	1.5	3.6
13	2.7	3.7	2.7	4.8	4.8	5.2	4.7	6.6	5.8	6.5	4.2	3.0	4.1	6.3	5.3	6.0	5.4	5.5	3.5	5.0	6.7	7.2	8.0	6.7	8.0	2.7	5.2
14	5.9	5.2	5.9	6.5	7.3	7.3	5.3	4.9	5.4	5.2	3.8	2.2	1.8	1.8	2.3	3.2	3.7	3.7	3.6	3.5	4.2	4.5	3.8	2.3	7.3	1.8	4.3
15	3.6	4.8	4.1	3.7	4.5	3.9	3.7	2.6	2.6	2.6	2.5	5.1	4.3	5.4	6.5	9.8	10.0	8.6	7.7	9.5	9.6	9.8	9.8	9.1	10.0	2.5	6.0
16	9.5	10.1	12.0	11.5	9.1	6.6	5.1	3.9	3.8	4.4	4.3	2.2	2.1	2.2	1.5	1.1	1.0	1.1	1.0	1.2	1.0	0.6	0.8	1.4	12.0	0.6	4.1
17	1.9	1.9	1.7	0.7	0.2	0.6	0.4	1.1	1.0	0.4	0.7	0.4	0.9	1.8	2.4	2.6	1.2	0.8	1.3	1.0	0.7	3.7	5.7	5.7	5.7	0.2	1.6
18	5.6	7.7	4.0	2.6	2.5	1.7	1.3	1.6	1.8	2.1	1.6	3.2	1.9	2.6	1.7	3.4	2.7	2.5	3.3	3.7	3.7	5.0	3.5	2.3	7.7	1.3	3.0
19	2.2	3.0	2.2	4.1	3.9	2.7	3.0	4.7	7.1	7.6	10.6	10.6	10.4	13.0	13.8	12.8	9.6	11.1	10.9	10.5	11.1	11.2	8.3	10.7	13.8	2.2	8.1
20	7.8	7.9	7.9	8.8	9.6	13.9	14.3	12.5	12.7	12.4	13.5	13.7	14.0	14.4	13.9	13.7	12.7	11.8	12.5	10.8	10.3	12.4	9.6	6.3	14.4	6.3	11.6
21	5.7	6.3	5.0	2.2	4.3	4.1	3.1	2.2	1.9	1.5	0.9	1.0	0.8	1.6	1.0	1.2	1.0	0.6	1.0	0.3	0.6	0.6	0.4	0.4	6.3	0.3	2.0
22	0.4	0.3	0.5	0.8	0.4	0.4	0.8	0.8	1.1	2.7	3.1	2.7	5.9	2.5	0.7	0.6	0.4	0.9	0.7	1.5	2.1	1.7	2.1	1.9	5.9	0.3	1.5
23	2.9	3.2	3.0	3.3	3.6	2.8	2.1	2.3	1.5	3.0	4.8	3.7	1.5	4.7	6.0	5.3	5.7	6.5	9.2	9.0	8.6	8.2	7.4	6.5	9.2	1.5	4.8
24	9.8	11.7	12.5	13.8	14.3	11.9	9.7	8.2	12.9	11.5	11.3	11.7	12.9	10.9	11.2	11.8	11.5	11.8	11.5	9.3	10.7	10.9	12.7	11.9	14.3	8.2	11.5
25	12.9	10.8	11.9	11.3	10.5	11.1	10.3	7.8	2.9	5.4	4.1	4.3	6.6	1.9	2.2	2.8	4.2	5.3	5.6	7.2	6.3	6.3	6.8	2.8	12.9	1.9	6.7
26	4.8	6.3	7.2	4.4	3.9	3.9	4.9	5.0	4.2	4.3	4.7	5.8	5.0	7.0	8.5	7.5	9.5	9.8	8.4	8.0	8.1	5.6	3.7	3.2	9.8	3.2	6.0
27	1.9	2.1	3.5	2.6	0.8	1.3	1.1	0.7	2.3	2.8	4.1	1.5	1.5	3.5	2.7	2.6	3.5	2.6	4.0	3.1	2.2	2.5	1.8	3.3	4.1	0.7	2.4
28	5.0	4.9	5.5	5.4	6.2	5.5	3.2	4.4	4.3	2.8	3.0	4.3	5.5	5.4	3.5	3.3	2.3	2.0	1.4	1.9	1.6	1.7	2.8	2.1	6.2	1.4	3.7
29	2.0	4.0	3.8	3.4	2.8	3.5	5.0	4.6	5.5	5.4	4.4	4.9	4.9	6.0	5.8	6.3	7.4	6.6	7.4	6.9	7.2	6.6	6.3	8.4	8.4	2.0	5.4
30	6.8	7.9	7.9	9.6	7.7	7.4	7.3	7.3	7.0	7.0	7.0	6.6	7.1	6.3	8.1	7.2	5.3	1.4	4.4	3.5	2.0	2.9	1.1	2.5	9.6	1.1	5.9
Max.	**12.9**	**11.7**	**12.5**	**13.8**	**14.3**	**13.9**	**14.3**	**12.5**	**12.9**	**12.4**	**13.5**	**13.7**	**14.0**	**14.4**	**13.9**	**13.7**	**12.7**	**11.8**	**12.5**	**11.9**	**11.9**	**12.4**	**12.7**	**11.9**	**14.4**		
Min.	**0.4**	**0.3**	**0.5**	**0.4**	**0.2**	**0.4**	**0.4**	**0.7**	**0.7**	**0.4**	**0.7**	**0.4**	**0.4**	**0.6**	**0.3**	**0.5**	**0.4**	**0.6**	**0.7**	**0.3**	**0.6**	**0.6**	**0.4**	**0.4**		**0.2**	
Avg.	**5.1**	**5.1**	**5.1**	**5.0**	**5.0**	**5.2**	**4.8**	**4.6**	**4.4**	**4.3**	**4.3**	**4.1**	**4.2**	**4.5**	**4.5**	**4.9**	**4.8**	**4.8**	**5.0**	**5.2**	**5.3**	**5.6**	**5.3**	**5.3**			**4.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Speed (RMYoung) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.5	4.9	4.3	2.4	2.7	2.0	0.4	0.3	0.6	0.7	0.5	0.5	0.8	0.4	0.7	0.6	1.0	1.7	1.8	1.7	2.8	4.4	4.4	3.7	4.9	0.3	1.9
2	2.7	3.5	3.9	10.3	10.4	6.6	9.6	10.5	10.6	10.2	11.1	13.6	13.6	14.0	14.2	14.4	14.8	16.1	16.3	15.8	15.6	14.7	15.7	16.3	16.3	2.7	11.9
3	14.3	13.7	16.7	14.9	15.2	17.5	17.6	18.2	15.4	15.9	19.3	19.8	19.2	19.3	21.3	22.0	21.1	19.5	19.3	19.4	19.0	19.2	18.4	18.2	22.0	13.7	18.1
4	16.7	15.9	15.1	15.2	14.3	15.3	14.9	15.6	13.7	15.5	16.0	14.0	12.6	13.3	13.7	13.0	12.3	11.5	12.6	11.6	11.6	12.0	12.9	15.7	16.7	11.5	14.0
5	16.3	15.2	14.3	12.4	12.6	11.4	11.2	12.2	10.4	11.3	12.1	12.3	11.9	11.9	11.2	10.6	9.1	9.8	9.9	9.0	8.3	7.0	6.1	6.2	16.3	6.1	11.0
6	6.2	7.9	8.4	6.7	7.7	8.3	6.8	4.7	3.6	4.8	5.5	3.1	1.5	0.8	0.7	0.6	0.4	1.2	0.2	0.7	1.0	1.2	0.9	0.5	8.4	0.2	3.5
7	0.6	1.3	1.6	1.7	2.7	2.7	1.1	0.5	2.2	1.8	1.5	1.4	1.1	2.1	2.7	2.8	2.4	1.1	1.0	0.6	1.9	1.2	0.9	0.7	2.8	0.5	1.6
8	1.0	0.6	0.7	1.7	1.9	1.6	1.8	2.9	4.8	6.4	5.3	5.0	7.3	8.3	12.7	11.5	8.9	7.4	5.7	5.7	5.4	4.0	3.8	2.6	12.7	0.6	4.9
9	3.3	1.7	1.0	2.2	3.3	1.9	1.3	1.1	1.9	2.2	1.0	0.7	1.1	0.6	0.8	1.7	1.1	1.4	1.4	1.2	1.0	2.6	5.4	8.3	8.3	0.6	2.0
10	9.5	8.3	9.6	10.2	10.2	10.2	9.7	9.6	10.1	9.3	6.6	4.3	4.4	3.6	1.9	4.3	3.3	3.3	3.5	3.1	4.2	4.4	3.6	3.3	10.2	1.9	6.3
11	3.7	2.5	0.7	0.6	0.7	0.7	0.6	1.5	1.8	1.2	2.0	5.2	6.0	4.8	4.5	4.3	3.4	0.9	2.8	2.7	2.7	3.3	3.5	3.6	6.0	0.6	2.7
12	3.0	1.4	1.0	1.2	1.7	0.9	0.8	0.8	0.6	0.7	0.9	0.5	0.6	0.8	0.5	0.5	1.2	0.6	3.2	4.9	4.5	5.5	5.1	5.3	5.5	0.5	1.9
13	6.1	6.1	5.6	8.2	9.7	7.4	3.6	5.9	5.4	1.1	1.0	1.3	1.0	0.6	1.6	2.5	0.8	0.9	0.9	1.0	1.9	2.0	2.0	3.6	9.7	0.6	3.3
14	4.7	6.0	6.8	5.2	2.0	2.2	3.4	3.3	7.2	14.8	15.2	14.9	13.9	11.0	13.0	12.9	12.1	12.3	11.3	12.2	16.4	17.1	14.2	14.1	17.1	2.0	10.3
15	14.4	12.5	11.4	12.3	12.1	10.1	11.0	9.3	8.6	9.3	10.6	8.3	3.5	4.9	6.4	2.8	1.5	1.5	0.5	0.9	0.5	0.7	0.5	0.7	14.4	0.5	6.4
16	1.1	1.0	1.0	0.6	0.6	1.1	1.8	2.0	2.4	3.0	4.7	9.4	11.8	12.2	12.7	13.1	12.9	10.8	12.6	15.5	14.7	13.9	15.5	15.7	15.7	0.6	7.9
17	15.2	12.1	12.9	14.1	15.2	13.5	13.6	15.5	16.4	16.8	16.5	15.2	15.1	15.9	15.8	14.4	16.0	15.7	13.8	12.3	12.1	13.9	13.5	13.7	16.8	12.1	14.6
18	15.6	14.9	14.6	14.2	14.7	16.8	14.1	15.1	15.1	15.4	15.4	14.9	14.1	14.7	16.8	17.0	16.6	14.9	15.0	16.2	15.5	14.4	14.3	15.7	17.0	14.1	15.2
19	14.7	13.9	13.1	13.5	13.9	13.2	13.9	13.3	14.1	14.0	11.7	11.3	8.8	5.1	5.3	3.7	3.9	4.3	4.4	5.1	7.3	6.7	5.8	4.6	14.7	3.7	9.4
20	5.2	5.1	4.8	6.2	6.4	6.3	7.6	3.9	1.5	2.3	1.0	0.9	0.7	1.0	5.5	4.5	1.2	1.7	1.1	1.4	0.9	1.3	0.6	1.1	7.6	0.6	3.0
21	0.8	0.5	0.8	1.4	0.9	1.0	1.0	0.3	0.2	0.7	0.8	0.3	0.3	1.6	1.2	1.4	1.2	0.8	1.4	1.1	0.9	1.6	1.6	3.1	3.1	0.2	1.0
22	3.5	3.4	2.5	4.3	4.4	5.8	9.4	11.4	9.1	10.6	13.1	9.7	6.0	4.3	5.9	7.2	8.0	9.6	9.8	10.4	10.2	10.2	10.0	11.1	13.1	2.5	7.9
23	13.3	14.3	12.8	11.8	11.3	11.1	9.6	7.6	3.4	7.8	8.2	9.1	7.5	8.3	8.8	9.5	7.2	8.6	9.7	10.0	11.5	10.7	10.0	8.8	14.3	3.4	9.6
24	7.0	7.9	6.4	3.9	2.6	3.3	5.6	6.1	5.8	4.8	4.9	5.2	3.2	4.0	2.8	2.5	1.9	0.9	1.5	2.5	2.5	3.7	5.2	4.0	7.9	0.9	4.1
25	5.1	8.2	14.0	13.9	16.3	16.5	15.5	14.5	14.1	13.9	13.1	15.0	17.0	16.0	14.4	11.9	9.8	13.6	12.0	12.3	13.6	12.2	14.0	13.1	17.0	5.1	13.3
26	12.0	13.6	14.2	12.1	9.9	8.8	10.6	9.9	10.2	11.2	10.4	10.4	11.3	11.0	11.2	10.3	8.5	9.0	10.6	11.9	12.5	11.3	12.2	12.5	14.2	8.5	11.1
27	9.6	9.6	11.6	15.3	16.0	14.9	14.6	15.8	14.0	16.2	14.0	12.9	11.5	12.8	15.0	10.6	11.8	14.6	12.5	16.3	14.5	10.5	8.2	11.5	16.3	8.2	13.1
28	13.7	15.1	12.3	11.6	10.1	9.2	9.9	11.2	10.5	16.1	12.5	13.2	9.2	7.9	9.1	7.1	8.2	7.7	6.9	6.5	5.4	4.7	3.8	4.8	16.1	3.8	9.4
29	3.9	3.3	2.4	3.9	2.2	2.0	2.7	3.3	2.1	3.2	3.2	3.1	2.9	3.4	4.5	5.2	4.5	3.3	4.2	3.5	4.5	3.1	3.9	2.9	5.2	2.0	3.4
30	4.1	2.2	4.9	3.6	4.6	5.2	5.0	2.1	1.9	3.1	0.7	3.1	1.8	2.1	2.9	0.8	1.4	2.0	1.3	0.5	0.9	1.2	1.1	1.0	5.2	0.5	2.4
31	1.2	1.8	1.9	1.2	1.0	3.0	2.3	1.7	1.5	1.5	2.6	4.3	6.3	5.4	5.1	5.6	5.6	7.0	9.5	10.7	3.6	1.4	1.7	1.1	10.7	1.0	3.6
Max.	**16.7**	**15.9**	**16.7**	**15.3**	**16.3**	**17.5**	**17.6**	**18.2**	**16.4**	**16.8**	**19.3**	**19.8**	**19.2**	**19.3**	**21.3**	**22.0**	**21.1**	**19.5**	**19.3**	**19.4**	**19.0**	**19.2**	**18.4**	**18.2**	**22.0**		
Min.	**0.6**	**0.5**	**0.7**	**0.6**	**0.6**	**0.7**	**0.4**	**0.3**	**0.2**	**0.7**	**0.5**	**0.3**	**0.3**	**0.4**	**0.5**	**0.5**	**0.4**	**0.6**	**0.2**	**0.5**	**0.5**	**0.7**	**0.5**	**0.5**		**0.2**	
Avg.	**7.5**	**7.4**	**7.5**	**7.6**	**7.7**	**7.4**	**7.5**	**7.4**	**7.1**	**7.9**	**7.8**	**7.8**	**7.3**	**7.2**	**7.8**	**7.4**	**6.8**	**6.9**	**7.0**	**7.3**	**7.3**	**7.1**	**7.1**	**7.3**			**7.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	300.8	301.6	309.3	318.1	314.5	318.8	313.5	309.3	315.2	319.4	330.8	311.0	312.4	315.2	327.8	336.2	292.9	349.8	315.0	344.6	340.5	316.3	320.1	331.0
2	334.5	306.6	307.8	308.2	334.4	329.5	353.1	333.1	329.6	288.2	305.7	337.0	325.5	299.9	300.5	278.6	308.5	303.6	238.7	302.5	213.6	201.5	225.3	295.7
3	259.3	250.3	195.7	193.5	222.7	219.8	289.0	296.2	194.1	347.8	249.3	302.9	197.0	352.7	343.2	333.9	133.9	327.6	336.1	332.9	309.4	331.4	5.4	4.6
4	0.1	223.5	330.8	15.9	358.1	15.6	314.8	346.4	352.6	296.9	4.3	21.3	354.9	346.1	345.6	342.5	325.9	334.5	335.3	326.8	323.8	352.6	0.6	341.8
5	349.8	339.4	336.8	327.2	326.2	328.4	327.9	329.8	327.7	329.9	336.2	336.4	336.8	339.7	337.3	334.4	332.8	328.6	329.1	336.4	339.2	337.4	334.3	331.6
6	334.3	324.2	320.3	323.5	330.4	340.2	337.0	328.3	326.0	331.5	327.2	325.7	325.2	325.2	319.4	324.3	326.3	326.8	330.5	322.1	319.2	324.3	324.8	324.8
7	326.8	332.6	216.1	211.2	336.8	332.5	328.4	332.3	350.4	330.8	334.1	319.9	334.6	321.2	336.5	330.7	330.1	324.7	334.9	357.0	344.6	332.7	337.7	330.9
8	329.3	338.1	271.6	318.9	332.1	326.4	326.7	359.0	216.9	273.0	338.2	26.4	334.1	319.0	348.5	49.4	309.0	330.0	302.7	321.7	334.0	332.6	306.6	331.0
9	304.7	299.3	306.5	325.5	314.5	311.0	328.8	327.7	336.1	341.6	339.1	331.5	307.6	331.8	338.6	333.4	337.6	334.9	333.2	332.7	327.6	327.2	327.5	329.3
10	330.0	329.0	331.1	334.2	328.4	328.6	330.3	327.7	326.2	338.6	332.6	335.9	328.3	326.6	329.6	332.7	324.0	323.4	323.6	324.9	327.8	335.7	334.2	324.5
11	319.0	316.4	323.7	332.9	338.6	335.0	334.9	328.0	330.1	328.9	329.5	327.9	322.9	325.2	321.7	321.4	321.7	324.4	320.9	323.2	321.5	328.9	328.3	342.7
12	13.6	358.9	347.8	346.2	335.8	351.0	353.5	339.0	344.9	343.6	339.4	339.5	352.7	4.2	348.0	333.5	333.7	328.4	333.7	340.5	334.9	337.6	345.2	337.8
13	338.3	330.9	334.7	333.7	333.4	330.5	332.6	331.6	329.6	326.4	329.5	332.0	324.4	325.5	328.4	329.9	335.2	335.8	316.2	314.2	319.5	32.2	303.7	323.8
14	328.6	309.1	49.2	224.0	280.1	190.1	319.1	179.5	248.4	157.9	143.4	135.5	128.4	124.5	128.9	131.4	132.3	130.9	136.2	134.3	123.7	131.2	138.4	139.2
15	130.7	127.3	129.2	138.8	144.6	154.2	152.2	153.3	149.1	153.5	151.7	147.4	154.3	150.0	144.6	150.0	152.5	153.4	151.7	153.7	151.6	151.5	144.4	153.4
16	192.2	214.0	231.4	228.7	243.5	242.3	239.1	239.5	251.6	251.7	235.1	216.4	225.6	218.2	175.9	163.4	165.1	167.6	181.3	215.2	196.9	185.2	166.2	169.2
17	196.9	153.1	138.0	135.2	128.8	128.5	123.0	125.9	119.3	112.0	110.6	110.4	104.7	105.9	109.0	116.1	117.9	127.1	141.4	157.6	162.2	161.2	150.8	149.2
18	148.4	145.5	149.1	155.9	148.5	139.7	143.1	155.4	165.0	201.5	193.4	230.9	235.4	218.7	10.4	109.1	168.9	183.8	185.4	173.8	178.5	208.5	156.2	144.9
19	140.9	145.4	146.6	139.9	145.3	146.0	133.8	144.5	141.1	134.7	135.3	134.5	135.4	133.3	133.5	134.7	136.3	137.8	136.7	134.3	134.0	136.2	139.2	140.9
20	143.2	147.1	143.3	139.7	129.3	133.9	135.2	135.0	135.3	141.8	133.7	131.4	131.5	131.2	130.0	88.6	31.1	55.8	338.8	134.1	130.4	172.3	158.5	144.9
21	153.3	152.7	155.2	224.4	170.8	130.3	137.3	132.7	131.3	130.5	133.6	132.2	133.5	130.0	124.5	121.0	122.8	125.9	121.9	132.7	129.0	132.0	128.1	134.3
22	141.1	155.1	172.6	170.4	166.2	170.8	176.6	175.9	175.4	177.8	204.3	213.1	221.4	216.3	231.7	221.4	218.9	198.7	208.5	200.6	208.7	247.3	291.2	312.0
23	331.5	322.5	336.4	321.7	319.7	314.3	318.5	321.9	326.3	317.2	316.1	319.6	325.8	314.8	300.9	325.6	336.2	343.3	335.8	339.7	319.9	291.0	82.4	331.4
24	224.2	264.8	337.8	2.3	349.7	257.1	186.6	146.0	203.5	151.5	147.5	140.0	139.8	137.8	136.1	142.5	147.2	148.3	151.1	154.2	162.3	163.6	160.7	174.5
25	190.8	207.2	233.6	258.4	307.0	250.3	246.4	253.4	256.9	261.0	265.7	268.3	249.0	248.6	257.6	257.3	273.5	288.3	297.4	325.4	335.2	330.3	337.9	332.8
26	327.2	331.3	334.7	328.8	327.5	340.7	332.5	327.0	320.0	6.5	315.3	304.3	305.9	211.9	216.0	199.0	332.5	100.3	346.4	269.9	163.4	220.8	192.3	152.0
27	148.1	147.0	146.4	145.8	150.9	145.6	149.1	149.5	144.2	139.1	133.6	134.2	133.0	132.9	128.3	130.8	132.6	128.7	127.1	127.8	125.7	126.1	131.1	132.7
28	131.7	136.8	142.9	147.4	149.0	148.0	148.6	147.3	143.0	146.2	150.4	145.9	142.4	188.2	222.3	231.5	227.2	219.4	284.1	231.0	210.3	281.1	278.0	200.3
29	305.0	246.2	259.1	259.1	289.2	307.3	259.4	238.2	204.9	242.3	240.4	189.8	215.6	327.5	278.1	220.6	325.1	317.3	332.2	330.0	8.6	3.6	341.8	317.8
30	265.4	242.1	279.9	303.4	285.4	316.0	203.7	308.1	329.8	325.9	323.0	315.9	314.5	311.2	318.9	325.8	328.0	348.2	8.6	344.7	337.2	334.5	339.1	332.1
31	336.6	339.7	330.8	358.7	318.7	320.9	332.9	226.2	261.0	297.6	284.3	241.0	224.3	336.8	248.9	246.0	228.9	200.1	177.7	102.3	218.5	188.3	212.5	208.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	220.9	329.5	260.8	202.0	221.8	211.4	231.3	191.2	351.4	264.4	166.7	117.9	24.1	127.8	124.9	105.5	126.4	60.1	24.4	0.7	238.0	325.3	220.3	209.9
2	237.5	266.1	304.8	307.3	294.0	310.9	50.6	281.6	330.5	336.1	334.4	341.4	328.5	326.8	323.5	329.5	321.8	316.6	320.7	325.2	335.8	326.9	318.8	321.9
3	330.5	337.3	330.6	338.6	340.3	335.8	335.1	327.3	320.4	321.4	336.6	345.2	336.7	18.4	351.3	28.6	319.4	1.3	332.3	311.9	315.1	299.5	314.7	296.4
4	284.4	277.9	301.2	283.7	281.8	239.8	204.4	310.7	283.3	184.3	179.3	356.1	341.2	343.1	304.4	242.3	306.7	317.6	334.7	317.7	331.7	321.4	324.6	320.8
5	335.8	332.9	333.3	327.8	338.6	327.6	350.8	266.9	332.6	58.2	358.3	344.1	253.1	297.4	222.7	306.8	321.3	335.8	334.7	308.7	324.7	307.9	300.9	320.4
6	267.3	235.4	309.5	293.1	190.3	306.7	298.4	283.0	297.6	299.3	265.9	302.0	302.1	312.2	298.1	318.7	317.1	289.2	319.2	332.3	330.7	326.1	340.4	306.9
7	311.2	319.0	315.1	323.5	315.0	326.8	293.3	308.6	336.2	313.5	317.0	327.9	316.6	313.2	340.8	336.5	347.1	356.6	10.4	8.5	333.2	299.1	291.8	315.7
8	341.9	278.5	26.9	341.9	326.5	157.1	188.7	146.6	272.7	186.4	129.1	131.6	181.5	46.7	127.9	171.7	129.1	80.5	127.5	123.6	165.0	41.8	50.5	44.0
9	49.3	65.1	65.2	59.6	58.4	61.4	58.6	60.9	35.4	31.8	13.2	325.7	311.0	308.5	356.0	286.5	315.8	304.8	357.2	305.5	284.9	319.9	317.0	332.5
10	338.7	299.9	319.8	310.6	324.0	309.4	344.2	333.6	309.0	265.1	260.7	201.0	239.3	226.2	210.8	277.7	285.1	308.8	15.1	358.4	326.5	321.5	272.9	318.9
11	354.9	130.5	181.8	243.4	215.3	275.1	215.5	168.5	169.4	278.4	277.6	214.2	87.7	329.3	231.8	349.3	2.1	6.7	357.8	9.9	302.0	215.3	272.4	329.9
12	208.2	247.0	272.5	285.2	314.9	227.4	275.5	311.6	282.0	311.9	308.9	301.7	238.6	275.3	311.1	279.3	281.3	274.4	328.0	356.4	213.7	177.4	273.7	310.5
13	126.3	130.7	138.5	128.4	113.3	111.8	113.1	109.8	112.6	115.8	116.2	119.5	117.6	117.2	116.9	116.5	117.2	117.4	115.4	118.5	117.6	116.3	122.3	120.6
14	119.0	119.3	118.5	124.1	126.1	127.2	130.2	168.1	192.7	219.5	236.4	232.3	225.4	205.5	198.2	195.4	201.8	209.6	215.2	205.6	216.2	243.5	260.8	261.1
15	251.4	273.8	251.2	265.3	264.8	285.6	301.7	285.6	266.3	242.1	279.4	281.0	272.4	212.5	235.6	214.6	211.5	279.4	329.7	358.1	232.1	148.9	155.9	138.5
16	127.0	127.7	121.1	121.5	121.2	117.5	114.2	116.4	107.1	95.1	93.9	91.9	98.2	98.5	101.8	99.0	103.3	123.7	153.9	168.7	156.0	148.6	146.8	165.2
17	145.4	141.5	144.7	137.1	129.7	121.4	115.3	117.2	109.1	88.0	84.6	52.5	36.1	50.7	45.8	44.0	69.8	118.1	122.4	127.6	131.6	132.1	135.1	135.6
18	129.4	125.5	122.2	117.9	114.6	115.5	115.7	121.1	125.1	134.5	130.1	128.7	128.7	126.9	126.6	129.3	132.9	138.0	140.9	136.4	129.0	131.8	131.6	128.5
19	122.9	120.0	93.7	48.7	333.0	352.6	327.3	43.0	4.0	359.0	28.9	30.9	31.4	32.5	51.0	52.6	44.1	36.5	31.7	54.1	77.7	100.2	96.2	104.5
20	120.0	124.4	127.1	133.7	132.8	131.6	136.4	136.3	135.6	128.5	130.2	120.6	116.7	113.7	119.3	124.7	108.4	63.9	52.5	19.5	30.0	12.3	20.8	46.4
21	56.6	28.6	25.6	28.2	39.5	41.8	23.3	16.5	25.8	31.7	41.1	42.1	42.8	62.0	68.3	57.7	29.5	72.0	116.1	112.6	143.3	86.0	87.3	77.1
22	68.0	47.6	87.7	90.8	117.4	124.7	115.3	74.3	87.1	96.3	121.6	93.8	89.0	101.3	114.0	119.3	133.7	130.9	129.5	133.5	134.7	132.0	136.7	142.4
23	148.6	148.6	131.1	130.7	103.0	184.9	245.3	311.8	281.3	297.9	210.6	299.5	293.2	306.2	260.2	294.2	312.6	300.3	257.5	295.4	308.2	321.1	309.8	311.9
24	341.1	339.8	341.0	336.6	335.8	346.5	348.5	341.3	352.3	337.4	334.3	326.6	325.7	326.8	331.8	338.0	346.3	354.8	337.0	348.9	346.6	338.6	332.4	331.5
25	343.9	349.7	342.5	338.9	336.1	336.5	338.9	334.7	330.1	329.1	324.3	310.7	288.2	310.5	254.4	251.7	253.5	253.0	303.2	330.1	347.7	332.5	348.0	12.8
26	82.7	330.5	318.2	228.8	323.4	341.3	320.7	289.6	276.8	297.2	273.9	268.0	223.8	310.1	276.4	299.3	314.8	307.6	318.7	320.3	323.4	288.7	293.4	296.1
27	302.2	319.6	324.8	315.5	300.9	276.1	214.9	242.7	210.5	220.1	328.0	268.7	207.2	257.6	294.5	324.3	334.4	324.3	289.2	314.5	290.1	311.0	311.1	223.8
28	246.0	340.6	306.8	339.6	306.8	329.3	240.6	332.7	281.3	285.3	326.2	243.6	290.2	297.2	300.2	337.1	315.6	313.4	256.4	319.0	328.0	357.4	289.2	325.7
29	309.0	288.2	313.5	291.9	342.4	197.2	312.2	317.7	304.7	320.8	357.2	320.6	333.5	308.0	330.0	312.0	346.6	10.6	324.3	313.6	322.8	330.9	330.0	322.6

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	317.3	314.3	309.6	303.7	313.2	301.4	293.9	354.1	225.7	141.3	121.3	124.3	120.1	116.2	107.9	110.6	107.8	102.8	92.8	62.2	79.3	84.7	87.1	90.3
2	90.7	93.0	102.8	111.3	115.6	112.5	112.4	125.3	136.3	145.5	146.7	144.3	143.6	146.8	148.9	150.1	155.5	143.0	131.1	139.1	135.9	132.0	129.8	131.4
3	128.3	139.7	143.8	145.2	131.8	129.0	131.0	130.0	130.7	124.1	126.2	124.1	126.8	130.0	132.4	128.4	134.5	135.4	135.4	136.5	147.0	143.2	142.3	133.6
4	134.8	130.6	128.4	131.2	127.6	122.2	125.4	122.1	118.9	123.4	125.0	121.4	122.4	124.7	123.2	125.9	126.2	126.7	126.5	123.1	115.8	120.6	120.0	119.6
5	118.3	117.8	120.0	115.5	117.7	121.5	113.8	115.6	110.9	112.1	118.2	115.8	116.1	118.1	117.8	122.0	118.6	118.0	125.9	127.9	128.4	130.0	131.6	136.2
6	137.0	138.7	139.2	139.1	143.7	131.6	120.9	115.2	125.1	130.5	133.5	127.5	127.8	132.1	136.6	130.9	132.4	129.0	123.2	97.4	54.7	21.3	26.4	22.9
7	19.4	23.1	10.3	2.9	334.5	315.6	333.5	259.3	302.7	311.1	306.0	248.8	290.1	327.2	217.7	212.6	242.7	236.9	234.0	228.0	200.0	202.2	203.0	208.2
8	206.2	190.2	198.4	198.8	176.1	158.5	169.3	135.6	128.1	124.6	107.2	122.4	112.2	99.4	76.3	50.5	19.9	35.8	53.3	51.3	39.0	26.3	29.7	26.1
9	17.5	7.4	6.0	13.4	24.6	14.3	0.5	19.1	16.6	358.7	5.3	7.8	357.9	30.3	336.2	240.2	314.2	305.0	236.5	299.6	266.1	217.2	226.5	202.1
10	267.6	233.6	223.7	204.7	210.7	233.0	220.8	217.7	221.7	233.9	228.9	238.5	238.9	229.2	206.3	230.0	213.8	214.5	234.0	236.3	240.8	243.4	240.3	238.2
11	241.4	236.8	239.9	237.4	239.8	238.9	236.5	232.8	237.0	237.2	247.6	246.9	235.0	212.9	232.9	256.5	308.8	24.1	113.8	219.4	254.2	257.5	225.9	211.3
12	42.4	219.9	286.6	288.8	295.4	333.8	252.6	203.9	194.0	255.2	347.1	18.6	11.7	13.5	0.1	354.1	342.2	347.3	353.3	351.9	350.4	342.3	349.8	330.9
13	324.2	335.0	336.4	330.8	339.2	337.2	335.4	332.6	328.1	332.5	310.4	308.8	318.5	308.7	305.1	317.3	324.8	309.9	302.9	287.8	269.2	250.6	219.5	216.5
14	224.7	305.9	209.3	234.8	343.7	317.5	305.3	265.3	335.3	308.8	278.4	194.5	178.7	229.9	180.9	211.4	199.7	181.9	179.9	150.7	181.5	162.2	148.1	137.9
15	135.1	137.5	128.3	124.3	124.7	118.3	121.3	121.8	128.0	129.3	128.5	128.1	123.8	124.6	129.6	128.8	128.7	129.6	129.7	129.7	128.9	126.4	127.1	129.5
16	123.6	121.5	125.0	124.0	114.5	135.2	152.4	186.9	189.3	209.4	151.6	167.1	136.6	122.4	329.1	240.3	215.1	205.9	282.5	299.3	329.1	332.4	337.4	309.2
17	284.8	290.8	262.1	286.9	271.8	225.3	291.5	283.9	268.0	288.2	319.8	229.9	206.0	222.0	80.2	47.5	195.7	196.8	210.4	199.5	189.2	192.1	198.5	225.4
18	328.3	303.5	314.9	320.5	329.7	323.0	334.2	321.8	326.8	316.2	318.7	330.6	329.6	330.1	320.1	323.8	321.4	320.1	324.5	335.4	336.3	337.2	340.2	332.9
19	329.6	327.2	330.8	330.4	327.6	326.1	322.8	326.2	324.9	324.3	319.8	324.1	330.3	334.1	334.8	332.2	335.5	341.9	329.9	344.9	333.8	329.0	324.2	322.1
20	325.4	320.9	317.1	311.3	314.4	321.1	327.6	326.2	324.1	314.5	328.6	341.4	204.8	214.4	201.4	197.3	167.7	237.1	326.4	329.7	318.6	334.2	329.2	322.8
21	277.4	277.0	322.4	334.8	315.6	316.4	330.1	317.3	313.9	317.6	317.1	283.9	306.8	194.2	302.4	308.2	297.6	355.8	302.6	331.6	357.8	331.3	314.4	303.5
22	297.0	295.4	294.8	43.3	275.8	312.4	335.2	343.6	335.3	345.2	330.2	305.7	323.2	345.8	321.3	339.1	321.2	320.9	288.3	99.6	274.3	295.6	288.4	294.6
23	290.2	307.5	309.9	307.8	306.1	304.1	330.2	327.9	326.0	339.3	333.1	315.3	339.3	321.3	324.7	322.1	305.9	323.3	326.6	325.3	333.1	327.9	333.9	324.9
24	320.5	325.9	319.8	274.6	310.8	311.3	227.2	290.1	283.1	294.6	305.9	304.6	256.4	317.3	341.9	305.7	320.6	299.0	291.7	302.9	297.3	233.4	283.7	327.4
25	294.8	280.1	221.4	171.4	206.9	221.1	231.3	248.1	223.8	254.9	355.8	338.3	216.1	214.8	315.1	182.1	205.3	264.2	296.5	279.5	298.2	297.4	217.5	265.8
26	252.9	255.4	215.5	295.9	308.4	298.7	304.8	289.0	315.9	310.9	324.4	324.5	328.7	309.3	220.8	331.9	311.9	285.3	275.8	262.3	229.4	280.5	280.8	272.3
27	281.3	284.2	295.5	285.6	280.0	291.8	277.9	16.2	197.7	174.8	25.6	33.4	110.5	281.8	281.9	296.6	303.8	307.7	296.5	293.8	300.5	301.3	303.3	312.3
28	306.4	320.7	310.3	317.2	246.5	286.2	219.5	312.2	284.3	250.3	275.8	220.0	233.5	252.5	201.4	359.0	284.1	219.8	218.5	203.4	199.7	193.7	152.0	175.6
29	203.9	221.0	227.0	194.3	165.7	215.5	148.4	136.3	130.2	126.2	128.2	128.1	126.2	126.8	130.2	128.9	124.7	120.2	119.2	123.8	125.0	124.7	119.1	121.9
30	121.4	123.4	123.2	122.6	122.2	123.8	125.5	127.3	124.8	126.3	128.0	124.5	122.2	123.2	124.7	125.4	122.6	123.8	129.0	129.5	129.3	130.6	138.0	136.0
31	136.6	143.0	143.4	146.5	148.3	144.3	132.9	125.6	132.3	133.2	129.0	132.2	132.3	132.4	132.5	132.8	130.7	129.2	129.3	133.0	131.6	131.7	130.1	129.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	128.1	126.5	127.2	128.5	131.2	133.2	131.5	129.7	129.1	128.7	130.0	133.0	134.3	134.4	138.6	132.5	131.5	134.8	133.5	142.3	140.5	140.7	188.7	220.4
2	215.3	338.6	23.7	214.8	221.0	233.6	245.9	218.3	211.9	222.0	223.4	224.7	230.0	188.8	206.1	205.6	184.4	149.8	153.0	183.3	155.7	143.6	151.8	154.1
3	146.9	146.7	151.2	152.9	156.6	147.1	149.7	143.9	146.6	155.9	139.5	141.2	138.4	136.7	133.6	131.8	132.5	127.8	129.8	127.0	129.9	124.7	129.5	132.5
4	131.5	128.4	129.3	129.5	126.6	126.7	128.3	126.5	128.1	127.2	129.4	131.7	134.3	140.8	145.0	149.7	157.3	158.2	158.4	166.5	191.6	220.7	249.6	284.4
5	292.6	318.0	340.9	310.8	318.4	309.7	313.8	290.0	289.2	308.9	315.2	118.8	150.1	274.6	283.0	281.0	282.6	299.3	331.0	328.8	320.1	308.3	308.5	303.8
6	300.4	309.1	329.8	324.0	324.9	326.7	319.6	311.9	313.0	316.7	320.5	320.6	336.4	341.9	334.3	336.1	342.8	341.3	341.9	344.9	333.2	339.3	349.7	343.1
7	339.0	324.7	329.4	328.6	319.5	320.2	322.1	327.5	327.4	322.4	320.9	319.6	321.9	333.6	337.0	324.3	317.4	301.3	293.6	294.7	297.7	303.4	293.0	307.5
8	299.2	288.9	225.3	226.2	206.0	201.6	203.5	201.6	204.4	200.8	221.0	231.3	223.0	224.6	222.0	220.4	212.9	229.5	219.4	246.1	260.7	292.1	297.6	306.6
9	311.2	314.3	299.9	297.7	305.2	307.3	309.0	308.4	311.6	197.7	307.5	314.0	302.0	291.4	292.6	293.4	304.0	313.8	310.6	307.5	319.3	309.0	298.2	295.1
10	301.1	320.3	321.2	317.7	278.1	316.3	195.7	310.8	215.0	271.8	236.0	269.2	177.1	315.1	317.6	279.7	281.3	294.7	288.5	295.9	292.2	288.7	300.8	301.9
11	301.3	311.2	274.8	295.2	301.5	314.2	254.7	264.1	217.0	13.8	247.2	324.8	301.1	311.8	315.5	320.5	327.3	319.4	311.0	298.8	296.8	283.7	287.9	286.7
12	292.8	291.7	288.7	280.9	305.3	300.7	296.9	302.4	301.3	215.5	318.2	324.0	313.7	309.9	316.0	317.3	318.0	315.9	312.9	278.4	284.9	274.8	261.4	217.8
13	214.5	204.9	197.9	210.9	222.0	201.5	219.2	216.9	206.8	216.6	186.2	186.8	179.0	191.7	193.6	201.7	203.2	198.1	214.4	216.5	217.8	219.2	221.9	221.9
14	220.4	226.8	225.1	228.1	234.1	236.1	235.2	238.1	229.4	225.2	224.2	225.5	239.4	241.2	205.4	219.3	220.2	210.2	179.7	236.6	239.3	219.8	226.4	219.2
15	222.9	60.8	187.0	206.9	226.9	318.8	347.8	341.4	332.4	341.3	331.1	341.9	344.6	342.4	341.0	344.3	346.4	344.1	343.3	342.2	345.1	340.4	344.5	344.3
16	345.8	349.2	343.0	344.6	339.5	334.9	339.8	330.4	303.1	308.5	319.9	305.4	314.5	326.9	317.2	301.4	294.0	286.1	282.5	260.5	241.0	244.3	250.3	246.1
17	251.9	262.2	261.4	258.0	298.3	291.0	291.2	286.1	278.3	211.0	236.7	226.1	210.9	218.0	225.7	229.2	213.8	228.9	236.2	229.5	211.4	225.0	227.5	220.4
18	221.5	202.4	242.3	235.9	216.4	203.3	201.0	190.1	192.3	217.0	196.7	211.7	222.0	214.7	234.3	207.4	204.9	173.9	184.6	170.6	178.1	169.1	153.5	157.8
19	159.5	155.8	234.2	195.1	171.1	173.6	156.0	173.0	190.2	230.3	212.1	208.0	170.7	144.1	148.9	163.1	176.3	202.8	186.0	148.9	140.9	152.5	216.1	143.5
20	139.0	146.6	142.8	136.9	140.0	136.3	131.1	126.0	128.6	130.8	128.4	135.4	143.5	132.6	130.0	140.9	134.5	142.7	143.1	142.5	144.0	145.7	145.3	142.0
21	148.8	144.1	144.8	144.2	141.3	137.6	141.9	140.0	131.7	146.1	135.1	132.6	136.1	134.4	139.2	138.9	147.6	161.0	158.9	141.9	137.8	152.3	200.1	182.2
22	168.9	144.7	140.5	144.9	187.6	198.3	214.1	206.3	173.7	160.9	193.2	182.4	188.2	169.9	173.6	171.5	175.2	154.3	141.0	172.4	206.5	216.7	245.7	233.0
23	208.5	211.0	254.9	240.2	210.2	234.6	298.3	248.3	240.1	257.8	262.1	265.0	252.7	247.2	200.9	266.8	280.7	278.4	251.5	238.7	249.3	224.7	238.2	223.7
24	223.3	233.8	230.2	228.8	217.4	176.9	106.6	220.4	295.6	99.7	130.3	20.9	39.9	100.5	24.2	175.9	222.9	236.5	220.7	199.0	189.4	201.4	214.3	216.0
25	210.2	218.7	249.9	298.1	309.1	307.3	306.8	313.8	305.9	319.1	329.8	325.6	330.7	327.6	324.6	324.3	329.5	336.4	335.2	335.4	342.0	339.5	330.9	325.5
26	331.6	328.7	332.1	333.1	332.7	329.0	331.5	329.4	332.2	342.1	341.1	342.5	347.3	347.5	349.8	348.4	350.4	355.5	353.4	350.3	349.0	343.7	344.6	346.2
27	346.1	343.7	345.3	341.3	339.3	337.4	336.0	335.2	341.3	344.8	346.5	343.5	339.3	341.0	346.1	343.3	341.1	343.4	340.2	333.6	338.8	332.8	318.4	320.2
28	317.3	324.2	300.9	316.4	275.2	252.3	309.6	304.6	312.8	177.1	205.5	250.2	251.5	236.4	313.7	308.5	326.1	322.4	324.1	307.8	293.0	299.1	299.5	289.7
29	295.0	309.1	306.2	309.1	201.6	329.2	336.5	324.1	326.3	302.0	323.5	325.7	335.6	346.5	343.9	332.1	334.9	336.0	338.5	335.8	334.8	328.6	329.3	330.6
30	331.9	333.3	327.7	337.4	46.8	320.2	315.2	308.0	354.0	18.3	198.0	162.5	133.1	12.2	332.7	332.3	0.1	42.4	5.6	336.7	329.2	334.6	329.6	330.8

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	328.6	332.5	326.9	323.6	327.6	327.6	320.3	307.2	316.4	319.8	301.1	287.3	310.3	319.6	317.1	320.3	342.0	344.9	342.7	347.6	349.3	333.5	318.6	320.4
2	318.8	332.0	340.0	327.3	324.1	321.7	324.4	323.6	322.7	324.5	331.7	353.2	341.0	193.7	207.8	241.2	273.9	278.2	265.5	299.8	294.4	215.9	265.8	244.8
3	179.8	219.5	225.3	193.4	143.8	177.1	132.1	137.7	133.5	103.5	132.7	119.6	117.2	119.7	96.5	115.1	151.2	133.4	98.7	50.3	78.4	126.3	121.9	74.0
4	68.2	86.2	76.3	75.0	65.9	71.3	73.1	78.6	76.2	68.9	76.3	83.6	125.1	226.7	100.5	56.5	87.3	96.2	186.1	225.0	259.8	239.6	293.9	230.4
5	250.5	242.6	186.4	338.4	256.0	238.6	257.2	205.5	232.7	284.1	218.3	329.0	205.6	221.6	213.1	219.6	221.8	228.4	217.6	219.6	219.1	228.0	220.4	216.1
6	214.8	219.4	220.4	204.8	184.3	200.8	223.5	154.7	139.6	134.3	136.0	139.8	137.2	134.0	128.0	128.2	130.4	125.1	123.7	125.7	123.0	123.5	126.0	126.3
7	124.4	120.4	123.9	125.1	126.0	128.9	125.7	123.7	123.7	121.7	125.6	127.8	127.3	129.7	127.5	127.4	120.8	120.0	126.1	124.9	123.5	127.0	125.3	124.8
8	125.3	125.5	120.0	116.9	121.9	123.7	120.0	115.4	119.3	119.5	117.9	119.5	123.4	123.9	124.9	123.2	125.0	125.4	123.8	121.3	119.6	116.1	116.3	120.8
9	121.2	114.7	98.3	113.0	109.3	97.8	114.5	117.2	122.9	132.7	122.6	116.9	121.4	134.2	128.3	128.9	134.2	145.1	145.8	124.1	140.0	151.3	19.7	221.2
10	238.2	92.3	320.5	185.9	217.8	266.9	213.3	200.9	195.8	245.1	219.9	207.0	206.2	205.3	226.7	229.0	219.5	212.6	216.7	188.8	142.9	123.2	128.0	120.3
11	132.7	122.8	124.5	125.4	120.2	117.8	127.1	126.4	117.1	117.3	126.9	125.2	124.3	121.7	113.4	115.4	115.8	119.9	115.0	117.5	116.0	108.2	106.6	112.5
12	115.4	114.3	114.7	108.3	112.0	104.3	104.6	85.4	90.4	102.4	121.4	122.0	123.3	129.1	131.5	133.2	118.9	116.7	109.1	110.9	110.8	109.0	109.3	114.9
13	119.5	120.6	122.1	126.6	134.9	141.4	148.0	142.8	136.1	132.2	128.3	119.6	129.3	132.4	127.6	131.0	133.8	130.2	126.2	126.0	121.4	121.2	126.5	128.2
14	129.2	121.4	108.2	94.3	339.0	63.7	37.2	33.2	30.8	16.1	10.8	1.8	10.7	22.8	44.0	64.1	65.3	68.3	74.0	79.5	84.4	63.7	345.7	263.1
15	247.7	239.7	219.3	213.1	205.8	193.5	195.9	207.3	182.9	191.4	200.1	173.9	159.6	175.0	178.8	184.1	185.8	177.6	172.3	153.7	161.6	159.8	153.9	168.5
16	180.8	185.8	190.7	188.2	206.1	207.7	161.6	194.5	193.7	175.9	162.6	129.9	140.1	137.1	142.8	145.1	148.2	148.4	165.3	183.0	222.5	222.8	229.0	252.4
17	295.5	249.8	241.7	230.0	233.0	280.2	256.2	302.8	286.2	320.1	320.0	79.0	34.8	213.8	208.3	215.5	219.4	224.5	206.7	217.5	207.4	157.3	154.6	145.4
18	146.2	145.4	136.4	146.8	138.4	130.6	149.3	156.9	161.9	174.6	148.6	150.0	160.7	166.8	176.5	181.1	167.4	147.8	143.2	150.2	146.4	136.1	140.4	147.0
19	145.7	199.2	217.9	215.3	229.5	227.1	233.6	258.5	278.1	47.2	297.1	3.8	309.1	288.0	292.8	280.9	290.2	307.1	296.9	302.0	298.6	299.5	298.1	304.6
20	301.9	307.7	303.9	316.2	359.4	320.6	331.0	44.7	43.3	351.2	354.0	2.5	44.0	127.4	163.0	193.9	204.0	207.4	208.8	214.0	211.9	224.1	229.2	239.8
21	214.3	221.7	257.8	210.0	201.6	212.2	280.5	272.5	56.3	348.6	141.9	164.8	197.6	222.0	213.4	200.1	223.6	221.8	217.1	217.4	234.0	233.4	237.2	243.6
22	246.2	248.7	246.6	248.4	238.8	193.8	348.5	192.7	290.8	276.5	127.1	154.6	173.7	154.0	152.9	144.5	139.8	132.9	132.7	128.4	121.5	123.2	116.8	112.0
23	116.9	116.0	113.1	116.3	115.0	117.5	118.1	118.9	123.5	119.7	111.7	116.9	115.8	116.1	122.4	122.5	119.3	123.8	127.3	127.8	128.8	133.0	140.5	143.9
24	143.4	144.4	146.3	145.5	143.1	138.3	134.5	140.2	142.2	141.1	143.1	142.4	134.8	133.8	131.0	122.1	125.3	135.5	151.6	183.1	156.2	154.7	181.4	175.7
25	177.5	164.2	152.4	146.7	151.4	165.5	158.6	166.5	158.2	162.3	158.9	164.7	161.8	169.6	169.1	171.2	178.4	185.6	189.1	180.0	179.1	181.1	184.4	181.8
26	192.7	186.2	190.6	200.0	200.0	206.1	213.8	214.2	216.9	213.5	217.6	212.4	208.9	209.8	189.8	242.9	241.6	230.1	279.2	257.8	235.6	237.9	242.9	247.5
27	257.9	258.0	255.5	239.0	260.8	281.9	201.9	183.4	139.8	265.3	280.8	270.1	271.3	284.3	280.3	284.0	286.6	286.9	276.4	270.7	273.0	278.0	283.8	284.8
28	249.1	294.2	285.1	265.9	286.7	284.3	303.4	302.9	147.5	287.1	264.9	280.5	274.6	275.7	273.9	274.0	277.3	285.8	291.4	296.1	291.7	293.5	302.1	308.3
29	313.6	321.2	309.6	313.1	300.6	288.8	316.7	321.6	332.2	341.5	353.2	354.5	351.0	356.0	348.3	348.7	349.5	352.5	353.5	352.8	351.0	347.8	339.0	328.4
30	322.1	311.9	297.7	203.2	194.8	169.6	137.9	140.8	152.8	149.7	137.0	135.0	143.2	150.0	145.9	147.7	148.4	145.5	141.3	134.6	118.6	118.7	115.6	126.0
31	126.5	127.1	126.9	124.8	125.7	127.5	124.9	125.5	125.4	124.7	121.7	123.2	123.0	124.7	123.9	125.9	124.5	120.9	121.4	123.9	134.0	133.7	139.7	142.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	133.3	131.8	132.1	128.7	119.4	118.1	112.4	112.2	118.4	118.5	114.7	113.3	121.2	124.7	124.4	125.3	129.7	129.4	127.9	128.2	125.3	113.4	117.4	126.4
2	121.1	103.0	95.5	100.3	108.9	103.1	106.5	85.3	111.9	101.4	106.0	111.3	105.2	79.5	123.7	125.9	121.9	143.3	151.3	150.6	196.9	197.1	166.3	207.7
3	235.6	269.2	282.3	297.5	269.6	344.6	93.3	115.0	154.0	184.6	146.8	79.2	169.2	160.7	171.5	156.8	154.3	156.3	156.7	153.6	151.9	148.0	151.8	148.9
4	147.7	150.8	143.0	140.9	139.2	141.6	140.1	135.1	137.4	150.6	147.6	145.7	143.7	140.0	146.0	147.2	151.6	152.8	152.2	151.1	151.1	152.9	148.9	145.9
5	147.1	149.8	149.2	149.4	137.2	134.7	129.7	126.2	126.2	119.0	122.0	120.3	114.5	116.6	117.4	112.3	115.5	121.4	132.8	136.3	144.4	148.7	277.5	296.1
6	301.4	307.1	325.7	323.3	326.6	311.2	322.7	345.9	311.4	301.5	289.4	339.1	327.7	335.2	327.5	313.3	303.3	302.8	298.2	295.7	284.7	298.5	300.2	296.1
7	237.3	246.8	292.7	306.6	305.6	306.2	316.5	332.4	348.1	347.3	327.5	327.8	332.6	350.8	343.8	311.1	246.8	202.3	221.9	228.7	231.2	219.7	216.2	199.6
8	220.3	216.4	235.6	218.2	224.5	218.7	226.8	244.0	36.9	95.3	202.6	188.5	185.8	187.2	199.5	202.9	196.6	205.1	208.3	199.3	205.9	202.5	203.5	220.0
9	213.5	223.3	218.2	216.5	221.4	221.4	210.9	202.5	214.7	229.0	216.6	245.5	252.3	268.1	259.0	242.5	244.9	231.7	222.2	243.0	246.7	239.6	223.5	229.8
10	244.4	230.4	204.7	183.0	207.6	219.2	22.7	11.9	29.7	155.6	59.5	298.1	165.8	93.8	151.4	178.8	165.0	168.1	176.0	181.0	180.1	218.8	231.0	227.9
11	24.2	219.9	3.5	262.7	226.8	251.8	356.1	44.7	49.6	52.8	318.0	38.0	299.1	207.4	229.0	237.1	237.8	233.6	229.1	236.5	210.3	196.1	209.5	231.2
12	233.0	223.5	226.9	231.7	250.3	223.4	299.7	324.9	82.8	59.5	57.6	49.8	31.2	291.3	241.4	204.5	216.9	220.1	231.7	221.8	249.3	289.3	287.5	66.8
13	211.3	206.8	296.0	296.9	302.5	310.4	320.2	297.3	301.7	334.4	349.9	358.2	342.1	317.2	320.9	325.5	276.4	280.6	267.6	269.5	243.0	223.1	246.6	240.0
14	246.5	177.5	9.1	320.3	8.2	268.5	143.5	8.1	8.9	29.7	309.7	345.3	352.6	345.3	352.6	70.9	202.2	198.5	186.2	171.2	213.6	215.9	225.2	218.3
15	235.9	177.6	322.5	228.6	330.8	1.2	249.7	319.7	15.8	24.2	46.1	56.8	52.4	50.2	168.5	189.7	188.8	213.9	208.1	195.3	200.1	203.2	217.0	219.2
16	197.3	187.3	235.2	1.9	350.8	351.9	342.0	161.5	153.1	357.4	345.8	349.0	348.3	215.8	190.1	235.7	259.5	232.8	239.4	236.3	231.3	236.5	234.5	263.8
17	200.3	210.3	225.9	208.1	216.8	220.7	216.8	159.0	76.6	14.2	57.2	356.1	214.4	170.3	161.1	151.0	166.8	158.4	151.6	145.9	146.4	146.5	153.7	152.1
18	231.9	211.3	205.0	174.3	124.4	190.5	189.5	19.2	33.4	219.0	207.5	227.2	243.8	204.7	194.5	170.8	192.1	204.3	221.5	232.5	230.7	232.3	242.9	200.2
19	219.8	52.7	169.5	205.3	220.0	237.2	316.4	168.7	81.9	56.1	195.8	225.9	241.2	226.9	199.5	180.5	173.1	178.5	186.0	185.0	196.7	199.6	205.0	193.8
20	194.0	213.8	210.7	211.4	193.4	246.0	253.0	72.3	73.6	131.6	145.2	146.1	142.4	143.5	146.2	147.4	150.8	152.6	155.0	143.2	137.6	141.7	143.7	160.7
21	161.3	143.1	145.8	153.8	147.8	156.9	155.5	145.4	137.3	117.1	159.2	76.1	16.2	2.5	25.0	36.0	45.0	149.1	153.0	157.1	156.8	152.4	148.5	192.3
22	184.5	157.3	146.3	149.0	139.9	160.0	197.1	194.8	195.3	188.0	222.9	131.5	141.2	144.5	146.1	143.6	141.2	141.9	144.8	144.2	144.6	148.4	148.2	145.6
23	147.4	144.7	149.6	147.4	146.4	152.5	152.9	142.1	138.4	141.1	139.2	140.7	134.9	135.0	139.8	145.7	153.0	145.5	142.2	149.5	154.7	167.1	168.9	151.1
24	149.9	145.8	157.5	134.1	136.2	140.2	131.7	126.8	122.3	124.9	127.3	125.4	130.7	133.1	127.9	124.8	126.9	120.0	121.3	121.1	116.7	113.8	111.0	112.0
25	115.5	120.5	121.9	122.8	121.7	124.8	118.7	117.4	113.6	114.2	116.1	112.8	113.1	113.0	116.2	119.2	112.4	118.1	122.5	127.3	130.3	126.5	102.0	97.5
26	86.8	126.2	132.0	131.5	150.5	153.3	63.1	81.4	88.4	81.4	71.1	62.0	54.3	118.2	141.1	86.9	74.0	87.3	106.0	88.5	123.3	134.7	144.4	191.0
27	161.2	258.5	205.0	166.9	195.2	209.6	184.7	129.5	130.0	129.0	136.4	130.4	133.2	129.1	133.3	135.9	136.6	142.5	157.1	150.7	155.6	171.6	252.9	244.0
28	183.1	209.6	210.6	228.2	222.6	194.9	174.0	333.5	255.4	189.3	213.1	212.7	202.2	208.9	224.4	210.3	200.0	195.1	185.2	182.1	184.8	166.2	176.1	174.3
29	179.8	163.5	156.9	144.7	154.5	196.8	185.1	193.9	208.4	201.9	205.9	175.9	165.4	154.7	144.7	144.7	135.4	139.0	140.5	133.4	139.4	144.9	146.2	147.2
30	148.4	151.5	148.5	162.7	164.1	181.0	228.9	228.8	247.0	353.8	14.3	28.2	44.7	337.1	49.9	348.6	155.3	231.3	228.0	234.6	30.5	276.5	302.3	203.6

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	211.9	211.9	208.1	226.3	215.8	181.9	254.7	115.7	41.7	42.5	85.7	122.0	136.1	129.8	124.1	126.6	130.2	132.8	123.4	119.6	120.1	122.7	130.6	134.1
2	136.1	132.5	126.1	120.6	119.6	114.7	113.4	124.2	125.6	126.8	125.7	121.2	126.5	124.0	124.3	126.8	134.3	135.6	140.2	142.8	147.9	143.4	129.3	130.7
3	119.6	124.0	109.7	114.9	108.5	119.3	110.2	123.5	122.4	132.9	135.3	124.9	113.9	121.3	111.5	116.0	111.7	141.1	127.5	116.3	124.0	109.6	138.5	115.0
4	130.9	121.2	160.9	142.5	107.6	291.0	313.1	341.5	22.2	26.4	111.6	93.1	119.5	122.3	122.6	153.6	163.2	116.3	185.5	224.8	222.0	227.7	217.6	165.9
5	191.1	181.0	180.3	172.5	181.4	175.2	157.5	162.8	11.8	143.2	139.1	146.7	75.8	46.5	79.7	175.6	183.8	215.8	130.9	150.8	175.7	210.1	202.8	218.5
6	213.9	214.9	182.9	183.7	215.4	218.9	206.9	181.0	33.5	22.6	126.9	150.5	145.1	145.0	143.9	156.7	153.8	142.4	144.0	148.2	143.4	148.8	164.6	143.5
7	141.3	151.1	150.9	151.3	149.5	143.4	147.8	146.5	144.3	141.9	142.0	144.6	145.8	146.3	143.2	144.2	146.8	146.9	146.7	150.2	163.5	205.0	216.1	230.7
8	226.9	225.4	227.4	210.4	221.1	215.0	210.1	212.9	210.1	205.5	211.4	206.4	175.9	173.2	182.9	186.1	173.7	173.9	191.8	191.7	188.8	201.2	198.2	199.3
9	182.4	181.2	156.9	154.8	161.5	149.0	148.9	160.8	141.3	136.7	152.5	147.5	147.1	147.2	136.1	135.0	139.7	129.3	125.8	132.4	144.0	132.9	137.4	132.8
10	136.1	140.2	145.0	142.5	138.3	136.2	131.6	139.0	141.5	148.0	140.7	142.2	143.3	143.4	147.7	136.2	148.9	146.4	148.9	142.2	148.8	147.9	143.8	142.4
11	138.6	148.5	136.0	150.7	156.0	151.9	164.3	160.9	184.3	208.3	181.2	163.6	142.0	140.5	147.2	144.4	139.2	152.0	151.2	150.8	144.3	152.1	158.6	162.8
12	153.2	155.4	154.3	167.6	136.1	134.3	147.4	142.1	134.8	136.4	136.7	136.9	136.1	137.6	135.5	134.0	134.9	133.9	134.0	133.2	131.8	130.4	135.4	133.7
13	133.0	136.7	133.4	135.1	138.3	134.6	139.1	144.9	146.5	143.0	148.1	144.2	155.5	152.6	147.7	165.1	155.9	165.9	188.0	207.3	216.8	227.0	226.8	230.8
14	228.8	230.8	234.4	220.6	214.1	228.0	225.7	225.0	189.3	217.4	227.1	177.9	169.4	149.2	178.6	181.8	153.0	153.5	174.0	177.8	179.9	164.9	168.4	169.5
15	173.1	197.6	210.5	212.2	214.4	194.5	222.0	211.5	177.2	141.8	152.8	146.4	148.0	142.8	142.5	152.7	148.5	151.9	166.4	158.3	161.9	168.2	176.8	166.7
16	132.5	124.8	128.9	128.1	130.1	131.7	131.1	130.0	130.1	132.4	130.8	128.8	122.0	126.9	126.9	125.3	131.4	127.6	128.6	128.7	127.5	132.0	131.1	135.0
17	147.6	155.1	192.5	205.9	207.6	208.8	194.2	204.6	208.8	202.7	207.2	213.3	220.8	208.8	210.9	214.6	221.2	223.8	224.3	221.2	217.7	216.6	215.4	202.2
18	200.0	207.3	202.7	189.2	196.3	198.3	199.2	212.2	219.4	215.5	226.5	234.9	218.2	280.5	238.0	254.2	248.6	252.7	327.6	267.4	251.0	188.7	213.0	224.2
19	189.5	263.0	291.2	296.0	299.9	301.0	303.0	310.1	312.0	323.4	332.5	330.1	332.5	319.0	340.2	335.1	340.6	335.1	352.4	328.7	333.9	325.1	316.9	296.2
20	280.6	282.3	268.6	248.6	256.6	237.7	242.7	221.5	199.9	200.7	206.2	193.3	205.1	191.3	200.3	195.3	195.5	198.0	191.2	183.8	181.3	189.8	181.8	171.1
21	175.8	183.9	182.5	177.9	179.2	180.8	180.9	188.1	195.9	195.5	191.4	197.0	224.4	251.6	293.6	273.9	271.8	216.0	251.7	256.5	284.1	251.2	231.8	222.5
22	217.6	222.0	219.5	231.7	322.0	287.1	210.3	231.7	191.5	117.9	124.7	133.3	149.0	203.1	195.7	204.7	210.3	207.2	203.6	197.5	202.6	205.2	215.9	201.4
23	199.8	192.4	147.3	230.9	296.4	25.6	217.4	215.9	230.9	237.4	221.6	208.2	198.0	193.1	188.4	189.2	189.5	189.8	189.8	194.2	193.2	212.1	224.1	13.7
24	29.4	210.5	205.8	171.3	305.0	56.0	328.3	331.5	330.5	333.3	330.0	340.5	342.1	336.9	341.8	349.0	355.5	339.0	348.5	357.4	1.6	339.7	337.4	332.0
25	328.8	327.1	324.1	326.8	319.3	332.9	332.6	326.0	329.5	333.8	330.9	332.4	339.3	339.7	345.6	342.9	336.6	331.5	323.3	321.6	315.6	306.6	303.9	289.4
26	296.7	187.6	296.9	296.1	270.9	216.1	286.9	207.7	194.3	207.9	224.0	201.2	234.1	228.9	227.8	222.8	227.9	197.0	206.5	186.5	215.1	207.7	202.4	193.2
27	192.7	188.7	203.0	194.9	194.9	241.6	248.3	183.9	139.9	141.4	146.3	135.3	125.8	131.7	131.6	132.8	139.4	143.7	147.8	159.6	201.5	223.7	231.4	231.4
28	226.7	200.0	206.9	282.6	288.7	284.7	291.3	307.6	327.5	334.9	331.2	328.5	337.4	347.5	350.5	335.8	327.5	327.5	327.7	330.3	326.1	323.1	314.9	308.8
29	322.7	324.8	322.2	326.6	322.0	325.5	320.5	326.3	330.7	341.1	344.5	339.6	335.3	335.4	327.4	328.6	321.5	325.6	321.9	330.3	332.0	323.6	332.2	344.7
30	344.6	333.4	331.2	333.9	330.3	328.8	325.5	327.7	322.5	328.1	332.4	330.4	329.9	326.7	328.3	326.3	334.4	342.3	338.8	342.6	349.8	347.6	341.0	335.1
31	321.4	298.7	275.5	311.0	311.7	310.3	312.1	306.7	330.9	333.7	336.1	332.3	318.9	307.2	305.1	301.8	292.2	295.5	301.5	290.7	284.4	266.3	241.4	251.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	261.4	258.3	12.4	172.7	208.3	212.9	37.1	337.2	348.8	28.1	33.9	35.6	36.7	54.5	77.6	205.3	216.8	227.5	223.4	219.2	226.2	229.6	227.2	224.2
2	224.6	220.2	212.9	191.7	186.1	189.9	213.3	189.6	196.3	198.3	171.1	168.4	156.8	163.7	169.6	161.4	150.1	144.3	148.9	213.9	234.5	231.1	226.5	244.2
3	205.4	283.4	303.9	325.3	333.4	297.5	317.3	321.1	335.7	334.6	340.3	20.8	105.7	212.1	151.6	131.5	140.9	146.8	144.4	151.9	144.9	158.3	156.0	152.0
4	151.9	150.3	152.6	155.2	149.4	152.0	155.2	146.5	146.0	146.1	155.1	152.8	143.3	140.2	141.1	140.3	152.6	156.8	145.8	146.6	171.8	201.9	226.2	222.3
5	223.6	229.7	227.8	215.7	234.1	221.2	246.5	229.5	340.5	348.8	12.9	356.8	352.1	340.2	347.5	349.5	346.3	354.3	346.6	348.6	347.2	343.9	329.9	329.2
6	329.0	346.0	331.8	319.9	331.1	332.6	334.7	341.2	354.8	345.4	350.0	336.0	335.0	327.8	331.6	328.5	323.8	322.2	328.9	330.7	332.1	329.9	333.0	348.4
7	327.7	334.4	330.7	326.8	320.7	315.5	314.5	329.4	326.8	328.4	334.9	335.5	337.1	336.4	343.5	345.0	327.9	325.4	328.7	333.4	339.1	325.9	315.5	317.4
8	315.8	317.4	317.1	317.6	321.5	308.6	323.9	343.0	324.0	318.0	336.0	340.2	349.2	353.4	7.1	4.5	341.9	1.8	333.1	352.0	330.9	330.4	316.8	312.7
9	321.7	318.8	301.8	311.2	307.2	309.4	324.3	328.1	331.6	333.8	336.8	329.5	345.4	350.7	350.2	354.4	345.2	347.2	341.2	347.9	338.7	319.0	250.0	302.2
10	195.7	254.9	262.1	209.6	209.3	224.1	209.5	219.8	218.4	218.9	219.9	232.7	343.2	331.0	210.0	206.3	119.6	149.2	188.3	152.9	216.8	227.9	228.1	225.9
11	227.3	229.2	203.6	201.3	180.1	201.3	161.4	139.6	138.4	137.0	134.9	130.2	130.3	127.9	135.3	135.9	131.3	132.2	126.4	143.3	164.8	162.1	188.4	197.3
12	226.3	216.2	204.1	306.8	319.5	260.2	288.8	294.6	339.9	310.2	321.8	343.4	350.0	350.4	7.6	53.3	29.9	67.3	155.3	154.9	206.5	203.1	231.3	234.5
13	216.8	212.6	159.0	52.9	308.6	201.0	212.1	205.0	204.0	203.2	12.4	330.9	329.5	344.5	35.7	79.7	109.5	127.7	137.5	147.7	137.3	134.8	137.1	131.6
14	167.2	185.3	70.8	285.2	157.9	131.8	128.2	134.4	164.7	152.4	151.3	152.0	145.1	142.8	148.6	154.1	147.3	147.0	145.8	161.3	162.4	185.9	163.6	199.6
15	228.3	220.9	220.6	224.3	225.9	210.5	226.3	8.5	1.9	39.2	45.8	28.6	6.6	348.9	336.5	22.1	127.0	162.3	192.6	229.3	229.6	200.8	183.1	193.4
16	123.3	154.6	152.0	152.3	151.2	161.3	161.0	158.9	157.8	142.8	147.9	151.3	139.4	135.2	142.9	143.3	149.8	150.0	152.0	146.5	150.8	199.9	226.1	166.3
17	150.5	168.2	140.1	154.7	152.0	142.4	128.4	133.1	142.5	134.4	114.7	120.5	127.5	131.2	130.8	131.6	131.3	131.9	136.3	138.9	138.4	130.0	126.2	132.0
18	137.3	130.2	141.7	128.4	133.0	83.9	310.2	243.0	0.3	73.9	35.0	40.2	32.7	41.1	78.9	59.6	72.8	43.9	5.7	56.4	58.5	268.8	258.5	209.8
19	213.0	237.0	200.6	210.2	247.4	203.9	286.6	274.8	215.0	326.4	191.3	215.9	308.8	298.5	307.8	296.8	335.5	333.8	306.8	317.2	14.1	302.8	213.3	213.7
20	226.4	176.5	183.7	201.9	186.5	242.6	217.6	203.1	203.5	311.9	351.2	5.0	6.8	325.3	339.3	304.9	318.4	333.6	320.3	327.0	337.0	341.9	303.7	219.0
21	210.6	217.5	212.9	225.3	269.2	270.9	238.9	227.5	251.0	232.0	212.7	231.3	240.4	216.4	192.3	243.9	219.8	202.8	226.6	263.4	225.0	216.6	211.7	224.4
22	215.2	259.2	284.8	201.5	294.1	359.1	241.5	353.0	22.7	24.9	31.8	17.8	62.8	1.6	306.0	254.0	287.7	245.1	289.7	273.6	250.2	229.8	259.5	184.1
23	174.7	164.3	215.1	264.9	214.3	200.4	295.5	320.1	321.5	328.7	345.2	349.2	341.9	329.8	339.9	316.3	318.8	322.8	214.0	201.7	223.6	198.4	187.3	225.7
24	233.0	225.2	38.9	284.2	192.9	192.7	221.4	258.8	305.5	323.4	339.7	340.8	351.9	349.6	353.6	350.3	349.9	347.4	355.0	2.8	333.2	309.2	309.3	301.4
25	304.0	294.2	271.4	231.7	203.4	206.5	219.8	340.1	333.7	359.2	36.2	216.6	214.8	159.6	173.7	139.3	144.9	146.0	134.5	149.2	150.0	156.6	154.6	146.9
26	171.2	143.5	167.3	169.3	162.9	140.9	151.3	144.9	149.8	147.3	148.4	143.9	146.0	147.9	147.8	149.4	143.7	141.2	160.1	162.5	155.8	156.9	192.2	191.4
27	181.8	213.1	223.0	212.2	221.7	231.6	299.1	203.2	207.3	16.7	255.2	241.5	301.1	300.3	269.2	255.7	247.4	276.4	279.3	265.4	263.9	246.5	227.4	233.7
28	248.3	238.2	221.8	330.4	166.6	233.5	281.3	330.1	264.9	326.2	355.7	0.8	331.8	319.9	325.8	297.2	290.8	318.4	292.6	310.2	319.3	328.2	331.2	320.2
29	320.1	322.4	322.5	315.4	312.5	279.5	177.9	181.8	276.1	176.1	109.0	337.0	267.5	230.9	205.7	203.5	195.5	223.7	223.7	226.5	209.6	199.3	203.8	215.1
30	208.9	217.9	220.7	194.0	189.6	205.2	210.0	213.3	207.2	187.7	65.1	35.8	17.9	87.1	107.3	125.8	106.1	133.2	135.8	145.1	151.6	137.6	123.0	119.1
31	119.3	122.9	121.6	114.4	114.0	113.9	119.5	119.5	114.2	85.6	72.4	79.0	83.0	82.5	64.8	66.0	54.4	57.7	45.4	38.8	41.0	45.4	56.7	37.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	31.8	34.5	37.9	52.6	69.7	32.9	24.3	21.8	25.7	47.1	44.5	52.4	90.8	95.8	86.2	74.4	104.2	116.3	95.7	93.0	110.7	95.5	100.8	105.1
2	112.7	109.6	117.6	118.3	114.0	110.2	114.0	109.8	113.5	112.4	115.8	113.2	122.2	115.6	112.0	109.5	94.1	76.1	50.6	26.2	5.2	16.4	15.1	18.8
3	28.1	32.7	37.6	18.6	14.3	3.1	0.5	15.4	354.1	212.7	128.7	60.4	119.1	135.2	154.7	191.7	183.1	176.1	169.1	172.5	161.5	175.1	214.4	198.1
4	204.8	194.9	188.7	193.5	193.3	198.8	213.5	208.6	205.7	211.7	223.3	176.5	207.1	210.8	169.6	153.6	146.3	181.7	204.9	218.7	215.4	211.0	203.8	237.6
5	205.3	197.7	220.2	185.4	201.5	226.7	205.8	203.9	226.7	204.3	180.9	185.0	174.1	199.3	218.9	251.6	247.6	57.9	85.2	93.0	176.1	195.4	190.4	192.8
6	191.8	150.0	134.9	125.2	116.0	111.8	112.9	105.4	102.1	97.6	95.4	106.0	109.5	114.4	116.2	103.7	95.1	93.8	97.2	104.2	87.4	102.5	113.5	100.9
7	101.5	110.8	117.2	108.2	82.1	83.5	95.7	87.2	74.9	74.8	88.9	121.8	129.5	132.1	131.4	126.9	125.6	128.0	130.5	135.3	137.0	141.4	141.1	150.3
8	154.4	183.6	178.5	181.8	179.4	186.3	181.7	174.2	165.9	157.1	123.0	109.5	101.3	112.7	112.7	108.8	105.6	114.3	109.6	108.5	79.2	92.1	94.1	115.3
9	121.9	120.4	115.3	107.0	114.9	84.4	159.6	70.8	71.5	98.4	92.1	86.1	93.1	106.1	125.0	127.1	122.9	127.6	130.8	129.5	133.7	127.0	125.8	126.8
10	126.5	132.2	135.0	137.9	129.9	131.3	59.4	54.4	136.1	165.5	166.4	192.5	199.6	197.0	215.6	235.9	209.0	221.3	223.7	224.1	207.3	221.6	220.4	215.0
11	236.8	227.4	215.1	223.0	227.2	212.5	197.9	194.8	193.2	181.3	178.8	176.8	169.3	170.8	173.0	172.8	175.5	161.4	147.0	147.5	132.0	124.1	116.7	124.6
12	127.1	121.4	116.0	122.2	128.3	119.9	119.6	116.7	117.5	116.2	116.3	118.9	121.1	123.0	121.8	119.9	117.5	116.8	119.5	121.0	119.6	118.9	119.8	119.7
13	120.2	115.2	114.6	120.6	126.0	121.7	124.6	121.2	123.5	117.8	122.8	125.0	131.7	132.6	121.8	117.0	123.8	119.3	117.7	115.4	117.1	119.0	118.4	119.3
14	119.7	124.8	126.3	131.4	134.9	136.3	134.1	136.8	128.7	127.7	126.4	123.1	122.8	126.6	125.7	127.0	130.9	131.2	130.1	132.2	143.5	146.3	150.9	144.5
15	146.2	148.4	142.3	136.9	121.6	131.9	123.7	126.2	124.4	117.2	125.8	130.3	138.7	130.2	134.5	127.3	129.7	127.5	125.1	133.2	134.8	143.7	140.1	141.1
16	138.9	140.5	349.2	233.6	290.3	311.9	293.2	245.4	322.2	108.2	326.0	323.2	333.9	324.2	319.0	292.2	321.7	290.9	281.4	270.5	267.1	259.3	250.1	244.7
17	261.5	257.4	239.4	224.5	222.6	215.0	216.0	218.1	213.2	256.6	347.5	34.7	31.8	71.5	98.7	103.2	94.4	101.3	114.2	99.7	98.5	102.3	94.6	31.9
18	25.6	16.3	17.2	19.9	24.0	17.9	15.7	13.5	8.8	10.0	357.0	341.1	337.0	317.0	312.4	305.5	314.7	316.6	311.8	321.8	182.8	307.5	89.7	88.0
19	76.5	44.0	60.6	50.7	46.1	86.0	75.6	92.0	96.4	109.4	138.9	151.2	139.9	156.8	201.6	272.7	282.0	286.8	291.3	281.2	285.9	285.7	287.3	280.5
20	264.2	263.4	281.8	267.1	287.1	294.4	297.5	296.7	299.0	310.8	341.6	342.0	334.3	285.4	273.0	307.5	295.3	310.7	295.9	320.9	300.4	263.7	290.3	297.1
21	296.3	313.4	269.1	288.4	280.1	283.7	285.4	303.0	281.9	215.7	160.2	34.0	9.6	336.8	336.1	310.6	294.8	310.1	320.2	298.8	295.4	297.7	308.5	307.6
22	309.9	195.4	256.3	232.1	312.4	214.3	226.4	205.6	234.4	206.6	164.6	260.5	189.1	158.1	172.9	171.3	154.2	146.9	152.1	192.2	198.0	199.8	201.6	194.0
23	196.4	189.7	214.7	188.4	201.3	201.8	202.2	207.6	205.9	203.1	206.6	205.6	200.6	191.2	187.9	191.0	196.4	197.9	193.8	195.6	195.8	198.3	193.6	185.0
24	173.3	170.0	158.9	152.0	158.5	155.1	144.6	133.2	145.1	149.1	134.9	138.5	118.4	120.1	114.1	115.8	101.5	105.7	102.6	94.2	97.3	132.7	142.9	255.0
25	277.1	324.7	353.5	315.0	317.4	305.6	310.0	12.3	18.9	354.2	20.9	35.2	13.4	14.0	42.8	70.4	38.2	86.5	88.7	94.1	126.9	261.1	327.9	227.7
26	238.2	209.4	197.7	244.6	305.5	270.5	213.3	205.4	204.7	211.7	225.1				347.9	325.8	294.7	297.1	296.0	304.8	315.1	327.9	298.7	247.5
27	334.2	333.9	314.1	312.6	329.8	322.3	334.6	342.1	339.6	334.5	348.1	345.2	343.5	346.1	346.8	348.6	342.1	347.3	344.1	346.2	351.1	336.5	330.7	334.5
28	341.8	343.0	331.4	326.5	316.8	311.6	163.1	275.7	300.7	207.4	152.4	79.8	55.7	16.9	60.2	7.0	71.9	154.1	143.4	150.5	159.2	208.1	229.3	147.9
29	143.4	151.4	150.0	116.6	117.1	131.3	134.9	144.9	145.6	158.5	146.5	131.1	142.5	135.6	145.6	141.9	145.1	138.5	140.3	152.7	148.2	178.3	199.6	196.7
30	206.8	245.2	193.7	208.8	326.8	331.0	314.9	323.2	327.2	345.3	333.1	355.1	0.6	332.7	336.0	320.9	329.1	300.7	351.7	328.5	244.2	206.3	198.6	183.0

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	200.0	195.1	196.7	200.3	222.5	222.6	205.1	249.4	178.4	142.2	148.8	141.8	147.6	148.6	156.4	158.2	178.7	152.9	152.6	165.5	150.5	150.3	158.0	162.8
2	170.7	143.9	144.6	170.3	178.4	220.6	221.2	225.9	227.0	237.2	209.1	217.8	114.5	178.3	87.0	258.6	245.6	228.9	229.4	226.1	234.0	218.1	218.9	219.4
3	221.0	210.5	221.2	214.5	265.7	256.6	299.7	323.4	334.5	334.9	329.4	328.8	338.1	343.9	332.5	332.6	331.5	337.7	328.4	321.5	325.9	349.8	241.9	291.3
4	323.6	314.8	332.0	312.6	314.2	307.1	301.4	233.9	323.8	338.6	162.1	334.1	355.0	225.6	309.8	296.6	292.2	271.1	44.2	358.5	233.1	341.5	252.4	220.2
5	229.5	228.4	231.1	195.6	211.4	224.5	226.0	323.6	310.8	242.4	134.0	7.8	311.7	342.2	348.6	332.3	343.7	351.0	338.0	354.8	348.5	348.8	356.8	342.6
6	331.7	327.4	324.3	326.7	328.4	336.6	330.2	3.0	359.4	331.8	319.3	331.7	342.9	3.0	348.2	317.9	326.5	328.3	325.5	328.8	320.8	313.6	308.6	323.0
7	329.9	330.5	328.7	329.0	329.3	331.8	332.1	324.4	334.7	326.0	336.4	343.7	336.2	337.7	329.9	328.9	325.9	326.2	331.1	334.6	328.5	328.0	331.3	323.2
8	324.4	320.9	316.7	317.5	323.0	328.7	328.2	329.8	323.1	320.3	326.9	327.5	343.1	1.8	3.1	5.5	4.5	3.1	5.8	11.2	15.8	65.5	194.0	211.4
9	238.2	122.0	121.5	124.0	124.9	123.6	123.5	123.6	122.5	123.2	124.1	122.6	120.2	119.4	121.7	123.0	124.7	124.7	124.4	123.6	124.2	125.6	131.6	133.2
10	138.3	135.0	143.7	152.3	218.6	220.9	235.7	239.4	234.0	235.8	220.8	210.4	181.8	157.7	152.9	154.1	146.6	149.6	153.8	147.3	145.3	144.6	147.3	137.3
11	134.9	133.3	129.2	128.5	126.1	123.1	127.8	138.3	152.6	329.4	344.7	335.8	338.7	344.3	344.6	348.3	344.7	339.5	338.2	339.8	337.5	337.3	340.6	341.1
12	342.0	340.6	338.4	337.9	333.5	333.2	331.1	334.7	333.9	334.5	333.9	331.8	334.0	341.9	328.1	331.0	341.2	338.5	334.0	332.1	330.0	341.1	332.3	330.9
13	312.3	333.7	318.7	325.2	310.5	247.5	289.9	292.9	200.3	42.4	167.1	48.5	120.5	155.9	138.7	131.3	121.6	117.5	119.1	127.8	123.7	127.2	134.9	137.6
14	134.4	142.5	145.1	143.6	146.0	163.1	189.1	187.8	180.9	168.7	159.1	155.6	154.0	149.6	158.0	160.0	140.0	142.9	136.3	165.4	157.2	200.4	9.8	340.7
15	336.5	336.0	341.9	342.3	18.9	343.6	13.7	343.0	344.5	334.5	354.5	330.4	322.9	328.1	342.7	345.8	336.7	335.2	343.7	6.9	339.8	338.0	339.6	337.5
16	325.0	330.8	347.5	312.8	311.3	325.2	318.4	325.5	330.0	330.6	325.3	335.4	1.2	19.7	351.0	323.6	318.2	321.0	324.2	330.1	318.1	313.4	270.6	247.4
17	195.4	184.5	200.2	255.1	207.5	192.8	195.8	198.4	213.9	201.0	222.2	233.9	169.4	88.7	2.5	4.0	152.6	170.4	162.6	149.3	141.4	135.1	124.9	123.1
18	126.7	126.7	125.9	126.3	126.2	125.2	121.8	119.6	121.1	121.6	120.3	111.1	110.6	105.2	93.2	55.5	75.9	52.7	10.2	40.1	3.5	2.3	296.1	285.8
19	312.5	327.6	345.4	5.0	1.8	92.2	6.1	323.0	311.5	331.2	332.2	333.6	339.0	348.6	349.4	332.4	324.9	248.8	327.6	322.8	350.6	46.5	352.9	7.4
20	230.2	332.0	208.2	204.4	207.4	2.6	18.4	42.0	21.3	176.3	319.7	18.4	18.2	45.2	28.8	2.4	21.3	317.9	197.3	179.0	14.9	209.5	351.9	216.7
21	331.7	250.6	260.7	343.8	339.1	21.5	323.2	323.9	332.5	5.2	4.8	340.9	340.8	332.5	338.5	353.6	351.0	354.8	347.3	339.5	336.7	330.9	329.4	331.5
22	331.2	328.7	330.4	330.8	322.8	326.3	328.8	337.5	346.7	336.1	338.1	332.0	331.8	340.9	341.3	350.6	1.3	341.9	335.1	334.6	343.0	337.4	336.0	339.1
23	312.9	316.9	318.2	341.1	1.8	341.5	344.2	331.2	323.7	335.9	332.7	335.3	333.1	330.3	330.5	326.0	318.6	324.3	306.4	289.2	275.7	264.9	268.8	278.6
24	274.6	290.3	294.0	297.3	294.4	298.1	310.1	324.3	326.4	294.0	285.8	289.8	254.4	206.5	239.1	237.2	237.1	238.0	232.2	226.0	247.0	213.0	212.9	220.9
25	155.6	149.5	135.0	142.9	145.4	167.3	232.3	177.8	145.3	138.5	148.7	153.3	134.4	139.7	140.6	128.8	214.0	222.9	145.6	181.5	315.4	192.2	238.9	304.0
26	294.9	326.4	3.7	51.3	8.8	349.3	332.2	333.3	336.4	329.4	330.2	335.2	328.3	337.8	343.9	335.2	332.9	352.2	348.0	342.0	338.7	340.4	337.4	341.3
27	336.8	331.8	335.2	338.9	335.2	337.9	333.3	329.4	345.1	332.8	301.6	328.0	320.2	317.5	315.6	337.2	351.2	347.4	336.7	304.0	341.1	218.5	244.5	203.9
28	199.5	210.5	214.4	175.0	254.1	172.5	116.1	151.3	150.7	157.4	157.3	153.3	155.6	158.6	153.1	148.1	140.8	147.8	196.9	230.0	209.5	214.0	214.8	187.1
29	182.0	270.4	214.1	229.0	182.7	187.1	203.6	203.4	236.8	228.0	229.0	230.7	208.7	177.3	165.8	186.7	169.9	169.3	179.0	158.5	150.1	139.0	138.9	141.7
30	140.2	137.8	136.5	138.3	134.1	154.5	230.5	250.8	359.6	202.0	172.1	177.8	116.1	202.6	106.5	118.2	148.2	113.8	163.4	158.9	203.7	176.0	191.1	191.2
31	202.0	222.4	231.8	291.6	206.5	210.5	212.6	200.6	222.3	215.0	228.4	211.1	198.4	295.5	257.9	48.8	245.2	207.1	230.9	190.3	196.5	0.9	207.7	229.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	234.5	3.6	290.9	217.0	224.3	92.6	309.5	303.6	323.2	326.8	288.6	325.8	23.6	13.9	42.0	35.0	32.3	39.1	327.7	343.4	337.2	341.3	346.5	330.0
2	329.0	323.8	333.2	318.7	338.3	339.5	331.9	324.9	326.2	344.4	339.8	332.3	336.6	348.3	354.0	356.9	338.1	340.0	338.6	337.8	345.0	340.9	343.8	338.8
3	334.8	333.6	337.5	335.7	335.8	335.6	336.5	338.2	329.7	331.8	332.2	332.2	334.0	333.8	334.8	317.4	310.2	313.9	323.5	331.6	334.6	350.5	343.0	348.3
4	338.9	348.9	352.0	353.3	328.2	321.9	340.4	343.2	331.8	343.6	317.5	331.4	335.8	336.6	342.7	338.3	328.6	324.4	323.0	353.7	339.3	346.7	336.3	307.2
5	298.6	338.1	333.0	308.5	291.7	293.9	299.9	307.8	312.4	299.0	293.4	247.7	350.7	333.3	343.8	191.4	309.8	328.1	211.0	290.7	293.3	298.6	273.6	309.9
6	324.9	319.9	328.3	320.9	334.9	338.0	295.9	316.6	179.3	242.8	193.3	197.9	250.2	234.8	344.3	328.5	306.2	300.0	236.5	328.5	336.0	1.2	330.9	329.5
7	321.4	352.0	345.8	316.0	295.1	325.0	337.1	298.5	346.5	23.2	326.5	37.4	281.4	6.9	50.0	331.1	357.4	216.4	224.5	190.8	201.4	178.0	188.5	211.6
8	214.5	207.0	202.5	212.6	190.9	194.9	176.6	145.0	142.8	123.4	75.9	146.1	142.9	130.9	131.2	127.5	119.3	106.0	114.6	116.1	111.8	114.5	102.6	95.5
9	98.9	94.4	93.8	102.9	113.2	113.4	111.2	117.6	107.7	93.3	87.0	83.6	87.8	81.3	102.9	119.6	118.1	103.7	96.0	120.1	122.7	124.8	124.2	126.4
10	131.2	127.7	111.9	107.2	100.4	78.8	72.8	55.3	16.5	3.9	42.6	59.6	53.7	25.2	25.1	35.6	85.9	135.0	146.1	151.3	135.9	125.5	125.3	120.4
11	118.6	117.1	105.8	104.8	121.7	115.7	117.1	115.4	112.1	123.6	115.7	126.5	151.9	149.3	184.4	219.0	259.8	240.0	212.8	238.0	213.9	208.9	254.2	239.4
12	216.7	236.6	219.0	229.7	213.6	223.0	228.4	191.9	192.7	230.1	236.5	241.9	233.8	233.5	233.5	244.3	239.9	245.1	223.9	211.9	199.6	185.6	195.8	202.0
13	194.6	180.6	200.4	156.0	139.5	133.8	135.6	145.1	146.8	138.8	145.7	148.7	146.1	135.0	137.0	141.7	140.7	178.9	191.0	187.3	185.5	179.2	176.7	179.3
14	186.7	187.1	183.8	174.1	168.4	168.1	173.1	174.6	179.2	171.3	198.6	222.1	234.4	197.7	209.4	225.4	213.8	198.0	195.7	199.1	204.8	209.4	205.1	205.0
15	205.1	228.0	224.4	219.4	214.8	200.9	202.4	205.8	169.0	112.6	69.5	150.6	135.2	127.7	130.4	138.1	140.7	134.3	129.2	123.9	127.4	130.6	129.5	129.7
16	134.7	134.8	142.3	154.0	161.4	186.9	194.7	224.7	233.1	237.3	238.5	224.9	232.5	222.8	202.3	215.8	179.5	201.1	202.3	202.5	199.5	169.0	170.0	183.9
17	175.3	188.7	197.4	212.0	261.3	166.3	203.8	198.1	208.1	218.6	198.4	344.6	200.3	312.4	319.6	332.9	99.0	133.1	105.2	119.5	110.4	339.7	323.1	323.0
18	335.0	331.0	9.0	354.8	352.6	10.8	346.2	342.3	316.9	346.4	337.4	342.2	330.7	339.2	355.6	351.9	357.7	6.4	338.1	329.9	341.0	323.1	330.4	343.8
19	344.6	337.3	338.3	326.4	328.1	13.0	29.2	349.6	345.7	343.9	339.7	344.2	336.7	344.1	352.9	340.6	338.1	342.0	338.7	345.1	342.3	343.7	341.1	340.8
20	337.5	328.6	326.4	329.2	332.0	344.0	337.9	333.5	334.3	328.4	333.7	335.1	344.7	346.1	343.3	343.1	342.1	341.4	345.0	343.0	347.7	347.6	352.4	344.3
21	346.1	350.4	348.7	333.6	335.3	341.9	344.6	329.4	337.1	328.7	166.9	342.5	199.8	307.8	297.4	8.3	327.5	304.8	196.9	159.2	344.6	351.0	4.6	345.1
22	160.8	30.2	347.7	311.3	358.3	207.9	184.2	263.8	201.9	211.9	208.6	202.0	231.8	328.2	30.7	347.0	216.2	254.0	275.6	204.7	290.1	228.7	207.1	262.4
23	214.0	230.7	225.5	233.3	218.2	211.4	216.9	243.4	225.1	261.3	245.3	256.6	341.2	137.9	136.5	134.8	139.4	130.4	132.9	126.4	120.4	124.6	120.1	116.8
24	113.8	115.2	115.2	115.8	118.5	118.8	112.6	110.4	114.1	116.9	120.6	121.9	126.6	121.1	128.0	130.5	131.3	135.6	138.3	157.4	156.0	187.1	198.1	195.0
25	210.7	207.9	212.3	211.4	204.6	206.3	207.2	193.5	202.7	202.8	212.6	204.7	202.2	285.7	301.1	299.8	301.6	299.0	304.8	295.3	306.9	317.3	313.8	349.2
26	331.5	331.2	320.6	330.8	330.5	335.1	341.5	333.9	328.2	333.2	333.1	334.7	331.2	341.2	341.2	337.6	339.9	346.7	344.2	342.6	342.8	344.2	338.1	350.8
27	332.3	331.6	302.5	314.2	245.6	196.5	197.2	128.2	279.0	268.3	308.8	207.2	281.1	304.6	346.9	260.8	309.4	342.4	302.1	331.0	337.0	339.6	5.5	312.1
28	307.8	300.2	309.6	309.2	304.8	310.7	328.9	316.4	312.0	341.1	319.2	312.4	305.8	307.5	320.3	321.2	343.3	16.3	5.2	28.1	63.9	22.2	18.0	10.3
29	33.3	342.0	332.8	329.9	329.8	329.3	322.6	321.5	321.7	329.6	333.4	335.0	327.3	332.2	338.3	333.6	323.1	329.5	324.7	329.5	332.2	329.9	331.8	324.7
30	327.7	315.3	326.1	317.3	326.7	330.2	329.9	333.2	330.8	326.6	334.9	334.9	337.9	337.0	325.1	334.7	335.1	338.3	358.5	346.9	328.1	337.0	298.7	344.4

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	315.9	307.1	308.5	262.4	316.0	271.8	156.4	17.9	123.8	45.4	32.3	50.5	279.6	135.2	7.0	351.2	1.1	133.3	1.7	149.3	119.9	136.0	133.1	150.1
2	213.1	198.1	187.5	151.4	135.8	110.9	121.4	127.9	130.2	127.3	128.6	120.1	114.0	119.1	118.7	115.9	119.2	125.1	129.1	126.9	122.5	121.2	121.1	124.1
3	120.1	125.1	122.4	120.0	116.1	117.4	123.2	121.6	116.2	113.6	117.6	117.9	118.0	114.6	115.5	116.9	115.5	118.0	120.0	122.0	125.3	126.8	126.4	127.7
4	127.6	124.6	129.7	139.7	144.3	141.4	142.6	145.4	139.1	142.0	146.1	132.3	124.1	125.3	126.6	127.6	125.9	127.8	136.5	142.0	137.0	137.8	138.5	144.2
5	148.7	150.2	143.8	134.2	135.1	139.0	136.8	133.9	128.6	129.1	128.6	129.5	131.4	131.9	129.0	127.3	127.8	127.2	130.4	134.3	134.8	113.8	113.3	124.3
6	123.6	132.3	124.2	125.7	129.1	132.8	124.6	115.8	113.5	109.4	114.8	109.3	1.1	45.3	5.1	227.3	134.2	234.4	342.5	198.3	318.3	312.8	325.4	28.2
7	339.2	355.0	359.3	340.3	352.6	333.5	349.7	348.7	351.4	354.5	11.6	0.0	34.1	325.1	311.6	303.2	308.6	341.1	201.0	281.7	357.5	336.9	337.1	336.7
8	344.5	273.7	148.5	38.0	1.2	9.5	21.7	17.4	50.7	54.7	42.9	35.4	30.6	38.8	53.5	43.9	36.8	22.3	3.9	4.3	7.4	10.1	20.8	20.5
9	21.4	0.4	333.1	328.5	311.4	350.9	349.5	344.0	340.0	321.3	200.1	357.2	4.2	195.6	165.4	23.8	17.5	203.8	21.3	269.4	187.3	239.5	222.0	216.0
10	206.4	193.6	197.8	206.5	205.9	195.4	199.5	202.9	207.5	215.3	224.5	231.7	231.1	243.4	254.6	262.9	248.0	247.7	251.3	238.1	264.3	282.9	285.9	288.4
11	288.5	287.6	310.8	288.4	253.6	218.1	253.5	212.8	204.3	185.2	221.7	237.0	243.3	261.4	286.3	315.7	342.2	325.1	340.4	328.7	312.8	310.4	312.9	326.9
12	337.5	355.1	293.6	259.9	332.3	308.9	322.1	226.2	199.1	237.9	219.9	209.7	71.6	192.1	20.5	217.7	8.9	1.9	313.4	310.1	330.0	345.0	344.5	344.2
13	330.7	335.4	335.1	340.5	346.5	334.9	345.1	349.2	342.3	19.9	69.0	349.1	201.6	215.4	330.6	313.9	323.2	190.9	187.7	338.4	194.3	214.2	211.5	209.4
14	215.5	218.4	180.4	198.8	109.9	222.6	195.1	194.0	178.1	147.3	145.1	152.1	151.7	152.4	145.2	146.3	153.4	147.3	147.7	146.4	144.3	136.3	138.3	138.7
15	137.3	133.8	145.8	139.0	141.8	143.7	142.6	145.9	139.5	146.2	159.7	161.2	160.7	160.5	150.2	202.7	165.6	194.4	212.6	331.5	348.1	220.9	229.2	297.9
16	299.6	253.7	207.8	152.4	47.7	210.8	161.3	161.3	228.0	141.0	187.4	140.8	144.3	154.5	159.8	154.5	152.8	154.2	156.2	153.9	152.0	152.5	152.3	148.5
17	142.8	141.6	132.4	134.7	137.3	135.7	133.4	132.3	136.3	134.4	134.0	134.1	135.0	135.9	136.1	136.8	138.9	136.1	136.8	133.6	133.5	134.7	144.2	140.1
18	138.3	138.9	135.0	132.6	134.7	135.3	132.0	129.6	130.6	127.6	127.0	122.1	117.0	118.7	123.4	124.1	121.5	123.0	121.9	121.8	120.1	120.1	121.1	121.3
19	122.1	119.9	116.3	114.9	115.1	112.3	116.5	117.2	118.8	118.5	113.9	114.7	107.2	86.2	83.5	71.1	46.9	66.6	51.9	49.2	54.1	57.1	49.6	23.5
20	49.1	68.6	55.3	66.9	70.6	76.0	70.8	34.7	63.9	25.6	111.9	226.2	156.1	74.8	97.0	109.2	228.4	184.3	140.8	206.4	202.8	213.0	236.5	245.4
21	204.5	176.5	221.8	247.6	245.1	187.0	180.3	61.0	3.9	322.2	35.1	37.3	333.5	220.2	287.1	257.4	3.2	203.3	209.2	211.5	198.7	203.0	221.5	216.7
22	226.8	218.1	179.0	173.8	167.3	138.2	136.4	147.7	162.3	163.7	159.1	161.3	202.2	194.2	177.1	175.7	176.5	175.2	152.7	155.3	156.1	156.0	155.8	147.0
23	137.8	134.5	133.2	127.6	127.6	129.4	135.4	154.2	247.4	286.1	280.7	269.9	259.1	254.5	259.8	262.7	260.3	256.5	262.4	256.4	257.4	258.2	259.1	269.6
24	282.4	277.6	281.4	267.0	228.1	267.6	294.3	276.6	273.6	262.5	266.1	280.2	292.4	284.3	313.3	315.8	314.0	206.7	198.2	211.8	176.1	143.3	145.9	213.6
25	185.0	134.9	138.7	139.5	133.4	132.9	131.2	128.9	136.9	137.7	147.1	151.3	150.0	151.7	153.5	158.4	262.0	296.1	301.1	307.4	308.9	314.7	314.3	318.0
26	317.5	315.7	316.1	315.6	320.1	319.5	317.2	315.6	313.2	305.5	304.3	310.4	309.8	307.6	307.3	303.1	309.0	302.9	299.6	303.2	306.3	304.8	314.2	321.8
27	328.1	328.2	335.2	343.4	344.9	345.7	345.2	346.3	342.2	340.3	339.4	342.7	339.0	341.6	342.2	339.2	339.8	342.9	342.1	341.4	341.8	340.5	335.6	338.2
28	342.1	348.0	342.3	338.3	347.5	346.1	345.6	342.9	0.1	352.6	343.9	343.7	341.3	338.9	351.2	355.4	343.5	345.1	349.4	346.2	339.7	335.9	338.0	341.3
29	330.7	328.4	339.3	340.9	3.7	346.5	335.4	332.6	347.6	343.4	335.7	335.6	318.8	324.0	317.5	311.4	302.7	316.8	319.0	328.2	327.8	337.4	314.9	332.0
30	320.6	327.2	310.7	317.9	302.6	304.9	311.4	320.8	336.7	341.7	304.9	312.5	338.5	344.4	1.9	340.5	328.5	333.4	17.6	14.1	334.0	356.8	15.4	284.9
31	150.4	352.6	344.5	67.3	54.5	9.9	354.9	16.1	10.1	25.6	341.8	332.5	322.6	332.6	333.1	332.0	327.1	324.9	319.3	317.2	342.9	85.3	97.6	131.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.8	13.4	7.0	10.3	11.1	14.2	27.1	24.2	20.2	27.0	23.1	8.8	13.1	11.5	13.3	37.0	41.1	49.7	37.0	18.6	33.7	46.8	11.8	27.3	49.7	7.0	22.4
2	29.4	8.3	10.7	18.9	26.7	23.3	26.0	11.7	17.6	74.7	29.4	76.2	12.9	9.0	45.9	41.8	11.8	40.5	58.7	17.7	58.5	15.6	47.1	46.1	76.2	8.3	31.6
3	45.6	43.0	23.3	25.0	57.6	48.8	27.2	9.5	44.6	42.5	61.2	12.7	83.5	35.8	16.8	36.1	44.8	33.7	38.5	16.4	8.4	15.1	19.2	19.7	83.5	8.4	33.7
4	23.9	71.1	33.5	61.5	46.7	68.3	18.9	41.1	20.5	70.9	38.1	25.9	32.2	25.5	9.9	13.6	11.9	35.9	40.9	14.0	12.3	23.2	33.4	18.8	71.1	9.9	33.0
5	19.4	11.7	8.5	4.6	5.2	4.6	3.7	5.5	4.1	5.2	5.9	5.2	4.2	4.7	4.0	4.5	3.4	2.9	2.8	4.4	3.9	3.2	3.4	2.9	19.4	2.8	5.3
6	3.9	4.9	3.9	6.1	4.8	9.4	9.3	5.6	5.3	5.0	3.6	4.0	4.9	6.2	5.2	3.7	4.4	3.7	4.9	3.8	4.2	5.4	4.5	4.8	9.4	3.6	5.1
7	25.0	43.3	54.6	46.9	26.1	4.8	5.7	8.7	28.3	41.6	24.4	26.1	11.2	13.7	8.9	14.7	12.6	13.5	7.1	12.6	12.0	5.4	8.7	13.1	54.6	4.8	19.6
8	7.8	78.8	55.5	53.4	59.7	29.5	65.2	44.6	57.5	35.2	32.5	81.4	42.8	42.3	18.2	67.5	44.9	56.4	21.5	64.7	36.2	46.6	57.8	12.0	81.4	7.8	46.3
9	45.7	34.1	12.7	9.4	7.7	7.8	7.7	6.7	31.1	8.4	8.1	13.6	39.2	12.2	8.3	3.9	4.2	3.7	4.1	3.4	2.9	3.2	3.3	4.4	45.7	2.9	11.9
10	3.5	3.4	2.9	4.3	3.3	4.1	4.4	3.5	3.8	11.7	4.1	5.4	3.8	4.2	4.2	6.0	5.6	10.6	4.2	5.5	4.7	5.3	5.3	7.0	11.7	2.9	5.0
11	5.2	7.3	7.5	2.8	4.4	3.9	4.6	4.2	5.3	4.0	4.2	6.1	8.0	5.0	3.6	4.0	4.9	4.5	4.7	5.4	4.9	7.3	9.8	27.4	27.4	2.8	6.2
12	40.6	37.1	14.8	13.9	9.4	23.0	20.5	21.3	17.5	14.0	14.5	21.5	17.9	39.8	74.2	16.2	8.1	8.3	5.4	6.0	5.1	6.7	9.3	7.0	74.2	5.1	18.8
13	4.4	4.8	6.3	9.9	5.2	5.3	3.2	3.0	3.7	4.6	5.0	4.8	6.4	6.0	6.0	15.0	6.2	8.5	9.1	6.2	9.5	72.2	35.5	38.0	72.2	3.0	11.6
14	26.0	17.0	77.3	37.1	71.3	60.3	41.9	43.7	38.5	56.1	3.9	4.9	8.2	7.3	4.6	4.2	3.9	3.9	3.6	4.2	5.1	6.9	4.3	4.8	77.3	3.6	22.5
15	4.2	4.1	4.8	5.0	5.2	4.5	4.5	7.0	4.3	4.3	4.8	3.8	10.5	6.4	4.0	4.5	5.1	8.3	6.0	8.6	6.1	4.4	3.8	7.2	10.5	3.8	5.5
16	33.3	39.3	10.3	4.7	6.4	6.3	4.2	3.6	3.8	5.1	8.8	7.0	6.1	14.7	14.8	12.9	10.1	12.9	29.7	15.7	19.0	40.3	46.9	35.7	46.9	3.6	16.3
17	20.9	27.1	4.1	4.7	5.6	4.9	3.9	4.1	4.1	4.1	6.7	4.9	4.2	4.6	5.9	4.5	5.0	5.2	7.7	6.1	4.1	4.5	5.2	5.6	27.1	3.9	6.6
18	4.5	7.3	7.1	6.4	7.3	8.7	28.8	29.7	30.0	36.1	51.6	10.4	7.3	8.3	51.0	55.3	34.8	32.0	25.0	28.8	65.8	45.1	17.8	4.0	65.8	4.0	25.1
19	4.9	4.5	5.3	5.2	3.9	6.7	5.1	5.6	4.0	4.5	4.6	4.6	4.6	4.7	5.0	4.5	4.5	4.1	4.3	4.8	5.0	5.0	4.5	4.8	6.7	3.9	4.8
20	4.2	5.3	4.4	5.8	5.0	4.8	4.1	4.0	4.4	5.7	4.1	3.6	3.6	3.6	3.8	44.5	36.6	10.2	39.2	85.1	82.8	26.7	9.9	4.7	85.1	3.6	16.9
21	6.1	6.1	10.8	68.1	50.1	4.0	5.6	5.5	4.4	5.2	4.4	4.5	4.5	4.6	4.5	5.0	6.1	5.4	6.8	5.7	5.2	5.7	6.1	6.8	68.1	4.0	10.1
22	5.9	12.0	6.6	5.5	7.3	6.7	6.0	5.4	6.8	6.0	10.2	6.0	6.5	5.0	7.5	6.6	8.6	7.6	9.6	70.7	32.2	18.0	24.8	9.7	70.7	5.0	12.1
23	5.4	4.5	6.0	4.1	5.0	3.9	5.1	5.3	7.1	5.8	4.1	5.8	6.5	12.2	7.1	4.2	6.1	4.6	3.5	6.2	27.5	23.2	65.7	21.6	65.7	3.5	10.4
24	89.7	72.6	26.4	34.2	64.9	95.8	29.1	21.8	42.4	11.7	9.0	6.6	4.5	4.8	4.8	5.7	3.6	4.1	4.3	3.8	7.1	5.4	3.6	14.2	95.8	3.6	23.8
25	35.7	34.1	14.1	43.9	20.9	5.5	4.0	8.8	7.9	8.1	5.0	6.9	12.1	9.0	6.8	8.7	7.3	5.7	10.1	6.7	10.7	6.7	9.5	13.0	43.9	4.0	12.5
26	7.7	4.0	4.5	5.3	4.5	24.1	10.1	7.2	61.5	57.7	44.7	38.2	21.7	92.6	70.1	60.8	44.3	71.5	51.5	90.9	78.8	47.1	35.1	6.4	92.6	4.0	39.2
27	4.3	3.3	4.1	5.9	4.9	4.2	3.4	5.8	6.1	4.1	3.7	3.6	3.6	3.9	4.7	4.5	3.9	4.3	4.4	4.7	5.4	5.1	5.1	4.7	6.1	3.3	4.5
28	4.5	4.5	3.5	4.4	3.9	3.9	4.2	4.7	3.7	4.7	5.6	6.4	6.1	24.8	9.8	3.4	3.8	7.7	42.5	45.2	14.3	54.5	59.7	61.3	61.3	3.4	16.1
29	79.5	27.6	6.8	14.2	7.6	29.1	57.0	55.0	15.9	37.4	78.8	51.8	45.4	28.6	16.7	54.0	48.0	13.2	82.0	59.5	17.3	16.1	37.4	29.6	82.0	6.8	37.9
30	44.5	43.2	44.1	7.8	94.7	7.3	73.1	87.1	9.9	4.1	6.1	7.9	6.8	5.5	4.9	5.9	5.0	8.8	34.1	15.3	21.9	7.4	8.7	12.0	94.7	4.1	23.6
31	16.3	21.3	4.2	79.0	10.1	12.8	62.8	36.1	74.7	5.6	17.2	7.9	8.3	67.6	52.9	47.5	7.2	17.6	60.6	76.3	34.4	36.4	8.8	17.9	79.0	4.2	32.6
Max.	**89.7**	**78.8**	**77.3**	**79.0**	**94.7**	**95.8**	**73.1**	**87.1**	**74.7**	**74.7**	**78.8**	**81.4**	**83.5**	**92.6**	**74.2**	**67.5**	**48.0**	**71.5**	**82.0**	**90.9**	**82.8**	**72.2**	**65.7**	**61.3**	**95.8**		
Min.	**3.5**	**3.3**	**2.9**	**2.8**	**3.3**	**3.9**	**3.2**	**3.0**	**3.7**	**4.0**	**3.6**	**3.6**	**3.6**	**3.6**	**3.6**	**3.4**	**3.4**	**2.9**	**2.8**	**3.4**	**2.9**	**3.2**	**3.3**	**2.9**		**2.8**	
Avg.	**21.4**	**22.6**	**15.7**	**19.6**	**20.8**	**17.4**	**18.6**	**17.1**	**19.0**	**19.7**	**17.0**	**15.4**	**14.5**	**16.9**	**16.0**	**19.4**	**14.4**	**16.1**	**21.4**	**23.1**	**20.6**	**19.8**	**19.6**	**15.9**			**18.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	48.0	0.1	61.1	13.6	64.0	14.2	27.1	8.2	0.6	42.1	10.6	10.2	1.2	1.1	6.3	47.6	22.2	53.1	37.0	25.4	69.3	24.7	15.5	27.4	69.3	0.1	26.3
2	67.4	74.7	34.1	21.8	9.7	48.2	67.0	60.8	12.9	32.8	18.8	21.1	3.1	4.3	4.5	3.9	4.0	4.3	5.5	7.4	8.5	5.5	7.4	5.2	74.7	3.1	22.2
3	4.7	15.4	8.8	10.6	7.7	6.0	5.4	5.1	20.8	11.9	8.9	9.4	9.2	37.1	25.0	58.2	46.5	51.0	26.1	50.0	18.8	23.3	40.6	11.1	58.2	4.7	21.3
4	32.0	41.5	7.9	34.4	46.6	51.0	65.6	9.3	52.1	14.9	23.6	48.5	20.6	54.5	30.9	49.3	9.2	53.5	27.7	46.5	11.1	19.5	51.7	14.6	65.6	7.9	34.0
5	15.1	42.0	21.9	51.3	32.3	17.5	26.4	65.0	27.3	85.8	38.8	19.7	68.3	27.6	88.9	29.9	11.0	32.8	14.7	23.0	27.7	14.8	8.8	42.0	88.9	8.8	34.7
6	45.8	51.9	35.6	29.9	13.3	13.9	9.7	31.8	5.8	7.8	62.9	24.2	12.3	9.6	49.2	20.4	15.9	57.9	15.7	45.8	39.2	17.2	36.4	32.8	62.9	5.8	28.5
7	11.8	21.1	39.4	12.5	16.3	11.5	43.4	42.5	74.7	12.3	19.4	34.0	33.1	19.1	39.2	44.2	31.8	52.0	40.8	44.5	67.3	77.7	59.8	11.6	77.7	11.5	35.8
8	32.1	62.7	62.1	30.7	30.5	42.3	29.7	34.9	55.8	83.8	24.0	21.4	73.1	77.1	65.3	27.2	38.0	40.5	25.4	13.3	23.7	39.7	13.6	10.4	83.8	10.4	39.9
9	14.9	8.9	5.9	4.5	4.5	4.4	4.0	11.3	28.0	35.0	16.1	24.8	57.3	39.9	44.0	52.1	21.1	21.1	66.1	45.6	70.6	10.1	9.0	19.3	70.6	4.0	25.8
10	23.6	8.5	22.5	12.2	38.1	29.0	16.8	25.0	34.9	78.9	49.1	30.4	37.4	42.5	13.4	69.0	73.1	77.7	16.6	23.2	7.7	6.3	46.3	19.2	78.9	6.3	33.4
11	30.8	42.2	59.3	41.3	45.2	19.7	42.6	34.7	68.3	12.5	22.2	34.7	2.5	26.9	76.6	77.3	39.0	21.5	33.0	26.3	52.3	37.3	70.5	73.2	77.3	2.5	41.2
12	7.4	43.6	55.0	37.5	43.1	42.4	54.3	58.6	45.8	74.8	21.9	29.7	45.1	54.0	23.4	54.3	14.9	39.4	28.9	25.7	25.6	44.3	66.8	79.3	79.3	7.4	42.3
13	5.4	3.4	7.1	8.8	5.0	4.1	5.7	4.8	4.9	4.5	4.8	5.3	5.4	5.2	4.8	4.4	5.2	4.8	4.5	4.2	5.5	5.2	4.5	5.0	8.8	3.4	5.1
14	4.4	4.3	4.2	4.3	4.0	4.2	4.0	23.0	9.4	18.2	9.4	6.0	7.2	18.1	14.1	12.1	16.2	10.2	7.3	13.8	9.7	9.3	5.6	8.6	23.0	4.0	9.5
15	6.4	8.8	7.6	7.1	6.5	9.8	8.4	23.4	12.0	31.6	40.3	56.8	43.1	24.9	56.2	43.4	14.6	62.8	64.5	52.3	43.9	36.9	13.7	7.6	64.5	6.4	28.4
16	4.5	4.2	3.6	4.6	4.1	4.1	3.9	4.4	4.4	5.3	4.6	4.2	5.0	3.1	3.0	3.5	5.7	10.6	10.8	5.9	6.8	6.0	6.9	14.2	14.2	3.0	5.6
17	9.1	5.4	5.9	6.7	3.8	5.6	4.7	3.9	5.9	7.3	7.4	29.2	7.2	8.4	12.1	11.2	19.7	5.7	4.7	4.6	4.4	4.6	4.5	4.6	29.2	3.8	7.8
18	4.9	5.3	5.0	6.3	5.7	5.8	4.9	5.9	5.3	7.7	5.2	4.9	4.8	5.4	4.8	6.0	5.4	5.4	4.7	4.9	3.9	4.9	4.7	4.2	7.7	3.9	5.3
19	5.3	4.2	16.8	35.9	8.6	19.7	63.4	20.6	28.5	10.2	12.3	7.5	4.4	4.9	7.2	5.2	10.4	9.3	11.8	7.7	16.3	8.0	5.7	11.7	63.4	4.2	14.0
20	5.0	4.8	4.4	4.7	5.2	5.4	5.1	4.9	5.1	5.0	5.2	7.5	5.2	3.8	4.4	4.7	13.9	9.2	26.5	7.6	7.4	14.2	16.0	8.4	26.5	3.8	7.6
21	3.8	18.4	10.0	14.8	7.2	5.5	13.2	12.3	8.0	13.7	10.4	6.9	5.9	8.0	8.2	17.1	12.5	29.9	18.3	32.6	39.9	53.9	6.7	6.0	53.9	3.8	15.1
22	12.7	11.2	11.2	4.5	13.9	5.3	10.2	12.9	5.5	5.1	6.4	6.3	4.6	7.1	4.5	4.5	5.3	5.8	5.0	5.4	4.5	4.5	3.6	5.9	13.9	3.6	6.9
23	5.0	5.4	13.8	8.7	94.1	50.2	57.4	54.9	47.0	10.9	34.3	12.6	28.6	24.7	42.3	14.8	10.9	51.8	55.2	31.9	27.5	6.8	35.0	24.6	94.1	5.0	31.2
24	20.4	36.0	8.8	7.7	8.2	10.0	17.6	9.8	12.4	6.7	7.1	5.1	4.1	4.3	12.4	10.5	12.0	17.9	5.3	13.0	6.9	6.2	4.5	3.6	36.0	3.6	10.4
25	13.6	11.0	10.7	5.8	8.0	6.7	7.2	8.6	4.5	5.4	8.1	14.3	45.5	49.4	49.9	40.0	20.0	35.6	52.7	48.9	44.2	25.7	17.6	62.7	62.7	4.5	24.8
26	34.4	20.6	54.6	64.6	31.2	42.6	22.6	20.5	37.3	36.8	73.9	48.4	32.7	48.6	32.3	34.2	20.3	13.1	14.7	8.8	20.1	14.5	12.2	8.1	73.9	8.1	31.1
27	14.2	30.3	13.2	12.4	10.9	30.8	47.5	48.5	36.1	53.0	27.6	42.9	23.4	66.4	75.1	53.2	24.0	21.3	26.9	24.3	38.8	15.8	29.5	34.0	75.1	10.9	33.3
28	40.3	20.6	51.9	36.5	35.0	28.4	53.6	43.9	53.0	37.6	9.8	50.4	40.5	13.3	27.0	89.0	11.8	10.0	59.5	24.6	58.4	23.8	63.7	8.4	89.0	8.4	37.1
29	23.2	57.6	25.3	35.1	56.2	55.7	24.4	22.5	11.1	30.1	64.9	31.0	24.2	8.8	25.8	72.7	27.0	19.4	31.7	9.9	5.6	6.7	6.6	8.1	72.7	5.6	28.5
Max.	**67.4**	**74.7**	**62.1**	**64.6**	**94.1**	**55.7**	**67.0**	**65.0**	**74.7**	**85.8**	**73.9**	**56.8**	**73.1**	**77.1**	**88.9**	**89.0**	**73.1**	**77.7**	**66.1**	**52.3**	**70.6**	**77.7**	**70.5**	**79.3**	**94.1**		
Min.	**3.8**	**0.1**	**3.6**	**4.3**	**3.8**	**4.1**	**3.9**	**3.9**	**0.6**	**4.5**	**4.6**	**4.2**	**1.2**	**1.1**	**3.0**	**3.5**	**4.0**	**4.3**	**4.5**	**4.2**	**3.9**	**4.5**	**3.6**	**3.6**		**0.1**	
Avg.	**18.8**	**22.9**	**23.0**	**19.6**	**22.7**	**20.5**	**25.7**	**24.6**	**24.7**	**26.9**	**22.4**	**22.3**	**22.6**	**24.1**	**29.3**	**33.1**	**19.4**	**28.5**	**25.6**	**23.3**	**26.4**	**19.6**	**23.0**	**19.7**			**23.7**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.6	9.0	9.0	6.9	7.2	8.9	18.2	28.0	45.6	42.5	20.8	18.3	12.9	8.3	4.9	3.7	3.4	5.3	7.3	9.8	11.0	7.9	6.2	5.2	45.6	3.4	13.0
2	5.6	5.0	4.6	5.2	4.6	3.9	4.8	4.9	6.8	5.0	5.4	5.6	5.1	4.8	5.7	7.3	6.7	9.7	5.5	4.2	4.4	3.6	3.9	4.5	9.7	3.6	5.3
3	3.8	7.3	6.5	4.6	7.3	4.6	4.1	4.7	4.2	4.3	4.4	4.5	4.7	5.1	5.2	4.9	5.3	4.9	6.1	6.7	8.2	4.9	5.4	4.2	8.2	3.8	5.2
4	4.1	5.0	3.8	4.5	5.2	4.9	4.5	4.8	5.1	4.7	4.6	4.4	4.6	5.0	4.5	4.7	4.4	4.5	4.2	4.4	4.5	4.6	4.3	4.1	5.2	3.8	4.6
5	4.5	4.7	4.3	5.4	5.2	4.9	6.8	5.9	5.8	4.9	4.9	4.9	4.6	4.6	4.3	5.7	4.9	5.0	5.1	4.8	4.3	5.0	4.8	4.8	6.8	4.3	5.0
6	4.4	4.3	4.5	5.0	5.2	7.4	3.8	3.9	5.5	5.4	5.2	3.3	4.0	4.3	4.3	4.6	4.2	4.8	3.8	23.2	32.9	9.6	10.3	12.2	32.9	3.3	7.3
7	8.4	10.4	15.7	18.8	32.0	43.0	24.8	69.5	45.3	13.7	16.7	24.3	36.5	59.9	22.9	36.3	6.1	5.7	7.9	8.1	10.3	6.4	12.9	12.6	69.5	5.7	22.8
8	19.6	12.6	5.2	5.8	27.4	30.2	57.9	6.7	3.5	6.3	8.1	4.8	4.3	11.3	11.4	10.2	6.8	9.8	6.4	4.8	6.5	9.3	8.1	9.2	57.9	3.5	11.9
9	4.7	8.4	7.6	5.2	7.0	16.4	15.4	10.1	4.5	11.7	13.2	12.8	27.6	40.0	40.2	74.4	11.4	25.8	34.4	22.5	37.9	23.1	22.7	67.8	74.4	4.5	22.7
10	42.7	8.2	4.8	15.0	17.7	8.7	13.4	18.4	5.7	8.1	6.7	6.2	9.2	13.1	83.0	12.3	15.5	24.9	45.5	7.3	5.7	5.6	5.0	7.5	83.0	4.8	16.3
11	5.7	4.8	6.2	5.0	8.3	6.5	5.5	5.2	6.8	16.7	23.5	13.3	6.6	13.6	14.2	16.3	43.8	58.2	86.0	59.5	26.4	34.1	49.2	73.3	86.0	4.8	24.5
12	66.9	47.5	6.6	9.9	12.1	36.5	41.6	37.2	15.8	61.2	23.5	18.2	26.8	15.9	17.8	17.8	18.4	14.5	16.1	16.3	14.4	14.2	17.7	11.3	66.9	6.6	24.1
13	9.5	13.2	11.5	11.6	8.9	9.4	12.4	13.1	15.0	12.9	14.2	19.7	21.1	16.7	18.9	17.9	20.2	19.7	17.8	13.1	12.5	23.7	52.9	27.7	52.9	8.9	17.2
14	42.3	22.9	25.1	44.4	40.6	48.4	30.1	52.9	30.6	36.3	53.3	26.8	23.6	57.6	27.2	11.8	37.2	37.7	21.6	17.4	20.8	8.2	4.3	10.6	57.6	4.3	30.5
15	4.4	4.3	3.9	3.4	3.7	3.8	4.2	4.3	3.4	3.6	4.3	3.9	4.2	4.3	4.0	4.0	3.9	3.8	3.8	3.6	3.5	3.7	4.0	3.8	4.4	3.4	3.9
16	4.2	3.6	3.5	3.7	6.6	20.2	39.2	23.7	63.0	17.8	24.3	36.7	26.4	55.7	37.2	54.7	15.7	13.3	42.2	13.4	18.0	28.4	43.8	18.5	63.0	3.5	25.6
17	25.0	27.3	16.0	27.2	39.9	29.2	35.8	49.8	20.0	25.5	14.7	39.3	10.7	24.6	66.1	38.9	12.9	10.3	7.8	9.8	6.7	4.9	12.7	16.2	66.1	4.9	23.8
18	25.1	17.0	9.2	9.7	4.2	6.2	8.1	8.9	7.3	6.8	10.5	3.8	5.4	8.1	9.7	6.2	5.7	5.6	6.3	4.6	4.3	5.7	4.7	4.4	25.1	3.8	7.8
19	4.1	3.4	3.4	5.0	4.2	5.1	4.2	4.4	4.9	4.3	4.2	5.1	3.4	5.2	5.5	3.7	5.3	4.8	5.1	5.8	5.1	2.4	3.2	4.7	5.8	2.4	4.4
20	4.0	4.6	4.5	5.1	5.9	5.4	6.1	4.3	7.0	6.3	14.3	47.1	15.0	22.2	13.6	29.4	19.4	55.5	5.2	6.2	6.0	5.5	18.8	57.8	57.8	4.0	15.4
21	49.1	61.4	9.9	31.0	9.3	6.8	21.8	12.0	11.9	10.2	13.1	51.0	33.9	26.8	48.6	10.4	8.5	66.5	11.1	21.3	30.0	39.4	13.6	6.1	66.5	6.1	25.1
22	8.2	11.6	10.6	91.3	53.5	10.0	11.1	33.0	18.5	34.4	56.8	15.2	9.3	21.3	14.0	18.7	6.1	10.4	78.0	49.7	32.5	8.1	4.7	12.3	91.3	4.7	25.8
23	11.6	11.4	19.0	19.3	18.6	7.7	49.0	22.2	21.9	31.0	18.1	23.0	28.6	8.1	11.6	7.8	5.6	9.6	4.5	4.3	3.9	4.5	6.7	5.9	49.0	3.9	14.7
24	10.8	8.9	5.3	82.0	24.0	74.6	44.5	8.8	36.0	15.8	17.7	53.6	63.1	27.1	38.4	40.1	20.6	4.5	4.1	10.4	37.9	21.3	19.0	36.4	82.0	4.1	29.4
25	10.8	22.6	25.9	57.9	26.0	15.5	16.0	12.4	15.1	85.8	25.0	79.0	37.5	54.1	66.7	18.6	16.9	40.0	13.5	32.6	31.5	31.9	17.5	33.8	85.8	10.8	32.8
26	54.3	51.8	12.6	19.2	14.8	36.4	18.9	29.5	47.4	12.0	38.3	14.7	11.9	25.0	55.6	27.4	9.2	4.7	7.6	15.1	21.4	35.0	12.5	4.0	55.6	4.0	24.1
27	5.6	3.3	11.8	5.5	6.5	5.1	56.1	46.7	33.4	33.0	34.8	55.4	58.0	8.7	20.4	6.1	6.3	4.0	4.5	3.5	3.7	5.0	4.5	12.7	58.0	3.3	18.1
28	15.8	17.7	16.5	26.4	27.5	28.7	68.4	23.8	58.4	34.7	51.2	54.1	56.4	57.0	33.5	37.8	11.3	34.9	10.2	11.4	12.0	19.6	18.6	36.2	68.4	10.2	31.8
29	42.5	27.9	13.6	16.8	10.2	29.1	3.6	6.2	4.3	4.5	5.2	4.5	4.9	5.1	4.8	4.6	6.1	4.1	4.9	4.7	4.4	4.9	4.5	4.5	42.5	3.6	9.4
30	4.2	4.4	4.9	5.0	4.9	5.1	4.3	4.7	4.6	4.5	4.9	5.0	5.4	5.2	4.6	4.7	4.1	4.5	3.8	4.0	4.5	4.9	4.1	5.1	5.4	3.8	4.6
31	4.4	3.7	3.7	6.4	4.7	8.2	4.7	5.0	4.1	4.8	4.8	4.2	3.9	4.1	3.9	4.3	4.5	4.5	5.0	4.7	4.8	4.8	4.0	3.9	8.2	3.7	4.6
Max.	**66.9**	**61.4**	**25.9**	**91.3**	**53.5**	**74.6**	**68.4**	**69.5**	**63.0**	**85.8**	**56.8**	**79.0**	**63.1**	**59.9**	**83.0**	**74.4**	**43.8**	**66.5**	**86.0**	**59.5**	**37.9**	**39.4**	**52.9**	**73.3**	**91.3**		
Min.	**3.8**	**3.3**	**3.4**	**3.4**	**3.7**	**3.8**	**3.6**	**3.9**	**3.4**	**3.6**	**4.2**	**3.3**	**3.4**	**4.1**	**3.9**	**3.7**	**3.4**	**3.8**	**3.8**	**3.5**	**3.5**	**2.4**	**3.2**	**3.8**		**2.4**	
Avg.	**16.7**	**14.5**	**9.4**	**18.1**	**14.6**	**17.1**	**20.6**	**18.2**	**18.1**	**18.3**	**17.6**	**21.4**	**18.4**	**20.1**	**22.7**	**17.6**	**11.3**	**16.5**	**15.6**	**13.1**	**13.9**	**12.6**	**13.0**	**16.8**			**16.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.5	4.2	4.4	4.3	4.8	4.8	4.7	4.7	4.5	4.6	4.1	4.6	4.3	4.8	4.6	3.9	3.8	4.2	3.5	4.7	4.3	6.2	11.0	25.6	25.6	3.5	5.6
2	27.3	42.9	65.5	35.2	45.5	40.0	40.1	31.2	17.6	19.6	9.5	4.2	8.7	23.2	4.6	26.5	16.2	56.4	34.7	10.1	8.5	3.6	5.1	8.9	65.5	3.6	24.4
3	4.5	4.3	4.1	3.6	4.2	6.3	5.2	3.4	4.6	5.3	5.3	7.1	3.7	3.4	3.3	3.5	3.6	4.2	3.8	3.7	3.8	4.1	4.3	4.1	7.1	3.3	4.3
4	4.2	4.0	4.8	4.2	4.0	4.1	4.5	4.6	4.1	4.2	4.6	4.7	4.9	4.8	5.5	5.7	3.7	3.3	3.1	9.6	9.4	5.1	14.8	9.1	14.8	3.1	5.5
5	7.9	14.5	17.2	7.8	8.5	10.7	8.7	14.2	6.5	6.3	58.7	68.8	57.0	4.7	7.2	7.9	4.7	14.1	9.8	4.1	8.4	3.6	5.4	5.5	68.8	3.6	15.1
6	4.6	5.9	8.8	5.0	3.1	3.1	9.1	8.8	5.2	5.8	6.1	4.7	7.5	6.6	5.3	4.5	4.5	3.9	3.2	2.7	14.5	21.0	10.9	11.7	21.0	2.7	6.9
7	8.1	10.5	7.1	6.1	6.1	7.4	6.3	2.8	3.4	5.3	3.4	4.2	6.3	6.5	4.9	4.9	7.3	4.1	6.4	3.0	7.0	4.6	4.4	29.5	29.5	2.8	6.7
8	27.3	44.7	17.3	15.9	15.1	12.7	9.2	7.6	16.9	7.7	5.5	8.5	6.5	4.2	5.9	5.4	13.1	6.7	6.2	35.2	14.4	8.2	4.2	6.0	44.7	4.2	12.7
9	5.7	8.8	7.4	7.9	4.6	6.1	6.4	4.5	28.6	37.5	30.2	9.7	6.4	7.3	6.8	7.2	4.2	4.4	4.5	4.3	6.9	6.7	4.9	4.0	37.5	4.0	9.4
10	8.8	8.4	5.3	22.6	55.4	56.0	67.2	88.1	52.4	72.4	45.8	34.1	65.4	14.4	16.6	7.5	25.8	2.8	3.4	2.8	4.3	3.9	7.8	7.6	88.1	2.8	28.3
11	9.1	39.1	35.2	37.2	9.0	40.3	57.7	86.3	62.2	78.3	82.2	23.4	11.2	7.2	8.4	3.7	6.0	7.1	5.7	4.4	5.1	6.8	4.4	6.0	86.3	3.7	26.5
12	7.2	5.5	4.7	62.2	18.7	7.6	5.6	5.9	9.2	51.9	27.0	11.0	6.9	6.8	6.3	4.6	4.7	4.2	9.2	30.0	12.6	48.2	34.3	33.7	62.2	4.2	17.4
13	23.1	34.9	17.4	9.4	9.7	11.0	10.0	7.6	9.0	9.7	6.9	7.1	5.2	4.6	4.6	4.8	6.5	9.3	5.3	5.1	7.0	4.5	5.2	5.9	34.9	4.5	9.3
14	5.4	3.7	4.0	4.5	4.4	4.1	5.2	3.9	4.7	2.4	0.0	7.4	6.3	10.3	8.6	9.3	9.7	17.5	15.7	9.6	4.2	5.9	16.5	12.5	17.5	0.0	7.3
15	10.5	88.4	38.7	34.9	52.6	28.1	22.5	9.3	11.3	4.0	8.6	4.1	4.5	3.3	4.0	3.9	4.8	4.1	4.0	2.9	4.0	3.4	4.3	5.1	88.4	2.9	15.1
16	5.5	9.5	5.3	9.0	5.3	6.5	4.6	14.4	4.7	3.3	7.0	10.0	8.8	11.6	9.7	6.0	5.7	5.8	11.0	4.1	17.9	8.5	4.6	3.6	17.9	3.3	7.6
17	9.1	10.0	4.9	4.7	14.7	5.3	7.7	6.0	42.9	28.1	41.2	12.9	13.2	9.7	6.7	9.3	24.6	9.4	8.9	28.8	35.7	7.6	6.4	30.9	42.9	4.7	15.8
18	45.3	68.6	71.4	58.3	27.0	32.1	19.5	12.3	14.5	10.0	15.9	22.5	9.3	10.4	19.9	50.3	18.7	32.6	25.2	24.1	31.0	43.4	40.0	34.0	71.4	9.3	30.7
19	43.5	53.1	34.8	25.7	23.3	22.4	22.3	18.0	30.0	37.1	31.6	30.2	27.4	5.9	19.3	19.3	21.1	23.3	20.8	12.7	4.2	14.6	44.0	5.6	53.1	4.2	24.6
20	4.8	10.5	6.2	4.7	5.3	4.7	4.8	3.8	3.8	4.2	4.1	10.5	8.4	7.0	4.9	8.4	6.0	4.9	4.1	4.7	5.0	4.1	4.0	4.1	10.5	3.8	5.5
21	5.3	4.4	4.4	4.1	4.5	3.5	4.3	5.0	4.9	5.6	4.9	5.5	5.2	3.6	5.2	5.9	8.0	6.2	7.8	5.9	4.2	14.7	29.3	21.6	29.3	3.5	7.3
22	20.9	3.6	7.4	4.9	52.3	39.3	32.2	32.5	36.8	23.7	35.4	39.7	25.4	29.6	21.0	29.9	21.4	27.7	38.3	50.5	16.2	63.8	51.4	24.1	63.8	3.6	30.3
23	7.1	15.4	28.2	51.6	15.2	23.9	20.4	10.9	22.3	9.7	37.9	40.2	49.8	31.9	14.7	42.2	4.4	6.4	19.4	39.4	19.0	33.3	7.2	6.3	51.6	4.4	23.2
24	8.3	6.3	9.4	20.4	21.2	76.8	95.6	77.7	88.5	78.1	28.2	36.9	11.9	69.7	58.3	79.5	6.8	20.5	12.4	8.6	7.4	16.0	6.8	8.8	95.6	6.3	35.6
25	7.4	5.5	39.5	6.3	6.6	7.1	6.0	6.1	8.4	5.9	3.8	4.0	7.2	6.7	6.3	5.7	3.8	7.1	7.7	5.5	6.4	7.2	3.1	3.7	39.5	3.1	7.4
26	3.6	3.6	3.0	3.0	2.5	2.8	4.2	4.7	6.2	5.2	4.6	4.0	5.5	6.7	10.5	7.0	9.8	14.1	11.9	8.2	9.0	4.3	4.0	4.5	14.1	2.5	5.9
27	4.6	3.5	3.6	3.6	4.3	4.1	4.5	4.2	4.1	4.9	4.7	4.8	4.3	6.1	4.4	4.0	5.2	5.8	6.4	3.8	5.9	4.6	9.9	9.1	9.9	3.5	5.0
28	12.5	24.7	19.0	36.9	64.3	55.0	67.2	28.3	52.0	23.8	27.1	49.4	5.5	14.0	19.8	16.7	6.7	5.9	7.4	5.8	5.9	6.9	9.9	2.5	67.2	2.5	23.6
29	10.0	8.2	5.5	9.6	67.2	14.6	11.5	6.3	6.8	26.8	7.5	8.3	8.2	9.7	9.6	8.0	5.3	4.4	4.3	5.1	6.9	2.9	3.9	4.6	67.2	2.9	10.6
30	7.7	5.8	15.0	56.2	77.0	30.3	8.6	23.8	60.7	50.6	15.1	25.9	33.1	53.7	15.1	11.5	28.2	15.4	15.2	6.1	4.9	6.1	5.4	6.3	77.0	4.9	24.1
Max.	**45.3**	**88.4**	**71.4**	**62.2**	**77.0**	**76.8**	**95.6**	**88.1**	**88.5**	**78.3**	**82.2**	**68.8**	**65.4**	**69.7**	**58.3**	**79.5**	**28.2**	**56.4**	**38.3**	**50.5**	**35.7**	**63.8**	**51.4**	**34.0**	**95.6**		
Min.	**3.6**	**3.5**	**3.0**	**3.0**	**2.5**	**2.8**	**4.2**	**2.8**	**3.4**	**2.4**	**0.0**	**4.0**	**3.7**	**3.3**	**3.3**	**3.5**	**3.6**	**2.8**	**3.1**	**2.7**	**3.8**	**2.9**	**3.1**	**2.5**		**0.0**	
Avg.	**11.8**	**18.4**	**16.6**	**18.7**	**21.2**	**19.0**	**19.2**	**17.9**	**20.9**	**21.1**	**18.9**	**17.0**	**14.3**	**12.9**	**10.7**	**13.6**	**9.8**	**11.2**	**10.6**	**11.5**	**9.8**	**12.5**	**12.3**	**11.5**			**15.1**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.3	5.0	5.5	6.3	7.2	8.4	6.7	13.3	9.3	12.9	28.5	13.1	8.3	5.0	3.4	6.7	11.1	7.8	9.6	11.7	7.1	5.3	4.1	3.1	28.5	3.1	8.6
2	3.6	5.7	4.7	3.7	5.8	5.1	4.3	4.1	4.0	9.2	9.7	29.4	72.1	15.8	17.0	13.9	8.7	3.5	8.4	63.9	72.1	21.2	83.0	40.6	83.0	3.5	21.2
3	27.3	21.3	20.9	50.8	10.8	11.7	7.4	6.8	5.9	17.3	6.6	6.1	5.8	6.8	10.9	17.7	10.7	7.5	41.1	34.6	23.2	15.9	21.4	11.8	50.8	5.8	16.7
4	5.1	10.1	12.7	13.9	7.2	9.6	8.9	9.5	12.2	11.6	10.7	12.3	35.2	52.8	40.7	20.2	17.0	12.7	31.9	13.3	40.3	46.9	26.3	33.8	52.8	5.1	20.6
5	48.1	53.9	45.7	78.6	64.3	38.7	14.0	21.6	34.5	23.3	23.8	57.3	18.9	42.6	15.9	11.0	4.4	4.6	5.9	5.2	9.2	9.5	11.9	10.2	78.6	4.4	27.2
6	9.7	7.4	34.5	31.0	19.3	14.1	24.2	20.6	9.3	3.9	3.2	5.0	4.2	4.4	5.0	5.1	4.3	5.2	5.3	4.9	5.0	4.8	4.9	4.7	34.5	3.2	10.0
7	5.6	4.7	4.3	4.3	4.5	4.0	4.2	4.1	4.4	3.7	4.5	4.0	3.8	4.0	4.3	3.8	4.0	5.2	3.7	4.3	4.6	4.9	4.9	5.9	5.9	3.7	4.4
8	4.2	4.6	4.7	4.4	4.3	4.0	4.6	5.0	4.2	4.1	3.6	4.1	4.8	4.7	4.4	4.5	4.7	4.5	4.9	4.7	5.1	5.0	5.3	7.7	7.7	3.6	4.7
9	6.1	5.8	9.1	9.3	9.0	10.2	6.2	5.5	6.5	5.0	4.5	5.2	6.4	5.1	5.2	4.8	5.1	5.5	6.2	12.9	8.3	6.1	98.5	35.1	98.5	4.5	11.7
10	48.3	73.6	33.3	48.1	26.4	36.2	56.4	16.6	6.2	3.5	21.8	7.1	7.9	10.5	4.6	4.8	13.7	15.3	13.4	25.0	10.6	9.8	7.4	4.3	73.6	3.5	21.0
11	8.5	5.3	4.5	4.9	4.7	4.7	4.7	6.4	5.1	5.3	5.6	5.5	5.7	6.4	6.2	6.0	8.0	6.8	5.7	5.4	5.4	6.1	5.1	5.3	8.5	4.5	5.7
12	5.2	5.6	5.7	5.9	7.1	7.5	7.7	11.4	10.4	9.1	6.0	4.8	7.8	5.2	5.0	5.5	6.6	6.5	5.8	5.6	5.4	5.1	5.3	5.9	11.4	4.8	6.5
13	5.6	5.4	5.6	4.9	6.1	6.4	5.4	5.0	4.5	4.7	5.1	4.8	5.9	5.5	5.0	6.0	6.0	5.3	5.5	5.2	4.6	5.3	5.4	4.3	6.4	4.3	5.3
14	5.0	5.6	5.0	45.3	34.7	63.2	9.8	6.4	6.9	7.5	8.7	8.5	5.0	7.9	9.3	9.6	7.6	4.9	6.1	8.8	7.2	42.6	54.9	43.3	63.2	4.9	17.2
15	60.8	10.2	8.9	9.9	11.2	11.0	4.8	17.0	5.8	12.2	14.7	15.2	8.4	5.3	7.3	7.1	5.9	4.7	7.7	8.3	9.3	10.3	5.2	7.1	60.8	4.7	11.2
16	6.3	5.7	6.1	7.0	6.6	10.2	27.4	28.7	19.8	21.5	57.9	7.6	8.8	7.7	6.7	7.1	5.4	6.3	8.3	14.8	12.7	10.7	6.1	41.7	57.9	5.4	14.2
17	37.5	35.7	18.5	9.3	24.5	29.6	24.4	13.7	20.8	49.2	57.5	55.8	71.3	17.8	14.3	12.8	8.3	5.1	17.4	10.6	26.9	8.0	7.6	4.9	71.3	4.9	24.2
18	3.6	6.3	15.3	4.4	5.8	16.0	8.9	6.3	8.3	8.6	10.8	13.8	18.7	16.8	21.5	19.9	17.6	9.0	7.5	6.9	10.1	7.2	5.2	11.7	21.5	3.6	10.8
19	7.7	45.8	42.3	35.2	26.8	36.6	42.1	31.4	32.5	48.6	52.9	23.7	41.2	25.9	17.0	18.6	19.7	8.7	5.8	8.2	8.2	4.6	2.6	5.2	52.9	2.6	24.6
20	5.3	4.7	5.9	35.8	63.8	8.6	28.1	80.1	72.1	41.1	37.2	15.3	75.5	21.6	20.9	19.3	17.5	13.0	9.2	8.6	19.5	17.2	12.7	27.7	80.1	4.7	27.5
21	16.6	37.6	65.2	39.8	20.2	16.9	44.1	76.1	53.4	56.9	40.0	23.3	32.4	9.9	11.1	15.2	7.7	7.1	10.3	9.6	5.6	5.9	6.2	4.8	76.1	4.8	25.7
22	4.7	6.1	6.8	7.3	27.6	61.5	35.9	23.9	54.9	36.3	52.7	33.8	18.8	39.3	26.4	11.9	9.7	9.2	7.9	5.8	8.3	6.9	5.6	7.2	61.5	4.7	21.2
23	6.0	6.2	5.6	5.3	5.9	6.4	6.3	6.0	7.0	7.9	6.6	6.9	6.4	7.0	8.2	6.4	6.0	6.4	6.6	6.2	6.0	6.0	5.5	5.8	8.2	5.3	6.4
24	5.1	5.8	6.1	5.6	6.0	6.3	5.6	5.4	5.5	5.8	7.0	7.2	5.8	5.8	6.5	8.0	10.1	6.3	15.1	15.2	10.0	15.7	14.2	9.8	15.7	5.1	8.1
25	9.0	14.9	8.8	5.6	8.8	12.5	13.1	11.4	11.3	12.0	7.9	8.6	9.8	10.1	8.4	6.8	12.7	7.8	8.5	11.0	11.1	10.4	15.0	10.9	15.0	5.6	10.3
26	11.2	11.2	11.8	7.4	16.9	23.8	18.5	13.4	8.8	7.9	10.5	16.0	12.1	13.5	44.2	19.1	12.4	20.0	17.8	11.7	6.5	4.9	8.5	4.0	44.2	4.0	13.8
27	9.6	22.0	20.3	18.2	64.1	37.3	40.9	32.8	50.6	71.8	16.2	12.8	16.9	14.9	15.9	12.9	10.0	13.3	12.7	8.4	6.5	4.2	4.3	6.7	71.8	4.2	21.8
28	42.3	56.6	7.7	57.9	34.3	3.7	31.0	7.1	78.9	12.4	15.9	8.4	25.4	20.0	14.0	12.2	13.6	10.6	7.9	6.3	3.9	3.1	6.0	5.8	78.9	3.1	20.2
29	13.7	9.0	6.3	7.1	18.4	33.2	5.9	6.3	6.7	6.6	11.8	13.3	12.3	12.6	15.8	14.7	13.7	16.9	16.4	14.8	11.8	6.0	6.7	3.8	33.2	3.8	11.8
30	6.4	17.7	18.0	20.1	30.2	30.1	3.0	5.2	9.0	7.5	8.2	9.2	8.9	6.8	6.6	6.0	6.4	6.3	6.3	8.2	8.4	8.3	6.9	5.5	30.2	3.0	10.4
31	4.8	4.6	4.6	5.4	5.3	4.9	5.3	5.0	6.1	6.4	6.4	6.3	6.7	7.6	6.7	6.8	6.9	7.3	6.5	9.5	6.1	5.1	4.9	4.7	9.5	4.6	6.0
Max.	**60.8**	**73.6**	**65.2**	**78.6**	**64.3**	**63.2**	**56.4**	**80.1**	**78.9**	**71.8**	**57.9**	**57.3**	**75.5**	**52.8**	**44.2**	**20.2**	**19.7**	**20.0**	**41.1**	**63.9**	**72.1**	**46.9**	**98.5**	**43.3**	**98.5**		
Min.	**3.6**	**4.6**	**4.3**	**3.7**	**4.3**	**3.7**	**3.0**	**4.1**	**4.0**	**3.5**	**3.2**	**4.0**	**3.8**	**4.0**	**3.4**	**3.8**	**4.0**	**3.5**	**3.7**	**4.3**	**3.9**	**3.1**	**2.6**	**3.1**		**2.6**	
Avg.	**14.2**	**16.6**	**14.7**	**19.1**	**19.0**	**18.5**	**16.4**	**16.3**	**18.5**	**17.2**	**17.9**	**14.3**	**18.4**	**13.5**	**12.5**	**10.5**	**9.5**	**8.2**	**10.5**	**11.9**	**12.2**	**10.4**	**14.9**	**12.4**			**14.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	4.7	4.7	6.2	6.4	6.1	6.0	6.5	6.3	6.0	7.0	7.0	7.4	6.4	6.3	6.9	5.9	5.2	6.2	5.4	6.8	7.3	8.0	5.5	8.0	4.7	6.3
2	12.0	9.0	7.1	7.7	7.2	8.6	9.9	16.2	12.0	9.0	8.0	11.8	15.3	16.8	14.7	15.6	26.1	13.8	13.4	7.9	37.4	35.2	19.8	49.6	49.6	7.1	16.0
3	32.5	39.4	52.7	66.3	69.1	73.1	45.3	57.7	21.9	66.9	37.0	43.2	23.1	15.4	27.3	9.6	6.9	9.2	6.6	4.9	5.0	5.7	6.3	8.1	73.1	4.9	30.5
4	7.5	6.6	5.8	4.4	5.6	5.1	9.3	9.9	10.3	12.1	8.9	7.8	7.5	6.8	7.4	6.4	7.2	6.5	7.0	6.5	5.3	6.9	5.8	5.5	12.1	4.4	7.2
5	5.9	5.0	5.4	5.6	5.6	5.1	7.4	6.0	6.4	6.6	7.1	7.5	6.8	7.0	7.5	7.2	7.6	8.9	7.2	7.9	6.4	8.9	37.7	8.3	37.7	5.0	8.1
6	5.4	5.8	6.6	5.7	7.2	34.9	33.7	24.3	15.3	26.0	78.0	17.7	20.0	20.0	21.8	34.0	27.8	10.8	10.4	9.6	12.7	8.4	5.0	9.5	78.0	5.0	18.8
7	37.7	32.0	6.9	38.9	12.2	7.1	10.8	8.3	12.4	13.8	10.6	12.9	19.0	20.7	33.7	37.4	43.6	15.9	27.9	11.5	7.6	14.6	9.6	9.0	43.6	6.9	18.9
8	7.8	9.9	42.4	57.0	9.7	15.0	11.1	42.9	14.1	54.5	30.8	20.6	12.8	17.1	12.0	13.1	14.3	11.3	11.5	9.3	9.1	9.5	14.7	20.3	57.0	7.8	19.6
9	17.1	11.9	11.4	10.8	11.5	6.3	9.4	9.3	8.7	13.5	19.9	26.5	27.1	16.2	33.6	15.2	20.6	18.1	15.9	9.2	8.4	12.5	22.0	17.3	33.6	6.3	15.5
10	7.0	15.0	27.4	71.5	15.1	63.6	47.2	62.9	21.8	52.5	63.5	54.9	34.0	89.3	47.1	12.6	24.4	23.6	14.5	8.3	18.7	14.0	9.5	17.6	89.3	7.0	34.0
11	85.5	37.0	72.4	58.0	33.4	42.6	72.2	53.9	15.2	21.1	36.0	48.8	68.4	19.7	15.7	10.0	9.6	11.0	12.9	10.4	15.7	9.0	7.2	8.1	85.5	7.2	32.2
12	7.6	4.8	14.2	53.7	39.9	21.4	27.1	71.1	58.5	50.7	30.9	34.9	60.3	31.6	40.5	59.4	14.5	12.3	11.1	12.3	29.7	8.5	15.2	38.2	71.1	4.8	31.2
13	31.6	29.0	29.7	8.5	7.0	8.0	21.2	52.1	9.8	24.9	26.4	31.3	37.6	20.5	26.1	32.6	34.9	41.9	33.2	16.1	31.1	11.5	5.4	14.9	52.1	5.4	24.4
14	68.6	28.6	78.9	70.4	79.5	73.4	41.9	21.7	20.1	26.4	12.9	33.2	19.6	24.1	44.4	91.8	22.7	17.2	11.4	23.8	23.1	9.4	8.7	38.1	91.8	8.7	37.1
15	56.9	74.2	27.9	45.4	83.4	51.8	71.2	65.3	31.3	24.3	11.6	18.4	24.9	18.2	78.1	10.9	17.5	14.4	13.7	9.7	7.6	8.4	8.9	11.3	83.4	7.6	32.7
16	31.1	27.6	59.2	54.5	20.4	25.6	59.2	19.4	20.2	66.6	39.6	50.1	40.4	41.9	19.3	37.5	13.3	17.8	10.7	11.0	13.4	24.6	23.2	25.8	66.6	10.7	31.3
17	30.3	26.9	40.8	30.9	11.3	32.3	37.6	24.8	37.8	52.4	17.5	70.5	74.5	36.7	27.1	14.6	17.5	18.8	16.3	9.2	5.7	6.9	6.7	52.5	74.5	5.7	29.2
18	26.7	9.8	58.2	61.1	82.4	63.1	38.6	36.8	34.2	18.7	32.5	20.6	11.7	21.2	14.9	20.6	14.7	13.5	18.1	18.3	14.2	10.7	25.7	41.2	82.4	9.8	29.5
19	62.1	76.9	62.5	51.9	30.5	57.6	26.5	52.4	54.7	33.8	71.6	27.0	45.9	35.2	25.5	21.5	16.4	15.7	19.4	16.4	12.9	10.9	13.8	14.1	76.9	10.9	35.6
20	22.5	15.9	31.3	26.7	36.1	55.7	75.8	78.7	43.6	20.5	14.3	12.3	12.3	11.6	11.5	10.8	9.4	9.4	9.3	8.4	7.5	8.3	8.1	12.9	78.7	7.5	23.0
21	7.9	5.6	7.3	6.4	7.9	9.0	7.7	7.7	14.6	27.8	28.6	70.3	35.1	20.7	38.6	41.5	46.8	34.1	20.4	17.0	17.1	27.3	13.6	21.1	70.3	5.6	22.3
22	28.7	15.8	9.4	9.4	7.0	55.1	38.0	30.7	39.3	44.1	29.7	12.7	15.1	10.1	10.4	8.2	7.2	7.3	6.7	7.0	6.4	6.8	6.1	6.0	55.1	6.0	17.4
23	6.2	5.5	5.9	6.4	7.0	8.6	8.1	7.6	7.3	6.8	8.8	12.5	13.2	13.6	12.2	11.5	13.8	16.0	13.1	9.4	6.9	11.7	12.2	6.2	16.0	5.5	9.6
24	5.9	23.6	44.8	27.7	9.5	6.8	7.5	6.4	8.3	8.3	8.9	8.9	9.6	9.0	7.7	7.6	7.3	8.9	7.8	8.6	8.2	7.3	7.9	7.7	44.8	5.9	11.0
25	7.5	6.2	6.2	6.7	6.9	6.8	7.0	7.1	6.7	7.0	7.3	9.0	8.4	8.0	9.3	9.7	9.1	8.6	7.7	8.6	7.3	8.2	11.8	8.7	11.8	6.2	7.9
26	12.6	9.7	7.2	13.7	43.0	44.6	36.5	19.0	9.5	15.3	18.7	8.0	9.5	38.3	15.3	29.5	11.3	26.7	14.7	16.3	14.3	9.3	11.5	16.3	44.6	7.2	18.8
27	14.1	78.4	29.9	73.2	31.5	37.8	39.4	13.1	6.1	8.6	11.0	8.5	11.2	12.8	14.7	12.1	10.8	12.5	11.3	10.5	9.7	25.5	28.2	45.0	78.4	6.1	23.2
28	45.5	31.1	20.1	6.3	9.8	36.9	18.6	41.1	16.5	37.9	11.4	11.2	11.6	15.3	15.3	12.4	14.1	19.7	9.7	10.5	9.3	11.2	8.0	8.6	45.5	6.3	18.0
29	9.8	10.3	10.4	8.1	11.2	18.3	16.8	10.2	9.5	9.5	10.3	26.2	13.7	14.0	13.1	11.2	12.3	14.3	13.2	9.7	7.0	5.6	5.3	5.5	26.2	5.3	11.5
30	7.0	8.8	9.1	16.3	12.3	30.5	8.4	8.8	39.4	35.3	53.2	47.4	63.9	50.6	75.2	81.8	65.3	34.3	17.2	12.4	65.8	56.0	10.7	10.2	81.8	7.0	34.2
Max.	**85.5**	**78.4**	**78.9**	**73.2**	**83.4**	**73.4**	**75.8**	**78.7**	**58.5**	**66.9**	**78.0**	**70.5**	**74.5**	**89.3**	**78.1**	**91.8**	**65.3**	**41.9**	**33.2**	**23.8**	**65.8**	**56.0**	**37.7**	**52.5**	**91.8**		
Min.	**5.4**	**4.7**	**4.7**	**4.4**	**5.6**	**5.1**	**6.0**	**6.0**	**6.1**	**6.0**	**7.0**	**7.0**	**6.8**	**6.4**	**6.3**	**6.4**	**5.9**	**5.2**	**6.2**	**4.9**	**5.0**	**5.6**	**5.0**	**5.5**		**4.4**	
Avg.	**23.6**	**22.2**	**26.5**	**30.3**	**24.0**	**30.4**	**28.3**	**29.1**	**20.4**	**26.7**	**25.1**	**25.7**	**25.3**	**22.3**	**24.2**	**23.1**	**18.4**	**15.9**	**13.3**	**10.9**	**14.4**	**13.3**	**12.5**	**18.1**			**21.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.6	21.7	12.6	12.0	21.3	45.5	53.2	72.4	41.1	32.6	32.8	16.4	14.7	12.3	11.1	9.7	11.3	10.5	8.4	7.4	7.7	6.7	6.7	5.4	72.4	5.4	20.1
2	7.3	5.4	6.3	7.2	6.1	7.1	7.3	7.2	7.0	6.5	8.5	7.9	9.1	10.5	9.3	9.5	9.8	9.0	8.2	12.5	12.6	9.3	12.1	10.3	12.6	5.4	8.6
3	18.4	13.2	17.5	10.5	12.1	9.3	12.7	9.2	7.5	11.7	5.5	21.1	16.6	8.5	12.0	10.3	14.0	13.2	11.3	8.4	13.4	24.0	25.0	13.6	25.0	5.5	13.3
4	11.6	12.8	12.7	22.6	51.7	79.8	38.4	17.6	51.8	19.3	35.1	26.6	47.7	46.6	66.3	36.8	58.8	47.6	46.8	18.5	14.0	26.8	35.2	60.0	79.8	11.6	36.9
5	31.3	18.0	54.2	15.1	56.4	33.3	70.4	77.7	63.1	38.0	18.6	43.2	67.7	53.0	54.8	28.0	42.5	34.6	40.9	24.9	27.3	12.6	68.6	15.9	77.7	12.6	41.3
6	22.3	47.1	87.7	45.5	44.6	16.3	36.5	50.2	35.8	68.1	21.3	14.2	13.8	15.4	12.3	9.0	9.6	11.5	11.6	7.4	5.9	8.3	36.6	21.2	87.7	5.9	27.2
7	5.9	7.7	6.3	9.6	11.3	9.3	9.2	7.4	6.2	6.3	6.8	6.2	7.1	6.8	6.4	7.0	7.6	7.5	8.4	9.5	18.8	27.4	28.5	17.2	28.5	5.9	10.2
8	6.9	7.7	8.0	22.3	24.7	18.4	13.6	13.2	14.2	12.8	17.3	19.7	13.5	10.3	11.9	10.8	9.4	9.1	9.7	8.1	8.9	7.9	7.3	26.0	26.0	6.9	13.0
9	38.0	28.8	14.5	12.9	13.4	11.7	17.6	17.0	9.9	8.6	11.3	15.9	10.2	11.1	11.3	9.4	10.4	11.0	8.0	8.0	9.3	6.8	7.2	7.8	38.0	6.8	12.9
10	7.1	6.5	6.4	6.1	6.1	7.4	7.1	6.6	7.5	7.5	9.0	8.5	8.2	10.3	11.3	15.3	10.8	9.5	9.0	8.3	8.6	6.3	6.3	5.8	15.3	5.8	8.1
11	11.7	19.0	6.5	6.1	5.8	6.6	98.3	30.3	48.8	30.9	35.9	15.4	10.9	12.0	15.6	15.2	14.5	14.2	11.9	11.4	9.5	8.4	12.2	13.3	98.3	5.8	19.3
12	7.4	6.7	12.0	36.2	4.9	7.1	8.0	9.8	6.5	7.6	8.4	6.7	6.5	7.1	8.2	9.0	7.1	7.0	7.5	7.0	7.3	6.9	7.0	7.9	36.2	4.9	8.7
13	6.7	7.3	6.8	5.7	6.2	6.0	6.1	7.7	8.4	8.0	9.3	7.0	9.0	9.1	10.2	11.2	13.3	28.0	34.7	29.1	18.9	10.3	8.5	8.1	34.7	5.7	11.5
14	6.6	7.0	5.7	6.1	7.5	6.9	7.1	18.1	31.7	18.9	13.5	47.3	48.5	31.5	35.6	14.8	17.6	22.5	16.0	10.8	9.2	7.2	7.8	11.8	48.5	5.7	17.1
15	14.0	18.7	15.8	15.2	14.5	27.8	11.6	15.8	26.9	9.4	9.3	9.5	11.2	14.0	12.4	7.5	10.1	11.3	13.0	13.1	12.8	13.5	13.5	14.8	27.8	7.5	14.0
16	11.7	7.1	6.8	6.4	6.4	6.6	7.4	6.7	7.4	7.5	6.2	7.0	7.3	6.3	6.5	6.6	6.5	7.0	6.8	6.6	6.5	6.3	6.2	5.7	11.7	5.7	6.9
17	8.7	11.7	7.5	12.4	8.9	7.6	12.9	11.1	12.0	10.9	8.7	9.8	11.1	11.1	9.3	10.7	11.1	9.6	9.8	9.9	8.3	6.7	7.1	12.7	12.9	6.7	10.0
18	14.3	20.6	16.9	8.4	11.3	8.5	10.0	11.2	15.8	13.5	16.0	11.6	24.8	41.2	24.0	21.1	33.7	21.0	15.0	35.5	7.2	45.9	42.9	39.4	45.9	7.2	21.2
19	51.7	24.3	8.5	5.2	6.1	7.3	10.9	8.4	6.4	7.0	9.7	9.4	11.7	15.5	13.2	15.1	8.4	12.2	12.3	11.3	11.6	7.0	12.4	9.1	51.7	5.2	12.3
20	5.6	6.6	16.0	51.2	12.1	5.4	5.1	12.8	11.7	8.5	10.8	11.8	17.9	11.6	12.5	10.5	9.6	9.1	9.0	8.9	9.8	9.5	9.0	10.1	51.2	5.1	11.9
21	9.9	9.1	8.8	8.9	10.1	9.1	9.1	9.2	7.8	8.7	10.6	16.0	17.4	21.8	15.7	44.6	30.0	19.4	24.4	41.1	35.6	76.0	7.5	9.1	76.0	7.5	19.2
22	12.4	8.5	7.8	10.9	55.9	22.4	17.4	35.1	46.3	31.2	49.0	10.1	25.8	11.6	13.6	11.6	17.8	20.4	13.4	11.0	9.2	19.6	9.8	7.6	55.9	7.6	19.9
23	13.8	22.8	21.5	10.3	55.0	41.5	17.4	10.0	16.3	13.1	11.8	12.1	10.7	8.8	8.1	7.9	10.1	14.4	9.5	8.5	8.0	11.4	13.3	36.9	55.0	7.9	16.4
24	38.4	17.8	19.5	25.0	22.2	63.1	17.2	5.0	6.1	7.2	6.8	9.5	10.7	9.9	11.0	13.4	13.7	16.7	12.3	13.5	13.0	9.1	7.2	6.7	63.1	5.0	15.6
25	5.8	5.5	5.2	6.8	8.2	6.5	9.9	6.9	5.8	7.7	6.7	9.4	11.2	12.7	14.9	13.9	12.7	14.5	11.6	8.6	8.2	7.6	6.6	5.4	14.9	5.2	8.8
26	6.7	34.8	32.5	29.6	32.3	45.0	74.3	27.9	14.2	15.0	22.8	34.1	9.7	11.9	18.1	20.3	15.3	17.4	15.3	21.8	12.6	7.0	10.0	7.5	74.3	6.7	22.3
27	6.4	8.6	7.8	10.6	27.7	16.6	16.1	36.3	9.1	10.1	13.1	6.6	14.6	11.2	14.1	12.1	11.0	9.9	10.2	13.7	19.7	8.5	5.4	6.9	36.3	5.4	12.8
28	34.6	33.7	47.5	9.2	11.2	31.6	8.1	9.7	9.8	9.3	10.8	10.4	11.4	12.0	13.6	11.0	8.2	9.2	8.8	8.5	9.4	7.8	11.2	6.8	47.5	6.8	14.3
29	5.7	6.8	4.5	8.6	55.2	6.5	7.3	5.9	8.7	8.9	8.2	10.4	8.7	10.3	11.9	11.7	10.3	9.6	8.2	8.5	6.8	7.0	8.1	6.4	55.2	4.5	10.2
30	6.6	7.7	4.4	5.1	4.1	5.1	5.9	6.7	9.7	9.8	9.7	8.4	11.1	14.4	11.0	11.3	11.7	11.5	12.9	12.0	10.3	9.2	12.5	9.0	14.4	4.1	9.2
31	40.4	63.5	58.8	42.8	12.6	96.7	24.9	37.4	15.2	10.4	8.8	11.9	18.9	16.8	14.9	14.2	13.1	13.4	12.2	11.6	11.1	12.1	5.6	6.4	96.7	5.6	23.9
Max.	**51.7**	**63.5**	**87.7**	**51.2**	**56.4**	**96.7**	**98.3**	**77.7**	**63.1**	**68.1**	**49.0**	**47.3**	**67.7**	**53.0**	**66.3**	**44.6**	**58.8**	**47.6**	**46.8**	**41.1**	**35.6**	**76.0**	**68.6**	**60.0**	**98.3**		
Min.	**5.6**	**5.4**	**4.4**	**5.1**	**4.1**	**5.1**	**5.1**	**5.0**	**5.8**	**6.3**	**5.5**	**6.2**	**6.5**	**6.3**	**6.4**	**6.6**	**6.5**	**7.0**	**6.8**	**6.6**	**5.9**	**6.3**	**5.4**	**5.4**		**4.1**	
Avg.	**15.4**	**16.7**	**17.7**	**15.6**	**20.2**	**21.7**	**21.0**	**19.4**	**18.3**	**15.0**	**14.6**	**14.6**	**16.7**	**15.7**	**16.2**	**14.2**	**15.2**	**14.9**	**14.1**	**13.4**	**12.0**	**14.0**	**14.8**	**13.7**			**16.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.6	8.9	70.5	41.2	27.2	60.5	47.8	28.2	19.3	12.4	10.5	21.6	36.5	35.2	76.6	21.8	13.8	13.2	13.3	8.1	6.0	5.7	5.6	7.7	76.6	5.6	25.0
2	10.4	11.8	15.4	27.8	24.7	32.5	21.6	24.5	20.8	43.7	10.7	12.2	10.9	11.3	16.5	10.3	10.0	8.6	9.2	23.4	7.1	6.6	13.6	40.0	43.7	6.6	17.6
3	70.2	19.4	7.7	11.1	8.0	74.0	74.9	29.6	12.5	14.5	20.6	50.9	56.0	54.9	35.1	16.1	14.3	12.4	10.7	10.6	6.7	8.6	8.6	6.4	74.9	6.4	26.4
4	7.5	7.4	7.3	9.9	10.3	15.7	17.5	9.0	8.0	7.9	25.5	27.4	11.6	11.7	15.5	9.6	11.6	12.5	10.6	9.1	38.9	31.1	11.1	12.6	38.9	7.3	14.1
5	14.7	11.4	13.9	20.6	6.1	11.2	56.3	42.6	52.7	12.7	17.0	18.3	16.3	15.6	16.3	21.2	15.4	14.9	12.4	13.1	9.4	6.9	4.9	4.2	56.3	4.2	17.8
6	4.8	56.8	36.9	50.9	7.3	9.9	8.2	17.1	15.2	11.7	18.6	23.9	13.0	11.7	10.0	14.4	11.0	9.2	7.6	5.8	6.5	5.4	8.1	10.2	56.8	4.8	15.6
7	9.7	9.2	7.6	8.3	9.5	8.4	16.5	7.9	7.5	10.3	10.1	9.8	10.7	11.8	16.3	15.5	9.9	11.2	9.3	11.4	10.1	7.3	5.1	4.4	16.5	4.4	9.9
8	4.7	6.3	8.0	9.4	22.1	17.5	17.3	51.8	30.4	8.0	9.1	12.1	15.5	19.7	21.9	23.4	17.2	16.6	15.4	18.8	8.9	5.2	7.7	8.1	51.8	4.7	15.6
9	7.8	42.6	48.7	11.7	7.5	5.9	7.0	5.3	8.8	8.2	12.3	14.9	16.7	15.7	16.3	15.4	16.7	14.0	12.4	13.1	11.5	9.4	86.2	46.1	86.2	5.3	18.9
10	13.3	43.6	57.4	41.2	21.4	49.9	18.2	12.8	6.9	7.1	9.6	15.7	71.4	78.9	35.0	16.8	46.6	38.0	16.8	13.1	43.5	5.6	6.9	9.4	78.9	5.6	28.3
11	7.5	7.7	26.1	25.9	18.8	27.8	14.9	9.3	6.7	8.8	7.4	8.8	10.7	13.7	12.6	13.3	10.5	10.7	10.7	13.3	9.0	67.0	21.6	18.2	67.0	6.7	15.9
12	40.1	30.4	9.4	10.4	13.4	41.5	34.8	23.1	41.3	16.2	26.0	24.1	34.2	26.7	28.0	17.0	20.2	52.9	25.6	21.5	27.1	19.8	64.7	50.7	64.7	9.4	29.1
13	25.5	39.9	25.5	51.0	41.9	10.5	37.5	9.8	16.0	14.7	49.9	18.7	16.4	25.9	30.8	42.0	18.3	34.1	8.8	8.1	8.4	6.1	5.7	8.2	51.0	5.7	23.1
14	55.3	36.7	57.8	54.8	28.1	77.8	13.3	37.9	21.3	6.5	7.1	8.4	8.9	10.2	10.6	10.5	8.4	8.3	8.8	8.5	8.9	38.3	21.2	29.1	77.8	6.5	24.0
15	7.2	6.3	6.5	7.4	6.9	14.2	20.7	60.5	24.9	13.7	16.2	22.5	30.4	31.2	46.3	59.7	58.2	29.1	48.2	9.6	15.3	30.2	25.5	14.9	60.5	6.3	25.2
16	21.2	30.7	7.9	12.1	13.2	11.4	12.7	9.8	10.4	8.1	8.4	9.2	9.1	12.9	10.4	8.7	9.1	12.5	10.2	7.4	6.5	37.3	26.5	12.7	37.3	6.5	13.3
17	11.8	15.0	9.4	9.6	6.4	8.2	6.3	4.2	8.6	13.0	10.8	11.2	10.3	10.2	9.8	9.5	9.2	9.1	9.9	6.4	6.5	9.9	7.8	6.2	15.0	4.2	9.1
18	5.9	6.1	6.2	8.7	5.2	71.6	32.6	35.1	58.7	30.6	12.5	15.1	16.6	24.2	31.7	27.7	20.0	51.1	19.3	29.3	45.2	37.3	52.3	50.1	71.6	5.2	28.9
19	9.3	31.2	19.6	21.4	58.6	24.4	77.3	68.0	21.8	44.4	48.3	78.1	18.4	18.3	16.0	15.4	25.5	13.8	13.2	14.6	70.4	31.5	32.0	33.7	78.1	9.3	33.5
20	57.5	26.5	22.7	24.8	25.1	21.2	30.2	40.8	37.2	24.8	24.2	13.5	46.4	34.7	26.0	28.7	26.0	24.9	17.0	7.1	11.6	17.4	45.0	14.1	57.5	7.1	27.0
21	15.1	34.9	4.3	20.2	10.1	3.7	11.4	5.1	48.7	35.3	24.0	8.8	12.8	33.4	18.7	14.7	14.1	15.0	20.6	25.6	32.4	12.5	9.7	6.4	48.7	3.7	18.2
22	7.8	47.7	42.4	13.7	34.1	45.4	47.4	29.9	34.5	21.0	18.6	25.2	30.1	61.2	17.2	52.3	67.7	90.5	29.9	18.4	40.8	28.5	55.1	26.9	90.5	7.8	36.9
23	36.0	26.7	56.3	51.7	63.8	34.0	61.5	6.3	5.7	9.9	15.3	20.5	26.4	36.7	27.5	44.9	25.1	44.5	13.3	30.3	7.8	35.8	32.0	13.8	63.8	5.7	30.2
24	8.4	12.6	70.4	85.2	79.3	85.6	44.0	39.7	12.4	17.3	16.3	15.2	17.4	20.0	16.9	19.7	20.0	19.2	25.1	20.3	34.4	9.0	24.3	40.0	85.6	8.4	31.4
25	5.6	8.3	19.1	46.6	65.1	54.1	74.7	43.2	26.1	27.5	47.2	16.8	15.8	39.4	43.2	27.8	12.2	13.0	10.1	8.9	8.1	9.5	9.1	10.6	74.7	5.6	26.7
26	21.8	11.0	12.2	12.5	15.9	13.0	7.6	7.9	6.9	7.1	7.8	7.8	7.9	8.0	8.1	11.3	7.9	12.1	10.8	7.1	10.3	15.0	51.5	34.6	51.5	6.9	13.2
27	34.0	19.5	17.8	18.6	8.1	13.6	25.5	16.1	71.8	15.4	24.6	17.4	29.2	22.9	17.3	16.5	15.3	13.8	10.2	11.6	9.1	17.7	31.7	23.6	71.8	8.1	20.9
28	46.0	29.8	55.0	50.1	37.8	30.4	4.0	39.0	50.4	25.8	16.5	25.7	15.6	19.6	15.7	17.1	14.0	16.1	18.0	27.2	7.3	6.8	4.8	5.2	55.0	4.0	24.1
29	3.6	3.5	4.9	13.2	4.3	65.4	53.0	46.4	51.7	21.2	65.2	82.4	34.1	45.2	24.1	17.0	15.7	11.2	12.1	9.1	34.7	28.7	19.6	18.7	82.4	3.5	28.5
30	17.6	22.5	32.4	13.7	14.3	12.3	9.0	25.8	34.6	19.5	61.4	30.7	24.3	40.0	28.4	17.1	15.6	13.4	12.9	10.9	7.7	8.5	7.4	6.7	61.4	6.7	20.3
31	7.2	7.9	8.7	7.1	6.7	7.2	8.3	8.0	8.6	14.5	7.8	8.5	9.2	14.2	9.8	8.6	7.9	7.7	6.9	7.3	6.6	8.6	6.8	9.8	14.5	6.6	8.5
Max.	**70.2**	**56.8**	**70.5**	**85.2**	**79.3**	**85.6**	**77.3**	**68.0**	**71.8**	**44.4**	**65.2**	**82.4**	**71.4**	**78.9**	**76.6**	**59.7**	**67.7**	**90.5**	**48.2**	**30.3**	**70.4**	**67.0**	**86.2**	**50.7**	**90.5**		
Min.	**3.6**	**3.5**	**4.3**	**7.1**	**4.3**	**3.7**	**4.0**	**4.2**	**5.7**	**6.5**	**7.1**	**7.8**	**7.9**	**8.0**	**8.1**	**8.6**	**7.9**	**7.7**	**6.9**	**5.8**	**6.0**	**5.2**	**4.8**	**4.2**		**3.5**	
Avg.	**19.2**	**21.7**	**25.4**	**25.5**	**22.6**	**30.9**	**29.4**	**25.6**	**25.2**	**17.1**	**21.3**	**21.8**	**22.0**	**26.3**	**22.9**	**20.8**	**19.0**	**21.1**	**14.8**	**13.8**	**18.0**	**18.3**	**23.0**	**18.8**			**21.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.4	7.4	11.6	35.8	53.9	10.5	9.3	15.5	8.6	10.6	14.9	11.1	27.1	12.2	11.1	9.8	19.1	19.3	8.1	7.2	12.6	9.1	8.1	8.0	53.9	6.4	14.5
2	7.3	8.6	6.8	6.7	6.6	6.6	7.0	6.6	7.1	7.4	9.2	7.3	9.1	8.7	9.0	9.5	10.4	17.2	9.6	11.4	12.9	13.4	8.1	6.3	17.2	6.3	8.9
3	10.1	8.2	14.3	9.0	7.8	11.8	12.2	22.2	28.6	21.7	44.0	27.9	16.9	7.8	24.7	9.1	10.8	8.4	12.8	10.6	9.6	20.0	12.6	8.3	44.0	7.8	15.4
4	9.6	8.7	9.6	8.6	9.3	7.5	14.7	11.7	11.7	11.5	93.3	42.6	33.8	19.3	39.5	15.4	10.2	17.1	11.3	12.5	14.0	18.5	14.6	51.4	93.3	7.5	20.7
5	42.1	68.4	39.6	20.9	12.2	25.1	21.3	16.8	21.8	12.8	57.7	52.0	40.8	18.6	9.7	55.5	17.5	50.2	37.4	56.7	43.8	18.4	21.1	20.4	68.4	9.7	32.5
6	63.8	17.2	6.8	5.8	15.5	10.0	7.2	8.3	8.7	6.2	11.2	10.1	7.2	7.5	7.6	9.9	9.8	7.3	9.1	8.0	11.2	6.9	7.8	6.3	63.8	5.8	11.2
7	7.3	8.3	6.6	12.2	8.7	7.7	19.4	11.0	7.1	8.4	8.9	16.7	7.8	7.6	6.1	10.7	9.4	10.5	7.0	7.4	8.0	7.1	7.1	8.8	19.4	6.1	9.1
8	11.1	7.9	9.0	9.5	9.0	8.1	8.2	10.7	11.7	14.2	13.8	12.5	12.4	9.3	8.2	10.3	9.6	6.8	8.4	12.4	13.2	7.8	8.3	7.5	14.2	6.8	10.0
9	5.6	7.1	8.9	9.8	12.9	32.1	46.7	43.8	26.1	8.6	9.8	13.4	10.8	11.6	8.9	7.1	7.4	7.7	6.5	6.4	7.5	6.0	6.2	6.0	46.7	5.6	13.2
10	6.3	4.6	7.1	7.0	10.0	13.8	35.0	31.0	15.8	28.3	22.5	14.3	11.8	9.2	23.4	19.5	13.2	15.1	11.8	10.4	15.3	20.8	13.6	10.5	35.0	4.6	15.4
11	9.6	9.2	14.2	7.1	9.5	12.3	11.8	8.7	14.1	10.2	9.9	9.2	13.4	13.8	12.5	13.1	17.9	11.6	9.5	9.4	8.5	6.6	7.7	8.4	17.9	6.6	10.8
12	7.0	6.9	7.4	8.2	7.7	8.3	7.4	7.4	6.7	6.6	6.6	7.1	7.3	7.2	6.9	6.7	7.4	6.9	6.7	6.9	7.0	7.5	6.9	7.2	8.3	6.6	7.2
13	6.6	7.1	7.1	8.6	7.3	7.2	7.4	7.1	7.3	8.0	7.9	7.7	8.3	7.8	8.1	8.1	8.0	7.7	7.6	6.8	6.5	6.7	7.1	7.3	8.6	6.5	7.5
14	7.5	7.3	7.2	7.6	6.6	5.9	6.8	6.0	6.4	7.4	7.0	6.4	7.3	7.6	8.3	7.5	7.3	7.7	8.0	7.1	7.5	6.8	8.2	8.6	8.6	5.9	7.3
15	5.6	10.8	6.6	8.3	6.2	10.3	6.8	7.7	7.2	7.6	7.5	7.1	8.2	7.6	8.7	9.0	7.8	7.7	7.4	6.4	7.1	8.2	6.9	7.4	10.8	5.6	7.7
16	10.0	52.7	46.6	28.9	57.9	21.9	49.2	32.2	85.6	58.9	45.3	14.0	12.6	9.1	11.3	15.1	12.4	18.9	11.0	7.3	5.9	11.8	7.3	7.9	85.6	5.9	26.4
17	6.3	5.1	24.2	64.3	73.6	10.7	9.1	10.0	10.2	61.4	37.8	16.7	14.0	28.3	16.3	10.5	9.2	12.8	10.0	8.4	10.2	9.8	10.3	21.4	73.6	5.1	20.4
18	8.9	7.4	6.6	6.2	7.6	7.6	7.2	6.7	9.0	8.0	13.5	7.7	6.4	9.9	13.1	10.6	7.5	9.2	15.1	54.2	77.9	22.8	16.9	12.5	77.9	6.2	14.7
19	12.2	46.2	16.3	11.3	11.0	12.8	11.5	8.4	7.8	12.4	11.0	16.1	12.6	18.5	43.7	7.8	10.5	9.4	10.2	7.3	7.6	10.9	8.7	8.9	46.2	7.3	13.9
20	16.3	7.6	6.6	11.7	11.4	5.6	11.2	8.9	9.0	74.0	17.0	17.1	17.2	17.8	17.6	26.6	21.8	21.2	8.7	10.5	21.2	15.5	19.4	6.7	74.0	5.6	16.7
21	40.2	50.5	41.9	12.3	25.4	16.4	3.9	9.3	64.7	17.0	50.4	35.6	26.2	16.1	22.0	17.4	13.1	9.8	12.1	7.2	4.9	5.2	4.2	4.9	64.7	3.9	21.3
22	8.3	27.3	63.8	35.0	35.4	53.5	42.9	12.5	25.5	10.7	26.4	85.8	27.8	30.8	21.6	13.5	12.0	15.5	13.0	24.7	20.8	26.3	19.6	22.4	85.8	8.3	28.1
23	22.5	20.9	11.2	15.4	8.2	8.2	7.8	9.5	8.9	10.2	10.8	9.0	9.0	9.1	9.1	9.8	9.6	9.8	8.9	9.1	8.6	8.0	8.2	9.7	22.5	7.8	10.5
24	8.7	8.3	8.1	7.6	7.1	7.7	10.7	11.2	9.3	27.5	16.0	17.4	11.4	8.9	12.0	11.4	9.2	9.9	10.4	6.8	5.8	65.7	84.2	83.0	84.2	5.8	19.1
25	21.6	18.1	25.8	34.0	12.9	27.0	26.9	28.9	57.3	23.7	30.0	19.3	17.1	33.0	17.9	19.6	11.7	12.2	10.1	10.2	15.7	3.3	11.7	2.8	57.3	2.8	20.5
26	8.6	14.7	11.8	21.3	15.9	33.8	16.7	8.7	11.2	36.4	12.5				13.9	16.4	51.7	13.4	9.9	9.2	6.3	10.8	84.7	43.8	84.7	6.3	21.5
27	9.4	8.9	68.8	35.9	19.2	6.4	11.1	49.6	9.3	7.9	10.8	9.1	9.4	11.5	12.5	11.9	9.2	10.2	7.0	10.3	13.6	6.8	6.9	4.9	68.8	4.9	15.0
28	15.7	11.3	3.1	4.4	7.0	10.9	36.9	48.3	16.0	64.5	27.3	34.4	28.9	28.7	49.8	74.5	45.4	16.5	8.2	10.4	20.2	25.2	50.0	16.0	74.5	3.1	27.2
29	11.4	5.6	7.5	25.2	11.8	5.4	8.7	11.0	8.1	13.2	11.3	8.9	9.6	9.5	9.1	9.7	13.6	11.7	10.4	14.6	48.7	38.3	20.0	43.6	48.7	5.4	15.3
30	22.6	74.9	46.0	48.8	33.5	25.0	42.7	8.6	16.7	41.6	16.3	13.2	14.4	19.9	16.0	25.6	25.1	30.6	28.3	19.5	63.6	11.3	10.6	25.8	74.9	8.6	28.4
Max.	**63.8**	**74.9**	**68.8**	**64.3**	**73.6**	**53.5**	**49.2**	**49.6**	**85.6**	**74.0**	**93.3**	**85.8**	**40.8**	**33.0**	**49.8**	**74.5**	**51.7**	**50.2**	**37.4**	**56.7**	**77.9**	**65.7**	**84.7**	**83.0**	**93.3**		
Min.	**5.6**	**4.6**	**3.1**	**4.4**	**6.2**	**5.4**	**3.9**	**6.0**	**6.4**	**6.2**	**6.6**	**6.4**	**6.4**	**7.2**	**6.1**	**6.7**	**7.3**	**6.8**	**6.5**	**6.4**	**4.9**	**3.3**	**4.2**	**2.8**		**2.8**	
Avg.	**14.3**	**18.2**	**18.4**	**17.6**	**17.4**	**14.3**	**17.3**	**16.0**	**17.9**	**21.2**	**22.0**	**18.9**	**15.1**	**14.0**	**15.9**	**16.1**	**14.3**	**13.7**	**11.2**	**13.0**	**17.2**	**14.5**	**16.9**	**16.2**			**16.3**

Total Hours in Month 720 **Hours Data Available** 717 **Data Recovery** 99.6%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.7	31.2	16.3	22.8	12.3	14.2	26.3	49.4	47.8	9.8	7.9	8.1	8.5	8.2	8.3	8.8	9.9	9.8	8.9	12.0	8.3	8.8	7.2	16.7	49.4	7.2	15.6
2	21.3	19.9	23.9	19.8	30.4	26.8	14.3	17.1	22.3	72.7	19.1	36.9	64.4	54.3	76.2	69.5	11.8	17.4	22.8	18.6	11.1	10.6	8.5	9.0	76.2	8.5	29.1
3	7.2	27.4	17.9	22.3	82.8	23.0	12.6	9.1	8.8	8.3	9.0	7.7	7.4	8.9	6.7	6.7	8.2	13.3	8.3	8.8	45.0	45.4	57.3	75.9	82.8	6.7	22.0
4	24.7	61.3	37.8	14.7	10.4	14.0	48.2	74.9	34.9	76.0	18.5	74.0	46.6	72.7	35.2	25.0	12.9	58.0	8.8	38.3	72.3	35.4	21.6	16.3	76.0	8.8	38.9
5	7.9	48.8	11.3	15.4	17.1	6.4	9.7	58.0	92.3	55.4	84.7	20.3	16.7	15.1	16.3	9.3	14.2	15.4	7.1	12.4	8.9	9.8	9.8	6.8	92.3	6.4	23.7
6	5.3	5.4	5.6	7.3	8.3	8.8	8.8	34.2	20.9	48.4	13.8	23.1	16.9	16.3	11.8	18.9	11.4	6.6	9.3	5.7	10.3	12.3	11.4	6.0	48.4	5.3	13.6
7	6.1	5.4	6.9	6.6	6.6	4.9	5.0	6.4	7.5	6.4	10.8	8.3	7.0	6.2	7.1	7.8	7.1	7.3	6.2	5.6	6.5	6.6	6.0	6.3	10.8	4.9	6.7
8	6.0	6.1	6.5	6.0	5.3	5.7	5.7	5.2	10.1	5.0	4.8	7.1	8.5	12.5	11.3	10.6	8.5	10.1	7.3	11.6	73.9	81.4	22.4	23.9	81.4	4.8	14.8
9	51.1	10.4	6.9	7.2	6.6	6.5	6.3	5.6	5.9	6.2	5.9	6.0	6.0	6.2	6.3	6.1	6.5	6.0	6.5	6.3	6.8	6.9	7.3	5.6	51.1	5.6	8.4
10	6.5	6.1	8.1	15.8	9.8	12.8	13.4	9.8	6.6	7.3	9.1	7.7	12.1	16.5	11.6	8.4	7.2	7.6	6.8	8.0	5.9	5.4	5.7	8.2	16.5	5.4	9.0
11	6.1	6.0	5.8	6.4	6.9	7.9	7.9	7.0	86.4	12.3	11.9	6.8	7.9	7.5	7.5	10.6	8.0	5.3	5.0	5.7	5.0	4.9	4.8	4.6	86.4	4.6	10.3
12	4.3	5.0	4.7	5.4	4.6	4.5	4.6	4.6	4.5	4.3	4.4	4.4	5.1	7.4	9.0	5.7	5.4	4.3	4.8	6.7	7.1	10.0	4.4	5.8	10.0	4.3	5.5
13	23.3	4.9	9.8	17.6	56.9	62.2	33.2	54.7	32.4	63.5	43.4	65.3	47.8	31.2	6.5	7.1	6.3	7.6	6.9	8.2	7.0	5.7	4.5	4.3	65.3	4.3	25.4
14	4.6	5.7	4.3	4.7	5.6	13.0	8.0	13.9	8.5	11.4	6.3	6.4	6.2	5.7	6.5	12.3	6.0	6.7	5.3	42.0	39.1	30.1	42.0	23.6	42.0	4.3	13.3
15	6.8	13.8	11.6	36.9	32.7	8.9	38.1	9.9	9.5	11.6	29.5	13.4	7.5	8.2	9.4	6.0	4.9	9.2	15.7	11.6	10.0	9.9	10.9	38.6	38.6	4.9	15.2
16	20.3	31.2	41.8	9.5	10.1	14.8	17.2	29.4	13.0	19.4	13.1	85.1	32.2	18.9	40.9	13.1	5.8	9.5	14.0	20.1	32.0	37.2	65.4	61.8	85.1	5.8	27.3
17	36.4	56.6	21.2	49.8	26.2	22.4	37.1	19.0	16.3	9.2	23.1	65.1	24.2	63.9	19.6	60.1	47.1	12.6	9.4	9.4	5.1	6.8	7.6	5.8	65.1	5.1	27.3
18	6.0	5.5	5.2	5.3	5.3	5.0	5.4	5.3	4.8	4.9	4.4	5.3	5.3	5.0	6.9	18.4	9.7	25.9	14.2	14.6	68.6	45.4	68.2	50.6	68.6	4.4	16.5
19	12.4	26.5	38.5	37.5	41.7	81.8	42.2	47.4	10.0	14.0	17.1	14.4	16.2	31.2	19.6	28.1	17.6	69.9	56.0	15.9	30.2	78.1	28.9	40.0	81.8	10.0	34.0
20	86.3	40.9	21.3	51.9	46.2	27.2	25.2	21.6	17.1	87.4	63.1	32.1	28.3	15.7	17.2	17.4	81.1	87.1	59.5	78.4	35.0	54.9	79.8	44.2	87.4	15.7	46.6
21	75.7	57.3	23.6	47.4	24.9	57.7	26.8	7.7	40.0	24.0	32.3	21.9	17.1	7.9	4.4	12.3	9.5	11.6	6.8	3.2	3.8	4.5	4.7	5.1	75.7	3.2	22.1
22	4.4	5.3	5.5	4.9	7.1	9.1	6.0	18.6	10.8	10.1	6.0	5.2	3.7	6.2	5.7	15.6	15.3	5.3	4.0	4.6	7.1	7.2	18.7	35.2	35.2	3.7	9.2
23	11.8	12.2	14.4	17.1	24.6	10.5	7.3	7.0	4.7	5.8	6.1	7.8	4.5	4.5	4.1	6.3	5.9	7.3	9.5	15.7	6.4	6.2	6.4	8.3	24.6	4.1	8.9
24	8.6	8.2	7.6	7.5	7.9	7.3	5.9	8.0	8.5	7.3	5.7	8.3	18.2	28.5	6.5	5.8	5.9	5.3	8.6	11.2	28.5	14.5	13.0	50.6	50.6	5.3	12.0
25	38.7	9.4	6.1	5.6	5.1	33.0	18.4	75.1	38.2	7.0	5.0	11.3	7.1	5.3	10.6	5.8	60.3	24.3	43.7	58.2	53.7	41.7	51.1	53.7	75.1	5.0	27.9
26	8.7	49.5	73.8	68.9	42.0	18.1	8.1	6.3	5.9	6.1	5.1	6.0	6.5	12.8	12.0	18.5	9.5	12.6	7.8	4.9	4.5	5.1	6.2	3.9	73.8	3.9	16.8
27	4.4	4.8	11.8	7.4	8.5	5.7	5.9	8.1	7.2	31.8	36.4	14.2	13.1	7.2	10.6	15.9	12.1	13.3	11.3	37.4	44.0	56.7	62.4	62.3	62.4	4.4	20.5
28	64.2	41.7	47.9	66.4	60.3	80.8	68.5	9.7	6.5	5.4	5.6	6.5	7.0	13.3	38.2	57.7	32.4	26.3	35.6	49.4	24.5	22.8	37.3	23.9	80.8	5.4	34.7
29	59.6	49.8	45.5	49.1	26.9	21.2	9.3	12.7	31.5	3.3	5.5	6.5	31.1	24.9	15.8	21.1	8.8	13.1	12.7	15.3	13.7	5.3	5.3	5.6	59.6	3.3	20.6
30	4.2	4.2	4.4	4.7	4.0	47.2	31.1	32.3	72.3	57.7	45.6	77.0	80.8	42.8	18.6	22.9	22.6	13.6	29.4	29.3	36.6	33.4	83.1	29.2	83.1	4.0	34.5
31	37.4	20.3	16.6	87.8	40.5	16.3	17.4	21.9	49.1	17.6	26.8	28.2	23.0	69.1	88.6	38.0	64.0	15.5	40.0	19.3	25.2	59.1	65.7	72.3	88.6	15.5	40.0
Max.	**86.3**	**61.3**	**73.8**	**87.8**	**82.8**	**81.8**	**68.5**	**75.1**	**92.3**	**87.4**	**84.7**	**85.1**	**80.8**	**72.7**	**88.6**	**69.5**	**81.1**	**87.1**	**59.5**	**78.4**	**73.9**	**81.4**	**83.1**	**75.9**	**92.3**		
Min.	**4.2**	**4.2**	**4.3**	**4.7**	**4.0**	**4.5**	**4.6**	**4.6**	**4.5**	**3.3**	**4.4**	**4.4**	**3.7**	**4.5**	**4.1**	**5.7**	**4.9**	**4.3**	**4.0**	**3.2**	**3.8**	**4.5**	**4.4**	**3.9**		**3.2**	
Avg.	**21.7**	**22.0**	**18.2**	**23.5**	**21.9**	**21.9**	**18.5**	**22.3**	**23.7**	**22.9**	**18.7**	**22.3**	**18.9**	**20.4**	**17.7**	**18.4**	**17.3**	**17.4**	**15.9**	**19.0**	**23.8**	**24.6**	**26.7**	**25.9**			**21.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	66.3	34.4	82.4	52.5	52.8	83.9	30.6	10.9	28.2	52.6	65.5	13.7	60.2	58.4	38.9	51.5	72.7	27.4	34.8	35.4	20.1	13.7	11.9	5.4	83.9	5.4	41.8
2	7.3	5.7	7.5	10.6	9.6	6.5	6.1	6.0	6.0	9.4	8.9	5.9	7.0	8.0	12.1	12.5	4.6	6.0	5.7	5.7	8.8	7.2	9.4	6.4	12.5	4.6	7.6
3	6.3	5.8	4.5	5.1	4.5	4.7	5.5	6.9	6.0	3.5	6.1	3.7	4.0	4.9	5.6	6.7	5.3	5.1	7.7	5.1	5.1	11.2	9.3	9.2	11.2	3.5	5.9
4	10.4	10.6	12.3	20.5	12.7	7.6	12.2	6.3	8.0	52.2	7.9	12.3	11.2	9.7	8.5	9.5	6.4	6.1	6.0	36.4	18.1	12.2	20.4	7.7	52.2	6.0	13.6
5	7.7	34.3	18.8	9.2	7.0	6.4	12.3	15.3	16.4	30.4	32.0	76.2	52.3	47.7	31.7	46.6	52.8	68.2	96.2	73.6	46.1	54.6	70.6	64.4	96.2	6.4	40.5
6	27.0	35.3	20.1	13.6	11.3	57.3	66.6	36.7	87.8	59.4	40.9	38.6	55.2	64.2	58.6	51.9	12.7	43.1	69.6	47.2	71.9	77.5	11.4	11.9	87.8	11.3	44.6
7	28.7	45.0	18.8	14.3	22.2	17.5	17.1	43.2	44.7	75.8	72.5	52.8	69.4	48.1	31.2	49.9	51.3	78.9	11.2	46.0	23.0	17.8	34.8	9.4	78.9	9.4	38.5
8	6.4	12.2	10.2	7.7	25.7	20.7	32.8	18.3	10.0	17.1	57.4	17.1	5.3	6.8	7.5	7.1	11.5	5.8	5.6	4.9	4.9	6.6	5.8	5.0	57.4	4.9	13.0
9	5.0	4.9	6.7	9.3	6.1	6.3	9.0	6.1	9.9	6.2	10.9	13.1	9.8	6.9	15.4	5.9	6.2	6.5	5.5	8.7	5.8	5.3	5.5	6.0	15.4	4.9	7.5
10	4.9	5.6	9.6	16.9	16.7	8.8	4.8	15.1	18.3	14.2	38.9	8.2	9.6	9.9	11.6	6.5	32.9	8.2	4.7	5.6	14.6	4.8	5.0	5.5	38.9	4.7	11.7
11	5.3	5.1	5.7	7.0	6.0	5.2	6.2	6.3	6.2	9.3	9.4	14.4	13.8	25.3	34.7	15.1	12.1	6.3	51.7	19.8	21.0	37.8	9.9	4.6	51.7	4.6	14.1
12	15.7	58.5	18.0	6.7	15.7	6.6	90.1	23.5	24.0	22.4	7.2	12.8	9.0	9.0	12.0	4.2	4.7	7.6	9.6	13.8	8.1	11.5	17.5	14.6	90.1	4.2	17.6
13	25.0	21.1	14.1	10.9	8.7	5.8	5.5	4.8	6.4	4.8	5.7	10.5	7.7	4.0	7.7	5.6	15.7	14.3	10.3	8.8	6.2	6.5	6.2	6.3	25.0	4.0	9.3
14	5.3	12.0	6.6	7.1	5.5	4.8	7.0	7.2	6.8	7.1	17.4	14.5	15.4	20.5	12.2	12.7	13.9	7.7	7.6	7.7	7.2	7.4	7.5	13.2	20.5	4.8	9.8
15	8.9	7.9	8.9	8.1	8.8	9.9	9.1	9.3	35.4	39.7	58.9	6.5	15.8	6.3	7.7	5.5	4.8	4.9	5.0	4.5	5.0	4.0	4.2	4.3	58.9	4.0	11.8
16	5.3	4.5	6.2	4.7	7.1	9.6	6.0	16.8	8.8	3.5	5.5	14.5	17.7	17.2	39.0	34.0	53.4	35.2	24.5	26.5	22.5	57.7	62.3	25.3	62.3	3.5	21.2
17	21.4	19.9	24.4	49.9	58.2	48.7	42.4	15.6	18.6	73.8	27.2	56.8	46.9	14.3	32.7	50.1	58.2	60.6	41.8	52.3	60.3	42.9	13.7	6.0	73.8	6.0	39.0
18	4.3	5.7	42.7	65.6	35.8	27.4	24.3	37.9	28.9	36.5	19.3	6.0	44.9	19.3	25.4	11.6	16.8	20.7	9.3	7.4	32.0	7.5	12.9	42.4	65.6	4.3	24.4
19	27.6	12.7	31.1	7.9	12.4	42.9	36.2	20.0	13.8	19.9	8.1	10.5	5.8	9.5	11.9	7.5	5.2	4.2	5.0	7.0	9.6	6.3	7.9	6.5	42.9	4.2	13.7
20	7.8	6.4	8.0	7.2	5.8	3.7	4.2	4.3	4.4	4.9	5.4	6.4	9.5	9.1	5.0	4.8	4.4	4.3	6.6	4.8	9.8	7.4	12.3	15.4	15.4	3.7	6.8
21	7.7	10.8	7.8	38.9	5.9	7.4	10.2	8.8	13.5	85.6	86.8	69.4	70.9	28.7	70.0	88.2	82.8	90.0	18.4	73.1	28.2	23.3	25.2	32.2	90.0	5.9	41.0
22	71.3	38.6	24.3	65.8	63.9	55.4	32.6	53.5	35.8	20.9	30.0	52.7	6.8	69.7	30.1	47.1	56.2	91.7	46.7	34.3	76.7	69.9	18.6	67.6	91.7	6.8	48.3
23	21.2	20.9	17.9	15.0	12.2	11.8	19.2	41.3	63.0	51.7	12.7	52.2	48.2	21.4	4.3	7.4	7.3	5.2	4.8	5.2	4.8	4.4	5.0	5.4	63.0	4.3	19.3
24	5.6	5.5	5.4	4.9	4.8	5.6	7.9	8.3	5.6	6.0	5.3	4.8	5.1	5.3	6.8	5.0	4.5	4.3	4.4	8.6	5.6	13.6	5.4	6.6	13.6	4.3	6.0
25	8.5	19.9	9.3	7.3	6.3	5.1	4.8	12.6	35.3	11.7	19.6	15.8	6.8	83.7	40.2	9.7	8.1	6.7	4.3	5.6	6.0	6.6	7.5	17.7	83.7	4.3	15.0
26	4.8	4.0	7.9	4.2	3.8	4.3	4.1	5.0	3.9	4.6	4.1	5.1	3.9	4.9	3.2	5.5	4.7	5.4	2.8	5.5	5.0	11.9	15.8	35.9	35.9	2.8	6.7
27	52.3	25.8	10.3	13.3	52.1	24.7	30.1	76.8	40.0	61.1	9.8	47.8	55.5	27.3	41.4	69.2	31.6	73.7	23.0	47.0	40.3	20.4	16.2	25.9	76.8	9.8	38.2
28	11.9	12.8	8.3	7.4	6.7	7.7	17.0	11.0	13.9	33.8	9.4	8.1	8.9	8.5	10.8	15.2	19.8	16.2	18.5	25.5	45.0	56.3	29.6	19.8	56.3	6.7	17.6
29	20.7	9.4	5.1	4.2	4.2	6.8	5.2	8.9	9.2	5.4	8.7	4.9	5.3	6.1	5.1	6.2	6.6	5.5	5.9	4.4	4.9	4.0	3.4	6.5	20.7	3.4	6.5
30	4.7	7.2	7.2	5.7	4.3	3.4	2.7	3.2	3.3	3.8	4.6	4.6	5.1	7.4	5.3	4.2	7.4	64.5	22.9	48.2	60.8	36.8	78.3	69.2	78.3	2.7	19.4
Max.	**71.3**	**58.5**	**82.4**	**65.8**	**63.9**	**83.9**	**90.1**	**76.8**	**87.8**	**85.6**	**86.8**	**76.2**	**70.9**	**83.7**	**70.0**	**88.2**	**82.8**	**91.7**	**96.2**	**73.6**	**76.7**	**77.5**	**78.3**	**69.2**	**96.2**		
Min.	**4.3**	**4.0**	**4.5**	**4.2**	**3.8**	**3.4**	**2.7**	**3.2**	**3.3**	**3.5**	**4.1**	**3.7**	**3.9**	**4.0**	**3.2**	**4.2**	**4.4**	**4.2**	**2.8**	**4.4**	**4.8**	**4.0**	**3.4**	**4.3**		**2.7**	
Avg.	**16.8**	**16.7**	**15.3**	**16.7**	**16.6**	**17.2**	**18.7**	**18.0**	**20.4**	**27.6**	**23.2**	**22.0**	**22.9**	**22.1**	**20.9**	**21.9**	**22.5**	**26.1**	**19.0**	**22.6**	**22.6**	**21.6**	**18.1**	**18.5**			**20.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 5 Meteorological Station - Wind Sigma (RMYoung)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.5	15.5	43.5	83.8	43.8	68.6	54.7	38.6	59.3	71.2	43.2	69.6	83.3	74.6	92.2	57.2	75.5	65.4	55.8	53.2	22.7	19.2	11.7	46.8	92.2	11.7	52.7
2	57.0	34.5	29.0	11.3	5.8	17.6	7.9	4.4	3.7	3.9	3.9	7.4	4.5	4.9	4.6	4.7	4.7	6.3	4.2	4.2	5.4	4.8	4.8	4.4	57.0	3.7	10.2
3	4.6	5.2	4.5	5.4	5.4	5.2	4.7	4.5	5.2	6.2	5.2	5.4	5.2	5.7	5.7	5.3	5.3	5.1	4.9	4.7	5.4	5.1	4.9	4.8	6.2	4.5	5.1
4	5.0	5.0	6.1	5.2	6.0	4.5	4.4	4.2	4.7	6.1	4.6	6.1	5.0	4.3	4.4	4.2	4.9	5.2	6.3	6.6	5.9	5.1	5.3	4.4	6.6	4.2	5.1
5	4.6	4.3	6.3	4.7	4.8	5.4	5.0	5.1	4.7	4.3	4.4	4.1	4.2	4.9	5.4	4.4	4.4	4.1	5.5	4.2	4.6	10.7	6.8	5.8	10.7	4.1	5.1
6	5.8	4.8	7.0	5.9	4.8	5.6	5.9	6.9	7.7	5.3	7.2	9.3	40.6	30.8	50.9	54.2	37.5	40.1	12.7	12.8	18.7	9.0	8.8	60.5	60.5	4.8	18.9
7	71.5	17.6	30.0	25.1	15.7	8.7	45.7	78.3	45.9	27.4	33.3	26.5	18.5	15.8	13.7	7.9	10.1	51.1	15.0	92.9	34.8	19.2	15.3	17.5	92.9	7.9	30.7
8	25.3	63.6	86.2	38.0	21.9	26.2	22.1	24.7	12.1	15.5	12.7	14.4	6.6	13.0	5.2	5.8	7.8	10.5	12.8	11.4	14.8	10.6	9.9	13.0	86.2	5.2	20.2
9	9.2	36.3	38.9	35.0	9.4	22.1	30.6	21.6	17.8	54.7	24.4	86.6	70.9	56.6	81.9	58.3	39.6	49.7	88.6	74.9	82.2	78.2	11.7	6.6	88.6	6.6	45.2
10	5.2	6.7	8.9	5.6	7.1	7.1	5.6	5.3	8.1	7.5	9.5	8.7	4.5	17.0	81.9	4.5	8.5	6.0	4.5	6.3	11.4	4.1	3.9	4.9	81.9	3.9	10.1
11	3.1	10.1	78.8	59.7	58.6	78.8	42.2	43.8	35.2	29.5	50.9	7.1	5.8	10.6	13.1	18.4	10.0	55.0	10.5	12.4	8.0	7.0	7.1	8.7	78.8	3.1	27.7
12	7.4	72.6	46.4	46.7	14.4	22.8	21.0	46.1	30.1	53.2	49.6	65.4	84.7	45.7	60.5	57.8	24.9	56.2	21.9	6.3	6.8	13.9	9.0	7.0	84.7	6.3	36.3
13	10.4	7.0	4.9	5.1	9.3	5.0	13.1	14.9	29.2	81.1	80.8	58.2	42.0	78.5	44.7	10.3	74.7	13.2	35.4	76.5	25.7	14.7	25.9	23.5	81.1	4.9	32.7
14	29.7	29.1	27.0	28.5	62.6	79.4	29.5	30.6	33.4	4.5	5.0	6.7	5.6	5.6	3.8	4.2	7.4	6.4	6.3	5.5	4.5	4.7	5.7	5.0	79.4	3.8	18.0
15	4.7	6.1	8.8	6.8	6.6	5.9	6.7	6.2	9.0	5.9	5.1	6.8	16.2	30.9	6.0	43.2	70.2	15.7	56.3	10.6	30.4	28.7	50.0	49.3	70.2	4.7	20.3
16	45.0	67.1	55.8	71.2	58.9	61.6	35.5	61.5	46.0	55.1	28.2	5.0	5.4	6.0	5.9	6.1	5.4	6.9	5.5	5.2	4.9	5.2	6.5	4.0	71.2	4.0	27.4
17	4.8	8.7	5.5	5.4	4.8	5.3	5.3	4.6	4.5	4.5	4.5	5.0	4.9	5.4	5.4	5.2	4.7	4.7	4.8	5.9	5.6	6.8	5.8	5.3	8.7	4.5	5.3
18	4.7	4.8	4.9	4.5	4.6	4.3	5.0	5.2	4.9	5.0	4.9	4.9	4.9	5.3	5.0	5.2	5.3	5.1	5.5	5.0	4.7	5.0	5.0	4.8	5.5	4.3	4.9
19	4.9	6.1	5.3	5.5	5.0	5.3	4.8	5.0	4.8	4.6	6.4	5.6	6.3	10.2	4.4	9.1	10.4	10.0	7.7	8.2	4.9	5.7	8.7	24.1	24.1	4.4	7.2
20	24.7	5.8	8.2	6.3	5.0	7.7	5.9	39.1	55.2	15.4	93.4	93.5	76.4	57.5	9.7	79.7	83.6	25.4	74.1	21.6	75.6	49.2	68.6	68.8	93.5	5.0	43.8
21	20.9	52.4	45.7	40.0	73.3	72.7	78.3	40.3	79.0	61.0	69.7	53.1	54.9	82.2	63.6	51.5	52.2	49.4	50.0	70.2	47.2	13.7	21.1	6.1	82.2	6.1	52.0
22	6.8	20.4	24.1	16.3	25.6	7.3	6.4	6.6	7.5	7.7	5.1	6.9	16.0	26.0	10.9	8.6	6.1	6.2	5.3	4.0	4.9	4.0	4.5	5.5	26.0	4.0	10.1
23	4.7	4.1	4.0	4.7	4.7	4.3	4.6	16.5	30.3	10.4	6.1	5.2	8.1	4.6	8.4	5.2	10.7	10.1	5.9	4.9	5.9	6.4	6.8	6.1	30.3	4.0	7.6
24	8.1	6.1	7.6	17.7	21.0	23.6	4.6	12.7	7.9	13.0	7.4	5.8	6.6	4.7	27.6	10.7	72.8	21.5	26.8	27.1	32.4	13.3	11.0	45.1	72.8	4.6	18.1
25	67.9	7.7	4.9	5.0	4.2	4.2	5.0	5.4	4.7	5.2	5.6	4.7	4.3	5.0	4.3	9.7	21.3	7.6	6.1	5.5	4.3	5.6	4.3	4.5	67.9	4.2	8.6
26	5.2	4.8	4.6	5.5	9.0	7.3	6.2	5.9	5.6	4.8	4.7	4.4	4.1	4.3	4.4	5.6	5.1	4.7	4.5	5.4	3.7	5.1	4.8	5.2	9.0	3.7	5.2
27	5.1	5.7	5.8	7.8	5.7	8.0	5.2	5.7	4.3	4.2	4.5	6.3	5.7	5.3	5.0	5.5	6.0	5.3	4.8	4.1	5.3	5.2	4.7	4.1	8.0	4.1	5.4
28	3.9	11.6	6.4	7.3	9.1	12.2	10.6	5.4	18.3	13.0	4.6	11.4	7.8	5.4	10.7	12.1	4.3	5.9	9.0	6.7	8.8	6.4	8.8	8.2	18.3	3.9	8.7
29	9.7	7.5	26.4	7.8	26.0	13.2	11.5	6.9	43.8	13.7	11.2	9.8	20.4	26.2	9.7	6.5	7.4	13.5	14.2	20.1	12.3	31.6	14.7	19.7	43.8	6.5	16.0
30	9.5	37.2	13.3	25.8	17.3	9.1	20.4	56.7	58.0	25.0	88.9	15.8	81.1	50.8	79.9	63.5	33.6	20.6	64.3	48.5	43.4	79.4	35.0	88.9	88.9	9.1	44.4
31	34.0	38.3	27.7	65.9	80.1	40.6	19.4	38.7	65.2	72.5	23.3	31.3	6.3	11.4	19.7	6.5	7.7	5.5	3.4	3.5	46.7	55.1	50.2	96.9	96.9	3.4	35.4
Max.	**71.5**	**72.6**	**86.2**	**83.8**	**80.1**	**79.4**	**78.3**	**78.3**	**79.0**	**81.1**	**93.4**	**93.5**	**84.7**	**82.2**	**92.2**	**79.7**	**83.6**	**65.4**	**88.6**	**92.9**	**82.2**	**79.4**	**68.6**	**96.9**	**96.9**		
Min.	**3.1**	**4.1**	**4.0**	**4.5**	**4.2**	**4.2**	**4.4**	**4.2**	**3.7**	**3.9**	**3.9**	**4.1**	**4.1**	**4.3**	**3.8**	**4.2**	**4.3**	**4.1**	**3.4**	**3.5**	**3.7**	**4.0**	**3.9**	**4.0**		**3.1**	
Avg.	**16.8**	**19.6**	**21.8**	**21.4**	**20.3**	**21.0**	**17.0**	**21.0**	**24.1**	**22.3**	**22.9**	**21.0**	**22.9**	**22.9**	**24.2**	**20.4**	**23.3**	**19.1**	**20.4**	**20.3**	**19.1**	**17.2**	**14.2**	**21.3**			**20.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 4 Meteorological Station - Daily Total NOAH Precipitation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	11.2	0.0	0.0	0.0	0.0	0.8	15.7	0.0	0.0
2	-	-	-	0.0	3.8	0.0	0.0	0.0	8.6	0.5	0.0	0.0
3	-	-	-	1.5	0.3	0.5	0.5	0.0	17.0	0.3	0.0	0.3
4	-	-	-	3.8	0.0	0.0	0.0	0.0	0.3	2.0	0.0	0.5
5	-	-	-	0.3	0.0	0.3	0.0	0.0	0.5	4.3	0.0	11.9
6	-	-	-	0.5	0.5	1.3	0.0	0.0	8.6	0.5	0.0	3.3
7	-	-	0.0	0.0	0.3	0.0	0.5	0.0	7.1	0.0	0.0	0.3
8	-	-	0.0	0.3	0.3	0.0	0.3	0.0	7.1	0.0	0.0	0.3
9	-	-	0.0	0.3	1.8	0.3	0.0	0.0	3.6	17.3	2.5	0.0
10	-	-	0.0	0.0	0.0	0.0	0.0	0.0	2.0	12.4	6.6	0.0
11	-	-	0.0	0.0	0.8	1.0	0.0	0.0	2.0	33.3	0.5	0.0
12	-	-	0.0	0.0	0.0	4.8	8.6	0.0	10.4	6.4	0.8	1.8
13	-	-	0.0	3.0	2.5	2.0	1.3	0.8	26.7	0.3	0.5	0.0
14	-	-	0.0	1.8	0.0	0.5	0.0	1.0	3.6	3.3	1.0	0.0
15	-	-	0.0	0.0	2.3	0.0	0.0	5.1	0.0	0.0	0.8	0.8
16	-	-	0.0	1.5	2.5	1.3	8.6	0.3	1.8	0.0	0.8	0.0
17	-	-	0.0	0.0	0.0	0.0	2.8	0.0	8.1	0.0	0.0	0.5
18	-	-	0.0	0.0	2.0	0.0	0.0	0.0	14.5	0.0	0.0	0.8
19	-	-	0.0	0.3	0.0	0.0	2.0	0.3	8.6	0.0	0.3	0.0
20	-	-	1.3	0.0	0.0	0.0	0.8	0.0	1.5	0.8	0.3	0.0
21	-	-	1.5	0.5	0.0	0.0	9.4	1.5	0.0	0.0	0.0	0.0
22	-	-	0.0	0.0	0.0	0.0	3.3	2.0	6.1	0.0	0.0	3.0
23	-	-	0.0	0.0	0.8	0.0	2.8	2.0	25.1	0.0	0.3	2.0
24	-	-	0.3	0.5	1.5	0.0	10.4	4.6	3.8	0.0	0.5	0.0
25	-	-	0.0	0.0	1.3	0.0	0.0	0.0	2.0	0.3	0.3	0.5
26	-	-	0.0	0.0	0.5	1.8	0.0	0.3	0.3	0.0	0.0	0.8
27	-	-	0.0	0.8	0.0	0.0	8.1	0.0	0.0	0.0	1.3	0.3
28	-	-	0.0	0.0	0.0	2.5	0.0	4.3	0.0	0.0	7.6	0.5
29	-	-	0.0	0.0	0.0	1.5	0.0	0.0	0.5	0.0	2.3	0.0
30	-		0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
31	-		0.5		0.3		0.0	0.3		0.0		0.0
Total	0.0	0.0	3.8	26.4	21.3	18.0	59.4	22.4	170.7	97.3	26.2	27.4

Pebble 4 Meteorological Station - Daily Total Pan Evaporation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	0.0	6.2	4.9	1.0	0.0	-	-
2	-	-	-	-	-	0.0	5.2	1.1	0.0	0.0	-	-
3	-	-	-	-	-	2.8	0.0	3.7	0.0	0.0	-	-
4	-	-	-	-	-	5.7	0.9	2.6	0.0	0.0	-	-
5	-	-	-	-	-	2.3	2.2	3.4	0.0	0.0	-	-
6	-	-	-	-	-	1.3	5.3	4.2	0.0	0.0	-	-
7	-	-	-	-	-	5.7	0.4	4.1	0.0	0.0	-	-
8	-	-	-	-	-	5.5	0.1	4.1	0.0	0.0	-	-
9	-	-	-	-	-	2.3	5.3	4.7	0.0	0.0	-	-
10	-	-	-	-	-	1.4	4.1	2.8	0.0	0.0	-	-
11	-	-	-	-	-	0.0	4.9	3.7	0.0	0.0	-	-
12	-	-	-	-	0.0	0.0	0.0	2.0	0.0	0.0	-	-
13	-	-	-	-	0.0	0.0	0.0	0.0	0.0	-	-	-
14	-	-	-	-	0.0	2.0	2.3	0.0	0.0	-	-	-
15	-	-	-	-	0.0	3.2	2.8	0.0	1.0	-	-	-
16	-	-	-	-	0.0	0.0	0.0	0.0	0.0	-	-	-
17	-	-	-	-	0.0	5.7	0.0	2.4	0.0	-	-	-
18	-	-	-	-	0.0	4.2	0.2	1.6	0.0	-	-	-
19	-	-	-	-	0.0	3.4	0.0	1.9	0.0	-	-	-
20	-	-	-	-	0.0	6.3	0.0	0.0	0.0	-	-	-
21	-	-	-	-	0.0	2.7	0.0	0.0	0.8	-	-	-
22	-	-	-	-	0.0	4.1	0.0	0.0	0.0	-	-	-
23	-	-	-	-	0.0	5.4	0.0	0.0	0.0	-	-	-
24	-	-	-	-	0.0	4.3	0.0	0.0	0.0	-	-	-
25	-	-	-	-	0.0	6.8	5.8	1.9	0.0	-	-	-
26	-	-	-	-	0.0	0.0	2.1	0.0	0.0	-	-	-
27	-	-	-	-	0.0	3.7	0.0	0.5	0.0	-	-	-
28	-	-	-	-	0.0	0.0	3.1	0.0	0.0	-	-	-
29	-	-	-	-	0.0	2.2	4.7	1.6	0.0	-	-	-
30	-	-	-	-	0.0	0.9	5.8	1.7	0.1	-	-	-
31	-		-		0.0		5.4	1.8		-		-
Total	-	-	-	-	0.1	81.9	66.8	54.8	3.0	0.0	-	-

Appendix E

Validated Manual Particulate Data

Not Applicable.

APPENDIX 2N

2008 Annual Data Report, Pebble 6 Station, for the Pebble Project Meteorological Monitoring Program

2008 Annual Data Report
Pebble 6 Station

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

April 2009

Pebble 6 Station
2008 Annual Data Report

for the

Pebble Project
Meteorological Monitoring Program

Iliamna, Alaska

April 2009

prepared for

Pebble Limited Partnership,
care of Pebble Mines Corp.
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CONTENTS

Executive Summary **1**

1.0 Introduction **4**

1.1 Project Summary 4
1.2 Measurements Method Table 5
1.3 Variations from the Quality Assurance Project Plan 5

2.0 Station Performance Summary **10**

2.1 Significant Project Events 10
2.2 Missing, Invalid, and Adjusted Data 11
2.3 Network Data Completeness 11
2.4 Precision Statistics 14
2.4.1 Monitoring Network Precision Statistics 14
2.4.2 Analytical Laboratory Precision Statistics 14
2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples 14
2.5 Accuracy Statistics 14
2.5.1 Instrument Calibration Statistics 14
2.5.2 Independent Quality Assurance Audits 14

3.0 Monitoring Data Network Summary **20**

3.1 Air Quality Data Summary 20
3.2 Meteorological Data Summary 20
3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology 20
3.2.2 Temperature Climatology 32
3.3.3 Other Meteorological Parameters 37

4.0 References **43**

List of Figures

1-1. Map of the Pebble Project Area 7
1-2. Map of the Pebble 6 Station 8
1-3. Pebble 6 Meteorological Monitoring Station 9
3-1. 2008 Pebble 6 Station Wind Roses 22
3-2. Quarterly Pebble 6 Station Wind Roses (Climatronics) 23
3-3. Quarterly Pebble 6 Station Wind Roses (RM Young) 24
3-4. 2008 Wind Rose Superimposed on Site Map 31
3-5. Hourly Average 2-Meter and 10-Meter Temperatures 35

3-6. Hourly Average Vertical Temperature Difference 36
3-7. Hourly Average Relative Humidity 38
3-8. Hourly Average Barometric Pressure 40
3-9. Hourly Average Solar Radiation 41
3-10. Hourly and Cumulative Precipitation 42

List of Tables

E-1. Meteorological Data Capture – Valid Hours per Month 2
E-2. Meteorological Data Capture – Percent Data Capture 3
1-1. Meteorological Measurement Methods 6
2-1. Chronology of Significant Events 10
2-2. Percentage of Final Data Set Flagged 12
2-3. Pebble 6 Station Percent Data Capture 13
2-4. September 8, 2007 Performance Audit Summary 16
2-5. February 9, 2008 Performance Audit Summary 17
2-6. September 22 and 23, 2008 Performance Audit Summary 18
3-1. Average and Maximum Wind Speeds at Pebble 6 Station 20
3-2. Average and Maximum Wind Speeds at Iliamna 21
3-3. 2008 Annual Wind Rose Analysis Table (Climatronics) 25
3-4. Quarter A Wind Rose Analysis Table (Climatronics) 26
3-5. Quarter B Wind Rose Analysis Table (Climatronics) 26
3-6. Quarter C Wind Rose Analysis Table (Climatronics) 27
3-7. Quarter D Wind Rose Analysis Table (Climatronics) 27
3-8. 2008 Annual Wind Rose Analysis Table (RM Young) 28
3-9. Quarter A Wind Rose Analysis Table (RM Young) 29
3-10. Quarter B Wind Rose Analysis Table (RM Young) 29
3-11. Quarter C Wind Rose Analysis Table (RM Young) 30
3-12. Quarter D Wind Rose Analysis Table (RM Young) 30
3-13. 2-Meter Temperature Summary 33
3-14. 10-Meter Temperature Summary 34
3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary 38

List of Appendices

A Data Processing Specifications and Statistical Formulae
B Precision Data
C Accuracy Data
D Validated Continuous Data Summaries
E Validated Manual Particulate Data

Executive Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG, Inc., dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and Prevention of Significant Deterioration (PSD) permitting needs for the Pebble Project.

PSD-quality meteorological monitoring for the Pebble Project began on August 3, 2007. This report provides details of the first year of meteorological measurements collected from January 1, 2008 through December 31, 2008 at the Pebble 6 station.

Table E-1 and E-2 provide monthly and annual valid data capture hours and the percent data capture, respectively, for the Pebble 6 meteorological monitoring station. The Pebble 6 meteorological monitoring station met all PSD requirements during the monitoring year with the exception of the secondary precipitation sensor (Met-One) during Monitoring Quarter A, B and C, and the solar sensor during Monitoring Quarter D.

Table E-1. Meteorological Data Capture – Valid Hours per Month

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	N/A
February 2008	694	694	694	694	694	694	694	694	694	696	696	696	681	N/A
March 2008	743	743	743	743	743	743	743	743	743	743	743	743	743	N/A
April 2008	720	720	720	706	720	720	720	720	720	720	720	720	720	N/A
May 2008	744	744	744	740	744	744	744	744	744	744	744	744	744	467
June 2008	720	720	720	720	720	720	720	720	720	720	720	720	720	720
July 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	744
August 2008	744	744	744	744	744	744	744	744	744	744	744	744	744	744
September 2008	718	718	718	719	719	719	718	718	718	720	542	720	718	716
October 2008	744	744	744	744	744	744	744	744	744	744	0	744	744	312
November 2008	720	720	720	720	720	720	720	720	720	720	0	720	720	N/A
December 2008	744	744	744	744	744	744	744	744	744	744	0	744	744	N/A
Monitoring Year	**8779**	**8779**	**8779**	**8762**	**8780**	**8780**	**8779**	**8779**	**8779**	**8783**	**6397[4]**	**8783**	**8766**	**3703**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Solar sensor failed the March 8, 2009 audit. Data was invalidated back to the September 23, 2008 audit.

Table E-2. Meteorological Data Capture – Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
February 2008	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	100%	100%	100%	97.8%	N/A
March 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	N/A
Quarter A	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.3%**	**N/A**
April 2008	100%	100%	100%	98.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
May 2008	100%	100%	100%	99.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
June 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**100%**	**100%**	**99.2%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	99.9%	99.9%	99.7%	99.7%	99.7%	100%	75.3%	100%	99.7%	99.4%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**91.9%**	**100%**	**99.9%**	**99.8%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**0.0%**	**100%**	**100%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**99.9%**	**99.7%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**72.8%[4]**	**100%**	**99.8%**	**99.9**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Solar sensor failed the March 8, 2009 audit. Data was invalidated back to the September 23, 2008 audit.

1.0 Introduction

1.1 Project Summary

On behalf of The Pebble Limited Partnership, care of Pebble Mines Corp., its general partner, HCG Inc, dba. Hoefler Consulting Group is collecting meteorological data to support baseline environmental studies, mine design objectives, and future air quality permitting needs for the Pebble Project. This meteorological monitoring project currently consists of seven PSD-quality meteorological monitoring stations. Four stations are located in the deposit area; Pebble 1, Pebble 4, Pebble 5, and Pebble 6. Three stations are located in the proposed Port area; Pebble Port, Williamsport, and North Head. Data from the additional non-PSD meteorological monitoring station, Pebble 3 and Pebble 5A, are being used for engineering and mine design purposes. This report focuses on the first year of measurements collected at the Pebble 6 station from January 1, 2008 through December 31, 2008. A separate annual data report has been prepared for each of the other PSD-quality meteorological monitoring stations.

Figure 1-1 is a map of the Pebble Project meteorological monitoring sites located in southwest Alaska. Figures 1-2 and 1-3 provide a higher resolution map and a site photo, respectively, of the Pebble 6 station.

The Pebble 6 station collects data for the following parameters:

- Air temperature, two meters above ground (degrees Celsius [°C]);
- Air temperature, ten meters above ground (degrees Celsius [°C]);
- Vertical temperature difference (ΔT, “Delta T” (degrees Celsius [°C]));
- Wind speed (meters per second [m/s]);
- Wind direction (degrees [°]);
- Wind direction standard deviation (wind sigma [σ_θ]);
- Relative humidity (percent [%]);
- Solar radiation (Watts per square meter [W/m^2]);
- Barometric Pressure (millibar [mb]);
- Precipitation (millimeters [mm]); and
- Evaporation (millimeters [mm]).

Measurements of these parameters will provide at least one year of representative surface observations for use in air dispersion modeling and PSD permitting needs.

1.2 Measurements Method Table

Table 1-1 lists each parameter measured at the Pebble 6 station and includes the sensor manufacturer and model number, measurement range, accuracy, sampling frequency, and sample averaging period. All instruments meet or exceed the U.S. Environmental Protection Agency (EPA) PSD requirements for range accuracies, thresholds, response times, resolutions, damping ratios, and other measures of instrument performance. For this project, wind speed and wind direction measurements are collected using two different types of PSD-quality sensors collocated at 10-meters above ground level. The Climatronics F460 (CLM) features a three-cup anemometer and separate wind vane, while the RM Young 05305-AQ (RMY) is a propeller-vane anemometer, which is a single unit consisting of a four-blade propeller fitted to the front end of a wind vane. Dual wind sensors are deployed at the Pebble 6 station to prevent the loss of valid data in the event that one of the sensors is damaged or subjected to inclement weather conditions. Because the manufacturers' stated wind speed accuracy, wind direction accuracy, and wind speed threshold values of the CLM sensor exceed those of the RMY sensor, the CLM sensor has been designated as the "primary" wind instrument at the Pebble 6 PSD station.

1.3 Variations from the Quality Assurance Project Plan

During the 2008 monitoring year, no variations occurred from the Pebble Project Meteorological Monitoring Quality Assurance Project Plan (QAPP).

Table 1-1. Meteorological Measurement Methods

Parameter	Sensor Manufacturer/ Model Number	Measurement Method	Range	Accuracy	Sampling Frequency	Averaging Period
Ambient Temperature	Met One, Inc. Model 062 MP	Solid state thermistor	+50°C to -50°C	± 0.05°C	1 second	1 hour
Wind Speed[1]	Climatronics, Inc. F460 (P/N 100075)	Three-cup anemometer, LED photo chopper	0 to 65 m/s	± 0.15 m/s or 1%	1 second	1 hour
Wind Direction[1]	Climatronics, Inc. F460 (P/N 100076)	Light-weight vane, Low torque potentiometer	0 to 360°	± 2°	1 second	1 hour
Wind Speed[1]	RM Young Co. 05305-AQ	Propeller, magnetically induced AC sine wave	0 to 60 m/s	± 0.3 m/s or 1%	1 second	1 hour
Wind Direction[1]	RM Young Co. 05305-AQ	Light-weight vane, Low torque potentiometer	0 to 360°	± 3°	1 second	1 hour
Relative Humidity	Vaisala, Inc. HMP 45C	Capacitive polymer chip	0.8 to 100%	± 2%	1 second	1 hour
Solar Radiation	LI-COR, Inc. LI200X	Silicon photovoltaic detector	0 to 3,000 W/m^2 (400 to 1,100 nm)	± 5%	1 second	1 hour
Barometric Pressure	Vaisala, Inc. PTB 101B	Silicon capacitive sensor	600 to 1060 mb	± 0.5 mb	1 hour[2]	N/A[2]
Precipitation	ETI NOAH II	Pressure of water column above a load cell mechanism	0 to 12 in	± .254 mm	N/A[3]	N/A[3]
Precipitation	Met One	Tipping bucket mechanism	0 to 76.2mm/hr	± 1%	N/A[3]	N/A[3]
Evaporation	Nova Lynx 255-100	Change in pressure head determined by float mechanism	3 to 10 in	± 0.25% over 10 in range	1 second	1 minute

[1] Wind speed and wind direction measurements are collected using two different types of PSD-quality sensors.
[2] Instantaneous barometric pressure measurements are collected for one second during every hour.
[3] Instantaneous precipitation measurements are collected by the datalogger and subsequently summed on an hourly basis.

Figure 1-1. Map of the Pebble Project Area

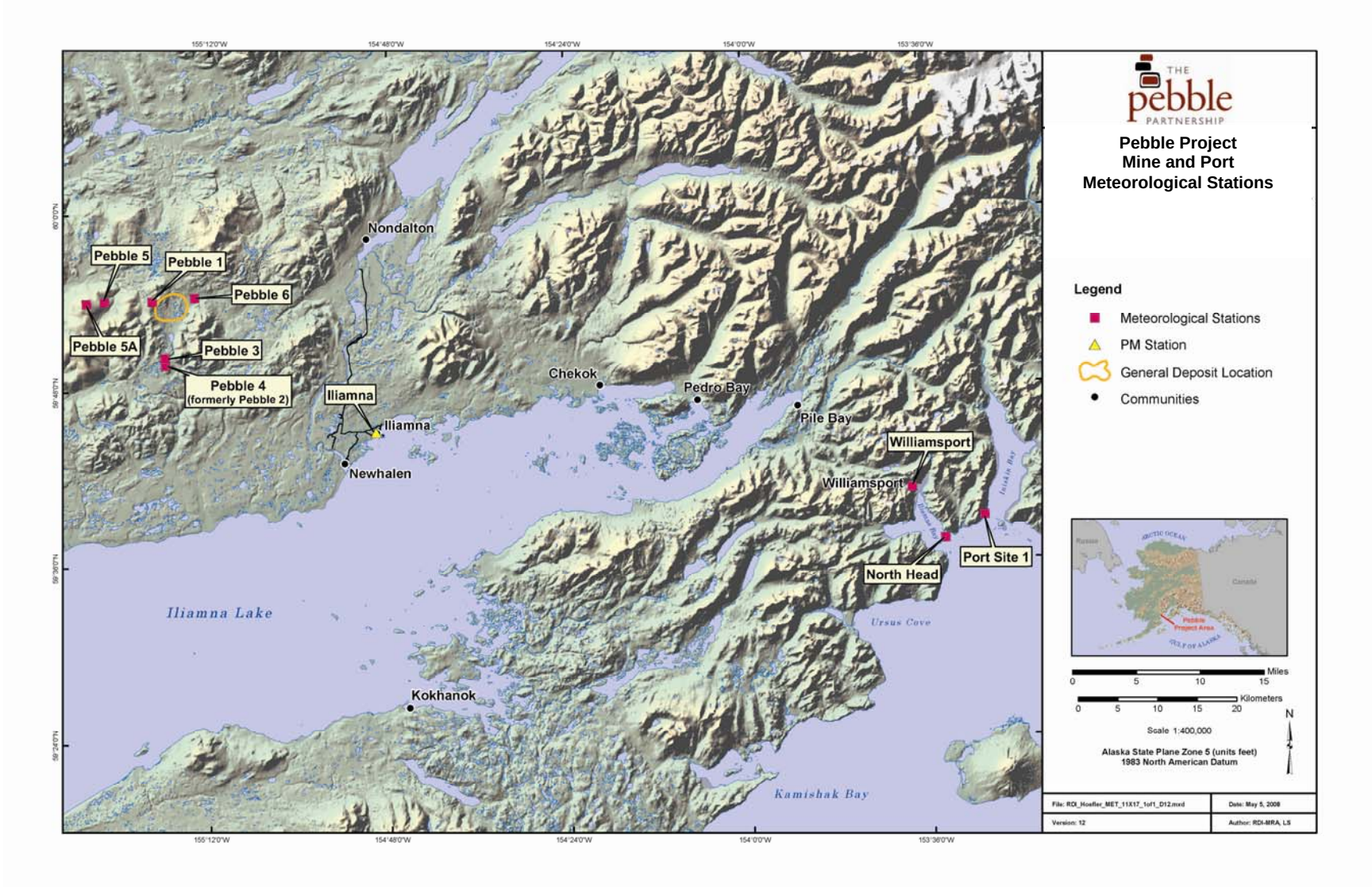


Figure 1-2. Map of the Pebble 6 Station

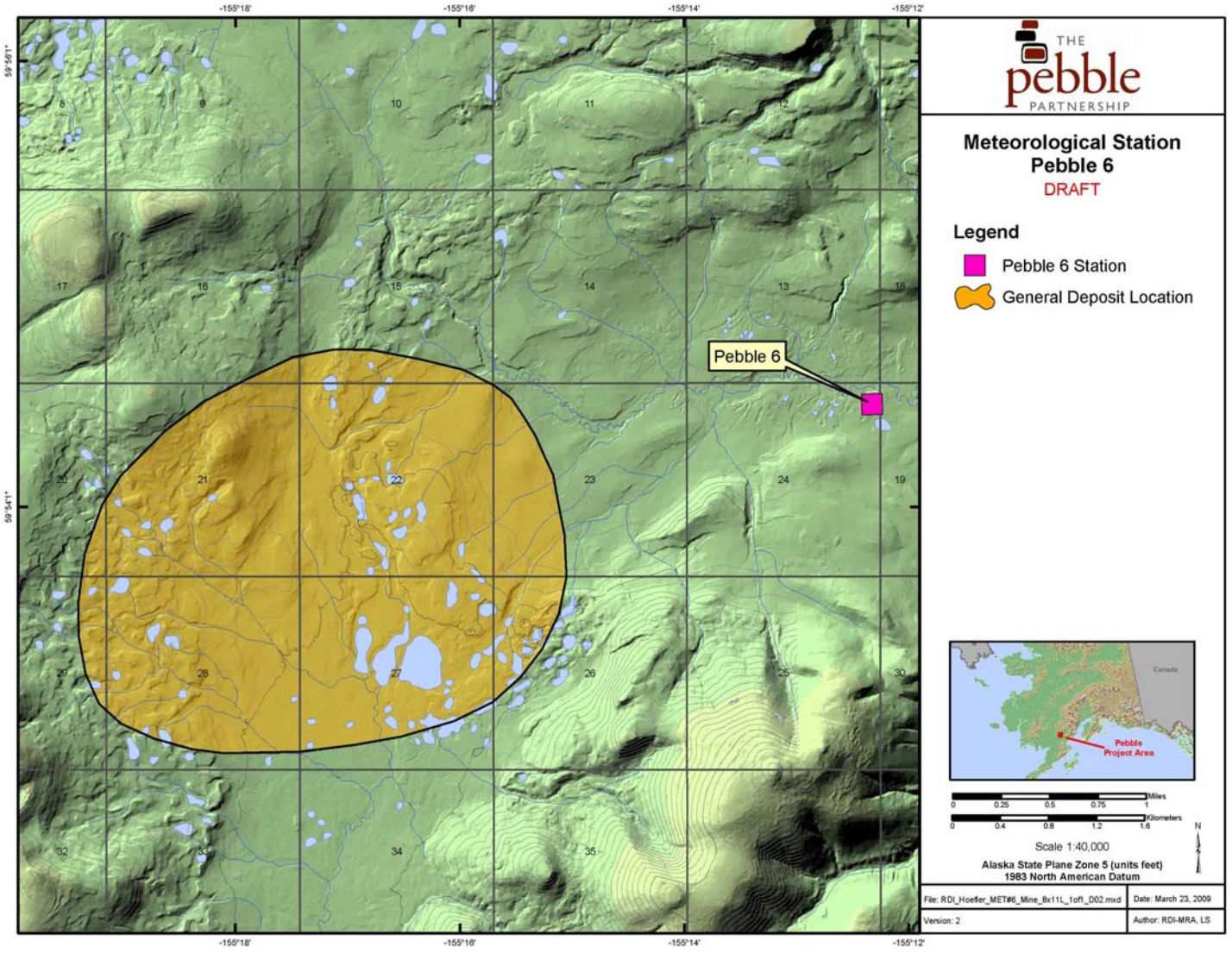


Figure 1-3. Pebble 6 Meteorological Monitoring Station

2.0 Station Performance Summary

2.1 Significant Project Events

Table 2-1 summarizes the significant events that occurred at the Pebble 6 station relevant to the 2008 meteorological monitoring year.

Table 2-1. Chronology of Significant Events

Date	Event
January 1, 2008	Beginning of 2008 monitoring year.
January 30, 2008	Site visit to service precipitation gauges.
February 9, 2008	Full audit performed (all sensors passed too cold to perform tipping precipitation test).
March 5, 2008	Precipitation gauge audit and calibration (instrument passed).
April 29, 2008	Site visit to service precipitation gauges.
May 12, 2008	Calibrated and refreshed precipitation gauges, calibrated and started evaporation gauge.
September 22 and 23, 2008	Full audit performed. Secondary precipitation sensor failed.
October 13, 2008	Evaporation gauge decommissioned for winter.
December 31, 2008	End of 2008 monitoring year.

2.2 Missing, Invalid, and Adjusted Data

The data for the Pebble 6 station were carefully reviewed during the quality assurance process. Some data were removed as a result of planned site activities, including data collected during station system and performance audits and calibrations.

All data were validated only after being screened by the criteria listed in Table 8-4 of *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005). Table 2-2 lists the quantities of data that were flagged according to EPA criteria, yet not removed from the refined final data set. All flagged data were carefully examined, but generally remained in the reduced data unless dictated by certain circumstances, including values outside the normal range of variation, consecutive repetitive values recorded for an unidentified reason, maintenance activity at the site, and impairing damage to sensors.

2.3 Network Data Completeness

Data completeness is a measure of the amount of data actually collected compared to the amount of data that could have been collected. Data completeness was calculated by dividing the number of valid hours of data by the total number of hours during the monitoring period. The data quality objective (DQO) for data completeness for the Pebble Project Meteorological Monitoring Program is 90 percent data capture per quarter for each parameter listed in Section 1.1. Table 2-3 provides a summary of data completeness, in terms of a percentage, for the 2008 monitoring year at the Pebble 6 station.

Table 2-2. Percentage of Final Data Set Flagged

Parameter	Flagging Criteria[1]	Percent Flagged
Wind Speed (Climatronics)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.0%
	< 0.1 m/s variation for 3 consecutive hours	1.5%
	<0.5 m/s variation for 12 consecutive hours	0.4%
Wind Direction (Climatronics)	Value is < 0°, > 360°	0.0%
	<1° variation over 3 consecutive hours	0.8%
	< 10° variation over 18 consecutive hours	0.3%
Wind Speed (RM Young)	Value is < 0 m/s	0.0%
	Value is > 25 m/s	0.0%
	< 0.1 m/s variation for 3 consecutive hours	0.9%
	< 0.5 m/s variation for 12 consecutive hours	0.0%
Wind Direction (RM Young)	Value is < 0°, > 360°	0.0%
	< 1° variation over 3 consecutive hours	1.0%
	< 10° variation over 18 consecutive hours	0.4%
Temperature (2 meters)	> 5°C variation from previous hour	0.2%
	< 0.5°C variation for 12 consecutive hours	0.5%
	Value is > record high, < record low	0.0%
Temperature (10 meters)	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	0.3%
	Value is > record high, < record low	0.0%
Temperature Difference, ΔT	Value is > 0.8°C during the daytime	1.6%
	Value is < -0.8°C during the night	0.0%
	Value is > 5°C, < -3°C	0.1%
Relative Humidity (Dew Point Temperature)[2]	Value is > ambient temperature	0.0%
	> 5°C variation from previous hour	0.1%
	< 0.5°C variation for 12 consecutive hours	0.8%
	Equals ambient temperature for 12 consecutive hours	0.0%
Solar Radiation	> 0 W/m^2 at night	0.0%
	Greater than the maximum possible value for date	0.0%
Barometric Pressure	> 1060 mb (sea level)	0.0%
	< 940 mb (sea level)	0.0%
	> 6 mb variation for 3 consecutive hours	0.0%
Precipitation	> 25 mm in one hour	0.0%
	> 100 mm in 24 hours	0.0%
	< 50 mm in one month	58.3%

[1] Based upon Table 8-4: Suggested Data Screening Criteria in *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA-454/R-99-005).
[2] Guidance document provides criteria relative to dew point temperature.

Table 2-3. Pebble 6 Station Percent Data Capture

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
February 2008	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	100%	100%	100%	97.8%	N/A
March 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	N/A
Quarter A	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.3%**	**N/A**
April 2008	100%	100%	100%	98.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
May 2008	100%	100%	100%	99.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
June 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**100%**	**100%**	**99.2%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	99.9%	99.9%	99.7%	99.7%	99.7%	100%	75.3%	100%	99.7%	99.4%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**91.9%**	**100%**	**99.9%**	**99.8%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**0.0%**	**100%**	**100%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**99.9%**	**99.7%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**72.8%[4]**	**100%**	**99.8%**	**99.9**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Solar sensor failed the March 8, 2009 audit. Data was invalidated back to the September 23, 2008 audit.

2.4 Precision Statistics

2.4.1 Monitoring Network Precision Statistics

Not applicable.

2.4.2 Analytical Laboratory Precision Statistics

Not applicable.

2.4.3 Analytical Laboratory Precision Statistics for Lead Analysis of Particulate Samples

Not applicable.

2.5 Accuracy Statistics

2.5.1 Instrument Calibration Statistics

Not applicable.

2.5.2 Independent Quality Assurance Audits

A performance audit was performed on all station sensors on September 8, 2007 to check sensor operation against certified audit equipment. All sensors passed. The results of the performance audit are presented in Table 2-4.

The first annual performance audit for 2008 was conducted at the Pebble 6 station on February 9, all sensors passed. The results of the performance audit are presented in Table 2-5.

The second annual performance audit for 2008 was conducted at the Pebble 6 station on September 22 and 23, 2008 on all instruments. All sensors passed with the exception of the secondary precipitation sensor (Met-One). The sensor was replaced and a second audit was conducted. The results of this audit are presented in Table 2-6.

The performance audit involves reading the data acquisition system (DAS) output for each meteorological sensor and comparing the value with the input from appropriate audit equipment or from calibrated instruments collocated with the sensor. For each reading, the difference between the station value and the predicted value is compared with established PSD limits to assess the accuracy of the sensor.

During each of these audits, the power supply, DAS, communications system, and audited sensors all worked properly. A technical systems audit was performed during the September 22 and 23, 2008, audit and found that the station is well-planned, equipped with PSD quality equipment, and properly sited according to criteria recommended by EPA. The operator provided adequate manuals for system maintenance and proper documentation to report operation and quality control activities. The operator was knowledgeable and competent with all meteorological equipment, communications equipment, and the power supply system.

Appendix C contains all of the complete technical systems and performance audit reports.

Table 2-4. September 8, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	-0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	-0.25	Pass
Air Temperature Difference	≤ ±0.1	°C	0.07	Pass
2-m Temperature Accuracy[1]	≤ ±0.5	°C	-0.26	Pass
10-m Temperature Accuracy[1]	≤ ±0.5	°C	-0.21	Pass
Air Temperature Difference[1]	≤ ±0.1	°C	0.05	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.7	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.08	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	1.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.8	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.7	Pass
Barometric Pressure	≤ ±3	Mbar	0.7	Pass
Solar Radiation	≤ ±5+Res	% input	-8.7[2]	Pass
Tipping Precipitation	≤ ±10	% input	4.2	Pass
Weighing Precipitation	≤ ±10	% input	9.9	Pass
Evaporation	≤ ±10	% input	2.3	Pass

[1] Temperature program changed to half bridge and re-audited.
[2] Max percent error value of -8.7 within limit of 5% input + resolution, see audit.

Table 2-5. February 9, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:14	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
Air Temperature Difference	≤ ±0.1	°C	0.0	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.3	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.08	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	1.9	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.7	Pass
Wind Direction Linearity	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.7	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	8.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.4	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.8	Pass
Barometric Pressure	≤ ±3	Mbar	2.4	Pass
Solar Radiation	≤ ±5+Res	% input	-7.5[1]	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Tipping Precipitation[2]	≤ ±10	% input	-0.9	Pass
Evaporation	≤ ±10	% input	0.004	Pass

[1] Max percent error value of 7.5 within limit of 5% input + resolution, see audit.
[2] Too cold to run precipitation gauge test in February; tested on March 5, 2008.

Table 2-6. September 22 and 23, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:14	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.19	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.21	Pass
Air Temperature Difference	≤ ±0.1	°C	0.06	Pass
Relative Humidity/Dew Point	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System (In Situ)				
Wind Speed Torque	≤ 0.35	gm-cm	<0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 7.5	gm-cm	7.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	1.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.9	Pass
Climatronics Wind System (Replacement Direction Sensor)				
Wind Direction Torque	≤ 7.5	gm-cm	4.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.5	Pass
RM Young Wind System (In Situ)				
Wind Speed Torque-Old Bearings	≤ 1.0	gm-cm	0.5	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	8.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.9	Pass

Table 2-6 (Cont.) September 22 and 23, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System (Replacement)				
Wind Speed Torque-Old Bearings	≤ 1.0	gm-cm	0.5	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	5.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.9	Pass
Barometric Pressure	≤ ±3	Mbar	0.0	Pass
Solar Radiation	≤ ±5+Res	% input	7.9[1]	Pass
Tipping Precipitation (In Situ)	≤ ±10	% input	57.5	Fail
Tipping Precipitation (Replacement)	≤ ±10	% input	3.5	Pass
Weighing Precipitation	≤ ±10	% input	8.9	Pass
Evaporation	≤ ±10	% input	2.5	Pass

[1] Maximum error within limit of 5% of input + resolution, see audit.

3.0 Monitoring Data Network Summary

3.1 Air Quality Data Summary

Not applicable.

3.2 Meteorological Data Summary

3.2.1 Wind Speed (WS) and Wind Direction (WD) Climatology

Table 3-1 provides a statistical summary of Climatronics (CLM) and RM Young (RMY) wind speed measurements during the 2008 year of meteorological monitoring at the Pebble 6 station. The mean hourly average wind speed during the monitoring year was 5.32 meters per second (m/s) and 5.22 m/s for the CLM and RMY sensors, respectively. Maximum hourly average wind speeds of 20.07 m/s and 19.38 m/s were measured by the CLM and RMY sensors, respectively, on April 15, 2008. Table 3-2 provides the mean and maximum daily wind speeds at the Iliamna Airport, located approximately 25 kilometers (km) from the Pebble 6 station. During the monitoring year the mean daily average wind speed at the Iliamna airport was 3.94 m/s, while the maximum daily average wind speed was 16.99 m/s, recorded on January 19, January 21, and May 23, 2008.

Table 3-1. Average and Maximum Wind Speeds at Pebble 6 Station

Monitoring Period	Mean Hourly Average Wind Speed (m/s) (CLM)	Mean Hourly Average Wind Speed (m/s) (RMY)	Maximum Hourly Average Wind Speed (m/s) (CLM)	Maximum Hourly Average Wind Speeds (m/s) (RMY)
Quarter A	6.68	6.55	18.55	17.77
Quarter B	5.25	5.09	20.07	19.38
Quarter C	3.95	3.80	12.74	12.30
Quarter D	5.40	5.47	17.65	16.96
Monitoring Year	**5.32**	**5.22**	**20.07**	**19.38**

Table 3-2. Average and Maximum Wind Speeds at Iliamna

Monitoring Period	Mean Hourly Average Wind Speed (m/s)	Maximum Hourly Average Wind Speed (m/s)
Quarter A	4.23	16.99
Quarter B	3.87	16.99
Quarter C	3.22	12.52
Quarter D	4.46	14.30
Monitoring Year	**3.94**	**16.99**

Figure 3-1 provides wind roses for the CLM and RMY wind instruments during the 2008 monitoring year. Winds were predominantly from the west and southeast, with other minor wind components. Figures 3-2 and 3-3 present the quarterly wind roses for the CLM and RMY sensors, respectively. All of the quarterly wind roses are characterized by major wind components from the west. Quarter A and D wind roses exhibited a minor wind components from the east, southeast and northwest directions. Quarter B and C wind roses exhibited an additional major wind component to the southeast direction and other minor wind components from the east and northwest directions. Tables 3-3 through 3-7 are the annual and quarterly wind analysis tables for the Climatronics wind measurements. Tables 3-8 through 3-12 are the annual and quarterly wind analysis tables for the RM Young wind measurements.

Figure 3-4 shows the 2008 monitoring year wind rose (derived from the Climatronics wind sensor measurements) superimposed over a map of the meteorological station and vicinity. The wind rose in Figure 3-4 is centered over the location of the Pebble 6 station.

Figure 3-1. 2008 Pebble 6 Station Wind Roses

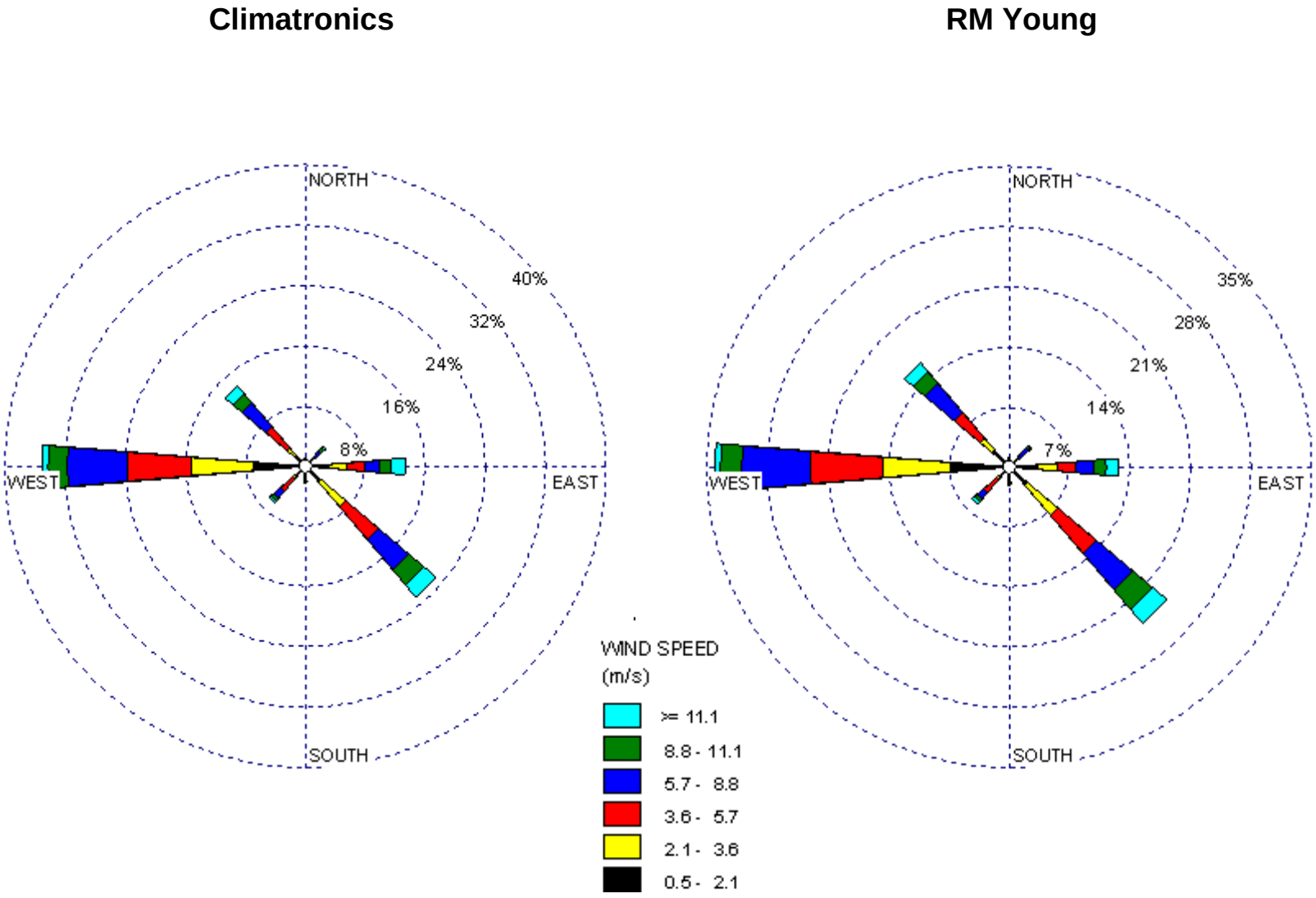
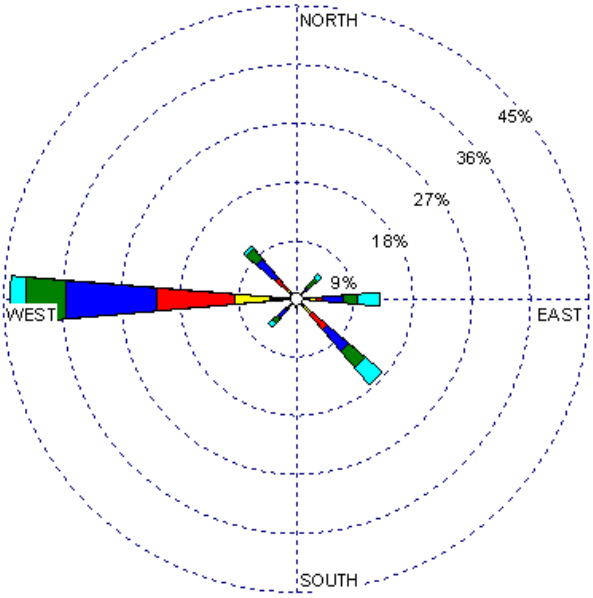
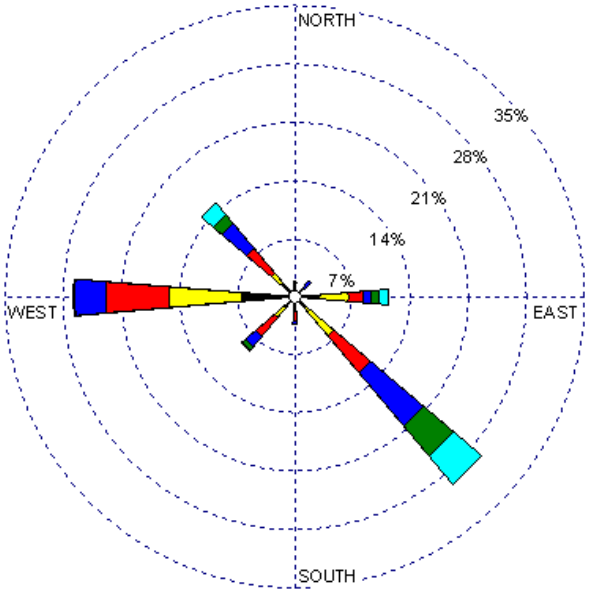


Figure 3-2. Quarterly Pebble 6 Station Wind Roses (Climatronics)

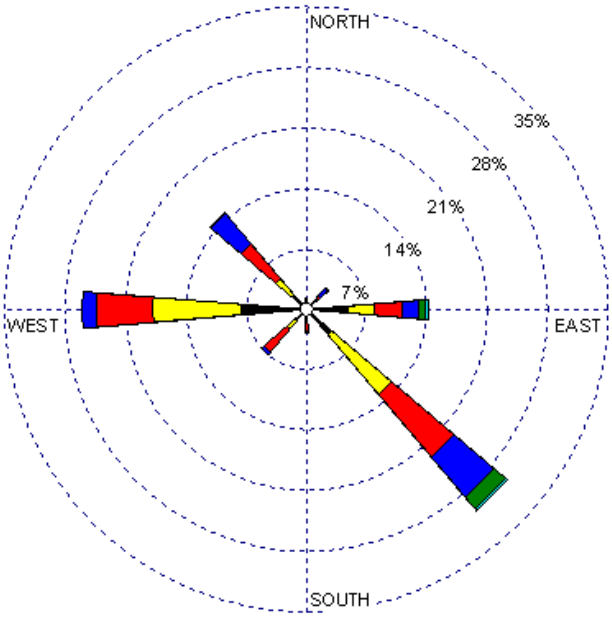
Quarter A (1/1/08 – 3/31/08)



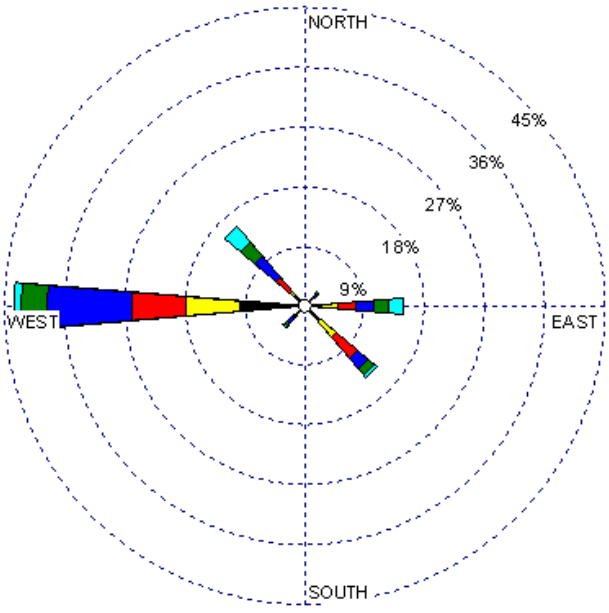
Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)



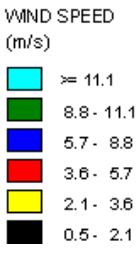
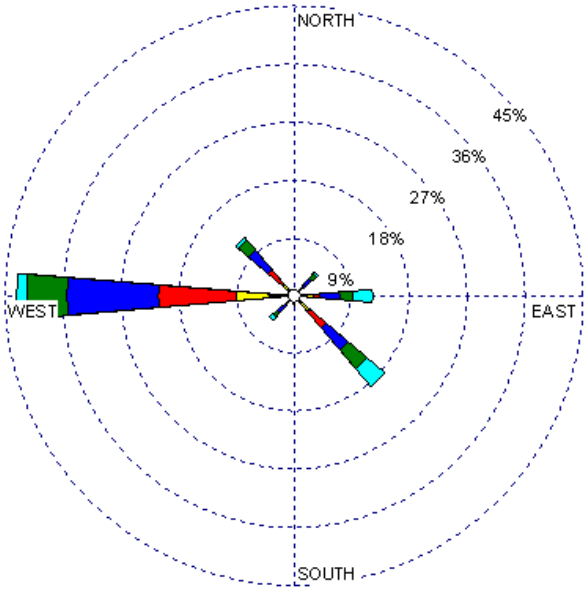
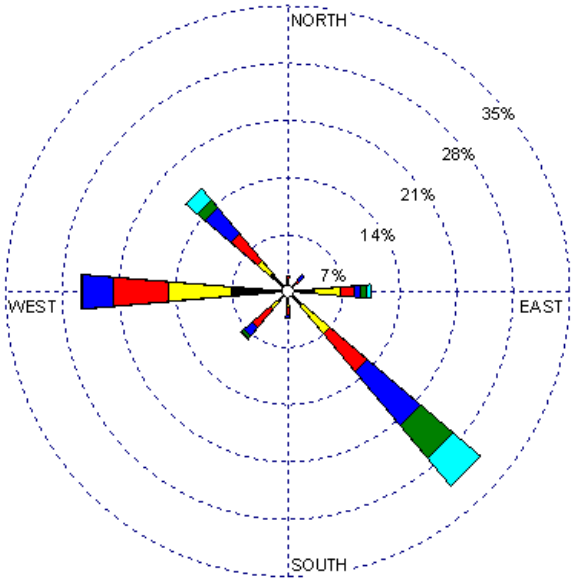


Figure 3-3. Quarterly Pebble 6 Station Wind Roses (RM Young)

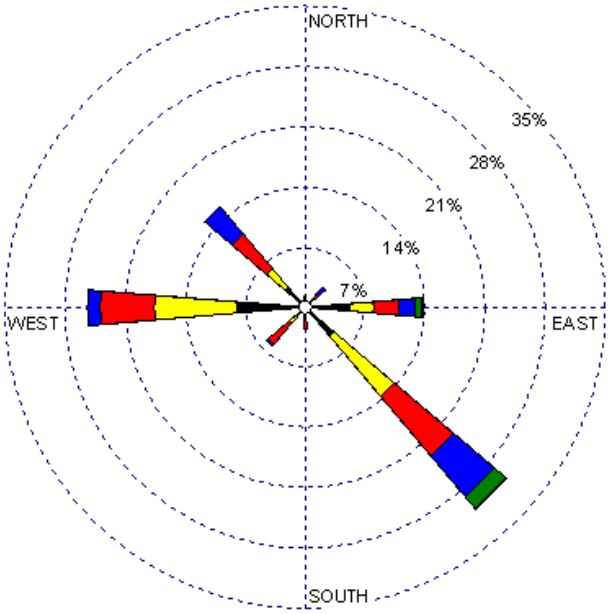
Quarter A (1/1/08 – 3/31/08)



Quarter B (4/1/08 – 6/30/08)



Quarter C (7/1/08 – 9/30/08)



Quarter D (10/1/08 – 12/31/08)

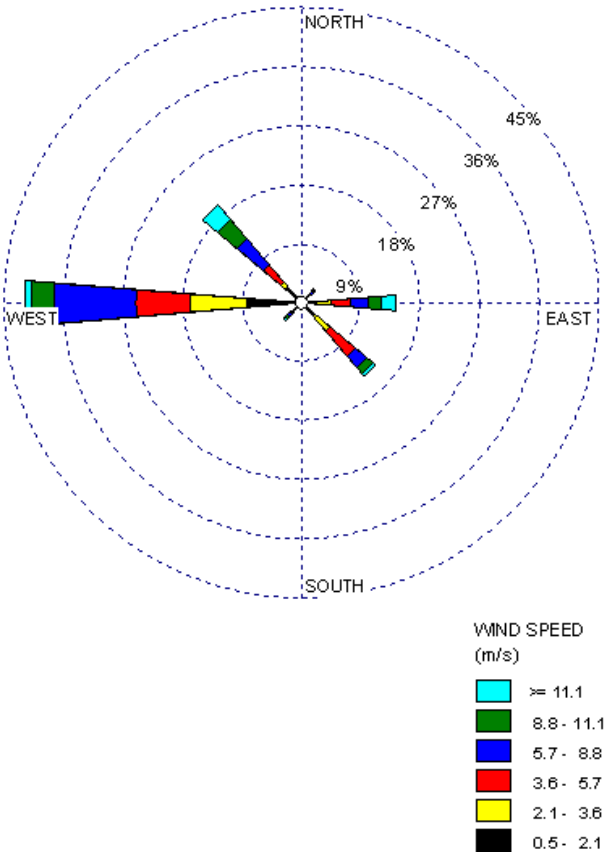


Table 3-3. 2008 Annual Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 6 (Climatronics) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.58%	0.27%	0.20%	0.07%	0.03%	0.00%	1.16%
NE	0.93%	0.28%	0.22%	1.28%	0.64%	0.24%	3.59%
E	3.15%	2.47%	2.24%	2.10%	1.54%	1.84%	13.34%
SE	2.62%	4.54%	5.66%	5.18%	2.73%	2.14%	22.87%
S	0.72%	0.54%	0.63%	0.18%	0.15%	0.03%	2.24%
SW	0.99%	1.26%	2.21%	1.15%	0.49%	0.35%	6.46%
W	7.06%	8.11%	8.53%	7.91%	2.55%	0.85%	35.01%
NW	1.84%	1.50%	3.63%	4.12%	1.57%	1.38%	14.05%
Sub-Total:	17.90%	18.98%	23.32%	21.99%	9.70%	6.84%	98.72%
Calms (<0.5m/s):							1.28%
Total:							100.00%

Table 3-4. Quarter A Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 6 (Climatronics) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.14%	0.27%	0.00%	0.00%	0.09%	0.00%	0.50%
NE	0.46%	0.18%	0.05%	1.69%	1.97%	0.78%	5.13%
E	2.11%	1.05%	0.96%	3.07%	2.29%	3.48%	12.96%
SE	1.60%	1.56%	3.11%	4.30%	3.34%	3.43%	17.35%
S	0.46%	0.37%	0.05%	0.14%	0.46%	0.14%	1.60%
SW	0.64%	0.46%	1.24%	1.60%	1.05%	0.78%	5.77%
W	4.21%	5.40%	12.00%	13.78%	6.14%	2.38%	43.91%
NW	0.96%	0.96%	2.52%	3.66%	2.15%	0.55%	10.81%
Sub-Total:	10.58%	10.26%	19.92%	28.25%	17.49%	11.54%	98.03%
Calms (<0.5m/s):							1.97%
Total:							100.00%

Table 3-5. Quarter B Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 6 (Climatronics) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.87%	0.50%	0.46%	0.05%	0.05%	0.00%	1.92%
NE	0.78%	0.64%	0.18%	1.01%	0.09%	0.00%	2.70%
E	2.93%	3.57%	1.83%	0.87%	0.92%	1.19%	11.31%
SE	1.97%	4.26%	5.82%	8.33%	4.67%	4.53%	29.58%
S	0.92%	0.92%	1.19%	0.37%	0.05%	0.00%	3.43%
SW	0.96%	2.29%	3.07%	1.60%	0.46%	0.18%	8.56%
W	6.55%	8.75%	7.51%	3.75%	0.18%	0.00%	26.74%
NW	2.15%	1.65%	3.89%	3.98%	1.33%	1.83%	14.84%
Sub-Total:	17.12%	22.57%	23.95%	19.96%	7.74%	7.74%	99.08%
Calms (<0.5m/s):							0.92%
Total:							100.00%

Table 3-6. Quarter C Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 6 (Climatronics) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.82%	0.18%	0.23%	0.18%	0.00%	0.00%	1.40%
NE	1.50%	0.23%	0.36%	1.18%	0.27%	0.00%	3.53%
E	4.85%	3.04%	3.26%	1.95%	0.73%	0.41%	14.23%
SE	3.94%	9.02%	9.47%	5.98%	1.81%	0.18%	30.40%
S	0.68%	0.82%	1.13%	0.14%	0.00%	0.00%	2.76%
SW	1.27%	1.72%	3.62%	0.36%	0.00%	0.00%	6.98%
W	7.70%	10.10%	6.57%	1.59%	0.00%	0.00%	25.96%
NW	2.17%	2.58%	5.30%	4.58%	0.05%	0.00%	14.68%
Sub-Total:	22.93%	27.68%	29.95%	15.95%	2.85%	0.59%	99.95%
Calms (<0.5m/s):							0.05%
Total:							100.00%

Table 3-7. Quarter D Wind Rose Analysis Table (Climatronics)

Station ID: Pebble 6 (Climatronics) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.50%	0.14%	0.14%	0.05%	0.00%	0.00%	0.82%
NE	1.00%	0.09%	0.27%	1.22%	0.23%	0.18%	2.99%
E	2.72%	2.22%	2.90%	2.49%	2.22%	2.31%	14.86%
SE	2.94%	3.31%	4.21%	2.13%	1.13%	0.45%	14.18%
S	0.82%	0.05%	0.14%	0.09%	0.09%	0.00%	1.18%
SW	1.09%	0.59%	0.91%	1.04%	0.45%	0.45%	4.53%
W	9.74%	8.15%	8.06%	12.55%	3.89%	1.04%	43.43%
NW	2.08%	0.82%	2.81%	4.26%	2.76%	3.13%	15.85%
Sub-Total:	20.88%	15.35%	19.43%	23.82%	10.78%	7.56%	97.83%
Calms (<0.5m/s):							2.17%
Total:							100.00%

Table 3-8. 2008 Annual Wind Rose Analysis Table (RM Young)

Station ID: Pebble 6 (RM Young) Run ID: 2008
Start Date: January 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.63%	0.27%	0.26%	0.08%	0.01%	0.00%	1.25%
NE	0.87%	0.23%	0.39%	1.55%	0.30%	0.13%	3.45%
E	3.34%	2.25%	2.14%	2.08%	1.42%	1.48%	12.72%
SE	2.82%	4.58%	5.85%	5.42%	2.99%	2.14%	23.81%
S	0.74%	0.51%	0.58%	0.17%	0.16%	0.03%	2.20%
SW	0.75%	1.23%	1.99%	0.97%	0.46%	0.32%	5.72%
W	6.90%	7.75%	8.29%	7.91%	2.46%	0.64%	33.96%
NW	2.69%	1.72%	3.97%	4.41%	1.80%	1.32%	15.91%
Sub-Total:	18.73%	18.55%	23.48%	22.59%	9.60%	6.06%	99.01%
Calms (<0.5m/s):							0.99%
Total:							100.00%

Table 3-9. Quarter A Wind Rose Analysis Table (RM Young)

Station ID: Pebble 6 (RM Young) Run ID: Quarter A
Start Date: January 1, 2008 End Date: March 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.23%	0.37%	0.05%	0.00%	0.00%	0.00%	0.64%
NE	0.37%	0.14%	0.18%	2.93%	1.05%	0.37%	5.04%
E	2.11%	0.96%	1.05%	3.02%	2.06%	3.07%	12.27%
SE	1.83%	1.47%	3.39%	4.44%	3.80%	3.57%	18.50%
S	0.46%	0.23%	0.09%	0.18%	0.46%	0.14%	1.56%
SW	0.46%	0.46%	1.10%	1.51%	0.96%	0.73%	5.22%
W	3.94%	5.22%	12.00%	14.15%	6.23%	1.56%	43.09%
NW	1.37%	1.10%	2.88%	4.03%	2.11%	0.46%	11.95%
Sub-Total:	10.76%	9.94%	20.74%	30.27%	16.67%	9.89%	98.17%
Calms (<0.5m/s):							1.74%
Total:							100.00%

Table 3-10. Quarter B Wind Rose Analysis Table (RM Young)

Station ID: Pebble 6 (RM Young) Run ID: Quarter B
Start Date: April 1, 2008 End Date: June 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	1.01%	0.46%	0.46%	0.05%	0.05%	0.00%	2.01%
NE	0.96%	0.60%	0.32%	0.87%	0.00%	0.00%	2.75%
E	3.39%	3.21%	1.69%	0.78%	0.78%	0.50%	10.35%
SE	2.43%	4.49%	6.00%	8.70%	5.27%	4.35%	31.23%
S	0.96%	1.01%	1.10%	0.27%	0.09%	0.00%	3.43%
SW	0.87%	2.11%	2.93%	1.37%	0.41%	0.14%	7.83%
W	7.10%	7.74%	6.87%	3.75%	0.18%	0.00%	25.64%
NW	2.98%	2.01%	4.35%	4.12%	1.28%	1.83%	16.58%
Sub-Total:	19.69%	21.61%	23.72%	19.92%	8.06%	6.82%	99.82%
Calms (<0.5m/s):							0.18%
Total:							100.00%

Table 3-11. Quarter C Wind Rose Analysis Table (RM Young)

Station ID: Pebble 6 (RM Young) Run ID: Quarter C
Start Date: July 1, 2008 End Date: September 30, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.77%	0.14%	0.36%	0.23%	0.00%	0.00%	1.50%
NE	1.27%	0.09%	0.73%	1.09%	0.05%	0.00%	3.22%
E	5.35%	2.67%	2.99%	1.81%	0.82%	0.23%	13.87%
SE	4.40%	9.20%	9.02%	6.21%	1.72%	0.18%	30.73%
S	0.82%	0.77%	1.00%	0.14%	0.00%	0.00%	2.72%
SW	0.86%	1.68%	3.26%	0.23%	0.00%	0.00%	6.03%
W	8.07%	9.52%	6.26%	1.50%	0.00%	0.00%	25.34%
NW	3.08%	2.81%	5.30%	4.22%	0.00%	0.00%	15.41%
Sub-Total:	24.61%	26.88%	28.92%	15.41%	2.58%	0.41%	98.82%
Calms (<0.5m/s):							1.18%
Total:							100.00%

Table 3-12. Quarter D Wind Rose Analysis Table (RM Young)

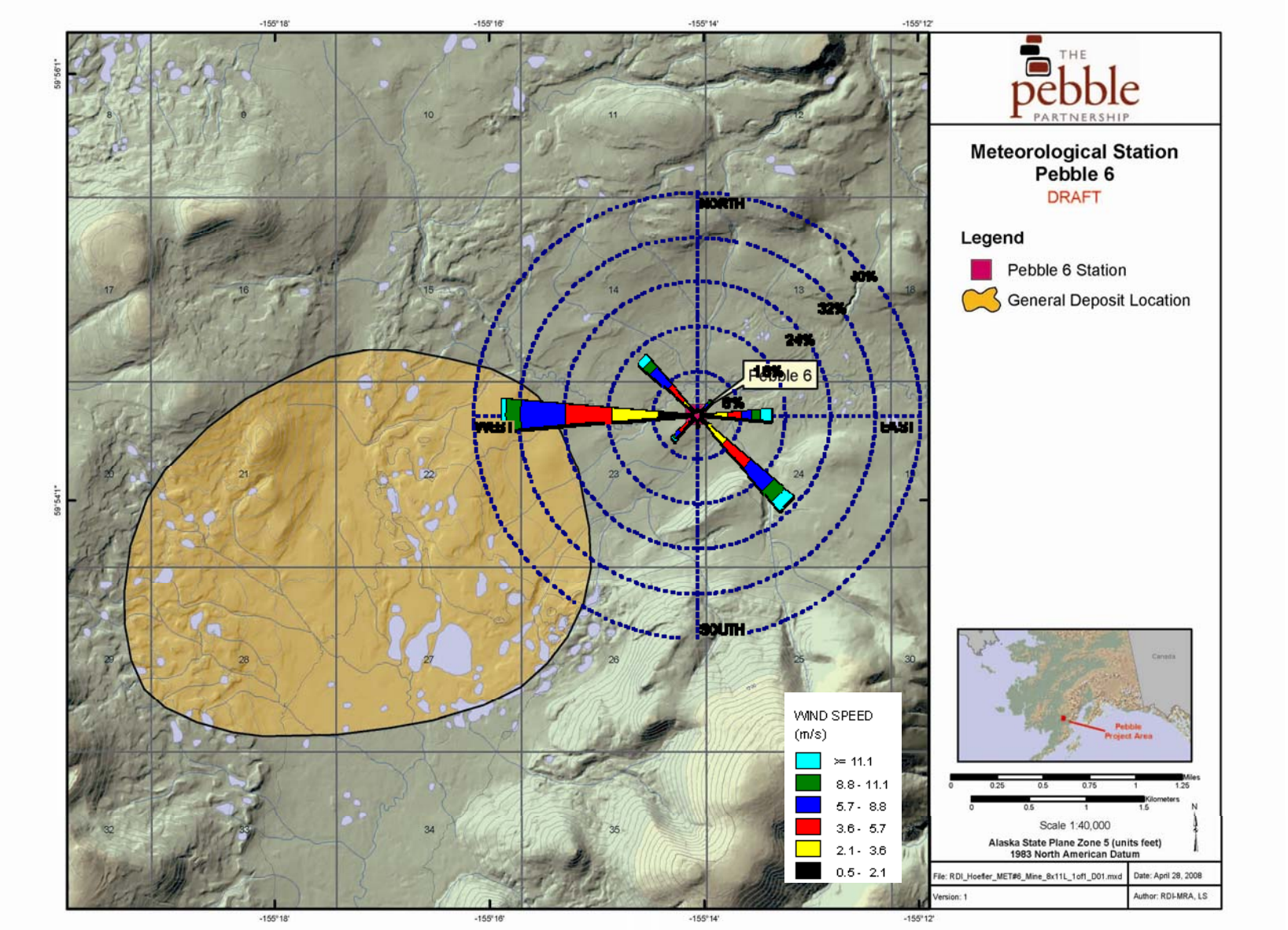
Station ID: Pebble 6 (RM Young) Run ID: Quarter D
Start Date: October 1, 2008 End Date: December 31, 2008

Frequency Distribution
(Percent)

Speed (m/s)

Direction	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
N	0.50%	0.14%	0.18%	0.05%	0.00%	0.00%	0.86%
NE	0.86%	0.09%	0.32%	1.31%	0.09%	0.14%	2.81%
E	2.49%	2.17%	2.81%	2.72%	2.04%	2.13%	14.36%
SE	2.63%	3.13%	4.98%	2.36%	1.22%	0.50%	14.81%
S	0.72%	0.05%	0.14%	0.09%	0.09%	0.00%	1.09%
SW	0.82%	0.68%	0.68%	0.77%	0.45%	0.41%	3.80%
W	8.47%	8.51%	8.06%	12.27%	3.44%	1.00%	41.76%
NW	3.31%	0.95%	3.35%	5.25%	3.80%	2.99%	19.66%
Sub-Total:	19.79%	15.72%	20.52%	24.82%	11.14%	7.16%	99.14%
Calms (<0.5m/s):							0.86%
Total:							100.00%

Figure 3-4. 2008 Wind Rose Superimposed on Site Map



3.2.2 Temperature Climatology

Tables 3-13 and 3-14 provides maximum and minimum daily mean temperatures, monthly mean temperatures, and maximum and minimum hourly average temperatures for the 2-meter and 10-meter temperature measurements, respectively. Hourly average temperatures at the Pebble 6 station ranged from 21.3°C on July 31, 2008 to -30.7°C on January 12, 2008. The average 2-meter temperature during the monitoring year was -1.5°C, which is slightly less than the mean temperature of 0.2°C observed at the Iliamna Airport during the same period.

Figure 3-5 provides a graph of the 2-meter and 10-meter hourly average temperatures. Considerable monthly temperature variation existed throughout the late-autumn and winter months. The coldest temperatures were observed during January 2008. Figure 3-5 also includes a plot of average daily temperatures recorded at the Iliamna Airport meteorological monitoring station.

Figure 3-6 is a plot of the vertical temperature difference (the difference between 10-m and 2-m temperature values) during the monitoring year. The greatest positive vertical temperature difference was 5.9°C measured on February 8, 2008. The greatest negative vertical temperature difference was -1.5°C measured on June 4, 2008.

Table 3-13. 2-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	1.4	-30.0	-14.2	2.7	-30.7
February 2008	2.4	-27.0	-12.5	3.6	-30.3
March 2008	2.2	-17.3	-6.1	3.0	-19.9
Quarter A	**2.4**	**-30.0**	**-10.9**	**3.6**	**-30.7**
April 2008	1.3	-13.2	-4.5	4.2	-17.4
May 2008	10.2	-0.5	4.8	15.1	-4.0
June 2008	13.8	4.7	8.7	19.2	-1.3
Quarter B	**13.8**	**-13.2**	**3.0**	**19.2**	**-17.4**
July 2008	14.9	7.4	10.8	21.3	-0.4
August 2008	12.6	8.1	10.7	18.7	-0.3
September 2008	11.7	2.4	7.0	14.7	-2.7
Quarter C	**14.9**	**2.4**	**9.5**	**21.3**	**-2.7**
October 2008	4.4	-15.8	-4.8	7.1	-21.6
November 2008	1.4	-25.0	-10.2	3.0	-26.4
December 2008	2.9	-26.4	-8.0	3.9	-27.3
Quarter D	**4.4**	**-26.4**	**-7.6**	**7.1**	**-27.3**
Monitoring Year	**14.9**	**-30.0**	**-1.5**	**21.3**	**-30.7**

Table 3-14. 10-Meter Temperature Summary

Period	Maximum Daily Mean Temperature (°C)	Minimum Daily Mean Temperature (°C)	Monthly Mean Temperature (°C)	Maximum Temperature (°C)	Minimum Temperature (°C)
January 2008	1.7	-29.9	-13.9	3.3	-30.6
February 2008	2.7	-26.7	-11.9	4.0	-28.6
March 2008	2.6	-17.4	-5.8	3.5	-19.8
Quarter A	**2.7**	**-29.9**	**-10.5**	**4.0**	**-30.6**
April 2008	1.9	-12.8	-4.2	5.2	-16.0
May 2008	10.1	-0.4	4.8	14.5	-3.9
June 2008	13.5	4.6	8.6	18.1	2.0
Quarter B	**13.5**	**-12.8**	**3.1**	**18.1**	**-16.0**
July 2008	14.8	7.3	10.6	20.7	2.4
August 2008	12.5	8.5	10.8	17.9	1.9
September 2008	11.7	2.9	7.2	14.0	-2.2
Quarter C	**14.8**	**2.9**	**9.6**	**20.7**	**-2.2**
October 2008	4.7	-13.7	-4.4	6.9	-18.6
November 2008	1.6	-24.8	-9.8	3.3	-25.8
December 2008	3.3	-26.2	-7.5	4.5	-27.2
Quarter D	**4.7**	**-26.2**	**-7.2**	**6.9**	**-27.2**
Monitoring Year	**14.8**	**-29.9**	**-1.2**	**20.7**	**-30.6**

Figure 3-5. Hourly Average 2-Meter and 10-Meter Temperatures

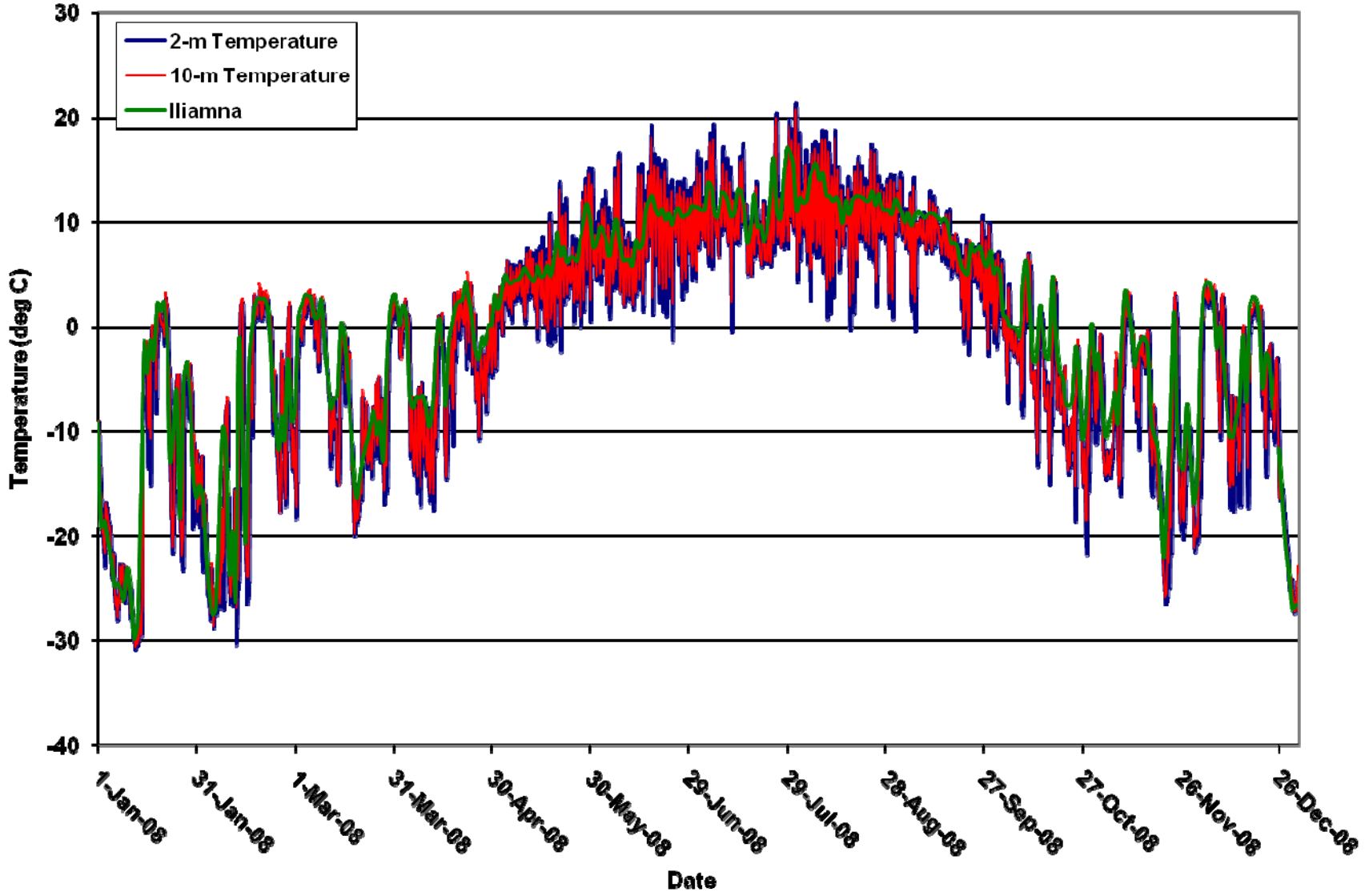
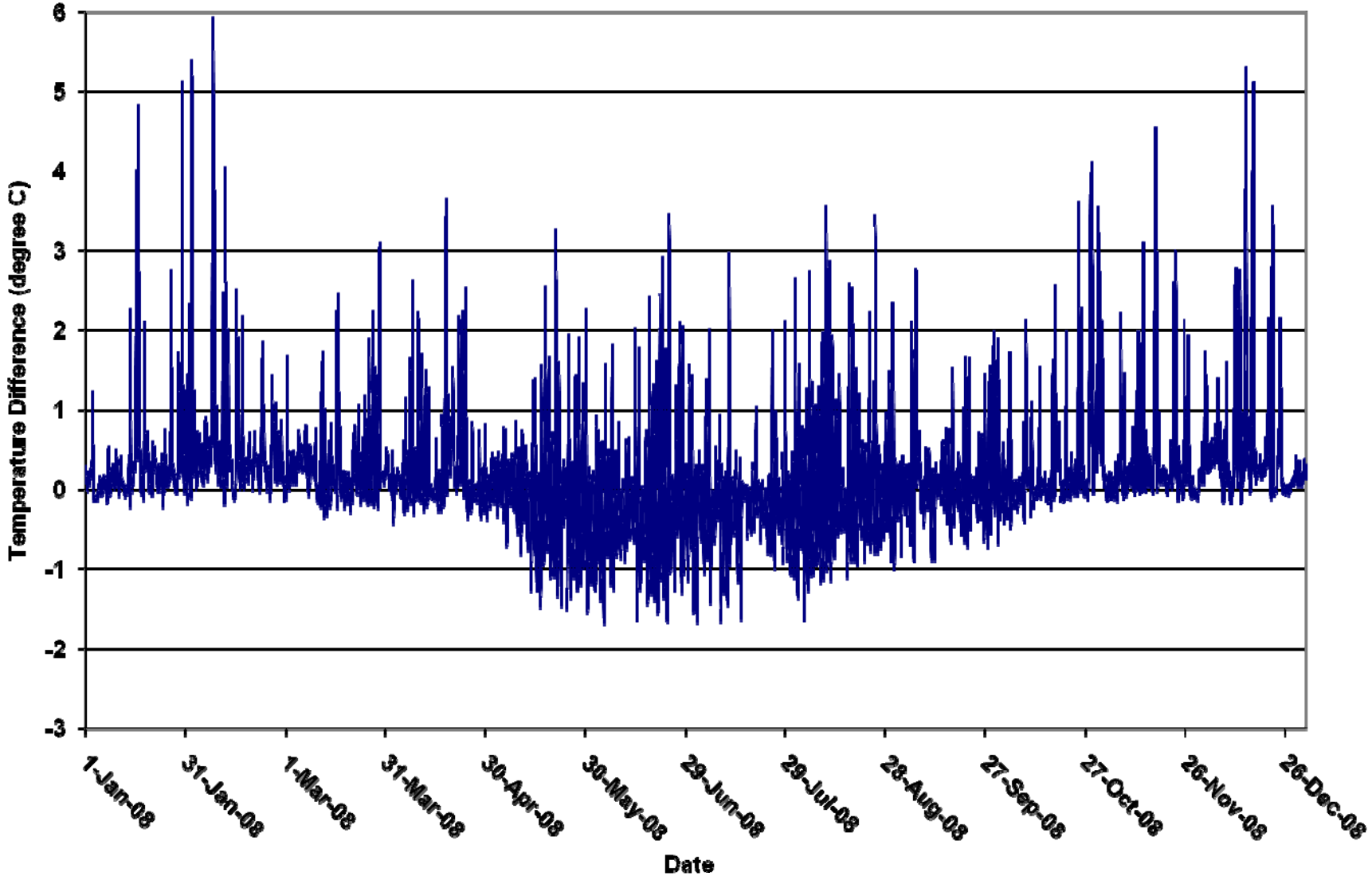


Figure 3-6. Hourly Average Vertical Temperature Difference



3.3.3 Other Meteorological Parameters

Other measured meteorological parameters include relative humidity, barometric pressure, solar radiation, precipitation, and evaporation.

Table 3-15 provides a summary of the relative humidity, barometric pressure, and solar radiation at the Pebble 6 station during the 2008 monitoring year.

Figure 3-7 is a plot of the annual hourly average relative humidity. The mean relative humidity at the Pebble 6 station was 80.8 percent. The minimum relative humidity was 31.3 percent, measured on May 20, 2008. The mean relative humidity at the Iliamna Airport meteorological station for the monitoring period was 75.6 percent.

Figure 3-8 is a plot of the annual hourly instantaneous barometric pressure. Barometric pressure varied from a minimum of 940 mb on February 19, 2008 to a maximum of 1013 mb observed on December 13, 2008. The mean barometric pressure during the monitoring year was 978 mb. The mean barometric pressure at the Iliamna Airport meteorological station for the monitoring period was 1,009 mb.

Figure 3-9 is a plot of the annual hourly average solar radiation. The maximum hourly average solar radiation was 929.0 W/m^2 recorded on July 2, 2008. The mean hourly average solar radiation for the monitoring year was 133.3 W/m^2.

Figure 3-10 is a graph of total daily precipitation and the cumulative precipitation during the 2008 monitoring year. The highest total daily precipitation was 20.3 mm measured on September 13, 2008. The maximum monthly precipitation was 165.4 mm during September 2008. The cumulative precipitation during the monitoring year was 690.6 mm. Daily winter precipitation data (October through April) should be closely examined before use because snowfall adaptors may influence daily totals.

A table of total daily evaporation is provided in Appendix D. The maximum total monthly evaporation at the Pebble 6 station was 84.0 mm during June 2008.

Comprehensive hourly data tables of temperature, vertical temperature difference, wind speed, wind direction, wind sigma, relative humidity, barometric pressure, and solar radiation are also provided in Appendix D.

Table 3-15. Relative Humidity, Barometric Pressure, and Solar Radiation Summary

Period	Mean Relative Humidity (%)	Minimum Relative Humidity (%)	Mean Barometric Pressure (mb)	Minimum Barometric Pressure (mb)	Maximum Barometric Pressure (mb)	Mean Solar Radiation (W/m^2)	Maximum Solar Radiation (W/m^2)
January 2008	80.8	55.1	975	950	1,006	16.5	240.5
February 2008	76.1	44.5	970	940	989	49.8	401.5
March 2008	82.7	60.0	974	949	994	108.4	581.9
Quarter A	**79.9**	**44.5**	**973**	**940**	**1,006**	**58.4**	**581.9**
April 2008	80.7	54.7	985	968	1010	195.1	843.0
May 2008	74.2	31.3	982	951	999	211.4	843.0
June 2008	75.5	38.5	984	967	996	204.7	871.0
Quarter B	**76.8**	**31.3**	**984**	**951**	**1,010**	**203.8**	**871.0**
July 2008	80.2	33.9	982	972	993	167.0	929.0
August 2008	81.1	31.6	979	964	992	159.3	768.7
September 2008	86.6	38.6	978	960	992	68.3	537.6
Quarter C	**82.6**	**31.6**	**980**	**960**	**993**	**137.9**	**929.0**
October 2008	85.3	55.1	975	956	992	N/A[1]	392.1
November 2008	84.0	59.5	972	944	996	N/A	241.0
December 2008	81.8	54.2	983	941	1,013	N/A	101.1
Quarter D	**83.7**	**54.2**	**977**	**941**	**1,013**	N/A	**392.1**
Monitoring Year	**80.8**	**31.3**	**978**	**940**	**1,013**	**133.3**	**929.0**

[1] Solar sensor failed the March 8, 2009 audit. Data was invalidated back to the September 23, 2008 audit.

Figure 3-7. Hourly Average Relative Humidity

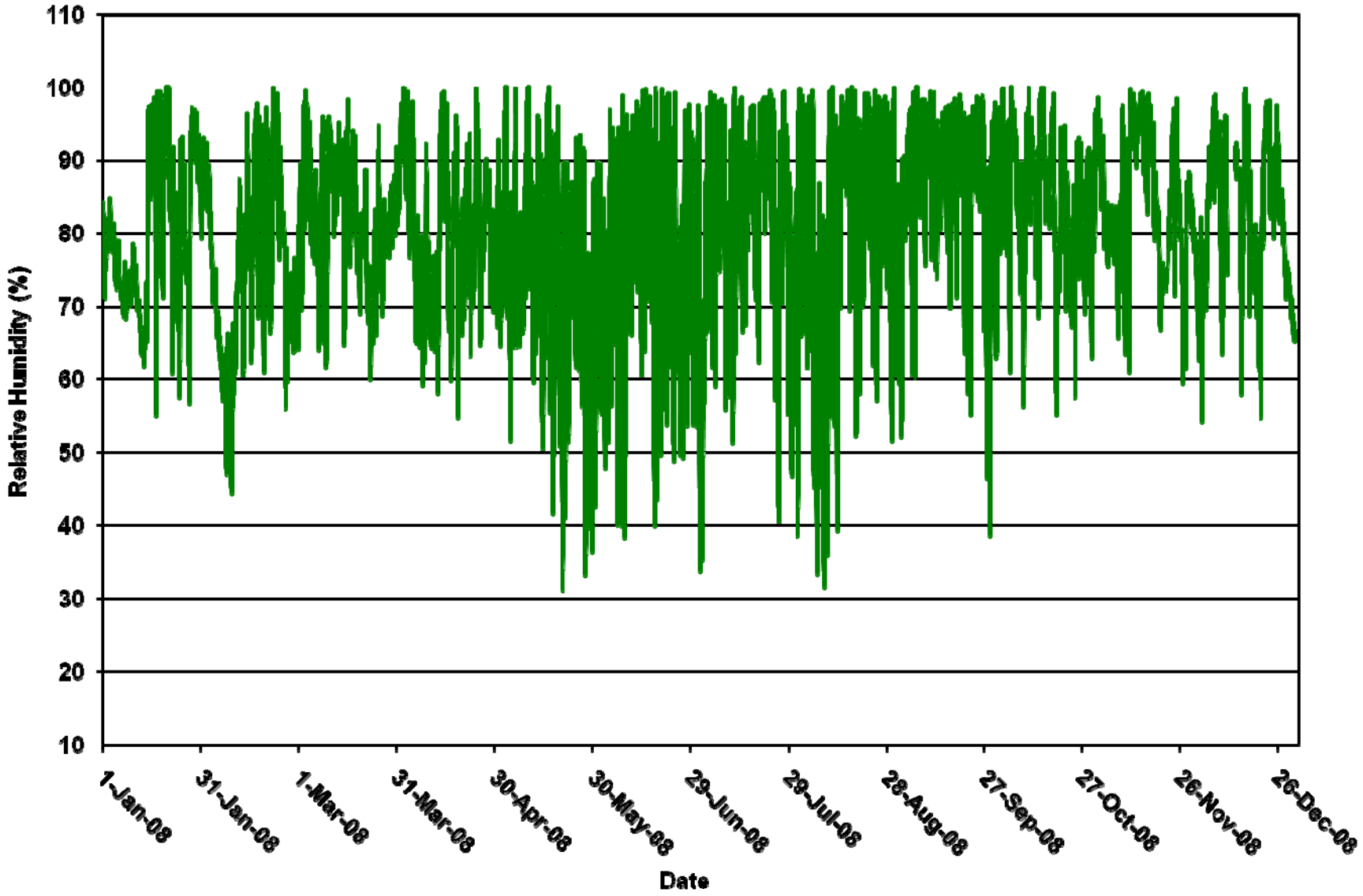


Figure 3-8. Hourly Average Barometric Pressure

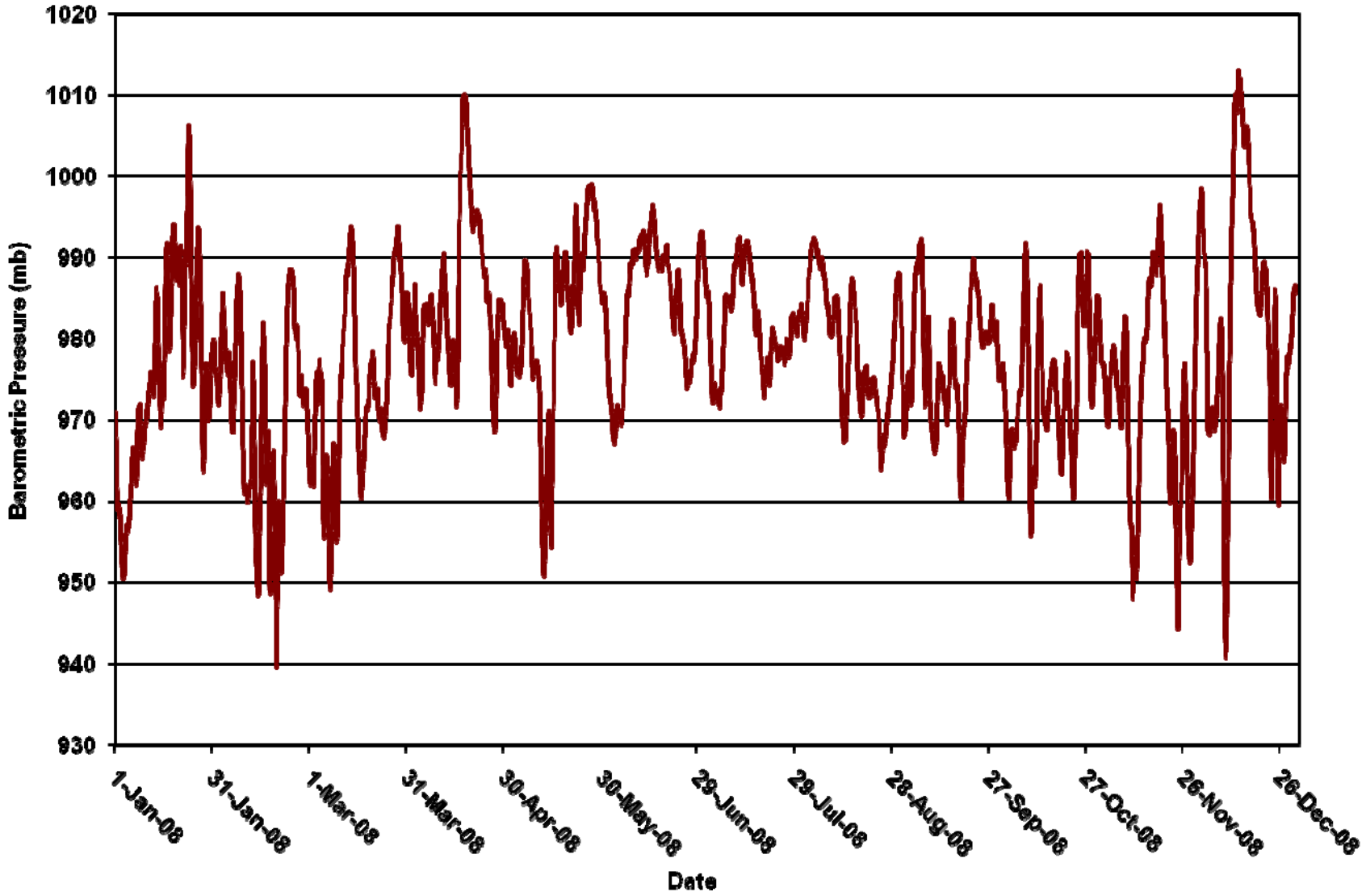


Figure 3-9. Hourly Average Solar Radiation

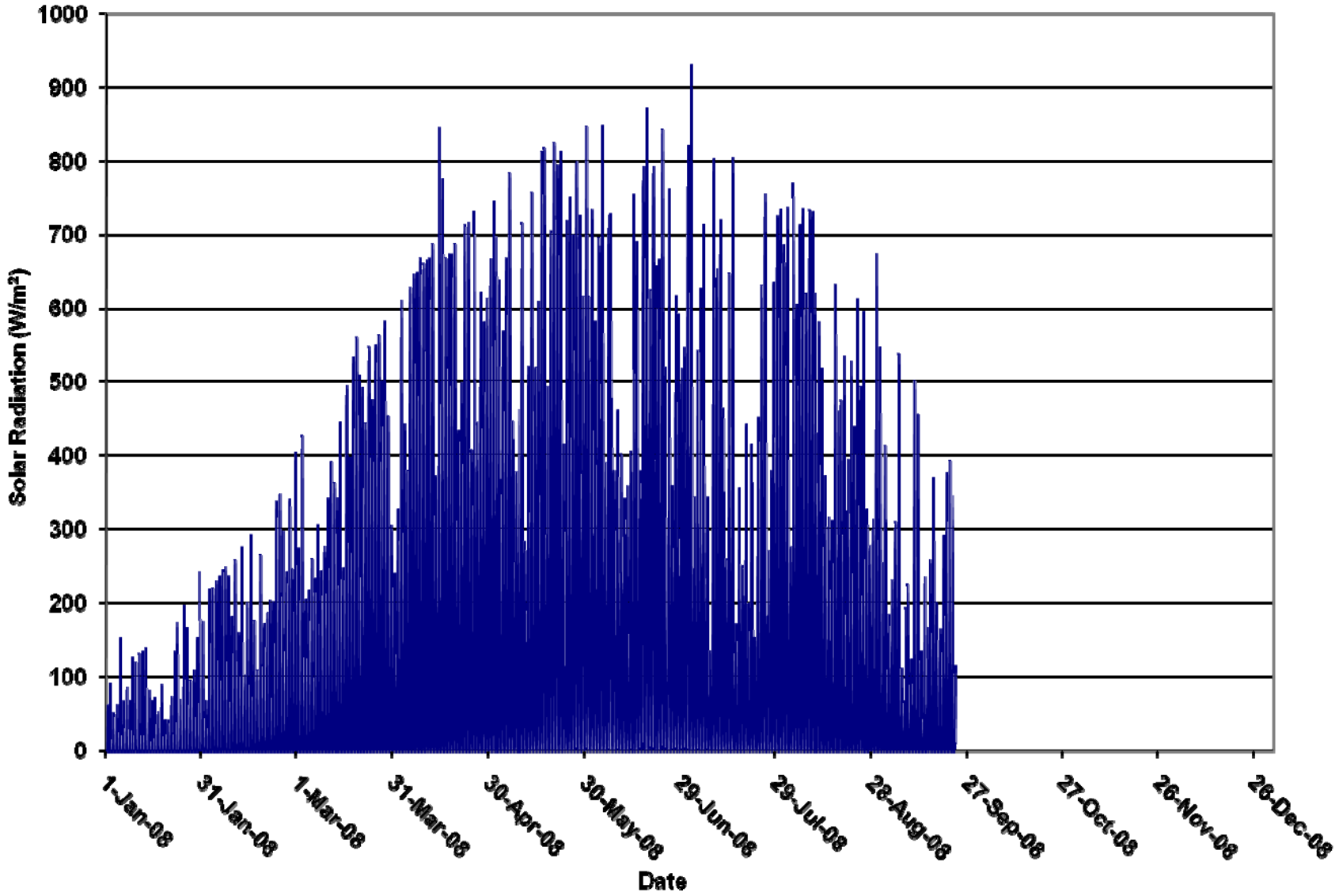
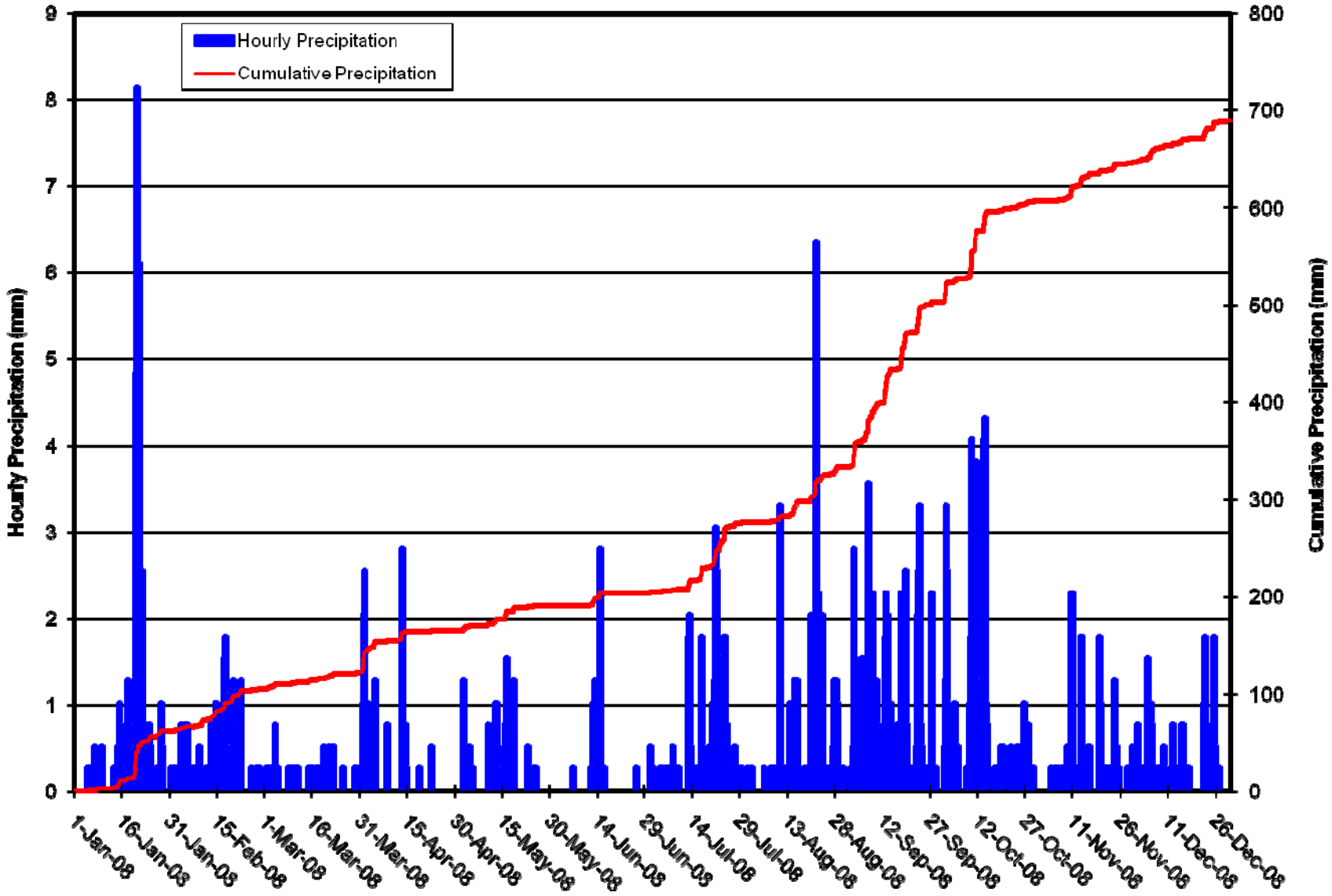


Figure 3-10. Hourly and Cumulative Precipitation



4.0 References

Hoefler Consulting Group, Inc., *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, Iliamna, Alaska, June 2008.

U.S. Environmental Protection Agency (EPA), *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-013, Revised August 1995.

U.S. Environmental Protection Agency (EPA), *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-450/4-87-007, 1987.

U.S. Environmental Protection Agency (EPA), *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, EPA-454/R-99-005, 2000.

U.S. Department of Commerce, National Climatic Data Center, Asheville, North Carolina, *http://www.ncdc.noaa.gov*.

Western Regional Climate Center, Desert Research Institute, Reno Nevada, *http://www.wrcc.dri.edu/summary/climsmak.html.*

Yamartino, R.J., *A Comparison of Several "Single-Pass" Estimators of the Standard Deviation of Wind Direction*, J. Climate Appl. Meteor., Vol. 23, pp. 1362-1366, 1984.

Appendix A

Data Processing Specifications and Statistical Formulae

A.1 Data Recovery Percentage

Data completeness for meteorological monitoring methods was calculated assuming a minimum of 90 percent valid hourly average data to calculate quarterly average data completeness and a minimum of 90 percent quarterly data completeness for four consecutive quarters.

Quarterly data completeness (DC_i) was determined using the following equation:

$$DC_i = h_v/h_i \times 100$$

Where: h_v = number of hours of valid data actually collected
h_i = number of possible valid hours of data collection during the monitoring period

Table A-1. Station Performance Summary – Data Recovery 2008

Period	Meteorological Parameters													
	2-m Temp	10-m Temp	Δ T	WS (CLM)[1]	WD (CLM)	Sigma (CLM)	WS (RMY)[2]	WD (RMY)	Sigma (RMY)	RH	Solar	BP	Precip	Evap[3]
January 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
February 2008	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	100%	100%	100%	97.8%	N/A
March 2008	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	N/A
Quarter A	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.3%**	**N/A**
April 2008	100%	100%	100%	98.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	N/A
May 2008	100%	100%	100%	99.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
June 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Quarter B	**100%**	**100%**	**100%**	**99.2%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
July 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
August 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
September 2008	99.7%	99.7%	99.7%	99.9%	99.9%	99.9%	99.7%	99.7%	99.7%	100%	75.3%	100%	99.7%	99.4%
Quarter C	**99.9%**	**99.9%**	**99.9%**	**100%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**91.9%**	**100%**	**99.9%**	**99.8%**
October 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	100%
November 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	N/A
December 2008	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.0%	100%	100%	N/A
Quarter D	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**0.0%**	**100%**	**100%**	**100%**
Monitoring Year	**99.9%**	**99.9%**	**99.9%**	**99.7%**	**100%**	**100%**	**99.9%**	**99.9%**	**99.9%**	**100%**	**72.8%[4]**	**100%**	**99.8%**	**99.9**

[1] CLM = Climatronics wind speed and wind direction sensor.
[2] RMY = R.M. Young wind speed and wind direction sensor.
[3] Evaporation gauge decommissioned for winter. Gauge operated May 12, 2008, through October 13, 2008.
[4] Solar sensor failed the March 8, 2009 audit. Data was invalidated back to the September 23, 2008 audit.

A.2 Data Bias Correction Using Calibration Information

Not Applicable.

A.3 Estimation of Pasquill-Gifford Stability Categories

Not Applicable.

Appendix B

Precision Data

Not Applicable.

Appendix C

Accuracy Data

CONTENTS

1. Pebble 6 Station September 2007 Quality Assurance Systems Audit and Performance Audit

2. Pebble 6 Station February 2008 Quality Assurance Performance Audit

3. Pebble 6 Station September 2008 Quality Assurance Systems Audit and Performance Audit

Pebble 6
PSD Meteorological Monitoring Station

September 2007

Quality Assurance Systems Audit and Performance Audit

for the

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for

Northern Dynasty Mines, Inc.

Pebble 6 PSD Meteorological Monitoring Station
September 2007
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

Northern Dynasty Mines, Inc.
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 6

3.0 PERFORMANCE AUDIT 7

3.1 Performance Audit Methodology 7

3.1.1 Data Acquisition System 8
3.1.2 Air Temperature and Air Temperature Difference 8
3.1.3 Relative Humidity 8
3.1.4 Wind Speed 9
3.1.5 Wind Direction 9
3.1.6 Barometric Pressure 11
3.1.7 Solar Radiation 11
3.1.8 Precipitation 11
3.1.9 Evaporation 12

3.2 Performance Audit Results 12

3.3 Performance Audit Recommendations 12

4.0 REFERENCES 14

LIST of FIGURES and TABLES

Figure 2-1 Pebble 6 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 7
Table 3-2 Pebble 6 September 8, 2007 Performance Audit Summary 13

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

Hoefler Consulting Group, Inc. (HCG) operates meteorological monitoring stations for Northern Dynasty Mines, Inc. (NDM) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 6 Station (Pebble 6) located near the proposed mine site.

Pebble 6 is located approximately two miles east of the proposed mine ore body, just south of Upper Talarik Creek. The station is situated at roughly 765 foot elevation on flat terrain. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet east of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 90 feet east of the tower. Approximately 30 feet west of the tower is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 6 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Precipitation 2 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for NDM to serve as an official review of the Pebble 6 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan) was completed by HCG in August 2006. While the Plan has not been updated to include the Pebble 6 station, the Plan does describe virtually identical systems previously installed on the project. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

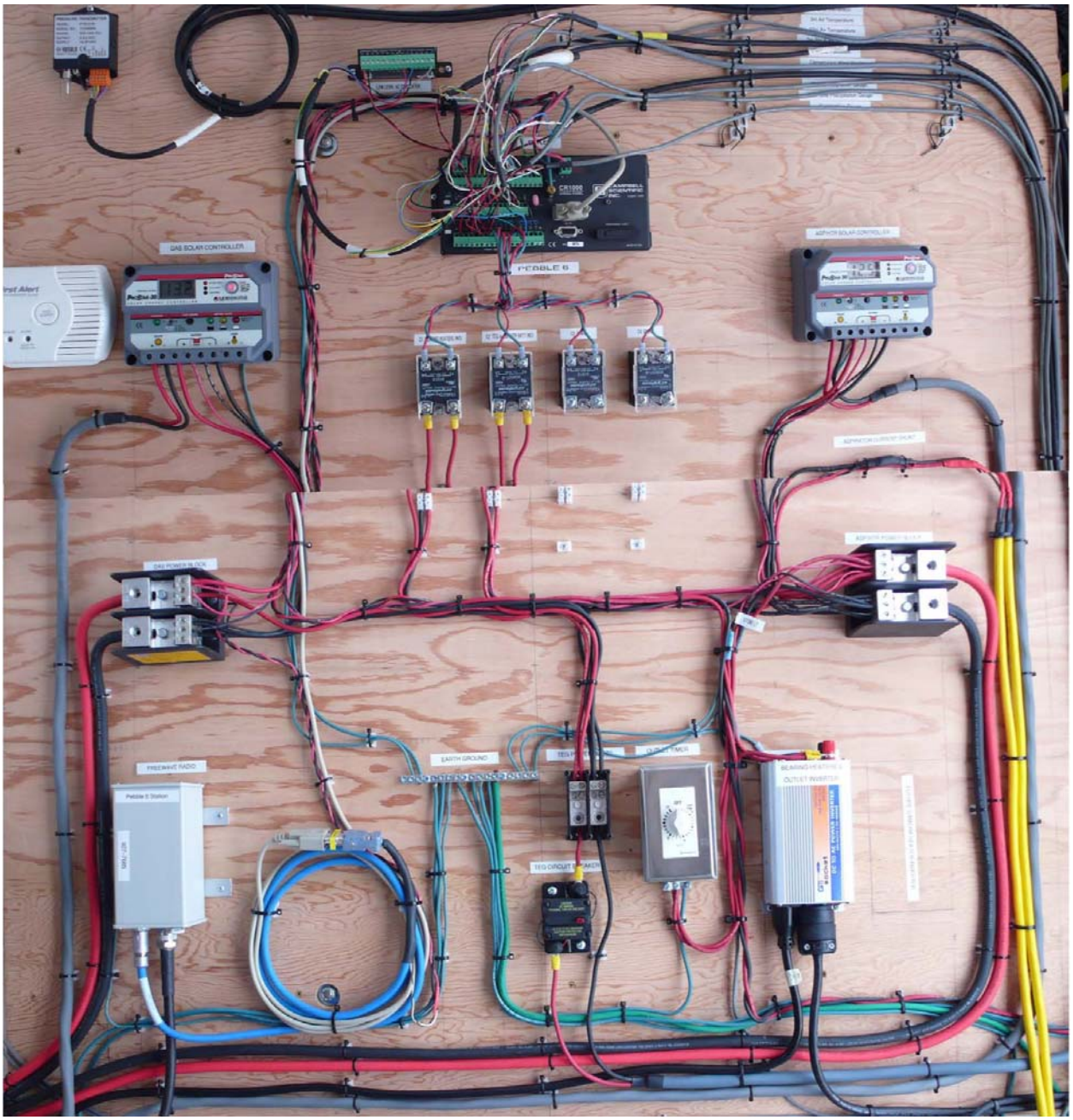
2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 6 station was conducted in September 2007. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 6 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’

deck supported on four adjustable pier blocks, which allow leveling. All instrumentation wires from the tower, precipitation gauges and evaporation gauge are protected in conduit. These conduits all converge at the insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4' by 4' plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 6 Station DAS Wiring Panel



The Campbell Scientific CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the solar power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, and other system documentation, and a review of system operations. System operations include both physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program, although not updated to include Pebble 6. Program objectives, general installations, operations, data management and quality assurance are all clearly outlined. The Pebble 6 station is representative of the generic Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had DAS and most meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 6 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 6 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Maintain complete equipment manuals for station in digital or paper form
- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. A well excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 6 station on September 8, 2007, with Dominic Shallies of HCG assisting. All sensors were challenged with certified audit equipment and yielded errors below the PSD limits. Summary audit results are contained in Tables 3-2, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 6 September 8, 2007 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:02	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	-0.32	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	-0.25	Pass
Air Temperature Difference	≤ ±0.1	°C	0.07	Pass
2-m Temperature Accuracy[1]	≤ ±0.5	°C	-0.26	Pass
10-m Temperature Accuracy[1]	≤ ±0.5	°C	-0.21	Pass
Air Temperature Difference[1]	≤ ±0.1	°C	0.05	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.7	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.080	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	1.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	-1.8	Pass
RM Young Wind System				
Wind Speed Torque-Old Bearings	≤ 0.014	oz-in	0.005	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	7.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.2	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.3	Pass
Wind Direction Linearity	≤ 3	Degree	1.3	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.7	Pass
Barometric Pressure	≤ ±3	Mbar	0.7	Pass
Solar Radiation	≤ ±5+Res	% input	-8.7[2]	Pass
Weighing Precipitation	≤ ±10	% input	9.9	Pass
Tipping Precipitation	≤ ±10	% input	4.2	Pass
Evaporation	≤ ±10	% input	2.3	Pass

1. Temperature program changed to half bridge and re-audited.
2. Max % error value of -8.7 within limit of 5% input + resolution, see audit.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 6 PSD Meteorological Station Systems Audit

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 8, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 6 PSD Meteorological Station Systems Audit

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 8, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 6 station is located on an flat terrain just south of the Upper Talarik Creek. The site is swampy and treeless with some low shrubs and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

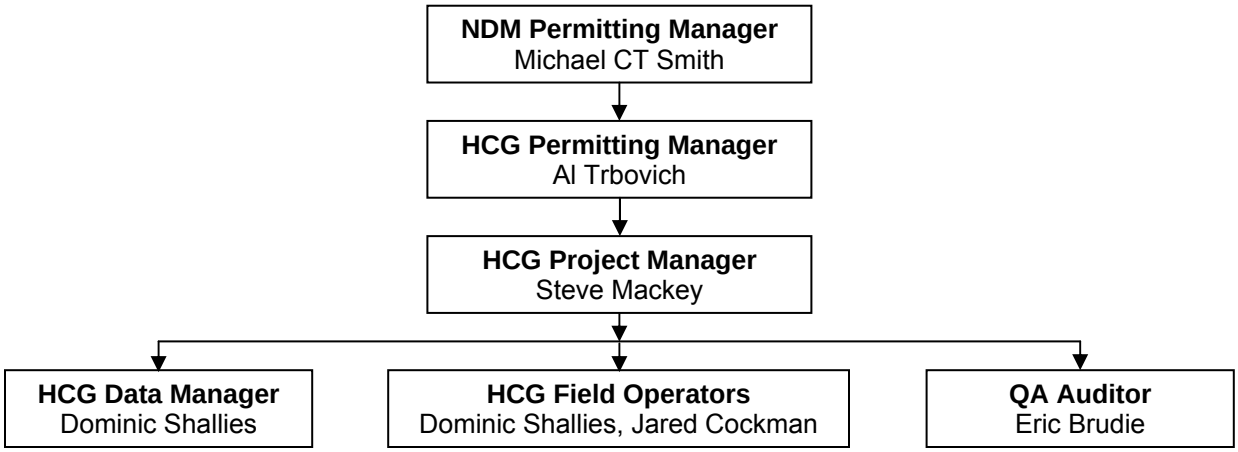
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.481' N
155° 12' W	155° 12.326' W
Elevation: 765 feet	Elevation: 765 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 8, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR1000	9718
DAS Wiring Panel	Campbell Scientific	CR1000	9474
Temperature (2-meter)	Met One	062MP	G2668, ID #2/2
Temperature (10-meter)	Met One	062MP	G2668, ID #1/2
Relative Humidity	Vaisala	HMP45AC	C0540040
Temperature Aspirators	Met One	076B-4	Unknown
Primary Wind Speed	Climatronics	F460-100075	5194
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2320
Primary Wind Direction	Climatronics	F460-100076	4866
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1488
Wind Sigma	Campbell Scientific	DAS Calculated	9718
Backup Wind Speed/Direction	RM Young	05305 Wind Mon-AQ	80038
Backup Wind Spd Prop	RM Young	08254	65482
Barometric Pressure	Vaisala	PTB101B	C1250004
Solar Radiation	LI-COR	Li-200SX	PY56229
Precipitation-Weighing	ETI	8205-00710 Noah II	387
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Precipitation-Tipping	Met-One	370	G4672
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Evaporation Gauge	NovaLynx	255-100	930
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet telephone modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.
Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power? ■ Yes □ No Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained? ■ Yes □ No Comments: None.

Are all sensors operational, online and reporting data? ■ Yes □ No Comments: None.

Do all sensors meet EPA criteria for PSD quality sensors? ■ Yes □ No Comments: See table below.

Are spare parts stocked for items which are frequently worn out or broken? ■ Yes □ No Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2m & 10m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution (2m & 10m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 6 PSD Meteorological Station Systems Audit

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 8, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10” range	Not Specified	N/A
Range:	2” to 10”	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.
If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 8, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	□ Yes ■ No	Comments: Limited quantity of animals in area which could impact pan & gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.
Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.

Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

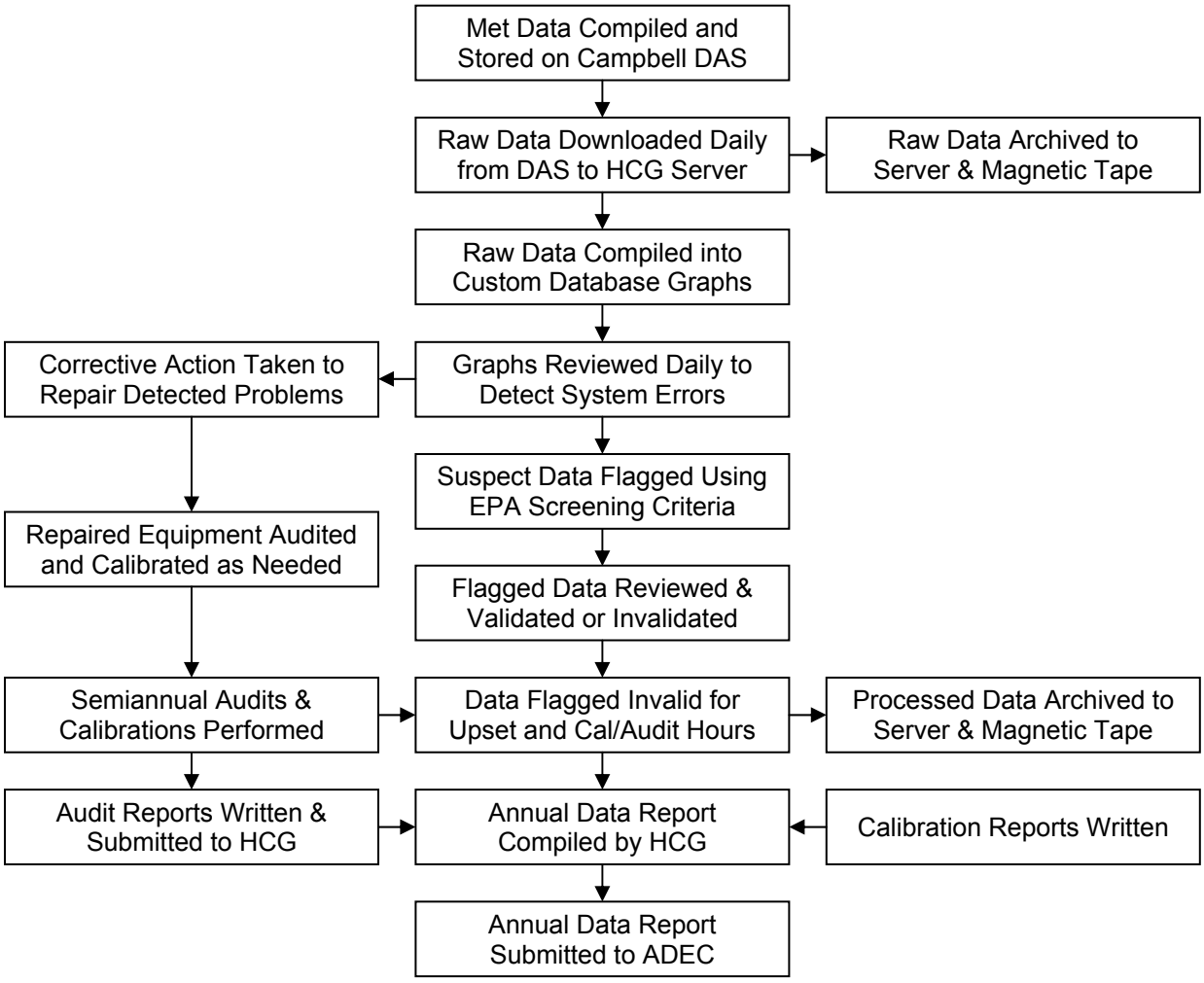
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: NDM Operator: D. Shallies Alternate: S. Mackey Date: Sep 8, 2007
Witness(s): D. Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.
Are written procedures for data handling available for the project?	■ Yes □ No	Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing?	■ Yes □ No	Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use?	■ Yes □ No	Comments: None.
Are adjusted and unadjusted data sets maintained?	■ Yes □ No	Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or

invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.
Have audits been conducted on the suggested schedule of every six months?	■ Yes □ No	Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists, inventories and visit forms.
- Maintain all equipment manuals in the field or on the field computer.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 8, 2007

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: Time rechecked after datalogger reprogrammed for temperature.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
8:41:30	8:41:32	**00:02**	**PASS**
11:32:00	11:32:02	**00:02**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT (Old-Prog)*

Lower Height: 1.9 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G2668 #2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G2668 #1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1030
End: 1100

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	40.42	40.55	0.13	Pass	40.53	0.11	Pass	-0.02	Pass
Warm	15 to 25	25.70	25.73	0.03	Pass	25.73	0.03	Pass	0.00	Pass
Ice Bath	0	0.03	0.07	0.04	Pass	0.07	0.04	Pass	0.00	Pass
Cold	-15 to -25	-16.69	-16.70	-0.01	Pass	-16.70	-0.01	Pass	0.00	Pass
Very Cold	-35 to -45	-36.78	-37.10	-0.32	Pass	-37.03	-0.25	Pass	0.07	Pass
		Max Abs. Error	0.32	**PASS**		0.25	**PASS**	0.07	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Thermistors reprogrammed to half-bridge and then re-tested.

● *TEMPERATURE SENSORS & ΔT AUDIT (New-Prog)*

Lower Height: 1.9 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G2668 #2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G2668 #1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1100
End: 1130

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	39.48	39.61	0.13	Pass	39.61	0.13	Pass	0.00	Pass
Warm	15 to 25	22.59	22.63	0.04	Pass	22.63	0.04	Pass	0.00	Pass
Ice Bath	0	0.02	0.12	0.10	Pass	0.12	0.10	Pass	0.00	Pass
Cold	-15 to -25	-17.77	-17.71	0.06	Pass	-17.71	0.06	Pass	0.00	Pass
Very Cold	-35 to -45	-38.90	-39.16	-0.26	Pass	-39.11	-0.21	Pass	0.05	Pass
		Max Abs. Error	0.26	**PASS**		0.21	**PASS**	0.05	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: Thermistors tested with new DAS program.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 8, 2007

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5194	**Cup #:**	2320	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4866	**Vane #:**	1488	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1028 End: 1032

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	241.7	1.1	Pass
Compass	203.0	202.2	-0.8	Pass
Compass	92.0	92.4	0.4	Pass
Compass	4.0	3.4	-0.6	Pass
Compass	274.0	273.3	-0.7	Pass

Time: Begin: 840 End: 905

Max Abs. Error	**1.1**	**PASS**
Mean Abs. Error	**0.7**	**GOOD**

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	179.6	-0.4	Pass
West	270.0	270.5	0.5	Pass
North	360.0	0.7	0.7	Pass
East	90.0	90.2	0.2	Pass
North	360.0	0.7	0.7	Pass
West	270.0	270.3	0.3	Pass
South	180.0	180.0	0.0	Pass
East	90.0	90.4	0.4	Pass
	Max Abs. Error		**0.7**	**PASS**
	Mean Abs. Error		**0.4**	**PASS**

Time: Begin: 1008 End: 1013

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.8	-1.2	Pass	330.0	329.9	-0.1	Pass
60.0	58.6	-1.4	Pass	355.0	354.3	-0.7	Pass
90.0	88.8	-1.2	Pass	30.0	28.5	-1.5	Pass
120.0	119.2	-0.8	Pass	60.0	58.3	-1.7	Pass
150.0	148.5	-1.5	Pass	90.0	88.2	-1.8	Pass
180.0	178.6	-1.4	Pass	120.0	119.3	-0.7	Pass
210.0	208.2	-1.8	Pass	150.0	148.4	-1.6	Pass
240.0	238.4	-1.6	Pass	180.0	178.6	-1.4	Pass
270.0	269.0	-1.0	Pass	**Max Abs. Error**		**1.8**	**PASS**
300.0	299.7	-0.3	Pass	**Mean Abs. Error**		**1.2**	**PASS**

Time: Begin: 1017 End: 1022

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.0049	<0.003	**PASS**
New	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.104	0.080	**PASS**
New	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	241.1	0.5	Pass
Compass	5.0	3.2	-1.8	Pass
Compass	125.0	125.1	0.1	Pass

Time: Begin: 1250 End: 1310

Max Abs. Error	**1.8**	**PASS**
Mean Abs. Error	**0.8**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

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Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 8, 2007

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:**	RM Young	**Model:**	05305 AQ	**S.N.#:**	80038	**Prop #:**	65482	0-360	**Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	RMY Mdl 18112 Bench Stand	**S.N.#:**	None	**Torque:**	RMY Mdl 18331 Torque Gauge			**S.N.#:**	None
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.3	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1023 End: 1027

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	240.0	-0.6	Pass
Compass	204.0	203.4	-0.6	Pass
Compass	92.0	94.2	2.2	Pass
Compass	3.5	5.4	1.9	Pass
Compass	274.0	273.8	-0.2	Pass
Time: Begin: 840	**Max Abs. Error**		**2.2**	**PASS**
End: 905	**Mean Abs. Error**		**1.1**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	30.3	0.3	Pass	150.0	148.3	-1.7	Pass	270.0	267.9	-2.1	Pass
60.0	60.1	0.1	Pass	180.0	177.7	-2.3	Pass	300.0	298.3	-1.7	Pass
90.0	89.4	-0.6	Pass	210.0	208.0	-2.0	Pass	330.0	328.8	-1.2	Pass
120.0	118.4	-1.6	Pass	240.0	238.9	-1.1	Pass	355.0	354.5	-0.5	Pass
					Time: Begin:	1034		**Max Abs. Error**		**2.3**	**PASS**
					End:	1036		**Mean Abs. Error**		**1.3**	**PASS**

WIND SPD TORQUE TEST

Bearings Replaced?	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.014	0.005	**PASS**
New	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Replaced?	Limit gm-cm	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	7.0	**PASS**
New	11.0	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	239.0	-1.6	Pass
Compass	4.0	5.7	1.7	Pass
Compass	125.0	125.1	0.1	Pass
Time: Begin: 1250	**Max Abs. Error**		**1.7**	**PASS**
End: 1310	**Mean Abs. Error**		**1.1**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Northern Dynasty **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 8, 2007

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** C1250004 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST							
Date:	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
09/08/07	1408	28.89	28.80	975.12	975.80	0.7	Pass
09/10/07	1840	29.22	29.13	986.33	987.04	0.7	Pass
				Max Abs. Error		0.7	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/26/07	
Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

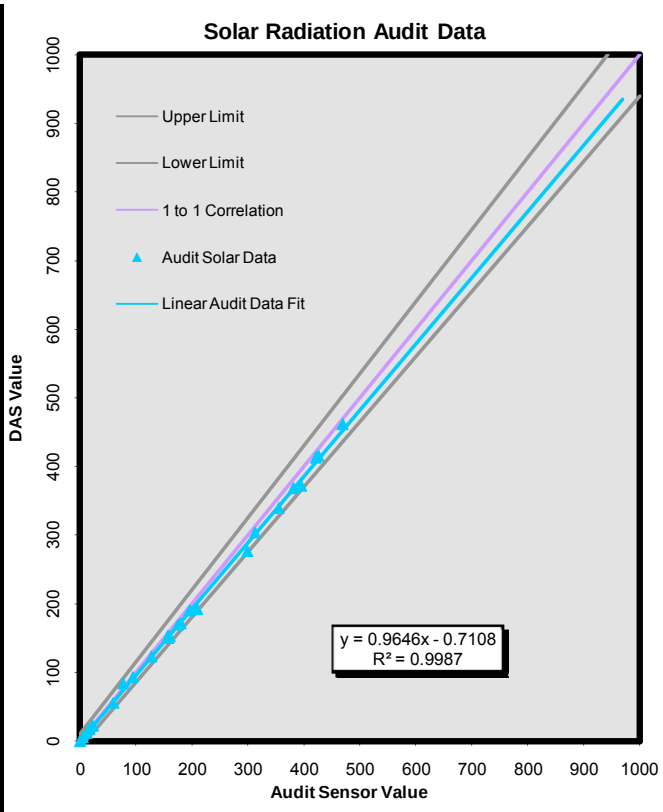
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.1 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56229 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1726	23.4	22.5	-0.9	±11.2	n/a	Pass
809	12.6	12.0	-0.6	±10.6	n/a	Pass
1415	159.0	150.2	-8.8	±18.0	-5.5%	Pass
1501	469.8	462.0	-7.8	±33.5	-1.7%	Pass
1300	94.8	92.9	-1.9	±14.7	-2.0%	Pass
1400	158.1	153.7	-4.4	±17.9	-2.8%	Pass
1500	160.8	152.5	-8.3	±18.0	-5.2%	Pass
1600	128.1	123.2	-4.9	±16.4	-3.8%	Pass
1700	196.4	190.6	-5.8	±19.8	-3.0%	Pass
1800	60.1	55.6	-4.5	±13.0	-7.5%	Pass
1900	17.4	17.7	0.2	±10.9	n/a	Pass
600	0.5	0.0	-0.5	±10.0	n/a	Pass
700	5.6	5.6	-0.1	±10.3	n/a	Pass
800	78.1	83.9	5.8	±13.9	7.4%	Pass
900	210.2	191.9	-18.3	±20.5	-8.7%	Pass
1000	299.8	276.6	-23.2	±25.0	-7.7%	Pass
1100	396.1	371.9	-24.2	±29.8	-6.1%	Pass
1200	356.1	339.5	-16.6	±27.8	-4.7%	Pass
1300	382.1	368.5	-13.6	±29.1	-3.6%	Pass
1400	427.0	415.7	-11.3	±31.4	-2.6%	Pass
1500	422.3	413.1	-9.2	±31.1	-2.2%	Pass
1600	313.4	303.9	-9.5	±25.7	-3.0%	Pass
1700	180.9	171.4	-9.5	±19.0	-5.3%	Pass
1800	175.9	169.4	-6.5	±18.8	-3.7%	Pass
Corr. Val	**0.9994**	**Max Abs. Percent Error**			**8.7%**	**PASS**
R² Value	**0.9987**	**Intercept**	**-0.7**	**Slope**	**0.9646**	**PASS**



Begin Date: 09/07/07 **End Date:** 09/10/07

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

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Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 8, 2007

● *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.7 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 387 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
759		1600	21.9	0.00	21.84	21.84	-0.4%	Pass	
815		1600	21.9	0.00	23.62	23.62	7.7%	Pass	
830		1600	21.9	23.62	46.74	23.12	5.4%	Pass	
845		1600	21.9	46.74	70.40	23.66	7.9%	Pass	
900		1600	21.9	70.40	94.50	24.10	9.9%	Pass	
920		1600	21.9	0.00	23.37	23.37	6.6%	Pass	
930		1600	21.9	23.37	46.74	23.37	6.6%	Pass	
950		1600	21.9	46.74	70.70	23.96	9.3%	Pass	
					Max Abs. Error		**9.9%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

● *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 0.9/1.4 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** G4672 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
801	650	20.0	0.00	18.80	2.03	911	20.83	4.2%	Pass	
1005	650	20.0	0.51	18.29	2.79	1108	20.57	2.8%	Pass	
1415	650	20.0	0.00	16.76	4.06	1520	20.82	4.1%	Pass	
						Max Abs. Error		**4.2%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

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Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 8, 2007

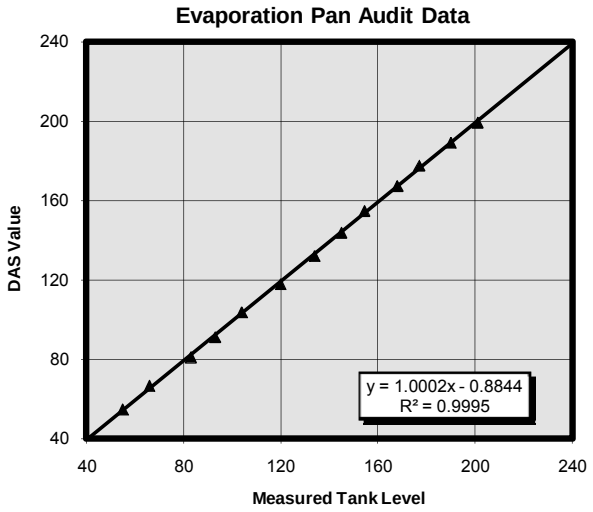
● *EVAPORATION GAUGE AUDIT*

Height: 0.5 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 930 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

Pan inch	Pan mm	DAS mm	Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	201.0	199.4	200.1	-0.7	-0.4%	Pass
	190.0	189.2	189.1	0.1	0.0%	Pass
	177.0	177.7	176.1	1.6	0.9%	Pass
	168.0	167.4	167.1	0.3	0.2%	Pass
	154.5	154.8	153.6	1.2	0.8%	Pass
	145.0	143.8	144.1	-0.3	-0.2%	Pass
	134.0	132.0	133.1	-1.1	-0.8%	Pass
	120.0	117.8	119.1	-1.3	-1.1%	Pass
	104.0	103.7	103.1	0.6	0.6%	Pass
	93.0	91.2	92.1	-0.9	-1.0%	Pass
	83.0	81.0	82.1	-1.1	-1.4%	Pass
	66.0	66.6	65.1	1.5	2.3%	Pass
	55.0	54.7	54.1	0.6	1.1%	Pass
		Max Abs. Error		**1.6**	**2.3%**	**PASS**
		Intercept	**-0.9**	**Slope**	**1.0002**	**PASS**



Date: 09/08/07 **Time:** Begin: 1420 End: 1510

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 1.9 **Meters**

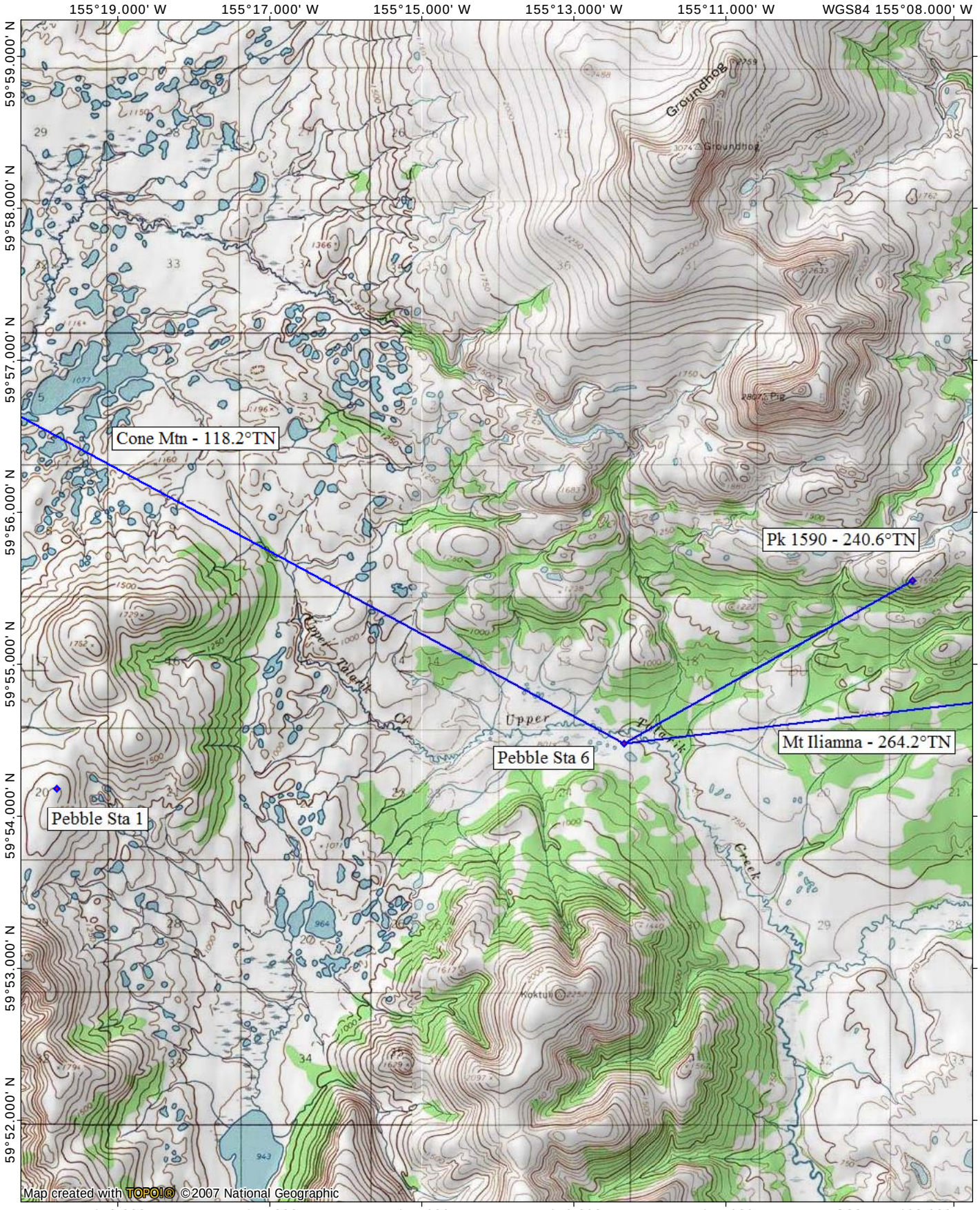
RH Sensor: **Make:** Vaisala **Model:** HMP45AC **S.N.#:** C0540040 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST

Date:	Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
09/07/07	1820	74.2	10.7	6.3	75.4	11.2	7.0	0.7	Pass
09/08/07	822	92.1	11.3	10.1	92.4	11.9	10.7	0.6	Pass
09/08/07	917	94.0	11.2	10.3	94.0	11.8	10.9	0.6	Pass
09/10/07	1816	70.7	11.3	6.2	71.6	11.7	6.7	0.5	Pass
						Max Abs. Error		0.7	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

TOPO! map printed on 10/30/07 from "Pebble 6.tpo"



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17½°
10/30/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

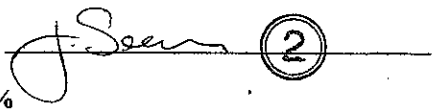
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: 

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner Name: HOEFLER Consulting Group

Address: 340 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER:

MODEL NUMBER: 5008

SERIAL NUMBER: 5080199319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: K. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Pebble Station 6
February 2008
Quality Assurance Performance Audit

for the:

Pebble Project
Meteorological Monitoring Program
Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corp.

prepared by:

Hoefler
CONSULTING GROUP

Pebble 6 PSD Meteorological Monitoring Station
February 2008
Quality Assurance Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
Anchorage, Alaska 99503

TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 PERFORMANCE AUDIT 2

2.1 Performance Audit Methodology 2

2.1.1 Data Acquisition System 3
2.1.2 Air Temperature and Air Temperature Difference 3
2.1.3 Relative Humidity 3
2.1.4 Wind Speed 4
2.1.5 Wind Direction 4
2.1.6 Barometric Pressure 6
2.1.7 Solar Radiation 6
2.1.8 Precipitation 6
2.1.9 Evaporation 7

2.2 Performance Audit Results 7

2.3 Performance Audit Recommendations 7

3.0 REFERENCES 9

LIST of FIGURES and TABLES

Table 2-1 Performance Audit Methods and Acceptable Limits 2
Table 2-2 Pebble 6 February 9, 2008 Performance Audit Summary 8

LIST of APPENDICES

A PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
B AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for The Pebble Limited Partnership, care of Pebble Mines Corporation (PMC); in support of the Pebble Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 6 Station (Pebble 6.)

Pebble 6 is located approximately two miles east of the deposit area, just south of Upper Talarik Creek. The station is situated at roughly 765 foot elevation on flat terrain. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet east of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 90 feet east of the tower. Approximately 30 feet west of the tower is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 6 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR10X DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Precipitation 2 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PMC to serve as a quantitative review of the Pebble 6 station. To that end, a Performance Audit was undertaken in order to demonstrate that the equipment installed at the meteorological monitoring station is operating correctly and meets the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 PERFORMANCE AUDIT

2.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 2-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 2-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

2.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

2.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6” diameter by 9” high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

2.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and

temperature readings are used. For the audit; instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

2.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

2.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the

compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

2.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

2.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change. An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

2.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited by adding measured water volumes to the gauge opening using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator. The DAS reading is recorded at the beginning of the test and after every 1/2” to 1” pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

2.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

2.2 Performance Audit Results

A performance audit was conducted at the Pebble 6 station on February 9, 2008, with Dominic Shallies of HCG assisting. All sensors except the tipping precipitation gauge were challenged with certified audit equipment and yielded errors below the PSD limits. Attempts were made to audit the tipping precipitation gauge, but the ambient temperature was too cold to operate the testing device. The tipping precipitation gauge was audited on March 5, 2008. Table 2-2 contains summary data from the audit and complete audit reports and audit equipment calibration certificates are contained in Appendix A and Appendix B respectively.

2.3 Performance Audit Recommendations

- None.

Table 2-2 Pebble 6 February 9, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:14	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.11	Pass
Air Temperature Difference	≤ ±0.1	°C	0.00	Pass
Relative Humidity (dew point)	≤ ±1.5	°C	0.3	Pass
Climatronics Wind System				
Wind Speed Torque	≤ 0.0049	oz-in	<0.003	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 0.104	oz-in	0.080	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	1.9	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.7	Pass
Wind Direction Linearity	≤ 3	Degree	2.1	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	1.7	Pass
RM Young Wind System				
Wind Speed Torque	≤ 0.014	oz-in	0.004	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11	g-cm	8.0	Pass
Wind Dir. Azim. Align. (as-found)	≤ ±5	Degree	2.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.4	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Align. (as-left)	≤ ±5	Degree	2.8	Pass
Barometric Pressure	≤ ±3	Mbar	2.4	Pass
Solar Radiation	≤ ±5+Res	% input	-7.5[1]	Pass
Weighing Precipitation	≤ ±10	% input	6.6	Pass
Tipping Precipitation[2]	≤ ±10	% input	-0.9	Pass

1. Max % error value of 7.5 within limit of 5% input + resolution, see audit.
2. Too cold to run precipitation gauge test in February; tested on March 5, 2008.

3.0 REFERENCES

"Draft Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Meteorological Measurement Methods Validation Criteria", ADEC, November 2007.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 9, 2008

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: DAS CR1000 SN: 9718; Wire panel # 9474.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
16:27:00	16:27:14	**00:14**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 1.9 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G2668 #2/2 **Range:** -50 to 50 **°C**
10-M Thermistor: **Make:** Met One **Model:** 062MP **S.N.#:** G2668 #1/2 **Range:** -50 to 50 **°C**
Audit Digital Thermometer: **Make:** Van Waters & Rogers **Model:** 61220/601 **S.N.#:** 51091749 **Range:** -40 to 150 **°C**
Audit Probe: **Make:** Van Waters & Rogers **Model:** 61220/604 **S.N.#:** 240301145 **Range:** -40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1552
End: 1420

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	37.28	37.36	0.08	Pass	37.36	0.08	Pass	0.00	Pass
Warm	15 to 25	21.18	21.19	0.01	Pass	21.19	0.01	Pass	0.00	Pass
Ice Bath	0	-0.04	0.07	0.11	Pass	0.07	0.11	Pass	0.00	Pass
Cold	-15 to -25	-19.22	-19.22	0.00	Pass	-19.22	0.00	Pass	0.00	Pass
Very Cold	-35 to -45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Max Abs. Error	0.11	**PASS**		0.11	**PASS**	0.00	**PASS**	

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: No dry ice for very cold tests.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 1.9 **Meters**

RH Sensor: **Make:** Vaisala **Model:** HMP45AC **S.N.#:** C0540040 **Range:** 0.8 to 100 **% RH**
Audit Equipment: **Make:** Vaisala **Model:** HMI 41 **S.N.#:** X0650080 **Range:** 0 to 100 **% RH**
Audit Equipment: **Probe#** HMI41 X07450015

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1145	45.8	-8.2	-16.9	51.9	-8.6	-16.9	0.0	Pass
1425	52.5	-12.4	-19.4	58.9	-12.7	-19.1	0.3	Pass
					Max Abs. Error		0.3	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 9, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS*

Height: 11.0 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5194	**Cup #:**	2320	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4866	**Vane #:**	1488	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.2	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.72	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1410 End: 1415

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	240.7	0.1	Pass
Compass	92.0	93.9	1.9	Pass
Compass	351.0	352.0	1.0	Pass
Compass	271.5	271.9	0.4	Pass
Compass	196.0	195.3	-0.7	Pass

Time: Begin: 1350 End: 1410 **Max Abs. Error** **1.9** **PASS** **Mean Abs. Error** **0.8** **GOOD**

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.4	0.4	Pass
West	270.0	271.5	1.5	Pass
North	360.0	0.7	0.7	Pass
East	90.0	91.5	1.5	Pass
North	360.0	0.7	0.7	Pass
West	270.0	270.5	0.5	Pass
South	180.0	180.3	0.3	Pass
East	90.0	91.5	1.5	Pass
	Max Abs. Error		**1.5**	**PASS**
	Mean Abs. Error		**0.9**	**PASS**

Time: Begin: 1536 End: 1538

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	27.6	-2.4	Pass	330.0	328.8	-1.2	Pass
60.0	57.3	-2.7	Pass	360.0	358.0	-2.0	Pass
90.0	87.8	-2.2	Pass	30.0	27.9	-2.1	Pass
120.0	117.9	-2.1	Pass	60.0	57.6	-2.4	Pass
150.0	147.4	-2.6	Pass	90.0	87.8	-2.2	Pass
180.0	177.4	-2.6	Pass	120.0	118.3	-1.7	Pass
210.0	207.6	-2.4	Pass	150.0	147.8	-2.2	Pass
240.0	237.6	-2.4	Pass	180.0	177.8	-2.2	Pass
270.0	268.0	-2.0	Pass	**3.0**		**2.7**	**PASS**
300.0	299.0	-1.0	Pass	**Mean Abs. Error**		**2.1**	**PASS**

Time: Begin: 1527 End: 1530

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	0.35	0.0049	<0.003	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	7.5	0.104	0.080	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	240.1	-0.5	Pass
Compass	84.0	85.7	1.7	Pass
Compass	7.0	7.5	0.5	Pass
Compass	193.0	192.7	-0.3	Pass

Time: Begin: 1645 End: 1700 **Max Abs. Error** **1.7** **PASS** **Mean Abs. Error** **0.8** **GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 9, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ*

Height: 10.4 **Meters**

Wind Sensor:	**Make:**	RM Young	**Model:**	05305 AQ	**S.N.#:**	80038	**Prop #:**	65482	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	RMY Mdl 18112 Bench Stand	**S.N.#:**	None	**Torque:**	RMY Mdl 18331 Torque Gauge			**S.N.#:**	None
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.2	**E of N**	

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1450 End: 1453

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	239.6	-1.0	Pass
Compass	92.0	93.4	1.4	Pass
Compass	350.5	352.5	2.0	Pass
Compass	271.5	271.8	0.3	Pass
Compass	196.5	195.6	-0.9	Pass
Time: Begin: 1350	**Max Abs. Error**		**2.0**	**PASS**
End: 1410	**Mean Abs. Error**		**1.1**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.1	1.1	Pass	150.0	148.7	-1.3	Pass	270.0	269.6	-0.4	Pass
60.0	60.6	0.6	Pass	180.0	178.6	-1.4	Pass	300.0	300.3	0.3	Pass
90.0	89.7	-0.3	Pass	210.0	208.7	-1.3	Pass	330.0	330.8	0.8	Pass
120.0	119.2	-0.8	Pass	240.0	238.9	-1.1	Pass	355.0	354.4	-0.6	Pass
				Time:	Begin: 1435	**Max Abs. Error**		**1.4**			**PASS**
					End: 1438	**Mean Abs. Error**		**0.8**			**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque oz-in	Pass/ Fail?
In-Situ	1.0	0.014	0.004	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	8.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Peak 1590	240.6	241.6	1.0	Pass
Compass	84.0	86.8	2.8	Pass
Compass	7.0	7.5	0.5	Pass
Compass	193.0	195.5	2.5	Pass
Time: Begin: 1645	**Max Abs. Error**		**2.8**	**PASS**
End: 1700	**Mean Abs. Error**		**1.7**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 9, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** C1250004 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST

Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
1152	28.51	28.41	962.21	964.40	2.19	Pass
1215	28.49	28.39	961.54	963.90	2.36	Pass
			Max Abs. Error		2.36	**PASS**

Audit Inst Cal Data
Cal. Date: 07/26/07

Audit Inst	Offset Amount
24.11	-0.11
26.28	-0.10
28.10	-0.10
30.09	-0.09
Intercept	**-0.18**
Slope	**0.0031**

PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: None.

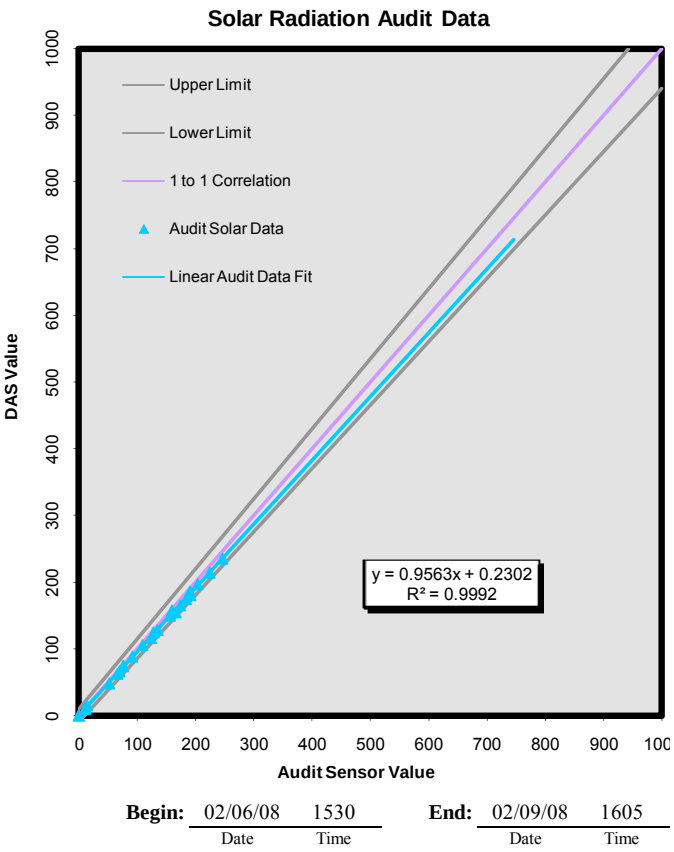
• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.1 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56229 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST

Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1048	66.1	63.0	-3.1	±13.3	-4.7%	Pass
1103	76.2	74.6	-1.6	±13.8	-2.1%	Pass
1121	109.7	105.8	-3.9	±15.5	-3.6%	Pass
1143	190.9	186.2	-4.7	±19.5	-2.5%	Pass
1209	159.8	158.1	-1.7	±18.0	-1.1%	Pass
1317	174.3	165.1	-9.2	±18.7	-5.3%	Pass
900	0.0	0.1	0.1	±10.0	n/a	Pass
1000	10.3	9.6	-0.7	±10.5	n/a	Pass
1100	92.0	88.6	-3.4	±14.6	-3.7%	Pass
1200	156.4	149.7	-6.7	±17.8	-4.3%	Pass
1300	224.9	214.8	-10.1	±21.2	-4.5%	Pass
1400	246.4	236.1	-10.3	±22.3	-4.2%	Pass
1500	203.9	197.5	-6.4	±20.2	-3.1%	Pass
1600	128.5	124.7	-3.8	±16.4	-3.0%	Pass
1700	69.8	66.8	-3.0	±13.5	-4.3%	Pass
1800	14.2	15.7	1.5	±10.7	n/a	Pass
900	0.0	0.1	0.1	±10.0	n/a	Pass
1000	11.8	11.5	-0.3	±10.6	n/a	Pass
1100	52.4	48.5	-4.0	±12.6	-7.5%	Pass
1200	135.3	128.9	-6.4	±16.8	-4.7%	Pass
1300	166.3	155.0	-11.3	±18.3	-6.8%	Pass
1400	191.8	180.9	-10.9	±19.6	-5.7%	Pass
1500	184.0	175.2	-8.8	±19.2	-4.8%	Pass
1600	124.2	116.2	-8.0	±16.2	-6.4%	Pass
Corr. Val	**0.9996**	**Max Abs. Percent Error**			**7.5%**	**PASS**
R² Value	**0.9992**	**Intercept**	**0.2**	**Slope**	**0.9563**	**PASS**



Begin: 02/06/08 (Date) 1530 (Time) **End:** 02/09/08 (Date) 1605 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Mines Corp **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Feb 9, 2008

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.7 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 387 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1101	4.00	1600	21.9	0.00	19.81	19.81	N/A	Pass	Disregard initial test.
1135		1600	21.9	0.25	22.86	22.61	3.1%	Pass	
1200		1600	21.9	22.86	45.72	22.86	4.2%	Pass	
1230		1600	21.9	0.00	23.11	23.11	5.4%	Pass	
1340		1600	21.9	0.00	23.11	23.11	5.4%	Pass	
1400		1600	21.9	23.11	46.23	23.12	5.4%	Pass	
1630	10.00	1600	21.9	0.00	22.86	22.86	4.2%	Pass	
1644		1600	21.9	22.86	46.23	23.37	6.6%	Pass	
					Max Abs. Error		**6.6%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

• *TIPPING PRECIPITATION GAUGE AUDIT*

Height with Snowfall Adapter Off/On: 0.9/1.4 **Meters**

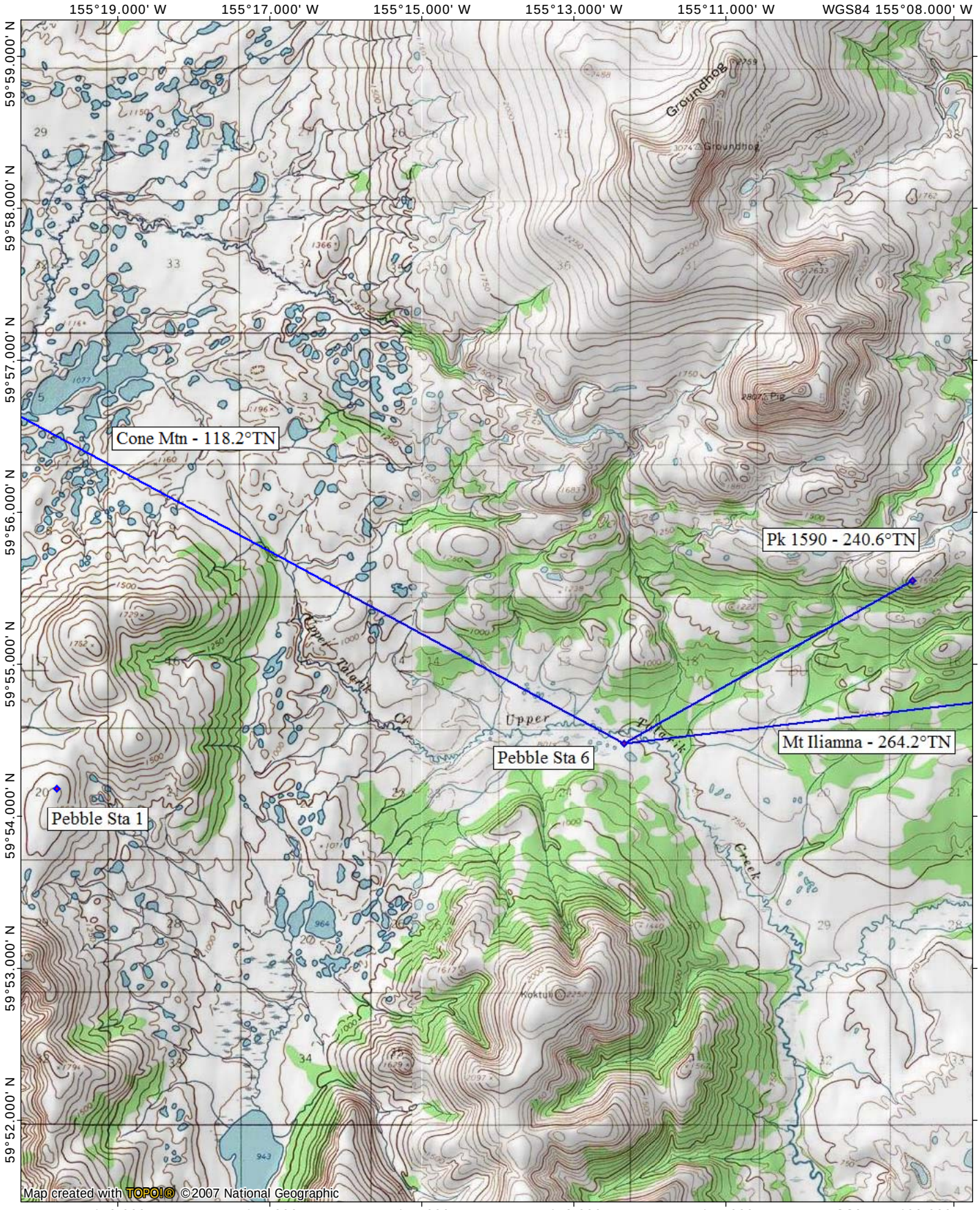
Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.2mm **S.N.#:** G4672 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
03/05/08	1530	650	20.0	1.02		20.83	1600	19.8	-0.9%	Pass	Very cold.
03/05/08	1601	650	20.0	0.00		20.07	1626	20.1	0.3%	Pass	Very cold.
03/05/08	1627	400	12.3	20.07		32.26	1644	12.2	-0.9%	Pass	
							Max Abs. Error		**0.9%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Too cold to test on 2/9/08, tested on 3/5/08.

TOPO! map printed on 04/25/08 from "Pebble 6.tpo"



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17°
04/25/08

APPENDIX B
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Alaska Calibration, Inc.

Troubleshooting, Repair and Calibration of
Test & Measurement Equipment

Black unit

CERTIFICATE OF CALIBRATION

WORK ORDER NO. 9665 **TRACEABILITY CERTIFICATE** 07041701

ISSUED TO: Hoefler Consulting Group, Inc

INSTRUMENT:61220-601,Digital Thermometer & 61220-604 Temperature Probe, Fisher Scientific, S/N's 51091749 & 240301145

DATE DONE: April 17, 2007 **DATE DUE:** April 16, 2008

CERTIFIED BY METROLOGIST: A.T. Grabowski A.T. Grabowski **TEMPERATURE:** 69°F **HUMIDITY:** 43% RH

INCOMING STATUS: This instrument was in (XX) was out of ( ) tolerance when received.

CALIBRATION APPARATUS USED

MODEL	NOMENCLATURE	MFR	SERIAL NO.	DUE DATE
MK3900	Temperature Chamber	Delta Design	89308	NCR
32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Made as Needed	Natural Phys. Const.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	A135	11/13/07
DP41-RTD	Digital Thermometer	Omega Engineering	4381337	11/13/07

CHARTED TEMPERATURE READINGS

Laboratory Probe	Test Instrument Thermometer	System Uncertainty
-50.013°C	- 50.025°C	0.009°C
-25.038°C	- 25.052°C	0.009°C
0.007°C	0.011°C	0.009°C
+ 25.033°C	+25.047°C	0.009°C
+50.004°C	+50.012°C	0.009°C

RANGE/LIMITATIONS: Calibrated over entire range.

PROCEDURE & ACCURACY STATEMENT: T.O. 33K5-4-42-1. Accuracy: See Chart Above.

NIST TRACEABLE REPORT NUMBERS

MODEL	NOMENCLATURE	MFR	DUE DATE	REPORT NO.
RFJA0TL150CA060	Temperature Probe	Watlow/Gordon	11/13/07	G209372
-32°F/ 0°C	Ice Bath	Alaska Calibration, Inc	Natural Phys. Const.	Made as Needed

COMPLIANCE

Alaska Calibration Inc.'s calibration practices and procedures comply with the requirements of ANSI/ISO/ Z540-1 and ANSI/ISO/IEC 17025: 2000 and relevant requirements of ISO 9002:1994. The standards used are certified as being traceable to the National Institute of Standards and Technology (NIST), by comparison to SI units through laboratory standards in an unbroken chain of Calibrations through appropriate primary and national measurement standards, derived from an acceptable value of a natural physical constant, or derived by the ratio type of self calibration techniques. Certificate shall not be reproduced, except in full, without the written approval of Alaska Calibration, Inc.

4706 Harding Drive, Suite A, Anchorage, Alaska 99517-3119 (907) 677-1993

VAISALA Certificate of Calibration

Report #: 060407-X0740015-RH RMA #: 95-60966 **Calibration Date: Jun-04-2007**

Model #: HMI41/HMP41 **Serial #: X0650080/X0740015**

Instrument Type: Humidity Transmitter
Instrument Range: 0 to 100%, RH
Instrument Range: -20 to +60 °C, T

Calibration Procedure: 11603100
Recommended Calibration Due Date: Jun-04-2008

Customer: HOEFLER CONSULTING GROUP

City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0%* against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement. *Note: the 0% RH point is not ISO17025 Accredited.

Calibration Data (As Left)

Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.07	21.10	0.03	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	0.10	0.07	2.00	0.50 *
11.17	11.30	0.13	2.00	0.92
32.67	32.50	-0.17	2.00	1.01
74.78	74.80	0.02	2.00	1.02

Problem Noted: **No "As Found" Data. Intermittent readings from Temp Sensor. Damage to Temp Sensor. RH sensor dirty.**
Action Taken: **Replaced Temp and RH sensors. The unit was calibrated.**

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Numbers TN 274176 and TN 274579-07. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 4A			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900610	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7405020	Aug. 4, 2006	Aug. 4, 2007
HMK13B	513796	Mar. 26, 2007	Sep. 26, 2007
HMP233	V4310014	May. 22, 2007	Aug. 22, 2007
HMT333	B0920003	May. 22, 2007	Aug. 22, 2007
HMI41/HMP45	S0720005	Mar. 5, 2007	Jun. 5, 2007

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.40 %RH

Approved By

Technical Operator
Matthew Nocivelli

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

YOUNG

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: 18811 (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft
(2) 27106D produces 10 pulses per revolution of the anemometer shaft
(3) Indicated on the Control Unit LCD display

*Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration DP4863

Date of inspection 26 July 2007

Tested By EA

R.M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City Michigan 49686-9171 USA
TEL. (231) 946-3980 FAX: (231) 946-4772 Email: met sales@youngusa com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 28 Nov 2007
Inspection Interval One Year

Tested By EJC

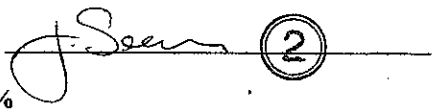
Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Hoefler
Certificate Number: 5944
Instrument Make: Waters Torque Watch
Model: 366-3
S/N: 4864
ID: n/a

Date: 12-05-07
Temp: 73 Deg f
Humidity: 43%
Rec. In Tol.
Due Date: 12-05-08

This report may not be reproduced, except in full without written permission from Cal-Tech Calibration.

Certification by: 

Accuracy: +/- 3%

Comments:

Standards Used	Model	Certification Number	Due Date
Troemner	1156	822/266607/02	3-01-08

In.oz. Range	As Found	Adjustments	Final
.015	.015	none	.015
.021	.021	none	.021
.024	.024	none	.024
.03	.03	none	.03

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

Houston Precision, Inc.

8729 Gulf Freeway
Houston, TX 77017-6504

Calibration Report

Company:	Hoefler Consulting Group	**Doc #:**	37827
Address:		**Date:**	1/10/2007
	3401 Minnesota Drive, Suite 300		
	Anchorage, AK 99503	**PO#:**	1208-004-403
Contact:	Dominic Shallies	**Page:**	1
Dept:			

Gage:	Torque Watch	**Control:**	5042
Mfg:	HONEYWELL	**Model:**	366
Location:	Calibration Lab	**Serial #:**	5042

Parameters:

Parameter:

Text:

Comments:

Calibration Completed by:Cal-Tech Calibration, Inc.
Original Certificate (attached) #4327

Reference HPI S/O #14549

We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
: VENDOR MASTER
Last / Next Cal Dates: -->

Gage Status: PASS **Next Calibration Due: 1/10/2008**

Certified By: Denice V. Mills Signature: Denice Mills

This certificate is not valid unless all 1 page(s) are present.
*Laboratory Environmental Conditions: Temperature: 68°F +/- 3.6°F and/or 20C +/- 2C, Relative Humidity: between 40% and 60%.
*Calibration measurements are performed in accordance with guidelines set forth in ANSI/NCSL Z540-1-1994 and Houston Precision's Quality manual.
*The measurement of uncertainity has not been taken into account when reporting readings "in" or "out of tolerance" on this calibration report.
*If additional information regarding this calibration is required, please contact this laboratory.
*All calibrations have been performed under the supervision and authority of Omar Martinez, Lab Manager.
*Any number of factors may cause the subject of this calibration to drift out of calibration before the recommended interval has expired.
HPI will not be held responsible for the calibration status of an item whose calibration interval exceeds the actual validity of the calibration.
*This Report shall not be reproduced expect in full, or with the expressed written permission of Houston Precision, Inc.
End of document.

Certificate of Calibration

The instrument listed below meets or exceeds published specifications and has been calibrated under controlled conditions and is traceable to the National Institute of Standards and Technology(N.I.S.T.), or to accepted intrinsic standards of measurement, or by the ratio type of self-calibration techniques. Cal-Tech Calibration conforms to the following, ANSI/NCSL Z540-1-1994, ISO/IEC 25/17025.

Customer: Houston Precision
Certificate Number: 4327
Instrument Make: Honeywell Torque Watch
Model: 366
S/N: none
ID: 5042

Date: 1-10-07
Temp: 72 Deg f
Humidity: 39%
Rec. In Tol.
Due Date: 1-10-08

This report may not be reproduced, except in full without written permission from Cal-Tec Calibration.

Certification by: J. Sears

Accuracy: +\- 1% of reading.

Comments:

Standards Used	Model	Certification Number	Due Date
Acculab	300g	822/270236-04	12-01-07

Reading In/oz	As Found	After Adjust	Final Reading
0.10	0.1	none	0.1
0.20	0.19	none	0.19
0.40	0.40	none	0.40
0.60	0.60	none	0.60

Cal-Tech Calibration, Inc.
1314 FM 646 West /Ste. 15 / Dickinson, Texas 77539 /Phone 281-614-0050 / Fax 281-614-0046

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner Name: HOEFLER Consulting Group

Address: 340 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER:

MODEL NUMBER: 5008

SERIAL NUMBER: 5080199319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072607. 01 C

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/26/07 Lab temperature 73.0 ℉
Lab pressure 664.9 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.11	0.11	-0.11
26.18	26.28	0.10	-0.10
28.00	28.10	0.10	-0.10
30.00	30.09	0.09	-0.09

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES **NO**
Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: RLS Date: 7/26/2007

Correction: RLS **Corrected Date:** **10/04/07**

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
12 Sheffield Ave., P.O. Box 419, Newport, RI 02840 USA
Telephone: 401-847-1020 Fax: 401-847-1031
Email: info@eppleylab.com Internet: www.eppleylab.com

EPLAB
Scientific Instruments
for Precision Measurements
Since 1917

STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24×10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: K. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Pebble Station 6
September 2008
Quality Assurance Systems Audit
and Performance Audit

for the:

Pebble Project

Meteorological Monitoring Program

Iliamna, Alaska

prepared for:

Pebble Limited Partnership,
care of Pebble Mines Corporation

prepared by:

Hoefler
CONSULTING GROUP

Pebble Station 6
PSD Meteorological Monitoring Station
September 2008
Quality Assurance Systems Audit
and Performance Audit

Prepared for:

The Pebble Limited Partnership,
care of Pebble Mines Corporation
Anchorage, Alaska

Prepared by:

Hoefler Consulting Group, Inc.
3401 Minnesota Drive, Suite 300
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TABLE of CONTENTS

1.0 INTRODUCTION 1

2.0 SYSTEMS AUDIT 2

2.1 Systems Audit Methodology 2

2.2 Meteorological Station Onsite Systems Audit 2

2.3 Operations, Data Management and Documentation Systems Audit 4

2.4 Comments and Suggestions 5

3.0 PERFORMANCE AUDIT 6

3.1 Performance Audit Methodology 6

3.1.1 Data Acquisition System 7
3.1.2 Air Temperature and Air Temperature Difference 7
3.1.3 Relative Humidity 7
3.1.4 Wind Speed 8
3.1.5 Wind Direction 8
3.1.6 Barometric Pressure 9
3.1.7 Solar Radiation 9
3.1.8 Precipitation 10
3.1.9 Evaporation 10

3.2 Performance Audit Results 10

3.3 Performance Audit Recommendations 10

4.0 REFERENCES 13

LIST of FIGURES and TABLES

Figure 2-1 Pebble 6 Station DAS Wiring Panel 3
Table 3-1 Performance Audit Methods and Acceptable Limits 6
Table 3-2 Pebble 6 September 22-23, 2008 Performance Audit Summary 11

LIST of APPENDICES

A SYSTEMS AUDIT DATA SHEETS
B PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP
C AUDIT EQUIPMENT CALIBRATION CERTIFICATES

1.0 INTRODUCTION

HCG Inc., dba Hoefler Consulting Group (HCG) operates meteorological monitoring stations for Pebble Limited Partnership (PLP) in support of the Pebble Mine Project near Iliamna, Alaska. The air monitoring program is one component of ongoing baseline environmental studies being conducted to support mine permitting, mine design and mine transportation infrastructure development. The stations meet Prevention of Significant Deterioration (PSD) guidelines, although PSD permits may not be required. This report covers the Pebble 6 Station (Pebble 6) located near the proposed mine site.

Pebble 6 is located approximately two miles east of the proposed mine ore body, just south of Upper Talarik Creek. The station is situated at roughly 765 foot elevation on flat terrain. The station consists of an instrumented 11-meter sectional tower secured with three guy wires. A weighing precipitation gauge is located approximately 75 feet east of the tower and an evaporation pan, collocated with a tipping precipitation gauge, is located roughly 90 feet east of the tower. Approximately 30 feet west of the tower is a 5' by 7' insulated building which houses the datalogger and power supply system. Pebble 6 is instrumented with PSD quality sensors monitoring the following parameters:

- Ambient Temperature (ºC): Met One 062MP Thermistor Probe at 2-m
- Temperature Difference (ºC): Met One 062MP Thermistors at 2-m and 10-m
- Relative Humidity (%RH): Vaisala HMP45AC Relative Humidity Sensor
- Wind Speed 1 (m/s): Climatronics F460 P/N 100075 Wind Speed Sensor
- Wind Direction 1 (°): Climatronics F460 P/N 100076 Wind Direction Sensor
- Wind Speed 2 (m/s): RM Young 05305 Wind Monitor-AQ
- Wind Direction 2 (°): RM Young 05305 Wind Monitor-AQ
- Sigma Theta (°): Campbell Scientific CR1000 DAS calculated (Yamartino)
- Barometric Pressure (mbar): Vaisala PT101B Barometric Pressure Sensor
- Solar Radiation (W/m2): LI-COR Li-200SX Solar Radiation Pyranometer
- Precipitation 1 (mm H_2O): ETI Model Noah II Weighing Precipitation Gauge
- Precipitation 2 (mm H_2O): Met-One Model 370 Tipping Precipitation Gauge
- Evaporation (mm H_2O): Nova-Lynx Model 255-100/200 Pan and Gauge.

This report has been prepared for PLP to serve as an official review of the Pebble 6 station and a review of the overall Pebble Project Meteorological Monitoring Program. To that end, Systems and Performance Audits were undertaken in order to help demonstrate that the equipment and procedures used for collecting meteorological data by HCG meet the requirements set forth by the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC).

2.0 SYSTEMS AUDIT

2.1 Systems Audit Methodology

In the *Quality Assurance Handbook for Air Pollution Measurement Systems* and the *Meteorological Monitoring Guidance for Regulatory Modeling Applications*, EPA provides guidance for conducting systems audits. EPA recommends that a systems audit be conducted to serve as a qualitative review of all aspects of a meteorological monitoring program. The systems audit includes a review of the program plan, station site, facilities, equipment, personnel, procedures, record keeping, data validation and data reporting. The systems audit should be completed within the first 30 days of operation and every year thereafter.

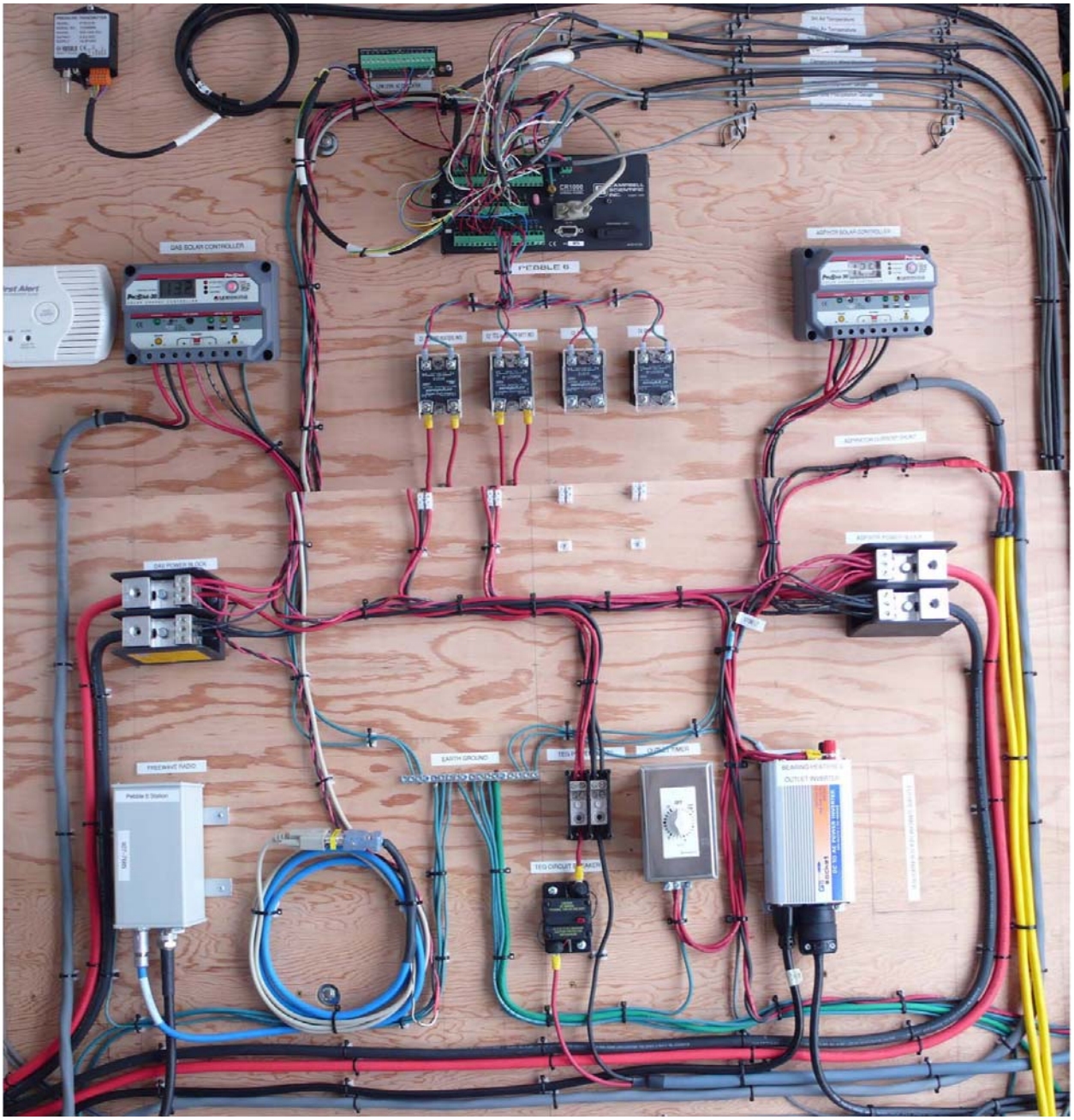
The *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program* (Plan) was completed by HCG in August 2006. While the Plan has not been updated to include the Pebble 6 station, the Plan does describe virtually identical systems previously installed on the project. This systems audit consisted of a review of the plan, site visits and personnel interviews. Personnel were also observed during station maintenance and calibration operations. All aspects of the program not specifically mentioned in the plan were reviewed to determine consistency with EPA and ADEC guidelines. The complete systems audit report contained in Appendix A is organized into six major sections; 1) General Program Information, 2) Monitoring Program Staff Organization, 3) Meteorological Monitoring Station Equipment, 4) Standard Operating Procedures, 5) Documentation, 6) Data Processing and Validation, 7) Quality Assurance and Quality Control (QA/QC), and 8) Comments and Suggestions. Each section consists of a question and answer format with additional comments to provide clarity. Flow charts are also used to accurately document program staff organization and the data handling process. A complete list of the references used for the systems audit is contained in Section 4.

2.2 Meteorological Station Onsite Systems Audit

The on-site systems audit of the Pebble 6 station was conducted in September 2008. Eric Brudie of HCG completed the systems audit with Dominic Shallies of HCG assisting and witnessing. Mr. Brudie serves as an independent auditor on this project and is not involved with day to day operations of the station.

The Pebble 6 meteorological monitoring station is founded on a stable, well anchored tower with PSD quality sensors securely affixed. The weighing precipitation gauge is shielded from high winds by a 20’ diameter Wyoming Wind Screen. The evaporation pan, evaporation gauge and a tipping precipitation gauge are mounted on a 6’ by 8’ deck supported on four adjustable pier blocks, which allow leveling. All instrumentation wires from the tower, precipitation gauges and evaporation gauge are protected in conduit. These conduits all converge at the insulated prefab building. The data acquisition system (DAS), communications system, solar controllers and power distribution system are mounted on a 4’ by 4’ plywood wiring panel mounted in the building, see photo.

Figure 2-1 Pebble 6 Station DAS Wiring Panel



The Campbell Scientific CR1000 DAS wiring is well organized and needs no further discussion. Constant communication between the DAS and a dedicated polling computer in the HCG office is integral to this installation. FreeWave spread spectrum radio modems transmit the signal to a SixNet industrial phone modem which is linked to the grid in Iliamna. The met station radio and base radio rely on directional Yagi antennas focused on an omni-directional antenna at the repeater radio. The repeater radio is powered by one 70-Watt solar panel buffered through a solar controller and five 100 Amp-Hr deep cycle gel cell batteries.

Power generation at the meteorological monitoring station consists of three 70-Watt solar panels and a Global Thermoelectric Generator (TEG). One solar panel is dedicated to the DAS and meteorological instrumentation; wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. Two solar panels are dedicated to the aspirator fans, Climatronics bearing heaters, shelter lighting and 120VAC power; also wired through a solar controller and buffered through two 200 Amp-Hr deep cycle gel cell batteries. The shelter lights and 120VAC inverter for laptop use are routed through manual timers to ensure use only when operators are on site. During the winter months, November through April, the TEG is turned on to supplement the solar power system. The TEG power is routed through relays wired to the DAS control ports which isolate the critical DAS/sensor system during upset conditions. Climatronics heaters are also controlled through relays programmed to limit heater use to weather conditions conducive to icing. All system battery voltages are monitored by the DAS and the thermistor aspirator fans are wired through a current shunt in order to monitor fan operation.

2.3 Operations, Data Management and Documentation Systems Audit

This phase of the systems audit consists of a review of the HCG *Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program*, and other system documentation, and a review of system operations. System operations include both physically running the station and subsequent data management.

The Plan is a comprehensive document which adequately details the Pebble meteorological monitoring program, although not updated to include Pebble 6. Program objectives, general installations, operations, data management and quality assurance are all clearly outlined. The Pebble 6 station is representative of the generic Plan design. The Plan provides standard operating procedures and standard forms for all equipment field calibrations and audits. Station operators also had DAS and most meteorological sensor manuals on hand at the station. Plan and documentation review are covered further in Appendix A.

Station operators were observed during calibration and maintenance procedures and appeared knowledgeable about all facets of operating the monitoring station. Data are downloaded daily using an automated script on a dedicated polling computer located at the HCG office. The raw data are appended to a station file located on the HCG server, which is backed up daily. The data manager copies the raw data to a custom Access/Excel database, leaving the raw data unaltered. The custom database creates a series of graphs of all meteorological data as well as some station operational parameters. These plots are reviewed 5-6 days per week in order to immediately identify station upsets. An example is a graph of solar radiation and battery voltage; which reveals potential problems with daily charge cycles. Both the Climatronics and RM Young Wind sensor data are plotted together to indicate problems with one of the sensors. All station parameters are plotted with ranges and pairings intended to best reveal upset conditions. Problems are immediately identified and corrective action planned and executed. Steps are taken to flag data which may have been identified as suspect during this graphical

data review. Data generated during station maintenance, audits and calibrations are also flagged as invalid.

Prior to compilation of data summary reports, data are screened using EPA recommended screening criteria. Data flagged as outliers by the screening program are further reviewed for consistency with prevailing conditions and then permanently invalidated or validated. Data ultimately invalidated are permanently removed from the database and the reasoning is codified in a special column in the database. This cleaned dataset is used for all subsequent data summaries, wind roses, data reports and capture rate calculations. More detailed discussion of the operations and data management are contained in the Systems Audit Appendix A.

2.4 Comments and Suggestions

The Pebble 6 station is a well designed and operated meteorological monitoring station. The remote station is equipped with a robust and sophisticated power supply which is constantly monitored. The systems audit revealed that HCG possesses the necessary organization, personnel, training, equipment, quality assurance, and quality control procedures to accurately collect and report PSD quality data. HCG adequately maintains the Pebble 6 station and practices sufficient data review and preventive maintenance to avoid unnecessary data loss.

The following recommendations are made to the program in order to improve the operation of the stations and ensure their operation is in accordance with standards:

- Maintain complete equipment manuals for station in digital or paper form
- Create custom site visit procedural and inventory checklists
- Keep files on site containing copies of previous visit checklists
- Always use paper calibration forms as well as computer entered forms.

3.0 PERFORMANCE AUDIT

3.1 Performance Audit Methodology

During the performance audit, the station datalogger is interfaced with a portable laptop computer to display the outputs for the meteorological sensors. The value of each meteorological sensor is compared to the output value from the appropriate piece of audit equipment or from calibrated instruments collocated with the sensor. The difference between the station's datalogger reading and the output from each audit instrument is compared with established PSD limits to determine the accuracy of each sensor. Additionally, threshold torques for wind speed and wind direction are measured with audit equipment and compared with manufacturer torques corresponding to the PSD threshold speed of 0.5 m/s. Table 3-1 provides a summary of the performance audit methods and limits used to audit each parameter at the stations.

Table 3-1 Performance Audit Methods and Acceptable Limits

Parameter	Audit Method	EPA/Manufacturer Limit
Datalogger Time	NOAA Clock	≤ ±5:00 minutes from AST
Temperature Accuracy	Collocated NIST thermistor	≤ ±0.5 °C
Temperature Difference	Collocated NIST thermistor	≤ ±0.1 °C
Relative Humidity	Collocated NIST RH sensor	≤ ±1.5 °C of dew point
Wind Speed Accuracy	Synchronous rpm motor	≤ ±0.2 m/s + 5 % observed
Wind Spd Torque (Clim)	Torque watch	≤ 0.35 g-cm (0.0049 oz-in)
Wind Spd Torque (RMY)	Torque watch	≤ 1.0 g-cm (0.014 oz-in)
Wind Direction Alignment	GPS, compass or landmark	≤ ±5° from true azimuth
Wind Direction Accuracy	Linearity tester	≤ ±5° per audit point
Wind Direction Linearity	Linearity tester	≤ 3° mean absolute average
Wind Dir Torque (Clim)	Torque watch	≤ 7.5 g-cm (0.104 oz-in)
Wind Dir Torque (RMY)	Vane torque gauge	≤ 11 g-cm (0.153 oz-in)
Barometric Pressure	Collocated NIST BP sensor	≤ ±3 mbar
Solar Radiation	Collocated NIST sensor	≤ ±5% of input+resolutuion[1]
Precipitation	Calibrated water volume	≤ ±10% of input
Evaporation	Measured water level	≤ ±10% of input

1. This audit limit is modified from PSD standard, as discussed below.

3.1.1 Data Acquisition System

An audit of the datalogger is conducted by comparing all datalogger outputs to the audit standards, as described below. The datalogger time is checked against an instantaneous time reading from the National Oceanic and Atmospheric Administration (NOAA) clock in Boulder, Colorado, via a global positioning system (GPS) handheld unit or telephone contact with the NOAA clock.

3.1.2 Air Temperature and Air Temperature Difference

The 2-meter and 10-meter thermistors are removed from their aspirator shields and collocated with a National Institute of Standards and Technology (NIST) traceable digital thermometer. The station thermistors and the transfer standard NIST thermometer are taped together and immersed in insulated thermoses containing a series of fluid baths; hot water (35°C to 45°C), warm water (15°C to 25°C), water/ice bath (0°C), cold glycol (-15°C to -25°C) and very cold glycol (-35°C to -45°C). Dry ice is used to cool the glycol baths. Each liquid bath is agitated and allowed to equilibrate before simultaneous readings are taken from the three instruments.

An alternate method can also be used for the low temperature audits, employing a Thermal Mass Device (TMD). The TMD consists of a 6" diameter by 9" high solid aluminum block milled to fit snuggly inside of an insulated Dewar flask. On the top of the TMD, and in corresponding locations on the flask lid, are holes sized to accommodate a variety of Campbell, Climatronics, Met-One and VWR thermistors. The TMD is cooled to the target temperatures by contact with dry ice and then placed in the insulated flask. The audit and station thermistors are inserted through the flask lid and into the appropriate holes in the TMD. After the TMD and the thermistors are allowed to equilibrate, readings for all thermistors are simultaneously taken. The aluminum TMD has a very high thermal conductivity and when allowed to equilibrate inside of the insulated flask, thermal gradients across the TMD are very small.

In all cases, the difference between the individual station thermistors and the NIST standard are compared to the PSD temperature accuracy limit of ±0.5°C. The difference between the two station thermistors (10-m°C minus 2-m°C) is compared to the PSD temperature difference limit of ±0.1°C.

3.1.3 Relative Humidity

Relative humidity (RH) is audited using a collocated NIST traceable RH sensor. The NIST sensor and the field sensor are collocated out of direct sunlight to eliminate solar radiation effects, preferably inside of the motor aspirated shield. If the NIST standard reads directly in dew point °C, those readings are used; if not, relative humidity and temperature readings are used. For the audit, instantaneous readings of dew point, relative humidity and ambient temperature are recorded from the transfer standard and the DAS. All relative humidity and temperature readings are converted to dew point in order to assess the PSD error limit of ±1.5°C dew point.

3.1.4 Wind Speed

Anemometers are audited to determine their accuracies in reading known wind speeds and to ascertain the sensor's threshold torque. The Climatronics and RM Young sensors are audited in very similar manners and are discussed together. The instruments are tested after removal from the tower and after removal of the sensor's props or cups.

First, an RM Young synchronous motor is attached to the shaft of the anemometer by using brand specific coupling devices. The sensor shaft is rotated at several different known revolutions per minute (rpm). Each rotational speed in rpm is equated to a wind speed in meters per second (m/s) by using the anemometer manufacturer's linear calibration formula. The difference between the calculated input speed in m/s and the datalogger output is compared to established PSD limits for each input rpm.

Next, a high precision torque watch is attached to the shaft of the anemometer, once again using custom couplings. Torque readings are made in both directions in each quadrant along the axis of rotation of the shaft. The maximum reading is recorded for the torque required to turn the shaft of the anemometer. The torque value recorded during the audit is compared to manufacturer's torque corresponding to the minimum PSD threshold speed of 0.5m/s.

3.1.5 Wind Direction

The wind direction sensors are first audited as-found to determine the accuracy of their alignment with respect to true north (true azimuth alignment) using one of four methods. In one method, a handheld GPS unit is used to measure the position of the auditor with respect to a waypoint captured under the wind sensor's position on the tower. Using binoculars, the tail of the wind vane is aligned with the auditor's position at a distance of several hundred feet from the tower. The GPS bearing back to the tower waypoint is then compared to the DAS reading. The difference between the two should not exceed ±5° per audit point. This procedure is repeated at least 4 times, once per quadrant, generally near the cardinal directions. The second method uses a calibrated precision compass mounted on a gimbal and tripod. The compass declination is preset for the specific location and date using one of a variety of magnetic declination computer models. The sensor tail is aligned toward the auditor while auditor sights the compass toward the sensor and readings are taken in a similar manner to the GPS method.

Another option is to align the tail of the sensor with a distant identifiable landmark of know bearing. The bearing to the landmark may be ascertained using a variety of methods. One method involves physically capturing a distant GPS waypoint, such as at a discernable structure or emissions stack. Bearings to inaccessible natural landmarks, usually distant mountain peaks, are acquired through the use of various computer mapping programs, such as Natural Geographic's TOPO program or USGS digital raster graphics (DRGs) loaded into AutoCAD. The bearing from the station location to the landmark is compared to the DAS reading. This method yields the most accurate audit value, but is limited by weather and availability of

discernable landmarks. The final method is to align the vane with the tower guy wires or preset survey markers, whose bearing has been ascertained using precision survey equipment.

The wind direction accuracy and linearity are subsequently audited after the wind direction sensor is removed from the tower. The Climatronics sensor is mounted on a Climatronics Model 101984 linearity tester and the RM Young sensor is mounted on an RM Young Model 18112 Vane Angle Bench Stand. Both test fixtures are keyed to their respective sensor and graduated from 0° to 360°. A series of readings starting at 30° and then clockwise in 30° increments are taken. The RM Young is read from 30° to 360° and the Climatronics is read from 30° to 540°. The Climatronics sensor is tested 180° past 360° in order to test the second potentiometer used in some DAS programming. Although not required, the Climatronics sensor is also tested with the vane attached in order to ascertain sensor accuracy and linearity relative to the instrument crossarm. The vane is aligned along the axis of the crossarm to yield the 0°/360° and 180° values and against a square held to the crossarm for the 90° and 270° directions. Four readings are taken in a clockwise direction and four are taken counterclockwise to complete the test. For both the linearity test fixture and crossarm tests, individual error values are assessed for the PSD accuracy limit of ±5° per point and the mean absolute average error is assessed against the linearity limit of 3°.

Next, the RM Young wind direction threshold is tested by measuring wind vane torque using an RM Young Model 18331 Vane Torque Gauge. This device saddles the wind vane and a calibrated spring is pulled to determine maximum torque from readings taken in both directions in all four quadrants. The Climatronics wind direction starting torque is measured with the vane removed by using a precision torque watch in the same manner as the wind speed torque. The highest torque readings are compared to specific manufacturer limits for instrument staring torque.

Finally, the wind direction sensors are placed back on the tower and as-left audits of the azimuth alignments are conducted to ensure the instruments are properly reinstalled.

3.1.6 Barometric Pressure

Barometric pressure (BP) is audited using a collocated NIST traceable BP sensor. The difference between the NIST sensor and the station sensor are compared to the PSD limit of ±3 mbar.

3.1.7 Solar Radiation

Outputs of the station sensor are compared to the output of a level collocated audit solar radiation sensor. The audit sensor is connected to an independent audit datalogger with the scan interval and clock synchronized with the station DAS. Hourly average solar radiation readings and instantaneous readings are recorded during the audit and then input into a custom spreadsheet to calculate a linear regression for the data. The PSD limit for solar radiation audits is ±5% of observed, but this standard is very difficult to obtain at the northern latitude of this installation. This EPA standard is currently undergoing review and is expected to change.

An excepted substitute is that individual DAS and audit data pairs are compared to a limit of ±5% of observed **+ EPA minimum instrument resolution (10W/m²)**. Individual data pairs are evaluated against this standard, but the overall set is restricted to a 5% error by limiting allowable linear slope to 1.0±0.05.

3.1.8 Precipitation

The Met-One tipping precipitation gauge is audited by slowly adding precisely measured volumes of water to the gauge using a dripping Nova Lynx Model 260-2595 Rain Gauge Calibrator. The predicted millimeters of precipitation corresponding to the measured volume added are calculated using the diameter of the gauge opening. The tare reading from the DAS is initially recorded and subsequent DAS readings are recorded after each test run.

The ETI weighing gauge is also audited using the calibrated bottle from the Nova Lynx Model 260-2595 Rain Gauge Calibrator, except the measured water volume is poured directly into the gauge opening. The DAS reading is recorded at the beginning of the test and after every 1/2" to 1" pour thereafter, up to the limit of the gauge. With both gauges, the percent difference between the predicted audit value and the DAS value is compared to the PSD limit of ±10%.

3.1.9 Evaporation

The evaporation gauge is first checked to confirm that the pan and gauge are level. The accuracy is checked by first removing or adding enough water to bring the initial level to approximately 50 mm or 240 mm, the minimum and maximum for this gauge. An accurate millimeter scale is taped to the inside of the evaporation pan and the water level on the scale is compared to the DAS output. Water is added to or removed from the pan to change the level by 10-20mm and another set of readings are taken. This process is repeated until the level in the pan reaches the upper or lower limit of the gauge. The resultant suite of DAS and scaled water level readings are then input into a custom spreadsheet which calculates a linear regression for the data. The evaporation gauge reads change in water level due to evaporation and rainfall, so the calculated intercept must be removed from measured water levels. The adjusted level is compared to the DAS output with a maximum allowable error of ±10% of input and the slope of resultant line has a limit of 1.0±0.1.

3.2 Performance Audit Results

The performance audit was conducted at the Pebble 6 station on September 22 and 23, 2008, with Dominic Shallies of HCG assisting. All PSD program sensors were challenged with certified audit equipment and yielded errors below the limits. The tipping precipitation gauge was in disrepair upon arrival so the instrument was replaced and re-audited. Summary audit results are contained in Table 3-2, and complete audit reports and audit equipment calibration certificates are contained in Appendix B and Appendix C respectively.

3.3 Performance Audit Recommendations

- None.

Table 3-2 Pebble 6 September 22-23, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
Datalogger Time	≤ ±5:00	Min:Sec	0:14	Pass
2-m Temperature Accuracy	≤ ±0.5	°C	0.19	Pass
10-m Temperature Accuracy	≤ ±0.5	°C	0.21	Pass
Air Temperature Difference	≤ ±0.1	°C	0.06	Pass
Relative Humidity (Dew Point)	≤ ±1.5	°C	1.0	Pass
Climatronics Wind System (In Situ)				
Wind Speed Torque	≤ 0.35	gm-cm	<0.2	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 7.5	gm-cm	7.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	1.7	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.9	Pass
Climatronics Wind System (Replacement Direction Sensor)				
Wind Direction Torque	≤ 7.5	gm-cm	4.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.1	Pass
Wind Direction Linearity	≤ 3	Degree	0.8	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.5	Pass
RM Young Wind System (In Situ)				
Wind Speed Torque-Old Bearings	≤ 1.0	gm-cm	0.5	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	8.0	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.1	Pass
Wind Direction Accuracy	≤ ±5	Degree	1.8	Pass
Wind Direction Linearity	≤ 3	Degree	0.9	Pass

Table 3-2 (Cont.) Pebble 6 September 22-23, 2008 Performance Audit Summary

Parameter	Limit	Units	Max Err	Status
RM Young Wind System (Replacement Sensor)				
Wind Speed Torque-Old Bearings	≤ 1.0	gm-cm	0.5	Pass
Low Wind Spd. Accuracy (≤5m/s)	≤ ±0.2	m/s	0.00	Pass
High Wind Spd. Accuracy (>5m/s)	≤ ±5	% input	0.0	Pass
Wind Direction Torque	≤ 11.0	gm-cm	5.0	Pass
Wind Direction Accuracy	≤ ±5	Degree	2.0	Pass
Wind Direction Linearity	≤ 3	Degree	1.2	Pass
Wind Dir. Azim. Alignment	≤ ±5	Degree	2.9	Pass
Barometric Pressure	≤ ±3	Mbar	0.0	Pass
Solar Radiation	≤ ±5+Res	% input	7.9	Pass[1]
Tipping Precipitation (In Situ)	≤ ±10	% input	57.5	Fail
Tipping Precipitation (Replacement)	≤ ±10	% input	3.5	Pass
Weighing Precipitation	≤ ±10	% input	8.9	Pass
Evaporation	≤ ±10	% input	2.5	Pass

1. Maximum error within limit of 5% of input + resolution, see audit.

4.0 REFERENCES

"Quality Assurance Project Plan for the Pebble Project Meteorological Monitoring Program", Hoefler Consulting Group, Inc., August 2006.

"Quality Assurance Manual for Ambient Air Quality Monitoring" ADEC, August 1996.

"Elements for Ambient Air Monitoring Quality Assurance Project Plan (QAPP)", ADEC, September 2004.

"Ambient Air and/or Meteorological Monitoring Quality Assurance Project Plan (QAPP) Review Checklist", ADEC, September 2004.

"Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)", EPA-450/4-87-007, May 1987.

"Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring", EPA-40 CFR Part 58, Appendix B, November 2004.

"On-Site Meteorological Program Guidance for Regulatory Modeling Applications", EPA-450/4-87-013, August 1995.

"Meteorological Monitoring Guidance for Regulatory Modeling Applications", EPA-454/R-99-005, February 2000.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development", EPA-454/R-98-004, August 1998.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", EPA/600/R-94/038d, March 1995.

"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume V: Precipitation Measurement Systems", EPA/600/R-94/038e, April 1994.

APPENDIX A
SYSTEMS AUDIT DATA SHEETS

Pebble 6 PSD Meteorological Station Systems Audit

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

TABLE OF CONTENTS

1.0 GENERAL PROGRAM INFORMATION 2
1.1 Site Description 2
1.2 Site Location 2
1.2.1 Coordinates 2
1.2.2 Appearance and Safety 2
2.0 MONITORING PROGRAM STAFF ORGANIZATION 2
3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT 3
3.1 Inventory 3
3.2 Equipment Evaluation 3
3.2.1 Data Acquisition System (DAS) and Communications System 3
3.2.2 Power Supply System 4
3.2.3 Meteorological Monitoring Sensors 4
3.2.4 EPA PSD Meteorological Instrument Standards 4
3.3 Station Location and Sensor Placement 6
3.3.1 Tower 6
3.3.2 Temperature Sensors 6
3.3.3 Relative Humidity Sensor 7
3.3.4 Wind Speed and Wind Direction Sensors 7
3.3.5 Barometric Pressure Sensor 7
3.3.6 Solar Radiation Sensor 7
3.3.7 Precipitation Gauge 7
3.3.8 Evaporation Gauge 8
4.0 STANDARD OPERATING PROCEDURES 8
4.1 General 8
4.2 DAS and Meteorological Sensors 8
5.0 DOCUMENTATION 9
5.1 System Reference and Maintenance Manuals 9
5.2 Station Monitoring Plan and Report Forms 9
6.0 DATA PROCESSING AND VALIDATAION 10
6.1 Overall Data Management 10
6.2 Data Collection and Initial Data Review 10
6.3 Corrective Actions 11
6.4 Data Validation 11
6.5 Data Capture 12
6.6 Data Reporting 12
7.0 QUALITY ASSURANCE AND QUALITY CONTROL 12
7.1 Quality Assurance Program 12
7.2 Quality Assurance Methods and Audits 12
8.0 COMMENTS AND SUGGESTIONS 13

Pebble 6 PSD Meteorological Station Systems Audit

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 22-23, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

1.0 GENERAL PROGRAM INFORMATION

1.1 Site Description

The Pebble 6 station is located on an flat terrain just south of the Upper Talarik Creek. The site is swampy and treeless with some low shrubs and virtually no obstructions around the station.

1.2 Site Location

1.2.1 Coordinates

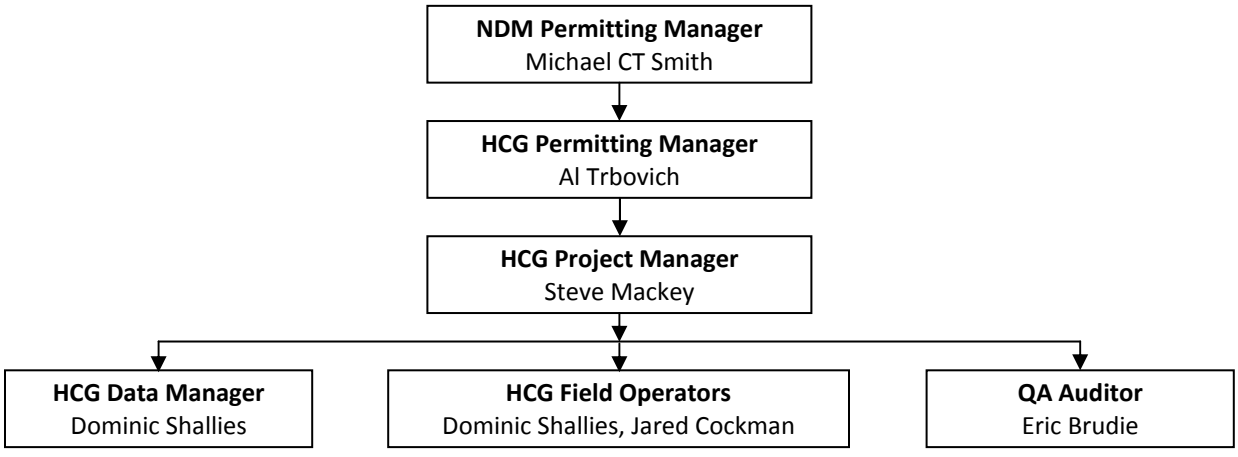
Indicated by Operator	Determined by Auditor
59° 54' N	59° 54.481' N
155° 12' W	155° 12.326' W
Elevation: 765 feet	Elevation: 765 feet

1.2.2 Appearance and Safety

Does the site appear clean, organized and well maintained?	■ Yes □ No	Comments: None.
Does the site appear to be safe and reasonably hazard free?	■ Yes □ No	Comments: None.
Does the site have a shelter for operators?	■ Yes □ No	Comments: None.
Does the site have emergency equipment such as a first aid kit available?	■ Yes □ No	Comments: None.
Does the site have adequate measures to prevent human tampering?	■ Yes □ No	Comments: Remote site.
Does the site have adequate measures to prevent damage from animals?	■ Yes □ No	Comments: Cables protected in liquid-tight conduit and electronics inside shelter.

2.0 MONITORING PROGRAM STAFF ORGANIZATION

- Draw a diagram of the organizational structure of the monitoring program, including names and titles:



Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

3.0 METEOROLOGICAL MONITORING STATION EQUIPMENT

3.1 Inventory

Parameter	Make	Model	Serial No.
DAS	Campbell Scientific	CR1000	9718
DAS Wiring Panel	Campbell Scientific	CR1000	9474
Temperature (2-meter)	Met One	062MP	G2668, ID #2/2
Temperature (10-meter)	Met One	062MP	G2668, ID #1/2
Relative Humidity	Vaisala	HMP45AC	C0540040
Temperature Aspirators	Met One	076B-4	Unknown
Primary Wind Speed	Climatronics	F460-100075	5194
Primary Wind Speed Cups	Climatronics	HD Al. P/N 101287	2320
Old Primary Wind Direction	Climatronics	F460-100076	4866
New Primary Wind Direction	Climatronics	F460-100076	4003
Primary Wind Direction Vane	Climatronics	HD P/N 101288	1488
Wind Sigma	Campbell Scientific	DAS Calculated	9718
Old Backup Wind Spd/Dir	RM Young	05305 Wind Mon-AQ	80038
New Backup Wind Spd/Dir	RM Young	05305 Wind Mon-AQ	89369
Backup Wind Spd Prop	RM Young	08254	65482
Barometric Pressure	Vaisala	PTB101B	C1250004
Solar Radiation	LI-COR	Li-200SX	PY56229
Old Precipitation-Tipping	Met-One	370	G4672
New Precipitation-Tipping	Met-One	370	H7453
Precip Tipping Wind Screen	NovaLynx	260-952 Alter Type	N/A
Precipitation-Weighing	ETI	8205-00710 Noah II	387
Precip Weighing Wind Screen	Custom made.	Wyom. Wind Screen	N/A
Evaporation Gauge	NovaLynx	255-100	930
Evaporation Pan	NovaLynx	255-200	None

3.2 Equipment Evaluation

3.2.1 Data Acquisition System (DAS) and Communications System

Is the DAS well protected from the elements with adequate room for maintenance?	■ Yes □ No	Comments: DAS inside of a weatherproof building, mounted on a 4'x4' wiring panel.
Is the DAS rated for operation in the expected local temperature range?	■ Yes □ No	Comments: -55°C to + 85°C.
Are all sensor cables neatly and securely connected to the correct DAS channels?	■ Yes □ No	Comments: Well organized wiring panel.
Is remote communication to the DAS system available to operators?	■ Yes □ No	Comments: DAS connected to FreeWave network linked to SixNet telephone modem.
Are all components of the DAS and communications system operational?	■ Yes □ No	Comments: None.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Are the DAS and communication equipment properly grounded?	■ Yes □ No	Comments: 8' ground rod wired to central ground buss.
Are the DAS and communication equipment protected from lightning?	□ Yes ■ No	Comments: There is no lighting protection, but area not prone to strikes.

3.2.2 Power Supply System

Does the system have a stable power supply or line power?	■ Yes □ No	Comments: Very robust alternative power supply described below.

- Describe the meteorological monitoring station power supply system.

The DAS, communications equipment and meteorological sensors are powered by one 70-Watt solar panel, buffered through two 200 amp-hr deep cycle gel cell batteries. The aspirator fans and Climatronics wind sensor heaters are powered by two 70-Watt solar panels buffered through two 200 amp-hr deep cycle gel cell batteries. During the winter months (November through April), the aspirator/heater system is also powered by a propane Thermo-Electric Generator (TEG). The isolated DAS and Aspirator power systems can be interconnected during upset conditions through an array of relays managed through the DAS control ports. The DAS monitors battery levels and can connect the two power systems should one run low. The DAS also has algorithms programmed to assess weather conditions and limit heater use when not essential.

3.2.3 Meteorological Monitoring Sensors

Do all sensors appear to be clean, intact, in good condition and well maintained?	■ Yes □ No	Comments: None.
Are all sensors operational, online and reporting data?	■ Yes □ No	Comments: None.
Do all sensors meet EPA criteria for PSD quality sensors?	■ Yes □ No	Comments: See table below.
Are spare parts stocked for items which are frequently worn out or broken?	■ Yes □ No	Comments: Spare props, cups and vanes onsite and spare bearings in field kit.

3.2.4 EPA PSD Meteorological Instrument Standards

Parameter	Instrument Specifications	EPA Standard	Pass?
Air Temperature (2-M, 10-M & Delta-T) – Met One Mdl. 062MP			
Accuracy (2m & 10m):	±0.05 °C	±0.5 °C	Yes
Accuracy (Delta-T):	±0.02 °C	±0.1 °C	Yes
Range (Operating Temp):	-50°C to +50°C	-20°C to +30°C	Yes
*Resolution (2m & 10m):	0.01°C	0.1°C	Yes
*Resolution (Delta-T):	0.01°C	0.02°C	Yes
Response Time:	10 seconds	≤1 minute	Yes
Relative Humidity – Vaisala Mdl. HMP45AC			
Accuracy:	±2/3% at 0-90/90-100% RH	±1.5°C Dew Point**	Yes
Range:	0.8% to 100% RH	-30°C to +30°C Dew Point**	Yes
*Resolution:	0.1% RH	1% RH	Yes
Response Time:	10 sec	≤30 minutes	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
** EPA criteria in units of dew point, RH and operating temperature ranges meet these criteria.			

Pebble 6 PSD Meteorological Station Systems Audit

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Wind Speed – Climatronics Mdl. F460-100075			
Accuracy:	±0.07 m/s or ±1% of obs.	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 65 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<4.0 m (HD Alum. Cups)	≤5 m	Yes
Operating Temperatures:	-40°C to +60°C	-30°C to + 30°C	Yes
Wind Direction – Climatronics Mdl. F460-100076			
Accuracy:	±2°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.22 m/s	≤0.5 m/s	Yes
Distance Constant:	<2.5 m (Heavy Duty Vane)	≤5 m	Yes
Damping Ratio:	>0.4 @10° initial angle	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +60°C	-30°C to + 30°C	Yes
Wind Speed – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±0.2 m/s or 1% of observed	±0.2 m/s + 5% of observed	Yes
Range:	0.0 m/s to 50 m/s	0.5 m/s to 50 m/s	Yes
*Resolution:	0.01m/s	0.1 m/s	Yes
Threshold Speed:	0.4 m/s	≤0.5 m/s	Yes
Distance Constant:	2.1 m	≤5 m	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Wind Direction – RM Young Mdl. 05305 Wind Monitor-AQ			
Accuracy:	±3°	±5°	Yes
Range:	0° to 360°	0° to 360°	Yes
*Resolution:	0.1°	1°	Yes
Threshold Speed:	0.5 m/s @10° displacement	≤0.5 m/s	Yes
Distance Constant:	1.2 m	≤5 m	Yes
Damping Ratio:	0.45	0.4 to 0.7	Yes
Operating Temperatures:	-50°C to +50°C	-30°C to + 30°C	Yes
Barometric Pressure – Vaisala Mdl. PTB101B			
Accuracy:	±0.5 mbar	±3 mbar	Yes
Range:	600 mbar to 1060 mbar	Not Specified	N/A
*Resolution:	0.1 mbar	0.5 mbar	Yes
Response Time:	300 msec	Not Specified	N/A
Operating Temperatures:	-40°C to +60°C	Not Specified	N/A
Solar Radiation – LI-COR Mdl. Li-200SX Pyranometer			
Accuracy:	±5% Observed	±5% Observed	Yes
Range:	0 W/m^2 to 3000 W/m^2	Not Specified	N/A
*Resolution:	1 W/m^2	10 W/m^2	Yes
Response Time:	10 µs	5 seconds	Yes
Spectral Response:	400 nm to 1,100 nm	285 nm to 2800 nm	No
Operating Temperatures:	-40°C to +65°C	-20°C to +40°C	Yes

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Parameter (Continued)	Instrument Specifications	EPA Standard	Pass?
Weighing Precipitation – ETI Mdl. 8205-00710 Noah II			
Accuracy:	±0.01 in (0.254mm)	±10% observed or ±0.5 mm	Yes
Range:	0-152 mm/hr (0-6 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.01in (0.254mm)	0.3 mm	Yes
Operating Temperatures:	-30°C to +50°C	Not Specified	N/A
Tipping Precipitation – Met One Mdl. 370-0.2mm			
Accuracy:	±1% of 1-3 in/hr (±0.5mm)	±10% observed or ±0.5 mm	Yes
Range:	0-76 mm/hr (0-3 in/hr)	0-50 mm/hr (0-2 in/hr)	Yes
*Resolution:	0.2 mm	0.3 mm	Yes
Operating Temperatures:	-50°C to +50°C	Not Specified	N/A
Evaporation – NovaLynx Mdl. 255-100/200			
Accuracy:	±0.25% over 10" range	Not Specified	N/A
Range:	2" to 10"	Not Specified	N/A
*Resolution:	0.1 mm	Not Specified	N/A
Operating Temperatures:	0°C to +60°C	Not Specified	N/A
* For all instruments; resolutions are the result of instrument type, configuration and DAS programming.			

3.3 Station Location and Sensor Placement

3.3.1 Tower

Do all obstructions exist below a 1:10 slope away from the tower base? ■ Yes □ No Comments: None.

Is the height of the tower at least 10 meters above the ground? ■ Yes □ No Comments: None.

Is the tower stable and plumb? ■ Yes □ No Comments: None.

Is the tower protected from lightning? □ Yes ■ No Comments: There is no lighting protection, but area not prone to strikes.

3.3.2 Temperature Sensors

Are the sensors mounted at least 2-m above open level ground at least 9-m in diameter? ■ Yes □ No Comments: None.

Are the temperature difference probes at heights of 2-m and 10-m above the ground? ■ Yes □ No Comments: None.

Are the sensors at a distance greater than four times the height of any obstruction? ■ Yes □ No Comments: None.

Is the ground beneath the temperature sensors natural native material? ■ Yes □ No Comments: None.

Is the site free of any natural features that could bias temperature data (e.g. open water, sloping ridge, etc.)? ■ Yes □ No Comments: None.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

Is the site free of any man-made features that could bias temperature data (e.g. asphalt, concrete, exhaust plumes, etc.)?	■ Yes □ No	Comments: None.
Are the sensors located at least 30 meters from large paved areas?	■ Yes □ No	Comments: None.
Is the ambient temperature sensor protected from the influence of solar radiation?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shield.
Are the temperature difference sensors located in identical aspirated shields?	■ Yes □ No	Comments: Housed in Met One Mdl 076B-4 Motor Aspirated Radiation Shields.

3.3.3 Relative Humidity Sensor

Is the relative humidity sensor open to the atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in 2-m aspirated shield with temperature sensor.

3.3.4 Wind Speed and Wind Direction Sensors

Is the horizontal distance between the instruments and any obstruction at least 10 times the height of the obstruction?	■ Yes □ No	Comments: None.
Are the instruments at least 1.5 times nearby building height(s) above the building roof(s), or 10-m high?	■ Yes □ No	Comments: None.
Are the wind speed and wind direction sensors stable and plumb?	■ Yes □ No	Comments: None.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: Climatronics Sensors mounted on a crossarm which meets this criterion.
Is the distance of the sensor on the cross-arm at least twice the diameter of the tower?	■ Yes □ No	Comments: RM Young sensor mounted on an extension arm which meets this criterion.
Is the wind direction sigma theta data being collected according to EPA requirements?	■ Yes □ No	Comments: DAS calculated using Yamartino method and a one-second scan interval.

3.3.5 Barometric Pressure Sensor

Is the barometric pressure sensor open to atmosphere & protected from precipitation?	■ Yes □ No	Comments: Housed in unsealed shelter, mounted on the wiring panel.

3.3.6 Solar Radiation Sensor

Is the instrument situated above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Is the sensor situated south of the tower to minimize obstruction from the tower?	■ Yes □ No	Comments: None.

3.3.7 Precipitation Gauge

Are all obstructions to the wind farther away from the gauge than the obstruction height?	■ Yes □ No	Comments: None.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

If located in an open and windy area, is a windshield being used?	■ Yes □ No	Comments: Wyoming Wind screen surrounds ETI gauge and Alter type around Met-One.
Is the area surrounding the rain gauge covered by natural vegetation or gravel?	■ Yes □ No	Comments: None.
Is the instrument mounted at least 30 cm above the ground?	■ Yes □ No	Comments: None.
Is the instrument mounted level?	■ Yes □ No	Comments: None.

3.3.8 Evaporation Gauge

Is the evaporation pan above the plane of any obstructions that could cast shadows?	■ Yes □ No	Comments: None.
Are the pan and gauge mounted on a stable and level platform?	■ Yes □ No	Comments: Mounted on a 6' x 8' deck supported on adjustable pier blocks.
Is the evaporation pan protected from animals?	□ Yes ■ No	Comments: Limited quantity of animals in area which could impact pan & gauge.

4.0 STANDARD OPERATING PROCEDURES

4.1 General

Is the station visited on a preset schedule?	■ Yes □ No	Comments: None.
Have standard SOPs been developed, and are they being followed by the operators?	■ Yes □ No	Comments: None.
Does the operator follow a preventative maintenance schedule?	■ Yes □ No	Comments: None.
Are site visits and maintenance activities properly documented in a Station Log?	■ Yes □ No	Comments: Site visit memos are compiled.
Are station operators knowledgeable and competent regarding effective operation?	■ Yes □ No	Comments: None.
Have operators attended any formal training for operating met monitoring stations?	■ Yes □ No	Comments: Lead operator has formal training and all operators have onsite experience.
Are copies of the NIST certifications for the calibration equipment made available?	■ Yes □ No	Comments: Attached.

4.2 DAS and Meteorological Sensors

Are regular multipoint QC checks performed on the DAS?	■ Yes □ No	Comments: DAS audited by virtue of the instrument output values.
Are regular multipoint QC checks performed on the meteorological sensors?	■ Yes □ No	Comments: None.
Are the sensors visually inspected for defects and problems?	■ Yes □ No	Comments: None.

Owner: PLP | Operator: D. Shallies | Witness(s): D. Shallies | Alternate: S. Mackey | Date: Sep 22-23, 2008 | Auditor: Eric Brudie

Are ambient conditions compared with sensor readings from the DAS?	■ Yes □ No	Comments: DAS output compared to Iliamna Airport weather station.
Are data frequently reviewed for reasonableness and completeness?	■ Yes □ No	Comments: None.
Is a copy of the datalogger program made available for review?	■ Yes □ No	Comments: None.

5.0 DOCUMENTATION

5.1 System Reference and Maintenance Manuals

Does the operator have all required DAS and meteorological instrument manuals?	■ Yes □ No	Comments: On-site and at HCG offices.
Does the operator have configuration and wiring schematics specific to the station?	■ Yes □ No	Comments: Operator carries wiring schematics.

5.2 Station Monitoring Plan and Report Forms

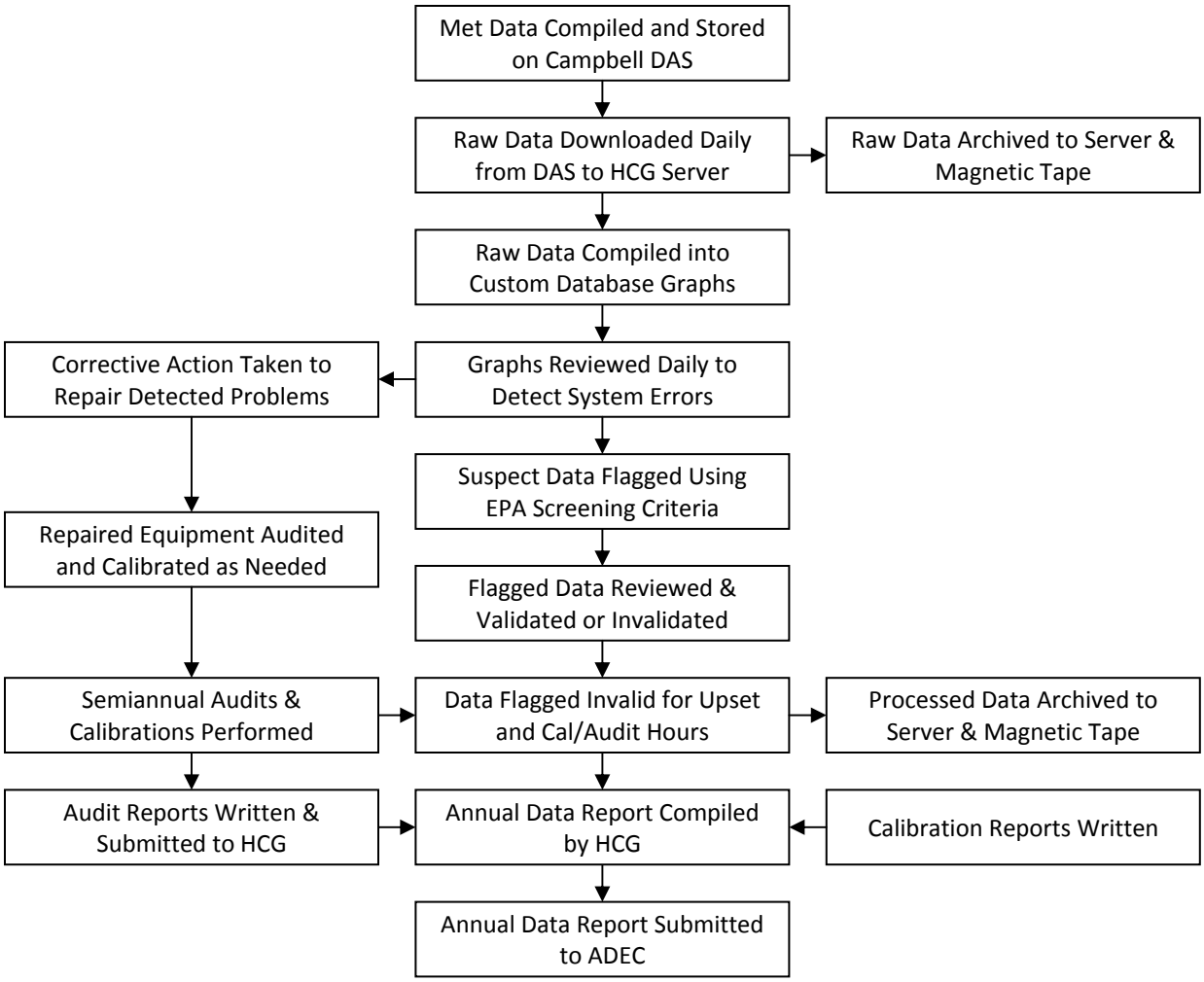
Is the Monitoring/QA plan comprehensive and reflective of the actual installation?	■ Yes □ No	Comments: None.
Does the Monitoring/QA plan indicate the intended use for the data collected during the monitoring program?	■ Yes □ No	Comments: Collect PSD quality data to meet dispersion modeling requirements and satisfy mine/transportation design requirements.
Does the system outlined in the QA plan meet the objectives outlined above?	■ Yes □ No	Comments: PSD quality installation.
Does the QA Plan indicate the intended schedule for reports to be submitted?	■ Yes □ No	Comments: None.
Does the station have an activity log?	□ Yes ■ No	Comments: Site visit memos written after each visit to supplant a log book.
Does the station have a formal Site Visit and Checklist Form?	□ Yes ■ No	Comments: No formal checklist used.
Does the station have an adequate Operations Manual?	■ Yes □ No	Comments: Monitoring/QA plan and equipment manuals.
Does the station have an adequate calibration form and copies of previous audits & cals?	■ Yes □ No	Comments: None.
Are report forms and site logs properly completed and current?	■ Yes □ No	Comments: None.

Owner: PLP Operator: D. Shallies Alternate: S. Mackey Date: Sep 22-23, 2008
Witness(s): D. Shallies Auditor: Eric Brudie

6.0 DATA PROCESSING and VALIDATAION

6.1 Overall Data Management

- Diagram the flow of data from monitoring equipment to submission of a final report.



6.2 Data Collection and Initial Data Review

Is the station polled and data downloaded on a regular basis?	■ Yes □ No	Comments: Daily via RF modem and telephony modem.
Are the monitoring station data reviewed on a regular basis?	■ Yes □ No	Comments: Data imported into custom graphs and reviewed 5-6 days per week.
Are the monitoring station data screened on a regular basis?	■ Yes □ No	Comments: Data screened using EPA criteria prior to summary compilations.
Are procedures in place for backing up raw data?	■ Yes □ No	Comments: Raw data files are backed up on the HCG server and on magnetic tape.

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 22-23, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

Are written procedures for data handling available for the project? ■ Yes □ No Comments: None.

- Describe the data polling process and initial data evaluation.

Data is downloaded from the station on a daily basis using a dedicated data polling computer located at the HCG office. The raw *.dat file is appended to the existing raw station data file located on the HCG server, which is backed up to tape daily. The raw data are copied to an Access/Excel database file which generates custom graphs of the various meteorological and operational parameters. These graphs are reviewed 5-6 days per week in order to identify station problems. This graphical data review is the frontline of maintaining a complete and defensible dataset. Station upsets are instantly identified and repaired within days. Copies of both the raw unadjusted data and the custom database files are retained for a minimum of 5 years.

6.3 Corrective Actions

Are procedures established for initiating corrective actions during data processing? ■ Yes □ No Comments: Daily graphical data review and subsequent reactions.

- Describe procedures for initiating, tracking and closing corrective actions.

When nonconformance issues are recognized during graphical review, the Lead Operator/Data Manager plans and executes corrective action. A calibration check is performed on any sensor which is repaired or replaced during the action. A site visit memo outlining the nature of the problem and repairs undertaken is written and saved to the station file. Any quantifiable error is also documented for possible data validation. The Operator/Data Manager ensures the erroneous data are flagged for the period from initial noncompliance until repair and calibration are affected.

6.4 Data Validation

Are data validation procedures established and in use? ■ Yes □ No Comments: None.

Are adjusted and unadjusted data sets maintained? ■ Yes □ No Comments: Both are backed up on the HCG server and magnetic tape.

- Describe the initial data validation procedure.

Data is compiled in a custom Excel spreadsheet programmed to evaluate meteorological data against EPA recommended PSD data screening criteria. The data are screened for events such as; extended periods of zero wind speed (indicating icing or worn bearings), temperatures outside of the known monthly max/min for the area, etc. Nonconforming data are flagged by the screening program for further investigation. Also, data periods for individual parameters are flagged for times when the corresponding instrument was undergoing field servicing, calibrations or audits. Periods when instruments are known to have been out of calibration or malfunctioning are also flagged.

- Describe procedures for validating and invalidating flagged data (outliers).

Data flagged during the screening process described above are manually reviewed. If the data have a quantifiable, consistent and documented bias, they may be adjusted and then validated. Specific guidelines are detailed in the Plan. Data which have been flagged by the screening program are also compared to local weather conditions as determined from other sources. Examples where data flagged during screening may be

validated include periods when winds were known to have been exceptionally calm at nearby stations or extreme temperatures outside the historical max/min were witnessed. At this point, flagged data are permanently validated and left in the database or invalidated and removed from the database. Data removed from the database are replaced with an alphanumeric code to indicate the reason for invalidation.

- Identify those responsible for data validation.

Name: Dominic Shallies
Position: Lead Operator & Data Manager
Affiliation: Hoefler Consulting Group, Inc.

Name: Rebecca Van Wyck
Position: Data Management
Affiliation: Hoefler Consulting Group, Inc.

6.5 Data Capture

- Identify the desired data capture rate for the monitoring data.

Target rate for PSD Quality Meteorological Monitoring Data is 90%.

Is the desired data capture rate being met for each data type?	■ Yes □ No	Comments: None.

6.6 Data Reporting

Are quarterly and annual data reports being submitted for the site?	■ Yes □ No	Comments: None.
Are qualified staff personnel reviewing data reports prior to submittal?	■ Yes □ No	Comments: None.
Is finalized data set submitted with report to ADEC?	■ Yes □ No	Comments: None.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Program

Has a quality assurance plan been written describing quality assurance procedures?	■ Yes □ No	Comments: None.
Is a copy of the plan available to field and data processing personnel?	■ Yes □ No	Comments: None.
Has the quality assurance plan been approved by the ADEC?	■ Yes □ No	Comments: None.

- Identify those person(s) responsible for updating the plan SOPs.

Name: Steve Mackey
Position: Project Manager
Affiliation: Hoefler Consulting Group, Inc.

7.2 Quality Assurance Methods and Audits

Have adequate audit procedures been identified within the quality assurance plan?	■ Yes □ No	Comments: None.
Does the Plan correctly document PSD accuracy limits for calibrating and auditing?	■ Yes □ No	Comments: None.

Owner: PLP | Operator: D. Shallies | Alternate: S. Mackey | Date: Sep 22-23, 2008
Witness(s): D. Shallies | Auditor: Eric Brudie

Have audits been conducted on the suggested schedule of every six months? ■ Yes □ No Comments: None.

- Identify the person(s) responsible for conducting audits on the monitoring instrumentation.

Name: Eric Brudie
Position: Field Auditor
Affiliation: Hoefler Consulting Group, Inc.

8.0 COMMENTS AND SUGGESTIONS

- Prepare and compile site specific station checklists, inventories and visit forms.
- Maintain all equipment manuals in the field or on the field computer.

APPENDIX B
PERFORMANCE AUDIT DATA SHEETS and ALIGNMENT MAP

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

● *DAS TIME AUDIT*

PSD Limits: DAS time = Alaska Standard Time (AST) +/- 5 minutes.
Conversions: Winter; (AST) = (DST), Summer; (AST) = (DST) - 1 hr.
Comments: None.

DAS TIME vs. NOAA CLOCK			
AST Time	DAS Time	Error Min:Sec	Pass/ Fail?
12:48:30	12:48:44	**00:14**	**PASS**

● *TEMPERATURE SENSORS & ΔT AUDIT*

Lower Height: 1.9 **Meters** **Upper Height:** 9.9 **Meters**

2-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G2668 #2/2	**Range:**	-50 to 50 **°C**
10-M Thermistor:	**Make:**	Met One	**Model:**	062MP	**S.N.#:**	G2668 #1/2	**Range:**	-50 to 50 **°C**
Audit Digital Thermometer:	**Make:**	Van Waters & Rogers	**Model:**	61220/601	**S.N.#:**	51091749	**Range:**	-40 to 150 **°C**
Audit Probe:	**Make:**	Van Waters & Rogers	**Model:**	61220/604	**S.N.#:**	240301145	**Range:**	-40 to 150 **°C**

Wiring Check	
2m=2m	✓
10m=10m	✓

Time:
Begin: 1425
End: 1440

THERMISTOR COLLOCATED STANDARD TEST										
Thermal Input			Station Response (2M)			Station Response (10M)			Station (Delta T)	
Temp Range	Target °C	Input °C	DAS °C	Error °C	Pass/ Fail?	DAS °C	Error °C	Pass/ Fail?	Delta T °C	Pass/ Fail?
Hot	35 to 45	37.83	38.02	0.19	Pass	38.02	0.19	Pass	0.00	Pass
Warm	15 to 25	19.76	19.82	0.06	Pass	19.82	0.06	Pass	0.00	Pass
Ice Bath	0	0.04	0.11	0.07	Pass	0.11	0.07	Pass	0.00	Pass
Cold	-15 to -25	-18.01	-18.12	-0.11	Pass	-18.12	-0.11	Pass	0.00	Pass
Very Cold	-35 to -45	-34.56	-34.71	-0.15	Pass	-34.77	-0.21	Pass	-0.06	Pass
		Max Abs. Error		0.19	**PASS**		0.21	**PASS**	0.06	**PASS**

PSD Limits: Max Absolute Error > 0.5 °C (Sensor Accuracy); Max Absolute Error > 0.1 °C (Delta Temperature).
Comments: None.

● *RELATIVE HUMIDITY SENSOR AUDIT*

Height: 1.9 **Meters**

RH Sensor:	**Make:**	Vaisala	**Model:**	HMP45AC	**S.N.#:**	C0540040	**Range:**	0.8 to 100 **% RH**
Audit Equipment:	**Make:**	Vaisala	**Model:**	HMI 41	**S.N.#:**	X0650080	**Range:**	0 to 100 **% RH**
Audit Equipment:	**Probe#**	HMI41 X07450015						

RH COLLOCATED STANDARD TEST								
Reading Time	Input %RH	Input AT (°C)	Input DP (°C)	DAS %RH	DAS AT (°C)	DAS DP (°C)	Error DP (°C)	Pass/ Fail?
1355	50.4	8.7	-1.0	55.9	8.2	-0.1	0.9	Pass
1410	55.9	8.5	0.1	60.0	8.4	1.1	1.0	Pass
1611	78.1	5.8	2.7	81.8	6.2	3.3	0.6	Pass
						Max Abs. Error	1.0	**PASS**

PSD Limits: Max Absolute Error > 1.5°C Dew Point.
Conversions: Td=DP(°C), Ta=AT(°C), RH=Fraction: Td=b*ע/(a-ע), where ע=a*Ta/(b + Ta) + ln(RH), and a = 17.27, b=237.7°C.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

● *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (In Situ)*

Height: 11.0 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5194	**Cup #:**	2320	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4866	**Vane #:**	1488	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.1 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22	0.22	0.00	N/A	Pass
100	2.57	2.57	0.00	N/A	Pass
200	4.92	4.92	0.00	N/A	Pass
400	9.62	9.62	N/A	0.0	Pass
1000	23.72	23.71	N/A	0.0	Pass
2000	47.22	47.21	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1322 End: 1327

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	188.5	186.8	-1.7	Pass
Compass	95.5	96.4	0.9	Pass
Compass	7.0	7.2	0.2	Pass
Compass	269.5	269.6	0.1	Pass
Compass	328.0	329.7	1.7	Pass
Max Abs. Error			**1.7**	**PASS**
Mean Abs. Error			**0.9**	**GOOD**

Time: Begin: 1030 End: 1050

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.5	0.5	Pass
West	270.0	270.1	0.1	Pass
North	360.0	1.0	1.0	Pass
East	90.0	91.2	1.2	Pass
North	360.0	0.7	0.7	Pass
West	270.0	269.1	-0.9	Pass
South	180.0	180.1	0.1	Pass
East	90.0	92.3	2.3	Pass
	Max Abs. Error		**2.3**	**PASS**
	Mean Abs. Error		**0.8**	**PASS**

Time: Begin: 1318 End: 1320

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	28.5	-1.5	Pass	330.0	329.4	-0.6	Pass
60.0	58.9	-1.1	Pass	355.0	354.5	-0.5	Pass
90.0	89.2	-0.8	Pass	30.0	28.5	-1.5	Pass
120.0	119.8	-0.2	Pass	60.0	58.9	-1.1	Pass
150.0	149.0	-1.0	Pass	90.0	89.6	-0.4	Pass
180.0	178.7	-1.3	Pass	120.0	119.7	-0.3	Pass
210.0	208.2	-1.8	Pass	150.0	149.6	-0.4	Pass
240.0	238.8	-1.2	Pass	180.0	178.8	-1.2	Pass
270.0	269.6	-0.4	Pass	**Max Abs. Error**		**1.8**	**PASS**
300.0	299.7	-0.3	Pass	**Mean Abs. Error**		**0.9**	**PASS**

Time: Begin: 1337 End: 1340

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	<0.2	**PASS**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	7.0	**PASS**
New	7.5	0.104	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No Post-Audit				
New sensor installed				
Max Abs. Error				
Mean Abs. Error				

Time: Begin: N/A End: N/A

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: Wind direction sensor replaced for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

• *HORIZONTAL WIND SENSOR AUDIT - CLIMATRONICS (Replacement Sensor)*

Height: 11.0 **Meters**

Wind Spd Sensor:	**Make:**	Climatronics	**Model:**	100075	**S.N.#:**	5194	**Cup #:**	2320	**Range:**	0-60 **m/s**
Wind Dir Sensor:	**Make:**	Climatronics	**Model:**	100076	**S.N.#:**	4003	**Vane #:**	1488	**Range:**	0-360 **Deg**
Spd Audit Eq:	**Low Spd:**	RM Young	**Model:**	18811	**S.N.#:**	CA02136	**Torque:**	Watters Mdl 366-3	**S.N.#:**	4864
Spd Audit Eq:	**High Spd:**	RM Young	**Model:**	18801	**S.N.#:**	CA01674				
Dir Audit Eq:	**Linearity:**	Climatronics	**Model:**	101984	**S.N.#:**	145	**Torque:**	Honeywell Mdl 366-0	**S.N.#:**	5042
Dir Audit Eq:	**Compass:**	Brunton	**Model:**	11-F5008	**S.N.#:**	5080799319	**Magnetic Declin:**	17.1 **E of N**		

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.22			N/A	
100	2.57			N/A	
200	4.92			N/A	
400	9.62		N/A		
1000	23.72		N/A		
2000	47.22		N/A		
	Max Abs. Error				

Time: Begin: N/A End: N/A

Conversion: Heavy Duty Al Cups: m/s = rpm÷42.55+0.22.
Cups rotate clockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No In Situ Audit				
New sensor installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

CROSSARM-VANE ACCUR. & LIN. TEST

Input Dir	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
South	180.0	180.8	0.8	Pass
West	270.0	271.3	1.3	Pass
North	360.0	1.3	1.3	Pass
East	90.0	91.4	1.4	Pass
North	360.0	0.7	0.7	Pass
West	270.0	271.0	1.0	Pass
South	180.0	180.5	0.5	Pass
East	90.0	91.6	1.6	Pass
	Max Abs. Error	**1.6**		**PASS**
	Mean Abs. Error	**1.1**		**PASS**

Time: Begin: 1353 End: 1355

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	27.9	-2.1	Pass	330.0	331.1	1.1	Pass
60.0	58.5	-1.5	Pass	355.0	357.0	2.0	Pass
90.0	88.7	-1.3	Pass	30.0	28.3	-1.7	Pass
120.0	119.5	-0.5	Pass	60.0	58.6	-1.4	Pass
150.0	149.8	-0.2	Pass	90.0	89.1	-0.9	Pass
180.0	179.9	-0.1	Pass	120.0	119.7	-0.3	Pass
210.0	209.8	-0.2	Pass	150.0	149.9	-0.1	Pass
240.0	240.0	0.0	Pass	180.0	180.0	0.0	Pass
270.0	270.5	0.5	Pass	**Max Abs. Error**		**2.1**	**PASS**
300.0	300.8	0.8	Pass	**Mean Abs. Error**		**0.8**	**PASS**

Time: Begin: 1347 End: 1351

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	0.35	0.0049	N/A	**N/A**
New	0.35	0.0049	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	7.5	0.104	N/A	**N/A**
New	7.5	0.104	4.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Cups Aligned North? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	90.5	90.1	-0.4	Pass
Compass	347.5	347.9	0.4	Pass
Compass	275.0	273.5	-1.5	Pass
Compass	199.5	197.0	-2.5	Pass
Time: Begin: 1445	**Max Abs. Error**		**2.5**	**PASS**
End: 1458	**Mean Abs. Error**		**1.2**	**GOOD**

Spd PSD Limits: Threshold Torque >0.35gm-cm (0.0049oz-in) @ 0.50m/s.
Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.

Dir PSD Limits: Threshold Torque >7.5 gm-cm (.104 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.

Comments: New wind direction sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

● *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ (In Situ)*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 80038	**Prop #:** 65482	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1214 End: 1216

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Compass	188.5	189.6	1.1	Pass
Compass	95.5	96.9	1.4	Pass
Compass	6.5	8.6	2.1	Pass
Compass	269.5	270.3	0.8	Pass
Compass	328.0	329.6	1.6	Pass
Time: Begin: 1030	**Max Abs. Error**		**2.1**	**PASS**
End: 1050	**Mean Abs. Error**		**1.4**	**GOOD**

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	31.8	1.8	Pass	150.0	149.6	-0.4	Pass	270.0	269.7	-0.3	Pass
60.0	61.2	1.2	Pass	180.0	178.3	-1.7	Pass	300.0	299.9	-0.1	Pass
90.0	90.4	0.4	Pass	210.0	208.6	-1.4	Pass	330.0	330.8	0.8	Pass
120.0	119.4	-0.6	Pass	240.0	239.1	-0.9	Pass	353.0	354.5	1.5	Pass
				Time: Begin:	1104	**Max Abs. Error**		**1.8**			**PASS**
				End:	1108	**Mean Abs. Error**		**0.9**			**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	0.5	**PASS**
New	1.0	0.014	N/A	**N/A**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	8.0	**PASS**
New	11.0	0.153	N/A	**N/A**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓ Input Description	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
No Post-Audit				
New sensor installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: Sensor replaced for routine maintenance.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

• *HORIZONTAL WIND SENSOR AUDIT - RM YOUNG AQ (Replacement Sensor)*

Height: 10.4 **Meters**

Wind Sensor:	**Make:** RM Young	**Model:** 05305 AQ	**S.N.#:** 89369	**Prop #:** 65482	**Range:** 0-360	**Deg**			
Spd Audit Eq:	**Low Spd:** RM Young	**Model:** 18811	**S.N.#:** CA02136	**Torque:** Watters Mdl 366-3	**S.N.#:** 4864				
Spd Audit Eq:	**High Spd:** RM Young	**Model:** 18801	**S.N.#:** CA01674						
Dir Audit Eq:	**Linearity:** RMY Mdl 18112 Bench Stand	**S.N.#:** None	**Torque:** RMY Mdl 18331 Torque Gauge	**S.N.#:** None					
Dir Audit Eq:	**Compass:** Brunton	**Model:** 11-F5008	**S.N.#:** 5080799319	**Magnetic Declin:** 17.1	**E of N**				

WIND SPD SYNCHRONOUS MOTOR TEST

Input rpm	Input m/s	DAS m/s	Error m/s	Error % Input	Pass/ Fail?
0	0.00	0.00	0.00	N/A	Pass
400	2.05	2.05	0.00	N/A	Pass
1000	5.12	5.12	N/A	0.0	Pass
2000	10.24	10.24	N/A	0.0	Pass
5000	25.60	25.60	N/A	0.0	Pass
10000	51.20	51.20	N/A	0.0	Pass
	Max Abs. Error		**0.00**	**0.0**	**PASS**

Time: Begin: 1304 End: 1306

Conversion: Model 08254 Prop: m/s = 0.00512*rpm.
Prop rotates counterclockwise.

WIND DIR IN-SITU AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
No In Situ Audit				
New sensor installed				
Time: Begin: N/A	**Max Abs. Error**			
End: N/A	**Mean Abs. Error**			

WIND DIR BENCH STAND ACCURACY & LINEARITY TEST

Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
30.0	32.0	2.0	Pass	150.0	148.8	-1.2	Pass	270.0	271.5	1.5	Pass
60.0	61.1	1.1	Pass	180.0	178.8	-1.2	Pass	300.0	301.8	1.8	Pass
90.0	90.1	0.1	Pass	210.0	209.2	-0.8	Pass	330.0	331.7	1.7	Pass
120.0	119.1	-0.9	Pass	240.0	240.5	0.5	Pass	353.0	354.4	1.4	Pass
				Time: Begin:	1300	**Max Abs. Error**			**2.0**		**PASS**
				End:	1302	**Mean Abs. Error**			**1.2**		**PASS**

WIND SPD TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	1.0	0.014	N/A	**N/A**
New	1.0	0.014	0.5	**PASS**

WIND DIR TORQUE TEST

Bearings Tested	Limit gm-cm	Limit oz-in	Torque gm-cm	Pass/ Fail?
In-Situ	11.0	0.153	N/A	**N/A**
New	11.0	0.153	5.0	**PASS**

WIND DIR POST-AUDIT AZIMUTH ALIGNMENT TEST

Box Aligned South? ✓	Input Deg	DAS Deg	Error Deg	Pass/ Fail?
Input Description				
Compass	90.5	92.3	1.8	Pass
Compass	347.5	349.0	1.5	Pass
Compass	275.0	277.9	2.9	Pass
Compass	199.5	199.6	0.1	Pass
Time: Begin: 1445	**Max Abs. Error**		**2.9**	**PASS**
End: 1458	**Mean Abs. Error**		**1.6**	**GOOD**

Spd PSD Limits: Threshold Torque >1.0gm-cm (0.014oz-in) @ 0.50m/s. Max Abs Error > 0.20m/s @ WS<=5m/s or > 5% of input @ WS>5m/s.
Dir PSD Limits: Threshold Torque >11.0 gm-cm (0.153 oz-in) @ 0.5 m/s. Max Abs Error >5° from True Azimuth (alignment).
Max Abs Error >5° (accuracy). Mean Abs Error >3° (linearity). Azimuth Mean Abs Error calculated for information only.
Comments: New sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

• *BAROMETRIC PRESSURE SENSOR AUDIT*

Height: N/A **Meters**

Pressure Sensor: **Make:** Vaisala **Model:** PTB101B **S.N.#:** C1250004 **Range:** 600-1060 **hPa**
Audit Equipment: **Make:** PRETEL **Model:** AltiPlus A2 **S.N.#:** 27806 **Range:** 470-1040 **hPa**

BP COLLOCATED STANDARD TEST							
Date	Reading Time	Raw Input in Hg	Adj Input in Hg	Adj Input mb	DAS mb	Error mb	Pass/ Fail?
10/13/08	1300	28.88	28.81	975.69	975.66	-0.03	Pass
				Max Abs. Error		0.03	**PASS**

Audit Inst Cal Data	
Cal. Date: 07/28/08	
Audit Inst	Offset Amount
24.09	-0.09
26.06	-0.07
28.08	-0.08
30.06	-0.06
Intercept	**-0.18**
Slope	**0.0040**

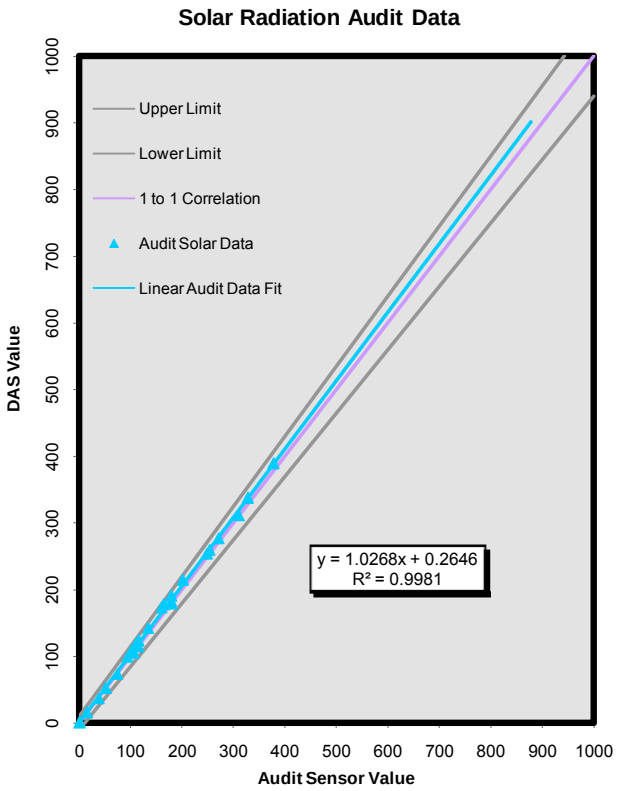
PSD Limits: Max Absolute Error > 3mb (0.3kPa).
Comments: New audit instrument broken during September audit, audited with calibrated standard during October trip.

• *SOLAR RADIATION SENSOR AUDIT*

Height: 4.1 **Meters**

Station Sensor: **Make:** Li-Cor **Model:** Li-200SX **S.N.#:** PY56229 **Range:** 0-3000 **W/m²**
Audit Sensor: **Make:** Eppley **Model:** PSP **S.N.#:** 34377F3 **Range:** 0-2800 **W/m²**

SOLAR RADIATION COLLOCATED STANDARD TEST						
Data Hr AST	Audit W/m²	DAS W/m²	Error W/m²	Allow Err W/m²	Error % Input	Pass/ Fail?
1245	378.2	389.6	11.4	±28.9	3.0%	Pass
1242	328.5	337.8	9.3	±26.4	2.8%	Pass
1343	248.8	254.1	5.3	±22.4	2.1%	Pass
1347	254.1	259.1	5.0	±22.7	2.0%	Pass
1410	202.3	214.7	12.4	±20.1	6.1%	Pass
1415	165.3	178.3	13.0	±18.3	7.9%	Pass
1420	161.1	172.6	11.5	±18.1	7.1%	Pass
1501	134.7	141.8	7.1	±16.7	5.3%	Pass
1537	102.2	108.6	6.4	±15.1	6.3%	Pass
1601	110.5	117.9	7.4	±15.5	6.7%	Pass
1010	38.7	36.1	-2.6	±11.9	n/a	Pass
1300	310.6	311.4	0.8	±25.5	0.3%	Pass
1400	271.4	276.9	5.5	±23.6	2.0%	Pass
1500	179.8	190.8	11.0	±19.0	6.1%	Pass
1600	116.2	123.5	7.3	±15.8	6.3%	Pass
1700	94.5	98.6	4.1	±14.7	4.3%	Pass
1800	52.0	52.4	0.4	±12.6	0.7%	Pass
1900	15.8	15.4	-0.4	±10.8	n/a	Pass
2000	1.4	0.8	-0.6	±10.1	n/a	Pass
2100	0.9	0.0	-0.8	±10.0	n/a	Pass
1100	74.8	73.0	-1.8	±13.7	-2.4%	Pass
1200	107.0	104.7	-2.3	±15.4	-2.1%	Pass
1300	116.2	114.3	-1.9	±15.8	-1.6%	Pass
1400	181.8	178.5	-3.3	±19.1	-1.8%	Pass
Corr. Val	**0.9991**	**Max Abs. Percent Error**			**7.9%**	**PASS**
R² Value	**0.9981**	**Intercept**	**0.3**	**Slope**	**1.0268**	**PASS**



Begin: 09/22/08 (Date) 1245 (Time) **End:** 09/23/08 (Date) 1405 (Time)

PSD Limits: Max Abs Err <5% of Observed + Resolution(10W/m²). Linear regression slope in range 1.0±5% (0.95 to 1.05) when R² > 0.995.
Note: Instantaneous values are associated with minute timestamps and hourly averages coincide with whole hour timestamps.
Comments: None.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

● *TIPPING PRECIPITATION GAUGE AUDIT (In Situ)*

Height with Snowfall Adapter Off/On: 0.9/1.4 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.01in **S.N.#:** G4672 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/22/08	1301	650	20.0	0.00		30.99	1330	30.99	55.0%	Fail	
09/22/08	1331	650	20.0	30.99		62.48	1400	31.49	57.5%	Fail	
09/22/08	1520	650	20.0	0.00		19.03	1550	19.03	-4.8%	Pass	
09/22/08	1620	350	10.8	3.05		15.24	1650	12.19	12.9%	Fail	
09/22/08	1655	300	9.3	17.02		25.91	1730	8.89	-4.4%	Pass	
							Max Abs. Error	**57.5%**	**FAIL**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Instrument reading 0.254mm in one tip direction and 0.508mm in other tip direction, therefore initially ~50% high. Preliminary repair attempted in the field and gauge replaced and audited below.

● *TIPPING PRECIPITATION GAUGE AUDIT (Replacement)*

Height with Snowfall Adapter Off/On: 0.9/1.4 **Meters**

Precipitation Gauge: **Make:** Met-One **Model:** 370 - 0.01in **S.N.#:** H7453 **Range:** 3 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 8.00 **Inches** **Volume Rate** 32.43 **ml/mm** **Int Dat:** DAS hourly data and/or adjustments.

TIPPING PRECIPITATION GAUGE VOLUME TEST

Date:	Start Time	Input Vol ml	Input mm	Begin mm	Int Dat mm	End mm	End Time	Final mm	Error % Input	Pass/ Fail?	Notes
09/27/08	850	350	10.8	0.51	7.87	3.81	908	11.18	3.5%	Pass	
09/27/08	910	350	10.8	4.57		15.75	929	11.18	3.5%	Pass	
09/27/08	930	650	20.0	15.75		36.07	955	20.32	1.6%	Pass	
							Max Abs. Error	**3.5%**	**PASS**		

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: Replacement sensor.

METEOROLOGICAL STATION - INSTRUMENT PERFORMANCE AUDIT (11-M)

Owner: Pebble Limited Partnership **Operator:** Dominic Shallies **Alternate:** Steve Mackey **Station Site:** Pebble 6
Auditor: Eric Brudie **Witness(s):** Dominic Shallies **Audit Date:** Sep 22-23, 2008

• *WEIGHING PRECIPITATION GAUGE AUDIT*

Height: 2.7 **Meters**

Precipitation Gauge: **Make:** ETI **Model:** 8205-00710 Noah II **S.N.#:** 387 **Range:** 6 **Inches per Hour**
Audit Equipment: **Make:** Nova Lynx Corp. **Model:** 260-2595 **S.N.#:** 936 **Range:** 2 **Inches per Hour**
Diameter: 12.00 **Inches** **Volume Rate** 72.97 **ml/mm**

WEIGHING PRECIPITATION GAUGE VOLUME TEST

Reading Time	Approx in	Input Vol ml	Input mm	Begin mm	End mm	Delta mm	Error % Input	Pass/ Fail?	Notes
1325	4.00	1600	21.9	0.00	21.89	21.89	N/A	Pass	
1335		1600	21.9	21.89	45.21	23.32	6.3%	Pass	
1351		1600	21.9	45.21	68.83	23.62	7.7%	Pass	
1404		1600	21.9	68.83	92.21	23.38	6.6%	Pass	
1420		1600	21.9	0.51	24.38	23.88	8.9%	Pass	
1428		1600	21.9	24.38	47.50	23.11	5.4%	Pass	
1442	10.00	1600	21.9	47.50	70.87	23.37	6.6%	Pass	
1453		1600	21.9	70.87	93.73	22.86	4.2%	Pass	
1459	12.00	1600	21.9	93.73	116.59	22.86	4.2%	Pass	
					Max Abs. Error		**8.9%**	**PASS**	

PSD Limits: Max Absolute Error > 10 % of Input.
Comments: None.

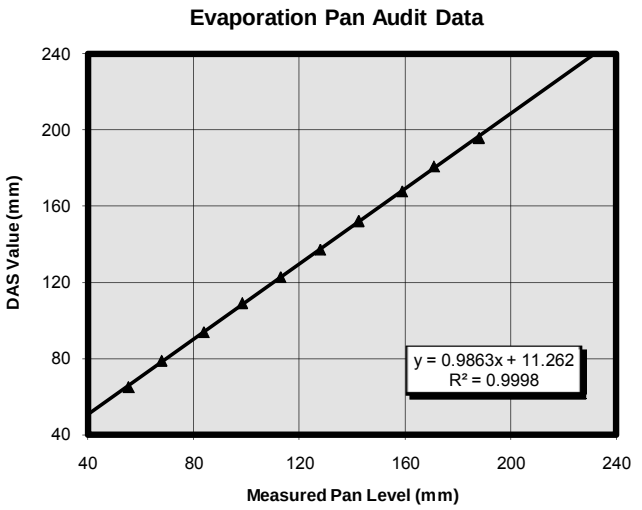
• *EVAPORATION GAUGE AUDIT*

Height: 0.6 **Meters**

Evaporation Gauge: **Make:** NovaLynx **Model:** 255-100 **S.N.#:** 930 **Range:** 40-254 **mm**
Evaporation Pan: **Make:** NovaLynx **Model:** 255-200 **S.N.#:** None **Range:** 0-254 **mm**

EVAPORATION PAN STAGE HEIGHT TEST

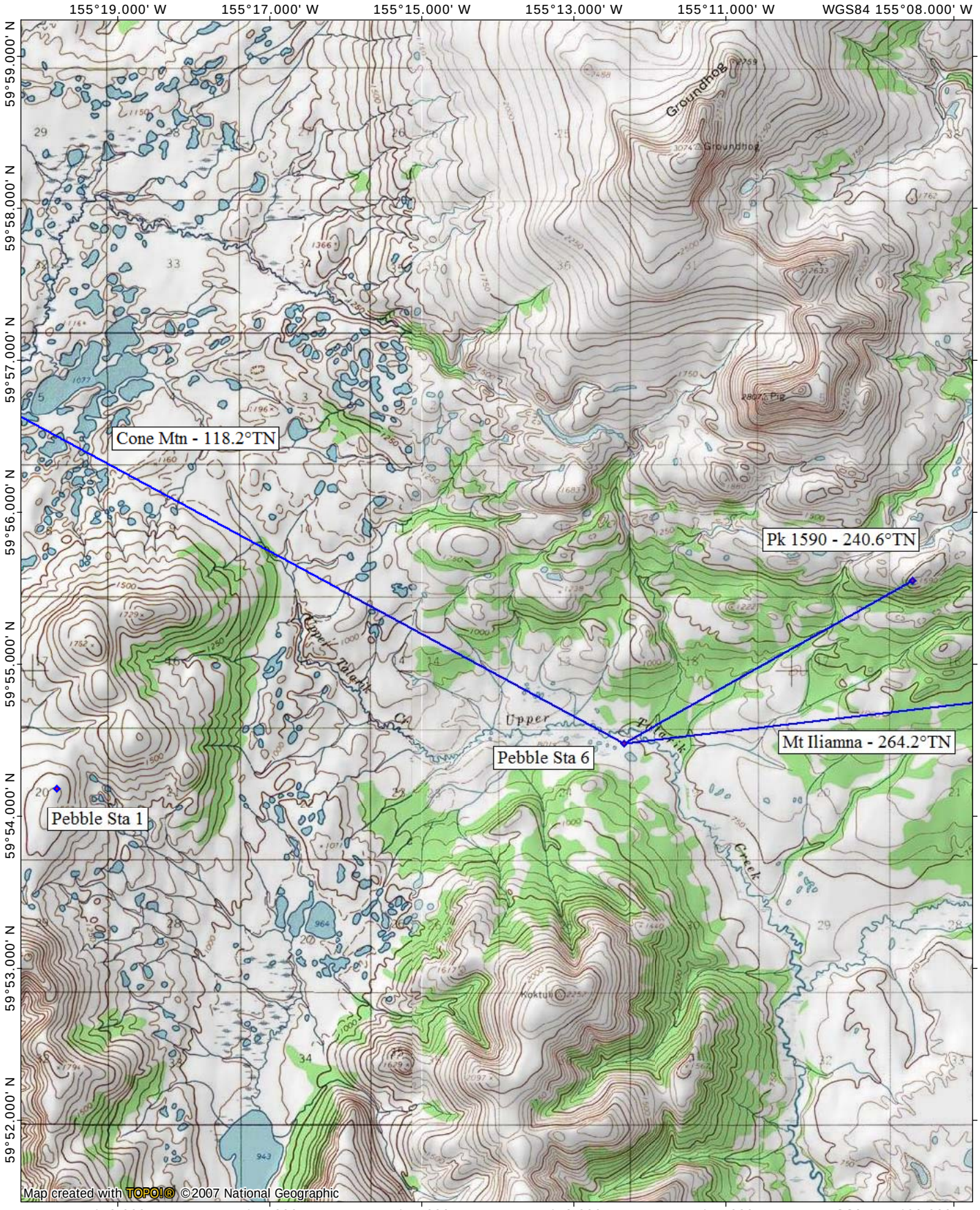
Pan inch	Pan mm	DAS mm	Pan Level + Intcpt	Error mm	Error % Input	Pass/ Fail?
	188.0	195.8	199.3	-3.5	-1.7%	Pass
	171.0	180.9	182.3	-1.4	-0.7%	Pass
	159.0	167.7	170.3	-2.6	-1.5%	Pass
	142.5	152.2	153.8	-1.6	-1.0%	Pass
	128.0	137.2	139.3	-2.1	-1.5%	Pass
	113.0	122.7	124.3	-1.6	-1.3%	Pass
	98.5	109.2	109.8	-0.6	-0.5%	Pass
	84.0	93.9	95.3	-1.4	-1.4%	Pass
	68.0	78.9	79.3	-0.4	-0.5%	Pass
	55.5	65.1	66.8	-1.7	-2.5%	Pass
		Max Abs. Error		**3.5**	**2.5%**	**PASS**
		Intercept	**11.3**	**Slope**	**0.9863**	**PASS**



Date: 09/23/08 **Time:** Begin: 1105 End: 1330

PSD Limits: Max Absolute Error > 10 % of Input adjusted for slope/intercept.
Comments: Tubing between gauge and pan frozen upon arrival. Thawed tubing, audited system and winterized pan.

TOPO! map printed on 10/30/07 from "Pebble 6.tpo"



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 miles
0.0 0.5 1.0 1.5 2.0 2.5 3.0 km

TN MN
17½°
10/30/07

APPENDIX C
AUDIT EQUIPMENT CALIBRATION CERTIFICATES

Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1

ACCREDITED

Calibration Certificate No. 1750.01

Cert. No.: 4000-1974024

Traceable® Certificate of Calibration for Digital Thermometer

Instrument Identification:

Hoefler Consulting Group, 3401 Minnesota Dr, Suite300, Attn: Justin Mangold, Anchorage, AK 99503 U.S.A. (RMA:944729)

Model: 61220-601 S/N: 51091749 Manufacturer : Control Company

Model: 61220-604 S/N: 240301145

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Temperature Calibration Bath TC191	A79341		
Thermistor Module	A27129	8/22/09	1000248949
Temperature Probe	3039	10/26/08	A7710039-4
Temperature Probe	149	3/06/09	A82225037-3
Thermistor Module	A17118	10/30/08	A7831032
Temperature Calibration Bath TC218	A73332		

Certificate Information:

Technician: 68 Procedure: CAL-06 Cal Date: 9/08/08 **Cal Due: 9/08/09**

Test Conditions: 24.5°C 45.0 %RH 1017 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±uc	TUR
°C	0.001	0.087	N	0.001	0.000	Y	-0.049	0.051	0.013	3.8:1
°C	25.001	25.076	N	25.001	25.000	Y	24.951	25.051	0.013	3.8:1
°C	60.001	60.127	N	60.001	59.999	Y	59.951	60.051	0.018	2.8:1
°C	100.001	100.333	N	100.001	100.001	Y	99.951	100.051	0.013	3.8:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±uc=Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Date=MM/DD/YY

Wallace Berry

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometers change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025:2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.
Control Company is ISO 9001:2000 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-AQ-HOU.
International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Traceable® is a registered trademark of Control Company

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VAISALA

Certificate of Calibration

Report #: 090408-X0740015-RH **RMA #:** 95-70314 **Calibration Date:** Sep-04-2008
Model #: HMI41/HMP45 **Serial #:** X0650080/X0740015
Instrument Type: Humidity Transmitter Calibration Procedure: 11603100
Instrument Range: 0 to 100%, RH Recommended Calibration Due Date: Sep-04-2009
Instrument Range: -20 to +60 °C, T

Customer: HOEFLER CONSULTING GROUP, INC.
City, State: ANCHORAGE, AK

This unit was calibrated by adjusting its reading at 0% against a dry-air line and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize a dry-air line and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are humidity and temperature controlled. The calibration uncertainty is presented at 95% confidence level, k=2. The standard uncertainty of the measurement has been determined in accordance with U.S. Guide to the Expression of Uncertainty in Measurement.

Calibration Data (As Found)				
Out of Tolerance: NO				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
22.11	22.30	0.19	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.12	11.30	0.18	2.00	0.92
33.04	32.30	-0.74	2.00	1.01
74.33	72.60	-1.73	2.00	1.02
Calibration Data (As Left)				
Temperature Calibration, °C				
Reference	Unit Under Test	Error	± Tolerance, °C	± Uncertainty, °C
21.97	21.90	-0.07	0.20	0.07
Humidity Calibration, %RH				
Reference	Unit Under Test	Error	± Tolerance, %	± Uncertainty %
0.03	-0.40	-0.43	2.00	0.50
11.21	11.50	0.29	2.00	0.92
32.80	33.00	0.20	2.00	1.01
74.89	74.90	0.01	2.00	1.02

Problem Noted: None
Action Taken: The Unit Was Calibrated

The results of this calibration are related only to the items being calibrated at the time of calibration, and, are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN 276340-08. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. The certificate was established to comply with the requirements of ISO/IEC17025. Vaisala is ISO 9001:2000 certified.

Calibration Equipment Used: Workstation 6B			
Model Number	Serial Number	Calibration Date	Due Date
Power Supply	9900343	Nov. 27, 2006	Nov. 27, 2008
Fluke 45	7519018	Dec. 19, 2007	Jun. 19, 2009
HMK13B	P3940001	May. 16, 2008	Nov. 16, 2008
HMP233	V4210039	Jul. 17, 2008	Oct. 17, 2008
HMT333	B0920007	Jun. 17, 2008	Sep. 17, 2008
HMI41/HMP45	S0720005	May. 21, 2008	Nov. 21, 2008

Ambient Conditions	
Temperature:	22.00 °C
Humidity:	49.50 %RH

Approved By

Technical Operator
Roun Roeun

Vaisala Inc., Boston Office
10-D Gill Street, Woburn, MA 01801, USA
Telephone 781 933 4500 • Fax 781 933 8029
www.vaisala.com

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18811** (Comprised of Models 18820A Control Unit & 18831A Motor Assembly)
SERIAL NUMBER: CA 02136

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	27106D Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
30.0	5	30.0	30.0
150.0	25	150.0	150.0
300.0	50	300.0	300.0
450.0	75	450.0	450.0
600.0	100	600.0	600.0
750.0	125	750.0	750.0
990.0	165	990.0	990.0
☑ Clockwise and Counterclockwise rotation verified			

(1) Measured frequency output of RM Young Model 27106D standard anemometer attached to motor shaft 27106D produces 10 pulses per revolution of the anemometer shaft

(2) Indicated on the Control Unit LCD display

* Indicates out of tolerance

☑ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 7/31/08
Inspection Interval One Year

Tested By RP

CERTIFICATE OF CALIBRATION AND TESTING

MODEL: **18801** (Comprised of Models 18820 Control Unit & 18830 Motor Assembly)
SERIAL NUMBER: CA 01674

R. M. Young Company certifies that the above equipment was inspected and calibrated prior to shipment in accordance with established manufacturing and testing procedures. Standards established by R.M. Young Company for calibrating the measuring and test equipment used in controlling product quality are traceable to the National Institute of Standards and Technology.

Nominal Motor Rpm	Output Frequency Hz (1)	Calculated Rpm (2)	Indicated Rpm (3)
600	320	600	600
1200	640	1200	1200
2400	1280	2400	2400
4200	2240	4200	4200
6,000	3200	6000	6000
8,100	4320	8100	8100
9,900	5280	9900	9900
☒ Clockwise and Counterclockwise rotation verified			

(1) Measured at the optical encoder output.
(2) Frequency output produces 32 pulses per revolution of motor shaft.
(3) Indicated on the Control Unit LCD display.

* Indicates out of tolerance

☒ No Calibration Adjustments Required ☐ As Found ☐ As Left

Traceable frequency meter used in calibration Model: DP5740 SN: 4863

Date of inspection 10/23/08
Inspection Interval One Year

Tested By RP

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP. P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5103

Model Number: 366-3M
Part Number: 060-SQF41200-01
Order Code: TW3663M

Product Specifications

Full Scale Range: 0.2-2.0 GM CM
Calibrated At: 0.2-2.0 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW150

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/12/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-3M SERIAL NUMBER: 5103 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.01	0.00	0.00	.01
.2	0.00	.25	.37	.40
.4	.20	.47	.43	.60
.6	.40	.65	.60	.80
.8	.60	.84	.80	1.00
1.0	.80	1.02	1.05	1.20
1.2	1.00	1.25	1.28	1.40
1.4	1.20	1.46	1.49	1.60
1.6	1.40	1.68	1.70	1.80
1.8	1.60	1.91	1.94	2.00
2.0	1.80	2.14	2.17	2.20

Max pos error (% FS) = 8.5 % at .200
Max neg error (% FS) = -.2 % at .800

Torque Watch is a: PASS

Job 128274

Honeywell

Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228 U.S.A.

Phone: 614-850-5000
Fax: 614-850-1111
URL: http://www.sensotec.com
E-mail: service@sensotec.com

Certificate of Calibration

Customer Identification

Customer: CLIMATRONICS CORP.

P.O.#:30880

Product Identification

Product Type: Torque Watch
Serial Number: 5116

Model Number: 366-2M
Part Number: 060-SQF41198-01
Order Code: TQ3662M

Product Specifications

Full Scale Range: 1-7.5 GM CM
Calibrated At: 1-7.5 GM CM

Supply: N/A
Output: Display

Calibration Results

See data on page 2 of this report.

Equipment Information

Test Equipment #: GW151

Accuracy of Standard: +/- 1% FS

Certificate Information

Type of Calibration: Standard
Calibration Date: 10/15/07

Certificate Number: 086-6000-03
Calibration Procedure: 072-LC75-29

This report certifies that the product identified above has been inspected to +/- 10% of full scale reading and found to be accurate.
Instruments used in the calibration of this product have been calibrated to standards traceable to the National Institute of Standards and Technology (NIST), Report #822/254480.

This is a quality record.

Approved and Certified By: Esther Gozon

Esther Gozon, Quality Manager

LOW RANGE TORQUE WATCH DIAL SETTINGS vs. OUTPUT OF LOW RANGE STANDARD

MODEL: 366-2M SERIAL NUMBER: 5116 Units = gm cm Accuracy = 10 % FS

Set Dial To	Low Limit	CW Rdg	CCW Rdg	High Limit
0.0	-.05	0.00	0.00	.05
1.0	.25	.95	.95	1.75
2.0	1.25	1.85	1.88	2.75
3.0	2.25	2.77	2.82	3.75
4.0	3.25	3.73	3.77	4.75
5.0	4.25	4.62	4.76	5.75
6.0	5.25	5.61	5.77	6.75
7.0	6.25	6.50	6.72	7.75
7.5	6.75	6.96	7.14	8.25

Max pos error (% FS) = 0.0 %
Max neg error (% FS) = -7.2 % at 7.500

Torque Watch is a: PASS

THE BRUNTON COMPANY
Certificate Of Calibration

Equipment Owner: HOEFLER Consulting Group
Name: _____

Address: 341 MINNESOTA DR. STE. 300

City, State, Zip: ANCHORAGE AK 99503

Calibration traceable to the National Institute of Standards and Technology in accordance with Mil-STD-45662A has been accomplished on the instrument listed below by comparison with standards maintained by The Brunton Co. The accuracy and stability of all standards maintained by The Brunton Co. are traceable to national standards maintained by the National Institute of Standards and Technology in Washington, D.C. and Boulder, CO. Complete record of all work performed is maintained by The Brunton Co. and is available for inspection upon request.

This Unit has been calibrated to Lietz TM10E serial number 30937 traceable to N.B.S. no. 738 227675 this 18TH Day of JANUARY 2008

DESCRIPTION: POCKET TRANSIT

PURCHASE ORDER: BA 52200

ORDER NUMBER: 1572739

LOT NUMBER: _____

MODEL NUMBER: 5008

SERIAL NUMBER: 508099319

CALIBRATION DATE: 1-18-08

RECALIBRATION DUE DATE: 1-18-09

Signed: Linda Kenyon
QUALITY CONTROL MANAGER

Certificate of Accuracy

Transfer Standard Type: Barometric Pressure/Altimeter

Certificate No: B 072808. 03

Transfer standard model: Pretel AltiPlus A2
Serial number: 27806
submitted by/owner: Hoefler Consulting Group
3401 Minnesota Drive
Suite 300
Anchorage, AK 99503

Was compared to Precision Absolute Reference Barometer:
Model number: 355-AI0900 Serial number: 913930-M1
Certified accuracy of ± 0.007"Hg
NIST traceable to Ruska Deadweight Tester SN 38342/C-85

Date: 07/28/08 Lab temperature 72.9 °F
Lab pressure 660.0 mm Hg

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)
24.00	24.09	0.09	-0.09
25.99	26.06	0.07	-0.07
28.00	28.08	0.08	-0.08
30.00	30.06	0.06	-0.06

Note:
If no sign is given on the correction, the true pressure is higher than the indicated pressure. If the sign is negative, the true pressure is lower than the indicated pressure.

Transfer Standard adjustments made? YES ☐ NO ☒

Post-calibration measurements:

Reference barometer ("Hg)	Transfer Standard ("Hg)	Difference from Reference ("Hg)	Transfer Standard Correction* ("Hg)

Reviewed: R [illegible] Date: 7/28/08

Roger L. Sanders, PE

Chinook Engineering
a division of Inter-Mountain Laboratories, Inc.
555 Absaraka Street
Sheridan, Wyoming 82801 USA
(307) 672-7790
chinook@imlinc.com

THE EPPLEY LABORATORY, INC.
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Email: info@eppleylab.com Internet: www.eppleylab.com

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STANDARDIZATION OF EPPLEY PRECISION SPECTRAL PYRANOMETER Model PSP

Serial Number: 34377F3

Resistance: 603 Ω at 23 °C
Temperature Compensation Range: -20° to +40 °C

This radiometer has been compared with Standard Precision Spectral Pyranometer, Serial Number 21231F3 in Eppley's Integrating Hemisphere under radiation intensities of approximately 700 watts meter^{-2} (roughly one half a solar conatant).

As a result of a series of comparisons, it has been found to have a sensitivity of:

9.24 x 10^{-6} volts/watts meter^{-2}

The calculation of this constant is based on the fact that the relationship between radiation intensity and emf is rectilinear to intensities of 1400 watts meter^{-2}. This radiometer is linear to within ± 0.5% up to this intensity.

The calibration of this instrument is traceable to standard self-calibrating cavity pyrheliometers in terms of the Systems Internationale des Unites (SI units), which participated in the Tenth International Pyrheliometric Comparisons (IPC X) at Davos, Switzerland in September-October 2005.

Eppley recommends a minimum calibration cycle of five (5) years but encourages annual calibrations for highest measurement accuracy. Unless otherwise stated in the remarks section below or on the Sales Order, the results are "AS FOUND / AS LEFT".

Useful conversion facts: 1 cal cm^{-2} min^{-1} = 697.3 watts meter^{-2}
1 BTU/ft^2-hr^{-1} = 3.153 watts meter^{-2}

Shipped to: Hoefler Consulting Group
Anchorage, AK

Date of Test: March 4, 2008

In Charge of Test: R. T. Eppley

S.O. Number: 61537
Date: March 6, 2008

Reviewed by: Thomas J. Kirk

Remarks:

Appendix D

Validated Continuous Data Summaries

CONTENTS

Pebble 6 Station 2008 Hourly Data:

1. Temperature at 2 meters (deg. C)

2. Temperature at 10 meters (deg. C)

3. Temperature Difference 2 meter to 10 meter (deg. C)

4. Relative Humidity (%)

5. Solar (Watts/m^2)

6. Barometric Pressure (mbar)

7. Wind Speed – Climatronic (m/s)

8. Wind Direction – Climatronic (degrees)

9. Wind Sigma – Climatronic (σ_θ)

10. Wind Speed – RM Young (m/s)

11. Wind Direction – RM Young (degrees)

12. Wind Sigma – RM Young (σ_θ)

13. Daily Total Precipitation (mm)

14. Daily Total Evaporation (mm)

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-9.2	-10.1	-10.0	-9.8	-10.3	-10.1	-9.4	-9.1	-9.3	-9.7	-10.2	-10.4	-11.3	-12.6	-13.7	-13.2	-13.5	-13.5	-13.6	-13.5	-14.3	-14.6	-15.1	-16.9	-9.1	-16.9	-11.8
2	-16.0	-16.6	-16.4	-17.2	-17.3	-17.4	-17.9	-17.8	-18.1	-18.3	-18.3	-19.2	-19.8	-19.2	-19.4	-19.2	-19.2	-19.6	-20.0	-19.9	-20.1	-20.9	-20.8	-21.5	-16.0	-21.5	-18.8
3	-21.1	-21.3	-21.6	-22.2	-21.6	-22.9	-20.8	-21.0	-19.6	-18.4	-17.5	-16.8	-17.8	-17.6	-18.1	-18.3	-17.9	-17.7	-17.3	-17.5	-18.0	-18.1	-18.2	-18.3	-16.8	-22.9	-19.1
4	-18.0	-18.1	-18.4	-18.6	-18.5	-18.6	-18.8	-18.7	-18.8	-19.0	-19.1	-19.2	-19.2	-19.1	-19.1	-19.0	-19.1	-19.6	-19.8	-20.5	-21.3	-21.2	-21.8	-22.0	-18.0	-22.0	-19.4
5	-22.3	-22.5	-22.9	-23.7	-22.9	-23.7	-23.3	-23.4	-23.4	-24.0	-23.8	-23.1	-22.5	-21.9	-21.6	-21.6	-21.6	-22.0	-22.2	-21.9	-22.0	-22.8	-23.8	-24.2	-21.6	-24.2	-22.8
6	-24.8	-25.0	-25.6	-25.6	-25.6	-26.0	-26.2	-26.7	-26.4	-26.8	-26.7	-26.3	-26.1	-26.3	-26.0	-25.8	-26.1	-26.8	-27.2	-27.6	-27.9	-27.8	-26.9	-27.0	-24.8	-27.9	-26.4
7	-26.7	-27.1	-26.9	-26.5	-26.0	-26.1	-26.1	-26.6	-26.5	-25.8	-25.4	-25.0	-25.0	-23.8	-23.9	-22.7	-23.5	-23.2	-22.8	-23.0	-23.3	-23.3	-23.8	-25.6	-22.7	-27.1	-24.9
8	-25.8	-24.9	-25.0	-24.9	-24.8	-24.1	-23.7	-23.6	-23.3	-23.3	-22.9	-23.4	-23.5	-23.2	-23.3	-22.8	-22.8	-22.8	-23.2	-24.2	-24.5	-24.4	-25.2	-24.9	-22.8	-25.8	-23.9
9	-24.8	-25.0	-24.6	-25.0	-25.3	-25.5	-25.6	-25.8	-26.1	-25.6	-25.8	-26.2	-25.7	-24.4	-23.2	-23.4	-23.0	-23.4	-24.2	-24.3	-23.6	-23.3	-23.1	-23.2	-23.0	-26.2	-24.6
10	-23.3	-23.4	-23.9	-24.7	-24.7	-24.4	-24.1	-24.8	-25.4	-25.3	-25.5	-24.8	-24.8	-24.6	-24.9	-24.7	-24.4	-24.8	-25.5	-26.4	-26.8	-27.0	-26.7	-27.8	-23.3	-27.8	-25.1
11	-27.2	-25.7	-25.1	-25.3	-25.8	-26.2	-26.4	-27.3	-27.5	-27.4	-27.1	-27.4	-27.7	-27.8	-27.8	-27.8	-28.1	-28.5	-28.8	-29.7	-29.1	-29.0	-29.1	-29.0	-25.1	-29.7	-27.5
12	-29.3	-29.8	-29.7	-29.6	-30.1	-30.0	-30.1	-30.5	-30.7	-30.5	-30.6	-30.6	-30.2	-29.9	-29.4	-29.4	-29.2	-29.5	-30.1	-30.0	-29.9	-29.9	-30.3	-30.1	-29.2	-30.7	-30.0
13	-30.2	-30.3	-30.2	-29.9	-29.4	-29.4	-29.4	-29.5	-29.6	-29.7	-29.7	-29.8	-29.4	-29.1	-28.8	-28.5	-28.4	-28.5	-28.9	-29.0	-28.3	-28.5	-28.1	-28.1	-28.1	-30.3	-29.2
14	-28.0	-28.9	-28.2	-28.7	-29.4	-28.4	-27.1	-27.1	-26.9	-26.3	-24.9	-17.5	-14.9	-12.6	-10.4	-9.3	-9.0	-8.3	-8.0	-7.5	-6.7	-6.8	-5.6	-4.4	-4.4	-29.4	-17.7
15	-3.1	-2.6	-2.3	-2.2	-2.1	-2.4	-2.9	-2.9	-3.4	-3.1	-3.2	-3.2	-3.2	-3.0	-3.2	-3.2	-3.0	-3.1	-3.2	-3.1	-3.2	-3.0	-2.4	-2.0	-2.0	-3.4	-2.9
16	-1.6	-2.0	-2.3	-2.5	-4.2	-5.2	-6.2	-9.0	-10.5	-11.5	-13.4	-13.4	-11.7	-8.0	-7.6	-7.0	-4.9	-4.0	-3.6	-4.9	-8.0	-9.9	-10.6	-9.0	-1.6	-13.4	-7.1
17	-8.7	-13.1	-15.0	-13.6	-7.6	-4.8	-3.2	-1.9	-2.9	-2.7	-1.6	-1.3	-0.6	-0.2	-0.2	-0.3	-0.9	-1.2	-1.0	-1.0	-1.0	-1.1	-1.3	-1.4	-0.2	-15.0	-3.6
18	-1.3	-1.3	-1.5	-1.4	-1.6	-1.8	-1.9	-1.4	-1.0	-1.0	-2.0	-2.2	-2.1	-2.2	-2.3	-2.4	-3.8	-5.6	-8.1	-7.2	-4.1	-2.9	-3.0	-1.1	-1.0	-8.1	-2.6
19	-1.6	-1.5	-0.4	-0.8	-0.6	-1.1	0.5	0.6	0.8	0.8	1.3	1.5	1.2	1.0	0.6	0.6	0.7	0.8	0.7	0.8	1.2	1.1	1.1	1.1	1.5	-1.6	0.4
20	0.6	0.6	0.5	0.4	0.5	0.5	0.3	0.1	0.3	0.3	0.1	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	-0.4	-0.2	0.0	-0.1	0.6	-0.4	0.2
21	-0.7	-0.3	0.0	-0.4	-1.6	-0.5	0.7	1.3	1.9	1.6	1.5	1.8	2.1	2.3	2.6	2.6	2.7	2.7	2.6	2.3	2.1	2.0	2.1	2.1	2.7	-1.6	1.4
22	2.0	1.7	1.5	1.8	1.5	1.2	1.0	-0.1	-0.2	0.0	-0.2	-1.4	-2.1	-2.6	-3.0	-3.6	-3.8	-4.0	-3.8	-4.0	-4.4	-4.9	-4.8	-4.5	2.0	-4.9	-1.5
23	-5.0	-5.7	-6.6	-8.0	-9.7	-12.4	-13.7	-14.2	-14.8	-15.1	-16.4	-17.4	-18.2	-17.8	-18.0	-17.8	-18.2	-19.1	-19.9	-20.3	-20.7	-21.5	-21.3	-19.8	-5.0	-21.5	-15.5
24	-20.0	-19.7	-19.2	-18.3	-17.9	-17.8	-17.3	-16.9	-15.7	-14.8	-11.7	-9.1	-9.0	-9.5	-8.7	-7.8	-7.4	-7.4	-7.3	-7.2	-6.6	-6.1	-5.8	-5.7	-5.7	-20.0	-12.0
25	-5.6	-5.2	-5.4	-6.6	-6.1	-5.8	-5.3	-4.6	-4.6	-4.9	-5.3	-5.4	-5.2	-5.2	-5.1	-5.2	-4.6	-4.8	-4.8	-7.0	-9.3	-11.9	-14.0	-15.2	-4.6	-15.2	-6.5
26	-16.4	-16.8	-17.1	-17.9	-18.5	-18.8	-19.5	-18.9	-20.0	-20.7	-20.6	-21.9	-22.3	-21.2	-21.6	-22.4	-21.7	-21.2	-21.3	-22.3	-23.0	-23.2	-21.6	-19.8	-16.4	-23.2	-20.4
27	-18.6	-16.4	-12.1	-9.7	-9.8	-8.9	-8.2	-7.6	-6.3	-5.5	-5.0	-4.8	-4.6	-4.7	-4.7	-4.6	-4.4	-4.5	-4.4	-4.0	-3.9	-4.0	-3.7	-3.7	-3.7	-18.6	-6.8
28	-3.7	-3.8	-3.9	-4.0	-4.0	-4.0	-4.0	-4.4	-4.8	-4.9	-4.9	-4.8	-4.6	-4.5	-4.3	-4.1	-4.3	-4.3	-4.7	-7.1	-8.6	-8.9	-5.1	-4.5	-3.7	-8.9	-4.8
29	-4.5	-5.2	-5.0	-4.3	-3.7	-4.2	-4.6	-5.4	-5.3	-6.3	-7.2	-6.4	-7.3	-7.5	-6.6	-6.4	-6.2	-7.5	-7.9	-8.1	-10.4	-11.7	-13.2	-15.5	-3.7	-15.5	-7.1
30	-17.9	-19.1	-15.8	-13.0	-11.5	-12.5	-11.9	-11.0	-12.3	-11.5	-12.4	-12.9	-13.4	-13.4	-13.3	-13.2	-13.5	-14.1	-14.0	-13.7	-13.7	-13.5	-14.5	-15.0	-11.0	-19.1	-13.6
31	-15.3	-15.2	-15.5	-15.3	-13.2	-13.0	-12.2	-14.1	-15.6	-16.0	-17.0	-18.6	-17.4	-15.9	-15.2	-14.5	-13.7	-13.8	-13.8	-13.5	-15.3	-15.3	-15.7	-16.6	-12.2	-18.6	-15.1
Max.	**2.0**	**1.7**	**1.5**	**1.8**	**1.5**	**1.2**	**1.0**	**1.3**	**1.9**	**1.6**	**1.5**	**1.8**	**2.1**	**2.3**	**2.6**	**2.6**	**2.7**	**2.7**	**2.6**	**2.3**	**2.1**	**2.0**	**2.1**	**2.1**	**2.7**		
Min.	**-30.2**	**-30.3**	**-30.2**	**-29.9**	**-30.1**	**-30.0**	**-30.1**	**-30.5**	**-30.7**	**-30.5**	**-30.6**	**-30.6**	**-30.2**	**-29.9**	**-29.4**	**-29.4**	**-29.2**	**-29.5**	**-30.1**	**-30.0**	**-29.9**	**-29.9**	**-30.3**	**-30.1**		**-30.7**	
Avg.	**-14.5**	**-14.7**	**-14.5**	**-14.4**	**-14.2**	**-14.3**	**-14.1**	**-14.3**	**-14.4**	**-14.4**	**-14.4**	**-14.2**	**-14.1**	**-13.7**	**-13.6**	**-13.4**	**-13.3**	**-13.5**	**-13.7**	**-14.0**	**-14.4**	**-14.6**	**-14.6**	**-14.6**			**-14.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-18.6	-19.0	-18.4	-18.2	-16.0	-15.7	-15.1	-14.4	-13.9	-13.8	-14.4	-16.0	-14.0	-13.3	-12.9	-12.5	-12.4	-12.5	-15.5	-21.2	-22.3	-22.4	-22.4	-23.1	-12.4	-23.1	-16.6
2	-23.3	-17.9	-18.1	-17.9	-18.2	-17.2	-17.4	-16.7	-16.2	-16.8	-17.1	-17.1	-17.5	-16.5	-17.6	-17.6	-17.0	-18.2	-18.8	-18.7	-20.4	-19.8	-19.8	-20.3	-16.2	-23.3	-18.2
3	-20.8	-21.3	-22.9	-23.1	-22.8	-22.9	-23.5	-24.0	-24.5	-25.5	-24.7	-25.1	-25.0	-24.5	-23.9	-23.4	-23.1	-23.1	-23.9	-26.1	-25.8	-26.3	-26.7	-26.3	-20.8	-26.7	-24.1
4	-26.7	-26.5	-26.4	-26.8	-26.9	-27.5	-27.9	-27.7	-27.7	-27.6	-26.9	-26.4	-25.7	-25.8	-25.0	-23.0	-23.2	-23.2	-23.3	-23.7	-24.7	-25.2	-25.2	-25.8	-23.0	-27.9	-25.8
5	-27.3	-26.8	-27.2	-27.9	-28.2	-27.6	-27.9	-28.2	-28.7	-28.7	-28.1	-27.2	-27.1	-26.4	-26.0	-25.1	-25.6	-26.0	-25.8	-26.9	-26.1	-26.5	-26.3	-25.9	-25.1	-28.7	-27.0
6	-25.9	-25.9	-26.6	-27.1	-27.4	-26.8	-27.2	-27.3	-26.1	-25.6	-25.4	-25.2	-25.0	-23.5	-24.2	-24.0	-23.8	-24.4	-23.7	-23.9	-25.1	-25.7	-25.3	-25.8	-23.5	-27.4	-25.5
7	-26.3	-25.9	-25.6	-25.9	-26.2	-26.4	-26.8	-25.2	-26.1	-26.1	-24.4	-24.0	-22.9	-21.1	-20.4	-19.5	-18.4	-18.4	-18.0	-19.9	-24.7	-21.0	-18.5	-18.0	-18.0	-26.8	-22.9
8	-19.5	-21.9	-24.7	-25.0	-23.4	-25.9	-26.5	-26.3	-26.9	-26.8	-26.5	-25.2	-23.9	-21.6	-17.4	-13.8	-13.9	-13.4	-15.2	-17.3	-16.1	-12.4	-9.6	-8.4	-8.4	-26.9	-20.1
9	-8.1	-7.9	-7.8	-7.9	-7.9	-7.9	-7.8	-7.7	-7.5	-7.3	-7.2	-7.8	-9.3	-11.3	-13.4	-12.5	-6.5	-8.1	-16.3	-18.3	-19.6	-20.5	-21.6	-22.2	-6.5	-22.2	-11.4
10	-23.1	-23.5	-24.7	-24.5	-24.5	-25.3	-24.9	-25.1	-25.3	-26.2	-26.4	-25.9	-25.6	-25.4	-24.5	-23.4	-22.7	-22.5	-22.6	-23.2	-23.8	-24.2	-24.1	-23.5	-22.5	-26.4	-24.4
11	-23.9	-24.7	-25.9	-26.6	-26.4	-25.2	-23.8	-23.2	-21.9	-21.4	-20.9	-20.2	-18.6	-17.5	-16.5	-16.1	-15.6	-15.5	-15.7	-16.4	-17.1	-17.1	-18.0	-19.3	-15.5	-26.6	-20.3
12	-20.5	-21.0	-23.9	-28.1	-30.3	-28.4	-26.7	-28.0	-28.6	-28.6	-27.9	-26.3	-24.8	-24.4	-23.8	-23.9	-23.8	-23.7	-24.2	-24.6	-24.9	-23.8	-24.4	-24.2	-20.5	-30.3	-25.4
13	-23.3	-22.2	-18.1	-8.6	-6.8	-7.2	-7.3	-7.0	-5.4	-2.0	-0.6	-0.1	0.6	1.4	1.5	1.5	1.8	2.0	2.1	2.2	2.2	2.1	1.8	2.0	2.2	-23.3	-3.6
14	2.1	2.3	2.3	1.9	1.3	1.1	0.6	-0.8	-7.0	-9.3	-10.8	-12.3	-13.3	-14.1	-14.9	-15.8	-16.4	-16.8	-17.2	-17.3	-17.2	-16.9	-16.7	-16.6	2.3	-17.3	-9.2
15	-16.9	-17.9	-18.6	-19.0	-19.7	-21.1	-22.7	-22.5	-23.0	-24.4	-26.4	-24.9	-22.9	-22.9	-22.6	-22.3	-22.0	-22.7	-23.6	-25.7	-25.3	-25.2	-24.0	-20.3	-16.9	-26.4	-22.4
16	-17.5	-12.6	-11.0	-10.7	-10.0	-9.7	-8.9	-7.5	-7.2	-6.7	-6.7	-6.4	-5.8	-5.2	-4.5	-4.0	-3.8	-4.0	-3.9	-3.8	-4.1	-4.5	-4.6	-5.9	-3.8	-17.5	-7.0
17	-7.7	-10.4	-8.1	-6.9	-7.0	-2.6	-2.5	-1.2	-0.2	-0.4	0.8	2.3	2.9	1.8	1.6	1.4	0.7	0.8	0.8	0.6	1.1	1.4	1.7	1.6	2.9	-10.4	-1.1
18	1.6	1.4	1.1	1.0	1.1	1.2	0.9	1.0	1.1	1.2	1.4	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.1	0.8	1.2	1.5	1.8	1.8	0.8	1.3
19	1.9	1.8	2.0	1.8	3.1	3.6	3.3	3.6	2.9	2.1	2.0	2.0	2.0	2.2	2.4	2.9	3.1	3.2	3.2	2.8	2.0	1.0	0.9	1.0	3.6	0.9	2.4
20	0.8	1.1	0.7	1.0	1.0	1.1	1.2	1.0	0.9	1.0	1.1	1.2	2.2	2.7	2.5	2.3	2.3	2.7	2.7	2.6	2.7	2.7	2.8	2.3	2.8	0.7	1.8
21	1.8	1.8	2.4	2.1	2.1	2.3	2.6	2.9	2.8	2.5	2.5	2.2	2.4	2.5	2.6	2.6	2.6	2.5	2.0	1.6	1.6	0.9	0.5	0.6	2.9	0.5	2.1
22	0.8	1.1	0.2	0.2	0.0	-0.2	-0.6	0.1	0.2	0.1	-0.3	-0.1	0.0	0.0	0.9	0.9	0.6	0.5	0.3	-0.2	-0.6	-1.9	-2.7	-1.4	1.1	-2.7	-0.1
23	-1.9	-3.7	-6.1	-4.7	-5.0	-6.7	-8.0	-8.3	-9.0	-10.1	-7.7	-8.2	-10.2	-6.8	-6.7	-4.8	-5.5	-5.1	-5.4	-5.0	-4.7	-6.3	-6.9	-7.9	-1.9	-10.2	-6.4
24	-8.4	-8.2	-8.7	-8.7	-9.2	-9.1	-9.4	-9.6	-10.2	-10.7	-11.4	-11.5	-12.2	-11.9	-11.7	-11.4	-11.3	-11.2	-11.7	-12.9	-13.8	-13.9	-13.9	-14.0	-8.2	-14.0	-11.0
25	-14.6	-14.4	-14.9	-15.5	-16.3	-16.5	-17.2	-17.6	-17.6	-17.5	-17.1	-16.7	-16.7	-16.1	-15.9	-14.7	-12.6	-11.1	-8.9	-5.6	-2.9	-3.3	-2.6	-4.9	-2.6	-17.6	-13.0
26	-5.7	-5.4	-6.1	-7.4	-9.9	-10.2	-11.0	-11.9	-11.7	-10.9	-9.6	-6.8	-3.7	-3.9	-4.6	-6.0	-6.0	-7.0	-9.0	-9.0	-10.1	-10.0	-10.6	-11.4	-3.7	-11.9	-8.2
27	-12.5	-13.8	-13.9	-14.7	-15.5	-16.0	-16.0	-16.2	-16.5	-17.1	-16.2	-15.6	-14.3	-13.0	-11.6	-11.2	-10.3	-9.0	-6.8	-4.8	-3.9	-2.3	-1.4	-1.2	-1.2	-17.1	-11.4
28	-1.2	-0.6	-1.1	0.2	0.7	1.1	1.0	1.2	1.7	1.9	1.4	0.3	-0.6	-2.9	-3.3	-3.1	-3.4	-4.0	-5.9	-7.8	-6.6	-6.6	-7.5	-8.1	1.9	-8.1	-2.2
29	-8.9	-10.0	-10.1	-10.1	-10.7	-10.7	-10.9	-11.9	-12.7	-13.4	-13.7	-13.3	-12.3	-12.6	-12.3	-11.4	-10.5	-9.8	-10.1	-10.4	-10.8	-10.9	-11.8	-12.4	-8.9	-13.7	-11.3
Max.	**2.1**	**2.3**	**2.4**	**2.1**	**3.1**	**3.6**	**3.3**	**3.6**	**2.9**	**2.5**	**2.5**	**2.3**	**2.9**	**2.7**	**2.6**	**2.9**	**3.1**	**3.2**	**3.2**	**2.8**	**2.7**	**2.7**	**2.8**	**2.3**	**3.6**		
Min.	**-27.3**	**-26.8**	**-27.2**	**-28.1**	**-30.3**	**-28.4**	**-27.9**	**-28.2**	**-28.7**	**-28.7**	**-28.1**	**-27.2**	**-27.1**	**-26.4**	**-26.0**	**-25.1**	**-25.6**	**-26.0**	**-25.8**	**-26.9**	**-26.1**	**-26.5**	**-26.7**	**-26.3**		**-30.3**	
Avg.	**-12.9**	**-12.8**	**-13.1**	**-13.0**	**-13.1**	**-13.0**	**-13.1**	**-13.1**	**-13.3**	**-13.4**	**-13.1**	**-12.9**	**-12.4**	**-12.0**	**-11.7**	**-11.3**	**-10.9**	**-10.9**	**-11.5**	**-12.1**	**-12.4**	**-12.3**	**-12.3**	**-12.3**			**-12.5**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-13.1	-13.8	-13.8	-14.0	-14.6	-14.8	-14.8	-15.3	-16.0	-18.3	-16.6	-18.0	-18.1	-16.7	-12.7	-8.8	-6.3	-4.7	-5.0	-4.4	-3.9	-2.8	-2.9	-2.7	-2.7	-18.3	-11.3
2	-2.3	-0.7	-0.1	0.5	-0.1	0.5	0.5	-0.3	-0.7	-1.0	-0.8	-0.5	-0.2	0.3	0.5	0.5	0.5	0.1	0.1	-0.5	-1.0	-0.6	-0.6	-0.7	0.5	-2.3	-0.3
3	-0.9	-1.1	-1.5	-1.5	-1.0	0.2	0.1	0.0	0.2	0.3	0.1	0.1	0.2	0.3	0.6	1.3	1.5	1.8	1.9	1.9	2.0	2.0	1.9	2.2	2.2	-1.5	0.5
4	2.2	2.3	2.3	2.3	1.6	0.9	1.3	1.6	1.7	1.5	1.4	1.1	1.7	2.2	2.4	2.5	2.5	2.5	2.4	2.4	2.0	1.8	1.9	1.9	2.5	0.9	1.9
5	2.1	1.9	2.4	2.6	2.7	2.5	2.3	2.1	2.0	2.1	2.5	2.1	2.3	2.0	2.1	2.7	3.0	2.8	2.3	1.8	1.5	1.5	1.5	1.5	3.0	1.5	2.2
6	1.4	1.3	1.2	1.1	0.5	0.7	1.1	1.0	0.9	0.9	1.1	1.3	1.5	1.4	1.8	2.0	2.1	2.0	1.9	2.0	1.4	2.5	2.4	2.7	2.7	0.5	1.5
7	2.2	1.7	1.5	1.3	0.6	-0.7	-2.0	-1.9	-0.4	-0.2	-0.5	-0.3	0.2	0.6	1.0	1.2	0.9	0.9	0.8	0.3	0.0	-0.6	-1.2	-1.8	2.2	-2.0	0.2
8	-2.0	-2.2	-2.2	-2.8	-3.8	-3.9	-4.1	-3.3	-2.9	-2.8	-3.6	-2.2	-1.3	-0.6	1.1	1.3	1.7	1.7	1.3	1.2	0.9	0.8	0.9	1.1	1.7	-4.1	-1.1
9	1.3	1.6	2.4	2.4	2.5	2.5	2.4	2.3	2.2	2.4	1.4	1.4	2.0	1.9	1.3	1.2	1.3	1.1	0.8	0.8	0.4	-0.6	0.3	-0.2	2.5	-0.6	1.5
10	-0.4	-1.0	-1.2	-1.5	-1.2	-2.5	-2.6	-3.0	-3.4	-3.3	-3.4	-3.5	-3.5	-3.3	-3.5	-3.5	-3.3	-3.2	-3.4	-3.6	-4.0	-4.0	-4.4	-4.4	-0.4	-4.4	-3.0
11	-4.7	-5.2	-5.6	-6.0	-6.3	-6.6	-6.8	-6.5	-6.6	-7.0	-6.7	-6.6	-6.3	-6.3	-6.5	-6.5	-6.5	-6.9	-7.2	-8.2	-11.5	-10.5	-9.5	-9.4	-4.7	-11.5	-7.1
12	-11.8	-13.4	-12.9	-12.5	-12.0	-12.0	-12.7	-11.5	-12.3	-10.5	-9.3	-8.7	-8.3	-8.1	-7.7	-7.4	-7.3	-7.0	-7.4	-8.0	-9.8	-10.7	-10.4	-10.7	-7.0	-13.4	-10.1
13	-7.5	-6.8	-7.0	-7.4	-7.7	-8.1	-8.4	-8.7	-8.9	-9.1	-9.2	-9.4	-9.3	-9.3	-9.0	-8.8	-9.0	-8.9	-9.1	-9.6	-10.6	-12.2	-12.9	-13.0	-6.8	-13.0	-9.2
14	-14.9	-14.9	-14.5	-13.5	-13.2	-13.2	-13.5	-13.5	-13.7	-13.9	-14.8	-14.8	-14.6	-13.9	-12.3	-11.5	-10.9	-9.2	-7.0	-5.2	-4.9	-4.3	-4.2	-3.9	-3.9	-14.9	-11.3
15	-3.3	-3.6	-3.5	-3.2	-3.0	-2.0	-2.0	-2.1	-1.8	-1.4	-1.6	-1.2	-0.6	-0.3	0.0	0.2	0.1	-0.1	-0.3	-0.4	-0.6	-0.8	-1.1	-1.4	0.2	-3.6	-1.4
16	-1.7	-2.0	-2.4	-2.7	-2.8	-3.4	-4.1	-4.3	-5.4	-5.9	-7.4	-4.6	-2.6	-2.2	-2.4	-2.0	-1.1	-1.2	-3.0	-3.5	-4.6	-3.1	-3.0	-3.4	-1.1	-7.4	-3.3
17	-2.4	-4.6	-4.7	-3.9	-3.8	-5.4	-6.0	-6.0	-4.8	-4.7	-4.6	-3.5	-3.3	-3.2	-2.7	-2.6	-2.7	-2.9	-5.1	-6.4	-7.2	-7.5	-7.6	-7.3	-2.4	-7.6	-4.7
18	-7.8	-8.2	-8.8	-9.3	-10.1	-10.9	-11.2	-12.2	-13.5	-14.0	-13.3	-12.8	-12.8	-12.4	-12.0	-11.6	-11.4	-11.9	-12.3	-12.9	-13.5	-14.4	-14.8	-15.1	-7.8	-15.1	-12.0
19	-15.4	-15.8	-16.5	-17.5	-17.8	-18.1	-18.6	-19.2	-19.6	-19.9	-19.6	-18.0	-17.3	-16.6	-15.8	-15.4	-15.1	-15.0	-15.4	-15.9	-16.6	-16.9	-16.6	-17.5	-15.0	-19.9	-17.1
20	-18.8	-18.2	-17.9	-18.3	-18.2	-18.1	-18.1	-18.2	-18.2	-18.3	-18.0	-17.8	-17.8	-17.6	-17.2	-17.0	-16.6	-16.2	-15.8	-15.5	-15.7	-16.0	-16.6	-16.3	-15.5	-18.8	-17.3
21	-15.8	-15.5	-15.2	-14.6	-14.2	-13.6	-14.0	-15.3	-15.6	-16.5	-15.3	-13.5	-14.3	-10.1	-7.6	-6.8	-6.9	-6.9	-7.2	-7.6	-8.9	-8.6	-10.8	-11.3	-6.8	-16.5	-11.9
22	-11.6	-11.3	-10.2	-11.1	-11.5	-11.9	-12.4	-11.7	-12.0	-12.4	-11.9	-11.6	-11.7	-10.9	-10.7	-10.4	-10.1	-9.5	-8.5	-7.5	-8.6	-11.0	-12.8	-12.8	-7.5	-12.8	-11.0
23	-12.9	-13.5	-13.4	-11.7	-11.6	-12.3	-12.8	-13.0	-13.4	-12.7	-12.6	-12.4	-12.4	-12.0	-11.1	-10.6	-10.2	-9.8	-10.2	-10.2	-10.7	-11.3	-12.1	-12.8	-9.8	-13.5	-11.9
24	-12.9	-12.9	-13.1	-12.7	-12.3	-12.2	-11.9	-12.1	-13.0	-14.4	-12.7	-12.2	-11.6	-10.2	-9.4	-8.6	-8.2	-7.7	-7.7	-8.3	-8.8	-9.8	-10.1	-10.5	-7.7	-14.4	-11.0
25	-10.9	-10.9	-10.3	-10.1	-10.0	-9.7	-11.0	-11.4	-12.4	-12.5	-10.8	-9.1	-8.6	-7.5	-7.1	-6.2	-5.7	-5.6	-5.8	-6.2	-6.7	-6.7	-5.8	-6.3	-5.6	-12.5	-8.6
26	-8.7	-9.9	-11.1	-11.8	-11.5	-12.4	-11.9	-10.5	-11.6	-11.9	-11.3	-9.9	-8.3	-7.3	-6.5	-5.6	-5.1	-4.9	-5.5	-6.4	-7.1	-9.6	-9.7	-10.4	-4.9	-12.4	-9.1
27	-10.5	-11.0	-11.4	-12.8	-12.1	-11.7	-10.8	-10.4	-9.9	-8.8	-8.4	-8.2	-8.1	-8.1	-7.8	-7.5	-6.9	-6.9	-7.3	-8.9	-10.6	-12.3	-12.4	-13.0	-6.9	-13.0	-9.8
28	-12.8	-12.1	-12.0	-14.1	-14.2	-13.8	-16.6	-16.9	-16.3	-15.6	-14.9	-13.9	-13.4	-12.3	-11.3	-10.3	-9.7	-9.6	-9.9	-10.5	-11.9	-14.0	-14.8	-15.7	-9.6	-16.9	-13.2
29	-15.5	-15.8	-15.1	-13.8	-12.4	-10.6	-9.0	-7.9	-7.2	-6.2	-5.7	-3.9	-2.2	-1.6	-1.3	-1.1	-1.2	-1.4	-1.3	-1.1	-1.0	-0.8	-0.6	-0.1	-0.1	-15.8	-5.7
30	0.1	0.1	0.3	0.4	0.3	0.1	0.0	0.2	0.3	0.4	0.7	1.2	1.5	1.8	1.8	1.6	1.5	1.3	1.1	0.9	0.8	1.0	1.2	1.1	1.8	0.0	0.8
31	1.0	1.2	1.1	1.1	1.2	1.8	2.3	1.9	1.6	1.9	2.1	2.5	2.4	2.6	2.6	2.5	2.4	2.4	2.4	2.4	2.2	1.9	1.7	1.8	2.6	1.0	2.0
Max.	**2.2**	**2.3**	**2.4**	**2.6**	**2.7**	**2.5**	**2.4**	**2.3**	**2.2**	**2.4**	**2.5**	**2.5**	**2.4**	**2.6**	**2.6**	**2.7**	**3.0**	**2.8**	**2.4**	**2.4**	**2.2**	**2.5**	**2.4**	**2.7**	**3.0**		
Min.	**-18.8**	**-18.2**	**-17.9**	**-18.3**	**-18.2**	**-18.1**	**-18.6**	**-19.2**	**-19.6**	**-19.9**	**-19.6**	**-18.0**	**-18.1**	**-17.6**	**-17.2**	**-17.0**	**-16.6**	**-16.2**	**-15.8**	**-15.9**	**-16.6**	**-16.9**	**-16.6**	**-17.5**		**-19.9**	
Avg.	**-6.7**	**-6.9**	**-6.9**	**-6.9**	**-7.0**	**-7.1**	**-7.3**	**-7.3**	**-7.4**	**-7.5**	**-7.2**	**-6.7**	**-6.3**	**-5.7**	**-5.1**	**-4.7**	**-4.4**	**-4.3**	**-4.5**	**-4.7**	**-5.4**	**-5.7**	**-5.9**	**-6.1**			**-6.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.9	1.5	1.2	1.1	1.1	1.0	0.6	0.5	0.7	0.8	0.9	1.3	1.1	1.3	1.6	1.6	1.5	1.4	1.0	0.9	0.7	0.4	0.1	-0.2	1.9	-0.2	1.0
2	-0.3	-1.2	-2.5	-2.3	-2.5	-2.9	-2.5	-2.6	-2.9	-2.5	-2.7	-2.8	-2.7	-2.3	-1.8	-1.7	-1.7	-1.2	-1.1	-0.7	-0.4	-0.6	-0.2	0.0	0.0	-2.9	-1.8
3	-0.1	-0.3	0.0	0.1	0.0	-0.2	-0.1	-0.1	0.0	0.2	0.6	0.7	0.8	1.3	1.8	2.1	2.2	2.4	1.9	1.5	1.3	1.2	1.2	1.2	2.4	-0.3	0.8
4	1.1	1.0	1.1	0.9	0.9	1.1	1.1	1.2	1.1	1.0	0.8	0.8	0.7	0.6	0.7	1.0	0.8	0.6	0.5	0.4	-0.4	-1.5	-2.7	-3.4	1.2	-3.4	0.4
5	-4.1	-5.5	-6.8	-7.6	-8.8	-10.2	-11.6	-12.4	-12.3	-12.4	-11.1	-10.2	-9.2	-8.5	-8.0	-7.6	-7.2	-6.9	-6.9	-7.7	-9.0	-11.6	-11.4	-11.0	-4.1	-12.4	-9.1
6	-11.3	-11.1	-12.0	-11.9	-13.5	-13.5	-13.7	-13.4	-13.9	-14.0	-12.9	-11.6	-10.4	-9.5	-8.9	-8.2	-7.7	-7.5	-7.7	-8.0	-9.4	-10.9	-10.5	-11.7	-7.5	-14.0	-11.0
7	-11.8	-12.7	-12.8	-13.8	-13.3	-14.7	-13.4	-13.9	-15.8	-14.4	-13.4	-11.1	-9.5	-7.5	-6.7	-6.1	-5.8	-5.9	-7.1	-8.3	-9.2	-10.2	-10.0	-11.1	-5.8	-15.8	-10.8
8	-10.7	-12.5	-13.7	-13.0	-15.1	-15.6	-16.1	-17.1	-17.0	-15.2	-13.8	-11.8	-10.2	-8.8	-7.8	-6.8	-6.1	-5.4	-6.1	-6.8	-6.9	-7.6	-8.7	-10.6	-5.4	-17.1	-11.0
9	-11.2	-10.1	-9.3	-9.4	-10.4	-11.2	-12.3	-12.5	-12.8	-12.0	-10.9	-10.0	-9.4	-8.6	-7.8	-7.4	-6.9	-6.8	-7.7	-9.2	-11.4	-11.4	-13.0	-13.2	-6.8	-13.2	-10.2
10	-13.5	-11.3	-11.6	-12.2	-12.3	-12.5	-14.1	-12.8	-13.2	-14.2	-13.4	-12.4	-11.5	-10.2	-9.1	-8.4	-7.9	-7.8	-8.7	-10.1	-11.5	-12.5	-13.5	-15.2	-7.8	-15.2	-11.7
11	-15.3	-15.7	-15.6	-15.4	-15.6	-16.1	-16.0	-16.7	-15.9	-15.3	-14.2	-13.5	-12.4	-10.6	-9.6	-9.0	-8.6	-8.5	-8.9	-9.9	-12.3	-13.9	-14.5	-14.3	-8.5	-16.7	-13.2
12	-13.9	-13.5	-14.5	-15.2	-16.1	-16.0	-17.4	-16.7	-16.4	-14.5	-12.8	-11.4	-10.1	-8.6	-7.4	-6.8	-6.5	-6.4	-6.7	-7.6	-8.5	-8.6	-9.5	-10.5	-6.4	-17.4	-11.5
13	-11.5	-11.7	-10.2	-9.2	-8.3	-7.9	-7.8	-7.7	-7.4	-7.1	-6.5	-4.7	-4.3	-2.4	-0.9	0.5	0.8	0.9	1.0	0.7	0.7	0.4	0.1	0.0	1.0	-11.7	-4.3
14	-0.2	-0.5	-0.7	-0.9	-0.9	-1.0	-1.2	-1.4	-1.4	-1.4	-0.8	-0.6	-0.2	0.2	0.3	0.4	0.4	0.8	0.8	1.2	1.0	1.1	0.9	0.5	1.2	-1.4	-0.1
15	0.1	-0.4	-1.1	-2.3	-2.9	-2.6	-1.9	-1.6	-2.6	-3.7	-4.6	-5.5	-5.3	-4.8	-4.9	-5.6	-6.0	-6.3	-6.6	-7.6	-8.8	-10.2	-10.9	-11.3	0.1	-11.3	-4.9
16	-11.7	-12.0	-12.4	-13.0	-13.5	-14.0	-14.4	-14.4	-14.5	-13.8	-13.0	-12.2	-11.2	-10.1	-9.3	-8.3	-7.2	-6.4	-6.0	-6.0	-6.7	-6.8	-5.6	-5.6	-5.6	-14.5	-10.3
17	-5.5	-4.8	-4.9	-4.5	-4.4	-4.6	-6.1	-6.3	-5.4	-4.0	-3.0	-2.7	-2.2	-1.6	-1.2	-1.1	-1.0	-1.1	-1.3	-1.1	-1.9	-3.1	-5.2	-6.5	-1.0	-6.5	-3.5
18	-8.1	-8.5	-9.7	-10.0	-10.4	-10.6	-11.2	-11.3	-11.1	-9.1	-6.4	-3.9	-0.8	1.5	2.6	3.2	3.0	2.6	1.5	1.5	0.8	-0.2	-1.7	-2.2	3.2	-11.3	-4.1
19	-3.3	-1.6	-0.2	0.5	0.4	0.3	0.3	-0.1	0.4	0.7	1.4	2.0	2.4	2.7	2.9	2.9	2.8	2.7	2.6	2.0	1.4	0.6	0.5	-0.5	2.9	-3.3	1.0
20	-0.9	-1.1	0.2	-0.7	-0.5	-0.5	-0.7	-0.5	0.4	1.8	2.6	2.6	2.8	2.9	2.7	2.2	2.5	1.9	1.3	1.0	1.0	1.1	0.7	0.7	2.9	-1.1	1.0
21	0.7	0.6	0.6	1.0	1.2	1.0	0.7	0.4	0.1	0.6	1.0	1.5	1.8	1.8	2.0	2.2	2.4	2.4	2.2	2.3	2.4	1.5	0.2	-0.1	2.4	-0.1	1.3
22	-0.6	-1.1	-0.8	0.6	-1.8	-2.2	-2.5	-3.9	-3.5	-1.5	0.5	2.3	3.2	3.5	4.1	4.0	3.9	4.2	3.5	3.1	2.0	1.0	1.8	1.9	4.2	-3.9	0.9
23	1.0	-0.8	-1.5	-1.3	-1.9	-2.5	-3.1	-2.0	-1.3	-0.1	1.6	2.8	2.6	2.9	3.2	3.2	3.6	3.7	3.9	3.0	2.5	0.9	0.5	0.6	3.9	-3.1	0.9
24	-0.3	0.2	1.8	1.4	-1.1	-4.3	-4.0	-3.2	-2.7	-2.4	-1.7	-1.0	-0.6	-0.2	-0.3	-0.1	0.5	0.4	0.7	0.7	0.7	0.8	1.1	0.2	1.8	-4.3	-0.6
25	-1.4	-2.1	-2.6	-3.3	-4.7	-5.0	-5.6	-6.2	-7.1	-6.9	-5.9	-5.4	-5.2	-5.0	-4.8	-4.6	-4.4	-4.4	-4.4	-4.3	-4.9	-6.0	-8.1	-8.6	-1.4	-8.6	-5.0
26	-8.2	-8.9	-9.9	-10.1	-10.7	-10.5	-10.1	-9.8	-9.5	-8.7	-7.7	-6.7	-5.4	-4.6	-4.3	-4.0	-3.7	-3.2	-2.5	-2.1	-2.1	-3.0	-3.9	-4.3	-2.1	-10.7	-6.4
27	-4.4	-4.6	-4.8	-5.0	-5.2	-5.8	-6.2	-6.2	-6.2	-6.3	-6.3	-5.9	-5.1	-4.4	-4.1	-4.2	-3.7	-3.4	-2.9	-2.7	-2.9	-3.3	-3.8	-3.8	-2.7	-6.3	-4.6
28	-4.2	-4.6	-5.6	-6.4	-7.0	-6.7	-7.4	-8.1	-6.4	-5.5	-4.5	-4.0	-3.5	-2.9	-2.2	-1.5	-1.0	-0.8	-0.9	-1.5	-2.0	-2.4	-2.7	-3.3	-0.8	-8.1	-4.0
29	-3.5	-3.5	-3.5	-4.7	-4.0	-3.5	-3.6	-3.5	-3.0	-3.0	-2.3	-1.8	-1.0	0.0	0.2	0.9	1.6	1.7	1.8	1.6	1.2	0.6	0.0	-0.8	1.8	-4.7	-1.3
30	-2.2	-3.2	-3.3	-3.5	-4.1	-3.8	-4.3	-4.7	-4.2	-3.8	-3.2	-2.2	-1.0	-0.1	0.6	1.0	1.1	0.8	0.4	0.0	-0.3	-0.5	-1.1	-1.8	1.1	-4.7	-1.8
Max.	**1.9**	**1.5**	**1.8**	**1.4**	**1.2**	**1.1**	**1.1**	**1.2**	**1.1**	**1.8**	**2.6**	**2.8**	**3.2**	**3.5**	**4.1**	**4.0**	**3.9**	**4.2**	**3.9**	**3.1**	**2.5**	**1.5**	**1.8**	**1.9**	**4.2**		
Min.	**-15.3**	**-15.7**	**-15.6**	**-15.4**	**-16.1**	**-16.1**	**-17.4**	**-17.1**	**-17.0**	**-15.3**	**-14.2**	**-13.5**	**-12.4**	**-10.6**	**-9.6**	**-9.0**	**-8.6**	**-8.5**	**-8.9**	**-10.1**	**-12.3**	**-13.9**	**-14.5**	**-15.2**		**-17.4**	
Avg.	**-5.1**	**-5.3**	**-5.5**	**-5.7**	**-6.2**	**-6.5**	**-6.8**	**-6.9**	**-6.8**	**-6.2**	**-5.4**	**-4.6**	**-3.9**	**-3.1**	**-2.5**	**-2.2**	**-1.9**	**-1.8**	**-2.1**	**-2.4**	**-3.1**	**-3.8**	**-4.3**	**-4.8**			**-4.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.1	-2.5	-2.6	-3.0	-3.3	-3.8	-4.0	-4.0	-3.9	-3.4	-2.4	-1.2	-0.1	1.3	2.3	2.6	2.7	2.8	2.7	2.1	2.2	1.9	1.7	0.9	2.8	-4.0	-0.5
2	0.2	1.0	0.8	0.6	0.4	0.5	0.5	0.5	0.8	1.5	1.9	2.5	3.1	3.6	3.8	2.7	3.6	3.7	3.5	2.1	1.2	1.3	1.7	1.3	3.8	0.2	1.8
3	0.9	0.6	0.4	0.0	-0.1	-0.2	-0.5	-0.7	-0.4	0.8	1.8	3.4	4.4	4.6	4.5	4.2	3.8	3.2	2.7	2.3	3.3	2.5	2.1	2.6	4.6	-0.7	1.9
4	2.5	2.4	2.3	2.5	2.1	2.8	2.7	2.8	3.0	3.0	3.5	4.1	4.5	4.8	5.4	6.0	6.2	5.9	4.9	3.4	3.7	2.5	2.0	2.2	6.2	2.0	3.5
5	1.7	2.8	2.9	3.3	2.8	1.8	1.2	1.4	1.9	2.5	3.3	4.0	3.9	4.3	4.8	5.2	5.5	5.9	5.7	5.7	4.1	3.1	2.3	1.8	5.9	1.2	3.4
6	1.3	0.7	1.1	1.1	1.0	0.8	0.5	1.0	1.9	3.4	4.2	4.6	5.0	5.4	5.8	5.9	5.8	5.3	4.8	4.2	3.4	2.7	2.3	2.3	5.9	0.5	3.1
7	2.3	2.4	2.5	2.6	2.7	2.5	2.4	2.7	3.0	3.8	4.6	4.6	5.0	4.9	5.2	5.2	5.4	5.8	5.7	5.0	4.4	4.4	3.5	2.9	5.8	2.3	3.9
8	3.0	2.7	2.8	3.2	3.2	2.9	3.0	3.2	3.6	4.1	4.8	5.2	5.5	5.1	4.9	5.6	5.9	6.2	5.9	5.4	4.7	4.3	4.3	3.6	6.2	2.7	4.3
9	3.3	2.8	2.9	2.5	2.6	2.6	2.6	2.5	3.0	4.4	5.4	5.2	5.4	5.4	5.0	5.7	5.7	5.3	5.0	4.4	3.2	2.4	1.9	1.5	5.7	1.5	3.8
10	1.4	1.4	0.8	0.8	0.4	0.5	0.6	0.9	1.7	2.7	3.8	4.6	5.3	6.1	6.6	7.1	7.0	7.2	7.5	7.2	5.6	4.7	3.6	3.7	7.5	0.4	3.8
11	3.7	3.3	2.7	3.4	3.4	3.0	3.3	3.7	5.1	6.4	5.7	5.2	5.1	4.9	6.5	7.1	6.9	6.6	7.0	6.6	6.3	5.6	4.1	4.1	7.1	2.7	5.0
12	4.0	3.9	3.6	4.0	3.6	3.4	3.1	3.0	3.6	4.6	6.0	6.9	7.0	6.9	6.7	5.3	4.6	4.8	4.9	4.4	3.9	3.4	2.8	2.8	7.0	2.8	4.5
13	2.7	2.6	2.0	1.8	1.9	1.7	1.7	2.0	2.1	2.8	4.0	4.9	6.3	6.2	7.2	7.2	6.7	5.6	5.6	4.8	3.8	3.1	2.6	1.9	7.2	1.7	3.8
14	0.9	0.9	-0.4	-1.2	-1.1	1.7	2.8	3.1	3.4	3.8	4.5	5.0	6.2	6.9	6.8	6.7	7.5	7.6	7.5	6.5	6.3	5.5	4.2	4.3	7.6	-1.2	4.1
15	2.9	1.8	1.8	3.3	3.0	2.6	2.1	3.0	4.6	5.6	6.4	7.5	8.5	7.5	6.5	6.7	6.1	5.3	5.0	4.5	3.8	3.2	2.4	2.4	8.5	1.8	4.4
16	2.7	2.6	2.3	2.0	1.7	1.0	0.5	0.2	0.2	0.5	1.4	3.5	5.1	6.5	7.1	7.2	7.3	7.4	7.2	6.8	6.2	4.8	1.6	-0.3	7.4	-0.3	3.5
17	-0.2	1.3	0.7	-0.5	-1.3	-1.5	-1.3	1.2	3.1	4.8	6.6	7.5	7.9	8.8	9.5	9.9	10.5	10.8	10.3	9.9	8.7	6.8	4.7	2.9	10.8	-1.5	5.1
18	1.6	-1.0	-1.6	-0.1	0.3	0.8	0.7	2.2	3.4	3.7	3.4	3.8	4.2	4.2	4.9	5.3	5.1	6.3	6.1	5.2	4.9	4.2	3.4	2.3	6.3	-1.6	3.0
19	1.7	1.0	0.3	-0.8	-1.2	-0.8	-0.1	0.9	2.7	3.9	4.5	5.7	6.4	7.0	7.7	8.3	8.9	8.6	8.6	8.6	7.2	6.2	3.4	2.3	8.9	-1.2	4.2
20	3.3	3.5	3.6	3.0	2.3	2.5	2.5	3.5	4.8	7.2	8.5	9.7	10.9	12.1	13.0	13.7	13.8	13.8	13.7	13.5	12.3	10.1	5.9	1.5	13.8	1.5	7.9
21	0.1	-0.8	-1.7	-1.8	-2.1	-2.3	-1.4	2.4	4.0	6.0	7.8	9.4	10.7	11.7	11.5	11.6	11.4	11.3	11.2	10.0	9.4	7.8	6.0	2.9	11.7	-2.3	5.6
22	3.7	4.5	3.9	3.2	2.9	2.2	2.7	3.8	5.2	6.3	7.6	9.1	9.7	10.7	11.0	12.2	11.2	10.3	9.1	7.9	6.7	5.6	5.0	4.9	12.2	2.2	6.7
23	4.5	3.9	3.2	3.1	2.8	3.6	3.7	3.8	4.5	4.9	6.0	5.9	5.7	5.0	4.6	5.6	5.5	5.7	5.7	5.6	5.7	5.7	4.8	4.2	6.0	2.8	4.7
24	3.9	3.8	3.9	4.1	3.9	4.1	4.1	4.3	4.7	4.9	5.5	5.5	6.0	6.5	7.0	8.7	8.0	8.3	8.3	7.0	5.9	5.2	4.6	3.5	8.7	3.5	5.5
25	2.5	0.5	1.0	2.0	2.4	2.9	2.3	2.0	2.4	3.8	5.0	6.1	6.4	5.8	5.5	7.1	8.3	6.0	6.3	5.9	6.0	5.2	4.1	3.9	8.3	0.5	4.3
26	3.5	3.2	2.4	2.3	2.6	2.4	2.8	3.2	3.7	4.4	5.0	5.8	6.5	7.3	8.2	7.3	7.4	7.8	7.7	7.6	7.7	6.8	4.8	2.8	8.2	2.3	5.1
27	1.1	2.0	0.7	0.0	0.9	0.6	0.4	2.2	4.4	5.7	6.9	8.5	9.5	10.3	11.2	12.0	12.5	12.7	12.7	12.6	12.0	10.2	7.1	5.1	12.7	0.0	6.7
28	5.2	3.1	3.0	2.4	1.8	1.6	2.8	4.7	6.7	8.4	9.6	10.9	11.5	12.2	12.7	13.6	13.6	14.1	14.0	13.2	12.7	11.5	9.0	7.5	14.1	1.6	8.6
29	7.4	6.6	6.3	5.2	4.9	4.0	5.4	6.1	7.5	8.9	10.2	11.5	12.2	12.8	13.5	14.4	14.9	14.8	15.1	15.1	14.6	12.9	10.7	9.9	15.1	4.0	10.2
30	7.9	7.0	3.7	1.1	0.6	0.7	2.1	5.4	9.1	11.8	13.0	13.6	14.2	14.9	15.0	14.8	14.7	12.8	12.2	11.4	9.6	8.6	7.7	7.4	15.0	0.6	9.1
31	7.1	7.0	6.2	6.0	5.8	6.1	6.3	6.1	5.9	6.5	7.9	8.5	9.3	10.0	9.4	9.4	9.7	9.7	8.3	7.1	6.4	6.0	5.6	5.0	10.0	5.0	7.3
Max.	**7.9**	**7.0**	**6.3**	**6.0**	**5.8**	**6.1**	**6.3**	**6.1**	**9.1**	**11.8**	**13.0**	**13.6**	**14.2**	**14.9**	**15.0**	**14.8**	**14.9**	**14.8**	**15.1**	**15.1**	**14.6**	**12.9**	**10.7**	**9.9**	**15.1**		
Min.	**-2.1**	**-2.5**	**-2.6**	**-3.0**	**-3.3**	**-3.8**	**-4.0**	**-4.0**	**-3.9**	**-3.4**	**-2.4**	**-1.2**	**-0.1**	**1.3**	**2.3**	**2.6**	**2.7**	**2.8**	**2.7**	**2.1**	**1.2**	**1.3**	**1.6**	**-0.3**		**-4.0**	
Avg.	**2.7**	**2.4**	**2.0**	**1.8**	**1.6**	**1.6**	**1.8**	**2.5**	**3.4**	**4.4**	**5.4**	**6.2**	**6.8**	**7.2**	**7.5**	**7.9**	**7.9**	**7.8**	**7.6**	**7.0**	**6.3**	**5.4**	**4.2**	**3.4**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.6	5.1	5.2	5.6	6.0	6.3	7.1	7.2	7.1	7.2	8.5	9.8	10.7	10.2	10.8	11.0	10.9	8.6	8.8	8.3	7.9	7.1	6.9	5.7	11.0	4.6	7.8
2	4.5	4.9	5.6	5.5	5.8	5.2	4.2	5.3	7.7	9.1	9.4	10.3	11.1	11.7	11.8	11.7	12.1	11.0	11.0	10.9	10.6	10.2	9.1	7.6	12.1	4.2	8.6
3	6.2	6.4	5.7	6.4	6.4	6.3	7.2	7.2	7.6	8.2	9.6	10.7	10.7	12.9	12.4	12.0	11.9	12.1	11.3	10.1	7.7	6.7	5.4	4.7	12.9	4.7	8.6
4	4.6	4.0	3.7	3.4	2.3	3.7	3.8	4.6	6.0	7.8	8.0	8.4	8.8	10.2	10.7	11.4	10.9	10.3	10.9	10.8	10.0	8.7	7.0	3.3	11.4	2.3	7.2
5	1.5	0.9	1.2	2.2	3.4	4.0	4.6	5.1	5.3	6.5	6.7	6.8	6.9	7.9	8.4	8.0	8.6	8.0	7.4	7.5	7.0	6.7	6.1	5.0	8.6	0.9	5.7
6	4.7	3.6	3.8	3.8	4.3	4.9	4.7	4.9	5.3	6.3	8.0	10.0	11.4	12.7	13.2	13.4	15.1	15.0	13.8	12.7	12.1	12.4	11.8	7.7	15.1	3.6	9.0
7	3.8	4.0	5.4	6.9	6.9	6.2	6.4	8.1	9.4	11.1	12.6	14.1	14.4	14.4	15.2	16.0	16.5	16.2	16.6	16.3	14.8	13.4	11.0	8.5	16.6	3.8	11.2
8	6.4	5.1	4.7	4.2	3.6	3.4	3.7	4.4	5.7	7.1	8.3	8.9	10.1	9.7	9.8	10.0	9.9	9.5	9.2	8.8	8.8	8.3	6.1	4.1	10.1	3.4	7.1
9	4.1	3.7	3.5	3.0	2.4	2.2	2.0	2.1	2.7	3.4	4.3	5.7	6.0	6.5	7.2	7.3	7.4	7.9	8.1	7.9	7.6	7.1	6.5	5.3	8.1	2.0	5.2
10	5.1	4.8	4.0	3.3	3.1	2.9	3.3	3.7	4.2	4.5	5.2	6.1	7.0	7.3	8.4	9.0	9.0	9.0	8.5	8.1	7.6	6.7	6.1	5.4	9.0	2.9	5.9
11	4.7	4.2	3.7	2.6	2.8	2.6	2.8	3.9	5.4	5.7	6.2	6.6	7.3	7.2	7.4	7.3	7.6	7.9	8.0	7.6	7.0	6.4	6.0	5.5	8.0	2.6	5.7
12	4.5	4.1	3.2	2.9	2.3	1.8	1.7	2.6	3.4	4.6	5.6	6.4	7.0	7.4	7.7	7.1	6.6	6.2	5.6	4.9	4.6	4.4	3.9	3.7	7.7	1.7	4.7
13	3.2	3.1	3.1	3.4	3.8	4.0	4.6	5.3	5.8	6.4	7.1	8.2	10.0	11.1	11.7	12.2	13.2	13.8	14.7	15.2	14.0	13.1	10.5	8.2	15.2	3.1	8.6
14	5.1	3.7	4.0	4.5	5.1	5.4	5.5	6.1	6.5	7.7	8.7	10.1	11.5	12.8	13.7	14.4	15.6	15.4	15.3	11.4	10.4	10.9	10.2	9.1	15.6	3.7	9.3
15	6.7	3.8	2.7	1.5	3.1	4.3	4.7	5.9	7.4	8.4	9.0	8.8	9.7	11.3	12.4	12.4	12.9	11.5	11.9	12.0	10.9	9.5	9.0	8.3	12.9	1.5	8.2
16	8.0	7.6	7.0	6.7	6.6	6.4	6.8	7.2	7.8	9.1	10.4	11.3	12.0	12.8	12.7	13.6	13.1	13.7	14.6	14.8	14.7	14.3	13.2	12.1	14.8	6.4	10.7
17	10.6	9.7	9.0	8.7	8.4	7.9	8.2	10.2	12.1	13.6	15.0	16.4	15.3	17.6	18.5	19.0	19.1	19.2	19.1	18.4	17.2	15.4	13.1	10.2	19.2	7.9	13.8
18	7.5	4.9	2.7	1.4	1.3	1.6	4.4	6.0	9.3	11.9	12.8	13.3	15.0	15.8	15.8	16.0	16.0	16.5	15.7	15.5	15.6	14.7	12.8	10.6	16.5	1.3	10.7
19	8.6	8.5	7.2	6.8	6.0	6.2	6.6	8.9	10.3	11.7	12.5	12.8	13.7	14.2	14.6	15.3	15.2	15.6	16.1	15.8	14.9	13.4	12.1	11.0	16.1	6.0	11.6
20	9.4	8.7	7.9	4.4	3.1	2.5	3.0	5.5	8.6	10.6	11.8	13.1	14.1	14.9	15.0	15.5	15.2	14.7	14.2	13.1	11.7	10.5	9.0	7.7	15.5	2.5	10.2
21	6.5	5.3	4.8	4.9	3.9	1.6	1.9	5.2	8.4	9.5	10.4	11.4	11.7	12.1	12.9	13.6	14.4	15.7	15.9	15.2	14.2	12.5	10.6	8.3	15.9	1.6	9.6
22	5.3	3.2	2.5	1.4	1.3	1.1	1.9	5.9	9.8	10.1	11.4	12.3	12.8	13.5	13.3	12.8	12.5	12.9	12.1	10.8	9.6	8.9	8.1	7.7	13.5	1.1	8.4
23	7.5	7.2	6.8	6.6	5.4	2.9	5.0	7.0	8.4	9.5	9.5	10.2	11.5	12.5	13.1	13.4	13.7	13.8	14.0	13.4	12.5	11.2	9.4	6.6	14.0	2.9	9.6
24	3.2	1.7	-0.1	-1.3	-1.0	0.1	4.4	7.2	8.8	10.0	10.4	10.8	10.4	10.1	10.2	10.2	9.8	9.8	9.6	9.7	9.7	9.5	9.4	9.2	10.8	-1.3	7.2
25	9.1	9.4	9.5	9.0	8.8	8.3	8.5	9.2	8.8	10.5	11.0	11.0	11.4	11.9	12.4	13.3	13.8	13.5	12.5	11.9	10.7	10.1	9.8	9.1	13.8	8.3	10.6
26	8.7	6.8	6.2	6.6	6.0	6.7	7.3	8.4	9.5	10.7	11.8	12.9	13.8	12.6	12.0	12.6	12.7	12.7	12.7	12.4	12.5	12.1	10.4	8.9	13.8	6.0	10.3
27	7.0	4.1	4.5	2.8	2.7	4.0	5.2	7.0	9.0	9.7	10.2	11.4	12.0	12.7	13.1	13.1	13.4	14.1	13.5	12.2	11.1	9.7	7.6	6.1	14.1	2.7	9.0
28	3.7	3.6	4.6	4.3	4.3	3.5	4.2	5.8	7.9	8.8	9.6	9.8	10.2	11.3	13.0	12.5	11.0	11.5	12.6	12.5	12.2	10.7	9.4	8.6	13.0	3.5	8.6
29	7.8	8.0	8.0	7.6	7.7	7.6	7.2	7.0	8.1	9.4	10.5	10.7	11.7	12.0	13.0	12.9	13.3	13.3	13.0	11.8	10.5	9.1	8.3	7.3	13.3	7.0	9.8
30	6.4	5.0	4.6	5.0	4.9	4.8	5.4	6.1	8.4	9.5	10.7	11.2	11.7	12.5	12.8	13.2	13.3	13.7	13.7	11.9	12.0	10.0	8.8	7.7	13.7	4.6	9.3
Max.	**10.6**	**9.7**	**9.5**	**9.0**	**8.8**	**8.3**	**8.5**	**10.2**	**12.1**	**13.6**	**15.0**	**16.4**	**15.3**	**17.6**	**18.5**	**19.0**	**19.1**	**19.2**	**19.1**	**18.4**	**17.2**	**15.4**	**13.2**	**12.1**	**19.2**		
Min.	**1.5**	**0.9**	**-0.1**	**-1.3**	**-1.0**	**0.1**	**1.7**	**2.1**	**2.7**	**3.4**	**4.3**	**5.7**	**6.0**	**6.5**	**7.2**	**7.1**	**6.6**	**6.2**	**5.6**	**4.9**	**4.6**	**4.4**	**3.9**	**3.3**		**-1.3**	
Avg.	**6.0**	**5.2**	**4.8**	**4.5**	**4.4**	**4.3**	**4.9**	**6.1**	**7.5**	**8.6**	**9.5**	**10.3**	**11.0**	**11.7**	**12.1**	**12.3**	**12.5**	**12.4**	**12.3**	**11.7**	**11.0**	**10.1**	**8.9**	**7.4**			**8.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.5	4.7	5.1	5.5	5.6	5.0	4.6	8.7	10.8	12.0	13.4	14.2	14.9	16.0	16.4	16.7	16.5	15.7	14.2	13.9	12.4	11.2	10.4	9.7	16.7	4.6	11.0
2	9.2	8.5	8.2	8.1	7.8	7.5	7.6	7.9	8.2	9.4	10.6	11.6	13.2	14.4	15.6	16.1	15.0	14.6	12.9	11.9	11.7	11.0	9.9	9.2	16.1	7.5	10.8
3	10.4	9.0	9.5	9.8	10.6	9.4	10.6	10.4	10.5	9.9	8.6	9.8	10.5	11.3	11.0	11.8	12.3	12.0	11.3	10.8	10.9	10.5	9.9	9.6	12.3	8.6	10.4
4	9.2	9.1	8.5	8.2	8.0	7.8	8.0	9.1	10.1	11.4	12.2	13.0	14.7	15.7	14.9	14.8	15.4	15.5	13.7	12.4	11.6	11.1	10.6	9.1	15.7	7.8	11.4
5	6.9	7.4	7.3	6.2	6.4	6.0	5.9	7.5	10.0	11.8	14.4	16.0	17.2	18.2	18.4	16.9	16.3	16.7	16.5	16.7	16.3	15.0	13.5	12.2	18.4	5.9	12.5
6	11.3	10.2	9.2	7.0	6.7	5.6	6.1	9.5	12.6	15.9	17.7	18.5	19.3	18.1	16.2	16.1	16.0	15.4	14.5	13.6	12.7	12.2	11.7	11.1	19.3	5.6	12.8
7	10.5	10.2	9.9	9.5	9.4	9.2	9.3	9.5	8.9	9.3	9.3	8.9	9.0	9.1	8.8	9.2	9.1	9.8	10.6	10.6	10.3	10.0	9.5	8.8	10.6	8.8	9.5
8	8.0	7.6	7.3	7.0	7.1	7.0	6.8	6.8	7.0	7.6	8.2	8.7	9.1	9.7	10.3	11.0	11.3	11.6	11.0	10.7	10.6	10.5	10.3	10.1	11.6	6.8	9.0
9	9.9	10.1	9.7	8.9	9.4	9.4	9.2	9.7	11.8	13.4	13.7	14.3	15.3	16.0	16.8	17.1	17.0	15.7	15.0	13.5	12.9	12.4	11.8	10.8	17.1	8.9	12.7
10	9.9	9.9	9.8	9.7	9.8	9.7	9.4	9.6	10.1	10.7	11.4	13.2	13.3	13.8	14.3	14.9	15.6	16.0	14.9	13.8	12.9	12.1	11.3	10.4	16.0	9.4	11.9
11	9.3	8.9	8.7	8.3	8.2	8.0	7.9	8.2	9.1	10.5	11.0	11.6	12.3	13.4	13.8	14.8	15.2	15.1	14.5	14.0	13.1	11.7	10.1	8.9	15.2	7.9	11.1
12	6.7	6.1	3.1	1.1	-0.4	-0.4	0.9	6.5	10.8	11.4	12.7	12.2	12.0	12.5	12.7	12.1	12.2	12.0	11.0	9.5	9.0	8.7	8.4	8.4	12.7	-0.4	8.3
13	8.5	8.5	8.6	8.4	8.1	8.1	8.1	8.2	8.4	8.7	9.2	9.9	10.1	10.8	11.2	11.8	11.9	11.7	11.6	11.5	11.3	10.8	10.3	9.6	11.9	8.1	9.8
14	9.0	8.4	8.2	8.3	8.0	8.0	8.1	8.9	9.8	10.6	11.7	12.8	13.4	14.2	15.8	16.2	15.8	16.2	16.2	16.1	15.5	14.7	13.4	12.9	16.2	8.0	12.2
15	12.2	11.7	11.8	11.8	10.8	10.6	9.7	10.1	11.7	13.0	14.0	14.5	15.6	16.8	17.3	17.5	16.2	14.8	13.6	12.8	12.0	11.8	11.5	11.6	17.5	9.7	13.1
16	11.6	11.4	11.4	11.1	11.0	10.8	10.7	10.8	10.9	10.7	10.0	9.7	10.4	10.8	11.3	11.6	10.3	9.7	9.8	9.5	9.3	9.1	9.0	8.8	11.6	8.8	10.4
17	8.6	8.4	7.8	6.4	5.2	5.0	5.0	5.2	5.7	6.2	6.1	6.3	7.5	8.5	8.5	9.0	9.2	10.0	9.8	9.4	8.8	8.3	7.8	7.3	10.0	5.0	7.5
18	7.0	6.5	5.9	5.5	5.2	5.1	5.0	5.3	6.1	6.7	7.5	7.9	8.0	8.1	8.9	9.2	9.1	9.5	9.8	10.1	9.8	9.2	8.5	8.0	10.1	5.0	7.6
19	7.8	7.7	7.2	6.9	6.6	7.1	7.4	7.8	8.5	8.7	9.2	10.8	11.6	12.6	13.3	13.9	12.8	13.7	13.2	11.9	11.4	11.0	10.6	9.2	13.9	6.6	10.0
20	8.0	9.0	8.8	8.7	8.5	7.7	7.1	8.3	10.1	9.8	9.4	8.2	8.3	8.6	8.2	8.4	8.1	7.7	7.0	6.6	6.5	6.8	6.9	6.4	10.1	6.4	8.0
21	6.5	6.9	6.5	6.3	5.9	5.8	5.8	6.2	6.7	7.1	7.6	8.4	9.4	9.7	9.7	10.7	11.3	12.0	11.4	11.4	11.9	11.0	9.7	8.8	12.0	5.8	8.6
22	7.9	7.8	7.6	7.0	6.7	6.1	6.4	6.7	7.1	7.8	8.2	8.0	8.0	8.0	7.8	8.1	8.1	7.7	7.6	7.5	7.2	7.2	6.9	6.7	8.2	6.1	7.4
23	6.4	6.3	6.3	6.2	6.2	6.1	6.2	6.4	7.1	8.3	8.1	9.3	9.8	10.4	10.2	10.6	11.5	11.6	11.2	10.5	9.3	7.8	7.2	6.6	11.6	6.1	8.3
24	6.5	6.1	6.0	5.9	6.0	6.1	6.4	6.9	7.5	8.2	9.0	9.6	10.8	12.2	13.5	14.0	15.8	16.0	14.1	14.5	13.3	12.1	11.9	9.4	16.0	5.9	10.1
25	9.1	8.2	7.0	8.5	8.1	8.5	8.8	9.3	10.5	11.8	13.4	15.1	16.3	17.6	18.8	19.5	20.0	19.2	19.6	20.3	18.6	17.6	14.8	13.9	20.3	7.0	13.9
26	12.3	11.7	11.8	11.8	9.8	8.1	8.4	9.0	9.2	9.7	10.3	10.6	9.7	10.2	10.7	11.0	11.6	11.9	12.7	12.5	12.2	11.0	9.4	9.1	12.7	8.1	10.6
27	8.9	8.6	8.3	8.1	7.9	7.9	7.8	7.7	8.0	8.3	8.8	8.9	9.5	10.3	10.8	10.6	10.2	11.1	11.5	11.3	10.7	10.6	9.3	8.2	11.5	7.7	9.3
28	7.6	7.9	8.4	8.5	8.3	8.7	9.0	9.6	11.2	12.7	13.2	15.1	15.1	15.7	15.8	15.9	16.3	16.8	16.7	16.3	15.7	14.0	10.7	8.6	16.8	7.6	12.4
29	8.0	8.4	9.7	9.7	9.4	9.4	7.6	8.4	10.0	11.3	13.4	14.6	15.8	16.4	18.2	19.2	19.6	19.8	19.0	18.9	18.0	16.6	14.7	12.7	19.8	7.6	13.7
30	12.2	11.9	11.4	11.1	10.7	10.7	10.5	10.4	10.3	12.2	13.6	14.6	16.3	17.6	18.7	18.8	18.0	17.2	16.6	15.5	15.0	13.9	12.4	11.8	18.8	10.3	13.8
31	9.9	9.7	9.6	10.5	9.9	9.6	9.2	9.6	10.7	12.3	14.2	16.4	17.8	18.6	19.4	20.3	20.9	21.3	21.3	21.0	20.5	18.3	15.4	11.8	21.3	9.2	14.9
Max.	**12.3**	**11.9**	**11.8**	**11.8**	**11.0**	**10.8**	**10.7**	**10.8**	**12.6**	**15.9**	**17.7**	**18.5**	**19.3**	**18.6**	**19.4**	**20.3**	**20.9**	**21.3**	**21.3**	**21.0**	**20.5**	**18.3**	**15.4**	**13.9**	**21.3**		
Min.	**5.5**	**4.7**	**3.1**	**1.1**	**-0.4**	**-0.4**	**0.9**	**5.2**	**5.7**	**6.2**	**6.1**	**6.3**	**7.5**	**8.0**	**7.8**	**8.1**	**8.1**	**7.7**	**7.0**	**6.6**	**6.5**	**6.8**	**6.9**	**6.4**		**-0.4**	
Avg.	**8.9**	**8.6**	**8.3**	**8.1**	**7.8**	**7.5**	**7.5**	**8.3**	**9.3**	**10.2**	**11.0**	**11.7**	**12.4**	**13.1**	**13.5**	**13.8**	**13.8**	**13.8**	**13.3**	**12.9**	**12.3**	**11.6**	**10.6**	**9.7**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

August *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.1	8.8	8.8	9.7	9.5	8.1	4.4	5.6	7.3	9.2	9.9	10.5	11.6	14.0	16.5	18.2	18.4	18.5	18.5	17.4	15.8	14.1	11.1	8.1	18.5	4.4	11.8
2	6.6	6.4	7.2	8.5	9.2	9.8	9.6	9.7	10.1	10.2	10.8	11.5	12.1	12.7	13.0	13.2	13.3	13.5	12.9	13.0	12.7	11.9	11.1	10.0	13.5	6.4	10.8
3	9.8	8.8	10.3	11.0	10.9	9.9	9.1	9.3	10.0	11.6	13.7	14.6	15.5	15.6	16.1	16.6	16.8	16.6	15.8	14.8	13.4	11.8	10.5	8.8	16.8	8.8	12.6
4	8.1	8.6	8.5	7.2	6.1	6.1	6.5	7.9	9.9	11.0	11.9	12.3	12.7	13.7	13.9	14.2	14.5	15.5	15.2	14.4	12.6	10.6	9.0	6.4	15.5	6.1	10.7
5	4.9	4.0	2.6	4.1	4.4	4.8	5.9	7.1	9.5	11.3	13.4	15.2	15.2	16.1	16.3	16.9	17.4	17.3	16.8	16.5	15.5	13.8	11.9	11.4	17.4	2.6	11.3
6	9.9	7.1	7.3	7.7	8.2	7.8	7.8	7.6	9.3	10.7	12.3	14.0	15.4	16.6	17.5	17.5	17.7	17.3	15.9	15.3	15.3	13.8	11.8	10.2	17.7	7.1	12.2
7	9.4	10.1	10.7	10.2	9.1	6.7	6.9	7.7	8.3	10.8	12.2	13.6	14.6	15.6	15.7	16.5	16.9	17.3	15.8	15.2	15.3	12.9	8.9	7.6	17.3	6.7	12.0
8	7.4	7.2	7.5	7.0	8.2	7.9	6.9	7.6	8.6	9.9	11.4	13.2	14.9	16.1	17.1	17.9	18.3	18.7	18.5	18.2	16.7	14.8	11.5	9.8	18.7	6.9	12.3
9	10.1	7.6	5.3	6.9	6.6	6.4	6.2	6.6	10.0	11.1	12.5	14.3	16.0	16.9	17.9	18.6	18.5	18.5	17.7	17.2	16.7	13.4	10.1	9.0	18.6	5.3	12.3
10	6.5	5.4	4.7	5.1	3.8	1.3	0.8	1.9	7.6	10.6	12.4	14.5	16.1	16.9	17.6	16.4	12.9	16.0	16.5	15.8	14.4	12.1	8.6	5.5	17.6	0.8	10.1
11	3.7	2.1	3.0	2.2	1.7	1.4	3.3	4.5	8.7	10.9	11.8	12.3	13.4	14.1	14.7	15.1	15.3	14.9	14.7	13.9	12.5	9.5	6.0	4.0	15.3	1.4	8.9
12	3.4	3.0	4.4	5.8	7.4	5.3	5.0	4.8	7.8	11.9	13.5	14.6	15.7	16.9	18.0	18.6	18.7	16.8	14.9	14.4	14.0	13.0	11.0	9.8	18.7	3.0	11.2
13	10.1	10.3	11.4	11.4	10.9	9.3	8.5	8.7	9.5	10.8	11.8	13.3	13.6	14.7	14.7	14.4	15.3	14.5	12.3	11.8	11.5	10.7	9.6	8.3	15.3	8.3	11.6
14	7.6	6.0	5.3	6.5	6.9	6.5	6.9	7.6	8.7	9.8	11.2	11.8	11.7	11.8	12.3	13.3	13.5	13.4	13.1	12.6	12.0	11.3	10.9	10.6	13.5	5.3	10.0
15	10.0	9.5	8.5	8.1	8.1	8.1	8.0	7.7	7.7	8.2	8.9	9.2	9.7	10.5	10.7	11.3	11.9	12.3	11.9	11.5	10.8	10.3	10.0	9.9	12.3	7.7	9.7
16	9.8	9.7	9.7	9.7	9.8	9.9	9.8	9.8	10.1	10.5	10.9	10.9	12.0	13.3	13.7	14.3	14.3	14.2	13.3	11.6	11.3	10.1	9.1	7.4	14.3	7.4	11.0
17	5.4	5.7	6.6	4.6	1.7	0.5	-0.3	0.1	3.8	7.4	10.2	11.6	12.2	12.5	12.8	12.5	12.4	12.6	12.0	11.6	10.4	9.3	9.3	8.8	12.8	-0.3	8.1
18	7.2	5.8	5.8	3.6	1.3	1.3	1.7	1.8	6.4	10.3	12.1	13.6	14.1	14.6	15.2	15.1	15.0	15.1	15.1	14.2	12.2	10.2	8.5	8.6	15.2	1.3	9.5
19	8.8	7.5	5.8	5.2	5.0	5.2	5.3	7.2	8.8	8.6	10.1	12.2	13.7	15.5	15.8	16.1	16.2	15.8	15.7	14.6	12.5	12.0	10.8	9.8	16.2	5.0	10.8
20	9.5	9.2	9.3	9.7	9.3	9.2	8.6	8.3	9.4	10.8	11.2	11.6	13.1	13.6	13.7	13.9	14.4	14.7	15.4	14.7	13.9	11.9	10.7	10.0	15.4	8.3	11.5
21	9.9	9.6	9.3	9.4	9.8	9.4	8.6	8.3	10.0	11.2	12.1	12.3	13.0	13.2	13.3	14.0	14.1	13.6	13.0	11.6	10.8	10.5	10.3	9.7	14.1	8.3	11.1
22	9.0	7.6	8.1	8.7	8.3	8.0	8.0	8.7	9.2	9.5	9.9	10.6	11.7	13.1	13.0	13.7	12.7	12.6	13.9	13.8	12.8	10.9	9.1	8.2	13.9	7.6	10.5
23	7.8	7.0	6.6	6.7	7.2	7.9	8.8	9.9	10.9	11.9	13.2	14.6	15.1	15.8	16.5	17.4	17.1	15.9	14.3	12.7	12.1	11.7	11.4	10.7	17.4	6.6	11.8
24	10.2	9.8	9.2	8.7	8.5	7.7	6.3	6.4	8.9	9.3	9.7	11.6	12.5	13.3	14.6	15.4	16.3	16.6	16.8	15.3	13.5	11.2	7.6	7.1	16.8	6.3	11.1
25	5.9	5.7	5.8	4.8	2.1	2.4	3.3	4.1	5.3	8.0	9.3	10.0	10.6	10.5	11.1	11.4	13.6	14.1	14.4	13.0	12.0	10.8	9.8	9.6	14.4	2.1	8.6
26	9.3	9.0	8.6	8.5	8.6	9.0	9.1	9.3	9.7	10.2	10.8	10.9	11.0	12.0	13.2	13.4	13.1	13.3	13.5	12.5	11.5	10.7	10.6	10.1	13.5	8.5	10.7
27	9.6	9.4	9.3	9.0	8.9	8.8	8.9	9.2	9.0	9.3	9.4	9.9	10.5	11.3	12.1	12.4	11.9	13.1	12.8	12.2	11.0	10.3	9.6	8.6	13.1	8.6	10.3
28	8.4	8.8	8.1	8.5	9.0	8.7	8.1	8.5	9.1	9.5	10.0	10.2	11.3	12.2	13.0	14.1	12.8	12.0	11.9	11.6	11.2	9.5	8.0	7.2	14.1	7.2	10.1
29	7.0	7.1	6.5	6.2	4.1	3.4	1.9	2.1	4.2	8.6	10.9	12.5	13.7	14.5	14.2	14.3	13.5	14.4	13.5	12.0	10.4	9.4	7.9	5.4	14.5	1.9	9.1
30	3.4	2.1	1.8	2.6	3.6	2.7	1.6	0.9	3.1	6.1	8.3	10.2	11.1	11.8	12.7	14.0	14.4	14.4	14.0	13.0	11.3	10.3	10.8	10.6	14.4	0.9	8.1
31	10.2	9.7	9.6	10.2	9.9	9.8	9.3	9.0	8.8	8.8	9.0	10.6	11.2	12.3	12.4	12.4	12.9	12.6	12.6	12.7	12.0	11.2	10.6	10.6	12.9	8.8	10.8
Max.	**10.2**	**10.3**	**11.4**	**11.4**	**10.9**	**9.9**	**9.8**	**9.9**	**10.9**	**11.9**	**13.7**	**15.2**	**16.1**	**16.9**	**18.0**	**18.6**	**18.7**	**18.7**	**18.5**	**18.2**	**16.7**	**14.8**	**11.9**	**11.4**	**18.7**		
Min.	**3.4**	**2.1**	**1.8**	**2.2**	**1.3**	**0.5**	**-0.3**	**0.1**	**3.1**	**6.1**	**8.3**	**9.2**	**9.7**	**10.5**	**10.7**	**11.3**	**11.9**	**12.0**	**11.9**	**11.5**	**10.4**	**9.3**	**6.0**	**4.0**		**-0.3**	
Avg.	**8.0**	**7.4**	**7.3**	**7.3**	**7.0**	**6.6**	**6.3**	**6.7**	**8.4**	**9.9**	**11.1**	**12.2**	**13.1**	**13.9**	**14.5**	**14.9**	**15.0**	**15.0**	**14.6**	**13.8**	**12.8**	**11.4**	**9.9**	**8.8**			**10.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.9	10.9	10.8	10.7	10.7	10.7	10.5	10.9	11.4	11.7	13.2	14.3	14.7	13.9	14.1	14.2	14.3	12.6	11.9	10.9	9.8	9.4	9.3	9.0	14.7	9.0	11.7
2	9.0	9.1	8.6	8.7	8.4	8.7	8.9	9.1	9.3	9.5	9.8	9.2	10.0	10.4	10.9	10.8	11.3	10.9	10.5	10.1	9.5	9.2	8.9	8.7	11.3	8.4	9.6
3	8.4	7.9	7.7	7.7	7.9	8.3	7.6	7.7	8.0	8.0	9.0	9.1	9.2	9.1	9.3	10.0	10.7	11.3	11.1	10.1	9.5	8.9	8.5	9.1	11.3	7.6	8.9
4	9.1	9.1	8.8	8.4	8.1	8.2	8.1	7.2	7.4	8.7	9.8	10.3	11.0	11.5	11.9	12.1	12.3	12.7	12.6	11.7	10.8	7.0	4.1	2.8	12.7	2.8	9.3
5	2.2	2.3	2.0	2.5	1.9	1.6	1.7	1.8	3.7	5.1	7.0	9.5	11.7	13.3	14.2	14.3	13.4	11.8	11.0	9.7	8.1	5.0	4.1	3.2	14.3	1.6	6.7
6	1.4	0.4	-0.1	-0.3	0.4	0.1	1.1	4.4	6.3	7.2	7.3	9.1	9.5	9.3	9.0	9.4	9.3	9.4	9.3	9.0	8.9	8.5	8.1	8.2	9.5	-0.3	6.0
7	8.1	8.8	8.4	8.0	9.2	9.2	9.4	8.5	8.9	9.6	9.4	9.2	9.1	9.2	9.1	9.8	10.2	10.4	9.9	9.0	8.6	8.5	8.4	8.6	10.4	8.0	9.1
8	8.7	9.0	9.1	8.9	9.0	8.9	8.5	8.2	8.2	8.9	9.4	10.3	10.9	10.8	10.6	10.5	10.1	9.2	8.5	8.2	8.1	8.3	8.2	8.4	10.9	8.1	9.1
9	8.2	7.9	8.0	7.9	7.8	8.1	7.9	7.3	7.2	7.5	8.2	8.8	9.5	10.0	10.4	10.5	10.2	10.0	10.2	10.1	9.6	9.2	9.3	8.8	10.5	7.2	8.9
10	8.5	8.3	8.2	7.9	7.8	7.7	7.9	7.8	8.0	8.4	8.9	9.9	10.9	11.3	12.2	12.9	12.6	12.4	11.6	10.8	10.6	10.3	10.2	9.7	12.9	7.7	9.8
11	9.4	8.6	8.1	8.0	7.6	7.4	7.2	7.2	7.4	7.7	8.3	9.1	10.0	10.0	9.9	11.7	12.2	12.4	12.0	11.4	10.7	9.7	9.8	9.4	12.4	7.2	9.4
12	9.4	9.2	9.5	9.4	8.6	8.1	7.7	7.8	7.9	8.5	9.0	9.9	10.7	11.4	11.1	10.1	10.2	9.9	9.8	9.7	9.5	9.3	9.4	9.5	11.4	7.7	9.4
13	9.4	9.5	9.4	9.5	9.3	9.1	8.9	9.1	9.3	9.3	8.9	8.4	8.5	8.4	8.3	8.2	8.6	8.6	8.4	8.3	7.9	7.2	7.6	7.4	9.5	7.2	8.7
14	7.6	7.4	7.4	7.1	6.6	6.4	6.7	6.4	7.1	7.6	7.6	7.7	8.3	8.7	9.0	9.5	9.8	9.8	9.7	9.4	8.1	8.2	8.4	8.0	9.8	6.4	8.0
15	7.9	7.8	7.7	7.7	7.5	7.4	6.8	6.1	6.4	7.7	8.9	10.0	10.8	10.6	11.0	10.6	10.5	10.1	9.8	9.2	8.7	8.3	7.5	7.1	11.0	6.1	8.6
16	6.9	5.8	6.1	6.1	6.9	7.1	7.3	7.1	6.4	6.4	7.1	8.5	10.1	11.2	10.9	11.1	9.4	10.7	9.0	8.5	6.3	6.9	7.0	6.2	11.2	5.8	7.9
17	5.9	5.4	4.8	4.9	5.5	6.0	6.1	5.9	5.9	5.9	6.4	7.6	8.3	8.7	8.7	8.6	8.7	8.0	7.0	6.4	5.8	5.5	5.3	5.5	8.7	4.8	6.5
18	6.2	6.4	6.3	6.3	6.1	6.1	6.1	6.4	6.5	6.7	7.9	8.8	8.5	8.6	8.3	8.4	8.3	7.9	7.3	7.2	6.5	5.9	5.6	5.4	8.8	5.4	7.0
19	5.3	5.2	5.0	5.1	4.9	5.2	5.5	5.5	5.7	5.9	6.2	6.5	7.1	7.5	7.8	7.8	7.4	7.1	6.6	6.2	5.8	5.5	5.1	4.8	7.8	4.8	6.0
20	4.6	4.6	4.2	4.1	3.9	3.6	2.5	1.7	1.7	3.3	4.6	5.0	5.0	5.2	6.3	6.7	6.6	6.6	6.3	5.1	1.7	-0.3	-1.1	-1.4	6.7	-1.4	3.8
21	0.2	-0.2	-0.1	-0.7	1.1	1.7	2.3	2.9	3.4	3.7	5.1	6.4	7.2	8.0	7.9	8.2	7.4	6.9	6.8	5.4	2.2	1.0	1.0	1.3	8.2	-0.7	3.7
22	0.5	0.9	0.4	-0.6	-1.0	-1.5	-2.6	-2.1	-2.3	0.1	2.7	5.6	6.6	7.2	7.9			5.9	5.4	4.7	4.4	4.4	4.4	4.4	7.9	-2.6	2.5
23	4.6	4.7	4.8	5.1	5.9	7.5	7.5	7.4	7.2	7.3	7.3	7.4	7.5	7.7	7.3	7.4	7.2	6.6	7.0	6.8	6.4	6.3	6.2	5.7	7.7	4.6	6.6
24	5.8	5.9	5.6	5.3	5.2	5.1	4.9	4.9	4.4	4.8	5.2	5.7	6.5	7.3	7.2	7.2	7.6	7.5	7.5	6.8	6.1	5.5	5.3	4.9	7.6	4.4	5.9
25	4.4	4.8	4.7	4.9	5.0	5.2	4.6	4.1	3.8	4.4	5.6	6.5	7.1	7.3	7.4	7.8	7.9	7.7	7.4	6.9	5.8	5.1	4.8	4.4	7.9	3.8	5.7
26	4.3	4.9	4.7	4.1	3.9	3.7	3.3	2.7	2.7	3.6	5.2	6.8	8.8	10.1	10.6	10.0	9.5	8.6	9.2	6.9	3.5	3.8	4.6	4.7	10.6	2.7	5.8
27	3.9	3.7	3.5	3.1	2.9	1.5	1.3	1.2	1.3	1.9	2.2	3.3	5.0	6.8	7.7	8.2	8.5	8.3	7.8	6.1	4.1	3.6	2.7	2.0	8.5	1.2	4.2
28	1.4	-0.2	1.1	0.9	1.1	1.3	1.0	-1.6	-2.7	-0.5	3.3	6.0	7.6	8.8	9.5	10.0	9.5	9.0	8.0	6.2	3.0	1.2	2.5	4.3	10.0	-2.7	3.8
29	5.0	4.1	3.6	2.8	1.9	0.8	0.4	0.4	0.9	1.2	4.0	6.3	6.6	5.4	5.4	5.8	6.3	6.7	6.7	6.0	4.9	3.7	3.5	1.0	6.7	0.4	3.9
30	-0.8	-1.4	-0.4	0.3	0.2	-0.1	-1.0	0.3	0.5	1.7	3.6	5.3	6.0	6.6	6.9	6.6	6.6	6.4	6.1	4.8	2.8	-0.5	-2.0	-1.8	6.9	-2.0	2.4
Max.	**10.9**	**10.9**	**10.8**	**10.7**	**10.7**	**10.7**	**10.5**	**10.9**	**11.4**	**11.7**	**13.2**	**14.3**	**14.7**	**13.9**	**14.2**	**14.3**	**14.3**	**12.7**	**12.6**	**11.7**	**10.8**	**10.3**	**10.2**	**9.7**	**14.7**		
Min.	**-0.8**	**-1.4**	**-0.4**	**-0.7**	**-1.0**	**-1.5**	**-2.6**	**-2.1**	**-2.7**	**-0.5**	**2.2**	**3.3**	**5.0**	**5.2**	**5.4**	**5.8**	**6.3**	**5.9**	**5.4**	**4.7**	**1.7**	**-0.5**	**-2.0**	**-1.8**		**-2.7**	
Avg.	**5.9**	**5.7**	**5.6**	**5.5**	**5.5**	**5.4**	**5.3**	**5.2**	**5.4**	**6.0**	**7.0**	**8.0**	**8.7**	**9.1**	**9.4**	**9.6**	**9.5**	**9.2**	**8.8**	**8.1**	**6.9**	**6.2**	**5.9**	**5.6**			**7.0**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-1.7	-1.8	-1.9	-1.2	-0.6	-0.2	0.3	0.6	0.7	1.6	2.6	3.2	4.6	6.0	7.1	6.7	6.1	5.6	5.7	5.2	4.9	4.5	4.2	4.4	7.1	-1.9	2.8
2	4.4	4.2	3.5	2.9	2.6	2.2	1.7	2.1	1.4	1.0	2.3	3.8	4.7	5.6	5.9	6.3	5.9	4.8	5.1	3.9	3.7	1.7	0.9	0.8	6.3	0.8	3.4
3	0.2	0.0	-0.1	-0.5	-0.8	-0.7	-0.7	-0.7	-1.0	-0.8	-0.6	-0.2	0.1	0.5	0.8	1.0	1.4	0.9	0.9	0.3	-0.5	-1.9	-0.9	-1.5	1.4	-1.9	-0.2
4	-2.8	-4.0	-4.6	-4.3	-5.1	-6.4	-6.4	-7.2	-5.8	-4.6	-2.0	0.3	2.0	3.1	3.9	4.0	3.9	3.3	2.9	1.4	0.5	0.1	-0.1	-0.7	4.0	-7.2	-1.2
5	-1.0	-1.1	-1.4	-1.6	-1.6	-1.0	-1.3	-1.7	-2.3	-2.1	-1.5	-1.0	-0.7	-0.5	-0.2	-0.2	-0.3	-0.4	-0.3	-0.5	-0.8	-1.2	-1.6	-2.2	-0.2	-2.3	-1.1
6	-2.1	-2.1	-2.4	-2.6	-2.7	-2.7	-2.5	-2.3	-2.4	-2.4	-2.1	-1.8	-1.5	-1.2	-0.9	-0.7	-0.5	-0.5	-0.6	-1.0	-1.4	-1.7	-1.8	-2.0	-0.5	-2.7	-1.7
7	-2.1	-2.4	-3.0	-2.4	-2.4	-2.7	-2.9	-2.9	-3.4	-3.4	-2.9	-2.9	-2.5	-2.4	-2.1	-1.8	-1.6	-1.5	-1.8	-2.0	-2.1	-2.4	-2.4	-3.0	-1.5	-3.4	-2.5
8	-2.9	-2.7	-2.8	-2.8	-3.3	-4.1	-5.6	-7.1	-7.9	-7.2	-5.1	-3.3	-2.1	-1.6	-0.9	-0.6	-0.5	-0.6	-1.4	-3.4	-5.3	-8.0	-8.5	-7.1	-0.5	-8.5	-4.0
9	-7.8	-7.5	-5.2	-2.7	-0.2	0.1	-0.3	-0.5	-0.4	0.3	0.4	0.6	0.7	2.1	2.7	3.2	3.8	4.3	4.6	4.6	4.8	5.1	5.4	5.6	5.6	-7.8	1.0
10	5.3	4.9	4.5	4.6	5.2	4.9	3.9	2.8	1.4	0.3	0.3	2.7	3.7	4.9	6.0	6.5	7.0	6.2	5.6	5.0	5.2	5.3	5.4	5.0	7.0	0.3	4.4
11	5.0	5.0	4.9	5.8	5.8	5.3	5.2	5.3	5.2	2.7	-0.2	-2.7	-4.2	-4.6	-4.9	-5.0	-5.2	-5.1	-5.1	-5.2	-5.0	-5.1	-5.1	-5.2	5.8	-5.2	-0.5
12	-4.9	-4.7	-4.5	-4.3	-4.5	-5.1	-5.8	-6.1	-6.3	-6.7	-6.5	-5.9	-5.0	-4.7	-4.6	-4.4	-4.2	-4.3	-4.7	-5.6	-6.3	-6.7	-7.3	-8.6	-4.2	-8.6	-5.5
13	-9.7	-9.8	-10.5	-10.6	-10.8	-11.6	-12.4	-13.1	-13.3	-12.7	-10.6	-8.0	-6.4	-5.3	-4.5	-3.0	-2.4	-1.4	-1.5	-2.2	-2.0	-1.6	-1.4	-1.0	-1.0	-13.3	-6.9
14	-0.5	-0.2	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.7	1.2	1.3	0.9	0.8	0.7	0.4	0.4	0.8	1.3	-0.5	0.4
15	0.6	-0.4	-2.1	-3.1	-3.3	-4.1	-4.7	-5.0	-5.6	-5.8	-6.3	-6.0	-5.5	-5.0	-4.6	-4.2	-4.2	-4.5	-4.7	-5.7	-6.2	-7.1	-7.7	-7.8	0.6	-7.8	-4.7
16	-7.6	-7.1	-7.0	-6.9	-7.0	-7.2	-7.2	-7.5	-7.8	-7.7	-7.6	-7.7	-7.0	-7.1	-6.5	-5.8	-5.4	-5.7	-7.1	-8.4	-8.6	-9.7	-11.1	-11.4	-5.4	-11.4	-7.6
17	-12.9	-13.5	-14.2	-14.9	-14.7	-13.2	-12.2	-11.5	-10.7	-10.4	-9.4	-8.2	-7.1	-6.9	-6.4	-5.7	-5.5	-5.8	-6.3	-8.4	-9.3	-7.9	-6.7	-3.5	-3.5	-14.9	-9.4
18	-2.6	-2.7	-2.9	-1.0	-0.6	-0.5	-0.8	-0.3	0.3	0.3	-0.5	0.1	1.4	3.3	3.6	4.3	4.3	4.1	3.5	3.1	3.2	2.5	3.0	0.2	4.3	-2.9	1.1
19	-0.4	-2.7	-2.9	-3.7	-3.7	-4.0	-4.4	-5.0	-6.1	-7.2	-7.1	-7.7	-7.7	-7.1	-6.1	-5.2	-5.4	-5.1	-5.0	-5.5	-5.3	-5.3	-5.5	-5.6	-0.4	-7.7	-5.2
20	-5.5	-5.3	-5.2	-4.9	-4.9	-4.8	-5.0	-5.3	-6.2	-7.5	-7.9	-8.1	-7.1	-6.9	-7.0	-6.9	-7.5	-7.5	-7.4	-7.2	-6.7	-7.0	-6.8	-6.8	-4.8	-8.1	-6.5
21	-6.6	-6.5	-6.3	-6.0	-6.1	-6.6	-6.8	-9.0	-10.0	-11.1	-8.6	-7.7	-6.3	-5.4	-4.5	-3.8	-4.0	-4.5	-5.3	-6.6	-7.9	-8.7	-9.5	-10.0	-3.8	-11.1	-7.0
22	-10.4	-10.7	-11.3	-11.0	-11.6	-11.7	-11.5	-11.9	-12.3	-12.7	-12.2	-12.1	-11.4	-10.6	-10.0	-9.8	-9.6	-9.8	-10.2	-11.3	-12.5	-13.1	-13.8	-14.0	-9.6	-14.0	-11.5
23	-12.5	-13.0	-12.4	-12.3	-12.1	-12.6	-12.9	-13.5	-13.1	-13.4	-13.3	-12.9	-12.0	-11.1	-10.1	-9.5	-10.1	-10.0	-10.3	-10.4	-9.7	-9.4	-9.5	-10.3	-9.4	-13.5	-11.5
24	-8.8	-9.0	-9.3	-8.7	-8.8	-9.3	-11.2	-12.0	-11.8	-11.0	-11.2	-10.9	-9.9	-9.0	-7.9	-7.4	-6.9	-7.7	-9.6	-11.4	-12.7	-15.3	-17.1	-18.5	-6.9	-18.5	-10.6
25	-17.6	-14.4	-9.4	-9.3	-7.4	-7.0	-6.9	-6.3	-6.5	-5.7	-5.2	-4.5	-3.8	-3.6	-2.8	-1.9	-2.0	-2.8	-4.6	-6.8	-5.0	-5.6	-5.4	-5.1	-1.9	-17.6	-6.2
26	-4.9	-4.1	-5.2	-5.8	-7.4	-7.6	-7.6	-7.3	-7.2	-7.6	-7.3	-7.6	-8.1	-7.8	-8.3	-8.5	-8.8	-9.5	-10.0	-10.7	-10.5	-10.8	-10.9	-12.2	-4.1	-12.2	-8.2
27	-12.6	-13.4	-13.8	-13.7	-13.6	-14.3	-14.4	-14.8	-15.1	-15.0	-14.9	-14.3	-13.9	-13.0	-12.3	-11.8	-11.7	-12.2	-12.7	-13.3	-14.2	-14.3	-15.6	-17.2	-11.7	-17.2	-13.8
28	-18.4	-19.9	-21.0	-20.9	-20.6	-20.8	-21.0	-21.4	-21.6	-21.2	-20.3	-16.1	-11.7	-7.3	-9.3	-7.3	-7.0	-9.1	-12.4	-13.1	-13.8	-15.0	-15.5	-15.3	-7.0	-21.6	-15.8
29	-15.8	-15.4	-14.7	-14.6	-14.9	-14.3	-12.5	-11.1	-9.8	-9.3	-9.9	-8.3	-6.5	-5.6	-4.7	-3.9	-2.7	-1.7	-1.0	-1.0	-1.2	-1.2	-1.2	-2.0	-1.0	-15.8	-7.6
30	-2.2	-2.5	-2.1	-3.8	-3.8	-3.2	-3.4	-3.1	-2.5	-2.2	-4.2	-5.2	-3.8	-2.0	-0.4	-1.2	-1.4	-2.4	-5.2	-7.8	-8.8	-8.5	-9.4	-9.4	-0.4	-9.4	-4.1
31	-10.8	-11.0	-10.8	-11.1	-10.4	-6.9	-6.4	-8.9	-10.4	-11.1	-10.8	-9.3	-6.8	-6.4	-5.1	-3.7	-3.8	-4.4	-5.4	-7.9	-9.7	-10.0	-9.4	-8.9	-3.7	-11.1	-8.3
Max.	**5.3**	**5.0**	**4.9**	**5.8**	**5.8**	**5.3**	**5.2**	**5.3**	**5.2**	**2.7**	**2.6**	**3.8**	**4.7**	**6.0**	**7.1**	**6.7**	**7.0**	**6.2**	**5.7**	**5.2**	**5.2**	**5.3**	**5.4**	**5.6**	**7.1**		
Min.	**-18.4**	**-19.9**	**-21.0**	**-20.9**	**-20.6**	**-20.8**	**-21.0**	**-21.4**	**-21.6**	**-21.2**	**-20.3**	**-16.1**	**-13.9**	**-13.0**	**-12.3**	**-11.8**	**-11.7**	**-12.2**	**-12.7**	**-13.3**	**-14.2**	**-15.3**	**-17.1**	**-18.5**		**-21.6**	
Avg.	**-5.5**	**-5.6**	**-5.6**	**-5.5**	**-5.5**	**-5.5**	**-5.7**	**-6.0**	**-6.1**	**-6.2**	**-5.9**	**-5.2**	**-4.3**	**-3.5**	**-3.0**	**-2.6**	**-2.5**	**-2.8**	**-3.3**	**-4.2**	**-4.6**	**-5.1**	**-5.3**	**-5.6**			**-4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-8.6	-7.6	-7.4	-7.3	-7.4	-7.2	-4.8	-5.1	-4.4	-3.5	-3.0	-2.2	-1.5	-0.8	-0.8	-1.0	-0.9	-1.9	-3.2	-3.6	-3.9	-3.8	-3.4	-3.8	-0.8	-8.6	-4.1
2	-4.4	-4.4	-4.7	-4.5	-4.8	-5.2	-5.6	-5.9	-7.3	-9.9	-11.3	-12.0	-12.4	-12.6	-12.6	-12.5	-12.4	-12.6	-13.2	-13.9	-14.0	-13.8	-13.8	-14.0	-4.4	-14.0	-9.9
3	-14.1	-14.3	-14.3	-14.5	-14.1	-13.7	-13.4	-13.6	-13.2	-13.6	-14.3	-13.8	-13.2	-12.1	-11.8	-12.3	-12.3	-12.6	-13.2	-13.5	-14.1	-14.0	-13.0	-13.2	-11.8	-14.5	-13.4
4	-12.7	-12.3	-12.4	-12.4	-12.6	-12.9	-13.6	-13.8	-14.0	-14.1	-14.3	-14.3	-13.7	-13.1	-12.6	-12.1	-11.9	-12.0	-12.0	-11.9	-12.0	-11.8	-12.0	-12.6	-11.8	-14.3	-12.8
5	-13.5	-13.3	-12.9	-12.3	-11.6	-11.6	-11.5	-11.3	-12.6	-12.1	-11.2	-10.6	-10.1	-9.9	-9.7	-8.1	-7.8	-8.8	-9.7	-9.7	-9.6	-9.4	-9.7	-9.0	-7.8	-13.5	-10.7
6	-9.2	-9.0	-7.9	-7.7	-7.5	-6.9	-6.4	-4.0	-4.5	-5.3	-5.5	-4.3	-3.2	-3.4	-4.2	-5.4	-5.2	-5.5	-5.7	-5.3	-6.9	-8.6	-9.4	-9.0	-3.2	-9.4	-6.2
7	-10.4	-12.1	-12.8	-12.9	-13.1	-13.7	-14.6	-14.9	-15.2	-15.0	-14.4	-14.3	-13.8	-13.3	-12.7	-12.6	-13.3	-14.3	-16.1	-14.4	-12.5	-11.3	-10.6	-8.8	-8.8	-16.1	-13.2
8	-8.3	-7.6	-6.4	-5.8	-5.5	-5.3	-5.2	-5.1	-5.3	-5.2	-5.3	-5.4	-5.7	-5.1	-4.2	-3.9	-3.8	-3.4	-2.3	-1.8	-1.5	-0.9	-0.4	-0.8	-0.4	-8.3	-4.3
9	-0.6	-0.1	0.0	0.1	0.6	1.7	1.8	1.7	1.7	1.7	1.3	1.2	1.5	1.8	1.5	1.7	1.5	1.2	0.9	0.8	2.5	3.0	2.9	2.2	3.0	-0.6	1.4
10	1.7	1.8	1.7	0.7	1.9	2.0	1.7	1.8	2.5	2.9	1.6	1.0	1.3	1.0	0.5	0.2	0.1	0.1	-0.3	0.0	0.3	0.6	0.4	0.4	2.9	-0.3	1.1
11	0.3	-0.3	-1.5	-1.6	-0.8	-2.2	-2.6	-1.8	-2.1	-2.6	-3.2	-2.3	-2.2	-1.7	-1.7	-1.8	-1.2	-3.8	-5.4	-6.8	-6.9	-6.3	-4.1	-3.0	0.3	-6.9	-2.7
12	-2.8	-3.4	-3.3	-3.6	-3.7	-4.6	-5.1	-4.9	-4.6	-4.1	-4.4	-5.3	-7.4	-7.5	-7.9	-9.0	-9.0	-8.7	-7.8	-7.1	-6.4	-6.1	-5.7	-5.1	-2.8	-9.0	-5.7
13	-4.6	-4.1	-3.7	-3.5	-5.2	-7.7	-7.9	-9.6	-9.1	-10.2	-11.6	-10.8	-7.3	-4.8	-3.8	-2.9	-2.5	-2.3	-2.2	-3.2	-3.1	-3.1	-2.9	-2.0	-2.0	-11.6	-5.3
14	-1.0	-1.3	-1.2	-1.3	-1.5	-1.7	-2.3	-2.6	-3.3	-3.2	-2.8	-2.1	-1.9	-1.9	-1.6	-1.7	-1.9	-2.2	-2.7	-3.3	-3.0	-3.7	-3.2	-3.2	-1.0	-3.7	-2.3
15	-3.4	-3.0	-3.0	-3.6	-3.5	-3.1	-3.2	-3.6	-4.3	-4.1	-3.9	-3.9	-3.9	-3.1	-3.0	-2.5	-2.0	-1.3	-1.1	-1.0	-1.2	-1.0	-0.5	-0.4	-0.4	-4.3	-2.6
16	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.7	-1.1	-2.4	-5.4	-9.6	-9.0	-6.1	-5.0	-4.2	-4.1	-5.4	-9.7	-12.2	-12.9	-13.2	-14.1	-14.4	-14.9	-0.4	-14.9	-6.1
17	-15.4	-15.6	-15.5	-15.9	-14.8	-13.1	-14.1	-14.7	-16.1	-16.1	-15.6	-15.3	-13.0	-10.2	-8.9	-8.7	-8.3	-7.9	-7.7	-8.3	-8.4	-9.4	-9.8	-10.1	-7.7	-16.1	-12.2
18	-9.6	-10.4	-11.9	-12.4	-12.3	-11.7	-12.0	-12.5	-13.0	-13.1	-12.6	-12.9	-13.1	-12.5	-12.1	-12.2	-12.6	-13.0	-13.4	-14.0	-14.5	-14.7	-14.8	-15.3	-9.6	-15.3	-12.8
19	-15.2	-15.4	-15.7	-16.0	-16.5	-16.8	-17.1	-16.6	-16.0	-14.9	-16.5	-15.6	-13.7	-13.8	-14.3	-14.3	-13.3	-13.7	-13.7	-14.7	-14.4	-15.2	-15.2	-15.5	-13.3	-17.1	-15.2
20	-15.3	-16.1	-15.8	-15.8	-16.3	-17.6	-18.4	-19.2	-19.3	-20.3	-20.5	-20.5	-20.4	-20.8	-20.7	-20.7	-20.9	-21.2	-21.5	-21.9	-22.2	-22.6	-22.8	-23.4	-15.3	-23.4	-19.7
21	-23.7	-23.5	-23.7	-24.5	-24.5	-24.7	-24.8	-25.2	-24.9	-26.0	-25.8	-26.4	-25.4	-25.2	-25.3	-25.0	-25.1	-25.6	-26.0	-25.6	-26.0	-24.8	-24.4	-23.8	-23.5	-26.4	-25.0
22	-23.3	-23.2	-22.0	-21.2	-20.5	-19.8	-20.8	-22.5	-22.7	-23.9	-24.6	-24.9	-24.0	-22.0	-20.1	-19.4	-18.5	-17.5	-16.2	-15.7	-15.7	-17.1	-20.4	-21.0	-15.7	-24.9	-20.7
23	-21.1	-21.7	-20.3	-18.8	-17.4	-15.7	-14.8	-13.9	-12.9	-12.6	-12.6	-12.2	-11.7	-11.5	-10.6	-9.0	-8.8	-8.5	-7.7	-5.0	-3.8	-3.9	-3.3	-2.8	-2.8	-21.7	-11.7
24	-2.0	-0.8	0.5	1.2	1.5	2.3	2.9	2.6	2.3	2.3	2.2	2.2	2.1	1.4	1.3	0.9	0.9	0.7	0.6	0.4	0.2	-0.7	-3.4	-5.2	2.9	-5.2	0.7
25	-6.7	-8.1	-9.2	-9.3	-9.6	-9.8	-9.4	-9.6	-10.1	-11.1	-12.3	-13.7	-13.9	-16.6	-17.4	-17.5	-16.5	-16.1	-18.7	-18.0	-17.8	-18.5	-18.5	-18.2	-6.7	-18.7	-13.6
26	-19.2	-19.3	-19.3	-19.4	-17.8	-17.4	-16.2	-15.6	-16.0	-16.1	-15.3	-15.1	-15.2	-14.8	-15.2	-14.6	-15.3	-16.1	-15.9	-13.3	-15.4	-18.8	-20.2	-18.6	-13.3	-20.2	-16.7
27	-18.8	-17.7	-18.0	-19.2	-19.2	-18.9	-18.7	-17.9	-16.6	-17.2	-16.4	-15.5	-15.4	-14.7	-13.7	-13.3	-12.7	-13.7	-13.1	-13.3	-13.2	-12.8	-12.5	-12.1	-12.1	-19.2	-15.6
28	-11.5	-11.3	-11.2	-11.0	-11.2	-10.8	-10.6	-10.6	-10.8	-10.7	-10.3	-10.4	-10.2	-10.3	-10.8	-10.5	-10.2	-10.2	-10.2	-10.6	-9.6	-11.2	-11.6	-11.5	-9.6	-11.6	-10.7
29	-10.4	-11.6	-12.1	-12.5	-12.4	-12.8	-13.3	-13.8	-14.4	-14.5	-14.7	-14.9	-15.0	-15.1	-15.2	-15.1	-15.1	-15.2	-15.6	-16.0	-16.1	-16.4	-16.6	-17.1	-10.4	-17.1	-14.4
30	-17.8	-18.3	-19.3	-19.9	-19.8	-21.1	-20.7	-21.4	-20.5	-20.5	-20.7	-19.7	-20.0	-19.8	-19.5	-20.0	-20.3	-20.2	-20.0	-19.6	-19.7	-20.7	-20.0	-19.2	-17.8	-21.4	-19.9
Max.	**1.7**	**1.8**	**1.7**	**1.2**	**1.9**	**2.3**	**2.9**	**2.6**	**2.5**	**2.9**	**2.2**	**2.2**	**2.1**	**1.8**	**1.5**	**1.7**	**1.5**	**1.2**	**0.9**	**0.8**	**2.5**	**3.0**	**2.9**	**2.2**	**3.0**		
Min.	**-23.7**	**-23.5**	**-23.7**	**-24.5**	**-24.5**	**-24.7**	**-24.8**	**-25.2**	**-24.9**	**-26.0**	**-25.8**	**-26.4**	**-25.4**	**-25.2**	**-25.3**	**-25.0**	**-25.1**	**-25.6**	**-26.0**	**-25.6**	**-26.0**	**-24.8**	**-24.4**	**-23.8**		**-26.4**	
Avg.	**-10.1**	**-10.1**	**-10.1**	**-10.2**	**-10.0**	**-10.0**	**-10.0**	**-10.2**	**-10.3**	**-10.6**	**-10.9**	**-10.8**	**-10.3**	**-9.9**	**-9.7**	**-9.6**	**-9.5**	**-9.9**	**-10.2**	**-10.1**	**-10.1**	**-10.4**	**-10.5**	**-10.4**			**-10.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 2 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-19.3	-19.8	-20.1	-20.2	-20.2	-20.4	-20.0	-19.6	-19.6	-18.3	-18.1	-16.5	-16.4	-15.2	-15.0	-14.9	-14.2	-14.4	-15.3	-16.2	-16.3	-15.8	-15.0	-13.6	-13.6	-20.4	-17.3
2	-12.9	-12.6	-12.6	-12.6	-12.3	-11.7	-9.5	-8.9	-8.3	-3.7	-2.5	-2.2	-2.0	-1.2	-0.2	0.1	0.3	0.5	0.3	0.4	0.6	0.9	1.0	1.5	1.5	-12.9	-4.5
3	1.7	2.0	2.1	2.3	2.4	2.6	2.7	3.1	3.3	3.1	3.1	3.1	3.1	2.5	3.0	3.0	2.9	3.4	3.6	3.9	3.7	3.5	3.2	2.9	3.9	1.7	2.9
4	2.6	2.6	2.5	2.2	2.2	2.3	2.4	2.4	2.2	2.1	2.3	2.4	2.7	2.7	2.4	1.9	2.8	3.0	3.0	2.7	2.8	2.6	2.8	2.5	3.0	1.9	2.5
5	2.5	2.5	2.3	2.6	2.7	2.9	2.7	2.9	2.7	2.2	2.6	2.5	2.8	2.5	2.4	2.2	2.5	2.9	2.4	2.1	2.5	2.4	2.0	1.9	2.9	1.9	2.5
6	1.7	1.7	2.5	2.1	2.0	2.2	2.4	2.7	3.4	2.6	2.2	1.9	1.7	1.8	2.1	2.2	1.5	1.1	1.1	1.3	1.5	1.5	1.4	1.1	3.4	1.1	1.9
7	0.7	0.6	0.2	-1.0	-1.6	-2.7	-3.2	-3.4	-3.5	-4.4	-4.7	-5.8	-6.1	-5.7	-5.4	-5.4	-5.6	-6.5	-7.6	-8.5	-8.9	-9.1	-9.2	-9.6	0.7	-9.6	-4.9
8	-10.1	-10.6	-10.3	-9.5	-8.1	-7.3	-6.2	-4.3	-0.4	0.4	0.8	2.0	2.8	2.3	1.2	1.3	1.6	2.2	2.8	2.7	2.5	2.1	2.0	1.7	2.8	-10.6	-1.6
9	1.6	1.5	1.6	-0.8	-2.7	-3.9	-4.4	-5.7	-6.2	-6.6	-6.2	-5.6	-5.4	-5.4	-5.2	-4.9	-5.1	-5.2	-6.1	-6.6	-6.8	-6.2	-5.9	-5.7	1.6	-6.8	-4.4
10	-5.7	-4.9	-4.0	-3.6	-4.2	-5.9	-6.6	-6.7	-6.2	-7.5	-8.9	-9.7	-10.7	-11.7	-10.7	-10.6	-11.9	-12.1	-13.3	-13.2	-14.8	-13.4	-12.1	-12.3	-3.6	-14.8	-9.2
11	-12.7	-14.1	-14.7	-16.3	-17.2	-16.9	-15.6	-14.8	-16.1	-17.3	-16.1	-12.2	-11.6	-10.4	-9.8	-6.6	-8.0	-9.7	-10.7	-11.4	-11.3	-12.0	-11.5	-12.8	-6.6	-17.3	-12.9
12	-16.2	-14.9	-15.2	-16.5	-16.1	-16.4	-17.6	-17.2	-15.2	-13.5	-12.1	-10.7	-10.8	-10.8	-10.4	-9.9	-9.7	-10.9	-8.3	-7.0	-6.8	-7.1	-7.5	-7.3	-6.8	-17.6	-12.0
13	-7.7	-7.5	-8.0	-7.6	-7.8	-8.8	-9.1	-9.4	-9.4	-8.6	-11.1	-10.1	-10.2	-11.4	-11.6	-10.0	-11.4	-11.4	-14.3	-15.6	-16.8	-16.7	-16.3	-17.0	-7.5	-17.0	-11.2
14	-16.3	-16.2	-16.5	-15.8	-16.8	-16.8	-16.2	-17.0	-14.6	-9.1	-7.6	-7.7	-4.1	-4.8	-3.9	-4.2	-3.8	-3.7	-4.6	-3.5	-2.4	-1.8	-1.2	-1.0	-1.0	-17.0	-8.7
15	-0.7	-0.2	-0.1	-0.2	-0.7	-0.6	-0.5	-0.5	-0.1	-0.2	-0.9	-1.0	-0.8	-0.9	-1.2	-1.8	-1.9	-2.5	-3.8	-7.3	-5.5	-6.7	-6.9	-6.5	-0.1	-7.3	-2.1
16	-8.1	-9.2	-9.7	-9.4	-11.4	-14.2	-15.1	-15.4	-15.8	-17.0	-17.2	-16.6	-15.7	-12.6	-6.0	-6.3	-5.3	-5.8	-5.9	-5.7	-5.7	-5.2	-3.9	-2.7	-2.7	-17.2	-10.0
17	-2.3	-1.0	0.0	-0.3	-0.7	-0.5	-0.7	-0.3	0.3	0.6	0.3	0.5	1.1	1.4	1.5	1.4	1.3	1.1	1.2	1.2	1.3	1.3	1.0	0.9	1.5	-2.3	0.4
18	1.0	1.0	1.2	1.2	1.2	1.1	1.4	1.2	1.3	1.4	1.6	1.6	1.5	1.9	2.1	2.2	2.1	2.2	2.1	2.2	1.9	2.2	2.2	2.1	2.2	1.0	1.7
19	2.0	2.2	2.3	2.1	2.0	1.9	1.9	1.7	1.7	1.7	1.6	1.4	1.2	0.9	0.9	0.6	0.9	1.3	1.4	1.5	1.6	1.7	1.4	1.5	2.3	0.6	1.6
20	1.6	1.3	0.1	0.8	0.9	1.0	1.1	1.1	1.3	1.1	1.0	0.6	-0.1	1.0	1.5	0.7	0.6	-0.3	-3.1	-5.6	-6.6	-6.5	-4.9	-4.6	1.6	-6.6	-0.7
21	-4.1	-6.5	-7.8	-7.3	-6.0	-4.8	-5.3	-5.7	-7.5	-6.5	-4.2	-3.9	-4.8	-5.3	-5.0	-4.9	-5.2	-8.0	-10.8	-11.5	-12.2	-12.3	-13.6	-13.5	-3.9	-13.6	-7.4
22	-14.0	-14.2	-14.0	-12.3	-10.3	-8.7	-7.8	-5.0	-3.6	-3.0	-2.5	-2.6	-2.8	-2.5	-2.6	-2.6	-2.5	-2.5	-2.4	-2.2	-2.3	-2.7	-2.7	-2.6	-2.2	-14.2	-5.3
23	-2.7	-2.6	-2.3	-2.2	-2.2	-1.8	-1.8	-2.1	-1.6	-1.8	-2.4	-4.2	-6.8	-7.0	-6.8	-6.7	-7.8	-8.1	-8.4	-7.8	-7.5	-7.6	-7.8	-8.5	-1.6	-8.5	-4.9
24	-8.6	-7.9	-8.2	-7.9	-8.4	-8.0	-8.6	-9.7	-10.7	-9.9	-8.6	-8.6	-9.7	-9.1	-7.9	-8.0	-7.2	-8.1	-10.3	-11.2	-10.7	-10.3	-9.6	-8.1	-7.2	-11.2	-9.0
25	-8.3	-7.8	-6.9	-5.4	-4.8	-4.7	-4.1	-3.5	-3.2	-3.2	-3.2	-3.2	-3.0	-3.4	-3.9	-4.0	-3.5	-5.3	-6.9	-7.8	-8.2	-8.8	-9.5	-10.2	-3.0	-10.2	-5.5
26	-10.6	-11.6	-13.6	-14.8	-15.5	-16.0	-16.2	-16.4	-16.4	-16.1	-15.8	-15.5	-15.7	-15.6	-15.5	-15.4	-15.0	-15.2	-15.2	-15.4	-15.6	-15.7	-15.5	-15.7	-10.6	-16.4	-15.2
27	-15.7	-15.6	-15.7	-16.1	-16.4	-16.5	-16.7	-17.0	-17.1	-17.4	-17.7	-17.9	-17.8	-17.7	-17.9	-17.9	-18.1	-18.3	-18.6	-18.8	-19.3	-19.4	-19.5	-19.7	-15.6	-19.7	-17.6
28	-19.9	-19.8	-20.0	-19.9	-20.0	-20.3	-20.3	-20.4	-20.7	-21.3	-21.3	-21.0	-21.6	-21.4	-21.3	-21.4	-21.7	-22.2	-22.4	-23.1	-23.4	-23.9	-24.1	-24.0	-19.8	-24.1	-21.5
29	-24.4	-25.0	-24.1	-23.9	-24.2	-24.3	-24.5	-24.5	-24.7	-24.7	-24.5	-24.5	-24.9	-24.7	-24.6	-24.6	-24.3	-24.3	-24.3	-24.6	-24.1	-24.5	-24.9	-25.4	-23.9	-25.4	-24.5
30	-25.9	-25.8	-25.8	-25.7	-25.6	-25.5	-26.4	-25.9	-26.0	-25.9	-26.6	-26.6	-26.9	-27.3	-27.0	-26.5	-26.3	-26.3	-26.5	-26.9	-27.2	-26.9	-26.8	-27.3	-25.5	-27.3	-26.4
31	-26.8	-27.1	-26.8	-26.8	-26.4	-26.4	-26.7	-25.3	-25.6	-24.4	-25.1	-25.2	-24.8	-25.0	-25.0	-24.6	-24.4	-24.5	-23.6	-23.8	-23.4	-23.7	-23.4	-23.1	-23.1	-27.1	-25.1
Max.	**2.6**	**2.6**	**2.5**	**2.6**	**2.7**	**2.9**	**2.7**	**3.1**	**3.4**	**3.1**	**3.1**	**3.1**	**3.1**	**2.7**	**3.0**	**3.0**	**2.9**	**3.4**	**3.6**	**3.9**	**3.7**	**3.5**	**3.2**	**2.9**	**3.9**		
Min.	**-26.8**	**-27.1**	**-26.8**	**-26.8**	**-26.4**	**-26.4**	**-26.7**	**-25.9**	**-26.0**	**-25.9**	**-26.6**	**-26.6**	**-26.9**	**-27.3**	**-27.0**	**-26.5**	**-26.3**	**-26.3**	**-26.5**	**-26.9**	**-27.2**	**-26.9**	**-26.8**	**-27.3**		**-27.3**	
Avg.	**-8.3**	**-8.4**	**-8.4**	**-8.5**	**-8.6**	**-8.7**	**-8.7**	**-8.5**	**-8.3**	**-7.9**	**-7.8**	**-7.6**	**-7.6**	**-7.5**	**-7.1**	**-7.0**	**-7.0**	**-7.3**	**-7.9**	**-8.2**	**-8.3**	**-8.3**	**-8.2**	**-8.2**			**-8.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

January *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-8.6	-9.8	-9.8	-9.7	-10.2	-10.0	-9.3	-9.0	-9.2	-9.6	-10.1	-10.3	-11.2	-12.6	-13.7	-13.2	-13.5	-13.5	-13.5	-13.4	-14.1	-14.5	-15.0	-16.8	-8.6	-16.8	-11.7
2	-15.9	-16.4	-16.2	-17.1	-17.2	-17.3	-17.8	-17.7	-18.0	-18.1	-18.1	-19.0	-19.7	-18.9	-19.2	-18.9	-19.0	-19.3	-19.7	-19.6	-19.8	-20.5	-20.5	-21.2	-15.9	-21.2	-18.5
3	-20.7	-20.7	-21.1	-21.1	-20.9	-21.6	-20.5	-20.4	-19.6	-18.5	-17.4	-16.9	-17.9	-17.7	-18.2	-18.4	-18.0	-17.8	-17.4	-17.6	-18.1	-18.3	-18.3	-18.4	-16.9	-21.6	-19.0
4	-18.1	-18.3	-18.6	-18.8	-18.6	-18.8	-19.0	-18.9	-19.0	-19.1	-19.3	-19.3	-19.3	-19.3	-19.3	-19.1	-19.1	-19.6	-19.7	-20.5	-21.2	-21.2	-21.7	-22.0	-18.1	-22.0	-19.5
5	-22.3	-22.4	-22.7	-23.6	-22.8	-23.5	-23.2	-23.3	-23.3	-23.8	-23.7	-23.1	-22.5	-22.0	-21.7	-21.7	-21.7	-21.9	-22.2	-21.9	-22.0	-22.9	-23.8	-24.2	-21.7	-24.2	-22.8
6	-24.7	-25.0	-25.5	-25.5	-25.5	-25.9	-26.2	-26.6	-26.3	-26.7	-26.7	-26.4	-26.2	-26.2	-26.0	-25.8	-26.0	-26.6	-27.0	-27.5	-27.8	-27.7	-26.9	-26.9	-24.7	-27.8	-26.3
7	-26.7	-27.0	-26.9	-26.5	-26.0	-26.1	-26.0	-26.5	-26.4	-25.8	-25.3	-24.9	-25.1	-24.0	-24.1	-22.9	-23.7	-23.4	-22.9	-23.1	-23.4	-23.4	-23.7	-25.1	-22.9	-27.0	-24.9
8	-25.3	-24.7	-24.8	-24.7	-24.5	-24.0	-23.7	-23.7	-23.3	-23.3	-22.9	-23.3	-23.4	-23.2	-23.4	-22.8	-22.8	-22.7	-23.1	-24.0	-24.4	-24.3	-25.1	-24.6	-22.7	-25.3	-23.8
9	-24.6	-24.8	-24.4	-24.8	-25.2	-25.3	-25.4	-25.6	-25.8	-25.4	-25.6	-26.0	-25.5	-24.3	-23.2	-23.3	-22.9	-23.3	-24.0	-24.0	-23.5	-23.3	-23.1	-23.1	-22.9	-26.0	-24.4
10	-23.2	-23.4	-23.8	-24.2	-24.2	-24.1	-24.0	-24.5	-24.9	-24.9	-25.2	-24.7	-24.7	-24.6	-24.9	-24.6	-24.3	-24.7	-25.4	-26.3	-26.6	-26.8	-26.5	-27.5	-23.2	-27.5	-24.9
11	-27.0	-25.7	-25.2	-25.3	-25.8	-26.1	-26.4	-27.2	-27.4	-27.3	-27.1	-27.4	-27.6	-27.7	-27.7	-27.7	-27.9	-28.1	-28.5	-29.5	-28.9	-28.9	-28.9	-29.0	-25.2	-29.5	-27.4
12	-29.3	-29.8	-29.6	-29.6	-30.0	-30.0	-30.1	-30.5	-30.6	-30.5	-30.5	-30.6	-30.3	-29.9	-29.4	-29.4	-29.1	-29.5	-30.1	-29.9	-29.9	-29.9	-30.3	-30.1	-29.1	-30.6	-29.9
13	-30.3	-30.3	-30.2	-29.9	-29.4	-29.4	-29.5	-29.6	-29.6	-29.7	-29.7	-29.8	-29.4	-29.1	-28.9	-28.5	-28.3	-28.5	-28.8	-28.8	-28.1	-28.4	-27.9	-27.6	-27.6	-30.3	-29.1
14	-27.8	-28.6	-27.9	-28.8	-29.5	-28.2	-27.3	-27.3	-27.0	-26.5	-24.4	-15.2	-13.7	-12.2	-10.2	-9.2	-8.9	-8.1	-7.8	-7.2	-6.6	-6.7	-5.5	-4.2	-4.2	-29.5	-17.5
15	-3.0	-2.6	-2.3	-2.1	-2.0	-2.4	-2.9	-2.9	-3.4	-3.1	-3.1	-3.1	-3.2	-2.9	-3.1	-2.9	-2.8	-2.9	-2.9	-2.8	-2.8	-2.7	-2.1	-1.7	-1.7	-3.4	-2.7
16	-1.4	-1.7	-2.0	-2.3	-3.0	-4.1	-4.7	-6.7	-7.3	-8.4	-9.4	-9.4	-9.7	-7.2	-7.0	-6.0	-4.3	-3.6	-2.9	-3.7	-5.9	-8.1	-8.5	-6.7	-1.4	-9.7	-5.6
17	-7.2	-9.3	-10.2	-10.6	-5.2	-2.1	-1.8	-1.1	-1.8	-1.8	-1.0	-0.8	-0.1	0.2	0.1	-0.1	-0.7	-1.1	-1.0	-1.1	-1.0	-1.0	-1.2	-1.5	0.2	-10.6	-2.6
18	-1.4	-1.3	-1.4	-1.4	-1.4	-1.7	-1.8	-1.3	-0.9	-0.8	-1.8	-1.9	-2.1	-2.4	-2.3	-2.1	-2.9	-4.1	-6.0	-5.3	-2.9	-2.7	-2.4	-0.7	-0.7	-6.0	-2.2
19	-1.2	-1.1	0.1	-0.2	-0.2	-0.6	1.0	1.1	1.3	1.2	1.6	1.7	1.5	1.7	1.0	1.0	1.2	1.4	1.5	1.5	1.8	1.5	1.6	1.3	1.8	-1.2	0.9
20	0.7	0.6	0.5	0.4	0.5	0.5	0.3	0.1	0.3	0.3	0.1	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	-0.3	-0.1	-0.1	0.7	-0.3	0.2
21	-0.5	-0.4	-0.1	-0.3	-1.0	0.0	1.1	1.6	2.1	1.8	1.8	2.2	2.5	2.7	3.0	3.1	3.3	3.3	3.1	2.7	2.4	2.4	2.4	2.5	3.3	-1.0	1.7
22	2.4	1.9	1.8	2.1	1.8	1.6	1.3	0.1	-0.1	0.1	-0.1	-1.3	-2.0	-2.6	-3.1	-3.6	-3.7	-4.0	-3.8	-3.9	-4.2	-4.6	-4.7	-4.4	2.4	-4.7	-1.4
23	-4.9	-5.6	-6.6	-8.0	-9.6	-12.1	-13.4	-14.0	-14.6	-14.8	-16.2	-17.2	-18.1	-17.7	-17.8	-17.6	-18.0	-19.0	-19.7	-20.2	-20.5	-21.1	-20.9	-19.8	-4.9	-21.1	-15.3
24	-20.1	-19.8	-19.4	-18.5	-18.1	-18.1	-17.5	-17.1	-15.8	-14.7	-11.3	-8.8	-8.9	-9.5	-8.7	-7.8	-7.4	-7.4	-7.3	-7.2	-6.6	-6.1	-5.8	-5.7	-5.7	-20.1	-12.0
25	-5.6	-5.1	-5.4	-5.8	-5.8	-5.3	-5.2	-4.5	-4.5	-4.8	-5.1	-5.2	-5.0	-4.9	-4.9	-4.9	-4.6	-4.8	-4.7	-7.0	-9.2	-11.6	-13.8	-15.1	-4.5	-15.1	-6.4
26	-16.2	-16.5	-16.9	-17.8	-18.3	-18.6	-19.4	-18.7	-19.8	-20.5	-20.5	-21.4	-21.9	-20.9	-21.1	-21.6	-21.1	-20.6	-20.4	-20.4	-20.5	-20.4	-20.1	-18.6	-16.2	-21.9	-19.7
27	-17.8	-14.9	-11.2	-9.2	-9.6	-8.7	-8.1	-7.3	-5.9	-5.2	-4.7	-4.5	-4.3	-4.5	-4.6	-4.5	-4.3	-4.4	-4.3	-3.9	-3.7	-3.9	-3.5	-3.5	-3.5	-17.8	-6.5
28	-3.6	-3.8	-3.9	-4.0	-4.0	-4.0	-4.1	-4.5	-4.8	-4.9	-4.9	-4.8	-4.7	-4.5	-4.3	-4.1	-4.2	-4.2	-4.5	-5.5	-6.8	-7.5	-4.8	-4.3	-3.6	-7.5	-4.6
29	-4.1	-4.5	-4.3	-3.7	-3.5	-3.9	-4.4	-5.3	-5.1	-5.5	-5.9	-6.0	-6.8	-6.7	-5.4	-6.1	-5.7	-6.8	-7.6	-7.7	-8.8	-10.2	-11.6	-12.9	-3.5	-12.9	-6.4
30	-14.2	-14.0	-12.9	-11.2	-10.8	-11.7	-11.0	-10.3	-11.0	-11.1	-12.1	-12.7	-13.4	-13.4	-13.4	-13.2	-13.5	-14.0	-14.0	-13.6	-13.6	-13.4	-14.3	-14.9	-10.3	-14.9	-12.8
31	-15.0	-14.9	-15.1	-15.0	-12.9	-12.2	-11.8	-12.8	-14.5	-14.9	-15.6	-17.8	-16.7	-15.7	-14.8	-14.5	-13.9	-13.6	-13.1	-13.1	-13.9	-14.4	-15.0	-16.0	-11.8	-17.8	-14.5
Max.	**2.4**	**1.9**	**1.8**	**2.1**	**1.8**	**1.6**	**1.3**	**1.6**	**2.1**	**1.8**	**1.8**	**2.2**	**2.5**	**2.7**	**3.0**	**3.1**	**3.3**	**3.3**	**3.1**	**2.7**	**2.4**	**2.4**	**2.4**	**2.5**	**3.3**		
Min.	**-30.3**	**-30.3**	**-30.2**	**-29.9**	**-30.0**	**-30.0**	**-30.1**	**-30.5**	**-30.6**	**-30.5**	**-30.5**	**-30.6**	**-30.3**	**-29.9**	**-29.4**	**-29.4**	**-29.1**	**-29.5**	**-30.1**	**-29.9**	**-29.9**	**-29.9**	**-30.3**	**-30.1**		**-30.6**	
Avg.	**-14.1**	**-14.2**	**-14.1**	**-14.1**	**-14.0**	**-14.0**	**-13.9**	**-14.0**	**-14.1**	**-14.1**	**-14.0**	**-13.8**	**-13.8**	**-13.5**	**-13.4**	**-13.2**	**-13.2**	**-13.3**	**-13.5**	**-13.7**	**-13.9**	**-14.2**	**-14.3**	**-14.3**			**-13.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-17.0	-16.7	-16.7	-16.5	-15.4	-15.2	-14.8	-14.4	-13.9	-13.9	-14.0	-15.1	-14.1	-13.4	-13.0	-12.6	-12.5	-12.3	-13.7	-15.8	-17.5	-17.2	-19.0	-18.3	-12.3	-19.0	-15.1
2	-18.3	-16.4	-17.0	-16.9	-17.0	-15.9	-17.0	-16.4	-16.0	-16.5	-16.6	-16.7	-17.1	-16.2	-17.2	-17.1	-16.6	-17.7	-17.8	-17.9	-19.2	-19.2	-19.4	-19.9	-15.9	-19.9	-17.3
3	-20.6	-21.0	-22.5	-22.8	-22.5	-22.7	-23.4	-23.9	-24.3	-25.1	-24.5	-25.0	-25.0	-24.5	-23.9	-23.3	-23.1	-23.0	-23.7	-25.4	-25.4	-25.8	-26.2	-25.9	-20.6	-26.2	-23.9
4	-26.2	-25.8	-26.0	-26.3	-26.4	-26.9	-27.4	-27.2	-27.2	-26.9	-26.4	-26.0	-25.4	-25.7	-24.7	-22.6	-22.8	-23.0	-23.1	-23.5	-24.5	-24.6	-24.7	-25.3	-22.6	-27.4	-25.3
5	-27.1	-26.6	-27.1	-27.7	-28.0	-27.3	-27.7	-28.0	-28.6	-28.6	-28.1	-27.1	-27.0	-26.3	-26.0	-25.0	-25.5	-25.8	-25.7	-26.3	-25.5	-25.7	-25.9	-25.4	-25.0	-28.6	-26.7
6	-25.4	-25.4	-25.7	-26.6	-26.9	-26.3	-26.6	-26.6	-25.5	-24.7	-24.9	-24.7	-24.4	-23.2	-24.0	-23.9	-23.6	-24.1	-23.4	-23.6	-24.7	-25.2	-25.0	-25.5	-23.2	-26.9	-25.0
7	-25.9	-25.7	-25.2	-25.6	-26.0	-25.9	-26.4	-24.7	-25.5	-25.7	-23.7	-23.6	-22.5	-20.7	-20.0	-19.2	-17.9	-17.8	-17.4	-19.1	-23.5	-19.0	-17.4	-17.4	-17.4	-26.4	-22.3
8	-18.7	-20.7	-22.6	-21.5	-21.2	-22.2	-22.1	-21.4	-21.5	-20.8	-21.7	-20.7	-19.3	-17.4	-14.6	-12.6	-11.8	-11.4	-12.0	-13.5	-12.3	-10.6	-8.9	-8.1	-8.1	-22.6	-17.0
9	-7.8	-7.6	-7.6	-7.7	-7.6	-7.6	-7.5	-7.3	-7.0	-6.9	-6.8	-7.2	-8.2	-10.8	-13.1	-12.5	-6.5	-6.8	-16.0	-17.8	-19.2	-20.1	-21.3	-22.0	-6.5	-22.0	-11.0
10	-22.7	-23.1	-24.1	-24.1	-24.3	-25.1	-24.6	-25.0	-24.8	-25.7	-25.8	-25.4	-25.2	-25.3	-24.5	-23.1	-22.5	-22.4	-22.2	-22.9	-23.5	-23.7	-23.9	-23.3	-22.2	-25.8	-24.1
11	-23.7	-24.0	-23.8	-24.1	-24.0	-23.3	-22.5	-22.8	-21.7	-21.4	-20.8	-20.2	-18.7	-17.6	-16.7	-16.3	-15.8	-15.6	-15.8	-16.5	-17.1	-17.2	-17.9	-19.3	-15.6	-24.1	-19.9
12	-20.7	-21.0	-23.2	-25.5	-26.2	-26.4	-25.7	-26.1	-26.0	-26.9	-25.8	-25.6	-24.7	-24.4	-23.7	-23.8	-23.7	-23.5	-23.8	-24.0	-24.2	-23.0	-23.6	-22.6	-20.7	-26.9	-24.3
13	-22.7	-21.4	-16.1	-7.7	-6.1	-6.7	-6.9	-6.5	-4.8	-1.5	-0.1	0.3	0.9	1.8	1.9	1.8	2.1	2.2	2.4	2.6	2.5	2.4	2.2	2.3	2.6	-22.7	-3.1
14	2.5	2.7	2.6	2.2	1.4	1.2	0.6	-0.7	-7.0	-9.3	-10.9	-12.4	-13.4	-14.1	-15.0	-15.8	-16.5	-16.9	-17.3	-17.4	-17.4	-17.0	-16.8	-16.6	2.7	-17.4	-9.2
15	-17.0	-18.0	-18.6	-19.1	-19.7	-20.8	-22.0	-22.2	-22.5	-23.2	-23.9	-23.6	-22.4	-22.6	-22.3	-22.0	-21.6	-21.6	-22.9	-23.9	-23.7	-23.3	-22.4	-19.6	-17.0	-23.9	-21.6
16	-16.7	-12.3	-10.7	-10.3	-9.7	-9.6	-8.7	-7.3	-7.0	-6.6	-6.6	-6.3	-5.7	-5.1	-4.4	-4.0	-3.8	-3.9	-3.9	-3.8	-4.1	-4.3	-4.4	-5.2	-3.8	-16.7	-6.8
17	-6.4	-8.8	-6.9	-6.0	-4.9	-1.4	-1.8	-0.6	0.5	0.2	1.2	2.6	3.2	1.9	1.7	1.4	0.7	0.9	0.9	0.7	1.2	1.7	2.0	2.0	3.2	-8.8	-0.6
18	1.9	1.7	1.3	1.1	1.3	1.4	1.1	1.2	1.3	1.5	1.6	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.2	0.8	1.4	1.9	2.2	2.2	0.8	1.5
19	2.5	2.4	2.7	2.6	3.5	4.0	3.8	4.0	3.3	2.4	2.3	2.2	2.2	2.5	2.6	3.2	3.5	3.5	3.6	3.1	2.3	1.3	1.2	1.3	4.0	1.2	2.7
20	0.9	1.1	0.7	1.0	1.0	1.3	1.4	1.1	1.1	1.2	1.3	1.4	2.6	3.3	3.2	3.0	2.8	3.0	3.0	2.9	3.1	3.1	3.2	2.6	3.3	0.7	2.1
21	2.1	2.1	2.9	2.5	2.4	2.7	3.0	3.4	3.2	2.9	2.8	2.5	2.7	2.7	2.9	2.9	3.0	2.9	2.4	2.0	1.9	1.0	0.6	0.8	3.4	0.6	2.4
22	1.0	1.2	0.3	0.2	0.1	0.1	-0.2	0.3	0.2	0.3	0.0	0.0	0.1	-0.1	1.0	1.0	0.6	0.6	0.5	0.1	-0.4	-1.2	-1.7	-1.0	1.2	-1.7	0.1
23	-1.3	-2.7	-4.5	-3.7	-4.5	-5.5	-6.6	-6.8	-7.6	-8.2	-6.8	-7.3	-9.1	-6.2	-5.7	-4.1	-4.7	-4.4	-4.5	-4.5	-4.2	-5.9	-6.6	-7.6	-1.3	-9.1	-5.5
24	-8.1	-8.0	-8.4	-8.5	-8.9	-8.9	-9.2	-9.5	-9.9	-10.4	-11.2	-11.5	-12.2	-11.9	-11.7	-11.4	-11.2	-11.1	-11.5	-12.6	-13.6	-13.7	-13.7	-13.8	-8.0	-13.8	-10.9
25	-14.4	-14.2	-14.8	-15.4	-16.1	-16.4	-17.2	-17.6	-17.7	-17.6	-17.2	-16.8	-16.7	-15.9	-15.7	-14.6	-12.6	-11.0	-8.4	-5.1	-2.7	-2.9	-2.3	-4.3	-2.3	-17.7	-12.8
26	-4.6	-4.4	-4.7	-6.1	-9.0	-9.6	-10.4	-10.9	-10.8	-10.0	-8.9	-5.9	-3.2	-3.3	-3.8	-5.2	-5.3	-6.5	-8.9	-8.9	-9.9	-9.6	-10.3	-11.2	-3.2	-11.2	-7.6
27	-12.1	-13.6	-13.6	-14.3	-14.8	-14.9	-15.0	-15.5	-16.0	-16.5	-15.7	-15.1	-14.1	-12.9	-11.6	-11.1	-10.2	-8.8	-6.2	-4.2	-3.1	-2.0	-1.0	-0.8	-0.8	-16.5	-11.0
28	-0.7	-0.1	-0.4	0.7	1.1	1.5	1.5	1.8	2.2	2.3	1.8	1.0	0.0	-2.7	-3.2	-2.9	-3.2	-3.5	-5.3	-6.9	-6.2	-6.3	-7.2	-7.6	2.3	-7.6	-1.8
29	-8.7	-9.7	-9.8	-9.8	-10.5	-10.4	-10.6	-11.9	-12.5	-13.2	-13.5	-13.1	-12.1	-12.6	-12.3	-11.6	-10.6	-9.8	-10.2	-10.4	-10.8	-10.9	-11.8	-12.4	-8.7	-13.5	-11.2
Max.	**2.5**	**2.7**	**2.9**	**2.6**	**3.5**	**4.0**	**3.8**	**4.0**	**3.3**	**2.9**	**2.8**	**2.6**	**3.2**	**3.3**	**3.2**	**3.2**	**3.5**	**3.5**	**3.6**	**3.1**	**3.1**	**3.1**	**3.2**	**2.6**	**4.0**		
Min.	**-27.1**	**-26.6**	**-27.1**	**-27.7**	**-28.0**	**-27.3**	**-27.7**	**-28.0**	**-28.6**	**-28.6**	**-28.1**	**-27.1**	**-27.0**	**-26.3**	**-26.0**	**-25.0**	**-25.5**	**-25.8**	**-25.7**	**-26.3**	**-25.5**	**-25.8**	**-26.2**	**-25.9**		**-28.6**	
Avg.	**-12.3**	**-12.3**	**-12.4**	**-12.3**	**-12.4**	**-12.3**	**-12.5**	**-12.5**	**-12.6**	**-12.7**	**-12.5**	**-12.3**	**-12.0**	**-11.7**	**-11.4**	**-11.0**	**-10.6**	**-10.6**	**-11.0**	**-11.4**	**-11.8**	**-11.6**	**-11.7**	**-11.8**			**-11.9**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-13.1	-13.9	-13.7	-14.1	-14.7	-14.9	-14.7	-15.2	-15.1	-16.8	-15.6	-16.4	-17.2	-15.9	-11.7	-7.8	-6.0	-4.5	-5.0	-4.3	-3.7	-2.6	-2.7	-2.4	-2.4	-17.2	-10.9
2	-1.9	-0.4	0.2	0.8	0.4	0.7	0.7	-0.2	-0.7	-1.0	-0.8	-0.4	-0.1	0.5	0.7	0.7	0.6	0.2	0.4	-0.4	-0.7	-0.5	-0.5	-0.5	0.8	-1.9	-0.1
3	-0.6	-0.7	-1.4	-1.4	-0.8	0.5	0.4	0.5	0.5	0.6	0.1	0.2	0.4	0.4	0.9	1.8	1.8	2.1	2.1	2.2	2.3	2.2	2.2	2.6	2.6	-1.4	0.8
4	2.6	2.7	2.7	2.7	1.8	1.0	1.3	1.8	1.9	1.6	1.6	1.2	2.0	2.6	2.8	2.9	2.9	3.0	2.9	2.8	2.3	2.0	2.3	2.3	3.0	1.0	2.2
5	2.6	2.3	3.0	3.4	3.3	3.0	2.9	2.5	2.4	2.5	3.0	2.5	2.7	2.4	2.5	3.2	3.5	3.2	2.7	2.1	1.8	1.8	1.8	1.8	3.5	1.8	2.6
6	1.7	1.6	1.5	1.5	0.9	0.9	1.3	1.2	1.3	1.4	1.6	1.8	2.0	1.9	2.4	2.6	2.7	2.4	2.4	2.7	2.1	3.0	2.8	3.1	3.1	0.9	2.0
7	2.5	1.9	1.7	1.8	1.2	0.1	-1.2	-1.1	0.0	0.3	0.0	0.2	0.4	0.7	1.1	1.2	0.9	1.0	0.9	0.4	0.1	-0.7	-1.3	-1.8	2.5	-1.8	0.4
8	-2.0	-2.2	-2.2	-2.7	-3.4	-3.4	-3.5	-3.2	-2.9	-2.8	-3.4	-1.7	-0.8	-0.3	1.3	1.5	1.9	1.9	1.5	1.4	1.1	1.0	1.2	1.4	1.9	-3.5	-0.8
9	1.5	1.9	2.7	2.7	2.9	2.8	2.8	2.7	2.5	2.8	1.8	1.7	2.3	2.1	1.5	1.3	1.4	1.2	1.0	1.1	0.9	0.0	0.7	0.4	2.9	0.0	1.8
10	0.0	-0.2	-0.6	-1.0	-1.2	-2.5	-2.6	-2.9	-3.3	-3.3	-3.5	-3.6	-3.7	-3.4	-3.6	-3.6	-3.4	-3.3	-3.5	-3.6	-4.0	-4.0	-4.4	-4.4	0.0	-4.4	-2.9
11	-4.7	-5.1	-5.5	-5.9	-6.2	-6.4	-6.7	-6.5	-6.6	-6.7	-6.7	-6.7	-6.5	-6.5	-6.6	-6.6	-6.7	-6.9	-7.2	-7.8	-10.3	-9.6	-9.3	-8.9	-4.7	-10.3	-6.9
12	-10.6	-11.8	-12.0	-11.9	-11.5	-10.9	-10.9	-10.8	-11.1	-10.3	-9.4	-8.9	-8.5	-8.4	-8.1	-7.7	-7.5	-7.2	-7.2	-7.7	-8.8	-9.8	-9.5	-9.7	-7.2	-12.0	-9.6
13	-7.3	-6.8	-7.0	-7.5	-7.8	-8.2	-8.5	-8.8	-9.0	-9.2	-9.4	-9.6	-9.6	-9.6	-9.3	-9.2	-9.2	-9.1	-9.2	-9.7	-10.5	-11.9	-12.6	-12.7	-6.8	-12.7	-9.2
14	-14.6	-14.3	-14.2	-13.6	-13.4	-13.3	-13.6	-13.6	-13.8	-14.0	-14.9	-15.0	-14.8	-14.1	-12.6	-11.6	-10.8	-8.9	-6.3	-4.3	-4.3	-3.9	-3.9	-3.6	-3.6	-15.0	-11.1
15	-2.9	-3.4	-3.3	-3.0	-2.8	-1.6	-1.7	-1.9	-1.6	-1.2	-1.6	-1.1	-0.5	-0.1	0.3	0.4	0.2	0.0	-0.2	-0.3	-0.5	-0.8	-1.1	-1.4	0.4	-3.4	-1.3
16	-1.7	-1.9	-2.4	-2.6	-2.4	-2.3	-2.6	-2.9	-3.1	-4.2	-5.4	-4.3	-2.8	-2.0	-2.1	-2.0	-1.3	-1.0	-1.7	-1.9	-2.1	-2.1	-2.1	-2.5	-1.0	-5.4	-2.5
17	-2.0	-3.5	-3.5	-3.1	-3.1	-4.2	-5.2	-5.3	-4.0	-4.4	-4.6	-3.4	-3.3	-3.3	-2.6	-2.7	-2.8	-3.0	-5.2	-6.4	-7.3	-7.5	-7.6	-7.4	-2.0	-7.6	-4.4
18	-7.8	-8.2	-8.8	-9.2	-10.0	-10.7	-11.2	-12.2	-13.3	-13.8	-13.4	-12.9	-12.9	-12.5	-12.3	-11.8	-11.6	-12.0	-12.4	-12.9	-13.5	-14.3	-14.7	-14.9	-7.8	-14.9	-12.0
19	-15.2	-15.6	-16.4	-17.4	-17.7	-17.9	-18.4	-19.0	-19.4	-19.8	-19.5	-18.1	-17.4	-16.7	-16.0	-15.5	-15.3	-15.2	-15.4	-15.9	-16.6	-16.9	-16.7	-17.4	-15.2	-19.8	-17.1
20	-18.6	-18.2	-17.9	-18.3	-18.3	-18.2	-18.2	-18.3	-18.2	-18.4	-18.2	-17.9	-17.9	-17.7	-17.4	-17.3	-16.9	-16.4	-15.9	-15.5	-15.7	-15.9	-16.5	-16.3	-15.5	-18.6	-17.4
21	-15.9	-15.4	-15.1	-14.6	-14.2	-13.7	-14.1	-15.5	-15.7	-16.0	-15.2	-13.5	-14.3	-10.0	-7.3	-6.1	-6.5	-6.3	-6.7	-7.1	-8.5	-7.8	-10.3	-10.9	-6.1	-16.0	-11.7
22	-11.4	-10.7	-9.9	-10.8	-11.3	-11.6	-12.1	-11.4	-11.4	-12.1	-11.8	-11.4	-11.6	-10.8	-10.7	-10.5	-9.9	-9.5	-8.4	-7.2	-8.1	-10.5	-11.7	-12.0	-7.2	-12.1	-10.7
23	-12.3	-13.0	-12.7	-11.5	-11.4	-11.9	-12.4	-12.6	-13.1	-12.6	-12.4	-12.4	-12.5	-12.2	-11.3	-10.7	-10.3	-9.8	-10.1	-9.9	-10.3	-11.0	-11.8	-12.6	-9.8	-13.1	-11.7
24	-12.8	-12.6	-12.8	-12.5	-12.3	-12.2	-11.9	-12.0	-12.6	-13.7	-12.6	-12.2	-11.7	-10.3	-9.5	-8.6	-8.2	-7.8	-7.7	-8.0	-8.2	-8.7	-9.6	-10.0	-7.7	-13.7	-10.8
25	-10.3	-10.6	-10.3	-10.1	-10.0	-9.6	-10.2	-10.8	-11.7	-11.9	-10.5	-9.1	-8.6	-7.7	-7.3	-6.3	-5.8	-5.7	-5.8	-5.8	-5.8	-5.9	-5.3	-5.6	-5.3	-11.9	-8.4
26	-7.7	-8.7	-10.0	-9.9	-10.2	-11.2	-10.3	-9.6	-10.9	-11.4	-10.9	-9.4	-8.5	-7.5	-6.5	-5.6	-5.0	-4.8	-5.3	-6.3	-6.7	-8.8	-8.9	-9.5	-4.8	-11.4	-8.5
27	-9.6	-10.1	-10.1	-10.5	-11.0	-10.8	-10.3	-10.2	-9.7	-8.7	-8.4	-8.3	-8.3	-8.3	-8.0	-7.6	-7.1	-7.0	-7.3	-8.6	-10.0	-10.8	-11.6	-12.4	-7.0	-12.4	-9.4
28	-12.4	-11.6	-11.6	-12.6	-13.0	-12.9	-15.7	-15.7	-15.4	-15.0	-14.6	-13.9	-13.5	-12.5	-11.5	-10.6	-9.9	-9.7	-9.5	-9.8	-10.7	-11.7	-12.5	-13.4	-9.5	-15.7	-12.5
29	-13.0	-13.1	-12.1	-11.3	-9.3	-9.4	-7.8	-6.5	-6.1	-5.0	-5.2	-3.7	-2.1	-1.6	-1.2	-1.1	-1.2	-1.3	-1.2	-1.0	-0.9	-0.7	-0.4	0.1	0.1	-13.1	-4.8
30	0.2	0.3	0.4	0.5	0.4	0.3	0.2	0.3	0.5	0.6	0.9	1.4	1.6	2.0	2.0	1.8	1.6	1.3	1.2	1.0	0.9	1.2	1.4	1.2	2.0	0.2	1.0
31	1.1	1.4	1.2	1.3	1.5	2.2	2.7	2.2	1.9	2.3	2.5	3.0	2.9	3.1	3.0	2.9	2.8	2.8	2.9	2.8	2.6	2.2	1.9	1.9	3.1	1.1	2.3
Max.	**2.6**	**2.7**	**3.0**	**3.4**	**3.3**	**3.0**	**2.9**	**2.7**	**2.5**	**2.8**	**3.0**	**3.0**	**2.9**	**3.1**	**3.0**	**3.2**	**3.5**	**3.2**	**2.9**	**2.8**	**2.6**	**3.0**	**2.8**	**3.1**	**3.5**		
Min.	**-18.6**	**-18.2**	**-17.9**	**-18.3**	**-18.3**	**-18.2**	**-18.4**	**-19.0**	**-19.4**	**-19.8**	**-19.5**	**-18.1**	**-17.9**	**-17.7**	**-17.4**	**-17.3**	**-16.9**	**-16.4**	**-15.9**	**-15.9**	**-16.6**	**-16.9**	**-16.7**	**-17.4**		**-19.8**	
Avg.	**-6.3**	**-6.4**	**-6.5**	**-6.5**	**-6.6**	**-6.7**	**-6.8**	**-6.9**	**-7.0**	**-7.1**	**-7.0**	**-6.5**	**-6.2**	**-5.7**	**-5.1**	**-4.6**	**-4.4**	**-4.2**	**-4.3**	**-4.5**	**-4.9**	**-5.2**	**-5.5**	**-5.7**			**-5.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.1	1.7	1.3	1.2	1.1	1.1	0.6	0.5	0.7	0.8	1.0	1.5	1.3	1.4	1.8	1.8	1.6	1.5	1.1	1.0	0.8	0.4	0.1	-0.2	2.1	-0.2	1.1
2	-0.2	-0.7	-2.2	-2.3	-2.4	-2.8	-2.6	-2.7	-2.6	-2.7	-2.9	-3.0	-3.1	-2.7	-2.0	-1.8	-1.9	-1.4	-1.2	-0.8	-0.4	-0.4	-0.2	0.0	0.0	-3.1	-1.8
3	-0.1	-0.3	-0.1	0.0	0.0	-0.2	-0.1	-0.1	0.1	0.2	0.6	0.8	0.8	1.5	2.0	2.3	2.4	2.7	2.1	1.7	1.4	1.4	1.4	1.4	2.7	-0.3	0.9
4	1.3	1.2	1.2	1.0	1.0	1.3	1.3	1.3	1.2	1.0	0.7	0.8	0.6	0.6	0.7	0.9	0.7	0.5	0.4	0.5	-0.4	-1.5	-2.7	-3.5	1.3	-3.5	0.4
5	-4.1	-5.6	-6.8	-7.6	-8.6	-9.9	-11.2	-11.9	-11.8	-11.8	-11.2	-10.4	-9.5	-8.7	-8.3	-7.9	-7.5	-7.1	-6.7	-7.3	-8.4	-10.4	-10.4	-10.2	-4.1	-11.9	-8.9
6	-10.8	-10.9	-11.7	-11.6	-13.1	-13.1	-13.4	-13.2	-13.7	-13.8	-12.8	-11.8	-10.5	-9.6	-9.1	-8.5	-7.9	-7.6	-7.7	-7.9	-9.1	-10.4	-10.1	-11.2	-7.6	-13.8	-10.8
7	-11.5	-12.0	-12.1	-13.2	-12.5	-13.1	-12.7	-13.0	-14.3	-13.5	-12.9	-11.0	-9.5	-7.7	-6.9	-6.3	-5.8	-5.9	-6.7	-7.8	-8.2	-9.3	-9.1	-9.8	-5.8	-14.3	-10.2
8	-9.1	-10.4	-11.9	-11.5	-12.7	-13.1	-14.1	-14.4	-15.3	-14.3	-13.2	-11.8	-10.4	-9.1	-8.0	-7.0	-6.4	-5.5	-6.2	-6.9	-7.0	-7.6	-8.5	-10.2	-5.5	-15.3	-10.2
9	-10.7	-9.9	-9.2	-9.3	-10.1	-10.9	-11.8	-12.0	-12.5	-11.8	-10.8	-9.9	-9.5	-8.7	-7.8	-7.5	-7.0	-6.9	-7.6	-8.9	-10.6	-10.6	-10.7	-11.2	-6.9	-12.5	-9.8
10	-11.4	-10.8	-11.0	-11.6	-12.0	-12.0	-13.2	-12.4	-12.8	-13.8	-13.3	-12.5	-11.6	-10.3	-9.2	-8.5	-8.0	-7.9	-8.7	-9.9	-10.9	-11.5	-12.2	-13.5	-7.9	-13.8	-11.2
11	-13.7	-14.3	-14.6	-13.8	-14.9	-15.3	-15.4	-15.9	-15.5	-15.1	-14.2	-13.5	-12.6	-10.9	-9.9	-9.1	-8.7	-8.6	-9.0	-9.7	-11.7	-13.0	-13.6	-13.1	-8.6	-15.9	-12.8
12	-13.3	-13.0	-13.5	-14.3	-14.6	-14.7	-16.0	-15.5	-15.2	-13.7	-12.4	-11.5	-10.3	-8.8	-7.6	-6.9	-6.6	-6.4	-6.5	-7.2	-8.2	-7.9	-8.3	-9.2	-6.4	-16.0	-10.9
13	-10.6	-10.4	-9.7	-9.2	-8.0	-7.8	-7.7	-7.7	-7.5	-7.2	-6.6	-4.8	-4.3	-2.5	-1.0	0.5	0.9	1.0	1.0	0.7	0.7	0.4	0.0	-0.1	1.0	-10.6	-4.2
14	-0.3	-0.6	-0.8	-0.9	-0.9	-1.0	-1.2	-1.5	-1.5	-1.4	-0.9	-0.7	-0.4	0.1	0.2	0.3	0.3	0.8	0.8	1.3	1.1	1.1	1.0	0.6	1.3	-1.5	-0.2
15	0.3	-0.2	-0.8	-1.7	-2.2	-2.1	-1.7	-1.4	-2.6	-3.7	-4.7	-5.5	-5.3	-5.0	-5.2	-5.8	-6.1	-6.3	-6.6	-7.5	-8.7	-10.0	-10.6	-11.1	0.3	-11.1	-4.8
16	-11.5	-11.9	-12.2	-12.8	-13.2	-13.8	-14.3	-14.2	-14.4	-13.8	-13.1	-12.4	-11.4	-10.4	-9.5	-8.5	-7.4	-6.6	-6.2	-5.9	-6.1	-5.9	-5.3	-5.4	-5.3	-14.4	-10.3
17	-5.3	-4.7	-4.6	-4.2	-4.1	-4.2	-5.5	-5.5	-4.7	-3.3	-2.9	-2.9	-2.3	-1.8	-1.5	-1.3	-1.2	-1.3	-1.4	-1.1	-1.6	-2.5	-4.3	-5.1	-1.1	-5.5	-3.2
18	-5.9	-6.0	-7.0	-6.6	-7.4	-7.4	-7.6	-7.7	-7.9	-7.7	-5.6	-3.6	-0.8	1.5	2.6	3.1	3.1	2.7	1.8	1.6	1.2	0.5	-0.8	-1.4	3.1	-7.9	-2.7
19	-2.1	-0.7	0.6	1.2	1.2	1.1	1.1	0.6	0.8	1.0	1.7	2.1	2.7	3.1	3.3	3.4	3.3	3.2	3.1	2.7	2.1	1.1	1.2	0.4	3.4	-2.1	1.6
20	-0.1	-0.5	1.0	0.0	0.5	0.4	0.5	1.1	1.7	2.5	3.3	3.2	3.4	3.5	3.2	2.4	2.8	2.0	1.3	1.1	1.1	1.3	0.8	0.9	3.5	-0.5	1.6
21	0.9	0.8	0.8	1.2	1.5	1.2	0.9	0.5	0.2	0.6	1.0	1.5	1.9	1.8	2.0	2.3	2.5	2.6	2.5	3.0	2.9	1.8	0.6	0.3	3.0	0.2	1.5
22	0.1	0.2	1.4	2.2	-0.8	-1.3	-1.3	-2.3	-2.6	-0.9	0.6	2.5	3.6	3.7	4.3	4.3	4.7	5.2	4.3	4.4	3.3	2.8	3.8	4.0	5.2	-2.6	1.9
23	2.7	0.6	0.4	0.5	-0.3	-0.2	-1.5	-0.6	0.2	0.3	1.6	2.7	2.6	2.8	3.1	3.3	3.8	3.7	4.3	3.5	3.6	2.5	2.8	3.2	4.3	-1.5	1.9
24	1.0	1.3	2.4	2.2	-0.3	-3.4	-3.9	-3.2	-2.9	-2.6	-2.0	-1.3	-0.9	-0.5	-0.5	-0.3	0.4	0.3	0.6	0.7	0.5	0.8	1.2	0.2	2.4	-3.9	-0.4
25	-1.5	-2.2	-2.7	-3.4	-4.8	-5.1	-5.7	-6.2	-7.0	-6.9	-5.9	-5.5	-5.5	-5.2	-5.1	-4.9	-4.6	-4.5	-4.4	-4.3	-4.8	-5.5	-7.3	-7.9	-1.5	-7.9	-5.0
26	-7.9	-8.7	-9.6	-9.8	-10.5	-10.4	-9.9	-9.6	-9.5	-8.8	-7.8	-6.9	-5.5	-4.7	-4.5	-4.1	-3.8	-3.3	-2.6	-2.1	-2.0	-3.0	-3.9	-4.3	-2.0	-10.5	-6.4
27	-4.4	-4.6	-4.8	-5.0	-5.2	-5.8	-6.2	-6.3	-6.3	-6.3	-6.4	-6.0	-5.3	-4.5	-4.2	-4.2	-3.9	-3.5	-3.0	-2.8	-2.9	-3.3	-3.9	-3.8	-2.8	-6.4	-4.7
28	-4.1	-4.4	-5.2	-6.0	-6.3	-6.1	-6.9	-7.4	-6.2	-5.5	-4.7	-4.3	-3.8	-3.2	-2.5	-1.8	-1.4	-1.2	-1.2	-1.7	-2.0	-2.4	-2.6	-3.2	-1.2	-7.4	-3.9
29	-3.3	-3.3	-3.3	-4.4	-3.8	-3.5	-3.5	-3.4	-3.1	-3.1	-2.4	-2.1	-1.2	-0.3	-0.1	0.8	1.6	1.9	2.0	1.9	1.5	1.0	0.4	0.0	2.0	-4.4	-1.2
30	-1.9	-2.9	-3.1	-3.3	-3.8	-3.6	-4.0	-4.5	-4.0	-3.9	-3.2	-2.5	-1.3	-0.4	0.3	0.8	0.8	0.7	0.3	-0.1	-0.3	-0.4	-1.0	-1.8	0.8	-4.5	-1.8
Max.	**2.7**	**1.7**	**2.4**	**2.2**	**1.5**	**1.3**	**1.3**	**1.3**	**1.7**	**2.5**	**3.3**	**3.2**	**3.6**	**3.7**	**4.3**	**4.3**	**4.7**	**5.2**	**4.3**	**4.4**	**3.6**	**2.8**	**3.8**	**4.0**	**5.2**		
Min.	**-13.7**	**-14.3**	**-14.6**	**-14.3**	**-14.9**	**-15.3**	**-16.0**	**-15.9**	**-15.5**	**-15.1**	**-14.2**	**-13.5**	**-12.6**	**-10.9**	**-9.9**	**-9.1**	**-8.7**	**-8.6**	**-9.0**	**-9.9**	**-11.7**	**-13.0**	**-13.6**	**-13.5**		**-16.0**	
Avg.	**-4.5**	**-4.8**	**-4.9**	**-5.1**	**-5.6**	**-5.9**	**-6.2**	**-6.3**	**-6.3**	**-6.0**	**-5.3**	**-4.6**	**-3.9**	**-3.2**	**-2.6**	**-2.3**	**-2.0**	**-1.8**	**-2.0**	**-2.3**	**-2.8**	**-3.4**	**-3.7**	**-4.2**			**-4.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-2.0	-2.3	-2.5	-2.9	-3.2	-3.6	-3.9	-3.9	-3.8	-3.4	-2.5	-1.4	-0.2	1.1	2.1	2.6	2.9	2.9	3.0	2.4	2.6	2.3	2.1	1.3	3.0	-3.9	-0.4
2	0.6	1.3	1.0	0.7	0.5	0.6	0.7	0.7	1.0	1.8	2.0	2.7	3.2	3.7	3.6	2.6	3.7	3.8	3.5	2.2	1.5	1.4	2.0	1.5	3.8	0.5	1.9
3	1.3	0.8	0.5	0.0	-0.2	-0.2	-0.1	-0.8	-0.5	0.7	1.7	3.1	4.1	4.3	4.4	4.3	3.7	3.0	2.8	2.8	3.7	3.0	2.5	2.9	4.4	-0.8	2.0
4	2.8	2.6	2.5	2.7	2.5	3.0	2.9	3.0	3.3	3.2	3.5	4.0	4.3	4.7	5.2	5.8	6.2	5.9	5.1	3.6	3.8	2.9	2.4	2.6	6.2	2.4	3.7
5	2.1	3.2	3.3	3.7	3.4	2.6	1.9	1.7	2.0	2.4	3.1	3.8	3.7	4.0	4.5	4.8	5.1	5.6	5.7	5.7	4.3	3.6	2.9	2.3	5.7	1.7	3.6
6	2.0	1.5	1.3	1.5	1.4	1.3	1.1	1.1	1.9	3.5	4.0	4.3	4.5	4.8	5.1	5.2	5.2	4.9	4.6	4.2	3.6	2.9	2.6	2.6	5.2	1.1	3.1
7	2.7	2.7	2.8	3.0	3.1	2.9	2.7	2.9	3.2	3.9	4.5	4.6	4.9	4.9	5.1	5.1	5.3	5.6	5.6	5.2	4.7	4.8	3.9	3.2	5.6	2.7	4.1
8	3.3	3.0	3.1	3.6	3.6	3.3	3.3	3.5	3.8	4.3	4.8	5.2	5.4	5.1	4.9	5.5	5.6	5.9	5.7	5.4	4.9	4.7	4.7	4.1	5.9	3.0	4.4
9	3.9	3.7	3.6	3.2	3.2	3.1	3.0	2.8	3.1	4.3	5.2	5.0	5.0	5.0	4.4	5.1	5.2	5.0	4.6	4.2	3.2	2.4	2.1	2.0	5.2	2.0	3.8
10	2.0	1.8	1.2	1.2	0.8	0.9	0.9	0.9	1.6	2.4	3.4	4.1	4.7	5.3	5.8	6.3	6.3	6.6	7.0	6.8	5.5	5.0	4.1	4.4	7.0	0.8	3.7
11	4.4	3.7	3.1	3.9	3.9	3.7	3.7	3.9	5.2	6.3	5.3	4.9	4.7	4.6	6.6	7.2	7.1	6.8	7.2	6.9	6.5	5.9	4.6	4.5	7.2	3.1	5.2
12	4.4	4.3	4.1	4.3	4.0	3.8	3.4	3.1	3.5	4.4	5.5	6.4	6.4	6.4	5.9	4.8	4.0	4.4	4.5	4.2	3.9	3.4	3.0	3.0	6.4	3.0	4.4
13	2.9	2.8	2.2	2.0	2.0	1.9	1.8	2.1	2.1	2.8	3.9	4.4	5.3	5.4	6.0	6.0	5.6	5.0	5.0	4.3	3.6	3.2	2.8	2.3	6.0	1.8	3.5
14	1.5	1.5	0.6	0.2	-0.2	2.3	3.1	3.3	3.6	3.9	4.5	4.9	5.6	6.2	6.0	5.9	6.7	7.0	6.9	6.0	6.1	5.8	4.9	5.1	7.0	-0.2	4.2
15	4.3	3.0	2.9	4.0	3.5	3.2	2.6	3.0	4.2	5.0	5.6	6.5	7.3	6.9	5.8	5.7	5.3	4.7	4.5	4.2	3.7	3.1	2.5	2.5	7.3	2.5	4.3
16	2.9	2.8	2.4	2.1	1.9	1.2	0.6	0.2	0.1	0.4	1.2	2.9	4.3	5.4	5.6	5.8	5.9	6.2	6.1	6.1	5.8	4.8	2.2	1.2	6.2	0.1	3.3
17	0.9	2.2	1.6	0.6	-0.5	-0.6	-0.1	1.6	2.8	4.4	5.9	6.6	7.0	7.8	8.6	9.0	9.7	9.9	9.4	9.3	8.5	6.9	5.3	3.9	9.9	-0.6	5.0
18	3.0	0.7	1.0	1.5	1.7	1.6	1.3	2.1	3.1	3.4	3.1	3.3	3.6	3.7	4.3	4.8	4.5	5.5	5.5	5.0	4.8	4.1	3.5	2.6	5.5	0.7	3.2
19	2.0	1.7	1.1	0.5	0.4	-0.1	0.4	1.1	2.5	3.5	3.9	4.7	5.5	6.1	6.7	7.2	7.8	7.7	8.0	8.1	7.0	6.2	4.0	3.0	8.1	-0.1	4.1
20	3.7	3.9	4.2	3.4	2.7	3.1	3.0	3.5	4.5	6.6	7.8	8.9	10.0	11.0	12.0	12.7	12.7	13.0	13.0	12.9	12.1	10.4	7.3	4.3	13.0	2.7	7.8
21	3.2	2.5	1.2	0.6	0.5	0.2	0.0	2.5	3.7	5.5	7.3	8.5	9.7	10.3	10.2	10.3	10.5	10.5	10.5	9.6	9.1	7.8	6.4	4.5	10.5	0.0	6.0
22	4.9	5.4	4.7	3.8	3.5	2.8	3.1	3.6	4.8	5.8	7.1	8.3	8.9	9.6	10.1	10.8	10.2	9.5	8.5	7.7	6.6	5.7	5.2	5.0	10.8	2.8	6.5
23	4.7	4.1	3.3	3.3	3.1	4.0	4.0	4.0	4.6	4.8	5.5	5.6	5.3	4.8	4.6	5.7	5.5	5.7	5.7	5.6	5.7	5.7	5.0	4.5	5.7	3.1	4.8
24	4.2	4.1	4.1	4.3	4.1	4.2	4.1	4.3	4.6	4.8	5.3	5.3	5.5	5.8	6.1	7.2	7.2	7.4	7.6	6.9	5.8	5.4	4.9	4.2	7.6	4.1	5.3
25	3.7	2.5	2.3	2.9	3.1	3.3	2.8	2.6	2.6	3.5	4.6	5.5	5.5	5.1	4.6	5.8	6.9	5.6	5.8	5.5	5.7	5.1	4.3	4.1	6.9	2.3	4.3
26	3.7	3.4	2.8	2.6	2.7	2.7	3.0	3.2	3.4	4.0	4.4	5.0	5.8	6.3	7.1	6.3	6.3	7.0	7.1	7.1	7.2	6.7	5.3	4.2	7.2	2.6	4.9
27	2.4	3.2	2.2	1.0	1.8	1.4	0.8	2.1	3.9	5.0	6.1	7.5	8.4	9.1	9.9	10.8	11.3	11.7	11.9	12.0	11.7	10.2	7.6	5.9	12.0	0.8	6.6
28	6.0	4.8	4.4	3.4	3.7	2.5	3.2	4.8	6.4	7.8	8.7	9.9	10.5	11.1	11.6	12.4	12.8	13.4	13.5	12.9	12.5	11.5	9.4	7.9	13.5	2.5	8.5
29	7.9	7.3	6.8	6.3	6.1	5.4	5.7	6.0	7.3	8.3	9.6	10.9	11.5	12.1	12.8	13.4	14.0	14.1	14.3	14.5	14.2	13.0	11.1	10.6	14.5	5.4	10.1
30	8.8	8.1	5.6	3.4	2.8	2.5	3.2	5.5	8.8	11.2	12.1	12.4	12.9	13.4	13.5	13.5	13.3	12.1	11.5	10.5	9.2	8.5	7.8	7.6	13.5	2.5	9.1
31	7.3	7.2	6.5	6.2	6.0	6.2	6.3	6.1	5.9	6.3	7.3	7.6	8.3	8.8	8.6	8.6	8.7	8.6	7.7	6.7	6.2	5.8	5.5	5.1	8.8	5.1	7.0
Max.	**8.8**	**8.1**	**6.8**	**6.3**	**6.1**	**6.2**	**6.3**	**6.1**	**8.8**	**11.2**	**12.1**	**12.4**	**12.9**	**13.4**	**13.5**	**13.5**	**14.0**	**14.1**	**14.3**	**14.5**	**14.2**	**13.0**	**11.1**	**10.6**	**14.5**		
Min.	**-2.0**	**-2.3**	**-2.5**	**-2.9**	**-3.2**	**-3.6**	**-3.9**	**-3.9**	**-3.8**	**-3.4**	**-2.5**	**-1.4**	**-0.2**	**1.1**	**2.1**	**2.6**	**2.9**	**2.9**	**2.8**	**2.2**	**1.5**	**1.4**	**2.0**	**1.2**		**-3.9**	
Avg.	**3.4**	**3.1**	**2.7**	**2.5**	**2.3**	**2.2**	**2.2**	**2.6**	**3.3**	**4.2**	**5.0**	**5.7**	**6.2**	**6.5**	**6.8**	**7.1**	**7.3**	**7.2**	**7.2**	**6.7**	**6.2**	**5.6**	**4.6**	**4.0**			**4.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.8	5.2	5.3	5.7	6.2	6.5	7.2	7.4	7.2	7.1	8.2	9.2	9.5	9.1	9.7	9.8	9.7	8.1	8.2	8.0	7.7	7.1	6.9	5.9	9.8	4.8	7.5
2	5.0	5.7	6.3	6.1	6.2	5.7	5.1	5.7	7.4	8.4	8.7	9.4	10.0	10.7	11.0	11.0	11.2	10.5	10.5	10.4	10.4	10.1	9.2	8.0	11.2	5.0	8.4
3	6.7	7.0	6.4	7.0	7.0	6.9	7.5	7.3	7.4	7.8	9.1	10.2	10.3	11.5	11.2	10.8	10.5	10.9	10.3	9.3	7.5	6.6	5.5	5.1	11.5	5.1	8.3
4	4.9	4.4	4.1	3.9	2.9	3.7	3.8	4.3	5.5	6.8	7.1	7.8	8.1	8.7	9.3	9.7	9.7	9.4	9.6	9.6	9.3	8.5	7.2	4.9	9.7	2.9	6.8
5	2.8	2.0	2.3	3.3	3.8	4.4	4.8	5.1	5.3	6.1	6.4	6.4	6.4	7.2	7.6	7.4	7.8	7.4	6.9	6.9	6.6	6.5	6.2	5.3	7.8	2.0	5.6
6	4.9	4.1	4.0	4.2	4.5	5.0	4.8	4.9	5.2	6.0	7.4	9.1	10.2	11.6	12.4	12.7	14.1	13.9	13.1	12.5	11.8	12.4	11.7	8.9	14.1	4.0	8.7
7	5.5	5.8	6.5	7.3	7.3	6.4	6.5	7.8	8.9	10.4	11.7	12.9	13.7	13.7	14.4	15.2	15.7	15.5	15.8	15.7	14.5	13.3	11.1	9.0	15.8	5.5	11.0
8	6.7	5.4	4.8	4.3	3.5	3.3	3.5	4.1	5.0	6.5	7.5	8.1	9.4	9.1	9.1	9.4	9.4	9.2	9.0	8.6	8.6	8.2	6.5	5.0	9.4	3.3	6.8
9	4.1	3.7	3.5	3.0	2.4	2.1	2.0	2.0	2.4	2.9	3.7	5.0	5.2	5.8	6.4	6.5	6.7	7.2	7.6	7.4	7.2	6.9	6.5	5.4	7.6	2.0	4.8
10	5.2	4.9	4.1	3.4	3.2	3.0	3.1	3.4	3.9	4.3	4.9	5.7	6.6	6.9	7.6	8.1	8.3	8.3	8.0	7.8	7.4	6.7	6.2	5.9	8.3	3.0	5.7
11	5.1	4.7	4.1	3.3	3.2	2.9	3.0	3.7	5.0	5.2	5.7	6.1	6.5	6.6	6.7	6.8	7.0	7.3	7.4	7.2	6.9	6.4	6.0	5.6	7.4	2.9	5.5
12	4.7	4.4	3.6	3.2	2.8	2.4	2.0	2.5	3.0	3.9	5.0	6.0	6.5	7.0	7.1	6.8	6.3	6.0	5.4	4.8	4.5	4.4	3.8	3.7	7.1	2.0	4.6
13	3.4	3.2	3.2	3.5	3.8	4.1	4.7	5.2	5.7	6.2	6.7	7.7	9.4	10.6	11.2	11.6	12.7	13.4	14.3	14.5	13.8	12.9	11.1	9.3	14.5	3.2	8.4
14	7.1	5.2	4.5	4.8	5.2	5.3	5.3	5.9	6.3	7.3	8.2	9.4	10.4	11.4	12.1	12.7	14.2	14.4	14.3	11.6	10.5	10.9	10.5	9.6	14.4	4.5	9.0
15	7.7	5.4	4.5	3.0	4.0	4.6	4.7	5.7	7.0	7.8	8.1	7.8	8.5	10.1	11.4	11.3	11.7	10.6	11.3	11.6	10.7	9.3	8.9	8.3	11.7	3.0	8.1
16	8.0	7.6	7.0	6.7	6.6	6.4	6.7	7.0	7.5	8.7	9.9	10.8	11.5	11.9	12.3	13.1	12.5	13.1	13.9	14.3	14.4	14.1	13.2	12.5	14.4	6.4	10.4
17	11.2	10.3	9.8	9.2	9.0	8.7	8.5	9.8	11.6	13.0	14.4	15.3	14.9	16.4	17.1	17.5	17.7	18.0	18.1	17.7	16.8	15.3	13.5	10.9	18.1	8.5	13.5
18	8.9	6.9	4.7	3.8	2.7	3.0	5.0	5.9	8.9	11.5	12.2	12.8	14.0	14.5	14.5	14.8	15.0	15.4	15.0	14.9	15.0	14.5	13.1	11.1	15.4	2.7	10.7
19	9.3	9.4	8.4	8.2	7.3	7.2	6.7	8.6	9.7	11.2	11.7	12.0	12.7	13.2	13.7	13.9	14.0	14.6	15.1	15.0	14.5	13.6	12.6	11.7	15.1	6.7	11.4
20	9.9	9.1	8.6	5.8	4.6	4.1	4.0	5.4	8.2	9.8	10.8	11.8	12.6	13.4	13.6	14.0	13.8	13.5	13.1	12.3	11.1	10.3	9.2	8.1	14.0	4.0	9.9
21	7.2	6.1	5.3	5.6	5.5	4.0	3.6	5.2	8.1	9.1	9.9	10.8	11.2	11.6	12.1	12.9	13.7	14.5	14.7	14.3	13.7	12.4	10.9	9.0	14.7	3.6	9.6
22	7.4	5.4	5.1	4.1	4.2	3.6	4.0	6.6	9.3	9.7	10.5	11.2	11.6	12.1	12.2	12.0	11.8	11.7	11.1	10.4	9.5	8.8	8.1	7.7	12.2	3.6	8.7
23	7.6	7.3	7.1	7.0	6.3	4.7	5.5	7.0	8.1	8.8	9.0	9.3	10.2	10.9	11.4	11.8	12.2	12.5	12.8	12.6	12.0	11.1	9.7	7.9	12.8	4.7	9.3
24	5.2	3.8	2.5	2.2	2.1	3.0	5.6	7.2	8.3	9.1	9.3	9.8	9.8	9.7	9.9	9.8	9.7	9.7	9.5	9.7	9.8	9.5	9.5	9.3	9.9	2.1	7.7
25	9.2	9.6	9.7	9.2	9.0	8.4	8.5	9.2	8.8	10.2	10.7	10.8	11.2	11.7	12.1	12.5	12.6	12.6	12.1	11.7	10.5	10.0	9.9	9.3	12.6	8.4	10.4
26	9.2	7.8	7.5	7.7	6.8	7.4	7.9	8.8	9.8	10.6	11.7	12.5	13.3	12.2	11.5	12.1	12.4	12.3	12.1	12.2	12.2	12.1	10.8	9.8	13.3	6.8	10.4
27	8.3	5.7	5.5	4.9	4.1	5.3	5.4	7.1	8.7	9.2	9.5	10.5	11.0	11.6	12.1	12.1	12.4	12.8	12.4	11.7	10.9	9.9	8.3	7.3	12.8	4.1	9.0
28	5.3	5.6	6.2	5.1	5.3	4.6	5.0	5.6	7.5	8.4	8.9	9.0	9.6	10.6	11.9	11.9	10.6	11.1	12.2	12.2	12.0	10.6	9.5	8.9	12.2	4.6	8.6
29	8.1	8.2	8.1	7.7	7.9	7.7	7.4	7.1	7.8	8.9	9.8	10.1	10.7	11.1	11.8	11.9	12.2	12.2	12.0	11.4	10.4	9.3	8.6	7.7	12.2	7.1	9.5
30	7.0	6.0	6.2	5.9	5.8	5.7	6.1	6.2	7.8	8.9	10.0	10.6	11.1	11.8	12.0	12.6	12.9	13.0	13.3	11.8	11.9	10.9	9.9	8.9	13.3	5.7	9.4
Max.	**11.2**	**10.3**	**9.8**	**9.2**	**9.0**	**8.7**	**8.5**	**9.8**	**11.6**	**13.0**	**14.4**	**15.3**	**14.9**	**16.4**	**17.1**	**17.5**	**17.7**	**18.0**	**18.1**	**17.7**	**16.8**	**15.3**	**13.5**	**12.5**	**18.1**		
Min.	**2.8**	**2.0**	**2.3**	**2.2**	**2.1**	**2.1**	**2.0**	**2.0**	**2.4**	**2.9**	**3.7**	**5.0**	**5.2**	**5.8**	**6.4**	**6.5**	**6.3**	**6.0**	**5.4**	**4.8**	**4.5**	**4.4**	**3.8**	**3.7**		**2.0**	
Avg.	**6.7**	**6.0**	**5.6**	**5.3**	**5.1**	**5.0**	**5.3**	**6.1**	**7.2**	**8.1**	**8.9**	**9.6**	**10.2**	**10.8**	**11.2**	**11.4**	**11.6**	**11.6**	**11.6**	**11.3**	**10.7**	**10.1**	**9.1**	**8.0**			**8.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.9	5.8	6.2	6.0	6.6	6.2	5.4	8.8	10.6	11.5	12.4	13.1	13.5	14.5	14.9	15.3	15.0	14.4	13.5	13.2	12.1	11.2	10.5	10.0	15.3	5.4	10.7
2	9.4	8.7	8.4	8.4	8.1	7.8	7.8	8.0	8.2	9.1	9.9	11.0	12.1	13.0	14.0	14.6	13.8	13.7	12.7	11.6	11.4	11.0	10.0	9.4	14.6	7.8	10.5
3	10.6	9.2	9.6	10.1	11.0	9.9	11.0	10.5	10.4	9.7	8.3	9.4	10.1	10.8	10.7	11.3	11.7	11.3	10.7	10.5	10.7	10.5	10.1	9.8	11.7	8.3	10.3
4	9.3	9.2	8.6	8.5	8.4	8.1	8.2	9.1	10.0	11.1	11.9	12.5	13.9	14.7	14.4	14.1	14.6	14.8	13.4	12.0	11.2	10.9	10.5	9.6	14.8	8.1	11.2
5	7.8	7.9	7.5	6.9	7.2	7.1	7.3	7.7	9.7	11.6	14.0	15.3	16.4	17.5	17.6	16.3	15.8	16.2	16.0	16.1	16.1	15.2	14.1	12.7	17.6	6.9	12.5
6	12.3	10.9	10.2	8.3	8.3	7.6	6.6	9.9	12.4	15.4	16.8	17.5	17.8	17.0	15.3	15.1	15.1	14.6	13.8	13.1	12.3	12.0	11.7	11.1	17.8	6.6	12.7
7	10.4	10.1	9.9	9.4	9.4	9.2	9.3	9.4	8.8	9.1	9.1	8.7	8.7	8.8	8.5	8.8	8.8	9.4	9.9	10.2	10.1	9.9	9.5	8.9	10.4	8.5	9.3
8	8.6	8.0	7.7	7.3	7.3	7.2	6.7	6.6	6.8	7.4	8.0	8.5	8.9	9.3	9.9	10.7	11.0	11.4	10.9	10.6	10.6	10.5	10.4	10.3	11.4	6.6	8.9
9	10.0	10.2	10.0	9.9	10.2	10.0	9.5	9.6	11.4	12.9	12.9	13.3	14.2	14.6	15.2	15.5	15.5	14.5	14.1	13.2	12.7	12.4	11.9	11.0	15.5	9.5	12.3
10	10.2	10.1	9.9	9.8	9.9	9.8	9.5	9.6	9.9	10.5	11.0	12.0	12.4	12.9	13.6	14.2	14.5	14.7	14.2	13.5	12.7	12.1	11.4	10.5	14.7	9.5	11.6
11	9.5	9.0	8.9	8.5	8.3	8.1	8.0	8.2	8.7	9.7	10.0	10.5	11.1	12.0	12.6	13.3	13.7	13.8	13.4	13.1	12.6	11.7	10.5	9.6	13.8	8.0	10.6
12	7.9	7.2	4.6	3.4	2.4	2.5	2.7	6.8	10.4	11.0	11.7	11.6	11.6	11.9	12.0	11.8	11.8	11.7	10.9	9.6	9.1	8.8	8.6	8.6	12.0	2.4	8.7
13	8.5	8.7	8.8	8.5	8.1	8.2	8.1	8.1	8.3	8.6	9.0	9.5	9.7	10.3	10.7	11.2	11.3	11.2	11.2	11.0	11.0	10.7	10.3	9.8	11.3	8.1	9.6
14	9.3	8.7	8.5	8.7	8.5	8.3	8.4	8.7	9.6	10.2	11.0	12.0	12.6	13.3	14.6	15.1	15.0	15.4	15.7	15.6	15.1	14.6	13.5	13.0	15.7	8.3	11.9
15	12.3	11.8	11.9	12.0	10.9	10.9	10.1	9.9	11.3	12.3	13.4	13.7	14.5	15.5	15.7	16.0	15.2	14.3	13.2	12.6	12.0	11.8	11.6	11.7	16.0	9.9	12.7
16	11.7	11.5	11.5	11.2	11.0	10.9	10.7	10.8	10.8	10.6	9.9	9.7	10.4	10.8	11.1	11.6	10.3	9.6	9.9	9.5	9.3	9.2	9.1	8.9	11.7	8.9	10.4
17	8.6	8.4	7.9	6.4	5.2	5.0	5.1	5.1	5.6	6.0	5.8	5.9	7.1	7.9	8.0	8.5	8.8	9.6	9.5	9.2	8.7	8.2	7.8	7.3	9.6	5.0	7.3
18	7.0	6.5	5.9	5.5	5.2	5.1	4.9	5.1	5.8	6.5	7.0	7.3	7.5	7.7	8.5	8.6	8.8	9.2	9.4	9.7	9.6	9.2	8.6	8.2	9.7	4.9	7.4
19	8.0	7.9	7.4	7.3	6.8	7.2	7.5	7.8	8.3	8.4	8.8	10.3	11.1	12.1	12.9	13.4	12.5	13.3	12.9	11.8	11.4	11.1	10.9	9.9	13.4	6.8	10.0
20	8.8	9.2	9.2	9.2	9.2	8.7	7.9	9.0	10.1	9.7	9.3	8.0	8.1	8.2	7.9	8.1	7.9	7.5	6.9	6.6	6.5	6.8	6.9	6.4	10.1	6.4	8.2
21	6.6	7.0	6.6	6.3	6.0	5.8	5.8	6.2	6.7	6.9	7.3	7.9	8.7	9.2	9.3	10.2	10.9	11.6	11.3	11.2	11.7	10.9	9.8	8.9	11.7	5.8	8.5
22	8.0	7.9	7.6	7.1	6.8	6.3	6.5	6.6	6.8	7.3	7.8	7.7	7.8	7.7	7.6	7.8	7.8	7.5	7.3	7.2	7.0	7.1	6.9	6.7	8.0	6.3	7.3
23	6.5	6.3	6.2	6.2	6.2	6.1	6.2	6.3	6.9	7.9	7.7	8.7	9.1	9.6	9.5	9.9	10.7	10.9	10.8	10.3	9.1	7.8	7.3	6.8	10.9	6.1	8.1
24	6.7	6.3	6.2	6.0	6.2	6.2	6.5	7.0	7.5	8.1	8.8	9.4	10.3	11.4	12.6	13.3	15.0	15.6	14.2	14.6	13.7	12.8	13.0	11.3	15.6	6.0	10.1
25	10.5	9.3	7.9	9.1	8.7	8.9	9.1	9.4	10.4	11.6	13.0	14.4	15.5	16.7	17.8	18.5	19.2	19.0	19.4	19.9	18.7	17.8	15.8	14.6	19.9	7.9	14.0
26	13.0	12.1	12.1	12.3	10.5	8.5	8.5	8.9	8.9	9.4	9.9	10.2	9.3	9.8	10.4	10.7	11.3	11.5	12.1	12.1	12.0	11.1	9.5	9.1	13.0	8.5	10.5
27	8.9	8.6	8.2	8.0	7.9	7.8	7.7	7.6	7.8	8.2	8.6	8.6	9.0	9.9	10.4	10.1	9.9	10.5	10.8	10.9	10.5	10.5	9.4	8.3	10.9	7.6	9.1
28	8.0	8.3	8.6	8.9	8.5	9.0	9.1	9.6	10.9	12.1	12.6	14.1	14.7	15.2	15.3	15.5	15.8	16.4	16.4	16.2	15.8	14.6	12.4	10.7	16.4	8.0	12.5
29	9.6	9.8	10.5	10.4	9.9	9.9	8.1	8.5	9.7	11.0	12.8	13.9	14.9	15.8	17.3	18.3	18.7	19.1	18.7	18.8	18.1	16.8	14.9	13.0	19.1	8.1	13.7
30	12.3	12.0	11.5	11.2	10.8	10.9	10.6	10.5	10.4	12.1	13.0	14.0	15.4	16.5	17.6	17.8	17.1	16.3	15.9	15.1	14.6	14.0	12.9	12.1	17.8	10.4	13.5
31	10.3	10.0	9.9	10.8	10.2	10.0	9.4	9.6	10.4	11.7	13.5	15.5	16.7	17.7	18.6	19.3	20.0	20.5	20.7	20.7	20.4	18.7	16.5	13.6	20.7	9.4	14.8
Max.	**13.0**	**12.1**	**12.1**	**12.3**	**11.0**	**10.9**	**11.0**	**10.8**	**12.4**	**15.4**	**16.8**	**17.5**	**17.8**	**17.7**	**18.6**	**19.3**	**20.0**	**20.5**	**20.7**	**20.7**	**20.4**	**18.7**	**16.5**	**14.6**	**20.7**		
Min.	**6.5**	**5.8**	**4.6**	**3.4**	**2.4**	**2.5**	**2.7**	**5.1**	**5.6**	**6.0**	**5.8**	**5.9**	**7.1**	**7.7**	**7.6**	**7.8**	**7.8**	**7.5**	**6.9**	**6.6**	**6.5**	**6.8**	**6.9**	**6.4**		**2.4**	
Avg.	**9.3**	**8.9**	**8.7**	**8.4**	**8.2**	**8.0**	**7.8**	**8.4**	**9.1**	**9.9**	**10.5**	**11.1**	**11.7**	**12.3**	**12.7**	**13.1**	**13.2**	**13.2**	**12.9**	**12.6**	**12.2**	**11.6**	**10.8**	**10.1**			**10.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.7	10.8	9.4	10.3	10.1	9.1	5.2	5.4	7.1	8.8	9.4	10.0	11.0	13.0	15.2	16.9	17.0	17.2	17.4	16.6	15.5	14.2	11.8	8.8	17.4	5.2	11.8
2	8.1	8.0	8.3	9.0	9.4	9.8	9.7	9.6	10.0	10.0	10.5	11.1	11.6	12.1	12.5	12.5	12.7	12.8	12.5	12.6	12.5	11.9	11.3	10.4	12.8	8.0	10.8
3	10.6	9.6	10.7	11.2	11.1	10.3	9.3	9.4	9.9	11.1	12.9	13.9	14.1	14.0	14.5	15.2	15.4	15.3	14.8	14.2	13.2	11.9	10.9	9.5	15.4	9.3	12.2
4	8.8	9.1	9.1	8.1	7.3	7.1	7.4	8.0	9.7	10.5	11.3	11.6	11.8	12.6	12.9	13.3	13.6	14.2	14.2	13.7	12.2	10.8	9.6	7.6	14.2	7.1	10.6
5	6.7	5.8	5.4	5.4	5.9	5.9	6.4	7.1	9.4	10.9	12.5	14.4	14.5	15.1	15.3	15.8	16.4	16.5	16.2	16.2	15.4	14.2	12.7	12.1	16.5	5.4	11.5
6	10.8	8.0	8.4	8.4	9.0	8.7	9.2	8.1	9.2	10.3	11.7	13.1	14.3	15.5	16.4	16.6	16.9	16.9	15.8	15.4	15.3	14.1	12.5	11.2	16.9	8.0	12.3
7	10.1	10.6	11.0	10.6	9.7	7.8	7.4	8.0	8.6	10.3	11.5	12.7	13.7	14.6	15.0	15.7	16.0	16.4	15.5	15.1	15.2	13.6	10.2	8.4	16.4	7.4	12.0
8	8.5	8.0	8.2	7.9	8.8	8.6	7.8	8.0	8.5	9.5	10.7	12.3	13.9	15.0	16.0	16.8	17.3	17.7	17.8	17.8	16.9	15.4	12.3	10.4	17.8	7.8	12.3
9	10.8	9.4	6.7	8.8	7.8	7.2	7.0	7.0	9.9	10.7	11.9	13.5	15.1	15.9	16.8	17.6	17.8	17.8	17.4	17.2	16.8	14.3	11.5	10.6	17.8	6.7	12.5
10	9.3	7.7	6.0	6.7	5.3	4.9	3.5	3.7	7.4	10.2	11.8	13.6	15.0	16.0	16.7	16.3	13.3	15.5	16.2	15.3	14.2	12.4	9.5	7.3	16.7	3.5	10.7
11	6.2	4.9	5.0	5.0	4.5	4.3	5.0	6.3	9.0	10.6	11.3	11.9	12.8	13.3	13.7	13.9	14.3	14.2	14.2	13.7	12.9	10.9	7.8	5.9	14.3	4.3	9.7
12	5.3	4.8	5.6	7.0	8.6	6.2	6.1	6.1	8.0	11.4	13.0	14.0	15.1	16.2	17.1	17.7	17.9	16.4	14.7	14.4	14.1	13.4	12.0	11.0	17.9	4.8	11.5
13	10.9	10.8	11.8	12.1	11.6	9.9	9.4	9.3	9.4	10.6	11.5	12.9	13.3	14.1	14.3	14.1	14.9	14.1	11.9	11.6	11.5	10.9	10.4	9.2	14.9	9.2	11.7
14	8.6	7.4	6.3	7.2	7.8	7.6	7.8	8.0	8.8	9.7	11.0	11.5	11.4	11.5	11.8	12.8	13.0	13.0	12.7	12.4	11.9	11.3	10.9	10.6	13.0	6.3	10.2
15	10.1	9.6	8.7	8.2	8.4	8.4	8.2	7.8	7.6	8.0	8.6	8.9	9.3	10.0	10.3	10.8	11.4	11.8	11.6	11.3	10.7	10.2	10.0	9.9	11.8	7.6	9.6
16	9.8	9.7	9.7	9.7	9.8	9.8	9.7	9.8	10.0	10.3	10.7	10.8	11.4	12.5	12.9	13.2	13.2	13.2	12.5	11.6	11.2	10.4	9.5	8.3	13.2	8.3	10.8
17	6.7	6.5	7.1	6.0	4.2	2.9	1.9	2.7	4.6	7.5	9.8	11.0	11.7	11.9	12.1	11.8	11.6	11.7	11.4	11.2	10.6	9.7	9.7	9.3	12.1	1.9	8.5
18	8.0	7.2	7.3	6.2	3.8	3.2	3.8	3.9	6.9	10.0	11.6	12.9	13.3	13.7	14.3	14.5	14.5	14.7	14.7	14.1	12.5	11.1	9.9	9.6	14.7	3.2	10.1
19	9.6	8.2	7.3	6.8	6.3	6.6	6.6	7.9	9.1	8.5	9.8	11.8	13.0	14.6	15.1	15.4	15.6	15.6	15.5	14.6	12.9	12.6	11.6	10.5	15.6	6.3	11.1
20	10.2	9.9	9.9	10.3	9.8	9.7	9.8	8.9	9.7	10.9	11.3	11.3	12.7	13.1	13.4	13.6	13.9	14.2	14.8	14.5	13.9	12.1	11.3	10.6	14.8	8.9	11.7
21	10.5	10.1	9.8	10.0	10.3	9.9	9.0	8.8	10.2	11.0	11.8	12.0	12.5	12.6	12.6	13.0	13.3	13.0	12.8	11.7	10.9	10.5	10.5	9.8	13.3	8.8	11.1
22	9.2	8.2	8.4	8.8	8.4	8.1	8.2	8.8	9.1	9.4	9.7	10.3	11.3	12.5	12.6	13.1	12.5	12.3	13.4	13.3	12.8	11.4	10.2	9.4	13.4	8.1	10.5
23	9.4	9.2	7.8	8.1	9.0	8.8	9.5	10.3	11.0	11.6	12.8	13.9	14.3	15.1	15.9	16.8	16.6	15.3	14.0	12.8	12.2	11.8	11.6	11.0	16.8	7.8	12.0
24	10.5	10.3	9.7	9.3	9.0	8.3	7.6	7.4	8.9	9.4	9.5	11.0	11.8	12.7	13.8	14.7	15.6	16.1	16.5	15.5	13.8	12.0	9.1	9.6	16.5	7.4	11.3
25	9.4	8.8	7.7	7.2	4.2	4.1	4.8	5.0	5.9	7.9	9.0	9.6	10.1	9.8	10.4	10.9	12.8	13.4	13.6	12.7	12.0	10.9	10.0	9.8	13.6	4.1	9.2
26	9.7	9.4	9.2	9.0	9.1	9.4	9.5	9.5	9.7	10.1	10.6	10.9	10.8	11.5	12.4	12.7	12.6	12.8	13.0	12.4	11.6	10.8	10.6	10.3	13.0	9.0	10.7
27	9.8	9.6	9.5	9.3	9.1	9.0	9.1	9.2	9.0	9.2	9.3	9.5	10.0	10.6	11.6	11.9	11.8	12.7	12.6	12.1	10.9	10.4	10.1	9.1	12.7	9.0	10.2
28	9.1	9.5	9.1	9.3	9.4	9.2	8.6	8.8	9.1	9.4	9.8	10.0	11.0	11.7	12.5	13.6	13.0	12.2	11.9	11.7	11.5	10.3	9.0	7.8	13.6	7.8	10.3
29	7.6	7.6	6.9	6.9	5.6	4.4	3.1	3.3	4.8	8.5	10.4	11.9	13.0	13.6	13.8	13.8	13.0	14.0	13.4	12.2	10.9	10.3	8.6	7.1	14.0	3.1	9.4
30	5.7	4.4	3.2	3.7	4.4	3.8	3.1	2.6	3.6	6.0	8.1	9.8	10.7	11.2	11.9	13.0	13.7	13.8	13.7	13.0	11.5	10.7	11.2	10.8	13.8	2.6	8.5
31	10.5	9.9	9.9	10.5	10.1	10.0	9.5	9.1	9.0	9.0	9.1	10.5	11.1	12.0	12.2	12.4	12.7	12.7	12.6	12.7	12.3	11.6	10.9	10.8	12.7	9.0	10.9
Max.	**12.7**	**10.8**	**11.8**	**12.1**	**11.6**	**10.3**	**9.8**	**10.3**	**11.0**	**11.6**	**13.0**	**14.4**	**15.1**	**16.2**	**17.1**	**17.7**	**17.9**	**17.8**	**17.8**	**17.8**	**16.9**	**15.4**	**12.7**	**12.1**	**17.9**		
Min.	**5.3**	**4.4**	**3.2**	**3.7**	**3.8**	**2.9**	**1.9**	**2.6**	**3.6**	**6.0**	**8.1**	**8.9**	**9.3**	**9.8**	**10.3**	**10.8**	**11.4**	**11.7**	**11.4**	**11.2**	**10.6**	**9.7**	**7.8**	**5.9**		**1.9**	
Avg.	**9.1**	**8.5**	**8.2**	**8.3**	**8.0**	**7.5**	**7.2**	**7.4**	**8.5**	**9.7**	**10.7**	**11.7**	**12.4**	**13.2**	**13.7**	**14.2**	**14.3**	**14.4**	**14.2**	**13.7**	**12.9**	**11.8**	**10.6**	**9.6**			**10.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.1	11.2	11.0	11.0	11.1	11.0	10.9	11.1	11.5	11.7	12.9	14.0	13.8	13.3	13.6	13.8	13.9	12.4	11.8	10.9	10.1	9.7	9.6	9.4	14.0	9.4	11.7
2	9.5	9.5	9.0	9.0	8.7	8.9	9.3	9.4	9.6	9.7	9.9	9.2	9.9	10.2	10.7	10.7	11.0	10.8	10.7	10.4	9.8	9.5	9.1	9.0	11.0	8.7	9.7
3	8.6	8.1	7.9	7.9	8.2	8.6	7.9	8.0	8.2	8.1	8.8	8.9	8.9	8.8	9.0	9.6	10.2	10.9	10.9	10.0	9.6	9.0	8.6	9.2	10.9	7.9	8.9
4	9.3	9.2	8.8	8.4	8.1	8.2	8.4	7.6	7.4	8.5	9.4	9.7	10.3	10.8	11.2	11.6	11.8	12.3	12.3	11.8	11.5	8.5	6.2	4.5	12.3	4.5	9.4
5	3.6	3.8	3.7	3.6	3.7	3.2	3.4	3.1	4.4	5.3	6.7	9.0	11.2	12.5	13.3	13.4	12.8	11.7	11.0	10.0	9.0	6.6	5.6	5.1	13.4	3.1	7.3
6	3.6	2.9	2.3	2.4	3.2	2.8	3.1	5.6	6.7	7.3	7.3	9.2	9.8	9.6	9.2	9.6	9.7	9.8	9.6	9.3	9.2	8.8	8.5	8.5	9.8	2.3	7.0
7	8.4	9.1	8.7	8.6	9.8	9.9	9.9	8.8	9.3	9.9	9.4	9.1	9.0	9.2	9.0	9.5	9.9	10.2	9.9	9.0	8.7	8.6	8.5	8.6	10.2	8.4	9.2
8	8.7	9.1	9.2	9.0	9.1	9.0	8.5	8.2	8.1	8.8	9.1	9.9	10.5	10.6	10.5	10.4	10.2	9.3	8.5	8.4	8.3	8.6	8.7	8.8	10.6	8.1	9.2
9	8.7	8.3	8.4	8.3	8.0	8.4	8.3	7.6	7.2	7.5	8.1	8.5	9.3	9.7	10.2	10.4	10.2	10.0	10.2	10.2	9.7	9.5	9.7	9.2	10.4	7.2	9.0
10	9.0	8.7	8.6	8.2	8.1	7.9	8.1	8.0	8.0	8.3	8.7	9.6	10.3	10.8	11.4	12.0	11.9	12.0	11.5	10.9	10.8	10.6	10.4	10.0	12.0	7.9	9.7
11	9.4	8.6	8.1	8.1	7.7	7.6	7.3	7.2	7.3	7.6	8.1	8.8	9.4	9.6	9.5	10.8	11.5	11.8	11.7	11.4	10.9	10.0	10.0	9.7	11.8	7.2	9.2
12	9.5	9.3	9.7	9.6	8.7	8.2	7.8	7.9	8.1	8.7	9.1	10.0	10.7	11.4	11.0	10.2	10.4	9.9	9.9	9.9	9.6	9.4	9.5	9.6	11.4	7.8	9.5
13	9.6	9.6	9.5	9.6	9.3	9.1	8.9	9.2	9.5	9.4	8.9	8.4	8.5	8.3	8.2	8.1	8.4	8.6	8.6	8.6	8.2	7.6	8.2	7.9	9.6	7.6	8.8
14	8.0	7.9	7.9	7.5	7.3	6.9	7.2	6.9	7.5	7.8	7.6	7.5	8.0	8.6	8.8	9.3	9.6	9.8	9.6	9.4	8.7	8.6	8.7	8.3	9.8	6.9	8.2
15	8.3	8.2	8.0	8.4	8.0	7.9	7.5	6.8	7.0	7.8	8.9	9.8	10.5	10.2	10.6	10.3	10.2	9.9	9.8	9.3	8.9	8.5	7.8	7.4	10.6	6.8	8.8
16	7.3	6.6	6.6	6.6	7.1	7.3	7.5	7.3	6.6	6.5	7.0	8.2	9.5	10.6	10.5	10.7	9.4	10.4	8.9	8.7	7.1	7.4	7.6	7.4	10.7	6.5	8.0
17	7.2	6.6	6.3	5.6	5.7	6.0	6.2	6.0	5.9	5.9	6.2	7.2	7.8	8.2	8.3	8.3	8.5	8.0	7.1	6.5	5.9	5.7	5.5	5.7	8.5	5.5	6.7
18	6.3	6.6	6.5	6.4	6.3	6.3	6.3	6.6	6.8	6.9	8.2	8.9	8.7	8.6	8.2	8.2	8.1	7.8	7.3	7.3	6.8	6.3	5.9	5.6	8.9	5.6	7.1
19	5.6	5.3	5.2	5.3	5.1	5.3	5.6	5.6	5.7	5.8	5.9	6.1	6.6	7.0	7.3	7.4	7.0	6.9	6.5	6.2	5.9	5.7	5.3	4.9	7.4	4.9	6.0
20	4.9	4.9	4.5	4.5	4.3	4.1	3.2	2.8	2.7	3.4	4.4	4.7	4.5	4.7	5.7	6.2	6.3	6.3	6.2	5.5	2.9	1.3	0.0	-0.3	6.3	-0.3	4.1
21	1.4	0.9	0.9	0.7	1.8	2.3	2.8	3.2	3.8	3.9	4.9	6.0	6.7	7.2	7.4	7.7	7.2	6.9	6.8	5.6	2.9	1.6	1.4	1.8	7.7	0.7	4.0
22	1.3	1.6	1.5	0.5	0.0	-0.2	-1.2	-1.0	-0.6	0.3	2.4	5.2	6.3	6.7	8.0			5.8	5.3	4.7	4.6	4.6	4.5	4.5	8.0	-1.2	3.0
23	4.6	4.8	4.8	5.2	6.0	7.6	7.6	7.5	7.3	7.4	7.4	7.4	7.5	7.6	7.2	7.3	7.2	6.6	7.0	6.9	6.5	6.4	6.4	5.8	7.6	4.6	6.7
24	5.9	5.9	5.7	5.4	5.4	5.1	5.0	5.1	4.7	4.7	5.0	5.4	6.2	6.9	6.9	7.0	7.2	7.3	7.3	6.9	6.3	5.9	5.6	5.4	7.3	4.7	5.9
25	4.8	5.5	5.2	5.5	5.7	5.8	5.1	4.8	4.4	4.5	5.5	6.2	6.8	6.9	7.1	7.5	7.6	7.5	7.3	7.1	6.4	5.8	5.1	5.0	7.6	4.4	6.0
26	4.7	5.3	4.9	4.6	4.2	4.1	3.8	3.4	3.3	4.0	5.1	6.4	8.3	9.5	10.0	9.5	9.4	8.8	9.0	7.5	4.9	4.8	5.0	5.0	10.0	3.3	6.1
27	4.2	4.0	3.9	3.4	3.2	1.8	1.6	1.6	1.5	2.0	2.0	2.8	4.4	6.1	7.1	7.8	8.1	8.2	7.8	6.5	4.8	4.1	3.2	2.6	8.2	1.5	4.3
28	2.2	1.1	2.1	1.9	2.4	2.1	2.0	-0.1	-2.2	-0.4	3.1	5.6	7.1	8.2	9.1	9.6	9.2	8.8	8.2	7.1	4.5	2.5	3.8	5.1	9.6	-2.2	4.3
29	5.7	4.7	4.5	4.0	3.3	2.5	2.1	2.3	2.5	3.2	4.5	6.3	6.4	5.4	5.2	5.5	6.0	6.4	6.5	6.2	5.4	4.5	4.2	2.6	6.5	2.1	4.6
30	0.4	-0.4	0.7	1.3	1.2	0.7	0.1	0.9	0.9	1.9	3.4	4.9	5.4	5.9	6.3	6.2	6.1	6.1	6.0	5.5	4.3	1.4	-0.5	-0.3	6.3	-0.5	2.9
Max.	**11.1**	**11.2**	**11.0**	**11.0**	**11.1**	**11.0**	**10.9**	**11.1**	**11.5**	**11.7**	**12.9**	**14.0**	**13.8**	**13.3**	**13.6**	**13.8**	**13.9**	**12.4**	**12.3**	**11.8**	**11.5**	**10.6**	**10.4**	**10.0**	**14.0**		
Min.	**0.4**	**-0.4**	**0.7**	**0.5**	**0.0**	**-0.2**	**-1.2**	**-1.0**	**-2.2**	**-0.4**	**2.0**	**2.8**	**4.4**	**4.7**	**5.2**	**5.5**	**6.0**	**5.8**	**5.3**	**4.7**	**2.9**	**1.3**	**-0.5**	**-0.3**		**-2.2**	
Avg.	**6.4**	**6.2**	**6.1**	**6.0**	**6.0**	**6.0**	**5.8**	**5.7**	**5.8**	**6.2**	**6.9**	**7.8**	**8.4**	**8.8**	**9.0**	**9.3**	**9.3**	**9.0**	**8.8**	**8.3**	**7.4**	**6.7**	**6.4**	**6.2**			**7.2**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-0.9	-0.4	-0.6	-0.5	-0.2	0.2	0.8	1.1	1.1	1.6	2.5	3.0	4.3	5.6	6.9	6.6	6.1	5.5	5.7	5.3	5.0	4.6	4.3	4.5	6.9	-0.9	3.0
2	4.5	4.2	3.6	2.9	2.8	2.4	2.2	2.3	1.9	1.4	2.1	3.6	4.5	5.3	5.5	6.0	5.6	4.7	5.0	4.3	3.9	1.7	1.0	0.9	6.0	0.9	3.4
3	0.4	0.1	0.0	-0.3	-0.6	-0.6	-0.6	-0.7	-1.1	-0.9	-0.7	-0.4	-0.1	0.1	0.5	0.7	1.0	0.9	0.9	0.5	-0.1	-1.5	-0.4	-0.8	1.0	-1.5	-0.2
4	-2.0	-3.3	-4.0	-3.7	-4.3	-4.9	-5.2	-5.4	-4.3	-4.3	-2.2	-0.1	1.5	2.6	3.5	3.7	3.7	3.2	2.9	2.0	0.8	0.2	-0.1	-0.7	3.7	-5.4	-0.8
5	-1.0	-1.1	-1.4	-1.5	-1.5	-1.0	-1.2	-1.6	-2.2	-2.1	-1.6	-1.2	-0.9	-0.7	-0.4	-0.4	-0.5	-0.5	-0.4	-0.5	-0.8	-1.3	-1.6	-2.1	-0.4	-2.2	-1.1
6	-2.1	-2.1	-2.4	-2.5	-2.6	-2.6	-2.4	-2.3	-2.4	-2.4	-2.3	-2.1	-1.8	-1.4	-1.1	-0.9	-0.7	-0.6	-0.7	-1.0	-1.4	-1.6	-1.7	-1.9	-0.6	-2.6	-1.8
7	-2.0	-2.3	-2.8	-2.4	-2.4	-2.6	-2.9	-2.9	-3.3	-3.4	-3.0	-3.0	-2.6	-2.6	-2.2	-1.9	-1.7	-1.6	-1.8	-2.0	-2.0	-2.3	-2.3	-2.8	-1.6	-3.4	-2.5
8	-2.8	-2.7	-2.7	-2.8	-3.2	-3.9	-4.9	-6.2	-7.1	-6.9	-5.2	-3.7	-2.5	-1.9	-1.3	-0.8	-0.7	-0.7	-1.3	-2.4	-4.2	-6.4	-6.4	-4.9	-0.7	-7.1	-3.6
9	-5.8	-5.9	-4.8	-2.4	0.1	0.2	-0.2	-0.4	-0.3	0.5	0.5	0.7	0.8	2.3	3.0	3.4	3.9	4.4	4.6	4.8	5.0	5.3	5.7	5.8	5.8	-5.9	1.3
10	5.5	5.1	4.7	4.7	5.3	5.0	4.1	3.2	2.2	0.8	0.5	2.6	3.4	4.6	5.7	6.3	6.9	6.3	6.0	5.7	5.7	5.9	6.1	6.0	6.9	0.5	4.7
11	6.1	5.8	5.6	6.2	6.1	5.5	5.3	5.4	5.3	2.8	-0.3	-2.9	-4.3	-4.7	-5.0	-5.1	-5.2	-5.1	-5.2	-5.2	-5.1	-5.1	-5.1	-5.2	6.2	-5.2	-0.4
12	-5.0	-4.7	-4.5	-4.3	-4.6	-5.2	-5.8	-6.1	-6.3	-6.7	-6.5	-6.0	-5.1	-4.7	-4.6	-4.4	-4.2	-4.3	-4.6	-5.4	-6.1	-6.5	-7.0	-8.0	-4.2	-8.0	-5.4
13	-9.2	-9.2	-9.7	-10.1	-10.2	-10.8	-11.1	-11.6	-12.1	-11.9	-10.5	-8.1	-6.5	-5.4	-4.6	-3.1	-2.4	-1.2	-1.5	-2.2	-2.1	-1.6	-1.4	-1.0	-1.0	-12.1	-6.6
14	-0.5	-0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.2	0.3	0.3	0.5	0.5	0.5	0.7	1.3	1.5	1.1	1.0	0.8	0.5	0.5	0.8	1.5	-0.5	0.4
15	0.6	-0.4	-2.2	-3.2	-3.4	-4.1	-4.8	-4.9	-5.7	-5.8	-6.3	-6.0	-5.7	-5.1	-4.8	-4.3	-4.3	-4.5	-4.8	-5.7	-6.2	-7.0	-7.6	-7.7	0.6	-7.7	-4.7
16	-7.6	-7.1	-7.1	-7.0	-7.0	-7.3	-7.3	-7.6	-7.9	-7.8	-7.7	-7.8	-7.2	-7.2	-6.7	-6.0	-5.6	-5.7	-6.9	-8.1	-8.2	-9.1	-10.4	-10.6	-5.6	-10.6	-7.5
17	-11.5	-12.2	-12.6	-13.6	-14.1	-12.7	-11.9	-11.6	-10.8	-10.5	-9.6	-8.3	-7.2	-6.9	-6.3	-5.7	-5.6	-5.8	-6.0	-6.7	-6.7	-6.7	-6.4	-2.9	-2.9	-14.1	-8.8
18	-2.4	-2.1	-1.7	-0.2	-0.1	0.1	-0.1	0.3	0.8	0.8	0.3	0.7	1.9	3.6	3.9	4.5	4.6	4.5	4.0	3.5	3.6	3.2	3.7	1.0	4.6	-2.4	1.6
19	0.4	-2.4	-2.5	-3.3	-3.3	-3.7	-4.2	-4.9	-6.0	-7.0	-7.0	-7.7	-7.8	-7.2	-6.2	-5.4	-5.4	-5.2	-5.0	-5.4	-5.2	-5.3	-5.5	-5.6	0.4	-7.8	-5.0
20	-5.5	-5.4	-5.2	-5.0	-4.9	-4.8	-5.0	-5.3	-6.1	-7.4	-7.9	-8.2	-7.3	-7.0	-7.1	-7.0	-7.4	-7.5	-7.3	-7.1	-6.7	-7.0	-6.8	-6.8	-4.8	-8.2	-6.5
21	-6.4	-6.3	-6.2	-5.6	-5.1	-5.6	-6.4	-8.3	-9.3	-9.1	-8.0	-7.5	-6.2	-5.4	-4.6	-3.8	-3.9	-4.5	-5.1	-6.3	-7.7	-8.6	-9.5	-10.0	-3.8	-10.0	-6.6
22	-10.3	-10.6	-11.2	-10.9	-11.5	-11.6	-11.5	-11.9	-12.2	-12.7	-12.2	-12.2	-11.5	-10.7	-10.1	-9.9	-9.7	-9.8	-9.9	-11.1	-12.1	-12.6	-13.4	-13.8	-9.7	-13.8	-11.4
23	-12.4	-12.8	-12.3	-12.2	-12.1	-12.5	-12.7	-13.4	-13.0	-13.4	-13.3	-12.9	-12.0	-11.1	-10.1	-9.5	-10.2	-10.0	-10.2	-10.2	-9.6	-9.2	-9.4	-9.9	-9.2	-13.4	-11.4
24	-8.8	-8.9	-9.2	-8.6	-8.7	-9.3	-11.1	-11.9	-11.7	-11.0	-11.0	-10.8	-9.8	-9.0	-8.0	-7.4	-6.8	-7.2	-8.4	-10.1	-11.2	-13.1	-13.7	-14.9	-6.8	-14.9	-10.0
25	-15.2	-12.2	-8.5	-7.9	-7.1	-6.8	-6.8	-6.3	-6.5	-5.6	-5.2	-4.5	-3.6	-3.1	-2.3	-1.3	-1.2	-1.7	-3.2	-4.5	-3.9	-4.7	-4.3	-4.5	-1.2	-15.2	-5.5
26	-4.1	-3.5	-4.9	-5.4	-7.2	-7.3	-7.3	-7.1	-7.1	-7.4	-7.3	-7.7	-8.2	-7.8	-8.3	-8.6	-8.9	-9.5	-9.9	-10.6	-10.5	-10.8	-10.9	-12.1	-3.5	-12.1	-8.0
27	-12.5	-13.3	-13.7	-13.7	-13.6	-14.3	-14.4	-14.7	-15.0	-15.0	-14.9	-14.3	-14.0	-13.1	-12.4	-11.9	-11.7	-12.0	-12.5	-13.0	-13.7	-14.0	-15.1	-16.1	-11.7	-16.1	-13.7
28	-17.1	-18.2	-18.6	-18.5	-17.5	-17.8	-18.1	-18.0	-17.7	-17.8	-18.5	-14.2	-9.9	-6.1	-7.6	-6.7	-5.9	-7.3	-8.7	-10.0	-11.2	-12.4	-11.3	-12.3	-5.9	-18.6	-13.4
29	-12.1	-12.3	-11.9	-11.4	-12.1	-11.5	-10.5	-9.7	-8.8	-8.2	-8.2	-7.9	-6.5	-5.6	-4.8	-3.9	-2.5	-1.1	-0.6	-0.7	-0.9	-0.8	-0.9	-1.3	-0.6	-12.3	-6.4
30	-1.4	-1.6	-1.2	-2.5	-2.8	-2.4	-2.6	-2.2	-2.1	-1.6	-3.0	-3.7	-2.7	-1.7	-0.2	-0.8	-0.7	-1.4	-3.2	-5.0	-5.5	-6.0	-5.9	-6.9	-0.2	-6.9	-2.8
31	-7.9	-8.1	-7.6	-9.1	-7.2	-5.5	-5.9	-8.3	-8.5	-8.4	-9.3	-8.4	-6.2	-5.9	-4.4	-3.3	-3.3	-4.0	-4.4	-5.7	-7.8	-7.8	-7.6	-7.0	-3.3	-9.3	-6.7
Max.	**6.1**	**5.8**	**5.6**	**6.2**	**6.1**	**5.5**	**5.3**	**5.4**	**5.3**	**2.8**	**2.5**	**3.6**	**4.5**	**5.6**	**6.9**	**6.6**	**6.9**	**6.3**	**6.0**	**5.7**	**5.7**	**5.9**	**6.1**	**6.0**	**6.9**		
Min.	**-17.1**	**-18.2**	**-18.6**	**-18.5**	**-17.5**	**-17.8**	**-18.1**	**-18.0**	**-17.7**	**-17.8**	**-18.5**	**-14.3**	**-14.0**	**-13.1**	**-12.4**	**-11.9**	**-11.7**	**-12.0**	**-12.5**	**-13.0**	**-13.7**	**-14.0**	**-15.1**	**-16.1**		**-18.6**	
Avg.	**-4.8**	**-5.0**	**-5.0**	**-5.0**	**-4.9**	**-5.0**	**-5.2**	**-5.5**	**-5.7**	**-5.8**	**-5.7**	**-5.1**	**-4.3**	**-3.5**	**-3.0**	**-2.6**	**-2.4**	**-2.6**	**-2.9**	**-3.6**	**-4.0**	**-4.5**	**-4.6**	**-4.9**			**-4.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-7.0	-6.0	-5.9	-5.9	-5.8	-5.9	-4.3	-4.7	-3.9	-3.1	-2.7	-2.1	-1.4	-0.7	-0.8	-0.9	-0.9	-1.8	-3.0	-3.5	-3.8	-3.7	-3.3	-3.7	-0.7	-7.0	-3.5
2	-4.2	-4.4	-4.7	-4.5	-4.9	-5.2	-5.7	-6.0	-7.4	-9.9	-11.3	-12.1	-12.5	-12.7	-12.7	-12.7	-12.5	-12.6	-13.2	-13.8	-13.9	-13.7	-13.7	-13.8	-4.2	-13.9	-9.9
3	-14.0	-14.1	-14.2	-14.3	-13.9	-13.6	-13.3	-13.4	-13.1	-13.4	-14.1	-13.7	-13.2	-12.2	-11.9	-12.3	-12.3	-12.5	-13.0	-13.4	-14.0	-13.9	-13.0	-13.2	-11.9	-14.3	-13.3
4	-12.7	-12.4	-12.4	-12.5	-12.7	-12.9	-13.5	-13.7	-13.9	-14.0	-14.2	-14.2	-13.7	-13.1	-12.7	-12.2	-11.9	-12.1	-12.0	-11.9	-12.0	-11.8	-12.1	-12.5	-11.8	-14.2	-12.8
5	-13.1	-13.1	-12.9	-12.4	-11.7	-11.7	-11.5	-11.3	-12.5	-11.9	-11.3	-10.7	-10.1	-10.0	-9.6	-8.0	-7.7	-8.6	-9.6	-9.3	-9.2	-9.1	-9.3	-8.7	-7.7	-13.1	-10.6
6	-8.9	-8.7	-7.7	-7.5	-7.2	-6.5	-6.0	-3.3	-3.4	-3.8	-3.3	-3.2	-2.5	-3.1	-4.2	-5.3	-5.1	-5.2	-5.3	-5.0	-6.5	-8.4	-9.3	-8.9	-2.5	-9.3	-5.8
7	-10.3	-12.1	-12.8	-12.9	-13.1	-13.6	-14.5	-14.8	-15.1	-14.9	-14.3	-14.3	-13.8	-13.5	-12.8	-12.5	-13.1	-13.8	-14.6	-13.8	-12.4	-11.3	-10.6	-8.7	-8.7	-15.1	-13.1
8	-8.3	-7.7	-6.5	-5.9	-5.6	-5.4	-5.3	-5.2	-5.3	-5.2	-5.3	-5.2	-5.7	-5.1	-4.2	-3.9	-3.7	-3.3	-2.1	-1.5	-1.2	-0.6	-0.2	-0.8	-0.2	-8.3	-4.3
9	-0.4	0.1	0.2	0.3	0.8	2.0	2.1	2.0	1.9	1.8	1.4	1.3	1.6	2.0	1.7	1.9	1.8	1.4	1.0	0.9	2.8	3.3	3.3	2.5	3.3	-0.4	1.6
10	2.0	2.0	2.1	1.5	2.1	2.1	1.8	1.9	2.7	3.2	1.7	1.0	1.3	1.0	0.5	0.2	0.1	0.0	-0.3	-0.1	0.3	0.6	0.4	0.4	3.2	-0.3	1.2
11	0.4	-0.1	-0.9	-1.1	-0.5	-1.3	-1.6	-1.2	-1.5	-1.4	-2.3	-1.9	-2.0	-1.6	-1.5	-1.5	-0.9	-2.5	-3.8	-5.6	-4.9	-5.4	-3.8	-2.9	0.4	-5.6	-2.1
12	-2.6	-3.1	-3.3	-3.5	-3.7	-4.7	-5.1	-4.9	-4.6	-4.1	-4.2	-5.0	-6.4	-6.8	-6.9	-7.1	-8.0	-7.9	-7.1	-6.9	-6.4	-5.9	-5.7	-4.8	-2.6	-8.0	-5.4
13	-4.4	-4.1	-3.7	-3.4	-4.0	-5.6	-5.2	-6.7	-6.0	-7.5	-8.7	-8.0	-6.2	-4.0	-3.8	-2.8	-2.4	-2.2	-2.2	-2.7	-2.7	-2.4	-2.5	-1.9	-1.9	-8.7	-4.3
14	-0.9	-1.3	-1.2	-1.2	-1.4	-1.6	-2.1	-2.4	-2.8	-2.9	-2.6	-1.9	-1.9	-1.9	-1.6	-1.6	-1.7	-1.9	-2.5	-3.1	-2.7	-3.2	-3.0	-3.2	-0.9	-3.2	-2.1
15	-3.3	-3.0	-2.9	-3.2	-3.1	-2.9	-2.9	-3.3	-3.9	-3.8	-3.9	-3.7	-3.7	-2.8	-2.7	-2.3	-1.8	-1.1	-0.8	-0.8	-1.2	-1.0	-0.4	-0.4	-0.4	-3.9	-2.5
16	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6	-0.8	-1.6	-3.3	-7.3	-7.5	-5.7	-4.6	-3.8	-3.3	-4.2	-6.3	-7.7	-9.3	-10.6	-10.3	-10.7	-11.5	-0.4	-11.5	-4.7
17	-11.4	-11.8	-11.4	-11.4	-10.9	-10.6	-11.6	-12.3	-13.0	-13.2	-13.3	-12.3	-10.8	-9.1	-8.5	-8.5	-8.3	-7.8	-7.4	-8.0	-8.0	-9.1	-9.5	-9.6	-7.4	-13.3	-10.3
18	-9.2	-9.8	-11.0	-11.7	-11.9	-11.5	-11.8	-12.3	-12.8	-13.0	-12.5	-12.7	-13.0	-12.4	-12.0	-12.0	-12.5	-12.9	-13.3	-13.9	-14.4	-14.6	-14.7	-15.0	-9.2	-15.0	-12.5
19	-15.0	-15.3	-15.6	-15.9	-16.4	-16.6	-17.0	-16.3	-15.8	-14.6	-16.3	-15.4	-13.5	-13.6	-14.2	-14.2	-13.1	-13.5	-13.4	-14.5	-14.2	-15.0	-15.0	-15.4	-13.1	-17.0	-15.0
20	-15.2	-16.0	-15.7	-15.6	-16.0	-17.6	-18.3	-19.1	-19.3	-20.2	-20.5	-20.5	-20.5	-20.8	-20.8	-20.7	-20.9	-21.2	-21.4	-21.8	-22.1	-22.6	-22.8	-23.3	-15.2	-23.3	-19.7
21	-23.6	-23.5	-23.7	-24.4	-24.4	-24.6	-24.7	-25.0	-24.8	-25.8	-25.5	-25.8	-25.1	-25.1	-25.2	-24.9	-24.8	-25.3	-25.6	-25.1	-25.5	-24.7	-24.4	-23.7	-23.5	-25.8	-24.8
22	-23.1	-22.8	-21.7	-21.2	-20.3	-19.6	-20.3	-20.7	-21.4	-21.7	-22.6	-22.3	-21.8	-20.5	-19.3	-18.0	-17.8	-16.7	-15.1	-15.0	-15.4	-15.7	-17.7	-18.0	-15.0	-23.1	-19.5
23	-18.3	-19.2	-19.0	-17.2	-16.5	-15.0	-14.1	-13.5	-12.7	-12.4	-12.6	-12.2	-11.5	-11.1	-10.6	-8.9	-8.9	-8.7	-7.2	-4.7	-3.6	-3.8	-3.2	-2.6	-2.6	-19.2	-11.2
24	-1.8	-0.7	0.7	1.4	1.9	2.6	3.2	2.8	2.5	2.6	2.5	2.5	2.3	1.5	1.3	0.9	0.9	0.8	0.6	0.4	0.1	-0.7	-3.4	-5.3	3.2	-5.3	0.8
25	-6.8	-8.2	-9.2	-9.4	-9.7	-9.8	-9.5	-9.6	-10.0	-11.0	-12.1	-13.1	-13.5	-14.5	-16.2	-16.9	-15.8	-15.6	-17.5	-17.3	-17.4	-18.0	-18.2	-17.9	-6.8	-18.2	-13.2
26	-18.8	-18.8	-18.8	-18.5	-17.2	-16.9	-16.0	-15.5	-15.7	-15.5	-15.1	-14.9	-15.1	-14.5	-14.9	-14.4	-14.9	-15.7	-15.4	-12.9	-14.6	-17.8	-18.3	-17.9	-12.9	-18.8	-16.2
27	-18.0	-17.2	-17.6	-18.6	-18.6	-18.4	-18.4	-17.4	-16.4	-17.1	-16.3	-15.3	-15.3	-14.8	-13.6	-13.3	-12.6	-13.7	-13.1	-13.4	-13.2	-12.9	-12.6	-12.1	-12.1	-18.6	-15.4
28	-11.6	-11.4	-11.2	-11.0	-11.2	-10.9	-10.6	-10.4	-10.6	-10.7	-10.4	-10.5	-10.3	-10.3	-10.8	-10.6	-10.2	-10.2	-10.3	-10.6	-9.6	-11.3	-11.7	-11.5	-9.6	-11.7	-10.8
29	-10.4	-11.7	-12.1	-12.6	-12.4	-12.8	-13.4	-13.9	-14.4	-14.6	-14.8	-15.0	-15.1	-15.2	-15.3	-15.3	-15.2	-15.3	-15.7	-16.1	-16.2	-16.4	-16.7	-17.2	-10.4	-17.2	-14.5
30	-17.8	-18.3	-19.2	-19.7	-19.7	-20.8	-20.5	-21.2	-20.3	-20.4	-20.5	-19.5	-19.8	-19.6	-19.3	-19.8	-20.0	-19.9	-19.8	-19.6	-19.5	-20.1	-19.8	-19.0	-17.8	-21.2	-19.7
Max.	**2.0**	**2.0**	**2.1**	**1.5**	**2.1**	**2.6**	**3.2**	**2.8**	**2.7**	**3.2**	**2.5**	**2.5**	**2.3**	**2.0**	**1.7**	**1.9**	**1.8**	**1.4**	**1.0**	**0.9**	**2.8**	**3.3**	**3.3**	**2.5**	**3.3**		
Min.	**-23.6**	**-23.5**	**-23.7**	**-24.4**	**-24.4**	**-24.6**	**-24.7**	**-25.0**	**-24.8**	**-25.8**	**-25.5**	**-25.8**	**-25.1**	**-25.1**	**-25.2**	**-24.9**	**-24.8**	**-25.3**	**-25.6**	**-25.1**	**-25.5**	**-24.7**	**-24.4**	**-23.7**		**-25.8**	
Avg.	**-9.6**	**-9.8**	**-9.8**	**-9.8**	**-9.6**	**-9.7**	**-9.7**	**-9.7**	**-9.8**	**-10.1**	**-10.4**	**-10.3**	**-10.0**	**-9.6**	**-9.5**	**-9.4**	**-9.3**	**-9.5**	**-9.7**	**-9.7**	**-9.7**	**-10.0**	**-10.1**	**-10.0**			**-9.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature at 10 meters (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	-19.0	-19.5	-19.8	-19.9	-20.0	-20.1	-19.6	-19.3	-19.5	-18.2	-18.0	-16.2	-16.1	-14.9	-14.7	-14.5	-14.0	-13.8	-14.0	-14.7	-14.5	-14.4	-13.5	-13.0	-13.0	-20.1	-16.7
2	-12.3	-11.9	-11.8	-11.3	-11.6	-11.4	-9.3	-8.7	-7.0	-2.7	-2.0	-1.6	-1.5	-0.6	0.1	0.5	0.6	0.8	0.5	0.7	0.9	1.1	1.3	1.8	1.8	-12.3	-4.0
3	2.0	2.3	2.4	2.5	2.6	2.9	3.1	3.4	3.7	3.5	3.5	3.6	3.5	2.8	3.5	3.4	3.3	4.0	4.2	4.5	4.3	4.1	3.7	3.3	4.5	2.0	3.3
4	3.1	3.0	3.0	2.6	2.8	2.8	2.9	2.9	2.6	2.5	2.8	2.8	3.2	3.2	2.8	2.2	3.4	3.6	3.6	3.6	3.5	3.1	3.5	3.1	3.6	2.2	3.0
5	3.0	2.9	3.0	3.2	3.2	3.3	3.3	3.4	3.1	2.6	3.1	3.1	3.3	3.0	2.9	2.5	2.9	3.7	3.8	3.5	3.2	2.8	2.5	2.5	3.8	2.5	3.1
6	2.3	2.5	3.1	2.9	2.6	2.7	2.6	3.1	4.0	3.3	3.0	2.3	2.1	2.3	2.3	2.5	1.7	1.6	1.7	1.9	1.9	1.7	1.6	1.3	4.0	1.3	2.4
7	0.9	0.7	0.2	-1.1	-1.7	-2.8	-3.3	-3.6	-3.6	-4.5	-4.9	-6.0	-6.2	-5.9	-5.4	-5.3	-5.5	-6.4	-7.4	-7.8	-8.2	-8.9	-9.0	-9.5	0.9	-9.5	-4.8
8	-9.7	-10.1	-9.9	-8.8	-7.4	-7.0	-5.0	-2.7	0.2	0.8	1.3	2.3	3.0	2.5	1.2	1.4	1.8	2.4	3.1	3.0	2.8	2.3	2.2	1.9	3.1	-10.1	-1.2
9	1.9	1.7	1.9	-0.7	-2.6	-3.9	-4.3	-5.8	-6.2	-6.6	-6.2	-5.5	-5.5	-5.6	-5.4	-5.0	-5.0	-5.3	-6.3	-6.8	-6.9	-6.3	-5.9	-5.8	1.9	-6.9	-4.4
10	-5.7	-5.0	-4.0	-3.6	-4.2	-5.8	-6.4	-6.5	-6.2	-7.4	-8.7	-9.5	-10.1	-10.7	-10.4	-10.1	-10.7	-10.9	-11.2	-12.0	-12.8	-10.9	-11.1	-11.4	-3.6	-12.8	-8.6
11	-11.5	-12.3	-12.8	-14.3	-14.4	-15.4	-13.6	-13.2	-13.5	-15.2	-13.9	-12.0	-11.5	-10.1	-9.6	-6.6	-8.0	-9.5	-10.4	-10.5	-10.5	-11.5	-11.2	-11.9	-6.6	-15.4	-11.8
12	-14.7	-14.1	-13.7	-15.1	-14.9	-15.0	-14.8	-15.1	-13.4	-12.9	-12.2	-10.9	-11.0	-11.0	-10.5	-10.0	-9.7	-9.9	-8.2	-7.0	-6.7	-7.0	-7.4	-7.2	-6.7	-15.1	-11.4
13	-7.5	-7.4	-7.8	-7.5	-7.7	-8.5	-8.9	-9.1	-9.2	-8.0	-10.5	-9.7	-10.0	-10.9	-10.8	-9.7	-10.9	-10.8	-12.5	-12.6	-13.0	-13.2	-12.9	-13.9	-7.4	-13.9	-10.1
14	-12.8	-12.3	-11.2	-11.9	-12.8	-13.0	-12.3	-12.7	-10.8	-6.9	-5.9	-5.4	-3.4	-3.6	-2.7	-3.3	-2.9	-2.8	-3.9	-2.6	-1.9	-1.3	-0.7	-0.6	-0.6	-13.0	-6.6
15	-0.3	0.1	0.1	0.0	-0.4	-0.4	-0.3	-0.4	0.1	-0.1	-1.0	-1.0	-0.8	-0.9	-1.2	-1.8	-1.8	-2.1	-2.9	-5.1	-4.3	-5.9	-5.2	-5.1	0.1	-5.9	-1.7
16	-6.1	-7.0	-7.6	-7.2	-8.5	-10.2	-11.0	-10.7	-11.6	-12.5	-12.1	-13.6	-11.7	-9.2	-5.6	-5.6	-5.0	-5.2	-5.4	-5.3	-5.4	-4.7	-3.7	-2.5	-2.5	-13.6	-7.8
17	-2.1	-0.6	0.3	-0.1	-0.5	-0.4	-0.6	-0.2	0.4	0.7	0.5	0.7	1.3	1.6	1.7	1.6	1.5	1.4	1.5	1.4	1.5	1.5	1.1	1.1	1.7	-2.1	0.7
18	1.2	1.3	1.4	1.5	1.4	1.4	1.7	1.5	1.6	1.7	2.0	1.9	1.8	2.1	2.3	2.4	2.4	2.4	2.4	2.4	2.0	2.5	2.3	2.2	2.5	1.2	1.9
19	2.2	2.5	2.6	2.4	2.3	2.1	2.2	2.1	2.0	2.0	1.9	1.7	1.5	1.2	1.2	0.8	1.2	1.6	1.6	1.8	1.8	1.9	1.7	1.8	2.6	0.8	1.8
20	1.9	1.6	0.8	1.2	1.3	1.5	1.5	1.4	1.6	1.4	1.4	1.0	0.8	1.5	1.9	1.6	1.2	0.8	-1.0	-3.8	-4.6	-4.3	-3.1	-3.4	1.9	-4.6	0.2
21	-3.4	-5.5	-6.6	-6.1	-4.7	-3.8	-4.4	-4.8	-6.5	-5.9	-4.0	-3.8	-4.8	-5.4	-5.2	-5.0	-5.0	-6.5	-8.5	-8.9	-9.4	-10.2	-10.0	-10.8	-3.4	-10.8	-6.2
22	-11.3	-10.9	-11.7	-11.0	-9.0	-7.6	-6.2	-4.5	-3.5	-3.0	-2.5	-2.6	-2.8	-2.5	-2.7	-2.7	-2.5	-2.5	-2.4	-2.2	-2.3	-2.8	-2.7	-2.6	-2.2	-11.7	-4.8
23	-2.7	-2.6	-2.3	-2.2	-2.2	-1.8	-1.8	-2.1	-1.6	-1.8	-2.4	-3.9	-6.4	-6.7	-6.5	-6.4	-7.5	-7.6	-7.8	-7.4	-7.1	-7.3	-7.5	-8.0	-1.6	-8.0	-4.7
24	-8.1	-7.4	-7.8	-7.2	-7.6	-7.5	-7.9	-8.6	-9.4	-8.9	-7.8	-7.8	-7.5	-7.2	-6.7	-7.4	-6.8	-7.4	-9.5	-9.9	-10.0	-9.6	-9.4	-8.0	-6.7	-10.0	-8.1
25	-8.2	-7.7	-6.7	-5.3	-4.8	-4.6	-4.1	-3.4	-3.1	-3.2	-3.2	-3.2	-3.1	-3.5	-3.9	-4.0	-3.5	-5.3	-6.9	-7.8	-8.2	-8.8	-9.5	-10.2	-3.1	-10.2	-5.5
26	-10.6	-11.7	-13.7	-14.8	-15.5	-16.0	-16.2	-16.3	-16.4	-16.1	-15.7	-15.4	-15.7	-15.6	-15.5	-15.3	-15.0	-15.1	-15.2	-15.4	-15.6	-15.7	-15.6	-15.8	-10.6	-16.4	-15.2
27	-15.7	-15.6	-15.7	-16.1	-16.3	-16.5	-16.7	-17.0	-17.1	-17.4	-17.6	-17.8	-17.8	-17.7	-17.8	-17.9	-18.0	-18.2	-18.5	-18.8	-19.3	-19.3	-19.4	-19.6	-15.6	-19.6	-17.6
28	-19.8	-19.7	-19.9	-19.8	-19.9	-20.2	-20.2	-20.3	-20.6	-21.1	-21.2	-21.0	-21.5	-21.4	-21.2	-21.3	-21.5	-22.1	-22.2	-22.9	-23.3	-23.8	-23.9	-23.9	-19.7	-23.9	-21.4
29	-24.2	-24.6	-24.0	-23.8	-24.1	-24.2	-24.3	-24.4	-24.5	-24.5	-24.4	-24.3	-24.6	-24.5	-24.4	-24.3	-23.9	-24.0	-24.1	-24.5	-24.1	-24.4	-24.8	-25.3	-23.8	-25.3	-24.3
30	-25.7	-25.4	-25.5	-25.5	-25.3	-25.2	-26.1	-25.7	-25.8	-25.8	-26.5	-26.5	-26.8	-27.2	-27.0	-26.3	-26.2	-26.3	-26.4	-26.8	-27.1	-26.8	-26.7	-27.2	-25.2	-27.2	-26.2
31	-26.7	-26.9	-26.7	-26.5	-26.3	-26.3	-26.7	-25.2	-25.3	-24.3	-24.8	-24.9	-24.6	-24.8	-24.7	-24.3	-24.2	-24.1	-23.3	-23.4	-23.3	-23.6	-23.1	-22.8	-22.8	-26.9	-24.9
Max.	**3.1**	**3.0**	**3.1**	**3.2**	**3.2**	**3.3**	**3.3**	**3.4**	**4.0**	**3.5**	**3.5**	**3.6**	**3.5**	**3.2**	**3.5**	**3.4**	**3.4**	**4.0**	**4.2**	**4.5**	**4.3**	**4.1**	**3.7**	**3.3**	**4.5**		
Min.	**-26.7**	**-26.9**	**-26.7**	**-26.5**	**-26.3**	**-26.3**	**-26.7**	**-25.7**	**-25.8**	**-25.8**	**-26.5**	**-26.5**	**-26.8**	**-27.2**	**-27.0**	**-26.3**	**-26.2**	**-26.3**	**-26.4**	**-26.8**	**-27.1**	**-26.8**	**-26.7**	**-27.2**		**-27.2**	
Avg.	**-7.7**	**-7.7**	**-7.8**	**-7.9**	**-7.9**	**-8.1**	**-8.0**	**-7.8**	**-7.6**	**-7.4**	**-7.3**	**-7.2**	**-7.2**	**-7.1**	**-6.8**	**-6.7**	**-6.7**	**-6.9**	**-7.3**	**-7.5**	**-7.6**	**-7.7**	**-7.6**	**-7.7**			**-7.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.6	0.30	0.26	0.13	0.07	0.15	0.13	0.09	0.11	0.10	0.11	0.10	0.06	0.09	-0.01	-0.02	0.02	0.02	0.02	0.09	0.21	0.11	0.17	0.06	0.60	-0.02	0.12
2	0.1	0.22	0.23	0.06	0.09	0.09	0.10	0.13	0.11	0.19	0.21	0.24	0.14	0.25	0.18	0.25	0.27	0.29	0.29	0.31	0.31	0.31	0.31	0.35	0.35	0.06	0.21
3	0.4	0.51	0.49	1.12	0.69	1.23	0.33	0.55	-0.03	-0.08	0.02	-0.05	-0.09	-0.13	-0.07	-0.09	-0.08	-0.08	-0.08	-0.07	-0.13	-0.14	-0.13	-0.12	1.23	-0.14	0.17
4	-0.1	-0.13	-0.14	-0.13	-0.12	-0.13	-0.14	-0.13	-0.14	-0.15	-0.14	-0.14	-0.13	-0.13	-0.13	-0.08	-0.04	-0.04	0.03	0.02	0.07	0.05	0.07	0.03	0.07	-0.15	-0.08
5	0.0	0.11	0.13	0.16	0.07	0.12	0.10	0.08	0.08	0.13	0.05	-0.01	-0.06	-0.07	-0.07	-0.04	-0.01	0.03	0.00	-0.02	0.01	-0.06	0.00	0.05	0.16	-0.07	0.03
6	0.1	0.05	0.14	0.09	0.07	0.04	0.05	0.10	0.07	0.09	-0.03	-0.04	-0.06	0.04	0.02	0.06	0.13	0.18	0.12	0.13	0.17	0.15	0.01	0.10	0.18	-0.06	0.07
7	0.0	0.05	0.07	-0.01	0.02	0.04	0.02	0.13	0.13	0.00	0.03	0.11	-0.09	-0.12	-0.17	-0.13	-0.16	-0.15	-0.10	-0.08	-0.07	-0.06	0.08	0.50	0.50	-0.17	0.00
8	0.5	0.16	0.21	0.27	0.24	0.05	0.01	-0.04	-0.05	-0.01	0.01	0.09	0.11	-0.01	-0.06	-0.05	0.04	0.03	0.09	0.22	0.14	0.05	0.10	0.28	0.53	-0.06	0.10
9	0.2	0.15	0.21	0.28	0.13	0.17	0.24	0.20	0.33	0.22	0.21	0.24	0.25	0.11	0.03	0.09	0.09	0.11	0.23	0.31	0.08	0.01	0.06	0.06	0.33	0.01	0.17
10	0.1	0.02	0.15	0.50	0.44	0.34	0.17	0.33	0.44	0.39	0.29	0.05	0.06	0.04	0.06	0.13	0.09	0.10	0.11	0.14	0.23	0.25	0.16	0.38	0.50	0.02	0.21
11	0.2	-0.03	-0.08	-0.01	0.02	0.08	0.04	0.03	0.18	0.10	0.00	0.03	0.02	0.05	0.17	0.11	0.21	0.42	0.28	0.26	0.19	0.12	0.12	0.05	0.42	-0.08	0.11
12	0.0	0.08	0.09	0.05	0.10	0.07	0.01	0.02	0.09	0.05	0.02	0.02	0.00	0.00	-0.04	-0.01	0.07	0.06	0.05	0.02	0.02	0.02	0.05	-0.01	0.10	-0.04	0.03
13	-0.1	-0.02	0.02	-0.04	-0.05	-0.02	-0.05	-0.04	0.00	-0.01	-0.01	0.01	-0.02	-0.02	-0.04	0.00	0.04	0.05	0.19	0.28	0.22	0.11	0.21	0.44	0.44	-0.10	0.05
14	0.2	0.24	0.30	-0.05	-0.03	0.23	-0.15	-0.23	-0.09	-0.18	0.52	2.27	1.17	0.35	0.19	0.10	0.11	0.14	0.23	0.23	0.13	0.07	0.08	0.14	2.27	-0.23	0.25
15	0.1	0.05	0.07	0.06	0.02	0.00	0.00	0.01	-0.03	0.06	0.07	0.06	0.08	0.10	0.08	0.27	0.24	0.24	0.24	0.30	0.35	0.33	0.28	0.26	0.35	-0.03	0.14
16	0.3	0.25	0.38	0.23	1.15	1.09	1.55	2.30	3.24	3.03	4.02	4.00	1.99	0.84	0.52	0.99	0.54	0.37	0.65	1.19	2.06	1.77	2.14	2.25	4.02	0.23	1.53
17	1.5	3.73	4.83	2.93	2.35	2.73	1.40	0.82	1.12	0.89	0.62	0.53	0.48	0.36	0.24	0.28	0.24	0.06	0.00	-0.03	-0.01	0.06	0.10	-0.04	4.83	-0.04	1.05
18	0.0	-0.06	0.04	0.02	0.15	0.16	0.10	0.09	0.13	0.15	0.17	0.27	0.03	-0.13	0.01	0.31	0.90	1.46	2.11	1.89	1.15	0.22	0.58	0.36	2.11	-0.13	0.42
19	0.4	0.43	0.49	0.57	0.43	0.49	0.53	0.48	0.50	0.44	0.31	0.25	0.32	0.70	0.39	0.39	0.56	0.61	0.72	0.73	0.53	0.40	0.46	0.20	0.73	0.20	0.47
20	0.1	0.02	0.00	-0.01	0.04	0.05	0.01	-0.02	-0.01	-0.01	-0.03	0.01	-0.02	-0.01	0.00	0.01	0.02	0.00	-0.03	-0.02	0.35	-0.06	-0.07	-0.02	0.35	-0.07	0.01
21	0.1	-0.01	-0.07	0.07	0.61	0.54	0.40	0.34	0.23	0.22	0.26	0.30	0.40	0.44	0.48	0.52	0.53	0.53	0.52	0.40	0.33	0.33	0.35	0.36	0.61	-0.07	0.34
22	0.3	0.26	0.30	0.39	0.37	0.38	0.27	0.19	0.11	0.07	0.07	0.06	0.05	0.07	-0.01	0.00	0.01	-0.02	0.01	0.08	0.22	0.32	0.20	0.07	0.39	-0.02	0.16
23	0.1	0.07	-0.01	-0.02	0.11	0.27	0.25	0.26	0.24	0.30	0.21	0.21	0.16	0.13	0.17	0.17	0.19	0.13	0.16	0.14	0.18	0.45	0.40	0.03	0.45	-0.02	0.18
24	-0.1	-0.13	-0.16	-0.19	-0.16	-0.22	-0.20	-0.18	-0.09	0.03	0.34	0.32	0.18	-0.01	-0.01	0.01	-0.01	-0.05	-0.02	-0.01	-0.01	0.00	0.01	0.00	0.34	-0.22	-0.03
25	0.0	0.03	0.04	0.76	0.31	0.44	0.15	0.08	0.11	0.14	0.20	0.19	0.22	0.31	0.22	0.23	0.02	0.04	0.05	0.03	0.06	0.29	0.14	0.12	0.76	0.02	0.18
26	0.2	0.22	0.20	0.18	0.18	0.15	0.07	0.19	0.19	0.25	0.12	0.47	0.50	0.27	0.51	0.72	0.59	0.63	0.86	1.92	2.51	2.75	1.46	1.14	2.75	0.07	0.68
27	0.8	1.53	0.95	0.52	0.17	0.16	0.14	0.30	0.33	0.30	0.30	0.29	0.30	0.24	0.13	0.09	0.09	0.08	0.06	0.07	0.12	0.17	0.20	0.16	1.53	0.06	0.31
28	0.1	0.02	-0.02	-0.02	-0.03	-0.04	-0.03	-0.02	-0.01	-0.01	-0.01	-0.03	-0.05	-0.03	0.00	-0.01	0.10	0.14	0.21	1.58	1.72	1.44	0.30	0.26	1.72	-0.05	0.23
29	0.3	0.73	0.73	0.57	0.16	0.31	0.16	0.15	0.20	0.82	1.22	0.47	0.51	0.79	1.20	0.31	0.45	0.74	0.25	0.42	1.59	1.56	1.61	2.56	2.56	0.15	0.74
30	3.7	5.12	2.90	1.82	0.68	0.86	0.92	0.73	1.31	0.38	0.30	0.15	0.00	-0.01	-0.04	-0.01	0.02	0.09	0.02	0.06	0.11	0.14	0.13	0.15	5.12	-0.04	0.81
31	0.2	0.30	0.43	0.36	0.32	0.76	0.33	1.24	1.12	1.06	1.45	0.87	0.69	0.19	0.41	-0.02	-0.19	0.19	0.71	0.45	1.39	0.96	0.63	0.62	1.45	-0.19	0.60
Max.	**3.7**	**5.12**	**4.83**	**2.93**	**2.35**	**2.73**	**1.55**	**2.30**	**3.24**	**3.03**	**4.02**	**4.00**	**1.99**	**0.84**	**1.20**	**0.99**	**0.90**	**1.46**	**2.11**	**1.92**	**2.51**	**2.75**	**2.14**	**2.56**	**5.12**		
Min.	**-0.1**	**-0.13**	**-0.16**	**-0.19**	**-0.16**	**-0.22**	**-0.20**	**-0.23**	**-0.14**	**-0.18**	**-0.14**	**-0.14**	**-0.13**	**-0.13**	**-0.17**	**-0.13**	**-0.19**	**-0.15**	**-0.10**	**-0.08**	**-0.13**	**-0.14**	**-0.13**	**-0.12**		**-0.23**	
Avg.	**0.3**	**0.46**	**0.42**	**0.34**	**0.28**	**0.34**	**0.22**	**0.26**	**0.32**	**0.29**	**0.35**	**0.37**	**0.23**	**0.15**	**0.14**	**0.15**	**0.16**	**0.21**	**0.26**	**0.36**	**0.46**	**0.39**	**0.33**	**0.35**			**0.30**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.7	2.33	1.76	1.66	0.68	0.46	0.27	0.02	0.02	-0.04	0.45	0.85	-0.04	-0.09	-0.10	-0.10	-0.08	0.12	1.80	5.39	4.80	5.19	3.39	4.82	5.39	-0.10	1.47
2	5.0	1.51	1.13	1.01	1.10	1.25	0.36	0.24	0.17	0.29	0.48	0.34	0.40	0.30	0.34	0.52	0.41	0.54	1.03	0.78	1.24	0.69	0.35	0.39	4.97	0.17	0.83
3	0.2	0.23	0.37	0.24	0.31	0.27	0.11	0.14	0.15	0.45	0.16	0.12	0.03	0.00	0.05	0.12	0.07	0.09	0.19	0.74	0.33	0.51	0.47	0.36	0.74	0.00	0.24
4	0.5	0.63	0.46	0.53	0.47	0.59	0.56	0.52	0.55	0.71	0.55	0.47	0.31	0.18	0.22	0.38	0.43	0.27	0.21	0.24	0.20	0.58	0.53	0.50	0.71	0.18	0.44
5	0.2	0.19	0.11	0.14	0.22	0.24	0.21	0.19	0.13	0.12	0.07	0.12	0.08	0.11	0.06	0.10	0.13	0.18	0.15	0.59	0.64	0.86	0.44	0.47	0.86	0.06	0.24
6	0.5	0.51	0.91	0.51	0.52	0.47	0.64	0.68	0.64	0.84	0.48	0.47	0.61	0.34	0.27	0.11	0.15	0.27	0.25	0.32	0.43	0.49	0.29	0.27	0.91	0.11	0.46
7	0.3	0.29	0.44	0.32	0.22	0.49	0.36	0.58	0.55	0.48	0.67	0.40	0.38	0.32	0.37	0.35	0.44	0.58	0.60	0.78	1.28	1.98	1.17	0.55	1.98	0.22	0.58
8	0.8	1.22	2.14	3.54	2.28	3.71	4.35	4.86	5.45	5.94	4.83	4.54	4.56	4.15	2.81	1.23	2.18	1.98	3.12	3.76	3.75	1.83	0.72	0.37	5.94	0.37	3.09
9	0.3	0.25	0.23	0.22	0.27	0.30	0.34	0.39	0.46	0.44	0.42	0.55	1.05	0.51	0.32	0.07	-0.08	1.28	0.31	0.53	0.41	0.41	0.37	0.17	1.28	-0.08	0.40
10	0.4	0.39	0.62	0.39	0.18	0.24	0.25	0.16	0.55	0.52	0.59	0.43	0.37	0.04	0.02	0.22	0.15	0.11	0.35	0.33	0.37	0.46	0.24	0.21	0.62	0.02	0.32
11	0.3	0.64	2.08	2.47	2.40	1.96	1.34	0.46	0.21	0.06	0.07	0.00	-0.16	-0.16	-0.20	-0.18	-0.18	-0.16	-0.12	-0.14	-0.07	-0.10	0.12	-0.01	2.47	-0.20	0.44
12	-0.2	0.04	0.71	2.65	4.05	1.98	1.07	1.92	2.61	1.74	2.08	0.68	0.12	0.06	0.06	0.05	0.13	0.24	0.46	0.61	0.69	0.77	0.75	1.66	4.05	-0.19	1.04
13	0.6	0.72	2.01	0.87	0.72	0.51	0.43	0.49	0.57	0.56	0.56	0.43	0.38	0.40	0.36	0.25	0.24	0.24	0.28	0.37	0.33	0.31	0.33	0.32	2.01	0.24	0.51
14	0.3	0.38	0.38	0.22	0.11	0.10	0.01	0.09	-0.01	0.00	-0.08	-0.09	-0.08	-0.04	-0.08	-0.07	-0.10	-0.12	-0.13	-0.13	-0.12	-0.10	-0.07	-0.01	0.38	-0.13	0.02
15	0.0	-0.06	-0.05	-0.09	-0.04	0.25	0.67	0.29	0.52	1.12	2.51	1.30	0.44	0.36	0.29	0.26	0.37	1.14	0.71	1.83	1.55	1.92	1.63	0.73	2.51	-0.09	0.73
16	0.9	0.27	0.30	0.36	0.31	0.15	0.15	0.16	0.13	0.08	0.10	0.13	0.08	0.09	0.07	0.01	0.05	0.17	0.10	0.01	0.06	0.22	0.17	0.61	0.85	0.01	0.19
17	1.3	1.61	1.29	0.97	2.18	1.12	0.76	0.56	0.66	0.60	0.37	0.30	0.26	0.09	0.06	0.03	0.00	0.12	0.12	0.05	0.13	0.25	0.33	0.40	2.18	0.00	0.56
18	0.4	0.26	0.17	0.11	0.19	0.20	0.18	0.18	0.21	0.24	0.27	0.29	0.26	0.26	0.25	0.23	0.27	0.26	0.27	0.17	0.08	0.18	0.33	0.41	0.41	0.08	0.24
19	0.5	0.65	0.72	0.73	0.38	0.45	0.49	0.47	0.37	0.23	0.22	0.23	0.21	0.22	0.23	0.29	0.37	0.34	0.37	0.30	0.30	0.27	0.34	0.28	0.73	0.21	0.38
20	0.1	0.08	0.00	0.05	0.04	0.15	0.22	0.15	0.14	0.19	0.19	0.26	0.41	0.68	0.72	0.74	0.48	0.35	0.32	0.36	0.38	0.40	0.40	0.33	0.74	0.00	0.30
21	0.3	0.35	0.45	0.39	0.33	0.39	0.41	0.46	0.42	0.41	0.38	0.31	0.30	0.27	0.29	0.34	0.36	0.34	0.36	0.40	0.36	0.17	0.14	0.18	0.46	0.14	0.34
22	0.1	0.12	0.04	0.04	0.09	0.39	0.44	0.18	0.04	0.19	0.30	0.03	0.02	-0.03	0.11	0.04	0.04	0.13	0.12	0.25	0.19	0.66	0.92	0.32	0.92	-0.03	0.20
23	0.5	1.03	1.64	0.93	0.58	1.20	1.38	1.51	1.40	1.87	0.92	0.88	1.07	0.60	0.93	0.68	0.73	0.76	0.88	0.43	0.48	0.44	0.35	0.33	1.87	0.33	0.90
24	0.3	0.24	0.31	0.12	0.35	0.20	0.23	0.13	0.31	0.30	0.17	0.01	0.03	0.01	-0.01	0.00	0.09	0.10	0.15	0.31	0.22	0.22	0.21	0.22	0.35	-0.01	0.17
25	0.2	0.20	0.13	0.13	0.14	0.14	0.04	-0.02	-0.11	-0.10	-0.13	-0.07	0.02	0.20	0.27	0.02	-0.02	0.16	0.55	0.47	0.29	0.46	0.35	0.60	0.60	-0.13	0.16
26	1.1	0.98	1.44	1.32	0.82	0.57	0.54	1.08	0.97	0.89	0.68	0.84	0.54	0.59	0.73	0.75	0.70	0.48	0.11	0.11	0.20	0.33	0.30	0.24	1.44	0.11	0.68
27	0.3	0.18	0.35	0.41	0.74	1.10	0.91	0.68	0.52	0.57	0.52	0.48	0.26	0.06	0.09	0.10	0.10	0.14	0.59	0.61	0.73	0.39	0.39	0.38	1.10	0.06	0.44
28	0.5	0.53	0.68	0.49	0.46	0.46	0.51	0.53	0.53	0.47	0.40	0.65	0.63	0.22	0.09	0.21	0.16	0.46	0.55	0.88	0.36	0.30	0.29	0.47	0.88	0.09	0.45
29	0.2	0.34	0.27	0.21	0.22	0.29	0.36	0.07	0.16	0.17	0.16	0.12	0.14	0.01	-0.03	-0.14	-0.13	-0.08	-0.11	-0.06	-0.02	0.02	0.00	0.00	0.36	-0.14	0.09
Max.	**5.0**	**2.33**	**2.14**	**3.54**	**4.05**	**3.71**	**4.35**	**4.86**	**5.45**	**5.94**	**4.83**	**4.54**	**4.56**	**4.15**	**2.81**	**1.23**	**2.18**	**1.98**	**3.12**	**5.39**	**4.80**	**5.19**	**3.39**	**4.82**	**5.94**		
Min.	**-0.2**	**-0.06**	**-0.05**	**-0.09**	**-0.04**	**0.10**	**0.01**	**-0.02**	**-0.11**	**-0.10**	**-0.13**	**-0.09**	**-0.16**	**-0.16**	**-0.20**	**-0.18**	**-0.18**	**-0.16**	**-0.13**	**-0.14**	**-0.12**	**-0.10**	**-0.07**	**-0.01**		**-0.20**	
Avg.	**0.6**	**0.56**	**0.73**	**0.72**	**0.70**	**0.68**	**0.61**	**0.59**	**0.63**	**0.67**	**0.63**	**0.52**	**0.44**	**0.34**	**0.30**	**0.23**	**0.26**	**0.36**	**0.47**	**0.70**	**0.68**	**0.69**	**0.53**	**0.54**			**0.55**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.0	-0.03	0.05	-0.06	-0.11	-0.06	0.02	0.08	0.81	1.51	1.01	1.68	0.87	0.86	1.08	0.93	0.28	0.18	0.04	0.05	0.15	0.19	0.18	0.29	1.68	-0.11	0.42
2	0.4	0.32	0.24	0.31	0.48	0.29	0.23	0.07	0.01	-0.01	0.06	0.11	0.14	0.17	0.15	0.23	0.10	0.07	0.27	0.17	0.21	0.09	0.10	0.17	0.48	-0.01	0.18
3	0.3	0.48	0.13	0.12	0.19	0.32	0.33	0.41	0.39	0.25	0.07	0.08	0.15	0.14	0.36	0.49	0.35	0.25	0.26	0.34	0.29	0.28	0.34	0.42	0.49	0.07	0.28
4	0.4	0.39	0.41	0.37	0.22	0.06	0.07	0.17	0.23	0.17	0.18	0.12	0.26	0.39	0.42	0.39	0.43	0.45	0.46	0.45	0.34	0.23	0.40	0.35	0.46	0.06	0.31
5	0.5	0.44	0.58	0.75	0.65	0.51	0.56	0.43	0.36	0.35	0.50	0.41	0.45	0.40	0.37	0.49	0.58	0.48	0.43	0.32	0.26	0.27	0.28	0.30	0.75	0.26	0.44
6	0.3	0.35	0.32	0.36	0.39	0.27	0.21	0.23	0.41	0.46	0.45	0.54	0.50	0.57	0.57	0.56	0.55	0.46	0.52	0.64	0.74	0.53	0.44	0.42	0.74	0.21	0.45
7	0.3	0.25	0.25	0.43	0.57	0.81	0.80	0.78	0.42	0.49	0.51	0.42	0.18	0.13	0.10	0.00	0.01	0.06	0.08	0.12	0.08	-0.05	-0.08	-0.06	0.81	-0.08	0.28
8	0.0	0.05	0.04	0.15	0.40	0.48	0.56	0.11	0.03	0.02	0.19	0.51	0.54	0.30	0.20	0.22	0.22	0.23	0.19	0.22	0.19	0.19	0.22	0.24	0.56	-0.02	0.23
9	0.2	0.30	0.38	0.37	0.38	0.38	0.42	0.40	0.35	0.40	0.36	0.31	0.34	0.16	0.12	0.13	0.13	0.13	0.15	0.36	0.54	0.66	0.39	0.55	0.66	0.12	0.33
10	0.3	0.77	0.58	0.43	0.04	0.01	0.04	0.08	0.06	0.02	-0.10	-0.12	-0.16	-0.09	-0.14	-0.10	-0.12	-0.10	-0.02	0.04	0.06	0.00	-0.03	0.03	0.77	-0.16	0.06
11	0.0	0.03	0.15	0.08	0.12	0.13	0.17	0.05	0.04	0.37	-0.07	-0.10	-0.16	-0.14	-0.16	-0.19	-0.23	-0.06	-0.04	0.33	1.22	0.92	0.18	0.50	1.22	-0.23	0.13
12	1.2	1.60	0.94	0.62	0.45	1.15	1.74	0.70	1.17	0.19	-0.11	-0.17	-0.23	-0.23	-0.35	-0.28	-0.12	-0.19	0.14	0.33	1.00	0.88	0.83	1.03	1.74	-0.35	0.51
13	0.2	0.00	-0.01	-0.06	-0.07	-0.06	-0.09	-0.12	-0.12	-0.15	-0.20	-0.24	-0.29	-0.32	-0.32	-0.31	-0.24	-0.18	-0.10	-0.09	0.13	0.33	0.33	0.33	0.33	-0.32	-0.07
14	0.3	0.62	0.31	-0.08	-0.13	-0.12	-0.10	-0.14	-0.15	-0.08	-0.10	-0.14	-0.18	-0.20	-0.23	-0.13	0.04	0.27	0.71	0.84	0.61	0.35	0.24	0.30	0.84	-0.23	0.12
15	0.4	0.21	0.16	0.12	0.16	0.31	0.23	0.16	0.20	0.23	0.04	0.07	0.16	0.20	0.23	0.19	0.11	0.09	0.08	0.09	0.12	0.05	0.02	0.01	0.42	0.01	0.15
16	0.0	0.11	-0.02	0.10	0.37	1.05	1.49	1.45	2.25	1.70	2.03	0.31	-0.20	0.21	0.35	0.02	-0.24	0.22	1.26	1.53	2.46	1.04	0.93	0.84	2.46	-0.24	0.80
17	0.5	1.06	1.22	0.80	0.73	1.20	0.86	0.71	0.78	0.32	0.03	0.06	0.05	-0.05	0.07	-0.05	-0.12	-0.06	-0.10	-0.07	-0.07	-0.03	-0.01	-0.02	1.22	-0.12	0.32
18	0.0	-0.01	-0.02	0.05	0.09	0.19	0.00	0.05	0.24	0.16	-0.05	-0.10	-0.14	-0.15	-0.25	-0.13	-0.20	-0.11	-0.05	-0.04	0.02	0.11	0.10	0.20	0.24	-0.25	0.00
19	0.2	0.20	0.12	0.15	0.14	0.20	0.20	0.17	0.15	0.15	0.08	-0.06	-0.06	-0.12	-0.18	-0.16	-0.14	-0.15	-0.05	-0.03	0.05	0.00	-0.07	0.08	0.23	-0.18	0.04
20	0.2	-0.01	-0.03	0.01	-0.09	-0.09	-0.09	-0.09	-0.05	-0.12	-0.19	-0.09	-0.09	-0.15	-0.25	-0.23	-0.29	-0.26	-0.14	-0.03	0.03	0.08	0.15	0.09	0.21	-0.29	-0.07
21	0.0	0.02	0.08	-0.03	-0.07	-0.08	-0.11	-0.17	-0.15	0.49	0.13	0.09	0.08	0.13	0.33	0.71	0.43	0.60	0.46	0.48	0.44	0.81	0.47	0.35	0.81	-0.17	0.23
22	0.2	0.61	0.32	0.34	0.21	0.26	0.32	0.36	0.54	0.28	0.11	0.18	0.15	0.08	-0.04	-0.06	0.20	0.03	0.14	0.33	0.45	0.54	1.07	0.84	1.07	-0.06	0.31
23	0.6	0.52	0.65	0.16	0.18	0.42	0.44	0.47	0.21	0.04	0.14	0.02	-0.08	-0.15	-0.19	-0.16	-0.12	-0.06	0.08	0.25	0.35	0.28	0.29	0.17	0.65	-0.19	0.19
24	0.1	0.24	0.34	0.16	0.00	0.00	0.00	0.07	0.38	0.66	0.10	-0.01	-0.03	-0.12	-0.08	-0.08	-0.05	-0.11	-0.04	0.34	0.57	1.19	0.51	0.59	1.19	-0.12	0.20
25	0.6	0.29	0.03	0.00	-0.01	0.05	0.77	0.57	0.74	0.54	0.28	-0.01	-0.03	-0.16	-0.19	-0.10	-0.10	-0.07	0.02	0.41	0.88	0.83	0.44	0.66	0.88	-0.19	0.27
26	1.0	1.26	1.11	1.90	1.30	1.24	1.61	0.92	0.70	0.54	0.45	0.52	-0.12	-0.18	-0.08	-0.04	0.05	0.14	0.14	0.12	0.31	0.87	0.79	0.90	1.90	-0.18	0.64
27	0.9	0.86	1.30	2.24	1.03	0.92	0.49	0.22	0.26	0.16	-0.02	-0.12	-0.21	-0.17	-0.18	-0.16	-0.15	-0.06	0.02	0.27	0.61	1.54	0.80	0.54	2.24	-0.21	0.46
28	0.4	0.48	0.47	1.44	1.14	0.86	0.92	1.17	0.93	0.60	0.29	0.04	-0.17	-0.23	-0.25	-0.22	-0.19	-0.10	0.32	0.64	1.15	2.31	2.29	2.32	2.32	-0.25	0.69
29	2.5	2.71	3.03	2.46	3.10	1.16	1.22	1.41	1.05	1.23	0.48	0.20	0.07	0.03	0.02	0.01	0.01	0.11	0.14	0.14	0.14	0.13	0.22	0.17	3.10	0.01	0.91
30	0.2	0.13	0.14	0.12	0.12	0.15	0.18	0.18	0.21	0.23	0.18	0.17	0.16	0.19	0.19	0.18	0.12	0.06	0.06	0.07	0.06	0.15	0.22	0.14	0.23	0.06	0.15
31	0.2	0.19	0.16	0.17	0.25	0.40	0.39	0.36	0.30	0.39	0.41	0.52	0.44	0.47	0.46	0.42	0.42	0.41	0.44	0.44	0.39	0.32	0.18	0.17	0.52	0.15	0.34
Max.	**2.5**	**2.71**	**3.03**	**2.46**	**3.10**	**1.24**	**1.74**	**1.45**	**2.25**	**1.70**	**2.03**	**1.68**	**0.87**	**0.86**	**1.08**	**0.93**	**0.58**	**0.60**	**1.26**	**1.53**	**2.46**	**2.31**	**2.29**	**2.32**	**3.10**		
Min.	**0.0**	**-0.03**	**-0.03**	**-0.08**	**-0.13**	**-0.12**	**-0.11**	**-0.17**	**-0.15**	**-0.15**	**-0.20**	**-0.24**	**-0.29**	**-0.32**	**-0.35**	**-0.31**	**-0.29**	**-0.26**	**-0.14**	**-0.09**	**-0.07**	**-0.05**	**-0.08**	**-0.06**		**-0.35**	
Avg.	**0.4**	**0.47**	**0.43**	**0.45**	**0.39**	**0.40**	**0.45**	**0.36**	**0.41**	**0.37**	**0.23**	**0.17**	**0.08**	**0.06**	**0.07**	**0.08**	**0.05**	**0.09**	**0.19**	**0.29**	**0.44**	**0.49**	**0.39**	**0.42**			**0.30**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.18	0.09	0.04	0.06	0.06	0.02	0.01	0.05	0.04	0.09	0.17	0.14	0.15	0.17	0.19	0.14	0.12	0.06	0.10	0.10	0.05	-0.03	-0.04	0.23	-0.04	0.09
2	0.1	0.49	0.31	-0.02	0.12	0.05	-0.10	-0.06	0.28	-0.21	-0.16	-0.29	-0.39	-0.43	-0.21	-0.13	-0.25	-0.15	-0.14	-0.18	-0.02	0.18	0.04	0.04	0.49	-0.43	-0.05
3	0.0	-0.04	-0.03	-0.02	0.00	-0.01	0.00	-0.03	0.00	-0.01	0.06	0.07	0.06	0.13	0.16	0.20	0.21	0.28	0.21	0.22	0.19	0.18	0.18	0.19	0.28	-0.04	0.09
4	0.2	0.15	0.17	0.11	0.10	0.18	0.18	0.18	0.16	0.06	0.00	0.00	-0.05	-0.03	-0.05	-0.07	-0.09	-0.08	-0.03	0.02	-0.03	-0.06	0.01	-0.09	0.18	-0.09	0.04
5	-0.1	-0.05	-0.06	-0.01	0.18	0.34	0.33	0.44	0.44	0.63	-0.10	-0.18	-0.27	-0.23	-0.31	-0.31	-0.25	-0.23	0.15	0.33	0.66	1.15	0.96	0.78	1.15	-0.31	0.18
6	0.5	0.29	0.35	0.33	0.42	0.32	0.29	0.17	0.24	0.20	0.04	-0.16	-0.13	-0.09	-0.21	-0.25	-0.22	-0.10	0.04	0.14	0.30	0.49	0.42	0.47	0.49	-0.25	0.16
7	0.3	0.63	0.71	0.60	0.79	1.65	0.65	0.88	1.49	0.92	0.50	0.08	-0.05	-0.18	-0.16	-0.16	-0.05	-0.07	0.37	0.49	1.04	0.89	0.89	1.36	1.65	-0.18	0.56
8	1.7	2.14	1.82	1.52	2.39	2.51	1.95	2.63	1.67	0.95	0.54	-0.04	-0.18	-0.31	-0.22	-0.23	-0.26	-0.11	-0.15	-0.15	-0.12	-0.07	0.22	0.36	2.63	-0.31	0.77
9	0.5	0.26	0.16	0.13	0.25	0.31	0.49	0.46	0.35	0.24	0.16	0.07	-0.12	-0.11	-0.07	-0.09	-0.09	-0.11	0.15	0.39	0.84	0.76	2.23	1.98	2.23	-0.12	0.38
10	2.1	0.51	0.53	0.62	0.32	0.58	0.93	0.42	0.36	0.33	0.09	-0.09	-0.13	-0.13	-0.17	-0.15	-0.13	-0.16	-0.07	0.20	0.60	0.96	1.28	1.70	2.14	-0.17	0.44
11	1.5	1.43	1.02	1.61	0.72	0.80	0.63	0.74	0.41	0.16	0.00	-0.08	-0.21	-0.28	-0.26	-0.12	-0.07	-0.10	-0.08	0.16	0.62	0.90	0.93	1.18	1.61	-0.28	0.49
12	0.7	0.53	0.96	0.91	1.50	1.26	1.39	1.21	1.19	0.87	0.33	-0.09	-0.22	-0.21	-0.21	-0.14	-0.08	-0.07	0.19	0.45	0.35	0.62	1.18	1.28	1.50	-0.22	0.58
13	0.9	1.24	0.53	0.00	0.24	0.10	0.06	-0.06	-0.10	-0.09	-0.09	-0.05	-0.01	-0.07	-0.07	0.00	0.03	0.07	0.02	0.02	0.01	-0.03	-0.11	-0.08	1.24	-0.11	0.10
14	-0.1	-0.11	-0.10	0.00	0.02	-0.04	-0.06	-0.06	-0.10	-0.05	-0.09	-0.13	-0.13	-0.06	-0.10	-0.09	-0.09	0.02	0.03	0.09	0.09	0.07	0.10	0.10	0.10	-0.13	-0.03
15	0.2	0.19	0.28	0.62	0.66	0.46	0.18	0.17	0.00	-0.04	-0.11	-0.09	-0.08	-0.14	-0.28	-0.19	-0.06	-0.03	0.02	0.09	0.15	0.22	0.25	0.23	0.66	-0.28	0.11
16	0.1	0.17	0.16	0.20	0.22	0.17	0.16	0.20	0.10	0.00	-0.07	-0.14	-0.25	-0.28	-0.28	-0.23	-0.21	-0.18	-0.16	0.07	0.65	0.93	0.38	0.29	0.93	-0.28	0.09
17	0.2	0.13	0.31	0.38	0.29	0.37	0.64	0.79	0.68	0.71	0.07	-0.18	-0.16	-0.21	-0.22	-0.20	-0.19	-0.17	-0.12	0.01	0.28	0.60	0.93	1.36	1.36	-0.22	0.26
18	2.1	2.52	2.74	3.43	3.00	3.12	3.66	3.61	3.17	1.36	0.78	0.27	-0.05	0.03	-0.04	-0.05	0.13	0.12	0.21	0.14	0.35	0.65	0.90	0.81	3.66	-0.05	1.37
19	1.2	0.98	0.86	0.75	0.84	0.83	0.83	0.72	0.48	0.32	0.33	0.17	0.35	0.40	0.45	0.45	0.49	0.48	0.52	0.62	0.62	0.52	0.73	0.91	1.20	0.17	0.62
20	0.8	0.62	0.78	0.69	1.00	0.94	1.18	1.54	1.21	0.76	0.70	0.59	0.60	0.59	0.48	0.16	0.29	0.08	0.04	0.09	0.12	0.21	0.13	0.17	1.54	0.04	0.57
21	0.2	0.16	0.16	0.26	0.28	0.28	0.24	0.17	0.10	-0.02	-0.05	0.02	0.06	0.07	0.04	0.07	0.08	0.15	0.29	0.67	0.50	0.39	0.45	0.42	0.67	-0.05	0.21
22	0.7	1.31	2.18	1.54	1.05	0.95	1.19	1.64	0.90	0.53	0.07	0.26	0.48	0.18	0.22	0.32	0.79	0.95	0.77	1.30	1.23	1.77	2.05	2.14	2.18	0.07	1.02
23	1.7	1.37	1.96	1.82	1.56	2.25	1.52	1.38	1.45	0.40	-0.02	-0.09	-0.03	-0.06	-0.10	0.07	0.22	-0.02	0.45	0.44	1.12	1.64	2.36	2.54	2.54	-0.10	1.00
24	1.3	1.12	0.62	0.82	0.78	0.90	0.15	-0.03	-0.15	-0.22	-0.22	-0.24	-0.30	-0.36	-0.16	-0.22	-0.15	-0.10	-0.05	-0.06	-0.13	0.05	0.11	0.01	1.28	-0.36	0.14
25	-0.1	-0.11	-0.09	-0.14	-0.14	-0.11	-0.07	0.03	0.04	-0.06	-0.05	-0.15	-0.22	-0.28	-0.30	-0.29	-0.24	-0.13	-0.04	-0.04	0.16	0.45	0.84	0.70	0.84	-0.30	-0.01
26	0.3	0.29	0.28	0.24	0.21	0.14	0.17	0.18	-0.03	-0.06	-0.11	-0.14	-0.11	-0.09	-0.14	-0.12	-0.10	-0.10	-0.04	0.01	0.07	0.07	0.01	-0.01	0.31	-0.14	0.04
27	0.0	-0.03	-0.03	-0.03	-0.03	-0.05	-0.07	-0.07	-0.06	-0.08	-0.09	-0.12	-0.17	-0.13	-0.08	-0.08	-0.17	-0.14	-0.09	-0.03	0.06	0.01	-0.02	0.02	0.06	-0.17	-0.06
28	0.1	0.13	0.38	0.46	0.75	0.59	0.58	0.73	0.20	-0.04	-0.25	-0.24	-0.30	-0.24	-0.30	-0.30	-0.33	-0.36	-0.28	-0.14	-0.06	-0.02	0.11	0.16	0.75	-0.36	0.05
29	0.2	0.27	0.21	0.27	0.18	0.08	0.08	0.05	-0.02	-0.08	-0.08	-0.23	-0.15	-0.29	-0.27	-0.14	-0.07	0.11	0.21	0.30	0.40	0.44	0.44	0.83	0.83	-0.29	0.12
30	0.3	0.33	0.23	0.21	0.28	0.15	0.25	0.28	0.14	-0.03	-0.08	-0.27	-0.37	-0.38	-0.30	-0.21	-0.25	-0.14	-0.11	-0.06	-0.02	0.12	0.10	0.05	0.33	-0.38	0.01
Max.	**2.1**	**2.52**	**2.74**	**3.43**	**3.00**	**3.12**	**3.66**	**3.61**	**3.17**	**1.36**	**0.78**	**0.59**	**0.60**	**0.59**	**0.48**	**0.45**	**0.79**	**0.95**	**0.77**	**1.30**	**1.23**	**1.77**	**2.36**	**2.54**	**3.66**		
Min.	**-0.1**	**-0.11**	**-0.10**	**-0.14**	**-0.14**	**-0.11**	**-0.10**	**-0.07**	**-0.15**	**-0.22**	**-0.25**	**-0.29**	**-0.39**	**-0.43**	**-0.31**	**-0.31**	**-0.33**	**-0.36**	**-0.28**	**-0.18**	**-0.13**	**-0.07**	**-0.11**	**-0.09**		**-0.43**	
Avg.	**0.6**	**0.57**	**0.58**	**0.58**	**0.60**	**0.64**	**0.58**	**0.61**	**0.49**	**0.25**	**0.07**	**-0.04**	**-0.08**	**-0.10**	**-0.10**	**-0.08**	**-0.03**	**-0.01**	**0.08**	**0.19**	**0.34**	**0.47**	**0.60**	**0.66**			**0.31**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.1	0.16	0.11	0.13	0.14	0.18	0.13	0.12	0.07	-0.02	-0.08	-0.24	-0.16	-0.19	-0.16	-0.02	0.13	0.11	0.35	0.38	0.36	0.35	0.41	0.47	0.47	-0.24	0.12
2	0.4	0.29	0.20	0.14	0.09	0.14	0.18	0.13	0.16	0.24	0.14	0.23	0.14	0.08	-0.18	-0.03	0.03	0.06	-0.01	0.06	0.27	0.15	0.35	0.24	0.37	-0.18	0.14
3	0.4	0.14	0.04	-0.06	-0.07	0.00	0.37	-0.04	-0.11	-0.11	-0.18	-0.32	-0.34	-0.29	-0.17	0.06	-0.18	-0.19	0.11	0.47	0.39	0.48	0.47	0.29	0.48	-0.34	0.05
4	0.2	0.25	0.23	0.24	0.35	0.26	0.26	0.23	0.22	0.15	0.08	-0.07	-0.18	-0.05	-0.16	-0.20	-0.01	0.02	0.20	0.16	0.20	0.39	0.44	0.38	0.44	-0.20	0.15
5	0.4	0.44	0.43	0.44	0.59	0.78	0.61	0.32	0.05	-0.07	-0.26	-0.13	-0.16	-0.38	-0.26	-0.40	-0.34	-0.32	0.04	0.07	0.15	0.54	0.59	0.52	0.78	-0.40	0.15
6	0.7	0.76	0.26	0.42	0.43	0.51	0.55	0.14	-0.02	0.06	-0.20	-0.36	-0.48	-0.61	-0.71	-0.66	-0.59	-0.40	-0.18	0.01	0.14	0.28	0.31	0.31	0.76	-0.71	0.03
7	0.3	0.30	0.34	0.33	0.37	0.34	0.30	0.28	0.22	0.12	-0.09	0.04	-0.15	0.01	-0.11	-0.06	-0.11	-0.21	-0.15	0.20	0.33	0.46	0.40	0.30	0.46	-0.21	0.16
8	0.3	0.28	0.31	0.39	0.37	0.34	0.33	0.35	0.25	0.15	-0.04	-0.03	-0.07	-0.01	-0.04	-0.18	-0.26	-0.27	-0.18	-0.02	0.19	0.33	0.44	0.44	0.44	-0.27	0.14
9	0.5	0.86	0.71	0.71	0.58	0.53	0.42	0.31	0.15	-0.12	-0.19	-0.26	-0.36	-0.39	-0.56	-0.55	-0.46	-0.35	-0.34	-0.17	-0.04	0.03	0.24	0.45	0.86	-0.56	0.07
10	0.5	0.45	0.41	0.38	0.35	0.33	0.29	0.01	-0.13	-0.36	-0.46	-0.50	-0.60	-0.81	-0.80	-0.82	-0.66	-0.59	-0.54	-0.41	-0.12	0.34	0.46	0.73	0.73	-0.82	-0.10
11	0.7	0.46	0.41	0.49	0.49	0.70	0.46	0.18	0.15	-0.11	-0.40	-0.32	-0.38	-0.31	0.08	0.13	0.16	0.22	0.20	0.28	0.27	0.34	0.46	0.46	0.74	-0.40	0.22
12	0.4	0.45	0.55	0.24	0.40	0.42	0.32	0.19	-0.11	-0.20	-0.56	-0.52	-0.63	-0.54	-0.77	-0.53	-0.54	-0.48	-0.43	-0.19	-0.04	0.02	0.15	0.21	0.55	-0.77	-0.09
13	0.2	0.14	0.13	0.13	0.13	0.10	0.12	0.05	-0.01	0.01	-0.16	-0.53	-1.04	-0.79	-1.28	-1.19	-1.13	-0.54	-0.64	-0.44	-0.14	0.07	0.21	0.42	0.42	-1.28	-0.26
14	0.6	0.58	0.98	1.38	0.90	0.57	0.33	0.20	0.15	0.10	0.06	-0.09	-0.58	-0.76	-0.75	-0.76	-0.79	-0.61	-0.60	-0.48	-0.18	0.34	0.71	0.75	1.38	-0.79	0.08
15	1.4	1.20	1.07	0.70	0.49	0.54	0.55	0.06	-0.33	-0.56	-0.80	-1.04	-1.27	-0.65	-0.68	-0.94	-0.84	-0.57	-0.44	-0.30	-0.15	-0.08	0.01	0.10	1.40	-1.27	-0.11
16	0.2	0.18	0.16	0.10	0.21	0.21	0.13	0.03	-0.04	-0.06	-0.21	-0.58	-0.81	-1.11	-1.48	-1.35	-1.41	-1.22	-1.05	-0.77	-0.40	0.05	0.66	1.57	1.57	-1.48	-0.29
17	1.1	0.82	0.90	1.09	0.78	0.96	1.15	0.35	-0.27	-0.45	-0.72	-0.96	-0.95	-0.97	-0.89	-0.91	-0.82	-0.90	-0.87	-0.66	-0.22	0.10	0.52	0.94	1.15	-0.97	-0.04
18	1.3	1.75	2.55	1.61	1.35	0.80	0.54	-0.02	-0.30	-0.27	-0.29	-0.50	-0.65	-0.55	-0.57	-0.52	-0.57	-0.77	-0.56	-0.21	-0.10	-0.09	0.05	0.30	2.55	-0.77	0.18
19	0.3	0.62	0.85	1.35	1.66	0.77	0.49	0.15	-0.21	-0.37	-0.52	-1.04	-0.91	-0.85	-1.02	-1.10	-1.08	-0.90	-0.62	-0.53	-0.23	-0.05	0.59	0.73	1.66	-1.10	-0.08
20	0.4	0.34	0.58	0.40	0.41	0.62	0.46	0.04	-0.24	-0.56	-0.72	-0.89	-0.87	-1.10	-0.98	-0.99	-1.02	-0.89	-0.70	-0.61	-0.28	0.33	1.41	2.86	2.86	-1.10	-0.08
21	3.0	3.27	2.94	2.43	2.63	2.48	1.44	0.06	-0.29	-0.51	-0.52	-0.86	-1.03	-1.34	-1.34	-1.31	-0.91	-0.84	-0.67	-0.34	-0.27	0.01	0.43	1.61	3.27	-1.34	0.42
22	1.2	0.89	0.80	0.57	0.63	0.54	0.35	-0.17	-0.38	-0.51	-0.56	-0.82	-0.74	-1.02	-0.92	-1.47	-1.04	-0.77	-0.57	-0.25	-0.10	0.04	0.11	0.14	1.18	-1.47	-0.17
23	0.1	0.13	0.12	0.14	0.22	0.38	0.27	0.16	0.04	-0.09	-0.45	-0.29	-0.34	-0.18	0.01	0.04	0.00	-0.03	0.00	0.04	0.01	-0.04	0.20	0.26	0.38	-0.45	0.03
24	0.3	0.24	0.19	0.17	0.16	0.16	0.07	-0.03	-0.11	-0.14	-0.21	-0.20	-0.50	-0.70	-0.87	-1.51	-0.78	-0.93	-0.78	-0.19	-0.03	0.14	0.35	0.77	0.77	-1.51	-0.19
25	1.2	1.94	1.33	0.93	0.65	0.39	0.52	0.63	0.18	-0.28	-0.42	-0.54	-0.85	-0.66	-0.85	-1.28	-1.37	-0.49	-0.51	-0.44	-0.29	-0.07	0.22	0.21	1.94	-1.37	0.01
26	0.2	0.19	0.36	0.24	0.16	0.23	0.14	-0.08	-0.23	-0.44	-0.61	-0.76	-0.75	-0.99	-1.11	-1.01	-1.08	-0.85	-0.59	-0.53	-0.57	-0.04	0.45	1.42	1.42	-1.11	-0.26
27	1.3	1.20	1.45	1.03	0.97	0.75	0.43	-0.12	-0.43	-0.72	-0.86	-1.04	-1.13	-1.17	-1.26	-1.26	-1.11	-0.95	-0.81	-0.58	-0.28	0.06	0.47	0.84	1.45	-1.26	-0.14
28	0.8	1.62	1.37	0.98	1.91	0.96	0.42	0.13	-0.36	-0.66	-0.86	-1.06	-1.02	-1.06	-1.12	-1.19	-0.81	-0.77	-0.57	-0.32	-0.20	-0.04	0.40	0.45	1.91	-1.19	-0.04
29	0.5	0.61	0.56	1.10	1.22	1.34	0.32	-0.09	-0.27	-0.55	-0.56	-0.57	-0.71	-0.69	-0.74	-0.98	-0.99	-0.72	-0.74	-0.56	-0.34	0.08	0.40	0.73	1.34	-0.99	-0.07
30	1.0	1.11	1.94	2.27	2.20	1.83	1.08	0.04	-0.31	-0.62	-0.94	-1.14	-1.29	-1.54	-1.49	-1.32	-1.46	-0.74	-0.65	-0.85	-0.43	-0.03	0.11	0.17	2.27	-1.54	-0.04
31	0.2	0.22	0.29	0.24	0.15	0.09	0.04	-0.04	-0.05	-0.22	-0.64	-0.90	-0.94	-1.18	-0.79	-0.79	-1.00	-1.16	-0.65	-0.36	-0.25	-0.19	-0.08	0.06	0.29	-1.18	-0.33
Max.	**3.0**	**3.27**	**2.94**	**2.43**	**2.63**	**2.48**	**1.44**	**0.63**	**0.25**	**0.24**	**0.14**	**0.23**	**0.14**	**0.08**	**0.08**	**0.13**	**0.16**	**0.22**	**0.35**	**0.47**	**0.39**	**0.54**	**1.41**	**2.86**	**3.27**		
Min.	**0.1**	**0.13**	**0.04**	**-0.06**	**-0.07**	**0.00**	**0.04**	**-0.17**	**-0.43**	**-0.72**	**-0.94**	**-1.14**	**-1.29**	**-1.54**	**-1.49**	**-1.51**	**-1.46**	**-1.22**	**-1.05**	**-0.85**	**-0.57**	**-0.19**	**-0.08**	**0.06**		**-1.54**	
Avg.	**0.7**	**0.71**	**0.73**	**0.67**	**0.68**	**0.59**	**0.42**	**0.12**	**-0.08**	**-0.23**	**-0.40**	**-0.53**	**-0.64**	**-0.67**	**-0.71**	**-0.74**	**-0.68**	**-0.55**	**-0.42**	**-0.24**	**-0.08**	**0.14**	**0.39**	**0.62**			**-0.01**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.18	0.12	0.15	0.17	0.25	0.18	0.17	0.08	-0.06	-0.32	-0.61	-1.16	-1.08	-1.19	-1.22	-1.27	-0.42	-0.53	-0.36	-0.20	-0.07	0.03	0.17	0.25	-1.27	-0.28
2	0.4	0.79	0.69	0.59	0.42	0.54	0.94	0.38	-0.31	-0.72	-0.69	-0.95	-1.16	-0.93	-0.88	-0.65	-0.91	-0.52	-0.55	-0.43	-0.18	-0.13	0.17	0.43	0.94	-1.16	-0.15
3	0.5	0.56	0.75	0.63	0.55	0.59	0.31	0.07	-0.15	-0.33	-0.51	-0.51	-0.41	-1.36	-1.16	-1.22	-1.40	-1.19	-1.03	-0.80	-0.19	-0.11	0.15	0.38	0.75	-1.40	-0.24
4	0.3	0.42	0.39	0.50	0.61	0.06	-0.03	-0.31	-0.51	-0.96	-0.90	-0.63	-0.69	-1.44	-1.49	-1.69	-1.27	-0.90	-1.28	-1.23	-0.75	-0.25	0.18	1.58	1.58	-1.69	-0.43
5	1.3	1.11	1.04	1.04	0.46	0.34	0.18	0.02	-0.07	-0.34	-0.32	-0.36	-0.47	-0.62	-0.76	-0.57	-0.83	-0.56	-0.52	-0.59	-0.37	-0.16	0.09	0.30	1.31	-0.83	-0.03
6	0.3	0.50	0.24	0.40	0.20	0.07	0.10	0.03	-0.11	-0.32	-0.58	-0.94	-1.19	-1.10	-0.79	-0.69	-0.99	-1.12	-0.66	-0.24	-0.22	-0.03	-0.02	1.16	1.16	-1.19	-0.25
7	1.7	1.83	1.15	0.35	0.40	0.26	0.03	-0.30	-0.50	-0.74	-0.93	-1.26	-0.71	-0.69	-0.73	-0.74	-0.78	-0.65	-0.72	-0.57	-0.37	-0.08	0.10	0.49	1.83	-1.26	-0.15
8	0.3	0.27	0.12	0.03	-0.08	-0.07	-0.21	-0.30	-0.67	-0.56	-0.81	-0.83	-0.74	-0.60	-0.72	-0.60	-0.44	-0.27	-0.19	-0.17	-0.26	-0.14	0.39	0.85	0.85	-0.83	-0.24
9	0.0	-0.01	0.00	-0.03	-0.06	-0.03	-0.05	-0.14	-0.22	-0.46	-0.62	-0.72	-0.86	-0.69	-0.82	-0.83	-0.63	-0.68	-0.57	-0.44	-0.32	-0.19	-0.02	0.07	0.07	-0.86	-0.35
10	0.1	0.13	0.12	0.09	0.09	0.02	-0.12	-0.30	-0.36	-0.25	-0.33	-0.39	-0.41	-0.43	-0.85	-0.91	-0.73	-0.66	-0.54	-0.38	-0.20	-0.02	0.14	0.49	0.49	-0.91	-0.24
11	0.4	0.46	0.37	0.64	0.43	0.26	0.21	-0.18	-0.38	-0.48	-0.51	-0.50	-0.75	-0.57	-0.71	-0.53	-0.58	-0.58	-0.63	-0.39	-0.06	0.02	0.02	0.10	0.64	-0.75	-0.16
12	0.1	0.22	0.37	0.21	0.44	0.66	0.23	-0.16	-0.41	-0.63	-0.58	-0.46	-0.42	-0.39	-0.57	-0.34	-0.27	-0.18	-0.19	-0.10	-0.08	-0.05	-0.04	0.04	0.66	-0.63	-0.11
13	0.1	0.14	0.12	0.10	0.06	0.06	0.02	-0.07	-0.11	-0.21	-0.39	-0.58	-0.66	-0.48	-0.54	-0.61	-0.50	-0.46	-0.49	-0.66	-0.18	-0.18	0.61	1.12	1.12	-0.66	-0.15
14	2.0	1.52	0.52	0.24	0.09	-0.03	-0.15	-0.23	-0.26	-0.40	-0.40	-0.68	-1.09	-1.41	-1.54	-1.64	-1.38	-0.99	-0.94	0.17	0.15	0.01	0.27	0.53	2.02	-1.64	-0.23
15	1.0	1.66	1.78	1.49	0.96	0.33	-0.02	-0.19	-0.42	-0.56	-0.98	-0.97	-1.26	-1.14	-1.02	-1.07	-1.14	-0.92	-0.53	-0.35	-0.25	-0.13	-0.07	-0.01	1.78	-1.26	-0.16
16	0.0	0.01	-0.06	-0.03	0.00	-0.01	-0.08	-0.21	-0.27	-0.42	-0.51	-0.51	-0.44	-0.88	-0.43	-0.53	-0.55	-0.56	-0.64	-0.50	-0.29	-0.22	0.01	0.41	0.41	-0.88	-0.28
17	0.5	0.60	0.75	0.47	0.63	0.73	0.28	-0.37	-0.48	-0.63	-0.65	-1.13	-0.40	-1.19	-1.44	-1.44	-1.37	-1.13	-1.04	-0.75	-0.38	-0.05	0.36	0.69	0.75	-1.44	-0.31
18	1.4	2.01	1.99	2.42	1.49	1.37	0.58	-0.09	-0.31	-0.47	-0.67	-0.49	-1.01	-1.27	-1.31	-1.24	-1.02	-1.09	-0.68	-0.56	-0.58	-0.25	0.25	0.46	2.42	-1.31	0.04
19	0.7	0.84	1.16	1.32	1.27	1.03	0.10	-0.32	-0.56	-0.51	-0.78	-0.88	-1.05	-0.97	-0.89	-1.39	-1.18	-1.01	-0.97	-0.81	-0.40	0.22	0.46	0.68	1.32	-1.39	-0.16
20	0.5	0.44	0.71	1.44	1.50	1.62	1.00	-0.16	-0.43	-0.78	-1.03	-1.31	-1.53	-1.55	-1.38	-1.52	-1.34	-1.18	-1.11	-0.86	-0.60	-0.21	0.21	0.42	1.62	-1.55	-0.30
21	0.7	0.77	0.54	0.70	1.62	2.44	1.65	0.03	-0.25	-0.40	-0.48	-0.55	-0.43	-0.52	-0.71	-0.74	-0.73	-1.13	-1.14	-0.92	-0.59	-0.16	0.27	0.68	2.44	-1.14	0.03
22	2.1	2.21	2.69	2.64	2.93	2.45	2.02	0.70	-0.52	-0.46	-0.92	-1.12	-1.17	-1.37	-1.10	-0.74	-0.72	-1.22	-1.04	-0.43	-0.12	-0.05	0.00	0.06	2.93	-1.37	0.28
23	0.1	0.15	0.32	0.47	0.91	1.78	0.49	-0.05	-0.28	-0.68	-0.51	-0.93	-1.28	-1.63	-1.66	-1.58	-1.46	-1.29	-1.16	-0.74	-0.44	-0.11	0.33	1.35	1.78	-1.66	-0.33
24	2.0	2.13	2.60	3.46	3.10	2.86	1.13	0.00	-0.50	-0.92	-1.05	-1.01	-0.60	-0.43	-0.29	-0.31	-0.20	-0.17	-0.06	-0.01	0.01	0.05	0.08	0.09	3.46	-1.05	0.50
25	0.1	0.17	0.17	0.17	0.15	0.10	0.07	0.02	0.02	-0.33	-0.31	-0.20	-0.26	-0.18	-0.36	-0.78	-1.27	-0.86	-0.38	-0.25	-0.23	-0.07	0.12	0.25	0.25	-1.27	-0.17
26	0.5	1.00	1.30	1.10	0.76	0.65	0.60	0.40	0.23	-0.10	-0.11	-0.42	-0.52	-0.44	-0.58	-0.49	-0.32	-0.39	-0.51	-0.27	-0.21	0.00	0.37	0.92	1.30	-0.58	0.14
27	1.2	1.54	1.06	2.09	1.41	1.32	0.16	0.06	-0.21	-0.50	-0.71	-0.93	-0.99	-1.10	-0.98	-0.96	-1.01	-1.31	-1.11	-0.54	-0.20	0.18	0.71	1.21	2.09	-1.31	0.02
28	1.6	2.05	1.53	0.83	1.01	1.04	0.86	-0.21	-0.36	-0.39	-0.64	-0.84	-0.61	-0.72	-1.06	-0.58	-0.32	-0.35	-0.40	-0.29	-0.17	-0.08	0.07	0.25	2.05	-1.06	0.09
29	0.3	0.17	0.04	0.12	0.11	0.09	0.11	0.07	-0.28	-0.47	-0.71	-0.65	-0.99	-0.91	-1.15	-0.99	-1.09	-1.08	-1.03	-0.47	-0.12	0.22	0.30	0.41	0.41	-1.15	-0.33
30	0.6	0.98	1.58	0.82	0.93	0.86	0.67	0.15	-0.54	-0.63	-0.70	-0.56	-0.56	-0.70	-0.75	-0.62	-0.46	-0.69	-0.40	-0.06	-0.10	0.94	1.04	1.25	1.58	-0.75	0.13
Max.	**2.1**	**2.21**	**2.69**	**3.46**	**3.10**	**2.86**	**2.02**	**0.70**	**0.23**	**-0.06**	**-0.11**	**-0.20**	**-0.26**	**-0.18**	**-0.29**	**-0.31**	**-0.20**	**-0.17**	**-0.06**	**0.17**	**0.15**	**0.94**	**1.04**	**1.58**	**3.46**		
Min.	**0.0**	**-0.01**	**-0.06**	**-0.03**	**-0.08**	**-0.07**	**-0.21**	**-0.37**	**-0.67**	**-0.96**	**-1.05**	**-1.31**	**-1.53**	**-1.63**	**-1.66**	**-1.69**	**-1.46**	**-1.31**	**-1.28**	**-1.23**	**-0.75**	**-0.25**	**-0.07**	**-0.01**		**-1.69**	
Avg.	**0.7**	**0.83**	**0.81**	**0.82**	**0.75**	**0.72**	**0.38**	**-0.05**	**-0.30**	**-0.49**	**-0.62**	**-0.73**	**-0.79**	**-0.89**	**-0.93**	**-0.91**	**-0.87**	**-0.79**	**-0.70**	**-0.47**	**-0.26**	**-0.04**	**0.22**	**0.56**			**-0.13**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.4	1.14	1.11	0.52	0.93	1.18	0.75	0.08	-0.28	-0.54	-0.96	-1.12	-1.39	-1.54	-1.53	-1.46	-1.52	-1.30	-0.65	-0.67	-0.27	-0.01	0.16	0.27	1.44	-1.54	-0.24
2	0.2	0.22	0.23	0.25	0.30	0.32	0.24	0.10	-0.02	-0.31	-0.73	-0.64	-1.09	-1.34	-1.68	-1.49	-1.19	-0.88	-0.15	-0.31	-0.31	0.00	0.11	0.20	0.32	-1.68	-0.33
3	0.2	0.16	0.17	0.27	0.42	0.49	0.33	0.11	-0.09	-0.16	-0.31	-0.44	-0.36	-0.46	-0.26	-0.50	-0.62	-0.65	-0.57	-0.33	-0.22	0.04	0.17	0.18	0.49	-0.65	-0.10
4	0.1	0.18	0.13	0.27	0.32	0.27	0.19	-0.04	-0.12	-0.28	-0.32	-0.44	-0.80	-1.06	-0.54	-0.74	-0.76	-0.66	-0.25	-0.38	-0.43	-0.28	-0.12	0.52	0.52	-1.06	-0.22
5	0.9	0.50	0.17	0.70	0.83	1.06	1.39	0.20	-0.26	-0.22	-0.37	-0.70	-0.78	-0.67	-0.87	-0.60	-0.50	-0.54	-0.50	-0.55	-0.16	0.16	0.54	0.58	1.39	-0.87	0.01
6	1.0	0.69	1.05	1.33	1.59	2.01	0.49	0.38	-0.20	-0.49	-0.90	-0.99	-1.43	-1.13	-0.84	-0.96	-0.91	-0.83	-0.74	-0.54	-0.37	-0.20	-0.07	-0.02	2.01	-1.43	-0.09
7	0.0	-0.04	-0.06	-0.05	0.00	-0.03	-0.04	-0.06	-0.10	-0.23	-0.21	-0.24	-0.27	-0.33	-0.25	-0.32	-0.31	-0.45	-0.67	-0.43	-0.29	-0.11	0.02	0.17	0.17	-0.67	-0.18
8	0.5	0.38	0.37	0.29	0.20	0.12	-0.05	-0.15	-0.19	-0.23	-0.19	-0.18	-0.17	-0.34	-0.37	-0.26	-0.23	-0.15	-0.13	-0.10	-0.05	-0.01	0.08	0.15	0.53	-0.37	-0.03
9	0.1	0.15	0.27	0.94	0.80	0.54	0.34	-0.11	-0.39	-0.56	-0.77	-0.98	-1.10	-1.40	-1.61	-1.67	-1.47	-1.15	-0.96	-0.34	-0.15	0.00	0.13	0.20	0.94	-1.67	-0.38
10	0.3	0.26	0.15	0.09	0.12	0.10	0.05	-0.05	-0.16	-0.22	-0.40	-1.16	-0.95	-0.83	-0.75	-0.70	-1.03	-1.31	-0.75	-0.24	-0.14	-0.02	0.09	0.06	0.33	-1.31	-0.31
11	0.1	0.18	0.23	0.15	0.12	0.09	0.05	-0.06	-0.36	-0.78	-1.02	-1.08	-1.22	-1.37	-1.21	-1.42	-1.46	-1.35	-1.07	-0.84	-0.42	-0.06	0.40	0.65	0.65	-1.46	-0.49
12	1.2	1.06	1.50	2.28	2.75	2.98	1.85	0.31	-0.36	-0.44	-0.95	-0.56	-0.46	-0.62	-0.66	-0.36	-0.39	-0.33	-0.07	0.11	0.11	0.12	0.11	0.11	2.98	-0.95	0.39
13	0.1	0.12	0.15	0.09	0.03	0.07	0.05	-0.03	-0.07	-0.07	-0.17	-0.41	-0.43	-0.49	-0.49	-0.57	-0.58	-0.51	-0.45	-0.42	-0.34	-0.13	0.03	0.25	0.25	-0.58	-0.18
14	0.3	0.28	0.30	0.38	0.49	0.31	0.26	-0.12	-0.20	-0.42	-0.66	-0.82	-0.84	-0.93	-1.15	-1.12	-0.86	-0.75	-0.52	-0.43	-0.32	-0.12	0.07	0.08	0.49	-1.15	-0.28
15	0.1	0.09	0.10	0.11	0.12	0.31	0.40	-0.13	-0.41	-0.63	-0.67	-0.79	-1.10	-1.32	-1.62	-1.55	-0.95	-0.56	-0.44	-0.19	0.09	0.07	0.08	0.11	0.40	-1.62	-0.37
16	0.1	0.07	0.08	0.05	0.05	0.04	0.03	-0.01	-0.08	-0.10	-0.08	-0.02	0.05	0.01	-0.13	-0.04	0.00	-0.08	0.01	0.01	0.04	0.04	0.05	0.05	0.09	-0.13	0.01
17	0.0	-0.01	0.02	0.00	0.01	0.05	0.06	-0.06	-0.17	-0.25	-0.23	-0.36	-0.46	-0.62	-0.45	-0.48	-0.38	-0.37	-0.28	-0.22	-0.07	-0.04	0.01	0.01	0.06	-0.62	-0.18
18	0.0	-0.02	-0.03	0.03	-0.06	-0.02	-0.09	-0.26	-0.33	-0.24	-0.49	-0.56	-0.47	-0.42	-0.40	-0.54	-0.33	-0.33	-0.42	-0.39	-0.24	-0.04	0.05	0.19	0.19	-0.56	-0.23
19	0.2	0.20	0.22	0.34	0.24	0.13	0.06	-0.05	-0.18	-0.34	-0.38	-0.47	-0.51	-0.51	-0.42	-0.52	-0.29	-0.43	-0.26	-0.12	-0.01	0.10	0.35	0.66	0.66	-0.52	-0.08
20	0.8	0.28	0.39	0.59	0.63	1.04	0.80	0.71	0.01	-0.09	-0.10	-0.19	-0.17	-0.32	-0.33	-0.32	-0.25	-0.24	-0.12	-0.06	-0.04	0.02	0.04	-0.03	1.04	-0.33	0.13
21	0.0	0.12	0.09	0.04	0.02	0.02	-0.01	0.01	-0.03	-0.14	-0.30	-0.44	-0.66	-0.47	-0.39	-0.45	-0.46	-0.39	-0.08	-0.26	-0.24	-0.11	0.08	0.06	0.12	-0.66	-0.16
22	0.1	0.08	0.07	0.11	0.06	0.11	0.10	-0.16	-0.29	-0.45	-0.42	-0.35	-0.28	-0.26	-0.25	-0.28	-0.28	-0.20	-0.24	-0.22	-0.21	-0.17	-0.08	-0.01	0.11	-0.45	-0.15
23	0.0	-0.02	-0.03	0.00	-0.01	0.02	-0.06	-0.12	-0.21	-0.37	-0.36	-0.59	-0.62	-0.77	-0.69	-0.68	-0.79	-0.66	-0.35	-0.20	-0.14	0.01	0.07	0.16	0.16	-0.79	-0.27
24	0.1	0.17	0.20	0.11	0.11	0.12	0.10	0.03	-0.02	-0.08	-0.15	-0.24	-0.54	-0.77	-0.81	-0.68	-0.80	-0.44	0.02	0.03	0.39	0.62	1.07	2.00	2.00	-0.81	0.02
25	1.4	1.16	0.86	0.57	0.61	0.44	0.32	0.14	-0.10	-0.29	-0.49	-0.66	-0.79	-0.97	-1.00	-0.91	-0.85	-0.22	-0.20	-0.47	0.12	0.26	1.00	0.70	1.37	-1.00	0.03
26	0.7	0.42	0.39	0.51	0.64	0.33	0.07	-0.15	-0.23	-0.29	-0.33	-0.34	-0.42	-0.34	-0.29	-0.35	-0.32	-0.42	-0.55	-0.35	-0.29	0.07	0.14	-0.04	0.70	-0.55	-0.06
27	0.0	0.03	-0.04	-0.03	-0.03	-0.04	-0.06	-0.09	-0.13	-0.18	-0.18	-0.32	-0.43	-0.46	-0.39	-0.43	-0.30	-0.65	-0.66	-0.43	-0.24	-0.15	0.07	0.14	0.14	-0.66	-0.21
28	0.5	0.39	0.29	0.40	0.29	0.27	0.11	0.00	-0.29	-0.62	-0.55	-0.92	-0.39	-0.47	-0.50	-0.42	-0.43	-0.38	-0.21	-0.03	0.12	0.67	1.72	2.12	2.12	-0.92	0.07
29	1.6	1.33	0.81	0.64	0.45	0.47	0.48	0.11	-0.31	-0.38	-0.61	-0.71	-0.87	-0.60	-0.85	-0.89	-0.83	-0.73	-0.36	-0.10	0.07	0.20	0.22	0.23	1.61	-0.89	-0.03
30	0.2	0.10	0.11	0.12	0.16	0.17	0.16	0.10	0.09	-0.05	-0.61	-0.66	-0.91	-1.05	-1.07	-1.06	-0.98	-0.86	-0.73	-0.40	-0.33	0.01	0.48	0.29	0.48	-1.07	-0.28
31	0.4	0.35	0.34	0.33	0.32	0.34	0.29	0.07	-0.26	-0.55	-0.74	-0.91	-1.11	-0.91	-0.78	-0.93	-0.94	-0.80	-0.59	-0.31	-0.04	0.39	1.11	1.81	1.81	-1.11	-0.13
Max.	**1.6**	**1.33**	**1.50**	**2.28**	**2.75**	**2.98**	**1.85**	**0.71**	**0.09**	**-0.05**	**-0.08**	**-0.02**	**0.05**	**0.01**	**-0.13**	**-0.04**	**0.00**	**-0.08**	**0.02**	**0.11**	**0.39**	**0.67**	**1.72**	**2.12**	**2.98**		
Min.	**0.0**	**-0.04**	**-0.06**	**-0.05**	**-0.06**	**-0.04**	**-0.09**	**-0.26**	**-0.41**	**-0.78**	**-1.02**	**-1.16**	**-1.43**	**-1.54**	**-1.68**	**-1.67**	**-1.52**	**-1.35**	**-1.07**	**-0.84**	**-0.43**	**-0.28**	**-0.12**	**-0.04**		**-1.68**	
Avg.	**0.4**	**0.32**	**0.31**	**0.37**	**0.40**	**0.43**	**0.28**	**0.02**	**-0.19**	**-0.32**	**-0.47**	**-0.59**	**-0.68**	**-0.73**	**-0.73**	**-0.73**	**-0.68**	**-0.60**	**-0.42**	**-0.30**	**-0.14**	**0.04**	**0.26**	**0.38**			**-0.14**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.7	2.02	0.58	0.66	0.59	0.98	0.77	-0.14	-0.22	-0.38	-0.47	-0.51	-0.63	-0.97	-1.31	-1.22	-1.37	-1.22	-1.09	-0.86	-0.34	0.07	0.64	0.69	2.66	-1.37	-0.04
2	1.5	1.58	1.10	0.49	0.18	0.08	0.02	-0.05	-0.06	-0.18	-0.24	-0.34	-0.46	-0.53	-0.56	-0.74	-0.60	-0.68	-0.46	-0.36	-0.21	-0.02	0.13	0.44	1.58	-0.74	0.00
3	0.8	0.80	0.32	0.20	0.19	0.38	0.28	0.16	-0.12	-0.49	-0.77	-0.69	-1.44	-1.60	-1.64	-1.48	-1.38	-1.25	-1.02	-0.63	-0.18	0.10	0.37	0.67	0.80	-1.64	-0.35
4	0.8	0.43	0.54	0.87	1.27	1.00	0.82	0.09	-0.15	-0.54	-0.61	-0.65	-0.85	-1.15	-0.94	-0.84	-0.93	-1.28	-0.99	-0.65	-0.34	0.23	0.62	1.25	1.27	-1.28	-0.08
5	1.8	1.80	2.74	1.29	1.52	1.19	0.49	-0.04	-0.12	-0.40	-0.87	-0.83	-0.69	-1.07	-1.08	-1.08	-1.06	-0.81	-0.58	-0.34	-0.03	0.45	0.79	0.70	2.74	-1.08	0.16
6	0.9	0.90	1.17	0.73	0.87	0.93	1.35	0.51	-0.11	-0.43	-0.65	-0.91	-1.04	-1.06	-1.03	-0.84	-0.78	-0.48	-0.05	0.02	0.01	0.36	0.72	1.05	1.35	-1.06	0.09
7	0.8	0.53	0.27	0.35	0.60	1.07	0.47	0.30	0.25	-0.49	-0.69	-0.86	-0.89	-0.97	-0.76	-0.83	-0.93	-0.92	-0.28	-0.06	-0.02	0.69	1.29	0.82	1.29	-0.97	-0.01
8	1.1	0.81	0.71	0.84	0.56	0.69	0.92	0.48	-0.10	-0.45	-0.73	-0.87	-1.03	-1.10	-1.17	-1.13	-1.06	-0.97	-0.71	-0.45	0.17	0.62	0.78	0.64	1.10	-1.17	-0.06
9	0.7	1.85	1.45	1.98	1.15	0.81	0.79	0.41	-0.08	-0.42	-0.64	-0.76	-0.90	-0.98	-1.13	-1.00	-0.74	-0.67	-0.29	-0.07	0.05	0.87	1.31	1.51	1.98	-1.13	0.22
10	2.8	2.33	1.32	1.62	1.52	3.56	2.66	1.76	-0.15	-0.45	-0.59	-0.92	-1.02	-0.84	-0.92	-0.17	0.38	-0.50	-0.39	-0.47	-0.24	0.33	0.88	1.86	3.56	-1.02	0.60
11	2.5	2.78	2.04	2.79	2.76	2.88	1.64	1.83	0.25	-0.28	-0.49	-0.42	-0.66	-0.76	-0.93	-1.14	-1.05	-0.71	-0.54	-0.26	0.37	1.47	1.88	1.90	2.88	-1.14	0.74
12	1.9	1.78	1.14	1.18	1.16	0.91	1.11	1.34	0.25	-0.49	-0.50	-0.57	-0.62	-0.67	-0.84	-0.84	-0.78	-0.45	-0.19	-0.02	0.10	0.35	0.93	1.14	1.94	-0.84	0.31
13	0.8	0.53	0.44	0.70	0.68	0.64	0.88	0.58	-0.01	-0.22	-0.33	-0.48	-0.35	-0.58	-0.41	-0.26	-0.35	-0.40	-0.38	-0.13	0.02	0.26	0.76	0.90	0.90	-0.58	0.14
14	1.0	1.45	1.02	0.69	0.92	1.10	0.89	0.38	0.06	-0.15	-0.26	-0.27	-0.24	-0.34	-0.53	-0.46	-0.44	-0.47	-0.35	-0.20	-0.08	0.04	0.04	0.02	1.45	-0.53	0.16
15	0.1	0.15	0.16	0.14	0.28	0.23	0.27	0.09	-0.10	-0.21	-0.32	-0.30	-0.42	-0.49	-0.40	-0.51	-0.53	-0.49	-0.31	-0.21	-0.12	-0.08	0.01	0.02	0.28	-0.53	-0.13
16	0.0	-0.01	0.01	0.00	-0.01	-0.02	-0.01	0.01	-0.07	-0.15	-0.19	-0.16	-0.62	-0.81	-0.77	-1.11	-1.07	-1.02	-0.76	-0.03	-0.02	0.22	0.45	0.87	0.87	-1.11	-0.22
17	1.3	0.74	0.54	1.42	2.53	2.40	2.18	2.59	0.79	0.09	-0.39	-0.56	-0.52	-0.53	-0.65	-0.67	-0.82	-0.91	-0.53	-0.31	0.15	0.40	0.36	0.51	2.59	-0.91	0.42
18	0.8	1.41	1.50	2.55	2.42	1.84	2.06	2.08	0.54	-0.32	-0.45	-0.69	-0.80	-0.92	-0.89	-0.57	-0.51	-0.42	-0.38	-0.15	0.36	0.81	1.42	1.01	2.55	-0.92	0.53
19	0.8	0.67	1.49	1.53	1.28	1.41	1.29	0.70	0.30	-0.04	-0.26	-0.42	-0.67	-0.98	-0.73	-0.67	-0.57	-0.20	-0.17	0.09	0.39	0.60	0.80	0.71	1.53	-0.98	0.31
20	0.7	0.72	0.61	0.56	0.48	0.50	1.21	0.60	0.29	0.01	0.03	-0.22	-0.44	-0.48	-0.22	-0.32	-0.41	-0.44	-0.61	-0.21	0.06	0.22	0.58	0.58	1.21	-0.61	0.16
21	0.6	0.50	0.49	0.56	0.52	0.44	0.36	0.49	0.16	-0.24	-0.27	-0.36	-0.55	-0.59	-0.70	-0.91	-0.80	-0.57	-0.24	0.06	0.04	0.02	0.19	0.12	0.63	-0.91	-0.03
22	0.2	0.57	0.31	0.12	0.09	0.10	0.14	0.08	-0.07	-0.14	-0.22	-0.25	-0.39	-0.54	-0.45	-0.67	-0.26	-0.32	-0.52	-0.41	-0.04	0.48	1.13	1.20	1.20	-0.67	0.01
23	1.5	2.23	1.21	1.43	1.78	0.85	0.68	0.42	0.04	-0.26	-0.45	-0.72	-0.78	-0.74	-0.55	-0.66	-0.51	-0.59	-0.31	0.14	0.06	0.10	0.25	0.31	2.23	-0.78	0.23
24	0.3	0.45	0.46	0.62	0.51	0.60	1.37	0.95	-0.05	0.11	-0.21	-0.64	-0.61	-0.61	-0.80	-0.71	-0.66	-0.46	-0.33	0.14	0.29	0.78	1.49	2.48	2.48	-0.80	0.23
25	3.5	3.13	1.98	2.41	2.12	1.75	1.48	0.94	0.66	-0.15	-0.27	-0.31	-0.46	-0.69	-0.61	-0.50	-0.79	-0.76	-0.76	-0.26	-0.05	0.16	0.26	0.19	3.45	-0.79	0.54
26	0.4	0.42	0.55	0.52	0.43	0.33	0.45	0.20	-0.01	-0.05	-0.12	-0.09	-0.18	-0.53	-0.72	-0.73	-0.50	-0.45	-0.55	-0.10	0.13	0.05	0.00	0.15	0.55	-0.73	-0.02
27	0.1	0.12	0.18	0.33	0.17	0.16	0.16	0.05	-0.05	-0.09	-0.13	-0.35	-0.51	-0.63	-0.49	-0.56	-0.09	-0.40	-0.19	-0.11	-0.10	0.09	0.43	0.56	0.56	-0.63	-0.06
28	0.7	0.62	0.97	0.72	0.46	0.57	0.53	0.30	0.06	-0.03	-0.18	-0.24	-0.36	-0.52	-0.52	-0.51	0.21	0.15	0.00	0.10	0.28	0.72	1.04	0.64	1.04	-0.52	0.24
29	0.5	0.50	0.42	0.69	1.49	1.09	1.25	1.24	0.52	-0.15	-0.49	-0.54	-0.68	-0.89	-0.48	-0.55	-0.49	-0.46	-0.18	0.22	0.50	0.88	0.73	1.70	1.70	-0.89	0.29
30	2.3	2.35	1.44	1.08	0.82	1.08	1.55	1.70	0.46	-0.12	-0.23	-0.41	-0.46	-0.60	-0.77	-1.00	-0.74	-0.66	-0.36	0.05	0.21	0.39	0.38	0.27	2.35	-1.00	0.36
31	0.2	0.22	0.30	0.22	0.20	0.20	0.16	0.17	0.26	0.24	0.15	-0.08	-0.14	-0.38	-0.24	-0.04	-0.17	0.01	-0.02	0.03	0.21	0.31	0.32	0.26	0.32	-0.38	0.10
Max.	**3.5**	**3.13**	**2.74**	**2.79**	**2.76**	**3.56**	**2.66**	**2.59**	**0.79**	**0.24**	**0.15**	**-0.08**	**-0.14**	**-0.34**	**-0.22**	**-0.04**	**0.38**	**0.15**	**0.00**	**0.22**	**0.50**	**1.47**	**1.88**	**2.48**	**3.56**		
Min.	**0.0**	**-0.01**	**0.01**	**0.00**	**-0.01**	**-0.02**	**-0.01**	**-0.14**	**-0.22**	**-0.54**	**-0.87**	**-0.92**	**-1.44**	**-1.60**	**-1.64**	**-1.48**	**-1.38**	**-1.28**	**-1.09**	**-0.86**	**-0.34**	**-0.08**	**0.00**	**0.02**		**-1.64**	
Avg.	**1.1**	**1.11**	**0.89**	**0.94**	**0.95**	**0.96**	**0.91**	**0.65**	**0.11**	**-0.22**	**-0.38**	**-0.50**	**-0.63**	**-0.76**	**-0.75**	**-0.73**	**-0.64**	**-0.61**	**-0.44**	**-0.18**	**0.05**	**0.39**	**0.68**	**0.81**			**0.16**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.3	0.26	0.24	0.28	0.35	0.31	0.35	0.29	0.17	0.03	-0.29	-0.39	-0.83	-0.55	-0.47	-0.40	-0.40	-0.21	-0.09	0.03	0.22	0.26	0.34	0.37	0.37	-0.83	0.00
2	0.4	0.37	0.39	0.34	0.32	0.24	0.33	0.29	0.24	0.17	0.09	0.03	-0.07	-0.19	-0.13	-0.08	-0.31	-0.16	0.15	0.25	0.27	0.29	0.25	0.26	0.43	-0.31	0.16
3	0.2	0.19	0.21	0.23	0.28	0.29	0.25	0.31	0.23	0.02	-0.16	-0.20	-0.32	-0.28	-0.36	-0.44	-0.42	-0.32	-0.19	-0.04	0.04	0.12	0.08	0.11	0.31	-0.44	-0.01
4	0.1	0.09	0.04	0.01	0.01	0.05	0.21	0.32	-0.01	-0.22	-0.45	-0.58	-0.65	-0.63	-0.69	-0.59	-0.54	-0.45	-0.29	0.10	0.63	1.57	2.11	1.65	2.11	-0.69	0.08
5	1.4	1.42	1.70	1.14	1.75	1.62	1.76	1.32	0.74	0.15	-0.31	-0.46	-0.51	-0.85	-0.90	-0.88	-0.59	-0.10	0.02	0.28	0.91	1.59	1.51	1.86	1.86	-0.90	0.61
6	2.2	2.55	2.48	2.77	2.74	2.71	2.07	1.15	0.47	0.08	0.03	0.13	0.29	0.27	0.25	0.26	0.33	0.39	0.35	0.32	0.27	0.28	0.32	0.31	2.77	0.03	0.96
7	0.3	0.40	0.34	0.61	0.57	0.73	0.45	0.26	0.36	0.31	0.02	-0.11	-0.06	0.07	-0.07	-0.25	-0.28	-0.20	-0.02	0.00	0.02	0.09	0.06	0.01	0.73	-0.28	0.15
8	0.0	0.10	0.08	0.06	0.09	0.11	0.08	0.01	-0.07	-0.10	-0.32	-0.46	-0.45	-0.23	-0.15	-0.07	0.07	0.15	0.03	0.12	0.21	0.33	0.53	0.45	0.53	-0.46	0.02
9	0.5	0.40	0.35	0.34	0.20	0.25	0.39	0.28	0.08	-0.02	-0.14	-0.24	-0.25	-0.24	-0.19	-0.08	-0.03	0.03	0.06	0.04	0.16	0.35	0.35	0.44	0.50	-0.25	0.13
10	0.5	0.40	0.37	0.31	0.26	0.21	0.17	0.13	0.07	-0.13	-0.17	-0.29	-0.58	-0.51	-0.75	-0.88	-0.65	-0.43	-0.10	0.15	0.17	0.22	0.21	0.26	0.50	-0.88	-0.04
11	0.1	0.01	-0.01	0.12	0.11	0.16	0.19	0.04	-0.07	-0.14	-0.17	-0.30	-0.57	-0.42	-0.41	-0.88	-0.71	-0.64	-0.38	-0.03	0.20	0.34	0.23	0.23	0.34	-0.88	-0.13
12	0.2	0.16	0.20	0.17	0.09	0.11	0.12	0.16	0.17	0.19	0.14	0.07	-0.01	-0.01	-0.09	0.10	0.15	0.08	0.13	0.16	0.12	0.10	0.15	0.18	0.20	-0.09	0.12
13	0.2	0.13	0.13	0.08	0.05	0.03	0.00	0.09	0.18	0.13	-0.01	-0.07	-0.03	-0.08	-0.10	-0.11	-0.19	-0.01	0.24	0.31	0.34	0.39	0.58	0.45	0.58	-0.19	0.11
14	0.5	0.52	0.45	0.45	0.63	0.49	0.47	0.43	0.45	0.23	0.04	-0.12	-0.21	-0.10	-0.17	-0.28	-0.16	-0.08	-0.11	0.03	0.53	0.43	0.31	0.23	0.63	-0.28	0.21
15	0.4	0.36	0.37	0.68	0.47	0.53	0.77	0.70	0.52	0.15	0.03	-0.13	-0.31	-0.33	-0.42	-0.27	-0.28	-0.18	-0.08	0.06	0.15	0.17	0.30	0.29	0.77	-0.42	0.16
16	0.4	0.76	0.56	0.50	0.21	0.13	0.19	0.19	0.19	0.04	-0.06	-0.30	-0.60	-0.67	-0.40	-0.36	-0.06	-0.25	-0.06	0.24	0.75	0.51	0.62	1.20	1.20	-0.67	0.16
17	1.3	1.24	1.53	0.74	0.17	0.02	0.03	0.04	0.08	-0.06	-0.20	-0.40	-0.45	-0.43	-0.33	-0.30	-0.21	-0.01	0.05	0.06	0.07	0.16	0.15	0.22	1.53	-0.45	0.14
18	0.2	0.15	0.12	0.11	0.11	0.18	0.20	0.21	0.26	0.23	0.24	0.14	0.21	-0.04	-0.16	-0.25	-0.18	-0.11	-0.04	0.10	0.33	0.46	0.30	0.24	0.46	-0.25	0.12
19	0.3	0.19	0.19	0.18	0.14	0.08	0.07	0.06	0.03	-0.08	-0.27	-0.32	-0.46	-0.56	-0.51	-0.42	-0.41	-0.28	-0.14	-0.02	0.08	0.14	0.18	0.20	0.34	-0.56	-0.07
20	0.3	0.25	0.30	0.40	0.35	0.51	0.67	1.03	1.04	0.12	-0.22	-0.32	-0.53	-0.56	-0.66	-0.53	-0.36	-0.24	-0.06	0.39	1.30	1.66	1.14	1.10	1.66	-0.66	0.30
21	1.1	1.04	1.03	1.41	0.76	0.59	0.43	0.28	0.33	0.20	-0.20	-0.40	-0.47	-0.72	-0.58	-0.53	-0.26	-0.09	-0.07	0.26	0.76	0.60	0.43	0.47	1.41	-0.72	0.27
22	0.8	0.73	1.10	1.07	0.99	1.33	1.33	1.13	1.65	0.27	-0.30	-0.38	-0.31	-0.49	0.18			-0.10	-0.03	0.04	0.14	0.15	0.13	0.10	1.65	-0.49	0.43
23	0.1	0.06	0.05	0.10	0.12	0.12	0.10	0.12	0.10	0.06	0.07	0.01	-0.08	-0.11	-0.15	-0.16	-0.08	0.00	0.00	0.06	0.10	0.10	0.15	0.10	0.15	-0.16	0.04
24	0.1	0.02	0.07	0.12	0.15	0.07	0.05	0.16	0.27	-0.04	-0.15	-0.23	-0.25	-0.39	-0.28	-0.27	-0.35	-0.24	-0.13	0.02	0.22	0.34	0.33	0.49	0.49	-0.39	0.00
25	0.4	0.72	0.43	0.61	0.66	0.63	0.49	0.62	0.51	0.15	-0.11	-0.30	-0.30	-0.37	-0.34	-0.33	-0.29	-0.19	-0.11	0.18	0.62	0.70	0.37	0.58	0.72	-0.37	0.22
26	0.4	0.41	0.25	0.48	0.31	0.37	0.54	0.65	0.59	0.32	-0.11	-0.36	-0.47	-0.58	-0.65	-0.48	-0.12	0.18	-0.23	0.59	1.45	1.05	0.44	0.29	1.45	-0.65	0.22
27	0.3	0.31	0.32	0.28	0.27	0.35	0.31	0.33	0.27	0.12	-0.19	-0.45	-0.62	-0.73	-0.60	-0.48	-0.36	-0.17	0.06	0.40	0.74	0.51	0.49	0.59	0.74	-0.73	0.08
28	0.8	1.34	1.01	1.02	1.28	0.85	1.05	1.55	0.49	0.18	-0.21	-0.47	-0.44	-0.55	-0.49	-0.36	-0.25	-0.15	0.21	0.87	1.44	1.29	1.24	0.78	1.55	-0.55	0.52
29	0.7	0.57	0.84	1.19	1.48	1.80	1.73	1.89	1.59	1.99	0.50	-0.08	-0.15	-0.09	-0.22	-0.27	-0.31	-0.31	-0.20	0.20	0.50	0.79	0.78	1.61	1.99	-0.31	0.69
30	1.2	0.96	1.13	1.03	1.04	0.87	1.16	0.56	0.46	0.26	-0.18	-0.42	-0.56	-0.68	-0.67	-0.46	-0.43	-0.30	-0.09	0.62	1.50	1.90	1.43	1.52	1.90	-0.68	0.49
Max.	**2.2**	**2.55**	**2.48**	**2.77**	**2.74**	**2.71**	**2.07**	**1.89**	**1.65**	**1.99**	**0.50**	**0.14**	**0.29**	**0.27**	**0.25**	**0.26**	**0.33**	**0.39**	**0.35**	**0.87**	**1.50**	**1.90**	**2.11**	**1.86**	**2.77**		
Min.	**0.0**	**0.01**	**-0.01**	**0.01**	**0.01**	**0.02**	**0.00**	**0.01**	**-0.07**	**-0.22**	**-0.45**	**-0.58**	**-0.83**	**-0.85**	**-0.90**	**-0.88**	**-0.71**	**-0.64**	**-0.38**	**-0.04**	**0.02**	**0.09**	**0.06**	**0.01**		**-0.90**	
Avg.	**0.5**	**0.54**	**0.54**	**0.56**	**0.53**	**0.52**	**0.53**	**0.49**	**0.38**	**0.15**	**-0.10**	**-0.25**	**-0.33**	**-0.37**	**-0.35**	**-0.35**	**-0.26**	**-0.15**	**-0.04**	**0.19**	**0.48**	**0.56**	**0.52**	**0.55**			**0.21**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.8	1.39	1.30	0.72	0.40	0.44	0.54	0.51	0.39	0.04	-0.17	-0.13	-0.29	-0.37	-0.22	-0.09	0.00	-0.01	-0.01	0.06	0.07	0.07	0.08	0.06	1.39	-0.37	0.23
2	0.1	0.02	0.06	0.02	0.15	0.16	0.58	0.25	0.46	0.47	-0.16	-0.23	-0.27	-0.28	-0.42	-0.35	-0.28	-0.10	-0.13	0.36	0.17	0.04	0.07	0.08	0.58	-0.42	0.03
3	0.2	0.07	0.07	0.26	0.17	0.09	0.03	-0.02	-0.03	-0.09	-0.13	-0.21	-0.26	-0.33	-0.36	-0.35	-0.35	-0.05	-0.02	0.29	0.49	0.39	0.51	0.72	0.72	-0.36	0.04
4	0.8	0.76	0.55	0.64	0.78	1.47	1.20	1.73	1.52	0.37	-0.16	-0.38	-0.48	-0.48	-0.46	-0.38	-0.19	-0.09	0.06	0.63	0.21	0.03	0.01	-0.01	1.73	-0.48	0.34
5	0.0	0.04	0.06	0.08	0.03	0.06	0.09	0.08	0.11	0.01	-0.13	-0.15	-0.18	-0.20	-0.21	-0.23	-0.17	-0.14	-0.09	-0.01	0.01	-0.02	0.00	0.08	0.11	-0.23	-0.04
6	0.0	0.02	0.06	0.10	0.09	0.11	0.03	-0.02	0.01	-0.06	-0.19	-0.28	-0.26	-0.25	-0.24	-0.25	-0.18	-0.16	-0.08	0.00	0.06	0.09	0.09	0.05	0.11	-0.28	-0.05
7	0.1	0.10	0.15	0.03	0.03	0.04	0.05	0.03	0.02	-0.03	-0.10	-0.12	-0.16	-0.15	-0.14	-0.08	-0.09	-0.06	0.00	0.05	0.07	0.10	0.10	0.20	0.20	-0.16	0.00
8	0.1	0.06	0.09	0.03	0.06	0.19	0.71	0.84	0.82	0.29	-0.14	-0.36	-0.41	-0.30	-0.32	-0.27	-0.20	-0.10	0.11	1.03	1.16	1.68	2.10	2.13	2.13	-0.41	0.39
9	2.0	1.60	0.43	0.30	0.28	0.16	0.12	0.09	0.10	0.16	0.06	0.03	0.06	0.24	0.28	0.22	0.11	0.07	0.05	0.19	0.21	0.25	0.23	0.20	1.98	0.03	0.31
10	0.2	0.20	0.19	0.12	0.12	0.09	0.24	0.44	0.89	0.53	0.21	-0.15	-0.25	-0.33	-0.30	-0.15	-0.15	0.11	0.34	0.70	0.54	0.68	0.72	0.98	0.98	-0.33	0.25
11	1.1	0.82	0.73	0.45	0.33	0.19	0.13	0.09	0.09	0.03	-0.07	-0.24	-0.10	-0.06	-0.07	-0.07	-0.05	-0.05	-0.08	-0.07	-0.06	-0.06	-0.04	-0.04	1.10	-0.24	0.12
12	0.0	-0.02	-0.03	-0.03	-0.02	-0.01	0.01	0.03	0.03	0.04	-0.01	-0.10	-0.10	-0.03	-0.02	-0.01	-0.01	0.03	0.07	0.12	0.16	0.24	0.31	0.59	0.59	-0.10	0.05
13	0.5	0.55	0.76	0.47	0.60	0.80	1.28	1.54	1.18	0.71	0.14	-0.06	-0.10	-0.09	-0.07	-0.05	0.03	0.15	0.05	-0.02	-0.02	-0.02	-0.04	-0.02	1.54	-0.10	0.35
14	0.0	-0.03	-0.03	-0.03	-0.04	-0.04	-0.02	-0.04	-0.05	-0.05	-0.01	-0.01	0.00	0.00	0.00	0.05	0.13	0.14	0.21	0.13	0.16	0.11	0.10	0.07	0.21	-0.05	0.03
15	0.0	-0.02	-0.15	-0.13	-0.07	-0.04	-0.07	0.01	-0.01	0.00	-0.02	-0.01	-0.11	-0.12	-0.17	-0.13	-0.06	0.00	-0.03	-0.05	-0.05	0.05	0.12	0.09	0.12	-0.17	-0.04
16	0.0	-0.04	-0.04	-0.06	-0.06	-0.06	-0.02	-0.06	-0.07	-0.07	-0.12	-0.14	-0.19	-0.19	-0.18	-0.18	-0.25	-0.08	0.15	0.35	0.40	0.61	0.67	0.80	0.80	-0.25	0.05
17	1.4	1.31	1.62	1.35	0.59	0.50	0.36	-0.07	-0.12	-0.08	-0.12	-0.07	-0.04	-0.06	0.05	-0.04	-0.06	-0.06	0.32	1.72	2.57	1.19	0.35	0.62	2.57	-0.12	0.55
18	0.3	0.58	1.20	0.88	0.54	0.57	0.66	0.64	0.58	0.50	0.81	0.54	0.45	0.39	0.31	0.25	0.29	0.36	0.45	0.45	0.44	0.67	0.70	0.79	1.20	0.25	0.55
19	0.8	0.30	0.35	0.36	0.38	0.25	0.18	0.13	0.08	0.17	0.14	0.01	-0.08	-0.11	-0.11	-0.14	-0.01	-0.05	0.02	0.10	0.08	0.04	0.01	-0.02	0.85	-0.14	0.12
20	0.0	-0.05	-0.06	-0.06	-0.07	-0.04	-0.04	-0.02	0.11	0.04	0.00	-0.10	-0.14	-0.15	-0.14	-0.10	0.08	0.04	0.11	0.06	0.01	0.04	0.05	0.09	0.11	-0.15	-0.02
21	0.2	0.26	0.15	0.35	1.00	1.05	0.44	0.72	0.79	1.98	0.66	0.13	0.17	-0.03	-0.10	0.02	0.04	0.08	0.18	0.27	0.19	0.09	0.02	0.01	1.98	-0.10	0.36
22	0.1	0.12	0.04	0.03	0.07	0.06	0.04	0.03	0.04	0.07	0.03	-0.06	-0.12	-0.11	-0.10	-0.05	-0.04	0.05	0.21	0.22	0.36	0.46	0.40	0.23	0.46	-0.12	0.09
23	0.1	0.17	0.12	0.08	0.03	0.10	0.22	0.17	0.12	0.04	0.02	0.02	-0.03	0.00	-0.06	-0.06	-0.07	0.00	0.14	0.19	0.14	0.21	0.17	0.38	0.38	-0.07	0.09
24	0.0	0.09	0.10	0.03	0.04	-0.02	0.04	0.08	0.07	0.04	0.15	0.14	0.07	-0.01	-0.07	-0.02	0.08	0.52	1.22	1.35	1.49	2.28	3.47	3.61	3.61	-0.07	0.61
25	2.4	2.14	0.91	1.38	0.31	0.23	0.01	0.04	-0.01	0.08	0.00	0.00	0.17	0.54	0.53	0.52	0.79	1.07	1.38	2.29	1.14	0.90	1.10	0.62	2.38	-0.01	0.77
26	0.7	0.69	0.33	0.36	0.24	0.31	0.25	0.18	0.15	0.21	0.06	-0.03	-0.08	-0.03	-0.05	-0.05	-0.01	0.03	0.08	0.10	0.04	0.01	0.02	0.06	0.74	-0.08	0.15
27	0.0	0.08	0.08	0.03	0.00	0.05	0.07	0.11	0.10	0.03	0.00	-0.02	-0.10	-0.11	-0.12	-0.09	-0.03	0.11	0.20	0.28	0.55	0.33	0.52	1.04	1.04	-0.12	0.13
28	1.3	1.64	2.43	2.44	3.10	3.02	2.95	3.45	3.97	3.41	1.79	1.82	1.82	1.13	1.73	0.57	1.10	1.83	3.62	3.05	2.57	2.59	4.12	3.01	4.12	0.57	2.44
29	3.6	3.10	2.79	3.19	2.71	2.81	2.04	1.41	1.00	1.08	1.75	0.42	-0.05	-0.01	-0.03	0.02	0.21	0.61	0.39	0.31	0.32	0.44	0.34	0.71	3.62	-0.05	1.22
30	0.9	0.92	0.87	1.22	1.08	0.85	0.78	0.85	0.36	0.64	1.22	1.56	1.06	0.30	0.23	0.38	0.67	1.05	2.02	2.78	3.23	2.51	3.55	2.57	3.55	0.23	1.31
31	2.8	2.94	3.21	2.03	3.21	1.42	0.48	0.54	1.93	2.73	1.53	0.87	0.60	0.49	0.74	0.33	0.50	0.36	0.97	2.14	1.92	2.13	1.80	1.90	3.21	0.33	1.57
Max.	**3.6**	**3.10**	**3.21**	**3.19**	**3.21**	**3.02**	**2.95**	**3.45**	**3.97**	**3.41**	**1.79**	**1.82**	**1.82**	**1.13**	**1.73**	**0.57**	**1.10**	**1.83**	**3.62**	**3.05**	**3.23**	**2.59**	**4.12**	**3.61**	**4.12**		
Min.	**0.0**	**-0.05**	**-0.15**	**-0.13**	**-0.07**	**-0.06**	**-0.07**	**-0.07**	**-0.12**	**-0.09**	**-0.19**	**-0.38**	**-0.48**	**-0.48**	**-0.46**	**-0.38**	**-0.35**	**-0.16**	**-0.13**	**-0.07**	**-0.06**	**-0.06**	**-0.04**	**-0.04**		**-0.48**	
Avg.	**0.7**	**0.64**	**0.59**	**0.54**	**0.52**	**0.48**	**0.43**	**0.44**	**0.47**	**0.43**	**0.23**	**0.09**	**0.02**	**-0.02**	**0.00**	**-0.03**	**0.06**	**0.18**	**0.38**	**0.62**	**0.60**	**0.58**	**0.70**	**0.70**			**0.39**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.6	1.56	1.51	1.44	1.64	1.31	0.54	0.44	0.57	0.35	0.28	0.16	0.10	0.10	0.06	0.03	0.02	0.09	0.19	0.14	0.10	0.12	0.12	0.09	1.64	0.02	0.52
2	0.1	0.03	-0.01	-0.03	-0.07	-0.08	-0.09	-0.10	-0.11	-0.05	-0.04	-0.09	-0.10	-0.12	-0.13	-0.12	-0.10	-0.03	0.04	0.06	0.08	0.09	0.16	0.21	0.21	-0.13	-0.02
3	0.1	0.12	0.11	0.20	0.17	0.15	0.15	0.17	0.13	0.18	0.18	0.03	-0.02	-0.10	-0.11	-0.03	0.01	0.11	0.20	0.11	0.15	0.11	0.05	0.01	0.20	-0.11	0.09
4	0.0	-0.05	-0.01	-0.02	-0.04	-0.01	0.09	0.07	0.05	0.10	0.10	0.06	-0.03	0.01	-0.05	-0.11	-0.04	-0.02	-0.04	-0.02	0.01	-0.03	-0.01	0.11	0.11	-0.11	0.00
5	0.4	0.15	-0.03	-0.05	-0.05	-0.04	-0.04	0.04	0.15	0.14	-0.02	-0.15	-0.01	-0.06	0.08	0.13	0.06	0.18	0.15	0.32	0.43	0.29	0.43	0.32	0.43	-0.15	0.12
6	0.3	0.26	0.27	0.22	0.27	0.37	0.35	0.68	1.08	1.47	2.22	1.04	0.70	0.30	0.10	0.11	0.14	0.31	0.35	0.28	0.36	0.18	0.09	0.04	2.22	0.04	0.48
7	0.1	-0.05	-0.04	0.02	0.02	0.08	0.10	0.08	0.08	0.09	0.02	0.04	0.00	-0.11	-0.05	0.16	0.24	0.48	1.46	0.56	0.07	-0.04	0.05	0.11	1.46	-0.11	0.15
8	0.0	-0.06	-0.05	-0.08	-0.05	-0.06	-0.08	-0.08	0.02	-0.06	0.00	0.17	0.01	-0.02	0.06	-0.02	0.06	0.14	0.22	0.23	0.28	0.29	0.18	0.05	0.29	-0.08	0.05
9	0.2	0.20	0.25	0.23	0.25	0.33	0.27	0.30	0.22	0.13	0.12	0.10	0.11	0.16	0.22	0.24	0.24	0.16	0.05	0.14	0.30	0.34	0.38	0.31	0.38	0.05	0.22
10	0.2	0.21	0.39	0.78	0.25	0.15	0.10	0.11	0.21	0.30	0.06	0.04	0.07	0.02	-0.01	0.01	-0.04	-0.05	-0.06	-0.04	-0.04	-0.01	-0.01	0.01	0.78	-0.06	0.11
11	0.1	0.20	0.57	0.51	0.24	0.94	0.99	0.63	0.66	1.23	0.93	0.40	0.19	0.01	0.23	0.31	0.36	1.33	1.57	1.18	1.98	0.84	0.36	0.14	1.98	0.01	0.66
12	0.1	0.27	0.08	0.07	-0.04	-0.04	-0.02	0.01	0.02	0.02	0.22	0.28	0.95	0.68	1.08	1.84	1.03	0.79	0.73	0.16	-0.02	0.22	0.09	0.34	1.84	-0.04	0.37
13	0.1	0.00	0.01	0.03	1.23	2.15	2.71	2.99	3.11	2.65	2.96	2.82	1.14	0.80	-0.01	0.09	0.05	0.06	0.08	0.47	0.41	0.75	0.41	0.11	3.11	-0.01	1.05
14	0.1	-0.02	0.02	0.12	0.07	0.14	0.24	0.21	0.52	0.27	0.24	0.16	0.07	0.05	0.04	0.11	0.21	0.27	0.20	0.22	0.22	0.44	0.15	0.04	0.52	-0.02	0.17
15	0.1	0.07	0.10	0.39	0.41	0.14	0.32	0.34	0.39	0.27	0.02	0.20	0.13	0.29	0.31	0.15	0.14	0.22	0.24	0.19	0.03	0.02	0.05	-0.01	0.41	-0.01	0.19
16	0.0	0.01	-0.03	-0.04	-0.03	-0.01	0.01	0.30	0.75	2.12	2.24	1.51	0.43	0.35	0.44	0.82	1.21	3.34	4.53	3.62	2.57	3.80	3.66	3.35	4.53	-0.04	1.46
17	4.0	3.86	4.12	4.55	3.97	2.55	2.51	2.44	3.09	2.95	2.26	2.98	2.18	1.10	0.43	0.25	-0.02	0.11	0.30	0.37	0.33	0.37	0.33	0.48	4.55	-0.02	1.90
18	0.4	0.58	0.96	0.68	0.44	0.15	0.22	0.19	0.19	0.14	0.15	0.16	0.12	0.07	0.11	0.16	0.12	0.09	0.10	0.08	0.09	0.10	0.16	0.26	0.96	0.07	0.24
19	0.2	0.11	0.11	0.07	0.11	0.15	0.18	0.30	0.25	0.30	0.18	0.26	0.20	0.17	0.10	0.16	0.17	0.20	0.24	0.27	0.18	0.22	0.18	0.16	0.30	0.07	0.19
20	0.1	0.12	0.18	0.20	0.24	0.04	0.06	0.05	-0.02	0.03	-0.01	-0.05	-0.06	-0.06	-0.05	-0.01	0.01	0.05	0.07	0.06	0.05	0.05	0.04	0.04	0.24	-0.06	0.05
21	0.1	0.05	0.05	0.13	0.15	0.14	0.10	0.17	0.12	0.17	0.26	0.63	0.29	0.07	0.07	0.11	0.28	0.33	0.33	0.49	0.51	0.13	0.06	0.17	0.63	0.05	0.20
22	0.3	0.40	0.30	0.01	0.21	0.15	0.50	1.78	1.36	2.16	2.01	2.60	2.23	1.53	0.79	1.32	0.72	0.75	1.09	0.77	0.24	1.42	2.67	3.00	3.00	0.01	1.18
23	2.7	2.48	1.31	1.55	0.91	0.69	0.75	0.38	0.23	0.12	0.05	0.00	0.17	0.35	0.04	0.08	-0.10	-0.13	0.53	0.27	0.13	0.05	0.02	0.12	2.72	-0.13	0.53
24	0.1	0.11	0.14	0.22	0.35	0.34	0.31	0.24	0.27	0.27	0.26	0.28	0.26	0.09	0.05	0.01	0.03	0.01	0.00	-0.01	-0.03	-0.02	-0.04	-0.08	0.35	-0.08	0.13
25	-0.1	-0.11	-0.09	-0.08	-0.08	-0.05	-0.03	0.04	0.05	0.10	0.20	0.62	0.38	2.13	1.25	0.57	0.61	0.52	1.17	0.68	0.44	0.54	0.32	0.29	2.13	-0.11	0.39
26	0.4	0.52	0.54	0.89	0.59	0.49	0.15	0.06	0.27	0.55	0.23	0.20	0.09	0.29	0.32	0.21	0.38	0.36	0.58	0.36	0.77	0.97	1.93	0.72	1.93	0.06	0.49
27	0.9	0.45	0.44	0.55	0.59	0.52	0.30	0.42	0.17	0.13	0.15	0.17	0.04	-0.04	0.10	0.06	0.11	0.01	-0.05	-0.10	-0.06	-0.06	-0.10	0.03	0.87	-0.10	0.20
28	0.0	-0.05	-0.03	0.03	-0.01	-0.04	0.00	0.16	0.13	-0.04	-0.07	-0.08	-0.02	-0.03	-0.07	-0.08	-0.04	-0.04	-0.07	-0.05	0.00	-0.04	-0.09	-0.06	0.16	-0.09	-0.03
29	0.0	-0.06	-0.04	-0.08	-0.05	-0.07	-0.10	-0.10	-0.05	-0.10	-0.10	-0.10	-0.10	-0.11	-0.12	-0.13	-0.10	-0.09	-0.09	-0.09	-0.07	-0.02	-0.02	-0.03	0.01	-0.13	-0.08
30	0.0	0.00	0.12	0.20	0.12	0.25	0.22	0.22	0.26	0.13	0.15	0.16	0.23	0.17	0.17	0.20	0.24	0.28	0.21	0.07	0.20	0.60	0.24	0.28	0.60	-0.01	0.20
Max.	**4.0**	**3.86**	**4.12**	**4.55**	**3.97**	**2.55**	**2.71**	**2.99**	**3.11**	**2.95**	**2.96**	**2.98**	**2.23**	**2.13**	**1.25**	**1.84**	**1.21**	**3.34**	**4.53**	**3.62**	**2.57**	**3.80**	**3.66**	**3.35**	**4.55**		
Min.	**-0.1**	**-0.11**	**-0.09**	**-0.08**	**-0.08**	**-0.08**	**-0.10**	**-0.10**	**-0.11**	**-0.10**	**-0.10**	**-0.15**	**-0.10**	**-0.12**	**-0.13**	**-0.13**	**-0.10**	**-0.13**	**-0.09**	**-0.10**	**-0.07**	**-0.06**	**-0.10**	**-0.08**		**-0.15**	
Avg.	**0.4**	**0.38**	**0.37**	**0.42**	**0.39**	**0.36**	**0.36**	**0.42**	**0.47**	**0.54**	**0.51**	**0.49**	**0.32**	**0.27**	**0.18**	**0.22**	**0.20**	**0.33**	**0.48**	**0.36**	**0.32**	**0.39**	**0.40**	**0.35**			**0.37**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Temperature Difference 2-meter to 10-meter (deg. C)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0.2	0.33	0.36	0.30	0.28	0.36	0.39	0.25	0.17	0.10	0.07	0.26	0.35	0.22	0.28	0.36	0.25	0.62	1.21	1.52	1.74	1.45	1.44	0.63	1.74	0.07	0.55
2	0.6	0.76	0.77	1.28	0.68	0.29	0.22	0.24	1.29	1.01	0.49	0.58	0.52	0.58	0.31	0.35	0.27	0.26	0.22	0.25	0.24	0.23	0.24	0.27	1.29	0.22	0.50
3	0.3	0.27	0.25	0.24	0.27	0.29	0.33	0.37	0.40	0.42	0.40	0.45	0.44	0.29	0.48	0.42	0.43	0.55	0.60	0.64	0.65	0.62	0.55	0.44	0.65	0.24	0.42
4	0.4	0.43	0.48	0.47	0.54	0.54	0.51	0.45	0.39	0.39	0.49	0.41	0.49	0.47	0.36	0.29	0.55	0.64	0.70	0.82	0.67	0.55	0.66	0.59	0.82	0.29	0.51
5	0.5	0.37	0.65	0.61	0.48	0.42	0.52	0.50	0.47	0.42	0.52	0.53	0.54	0.50	0.46	0.35	0.40	0.77	1.35	1.41	0.74	0.40	0.43	0.60	1.41	0.35	0.58
6	0.6	0.76	0.65	0.77	0.59	0.53	0.28	0.38	0.56	0.75	0.85	0.38	0.42	0.45	0.17	0.25	0.19	0.47	0.63	0.55	0.44	0.26	0.20	0.15	0.85	0.15	0.47
7	0.2	0.10	-0.01	-0.12	-0.08	-0.08	-0.09	-0.13	-0.14	-0.16	-0.13	-0.15	-0.11	-0.13	0.00	0.10	0.15	0.16	0.21	0.74	0.72	0.12	0.18	0.16	0.74	-0.16	0.06
8	0.4	0.49	0.44	0.64	0.63	0.37	1.22	1.60	0.65	0.41	0.44	0.27	0.27	0.17	0.06	0.11	0.18	0.27	0.33	0.31	0.28	0.22	0.20	0.21	1.60	0.06	0.42
9	0.2	0.22	0.23	0.16	0.05	0.00	0.11	-0.11	-0.02	-0.05	-0.03	0.04	-0.09	-0.15	-0.17	-0.12	0.10	-0.03	-0.16	-0.17	-0.15	-0.06	0.01	-0.05	0.25	-0.17	-0.01
10	0.0	-0.03	-0.03	-0.03	-0.02	0.02	0.12	0.15	0.04	0.14	0.21	0.25	0.54	1.02	0.31	0.44	1.16	1.19	2.10	1.27	1.97	2.56	0.96	0.92	2.56	-0.03	0.63
11	1.2	1.80	1.87	2.01	2.78	1.53	2.03	1.60	2.56	2.11	2.26	0.25	0.06	0.26	0.23	0.04	0.03	0.27	0.29	0.84	0.77	0.47	0.29	0.95	2.78	0.03	1.11
12	1.5	0.85	1.41	1.42	1.11	1.32	2.76	2.10	1.85	0.59	-0.13	-0.15	-0.14	-0.17	-0.11	-0.15	-0.08	0.96	0.10	0.00	0.11	0.06	0.08	0.16	2.76	-0.17	0.64
13	0.2	0.13	0.20	0.13	0.13	0.31	0.20	0.27	0.22	0.55	0.60	0.38	0.28	0.53	0.79	0.26	0.44	0.64	1.74	3.01	3.78	3.44	3.39	3.15	3.78	0.13	1.03
14	3.5	3.89	5.31	3.92	4.00	3.88	3.87	4.32	3.83	2.25	1.69	2.25	0.72	1.22	1.23	0.87	0.91	0.84	0.74	0.85	0.53	0.47	0.51	0.41	5.31	0.41	2.17
15	0.4	0.27	0.24	0.20	0.25	0.17	0.16	0.15	0.21	0.12	-0.04	-0.04	-0.02	0.00	0.00	0.03	0.09	0.43	0.83	2.16	1.22	0.80	1.65	1.38	2.16	-0.04	0.45
16	2.0	2.18	2.12	2.17	2.94	3.96	4.07	4.66	4.24	4.48	5.11	3.05	3.98	3.39	0.42	0.72	0.22	0.56	0.49	0.38	0.37	0.44	0.18	0.24	5.11	0.18	2.18
17	0.3	0.47	0.35	0.22	0.14	0.13	0.08	0.13	0.15	0.14	0.15	0.22	0.22	0.23	0.22	0.23	0.23	0.23	0.24	0.23	0.24	0.23	0.19	0.19	0.47	0.08	0.21
18	0.2	0.23	0.27	0.25	0.22	0.25	0.31	0.28	0.31	0.33	0.43	0.28	0.26	0.24	0.23	0.22	0.22	0.23	0.23	0.24	0.13	0.23	0.16	0.18	0.43	0.13	0.25
19	0.2	0.32	0.32	0.29	0.28	0.26	0.28	0.32	0.30	0.29	0.29	0.30	0.25	0.36	0.32	0.17	0.31	0.30	0.19	0.21	0.21	0.23	0.26	0.30	0.36	0.17	0.27
20	0.3	0.36	0.66	0.36	0.43	0.55	0.32	0.30	0.29	0.36	0.38	0.43	0.85	0.52	0.43	0.95	0.61	1.08	2.09	1.77	2.00	2.16	1.72	1.26	2.16	0.28	0.84
21	0.8	1.05	1.20	1.21	1.30	1.01	0.86	0.85	0.99	0.66	0.26	0.14	0.02	-0.08	-0.11	-0.10	0.27	1.50	2.26	2.61	2.80	2.18	3.55	2.67	3.55	-0.11	1.16
22	2.8	3.32	2.29	1.35	1.27	1.06	1.67	0.48	0.05	0.02	0.00	0.01	0.01	-0.03	-0.05	-0.07	-0.02	-0.02	-0.03	-0.02	0.00	0.00	0.01	-0.01	3.32	-0.07	0.59
23	0.0	0.00	-0.01	-0.02	-0.01	0.03	0.00	-0.03	0.02	0.01	0.07	0.31	0.41	0.30	0.30	0.32	0.30	0.42	0.59	0.43	0.36	0.32	0.33	0.49	0.59	-0.03	0.21
24	0.5	0.51	0.43	0.76	0.73	0.51	0.75	1.05	1.23	1.00	0.76	0.87	2.16	1.91	1.17	0.57	0.40	0.73	0.83	1.27	0.72	0.68	0.13	0.15	2.16	0.13	0.82
25	0.1	0.12	0.14	0.07	0.09	0.03	0.02	0.08	0.08	0.02	-0.04	-0.05	-0.03	-0.03	-0.01	-0.01	-0.01	-0.02	-0.02	0.00	0.02	0.01	-0.01	0.00	0.14	-0.05	0.02
26	0.0	-0.01	-0.05	-0.02	-0.05	-0.06	-0.01	0.00	0.01	0.02	0.04	0.04	0.05	0.02	0.00	0.06	0.03	0.04	0.02	-0.04	-0.01	-0.03	-0.04	-0.06	0.06	-0.06	0.00
27	0.0	-0.04	-0.03	-0.01	0.04	0.04	0.03	0.03	0.02	0.04	0.04	0.07	0.01	-0.01	0.05	0.08	0.07	0.08	0.05	0.07	0.07	0.10	0.09	0.10	0.10	-0.04	0.04
28	0.1	0.09	0.10	0.07	0.08	0.14	0.08	0.05	0.11	0.11	0.05	0.07	0.08	0.08	0.08	0.10	0.16	0.12	0.16	0.21	0.09	0.15	0.24	0.16	0.24	0.05	0.11
29	0.3	0.43	0.13	0.09	0.10	0.08	0.20	0.11	0.18	0.20	0.18	0.16	0.24	0.13	0.20	0.35	0.37	0.26	0.27	0.11	0.04	0.06	0.16	0.14	0.43	0.04	0.19
30	0.2	0.37	0.26	0.15	0.30	0.28	0.29	0.15	0.21	0.13	0.07	0.07	0.11	0.04	0.04	0.13	0.08	0.05	0.10	0.09	0.09	0.11	0.10	0.09	0.37	0.04	0.15
31	0.1	0.12	0.12	0.22	0.15	0.09	0.09	0.18	0.33	0.14	0.29	0.38	0.21	0.21	0.30	0.35	0.24	0.39	0.28	0.34	0.19	0.12	0.31	0.25	0.39	0.09	0.22
Max.	**3.5**	**3.89**	**5.31**	**3.92**	**4.00**	**3.96**	**4.07**	**4.66**	**4.24**	**4.48**	**5.11**	**3.05**	**3.98**	**3.39**	**1.23**	**0.95**	**1.16**	**1.50**	**2.26**	**3.01**	**3.78**	**3.44**	**3.55**	**3.15**	**5.31**		
Min.	**0.0**	**-0.04**	**-0.05**	**-0.12**	**-0.08**	**-0.08**	**-0.09**	**-0.13**	**-0.14**	**-0.16**	**-0.13**	**-0.15**	**-0.14**	**-0.17**	**-0.17**	**-0.15**	**-0.08**	**-0.03**	**-0.16**	**-0.17**	**-0.15**	**-0.06**	**-0.04**	**-0.06**		**-0.17**	
Avg.	**0.6**	**0.65**	**0.68**	**0.62**	**0.64**	**0.59**	**0.70**	**0.67**	**0.68**	**0.55**	**0.51**	**0.39**	**0.42**	**0.40**	**0.26**	**0.25**	**0.28**	**0.45**	**0.60**	**0.71**	**0.68**	**0.60**	**0.59**	**0.52**			**0.54**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	83.5	84.2	83.7	82.5	83.4	82.5	78.8	75.6	74.5	74.8	75.6	72.4	71.2	75.5	79.2	77.8	76.6	76.1	74.6	75.3	75.8	75.1	75.6	78.5	84.2	71.2	77.6
2	75.8	76.5	75.9	77.4	77.8	77.5	78.0	77.7	77.6	78.0	77.7	77.6	79.0	78.7	78.2	78.7	78.2	79.1	80.2	79.7	80.3	80.9	81.0	81.9	81.9	75.8	78.5
3	82.1	82.6	83.3	83.3	82.4	84.0	83.3	84.8	82.5	82.4	82.3	80.8	80.7	80.8	80.3	80.3	80.4	79.8	79.4	78.8	79.7	80.3	79.5	80.2	84.8	78.8	81.4
4	78.9	77.5	79.4	78.0	79.0	80.5	80.0	78.0	80.0	80.9	81.2	81.4	77.6	78.6	79.1	76.2	75.1	76.0	74.2	73.6	74.1	73.3	73.6	73.4	81.4	73.3	77.5
5	73.4	73.3	72.9	75.3	74.0	74.4	74.0	73.3	72.3	73.4	75.4	75.7	75.7	75.6	75.6	77.3	77.7	77.2	78.0	79.0	77.2	74.8	75.2	74.7	79.0	72.3	75.2
6	74.7	73.5	73.8	73.2	72.9	73.0	72.9	73.0	72.5	72.0	72.3	72.3	72.1	72.8	72.3	71.1	71.5	71.8	71.9	71.9	71.7	71.7	72.2	70.8	74.7	70.8	72.4
7	69.3	69.3	69.5	69.3	69.9	71.9	72.2	72.9	71.8	69.7	69.2	68.6	70.9	73.2	75.2	76.1	76.1	75.6	75.7	73.5	71.0	70.8	68.4	71.2	76.1	68.4	71.7
8	69.9	68.5	68.6	69.0	69.6	69.5	71.1	73.1	73.5	72.1	71.7	71.8	72.0	70.6	71.8	71.1	70.6	70.6	70.9	72.6	73.2	73.6	74.9	73.5	74.9	68.5	71.4
9	73.0	73.1	72.0	72.4	73.5	73.5	73.2	74.4	74.2	74.1	73.3	72.7	71.0	71.2	70.2	72.9	72.5	73.4	73.5	73.7	74.2	74.5	74.3	74.8	74.8	70.2	73.2
10	76.5	77.6	78.2	78.5	77.8	77.2	76.8	77.0	78.0	77.3	76.5	76.8	76.2	75.6	74.5	74.4	72.2	71.7	71.6	73.8	74.3	73.9	73.2	73.9	78.5	71.6	75.6
11	74.4	75.3	75.6	75.1	74.1	72.4	71.0	72.1	72.6	72.0	69.6	71.1	70.5	70.3	69.8	70.5	70.4	70.8	70.6	70.8	70.6	69.8	69.7	69.2	75.6	69.2	71.6
12	68.8	69.5	68.6	67.3	67.3	66.7	66.7	67.2	67.2	66.8	66.3	66.2	65.7	64.7	63.6	64.1	63.7	63.7	64.5	63.7	63.4	63.6	65.5	65.1	69.5	63.4	65.8
13	66.1	65.2	65.8	64.4	63.2	64.8	66.5	65.4	63.8	63.9	63.3	62.7	61.9	62.8	64.3	63.4	64.5	66.0	66.9	66.4	66.0	67.1	65.3	64.3	67.1	61.9	64.7
14	64.3	66.1	66.0	69.5	73.1	72.9	70.9	71.1	72.3	71.9	73.3	68.4	65.3	72.3	82.5	81.9	80.4	79.3	81.3	80.7	79.9	83.4	85.8	87.2	87.2	64.3	75.0
15	95.7	96.7	95.8	96.8	97.3	97.1	96.5	95.1	96.0	94.4	92.2	91.8	90.0	89.6	91.5	87.5	87.8	88.8	89.4	89.0	89.7	89.6	87.8	87.0	97.3	87.0	92.2
16	84.7	86.6	88.6	92.7	95.9	97.0	97.6	96.8	96.8	95.2	92.3	92.2	93.9	96.0	96.0	96.6	98.1	98.5	98.5	97.2	95.0	94.8	93.2	96.3	98.5	84.7	94.6
17	94.2	90.8	90.6	92.6	97.0	94.9	63.0	58.0	62.8	61.6	55.1	56.8	75.3	75.4	74.0	74.8	82.1	93.5	97.4	99.3	98.5	97.2	96.4	98.2	99.3	55.1	82.5
18	97.5	97.1	95.3	95.7	95.7	96.2	97.0	93.7	90.4	89.5	94.1	95.0	96.6	98.5	99.3	98.4	96.7	96.6	98.6	98.5	98.9	97.4	94.9	81.2	99.3	81.2	95.5
19	83.0	81.6	74.3	75.1	77.3	79.8	75.1	74.7	72.8	71.7	71.3	72.3	74.0	79.1	86.7	90.4	89.0	87.7	92.3	92.7	88.5	90.3	89.7	90.7	92.7	71.3	81.7
20	95.0	95.6	97.1	97.8	97.9	98.1	98.9	99.9	99.8	99.5	100.0	99.3	99.8	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9	100.0	100.0	100.0	100.0	95.0	99.1
21	100.0	100.0	100.0	100.0	99.6	94.7	88.7	86.4	83.3	86.2	87.6	85.1	83.3	83.3	82.7	83.8	82.6	81.8	81.7	84.0	86.4	88.1	88.0	86.9	100.0	81.7	88.5
22	84.6	83.7	75.8	62.6	61.0	60.9	67.5	83.6	88.1	91.2	91.7	90.8	90.1	89.4	85.7	83.2	79.8	75.6	73.5	76.2	81.9	84.5	84.8	81.9	91.7	60.9	80.3
23	84.9	85.5	79.0	71.9	69.5	69.7	74.1	76.6	74.7	68.8	71.9	74.0	73.9	72.4	72.8	68.6	67.8	68.3	71.1	73.0	73.2	71.0	70.2	66.8	85.5	66.8	72.9
24	70.9	72.7	71.2	70.6	68.6	70.7	68.4	71.1	71.4	73.1	64.7	57.6	71.0	91.1	92.2	90.9	90.5	92.4	92.7	92.8	92.4	92.4	92.0	91.9	92.8	57.6	79.7
25	91.1	87.7	89.1	93.1	92.3	92.0	90.7	87.0	86.6	85.1	85.4	86.8	86.4	85.4	85.1	85.7	86.8	86.9	88.1	89.4	84.4	81.5	81.0	78.2	93.1	78.2	86.9
26	77.4	77.9	78.2	77.6	76.9	77.5	76.4	74.5	76.2	76.9	76.3	75.4	76.0	73.8	73.3	73.9	73.7	74.9	76.3	76.9	77.7	79.0	78.5	77.7	79.0	73.3	76.4
27	76.2	74.3	68.8	62.2	69.0	75.4	69.3	63.8	56.8	61.0	69.8	73.1	76.3	84.6	91.4	90.3	91.3	92.9	93.9	93.6	91.9	89.2	85.1	88.4	93.9	56.8	78.7
28	92.2	94.7	96.0	96.3	96.6	97.2	96.5	94.4	93.4	94.0	93.9	95.1	95.2	93.5	92.0	93.0	93.3	94.3	96.7	95.9	95.9	95.9	95.0	93.4	97.2	92.0	94.8
29	93.4	94.1	93.8	94.2	95.5	94.7	95.6	96.9	93.4	92.9	93.7	93.0	93.9	94.6	89.7	91.4	90.6	94.1	96.5	96.1	95.2	93.7	92.8	89.3	96.9	89.3	93.7
30	87.7	87.1	90.4	93.0	92.9	92.3	92.8	93.5	92.6	93.2	92.2	91.8	91.6	91.5	91.6	91.6	90.6	89.7	88.7	86.6	84.5	82.4	82.7	84.5	93.5	82.4	89.8
31	83.5	82.5	83.2	82.9	79.9	80.1	79.4	81.3	85.2	84.6	86.7	87.5	87.2	86.3	85.5	85.2	85.7	91.2	91.2	93.0	91.6	92.0	89.7	88.5	93.0	79.4	86.0
Max.	**100.0**	**100.0**	**100.0**	**100.0**	**99.6**	**98.1**	**98.9**	**99.9**	**99.8**	**99.5**	**100.0**	**99.3**	**99.8**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.9**	**99.9**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**		
Min.	**64.3**	**65.2**	**65.8**	**62.2**	**61.0**	**60.9**	**63.0**	**58.0**	**56.8**	**61.0**	**55.1**	**56.8**	**61.9**	**62.8**	**63.6**	**63.4**	**63.7**	63.7	64.5	**63.7**	**63.4**	**63.6**	**65.3**	**64.3**		**55.1**	
Avg.	**81.4**	**81.3**	**80.7**	**80.3**	**80.7**	**80.9**	**79.4**	**79.5**	**79.1**	**79.0**	**78.9**	**78.6**	**79.5**	**80.9**	**81.5**	**81.3**	**81.2**	**81.9**	**82.6**	**82.8**	**82.5**	**82.3**	**81.8**	**81.3**			**80.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	86.6	87.2	87.2	88.0	89.7	89.6	90.5	90.8	91.1	91.2	90.2	89.5	91.3	91.5	91.9	92.2	92.3	92.1	87.9	84.1	84.0	83.6	83.4	83.1	92.3	83.1	88.7
2	83.3	88.9	87.6	87.7	87.9	88.0	88.5	89.0	89.3	88.5	88.5	87.9	88.3	89.0	87.3	87.0	85.1	83.0	82.7	81.0	82.7	82.9	81.1	79.3	89.3	79.3	86.0
3	78.7	78.0	78.7	79.3	77.9	75.9	75.5	76.3	75.4	76.5	77.2	75.3	74.3	74.4	73.7	71.6	71.7	71.0	70.5	72.5	72.9	72.8	72.5	71.6	79.3	70.5	74.7
4	71.0	71.4	70.3	71.0	70.9	71.5	72.3	73.7	73.5	75.1	73.8	73.2	72.1	73.5	73.6	70.0	69.9	68.3	66.1	65.8	66.7	67.0	69.0	68.2	75.1	65.8	70.7
5	69.4	67.6	67.2	67.8	68.5	67.6	67.2	67.8	68.5	67.4	66.7	64.8	64.9	64.2	63.6	62.9	64.0	65.0	64.8	65.9	65.1	65.1	64.2	62.6	69.4	62.6	65.9
6	62.2	61.6	63.5	64.4	63.9	62.4	63.4	63.4	61.9	60.0	58.6	58.5	59.2	57.2	61.9	60.2	58.7	60.1	59.0	58.5	59.7	62.3	61.4	62.2	64.4	57.2	61.0
7	63.4	61.3	60.7	61.0	62.3	63.0	63.0	58.5	61.3	62.1	58.0	56.8	54.8	52.0	52.2	51.8	48.0	48.9	47.0	52.5	64.4	56.2	50.3	49.1	64.4	47.0	56.6
8	53.8	60.0	65.9	63.6	60.8	64.9	66.2	65.5	65.8	65.0	64.7	63.6	64.1	63.9	58.1	51.1	57.2	55.9	58.7	64.0	61.5	51.4	45.4	45.4	66.2	45.4	59.8
9	48.5	51.7	55.3	57.9	57.1	58.1	58.0	57.5	53.1	50.0	46.4	44.5	53.4	61.3	67.6	58.3	56.1	58.1	59.6	62.2	58.2	60.8	60.5	61.2	67.6	44.5	56.5
10	62.2	62.0	64.3	63.1	61.8	62.4	61.4	60.8	61.4	63.0	62.3	61.8	63.6	65.7	67.3	65.5	66.7	71.3	72.8	71.0	70.1	70.7	71.3	72.2	72.8	60.8	65.6
11	72.9	74.0	76.9	78.0	78.9	78.4	73.4	73.9	72.0	74.0	75.2	77.1	80.1	81.7	83.2	83.9	85.2	86.6	86.8	87.4	87.4	86.8	86.4	85.8	87.4	72.0	80.2
12	86.4	85.1	83.1	80.3	78.5	79.8	79.5	78.0	78.2	77.0	78.4	79.5	80.2	80.2	79.9	78.5	76.1	74.2	73.7	74.6	74.4	74.2	74.4	75.5	86.4	73.7	78.3
13	75.4	76.7	71.7	60.5	61.7	70.1	74.5	76.5	80.7	78.9	80.8	78.9	76.6	73.3	74.0	82.6	82.1	80.3	79.1	77.3	76.9	77.5	78.7	80.0	82.6	60.5	76.0
14	80.3	79.3	79.8	83.6	89.8	92.0	96.4	95.9	92.2	90.2	88.8	87.0	86.1	85.0	83.8	83.6	82.9	81.7	81.0	82.1	82.0	80.4	83.0	84.9	96.4	79.3	85.5
15	80.3	79.5	80.5	79.3	78.5	75.1	77.3	73.6	69.5	71.7	75.2	72.1	62.5	64.4	65.7	64.5	66.8	68.5	68.7	71.3	73.7	75.5	76.4	75.8	80.5	62.5	72.8
16	76.4	75.8	76.6	77.8	78.7	87.3	93.5	92.7	91.0	89.3	88.8	90.0	91.2	92.0	91.0	92.6	93.4	93.7	95.1	96.5	94.5	93.6	94.5	95.3	96.5	75.8	89.2
17	95.4	96.6	97.7	96.7	95.5	85.4	84.1	81.8	76.8	74.3	72.9	68.9	68.6	87.9	89.4	91.4	96.1	95.8	95.3	96.0	92.1	88.0	83.2	81.3	97.7	68.6	87.1
18	84.2	87.8	90.0	92.1	88.8	88.5	92.9	92.5	92.9	92.8	91.7	89.0	88.6	88.3	87.3	86.4	85.4	87.3	88.0	92.7	94.8	90.9	86.8	83.0	94.8	83.0	89.3
19	80.1	81.1	75.3	73.3	65.7	61.0	61.0	62.4	72.4	84.1	88.9	90.0	91.7	89.0	86.2	81.2	77.9	76.9	76.5	82.4	89.6	96.6	97.2	96.7	97.2	61.0	80.7
20	96.9	93.6	95.4	93.1	94.3	92.0	89.9	91.4	89.6	86.1	86.9	86.2	77.6	72.4	74.0	75.5	74.4	70.3	70.3	71.4	70.0	69.2	68.4	74.0	96.9	68.4	81.8
21	76.5	76.4	70.8	72.3	73.7	71.4	69.2	66.3	68.1	69.2	70.8	74.7	73.0	73.8	73.7	74.1	73.3	73.6	79.3	83.2	82.4	92.9	97.8	97.0	97.8	66.3	76.4
22	94.1	91.1	99.0	99.8	99.4	98.6	97.9	96.1	97.4	95.5	95.6	97.4	97.0	99.0	91.8	89.5	91.0	88.2	86.3	84.9	88.2	88.9	90.1	90.7	99.8	84.9	93.6
23	92.3	94.7	98.8	99.1	98.3	96.7	96.0	95.6	94.9	94.2	96.4	95.2	94.2	96.2	95.8	83.6	81.9	79.3	78.8	77.8	76.5	80.8	82.6	86.9	99.1	76.5	90.3
24	90.0	89.9	90.8	91.8	90.5	89.4	90.1	88.5	87.6	87.3	87.7	87.2	86.2	82.0	80.2	79.4	79.2	78.5	78.3	80.1	82.6	81.7	81.7	82.4	91.8	78.3	85.1
25	82.8	82.5	82.6	82.9	81.8	82.6	80.5	78.6	82.6	82.4	81.7	81.8	81.4	79.6	78.8	78.4	74.6	75.9	74.0	66.1	59.1	58.8	56.1	65.6	82.9	56.1	76.3
26	65.6	64.0	68.6	71.7	74.0	75.2	76.2	77.9	78.0	76.9	75.5	69.1	59.8	61.9	63.6	66.5	66.9	66.3	67.4	66.9	70.2	65.2	65.7	67.6	78.0	59.8	69.2
27	66.6	69.7	69.9	70.1	71.0	71.5	71.5	71.4	71.5	73.3	72.2	73.1	72.9	72.5	71.1	72.0	73.2	66.6	67.7	70.4	74.7	73.2	72.5	72.4	74.7	66.6	71.3
28	72.6	70.1	71.4	69.9	69.8	68.4	67.3	65.4	64.2	63.8	65.8	70.1	69.4	72.9	72.3	69.1	67.3	67.6	70.1	76.7	69.2	65.0	64.0	65.6	76.7	63.8	68.7
29	67.2	68.6	66.1	65.2	66.2	65.6	65.6	66.9	69.2	70.4	71.6	70.7	69.6	70.4	71.8	70.6	68.5	68.4	66.0	64.2	66.9	71.5	76.8	80.9	80.9	64.2	69.1
Max.	**96.9**	**96.6**	**99.0**	**99.8**	**99.4**	**98.6**	**97.9**	**96.1**	**97.4**	**95.5**	**96.4**	**97.4**	**97.0**	**99.0**	**95.8**	**92.6**	**96.1**	**95.8**	**95.3**	**96.5**	**94.8**	**96.6**	**97.8**	**97.0**	**99.8**		
Min.	**48.5**	**51.7**	**55.3**	**57.9**	**57.1**	**58.1**	**58.0**	**57.5**	**53.1**	**50.0**	**46.4**	**44.5**	**53.4**	**52.0**	**52.2**	**51.1**	**48.0**	48.9	47.0	**52.5**	**58.2**	**51.4**	**45.4**	**45.4**		**44.5**	
Avg.	**76.4**	**76.8**	**77.4**	**77.3**	**77.1**	**77.0**	**77.3**	**76.9**	**76.9**	**76.9**	**76.9**	**76.3**	**75.6**	**76.4**	**76.2**	**75.0**	**74.7**	**74.2**	**74.2**	**75.2**	**75.5**	**75.3**	**75.0**	**75.7**			**76.1**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	80.6	81.1	80.9	82.1	82.9	83.4	83.1	84.2	85.3	87.3	89.4	86.3	83.3	83.6	82.0	72.1	69.6	69.6	85.7	88.9	85.4	79.3	77.8	77.8	89.4	69.6	81.7
2	80.2	75.6	73.7	71.9	80.1	77.7	84.4	94.5	96.9	97.5	92.0	87.5	86.2	83.6	81.7	80.6	84.3	90.4	87.8	95.3	98.0	96.8	97.5	98.4	98.4	71.9	87.2
3	98.4	97.3	99.5	99.4	94.5	85.5	86.0	87.5	88.0	91.3	96.9	97.7	96.9	96.8	93.9	87.5	83.6	82.1	83.3	83.7	84.4	86.8	87.7	85.1	99.5	82.1	90.6
4	86.6	86.7	86.9	86.0	92.2	95.3	93.2	90.1	87.3	88.8	87.2	91.5	85.0	80.0	79.6	78.7	78.8	79.0	79.5	80.0	84.4	85.6	83.5	82.5	95.3	78.7	85.3
5	80.7	82.8	78.6	76.9	77.7	80.6	81.7	83.4	82.2	80.5	78.5	83.7	82.6	85.3	83.9	78.0	75.9	78.2	82.7	86.6	88.0	88.3	88.7	88.1	88.7	75.9	82.2
6	86.7	86.0	86.8	84.4	87.5	88.0	83.5	80.9	80.6	80.7	79.5	79.4	81.4	82.9	81.7	81.1	79.1	79.3	77.7	74.5	74.2	64.6	65.7	64.1	88.0	64.1	79.6
7	69.0	77.0	78.6	77.1	78.4	80.1	81.2	81.3	77.7	78.0	81.9	83.2	82.0	81.1	79.5	79.1	85.4	84.7	84.5	82.2	86.0	93.4	93.1	90.7	93.4	69.0	81.9
8	89.6	88.4	83.1	88.7	94.8	94.9	95.9	95.5	95.4	94.2	93.9	85.4	79.6	77.3	65.1	67.1	66.8	68.4	72.3	72.9	77.2	80.7	79.8	77.6	95.9	65.1	82.7
9	75.9	71.9	63.6	63.5	61.7	62.0	62.7	64.3	66.7	65.3	76.0	77.6	73.2	76.9	83.7	86.6	88.4	90.7	90.4	87.3	89.2	93.1	92.3	92.8	93.1	61.7	77.3
10	92.8	92.9	92.9	96.0	94.4	89.4	85.8	87.5	88.6	86.6	89.6	89.0	91.6	90.6	88.0	89.8	88.5	86.0	88.6	88.7	94.0	91.4	91.1	87.1	96.0	85.8	90.0
11	90.0	90.5	88.8	86.7	86.9	89.5	91.7	92.1	91.0	86.4	90.4	89.2	88.2	82.9	85.3	83.2	81.4	80.3	83.0	79.6	83.2	85.1	83.1	81.2	92.1	79.6	86.2
12	84.7	88.4	88.6	88.7	89.2	89.0	91.3	91.8	91.7	91.9	90.8	90.4	88.5	86.5	86.1	84.9	83.3	82.9	82.7	84.4	85.2	86.6	87.2	91.1	91.9	82.7	87.7
13	88.3	86.9	88.0	89.6	90.9	91.4	93.1	94.1	95.2	95.1	94.1	92.8	90.6	90.2	90.2	87.5	85.6	85.4	86.1	86.5	86.3	86.4	85.9	88.7	95.2	85.4	89.5
14	88.4	91.6	92.7	92.2	91.7	91.4	91.3	91.2	91.2	90.6	89.8	90.4	90.0	91.1	92.4	92.6	92.7	87.3	78.6	64.8	66.6	70.9	76.0	74.2	92.7	64.8	86.2
15	67.1	83.0	88.6	91.7	90.6	82.8	86.3	90.9	88.8	85.9	93.9	92.0	87.9	85.4	83.8	83.3	85.9	88.2	89.3	89.5	89.4	93.0	96.2	96.9	96.9	67.1	87.9
16	98.2	97.1	97.9	98.1	96.2	89.0	85.7	82.1	81.5	79.4	83.2	83.3	75.9	75.6	78.7	84.8	81.4	79.8	81.5	77.4	79.6	82.2	85.7	87.9	98.2	75.6	85.1
17	85.7	88.3	89.2	87.4	86.3	89.7	90.4	91.1	89.7	90.7	92.3	90.9	91.0	92.0	91.8	93.0	94.1	92.5	88.8	89.2	89.3	86.6	85.4	84.5	94.1	84.5	89.6
18	90.7	93.3	91.6	89.2	86.8	83.9	83.9	86.6	86.4	85.1	84.3	83.0	82.7	80.3	79.7	76.5	74.8	75.9	78.0	77.7	78.0	77.6	75.9	78.0	93.3	74.8	82.5
19	79.1	79.4	79.0	78.4	78.0	78.1	78.8	78.6	78.9	79.0	77.7	73.4	72.4	69.9	69.0	69.8	69.8	72.2	74.9	76.9	78.1	79.7	80.9	81.0	81.0	69.0	76.4
20	82.2	82.7	81.6	81.3	81.6	80.7	80.7	81.0	80.5	82.3	81.9	77.9	77.6	77.2	77.0	79.0	80.3	80.5	80.7	82.1	82.3	82.3	83.2	81.8	83.2	77.0	80.8
21	81.2	80.5	79.8	81.0	83.7	85.3	87.1	88.6	88.7	88.1	87.6	84.7	83.7	81.0	76.7	74.3	72.1	73.2	71.4	72.0	75.9	69.4	74.4	73.2	88.7	69.4	79.7
22	73.2	72.8	67.7	71.5	70.2	72.7	73.9	75.6	75.3	70.2	67.9	69.4	70.6	67.1	65.7	67.0	65.5	64.0	62.4	60.2	60.0	64.9	70.0	68.6	75.6	60.0	68.6
23	68.5	70.0	69.7	64.6	69.3	66.7	67.1	66.5	70.1	68.6	67.7	65.0	69.7	70.9	69.4	70.1	70.6	66.4	70.3	70.9	73.0	73.3	73.9	75.8	75.8	64.6	69.5
24	80.2	80.3	79.5	77.8	77.5	80.6	79.6	83.3	83.1	82.9	79.1	76.7	75.5	72.1	68.9	66.1	68.8	69.7	74.7	75.3	72.5	74.1	76.6	81.6	83.3	66.1	76.5
25	85.0	86.2	85.9	89.6	88.6	89.0	91.2	91.8	92.6	91.8	91.6	94.7	92.7	87.5	85.9	82.3	80.0	79.3	77.1	76.0	75.6	75.6	72.2	73.0	94.7	72.2	84.8
26	78.7	80.9	82.7	83.7	83.6	84.2	84.4	80.9	82.6	82.5	82.5	80.3	76.7	77.5	74.6	72.7	71.8	68.9	69.8	72.6	70.7	76.7	75.7	77.2	84.4	68.9	78.0
27	78.8	80.9	82.2	84.6	84.3	83.7	82.4	82.5	82.0	78.8	79.6	80.3	79.5	81.9	80.1	80.9	80.1	78.3	76.9	79.9	80.6	82.1	80.8	80.9	84.6	76.9	80.9
28	79.6	77.4	76.9	79.6	79.3	78.0	81.5	82.7	81.9	80.0	79.3	79.0	78.9	78.5	78.2	77.4	77.3	77.6	77.0	76.8	78.3	82.0	83.0	84.3	84.3	76.8	79.4
29	84.3	85.5	85.2	84.2	83.3	83.4	85.4	85.4	86.5	82.6	78.7	78.8	80.6	80.3	79.5	79.4	80.5	78.1	78.6	80.3	82.9	85.2	86.0	85.6	86.5	78.1	82.5
30	86.3	86.7	87.0	87.2	87.8	87.8	88.0	86.8	83.5	84.7	83.7	81.9	81.7	79.7	80.4	84.0	85.3	87.7	89.2	90.7	91.7	89.0	87.0	88.9	91.7	79.7	86.1
31	89.8	87.5	88.4	88.4	88.3	84.7	81.2	84.4	87.4	86.1	85.2	83.1	83.4	82.9	83.6	83.7	84.4	84.0	83.5	83.5	85.2	88.3	90.6	90.4	90.6	81.2	85.8
Max.	**98.4**	**97.3**	**99.5**	**99.4**	**96.2**	**95.3**	**95.9**	**95.5**	**96.9**	**97.5**	**96.9**	**97.7**	**96.9**	**96.8**	**93.9**	**93.0**	**94.1**	**92.5**	**90.4**	**95.3**	**98.0**	**96.8**	**97.5**	**98.4**	**99.5**		
Min.	**67.1**	**70.0**	**63.6**	**63.5**	**61.7**	**62.0**	**62.7**	**64.3**	**66.7**	**65.3**	**67.7**	**65.0**	**69.7**	**67.1**	**65.1**	**66.1**	**65.5**	64.0	62.4	**60.2**	**60.0**	**64.6**	**65.7**	**64.1**		**60.0**	
Avg.	**83.2**	**84.2**	**83.7**	**83.9**	**84.5**	**83.8**	**84.3**	**85.1**	**85.1**	**84.3**	**84.7**	**83.8**	**82.6**	**81.6**	**80.5**	**79.8**	**79.5**	**79.4**	**80.2**	**80.2**	**81.5**	**82.3**	**82.8**	**82.9**			**82.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	89.4	91.9	93.5	94.2	94.6	94.6	97.3	97.7	95.9	95.1	94.7	92.0	94.4	94.8	92.0	91.9	93.6	94.3	96.2	96.3	97.0	98.4	99.8	99.8	99.8	89.4	95.0
2	97.7	97.0	97.0	98.3	97.8	97.9	99.3	99.1	98.4	99.7	98.8	96.0	95.7	94.4	90.1	86.1	87.4	85.6	85.6	86.6	84.8	85.9	89.6	93.5	99.7	84.8	93.4
3	94.3	98.3	99.3	98.8	96.0	96.2	95.5	96.5	93.8	92.9	89.8	88.1	89.3	86.0	82.1	80.3	79.5	76.8	82.2	85.3	86.2	87.1	89.2	88.7	99.3	76.8	89.7
4	90.0	91.6	90.0	91.8	90.9	88.8	88.5	87.3	88.0	89.8	93.3	93.9	95.8	96.1	96.1	94.9	96.7	97.8	98.0	95.9	90.7	92.2	92.4	92.9	98.0	87.3	92.6
5	90.4	87.9	82.4	77.7	74.9	75.7	76.7	75.9	73.6	76.6	75.0	72.5	71.5	72.4	74.3	74.5	76.5	75.3	65.3	65.0	68.7	75.0	77.1	78.5	90.4	65.0	75.6
6	80.2	79.1	80.5	82.4	80.8	77.3	76.3	75.5	76.3	78.5	78.6	75.5	72.9	71.4	69.8	66.1	64.6	65.0	65.4	64.5	68.1	72.9	70.9	74.5	82.4	64.5	73.6
7	74.5	76.6	76.7	78.3	77.8	79.3	76.4	75.5	79.6	78.5	79.2	74.7	74.6	66.8	63.5	61.2	59.3	63.3	74.3	73.7	70.3	70.5	72.7	73.9	79.6	59.3	73.0
8	67.2	69.4	71.5	67.4	71.6	73.5	73.7	76.0	75.4	74.3	74.0	69.5	67.6	66.0	65.7	62.4	62.9	64.6	81.2	92.1	91.2	90.2	88.8	89.1	92.1	62.4	74.4
9	89.4	89.7	88.0	87.9	86.2	85.9	85.1	83.6	82.5	80.6	78.6	77.7	77.0	78.2	76.6	75.1	73.0	66.8	70.2	77.1	78.8	75.0	75.2	71.1	89.7	66.8	79.6
10	70.1	65.6	68.1	68.8	68.2	67.4	72.5	69.7	70.0	74.4	72.3	71.5	70.1	67.6	64.9	64.4	65.6	67.4	69.0	70.5	69.6	67.6	70.6	72.5	74.4	64.4	69.1
11	73.9	74.0	72.9	73.3	73.3	74.4	75.1	76.7	76.4	75.9	74.3	76.8	76.0	68.9	65.8	64.5	64.0	64.3	66.4	67.1	74.3	75.6	74.7	74.4	76.8	64.0	72.2
12	72.4	73.6	75.6	73.7	75.5	74.4	77.5	75.4	76.0	73.8	71.6	73.0	71.4	66.2	59.9	58.2	63.6	66.3	67.7	72.0	73.9	70.3	73.0	76.7	77.5	58.2	71.3
13	79.1	80.7	84.8	83.8	81.2	77.8	88.0	93.2	94.2	94.6	95.2	95.0	96.3	96.8	96.1	96.0	94.0	93.4	92.9	96.6	95.9	97.9	99.1	97.9	99.1	77.8	91.7
14	97.0	97.3	97.5	96.8	96.3	97.6	98.3	99.0	99.3	97.4	94.7	95.7	95.0	90.7	89.1	87.4	87.1	83.1	84.4	81.8	86.3	88.5	87.7	88.7	99.3	81.8	92.4
15	90.1	91.2	94.8	97.7	97.7	95.2	92.1	93.6	90.6	87.5	87.1	88.4	85.3	81.5	79.3	75.9	72.3	69.9	66.6	67.7	67.9	68.5	68.6	69.5	97.7	66.6	82.5
16	69.7	69.0	68.6	70.4	71.1	71.8	71.5	70.3	71.5	70.4	71.7	69.2	66.4	64.4	61.7	59.9	63.9	70.7	70.4	72.1	73.7	74.3	77.7	80.1	80.1	59.9	70.0
17	83.3	81.7	83.4	83.0	82.4	83.3	86.7	86.1	83.7	80.4	78.4	81.6	88.5	90.9	89.9	87.7	86.3	85.5	85.8	83.8	86.5	88.7	91.7	94.6	94.6	78.4	85.6
18	96.1	95.6	95.2	95.0	94.4	93.8	93.5	92.8	92.9	91.3	86.8	82.3	75.7	62.5	56.4	54.7	66.2	67.7	74.5	71.6	73.8	74.6	79.1	79.1	96.1	54.7	81.1
19	81.7	73.5	69.5	70.1	70.4	68.7	67.7	70.8	71.2	71.7	68.7	67.9	66.5	66.8	66.6	66.8	67.5	66.8	66.2	68.6	71.6	76.3	77.0	80.3	81.7	66.2	70.5
20	83.5	84.8	76.5	80.4	77.8	76.6	77.5	73.7	72.3	70.1	68.9	70.2	68.8	68.4	71.6	75.6	74.0	79.8	84.5	85.9	85.4	83.2	88.2	87.6	88.2	68.4	77.7
21	88.2	88.9	88.7	84.8	82.5	84.0	87.2	90.2	92.1	89.7	88.1	85.1	82.5	83.6	82.4	80.7	79.0	78.5	79.6	75.8	72.6	78.4	85.1	86.8	92.1	72.6	83.9
22	87.4	84.0	80.6	71.2	83.2	90.6	92.4	93.6	90.8	85.1	78.9	72.0	67.7	68.3	63.3	68.1	68.6	69.7	75.0	76.7	80.6	81.3	75.5	73.9	93.6	63.3	78.3
23	77.4	82.1	83.7	81.5	81.7	82.2	83.7	80.5	79.7	78.7	75.9	70.1	73.6	73.7	72.4	74.6	73.0	73.0	72.4	78.1	79.8	83.9	83.8	81.7	83.9	70.1	78.2
24	83.1	82.5	77.7	73.1	82.0	96.8	99.7	99.5	99.3	99.0	97.4	92.7	92.8	90.5	91.6	97.7	93.3	93.2	91.7	91.7	93.1	94.2	87.8	83.8	99.7	73.1	91.0
25	86.3	88.9	89.2	87.9	88.6	89.2	89.4	88.2	82.8	77.8	67.3	65.4	64.8	64.7	65.6	64.8	65.3	65.7	65.7	66.8	69.2	73.0	81.2	83.5	89.4	64.7	76.3
26	78.3	78.3	81.2	81.5	80.9	79.2	78.1	78.2	78.9	79.0	77.5	77.5	75.2	75.9	81.6	82.3	83.5	80.8	78.7	77.8	77.8	79.0	83.8	87.2	87.2	75.2	79.7
27	87.9	89.4	89.7	89.1	88.1	88.7	90.2	88.9	88.6	87.8	88.6	87.8	85.1	83.9	86.3	88.5	88.4	86.2	83.4	82.5	81.7	83.5	86.3	85.4	90.2	81.7	86.9
28	84.3	83.4	85.2	87.0	88.6	86.7	87.7	88.7	86.3	84.6	83.3	81.8	81.5	79.8	77.4	72.3	70.9	70.3	70.3	75.0	75.9	79.7	79.6	82.3	88.7	70.3	80.9
29	77.1	76.5	78.0	81.3	79.6	80.0	83.2	83.0	82.4	83.0	80.5	81.2	77.3	72.1	70.1	69.3	69.3	69.7	70.2	71.6	73.3	73.6	74.2	74.5	83.2	69.3	76.3
30	79.1	83.1	81.4	80.4	81.7	80.1	81.0	81.2	77.8	77.1	75.5	74.7	72.2	70.4	68.0	67.2	72.7	78.4	82.1	82.9	86.3	86.4	89.8	91.9	91.9	67.2	79.2
Max.	**97.7**	**98.3**	**99.3**	**98.8**	**97.8**	**97.9**	**99.7**	**99.5**	**99.3**	**99.7**	**98.8**	**96.0**	**96.3**	**96.8**	**96.1**	**97.7**	**96.7**	**97.8**	**98.0**	**96.6**	**97.0**	**98.4**	**99.8**	**99.8**	**99.8**		
Min.	**67.2**	**65.6**	**68.1**	**67.4**	**68.2**	**67.4**	**67.7**	**69.7**	**70.0**	**70.1**	**67.3**	**65.4**	**64.8**	**62.5**	**56.4**	**54.7**	**59.3**	63.3	65.3	**64.5**	**67.9**	**67.6**	**68.6**	**69.5**		**54.7**	
Avg.	**83.3**	**83.5**	**83.4**	**82.9**	**83.2**	**83.6**	**84.7**	**84.7**	**84.0**	**83.2**	**81.5**	**80.0**	**79.0**	**77.1**	**75.7**	**75.0**	**75.4**	**75.7**	**77.2**	**78.4**	**79.5**	**80.9**	**82.3**	**83.1**			**80.7**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	92.7	92.1	89.8	85.7	80.1	79.4	79.3	78.6	77.9	77.1	76.8	75.4	73.6	72.1	66.7	64.7	65.7	66.4	66.5	70.2	68.5	71.3	72.3	77.9	92.7	64.7	75.9
2	82.3	75.8	80.2	85.5	84.8	83.9	80.8	81.2	80.1	78.9	79.5	76.0	74.7	71.4	73.5	80.8	76.0	77.6	80.6	91.6	96.6	95.2	91.9	94.2	96.6	71.4	82.2
3	95.6	97.3	98.3	99.4	100.0	100.0	99.7	99.9	100.0	99.1	92.6	85.3	76.7	69.9	68.5	68.8	72.5	79.1	81.4	83.2	73.8	78.2	81.2	76.0	100.0	68.5	86.5
4	75.4	76.7	76.9	75.2	78.0	72.6	72.8	71.4	68.8	70.6	68.3	63.8	61.7	61.5	57.6	54.7	51.7	55.7	64.2	75.1	73.7	82.5	85.2	82.3	85.2	51.7	69.8
5	85.6	77.5	76.1	71.5	72.2	79.0	81.8	82.0	81.4	79.1	75.4	71.7	73.5	71.8	70.1	68.3	68.5	64.5	66.6	73.4	81.1	85.0	87.2	90.1	90.1	64.5	76.4
6	92.4	96.3	97.6	98.0	98.8	99.0	99.6	99.7	95.9	83.8	78.2	75.0	73.3	70.5	67.1	66.3	64.5	65.1	65.6	66.9	72.5	77.8	82.1	82.5	99.7	64.5	82.0
7	81.3	80.0	76.7	75.6	75.0	75.6	75.9	75.2	73.6	69.6	65.8	67.2	66.5	67.2	66.9	66.8	66.2	64.7	64.7	67.3	68.9	68.1	74.3	80.4	81.3	64.7	71.4
8	80.6	82.9	81.8	78.6	78.7	81.5	80.7	78.2	75.4	72.9	70.1	68.6	67.8	71.5	74.4	69.3	68.0	66.4	67.4	68.3	70.4	70.6	69.9	73.6	82.9	66.4	73.6
9	74.6	77.5	77.2	79.9	80.5	81.6	82.8	86.2	85.3	76.8	71.2	74.7	76.1	82.2	90.8	87.0	84.5	84.7	88.7	91.1	96.1	97.7	97.8	98.3	98.3	71.2	84.3
10	97.8	97.1	99.3	99.0	99.7	99.9	100.0	100.0	99.9	97.7	93.3	88.7	85.6	81.6	78.8	75.5	77.5	76.1	74.2	72.4	78.6	82.6	84.9	83.6	100.0	72.4	88.5
11	82.6	86.2	90.1	86.9	86.8	87.1	85.7	84.3	77.7	73.1	78.7	82.5	83.8	82.9	67.0	61.4	60.3	61.9	59.7	61.7	63.7	66.9	75.9	76.8	90.1	59.7	76.0
12	77.7	77.7	78.9	76.1	78.7	82.3	85.2	86.3	82.5	77.4	70.1	64.3	63.7	64.7	66.7	75.3	80.7	77.4	74.1	74.0	76.2	80.0	84.8	84.0	86.3	63.7	76.6
13	84.1	85.5	91.8	93.1	94.1	95.1	96.1	95.1	95.6	93.0	87.0	84.4	75.5	73.0	67.1	66.1	66.7	70.5	66.8	67.5	71.7	72.3	74.0	79.0	96.1	66.1	81.0
14	85.1	83.5	87.4	90.8	89.9	71.2	66.1	66.6	64.6	60.5	55.9	55.1	53.1	51.3	54.7	56.3	52.9	50.6	52.6	59.2	58.6	60.9	66.2	66.1	90.8	50.6	65.0
15	72.8	80.1	81.6	71.9	75.3	78.6	83.8	82.5	76.7	74.2	72.9	67.5	63.1	72.5	85.0	82.4	81.1	87.5	90.8	92.4	94.3	95.6	95.6	97.7	97.7	63.1	81.5
16	95.1	95.1	96.7	95.9	94.4	97.1	98.7	99.8	100.0	100.0	98.4	92.6	83.3	71.8	68.9	64.5	62.0	56.3	55.6	56.4	58.7	65.9	80.9	87.9	100.0	55.6	82.3
17	89.0	88.6	90.6	92.9	94.1	93.0	92.9	88.8	83.3	74.6	65.4	59.9	56.7	52.9	47.6	43.7	41.7	44.5	51.2	49.7	51.7	60.9	68.1	73.1	94.1	41.7	69.0
18	75.4	87.7	87.8	82.4	82.7	83.2	86.5	88.8	86.1	85.7	91.9	93.1	92.9	93.6	91.3	89.2	91.0	83.4	79.2	81.7	80.1	81.6	83.5	88.5	93.6	75.4	86.1
19	91.1	91.5	93.3	97.3	95.7	94.3	93.9	92.6	84.3	77.0	74.1	70.7	66.2	61.6	60.0	56.0	52.3	54.2	52.0	51.0	58.2	62.7	72.7	77.7	97.3	51.0	74.2
20	72.5	71.4	69.3	69.2	71.7	68.8	68.4	65.1	61.5	56.2	53.7	50.5	45.9	40.8	37.7	36.5	35.3	33.3	31.3	32.7	36.0	44.2	59.9	77.3	77.3	31.3	53.7
21	82.3	85.6	89.6	88.8	89.2	89.8	89.3	79.0	71.8	65.7	58.5	53.9	50.2	43.7	48.0	41.1	44.8	47.1	52.0	59.3	62.3	67.6	74.6	84.3	89.8	41.1	67.4
22	83.1	79.0	76.8	82.2	84.5	89.6	87.5	84.6	77.6	71.6	63.3	57.5	53.5	51.9	53.3	51.5	54.0	55.8	58.8	59.6	63.8	69.2	71.3	71.1	89.6	51.5	68.8
23	72.9	78.3	85.4	85.2	85.2	79.0	78.1	78.3	74.1	73.7	68.7	69.3	75.1	80.6	87.1	79.1	79.0	78.0	78.3	78.6	77.1	77.0	81.8	83.7	87.1	68.7	78.5
24	84.5	85.1	84.9	83.7	84.8	84.2	86.7	85.6	83.4	85.8	82.2	82.6	81.1	79.2	75.7	67.7	66.6	63.5	61.8	65.7	79.8	83.0	81.6	85.3	86.7	61.8	79.4
25	86.1	93.0	91.3	86.4	85.2	81.4	84.9	88.6	88.8	77.0	71.1	61.7	63.1	72.8	82.0	69.4	61.3	77.0	75.3	75.7	74.8	79.3	86.5	84.7	93.0	61.3	79.1
26	87.1	90.5	93.4	93.4	90.6	89.4	86.4	85.2	82.9	77.1	75.3	72.7	66.9	63.1	56.3	68.6	66.8	64.4	64.3	65.4	63.8	66.3	73.8	82.2	93.4	56.3	76.1
27	89.1	86.4	89.0	91.6	88.5	89.7	91.2	87.7	78.6	72.6	67.5	59.2	51.3	46.0	42.3	39.5	34.6	33.3	35.2	37.6	41.3	51.1	65.1	71.0	91.6	33.3	64.1
28	64.3	71.7	72.2	74.4	75.8	77.4	74.2	66.0	60.5	56.2	52.0	49.5	46.1	44.1	42.9	40.7	39.7	41.7	44.3	47.7	50.3	55.7	65.8	68.2	77.4	39.7	57.6
29	67.1	68.5	68.8	73.5	74.4	77.2	73.2	72.5	65.1	60.7	54.1	46.6	43.8	42.9	41.4	40.5	38.3	37.9	37.4	36.6	36.9	41.5	47.3	48.6	77.2	36.6	53.9
30	55.4	58.6	71.1	83.5	86.7	87.5	84.8	73.6	60.8	53.2	47.6	45.6	44.7	43.8	43.6	44.0	42.8	45.8	50.5	56.8	61.7	64.6	68.9	70.2	87.5	42.8	60.2
31	72.3	74.9	80.6	83.4	85.3	84.0	82.6	85.9	89.7	87.7	78.8	74.1	70.7	66.9	67.9	67.4	66.7	66.4	74.1	84.1	85.7	86.0	86.3	88.1	89.7	66.4	78.7
Max.	**97.8**	**97.3**	**99.3**	**99.4**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**98.4**	**93.1**	**92.9**	**93.6**	**91.3**	**89.2**	**91.0**	**87.5**	**90.8**	**92.4**	**96.6**	**97.7**	**97.8**	**98.3**	**100.0**		
Min.	**55.4**	**58.6**	**68.8**	**69.2**	**71.7**	**68.8**	**66.1**	**65.1**	**60.5**	**53.2**	**47.6**	**45.6**	**43.8**	**40.8**	**37.7**	**36.5**	**34.6**	33.3	31.3	**32.7**	**36.0**	**41.5**	**47.3**	**48.6**		**31.3**	
Avg.	**81.5**	**83.0**	**84.7**	**84.9**	**85.2**	**84.9**	**84.8**	**83.5**	**80.1**	**76.1**	**72.2**	**69.0**	**66.5**	**65.2**	**64.5**	**62.7**	**61.7**	**62.3**	**63.4**	**66.2**	**68.6**	**72.3**	**77.1**	**80.1**			**74.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	89.4	86.8	86.8	84.4	81.2	77.9	72.4	70.0	70.4	69.5	61.9	56.4	56.1	58.4	55.7	55.3	55.8	63.6	64.3	67.4	69.4	73.9	73.7	79.6	89.4	55.3	70.0
2	84.7	80.9	74.7	74.2	71.8	74.5	80.4	77.8	65.2	59.5	59.3	54.8	52.1	48.0	47.9	49.6	48.6	52.2	52.3	52.8	53.3	55.2	59.7	66.4	84.7	47.9	62.3
3	75.0	72.9	80.1	79.6	78.7	78.8	74.4	78.5	79.4	75.2	67.2	60.3	61.0	51.5	55.4	60.9	62.3	59.8	63.9	68.7	77.0	79.6	84.1	86.8	86.8	51.5	71.3
4	86.8	89.3	92.7	93.8	96.9	95.8	95.3	93.4	84.5	73.7	71.9	68.1	68.6	62.7	59.4	57.8	58.2	59.3	58.4	56.5	58.2	62.7	69.7	82.6	96.9	56.5	74.8
5	90.6	94.4	94.5	92.7	90.6	87.5	85.6	82.7	81.8	75.5	74.2	75.6	75.2	68.3	65.4	67.6	64.9	66.2	70.3	71.4	74.1	75.0	81.2	86.0	94.5	64.9	78.8
6	87.8	90.7	90.9	89.7	88.7	88.6	91.1	92.8	92.2	91.1	81.1	68.3	60.7	51.7	47.3	47.8	40.1	46.0	51.0	56.4	56.8	57.8	64.1	77.3	92.8	40.1	71.3
7	92.3	94.5	93.0	89.4	89.1	92.3	91.7	87.1	81.5	73.7	67.0	60.0	52.6	52.3	46.5	41.7	40.1	52.4	52.2	55.0	60.9	67.0	72.9	81.0	94.5	40.1	70.3
8	88.4	92.7	93.3	92.9	97.4	98.8	94.4	83.1	70.4	60.0	56.9	53.2	51.3	46.7	39.1	38.5	41.5	48.3	51.2	55.4	51.3	49.8	55.5	75.7	98.8	38.5	66.1
9	83.2	84.3	83.0	87.9	94.0	96.0	95.1	96.2	92.2	88.3	82.8	72.4	76.8	73.6	69.1	72.8	73.9	69.7	66.3	68.9	72.3	72.7	72.9	78.3	96.2	66.3	80.1
10	79.3	81.3	86.2	91.2	92.8	93.8	92.8	90.7	88.2	86.5	85.2	81.3	76.8	75.9	72.1	69.3	68.0	66.1	71.5	69.8	71.4	75.5	79.0	81.9	93.8	66.1	80.3
11	86.5	89.1	90.6	94.6	94.3	95.1	96.1	93.8	88.9	86.4	82.1	81.0	80.8	82.4	80.3	77.7	74.8	73.6	74.7	73.4	77.7	79.3	80.2	81.5	96.1	73.4	84.0
12	83.1	82.2	89.2	90.8	95.0	97.5	98.0	96.2	91.8	84.4	79.7	75.7	73.9	72.0	72.4	81.9	86.6	88.0	90.5	90.8	93.6	93.5	95.2	95.4	98.0	72.0	87.4
13	96.0	96.9	96.6	94.7	94.0	95.1	94.8	94.2	93.2	92.4	90.8	87.0	80.5	76.6	71.8	69.7	65.6	64.5	60.4	64.0	71.2	75.0	84.2	91.0	96.9	60.4	83.3
14	96.8	98.5	99.1	99.2	99.3	99.4	99.4	99.5	98.1	95.7	93.4	87.3	79.5	74.1	70.9	68.6	64.4	63.9	64.7	82.3	92.2	87.3	84.2	87.5	99.5	63.9	86.9
15	94.4	98.3	99.2	99.6	99.3	97.2	96.8	94.7	90.8	89.1	87.1	88.2	84.7	78.1	71.4	70.8	71.2	79.1	76.7	76.6	80.3	85.9	88.7	92.7	99.6	70.8	87.1
16	95.0	97.0	98.3	98.5	97.7	96.5	97.7	98.7	98.3	94.2	87.8	84.9	82.0	78.7	77.6	72.8	82.1	76.7	71.6	68.0	67.8	69.7	75.0	81.9	98.7	67.8	85.3
17	86.7	89.2	91.2	92.5	92.7	94.2	94.1	86.6	79.2	74.7	68.0	64.5	66.6	57.8	50.9	47.9	44.5	40.1	42.7	45.2	46.2	55.9	66.4	76.6	94.2	40.1	68.9
18	86.3	93.3	97.3	99.1	99.6	99.9	99.0	97.3	88.5	76.9	71.9	68.2	60.8	55.3	55.8	50.2	45.5	43.6	50.5	52.7	52.2	55.1	66.3	75.6	99.9	43.6	72.5
19	83.1	84.2	88.8	89.6	92.3	91.7	92.2	83.9	78.4	71.5	68.9	68.7	65.9	65.2	62.2	59.4	58.1	54.6	49.8	51.7	54.0	64.4	72.0	76.9	92.3	49.8	72.0
20	84.0	88.4	90.3	97.0	99.0	99.0	99.6	95.5	85.4	78.4	73.2	64.8	60.7	58.5	58.8	56.1	56.4	57.4	58.3	62.0	66.9	70.5	75.9	79.7	99.6	56.1	75.7
21	83.7	88.4	91.0	93.3	95.0	98.0	98.5	93.6	79.6	73.7	69.6	66.5	65.6	63.4	61.4	60.7	58.7	53.8	54.0	56.5	59.9	66.5	73.2	82.0	98.5	53.8	74.4
22	91.5	96.6	97.5	98.9	99.0	98.9	99.1	94.5	81.2	77.5	71.4	68.9	65.4	61.9	62.6	64.5	67.3	68.0	71.4	73.9	76.6	79.2	84.7	86.3	99.1	61.9	80.7
23	87.1	87.7	88.7	88.0	89.2	94.5	92.8	84.8	75.2	68.9	66.8	65.7	59.9	56.0	54.0	53.3	51.4	51.4	49.0	51.5	53.0	58.4	66.6	77.6	94.5	49.0	69.6
24	88.4	94.0	97.9	99.2	98.4	97.2	90.4	79.2	70.7	64.1	62.4	61.2	62.9	67.7	68.8	68.8	70.7	71.7	73.7	72.5	71.1	72.0	73.2	74.5	99.2	61.2	77.1
25	75.2	71.0	69.3	71.5	73.5	78.6	77.5	72.0	75.2	64.5	61.8	60.9	59.1	55.4	54.3	52.7	50.3	49.7	52.1	54.6	63.2	66.4	66.0	69.5	78.6	49.7	64.4
26	69.7	78.2	80.9	78.6	83.8	83.3	82.7	76.4	70.6	66.3	58.3	54.3	49.3	57.7	66.0	61.4	57.3	58.1	60.6	58.4	60.3	62.0	73.6	83.9	83.9	49.3	68.0
27	85.3	93.4	93.6	96.4	96.8	95.7	94.1	87.3	78.9	75.7	74.3	67.7	64.4	60.5	57.6	56.8	56.1	53.7	56.6	61.0	63.9	66.7	76.5	80.1	96.8	53.7	74.7
28	88.3	88.7	88.2	91.8	94.1	96.8	97.6	96.3	88.1	83.6	80.2	80.3	78.3	73.5	63.8	67.1	79.7	80.0	68.3	67.8	70.2	76.2	83.9	86.3	97.6	63.8	82.0
29	89.4	91.2	93.9	89.9	84.3	84.8	88.3	92.9	87.2	78.4	71.0	68.1	65.6	61.6	56.4	56.3	54.5	53.8	55.6	58.0	61.7	66.5	70.9	76.6	93.9	53.8	73.2
30	80.9	85.2	85.3	83.8	83.2	84.0	82.9	83.4	73.0	66.2	62.4	60.7	58.7	56.2	55.8	54.1	54.1	59.0	53.6	74.6	78.8	90.2	92.1	94.5	94.5	53.6	73.0
Max.	**96.8**	**98.5**	**99.2**	**99.6**	**99.6**	**99.9**	**99.6**	**99.5**	**98.3**	**95.7**	**93.4**	**88.2**	**84.7**	**82.4**	**80.3**	**81.9**	**86.6**	**88.0**	**90.5**	**90.8**	**93.6**	**93.5**	**95.2**	**95.4**	**99.9**		
Min.	**69.7**	**71.0**	**69.3**	**71.5**	**71.8**	**74.5**	**72.4**	**70.0**	**65.2**	**59.5**	**56.9**	**53.2**	**49.3**	**46.7**	**39.1**	**38.5**	**40.1**	40.1	42.7	**45.2**	**46.2**	**49.8**	**55.5**	**66.4**		**38.5**	
Avg.	**86.3**	**88.6**	**90.1**	**90.8**	**91.4**	**92.0**	**91.5**	**88.4**	**82.6**	**77.2**	**73.0**	**69.2**	**66.5**	**63.4**	**61.0**	**60.4**	**60.1**	**60.8**	**61.2**	**63.9**	**66.8**	**70.3**	**75.4**	**81.5**			**75.5**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	96.0	96.7	97.0	97.5	97.4	95.8	96.4	82.6	72.6	66.8	61.6	58.0	54.8	48.2	42.2	34.9	33.9	37.7	43.8	47.1	55.7	60.3	61.1	57.2	97.5	33.9	66.5
2	60.9	70.8	68.3	64.9	66.5	67.7	68.1	67.7	66.8	60.3	56.5	49.3	43.5	42.3	37.5	35.3	39.3	37.4	45.8	55.4	56.7	57.6	64.9	66.9	70.8	35.3	56.3
3	56.4	66.1	62.8	61.5	57.1	67.7	56.9	58.6	61.6	72.1	86.9	79.7	72.7	68.1	69.8	65.9	67.2	69.8	78.4	81.1	79.8	82.8	86.2	87.7	87.7	56.4	70.7
4	90.0	90.9	95.0	96.2	96.3	97.1	96.6	93.0	89.1	82.3	78.0	74.3	69.7	66.7	71.9	72.0	69.6	70.3	78.6	85.0	87.3	87.6	90.1	94.6	97.1	66.7	84.3
5	98.3	99.2	99.2	99.2	99.2	98.8	98.9	98.9	96.2	89.6	76.9	70.1	65.8	61.8	63.2	70.1	72.3	69.9	70.8	68.8	71.9	76.9	84.5	90.3	99.2	61.8	82.9
6	91.8	93.9	93.6	97.6	97.6	97.7	98.8	97.6	90.1	77.0	70.7	64.8	59.0	65.2	74.4	74.8	73.7	75.6	77.6	79.6	81.3	82.3	84.1	87.7	98.8	59.0	82.8
7	91.7	93.6	94.5	95.6	96.2	98.0	97.7	96.1	93.4	85.1	81.2	88.0	88.3	86.6	87.9	85.6	88.7	84.4	79.3	74.9	75.9	76.4	78.3	80.0	98.0	74.9	87.4
8	78.9	81.2	86.3	91.2	90.8	91.5	97.1	97.8	98.2	98.3	96.6	94.2	92.3	92.9	91.2	87.8	86.3	86.0	91.6	95.7	92.8	91.9	92.6	93.7	98.3	78.9	91.5
9	93.8	92.7	94.4	96.5	96.2	96.3	97.4	97.5	88.7	77.1	73.2	69.6	62.9	61.7	58.0	56.2	56.0	60.4	62.4	66.4	67.3	67.6	70.0	75.5	97.5	56.0	76.6
10	79.7	80.3	81.7	82.6	81.9	82.6	84.2	84.1	82.8	78.4	74.3	69.0	68.2	66.2	63.7	61.3	59.7	57.7	60.6	64.8	67.8	71.4	75.1	79.8	84.2	57.7	73.2
11	84.5	86.9	87.3	89.4	91.5	94.0	94.1	93.2	88.5	78.2	75.1	69.3	65.8	60.9	58.6	54.3	52.2	51.3	53.9	54.2	57.6	62.5	68.7	74.2	94.1	51.3	72.8
12	82.6	85.9	93.3	98.3	99.8	99.7	99.2	88.2	69.2	67.4	64.3	66.9	66.7	63.7	64.1	67.3	67.7	68.5	75.2	88.7	91.4	92.5	93.3	94.1	99.8	63.7	81.2
13	95.7	94.7	93.4	94.6	97.1	96.2	95.9	96.3	95.8	93.8	92.0	90.4	88.4	85.9	82.9	78.5	78.9	80.4	81.4	82.7	82.9	85.6	88.6	91.3	97.1	78.5	89.3
14	93.0	95.5	96.9	97.1	97.9	98.3	98.5	96.3	91.2	87.7	81.1	78.6	76.7	73.4	67.9	67.8	69.9	66.7	66.5	68.1	71.0	75.1	80.7	79.5	98.5	66.5	82.3
15	83.0	81.1	81.9	82.9	89.2	89.8	92.4	92.5	86.3	81.5	76.8	75.0	71.5	68.1	67.9	67.4	71.5	75.4	79.3	80.9	83.1	82.4	83.4	83.8	92.5	67.4	80.3
16	83.9	84.6	84.2	85.8	85.9	85.7	84.9	83.7	82.9	82.6	89.0	91.7	88.1	84.6	81.9	77.9	87.3	92.3	90.7	92.6	92.9	93.7	94.0	95.0	95.0	77.9	87.3
17	96.3	97.1	95.6	93.6	93.7	92.1	90.5	93.7	92.8	91.7	92.1	91.2	87.6	85.8	89.6	89.3	87.1	82.7	83.6	84.2	88.9	90.0	90.8	92.9	97.1	82.7	90.5
18	93.0	95.6	96.7	94.1	97.5	97.2	97.5	97.5	91.7	86.4	83.6	80.3	79.6	77.5	72.4	77.1	77.3	74.4	75.4	71.0	76.8	80.7	84.7	87.3	97.5	71.0	85.2
19	86.0	86.8	89.1	87.9	89.9	89.5	89.3	88.6	84.6	84.3	84.4	78.7	76.1	73.2	72.0	66.0	75.0	65.2	62.5	72.3	80.3	85.2	85.0	90.6	90.6	62.5	80.9
20	94.7	90.5	91.0	93.0	95.3	96.0	97.7	95.4	91.5	92.1	91.0	94.7	90.2	86.8	87.5	86.0	88.0	91.6	93.7	95.0	95.9	93.1	92.0	98.2	98.2	86.0	92.5
21	97.6	89.9	91.2	94.0	96.5	98.1	98.5	96.4	93.1	93.3	93.7	91.5	86.8	86.9	89.5	86.9	83.3	80.0	87.5	88.9	84.7	90.1	92.6	95.2	98.5	80.0	91.1
22	96.2	94.8	95.2	96.9	97.5	97.9	98.1	98.2	98.5	96.2	93.5	95.3	91.2	92.4	92.5	91.0	88.3	90.7	91.9	92.3	95.4	96.5	97.4	97.4	98.5	88.3	94.8
23	98.4	99.0	99.2	99.2	99.3	99.4	99.4	99.5	98.9	94.3	93.7	88.2	84.7	81.7	82.9	79.1	71.7	70.7	71.3	76.2	84.8	92.6	93.5	96.3	99.5	70.7	89.7
24	95.1	97.2	97.3	98.3	97.3	96.4	96.6	96.4	96.1	94.7	92.5	89.7	84.4	80.4	73.6	67.2	57.7	57.3	73.1	66.0	71.8	80.4	79.3	80.7	98.3	57.3	84.1
25	78.0	80.0	83.3	74.7	74.7	73.2	70.4	69.0	67.3	64.1	60.1	56.0	53.5	50.3	46.8	44.6	42.9	44.1	43.0	40.5	47.2	54.5	65.2	66.6	83.3	40.5	60.4
26	71.0	72.7	71.6	70.7	78.3	85.3	92.6	93.9	93.2	89.6	86.1	84.8	89.1	86.6	84.9	82.7	79.7	80.1	73.2	70.3	70.7	78.7	90.5	96.9	96.9	70.3	82.2
27	96.7	97.9	98.2	99.0	99.1	99.2	99.3	99.0	96.7	95.4	91.8	93.5	91.7	87.0	84.3	86.4	91.4	87.3	82.4	81.4	85.3	83.3	89.8	93.7	99.3	81.4	92.1
28	94.9	93.6	93.4	89.9	90.9	89.7	90.0	93.1	89.5	82.1	79.0	72.2	67.4	58.8	57.4	59.4	57.6	55.3	55.6	59.0	62.4	72.9	85.1	88.0	94.9	55.3	76.5
29	88.2	85.2	77.5	75.9	77.1	78.4	85.4	86.2	83.6	80.6	69.5	64.5	60.0	57.1	51.0	47.6	47.0	46.8	49.5	47.9	49.0	52.1	57.8	66.5	88.2	46.8	66.0
30	65.0	66.4	69.3	71.2	74.1	74.5	75.7	76.9	79.4	71.1	66.7	64.2	59.5	56.4	54.0	54.8	57.2	59.6	61.6	65.9	67.1	70.6	77.2	77.7	79.4	54.0	67.3
31	84.6	85.6	85.5	82.3	83.4	84.6	85.9	84.3	81.8	76.4	71.6	64.4	56.2	47.7	45.9	43.1	38.6	39.4	41.2	44.3	45.3	64.0	75.8	88.3	88.3	38.6	66.7
Max.	**98.4**	**99.2**	**99.2**	**99.2**	**99.8**	**99.7**	**99.4**	**99.5**	**98.9**	**98.3**	**96.6**	**95.3**	**92.3**	**92.9**	**92.5**	**91.0**	**91.4**	**92.3**	**93.7**	**95.7**	**95.9**	**96.5**	**97.4**	**98.2**	**99.8**		
Min.	**56.4**	**66.1**	**62.8**	**61.5**	**57.1**	**67.7**	**56.9**	**58.6**	**61.6**	**60.3**	**56.5**	**49.3**	**43.5**	**42.3**	**37.5**	**34.9**	**33.9**	37.4	41.2	**40.5**	**45.3**	**52.1**	**57.8**	**57.2**		**33.9**	
Avg.	**87.0**	**87.9**	**88.5**	**88.8**	**89.8**	**90.6**	**91.1**	**90.1**	**86.8**	**82.9**	**80.1**	**77.4**	**73.9**	**71.1**	**69.9**	**68.3**	**68.3**	**68.0**	**70.4**	**72.3**	**74.9**	**78.4**	**82.3**	**85.4**			**80.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	93.2	96.6	96.6	96.2	95.4	95.6	98.5	99.3	99.5	99.6	99.6	99.5	94.7	84.6	74.4	67.5	66.2	66.0	66.1	68.5	71.4	79.8	90.2	96.5	99.6	66.0	87.3
2	98.6	98.8	98.6	97.9	97.2	95.1	96.5	97.4	95.5	97.0	94.2	88.5	84.3	81.2	80.6	81.2	79.5	79.6	83.4	84.1	85.7	90.9	95.5	97.6	98.8	79.5	90.8
3	96.3	97.2	95.8	93.7	92.1	91.8	92.4	89.8	87.7	81.2	72.8	66.2	71.5	71.4	67.5	63.9	61.6	64.0	67.0	68.8	70.2	75.2	80.7	88.7	97.2	61.6	79.5
4	93.7	92.6	91.9	94.6	96.8	97.9	98.6	98.5	92.8	85.7	79.3	78.8	76.5	72.5	70.4	69.7	68.4	64.1	64.5	67.8	77.7	85.7	91.4	95.8	98.6	64.1	83.6
5	98.6	98.5	99.3	99.5	99.3	99.4	99.4	99.4	96.5	86.2	76.3	61.2	60.7	52.9	47.5	46.3	45.2	46.7	47.8	47.2	49.7	57.0	61.0	60.3	99.5	45.2	72.3
6	65.8	77.3	75.8	73.3	69.3	72.1	69.6	71.9	65.2	61.1	56.2	49.8	42.5	38.0	36.0	34.6	33.5	37.1	43.4	48.1	48.9	56.8	68.3	72.9	77.3	33.5	57.0
7	76.6	75.0	71.5	72.2	75.1	85.0	86.8	83.9	82.5	72.6	67.9	64.1	60.0	55.3	52.3	48.1	46.0	45.4	52.4	52.7	52.0	62.7	80.0	82.3	86.8	45.4	66.8
8	82.2	82.4	79.7	81.9	76.1	75.9	79.4	75.8	73.8	68.0	63.9	57.6	48.8	43.7	38.7	34.8	32.8	32.6	31.6	34.3	42.6	51.0	60.1	66.5	82.4	31.6	58.9
9	63.8	73.5	81.8	75.0	76.3	79.1	79.5	80.3	67.4	64.9	61.3	53.8	49.3	45.2	42.4	36.6	36.1	38.2	41.9	41.7	45.3	60.8	70.3	72.4	81.8	36.1	59.9
10	82.6	87.7	90.5	91.6	94.9	97.8	98.5	99.3	93.4	83.7	76.0	68.6	64.8	59.0	54.7	57.1	74.3	61.5	60.8	68.6	74.1	82.2	92.7	97.7	99.3	54.7	79.7
11	98.8	99.6	99.7	99.9	100.0	100.0	99.8	99.7	97.9	89.0	81.9	77.6	70.8	66.4	63.8	61.4	55.9	53.7	54.2	58.9	66.2	81.7	91.5	94.4	100.0	53.7	81.8
12	95.9	96.1	90.8	88.3	81.3	87.7	87.2	88.8	84.3	72.3	69.8	67.2	62.4	51.9	42.4	39.4	40.5	56.4	55.8	63.1	69.4	78.5	86.3	90.2	96.1	39.4	72.7
13	84.3	82.6	75.2	75.6	79.3	88.5	94.0	94.2	94.5	88.7	84.4	78.4	78.5	73.9	69.9	77.0	70.5	75.1	90.3	90.6	90.5	92.0	95.7	97.5	97.5	69.9	84.2
14	98.0	97.9	98.6	98.5	98.4	98.7	98.6	98.6	98.1	96.6	94.0	91.5	93.2	92.8	93.4	89.0	86.5	87.0	87.6	89.3	93.8	94.8	97.0	97.6	98.7	86.5	94.6
15	93.6	90.9	92.7	95.4	95.4	94.2	93.8	95.3	95.6	94.3	93.3	93.3	94.8	92.0	91.6	90.2	88.1	85.2	88.4	90.8	95.3	97.7	98.6	98.9	98.9	85.2	93.3
16	99.1	99.3	99.4	99.4	99.5	99.5	99.5	99.0	97.2	94.6	92.9	92.0	87.3	80.1	77.0	74.1	71.3	69.5	71.3	73.9	73.6	77.8	84.0	90.6	99.5	69.5	87.6
17	96.6	97.6	96.1	96.0	98.6	99.6	99.9	100.0	99.1	92.4	82.0	73.2	71.3	71.2	70.8	72.4	75.0	73.9	72.8	73.5	77.6	82.6	81.3	81.9	100.0	70.8	84.8
18	87.3	92.3	92.5	94.8	98.6	99.4	98.3	98.9	91.6	76.2	63.5	58.5	60.1	57.5	52.3	52.6	53.5	52.9	53.9	63.5	75.1	82.7	86.9	86.0	99.4	52.3	76.2
19	82.7	89.4	94.9	95.2	95.7	95.7	95.5	91.1	84.6	89.9	83.6	72.4	66.1	61.3	62.5	62.3	58.1	61.7	66.2	72.8	75.6	77.2	85.7	92.8	95.7	58.1	79.7
20	92.6	92.3	91.7	92.0	94.0	93.5	92.0	93.8	93.5	89.3	91.8	92.2	82.1	75.0	75.8	75.0	70.0	71.0	71.2	73.2	78.1	89.1	94.4	94.3	94.4	70.0	85.7
21	93.6	95.2	96.6	96.4	96.1	96.6	98.4	99.0	97.9	94.1	89.8	90.1	84.6	82.9	82.9	80.6	79.3	81.7	83.8	91.9	95.1	97.9	95.8	94.8	99.0	79.3	91.5
22	96.4	98.1	98.9	98.7	98.5	98.9	99.0	98.4	97.7	97.3	97.4	93.8	90.0	81.7	83.4	79.9	87.1	87.2	78.3	77.9	84.8	91.0	94.3	94.4	99.0	77.9	91.8
23	93.3	94.7	95.7	96.0	95.7	93.5	90.8	86.9	83.8	82.3	77.9	73.9	72.4	69.7	66.7	62.1	68.0	74.8	80.2	85.5	92.4	93.0	90.9	93.4	96.0	62.1	83.9
24	96.4	97.0	97.9	98.8	98.6	99.0	99.1	99.4	99.5	94.4	91.5	86.2	78.6	74.9	68.9	64.7	60.5	58.1	57.2	71.9	83.7	88.9	96.1	92.6	99.5	57.2	85.6
25	92.0	90.9	88.7	89.3	97.2	98.7	98.2	98.5	98.0	96.5	91.3	86.6	83.7	85.7	82.0	81.1	73.0	70.4	71.1	78.6	82.7	88.1	92.8	94.4	98.7	70.4	87.9
26	95.8	96.1	96.9	97.8	98.0	97.0	97.4	96.8	98.1	96.5	92.0	90.6	90.6	86.9	78.9	77.2	77.8	77.5	75.7	80.3	84.7	91.2	93.3	93.6	98.1	75.7	90.0
27	95.7	97.2	97.7	97.9	98.3	98.2	98.6	98.1	96.6	94.9	93.0	92.3	89.6	86.2	80.8	80.2	80.6	72.5	75.4	83.0	93.7	95.8	97.3	97.9	98.6	72.5	91.3
28	96.7	93.0	92.9	92.4	92.0	93.2	95.4	94.6	94.5	94.4	91.6	88.7	84.6	80.0	75.5	68.1	79.7	83.2	86.9	88.1	87.9	87.6	87.6	87.8	96.7	68.1	88.2
29	87.1	85.8	87.4	87.8	92.0	93.6	96.0	96.5	94.6	84.3	76.2	64.0	56.2	54.5	54.9	60.8	70.5	54.4	51.7	58.9	69.3	70.4	76.1	85.4	96.5	51.7	75.3
30	92.5	97.1	98.2	98.5	98.1	98.5	99.3	99.9	99.6	96.9	86.6	76.9	74.4	74.1	72.5	65.3	61.0	60.5	63.5	66.8	77.1	81.1	69.8	73.6	99.9	60.5	82.6
31	76.8	83.1	84.1	74.9	73.8	71.4	72.8	77.0	80.4	83.1	86.6	75.6	72.4	68.7	66.3	65.2	62.2	60.7	60.7	59.5	60.9	62.7	64.7	65.0	86.6	59.5	71.2
Max.	**99.1**	**99.6**	**99.7**	**99.9**	**100.0**	**100.0**	**99.9**	**100.0**	**99.6**	**99.6**	**99.6**	**99.5**	**94.8**	**92.8**	**93.4**	**90.2**	**88.1**	**87.2**	**90.3**	**91.9**	**95.3**	**97.9**	**98.6**	**98.9**	**100.0**		
Min.	**63.8**	**73.5**	**71.5**	**72.2**	**69.3**	**71.4**	**69.6**	**71.9**	**65.2**	**61.1**	**56.2**	**49.8**	**42.5**	**38.0**	**36.0**	**34.6**	**32.8**	32.6	31.6	**34.3**	**42.6**	**51.0**	**60.1**	**60.3**		**31.6**	
Avg.	**90.2**	**91.8**	**91.9**	**91.6**	**92.0**	**93.1**	**93.6**	**93.6**	**91.3**	**87.0**	**82.5**	**77.5**	**74.1**	**70.0**	**67.0**	**65.1**	**64.9**	**64.6**	**66.3**	**70.1**	**75.0**	**80.8**	**85.5**	**88.0**			**81.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	63.1	63.2	63.9	63.9	63.6	63.6	63.5	62.1	60.7	61.8	58.4	52.2	56.7	60.5	55.9	55.7	54.5	68.7	73.2	83.0	90.2	89.7	88.0	88.2	90.2	52.2	66.8
2	87.2	86.1	89.2	88.2	90.6	90.2	87.4	85.7	84.2	83.7	82.5	88.9	83.3	80.1	75.7	79.0	82.3	86.8	82.0	82.0	82.5	83.5	84.9	84.3	90.6	75.7	84.6
3	86.8	88.3	88.3	87.1	85.5	84.0	90.7	91.1	90.3	93.3	89.3	91.7	94.2	94.2	94.3	93.3	88.7	81.4	81.7	90.6	89.9	91.6	96.4	94.9	96.4	81.4	89.9
4	92.7	90.8	94.2	95.9	96.9	95.3	92.0	96.0	97.1	90.6	82.9	80.7	77.5	75.2	73.9	71.9	69.1	60.6	61.9	71.7	75.6	90.3	95.4	97.2	97.2	60.6	84.4
5	97.9	98.3	98.8	98.4	98.9	99.2	99.2	99.1	98.6	97.3	94.5	87.6	77.1	69.4	62.8	60.3	66.0	75.3	80.1	89.4	93.4	97.0	98.3	98.3	99.2	60.3	89.0
6	99.5	99.9	100.0	100.0	100.0	100.0	100.0	99.3	97.4	96.4	96.4	88.7	85.6	85.5	87.9	84.8	84.1	83.8	86.3	89.6	88.7	90.3	92.4	92.4	100.0	83.8	92.9
7	93.8	90.0	90.9	90.9	82.6	82.3	82.3	90.4	89.7	87.1	92.8	96.2	95.9	92.4	94.6	93.0	90.7	88.8	88.5	94.3	97.1	97.6	97.9	98.3	98.3	82.3	91.6
8	98.0	95.5	94.5	96.7	96.0	94.7	97.1	98.1	98.2	96.2	93.5	88.7	86.5	87.6	79.3	75.7	78.1	87.4	92.6	93.5	93.6	92.2	92.0	89.7	98.2	75.7	91.5
9	90.7	92.8	91.4	91.8	91.8	88.6	90.0	92.8	96.3	97.7	97.1	96.5	97.2	97.2	94.6	92.6	92.1	91.2	88.6	88.3	89.3	88.7	87.8	92.4	97.7	87.8	92.4
10	94.3	95.9	97.3	98.4	98.9	99.0	99.0	99.0	99.3	99.3	97.7	91.2	85.1	80.8	78.4	76.5	78.8	78.9	84.1	87.8	87.2	89.7	91.0	94.2	99.3	76.5	90.9
11	95.6	96.2	96.8	96.1	93.7	94.0	96.0	97.8	98.9	99.2	98.9	96.7	92.9	90.7	92.4	82.3	76.4	75.1	77.6	80.9	83.4	84.1	81.5	84.3	99.2	75.1	90.1
12	85.1	86.4	84.2	86.4	92.1	90.5	89.9	87.9	88.0	84.8	83.5	79.1	76.2	73.8	79.4	90.8	87.7	92.0	92.1	92.7	94.4	95.4	94.0	93.1	95.4	73.8	87.5
13	93.4	93.5	93.5	91.6	92.1	92.4	92.6	90.1	88.9	89.2	89.9	91.0	91.5	91.3	89.4	88.4	87.1	84.8	82.7	80.6	85.0	91.2	89.5	91.1	93.5	80.6	89.6
14	89.7	90.5	89.4	92.4	95.3	96.5	94.4	95.8	90.8	88.1	91.2	95.0	93.5	89.9	90.5	89.0	88.4	85.9	84.7	85.2	87.3	85.3	85.0	88.6	96.5	84.7	90.1
15	89.2	89.8	90.5	92.0	94.1	94.4	95.3	97.1	96.8	94.3	88.7	84.3	80.6	83.0	79.9	80.2	78.6	78.1	77.5	79.9	83.2	85.7	90.9	94.6	97.1	77.5	87.4
16	95.9	97.4	96.5	94.8	92.9	90.7	89.4	89.6	91.1	92.5	90.8	86.7	78.4	69.9	73.2	69.9	80.9	74.4	88.8	88.7	92.9	91.1	92.0	93.8	97.4	69.9	87.6
17	92.3	93.3	95.1	96.9	96.8	97.7	96.2	97.2	96.4	96.5	93.4	90.0	85.7	83.5	83.5	83.1	81.4	86.8	92.3	94.3	96.0	97.4	98.4	96.6	98.4	81.4	92.5
18	90.0	88.1	88.0	87.5	86.6	85.7	85.9	83.5	81.7	82.8	75.1	71.2	75.6	86.4	89.0	88.0	87.8	91.2	93.7	93.0	95.3	96.3	97.1	97.8	97.8	71.2	87.4
19	97.0	97.8	98.1	98.5	98.7	98.9	97.4	97.1	96.6	97.2	97.9	97.5	93.9	92.8	92.3	89.3	85.3	87.0	90.9	88.6	91.1	93.1	94.6	95.4	98.9	85.3	94.5
20	95.0	94.5	95.9	95.2	94.8	94.1	95.5	96.0	96.5	94.4	86.7	82.8	86.0	84.8	70.5	63.6	66.0	65.5	67.4	70.9	86.9	94.4	95.6	95.8	96.5	63.6	86.2
21	91.2	90.9	89.9	92.4	86.9	85.8	83.0	80.1	76.9	77.1	77.4	74.4	68.2	59.5	59.1	58.1	62.5	62.7	61.8	67.4	82.0	83.6	84.7	85.8	92.4	58.1	76.7
22	89.5	88.6	89.7	92.6	93.6	93.6	95.9	94.9	95.4	91.9	85.6	67.6	55.1	58.0	57.7	58.3	69.4	80.6	88.7	93.0	93.0	92.7	93.0	94.0	95.9	55.1	83.8
23	95.4	96.6	97.3	96.9	97.2	92.6	92.4	92.5	93.5	93.3	90.3	90.5	89.3	86.1	85.7	89.1	90.3	90.6	90.1	90.2	90.3	89.9	88.3	95.6	97.3	85.7	91.8
24	96.9	97.4	97.2	97.3	95.7	96.7	97.3	97.4	98.0	98.6	96.9	95.0	91.7	87.8	88.2	87.9	86.7	87.0	84.5	91.0	94.4	95.7	95.1	96.2	98.6	84.5	93.8
25	96.5	92.4	90.6	87.5	85.0	83.1	86.0	91.0	95.3	95.9	92.6	87.7	85.2	87.3	88.0	85.8	87.7	90.7	91.2	90.2	94.9	95.9	97.1	98.2	98.2	83.1	90.7
26	98.5	96.6	95.8	96.4	97.2	97.5	97.6	98.2	98.8	97.8	94.5	90.5	76.2	68.6	66.7	71.2	73.2	78.5	77.6	86.9	94.7	89.9	82.0	77.7	98.8	66.7	87.6
27	79.6	80.2	80.2	82.1	82.6	87.7	89.0	88.1	87.0	83.6	82.2	78.2	72.7	64.4	59.3	55.6	52.6	50.0	46.4	52.7	60.2	61.5	66.9	69.6	89.0	46.4	71.4
28	71.9	79.7	72.3	72.9	70.9	70.8	71.7	83.5	89.0	82.5	66.2	55.8	48.9	42.7	39.8	38.6	48.9	55.1	60.9	67.2	80.9	90.4	83.4	81.0	90.4	38.6	67.7
29	78.4	80.8	83.0	84.3	88.1	92.2	94.2	95.3	93.2	94.1	86.1	72.1	71.6	82.1	86.1	82.6	77.5	75.6	71.6	75.8	83.6	88.1	88.5	95.8	95.8	71.6	84.2
30	97.5	97.8	97.1	94.6	92.4	92.8	95.1	95.0	96.7	95.1	90.0	73.4	66.3	63.9	63.0	64.1	65.7	63.9	63.6	69.0	77.7	90.6	95.2	95.4	97.8	63.0	83.2
Max.	**99.5**	**99.9**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**99.3**	**99.3**	**99.3**	**98.9**	**97.5**	**97.2**	**97.2**	**94.6**	**93.3**	**92.1**	**92.0**	**93.7**	**94.3**	**97.1**	**97.6**	**98.4**	**98.3**	**100.0**		
Min.	**63.1**	**63.2**	**63.9**	**63.9**	**63.6**	**63.6**	**63.5**	**62.1**	**60.7**	**61.8**	**58.4**	**52.2**	**48.9**	**42.7**	**39.8**	**38.6**	**48.9**	50.0	46.4	**52.7**	**60.2**	**61.5**	**66.9**	**69.6**		**38.6**	
Avg.	**90.8**	**91.0**	**91.0**	**91.3**	**91.1**	**90.8**	**91.2**	**92.1**	**92.0**	**91.1**	**88.1**	**84.1**	**80.6**	**79.0**	**77.7**	**76.6**	**77.3**	**78.6**	**80.1**	**83.6**	**87.8**	**90.1**	**90.6**	**91.7**			**86.6**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	95.8	96.3	95.7	95.6	96.5	96.9	95.5	95.7	97.2	96.9	94.0	93.6	88.3	83.4	77.3	86.5	89.4	89.2	94.1	95.6	95.4	95.8	95.6	96.4	97.2	77.3	93.2
2	95.2	97.0	95.0	97.1	98.3	98.6	98.8	98.4	98.7	99.6	99.7	96.1	88.7	80.9	79.9	78.1	82.4	85.8	85.3	90.6	90.3	88.9	85.0	82.0	99.7	78.1	91.3
3	84.7	85.3	88.4	91.9	94.8	93.8	94.7	94.8	92.8	91.7	91.4	90.6	88.7	88.3	85.5	84.5	81.3	79.3	77.0	79.5	83.7	89.4	82.0	84.6	94.8	77.0	87.4
4	89.1	91.9	93.7	92.6	93.6	95.2	95.0	95.5	94.2	92.3	88.3	81.2	68.9	64.5	61.7	60.9	62.2	68.3	75.9	76.8	90.1	97.8	99.8	100.0	100.0	60.9	84.6
5	99.9	96.8	96.9	97.7	98.0	92.7	93.6	95.5	97.5	97.7	96.5	93.6	92.6	91.9	90.1	92.1	94.5	96.4	95.9	96.9	92.2	93.6	93.0	94.3	99.9	90.1	95.0
6	94.3	94.4	94.2	92.5	94.0	93.5	93.3	92.4	92.5	93.1	92.8	91.6	90.5	88.3	85.6	83.7	82.7	85.3	87.7	88.3	86.7	87.2	87.1	89.0	94.4	82.7	90.0
7	86.8	87.3	89.7	89.4	87.5	84.4	80.8	80.9	83.6	88.2	84.3	78.5	78.0	77.3	77.1	76.2	72.6	71.7	73.0	72.9	74.0	75.9	76.4	81.0	89.7	71.7	80.3
8	82.6	84.5	81.1	84.0	81.9	80.6	84.2	88.1	89.6	88.9	82.8	74.2	67.2	62.6	58.7	57.0	56.3	57.1	58.5	67.6	75.6	87.1	87.1	82.8	89.6	56.3	75.8
9	86.7	89.4	87.7	81.1	74.8	79.4	83.9	87.2	88.2	83.1	89.8	94.1	96.4	88.3	84.8	86.9	87.9	87.2	87.2	90.0	91.7	91.0	89.7	91.1	96.4	74.8	87.4
10	93.8	95.9	96.6	97.2	96.2	95.8	94.9	92.3	95.5	98.2	99.9	98.8	96.3	96.0	92.1	89.8	84.6	87.6	86.3	90.1	87.6	85.9	84.6	84.8	99.9	84.6	92.5
11	82.7	81.3	81.6	83.1	87.1	92.5	94.7	95.7	95.8	94.8	93.3	92.4	93.4	93.1	91.6	91.2	92.2	91.2	91.4	91.6	91.1	90.2	88.2	88.1	95.8	81.3	90.3
12	87.2	86.4	86.2	87.1	86.0	86.7	87.1	86.6	86.2	85.7	85.1	83.6	79.3	77.8	76.8	75.7	73.9	74.0	74.5	76.8	78.3	77.4	79.0	82.7	87.2	73.9	81.7
13	85.5	85.1	85.8	86.1	86.5	88.3	89.8	89.9	91.0	91.7	90.6	87.0	82.4	78.1	75.7	68.5	71.6	70.8	87.8	94.6	96.6	97.4	98.2	98.1	98.2	68.5	86.5
14	98.3	98.4	98.7	99.0	99.0	98.4	97.4	98.3	99.8	99.6	98.0	98.1	97.9	98.3	98.8	98.8	98.7	98.0	99.3	99.7	99.6	99.7	99.9	97.9	99.9	97.4	98.7
15	97.2	95.6	96.4	92.9	92.6	93.2	91.0	91.8	91.2	88.4	87.5	87.3	84.9	83.6	83.3	81.4	81.6	81.7	82.8	84.7	86.1	86.8	87.4	87.1	97.2	81.4	88.2
16	87.5	87.3	88.4	88.1	88.4	89.0	88.3	89.2	90.0	89.6	88.3	88.7	86.5	86.0	84.9	82.6	80.6	80.9	83.2	85.3	85.1	86.5	89.0	89.9	90.0	80.6	86.8
17	91.5	91.9	91.9	91.6	91.9	93.4	92.8	93.1	93.8	93.9	94.7	95.6	96.2	96.4	96.8	97.2	97.2	97.0	96.6	94.9	95.0	96.0	96.9	99.0	99.0	91.5	94.8
18	99.1	98.9	98.9	92.8	86.0	84.0	84.2	81.4	78.7	77.7	79.3	78.9	77.9	66.2	63.6	58.4	60.7	60.9	60.7	60.3	58.4	60.3	55.1	67.8	99.1	55.1	74.6
19	68.5	75.4	72.1	72.9	70.4	69.4	69.2	70.4	71.9	75.2	73.9	76.4	76.9	75.7	73.2	72.3	73.9	72.1	73.7	77.0	75.3	76.3	77.5	79.6	79.6	68.5	73.7
20	82.6	86.2	92.3	94.4	93.2	94.3	94.3	93.0	88.7	84.7	83.7	85.0	83.7	81.1	79.6	77.5	78.4	79.0	80.9	81.7	80.8	83.1	81.0	81.5	94.4	77.5	85.0
21	82.8	83.3	83.0	83.5	86.7	89.0	89.1	93.5	93.0	94.7	87.9	82.1	79.5	77.8	75.7	70.6	69.5	73.5	75.2	77.6	81.6	85.8	87.3	87.6	94.7	69.5	82.9
22	87.6	87.7	88.4	86.0	85.1	84.4	82.4	83.0	82.6	83.2	80.7	80.2	77.5	73.5	70.6	71.3	71.8	71.9	71.3	73.2	74.7	73.9	76.4	77.8	88.4	70.6	79.0
23	71.2	72.5	69.0	71.0	71.3	71.2	68.7	71.4	69.7	71.8	72.0	71.7	70.9	69.6	67.1	67.9	76.0	78.3	80.7	82.0	79.8	77.7	78.5	86.5	86.5	67.1	73.6
24	85.6	82.7	85.7	85.2	81.2	82.6	81.0	78.3	78.5	78.8	77.8	75.5	72.6	70.8	66.4	63.6	57.5	61.4	68.0	74.5	79.7	85.6	89.2	88.8	89.2	57.5	77.1
25	88.7	88.9	74.1	76.9	81.2	92.4	92.4	92.0	92.3	91.0	91.6	89.6	88.0	86.9	84.3	80.0	80.6	81.1	86.2	92.9	87.7	85.0	84.7	79.9	92.9	74.1	86.2
26	78.3	73.7	78.2	79.5	85.8	87.7	89.9	90.7	91.9	92.3	91.4	89.4	84.1	80.4	78.1	76.5	75.7	77.8	78.5	80.6	80.9	81.1	78.8	81.2	92.3	73.7	82.6
27	80.2	80.5	80.9	79.9	77.7	79.1	78.8	78.4	79.4	79.0	77.8	75.8	75.2	72.2	70.3	69.8	69.0	70.9	71.8	73.3	75.8	76.7	79.8	82.4	82.4	69.0	76.5
28	84.1	86.2	87.2	87.3	86.8	86.8	86.4	85.9	85.4	85.9	86.7	90.0	91.3	78.6	73.6	71.7	71.7	77.4	87.5	88.9	90.1	91.6	90.7	90.4	91.6	71.7	85.1
29	89.8	89.8	90.0	89.0	87.6	85.0	84.0	84.9	85.1	84.2	86.6	82.9	76.1	73.7	72.3	70.7	67.1	62.9	63.3	70.3	73.2	72.4	78.3	80.7	90.0	62.9	79.2
30	83.8	85.4	84.4	88.9	89.8	89.6	90.9	91.1	89.2	87.4	90.6	91.0	85.2	79.8	77.5	82.3	83.5	85.7	92.1	96.4	95.9	96.0	95.3	95.2	96.4	77.5	88.6
31	93.7	94.2	94.0	93.4	93.9	96.9	96.4	94.5	93.6	93.2	93.7	94.8	96.8	96.4	97.6	98.5	98.3	97.4	96.9	95.4	94.5	94.5	94.9	94.9	98.5	93.2	95.4
Max.	**99.9**	**98.9**	**98.9**	**99.0**	**99.0**	**98.6**	**98.8**	**98.4**	**99.8**	**99.6**	**99.9**	**98.8**	**97.9**	**98.3**	**98.8**	**98.8**	**98.7**	**98.0**	**99.3**	**99.7**	**99.6**	**99.7**	**99.9**	**100.0**	**100.0**		
Min.	**68.5**	**72.5**	**69.0**	**71.0**	**70.4**	**69.4**	**68.7**	**70.4**	**69.7**	**71.8**	**72.0**	**71.7**	**67.2**	**62.6**	**58.7**	**57.0**	**56.3**	57.1	58.5	**60.3**	**58.4**	**60.3**	**55.1**	**67.8**		**55.1**	
Avg.	**87.6**	**88.1**	**87.9**	**88.0**	**87.9**	**88.5**	**88.5**	**88.8**	**89.0**	**88.8**	**88.1**	**86.7**	**84.3**	**81.2**	**79.1**	**78.1**	**78.2**	**79.1**	**81.4**	**83.9**	**84.8**	**86.0**	**86.0**	**87.2**			**85.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	95.3	95.6	95.5	95.5	95.2	95.0	92.8	91.8	90.8	89.1	89.4	87.7	85.1	83.3	83.9	84.6	83.5	85.4	88.3	89.5	91.2	90.8	89.1	90.5	95.6	83.3	90.0
2	90.9	91.5	93.0	91.6	92.0	93.3	93.3	92.7	91.3	86.4	83.0	80.8	79.3	78.0	78.6	78.1	78.9	80.3	80.7	80.6	80.9	81.7	81.0	82.7	93.3	78.0	85.0
3	83.2	83.3	83.7	84.0	83.1	82.7	83.1	84.1	82.9	82.3	83.5	80.7	79.4	76.0	75.6	76.9	76.5	77.1	79.4	80.6	81.9	81.4	78.9	80.7	84.1	75.6	80.9
4	79.9	78.7	79.1	80.2	81.1	82.0	83.5	83.7	83.5	82.7	82.1	81.4	80.1	78.4	77.1	77.4	77.5	78.5	79.5	79.8	80.3	80.0	81.2	82.7	83.7	77.1	80.4
5	83.7	83.1	82.1	79.9	78.3	78.1	77.4	77.6	80.9	79.9	79.9	80.4	80.6	77.0	77.5	76.2	75.9	76.3	77.1	76.8	78.1	78.2	80.6	80.0	83.7	75.9	79.0
6	80.8	82.4	83.5	83.5	83.6	82.6	82.0	77.2	77.9	78.7	77.9	72.2	69.7	70.1	71.2	71.5	68.3	68.1	69.2	65.6	68.2	73.8	75.5	72.0	83.6	65.6	75.2
7	75.6	81.3	83.5	82.8	81.4	81.3	82.7	84.3	84.2	84.0	81.8	82.1	80.5	79.4	77.1	75.6	77.0	80.1	85.3	84.4	83.4	84.4	86.1	93.8	93.8	75.6	82.2
8	96.5	96.6	97.0	97.2	97.3	97.4	97.4	97.3	96.8	95.1	92.8	92.3	94.7	91.9	88.1	87.0	87.4	86.7	80.7	76.9	73.6	69.6	67.0	66.2	97.4	66.2	88.5
9	67.8	64.2	65.2	66.2	64.9	63.4	64.4	68.3	69.2	68.1	72.3	73.1	72.5	73.7	78.2	78.2	80.2	85.0	88.2	92.8	77.2	73.9	74.2	78.5	92.8	63.4	73.3
10	82.4	79.8	75.7	79.2	72.0	73.8	78.7	76.1	65.9	60.9	83.8	92.5	90.4	93.2	96.7	99.0	99.5	99.6	99.3	99.1	98.5	95.9	96.3	95.7	99.6	60.9	86.8
11	93.2	92.3	94.2	96.0	91.6	93.9	95.1	95.7	96.9	98.3	98.7	96.6	98.7	99.1	99.0	97.5	96.0	96.5	94.8	95.3	95.4	97.9	96.8	95.4	99.1	91.6	96.0
12	94.4	96.3	96.7	95.0	95.1	92.0	92.3	91.3	90.1	90.3	89.0	91.3	93.7	93.9	94.8	95.2	95.1	93.1	92.6	92.9	92.4	94.3	96.2	96.9	96.9	89.0	93.5
13	96.9	96.0	95.3	94.8	95.5	97.2	96.1	95.3	95.4	94.0	93.6	93.7	96.6	97.3	98.4	98.8	98.9	98.6	99.0	98.9	99.1	97.0	95.7	96.8	99.1	93.6	96.6
14	94.9	98.0	98.1	95.5	96.9	97.0	98.1	98.3	99.3	99.1	99.0	97.8	97.9	98.2	91.6	88.2	90.7	89.5	91.5	95.5	94.4	96.6	97.3	97.5	99.3	88.2	95.9
15	98.7	96.5	90.9	86.9	86.1	86.0	85.6	87.7	93.0	94.4	95.2	93.3	94.9	90.2	88.9	87.5	85.5	83.0	82.7	85.8	94.4	95.2	94.6	96.1	98.7	82.7	90.5
16	96.9	96.7	97.7	98.9	99.1	98.2	98.2	96.1	97.5	97.6	95.6	96.2	97.0	97.6	97.4	95.1	96.8	95.4	93.5	92.4	91.9	91.2	91.1	90.5	99.1	90.5	95.8
17	90.0	90.2	90.2	89.4	91.0	92.3	90.5	90.6	89.4	89.5	90.2	90.0	92.6	94.5	94.9	95.1	90.1	83.4	81.0	81.9	80.6	82.7	83.4	83.9	95.1	80.6	88.6
18	81.7	79.0	83.2	86.5	88.3	85.8	84.7	85.0	85.8	85.7	84.2	83.2	83.6	83.5	82.7	82.5	81.9	81.5	82.2	82.9	83.6	83.3	82.5	82.6	88.3	79.0	83.6
19	81.8	82.4	82.1	82.1	83.0	82.1	80.4	79.1	76.2	73.3	76.3	73.7	67.4	68.5	71.6	71.4	66.7	68.5	68.5	72.1	69.9	73.1	71.5	71.8	83.0	66.7	74.7
20	70.0	74.0	73.3	73.0	73.1	74.0	73.0	73.4	73.1	76.0	75.0	73.7	71.8	72.8	72.7	72.1	72.2	72.5	73.2	74.0	74.0	74.3	74.0	73.7	76.0	70.0	73.3
21	73.7	73.0	72.7	73.7	72.8	73.3	73.0	73.7	73.2	75.1	75.0	74.5	73.4	72.8	73.2	72.8	72.1	73.2	73.4	73.6	74.7	73.2	74.3	74.6	75.1	72.1	73.5
22	74.3	76.3	77.9	78.4	81.4	79.8	82.0	82.2	81.7	83.0	81.9	81.8	81.9	80.8	78.8	78.2	78.0	79.3	80.2	80.4	81.9	83.9	85.8	85.6	85.8	74.3	80.6
23	84.5	84.7	84.9	84.4	85.6	85.8	86.1	88.8	92.4	92.1	91.9	92.5	92.8	93.1	93.6	94.9	94.4	92.4	92.0	91.2	94.5	96.4	97.0	95.5	97.0	84.4	90.9
24	94.9	93.5	86.9	82.1	80.2	75.6	71.5	74.4	78.3	78.0	78.2	78.6	79.4	87.1	89.7	93.8	93.2	94.3	95.9	96.8	98.4	93.4	90.7	90.2	98.4	71.5	86.5
25	91.0	88.2	88.0	88.2	88.1	88.7	85.9	87.2	86.6	87.3	86.7	85.1	82.4	85.9	84.8	83.4	84.1	85.2	84.9	84.4	83.0	82.2	81.8	81.6	91.0	81.6	85.6
26	80.0	80.0	80.1	80.5	79.0	80.0	79.1	79.1	80.4	79.5	77.0	75.6	76.2	73.2	75.4	74.2	76.5	77.7	73.2	59.5	63.4	73.0	76.1	73.5	80.5	59.5	75.9
27	73.9	71.8	72.3	73.2	72.8	71.4	71.4	70.1	66.3	69.2	67.9	66.0	66.8	68.2	64.3	61.4	61.6	68.0	67.2	76.7	83.4	85.1	85.5	86.7	86.7	61.4	71.7
28	86.7	87.0	86.1	86.8	86.5	86.7	86.3	86.7	86.8	87.1	86.0	83.5	84.6	86.2	87.5	87.0	88.3	87.9	87.5	87.2	86.1	86.4	86.4	87.0	88.3	83.5	86.6
29	81.4	81.6	82.1	83.1	81.7	81.7	85.2	85.1	84.3	83.9	83.7	83.8	83.0	82.2	80.8	81.2	81.4	81.6	83.4	83.1	80.5	79.0	79.4	80.4	85.2	79.0	82.2
30	80.7	79.9	79.4	78.6	77.6	79.3	78.4	78.8	78.9	79.3	79.9	77.7	78.1	78.4	77.5	78.4	78.9	75.7	74.6	74.2	73.1	74.7	73.8	71.9	80.7	71.9	77.4
Max.	**98.7**	**98.0**	**98.1**	**98.9**	**99.1**	**98.2**	**98.2**	**98.3**	**99.3**	**99.1**	**99.0**	**97.8**	**98.7**	**99.1**	**99.0**	**99.0**	**99.5**	**99.6**	**99.3**	**99.1**	**99.1**	**97.9**	**97.3**	**97.5**	**99.6**		
Min.	**67.8**	**64.2**	**65.2**	**66.2**	**64.9**	**63.4**	**64.4**	**68.3**	**65.9**	**60.9**	**67.9**	**66.0**	**66.8**	**68.2**	**64.3**	**61.4**	**61.6**	68.0	67.2	**59.5**	**63.4**	**69.6**	**67.0**	**66.2**		**59.5**	
Avg.	**85.2**	**85.1**	**85.0**	**84.9**	**84.5**	**84.4**	**84.3**	**84.4**	**84.3**	**84.0**	**84.4**	**83.7**	**83.5**	**83.5**	**83.4**	**83.1**	**82.9**	**83.1**	**83.3**	**83.5**	**83.6**	**84.1**	**84.1**	**84.5**			**84.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Relative Humidity (%)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	71.7	71.3	70.4	69.6	69.2	69.4	67.3	66.2	69.2	67.9	70.7	65.5	64.4	62.7	66.0	71.4	70.1	70.7	73.3	75.8	75.5	74.1	73.4	71.8	75.8	62.7	69.9
2	73.0	75.7	77.6	78.9	81.9	82.1	77.9	77.5	76.7	54.5	54.2	56.8	59.1	64.2	67.3	71.3	73.3	68.5	70.3	71.2	71.6	72.1	74.1	73.2	82.1	54.2	71.0
3	73.4	74.3	74.8	75.4	76.0	75.9	75.6	73.8	72.7	73.6	74.8	74.0	73.4	78.8	72.7	73.5	75.0	71.1	70.4	69.6	71.8	73.6	76.1	78.4	78.8	69.6	74.1
4	80.2	81.7	81.6	84.4	84.3	84.2	83.9	84.4	86.6	86.4	85.4	86.0	83.6	84.4	87.7	91.7	86.6	84.4	84.5	85.3	84.6	85.9	84.9	86.4	91.7	80.2	85.0
5	86.7	86.8	87.6	86.2	85.8	85.2	86.6	87.3	90.5	93.8	92.1	93.2	91.7	93.6	94.1	94.0	92.4	91.3	93.2	94.2	93.3	93.7	96.3	97.0	97.0	85.2	91.1
6	97.9	98.7	94.5	95.2	94.5	92.6	90.9	88.7	84.3	87.8	90.3	91.9	94.8	93.9	92.4	92.2	96.8	98.6	98.9	97.6	97.1	96.1	95.3	95.3	98.9	84.3	94.0
7	96.5	94.3	95.0	96.6	95.0	93.4	94.9	94.3	92.8	91.7	91.4	90.2	89.1	87.5	87.5	86.5	87.2	88.4	92.1	94.4	94.5	93.8	94.7	95.3	96.6	86.5	92.4
8	94.9	94.8	95.0	94.9	95.1	95.2	94.8	92.5	79.8	78.3	76.9	71.7	68.1	75.6	85.3	82.9	77.2	70.1	63.5	63.7	65.8	69.6	71.5	72.4	95.2	63.5	80.4
9	68.9	69.1	68.8	72.6	73.5	74.8	79.5	86.2	89.0	88.5	87.4	87.9	86.6	88.8	92.8	94.5	96.0	96.1	95.8	95.8	94.9	93.7	94.5	95.6	96.1	68.8	86.3
10	95.9	95.0	94.1	91.2	89.5	85.8	79.2	74.2	78.8	77.6	77.4	73.6	76.3	79.3	76.3	76.5	81.5	84.0	86.8	86.2	88.6	90.7	88.8	89.8	95.9	73.6	84.0
11	90.7	89.0	89.8	88.9	88.6	88.4	87.8	86.9	86.2	86.1	86.7	88.2	90.0	91.6	92.1	92.2	94.3	94.3	94.1	90.7	81.0	82.0	83.1	84.7	94.3	81.0	88.6
12	87.5	85.8	84.2	85.4	83.7	83.9	85.0	84.9	80.9	79.8	82.3	82.6	89.6	92.1	92.1	92.0	92.8	93.6	91.8	89.8	90.7	88.9	89.5	87.6	93.6	79.8	87.4
13	88.0	89.9	92.4	92.2	91.0	90.8	91.4	91.3	90.2	85.6	90.1	89.6	87.9	88.4	88.0	85.4	86.3	86.1	89.1	90.1	89.2	89.9	88.8	88.4	92.4	85.4	89.2
14	89.0	88.0	88.5	87.5	88.2	88.8	88.6	88.4	87.2	76.4	72.4	71.5	60.0	62.0	57.9	62.5	62.9	64.5	68.1	68.8	73.4	75.3	74.5	75.7	89.0	57.9	75.8
15	77.1	77.2	77.5	80.4	81.8	81.9	81.8	82.8	80.1	84.6	97.6	98.7	98.1	98.5	98.8	99.1	99.2	99.8	99.5	96.8	97.9	96.7	96.4	95.6	99.8	77.1	90.7
16	95.4	94.9	94.9	95.3	93.4	91.3	90.3	90.3	89.7	88.6	88.9	88.8	90.3	93.2	97.5	96.8	97.5	97.0	97.0	97.1	95.7	90.5	87.1	78.6	97.5	78.6	92.5
17	75.6	72.1	68.8	76.3	84.1	82.7	88.6	85.7	83.1	80.9	79.6	77.4	74.6	72.4	72.6	74.0	74.3	74.6	73.9	74.2	73.5	72.6	75.5	76.4	88.6	68.8	76.8
18	75.7	76.1	74.8	74.5	75.5	75.8	73.8	74.6	74.3	73.8	73.1	73.2	73.5	72.2	71.9	74.0	75.6	76.1	76.9	76.8	81.3	78.1	79.4	80.2	81.3	71.9	75.5
19	79.2	75.9	74.5	75.7	75.2	75.9	72.3	68.7	71.3	72.7	73.3	75.0	76.5	77.9	74.2	75.6	73.6	70.1	67.3	66.1	65.0	61.8	62.7	61.8	79.2	61.8	71.8
20	61.1	63.3	69.5	66.0	64.4	62.2	61.4	61.8	61.0	61.4	59.9	59.9	60.8	56.3	54.7	62.1	63.1	67.3	75.0	81.3	83.5	82.5	77.9	78.2	83.5	54.7	66.4
21	78.2	85.4	88.5	89.0	86.3	84.1	84.5	80.5	87.9	86.7	78.0	79.0	84.9	84.1	83.7	84.9	86.0	91.4	94.3	93.6	92.9	92.5	92.0	91.9	94.3	78.0	86.7
22	91.8	91.3	91.6	92.5	93.8	94.9	95.8	97.2	97.7	97.2	96.0	93.4	94.6	96.8	97.4	98.0	97.7	97.3	97.2	96.0	94.5	94.2	93.9	94.4	98.0	91.3	95.2
23	96.9	95.7	95.8	96.2	95.3	93.5	95.2	98.2	94.7	92.5	91.0	82.9	83.1	84.6	82.2	83.4	86.2	86.7	85.1	83.6	86.3	88.4	88.4	90.5	98.2	82.2	89.9
24	90.8	91.7	90.2	89.7	90.0	88.1	86.0	87.0	91.6	91.3	89.4	90.0	90.2	86.9	83.3	82.1	79.9	79.4	85.1	88.1	88.3	89.1	89.7	83.6	91.7	79.4	87.6
25	86.0	82.4	88.2	90.4	89.7	91.9	92.2	91.9	91.0	94.0	97.1	97.5	97.1	95.4	93.6	94.3	93.7	92.3	91.1	93.5	93.3	92.5	92.0	92.8	97.5	82.4	92.2
26	91.8	90.2	87.9	85.4	84.1	84.1	82.1	81.5	83.9	85.5	85.2	84.8	83.9	83.7	85.1	84.9	85.0	84.9	84.8	85.6	85.2	86.0	85.9	84.4	91.8	81.5	85.2
27	83.8	83.3	81.8	82.3	84.8	84.5	80.4	80.9	80.6	79.4	78.6	82.2	80.5	80.0	79.0	79.4	79.6	81.5	79.8	76.2	77.0	76.9	75.8	75.7	84.8	75.7	80.2
28	75.3	74.2	74.9	72.9	71.5	71.8	71.9	71.1	72.1	75.9	76.1	72.9	73.8	73.5	72.8	72.2	71.4	73.5	73.7	73.9	75.2	75.3	75.0	74.9	76.1	71.1	73.6
29	74.0	74.6	72.7	72.1	72.7	73.5	72.8	72.8	72.7	72.6	72.0	71.3	72.0	71.5	71.0	71.3	70.0	68.9	68.6	69.9	69.1	69.4	69.8	70.4	74.6	68.6	71.5
30	70.9	70.3	69.8	68.6	68.3	66.8	68.9	67.6	67.1	67.3	68.1	67.0	66.3	67.6	67.1	66.1	65.9	65.5	65.8	65.8	66.3	65.7	65.2	66.7	70.9	65.2	67.3
31	65.7	65.9	65.8	65.3	65.9	65.8	67.8	64.5	65.7	62.8	65.0	66.0	64.8	66.0	65.6	65.7	65.6	64.2	61.3	60.6	60.1	59.8	59.7	56.7	67.8	56.7	64.0
Max.	**97.9**	**98.7**	**95.8**	**96.6**	**95.3**	**95.2**	**95.8**	**98.2**	**97.7**	**97.2**	**97.6**	**98.7**	**98.1**	**98.5**	**98.8**	**99.1**	**99.2**	**99.8**	**99.5**	**97.6**	**97.9**	**96.7**	**96.4**	**97.0**	**99.8**		
Min.	**61.1**	**63.3**	**65.8**	**65.3**	**64.4**	**62.2**	**61.4**	**61.8**	**61.0**	**54.5**	**54.2**	**56.8**	**59.1**	**56.3**	**54.7**	**62.1**	**62.9**	64.2	61.3	**60.6**	**60.1**	**59.8**	**59.7**	**56.7**		**54.2**	
Avg.	**82.7**	**82.5**	**82.6**	**82.9**	**83.0**	**82.6**	**82.2**	**81.7**	**81.6**	**80.5**	**80.7**	**80.1**	**80.0**	**80.8**	**80.7**	**81.6**	**81.8**	**81.7**	**82.2**	**82.3**	**82.5**	**82.3**	**82.3**	**82.1**			**81.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	0	8	40	55	62	53	32	6	0	0	0	0	0	0	62	0	11
2	0	0	0	0	0	0	0	0	0	0	0	9	46	90	87	22	16	5	0	0	0	0	0	0	90	0	11
3	0	0	0	0	0	0	0	0	0	0	0	5	27	50	47	28	19	4	0	0	0	0	0	0	50	0	7
4	0	0	0	0	0	0	0	0	0	0	0	8	32	53	63	55	30	6	0	0	0	0	0	0	63	0	10
5	0	0	0	0	0	0	0	0	0	0	0	25	82	141	151	70	23	6	0	0	0	0	0	0	151	0	21
6	0	0	0	0	0	0	0	0	0	0	0	15	35	36	67	31	20	6	0	0	0	0	0	0	67	0	9
7	0	0	0	0	0	0	0	0	0	0	0	9	30	47	85	52	33	5	0	0	0	0	0	0	85	0	11
8	0	0	0	0	0	0	0	0	0	0	0	10	35	59	68	67	36	10	0	0	0	0	0	0	68	0	12
9	0	0	0	0	0	0	0	0	0	0	0	12	58	108	124	29	19	8	0	0	0	0	0	0	124	0	15
10	0	0	0	0	0	0	0	0	0	0	1	16	65	106	117	38	21	8	0	0	0	0	0	0	117	0	15
11	0	0	0	0	0	0	0	0	0	0	1	9	55	111	129	45	21	9	0	0	0	0	0	0	129	0	16
12	0	0	0	0	0	0	0	0	0	0	1	14	50	90	134	59	20	9	1	0	0	0	0	0	134	0	16
13	0	0	0	0	0	0	0	0	0	0	1	15	67	119	137	67	20	9	1	0	0	0	0	0	137	0	18
14	0	0	0	0	0	0	0	0	0	0	0	6	27	49	71	80	49	9	0	0	0	0	0	0	80	0	12
15	0	0	0	0	0	0	0	0	0	0	0	8	30	66	68	62	41	10	0	0	0	0	0	0	68	0	12
16	0	0	0	0	0	0	0	0	0	0	0	11	37	72	40	38	32	9	0	0	0	0	0	0	72	0	10
17	0	0	0	0	0	0	0	0	0	0	0	5	26	44	48	51	33	6	0	0	0	0	0	0	51	0	9
18	0	0	0	0	0	0	0	0	0	0	1	15	50	79	89	65	48	16	0	0	0	0	0	0	89	0	15
19	0	0	0	0	0	0	0	0	0	0	0	6	19	35	41	35	31	10	0	0	0	0	0	0	41	0	7
20	0	0	0	0	0	0	0	0	0	0	0	7	18	40	38	33	26	7	0	0	0	0	0	0	40	0	7
21	0	0	0	0	0	0	0	0	0	0	3	40	60	62	73	47	24	7	1	0	0	0	0	0	73	0	13
22	0	0	0	0	0	0	0	0	0	0	1	21	61	134	128	108	63	19	1	0	0	0	0	0	134	0	22
23	0	0	0	0	0	0	0	0	0	0	2	31	102	154	173	158	75	17	1	0	0	0	0	0	173	0	30
24	0	0	0	0	0	0	0	0	0	0	1	10	25	46	69	64	40	14	1	0	0	0	0	0	69	0	11
25	0	0	0	0	0	0	0	0	0	0	2	21	78	149	177	197	196	71	3	0	0	0	0	0	197	0	37
26	0	0	0	0	0	0	0	0	0	0	3	39	114	167	118	90	79	28	2	0	0	0	0	0	167	0	27
27	0	0	0	0	0	0	0	0	0	0	1	16	40	56	76	94	46	19	2	0	0	0	0	0	94	0	15
28	0	0	0	0	0	0	0	0	0	0	1	21	57	93	98	108	83	33	3	0	0	0	0	0	108	0	21
29	0	0	0	0	0	0	0	0	0	0	3	25	55	94	142	152	130	38	3	0	0	0	0	0	152	0	27
30	0	0	0	0	0	0	0	0	0	0	6	37	113	131	241	188	93	39	5	0	0	0	0	0	241	0	36
31	0	0	0	0	0	0	0	0	0	0	5	42	86	171	174	115	74	45	9	0	0	0	0	0	174	0	30
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**42**	**114**	**171**	**241**	**197**	**196**	**71**	**9**	**0**	**0**	**0**	**0**	**0**	**241**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**18**	**35**	**38**	**22**	**16**	**4**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**52**	**87**	**101**	**74**	**48**	**16**	**1**	**0**	**0**	**0**	**0**	**0**			**17**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	4	23	51	67	51	45	35	19	3	0	0	0	0	0	67	0	12
2	0	0	0	0	0	0	0	0	0	0	5	44	102	178	218	203	155	70	8	0	0	0	0	0	218	0	41
3	0	0	0	0	0	0	0	0	0	0	7	65	151	204	220	204	143	64	9	0	0	0	0	0	220	0	44
4	0	0	0	0	0	0	0	0	0	0	9	73	158	209	230	216	167	85	9	0	0	0	0	0	230	0	48
5	0	0	0	0	0	0	0	0	0	0	10	78	163	215	236	221	172	93	10	0	0	0	0	0	236	0	50
6	0	0	0	0	0	0	0	0	0	0	12	85	169	223	245	230	180	100	12	0	0	0	0	0	245	0	52
7	0	0	0	0	0	0	0	0	0	0	13	89	173	227	248	232	184	105	15	0	0	0	0	0	248	0	54
8	0	0	0	0	0	0	0	0	0	0	10	89	150	215	236	198	125	67	16	0	0	0	0	0	236	0	46
9	0	0	0	0	0	0	0	0	0	0	11	48	129	155	181	175	116	51	25	1	0	0	0	0	181	0	37
10	0	0	0	0	0	0	0	0	0	0	19	106	187	239	259	243	171	77	14	1	0	0	0	0	259	0	55
11	0	0	0	0	0	0	0	0	0	0	12	55	110	143	148	159	106	65	18	1	0	0	0	0	159	0	34
12	0	0	0	0	0	0	0	0	0	1	40	128	187	254	275	258	209	124	25	1	0	0	0	0	275	0	63
13	0	0	0	0	0	0	0	0	0	0	9	45	64	85	85	96	101	61	24	1	0	0	0	0	101	0	24
14	0	0	0	0	0	0	0	0	0	0	12	69	113	199	160	123	105	58	22	1	0	0	0	0	199	0	36
15	0	0	0	0	0	0	0	0	0	1	20	78	175	256	292	280	219	122	36	2	0	0	0	0	292	0	62
16	0	0	0	0	0	0	0	0	0	0	16	68	74	115	109	157	174	110	48	2	0	0	0	0	174	0	36
17	0	0	0	0	0	0	0	0	0	1	14	49	89	100	107	71	65	31	15	1	0	0	0	0	107	0	23
18	0	0	0	0	0	0	0	0	0	1	45	191	265	219	155	91	116	109	56	7	0	0	0	0	265	0	52
19	0	0	0	0	0	0	0	0	0	1	19	63	135	166	163	158	170	73	25	2	0	0	0	0	170	0	41
20	0	0	0	0	0	0	0	0	0	1	19	83	133	128	165	185	122	76	32	2	0	0	0	0	185	0	39
21	0	0	0	0	0	0	0	0	0	3	34	79	118	153	178	203	157	80	30	4	0	0	0	0	203	0	43
22	0	0	0	0	0	0	0	0	0	1	16	51	74	63	132	200	171	95	28	4	0	0	0	0	200	0	35
23	0	0	0	0	0	0	0	0	0	4	46	156	259	322	337	321	268	185	83	9	0	0	0	0	337	0	83
24	0	0	0	0	0	0	0	0	0	6	72	167	259	326	348	330	275	190	87	9	0	0	0	0	348	0	86
25	0	0	0	0	0	0	0	0	0	5	46	105	229	295	154	149	156	105	48	7	0	0	0	0	295	0	54
26	0	0	0	0	0	0	0	0	0	4	36	96	158	194	208	232	241	133	61	11	0	0	0	0	241	0	57
27	0	0	0	0	0	0	0	0	0	5	93	169	204	336	340	236	215	124	56	10	0	0	0	0	340	0	74
28	0	0	0	0	0	0	0	0	0	5	32	115	172	181	244	215	230	135	91	20	0	0	0	0	244	0	60
29	0	0	0	0	0	0	0	0	0	12	105	213	301	333	382	402	272	173	195	40	0	0	0	0	402	0	101
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**105**	**213**	**301**	**336**	**382**	**402**	**275**	**190**	**195**	**40**	**0**	**0**	**0**	**0**	**402**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**23**	**51**	**63**	**51**	**45**	**35**	**19**	**3**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**27**	**92**	**157**	**200**	**211**	**201**	**166**	**96**	**38**	**5**	**0**	**0**	**0**	**0**			**50**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	20	114	227	274	208	198	182	201	120	53	11	0	0	0	0	274	0	67
2	0	0	0	0	0	0	0	0	0	15	61	106	165	267	426	340	230	148	83	27	0	0	0	0	426	0	78
3	0	0	0	0	0	0	0	0	0	9	43	74	108	146	189	151	103	205	105	18	1	0	0	0	205	0	48
4	0	0	0	0	0	0	0	0	0	11	32	68	115	139	180	216	160	112	65	14	0	0	0	0	216	0	46
5	0	0	0	0	0	0	0	0	0	12	58	75	119	161	260	257	192	134	74	24	0	0	0	0	260	0	57
6	0	0	0	0	0	0	0	0	1	16	40	70	99	97	140	123	194	229	98	26	1	0	0	0	229	0	47
7	0	0	0	0	0	0	0	0	1	22	76	133	270	285	305	300	258	157	156	56	1	0	0	0	305	0	84
8	0	0	0	0	0	0	0	0	1	46	169	148	197	242	240	200	181	123	65	21	1	0	0	0	242	0	68
9	0	0	0	0	0	0	0	0	1	17	65	113	151	252	276	231	268	193	55	13	1	0	0	0	276	0	68
10	0	0	0	0	0	0	0	0	1	43	126	199	234	312	342	297	303	221	80	22	1	0	0	0	342	0	91
11	0	0	0	0	0	0	0	0	2	28	101	221	278	390	380	312	391	254	133	76	3	0	0	0	391	0	107
12	0	0	0	0	0	0	0	0	3	33	97	179	251	321	363	325	269	197	89	29	3	0	0	0	363	0	90
13	0	0	0	0	0	0	0	0	3	35	106	193	285	311	342	325	290	201	115	38	3	0	0	0	342	0	94
14	0	0	0	0	0	0	0	0	3	41	118	203	362	440	445	317	289	172	124	35	2	0	0	0	445	0	106
15	0	0	0	0	0	0	0	0	2	30	80	175	217	247	233	202	228	145	90	42	4	0	0	0	247	0	71
16	0	0	0	0	0	0	0	0	6	72	142	243	451	483	459	494	417	256	198	86	7	0	0	0	494	0	138
17	0	0	0	0	0	0	0	0	7	52	139	260	343	374	396	331	285	186	112	50	6	0	0	0	396	0	106
18	0	0	0	0	0	0	0	0	7	82	220	286	408	492	530	379	431	228	123	50	7	0	0	0	530	0	135
19	0	0	0	0	0	0	0	0	9	74	156	328	430	500	560	526	397	337	216	98	10	0	0	0	560	0	152
20	0	0	0	0	0	0	0	0	11	61	157	365	446	509	437	395	348	269	136	54	8	0	0	0	509	0	133
21	0	0	0	0	0	0	0	0	5	33	115	194	253	382	451	491	412	254	162	127	13	0	0	0	491	0	121
22	0	0	0	0	0	0	0	0	9	51	199	238	279	429	444	440	367	431	259	174	20	0	0	0	444	0	139
23	0	0	0	0	0	0	0	0	40	185	257	379	471	529	548	539	463	372	266	163	27	0	0	0	548	0	177
24	0	0	0	0	0	0	0	0	12	69	205	335	423	475	461	438	421	324	210	65	28	0	0	0	475	0	144
25	0	0	0	0	0	0	0	0	19	70	228	385	487	546	550	532	466	371	254	130	23	0	0	0	550	0	169
26	0	0	0	0	0	0	0	1	33	150	274	397	494	548	563	548	489	391	259	159	17	0	0	0	563	0	180
27	0	0	0	0	0	0	0	1	32	98	198	312	415	471	482	502	480	355	260	131	29	0	0	0	502	0	157
28	0	0	0	0	0	0	0	1	44	164	295	407	501	567	582	545	487	365	208	102	24	0	0	0	582	0	179
29	0	0	0	0	0	0	0	1	29	113	192	368	454	396	430	453	419	265	160	72	17	0	0	0	454	0	140
30	0	0	0	0	0	0	0	1	28	81	145	197	281	305	304	284	239	172	111	54	17	0	0	0	305	0	92
31	0	0	0	0	0	0	0	1	28	70	160	212	229	239	240	160	126	102	91	63	13	0	0	0	240	0	72
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**44**	**185**	**295**	**407**	**501**	**567**	**582**	**548**	**489**	**431**	**266**	**174**	**29**	**0**	**0**	**0**	**582**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**32**	**68**	**99**	**97**	**140**	**123**	**103**	**102**	**53**	**11**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**58**	**141**	**229**	**306**	**357**	**379**	**350**	**316**	**235**	**142**	**66**	**9**	**0**	**0**	**0**			**108**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	1	27	62	124	147	183	248	327	266	285	264	163	89	20	1	0	0	327	0	92
2	0	0	0	0	0	0	0	1	14	48	111	215	235	358	602	538	418	247	155	105	33	1	0	0	602	0	128
3	0	0	0	0	0	0	0	2	43	92	164	246	342	410	443	405	394	267	233	66	24	1	0	0	443	0	131
4	0	0	0	0	0	0	0	3	22	53	127	222	303	292	330	380	355	251	153	110	27	2	0	0	380	0	110
5	0	0	0	0	0	0	0	6	54	220	374	470	562	618	627	606	533	436	314	179	60	3	0	0	627	0	211
6	0	0	0	0	0	0	0	8	94	225	359	478	573	629	646	620	552	450	323	195	65	4	0	0	646	0	217
7	0	0	0	0	0	0	0	10	100	231	365	486	579	633	648	617	549	447	318	175	55	4	0	0	648	0	217
8	0	0	0	0	0	0	0	11	107	227	361	482	574	627	668	620	468	323	231	109	52	6	0	0	668	0	203
9	0	0	0	0	0	0	0	14	108	236	376	496	588	647	661	629	565	428	330	204	74	5	0	0	661	0	223
10	0	0	0	0	0	0	0	17	117	247	384	504	595	650	666	639	573	474	347	214	83	6	0	0	666	0	230
11	0	0	0	0	0	0	0	19	122	253	388	508	599	652	668	642	573	471	344	205	76	7	0	0	668	0	230
12	0	0	0	0	0	0	0	20	111	246	382	500	596	655	686	650	570	469	328	168	54	7	0	0	686	0	227
13	0	0	0	0	0	0	0	17	68	124	210	282	319	339	338	372	322	218	185	87	33	3	0	0	372	0	122
14	0	0	0	0	0	0	0	14	71	154	366	524	843	642	534	504	482	450	258	129	50	7	0	0	843	0	209
15	0	0	0	0	0	0	0	21	77	141	230	319	429	691	771	515	412	364	378	234	102	13	0	0	771	0	196
16	0	0	0	0	0	0	1	26	119	252	394	509	600	658	668	642	512	436	297	221	73	7	0	0	668	0	225
17	0	0	0	0	0	0	1	35	104	222	352	502	611	666	673	573	488	494	342	192	80	11	0	0	673	0	223
18	0	0	0	0	0	0	1	30	111	228	368	482	596	661	673	658	600	462	259	219	95	19	0	0	673	0	228
19	0	0	0	0	0	0	2	47	161	258	372	574	609	650	687	643	576	457	289	167	76	19	0	0	687	0	233
20	0	0	0	0	0	0	2	40	124	164	214	258	279	318	308	392	433	391	215	117	49	10	0	0	433	0	138
21	0	0	0	0	0	0	1	22	77	157	268	406	499	429	416	431	300	251	199	135	67	15	0	0	499	0	153
22	0	0	0	0	0	0	4	62	185	311	442	557	646	700	712	683	617	520	392	259	131	26	1	0	712	0	260
23	0	0	0	0	0	0	4	62	184	316	451	566	652	704	716	686	620	523	397	263	128	27	1	0	716	0	262
24	0	0	0	0	0	0	5	44	85	138	226	306	370	407	359	255	330	169	145	96	56	10	0	0	407	0	125
25	0	0	0	0	0	0	4	34	156	335	470	583	671	724	731	707	638	476	359	294	92	30	1	0	731	0	263
26	0	0	0	0	0	0	5	39	123	185	277	374	385	388	445	357	394	351	276	168	81	28	1	0	445	0	162
27	0	0	0	0	0	0	5	51	126	231	267	445	503	530	478	467	620	375	300	184	115	30	2	0	620	0	197
28	0	0	0	0	0	0	11	88	161	237	346	435	423	463	580	569	457	486	439	228	105	31	2	0	580	0	211
29	0	0	0	0	0	0	5	29	112	213	286	392	456	573	612	536	575	500	399	275	147	42	2	0	612	0	215
30	0	0	0	0	0	0	11	73	161	358	396	456	607	639	665	527	418	315	232	161	86	28	2	0	665	0	214
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**88**	**185**	**358**	**470**	**583**	**843**	**724**	**771**	**707**	**638**	**523**	**439**	**294**	**147**	**42**	**2**	**0**	**843**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**14**	**48**	**111**	**147**	**183**	**248**	**308**	**255**	**285**	**169**	**145**	**66**	**20**	**1**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**104**	**205**	**315**	**424**	**507**	**553**	**578**	**538**	**488**	**392**	**287**	**175**	**73**	**13**	**0**	**0**			**195**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	12	92	214	354	489	594	628	717	742	596	554	556	312	171	135	29	2	0	742	0	258
2	0	0	0	0	0	0	14	161	242	319	324	437	553	640	698	622	558	464	230	112	29	11	3	0	698	0	226
3	0	0	0	0	0	0	10	47	119	347	399	511	638	477	349	286	336	364	231	109	48	16	1	0	638	0	179
4	0	0	0	0	0	0	10	34	71	128	170	243	348	428	515	569	517	441	357	182	117	45	5	0	569	0	174
5	0	0	0	0	0	0	15	69	109	185	295	376	504	607	659	667	564	489	251	178	77	35	4	0	667	0	212
6	0	0	0	0	0	0	11	44	133	176	324	423	498	725	783	760	677	578	447	318	181	60	6	0	783	0	256
7	0	0	0	0	0	0	13	52	107	263	392	377	444	277	355	331	381	421	348	147	59	28	3	0	444	0	167
8	0	0	0	0	0	0	8	43	78	109	200	229	256	228	269	325	339	378	330	210	92	28	4	0	378	0	130
9	0	0	0	0	0	0	7	45	105	219	252	269	249	343	412	462	376	264	205	123	74	30	3	0	462	0	143
10	0	0	0	0	0	1	21	48	116	245	339	457	538	605	715	569	407	394	386	195	112	42	4	0	715	0	216
11	0	0	0	0	0	1	19	45	119	247	284	227	270	244	193	188	129	105	146	90	68	32	6	0	284	0	100
12	0	0	0	0	0	1	15	58	131	149	447	354	494	399	520	331	310	304	292	163	88	57	8	0	520	0	172
13	0	0	0	0	0	0	4	25	30	57	184	443	653	487	749	682	595	320	426	275	115	71	7	0	749	0	213
14	0	0	0	0	0	2	17	52	75	104	148	228	448	481	462	417	485	519	459	300	94	24	5	0	519	0	180
15	0	0	0	0	0	2	26	68	134	235	367	465	607	349	481	486	386	254	190	123	54	32	8	0	607	0	178
16	0	0	0	0	0	1	8	23	49	108	225	382	465	606	810	709	710	601	482	350	219	93	15	1	810	0	244
17	0	0	0	0	0	4	49	156	280	415	538	672	740	747	817	738	701	586	410	316	163	87	14	1	817	0	310
18	0	0	0	0	0	3	42	129	169	107	142	218	292	206	271	264	304	493	283	141	75	49	8	1	493	0	133
19	0	0	0	0	0	2	18	71	147	229	300	636	556	462	669	704	678	588	398	341	184	124	23	1	704	0	256
20	0	0	0	0	0	5	57	168	292	428	552	662	742	798	824	769	705	557	443	360	229	110	26	1	824	0	322
21	0	0	0	0	0	7	68	158	259	421	543	660	736	794	793	753	710	594	449	361	248	111	31	2	794	0	321
22	0	0	0	0	0	5	41	109	197	265	545	672	659	810	517	751	500	360	274	156	87	33	7	0	810	0	249
23	0	0	0	0	0	1	4	44	110	147	416	193	233	114	85	88	42	65	41	28	50	111	41	3	416	0	76
24	0	0	0	0	0	3	12	38	74	113	109	97	235	320	455	717	338	455	328	122	115	30	5	1	717	0	149
25	0	0	0	0	0	3	11	19	55	169	255	310	520	378	612	750	696	304	216	188	146	87	26	2	750	0	198
26	0	0	0	0	0	4	21	57	100	221	339	424	385	501	700	514	515	404	330	264	269	97	19	3	700	0	215
27	0	0	0	0	0	10	65	169	293	421	547	646	728	793	799	746	642	536	439	329	204	99	31	3	799	0	313
28	0	0	0	0	0	12	64	120	273	404	506	676	623	606	659	720	438	419	276	177	136	90	19	3	720	0	259
29	0	0	0	0	0	15	52	132	185	285	283	328	375	377	406	577	612	433	444	368	238	138	50	5	612	0	221
30	0	0	0	0	0	11	42	138	230	358	500	589	674	770	843	672	730	339	360	403	181	49	19	2	843	0	288
31	0	0	0	0	0	5	40	61	85	191	400	455	419	615	383	374	509	525	249	161	107	99	44	3	615	0	197
Max.	**0**	**0**	**0**	**0**	**0**	**15**	**68**	**169**	**293**	**428**	**552**	**676**	**742**	**810**	**843**	**769**	**730**	**601**	**482**	**403**	**269**	**138**	**50**	**5**	**843**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**19**	**30**	**57**	**109**	**97**	**233**	**114**	**85**	**88**	**42**	**65**	**41**	**28**	**29**	**11**	**1**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**26**	**80**	**148**	**239**	**349**	**427**	**500**	**513**	**566**	**553**	**498**	**423**	**324**	**218**	**129**	**63**	**14**	**1**			**211**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	5	21	28	46	123	309	426	727	645	715	699	717	250	291	185	109	58	33	3	727	0	225
2	0	0	0	0	0	4	28	89	149	294	285	412	582	388	404	298	386	214	217	185	94	83	19	4	582	0	172
3	0	0	0	0	0	7	35	58	124	254	409	333	282	692	505	579	684	573	512	345	80	59	21	3	692	0	231
4	0	0	0	0	1	5	21	106	243	447	350	224	266	727	722	845	594	432	564	535	337	135	56	6	845	0	276
5	0	0	0	0	1	9	33	27	62	170	179	199	230	305	357	291	389	235	197	195	126	74	33	3	389	0	130
6	0	0	0	0	1	5	13	37	67	194	379	579	708	708	431	532	640	717	385	146	141	102	71	7	717	0	244
7	0	0	0	0	1	17	89	211	324	454	550	724	354	305	383	477	457	354	455	387	264	138	40	5	724	0	249
8	0	0	0	0	0	12	66	154	295	339	375	380	374	276	339	290	195	113	80	83	154	147	34	7	380	0	155
9	0	0	0	0	0	3	15	43	81	159	326	406	459	323	329	368	248	286	227	169	128	99	53	4	459	0	155
10	0	0	0	0	1	9	35	72	91	93	184	204	240	182	397	361	250	204	177	121	64	27	10	1	397	0	113
11	0	0	0	0	0	6	33	97	212	227	216	282	336	261	341	248	245	274	291	134	50	39	26	5	341	0	138
12	0	0	0	0	1	8	32	59	137	313	358	275	224	180	200	175	124	95	86	43	27	17	9	2	358	0	99
13	0	0	0	0	0	2	17	44	80	126	200	319	404	292	298	397	363	255	302	373	150	162	21	5	404	0	159
14	1	0	0	0	1	7	40	65	112	201	181	318	491	694	727	754	733	577	421	21	49	139	31	8	754	0	232
15	1	0	0	0	1	14	48	173	303	332	431	351	549	585	690	618	673	457	215	147	79	33	9	2	690	0	238
16	0	0	0	0	0	4	23	56	101	197	312	296	264	379	283	301	238	282	338	206	119	112	38	6	379	0	148
17	0	0	0	0	1	16	71	219	315	449	588	662	195	766	793	791	724	633	525	402	278	165	67	10	793	0	319
18	1	0	0	0	1	14	49	133	313	438	386	338	696	828	871	785	714	660	335	259	306	175	67	9	871	0	307
19	1	0	0	0	1	10	60	198	312	442	374	406	457	382	459	622	560	612	520	403	236	68	26	5	622	0	256
20	0	0	0	0	1	10	98	180	324	377	532	671	732	781	668	791	729	638	527	409	284	169	72	11	791	0	333
21	1	0	0	0	1	17	81	116	181	234	374	391	221	254	450	432	491	654	585	441	299	146	63	8	654	0	227
22	1	0	0	0	1	20	70	131	328	242	459	483	546	666	486	316	330	555	418	153	56	34	12	4	666	0	221
23	0	0	0	0	1	9	37	95	178	333	287	428	654	772	842	797	730	647	537	416	289	174	73	9	842	0	304
24	1	0	0	0	1	18	120	199	331	502	520	476	286	200	167	158	115	98	53	43	39	20	11	3	520	0	140
25	0	0	0	0	2	11	75	83	99	287	227	199	227	218	284	571	760	457	249	183	139	79	39	17	760	0	175
26	1	0	0	0	0	6	18	64	109	189	226	358	348	252	351	258	218	241	221	122	109	64	25	3	358	0	133
27	0	0	0	0	1	9	33	63	101	202	302	371	465	486	452	398	451	616	514	264	166	64	21	5	616	0	208
28	0	0	0	0	1	8	30	103	231	206	304	427	251	375	591	322	199	232	235	153	96	61	32	4	591	0	161
29	0	0	0	0	0	2	9	25	163	221	287	248	473	397	497	424	500	506	517	230	135	55	35	6	517	0	197
30	0	0	0	0	1	5	33	76	299	413	546	364	365	463	370	405	268	417	235	137	178	51	36	8	546	0	195
Max.	**1**	**0**	**0**	**0**	**2**	**20**	**120**	**219**	**331**	**502**	**588**	**724**	**732**	**828**	**871**	**845**	**760**	**717**	**585**	**535**	**337**	**175**	**73**	**17**	**871**		
Min.	**0**	**0**	**0**	**0**	**0**	**2**	**9**	**25**	**46**	**93**	**179**	**199**	**195**	**180**	**167**	**158**	**115**	**95**	**53**	**21**	**27**	**17**	**9**	**1**		**0**	
Avg.	**0**	**0**	**0**	**0**	**1**	**9**	**44**	**100**	**190**	**282**	**349**	**385**	**413**	**459**	**480**	**477**	**457**	**409**	**341**	**230**	**153**	**92**	**36**	**6**			**205**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1	0	0	0	1	13	105	187	303	441	564	611	732	807	812	806	820	656	347	410	200	97	34	5	820	0	331
2	0	0	0	0	0	6	36	87	119	223	396	365	641	738	929	818	547	453	115	174	155	58	17	5	929	0	245
3	0	0	0	0	0	3	24	60	121	154	187	245	220	242	162	247	337	342	234	171	104	31	13	2	342	0	121
4	0	0	0	0	0	2	5	42	73	154	190	346	541	542	256	302	306	247	83	116	112	72	23	4	542	0	142
5	0	0	0	0	0	8	46	82	157	228	367	513	624	430	390	261	267	247	182	245	81	31	5	1	624	0	174
6	0	0	0	0	1	7	31	75	175	433	518	542	713	502	329	379	386	310	275	210	132	63	25	7	713	0	213
7	0	0	0	0	0	2	9	30	40	115	118	191	215	232	176	214	223	277	340	193	121	60	25	4	340	0	108
8	0	0	0	0	0	2	11	23	37	51	50	52	69	135	134	101	82	65	36	25	22	16	5	1	135	0	38
9	0	0	0	0	0	5	43	120	227	342	465	494	577	755	794	802	709	486	439	187	110	35	13	3	802	0	275
10	0	0	0	0	0	2	21	54	83	159	247	638	429	370	344	334	527	645	299	115	80	40	12	2	645	0	183
11	0	0	0	0	0	2	11	30	143	355	426	435	595	673	576	655	719	648	514	392	262	157	54	4	719	0	277
12	0	0	0	0	1	11	80	160	266	315	463	277	257	348	350	206	220	175	81	39	20	12	4	3	463	0	137
13	0	0	0	0	0	1	10	32	54	70	151	237	247	218	224	259	249	203	173	134	107	39	14	3	259	0	101
14	0	0	0	0	0	2	16	52	89	136	265	381	339	438	646	516	385	311	224	182	158	73	12	1	646	0	176
15	0	0	0	0	0	6	39	100	170	248	289	341	478	674	804	755	406	220	166	76	32	16	9	2	804	0	201
16	0	0	0	0	0	1	10	30	62	61	88	74	114	127	171	113	65	54	55	34	18	14	3	1	171	0	46
17	0	0	0	0	0	2	6	31	107	147	126	198	252	356	228	253	197	202	161	121	65	47	12	1	356	0	105
18	0	0	0	0	0	2	15	92	142	162	185	249	168	192	245	244	140	165	209	162	104	40	13	1	249	0	105
19	0	0	0	0	0	2	17	57	107	182	218	270	289	315	439	443	422	365	249	129	72	49	24	2	443	0	152
20	0	0	0	0	0	1	10	50	65	98	112	93	111	197	180	163	144	133	49	14	11	6	6	0	197	0	60
21	0	0	0	0	0	0	5	18	48	89	187	237	415	279	304	319	334	360	114	212	164	122	15	2	415	0	134
22	0	0	0	0	0	2	20	42	74	150	152	103	97	111	133	148	144	97	89	76	59	34	9	1	152	0	64
23	0	0	0	0	0	1	13	28	103	262	204	416	371	452	375	431	411	327	162	100	61	13	3	0	452	0	156
24	0	0	0	0	0	0	4	18	49	103	155	212	425	561	631	537	612	431	345	212	76	40	39	2	631	0	185
25	0	0	0	0	0	2	33	133	245	375	496	607	691	747	755	712	646	257	325	447	122	96	30	1	755	0	280
26	0	0	0	0	0	1	29	79	77	113	130	181	155	128	139	150	127	191	269	218	174	89	12	0	269	0	94
27	0	0	0	0	0	0	4	19	48	85	92	150	240	259	206	176	161	373	316	196	107	87	11	1	373	0	105
28	0	0	0	0	0	0	12	61	235	426	380	634	282	421	394	311	314	360	256	153	86	40	17	1	634	0	183
29	0	0	0	0	0	1	15	125	207	311	484	587	700	448	721	679	647	556	319	227	127	56	12	0	721	0	259
30	0	0	0	0	0	0	4	34	75	147	406	420	648	701	734	700	643	545	428	247	208	91	17	1	734	0	252
31	0	0	0	0	0	1	17	97	211	338	456	579	686	566	547	658	662	581	469	340	227	97	18	1	686	0	273
Max.	**1**	**0**	**0**	**0**	**1**	**13**	**105**	**187**	**303**	**441**	**564**	**638**	**732**	**807**	**929**	**818**	**820**	**656**	**514**	**447**	**262**	**157**	**54**	**7**	**929**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**18**	**37**	**51**	**50**	**52**	**69**	**111**	**133**	**101**	**65**	**54**	**36**	**14**	**11**	**6**	**3**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**3**	**23**	**66**	**126**	**209**	**276**	**344**	**397**	**418**	**424**	**409**	**382**	**332**	**236**	**179**	**109**	**55**	**16**	**2**			**167**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	1	12	60	101	139	199	249	373	709	737	715	627	595	462	368	218	90	9	0	737	0	236
2	0	0	0	0	0	0	2	18	32	72	109	138	181	202	236	275	233	253	140	127	55	18	6	0	275	0	87
3	0	0	0	0	0	1	17	94	206	354	475	515	712	740	769	706	666	598	465	305	162	73	7	0	769	0	286
4	0	0	0	0	0	0	8	62	98	199	240	244	349	509	405	372	469	605	455	326	200	52	8	0	605	0	192
5	0	0	0	0	0	0	8	55	106	263	486	493	401	682	677	713	655	514	401	318	196	88	11	0	713	0	253
6	0	0	0	0	0	0	15	101	219	347	470	584	670	734	705	604	575	370	150	124	113	44	8	0	734	0	243
7	0	0	0	0	0	0	11	42	80	335	458	564	565	617	467	551	598	551	186	174	184	53	8	0	617	0	227
8	0	0	0	0	0	0	9	90	208	335	458	572	660	713	734	712	655	569	448	335	159	75	7	0	734	0	281
9	0	0	0	0	0	0	8	86	203	328	451	564	650	702	730	652	530	456	284	220	183	58	4	0	730	0	255
10	0	0	0	0	0	0	10	81	185	335	339	555	620	523	451	284	202	428	322	314	190	53	3	0	620	0	204
11	0	0	0	0	0	0	8	75	203	207	237	195	285	349	490	581	538	368	314	206	107	33	2	0	581	0	175
12	0	0	0	0	0	0	4	37	145	322	303	327	407	459	518	513	454	248	151	88	74	33	2	0	518	0	170
13	0	0	0	0	0	0	2	24	65	121	206	276	232	372	270	268	303	295	175	80	48	15	1	0	372	0	115
14	0	0	0	0	0	0	1	17	43	70	129	150	133	182	315	261	254	257	168	93	52	18	1	0	315	0	89
15	0	0	0	0	0	0	1	17	55	99	148	151	215	267	199	309	268	261	137	72	28	11	1	0	309	0	93
16	0	0	0	0	0	0	1	17	34	86	92	94	376	405	438	630	539	562	374	114	138	41	2	0	630	0	164
17	0	0	0	0	0	0	4	63	145	190	178	260	242	271	281	300	442	458	300	178	42	13	1	0	458	0	140
18	0	0	0	0	0	0	3	50	154	275	417	467	443	436	472	310	309	296	276	135	58	16	1	0	472	0	172
19	0	0	0	0	0	0	1	14	37	57	124	238	353	536	377	365	300	152	156	68	42	6	0	0	536	0	118
20	0	0	0	0	0	0	1	21	62	85	60	154	322	299	168	241	288	291	390	138	61	8	0	0	390	0	108
21	0	0	0	0	0	0	1	12	62	144	131	166	279	292	352	526	432	235	83	28	15	5	0	0	526	0	115
22	0	0	0	0	0	0	0	7	22	51	95	190	293	418	327	435	152	214	339	243	124	27	1	0	435	0	122
23	0	0	0	0	0	0	1	33	191	264	384	495	497	612	429	535	316	240	152	34	36	12	0	0	612	0	176
24	0	0	0	0	0	0	1	46	115	98	192	471	428	382	492	436	427	260	206	65	61	14	0	0	492	0	154
25	0	0	0	0	0	0	0	15	63	116	135	131	194	228	241	293	594	355	355	164	80	9	0	0	594	0	124
26	0	0	0	0	0	0	0	3	19	43	115	83	104	246	325	327	214	246	301	109	34	5	0	0	327	0	91
27	0	0	0	0	0	0	0	5	26	53	90	171	263	273	252	274	109	251	187	188	53	3	0	0	274	0	92
28	0	0	0	0	0	0	0	14	44	80	146	177	250	299	284	310	115	99	109	72	41	9	0	0	310	0	85
29	0	0	0	0	0	0	0	22	121	239	369	391	531	666	284	318	353	355	228	84	45	5	0	0	666	0	167
30	0	0	0	0	0	0	0	14	46	112	233	285	261	341	478	544	357	306	203	88	27	4	0	0	544	0	137
31	0	0	0	0	0	0	0	2	17	33	48	99	113	252	228	156	210	107	128	151	42	4	0	0	252	0	66
Max.	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**101**	**219**	**354**	**486**	**584**	**712**	**740**	**769**	**715**	**666**	**605**	**465**	**368**	**218**	**90**	**11**	**0**	**769**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**17**	**33**	**48**	**83**	**104**	**182**	**168**	**156**	**109**	**99**	**83**	**28**	**15**	**3**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**39**	**100**	**176**	**242**	**305**	**368**	**442**	**423**	**436**	**393**	**348**	**259**	**162**	**92**	**29**	**3**	**0**			**159**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	6	90	137	321	340	412	277	302	311	271	171	94	63	10	1	0	0	412	0	117
2	0	0	0	0	0	0	0	2	17	22	51	59	118	159	134	126	183	124	75	34	8	0	0	0	183	0	46
3	0	0	0	0	0	0	0	3	21	51	111	104	140	136	174	229	221	200	114	41	13	1	0	0	229	0	65
4	0	0	0	0	0	0	0	3	63	173	272	278	300	302	309	272	249	251	176	125	71	3	0	0	309	0	119
5	0	0	0	0	0	0	0	7	34	70	196	280	486	538	515	482	283	89	48	41	29	1	0	0	538	0	129
6	0	0	0	0	0	0	0	3	23	45	40	110	73	42	44	71	46	31	26	25	9	0	0	0	110	0	25
7	0	0	0	0	0	0	0	1	12	29	66	59	53	57	61	153	193	136	59	25	6	0	0	0	193	0	38
8	0	0	0	0	0	0	0	2	24	86	169	226	222	128	200	136	64	29	36	15	4	0	0	0	226	0	56
9	0	0	0	0	0	0	0	1	10	24	60	95	89	100	123	96	75	58	60	48	13	0	0	0	123	0	35
10	0	0	0	0	0	0	0	1	14	43	92	200	329	310	415	500	320	219	106	44	15	0	0	0	500	0	109
11	0	0	0	0	0	0	0	1	7	25	46	143	262	161	210	454	303	287	144	53	7	0	0	0	454	0	88
12	0	0	0	0	0	0	0	1	4	21	39	95	121	114	133	43	55	43	27	9	1	0	0	0	133	0	29
13	0	0	0	0	0	0	0	0	5	17	19	35	46	68	107	136	235	136	43	25	4	0	0	0	235	0	37
14	0	0	0	0	0	0	0	1	8	45	56	59	100	92	137	167	135	104	120	64	9	0	0	0	167	0	46
15	0	0	0	0	0	0	0	0	15	30	93	194	259	194	253	148	162	127	93	37	7	0	0	0	259	0	67
16	0	0	0	0	0	0	0	1	12	37	116	179	334	368	226	225	155	284	155	74	9	0	0	0	368	0	91
17	0	0	0	0	0	0	0	1	20	100	145	183	201	184	140	123	105	67	33	16	2	0	0	0	201	0	55
18	0	0	0	0	0	0	0	0	13	27	94	120	67	106	132	165	134	91	38	12	3	0	0	0	165	0	42
19	0	0	0	0	0	0	0	0	8	35	89	108	195	245	228	291	251	155	89	40	3	0	0	0	291	0	72
20	0	0	0	0	0	0	0	0	27	73	140	170	295	272	376	293	223	149	108	62	5	0	0	0	376	0	91
21	0	0	0	0	0	0	0	0	18	69	133	186	218	393	255	259	147	116	92	60	5	0	0	0	393	0	81
22	0	0	0	0	0	0	0	0	28	138	238	344	294	311	277	191	124	99	52	15	1	0	0	0	344	0	88
23	0	0	0	0	0	0	0	0	6	24	42	73	105	114	179	152	110	49	67	18	1	0	0	0	179	0	39
24	0	0	0	0	0	0	0	0	7	27	53	83	100	155	100	121	130	82	61	24	1	0	0	0	155	0	39
25	0	0	0	0	0	0	0	0	4	28	91	174	187	161	159	162	127	87	59	26	1	0	0	0	187	0	53
26	0	0	0	0	0	0	0	0	13	46	86	228	298	449	382	207	102	71	129	27	2	0	0	0	449	0	85
27	0	0	0	0	0	0	0	0	16	107	222	324	403	450	454	421	353	247	138	38	2	0	0	0	454	0	132
28	0	0	0	0	0	0	0	0	13	102	213	306	362	431	412	310	173	137	73	24	1	0	0	0	431	0	107
29	0	0	0	0	0	0	0	0	8	28	82	112	92	99	149	159	148	153	103	18	0	0	0	0	159	0	48
30	0	0	0	0	0	0	0	0	9	63	215	321	387	390	274	161	159	105	71	16	0	0	0	0	390	0	91
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**90**	**173**	**321**	**344**	**486**	**538**	**515**	**500**	**353**	**287**	**176**	**125**	**71**	**3**	**0**	**0**	**538**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**17**	**19**	**35**	**46**	**42**	**44**	**43**	**46**	**29**	**26**	**9**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**	**57**	**120**	**173**	**218**	**227**	**229**	**219**	**174**	**130**	**83**	**37**	**8**	**0**	**0**	**0**			**71**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	8	45	71	88	156	205	204	134	67	87	27	4	0	0	0	0	205	0	46
2	0	0	0	0	0	0	0	0	4	36	121	90	193	189	234	200	140	67	82	12	0	0	0	0	234	0	57
3	0	0	0	0	0	0	0	0	3	35	61	135	160	183	207	193	190	88	87	16	0	0	0	0	207	0	57
4	0	0	0	0	0	0	0	0	6	82	192	282	365	392	392	199	96	57	71	9	0	0	0	0	392	0	89
5	0	0	0	0	0	0	0	0	1	12	27	46	62	75	87	94	53	35	29	6	0	0	0	0	94	0	22
6	0	0	0	0	0	0	0	0	2	30	104	192	199	238	246	206	159	99	49	9	0	0	0	0	246	0	64
7	0	0	0	0	0	0	0	0	2	34	77	108	184	156	126	95	100	76	29	5	0	0	0	0	184	0	41
8	0	0	0	0	0	0	0	0	3	57	165	260	338	385	386	352	287	193	87	8	0	0	0	0	386	0	105
9	0	0	0	0	0	0	0	0	0	7	21	26	37	59	50	25	27	39	18	1	0	0	0	0	59	0	13
10	0	0	0	0	0	0	0	0	2	25	62	124	90	152	144	114	196	58	20	1	0	0	0	0	196	0	41
11	0	0	0	0	0	0	0	0	0	2	6	13	29	26	39	44	59	60	41	2	0	0	0	0	60	0	13
12	0	0	0	0	0	0	0	0	1	20	122	248	323	272	180	198	237	168	66	4	0	0	0	0	323	0	77
13	0	0	0	0	0	0	0	0	1	20	48	73	138	181	177	152	84	49	15	1	0	0	0	0	181	0	39
14	0	0	0	0	0	0	0	0	0	10	50	139	94	176	133	133	84	57	15	1	0	0	0	0	176	0	37
15	0	0	0	0	0	0	0	0	1	39	86	183	309	343	351	322	238	129	42	2	0	0	0	0	351	0	85
16	0	0	0	0	0	0	0	0	0	15	57	118	198	217	229	208	304	146	41	2	0	0	0	0	304	0	64
17	0	0	0	0	0	0	0	0	0	13	56	109	169	233	333	239	181	140	39	1	0	0	0	0	333	0	63
18	0	0	0	0	0	0	0	0	0	13	66	112	182	236	267	280	217	115	23	1	0	0	0	0	280	0	63
19	0	0	0	0	0	0	0	0	0	17	103	204	277	316	320	324	169	111	39	1	0	0	0	0	324	0	78
20	0	0	0	0	0	0	0	0	0	7	27	91	132	170	219	278	163	109	25	1	0	0	0	0	278	0	51
21	0	0	0	0	0	0	0	0	0	13	125	192	267	307	318	280	208	118	24	1	0	0	0	0	318	0	77
22	0	0	0	0	0	0	0	0	0	14	96	195	268	301	294	243	240	112	21	0	0	0	0	0	301	0	74
23	0	0	0	0	0	0	0	0	0	18	86	165	261	300	303	266	187	118	24	0	0	0	0	0	303	0	72
24	0	0	0	0	0	0	0	0	0	10	78	176	244	285	240	219	145	94	16	0	0	0	0	0	285	0	63
25	0	0	0	0	0	0	0	0	0	5	32	128	129	117	185	217	157	63	15	0	0	0	0	0	217	0	44
26	0	0	0	0	0	0	0	0	0	8	75	164	237	280	284	248	182	93	12	0	0	0	0	0	284	0	66
27	0	0	0	0	0	0	0	0	0	6	74	169	237	276	278	243	178	88	9	0	0	0	0	0	278	0	65
28	0	0	0	0	0	0	0	0	0	7	74	177	226	204	290	239	101	39	7	0	0	0	0	0	290	0	57
29	0	0	0	0	0	0	0	0	0	2	24	72	101	112	117	112	81	36	5	0	0	0	0	0	117	0	28
30	0	0	0	0	0	0	0	0	0	3	23	72	150	246	224	148	149	62	6	0	0	0	0	0	246	0	45
31	0	0	0	0	0	0	0	0	0	3	34	101	177	218	226	204	156	68	5	0	0	0	0	0	226	0	50
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**82**	**192**	**282**	**365**	**392**	**392**	**352**	**304**	**193**	**87**	**16**	**0**	**0**	**0**	**0**	**392**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	**13**	**29**	**26**	**39**	**25**	**27**	**35**	**5**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**20**	**72**	**137**	**191**	**221**	**229**	**200**	**156**	**89**	**32**	**3**	**0**	**0**	**0**	**0**			**56**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	2	23	59	106	119	124	134	183	49	4	0	0	0	0	0	183	0	33
2	0	0	0	0	0	0	0	0	0	4	43	94	137	179	193	148	116	51	5	0	0	0	0	0	193	0	40
3	0	0	0	0	0	0	0	0	0	2	29	129	185	223	241	174	141	56	5	0	0	0	0	0	241	0	49
4	0	0	0	0	0	0	0	0	0	2	28	79	142	164	196	132	68	32	2	0	0	0	0	0	196	0	35
5	0	0	0	0	0	0	0	0	0	1	11	153	159	228	147	152	80	19	4	0	0	0	0	0	228	0	40
6	0	0	0	0	0	0	0	0	0	1	24	89	122	118	98	94	73	35	2	0	0	0	0	0	122	0	27
7	0	0	0	0	0	0	0	0	0	1	18	57	94	138	206	109	62	35	2	0	0	0	0	0	206	0	30
8	0	0	0	0	0	0	0	0	0	1	13	100	70	106	129	77	31	13	1	0	0	0	0	0	129	0	23
9	0	0	0	0	0	0	0	0	0	0	4	23	29	42	49	46	21	7	0	0	0	0	0	0	49	0	9
10	0	0	0	0	0	0	0	0	0	0	4	25	49	51	45	38	17	9	0	0	0	0	0	0	51	0	10
11	0	0	0	0	0	0	0	0	0	0	10	54	85	88	82	65	103	23	1	0	0	0	0	0	103	0	21
12	0	0	0	0	0	0	0	0	0	0	8	34	48	113	128	128	71	9	0	0	0	0	0	0	128	0	22
13	0	0	0	0	0	0	0	0	0	0	5	29	53	63	40	37	13	4	0	0	0	0	0	0	63	0	10
14	0	0	0	0	0	0	0	0	0	0	2	12	19	17	20	14	7	3	0	0	0	0	0	0	20	0	4
15	0	0	0	0	0	0	0	0	0	0	1	8	20	25	22	18	9	2	0	0	0	0	0	0	25	0	4
16	0	0	0	0	0	0	0	0	0	0	2	10	13	19	19	19	13	3	0	0	0	0	0	0	19	0	4
17	0	0	0	0	0	0	0	0	0	0	2	13	23	30	31	30	20	3	0	0	0	0	0	0	31	0	6
18	0	0	0	0	0	0	0	0	0	0	7	56	145	173	170	135	75	10	0	0	0	0	0	0	173	0	32
19	0	0	0	0	0	0	0	0	0	0	5	69	125	157	162	135	65	9	0	0	0	0	0	0	162	0	30
20	0	0	0	0	0	0	0	0	0	0	10	74	138	150	166	133	62	9	0	0	0	0	0	0	166	0	31
21	0	0	0	0	0	0	0	0	0	0	6	47	112	148	152	119	30	8	0	0	0	0	0	0	152	0	26
22	0	0	0	0	0	0	0	0	0	0	3	24	106	162	172	118	45	6	0	0	0	0	0	0	172	0	26
23	0	0	0	0	0	0	0	0	0	0	1	8	39	53	70	56	27	4	0	0	0	0	0	0	70	0	11
24	0	0	0	0	0	0	0	0	0	0	1	13	31	42	68	74	43	4	0	0	0	0	0	0	74	0	11
25	0	0	0	0	0	0	0	0	0	0	1	8	59	94	114	43	26	6	0	0	0	0	0	0	114	0	15
26	0	0	0	0	0	0	0	0	0	0	2	39	79	108	121	50	19	6	0	0	0	0	0	0	121	0	18
27	0	0	0	0	0	0	0	0	0	0	1	19	35	56	56	44	28	6	0	0	0	0	0	0	56	0	10
28	0	0	0	0	0	0	0	0	0	0	1	8	30	46	52	38	19	3	0	0	0	0	0	0	52	0	8
29	0	0	0	0	0	0	0	0	0	0	1	14	40	70	73	74	24	8	0	0	0	0	0	0	74	0	13
30	0	0	0	0	0	0	0	0	0	0	2	24	82	124	115	26	17	4	0	0	0	0	0	0	124	0	16
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**43**	**153**	**185**	**228**	**241**	**174**	**183**	**56**	**5**	**0**	**0**	**0**	**0**	**0**	**241**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**13**	**17**	**19**	**14**	**7**	**2**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**46**	**79**	**104**	**109**	**82**	**50**	**14**	**1**	**0**	**0**	**0**	**0**	**0**			**21**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Solar (Watts/m^2)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	0	0	0	0	0	0	0	0	0	0	1	17	70	62	53	37	19	2	0	0	0	0	0	0	70	0	11
2	0	0	0	0	0	0	0	0	0	0	0	8	27	41	39	37	21	3	0	0	0	0	0	0	41	0	7
3	0	0	0	0	0	0	0	0	0	0	0	5	8	9	57	49	26	4	0	0	0	0	0	0	57	0	7
4	0	0	0	0	0	0	0	0	0	0	0	7	12	24	21	17	25	2	0	0	0	0	0	0	25	0	5
5	0	0	0	0	0	0	0	0	0	0	0	7	23	30	23	20	10	1	0	0	0	0	0	0	30	0	5
6	0	0	0	0	0	0	0	0	0	0	0	9	21	40	52	34	21	3	0	0	0	0	0	0	52	0	7
7	0	0	0	0	0	0	0	0	0	0	1	17	25	36	46	39	19	3	0	0	0	0	0	0	46	0	8
8	0	0	0	0	0	0	0	0	0	0	0	4	25	32	39	32	15	2	0	0	0	0	0	0	39	0	6
9	0	0	0	0	0	0	0	0	0	0	0	8	33	38	43	47	11	1	0	0	0	0	0	0	47	0	8
10	0	0	0	0	0	0	0	0	0	0	0	10	29	53	101	70	30	4	0	0	0	0	0	0	101	0	12
11	0	0	0	0	0	0	0	0	0	0	0	6	30	34	28	29	11	2	0	0	0	0	0	0	34	0	6
12	0	0	0	0	0	0	0	0	0	0	0	3	9	20	23	12	5	1	0	0	0	0	0	0	23	0	3
13	0	0	0	0	0	0	0	0	0	0	0	7	34	66	53	18	11	2	0	0	0	0	0	0	66	0	8
14	0	0	0	0	0	0	0	0	0	0	1	16	57	92	79	32	18	2	0	0	0	0	0	0	92	0	12
15	0	0	0	0	0	0	0	0	0	0	0	2	16	20	49	26	10	2	0	0	0	0	0	0	49	0	5
16	0	0	0	0	0	0	0	0	0	0	0	6	58	82	49	16	7	1	0	0	0	0	0	0	82	0	9
17	0	0	0	0	0	0	0	0	0	0	0	5	16	32	40	43	16	2	0	0	0	0	0	0	43	0	6
18	0	0	0	0	0	0	0	0	0	0	0	6	21	35	28	27	10	1	0	0	0	0	0	0	35	0	5
19	0	0	0	0	0	0	0	0	0	0	0	4	20	38	41	21	17	1	0	0	0	0	0	0	41	0	6
20	0	0	0	0	0	0	0	0	0	0	0	5	21	47	82	39	12	2	0	0	0	0	0	0	82	0	9
21	0	0	0	0	0	0	0	0	0	0	0	5	21	35	42	43	26	3	0	0	0	0	0	0	43	0	7
22	0	0	0	0	0	0	0	0	0	0	0	5	30	33	39	47	23	2	0	0	0	0	0	0	47	0	7
23	0	0	0	0	0	0	0	0	0	0	0	8	42	62	89	51	21	5	0	0	0	0	0	0	89	0	12
24	0	0	0	0	0	0	0	0	0	0	0	7	34	73	62	42	23	2	0	0	0	0	0	0	73	0	10
25	0	0	0	0	0	0	0	0	0	0	0	4	17	38	36	32	16	2	0	0	0	0	0	0	38	0	6
26	0	0	0	0	0	0	0	0	0	0	0	7	43	74	44	26	25	5	0	0	0	0	0	0	74	0	9
27	0	0	0	0	0	0	0	0	0	0	0	6	44	77	63	29	19	4	0	0	0	0	0	0	77	0	10
28	0	0	0	0	0	0	0	0	0	0	0	9	45	83	72	24	16	4	0	0	0	0	0	0	83	0	11
29	0	0	0	0	0	0	0	0	0	0	0	8	45	87	77	22	16	5	0	0	0	0	0	0	87	0	11
30	0	0	0	0	0	0	0	0	0	0	0	9	47	91	83	22	16	5	0	0	0	0	0	0	91	0	11
31	0	0	0	0	0	0	0	0	0	0	0	9	48	91	87	22	16	5	0	0	0	0	0	0	91	0	12
Max.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**70**	**92**	**101**	**70**	**30**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**101**		
Min.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**8**	**9**	**21**	**12**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	
Avg.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**31**	**51**	**53**	**32**	**17**	**3**	**0**	**0**	**0**	**0**	**0**	**0**			**8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	973	971	970	969	968	967	966	965	965	964	963	963	962	961	960	960	960	959	959	959	959	959	959	959	973	959	963.4
2	959	960	959	959	959	959	958	958	958	958	958	958	958	957	957	956	956	955	954	954	953	953	952	952	960	952	956.8
3	952	952	952	951	951	951	951	951	951	950	951	951	951	951	951	951	951	952	952	952	953	953	953	954	954	950	951.6
4	954	954	955	955	955	956	956	956	956	956	957	957	957	957	957	956	957	956	956	957	957	957	957	957	957	954	956.3
5	958	958	957	958	958	958	958	958	959	959	960	960	960	960	961	961	961	961	962	962	963	963	963	964	964	957	960.1
6	964	965	965	965	966	965	966	967	967	966	967	966	966	966	966	966	966	965	964	964	964	964	964	963	967	963	965.3
7	964	964	964	964	963	963	963	962	962	962	962	962	963	963	962	963	964	966	966	967	967	968	968	969	969	962	964.2
8	970	970	971	971	971	971	972	972	972	972	971	972	971	972	971	971	971	971	970	970	970	969	968	968	972	968	970.6
9	968	967	967	966	966	966	965	965	965	966	966	966	967	967	967	966	966	967	967	967	967	968	968	968	968	965	966.6
10	969	969	969	969	969	969	969	969	970	970	970	970	970	971	971	970	971	970	971	971	971	972	972	972	972	969	970.2
11	972	972	972	972	972	972	973	974	973	974	974	974	974	975	974	975	975	975	975	975	976	976	975	976	976	972	974.0
12	975	976	976	975	975	974	974	974	973	974	974	974	974	974	973	973	973	974	975	974	975	975	977	975	977	973	974.4
13	978	979	979	980	981	981	981	982	983	984	985	985	985	986	986	986	986	986	985	985	984	985	985	985	986	978	983.4
14	985	985	984	984	982	982	981	981	980	979	977	978	978	977	977	976	976	976	975	975	973	973	972	971	985	971	978.2
15	970	970	969	969	969	969	970	972	972	972	972	973	974	974	974	974	974	974	974	974	974	973	973	973	974	969	972.2
16	974	974	975	976	977	978	979	980	981	983	985	986	988	988	989	990	990	991	991	992	992	992	992	991	992	974	984.7
17	991	991	990	990	989	987	987	986	985	983	983	981	980	980	979	979	979	979	980	980	980	980	981	982	991	979	983.5
18	983	983	983	984	984	985	986	986	987	988	989	990	991	992	992	992	993	993	994	993	993	992	993	994	994	983	989.2
19	994	994	994	993	993	993	991	992	991	992	991	991	990	990	990	988	988	988	987	988	988	988	989	989	994	987	990.4
20	990	991	991	991	990	990	990	989	988	988	988	987	987	987	987	987	987	987	987	988	988	990	990	990	991	987	988.6
21	990	991	991	991	991	990	989	989	989	989	988	987	986	985	983	982	981	979	977	976	975	976	976	975	991	975	984.5
22	976	978	979	980	980	980	980	981	982	982	984	985	986	988	990	990	991	991	990	990	989	989	989	989	991	976	985.0
23	990	990	992	993	995	995	996	998	999	1001	1001	1003	1003	1005	1005	1005	1006	1006	1006	1004	1004	1005	1004	1003	1006	990	000.4
24	1003	1002	1001	1000	998	997	995	993	990	990	988	987	986	985	983	981	980	979	978	977	976	975	974	974	1003	974	987.3
25	974	975	974	975	975	975	975	976	976	977	977	978	979	979	979	979	980	980	981	982	983	983	984	986	986	974	978.5
26	987	988	989	990	991	991	990	990	991	990	992	993	993	994	993	993	993	993	993	992	991	991	990	989	994	987	991.1
27	988	987	986	986	985	984	982	982	980	978	977	976	975	974	972	971	970	970	968	967	966	965	965	964	988	964	975.9
28	964	964	964	964	964	964	964	964	964	965	965	966	966	967	968	968	969	970	971	972	972	973	974	975	975	964	967.3
29	975	976	976	977	977	977	977	976	976	976	976	976	975	974	974	973	972	972	971	971	971	970	970	970	977	970	974.1
30	970	971	970	971	971	972	972	972	972	973	974	974	974	975	976	976	976	977	977	978	978	978	978	978	978	970	974.4
31	979	979	979	979	979	979	979	979	979	979	979	980	979	979	979	978	977	977	977	976	976	976	976	976	980	976	978.1
Max.	**1003**	**1002**	**1001**	**1000**	**998**	**997**	**996**	**998**	**999**	**1001**	**1001**	**1003**	**1003**	**1005**	**1005**	**1005**	**1006**	**1006**	**1006**	**1004**	**1004**	**1005**	**1004**	**1003**	**1006**		
Min.	**952**	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**950**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**952**	**952**	**952**	**953**	**953**	**952**	**952**		**950**	
Avg.	**976**	**976**	**976**	**976**	**976**	**975**	**975**	**975**	**975**	**975**	**976**	**976**	**976**	**976**	**976**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**975**			**975.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	976	976	976	976	975	975	975	975	975	975	974	974	974	973	973	973	972	972	972	972	972	972	973	973	976	972	973.9
2	973	973	974	974	974	975	975	975	976	976	977	978	979	979	980	980	981	982	982	982	983	983	984	984	984	973	978.3
3	984	985	986	986	985	985	983	982	983	983	982	982	982	981	981	980	979	979	979	979	979	978	978	978	986	978	981.6
4	978	978	978	977	977	977	976	976	976	976	976	977	977	977	976	976	976	976	976	976	976	976	976	977	978	976	976.5
5	977	977	977	978	977	978	977	978	977	977	977	976	976	976	975	974	974	973	972	972	971	971	970	970	978	970	975.1
6	969	969	969	969	969	969	969	969	969	969	970	970	970	971	971	972	972	973	973	974	975	975	975	976	976	969	971.1
7	976	977	978	979	979	979	981	981	982	983	983	984	985	985	985	986	986	986	986	986	987	987	987	987	987	976	983.2
8	987	988	987	987	987	987	987	987	986	986	986	986	985	985	983	982	982	981	981	980	979	978	976	976	988	976	983.8
9	974	973	972	971	971	970	969	968	967	966	965	964	964	963	963	962	961	961	961	961	961	961	961	962	974	961	965.5
10	962	962	962	962	962	962	962	961	961	961	961	961	961	961	961	961	960	960	960	960	960	960	961	961	962	960	961.0
11	961	961	961	961	961	961	961	961	961	961	962	962	962	962	962	962	962	962	962	963	963	964	965	966	966	961	962.0
12	967	968	969	970	971	972	973	974	974	975	976	976	977	977	976	976	975	975	974	973	973	972	971	969	977	967	973.0
13	968	966	966	964	962	960	959	957	956	954	954	954	954	953	952	952	952	951	951	951	950	950	950	950	968	950	955.6
14	949	949	948	949	949	949	949	949	950	953	954	955	955	957	957	957	958	959	959	960	960	962	963	964	964	948	954.7
15	966	967	969	970	971	973	974	975	977	978	979	979	980	981	980	981	982	981	981	979	980	980	979	979	982	966	976.7
16	978	977	977	975	974	972	971	970	968	966	964	963	963	962	962	963	963	964	964	966	967	967	968	968	978	962	967.9
17	968	969	968	967	967	965	964	962	960	959	956	953	953	951	950	949	949	949	951	953	954	955	957	958	969	949	957.8
18	959	959	959	958	958	958	958	958	959	961	963	964	965	965	966	965	966	966	966	966	966	966	966	966	966	958	962.6
19	966	965	963	962	958	957	955	954	952	950	949	947	946	945	943	942	940	940	940	941	942	943	944	945	966	940	949.4
20	946	948	951	953	954	955	956	957	958	959	960	960	960	959	958	958	957	956	955	955	954	953	953	954	960	946	955.4
21	953	953	952	952	952	951	952	951	952	952	952	953	954	955	955	955	956	957	958	959	960	961	961	962	962	951	954.9
22	963	964	964	965	966	966	967	968	968	969	970	971	972	973	974	975	975	977	978	979	980	980	981	982	982	963	972.0
23	983	983	984	984	984	985	985	986	986	987	987	988	988	988	988	988	988	988	987	988	988	988	988	988	988	983	986.5
24	989	988	988	988	988	988	987	988	988	988	988	988	988	988	988	988	988	987	988	987	987	987	986	986	989	986	987.6
25	986	985	984	984	982	981	981	981	981	981	981	981	981	981	980	980	980	980	980	980	980	981	981	981	986	980	981.6
26	982	982	982	982	981	981	981	981	980	980	980	979	978	978	977	976	976	975	974	974	974	974	973	973	982	973	978.0
27	973	973	973	974	974	974	974	974	975	975	975	975	975	975	975	975	974	974	974	973	973	973	973	973	975	973	974.0
28	973	973	973	973	972	972	972	972	972	972	972	973	973	973	973	973	973	973	973	973	974	974	974	974	974	972	972.8
29	973	973	973	973	972	972	971	970	970	970	969	969	969	968	967	967	966	966	965	964	964	963	963	963	973	963	968.4
Max.	**989**	**988**	**988**	**988**	**988**	**988**	**987**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**988**	**989**		
Min.	**946**	**948**	**948**	**949**	**949**	**949**	**949**	**949**	**950**	**950**	**949**	**947**	**946**	**945**	**943**	**942**	**940**	**940**	**940**	**941**	**942**	**943**	**944**	**945**		**940**	
Avg.	**971**	**971**	**971**	**971**	**971**	**971**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**970**	**971**			**970.4**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	963	963	962	962	962	962	962	962	962	963	963	964	964	964	964	964	964	963	963	962	962	962	962	962	964	962	962.8
2	962	962	962	962	963	963	963	964	965	967	968	969	970	970	970	970	971	971	972	972	973	974	974	975	975	962	967.9
3	975	976	976	976	975	975	974	974	973	973	972	972	972	973	973	973	973	974	974	976	976	976	977	977	977	972	974.4
4	977	977	977	977	977	976	975	975	975	975	975	975	975	976	975	975	975	975	975	975	975	974	973	972	977	972	975.3
5	970	968	966	964	963	961	960	959	958	958	957	956	955	956	956	956	958	957	958	958	959	960	961	961	970	955	959.8
6	963	963	964	964	965	965	966	966	965	965	965	965	965	965	964	964	963	962	962	960	959	958	957	955	966	955	962.8
7	954	953	953	952	951	950	950	949	949	949	950	950	950	951	951	951	952	953	953	954	956	957	958	960	960	949	952.4
8	961	962	963	964	965	965	966	966	967	967	967	967	967	966	965	964	963	962	962	961	960	960	959	958	967	958	963.5
9	957	957	956	956	956	955	955	955	955	955	956	956	957	958	959	959	960	960	961	962	963	963	964	965	965	955	958.3
10	966	967	968	969	969	970	971	972	973	973	974	975	975	975	975	975	976	976	976	976	976	977	977	977	977	966	973.3
11	978	978	978	979	979	979	979	979	980	980	980	981	981	981	982	982	982	982	982	982	983	983	983	984	984	978	980.7
12	984	985	985	986	986	986	986	986	987	987	988	988	988	988	988	988	988	988	988	988	988	989	989	989	989	984	987.2
13	989	989	990	990	990	990	990	990	991	991	991	992	992	993	993	993	993	993	993	993	993	994	993	993	994	989	991.6
14	993	993	993	993	993	993	992	992	992	991	991	990	990	990	989	988	988	986	986	985	984	983	982	981	993	981	989.2
15	980	980	979	978	977	976	976	975	975	975	975	975	975	974	974	973	972	972	971	970	970	969	969	968	980	968	974.2
16	967	967	966	966	965	965	964	964	964	964	964	963	963	963	962	962	961	961	960	960	961	961	961	961	967	960	963.1
17	961	962	962	963	963	963	963	963	964	964	964	965	965	965	965	965	965	965	966	967	968	968	968	968	968	961	964.6
18	968	969	969	969	969	970	970	970	971	971	971	971	972	972	972	972	972	972	972	971	971	971	971	972	972	968	970.7
19	971	971	972	972	972	972	972	973	972	973	973	974	974	974	974	975	975	975	975	976	976	976	976	976	976	971	973.7
20	976	976	977	977	977	977	977	977	977	977	978	978	978	978	978	978	978	977	977	977	976	976	976	975	978	975	977.1
21	975	974	974	974	973	973	973	973	973	973	973	974	974	973	973	973	973	973	973	973	973	973	973	974	975	973	973.3
22	973	973	973	972	972	971	971	971	971	971	971	971	970	971	971	970	971	970	970	970	970	971	971	971	973	970	971.1
23	971	971	971	970	970	970	970	970	969	969	969	969	969	968	969	969	969	968	968	968	968	968	968	968	971	968	969.2
24	968	968	969	969	969	969	969	970	970	971	971	971	971	971	972	972	972	972	972	973	973	974	974	975	975	968	971.1
25	976	977	977	978	978	978	979	979	980	981	981	981	981	981	982	982	982	981	982	982	982	982	983	983	983	976	980.3
26	983	984	984	984	984	984	985	985	985	986	986	986	987	987	987	987	987	987	987	987	988	988	989	989	989	983	986.1
27	989	990	990	990	990	990	990	990	990	990	991	991	991	991	991	991	991	991	991	991	992	992	992	992	992	989	990.7
28	992	993	993	993	993	993	993	993	994	993	994	994	993	993	993	992	992	991	991	990	990	990	990	990	994	990	992.2
29	990	990	989	989	989	989	988	988	988	987	987	986	986	986	986	985	985	984	984	983	983	982	982	982	990	982	986.1
30	981	981	981	981	980	980	980	980	980	981	981	981	982	982	982	982	982	983	984	983	983	985	985	986	986	980	981.9
31	985	986	986	985	985	984	985	984	984	984	984	984	984	984	983	982	982	980	980	979	978	978	978	978	986	978	982.6
Max.	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**994**	**993**	**994**	**994**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**993**	**994**	**993**	**993**	**994**		
Min.	**954**	**953**	**953**	**952**	**951**	**950**	**950**	**949**	**949**	**949**	**950**	**950**	**950**	**951**	**951**	**951**	**952**	**953**	**953**	**954**	**956**	**957**	**957**	**955**		**949**	
Avg.	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**975**	**975**	**975**	**975**	**975**	**975**	**974**	**974**	**974**	**975**	**975**	**975**	**975**			**974.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	977	977	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	977	977	978	978	979	979	976	976.5
2	979	980	981	982	983	983	984	985	985	986	986	986	986	987	987	985	985	984	984	984	983	983	982	982	987	979	983.9
3	982	981	981	981	981	981	981	981	980	980	980	980	980	979	979	978	978	977	977	976	976	976	975	974	982	974	979.0
4	974	973	974	973	972	972	971	971	972	972	972	973	973	973	973	973	973	973	974	974	975	977	978	979	979	971	973.6
5	980	981	982	982	982	983	983	984	984	984	984	984	984	984	984	983	983	982	982	983	983	984	984	984	984	980	983.1
6	984	984	984	984	984	984	984	984	984	984	984	983	983	983	983	983	982	982	982	982	982	982	983	983	984	982	983.1
7	983	983	984	984	985	985	985	985	984	985	985	985	985	985	985	985	984	984	984	983	983	984	983	983	985	983	984.2
8	983	982	982	982	981	980	980	980	979	979	978	978	977	977	976	975	975	975	975	975	975	975	975	976	983	975	977.9
9	976	976	977	977	977	978	978	978	978	978	978	978	978	978	978	978	978	978	978	977	978	978	979	979	979	976	977.8
10	979	979	980	980	980	981	981	982	982	983	984	984	984	985	985	985	985	985	986	986	986	987	987	988	988	979	983.6
11	988	988	988	989	989	989	989	989	990	990	990	990	990	990	990	989	989	988	988	988	987	987	987	986	990	986	988.6
12	986	985	985	984	984	983	983	982	982	982	982	982	981	981	980	980	980	980	979	979	979	979	978	978	986	978	981.5
13	977	977	977	976	976	976	976	975	975	975	974	974	975	974	975	974	975	976	975	975	975	976	976	977	977	974	975.6
14	977	977	977	977	977	978	979	979	979	980	980	980	979	980	979	979	979	979	978	978	978	978	977	977	980	977	978.5
15	977	976	976	975	974	973	972	972	972	972	973	973	974	974	974	976	977	977	979	980	982	983	985	985	985	972	976.2
16	986	987	988	990	991	992	993	994	996	997	998	999	1000	1000	1000	1001	1001	1001	1001	1001	1002	1002	1002	1003	1003	986	996.8
17	1004	1004	1004	1005	1006	1006	1007	1007	1007	1008	1008	1009	1009	1010	1010	1009	1010	1009	1010	1009	1009	1010	1010	1010	1010	1004	007.9
18	1010	1010	1010	1010	1010	1010	1010	1009	1009	1009	1009	1009	1009	1008	1008	1007	1007	1006	1006	1006	1005	1005	1005	1005	1010	1005	008.0
19	1005	1004	1004	1003	1003	1002	1002	1002	1001	1001	1001	1000	1000	1000	999	999	999	998	997	997	997	997	997	996	1005	996	000.2
20	996	996	995	995	995	994	994	994	994	993	994	994	994	994	994	994	995	995	994	995	994	994	994	994	996	993	994.3
21	995	994	994	994	995	995	995	995	995	995	995	995	995	995	995	995	996	995	995	994	995	995	995	995	996	994	995.0
22	995	995	995	995	995	995	995	995	995	995	995	995	995	994	994	993	993	993	992	992	992	992	992	993	995	992	993.9
23	993	992	992	992	992	991	991	991	991	990	990	990	990	989	989	989	988	988	988	988	988	988	988	988	993	988	989.8
24	988	988	988	988	989	989	989	988	988	988	988	988	988	988	987	987	987	986	986	985	985	985	985	985	989	985	987.2
25	985	985	985	986	986	986	985	985	985	985	986	986	985	985	984	984	984	983	983	983	982	983	983	982	986	982	984.4
26	982	982	981	981	980	979	979	978	977	976	975	974	974	973	972	972	971	971	971	970	970	970	970	970	982	970	974.9
27	969	969	968	969	969	969	969	969	969	969	970	970	971	971	972	973	974	975	976	977	978	978	980	980	980	968	972.2
28	980	981	981	982	982	983	983	983	984	984	984	984	985	985	985	985	984	984	984	984	984	984	984	985	985	980	983.6
29	985	985	984	984	984	984	984	984	984	984	984	984	984	984	983	983	983	982	982	982	982	982	982	982	985	982	983.4
30	982	981	981	981	981	980	980	980	980	980	980	980	980	980	979	979	979	979	980	980	980	980	981	981	982	979	980.2
Max.	**1010**	**1010**	**1010**	**1010**	**1010**	**1010**	**1010**	**1009**	**1009**	**1009**	**1009**	**1009**	**1009**	**1010**	**1010**	**1009**	**1010**	**1009**	**1010**	**1009**	**1009**	**1010**	**1010**	**1010**	**1010**		
Min.	**969**	**969**	**968**	**969**	**969**	**969**	**969**	**969**	**969**	**969**	**970**	**970**	**971**	**971**	**972**	**972**	**971**	**971**	**971**	**970**	**970**	**970**	**970**	**970**		**968**	
Avg.	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**986**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**	**985**			**985.2**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	981	981	981	981	981	981	981	981	981	981	981	981	980	980	979	979	979	978	977	977	977	976	977	976	981	976	979.4
2	976	975	975	975	974	974	974	975	975	975	975	976	976	976	977	977	977	977	977	978	978	978	979	979	979	974	976.2
3	980	980	980	980	980	980	981	981	980	980	980	980	980	979	979	979	979	978	977	977	977	978	977	977	981	977	979.2
4	977	977	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	975	975	975	975	976	976	976	977	975	975.9
5	976	976	976	976	976	976	977	977	977	977	978	978	978	979	979	980	980	980	981	981	982	983	984	985	985	976	978.9
6	985	986	986	987	987	988	988	988	988	989	989	990	990	990	989	989	989	989	989	989	989	989	989	989	990	985	988.5
7	989	989	988	988	988	988	988	987	987	987	986	986	986	986	986	986	985	985	985	985	984	984	984	984	989	984	986.3
8	983	983	983	982	982	982	982	981	981	981	981	980	980	980	980	979	979	978	977	977	977	977	977	977	983	977	980.1
9	977	976	976	975	975	975	976	976	976	976	976	976	976	977	977	977	977	977	977	977	977	977	977	977	977	975	976.3
10	977	977	977	977	977	977	977	977	977	977	977	977	976	977	976	976	976	976	975	975	975	975	975	974	977	974	976.3
11	974	974	973	972	972	970	970	969	968	967	966	966	965	964	962	961	960	959	958	957	956	956	955	955	974	955	964.5
12	954	954	953	953	952	952	951	951	951	951	951	951	952	952	952	953	954	954	954	955	955	956	956	957	957	951	953.1
13	958	959	960	961	962	963	964	964	965	966	967	967	968	968	969	969	970	970	970	971	971	971	971	970	971	958	966.4
14	969	969	968	966	965	964	963	961	960	959	958	956	956	955	955	955	955	954	955	955	956	957	958	959	969	954	959.5
15	960	961	962	964	965	967	968	969	971	972	973	975	976	977	978	979	980	981	982	983	984	985	986	987	987	960	974.3
16	987	988	989	989	990	990	990	991	991	991	991	991	991	990	990	990	989	989	989	988	988	988	988	988	991	987	989.4
17	988	988	987	987	987	987	986	986	986	986	986	986	986	985	985	985	985	984	984	984	984	985	985	985	988	984	985.7
18	986	986	986	986	987	987	987	987	988	988	988	989	989	989	989	990	989	989	990	989	990	990	990	991	991	986	988.4
19	990	991	990	990	990	990	990	990	989	989	989	989	988	988	987	987	986	986	986	985	985	985	985	985	991	985	987.9
20	985	984	984	984	984	983	983	983	982	982	982	982	982	981	981	981	981	981	981	981	981	981	982	982	985	981	982.2
21	982	983	983	983	984	984	984	985	985	986	986	987	987	987	987	988	988	989	989	990	990	991	992	993	993	982	986.9
22	994	994	995	995	996	996	996	996	996	996	996	996	996	995	994	994	994	994	993	993	992	991	991	990	996	990	994.3
23	989	988	986	985	983	984	984	983	983	983	982	983	983	984	985	986	987	987	988	989	990	989	989	990	990	982	985.9
24	990	989	989	989	989	990	989	990	989	989	989	989	988	989	989	989	989	988	989	990	990	990	991	991	991	988	989.4
25	992	992	992	993	993	993	994	994	995	995	995	995	995	996	996	996	996	996	997	997	997	997	998	998	998	992	995.0
26	998	998	998	999	998	998	998	999	999	999	999	999	998	998	998	998	998	998	998	997	998	998	998	998	999	997	998.2
27	999	999	999	999	999	998	999	999	998	999	998	998	998	998	997	997	997	996	996	996	996	996	997	997	999	996	997.6
28	997	997	996	996	996	996	996	995	995	995	995	995	995	994	994	994	993	993	993	992	992	992	992	992	997	992	994.4
29	992	992	992	991	991	991	990	990	990	990	990	989	989	989	988	988	987	987	986	986	986	986	986	986	992	986	988.8
30	986	986	986	985	985	985	985	985	985	985	985	984	985	984	984	984	985	985	985	985	985	985	986	986	986	984	985.0
31	986	986	985	986	985	985	985	985	985	985	985	984	984	984	984	984	983	983	982	981	981	981	980	980	986	980	983.7
Max.	**999**	**999**	**999**	**999**	**999**	**998**	**999**	**999**	**999**	**999**	**999**	**999**	**998**	**998**	**998**	**998**	**998**	**998**	**998**	**997**	**998**	**998**	**998**	**998**	**999**		
Min.	**954**	**954**	**953**	**953**	**952**	**952**	**951**	**951**	**951**	**951**	**951**	**951**	**952**	**952**	**952**	**953**	**954**	**954**	**954**	**955**	**955**	**956**	**955**	**955**		**951**	
Avg.	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**			**982.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	979	979	979	978	978	977	976	976	976	976	975	974	975	974	974	974	973	973	973	973	973	973	973	973	979	973	975.2
2	973	972	972	972	972	971	971	971	971	971	971	970	970	970	969	969	969	968	968	968	968	968	968	968	973	968	970.0
3	968	968	968	967	967	967	967	968	968	968	968	968	968	968	969	969	969	969	970	970	971	971	971	971	971	967	968.7
4	972	972	972	971	971	971	971	971	970	971	971	970	970	970	970	970	970	970	970	970	970	971	971	971	972	970	970.7
5	971	971	971	971	970	970	970	970	970	969	970	970	970	970	970	970	970	971	971	972	972	973	973	974	974	969	970.7
6	974	974	975	975	976	976	977	977	978	978	978	979	979	979	979	979	979	979	980	981	980	981	982	983	983	974	978.2
7	983	983	984	984	985	985	985	985	985	986	986	986	986	986	986	986	985	985	985	985	986	986	987	988	988	983	985.4
8	988	989	989	989	989	989	989	989	989	989	989	989	989	989	990	989	989	989	990	989	989	989	990	990	990	988	989.2
9	990	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	990	990	990	990	990	990	990	991	991	990	990.5
10	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	991	992	992	992	991	991.0
11	992	992	992	993	992	992	993	992	992	993	993	993	992	993	993	993	992	992	992	992	993	993	993	993	993	992	992.5
12	993	993	993	993	993	993	993	992	992	992	992	991	991	990	990	989	989	989	989	989	989	989	989	989	993	989	991.0
13	989	989	988	988	988	988	988	988	989	989	989	989	989	990	990	990	990	990	989	990	990	990	991	991	991	988	989.2
14	991	992	992	992	993	993	993	993	994	994	994	994	994	994	994	994	994	994	994	996	994	995	995	995	996	991	993.7
15	996	996	996	996	996	996	996	996	996	995	995	995	995	995	994	994	994	994	994	993	993	992	992	992	996	992	994.7
16	992	992	991	991	991	991	990	990	990	990	990	990	990	990	990	990	990	989	989	989	988	988	989	989	992	988	990.0
17	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	988	988	988	988	988	989	989	989	989	988	988.7
18	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	990	989	990	990	990	991	991	989	989.9
19	991	991	991	991	991	991	991	991	991	991	991	991	991	991	990	990	990	990	989	989	989	989	989	989	991	989	990.4
20	989	989	989	988	988	988	988	987	987	987	987	987	986	986	986	985	985	985	985	985	985	985	985	985	989	985	986.5
21	985	985	985	984	984	984	983	983	983	983	982	982	982	982	981	981	981	981	981	981	981	982	982	982	985	981	982.4
22	983	983	983	984	984	984	984	984	985	985	985	985	986	986	986	987	987	987	987	988	988	988	988	988	988	983	985.6
23	988	988	988	987	987	987	987	986	986	985	985	985	984	984	983	983	982	982	981	981	981	981	981	981	988	981	984.3
24	981	981	981	981	980	980	980	980	980	980	980	979	979	980	979	980	980	979	979	978	978	978	978	978	981	978	979.5
25	978	977	977	977	976	976	976	976	975	975	975	975	975	975	974	974	974	974	974	975	975	975	975	976	978	974	975.4
26	975	976	976	976	976	976	976	975	975	975	975	975	975	975	976	976	975	976	975	975	976	976	976	976	976	975	975.6
27	977	977	977	977	977	978	978	978	978	978	978	978	978	978	978	978	977	977	977	977	977	978	978	978	978	977	977.6
28	978	978	979	978	978	979	979	979	979	980	980	980	981	981	981	982	983	983	983	984	984	985	986	986	986	978	981.1
29	987	987	988	988	989	989	990	990	990	991	991	991	992	992	992	992	992	992	992	992	992	992	993	993	993	987	990.7
30	993	993	993	993	993	993	993	993	993	993	992	992	992	992	992	991	991	991	990	990	990	990	990	990	993	990	991.8
Max.	**996**	**996**	**996**	**996**	**996**	**996**	**996**	**996**	**996**	**995**	**995**	**995**	**995**	**995**	**994**	**994**	**994**	**994**	**994**	**996**	**994**	**995**	**995**	**995**	**996**		
Min.	**968**	**968**	**968**	**967**	**967**	**967**	**967**	**968**	**968**	**968**	**968**	**968**	**968**	**968**	**969**	**969**	**969**	**968**	**968**	**968**	**968**	**968**	**968**	**968**		**967**	
Avg.	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**	**984**			**984.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	989	990	989	989	988	988	988	988	987	987	987	986	986	986	985	985	985	985	986	985	986	985	985	985	990	985	986.7
2	986	986	986	986	985	985	985	984	985	984	984	984	983	982	981	981	980	979	979	978	978	978	977	977	986	977	982.2
3	976	976	975	974	974	974	973	973	972	973	973	973	972	972	972	972	972	972	973	972	973	973	973	974	976	972	973.3
4	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974	973	973	973	973	973	973	973	973	973	974	973	973.8
5	973	973	973	973	973	973	972	972	973	972	972	972	972	972	972	972	972	972	972	972	972	972	973	973	973	972	972.4
6	973	973	974	974	973	973	973	973	974	974	974	974	975	975	975	976	976	976	976	977	978	978	979	979	979	973	975.2
7	980	980	980	980	981	981	981	982	983	984	984	984	985	985	985	985	985	985	985	984	985	985	985	985	985	980	983.3
8	985	985	985	985	985	985	985	985	985	985	985	985	985	985	985	984	984	984	984	984	984	984	984	984	985	984	984.5
9	984	984	984	984	984	984	984	984	984	983	984	984	985	985	985	985	985	985	985	986	986	987	987	987	987	983	984.8
10	988	988	988	988	988	989	989	989	989	989	989	989	989	989	989	989	989	989	989	990	989	990	990	991	991	988	989.1
11	991	991	991	991	992	991	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	991	991.8
12	992	993	992	992	991	991	990	990	989	989	988	988	988	988	988	988	988	987	987	987	987	987	987	987	993	987	989.0
13	988	988	988	988	989	988	989	989	989	990	990	990	990	991	991	991	991	991	991	991	991	991	991	991	991	988	989.9
14	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	991	991	991	990	990	990	990	990	990	992	990	991.3
15	990	990	990	990	990	989	989	989	989	988	988	988	988	988	988	987	987	987	987	987	987	987	987	987	990	987	988.3
16	987	987	986	986	986	985	985	985	984	985	984	984	984	983	982	982	982	981	981	981	981	981	981	981	987	981	983.5
17	981	981	981	981	983	983	983	983	983	983	983	983	983	983	983	982	982	982	982	981	981	981	981	981	983	981	982.1
18	981	980	980	980	979	979	979	978	978	978	978	978	978	978	978	977	977	977	976	976	976	976	976	976	981	976	977.9
19	976	975	975	974	974	974	973	973	973	973	973	973	973	973	973	973	973	973	974	974	974	975	975	975	976	973	973.8
20	976	976	976	976	976	976	976	976	976	977	977	977	978	978	977	977	977	978	977	977	976	976	976	975	978	975	976.6
21	975	975	975	974	974	974	974	975	975	976	976	977	977	977	978	978	978	978	979	979	979	980	980	980	980	974	976.9
22	981	981	981	981	981	981	981	981	981	981	980	980	980	980	980	980	980	980	980	980	979	979	979	979	981	979	980.3
23	979	979	979	979	979	979	979	979	979	979	979	979	979	979	979	978	978	978	977	978	978	978	978	978	979	977	978.5
24	978	978	978	978	978	978	978	978	978	978	979	979	979	979	979	979	978	978	978	978	978	978	978	978	979	978	978.3
25	978	979	979	979	979	978	979	979	978	978	979	978	978	978	978	977	977	977	977	977	977	977	977	978	979	977	978.0
26	978	978	978	978	979	979	979	979	979	979	979	979	980	980	980	980	979	979	979	979	978	979	979	979	980	978	978.9
27	978	978	978	978	978	978	978	978	978	978	978	978	978	979	979	979	980	980	980	980	981	981	982	982	982	978	979.1
28	982	982	982	983	983	983	983	983	982	983	983	983	983	983	983	983	982	982	982	982	981	981	982	982	983	981	982.4
29	982	982	982	981	981	981	982	981	982	981	981	981	981	981	981	981	981	980	981	981	981	982	982	983	983	980	981.3
30	982	983	982	982	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	983	984	984	982	982.9
31	984	984	983	983	983	983	982	983	982	982	982	982	982	982	982	981	981	980	980	980	980	980	980	980	984	980	981.8
Max.	**992**	**993**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**993**		
Min.	**973**	**973**	**973**	**973**	**973**	**973**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**973**	**973**		**972**	
Avg.	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**982**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**981**	**982**			**981.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	981	981	981	981	981	981	982	982	982	982	982	983	983	983	983	982	982	983	983	983	983	984	984	985	985	981	982.3
2	986	986	986	987	987	987	987	988	988	988	988	988	988	988	988	989	989	989	989	989	990	990	990	990	990	986	988.2
3	991	991	991	991	991	991	991	991	991	992	991	992	992	992	992	992	992	992	992	991	992	992	992	992	992	991	991.4
4	992	992	992	992	992	992	992	992	992	992	992	992	992	991	991	991	991	990	990	990	990	991	991	991	992	990	991.4
5	991	991	991	990	990	990	990	990	990	990	990	990	990	990	989	989	989	989	989	989	989	989	989	990	991	989	989.7
6	990	990	990	989	990	990	990	990	990	990	990	990	990	989	989	989	988	988	988	988	988	988	988	988	990	988	989.1
7	988	988	987	987	987	987	987	987	987	986	986	986	986	986	985	985	985	984	984	984	984	984	984	984	988	984	985.9
8	984	984	984	983	983	983	983	983	983	983	982	982	982	982	982	981	981	981	981	980	980	981	981	981	984	980	982.1
9	981	981	981	981	980	980	980	980	981	981	981	981	980	981	981	981	981	981	981	981	982	982	982	983	983	980	980.9
10	983	983	984	984	984	984	984	985	985	985	985	985	985	985	984	985	984	984	984	984	984	985	985	985	985	983	984.4
11	985	985	985	985	984	984	984	984	984	984	984	983	983	983	982	982	981	981	980	980	979	979	979	979	985	979	982.5
12	978	978	977	976	976	976	975	975	974	973	973	973	972	971	971	970	970	970	970	970	970	969	969	969	978	969	972.7
13	969	968	968	968	967	967	968	968	968	968	968	968	967	968	968	968	968	969	969	970	970	971	971	971	971	967	968.4
14	972	972	972	973	973	973	974	974	975	976	976	977	977	978	978	979	979	980	980	981	981	982	982	983	983	972	976.9
15	983	984	984	985	985	985	986	986	986	987	987	987	987	987	987	987	987	987	987	987	987	987	987	987	987	983	986.2
16	987	986	986	986	986	986	986	986	986	985	985	985	985	985	984	984	984	983	983	982	982	982	982	982	987	982	984.6
17	982	981	981	980	980	979	979	979	978	978	978	977	977	976	976	976	975	975	974	974	974	974	974	973	982	973	977.1
18	973	973	973	973	973	972	972	971	971	971	971	971	971	971	971	971	970	970	970	971	971	971	972	972	973	970	971.5
19	972	973	973	973	974	974	974	975	975	976	976	976	976	976	976	976	976	976	975	976	976	976	976	976	976	972	975.1
20	977	976	976	976	976	975	975	975	975	975	975	975	974	974	974	974	973	973	973	973	973	973	973	973	977	973	974.5
21	973	973	973	973	973	973	973	973	973	973	973	973	973	974	974	974	974	973	974	974	974	974	974	975	975	973	973.4
22	975	975	975	975	975	975	975	975	975	975	975	975	975	975	974	974	974	974	973	973	973	973	973	973	975	973	974.5
23	973	973	973	973	972	972	972	972	972	972	972	972	972	972	971	971	971	971	971	971	971	971	970	970	973	970	971.7
24	970	969	969	968	968	967	967	966	966	965	965	965	965	965	964	964	964	964	964	964	964	965	965	965	970	964	965.7
25	965	965	966	966	966	966	967	967	967	967	968	968	968	968	968	968	967	967	967	967	967	967	967	967	968	965	967.0
26	968	968	968	968	968	968	968	969	969	969	970	970	971	970	971	971	971	970	970	971	971	972	972	972	972	968	969.8
27	972	972	972	972	972	972	972	973	973	973	973	974	974	974	974	974	974	974	974	974	975	975	975	976	976	972	973.6
28	976	976	976	977	977	977	977	977	978	978	979	979	979	980	980	980	980	981	981	981	982	983	983	983	983	976	979.2
29	984	984	985	985	986	986	986	986	987	987	987	987	987	987	987	987	987	987	987	987	987	987	988	988	988	984	986.5
30	988	988	988	988	988	988	987	987	987	987	988	987	987	987	986	986	985	984	984	983	983	982	982	982	988	982	985.9
31	981	981	980	979	978	976	976	975	974	974	973	972	972	971	970	970	969	969	968	968	968	968	968	968	981	968	972.9
Max.	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**991**	**992**	**992**	**992**	**992**	**992**		
Min.	**965**	**965**	**966**	**966**	**966**	**966**	**967**	**966**	**966**	**965**	**965**	**965**	**965**	**965**	**964**	**964**	**964**	**964**	**964**	**964**	**964**	**965**	**965**	**965**		**964**	
Avg.	**980**	**980**	**980**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**	**979**			**979.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	968	968	969	968	969	969	969	969	970	970	970	971	971	971	972	972	972	973	973	973	974	974	974	975	975	968	971.0
2	975	975	975	975	976	976	976	976	976	976	976	977	976	976	976	975	975	974	973	973	972	972	972	972	977	972	974.8
3	972	973	972	972	973	973	974	975	975	976	977	978	979	979	980	980	981	981	982	982	983	984	984	985	985	972	977.9
4	986	986	986	987	987	987	987	988	988	988	988	988	989	989	989	989	988	988	988	988	989	989	989	989	989	986	987.9
5	990	990	990	990	990	990	990	990	990	991	991	991	991	991	991	991	991	992	992	992	992	992	992	992	992	990	990.9
6	992	992	992	992	991	991	990	989	988	988	987	986	985	984	983	982	981	980	979	978	976	976	975	975	992	975	984.7
7	975	974	974	973	973	972	972	972	972	972	972	973	973	974	974	974	975	975	976	976	977	978	978	979	979	972	974.3
8	980	981	981	982	982	982	982	983	983	982	982	982	981	980	980	978	977	976	975	975	973	973	972	972	983	972	978.9
9	971	971	971	970	970	970	969	969	969	969	969	969	969	969	969	969	968	968	968	968	967	967	967	967	971	967	968.8
10	967	967	967	966	966	966	966	966	966	966	966	966	967	967	967	967	967	967	967	968	969	969	970	970	970	966	967.1
11	971	972	973	973	974	974	974	975	975	975	976	976	977	977	977	977	976	976	976	976	976	977	976	976	977	971	975.2
12	976	975	975	975	975	974	974	974	975	975	975	975	976	975	975	975	974	974	974	974	974	974	974	974	976	974	974.5
13	973	973	973	973	973	972	972	972	972	972	973	973	974	973	973	973	972	971	971	970	970	970	970	970	974	970	972.0
14	970	970	969	969	970	970	970	970	971	971	971	972	972	972	973	973	973	974	974	975	976	977	978	979	979	969	972.5
15	979	979	980	980	980	981	981	981	981	981	981	982	982	982	982	982	982	982	982	982	982	982	982	982	982	979	981.3
16	982	981	981	980	980	979	979	978	978	977	977	977	976	975	975	975	974	974	974	974	974	974	974	975	982	974	976.9
17	974	974	974	974	974	974	974	974	973	973	973	972	972	972	972	971	970	970	969	968	967	967	966	965	974	965	971.4
18	964	963	962	962	961	961	961	961	961	961	960	961	961	962	962	962	963	963	964	965	965	966	967	967	967	960	962.7
19	967	968	968	968	968	968	968	968	969	969	970	970	970	970	970	970	971	971	971	972	973	973	974	974	974	967	970.1
20	975	975	976	976	977	977	977	977	978	978	979	979	980	980	980	980	980	981	981	981	981	982	982	983	983	975	978.9
21	983	983	984	984	984	984	984	985	985	985	986	986	986	986	986	987	987	987	987	988	988	988	989	989	989	983	985.9
22	989	989	990	989	990	990	990	990	990	990	990	990	990	989	989	989	989	988	988	988	988	988	988	988	990	988	989.0
23	988	988	987	987	987	987	987	987	987	987	987	987	987	987	987	986	986	986	986	986	986	986	985	985	988	985	986.5
24	985	985	984	984	984	983	983	983	982	982	982	982	982	981	981	981	980	980	980	980	980	980	980	980	985	980	981.8
25	980	979	979	979	979	979	979	979	979	980	980	980	980	980	980	980	980	980	980	980	980	981	981	981	981	979	979.8
26	981	981	981	981	981	981	981	981	981	981	981	981	980	980	980	980	980	980	980	980	980	980	980	980	981	980	980.3
27	980	980	980	980	980	980	980	980	981	981	982	982	982	982	982	982	982	982	983	983	983	984	984	984	984	980	981.6
28	984	984	984	984	984	984	984	983	984	983	983	983	983	982	982	981	981	980	980	980	980	980	980	980	984	980	982.1
29	980	980	980	981	981	981	981	981	981	981	981	981	982	982	981	981	980	980	979	979	979	979	978	978	982	978	980.3
30	978	977	977	976	976	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	976	976	978	975	975.5
Max.	**992**	**992**	**992**	**992**	**991**	**991**	**990**	**990**	**990**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**991**	**992**	**992**	**992**	**992**	**992**	**992**	**992**	**992**		
Min.	**964**	**963**	**962**	**962**	**961**	**961**	**961**	**961**	**961**	**961**	**960**	**961**	**961**	**962**	**962**	**962**	**963**	**963**	**964**	**965**	**965**	**966**	**966**	**965**		**960**	
Avg.	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**	**978**			**977.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	976	976	976	976	976	976	976	976	976	977	977	977	977	976	976	976	975	975	974	974	974	974	974	973	977	973	975.6
2	973	973	972	972	971	971	970	970	969	969	968	968	967	966	966	965	964	964	963	963	962	962	962	962	973	962	967.2
3	962	961	961	961	960	960	960	961	961	962	962	963	964	964	965	965	966	966	967	967	967	968	968	968	968	960	963.7
4	969	969	969	969	969	969	969	968	969	968	968	968	968	968	967	967	967	967	967	967	967	967	967	967	969	967	967.8
5	967	967	967	967	967	967	967	967	968	968	968	968	969	968	969	969	969	969	969	970	970	970	971	971	971	967	968.5
6	971	972	972	972	972	972	972	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	973	971	972.8
7	974	974	974	974	974	974	975	975	976	976	977	978	978	979	980	980	981	982	982	983	984	985	985	985	985	974	978.6
8	986	987	988	988	989	989	990	990	991	991	991	992	992	991	991	991	990	990	989	989	988	988	987	986	992	986	989.4
9	985	984	983	982	981	979	979	977	976	975	974	972	970	968	966	965	963	961	960	959	958	957	957	956	985	956	970.4
10	956	956	956	956	956	957	958	959	960	961	962	962	963	963	963	963	963	963	963	964	964	964	964	964	964	956	960.8
11	964	963	963	963	962	962	962	962	962	963	964	965	966	966	967	967	967	969	970	972	973	974	975	976	976	962	966.6
12	977	977	978	978	979	979	980	981	982	983	983	984	984	985	985	985	985	985	986	986	986	986	987	986	987	977	982.7
13	986	985	985	984	983	982	981	980	980	978	978	977	976	975	974	974	973	972	972	972	972	971	971	971	986	971	977.2
14	971	971	971	971	971	971	970	971	971	971	971	971	971	971	971	970	970	969	969	969	969	969	969	969	971	969	970.3
15	969	969	969	969	969	970	970	971	971	971	971	972	972	972	972	972	973	973	973	973	973	973	974	974	974	969	971.5
16	974	974	975	975	975	975	975	975	975	976	976	976	976	976	976	976	976	976	977	977	977	977	977	977	977	974	975.9
17	977	977	977	977	977	977	977	977	977	977	977	976	976	976	976	975	975	974	974	973	973	973	973	972	977	972	975.6
18	972	972	972	971	971	971	971	970	970	970	970	970	970	970	969	968	968	967	967	967	966	966	966	965	972	965	969.2
19	965	965	964	964	964	964	964	963	964	964	964	965	965	965	965	965	966	966	967	968	968	969	970	970	970	963	965.6
20	970	971	971	971	971	971	972	972	973	973	974	974	975	975	976	976	976	976	976	977	977	977	977	978	978	970	974.2
21	978	978	978	978	978	978	978	978	978	978	978	978	978	978	977	976	976	975	974	974	973	973	972	972	978	972	976.4
22	971	971	970	970	970	969	968	969	968	968	968	968	968	968	967	966	965	964	963	963	962	962	962	962	971	962	966.8
23	962	961	961	961	961	960	961	961	961	962	962	963	964	965	966	966	967	968	969	969	968	969	969	969	969	960	964.4
24	969	970	971	971	972	973	975	977	979	980	982	983	984	985	986	986	987	987	988	988	989	990	990	990	990	969	981.3
25	990	990	990	990	990	990	990	990	990	990	991	990	991	990	990	989	988	988	987	987	987	986	986	986	991	986	989.1
26	985	985	984	983	983	982	982	982	982	982	982	982	982	982	982	982	982	982	983	983	984	984	985	983	985	982	982.9
27	985	986	987	987	986	987	988	988	988	989	990	990	991	990	990	990	990	990	990	990	990	990	990	989	991	985	988.8
28	989	987	986	985	984	983	982	981	980	980	979	978	977	976	975	974	973	973	972	972	972	972	972	972	989	972	978.1
29	972	972	972	972	973	973	973	974	974	975	975	976	976	977	977	977	977	978	978	979	979	979	980	980	980	972	975.7
30	981	981	981	982	982	983	983	983	984	984	984	985	985	985	985	985	985	985	985	985	985	985	985	984	985	981	983.9
31	984	984	984	983	983	982	982	981	981	980	980	980	979	979	978	978	977	977	977	977	977	977	977	977	984	977	979.7
Max.	**990**	**990**	**990**	**990**	**990**	**990**	**990**	**990**	**991**	**991**	**991**	**992**	**992**	**991**	**991**	**991**	**990**	**990**	**990**	**990**	**990**	**990**	**990**	**990**	**992**		
Min.	**956**	**956**	**956**	**956**	**956**	**957**	**958**	**959**	**960**	**961**	**962**	**962**	**963**	**963**	**963**	**963**	**963**	**961**	**960**	**959**	**958**	**957**	**957**	**956**		**956**	
Avg.	**975**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**974**	**975**	**975**	**975**	**975**	**975**	**975**	**975**	**974**	**974**	**974**	**974**	**975**	**975**	**975**	**975**			**974.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	977	977	977	977	977	977	977	977	977	977	977	977	977	977	976	976	975	975	975	975	975	974	974	974	977	974	976.0
2	973	973	973	972	972	972	971	971	970	970	969	970	969	969	970	970	970	969	970	970	969	970	970	970	973	969	970.5
3	970	970	971	971	971	972	972	973	973	973	974	974	975	975	976	976	976	977	977	977	977	977	977	977	977	970	974.3
4	977	978	978	978	978	978	978	978	978	978	979	979	979	979	979	979	979	979	979	979	979	978	978	978	979	977	978.5
5	978	978	977	977	977	977	976	976	976	976	976	975	975	975	975	974	974	974	974	974	974	974	974	974	978	974	975.4
6	974	974	974	974	973	973	973	972	972	972	971	971	971	971	971	971	970	970	970	969	969	969	969	970	974	969	971.4
7	970	971	971	971	972	973	973	974	975	976	977	977	978	979	979	979	980	980	981	981	981	982	982	982	982	970	976.9
8	983	983	983	982	982	982	982	981	981	982	981	981	980	979	978	977	976	975	974	973	972	970	969	968	983	968	978.1
9	967	966	965	964	963	962	962	961	961	960	960	959	959	959	958	958	957	957	957	957	957	957	957	957	967	957	960.0
10	957	956	955	954	953	952	952	950	949	948	949	949	949	949	949	949	949	950	951	951	951	952	953	953	957	948	951.2
11	953	953	952	952	952	951	951	951	951	951	951	951	951	951	950	950	951	951	951	952	953	953	954	954	954	950	951.6
12	955	956	956	957	957	958	959	959	960	961	962	964	964	965	966	967	968	968	969	970	970	971	972	972	972	955	963.6
13	973	973	974	974	974	975	975	975	976	976	976	976	977	977	977	977	977	978	978	979	979	979	980	980	980	973	976.5
14	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	980	981	981	981	982	982	983	983	980	980.4
15	983	984	984	985	985	986	986	986	986	987	987	987	987	987	987	987	987	987	987	987	987	987	987	987	987	983	986.3
16	987	987	987	987	987	987	988	988	989	989	990	990	990	990	991	990	990	990	990	990	990	990	990	991	991	987	989.1
17	991	990	990	990	990	990	990	989	989	989	990	989	989	989	989	988	988	988	988	988	989	989	989	990	991	988	989.2
18	990	990	991	992	992	992	992	993	993	994	994	995	995	995	995	995	995	995	995	996	996	996	996	996	996	990	994.1
19	996	996	995	995	995	994	993	993	992	992	992	991	990	990	989	988	988	987	987	987	986	985	986	985	996	985	990.5
20	984	985	983	982	982	982	982	980	982	982	982	981	980	979	978	978	977	977	976	976	975	975	974	974	985	974	979.4
21	973	973	973	973	973	971	971	971	970	969	969	969	967	967	966	965	964	963	962	962	961	961	960	960	973	960	967.2
22	960	960	960	960	960	961	961	961	962	962	963	964	964	965	965	965	966	966	967	967	968	968	968	969	969	960	963.8
23	969	969	968	968	968	967	967	967	966	965	965	963	962	961	960	958	957	956	955	954	953	952	951	950	969	950	961.3
24	949	948	947	946	946	945	944	944	945	946	946	946	947	947	948	948	949	950	950	951	951	952	954	955	955	944	948.1
25	956	958	959	959	959	960	960	959	960	960	961	962	962	962	963	964	964	965	966	967	968	968	969	970	970	956	962.6
26	970	971	972	973	973	974	974	975	975	975	976	976	976	977	977	977	977	975	974	973	973	972	972	971	977	970	974.1
27	971	970	969	968	967	965	965	964	963	962	961	960	960	959	957	956	955	955	955	954	954	954	953	953	971	953	960.4
28	953	953	953	953	953	953	953	953	954	954	955	956	956	956	957	957	957	958	958	959	960	961	962	963	963	953	956.0
29	964	964	965	966	967	968	968	969	970	972	973	973	974	975	976	976	977	978	979	980	981	982	983	984	984	964	973.5
30	985	985	986	987	987	987	987	988	988	989	989	990	990	991	992	991	993	993	993	993	995	995	995	996	996	985	990.2
Max.	**996**	**996**	**995**	**995**	**995**	**994**	**993**	**993**	**993**	**994**	**994**	**995**	**995**	**995**	**995**	**995**	**995**	**995**	**995**	**996**	**996**	**996**	**996**	**996**	**996**		
Min.	**949**	**948**	**947**	**946**	**946**	**945**	**944**	**944**	**945**	**946**	**946**	**946**	**947**	**947**	**948**	**948**	**949**	**950**	**950**	**951**	**951**	**952**	**951**	**950**		**944**	
Avg.	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**973**	**973**	**973**	**973**	**972**	**972**	**972**	**972**	**972**	**972**	**972**	**973**	**973**	**973**			**972.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Barometric Pressure (mbar)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	996	996	997	997	997	997	997	997	997	997	998	998	998	998	998	998	997	997	997	997	997	997	998	997	998	996	997.3
2	997	997	996	996	995	993	993	993	993	992	992	991	991	990	990	989	989	989	989	989	989	989	989	989	997	989	991.7
3	988	988	987	987	986	984	983	983	982	980	978	978	977	974	971	971	970	969	969	969	968	968	969	969	988	968	977.0
4	969	968	969	969	969	969	968	968	968	969	970	970	970	970	970	969	969	969	969	970	970	971	971	971	971	968	969.3
5	971	972	972	971	971	971	971	971	971	971	971	971	971	970	970	970	969	969	969	969	969	969	970	970	972	969	970.4
6	970	970	970	971	971	970	971	971	971	972	972	973	973	974	974	974	974	975	975	976	976	976	977	978	978	970	973.1
7	978	979	979	979	980	980	981	981	981	982	982	982	982	982	982	982	981	981	981	981	980	980	979	978	982	978	980.6
8	977	975	973	972	969	968	966	964	962	960	958	956	955	952	950	949	947	946	946	945	944	943	943	942	977	942	956.8
9	941	941	941	941	941	942	942	942	942	943	944	945	946	946	947	948	949	950	952	953	955	956	957	959	959	941	946.8
10	960	962	963	965	967	968	970	971	973	975	977	978	980	981	982	983	984	985	986	987	988	989	991	992	992	960	977.4
11	993	993	994	995	995	995	996	996	997	998	999	999	1000	1001	1001	1002	1003	1004	1005	1006	1006	1007	1008	1009	1009	993	000.2
12	1009	1010	1010	1010	1010	1010	1010	1010	1009	1010	1010	1010	1010	1009	1009	1008	1008	1008	1009	1009	1009	1010	1010	1011	1011	1008	009.5
13	1013	1013	1013	1013	1012	1011	1011	1011	1010	1011	1012	1012	1012	1012	1012	1012	1012	1011	1011	1011	1010	1010	1009	1009	1013	1009	011.4
14	1009	1009	1009	1008	1008	1007	1007	1007	1006	1007	1007	1007	1006	1005	1005	1004	1004	1004	1004	1004	1004	1004	1004	1004	1009	1004	006.0
15	1004	1004	1004	1004	1004	1004	1004	1004	1005	1005	1005	1006	1006	1006	1006	1005	1005	1006	1006	1005	1005	1005	1005	1005	1006	1004	005.0
16	1004	1004	1004	1003	1003	1003	1002	1002	1001	1001	1001	1001	1000	1000	999	998	997	997	996	996	996	995	995	995	1004	995	999.8
17	995	995	995	995	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	993	993	993	992	995	992	994.1
18	992	992	992	992	991	990	990	989	989	988	989	989	989	988	987	987	986	986	986	986	985	985	985	985	992	985	988.3
19	984	984	984	984	984	984	984	984	984	984	984	984	984	984	984	983	983	983	983	983	983	983	983	983	984	983	983.6
20	983	984	984	984	985	985	985	985	986	986	987	987	988	988	988	988	988	988	989	989	989	989	989	989	989	983	986.8
21	989	989	989	989	989	989	989	989	989	988	988	988	989	988	988	988	988	987	987	987	987	986	986	985	989	985	988.0
22	985	984	984	983	983	981	980	980	979	979	979	979	979	979	978	978	977	976	975	974	973	972	971	970	985	970	978.3
23	968	966	964	962	961	960	961	962	964	965	967	969	970	970	971	972	972	973	973	973	974	975	975	976	976	960	968.5
24	977	979	979	981	981	982	983	984	985	985	986	986	986	986	985	986	985	985	984	984	982	981	979	978	986	977	982.8
25	977	976	974	972	970	968	966	965	964	963	961	961	961	960	960	960	960	962	962	963	965	966	966	968	977	960	965.4
26	968	970	970	971	971	971	972	971	971	971	971	972	972	971	970	970	970	969	968	968	968	967	968	968	972	967	969.9
27	967	967	967	965	965	966	966	966	966	967	967	966	968	968	969	969	969	969	972	972	973	974	974	975	975	965	968.6
28	976	976	976	978	977	977	977	978	976	977	977	977	977	977	977	977	977	977	977	977	978	978	978	978	978	976	977.1
29	979	979	979	979	979	979	979	979	979	979	980	980	980	980	981	981	981	981	982	982	982	983	983	984	984	979	980.4
30	984	985	985	985	985	986	986	986	985	985	986	986	987	986	986	986	986	986	986	986	986	986	986	986	987	984	985.8
31	986	986	986	986	986	986	986	986	986	986	987	986	987	987	987	986	986	987	987	987	988	988	988	988	988	986	986.6
Max.	**1013**	**1013**	**1013**	**1013**	**1012**	**1011**	**1011**	**1011**	**1010**	**1011**	**1012**	**1012**	**1012**	**1012**	**1012**	**1012**	**1012**	**1011**	**1011**	**1011**	**1010**	**1010**	**1010**	**1011**	**1013**		
Min.	**941**	**941**	**941**	**941**	**941**	**942**	**942**	**942**	**942**	**943**	**944**	**945**	**946**	**946**	**947**	**948**	**947**	**946**	**946**	**945**	**944**	**943**	**943**	**942**		**941**	
Avg.	**984**	**984**	**984**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**	**983**			**983.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.5	11.8	12.9	11.4	10.5	12.3	12.1	11.5	11.3	9.6	9.9	11.3	11.5	11.3	13.2	12.5	12.9	12.4	10.9	13.0	13.2	10.8	9.4	9.2	13.2	9.2	11.4
2	7.5	8.3	8.1	9.4	8.8	8.9	8.0	8.9	8.1	6.2	6.3	6.9	4.7	5.7	6.2	5.8	7.7	6.8	5.1	4.8	4.4	4.7	4.8	4.5	9.4	4.4	6.7
3	4.1	3.7	3.1	2.9	2.9	2.1	3.9	2.0	2.2	3.8	5.1	5.4	7.2	7.9	7.8	6.6	6.4	7.2	5.8	6.4	5.8	5.3	6.1	5.6	7.9	2.0	5.0
4	5.0	5.3	4.7	5.6	4.3	5.7	5.7	5.0	5.7	4.7	4.7	5.8	7.5	6.4	6.1	7.6	7.6	10.1	10.5	11.3	10.9	11.9	11.5	13.1	13.1	4.3	7.3
5	13.3	10.2	10.5	9.0	9.3	9.2	10.2	11.0	10.0	8.8	8.2	7.6	8.2	8.7	7.1	6.6	7.5	6.2	7.8	5.5	9.3	8.2	6.0	6.3	13.3	5.5	8.5
6	6.7	5.9	4.9	7.7	8.8	8.4	8.7	5.1	6.4	6.7	6.9	9.2	8.5	6.4	6.4	7.2	7.2	7.8	9.4	8.8	8.7	8.2	7.0	6.4	9.4	4.9	7.4
7	7.4	6.8	6.3	6.4	7.3	6.9	6.4	7.4	9.0	8.9	7.9	8.3	10.2	8.3	10.4	8.9	10.5	6.8	5.0	7.3	6.8	5.5	4.9	4.5	10.5	4.5	7.4
8	5.7	5.8	6.0	6.6	6.9	7.2	7.2	7.4	6.7	6.4	5.5	5.3	6.1	4.9	6.8	7.1	8.5	7.6	9.2	7.5	8.0	8.3	8.0	7.9	9.2	4.9	6.9
9	9.9	10.9	10.5	10.2	10.6	10.4	10.6	11.6	9.9	9.2	8.4	7.5	7.4	7.4	7.8	8.3	7.9	5.4	6.7	5.2	5.8	4.6	5.0	3.3	11.6	3.3	8.1
10	6.3	6.3	5.5	4.2	5.3	6.2	5.4	5.9	7.0	7.8	8.3	9.6	7.3	8.2	7.6	8.2	8.2	7.4	6.9	8.4	6.3	6.7	5.5	5.9	9.6	4.2	6.9
11	6.3	4.9	6.7	8.5	10.2	10.9	8.1	6.4	7.7	7.5	7.4	11.6	11.0	9.6	8.7	9.7	7.8	8.2	9.9	8.7	8.6	9.8	9.5	8.6	11.6	4.9	8.6
12	8.4	7.6	7.2	8.9	7.5	8.1	9.1	9.1	8.2	8.5	8.6	8.8	9.1	10.9	9.5	9.9	10.5	9.4	7.0	11.0	11.3	11.6	7.9	10.6	11.6	7.0	9.1
13	12.3	6.0	8.0	7.4	6.1	7.4	9.5	11.7	8.8	7.0	6.7	9.2	9.1	5.6	6.1	5.5	5.0	7.5	9.4	11.0	11.2	12.3	9.1	6.7	12.3	5.0	8.3
14	7.7	4.2	3.6	2.0	1.2	1.8	1.7	2.2	2.2	1.0	3.5	4.0	7.1	7.5	7.6	8.4	8.4	8.3	7.2	7.7	6.9	6.8	8.4	11.0	11.0	1.0	5.4
15	11.6	11.5	12.4	13.5	11.6	10.6	10.8	11.2	8.7	12.0	10.3	9.0	9.0	9.1	8.0	7.1	8.9	7.8	7.7	7.1	5.6	3.8	6.3	8.1	13.5	3.8	9.2
16	5.5	2.4	2.8	2.2	0.7	1.1	0.9	1.8	2.0	1.0	1.1	1.1	1.1	1.3	0.9	0.8	0.8	1.2	1.7	1.0	0.8	1.2	0.8	2.3	5.5	0.7	1.5
17	1.7	0.8	0.8	1.2	5.0	7.1	6.8	7.5	4.6	5.6	7.4	9.3	13.1	9.8	7.3	6.3	6.0	7.4	7.3	4.7	4.5	5.2	7.0	4.1	13.1	0.8	5.9
18	3.6	3.4	4.2	5.2	6.9	7.2	5.9	5.6	4.9	5.0	2.0	2.4	2.9	2.1	1.1	2.2	1.8	1.7	1.0	3.0	5.6	6.6	7.3	8.0	8.0	1.0	4.2
19	5.8	4.7	7.7	7.7	7.0	5.3	12.3	11.2	10.3	9.3	9.5	10.9	13.6	14.7	15.9	17.5	16.0	15.5	18.0	17.6	18.2	18.6	18.3	16.9	18.6	4.7	12.6
20	14.0	9.9	7.2	6.2	4.5	3.4	3.9	2.9	2.4	2.4	1.9	2.5	1.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	14.0	0.2	2.7
21	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	7.3	7.9	7.3	7.8	9.7	10.5	11.3	11.0	9.2	11.4	15.5	16.3	17.1	16.7	16.6	14.2	17.1	0.2	8.0
22	13.2	10.3	6.6	10.6	10.4	9.5	10.7	11.1	9.5	9.7	12.0	12.6	12.9	13.1	9.0	8.0	7.0	2.9	2.8	1.6	1.1	1.0	1.7	3.9	13.2	1.0	8.0
23	4.0	5.7	7.3	7.4	8.2	9.7	12.0	12.9	12.1	10.2	8.9	8.2	7.0	5.7	5.8	6.9	8.7	7.2	5.1	8.7	9.1	7.1	8.1	6.0	12.9	4.0	8.0
24	7.3	4.4	4.5	2.7	1.7	4.7	5.2	2.0	3.7	6.6	7.7	8.5	7.7	6.5	7.5	9.7	10.0	10.4	10.3	9.0	7.3	6.7	7.2	6.1	10.4	1.7	6.6
25	6.4	4.2	2.3	2.5	4.0	4.1	4.7	4.2	6.6	6.2	7.9	8.3	7.9	7.3	6.6	7.7	7.3	7.8	9.8	9.9	9.3	9.5	12.1	8.5	12.1	2.3	6.9
26	8.8	9.4	10.4	8.9	9.9	11.6	11.9	14.2	13.9	14.7	8.3	5.7	5.5	5.1	2.8	2.8	2.7	2.5	1.9	1.5	1.3	1.1	1.3	1.5	14.7	1.1	6.6
27	1.5	1.2	3.3	4.4	3.2	3.4	4.7	5.7	8.8	11.5	14.5	14.5	14.8	14.0	15.3	15.3	15.7	14.3	12.7	12.2	13.7	13.6	13.4	13.0	15.7	1.2	10.2
28	12.3	10.5	10.0	9.3	8.2	6.6	5.5	6.1	9.0	7.6	7.4	6.5	6.8	6.1	5.0	3.7	1.8	0.7	1.3	2.6	2.0	1.5	2.8	3.3	12.3	0.7	5.7
29	3.2	2.1	1.7	2.5	4.1	4.0	3.1	4.7	2.9	3.3	3.9	3.4	1.0	0.9	2.6	4.1	3.0	4.9	4.9	3.7	1.8	1.7	1.5	1.3	4.9	0.9	2.9
30	0.6	1.3	1.9	3.0	4.5	4.8	5.4	6.1	6.3	6.3	6.6	8.0	8.1	9.8	8.4	8.3	9.1	8.7	9.7	10.2	10.7	10.8	10.5	11.7	11.7	0.6	7.1
31	10.7	9.9	10.7	10.0	8.5	9.2	7.6	6.8	6.7	5.7	4.7	1.8	1.5	0.8	1.7	1.1	1.3	1.8	1.1	1.3	1.0	1.7	0.6	1.3	10.7	0.6	4.5
Max.	**14.0**	**11.8**	**12.9**	**13.5**	**11.6**	**12.3**	**12.3**	**14.2**	**13.9**	**14.7**	**14.5**	**14.5**	**14.8**	**14.7**	**15.9**	**17.5**	**16.0**	**15.5**	**18.0**	**17.6**	**18.2**	**18.6**	**18.3**	**16.9**	**18.6**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.4**	**2.0**	**1.0**	**1.1**	**1.1**	**1.0**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**7.1**	**6.1**	**6.2**	**6.4**	**6.4**	**6.7**	**7.0**	**7.1**	**7.2**	**7.1**	**7.1**	**7.5**	**7.7**	**7.3**	**7.1**	**7.2**	**7.3**	**7.0**	**7.1**	**7.3**	**7.3**	**7.2**	**7.1**	**6.9**			**7.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.0	1.1	0.9	1.1	0.8	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.1	0.2	0.4
2	0.2	0.3	0.4	1.0	4.4	6.3	6.7	9.1	9.2	8.3	8.3	7.6	8.8	10.7	7.9	7.8	7.4	6.4	6.8	9.7	10.2	10.3	10.8	8.4	10.8	0.2	7.0
3	7.2	8.2	8.7	6.6	8.8	11.6	12.5	13.2	13.4	13.7	14.4	10.3	8.6	8.0	8.5	7.1	6.7	7.5	8.2	7.8	7.9	8.1	9.3	8.8	14.4	6.6	9.4
4	8.9	8.4	6.8	7.6	7.8	6.6	6.3	5.6	6.1	4.4	5.7	5.6	6.4	6.2	6.6	6.5	10.5	10.8	11.1	12.7	13.5	12.6	14.6	13.3	14.6	4.4	8.5
5	10.9	11.3	10.8	11.1	11.4	8.9	11.0	9.5	11.1	8.6	8.4	8.5	8.7	7.6	7.4	6.3	7.9	8.7	8.1	7.8	8.3	8.3	9.0	9.5	11.4	6.3	9.1
6	9.3	7.5	6.0	6.1	6.3	7.6	6.5	8.6	9.9	10.3	9.3	10.9	12.1	12.1	13.1	10.5	10.3	11.1	12.8	8.1	9.1	9.5	9.7	9.3	13.1	6.0	9.4
7	11.1	9.7	8.0	10.7	10.0	10.2	7.8	7.8	9.4	7.8	8.7	7.7	6.0	6.7	3.3	5.7	5.4	6.5	5.2	4.0	1.5	4.0	4.8	5.7	11.1	1.5	7.0
8	5.1	3.9	2.4	1.8	3.6	3.5	3.6	3.3	3.2	3.1	3.3	2.6	2.4	2.2	2.5	2.2	3.7	3.2	1.6	1.4	1.7	2.6	6.7	6.6	6.7	1.4	3.2
9	9.4	12.1	12.3	12.7	13.4	12.2	11.2	10.3	9.7	10.0	8.3	4.5	3.2	4.4	5.4	1.0	0.8	2.9	7.7	8.5	9.7	10.4	9.8	10.4	13.4	0.8	8.3
10	9.8	9.7	11.2	11.2	11.1	10.4	9.8	8.3	8.4	9.1	6.8	5.6	5.1	5.5	4.2	4.8	5.2	5.4	4.0	5.0	4.6	4.2	6.4	5.6	11.2	4.0	7.1
11	5.3	2.6	1.6	0.5	1.0	1.1	0.9	0.9	0.8	0.8	0.6	0.6	0.9	1.5	2.1	2.0	1.5	1.4	1.4	1.4	1.0	0.8	1.6	2.4	5.3	0.5	1.5
12	2.5	2.9	1.2	1.1	2.2	3.6	4.3	4.9	4.9	5.6	5.3	6.3	6.4	7.6	5.4	5.1	5.0	5.8	5.0	4.0	3.4	4.0	2.5	2.3	7.6	1.1	4.2
13	1.3	2.7	3.7	9.7	10.0	10.6	9.4	8.0	9.5	11.0	12.6	13.2	11.9	10.5	7.6	11.4	11.1	11.5	10.9	9.6	11.0	10.6	8.8	8.5	13.2	1.3	9.4
14	8.9	9.4	9.4	10.3	8.6	7.0	6.9	7.2	12.7	12.0	11.2	10.1	10.7	11.1	9.8	10.4	10.4	9.6	9.0	7.7	7.3	4.5	1.2	1.8	12.7	1.2	8.6
15	4.6	3.6	6.4	5.3	7.0	5.1	5.9	5.2	3.4	2.5	2.6	4.0	4.5	3.8	2.9	3.4	2.9	3.5	3.5	2.9	2.4	2.1	1.2	6.0	7.0	1.2	4.0
16	6.9	9.5	8.0	6.1	6.5	7.3	8.8	6.9	6.6	9.6	11.3	13.3	12.3	11.6	10.0	7.5	5.3	4.9	3.8	4.5	4.7	5.9	4.8	3.8	13.3	3.8	7.5
17	1.6	0.9	3.1	2.5	4.3	8.2	5.5	5.8	6.7	5.8	6.2	9.9	9.5	10.1	9.8	7.6	5.9	10.3	15.1	13.2	12.4	12.1	13.4	11.7	15.1	0.9	8.0
18	12.0	13.0	11.1	12.4	14.4	16.2	16.5	16.6	15.9	14.4	12.5	9.7	9.0	8.9	9.8	9.9	6.8	5.3	6.8	6.0	6.5	6.9	6.9	6.1	16.6	5.3	10.6
19	5.7	5.1	2.9	2.4	7.1	7.4	6.1	7.5	7.1	7.0	7.8	9.5	9.0	9.2	8.5	7.0	7.5	9.9	9.1	9.5	5.8	2.2	2.0	3.5	9.9	2.0	6.6
20	6.4	13.1	13.3	12.4	12.2	14.5	14.9	13.2	13.3	13.1	10.6	7.2	5.9	7.7	8.7	6.2	2.4	5.9	6.8	8.7	9.5	9.6	9.9	10.4	14.9	2.4	9.8
21	9.7	9.3	9.3	11.4	11.8	11.8	10.3	10.3	10.9	10.0	10.2	10.2	10.8	8.1	7.8	7.5	7.2	4.9	2.9	1.5	2.1	1.6	2.6	1.8	11.8	1.5	7.7
22	1.5	3.4	1.9	1.1	1.1	0.9	1.4	1.8	2.5	2.3	0.9	1.4	2.2	3.3	8.7	10.1	10.8	12.2	9.3	7.7	6.9	5.7	5.6	6.0	12.2	0.9	4.5
23	3.8	2.2	2.2	1.6	2.3	3.0	3.0	3.2	3.3	2.2	2.7	2.2	1.1	2.5	2.7	4.8	5.2	5.1	4.4	7.3	7.3	7.8	5.1	7.3	7.8	1.1	3.8
24	5.3	8.3	7.8	9.6	7.5	9.4	11.4	9.1	8.0	8.6	8.2	8.3	9.1	8.8	7.9	6.9	8.1	7.6	8.9	10.7	8.7	8.6	8.5	9.7	11.4	5.3	8.5
25	10.1	11.9	9.1	10.5	9.4	13.6	12.5	11.0	8.1	6.9	5.8	5.4	6.2	5.1	5.4	6.8	5.0	2.9	2.3	3.1	7.3	5.7	6.6	5.6	13.6	2.3	7.3
26	5.0	3.8	4.4	3.1	4.7	5.5	5.7	4.9	5.2	6.0	5.8	5.4	3.0	3.8	4.9	5.9	6.4	6.7	8.7	8.5	10.6	9.5	9.6	8.7	10.6	3.0	6.1
27	9.0	9.6	11.1	9.4	8.5	7.9	7.7	6.7	6.0	4.7	4.2	4.2	4.4	4.0	5.5	5.1	4.2	7.1	4.0	2.9	1.9	2.2	4.1	3.9	11.1	1.9	5.8
28	4.2	2.7	2.9	7.5	10.0	9.8	9.6	8.7	7.9	8.0	4.9	4.5	5.9	6.9	6.6	6.9	6.6	6.7	6.4	6.7	7.6	7.7	8.4	8.0	10.0	2.7	6.9
29	8.7	8.6	8.2	7.8	8.2	7.7	8.4	9.0	8.2	8.1	7.3	7.3	7.4	7.8	7.9	7.1	6.9	4.4	6.1	5.9	4.7	3.2	4.2	3.7	9.0	3.2	6.9
Max.	**12.0**	**13.1**	**13.3**	**12.7**	**14.4**	**16.2**	**16.5**	**16.6**	**15.9**	**14.4**	**14.4**	**13.3**	**12.3**	**12.1**	**13.1**	**11.4**	**11.1**	**12.2**	**15.1**	**13.2**	**13.5**	**12.6**	**14.6**	**13.3**	**16.6**		
Min.	**0.2**	**0.3**	**0.4**	**0.5**	**0.8**	**0.6**	**0.4**	**0.4**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**6.4**	**6.7**	**6.4**	**6.7**	**7.4**	**7.9**	**7.8**	**7.5**	**7.6**	**7.4**	**7.0**	**6.8**	**6.6**	**6.8**	**6.6**	**6.3**	**6.1**	**6.5**	**6.6**	**6.5**	**6.5**	**6.2**	**6.5**	**6.5**			**6.8**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.4	5.6	4.8	4.5	5.1	4.8	3.9	3.8	1.3	1.0	1.4	1.6	1.5	1.0	3.5	5.5	5.3	5.8	7.4	8.2	10.4	8.8	5.9	6.4	10.4	1.0	4.7
2	7.2	8.2	8.2	8.2	6.9	6.6	8.0	9.2	8.9	8.0	6.3	5.9	4.3	4.8	4.6	4.6	3.8	3.5	4.7	4.3	3.9	4.5	2.8	2.7	9.2	2.7	5.8
3	3.0	4.0	5.4	5.5	5.2	8.7	10.6	13.9	13.9	13.3	13.2	15.2	16.1	14.2	15.2	16.3	15.4	13.4	13.4	14.2	11.6	12.4	11.8	10.0	16.3	3.0	11.5
4	10.0	9.8	9.7	9.1	8.1	9.3	11.0	11.7	11.4	12.5	12.9	12.0	12.3	10.9	10.4	10.7	10.6	12.0	11.3	12.9	12.8	11.7	11.6	12.1	12.9	8.1	11.1
5	12.1	11.7	8.7	10.4	8.6	7.9	8.2	9.7	8.4	8.8	10.5	12.6	11.1	10.9	14.7	14.6	13.2	12.9	12.6	15.5	16.3	14.0	13.8	14.1	16.3	7.9	11.7
6	12.9	13.0	13.1	11.3	8.8	8.3	7.2	7.2	10.1	11.0	10.2	9.9	9.7	10.7	9.1	8.2	8.7	8.6	7.1	6.0	3.2	7.5	8.2	7.9	13.1	3.2	9.1
7	6.5	6.2	3.2	1.8	2.8	2.4	2.1	3.1	4.3	5.4	5.0	4.8	4.5	4.2	3.2	1.7	2.5	3.6	4.2	6.1	5.8	4.2	2.7	5.7	6.5	1.7	4.0
8	7.7	9.0	2.8	1.9	1.9	3.4	3.8	3.8	2.4	2.7	2.8	6.9	5.8	4.8	6.5	8.3	9.1	10.4	10.1	10.6	11.6	11.6	11.4	10.7	11.6	1.9	6.7
9	11.1	10.1	11.5	10.9	9.8	9.3	8.9	8.3	8.2	7.6	3.4	2.0	2.6	3.7	5.3	4.4	4.3	4.4	5.2	5.2	4.7	4.7	2.9	2.1	11.5	2.0	6.3
10	2.6	2.3	1.1	1.8	5.3	8.0	7.0	2.8	2.3	3.2	1.3	2.2	1.5	1.6	3.7	4.3	4.3	3.7	3.8	2.3	1.8	2.2	2.4	2.3	8.0	1.1	3.1
11	2.4	3.3	3.1	5.8	3.0	3.3	2.0	3.8	4.7	2.9	1.7	1.1	2.1	4.8	3.5	3.5	4.8	3.8	2.8	4.1	5.0	5.0	5.1	5.0	5.8	1.1	3.6
12	5.1	6.1	5.9	5.2	5.1	4.8	3.6	3.6	3.4	2.8	3.0	2.5	2.1	2.2	3.0	2.1	1.3	2.6	2.5	2.9	2.6	1.5	1.4	1.1	6.1	1.1	3.2
13	2.6	3.2	3.7	4.4	4.5	4.4	4.7	4.9	4.5	5.1	4.9	5.5	4.9	4.5	5.1	4.5	5.1	4.6	4.2	5.2	4.9	3.6	3.5	2.7	5.5	2.6	4.4
14	2.8	4.1	3.7	1.9	1.3	1.3	1.0	1.1	0.8	0.5	0.6	0.4	0.2	0.3	2.0	2.1	1.2	1.3	2.5	3.6	4.5	5.9	6.1	7.3	7.3	0.2	2.4
15	9.2	10.7	10.8	10.3	8.4	7.9	7.8	10.1	9.6	8.7	7.5	9.1	10.0	9.6	9.3	8.6	8.1	8.3	7.9	7.7	7.7	6.3	5.5	4.7	10.8	4.7	8.5
16	4.7	5.5	4.9	5.0	4.2	4.4	5.1	5.0	4.5	2.0	1.7	1.8	1.5	1.7	2.2	2.5	2.5	2.6	3.6	2.6	3.3	4.3	5.0	4.3	5.5	1.5	3.5
17	4.3	4.9	4.8	5.2	5.1	5.5	5.2	4.5	4.5	4.7	4.2	3.1	2.0	1.3	0.9	0.8	1.0	4.0	12.6	12.0	9.3	8.7	8.5	5.0	12.6	0.8	5.1
18	1.7	1.5	1.5	2.7	4.0	4.4	6.3	5.3	6.7	6.6	7.5	7.0	6.5	6.6	6.0	6.0	7.5	6.4	6.2	7.7	6.1	4.4	4.7	7.3	7.7	1.5	5.4
19	10.1	10.0	8.5	8.2	5.3	7.3	9.6	8.2	9.1	9.1	9.1	9.2	9.8	9.1	8.9	10.3	9.5	7.8	8.3	8.2	6.7	5.9	7.1	5.2	10.3	5.2	8.4
20	5.2	6.8	6.6	6.4	5.6	5.5	5.4	4.4	4.9	4.2	3.7	3.0	3.0	1.8	1.4	1.9	2.8	3.4	4.9	5.4	5.1	4.9	6.9	6.9	6.9	1.4	4.6
21	5.8	4.8	4.2	3.9	4.2	3.9	3.2	2.4	1.4	1.2	1.9	2.0	1.7	4.8	5.8	9.2	9.0	10.1	10.6	10.7	11.1	7.4	11.3	10.5	11.3	1.2	5.9
22	11.1	10.5	8.6	9.3	9.7	9.3	9.4	10.1	12.8	12.8	12.1	13.3	11.6	11.1	9.4	9.1	10.4	7.1	7.4	2.4	3.1	6.1	5.0	3.8	13.3	2.4	9.0
23	4.9	5.0	5.7	5.7	4.5	4.5	6.5	5.2	4.4	4.9	5.7	5.9	6.1	7.0	5.8	6.3	5.5	5.0	4.4	5.5	5.9	7.8	8.1	7.7	8.1	4.4	5.7
24	7.1	7.2	5.7	4.8	5.2	5.0	4.8	4.3	3.8	4.8	4.9	5.0	5.1	5.6	3.8	1.8	4.0	2.3	3.9	5.2	4.7	3.7	1.6	0.8	7.2	0.8	4.4
25	1.2	1.6	1.9	2.6	2.4	1.5	0.8	0.9	0.9	1.2	1.8	2.0	2.9	4.5	4.8	4.9	3.5	3.7	4.1	5.0	6.3	7.1	8.1	8.2	8.2	0.8	3.4
26	6.9	5.1	2.7	2.0	1.6	1.9	5.0	5.7	5.4	3.9	5.4	5.0	3.6	3.0	4.7	5.0	5.2	5.2	3.7	1.7	3.0	4.7	5.5	5.5	6.9	1.6	4.2
27	4.3	4.8	4.8	4.5	4.3	5.3	5.5	5.0	4.4	4.4	5.5	4.7	5.4	6.1	6.4	5.3	5.6	5.8	6.8	5.8	4.8	4.1	6.3	8.7	8.7	4.1	5.4
28	9.2	8.5	7.0	7.3	7.9	6.4	5.4	5.6	4.8	4.0	3.2	2.5	2.4	2.6	2.8	2.8	2.9	2.7	3.2	3.5	3.0	3.0	2.4	1.9	9.2	1.9	4.4
29	1.4	1.4	0.7	1.0	1.2	1.1	1.1	1.5	1.2	4.4	3.3	5.9	10.0	10.6	9.8	10.4	11.2	11.3	9.7	8.8	7.2	8.3	12.5	11.0	12.5	0.7	6.1
30	12.1	11.9	11.6	12.4	13.4	15.7	16.1	14.0	13.8	14.4	12.5	12.9	12.7	11.6	11.5	11.9	11.1	11.1	10.0	8.0	5.8	8.5	9.5	9.6	16.1	5.8	11.8
31	6.7	5.7	5.0	6.4	9.1	10.9	7.2	8.9	11.2	10.1	9.4	9.6	9.7	10.1	9.8	9.0	9.3	10.5	10.4	10.9	13.3	13.3	13.2	12.3	13.3	5.0	9.7
Max.	**12.9**	**13.0**	**13.1**	**12.4**	**13.4**	**15.7**	**16.1**	**14.0**	**13.9**	**14.4**	**13.2**	**15.2**	**16.1**	**14.2**	**15.2**	**16.3**	**15.4**	**13.4**	**13.4**	**15.5**	**16.3**	**14.0**	**13.8**	**14.1**	**16.3**		
Min.	**1.2**	**1.4**	**0.7**	**1.0**	**1.2**	**1.1**	**0.8**	**0.9**	**0.8**	**0.5**	**0.6**	**0.4**	**0.2**	**0.3**	**0.9**	**0.8**	**1.0**	**1.3**	**2.5**	**1.7**	**1.8**	**1.5**	**1.4**	**0.8**		**0.2**	
Avg.	**6.4**	**6.5**	**5.8**	**5.8**	**5.6**	**5.9**	**6.0**	**6.1**	**6.1**	**6.0**	**5.7**	**6.0**	**5.9**	**6.0**	**6.2**	**6.3**	**6.4**	**6.4**	**6.8**	**6.8**	**6.6**	**6.6**	**6.8**	**6.6**			**6.2**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.0	13.7	12.8	12.1	9.8	9.2	8.8	7.2	7.1	7.8	6.7	6.3	5.6	6.4	7.8	7.2	6.6	6.2	4.9	4.6	3.6	2.9	1.7	0.5	13.7	0.5	7.2
2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	2.6	1.4	1.5	2.4	1.7	1.4	1.7	2.4	3.5	3.7	6.0	6.0	0.2	1.3
3	4.2	3.0	3.6	4.9	6.2	7.2	6.6	5.8	3.9	2.1	3.4	3.9	4.4	7.2	8.1	9.2	10.2	9.6	11.8	12.7	11.8	11.8	12.0	14.4	14.4	2.1	7.4
4	14.3	14.6	13.9	13.2	12.9	12.9	13.9	12.3	11.6	11.2	11.4	10.9	9.5	9.2	8.7	7.9	6.8	6.4	7.5	9.4	8.5	10.1	10.4	9.0	14.6	6.4	10.7
5	5.9	6.9	5.4	3.9	4.8	3.9	3.6	3.9	3.0	3.1	3.8	2.6	3.1	4.8	5.4	6.1	6.6	5.8	7.3	7.1	6.3	4.8	5.2	5.8	7.3	2.6	5.0
6	6.8	6.2	5.5	5.8	4.5	5.6	4.5	5.5	5.2	7.6	6.5	5.7	7.4	7.8	5.3	3.4	3.4	3.7	3.6	5.0	4.8	4.3	7.1	9.3	9.3	3.4	5.6
7	9.0	7.7	6.3	7.0	7.3	6.3	6.5	6.9	8.6	8.3	6.3	5.9	5.7	5.3	5.3	5.8	5.5	4.1	5.1	4.2	5.7	4.9	5.2	4.8	9.0	4.1	6.2
8	5.0	4.9	5.0	3.6	3.0	3.7	3.1	3.6	2.6	2.6	1.8	1.7	1.8	1.9	1.6	1.4	1.7	1.6	2.4	2.5	2.9	4.3	5.7	4.6	5.7	1.4	3.0
9	5.4	6.7	8.0	7.6	6.1	7.9	6.8	7.2	7.2	7.5	8.3	7.8	6.8	7.3	7.6	7.8	6.5	4.9	5.3	5.2	4.7	4.0	5.4	4.5	8.3	4.0	6.5
10	4.6	5.4	7.6	7.8	7.4	6.8	7.8	10.1	9.2	8.2	6.6	5.7	6.3	6.3	4.4	4.7	4.0	4.3	3.1	3.7	5.3	6.6	6.4	6.2	10.1	3.1	6.2
11	5.8	6.0	6.7	6.8	7.5	7.4	8.2	8.3	7.5	7.7	8.3	6.3	5.7	5.4	5.9	6.7	6.8	5.9	4.7	5.3	5.5	6.0	6.3	7.8	8.3	4.7	6.6
12	7.4	5.8	5.4	5.7	6.8	6.3	6.4	6.8	7.3	7.3	7.0	5.1	5.3	5.8	6.4	7.7	6.3	5.2	5.0	6.6	6.9	3.9	4.4	1.9	7.7	1.9	5.9
13	1.6	1.1	1.0	1.8	3.4	3.3	4.3	3.7	3.8	3.9	3.4	3.8	2.2	2.4	2.8	6.6	7.3	7.2	5.8	9.6	8.0	6.1	11.7	9.7	11.7	1.0	4.8
14	10.2	12.9	13.1	11.6	10.2	8.8	7.0	8.3	9.3	8.7	7.7	7.2	7.8	6.0	4.6	4.0	4.8	4.4	3.6	3.5	3.6	3.6	3.2	5.1	13.1	3.2	7.1
15	4.5	3.1	3.4	1.7	1.6	2.0	4.0	4.4	8.3	10.9	12.5	12.5	12.2	12.5	17.4	17.6	11.1	14.8	12.6	12.8	15.0	16.2	16.1	16.9	17.6	1.6	10.2
16	20.1	19.3	19.9	16.7	14.4	14.9	14.0	14.6	12.0	7.9	10.4	10.2	7.1	7.2	7.7	7.3	6.6	6.8	4.5	3.4	3.0	2.3	2.6	2.3	20.1	2.3	9.8
17	2.5	2.6	3.2	4.0	3.8	4.4	3.6	3.8	3.4	4.0	2.9	3.8	5.2	5.3	6.1	4.3	4.4	4.7	4.6	2.5	2.0	1.2	2.0	0.9	6.1	0.9	3.5
18	1.7	2.0	2.0	2.1	2.6	1.6	2.1	2.1	2.0	2.4	2.1	1.0	2.5	2.4	2.7	2.5	2.5	3.8	3.3	3.0	3.1	2.7	1.3	2.8	3.8	1.0	2.3
19	1.1	4.3	6.3	7.6	7.2	7.6	8.5	8.6	8.7	8.0	8.8	6.3	8.6	7.7	8.5	8.3	8.3	6.9	6.9	8.0	6.8	4.5	7.3	5.1	8.8	1.1	7.1
20	5.7	5.4	9.3	8.1	8.4	7.6	6.8	6.3	6.0	9.3	11.3	11.8	12.0	9.8	7.4	6.4	10.2	7.3	7.2	7.8	6.6	8.0	7.8	7.6	12.0	5.4	8.1
21	9.1	9.1	8.5	9.0	8.6	5.8	6.3	5.7	3.3	3.9	4.4	7.4	8.0	9.7	9.2	8.3	4.1	4.6	4.5	6.9	6.1	3.8	4.1	5.0	9.7	3.3	6.5
22	3.5	2.6	4.4	4.3	2.0	2.9	2.8	2.0	2.3	0.9	1.4	3.1	2.7	1.9	1.7	1.8	2.4	2.3	2.4	2.7	2.6	3.2	4.6	4.9	4.9	0.9	2.7
23	4.1	2.1	3.1	3.4	2.8	2.2	3.3	3.9	2.0	2.3	1.5	1.4	1.3	1.5	1.8	2.6	2.5	1.6	1.7	2.3	3.4	2.9	3.5	3.2	4.1	1.3	2.5
24	2.7	1.8	2.9	5.2	2.4	2.0	2.1	1.1	1.2	1.7	1.7	1.9	3.4	2.3	1.3	2.4	4.6	3.6	2.9	1.8	2.0	3.2	5.8	4.8	5.8	1.1	2.7
25	2.5	0.2	0.2	5.5	9.9	9.0	8.5	10.2	9.8	10.0	8.2	7.0	7.2	7.5	8.4	8.4	8.7	9.0	7.6	6.2	7.0	5.0	4.0	5.1	10.2	0.2	6.9
26	7.2	8.0	6.1	7.3	8.4	10.9	8.6	7.8	8.7	10.2	6.2	12.4	10.7	9.4	13.1	13.6	13.4	13.1	11.0	10.6	10.3	11.4	12.3	10.9	13.6	6.1	10.1
27	10.1	9.9	12.0	12.5	12.2	12.6	12.4	13.7	12.6	12.6	12.5	12.4	11.6	10.6	10.0	10.4	9.9	10.0	9.1	8.5	8.3	7.4	6.5	6.7	13.7	6.5	10.6
28	6.9	7.8	6.9	6.0	5.5	5.0	4.0	5.4	5.9	4.7	2.5	2.2	2.4	1.6	3.3	2.9	3.5	3.9	3.8	3.4	4.4	4.5	4.4	4.5	7.8	1.6	4.4
29	4.7	5.0	4.0	5.7	5.9	5.5	5.4	6.0	4.3	6.3	6.2	5.7	5.0	3.7	2.4	3.4	4.8	5.7	5.9	5.5	6.3	7.0	8.3	3.0	8.3	2.4	5.3
30	6.7	7.4	7.2	7.6	6.6	7.5	7.3	7.0	7.5	6.7	5.7	3.9	2.9	2.6	2.3	2.0	3.1	3.7	4.1	5.4	6.0	4.2	4.2	5.5	7.6	2.0	5.3
Max.	**20.1**	**19.3**	**19.9**	**16.7**	**14.4**	**14.9**	**14.0**	**14.6**	**12.6**	**12.6**	**12.5**	**12.5**	**12.2**	**12.5**	**17.4**	**17.6**	**13.4**	**14.8**	**12.6**	**12.8**	**15.0**	**16.2**	**16.1**	**16.9**	**20.1**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**1.5**	**1.3**	**1.4**	**1.7**	**1.6**	**1.4**	**1.7**	**2.0**	**1.2**	**1.3**	**0.5**		**0.2**	
Avg.	**6.2**	**6.2**	**6.5**	**6.6**	**6.4**	**6.4**	**6.3**	**6.4**	**6.1**	**6.3**	**6.0**	**5.9**	**5.8**	**5.8**	**6.0**	**6.1**	**6.0**	**5.8**	**5.4**	**5.7**	**5.8**	**5.5**	**6.1**	**6.0**			**6.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.0	5.2	5.8	5.6	6.7	6.9	6.9	7.8	7.8	9.2	7.6	6.4	6.0	5.0	5.0	5.5	5.8	5.8	5.8	4.8	5.6	5.6	6.3	4.6	9.2	4.6	6.1
2	4.3	4.2	4.3	4.3	6.4	8.4	10.1	10.8	9.0	6.4	6.4	6.0	4.5	2.8	3.4	4.2	4.2	4.3	3.3	2.4	1.4	3.5	3.9	2.1	10.8	1.4	5.0
3	2.4	3.4	3.2	2.5	0.2	0.2	0.2	0.2	0.9	1.5	1.2	2.7	3.8	5.6	2.1	5.3	3.6	2.0	2.1	2.6	2.8	3.7	1.4	5.8	5.8	0.2	2.5
4	7.7	6.3	6.2	6.9	5.0	7.9	7.3	6.0	6.7	5.2	4.3	3.9	2.4	1.2	1.9	2.2	1.5	1.7	2.5	2.6	2.0	3.0	3.5	4.4	7.9	1.2	4.3
5	3.8	5.1	3.8	3.9	3.8	4.2	3.1	3.8	1.8	1.8	2.2	1.6	2.2	1.9	1.5	2.1	1.8	1.7	1.0	2.0	1.6	1.4	1.2	0.8	5.1	0.8	2.4
6	0.8	1.5	2.7	1.9	1.1	0.7	0.8	1.0	1.3	3.8	6.6	7.1	7.7	9.8	9.3	9.9	10.1	10.5	10.6	11.0	9.4	9.9	10.5	9.9	11.0	0.7	6.2
7	10.9	10.6	10.5	10.8	11.5	10.8	10.7	11.4	12.4	12.2	13.9	15.7	14.0	12.6	11.4	11.0	12.6	12.0	10.8	11.4	8.0	11.1	9.9	8.2	15.7	8.0	11.4
8	9.2	10.6	11.3	11.3	10.6	11.0	11.2	11.5	11.2	9.3	9.3	11.1	11.1	11.3	11.8	12.2	11.9	13.1	13.1	12.4	11.4	10.4	10.7	8.0	13.1	8.0	11.0
9	6.2	3.4	3.3	2.6	3.3	4.3	3.6	3.9	4.4	4.3	6.6	7.8	6.5	6.7	4.8	6.6	6.3	5.2	3.3	1.4	1.6	2.1	2.7	2.4	7.8	1.4	4.3
10	3.1	2.7	1.0	1.7	1.3	1.6	1.0	1.0	0.6	1.2	2.2	1.8	1.8	2.3	2.3	2.4	2.6	2.2	2.0	1.7	1.3	1.1	1.9	3.9	3.9	0.6	1.9
11	3.1	3.7	2.4	5.0	5.0	4.4	4.5	4.7	8.3	11.4	11.1	10.7	11.1	11.6	13.6	14.8	13.0	12.6	15.0	14.1	12.2	10.4	5.2	5.7	15.0	2.4	8.9
12	6.3	3.5	3.5	1.9	2.8	4.3	6.3	5.0	2.6	5.6	9.5	10.2	11.4	10.8	12.1	13.3	12.4	12.0	11.3	11.6	11.6	11.2	10.6	10.0	13.3	1.9	8.3
13	8.9	8.5	8.3	6.8	6.2	4.4	2.9	4.1	4.7	4.3	6.8	7.8	9.8	9.8	10.5	10.9	11.1	11.6	12.8	11.2	9.4	9.8	8.2	8.4	12.8	2.9	8.2
14	7.1	5.1	1.8	2.1	2.1	4.4	6.6	7.8	8.0	9.1	9.6	8.7	6.4	5.6	6.8	5.3	5.9	7.7	7.1	5.9	2.8	3.3	2.0	2.3	9.6	1.8	5.6
15	1.3	1.5	2.0	1.5	1.6	0.9	1.1	2.8	3.7	4.0	4.4	4.2	4.6	4.5	5.7	4.2	4.1	4.0	4.6	5.3	4.2	4.2	4.1	3.0	5.7	0.9	3.4
16	2.5	2.2	2.2	2.7	2.2	2.5	2.4	1.2	1.6	1.5	1.3	2.2	4.0	6.6	7.1	6.9	6.9	5.2	4.5	3.5	3.0	2.0	1.8	2.3	7.1	1.2	3.3
17	3.6	2.3	3.7	4.6	4.5	5.7	4.6	4.7	4.3	2.8	3.5	3.3	2.7	2.9	2.5	2.5	2.5	3.0	4.1	3.5	4.6	4.1	3.3	2.2	5.7	2.2	3.6
18	1.4	1.3	1.5	2.1	2.3	2.3	1.6	2.4	3.4	3.7	2.9	3.5	3.6	3.5	3.0	5.6	4.4	6.2	6.6	4.7	4.7	3.3	3.4	2.1	6.6	1.3	3.3
19	1.6	2.6	1.0	1.6	1.9	1.9	1.8	1.7	2.0	1.5	2.6	4.0	3.1	3.8	4.9	4.8	5.2	6.0	5.3	5.2	4.2	4.6	4.0	5.1	6.0	1.0	3.4
20	4.8	5.5	6.2	5.3	5.4	5.8	6.1	5.5	4.9	2.7	3.5	3.1	2.3	3.3	2.8	3.2	3.2	2.8	2.9	3.4	3.0	2.3	2.2	2.8	6.2	2.2	3.9
21	2.7	2.6	2.6	3.3	2.8	3.0	2.9	1.8	2.0	1.9	1.7	2.4	2.7	4.0	4.1	4.6	4.4	3.9	4.3	6.4	6.2	4.8	3.3	2.1	6.4	1.7	3.4
22	2.6	3.5	3.4	2.6	2.2	2.5	3.6	3.2	2.8	2.7	1.8	2.5	2.1	3.2	3.6	5.5	7.6	8.3	7.7	7.9	6.6	8.6	10.8	11.4	11.4	1.8	4.8
23	12.7	14.7	14.2	15.2	15.6	15.3	11.7	13.6	16.2	15.3	17.7	15.9	17.2	17.2	17.0	14.7	13.3	15.2	14.4	13.0	12.0	10.5	12.3	11.9	17.7	10.5	14.4
24	9.0	9.3	8.7	9.4	9.7	9.0	7.2	6.9	6.5	8.2	8.4	8.1	9.7	10.4	10.2	9.4	8.7	8.3	7.3	6.7	3.9	2.4	2.7	2.8	10.4	2.4	7.6
25	3.6	2.8	1.9	2.4	3.0	4.0	3.2	2.5	1.9	2.9	4.9	5.2	5.4	5.1	5.3	5.0	4.9	5.1	3.9	3.4	4.0	2.0	1.1	1.5	5.4	1.1	3.5
26	1.3	1.2	1.6	2.2	3.0	2.3	2.3	2.0	2.6	3.3	3.1	4.1	3.8	4.2	3.9	6.1	5.5	5.5	6.9	5.7	4.8	3.7	2.2	2.3	6.9	1.2	3.5
27	3.5	2.7	3.3	4.0	4.7	5.2	3.6	2.5	3.4	4.1	3.7	3.9	3.9	3.9	4.2	4.6	5.0	4.5	4.7	4.5	4.3	3.1	4.0	3.6	5.2	2.5	4.0
28	4.3	4.5	4.6	5.9	4.6	4.0	3.5	4.0	4.8	4.9	4.0	3.7	3.8	3.8	4.5	4.9	4.9	5.3	5.1	5.5	5.0	4.0	3.3	3.8	5.9	3.3	4.5
29	5.5	5.8	5.4	4.2	4.4	4.5	6.8	6.3	5.7	4.5	3.5	3.6	4.8	3.9	4.0	4.7	4.5	3.7	3.4	3.3	3.5	3.7	4.3	4.1	6.8	3.3	4.5
30	4.2	4.6	2.4	3.0	2.9	2.8	1.8	1.0	2.1	5.2	7.1	7.4	7.7	7.9	8.3	8.9	9.0	8.6	8.1	8.8	5.8	6.2	5.4	6.9	9.0	1.0	5.7
31	8.8	9.7	8.4	7.8	7.5	8.0	9.3	8.4	8.3	9.0	9.8	10.9	10.3	12.7	12.7	11.2	10.7	11.4	9.3	8.9	8.8	8.1	6.4	7.1	12.7	6.4	9.3
Max.	**12.7**	**14.7**	**14.2**	**15.2**	**15.6**	**15.3**	**11.7**	**13.6**	**16.2**	**15.3**	**17.7**	**15.9**	**17.2**	**17.2**	**17.0**	**14.8**	**13.3**	**15.2**	**15.0**	**14.1**	**12.2**	**11.2**	**12.3**	**11.9**	**17.7**		
Min.	**0.8**	**1.2**	**1.0**	**1.5**	**0.2**	**0.2**	**0.2**	**0.2**	**0.6**	**1.2**	**1.2**	**1.6**	**1.8**	**1.2**	**1.5**	**2.1**	**1.5**	**1.7**	**1.0**	**1.4**	**1.3**	**1.1**	**1.1**	**0.8**		**0.2**	
Avg.	**4.9**	**4.9**	**4.5**	**4.7**	**4.7**	**4.9**	**4.8**	**4.8**	**5.0**	**5.3**	**5.9**	**6.1**	**6.1**	**6.4**	**6.5**	**6.8**	**6.7**	**6.8**	**6.6**	**6.3**	**5.5**	**5.3**	**4.9**	**4.9**			**5.6**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.2	7.3	6.7	8.9	8.9	7.4	10.3	11.3	10.2	11.3	12.6	12.2	13.7	13.6	14.0	13.4	14.1	13.6	12.2	9.5	7.9	5.6	5.4	3.1	14.1	3.1	10.0
2	1.0	1.9	3.0	2.5	3.3	1.1	0.9	1.1	1.9	3.3	4.9	5.8	4.1	4.5	4.7	4.1	4.5	4.7	4.5	4.0	3.0	3.0	3.1	1.7	5.8	0.9	3.2
3	2.1	2.6	2.0	2.2	1.8	2.6	3.1	1.9	1.8	1.1	1.7	1.6	1.7	6.1	6.0	5.7	5.2	7.3	7.1	8.5	6.7	6.1	5.2	3.3	8.5	1.1	3.9
4	3.6	2.8	2.9	3.4	2.4	3.2	3.3	2.7	3.5	5.1	5.4	5.7	4.9	6.3	6.8	7.4	7.5	7.4	7.5	7.6	6.8	5.8	4.0	3.5	7.6	2.4	5.0
5	2.2	1.6	1.7	3.0	4.2	4.4	6.7	7.3	7.9	8.3	9.5	9.3	9.5	9.6	10.0	10.0	9.8	9.0	6.3	4.8	4.2	1.6	1.7	3.4	10.0	1.6	6.1
6	3.9	2.4	3.4	3.5	3.3	3.5	4.0	3.6	2.9	4.0	3.9	4.3	3.8	3.9	3.2	2.9	3.7	8.8	7.8	6.4	4.4	5.1	4.0	1.6	8.8	1.6	4.1
7	2.5	3.3	4.6	4.7	4.9	4.8	4.2	4.5	5.5	5.9	5.7	5.3	5.3	4.5	3.9	2.8	3.0	5.8	7.4	7.7	7.4	6.7	5.6	2.2	7.7	2.2	4.9
8	1.8	2.1	2.7	3.2	2.6	1.6	1.5	2.3	2.4	1.8	2.7	2.8	2.9	3.3	3.6	4.0	3.5	3.2	3.1	2.9	3.3	3.4	3.3	2.0	4.0	1.5	2.8
9	3.5	3.4	2.9	3.2	2.5	2.5	2.6	3.9	3.9	4.2	3.3	2.4	2.9	2.7	3.5	4.7	3.4	4.0	3.4	4.4	4.9	4.6	3.2	3.2	4.9	2.4	3.5
10	2.8	2.6	2.6	2.2	2.1	2.6	3.5	3.3	2.2	1.0	1.0	1.3	1.4	1.6	2.9	3.2	3.2	3.7	4.5	3.4	3.4	2.5	1.7	0.8	4.5	0.8	2.5
11	1.2	1.6	1.0	0.9	1.4	0.9	0.5	0.7	1.5	2.0	2.2	2.1	3.2	3.1	3.7	3.9	4.3	4.1	3.7	3.0	2.4	3.2	3.9	2.3	4.3	0.5	2.4
12	4.4	3.1	2.5	1.9	0.9	1.5	1.0	1.5	3.1	2.8	1.6	1.2	1.4	1.5	3.0	2.5	2.7	2.7	3.7	2.4	2.1	2.1	2.2	1.6	4.4	0.9	2.2
13	1.8	2.6	2.9	3.5	3.3	3.0	1.9	2.9	3.7	3.3	3.2	2.5	2.3	1.7	2.3	2.1	1.8	1.6	2.0	3.6	3.9	2.5	1.5	1.8	3.9	1.5	2.6
14	1.5	0.8	1.3	1.6	1.7	1.4	1.8	2.8	3.9	2.2	1.7	2.5	3.5	4.3	5.1	6.2	5.5	4.2	4.8	3.1	3.6	5.1	4.0	1.7	6.2	0.8	3.1
15	0.9	1.2	1.4	2.5	2.5	4.1	3.5	1.5	1.8	2.3	3.7	4.1	4.2	2.9	4.3	5.8	5.6	6.8	6.2	4.7	4.4	5.8	3.9	3.0	6.8	0.9	3.6
16	1.5	1.1	1.5	2.2	2.5	3.0	2.6	3.2	2.9	2.9	1.8	2.0	1.6	3.7	1.5	1.5	3.3	2.2	2.7	2.6	2.6	3.3	1.7	1.0	3.7	1.0	2.3
17	1.9	1.9	1.8	1.6	1.7	1.5	0.4	1.3	1.7	1.8	1.6	3.2	1.5	3.1	4.1	4.3	4.5	3.6	4.4	4.7	5.2	4.4	1.7	3.0	5.2	0.4	2.7
18	2.0	1.9	2.3	2.7	1.5	1.3	1.3	0.6	0.9	1.4	2.8	1.9	3.7	4.8	5.7	4.5	4.2	3.9	3.9	3.7	3.5	2.7	2.4	3.8	5.7	0.6	2.8
19	3.6	3.7	3.6	2.9	3.1	3.2	3.0	2.0	2.2	1.4	2.8	3.3	3.9	4.5	3.5	5.1	3.8	3.1	3.4	3.7	3.7	2.9	1.6	2.0	5.1	1.4	3.2
20	3.1	1.5	1.3	1.1	1.4	0.8	2.3	1.1	1.5	2.8	3.5	4.8	5.1	5.2	6.1	7.6	7.5	7.3	6.3	6.7	6.1	5.8	4.9	6.0	7.6	0.8	4.2
21	4.0	2.9	1.9	1.2	0.9	2.0	1.8	1.0	1.0	1.2	1.3	1.3	1.6	2.2	2.1	2.1	1.8	3.2	4.0	4.5	3.4	3.6	2.9	1.9	4.5	0.9	2.2
22	1.3	2.5	2.1	2.2	2.3	1.8	1.5	1.7	3.1	3.5	3.5	4.9	5.6	6.3	6.5	6.1	7.2	7.9	7.9	7.9	7.2	6.7	5.6	6.1	7.9	1.3	4.6
23	5.8	3.6	2.6	3.6	2.8	1.4	3.4	3.6	6.4	7.0	7.5	7.5	7.3	6.5	6.8	6.9	5.9	4.8	5.4	6.7	6.5	5.3	3.3	1.9	7.5	1.4	5.1
24	1.4	0.9	1.0	1.6	1.5	1.0	3.4	5.0	6.7	8.3	9.5	10.4	10.3	10.9	9.6	10.3	9.6	9.1	9.2	9.0	10.3	10.7	10.0	9.7	10.9	0.9	7.1
25	8.9	9.2	8.6	10.3	10.5	11.2	12.0	12.1	12.0	12.6	12.7	13.1	14.4	14.3	13.1	15.2	15.4	12.5	10.7	10.2	8.2	6.7	4.3	3.5	15.4	3.5	10.9
26	4.4	1.3	1.4	1.0	2.6	1.7	1.1	2.9	4.0	4.1	6.7	6.3	6.1	4.8	3.6	2.1	4.1	4.5	3.0	2.5	2.0	2.4	1.2	1.3	6.7	1.0	3.1
27	1.0	1.5	1.4	1.3	1.9	2.1	1.3	1.1	3.1	4.1	5.1	5.5	5.2	6.1	6.4	6.0	5.9	6.6	5.5	4.8	4.6	4.0	1.4	2.0	6.6	1.0	3.7
28	0.9	2.0	2.5	1.0	1.2	1.3	0.9	1.0	1.0	1.6	4.5	5.7	4.3	5.0	4.4	4.8	4.2	2.3	3.9	3.0	4.2	6.0	4.6	2.6	6.0	0.9	3.0
29	3.3	3.8	3.7	3.4	5.0	2.7	1.6	2.2	1.3	2.7	4.2	3.7	4.2	5.4	5.8	6.0	5.7	7.1	6.8	6.5	6.5	5.2	5.2	4.7	7.1	1.3	4.4
30	3.9	2.4	2.5	2.2	2.0	2.1	1.5	0.8	2.1	1.7	1.5	1.4	1.4	1.8	2.1	1.6	1.4	2.5	1.6	2.2	1.8	1.2	1.5	1.9	3.9	0.8	1.9
Max.	**8.9**	**9.2**	**8.6**	**10.3**	**10.5**	**11.2**	**12.0**	**12.1**	**12.0**	**12.6**	**12.7**	**13.1**	**14.4**	**14.3**	**14.0**	**15.2**	**15.4**	**13.6**	**12.2**	**10.2**	**10.3**	**10.7**	**10.0**	**9.7**	**15.4**		
Min.	**0.9**	**0.8**	**1.0**	**0.9**	**0.9**	**0.8**	**0.4**	**0.6**	**0.9**	**1.0**	**1.0**	**1.2**	**1.4**	**1.5**	**1.5**	**1.5**	**1.4**	**1.6**	**1.6**	**2.2**	**1.8**	**1.2**	**1.2**	**0.8**		**0.4**	
Avg.	**2.9**	**2.6**	**2.7**	**2.9**	**2.9**	**2.7**	**2.9**	**3.0**	**3.5**	**3.9**	**4.4**	**4.6**	**4.7**	**5.1**	**5.3**	**5.4**	**5.4**	**5.6**	**5.4**	**5.2**	**4.8**	**4.5**	**3.5**	**2.9**			**4.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.4	2.2	1.3	1.4	1.1	1.2	2.2	2.4	1.2	2.0	3.8	5.2	6.6	7.9	9.0	10.3	10.4	9.6	8.6	9.1	7.9	7.5	10.0	9.4	10.4	1.1	5.5
2	8.5	6.9	6.0	7.6	7.5	7.1	7.2	8.2	9.4	7.3	8.6	8.1	9.7	10.3	10.3	10.9	9.3	8.9	7.8	8.0	6.4	5.9	5.0	3.9	10.9	3.9	7.9
3	8.9	6.7	8.3	8.9	6.0	6.3	8.5	8.4	7.9	7.2	3.0	3.1	6.4	7.0	6.0	7.1	5.6	4.5	4.5	1.8	2.4	1.8	2.2	2.3	8.9	1.8	5.6
4	2.5	1.6	1.5	1.1	1.4	1.4	1.5	1.8	0.7	0.7	1.1	1.3	1.9	2.8	3.6	3.9	2.7	3.3	3.3	3.0	3.5	2.2	1.6	1.4	3.9	0.7	2.1
5	1.1	1.6	2.3	1.9	2.5	2.3	2.1	1.5	1.2	0.7	1.2	1.7	1.7	1.5	4.1	5.7	2.9	2.1	3.0	2.3	2.1	2.1	1.8	1.0	5.7	0.7	2.1
6	1.4	1.6	1.4	2.4	2.5	2.3	2.2	2.0	1.5	1.1	2.7	3.6	5.5	6.5	4.5	4.1	4.3	4.0	6.0	6.3	5.5	4.1	3.8	3.7	6.5	1.1	3.5
7	3.5	3.8	4.3	3.7	3.0	2.0	2.6	4.2	5.7	5.5	7.2	7.1	6.4	6.0	5.6	6.1	6.0	5.1	4.6	4.5	4.0	2.8	1.8	1.4	7.2	1.4	4.5
8	1.9	1.8	0.5	1.3	1.7	1.2	0.8	1.3	1.3	1.8	1.1	1.6	1.2	2.6	2.8	2.6	2.4	1.4	2.4	2.1	2.8	2.8	2.9	3.1	3.1	0.5	1.9
9	2.4	2.7	2.4	3.6	3.3	2.8	1.4	0.9	2.6	6.1	7.9	6.7	6.9	6.3	6.7	7.3	7.9	7.6	8.9	9.2	9.1	7.1	4.1	5.2	9.2	0.9	5.4
10	4.1	4.2	6.9	6.5	4.8	4.9	5.5	5.1	5.5	7.3	8.1	7.3	6.4	5.3	4.5	4.5	5.9	6.6	5.7	5.3	5.9	5.5	5.3	5.3	8.1	4.1	5.7
11	3.0	2.5	2.2	1.9	2.3	2.4	2.7	2.2	2.6	4.0	4.3	4.0	3.7	4.1	4.6	6.0	6.6	6.3	5.9	6.2	6.2	5.4	5.1	4.8	6.6	1.9	4.1
12	3.7	2.6	1.4	0.8	1.5	0.8	1.0	3.4	7.4	8.5	9.7	10.3	10.8	11.6	12.0	10.9	10.2	10.4	8.3	7.5	6.7	6.1	6.8	7.1	12.0	0.8	6.7
13	7.7	6.6	6.5	5.6	5.4	6.2	5.9	5.1	4.1	5.0	5.5	6.0	6.1	4.6	3.7	4.2	3.8	2.6	2.7	3.1	3.3	2.4	1.2	1.5	7.7	1.2	4.5
14	1.6	1.0	0.4	0.8	1.0	0.6	0.5	0.6	0.9	2.5	2.6	2.8	3.1	2.9	3.2	4.4	4.4	3.4	3.5	3.9	3.9	3.3	4.2	5.0	5.0	0.4	2.5
15	5.1	5.5	5.9	4.7	2.1	1.9	1.9	0.6	2.5	3.8	5.6	6.7	6.8	6.8	6.3	6.9	7.6	8.0	8.2	7.9	8.0	7.2	6.6	7.2	8.2	0.6	5.6
16	6.3	7.7	7.8	7.4	8.3	8.6	8.5	9.7	10.1	10.6	10.4	9.3	10.9	11.5	11.7	11.3	11.0	10.5	10.0	8.3	7.8	7.2	7.0	4.7	11.7	4.7	9.0
17	5.0	4.8	4.8	6.5	6.1	3.9	2.6	2.9	3.2	3.0	5.3	4.7	5.0	5.1	4.3	4.8	4.8	4.3	5.9	5.2	4.9	4.8	4.5	4.3	6.5	2.6	4.6
18	2.6	3.0	3.8	3.7	3.3	3.4	2.9	3.0	1.5	0.9	2.3	2.0	3.0	1.7	1.8	4.0	2.2	1.4	2.4	2.8	3.5	2.9	3.6	2.7	4.0	0.9	2.7
19	2.3	3.5	3.8	4.2	3.9	4.4	4.8	4.3	4.3	5.5	5.4	5.3	5.0	5.3	5.5	7.0	6.4	6.1	7.2	5.6	3.5	2.8	2.8	2.5	7.2	2.3	4.6
20	2.5	3.0	2.4	1.9	1.8	1.4	2.1	2.0	4.8	4.8	4.0	4.4	2.8	4.4	5.4	4.6	4.8	4.8	3.1	2.5	1.9	2.5	2.5	3.1	5.4	1.4	3.2
21	3.4	6.9	4.9	4.3	4.3	3.4	3.6	3.4	3.3	2.9	3.5	3.0	2.6	2.2	1.6	1.8	1.6	1.4	3.5	4.0	2.4	3.3	6.1	6.0	6.9	1.4	3.5
22	4.6	2.7	3.1	2.5	1.3	2.2	1.2	1.2	2.3	2.6	2.3	3.4	3.8	2.7	1.4	1.3	2.5	2.3	1.6	1.4	1.2	1.8	1.3	1.0	4.6	1.0	2.2
23	1.1	2.1	1.7	1.8	1.0	0.8	0.9	0.6	0.9	2.8	5.1	5.0	4.8	4.8	4.8	4.1	3.9	3.9	3.7	3.1	3.8	3.8	2.4	2.2	5.1	0.6	2.9
24	2.7	1.8	1.7	2.3	3.1	4.1	3.7	4.1	4.4	5.3	5.5	5.1	6.5	6.4	7.6	7.1	6.0	6.0	4.8	5.1	4.6	4.1	3.8	5.2	7.6	1.7	4.6
25	5.5	5.6	5.1	5.5	3.7	7.3	5.3	5.4	5.4	8.4	7.9	7.7	7.7	6.3	6.4	6.5	6.1	5.1	5.9	6.3	4.5	3.1	3.3	3.6	8.4	3.1	5.7
26	5.0	6.9	8.2	7.2	6.4	5.1	3.3	4.8	4.1	2.9	1.9	1.6	5.4	2.9	1.0	1.6	1.7	3.5	3.5	3.2	3.2	1.9	1.7	2.7	8.2	1.0	3.7
27	2.5	1.3	1.0	1.3	1.8	1.8	2.1	2.0	3.7	3.1	3.4	2.4	1.7	2.1	2.6	2.7	3.7	4.2	4.2	4.2	3.9	2.3	1.4	1.7	4.2	1.0	2.5
28	1.9	2.8	3.0	4.1	3.3	2.8	3.4	3.8	5.1	6.1	5.4	5.4	6.4	7.8	7.3	5.8	5.0	6.9	6.6	5.4	4.2	3.1	3.3	3.5	7.8	1.9	4.7
29	4.5	5.5	6.0	6.3	6.2	7.5	5.8	3.2	3.4	6.0	6.4	8.8	8.2	7.0	7.0	7.3	7.6	7.2	6.2	7.0	5.7	4.6	5.8	5.2	8.8	3.2	6.2
30	6.5	5.8	6.6	5.6	5.1	4.6	5.1	4.9	3.6	5.2	5.6	5.8	6.6	6.1	6.3	7.2	7.3	7.2	6.8	6.3	4.6	3.7	3.4	4.8	7.3	3.4	5.6
31	6.7	5.3	6.0	8.5	7.9	7.5	7.4	6.8	5.8	5.4	4.6	4.2	4.7	4.9	4.7	5.3	6.0	6.0	6.2	6.1	4.9	2.5	2.4	2.0	8.5	2.0	5.5
Max.	**8.9**	**7.7**	**8.3**	**8.9**	**8.3**	**8.6**	**8.5**	**9.7**	**10.1**	**10.6**	**10.4**	**10.3**	**10.9**	**11.6**	**12.0**	**11.3**	**11.0**	**10.5**	**10.0**	**9.2**	**9.1**	**7.5**	**10.0**	**9.4**	**12.0**		
Min.	**1.1**	**1.0**	**0.4**	**0.8**	**1.0**	**0.6**	**0.5**	**0.6**	**0.7**	**0.7**	**1.1**	**1.3**	**1.2**	**1.5**	**1.0**	**1.3**	**1.6**	**1.4**	**1.6**	**1.4**	**1.2**	**1.8**	**1.2**	**1.0**		**0.4**	
Avg.	**3.9**	**3.9**	**3.9**	**4.0**	**3.7**	**3.6**	**3.5**	**3.6**	**3.9**	**4.5**	**4.9**	**5.0**	**5.4**	**5.4**	**5.4**	**5.7**	**5.5**	**5.3**	**5.3**	**5.1**	**4.6**	**3.9**	**3.8**	**3.8**			**4.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.5	2.8	4.9	4.7	4.3	2.5	1.7	1.4	0.8	1.8	2.2	1.9	1.8	2.4	3.2	3.3	4.2	3.3	4.1	5.1	4.7	1.7	1.3	0.9	5.1	0.8	2.8
2	1.0	1.2	1.9	1.8	2.0	3.0	2.3	2.1	2.4	3.8	3.6	4.0	4.9	4.9	4.9	4.8	5.0	4.7	4.7	2.8	1.9	1.7	1.3	2.5	5.0	1.0	3.1
3	2.7	3.2	3.5	3.9	5.7	4.3	4.3	4.0	6.8	6.0	3.3	2.0	5.1	5.4	5.1	4.7	4.9	5.8	6.0	5.6	6.2	5.4	5.3	3.4	6.8	2.0	4.7
4	2.7	3.0	2.7	2.5	0.9	1.5	1.0	1.5	3.2	3.7	4.1	4.4	5.2	4.7	4.4	4.6	4.6	4.6	4.8	5.6	5.2	3.4	2.1	1.4	5.6	0.9	3.4
5	1.7	1.4	1.3	1.7	1.9	2.0	1.7	1.0	1.9	3.9	4.2	3.9	4.4	5.8	5.2	5.0	4.9	5.6	5.6	6.0	5.3	4.9	5.1	5.6	6.0	1.0	3.7
6	5.1	4.5	4.0	4.5	5.0	2.9	3.6	6.3	5.6	6.3	5.8	5.1	5.8	6.3	6.4	6.7	7.0	7.0	6.7	7.0	6.2	3.7	3.7	4.0	7.0	2.9	5.4
7	4.1	3.6	4.0	4.0	2.7	2.5	5.3	4.8	4.5	5.5	6.1	6.1	6.4	6.5	6.3	5.9	6.5	5.8	5.6	6.3	6.1	4.8	3.5	4.1	6.5	2.5	5.0
8	5.5	5.6	5.3	5.2	5.1	4.9	5.5	5.9	6.0	5.7	6.1	5.9	5.7	5.7	4.7	3.7	4.0	4.0	3.9	4.1	4.4	4.8	4.8	4.9	6.1	3.7	5.1
9	4.7	5.3	5.3	4.2	5.1	5.8	6.4	5.9	6.3	4.9	6.1	6.8	7.4	7.0	6.4	6.2	6.4	6.3	5.8	5.9	4.6	3.6	3.6	4.7	7.4	3.6	5.6
10	3.6	3.1	3.2	2.9	1.0	2.1	2.0	2.2	1.2	1.2	2.0	2.6	2.6	2.6	3.9	3.9	3.1	2.6	3.5	4.6	3.9	3.7	1.3	1.3	4.6	1.0	2.7
11	1.1	2.0	1.3	1.1	1.5	0.8	1.1	1.5	2.1	3.0	3.7	4.7	4.4	4.7	5.7	6.5	6.9	5.4	4.6	3.4	2.4	1.2	2.4	3.3	6.9	0.8	3.1
12	3.5	3.3	3.3	3.6	4.3	3.7	3.6	2.8	2.5	2.4	3.2	3.0	2.5	2.4	3.0	3.4	3.5	4.9	4.8	2.1	1.6	1.0	1.8	2.0	4.9	1.0	3.0
13	3.5	3.5	3.7	2.9	3.1	1.3	1.2	0.8	0.9	0.9	1.8	3.3	3.1	3.0	2.1	1.6	3.1	5.7	4.3	3.6	2.6	1.5	1.0	1.9	5.7	0.8	2.5
14	1.8	2.0	2.2	1.3	1.4	1.7	1.7	0.9	0.7	1.2	2.3	3.9	3.5	3.1	3.7	4.2	4.4	5.2	5.0	3.9	2.8	2.2	1.6	2.4	5.2	0.7	2.6
15	3.7	3.2	1.8	2.2	2.9	2.6	2.2	2.8	3.0	2.5	1.6	1.0	1.5	1.9	1.8	2.2	2.6	2.6	2.7	2.2	1.5	1.4	1.3	1.3	3.7	1.0	2.2
16	0.9	1.2	1.0	1.5	1.4	1.7	2.7	2.2	2.6	3.6	3.2	3.3	3.2	3.8	4.7	5.1	5.6	5.8	5.5	5.5	4.8	3.8	1.8	0.6	5.8	0.6	3.2
17	0.7	1.5	1.3	0.9	1.8	1.9	1.6	1.3	1.0	0.6	2.2	4.1	5.6	5.6	6.3	6.0	7.3	8.1	8.1	7.5	5.5	4.0	5.7	5.2	8.1	0.6	3.9
18	3.1	2.2	1.4	1.5	2.1	2.4	2.8	2.8	2.7	1.7	1.2	2.6	2.5	3.7	3.0	2.7	2.3	1.7	1.7	2.5	1.6	1.5	3.2	4.0	4.0	1.2	2.4
19	4.2	2.1	1.2	2.0	1.0	1.5	1.6	3.3	2.1	1.2	2.8	3.5	3.5	3.4	3.9	4.3	3.7	2.9	3.9	4.4	4.7	1.7	2.9	2.5	4.7	1.0	2.8
20	2.4	3.2	3.6	3.4	3.5	4.1	4.0	3.7	3.6	3.4	2.4	2.2	2.5	2.9	3.3	3.5	3.5	4.0	4.4	4.4	2.8	2.2	2.6	3.1	4.4	2.2	3.3
21	3.0	3.3	2.6	2.5	2.4	2.1	0.8	1.1	1.9	2.1	2.0	2.4	3.4	3.9	4.3	4.8	4.2	2.7	2.1	2.4	1.3	1.2	2.9	3.5	4.8	0.8	2.6
22	1.8	1.7	2.3	2.0	1.6	2.2	1.9	2.4	2.3	1.4	1.1	0.9	0.9	1.2	1.6	2.3	2.6	1.8	2.9	3.3	3.2	2.5	3.9	4.4	4.4	0.9	2.2
23	4.5	4.6	5.3	5.1	5.3	5.6	4.5	5.4	5.4	6.0	5.3	3.5	3.3	2.1	1.5	2.1	2.7	5.1	5.6	4.6	4.2	3.7	3.5	2.2	6.0	1.5	4.2
24	1.4	1.3	1.2	1.8	0.9	0.9	1.6	2.5	2.6	3.5	3.7	4.2	5.9	4.6	3.6	2.9	2.8	1.8	1.8	1.7	1.2	0.8	2.3	2.6	5.9	0.8	2.4
25	3.4	3.7	4.2	1.8	1.5	1.7	0.9	1.0	0.7	0.7	1.3	2.5	2.5	3.8	2.6	2.1	2.5	3.9	4.2	4.0	3.7	2.9	2.2	2.1	4.2	0.7	2.5
26	1.5	1.1	1.0	0.7	0.6	0.7	0.7	1.1	1.8	2.5	4.4	4.3	3.8	4.0	5.5	5.9	5.5	4.9	5.1	5.9	5.0	4.3	2.6	2.8	5.9	0.6	3.2
27	2.6	1.8	1.0	0.8	0.9	1.3	1.1	1.7	2.7	3.0	3.5	3.4	3.1	2.7	2.0	3.2	3.1	3.2	3.3	2.9	1.9	1.2	0.7	0.9	3.5	0.7	2.2
28	2.4	3.2	2.1	2.5	3.4	3.5	2.9	3.2	3.4	4.1	4.0	4.2	4.6	3.6	3.2	3.6	3.3	3.6	2.6	3.2	3.2	3.7	3.1	4.8	4.8	2.1	3.4
29	3.8	4.5	4.1	5.0	4.8	4.7	4.7	4.1	4.2	3.6	3.1	2.2	2.2	2.2	2.5	3.7	4.5	4.5	5.2	4.1	4.0	4.5	1.6	2.0	5.2	1.6	3.7
30	2.9	3.0	2.4	2.5	1.9	1.3	1.5	2.2	2.2	1.0	0.8	1.1	1.6	2.2	2.2	3.0	3.6	4.4	4.4	4.2	2.5	4.0	6.7	6.6	6.7	0.8	2.8
31	6.1	6.0	7.4	11.1	11.1	10.7	10.3	7.1	4.5	3.3	2.6	3.8	3.9	5.7	6.2	5.7	6.2	7.1	7.5	8.6	9.0	9.6	10.0	8.4	11.1	2.6	7.2
Max.	**6.1**	**6.0**	**7.4**	**11.1**	**11.1**	**10.7**	**10.3**	**7.1**	**6.8**	**6.3**	**6.1**	**6.8**	**7.4**	**7.0**	**6.4**	**6.7**	**7.3**	**8.1**	**8.1**	**8.6**	**9.0**	**9.6**	**10.0**	**8.4**	**11.1**		
Min.	**0.7**	**1.1**	**1.0**	**0.7**	**0.6**	**0.7**	**0.7**	**0.8**	**0.7**	**0.6**	**0.8**	**0.9**	**0.9**	**1.2**	**1.5**	**1.6**	**2.3**	**1.7**	**1.7**	**1.7**	**1.2**	**0.8**	**0.7**	**0.6**		**0.6**	
Avg.	**3.0**	**3.0**	**2.9**	**3.0**	**2.9**	**2.8**	**2.8**	**2.9**	**3.0**	**3.0**	**3.2**	**3.4**	**3.8**	**3.9**	**4.0**	**4.1**	**4.3**	**4.5**	**4.5**	**4.4**	**3.8**	**3.1**	**3.1**	**3.2**			**3.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.1	9.5	8.9	8.0	8.0	6.9	7.0	7.0	6.3	6.4	6.3	6.4	5.3	5.1	5.6	6.5	6.4	5.2	3.9	2.5	2.7	5.3	5.1	3.4	9.5	2.5	6.1
2	3.7	4.6	3.7	4.0	4.4	4.6	5.1	5.9	6.2	6.9	7.7	8.1	7.7	7.9	7.1	5.1	3.0	2.1	4.4	4.0	5.0	5.0	6.0	5.8	8.1	2.1	5.3
3	5.8	5.3	5.6	6.6	6.1	4.6	1.7	2.3	2.7	2.4	1.5	2.5	3.3	4.3	3.6	3.8	3.6	3.5	3.3	3.6	3.7	3.2	2.3	2.9	6.6	1.5	3.7
4	2.8	1.7	2.0	1.9	1.9	2.3	1.7	1.6	1.1	1.5	1.9	2.7	3.0	3.6	3.0	2.6	2.2	2.1	2.6	2.2	1.5	1.8	2.2	2.5	3.6	1.1	2.2
5	2.2	2.9	3.2	1.9	2.9	2.6	3.1	3.1	2.7	1.1	1.5	1.8	1.3	2.2	2.8	3.5	2.5	1.5	2.0	1.9	1.1	1.8	2.2	1.5	3.5	1.1	2.2
6	1.6	2.0	1.2	0.7	1.6	0.9	1.8	3.2	3.7	4.4	3.9	6.0	7.4	7.3	6.1	6.4	5.8	5.0	3.0	3.8	4.5	4.7	4.5	4.0	7.4	0.7	3.9
7	4.5	6.6	5.9	5.7	3.3	3.7	4.3	2.3	3.8	3.6	3.6	4.9	4.1	4.3	2.7	3.0	4.3	4.0	4.0	3.1	2.4	2.5	3.3	3.9	6.6	2.3	3.9
8	5.6	3.7	2.7	3.2	3.6	3.8	2.7	2.1	1.1	3.1	2.7	3.6	4.1	5.8	10.0	8.2	8.5	8.7	7.3	4.3	3.8	4.3	3.9	4.1	10.0	1.1	4.6
9	2.4	3.7	3.3	3.3	3.5	3.1	2.7	1.3	1.1	1.1	3.1	3.1	3.1	3.4	4.8	6.4	6.2	5.4	6.7	4.1	4.4	4.7	4.2	2.0	6.7	1.1	3.6
10	1.3	2.2	2.3	1.2	1.0	1.2	1.4	0.7	0.9	1.6	0.7	1.1	2.4	2.5	3.8	4.4	4.4	4.1	4.2	3.8	3.0	1.3	3.0	2.9	4.4	0.7	2.3
11	4.4	5.7	4.6	2.6	4.4	2.9	1.8	1.2	1.7	1.8	2.2	3.4	3.6	3.5	3.1	3.1	3.4	3.9	3.9	3.7	3.8	3.2	4.3	5.0	5.7	1.2	3.4
12	7.2	4.0	6.0	9.5	9.4	10.4	10.8	10.4	8.5	7.9	8.6	9.8	10.0	8.9	9.9	4.7	8.1	6.2	5.3	4.9	5.1	5.6	6.0	5.8	10.8	4.0	7.6
13	5.6	6.5	6.8	10.5	10.2	10.8	11.2	11.3	12.3	12.7	12.7	11.5	10.6	10.7	11.3	11.9	9.9	9.3	8.7	8.8	6.5	3.5	4.0	3.7	12.7	3.5	9.2
14	4.0	2.0	4.0	1.5	0.8	0.9	1.5	0.9	3.3	5.9	3.9	2.7	3.2	3.6	4.3	4.0	4.6	5.0	4.1	3.3	3.3	3.8	5.0	2.3	5.9	0.8	3.2
15	1.0	1.3	1.6	2.1	1.4	1.6	1.1	0.7	1.1	2.5	4.9	6.2	7.3	6.5	7.2	7.2	7.1	7.1	7.4	5.4	4.6	3.8	2.6	2.2	7.4	0.7	3.9
16	2.3	1.4	3.3	2.5	4.0	4.2	4.4	4.1	4.1	4.7	3.8	4.1	4.3	5.4	6.0	5.9	5.5	6.2	4.4	3.2	2.2	1.9	1.5	1.3	6.2	1.3	3.8
17	1.9	1.3	2.2	2.4	1.5	2.8	4.6	3.1	1.9	1.4	0.7	1.9	2.5	4.0	3.9	4.1	4.0	5.6	4.8	3.4	1.5	1.3	0.8	1.7	5.6	0.7	2.6
18	4.4	7.6	8.7	8.1	8.0	7.5	6.5	7.5	7.1	5.9	6.2	7.1	5.3	3.8	5.5	5.1	5.6	5.3	2.8	1.4	1.3	1.3	1.5	0.8	8.7	0.8	5.2
19	0.7	1.2	1.0	1.1	1.2	2.2	4.2	4.2	4.6	4.7	3.4	3.1	3.4	4.0	4.0	5.7	6.7	5.5	6.2	5.6	5.0	4.3	3.1	2.7	6.7	0.7	3.7
20	2.2	2.4	2.0	2.4	2.2	2.7	3.6	3.2	2.0	2.2	2.7	3.3	4.2	4.1	4.6	4.2	3.9	4.0	3.8	3.2	1.7	2.8	3.0	2.7	4.6	1.7	3.0
21	3.2	3.7	4.1	3.8	4.1	3.6	3.4	3.3	4.1	3.9	3.6	3.1	3.3	3.6	3.7	4.4	5.4	5.0	5.6	4.5	4.3	4.2	5.5	5.2	5.6	3.1	4.1
22	5.1	4.6	4.4	4.9	5.0	4.8	4.1	4.0	3.1	3.0	2.6	1.2	1.1	1.9	3.2	2.7	3.0	3.2	3.1	3.6	3.5	5.1	5.4	6.0	6.0	1.1	3.7
23	5.2	5.7	4.2	4.7	3.0	4.7	5.1	4.9	4.0	3.7	4.1	4.2	1.2		1.5	5.5	5.6	3.9	4.4	4.6	5.0	4.9	3.4	1.4	5.7	1.2	4.1
24	2.6	2.4	2.9	3.1	2.5	2.1	2.2	2.1	1.2	1.4	1.7	1.2	1.4	2.4	3.3	3.2	3.3	3.1	2.3	2.5	1.7	1.6	1.4	1.6	3.3	1.2	2.2
25	1.4	1.9	1.6	2.4	3.2	2.4	1.4	1.0	1.8	1.2	2.3	1.7	1.1	2.3	2.0	1.6	2.1	2.0	1.9	1.4	1.7	1.4	0.6	1.5	3.2	0.6	1.8
26	2.2	2.9	3.0	2.6	2.0	1.8	2.1	1.6	2.3	2.5	1.7	1.6	2.3	1.9	2.6	2.7	1.4	1.0	2.2	1.7	2.5	4.5	4.9	5.2	5.2	1.0	2.5
27	6.0	6.1	6.2	6.7	6.6	6.2	5.5	6.5	8.0	6.5	7.8	7.9	7.1	5.1	5.1	4.9	8.1	8.1	7.7	4.9	4.5	4.4	5.4	4.6	8.1	4.4	6.2
28	3.9	3.7	4.7	3.9	4.6	5.1	5.5	5.8	4.5	4.1	3.6	2.7	1.7	1.9	1.3	1.3	2.7	2.8	2.3	1.9	0.9	0.7	2.2	3.6	5.8	0.7	3.1
29	3.9	3.3	1.7	1.5	0.9	0.9	0.8	0.7	0.9	3.0	3.8	4.3	4.1	4.9	4.2	3.5	2.1	3.5	3.1	1.6	0.9	1.0	0.8	1.7	4.9	0.7	2.4
30	2.9	2.9	2.8	3.5	3.2	4.8	3.6	3.6	4.1	4.1	3.9	4.8	5.8	4.8	3.9	3.7	3.8	3.0	2.2	2.4	2.2	2.2	2.9	2.5	5.8	2.2	3.5
Max.	**9.1**	**9.5**	**8.9**	**10.5**	**10.2**	**10.8**	**11.2**	**11.3**	**12.3**	**12.7**	**12.7**	**11.5**	**10.6**	**10.7**	**11.3**	**11.9**	**9.9**	**9.3**	**8.7**	**8.8**	**6.5**	**5.6**	**6.0**	**6.0**	**12.7**		
Min.	**0.7**	**1.2**	**1.0**	**0.7**	**0.8**	**0.9**	**0.8**	**0.7**	**0.9**	**1.1**	**0.7**	**1.1**	**1.1**	**1.9**	**1.3**	**1.3**	**1.4**	**1.0**	**1.9**	**1.4**	**0.9**	**0.7**	**0.6**	**0.8**		**0.6**	
Avg.	**3.6**	**3.8**	**3.8**	**3.9**	**3.8**	**3.9**	**3.8**	**3.6**	**3.7**	**3.8**	**3.9**	**4.2**	**4.2**	**4.5**	**4.7**	**4.6**	**4.8**	**4.5**	**4.3**	**3.5**	**3.1**	**3.2**	**3.4**	**3.1**			**3.9**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.2	2.3	2.0	1.7	0.9	0.6	2.0	1.2	1.7	1.7	2.6	2.0	2.7	3.6	6.4	5.4	5.1	4.7	3.2	3.8	4.0	3.7	1.7	3.9	6.4	0.6	2.9
2	3.9	1.2	1.8	2.2	1.4	1.3	1.3	0.8	1.0	1.5	1.6	1.8	0.9	0.9	1.9	1.5	2.5	1.1	1.1	2.0	3.8	7.0	5.7	5.0	7.0	0.8	2.2
3	3.6	2.9	2.1	1.8	1.9	2.3	1.9	3.4	5.0	4.4	4.2	5.5	5.7	5.5	6.2	5.9	6.2	6.4	5.0	2.8	5.4	3.9	2.9	3.8	6.4	1.8	4.1
4	2.2	4.7	3.5	3.9	2.8	1.8	2.1	2.7	3.1	2.8	3.1	2.6	1.9	1.8	1.7	2.4	2.0	1.8	1.3	2.4	1.7	1.1	0.8	1.0	4.7	0.8	2.3
5	1.1	1.6	1.0	0.5	0.9	1.9	0.9	0.6	0.6	0.8	1.3	1.2	1.5	1.8	2.1	2.5	2.5	2.1	1.8	0.8	2.7	3.0	3.6	2.8	3.6	0.5	1.7
6	3.2	3.2	3.8	4.0	3.6	3.6	2.7	2.4	3.1	3.3	3.2	3.5	2.6	3.5	4.5	3.7	3.9	3.5	3.9	4.6	4.5	3.7	3.8	4.3	4.6	2.4	3.6
7	4.5	3.5	3.4	4.2	4.4	4.0	5.8	6.2	7.1	5.9	6.9	8.9	8.2	8.1	6.8	7.9	6.9	6.6	6.6	5.2	4.9	5.1	5.8	5.5	8.9	3.4	5.9
8	6.5	5.8	4.5	5.4	4.6	2.9	2.1	3.9	4.4	4.9	3.6	3.7	4.1	3.8	4.4	4.0	4.8	3.9	2.7	2.1	2.0	1.6	1.5	4.0	6.5	1.5	3.8
9	4.4	6.0	6.0	7.6	9.2	11.7	11.8	13.0	12.4	11.5	10.7	9.8	7.6	11.9	13.5	13.7	12.8	13.7	13.0	8.3	6.5	6.1	7.8	7.9	13.7	4.4	9.9
10	5.2	4.3	3.9	3.1	3.9	3.7	5.0	2.3	1.3	1.5	1.9	1.8	2.6	2.0	2.8	3.9	5.9	5.9	3.5	1.6	1.3	2.0	3.1	2.3	5.9	1.3	3.1
11	3.4	4.5	3.2	5.9	6.4	5.8	5.4	5.1	4.0	5.2	4.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	6.4	0.2	2.3
12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.1	12.6	12.5	13.0	9.6	8.3	6.4	4.5	4.3	5.1	13.0	0.2	3.5
13	6.2	5.9	6.1	5.3	4.5	2.4	3.1	2.9	2.1	1.6	1.5	3.1	5.4	5.3	4.7	2.4	3.9	5.4	5.3	5.5	5.1	4.8	4.9	4.8	6.2	1.5	4.3
14	5.6	6.8	6.5	6.4	5.1	6.2	8.4	6.0	2.8	5.2	5.1	5.3	3.9	3.3	3.3	3.1	4.1	3.4	2.4	2.6	1.9	0.7	2.1	3.1	8.4	0.7	4.3
15	2.2	2.9	6.4	8.0	9.3	6.6	7.8	8.5	7.7	5.5	7.1	7.4	7.6	7.7	8.3	7.6	6.7	6.6	6.6	8.7	8.6	8.1	7.1	8.3	9.3	2.2	7.1
16	7.3	6.3	6.2	6.6	6.9	6.7	6.9	6.7	7.5	8.2	7.9	7.5	7.1	7.3	7.1	6.2	6.4	6.1	5.3	5.4	5.4	4.7	3.7	3.3	8.2	3.3	6.4
17	2.8	2.9	3.0	2.6	1.9	1.8	1.4	1.4	1.4	1.0	0.8	0.5	0.5	0.5	0.5	0.5	0.7	0.8	0.7	1.3	1.2	0.5	1.1	4.3	4.3	0.5	1.4
18	4.7	4.7	4.6	4.6	4.6	4.3	4.3	5.8	6.1	5.6	4.9	4.0	4.0	5.1	4.4	5.1	5.5	5.2	5.1	5.9	7.5	4.1	3.2	5.3	7.5	3.2	4.9
19	6.1	5.1	5.9	7.0	6.4	8.7	9.4	8.6	9.1	9.3	9.3	8.9	8.8	8.9	8.3	6.5	6.6	5.6	5.4	4.9	5.6	5.6	4.0	3.1	9.4	3.1	7.0
20	2.7	3.0	2.7	3.0	2.7	1.8	1.5	2.2	3.2	3.2	2.9	3.7	3.5	4.1	4.6	4.5	4.5	4.1	3.1	3.4	4.1	3.6	2.8	3.6	4.6	1.5	3.3
21	4.1	3.8	2.8	1.9	0.9	1.3	1.8	2.0	1.1	1.6	1.7	1.4	4.3	3.9	5.5	6.8	7.1	6.0	5.9	6.5	7.5	5.2	4.7	5.0	7.5	0.9	3.9
22	3.6	5.4	6.9	9.2	8.6	9.8	11.0	11.4	11.5	10.4	11.6	9.8	6.3	4.9	6.8	6.4	6.3	7.5	8.5	8.5	7.6	2.9	4.0	4.6	11.6	2.9	7.7
23	5.8	8.8	9.1	8.7	10.3	8.2	10.5	10.0	9.9	12.3	13.3	8.9	8.3	8.6	7.0	7.6	8.7	7.2	5.8	5.0	5.1	5.0	3.9	2.8	13.3	2.8	7.9
24	6.0	8.1	8.6	9.1	9.0	10.4	11.0	10.2	9.0	7.8	5.6	5.1	6.7	6.4	4.4	2.2	1.7	2.3	1.6	1.4	1.5	1.9	1.5	2.1	11.0	1.4	5.6
25	1.1	2.7	4.6	4.1	3.7	3.7	5.1	5.0	5.2	4.5	4.1	4.0	3.6	3.5	3.9	2.9	2.3	3.0	0.9	1.5	2.9	3.8	3.9	4.9	5.2	0.9	3.5
26	5.2	5.8	6.4	6.1	6.9	6.5	7.4	7.2	8.4	8.5	9.4	8.9	9.7	10.5	11.8	10.7	10.1	10.8	8.0	5.8	5.2	5.6	9.8	8.9	11.8	5.2	8.1
27	8.7	5.6	5.5	8.5	10.9	12.8	11.9	8.6	11.3	13.4	10.9	12.3	13.0	9.4	12.1	9.7	8.2	7.4	7.8	5.6	6.2	4.7	4.2	3.3	13.4	3.3	8.8
28	2.9	1.7	1.3	1.7	2.2	2.1	1.9	1.7	1.1	0.9	0.9	1.1	0.9	0.9	1.4	0.9	0.8	1.1	2.0	3.3	2.1	1.7	2.5	2.7	3.3	0.8	1.7
29	2.7	3.0	2.8	2.9	2.5	2.8	2.1	1.4	1.1	1.4	1.2	1.3	0.8	1.0	0.8	0.9	2.5	2.6	3.0	4.0	3.6	3.8	4.3	2.9	4.3	0.8	2.3
30	3.6	3.2	3.4	1.9	1.0	1.0	1.1	1.4	1.1	1.7	1.3	1.6	1.3	1.9	1.3	0.8	1.4	1.5	2.3	1.9	2.4	2.5	2.4	2.4	3.6	0.8	1.8
31	1.4	2.1	1.8	1.6	1.8	1.8	1.6	1.6	1.7	1.5	1.7	1.6	1.6	0.8	0.7	2.4	1.7	2.0	2.8	2.8	3.1	2.7	3.0	2.8	3.1	0.7	1.9
Max.	**8.7**	**8.8**	**9.1**	**9.2**	**10.9**	**12.8**	**11.9**	**13.0**	**12.4**	**13.4**	**13.3**	**12.3**	**13.0**	**11.9**	**13.5**	**13.7**	**12.8**	**13.7**	**13.0**	**8.7**	**8.6**	**8.1**	**9.8**	**8.9**	**13.7**		
Min.	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**		**0.2**	
Avg.	**4.0**	**4.1**	**4.2**	**4.5**	**4.5**	**4.5**	**4.8**	**4.7**	**4.7**	**4.7**	**4.7**	**4.4**	**4.4**	**4.4**	**4.9**	**4.9**	**5.0**	**4.9**	**4.3**	**4.1**	**4.2**	**3.7**	**3.7**	**4.0**			**4.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.1	2.4	1.3	1.7	2.7	2.9	2.8	1.6	1.6	2.6	4.5	4.7	6.2	4.8	5.2	4.7	4.7	7.7	3.9	6.5	7.8	7.9	8.7	8.5	8.7	1.3	4.5
2	7.0	6.8	7.1	6.0	5.2	5.6	5.8	5.4	6.7	8.4	10.3	9.3	8.3	9.3	8.4	8.2	6.2	5.9	4.9	4.9	4.9	3.8	4.2	4.3	10.3	3.8	6.5
3	6.3	8.4	8.1	5.6	6.4	4.8	5.7	5.4	5.4	7.2	6.8	5.2	5.8	5.5	6.2	6.1	6.0	5.5	6.0	8.2	7.7	8.6	9.3	8.5	9.3	4.8	6.6
4	7.6	5.7	4.8	6.2	6.8	5.5	6.4	7.2	9.1	9.3	7.3	6.3	7.1	6.5	5.6	5.9	6.0	5.9	6.4	6.2	5.2	5.2	5.3	4.9	9.3	4.8	6.4
5	4.3	5.3	6.1	5.7	4.7	5.6	6.3	6.7	5.1	4.4	3.9	5.0	3.8	5.2	5.4	6.0	6.2	5.7	7.1	6.0	5.9	5.4	5.8	6.3	7.1	3.8	5.5
6	5.5	5.1	5.0	4.8	5.2	5.7	5.6	3.6	1.3	1.7	1.2	1.8	2.5	4.0	5.2	6.2	7.9	8.1	7.2	8.0	10.1	10.5	9.2	9.6	10.5	1.2	5.6
7	9.1	9.5	9.6	8.7	8.8	7.6	7.9	6.9	5.9	6.2	6.4	6.0	4.1	3.2	3.1	3.6	2.8	1.8	1.3	1.5	1.0	1.1	1.9	2.7	9.6	1.0	5.0
8	2.7	2.9	2.9	3.0	4.4	4.6	3.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.9	3.8	4.6	5.2	6.0	6.8	6.4	7.7	9.0	9.9	9.9	0.2	3.6
9	8.4	8.6	8.6	8.9	9.2	10.5	9.7	7.3	7.0	8.0	6.6	7.0	6.8	4.8	4.5	4.1	4.5	4.5	5.2	4.5	5.9	5.6	6.9	5.8	10.5	4.1	6.8
10	4.7	5.5	5.2	3.6	4.2	7.7	6.1	7.1	8.4	9.9	8.6	3.2	4.9	3.1	2.8	2.2	2.3	4.2	3.0	3.0	4.3	5.2	4.6	3.6	9.9	2.2	4.9
11	2.3	1.2	2.2	2.6	2.6	2.3	2.7	1.9	1.6	1.6	1.0	1.0	0.8	0.6	0.2	0.2	0.7	1.7	1.7	2.2	1.6	0.8	0.2	0.2	2.7	0.2	1.4
12	1.4	1.2	0.3	0.6	0.4	0.2	0.2	0.2	1.6	2.0	2.6	2.1	2.0	0.7	0.9	1.0	0.8	0.8	0.6	0.2	0.5	1.5	1.2	2.0	2.6	0.2	1.0
13	2.4	2.7	2.5	2.4	2.2	2.3	2.6	3.1	2.1	1.4	0.8	0.6	1.2	1.0	1.3	1.7	2.3	1.7	0.8	1.0	1.3	1.0	1.4	1.4	3.1	0.6	1.7
14	2.9	2.3	2.2	1.9	2.2	2.2	1.4	1.8	1.4	0.7	0.6	1.0	0.8	1.1	1.4	0.9	0.5	1.2	1.4	1.2	1.2	0.6	1.3	1.0	2.9	0.5	1.4
15	0.8	1.5	1.7	1.7	1.3	1.0	0.8	1.8	2.5	2.7	2.1	2.2	3.6	3.7	4.1	4.1	3.5	4.6	4.6	4.1	4.1	4.3	4.5	4.6	4.6	0.8	2.9
16	4.0	4.0	4.8	3.5	3.3	3.6	3.5	2.5	1.2	1.4	1.9	2.3	1.0	1.1	1.1	1.8	1.8	1.7	2.2	2.4	1.6	2.0	2.0	1.7	4.8	1.0	2.4
17	2.0	2.0	2.4	2.5	2.2	2.3	1.7	1.8	2.0	2.0	2.0	1.7	1.6	1.9	2.5	3.7	6.0	7.4	7.4	7.8	8.2	8.2	8.4	7.8	8.4	1.6	4.0
18	7.8	3.5	3.0	4.0	5.5	6.9	6.4	7.2	7.1	6.9	7.6	6.9	7.5	7.0	6.4	7.2	7.1	7.0	9.0	9.0	9.0	8.3	7.7	8.1	9.0	3.0	6.9
19	8.4	8.4	7.7	8.9	10.0	8.8	7.5	7.2	8.3	12.7	10.8	12.7	14.3	13.6	13.5	12.9	12.7	13.4	12.1	15.1	15.4	15.0	12.4	12.0	15.4	7.2	11.4
20	12.5	13.0	12.0	16.2	14.7	12.8	7.3	9.3	12.6	7.7	8.5	6.8	7.5	11.5	9.3	8.7	9.8	9.1	11.1	11.2	11.5	10.9	12.1	10.7	16.2	6.8	10.7
21	9.3	10.9	10.1	7.8	7.3	9.4	9.7	7.4	9.2	7.6	7.3	5.8	6.4	5.7	5.6	5.0	4.5	4.6	4.0	3.6	3.5	5.3	2.7	2.8	10.9	2.7	6.5
22	4.5	2.0	1.2	0.8	1.7	2.2	0.7	1.9	1.1	1.2	0.8	1.7	2.0	2.2	2.3	2.3	0.9	1.4	2.1	1.4	1.4	1.0	2.2	2.9	4.5	0.7	1.7
23	3.3	3.1	2.6	2.3	1.2	1.4	0.9	1.0	1.0	0.9	0.9	0.7	1.4	3.3	3.9	2.5	2.7	2.2	1.9	3.3	4.6	4.7	4.4	3.7	4.7	0.7	2.4
24	3.7	5.6	8.7	9.3	8.0	8.7	7.7	9.1	8.1	9.5	8.1	9.4	7.7	7.2	8.7	6.8	7.6	6.9	5.3	4.7	5.1	7.6	10.7	3.6	10.7	3.6	7.4
25	2.8	3.1	2.8	2.6	1.3	1.4	1.5	1.5	1.3	1.5	2.3	3.0	2.2	1.8	3.8	5.5	5.0	6.4	4.6	5.3	6.9	8.5	7.0	6.7	8.5	1.3	3.7
26	5.9	5.4	6.3	5.6	4.5	5.2	4.8	5.3	5.1	4.5	3.4	5.5	6.1	6.1	6.1	5.6	4.8	5.3	8.1	6.3	3.0	1.4	1.9	4.1	8.1	1.4	5.0
27	4.2	5.8	6.2	4.9	5.1	7.3	6.7	5.7	7.0	7.5	8.0	6.5	6.7	7.1	8.0	8.5	9.3	9.5	8.0	8.7	8.2	8.9	9.1	10.5	10.5	4.2	7.4
28	9.8	9.5	10.2	10.4	10.5	9.6	9.6	9.7	9.8	9.4	8.5	8.8	9.0	10.0	9.2	8.7	8.4	9.1	11.6	11.8	7.7	11.4	9.1	8.6	11.8	7.7	9.6
29	7.5	8.8	8.7	9.0	9.0	7.7	6.8	6.6	6.9	6.8	6.6	6.4	6.7	7.9	6.7	7.5	9.5	8.9	9.6	9.5	6.6	6.2	6.0	5.2	9.6	5.2	7.5
30	4.3	6.8	9.2	5.6	6.4	6.0	7.4	6.6	5.5	7.9	8.6	7.3	7.3	7.3	7.0	8.0	8.3	6.2	9.0	9.7	8.9	8.0	9.0	10.0	10.0	4.3	7.5
Max.	**12.5**	**13.0**	**12.0**	**16.2**	**14.7**	**12.8**	**9.7**	**9.7**	**12.6**	**12.7**	**10.8**	**12.7**	**14.3**	**13.6**	**13.5**	**12.9**	**12.7**	**13.4**	**12.1**	**15.1**	**15.4**	**15.0**	**12.4**	**12.0**	**16.2**		
Min.	**0.8**	**1.2**	**0.3**	**0.6**	**0.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.5**	**0.8**	**0.6**	**0.2**	**0.5**	**0.6**	**0.2**	**0.2**		**0.2**	
Avg.	**5.2**	**5.4**	**5.5**	**5.2**	**5.2**	**5.4**	**5.0**	**4.8**	**4.9**	**5.1**	**4.9**	**4.7**	**4.8**	**4.9**	**5.0**	**5.1**	**5.2**	**5.5**	**5.5**	**5.8**	**5.6**	**5.9**	**5.9**	**5.7**			**5.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (Climatronics) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.6	9.0	8.8	8.7	8.5	6.1	5.1	5.2	4.8	4.4	1.8	3.6	3.3	3.4	2.6	1.5	2.6	1.3	1.7	1.5	2.2	1.9	1.7	1.1	10.6	1.1	4.2
2	1.1	1.9	1.2	1.5	1.1	2.3	4.4	2.3	2.0	5.0	5.7	10.4	10.8	11.5	9.3	10.1	10.6	12.3	10.6	11.4	10.3	12.1	10.7	9.6	12.3	1.1	7.0
3	9.4	12.3	13.0	11.3	10.8	12.4	13.6	11.7	13.0	13.7	15.8	14.5	14.0	13.3	15.8	16.9	17.0	13.3	13.3	13.6	13.4	13.8	13.7	9.3	17.0	9.3	13.3
4	8.8	8.8	8.4	7.8	7.3	7.1	8.3	7.5	7.4	8.3	8.1	7.7	8.1	7.9	8.3	7.4	6.5	5.7	5.5	5.0	4.7	3.9	4.3	4.8	8.8	3.9	7.0
5	4.8	5.4	4.0	4.5	4.6	5.5	5.9	7.5	6.5	5.3	6.2	7.0	7.3	6.6	5.6	3.4	3.1	3.3	2.8	2.8	2.9	2.1	1.8	1.1	7.5	1.1	4.6
6	0.9	2.1	4.2	4.3	3.4	5.4	2.5	2.9	3.6	2.6	1.7	1.0	0.9	2.2	2.6	2.1	1.1	1.4	2.1	2.6	2.8	3.3	3.4	3.6	5.4	0.9	2.6
7	3.7	4.9	4.8	0.2	6.7	7.4	7.5	6.6	8.1	7.7	7.6	7.9	8.6	7.4	6.5	6.1	5.1	4.9	2.8	0.9	3.0	3.7	2.8	3.5	8.6	0.2	5.3
8	2.2	1.7	2.0	2.0	1.9	1.2	1.3	2.6	5.2	5.4	5.1	8.2	8.3	12.1	14.0	12.8	11.2	9.9	9.4	8.5	9.3	8.0	7.7	6.8	14.0	1.2	6.5
9	7.5	7.6	7.0	3.7	5.2	6.6	8.6	8.3	9.1	7.4	5.3	3.9	4.2	2.8	0.9	0.6	0.9	1.9	2.9	1.9	1.6	2.0	1.5	2.1	9.1	0.6	4.3
10	2.7	2.8	2.5	3.8	3.3	3.6	4.9	3.1	4.4	3.9	3.2	2.9	1.1	0.8	1.1	0.9	1.7	1.2	2.0	2.3	1.7	3.1	4.2	4.3	4.9	0.8	2.7
11	4.3	4.1	3.3	2.2	2.5	1.2	2.5	2.7	2.9	2.5	2.7	1.7	1.2	1.4	1.3	4.3	5.3	7.1	5.9	3.6	4.7	5.9	6.0	4.3	7.1	1.2	3.5
12	4.6	4.4	4.7	3.6	3.7	1.2	1.8	2.7	3.8	1.9	1.2	0.8	1.0	1.3	0.5	0.8	0.6	2.1	4.6	6.3	5.6	5.6	6.1	6.2	6.3	0.5	3.1
13	5.7	5.1	4.7	6.8	6.8	8.5	8.8	6.0	7.2	5.6	3.6	5.5	5.5	1.7	3.4	5.8	4.2	3.8	2.9	3.0	2.5	2.5	2.9	1.8	8.8	1.7	4.8
14	2.8	1.6	2.4	1.3	1.9	1.9	1.6	1.2	1.2	1.9	2.1	1.9	4.4	4.1	5.2	6.8	7.8	6.0	5.0	7.1	10.1	9.0	9.8	9.6	10.1	1.2	4.4
15	11.0	9.6	9.8	7.7	9.7	8.4	8.6	7.8	7.5	4.9	4.4	3.5	2.0	2.2	2.8	2.7	1.3	0.5	1.0	2.5	3.3	1.9	2.5	2.4	11.0	0.5	4.9
16	2.1	2.0	2.3	1.6	1.8	1.6	1.6	1.7	1.7	1.3	1.3	0.2	0.2	0.2	1.1	1.4	2.5	2.4	2.3	2.6	3.3	3.3	4.3	6.2	6.2	0.2	2.0
17	7.9	11.5	9.6	9.2	10.0	9.0	10.1	9.9	8.9	8.5	8.0	9.5	8.9	9.3	9.5	9.8	9.7	9.2	9.3	8.7	10.5	9.9	8.8	10.0	11.5	7.9	9.4
18	12.6	12.0	10.9	10.1	10.0	10.2	11.1	12.0	11.6	13.5	13.7	10.5	9.4	10.2	9.9	11.4	11.9	12.2	12.6	13.2	11.7	12.1	11.9	11.7	13.7	9.4	11.5
19	13.5	12.7	13.1	13.3	13.4	13.5	11.8	10.2	8.8	8.7	9.4	7.2	5.6	3.6	1.9	0.9	1.4	3.2	5.4	8.3	8.2	7.2	6.4	7.7	13.5	0.9	8.1
20	7.5	4.9	1.5	1.5	1.3	2.0	4.0	7.8	7.7	6.9	7.3	3.1	1.3	1.8	2.3	3.3	3.4	1.6	1.8	2.5	3.0	3.1	4.2	4.7	7.8	1.3	3.7
21	4.5	1.2	1.9	2.3	2.7	4.2	3.8	2.7	1.0	1.3	3.9	3.9	1.1	1.7	0.9	0.6	1.0	0.7	1.6	2.4	2.4	2.9	2.2	1.6	4.5	0.6	2.2
22	2.3	2.1	1.3	0.9	1.1	2.4	4.2	4.7	5.5	6.8	5.7	6.5	5.7	3.9	2.5	3.2	4.4	5.6	5.2	6.1	8.4	9.2	9.4	7.6	9.4	0.9	4.8
23	4.3	4.2	7.2	7.2	7.7	9.1	7.2	4.7	3.7	8.0	8.5	8.6	6.3	6.1	6.6	6.4	6.6	6.2	5.5	6.5	6.9	6.9	7.3	6.4	9.1	3.7	6.6
24	6.9	7.5	7.5	5.5	6.9	8.2	4.8	4.7	1.3	1.2	1.8	1.8	1.5	3.5	3.6	4.7	4.4	3.1	1.7	1.2	1.1	0.8	3.5	4.1	8.2	0.8	3.8
25	4.6	4.7	7.2	7.4	8.1	8.6	5.8	10.6	10.2	9.3	11.2	10.8	9.0	9.7	9.9	10.3	6.8	10.2	11.7	14.1	15.1	12.6	12.7	14.9	15.1	4.6	9.8
26	13.1	12.8	12.0	13.4	12.9	12.5	10.7	11.1	11.1	10.5	11.5	10.2	9.1	10.0	11.0	10.2	11.1	11.2	13.0	12.8	13.7	13.4	10.5	8.7	13.7	8.7	11.5
27	10.1	8.7	9.8	12.2	17.1	17.6	11.4	12.7	13.7	13.5	12.0	16.9	9.9	9.2	13.0	15.4	13.8	17.1	13.4	11.3	11.1	13.2	12.3	12.6	17.6	8.7	12.8
28	12.3	10.8	11.1	9.0	8.3	7.0	6.7	5.4	10.3	14.1	11.0	8.0	9.8	11.2	11.6	10.6	7.8	8.9	8.3	5.6	7.1	6.2	6.5	6.4	14.1	5.4	8.9
29	5.1	4.7	7.7	8.3	8.9	7.7	7.2	8.4	8.4	8.3	8.5	8.4	8.4	7.6	8.0	7.4	7.1	7.8	8.4	8.9	8.9	8.8	8.6	7.9	8.9	4.7	7.9
30	8.8	8.6	9.7	8.3	7.3	8.9	9.5	8.3	10.6	10.5	9.7	9.5	9.7	10.2	10.3	8.5	10.8	10.9	9.4	9.2	9.0	8.1	10.4	8.8	10.9	7.3	9.4
31	8.6	8.4	7.0	4.4	7.6	5.6	6.5	7.4	12.5	12.5	11.7	12.3	12.2	13.8	12.5	14.7	14.5	14.2	13.8	13.5	13.8	9.2	7.4	6.1	14.7	4.4	10.4
Max.	**13.5**	**12.8**	**13.1**	**13.4**	**17.1**	**17.6**	**13.6**	**12.7**	**13.7**	**14.1**	**15.8**	**16.9**	**14.0**	**13.8**	**15.8**	**16.9**	**17.0**	**17.1**	**13.8**	**14.1**	**15.1**	**13.8**	**13.7**	**14.9**	**17.6**		
Min.	**0.9**	**1.2**	**1.2**	**0.2**	**1.1**	**1.2**	**1.3**	**1.2**	**1.0**	**1.2**	**1.2**	**0.2**	**0.2**	**0.2**	**0.5**	**0.6**	**0.6**	**0.5**	**1.0**	**0.9**	**1.1**	**0.8**	**1.5**	**1.1**		**0.2**	
Avg.	**6.6**	**6.4**	**6.5**	**5.9**	**6.5**	**6.7**	**6.5**	**6.5**	**6.9**	**6.9**	**6.8**	**6.7**	**6.1**	**6.1**	**6.3**	**6.5**	**6.3**	**6.4**	**6.3**	**6.4**	**6.9**	**6.6**	**6.6**	**6.3**			**6.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	243.9	243.4	256.7	263.2	243.7	270.4	266.1	291.0	283.0	283.1	275.7	289.6	262.5	278.9	248.5	244.8	246.5	238.1	250.1	259.7	256.6	264.9	271.1	249.8
2	285.7	297.5	279.2	255.5	261.1	256.5	258.5	260.9	248.6	265.7	275.4	257.7	257.6	278.3	274.2	286.5	291.3	273.1	271.8	266.4	256.0	260.8	261.5	258.4
3	261.4	259.5	283.9	262.3	275.8	300.2	267.8	308.9	272.8	270.8	282.6	276.0	274.4	266.0	274.2	290.4	290.0	275.2	300.3	276.3	280.0	282.5	270.8	269.1
4	285.9	269.6	293.8	289.1	285.3	277.1	290.2	291.8	298.6	290.5	288.3	276.6	259.7	268.9	272.9	270.5	290.9	267.7	270.3	258.6	270.5	267.8	282.5	277.4
5	264.0	289.0	276.5	280.8	310.5	282.0	291.4	293.0	295.2	283.2	264.9	233.8	228.0	222.1	252.0	243.0	301.5	271.3	237.4	252.9	256.7	202.3	241.9	279.5
6	257.7	257.8	262.1	262.5	289.4	282.4	249.7	232.6	256.4	284.7	264.7	265.0	280.1	273.5	254.4	291.8	288.5	284.5	275.1	271.5	274.1	255.0	271.4	263.4
7	263.1	284.2	271.9	273.5	251.6	253.3	258.4	255.3	261.2	262.5	274.0	281.9	271.6	275.2	267.0	289.7	276.0	293.6	289.7	310.2	309.5	279.8	272.9	286.7
8	283.1	256.4	271.2	263.9	263.9	261.5	259.7	267.7	271.0	274.6	278.3	270.7	280.2	276.4	277.1	266.4	264.7	266.5	262.7	272.9	272.5	257.7	272.1	279.9
9	271.3	267.8	275.4	269.9	255.0	268.6	270.8	275.6	275.2	273.6	277.6	284.2	286.9	293.9	310.9	295.5	305.7	313.2	296.8	296.0	313.5	292.6	275.5	286.3
10	302.2	290.3	288.8	302.9	288.1	282.0	278.6	294.1	291.3	295.2	301.2	302.0	273.9	279.1	264.0	275.4	295.3	255.3	250.0	250.8	276.9	292.5	290.1	284.9
11	300.2	253.7	289.4	293.3	270.3	277.7	294.2	240.2	298.4	307.0	312.2	296.4	297.7	286.2	267.9	282.7	281.6	273.9	260.9	262.6	246.3	247.5	257.7	272.6
12	268.8	261.6	273.3	273.5	263.5	265.4	264.5	256.6	272.3	260.1	259.6	262.5	265.0	262.6	277.4	288.5	276.7	287.5	271.5	298.2	298.7	304.4	260.6	193.1
13	193.2	204.6	222.9	239.8	259.7	166.5	185.2	189.3	198.4	219.7	218.6	277.5	280.9	255.5	250.2	238.8	242.2	235.1	276.1	279.1	270.9	264.9	262.4	283.0
14	264.5	272.5	281.4	103.9	18.4	95.6	132.6	124.5	110.3	137.8	113.9	111.7	132.2	123.2	115.7	115.9	113.6	107.6	96.5	102.8	90.4	104.8	108.5	104.9
15	112.4	106.8	107.0	115.9	119.7	131.1	144.4	153.9	133.7	144.4	142.5	141.6	142.6	144.9	139.7	139.4	147.0	137.7	150.6	145.7	132.2	100.9	129.4	138.3
16	133.6	113.0	302.4	297.5	237.5	269.8	147.6	282.6	289.0	296.8	273.3	286.8	287.8	121.5	34.6	98.8	84.2	113.4	131.4	69.3	78.3	92.4	261.1	125.7
17	107.2	264.4	289.0	85.2	114.5	120.8	110.9	112.2	99.4	105.2	96.9	95.2	98.0	96.2	89.4	100.8	114.5	115.0	122.0	115.5	110.0	115.0	132.7	127.4
18	123.6	121.9	141.1	150.8	146.2	145.3	141.6	145.7	148.6	149.0	84.0	106.5	159.2	302.7	262.2	133.3	99.0	113.1	86.6	109.9	136.9	132.5	121.5	126.7
19	116.1	102.8	126.2	117.5	109.6	101.8	136.7	124.9	127.7	138.1	134.0	132.8	132.2	122.2	126.1	125.8	126.7	131.0	128.9	129.6	126.8	126.8	126.9	128.9
20	132.2	126.6	119.5	113.4	98.9	107.4	116.4	121.5	119.5	121.7	125.0	112.7	129.4	123.5	122.4	129.1	138.7	132.0	147.1	94.2	119.1	113.3	96.7	113.2
21	115.5	80.1	71.8	101.5	80.2	123.9	118.5	118.5	121.9	111.6	114.0	124.4	116.8	118.8	111.9	108.0	103.2	108.6	120.4	119.9	117.5	117.4	108.5	111.5
22	127.1	144.3	163.8	177.2	176.3	174.0	178.3	172.7	163.0	166.7	199.4	216.4	220.2	226.9	243.2	255.8	240.6	222.1	199.5	131.4	109.7	106.3	267.6	315.6
23	306.1	313.8	306.7	299.7	296.7	301.5	318.6	323.7	321.6	328.3	311.0	314.9	289.4	291.5	278.3	316.9	320.8	311.2	283.6	287.5	277.0	272.6	280.8	280.7
24	276.3	289.1	304.5	285.9	202.1	118.6	127.4	82.4	124.8	131.3	120.3	110.0	98.0	99.1	118.2	132.7	134.7	136.7	137.2	141.9	147.2	149.1	149.9	149.5
25	147.6	162.4	279.9	277.4	278.0	292.8	312.5	301.9	318.4	323.7	335.1	326.8	312.2	320.4	305.2	327.7	308.8	298.8	306.7	321.0	311.5	295.1	316.8	270.4
26	236.1	239.7	230.5	237.0	239.5	218.8	248.8	263.4	268.5	282.4	280.4	260.4	269.2	257.7	260.7	265.8	267.1	283.5	286.2	282.8	279.5	236.7	285.3	197.2
27	102.5	262.7	97.0	114.5	74.0	88.2	76.3	102.9	111.1	110.0	114.3	114.4	111.1	108.4	106.2	105.9	106.8	108.7	103.7	105.3	108.7	107.5	110.6	113.3
28	111.3	114.4	118.6	124.2	123.8	121.6	127.6	134.0	141.4	131.9	138.6	138.2	143.8	144.3	144.2	140.3	87.5	63.4	279.4	269.1	266.3	303.0	264.3	262.9
29	270.5	276.7	254.5	276.3	290.6	292.2	283.1	306.1	286.1	270.6	270.6	252.4	113.5	221.4	242.5	255.5	247.5	255.9	258.4	242.6	198.7	133.5	153.9	285.6
30	256.1	281.4	281.0	284.3	289.9	286.3	277.7	283.4	280.1	275.2	268.5	262.3	231.2	208.2	221.8	221.3	202.9	273.9	300.4	308.0	308.3	307.1	280.0	269.4
31	281.6	282.6	264.4	254.5	247.1	243.0	237.1	257.3	272.2	271.4	271.3	125.4	252.0	236.5	132.4	294.9	272.3	280.6	290.4	293.3	206.7	274.9	282.2	276.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	291.9	279.6	286.0	280.7	278.2	289.3	282.7	283.8	302.1	237.7	270.6	47.5	264.3	132.3	110.5	152.4	269.0	283.2	96.4	277.6	277.2	275.1	287.1	281.4
2	278.5	259.1	262.6	271.2	281.0	280.8	266.4	262.0	263.8	261.9	282.5	296.9	301.5	315.7	286.6	280.5	269.2	276.1	287.4	293.0	279.3	264.1	260.1	280.0
3	237.1	232.8	270.8	252.9	252.8	280.9	256.2	250.6	287.3	294.8	276.0	253.7	268.1	269.4	270.9	272.4	266.9	267.7	263.4	270.1	275.1	291.8	286.3	297.0
4	299.1	287.2	284.9	273.4	272.7	260.8	256.9	267.4	258.8	261.9	251.5	253.6	247.4	252.9	260.5	264.5	262.5	273.0	273.2	282.2	284.8	266.2	268.4	276.9
5	268.6	250.6	255.2	263.1	264.0	266.2	254.5	258.6	258.5	284.2	291.2	270.2	265.0	268.4	255.6	265.5	259.8	259.8	267.8	274.5	285.0	287.9	289.6	292.6
6	292.5	288.4	278.3	265.7	258.4	254.1	264.1	256.1	267.9	285.1	307.7	298.7	286.2	267.3	264.8	269.7	298.1	275.6	263.4	274.8	262.0	265.4	261.1	282.8
7	260.9	260.5	285.9	268.4	251.9	264.9	262.4	300.3	271.8	268.9	286.9	283.3	277.3	301.9	281.4	281.4	280.2	272.6	285.6	298.8	80.1	280.5	265.7	267.9
8	245.1	242.8	302.5	273.9	256.3	279.3	278.1	272.7	278.5	278.6	278.6	278.1	272.7	274.4	258.2	114.9	131.1	135.3	193.7	304.6	128.2	135.6	80.1	83.6
9	55.3	49.5	48.7	48.3	46.4	42.5	39.0	39.6	43.1	44.0	44.6	208.3	242.7	255.7	269.0	274.2	226.2	185.5	285.2	288.4	286.3	273.9	271.2	253.7
10	261.4	270.1	265.0	262.2	254.7	258.5	249.1	256.1	254.7	261.1	260.2	256.2	255.2	251.2	264.7	261.0	247.9	249.1	255.6	251.3	256.9	257.8	256.0	255.7
11	255.6	269.4	277.1	273.5	86.8	61.8	95.2	67.9	73.5	215.5	274.1	60.8	287.1	114.7	112.4	119.2	104.5	105.9	129.6	105.2	96.8	48.3	94.0	112.2
12	98.3	88.7	110.5	291.5	269.2	263.4	259.2	264.0	265.2	262.1	263.2	277.4	269.1	264.5	262.3	262.2	272.9	283.6	272.1	261.6	269.8	266.7	278.6	281.8
13	110.6	115.6	132.3	131.7	101.4	91.9	108.1	128.4	113.0	95.8	105.4	114.8	112.6	108.6	98.4	109.4	112.1	108.9	114.2	116.6	116.1	105.7	107.4	109.7
14	113.3	108.0	110.9	117.9	111.9	110.0	117.2	152.2	220.6	218.7	222.4	229.5	227.9	228.6	233.5	235.1	230.0	232.3	231.4	230.2	227.3	242.8	303.2	266.3
15	266.7	252.7	283.6	278.9	281.2	294.8	284.6	305.6	271.8	267.1	264.2	256.0	251.5	276.8	281.6	254.4	292.6	271.5	270.8	260.6	302.5	90.7	54.2	117.8
16	122.1	97.0	116.3	110.1	114.3	129.0	124.1	119.9	128.8	72.0	59.4	56.8	55.4	56.6	59.0	71.3	102.2	126.9	117.2	130.6	114.7	129.1	95.5	72.0
17	92.4	140.6	82.2	81.5	115.9	94.7	102.9	88.0	89.0	98.3	78.1	43.6	45.3	54.9	46.3	52.3	103.8	111.8	103.9	106.1	109.3	116.5	130.2	127.3
18	118.8	114.7	111.6	106.1	106.8	109.5	109.8	112.3	110.2	110.4	116.9	114.3	116.0	116.4	120.1	124.9	117.7	121.2	129.6	113.2	109.4	107.3	115.7	103.8
19	102.5	115.9	74.1	133.2	30.9	41.7	31.7	47.0	42.2	45.1	46.7	42.6	44.0	45.8	54.9	61.1	44.6	46.6	46.4	47.0	88.8	123.2	124.5	131.4
20	121.2	112.7	107.9	115.9	114.4	113.1	121.7	121.4	121.1	117.1	112.3	118.7	96.6	106.5	119.2	120.8	81.1	48.2	49.4	38.6	37.1	38.1	38.4	37.4
21	38.8	37.9	39.2	38.6	41.4	40.6	38.1	37.0	39.2	35.5	35.1	37.9	41.8	50.0	48.4	43.9	41.6	78.9	124.7	151.5	118.7	239.0	253.3	243.0
22	88.5	70.5	125.4	158.0	287.4	269.9	273.8	105.4	128.0	129.3	252.6	116.4	136.9	114.5	108.2	108.8	111.7	116.2	111.2	111.1	112.7	123.7	129.2	135.5
23	124.1	64.0	79.2	280.0	270.0	266.6	263.8	263.6	267.2	283.5	281.8	264.0	83.3	285.8	268.8	267.1	272.7	272.8	271.6	268.8	277.9	263.4	264.3	262.1
24	290.7	267.8	281.4	307.2	299.1	296.6	261.2	273.4	325.1	326.6	319.7	295.6	265.7	243.0	248.0	253.7	253.7	306.6	309.2	271.8	285.9	298.8	307.6	325.9
25	312.7	318.7	332.9	316.1	309.4	323.7	323.0	320.4	307.1	302.5	298.2	271.5	275.6	272.2	262.7	265.1	267.2	258.7	251.7	9.6	49.6	81.2	61.9	127.9
26	128.5	130.8	132.5	201.2	253.6	251.2	252.6	262.7	256.2	248.6	243.8	234.6	245.2	269.5	256.9	267.8	307.6	266.4	250.0	242.0	250.0	284.0	289.0	286.7
27	291.9	262.0	267.1	294.2	288.0	279.8	269.2	260.3	253.2	262.0	253.5	259.6	268.3	256.2	255.0	246.5	250.5	250.4	246.0	197.6	197.7	166.2	138.3	112.8
28	140.6	178.2	63.5	30.1	35.8	37.7	36.6	37.7	39.5	40.1	30.1	263.0	249.4	288.4	296.7	267.0	272.3	285.4	280.2	281.6	295.8	298.9	261.3	270.3
29	257.3	262.1	247.6	260.7	259.8	271.0	254.8	258.9	273.0	256.8	267.5	262.7	294.0	276.7	268.5	270.1	298.7	319.4	318.0	314.8	304.0	322.6	271.6	295.1

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	320.6	317.5	292.5	285.5	303.2	280.0	249.7	244.9	192.8	287.6	90.3	276.2	279.9	314.3	132.7	125.7	115.8	74.0	56.4	53.4	53.8	65.5	97.4	109.7
2	105.6	72.8	67.7	79.1	100.1	82.2	107.5	115.5	114.6	126.0	127.3	122.7	135.6	137.1	126.2	122.8	121.6	134.6	148.5	135.7	128.0	136.3	111.9	127.3
3	130.6	112.6	131.4	124.8	100.9	114.9	118.4	112.2	112.5	107.6	110.4	111.3	110.1	111.5	123.8	117.8	125.8	132.2	127.6	123.0	134.3	132.9	125.6	111.1
4	114.3	109.5	112.6	112.9	107.4	105.4	107.2	107.8	108.4	110.7	103.6	102.8	102.4	103.4	104.2	101.6	105.2	108.0	105.0	112.5	109.7	113.1	112.3	117.7
5	121.5	128.5	109.2	122.9	125.1	104.9	121.4	100.5	94.0	87.4	115.0	113.5	97.5	106.7	108.8	108.6	107.2	108.9	122.8	119.9	119.3	115.3	116.9	119.9
6	120.0	125.8	128.1	133.3	120.6	91.6	92.8	93.7	108.4	112.5	109.9	111.4	112.3	131.4	123.7	127.6	120.9	127.1	136.6	88.2	54.3	38.5	39.8	38.4
7	44.0	30.2	11.4	273.3	284.1	265.7	279.8	261.6	272.4	279.0	280.2	280.1	276.9	265.2	264.9	271.8	260.8	264.5	243.9	235.4	223.7	228.0	232.8	232.2
8	230.8	221.3	32.6	124.6	106.4	116.1	128.5	122.2	106.4	89.6	131.5	105.7	94.6	86.6	55.8	38.2	38.5	39.1	39.5	39.4	40.6	38.6	35.9	39.7
9	38.6	33.7	27.2	24.4	20.8	22.2	28.7	30.4	29.2	24.8	130.2	166.7	117.4	302.7	264.4	258.3	283.6	281.4	241.7	245.9	265.6	274.5	264.7	275.4
10	267.0	273.7	305.1	137.2	236.0	218.7	205.7	151.1	181.5	215.6	186.1	210.4	207.2	211.1	225.5	233.0	228.2	225.8	231.8	272.3	276.8	267.4	306.7	310.4
11	299.4	317.2	272.8	222.7	262.3	246.6	285.0	253.7	226.3	235.2	254.3	239.4	269.8	239.4	248.8	285.1	296.8	314.8	292.9	297.5	260.1	269.9	278.3	300.3
12	282.0	268.0	266.7	268.2	266.3	264.6	272.6	272.7	293.5	274.4	268.8	279.2	313.2	325.0	311.2	307.7	335.8	330.1	352.3	355.4	344.3	303.2	1.6	130.5
13	313.7	317.5	321.7	312.5	323.0	326.5	330.6	314.4	321.5	302.1	297.2	287.4	293.5	304.6	304.2	305.7	274.5	275.0	273.4	273.6	272.9	262.3	294.7	251.8
14	270.8	251.6	249.3	253.6	256.2	255.2	249.1	255.9	255.6	246.6	256.8	259.2	259.7	268.9	273.8	285.8	267.9	83.5	115.4	98.9	96.4	112.6	124.7	127.4
15	115.8	120.7	118.1	119.4	126.1	117.1	108.0	111.1	106.2	106.9	105.4	111.3	109.0	107.0	110.1	113.9	114.7	114.6	110.7	110.8	115.9	117.1	122.0	116.0
16	125.1	128.2	125.7	132.5	119.5	119.3	137.2	140.1	145.0	117.4	279.0	279.0	281.5	264.1	268.4	277.3	283.1	280.9	260.5	265.7	255.9	253.9	255.8	256.3
17	286.4	270.3	266.9	258.3	251.9	262.1	261.3	261.5	257.2	266.1	260.3	262.1	250.1	101.2	133.1	148.2	276.5	246.3	225.9	223.0	221.3	212.4	206.5	214.0
18	47.6	41.3	88.8	277.4	326.7	327.9	305.6	275.8	273.9	261.8	270.6	273.5	272.0	284.1	264.4	289.4	298.2	292.7	287.4	310.1	314.6	277.2	259.9	301.5
19	325.3	325.7	306.6	288.6	264.9	249.9	285.1	272.1	254.2	267.1	274.8	303.6	316.3	308.7	306.5	304.6	306.3	315.5	318.4	315.3	311.5	308.1	310.8	290.1
20	266.7	257.9	280.8	261.9	250.7	266.8	269.3	278.5	276.5	258.8	264.7	250.1	257.4	247.4	266.3	262.6	271.6	274.2	272.0	280.4	269.3	306.5	249.3	259.1
21	261.4	273.9	280.5	293.5	278.7	285.1	4.9	108.4	127.0	113.2	313.3	347.6	96.2	260.3	266.6	256.5	277.9	267.8	305.3	281.9	296.7	306.1	291.7	243.2
22	247.7	249.1	255.1	263.7	243.4	261.5	256.9	297.2	287.2	236.3	238.6	239.6	253.7	259.6	255.7	266.6	319.5	283.8	303.4	299.7	281.1	264.8	265.3	266.2
23	288.8	286.5	282.6	254.3	265.0	280.2	255.8	254.1	266.0	262.3	255.0	258.8	276.5	276.8	284.1	280.4	280.0	310.1	290.6	299.6	308.4	314.6	310.1	268.0
24	277.6	277.2	266.1	270.0	288.0	277.9	269.2	282.3	297.1	272.9	295.4	290.9	276.8	271.2	293.6	158.7	255.8	277.9	279.3	269.1	260.8	268.6	274.6	51.2
25	112.4	101.2	117.6	100.3	87.2	113.7	293.6	253.0	88.8	272.2	279.4	264.7	254.1	284.1	283.5	275.8	279.9	289.7	297.0	289.1	281.8	257.4	266.0	259.8
26	268.8	268.9	274.0	303.2	308.7	284.5	270.7	266.1	267.3	288.2	269.2	280.5	297.1	296.9	273.6	268.9	257.4	257.8	262.6	281.5	257.9	284.0	261.4	282.6
27	266.0	259.0	263.4	266.5	259.3	261.5	257.1	259.0	270.8	300.6	311.0	283.9	289.5	285.8	287.7	263.2	267.1	286.0	291.8	286.1	298.8	298.5	274.7	266.1
28	255.5	252.1	255.5	273.2	268.1	260.9	266.9	268.9	261.9	264.8	259.6	253.6	263.4	258.1	253.5	251.3	263.8	268.4	254.1	252.7	259.2	272.3	277.4	278.5
29	280.6	283.1	268.8	260.1	301.3	56.3	320.5	78.8	90.4	134.7	127.0	102.9	117.3	117.7	114.1	110.5	110.5	102.6	99.4	104.2	96.6	98.1	107.3	101.7
30	106.0	105.4	105.9	106.0	109.7	111.1	108.1	104.2	105.7	107.7	108.0	107.6	108.1	108.2	112.1	110.9	113.8	123.6	119.3	124.8	106.6	119.2	118.4	115.5
31	116.7	114.4	111.5	124.8	133.1	129.3	116.2	107.5	115.6	114.4	115.4	117.3	115.5	115.8	118.8	116.3	121.3	119.5	114.7	116.4	115.8	118.5	114.9	113.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	111.3	113.2	112.1	113.3	112.0	112.3	114.7	118.6	121.9	118.7	113.6	114.4	107.2	106.5	120.8	118.4	123.8	132.8	135.8	133.0	129.7	124.4	63.7	27.1
2	287.5	257.8	279.5	280.0	257.4	303.1	51.7	145.2	146.8	117.5	166.8	106.3	113.8	125.9	162.0	148.8	96.7	71.3	81.6	123.1	80.8	90.2	108.1	133.5
3	131.0	125.8	123.8	139.2	159.3	160.3	159.7	158.7	145.2	116.7	124.3	162.8	135.9	126.9	124.3	128.3	130.1	124.8	118.8	113.4	110.1	109.8	112.5	113.5
4	112.3	113.2	110.6	112.0	110.2	111.7	113.9	113.2	114.3	116.1	115.2	117.9	120.3	118.3	116.8	121.6	132.5	132.2	135.0	159.6	191.8	224.3	239.6	238.1
5	293.9	311.1	307.2	264.6	265.5	303.2	318.5	297.4	277.6	277.9	267.6	285.4	277.0	265.1	274.1	276.8	275.2	296.4	330.8	326.7	323.1	306.8	314.2	313.6
6	311.7	316.4	299.7	303.2	277.7	301.4	260.6	266.5	268.2	261.3	316.3	308.6	312.3	315.9	287.7	289.7	289.8	281.1	232.8	215.2	259.4	305.5	306.4	273.2
7	260.3	281.7	288.5	273.6	304.0	287.6	297.1	305.2	278.8	275.2	281.9	274.5	275.3	296.6	308.5	302.2	311.7	291.2	283.7	283.6	305.4	292.2	281.4	274.4
8	260.3	267.9	262.3	267.6	276.2	265.6	277.4	273.9	283.2	275.3	277.9	279.5	275.4	284.4	271.9	271.5	282.1	309.6	256.0	263.2	271.3	298.0	297.5	292.0
9	286.7	296.5	310.7	295.8	291.1	305.5	279.5	288.9	299.9	307.3	315.0	317.4	299.4	283.2	277.6	269.0	279.6	298.9	281.6	273.8	278.3	259.0	295.3	299.7
10	267.4	235.0	236.6	237.9	236.6	247.1	258.1	248.0	265.3	257.8	266.9	276.9	258.9	240.2	255.1	250.7	265.5	285.9	282.4	305.2	307.9	305.9	288.9	266.5
11	262.1	268.0	259.6	271.4	265.5	263.1	268.2	265.8	264.7	262.8	253.8	267.7	267.3	289.1	296.2	314.5	315.2	303.5	299.6	291.0	270.7	271.7	285.3	286.6
12	289.7	278.7	281.9	291.0	279.6	263.1	270.0	268.6	279.0	275.8	270.4	287.8	286.9	296.8	301.7	301.7	283.0	287.5	262.2	279.2	303.7	257.7	282.2	279.7
13	200.5	286.4	106.9	103.2	122.7	133.8	136.7	128.6	125.3	122.0	117.3	92.8	136.3	98.6	109.7	214.2	219.2	222.6	226.4	220.2	228.1	225.8	220.9	230.4
14	233.0	234.3	240.1	240.8	241.3	243.5	251.1	242.9	235.6	232.8	225.2	234.2	229.7	247.4	267.4	246.6	264.1	250.5	247.6	238.0	225.0	219.7	230.6	235.2
15	224.5	302.1	273.2	274.7	274.1	269.1	251.9	295.8	321.6	328.9	327.5	320.1	317.6	321.7	321.1	323.6	327.0	330.1	332.8	326.5	326.2	324.3	326.0	326.7
16	331.0	330.4	328.8	322.5	320.8	318.8	307.6	322.5	316.1	304.9	304.2	298.9	301.3	294.4	295.3	307.0	316.1	306.0	303.6	260.5	295.2	311.1	291.2	244.7
17	335.8	266.2	297.4	294.2	268.5	278.9	297.5	270.4	276.4	258.4	296.6	317.1	228.0	232.6	227.5	217.7	231.8	231.2	222.7	211.1	265.3	334.1	258.2	97.0
18	273.5	280.8	278.3	278.4	282.5	287.9	278.6	280.5	287.2	291.4	286.4	282.7	70.5	72.2	69.2	70.8	108.0	88.1	43.3	68.7	82.8	91.2	308.3	96.3
19	97.5	84.6	131.5	150.0	151.5	149.4	146.0	150.5	146.4	138.6	142.9	131.1	149.4	146.5	145.1	143.4	151.7	144.5	134.5	145.3	138.2	92.5	149.6	128.7
20	124.6	108.5	135.5	134.5	126.9	136.9	133.9	133.3	142.2	125.7	119.3	121.7	121.4	124.5	141.3	138.1	126.2	135.3	134.0	133.0	126.1	136.9	138.8	131.1
21	145.7	142.6	139.5	141.9	139.5	120.6	125.1	119.2	104.9	107.0	121.9	143.3	143.4	141.1	130.5	131.8	110.6	114.8	110.2	137.8	112.5	78.9	74.5	83.8
22	70.5	77.8	134.8	109.3	109.9	83.4	81.6	252.2	282.7	288.3	280.0	259.1	254.4	277.7	274.7	287.1	270.0	269.1	277.1	275.0	275.4	275.3	256.5	258.5
23	261.5	291.5	272.2	267.5	276.8	281.0	272.9	270.2	267.9	269.5	273.5	109.7	244.9	257.1	271.5	265.9	267.2	279.6	274.7	289.3	266.1	276.5	264.5	265.2
24	276.5	194.6	238.0	239.3	110.7	87.2	161.9	119.0	98.8	77.3	84.1	183.3	240.1	223.8	243.8	221.7	230.1	230.3	236.3	268.6	110.7	176.4	219.8	231.3
25	238.4	220.0	226.3	298.2	305.3	307.3	299.9	311.9	309.3	305.7	317.0	314.1	317.7	315.4	308.5	306.3	312.9	316.3	322.2	320.4	324.9	317.9	296.9	313.4
26	319.9	320.9	297.3	305.4	292.9	308.9	316.7	307.2	314.6	321.9	326.5	315.6	319.5	320.2	328.6	327.4	327.3	329.1	333.7	338.6	333.2	327.1	329.3	326.7
27	322.2	319.9	320.3	317.0	314.0	318.4	321.1	319.4	318.8	317.8	315.7	314.4	316.9	316.6	322.0	323.8	328.4	323.5	322.5	322.7	327.2	315.1	304.7	321.3
28	256.5	246.3	262.1	272.0	268.5	276.8	264.1	265.6	268.7	256.7	275.7	259.5	284.5	275.4	259.9	273.3	286.9	292.8	286.9	286.6	294.6	307.4	305.2	294.1
29	306.5	315.0	307.6	256.4	253.8	260.7	255.4	251.0	285.8	252.6	325.9	311.5	333.2	320.8	261.2	272.6	312.8	319.5	323.0	322.5	326.3	327.1	333.0	341.3
30	260.2	257.6	251.2	257.9	263.2	282.3	275.2	284.6	274.8	257.1	252.4	262.9	260.5	262.0	258.3	258.6	277.5	286.7	319.3	321.4	319.1	327.2	308.9	307.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	291.9	272.0	246.7	253.2	245.3	243.8	267.3	271.3	237.6	239.0	274.2	272.3	259.0	263.1	291.2	307.9	315.2	312.4	320.4	316.4	320.7	321.5	337.9	300.7
2	288.3	286.9	254.2	277.5	314.0	318.4	329.9	329.4	318.8	328.5	320.3	331.2	305.4	251.7	270.2	278.3	291.7	294.6	149.4	18.6	189.1	300.4	277.5	274.1
3	216.2	104.4	119.2	121.6	117.4	123.9	142.9	85.0	91.8	252.0	301.8	86.2	94.6	129.3	181.7	132.5	129.1	305.4	266.3	273.5	112.2	144.2	93.3	56.3
4	55.0	67.5	56.8	62.8	92.5	57.2	57.2	61.0	47.6	92.1	127.2	139.2	84.3	237.1	354.1	73.9	73.4	139.7	261.6	287.2	342.2	302.3	264.4	292.3
5	277.2	257.3	243.1	244.1	249.5	264.8	284.9	262.5	281.3	266.9	226.0	98.4	253.1	273.9	291.8	277.0	270.8	263.3	280.3	139.6	359.1	320.1	78.0	131.8
6	138.8	83.4	93.4	97.6	116.4	249.6	95.2	97.9	84.2	119.8	129.6	128.6	130.2	124.8	126.8	131.3	125.6	119.3	116.5	115.6	113.0	113.1	111.8	110.1
7	110.1	110.2	109.8	113.3	112.9	111.6	110.6	111.0	115.0	116.0	115.2	114.7	118.5	118.6	115.2	113.6	115.8	124.9	120.4	124.3	130.5	119.3	132.1	129.5
8	128.9	128.8	127.9	122.2	120.3	122.3	122.7	120.7	119.8	119.7	121.1	116.5	117.4	117.3	117.1	120.4	121.8	120.9	122.2	122.8	123.7	122.8	119.0	126.9
9	138.9	104.4	91.0	121.5	101.7	96.9	108.8	89.4	101.2	100.7	113.1	116.1	130.2	129.2	100.6	120.3	128.7	131.2	131.2	116.7	280.8	294.3	281.4	270.8
10	272.0	243.8	287.3	226.8	270.2	287.8	309.5	289.2	261.8	271.7	251.4	254.3	259.8	265.9	276.5	267.0	266.6	271.7	203.8	154.4	278.4	18.2	90.7	119.8
11	123.6	108.2	102.9	115.2	125.6	110.6	104.8	105.4	107.9	120.9	130.4	126.2	123.2	121.2	115.2	112.5	115.8	115.0	115.7	115.4	116.2	108.9	88.6	98.7
12	104.3	112.4	98.6	101.6	134.3	115.5	112.5	98.5	61.0	111.4	115.7	123.2	129.6	137.0	137.8	137.5	126.7	117.5	112.9	113.8	114.0	111.9	107.7	110.8
13	112.6	116.5	111.5	107.5	108.6	117.6	121.2	118.0	124.2	117.1	113.4	110.7	117.2	120.4	125.8	129.1	127.0	122.6	124.8	117.9	108.8	109.7	110.3	125.0
14	127.8	100.6	200.0	268.9	282.8	57.1	40.7	36.1	37.0	41.5	36.3	32.4	31.8	33.5	44.9	39.1	47.7	61.9	66.4	61.9	80.0	79.8	182.1	108.9
15	197.3	293.6	287.6	329.0	160.4	290.0	110.2	126.4	130.4	142.0	152.1	145.1	156.9	170.1	156.7	170.7	182.1	157.4	144.7	130.1	128.1	129.7	132.5	125.6
16	151.5	136.6	135.0	139.2	94.8	118.7	135.9	119.3	123.9	124.9	125.0	101.5	110.1	130.4	136.7	142.1	138.4	141.1	150.3	171.4	170.2	236.3	302.8	274.4
17	259.6	265.8	261.8	263.4	258.8	258.9	264.3	264.4	271.5	267.4	297.0	33.8	8.7	30.0	26.3	49.0	56.3	121.7	166.2	165.2	143.3	150.8	107.1	72.5
18	71.7	257.8	45.5	83.5	110.8	95.0	81.7	63.3	91.2	136.5	140.3	135.9	140.5	134.7	139.0	141.2	145.9	128.1	140.8	122.0	136.4	146.1	146.1	142.2
19	51.1	104.3	308.6	282.5	271.4	277.3	289.0	280.4	250.2	260.0	291.7	324.7	309.6	298.4	299.4	303.0	302.3	298.0	303.2	293.2	284.1	291.3	285.9	263.7
20	258.1	246.3	241.1	255.0	247.7	253.2	275.2	266.5	235.2	296.9	281.6	339.0	358.2	64.9	59.0	112.3	162.0	153.9	166.6	184.7	195.0	222.3	289.9	280.0
21	282.7	279.7	277.8	280.2	276.0	278.6	278.8	284.1	118.9	108.0	110.6	109.8	155.4	151.6	164.3	176.4	215.6	213.6	208.0	214.5	232.3	245.5	274.2	292.3
22	279.4	286.4	298.0	292.4	281.8	280.4	254.7	289.4	291.7	298.8	315.9	256.7	118.1	51.7	49.2	132.1	139.1	131.9	131.9	133.3	122.1	128.4	116.1	111.9
23	112.6	114.2	117.5	115.2	112.4	112.0	104.3	112.3	114.1	107.0	107.6	108.8	112.1	109.9	112.5	114.6	112.3	110.2	115.5	117.6	122.2	130.7	137.0	135.7
24	138.3	139.4	131.1	125.0	122.5	120.1	118.4	119.3	126.6	131.4	134.5	128.3	129.0	130.2	126.5	128.5	121.2	134.3	139.0	143.2	145.7	131.2	158.1	155.3
25	138.5	122.2	109.3	124.1	127.9	155.4	149.2	136.1	114.8	129.8	135.1	162.3	174.0	200.9	221.7	183.4	166.0	206.8	211.6	203.8	186.3	151.4	99.3	160.3
26	106.5	267.5	319.5	289.0	291.6	318.6	226.1	251.0	250.5	246.1	224.5	224.8	256.0	262.0	267.2	287.7	267.0	281.0	280.5	278.0	265.5	261.8	312.1	290.4
27	274.6	253.9	289.0	270.7	276.3	270.9	277.4	279.4	294.2	307.8	296.9	312.0	298.2	281.8	286.3	279.4	280.9	290.5	296.8	297.2	300.8	281.5	298.6	274.7
28	261.6	270.2	257.7	264.4	270.0	264.1	264.6	269.9	266.7	292.4	301.4	307.9	296.8	274.3	252.6	248.5	246.8	255.7	286.9	294.0	291.0	290.0	281.6	269.9
29	251.8	251.7	254.8	267.2	266.1	268.2	270.9	278.4	296.5	299.3	327.4	346.5	342.6	354.3	344.8	345.7	356.5	9.0	357.9	357.2	354.7	0.2	357.8	269.9
30	257.9	259.0	286.1	276.9	284.5	279.1	282.3	273.7	93.2	116.2	118.3	120.9	132.1	136.9	143.3	136.0	131.6	134.6	128.5	125.6	129.6	112.4	106.9	110.6
31	124.1	123.0	111.5	108.4	117.9	112.5	112.8	113.9	108.2	112.0	113.4	121.4	118.5	122.9	126.4	122.8	123.9	129.8	137.0	139.7	138.8	133.1	125.8	125.9

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	104.3	111.0	109.8	120.3	125.1	114.7	116.8	118.6	122.5	126.8	115.5	122.4	129.0	128.2	126.0	128.8	133.9	132.0	129.3	113.3	117.7	129.8	123.3	123.1
2	10.8	30.1	88.2	86.5	85.1	114.4	351.6	21.6	159.5	126.7	122.9	113.3	101.1	104.7	120.9	132.2	132.9	159.2	151.1	157.2	157.1	145.3	174.1	319.5
3	279.1	252.2	262.5	274.5	167.6	37.7	86.0	134.4	121.5	22.7	267.5	151.5	48.5	138.3	142.7	167.1	155.9	153.3	158.9	147.7	142.1	134.4	129.7	130.4
4	122.0	123.0	110.9	111.0	83.6	94.7	121.2	111.4	120.4	138.2	147.3	138.4	153.0	152.3	146.1	147.3	144.8	146.7	136.0	136.7	142.5	147.5	130.9	109.9
5	93.1	87.0	75.9	97.7	116.5	112.0	128.1	113.4	116.0	111.7	114.2	116.4	114.9	117.4	117.9	122.8	124.5	124.9	134.7	136.2	151.8	134.5	330.2	294.3
6	278.7	267.1	228.3	254.9	265.1	229.8	260.3	297.5	256.3	263.0	279.6	313.6	303.6	317.6	323.9	276.9	292.1	305.1	310.2	303.3	293.5	290.7	311.4	295.3
7	281.6	276.6	269.6	235.3	248.1	260.0	261.9	289.9	319.8	330.0	327.0	336.3	338.2	329.4	347.9	3.2	289.2	231.0	228.2	240.5	234.8	236.4	212.8	96.7
8	49.0	62.5	82.5	99.7	92.4	123.4	115.1	106.5	101.2	109.5	126.3	120.7	217.1	223.4	210.1	208.2	218.8	247.1	237.3	232.2	227.4	215.5	221.3	234.1
9	246.4	249.4	233.8	240.1	247.1	253.8	232.7	255.1	244.9	233.9	236.1	266.6	287.7	287.0	294.6	241.9	290.9	274.3	267.4	234.0	221.5	222.9	249.0	303.0
10	287.0	283.7	287.6	280.2	282.4	284.7	279.4	299.3	308.3	225.1	204.2	223.6	191.1	172.1	141.5	150.3	140.4	126.6	155.9	178.8	154.7	257.5	312.7	196.0
11	131.9	269.9	136.9	20.2	270.5	292.3	317.2	309.7	111.8	123.8	127.5	125.4	98.8	148.6	217.4	225.0	220.5	223.0	217.5	213.6	219.7	231.3	222.8	206.6
12	217.7	263.0	314.1	257.1	285.7	212.4	233.3	303.5	305.0	260.5	298.6	301.7	277.3	215.4	301.8	275.7	249.4	233.2	237.9	259.8	304.5	258.7	311.0	273.6
13	279.2	271.5	283.1	266.9	257.8	271.0	258.9	271.0	274.5	313.2	309.2	309.9	288.8	86.8	330.8	319.7	346.1	311.9	263.6	230.6	223.9	88.2	339.2	241.9
14	278.5	335.8	255.6	277.5	272.8	280.8	305.8	264.7	280.6	278.6	150.4	131.0	130.1	131.5	132.3	135.5	171.7	206.0	154.2	118.2	320.6	233.7	235.4	295.6
15	156.0	325.6	278.6	282.1	261.1	266.9	277.1	247.4	264.6	136.2	126.4	122.4	113.7	113.8	222.0	229.2	226.8	237.6	250.0	235.9	236.8	238.3	209.6	222.4
16	213.6	203.3	300.5	273.6	282.4	301.5	286.1	262.0	248.8	269.3	288.7	282.4	315.9	175.1	86.6	6.5	284.7	277.0	243.8	264.6	289.9	279.7	271.5	303.7
17	276.2	282.6	290.3	298.3	291.8	269.8	247.3	124.7	130.9	133.9	129.8	141.0	289.8	144.5	142.5	154.2	158.1	159.6	149.4	159.7	147.5	148.7	124.1	70.0
18	102.0	272.8	284.6	281.5	300.5	307.6	275.9	302.7	270.8	225.0	244.5	253.8	230.3	217.5	215.9	199.8	210.1	210.6	236.1	255.6	249.0	258.9	280.4	274.8
19	256.6	258.6	263.2	265.4	264.7	260.7	268.0	274.0	289.1	78.8	116.9	122.2	135.4	145.1	188.9	143.6	148.2	156.8	162.7	170.0	170.7	178.1	257.0	91.3
20	110.8	349.8	296.7	280.2	282.7	348.0	290.0	106.2	120.2	131.6	144.2	147.5	134.0	136.6	146.4	156.3	153.3	157.5	147.8	146.8	134.2	140.2	138.5	132.6
21	115.2	70.1	68.5	19.0	285.2	279.4	284.2	286.3	38.6	354.0	189.7	234.4	313.0	359.6	87.8	45.9	160.7	142.3	169.0	162.7	160.9	159.2	122.3	93.3
22	251.7	280.0	278.1	280.3	283.5	279.0	278.0	97.9	101.0	118.1	114.8	135.8	142.3	142.8	143.8	140.2	140.2	146.9	145.4	142.4	135.5	132.6	133.9	133.7
23	134.1	125.3	118.7	122.0	138.7	91.1	120.2	127.3	124.3	115.9	127.5	135.0	131.5	136.2	146.6	148.0	146.7	151.4	148.5	160.2	153.3	150.5	116.2	74.7
24	94.4	89.9	274.5	282.1	292.7	320.8	130.0	124.3	122.1	115.4	117.2	116.0	119.1	123.7	122.2	116.2	121.6	116.5	111.6	110.5	111.2	107.5	113.0	113.2
25	114.1	111.2	113.5	118.8	117.8	118.5	114.1	112.4	116.0	113.1	115.9	116.0	119.2	117.2	115.6	122.0	125.7	122.5	122.9	127.9	126.9	115.3	90.0	95.9
26	108.1	326.0	310.8	109.7	273.3	285.5	47.7	101.2	139.9	103.8	52.7	60.8	58.6	130.5	161.9	96.9	60.9	96.2	98.5	90.5	147.5	120.0	150.3	294.1
27	27.1	282.9	284.2	280.4	280.3	278.1	286.7	354.5	130.5	142.7	136.9	134.6	134.9	144.9	129.5	135.0	137.7	142.0	141.9	162.2	154.4	135.8	71.3	54.0
28	16.7	60.1	96.3	301.1	262.2	280.3	251.7	87.5	83.0	68.8	222.5	227.8	233.9	237.2	231.9	223.6	245.9	286.5	206.5	200.6	164.0	156.7	148.0	130.2
29	118.0	145.3	154.7	153.1	150.1	158.1	44.3	57.5	111.9	136.7	142.0	145.5	155.0	147.8	143.8	135.9	141.0	148.9	147.5	144.8	147.3	146.5	131.3	129.3
30	124.9	98.9	95.5	90.1	98.0	81.9	65.2	308.4	106.8	113.0	11.6	328.8	175.4	79.1	202.5	233.6	360.0	219.6	155.8	273.2	260.0	277.6	278.3	286.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	286.9	285.8	283.3	292.3	292.6	273.8	278.3	247.7	170.4	117.3	116.4	112.4	139.4	131.5	126.1	118.5	126.6	121.1	115.9	116.0	119.2	119.6	124.4	121.3
2	114.9	112.6	137.8	129.0	126.4	131.5	126.0	134.5	132.1	123.6	127.1	122.5	128.7	126.9	131.8	126.3	128.8	134.2	136.9	143.2	139.7	134.2	131.1	116.0
3	120.9	123.9	121.0	132.7	112.6	135.2	124.9	113.2	121.6	125.8	119.6	108.7	134.1	138.0	123.9	118.2	123.8	137.3	149.4	121.9	124.4	108.8	123.7	124.7
4	108.8	120.9	92.5	281.8	283.8	288.1	287.8	261.6	339.5	229.9	129.1	144.2	131.0	133.8	157.5	162.8	154.7	149.1	130.0	295.5	132.9	111.3	55.5	304.7
5	272.8	288.3	273.9	301.8	284.7	287.3	281.3	297.5	87.2	127.4	140.2	106.2	76.5	137.0	152.5	154.9	138.6	122.9	130.9	139.2	138.4	109.5	303.7	324.7
6	269.8	90.3	143.5	276.3	279.8	274.2	295.9	275.7	278.2	343.1	129.9	141.8	147.5	151.9	139.9	145.7	160.5	151.6	146.4	154.8	147.7	146.2	135.4	138.0
7	114.2	127.2	145.5	129.1	115.4	82.0	90.8	116.3	138.2	122.2	127.0	135.8	139.1	137.1	134.2	131.7	134.7	137.1	144.4	139.6	141.8	153.0	146.8	90.5
8	80.9	109.6	300.6	288.7	281.0	42.5	111.1	125.1	123.2	101.5	107.2	117.1	124.9	132.4	134.8	133.5	123.5	150.8	133.9	132.5	130.2	129.4	130.8	140.2
9	128.1	124.5	80.1	128.9	136.1	141.8	104.4	45.9	82.5	139.5	139.8	134.8	132.3	149.2	136.7	139.2	135.2	128.5	128.8	145.6	141.9	146.6	130.3	114.7
10	120.6	113.8	135.1	139.8	139.8	134.6	134.6	130.3	133.6	135.6	138.5	140.7	159.0	154.1	160.3	164.3	156.4	153.8	147.5	144.7	134.6	137.6	143.2	151.4
11	123.9	74.9	92.6	58.9	98.9	70.9	81.9	87.0	122.8	151.7	139.6	137.9	144.9	147.1	157.4	142.4	141.6	149.8	151.1	138.5	144.7	148.1	134.1	140.8
12	107.6	76.6	117.9	267.6	282.0	257.3	112.0	101.7	114.6	125.8	116.6	126.9	125.8	122.9	129.2	128.8	129.1	122.7	115.2	123.3	115.0	116.8	117.4	115.8
13	119.8	120.7	121.5	126.5	127.7	131.3	129.7	128.8	133.3	139.8	144.6	146.4	148.0	140.4	145.7	146.0	152.1	163.6	160.7	135.5	138.3	117.9	348.8	13.0
14	13.4	319.7	187.5	264.5	283.7	269.6	230.0	29.3	126.8	112.8	109.6	128.5	142.0	142.1	144.3	146.7	164.7	146.8	162.4	160.1	161.3	154.0	148.2	160.1
15	162.7	153.8	158.8	146.5	65.2	64.2	105.5	147.5	100.4	112.5	144.5	144.4	138.8	138.7	144.8	147.6	145.9	138.2	138.0	137.7	129.4	125.1	126.9	116.1
16	106.7	108.5	108.8	112.8	111.4	111.4	113.7	113.4	109.4	113.7	109.6	111.5	114.2	115.0	111.5	116.7	111.6	111.5	112.4	112.7	117.0	118.7	123.7	133.0
17	143.5	144.4	197.3	231.6	266.7	270.1	239.4	229.6	231.8	233.3	235.3	243.2	238.1	241.1	244.2	244.6	247.1	234.7	236.0	236.3	233.5	234.9	250.7	250.5
18	232.3	257.6	239.0	245.6	252.5	254.6	253.2	244.4	236.3	261.8	256.4	322.3	310.0	281.0	285.0	228.5	249.0	294.5	252.0	279.3	275.4	283.8	297.1	287.8
19	260.2	260.5	262.0	260.2	256.7	281.4	311.1	302.4	304.7	315.3	311.4	318.9	314.7	313.4	329.6	321.8	328.9	327.3	331.6	315.6	301.3	276.0	263.7	281.8
20	297.3	275.7	265.7	293.7	273.6	301.8	277.3	291.7	243.9	228.5	214.5	244.6	223.5	226.1	218.2	211.4	215.1	220.5	217.8	88.4	63.6	141.0	109.9	120.2
21	143.4	179.2	173.0	164.5	142.5	135.3	137.6	168.5	198.8	213.4	236.0	241.9	240.5	273.5	256.8	294.5	251.7	215.9	254.9	236.9	223.5	263.5	224.3	232.9
22	233.4	207.1	215.7	213.6	269.7	293.5	264.5	121.2	118.0	113.1	118.6	138.3	150.9	139.0	106.6	272.8	263.9	247.2	302.2	312.4	52.8	121.4	106.8	98.0
23	89.8	112.1	100.1	101.4	91.7	47.7	90.2	96.9	78.5	224.1	231.6	234.8	239.5	231.0	227.8	221.2	177.9	161.0	157.8	179.0	225.2	232.3	237.5	283.7
24	273.2	289.7	270.2	263.5	266.3	271.4	262.3	245.3	297.6	300.7	302.9	302.6	316.0	318.4	326.1	324.8	333.9	341.3	329.3	341.3	339.7	289.9	300.2	313.4
25	315.3	305.7	295.4	286.4	265.8	320.7	284.9	220.5	251.5	325.6	315.5	315.8	317.0	320.7	332.1	329.2	327.8	337.3	319.0	317.0	327.7	351.4	312.6	276.3
26	265.9	246.9	246.1	248.7	264.0	296.3	290.4	253.9	234.4	249.4	256.1	256.4	228.2	224.5	325.5	276.7	277.8	248.2	244.7	211.8	150.5	134.3	83.1	129.9
27	85.8	82.1	91.9	92.3	112.4	114.1	120.0	116.8	146.4	136.1	142.4	133.0	133.5	122.2	136.5	135.2	145.3	134.9	138.0	139.6	147.3	319.8	251.8	301.8
28	279.8	269.2	277.9	297.3	285.3	263.3	234.4	294.5	296.9	310.9	322.4	322.8	320.2	333.1	331.3	327.6	324.4	313.5	313.4	316.9	316.6	309.5	321.3	302.1
29	278.3	311.9	324.0	319.6	313.0	321.2	298.2	268.1	254.9	296.6	314.0	313.0	318.1	311.7	314.2	319.7	325.8	318.7	319.6	317.6	324.9	335.2	329.6	324.7
30	324.7	294.4	285.1	291.2	273.6	270.1	264.6	274.3	282.4	308.7	313.8	308.3	303.9	305.3	311.7	326.6	321.9	333.1	328.9	323.4	311.3	292.3	288.9	271.8
31	268.9	272.1	281.5	266.6	278.5	278.0	265.5	267.2	264.7	299.6	297.8	293.7	308.2	303.1	296.1	301.3	307.0	307.7	300.0	295.0	296.5	285.5	305.4	316.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	260.1	271.4	257.6	256.5	267.4	256.1	93.0	287.3	44.1	117.9	116.0	96.8	120.6	118.0	123.6	125.0	130.4	117.8	129.3	132.1	127.4	135.1	236.5	280.0
2	267.8	3.3	35.0	73.5	56.6	139.5	129.0	100.3	123.9	133.1	132.9	152.7	153.2	143.8	153.7	147.4	156.5	151.7	148.2	137.0	176.3	315.4	286.6	288.9
3	276.4	274.8	272.6	282.2	261.3	265.6	267.8	270.4	238.5	269.6	281.7	247.1	139.7	139.7	141.5	138.8	143.0	150.0	149.9	154.4	146.7	152.7	143.9	118.9
4	102.5	83.8	87.8	59.5	23.2	72.7	99.9	88.2	117.9	134.2	154.6	152.8	152.7	158.0	155.3	171.3	166.6	165.8	155.5	149.9	150.4	146.2	85.4	85.2
5	258.4	290.6	265.8	287.5	278.8	279.0	254.0	312.9	261.7	279.0	311.1	342.5	324.7	331.0	329.8	324.2	328.9	315.3	321.6	318.1	317.7	317.7	328.2	323.2
6	318.9	272.7	260.7	282.9	309.0	262.1	248.2	280.1	297.5	301.2	297.1	304.6	318.4	319.9	319.0	320.8	327.8	310.2	311.3	315.9	320.0	303.6	274.6	262.1
7	259.0	252.0	246.3	260.3	246.8	261.3	280.0	273.0	282.1	309.5	321.6	322.8	318.5	327.7	327.9	318.8	316.0	313.8	337.1	323.1	317.9	323.9	293.2	272.3
8	259.6	263.6	269.3	261.2	234.9	244.3	260.7	270.7	283.4	299.8	296.0	310.4	319.9	325.9	325.9	321.2	316.7	319.3	317.6	317.4	315.1	318.3	294.7	253.9
9	247.7	274.2	271.1	262.4	261.0	261.7	264.7	282.3	310.1	315.6	306.1	323.1	323.9	332.3	330.7	332.2	331.1	330.2	328.4	334.7	314.5	302.0	265.5	253.3
10	266.5	277.2	293.0	285.4	210.0	276.1	279.4	283.9	284.3	100.3	109.9	110.9	97.6	122.1	143.3	118.2	112.9	115.1	152.1	147.9	141.4	136.1	350.7	266.5
11	296.2	276.3	281.5	282.6	276.2	287.3	64.8	66.1	78.4	97.4	113.4	130.0	118.5	124.3	135.6	135.5	133.7	133.7	137.0	150.6	159.3	281.9	282.4	282.3
12	278.3	276.3	288.4	288.3	271.7	283.1	271.7	290.6	280.0	278.3	300.3	295.4	283.7	109.4	97.4	65.8	55.5	148.6	142.1	77.1	317.0	75.9	104.6	271.9
13	269.1	266.2	261.3	246.6	257.7	100.2	260.5	285.2	302.7	283.4	272.5	284.4	300.3	291.7	90.6	231.7	113.0	118.6	125.1	126.7	119.0	112.7	300.4	268.6
14	284.1	282.8	294.0	295.7	286.7	290.8	288.8	289.3	133.6	115.6	121.7	146.5	151.9	136.2	141.5	133.9	138.2	141.6	138.8	139.3	127.3	101.6	65.2	94.2
15	185.9	199.0	311.7	302.7	271.6	268.0	254.0	263.8	298.5	293.2	287.7	283.1	137.6	129.0	139.3	126.2	125.7	129.2	140.4	123.5	115.1	102.7	117.8	141.1
16	115.5	103.9	117.2	102.0	89.6	111.7	121.1	101.6	114.3	139.2	128.8	151.0	152.6	147.5	152.5	159.4	153.0	153.5	150.2	150.8	152.6	144.9	73.8	235.2
17	209.1	286.4	295.9	290.1	284.1	287.2	274.1	269.1	306.5	79.5	142.7	105.0	120.1	127.2	125.4	113.6	123.4	133.3	136.0	130.6	118.7	106.8	125.2	109.6
18	90.1	96.5	99.7	268.5	277.8	278.5	280.8	276.1	253.0	180.4	333.3	70.7	125.2	142.7	140.7	141.8	146.3	160.5	232.2	133.3	33.7	305.2	266.0	259.9
19	256.3	268.9	291.3	276.0	293.8	256.5	290.6	258.6	239.1	155.7	268.0	266.6	294.2	296.7	286.9	319.0	321.1	313.8	317.1	319.6	340.7	235.0	282.5	274.7
20	270.7	269.8	268.7	280.1	264.7	261.3	270.8	269.1	274.7	286.0	298.2	249.5	275.9	268.1	288.8	297.4	302.5	310.3	320.0	328.3	312.1	116.9	253.4	268.5
21	264.6	260.0	266.4	265.9	252.5	254.1	101.4	284.5	274.5	211.1	243.9	199.8	230.9	237.3	229.9	228.7	237.2	333.5	314.7	332.2	258.5	85.0	250.5	220.3
22	309.0	286.6	283.8	265.9	268.4	275.0	280.2	267.4	251.2	246.7	269.2	253.0	273.2	226.1	147.5	258.0	159.5	304.1	288.2	290.6	277.8	273.7	265.8	265.3
23	268.4	270.3	270.1	271.9	264.7	268.9	249.5	242.4	240.3	257.8	286.6	304.5	276.6	262.1	275.9	247.5	146.6	128.7	138.4	153.6	142.3	147.8	149.8	102.9
24	359.8	301.6	261.3	282.2	300.2	258.0	285.2	274.6	275.3	267.9	263.6	294.1	314.3	315.7	328.6	324.8	328.9	6.6	300.7	125.7	106.5	51.1	284.8	269.2
25	263.4	263.0	263.6	280.8	292.5	278.9	281.4	122.3	62.4	8.3	144.1	241.6	187.8	147.2	133.4	131.2	136.1	155.1	150.4	147.9	150.3	95.2	87.8	91.1
26	71.9	76.6	105.0	84.4	358.6	120.9	17.8	60.4	97.3	116.9	137.7	139.3	138.4	137.6	143.0	150.0	155.4	156.5	158.2	153.3	146.9	147.3	134.6	138.8
27	120.2	85.9	105.9	161.1	271.2	276.3	284.0	271.8	276.4	283.7	303.1	300.7	299.0	316.8	281.6	270.2	295.2	271.7	285.7	257.3	96.3	108.6	320.1	237.9
28	271.0	257.3	262.6	268.5	253.6	262.1	283.7	265.4	265.4	255.3	258.1	271.6	318.7	317.1	301.7	301.8	305.3	278.1	271.8	263.9	301.7	310.9	251.3	244.6
29	254.9	256.0	259.4	259.0	264.3	264.5	268.5	267.3	270.8	276.3	283.0	302.5	299.2	276.5	254.3	240.2	225.5	236.0	244.3	251.8	245.9	240.5	328.3	281.8
30	270.3	272.2	280.9	282.4	275.1	296.6	278.8	284.8	282.9	319.5	126.7	112.4	110.8	142.9	124.0	130.6	122.8	132.5	133.3	133.6	113.9	118.0	115.0	111.7
31	114.4	119.0	123.5	116.3	110.5	109.7	125.2	113.7	105.0	116.3	104.2	91.5	98.0	96.0	72.9	74.7	64.3	55.3	47.8	41.0	42.5	42.5	46.3	52.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	43.8	39.9	41.2	38.9	39.5	47.0	41.5	39.4	40.5	46.5	54.7	77.8	122.6	104.4	85.9	75.1	85.7	107.0	107.8	105.9	123.4	98.9	106.2	105.4
2	93.5	92.2	92.8	97.6	97.3	95.8	99.6	110.6	108.3	111.8	109.9	110.0	114.8	116.6	115.6	115.0	134.0	125.3	42.1	52.3	53.9	50.8	51.8	52.5
3	50.2	51.4	40.9	35.1	31.1	21.1	267.7	270.7	242.4	240.3	199.3	138.0	133.0	97.1	101.7	134.5	138.8	149.1	141.9	137.2	137.7	129.0	94.7	246.6
4	220.3	209.5	194.2	100.4	48.4	45.4	64.0	73.6	115.5	66.6	130.9	141.2	133.3	149.7	135.3	141.2	160.3	160.5	152.5	177.0	193.5	289.6	278.2	284.1
5	282.6	282.7	279.6	283.8	276.8	287.2	270.6	275.7	281.5	17.3	103.2	93.9	109.7	142.4	154.3	226.5	324.8	263.7	88.6	171.6	258.0	284.9	274.8	282.9
6	277.9	282.1	267.4	296.7	272.9	259.5	133.8	129.8	131.8	126.8	123.5	102.4	100.5	101.4	96.2	104.5	104.8	103.6	108.2	90.6	80.4	123.0	131.3	119.5
7	118.3	127.7	117.4	122.8	130.6	126.6	136.5	137.8	102.4	120.9	115.4	125.0	114.1	112.1	99.4	106.1	116.0	102.8	119.8	114.9	108.9	104.2	102.7	109.8
8	133.5	163.4	140.7	133.8	150.1	159.6	137.0	120.8	76.7	116.8	103.7	114.1	91.0	99.2	106.0	105.5	111.1	118.3	103.2	91.1	107.2	122.9	126.9	111.2
9	105.2	109.9	123.4	128.7	124.3	131.1	142.2	107.1	86.0	324.9	143.0	142.7	135.6	121.5	108.7	106.2	100.0	108.8	123.3	129.0	146.0	126.8	122.9	90.4
10	84.6	106.2	131.6	138.7	299.0	285.2	264.0	292.4	117.0	91.4	31.0	58.9	181.5	246.6	240.6	238.5	239.4	239.2	234.6	229.7	232.3	255.4	243.8	254.9
11	235.8	226.6	231.2	250.6	220.1	168.3	83.5	104.2	81.2	93.2	126.9	141.0	152.1	152.5	153.0	143.3	142.7	144.1	139.1	138.2	127.8	126.8	102.3	112.3
12	112.8	106.3	103.3	107.8	109.9	106.1	105.5	107.1	101.2	104.6	109.0	115.9	123.5	124.8	123.1	111.2	112.7	109.4	112.7	109.0	111.2	102.2	103.8	108.5
13	100.6	93.0	96.9	108.5	113.8	108.8	107.5	110.9	110.1	107.7	109.3	112.2	113.6	112.9	107.9	108.9	112.6	118.4	117.1	118.5	111.6	97.2	93.3	107.6
14	103.2	74.9	109.9	83.0	156.0	60.7	65.4	53.4	95.0	131.7	107.8	126.3	127.7	107.1	105.8	102.7	102.2	115.0	119.8	116.9	135.7	123.9	129.4	90.9
15	61.1	59.1	81.2	115.0	89.7	60.3	128.4	149.3	148.2	130.4	102.1	108.6	112.8	111.2	110.9	107.7	111.8	114.6	112.5	111.7	108.8	130.8	128.1	82.4
16	50.3	254.0	250.9	271.6	272.0	274.0	257.8	247.5	262.4	267.0	281.7	306.9	321.5	307.5	304.6	301.9	304.1	284.0	278.8	288.3	290.4	261.7	271.9	265.2
17	300.6	293.0	277.2	285.1	211.4	222.0	242.6	247.2	251.7	286.3	155.7	109.5	149.3	105.0	96.6	95.2	96.9	102.4	105.3	104.6	104.7	124.7	284.2	203.6
18	58.4	42.4	44.3	47.2	50.5	42.9	45.6	41.3	14.2	4.7	13.8	25.3	31.1	293.5	275.3	296.3	312.9	313.7	287.9	231.1	267.6	172.3	90.7	248.0
19	231.4	267.6	285.5	256.2	341.6	92.5	86.2	82.1	81.9	85.7	128.2	129.0	131.3	139.8	146.1	256.1	281.8	289.2	285.0	283.3	291.6	289.0	285.3	297.6
20	269.9	276.5	290.6	281.3	280.4	265.4	268.9	273.4	269.8	288.3	284.6	308.1	297.7	295.7	279.7	295.7	301.8	325.4	326.3	324.8	276.6	270.9	269.2	288.1
21	262.8	259.5	258.8	260.6	259.1	267.0	268.1	265.4	258.8	257.9	256.0	295.2	305.5	324.9	318.8	296.8	320.6	308.1	307.2	310.5	286.4	265.6	257.4	244.0
22	260.1	248.8	256.5	256.9	256.5	256.9	260.5	257.3	261.8	264.4	255.5	249.6	247.8	110.5	127.1	143.7	164.9	120.3	100.2	96.3	130.4	143.9	147.3	147.6
23	141.7	137.3	130.1	136.7	154.1	216.1	216.1	223.0	232.2	225.6	210.2	211.1	169.7		237.9	196.0	212.0	221.4	207.5	204.3	203.9	209.5	189.8	106.1
24	98.8	128.8	120.0	128.6	119.3	121.1	135.8	138.4	87.7	86.8	105.9	120.3	123.1	119.0	111.4	108.7	120.7	114.8	124.5	134.7	143.9	131.1	177.8	255.3
25	268.3	204.6	163.5	138.8	138.3	152.6	116.6	253.4	272.3	183.2	135.9	131.1	109.5	130.2	133.4	137.3	147.0	140.6	144.7	148.7	261.8	259.7	156.5	274.5
26	274.5	256.3	259.0	268.1	279.5	275.2	266.8	286.2	272.6	266.9	136.8	264.2	281.0	262.5	287.4	8.4	355.0	274.8	255.8	313.8	283.1	262.4	263.5	251.2
27	252.5	260.4	269.5	268.2	270.4	267.7	253.6	249.0	241.6	251.1	250.0	261.8	270.0	271.5	310.7	324.9	330.3	334.2	327.9	270.1	253.6	244.4	245.3	254.2
28	261.4	280.7	263.5	265.6	262.0	255.4	265.5	269.3	266.4	259.2	252.9	273.0	255.9	236.0	216.9	282.6	152.7	151.8	118.1	118.0	112.1	3.6	98.2	90.2
29	100.2	96.1	73.7	63.3	15.2	292.6	77.9	9.7	128.4	138.3	121.9	97.6	105.7	104.2	89.5	118.4	97.8	82.5	88.2	101.5	127.5	113.3	133.3	274.7
30	280.7	285.7	276.2	265.5	266.3	262.1	262.4	276.0	274.7	277.9	286.6	307.4	320.5	312.7	309.3	324.8	325.2	329.9	344.6	356.2	325.2	289.2	275.0	282.8

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	282.8	281.7	291.7	273.0	309.2	176.5	97.6	60.7	79.9	95.1	126.5	89.5	130.8	127.0	131.2	141.3	162.3	155.2	105.0	89.8	116.9	111.2	111.4	119.4
2	136.6	133.8	279.6	292.3	296.0	288.2	263.7	145.7	277.2	279.3	280.0	309.6	142.1	238.5	227.6	248.4	272.0	161.7	146.2	271.1	250.4	247.1	246.7	252.6
3	293.7	268.1	284.3	284.6	280.7	282.1	286.3	287.0	302.7	297.1	293.1	291.6	294.8	295.9	309.4	308.5	312.4	312.0	310.1	282.0	304.0	249.7	254.6	264.6
4	273.8	270.5	276.5	257.4	278.2	292.3	277.2	271.8	263.4	279.7	259.5	258.1	265.9	288.3	282.5	303.5	292.1	26.9	53.1	252.1	50.0	104.1	120.0	51.4
5	326.1	243.8	152.4	45.1	154.7	248.9	180.2	217.6	291.0	299.6	281.0	266.9	294.4	285.3	278.2	282.5	285.9	272.3	291.5	351.4	325.3	309.9	317.8	272.2
6	290.4	280.2	249.1	262.9	267.2	264.1	268.7	267.0	270.3	271.7	287.1	288.5	295.3	307.7	319.3	305.3	293.8	298.7	301.7	317.5	315.4	305.5	303.8	304.0
7	309.7	297.9	303.6	305.0	295.4	285.3	309.4	311.2	304.5	307.0	308.9	319.6	323.8	321.2	316.8	316.6	309.0	302.9	300.0	310.5	302.3	301.6	308.7	295.7
8	293.9	288.0	298.9	298.4	290.1	292.6	291.8	276.9	270.3	278.7	292.5	297.1	309.2	337.6	341.0	347.5	336.3	330.1	346.8	284.7	272.1	294.1	132.8	138.5
9	136.4	135.8	125.7	109.6	103.5	111.5	109.5	108.8	113.4	117.2	115.2	114.7	102.2	104.9	110.8	110.1	109.5	108.5	106.9	104.5	114.8	114.9	113.1	111.5
10	112.3	121.5	147.6	109.2	227.6	241.0	238.2	291.0	150.8	103.7	113.9	131.6	132.6	109.3	116.7	125.3	134.1	127.4	124.0	151.3	139.3	169.0	125.2	128.0
11	116.4	88.1	98.8	107.6	105.8	92.9	82.7	84.8	84.7	294.6	327.6	318.6	319.9	323.2	323.8	328.3	324.9	325.3	318.9	316.8	317.1	312.8	319.0	314.8
12	312.7	314.2	316.1	317.1	313.9	310.7	311.1	310.6	305.5	309.2	312.2	312.8	318.0	321.8	317.9	315.0	315.8	316.9	314.0	311.1	301.0	213.0	243.5	280.1
13	274.2	268.7	269.1	260.6	270.3	282.9	272.0	272.1	277.2	283.4	139.7	102.5	139.4	135.5	129.4	125.9	128.6	112.7	104.9	129.9	131.5	129.4	122.4	103.8
14	98.8	101.0	123.9	127.2	135.1	142.1	150.1	137.8	128.1	141.6	126.4	126.5	124.4	118.1	119.1	130.2	135.8	110.1	120.5	127.6	136.3	6.9	274.9	265.0
15	306.8	287.7	242.8	220.0	236.6	274.4	258.3	249.3	270.3	285.4	262.9	278.7	264.1	261.8	258.7	277.0	271.6	274.8	275.0	258.2	248.3	260.0	269.7	260.2
16	272.1	280.2	281.5	288.6	285.2	284.6	280.5	282.0	266.3	259.3	279.5	264.2	270.3	274.7	268.6	276.6	286.7	285.2	275.7	268.2	261.2	265.8	272.2	267.8
17	278.2	274.5	280.0	281.0	283.5	280.6	282.7	295.0	298.3	279.9	289.4	299.2	170.6	187.4	155.5	151.1	241.4	287.0	293.5	277.5	276.0	92.8	120.5	134.1
18	128.3	126.0	109.9	102.9	109.7	97.6	93.4	82.6	77.8	78.2	108.5	127.1	113.5	84.0	72.4	54.7	50.0	46.9	45.5	44.0	38.2	43.8	256.6	274.9
19	297.6	291.7	265.3	251.4	261.3	259.7	257.1	243.7	272.3	268.2	274.3	267.1	264.5	271.1	274.4	276.7	266.3	272.4	262.2	266.5	262.4	255.0	259.2	245.2
20	251.6	257.9	256.0	258.7	255.0	248.8	273.8	262.5	244.6	245.0	262.5	251.6	265.3	273.5	272.9	275.5	270.2	287.6	282.1	267.0	259.7	274.6	253.0	254.8
21	261.5	259.4	252.5	278.8	272.8	168.6	134.7	121.3	113.3	296.7	343.1	288.2	261.1	292.7	306.9	314.6	307.5	303.6	307.4	293.6	276.9	250.7	257.3	287.8
22	268.2	291.1	296.6	306.7	288.1	300.8	310.8	297.9	300.4	290.6	310.0	302.9	298.4	304.3	307.9	308.9	281.5	277.2	294.7	294.3	285.8	282.3	252.0	274.9
23	272.2	274.8	268.1	259.7	306.7	299.5	264.3	255.3	293.9	317.1	305.7	282.8	280.7	262.6	279.7	297.0	289.8	299.2	315.8	310.7	319.1	320.9	312.0	289.4
24	292.6	288.1	293.4	295.7	296.6	297.2	299.7	297.1	301.1	298.3	314.5	326.7	330.6	313.8	302.4	324.2	323.9	285.7	283.9	104.1	135.7	292.7	286.7	277.1
25	298.9	121.3	128.8	119.0	86.2	108.1	126.0	127.5	134.0	130.4	119.2	114.3	119.1	128.3	120.1	107.5	130.6	128.7	307.2	273.7	262.5	264.4	253.9	247.4
26	246.3	250.7	251.5	263.7	253.5	254.6	264.5	285.3	278.8	273.0	315.5	307.2	297.9	309.8	315.4	308.0	305.0	309.6	247.4	244.7	211.6	217.3	191.6	311.6
27	262.2	266.0	246.6	225.0	212.7	221.7	218.6	236.7	230.5	213.8	202.9	273.6	288.7	292.1	289.4	292.6	298.3	269.7	264.3	271.6	264.9	262.5	267.7	271.9
28	281.6	292.7	272.2	282.2	281.0	289.3	279.7	284.5	273.3	291.1	289.3	279.6	289.3	272.2	116.3	196.6	325.0	285.1	274.9	278.9	280.3	280.2	274.2	285.3
29	279.7	283.6	283.6	276.8	286.8	278.8	285.0	290.5	281.3	286.0	281.7	278.4	290.4	111.3	116.1	107.7	114.1	104.3	82.0	93.5	86.5	114.8	119.3	105.4
30	98.6	127.0	131.6	150.9	56.7	67.7	284.8	73.7	306.3	82.5	88.1	280.8	288.2	271.9	254.9	296.0	269.6	278.2	276.9	277.1	276.7	288.3	273.6	289.7
31	282.1	286.3	282.5	288.7	286.0	277.1	285.5	282.2	283.1	273.6	290.4	289.9	271.8	98.0	289.5	259.2	269.4	270.3	275.4	270.5	281.5	283.5	283.8	284.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	286.9	279.7	280.1	290.2	288.4	281.7	282.6	277.8	339.9	286.3	284.0	296.1	281.6	259.4	228.7	247.8	275.0	316.5	292.4	300.7	307.0	307.2	304.1	288.4
2	286.8	287.6	276.7	292.2	297.3	293.1	299.2	293.8	294.3	282.2	286.0	298.1	293.6	293.4	284.9	288.9	290.4	280.6	282.7	277.3	269.5	269.6	262.5	255.8
3	246.4	244.6	240.1	257.1	259.1	257.3	259.2	284.2	285.4	270.4	281.5	291.6	286.6	297.1	288.3	277.3	279.5	280.9	285.6	287.6	289.2	295.5	299.0	268.8
4	283.3	257.0	231.3	240.6	233.9	245.7	243.9	265.0	246.1	268.3	260.0	254.2	247.8	262.3	264.7	257.9	255.5	248.2	251.4	258.3	262.2	260.5	263.5	266.2
5	279.6	286.1	274.2	293.6	302.3	305.3	295.0	285.9	268.6	266.0	290.1	285.3	284.9	279.9	263.8	264.5	259.7	254.2	254.5	258.0	261.6	265.9	256.9	260.2
6	257.3	255.9	253.6	254.8	252.9	248.9	252.4	226.4	353.1	264.7	4.0	339.4	308.4	271.5	264.6	257.3	256.6	271.7	285.3	260.2	256.7	243.6	252.1	235.8
7	275.1	290.8	273.8	266.4	266.0	273.3	272.4	271.6	281.0	269.0	268.0	251.9	268.9	288.3	263.3	249.0	260.5	280.7	294.2	70.9	305.0	278.5	102.4	128.6
8	103.4	136.2	125.1	124.6	131.1	131.1	131.0	128.9	139.8	143.7	137.1	140.3	140.1	140.0	149.9	150.6	138.8	135.5	90.0	95.1	95.1	99.9	86.3	62.4
9	85.4	86.2	91.2	89.7	86.1	95.2	88.3	100.8	87.6	63.0	81.4	76.0	70.0	96.8	112.5	110.8	122.3	114.6	113.0	112.2	111.3	111.8	108.3	130.1
10	116.3	81.6	94.2	134.7	71.5	40.5	54.3	47.8	40.4	40.4	54.8	89.5	107.9	144.1	146.1	140.0	133.8	115.0	120.7	122.5	106.7	100.0	99.8	96.4
11	85.8	90.6	101.1	102.3	88.9	103.2	113.0	118.9	135.8	126.8	224.3	99.5	80.1	265.3	273.0	264.7	277.9	266.7	269.7	277.1	272.5	257.6	275.9	297.2
12	282.5	261.4	116.5	35.6	147.4	265.8	263.7	239.3	243.7	262.8	247.4	278.6	262.4	192.3	270.3	272.4	113.3	281.8	98.9	321.6	268.1	116.6	101.2	133.4
13	132.5	134.1	136.4	133.9	117.1	129.4	131.3	126.7	117.0	91.8	65.6	307.1	318.6	109.5	82.8	124.2	147.6	141.9	48.5	62.1	63.1	122.8	96.5	83.3
14	155.1	109.6	128.9	116.4	87.0	77.2	116.4	139.9	127.5	239.8	124.9	90.9	88.6	256.9	261.8	259.2	53.1	270.4	279.9	258.4	226.3	70.1	45.0	117.3
15	118.0	195.1	274.6	284.8	260.9	257.4	146.8	144.6	134.8	132.0	136.0	126.4	123.4	115.3	131.0	132.5	115.6	101.5	103.8	96.5	103.3	107.4	104.1	93.5
16	96.3	106.7	112.4	125.8	129.6	140.9	137.0	122.1	314.4	286.2	292.7	277.0	48.0	36.9	305.1	118.2	101.5	274.2	280.0	278.8	283.1	274.5	278.0	279.0
17	278.4	281.6	280.7	276.8	274.3	263.3	280.3	280.6	285.9	285.4	284.6	274.1	274.3	267.6	268.9	278.4	256.9	252.9	249.9	249.4	247.5	261.7	256.8	267.1
18	294.2	307.9	271.8	256.8	269.3	277.5	268.4	271.1	270.9	273.3	267.5	257.6	260.8	259.0	260.4	247.4	250.3	254.9	277.5	254.3	255.5	259.2	265.5	275.3
19	272.5	256.7	260.8	249.0	260.9	258.4	251.7	287.2	295.1	308.9	260.2	258.6	275.4	266.2	263.0	243.4	224.3	221.9	252.3	267.5	255.1	276.2	287.9	244.4
20	222.3	254.4	300.9	323.7	326.1	322.7	232.9	208.8	257.7	272.9	298.5	282.8	258.2	298.1	306.8	316.3	306.7	308.2	323.8	319.1	318.8	318.8	319.3	302.1
21	301.3	312.7	314.8	269.6	283.9	260.9	249.7	266.8	265.8	266.6	256.8	266.8	260.8	266.6	262.7	262.7	260.5	255.0	263.2	252.9	265.5	271.4	285.5	272.4
22	269.0	337.5	291.3	309.2	276.6	294.1	83.3	277.8	289.8	279.8	277.6	279.0	288.9	281.4	283.9	283.5	177.0	284.8	278.9	167.4	136.8	317.3	276.0	267.1
23	269.6	277.2	287.1	285.6	273.9	285.6	277.7	272.9	109.4	285.5	98.5	230.2	82.6	134.0	142.8	119.8	110.5	95.6	115.5	137.5	125.3	145.8	137.5	136.1
24	120.8	101.7	91.8	93.6	104.8	105.3	92.4	83.0	99.0	107.1	112.2	113.0	119.5	113.7	111.3	114.1	108.8	114.4	105.2	124.4	134.2	188.5	227.5	9.8
25	63.2	7.6	266.7	325.2	295.4	54.6	209.6	271.9	283.2	284.2	244.2	252.8	309.4	276.4	272.7	259.7	266.9	273.2	284.2	305.1	296.0	262.4	254.5	250.7
26	260.2	268.4	257.8	272.1	277.6	302.2	311.5	313.9	312.1	291.2	243.6	259.0	237.7	241.5	253.7	263.2	246.4	260.9	287.1	319.4	262.8	43.3	305.8	278.1
27	290.9	267.0	267.6	259.6	262.2	255.2	258.8	265.4	266.6	273.3	273.1	280.6	285.8	288.4	263.6	285.9	272.4	263.6	294.0	275.5	263.1	265.7	257.2	263.2
28	266.4	271.3	284.5	269.4	242.9	268.3	271.6	267.1	268.8	261.9	291.9	289.0	282.1	267.2	267.1	281.9	277.1	266.4	244.7	253.8	284.5	269.3	281.8	275.0
29	291.6	293.9	284.8	281.3	277.1	281.1	281.5	284.5	280.3	291.5	287.2	288.0	293.5	298.7	297.2	297.9	297.3	289.9	287.0	287.9	290.1	270.4	276.7	274.7
30	282.9	313.9	309.5	297.2	272.0	254.2	254.4	270.3	291.2	306.5	301.1	298.5	285.1	279.2	290.6	270.4	253.0	277.8	249.0	240.1	288.2	287.7	261.8	269.5

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (Climatronics) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	274.7	286.0	306.9	316.3	313.9	274.0	257.2	254.8	267.3	257.9	308.8	262.7	261.9	256.0	258.4	291.7	274.8	85.8	276.7	283.4	277.1	294.3	273.7	298.4
2	97.6	85.4	231.9	272.6	5.7	107.3	125.9	108.6	114.2	111.2	123.0	121.9	99.3	99.8	94.1	102.2	105.0	110.3	112.8	111.8	108.4	112.5	105.5	101.4
3	103.7	108.9	107.7	108.0	110.1	109.7	109.6	107.4	108.4	103.6	105.1	101.9	104.2	101.8	109.9	110.2	106.9	108.2	107.3	109.9	115.2	108.7	109.5	98.1
4	109.1	110.9	114.5	119.2	118.7	114.7	124.8	122.4	127.0	123.1	121.3	107.3	100.4	111.4	107.0	100.3	95.9	101.9	108.9	118.7	110.0	105.4	118.8	118.0
5	108.0	115.6	107.7	113.6	112.7	115.6	117.8	111.3	106.3	116.0	115.2	117.7	118.0	120.7	128.0	106.3	91.3	111.5	113.9	116.4	84.6	102.6	128.6	80.0
6	76.0	106.1	125.7	128.9	126.4	118.6	114.6	65.3	79.7	97.8	128.4	94.5	292.7	266.2	262.7	231.5	284.9	275.5	262.2	263.3	260.3	261.9	258.5	261.9
7	267.3	250.4	286.1	274.6	274.4	283.3	278.0	278.2	274.8	276.2	267.4	273.1	266.4	268.4	269.4	271.1	280.6	267.4	271.2	352.9	271.0	253.9	261.8	260.6
8	268.8	279.3	278.0	292.7	274.6	278.8	267.4	142.1	117.1	90.4	95.6	55.2	61.1	54.4	46.3	43.8	40.8	38.0	33.7	36.4	36.8	39.5	35.3	37.2
9	37.9	40.8	38.0	259.1	266.9	268.6	267.0	283.2	268.2	282.4	291.0	262.8	260.4	239.1	262.5	220.0	118.0	128.4	107.6	93.7	82.9	100.2	128.5	116.5
10	130.0	98.2	109.9	166.2	162.1	235.3	220.8	217.8	212.6	233.3	251.8	253.7	322.1	307.3	145.4	99.3	274.9	292.3	271.3	282.5	302.8	268.8	262.4	259.7
11	260.7	264.5	270.5	286.8	278.0	266.0	277.5	284.4	282.8	285.7	281.4	288.9	117.1	212.8	174.7	298.5	296.5	289.8	266.0	278.5	259.4	248.0	239.5	266.6
12	280.8	270.5	275.6	275.8	268.2	215.0	259.2	275.5	266.8	230.0	302.4	359.3	135.5	120.9	116.8	287.5	101.6	272.7	264.6	285.1	268.7	268.3	283.3	243.4
13	280.7	312.2	290.9	299.7	305.2	304.0	301.4	276.0	267.7	243.5	271.1	260.7	260.8	280.1	272.1	262.6	271.8	255.6	279.3	277.0	284.5	285.0	279.0	273.0
14	286.4	274.2	280.4	251.2	288.9	285.8	241.3	286.0	299.2	61.4	88.1	26.4	96.5	98.6	117.3	117.8	114.0	104.9	90.9	124.9	132.6	114.4	117.9	117.6
15	118.6	114.7	114.6	113.5	115.1	114.9	115.1	116.4	112.2	117.0	117.1	90.3	82.0	103.6	117.9	143.3	85.3	209.4	296.6	277.4	257.9	290.1	267.3	274.2
16	288.9	285.7	286.0	265.5	288.3	282.8	285.5	283.9	286.7	284.8	283.2	227.2	265.6	86.3	82.2	83.9	74.5	82.4	82.1	77.7	75.8	91.5	96.1	126.3
17	117.4	118.2	107.6	107.3	102.6	108.2	108.1	107.1	108.1	104.6	100.3	107.9	107.5	110.2	113.1	107.7	107.8	106.7	107.7	108.0	110.3	109.3	112.3	113.4
18	119.1	117.3	116.0	114.4	111.5	110.8	103.4	112.0	115.9	113.3	109.0	103.5	103.3	107.0	110.2	110.5	110.5	112.4	111.1	109.4	107.0	109.9	109.9	111.3
19	113.7	110.8	111.0	109.5	110.8	108.7	103.0	102.8	107.9	103.5	103.6	104.3	95.4	95.6	133.1	12.3	149.4	83.9	52.7	44.8	45.7	50.6	49.4	67.5
20	60.4	79.8	289.4	185.2	236.9	310.0	78.6	39.5	42.4	36.9	35.6	78.3	164.9	193.6	130.7	140.2	148.6	245.2	260.4	284.8	273.1	263.5	256.4	259.9
21	261.5	33.2	294.7	283.7	260.5	256.3	260.5	245.7	187.3	293.5	277.4	283.4	63.5	93.1	208.1	105.3	135.3	69.6	283.7	281.4	286.1	288.5	274.3	243.2
22	288.2	284.9	284.7	278.9	291.1	105.7	119.4	114.4	118.8	130.8	143.0	149.2	128.5	89.1	92.2	78.6	109.3	124.2	123.0	142.4	151.9	149.4	150.3	144.4
23	115.3	105.4	107.1	105.9	98.2	100.2	113.3	126.5	169.5	292.2	286.2	277.3	308.7	317.1	314.9	319.2	300.7	313.0	318.7	326.8	326.7	319.3	318.5	309.8
24	304.0	291.4	299.2	298.1	299.3	306.4	292.1	277.1	286.2	194.5	274.5	133.6	221.5	246.8	243.1	251.7	252.3	265.6	77.3	276.6	274.1	92.3	132.1	135.1
25	123.0	122.6	110.0	107.2	109.1	100.7	103.3	121.8	107.7	120.4	123.5	127.8	135.1	145.8	158.2	152.4	198.3	295.8	295.6	302.6	303.2	299.5	298.3	302.8
26	304.7	307.0	305.7	308.0	305.3	303.7	311.2	303.1	299.4	297.1	301.6	306.0	301.5	302.5	300.7	300.9	302.0	299.4	294.4	297.2	292.9	297.3	300.7	301.2
27	308.2	305.7	305.9	314.3	325.5	330.9	318.7	324.6	319.1	320.6	318.9	328.0	309.5	313.7	311.0	314.8	316.9	327.4	321.8	328.1	304.3	312.1	309.8	322.8
28	308.1	311.8	295.7	297.9	283.7	264.2	235.4	214.6	299.6	321.0	322.5	340.4	307.1	320.3	329.7	328.8	317.2	309.8	319.0	285.9	241.7	267.8	271.0	273.2
29	268.0	272.4	266.5	256.8	264.2	268.1	272.6	269.3	272.4	266.5	262.0	263.8	269.3	291.2	276.0	274.3	292.1	297.0	279.8	264.0	271.4	265.6	263.2	260.1
30	282.0	277.6	269.7	270.8	287.2	298.7	276.5	278.8	265.0	261.2	259.0	272.4	266.9	258.3	261.3	267.4	257.4	261.7	267.0	260.2	255.5	268.6	256.7	258.3
31	264.2	259.4	273.2	293.8	253.1	260.5	299.1	304.3	273.3	267.4	279.8	275.1	270.0	274.9	286.2	293.1	297.9	293.2	301.4	296.4	309.5	290.8	280.7	266.2

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	15.6	14.3	13.4	17.8	17.5	7.0	12.0	5.6	12.0	11.1	8.9	7.1	28.5	18.5	16.8	14.7	16.7	13.3	14.9	12.9	13.5	8.8	12.6	9.9	28.5	5.6	13.5
2	15.1	7.7	19.2	11.4	12.2	7.9	12.6	13.2	14.8	15.1	9.5	12.0	13.8	18.2	14.5	25.3	17.9	10.6	12.0	12.1	6.3	8.4	7.9	13.4	25.3	6.3	13.0
3	8.3	9.0	38.3	12.4	40.2	28.1	16.5	59.9	27.4	26.8	20.3	8.1	6.4	6.9	11.9	15.5	13.7	8.4	8.7	9.4	13.2	9.2	8.9	8.3	59.9	6.4	17.3
4	7.6	11.3	9.5	8.3	9.3	8.4	7.0	6.5	18.6	8.0	9.2	7.2	8.8	10.6	18.1	13.1	13.0	11.0	11.4	19.1	17.7	19.7	14.6	16.8	19.7	6.5	11.9
5	13.8	7.7	12.4	23.3	12.5	10.9	7.1	8.4	8.1	12.0	15.6	20.8	16.8	17.2	19.7	22.8	14.5	19.5	11.9	20.5	16.7	22.9	26.3	15.2	26.3	7.1	15.7
6	13.5	13.0	17.9	15.7	10.0	14.9	22.5	18.3	26.0	12.5	19.8	10.4	13.0	17.2	12.6	10.6	7.1	7.5	9.3	9.0	16.3	9.1	10.0	22.8	26.0	7.1	14.1
7	18.8	14.3	7.3	6.5	10.8	18.9	14.0	8.0	9.6	18.0	24.9	28.5	5.5	15.4	9.0	26.8	6.5	9.8	19.4	26.0	13.7	18.9	16.2	13.9	28.5	5.5	15.0
8	11.2	13.7	19.1	9.5	12.9	18.7	9.3	8.7	19.4	21.8	40.4	15.4	22.2	35.9	20.2	19.3	10.7	17.6	10.4	10.2	7.4	11.7	7.8	27.6	40.4	7.4	16.7
9	17.3	10.0	9.4	8.9	7.2	9.0	10.2	6.0	7.1	6.8	6.7	14.2	12.9	21.2	9.7	9.0	7.2	24.2	13.4	14.7	13.1	18.9	19.7	28.3	28.3	6.0	12.7
10	11.0	7.1	9.6	10.6	9.0	7.3	11.4	10.7	6.3	5.0	6.3	7.4	16.6	13.4	18.7	10.7	12.4	24.2	30.3	17.9	10.0	10.6	12.7	13.6	30.3	5.0	12.2
11	10.7	33.1	16.2	12.4	12.6	15.3	36.5	18.9	9.2	12.1	15.7	9.4	8.9	10.4	7.6	8.4	7.1	8.2	10.3	8.5	15.8	15.2	13.9	14.9	36.5	7.1	13.8
12	16.6	15.4	18.0	14.7	9.5	12.5	12.9	16.5	20.2	19.9	12.8	16.6	21.5	12.8	17.9	23.0	13.9	11.0	14.8	10.5	10.2	14.3	19.2	20.0	23.0	9.5	15.6
13	16.6	19.2	20.8	35.0	49.8	34.3	20.1	19.5	19.3	27.8	24.1	17.1	19.3	22.9	26.7	26.3	27.4	30.2	8.7	5.2	17.6	8.4	11.6	9.2	49.8	5.2	21.5
14	7.8	14.9	52.4	57.6	97.1	95.0	49.3	9.8	17.6	78.9	13.2	18.1	5.0	8.1	7.0	6.4	8.9	12.3	10.7	16.0	13.4	10.8	6.0	5.4	97.1	5.0	25.9
15	5.9	5.5	5.4	5.4	5.1	8.2	6.1	8.2	11.0	7.0	6.6	7.4	7.7	10.2	9.3	7.6	7.6	8.6	9.5	5.8	8.8	25.6	16.9	11.0	25.6	5.1	8.8
16	15.9	102.0	12.4	12.0	61.5	37.7	72.8	13.5	15.2	33.8	69.2	72.4	65.3	55.6	94.3	30.9	39.8	30.2	10.1	36.9	69.9	38.6	96.6	15.7	102.0	10.1	45.9
17	45.9	24.4	60.0	39.8	20.6	25.9	14.8	7.4	17.9	18.6	7.5	7.9	6.7	5.4	7.9	11.6	6.4	5.3	4.2	12.9	10.1	10.0	7.7	11.1	60.0	4.2	16.2
18	16.6	16.9	13.2	8.4	7.0	6.8	5.9	6.9	15.1	18.5	31.5	21.1	90.2	15.1	91.2	9.3	27.4	49.5	66.8	26.9	5.2	7.1	12.8	16.3	91.2	5.2	24.4
19	16.6	21.5	25.4	9.4	15.2	16.3	9.4	7.4	8.9	7.5	8.4	6.1	5.7	5.2	5.6	5.2	5.3	5.7	5.5	5.3	5.0	5.0	4.9	5.1	25.4	4.9	9.0
20	5.8	7.0	5.0	8.5	5.7	5.4	5.5	6.3	6.4	4.1	6.9	9.2	5.5	5.3	7.2	9.4	6.7	17.9	8.3	82.9	43.3	15.3	13.2	15.8	82.9	4.1	12.8
21	10.6	6.7	10.1	21.4	14.6	19.7	7.1	10.3	10.6	7.3	7.4	7.4	4.7	5.0	5.8	9.4	12.9	8.2	6.1	6.0	5.5	5.3	6.8	8.9	21.4	4.7	9.1
22	6.6	15.4	19.4	8.6	7.9	8.0	8.1	9.5	7.0	7.8	19.1	7.6	6.6	7.5	11.3	9.4	13.6	50.4	30.8	78.5	63.5	88.1	53.3	21.0	88.1	6.6	23.3
23	16.4	9.9	10.8	8.1	8.8	16.3	4.8	6.4	6.3	8.8	8.7	5.9	7.6	14.8	13.2	8.8	8.1	10.5	38.7	17.4	26.1	11.1	12.1	27.5	38.7	4.8	12.8
24	20.6	16.8	19.5	23.9	89.3	7.4	19.2	34.4	31.6	8.1	5.6	11.7	7.3	7.6	11.0	5.2	5.7	4.5	4.8	5.8	7.4	8.8	7.8	8.3	89.3	4.5	15.5
25	7.7	11.3	33.5	6.8	6.6	12.2	12.0	22.6	9.1	8.5	8.5	11.2	13.1	9.3	15.8	8.0	10.7	14.9	8.1	10.0	10.8	17.6	9.1	41.3	41.3	6.6	13.3
26	32.6	19.4	13.6	12.9	11.6	16.5	21.8	14.6	9.2	8.0	31.8	12.9	13.4	11.2	20.6	15.7	26.7	28.0	17.2	54.9	30.6	58.7	43.2	94.0	94.0	8.0	25.8
27	82.6	68.7	35.5	13.2	11.0	11.6	8.6	7.4	8.4	5.2	4.8	4.7	5.1	4.9	4.7	5.0	5.2	5.4	5.3	6.1	5.8	5.5	5.9	5.2	82.6	4.7	13.6
28	5.1	5.5	5.3	5.0	3.6	4.4	10.2	10.3	5.6	6.3	6.2	6.1	4.2	4.8	8.3	8.8	37.5	88.1	16.1	10.5	20.6	40.6	12.0	12.2	88.1	3.6	14.0
29	6.7	23.6	22.1	43.9	9.6	17.4	19.1	15.0	19.2	13.0	6.6	18.4	81.0	68.7	48.7	9.8	22.8	15.2	18.1	54.6	87.4	75.4	76.4	70.9	87.4	6.6	35.1
30	57.5	15.4	20.6	11.7	15.1	11.5	8.8	15.0	11.8	20.5	21.9	12.5	23.7	13.6	12.3	13.6	21.0	27.1	9.4	6.1	5.4	7.7	13.1	9.5	57.5	5.4	16.0
31	9.4	16.0	10.7	7.8	12.7	11.2	11.3	12.3	9.0	9.6	26.3	32.2	37.6	99.5	17.5	69.2	16.9	20.7	28.8	17.5	78.6	14.7	37.7	12.1	99.5	7.8	25.8
Max.	**82.6**	**102.0**	**60.0**	**57.6**	**97.1**	**95.0**	**72.8**	**59.9**	**31.6**	**78.9**	**69.2**	**72.4**	**90.2**	**99.5**	**94.3**	**69.2**	**39.8**	**88.1**	**66.8**	**82.9**	**87.4**	**88.1**	**96.6**	**94.0**	**102.0**		
Min.	**5.1**	**5.5**	**5.0**	**5.0**	**3.6**	**4.4**	**4.8**	**5.6**	**5.6**	**4.1**	**4.8**	**4.7**	**4.2**	**4.8**	**4.7**	**5.0**	**5.2**	**4.5**	**4.2**	**5.2**	**5.0**	**5.0**	**4.9**	**5.1**		**3.6**	
Avg.	**17.6**	**18.6**	**18.9**	**15.8**	**19.9**	**16.9**	**15.7**	**13.5**	**13.5**	**15.1**	**16.3**	**14.4**	**18.9**	**18.4**	**19.2**	**15.1**	**14.6**	**19.3**	**15.3**	**20.3**	**21.6**	**20.1**	**19.9**	**19.5**			**17.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.1	12.3	7.8	7.0	9.2	13.1	13.2	14.8	37.9	82.7	26.2	95.8	33.4	64.7	38.0	85.2	35.9	24.1	90.9	11.2	8.0	6.9	15.9	10.6	95.8	6.9	31.6
2	8.2	6.9	6.4	8.6	16.1	11.0	18.2	11.4	28.6	26.5	15.0	19.3	15.3	6.6	14.1	9.1	15.7	9.5	11.9	9.9	5.6	7.6	14.2	18.1	28.6	5.6	13.1
3	20.9	11.3	13.7	9.9	19.4	15.9	15.5	18.5	21.0	11.5	15.4	22.0	32.6	25.9	28.7	32.8	18.7	17.7	13.9	12.3	18.1	17.6	4.8	7.9	32.8	4.8	17.8
4	8.4	6.1	6.8	7.6	9.7	7.3	6.7	12.0	13.2	34.5	5.0	6.3	4.0	6.2	9.6	22.7	7.5	14.9	22.1	16.1	15.8	13.6	8.7	7.2	34.5	4.0	11.3
5	10.4	10.8	15.3	15.9	18.1	21.5	11.4	12.8	12.1	15.3	14.5	13.3	12.4	17.7	10.6	16.5	8.6	8.8	12.9	12.7	8.8	6.9	5.2	4.7	21.5	4.7	12.4
6	7.8	14.6	14.5	20.4	8.6	5.8	11.3	5.7	8.0	9.6	6.4	9.5	12.3	13.2	10.1	12.0	15.2	14.9	12.9	20.8	12.6	18.6	12.3	19.0	20.8	5.7	12.3
7	10.8	10.5	20.4	21.1	11.6	13.2	13.2	14.1	17.4	12.1	8.9	17.6	20.3	20.6	38.0	15.7	19.8	10.6	15.6	71.4	37.7	25.4	20.7	15.6	71.4	8.9	20.1
8	14.7	61.0	49.2	16.6	12.6	12.1	9.4	7.4	7.5	8.8	9.8	11.6	8.2	9.7	33.3	79.6	15.9	28.4	83.8	69.8	87.4	66.8	40.8	27.9	87.4	7.4	32.2
9	22.6	6.6	6.3	6.3	6.0	5.9	5.3	6.7	6.3	6.1	6.8	95.7	24.5	14.1	45.4	39.5	90.2	46.4	13.6	9.9	11.2	12.4	10.4	9.2	95.7	5.3	21.1
10	8.3	8.3	10.4	8.8	7.9	8.4	9.0	8.9	8.0	7.4	8.2	6.5	8.3	7.4	12.4	15.4	17.9	10.5	18.7	8.5	11.7	23.5	7.1	11.9	23.5	6.5	10.6
11	5.2	15.8	15.4	90.0	61.7	72.9	22.4	42.8	17.8	97.1	59.7	90.6	53.7	14.0	11.6	12.8	12.4	20.6	12.9	24.8	49.4	23.7	28.6	9.8	97.1	5.2	36.1
12	10.9	10.5	33.1	22.2	13.5	15.3	6.5	6.7	9.0	5.8	10.1	9.6	14.2	11.1	16.0	10.2	6.6	10.9	17.0	12.7	21.4	24.1	30.9	18.2	33.1	5.8	14.4
13	57.2	21.2	28.8	11.9	8.7	5.4	11.0	7.1	11.1	7.4	6.7	5.5	5.5	8.1	6.8	6.1	6.1	5.7	8.2	7.5	7.0	5.7	5.9	6.3	57.2	5.4	10.9
14	5.5	6.0	6.0	5.0	5.5	4.8	5.8	43.6	7.5	12.4	10.4	9.0	7.3	6.9	8.8	6.8	6.7	7.0	6.5	6.4	6.0	26.1	15.9	15.8	43.6	4.8	10.1
15	10.8	15.5	8.4	18.2	8.6	26.2	17.0	16.0	20.8	24.2	13.5	11.1	8.8	19.3	16.0	20.7	25.1	32.0	29.5	18.1	100.0	88.9	96.9	21.3	100.0	8.4	27.8
16	12.8	9.7	10.6	6.4	13.9	5.9	5.9	9.2	23.4	18.9	6.7	6.4	6.3	6.5	6.5	16.4	11.5	8.2	9.3	16.9	10.9	8.1	30.0	9.2	30.0	5.9	11.2
17	43.4	76.5	49.0	25.7	43.9	10.4	12.0	15.7	16.5	21.5	26.9	11.7	8.6	6.9	6.3	7.3	35.1	11.2	5.0	5.4	5.7	6.1	5.4	6.0	76.5	5.0	19.3
18	6.1	7.8	5.7	5.9	5.9	5.8	5.6	5.6	5.6	5.6	5.3	5.7	5.8	6.6	6.3	8.5	10.7	7.3	9.9	6.5	5.7	5.7	6.1	6.0	10.7	5.3	6.5
19	5.1	16.7	18.1	103.1	34.5	21.9	71.0	9.2	8.0	7.8	7.3	5.9	5.8	6.1	7.8	6.6	9.8	6.8	6.2	6.7	30.3	31.5	13.9	8.1	103.1	5.1	18.7
20	9.6	5.4	5.8	5.1	4.9	5.2	5.0	4.9	5.8	5.3	6.2	5.5	17.3	5.7	5.0	7.6	56.3	8.5	6.7	5.8	5.7	5.2	5.3	5.3	56.3	4.9	8.5
21	5.3	5.4	5.8	5.2	5.5	5.3	5.3	5.7	5.8	5.3	5.8	5.5	6.2	7.2	6.3	5.8	5.8	42.4	24.8	84.8	38.6	48.7	7.6	16.4	84.8	5.2	15.0
22	79.1	22.5	12.7	65.3	13.9	22.7	16.3	60.4	24.6	43.8	95.7	38.5	8.1	10.4	6.2	4.8	4.9	3.9	5.2	4.6	6.5	5.8	5.5	4.1	95.7	3.9	23.6
23	22.2	23.4	16.6	45.7	20.1	12.9	11.4	8.0	8.6	19.1	22.7	12.7	83.5	68.4	37.0	10.7	9.7	10.1	12.2	10.1	13.9	11.3	40.2	23.9	83.5	8.0	23.1
24	29.9	18.0	20.2	8.5	19.9	11.6	14.8	28.4	11.8	10.1	14.3	14.1	15.3	14.2	17.7	18.8	12.6	23.9	12.7	13.2	22.9	13.5	19.8	7.4	29.9	7.4	16.4
25	20.0	12.7	13.4	20.2	13.8	5.7	7.2	8.8	12.3	13.6	14.1	12.3	10.1	22.3	16.4	11.8	9.3	14.3	24.8	84.5	8.2	24.7	7.8	14.8	84.5	5.7	16.8
26	18.1	16.3	13.1	69.1	10.6	4.6	4.6	9.1	4.8	6.9	6.9	17.1	73.1	32.3	13.1	16.6	16.1	26.9	17.1	17.4	14.6	8.2	5.6	8.0	73.1	4.6	17.9
27	9.0	21.6	18.4	9.7	9.0	12.5	12.0	12.1	4.8	11.2	5.5	9.3	20.2	7.4	9.6	6.3	12.4	5.8	20.0	62.8	62.3	81.7	48.5	59.8	81.7	4.8	22.2
28	11.8	58.3	88.4	8.3	5.0	5.3	4.8	5.0	5.1	5.0	56.0	14.6	20.1	22.9	14.3	18.5	18.7	10.4	15.0	7.2	11.1	11.8	16.5	11.4	88.4	4.8	18.6
29	10.7	12.7	8.9	15.9	9.7	11.7	11.9	18.2	12.0	11.4	24.8	14.7	13.7	17.3	11.4	23.3	18.4	23.1	5.7	8.5	15.2	27.2	29.2	18.3	29.2	5.7	15.6
Max.	**79.1**	**76.5**	**88.4**	**103.1**	**61.7**	**72.9**	**71.0**	**60.4**	**37.9**	**97.1**	**95.7**	**95.8**	**83.5**	**68.4**	**45.4**	**85.2**	**90.2**	**46.4**	**90.9**	**84.8**	**100.0**	**88.9**	**96.9**	**59.8**	**103.1**		
Min.	**5.1**	**5.4**	**5.7**	**5.0**	**4.9**	**4.6**	**4.6**	**4.9**	**4.8**	**5.0**	**5.0**	**5.5**	**4.0**	**5.7**	**5.0**	**4.8**	**4.9**	**3.9**	**5.0**	**4.6**	**5.6**	**5.2**	**4.8**	**4.1**		**3.9**	
Avg.	**17.2**	**18.1**	**18.2**	**22.9**	**14.7**	**13.1**	**12.5**	**14.8**	**12.9**	**18.9**	**17.7**	**20.6**	**19.1**	**16.5**	**16.0**	**18.9**	**18.4**	**16.0**	**18.8**	**22.3**	**22.5**	**22.7**	**19.3**	**13.9**			**17.8**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.4	7.5	15.5	20.7	7.7	19.1	8.1	11.7	88.6	86.2	81.3	17.2	14.1	62.3	27.6	9.4	14.9	17.9	7.5	8.7	8.2	25.9	23.9	29.8	88.6	7.5	26.0
2	15.5	17.9	17.2	10.7	12.3	13.2	13.4	5.0	6.4	4.8	7.6	9.0	9.7	5.4	7.3	11.9	8.6	5.4	6.2	6.3	10.1	8.5	8.6	11.9	17.9	4.8	9.7
3	17.2	13.7	5.5	8.0	9.0	8.6	5.0	4.7	4.8	5.0	5.1	4.8	4.8	6.4	5.1	4.7	4.9	5.2	5.2	4.7	7.3	5.1	5.0	6.0	17.2	4.7	6.5
4	4.7	5.8	5.1	6.4	5.3	5.2	5.4	5.6	5.3	6.0	7.3	6.1	6.1	6.2	6.8	6.9	7.0	5.7	6.5	6.2	5.6	6.0	4.9	5.1	7.3	4.7	5.9
5	7.5	4.5	13.9	7.5	12.4	10.6	12.8	10.4	7.6	11.8	14.9	5.2	5.9	7.4	5.0	5.2	6.4	6.5	6.6	5.1	4.9	4.9	4.9	4.7	14.9	4.5	7.8
6	4.8	4.7	5.4	5.6	9.5	9.6	6.9	10.6	7.0	10.1	11.1	9.7	9.4	5.7	6.2	6.1	6.5	8.1	18.3	6.5	36.9	6.4	7.0	9.2	36.9	4.7	9.2
7	8.2	6.6	75.9	65.9	38.2	24.2	51.6	13.4	12.7	8.1	6.9	4.4	4.6	9.7	7.8	18.9	19.8	24.8	23.3	6.5	12.0	15.5	27.4	19.0	75.9	4.4	21.1
8	9.4	7.4	99.6	34.0	16.9	12.4	5.8	5.3	14.6	13.7	12.1	7.5	8.1	13.2	8.7	6.2	5.5	5.0	5.3	5.1	5.4	5.4	5.7	6.7	99.6	5.0	13.3
9	6.5	6.4	6.3	6.7	6.1	5.9	6.6	6.1	9.2	7.6	50.7	56.0	46.7	52.8	21.0	21.3	10.2	17.2	13.4	13.9	7.6	7.5	13.7	19.9	56.0	5.9	17.5
10	20.7	19.6	63.5	42.4	20.2	10.2	24.5	73.0	76.9	43.8	86.2	39.0	96.5	59.2	12.8	13.9	7.5	13.1	15.3	23.2	15.7	34.4	14.2	18.8	96.5	7.5	35.2
11	16.0	12.0	44.9	4.5	39.1	27.0	10.9	21.5	8.4	17.8	19.9	23.4	16.6	7.9	9.2	10.4	8.2	5.3	12.6	18.7	5.2	7.6	7.6	9.7	44.9	4.5	15.2
12	15.3	10.3	6.7	7.0	5.9	5.8	9.0	11.6	7.7	14.1	8.9	16.9	15.9	20.1	11.1	20.7	92.1	22.2	31.3	16.2	48.5	47.2	86.1	23.8	92.1	5.8	23.1
13	32.1	13.6	11.5	10.1	14.9	10.6	9.6	9.3	8.3	8.0	7.5	6.3	9.3	11.6	11.9	15.1	9.7	11.3	10.8	6.6	6.1	10.1	16.2	18.9	32.1	6.1	11.7
14	21.6	5.7	4.5	14.0	7.6	7.3	7.7	9.8	8.7	13.0	7.4	6.1	9.4	7.8	8.5	11.1	46.4	79.8	11.6	8.5	8.3	17.1	10.4	15.2	79.8	4.5	14.5
15	7.2	5.3	6.9	6.5	7.2	8.3	7.2	5.5	5.4	6.4	5.3	5.5	5.3	5.7	5.3	5.5	5.3	4.9	4.5	4.5	4.6	5.0	6.8	9.3	9.3	4.5	6.0
16	7.8	8.3	6.1	6.0	15.9	12.2	9.7	7.4	13.2	83.6	7.3	12.4	7.2	10.5	9.3	17.1	5.8	8.7	7.8	25.0	13.5	9.0	7.7	8.5	83.6	5.8	13.3
17	17.8	14.3	13.3	13.4	12.4	7.3	4.6	7.2	5.7	8.5	7.2	10.9	30.0	18.0	28.6	49.1	11.5	46.2	5.1	5.5	8.9	7.2	7.2	36.5	49.1	4.6	15.7
18	30.7	23.2	64.1	32.7	24.3	26.3	11.3	13.6	11.2	7.3	6.5	8.7	10.4	7.9	9.7	6.4	6.5	6.7	14.4	8.3	9.8	42.4	33.3	18.9	64.1	6.4	18.1
19	8.5	7.7	21.6	19.5	15.4	18.9	8.8	18.1	18.2	7.9	10.6	7.2	5.8	5.9	6.6	6.0	6.4	8.7	7.0	5.4	6.0	6.4	6.3	20.9	21.6	5.4	10.6
20	12.5	8.6	8.0	13.4	5.6	10.5	7.4	7.5	4.9	10.9	6.2	12.5	11.9	13.6	16.7	9.8	13.5	8.4	8.3	12.7	23.7	23.8	16.3	13.3	23.8	4.9	11.7
21	11.1	10.6	6.8	12.2	11.4	15.2	69.8	19.7	13.9	63.8	96.2	84.1	65.4	22.9	19.6	16.3	18.2	15.3	9.8	26.7	11.4	18.5	18.7	13.3	96.2	6.8	27.9
22	12.4	20.3	21.9	19.5	14.7	16.5	11.3	23.1	28.4	14.9	12.6	13.6	15.2	14.5	20.6	24.8	8.2	20.6	15.2	41.7	58.2	11.8	11.2	13.6	58.2	8.2	19.4
23	19.5	18.6	18.9	8.3	15.8	17.7	11.1	9.8	17.9	29.6	23.7	19.9	13.4	6.7	5.5	5.2	8.5	10.5	18.3	12.6	8.7	9.4	25.9	18.7	29.6	5.2	14.8
24	8.3	9.6	11.1	10.5	9.0	11.3	11.2	7.1	10.7	10.5	21.3	18.3	7.4	14.0	59.6	101.6	13.7	9.4	10.5	9.4	6.9	11.3	21.9	58.1	101.6	6.9	19.3
25	33.7	24.6	38.5	11.7	11.2	31.2	69.2	84.3	73.7	53.8	12.6	15.7	12.8	14.1	8.9	6.2	7.8	5.1	4.7	8.1	9.7	20.9	14.4	9.9	84.3	4.7	24.3
26	9.9	17.5	25.6	28.0	61.5	68.7	10.7	11.1	9.0	14.8	9.3	10.9	10.9	19.8	6.7	7.6	7.5	5.7	23.0	28.7	28.9	15.7	6.6	13.4	68.7	5.7	18.8
27	9.2	5.7	4.6	7.2	5.2	5.0	4.1	5.9	18.2	18.3	6.3	13.2	6.7	11.7	8.5	6.1	6.0	8.5	6.0	11.5	10.7	12.5	12.2	5.2	18.3	4.1	8.7
28	7.0	8.4	9.0	5.5	10.7	9.0	8.0	11.1	8.6	12.1	10.8	8.1	6.9	5.1	5.0	4.7	12.2	5.1	2.9	4.4	9.4	4.6	10.0	8.0	12.2	2.9	7.8
29	23.9	16.2	34.7	41.6	59.9	94.3	67.9	38.6	74.1	9.0	22.7	12.9	5.0	4.7	5.2	6.1	5.1	7.9	8.0	9.8	8.4	8.6	5.6	6.5	94.3	4.7	24.0
30	5.2	5.7	5.8	6.1	5.4	4.8	5.9	5.6	5.0	5.4	5.6	5.8	6.8	6.8	7.7	8.9	7.2	8.5	8.9	11.5	14.3	5.9	7.5	5.5	14.3	4.8	6.9
31	4.8	5.3	6.2	7.9	5.5	5.9	12.8	6.5	4.9	5.5	5.1	5.9	5.4	5.2	5.3	5.5	5.2	6.3	5.4	5.5	5.9	5.2	5.1	5.1	12.8	4.8	5.9
Max.	**33.7**	**24.6**	**99.6**	**65.9**	**61.5**	**94.3**	**69.8**	**84.3**	**88.6**	**86.2**	**96.2**	**84.1**	**96.5**	**62.3**	**59.6**	**101.6**	**92.1**	**79.8**	**31.3**	**41.7**	**58.2**	**47.2**	**86.1**	**58.1**	**101.6**		
Min.	**4.7**	**4.5**	**4.5**	**4.5**	**5.2**	**4.8**	**4.1**	**4.7**	**4.8**	**4.8**	**5.1**	**4.4**	**4.6**	**4.7**	**5.0**	**4.7**	**4.9**	**4.9**	**2.9**	**4.4**	**4.6**	**4.6**	**4.9**	**4.7**		**2.9**	
Avg.	**13.5**	**11.1**	**21.9**	**15.9**	**16.0**	**17.2**	**16.4**	**15.5**	**19.0**	**19.8**	**19.2**	**15.4**	**15.6**	**14.9**	**12.2**	**14.5**	**12.8**	**13.4**	**10.8**	**11.9**	**13.6**	**13.5**	**14.6**	**15.0**			**15.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.6	5.2	5.3	5.3	5.3	5.4	4.9	4.8	4.9	5.3	5.1	5.8	6.7	6.4	5.0	5.7	4.2	6.1	7.0	9.7	9.4	12.7	23.6	12.9	23.6	4.2	7.2
2	33.3	15.1	14.5	11.1	13.2	51.6	55.8	43.3	19.6	15.9	82.2	13.4	11.0	14.3	49.5	83.5	19.1	44.8	34.6	18.5	15.9	8.5	15.6	10.1	83.5	8.5	28.9
3	6.6	10.1	14.1	8.3	8.3	5.2	5.1	6.5	11.0	37.0	27.1	12.4	7.6	5.9	4.9	5.1	6.9	12.9	5.1	5.5	7.1	5.2	4.9	4.5	37.0	4.5	9.5
4	4.9	5.0	5.2	5.3	5.4	5.4	5.5	5.6	5.5	5.6	4.7	4.8	4.6	4.5	4.6	6.3	5.6	6.2	8.9	8.7	10.7	13.9	11.8	16.7	16.7	4.5	6.9
5	8.3	9.4	11.1	23.6	40.8	21.1	26.7	40.7	29.2	19.2	10.5	15.0	13.6	10.2	6.3	5.2	6.6	11.4	5.1	5.0	4.0	15.4	17.1	20.2	40.8	4.0	15.7
6	11.3	8.8	10.6	16.6	13.9	17.4	19.9	15.4	14.2	14.6	17.3	7.3	5.9	6.5	17.0	19.8	16.8	15.0	25.0	19.4	23.7	12.9	6.5	15.0	25.0	5.9	14.6
7	13.1	13.4	12.6	8.0	8.3	8.1	20.1	20.0	6.4	4.9	4.0	6.6	7.9	10.2	8.4	9.2	6.9	15.1	6.8	11.5	12.5	15.7	8.3	11.0	20.1	4.0	10.4
8	5.1	6.0	11.3	18.2	10.9	6.7	14.5	7.7	9.3	7.3	12.5	10.0	8.5	14.0	9.3	10.3	11.8	63.0	22.0	4.6	19.5	6.4	11.0	12.7	63.0	4.6	13.0
9	21.7	17.2	7.6	8.2	20.0	7.0	19.0	8.9	7.7	5.9	4.4	3.9	13.5	5.3	4.9	4.6	7.3	8.8	11.2	6.6	8.8	13.6	15.8	11.0	21.7	3.9	10.1
10	11.0	14.8	16.1	10.3	14.9	13.9	15.2	17.5	8.6	10.3	8.2	9.8	18.5	17.3	8.9	8.4	6.6	11.8	17.5	17.4	6.8	5.8	5.1	6.6	18.5	5.1	11.7
11	6.4	7.6	10.6	6.4	6.4	5.7	16.6	9.7	11.3	13.1	16.4	10.1	12.3	17.4	10.4	5.8	6.6	9.8	8.4	7.5	10.2	7.0	8.4	6.0	17.4	5.7	9.6
12	3.8	11.7	5.6	7.1	9.4	7.5	6.6	4.2	6.1	4.4	6.6	9.1	7.3	12.3	6.0	5.4	8.3	9.5	7.8	10.3	6.1	39.6	23.8	34.2	39.6	3.8	10.5
13	76.4	77.4	32.9	29.0	31.3	5.3	5.6	8.0	5.2	6.7	6.6	21.3	22.7	35.2	39.1	21.6	12.6	6.2	13.5	11.5	10.6	22.7	9.6	8.6	77.4	5.2	21.7
14	7.9	5.6	6.1	5.3	6.0	6.6	8.1	6.4	5.4	7.8	5.0	5.8	5.2	17.6	17.3	26.4	22.9	13.6	10.7	19.8	9.4	25.3	43.6	10.9	43.6	5.0	12.4
15	9.0	28.2	16.1	19.1	42.4	22.9	12.7	40.1	7.6	9.9	5.6	6.9	5.4	5.2	4.6	4.9	7.6	7.5	7.2	6.9	7.1	4.7	4.9	5.4	42.4	4.6	12.2
16	5.1	5.5	4.8	9.5	5.3	8.9	9.8	4.6	7.1	8.1	7.2	5.8	9.0	11.4	7.2	7.3	8.4	7.5	10.5	10.2	16.1	64.1	29.5	75.5	75.5	4.6	14.1
17	74.4	25.7	17.8	18.2	5.7	13.7	12.5	10.0	16.1	6.6	18.4	13.1	32.8	7.7	9.5	10.3	11.3	8.9	10.6	40.6	44.0	72.2	65.6	67.2	74.4	5.7	25.6
18	13.9	12.4	11.4	11.2	6.0	15.8	13.7	6.8	9.9	9.2	13.4	82.1	35.0	44.2	13.4	11.7	36.1	21.3	96.4	29.4	13.7	16.9	76.5	19.2	96.4	6.0	25.8
19	53.4	10.8	22.2	6.7	7.7	8.9	8.3	5.6	6.8	8.4	6.4	12.6	5.7	7.5	7.6	9.5	7.6	10.1	12.5	6.7	19.6	27.6	13.1	19.8	53.4	5.6	12.7
20	25.9	34.3	6.6	8.9	15.5	18.8	10.7	10.5	8.1	10.8	3.8	4.1	5.7	7.3	17.0	11.5	9.5	11.3	6.4	7.8	13.1	8.4	8.3	10.9	34.3	3.8	11.5
21	6.9	6.7	8.3	8.3	9.1	13.8	14.6	19.6	16.7	36.0	24.1	6.7	6.7	6.3	6.6	8.3	22.5	28.6	23.6	8.1	19.4	16.2	9.3	11.1	36.0	6.3	14.1
22	10.8	62.1	50.4	25.4	46.5	30.1	28.6	59.3	15.8	43.6	17.3	6.5	6.4	18.7	10.7	18.6	11.3	12.8	12.0	16.2	14.5	14.1	10.7	11.7	62.1	6.4	23.1
23	6.0	27.9	13.8	11.4	12.1	18.9	13.6	16.0	44.2	19.9	61.6	14.1	54.8	5.2	7.7	4.8	10.7	13.0	26.9	16.3	6.7	14.2	7.8	15.7	61.6	4.8	18.5
24	25.1	86.7	63.2	36.1	55.2	58.6	79.6	70.0	64.9	21.3	26.0	90.9	19.4	38.4	30.7	15.0	7.2	6.5	8.2	50.1	32.9	51.2	7.6	15.9	90.9	6.5	40.0
25	12.1	6.3	8.3	10.2	5.7	11.3	7.7	5.5	5.7	5.1	7.8	6.3	6.7	7.1	7.1	8.0	7.8	7.0	10.3	10.3	8.7	6.7	17.5	11.5	17.5	5.1	8.4
26	6.9	7.3	9.7	9.3	9.8	8.5	13.0	18.2	13.2	6.5	30.0	7.3	8.2	10.0	6.7	6.2	6.2	7.2	8.0	8.2	8.6	7.1	6.0	6.4	30.0	6.0	9.5
27	5.8	6.4	6.4	6.2	6.0	5.2	6.1	5.5	6.0	6.0	5.1	5.1	5.7	5.5	5.7	5.4	6.9	4.8	9.2	8.9	8.8	8.5	12.2	11.0	12.2	4.8	6.8
28	31.0	22.3	15.7	13.7	12.2	13.9	12.4	9.4	9.2	7.6	11.4	9.5	20.9	26.9	8.9	21.6	10.7	6.3	6.1	10.6	6.7	9.3	9.8	5.1	31.0	5.1	13.0
29	12.2	5.2	10.4	11.7	12.7	8.5	11.2	10.7	27.1	15.1	7.6	11.6	7.5	20.4	17.7	33.8	8.5	6.5	5.9	5.8	6.3	7.7	7.4	48.4	48.4	5.2	13.3
30	26.2	13.8	10.5	18.7	12.1	13.9	14.5	9.6	13.5	20.4	12.1	9.5	9.9	7.9	10.2	13.8	12.0	25.3	10.6	8.3	12.6	8.3	11.5	8.9	26.2	7.9	13.1
Max.	**76.4**	**86.7**	**63.2**	**36.1**	**55.2**	**58.6**	**79.6**	**70.0**	**64.9**	**43.6**	**82.2**	**90.9**	**54.8**	**44.2**	**49.5**	**83.5**	**36.1**	**63.0**	**96.4**	**50.1**	**44.0**	**72.2**	**76.5**	**75.5**	**96.4**		
Min.	**3.8**	**5.0**	**4.8**	**5.3**	**5.3**	**5.2**	**4.9**	**4.2**	**4.9**	**4.4**	**3.8**	**3.9**	**4.6**	**4.5**	**4.6**	**4.6**	**4.2**	**4.8**	**5.1**	**4.6**	**4.0**	**4.7**	**4.9**	**4.5**		**3.8**	
Avg.	**18.0**	**19.0**	**14.6**	**12.9**	**15.3**	**14.6**	**16.4**	**16.7**	**13.9**	**13.1**	**15.6**	**14.2**	**12.8**	**13.6**	**12.1**	**13.6**	**10.9**	**14.0**	**15.0**	**13.3**	**13.1**	**18.1**	**16.8**	**17.5**			**14.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.2	20.4	15.1	13.6	14.4	14.1	20.2	23.4	14.3	18.2	10.2	9.4	19.2	15.0	15.8	6.8	7.8	7.6	6.9	8.8	14.4	21.5	6.7	18.4	23.4	6.7	14.0
2	15.6	31.2	20.3	39.6	11.0	12.6	8.1	5.7	13.0	13.3	11.9	8.3	22.7	32.7	88.9	23.3	16.9	11.2	90.3	89.4	101.5	42.4	28.8	16.7	101.5	5.7	31.5
3	67.8	40.0	37.4	7.4	11.1	22.0	16.1	12.6	27.7	70.2	54.0	10.3	16.6	7.6	76.9	34.4	24.9	81.1	48.4	45.7	67.0	13.6	73.2	30.5	81.1	7.4	37.3
4	7.1	18.3	11.7	13.5	12.8	6.7	7.4	9.7	11.6	29.8	23.7	19.4	31.1	66.9	69.6	24.7	25.3	94.1	22.2	14.3	59.0	14.8	16.6	14.8	94.1	6.7	26.0
5	17.4	15.4	12.8	14.3	14.8	11.4	18.3	9.3	29.1	18.3	82.4	21.9	59.5	16.0	75.2	37.3	15.8	8.9	59.1	75.4	55.7	51.7	69.7	72.9	82.4	8.9	35.9
6	47.5	10.4	16.4	19.6	15.4	88.5	21.8	25.9	26.5	17.4	7.2	7.3	7.1	6.9	7.4	6.1	5.8	6.4	5.8	5.5	5.6	5.3	4.7	5.2	88.5	4.7	15.7
7	5.4	5.4	5.2	5.5	5.1	5.3	5.1	5.1	5.0	5.4	6.7	5.5	6.4	6.1	6.5	7.0	6.3	6.2	6.1	5.6	8.6	6.2	7.0	8.2	8.6	5.0	6.0
8	7.9	5.1	6.2	4.6	5.1	4.7	5.0	4.9	5.2	5.8	6.6	5.9	6.1	5.8	6.1	5.6	6.1	5.5	5.4	5.6	5.5	5.4	5.0	5.9	7.9	4.6	5.6
9	7.5	17.6	10.0	14.4	14.2	7.7	13.9	9.7	9.7	8.8	8.2	7.5	7.3	8.1	8.8	12.1	8.6	6.5	11.5	54.2	11.4	8.4	19.7	10.1	54.2	6.5	12.3
10	8.6	51.0	70.3	72.3	87.0	12.0	43.2	11.9	23.8	16.0	9.5	18.4	18.0	14.7	15.6	14.0	8.9	17.2	60.2	25.4	35.9	64.8	18.6	8.5	87.0	8.5	30.2
11	17.4	15.7	28.7	9.6	10.5	11.2	12.5	16.0	14.0	6.1	6.8	7.7	6.8	6.9	6.7	6.2	7.8	6.6	6.6	6.1	6.3	7.4	8.8	10.4	28.7	6.1	10.1
12	9.5	21.1	24.3	47.5	26.9	18.7	9.0	13.2	38.6	9.7	7.6	10.1	7.3	6.8	6.3	7.3	7.3	6.8	7.0	5.6	5.9	6.4	5.9	6.2	47.5	5.6	13.1
13	6.4	6.3	6.8	7.6	6.4	6.8	6.7	7.2	7.2	10.4	7.4	7.7	8.5	8.2	8.0	9.0	7.4	6.9	7.0	6.7	7.5	6.7	6.2	8.2	10.4	6.2	7.4
14	6.1	18.1	99.7	27.2	47.1	31.9	8.2	7.5	7.4	8.9	8.9	9.1	9.9	11.8	9.0	12.4	15.9	8.7	9.0	9.7	26.7	28.7	88.5	28.7	99.7	6.1	22.5
15	86.4	52.1	13.4	51.8	85.5	93.2	67.4	37.5	9.8	10.5	13.1	18.0	19.5	26.2	10.7	18.1	19.4	9.5	10.5	7.3	8.7	7.0	9.8	13.3	93.2	7.0	29.1
16	17.9	19.6	26.9	15.7	30.2	11.3	9.8	11.3	11.0	16.6	36.0	25.9	22.3	10.7	12.8	11.5	12.8	14.4	15.4	14.3	10.3	75.7	27.4	11.1	75.7	9.8	19.6
17	11.3	63.4	19.1	6.2	4.2	4.0	5.6	7.3	11.2	34.7	42.3	43.9	29.3	29.2	33.4	38.0	45.8	45.6	21.5	22.1	8.3	10.4	25.7	14.6	63.4	4.0	24.0
18	69.6	63.8	78.2	12.2	24.8	23.4	64.5	13.4	22.8	11.1	16.9	11.2	11.8	10.1	17.8	16.2	11.6	13.3	10.6	14.6	10.0	10.5	11.5	53.2	78.2	10.0	25.1
19	45.6	15.2	102.6	17.6	17.5	12.0	16.4	14.3	13.2	29.6	23.1	20.3	33.3	18.0	12.2	17.9	11.0	10.7	12.0	8.3	10.9	7.7	10.7	8.5	102.6	7.7	20.4
20	15.4	10.6	10.9	21.6	22.1	17.0	19.2	22.1	15.8	58.9	43.7	50.6	69.7	23.8	37.5	66.4	35.0	34.0	23.4	17.4	10.6	50.9	14.4	7.6	69.7	7.6	29.1
21	6.7	13.0	7.9	8.9	10.9	11.9	7.3	19.8	22.7	24.4	39.1	26.3	42.6	20.0	24.5	15.6	13.6	12.7	10.7	9.1	8.7	10.5	19.3	16.2	42.6	6.7	16.8
22	15.0	13.6	14.6	20.5	23.5	23.3	8.9	21.5	17.1	43.7	78.3	47.1	79.1	25.0	29.5	19.5	8.4	8.3	8.0	8.4	12.6	7.7	7.7	8.0	79.1	7.7	22.9
23	6.8	6.7	6.6	6.3	7.2	7.7	8.8	8.0	7.6	7.9	7.8	8.3	8.9	7.7	7.8	8.9	8.2	7.7	7.4	7.0	7.0	8.5	6.6	7.1	8.9	6.3	7.6
24	6.9	7.1	7.9	7.8	7.3	6.7	7.2	7.5	8.9	8.8	11.8	8.5	7.4	7.9	8.2	11.1	10.0	9.3	10.5	13.4	12.9	12.2	13.3	10.6	13.4	6.7	9.3
25	12.5	7.3	25.6	25.9	22.1	7.0	7.2	7.2	15.8	14.9	9.9	13.8	15.9	28.3	18.0	20.9	19.0	15.0	20.4	26.0	21.7	76.1	66.1	78.1	78.1	7.0	24.0
26	47.9	91.4	29.2	37.3	36.7	56.6	19.8	24.2	10.0	14.2	15.3	15.9	26.3	15.7	20.2	14.6	12.6	14.1	15.3	18.0	11.6	18.8	15.5	15.9	91.4	10.0	24.9
27	9.9	21.1	18.2	11.1	11.2	6.6	9.2	23.8	11.7	12.5	20.1	22.0	22.3	26.4	19.5	23.6	18.4	17.7	13.6	12.4	9.0	12.6	18.2	15.7	26.4	6.6	16.1
28	9.5	7.4	6.1	4.5	7.8	9.1	15.4	10.6	12.1	16.7	20.3	27.6	18.9	24.9	17.7	22.9	14.4	19.6	10.9	9.8	8.4	7.9	9.0	19.5	27.6	4.5	13.8
29	19.6	10.7	13.6	9.0	6.8	7.8	8.3	10.2	8.4	14.2	14.6	18.7	15.1	16.8	16.2	21.1	20.6	19.3	15.8	17.7	12.7	14.3	27.3	27.4	27.4	6.8	15.3
30	7.9	8.2	16.2	10.0	9.1	10.0	8.1	32.6	64.8	10.0	9.5	11.9	12.0	12.9	12.3	11.4	11.0	9.2	11.2	9.5	13.7	11.5	10.4	8.2	64.8	7.9	13.8
31	7.8	8.6	6.6	6.9	6.6	6.2	6.7	7.5	6.9	6.8	7.8	8.2	8.5	8.8	7.8	8.6	9.3	7.9	7.7	7.9	9.0	12.9	19.9	38.4	38.4	6.2	9.7
Max.	**86.4**	**91.4**	**102.6**	**72.3**	**87.0**	**93.2**	**67.4**	**37.5**	**64.8**	**70.2**	**82.4**	**50.6**	**79.1**	**66.9**	**88.9**	**66.4**	**45.8**	**94.1**	**90.3**	**89.4**	**101.5**	**76.1**	**88.5**	**78.1**	**102.6**		
Min.	**5.4**	**5.1**	**5.2**	**4.5**	**4.2**	**4.0**	**5.0**	**4.9**	**5.0**	**5.4**	**6.6**	**5.5**	**6.1**	**5.8**	**6.1**	**5.6**	**5.8**	**5.5**	**5.4**	**5.5**	**5.5**	**5.3**	**4.7**	**5.2**		**4.0**	
Avg.	**20.5**	**22.4**	**24.8**	**18.4**	**19.9**	**18.3**	**15.7**	**14.2**	**16.2**	**18.5**	**21.3**	**17.0**	**21.6**	**17.0**	**22.8**	**17.8**	**14.4**	**17.5**	**18.4**	**18.8**	**19.3**	**20.6**	**21.7**	**19.3**			**19.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	25.0	9.5	10.6	9.4	11.2	11.5	6.4	6.2	7.2	7.9	8.5	8.1	8.1	7.8	7.5	7.5	7.4	7.4	7.5	10.4	10.4	9.5	9.6	45.4	45.4	6.2	10.8
2	81.0	48.7	13.9	19.5	21.6	68.8	88.2	85.2	50.9	13.8	12.0	18.5	34.0	20.1	25.6	24.8	20.1	10.8	10.3	16.8	14.8	13.8	31.1	35.0	88.2	10.3	32.5
3	16.1	15.3	54.5	21.5	78.9	88.0	26.0	21.7	28.2	75.7	62.4	48.7	69.7	15.4	12.5	13.6	19.4	12.2	13.4	9.2	13.2	12.7	10.7	6.9	88.0	6.9	31.1
4	12.4	15.8	16.8	21.5	19.3	11.0	10.7	11.4	16.7	10.5	10.5	11.8	16.2	14.5	16.4	12.3	12.3	10.2	10.1	14.3	10.4	9.2	21.3	13.8	21.5	9.2	13.7
5	16.4	49.2	19.7	15.6	13.7	18.5	14.8	7.6	7.6	7.3	7.6	7.8	7.3	8.4	8.9	8.0	8.9	9.2	9.6	10.3	9.3	39.3	37.5	16.7	49.2	7.3	15.0
6	16.9	29.8	17.0	29.1	23.1	31.8	15.6	16.7	20.5	11.1	22.3	15.2	23.9	25.4	29.7	67.7	44.2	10.4	10.0	9.8	15.2	12.0	24.3	54.0	67.7	9.8	24.0
7	18.6	8.3	13.1	19.2	19.6	10.3	14.4	20.3	15.1	11.2	14.1	17.3	22.4	15.6	27.9	48.3	52.0	14.1	11.0	10.1	9.5	9.4	38.7	42.3	52.0	8.3	20.1
8	26.6	30.9	13.7	10.7	9.5	16.7	14.9	11.7	17.3	24.2	19.5	15.1	37.5	16.0	18.1	16.5	22.7	19.8	18.0	23.3	20.1	16.0	11.7	50.0	50.0	9.5	20.0
9	14.7	14.2	11.0	11.1	16.9	16.0	23.7	11.7	10.5	8.8	15.1	38.9	24.1	42.7	20.9	27.8	50.2	34.9	19.6	16.3	10.8	10.1	27.2	9.7	50.2	8.8	20.3
10	11.9	14.1	21.8	20.3	20.9	12.8	20.1	11.3	14.5	70.1	73.7	51.0	62.5	51.3	25.9	26.6	19.6	17.8	15.3	22.7	16.8	31.8	26.9	64.3	73.7	11.3	30.2
11	74.4	21.1	78.9	100.1	15.5	31.3	48.0	53.2	43.7	17.0	23.7	21.9	21.0	47.3	17.1	15.5	11.5	16.8	12.4	11.1	14.4	9.2	8.8	22.1	100.1	8.8	30.7
12	10.5	39.0	13.7	72.1	44.4	40.7	89.4	66.5	14.6	21.2	60.6	60.6	54.2	74.2	14.2	33.6	12.2	19.6	10.8	31.9	13.3	28.0	11.6	15.1	89.4	10.5	35.5
13	13.4	7.6	13.7	12.6	13.2	13.2	18.2	11.3	22.9	10.0	10.4	22.4	50.2	72.0	34.4	61.6	53.9	57.1	31.6	16.5	25.7	31.1	58.8	84.6	84.6	7.6	31.1
14	62.3	91.3	82.0	14.5	17.8	33.3	15.6	15.4	13.1	20.1	41.7	17.6	14.6	14.6	13.1	10.0	33.8	27.7	24.8	42.4	91.1	18.9	20.6	70.3	91.3	10.0	33.6
15	79.8	83.8	24.2	10.8	22.9	9.7	18.1	24.9	21.5	63.7	12.3	11.3	14.8	23.5	59.9	15.1	17.3	14.1	11.6	10.7	11.6	12.2	27.0	34.4	83.8	9.7	26.5
16	36.5	62.1	66.5	12.4	8.4	13.4	14.7	9.9	7.5	13.2	29.1	40.7	68.2	21.7	94.9	73.8	16.4	28.1	27.5	18.0	38.7	16.9	16.2	40.6	94.9	7.5	32.3
17	21.0	18.3	18.4	15.3	13.5	87.6	85.3	15.9	15.1	27.7	51.7	59.3	25.3	76.7	24.1	26.1	20.4	24.8	18.9	17.3	8.5	8.1	67.2	13.7	87.6	8.1	31.7
18	33.6	23.8	11.1	11.0	11.5	74.1	33.4	82.3	62.3	52.6	17.0	54.5	30.8	19.4	14.6	21.8	23.4	28.4	17.2	17.8	19.6	19.2	10.0	12.7	82.3	10.0	29.3
19	5.0	5.9	5.2	11.6	5.5	5.9	8.8	12.8	22.0	69.2	25.8	16.5	17.8	25.1	43.9	17.3	23.1	36.9	27.9	15.9	11.6	11.6	77.0	48.2	77.0	5.0	22.9
20	55.8	52.3	77.5	31.1	25.7	77.9	17.8	31.7	25.0	20.4	18.9	15.1	16.5	17.2	14.9	8.8	12.0	11.8	12.4	9.0	10.9	8.4	7.7	12.0	77.9	7.7	24.6
21	11.8	14.1	24.5	87.4	59.7	9.9	7.2	20.5	45.3	65.9	92.8	91.5	58.4	70.8	37.7	61.1	60.3	35.7	24.9	11.4	15.9	9.9	47.7	45.8	92.8	7.2	42.1
22	56.6	8.0	10.9	10.3	13.8	12.6	31.7	61.8	21.8	14.6	17.9	11.6	14.5	14.6	13.2	11.3	12.0	9.6	12.2	8.7	8.2	9.2	9.4	6.8	61.8	6.8	16.7
23	7.4	10.8	17.5	9.8	30.2	55.7	7.8	8.3	8.9	9.3	11.6	9.9	12.2	14.3	14.3	14.0	17.0	19.5	17.5	10.3	10.4	9.3	32.0	26.6	55.7	7.4	16.0
24	58.2	77.5	88.5	21.5	23.8	60.1	12.7	10.7	10.2	10.1	8.9	9.8	8.7	8.9	9.7	9.1	7.9	8.2	8.2	7.7	7.6	7.5	7.4	8.1	88.5	7.4	20.5
25	8.2	7.8	8.0	7.1	7.2	6.8	6.6	7.1	7.9	7.2	7.8	7.9	7.4	7.6	9.0	7.8	7.3	8.7	8.3	7.6	9.7	14.7	14.2	20.5	20.5	6.6	8.8
26	13.9	97.8	77.6	73.7	10.4	60.7	93.6	58.2	14.5	35.3	9.5	11.4	13.3	38.0	21.9	63.9	18.2	12.9	30.3	15.4	15.1	10.6	32.3	33.3	97.8	9.5	35.9
27	75.0	17.4	15.3	29.2	17.5	18.3	44.7	60.0	20.0	10.0	9.3	12.1	21.0	13.2	13.3	17.2	13.8	10.8	16.0	16.8	15.0	13.8	27.7	25.4	75.0	9.3	22.2
28	73.0	28.2	42.3	61.8	25.2	39.7	63.7	63.4	51.7	55.1	22.7	10.3	13.8	15.1	16.0	18.2	18.3	66.5	14.3	17.5	15.2	7.8	8.2	48.0	73.0	7.8	33.2
29	20.4	10.9	9.6	8.7	7.9	49.1	45.6	12.1	60.9	31.3	14.3	15.3	24.9	14.2	13.5	13.9	15.9	10.8	12.7	8.8	7.4	8.9	13.3	9.1	60.9	7.4	18.3
30	8.6	24.5	17.0	13.1	16.7	11.1	62.5	53.9	34.7	69.3	93.0	65.6	79.1	70.2	79.7	64.7	82.6	31.9	39.5	48.6	11.2	28.3	15.0	17.5	93.0	8.6	43.3
Max.	**81.0**	**97.8**	**88.5**	**100.1**	**78.9**	**88.0**	**93.6**	**85.2**	**62.3**	**75.7**	**93.0**	**91.5**	**79.1**	**76.7**	**94.9**	**73.8**	**82.6**	**66.5**	**39.5**	**48.6**	**91.1**	**39.3**	**77.0**	**84.6**	**100.1**		
Min.	**5.0**	**5.9**	**5.2**	**7.1**	**5.5**	**5.9**	**6.4**	**6.2**	**7.2**	**7.2**	**7.6**	**7.8**	**7.3**	**7.6**	**7.5**	**7.5**	**7.3**	**7.4**	**7.5**	**7.6**	**7.4**	**7.5**	**7.4**	**6.8**		**5.0**	
Avg.	**32.2**	**31.3**	**29.8**	**26.4**	**20.9**	**33.2**	**32.0**	**29.5**	**23.7**	**28.8**	**27.5**	**26.6**	**29.1**	**29.2**	**25.1**	**27.3**	**24.5**	**20.9**	**16.8**	**16.2**	**16.4**	**14.9**	**25.0**	**31.1**			**25.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	15.2	7.6	17.9	20.4	28.6	37.8	14.9	14.6	56.0	41.8	19.0	25.4	10.4	15.0	12.3	11.8	10.1	10.2	11.0	8.9	9.1	7.5	6.4	6.0	56.0	6.0	17.4
2	7.8	8.4	12.5	7.9	9.6	9.2	7.5	6.4	7.4	11.5	8.6	10.0	9.6	9.4	11.4	11.0	9.2	7.5	7.9	9.3	10.7	8.1	18.3	17.8	18.3	6.4	9.9
3	10.0	10.8	12.8	11.5	8.9	10.0	12.9	7.6	7.7	14.5	17.6	19.2	9.1	8.5	13.6	8.2	12.5	19.1	11.7	43.0	29.5	16.9	18.8	25.4	43.0	7.6	15.0
4	14.4	25.4	49.7	56.2	43.8	18.8	16.5	22.1	85.3	84.6	50.2	48.7	57.0	23.5	22.2	12.4	22.5	15.1	17.1	73.6	84.9	73.8	58.9	29.5	85.3	12.4	41.9
5	34.0	14.9	13.1	53.0	15.1	17.2	14.7	14.2	81.0	67.9	52.1	56.0	81.8	67.7	30.5	9.3	54.5	43.0	13.4	27.6	18.8	44.4	30.9	52.2	81.8	9.3	37.8
6	45.1	35.8	92.8	22.1	21.7	13.8	12.6	21.1	25.2	81.7	24.0	23.5	14.3	11.9	12.7	20.5	16.6	13.2	9.4	7.6	9.0	12.4	13.4	14.7	92.8	7.6	24.0
7	18.8	18.1	12.3	19.5	19.2	18.5	17.8	22.0	9.8	9.6	8.3	8.4	7.3	8.6	7.2	7.7	8.1	10.0	9.8	10.6	8.6	11.0	21.4	53.0	53.0	7.2	14.4
8	52.8	81.0	59.1	19.4	40.1	30.2	49.9	13.3	9.8	18.5	27.6	14.9	59.8	12.9	11.1	13.4	13.4	53.7	17.8	15.8	8.0	6.6	8.3	6.9	81.0	6.6	26.9
9	22.8	26.9	9.5	11.3	6.6	10.4	30.5	41.1	22.2	12.5	8.5	11.6	11.6	12.9	15.0	11.9	13.9	10.1	9.7	11.4	10.1	14.4	14.4	7.9	41.1	6.6	14.9
10	8.6	11.9	6.9	10.4	11.2	11.7	10.0	10.3	8.9	9.6	8.9	10.8	11.5	13.1	15.2	17.3	13.3	12.9	10.4	9.0	8.4	10.6	8.1	13.7	17.3	6.9	10.9
11	10.5	21.4	25.5	20.2	15.4	13.3	15.8	15.2	19.1	25.2	12.7	12.8	19.6	24.1	19.9	20.1	15.4	15.7	13.0	11.9	12.8	8.0	7.6	8.3	25.5	7.6	16.0
12	21.9	33.1	44.2	28.4	13.5	48.1	34.3	15.8	8.0	9.2	10.0	8.7	8.6	9.1	8.4	8.0	8.0	10.1	8.5	7.7	7.9	7.2	7.0	5.8	48.1	5.8	15.5
13	5.7	6.3	7.7	7.3	6.7	6.6	7.9	9.1	11.3	7.2	7.1	7.2	6.6	9.6	11.4	13.7	11.7	16.2	14.0	11.7	10.4	22.4	38.4	20.7	38.4	5.7	11.5
14	21.4	34.6	63.3	17.2	24.4	26.2	83.1	85.8	90.8	10.6	15.1	16.4	16.1	22.4	20.4	17.9	12.9	16.3	14.8	10.9	12.4	12.1	7.7	8.3	90.8	7.7	27.5
15	9.0	6.4	6.9	18.2	22.2	24.5	24.8	73.7	27.4	19.5	9.3	7.7	9.1	11.0	11.1	10.4	8.7	9.6	7.2	8.7	7.4	9.2	8.5	9.1	73.7	6.4	15.0
16	8.7	7.1	7.1	8.1	7.5	7.2	7.0	7.3	7.2	7.7	6.9	7.1	8.0	8.2	8.1	8.9	7.8	8.3	7.1	7.9	8.1	8.3	7.7	9.4	9.4	6.9	7.8
17	10.2	12.1	42.0	12.7	34.0	15.3	23.5	20.2	19.2	28.2	11.4	11.8	13.0	11.8	13.9	12.0	12.3	11.5	11.6	10.7	10.1	11.5	12.4	14.1	42.0	10.1	16.1
18	17.3	14.4	13.8	10.6	11.7	9.6	13.9	18.3	45.3	55.8	36.6	28.5	13.1	30.7	57.9	13.7	23.1	42.8	44.0	15.1	14.5	11.2	13.7	18.6	57.9	9.6	23.9
19	23.8	16.1	8.5	6.7	7.0	25.5	6.7	9.1	10.9	7.6	9.0	12.3	11.8	13.8	12.1	13.8	14.1	14.6	11.7	8.8	11.4	14.9	9.5	20.1	25.5	6.7	12.5
20	11.1	11.8	14.8	25.2	13.2	19.5	6.4	29.7	24.1	27.3	45.3	56.2	36.4	25.2	9.7	14.7	13.2	13.6	29.5	93.6	63.2	90.0	50.7	17.7	93.6	6.4	30.9
21	13.8	13.6	14.6	15.7	13.7	9.5	9.8	24.3	13.9	16.6	11.7	13.2	19.3	58.7	97.5	46.7	63.6	43.2	50.7	21.5	21.4	56.0	8.5	9.0	97.5	8.5	27.8
22	12.4	35.4	21.9	30.0	64.9	13.9	26.8	42.0	12.4	13.1	15.6	26.6	9.0	13.3	35.2	66.7	14.5	12.7	11.5	16.7	31.9	10.1	19.2	28.3	66.7	9.0	24.3
23	14.3	10.2	12.4	19.9	48.7	27.2	30.6	58.2	39.3	43.5	9.6	11.4	12.2	12.9	15.3	19.9	22.3	15.5	10.7	26.3	17.1	10.1	22.6	21.1	58.2	9.6	22.1
24	9.7	11.4	11.7	7.3	11.2	9.8	16.9	14.3	15.2	9.6	8.2	12.4	9.8	11.5	10.5	10.8	17.8	19.2	25.0	14.7	24.7	10.5	13.1	4.2	25.0	4.2	12.9
25	5.9	8.7	14.8	34.1	36.7	8.1	57.8	17.6	37.6	9.4	10.3	11.4	11.7	15.7	15.0	16.7	16.0	15.1	11.8	12.3	20.2	30.4	17.8	18.5	57.8	5.9	18.9
26	18.4	9.8	10.4	11.9	10.7	9.7	31.8	19.2	8.2	35.6	43.5	53.4	10.0	32.1	59.7	28.0	38.8	16.9	15.7	14.6	10.3	55.2	60.9	8.1	60.9	8.1	25.5
27	19.8	40.5	35.0	17.2	9.0	8.8	9.5	23.6	9.5	10.7	10.3	15.7	21.2	18.3	20.3	24.3	15.2	11.6	9.6	10.0	9.7	85.6	98.7	12.9	98.7	8.8	22.8
28	9.4	11.5	12.3	7.4	7.5	19.3	12.1	20.0	9.7	9.4	11.9	15.6	14.5	11.4	11.7	10.7	13.6	11.1	11.6	8.8	7.9	9.1	4.5	12.9	20.0	4.5	11.4
29	13.4	13.1	12.0	14.3	23.3	8.9	14.4	28.9	24.6	25.3	12.9	11.3	12.8	13.8	16.2	12.3	12.0	11.7	10.2	9.0	10.5	12.3	10.9	9.0	28.9	8.9	14.3
30	11.2	21.1	22.0	13.0	12.9	12.9	10.0	12.4	10.3	9.5	11.2	11.5	12.8	14.3	15.0	14.2	14.5	15.3	12.6	10.1	16.3	18.6	24.3	32.7	32.7	9.5	14.9
31	13.0	12.7	8.2	12.0	9.7	11.8	10.0	11.7	12.0	9.9	11.7	13.5	15.9	16.3	15.5	15.1	15.1	13.3	11.2	9.7	10.8	17.4	23.3	27.5	27.5	8.2	13.6
Max.	**52.8**	**81.0**	**92.8**	**56.2**	**64.9**	**48.1**	**83.1**	**85.8**	**90.8**	**84.6**	**52.1**	**56.2**	**81.8**	**67.7**	**97.5**	**66.7**	**63.6**	**53.7**	**50.7**	**93.6**	**84.9**	**90.0**	**98.7**	**53.0**	**98.7**		
Min.	**5.7**	**6.3**	**6.9**	**6.7**	**6.6**	**6.6**	**6.4**	**6.4**	**7.2**	**7.2**	**6.9**	**7.1**	**6.6**	**8.2**	**7.2**	**7.7**	**7.8**	**7.5**	**7.1**	**7.6**	**7.4**	**6.6**	**4.5**	**4.2**		**4.2**	
Avg.	**16.5**	**19.1**	**22.4**	**18.4**	**19.6**	**16.6**	**20.7**	**23.5**	**24.8**	**24.0**	**17.6**	**19.1**	**18.2**	**18.3**	**20.5**	**16.8**	**17.6**	**17.4**	**14.8**	**18.0**	**17.3**	**23.1**	**21.5**	**17.5**			**19.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	11.9	15.7	4.6	5.8	11.2	64.4	23.0	65.7	74.6	25.4	20.5	24.0	30.5	26.8	20.0	18.9	12.4	16.5	9.3	9.0	17.5	68.1	82.8	70.9	82.8	4.6	30.4
2	67.4	62.3	31.0	24.0	25.3	21.5	26.1	34.4	35.5	10.2	19.4	10.4	10.5	10.8	13.0	12.1	9.4	10.5	8.6	63.2	81.7	51.5	36.1	22.5	81.7	8.6	29.1
3	18.8	16.6	11.7	18.8	13.4	13.2	16.0	18.9	12.3	9.4	28.8	53.9	10.7	11.2	11.6	15.6	15.6	13.1	12.5	13.7	8.0	8.5	10.8	23.1	53.9	8.0	16.1
4	25.2	12.4	15.6	47.3	68.8	32.2	61.7	57.7	15.9	8.6	16.7	15.5	12.9	14.3	13.1	14.7	10.4	14.4	13.5	10.3	9.4	24.8	29.7	35.9	68.8	8.6	24.2
5	75.2	33.9	18.9	13.0	16.3	16.3	80.3	52.0	47.0	16.8	14.8	28.2	18.6	14.1	14.8	16.7	21.4	15.0	13.7	11.6	8.0	6.6	7.0	8.4	80.3	6.6	23.7
6	9.7	22.6	30.9	39.3	14.6	27.0	20.2	13.1	14.5	8.9	11.5	13.3	14.1	15.6	13.0	12.3	11.9	14.5	9.0	7.7	11.6	10.9	13.2	8.1	39.3	7.7	15.3
7	7.9	15.8	21.6	12.8	20.0	33.8	15.0	15.7	15.4	11.1	11.5	12.6	12.5	12.4	14.0	19.2	13.1	13.7	10.5	9.2	9.3	13.6	10.2	13.7	33.8	7.9	14.4
8	6.4	10.0	10.9	11.5	16.1	16.0	10.8	7.9	10.3	9.8	10.3	14.3	13.4	15.3	16.9	22.2	25.9	25.7	22.1	16.6	8.5	7.3	30.2	11.3	30.2	6.4	14.6
9	13.2	7.4	7.6	16.3	11.9	9.9	9.3	12.3	10.4	14.4	11.5	12.2	11.7	14.7	17.8	18.9	15.5	13.6	13.2	10.9	14.1	14.1	14.3	5.3	18.9	5.3	12.5
10	12.1	15.8	10.2	17.8	89.4	8.8	11.9	14.8	25.4	60.2	27.4	21.3	27.5	33.5	18.0	92.9	41.2	33.7	18.5	12.6	11.6	30.3	51.3	64.5	92.9	8.8	31.3
11	46.1	9.2	40.1	25.3	20.4	66.8	65.7	26.1	11.3	18.7	15.6	11.5	18.1	20.9	11.0	11.9	12.2	11.7	12.4	10.7	8.3	52.3	14.8	11.4	66.8	8.3	23.0
12	10.6	14.8	29.6	26.3	18.7	14.7	19.7	18.8	25.9	17.8	11.5	16.2	27.9	87.0	36.3	21.2	17.9	21.5	12.1	70.2	18.4	74.5	58.4	10.1	87.0	10.1	28.3
13	9.9	19.6	20.1	29.8	19.8	60.2	72.0	97.7	52.4	21.1	12.5	13.7	9.9	48.6	40.3	59.4	21.0	12.2	11.9	12.6	13.6	46.0	45.6	7.6	97.7	7.6	31.6
14	14.7	14.0	19.3	20.7	18.8	9.4	9.9	31.8	91.5	28.6	16.1	7.3	10.6	9.5	10.9	13.2	12.4	9.3	10.0	9.9	13.9	25.6	11.6	51.1	91.5	7.3	19.6
15	40.1	27.1	62.1	10.0	14.2	12.8	8.5	14.9	6.5	8.4	13.9	31.2	29.8	16.0	17.7	12.7	12.5	12.7	9.8	9.2	9.8	10.4	8.8	8.6	62.1	6.5	17.0
16	27.0	18.6	21.3	27.2	18.9	15.0	18.4	16.5	12.8	9.3	9.1	17.3	14.8	13.3	14.4	15.7	16.1	13.7	11.2	10.4	8.4	31.2	16.9	83.8	83.8	8.4	19.2
17	68.0	25.0	23.7	39.5	13.9	16.3	20.3	17.8	58.1	52.1	16.3	13.3	11.6	12.5	12.1	11.6	14.8	9.1	8.4	8.2	9.2	18.6	8.9	15.9	68.0	8.2	21.1
18	12.1	23.5	48.6	79.6	15.4	12.7	16.2	12.1	15.3	48.2	90.7	42.3	30.0	15.4	21.5	21.6	22.6	46.3	48.1	12.9	38.7	28.5	11.2	6.3	90.7	6.3	30.0
19	5.6	61.5	62.2	28.0	57.5	62.3	16.6	12.4	62.1	98.0	11.5	13.8	11.9	16.6	17.6	13.2	11.5	11.8	9.7	11.6	14.6	58.6	24.2	10.2	98.0	5.6	29.3
20	8.7	12.6	8.4	10.8	5.8	4.2	7.3	6.3	4.8	9.0	32.1	18.5	22.3	13.9	21.6	13.7	16.4	11.4	12.2	10.8	39.9	57.9	15.0	7.6	57.9	4.2	15.5
21	6.1	3.4	6.6	5.7	5.0	29.6	42.4	36.1	16.5	52.2	28.3	55.8	12.9	15.3	16.6	12.2	11.6	40.6	47.4	35.4	36.6	47.6	85.4	29.9	85.4	3.4	28.3
22	28.8	13.8	22.2	19.5	17.2	9.5	10.6	7.4	13.1	15.8	16.8	38.2	64.6	66.1	68.6	26.8	31.1	52.6	29.3	11.3	9.4	11.2	6.9	6.4	68.6	6.4	24.9
23	6.2	7.0	5.5	5.4	9.2	9.8	15.7	11.1	10.6	11.5	18.4	29.3	20.8	52.8	74.8	33.7	41.5	13.5	10.3	11.3	8.9	12.7	9.3	45.6	74.8	5.4	19.8
24	83.1	65.4	71.2	14.5	95.0	94.0	23.6	33.8	15.7	10.4	11.2	16.8	12.2	13.3	18.3	22.8	27.3	74.7	81.3	18.5	42.9	87.6	17.4	19.8	95.0	10.4	40.4
25	6.0	5.5	5.7	53.3	20.9	45.0	37.4	55.1	65.1	64.5	63.3	18.4	58.3	22.8	23.5	37.3	38.7	10.8	9.9	12.0	11.0	28.5	22.1	31.0	65.1	5.5	31.1
26	16.2	21.0	43.9	54.4	65.4	74.9	59.4	19.6	14.2	20.3	7.2	9.3	9.6	11.6	9.4	9.9	10.5	10.6	9.5	7.0	10.1	8.6	21.3	11.8	74.9	7.0	22.3
27	30.1	18.8	36.1	44.0	86.9	20.5	14.7	38.0	7.4	9.9	9.4	10.3	14.4	17.2	33.9	34.6	23.1	19.8	13.1	70.7	45.7	40.6	62.9	78.4	86.9	7.4	32.5
28	9.0	6.6	27.6	17.4	8.6	5.2	8.3	10.6	7.3	11.4	12.1	32.1	9.0	14.7	12.1	15.7	14.2	26.2	25.1	14.3	18.9	24.3	14.5	14.7	32.1	5.2	15.0
29	25.7	25.5	21.7	19.4	6.0	5.1	4.7	6.9	13.4	10.9	16.9	26.8	31.1	58.1	26.0	19.0	16.7	15.0	8.9	9.6	8.4	11.0	36.7	16.0	58.1	4.7	18.3
30	11.1	7.9	12.0	12.2	12.4	29.0	14.4	16.0	10.6	40.9	47.5	55.3	33.5	21.8	35.3	23.5	13.0	12.0	10.2	9.9	20.1	11.8	10.1	8.0	55.3	7.9	19.9
31	8.8	7.3	7.8	6.9	7.3	8.0	7.6	9.4	8.1	8.7	10.4	9.1	8.6	13.6	9.7	11.1	10.8	10.2	9.1	8.0	8.3	8.0	8.6	8.7	13.6	6.9	8.9
Max.	**83.1**	**65.4**	**71.2**	**79.6**	**95.0**	**94.0**	**80.3**	**97.7**	**91.5**	**98.0**	**90.7**	**55.8**	**64.6**	**87.0**	**74.8**	**92.9**	**41.5**	**74.7**	**81.3**	**70.7**	**81.7**	**87.6**	**85.4**	**83.8**	**98.0**		
Min.	**5.6**	**3.4**	**4.6**	**5.4**	**5.0**	**4.2**	**4.7**	**6.3**	**4.8**	**8.4**	**7.2**	**7.3**	**8.6**	**9.5**	**9.4**	**9.9**	**9.4**	**9.1**	**8.4**	**7.0**	**8.0**	**6.6**	**6.9**	**5.3**		**3.4**	
Avg.	**23.3**	**20.0**	**24.5**	**24.4**	**26.6**	**27.4**	**24.8**	**25.5**	**25.3**	**23.9**	**20.8**	**22.3**	**20.1**	**23.5**	**22.1**	**22.1**	**18.5**	**19.9**	**17.1**	**17.4**	**18.5**	**30.0**	**25.7**	**24.1**			**22.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.1	7.9	8.1	7.3	7.9	17.2	8.1	8.0	9.0	11.8	12.9	10.3	17.1	13.5	17.9	9.9	10.2	20.8	13.9	25.8	25.4	8.2	15.9	18.2	25.8	7.3	13.1
2	7.7	8.5	7.3	6.9	6.1	8.0	7.8	7.9	7.9	7.1	6.9	7.3	7.3	8.3	9.2	11.4	13.8	31.9	9.5	13.3	12.8	13.5	12.3	12.1	31.9	6.1	10.2
3	11.5	9.8	10.0	8.5	9.9	12.8	46.5	40.8	27.6	19.1	63.4	13.0	13.3	7.5	20.7	12.6	12.4	12.9	14.2	8.1	12.1	14.2	26.0	44.2	63.4	7.5	19.6
4	14.1	38.1	34.2	66.6	50.7	38.3	57.8	24.3	62.5	69.9	51.9	20.6	22.7	17.0	16.8	21.2	17.5	17.0	10.0	17.5	50.0	19.7	10.6	12.7	69.9	10.0	31.7
5	10.7	10.0	11.2	17.6	7.6	8.1	6.7	11.3	15.5	92.0	32.3	26.0	50.5	34.3	35.4	70.1	43.0	51.3	79.6	83.0	56.3	19.6	10.2	11.8	92.0	6.7	33.1
6	22.8	11.3	43.6	69.5	9.7	64.8	67.8	12.5	9.8	8.5	15.1	7.5	5.8	8.5	9.7	7.1	9.2	6.3	17.0	8.7	12.2	16.9	9.4	10.3	69.5	5.8	19.3
7	11.4	13.2	15.0	8.4	23.5	17.6	27.6	34.8	14.3	16.9	13.6	9.9	14.8	15.2	24.7	12.6	9.3	9.6	11.4	8.4	10.7	10.2	6.7	13.5	34.8	6.7	14.7
8	6.8	21.2	32.9	18.3	13.3	10.5	15.4	24.7	42.0	10.1	11.7	17.2	11.2	8.0	7.8	8.6	8.6	7.2	9.7	8.0	17.3	9.1	8.3	17.7	42.0	6.8	14.4
9	17.2	13.6	12.7	15.6	20.6	18.5	15.6	42.3	51.4	68.5	7.9	8.5	6.7	13.5	7.6	6.6	7.0	8.6	11.4	7.9	12.0	17.2	12.1	13.1	68.5	6.6	17.3
10	31.0	22.6	4.8	88.0	71.6	21.7	18.9	57.1	80.7	18.5	82.2	60.3	62.2	24.9	11.4	12.0	11.4	9.9	9.6	10.3	10.7	55.2	31.8	35.6	88.0	4.8	35.1
11	18.1	7.6	11.5	27.0	19.9	58.6	30.0	18.1	21.1	10.1	29.5	19.1	14.5	12.1	14.8	16.3	18.9	13.5	10.2	7.2	10.4	16.1	8.2	8.4	58.6	7.2	17.5
12	7.3	7.2	7.1	6.5	6.3	7.0	6.6	6.7	7.1	8.0	7.5	8.3	8.0	9.1	9.1	10.8	7.5	7.8	8.9	9.2	7.5	7.4	8.1	7.8	10.8	6.3	7.8
13	8.6	7.0	8.1	7.1	7.3	7.5	6.9	7.4	7.0	7.2	7.1	6.9	6.7	7.1	6.7	6.9	8.2	7.2	7.3	7.5	6.6	6.0	12.4	9.8	12.4	6.0	7.5
14	11.1	35.7	20.8	91.7	71.1	82.7	20.8	64.6	22.5	11.8	14.0	7.2	16.0	9.4	11.7	10.3	7.7	9.2	14.9	7.4	8.0	10.7	6.9	55.0	91.7	6.9	25.9
15	41.4	17.2	21.9	18.8	18.5	29.4	28.1	51.2	23.6	18.6	7.3	8.9	7.6	8.4	8.8	7.5	8.1	7.3	6.9	6.8	6.4	11.1	10.5	26.5	51.2	6.4	16.7
16	34.6	46.8	7.6	22.0	10.7	10.4	17.0	18.0	24.3	12.8	13.3	7.9	14.6	13.5	10.7	11.4	14.4	11.3	9.0	8.3	16.2	14.3	36.9	30.9	46.8	7.6	17.4
17	16.1	23.8	27.8	76.5	54.1	30.0	11.6	18.4	26.1	33.3	97.5	22.4	14.6	18.2	10.3	8.9	9.0	10.0	8.9	8.6	34.5	68.1	24.5	92.6	97.5	8.6	31.1
18	19.8	9.8	9.7	10.1	9.9	10.2	10.0	10.2	14.7	15.8	16.3	11.0	14.2	23.1	14.0	11.7	10.1	11.6	23.5	60.9	38.8	82.6	41.9	91.4	91.4	9.7	23.8
19	60.5	18.4	26.9	39.3	77.1	20.8	7.0	8.9	7.5	13.3	10.1	9.8	10.3	11.4	13.6	32.3	10.4	9.0	8.5	7.8	6.9	7.5	6.5	8.7	77.1	6.5	18.0
20	6.9	11.8	13.0	13.8	10.6	11.4	8.0	12.4	27.9	11.6	11.7	16.9	11.6	12.5	19.1	15.8	17.9	12.6	9.2	18.3	33.6	11.5	10.2	19.3	33.6	6.9	14.5
21	8.4	9.6	3.2	5.5	4.3	9.0	11.6	10.6	12.8	16.5	19.2	12.8	12.5	15.9	15.4	14.6	14.7	9.8	8.4	9.5	12.7	10.3	9.6	11.5	19.2	3.2	11.2
22	11.9	12.1	7.4	4.3	3.4	3.8	4.6	4.7	12.6	15.9	6.2	34.1	75.7	38.0	27.6	31.1	17.4	17.4	8.8	13.8	14.4	6.3	7.2	6.3	75.7	3.4	16.0
23	7.2	6.6	8.8	7.1	36.1	11.0	10.2	11.0	10.8	14.8	13.2	56.7	0.2		87.1	11.1	14.2	19.3	12.0	15.7	11.0	11.5	28.6	51.6	87.1	0.2	19.8
24	19.6	17.0	15.4	9.7	19.4	18.1	10.3	25.4	47.3	26.9	11.3	22.2	15.8	13.8	9.7	14.0	9.5	9.9	14.7	5.6	9.1	14.7	77.5	44.5	77.5	5.6	20.1
25	51.9	80.7	64.6	25.8	11.4	51.1	75.7	48.4	16.0	84.9	16.8	18.8	38.0	9.4	11.5	24.8	13.8	13.4	13.6	19.0	14.9	31.1	64.6	13.2	84.9	9.4	33.9
26	19.2	5.6	8.8	18.5	18.3	11.2	11.8	14.5	12.9	15.1	78.0	53.4	18.8	49.3	70.2	18.7	68.3	49.2	53.6	20.9	18.2	11.0	15.3	21.4	78.0	5.6	28.4
27	20.7	16.9	13.6	32.3	28.1	15.7	27.4	13.3	10.3	17.4	10.7	11.8	21.4	19.6	32.1	30.2	14.0	11.1	11.9	24.8	21.0	28.7	8.8	8.3	32.3	8.3	18.8
28	10.4	13.7	10.3	19.3	9.7	9.3	9.8	7.0	9.0	6.9	8.0	13.4	33.7	32.0	65.3	66.5	10.2	11.3	13.6	19.4	73.5	91.6	64.5	13.3	91.6	6.9	25.9
29	16.6	16.4	39.5	34.2	42.4	30.3	96.5	42.0	36.1	10.0	14.9	14.2	16.0	8.3	15.5	12.9	21.9	12.0	11.5	26.3	21.3	37.7	40.5	44.3	96.5	8.3	27.6
30	7.0	9.2	11.4	12.5	18.5	5.4	7.8	13.4	10.3	8.0	14.4	14.2	11.8	13.2	17.3	13.3	12.6	19.1	20.2	15.4	28.6	19.4	11.3	19.3	28.6	5.4	13.9
Max.	**60.5**	**80.7**	**64.6**	**91.7**	**77.1**	**82.7**	**96.5**	**64.6**	**80.7**	**92.0**	**97.5**	**60.3**	**75.7**	**49.3**	**87.1**	**70.1**	**68.3**	**51.3**	**79.6**	**83.0**	**73.5**	**91.6**	**77.5**	**92.6**	**97.5**		
Min.	**6.8**	**5.6**	**3.2**	**4.3**	**3.4**	**3.8**	**4.6**	**4.7**	**7.0**	**6.9**	**6.2**	**6.9**	**0.2**	**7.1**	**6.7**	**6.6**	**7.0**	**6.3**	**6.9**	**5.6**	**6.4**	**6.0**	**6.5**	**6.3**		**0.2**	
Avg.	**18.0**	**17.6**	**17.2**	**26.3**	**23.3**	**21.7**	**22.8**	**22.3**	**22.7**	**22.7**	**23.5**	**18.3**	**19.1**	**16.4**	**21.1**	**18.0**	**15.0**	**14.9**	**15.4**	**16.8**	**20.4**	**22.7**	**21.2**	**25.8**			**20.1**

Total Hours in Month 720 **Hours Data Available** 719 **Data Recovery** 99.9%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.0	11.1	42.1	25.4	17.9	83.8	19.6	67.0	15.8	23.7	11.1	26.5	13.2	16.0	9.2	8.7	14.0	11.9	27.9	11.1	9.3	10.2	43.3	14.7	83.8	8.7	22.6
2	12.9	85.3	25.0	8.9	23.1	25.9	41.6	90.4	78.5	14.4	11.1	31.3	68.0	46.6	19.4	36.8	26.1	83.2	82.1	32.6	18.4	11.8	13.4	18.0	90.4	8.9	37.7
3	19.3	26.9	34.0	28.0	14.2	19.2	9.0	7.8	19.2	12.4	15.6	11.5	10.5	11.8	10.2	10.9	10.5	9.2	10.6	29.7	12.9	33.6	21.0	16.5	34.0	7.8	16.9
4	42.1	14.6	19.7	6.4	19.1	25.9	25.5	10.2	14.3	20.3	9.9	11.8	37.5	36.3	56.7	14.5	43.2	62.3	65.5	14.6	35.2	30.8	12.6	17.1	65.5	6.4	26.9
5	59.7	21.9	88.0	86.6	67.9	16.0	42.0	48.1	56.9	16.4	14.0	12.9	15.0	15.7	11.0	9.0	10.3	11.7	15.3	71.7	17.7	16.1	12.2	22.6	88.0	9.0	31.6
6	13.1	12.6	18.8	17.1	8.8	8.3	14.0	13.0	11.5	16.3	11.4	11.4	15.0	17.9	9.4	12.3	11.6	11.9	11.5	7.2	6.9	5.5	6.7	7.2	18.8	5.5	11.6
7	6.4	8.5	10.2	10.7	10.0	13.2	13.4	10.9	10.8	9.9	10.2	9.4	9.2	9.3	9.5	8.4	9.2	9.5	9.5	11.7	9.2	9.5	8.8	8.1	13.4	6.4	9.8
8	7.3	8.7	10.3	7.8	11.3	15.3	20.8	10.4	11.1	6.8	13.3	10.0	17.5	15.6	16.3	18.1	12.0	14.1	30.2	82.3	80.4	63.2	71.9	6.1	82.3	6.1	23.4
9	6.5	4.1	8.3	13.5	8.5	7.0	6.7	6.4	7.4	7.5	6.4	7.2	7.9	8.3	7.4	7.5	7.2	7.0	7.7	8.2	9.3	9.1	7.6	8.2	13.5	4.1	7.7
10	13.6	13.6	8.5	23.4	45.8	14.5	14.4	53.9	49.4	24.6	32.0	36.0	12.8	24.8	25.6	24.4	9.7	10.1	16.8	40.7	62.5	22.6	15.3	17.6	62.5	8.5	25.5
11	19.5	10.7	11.6	8.9	6.9	11.6	7.3	7.4	10.1	70.4	8.1	8.1	7.8	8.3	9.1	9.2	7.8	8.3	10.0	8.7	8.5	8.6	8.9	8.8	70.4	6.9	11.9
12	10.3	9.7	9.0	8.6	8.5	9.4	9.1	9.7	10.3	9.5	10.0	9.0	8.2	7.7	8.7	7.5	8.0	7.4	9.9	9.8	10.9	38.8	28.0	13.8	38.8	7.4	11.3
13	8.4	13.9	7.9	13.2	15.4	44.5	14.4	18.7	13.7	18.6	97.1	33.0	6.0	6.4	7.6	13.9	7.4	9.1	5.9	9.4	9.3	6.8	8.9	9.1	97.1	5.9	16.6
14	8.5	8.0	7.6	5.7	9.4	8.4	6.5	14.9	20.1	12.4	11.1	9.8	10.6	7.3	8.7	6.9	8.5	27.1	17.8	10.4	17.0	63.3	22.4	25.4	63.3	5.7	14.5
15	70.0	28.6	17.4	12.8	14.1	17.9	30.3	13.0	13.9	17.7	14.4	17.4	15.1	6.9	7.5	9.4	11.1	11.2	12.0	12.8	10.0	14.7	12.1	10.6	70.0	6.9	16.7
16	9.0	8.1	12.0	12.6	11.1	8.4	9.5	9.0	9.7	14.7	15.2	10.8	6.7	7.4	7.3	7.2	10.2	7.0	10.9	5.1	6.0	8.2	17.0	6.9	17.0	5.1	9.6
17	6.2	5.0	8.3	7.7	8.9	12.4	10.4	13.0	14.4	11.4	20.7	44.1	70.9	84.0	33.1	84.6	40.2	19.1	15.7	10.9	21.8	79.7	32.3	6.1	84.6	5.0	27.5
18	12.1	6.8	14.7	17.4	12.2	11.2	9.5	6.4	6.0	6.3	19.6	14.5	17.1	7.5	13.2	8.4	8.1	7.3	8.0	10.3	8.4	77.5	43.4	17.2	77.5	6.0	15.1
19	17.5	30.3	18.7	10.3	33.3	19.2	18.9	17.1	20.1	11.5	11.4	9.0	8.0	13.0	8.4	12.1	5.4	10.2	11.1	11.4	7.3	5.9	9.3	7.7	33.3	5.4	13.6
20	7.5	5.6	6.2	8.4	20.7	35.6	39.3	25.7	13.6	8.3	11.2	7.4	21.9	11.0	7.4	10.4	9.2	16.1	12.1	11.6	9.5	12.9	8.5	6.7	39.3	5.6	13.6
21	4.7	4.6	19.4	30.7	44.9	83.3	17.4	17.9	69.6	23.0	65.9	33.0	21.3	17.6	8.5	10.0	8.3	10.0	12.3	14.5	13.5	22.8	19.2	32.2	83.3	4.6	25.2
22	33.3	16.6	9.5	7.6	9.5	18.1	8.8	8.5	6.6	7.1	11.3	9.6	10.7	14.8	10.4	12.7	19.0	32.0	14.5	21.2	42.4	61.4	15.2	25.5	61.4	6.6	17.8
23	11.2	15.6	17.7	15.1	7.8	15.8	12.2	23.6	20.5	11.2	8.0	14.8	17.1	13.9	12.8	13.0	6.0	10.4	7.1	11.6	10.3	6.4	16.3	10.4	23.6	6.0	12.9
24	8.5	7.8	8.6	7.1	6.5	7.0	6.2	6.1	6.2	9.6	9.4	9.6	9.7	7.6	13.3	24.5	23.6	14.9	74.6	44.6	64.3	61.4	52.5	9.7	74.6	6.1	20.5
25	93.3	34.6	8.0	12.3	7.8	8.7	6.0	8.4	4.7	5.4	12.0	8.1	9.3	4.7	9.9	14.5	9.9	14.7	70.7	37.5	9.7	18.3	23.3	9.8	93.3	4.7	18.4
26	10.0	18.5	15.6	14.4	11.1	12.2	10.5	18.0	14.3	18.7	7.2	10.4	10.9	11.4	7.2	7.4	13.1	9.0	33.6	23.6	46.8	39.8	27.0	34.1	46.8	7.2	17.7
27	58.4	29.5	26.5	17.2	24.7	16.0	14.4	16.2	17.4	12.9	27.6	15.1	14.2	13.1	9.0	11.9	15.5	16.8	15.2	10.7	6.2	16.4	13.5	22.6	58.4	6.2	18.4
28	22.8	12.7	49.8	11.5	11.4	10.1	7.6	8.2	19.2	70.1	66.9	19.0	69.8	90.5	20.5	83.1	33.8	27.4	17.5	7.1	12.5	22.5	6.9	10.4	90.5	6.9	29.6
29	8.0	6.5	7.7	8.4	13.7	4.0	7.5	14.6	27.1	15.2	12.3	17.9	36.2	13.6	27.1	27.0	17.6	16.7	8.1	8.5	15.9	22.7	22.5	14.3	36.2	4.0	15.6
30	19.0	10.1	8.5	57.5	51.3	40.1	38.8	51.9	42.2	34.6	41.8	43.0	21.3	7.9	15.0	37.8	13.8	16.9	15.0	11.0	7.3	10.3	12.8	11.0	57.5	7.3	25.8
31	12.0	13.7	13.0	12.8	8.1	15.6	15.7	7.3	9.6	7.4	13.9	9.3	8.8	75.2	74.8	6.9	29.1	21.6	25.5	8.8	8.5	9.6	8.2	8.1	75.2	6.9	17.6
Max.	**93.3**	**85.3**	**88.0**	**86.6**	**67.9**	**83.8**	**42.0**	**90.4**	**78.5**	**70.4**	**97.1**	**44.1**	**70.9**	**90.5**	**74.8**	**84.6**	**43.2**	**83.2**	**82.1**	**82.3**	**80.4**	**79.7**	**71.9**	**34.1**	**97.1**		
Min.	**4.7**	**4.1**	**6.2**	**5.7**	**6.5**	**4.0**	**6.0**	**6.1**	**4.7**	**5.4**	**6.4**	**7.2**	**6.0**	**4.7**	**7.2**	**6.9**	**5.4**	**7.0**	**5.9**	**5.1**	**6.0**	**5.5**	**6.7**	**6.1**		**4.0**	
Avg.	**20.6**	**16.3**	**18.2**	**17.0**	**18.2**	**20.6**	**16.4**	**20.4**	**20.8**	**17.7**	**20.3**	**16.8**	**19.6**	**20.4**	**15.9**	**18.3**	**14.8**	**17.5**	**22.1**	**19.7**	**19.6**	**26.5**	**20.0**	**14.1**			**18.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	17.7	18.0	40.4	16.2	15.8	15.7	21.9	67.6	55.0	15.6	8.1	8.4	11.9	19.9	13.5	12.5	21.3	7.5	20.6	13.1	9.0	7.5	10.1	11.5	67.6	7.5	19.1
2	6.2	12.5	7.7	8.4	8.4	8.8	7.4	7.7	9.7	11.2	8.5	10.2	10.9	10.4	11.7	12.0	14.0	11.9	14.3	23.4	26.7	36.8	19.6	15.6	36.8	6.2	13.1
3	14.2	9.5	10.1	9.7	14.9	13.6	10.4	8.2	7.6	5.9	9.3	12.9	9.3	14.4	14.6	6.8	9.1	8.1	8.1	5.3	5.7	8.2	10.1	13.0	14.9	5.3	10.0
4	10.8	62.9	21.5	8.8	14.4	11.7	16.0	11.0	12.3	13.1	13.3	14.0	15.5	16.7	16.0	10.0	10.9	10.8	12.2	9.2	9.9	10.8	9.2	8.2	62.9	8.2	14.6
5	10.9	13.3	6.3	11.0	14.2	7.3	10.8	14.6	19.5	11.4	11.7	11.0	29.2	11.6	8.9	7.8	7.9	8.8	6.2	8.9	10.7	9.4	5.5	7.9	29.2	5.5	11.0
6	6.6	6.1	6.1	5.3	6.1	5.3	7.4	73.1	86.6	74.6	70.9	95.1	71.4	18.1	12.9	17.7	12.8	9.6	12.2	23.7	27.4	14.1	10.5	20.4	95.1	5.3	28.9
7	15.7	7.3	12.3	9.0	7.6	6.9	7.5	9.7	7.8	15.8	8.6	12.7	14.2	16.3	13.5	5.9	10.0	18.1	76.4	91.5	64.3	41.0	25.3	24.0	91.5	5.9	21.7
8	23.9	8.5	15.6	14.5	8.0	6.9	7.4	7.7	6.2	11.5	7.0	10.9	5.7	8.4	13.0	7.8	7.7	8.6	10.8	7.4	7.6	7.2	9.9	7.1	23.9	5.7	9.6
9	15.9	9.1	10.7	7.7	8.0	10.1	9.3	12.5	10.3	10.2	24.9	21.6	19.5	22.4	14.6	13.8	11.1	14.3	15.2	11.4	8.2	8.7	8.2	10.7	24.9	7.7	12.8
10	10.9	10.1	12.2	15.0	33.4	7.6	9.1	8.9	8.1	8.0	10.5	26.2	15.5	14.6	12.7	11.8	8.0	9.0	8.7	10.1	10.7	6.4	11.4	10.3	33.4	6.4	12.1
11	11.7	10.0	30.8	24.2	13.9	10.8	10.8	16.9	11.8	17.0	69.8	46.7	96.7	71.1	23.9	9.5	22.0	17.6	11.6	9.1	14.7	85.5	51.1	12.1	96.7	9.1	29.1
12	36.7	37.9	75.7	43.0	48.4	29.4	24.5	41.7	30.8	16.2	17.5	20.9	12.8	42.6	72.9	39.4	84.0	51.0	85.8	74.6	27.5	58.8	36.9	8.4	85.8	8.4	42.4
13	7.4	6.5	6.5	7.5	11.7	10.3	19.5	14.3	20.4	10.9	78.4	69.3	69.6	38.4	18.3	25.7	7.3	17.8	68.5	24.0	27.5	69.7	36.9	19.5	78.4	6.5	28.6
14	18.9	16.7	14.6	20.3	10.2	8.7	22.3	9.1	13.5	98.0	62.2	82.0	27.0	84.8	26.9	40.2	76.1	30.0	12.1	57.3	45.5	65.1	43.8	35.2	98.0	8.7	38.4
15	27.8	67.1	23.9	11.6	21.5	57.8	41.0	17.5	10.8	12.0	20.1	14.1	8.0	9.2	6.6	4.7	9.3	6.8	10.7	8.8	15.7	7.4	5.5	6.6	67.1	4.7	17.7
16	6.0	7.8	6.2	7.1	11.9	7.2	5.5	62.7	60.7	47.0	12.1	7.8	93.3	99.6	72.3	32.7	84.4	10.0	6.0	12.9	24.9	10.6	10.7	13.7	99.6	5.5	29.7
17	8.6	14.0	6.0	5.9	9.7	7.4	16.6	18.4	10.7	11.0	11.3	11.1	14.7	11.9	11.6	11.0	16.9	8.5	7.1	9.6	9.4	11.9	10.5	11.7	18.4	5.9	11.1
18	16.1	51.9	48.2	47.7	14.1	16.1	12.6	14.6	14.0	12.7	13.2	13.7	13.6	15.9	13.4	14.1	14.2	17.8	12.5	13.7	14.2	13.9	11.4	9.2	51.9	9.2	18.3
19	10.6	16.4	21.7	18.1	13.9	13.1	13.0	22.2	25.6	9.8	16.4	18.9	14.8	17.0	8.5	18.9	15.4	14.4	42.7	19.8	14.3	12.2	15.7	24.6	42.7	8.5	17.4
20	22.6	15.5	20.0	7.6	8.8	10.7	33.7	43.2	34.1	10.8	14.3	24.5	30.1	21.2	16.5	13.9	12.6	10.6	10.8	8.2	8.1	9.8	11.3	11.1	43.2	7.6	17.1
21	10.0	14.3	15.6	23.5	20.0	19.0	16.3	11.0	15.7	10.2	12.0	9.1	12.5	13.1	10.9	11.8	11.5	11.3	12.0	8.7	17.1	17.5	47.9	18.4	47.9	8.7	15.4
22	14.4	70.5	42.8	55.5	20.0	40.1	44.9	10.6	46.1	28.8	53.4	6.8	10.2	11.1	6.2	14.2	94.8	21.9	12.1	80.9	89.7	98.1	9.7	8.1	98.1	6.2	37.1
23	8.2	6.5	14.6	9.8	34.1	13.2	55.8	59.1	73.9	49.5	38.8	92.0	30.4	8.8	6.6	30.9	13.4	14.0	24.4	8.9	21.2	7.8	6.9	7.4	92.0	6.5	26.5
24	8.9	10.0	5.8	6.1	5.6	7.2	13.2	7.2	8.1	6.5	5.4	5.5	7.7	6.5	5.5	6.9	6.1	6.8	9.2	6.1	12.6	36.4	8.2	73.1	73.1	5.4	11.4
25	74.1	57.5	50.9	73.7	62.9	67.1	46.4	99.5	63.4	33.4	11.0	34.3	28.3	50.7	25.5	8.3	11.2	14.2	10.7	7.9	13.1	8.0	14.1	12.3	99.5	7.9	36.6
26	12.1	13.3	14.6	10.6	9.0	13.2	6.6	4.9	6.1	20.8	43.1	19.2	20.1	14.8	9.9	15.7	11.2	11.3	13.3	29.8	75.0	71.9	58.4	24.3	75.0	4.9	22.1
27	35.4	24.4	9.5	15.4	12.7	11.5	7.5	10.0	10.5	13.9	11.8	10.7	13.8	22.9	9.2	7.8	10.0	9.0	10.3	19.0	9.8	7.0	6.5	8.0	35.4	6.5	12.8
28	13.3	9.5	9.4	9.2	12.3	14.6	11.5	8.1	11.0	13.3	7.8	12.6	14.9	14.8	12.6	14.3	16.2	18.2	12.7	11.3	19.3	6.8	6.4	22.5	22.5	6.4	12.6
29	19.2	8.3	8.1	5.6	17.4	11.4	5.5	7.0	7.5	6.6	7.2	12.6	9.4	8.5	9.2	7.8	5.8	7.7	8.3	6.9	10.3	13.9	10.0	9.9	19.2	5.5	9.3
30	17.7	11.1	5.1	15.4	20.2	11.7	11.4	18.1	13.0	8.7	11.1	9.5	17.4	16.4	8.7	19.2	9.5	21.1	16.1	20.1	10.3	9.5	15.3	16.1	21.1	5.1	13.9
Max.	**74.1**	**70.5**	**75.7**	**73.7**	**62.9**	**67.1**	**55.8**	**99.5**	**86.6**	**98.0**	**78.4**	**95.1**	**96.7**	**99.6**	**72.9**	**40.2**	**94.8**	**51.0**	**85.8**	**91.5**	**89.7**	**98.1**	**58.4**	**73.1**	**99.6**		
Min.	**6.0**	**6.1**	**5.1**	**5.3**	**5.6**	**5.3**	**5.5**	**4.9**	**6.1**	**5.9**	**5.4**	**5.5**	**5.7**	**6.5**	**5.5**	**4.7**	**5.8**	**6.8**	**6.0**	**5.3**	**5.7**	**6.4**	**5.5**	**6.6**		**4.7**	
Avg.	**17.1**	**20.9**	**19.1**	**17.4**	**17.0**	**15.8**	**17.5**	**23.9**	**23.7**	**20.5**	**23.0**	**24.8**	**24.9**	**24.4**	**16.9**	**15.1**	**21.5**	**14.2**	**19.4**	**21.4**	**22.0**	**25.7**	**17.9**	**16.0**			**20.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (Climatronics)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.7	5.4	10.0	10.4	19.2	11.9	7.2	5.6	16.4	10.6	44.2	35.0	17.1	16.2	16.3	20.7	32.0	87.3	37.2	27.9	19.1	12.3	21.1	56.2	87.3	5.4	22.8
2	73.0	20.4	86.0	24.5	84.6	16.6	21.6	12.4	16.0	23.2	21.1	15.2	7.0	4.6	5.2	5.7	5.8	5.6	5.5	5.3	5.6	5.6	5.7	6.1	86.0	4.6	20.1
3	7.0	5.2	5.1	6.1	6.4	6.2	6.2	10.1	7.4	6.5	6.0	6.3	5.9	7.9	6.2	6.5	6.9	8.4	8.5	8.3	7.4	5.9	5.3	8.4	10.1	5.1	6.8
4	6.8	6.1	5.8	5.3	5.5	7.8	5.4	8.4	7.5	6.5	7.3	10.4	6.3	7.3	6.3	6.3	7.7	11.9	11.3	7.4	9.2	10.8	9.9	7.0	11.9	5.3	7.7
5	9.9	12.9	8.8	8.6	7.0	8.5	8.1	8.3	5.4	5.4	5.5	6.3	7.3	6.2	5.2	17.1	18.1	10.1	15.3	16.3	12.4	27.0	29.6	45.3	45.3	5.2	12.7
6	51.6	26.4	7.9	6.2	9.6	10.7	57.4	18.5	13.8	21.7	96.1	52.7	67.8	7.3	7.1	39.8	30.5	13.9	11.5	5.5	5.6	4.7	7.7	11.3	96.1	4.7	24.4
7	8.9	6.4	16.1	11.3	12.3	9.1	9.5	12.8	9.5	9.6	9.8	6.3	8.8	7.0	7.9	6.4	9.9	9.9	29.8	56.7	25.0	13.6	14.4	12.6	56.7	6.3	13.5
8	14.7	20.5	15.2	17.0	22.2	54.7	54.7	91.0	20.6	22.0	26.3	20.6	12.5	9.7	7.4	7.3	7.1	7.3	8.2	7.1	7.9	8.6	8.2	7.9	91.0	7.1	19.9
9	7.6	7.1	8.6	42.4	23.3	17.5	7.4	5.1	8.3	12.0	15.8	6.2	9.0	10.6	38.4	92.5	59.4	63.2	10.6	11.5	16.2	50.6	49.4	24.7	92.5	5.1	24.9
10	17.8	13.7	50.7	48.4	44.6	21.9	11.0	23.8	19.2	13.1	18.3	48.4	37.2	75.3	71.9	68.2	18.7	32.3	11.1	8.9	11.0	13.8	3.8	3.7	75.3	3.7	28.6
11	4.7	7.0	18.3	23.7	9.8	63.4	9.5	13.3	19.0	12.3	11.6	18.4	60.9	82.6	74.9	20.6	8.4	11.1	11.6	10.3	9.0	8.1	11.9	16.2	82.6	4.7	22.4
12	7.1	6.2	8.9	11.3	5.3	61.0	66.5	35.3	9.3	79.7	16.9	79.0	24.7	34.5	30.0	70.4	74.8	11.0	6.2	11.9	12.6	18.1	16.6	14.0	79.7	5.3	29.6
13	20.0	12.4	9.4	10.8	9.9	8.8	9.8	21.1	18.0	55.2	15.5	10.5	8.8	25.4	14.5	12.9	12.2	11.2	19.4	14.2	13.6	18.9	15.4	53.0	55.2	8.8	17.5
14	8.0	36.2	13.1	89.3	20.1	17.9	78.9	60.3	84.5	48.4	40.7	79.3	25.1	12.6	14.5	9.9	9.8	20.8	24.3	7.5	6.4	7.5	6.1	6.1	89.3	6.1	30.3
15	5.5	5.7	6.1	6.8	5.6	6.2	6.0	5.3	6.5	9.1	9.8	18.8	27.4	15.5	10.2	5.5	41.0	94.2	44.3	20.4	22.0	51.0	47.8	39.3	94.2	5.3	21.3
16	25.5	27.0	23.3	64.0	39.8	20.4	14.7	8.0	8.3	13.1	9.6	86.7	47.1	62.2	13.0	33.1	13.6	12.3	12.0	16.4	11.9	10.9	10.6	11.3	86.7	8.0	24.8
17	7.1	7.2	5.9	5.4	5.5	5.2	5.5	5.8	9.4	11.2	7.5	5.5	9.3	8.9	7.7	7.6	7.9	6.1	6.4	6.9	6.8	6.7	6.1	7.8	11.2	5.2	7.1
18	4.5	4.4	4.9	6.0	5.2	5.6	10.7	9.9	7.6	6.5	8.2	6.7	7.7	7.1	8.0	5.8	5.8	5.7	5.3	5.7	5.5	5.5	5.5	5.5	10.7	4.4	6.4
19	5.3	5.4	5.6	5.4	5.2	6.2	6.3	5.9	7.7	7.7	6.1	5.7	8.7	12.1	31.7	84.6	34.3	28.1	9.8	7.9	7.9	8.3	11.7	7.5	84.6	5.2	13.6
20	12.2	18.8	62.1	99.1	86.6	88.4	57.8	7.3	7.7	7.0	6.7	56.1	90.9	90.5	48.6	11.6	24.5	74.4	15.4	13.0	9.4	8.6	5.5	5.2	99.1	5.2	37.8
21	18.4	81.9	38.2	30.3	38.0	13.9	12.6	62.2	83.1	50.7	9.6	18.4	73.2	17.2	83.2	53.3	30.5	58.9	12.5	9.6	9.6	7.8	8.3	63.4	83.2	7.8	36.9
22	9.2	14.1	27.4	46.0	91.9	10.7	7.0	10.6	6.0	5.4	8.2	7.5	19.5	27.3	20.9	25.6	9.4	7.1	12.4	7.6	6.4	6.2	5.7	9.7	91.9	5.4	16.8
23	17.8	10.2	4.9	5.7	6.4	6.3	5.7	6.4	48.0	8.4	5.1	5.1	13.6	11.8	11.8	6.8	13.3	14.5	11.0	10.7	11.0	7.7	7.8	9.5	48.0	4.9	10.8
24	11.6	8.2	15.9	12.1	6.7	4.5	21.4	18.0	69.8	74.4	27.1	41.0	47.2	11.5	16.6	13.3	13.1	39.9	30.1	54.3	69.5	76.2	6.3	7.1	76.2	4.5	29.0
25	7.1	7.6	5.8	7.6	7.7	7.8	18.1	13.2	11.6	7.3	4.9	4.5	10.1	9.6	7.9	7.1	67.6	7.4	6.1	5.7	5.5	6.1	6.1	6.1	67.6	4.5	10.4
26	5.8	6.2	6.2	6.2	6.0	6.2	6.3	6.3	5.2	5.4	5.1	5.5	5.8	5.9	5.6	5.3	5.6	5.1	5.1	5.4	5.2	6.7	6.1	6.7	6.7	5.1	5.8
27	6.1	9.2	9.2	9.3	6.1	5.5	7.2	7.1	6.3	6.7	8.0	6.1	15.6	14.9	10.9	8.7	8.3	6.6	8.4	9.8	9.3	7.5	8.3	11.7	15.6	5.5	8.6
28	27.4	14.5	17.5	38.1	30.7	27.2	41.5	52.8	32.3	5.3	15.3	18.4	16.9	10.3	9.0	7.4	14.3	8.5	13.6	38.8	19.9	22.6	26.2	21.0	52.8	5.3	22.1
29	12.2	17.5	19.1	22.6	18.3	16.1	9.8	11.6	9.2	10.6	9.5	9.4	11.1	12.6	11.1	8.4	6.8	9.5	9.5	16.5	15.2	12.5	9.9	11.6	22.6	6.8	12.5
30	11.7	11.3	12.4	13.4	14.4	8.8	6.9	16.9	12.3	18.0	12.9	12.4	10.9	12.0	10.9	17.3	9.5	11.3	15.9	10.1	12.6	24.1	12.2	12.0	24.1	6.9	12.9
31	18.3	11.1	30.3	58.7	20.8	37.8	30.6	23.2	8.3	11.9	6.1	4.5	7.2	8.6	6.8	5.4	3.6	3.3	4.9	7.1	5.0	15.6	18.0	61.0	61.0	3.3	17.0
Max.	**73.0**	**81.9**	**86.0**	**99.1**	**91.9**	**88.4**	**78.9**	**91.0**	**84.5**	**79.7**	**96.1**	**86.7**	**90.9**	**90.5**	**83.2**	**92.5**	**74.8**	**94.2**	**44.3**	**56.7**	**69.5**	**76.2**	**49.4**	**63.4**	**99.1**		
Min.	**4.5**	**4.4**	**4.9**	**5.3**	**5.2**	**4.5**	**5.4**	**5.1**	**5.2**	**5.3**	**4.9**	**4.5**	**5.8**	**4.6**	**5.2**	**5.3**	**3.6**	**3.3**	**4.9**	**5.3**	**5.0**	**4.7**	**3.8**	**3.7**		**3.3**	
Avg.	**14.5**	**14.4**	**18.0**	**24.3**	**21.8**	**19.1**	**20.0**	**19.2**	**19.2**	**18.9**	**16.0**	**22.8**	**23.2**	**20.8**	**20.0**	**22.3**	**19.7**	**22.5**	**14.0**	**14.4**	**12.7**	**15.8**	**13.1**	**18.4**			**18.5**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.2	11.4	12.4	11.0	10.1	11.9	11.8	11.3	11.0	9.4	9.7	11.1	11.1	11.0	12.6	11.9	12.3	11.8	10.4	12.5	12.6	10.5	9.2	8.9	12.6	8.9	11.0
2	7.4	8.1	7.9	9.1	8.6	8.6	7.8	8.7	7.8	6.1	6.1	6.8	4.6	5.6	6.1	5.7	7.6	6.7	5.0	4.7	4.3	4.6	4.7	4.4	9.1	4.3	6.5
3	4.0	3.6	3.0	2.8	2.7	2.0	3.8	1.8	2.0	3.7	5.1	5.3	7.1	7.8	7.7	6.5	6.3	7.1	5.8	6.3	5.8	5.3	6.0	5.6	7.8	1.8	4.9
4	4.9	5.2	4.7	5.6	4.2	5.6	5.6	4.9	5.7	4.6	4.7	5.7	7.3	6.3	5.9	7.4	7.4	9.8	10.2	10.9	10.6	11.5	11.2	12.6	12.6	4.2	7.2
5	12.7	10.1	10.2	8.7	9.1	8.9	9.9	10.7	9.7	8.5	8.0	7.3	7.8	8.3	6.8	6.3	7.1	6.0	7.5	5.2	9.0	8.0	5.7	6.0	12.7	5.2	8.2
6	6.5	5.8	4.8	7.5	8.6	8.1	8.4	4.9	6.2	6.6	6.7	8.9	8.3	6.2	6.3	7.2	7.2	7.6	9.2	8.6	8.5	8.0	6.8	6.2	9.2	4.8	7.2
7	7.3	6.7	6.2	6.3	7.2	6.7	6.2	7.2	8.7	8.7	7.6	8.1	9.8	8.1	10.0	8.6	10.2	6.8	5.0	7.2	6.8	5.4	4.8	4.5	10.2	4.5	7.2
8	5.5	5.7	5.9	6.4	6.8	7.0	7.1	7.2	6.6	6.3	5.2	5.1	6.0	4.8	6.7	6.9	8.3	7.4	8.9	7.3	7.9	8.1	7.8	7.6	8.9	4.8	6.8
9	9.6	10.5	10.2	9.8	10.2	10.1	10.3	11.3	9.6	9.0	8.2	7.4	7.3	7.3	7.7	8.2	7.8	5.3	6.6	5.2	5.8	4.5	4.9	3.1	11.3	3.1	7.9
10	6.3	6.3	5.5	4.2	5.3	6.2	5.3	5.8	6.9	7.7	8.2	9.3	7.1	8.0	7.4	8.0	8.0	7.1	6.7	8.1	6.2	6.6	5.5	5.8	9.3	4.2	6.7
11	6.2	4.7	6.5	8.2	9.8	10.5	7.9	6.2	7.7	7.4	7.3	11.3	10.7	9.4	8.6	9.4	7.6	8.1	9.6	8.4	8.3	9.5	9.1	8.3	11.3	4.7	8.4
12	8.1	7.4	6.9	8.7	7.3	7.8	8.8	8.8	8.0	8.2	8.3	8.5	8.8	10.5	9.1	9.5	10.2	9.2	6.8	10.7	11.0	11.2	7.7	10.3	11.2	6.8	8.8
13	11.8	5.8	7.7	7.0	5.6	7.1	9.2	11.3	8.5	6.6	6.4	8.9	8.9	5.3	5.8	5.2	4.8	7.2	9.2	10.7	10.9	11.8	8.8	6.6	11.8	4.8	8.0
14	7.5	4.1	3.4	1.9	1.0	1.8	1.6	2.1	2.2	0.8	3.4	4.0	7.1	7.4	7.6	8.3	8.3	8.3	7.2	7.7	6.8	6.7	8.3	10.8	10.8	0.8	5.3
15	11.3	11.3	12.1	13.1	11.4	10.5	10.6	10.8	8.5	11.7	10.2	8.9	8.9	9.1	8.0	7.1	8.8	7.8	7.6	7.1	5.6	3.7	6.3	8.0	13.1	3.7	9.1
16	5.5	2.2	2.7	2.1	0.5	1.0	0.7	1.7	1.9	0.8	1.0	1.0	0.9	1.2	0.7	0.6	0.6	1.1	2.0	1.0	0.7	1.3	0.6	3.3	5.5	0.5	1.5
17	2.5	1.0	0.9	1.7	5.3	7.1	6.8	7.5	4.5	5.5	7.3	9.2	12.7	9.6	7.2	6.2	6.0	7.5	7.6	5.0	4.7	5.5	7.3	4.2	12.7	0.9	5.9
18	3.7	3.4	4.3	5.3	7.1	7.5	6.2	5.8	5.0	5.1	1.9	2.4	3.0	2.1	0.9	2.2	1.7	1.6	0.8	2.9	5.8	6.8	7.6	8.2	8.2	0.8	4.2
19	5.8	4.8	8.0	7.9	7.0	5.3	12.1	11.1	10.2	9.2	9.4	10.8	13.2	14.2	15.3	16.7	15.4	14.9	17.2	16.9	17.5	17.8	17.6	16.3	17.8	4.8	12.3
20	14.2	11.2	8.4	7.4	5.6	4.3	5.3	4.4	3.7	4.3	3.9	5.3	4.4	3.8	3.4	2.5	2.1	1.1	2.3	0.1	0.0	0.0	0.0	0.0	14.2	0.0	4.1
21	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.8	10.7	7.8	7.2	7.7	9.6	10.4	11.1	10.8	9.0	11.2	15.0	15.7	16.4	16.1	16.0	13.8	16.4	0.0	8.4
22	12.8	10.1	6.5	10.4	10.2	9.4	10.5	11.0	9.5	9.8	11.7	12.2	12.4	12.6	8.8	7.8	6.9	2.7	2.6	1.4	0.9	0.8	1.5	3.9	12.8	0.8	7.8
23	4.0	5.7	7.3	7.3	8.1	9.6	11.8	12.6	11.8	10.1	8.7	8.1	6.9	5.6	5.7	6.9	8.7	7.1	5.0	8.5	8.9	7.0	8.0	5.8	12.6	4.0	7.9
24	7.2	4.3	4.5	2.7	1.5	4.7	5.2	1.9	3.7	6.6	7.7	8.5	7.7	6.4	7.4	9.6	9.7	9.7	9.5	8.3	6.7	6.2	6.6	5.7	9.7	1.5	6.3
25	6.0	4.0	2.2	2.3	3.8	3.9	4.5	4.0	6.5	6.2	7.8	8.2	7.8	7.3	6.5	7.7	7.3	7.7	9.7	9.9	9.2	9.3	11.8	8.2	11.8	2.2	6.7
26	8.5	9.1	10.0	8.6	9.6	11.0	11.3	13.6	13.4	14.1	7.9	5.6	5.4	5.0	2.7	2.7	2.6	2.4	1.8	1.4	1.1	0.9	1.2	1.4	14.1	0.9	6.3
27	1.3	1.0	3.1	4.3	3.1	3.3	4.7	5.6	8.7	11.3	14.1	14.1	14.3	13.6	14.8	14.7	15.1	13.9	12.3	11.9	13.3	13.3	13.0	12.7	15.1	1.0	9.9
28	12.0	10.4	9.9	9.2	8.1	6.6	5.5	6.1	8.9	7.6	7.4	6.5	6.6	6.0	4.8	3.6	1.7	0.4	1.2	2.7	1.9	1.4	2.8	3.3	12.0	0.4	5.6
29	3.2	2.0	1.5	2.3	4.1	3.9	3.0	4.6	2.8	3.2	3.9	3.3	0.8	0.7	2.5	4.0	2.9	4.8	4.7	3.5	1.7	1.5	1.4	1.2	4.8	0.7	2.8
30	0.5	0.8	1.9	3.3	5.0	5.4	6.0	7.0	7.2	7.1	7.4	9.0	9.1	10.4	8.4	8.2	8.9	8.5	9.3	9.9	10.5	10.5	10.2	11.3	11.3	0.5	7.3
31	10.5	9.6	10.4	9.7	8.2	9.0	7.4	6.7	6.6	5.7	4.6	1.7	1.3	0.5	1.6	1.0	1.2	1.7	1.0	1.2	0.7	1.5	0.4	1.8	10.5	0.4	4.3
Max.	**14.2**	**11.4**	**12.4**	**13.1**	**11.4**	**11.9**	**12.1**	**13.6**	**13.4**	**14.1**	**14.1**	**14.1**	**14.3**	**14.2**	**15.3**	**16.7**	**15.4**	**14.9**	**17.2**	**16.9**	**17.5**	**17.8**	**17.6**	**16.3**	**17.8**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**1.7**	**1.9**	**0.8**	**1.0**	**1.0**	**0.8**	**0.5**	**0.7**	**0.6**	**0.6**	**0.4**	**0.8**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**7.0**	**6.0**	**6.1**	**6.3**	**6.3**	**6.6**	**7.0**	**7.3**	**7.2**	**7.1**	**7.0**	**7.4**	**7.6**	**7.2**	**7.0**	**7.1**	**7.1**	**6.8**	**7.0**	**7.1**	**7.1**	**6.9**	**6.9**	**6.8**			**6.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	1.1	0.9	0.4	0.4	0.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.3	0.7	1.8	2.5	2.4	2.2	2.6	2.6	0.0	0.8
2	2.8	4.3	4.8	4.7	5.7	7.6	7.4	9.4	8.9	8.0	8.1	7.5	8.7	10.6	7.8	7.7	7.3	6.3	6.7	9.5	10.0	10.0	10.5	8.2	10.6	2.8	7.6
3	6.9	8.0	8.5	6.5	8.6	11.3	11.9	12.6	13.0	13.3	13.7	9.9	8.3	7.7	8.2	6.9	6.5	7.3	8.0	7.7	7.7	8.0	9.1	8.7	13.7	6.5	9.1
4	8.7	8.4	6.7	7.5	7.7	6.5	6.3	5.5	6.0	4.3	5.7	5.5	6.3	6.1	6.5	6.4	10.2	10.4	10.7	12.2	12.9	12.2	14.0	12.8	14.0	4.3	8.3
5	10.5	10.8	10.3	10.7	10.9	8.6	10.6	9.2	10.7	8.4	8.2	8.3	8.4	7.4	7.2	6.2	7.7	8.5	7.9	7.7	8.2	8.2	8.8	9.3	10.9	6.2	8.9
6	9.2	7.5	6.0	6.0	6.2	7.5	6.4	8.4	9.7	10.1	9.1	10.7	11.8	11.7	12.6	10.1	10.1	10.8	12.3	7.9	8.9	9.3	9.4	9.1	12.6	6.0	9.2
7	10.8	9.4	7.9	10.3	9.7	9.8	7.6	7.7	9.2	7.6	8.5	7.6	5.9	6.6	3.1	5.6	5.3	6.4	5.1	3.8	1.4	3.9	4.6	5.5	10.8	1.4	6.8
8	5.0	3.8	2.3	1.7	3.4	3.5	3.6	3.3	3.2	3.1	3.3	2.6	2.3	2.2	2.3	2.0	3.6	3.0	1.4	1.3	1.4	2.4	6.1	6.2	6.2	1.3	3.0
9	8.7	11.4	11.5	11.8	12.2	10.5	9.1	8.5	8.5	8.8	7.4	4.0	3.1	4.3	4.0	0.8	0.0	0.0	7.6	8.4	9.5	10.2	9.6	10.1	12.2	0.0	7.5
10	9.6	9.5	10.9	10.8	10.8	10.1	9.5	8.1	8.2	8.9	6.7	5.6	5.0	5.5	4.1	4.8	5.1	5.3	3.9	4.9	4.6	4.1	6.3	5.5	10.9	3.9	7.0
11	5.2	2.5	1.5	0.3	0.8	1.0	0.8	0.6	0.6	0.6	0.4	0.3	0.7	1.3	2.1	2.0	1.4	1.3	1.3	1.2	0.9	0.6	1.6	2.5	5.2	0.3	1.3
12	2.6	2.9	1.1	1.0	2.2	3.6	4.4	5.1	5.1	5.8	5.5	6.5	6.8	7.9	5.5	5.2	5.1	5.8	5.0	4.0	3.3	3.9	2.4	2.3	7.9	1.0	4.3
13	1.2	2.7	3.5	9.6	9.8	10.3	9.3	8.0	9.3	10.8	12.3	12.9	11.7	10.4	7.6	11.2	10.9	11.3	10.8	9.6	10.8	10.4	8.8	8.4	12.9	1.2	9.2
14	8.9	9.3	9.4	10.3	8.6	7.1	7.1	7.8	12.9	12.2	11.5	10.4	11.0	11.4	10.1	10.8	10.7	9.9	9.3	7.9	7.6	4.6	1.2	1.8	12.9	1.2	8.8
15	5.0	3.8	6.9	5.7	7.6	5.4	6.4	5.5	3.6	2.7	2.7	4.1	4.7	4.0	3.1	3.5	3.0	3.7	3.7	3.1	2.5	2.0	1.1	6.4	7.6	1.1	4.2
16	7.4	10.0	8.5	6.5	6.9	7.6	9.1	7.2	6.9	9.8	11.5	13.3	12.4	11.6	10.1	7.6	5.5	5.1	3.8	4.5	4.8	6.0	4.9	3.9	13.3	3.8	7.7
17	1.4	0.5	3.0	2.5	4.5	8.3	5.6	5.8	6.7	5.8	6.0	8.4	8.5	9.9	9.1	7.4	6.0	10.3	15.0	13.8	12.4	11.8	13.1	11.4	15.0	0.5	7.8
18	11.7	12.7	10.9	12.2	14.0	15.6	15.9	16.0	15.4	14.0	12.2	9.6	8.9	8.8	9.6	9.8	6.8	5.3	6.7	6.0	6.5	6.9	6.8	6.1	16.0	5.3	10.4
19	5.6	5.1	2.9	2.2	6.2	6.6	5.3	6.8	6.2	6.4	7.2	8.3	8.1	8.5	8.3	7.0	6.5	9.1	8.5	8.9	5.7	2.1	1.9	3.5	9.1	1.9	6.1
20	6.4	12.8	13.3	12.0	12.0	14.1	14.4	12.9	13.0	12.8	10.4	7.2	5.9	7.6	8.7	6.1	2.2	5.5	6.5	7.2	7.7	7.8	8.1	8.3	14.4	2.2	9.3
21	8.0	7.5	7.7	9.3	10.0	9.9	8.3	8.3	9.0	7.9	8.2	8.3	9.2	7.8	7.4	6.8	6.3	4.4	2.8	1.3	1.9	1.5	2.6	1.8	10.0	1.3	6.5
22	1.3	3.4	1.9	1.3	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3	2.6	3.7	8.7	10.0	10.7	12.0	9.2	7.7	6.8	5.7	5.5	6.0	12.0	0.0	4.1
23	3.7	2.0	2.1	1.4	2.1	2.8	2.9	3.1	3.1	2.0	2.6	2.2	1.2	2.9	2.6	4.8	5.2	5.0	4.4	7.2	7.2	7.7	4.9	7.2	7.7	1.2	3.8
24	5.1	8.1	7.7	9.4	7.4	9.2	11.0	8.9	7.9	8.6	8.1	8.1	8.9	8.6	7.7	6.8	7.9	7.5	8.8	10.5	8.5	8.5	8.3	9.5	11.0	5.1	8.4
25	9.9	11.6	8.9	10.3	9.2	13.2	12.2	10.8	8.0	6.9	5.8	5.4	6.2	5.0	5.3	6.7	4.9	2.8	2.2	2.7	7.0	5.6	6.6	5.6	13.2	2.2	7.2
26	4.9	3.7	4.3	2.9	4.7	5.5	5.7	4.8	5.1	6.0	5.7	5.3	2.8	3.7	4.8	5.8	6.4	6.6	8.4	8.1	10.3	9.3	9.6	8.6	10.3	2.8	6.0
27	8.9	9.3	10.8	9.2	8.5	7.8	7.6	6.6	6.0	4.6	4.1	4.1	4.3	4.0	5.4	5.1	4.2	7.0	3.9	2.7	1.7	1.9	3.9	3.7	10.8	1.7	5.6
28	4.2	2.5	2.5	6.5	7.8	7.9	7.5	7.0	6.5	6.7	4.0	4.4	5.8	6.9	6.5	6.8	6.5	6.6	6.4	6.6	7.6	7.6	8.2	7.9	8.2	2.5	6.3
29	8.5	8.5	8.1	7.6	8.1	7.6	8.2	8.7	8.0	7.9	7.1	7.1	7.4	7.7	7.8	7.0	6.8	4.3	6.2	5.8	4.6	3.1	4.1	3.7	8.7	3.1	6.8
Max.	**11.7**	**12.8**	**13.3**	**12.2**	**14.0**	**15.6**	**15.9**	**16.0**	**15.4**	**14.0**	**13.7**	**13.3**	**12.4**	**11.7**	**12.6**	**11.2**	**10.9**	**12.0**	**15.0**	**13.8**	**12.9**	**12.2**	**14.0**	**12.8**	**16.0**		
Min.	**1.1**	**0.5**	**0.4**	**0.3**	**0.8**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.7**	**1.2**	**0.9**	**0.6**	**1.1**	**1.8**		**0.0**	
Avg.	**6.3**	**6.7**	**6.3**	**6.6**	**7.1**	**7.6**	**7.4**	**7.1**	**7.3**	**7.0**	**6.8**	**6.5**	**6.4**	**6.7**	**6.4**	**6.2**	**6.0**	**6.3**	**6.4**	**6.4**	**6.4**	**6.1**	**6.4**	**6.4**			**6.6**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.4	5.6	4.8	4.4	5.2	4.8	3.9	3.8	1.1	0.8	1.2	1.5	1.4	0.8	3.4	5.5	5.3	5.8	7.3	8.0	10.1	8.5	5.8	6.3	10.1	0.8	4.6
2	7.1	8.1	8.1	8.1	6.8	6.5	8.0	9.2	9.0	8.2	6.4	6.0	4.3	4.8	4.6	4.6	3.8	3.5	4.7	4.3	3.9	4.6	2.8	2.7	9.2	2.7	5.8
3	3.0	4.1	5.5	5.6	5.2	8.6	10.4	13.6	13.5	13.0	13.1	15.2	16.5	15.2	15.1	15.8	14.9	13.1	13.1	13.8	11.4	12.1	11.5	9.9	16.5	3.0	11.4
4	9.8	9.7	9.5	9.0	8.1	9.3	10.9	11.5	11.2	12.3	12.6	11.8	12.0	10.7	10.3	10.5	10.4	11.8	11.1	12.6	12.5	11.5	11.4	11.8	12.6	8.1	10.9
5	11.9	11.5	8.6	10.3	8.5	7.8	8.2	9.6	8.3	8.8	10.3	12.3	10.9	10.7	14.3	14.3	12.9	12.6	12.3	15.0	15.7	13.6	13.4	13.7	15.7	7.8	11.5
6	12.6	12.6	12.8	11.1	8.7	8.2	7.1	7.2	10.0	10.8	10.1	9.8	9.6	10.6	9.1	8.2	8.6	8.5	7.0	6.0	2.8	6.2	6.9	6.9	12.8	2.8	8.8
7	5.8	5.3	2.7	1.6	2.6	2.3	2.0	3.0	4.3	5.3	4.9	4.7	4.4	4.1	3.1	1.5	2.4	3.5	4.1	6.0	5.7	4.1	2.5	5.5	6.0	1.5	3.8
8	7.5	8.8	2.5	1.8	1.8	3.4	3.8	3.8	2.3	2.6	2.7	6.9	5.8	4.8	6.3	6.8	7.5	8.6	8.4	8.7	9.7	9.4	9.2	9.0	9.7	1.8	5.9
9	9.2	8.3	10.1	10.1	9.5	8.9	7.8	7.1	7.0	7.0	3.1	1.8	2.4	3.6	5.3	4.3	4.2	4.3	5.1	5.1	4.6	4.7	2.9	2.0	10.1	1.8	5.8
10	2.5	2.2	0.9	1.6	5.2	7.8	6.8	2.6	2.2	3.0	1.2	2.1	1.4	1.4	3.7	4.2	4.2	3.6	3.7	2.1	1.7	2.1	2.4	2.3	7.8	0.9	3.0
11	2.4	3.3	3.1	5.8	2.9	3.3	1.9	3.7	4.6	2.8	1.6	0.9	2.0	4.7	3.4	3.5	4.8	3.8	2.7	4.0	5.0	5.0	5.0	4.9	5.8	0.9	3.5
12	5.1	6.1	5.8	5.2	5.1	4.7	3.6	3.5	3.4	2.7	3.0	2.5	2.1	2.1	2.9	2.0	1.1	2.5	2.4	2.9	2.5	1.4	1.3	1.0	6.1	1.0	3.1
13	2.5	3.2	3.7	4.4	4.5	4.5	4.8	4.9	4.5	5.1	4.9	5.4	4.9	4.5	5.1	4.6	5.1	4.5	4.1	5.1	4.8	3.6	3.5	2.7	5.4	2.5	4.4
14	2.7	4.0	3.6	2.1	1.1	0.5	0.5	0.9	0.9	0.6	0.9	1.6	2.1	2.3	2.0	2.0	1.0	1.2	2.4	3.6	4.5	5.9	6.1	7.2	7.2	0.5	2.5
15	9.1	10.5	10.6	10.1	8.4	8.0	7.8	10.1	9.6	8.7	7.5	9.0	9.9	9.5	9.3	8.6	8.0	8.3	7.9	7.7	7.7	6.4	5.6	4.8	10.6	4.8	8.5
16	4.8	5.6	5.0	5.1	4.3	4.5	5.1	5.0	4.6	1.8	1.6	1.7	1.3	1.5	2.2	2.4	2.4	2.6	3.6	2.6	3.2	4.2	5.0	4.2	5.6	1.3	3.5
17	4.2	4.9	4.7	5.1	5.0	5.4	5.1	4.4	4.5	4.7	4.1	3.0	1.8	1.2	0.7	0.6	0.8	3.7	12.1	11.5	9.0	8.4	8.3	4.9	12.1	0.6	4.9
18	1.5	1.3	1.4	2.7	4.0	4.3	6.2	5.2	6.7	6.5	7.4	7.0	6.4	6.6	5.9	5.9	7.4	6.3	6.1	7.6	6.0	4.3	4.4	7.2	7.6	1.3	5.3
19	10.0	9.9	8.3	8.1	5.1	7.2	9.4	8.1	8.9	8.9	8.9	9.1	9.7	9.0	8.8	10.1	9.4	7.8	8.3	8.2	6.7	5.9	7.0	5.2	10.1	5.1	8.2
20	5.1	6.7	6.5	6.3	5.6	5.4	5.4	4.4	4.9	4.2	3.7	3.0	3.0	1.7	1.2	1.7	2.8	3.4	4.8	5.4	5.0	4.8	6.7	6.7	6.7	1.2	4.5
21	5.8	4.8	4.2	3.8	4.1	3.9	3.1	2.4	1.3	1.0	1.7	1.9	1.6	4.9	5.8	9.0	8.7	9.8	10.4	10.5	10.9	7.2	11.0	10.1	11.0	1.0	5.7
22	10.8	10.2	8.3	9.1	9.4	9.0	9.2	9.6	12.4	12.2	11.5	12.8	11.2	10.7	9.2	8.9	10.3	7.0	7.3	2.3	2.9	6.0	4.9	3.7	12.8	2.3	8.7
23	4.8	4.8	5.5	5.7	4.4	4.4	6.5	5.2	4.4	4.8	5.6	5.8	6.1	6.9	5.8	6.2	5.5	5.0	4.3	5.4	5.8	7.7	8.0	7.5	8.0	4.3	5.7
24	7.0	7.2	5.6	4.8	5.2	5.0	4.7	4.3	3.8	4.7	4.9	5.0	5.1	5.6	3.7	1.7	3.9	2.2	3.9	5.1	4.6	3.7	1.4	0.6	7.2	0.6	4.3
25	1.1	1.4	1.8	2.5	2.3	1.3	0.6	0.7	0.8	1.0	1.7	1.9	2.8	4.5	4.8	4.9	3.5	3.7	4.1	5.0	6.3	7.0	7.9	8.0	8.0	0.6	3.3
26	6.9	5.0	2.6	1.9	1.4	1.7	5.0	5.6	5.4	3.9	5.3	5.0	3.5	3.0	4.7	5.0	5.2	5.1	3.6	1.5	2.9	4.6	5.5	5.4	6.9	1.4	4.1
27	4.3	4.8	4.7	4.5	4.3	5.2	5.5	5.0	4.3	4.3	5.5	4.7	5.4	6.1	6.4	5.2	5.6	5.8	6.7	5.7	4.7	4.1	6.2	8.6	8.6	4.1	5.3
28	9.0	8.4	6.9	7.3	7.9	6.4	5.3	5.6	4.8	3.9	3.1	2.4	2.3	2.5	2.8	2.7	2.9	2.7	3.1	3.4	2.9	2.9	2.4	1.8	9.0	1.8	4.3
29	1.2	1.3	0.5	0.8	1.1	0.9	0.9	1.3	1.0	4.4	3.2	5.9	9.9	10.5	9.7	10.3	11.0	11.1	9.6	8.8	7.1	8.3	12.3	10.8	12.3	0.5	5.9
30	11.9	11.7	11.4	12.2	13.0	15.2	15.6	13.6	13.4	14.0	12.3	12.7	12.5	11.4	11.3	11.7	10.9	11.0	9.9	7.9	5.7	8.5	9.4	9.5	15.6	5.7	11.5
31	6.7	5.7	5.0	6.3	9.0	10.8	7.2	8.8	11.0	9.9	9.3	9.4	9.6	9.9	9.7	8.9	9.2	10.4	10.2	10.7	13.0	13.0	13.0	12.1	13.0	5.0	9.5
Max.	**12.6**	**12.6**	**12.8**	**12.2**	**13.0**	**15.2**	**15.6**	**13.6**	**13.5**	**14.0**	**13.1**	**15.2**	**16.5**	**15.2**	**15.1**	**15.8**	**14.9**	**13.1**	**13.1**	**15.0**	**15.7**	**13.6**	**13.4**	**13.7**	**16.5**		
Min.	**1.1**	**1.3**	**0.5**	**0.8**	**1.1**	**0.5**	**0.5**	**0.7**	**0.8**	**0.6**	**0.9**	**0.9**	**1.3**	**0.8**	**0.7**	**0.6**	**0.8**	**1.2**	**2.4**	**1.5**	**1.7**	**1.4**	**1.3**	**0.6**		**0.5**	
Avg.	**6.2**	**6.3**	**5.6**	**5.7**	**5.5**	**5.8**	**5.9**	**5.9**	**5.9**	**5.9**	**5.6**	**5.9**	**5.9**	**6.0**	**6.1**	**6.2**	**6.2**	**6.2**	**6.6**	**6.7**	**6.4**	**6.4**	**6.6**	**6.4**			**6.1**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.7	13.4	12.5	12.0	9.7	9.1	9.2	8.2	8.1	8.1	6.7	6.3	5.7	6.4	7.7	7.2	6.7	6.2	4.9	4.6	3.5	2.9	1.7	1.2	13.4	1.2	7.3
2	1.3	1.8	3.1	3.8	2.1	1.2	1.1	1.0	1.9	2.7	1.9	2.8	3.7	2.6	1.2	1.3	2.3	1.5	1.3	1.6	2.3	3.4	3.6	6.0	6.0	1.0	2.3
3	4.2	3.0	3.9	5.7	7.2	7.8	7.0	6.2	4.1	2.1	3.4	3.9	4.4	7.2	8.1	9.1	10.1	9.5	11.6	12.4	11.6	11.6	11.7	14.0	14.0	2.1	7.5
4	13.9	14.1	13.6	12.8	12.6	12.6	13.5	12.0	11.3	11.0	11.2	10.7	9.4	9.1	8.6	7.9	6.8	6.4	7.5	9.6	9.0	10.3	10.5	9.1	14.1	6.4	10.6
5	6.1	7.0	5.5	3.8	4.8	3.9	3.5	3.9	2.9	3.1	3.7	2.5	3.0	4.8	5.3	6.1	6.5	5.8	7.3	7.1	6.3	4.8	5.2	5.7	7.3	2.5	4.9
6	6.8	6.1	5.4	5.7	4.4	5.6	4.4	5.3	5.1	7.5	6.5	5.6	7.5	7.8	5.2	3.3	3.3	3.6	3.4	4.8	4.7	4.2	7.1	9.1	9.1	3.3	5.5
7	8.8	7.5	6.2	6.9	7.2	6.3	6.4	6.9	8.5	8.2	6.3	5.9	5.7	5.3	5.3	5.8	5.5	4.1	5.1	4.2	5.7	4.9	5.2	4.7	8.8	4.1	6.1
8	5.0	4.9	5.0	3.5	2.9	3.6	2.9	3.6	2.5	2.6	1.6	1.6	1.7	1.7	1.5	1.2	1.6	1.4	2.3	2.4	2.9	4.2	5.8	4.6	5.8	1.2	3.0
9	5.4	6.6	8.0	7.5	6.0	7.9	6.8	7.2	7.2	7.4	8.2	7.9	6.8	7.2	7.4	7.7	6.5	4.9	5.3	5.1	4.6	3.8	5.4	4.5	8.2	3.8	6.5
10	4.6	5.3	7.4	7.6	7.2	6.7	7.6	9.9	9.0	8.1	6.5	5.7	6.2	6.2	4.4	4.6	3.9	4.3	3.1	3.7	5.2	6.5	6.3	6.1	9.9	3.1	6.1
11	5.8	5.9	6.6	6.7	7.4	7.3	8.0	8.2	7.3	7.6	8.2	6.2	5.7	5.4	5.9	6.7	6.8	5.9	4.7	5.2	5.5	5.9	6.2	7.7	8.2	4.7	6.5
12	7.3	5.8	5.3	5.6	6.7	6.2	6.3	6.7	7.2	7.3	6.9	5.1	5.2	5.8	6.4	7.7	6.3	5.1	4.9	6.5	6.7	3.8	4.3	1.8	7.7	1.8	5.9
13	1.5	0.9	0.8	1.7	3.4	3.3	4.3	3.7	3.9	3.9	3.5	3.9	2.2	2.2	2.7	6.4	7.1	7.1	5.5	9.2	7.9	6.0	11.5	9.4	11.5	0.8	4.7
14	9.8	11.9	11.3	9.9	8.8	7.6	6.2	7.2	8.5	8.7	7.8	7.2	7.7	6.0	4.5	3.9	4.7	4.3	3.5	3.4	3.5	3.5	3.1	5.1	11.9	3.1	6.6
15	4.4	3.1	3.4	1.6	1.4	1.9	4.0	4.3	8.3	10.9	12.3	12.2	12.0	12.3	16.9	17.0	10.9	14.5	12.4	12.6	14.7	15.8	15.7	16.4	17.0	1.4	10.0
16	19.4	18.6	19.2	16.2	14.2	14.5	13.7	14.3	11.8	7.8	10.2	10.0	7.0	7.2	7.6	7.3	6.6	6.8	4.4	3.4	3.0	2.1	2.5	2.1	19.4	2.1	9.6
17	2.3	2.4	3.1	4.0	3.8	4.3	3.5	3.7	3.4	4.0	2.8	3.7	5.0	5.2	6.0	4.2	4.3	4.6	4.5	2.4	1.8	0.9	1.8	0.7	6.0	0.7	3.4
18	1.6	1.9	1.9	2.1	2.6	1.6	2.1	2.2	1.9	2.3	2.1	0.8	2.4	2.2	2.6	2.4	2.4	3.8	3.2	2.9	3.1	2.6	1.2	2.6	3.8	0.8	2.3
19	0.9	4.2	6.2	7.5	7.2	7.5	8.4	8.5	8.6	8.0	8.7	6.3	8.6	7.6	8.4	8.2	8.2	6.9	6.8	8.0	6.8	4.5	7.2	5.0	8.7	0.9	7.0
20	5.6	5.3	9.1	8.0	8.3	7.5	6.7	6.2	6.0	9.1	11.1	11.5	11.7	9.7	7.4	6.3	10.0	7.3	7.2	7.7	6.5	7.9	7.8	7.5	11.7	5.3	8.0
21	8.9	9.0	8.4	8.9	8.5	5.7	6.3	5.6	3.3	3.9	4.4	7.3	7.9	9.6	9.1	8.1	4.0	4.5	4.5	6.8	6.0	3.8	4.1	4.9	9.6	3.3	6.4
22	3.4	2.5	4.4	4.2	1.9	2.8	2.7	1.9	2.2	0.8	1.3	3.0	2.6	1.8	1.6	1.6	2.3	2.1	2.3	2.6	2.5	3.1	4.5	4.8	4.8	0.8	2.6
23	4.0	2.0	3.0	3.3	2.7	2.1	3.2	3.9	1.9	2.1	1.4	1.2	1.1	1.4	1.7	2.5	2.4	1.5	1.5	2.2	3.3	2.8	3.4	3.1	4.0	1.1	2.4
24	2.6	1.6	2.7	5.0	2.2	1.8	2.0	0.9	1.0	1.5	1.5	1.7	3.3	2.2	1.1	2.3	4.5	3.5	2.8	1.6	1.9	3.0	5.7	4.6	5.7	0.9	2.5
25	5.1	6.8	6.9	7.7	9.7	9.0	8.4	10.0	9.7	9.8	8.2	7.0	7.2	7.5	8.3	8.3	8.7	8.9	7.6	6.1	7.1	5.0	4.0	5.1	10.0	4.0	7.6
26	7.2	8.0	6.0	7.2	8.2	10.7	8.5	7.7	8.6	10.1	6.0	12.2	10.6	9.3	12.9	13.4	13.2	12.9	10.9	10.6	10.3	11.3	12.1	10.8	13.4	6.0	9.9
27	10.0	9.8	11.9	12.2	11.9	12.3	12.2	13.4	12.3	12.4	12.2	12.2	11.5	10.5	10.0	10.4	9.9	10.0	9.1	8.6	8.2	7.4	6.3	6.6	13.4	6.3	10.5
28	6.7	7.6	6.8	6.0	5.5	4.9	3.9	5.4	5.8	4.7	2.4	2.1	2.3	1.4	3.2	2.8	3.4	3.9	3.8	3.3	4.4	4.4	4.4	4.5	7.6	1.4	4.3
29	4.7	4.9	3.9	5.6	5.8	5.4	5.3	5.9	4.2	6.2	6.2	5.7	5.0	3.8	2.3	3.3	4.8	5.8	5.9	5.6	6.3	7.0	8.3	2.9	8.3	2.3	5.2
30	6.6	7.2	7.0	7.5	6.5	7.5	7.2	6.9	7.4	6.5	5.6	3.9	2.8	2.5	2.1	1.9	3.0	3.7	4.1	5.4	6.0	4.2	4.1	5.5	7.5	1.9	5.2
Max.	**19.4**	**18.6**	**19.2**	**16.2**	**14.2**	**14.5**	**13.7**	**14.3**	**12.3**	**12.4**	**12.3**	**12.2**	**12.0**	**12.3**	**16.9**	**17.0**	**13.2**	**14.5**	**12.4**	**12.6**	**14.7**	**15.8**	**15.7**	**16.4**	**19.4**		
Min.	**0.9**	**0.9**	**0.8**	**1.6**	**1.4**	**1.2**	**1.1**	**0.9**	**1.0**	**0.8**	**1.3**	**0.8**	**1.1**	**1.4**	**1.1**	**1.2**	**1.6**	**1.4**	**1.3**	**1.6**	**1.8**	**0.9**	**1.2**	**0.7**		**0.7**	
Avg.	**6.2**	**6.3**	**6.6**	**6.7**	**6.4**	**6.3**	**6.2**	**6.4**	**6.1**	**6.3**	**6.0**	**5.9**	**5.9**	**5.7**	**5.9**	**6.0**	**5.9**	**5.7**	**5.4**	**5.7**	**5.7**	**5.4**	**6.0**	**5.9**			**6.0**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	4.9	5.1	5.7	5.5	6.5	6.8	6.7	7.6	7.6	9.0	7.6	6.3	6.0	4.9	5.0	5.5	5.8	5.8	5.8	4.7	5.5	5.5	6.4	4.6	9.0	4.6	6.0
2	4.2	4.1	4.2	4.2	6.3	8.3	10.0	10.7	8.9	6.4	6.4	5.9	4.4	2.6	3.4	4.2	4.1	4.3	3.3	2.1	1.2	3.3	3.8	1.9	10.7	1.2	4.9
3	2.3	3.3	3.1	4.1	2.7	2.1	2.3	1.2	1.0	1.3	1.0	2.6	3.7	5.6	2.0	5.1	3.5	1.9	2.0	2.5	2.7	3.6	1.2	5.6	5.6	1.0	2.8
4	7.5	6.1	5.9	6.7	5.0	7.7	7.1	5.9	6.0	5.1	4.3	3.8	2.2	1.0	1.6	2.1	1.3	1.5	2.4	2.5	1.9	3.0	3.4	4.3	7.7	1.0	4.1
5	3.7	5.0	3.7	3.8	3.7	4.1	3.0	3.7	1.6	1.7	2.1	1.4	2.0	1.7	1.3	1.9	1.7	1.6	0.7	1.8	1.4	1.2	1.0	0.5	5.0	0.5	2.3
6	0.5	1.4	2.6	1.7	0.9	0.5	0.6	0.8	1.1	3.8	6.5	7.0	7.6	9.6	9.2	9.8	10.0	10.3	10.4	10.7	9.3	9.7	10.3	9.7	10.7	0.5	6.0
7	10.7	10.4	10.2	10.6	11.2	10.5	10.4	11.1	12.1	11.9	13.5	15.1	13.6	12.2	11.2	10.8	12.3	11.7	10.6	11.2	7.9	10.8	9.7	8.1	15.1	7.9	11.1
8	9.0	10.4	11.1	11.0	10.4	10.8	11.0	11.2	11.0	9.2	9.1	10.8	10.9	11.1	11.5	11.9	11.6	12.8	12.7	12.1	11.1	10.2	10.5	7.9	12.8	7.9	10.8
9	6.2	3.4	3.2	2.5	3.2	4.2	3.5	3.9	4.4	4.3	6.5	7.7	6.5	6.7	4.8	6.5	6.2	5.2	3.2	1.2	1.5	2.0	2.6	2.4	7.7	1.2	4.2
10	3.1	2.5	0.8	1.4	1.2	1.5	0.8	0.8	0.3	1.1	2.0	1.6	1.6	2.2	2.1	2.3	2.4	2.1	1.8	1.6	1.1	0.9	1.7	3.8	3.8	0.3	1.7
11	3.0	3.5	2.3	4.9	5.0	4.3	4.5	4.7	8.2	11.1	10.8	10.5	10.8	11.3	13.2	14.3	12.7	12.3	14.5	13.7	11.9	10.2	5.1	5.6	14.5	2.3	8.7
12	6.3	3.5	3.4	1.7	2.7	4.3	6.2	4.9	2.4	5.6	9.3	10.0	11.2	10.6	11.7	12.9	12.0	11.6	11.0	11.4	11.3	11.0	10.4	9.8	12.9	1.7	8.1
13	8.7	8.3	8.2	6.7	6.1	4.3	2.8	4.0	4.7	4.2	6.8	7.7	9.6	9.6	10.3	10.6	10.9	11.3	12.4	10.9	9.2	9.7	8.1	8.3	12.4	2.8	8.1
14	7.1	5.1	1.6	2.0	1.9	3.7	5.8	6.5	6.6	8.0	8.2	7.4	5.5	5.0	6.2	4.7	5.6	7.6	7.1	5.9	2.6	3.2	1.8	2.1	8.2	1.6	5.1
15	1.1	1.3	1.9	1.4	1.4	0.6	0.9	2.7	3.7	4.0	4.4	4.1	4.5	4.5	5.6	4.1	4.0	4.0	4.5	5.3	4.1	4.2	4.0	3.0	5.6	0.6	3.3
16	2.4	2.1	2.1	2.6	2.0	2.5	2.4	1.1	1.7	1.4	1.2	2.0	3.9	6.5	7.0	6.8	6.8	5.1	4.5	3.5	3.0	1.8	1.7	2.2	7.0	1.1	3.2
17	3.5	2.1	3.6	4.5	4.4	5.6	4.6	4.6	4.2	2.6	3.4	3.0	2.5	2.6	2.2	2.2	2.2	2.9	4.1	3.4	4.6	4.0	3.2	2.1	5.6	2.1	3.4
18	1.1	1.1	1.3	1.9	2.1	2.2	1.4	2.3	3.4	3.6	2.8	3.4	3.6	3.4	2.9	5.5	4.4	6.1	6.5	4.6	4.7	3.2	3.3	1.9	6.5	1.1	3.2
19	1.4	2.5	0.9	1.4	1.8	1.8	1.7	1.5	1.8	1.3	2.4	4.0	2.9	3.7	4.8	4.7	5.1	5.9	5.3	5.2	4.1	4.5	3.9	5.0	5.9	0.9	3.2
20	4.7	5.3	6.1	5.1	5.1	5.7	6.0	5.4	4.7	2.5	3.3	2.9	2.0	3.1	2.5	3.0	3.0	2.6	2.8	3.3	2.8	2.2	2.1	2.8	6.1	2.0	3.7
21	2.7	2.5	2.5	3.3	2.7	3.0	2.8	1.7	1.9	1.7	1.4	2.2	2.6	3.9	4.0	4.5	4.3	3.7	4.2	6.2	6.0	4.6	3.1	2.0	6.2	1.4	3.2
22	2.5	3.4	3.3	2.4	2.1	2.4	3.4	3.1	2.6	2.5	1.6	2.2	1.8	2.8	3.3	5.4	7.5	8.2	7.6	7.8	6.5	8.4	10.5	11.1	11.1	1.6	4.7
23	12.3	14.1	13.6	14.6	15.0	14.7	11.4	13.1	15.5	14.7	16.9	15.3	16.4	16.4	16.2	14.1	12.8	14.5	13.8	12.5	11.6	10.3	11.9	11.5	16.9	10.3	13.9
24	8.8	9.1	8.5	9.2	9.5	8.8	7.0	6.8	6.4	8.1	8.2	7.9	9.5	10.2	10.1	9.3	8.5	8.2	7.2	6.5	3.8	2.3	2.7	2.7	10.2	2.3	7.5
25	3.5	2.8	1.8	2.3	2.9	3.9	3.1	2.5	1.8	2.9	4.9	5.1	5.3	5.0	5.1	4.9	4.9	5.0	3.8	3.2	3.9	1.8	0.9	1.3	5.3	0.9	3.4
26	1.0	0.9	1.4	2.0	2.9	2.1	2.1	1.8	2.5	3.1	3.0	4.0	3.6	4.1	3.7	6.0	5.4	5.4	6.8	5.6	4.7	3.5	2.0	2.1	6.8	0.9	3.3
27	3.4	2.5	3.2	3.9	4.6	5.1	3.5	2.4	3.3	4.0	3.6	3.8	3.8	3.7	4.1	4.4	4.9	4.4	4.7	4.4	4.3	3.0	3.9	3.5	5.1	2.4	3.8
28	4.2	4.5	4.5	5.8	4.6	3.9	3.4	3.9	4.7	4.8	3.9	3.6	3.7	3.7	4.4	4.7	4.8	5.2	5.0	5.4	4.9	3.9	3.2	3.7	5.8	3.2	4.3
29	5.3	5.7	5.3	4.1	4.4	4.5	6.6	6.1	5.5	4.5	3.5	3.5	4.8	3.8	3.9	4.7	4.4	3.6	3.4	3.2	3.5	3.7	4.3	4.0	6.6	3.2	4.4
30	4.1	4.4	2.3	2.9	2.9	2.8	1.6	0.8	1.9	5.1	7.0	7.3	7.6	7.8	8.1	8.8	8.9	8.4	8.0	8.7	5.7	6.1	5.3	6.8	8.9	0.8	5.6
31	8.6	9.5	8.2	7.7	7.3	7.8	9.1	8.2	8.2	8.8	9.6	10.6	10.1	12.4	12.3	10.9	10.4	11.1	9.1	8.7	8.6	7.8	6.1	6.7	12.4	6.1	9.1
Max.	**12.3**	**14.1**	**13.6**	**14.6**	**15.0**	**14.7**	**11.4**	**13.1**	**15.5**	**14.7**	**16.9**	**15.3**	**16.4**	**16.4**	**16.2**	**14.3**	**12.8**	**14.5**	**14.5**	**13.7**	**11.9**	**11.0**	**11.9**	**11.5**	**16.9**		
Min.	**0.5**	**0.9**	**0.8**	**1.4**	**0.9**	**0.5**	**0.6**	**0.8**	**0.3**	**1.1**	**1.0**	**1.4**	**1.6**	**1.0**	**1.3**	**1.9**	**1.3**	**1.5**	**0.7**	**1.2**	**1.1**	**0.9**	**0.9**	**0.5**		**0.3**	
Avg.	**4.8**	**4.7**	**4.4**	**4.6**	**4.6**	**4.9**	**4.7**	**4.7**	**4.8**	**5.1**	**5.7**	**5.9**	**5.9**	**6.2**	**6.3**	**6.7**	**6.5**	**6.6**	**6.4**	**6.1**	**5.3**	**5.2**	**4.8**	**4.7**			**5.4**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	6.0	7.2	6.6	8.7	8.7	7.3	10.0	11.0	10.0	11.0	12.2	11.8	13.3	13.2	13.5	13.0	13.6	13.1	11.8	9.3	7.8	5.5	5.3	3.0	13.6	3.0	9.7
2	0.8	1.7	2.9	2.3	3.1	0.8	0.7	0.9	1.7	3.3	4.9	5.7	4.0	4.4	4.6	4.1	4.5	4.7	4.4	4.0	2.9	2.9	3.0	1.5	5.7	0.7	3.1
3	2.0	2.5	1.8	2.0	1.6	2.3	3.0	1.8	1.6	0.9	1.4	1.4	1.5	6.0	5.9	5.7	5.1	7.2	7.0	8.3	6.6	6.0	5.1	3.2	8.3	0.9	3.8
4	3.5	2.6	2.8	3.3	2.3	3.2	3.3	2.6	3.5	5.0	5.3	5.7	4.8	6.2	6.8	7.3	7.5	7.3	7.5	7.5	6.7	5.8	3.9	3.4	7.5	2.3	4.9
5	2.1	1.4	1.5	2.9	4.2	4.3	6.6	7.2	7.7	8.1	9.3	9.1	9.3	9.4	9.7	9.8	9.6	8.8	6.3	4.7	4.2	1.4	1.5	3.3	9.8	1.4	5.9
6	3.9	2.2	3.3	3.3	3.1	3.3	3.9	3.5	2.8	3.9	3.8	4.2	3.7	3.8	3.1	2.7	3.6	8.7	7.7	6.3	4.3	5.0	3.9	1.5	8.7	1.5	4.0
7	2.4	3.3	4.5	4.5	4.8	4.6	4.1	4.4	5.4	5.9	5.6	5.3	5.2	4.5	3.7	2.6	2.8	5.6	7.2	7.4	7.1	6.5	5.4	2.1	7.4	2.1	4.8
8	1.6	1.9	2.6	3.1	2.5	1.5	1.3	2.2	2.3	1.6	2.5	2.7	2.7	3.2	3.5	3.9	3.4	3.0	3.0	2.7	3.1	3.2	3.2	1.9	3.9	1.3	2.6
9	3.3	3.2	2.8	3.1	2.4	2.3	2.4	3.7	3.7	4.1	3.2	2.2	2.7	2.5	3.4	4.5	3.3	3.9	3.3	4.3	4.8	4.5	3.1	3.1	4.8	2.2	3.3
10	2.6	2.5	2.4	2.0	2.0	2.5	3.4	3.2	2.1	0.7	0.7	1.1	1.2	1.3	2.8	3.0	3.1	3.6	4.4	3.3	3.3	2.3	1.5	0.6	4.4	0.6	2.3
11	1.0	1.5	0.8	0.6	1.3	0.7	0.2	0.5	1.3	1.9	2.0	2.0	3.1	3.0	3.6	3.8	4.2	4.0	3.6	2.9	2.2	3.1	3.7	2.2	4.2	0.2	2.2
12	4.2	2.9	2.4	1.8	0.7	1.4	0.8	1.3	3.0	2.7	1.3	1.0	1.1	1.2	2.9	2.3	2.6	2.6	3.6	2.3	2.0	2.0	2.1	1.5	4.2	0.7	2.1
13	1.7	2.4	2.7	3.4	3.2	2.9	1.8	2.8	3.6	3.3	3.1	2.4	2.1	1.4	2.1	1.9	1.5	1.3	1.8	3.4	3.7	2.3	1.4	1.6	3.7	1.3	2.4
14	1.4	0.6	1.1	1.4	1.6	1.3	1.7	2.7	3.9	2.0	1.6	2.3	3.3	4.2	5.0	6.1	5.3	4.0	4.7	3.0	3.4	4.9	3.8	1.5	6.1	0.6	3.0
15	0.7	1.0	1.3	2.4	2.3	4.0	3.3	1.3	1.6	2.1	3.6	4.0	4.1	2.7	4.1	5.6	5.4	6.5	6.0	4.6	4.2	5.6	3.7	2.8	6.5	0.7	3.4
16	1.3	0.9	1.3	2.1	2.4	2.9	2.5	3.1	2.8	2.8	1.6	1.8	1.4	3.6	1.3	1.3	3.2	2.0	2.6	2.4	2.5	3.1	1.5	0.8	3.6	0.8	2.1
17	1.7	1.8	1.7	1.5	1.5	1.4	0.1	1.1	1.5	1.6	1.3	3.0	1.3	3.0	4.0	4.2	4.4	3.5	4.3	4.7	5.1	4.3	1.5	2.9	5.1	0.1	2.6
18	1.8	1.8	2.2	2.7	1.3	1.1	1.2	0.2	0.6	1.1	2.6	1.7	3.4	4.7	5.5	4.3	4.0	3.8	3.7	3.6	3.3	2.6	2.3	3.7	5.5	0.2	2.6
19	3.5	3.6	3.5	2.7	3.0	3.1	2.8	1.8	2.0	1.1	2.7	3.2	3.8	4.4	3.3	5.0	3.7	3.0	3.3	3.6	3.7	2.8	1.4	1.8	5.0	1.1	3.0
20	3.0	1.3	1.2	0.9	1.2	0.6	2.2	0.8	1.2	2.7	3.4	4.7	5.0	5.2	6.0	7.5	7.4	7.2	6.2	6.6	6.0	5.7	4.8	5.9	7.5	0.6	4.0
21	3.8	2.8	1.7	1.0	0.7	1.9	1.8	0.8	0.7	0.9	1.1	1.0	1.4	2.0	1.9	1.8	1.6	3.0	3.9	4.4	3.3	3.5	2.7	1.7	4.4	0.7	2.1
22	1.2	2.4	2.0	2.1	2.3	1.7	1.4	1.5	3.0	3.4	3.4	4.8	5.5	6.2	6.4	6.0	7.1	7.8	7.8	7.7	7.1	6.6	5.5	6.0	7.8	1.2	4.5
23	5.7	3.5	2.5	3.5	2.7	1.2	3.3	3.5	6.4	6.9	7.3	7.4	7.2	6.4	6.7	6.9	5.8	4.7	5.4	6.7	6.4	5.2	3.2	1.7	7.4	1.2	5.0
24	1.2	0.7	0.8	1.5	1.4	0.8	3.3	4.9	6.6	8.2	9.3	10.2	10.1	10.6	9.4	10.0	9.4	8.9	9.0	8.8	10.0	10.4	9.7	9.5	10.6	0.7	6.9
25	8.7	8.9	8.4	10.0	10.2	10.9	11.7	11.7	11.6	12.2	12.3	12.7	13.9	13.8	12.7	14.7	14.8	12.1	10.4	10.0	8.0	6.6	4.2	3.4	14.8	3.4	10.6
26	4.3	1.1	1.2	0.7	2.5	1.6	0.8	2.7	3.9	3.9	6.3	6.1	5.9	4.7	3.5	1.9	4.0	4.4	2.8	2.4	1.8	2.3	1.0	1.1	6.3	0.7	3.0
27	0.8	1.3	1.3	1.1	1.8	2.0	1.1	0.9	3.0	4.1	5.0	5.4	5.1	6.0	6.3	5.9	5.9	6.6	5.5	4.8	4.6	3.9	1.2	1.7	6.6	0.8	3.6
28	0.6	1.9	2.4	0.8	1.0	1.2	0.7	0.7	0.7	1.4	4.3	5.6	4.1	4.8	4.2	4.6	4.1	2.1	3.7	2.9	4.1	5.9	4.5	2.4	5.9	0.6	2.9
29	3.1	3.7	3.6	3.3	4.9	2.5	1.4	2.1	1.1	2.5	4.2	3.6	4.2	5.4	5.7	5.9	5.6	7.0	6.7	6.5	6.4	5.2	5.1	4.7	7.0	1.1	4.3
30	3.9	2.2	2.4	2.1	1.9	2.0	1.3	0.5	1.9	1.4	1.2	1.2	1.1	1.6	1.9	1.3	1.2	2.3	1.4	2.1	1.6	1.0	1.4	1.7	3.9	0.5	1.7
Max.	**8.7**	**8.9**	**8.4**	**10.0**	**10.2**	**10.9**	**11.7**	**11.7**	**11.6**	**12.2**	**12.3**	**12.7**	**13.9**	**13.8**	**13.5**	**14.7**	**14.8**	**13.1**	**11.8**	**10.0**	**10.0**	**10.4**	**9.7**	**9.5**	**14.8**		
Min.	**0.6**	**0.6**	**0.8**	**0.6**	**0.7**	**0.6**	**0.1**	**0.2**	**0.6**	**0.7**	**0.7**	**1.0**	**1.1**	**1.2**	**1.3**	**1.3**	**1.2**	**1.3**	**1.4**	**2.1**	**1.6**	**1.0**	**1.0**	**0.6**		**0.1**	
Avg.	**2.7**	**2.5**	**2.5**	**2.7**	**2.7**	**2.6**	**2.7**	**2.8**	**3.4**	**3.7**	**4.2**	**4.4**	**4.5**	**5.0**	**5.1**	**5.3**	**5.3**	**5.4**	**5.3**	**5.0**	**4.7**	**4.3**	**3.4**	**2.7**			**3.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

July 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.3	2.1	1.1	1.2	0.9	1.0	2.1	2.3	1.0	1.8	3.7	5.1	6.5	7.7	8.9	10.1	10.2	9.4	8.4	8.9	7.8	7.4	9.8	9.2	10.2	0.9	5.4
2	8.2	6.8	5.9	7.5	7.3	6.9	7.1	8.1	9.2	7.2	8.5	8.0	9.5	10.1	10.1	10.6	9.1	8.8	7.7	7.9	6.4	5.8	4.8	3.8	10.6	3.8	7.7
3	8.7	6.6	8.1	8.7	5.9	6.2	8.3	8.2	7.8	7.0	2.9	2.9	6.3	6.9	6.0	7.0	5.6	4.4	4.4	1.6	2.2	1.7	2.1	2.2	8.7	1.6	5.5
4	2.3	1.5	1.3	0.9	1.2	1.2	1.3	1.6	0.4	0.4	0.8	1.0	1.7	2.7	3.5	3.9	2.6	3.2	3.2	2.8	3.4	2.0	1.4	1.3	3.9	0.4	1.9
5	0.9	1.4	2.2	1.7	2.4	2.2	2.0	1.4	1.0	0.4	0.9	1.4	1.4	1.2	4.1	5.6	2.7	1.9	2.9	2.2	2.0	2.0	1.7	0.8	5.6	0.4	1.9
6	1.3	1.4	1.3	2.3	2.5	2.2	2.1	1.9	1.3	0.8	2.5	3.5	5.4	6.4	4.4	4.0	4.3	3.9	6.0	6.2	5.4	4.0	3.7	3.5	6.4	0.8	3.3
7	3.4	3.7	4.2	3.6	2.9	1.9	2.5	4.1	5.6	5.4	7.0	7.0	6.4	6.0	5.5	6.0	5.9	5.0	4.5	4.4	3.9	2.7	1.6	1.2	7.0	1.2	4.4
8	1.7	1.6	0.3	1.2	1.5	1.0	0.6	1.2	1.2	1.7	0.9	1.5	0.9	2.5	2.7	2.5	2.3	1.2	2.2	1.9	2.7	2.7	2.8	3.0	3.0	0.3	1.7
9	2.3	2.5	2.3	3.5	3.3	2.7	1.3	0.6	2.5	6.0	7.8	6.6	6.8	6.3	6.6	7.2	7.8	7.5	8.8	9.1	8.9	7.0	4.0	5.2	9.1	0.6	5.3
10	4.0	4.1	6.8	6.4	4.7	4.8	5.4	5.1	5.4	7.2	7.9	7.2	6.4	5.3	4.4	4.4	5.9	6.5	5.6	5.3	5.8	5.4	5.3	5.2	7.9	4.0	5.6
11	2.9	2.4	2.1	1.6	2.2	2.3	2.6	2.1	2.5	3.9	4.2	3.9	3.6	4.0	4.5	5.8	6.5	6.2	5.9	6.1	6.1	5.3	5.0	4.7	6.5	1.6	4.0
12	3.6	2.4	1.3	0.6	1.4	0.7	0.8	3.3	7.3	8.3	9.5	10.1	10.5	11.2	11.6	10.5	9.9	10.1	8.1	7.3	6.5	6.0	6.7	6.9	11.6	0.6	6.4
13	7.6	6.4	6.4	5.5	5.4	6.1	5.8	5.1	4.1	4.9	5.5	6.0	6.1	4.6	3.6	4.2	3.8	2.5	2.6	3.0	3.3	2.3	0.9	1.3	7.6	0.9	4.5
14	1.4	0.8	0.1	0.6	0.8	0.4	0.2	0.3	0.6	2.4	2.5	2.7	3.0	2.8	3.1	4.3	4.3	3.3	3.4	3.9	3.9	3.2	4.2	5.0	5.0	0.1	2.4
15	4.9	5.5	5.8	4.6	1.8	1.7	1.8	0.3	2.3	3.8	5.6	6.7	6.8	6.7	6.2	6.8	7.5	7.8	8.1	7.7	7.9	7.1	6.5	7.2	8.1	0.3	5.5
16	6.2	7.5	7.7	7.3	8.1	8.3	8.3	9.4	9.8	10.3	10.2	9.1	10.6	11.1	11.3	11.1	10.8	10.2	9.7	8.2	7.6	7.1	6.8	4.7	11.3	4.7	8.8
17	4.9	4.8	4.6	6.2	5.8	3.7	2.4	2.7	3.0	2.7	5.1	4.5	4.8	4.9	4.1	4.6	4.6	4.2	5.7	5.0	4.7	4.6	4.3	4.1	6.2	2.4	4.4
18	2.4	2.8	3.6	3.5	3.1	3.3	2.7	2.8	1.3	0.6	2.2	1.9	2.9	1.5	1.5	3.9	2.0	1.2	2.3	2.7	3.4	2.8	3.4	2.6	3.9	0.6	2.5
19	2.2	3.4	3.7	4.1	3.8	4.3	4.7	4.2	4.3	5.5	5.3	5.2	4.9	5.2	5.4	6.9	6.3	6.1	7.2	5.5	3.5	2.7	2.6	2.4	7.2	2.2	4.6
20	2.3	2.9	2.3	1.8	1.7	1.3	2.0	1.8	4.6	4.6	3.8	4.2	2.5	4.3	5.3	4.5	4.6	4.6	2.9	2.3	1.7	2.3	2.3	3.0	5.3	1.3	3.1
21	3.3	6.8	4.8	4.2	4.2	3.3	3.5	3.3	3.2	2.8	3.4	2.8	2.4	2.1	1.4	1.6	1.4	1.2	3.4	3.9	2.2	3.1	5.9	5.8	6.8	1.2	3.3
22	4.4	2.5	3.0	2.4	1.1	2.0	1.0	1.0	2.2	2.5	2.2	3.3	3.7	2.6	1.3	1.1	2.4	2.2	1.5	1.3	1.0	1.7	1.1	0.8	4.4	0.8	2.0
23	1.0	2.0	1.6	1.7	0.8	0.6	0.7	0.4	0.7	2.6	5.0	4.9	4.7	4.7	4.6	3.9	3.8	3.9	3.7	3.0	3.6	3.6	2.2	2.1	5.0	0.4	2.7
24	2.6	1.7	1.6	2.2	3.0	4.0	3.6	4.0	4.2	5.2	5.4	5.0	6.4	6.3	7.5	7.1	6.0	6.0	4.7	5.1	4.5	4.1	3.7	5.2	7.5	1.6	4.5
25	5.4	5.5	5.0	5.3	3.5	7.1	5.0	5.2	5.2	8.2	7.7	7.6	7.6	6.2	6.4	6.5	6.1	5.1	5.8	6.2	4.5	3.0	3.2	3.4	8.2	3.0	5.6
26	4.8	6.8	8.1	7.0	6.2	5.0	3.2	4.7	4.0	2.8	1.7	1.4	5.2	2.7	0.7	1.4	1.5	3.3	3.3	3.0	3.1	1.7	1.4	2.6	8.1	0.7	3.6
27	2.3	1.1	0.8	1.1	1.7	1.8	2.0	1.9	3.6	3.1	3.3	2.3	1.6	1.9	2.5	2.6	3.6	4.1	4.1	4.1	3.8	2.1	1.2	1.6	4.1	0.8	2.4
28	1.7	2.6	2.9	4.1	3.2	2.7	3.2	3.7	5.0	6.0	5.3	5.4	6.3	7.8	7.3	5.7	5.0	6.8	6.5	5.3	4.2	3.0	3.2	3.5	7.8	1.7	4.6
29	4.4	5.4	5.9	6.2	6.1	7.4	5.7	3.1	3.2	5.9	6.3	8.7	8.1	6.9	6.9	7.2	7.6	7.2	6.1	7.0	5.7	4.5	5.7	5.1	8.7	3.1	6.1
30	6.4	5.6	6.4	5.4	5.0	4.5	4.9	4.8	3.5	5.1	5.5	5.7	6.5	6.0	6.3	7.2	7.2	7.1	6.8	6.3	4.5	3.6	3.3	4.7	7.2	3.3	5.5
31	6.5	5.2	5.9	8.3	7.7	7.3	7.2	6.7	5.7	5.3	4.5	4.1	4.6	4.9	4.6	5.3	6.0	5.9	6.0	6.0	4.8	2.3	2.3	1.8	8.3	1.8	5.4
Max.	**8.7**	**7.5**	**8.1**	**8.7**	**8.1**	**8.3**	**8.3**	**9.4**	**9.8**	**10.3**	**10.2**	**10.1**	**10.6**	**11.2**	**11.6**	**11.1**	**10.8**	**10.2**	**9.7**	**9.1**	**8.9**	**7.4**	**9.8**	**9.2**	**11.6**		
Min.	**0.9**	**0.8**	**0.1**	**0.6**	**0.8**	**0.4**	**0.2**	**0.3**	**0.4**	**0.4**	**0.8**	**1.0**	**0.9**	**1.2**	**0.7**	**1.1**	**1.4**	**1.2**	**1.5**	**1.3**	**1.0**	**1.7**	**0.9**	**0.8**		**0.1**	
Avg.	**3.8**	**3.7**	**3.8**	**3.9**	**3.5**	**3.5**	**3.4**	**3.4**	**3.7**	**4.3**	**4.7**	**4.8**	**5.3**	**5.3**	**5.2**	**5.6**	**5.4**	**5.2**	**5.2**	**4.9**	**4.5**	**3.8**	**3.7**	**3.7**			**4.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.4	2.6	4.7	4.5	4.2	2.3	1.5	1.2	0.5	1.6	2.0	1.8	1.6	2.1	3.0	3.2	4.1	3.2	4.0	5.0	4.7	1.4	1.0	0.7	5.0	0.5	2.6
2	0.8	1.0	1.5	1.7	1.8	2.8	2.2	1.9	2.2	3.7	3.5	3.9	4.9	4.8	4.8	4.7	5.0	4.6	4.6	2.6	1.7	1.6	1.2	2.4	5.0	0.8	2.9
3	2.7	3.2	3.4	3.8	5.5	4.2	4.1	3.9	6.6	5.9	3.1	1.8	5.1	5.3	5.0	4.6	4.8	5.8	5.9	5.5	6.0	5.3	5.2	3.2	6.6	1.8	4.6
4	2.6	2.9	2.6	2.4	0.6	1.2	0.7	1.3	3.1	3.6	4.1	4.3	5.2	4.7	4.4	4.5	4.6	4.6	4.7	5.5	5.2	3.3	1.9	1.2	5.5	0.6	3.3
5	1.5	1.2	1.2	1.7	1.8	1.9	1.5	0.8	1.7	3.8	4.1	3.8	4.3	5.8	5.1	4.9	4.8	5.5	5.5	5.9	5.3	4.8	5.0	5.5	5.9	0.8	3.7
6	5.0	4.3	3.9	4.3	4.9	2.8	3.5	6.2	5.5	6.2	5.6	5.0	5.8	6.3	6.4	6.6	6.9	6.9	6.6	6.9	6.1	3.6	3.6	3.9	6.9	2.8	5.3
7	4.1	3.5	3.8	3.9	2.5	2.3	5.1	4.6	4.4	5.4	6.0	6.1	6.3	6.4	6.3	5.9	6.4	5.7	5.6	6.2	6.1	4.7	3.4	3.9	6.4	2.3	4.9
8	5.4	5.5	5.1	5.1	4.9	4.7	5.4	5.8	5.9	5.6	6.0	5.8	5.6	5.7	4.6	3.6	3.9	3.9	3.8	4.0	4.4	4.7	4.6	4.7	6.0	3.6	5.0
9	4.5	5.2	5.2	4.1	4.9	5.7	6.3	5.7	6.2	4.8	6.0	6.7	7.2	7.0	6.4	6.1	6.4	6.3	5.8	5.9	4.6	3.5	3.5	4.6	7.2	3.5	5.5
10	3.5	3.0	3.1	2.7	0.8	2.1	1.9	2.1	1.0	0.9	1.8	2.4	2.3	2.4	3.8	3.8	3.0	2.5	3.4	4.6	3.8	3.6	1.1	1.1	4.6	0.8	2.5
11	0.9	1.9	1.1	1.0	1.3	0.6	0.8	1.3	2.0	2.9	3.6	4.7	4.3	4.7	5.7	6.4	6.8	5.4	4.5	3.3	2.3	1.0	2.3	3.2	6.8	0.6	3.0
12	3.4	3.2	3.2	3.5	4.2	3.6	3.4	2.7	2.4	2.3	3.1	2.9	2.3	2.2	2.8	3.2	3.2	4.8	4.7	1.9	1.5	0.8	1.6	1.9	4.8	0.8	2.9
13	3.4	3.3	3.5	2.7	2.9	1.2	0.9	0.5	0.7	0.6	1.6	3.2	3.1	2.8	1.9	1.4	3.0	5.6	4.3	3.5	2.5	1.3	0.8	1.7	5.6	0.5	2.3
14	1.6	1.9	2.1	1.1	1.2	1.6	1.6	0.7	0.5	1.0	2.2	3.8	3.4	3.1	3.6	4.2	4.4	5.2	4.9	3.8	2.6	2.1	1.5	2.3	5.2	0.5	2.5
15	3.5	3.0	1.6	2.1	2.8	2.5	2.1	2.7	2.9	2.4	1.4	0.8	1.3	1.8	1.7	2.1	2.4	2.5	2.7	2.1	1.3	1.3	1.2	1.1	3.5	0.8	2.1
16	0.7	1.1	0.9	1.4	1.2	1.6	2.6	2.1	2.5	3.6	3.1	3.2	3.1	3.7	4.6	5.1	5.5	5.7	5.4	5.4	4.7	3.7	1.7	0.3	5.7	0.3	3.0
17	0.4	1.3	1.1	0.7	1.7	1.8	1.5	1.2	0.8	0.3	2.1	4.0	5.5	5.5	6.2	5.9	7.1	8.0	8.0	7.4	5.5	3.9	5.6	5.1	8.0	0.3	3.8
18	3.0	2.1	1.2	1.4	2.0	2.3	2.8	2.7	2.5	1.5	1.0	2.4	2.4	3.6	2.9	2.6	2.2	1.5	1.5	2.4	1.3	1.4	3.1	3.9	3.9	1.0	2.2
19	4.1	1.9	1.0	1.8	0.9	1.3	1.4	3.2	1.9	1.1	2.7	3.4	3.4	3.3	3.8	4.3	3.6	2.8	3.8	4.4	4.6	1.5	2.8	2.4	4.6	0.9	2.7
20	2.3	3.1	3.5	3.2	3.4	4.0	3.9	3.7	3.5	3.3	2.3	2.1	2.3	2.8	3.2	3.4	3.5	4.0	4.4	4.3	2.7	2.1	2.4	3.0	4.4	2.1	3.2
21	2.9	3.2	2.5	2.4	2.3	2.0	0.5	0.9	1.7	1.9	1.8	2.2	3.2	3.7	4.1	4.6	4.1	2.6	2.0	2.3	1.1	1.0	2.7	3.4	4.6	0.5	2.5
22	1.6	1.6	2.2	1.8	1.5	2.0	1.7	2.2	2.2	1.2	0.9	0.6	0.6	1.0	1.4	2.1	2.5	1.6	2.8	3.2	3.1	2.3	3.8	4.3	4.3	0.6	2.0
23	4.5	4.6	5.2	5.1	5.3	5.4	4.3	5.3	5.2	5.9	5.2	3.4	3.2	1.8	1.2	1.8	2.5	5.0	5.6	4.5	4.1	3.6	3.4	2.0	5.9	1.2	4.1
24	1.2	1.1	1.0	1.7	0.7	0.7	1.5	2.4	2.4	3.4	3.6	4.1	5.9	4.6	3.5	2.8	2.7	1.6	1.6	1.5	0.9	0.6	2.2	2.5	5.9	0.6	2.3
25	3.4	3.6	4.1	1.6	1.4	1.6	0.7	0.8	0.4	0.4	1.1	2.3	2.4	3.8	2.5	1.8	2.3	3.8	4.2	4.0	3.6	2.7	2.0	2.0	4.2	0.4	2.4
26	1.4	0.9	0.7	0.4	0.3	0.4	0.5	0.8	1.7	2.3	4.3	4.2	3.7	4.0	5.5	5.9	5.4	4.9	5.0	5.8	4.9	4.2	2.4	2.7	5.9	0.3	3.0
27	2.4	1.7	0.7	0.6	0.6	1.2	0.9	1.5	2.6	2.9	3.4	3.3	3.0	2.7	1.8	3.0	3.0	3.1	3.2	2.7	1.7	1.0	0.5	0.8	3.4	0.5	2.0
28	2.3	3.1	2.0	2.4	3.3	3.4	2.8	3.1	3.3	4.0	3.9	4.1	4.5	3.5	3.1	3.5	3.2	3.5	2.5	3.1	3.1	3.6	2.9	4.7	4.7	2.0	3.3
29	3.6	4.2	3.8	4.9	4.7	4.6	4.7	4.1	4.1	3.5	2.9	2.0	2.1	2.0	2.3	3.5	4.3	4.3	5.0	3.9	3.8	4.3	1.4	1.9	5.0	1.4	3.6
30	2.8	2.9	2.3	2.4	1.7	1.2	1.3	2.1	2.1	0.7	0.6	0.8	1.3	2.0	2.0	2.9	3.5	4.3	4.3	4.1	2.4	3.9	6.5	6.4	6.5	0.6	2.7
31	6.0	5.9	7.2	10.7	10.8	10.4	10.0	7.0	4.4	3.2	2.4	3.7	3.8	5.6	6.1	5.6	6.0	6.8	6.9	7.4	7.8	8.3	9.0	8.0	10.8	2.4	6.8
Max.	**6.0**	**5.9**	**7.2**	**10.7**	**10.8**	**10.4**	**10.0**	**7.0**	**6.6**	**6.2**	**6.0**	**6.7**	**7.2**	**7.0**	**6.4**	**6.6**	**7.1**	**8.0**	**8.0**	**7.4**	**7.8**	**8.3**	**9.0**	**8.0**	**10.8**		
Min.	**0.4**	**0.9**	**0.7**	**0.4**	**0.3**	**0.4**	**0.5**	**0.5**	**0.4**	**0.3**	**0.6**	**0.6**	**0.6**	**1.0**	**1.2**	**1.4**	**2.2**	**1.5**	**1.5**	**1.5**	**0.9**	**0.6**	**0.5**	**0.3**		**0.3**	
Avg.	**2.8**	**2.8**	**2.8**	**2.8**	**2.8**	**2.7**	**2.7**	**2.7**	**2.8**	**2.9**	**3.1**	**3.3**	**3.6**	**3.8**	**3.9**	**4.0**	**4.2**	**4.4**	**4.4**	**4.3**	**3.7**	**2.9**	**2.9**	**3.1**			**3.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	8.0	8.0	7.6	6.7	6.8	5.9	6.0	5.9	5.4	5.7	6.0	6.4	5.2	5.0	5.5	6.4	6.3	5.2	3.8	2.4	2.6	5.2	5.0	3.3	8.0	2.4	5.6
2	3.6	4.5	3.6	3.9	4.3	4.5	5.0	5.8	6.1	6.8	7.5	7.9	7.5	7.7	7.0	5.0	2.9	2.0	3.8	3.7	4.6	4.6	5.5	5.4	7.9	2.0	5.1
3	5.4	5.0	4.8	5.5	5.2	4.2	1.5	2.1	2.5	2.3	1.3	2.5	3.2	4.3	3.5	3.7	3.5	3.4	3.3	3.5	3.7	3.1	2.2	2.7	5.5	1.3	3.4
4	2.7	1.4	1.8	1.7	1.6	2.0	1.5	1.4	0.9	1.3	1.7	2.6	2.9	3.5	2.9	2.5	2.1	2.0	2.5	2.1	1.3	1.7	2.2	2.5	3.5	0.9	2.0
5	2.1	2.9	3.1	1.8	2.9	2.5	3.0	2.9	2.6	0.9	1.3	1.6	1.0	2.0	2.7	3.3	2.3	1.2	1.9	1.7	0.9	1.6	2.1	1.3	3.3	0.9	2.1
6	1.5	1.9	1.1	0.4	1.5	0.7	1.5	3.1	3.7	4.4	3.8	5.9	7.3	7.2	6.0	6.3	5.8	4.9	2.9	3.8	4.3	4.6	4.5	3.9	7.3	0.4	3.8
7	4.5	6.5	5.8	5.6	3.2	3.6	4.2	2.1	3.7	3.5	3.6	4.9	4.0	4.2	2.6	3.0	4.2	3.9	3.9	3.0	2.4	2.4	3.2	3.8	6.5	2.1	3.8
8	5.5	3.6	2.5	3.1	3.5	3.7	2.5	2.0	0.9	3.0	2.6	3.5	4.0	5.8	9.7	8.0	8.3	8.5	7.1	4.2	3.7	4.2	3.8	4.0	9.7	0.9	4.5
9	2.4	3.6	3.2	3.2	3.3	3.0	2.6	1.1	0.9	0.9	3.0	3.1	3.1	3.3	4.7	6.3	6.2	5.3	6.5	4.0	4.3	4.6	4.1	1.8	6.5	0.9	3.5
10	1.0	2.1	2.2	1.0	0.8	1.0	1.3	0.5	0.6	1.5	0.4	0.8	2.2	2.3	3.7	4.2	4.3	4.0	4.1	3.7	2.8	1.1	2.8	2.7	4.3	0.4	2.1
11	4.3	5.6	4.4	2.4	4.2	2.7	1.7	1.0	1.6	1.6	2.1	3.3	3.6	3.4	3.1	3.0	3.3	3.9	3.9	3.6	3.8	3.2	4.2	4.9	5.6	1.0	3.3
12	7.1	3.9	5.9	9.3	9.2	10.1	10.5	10.1	8.4	7.8	8.4	9.6	9.8	8.7	9.7	4.6	7.9	6.1	5.2	4.9	5.0	5.5	5.9	5.7	10.5	3.9	7.5
13	5.5	6.4	6.7	10.2	9.9	10.6	10.9	10.9	11.9	12.2	12.3	11.1	10.3	10.4	11.0	11.6	9.6	9.1	8.5	8.6	6.4	3.4	3.9	3.7	12.3	3.4	9.0
14	3.9	1.8	3.9	1.3	0.5	0.7	1.3	0.6	3.2	5.8	3.8	2.7	3.1	3.5	4.3	4.0	4.5	4.9	4.0	3.3	3.2	3.7	4.9	2.1	5.8	0.5	3.1
15	0.7	1.1	1.4	2.0	1.2	1.4	0.9	0.4	0.9	2.4	4.8	6.1	7.2	6.4	7.1	7.1	7.0	6.9	7.3	5.3	4.5	3.7	2.5	2.0	7.3	0.4	3.8
16	2.0	1.2	3.2	2.3	3.9	4.1	4.3	4.0	3.9	4.6	3.7	4.1	4.3	5.3	5.9	5.8	5.4	6.1	4.3	3.1	2.1	1.7	1.3	1.1	6.1	1.1	3.6
17	1.8	1.1	2.1	2.3	1.3	2.6	4.4	2.9	1.7	1.2	0.4	1.8	2.4	3.9	3.9	4.1	3.9	5.5	4.7	3.3	1.3	1.1	0.6	1.6	5.5	0.4	2.5
18	3.9	6.7	7.7	7.3	7.4	6.5	5.8	6.6	6.8	5.7	5.8	6.4	4.6	3.7	5.4	5.0	5.6	5.2	2.7	1.2	1.2	1.2	1.3	0.5	7.7	0.5	4.8
19	0.4	1.0	0.9	0.9	1.0	2.1	4.1	4.1	4.5	4.6	3.3	3.1	3.3	3.9	4.0	5.5	6.5	5.3	6.0	5.4	4.9	4.2	3.0	2.6	6.5	0.4	3.5
20	2.1	2.2	1.8	2.3	2.1	2.6	3.5	3.1	1.9	2.0	2.6	3.2	4.1	4.1	4.5	4.2	3.8	4.0	3.7	3.1	1.4	2.6	2.9	2.6	4.5	1.4	2.9
21	3.1	3.5	4.0	3.7	4.0	3.5	3.3	3.1	4.0	3.7	3.4	3.0	3.3	3.5	3.6	4.3	5.4	4.9	5.4	4.4	4.2	4.1	5.3	5.1	5.4	3.0	4.0
22	5.0	4.5	4.3	4.8	4.9	4.7	3.9	3.9	3.0	2.9	2.4	1.0	0.8	1.6	3.1	2.5	2.9	3.2	3.0	3.5	3.4	5.1	5.3	5.9	5.9	0.8	3.6
23	5.1	5.6	4.2	4.7	2.8	4.5	4.9	4.7	3.8	3.6	3.9	2.1			0.0	5.0	5.4	3.8	4.2	4.4	4.8	4.7	3.2	1.2	5.6	0.0	3.9
24	2.5	2.3	2.8	3.1	2.4	2.0	2.2	2.0	1.1	1.2	1.6	1.0	1.2	2.3	3.2	3.2	3.3	3.1	2.2	2.4	1.6	1.4	1.2	1.5	3.3	1.0	2.1
25	1.2	1.7	1.3	2.3	3.1	2.3	1.1	0.8	1.6	1.0	2.2	1.5	0.9	2.2	1.8	1.5	1.9	1.9	1.8	1.3	1.6	1.2	0.3	1.4	3.1	0.3	1.6
26	2.1	2.8	2.9	2.5	1.8	1.6	1.9	1.5	2.2	2.4	1.5	1.3	2.2	1.7	2.4	2.6	0.9	0.7	2.1	1.6	2.5	4.4	4.7	5.0	5.0	0.7	2.3
27	5.8	5.9	6.0	6.5	6.4	6.0	5.3	6.2	7.8	6.3	7.6	7.7	7.0	5.0	4.9	4.6	7.9	8.0	7.6	4.7	4.4	4.2	5.2	4.4	8.0	4.2	6.1
28	3.8	3.5	4.5	3.8	4.5	5.0	5.4	5.7	4.3	3.9	3.5	2.5	1.5	1.7	1.1	1.0	2.6	2.7	2.2	1.7	0.6	0.4	2.1	3.5	5.7	0.4	3.0
29	3.8	3.2	1.5	1.2	0.6	0.7	0.5	0.5	0.7	2.9	3.7	4.2	4.0	4.9	4.1	3.5	2.0	3.4	3.0	1.5	0.7	0.8	0.6	1.5	4.9	0.5	2.2
30	2.8	2.8	2.6	3.3	3.1	4.7	3.5	3.5	4.0	4.0	3.8	4.8	5.8	4.7	3.8	3.6	3.7	3.0	2.1	2.4	2.1	2.1	2.8	2.4	5.8	2.1	3.4
Max.	**8.0**	**8.0**	**7.7**	**10.2**	**9.9**	**10.6**	**10.9**	**10.9**	**11.9**	**12.2**	**12.3**	**11.1**	**10.3**	**10.4**	**11.0**	**11.6**	**9.6**	**9.1**	**8.5**	**8.6**	**6.4**	**5.5**	**5.9**	**5.9**	**12.3**		
Min.	**0.4**	**1.0**	**0.9**	**0.4**	**0.5**	**0.7**	**0.5**	**0.4**	**0.6**	**0.9**	**0.4**	**0.8**	**0.8**	**1.6**	**0.0**	**1.0**	**0.9**	**0.7**	**1.8**	**1.2**	**0.6**	**0.4**	**0.3**	**0.5**		**0.0**	
Avg.	**3.4**	**3.5**	**3.6**	**3.6**	**3.6**	**3.6**	**3.6**	**3.4**	**3.5**	**3.7**	**3.7**	**4.0**	**4.1**	**4.4**	**4.5**	**4.5**	**4.6**	**4.4**	**4.1**	**3.4**	**3.0**	**3.1**	**3.2**	**3.0**			**3.7**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.1	2.2	1.9	1.6	0.6	0.3	1.9	1.0	1.5	1.6	2.5	1.9	2.7	3.5	6.3	5.3	5.0	4.6	3.1	3.7	3.9	3.6	1.4	3.8	6.3	0.3	2.8
2	3.8	0.9	1.7	2.1	1.2	1.2	1.1	0.6	0.8	1.4	1.5	1.6	0.6	0.6	1.7	1.2	2.4	0.9	0.8	1.8	3.6	6.7	5.5	4.8	6.7	0.6	2.0
3	3.5	2.7	2.0	1.6	1.8	2.1	1.7	3.3	4.9	4.3	4.0	5.3	5.5	5.3	6.1	5.8	6.1	6.3	4.8	2.6	5.4	3.8	2.7	3.7	6.3	1.6	4.0
4	2.0	4.5	3.3	3.9	2.6	1.7	2.0	2.6	2.9	2.7	3.0	2.4	1.6	1.6	1.4	2.3	1.8	1.6	1.0	2.2	1.5	1.2	1.0	0.0	4.5	0.0	2.1
5	0.8	2.5	1.1	0.3	1.1	2.6	1.2	0.6	0.7	0.9	1.9	1.7	2.1	2.3	2.4	2.8	2.8	2.3	2.0	0.7	3.0	3.3	3.9	3.1	3.9	0.3	1.9
6	3.4	3.5	4.0	4.4	3.9	3.9	2.8	2.5	3.3	3.5	3.4	3.7	2.7	3.6	4.7	3.8	3.9	3.4	3.8	4.6	4.4	3.6	3.7	4.2	4.7	2.5	3.7
7	4.4	3.4	3.3	4.1	4.3	3.9	5.6	6.1	6.9	5.8	6.8	8.7	8.0	7.9	6.7	7.7	6.8	6.4	6.5	5.1	4.8	4.9	5.7	5.3	8.7	3.3	5.8
8	6.4	5.7	4.3	5.3	4.5	2.7	1.9	3.8	4.3	4.8	3.4	3.6	4.1	3.8	4.4	3.9	4.8	3.8	2.5	1.9	1.8	1.4	1.2	3.9	6.4	1.2	3.7
9	4.3	6.0	5.9	7.4	9.0	11.3	11.4	12.5	12.0	11.2	10.5	9.8	7.7	11.5	12.9	13.2	12.4	13.2	12.6	8.1	6.4	6.0	7.6	7.8	13.2	4.3	9.6
10	5.1	4.3	3.9	3.0	3.7	3.5	4.8	2.1	1.1	1.4	1.7	1.7	2.5	1.9	2.7	3.8	5.8	5.8	3.4	1.4	1.1	1.9	3.0	2.2	5.8	1.1	3.0
11	3.3	4.4	3.1	5.8	6.3	5.7	5.3	5.1	3.9	5.0	7.2	9.0	10.8	11.2	12.3	12.5	13.5	13.6	10.7	11.4	10.7	10.0	10.2	10.5	13.6	3.1	8.4
12	8.7	8.3	9.2	9.3	9.5	8.9	9.8	9.4	8.4	8.8	9.0	8.9	9.9	10.9	11.3	12.4	12.3	12.6	9.4	8.1	6.2	4.4	4.2	5.1	12.6	4.2	8.9
13	6.2	5.8	6.0	5.2	4.4	2.2	3.0	2.8	1.9	1.5	1.3	3.0	5.4	5.3	4.7	2.3	3.9	5.4	5.3	5.5	5.1	4.8	5.0	4.9	6.2	1.3	4.2
14	5.7	7.1	7.1	7.2	5.9	7.0	9.1	6.4	2.9	5.6	5.6	5.8	4.2	3.4	3.3	3.1	4.1	3.4	2.4	2.6	1.8	0.3	2.0	3.0	9.1	0.3	4.5
15	2.1	6.7	7.7	8.7	9.8	7.2	8.3	9.1	8.4	6.4	7.1	7.4	7.6	7.5	8.1	7.4	6.5	6.4	6.5	8.5	8.4	7.9	6.9	8.1	9.8	2.1	7.4
16	7.2	6.2	6.1	6.4	6.8	6.6	6.8	6.6	7.4	8.0	7.7	7.4	6.9	7.1	7.0	6.1	6.3	6.0	5.2	5.3	5.3	4.7	3.5	3.2	8.0	3.2	6.2
17	2.7	2.8	3.0	2.5	1.8	1.8	1.3	1.2	1.2	0.8	0.6	0.4	0.4	0.1	0.5	0.4	0.7	0.8	0.7	1.5	1.4	0.3	1.2	5.1	5.1	0.1	1.4
18	4.8	4.6	4.5	4.5	4.5	4.2	4.2	5.7	6.0	5.5	4.8	3.9	3.9	5.0	4.3	5.0	5.3	4.9	4.6	5.2	6.4	3.7	3.0	5.2	6.4	3.0	4.7
19	6.0	4.8	5.7	6.8	6.2	8.5	9.1	8.3	8.8	9.0	9.1	8.7	8.6	8.7	8.2	6.4	6.5	5.5	5.3	4.9	5.5	5.5	3.9	3.0	9.1	3.0	6.8
20	2.6	2.9	2.6	2.9	2.6	1.6	1.3	2.1	3.1	3.1	2.8	3.7	3.5	4.0	4.5	4.4	4.4	4.1	2.9	3.3	4.0	3.5	2.7	3.5	4.5	1.3	3.2
21	4.0	3.7	2.6	1.8	0.6	1.1	1.6	1.8	0.9	1.5	1.5	1.2	4.1	3.7	5.4	6.8	7.0	5.8	5.8	6.4	7.3	5.0	4.6	4.8	7.3	0.6	3.7
22	3.3	5.2	6.7	8.9	8.4	9.6	10.7	11.0	11.2	10.1	11.3	9.5	6.1	4.8	6.6	6.3	6.0	7.3	8.3	8.2	7.4	2.7	3.9	4.5	11.3	2.7	7.4
23	5.7	8.6	8.9	8.5	9.9	7.9	10.1	9.7	9.5	11.9	12.7	8.6	8.0	8.3	6.8	7.4	8.5	7.1	5.7	4.9	5.0	5.0	3.8	2.7	12.7	2.7	7.7
24	5.9	7.9	8.4	8.8	8.7	10.0	10.7	9.9	8.8	7.6	5.5	5.2	6.7	6.4	4.2	2.1	1.6	2.2	1.4	1.2	1.3	1.8	1.3	2.1	10.7	1.2	5.4
25	1.0	2.5	4.6	4.1	3.6	3.8	5.2	5.1	5.3	4.5	4.1	4.0	3.6	3.5	3.9	2.9	2.3	2.9	0.7	1.4	2.9	3.7	3.7	4.8	5.3	0.7	3.5
26	5.1	5.7	6.3	6.0	6.7	6.3	7.2	6.9	8.2	8.3	9.2	8.6	9.4	10.1	11.5	10.4	9.9	10.4	7.7	5.5	4.9	5.4	9.4	8.4	11.5	4.9	7.8
27	8.3	5.3	5.3	8.2	10.4	12.3	11.4	8.3	10.9	12.8	10.4	11.8	12.7	9.2	11.8	9.4	7.9	7.2	7.6	5.5	6.1	4.6	4.1	3.2	12.8	3.2	8.5
28	2.8	1.6	1.2	1.6	2.2	2.0	1.8	1.6	0.9	0.7	0.8	1.2	0.9	0.6	1.3	0.7	0.6	0.9	1.9	3.2	2.0	1.5	2.5	2.7	3.2	0.6	1.6
29	2.8	3.1	2.7	2.9	2.4	2.8	2.0	1.2	1.0	1.2	1.1	1.2	0.6	0.8	0.6	0.6	2.4	2.5	3.0	3.9	3.5	3.8	4.2	2.8	4.2	0.6	2.2
30	3.5	3.1	3.4	1.7	0.7	0.8	0.9	1.2	0.9	1.5	1.0	1.4	1.1	1.8	1.1	0.5	1.3	1.3	2.2	1.7	2.4	2.5	2.4	2.4	3.5	0.5	1.7
31	1.3	2.1	1.8	1.5	1.8	1.7	1.6	1.5	1.7	1.5	1.7	1.5	1.7	0.8	0.7	3.2	1.8	1.9	2.7	2.7	3.1	2.7	3.0	2.8	3.2	0.7	2.0
Max.	**8.7**	**8.6**	**9.2**	**9.3**	**10.4**	**12.3**	**11.4**	**12.5**	**12.0**	**12.8**	**12.7**	**11.8**	**12.7**	**11.5**	**12.9**	**13.2**	**13.5**	**13.6**	**12.6**	**11.4**	**10.7**	**10.0**	**10.2**	**10.5**	**13.6**		
Min.	**0.8**	**0.9**	**1.1**	**0.3**	**0.6**	**0.3**	**0.9**	**0.6**	**0.7**	**0.7**	**0.6**	**0.4**	**0.4**	**0.1**	**0.5**	**0.4**	**0.6**	**0.8**	**0.7**	**0.7**	**1.1**	**0.3**	**1.0**	**0.0**		**0.0**	
Avg.	**4.2**	**4.5**	**4.5**	**4.7**	**4.7**	**4.7**	**5.0**	**4.8**	**4.8**	**4.9**	**4.9**	**4.9**	**5.0**	**5.0**	**5.4**	**5.2**	**5.3**	**5.2**	**4.5**	**4.3**	**4.4**	**3.9**	**3.9**	**4.2**			**4.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	2.0	2.3	1.2	1.6	2.7	2.8	2.6	1.4	1.4	2.5	4.4	4.6	6.1	4.7	5.0	4.6	4.5	7.5	3.7	6.3	7.5	7.6	8.5	8.3	8.5	1.2	4.3
2	6.8	6.7	7.0	5.9	5.2	5.5	5.8	5.4	6.6	8.2	10.0	9.1	8.1	9.0	8.1	7.9	6.0	5.7	4.7	4.6	4.6	3.5	4.0	4.1	10.0	3.5	6.4
3	6.1	8.1	7.9	5.5	6.2	4.6	5.5	5.3	5.3	7.0	6.7	5.1	5.6	5.3	6.1	6.0	5.8	5.3	5.8	8.0	7.5	8.3	9.0	8.2	9.0	4.6	6.4
4	7.4	5.5	4.7	6.1	6.7	5.3	6.2	7.0	8.9	9.1	7.1	6.1	7.0	6.4	5.5	5.7	5.9	5.8	6.2	6.1	5.0	5.0	5.2	4.8	9.1	4.7	6.2
5	4.2	5.1	6.0	5.6	4.6	5.5	6.2	6.6	5.0	4.3	3.8	4.9	3.7	5.1	5.3	5.9	6.1	5.6	6.9	5.9	5.8	5.3	5.7	6.2	6.9	3.7	5.4
6	5.3	5.0	4.9	4.7	5.1	5.6	5.5	3.4	1.1	1.5	1.0	1.6	2.3	4.0	5.1	6.1	7.7	8.0	7.0	7.8	9.8	10.1	9.0	9.3	10.1	1.0	5.5
7	8.9	9.3	9.3	8.5	8.5	7.5	7.6	6.7	5.8	6.1	6.2	5.8	4.0	3.1	3.0	3.5	2.7	1.6	1.1	1.4	0.8	0.9	1.8	2.6	9.3	0.8	4.9
8	2.7	2.9	2.9	2.9	4.4	4.6	4.0	3.7	3.7	2.4	3.1	4.4	4.6	4.6	3.9	3.6	4.3	4.9	5.5	6.8	6.3	7.5	8.6	9.7	9.7	2.4	4.7
9	8.2	8.4	8.4	8.8	9.1	10.4	9.5	7.2	6.9	7.9	6.4	6.8	6.6	4.7	4.4	4.1	4.4	4.4	5.1	4.5	5.8	5.6	6.8	5.8	10.4	4.1	6.7
10	4.6	5.4	5.1	3.5	4.0	6.7	5.9	6.6	7.4	8.7	8.3	3.1	4.9	3.0	2.7	2.4	3.0	5.4	4.0	4.4	6.0	7.3	6.7	5.3	8.7	2.4	5.2
11	3.5	3.4	3.1	3.7	3.7	3.3	3.8	2.5	2.1	2.1	1.1	1.1	1.0	0.6	0.9	2.0	1.8	2.4	2.4	3.1	2.6	2.1	1.9	1.8	3.8	0.6	2.3
12	2.5	2.0	1.2	1.0	1.5	2.8	2.1	3.2	3.5	2.6	3.6	2.8	2.7	0.7	1.0	1.2	0.9	0.9	0.5	0.4	0.7	1.8	1.4	2.7	3.6	0.4	1.8
13	3.2	3.6	3.4	3.2	2.8	2.9	3.4	4.2	2.8	1.7	0.8	0.6	1.4	1.1	1.6	2.1	3.0	2.1	0.8	1.2	1.7	1.2	1.7	1.7	4.2	0.6	2.2
14	3.9	3.0	2.8	2.4	2.9	2.8	1.7	2.3	1.7	0.7	0.5	1.1	0.8	1.2	1.7	0.9	0.3	1.4	1.6	1.3	1.3	0.6	1.5	1.0	3.9	0.3	1.6
15	0.8	1.9	2.2	2.1	1.4	1.1	0.8	2.1	3.1	3.3	2.6	2.7	4.6	4.7	5.2	5.1	4.2	5.6	5.4	4.7	4.6	5.0	5.1	5.3	5.6	0.8	3.5
16	4.8	4.8	5.6	4.3	4.0	4.4	4.4	2.9	1.3	1.6	2.3	2.8	1.0	1.3	1.3	2.1	2.0	2.0	2.7	2.9	2.0	2.5	2.5	2.1	5.6	1.0	2.8
17	2.4	2.4	2.7	2.7	2.3	2.7	2.2	2.4	2.3	2.4	2.2	1.8	1.6	2.0	4.0	5.5	7.3	8.8	8.8	9.1	9.5	9.3	9.4	8.8	9.5	1.6	4.7
18	8.6	3.7	3.2	4.4	5.9	7.4	6.9	7.7	7.7	7.3	8.1	7.3	8.0	7.3	6.6	7.5	7.4	7.1	9.3	9.3	9.3	8.5	8.0	8.5	9.3	3.2	7.3
19	8.7	8.5	7.8	9.0	10.2	9.0	7.6	7.3	8.4	12.8	10.7	12.4	13.8	13.2	13.0	12.3	12.0	12.8	11.6	14.4	14.7	14.4	12.0	11.5	14.7	7.3	11.2
20	11.9	12.5	11.6	15.6	14.1	12.3	6.9	8.9	12.1	7.5	8.4	6.5	7.0	11.1	9.0	8.5	9.6	9.0	10.9	10.9	11.2	10.7	11.8	10.4	15.6	6.5	10.3
21	9.1	10.6	9.8	7.5	7.1	9.1	9.4	7.2	8.9	7.5	7.2	5.7	6.3	5.5	5.5	4.9	4.4	4.5	3.9	3.5	3.4	5.2	2.6	2.7	10.6	2.6	6.3
22	4.4	1.8	1.0	0.6	1.6	2.0	0.5	1.7	0.9	1.0	0.6	1.5	1.9	2.1	2.2	2.2	0.7	1.3	2.0	1.2	1.2	0.8	2.1	2.9	4.4	0.5	1.6
23	3.2	3.0	2.6	2.3	1.0	1.2	0.7	0.8	0.7	0.6	0.7	0.5	1.2	3.3	4.0	2.4	2.7	2.0	1.8	3.3	4.5	4.7	4.4	3.7	4.7	0.5	2.3
24	3.8	5.8	8.7	9.2	7.9	8.5	7.6	8.9	8.0	9.4	8.1	9.3	7.7	7.2	8.6	6.7	7.6	6.9	5.3	4.7	5.3	8.0	10.6	3.4	10.6	3.4	7.4
25	2.5	3.1	2.7	2.6	1.1	1.3	1.4	1.5	1.2	1.5	2.4	3.1	2.2	1.8	3.9	5.7	5.1	6.6	4.7	5.5	7.1	8.6	7.1	6.8	8.6	1.1	3.7
26	5.9	5.5	6.3	5.7	4.6	5.3	4.9	5.4	5.2	4.6	3.2	5.4	6.0	6.0	6.1	5.5	4.7	5.2	8.1	6.2	2.8	1.2	1.8	4.0	8.1	1.2	5.0
27	4.0	5.7	6.1	4.8	5.0	7.2	6.6	5.6	6.8	7.4	7.9	6.4	6.6	7.0	7.8	8.4	9.1	9.3	7.9	8.6	8.1	8.7	8.9	10.3	10.3	4.0	7.3
28	9.6	9.3	10.0	10.2	10.2	9.3	9.4	9.5	9.7	9.2	8.4	8.7	8.9	9.8	8.9	8.4	8.1	8.9	11.2	11.5	7.5	11.1	8.9	8.5	11.5	7.5	9.4
29	7.4	8.6	8.6	8.9	8.8	7.6	6.7	6.5	6.8	6.8	6.5	6.2	6.6	7.7	6.6	7.3	9.3	8.8	9.4	9.3	6.5	6.1	5.9	5.1	9.4	5.1	7.4
30	4.2	6.6	9.0	5.5	6.2	5.9	7.2	6.4	5.3	7.7	8.4	7.1	7.1	7.1	6.9	7.8	8.1	6.1	8.7	9.4	8.8	7.9	8.8	9.7	9.7	4.2	7.3
Max.	**11.9**	**12.5**	**11.6**	**15.6**	**14.1**	**12.3**	**9.5**	**9.5**	**12.1**	**12.8**	**10.7**	**12.4**	**13.8**	**13.2**	**13.0**	**12.3**	**12.0**	**12.8**	**11.6**	**14.4**	**14.7**	**14.4**	**12.0**	**11.5**	**15.6**		
Min.	**0.8**	**1.8**	**1.0**	**0.6**	**1.0**	**1.1**	**0.5**	**0.8**	**0.7**	**0.6**	**0.5**	**0.5**	**0.8**	**0.6**	**0.9**	**0.9**	**0.3**	**0.9**	**0.5**	**0.4**	**0.7**	**0.6**	**1.4**	**1.0**		**0.3**	
Avg.	**5.4**	**5.5**	**5.5**	**5.3**	**5.3**	**5.5**	**5.1**	**5.0**	**5.0**	**5.2**	**5.0**	**4.8**	**5.0**	**5.0**	**5.1**	**5.2**	**5.3**	**5.5**	**5.6**	**5.9**	**5.7**	**6.0**	**6.1**	**5.8**			**5.4**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Speed (RMYoung) (m/s)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	10.3	8.8	8.6	8.5	8.4	6.1	5.0	5.1	4.7	4.3	1.6	3.5	3.2	3.3	2.4	1.3	2.4	1.2	1.6	1.3	2.1	1.7	1.6	0.9	10.3	0.9	4.1
2	0.9	1.7	1.0	1.4	0.9	2.2	4.3	2.2	1.9	4.9	5.6	10.2	10.5	11.2	9.1	9.9	10.4	12.1	10.5	11.1	10.2	11.8	10.5	9.4	12.1	0.9	6.8
3	9.2	12.0	12.6	11.0	10.5	12.1	13.3	11.4	12.7	13.4	15.3	14.0	13.5	12.9	15.3	16.3	16.3	12.9	13.0	13.3	13.1	13.4	13.3	9.2	16.3	9.2	12.9
4	8.7	8.7	8.3	7.7	7.3	7.1	8.2	7.4	7.3	8.2	8.0	7.7	8.0	7.9	8.2	7.4	6.4	5.7	5.4	5.0	4.6	3.9	4.3	4.8	8.7	3.9	6.9
5	4.8	5.3	4.0	4.4	4.5	5.3	5.8	7.4	6.4	5.3	6.1	7.0	7.2	6.6	5.6	3.3	3.0	3.3	2.8	2.8	2.8	1.9	1.6	0.9	7.4	0.9	4.5
6	0.6	2.0	4.2	4.2	3.3	5.3	2.3	2.8	3.5	2.5	1.6	0.8	0.7	2.1	2.4	1.9	1.0	1.3	2.0	2.5	2.8	3.3	3.3	3.6	5.3	0.6	2.5
7	3.6	4.9	5.0	5.8	6.9	7.2	7.4	6.4	7.9	7.6	7.5	7.7	8.4	7.3	6.3	6.0	5.1	4.8	2.6	0.7	2.9	3.7	2.6	3.4	8.4	0.7	5.5
8	2.1	1.6	1.9	1.9	1.8	1.0	1.1	2.4	5.0	5.3	5.0	7.5	8.1	11.5	12.9	11.5	9.8	8.4	7.9	7.2	7.9	7.0	6.5	5.9	12.9	1.0	5.9
9	6.5	6.6	5.9	3.5	5.0	6.5	8.5	8.2	8.9	7.3	5.2	3.8	4.1	2.6	0.6	0.3	0.7	1.8	2.9	1.8	1.5	1.8	1.3	2.0	8.9	0.3	4.1
10	2.6	2.8	2.4	3.7	3.3	3.5	4.8	2.9	4.3	3.7	3.1	2.8	0.9	0.5	0.9	0.7	1.6	1.0	1.9	2.2	1.5	3.1	4.1	4.2	4.8	0.5	2.6
11	4.2	4.0	3.2	2.1	2.4	1.0	2.4	2.6	2.8	2.4	2.6	1.6	1.0	1.2	1.1	4.2	5.2	7.0	5.8	3.6	4.6	5.8	5.9	4.2	7.0	1.0	3.4
12	4.5	4.3	4.6	3.5	3.6	1.0	1.6	2.5	3.7	1.7	1.0	0.5	0.8	1.2	0.3	0.5	0.4	2.0	4.5	6.2	5.6	5.5	6.0	6.1	6.2	0.3	3.0
13	5.6	5.0	4.6	6.7	6.7	8.4	8.6	5.8	7.0	5.4	3.5	5.4	5.4	1.5	3.3	5.7	4.1	3.7	2.7	2.9	2.4	2.5	2.8	1.7	8.6	1.5	4.6
14	2.8	1.4	2.3	1.1	1.8	1.8	1.4	1.1	0.9	1.6	1.8	1.6	4.3	4.0	5.2	6.7	7.7	5.9	4.9	7.0	9.9	8.8	9.6	9.4	9.9	0.9	4.3
15	10.8	9.4	9.6	7.6	9.5	8.2	8.5	7.7	7.4	4.9	4.4	3.6	2.1	2.3	3.0	2.9	1.1	0.3	0.9	2.7	3.6	1.9	2.7	2.4	10.8	0.3	4.9
16	2.2	2.1	2.5	1.6	1.8	1.8	1.7	1.7	1.7	1.2	1.1	0.2	0.2	0.4	2.3	1.5	3.0	2.9	2.8	3.1	3.8	3.7	4.5	6.4	6.4	0.2	2.3
17	7.9	11.3	9.4	9.0	9.8	8.9	9.9	9.8	8.7	8.3	7.9	9.3	8.8	9.2	9.3	9.7	9.6	9.1	9.2	8.6	10.4	9.7	8.7	9.8	11.3	7.9	9.3
18	12.2	11.7	10.7	9.9	9.8	10.0	10.9	11.7	11.4	13.1	13.3	10.4	9.2	10.0	9.8	11.1	11.6	11.9	12.2	12.8	11.4	11.8	11.6	11.5	13.3	9.2	11.3
19	13.1	12.3	12.8	12.9	13.0	13.1	11.5	10.0	8.6	8.6	9.2	7.1	5.5	3.5	1.7	0.6	1.2	3.1	5.1	7.5	7.6	6.9	5.9	7.6	13.1	0.6	7.8
20	7.4	4.6	1.3	1.1	1.1	1.7	3.4	6.7	6.8	5.8	6.1	2.6	1.1	1.5	2.1	3.2	3.2	1.5	1.6	2.4	3.0	3.0	4.1	4.6	7.4	1.1	3.3
21	4.4	0.9	1.7	2.2	2.5	4.1	3.7	2.5	0.7	1.0	3.8	3.8	0.9	1.5	0.7	0.3	0.8	0.5	1.5	2.3	2.4	2.9	2.1	1.5	4.4	0.3	2.0
22	2.2	2.0	1.2	0.8	0.9	2.4	4.4	4.8	5.6	6.9	5.7	6.4	5.7	3.8	2.5	3.3	4.7	6.1	5.6	6.3	8.5	9.0	9.2	7.5	9.2	0.8	4.8
23	4.3	4.2	7.2	7.2	7.7	9.0	7.2	4.8	3.7	8.1	8.6	8.6	6.4	6.2	6.7	6.4	6.6	6.2	5.5	6.5	6.9	6.9	7.3	6.4	9.0	3.7	6.6
24	6.9	7.4	7.4	5.6	6.8	8.1	4.7	4.7	1.0	1.0	1.6	1.6	1.3	3.5	3.5	4.6	4.3	3.0	1.6	1.0	0.9	0.5	3.5	4.0	8.1	0.5	3.7
25	4.6	4.7	7.2	7.4	8.0	8.5	5.8	10.5	10.1	9.2	11.0	10.6	8.8	9.4	9.7	10.0	6.7	10.1	11.4	13.6	14.5	12.2	12.3	14.3	14.5	4.6	9.6
26	12.6	12.3	11.6	12.9	12.5	12.0	10.4	10.9	10.8	10.2	11.2	9.9	8.9	9.8	10.7	10.0	10.8	10.9	12.5	12.4	13.2	12.8	10.2	8.6	13.2	8.6	11.2
27	9.9	8.6	9.6	11.8	16.4	17.0	11.1	12.4	13.4	13.2	11.8	16.3	9.5	8.8	12.6	14.8	13.2	16.3	12.8	11.0	10.7	12.8	12.0	12.2	17.0	8.6	12.4
28	11.9	10.5	10.8	8.6	8.0	6.8	6.4	5.1	9.9	13.6	10.7	7.8	9.6	11.0	11.4	10.5	7.7	8.6	8.1	5.4	6.9	6.0	6.4	6.2	13.6	5.1	8.7
29	5.0	4.6	7.5	8.0	8.6	7.5	7.0	8.2	8.3	8.1	8.3	8.2	8.3	7.5	7.8	7.2	7.0	7.7	8.3	8.6	8.6	8.5	8.4	7.7	8.6	4.6	7.7
30	8.6	8.5	9.4	8.1	7.2	8.8	9.3	8.0	10.3	10.1	9.3	9.2	9.4	9.9	9.9	8.2	10.4	10.5	9.1	8.9	8.7	7.8	10.0	8.6	10.5	7.2	9.1
31	8.4	8.1	6.8	4.3	7.3	5.4	6.2	7.2	12.1	12.0	11.5	12.0	11.9	13.4	12.2	14.2	14.1	13.7	13.4	13.1	13.3	8.8	7.2	5.9	14.2	4.3	10.1
Max.	**13.1**	**12.3**	**12.8**	**12.9**	**16.4**	**17.0**	**13.3**	**12.4**	**13.4**	**13.6**	**15.3**	**16.3**	**13.5**	**13.4**	**15.3**	**16.3**	**16.3**	**16.3**	**13.4**	**13.6**	**14.5**	**13.4**	**13.3**	**14.3**	**17.0**		
Min.	**0.6**	**0.9**	**1.0**	**0.8**	**0.9**	**1.0**	**1.1**	**1.1**	**0.7**	**1.0**	**1.0**	**0.2**	**0.2**	**0.4**	**0.3**	**0.3**	**0.4**	**0.3**	**0.9**	**0.7**	**0.9**	**0.5**	**1.3**	**0.9**		**0.2**	
Avg.	**6.4**	**6.2**	**6.3**	**6.0**	**6.4**	**6.5**	**6.4**	**6.3**	**6.7**	**6.7**	**6.6**	**6.5**	**5.9**	**6.0**	**6.1**	**6.3**	**6.1**	**6.2**	**6.1**	**6.3**	**6.7**	**6.4**	**6.4**	**6.2**			**6.3**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	243.9	243.3	256.9	263.4	243.5	271.1	266.9	292.1	283.9	283.9	276.4	290.7	263.1	279.8	248.7	244.9	246.6	238.0	250.4	260.1	257.1	265.5	271.7	250.2
2	286.6	298.6	280.0	256.0	261.7	257.1	259.1	261.4	249.0	266.3	276.2	258.2	258.1	279.2	274.9	287.3	292.3	273.7	272.3	267.0	256.8	261.5	261.9	258.8
3	262.1	260.3	285.1	264.2	277.5	303.2	268.6	309.7	272.6	271.7	283.4	276.6	275.0	266.8	275.0	291.3	291.0	276.0	301.3	276.9	280.7	283.3	271.7	269.8
4	286.7	270.4	294.7	289.9	286.1	278.0	291.1	292.6	299.7	291.3	289.2	277.5	260.3	269.8	273.6	271.2	291.6	268.3	271.0	259.0	271.2	268.6	283.5	278.2
5	264.6	290.2	277.3	281.5	311.6	282.7	292.2	293.7	295.8	284.0	265.4	233.5	227.5	221.4	252.3	242.9	302.2	271.7	237.3	252.6	257.1	200.7	241.5	279.8
6	258.0	258.1	262.4	263.0	290.3	282.9	249.8	232.0	256.8	285.6	265.3	265.6	280.9	274.3	254.8	293.0	289.5	285.3	275.8	272.1	274.4	255.3	271.6	263.6
7	263.6	285.0	272.8	274.4	251.9	253.7	258.8	255.8	261.7	263.0	274.5	282.6	272.3	276.0	267.8	290.3	276.7	294.7	290.6	311.5	310.6	280.4	273.6	287.3
8	283.8	256.9	271.7	264.6	264.4	262.0	260.2	268.4	271.7	275.2	279.1	271.5	281.2	277.0	277.7	267.1	265.5	267.0	263.4	273.7	273.3	258.3	272.9	280.7
9	271.8	268.4	276.1	270.5	255.4	269.3	271.5	276.3	275.8	274.2	278.2	284.9	287.7	295.2	312.4	296.5	307.0	314.6	297.7	296.7	315.0	293.4	275.9	287.1
10	303.4	291.3	289.8	304.1	289.2	282.6	279.3	295.3	292.1	296.2	302.4	302.8	274.5	279.7	264.8	276.1	296.1	255.5	249.9	251.0	277.4	293.4	290.9	285.7
11	301.2	253.4	290.3	294.2	270.9	278.4	295.4	240.1	299.4	308.4	313.6	297.3	298.8	287.1	268.8	283.4	282.3	274.5	261.1	262.8	246.4	247.7	258.2	273.1
12	268.9	262.1	273.9	274.2	264.0	266.0	264.8	256.9	272.9	260.4	259.8	262.2	265.4	263.1	277.9	289.1	275.0	279.5	252.3	288.4	291.7	297.8	260.6	191.3
13	191.2	202.8	222.0	239.4	259.0	165.1	183.2	187.4	196.5	218.7	217.5	278.3	281.9	256.0	250.4	238.6	242.0	234.6	277.0	279.9	271.6	265.5	263.1	284.0
14	265.2	273.1	280.7	102.9	13.2	94.9	131.9	124.0	110.6	138.3	114.1	112.6	131.5	122.1	114.8	115.1	112.9	107.2	96.9	102.8	91.1	104.7	108.1	104.7
15	111.7	106.5	106.5	115.1	118.8	130.1	143.1	152.5	132.6	143.2	141.3	140.3	141.3	143.6	138.4	138.1	145.5	136.4	149.1	144.3	130.9	100.2	128.3	137.0
16	132.2	73.5	304.2	299.5	247.6	272.9	139.3	285.6	292.1	303.1	279.1	298.4	295.6	120.5	31.0	98.4	77.3	112.9	131.4	68.1	80.9	89.7	357.6	125.2
17	103.2	275.5	302.0	80.9	114.6	120.2	110.3	111.5	100.0	105.2	97.4	95.5	98.1	96.5	90.2	100.9	113.7	114.2	120.9	114.5	109.2	114.0	131.5	126.3
18	122.7	121.0	139.8	149.5	144.9	144.0	140.1	144.3	147.1	147.5	84.2	105.6	153.3	304.4	251.5	132.7	99.3	111.9	87.4	109.8	135.9	131.4	120.7	125.7
19	115.2	102.6	125.4	116.5	109.0	101.6	135.7	123.9	126.6	136.8	132.9	131.8	131.3	121.2	125.2	124.9	125.9	130.2	128.2	128.7	125.9	125.9	126.0	127.9
20	130.8	125.4	118.4	112.9	99.6	107.3	115.7	121.0	119.4	121.6	125.2	112.7	127.6	121.8	121.7	128.9	137.1	131.3	144.5	147.4	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	121.7	117.4	120.9	110.7	113.1	123.3	115.7	117.8	111.2	107.5	102.9	108.1	119.3	118.8	116.6	116.4	108.0	110.7
22	126.1	143.1	162.1	175.2	174.3	172.2	176.2	170.9	161.5	165.0	197.7	215.4	219.4	226.4	243.6	256.6	240.8	221.5	197.3	131.8	104.6	109.3	268.3	317.3
23	307.5	315.6	308.2	300.8	297.6	302.8	320.2	325.3	323.2	329.9	312.4	316.4	290.1	292.3	279.3	318.8	322.5	312.7	284.0	288.3	277.5	273.4	281.7	281.5
24	277.1	290.1	306.0	286.8	194.9	117.6	126.1	83.0	123.5	130.2	119.1	109.3	97.9	99.0	117.3	131.7	133.4	135.8	136.4	140.9	146.1	147.8	148.6	148.2
25	146.2	160.8	281.4	278.6	279.3	294.0	314.1	303.1	320.2	325.5	336.9	328.7	313.9	322.5	307.0	329.8	310.9	300.3	308.1	322.7	312.9	296.1	318.2	270.8
26	235.7	239.7	230.0	237.0	239.4	217.7	249.0	264.0	269.4	283.5	281.0	260.8	269.7	258.1	261.6	267.5	269.2	285.8	288.7	281.9	283.8	237.5	283.2	194.2
27	107.8	262.2	98.6	113.3	75.1	88.7	77.0	102.2	110.4	109.4	113.4	113.5	110.4	107.8	105.8	105.5	106.4	108.2	103.6	104.9	108.1	107.0	110.0	112.5
28	110.7	113.6	117.6	123.1	122.7	120.3	126.2	132.6	140.0	130.6	137.1	136.7	142.4	142.9	142.7	138.8	88.3	63.1	285.8	270.1	267.0	304.6	264.6	263.8
29	271.5	277.7	253.7	275.8	291.8	293.4	283.4	307.1	286.7	270.8	270.7	252.8	118.3	212.5	242.3	256.3	247.4	256.2	258.7	242.7	197.9	128.7	143.1	292.3
30	265.9	287.4	286.3	287.3	291.5	287.7	279.1	284.9	281.2	276.4	269.3	263.1	230.9	207.0	221.3	220.7	201.3	274.1	301.1	309.1	309.4	308.2	280.7	270.0
31	282.2	283.3	264.9	254.8	247.2	243.0	236.8	257.6	272.8	271.9	271.8	124.0	254.0	233.3	131.2	296.3	273.6	282.6	292.1	295.5	201.1	278.4	287.5	281.4

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	296.5	283.1	287.7	283.0	282.2	293.1	310.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	302.5	288.5	89.7	280.7	279.0	277.7	292.0	284.7
2	282.3	259.7	262.8	271.6	281.7	281.2	267.0	262.7	264.2	262.1	282.6	297.7	302.5	317.2	287.5	281.2	270.0	277.0	287.7	293.6	279.5	264.4	260.4	280.5
3	236.7	232.5	271.0	253.1	253.0	281.6	256.5	250.9	288.3	295.7	276.7	253.9	268.6	270.0	271.6	273.1	267.3	268.3	263.8	270.7	275.8	292.9	287.2	298.1
4	300.2	288.2	285.7	274.0	273.3	261.3	257.1	268.2	259.4	261.5	251.7	254.0	247.8	253.7	261.3	264.9	263.2	273.6	273.8	282.9	285.6	266.8	269.0	277.7
5	269.1	250.9	255.4	263.4	264.4	266.7	255.0	259.0	259.0	284.9	292.0	270.9	265.7	269.0	256.2	266.2	260.5	260.3	268.2	274.8	285.7	288.7	290.5	293.6
6	293.5	289.1	278.7	266.0	258.8	254.5	264.5	256.3	268.6	285.8	308.9	300.0	287.3	268.0	265.5	270.6	299.3	276.5	263.8	275.3	262.5	265.6	261.7	283.4
7	261.1	260.8	286.3	268.6	251.9	264.8	262.1	301.1	271.4	267.5	287.1	281.3	274.8	303.2	282.2	282.8	281.3	273.5	286.2	297.5	82.5	281.8	266.0	265.2
8	233.7	238.2	301.0	278.2	257.4	279.4	281.3	291.3	307.4	322.1	355.0	0.7	318.9	312.7	274.5	114.4	129.7	134.3	195.3	305.5	129.7	134.3	80.7	84.5
9	56.9	50.9	50.1	49.6	47.7	43.6	40.0	40.8	44.3	45.1	45.7	199.1	242.0	284.7	346.3	328.2	271.8	32.6	287.8	282.9	286.0	273.3	269.5	254.4
10	263.2	271.4	266.4	264.0	256.7	260.3	251.0	258.1	256.4	262.6	261.3	256.9	255.6	248.2	265.1	262.0	249.9	250.9	257.1	251.4	254.2	259.8	258.1	257.9
11	257.4	272.4	280.4	300.9	96.3	68.2	101.7	82.1	79.1	220.8	279.0	171.6	286.5	116.7	113.8	120.6	106.1	108.2	130.5	107.0	103.9	53.3	95.5	113.4
12	100.3	91.1	112.2	294.0	273.3	266.1	261.4	266.7	267.1	261.1	259.5	280.0	271.5	266.8	264.6	263.0	272.7	284.1	264.1	291.4	275.2	269.1	282.7	286.7
13	115.0	117.7	133.7	132.5	103.0	94.1	109.6	129.2	114.5	97.7	106.9	115.9	113.8	110.0	100.1	110.8	113.3	110.2	115.3	117.7	117.2	107.1	108.7	110.9
14	114.5	109.4	112.2	118.8	113.1	111.1	118.2	153.1	221.5	219.5	223.4	231.0	229.4	230.1	235.3	237.1	231.5	234.0	233.0	231.8	228.8	244.3	302.3	268.5
15	269.2	254.7	286.1	281.5	283.7	297.6	287.5	308.5	273.9	269.4	266.7	258.5	253.8	279.9	284.7	256.8	296.0	273.5	273.7	263.4	296.2	90.7	53.0	119.1
16	123.7	99.1	117.7	111.9	116.1	130.1	125.5	121.2	130.0	75.0	62.4	60.0	58.8	59.9	62.2	74.5	104.3	127.8	117.9	131.3	115.8	129.8	97.3	74.6
17	96.3	126.3	81.9	84.5	116.0	96.9	104.7	90.7	91.8	100.5	80.9	46.5	48.2	58.0	49.2	55.2	105.4	113.1	106.0	108.5	111.0	117.5	131.1	128.2
18	119.9	115.7	112.5	107.4	108.1	110.8	111.1	113.4	111.4	111.7	117.9	115.2	117.1	117.5	121.0	125.7	118.7	121.7	130.2	114.3	110.6	108.4	116.7	105.2
19	103.9	116.7	77.5	117.2	34.4	44.6	35.7	49.8	45.0	48.0	49.8	45.5	46.9	48.6	58.1	64.4	47.5	49.5	49.5	49.9	91.0	123.6	124.5	132.1
20	122.3	113.8	109.3	117.0	115.6	114.3	122.8	122.2	122.0	118.2	113.5	119.6	98.4	107.9	120.1	121.7	83.9	51.1	52.3	41.4	40.0	40.9	41.2	40.2
21	41.5	40.8	42.1	41.5	44.0	43.3	41.2	39.9	42.1	38.6	38.2	40.7	44.6	52.9	51.5	46.8	44.4	81.1	125.2	152.5	120.2	240.6	256.0	246.1
22	86.4	73.2	125.2	147.8	292.7	293.6	0.0	0.0	0.0	0.0	0.0	120.3	136.8	115.4	109.4	110.0	113.0	117.1	112.3	112.2	113.7	124.3	130.2	136.0
23	124.5	66.7	82.0	281.6	273.1	270.9	268.4	268.0	272.0	290.1	286.1	268.6	80.8	290.2	273.3	269.6	275.3	275.3	274.0	271.2	280.2	265.6	266.0	264.0
24	292.5	269.9	283.8	310.1	301.8	299.3	263.4	275.7	328.4	329.9	322.7	298.1	268.0	245.1	250.1	256.1	255.9	309.5	312.1	274.0	288.1	301.3	310.3	329.2
25	315.6	321.7	336.1	319.3	312.4	327.0	326.3	323.8	310.0	305.3	301.0	273.9	278.4	274.4	265.0	267.5	269.7	261.3	254.6	15.0	52.6	84.4	65.2	128.7
26	129.2	131.3	133.3	197.3	255.4	253.1	254.6	265.3	258.5	250.4	245.7	236.3	246.0	271.9	258.8	270.1	310.6	268.4	251.8	243.5	251.9	286.6	291.7	289.2
27	294.4	264.0	269.3	296.5	290.2	281.8	271.1	262.2	255.1	264.5	255.9	262.4	271.0	258.8	257.3	248.7	252.5	252.5	248.4	199.1	196.8	163.0	139.2	114.5
28	141.0	178.3	67.4	33.1	38.9	40.8	39.6	40.8	42.5	43.1	33.5	265.3	251.3	291.0	299.4	269.2	274.4	288.0	282.5	283.4	298.4	301.6	263.5	272.5
29	259.1	264.2	249.6	262.7	262.1	273.4	256.8	260.9	275.2	259.0	269.8	265.0	296.8	279.0	270.9	272.5	301.3	322.5	321.4	318.0	306.6	326.0	273.9	297.7

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	323.9	320.7	295.0	288.0	306.2	282.4	251.6	246.7	185.3	279.3	91.6	278.9	282.9	313.0	132.6	126.7	117.1	77.3	59.5	56.4	57.0	68.5	99.7	111.3
2	107.4	75.8	70.9	81.9	102.0	85.0	109.0	116.7	115.7	127.0	128.1	123.7	136.1	137.6	126.8	123.5	122.3	135.1	148.8	136.1	128.5	136.8	112.9	128.2
3	131.4	113.8	131.9	125.5	102.3	116.1	119.5	113.6	113.7	109.0	111.8	112.7	111.4	112.6	124.8	118.8	126.6	132.8	128.5	123.9	135.0	133.5	126.4	112.3
4	115.4	110.6	113.6	113.8	108.4	106.5	108.1	108.7	109.2	111.6	104.8	103.9	103.6	104.6	105.4	102.9	106.3	109.0	106.1	113.5	110.7	114.1	113.3	118.4
5	122.3	129.1	110.3	123.8	125.8	106.1	122.2	101.9	95.8	89.5	116.1	114.6	99.0	108.0	110.1	109.7	108.4	110.1	123.6	120.8	120.2	116.2	117.7	120.6
6	120.7	126.6	129.0	133.9	121.4	93.4	94.5	95.5	109.6	113.6	111.1	112.5	113.5	132.2	124.6	128.4	121.8	127.7	136.8	90.2	57.9	41.5	42.7	41.5
7	46.9	33.6	14.1	273.4	286.5	268.0	281.5	264.5	274.9	281.8	282.9	282.8	279.4	267.4	267.5	274.5	263.4	267.0	245.6	237.3	224.9	229.2	234.1	234.0
8	232.5	222.5	57.2	126.0	108.1	116.8	128.6	122.8	108.1	92.0	132.1	107.0	96.4	88.9	58.9	41.3	41.4	41.9	42.2	42.2	43.2	41.2	38.8	42.6
9	41.4	36.8	30.5	27.8	24.3	25.8	32.0	33.7	32.6	28.4	130.2	165.3	117.9	304.5	266.6	260.2	285.7	283.7	243.4	247.8	268.4	277.3	266.8	279.0
10	269.6	275.7	309.6	139.4	237.2	219.8	206.4	151.6	180.0	217.2	193.0	212.1	212.8	203.3	226.8	234.7	229.7	227.0	233.4	275.1	279.4	269.7	310.1	313.8
11	302.2	320.9	275.5	224.0	264.5	248.6	288.5	256.1	227.6	236.5	256.5	239.8	272.2	241.5	251.0	288.1	300.2	318.6	295.3	300.3	262.1	272.8	280.9	303.1
12	284.0	270.0	268.9	270.1	268.7	267.2	274.9	275.1	296.3	277.0	271.5	281.9	316.7	328.7	314.6	311.5	347.5	333.8	355.9	359.1	349.0	304.6	9.4	132.3
13	319.1	321.1	325.4	316.0	326.6	330.3	334.2	318.0	325.3	305.4	300.3	290.3	296.5	308.0	307.7	309.2	277.2	277.7	276.0	276.2	275.3	264.2	297.0	253.4
14	274.1	253.9	252.0	258.3	260.4	257.7	250.5	259.2	260.2	249.5	259.8	264.2	264.0	272.2	276.8	289.2	269.7	90.8	117.1	100.1	97.7	113.4	125.1	127.9
15	116.8	121.5	119.1	120.3	126.9	118.1	109.1	112.2	107.5	108.2	106.6	112.4	110.2	108.3	111.3	114.9	115.8	115.8	111.9	112.0	116.9	118.1	122.8	117.0
16	125.8	128.9	126.0	132.6	120.2	120.4	137.8	140.6	145.2	123.7	282.0	282.9	284.5	266.8	271.4	281.0	286.6	284.2	262.7	268.9	258.1	256.0	258.1	258.4
17	288.9	272.4	268.9	260.5	253.7	263.8	263.3	263.0	259.4	268.4	262.3	264.0	252.2	102.9	133.7	147.9	279.3	231.7	227.3	224.2	222.4	213.3	207.1	214.3
18	50.6	48.4	92.1	279.0	329.9	331.2	308.5	278.0	276.1	264.1	272.9	276.0	274.5	286.7	267.1	292.2	301.4	295.4	289.9	313.3	318.0	279.4	261.9	304.4
19	328.7	329.0	309.5	291.5	267.0	251.7	287.7	274.6	256.1	269.5	277.2	306.6	319.8	312.3	310.2	308.0	309.7	319.1	322.0	318.8	314.9	311.2	314.2	292.7
20	268.7	260.0	283.2	263.8	252.6	269.1	271.7	281.0	278.9	260.9	267.2	252.5	259.9	249.7	268.4	265.0	274.0	276.8	274.5	282.9	271.5	309.3	251.2	261.2
21	263.6	276.3	282.9	296.5	281.2	287.8	7.7	109.7	127.8	107.7	307.3	352.7	94.7	262.7	269.1	258.7	280.1	270.0	308.8	284.5	299.3	308.9	294.4	245.0
22	249.6	250.9	256.8	265.5	245.3	263.5	259.0	299.4	289.9	237.9	240.3	241.4	256.1	261.9	257.9	269.0	323.2	286.6	306.5	303.0	283.0	266.9	267.4	268.1
23	290.9	288.4	284.7	256.5	266.8	282.4	258.1	256.5	268.3	264.4	256.9	260.9	279.3	279.6	287.1	283.4	283.0	313.9	293.7	302.4	311.5	317.8	313.1	270.5
24	279.9	279.7	268.6	272.7	291.0	280.7	271.6	284.9	300.2	274.8	298.5	294.2	279.4	273.7	296.6	152.8	258.3	281.1	282.1	271.3	263.3	270.6	277.5	58.0
25	112.7	103.3	120.0	101.7	89.3	115.3	294.0	265.6	101.2	279.5	281.2	267.3	256.6	287.1	286.5	278.8	283.2	293.2	300.3	292.3	284.7	259.7	268.3	262.1
26	271.3	270.5	277.3	306.9	311.0	287.9	273.8	268.5	269.9	291.3	271.7	283.5	300.5	300.4	276.6	271.9	260.1	260.3	264.8	284.9	259.6	285.8	263.7	284.9
27	267.8	261.0	265.4	268.8	260.7	263.4	259.2	261.3	272.7	303.4	314.4	286.6	292.5	288.6	290.7	266.0	269.9	288.9	295.0	289.1	301.4	301.1	276.9	268.2
28	257.5	254.3	257.8	276.0	270.5	263.3	268.9	270.8	264.0	266.7	261.8	256.2	266.0	260.7	256.1	253.7	266.5	271.4	256.4	254.5	262.2	275.6	281.2	282.0
29	283.5	286.0	276.9	265.5	301.5	51.7	320.3	82.0	84.7	134.9	128.0	104.4	118.3	118.8	115.2	111.7	111.7	104.1	101.0	105.6	98.4	99.7	108.5	103.2
30	107.5	106.8	107.2	107.3	110.9	112.2	109.3	105.5	107.1	108.9	109.4	109.0	109.3	109.5	113.2	112.1	114.8	124.5	120.2	125.7	107.7	120.1	119.3	116.4
31	117.5	115.3	112.3	125.4	133.7	130.1	117.3	108.7	116.5	115.5	116.4	118.3	116.6	116.8	119.8	117.3	122.2	120.5	115.7	117.5	116.9	119.4	115.9	114.0

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

April *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	112.3	114.4	113.2	114.3	113.1	113.4	115.6	119.7	122.8	119.6	114.7	115.4	108.6	107.8	121.7	119.4	124.5	133.3	136.1	133.3	129.9	124.4	65.9	30.7
2	291.5	260.9	283.0	282.7	260.3	307.4	55.5	143.6	146.6	118.3	163.3	107.2	114.8	126.3	161.7	137.1	97.8	73.9	85.0	124.3	83.5	91.9	109.1	133.8
3	131.3	126.3	124.5	139.5	159.5	160.4	159.8	158.7	145.3	117.8	125.2	162.8	136.2	127.6	125.0	129.0	130.8	125.5	119.7	114.5	111.4	110.9	113.6	114.7
4	113.5	114.3	111.9	113.1	111.4	112.9	115.0	114.2	115.3	117.2	116.0	118.5	120.9	119.1	117.7	122.3	132.9	132.7	135.4	159.4	191.0	225.6	241.4	239.8
5	296.9	314.5	310.3	266.5	267.4	305.6	322.4	300.1	279.4	278.4	269.8	288.6	279.8	267.8	276.9	279.6	277.9	299.6	334.5	330.5	326.8	308.8	316.6	316.6
6	315.1	319.7	302.3	305.7	279.9	304.1	262.6	268.7	270.4	263.2	319.3	311.9	315.9	319.6	290.6	292.6	292.6	283.8	233.8	215.9	261.4	308.4	309.4	275.5
7	262.3	283.6	290.3	275.5	306.4	290.1	299.8	307.9	280.5	277.2	284.1	277.0	277.9	299.7	312.1	305.7	315.3	294.3	286.5	286.7	308.7	294.3	283.0	276.3
8	262.5	270.4	264.3	269.3	279.7	268.9	282.1	277.4	287.3	278.9	281.3	282.4	278.1	287.4	274.9	273.6	284.9	314.6	258.3	265.7	273.9	300.9	300.3	294.3
9	288.9	299.4	314.1	298.7	293.8	308.5	281.9	291.5	302.4	310.2	318.1	320.9	302.5	286.1	280.3	271.9	282.5	301.9	284.0	276.0	279.9	260.8	298.6	303.0
10	269.5	236.4	238.1	239.5	238.0	249.0	260.3	249.8	267.6	260.0	269.5	279.6	261.5	242.3	257.7	253.3	268.4	289.1	285.5	308.4	310.9	309.2	291.3	269.0
11	264.7	270.7	261.7	273.9	267.5	265.4	270.2	267.9	266.7	264.8	255.9	270.0	270.0	292.0	299.4	318.3	318.9	306.8	302.7	293.8	273.3	273.6	287.5	289.2
12	292.4	281.0	283.9	293.4	282.2	265.4	271.9	270.5	280.7	278.0	272.6	290.3	289.8	300.1	305.0	305.1	286.0	290.5	264.5	282.0	306.9	259.5	284.9	282.5
13	200.1	287.1	110.4	104.7	123.5	134.5	136.8	129.1	125.8	122.6	118.4	95.3	137.2	100.4	111.4	215.1	220.3	223.8	227.8	221.4	229.6	227.2	222.0	232.0
14	234.8	236.3	242.6	243.3	243.8	246.2	254.0	245.6	237.8	234.6	226.8	236.2	231.6	249.8	270.3	248.8	266.9	253.3	250.2	240.2	226.7	221.2	234.3	237.4
15	225.9	305.5	276.3	277.7	276.9	272.1	254.1	298.8	324.9	332.1	330.9	323.5	321.1	325.2	324.7	327.1	330.5	333.6	336.4	330.2	329.8	327.7	329.4	330.1
16	334.4	333.8	332.2	325.9	324.2	322.1	310.7	325.9	319.4	308.2	307.5	301.9	304.6	297.5	298.4	310.5	319.7	309.4	307.0	263.0	298.6	314.6	294.4	247.6
17	339.9	268.7	300.7	297.4	271.2	281.7	300.0	272.9	279.0	261.3	300.1	321.0	229.9	234.5	229.2	218.8	233.6	233.1	224.2	212.2	268.0	334.1	262.2	109.2
18	276.6	284.4	281.9	282.0	286.1	291.5	282.8	283.8	291.3	295.6	290.1	291.7	73.4	75.4	71.9	73.5	109.4	90.1	46.3	71.7	85.5	94.0	309.2	99.1
19	100.2	86.8	131.9	150.2	151.7	149.7	146.4	150.9	146.8	139.0	143.3	131.6	149.6	146.7	145.4	143.6	151.7	144.7	134.9	145.5	138.5	94.1	149.9	129.1
20	125.3	109.6	136.2	134.8	127.6	137.3	134.1	133.6	142.6	126.5	120.2	122.5	122.3	125.4	141.9	138.5	127.1	135.8	134.6	133.6	126.7	137.4	139.2	131.5
21	145.9	143.0	139.8	142.3	140.0	121.3	125.7	119.9	105.9	108.2	122.7	143.6	143.7	141.5	131.1	132.3	111.6	115.9	111.4	138.2	113.5	81.4	76.9	85.7
22	73.4	79.3	135.7	110.0	112.0	86.1	86.2	255.0	286.1	291.7	281.4	262.0	257.2	281.0	278.0	290.9	272.7	272.3	280.4	277.7	279.7	278.8	259.1	261.0
23	263.5	296.0	275.8	270.8	279.6	284.0	276.7	272.6	271.3	272.3	279.7	111.0	247.7	259.9	274.4	269.3	270.8	283.7	278.9	293.6	269.0	280.7	267.7	268.2
24	279.0	191.4	239.7	240.9	112.2	88.4	161.2	117.4	98.5	80.6	86.7	179.5	242.3	223.6	244.7	222.9	231.8	232.1	238.4	269.0	112.4	176.5	221.1	233.1
25	240.5	221.4	228.0	301.2	308.8	310.5	302.9	315.2	312.6	308.9	320.4	317.7	321.3	319.1	312.0	309.9	316.6	319.8	325.8	324.0	328.3	321.1	298.8	316.2
26	323.3	324.3	300.1	308.3	295.4	311.8	319.9	309.9	317.7	325.2	329.8	318.9	322.9	323.4	331.9	330.6	330.5	332.5	336.9	341.8	336.5	330.5	332.8	330.0
27	325.5	323.2	323.6	320.3	317.3	321.7	324.5	322.8	322.2	321.2	319.0	317.8	320.4	320.0	325.5	327.3	331.9	326.9	325.8	326.1	330.4	318.3	307.1	324.3
28	258.7	248.2	264.6	274.8	270.9	279.4	266.0	267.9	271.2	259.1	278.5	262.2	287.5	278.0	262.6	276.1	289.8	295.8	289.9	289.5	297.6	310.6	308.3	296.8
29	309.5	318.1	309.9	258.7	256.2	263.4	257.7	253.2	288.0	254.7	329.3	314.7	336.7	324.4	263.8	275.4	316.5	323.1	326.6	326.0	329.6	330.2	336.1	344.7
30	262.2	259.7	253.4	260.2	265.6	284.9	277.8	287.3	277.3	259.2	254.6	265.5	263.1	264.7	260.6	261.1	280.2	289.3	322.8	324.6	322.2	330.5	311.5	310.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

May *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	294.1	274.2	248.6	255.4	247.4	245.8	269.5	273.8	239.2	240.7	277.0	274.9	261.3	265.7	293.9	311.1	318.6	315.7	323.8	319.3	323.8	324.4	341.3	303.5
2	290.5	289.4	256.2	279.2	316.9	321.6	333.2	332.7	321.9	332.0	323.8	334.7	308.0	253.8	277.1	281.7	294.5	297.5	147.5	38.4	179.7	303.4	280.3	276.8
3	218.3	105.1	119.4	122.1	117.8	124.7	141.7	84.7	91.6	258.8	302.0	88.4	96.3	129.7	180.2	132.6	129.3	312.4	268.5	276.6	112.4	144.4	99.8	59.1
4	57.8	70.3	59.6	65.6	94.3	60.0	60.0	64.0	50.4	93.8	127.7	139.6	86.4	237.2	358.3	76.4	77.5	134.6	264.2	290.7	345.7	306.2	266.9	294.7
5	279.0	259.6	245.2	246.0	251.5	267.3	288.0	264.8	284.7	269.9	228.4	100.3	256.4	276.7	299.4	280.1	273.2	265.6	282.9	137.8	2.4	323.2	76.8	125.9
6	135.8	85.7	95.1	99.7	117.7	346.6	99.2	100.1	85.0	120.5	130.1	129.1	130.7	125.4	127.2	131.6	126.0	119.8	117.1	116.4	113.8	113.9	112.7	110.9
7	111.0	111.2	110.7	114.3	113.8	112.4	111.4	111.7	115.8	116.8	116.1	115.5	119.2	119.3	116.1	114.4	116.6	125.4	121.0	124.8	130.7	119.9	132.4	129.7
8	129.0	129.1	128.3	122.7	120.9	122.9	123.4	121.4	120.5	120.4	121.7	117.3	118.2	118.1	118.0	121.3	122.6	121.6	122.8	123.5	124.2	123.5	119.8	127.2
9	138.7	105.4	92.9	122.2	102.8	98.0	109.8	91.0	102.2	101.7	114.0	116.9	130.6	129.5	101.6	120.8	129.1	131.2	131.4	116.0	284.8	298.4	284.9	272.8
10	274.1	245.8	285.1	232.8	270.3	290.6	314.6	293.4	275.4	275.1	253.5	256.5	262.4	268.1	278.6	269.2	269.1	274.4	202.8	154.0	281.8	14.7	92.5	120.4
11	124.3	109.2	104.3	115.9	125.8	111.3	105.6	106.3	108.8	121.7	130.7	126.6	123.8	122.0	116.0	113.5	116.7	115.8	116.4	116.2	117.0	109.9	90.3	99.8
12	105.0	113.4	100.2	101.3	134.7	116.3	113.2	99.5	63.0	112.1	116.5	123.9	130.1	137.2	138.0	137.7	127.2	118.3	113.7	114.6	114.9	112.8	108.6	111.8
13	113.5	117.3	112.3	108.6	109.6	118.4	122.1	118.9	124.8	117.8	114.4	111.7	117.9	121.2	126.3	129.4	127.4	123.2	125.5	118.8	109.8	110.7	111.3	125.5
14	128.0	101.8	194.9	271.2	285.3	59.9	43.5	39.0	39.6	44.4	38.9	35.4	34.5	36.3	47.5	41.9	50.5	64.9	69.5	64.8	82.4	82.5	179.9	109.9
15	199.9	296.7	289.6	333.9	145.0	328.3	110.1	127.3	130.5	141.8	151.8	145.0	156.6	169.9	156.4	170.3	181.6	157.1	144.6	130.2	128.1	129.8	132.3	125.5
16	150.8	136.0	135.0	138.5	96.0	119.5	136.0	118.4	123.5	123.3	125.0	102.9	111.1	130.7	136.8	142.1	138.4	141.0	150.1	170.8	169.8	236.6	306.0	276.9
17	262.7	266.1	264.3	265.6	260.9	260.6	266.8	266.8	273.9	269.9	299.7	36.3	12.3	32.6	30.2	51.0	58.2	121.8	165.9	164.9	143.2	150.4	107.5	74.7
18	77.7	260.7	46.0	85.2	110.8	96.8	90.4	65.8	93.2	136.5	140.5	136.2	140.6	134.9	139.1	141.5	145.9	128.7	140.8	122.6	136.6	146.0	146.0	137.9
19	56.1	106.9	27.0	286.1	275.6	281.4	293.7	284.9	252.4	262.5	294.8	328.0	312.5	301.5	302.4	306.1	305.5	301.0	306.4	295.9	286.3	293.5	287.6	265.5
20	260.3	248.3	242.7	256.9	249.6	255.4	277.6	268.4	236.6	298.5	284.9	342.7	2.7	67.1	61.3	115.0	161.2	153.9	166.6	184.2	194.6	223.1	293.3	283.1
21	285.7	283.5	282.1	283.7	279.2	283.0	283.0	288.5	119.5	109.2	112.6	110.9	155.4	151.5	163.8	174.8	216.4	214.4	208.3	215.1	233.9	247.8	277.0	294.2
22	281.4	288.9	300.4	293.7	284.8	282.3	257.1	292.3	294.9	301.4	322.9	257.8	120.1	53.9	51.7	132.4	139.2	132.3	132.3	133.7	122.7	128.8	117.1	113.0
23	113.5	115.1	118.4	116.0	113.5	113.0	105.4	113.4	114.9	108.1	108.4	110.0	113.1	110.9	113.4	115.5	113.2	111.3	116.3	118.4	122.8	131.1	137.4	136.0
24	138.5	139.6	131.4	125.5	123.0	120.8	119.3	119.9	127.1	131.9	134.6	128.8	129.4	130.6	127.0	128.9	121.9	134.6	139.0	143.4	145.8	131.1	157.7	154.8
25	138.3	122.3	109.7	123.4	127.7	154.8	148.7	135.4	115.4	129.9	135.2	162.0	173.4	201.5	223.0	182.9	165.4	207.0	212.1	203.8	185.9	150.1	103.0	154.1
26	106.4	259.2	324.5	292.5	295.0	321.3	227.3	253.5	252.8	248.0	225.5	225.7	257.7	264.2	269.5	290.2	269.3	283.5	283.1	280.4	267.8	264.3	315.7	292.7
27	276.6	256.1	292.0	273.3	278.6	273.2	280.1	282.3	300.3	311.5	299.5	315.2	301.1	284.4	289.0	281.9	283.5	293.2	299.6	300.0	303.8	284.1	301.5	276.7
28	263.6	272.3	260.0	266.5	272.0	266.1	266.2	272.2	268.8	294.9	304.4	310.8	299.4	276.5	254.4	250.2	248.5	257.6	289.6	296.8	293.7	292.4	283.5	273.0
29	253.8	253.6	256.9	270.0	268.8	271.0	273.1	280.7	299.1	302.0	331.1	350.1	346.1	357.6	348.1	349.3	359.9	12.5	1.7	0.8	358.4	3.9	1.2	272.1
30	260.3	261.5	290.8	281.2	288.6	282.5	286.4	283.0	101.8	117.0	119.1	121.5	132.3	137.2	143.4	136.4	131.9	134.9	128.7	126.0	129.9	113.2	107.9	111.6
31	124.8	123.7	112.4	109.3	118.6	113.4	113.6	114.8	109.2	112.9	114.3	122.2	119.5	123.6	127.1	123.6	124.6	130.3	137.2	139.9	139.2	133.3	126.1	126.1

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

June *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	104.9	111.4	110.5	120.8	125.6	115.4	117.7	119.6	123.2	127.4	116.4	123.1	129.3	128.6	126.5	129.2	134.2	132.4	129.7	114.1	118.3	130.1	123.7	122.8
2	14.3	30.3	89.6	88.1	86.5	117.2	0.2	29.7	159.3	127.3	123.3	114.2	102.2	105.8	121.3	132.6	132.9	158.9	150.9	156.8	156.8	144.9	173.6	322.1
3	282.1	254.9	265.8	276.5	167.9	41.7	88.2	134.2	121.7	21.2	270.7	149.5	53.4	138.2	142.6	166.7	155.6	153.0	158.5	147.7	142.1	134.5	129.9	130.6
4	122.3	123.1	111.2	111.5	86.1	95.8	121.5	112.1	121.1	138.3	147.2	138.3	152.9	152.0	146.0	147.2	144.7	146.6	136.0	136.8	142.5	147.4	130.8	110.0
5	94.0	86.9	76.6	98.6	116.9	112.7	128.6	114.2	116.9	112.7	115.0	117.2	115.8	118.2	118.7	123.5	125.2	125.5	134.8	136.6	151.4	134.7	333.3	296.6
6	281.1	267.6	229.2	256.4	266.7	230.7	262.4	300.2	258.4	265.3	282.0	316.9	306.7	320.9	327.5	280.4	295.1	308.4	313.4	306.3	296.3	293.3	314.5	298.7
7	284.7	278.5	271.5	236.5	249.7	262.1	263.7	292.5	322.9	333.5	330.4	339.9	341.7	333.1	351.4	6.7	292.4	232.2	229.1	242.1	236.2	237.9	213.9	97.9
8	51.3	64.2	84.4	100.6	93.7	123.8	116.0	107.7	102.3	110.0	126.9	121.1	217.4	224.3	210.2	208.2	219.2	248.6	238.8	233.2	228.5	216.0	222.2	235.6
9	248.1	251.4	235.5	241.8	249.3	256.2	234.0	257.5	247.0	235.6	237.7	269.3	290.2	288.7	297.4	243.4	294.4	276.8	269.7	235.3	222.4	223.8	250.8	306.6
10	289.8	286.8	290.2	282.9	285.6	287.8	281.9	302.4	311.7	231.4	198.6	224.3	189.2	169.5	141.1	150.0	140.4	126.9	155.6	178.6	154.4	259.4	316.4	188.4
11	128.4	273.9	137.9	20.8	273.6	295.4	314.0	310.0	111.6	124.5	128.1	125.7	99.9	148.6	217.9	226.0	221.2	223.8	218.2	214.0	220.2	232.7	223.8	206.8
12	218.7	265.6	318.4	262.5	299.1	213.2	245.1	293.9	308.2	262.7	303.1	307.0	279.1	220.8	304.7	278.2	251.7	234.8	239.8	262.4	308.1	261.5	314.7	276.2
13	281.9	273.8	285.7	269.4	259.9	273.8	261.8	274.1	276.9	316.9	312.8	313.1	292.7	86.6	334.4	325.4	349.8	315.1	265.1	231.9	224.6	89.7	343.1	244.5
14	282.1	335.9	264.4	282.2	276.3	284.5	309.5	267.2	283.1	281.1	150.2	131.3	130.3	131.4	132.2	135.3	171.4	206.2	154.2	117.5	326.5	235.5	236.7	299.2
15	154.2	320.6	282.6	285.1	263.3	269.1	279.3	248.7	266.7	134.1	126.8	122.9	114.2	114.5	222.6	230.5	227.9	239.1	251.9	237.4	238.2	239.7	210.1	222.9
16	214.2	188.1	304.9	276.5	285.1	304.6	289.1	264.4	250.8	271.7	291.5	285.1	319.7	174.5	89.7	8.2	287.0	279.3	245.4	266.7	292.6	281.8	274.2	313.7
17	279.4	287.4	295.0	303.6	296.6	268.4	62.8	125.5	131.2	134.2	129.3	140.5	293.6	141.0	142.3	153.9	157.6	159.0	149.0	159.2	147.1	148.3	124.2	71.8
18	104.0	276.5	288.0	285.8	304.9	310.0	279.4	349.8	275.4	225.5	246.0	252.8	231.1	218.0	216.4	199.7	210.2	210.7	237.7	257.6	250.9	261.0	283.4	277.4
19	259.2	261.1	265.2	268.7	267.6	263.6	270.5	276.1	291.9	82.0	117.3	122.6	135.5	145.4	188.7	143.5	148.1	156.1	162.0	169.4	170.2	177.9	258.0	91.8
20	110.8	357.8	300.7	283.9	286.1	3.1	294.7	110.2	120.9	131.9	144.3	147.6	134.2	136.7	146.4	156.1	152.9	157.1	147.7	146.5	134.4	140.2	138.4	132.8
21	115.4	71.6	69.9	15.2	279.1	282.3	286.4	290.0	43.8	354.2	176.5	223.2	318.8	3.2	89.1	48.2	160.6	142.5	168.4	162.1	160.5	158.9	122.2	95.5
22	255.9	283.6	281.1	283.8	287.1	282.1	281.7	98.2	102.2	118.8	115.4	135.9	142.3	142.9	143.7	140.2	140.2	146.8	145.5	142.5	135.7	132.7	134.1	133.8
23	134.3	125.4	118.9	122.4	139.0	91.6	120.6	127.7	125.0	116.8	128.1	135.3	131.8	136.3	146.5	147.8	146.5	151.2	148.5	160.0	153.2	150.5	116.6	75.9
24	94.8	91.7	268.6	284.6	293.8	320.2	130.4	124.9	123.0	116.3	118.1	116.9	119.9	124.3	122.9	117.1	122.5	117.4	112.4	111.5	112.2	108.5	114.0	114.2
25	115.1	112.2	114.5	119.6	118.6	119.4	115.1	113.6	116.9	114.2	116.9	117.0	120.0	118.2	116.8	122.9	126.3	123.2	123.8	128.5	127.6	115.9	91.2	96.8
26	109.0	348.7	312.7	112.3	275.7	288.5	44.6	102.0	140.4	105.1	55.0	63.0	60.9	130.8	161.8	97.0	63.0	97.6	99.9	92.2	147.6	120.8	149.9	297.4
27	30.7	286.7	287.7	285.2	283.3	282.5	290.2	4.1	131.0	142.9	137.2	135.2	135.3	145.0	130.0	135.2	137.8	142.1	142.0	161.9	154.3	135.6	73.8	56.0
28	22.3	62.7	96.7	305.0	268.4	282.8	271.4	83.0	86.8	74.1	223.7	229.1	235.3	238.7	233.4	224.5	247.7	291.2	206.4	200.2	163.5	156.3	147.6	130.0
29	118.0	145.2	154.5	152.8	149.9	157.7	48.3	59.2	108.8	136.7	142.2	145.7	155.1	147.9	144.1	136.4	141.1	148.9	147.4	144.8	147.3	146.6	131.5	129.5
30	125.1	99.1	95.6	91.2	98.5	83.4	69.1	311.0	108.7	114.8	25.2	334.4	165.6	79.8	202.5	233.3	5.1	219.8	155.0	276.1	262.9	282.2	281.5	290.0

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	291.1	290.9	286.9	296.8	289.0	276.2	281.2	249.7	167.2	118.4	117.2	113.3	139.6	131.7	126.4	119.0	126.9	121.7	116.6	116.7	119.8	120.3	125.0	122.1
2	115.6	113.4	137.9	129.4	126.9	131.7	126.5	134.7	132.5	124.3	127.6	123.1	129.2	127.5	132.2	126.9	129.3	134.5	137.1	143.2	139.7	134.3	131.2	116.5
3	121.5	124.4	121.4	133.0	113.0	135.3	125.4	114.0	122.1	126.1	120.0	109.4	134.3	138.0	124.4	118.9	124.1	137.4	149.3	122.0	124.7	109.6	123.8	124.8
4	109.3	121.1	93.2	278.5	287.6	292.0	292.7	264.6	357.9	242.0	133.4	143.0	130.7	133.8	157.2	162.5	154.6	149.0	130.2	300.4	130.1	109.6	60.8	309.8
5	271.7	290.2	277.0	306.2	289.3	291.1	285.9	302.4	89.9	126.9	140.1	107.0	79.6	137.3	152.1	154.5	138.4	123.5	131.1	138.8	138.6	109.6	306.7	322.8
6	272.8	91.8	141.7	280.2	284.2	278.2	301.5	280.8	281.4	358.0	130.0	141.8	147.3	151.9	139.9	145.5	160.3	151.5	146.3	154.6	147.5	146.0	135.5	137.9
7	114.8	127.5	145.5	129.1	115.8	83.8	92.3	116.8	138.5	122.9	127.6	136.2	139.4	137.5	134.6	132.2	135.0	137.4	144.3	139.7	141.9	152.8	146.7	92.6
8	82.1	113.9	283.6	293.4	283.9	46.6	112.1	125.5	123.6	102.6	109.8	117.6	118.3	132.9	135.2	133.8	124.2	147.9	134.2	133.0	130.4	129.7	131.1	140.4
9	128.1	124.6	82.1	129.2	136.5	142.0	105.7	50.3	84.0	139.7	139.8	135.0	132.4	148.9	136.6	138.9	135.0	128.6	129.1	145.5	141.8	146.3	130.5	115.4
10	120.9	114.3	135.0	139.6	139.6	134.6	134.7	130.3	133.6	135.8	138.5	140.6	158.7	153.8	159.6	163.8	156.0	153.3	147.2	144.5	134.6	137.6	143.1	151.2
11	124.0	76.1	93.7	60.9	99.7	72.7	83.6	88.3	123.5	151.7	139.7	137.9	144.9	147.0	157.1	142.2	141.4	149.3	150.7	138.3	144.5	147.7	134.0	140.5
12	107.7	78.7	120.3	272.1	284.5	265.2	114.0	102.8	115.6	126.3	117.4	127.5	126.2	123.6	129.6	129.4	129.5	123.3	116.2	123.8	115.8	117.6	118.1	116.6
13	120.4	121.3	122.0	126.8	127.8	131.4	129.9	128.9	133.4	139.7	144.4	146.2	147.7	140.3	145.6	145.9	151.8	163.3	160.3	135.3	138.1	118.2	353.6	17.0
14	16.8	323.1	244.1	266.0	287.2	265.8	185.8	65.6	121.5	113.6	110.4	128.8	142.1	141.9	144.3	146.5	164.0	146.5	161.9	159.7	160.8	153.7	147.7	159.6
15	162.3	153.3	158.4	146.2	67.8	66.8	106.9	135.7	101.5	113.1	144.4	144.3	138.7	138.6	144.4	147.2	145.7	138.1	137.9	137.6	129.5	125.3	127.0	116.6
16	107.5	109.3	109.7	113.6	112.3	112.1	114.4	114.1	110.3	114.5	110.4	112.4	115.1	115.8	112.3	117.5	112.5	112.4	113.1	113.3	117.7	119.3	124.1	133.2
17	143.3	144.0	197.9	232.9	269.1	272.9	240.7	230.9	233.8	234.2	237.1	245.0	239.7	242.8	246.0	246.4	249.0	236.3	237.6	237.8	235.1	236.5	253.0	252.6
18	233.6	259.9	240.9	247.8	254.8	257.1	255.5	246.5	236.1	267.3	258.8	326.3	313.4	284.1	288.5	229.9	251.0	297.8	253.7	282.0	278.0	286.5	299.7	290.1
19	262.5	262.6	264.2	262.3	259.0	283.8	314.5	305.6	307.9	318.8	314.6	322.5	318.2	316.8	333.2	325.4	332.4	330.9	335.3	319.0	304.3	278.6	266.2	285.4
20	298.7	278.2	268.0	296.9	275.5	305.1	280.5	294.4	245.9	229.9	214.9	246.8	224.2	227.2	218.9	211.6	215.4	221.3	217.4	87.4	65.6	136.7	110.2	120.3
21	143.0	178.5	172.3	163.9	142.2	135.1	137.2	167.6	198.4	213.8	237.9	244.0	242.1	276.1	268.1	299.0	256.2	215.3	256.8	238.5	224.6	265.2	225.5	234.6
22	235.2	207.8	216.7	215.4	281.7	296.9	271.4	121.7	118.4	113.5	119.0	138.2	150.5	138.6	106.9	277.8	267.1	249.8	306.6	318.9	57.8	121.5	107.0	97.6
23	90.4	112.3	100.3	101.7	90.1	55.7	90.6	96.7	82.2	225.8	233.3	236.6	241.3	232.3	228.9	221.8	177.1	160.4	157.2	178.5	226.2	233.8	239.6	287.6
24	276.1	293.7	274.2	266.8	268.7	273.9	264.7	247.2	300.4	303.8	306.0	305.6	319.7	322.1	330.0	328.5	337.6	345.0	332.5	344.9	343.1	292.2	303.4	316.4
25	318.1	308.2	297.4	288.6	267.9	324.1	287.1	221.0	252.8	328.8	318.8	319.2	320.5	324.2	335.7	333.2	331.7	341.0	322.8	320.6	331.2	355.2	315.1	278.5
26	268.0	248.8	247.8	250.5	266.5	299.2	293.9	256.2	236.0	250.8	255.0	254.2	229.4	223.2	332.6	279.9	280.4	250.4	246.6	211.9	150.2	133.7	84.1	130.0
27	86.9	81.9	91.5	92.0	112.5	114.1	119.9	116.1	146.0	135.9	142.3	133.0	133.2	122.4	136.5	135.1	145.0	134.7	137.8	139.4	146.8	326.3	260.0	305.9
28	281.8	271.9	280.6	300.2	288.1	265.5	235.6	297.3	299.8	314.3	325.9	326.6	323.9	336.9	334.9	331.4	328.1	317.0	316.8	320.5	320.3	313.0	324.3	303.7
29	280.4	314.5	327.4	322.8	316.4	324.7	300.9	270.4	256.8	299.6	317.4	316.3	321.6	314.9	317.6	323.3	329.5	322.4	323.4	321.2	328.6	338.8	333.1	328.1
30	328.2	297.0	287.6	293.7	276.0	272.7	267.0	276.9	285.0	312.1	317.2	311.8	307.2	308.7	315.3	330.3	325.6	336.9	332.7	327.1	314.8	295.0	291.9	274.2
31	271.1	274.5	284.1	269.0	281.0	280.6	267.9	269.5	267.1	302.7	300.8	296.5	311.6	306.3	299.2	304.5	310.7	311.1	303.3	297.9	299.5	288.9	309.5	318.7

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	262.9	275.7	260.0	259.2	270.0	260.6	94.8	286.4	45.1	117.9	116.7	97.9	121.5	119.1	124.0	125.0	130.3	118.2	129.1	131.8	127.2	135.1	234.6	284.5
2	272.4	1.0	36.3	73.6	57.8	138.9	128.7	100.9	123.6	133.3	132.9	152.3	152.8	143.5	153.3	147.0	156.0	151.4	147.9	136.7	175.0	320.3	290.6	291.6
3	279.3	276.5	275.4	285.2	263.6	268.1	270.2	272.9	240.1	272.1	284.1	248.7	139.5	139.6	141.4	138.9	142.7	149.8	149.7	154.1	146.7	152.6	143.8	119.1
4	102.6	84.8	89.1	61.4	23.4	76.4	106.0	93.0	118.4	134.4	154.5	152.8	152.5	157.8	155.1	170.7	166.0	165.3	155.0	149.7	150.1	145.8	86.9	87.5
5	258.8	294.7	270.6	291.9	283.8	284.6	265.9	318.3	266.9	281.8	314.4	345.9	328.2	334.6	333.7	328.1	332.7	318.9	325.3	321.8	321.4	321.0	331.3	326.3
6	321.5	274.8	262.9	285.0	311.7	263.9	250.6	282.8	300.1	304.1	300.1	307.9	321.9	323.4	322.6	324.3	331.5	313.5	314.5	319.3	323.4	306.6	276.9	264.6
7	261.9	254.1	247.4	262.9	248.8	263.3	282.2	275.2	284.5	312.8	325.2	326.3	322.1	331.3	331.7	322.3	319.7	317.3	340.5	326.7	321.6	326.7	294.4	275.1
8	262.0	265.9	271.4	263.2	236.1	246.1	263.0	273.3	285.9	302.7	298.7	313.5	323.4	329.3	329.6	324.6	320.1	322.7	321.2	321.0	318.5	321.5	297.6	255.9
9	249.5	276.4	273.0	265.2	263.2	263.9	266.9	284.5	313.1	318.7	309.2	326.6	327.5	335.8	334.4	336.0	334.9	333.7	332.2	338.2	318.1	304.8	267.9	255.8
10	270.5	282.4	297.8	290.5	209.6	280.0	284.1	287.4	287.8	101.0	110.6	111.6	98.4	122.9	143.3	113.1	113.8	115.4	152.0	147.6	141.3	136.0	353.6	259.1
11	299.9	280.8	288.1	288.4	280.8	288.3	67.2	67.6	79.4	98.4	114.1	130.4	119.0	124.7	135.8	135.5	133.9	133.7	137.2	150.2	159.3	280.3	286.1	286.0
12	282.9	280.5	292.5	291.8	274.9	286.4	274.3	294.9	283.4	280.7	303.1	298.3	286.3	108.6	99.1	67.8	57.5	148.1	141.7	78.0	321.2	87.1	104.9	275.3
13	271.3	269.0	263.9	248.1	260.3	101.5	264.8	358.5	307.4	286.7	275.1	287.0	303.5	294.2	92.4	234.4	113.7	119.3	125.4	126.8	119.3	119.6	291.5	273.4
14	288.9	287.9	298.9	300.5	290.9	294.8	293.1	295.1	125.3	116.0	121.7	146.4	151.6	136.1	141.4	134.0	138.2	141.5	138.7	139.1	127.4	102.4	66.9	95.4
15	185.9	199.0	319.7	306.6	274.2	270.1	256.2	266.3	301.7	296.3	290.9	285.0	134.6	128.8	138.6	126.2	125.8	129.2	140.2	123.6	115.3	102.9	117.5	140.1
16	113.1	103.7	116.2	102.3	89.8	111.7	121.1	102.1	114.4	139.3	129.1	150.8	152.5	147.4	152.4	158.9	152.5	153.0	149.9	150.5	152.0	144.4	75.4	253.7
17	202.1	290.1	298.9	294.0	287.0	291.7	278.2	275.9	298.5	90.1	142.3	106.1	120.4	127.5	125.7	114.2	123.7	133.2	135.8	130.7	119.1	107.2	125.5	110.1
18	91.6	96.5	100.1	264.2	281.2	283.1	284.6	281.6	255.7	179.3	348.6	72.1	125.8	142.2	140.7	141.6	145.9	158.5	233.9	133.0	35.7	307.5	268.7	261.8
19	258.5	273.7	298.8	280.3	301.5	260.1	294.5	261.1	244.8	135.4	270.8	269.3	297.1	299.7	289.6	322.8	324.7	317.3	320.6	323.0	344.1	235.6	285.3	276.5
20	272.3	272.1	271.0	282.5	266.9	263.5	273.4	271.3	276.9	288.8	298.5	250.0	278.4	270.7	291.5	300.3	305.7	313.6	323.6	332.0	315.9	119.0	255.6	271.1
21	266.5	262.3	268.4	268.0	255.2	257.1	87.8	292.6	277.1	211.8	245.8	200.0	232.0	238.8	231.2	229.6	238.8	336.6	318.3	336.2	252.0	94.5	251.7	221.4
22	313.5	290.3	286.8	268.9	271.6	278.2	283.0	270.4	253.6	249.9	273.4	260.2	285.1	227.2	142.9	259.8	158.9	308.7	291.3	293.5	280.7	276.4	268.2	267.4
23	270.8	272.8	271.9	274.1	267.0	271.4	251.6	244.3	241.8	259.9	289.1	307.3	278.9	265.6	276.7	248.9	147.3	129.0	138.3	153.1	142.0	147.2	149.4	102.7
24	7.9	308.4	269.6	284.8	10.3	44.1	289.8	279.0	278.5	270.6	266.0	296.9	317.6	319.1	332.2	328.5	332.2	8.6	307.3	125.9	105.9	84.2	288.1	272.9
25	266.5	265.7	265.4	283.8	295.6	281.9	285.7	125.4	67.4	27.0	142.9	243.1	188.2	147.1	133.4	131.1	135.9	154.8	149.9	147.6	150.0	96.2	88.9	91.9
26	73.9	77.9	103.4	79.9	18.8	99.2	17.9	63.2	97.8	117.3	137.7	139.1	138.2	137.5	142.8	149.7	155.1	156.0	157.7	152.8	146.6	146.9	134.4	138.2
27	120.0	87.0	113.7	160.9	319.8	280.1	287.6	274.9	279.1	286.5	306.5	304.0	302.0	320.3	284.8	272.6	298.2	273.9	288.1	261.4	97.3	108.4	334.3	249.6
28	273.9	259.5	266.4	271.4	255.9	264.6	285.9	267.5	267.9	257.5	260.4	274.1	322.4	320.5	304.5	304.8	308.4	280.6	274.4	266.6	304.4	313.7	253.5	246.0
29	257.2	258.3	261.5	261.3	266.3	266.1	270.0	269.3	273.1	278.5	285.5	305.6	302.4	278.9	256.2	241.7	226.5	237.4	246.0	254.0	248.0	242.2	333.3	284.7
30	273.3	275.7	284.7	286.2	278.3	300.4	282.3	287.7	285.9	323.6	114.0	113.1	110.8	142.6	124.3	130.6	123.1	132.5	133.3	133.4	114.0	118.0	115.7	112.3
31	115.1	119.5	123.9	116.9	111.2	110.4	125.6	114.2	105.5	116.7	105.7	93.0	99.0	97.2	75.0	76.9	66.7	57.6	50.0	43.3	44.5	44.4	48.6	54.5

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	45.8	42.1	43.4	40.9	41.5	49.2	43.6	41.4	42.7	48.7	56.8	79.7	122.7	105.2	87.4	77.3	87.3	108.0	108.6	107.1	123.4	99.9	107.2	106.3
2	94.6	93.5	94.2	98.6	98.6	96.9	100.7	111.4	109.0	112.5	110.7	110.7	115.4	117.1	116.1	115.5	134.1	125.3	44.1	54.7	56.2	53.3	54.1	55.0
3	52.6	53.7	43.3	37.6	33.8	24.0	273.4	274.7	244.3	241.7	196.9	138.2	133.3	98.3	102.8	134.8	139.0	149.0	142.0	137.2	137.6	128.8	95.3	248.3
4	221.2	210.8	193.5	102.6	49.8	48.2	70.8	75.8	116.3	71.2	131.1	141.3	133.6	149.5	135.3	141.2	159.8	159.8	152.0	176.6	193.2	292.3	282.2	287.3
5	287.4	287.0	283.6	287.6	280.3	291.8	274.1	280.2	285.7	28.1	104.3	95.7	110.8	142.1	153.9	226.8	328.8	263.9	90.8	169.6	267.0	288.4	278.7	287.2
6	282.9	285.0	281.4	298.8	277.6	280.3	132.4	129.7	132.1	127.3	123.9	103.6	101.5	102.2	97.2	105.4	105.7	104.4	109.1	92.1	83.0	123.6	131.3	119.8
7	118.7	128.3	118.1	122.7	130.9	127.1	136.7	137.9	103.9	121.3	116.1	125.5	114.7	113.0	100.9	107.0	116.9	103.8	120.3	115.4	109.2	104.6	103.1	110.2
8	133.7	163.0	141.0	133.9	150.0	159.3	136.9	120.7	80.3	117.6	105.0	115.0	92.6	100.4	107.1	106.3	111.6	118.7	104.1	92.5	108.0	122.9	127.0	111.8
9	106.7	111.0	123.5	128.5	124.2	131.4	142.0	107.2	83.5	337.4	142.6	142.6	135.9	122.1	109.4	107.1	101.1	109.6	123.7	129.2	145.9	127.1	123.1	91.3
10	84.1	107.2	131.9	154.0	309.0	290.6	267.5	303.1	87.1	92.3	58.5	60.5	182.4	249.0	242.8	240.4	241.1	241.0	236.3	231.2	234.2	257.6	245.7	257.5
11	237.6	228.0	232.8	253.6	221.2	168.2	85.9	105.7	83.1	94.7	127.2	141.0	151.8	152.2	152.6	143.2	142.6	144.1	139.0	138.1	128.2	127.0	103.4	113.0
12	113.6	107.3	104.1	108.6	110.5	106.9	106.2	107.7	102.1	105.3	109.8	116.5	123.8	125.1	123.5	111.8	113.4	110.2	113.3	109.7	111.9	103.1	104.8	109.5
13	101.9	94.4	98.1	109.3	114.4	109.6	108.3	111.7	110.9	108.7	110.1	112.9	114.2	113.6	108.6	109.6	113.2	118.8	117.5	118.9	112.1	98.1	94.5	108.6
14	104.0	76.0	110.4	78.5	165.4	77.6	67.8	55.2	96.1	131.7	108.5	126.5	127.9	107.9	106.9	103.6	103.2	115.6	120.1	117.5	135.5	123.8	129.3	90.4
15	62.9	62.2	83.1	115.3	92.1	60.6	129.3	137.8	146.6	131.2	103.1	109.2	113.2	111.8	111.4	108.6	112.3	115.0	113.0	112.0	109.3	130.7	127.7	83.6
16	52.7	255.3	253.3	275.3	274.7	276.5	259.8	249.3	264.7	269.5	284.4	310.0	325.1	310.8	307.7	305.0	307.3	286.5	281.6	291.2	292.6	263.2	269.5	267.9
17	304.3	295.4	279.4	292.0	211.3	222.6	244.5	249.5	254.1	290.3	132.2	110.7	149.0	105.9	97.8	96.3	97.8	103.2	106.0	105.4	105.4	118.4	290.2	205.3
18	60.8	44.7	46.9	49.9	53.0	45.3	48.1	43.6	17.1	7.7	16.6	27.9	33.7	296.1	277.5	298.9	316.1	316.9	290.8	236.5	270.6	171.5	90.6	294.8
19	237.8	273.6	291.5	260.8	348.0	94.0	88.0	84.4	84.1	87.5	128.2	129.0	131.3	139.6	145.7	258.0	284.2	291.8	287.4	285.6	294.3	291.7	288.2	301.4
20	273.3	279.5	292.0	283.3	282.7	267.4	271.5	275.4	271.7	291.7	287.4	311.4	300.5	298.5	282.2	298.7	305.0	329.1	330.1	328.2	281.4	274.9	272.9	293.1
21	266.1	262.3	260.8	263.8	261.2	269.3	270.2	267.4	260.7	260.2	258.1	297.8	308.5	328.4	322.4	299.5	324.1	311.3	310.3	313.8	288.4	267.5	259.8	245.7
22	262.3	250.6	258.5	258.7	258.3	259.2	263.7	259.7	265.3	267.3	257.7	251.4	241.4	111.2	127.0	143.3	164.2	120.4	101.0	97.4	129.9	143.5	146.7	147.0
23	141.2	136.9	129.8	136.3	153.0	216.6	216.6	223.8	233.6	226.7	210.4	201.2			254.1	195.7	213.0	223.0	208.4	204.8	204.4	210.3	189.9	107.2
24	99.1	127.9	119.5	128.0	119.0	121.0	135.4	137.9	87.2	87.2	105.9	119.9	123.2	119.3	111.4	109.0	120.6	114.8	124.7	134.4	143.6	130.9	176.7	259.7
25	268.5	207.1	164.9	139.3	138.6	151.8	116.0	258.6	277.4	172.3	135.4	132.7	115.2	130.0	133.0	137.0	146.5	140.5	144.7	148.3	267.4	267.0	177.3	279.5
26	280.1	260.6	262.8	272.5	284.8	280.9	272.1	291.9	278.1	272.2	136.8	274.7	284.9	266.6	290.4	10.9	45.0	274.4	257.0	316.1	287.0	265.1	265.4	252.9
27	254.1	262.6	271.9	270.3	272.8	269.9	255.0	250.8	243.0	252.9	251.8	264.0	272.4	273.8	313.8	327.5	333.5	337.4	331.3	272.2	255.6	245.7	246.8	256.1
28	263.9	283.9	265.6	268.2	264.6	257.4	268.2	272.1	268.5	261.5	255.2	275.3	258.4	236.8	217.1	287.0	152.3	151.5	118.3	119.2	121.6	338.1	100.0	91.2
29	100.8	96.9	79.6	64.7	10.1	290.6	358.8	359.0	130.2	138.0	122.2	98.5	106.5	104.7	91.0	118.8	99.0	84.4	90.0	103.9	130.2	117.0	133.1	278.5
30	284.9	290.4	280.7	269.3	269.8	264.6	264.6	278.2	276.8	280.2	289.2	310.7	324.0	316.2	312.6	327.8	328.5	332.6	346.9	358.4	327.3	293.3	278.6	286.8

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	286.7	285.7	294.6	275.8	309.0	172.3	98.7	71.7	81.4	95.5	126.5	91.2	130.7	126.9	130.9	140.8	161.7	154.6	105.9	91.3	116.9	111.5	114.8	119.2
2	135.9	120.7	287.0	295.7	298.1	293.1	273.2	167.1	267.0	285.4	286.0	313.2	138.5	245.4	228.4	250.8	274.4	163.3	151.4	273.6	252.5	248.9	248.4	254.5
3	296.9	270.3	286.6	287.0	282.9	284.3	288.6	289.6	305.5	300.0	295.7	294.2	297.5	298.5	312.7	311.8	315.6	315.2	313.4	284.1	307.0	250.7	256.4	266.5
4	276.3	273.3	279.5	259.1	280.6	295.7	281.2	276.7	266.6	282.9	261.9	260.3	267.0	290.6	284.3	306.8	294.6	29.2	51.1	254.9	52.1	106.3	120.0	0.0
5	263.6	246.2	170.9	26.9	175.2	251.2	179.6	222.8	300.6	304.9	284.4	269.5	297.7	288.4	280.8	285.0	288.6	275.0	294.7	347.3	327.7	312.8	320.9	274.7
6	293.0	282.9	251.3	265.2	269.9	266.8	271.2	269.4	273.0	274.1	289.9	291.3	298.1	310.6	322.5	308.3	296.6	301.7	304.6	320.8	318.5	308.5	306.8	307.1
7	313.1	300.8	306.7	307.9	298.2	287.5	312.4	314.6	307.6	310.2	312.2	322.8	327.1	324.5	320.3	319.9	312.4	306.1	303.1	313.6	305.5	304.7	312.1	298.8
8	296.9	290.8	301.9	301.6	292.9	294.9	293.5	278.9	272.6	281.0	295.2	299.8	312.0	340.1	343.8	350.0	339.3	333.0	348.4	283.6	273.1	296.6	141.8	138.6
9	135.8	135.4	125.6	110.3	104.1	111.8	109.8	109.1	113.6	117.2	115.3	114.8	102.6	105.4	110.9	110.3	109.7	108.8	107.2	105.1	115.2	115.2	113.4	111.9
10	112.7	121.7	147.1	109.0	229.4	242.9	239.8	292.1	148.9	105.1	114.7	131.1	132.3	109.9	117.1	125.3	133.6	127.3	124.0	152.1	143.2	168.9	125.1	127.6
11	116.8	90.0	100.5	108.5	106.2	93.9	84.8	86.5	86.4	297.9	330.4	322.5	323.8	326.8	327.5	332.0	328.7	329.0	322.4	320.2	320.7	316.3	322.5	318.3
12	316.2	317.8	319.8	320.6	317.3	314.2	314.6	314.0	308.9	312.6	315.4	316.1	321.4	325.0	321.2	318.6	319.3	320.6	317.4	314.3	304.1	212.7	244.7	282.6
13	276.5	270.9	271.3	262.9	272.8	285.3	274.5	275.6	281.1	287.0	145.4	103.8	139.5	135.6	129.7	127.1	128.9	113.6	106.4	130.2	131.8	129.8	122.9	105.1
14	100.3	102.1	124.2	127.3	135.4	142.2	150.0	137.8	128.3	141.5	126.4	126.2	124.2	118.0	119.3	130.1	135.5	111.2	121.5	127.8	135.8	357.5	278.2	266.1
15	314.5	290.0	244.2	220.3	237.9	276.2	260.0	251.2	272.8	288.0	265.1	281.4	266.5	264.3	261.2	279.3	273.9	277.1	277.2	260.6	250.2	262.0	271.8	262.3
16	274.5	282.7	283.9	291.2	287.7	286.9	283.0	284.4	268.9	261.4	282.0	266.5	272.7	276.9	271.0	279.1	289.4	287.8	278.1	270.6	263.6	268.5	275.0	271.0
17	282.0	278.2	284.0	285.5	288.1	286.4	288.9	300.7	303.6	284.7	295.5	301.0	172.3	228.7	153.6	147.0	245.8	291.7	298.0	281.4	281.4	126.7	120.5	134.6
18	129.1	127.1	111.9	104.6	110.9	99.6	94.9	84.8	80.2	80.4	109.9	127.2	114.5	86.2	75.1	57.1	52.4	49.4	47.9	46.4	40.6	48.0	257.9	277.2
19	300.1	293.4	267.3	253.4	263.0	262.0	258.9	245.1	274.6	270.4	276.6	269.6	267.0	273.6	276.9	279.4	268.7	274.7	264.4	268.6	264.6	257.2	261.4	247.5
20	254.0	260.3	258.5	261.2	257.0	251.0	272.2	264.8	246.3	247.4	265.5	253.8	267.0	275.5	275.1	277.9	272.3	289.8	283.6	269.1	262.0	276.4	255.1	257.1
21	263.9	261.8	254.7	281.7	273.6	154.8	134.8	121.1	119.6	299.8	346.4	290.5	263.3	295.0	310.0	317.7	310.6	306.3	310.2	296.0	279.3	252.3	259.2	290.0
22	269.9	293.3	299.2	309.5	290.4	303.4	313.7	300.7	303.2	293.2	313.0	306.0	301.3	307.2	311.1	312.1	283.7	279.7	297.4	296.5	287.7	283.2	254.3	276.7
23	274.4	277.3	270.4	261.7	309.4	302.1	266.7	257.0	296.2	320.0	308.6	285.2	283.1	265.1	282.4	300.1	292.5	302.1	318.9	313.7	322.2	324.0	314.5	291.2
24	295.4	290.7	296.2	298.4	299.5	300.2	302.6	300.1	304.0	301.5	317.8	329.7	333.6	317.3	305.8	326.6	325.7	288.3	288.1	106.1	139.7	294.5	286.8	280.6
25	282.1	121.2	128.9	119.6	88.2	109.0	126.4	128.0	134.2	130.8	119.7	115.0	119.9	128.6	120.6	109.0	131.0	129.4	304.5	278.6	265.0	267.3	256.7	249.6
26	248.2	252.6	253.2	266.1	255.4	256.6	266.6	287.5	281.1	275.4	318.4	309.8	300.5	312.8	318.5	311.3	308.1	312.6	248.8	246.2	212.2	217.7	191.3	314.3
27	263.3	267.5	247.9	225.6	212.7	221.9	218.8	237.8	231.3	213.5	202.7	276.1	291.5	295.0	292.2	295.4	301.1	272.0	266.2	273.9	267.4	264.9	269.9	275.1
28	285.1	296.5	274.8	284.6	284.6	291.2	282.5	288.2	280.5	299.5	290.7	286.1	294.0	255.6	118.2	185.0	318.2	285.5	278.1	282.6	285.0	284.2	276.9	288.2
29	282.5	287.1	287.2	280.4	290.8	282.2	287.3	294.2	286.7	289.0	285.3	281.7	293.6	116.0	122.7	115.2	115.4	106.8	84.5	94.9	88.6	115.7	120.1	106.7
30	100.2	128.2	132.2	151.8	63.5	78.7	287.1	81.4	303.6	83.7	91.4	282.6	289.6	274.8	258.2	301.1	272.9	282.0	280.8	280.3	280.2	291.7	277.6	293.2
31	287.1	290.7	286.4	295.6	292.2	282.4	292.6	288.6	290.9	280.5	298.1	297.4	278.5	109.9	323.7	261.3	272.3	274.1	278.8	275.0	285.8	287.7	288.5	288.6

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	292.7	284.3	284.7	295.3	291.8	286.5	287.0	279.0	338.6	289.1	286.9	299.0	284.1	261.6	229.7	249.8	277.0	319.4	293.6	303.1	309.8	310.0	307.1	290.9
2	289.3	290.1	279.0	295.0	300.0	295.8	302.0	296.3	296.9	284.4	288.4	300.6	296.0	296.0	287.3	291.1	292.8	282.9	284.6	279.0	270.9	271.2	264.1	257.6
3	248.0	246.0	241.4	259.0	260.9	259.3	261.2	286.1	287.4	272.4	283.5	294.1	288.9	299.9	290.9	279.7	282.0	283.2	287.8	290.0	291.4	297.9	301.6	270.7
4	285.4	258.8	232.0	241.9	234.8	247.2	245.4	267.1	247.7	270.5	262.2	256.1	249.6	264.5	267.1	260.1	257.6	250.1	253.4	260.4	264.2	262.6	265.8	268.3
5	281.2	288.5	276.3	295.9	305.0	308.3	297.6	288.3	270.8	268.1	292.2	287.5	286.9	282.2	266.0	266.5	261.7	256.4	256.6	260.2	263.8	268.1	259.1	262.5
6	259.6	258.3	256.1	257.3	255.2	251.3	254.8	227.5	354.6	269.2	0.6	339.1	309.1	274.2	266.8	259.2	258.7	273.9	287.4	262.1	258.2	245.2	254.0	236.8
7	277.3	293.4	276.2	268.6	268.5	275.5	274.7	273.9	283.3	271.4	270.2	254.0	271.1	290.8	265.4	251.2	263.1	284.2	295.8	77.3	300.9	280.2	104.4	129.2
8	104.5	136.7	125.9	125.5	132.0	132.1	132.2	133.7	140.9	144.7	138.1	141.1	140.8	140.7	150.4	151.2	139.5	136.1	92.2	96.3	96.4	100.8	87.9	64.9
9	87.0	87.9	92.6	91.3	87.9	96.2	89.9	101.9	89.6	65.6	83.5	78.0	72.4	98.2	113.2	111.6	122.8	115.2	113.5	112.8	111.8	112.4	108.9	130.2
10	116.9	83.5	95.9	134.9	73.9	42.7	57.0	50.2	42.9	42.7	57.5	92.1	108.9	144.2	146.1	139.7	133.6	115.6	120.7	122.3	107.3	100.7	100.4	97.1
11	87.0	91.8	103.0	102.8	90.7	103.1	113.2	118.8	135.2	126.4	247.1	95.7	43.5	287.0	279.5	268.6	281.6	270.1	273.5	280.2	274.1	279.1	283.6	301.4
12	286.7	264.1	112.8	35.0	145.3	269.1	267.5	240.3	245.3	265.7	249.2	282.2	266.3	181.2	280.8	278.7	105.2	290.0	75.9	334.7	281.1	110.6	100.7	132.5
13	131.9	133.6	135.9	133.4	116.2	128.4	130.3	126.2	115.7	91.1	54.8	315.4	327.5	105.9	82.7	123.0	146.4	139.2	54.6	62.1	63.1	118.5	96.4	84.1
14	153.8	109.7	128.1	115.7	88.3	79.3	116.6	139.1	126.3	265.5	117.1	82.3	86.9	276.9	265.7	264.2	77.2	272.8	283.8	264.0	226.2	74.5	47.1	115.8
15	113.2	199.2	277.9	288.3	264.3	261.8	142.4	143.3	134.4	131.6	135.5	126.1	123.6	116.1	131.0	132.5	115.7	102.4	104.6	97.5	104.1	108.1	104.6	94.5
16	97.1	107.1	112.5	125.7	129.2	140.4	136.4	120.6	317.7	289.8	296.1	280.3	31.8	57.2	310.5	117.9	97.3	277.7	283.6	283.3	291.3	279.7	283.4	284.7
17	283.6	287.5	285.9	282.8	281.3	269.3	286.7	287.5	292.7	292.3	292.2	282.6	282.3	273.8	272.4	280.8	258.6	254.8	251.5	250.9	248.8	263.2	258.4	268.6
18	296.1	309.3	273.8	259.1	271.0	279.5	270.2	272.8	272.9	275.2	269.3	259.3	262.8	260.9	262.2	248.7	251.8	256.1	279.4	255.8	256.9	260.7	267.2	277.1
19	274.3	258.2	262.3	250.3	262.5	259.9	253.3	288.5	297.6	311.5	261.7	260.1	277.5	268.2	264.9	244.6	224.3	221.6	253.0	269.5	256.7	277.8	290.0	245.4
20	222.5	256.1	303.0	326.2	328.7	325.5	233.2	208.5	259.4	274.8	300.9	284.8	259.6	300.4	309.5	319.1	309.4	310.8	326.6	321.8	321.5	321.5	322.0	304.7
21	303.7	315.3	317.1	271.5	285.9	262.7	250.9	268.7	267.5	268.7	258.6	268.9	263.0	268.8	264.9	264.6	262.3	256.9	265.5	254.9	268.1	273.3	284.6	275.3
22	271.2	339.9	293.3	310.7	280.3	296.6	75.4	280.9	300.4	286.0	273.3	282.7	292.3	285.6	287.8	287.5	226.4	289.0	282.4	173.0	143.9	263.2	279.3	270.3
23	273.2	280.9	289.6	287.0	277.6	289.7	274.3	272.0	106.3	289.7	107.4	240.4	85.3	133.6	142.5	120.4	111.2	96.9	115.5	137.8	126.2	146.1	137.7	136.5
24	121.7	103.1	93.3	94.8	105.5	106.0	93.7	84.9	99.9	107.6	112.7	113.4	120.0	114.2	111.7	114.4	109.3	114.7	105.9	124.6	134.0	188.5	228.4	12.5
25	65.9	10.6	267.9	328.6	296.4	57.6	210.7	282.9	284.4	286.8	246.3	254.7	311.9	281.0	274.8	261.8	269.2	275.0	285.9	308.0	298.5	264.5	256.3	252.5
26	261.7	270.4	259.4	273.6	279.6	304.3	313.9	316.4	314.7	293.5	244.4	260.5	238.4	242.9	255.4	264.9	247.7	262.5	289.0	321.7	263.0	44.7	306.5	280.4
27	293.0	269.1	269.6	261.6	264.3	257.0	260.7	267.4	268.3	274.9	275.0	282.4	287.9	290.7	265.4	288.0	274.4	265.7	296.3	277.7	265.1	267.7	259.3	265.2
28	268.4	273.1	286.6	271.5	244.3	270.0	273.5	269.1	270.8	263.7	294.0	291.2	284.2	269.0	268.7	283.5	278.7	268.1	246.2	255.5	286.2	271.3	283.7	277.1
29	293.8	296.1	286.8	283.4	279.3	283.2	283.7	286.6	282.4	293.8	289.3	289.9	295.7	301.1	299.4	300.3	299.9	292.2	289.2	290.1	292.5	272.5	278.8	276.7
30	284.8	316.9	312.5	299.8	274.4	256.0	256.3	271.9	292.9	308.9	303.5	300.8	287.4	281.2	293.1	272.4	254.8	279.6	250.4	241.1	290.6	290.0	263.6	271.7

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Resultant Wind Direction (RMYoung) (Degrees)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
1	277.0	288.4	309.5	319.0	316.7	276.2	259.3	257.0	269.6	260.2	309.7	263.9	264.6	258.7	260.9	294.4	277.9	84.3	279.4	285.9	280.9	297.2	275.7	297.8
2	101.6	88.5	232.8	275.0	346.7	108.4	126.4	109.5	115.5	112.1	123.4	122.4	100.4	100.8	95.2	103.2	105.7	110.9	113.3	112.5	109.0	113.1	106.2	102.3
3	104.5	109.5	108.3	108.7	110.7	110.5	110.3	108.1	108.8	104.3	105.7	102.5	104.8	102.6	110.4	110.7	107.5	108.7	107.9	110.4	115.6	109.2	109.9	99.0
4	109.6	111.3	114.8	119.4	118.9	114.9	124.8	122.6	127.0	123.2	121.5	108.0	101.4	112.0	107.5	101.1	97.2	103.0	109.8	119.2	110.6	105.8	119.3	118.1
5	108.1	115.7	108.7	114.3	113.3	115.9	118.3	111.9	107.0	116.7	115.8	118.2	118.4	121.0	128.0	106.8	92.5	112.4	114.8	116.9	86.6	105.1	128.9	79.3
6	83.8	106.3	126.1	129.7	127.0	119.1	116.0	67.0	82.3	100.5	141.2	105.1	280.6	270.0	265.5	233.6	289.0	280.0	266.0	265.6	262.6	264.2	260.8	264.0
7	269.0	252.4	288.4	276.9	276.7	285.7	280.3	280.7	277.0	278.4	269.5	275.2	268.4	270.4	271.4	273.0	282.7	269.5	273.2	354.3	273.7	255.8	264.8	263.2
8	272.8	284.4	283.0	298.4	279.8	283.3	279.5	149.9	117.9	92.3	97.1	57.7	63.6	56.9	48.6	46.1	42.9	40.4	36.3	38.8	39.1	41.8	37.9	39.6
9	40.2	43.1	40.4	261.1	268.6	270.4	269.2	285.4	270.3	284.5	293.3	265.0	262.6	241.1	262.8	149.4	122.1	126.4	108.7	96.1	85.7	105.3	131.5	118.4
10	130.9	99.5	111.4	165.7	161.9	236.4	221.0	218.3	212.7	234.5	253.7	254.9	323.3	301.5	149.0	109.9	277.5	294.0	274.5	285.7	305.2	271.0	264.3	261.8
11	262.9	266.6	273.0	290.6	281.6	262.4	280.9	286.6	285.4	288.2	285.1	293.1	118.8	209.3	173.8	301.0	298.7	292.1	268.3	280.1	261.4	249.8	240.6	268.8
12	282.3	272.2	277.3	276.7	269.2	220.0	260.2	280.2	269.5	234.2	305.7	8.5	133.8	128.0	115.8	293.4	115.4	276.2	267.0	287.8	270.8	270.4	285.4	244.7
13	282.5	315.0	293.1	302.3	308.0	306.4	303.8	277.3	269.6	244.3	273.4	262.7	263.1	282.1	274.6	264.6	274.1	257.9	283.4	280.9	287.6	287.8	282.5	277.8
14	289.1	276.7	283.5	249.3	292.9	289.3	247.8	290.8	301.7	61.7	93.1	26.3	97.6	99.1	117.4	118.1	114.3	105.4	91.9	124.7	132.7	114.9	118.3	118.1
15	119.0	115.1	115.0	113.9	115.6	115.3	115.5	116.9	112.7	117.6	117.5	91.6	83.4	105.2	118.5	143.5	84.2	222.0	297.9	281.8	261.1	293.3	271.0	277.7
16	293.1	290.7	291.1	273.5	293.7	287.3	291.7	288.8	292.5	291.5	291.7	287.3	293.8	69.2	84.5	83.5	76.8	84.1	83.3	79.4	77.5	92.8	97.1	126.6
17	117.8	118.6	108.2	108.0	103.4	108.8	108.5	107.8	108.7	105.3	101.2	108.3	108.0	110.6	113.5	108.1	108.4	107.3	108.2	108.5	110.8	109.7	112.8	113.8
18	119.4	117.6	116.3	114.8	111.9	111.3	104.1	112.3	116.2	113.7	109.4	104.1	103.8	107.5	110.8	110.9	110.9	112.7	111.4	109.8	107.5	110.4	110.4	111.7
19	114.1	111.3	111.5	110.0	111.3	109.2	103.6	103.4	108.4	104.0	104.2	105.0	96.5	97.3	134.9	353.1	151.3	86.2	55.2	47.3	48.0	53.1	52.0	70.0
20	62.9	82.5	291.6	197.4	236.9	310.2	81.2	42.0	44.7	39.4	38.2	81.1	172.0	199.2	131.8	140.9	149.3	248.2	263.5	288.5	276.3	266.7	258.9	261.8
21	263.5	42.1	296.8	286.7	262.5	257.9	262.1	246.0	192.6	294.8	279.3	285.8	65.6	95.8	211.7	111.1	138.2	74.9	288.0	284.3	288.5	291.5	277.4	247.5
22	291.0	287.5	288.5	288.3	298.0	108.1	120.7	115.0	119.1	131.1	143.0	149.2	128.8	90.4	93.6	79.8	109.9	124.5	123.3	142.4	152.0	149.4	150.3	144.3
23	116.0	106.2	107.9	106.7	99.3	101.2	114.0	126.7	169.4	295.0	288.9	279.9	311.8	320.2	318.1	322.5	303.6	316.1	321.6	329.9	329.6	322.5	321.8	313.0
24	307.2	294.3	302.3	301.0	302.0	309.5	294.3	279.4	279.5	198.3	275.0	135.5	222.6	248.5	244.4	253.3	254.0	267.9	80.0	276.9	278.3	93.1	132.5	135.3
25	123.3	123.1	110.5	107.9	109.7	101.8	104.4	122.2	108.5	120.9	123.7	127.9	135.1	145.6	158.2	152.2	198.5	298.4	298.0	305.4	306.0	302.3	301.0	305.7
26	307.5	310.0	308.6	310.9	308.2	306.5	314.1	306.0	302.0	299.7	304.4	308.9	304.4	305.3	303.5	303.7	304.8	302.1	296.8	299.8	295.4	299.9	303.3	303.9
27	311.0	308.4	308.6	316.9	328.0	333.8	321.7	327.4	322.2	323.4	321.8	330.7	312.2	316.4	313.9	317.6	319.7	330.2	324.6	330.9	307.1	315.0	312.6	325.6
28	310.6	314.5	298.1	300.0	285.4	266.0	235.9	215.1	301.8	323.6	325.3	342.8	309.8	323.1	332.4	331.4	319.8	312.4	321.5	287.5	242.6	269.5	272.6	275.1
29	270.2	274.3	268.2	258.2	266.0	270.0	274.5	271.3	274.4	268.5	264.0	266.0	271.5	293.5	278.0	276.2	294.1	299.4	281.7	265.8	273.1	267.4	265.1	261.9
30	283.9	279.5	271.5	272.8	289.2	301.2	278.2	280.7	266.8	262.9	260.8	274.2	268.9	260.3	263.2	269.2	259.3	263.5	268.8	262.0	257.3	270.4	258.3	260.1
31	266.0	261.2	274.8	294.9	254.7	261.8	300.8	306.5	275.3	269.3	281.8	276.8	272.1	277.1	288.4	295.2	300.3	295.4	303.8	298.5	312.0	293.0	282.5	266.8

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

January 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	16.1	14.6	13.6	18.1	17.8	7.0	12.2	5.6	12.2	11.1	8.9	7.2	29.0	18.7	17.3	15.2	17.1	13.7	15.4	13.2	13.7	8.7	12.7	10.1	29.0	5.6	13.7
2	15.2	7.9	19.5	11.6	12.5	8.1	12.8	13.1	15.3	15.5	9.5	12.2	13.5	18.5	14.8	25.8	18.2	10.9	12.0	12.4	6.5	8.5	8.0	13.4	25.8	6.5	13.1
3	8.6	9.4	39.7	13.5	42.5	28.3	16.8	60.8	27.4	27.1	20.6	8.1	6.3	7.0	11.9	15.7	13.8	8.3	8.9	9.5	13.4	9.3	8.9	8.3	60.8	6.3	17.7
4	7.9	11.3	9.7	8.5	9.5	8.5	7.1	6.5	19.0	7.9	9.3	7.2	8.9	10.7	18.3	13.1	13.3	11.1	11.5	19.5	18.1	20.2	14.9	17.2	20.2	6.5	12.1
5	14.1	7.7	12.5	23.7	12.8	10.9	7.1	8.6	8.2	12.0	15.8	21.6	17.4	17.9	20.1	23.4	15.1	19.7	12.2	20.9	17.0	23.5	26.7	15.6	26.7	7.1	16.0
6	13.6	13.3	18.1	16.0	10.1	15.2	22.7	18.8	26.7	12.7	20.3	10.6	13.1	17.4	12.9	10.8	7.1	7.6	9.4	9.0	16.5	9.2	10.1	23.0	26.7	7.1	14.3
7	19.2	14.5	7.3	6.5	11.1	19.5	14.3	8.2	9.7	18.3	25.1	28.7	5.5	15.5	9.0	26.9	6.6	10.0	19.8	26.4	14.2	19.0	16.5	14.0	28.7	5.5	15.2
8	11.4	14.0	19.3	9.7	13.1	19.0	9.4	8.8	19.8	21.5	41.0	15.5	22.6	36.5	20.4	19.6	10.9	17.7	10.7	10.4	7.4	12.0	7.8	28.1	41.0	7.4	16.9
9	17.6	10.2	9.5	9.1	7.4	9.1	10.3	6.0	7.2	6.8	6.9	14.4	13.2	21.6	10.2	9.1	7.6	24.7	13.8	15.0	13.3	19.3	20.2	28.9	28.9	6.0	13.0
10	11.2	7.2	9.8	10.7	9.1	7.3	11.6	11.0	6.4	4.9	6.3	7.7	16.6	13.7	19.0	10.8	12.6	24.6	31.2	18.4	10.0	10.7	12.9	13.8	31.2	4.9	12.4
11	10.8	33.9	16.5	12.7	12.9	15.6	37.6	19.5	9.4	12.5	16.1	9.6	9.0	10.5	7.6	8.4	7.3	8.3	10.4	8.6	16.2	15.7	14.3	15.2	37.6	7.3	14.1
12	16.9	15.6	18.4	14.9	9.5	12.7	13.1	16.8	20.3	20.1	12.9	16.7	21.9	12.9	18.2	23.7	14.4	24.0	49.4	54.6	43.7	35.8	19.2	20.3	54.6	9.5	21.9
13	16.9	19.6	21.4	36.1	50.9	33.7	20.1	19.6	19.8	28.5	24.9	17.4	19.6	23.3	27.5	27.2	28.0	31.4	8.8	5.3	17.9	8.5	11.9	9.4	50.9	5.3	22.0
14	7.8	15.3	51.7	55.9	93.3	94.4	47.5	9.5	17.0	64.7	12.9	17.1	4.7	8.0	6.8	6.2	8.5	11.6	10.1	15.1	12.6	10.2	5.5	5.0	94.4	4.7	24.6
15	5.6	5.1	5.0	5.1	5.0	8.0	6.1	8.1	10.8	6.9	6.5	7.1	7.6	10.0	9.2	7.5	7.4	8.4	9.4	5.8	8.8	25.0	16.1	10.9	25.0	5.0	8.6
16	15.7	98.9	12.8	12.3	54.4	39.7	65.4	13.6	15.9	35.2	62.9	68.9	61.2	55.3	81.5	24.8	29.0	29.7	9.7	33.8	55.4	35.6	86.6	17.1	98.9	9.7	42.3
17	46.5	24.3	53.9	36.6	19.8	24.7	14.3	7.1	17.3	17.9	7.2	7.4	6.3	5.0	7.3	10.8	5.9	5.1	4.1	12.4	9.4	9.5	7.7	10.8	53.9	4.1	15.5
18	16.1	16.4	13.1	8.4	7.1	6.8	5.8	6.8	14.9	18.5	24.2	20.1	90.7	15.4	92.4	9.0	26.6	47.1	60.8	25.4	5.0	7.1	12.6	16.0	92.4	5.0	23.6
19	16.2	20.5	24.6	9.1	14.6	15.4	9.3	7.5	8.8	7.4	8.3	5.9	5.6	5.2	5.5	5.2	5.3	5.5	5.4	5.3	5.0	5.0	4.8	5.1	24.6	4.8	8.8
20	5.7	6.9	4.8	7.8	5.4	5.0	5.5	6.6	6.3	4.1	6.8	8.8	5.3	4.9	7.0	9.3	6.4	14.4	8.1	1.7	0.0	0.0	0.0	0.0	14.4	0.0	5.5
21	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.0	10.4	6.9	7.1	7.3	4.6	4.8	5.4	8.9	12.0	7.7	6.0	5.8	5.3	5.2	6.4	8.4	12.0	0.0	5.2
22	6.7	15.1	18.9	8.2	7.5	7.5	7.6	9.1	6.9	7.6	19.6	7.8	6.9	7.8	11.6	9.6	14.2	50.9	30.8	65.4	51.8	78.6	54.8	21.9	78.6	6.7	21.9
23	16.8	10.2	11.1	8.2	8.9	16.7	4.8	6.4	6.4	8.8	9.2	5.9	7.6	15.0	13.5	8.9	8.3	10.8	39.4	17.5	26.4	11.2	12.3	28.1	39.4	4.8	13.0
24	21.0	17.3	20.0	24.2	89.1	7.4	18.8	33.2	30.1	8.1	5.6	11.1	7.0	7.1	10.7	5.1	5.5	4.3	4.7	5.6	7.3	8.7	7.8	8.1	89.1	4.3	15.3
25	7.6	11.1	34.4	6.9	6.6	12.6	12.4	23.5	9.2	8.4	8.9	11.2	13.4	9.2	16.1	7.9	10.9	15.2	8.3	9.9	11.0	18.1	9.2	42.2	42.2	6.6	13.5
26	33.3	19.9	14.2	13.3	12.0	17.3	22.3	14.9	9.3	8.1	32.7	13.0	13.6	11.4	21.7	16.5	22.0	28.9	17.2	51.5	25.0	58.8	33.2	95.0	95.0	8.1	25.2
27	79.6	66.5	30.3	12.6	10.7	10.8	8.3	7.1	8.0	5.0	4.6	4.5	4.8	4.5	4.2	4.7	4.8	5.0	4.9	5.6	5.4	5.0	5.5	4.9	79.6	4.2	12.8
28	4.8	5.2	5.1	4.9	3.5	4.3	10.0	10.1	5.3	6.3	6.1	6.0	4.3	4.7	8.3	8.7	35.8	44.7	14.4	10.7	21.5	40.6	12.1	12.7	44.7	3.5	12.1
29	7.1	24.4	22.4	41.9	9.7	17.8	19.2	15.5	19.5	13.1	6.5	19.4	67.6	62.9	49.6	10.1	23.1	15.4	18.2	55.1	88.4	75.3	74.5	70.4	88.4	6.5	34.5
30	48.9	16.0	21.6	11.3	15.6	11.8	9.1	15.3	12.1	20.6	22.1	12.8	24.5	14.2	13.0	14.3	21.8	27.4	9.8	6.3	5.6	8.0	13.1	9.4	48.9	5.6	16.0
31	9.4	16.0	10.6	8.0	13.1	11.4	11.5	12.6	9.1	9.6	26.7	27.3	38.5	91.3	17.6	69.9	17.3	20.8	29.6	17.9	79.7	15.9	39.9	12.7	91.3	8.0	25.7
Max.	**79.6**	**98.9**	**53.9**	**55.9**	**93.3**	**94.4**	**65.4**	**60.8**	**30.1**	**64.7**	**62.9**	**68.9**	**90.7**	**91.3**	**92.4**	**69.9**	**35.8**	**50.9**	**60.8**	**65.4**	**88.4**	**78.6**	**86.6**	**95.0**	**98.9**		
Min.	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.5**	**5.6**	**5.3**	**4.1**	**4.6**	**4.5**	**4.3**	**4.5**	**4.2**	**4.7**	**4.8**	**4.3**	**4.1**	**1.7**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	
Avg.	**17.0**	**18.3**	**18.4**	**15.0**	**19.2**	**16.3**	**15.3**	**13.5**	**13.5**	**14.7**	**16.0**	**14.1**	**18.4**	**18.1**	**19.0**	**15.1**	**14.1**	**18.2**	**16.3**	**18.5**	**20.4**	**19.9**	**18.9**	**19.2**			**17.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

February 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	13.4	12.6	6.8	7.4	9.9	13.2	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4	27.1	62.0	11.8	8.7	7.8	17.9	12.1	62.0	0.0	9.8
2	9.5	7.4	6.5	8.8	16.8	11.4	18.6	11.6	29.5	26.9	15.1	19.7	15.7	6.8	14.3	9.2	16.0	9.5	12.1	10.2	5.6	7.5	14.5	18.1	29.5	5.6	13.4
3	21.6	11.7	13.8	10.0	19.9	16.1	15.8	19.0	21.5	11.7	15.6	22.5	33.1	26.4	29.2	33.4	19.2	17.9	14.1	12.5	18.6	18.0	5.0	8.0	33.4	5.0	18.1
4	8.6	6.2	7.0	7.6	9.8	7.5	6.7	12.2	13.7	34.4	5.0	6.3	3.9	6.4	9.8	23.2	7.6	15.1	22.4	16.5	16.1	13.8	8.9	7.2	34.4	3.9	11.5
5	10.5	11.0	15.6	16.2	18.3	21.8	11.7	13.0	12.4	15.5	14.6	13.4	12.7	17.9	10.8	16.8	8.8	9.0	12.9	12.6	8.9	7.1	5.3	4.7	21.8	4.7	12.6
6	7.9	14.9	14.7	20.2	8.6	5.9	11.7	5.9	8.1	10.0	6.9	9.7	12.5	13.3	10.3	12.1	15.6	15.1	13.0	21.1	12.7	18.8	12.5	19.2	21.1	5.9	12.5
7	10.9	10.6	20.7	21.4	11.8	13.4	13.2	14.5	18.2	13.6	10.0	24.8	33.5	21.2	39.2	16.1	20.2	10.6	15.8	71.5	30.4	25.5	21.3	27.0	71.5	10.0	21.5
8	54.9	66.4	47.0	17.0	13.7	23.6	37.3	64.0	62.7	72.6	65.4	51.2	77.4	81.1	88.9	79.4	15.5	27.7	82.4	67.1	89.7	65.9	39.5	26.9	89.7	13.7	54.9
9	22.3	7.0	6.6	6.6	6.2	6.2	5.5	6.9	6.7	6.3	7.0	95.9	25.4	69.0	57.5	16.8	0.0	12.8	13.9	54.9	13.4	13.4	11.1	10.1	95.9	0.0	20.1
10	8.3	8.5	10.3	8.7	7.8	8.3	8.9	8.8	7.8	7.4	8.1	6.4	8.4	14.3	14.2	15.3	18.2	10.8	19.2	12.4	23.6	23.5	7.1	11.9	23.6	6.4	11.6
11	5.6	16.8	25.5	62.0	37.8	65.5	20.8	26.1	15.8	96.1	18.2	69.2	51.8	12.8	11.2	12.4	11.6	19.6	12.5	23.6	35.3	23.2	27.8	9.4	96.1	5.6	29.6
12	10.4	9.9	30.2	21.6	14.3	16.6	6.4	6.7	10.0	22.6	45.4	11.9	14.5	11.3	16.3	10.8	11.4	15.9	67.8	74.5	35.1	24.6	31.0	19.1	74.5	6.4	22.4
13	51.7	20.6	28.7	11.6	8.3	5.2	10.5	7.0	10.8	7.1	6.3	5.2	5.2	7.7	6.5	5.8	5.9	5.4	7.9	7.2	6.7	5.3	5.6	6.0	51.7	5.2	10.3
14	5.2	5.8	5.8	4.9	5.4	4.5	5.6	43.6	8.0	13.2	11.0	9.5	7.6	7.2	9.1	7.0	7.1	7.2	6.7	6.6	6.3	25.7	14.7	16.1	43.6	4.5	10.2
15	10.9	15.8	8.5	18.5	8.8	26.5	17.3	16.2	21.6	24.6	13.9	11.9	8.9	19.8	16.4	21.2	25.6	32.7	30.4	18.4	99.4	88.0	92.4	21.3	99.4	8.5	27.9
16	12.6	9.4	10.3	6.0	13.2	5.9	5.7	8.9	22.7	18.5	6.6	6.3	6.5	6.6	6.4	16.0	10.9	8.2	9.0	16.6	10.5	8.0	29.2	9.0	29.2	5.7	11.0
17	43.0	54.3	51.2	25.4	44.0	10.0	11.5	15.2	16.1	20.5	26.0	11.8	9.0	7.1	6.6	7.5	33.8	10.7	4.8	5.1	5.2	5.9	5.2	6.0	54.3	4.8	18.2
18	6.0	7.5	5.4	5.8	5.7	5.5	5.3	5.3	5.4	5.3	5.0	5.5	5.5	6.4	6.1	8.3	10.4	7.0	9.6	6.2	5.4	5.4	5.9	5.7	10.4	5.0	6.2
19	4.9	16.0	17.7	102.1	34.4	22.8	70.6	9.2	8.1	8.0	7.4	6.1	5.8	6.2	8.0	6.7	10.1	7.1	6.4	6.9	29.5	30.9	13.8	8.0	102.1	4.9	18.6
20	9.3	5.1	5.5	4.9	4.8	5.0	4.9	4.7	5.7	5.1	5.9	5.3	16.6	5.4	4.9	7.5	54.8	8.8	7.0	5.8	5.8	5.3	5.4	5.4	54.8	4.7	8.3
21	5.4	5.4	5.9	5.1	5.7	5.4	5.4	5.8	5.8	5.3	5.7	5.5	6.4	7.4	6.6	6.0	5.9	41.2	24.0	84.8	37.3	50.3	7.6	16.6	84.8	5.1	15.0
22	74.1	22.0	12.7	55.2	14.0	12.2	0.0	0.0	0.0	0.0	0.0	5.9	7.8	9.9	5.9	4.5	4.7	3.7	5.0	4.3	6.2	5.6	5.2	3.9	74.1	0.0	10.9
23	21.7	23.8	16.3	44.8	20.8	14.0	12.5	8.4	9.4	20.4	23.3	13.0	79.5	69.1	37.0	10.9	9.8	10.2	12.5	10.3	14.2	11.5	41.2	24.2	79.5	8.4	23.3
24	30.2	18.0	20.4	8.8	20.1	11.9	15.0	28.8	12.1	10.7	14.7	14.3	15.3	14.6	18.3	19.4	12.9	24.6	12.9	13.4	23.1	13.8	20.6	7.5	30.2	7.5	16.7
25	20.6	13.0	13.6	21.0	14.1	5.7	7.2	9.0	12.8	14.0	14.4	12.4	10.3	22.7	16.5	12.0	9.4	14.7	25.7	82.8	8.3	23.9	7.8	14.7	82.8	5.7	16.9
26	18.0	16.1	12.5	66.2	10.7	4.6	4.7	9.4	5.0	7.0	7.0	17.8	74.7	33.3	13.3	17.2	16.7	27.3	17.7	17.9	14.8	8.4	5.8	8.2	74.7	4.6	18.1
27	9.2	21.9	18.6	10.0	9.2	12.8	12.3	12.3	4.9	11.6	5.6	9.8	20.6	7.6	9.6	6.4	12.7	5.8	20.4	63.6	61.9	79.3	47.3	57.9	79.3	4.9	22.1
28	11.4	56.6	87.1	8.2	4.9	5.2	4.9	5.0	5.1	5.2	56.9	14.9	20.4	23.5	14.6	19.0	18.9	10.6	15.3	7.4	11.4	12.2	16.8	11.5	87.1	4.9	18.6
29	10.7	12.7	9.0	16.0	9.8	11.9	12.1	18.7	12.1	11.5	25.0	14.8	14.2	17.5	11.6	23.8	19.0	23.0	5.7	8.8	15.8	26.8	29.5	18.7	29.5	5.7	15.8
Max.	**74.1**	**66.4**	**87.1**	**102.1**	**44.0**	**65.5**	**70.6**	**64.0**	**62.7**	**96.1**	**65.4**	**95.9**	**79.5**	**81.1**	**88.9**	**79.4**	**54.8**	**41.2**	**82.4**	**84.8**	**99.4**	**88.0**	**92.4**	**57.9**	**102.1**		
Min.	**4.9**	**5.1**	**5.4**	**4.9**	**4.8**	**4.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**3.7**	**4.8**	**4.3**	**5.2**	**5.3**	**5.0**	**3.9**		**0.0**	
Avg.	**18.2**	**17.5**	**18.4**	**21.5**	**14.1**	**13.1**	**12.6**	**13.7**	**12.8**	**17.4**	**15.4**	**17.3**	**20.8**	**19.0**	**17.2**	**15.3**	**15.0**	**15.1**	**19.6**	**26.0**	**22.8**	**22.6**	**19.2**	**14.3**			**17.5**

Total Hours in Month 696 **Hours Data Available** 696 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

March 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.7	7.6	15.8	21.0	8.0	19.5	8.0	11.8	83.1	85.1	80.1	17.4	14.8	59.1	26.7	9.2	14.0	17.6	7.8	8.9	8.4	25.4	22.9	28.7	85.1	7.6	25.5
2	14.8	17.4	16.8	10.5	11.8	12.5	12.8	4.7	6.1	4.6	7.4	8.6	9.4	5.2	7.2	11.5	8.4	5.2	6.1	6.1	10.0	8.3	8.3	11.6	17.4	4.6	9.4
3	17.1	13.4	5.3	7.9	8.7	8.3	4.8	4.4	4.5	4.7	4.8	4.4	4.6	6.1	5.0	4.5	4.7	4.9	5.0	4.5	7.1	4.7	4.8	5.8	17.1	4.4	6.3
4	4.6	5.8	5.0	6.2	5.1	4.9	5.1	5.3	5.1	5.9	6.9	5.8	5.9	6.0	6.6	6.6	6.7	5.6	6.3	6.0	5.4	5.8	4.7	4.9	6.9	4.6	5.7
5	7.2	4.4	13.5	7.2	12.1	10.4	12.5	10.0	7.1	11.2	14.4	5.0	5.6	7.1	4.9	5.1	6.4	6.2	6.3	4.9	4.7	4.7	4.8	4.6	14.4	4.4	7.5
6	4.6	4.5	5.2	5.4	9.1	9.0	6.5	10.0	6.8	9.9	10.8	9.5	9.2	5.5	6.1	5.8	6.4	7.8	17.9	6.0	37.2	6.5	7.0	9.1	37.2	4.5	9.0
7	8.3	6.3	73.8	67.4	39.0	25.0	45.0	14.1	12.8	8.3	7.1	4.7	4.7	9.9	7.9	19.4	20.3	25.4	23.8	6.7	12.7	16.3	28.7	19.2	73.8	4.7	21.1
8	9.8	7.7	98.4	33.4	16.6	12.0	5.6	5.1	14.0	13.1	11.9	7.3	7.7	12.7	8.9	6.3	5.5	5.1	5.3	5.1	5.6	5.3	5.6	6.9	98.4	5.1	13.1
9	6.4	6.3	6.2	6.7	6.1	5.9	6.4	6.0	9.3	7.3	48.7	47.9	45.2	52.2	21.5	21.6	10.4	17.5	13.7	14.4	7.9	7.8	14.1	20.9	52.2	5.9	17.1
10	21.6	20.2	64.3	35.0	19.5	10.8	24.4	71.0	77.1	43.4	83.8	37.7	97.1	52.1	13.4	14.4	7.8	13.7	16.0	23.7	16.1	35.4	14.5	19.6	97.1	7.8	34.7
11	16.5	12.2	46.3	4.9	40.1	27.6	11.1	22.0	8.9	18.1	20.5	24.1	17.1	8.2	9.5	10.6	8.5	5.5	13.0	19.5	5.2	7.7	7.9	10.0	46.3	4.9	15.6
12	15.6	10.6	6.9	6.9	5.8	5.8	9.1	11.6	7.9	14.2	8.9	17.1	16.3	20.5	11.4	21.2	87.5	22.3	30.8	16.3	50.0	48.2	86.7	21.3	87.5	5.8	23.0
13	27.4	13.9	11.6	10.3	15.2	10.7	9.6	9.5	8.3	8.3	7.7	6.5	9.7	12.0	12.3	15.4	9.8	11.4	10.9	6.7	6.0	10.2	17.2	18.7	27.4	6.0	11.6
14	22.4	5.8	4.6	14.2	8.0	7.4	7.8	10.4	8.7	12.8	7.4	6.2	9.1	8.2	8.4	11.4	48.6	79.9	11.3	8.2	7.9	16.8	10.2	15.0	79.9	4.6	14.6
15	7.0	5.2	6.7	6.2	6.9	8.1	7.1	5.4	5.3	6.2	5.1	5.4	5.1	5.6	5.2	5.3	5.1	4.8	4.4	4.4	4.4	4.8	6.6	8.9	8.9	4.4	5.8
16	7.6	8.0	6.0	5.9	15.6	11.6	9.3	7.3	13.3	66.6	7.1	13.0	7.6	10.7	9.5	17.5	5.7	8.9	7.9	26.9	14.6	9.0	7.8	8.6	66.6	5.7	12.7
17	18.3	14.8	13.4	13.6	12.7	7.3	4.7	7.2	5.9	8.8	7.3	10.9	30.9	17.0	26.3	45.4	11.9	36.7	5.3	5.8	9.2	7.5	7.6	36.6	45.4	4.7	15.2
18	29.6	14.2	62.1	32.0	25.1	26.5	11.6	13.8	11.3	7.4	6.5	8.8	10.4	8.0	9.7	6.6	6.6	7.0	14.8	8.6	10.4	43.3	33.5	19.3	62.1	6.5	17.8
19	8.4	7.6	22.0	19.9	15.7	19.4	9.0	18.3	18.6	8.0	10.7	7.4	5.8	6.0	6.8	6.3	6.6	8.7	7.1	5.5	6.0	6.4	6.5	21.4	22.0	5.5	10.8
20	12.2	8.7	8.0	13.6	5.5	10.6	7.4	7.6	4.9	11.0	6.3	12.5	12.1	13.8	17.0	9.9	13.8	8.4	8.3	12.9	24.0	24.3	16.6	13.5	24.3	4.9	11.8
21	11.2	10.7	6.9	12.5	11.5	15.6	70.1	19.1	13.3	55.7	95.1	83.6	62.2	23.3	19.9	16.7	18.7	15.8	10.2	27.6	11.8	19.6	19.1	13.7	95.1	6.9	27.7
22	12.7	20.9	22.0	19.5	15.3	16.4	11.1	23.8	29.0	15.5	13.0	14.1	15.6	14.9	20.9	25.3	8.3	21.0	15.4	42.0	56.3	11.8	11.1	13.5	56.3	8.3	19.6
23	19.9	18.9	19.2	8.4	15.9	18.1	11.2	10.0	18.2	30.1	24.2	20.3	13.6	6.8	5.7	5.3	8.5	10.9	18.6	13.2	9.0	9.7	26.4	19.1	30.1	5.3	15.0
24	8.4	9.6	11.4	10.7	9.3	11.4	11.3	7.3	11.0	10.7	22.0	18.8	7.5	14.2	57.9	97.8	14.1	9.7	10.6	9.6	6.9	11.0	22.4	53.5	97.8	6.9	19.1
25	25.8	23.6	35.9	11.1	10.7	30.1	70.0	81.7	39.9	52.4	12.8	15.7	13.0	14.4	9.1	6.3	8.0	5.1	4.7	8.3	9.8	21.5	14.6	10.0	81.7	4.7	22.3
26	10.1	17.1	26.8	28.9	60.2	69.0	11.3	11.4	9.2	15.3	9.5	11.2	11.4	20.4	6.8	7.6	7.7	5.8	23.5	28.2	29.6	15.8	6.7	13.7	69.0	5.8	19.1
27	8.9	5.6	4.6	7.3	5.1	4.8	4.2	6.0	18.4	19.0	6.5	13.5	6.7	11.9	8.6	6.2	6.0	8.7	6.1	11.7	11.4	13.1	12.3	5.0	19.0	4.2	8.8
28	7.1	8.6	9.3	5.5	10.8	9.1	8.1	11.2	8.6	12.2	11.1	8.1	6.7	5.2	5.1	4.7	12.5	5.1	3.0	4.5	10.4	4.8	10.2	8.2	12.5	3.0	7.9
29	22.2	16.2	26.4	32.8	57.5	93.1	66.9	39.7	71.3	8.8	22.1	12.2	4.9	4.5	5.1	5.9	5.0	7.5	7.8	9.4	7.9	8.1	5.4	6.1	93.1	4.5	22.8
30	5.0	5.4	5.6	5.8	5.2	4.5	5.6	5.3	4.7	5.2	5.3	5.5	6.4	6.4	7.4	8.6	6.9	8.2	8.7	11.1	13.8	5.7	7.3	5.3	13.8	4.5	6.6
31	4.7	5.1	6.0	7.7	5.2	5.7	12.4	6.2	4.7	5.3	5.0	5.8	5.3	5.0	5.2	5.3	5.1	6.1	5.2	5.3	5.6	5.0	4.9	5.0	12.4	4.7	5.7
Max.	**29.6**	**23.6**	**98.4**	**67.4**	**60.2**	**93.1**	**70.1**	**81.7**	**83.1**	**85.1**	**95.1**	**83.6**	**97.1**	**59.1**	**57.9**	**97.8**	**87.5**	**79.9**	**30.8**	**42.0**	**56.3**	**48.2**	**86.7**	**53.5**	**98.4**		
Min.	**4.6**	**4.4**	**4.6**	**4.9**	**5.1**	**4.5**	**4.2**	**4.4**	**4.5**	**4.6**	**4.8**	**4.4**	**4.6**	**4.5**	**4.9**	**4.5**	**4.7**	**4.8**	**3.0**	**4.4**	**4.4**	**4.7**	**4.7**	**4.6**		**3.0**	
Avg.	**13.1**	**10.9**	**21.5**	**15.4**	**15.9**	**17.1**	**16.1**	**15.4**	**17.7**	**18.9**	**19.0**	**15.1**	**15.5**	**14.6**	**12.1**	**14.3**	**12.8**	**13.1**	**10.8**	**12.0**	**13.7**	**13.7**	**14.7**	**14.8**			**14.9**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

April 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	5.3	4.9	4.9	5.1	5.1	5.1	4.6	4.8	4.9	5.1	4.9	5.6	6.4	6.2	4.7	5.5	4.0	5.9	6.7	9.4	9.2	12.6	22.7	12.1	22.7	4.0	6.9
2	34.5	16.3	15.5	11.3	13.4	52.1	53.9	43.0	18.9	15.4	79.8	12.9	10.7	13.8	49.5	76.4	16.1	43.2	33.1	17.9	15.3	8.0	14.8	9.8	79.8	8.0	28.2
3	6.4	9.8	13.8	7.9	8.2	5.2	5.0	6.4	10.7	35.7	26.2	12.0	7.4	5.8	4.8	4.9	6.7	12.5	5.0	5.2	6.8	5.0	4.8	4.3	35.7	4.3	9.2
4	4.7	4.9	5.0	5.1	5.1	5.2	5.2	5.4	5.3	5.4	4.5	4.7	4.4	4.3	4.4	6.1	5.5	6.0	8.7	8.5	10.4	14.5	12.1	17.0	17.0	4.3	6.8
5	8.6	9.6	11.4	23.7	41.5	22.0	27.2	42.0	29.5	19.0	10.6	15.5	13.8	10.4	6.4	5.3	6.8	11.7	5.1	5.0	4.1	16.3	18.1	20.7	42.0	4.1	16.0
6	11.7	9.0	11.2	17.1	14.0	17.9	20.4	16.1	14.6	14.7	17.9	7.5	5.9	6.5	17.5	20.5	17.3	15.4	25.8	20.6	24.2	13.4	6.8	15.3	25.8	5.9	15.1
7	13.3	13.4	12.6	7.8	8.8	8.4	20.4	20.6	6.3	4.8	4.0	6.5	8.0	10.4	8.7	9.4	7.1	15.3	6.9	11.7	13.4	16.2	8.1	10.8	20.6	4.0	10.5
8	5.3	6.0	11.8	19.0	12.1	6.9	15.1	7.8	9.7	7.7	13.0	10.4	8.3	14.4	9.3	10.1	12.0	64.6	22.7	4.7	19.8	6.7	11.4	13.1	64.6	4.7	13.4
9	22.3	17.6	7.8	8.6	20.5	7.3	19.3	9.0	7.8	6.1	4.5	3.9	13.7	5.4	5.0	4.6	7.4	9.0	11.4	6.6	8.5	13.9	16.4	11.7	22.3	3.9	10.3
10	10.9	15.5	16.5	10.4	15.3	14.1	15.6	17.9	8.7	10.4	8.2	10.0	18.9	18.0	9.1	8.5	6.7	12.0	18.0	18.1	7.6	6.3	5.2	6.4	18.9	5.2	12.0
11	6.5	7.7	10.8	6.5	6.1	5.7	16.7	9.8	11.3	13.3	16.7	9.9	12.4	17.6	10.7	5.9	6.5	10.2	8.6	7.7	10.4	7.0	8.7	6.3	17.6	5.7	9.7
12	3.9	12.1	5.9	7.4	9.7	7.5	6.5	4.1	6.4	4.4	6.6	9.1	7.4	12.7	6.3	5.5	8.5	9.7	7.9	10.5	6.4	39.9	24.6	33.9	39.9	3.9	10.7
13	76.2	76.9	31.4	28.4	30.1	5.1	5.4	7.7	5.1	6.6	6.2	20.6	21.8	34.2	37.9	22.2	13.3	6.6	14.0	12.2	11.1	23.3	10.1	8.9	76.9	5.1	21.5
14	8.3	5.9	6.4	5.5	6.2	6.9	8.3	6.6	5.6	8.2	5.3	6.1	5.5	18.1	17.5	27.1	23.4	14.0	11.0	20.4	10.0	25.5	41.2	11.3	41.2	5.3	12.7
15	9.3	28.8	16.4	19.9	39.9	23.4	12.8	41.1	7.8	9.8	5.6	7.1	5.5	5.2	4.5	5.0	7.8	7.4	7.0	6.7	7.0	4.7	4.8	5.3	41.1	4.5	12.2
16	4.9	5.3	4.7	9.3	5.2	9.0	10.1	4.6	7.0	8.3	7.4	5.9	9.2	11.7	7.3	7.6	8.4	7.7	10.8	10.4	16.5	63.7	30.5	76.7	76.7	4.6	14.3
17	74.6	26.6	18.3	18.9	5.6	13.9	12.9	10.0	16.4	6.9	18.7	13.3	32.6	7.9	10.0	10.8	11.9	9.2	11.3	41.8	42.8	71.1	67.1	59.1	74.6	5.6	25.5
18	14.7	12.5	12.1	11.2	6.1	17.0	13.8	6.9	9.9	9.4	14.0	76.5	35.3	41.2	13.1	11.4	34.6	20.3	94.9	29.1	13.1	16.5	74.1	18.0	94.9	6.1	25.2
19	46.9	10.1	21.5	6.6	7.7	8.9	8.1	5.6	6.6	8.3	6.3	12.3	5.7	7.3	7.5	9.4	7.6	9.9	12.2	6.5	19.1	26.5	13.0	19.4	46.9	5.6	12.2
20	25.2	33.1	6.3	8.7	15.2	18.5	10.7	10.4	8.0	10.7	3.7	4.0	5.6	7.1	16.6	11.1	9.5	11.0	6.2	7.7	12.8	8.2	8.1	10.7	33.1	3.7	11.2
21	6.8	6.5	8.0	8.1	8.9	13.4	14.2	18.9	15.9	34.6	23.1	6.6	6.5	6.1	6.3	8.0	21.5	27.6	22.7	7.9	18.6	15.5	9.0	10.5	34.6	6.1	13.5
22	10.4	61.8	49.9	24.5	44.1	29.3	24.0	60.1	16.4	44.4	16.8	6.5	6.7	19.3	10.7	19.3	12.0	13.5	12.6	17.0	15.2	14.5	11.3	12.4	61.8	6.5	23.0
23	6.1	29.3	14.6	11.8	12.7	19.9	14.2	16.6	44.8	20.2	62.7	13.4	55.4	5.1	7.7	4.9	11.7	13.1	28.8	16.6	7.3	14.8	8.3	16.3	62.7	4.9	19.0
24	25.7	86.4	64.6	37.0	52.9	56.2	75.1	67.9	52.6	20.5	25.5	89.6	20.2	35.5	30.9	15.7	7.5	6.9	8.4	49.9	32.0	50.6	7.9	16.4	89.6	6.9	39.0
25	12.5	6.6	8.5	10.3	5.8	11.5	7.8	5.5	5.8	5.2	7.9	6.3	6.7	7.2	7.3	8.2	8.0	7.0	10.3	10.5	8.7	6.9	17.7	12.2	17.7	5.2	8.5
26	7.0	7.3	9.8	9.6	10.0	8.7	13.4	18.6	13.6	6.7	30.2	7.4	8.3	10.1	6.9	6.1	6.1	7.1	8.1	9.2	9.4	7.1	6.2	6.4	30.2	6.1	9.7
27	5.8	6.5	6.3	6.2	5.9	5.3	6.0	5.5	6.0	6.0	5.1	5.2	5.8	5.6	5.8	5.4	6.9	4.8	9.3	8.9	8.8	8.6	12.7	11.4	12.7	4.8	6.8
28	31.5	22.8	16.0	13.8	12.3	13.9	12.5	9.4	9.4	7.9	11.4	9.6	21.3	24.2	9.1	22.0	10.8	6.4	6.2	10.8	6.8	9.5	10.1	4.9	31.5	4.9	13.0
29	12.5	5.4	10.9	11.7	13.0	8.7	11.3	11.0	27.6	15.2	7.5	11.8	7.4	20.6	18.0	34.4	8.7	6.6	5.9	5.9	6.2	7.8	7.6	45.8	45.8	5.4	13.4
30	26.6	13.5	10.6	19.0	12.2	14.2	14.7	9.7	13.6	20.9	12.5	9.5	10.0	8.0	10.2	14.0	12.1	25.7	10.8	8.5	12.7	8.3	11.9	9.1	26.6	8.0	13.3
Max.	**76.2**	**86.4**	**64.6**	**37.0**	**52.9**	**56.2**	**75.1**	**67.9**	**52.6**	**44.4**	**79.8**	**89.6**	**55.4**	**41.2**	**49.5**	**76.4**	**34.6**	**64.6**	**94.9**	**49.9**	**42.8**	**71.1**	**74.1**	**76.7**	**94.9**		
Min.	**3.9**	**4.9**	**4.7**	**5.1**	**5.1**	**5.1**	**4.6**	**4.1**	**4.9**	**4.4**	**3.7**	**3.9**	**4.4**	**4.3**	**4.4**	**4.6**	**4.0**	**4.8**	**5.0**	**4.7**	**4.1**	**4.7**	**4.8**	**4.3**		**3.7**	
Avg.	**17.9**	**19.1**	**14.8**	**13.0**	**15.1**	**14.7**	**16.2**	**16.8**	**13.5**	**13.1**	**15.5**	**14.0**	**12.9**	**13.3**	**12.1**	**13.5**	**10.9**	**14.0**	**15.0**	**13.5**	**13.1**	**18.1**	**16.8**	**17.2**			**14.8**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

May 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	14.4	20.5	15.5	13.8	14.9	14.6	20.5	23.5	15.1	18.8	10.3	9.5	19.4	15.2	15.9	6.9	7.8	7.8	7.0	9.0	14.8	22.1	7.9	18.9	23.5	6.9	14.3
2	15.8	31.7	20.3	40.5	11.4	12.9	8.2	5.6	13.7	13.7	12.2	8.9	23.5	32.0	90.7	23.8	17.4	11.6	90.6	84.5	102.4	43.2	29.3	17.0	102.4	5.6	31.7
3	68.7	39.0	36.2	7.2	10.9	22.0	22.3	12.3	26.7	70.9	48.3	9.7	15.9	7.4	78.2	33.0	24.2	82.5	49.3	47.2	65.9	13.3	64.5	28.4	82.5	7.2	36.8
4	7.3	18.0	12.0	13.4	12.1	6.9	7.5	9.9	12.0	28.9	23.2	18.9	29.9	65.9	69.2	24.2	22.9	88.1	22.9	14.7	59.0	14.9	16.8	15.2	88.1	6.9	25.6
5	17.5	15.8	12.9	14.8	15.3	11.7	18.8	9.3	30.1	18.7	83.1	20.9	55.0	16.3	71.1	37.4	16.4	9.0	55.5	74.1	53.9	52.4	69.4	59.2	83.1	9.0	34.9
6	43.3	9.3	15.9	19.7	15.5	73.7	22.2	26.4	19.0	16.9	6.9	7.1	6.8	6.8	7.2	5.9	5.6	6.3	5.6	5.4	5.5	5.2	4.7	5.1	73.7	4.7	14.4
7	5.2	5.3	5.0	5.2	5.0	5.1	5.0	5.0	4.8	5.2	6.5	5.4	6.2	5.9	6.4	6.8	6.1	6.0	6.0	5.4	8.3	5.9	6.7	7.9	8.3	4.8	5.8
8	7.6	4.9	5.9	4.3	4.9	4.4	4.7	4.7	5.0	5.5	6.4	5.7	5.8	5.7	5.9	5.3	5.7	5.4	5.1	5.4	5.3	5.2	4.7	5.8	7.6	4.3	5.4
9	7.4	17.0	9.4	14.2	13.6	7.5	14.0	9.0	9.5	8.7	8.1	7.2	7.0	7.8	8.5	11.8	8.3	6.3	11.2	53.7	11.7	8.4	20.1	10.4	53.7	6.3	12.1
10	8.6	52.1	71.8	66.9	86.2	12.3	43.1	12.5	16.1	17.0	9.7	19.1	18.8	15.0	16.3	14.4	9.0	17.5	60.0	23.8	35.2	54.6	17.9	8.3	86.2	8.3	29.4
11	17.0	15.0	27.9	9.3	10.4	11.1	12.1	15.5	13.7	6.0	6.6	7.5	6.6	6.7	6.5	6.0	7.5	6.4	6.3	6.0	6.0	7.2	8.1	10.1	27.9	6.0	9.8
12	9.4	20.1	23.5	44.4	24.1	18.1	8.7	12.7	37.7	9.5	7.4	9.7	7.0	6.6	6.1	7.0	7.0	6.6	6.9	5.5	5.7	6.3	5.7	6.1	44.4	5.5	12.6
13	6.1	6.2	6.7	7.6	6.3	6.5	6.4	7.0	6.8	10.0	7.3	7.4	8.2	7.9	7.8	8.7	7.1	6.7	6.6	6.4	7.3	6.7	6.1	7.9	10.0	6.1	7.2
14	6.0	17.6	99.1	27.9	47.9	31.9	8.2	7.5	7.4	9.1	8.8	9.0	9.6	11.5	9.2	12.1	15.9	8.9	8.9	9.6	25.8	28.3	88.6	27.4	99.1	6.0	22.3
15	87.1	46.8	13.3	51.4	73.7	87.9	60.2	30.7	9.4	10.2	12.9	17.8	19.5	26.5	10.7	18.3	19.6	9.6	10.3	7.1	8.4	6.8	9.6	12.9	87.9	6.8	27.5
16	17.9	19.2	27.0	16.2	29.1	11.0	9.3	10.2	10.7	16.5	35.3	23.7	21.7	10.4	12.4	11.3	12.6	14.1	15.3	14.1	10.2	78.5	29.5	10.6	78.5	9.3	19.5
17	11.8	61.6	19.7	6.1	4.3	4.1	5.5	7.5	11.5	34.2	42.2	42.7	25.7	28.9	31.6	37.2	44.2	43.0	21.2	21.7	8.2	10.3	24.5	14.7	61.6	4.1	23.4
18	65.4	66.5	77.7	11.9	23.3	22.8	56.6	13.2	21.7	10.9	16.5	10.9	11.6	9.8	17.5	15.7	11.5	12.9	10.4	14.4	9.7	10.4	11.4	49.3	77.7	9.7	24.3
19	41.3	14.3	100.5	18.5	18.2	12.6	16.7	14.7	13.5	30.1	24.2	20.8	33.8	18.6	12.6	18.4	11.4	11.1	12.4	8.7	11.2	8.0	10.8	8.6	100.5	8.0	20.5
20	16.0	11.0	11.1	22.0	22.7	17.7	19.5	22.5	16.0	58.1	45.1	49.7	68.5	23.8	37.2	62.2	33.7	33.9	23.2	17.5	11.1	51.6	14.1	7.4	68.5	7.4	29.0
21	6.4	13.4	8.0	9.8	11.5	12.1	7.7	20.5	22.3	22.6	36.3	25.6	41.9	19.7	24.2	16.5	14.3	13.6	11.3	9.5	9.1	10.9	19.6	16.5	41.9	6.4	16.8
22	14.6	13.9	15.0	21.2	24.1	23.8	8.9	22.0	17.2	43.7	76.6	47.7	77.4	24.7	29.0	19.1	8.2	8.0	7.6	8.1	12.4	7.4	7.4	7.7	77.4	7.4	22.7
23	6.6	6.5	6.4	6.1	7.1	7.7	8.7	7.8	7.5	7.8	7.6	8.1	8.6	7.5	7.5	8.5	8.0	7.5	7.3	6.8	6.7	8.4	6.4	6.9	8.7	6.1	7.4
24	6.8	6.7	7.6	7.6	7.2	6.4	6.9	7.3	8.7	8.6	11.5	8.3	7.1	7.8	8.0	10.8	9.7	9.0	10.1	13.1	12.7	11.9	13.0	10.7	13.1	6.4	9.1
25	12.4	7.3	24.0	25.7	21.7	7.0	7.3	7.2	15.2	14.5	9.8	13.8	15.7	29.1	18.8	21.3	18.8	15.7	21.4	26.8	22.2	74.4	58.4	73.4	74.4	7.0	23.4
26	42.2	91.2	28.9	37.7	37.4	56.1	20.6	25.0	10.2	14.6	16.1	16.6	27.1	16.1	20.7	14.9	12.8	14.3	15.6	18.3	11.6	19.4	16.4	16.0	91.2	10.2	25.0
27	9.8	21.9	19.1	11.5	11.5	6.6	9.2	24.8	13.6	13.2	20.7	22.5	23.1	27.0	19.9	24.2	18.8	18.4	14.3	12.9	9.6	12.6	18.4	15.7	27.0	6.6	16.6
28	9.7	7.4	6.4	4.7	7.7	9.0	15.6	10.7	12.2	17.3	21.0	28.6	19.5	25.3	18.3	23.4	14.7	20.0	11.1	10.3	8.7	8.1	9.0	20.4	28.6	4.7	14.1
29	20.2	11.1	13.9	9.2	7.0	7.8	8.3	10.4	8.7	14.5	14.8	19.4	15.5	16.9	16.4	20.5	20.5	18.9	15.9	18.1	12.7	15.1	27.6	27.9	27.9	7.0	15.5
30	8.1	8.5	16.5	10.7	9.8	10.5	9.2	23.4	31.0	9.7	9.4	11.6	11.8	12.7	11.9	11.0	10.7	8.8	11.0	9.3	13.4	11.2	10.1	8.2	31.0	8.1	12.0
31	7.6	8.5	6.6	6.8	6.4	6.0	6.4	7.3	6.8	6.6	7.7	7.9	8.3	8.6	7.7	8.4	9.0	7.6	7.6	7.7	8.8	12.6	19.4	37.1	37.1	6.0	9.5
Max.	**87.1**	**91.2**	**100.5**	**66.9**	**86.2**	**87.9**	**60.2**	**30.7**	**37.7**	**70.9**	**83.1**	**49.7**	**77.4**	**65.9**	**90.7**	**62.2**	**44.2**	**88.1**	**90.6**	**84.5**	**102.4**	**78.5**	**88.6**	**73.4**	**102.4**		
Min.	**5.2**	**4.9**	**5.0**	**4.3**	**4.3**	**4.1**	**4.7**	**4.7**	**4.8**	**5.2**	**6.4**	**5.4**	**5.8**	**5.7**	**5.9**	**5.3**	**5.6**	**5.4**	**5.1**	**5.4**	**5.3**	**5.2**	**4.7**	**5.1**		**4.1**	
Avg.	**19.9**	**22.2**	**24.6**	**18.3**	**19.4**	**17.7**	**15.4**	**13.7**	**14.6**	**18.4**	**21.0**	**16.8**	**21.2**	**16.9**	**22.7**	**17.6**	**14.2**	**17.3**	**18.3**	**18.6**	**19.1**	**20.4**	**21.2**	**18.4**			**18.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

June 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	24.3	9.3	10.4	9.2	10.8	11.3	6.1	6.0	7.1	7.7	8.3	8.0	7.9	7.7	7.3	7.3	7.2	7.1	7.3	10.1	10.1	9.3	9.4	44.5	44.5	6.0	10.6
2	74.9	45.5	12.8	19.2	21.3	60.0	84.0	80.9	49.3	13.3	11.7	18.0	33.0	19.6	25.0	24.1	19.7	10.6	10.2	16.6	14.6	13.4	31.7	34.2	84.0	10.2	31.0
3	16.6	16.4	54.4	22.1	78.6	86.7	25.4	21.5	27.2	71.3	58.3	47.0	63.9	15.1	12.2	13.3	19.2	12.1	13.2	9.1	12.9	12.4	10.4	6.8	86.7	6.8	30.2
4	12.2	15.2	16.4	21.1	19.2	10.5	10.4	11.1	16.3	10.4	10.4	11.6	15.8	14.4	16.2	12.1	12.1	10.0	9.8	13.9	10.1	9.1	20.9	13.8	21.1	9.1	13.5
5	15.9	47.0	18.9	15.5	13.5	18.0	14.4	7.4	7.3	7.2	7.4	7.6	7.1	8.1	8.7	7.7	8.5	8.9	9.4	10.1	9.2	33.4	37.5	17.2	47.0	7.1	14.4
6	17.2	29.9	17.9	29.7	23.6	33.2	16.1	17.3	21.1	11.3	22.8	15.6	24.2	26.0	30.3	69.1	45.2	11.0	10.1	10.3	15.7	12.4	24.6	54.6	69.1	10.1	24.6
7	18.7	8.2	13.2	20.1	20.2	10.6	14.8	20.9	15.4	11.5	14.3	17.7	22.7	15.8	27.9	48.4	53.8	14.8	11.5	10.6	10.0	9.7	38.9	41.0	53.8	8.2	20.4
8	25.3	27.5	13.1	10.3	8.9	16.4	14.0	11.4	16.6	23.4	18.9	14.8	38.5	16.8	18.9	17.3	23.9	20.5	18.7	24.4	20.9	16.7	12.0	50.9	50.9	8.9	20.0
9	15.1	14.5	11.4	11.3	17.4	16.2	24.7	11.9	10.7	9.3	16.1	39.5	25.1	43.5	21.5	28.6	51.9	36.0	20.1	17.1	11.2	10.5	28.0	10.0	51.9	9.3	20.9
10	12.2	14.4	22.4	21.0	21.6	13.2	20.6	11.8	15.2	65.9	74.0	52.3	63.4	49.7	25.6	25.8	19.1	17.4	15.1	22.9	16.6	32.8	27.6	59.9	74.0	11.8	30.0
11	73.3	20.5	63.4	96.1	16.5	31.3	20.1	40.6	35.4	16.5	23.0	20.1	20.5	47.3	17.8	16.3	12.1	17.4	13.1	11.7	15.2	9.5	9.1	22.8	96.1	9.1	27.9
12	11.0	40.3	13.9	73.0	24.1	41.8	89.8	57.5	15.2	21.6	58.8	58.8	54.4	68.7	14.6	34.4	12.6	20.4	11.3	32.8	13.8	29.1	12.1	15.4	89.8	11.0	34.4
13	13.6	7.6	13.9	12.9	13.5	13.4	18.9	11.8	23.1	10.3	10.9	23.0	50.4	65.9	34.4	61.6	49.5	55.8	31.8	17.4	26.1	30.1	58.3	86.1	86.1	7.6	30.9
14	57.3	87.1	73.2	15.2	18.1	34.1	16.2	15.6	13.3	20.8	42.0	17.4	14.4	14.3	12.8	9.9	34.4	27.9	24.9	41.1	91.6	19.5	21.3	69.2	91.6	9.9	33.0
15	68.9	78.5	24.7	10.8	23.0	9.7	18.6	25.3	22.1	61.8	12.1	10.9	14.5	22.6	60.3	15.7	18.1	14.5	11.9	11.2	12.0	12.5	27.7	35.2	78.5	9.7	25.9
16	37.6	56.0	63.8	12.5	8.6	14.1	15.2	10.0	7.7	13.5	29.8	42.0	67.3	21.8	91.6	72.6	16.8	28.9	28.5	18.4	39.4	17.3	16.6	36.0	91.6	7.7	31.9
17	22.0	18.6	18.9	15.2	13.9	88.7	21.5	15.0	14.7	26.9	41.6	59.4	22.9	76.7	23.6	25.8	20.2	24.5	18.7	17.0	8.4	8.0	65.8	13.3	88.7	8.0	28.4
18	30.0	23.8	11.4	11.6	11.8	55.7	33.7	39.8	56.6	50.6	17.5	54.6	31.8	20.4	15.3	22.5	24.1	29.7	17.8	18.4	20.1	19.8	10.1	12.9	56.6	10.1	26.7
19	5.2	6.1	5.3	12.7	5.8	6.3	8.8	12.8	23.1	62.3	25.2	16.2	15.9	24.9	43.9	17.1	22.5	36.8	27.3	15.7	11.4	11.5	78.5	46.7	78.5	5.2	22.6
20	56.0	50.7	75.2	31.8	26.0	57.1	18.0	27.2	23.7	20.1	18.5	14.9	16.3	16.8	14.6	8.7	11.9	11.7	12.2	8.9	10.5	8.2	7.5	11.9	75.2	7.5	23.3
21	11.8	13.6	24.5	86.2	50.1	9.9	7.2	20.8	37.7	57.3	90.4	90.9	54.2	70.0	36.8	57.7	59.5	34.4	24.9	11.4	15.8	9.7	46.3	44.6	90.9	7.2	40.2
22	51.8	7.8	10.6	10.0	14.3	11.5	27.6	57.4	21.1	14.3	17.6	11.3	14.3	14.3	13.0	11.1	11.8	9.5	12.0	8.5	7.9	9.0	9.2	6.6	57.4	6.6	15.9
23	7.2	10.5	17.4	9.6	29.9	52.4	7.9	8.0	8.6	9.1	11.3	9.7	12.0	13.9	14.1	13.9	16.8	19.1	17.0	10.3	10.4	9.1	31.1	25.7	52.4	7.2	15.6
24	53.9	67.2	76.0	21.0	21.6	54.3	12.5	10.5	9.8	10.0	8.5	9.5	8.3	8.6	9.3	8.8	7.7	7.9	8.0	7.5	7.3	7.4	7.2	7.8	76.0	7.2	18.8
25	8.1	7.8	7.7	6.9	7.0	6.5	6.5	7.0	7.7	7.0	7.6	7.6	7.1	7.4	8.9	7.6	7.0	8.4	8.1	7.5	9.5	14.1	13.7	19.8	19.8	6.5	8.6
26	13.7	95.7	75.9	63.8	10.6	56.2	89.0	56.4	14.3	34.3	9.8	11.6	13.4	37.0	21.9	62.3	18.1	12.4	29.2	14.8	14.7	10.2	30.4	35.4	95.7	9.8	34.6
27	71.8	18.4	15.7	27.6	17.8	18.6	42.0	56.6	19.4	9.8	9.1	11.8	20.6	13.0	12.9	16.9	13.5	10.5	15.6	16.4	14.7	13.5	25.8	24.4	71.8	9.1	21.5
28	56.4	28.5	42.0	52.0	22.9	33.3	51.7	56.7	44.4	51.6	23.2	10.8	14.3	15.7	16.7	19.0	19.0	66.1	15.1	18.2	15.1	7.6	8.0	47.1	66.1	7.6	30.6
29	20.2	10.8	9.5	8.5	7.7	49.1	42.2	11.9	56.0	30.8	14.0	15.1	24.7	13.9	13.3	13.6	15.7	10.6	12.6	8.6	7.4	8.8	13.1	8.8	56.0	7.4	17.8
30	8.6	23.9	16.4	12.1	15.4	10.3	52.6	47.3	29.6	65.5	89.5	63.4	74.8	65.8	80.6	64.4	80.1	32.9	39.2	48.4	11.5	29.8	14.9	17.3	89.5	8.6	41.4
Max.	**74.9**	**95.7**	**76.0**	**96.1**	**78.6**	**88.7**	**89.8**	**80.9**	**56.6**	**71.3**	**90.4**	**90.9**	**74.8**	**76.7**	**91.6**	**72.6**	**80.1**	**66.1**	**39.2**	**48.4**	**91.6**	**33.4**	**78.5**	**86.1**	**96.1**		
Min.	**5.2**	**6.1**	**5.3**	**6.9**	**5.8**	**6.3**	**6.1**	**6.0**	**7.1**	**7.0**	**7.4**	**7.6**	**7.1**	**7.4**	**7.3**	**7.3**	**7.0**	**7.1**	**7.3**	**7.5**	**7.3**	**7.4**	**7.2**	**6.6**		**5.2**	
Avg.	**30.4**	**30.0**	**28.3**	**25.6**	**19.8**	**31.0**	**27.7**	**26.3**	**22.3**	**27.5**	**26.8**	**26.4**	**28.5**	**28.5**	**25.0**	**27.1**	**24.4**	**20.9**	**16.8**	**16.3**	**16.5**	**14.8**	**24.9**	**30.7**			**24.9**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

July *2008*

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	15.3	7.9	18.9	9.5	17.1	34.8	15.1	15.3	52.4	36.4	18.7	24.7	10.2	14.9	11.8	11.4	9.8	9.9	10.7	8.7	8.9	7.3	6.2	5.7	52.4	5.7	15.9
2	7.6	8.2	12.2	7.7	9.3	8.9	7.4	6.3	7.2	11.1	8.3	9.9	9.3	9.0	10.9	10.7	8.8	7.1	7.8	9.1	10.5	8.0	17.8	17.3	17.8	6.3	9.6
3	9.8	10.4	12.4	11.2	8.7	9.7	12.4	7.4	7.6	14.0	17.1	18.7	8.9	8.3	13.2	7.8	12.2	18.6	11.7	40.5	28.5	16.3	18.3	24.9	40.5	7.4	14.5
4	13.8	24.9	48.1	56.0	45.4	19.6	17.1	22.8	71.5	72.1	38.2	40.3	55.0	22.9	21.9	12.3	22.3	14.9	16.5	73.7	85.3	72.8	56.0	28.1	85.3	12.3	39.7
5	33.7	15.2	14.0	52.9	15.7	17.4	15.1	15.0	75.6	52.9	38.4	52.4	79.9	65.2	30.4	9.3	51.7	41.8	13.0	26.3	18.1	43.9	31.9	43.7	79.9	9.3	35.6
6	44.9	35.8	91.9	22.2	22.2	14.7	13.4	22.3	26.2	73.7	21.8	23.0	14.2	11.7	12.4	20.1	16.3	12.9	9.2	7.3	8.8	12.2	13.1	14.4	91.9	7.3	23.5
7	18.1	17.8	12.3	19.2	18.8	17.5	17.0	21.4	9.7	9.4	8.1	8.3	7.2	8.4	7.0	7.5	7.9	9.7	9.6	10.4	8.4	10.9	21.0	50.3	50.3	7.0	14.0
8	51.5	69.0	46.0	20.4	39.9	27.0	46.4	12.7	9.3	17.8	18.1	14.3	47.1	12.8	10.8	12.9	13.0	49.0	17.2	15.2	7.6	6.5	8.2	6.8	69.0	6.5	24.1
9	22.7	26.1	8.9	11.2	6.4	10.3	29.1	35.9	21.5	12.3	8.4	11.4	11.3	12.7	14.7	11.7	13.5	9.8	9.3	11.2	9.7	14.2	14.2	7.7	35.9	6.4	14.3
10	8.4	11.5	6.7	10.4	11.0	11.4	9.6	9.9	8.6	9.4	8.7	10.5	11.4	12.8	15.0	17.2	13.2	12.7	10.3	8.7	8.2	10.4	8.0	13.5	17.2	6.7	10.7
11	10.1	20.6	24.9	19.4	14.9	12.8	15.1	14.6	18.5	24.7	12.5	12.5	19.3	23.6	19.8	19.8	15.1	15.4	12.6	11.6	12.3	7.9	7.3	8.1	24.9	7.3	15.6
12	21.5	30.3	42.9	25.8	13.7	46.6	32.2	15.4	7.7	8.9	9.7	8.4	8.3	8.9	8.4	7.8	7.7	9.8	8.1	7.4	7.6	7.0	6.7	5.8	46.6	5.8	14.9
13	5.6	6.2	7.4	7.2	6.6	6.4	7.7	8.9	11.0	7.0	7.0	7.2	6.6	9.4	11.2	13.5	11.6	15.8	13.7	11.4	10.1	21.7	36.3	20.4	36.3	5.6	11.3
14	21.0	35.6	24.0	17.8	26.0	27.8	60.1	63.6	75.4	10.1	14.7	16.2	15.7	21.8	20.1	17.6	12.6	15.9	14.5	10.9	12.2	12.0	7.7	8.1	75.4	7.7	23.4
15	9.0	6.4	6.8	17.9	22.1	24.4	23.9	58.2	25.7	19.0	9.2	7.6	9.0	11.0	11.0	10.3	8.5	9.4	7.0	8.5	7.3	8.7	8.2	9.0	58.2	6.4	14.1
16	8.5	6.8	6.8	7.8	7.3	7.0	6.8	7.1	6.9	7.5	6.7	7.0	7.9	7.9	7.9	8.5	7.6	7.9	7.0	7.8	7.8	8.1	7.5	9.1	9.1	6.7	7.6
17	10.0	11.9	42.9	13.4	35.1	15.8	24.5	21.0	18.8	28.9	11.9	12.1	13.4	12.1	14.3	12.2	12.6	11.9	12.1	11.2	10.6	11.8	12.6	14.4	42.9	10.0	16.5
18	18.0	14.6	14.3	10.9	11.9	9.7	14.2	19.0	37.5	52.4	37.3	29.3	13.9	31.5	52.7	14.4	23.8	44.6	45.3	15.3	14.8	11.4	14.1	18.9	52.7	9.7	23.7
19	24.4	16.5	8.6	6.8	7.1	26.2	7.0	9.4	11.5	7.9	9.5	12.7	12.3	14.4	12.4	14.2	14.2	15.0	11.7	9.2	11.7	15.2	9.7	20.7	26.2	6.8	12.8
20	11.3	11.8	15.1	26.2	13.3	20.0	6.4	29.7	25.1	28.6	45.2	56.9	36.9	25.8	10.3	15.6	13.9	14.4	27.7	92.7	60.7	87.5	49.1	17.2	92.7	6.4	30.9
21	13.6	13.4	14.5	15.4	13.4	9.4	9.8	24.2	14.5	17.7	12.3	13.8	18.9	59.9	99.0	46.4	63.5	38.1	52.5	22.2	22.6	57.5	8.9	9.3	99.0	8.9	27.9
22	13.1	36.0	23.0	31.4	60.3	14.1	22.4	35.4	12.0	12.7	15.1	26.1	8.9	13.0	32.6	67.2	14.9	13.3	11.6	15.0	24.0	9.9	18.7	27.3	67.2	8.9	23.2
23	13.3	9.8	11.9	19.3	13.5	17.3	28.9	48.7	35.8	43.0	10.2	11.9	12.9	13.4	16.1	20.8	22.3	15.3	10.5	26.7	18.1	10.6	23.7	21.2	48.7	9.8	19.8
24	9.8	11.6	12.7	7.6	11.3	9.8	17.3	14.9	15.6	10.1	8.6	12.9	10.2	11.7	10.6	10.7	17.9	19.6	25.7	14.8	25.4	10.9	13.0	4.0	25.7	4.0	13.2
25	6.2	9.0	15.3	34.9	37.6	8.2	59.2	18.6	38.2	9.5	10.7	11.9	12.0	16.1	15.6	16.7	15.9	15.8	12.3	12.5	20.3	30.4	18.6	18.7	59.2	6.2	19.3
26	18.4	10.2	10.6	12.3	11.0	9.9	32.3	19.9	8.8	36.5	37.9	51.1	10.6	25.7	57.0	28.8	39.9	17.5	16.3	15.4	10.2	53.5	59.7	7.9	59.7	7.9	25.1
27	19.1	38.8	31.2	16.1	8.7	8.6	9.1	23.3	9.3	10.5	10.0	15.2	20.9	18.0	18.8	23.7	15.0	11.4	9.4	9.9	9.4	84.8	97.2	13.2	97.2	8.6	22.2
28	9.0	11.4	12.4	7.7	7.6	19.8	12.6	20.5	10.2	9.8	12.2	16.1	14.6	11.7	11.8	11.4	14.2	11.5	12.0	9.0	8.2	9.5	4.7	13.4	20.5	4.7	11.7
29	13.0	13.5	12.2	14.6	23.2	9.1	14.8	29.4	25.3	26.0	13.2	11.5	13.1	14.2	16.6	12.9	12.3	11.8	10.5	9.2	10.6	12.9	11.4	9.3	29.4	9.1	14.6
30	11.4	21.4	22.5	13.3	12.9	13.2	10.1	12.5	10.3	9.8	11.5	11.9	13.3	14.9	15.4	14.7	14.9	15.6	13.3	10.4	16.9	18.9	24.9	32.6	32.6	9.8	15.3
31	13.2	13.0	8.3	12.1	9.7	11.9	10.1	12.0	12.1	10.4	12.2	13.9	16.4	16.8	15.8	15.6	15.8	13.9	11.8	10.1	11.1	17.9	23.8	28.0	28.0	8.3	14.0
Max.	**51.5**	**69.0**	**91.9**	**56.0**	**60.3**	**46.6**	**60.1**	**63.6**	**75.6**	**73.7**	**45.2**	**56.9**	**79.9**	**65.2**	**99.0**	**67.2**	**63.5**	**49.0**	**52.5**	**92.7**	**85.3**	**87.5**	**97.2**	**50.3**	**99.0**		
Min.	**5.6**	**6.2**	**6.7**	**6.8**	**6.4**	**6.4**	**6.4**	**6.3**	**6.9**	**7.0**	**6.7**	**7.0**	**6.6**	**7.9**	**7.0**	**7.5**	**7.6**	**7.1**	**7.0**	**7.3**	**7.3**	**6.5**	**4.7**	**4.0**		**4.0**	
Avg.	**16.3**	**18.6**	**20.6**	**18.0**	**18.1**	**16.1**	**19.6**	**21.8**	**23.2**	**22.6**	**16.2**	**18.7**	**17.7**	**18.1**	**20.2**	**16.9**	**17.5**	**17.1**	**14.9**	**17.8**	**17.0**	**22.9**	**21.2**	**17.1**			**18.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

August 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	12.4	16.8	4.7	6.1	11.4	64.2	22.5	59.2	68.8	24.6	19.9	23.0	27.9	26.4	19.7	18.5	12.2	16.0	9.1	8.9	17.1	64.1	84.0	67.9	84.0	4.7	29.4
2	64.4	58.2	30.1	22.5	23.0	20.9	25.3	33.2	34.5	9.8	19.0	10.3	10.4	10.7	12.9	12.0	9.4	10.5	8.5	62.7	83.3	52.3	36.9	23.2	83.3	8.5	28.5
3	19.0	16.2	11.8	19.3	13.6	13.5	16.2	19.3	12.8	9.6	29.3	54.4	10.7	11.0	11.4	15.3	15.3	12.9	12.3	13.4	7.9	8.4	10.7	22.5	54.4	7.9	16.1
4	24.4	12.0	14.8	47.0	63.8	30.7	53.1	56.5	15.5	8.4	16.4	15.3	12.8	14.0	12.9	14.5	10.3	14.1	13.3	10.2	9.3	24.5	28.5	36.4	63.8	8.4	23.3
5	73.3	33.6	19.4	13.5	16.9	16.8	83.1	44.1	47.0	17.1	15.4	27.8	18.7	14.4	14.9	17.1	21.7	15.5	14.0	12.0	8.2	6.8	6.9	8.4	83.1	6.8	23.6
6	10.1	22.6	31.9	40.0	15.4	27.9	21.0	13.2	15.0	9.2	11.9	13.8	14.4	15.9	13.3	12.6	12.2	15.2	9.4	7.8	11.8	11.3	13.3	7.9	40.0	7.8	15.7
7	8.3	16.5	20.6	13.2	20.6	35.2	15.3	15.7	15.6	11.4	11.7	12.7	12.7	12.7	14.1	19.8	13.4	14.1	11.4	9.2	9.6	14.1	10.1	14.1	35.2	8.3	14.7
8	6.7	10.4	11.0	11.7	17.0	16.7	11.1	8.0	10.5	10.1	10.5	14.8	13.8	15.7	17.5	22.7	26.2	26.0	22.5	17.3	8.6	7.4	30.5	11.6	30.5	6.7	14.9
9	13.7	7.4	7.3	16.7	12.2	10.0	9.4	12.2	10.7	14.9	11.8	12.4	12.0	14.8	18.3	19.0	16.4	13.7	13.5	11.7	14.6	14.6	14.3	5.6	19.0	5.6	12.8
10	13.0	16.6	10.6	18.3	90.9	8.9	12.7	14.5	26.3	49.8	26.1	20.7	27.6	31.3	17.6	90.0	40.1	32.8	18.2	12.4	11.3	30.1	50.2	56.4	90.9	8.9	30.3
11	43.4	9.4	40.1	26.2	20.7	53.7	57.5	24.9	10.6	18.4	15.3	11.3	17.7	20.5	10.9	11.8	11.9	11.4	12.2	10.5	8.4	51.0	14.7	11.8	57.5	8.4	21.8
12	10.9	15.4	31.0	27.0	19.3	15.5	20.5	19.5	27.3	18.2	11.9	16.9	28.7	85.3	36.0	21.0	17.8	21.1	11.9	68.7	18.8	65.9	58.5	10.2	85.3	10.2	28.2
13	10.1	20.1	20.4	31.0	20.6	59.0	52.5	90.0	52.1	21.8	12.7	14.1	10.3	48.9	39.4	57.2	20.2	12.0	11.7	12.2	13.3	25.3	40.1	7.6	90.0	7.6	29.3
14	15.2	14.7	19.8	21.5	19.2	8.2	10.2	35.5	84.9	28.2	15.6	7.2	10.4	9.3	10.8	12.9	12.1	9.2	9.8	9.7	13.5	24.8	11.0	50.4	84.9	7.2	19.3
15	39.5	27.4	59.7	10.2	14.7	12.8	8.6	15.2	6.9	8.7	14.6	28.9	18.0	15.4	17.3	12.4	12.6	12.5	9.5	8.8	9.4	10.1	8.8	8.3	59.7	6.9	16.3
16	26.3	18.2	20.6	26.3	18.3	15.0	18.1	16.1	12.5	9.1	8.9	17.0	14.7	13.2	14.4	15.6	15.8	13.5	11.1	10.4	8.4	30.6	16.5	69.6	69.6	8.4	18.3
17	57.9	25.7	24.3	39.2	13.9	16.9	21.2	15.7	33.7	29.1	16.0	12.8	11.4	12.1	11.7	11.4	14.5	8.9	8.2	8.0	9.0	18.2	8.7	15.4	57.9	8.0	18.5
18	11.7	23.4	46.7	77.6	16.4	12.6	16.3	12.8	16.5	48.3	89.5	40.1	29.3	13.9	21.0	21.2	22.2	46.5	49.2	12.7	38.2	28.8	11.6	6.3	89.5	6.3	29.7
19	5.8	58.4	48.7	29.1	51.2	59.3	17.3	12.7	61.1	96.4	11.5	14.2	12.4	17.5	18.1	13.3	12.0	12.2	10.1	12.0	15.6	59.1	24.7	10.3	96.4	5.8	28.5
20	8.3	12.6	8.3	10.6	5.7	4.4	7.3	6.5	4.8	9.2	31.1	12.9	21.8	14.3	22.1	14.2	17.0	11.9	12.6	11.0	40.7	52.4	15.7	7.5	52.4	4.4	15.1
21	6.1	3.5	6.5	5.5	5.2	29.7	28.7	23.2	16.6	54.0	29.0	57.0	13.6	16.0	17.5	12.8	12.2	40.9	47.9	36.0	27.5	29.3	86.6	30.8	86.6	3.5	26.5
22	29.1	13.9	22.4	20.5	18.0	9.9	11.1	7.4	13.4	17.0	17.5	32.6	60.3	65.7	66.6	27.8	30.5	50.1	30.3	11.8	9.5	11.5	7.1	6.4	66.6	6.4	24.6
23	6.2	6.9	5.6	5.4	9.3	10.1	16.2	11.6	11.0	11.8	18.5	29.5	21.3	53.9	76.7	34.2	37.8	13.3	10.0	11.0	8.7	12.6	9.3	44.5	76.7	5.4	19.8
24	79.1	65.2	64.9	13.8	93.9	87.1	23.5	35.4	16.0	10.6	11.3	17.4	12.5	13.7	18.1	23.1	27.5	72.4	81.4	17.7	35.5	79.7	17.7	20.6	93.9	10.6	39.1
25	6.3	5.6	5.6	53.8	21.3	45.2	37.6	43.9	52.0	56.2	61.8	19.3	57.4	22.6	23.1	36.0	37.6	10.7	9.8	11.8	10.7	27.7	21.5	30.4	61.8	5.6	29.5
26	15.7	19.3	39.2	44.6	34.1	34.0	12.5	18.4	13.6	19.9	7.0	9.0	9.3	11.4	9.4	9.8	10.5	10.4	9.5	6.8	10.0	8.4	20.6	11.4	44.6	6.8	16.4
27	29.8	18.0	25.3	40.6	74.6	21.4	15.1	39.3	7.5	10.1	9.8	10.7	14.9	17.7	34.3	35.2	23.7	20.3	13.6	72.1	44.2	36.5	53.4	82.1	82.1	7.5	31.3
28	9.5	6.6	28.9	18.1	8.9	5.4	8.4	10.5	7.5	11.7	12.4	32.9	9.3	15.1	12.6	16.3	14.8	26.6	25.6	14.6	19.4	24.9	14.9	15.3	32.9	5.4	15.4
29	26.6	26.4	21.9	20.0	5.7	5.1	4.5	6.5	13.6	11.0	17.2	27.6	32.0	59.1	27.0	19.7	17.7	15.5	9.2	9.9	8.8	11.5	37.4	16.6	59.1	4.5	18.8
30	11.8	8.0	12.0	12.4	13.3	29.6	14.0	16.2	10.2	34.9	27.4	47.0	32.1	21.7	34.3	22.9	12.9	11.7	10.0	9.8	19.3	11.7	9.8	7.8	47.0	7.8	18.4
31	8.5	7.1	7.6	6.8	7.2	7.8	7.4	9.1	7.9	8.5	10.2	8.8	8.4	13.1	9.8	11.1	11.0	10.5	9.3	8.2	8.4	8.2	9.0	8.9	13.1	6.8	8.9
Max.	**79.1**	**65.2**	**64.9**	**77.6**	**93.9**	**87.1**	**83.1**	**90.0**	**84.9**	**96.4**	**89.5**	**57.0**	**60.3**	**85.3**	**76.7**	**90.0**	**40.1**	**72.4**	**81.4**	**72.1**	**83.3**	**79.7**	**86.6**	**82.1**	**96.4**		
Min.	**5.8**	**3.5**	**4.7**	**5.4**	**5.2**	**4.4**	**4.5**	**6.5**	**4.8**	**8.4**	**7.0**	**7.2**	**8.4**	**9.3**	**9.4**	**9.8**	**9.4**	**8.9**	**8.2**	**6.8**	**7.9**	**6.8**	**6.9**	**5.6**		**3.5**	
Avg.	**22.7**	**19.9**	**23.3**	**24.1**	**25.0**	**25.4**	**21.9**	**24.1**	**23.7**	**22.5**	**20.0**	**21.7**	**19.6**	**23.5**	**22.0**	**22.0**	**18.4**	**19.8**	**17.3**	**17.4**	**18.0**	**27.8**	**25.3**	**23.4**			**22.0**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

September 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.2	7.9	8.2	7.5	7.9	17.4	8.2	7.9	9.2	12.0	13.1	10.1	16.6	13.1	17.3	9.6	9.7	20.1	13.6	24.7	24.8	8.0	15.5	17.6	24.8	7.5	12.9
2	7.5	8.1	7.0	6.7	6.0	7.8	7.7	7.8	7.8	6.9	6.9	7.0	7.1	7.9	9.1	11.2	13.4	30.9	9.6	13.6	12.9	13.8	12.5	12.2	30.9	6.0	10.1
3	11.7	10.2	10.0	8.3	9.7	12.9	46.1	39.0	28.9	17.8	64.6	12.4	12.9	7.2	20.1	12.3	12.1	12.7	14.0	7.9	11.8	14.0	25.3	44.9	64.6	7.2	19.5
4	14.9	39.1	35.1	64.4	46.5	37.4	53.3	23.9	60.9	68.7	50.8	19.3	22.3	16.5	16.5	20.6	17.1	16.6	10.0	17.5	47.2	19.1	10.7	13.1	68.7	10.0	30.9
5	11.4	10.6	11.6	18.6	8.1	8.5	7.3	12.1	16.2	90.4	31.5	25.3	44.0	32.1	35.6	71.2	42.6	48.1	78.9	84.6	52.3	20.6	10.5	12.4	90.4	7.3	32.7
6	23.7	11.4	30.7	47.7	9.4	55.2	62.5	12.8	9.6	8.2	14.8	7.4	5.6	8.3	9.3	6.8	9.0	6.2	16.4	8.3	11.9	16.3	9.1	10.1	62.5	5.6	17.1
7	10.9	12.7	14.7	8.2	23.2	17.4	27.1	32.5	13.7	16.7	13.0	9.5	14.3	14.6	23.9	12.3	9.0	9.4	11.0	8.1	10.6	10.1	6.6	13.1	32.5	6.6	14.3
8	6.6	21.0	32.4	17.9	13.0	10.4	15.2	24.5	36.2	9.9	11.2	16.8	10.7	7.8	7.7	8.3	8.4	7.0	9.4	7.6	16.4	8.9	8.3	17.3	36.2	6.6	13.9
9	16.7	13.7	12.2	15.5	20.0	18.0	15.6	40.6	44.9	67.7	7.7	8.4	6.5	13.1	7.3	6.2	6.8	8.4	11.2	7.8	11.9	16.7	11.9	12.2	67.7	6.2	16.7
10	27.1	22.0	4.9	71.6	68.0	23.5	19.9	58.1	45.3	17.7	52.8	54.7	63.1	25.8	11.7	12.4	11.6	10.4	9.9	10.7	11.0	56.0	32.2	37.3	71.6	4.9	31.6
11	18.9	8.1	12.2	28.0	21.0	57.9	29.0	16.7	20.3	9.2	28.6	18.8	14.2	11.9	14.4	15.9	18.4	13.4	10.1	7.1	10.0	15.7	7.9	8.2	57.9	7.1	17.3
12	7.2	7.1	6.9	6.3	6.2	6.7	6.4	6.6	6.8	7.8	7.3	8.2	7.7	8.8	8.9	10.7	7.2	7.7	8.7	9.0	7.5	7.2	7.7	7.4	10.7	6.2	7.6
13	8.1	6.6	7.7	6.8	7.0	7.3	6.6	7.2	6.7	6.8	6.8	6.6	6.5	6.6	6.6	6.6	7.9	7.0	7.1	7.3	6.5	5.8	11.6	9.6	11.6	5.8	7.2
14	10.6	34.4	20.4	89.5	63.1	74.3	18.0	52.5	21.9	11.5	13.5	6.9	15.5	9.2	11.2	9.9	7.4	8.9	14.4	7.2	7.8	10.4	6.7	51.6	89.5	6.7	24.0
15	39.8	16.5	19.9	18.3	17.6	23.2	25.3	45.9	21.8	18.0	7.0	8.7	7.4	8.2	8.6	7.3	7.8	7.0	6.9	6.7	6.4	10.7	10.1	25.5	45.9	6.4	15.6
16	33.7	48.8	8.1	23.1	10.9	10.6	17.5	18.9	25.0	13.2	13.6	8.4	15.1	14.1	11.1	11.8	15.0	11.5	9.0	8.5	16.6	14.1	27.5	32.2	48.8	8.1	17.4
17	16.6	24.8	29.0	74.8	56.3	31.8	12.0	18.9	27.2	34.8	66.7	21.7	14.3	17.6	9.9	8.5	8.8	9.8	8.6	8.4	28.8	51.1	22.3	94.3	94.3	8.4	29.0
18	19.8	10.1	9.8	10.5	10.2	10.5	10.3	10.4	14.4	14.4	15.3	11.0	13.9	23.7	14.2	12.1	10.6	12.1	24.1	56.3	40.9	84.2	40.8	85.0	85.0	9.8	23.5
19	51.8	18.4	27.5	39.8	74.9	20.1	6.7	8.6	7.2	12.9	9.9	9.6	10.1	11.1	13.4	33.1	10.5	9.2	8.8	7.9	7.0	7.7	6.6	9.0	74.9	6.6	17.6
20	7.1	11.7	13.2	13.7	10.7	11.2	8.1	12.6	29.1	11.7	12.0	17.5	12.1	13.0	19.5	16.2	18.5	13.1	9.4	19.0	33.8	12.6	10.9	19.7	33.8	7.1	14.8
21	9.3	10.7	3.5	6.4	4.4	8.9	12.0	10.7	12.9	16.9	19.4	13.4	13.0	16.3	15.8	15.2	15.2	10.4	8.8	10.1	13.2	10.2	10.3	11.9	19.4	3.5	11.6
22	12.3	12.5	7.7	4.5	3.6	4.0	5.0	4.8	13.2	16.8	6.4	31.9	63.6	32.0	26.9	30.6	17.1	17.0	8.6	13.1	13.8	6.1	7.3	6.3	63.6	3.6	15.2
23	7.1	6.5	8.7	7.0	36.4	11.7	10.7	11.6	11.4	15.6	14.0	16.9			7.5	12.5	15.0	20.4	12.8	16.5	11.7	12.2	28.9	50.7	50.7	6.5	15.7
24	18.8	16.8	15.0	9.7	19.0	17.8	10.0	25.1	44.9	26.3	11.1	21.4	15.5	13.6	9.6	13.6	9.4	9.7	14.3	5.5	9.0	14.4	79.1	32.1	79.1	5.5	19.2
25	47.9	82.6	65.4	26.2	11.0	49.8	73.1	48.2	16.3	82.3	16.6	12.6	31.5	9.2	11.4	20.1	13.6	13.3	13.4	17.9	16.1	29.8	39.9	13.4	82.6	9.2	31.7
26	20.1	5.9	9.2	19.8	18.9	12.1	12.6	15.0	14.0	16.3	76.2	41.3	19.5	50.0	70.4	17.9	39.5	44.5	55.1	19.8	18.8	11.5	15.6	22.1	76.2	5.9	26.9
27	21.3	17.1	13.8	33.3	28.6	16.1	28.4	13.9	10.8	18.2	11.1	12.0	22.0	19.9	32.8	30.2	14.2	12.0	11.9	25.4	21.7	29.8	9.2	8.6	33.3	8.6	19.3
28	10.6	14.0	10.2	19.8	9.8	9.6	10.0	7.1	9.1	6.9	8.3	13.4	32.9	32.7	62.6	63.0	10.3	11.3	13.1	19.1	54.8	89.9	64.6	12.5	89.9	6.9	24.8
29	16.0	15.7	35.9	33.6	45.4	20.1	89.5	35.3	33.6	10.1	14.5	13.5	15.4	8.1	14.5	12.6	20.5	11.5	10.9	26.4	20.3	36.6	32.2	12.8	89.5	8.1	24.4
30	7.2	9.6	11.9	13.6	19.2	5.5	7.9	13.4	10.1	8.0	14.8	14.3	11.9	13.4	17.3	13.2	12.8	18.6	20.2	15.3	28.3	18.9	11.6	19.8	28.3	5.5	14.0
Max.	**51.8**	**82.6**	**65.4**	**89.5**	**74.9**	**74.3**	**89.5**	**58.1**	**60.9**	**90.4**	**76.2**	**54.7**	**63.6**	**50.0**	**70.4**	**71.2**	**42.6**	**48.1**	**78.9**	**84.6**	**54.8**	**89.9**	**79.1**	**94.3**	**94.3**		
Min.	**6.6**	**5.9**	**3.5**	**4.5**	**3.6**	**4.0**	**5.0**	**4.8**	**6.7**	**6.8**	**6.4**	**6.6**	**5.6**	**6.6**	**6.6**	**6.2**	**6.8**	**6.2**	**6.9**	**5.5**	**6.4**	**5.8**	**6.6**	**6.3**		**3.5**	
Avg.	**17.5**	**17.8**	**16.8**	**25.0**	**22.9**	**20.6**	**22.1**	**21.4**	**21.0**	**22.4**	**21.3**	**16.0**	**18.8**	**16.1**	**18.2**	**17.7**	**14.0**	**14.6**	**15.3**	**16.6**	**19.5**	**22.1**	**19.8**	**24.1**			**19.2**

Total Hours in Month 720 **Hours Data Available** 718 **Data Recovery** 99.7%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

October 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	9.1	11.4	42.5	26.4	11.7	43.0	18.7	58.4	15.7	23.5	10.8	25.3	12.7	15.3	9.0	8.5	13.7	11.9	26.7	10.5	9.0	9.9	30.9	14.3	58.4	8.5	19.5
2	12.8	76.3	16.9	9.1	20.2	25.9	38.2	81.6	72.6	15.0	11.8	30.8	55.9	41.3	20.5	32.5	26.3	67.7	70.3	32.9	19.0	12.4	14.0	18.4	81.6	9.1	34.3
3	19.4	26.8	34.0	27.5	14.4	19.3	9.3	8.1	19.6	12.8	15.9	11.9	11.0	12.3	10.4	11.2	10.6	9.4	10.8	30.4	13.2	34.9	21.1	16.7	34.9	8.1	17.1
4	42.2	14.8	20.3	6.3	19.4	26.9	26.8	10.7	15.5	20.5	9.9	11.9	36.5	34.7	56.5	14.5	43.6	62.5	58.2	14.2	35.1	29.9	12.0	0.0	62.5	0.0	26.0
5	6.5	23.7	71.8	47.7	43.9	17.3	39.9	45.9	55.5	15.8	14.5	13.1	15.5	15.9	11.1	9.3	10.6	11.6	15.3	63.0	16.3	15.7	11.8	22.8	71.8	6.5	25.6
6	13.3	12.5	19.5	17.4	8.7	8.3	14.2	13.1	11.5	16.6	11.7	11.6	15.6	18.2	9.3	12.6	11.9	12.2	11.9	7.1	7.0	5.7	6.9	7.4	19.5	5.7	11.8
7	6.7	8.6	10.4	10.8	10.5	13.5	13.7	10.9	11.2	10.3	10.5	9.4	9.2	9.2	9.7	8.3	9.4	9.9	9.8	11.9	9.5	9.9	9.0	8.5	13.7	6.7	10.0
8	7.6	8.9	10.6	8.0	11.6	15.7	20.1	10.2	11.3	7.0	13.5	10.3	17.5	15.8	15.4	17.9	12.1	13.8	30.2	79.6	77.7	59.1	65.2	6.1	79.6	6.1	22.7
9	6.7	4.3	8.2	13.0	8.1	6.9	6.7	6.2	7.2	7.3	6.2	6.9	7.7	8.1	7.1	7.2	6.9	6.6	7.5	7.8	9.1	9.0	7.4	8.0	13.0	4.3	7.5
10	13.4	13.3	8.5	22.6	46.7	15.2	15.0	53.4	47.7	23.7	31.4	34.7	12.4	24.0	24.9	23.3	9.6	9.9	16.7	40.4	57.9	22.6	15.0	17.6	57.9	8.5	25.0
11	18.8	10.3	11.2	8.9	6.8	11.0	7.0	6.9	9.6	70.7	8.2	8.2	7.8	8.3	9.6	9.6	8.0	8.7	10.2	8.8	8.5	8.6	9.0	8.7	70.7	6.8	11.8
12	10.4	9.9	9.0	8.6	8.5	9.3	9.0	9.7	10.5	9.6	10.0	8.9	8.1	7.4	8.7	7.4	7.9	7.4	10.0	10.0	11.3	39.3	28.7	14.0	39.3	7.4	11.4
13	8.4	13.8	7.6	13.5	15.7	43.9	14.9	19.9	13.5	19.2	96.1	32.1	6.0	6.3	7.5	13.4	7.2	8.8	5.7	9.2	9.2	6.8	8.5	8.7	96.1	5.7	16.5
14	8.2	7.7	7.4	5.6	9.2	8.3	6.6	14.7	19.7	12.4	10.9	9.5	10.4	7.0	8.5	6.7	8.4	25.9	17.1	10.0	16.6	58.8	23.0	24.2	58.8	5.6	14.0
15	59.0	29.0	18.0	13.6	14.9	18.0	30.9	13.5	13.9	18.1	14.5	17.7	15.4	7.0	7.6	9.3	11.0	11.2	11.9	13.1	10.4	14.8	11.7	10.8	59.0	7.0	16.5
16	9.0	8.2	12.2	12.9	11.2	8.7	9.6	9.2	9.6	14.8	15.2	10.8	6.5	7.4	7.2	7.2	10.6	7.2	11.0	4.9	6.0	8.2	18.0	7.3	18.0	4.9	9.7
17	6.8	5.4	8.7	8.2	8.9	12.8	10.7	12.8	14.4	11.4	14.7	35.6	62.4	28.7	29.9	58.1	40.0	18.8	15.5	11.3	8.6	63.3	28.5	6.2	63.3	5.4	21.7
18	11.6	6.6	14.1	17.0	11.9	11.0	8.9	6.1	5.9	6.2	18.7	14.3	16.4	7.1	13.2	8.7	8.5	7.6	8.4	10.7	8.5	76.1	42.6	17.3	76.1	5.9	14.9
19	17.9	30.3	18.8	10.7	33.9	19.6	19.4	17.8	20.4	11.3	11.4	8.8	8.1	13.1	8.4	12.2	5.3	10.2	11.0	11.4	7.2	5.9	9.4	7.9	33.9	5.3	13.8
20	7.6	5.7	6.2	8.3	21.1	34.4	32.4	25.8	13.7	8.7	11.3	7.5	21.8	11.0	7.3	10.3	9.1	16.4	12.4	11.4	9.4	12.9	8.6	6.8	34.4	5.7	13.3
21	4.6	4.7	19.9	31.0	40.0	67.2	17.2	17.6	65.2	22.7	64.1	31.3	21.4	17.9	8.7	10.0	8.4	10.2	12.3	14.8	13.7	23.6	19.3	32.8	67.2	4.6	24.1
22	33.4	17.1	9.9	7.7	9.7	18.6	8.8	8.8	7.0	7.3	11.4	9.9	11.2	15.3	10.7	12.8	19.3	32.8	15.1	21.6	42.0	56.6	15.5	25.4	56.6	7.0	17.8
23	11.2	15.9	18.0	14.8	8.1	16.2	12.3	24.0	20.8	11.3	8.2	14.9	17.3	14.1	13.0	13.3	6.2	10.7	6.9	11.8	10.3	6.3	16.6	10.8	24.0	6.2	13.0
24	8.7	8.1	8.8	7.3	6.6	7.1	6.4	6.4	6.5	9.8	9.4	9.6	9.6	7.5	13.5	22.9	22.5	15.2	73.4	42.2	60.8	56.6	24.7	9.2	73.4	6.4	18.9
25	89.7	36.3	7.9	11.9	7.5	8.6	5.8	8.1	4.6	5.2	11.7	8.0	9.0	4.6	9.5	14.0	9.8	14.6	62.1	30.5	9.6	19.1	24.1	10.3	89.7	4.6	17.6
26	10.5	19.1	15.6	14.5	11.2	12.1	10.4	18.0	14.3	18.5	7.2	10.6	11.1	11.5	7.2	7.5	13.4	9.2	34.8	24.4	47.1	40.5	27.4	34.4	47.1	7.2	17.9
27	59.7	29.8	27.4	18.1	25.2	16.8	15.2	16.8	18.4	13.4	28.3	15.2	14.5	13.3	9.3	12.2	15.9	17.0	15.3	10.6	6.1	16.7	13.6	23.3	59.7	6.1	18.8
28	23.0	11.9	45.1	11.4	11.6	10.2	6.9	8.2	16.7	65.9	51.2	13.3	44.4	72.0	19.1	71.0	26.0	24.7	17.7	7.6	12.7	21.7	7.0	11.0	72.0	6.9	25.4
29	8.1	7.0	7.8	8.8	14.0	4.1	7.4	14.6	24.6	15.0	12.5	17.5	30.0	13.7	24.9	25.2	17.1	16.9	7.7	8.0	15.3	22.1	21.7	13.8	30.0	4.1	14.9
30	18.5	9.9	8.4	58.4	50.6	34.9	35.1	48.3	37.6	34.9	40.4	37.1	20.5	7.6	14.9	30.4	13.4	16.5	15.3	11.1	7.5	10.4	13.2	11.7	58.4	7.5	24.4
31	12.9	13.5	12.8	12.7	8.5	16.7	16.2	7.5	10.3	7.2	14.0	9.7	9.3	48.9	70.7	6.9	28.0	22.6	26.3	9.5	8.5	10.6	9.1	8.8	70.7	6.9	16.7
Max.	**89.7**	**76.3**	**71.8**	**58.4**	**50.6**	**67.2**	**39.9**	**81.6**	**72.6**	**70.7**	**96.1**	**37.1**	**62.4**	**72.0**	**70.7**	**71.0**	**43.6**	**67.7**	**73.4**	**79.6**	**77.7**	**76.1**	**65.2**	**34.4**	**96.1**		
Min.	**4.6**	**4.3**	**6.2**	**5.6**	**6.6**	**4.1**	**5.8**	**6.1**	**4.6**	**5.2**	**6.2**	**6.9**	**6.0**	**4.6**	**7.1**	**6.7**	**5.3**	**6.6**	**5.7**	**4.9**	**6.0**	**5.7**	**6.9**	**0.0**		**0.0**	
Avg.	**18.6**	**16.2**	**17.3**	**15.9**	**17.1**	**18.8**	**15.9**	**19.8**	**20.2**	**17.6**	**19.5**	**16.0**	**17.9**	**16.9**	**15.6**	**16.6**	**14.5**	**17.0**	**21.2**	**19.1**	**18.8**	**25.4**	**18.5**	**13.6**			**17.8**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

November 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	18.2	18.2	41.9	17.5	16.2	16.0	22.8	67.3	44.9	15.7	8.3	8.7	12.1	20.3	14.3	12.8	21.5	7.5	21.3	13.5	9.2	7.7	10.3	11.8	67.3	7.5	19.1
2	6.4	12.6	7.7	8.7	8.6	9.0	7.7	7.8	9.8	11.2	8.6	10.5	11.1	10.6	11.9	12.4	14.4	12.1	14.5	23.8	26.9	37.3	19.6	15.7	37.3	6.4	13.3
3	14.7	9.8	10.5	9.7	14.9	13.8	10.4	8.3	7.7	5.7	9.4	13.1	9.4	14.8	15.0	6.8	9.3	8.3	8.3	5.4	5.9	8.4	10.5	13.1	15.0	5.4	10.1
4	10.9	64.6	22.3	9.2	15.0	12.1	16.5	10.8	12.6	13.2	13.5	14.4	16.1	16.9	16.2	10.1	11.0	10.9	12.3	9.2	9.8	10.8	9.2	7.9	64.6	7.9	14.8
5	10.8	13.6	6.2	11.3	14.7	7.7	11.1	14.9	19.1	11.4	11.8	11.2	28.5	11.6	8.7	7.6	7.8	8.8	6.3	8.8	10.5	9.2	5.6	7.7	28.5	5.6	11.1
6	6.7	6.3	6.2	5.3	6.3	5.5	7.6	71.7	84.7	72.1	69.8	94.3	69.6	18.4	12.9	17.7	13.2	9.6	12.6	24.4	28.5	14.7	10.7	21.6	94.3	5.3	28.8
7	16.0	7.5	12.4	8.9	7.5	6.9	7.5	9.7	8.0	15.9	8.4	12.8	14.4	16.6	13.5	6.1	10.3	18.5	68.4	91.9	56.8	36.0	24.6	23.8	91.9	6.1	20.9
8	23.2	8.4	15.2	14.0	7.8	6.8	7.2	6.6	6.1	11.4	6.7	10.8	5.6	8.2	13.1	7.9	7.7	8.5	10.3	7.0	7.2	6.9	9.4	7.2	23.2	5.6	9.3
9	15.3	8.5	10.1	7.2	7.5	9.4	8.7	12.0	9.8	10.3	24.2	20.9	19.1	21.6	14.4	13.6	10.8	13.9	14.8	11.1	8.1	8.5	8.0	10.4	24.2	7.2	12.4
10	10.7	9.7	11.8	14.7	33.0	7.9	9.2	9.2	8.3	8.1	10.8	25.9	15.0	14.4	12.5	11.4	7.4	8.5	8.2	9.4	10.2	6.1	11.0	9.8	33.0	6.1	11.8
11	11.4	9.7	29.9	23.1	13.6	10.6	10.6	16.4	11.5	17.0	87.4	43.6	91.5	17.4	14.7	9.3	22.0	18.1	12.3	9.4	15.3	91.4	47.4	12.6	91.5	9.3	26.9
12	37.8	40.5	72.4	39.6	46.8	30.0	25.2	42.5	32.5	16.9	18.3	21.0	13.3	40.9	63.6	35.7	81.4	45.7	75.5	51.2	24.7	54.3	36.3	8.2	81.4	8.2	39.8
13	7.1	6.3	6.3	7.2	11.8	10.8	19.6	14.6	20.7	9.2	72.6	50.1	67.2	36.0	17.4	24.9	7.0	16.5	55.6	21.2	26.0	63.7	34.9	18.6	72.6	6.3	26.0
14	18.9	15.9	14.1	19.6	9.7	8.3	20.8	8.8	13.5	95.2	57.1	73.1	25.0	80.5	28.4	40.6	19.0	29.6	12.2	58.1	36.8	52.9	42.9	33.8	95.2	8.3	33.9
15	24.9	54.5	25.1	11.8	22.0	61.3	40.5	16.8	10.4	11.6	19.4	13.6	7.7	8.7	6.4	4.6	9.1	6.6	10.3	8.5	15.2	7.3	5.4	6.2	61.3	4.6	17.0
16	5.7	7.6	6.2	7.0	11.6	7.1	5.3	61.9	60.0	47.2	12.5	8.3	85.8	95.2	71.9	32.4	82.5	10.6	6.0	13.5	18.8	11.5	11.1	14.0	95.2	5.3	28.9
17	8.4	14.4	6.0	5.9	10.0	7.5	17.5	18.9	11.4	11.6	11.8	11.3	15.5	12.8	11.9	11.1	17.4	8.8	7.3	9.9	9.7	11.8	10.6	11.5	18.9	5.9	11.4
18	16.3	50.0	48.8	45.3	13.9	16.4	12.4	14.5	14.0	12.7	13.1	14.0	13.7	16.1	13.5	14.5	14.6	18.4	12.7	13.8	14.5	14.0	11.5	9.1	50.0	9.1	18.2
19	10.6	16.7	21.8	18.6	14.1	13.1	13.3	22.3	26.1	10.2	16.4	19.2	15.0	17.3	8.4	19.6	16.3	15.1	43.9	20.2	14.5	12.2	15.9	25.8	43.9	8.4	17.8
20	23.4	15.9	20.2	7.5	8.7	10.7	34.9	43.7	35.1	10.8	14.6	24.9	31.3	21.3	16.7	13.9	12.8	10.6	10.8	8.1	7.9	9.9	11.3	11.2	43.7	7.5	17.3
21	10.2	14.5	15.8	23.7	19.9	19.4	16.8	10.9	16.0	10.2	12.0	9.1	12.4	13.1	11.0	11.8	11.4	11.5	12.3	9.1	17.9	17.5	44.5	19.0	44.5	9.1	15.4
22	14.4	69.8	39.5	52.2	20.2	39.8	22.9	10.1	25.8	17.6	48.1	6.8	10.2	11.3	6.6	14.7	86.0	14.7	12.0	76.8	87.1	90.7	9.9	8.5	90.7	6.6	33.2
23	8.3	6.6	15.2	9.4	32.0	14.0	46.1	52.2	70.1	47.6	24.1	65.4	24.9	8.7	6.6	30.1	13.0	13.4	23.8	8.8	20.7	7.8	6.8	7.3	70.1	6.6	23.5
24	8.6	9.9	5.5	5.8	5.5	7.0	12.5	6.8	7.7	6.4	5.3	5.5	7.6	6.4	5.5	6.8	6.0	6.7	8.9	5.9	12.5	36.9	8.8	73.0	73.0	5.3	11.3
25	73.9	57.2	51.0	71.6	61.6	60.8	46.8	98.2	59.4	33.2	11.4	34.8	27.9	49.7	25.1	8.2	11.2	14.3	10.7	8.0	13.5	8.0	14.5	12.6	98.2	8.0	36.0
26	12.2	13.2	14.6	10.5	8.7	13.5	6.6	4.8	6.1	21.1	43.5	19.2	20.5	15.4	10.2	15.5	11.3	11.2	13.5	30.4	74.7	72.1	56.1	24.6	74.7	4.8	22.1
27	35.8	24.2	9.4	14.5	12.8	11.4	7.4	9.9	10.3	14.0	11.8	10.8	14.1	23.3	9.1	8.0	10.0	9.0	10.4	19.2	9.7	6.9	6.6	7.9	35.8	6.6	12.8
28	13.3	9.5	9.7	9.2	12.9	14.7	11.5	7.9	10.9	13.3	8.0	12.9	15.0	14.7	12.3	14.6	16.2	18.1	13.3	11.5	19.7	6.6	6.6	22.6	22.6	6.6	12.7
29	19.3	8.4	8.3	5.8	17.4	11.4	5.6	7.2	7.5	6.7	7.4	12.7	9.6	8.7	9.3	8.0	5.9	7.8	8.4	7.0	10.6	14.0	10.1	9.8	19.3	5.6	9.5
30	18.0	11.1	5.2	15.7	20.4	12.0	11.6	18.1	13.1	8.8	11.5	10.0	17.5	16.5	8.9	19.3	9.8	21.2	16.5	20.6	10.5	9.8	15.7	16.3	21.2	5.2	14.1
Max.	**73.9**	**69.8**	**72.4**	**71.6**	**61.6**	**61.3**	**46.8**	**98.2**	**84.7**	**95.2**	**87.4**	**94.3**	**91.5**	**95.2**	**71.9**	**40.6**	**86.0**	**45.7**	**75.5**	**91.9**	**87.1**	**91.4**	**56.1**	**73.0**	**98.2**		
Min.	**5.7**	**6.3**	**5.2**	**5.3**	**5.5**	**5.5**	**5.3**	**4.8**	**6.1**	**5.7**	**5.3**	**5.5**	**5.6**	**6.4**	**5.5**	**4.6**	**5.9**	**6.6**	**6.0**	**5.4**	**5.9**	**6.1**	**5.4**	**6.2**		**4.6**	
Avg.	**17.0**	**20.5**	**19.0**	**17.0**	**16.8**	**15.8**	**16.6**	**23.5**	**22.4**	**19.9**	**22.6**	**23.0**	**24.2**	**22.2**	**16.3**	**15.0**	**19.2**	**13.8**	**18.4**	**20.5**	**21.1**	**24.8**	**17.5**	**16.1**			**19.3**

Total Hours in Month 720 **Hours Data Available** 720 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Wind Sigma (RMYoung)

December 2008

Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Max.	Min.	Avg.
1	7.8	5.6	10.3	10.5	19.4	11.8	7.1	5.7	16.4	10.9	42.5	28.3	17.7	17.3	16.6	20.8	30.6	85.1	27.8	28.7	19.5	12.4	21.3	55.2	85.1	5.6	22.1
2	73.5	20.9	83.1	24.6	71.9	16.5	21.6	12.0	15.6	22.6	20.8	14.9	6.6	4.4	5.0	5.5	5.6	5.6	5.4	5.1	5.6	5.4	5.6	5.8	83.1	4.4	19.3
3	6.5	5.2	5.0	6.0	6.3	6.1	6.1	9.8	7.2	6.4	5.7	6.0	5.6	7.6	6.1	6.4	6.8	8.2	8.3	8.1	7.2	5.9	5.2	8.1	9.8	5.0	6.6
4	6.6	6.0	5.6	5.2	5.3	7.6	5.3	8.1	7.4	6.3	7.1	10.1	6.0	7.1	6.2	6.0	7.4	11.5	11.0	7.3	9.0	10.7	9.8	6.9	11.5	5.2	7.5
5	9.6	12.6	8.9	8.4	6.9	8.3	8.0	8.1	5.3	5.3	5.4	6.3	7.3	6.0	5.3	16.3	17.3	9.9	15.3	16.2	12.1	26.1	29.5	42.3	42.3	5.3	12.4
6	43.9	25.8	7.7	5.9	9.5	10.4	56.9	18.7	13.9	20.5	92.7	38.0	50.2	8.1	7.2	40.3	25.4	13.7	12.4	5.1	5.3	4.7	7.8	11.2	92.7	4.7	22.3
7	8.7	6.5	16.3	11.1	12.2	9.2	9.5	13.0	9.5	9.7	9.8	6.3	8.7	6.9	7.8	6.3	10.0	9.8	28.5	44.1	25.4	13.3	14.8	12.9	44.1	6.3	12.9
8	15.1	20.4	15.8	17.2	21.8	40.5	48.8	90.5	20.1	21.2	25.4	20.6	12.6	9.9	7.6	7.5	7.3	7.5	8.3	7.2	7.8	8.9	8.2	7.9	90.5	7.2	19.1
9	7.9	7.6	8.7	41.7	23.6	17.5	7.4	5.1	8.3	12.2	16.2	6.4	8.9	10.3	36.5	47.2	51.4	51.8	10.3	10.9	15.7	48.0	47.2	24.2	51.8	5.1	21.9
10	17.4	13.2	48.5	45.2	43.8	22.8	11.6	24.4	20.0	13.8	18.7	47.0	37.1	63.0	65.6	66.5	18.5	32.5	11.9	9.7	11.5	13.8	3.6	3.6	66.5	3.6	27.7
11	4.7	6.7	17.9	24.5	10.0	60.1	10.1	13.7	19.3	12.9	12.4	17.8	60.4	80.5	75.9	20.8	8.6	11.5	11.9	10.2	8.8	8.5	12.3	16.8	80.5	4.7	22.3
12	7.7	5.8	9.0	11.1	4.9	54.9	65.7	32.2	9.3	77.6	16.6	76.8	19.6	24.0	19.8	52.1	59.9	11.5	6.1	12.2	12.6	18.3	16.9	14.5	77.6	4.9	26.6
13	20.1	12.6	9.7	11.0	10.2	9.1	10.1	21.5	17.9	56.1	15.7	10.5	8.6	24.1	15.1	12.9	11.8	11.3	20.0	14.8	14.4	18.6	16.0	49.2	56.1	8.6	17.6
14	7.9	33.9	13.5	79.5	20.1	17.5	71.7	49.6	75.2	49.5	36.9	77.9	24.2	11.9	14.4	9.6	9.6	20.1	23.5	7.4	6.2	7.4	6.0	5.9	79.5	5.9	28.3
15	5.3	5.6	6.0	6.7	5.5	6.0	6.0	5.2	6.4	8.9	9.5	18.1	28.0	15.0	10.0	5.6	39.0	65.0	37.3	20.9	22.1	50.4	48.0	40.2	65.0	5.2	19.6
16	26.4	28.0	23.2	63.6	34.1	19.5	14.2	8.2	9.1	13.7	10.0	38.2	21.0	44.4	13.0	28.8	13.2	11.9	11.5	16.3	11.8	10.5	10.0	11.1	63.6	8.2	20.5
17	7.0	7.1	5.9	5.2	5.2	5.2	5.4	5.6	9.1	10.8	7.3	5.5	9.0	8.7	7.6	7.3	7.7	6.0	6.3	6.7	6.7	6.6	6.0	7.6	10.8	5.2	6.9
18	4.4	4.3	4.8	5.9	5.3	5.5	10.3	9.7	7.5	6.4	8.0	6.6	7.5	6.9	7.9	5.7	5.7	5.6	5.3	5.6	5.5	5.4	5.4	5.4	10.3	4.3	6.3
19	5.2	5.3	5.6	5.3	5.3	6.0	6.1	5.7	7.6	7.4	6.1	5.5	8.2	11.7	30.0	81.1	32.9	27.8	10.2	8.3	8.0	8.6	12.1	7.7	81.1	5.2	13.2
20	12.3	18.7	60.0	90.7	83.6	85.8	56.8	7.6	8.0	7.2	6.8	54.2	87.3	89.0	44.8	11.1	23.2	74.8	15.8	13.1	9.6	9.3	5.6	5.2	90.7	5.2	36.7
21	18.9	75.8	33.8	30.0	36.7	15.2	12.5	61.7	75.7	45.6	9.6	18.8	71.1	16.6	80.9	52.6	30.3	56.4	12.0	9.9	10.0	8.0	8.2	63.6	80.9	8.0	35.6
22	8.9	14.1	27.7	32.7	86.3	10.4	6.7	10.6	5.8	5.2	8.1	7.6	19.0	26.4	20.2	25.1	9.1	6.9	12.2	7.5	6.4	6.2	5.8	9.7	86.3	5.2	15.8
23	16.9	9.8	4.7	5.5	6.0	6.1	5.6	6.2	48.6	8.6	5.2	5.4	13.8	11.8	11.9	6.6	13.5	14.6	11.1	10.9	11.1	7.5	7.8	9.7	48.6	4.7	10.8
24	11.8	8.6	16.2	12.5	6.9	4.7	22.0	18.3	64.4	67.6	24.9	37.7	32.0	12.1	17.3	13.3	13.3	39.7	30.3	51.9	65.3	60.7	6.3	7.1	67.6	4.7	26.9
25	7.0	7.5	5.7	7.4	7.6	7.5	17.4	13.0	11.3	7.1	4.7	4.4	10.0	9.6	8.0	7.2	68.8	7.6	6.3	5.8	5.6	6.3	6.3	6.3	68.8	4.4	10.3
26	6.0	6.3	6.3	6.3	6.2	6.3	6.3	6.4	5.4	5.4	5.2	5.7	5.9	6.0	5.8	5.5	5.8	5.2	5.2	5.5	5.2	6.9	6.3	6.9	6.9	5.2	5.9
27	6.1	9.3	9.3	9.4	6.1	5.6	7.2	7.3	6.2	6.5	7.8	6.2	16.1	14.8	10.9	8.6	8.3	6.9	8.4	10.1	9.5	7.5	8.4	11.6	16.1	5.6	8.7
28	27.7	14.6	17.8	38.1	31.1	27.5	42.5	53.5	32.4	5.2	15.6	19.0	17.0	10.3	9.1	7.5	14.3	8.6	14.0	38.8	20.8	22.9	26.4	20.9	53.5	5.2	22.3
29	12.3	17.5	19.4	23.2	18.4	16.3	9.8	11.6	9.2	10.5	9.6	9.3	11.0	12.8	11.1	8.3	6.9	9.8	9.6	16.6	15.4	12.4	9.8	11.7	23.2	6.9	12.6
30	11.8	11.2	12.4	13.4	14.5	9.1	6.8	17.0	12.3	18.3	12.9	12.4	10.9	12.0	10.9	17.2	9.5	11.3	15.7	10.0	13.0	24.3	12.3	12.2	24.3	6.8	13.0
31	18.5	11.2	30.4	58.6	20.4	38.3	30.8	23.1	8.2	11.9	6.2	4.4	7.0	8.5	6.9	5.6	3.8	3.5	5.0	7.3	5.2	15.7	18.0	61.0	61.0	3.5	17.1
Max.	**73.5**	**75.8**	**83.1**	**90.7**	**86.3**	**85.8**	**71.7**	**90.5**	**75.7**	**77.6**	**92.7**	**77.9**	**87.3**	**89.0**	**80.9**	**81.1**	**68.8**	**85.1**	**37.3**	**51.9**	**65.3**	**60.7**	**48.0**	**63.6**	**92.7**		
Min.	**4.4**	**4.3**	**4.7**	**5.2**	**4.9**	**4.7**	**5.3**	**5.1**	**5.3**	**5.2**	**4.7**	**4.4**	**5.6**	**4.4**	**5.0**	**5.5**	**3.8**	**3.5**	**5.0**	**5.1**	**5.2**	**4.7**	**3.6**	**3.6**		**3.5**	
Avg.	**14.3**	**14.1**	**17.7**	**23.1**	**20.8**	**18.3**	**19.6**	**18.8**	**18.5**	**18.4**	**15.6**	**20.2**	**20.9**	**19.3**	**19.2**	**19.9**	**18.6**	**21.0**	**13.5**	**13.9**	**12.7**	**15.2**	**13.1**	**18.1**			**17.7**

Total Hours in Month 744 **Hours Data Available** 744 **Data Recovery** 100.0%

HCG, Inc.

Pebble 6 Meteorological Station - Daily Total Precipitation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.8	1.3	12.2	0.0	0.0	0.3	0.3	0.3	9.4	0.0	0.8
2	0.0	0.0	1.3	0.5	4.6	0.0	0.0	0.0	7.6	10.4	0.0	1.8
3	0.0	1.5	0.8	5.1	0.5	0.3	0.5	0.0	17.0	0.0	0.0	0.5
4	0.0	0.0	1.8	2.5	0.3	0.0	0.3	0.0	0.5	2.0	0.3	2.3
5	0.8	1.5	0.3	0.0	0.0	0.0	0.3	0.3	2.0	2.0	0.3	5.8
6	0.0	0.0	0.0	0.3	0.0	0.8	0.3	0.0	5.8	0.0	0.5	2.5
7	0.5	1.0	0.0	0.3	0.0	0.3	1.0	0.3	14.7	0.0	0.5	0.3
8	0.3	0.8	0.3	0.8	0.0	0.0	0.3	0.3	8.1	0.3	1.0	0.5
9	0.8	0.5	0.3	0.0	2.8	0.0	0.5	0.3	4.1	14.0	2.0	2.0
10	0.0	4.6	1.3	0.3	0.5	0.0	0.0	4.1	4.6	14.2	10.4	0.3
11	0.0	1.5	0.5	0.0	0.0	0.5	0.0	0.3	0.8	19.8	0.5	0.0
12	0.0	0.0	0.0	0.3	0.0	4.1	6.4	0.5	7.9	0.3	1.0	2.5
13	0.3	2.3	0.0	7.4	2.5	3.3	2.8	1.5	20.3	0.8	6.6	0.0
14	2.3	4.1	0.3	0.5	0.0	5.3	0.3	2.0	5.6	18.8	1.5	0.8
15	4.8	0.3	1.0	1.3	2.8	0.3	0.3	8.1	0.5	0.0	1.5	2.5
16	0.0	2.0	0.5	1.0	5.8	0.8	6.6	4.1	1.0	0.0	2.0	0.0
17	2.8	7.4	1.0	0.5	0.3	0.5	5.1	0.0	9.9	0.5	0.0	1.0
18	0.0	0.5	0.3	0.5	3.6	0.3	0.3	0.3	16.3	0.5	0.0	0.0
19	0.3	3.0	0.8	0.0	0.0	0.0	1.0	0.0	10.7	0.8	2.8	0.0
20	26.7	3.6	0.8	0.0	0.8	0.3	1.8	3.6	0.3	1.8	0.3	0.0
21	6.6	0.8	2.3	0.0	0.3	0.3	15.5	14.2	0.3	0.0	0.5	0.0
22	3.0	5.1	1.5	0.3	0.3	0.3	7.1	3.3	1.3	0.8	0.8	8.1
23	0.8	0.0	0.0	0.3	0.5	0.0	5.6	2.0	18.1	0.3	1.5	3.3
24	4.3	0.0	0.0	0.0	0.5	0.0	11.7	3.8	2.8	1.5	4.3	0.0
25	1.3	0.5	0.3	0.5	0.3	0.3	0.5	0.3	1.5	1.5	0.5	6.4
26	0.0	0.0	0.0	0.8	0.3	0.8	0.0	0.3	0.5	1.0	0.0	0.0
27	1.8	1.0	0.0	0.0	0.0	0.3	3.3	2.5	2.8	1.3	0.0	0.5
28	4.3	0.3	0.0	0.3	0.3	0.3	0.3	4.8	0.3	0.5	1.0	0.0
29	0.0	0.0	0.8	0.0	0.3	0.0	0.3	0.3	0.0	0.5	0.5	0.0
30	0.0		0.3	0.3	0.3	1.0	0.0	0.3	0.0	0.0	0.0	0.0
31	0.3		2.0		0.0		0.3	0.0		0.0		2.0
Total	61.7	42.9	19.3	35.6	27.2	19.6	72.1	57.4	165.4	102.9	40.4	43.9

Pebble 6 Meteorological Station - Daily Total Pan Evaporation (mm)

January2008- December 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	4.8	5.8	3.4	2.2	0.0	-	-
2	-	-	-	-	-	2.7	5.7	1.6	0.0	0.0	-	-
3	-	-	-	-	-	3.4	0.8	4.9	0.0	0.0	-	-
4	-	-	-	-	-	4.2	1.3	2.8	0.3	0.0	-	-
5	-	-	-	-	-	2.0	1.7	4.5	0.0	0.0	-	-
6	-	-	-	-	-	2.3	3.3	5.4	0.0	0.0	-	-
7	-	-	-	-	-	3.7	0.0	4.2	0.0	0.1	-	-
8	-	-	-	-	-	2.8	0.0	4.6	0.0	0.0	-	-
9	-	-	-	-	-	1.6	4.1	4.4	0.0	0.0	-	-
10	-	-	-	-	-	0.0	3.7	0.0	0.0	0.0	-	-
11	-	-	-	-	-	0.4	4.5	1.9	0.0	0.0	-	-
12	-	-	-	-	0.0	0.0	0.0	1.6	0.0	0.0	-	-
13	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-
14	-	-	-	-	3.3	0.0	2.3	0.0	0.0	-	-	-
15	-	-	-	-	0.0	4.1	3.6	0.0	0.0	-	-	-
16	-	-	-	-	0.0	0.6	0.0	0.0	0.0	-	-	-
17	-	-	-	-	4.0	6.1	0.0	1.8	0.0	-	-	-
18	-	-	-	-	0.0	5.9	0.7	1.3	0.0	-	-	-
19	-	-	-	-	3.5	4.7	0.1	1.1	0.0	-	-	-
20	-	-	-	-	4.2	6.0	0.0	0.0	0.0	-	-	-
21	-	-	-	-	4.5	3.0	0.0	0.0	0.7	-	-	-
22	-	-	-	-	4.8	4.1	0.0	0.0	0.0	-	-	-
23	-	-	-	-	0.6	4.7	0.0	0.0	0.0	-	-	-
24	-	-	-	-	1.5	3.4	0.0	0.0	0.0	-	-	-
25	-	-	-	-	1.0	5.0	4.8	1.2	0.0	-	-	-
26	-	-	-	-	3.0	0.1	2.1	0.7	0.0	-	-	-
27	-	-	-	-	4.2	3.3	0.0	0.0	0.0	-	-	-
28	-	-	-	-	4.3	1.6	3.1	0.0	0.0	-	-	-
29	-	-	-	-	3.2	3.5	5.0	1.5	0.0	-	-	-
30	-	-	-	-	5.8	0.3	0.0	1.5	0.0	-	-	-
31	-		-		3.5		5.2	2.7		-		-
Total	-	-	-	-	51.5	84.0	57.8	50.8	3.2	0.1	-	-

Appendix E

Validated Manual Particulate Data

Not Applicable.